



RADIO TEST REPORT

FCC ID : 2AHBN-AP34
Equipment : 802.11ax 6E Wireless Access Point
Brand Name : Juniper
Model Name : AP34
Applicant : Juniper Networks, Inc.
1133 Innovation Way Sunnyvale, California 94089
USA
Manufacturer : Juniper Networks, Inc.
1133 Innovation Way Sunnyvale, California 94089
USA
Standard : 47 CFR FCC Part 15.407

The product was received on Mar. 22, 2022, and testing was started from Mar. 26, 2022 and completed on Jun. 20, 2022. 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 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	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Equivalent Isotopically Radiated Power (E.I.R.P.)	PASS	-
3.4	15.407(a)	Peak Power Spectral Density (E.I.R.P.)	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-
3.6	15.407(d)	Contention-Based Protocol	PASS	-
3.7	15.407(g)	Frequency Stability	PASS	-

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

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: Wendy Pan



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925-7125	ax (HEW20)	5955-7115	1-233 [59]
5925-7125	ax (HEW40)	5965-7085	3-227 [29]
5925-7125	ax (HEW80)	5985-7025	7-215 [14]
5925-7125	ax (HEW160)	6025-6985	15-207 [7]

For Radio 3

Band	Mode	BWch (MHz)	Nant
UNII 5~8	802.11ax HEW20	20	2TX
UNII 5~8	802.11ax HEW20-BF	20	2TX
UNII 5~8	802.11ax HEW40	40	2TX
UNII 5~8	802.11ax HEW40-BF	40	2TX
UNII 5~8	802.11ax HEW80	80	2TX
UNII 5~8	802.11ax HEW80-BF	80	2TX
UNII 5~8	802.11ax HEW160	160	2TX
UNII 5~8	802.11ax HEW160-BF	160	2TX

For Radio 4

Band	Mode	BWch (MHz)	Nant
UNII 5~8	802.11ax HEW20	20	1TX
UNII 5~8	802.11ax HEW40	40	1TX
UNII 5~8	802.11ax HEW80	80	1TX
UNII 5~8	802.11ax HEW160	160	1TX

Note:

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



1.1.2 Antenna Information

Ant.	Port							Brand Name	Model Name	Ant. Type	Connector	Gain (dBi)
	WLAN 5GHz (Radio 1)	WLAN 2.4GHz (Radio 2)	WLAN 6GHz (Radio 3)	WLAN 2.4GHz (Radio 4)	WLAN 5GHz (Radio 4)	WLAN 6GHz (Radio 4)	BT (Radio 5)					
1	2	1	-	-	-	-	-	Juniper	AP34	PIFA	I-PEX	Note 2
2	1	2	-	-	-	-	-	Juniper	AP34	PIFA	I-PEX	
3	-	-	2	-	-	-	-	Juniper	AP34	PIFA	I-PEX	
4	-	-	1	-	-	-	-	Juniper	AP34	PIFA	I-PEX	
5	-	-	-	1	1	1	-	Juniper	AP34	PIFA	I-PEX	
6	-	-	-	-	-	-	1	Juniper	AP34	PIFA	N/A	

Note1: The above information was declared by manufacturer.

Note2:

Ant.	Gain (dBi)																		
	WLAN5GHz (Radio 1)				WLAN 2.4GHz (Radio 2)	WLAN 6GHz (Radio 3)				WLAN2.4GHz (Radio 4)	WLAN 5GHz (Radio 4)				WLAN 6GHz (Radio 4)				BT (Radio 5)
	UNII 1	UNII 2A	UNII 2C	UNII 3		UNII 5	UNII 6	UNII 7	UNII 8		UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 5	UNII 6	UNII 7	UNII 8	
1	2.4	2.13	2.25	2.02	2.63	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	2.38	2.22	2.33	2.07	2.11	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	-	-	-	-	5.85	5.08	5.08	4.70	-	-	-	-	-	-	-	-	-	
4	-	-	-	-	-	5.85	5.08	5.08	4.70	-	-	-	-	-	-	-	-	-	
5	-	-	-	-	-	-	-	-	-	5.0	5.8	5.8	5.5	5.6	5.6	5.5	5.5	5.6	
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6	

Note3: WLAN 2.4GHz (Radio 2) and 5GHz (Radio 1): Maximum Directional Gain following KDB662911 D03.

The antenna report is provided in the operational description for this application.

Note4: The antenna gain of Radio 3, Radio 4 and Radio 5 were declared by manufacturer.

Note5: **For Radio 2**

For 2.4GHz:

For IEEE 802.11b/g/n/VHT/ax mode (2TX/2RX):

Port 1, Port 2 can be used as transmitting/receiving antenna.

Port 1, Port 2 could transmit/receive simultaneously.

For Radio 1

For 5GHz UNII 1~3:

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

Port 1, Port 2 can be used as transmitting/receiving antenna.

Port 1, Port 2 could transmit/receive simultaneously.

For Radio 3

For 6E UNII 5~8:

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

Port 1, Port 2 can be used as transmitting/receiving antenna.

Port 1, Port 2 could transmit/receive simultaneously.

For scanning Radio 4

For 2.4GHz, IEEE 802.11b/g/n/VHT/ax mode (1TX/1RX):

For 5GHz UNII 1~3, IEEE 802.11a/n/ac/ax mode (1TX/1RX):

For 6E UNII 5~8, IEEE 802.11ax mode (1TX/1RX):

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

For Radio 5

Bluetooth (1TX/1RX):

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



1.1.3 Mode Test Duty Cycle

For Radio 3:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.98	0.09	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20-BF	0.926	0.33	2.926m	1k
802.11ax HEW40	0.966	0.15	781u	3k
802.11ax HEW40-BF	0.961	0.17	4.36m	300
802.11ax HEW80	0.939	0.27	414u	3k
802.11ax HEW80-BF	0.957	0.19	4.851m	300
802.11ax HEW160	0.898	0.47	237u	10k
802.11ax HEW160-BF	0.964	0.16	4.821m	300

For Radio 4:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.968	0.14	781.25u	3k
802.11ax HEW80	0.936	0.29	413.25u	3k
802.11ax HEW160	0.898	0.47	236.625u	10k

Note:

- ◆ DC is Duty Cycle.
- ◆ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz of radio 2, n/ac/ax in 5GHz UNII 1~UNII 3 of radio 1 and ax in 6GHz UNII 5~UNII 8 of radio 3.			
Device Type	<input checked="" type="checkbox"/>	Indoor Access Point	<input type="checkbox"/>	Subordinate
	<input type="checkbox"/>	Indoor Client	<input type="checkbox"/>	Standard Power Access Point
	<input type="checkbox"/>	Dual Client	<input type="checkbox"/>	Standard Client
	<input type="checkbox"/>	Fixed Client		
Test Software Version	accessMTool(version3.2.1.5) DOS [ver 6.1.7601]			
Software / Firmware Version for CBP	Radio 3: 0.12.26260 Radio 4: 17.10.188.25026 (r805336 WLTEST)			

Note: The above information was declared by manufacturer.



1.1.5 Table for Radio function

Radio 1	Radio 2	Radio 3	Radio 4 (Scanning)	Radio 5
(WLAN 5GHz UNII 1~3)	(WLAN 2.4GHz)	(WLAN 6GHz)	(WLAN 2.4GHz)	(Bluetooth)
			(WLAN 5GHz)	
			(WLAN 6GHz)	

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15.407
- ♦ 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 987594 D02 v01r01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 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	Brian Sun	21.7~22.8 / 66~71	Apr. 01, 2022 ~ Apr. 04, 2022
Radiated (For Radio 3 Maximum Equivalent Isotopically Radiated Power (E.I.R.P.) Peak Power Spectral Density (E.I.R.P.))	03CH01-CB	Stim Sung	23.8-24.9 / 55-58	Mar. 25, 2022~ Apr. 01, 2022
Radiated Emission below 1GHz	03CH05-CB	Eason Chen	24.4-25.5 / 55-58	Mar. 30, 2022~ Mar. 31, 2022
Radiated Emission above 1GHz	03CH01-CB	Stim Sung	23.8-24.9 / 55-58	Mar. 26, 2022 ~ May 12, 2022
	03CH04-CB		24.5-25.6 / 57-60	
AC Conduction	CO01-CB	Joe Chu	20~22 / 60~62	Apr. 08, 2022
RF Conducted <Contention-Based Protocol test>	DF02-CB	Jeff Wu	24~26.2 / 65~68	May 11, 2022~ Jun. 20, 2022



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))

For Others test item: before Jun. 01, 2022

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%

For Contention-Based Protocol: After May 31, 2022

Test Items	Uncertainty	Remark
Conducted Emission	3.2 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For Radio 3:

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5955MHz	37
6175MHz	37
6415MHz	37
6435MHz	38
6475MHz	39
6515MHz	39
6535MHz	39
6695MHz	39
6855MHz	39
6875MHz Straddle 6.525-6.875GHz	41
6895MHz	35
6995MHz	35
7095MHz	39
7115MHz	20
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5955MHz	27
6175MHz	27
6415MHz	29
6435MHz	25
6475MHz	28
6515MHz	27
6535MHz	26
6695MHz	32
6855MHz	26
6875MHz Straddle 6.525-6.875GHz	27
6895MHz	29
6995MHz	29
7095MHz	39
7115MHz	19
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5965MHz	46
6165MHz	44
6405MHz	45



Mode	Power Setting
6445MHz	47
6485MHz	49
6525MHz Straddle 6.425-6.525GHz	49
6565MHz	45
6685MHz	47
6845MHz	45
6885MHz Straddle 6.525-6.875GHz	49
6925MHz	47
7005MHz	49
7085MHz	54
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5965MHz	46
6165MHz	43
6405MHz	47
6445MHz	46
6485MHz	43
6525MHz Straddle 6.425-6.525GHz	38
6565MHz	48
6685MHz	41
6845MHz	45
6885MHz Straddle 6.525-6.875GHz	50
6925MHz	49
7005MHz	50
7085MHz	52
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5985MHz	59
6145MHz	58
6385MHz	59
6465MHz	65
6545MHz Straddle 6.425-6.525GHz	62
6625MHz	58
6705MHz	62
6785MHz	59
6865MHz Straddle 6.525-6.875GHz	57
6945MHz	61
7025MHz	61
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5985MHz	60
6145MHz	62



Mode	Power Setting
6385MHz	60
6465MHz	62
6545MHz Straddle 6.425-6.525GHz	60
6625MHz	55
6705MHz	63
6785MHz	55
6865MHz Straddle 6.525-6.875GHz	58
6945MHz	60
7025MHz	62
802.11ax HEW160_Nss1,(MCS0)_2TX	-
6025MHz	72
6185MHz	71
6345MHz	71
6505MHz Straddle 6.425-6.525GHz	74
6665MHz	71
6825MHz Straddle 6.525-6.875GHz	66
6985MHz	71
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
6025MHz	77
6185MHz	76
6345MHz	70
6505MHz Straddle 6.425-6.525GHz	71
6665MHz	74
6825MHz Straddle 6.525-6.875GHz	74
6985MHz	74



For Radio 4:

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5955MHz	50
6175MHz	50
6415MHz	52
6435MHz	50
6475MHz	50
6515MHz	50
6535MHz	50
6695MHz	50
6855MHz	53
6875MHz	53
6895MHz	53
6995MHz	52
7095MHz	51
7115MHz	24
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5965MHz	61
6165MHz	62
6405MHz	65
6445MHz	64
6485MHz	65
6525MHz	66
6565MHz	66
6685MHz	64
6845MHz	66
6885MHz	66
6925MHz	61
7005MHz	62
7085MHz	63
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5985MHz	74
6145MHz	73
6385MHz	76
6465MHz	75
6545MHz	76
6625MHz	75
6705MHz	76
6785MHz	76



Mode	Power Setting
6865MHz	78
6945MHz	78
7025MHz	80
802.11ax HEW160_Nss1,(MCS0)_1TX	-
6025MHz	77
6185MHz	94
6345MHz	88
6505MHz	84
6665MHz	97
6825MHz	98
6985MHz	77



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests							
Tests Item	AC power-line conducted emissions						
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz						
Operating Mode	Normal Link						
	EUT	Radio 1	Radio 2	Radio 3	Radio 4	Radio 5	Powered by
1	EUT	5GHz Full Band	2.4GHz	6GHz	2.4GHz	Bluetooth	PoE
2	EUT	5GHz Full Band	2.4GHz	6GHz	5GHz	Bluetooth	PoE
3	EUT	5GHz Full Band	2.4GHz	6GHz	6GHz	Bluetooth	PoE
For operating mode 1 is the worst case and it was record in this test report.							

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Contention Based Protocol Emission MASK Frequency Stability
Test Condition	Conducted measurement at transmit chains
1	EUT + Radio 3
2	EUT + Radio 4

The Worst Case Mode for Following Conformance Tests	
Tests Item	Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Peak Power Spectral Density (E.I.R.P.)
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.
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found as below. So the measurement will follow this same test configuration
1	EUT in Z axis + Radio 3



The Worst Case Mode for Following Conformance Tests	
Tests Item	Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Peak Power Spectral Density (E.I.R.P.)
Test Condition	Conducted measurement at transmit chains
1	EUT + Radio 4

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	Normal Link						
	EUT	Radio 1	Radio 2	Radio 3	Radio 4	Radio 5	Powered by
1	EUT in Z axis	5GHz Full Band	2.4GHz	6GHz	2.4GHz	Bluetooth	PoE
2	EUT in Y axis	5GHz Full Band	2.4GHz	6GHz	2.4GHz	Bluetooth	PoE
3	EUT in X axis	5GHz Full Band	2.4GHz	6GHz	2.4GHz	Bluetooth	PoE
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 ~ 5 will follow this same test mode.							
4	EUT in Z axis	5GHz Full Band	2.4GHz	6GHz	5GHz	Bluetooth	PoE
5	EUT in Z axis	5GHz Full Band	2.4GHz	6GHz	6GHz	Bluetooth	PoE
For operating mode 1 is the worst case and it was record in this test report.							
Operating Mode > 1GHz	CTX						
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found as below. So the measurement will follow this same test configuration						
1	EUT in Z axis + Radio 3						
2	EUT in X axis + Radio 4						



The Worst Case Mode for Following Conformance Tests					
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation				
Operating Mode	Radio 1	Radio 2	Radio 3	Radio 4	Radio 5
1	5GHz Full Band	2.4GHz	6GHz	2.4GHz	Bluetooth
2	5GHz Full Band	2.4GHz	6GHz	5GHz	Bluetooth
3	5GHz Full Band	2.4GHz	6GHz	6GHz	Bluetooth

Refer to Sporton Test Report No.: FA231832 for Co-location RF Exposure Evaluation.

Note: The PoE is for measurement only, would not be marketed.

PoE information as below:

Power	Brand	Model
PoE	PHIHONG	POE60U-1BT-5

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS [ver 6.1.7601].
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Client and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.



2.4 Accessories

Bracket*1

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN PC	DELL	T3400	N/A
B	2.4G NB	DELL	E6430	N/A
C	5G NB	DELL	E6430	N/A
D	SCAN NB	DELL	E6430	N/A
E	Flash disk3.0	Transcend	JetFlash-700	N/A
F	PoE	PHIHONG	POE60U-1BT-5	N/A
G	6E NB	DELL	E6430	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN Notebook	DELL	E4300	N/A
B	5G NB	DELL	E4300	N/A
C	2.4G NB	DELL	E4300	N/A
D	6E NB	DELL	E4300	N/A
E	SCAN NB	DELL	E4300	N/A
F	Flash disk3.0	Silicon Power	B06	N/A
G	PoE	PHIHONG	POE60U-1BT-5	N/A



**For Radiated (above 1GHz):
non-beamforming mode:**

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	Microsemi	PD-9001-10GC/AC	N/A
B	Notebook	DELL	E4300	N/A

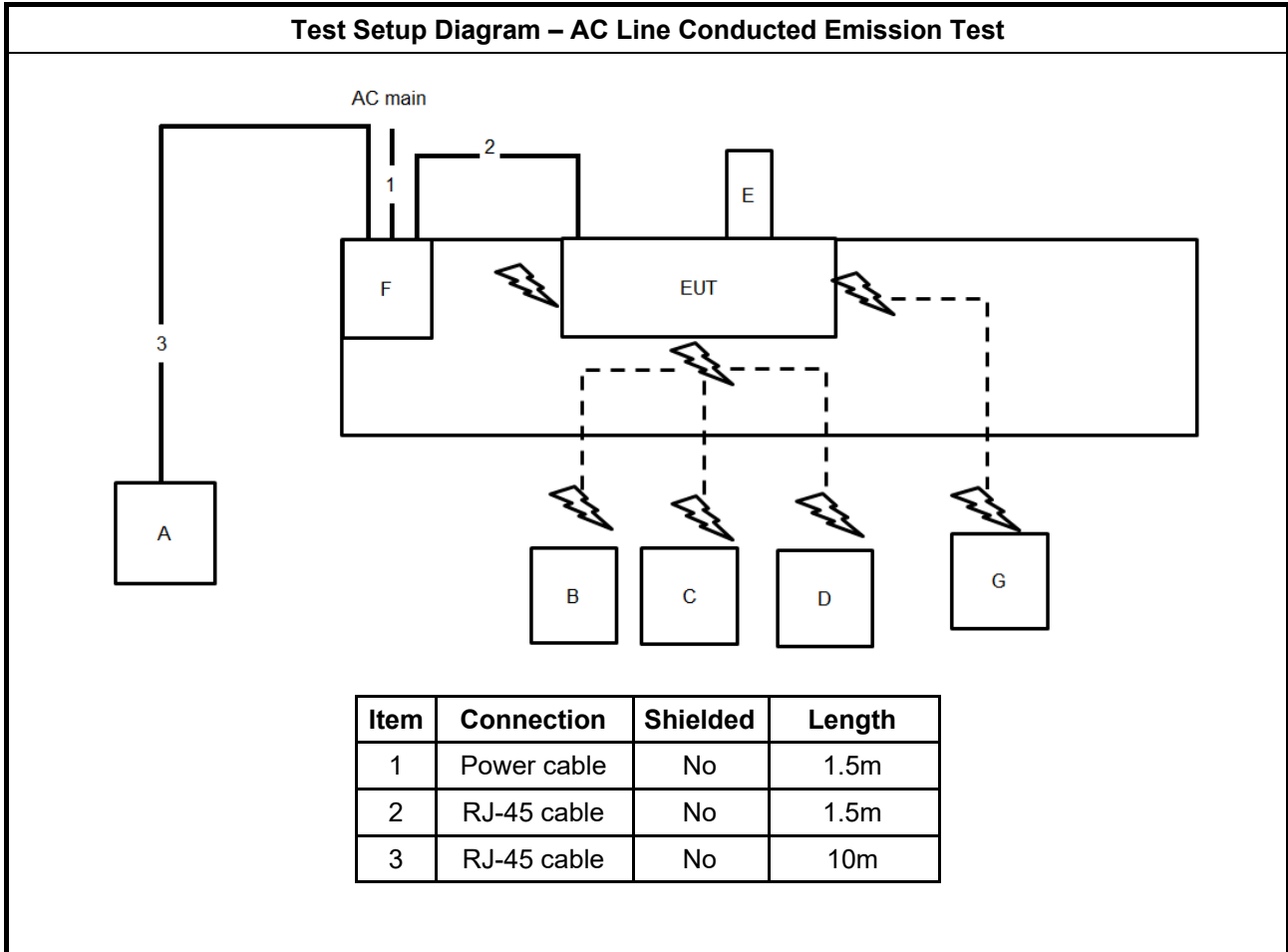
beamforming mode:

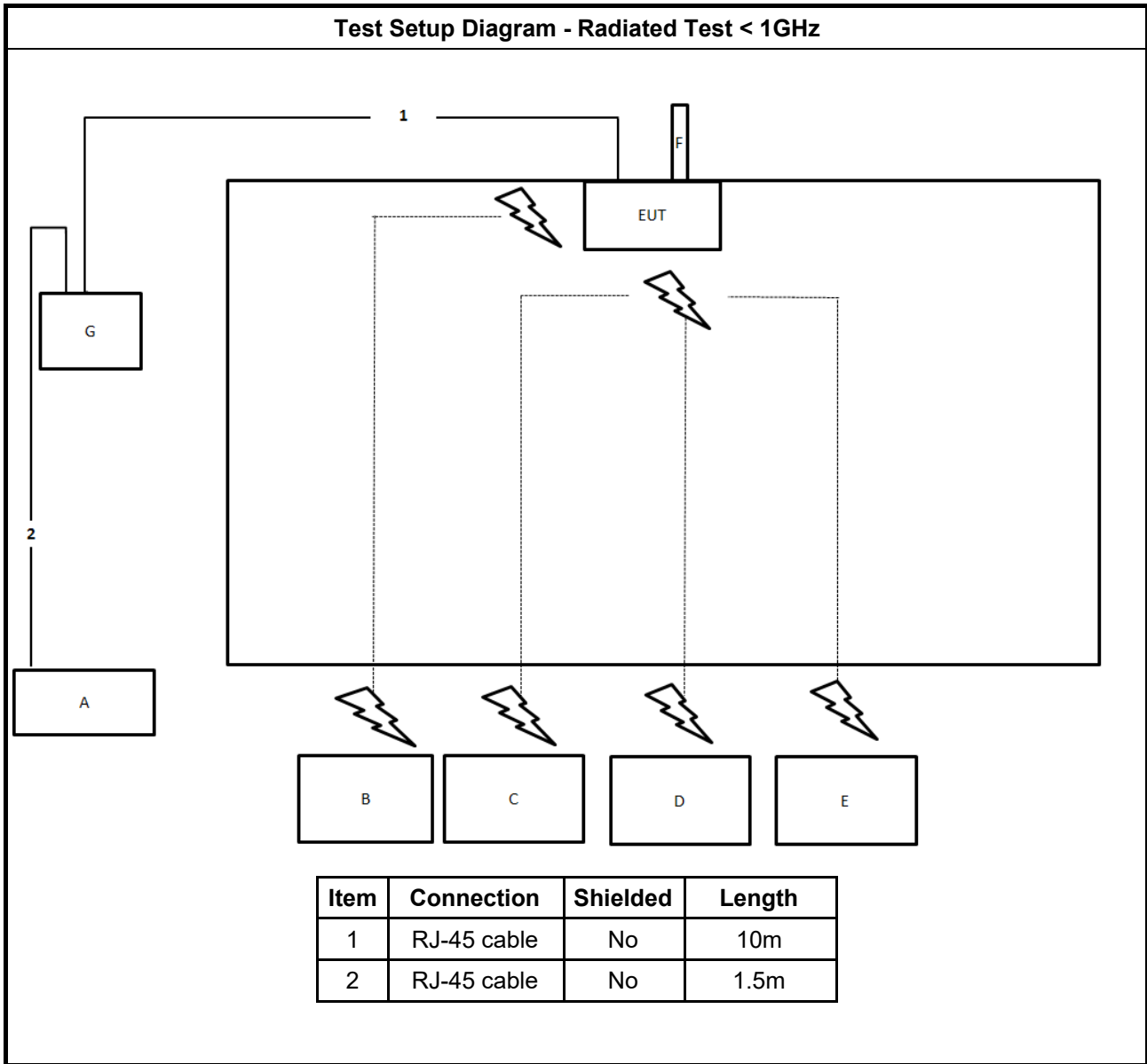
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	Microsemi	PD-9001-10GC/AC	N/A
B	Notebook	DELL	E4300	N/A
C	Client	Juniper	AP34	2AHBN-AP34
D	Notebook	DELL	E4300	N/A

For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE	PHIHONG	POE60U-1BT-X	N/A

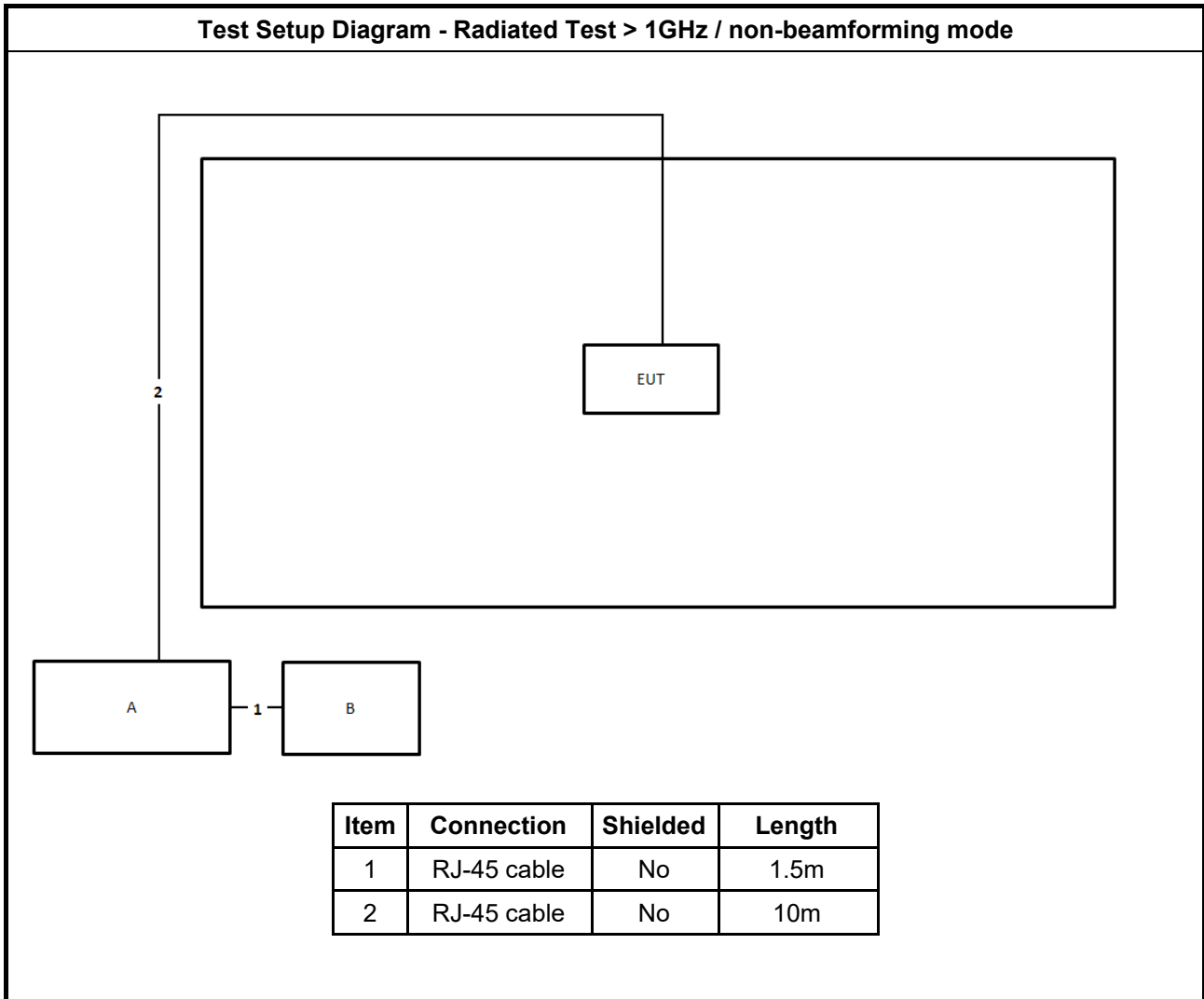
2.6 Test Setup Diagram





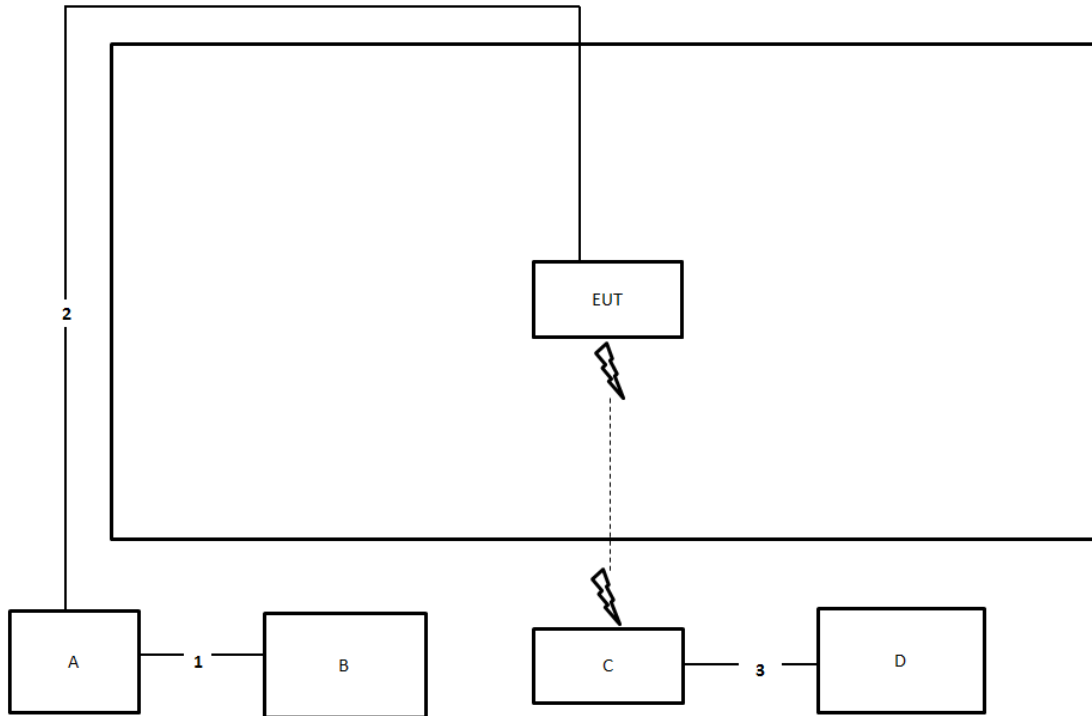


Test Setup Diagram - Radiated Test > 1GHz / non-beamforming mode



Item	Connection	Shielded	Length
1	RJ-45 cable	No	1.5m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz / beamforming mode



Item	Connection	Shielded	Length
1	RJ-45 cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

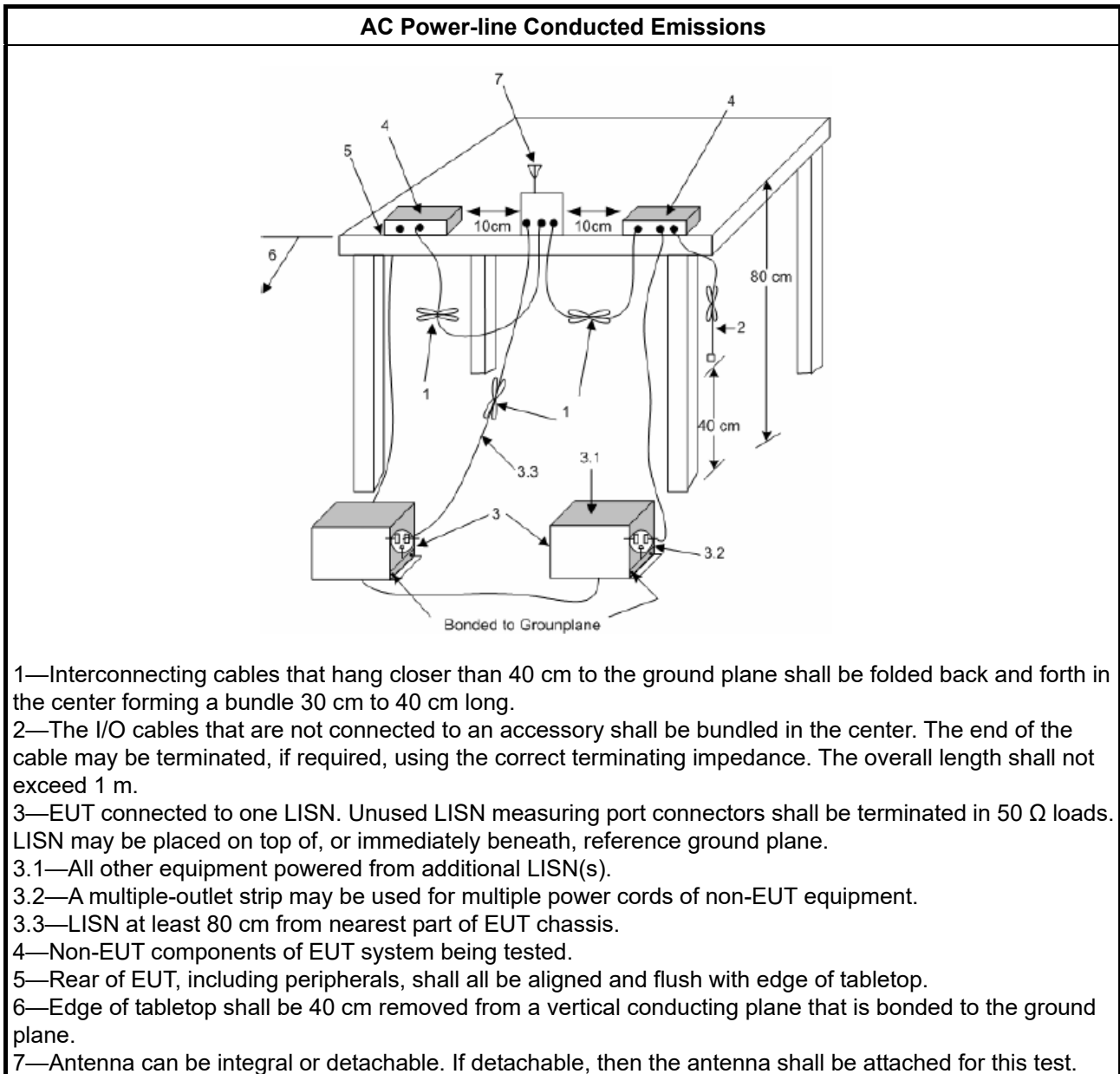
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- b. Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5925-6425 GHz band, N/A
<input checked="" type="checkbox"/>	For the 6425-6525 GHz band, N/A
<input checked="" type="checkbox"/>	For the 6525-6875 GHz band, N/A
<input checked="" type="checkbox"/>	For the 6875-7125 GHz band, N/A
RLAN Devices	
<input type="checkbox"/>	For the 5925-6425 GHz band, N/A
<input type="checkbox"/>	For the 6425-6525 GHz band, N/A
<input type="checkbox"/>	For the 6525-6875 GHz band, N/A
<input type="checkbox"/>	For the 6875-7125 GHz band, N/A

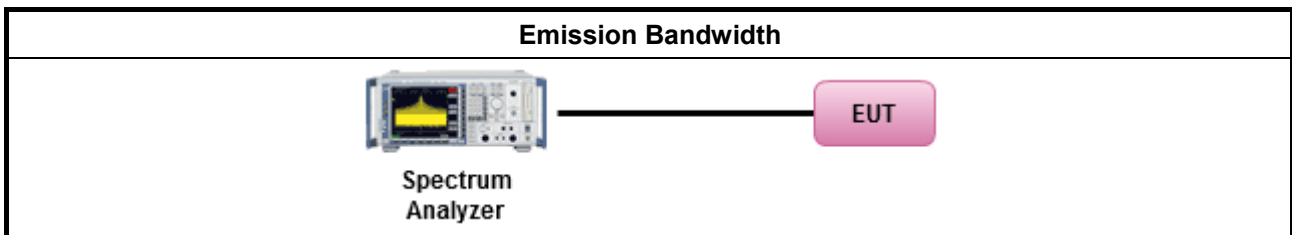
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	According to KDB 987594 D02 clause II.C, measurement procedure shall refer to 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.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



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

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

Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.925 ~ 6.425 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm). ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of a standard power access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
<input checked="" type="checkbox"/>	For the 6.425 ~ 6.525 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
<input checked="" type="checkbox"/>	For the 6.525 ~ 6.875 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm). ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of a standard power access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
<input checked="" type="checkbox"/>	For the 6.875 ~ 7.125 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
RLAN Devices	
<input type="checkbox"/>	For the 5.925 ~ 7.125 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For RLAN devices(Indoor) other than client devices < 30 dBm / occupied bandwidth. ▪ For client devices(Indoor) < 24 dBm / occupied bandwidth.



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"> According to FCC KDB 987594 D02 clause II.E, the test measurement procedure shall refer to KDB 789033. 	
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). Spectrum analyzer setting: RBW/VBW : 1/3MHz ; Detector : RMS ; Trace mode : Average ; Sweep Count 100.
<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 checked="" 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. 	

Note :

The test is the final test result, It includes antenna /cable loss factor & FSL factor.

The EIRP calculation refer to "KDB 412172 D01 Determining ERP and EIRP v01r01"

EIRP Formula :

EIRP(dBm) = PR(dBm) + LP(FSL factor)

where;

PR(dBm) : Power measurement level include antenna/cable loss

LP : Free Space Loss(dB)

PR Formula :

PR(dBm) = P Meas(dBm) – GR(dBi) + LC(dB)

where;

P Meas(dBm) : Power measurement level

GR(dBi) : Gain of the receive(measurement) antenna (dBi)

LC(dB) : Measurement cable loss (dB)



LP(FSL factor) Formula :

$$LP(dB) = 20 \log F + 20 \log D - 27.54$$

where;

F(MHz) : EUT center frequency

D(m) : Measurement distance

For Example:

Test mode Radio 3 nonTXBF HE20 4T1S 5955MHz EIRP measurement

PR Formula :

$$PR(dBm) = -36.37 - 10.59 + 5.32 = -41.64$$

LP(FSL factor) Formula :

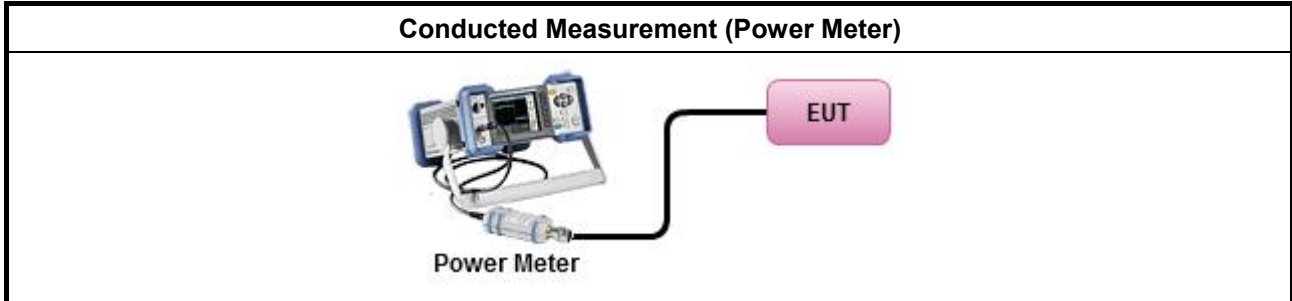
$$LP(dB) = 20 \log(5955) + 20 \log(3) - 27.5 = 57.54$$

EIRP Formula :

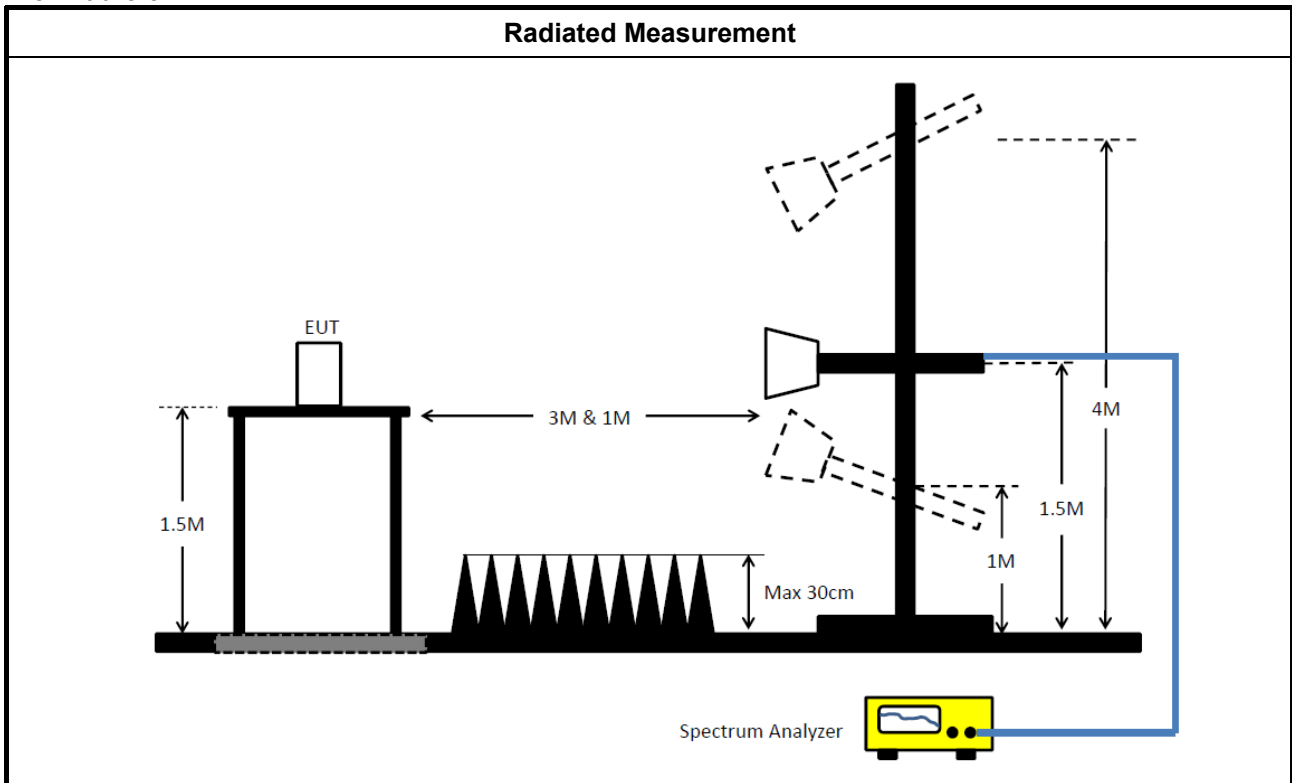
$$EIRP(dBm) = -41.64 + 57.54 = 15.90$$

3.3.4 Test Setup

For Radio 4:



For Radio 3:



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

Refer as Appendix C



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

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

Peak Power Spectral Density (E.I.R.P.) Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.925 ~ 6.425 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz. ▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz. ▪ For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz. ▪ For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz. ▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
<input checked="" type="checkbox"/>	For the 6.425 ~ 6.525 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz. ▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
<input checked="" type="checkbox"/>	For the 6.525 ~ 6.875 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz. ▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz. ▪ For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz. ▪ For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz. ▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
<input checked="" type="checkbox"/>	For the 6.875 ~ 7.125 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz. ▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
RLAN Devices	
<input type="checkbox"/>	For the 5.925 ~ 7.125 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For RLAN devices(Indoor) other than client devices < 5 dBm / MHz. ▪ For client devices(Indoor) < -1 dBm / MHz.

3.4.2 Measuring Instruments

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



3.4.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ According to KDB 987594 D02 clause II.F, the measurement procedure shall refer to KDB 789033. 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: <ul style="list-style-type: none"> <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. ▪ 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 checked="" 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.



Test Method	
	▪ Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

Note :

The test is the final test result, It includes antenna /cable loss factor & FSL factor.
The EIRP PSD calculation refer to "KDB 412172 D01 Determining ERP and EIRP v01r01"

EIRP PSD Formula :

$$\text{EIRP PSD(dBm/MHz)} = \text{PR(dBm/MHz)} + \text{LP(FSL factor)}$$

where;

PR(dBm/MHz) : Power measurement level include antenna/cable loss

LP : Free Space Loss(dB)

PR Formula :

$$\text{PR(dBm/MHz)} = \text{P Meas(dBm/MHz)} - \text{GR(dBi)} + \text{LC(dB)}$$

where;

P Meas(dBm/MHz) : PSD measurement level

GR(dBi) : Gain of the receive(measurement) antenna (dBi)

LC(dB) : Measurement cable loss (dB)

LP(FSL factor) Formula :

$$\text{LP(dB)} = 20 \log F + 20 \log D - 27.54$$

where;

F(MHz) : EUT center frequency

D(m) : Measurement distance

For Example:

Test mode Radio 3 nonTXBF HE20 4T1S 5955MHz EIRP PSD measurement

PR Formula :

$$\text{PR(dBm/MHz)} = -47.68 - 10.60 + 5.33 = -52.95$$

LP(FSL factor) Formula :

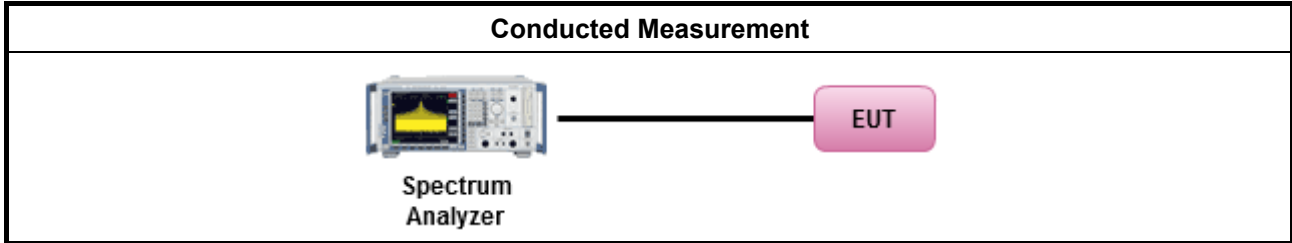
$$\text{LP(dB)} = 20\log(5949.66) + 20\log(3) - 27.5 = 57.53$$

EIRP PSD Formula

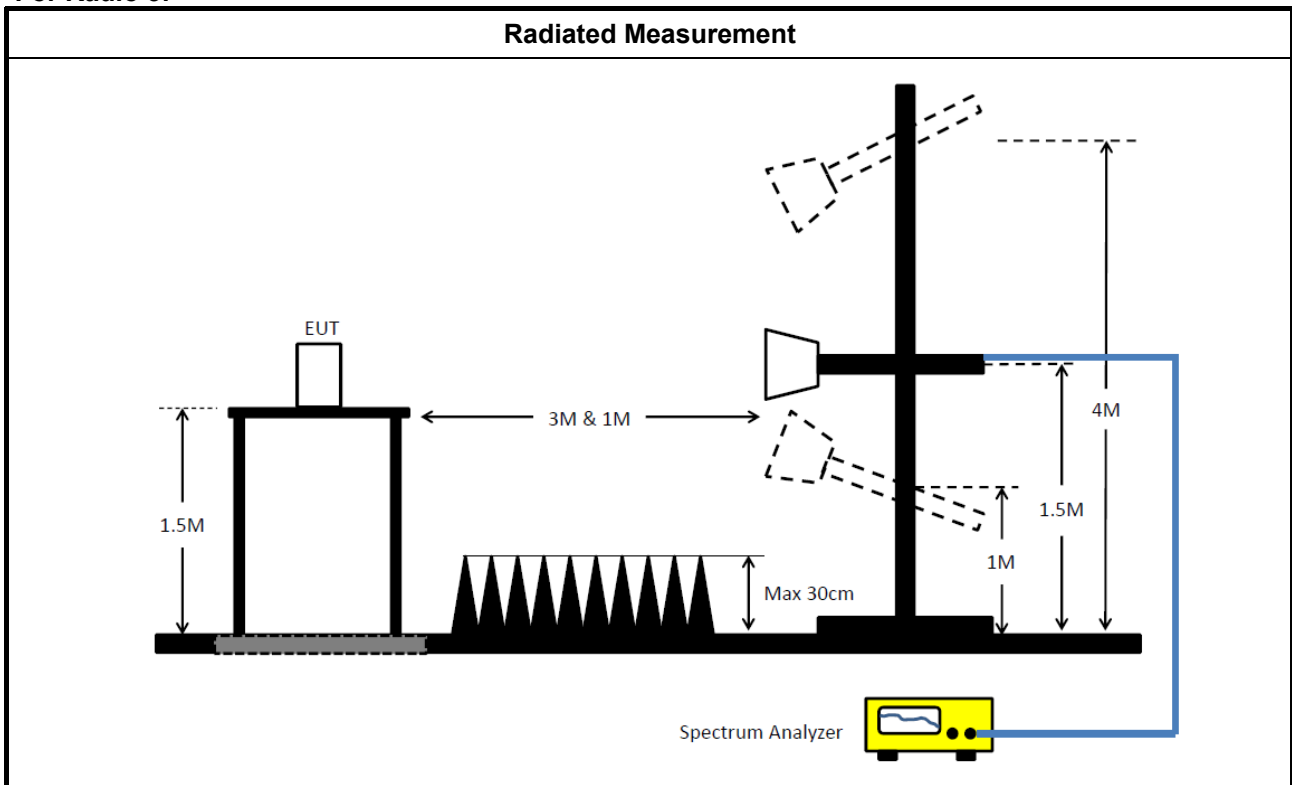
$$\text{EIRP PSD(dBm/MHz)} = -52.95 + 57.53 = 4.58$$

3.4.4 Test Setup

For Radio 4:



For Radio 3:



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

Refer as Appendix D



3.5 Unwanted Emissions

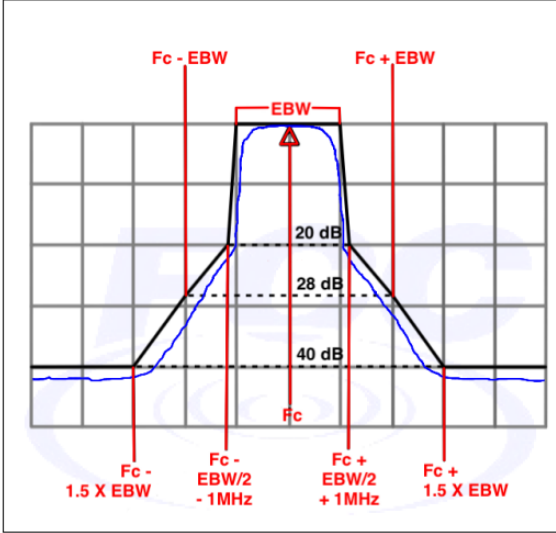
3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m($20 \times \log(\text{standard distance}/ \text{test distance}) = 20\log(3/1) = 9.54\text{dB}$).
 EX. Above 18GHz emission limit calculation (3m to 1m) = 54dBuV/m at 3m + 9.54dB = 63.54 dBuV/m at 1m.

Un-restricted band emissions above 1GHz Limit	
Frequency	Limit
Any outside the 5.945 – 7.125 GHz emission	<p>e.i.r.p. -27 dBm [68.2 dBuV/m@3m]</p> <p>Note 1: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m($20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$. EX. Above 18GHz emission limit calculation (3m to 1m) = $68.2\text{dBuV/m at } 3\text{m} + 9.54\text{dB} = 77.74 \text{ dBuV/m at } 1\text{m}$.</p> <p>Note 2:-27 dBm EIRP OOBE is measured RMS which is a deviation from the current 15E rules for 5 GHz bands. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.</p>
Frequency	Emission MASK Limit
5.945 – 7.125 GHz	<p>Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.</p> <div style="text-align: center;">  </div>



3.5.2 Measuring Instruments

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

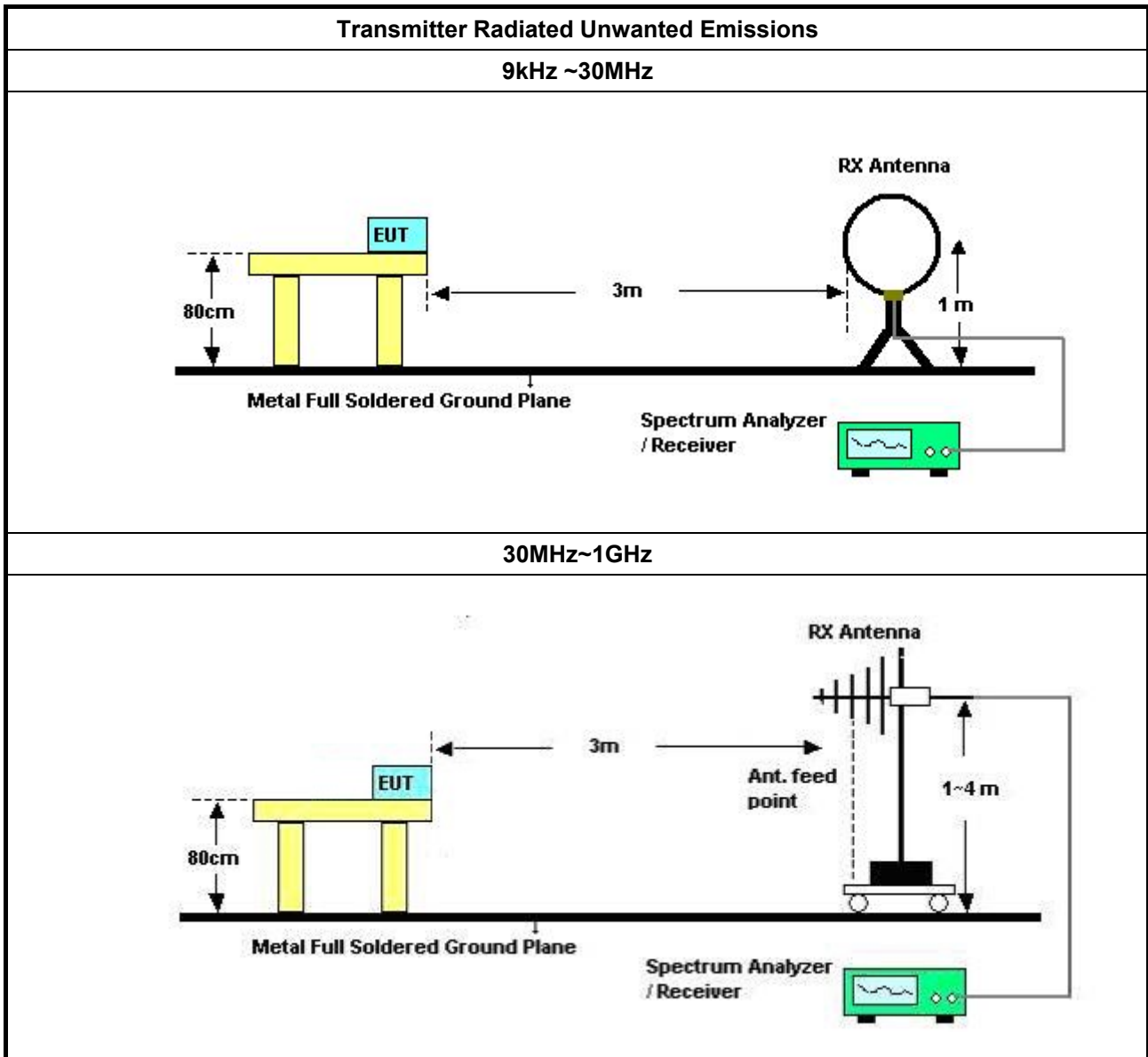
3.5.3 Test Procedures

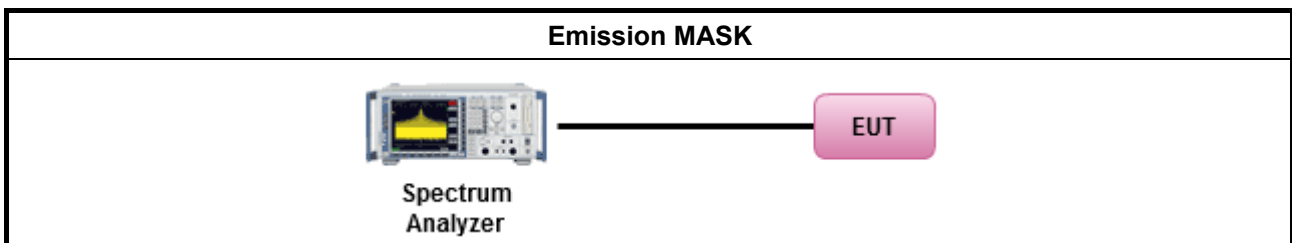
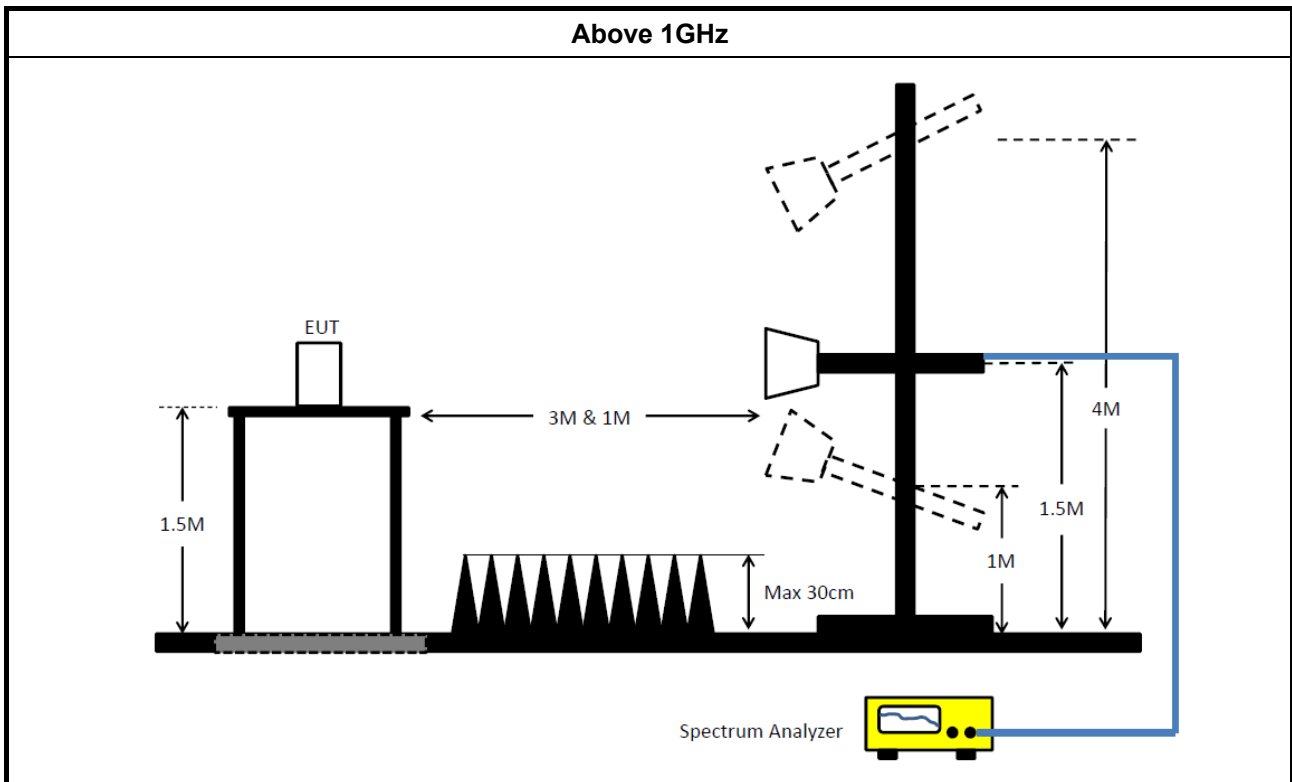
Test Method	
<ul style="list-style-type: none"> ▪ According to KDB 987594 D02 II.G. the unwanted emission measurement procedure shall refer to KDB 789300(except emission MASK). Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field 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 checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).
<input checked="" type="checkbox"/>	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.(For restricted band average measurement)
<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"> ▪ Refer as FCC KDB 789033 D02, clause G)3)d)ii) for Band edge Integration measurements. 	
<ul style="list-style-type: none"> ▪ For emission MASK shall be measured using following options below: 	
<input checked="" type="checkbox"/>	Refer as FCC draft KDB 987594 D02, J) In-Band Emissions
<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. 	



Test Method	
▪ For conducted and cabinet radiation measurement, refer as FCC KDB 789033 D02, clause G)3).	
▪ For conducted unwanted emissions into non-restricted bands (relative emission limits). Devices with multiple transmit chains: Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.	
▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB	
▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.	

3.5.4 Test Setup





3.5.5 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

3.5.6 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.

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Contention Based Protocol

3.6.1 Contention Based Protocol Limit

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

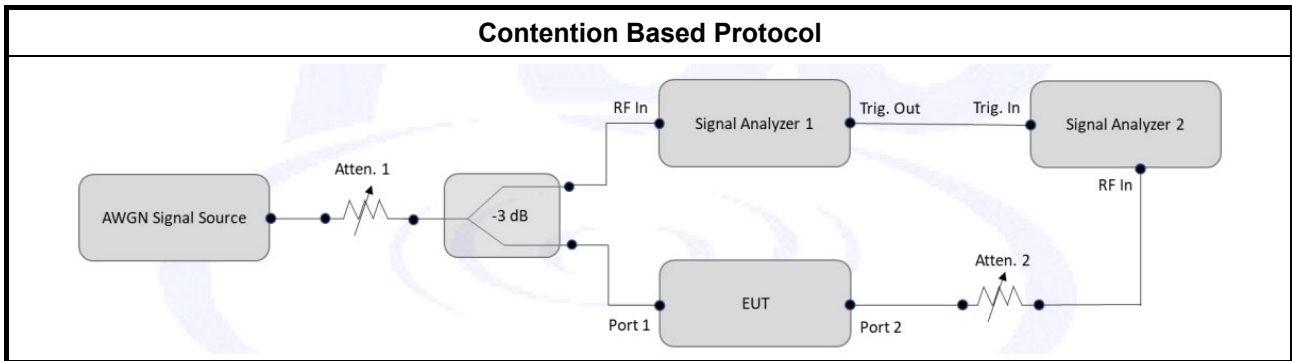
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
<input type="checkbox"/>	For Contention Based Protocol shall be measured using following options below:
<input checked="" type="checkbox"/>	Refer as FCC draft KDB 987594 D02, I) In-Band Emissions

3.6.4 Test Setup



3.6.5 Test Result of Contention Based Protocol

Refer as Appendix F

3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit	
▪	In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

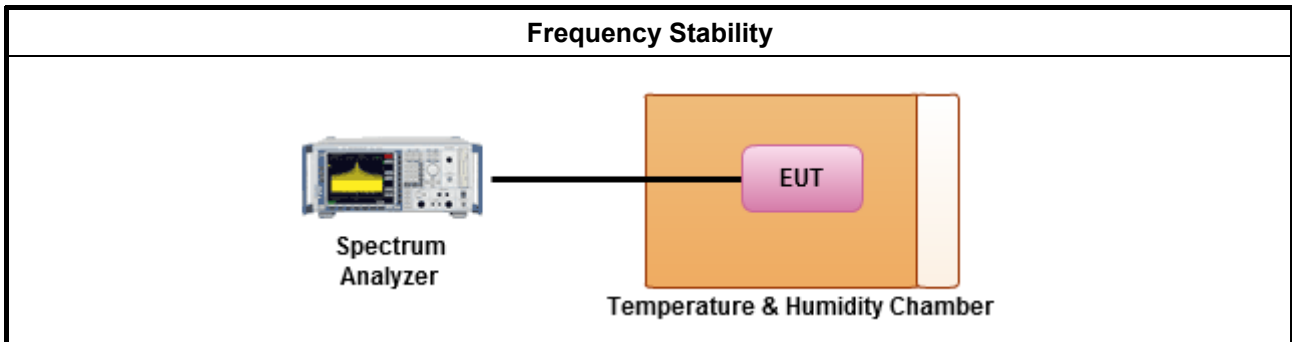
3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

Test Method	
▪	Refer as ANSI C63.10, clause 6.8 for frequency stability tests
▪	Frequency stability with respect to ambient temperature
▪	Frequency stability when varying supply voltage
▪	Extreme temperature is -30°C~50°C.

3.7.4 Test Setup



3.7.5 Test Result of Frequency Stability

Refer as Appendix G



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Jan. 07, 2022	Jan. 06, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 18, 2022	Mar. 17, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 07, 2021	Nov. 06, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Oct. 14, 2021	Oct. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	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. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 06, 2022	May 05, 2023	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2021	Nov. 05, 2022	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 20, 2021	May 19, 2022	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 03, 2021	May 02, 2022	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 25, 2021	Oct. 24, 2022	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH04-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 15, 2021	Apr. 14, 2022	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 28, 2022	Mar. 27, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 02, 2021	Aug. 01, 2022	Conducted (TH02-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-C2SP	TBN-1010206	-20~150 degree	Feb. 18, 2022	Feb. 17, 2023	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	SWI-02-P2	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P3	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P4	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P5	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)
Spectrum Analyzer	R&S	FSV40	101025	9kHz ~ 40GHz	Nov. 06, 2021	Nov. 05, 2022	Conducted (DF02-CB)
VEKTOR SIGNAL GENERATOR	R&S	SMW200A	109426	100KHz-7.5GHz	Dec. 28, 2021	Dec. 27, 2022	Conducted (DF02-CB)
RF Power Divider	STI	2 Way	DV-2way -07	1GHz ~ 8GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF02-CB)
RF Power Divider	STI	2 Way	DV-2way -08	1GHz ~ 8GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-61	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-62	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-63	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-66	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF02-CB)

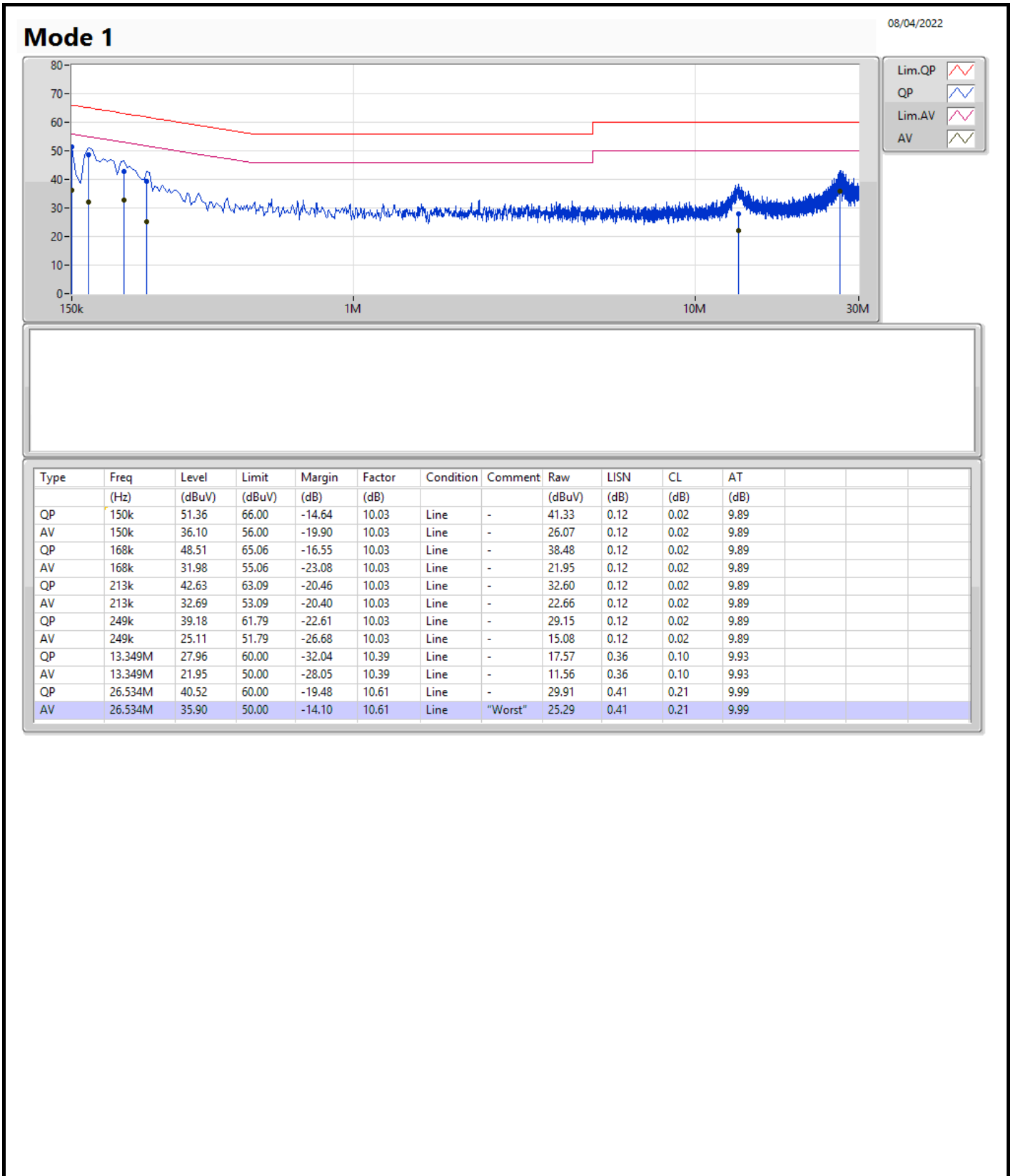
Note: Calibration Interval of instruments listed above is one year.

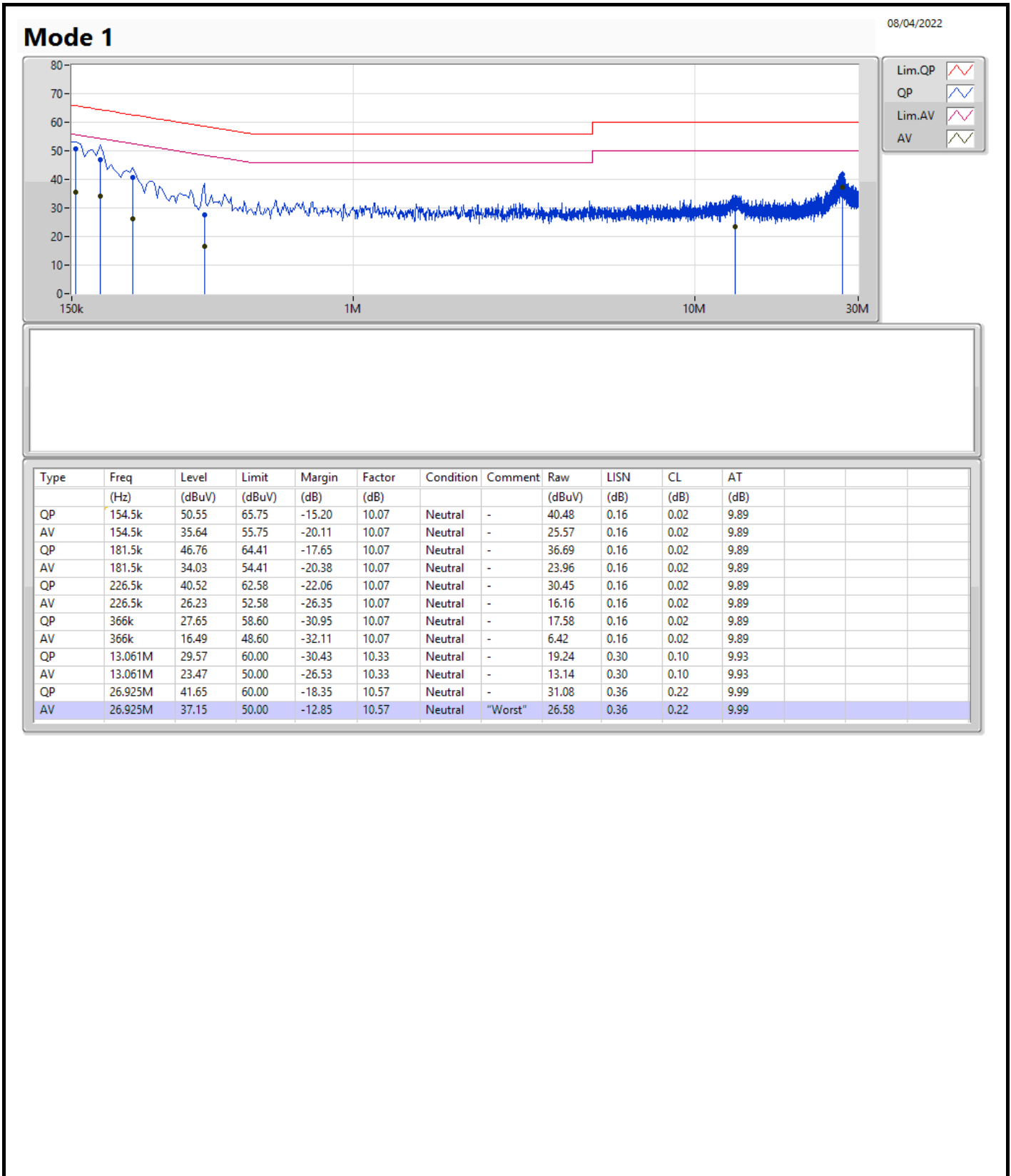
N.C.R. means Non-Calibration required.



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	26.925M	37.15	50.00	-12.85	Neutral





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	26.73M	19.31M	19M3D1D	22.47M	19.13M
802.11ax HEW40_Nss1,(MCS0)_2TX	45.24M	38.141M	38M1D1D	41.58M	38.081M
802.11ax HEW80_Nss1,(MCS0)_2TX	87.12M	78.201M	78M2D1D	82.68M	77.961M
802.11ax HEW160_Nss1,(MCS0)_2TX	240M	157.361M	157MD1D	164.88M	157.121M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	27.15M	19.28M	19M3D1D	22.77M	19.07M
802.11ax HEW40_Nss1,(MCS0)_2TX	46.26M	38.141M	38M1D1D	41.88M	38.081M
802.11ax HEW80_Nss1,(MCS0)_2TX	85.8M	78.081M	78M1D1D	82.68M	77.841M
802.11ax HEW160_Nss1,(MCS0)_2TX	259.68M	157.601M	158MD1D	239.52M	157.601M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	26.67M	19.25M	19M2D1D	23.16M	19.13M
802.11ax HEW40_Nss1,(MCS0)_2TX	43.62M	38.261M	38M3D1D	41.64M	38.021M
802.11ax HEW80_Nss1,(MCS0)_2TX	85.8M	78.081M	78M1D1D	82.2M	77.961M
802.11ax HEW160_Nss1,(MCS0)_2TX	247.44M	157.601M	158MD1D	165.36M	157.361M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	25.53M	19.31M	19M3D1D	22.89M	19.13M
802.11ax HEW40_Nss1,(MCS0)_2TX	45.96M	38.201M	38M2D1D	41.28M	38.081M
802.11ax HEW80_Nss1,(MCS0)_2TX	84.36M	78.081M	78M1D1D	83.76M	77.721M
802.11ax HEW160_Nss1,(MCS0)_2TX	247.2M	157.841M	158MD1D	241.68M	157.601M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5955MHz	Pass	Inf	22.47M	19.28M	25.14M	19.13M
6175MHz	Pass	Inf	26.73M	19.25M	23.61M	19.13M
6415MHz	Pass	Inf	25.32M	19.31M	25.29M	19.13M
6435MHz	Pass	Inf	24.45M	19.28M	23.97M	19.1M
6475MHz	Pass	Inf	27.15M	19.28M	24.3M	19.07M
6515MHz	Pass	Inf	22.77M	19.25M	24.15M	19.16M
6535MHz	Pass	Inf	25.59M	19.25M	24.21M	19.13M
6695MHz	Pass	Inf	25.98M	19.25M	23.16M	19.16M
6855MHz	Pass	Inf	26.67M	19.25M	25.74M	19.16M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	24.63M	19.25M	25.95M	19.13M
6895MHz	Pass	Inf	24.99M	19.25M	23.4M	19.13M
6995MHz	Pass	Inf	24.27M	19.28M	24.06M	19.16M
7095MHz	Pass	Inf	22.89M	19.31M	25.17M	19.16M
7115MHz	Pass	Inf	23.46M	19.31M	25.53M	19.16M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5965MHz	Pass	Inf	45.24M	38.141M	41.58M	38.141M
6165MHz	Pass	Inf	43.08M	38.141M	44.46M	38.081M
6405MHz	Pass	Inf	44.46M	38.141M	43.2M	38.141M
6445MHz	Pass	Inf	46.26M	38.141M	42.66M	38.081M
6485MHz	Pass	Inf	42.42M	38.081M	42.54M	38.081M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	44.16M	38.141M	41.88M	38.081M
6565MHz	Pass	Inf	41.64M	38.201M	42M	38.141M
6685MHz	Pass	Inf	42.48M	38.141M	42.72M	38.081M
6845MHz	Pass	Inf	42.12M	38.201M	42M	38.081M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	42.3M	38.261M	43.62M	38.021M
6925MHz	Pass	Inf	44.22M	38.081M	44.04M	38.201M
7005MHz	Pass	Inf	42.78M	38.141M	45.96M	38.141M
7085MHz	Pass	Inf	44.16M	38.141M	41.28M	38.141M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5985MHz	Pass	Inf	82.68M	77.961M	84.6M	77.961M
6145MHz	Pass	Inf	86.64M	78.081M	83.76M	78.201M
6385MHz	Pass	Inf	87.12M	77.961M	85.44M	78.081M
6465MHz	Pass	Inf	85.8M	77.841M	83.88M	77.961M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	82.68M	78.081M	83.88M	77.841M
6625MHz	Pass	Inf	83.28M	78.081M	85.68M	78.081M
6705MHz	Pass	Inf	83.4M	78.081M	85.8M	78.081M
6785MHz	Pass	Inf	82.2M	78.081M	83.52M	78.081M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	85.44M	77.961M	84.84M	77.961M
6945MHz	Pass	Inf	84.36M	77.961M	84.12M	77.961M
7025MHz	Pass	Inf	84.36M	78.081M	83.76M	77.721M
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	164.88M	157.121M	165.36M	157.121M
6185MHz	Pass	Inf	164.88M	157.121M	166.32M	157.121M
6345MHz	Pass	Inf	177.12M	157.361M	240M	157.361M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	239.52M	157.601M	259.68M	157.601M
6665MHz	Pass	Inf	166.32M	157.601M	247.44M	157.601M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	165.84M	157.361M	165.36M	157.361M
6985MHz	Pass	Inf	241.68M	157.841M	247.2M	157.601M

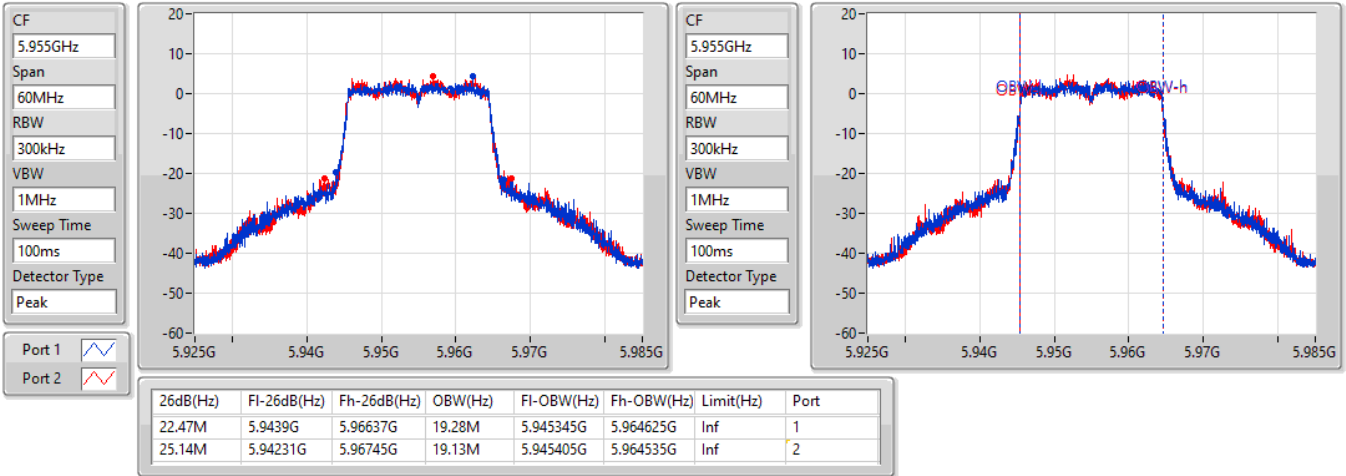
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
 Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5955MHz

13/04/2022

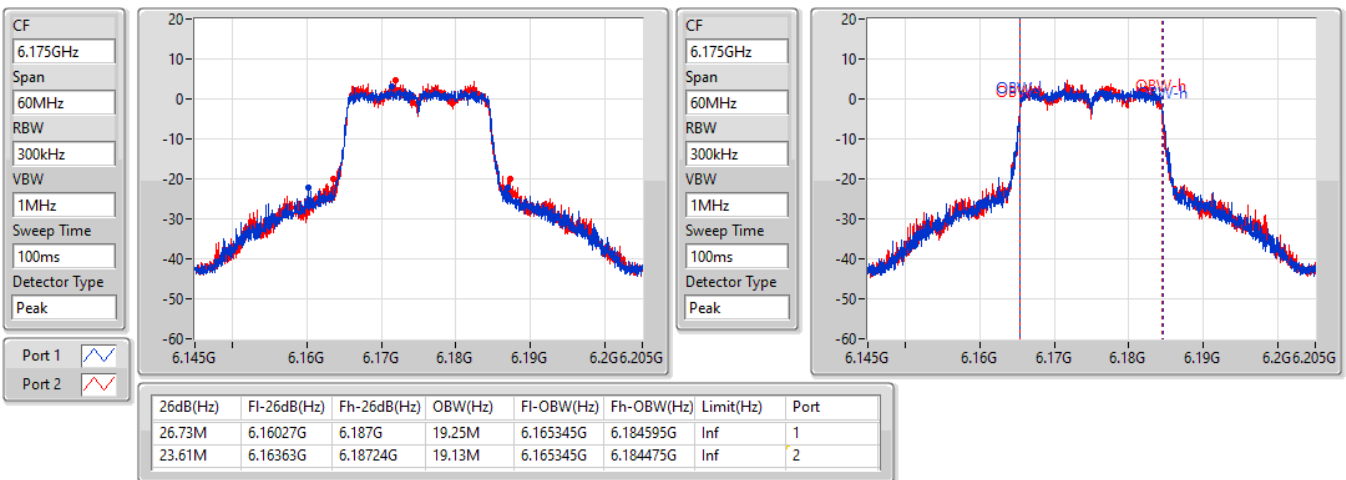


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6175MHz

13/04/2022

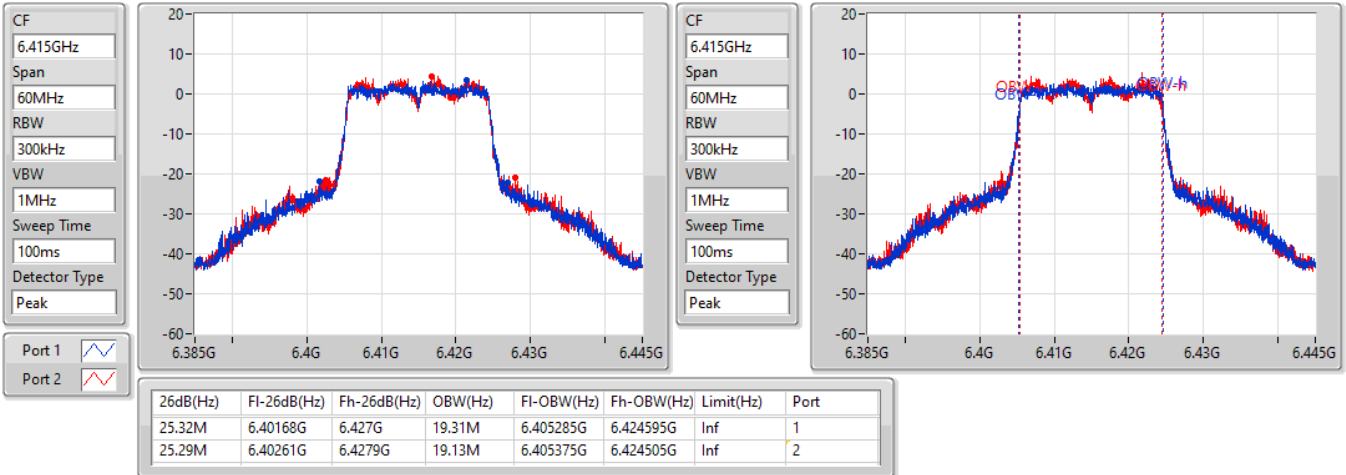


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6415MHz

13/04/2022

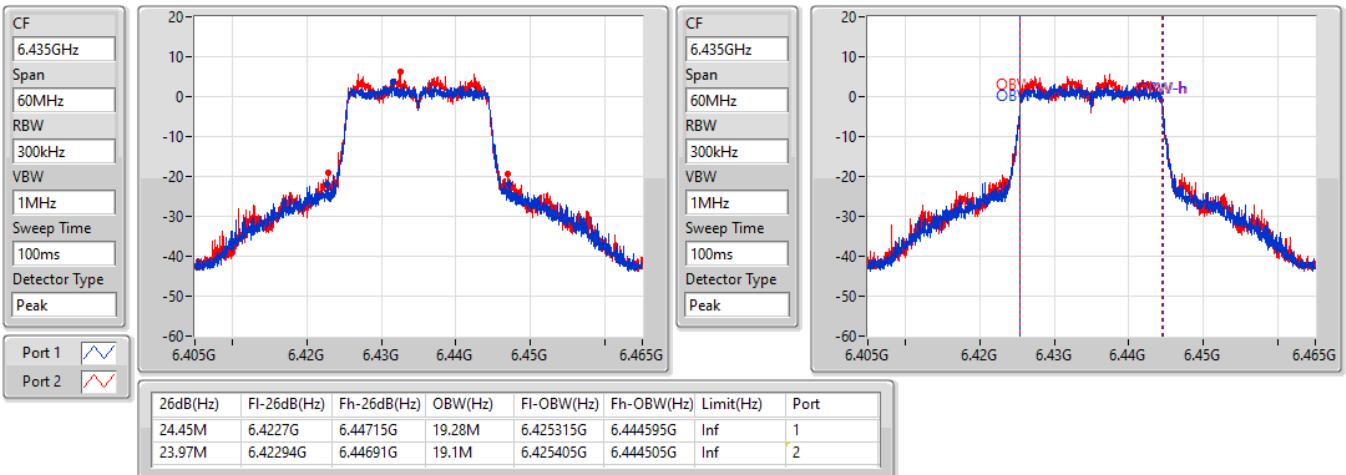


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6435MHz

13/04/2022

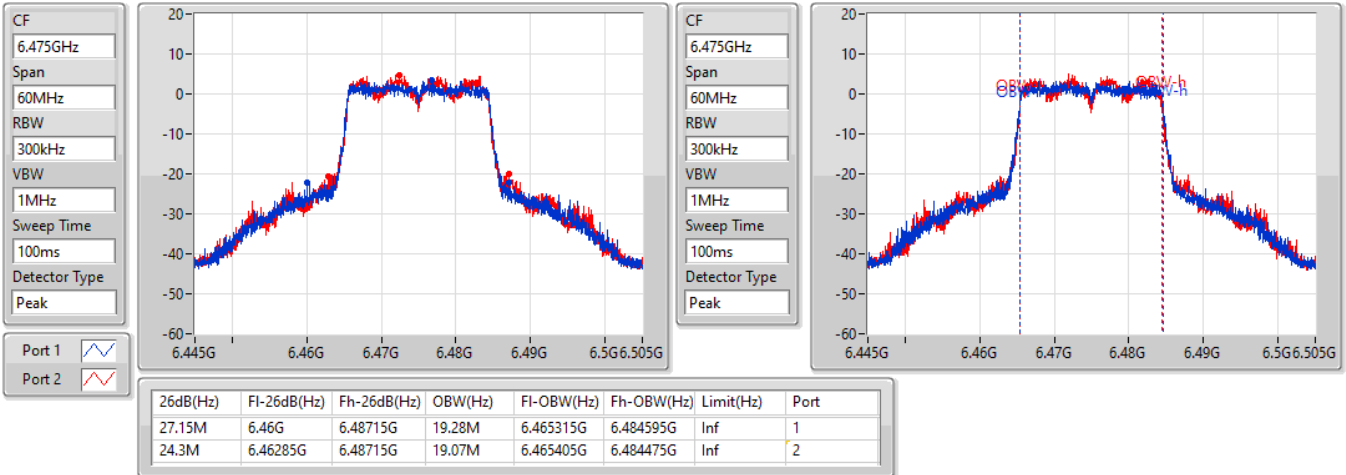


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6475MHz

13/04/2022

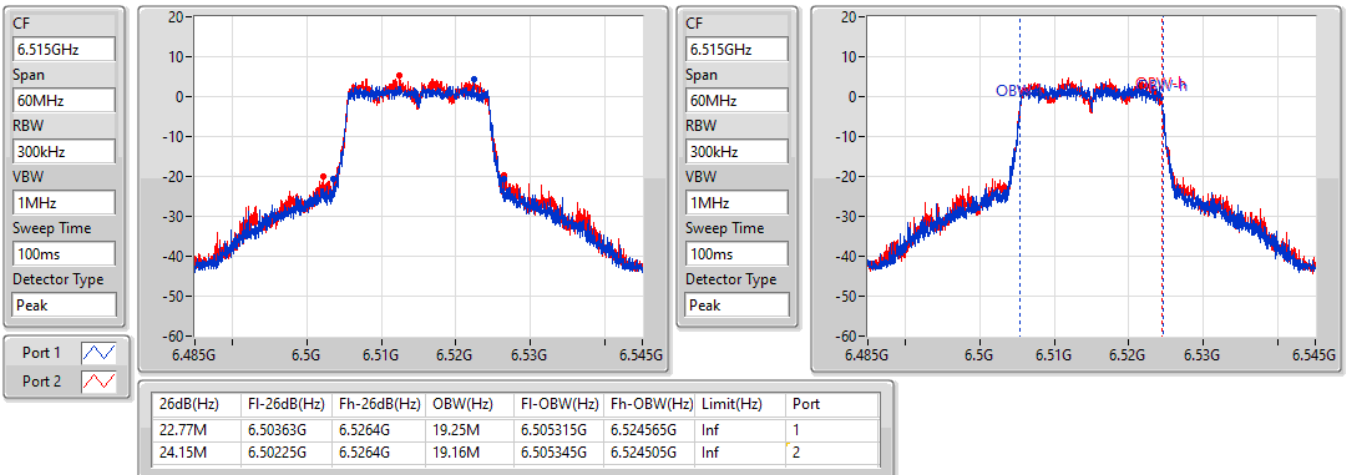


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6515MHz

13/04/2022

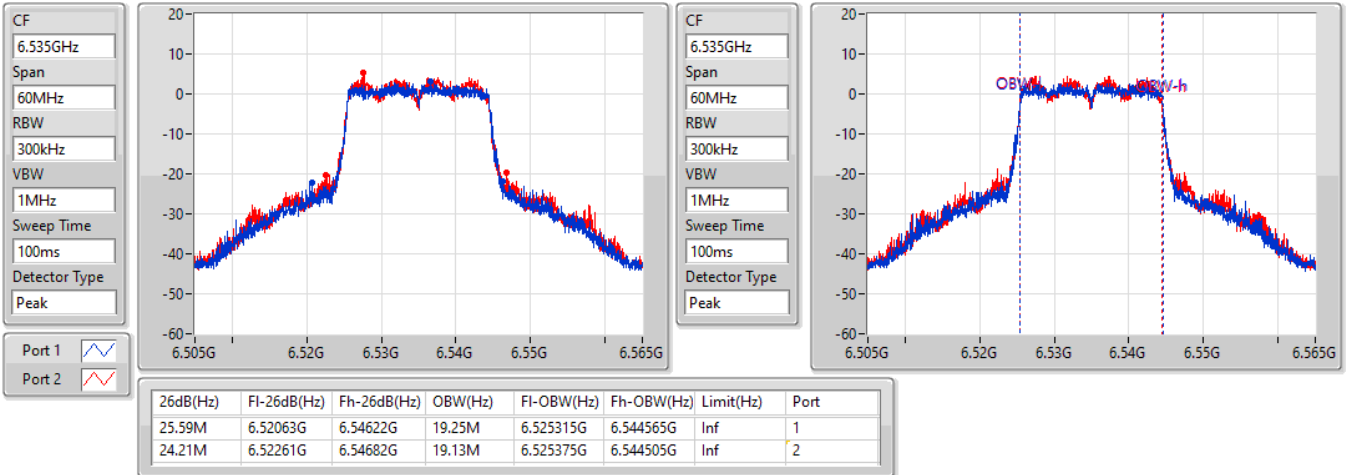


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6535MHz

13/04/2022

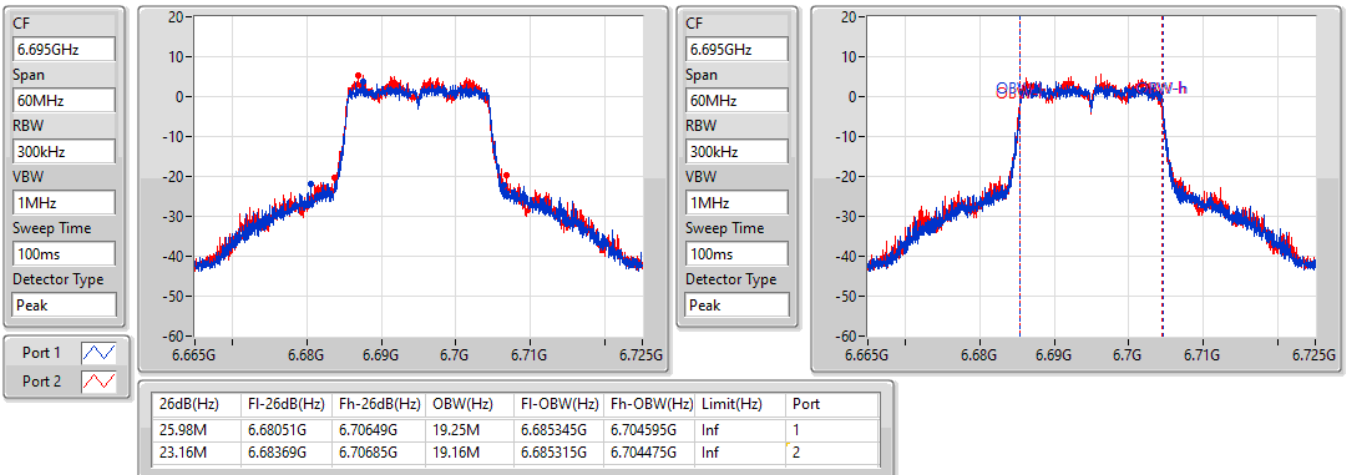


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6695MHz

13/04/2022

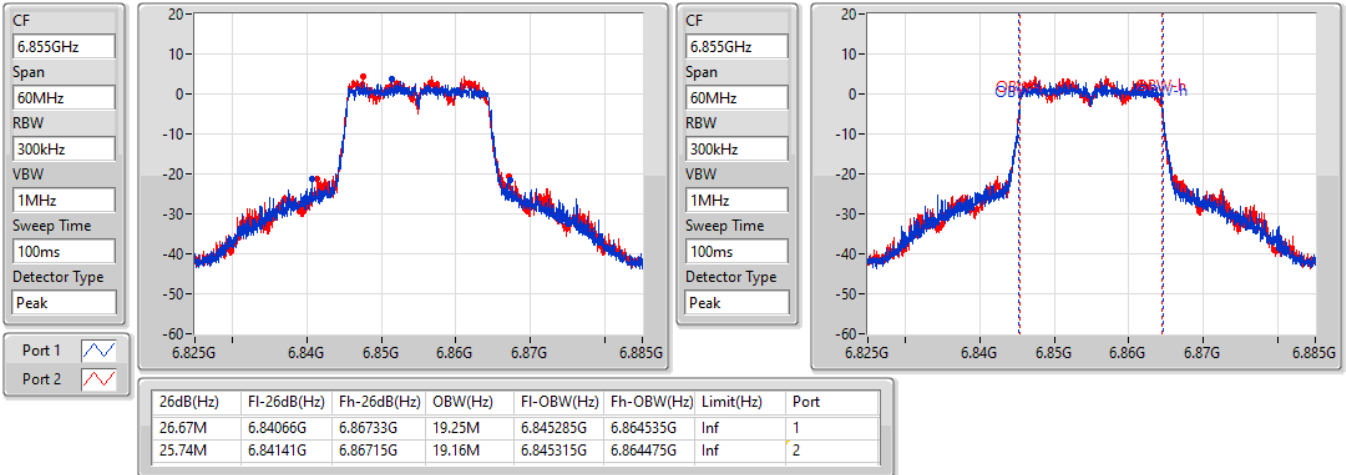


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6855MHz

13/04/2022

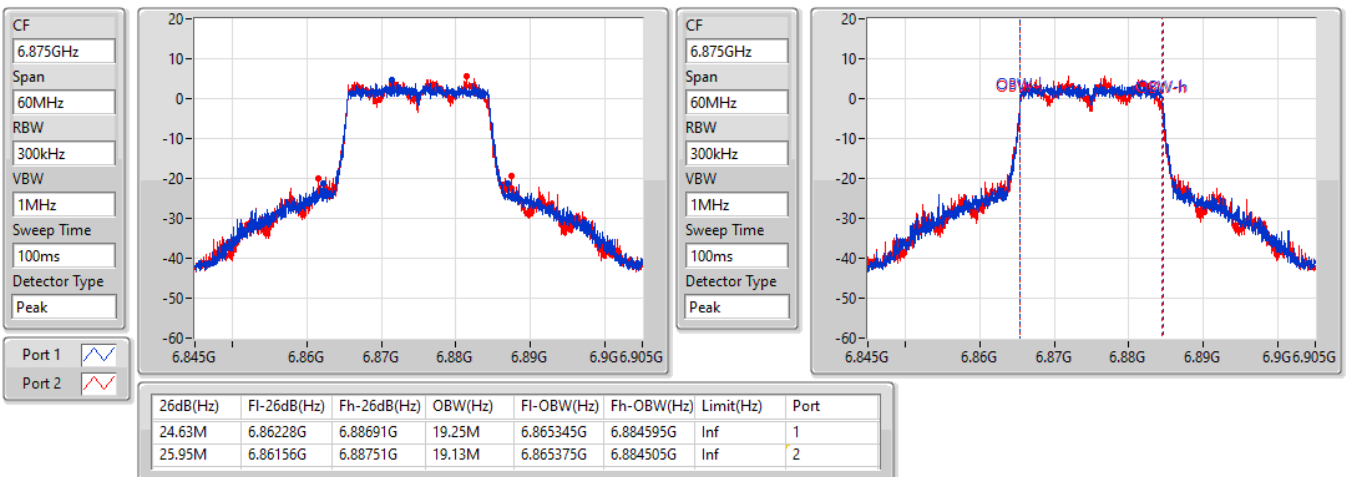


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6875MHz Straddle 6.525-6.875GHz

13/04/2022

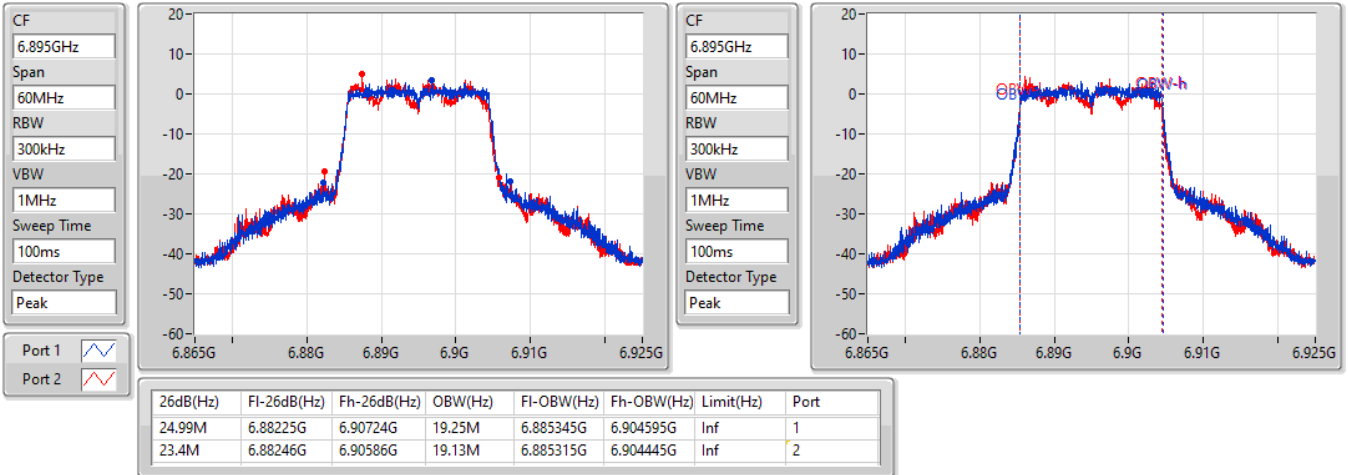


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6895MHz

13/04/2022

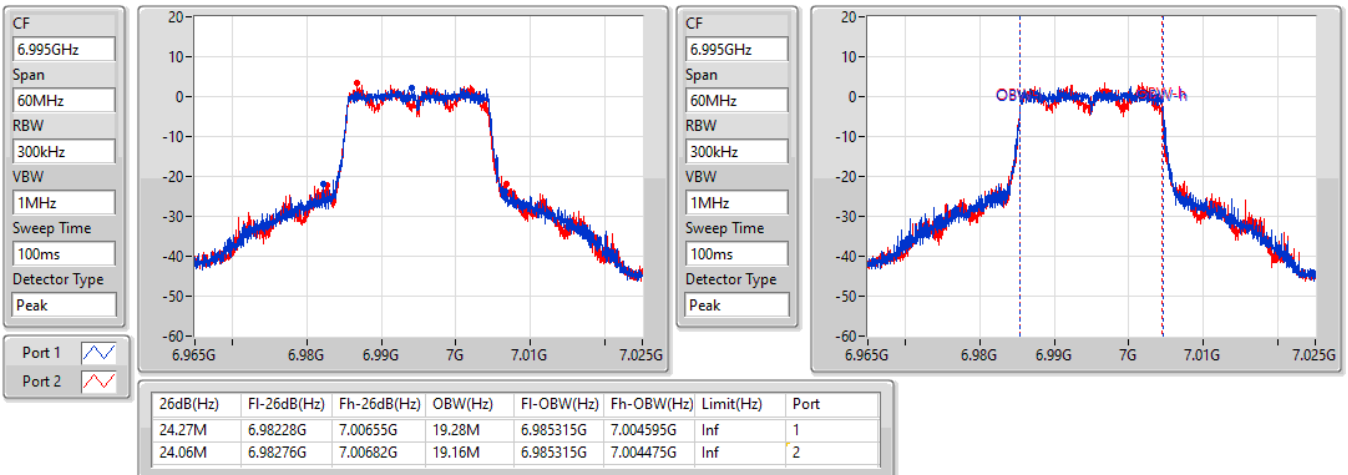


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6995MHz

13/04/2022



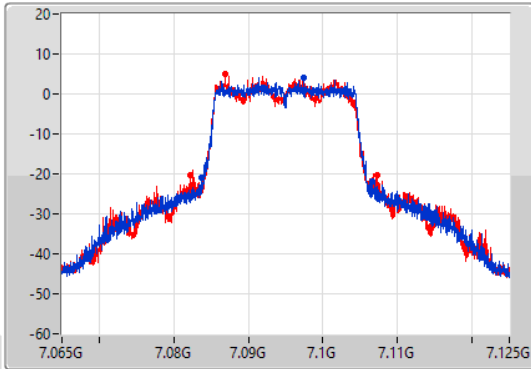
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

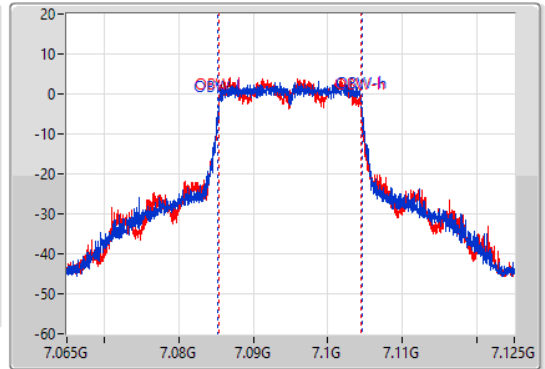
7095MHz

13/04/2022

CF
7.095GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
7.095GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.89M	7.08372G	7.10661G	19.31M	7.085285G	7.104595G	Inf	1
25.17M	7.08219G	7.10736G	19.16M	7.085315G	7.104475G	Inf	2

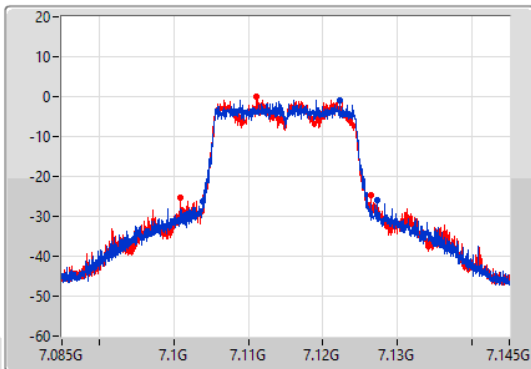
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

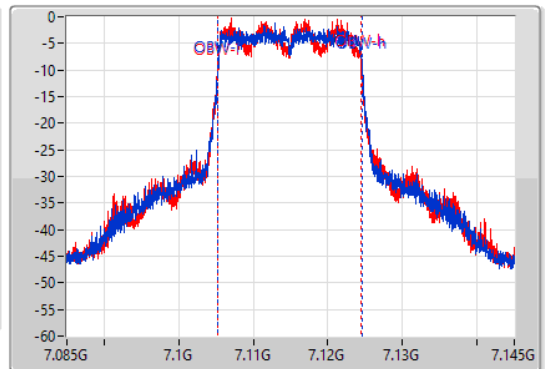
7115MHz

13/04/2022

CF
7.115GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
7.115GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.46M	7.10387G	7.12733G	19.31M	7.105285G	7.124595G	Inf	1
25.53M	7.10096G	7.12649G	19.16M	7.105285G	7.124445G	Inf	2

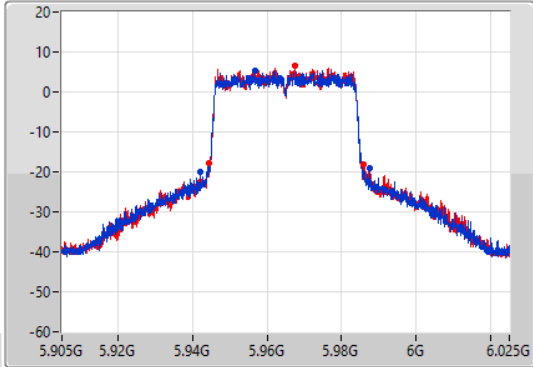
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

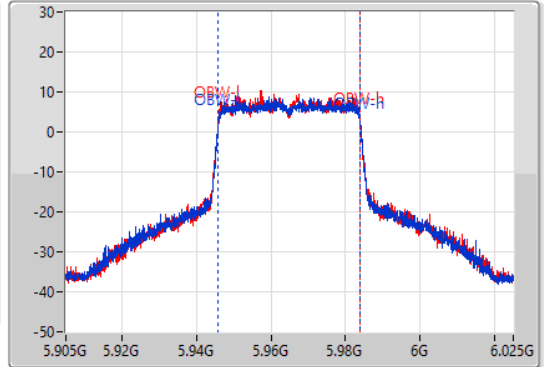
5965MHz

13/04/2022

CF
5.965GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.965GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
45.24M	5.9422G	5.98744G	38.141M	5.94587G	5.98401G	Inf	1
41.58M	5.94442G	5.986G	38.141M	5.94587G	5.98401G	Inf	2

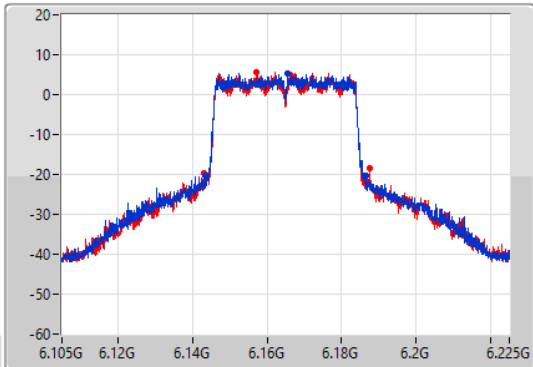
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

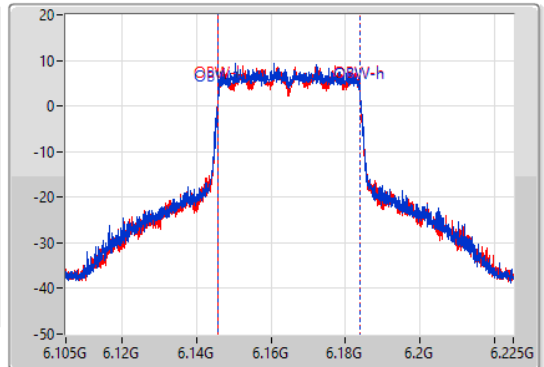
6165MHz

13/04/2022

CF
6.165GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.165GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



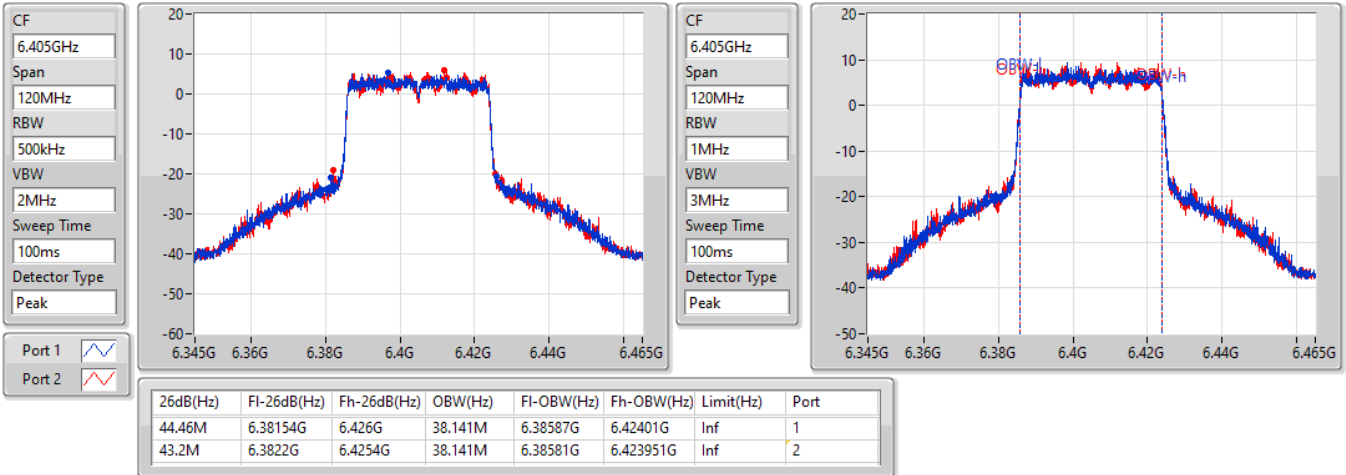
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.08M	6.14352G	6.1866G	38.141M	6.14587G	6.18401G	Inf	1
44.46M	6.14304G	6.1875G	38.081M	6.14587G	6.183951G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6405MHz

13/04/2022

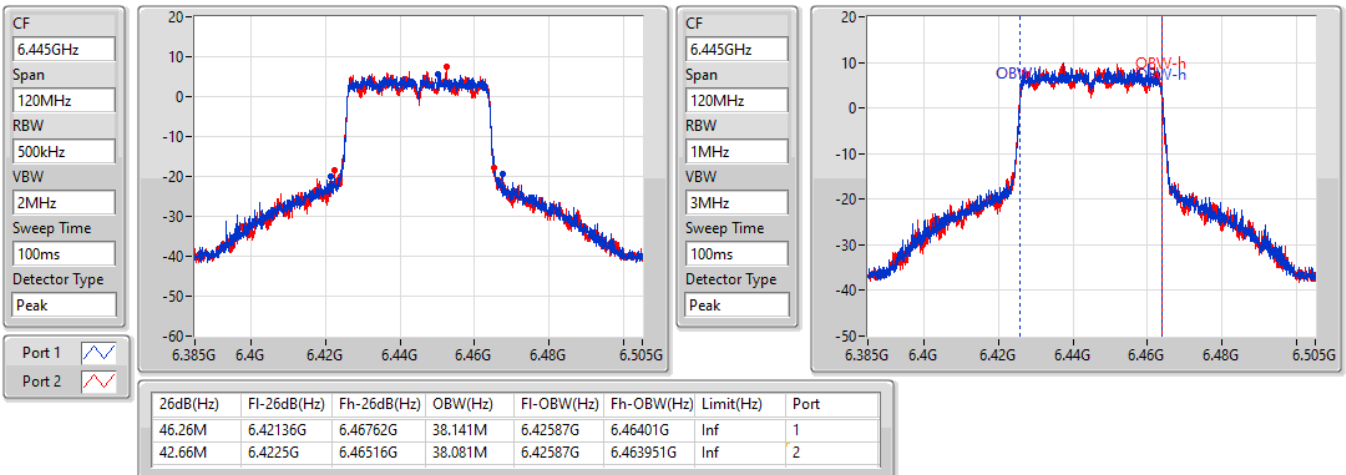


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6445MHz

13/04/2022



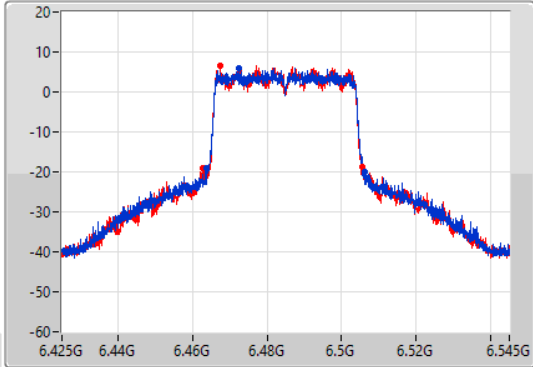
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

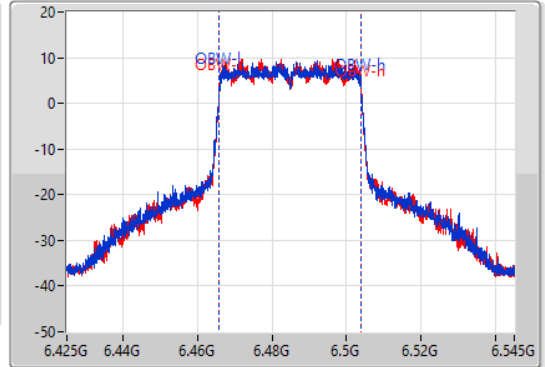
6485MHz

13/04/2022

CF
6.485GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.485GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.42M	6.46382G	6.50624G	38.081M	6.46587G	6.503951G	Inf	1
42.54M	6.46286G	6.5054G	38.081M	6.46587G	6.503951G	Inf	2

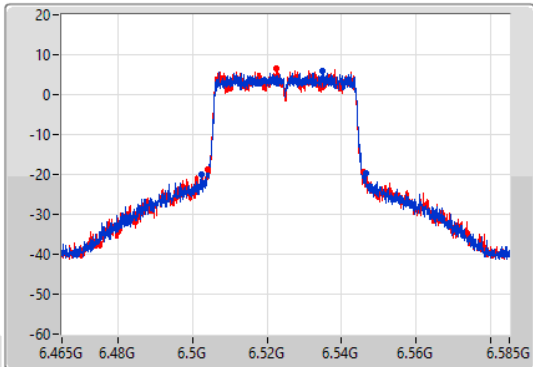
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

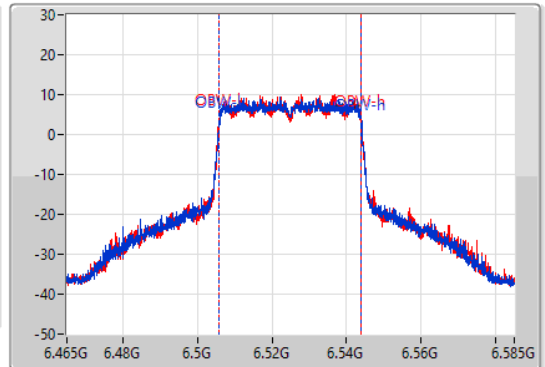
6525MHz Straddle 6.425-6.525GHz

13/04/2022

CF
6.525GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.525GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.16M	6.50232G	6.54648G	38.141M	6.50587G	6.54401G	Inf	1
41.88M	6.50412G	6.546G	38.081M	6.50587G	6.543951G	Inf	2

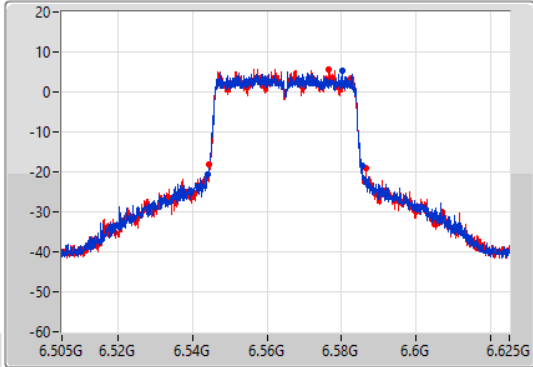
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

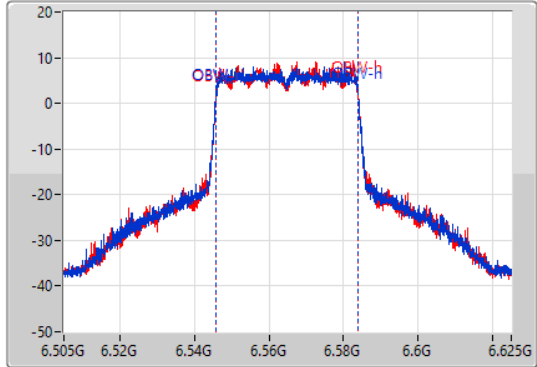
6565MHz

13/04/2022

CF
6.565GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.565GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.64M	6.544G	6.58564G	38.201M	6.54581G	6.58401G	Inf	1
42M	6.5446G	6.5866G	38.141M	6.54581G	6.583951G	Inf	2

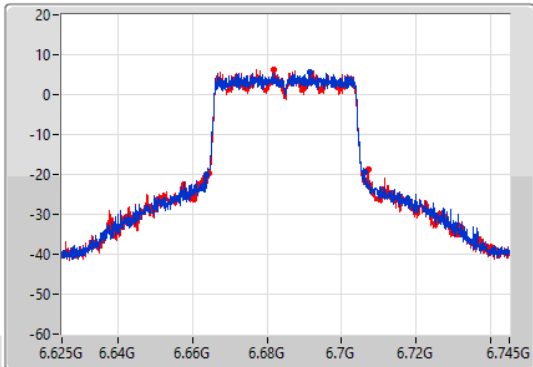
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

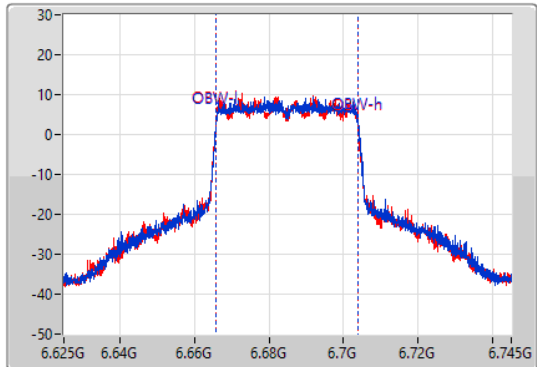
6685MHz

13/04/2022

CF
6.685GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.685GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



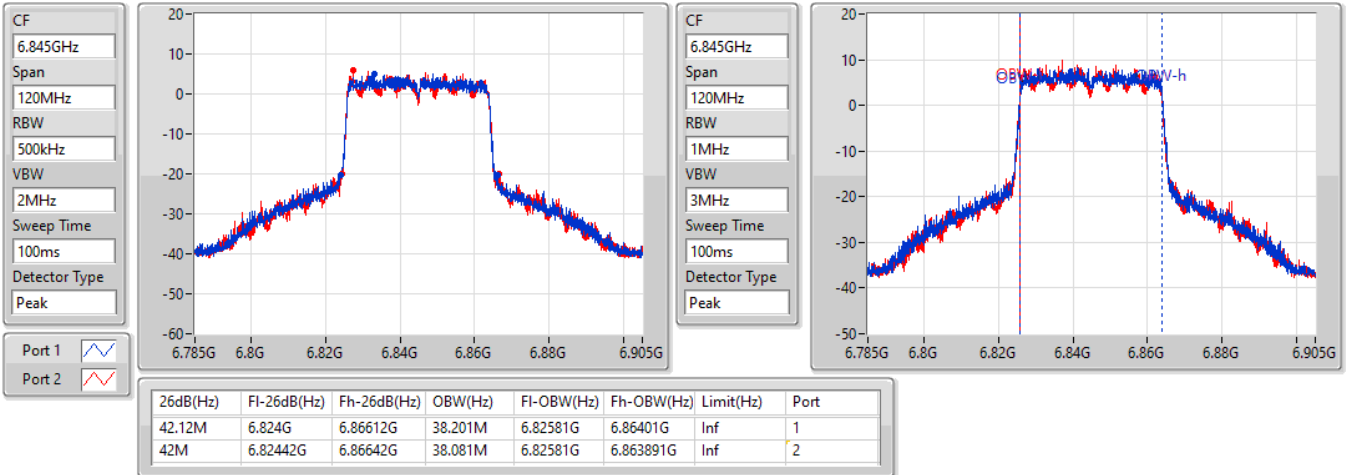
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.48M	6.66364G	6.70612G	38.141M	6.66587G	6.70401G	Inf	1
42.72M	6.66442G	6.70714G	38.081M	6.66581G	6.703891G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6845MHz

13/04/2022

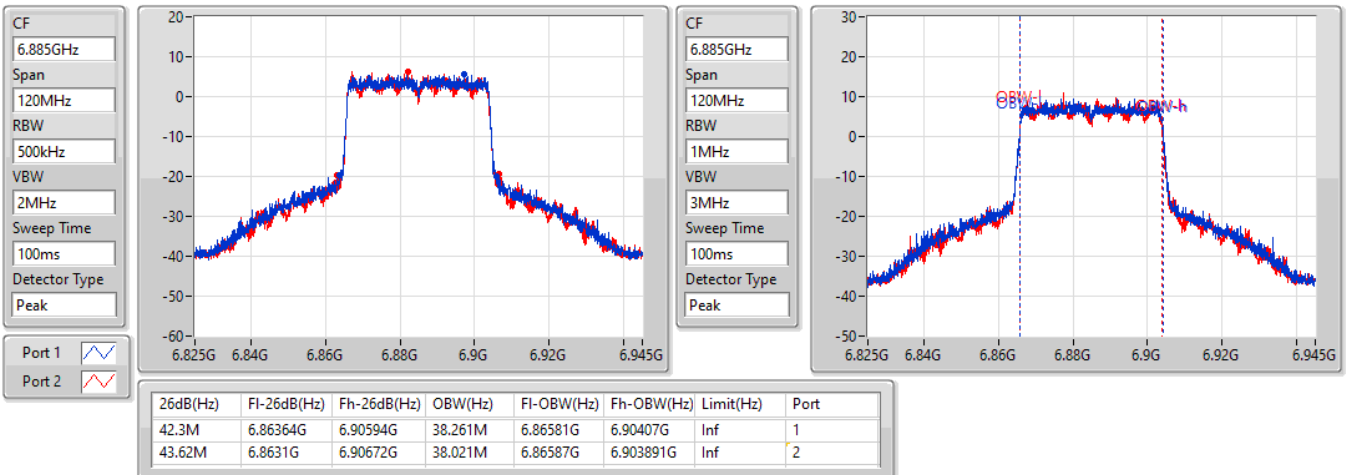


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6885MHz Straddle 6.525-6.875GHz

13/04/2022

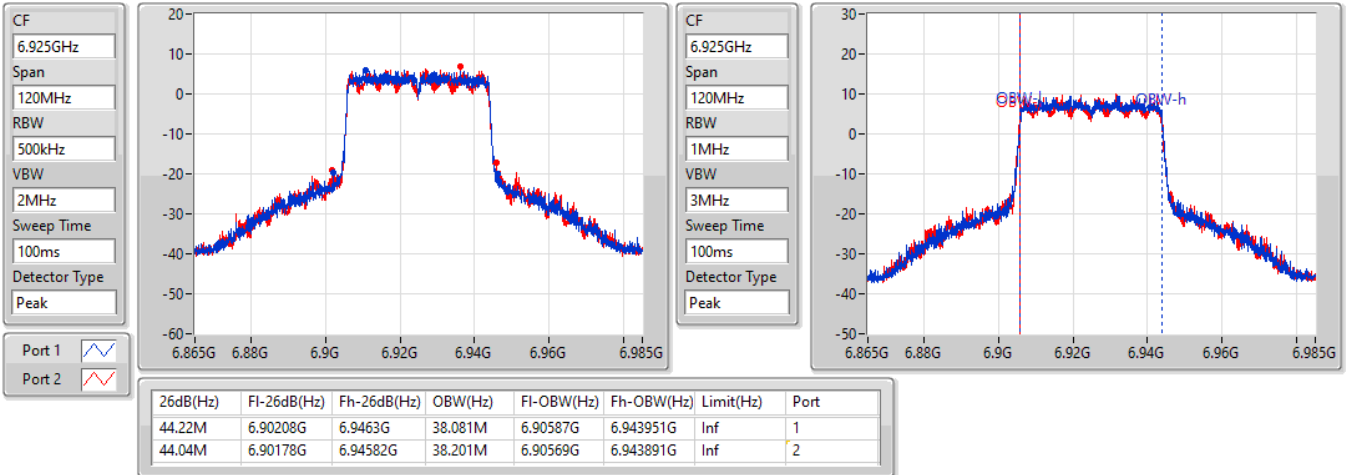


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6925MHz

13/04/2022

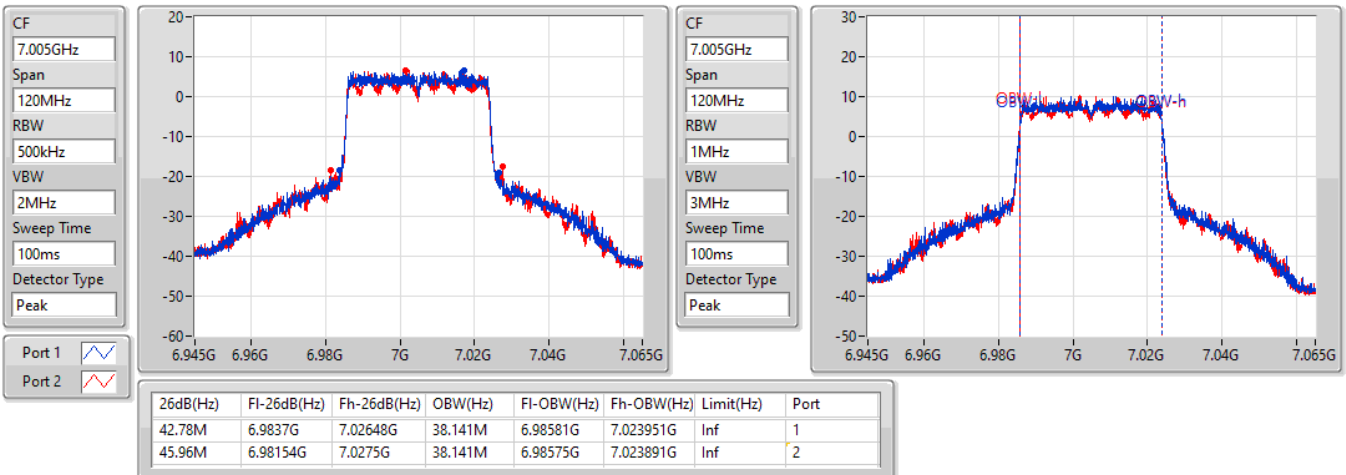


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

7005MHz

13/04/2022



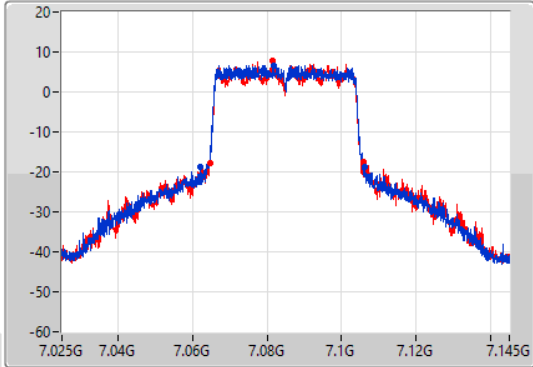
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

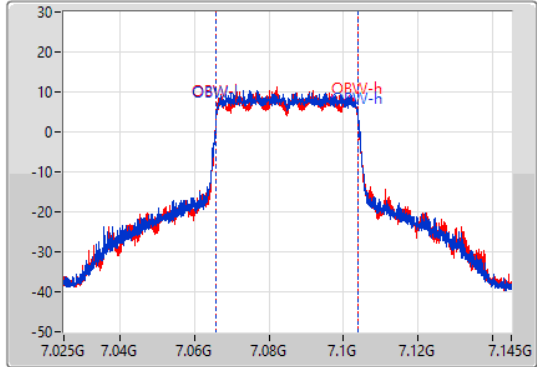
7085MHz

13/04/2022

CF
7.085GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
7.085GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.16M	7.06214G	7.1063G	38.141M	7.06587G	7.10401G	Inf	1
41.28M	7.06466G	7.10594G	38.141M	7.06581G	7.103951G	Inf	2

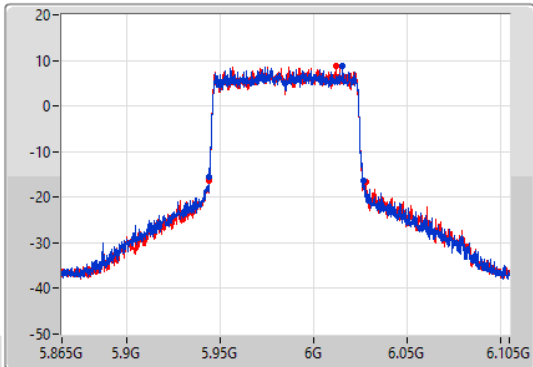
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

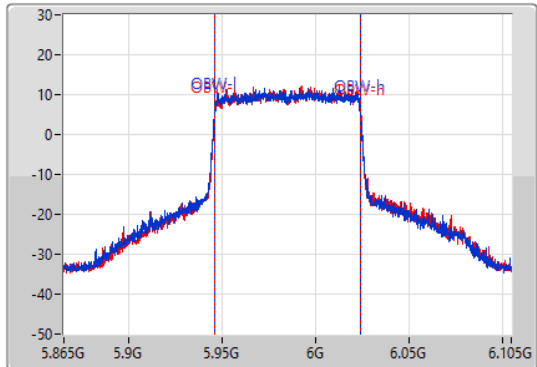
5985MHz

13/04/2022

CF
5.985GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.985GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



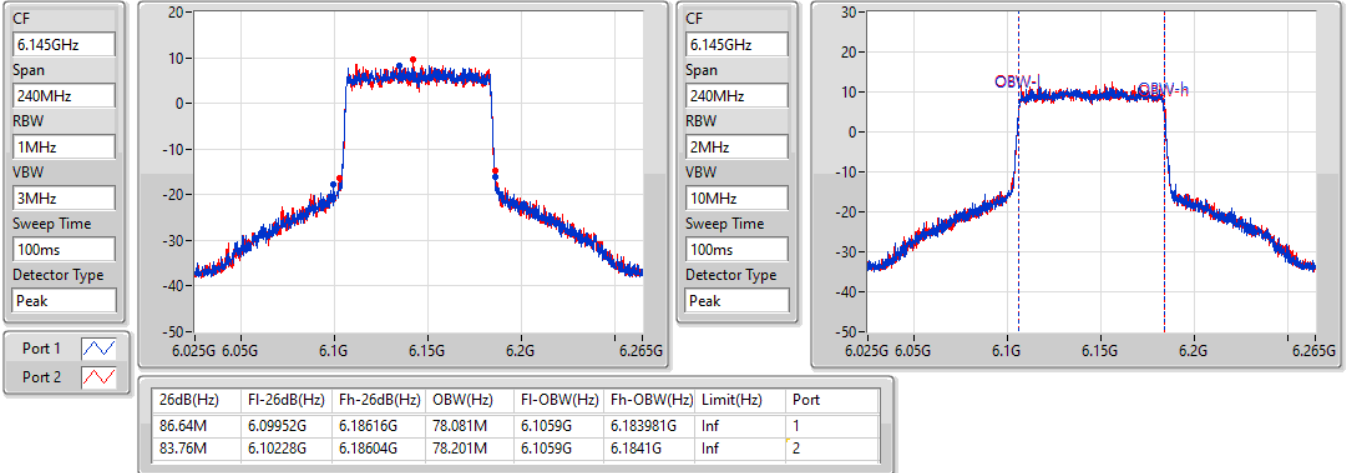
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.68M	5.94396G	6.02664G	77.961M	5.946019G	6.023981G	Inf	1
84.6M	5.94384G	6.02844G	77.961M	5.946019G	6.023981G	Inf	2

802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6145MHz

13/04/2022

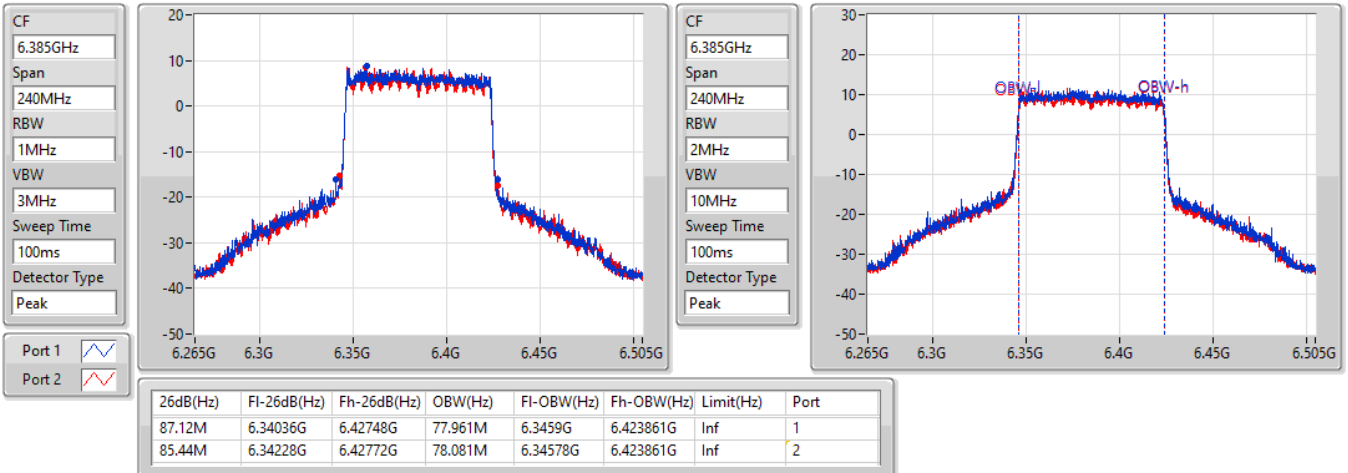


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6385MHz

13/04/2022



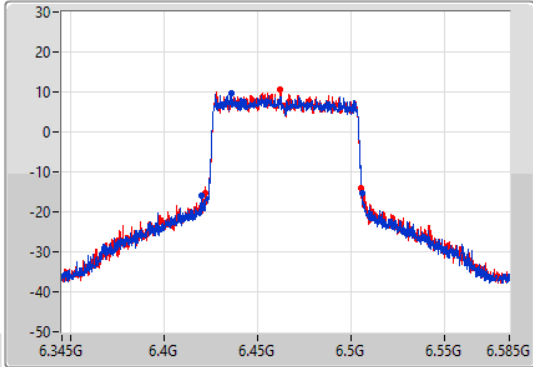
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

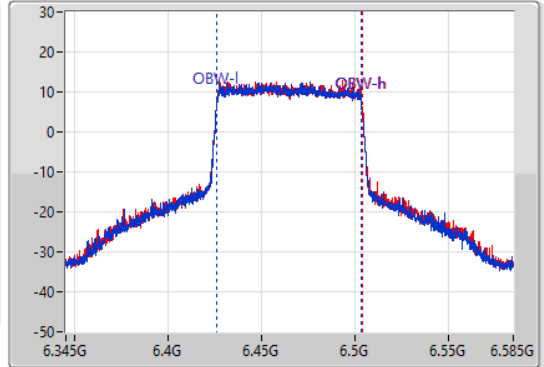
6465MHz

13/04/2022

CF
6.465GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.465GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
85.8M	6.42012G	6.50592G	77.841M	6.4259G	6.503741G	Inf	1
83.88M	6.42168G	6.50556G	77.961M	6.4259G	6.503861G	Inf	2

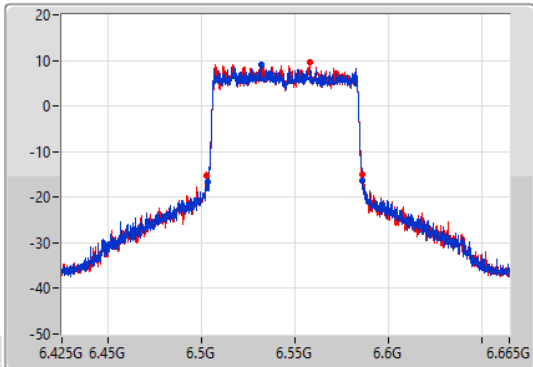
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

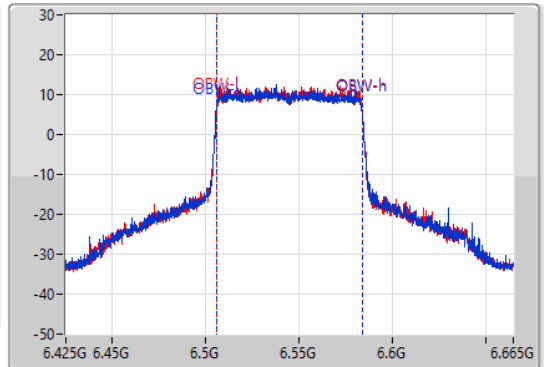
6545MHz Straddle 6.425-6.525GHz

13/04/2022

CF
6.545GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.545GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.68M	6.50348G	6.58616G	78.081M	6.50578G	6.583861G	Inf	1
83.88M	6.50228G	6.58616G	77.841M	6.506019G	6.583861G	Inf	2

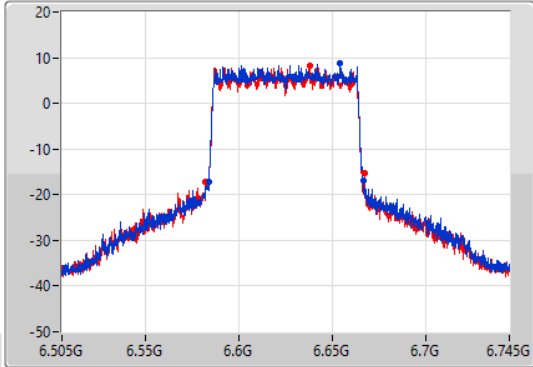
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

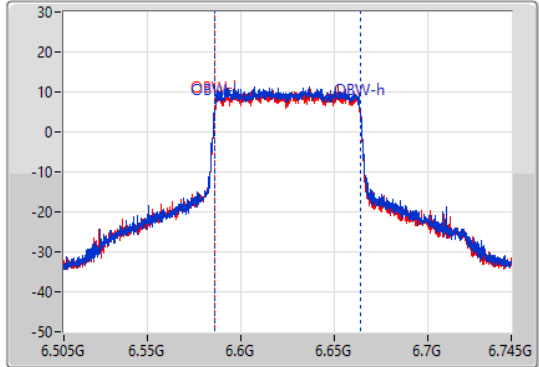
6625MHz

13/04/2022

CF
6.625GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.625GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.28M	6.58372G	6.667G	78.081M	6.5859G	6.663981G	Inf	1
85.68M	6.58168G	6.66736G	78.081M	6.5859G	6.663981G	Inf	2

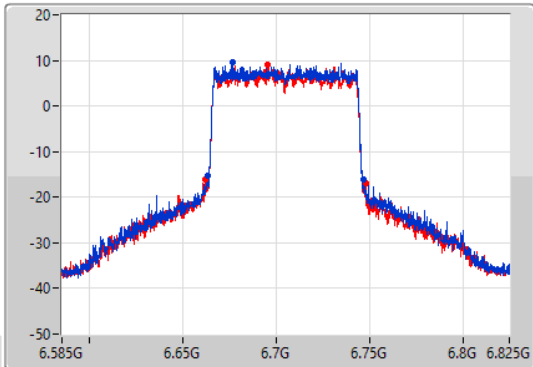
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

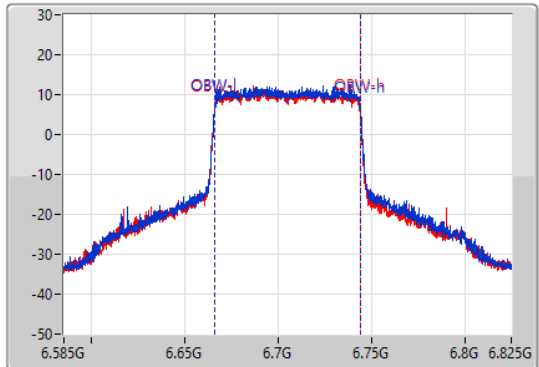
6705MHz

13/04/2022

CF
6.705GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.705GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.4M	6.66336G	6.74676G	78.081M	6.6659G	6.743981G	Inf	1
85.8M	6.66216G	6.74796G	78.081M	6.66578G	6.743861G	Inf	2

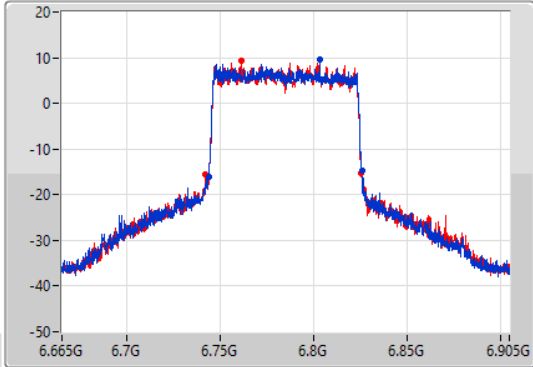
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

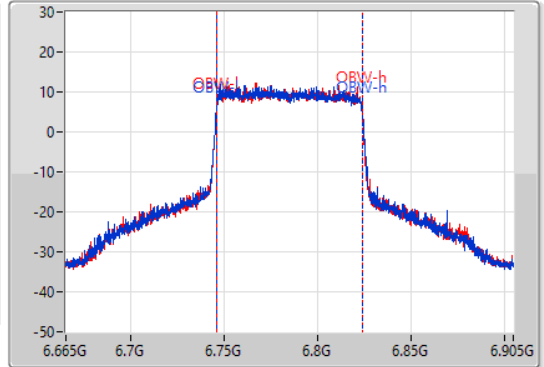
6785MHz

13/04/2022

CF
6.785GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.785GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.2M	6.74372G	6.82592G	78.081M	6.74578G	6.823861G	Inf	1
83.52M	6.74216G	6.82568G	78.081M	6.74578G	6.823861G	Inf	2

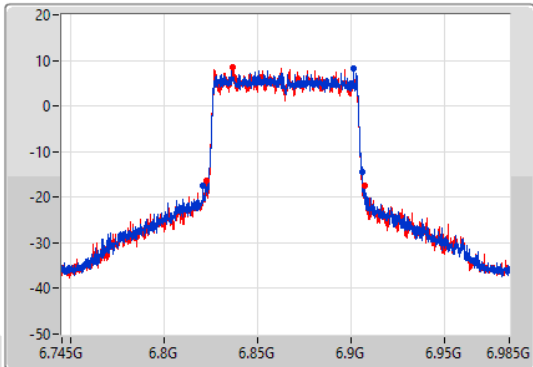
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

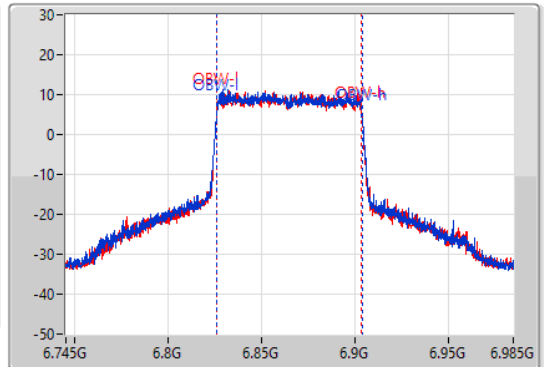
6865MHz Straddle 6.525-6.875GHz

13/04/2022

CF
6.865GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.865GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



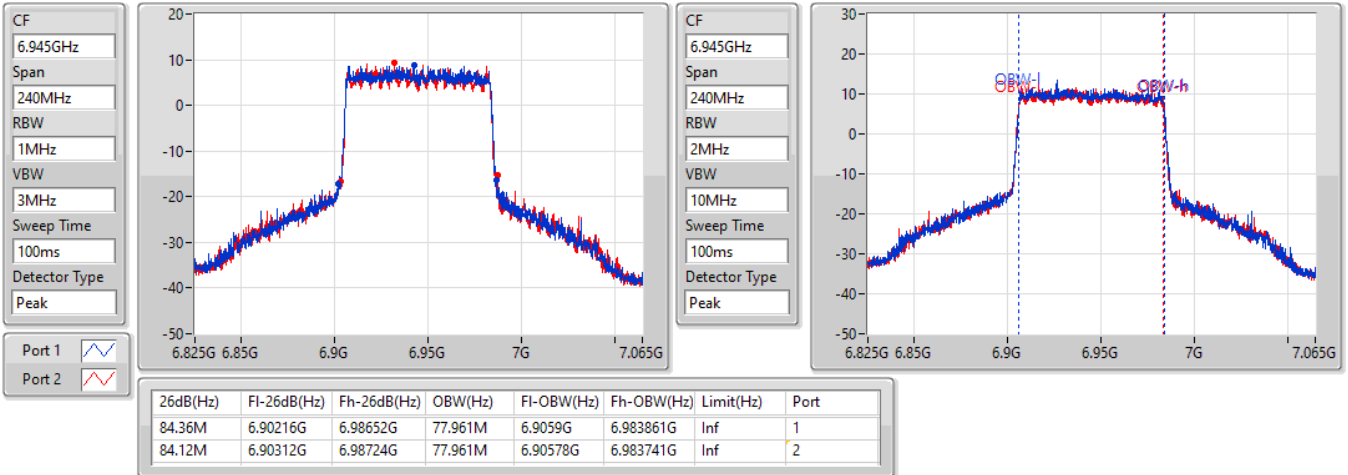
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
85.44M	6.82072G	6.90616G	77.961M	6.8259G	6.903861G	Inf	1
84.84M	6.82228G	6.90712G	77.961M	6.82578G	6.903741G	Inf	2

802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6945MHz

13/04/2022

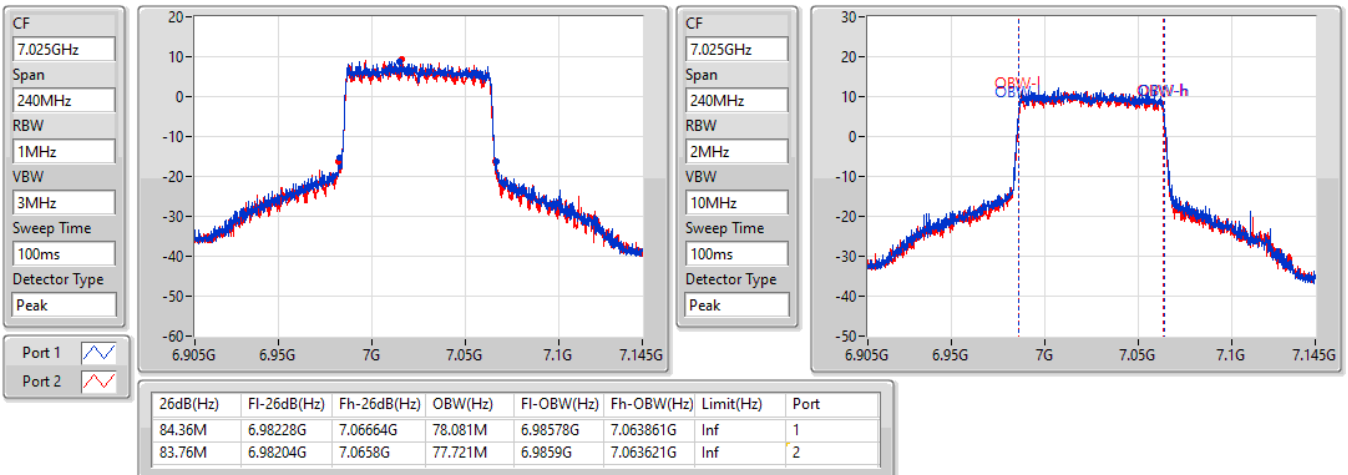


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

7025MHz

13/04/2022

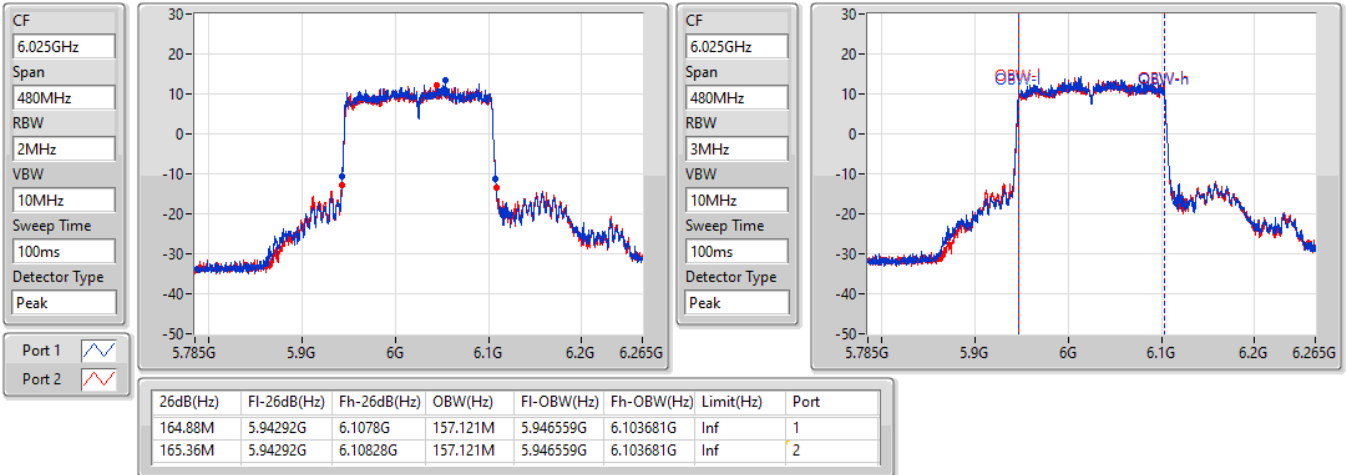


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6025MHz

13/04/2022

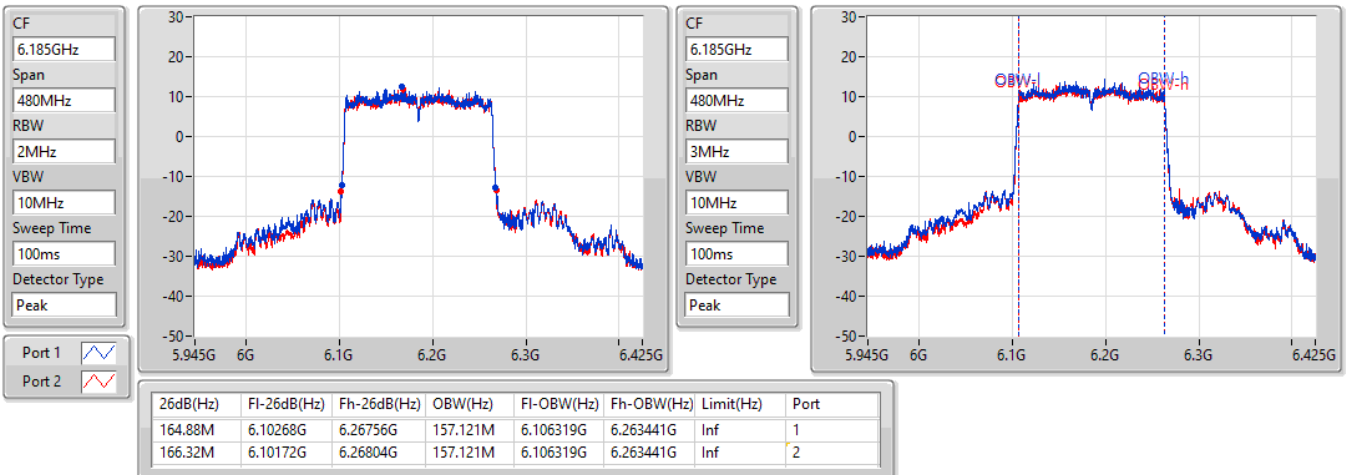


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6185MHz

13/04/2022

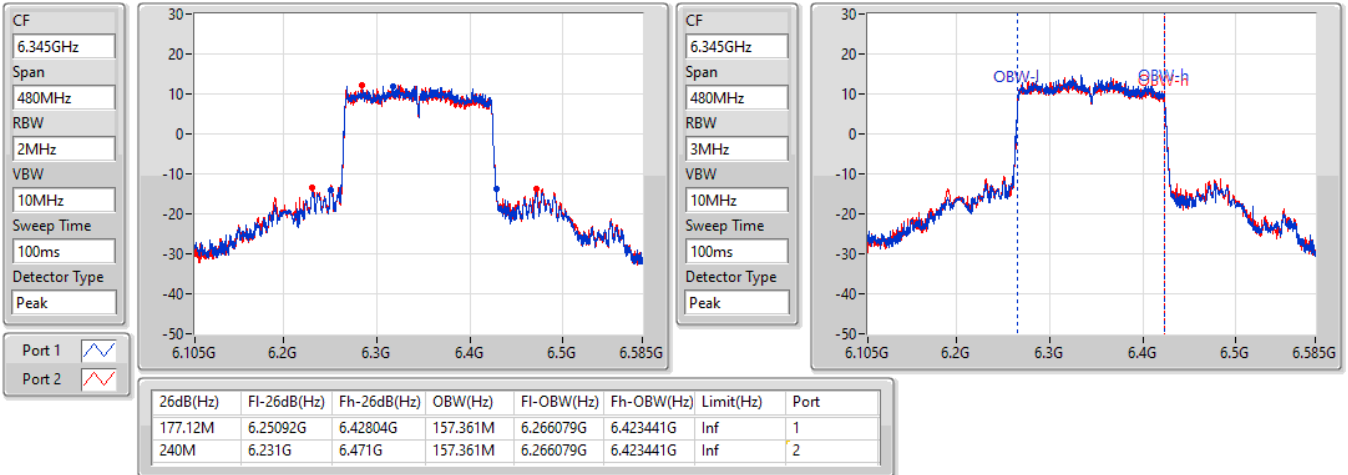


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6345MHz

13/04/2022

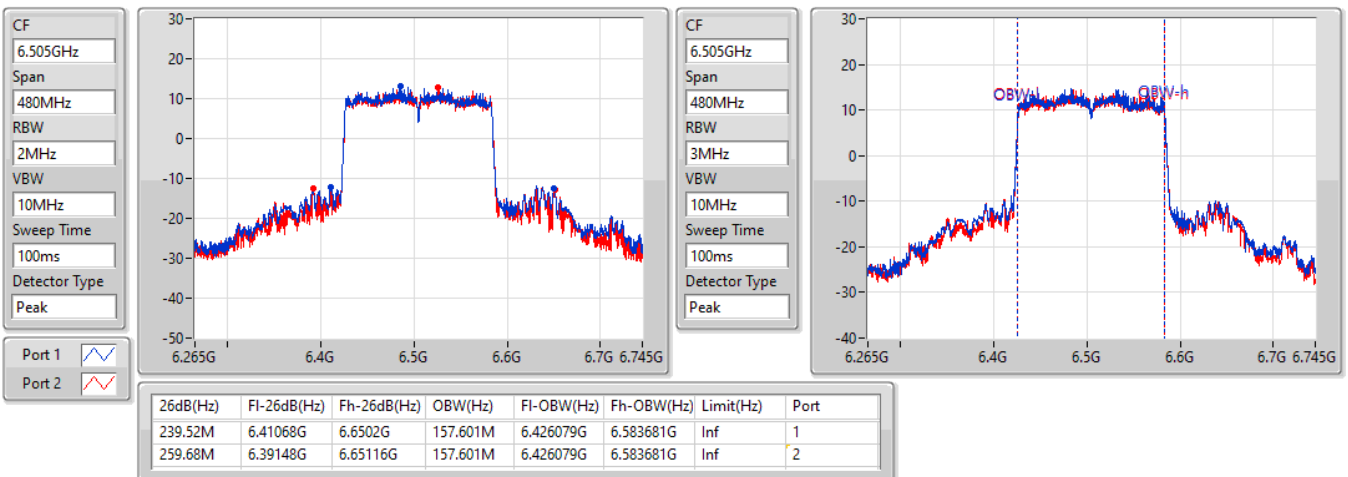


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6505MHz Straddle 6.425-6.525GHz

13/04/2022



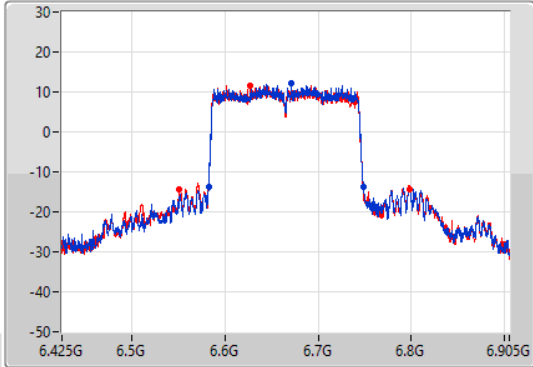
802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

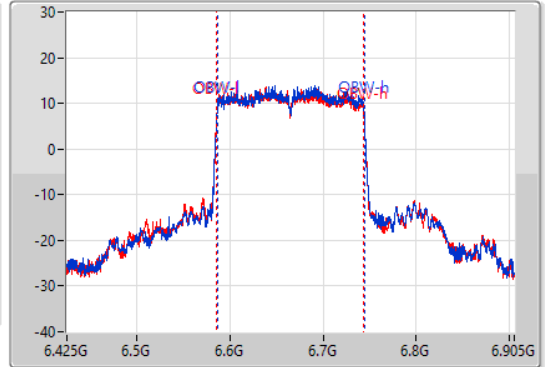
6665MHz

13/04/2022

CF
6.665GHz
Span
480MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.665GHz
Span
480MHz
RBW
3MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
166.32M	6.5822G	6.74852G	157.601M	6.586319G	6.743921G	Inf	1
247.44M	6.55124G	6.79868G	157.601M	6.586079G	6.743681G	Inf	2

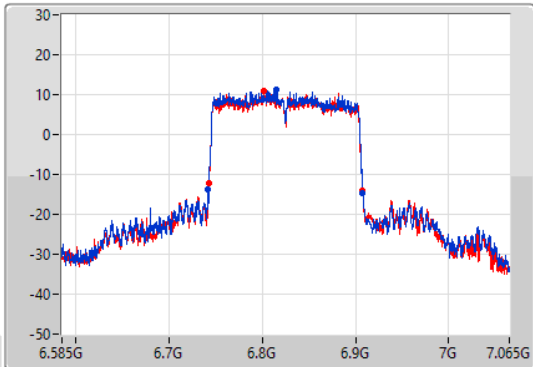
802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

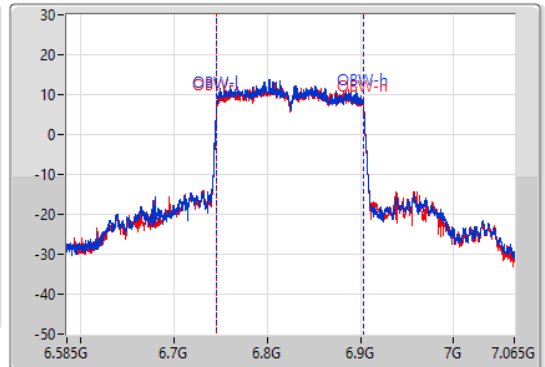
6825MHz Straddle 6.525-6.875GHz

13/04/2022

CF
6.825GHz
Span
480MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.825GHz
Span
480MHz
RBW
3MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
165.84M	6.74196G	6.9078G	157.361M	6.746079G	6.903441G	Inf	1
165.36M	6.74244G	6.9078G	157.361M	6.746079G	6.903441G	Inf	2

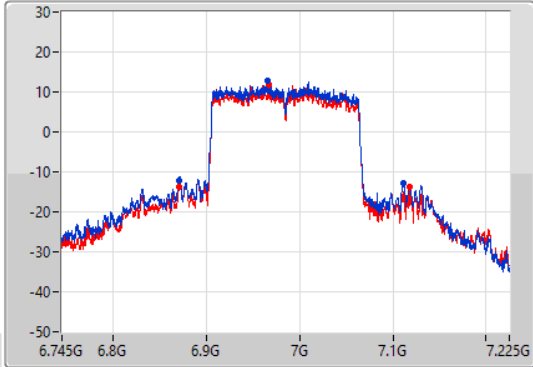
802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

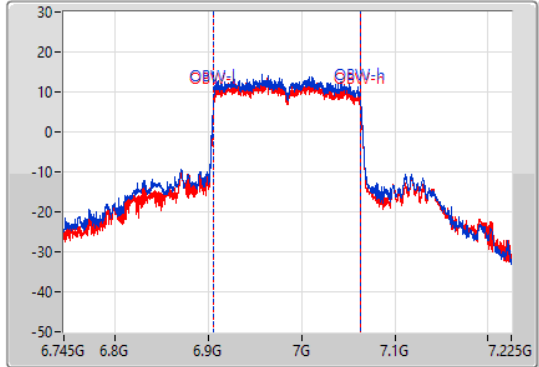
6985MHz



13/04/2022

CF
6.985GHz
Span
480MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.985GHz
Span
480MHz
RBW
3MHz
VBW
10MHz
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
241.68M	6.87004G	7.11172G	157.841M	6.9056G	7.063441G	Inf	1
247.2M	6.87052G	7.11772G	157.601M	6.90584G	7.063441G	Inf	2

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	26.49M	19.31M	19M3D1D	23.1M	19.13M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	44.1M	38.201M	38M2D1D	41.28M	38.141M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	84.96M	78.081M	78M1D1D	82.92M	77.961M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	261.36M	157.841M	158MD1D	165.36M	157.121M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	26.94M	19.28M	19M3D1D	23.43M	19.07M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	45.42M	38.201M	38M2D1D	41.04M	38.081M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	84.96M	78.081M	78M1D1D	82.44M	77.841M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	177.36M	157.601M	158MD1D	165.6M	157.361M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	27.72M	19.31M	19M3D1D	23.1M	19.07M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	44.52M	38.141M	38M1D1D	40.86M	38.021M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	85.56M	78.081M	78M1D1D	82.44M	77.841M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	261.84M	158.081M	158MD1D	209.28M	157.601M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	26.7M	19.31M	19M3D1D	21.96M	19.16M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	44.88M	38.201M	38M2D1D	41.04M	38.081M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	84.36M	78.081M	78M1D1D	82.2M	77.841M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	300M	158.321M	158MD1D	249.36M	158.321M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5955MHz	Pass	Inf	23.1M	19.25M	23.1M	19.16M
6175MHz	Pass	Inf	26.49M	19.31M	23.43M	19.13M
6415MHz	Pass	Inf	23.61M	19.28M	23.22M	19.13M
6435MHz	Pass	Inf	26.94M	19.25M	23.43M	19.1M
6475MHz	Pass	Inf	24.87M	19.25M	24.69M	19.07M
6515MHz	Pass	Inf	25.98M	19.28M	24.87M	19.1M
6535MHz	Pass	Inf	27.72M	19.31M	24.78M	19.07M
6695MHz	Pass	Inf	26.22M	19.28M	23.25M	19.1M
6855MHz	Pass	Inf	23.1M	19.25M	25.02M	19.13M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	25.86M	19.28M	23.55M	19.07M
6895MHz	Pass	Inf	22.35M	19.28M	21.96M	19.16M
6995MHz	Pass	Inf	24M	19.25M	22.98M	19.19M
7095MHz	Pass	Inf	26.7M	19.31M	22.62M	19.19M
7115MHz	Pass	Inf	24.33M	19.25M	22.68M	19.16M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5965MHz	Pass	Inf	43.92M	38.201M	42.18M	38.141M
6165MHz	Pass	Inf	44.1M	38.201M	41.28M	38.141M
6405MHz	Pass	Inf	42.96M	38.201M	41.58M	38.141M
6445MHz	Pass	Inf	45.42M	38.081M	42.48M	38.081M
6485MHz	Pass	Inf	42.48M	38.141M	42.3M	38.081M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	42.18M	38.201M	41.04M	38.081M
6565MHz	Pass	Inf	43.2M	38.141M	43.62M	38.081M
6685MHz	Pass	Inf	42.84M	38.141M	43.08M	38.141M
6845MHz	Pass	Inf	41.34M	38.141M	44.52M	38.141M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	44.16M	38.141M	40.86M	38.021M
6925MHz	Pass	Inf	41.76M	38.141M	42.72M	38.141M
7005MHz	Pass	Inf	43.14M	38.141M	44.88M	38.081M
7085MHz	Pass	Inf	41.82M	38.201M	41.04M	38.081M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5985MHz	Pass	Inf	84.12M	77.961M	84.96M	77.961M
6145MHz	Pass	Inf	83.04M	78.081M	82.92M	77.961M
6385MHz	Pass	Inf	82.92M	77.961M	84.12M	78.081M
6465MHz	Pass	Inf	82.44M	77.961M	83.88M	77.841M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	84.96M	78.081M	82.8M	78.081M
6625MHz	Pass	Inf	82.56M	78.081M	85.56M	78.081M
6705MHz	Pass	Inf	82.44M	77.841M	83.52M	77.961M
6785MHz	Pass	Inf	84.24M	77.961M	85.32M	78.081M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	83.28M	77.961M	84.36M	78.081M
6945MHz	Pass	Inf	84.24M	78.081M	83.88M	77.841M
7025MHz	Pass	Inf	82.2M	77.961M	84.36M	77.961M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	240.48M	157.601M	260.16M	157.601M
6185MHz	Pass	Inf	196.8M	157.601M	261.36M	157.841M
6345MHz	Pass	Inf	165.36M	157.121M	196.32M	157.361M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	165.6M	157.361M	177.36M	157.601M
6665MHz	Pass	Inf	209.28M	157.601M	247.2M	157.601M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	261.6M	158.081M	261.84M	157.841M
6985MHz	Pass	Inf	300M	158.321M	249.36M	158.321M

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

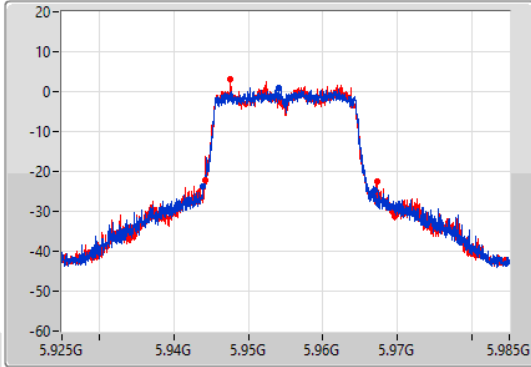
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

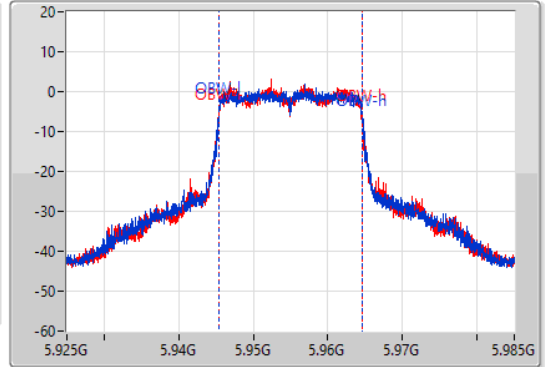
5955MHz

13/04/2022

CF: 5.955GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.955GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.1M	5.94393G	5.96703G	19.25M	5.945375G	5.964625G	Inf	1
23.1M	5.94423G	5.96733G	19.16M	5.945375G	5.964535G	Inf	2

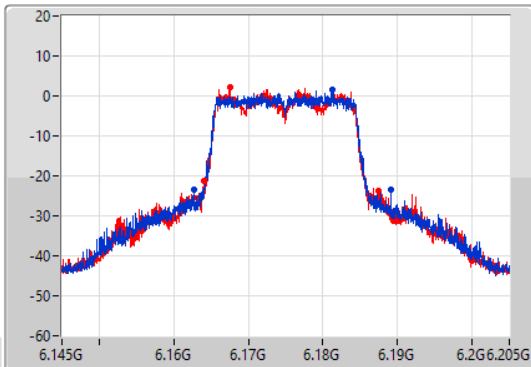
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

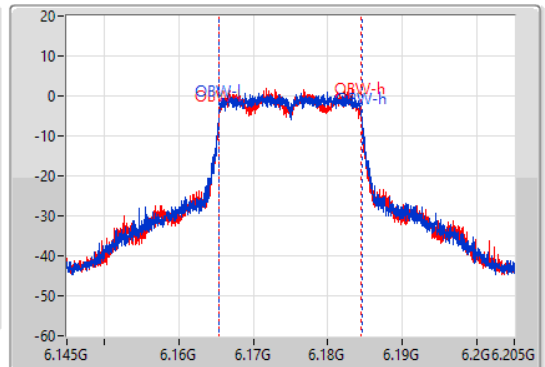
6175MHz

13/04/2022

CF: 6.175GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 6.175GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



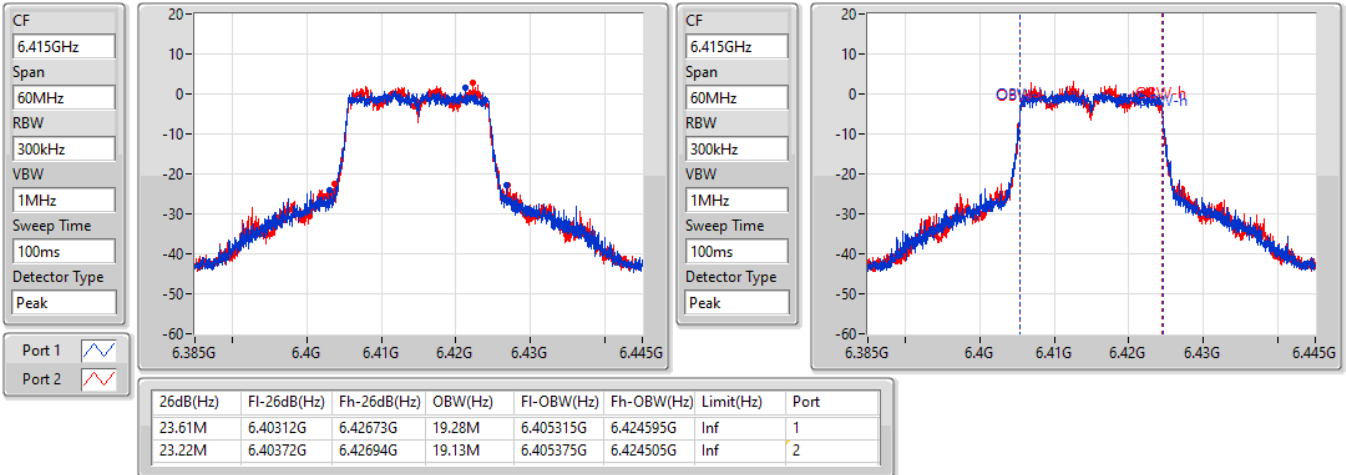
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
26.49M	6.16264G	6.18913G	19.31M	6.165315G	6.184625G	Inf	1
23.43M	6.16399G	6.18742G	19.13M	6.165375G	6.184505G	Inf	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6415MHz

13/04/2022

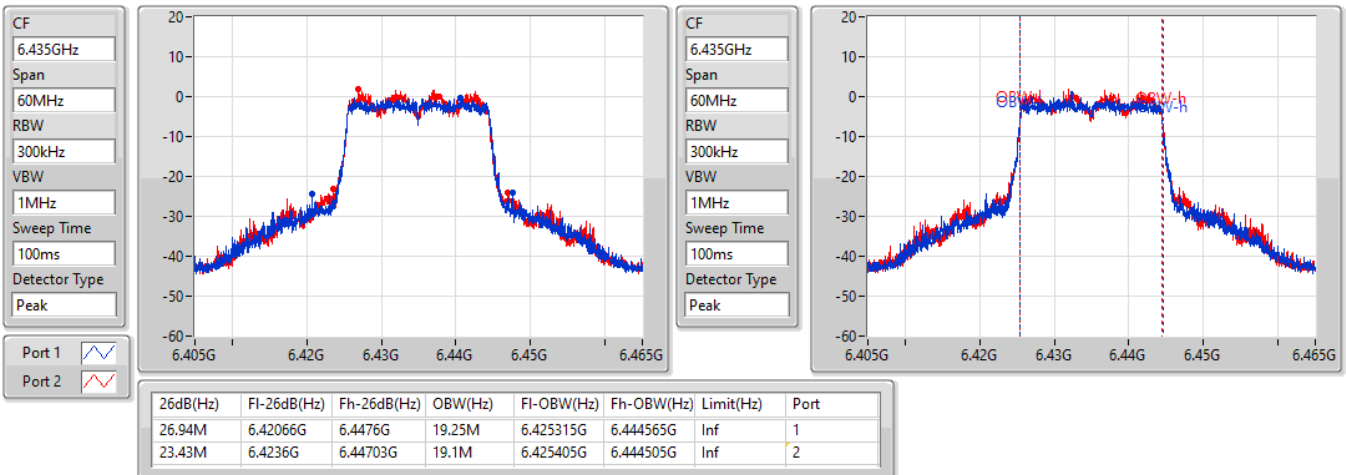


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6435MHz

13/04/2022

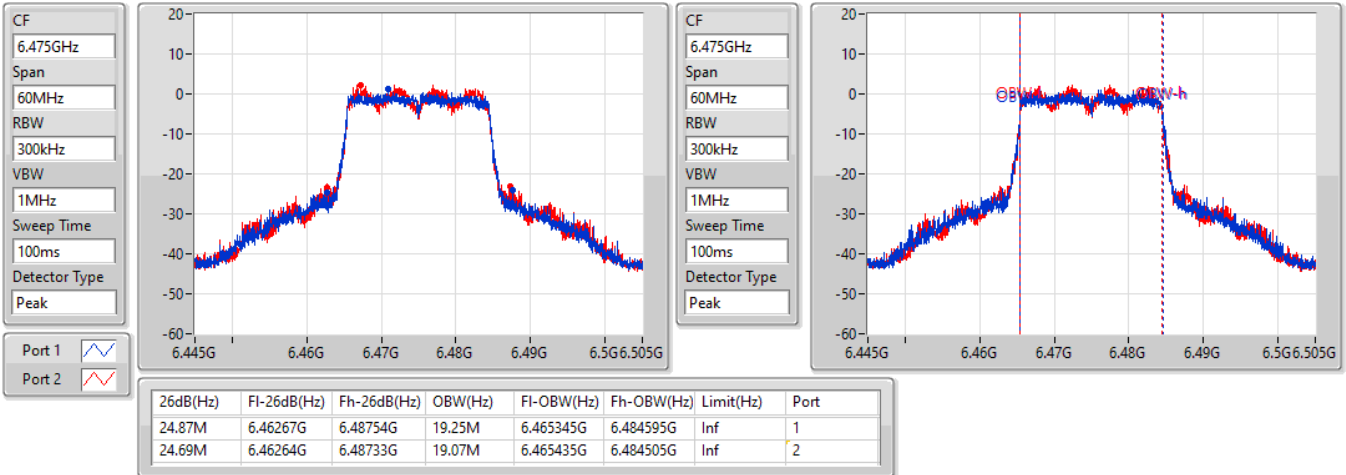


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6475MHz

13/04/2022

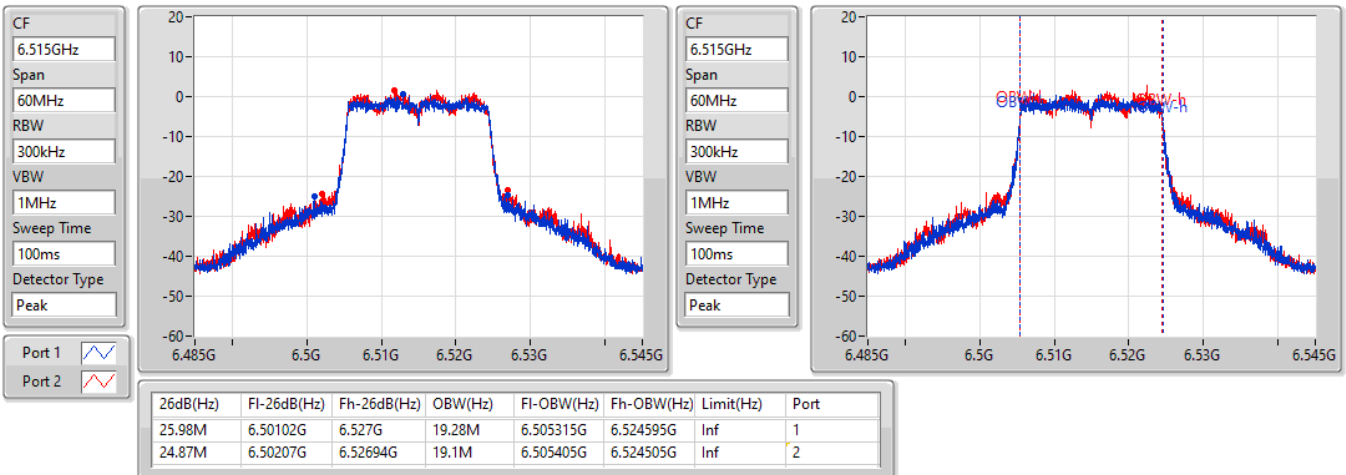


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6515MHz

13/04/2022

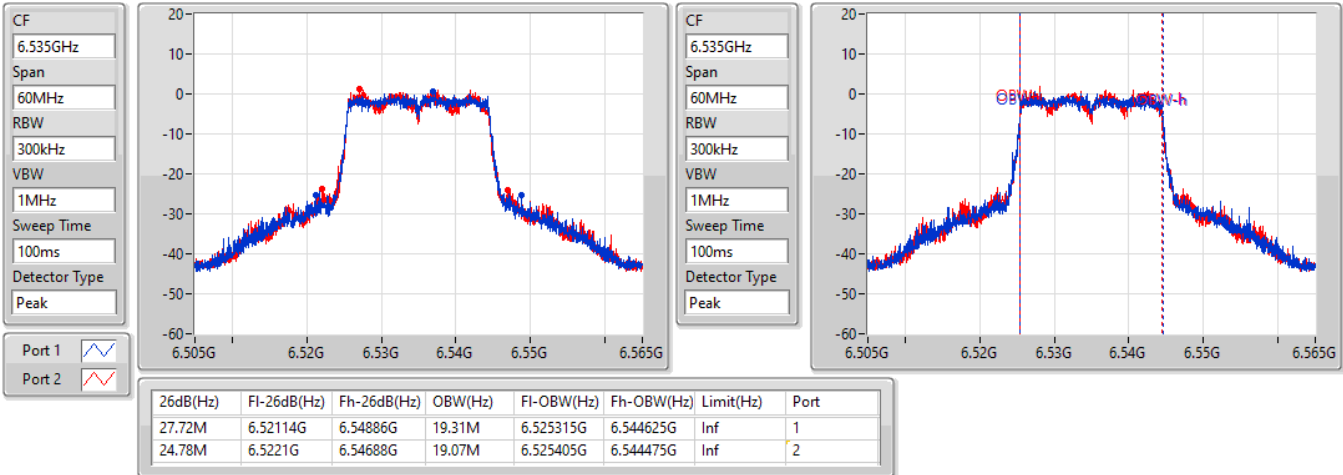


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6535MHz

13/04/2022

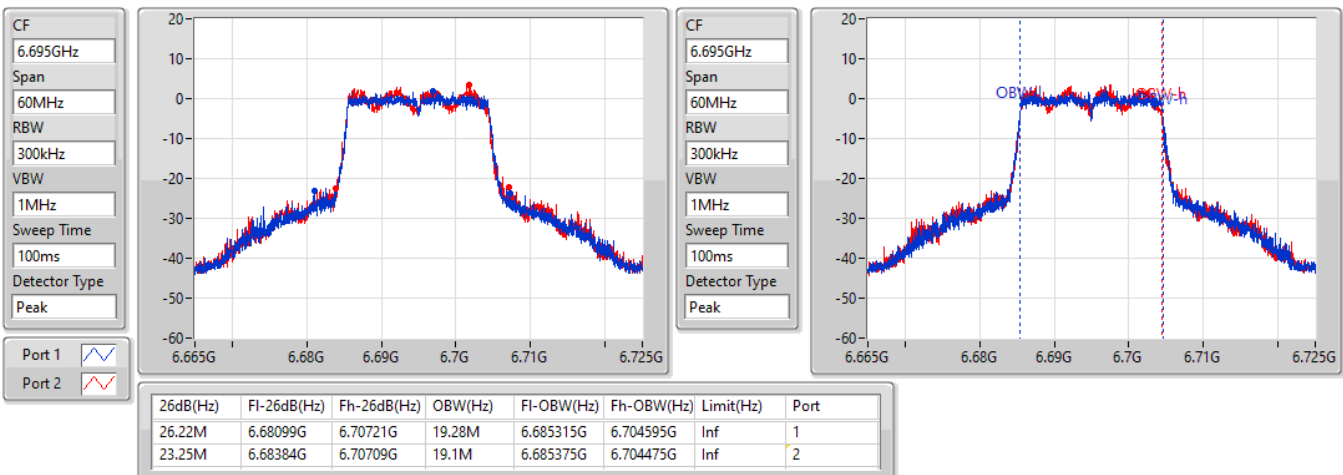


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6695MHz

13/04/2022

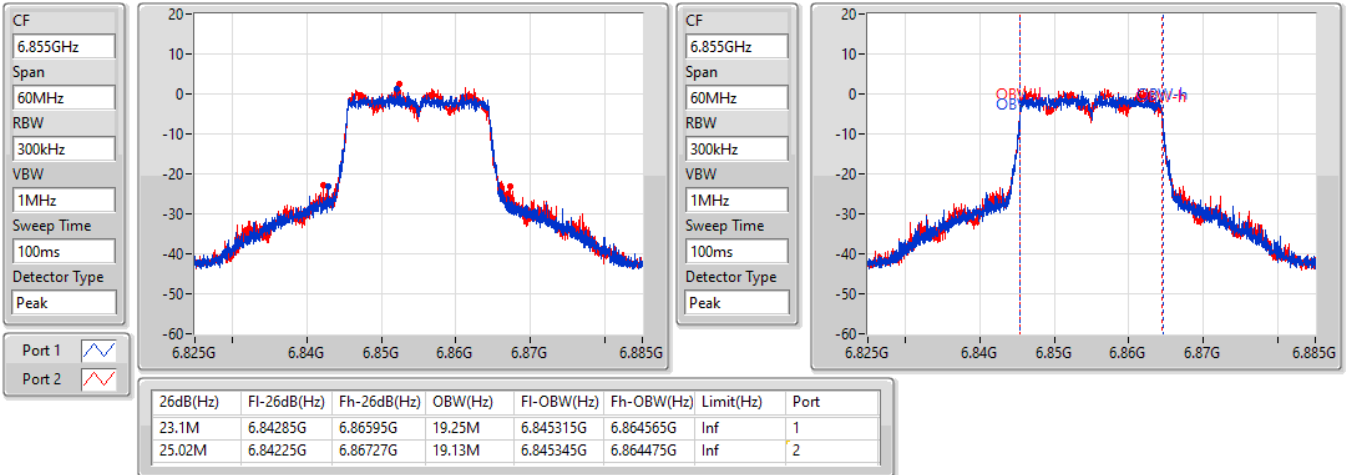


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6855MHz

13/04/2022

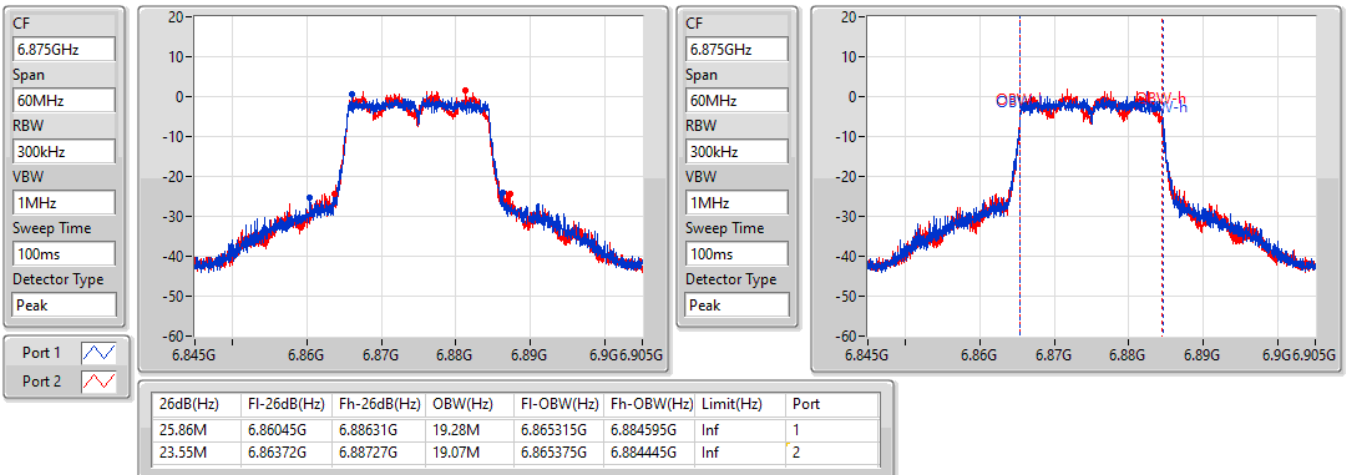


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6875MHz Straddle 6.525-6.875GHz

13/04/2022

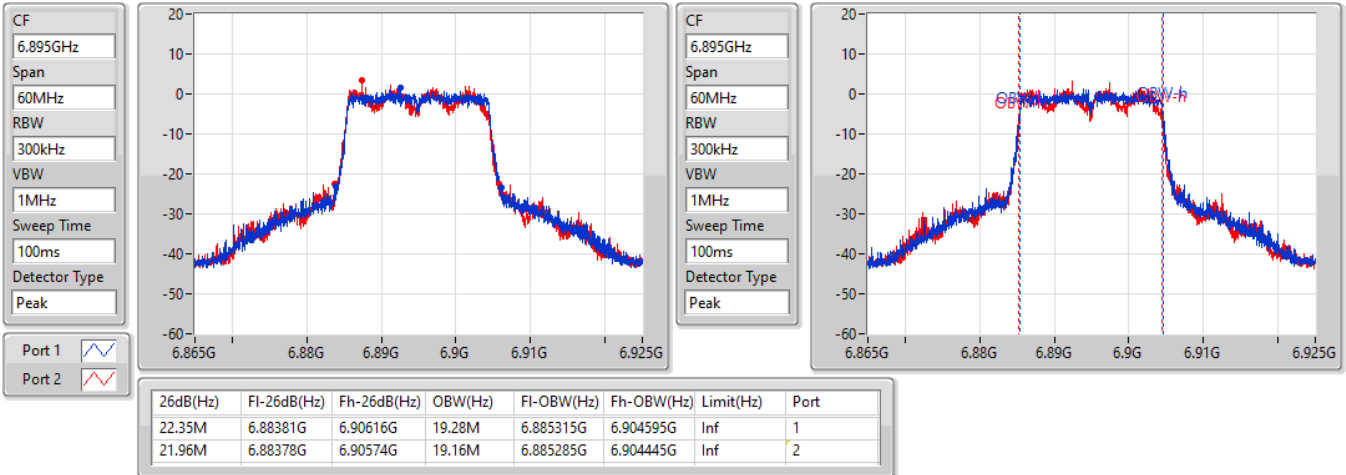


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6895MHz

13/04/2022

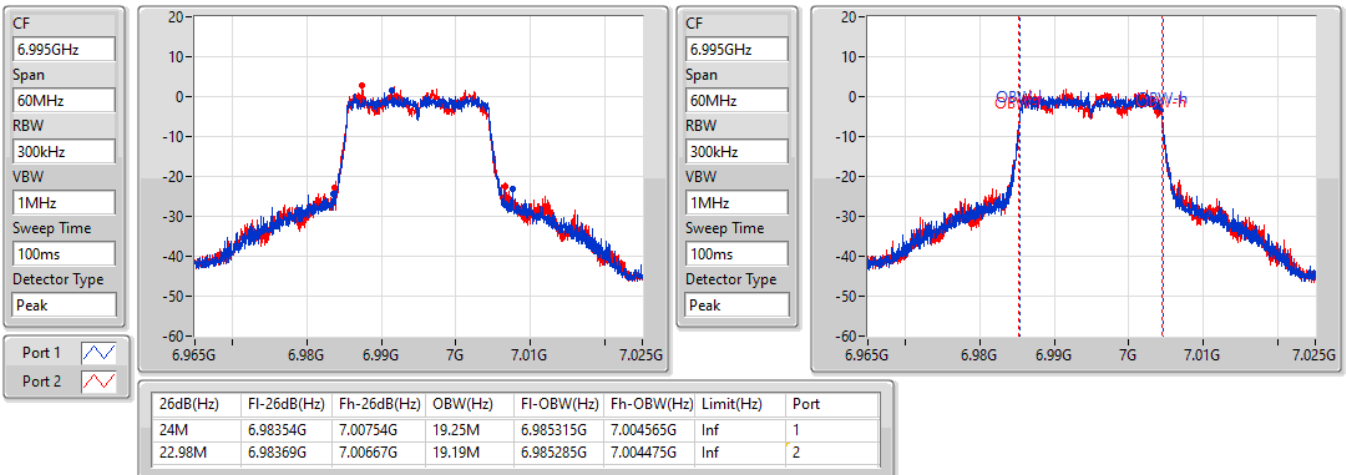


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

6995MHz

13/04/2022

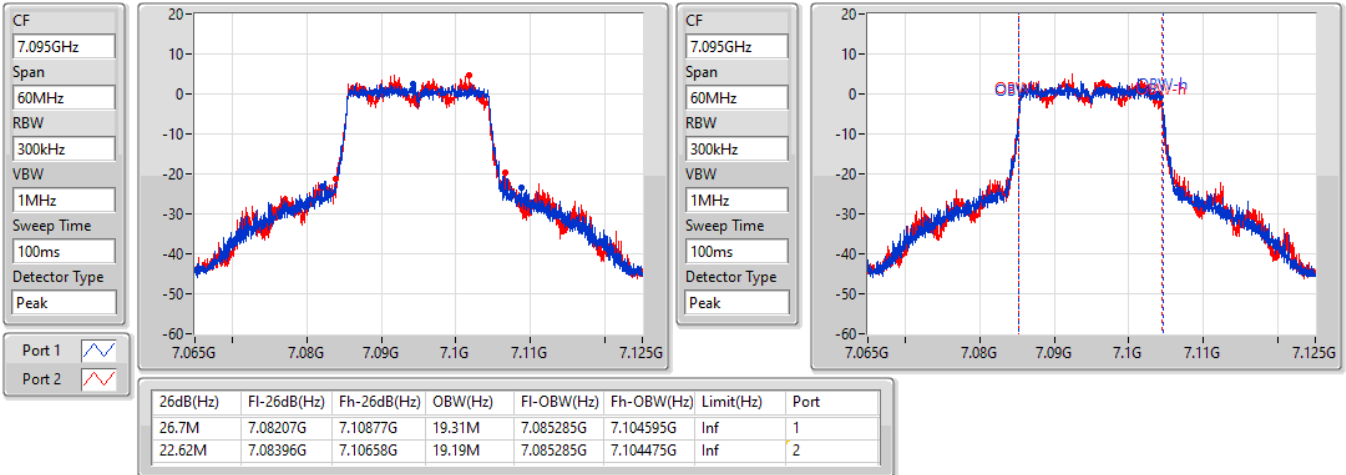


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

7095MHz

13/04/2022

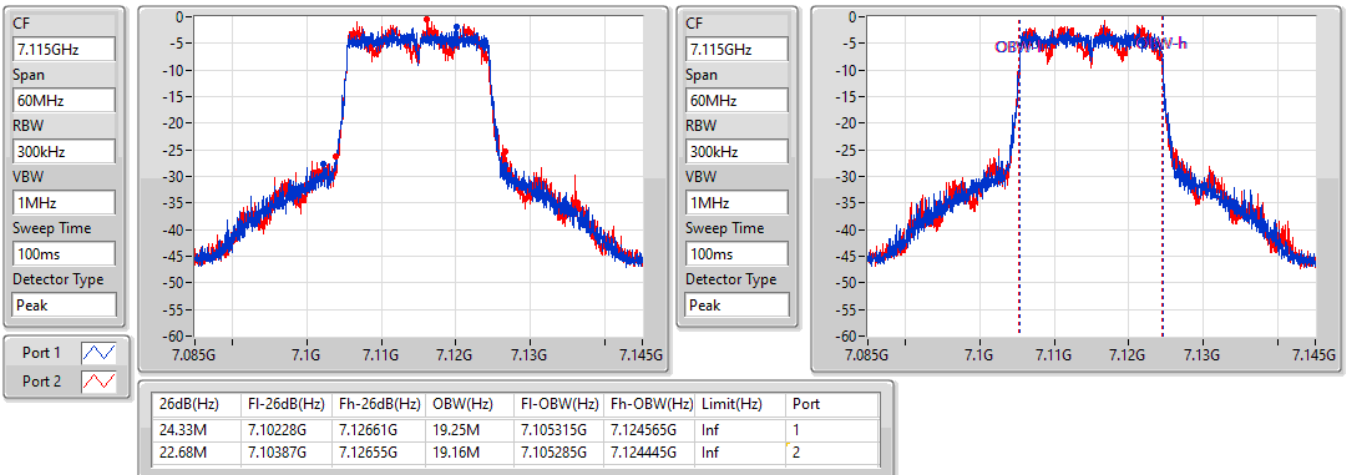


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

7115MHz

13/04/2022



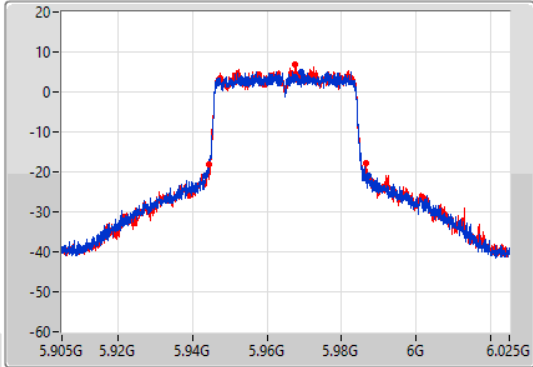
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

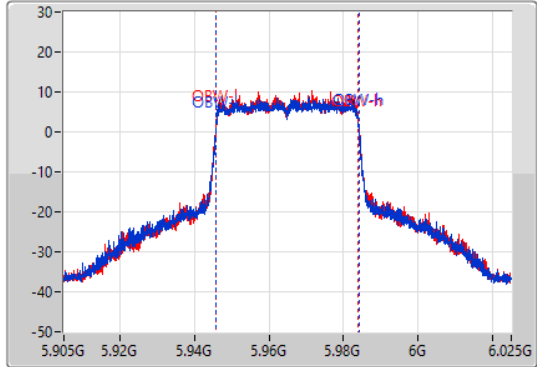
5965MHz

13/04/2022

CF
5.965GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.965GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.92M	5.94346G	5.98738G	38.201M	5.94587G	5.98407G	Inf	1
42.18M	5.94454G	5.98672G	38.141M	5.94587G	5.98401G	Inf	2

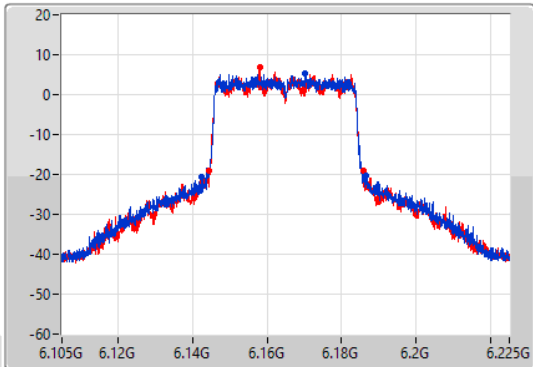
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

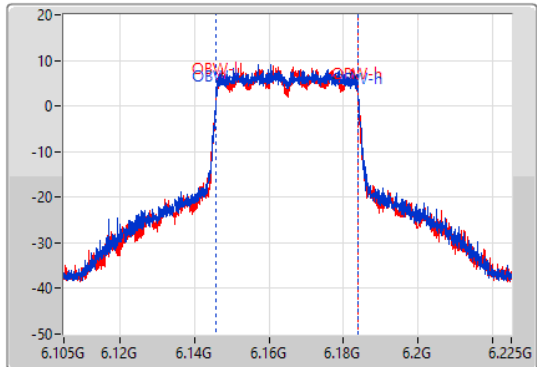
6165MHz

13/04/2022

CF
6.165GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.165GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



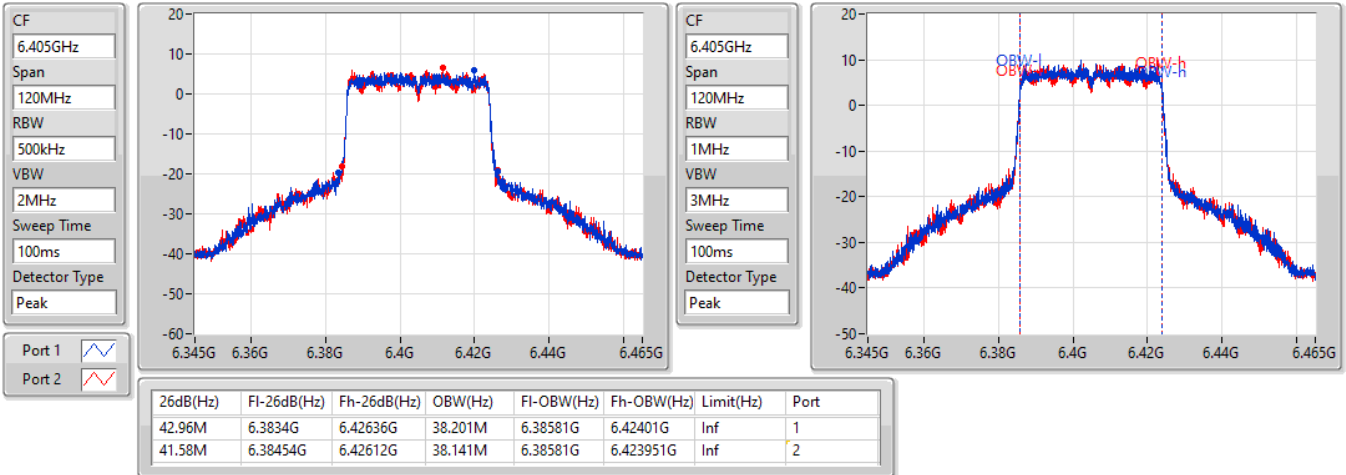
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.1M	6.1425G	6.1866G	38.201M	6.14581G	6.18401G	Inf	1
41.28M	6.1446G	6.18588G	38.141M	6.14581G	6.183951G	Inf	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6405MHz

13/04/2022

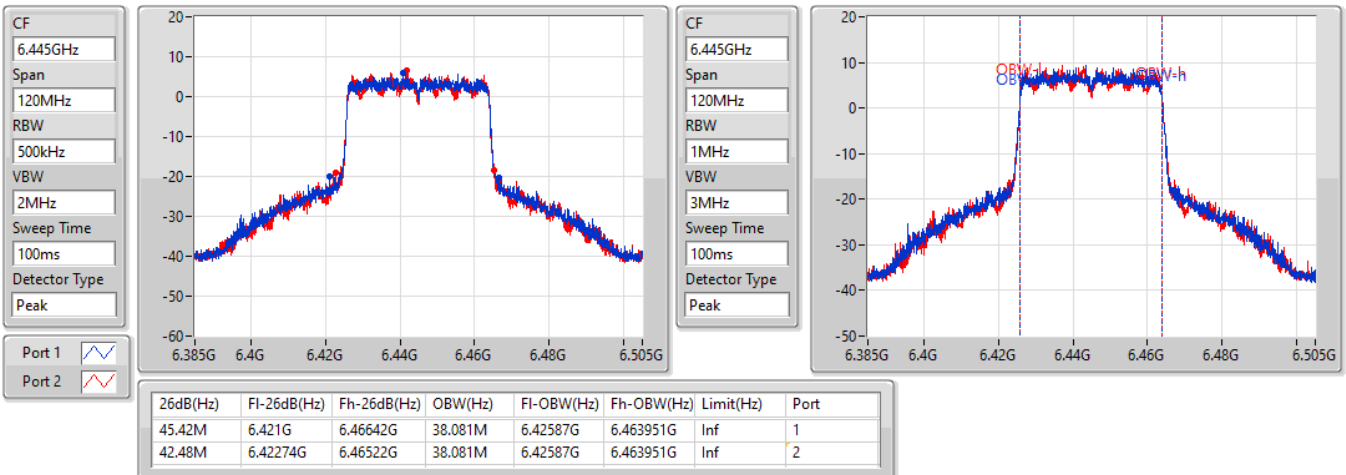


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6445MHz

13/04/2022

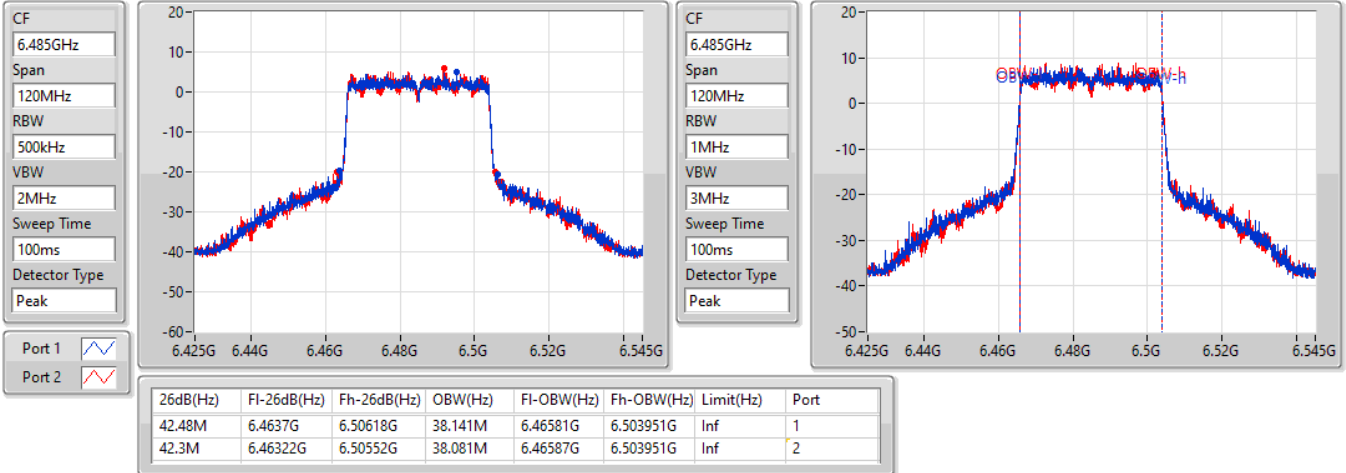


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6485MHz

13/04/2022

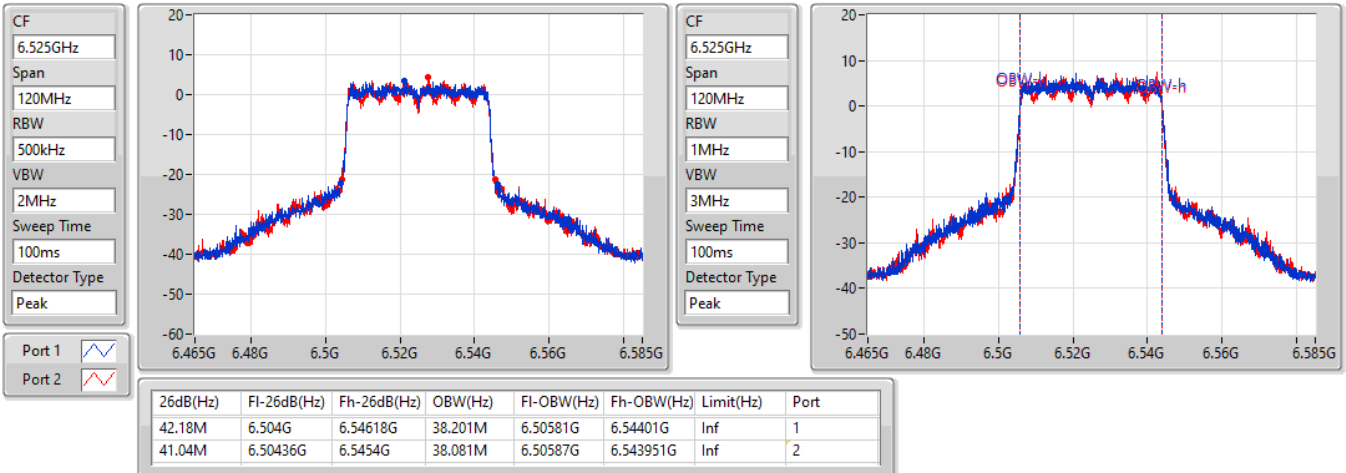


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6525MHz Straddle 6.425-6.525GHz

13/04/2022

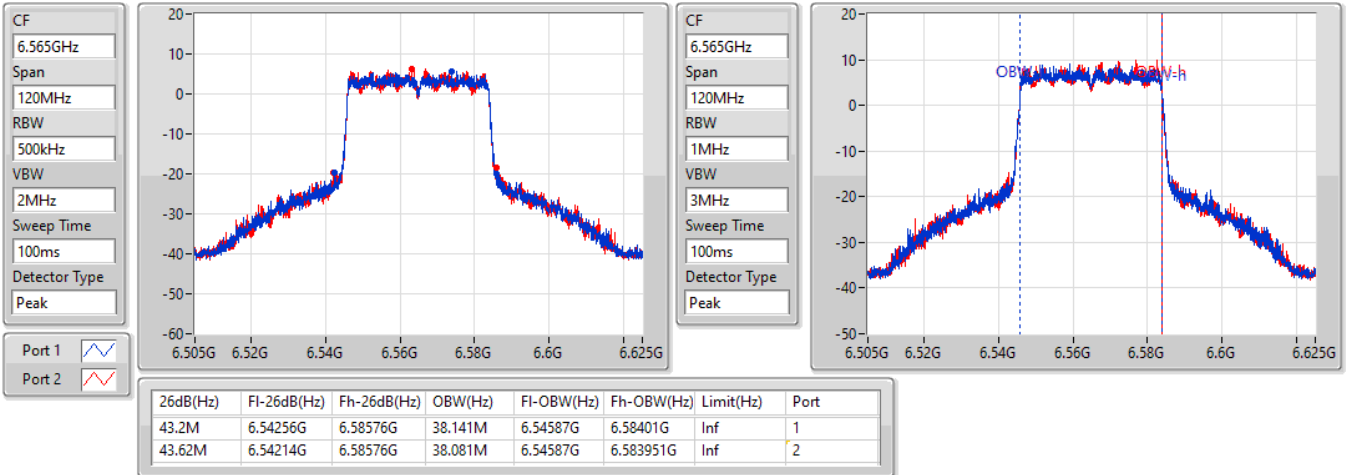


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6565MHz

13/04/2022

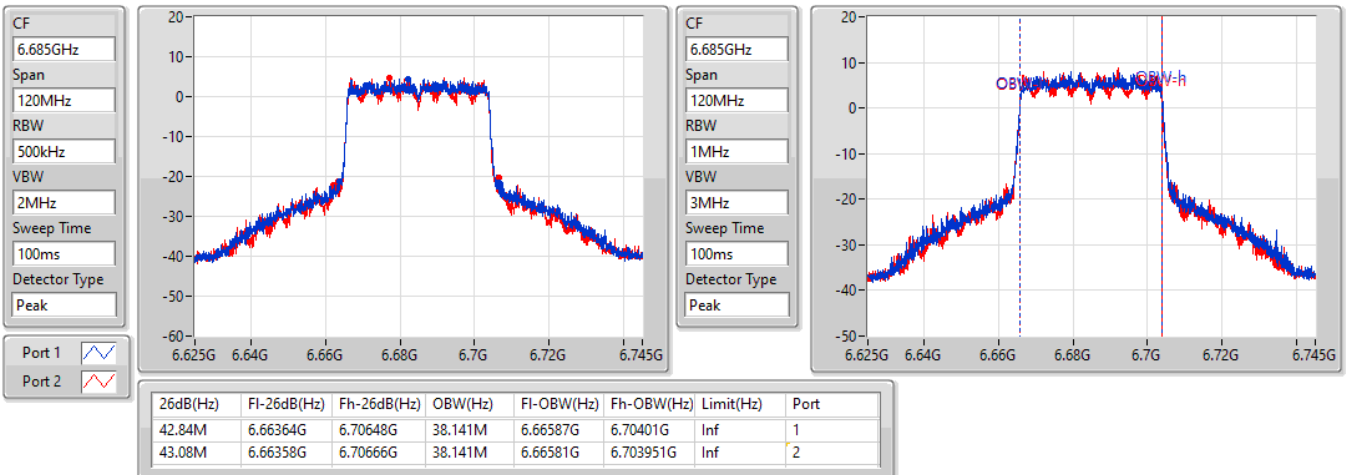


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6685MHz

13/04/2022

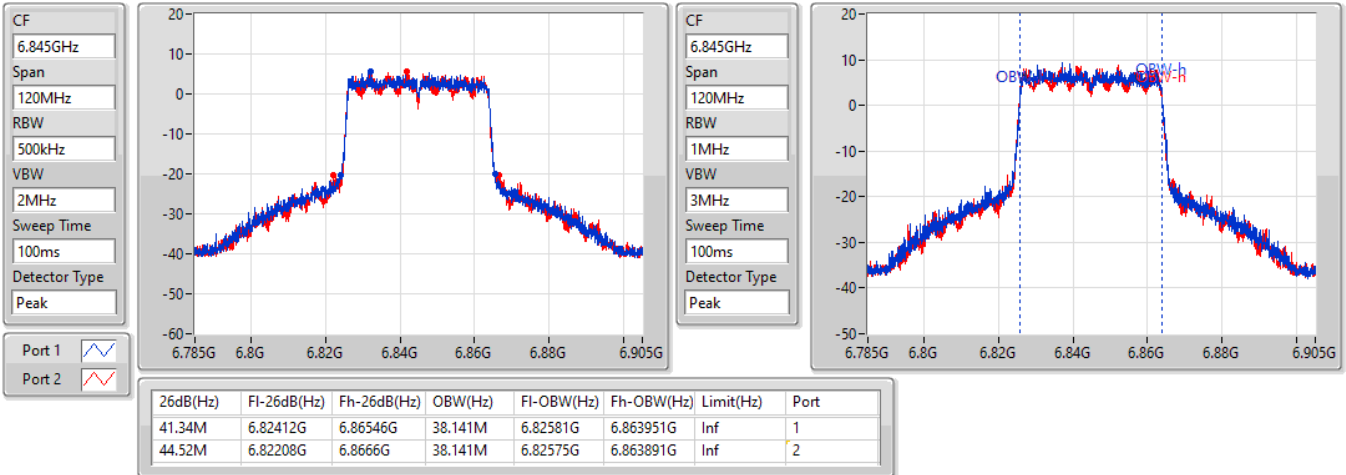


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6845MHz

13/04/2022

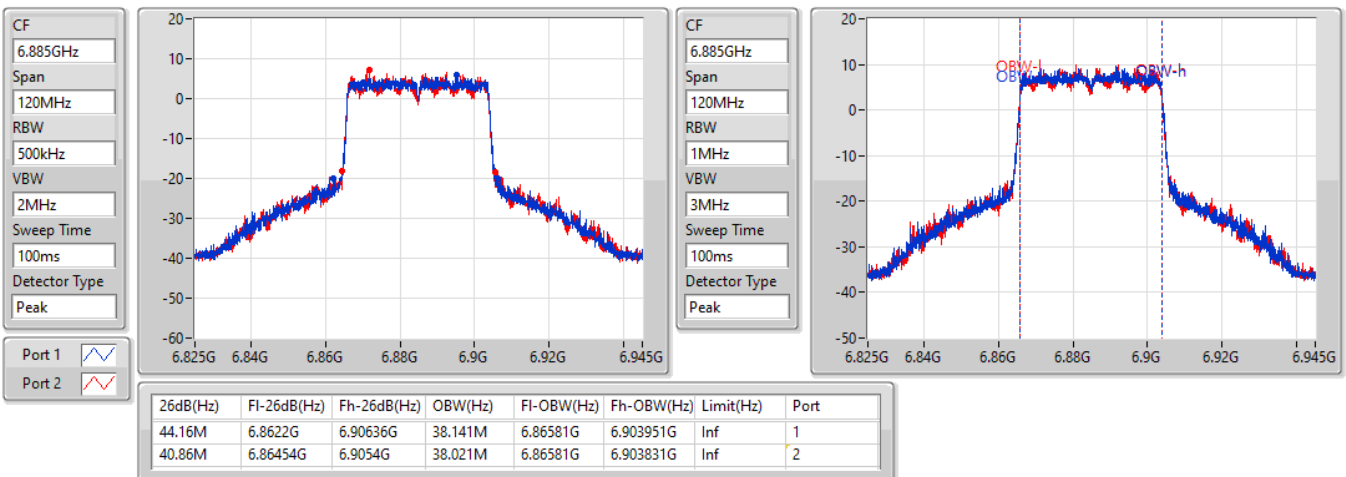


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6885MHz Straddle 6.525-6.875GHz

13/04/2022

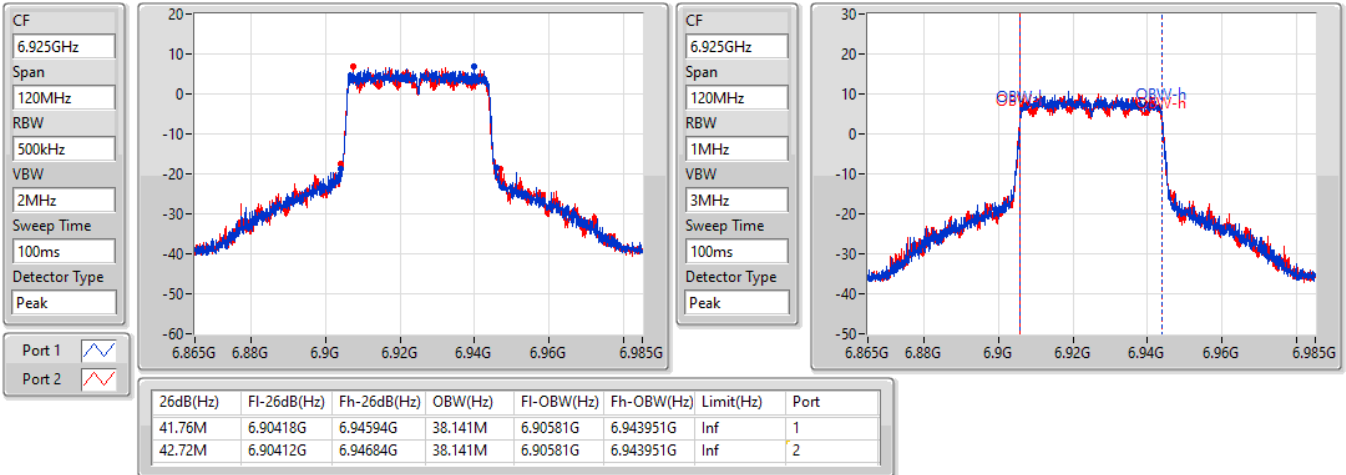


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

6925MHz

13/04/2022

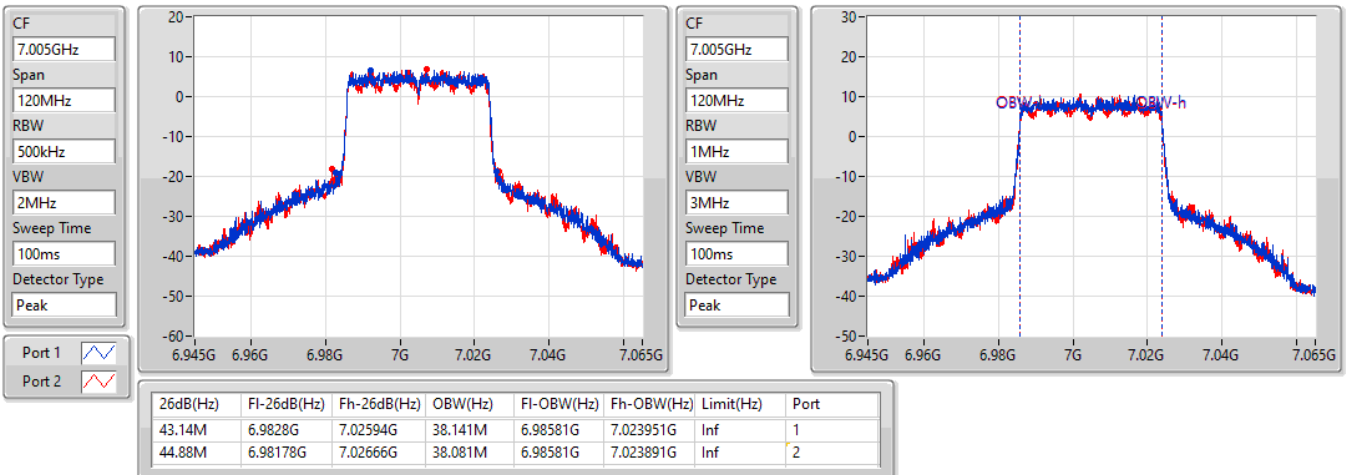


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

7005MHz

13/04/2022



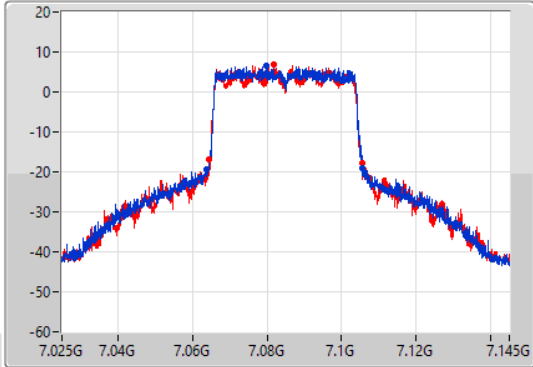
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

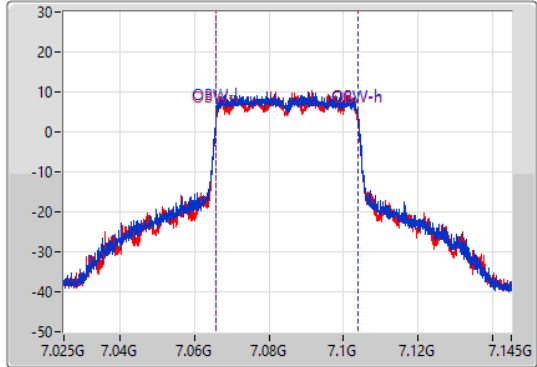
7085MHz

13/04/2022

CF
7.085GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
7.085GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.82M	7.06388G	7.1057G	38.201M	7.06581G	7.10401G	Inf	1
41.04M	7.06436G	7.1054G	38.081M	7.06581G	7.103891G	Inf	2

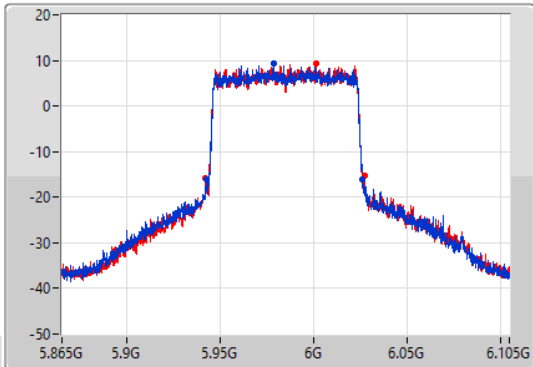
802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

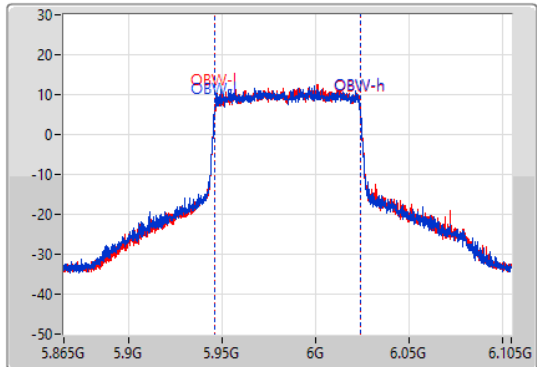
5985MHz

13/04/2022

CF
5.985GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.985GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



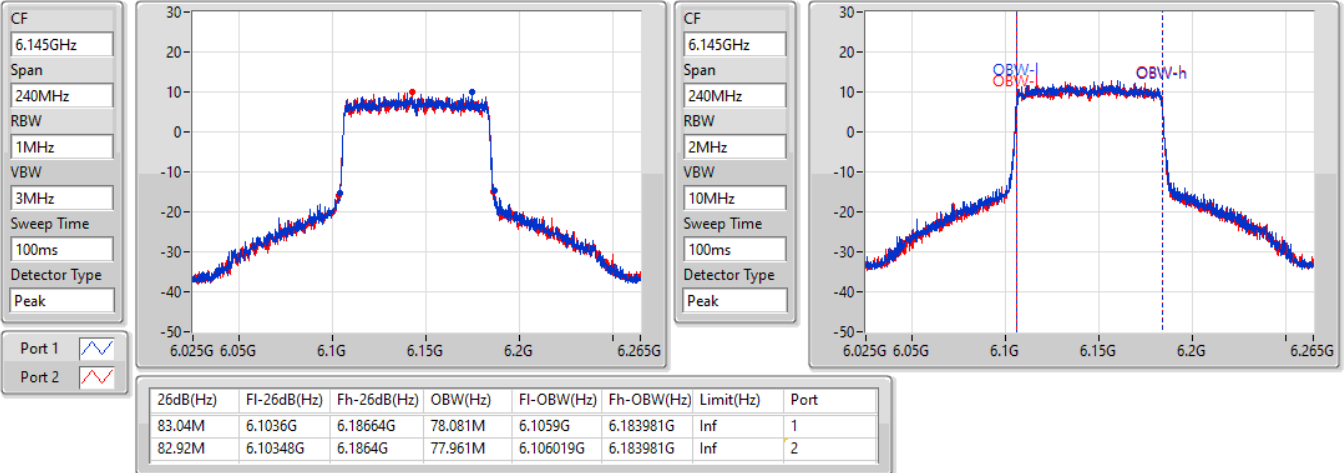
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.12M	5.94228G	6.0264G	77.961M	5.946019G	6.023981G	Inf	1
84.96M	5.94216G	6.02712G	77.961M	5.946019G	6.023981G	Inf	2

802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

6145MHz

13/04/2022

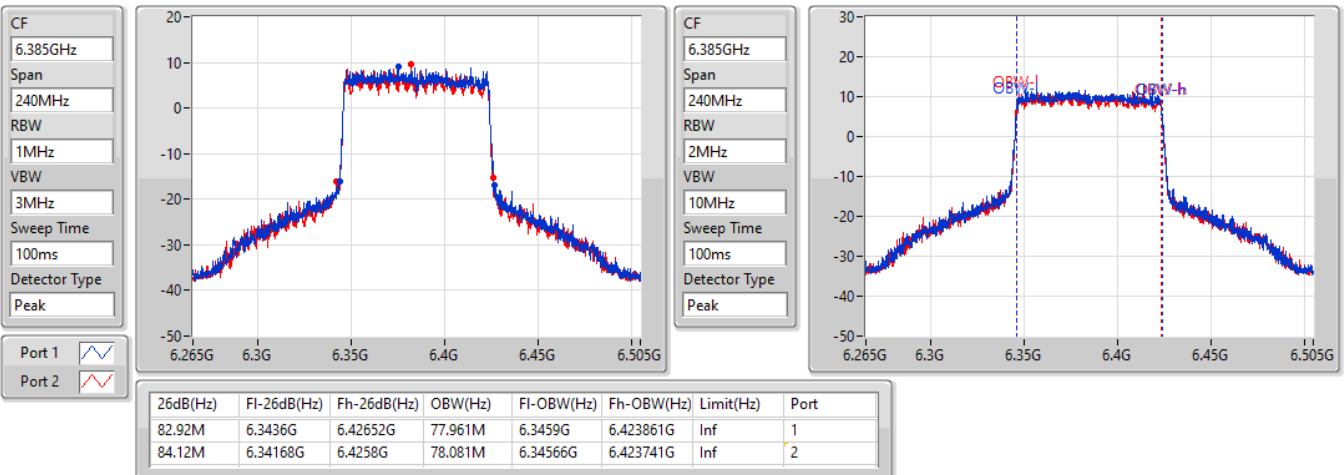


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

6385MHz

13/04/2022

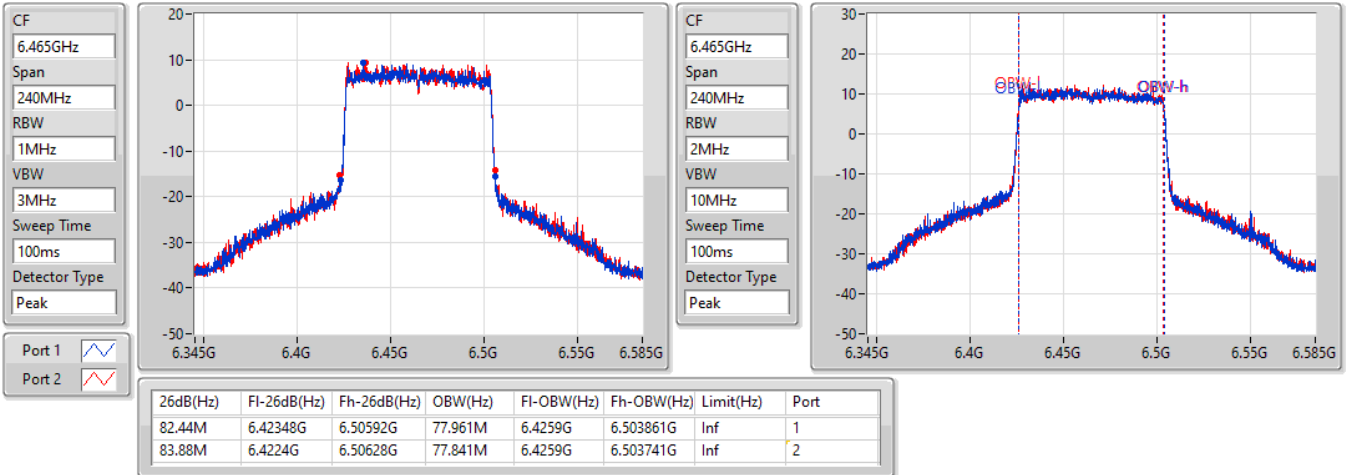


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

6465MHz

13/04/2022

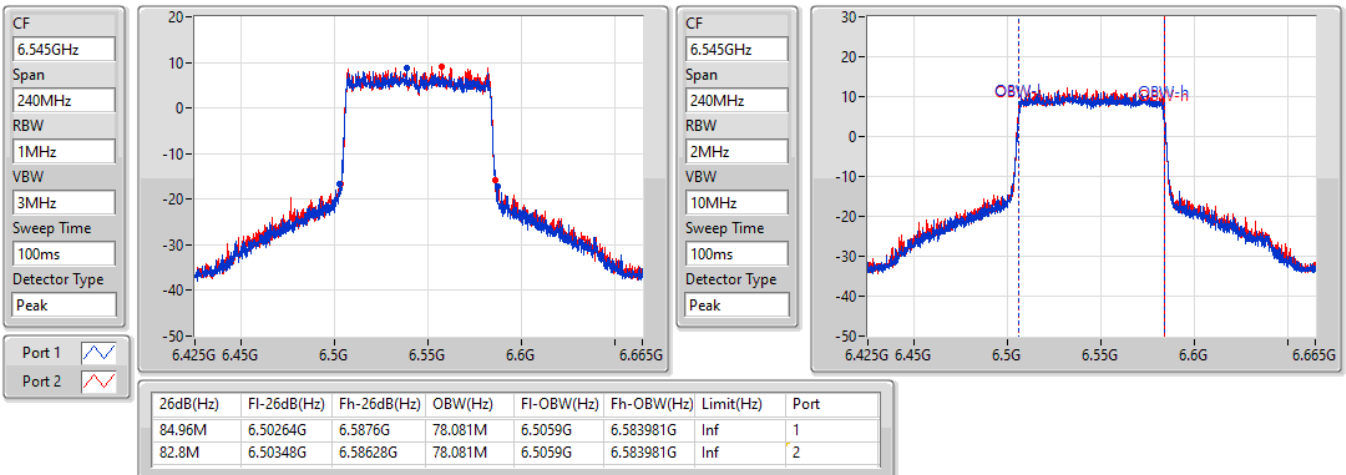


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

6545MHz Straddle 6.425-6.525GHz

13/04/2022



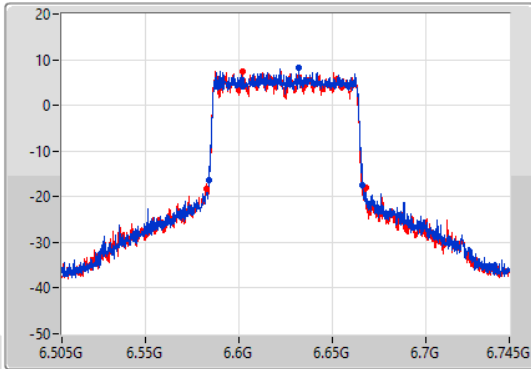
802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

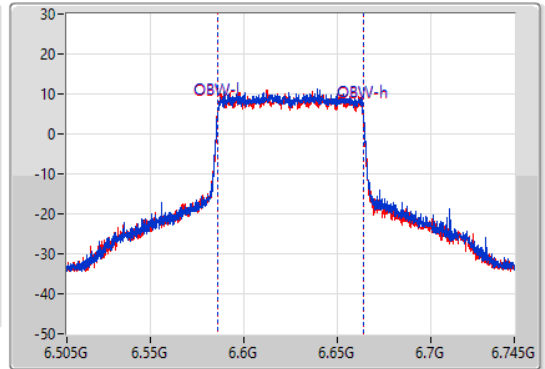
6625MHz

13/04/2022

CF
6.625GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.625GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.56M	6.58384G	6.6664G	78.081M	6.5859G	6.663981G	Inf	1
85.56M	6.58228G	6.66784G	78.081M	6.58578G	6.663861G	Inf	2

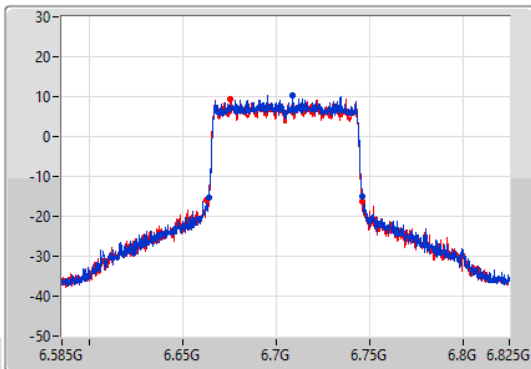
802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

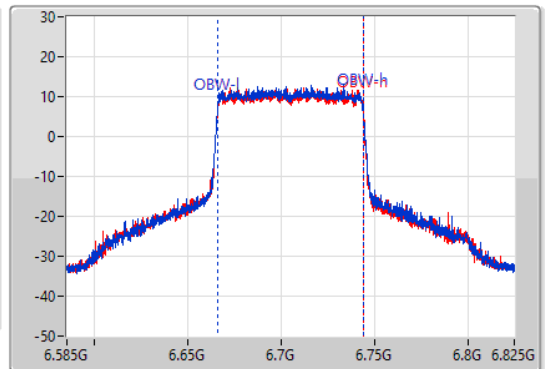
6705MHz

13/04/2022

CF
6.705GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.705GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



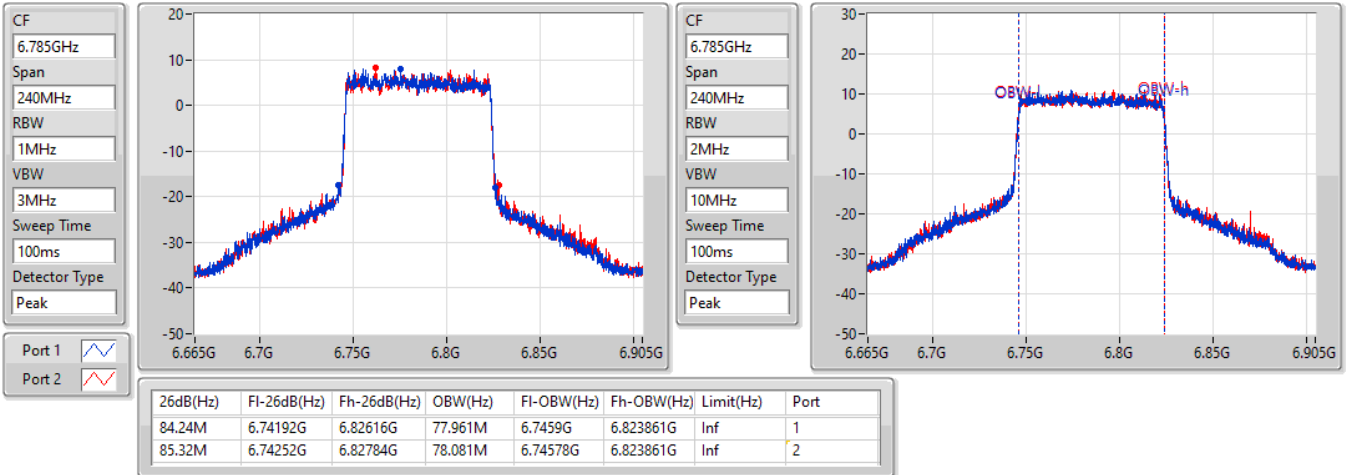
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.44M	6.66372G	6.74616G	77.841M	6.666019G	6.743861G	Inf	1
83.52M	6.66264G	6.74616G	77.961M	6.6659G	6.743861G	Inf	2

802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

6785MHz

13/04/2022

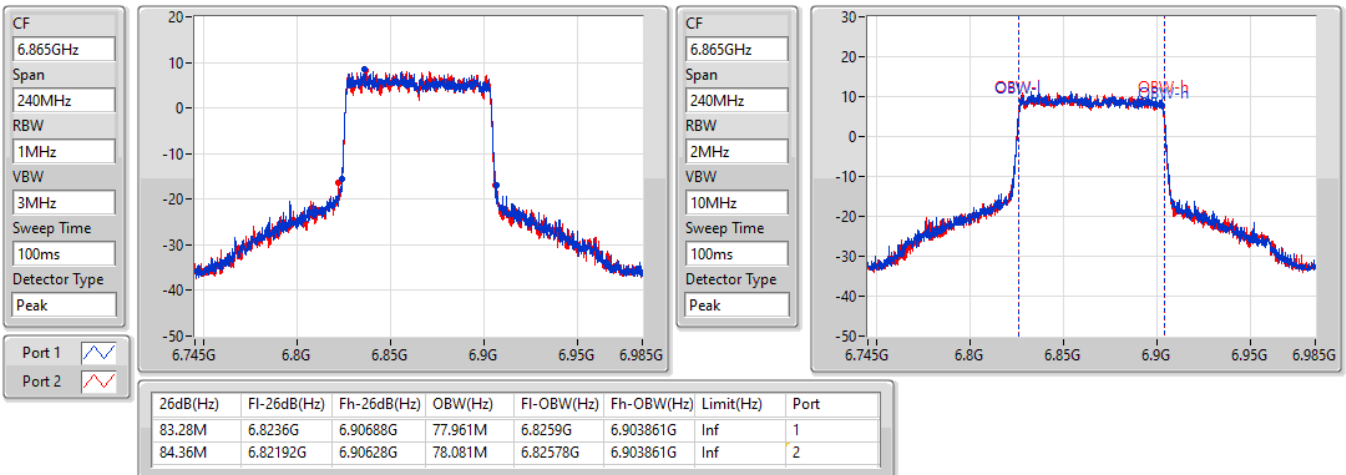


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

6865MHz Straddle 6.525-6.875GHz

13/04/2022

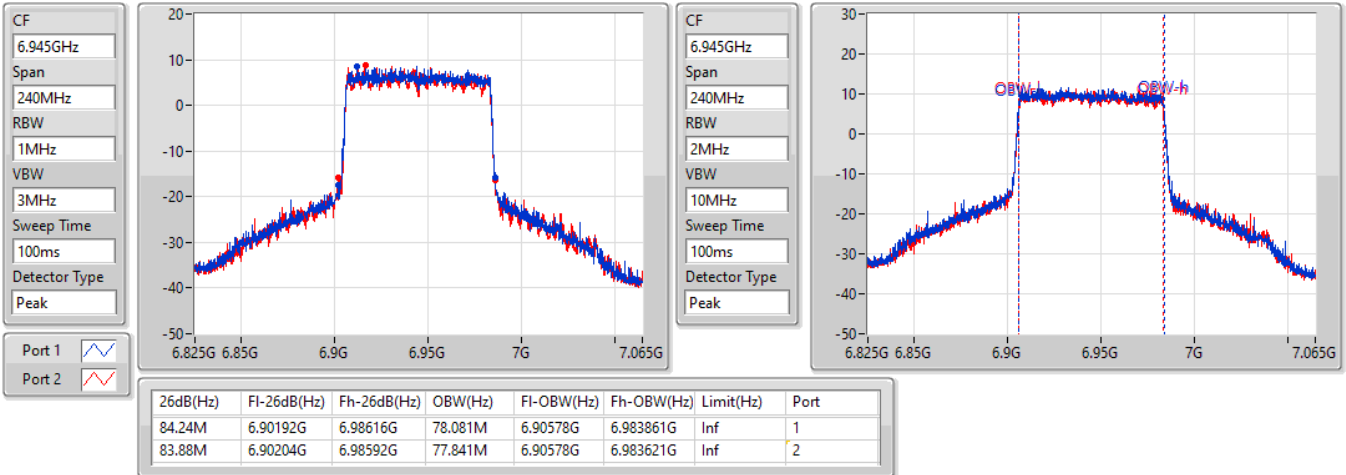


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

6945MHz

13/04/2022

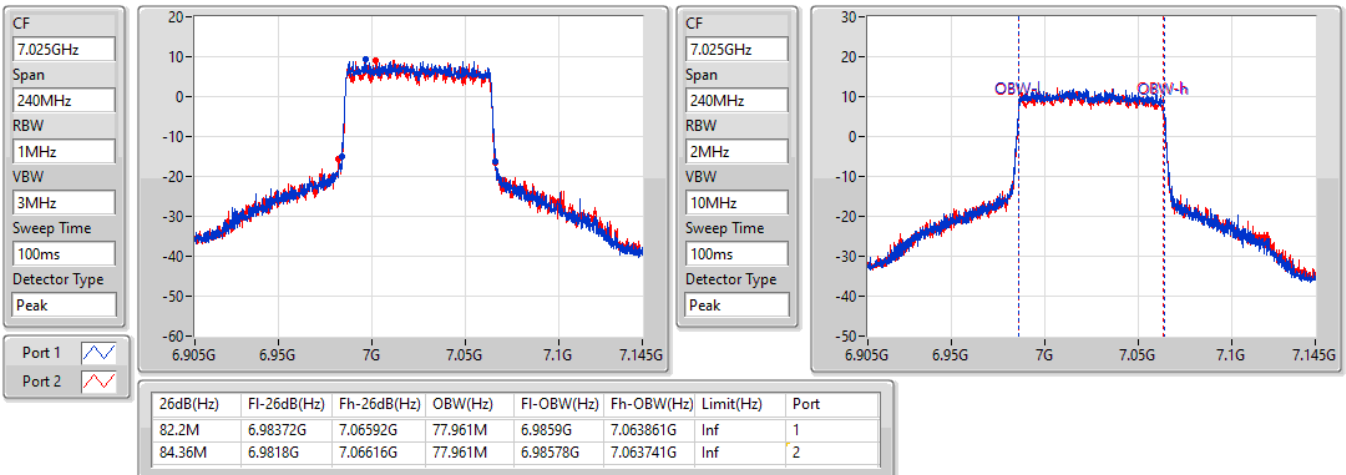


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

7025MHz

13/04/2022

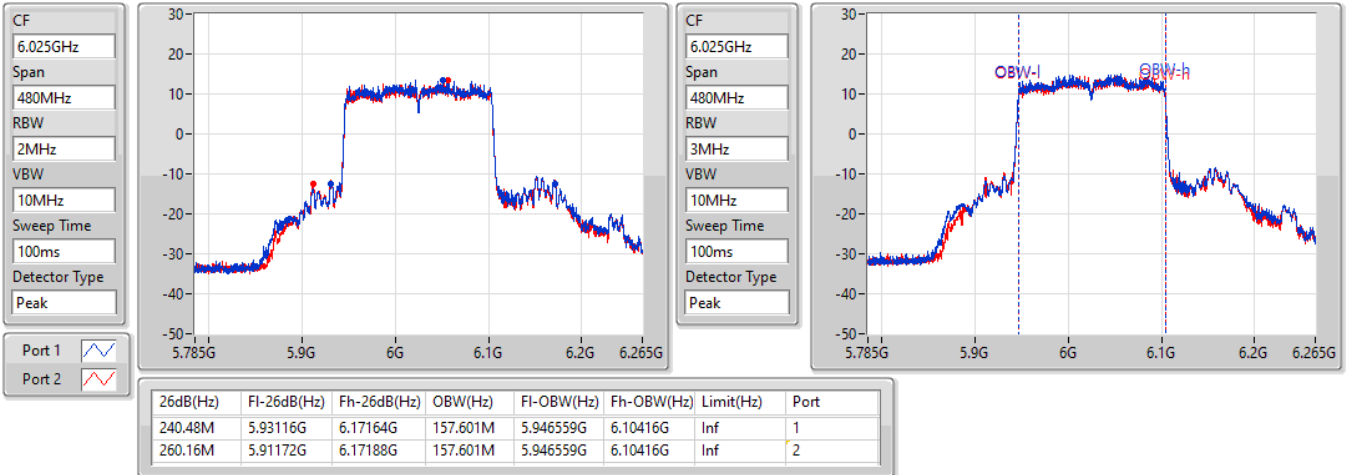


802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

6025MHz

13/04/2022

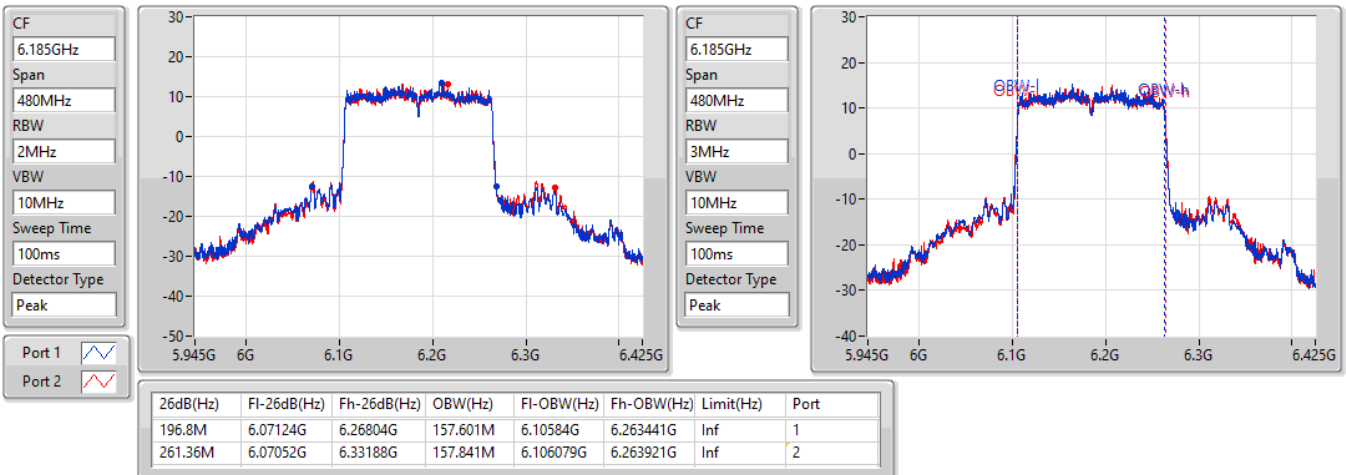


802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

6185MHz

13/04/2022

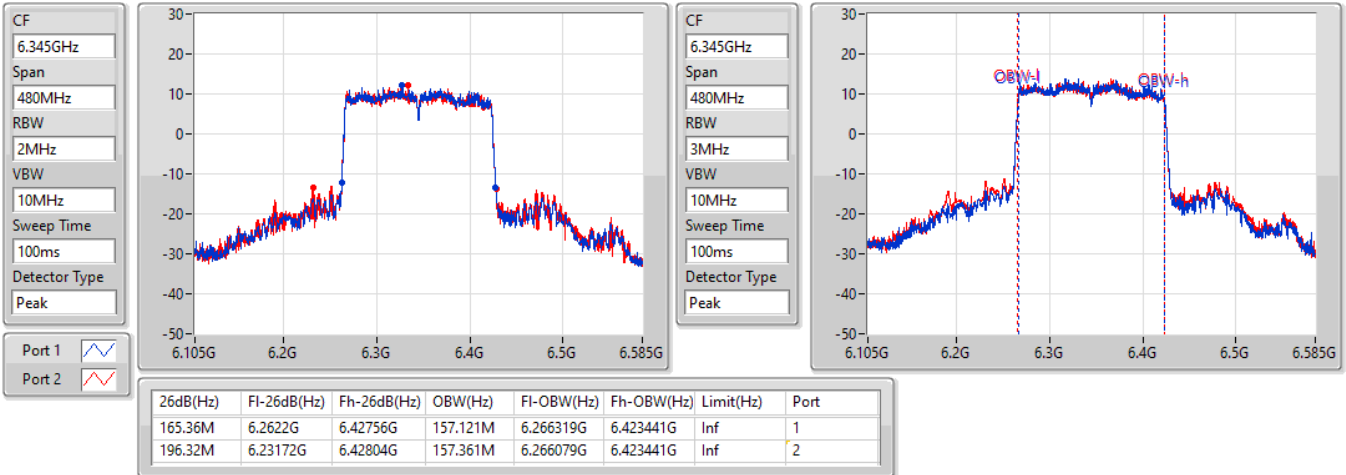


802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

6345MHz

13/04/2022

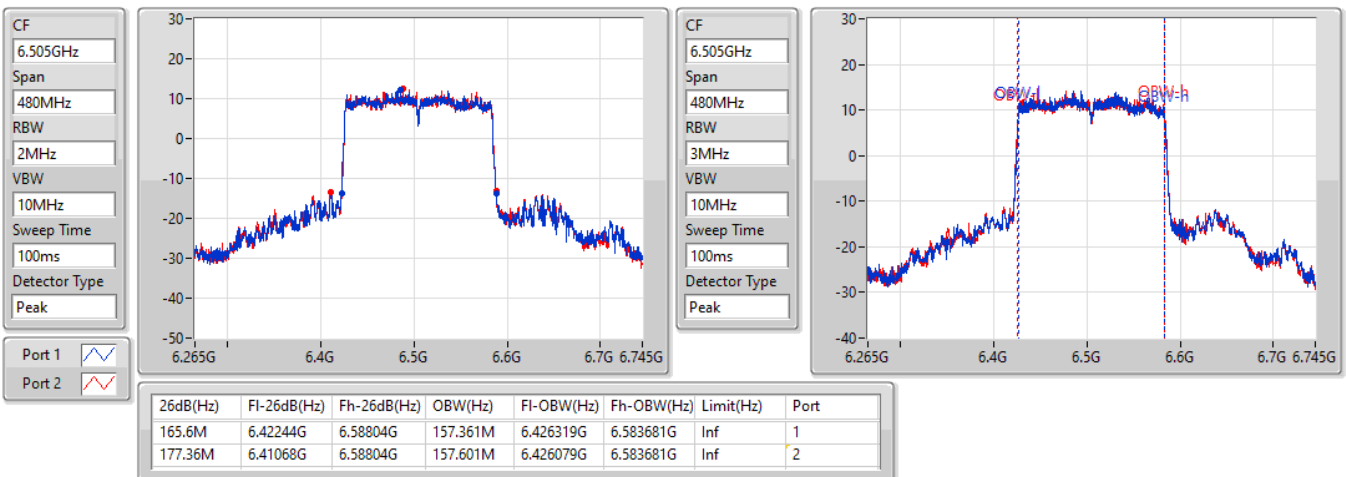


802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

6505MHz Straddle 6.425-6.525GHz

13/04/2022



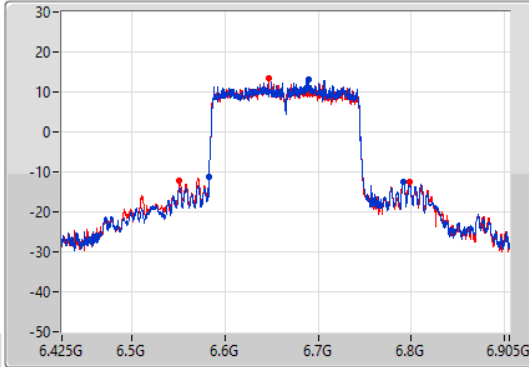
802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

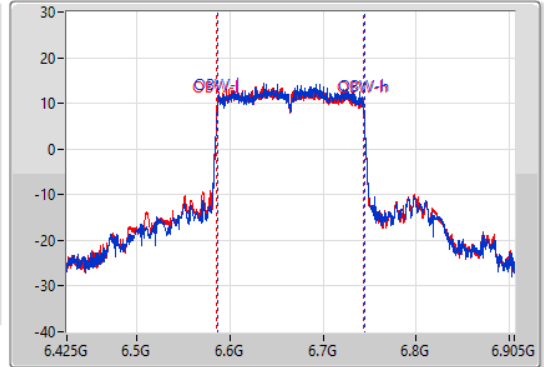
6665MHz

13/04/2022

CF
6.665GHz
Span
480MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.665GHz
Span
480MHz
RBW
3MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
209.28M	6.58244G	6.79172G	157.601M	6.586319G	6.743921G	Inf	1
247.2M	6.55124G	6.79844G	157.601M	6.586079G	6.743681G	Inf	2

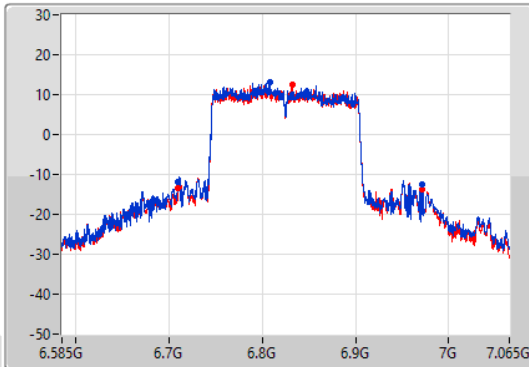
802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

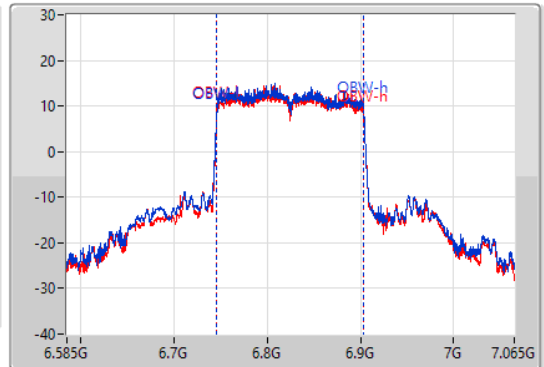
6825MHz Straddle 6.525-6.875GHz

13/04/2022

CF
6.825GHz
Span
480MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.825GHz
Span
480MHz
RBW
3MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
261.6M	6.70956G	6.97116G	158.081M	6.7456G	6.903681G	Inf	1
261.84M	6.7098G	6.97164G	157.841M	6.74584G	6.903681G	Inf	2

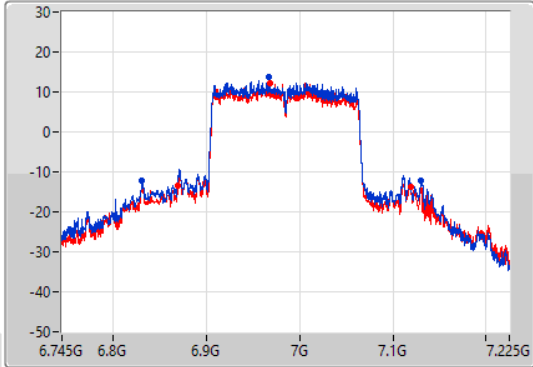
802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

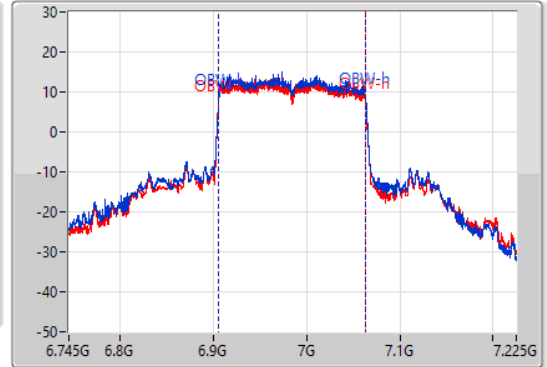
6985MHz

13/04/2022

CF
6.985GHz
Span
480MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.985GHz
Span
480MHz
RBW
3MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
300M	6.83068G	7.13068G	158.321M	6.90536G	7.063681G	Inf	1
249.36M	6.86956G	7.11892G	158.321M	6.90536G	7.063681G	Inf	2

Summary

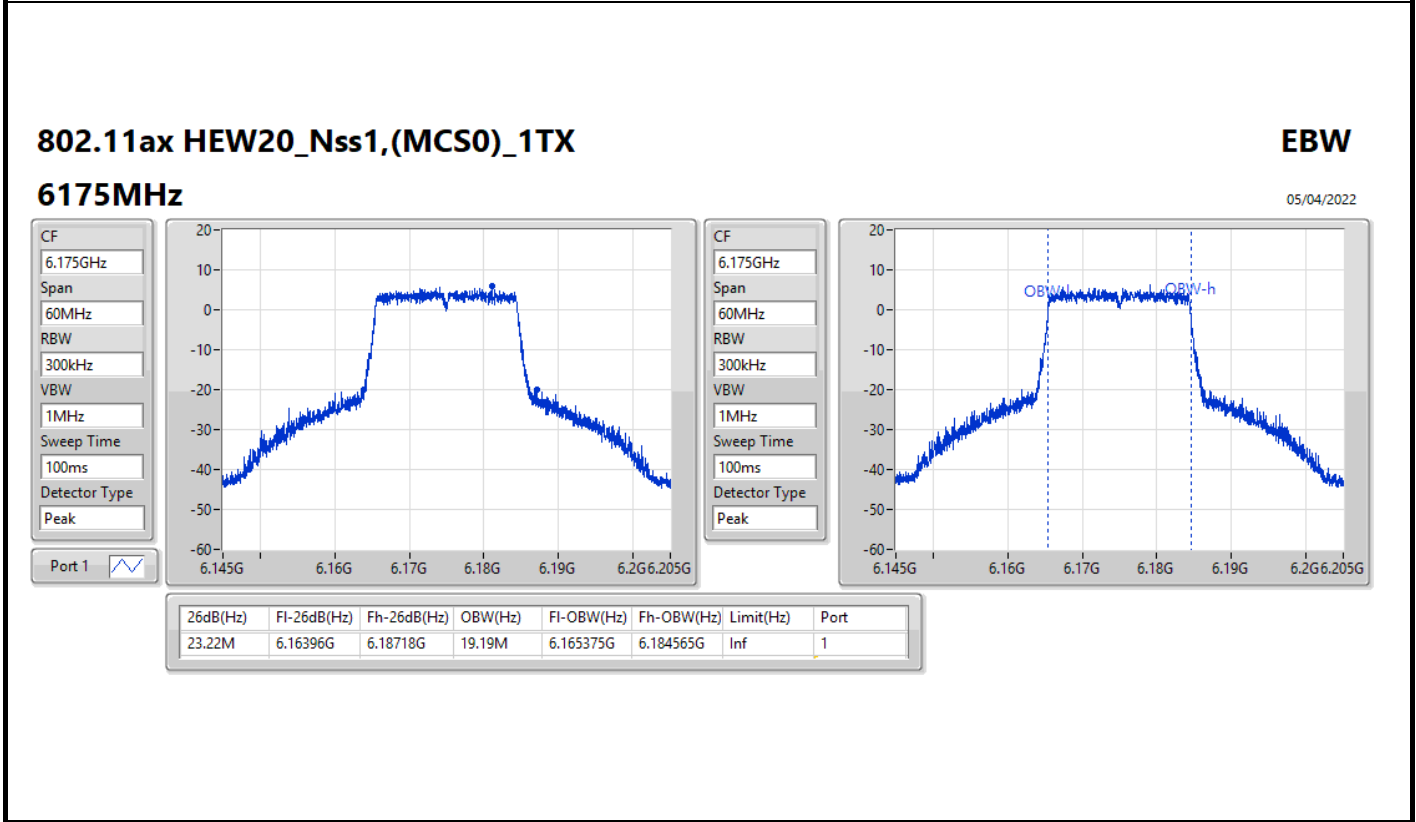
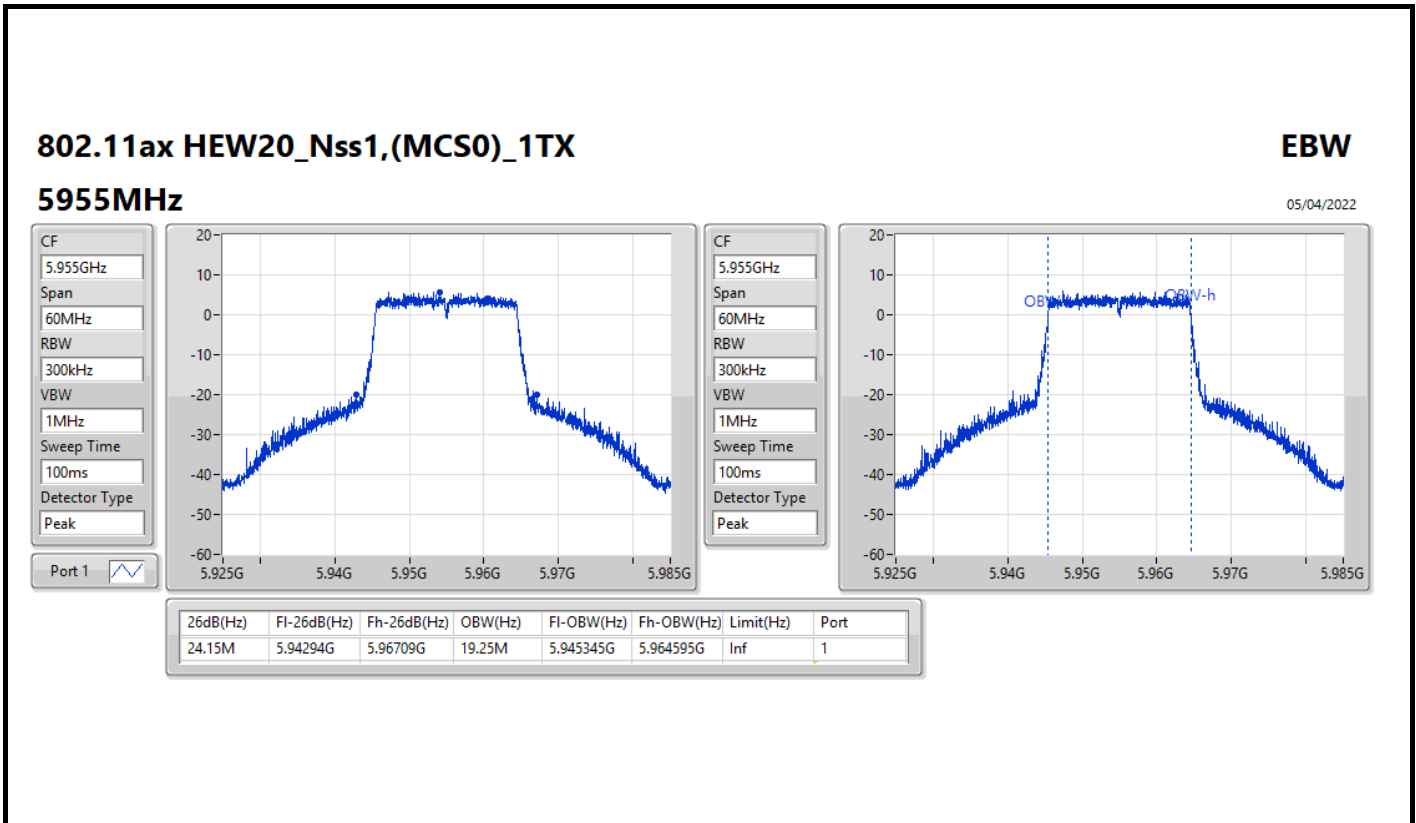
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	24.15M	19.25M	19M2D1D	22.53M	19.19M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.52M	38.141M	38M1D1D	41.4M	38.021M
802.11ax HEW80_Nss1,(MCS0)_1TX	86.28M	78.081M	78M1D1D	84.84M	77.961M
802.11ax HEW160_Nss1,(MCS0)_1TX	342.96M	195.502M	196MD1D	254.4M	157.841M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	23.73M	19.28M	19M3D1D	22.14M	19.25M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.58M	38.141M	38M1D1D	41.46M	38.081M
802.11ax HEW80_Nss1,(MCS0)_1TX	85.32M	78.081M	78M1D1D	83.88M	77.961M
802.11ax HEW160_Nss1,(MCS0)_1TX	309.6M	160.72M	161MD1D	309.6M	160.72M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	25.68M	19.22M	19M2D1D	23.16M	19.19M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.58M	38.201M	38M2D1D	41.28M	38.141M
802.11ax HEW80_Nss1,(MCS0)_1TX	148.56M	78.921M	78M9D1D	87.72M	78.201M
802.11ax HEW160_Nss1,(MCS0)_1TX	402M	279.46M	279MD1D	400.56M	267.226M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	27.57M	19.28M	19M3D1D	22.68M	19.16M
802.11ax HEW40_Nss1,(MCS0)_1TX	43.44M	38.201M	38M2D1D	41.64M	38.141M
802.11ax HEW80_Nss1,(MCS0)_1TX	163.32M	83.718M	83M7D1D	144.84M	79.28M
802.11ax HEW160_Nss1,(MCS0)_1TX	332.64M	160.96M	161MD1D	332.64M	160.96M

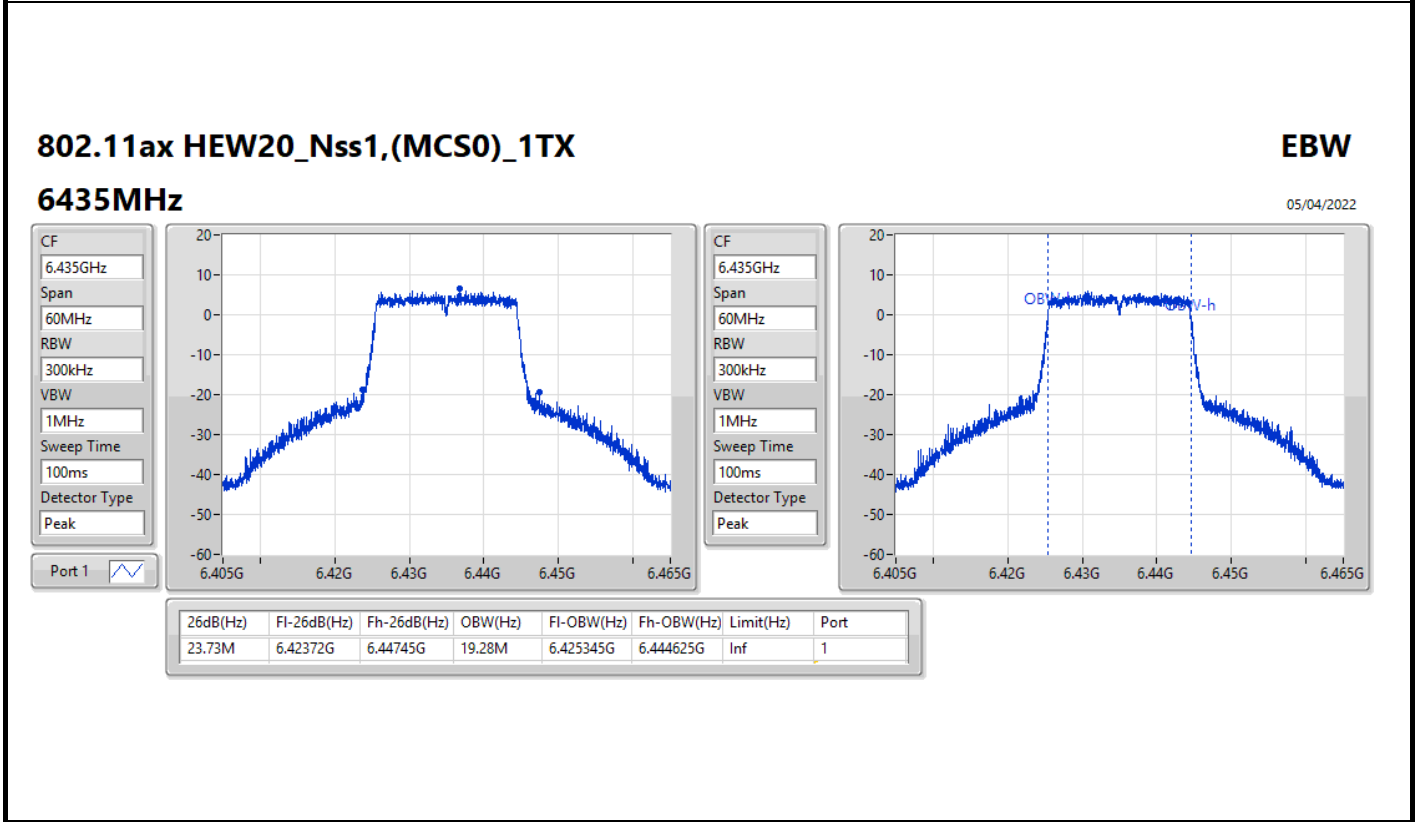
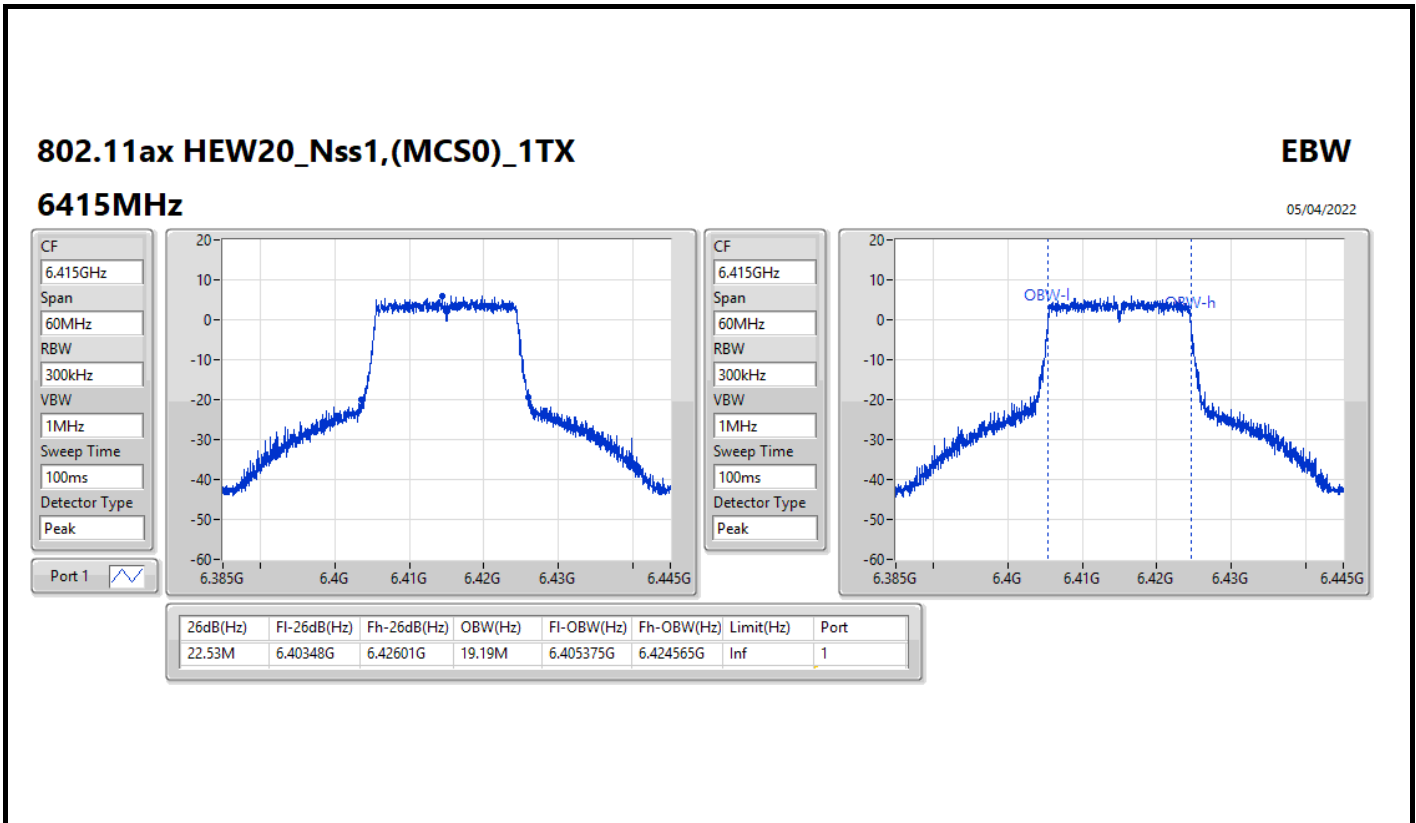
Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Max-OBW = Maximum 99% occupied bandwidth;
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Min-OBW = Minimum 99% occupied bandwidth

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5955MHz	Pass	Inf	24.15M	19.25M
6175MHz	Pass	Inf	23.22M	19.19M
6415MHz	Pass	Inf	22.53M	19.19M
6435MHz	Pass	Inf	23.73M	19.28M
6475MHz	Pass	Inf	22.95M	19.25M
6515MHz	Pass	Inf	22.14M	19.28M
6535MHz	Pass	Inf	23.16M	19.19M
6695MHz	Pass	Inf	24.45M	19.22M
6855MHz	Pass	Inf	25.68M	19.22M
6875MHz	Pass	Inf	23.67M	19.19M
6895MHz	Pass	Inf	22.68M	19.28M
6995MHz	Pass	Inf	26.85M	19.28M
7095MHz	Pass	Inf	27.57M	19.25M
7115MHz	Pass	Inf	24.96M	19.16M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5965MHz	Pass	Inf	41.4M	38.141M
6165MHz	Pass	Inf	41.52M	38.021M
6405MHz	Pass	Inf	41.46M	38.141M
6445MHz	Pass	Inf	41.46M	38.081M
6485MHz	Pass	Inf	41.58M	38.141M
6525MHz	Pass	Inf	41.58M	38.141M
6565MHz	Pass	Inf	41.34M	38.141M
6685MHz	Pass	Inf	41.28M	38.141M
6845MHz	Pass	Inf	41.34M	38.141M
6885MHz	Pass	Inf	41.58M	38.201M
6925MHz	Pass	Inf	43.44M	38.201M
7005MHz	Pass	Inf	41.64M	38.141M
7085MHz	Pass	Inf	41.64M	38.141M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5985MHz	Pass	Inf	85.56M	77.961M
6145MHz	Pass	Inf	86.28M	78.081M
6385MHz	Pass	Inf	84.84M	78.081M
6465MHz	Pass	Inf	83.88M	77.961M
6545MHz	Pass	Inf	85.32M	78.081M
6625MHz	Pass	Inf	87.72M	78.321M
6705MHz	Pass	Inf	95.4M	78.441M
6785MHz	Pass	Inf	93.96M	78.201M
6865MHz	Pass	Inf	148.56M	78.921M
6945MHz	Pass	Inf	144.84M	79.28M
7025MHz	Pass	Inf	163.32M	83.718M
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-
6025MHz	Pass	Inf	254.4M	157.841M
6185MHz	Pass	Inf	342.96M	195.502M
6345MHz	Pass	Inf	310.32M	160.24M
6505MHz	Pass	Inf	309.6M	160.72M
6665MHz	Pass	Inf	400.56M	267.226M
6825MHz	Pass	Inf	402M	279.46M
6985MHz	Pass	Inf	332.64M	160.96M

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



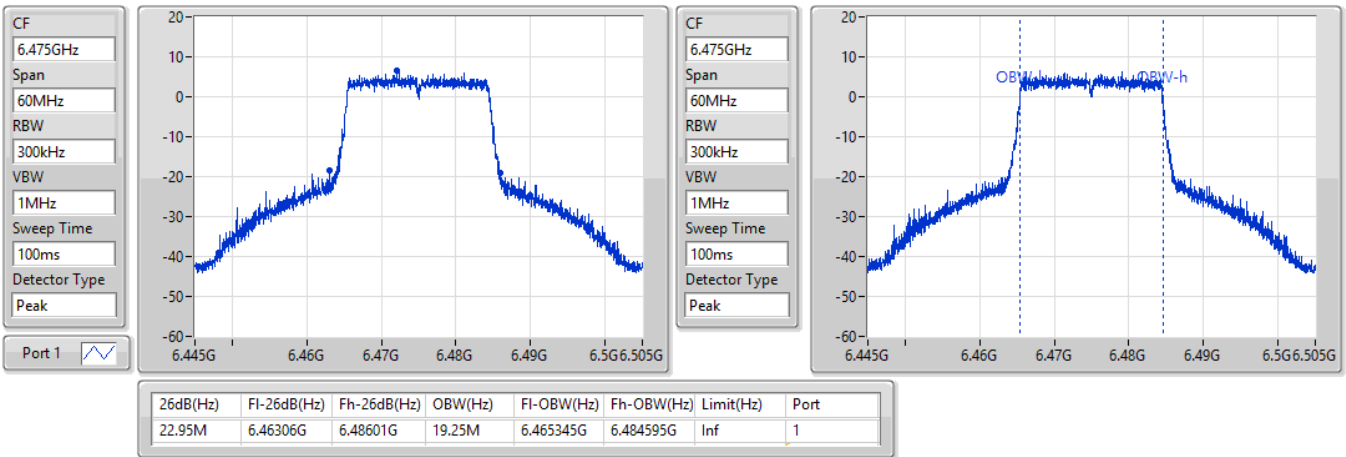


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6475MHz

05/04/2022

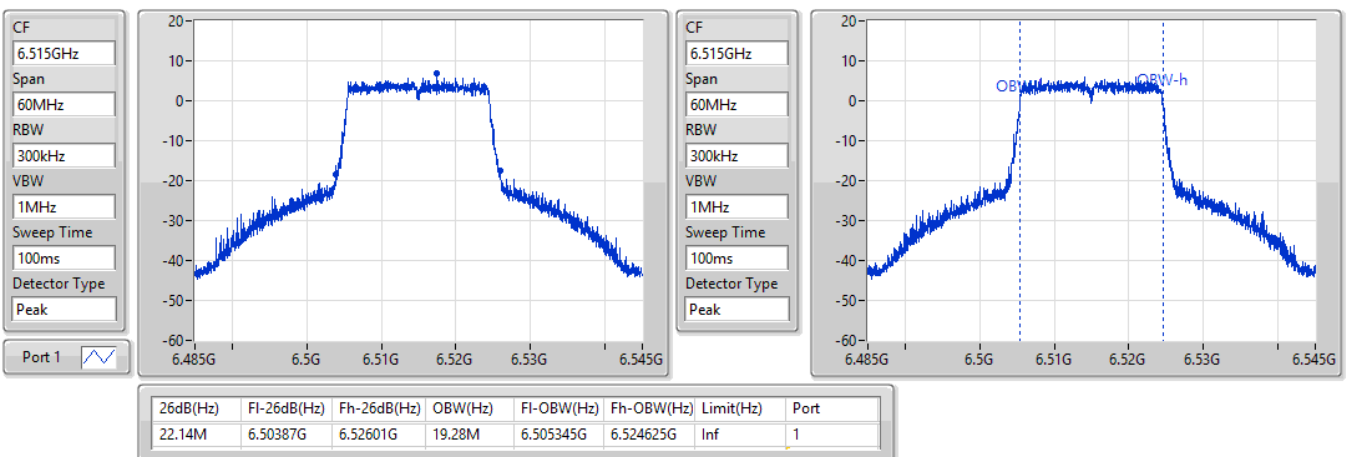


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6515MHz

05/04/2022

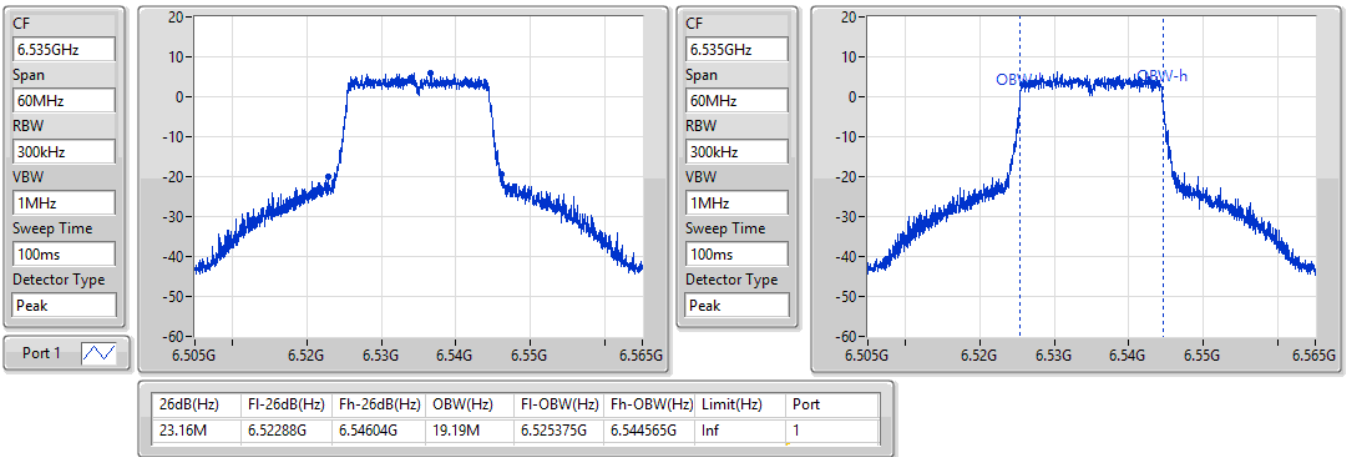


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6535MHz

05/04/2022

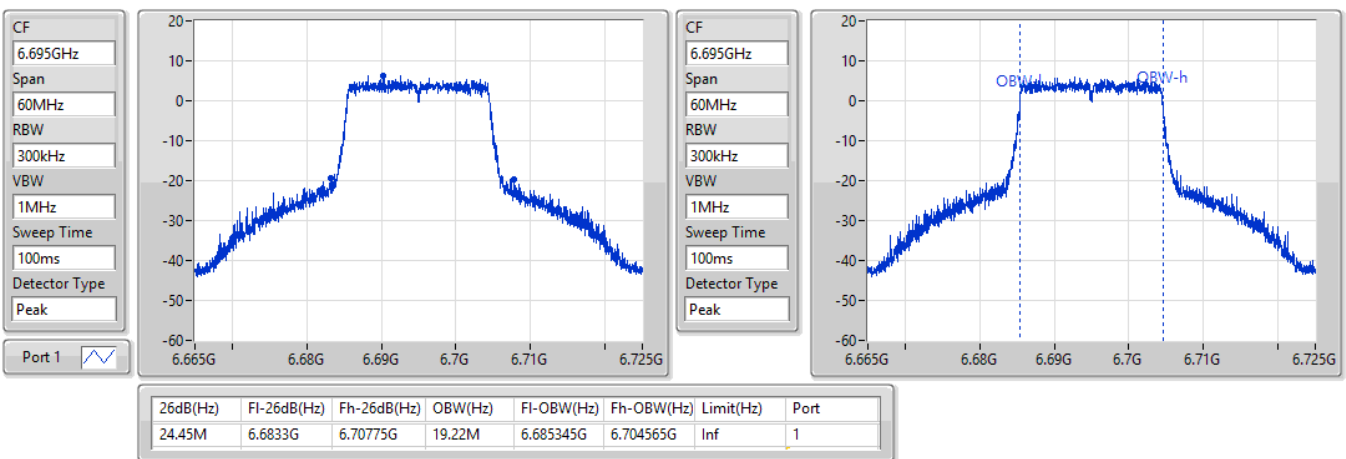


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6695MHz

05/04/2022

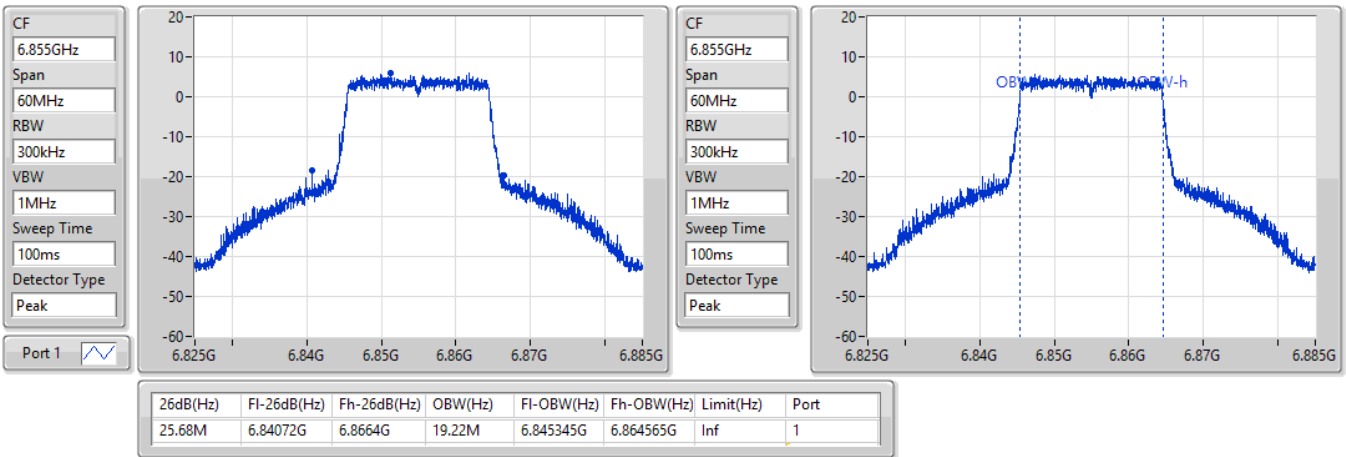


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6855MHz

05/04/2022

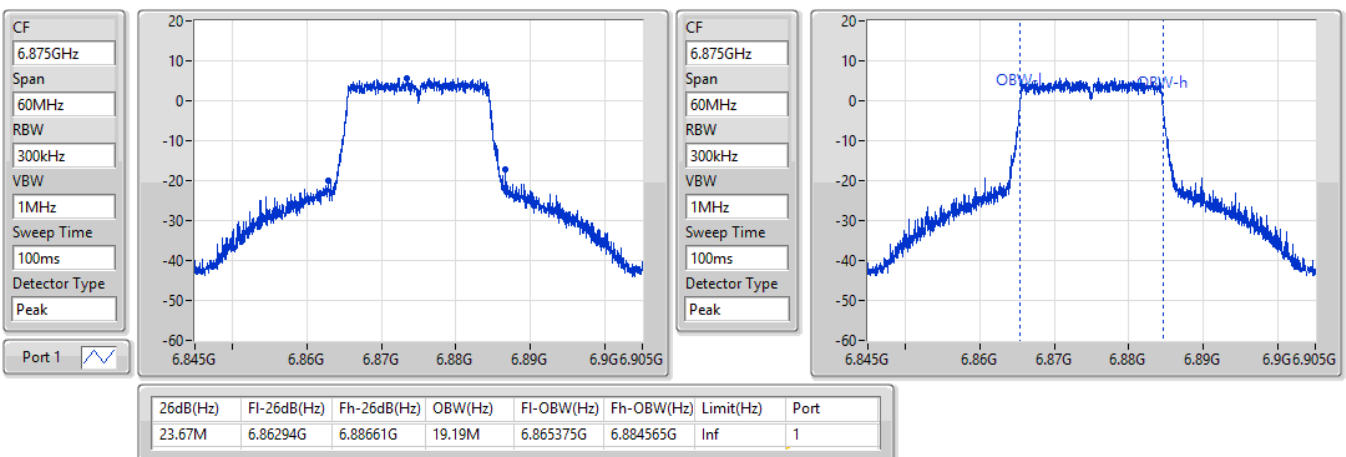


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6875MHz

05/04/2022

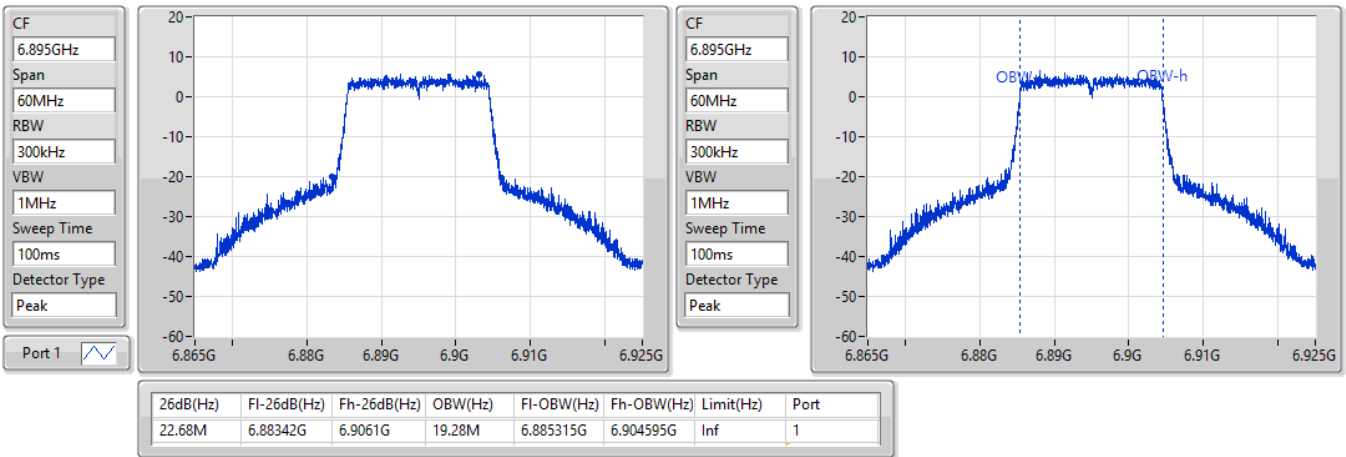


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6895MHz

05/04/2022

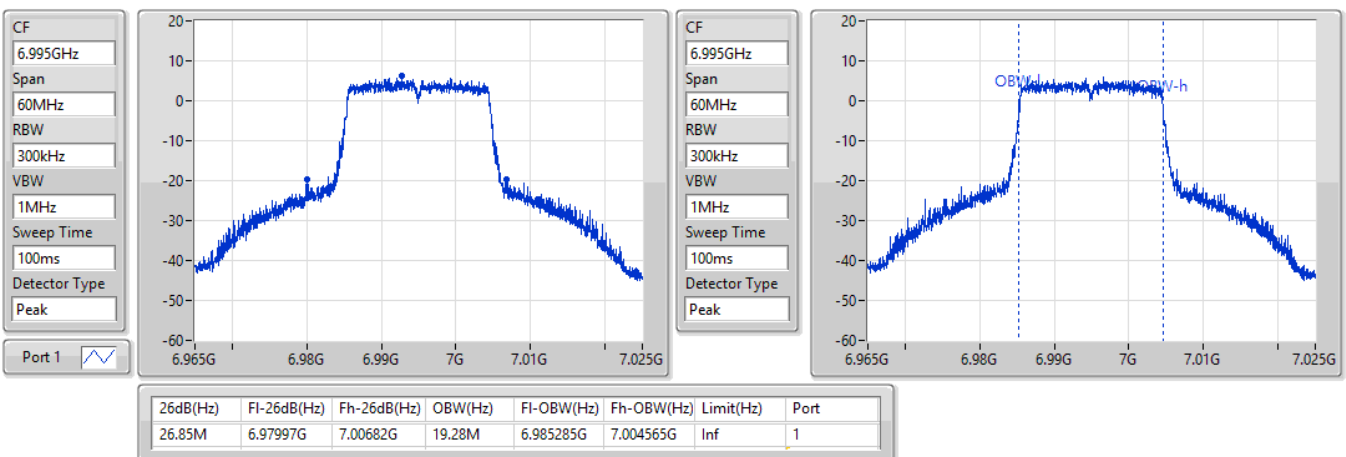


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6995MHz

05/04/2022

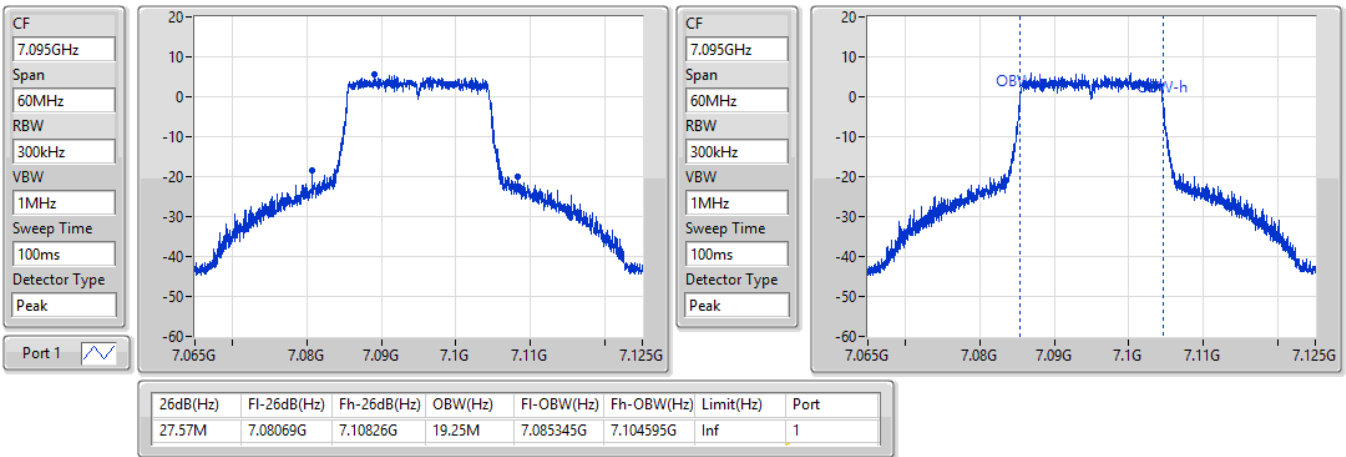


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

7095MHz

05/04/2022

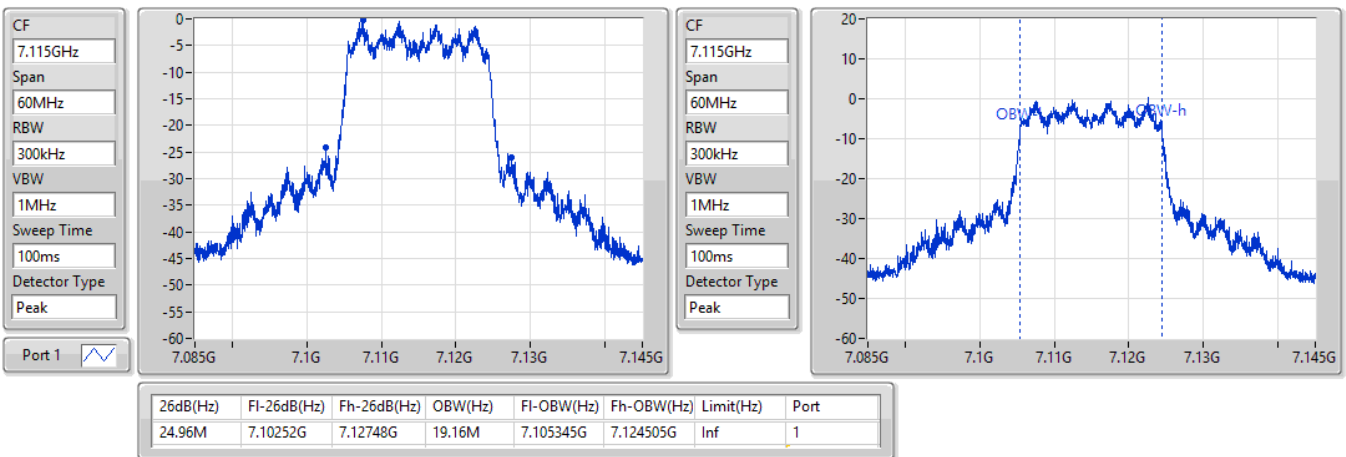


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

7115MHz

19/04/2022



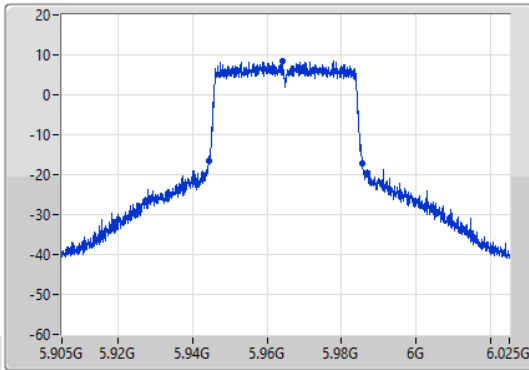
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

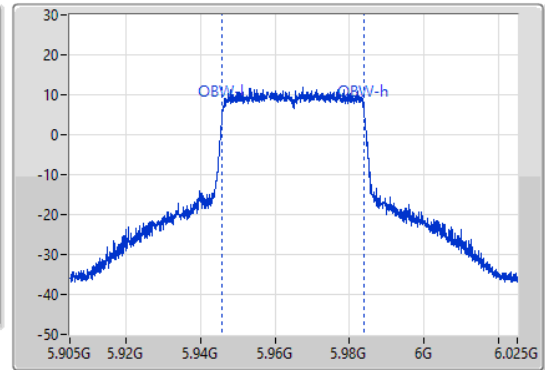
5965MHz

05/04/2022

CF
5.965GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
5.965GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.4M	5.9443G	5.9857G	38.141M	5.94587G	5.98401G	Inf	1

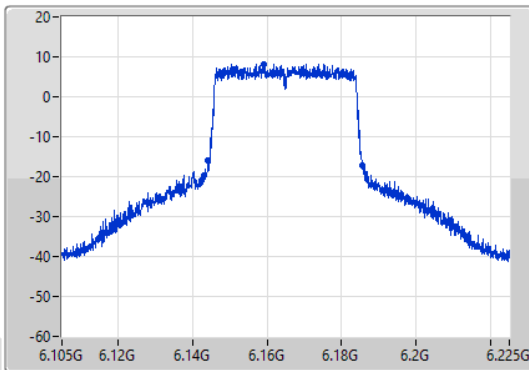
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

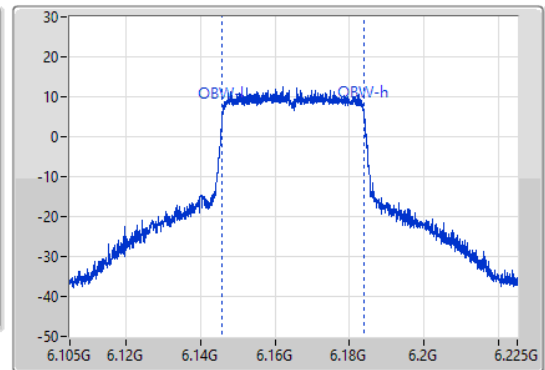
6165MHz

05/04/2022

CF
6.165GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
6.165GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



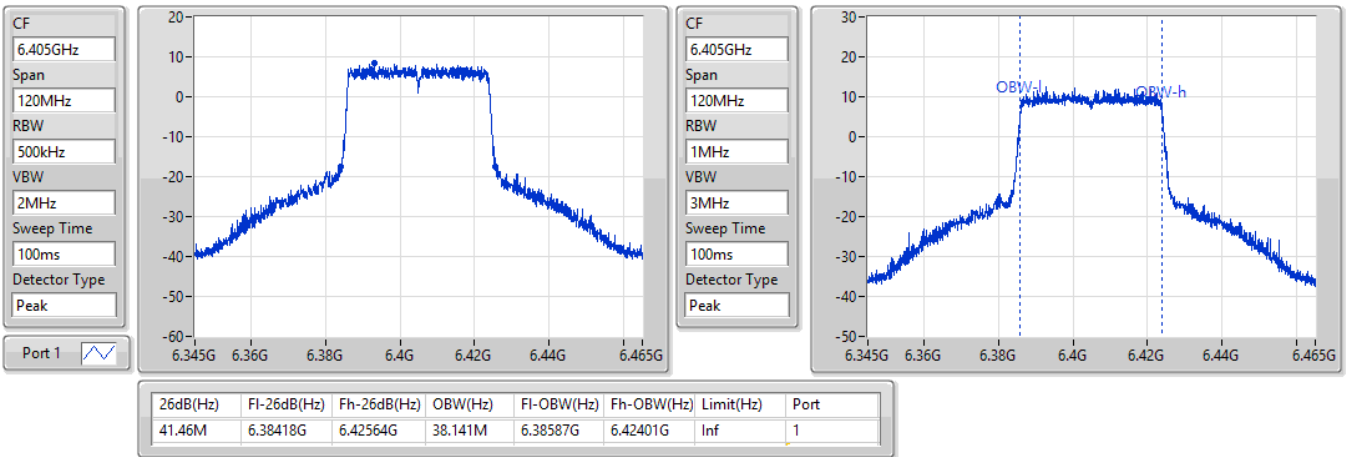
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.52M	6.14418G	6.1857G	38.021M	6.14593G	6.183951G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6405MHz

05/04/2022

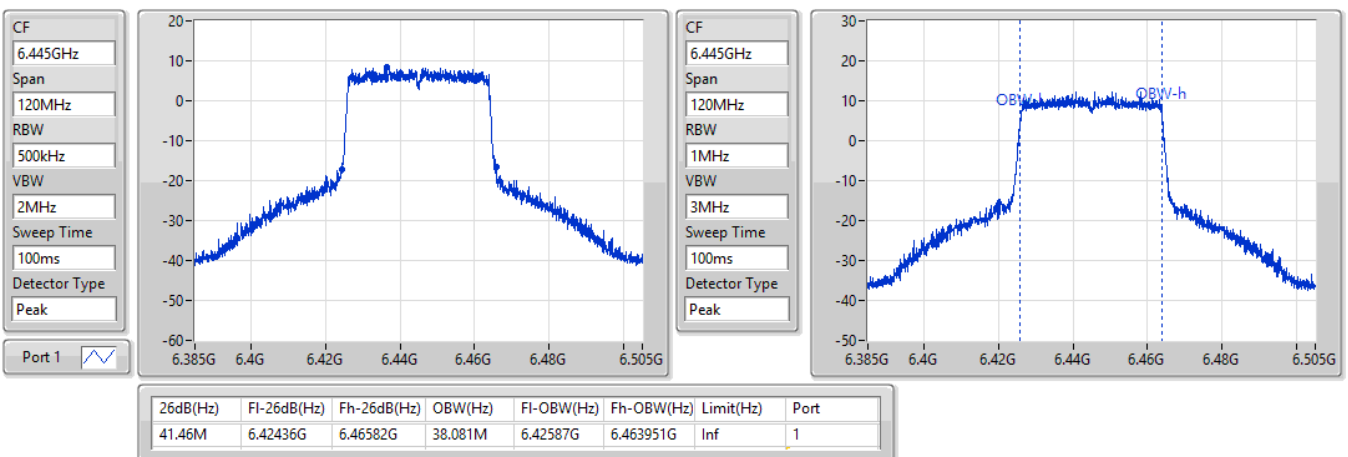


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6445MHz

05/04/2022



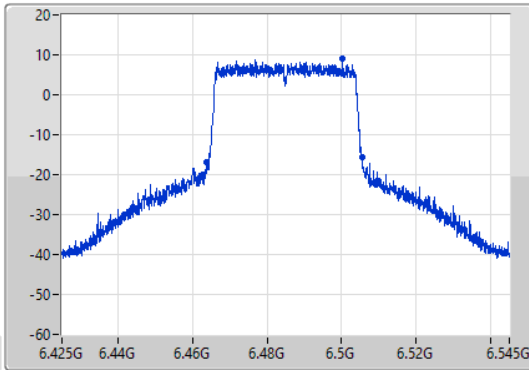
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

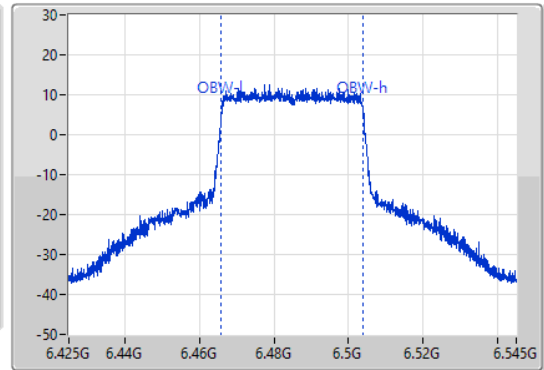
6485MHz

05/04/2022

CF
6.485GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
6.485GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.58M	6.46388G	6.50546G	38.141M	6.46587G	6.50401G	Inf	1

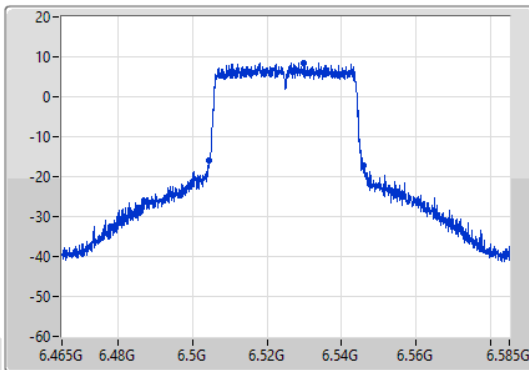
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

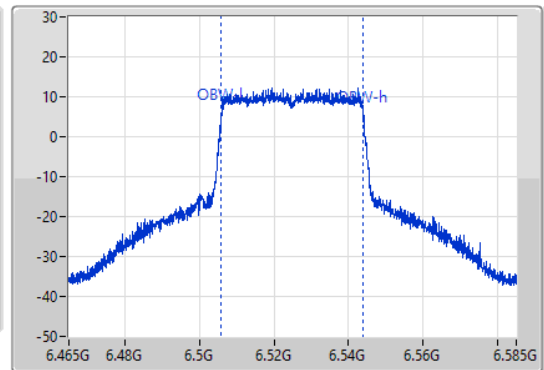
6525MHz

05/04/2022

CF
6.525GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
6.525GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



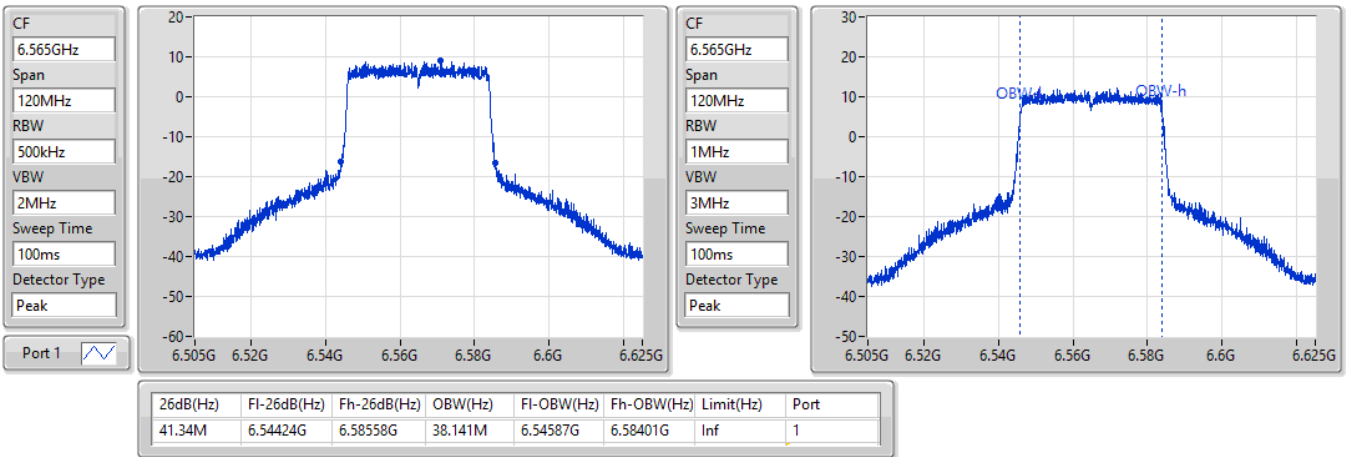
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.58M	6.5043G	6.54588G	38.141M	6.50587G	6.54401G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6565MHz

05/04/2022

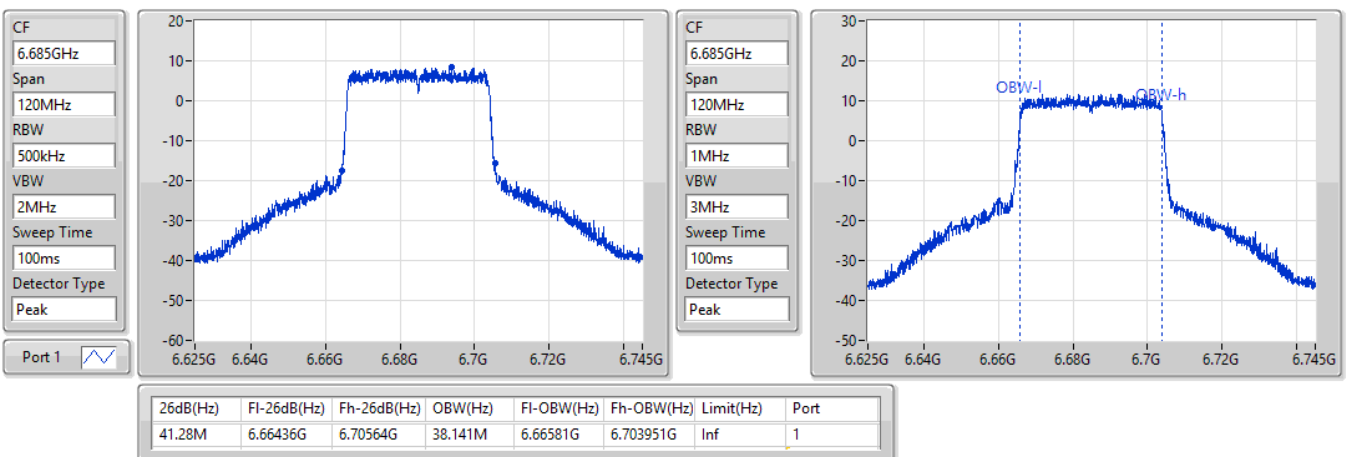


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6685MHz

05/04/2022

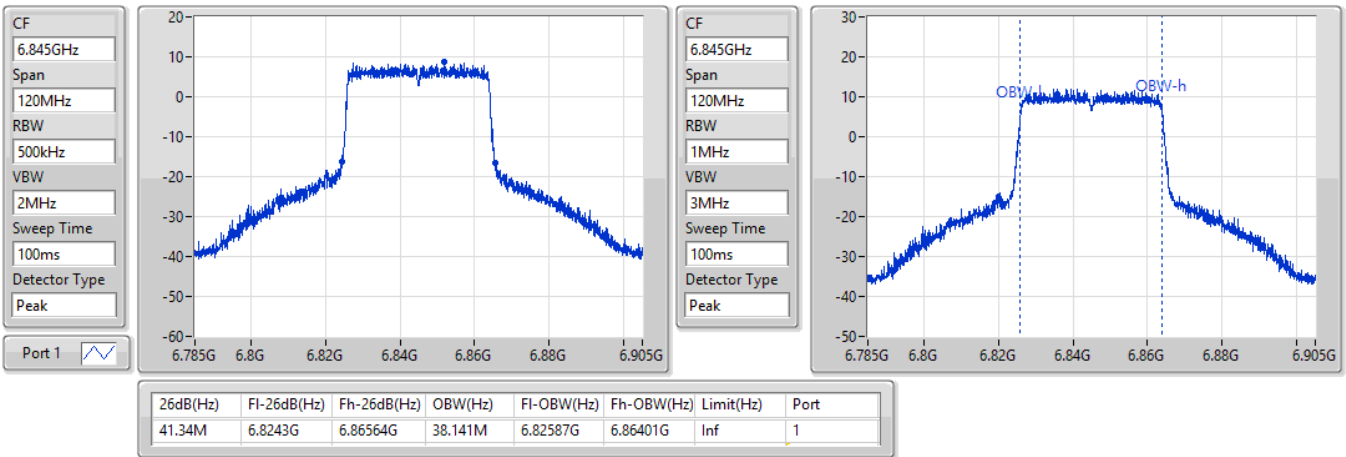


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6845MHz

05/04/2022

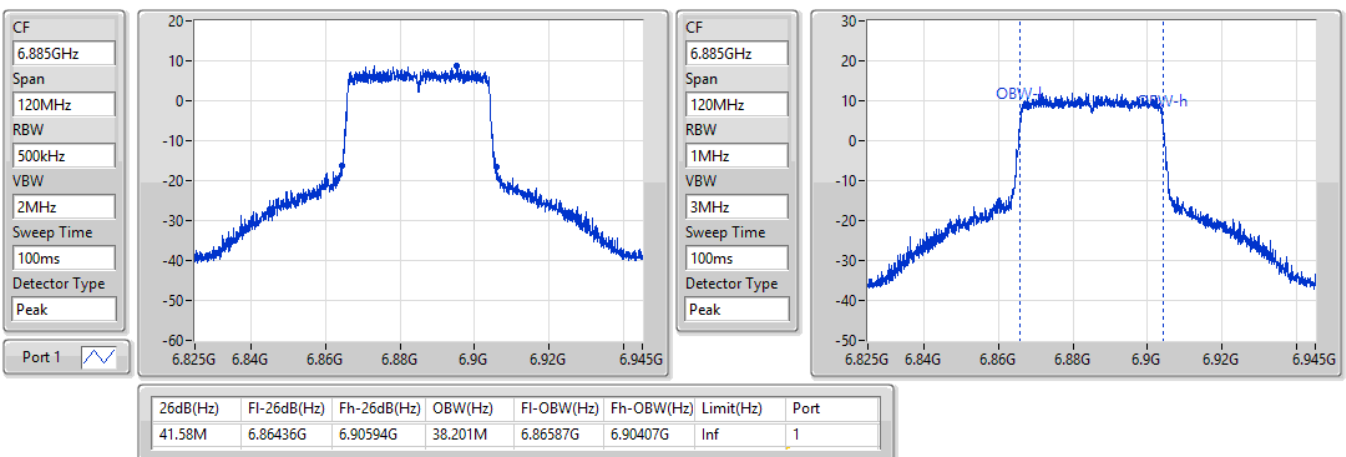


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6885MHz

05/04/2022



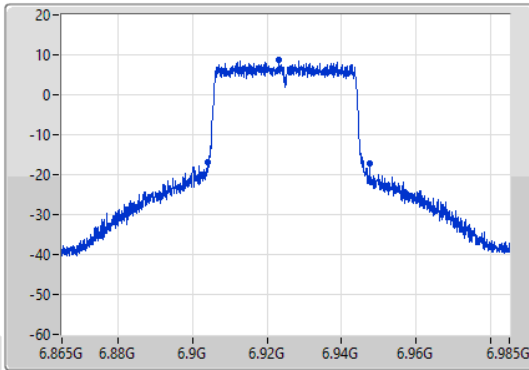
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

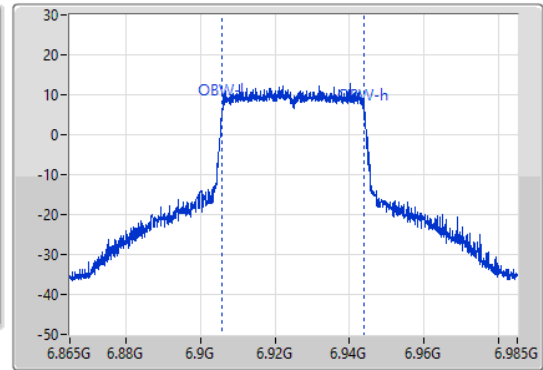
6925MHz

05/04/2022

CF
6.925GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
6.925GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.44M	6.90418G	6.94762G	38.201M	6.90581G	6.94401G	Inf	1

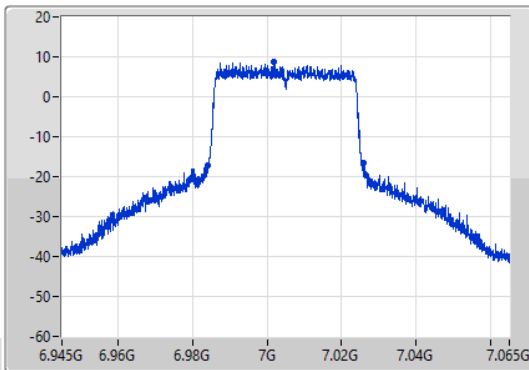
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

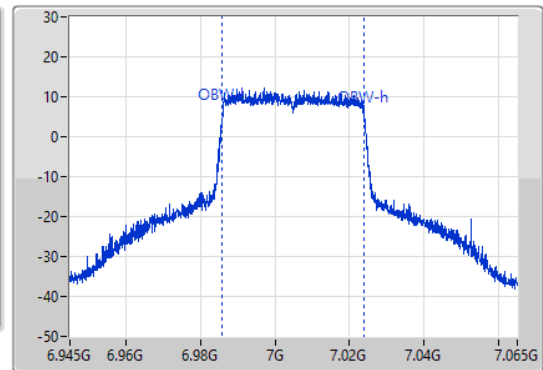
7005MHz

05/04/2022

CF
7.005GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
7.005GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



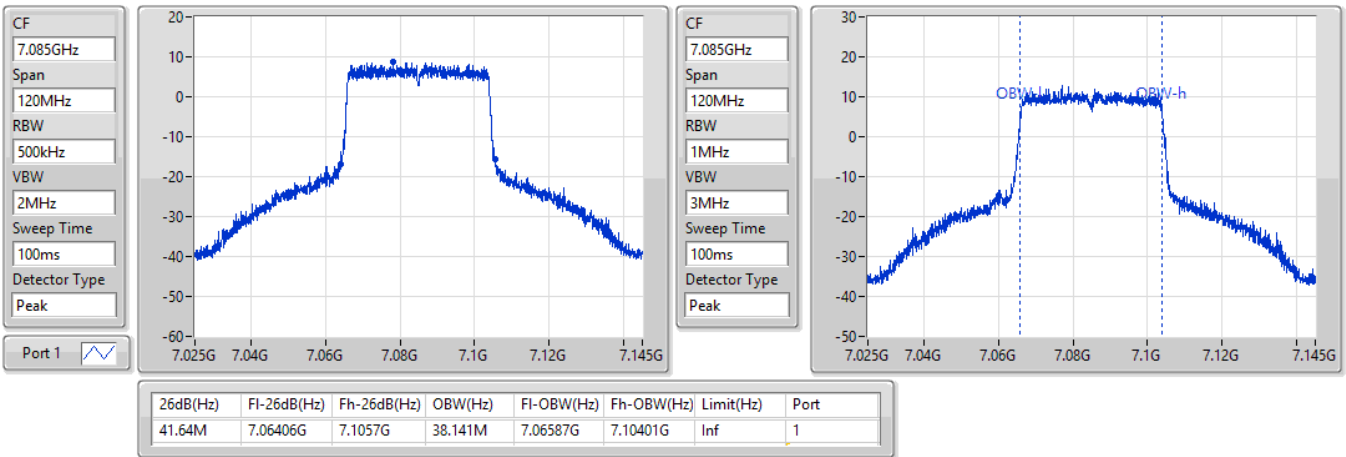
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.64M	6.98418G	7.02582G	38.141M	6.98587G	7.02401G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

7085MHz

05/04/2022

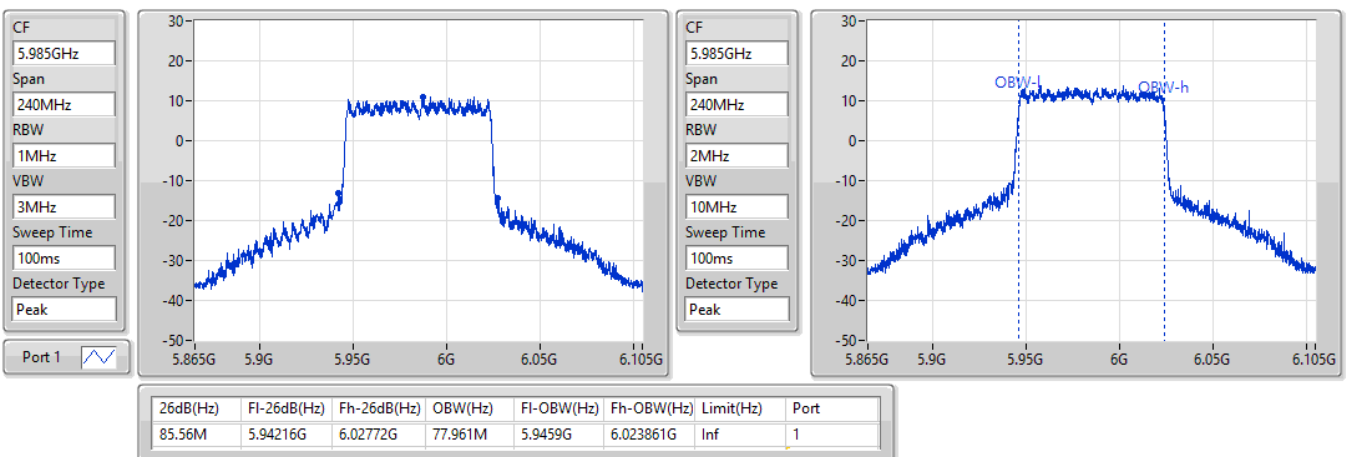


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5985MHz

19/04/2022

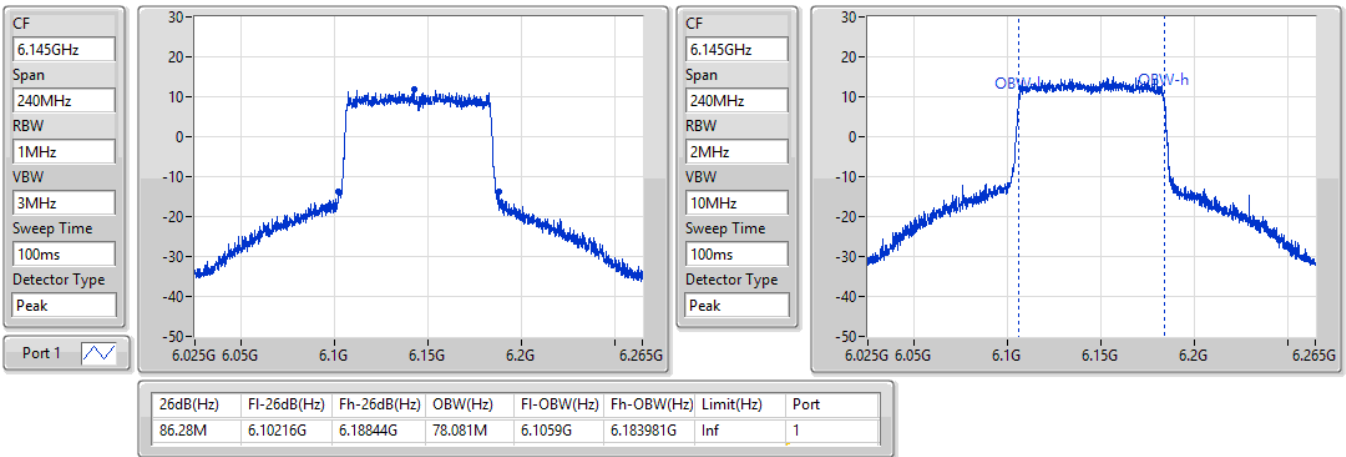


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6145MHz

05/04/2022

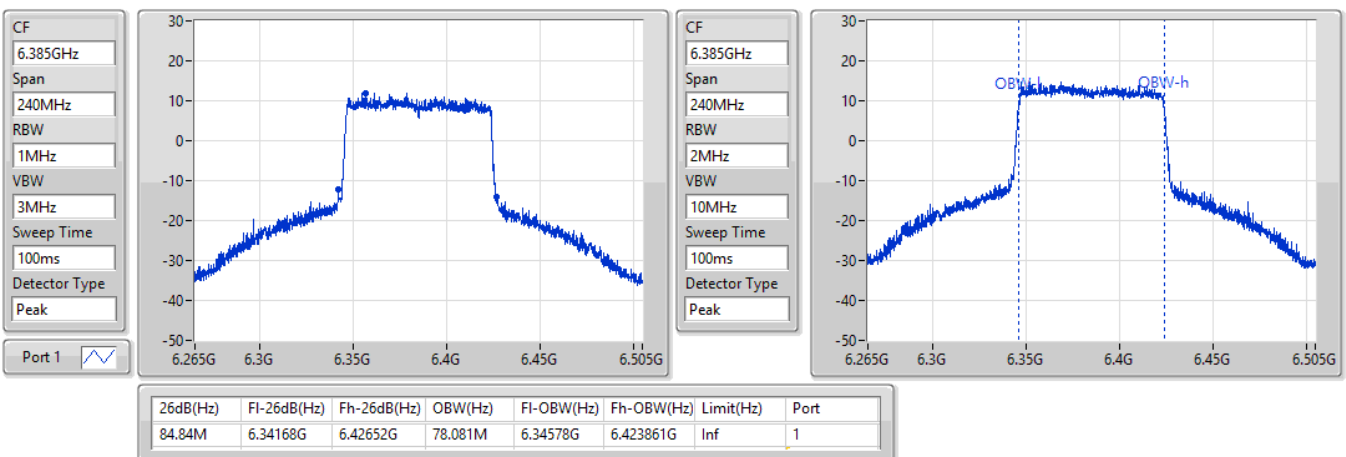


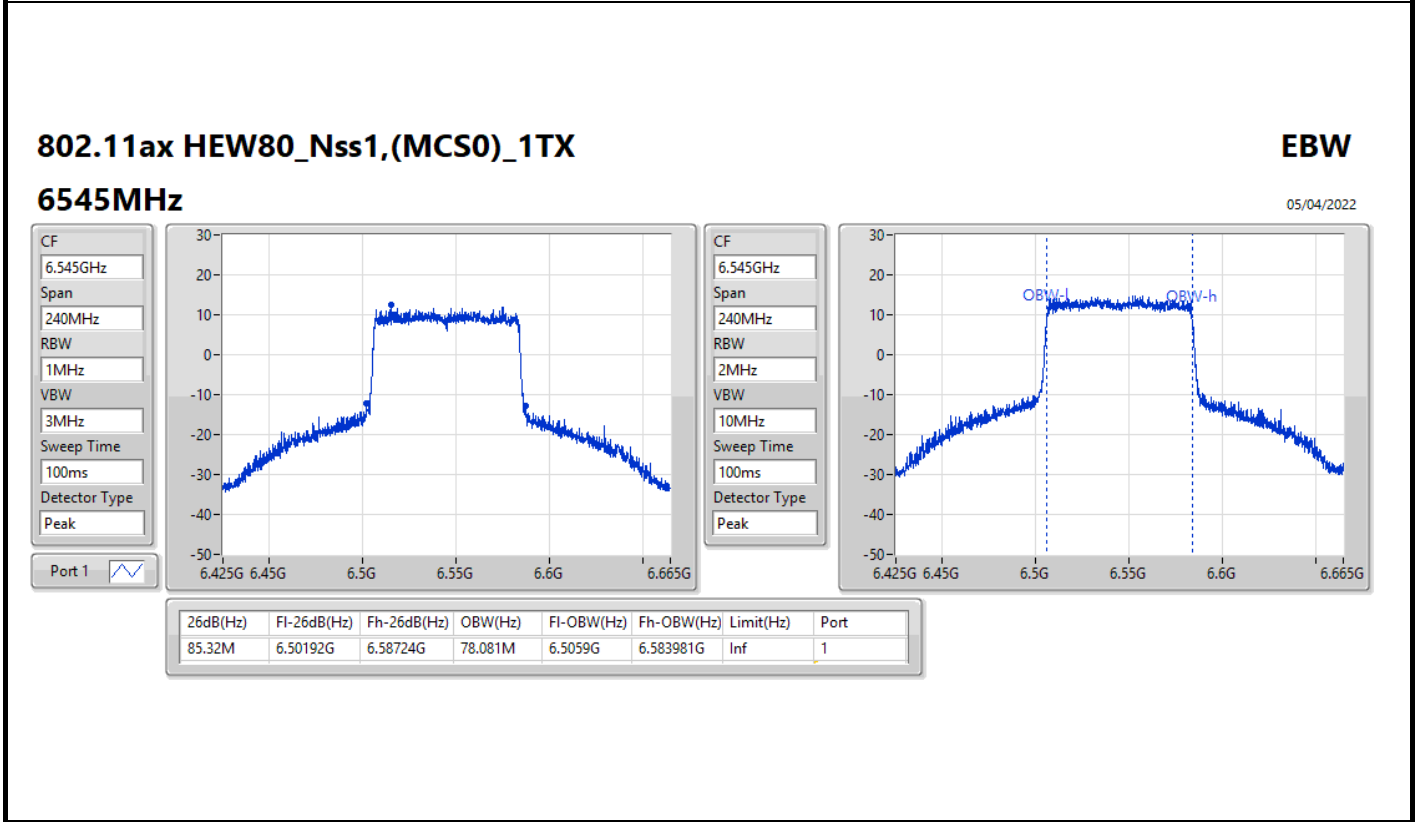
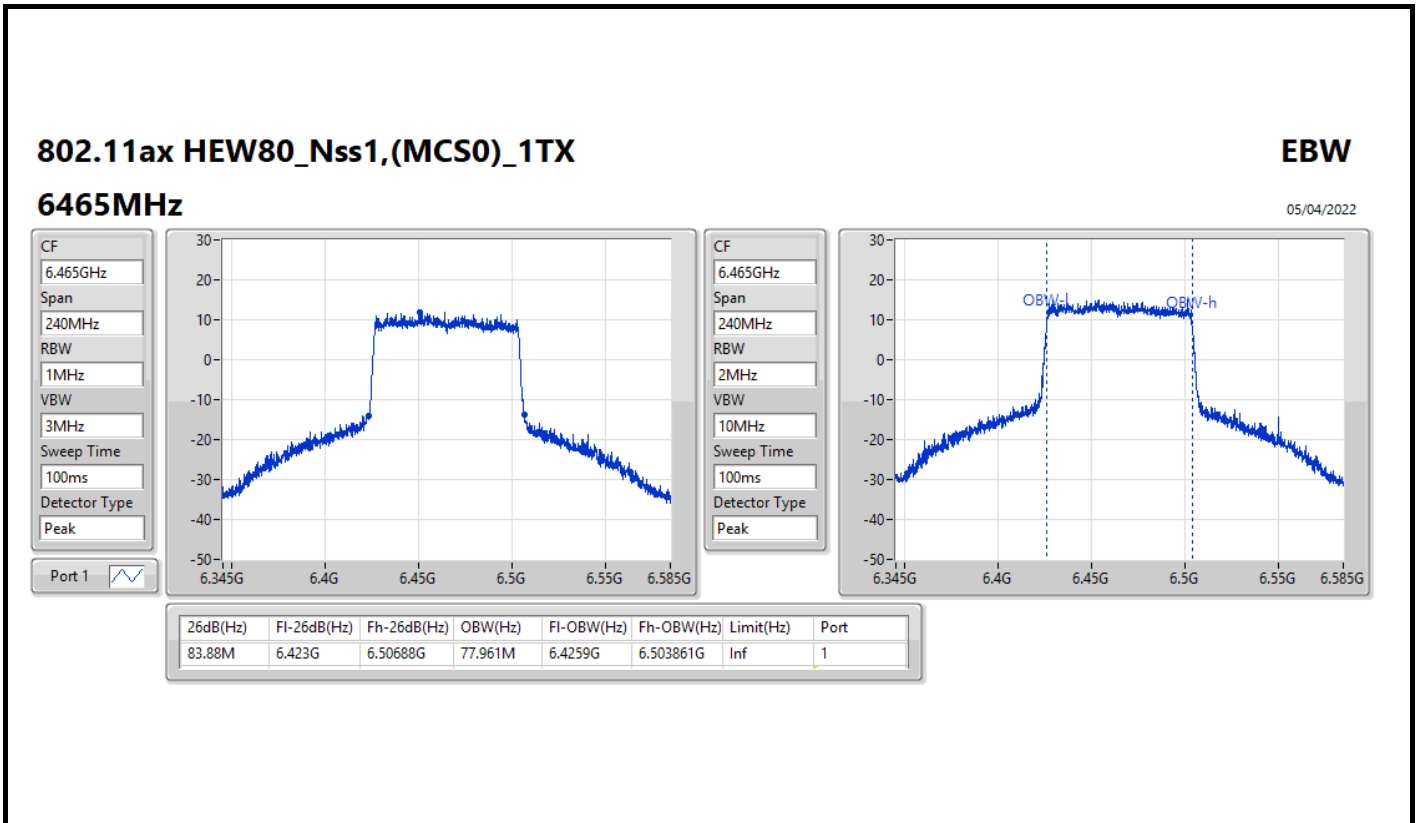
802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6385MHz

05/04/2022



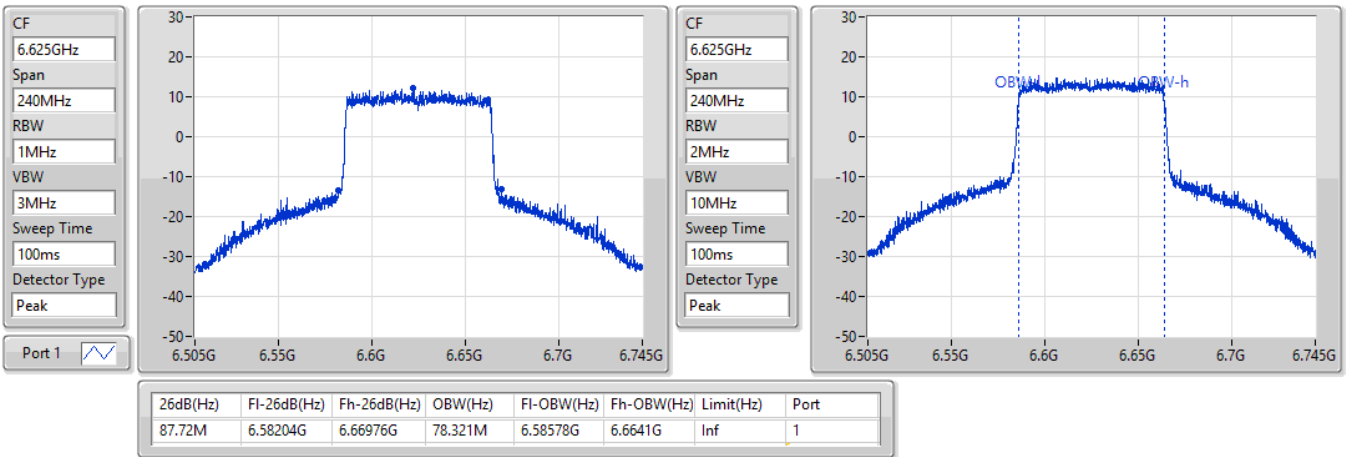


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6625MHz

05/04/2022

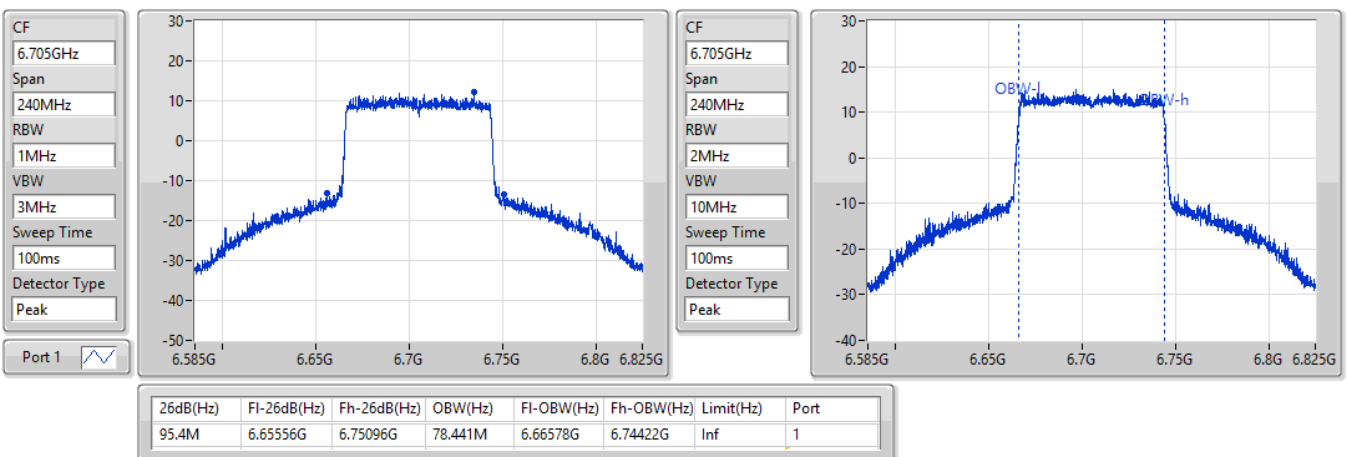


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6705MHz

05/04/2022

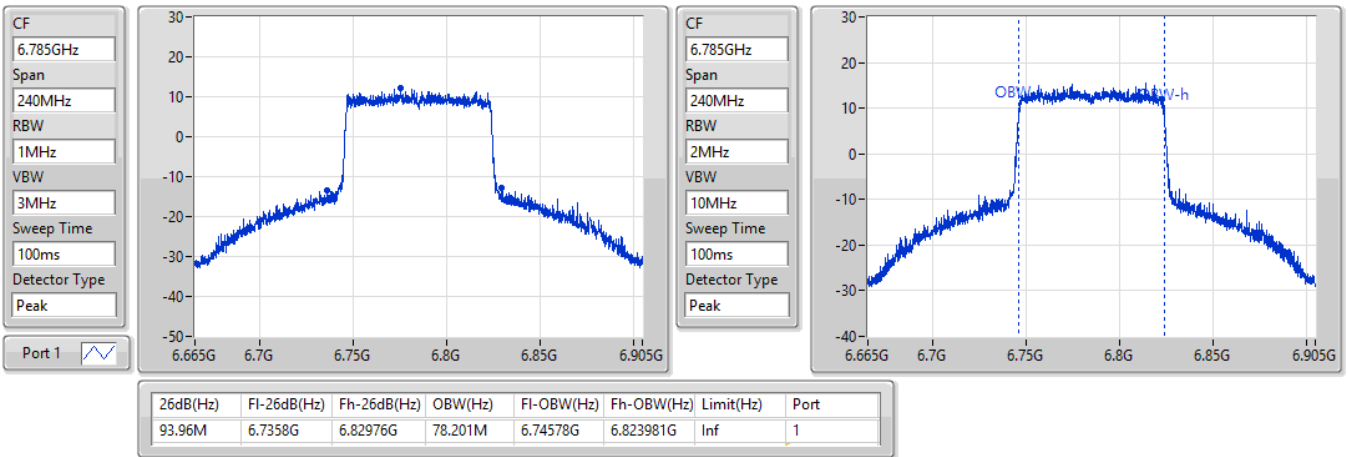


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6785MHz

05/04/2022

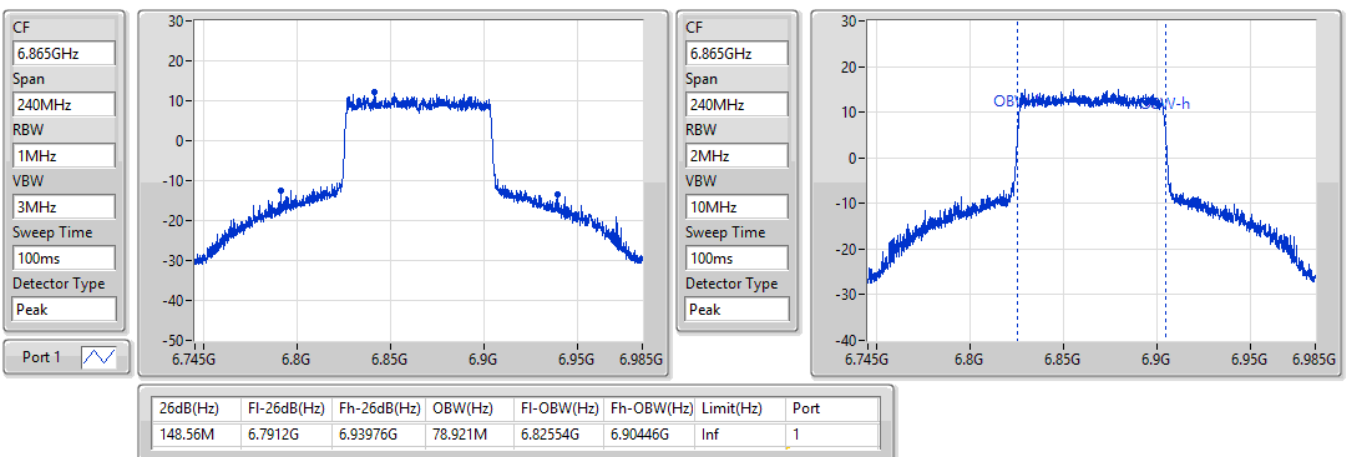


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6865MHz

05/04/2022

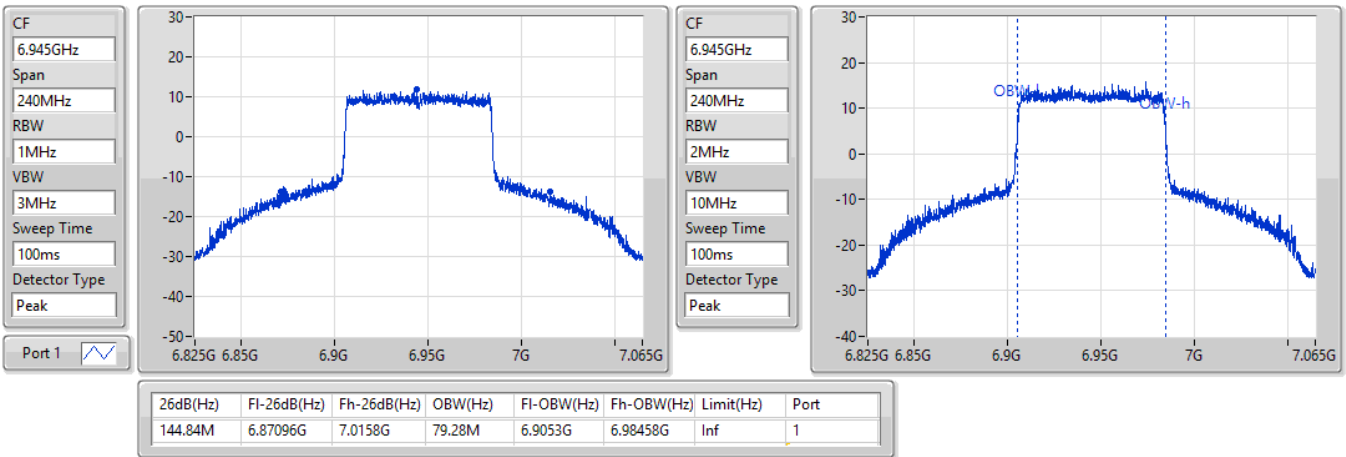


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6945MHz

05/04/2022

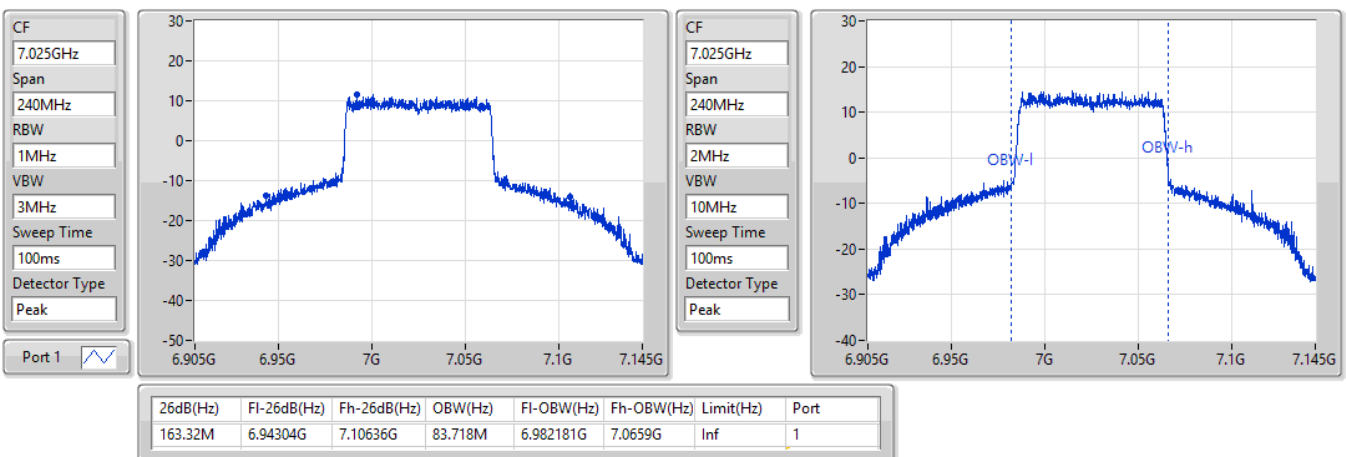


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

7025MHz

05/04/2022

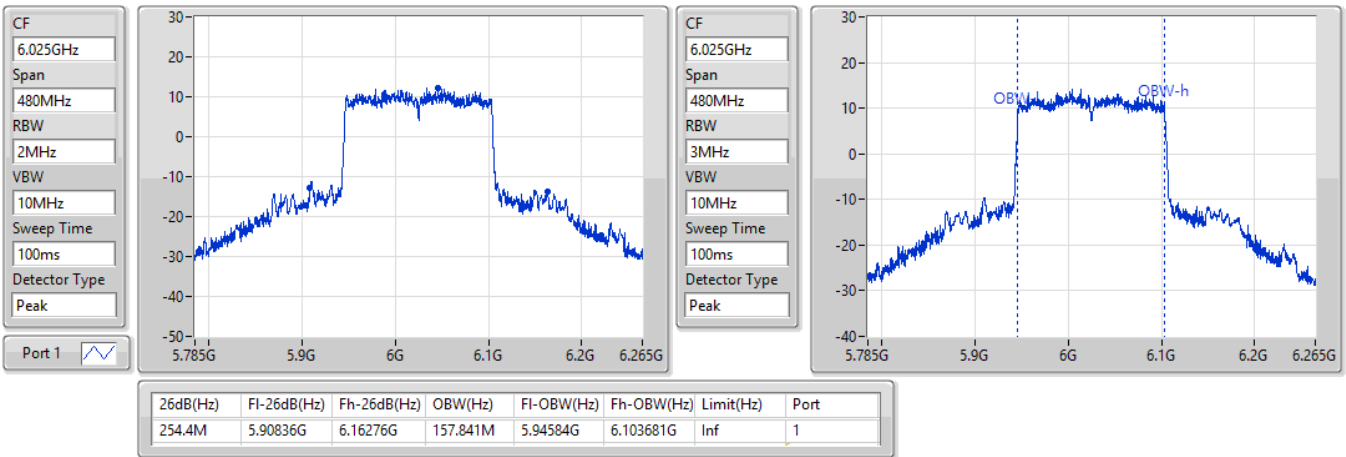


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6025MHz

19/04/2022

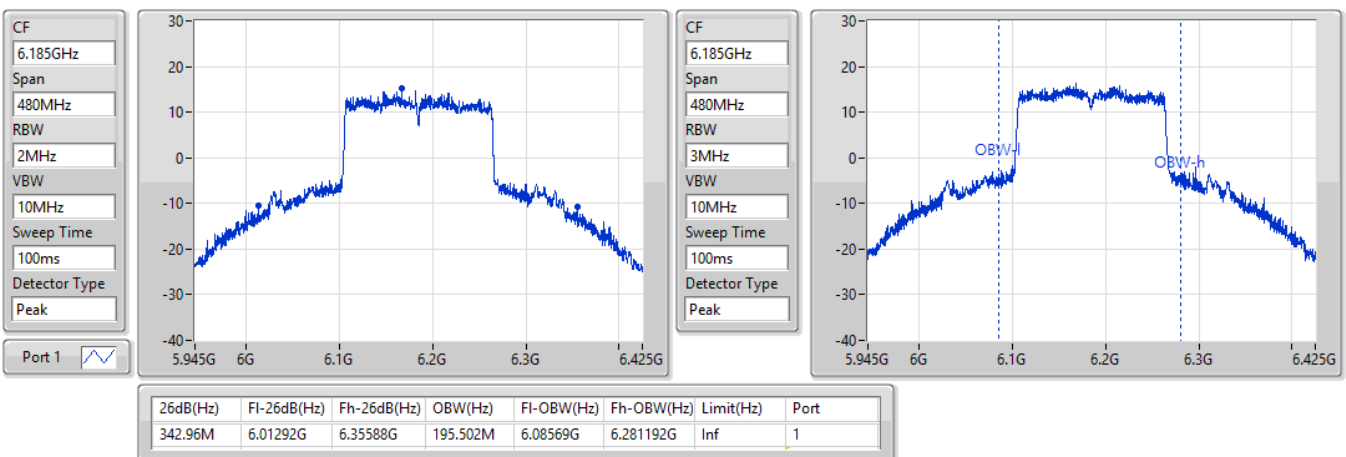


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6185MHz

05/04/2022

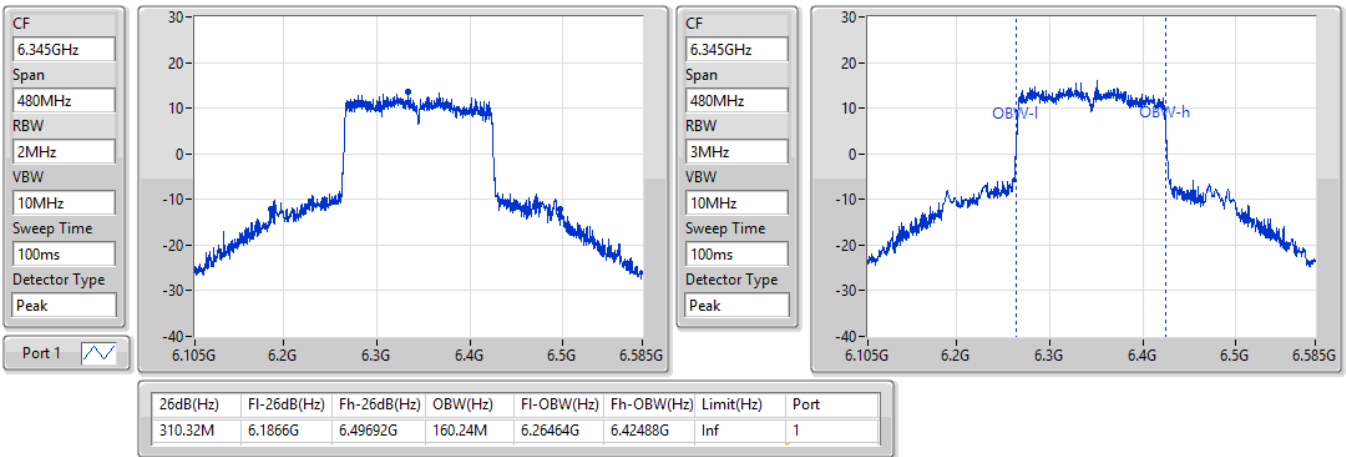


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6345MHz

05/04/2022

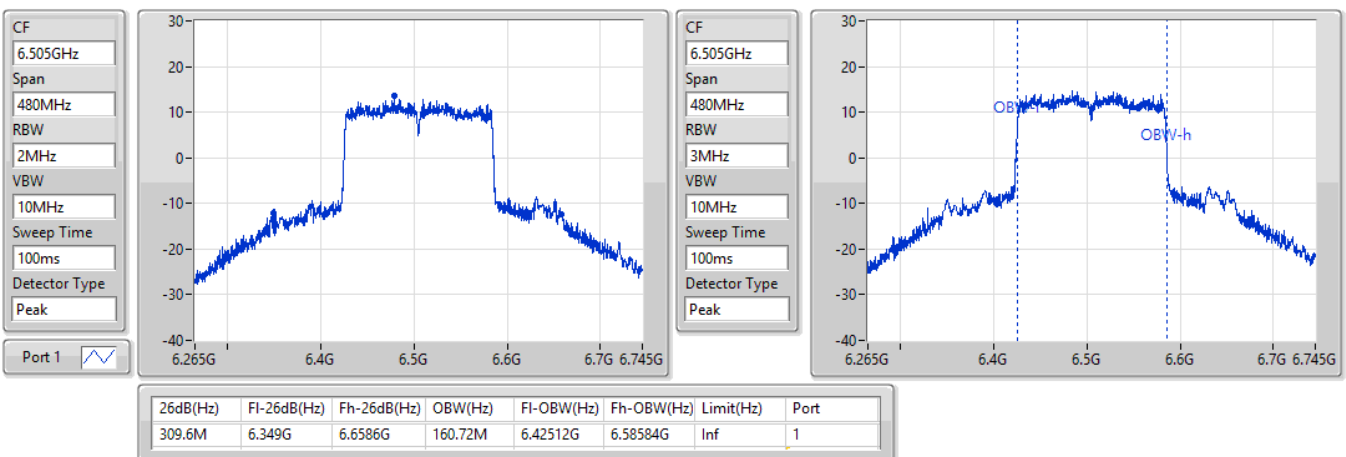


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6505MHz

05/04/2022

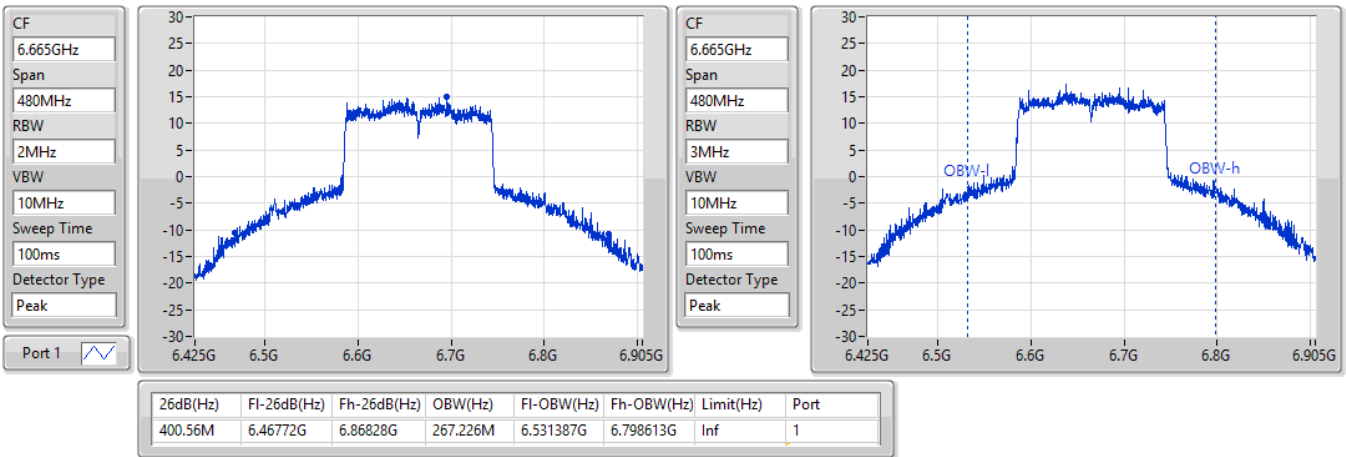


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6665MHz

05/04/2022

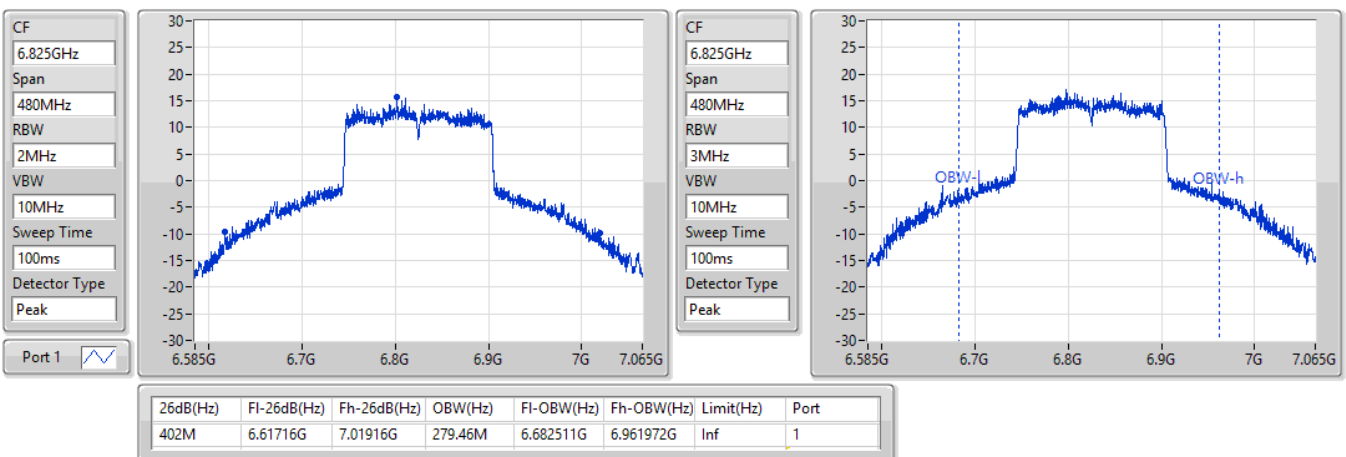


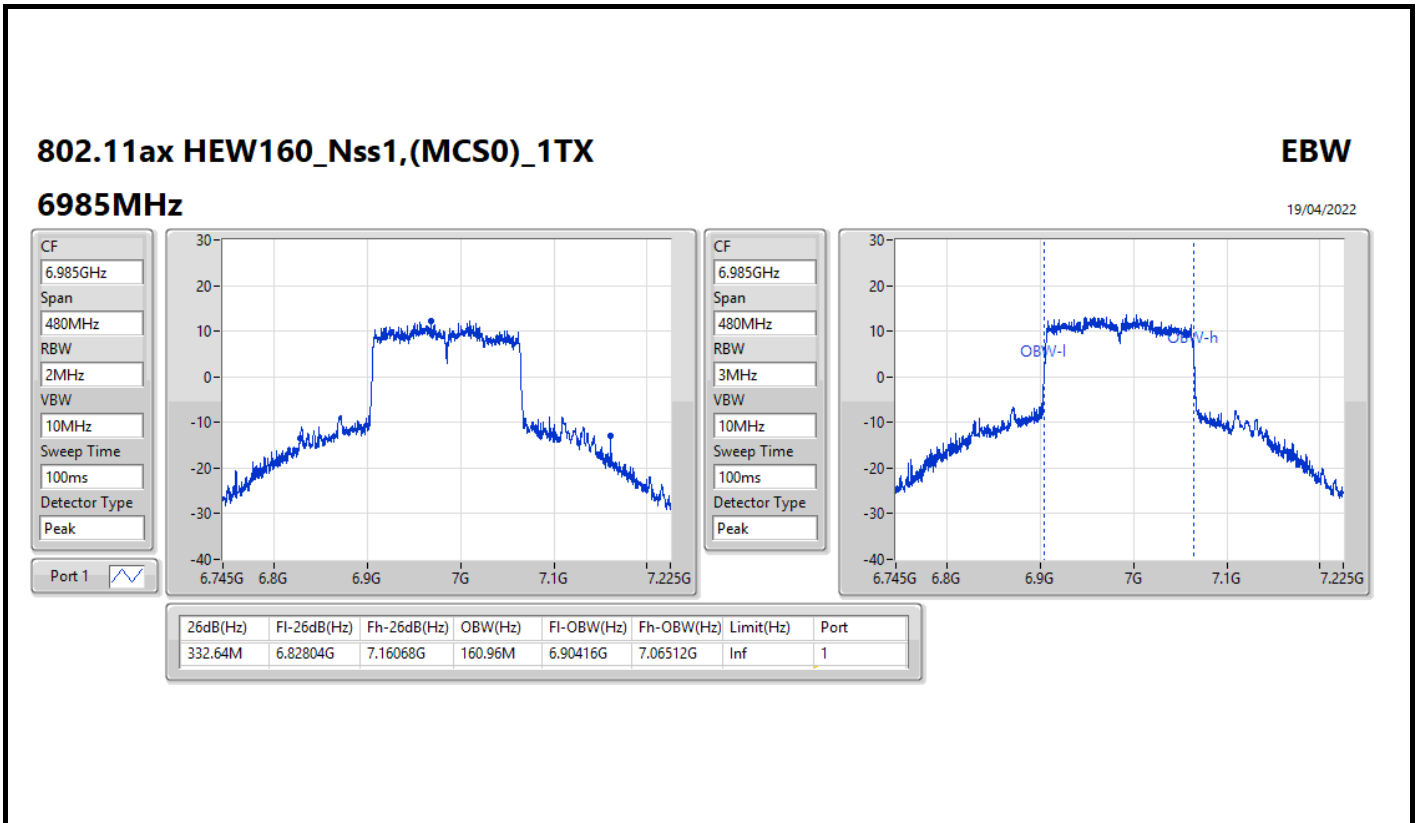
802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6825MHz

05/04/2022







Summary

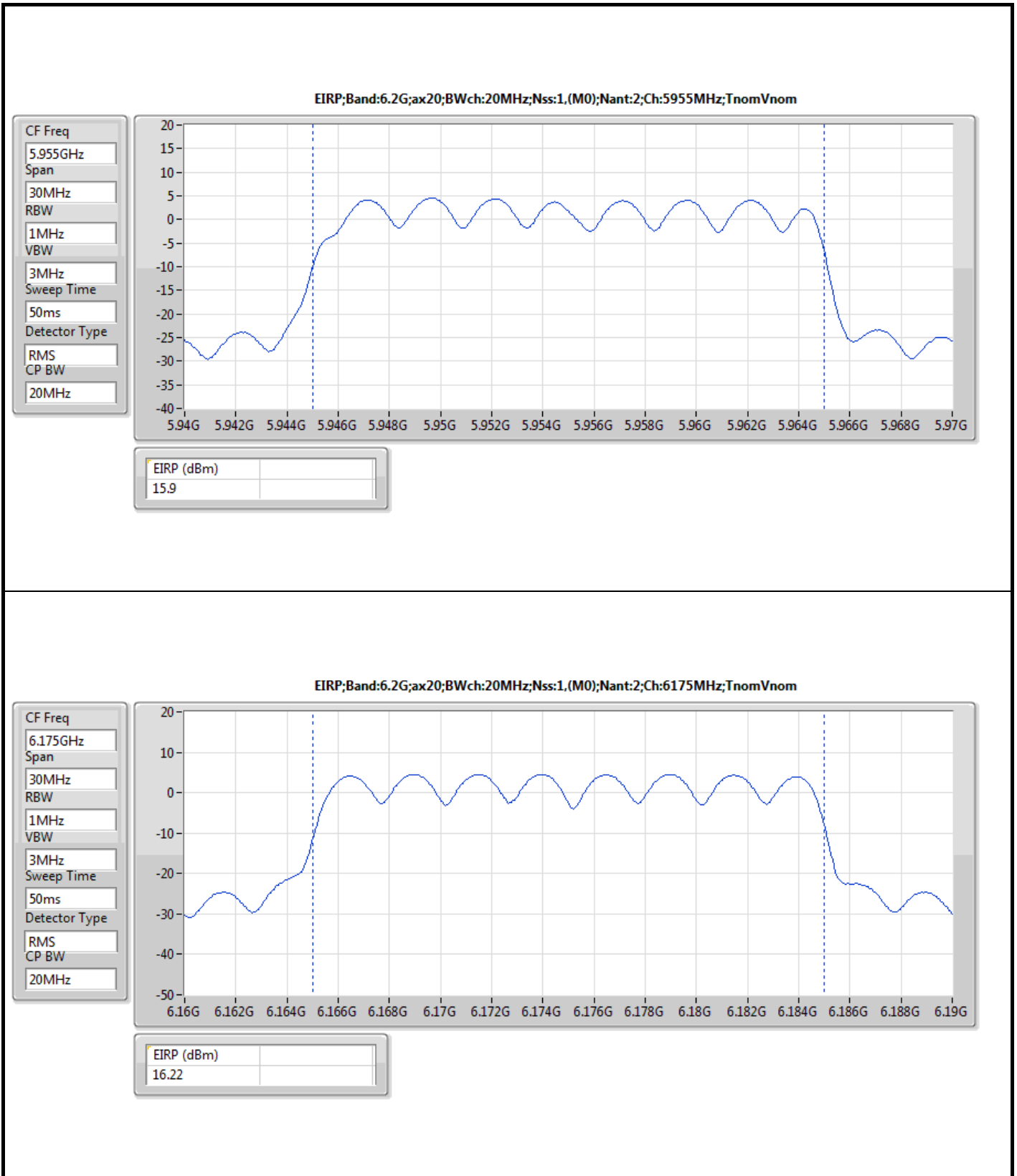
Mode	EIRP (dBm)	EIRP (W)
5.925-6.425GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	16.41	0.04375
802.11ax HEW40_Nss1,(MCS0)_2TX	19.28	0.08472
802.11ax HEW80_Nss1,(MCS0)_2TX	22.02	0.15922
802.11ax HEW160_Nss1,(MCS0)_2TX	24.71	0.29580
6.425-6.525GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	16.39	0.04355
802.11ax HEW40_Nss1,(MCS0)_2TX	19.13	0.08185
802.11ax HEW80_Nss1,(MCS0)_2TX	22.33	0.17100
802.11ax HEW160_Nss1,(MCS0)_2TX	24.52	0.28314
6.525-6.875GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	16.27	0.04236
802.11ax HEW40_Nss1,(MCS0)_2TX	18.83	0.07638
802.11ax HEW80_Nss1,(MCS0)_2TX	21.96	0.15704
802.11ax HEW160_Nss1,(MCS0)_2TX	24.07	0.25527
6.875-7.125GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	14.91	0.03097
802.11ax HEW40_Nss1,(MCS0)_2TX	18.99	0.07925
802.11ax HEW80_Nss1,(MCS0)_2TX	21.87	0.15382
802.11ax HEW160_Nss1,(MCS0)_2TX	23.66	0.23227

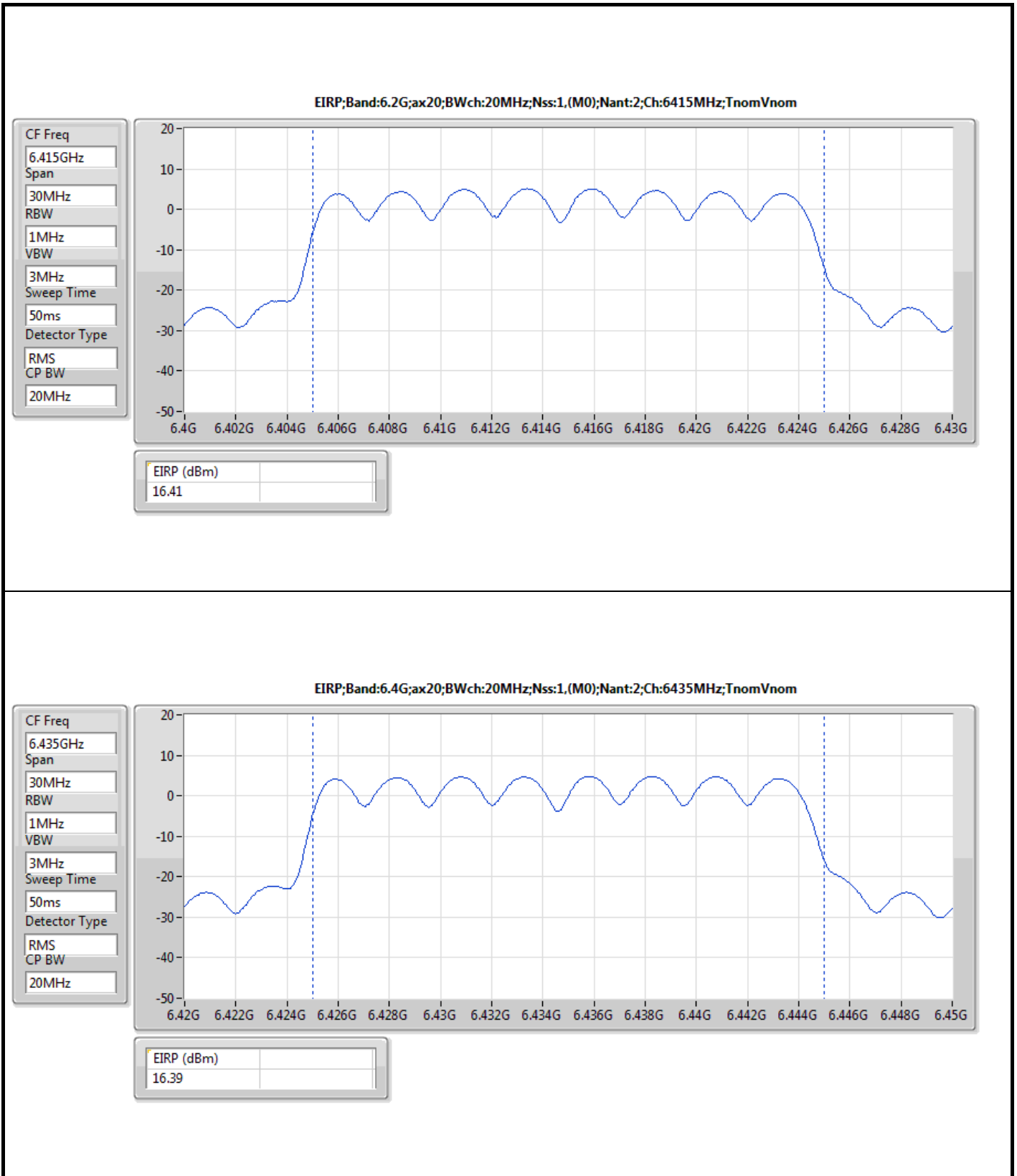


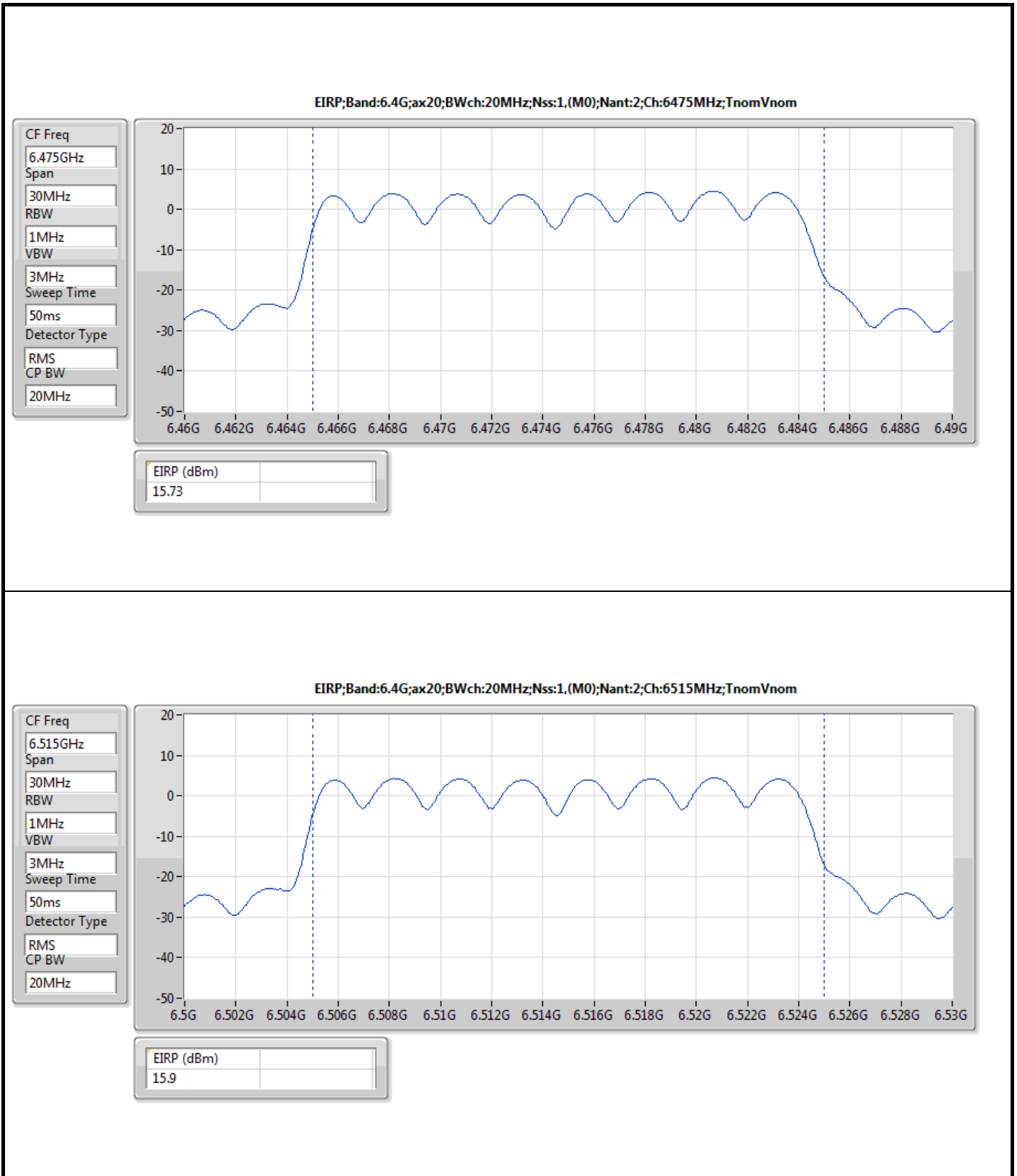
Result

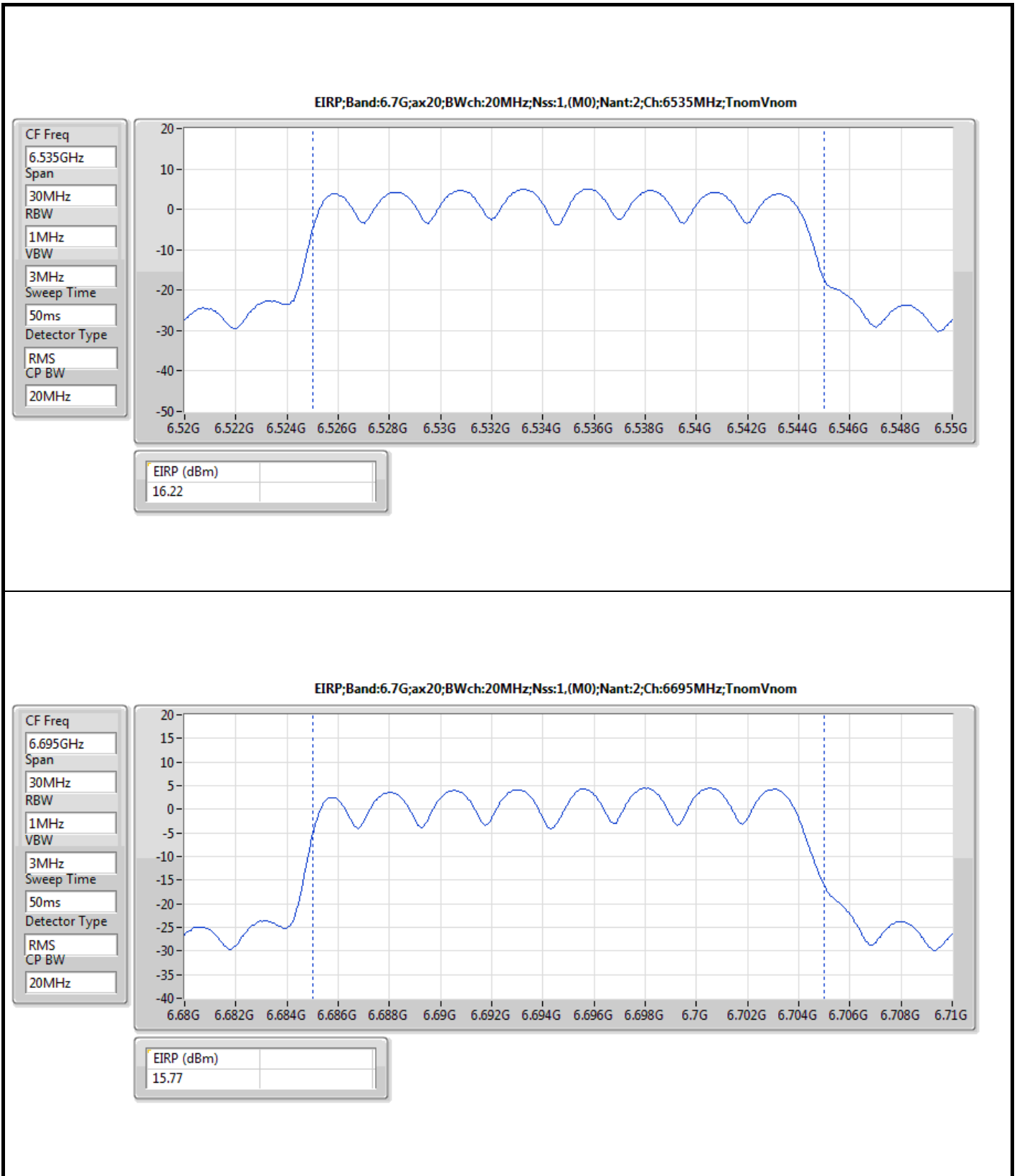
Mode	Result	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-
5955MHz	Pass	15.90	30.00
6175MHz	Pass	16.22	30.00
6415MHz	Pass	16.41	30.00
6435MHz	Pass	16.39	30.00
6475MHz	Pass	15.73	30.00
6515MHz	Pass	15.90	30.00
6535MHz	Pass	16.22	30.00
6695MHz	Pass	15.77	30.00
6855MHz	Pass	13.03	30.00
6875MHz Straddle 6.525-6.875GHz	Pass	16.27	30.00
6895MHz	Pass	14.91	30.00
6995MHz	Pass	14.62	30.00
7095MHz	Pass	14.85	30.00
7115MHz	Pass	10.24	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-
5965MHz	Pass	18.74	30.00
6165MHz	Pass	19.01	30.00
6405MHz	Pass	19.28	30.00
6445MHz	Pass	19.00	30.00
6485MHz	Pass	19.10	30.00
6525MHz Straddle 6.425-6.525GHz	Pass	19.13	30.00
6565MHz	Pass	18.70	30.00
6685MHz	Pass	18.83	30.00
6845MHz	Pass	18.53	30.00
6885MHz Straddle 6.525-6.875GHz	Pass	18.78	30.00
6925MHz	Pass	18.71	30.00
7005MHz	Pass	18.99	30.00
7085MHz	Pass	18.84	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-
5985MHz	Pass	21.21	30.00
6145MHz	Pass	21.82	30.00
6385MHz	Pass	22.02	30.00
6465MHz	Pass	22.33	30.00
6545MHz Straddle 6.425-6.525GHz	Pass	22.03	30.00
6625MHz	Pass	21.52	30.00
6705MHz	Pass	21.89	30.00
6785MHz	Pass	21.96	30.00
6865MHz Straddle 6.525-6.875GHz	Pass	20.94	30.00
6945MHz	Pass	21.87	30.00
7025MHz	Pass	21.22	30.00
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-
6025MHz	Pass	24.20	30.00
6185MHz	Pass	24.56	30.00
6345MHz	Pass	24.71	30.00
6505MHz Straddle 6.425-6.525GHz	Pass	24.52	30.00
6665MHz	Pass	24.07	30.00
6825MHz Straddle 6.525-6.875GHz	Pass	23.27	30.00
6985MHz	Pass	23.66	30.00

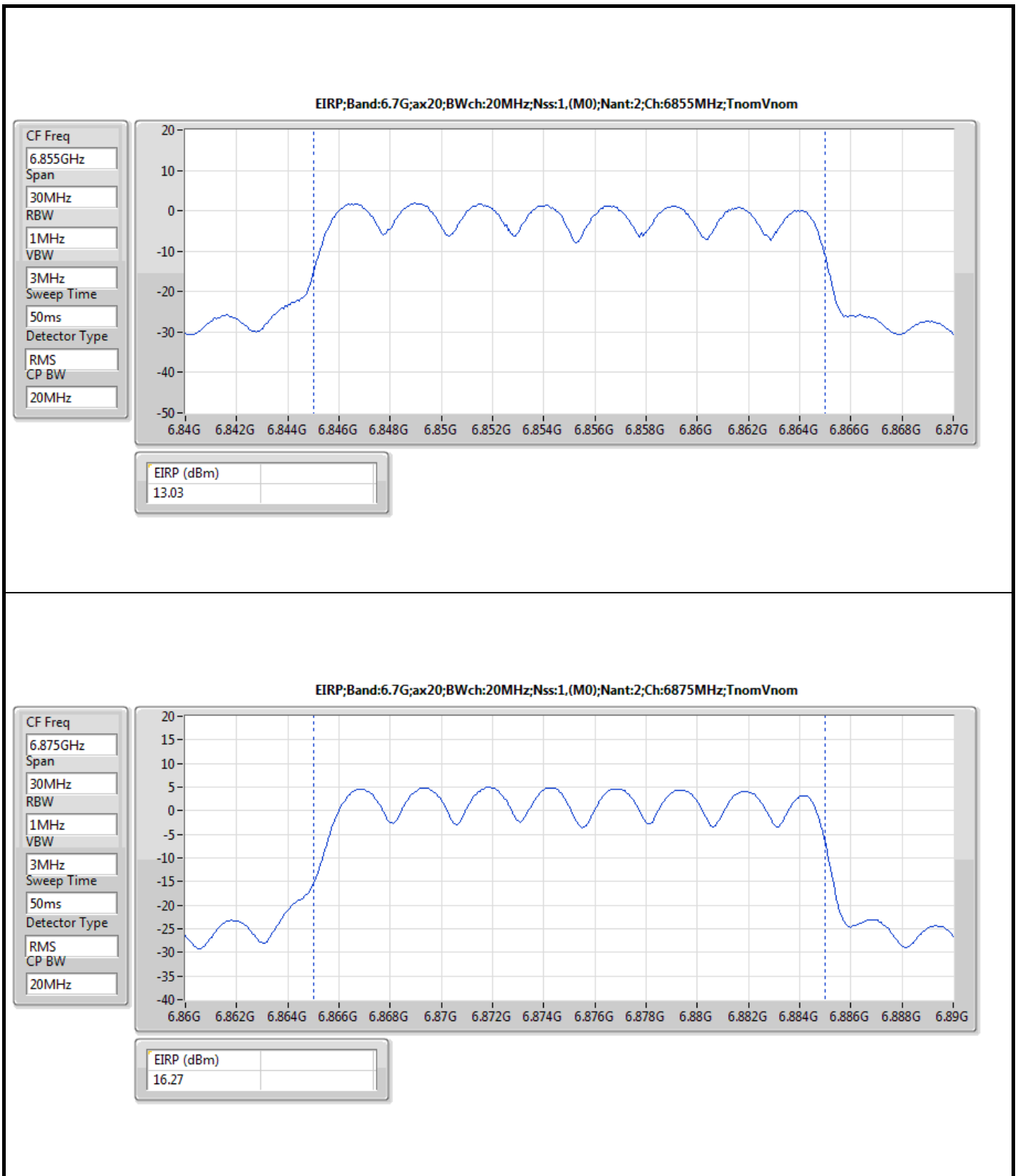
DG = Directional Gain; Port X = Port X output power





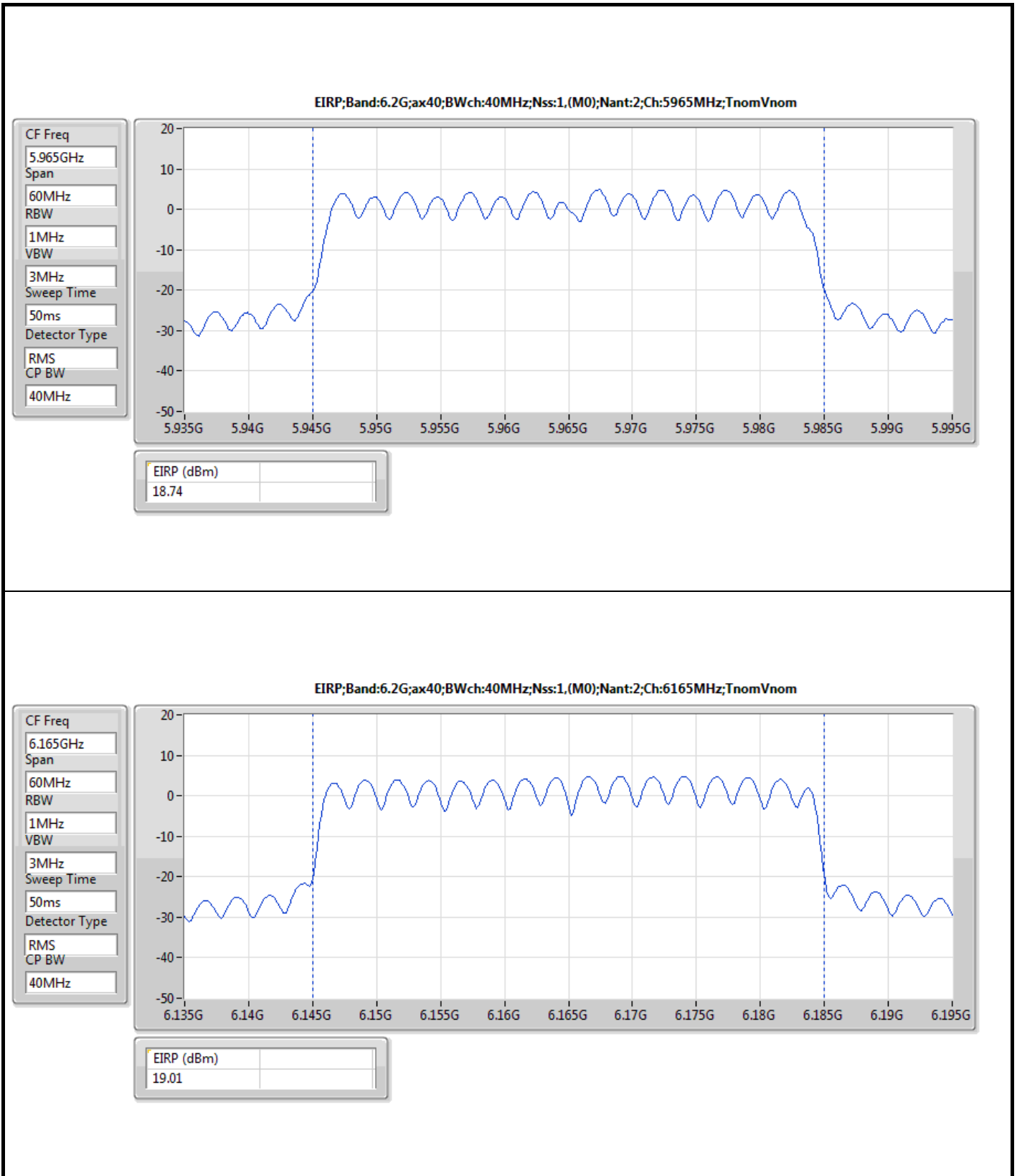


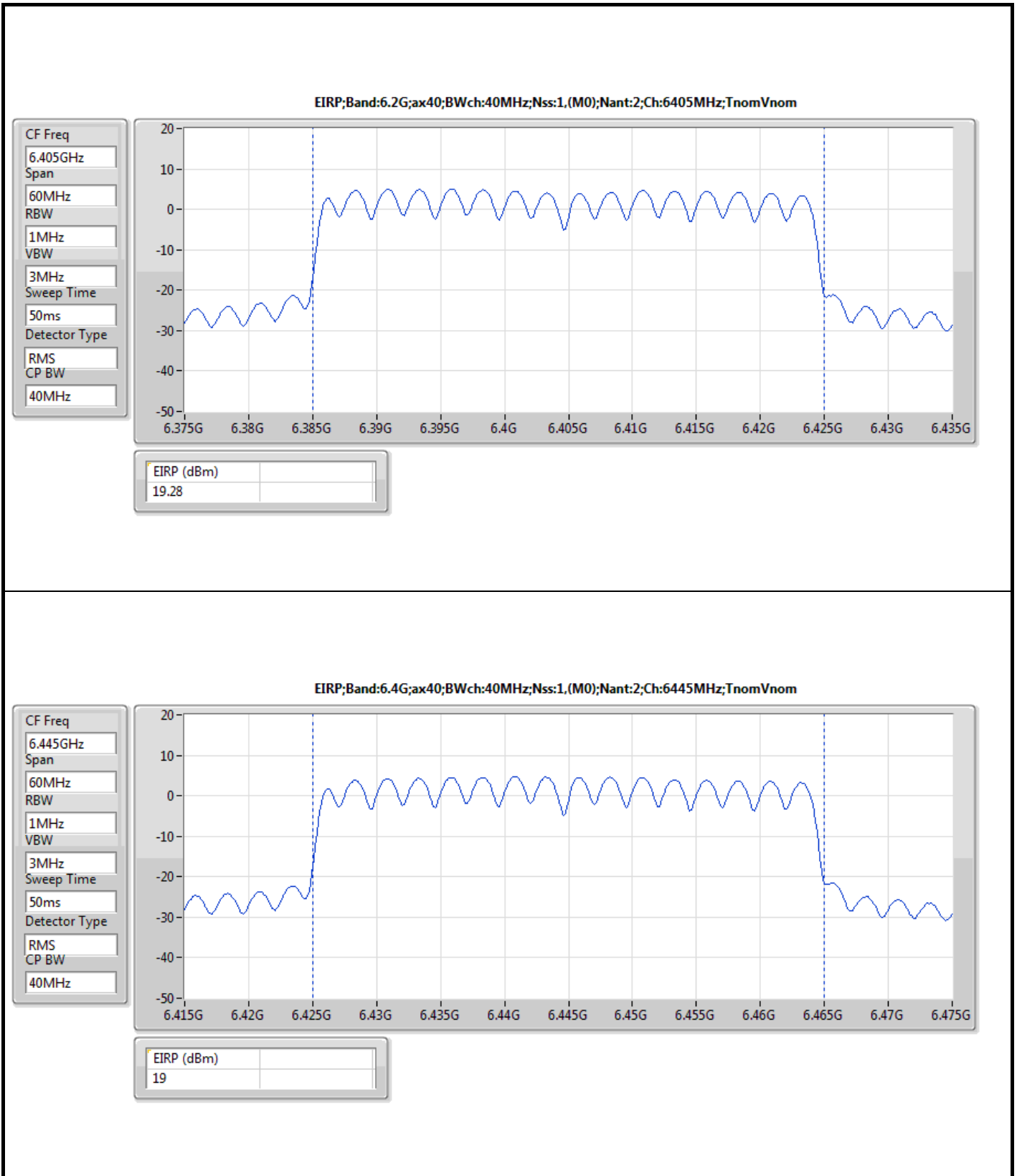


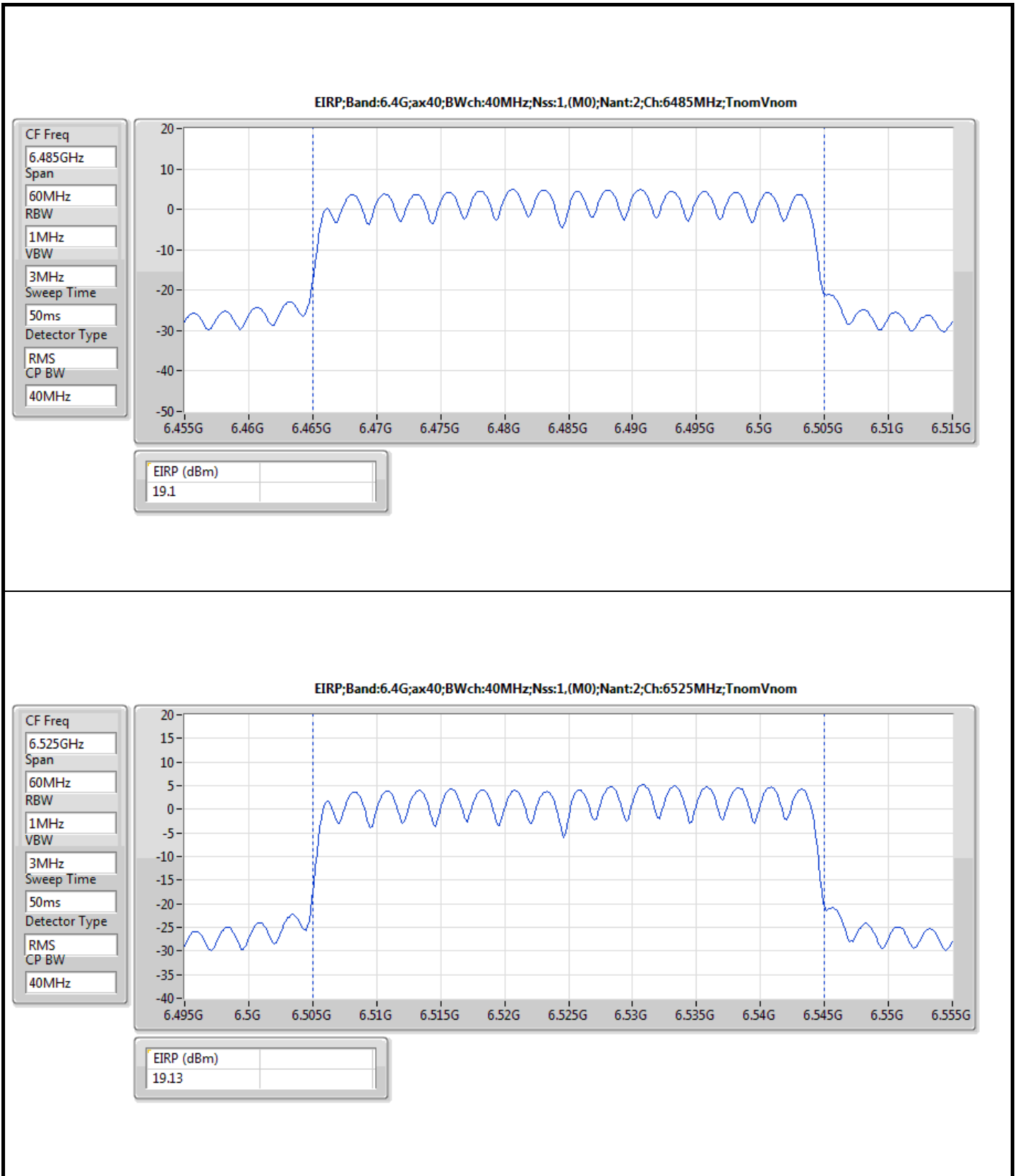


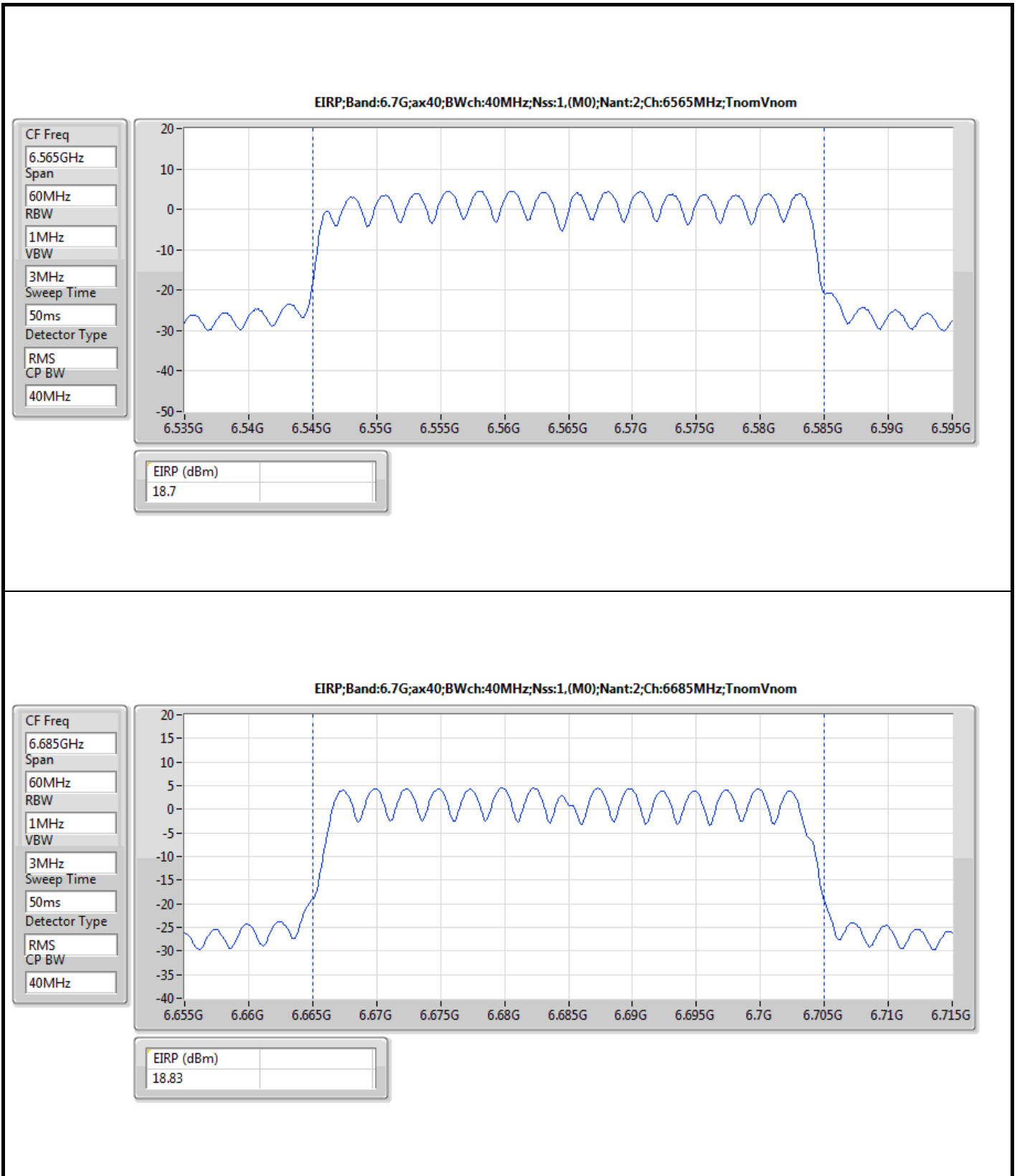


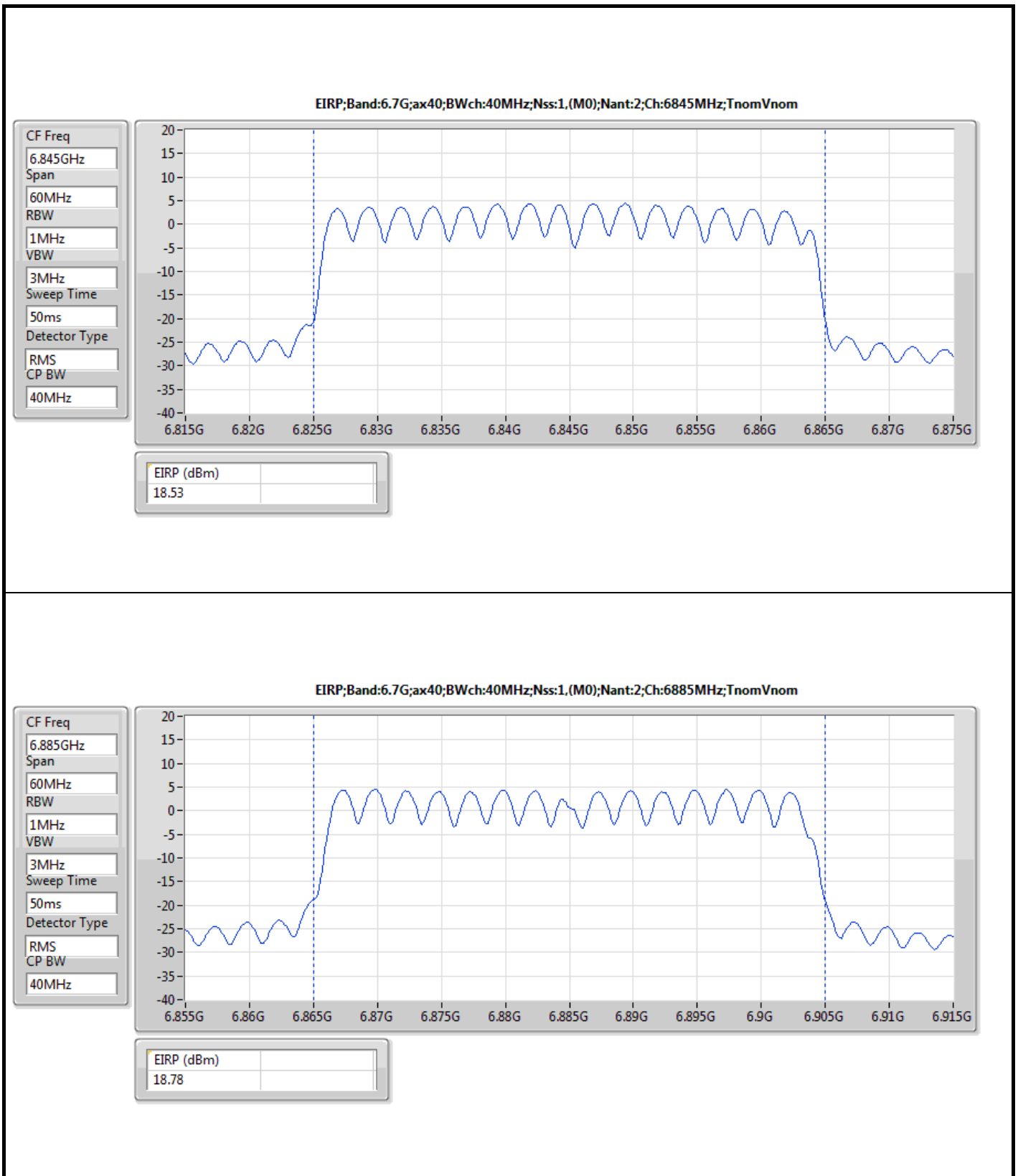


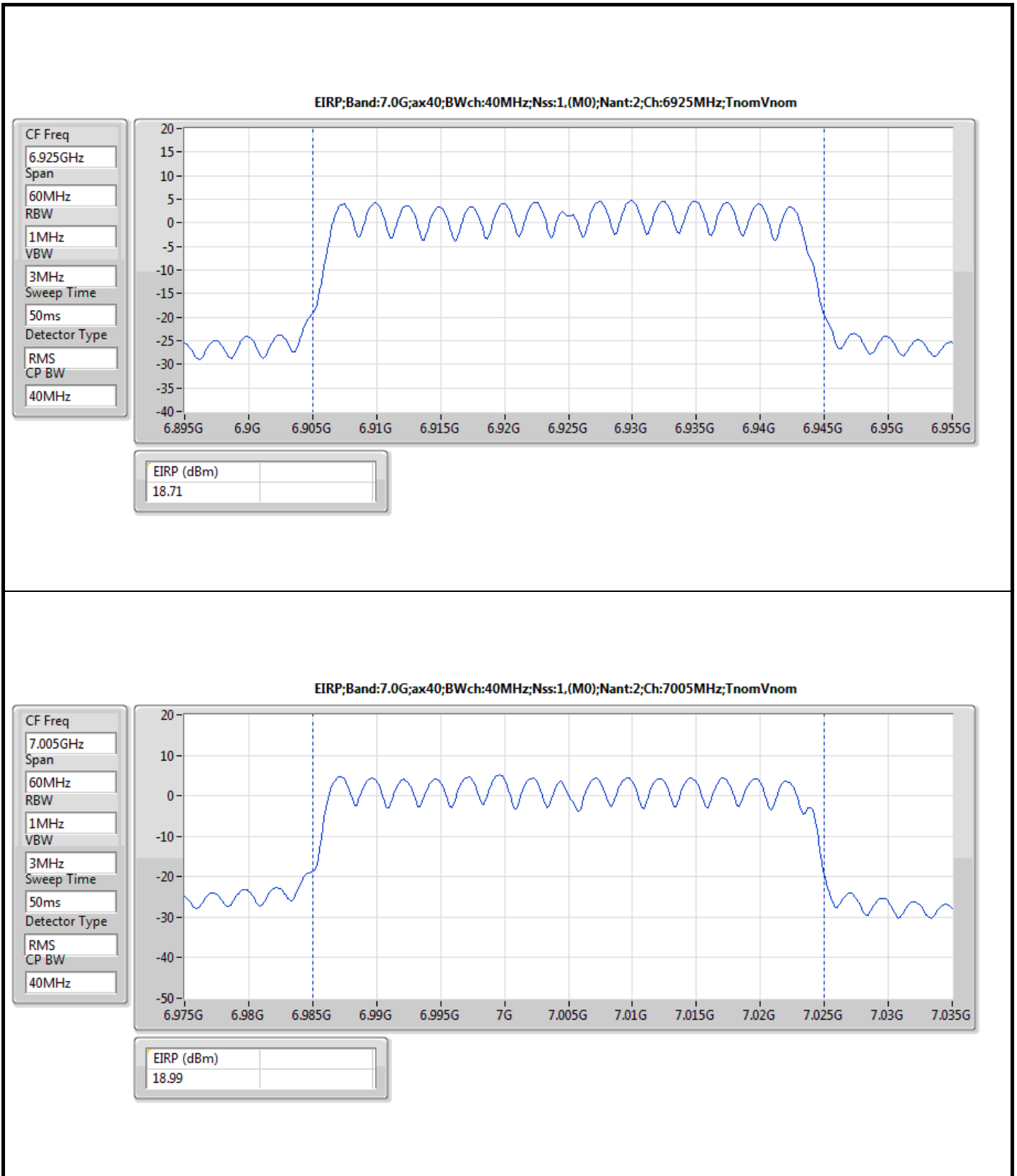


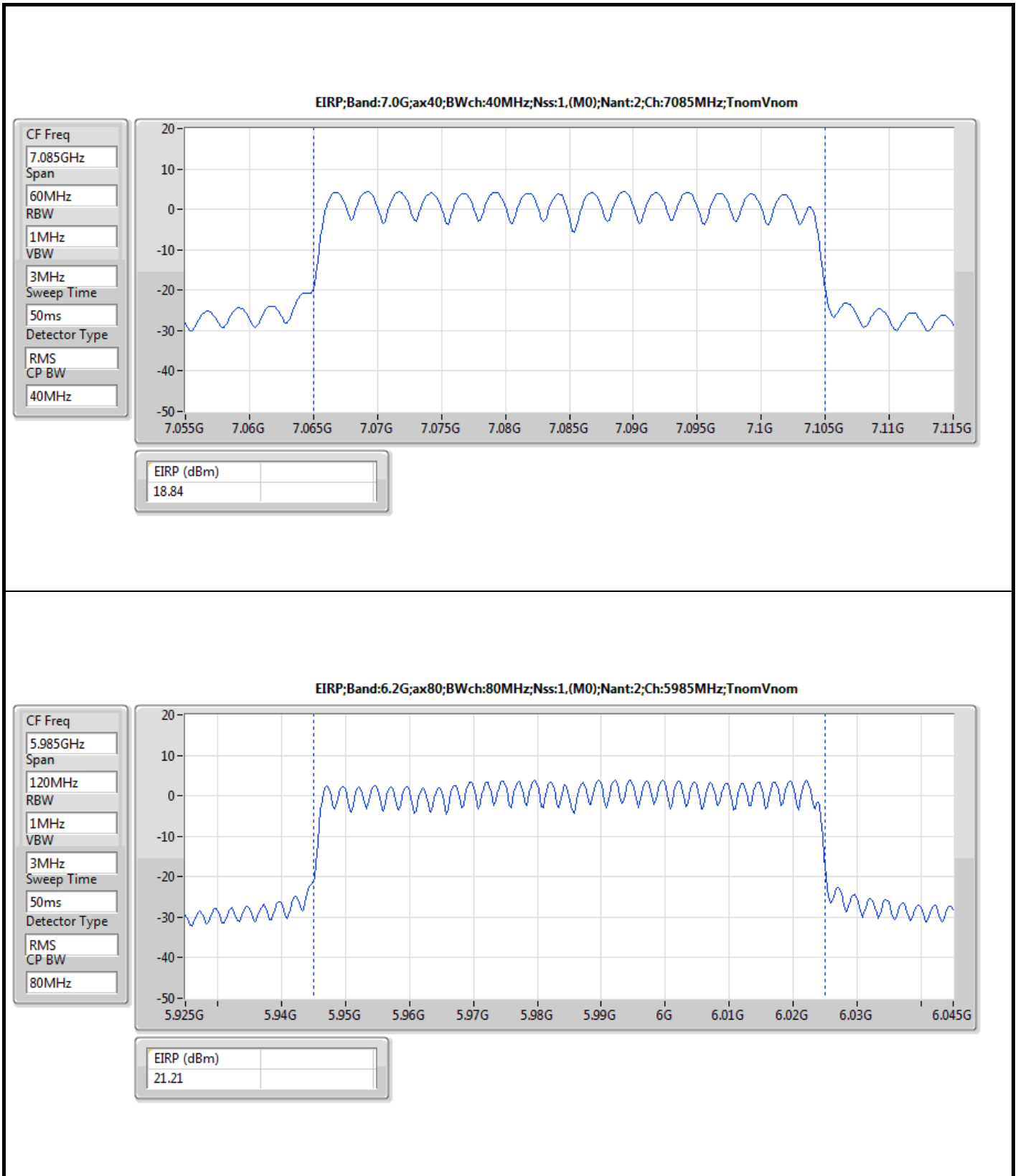


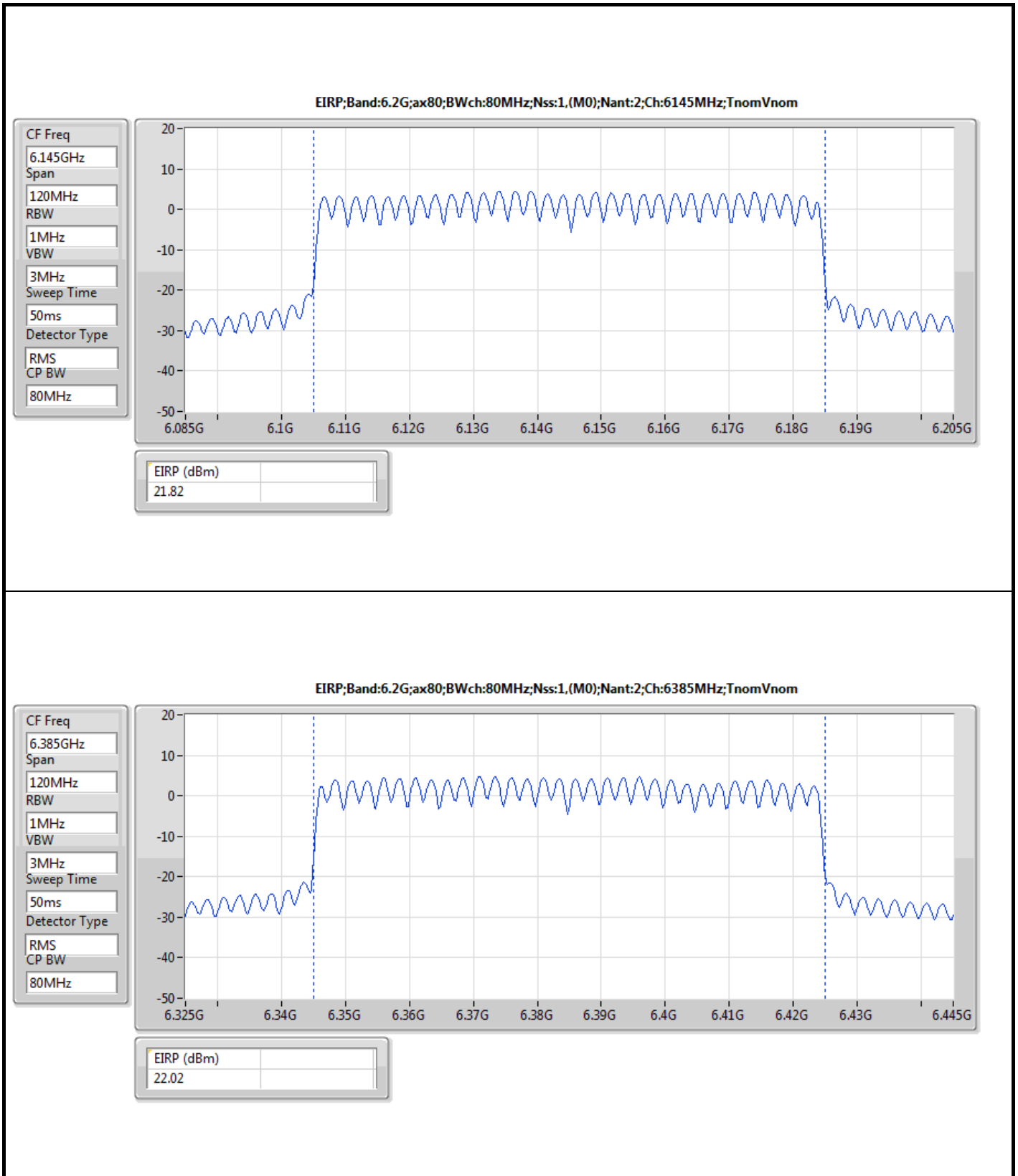


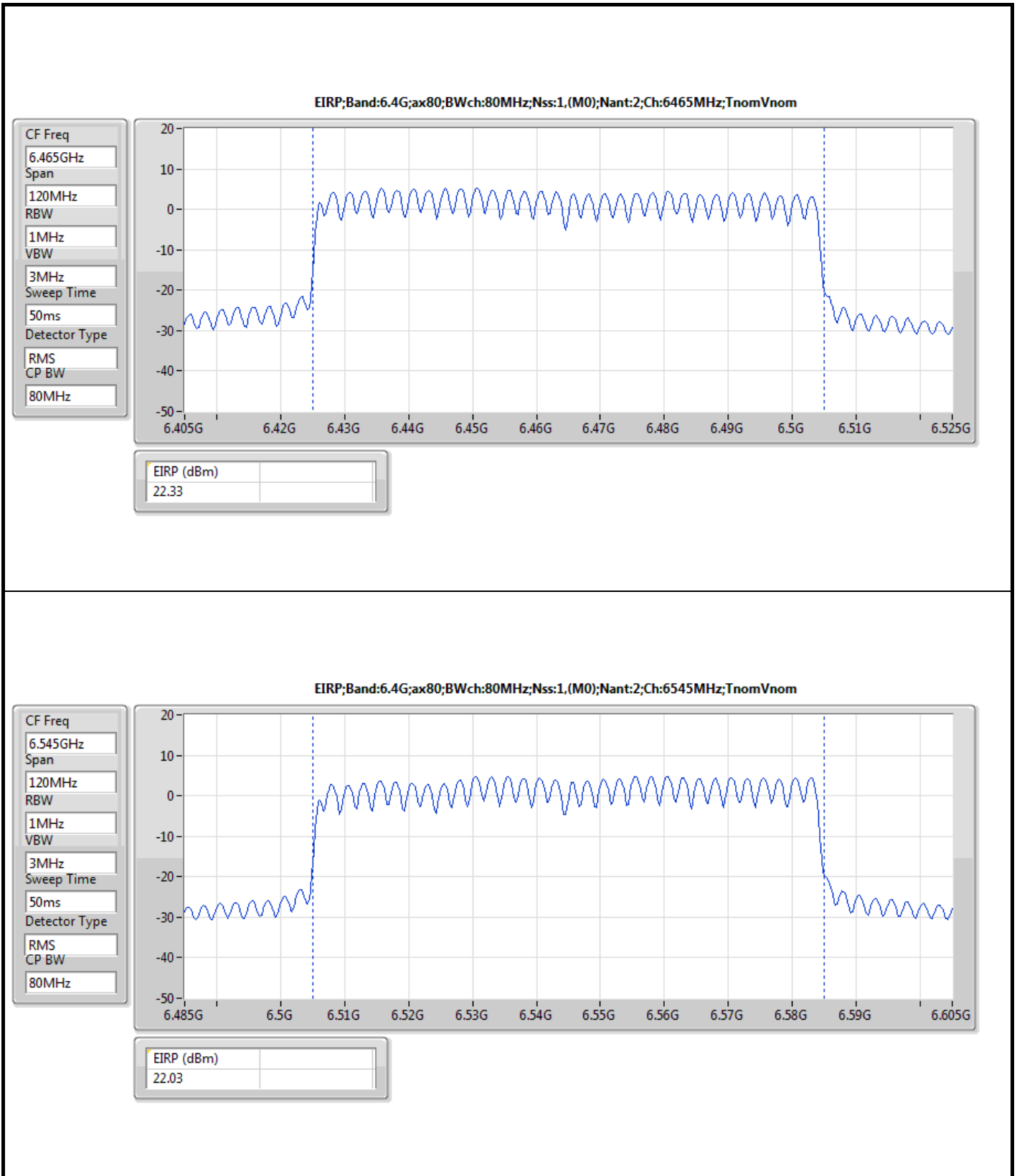


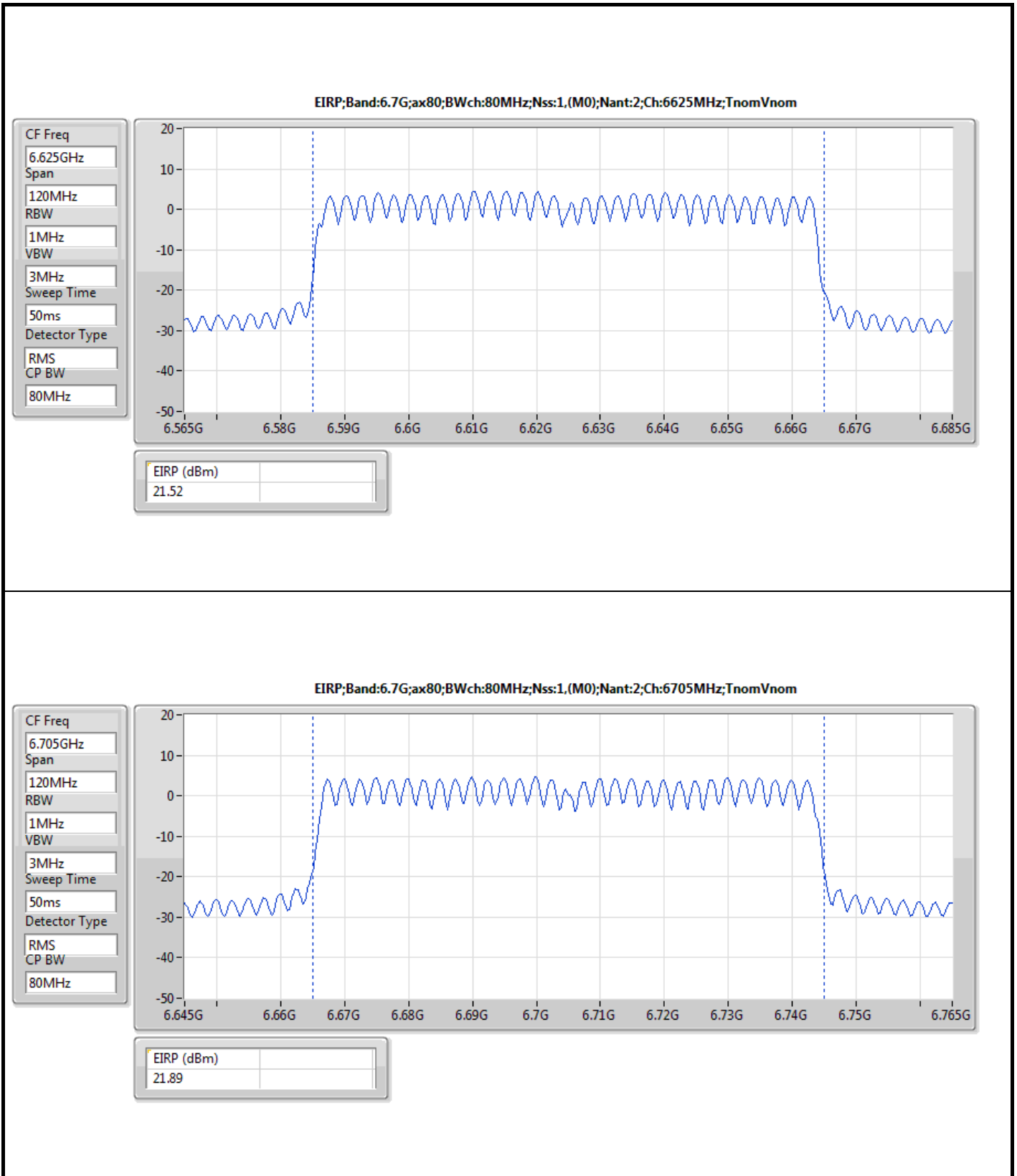


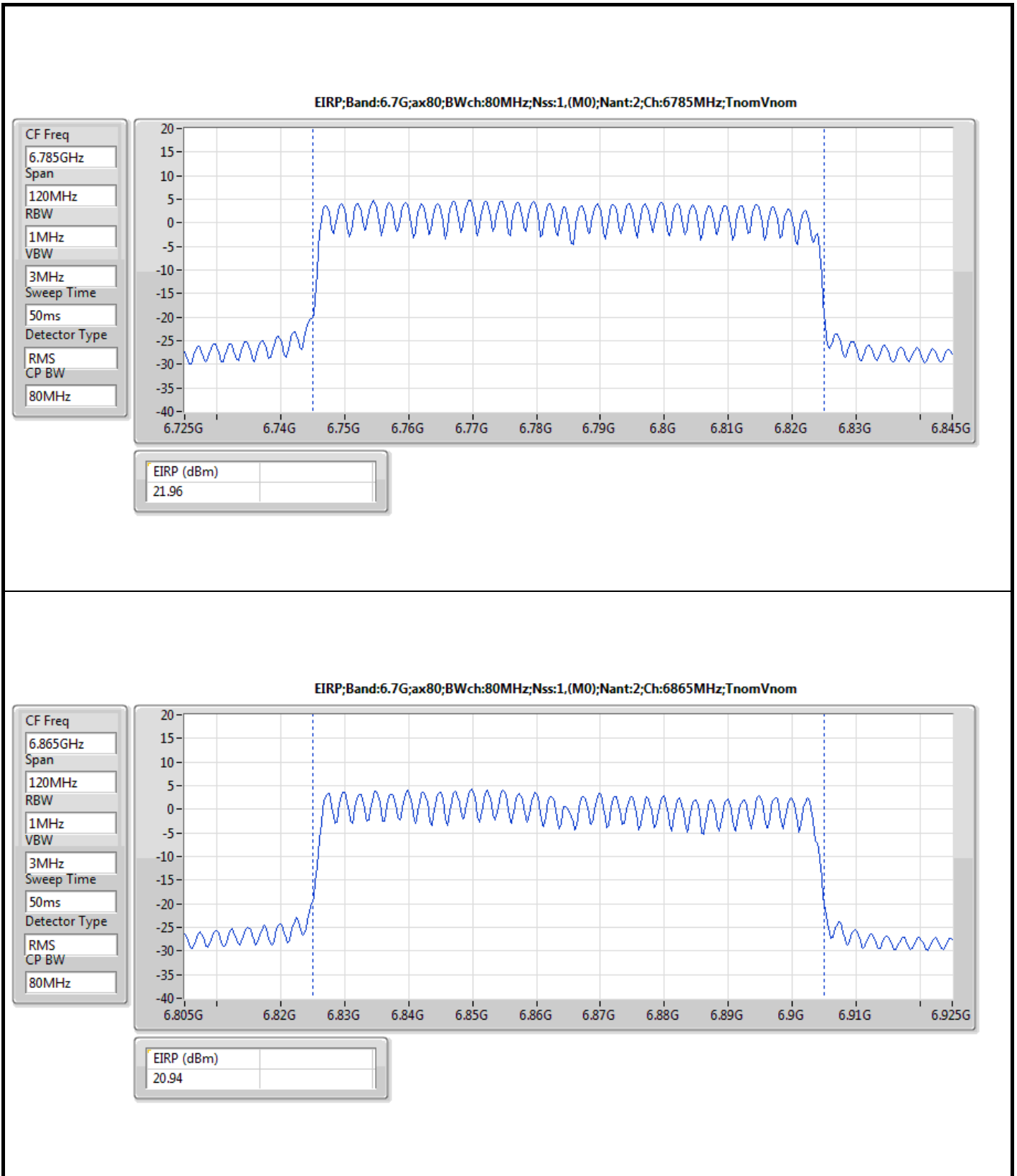


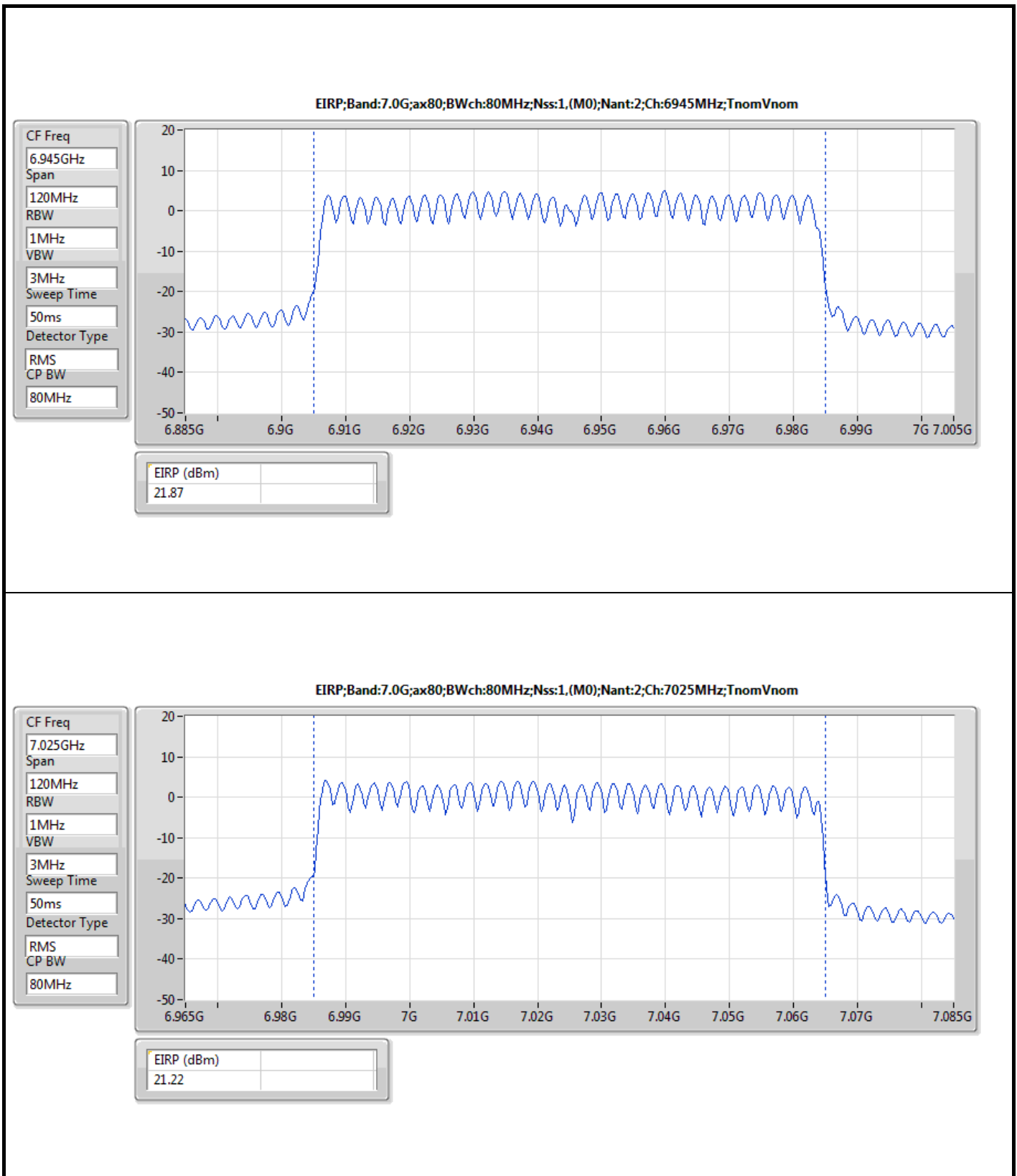


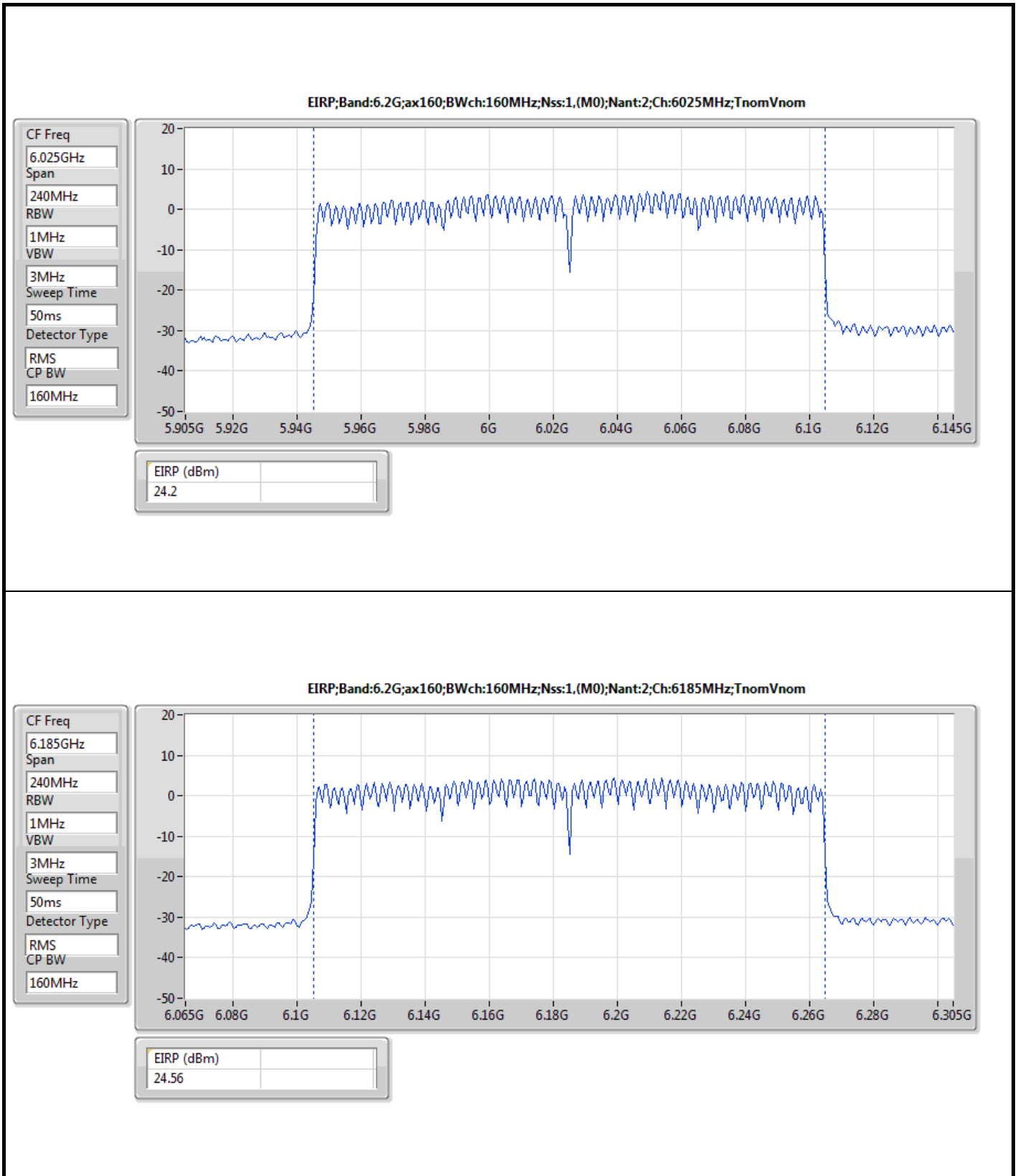


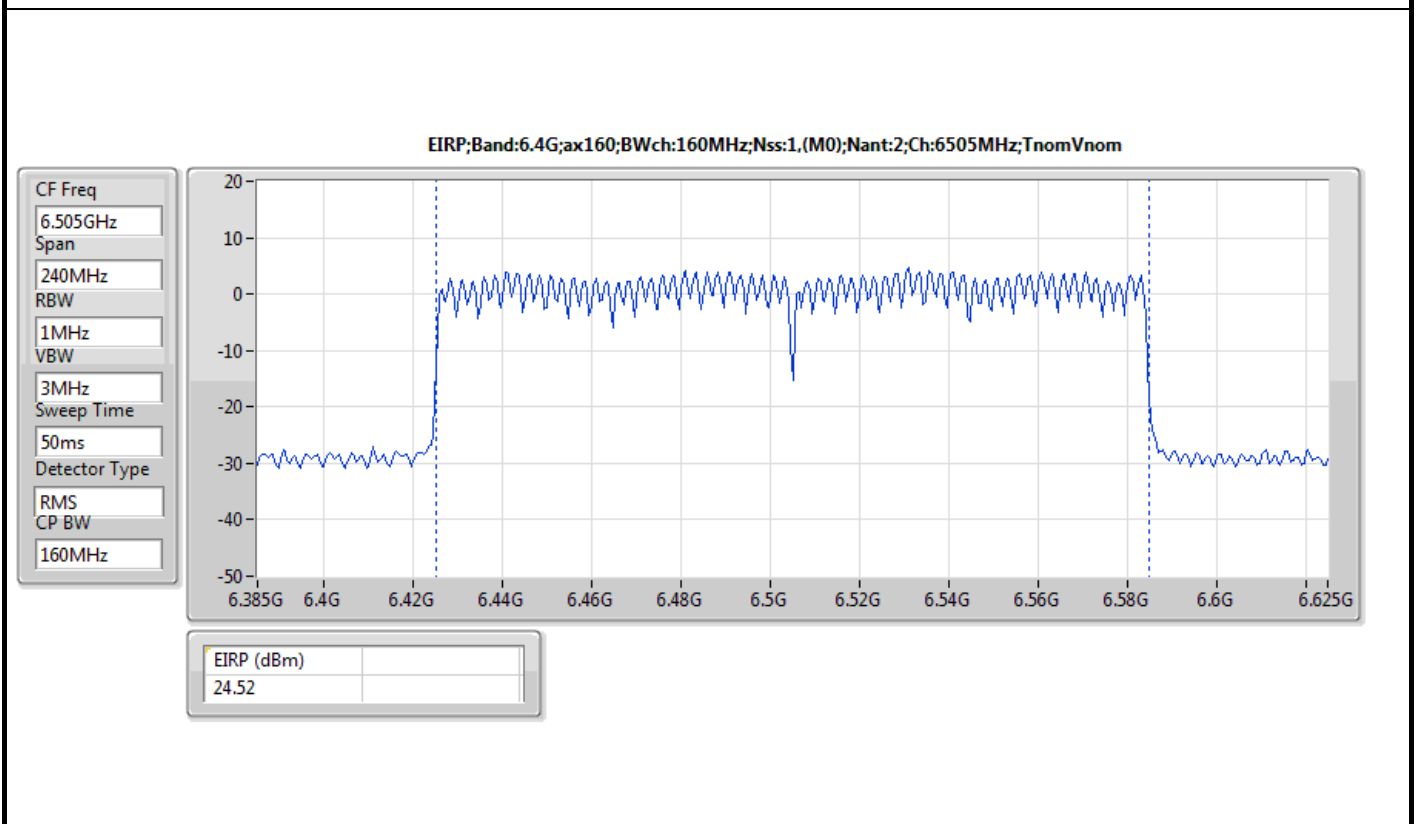
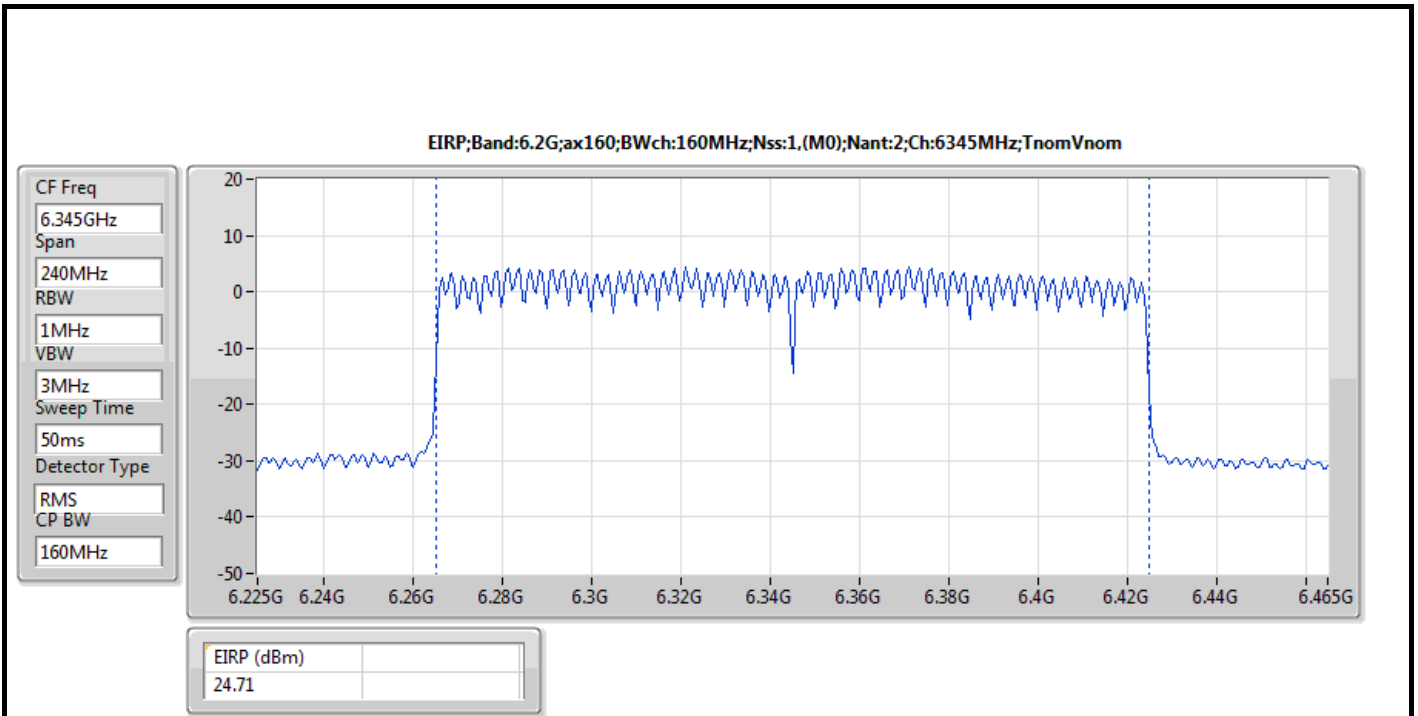




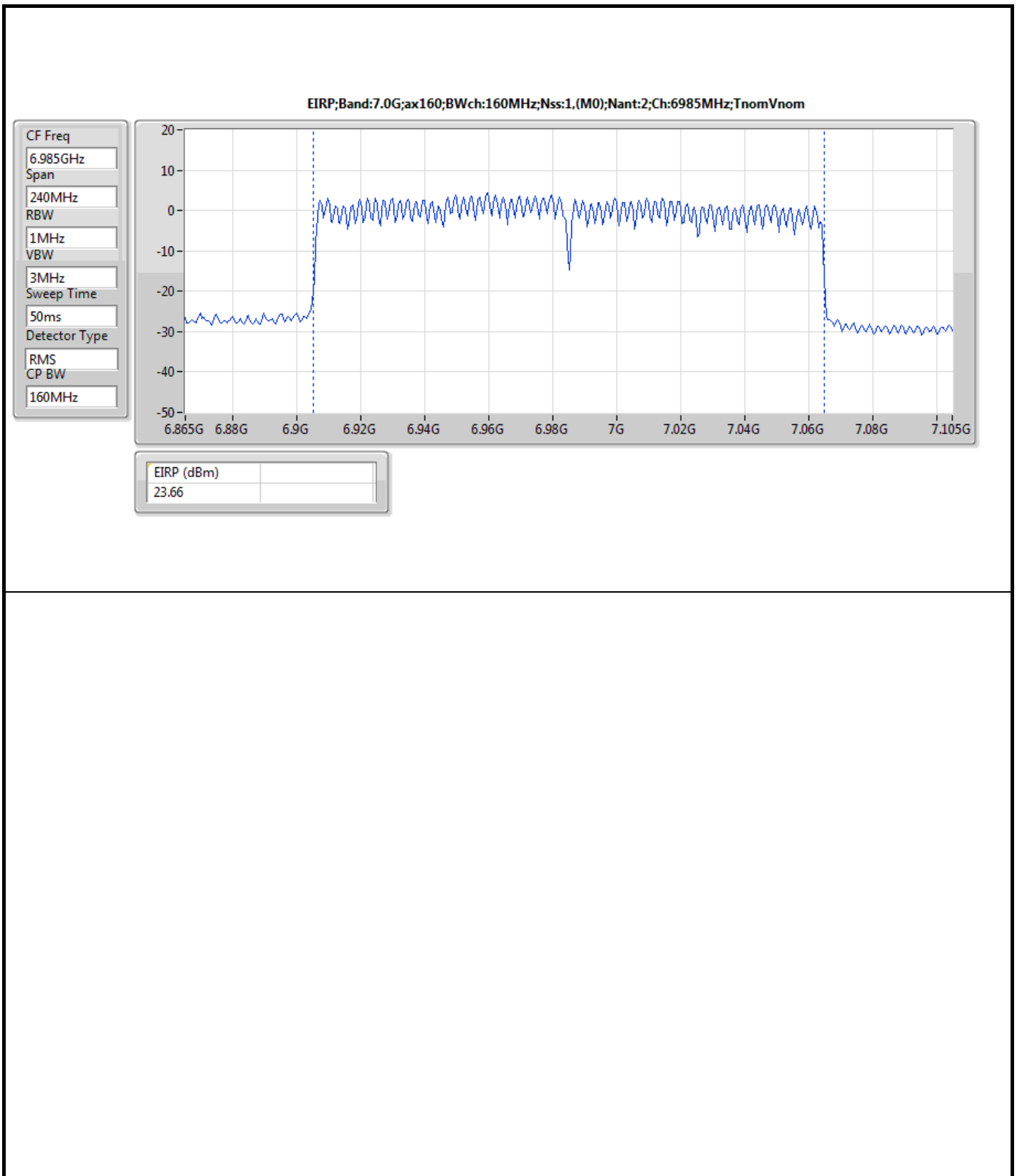














Summary

Mode	EIRP (dBm)	EIRP (W)
5.925-6.425GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.42	0.05521
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.24	0.16749
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	24.09	0.25645
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	27.25	0.53088
6.425-6.525GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.41	0.04375
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	21.40	0.13804
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.15	0.20654
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	24.80	0.30200
6.525-6.875GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.29	0.06745
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	21.95	0.15668
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	24.27	0.26730
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	27.13	0.51642
6.875-7.125GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.51	0.05636
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.35	0.17179
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.50	0.22387
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	25.59	0.36224



Result

Mode	Result	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-
5955MHz	Pass	15.62	30.00
6175MHz	Pass	16.73	30.00
6415MHz	Pass	17.42	30.00
6435MHz	Pass	15.80	30.00
6475MHz	Pass	16.41	30.00
6515MHz	Pass	15.33	30.00
6535MHz	Pass	16.51	30.00
6695MHz	Pass	18.29	30.00
6855MHz	Pass	17.43	30.00
6875MHz Straddle 6.525-6.875GHz	Pass	16.67	30.00
6895MHz	Pass	16.97	30.00
6995MHz	Pass	16.93	30.00
7095MHz	Pass	17.51	30.00
7115MHz	Pass	12.74	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-
5965MHz	Pass	21.39	30.00
6165MHz	Pass	21.39	30.00
6405MHz	Pass	22.24	30.00
6445MHz	Pass	21.40	30.00
6485MHz	Pass	19.93	30.00
6525MHz Straddle 6.425-6.525GHz	Pass	18.93	30.00
6565MHz	Pass	21.63	30.00
6685MHz	Pass	20.25	30.00
6845MHz	Pass	21.31	30.00
6885MHz Straddle 6.525-6.875GHz	Pass	21.95	30.00
6925MHz	Pass	21.62	30.00
7005MHz	Pass	22.35	30.00
7085MHz	Pass	20.54	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-
5985MHz	Pass	23.60	30.00
6145MHz	Pass	24.09	30.00
6385MHz	Pass	23.86	30.00
6465MHz	Pass	23.15	30.00
6545MHz Straddle 6.425-6.525GHz	Pass	22.88	30.00
6625MHz	Pass	23.20	30.00
6705MHz	Pass	24.27	30.00
6785MHz	Pass	23.58	30.00
6865MHz Straddle 6.525-6.875GHz	Pass	24.04	30.00
6945MHz	Pass	23.50	30.00
7025MHz	Pass	23.37	30.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-
6025MHz	Pass	27.23	30.00
6185MHz	Pass	27.25	30.00
6345MHz	Pass	24.92	30.00
6505MHz Straddle 6.425-6.525GHz	Pass	24.80	30.00
6665MHz	Pass	26.60	30.00
6825MHz Straddle 6.525-6.875GHz	Pass	27.13	30.00
6985MHz	Pass	25.59	30.00

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

