



RADIO TEST REPORT

FCC ID : Z8H-89FT0067
Equipment : XE3-4 Wi-Fi 6e Indoor Access Point
Brand Name : Cambium Networks
Model Name : XE3-4
Applicant : Cambium Networks Inc.
3800 Golf Road, Suite 360 Rolling Meadows, IL
60008, USA
Manufacturer : Cambium Networks, Ltd.
Ashburton, TQ13 7UP, UK
Standard : 47 CFR FCC Part 15.407

The product was received on Aug. 13, 2021, and testing was started from Aug. 17, 2021 and completed on Oct. 30, 2021. 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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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_5 Ver1.1



Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. 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]

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

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	Model Name	Antenna Type	Connector	Gain (dBi)				Remark
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	Blue tooth					WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	Blue tooth	
1	2	2	-	-	Accton	EAP9219A-6 E-1120-CAM	PIFA	I-PEX	4.85	5.60	-	-	Radio 1
2	1	1	-	-	Accton	EAP9219A-6 E-1120-CAM	PIFA	I-PEX	4.85	5.40	-	-	Radio 1
3	-	4	4	-	Accton	EAP9219A-6 E-1120-CAM	PIFA	I-PEX	-	Note 1	5.84	-	Radio 2
4	-	2	2	-	Accton	EAP9219A-6 E-1120-CAM	PIFA	I-PEX	-		6.29	-	Radio 2
5	-	3	3	-	Accton	EAP9219A-6 E-1120-CAM	PIFA	I-PEX	-		6.06	-	Radio 2
6	-	1	1	-	Accton	EAP9219A-6 E-1120-CAM	PIFA	I-PEX	-		5.99	-	Radio 2
7	-	-	-	1	Accton	EAP9219A-6 E-1120-CAM	Chip	N/A	-	-	-	3.39	Radio 3

Note1:

Notes:

Ant.	Port	Antenna Gain (dBi)		
	WLAN 5GHz	UNII 1	UNII 3	Remark
3	4	2.3	5.21	Radio 2
4	2	4.12	4.93	Radio 2
5	3	2.91	2.81	Radio 2
6	1	3.88	4.24	Radio 2

Radio 2 / Directional Gain (dBi)	
WLAN 5GHz UNII 1, 4T1S	WLAN 5GHz UNII 3, 4T1S
4.55	5.95

Note2: The above information was declared by manufacturer.

WLAN 2.4GHz, 5GHz (Radio 1), 6GHz: The directional gain is calculated which follows the procedure of KDB 662911 D01.

WLAN 5GHz (Radio 2): The directional gain is measured which follows the procedure of KDB 662911 D03. The antenna report is provided in the operational description for this application.

For Radio 1:**For 2.4GHz function:****For IEEE 802.11b/g/n/VHT/ax (2TX/2RX):**

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

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:**For IEEE 802.11a/n/ac/ax (2TX/2RX):**

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

Port 1 and Port 2 could transmit/receive simultaneously.

For Radio 2:**For 5GHz function:****For IEEE 802.11a/n/ac/ax (4TX/4RX):**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

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

For 6GHz function:**For IEEE 802.11ax (4TX/4RX):**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

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

For Bluetooth Function:**For Bluetooth mode (1TX/1RX)**

Only Port 1 can be use as transmit and receive antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.869	0.61	5.448m	300
802.11ax HEW20-BF	0.929	0.32	1.764m	1k
802.11ax HEW40	0.866	0.62	5.445m	300
802.11ax HEW40-BF	0.923	0.35	1.765m	1k
802.11ax HEW80	0.866	0.62	5.445m	300
802.11ax HEW80-BF	0.915	0.39	1.689m	1k
802.11ax HEW160	0.854	0.69	5.447m	300
802.11ax HEW160-BF	0.918	0.37	1.889m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz, n/ac/ax in 5GHz and ax in 6GHz.			
Device Type	☒	Indoor Access Point	☐	Subordinate
	☐	Indoor Client	☐	Standard Power Access Point
	☐	Dual Client	☐	Standard Client
	☐	Fixed Client		
Test Software Version	QSPR V5.0-00197, DOS [ver 6.1.7601]			

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 662911 D01 v02r01
- ♦ 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 ISCED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Serway Lee	23.3~24.3 / 54~57	Sep. 01, 2021 ~ Oct. 30, 2021
Radiated<1GHz	10CH01-CB	Wei Li	22~24 / 54~58	Aug. 17, 2021
Radiated>1GHz	03CH04-CB	RJ Huang	24.4-25.5 / 55-58	Sep. 14, 2021~ Sep. 25, 2021
	03CH01-CB	RJ Huang	24.6-25.7 / 56-59	Sep. 14, 2021~ Sep. 25, 2021
AC Conduction	CO01-CB	Wei Li	23~25 / 54~57	Aug. 18, 2021
Contention Based Protocol	DF01-CB	Benson Su	23.2-24.1 / 60-62	Oct. 19, 2021 ~ Oct. 21, 2021



1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.2 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%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5955MHz	8.5
6175MHz	8
6415MHz	8
6435MHz	8
6475MHz	8
6515MHz	7.5
6535MHz	8
6695MHz	7.5
6855MHz	7.5
6875MHz Straddle 6.525-6.875GHz	8
6895MHz	7.5
6995MHz	8.5
7095MHz	9
7115MHz	10.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5955MHz	8
6175MHz	8
6415MHz	8
6435MHz	8
6475MHz	8
6515MHz	8
6535MHz	8
6695MHz	8
6855MHz	8
6875MHz Straddle 6.525-6.875GHz	8
6895MHz	8
6995MHz	8
7095MHz	8
7115MHz	8
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5965MHz	12
6165MHz	11
6405MHz	11
6445MHz	11
6485MHz	11



Mode	Power Setting
6525MHz Straddle 6.425-6.525GHz	11
6565MHz	10
6685MHz	10
6845MHz	10
6885MHz Straddle 6.525-6.875GHz	10.5
6925MHz	10
7005MHz	11.5
7085MHz	12
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5965MHz	11
6165MHz	11
6405MHz	11
6445MHz	11
6485MHz	11
6525MHz Straddle 6.425-6.525GHz	11
6565MHz	11
6685MHz	11
6845MHz	11
6885MHz Straddle 6.525-6.875GHz	11
6925MHz	11
7005MHz	11
7085MHz	11
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5985MHz	14
6145MHz	14.5
6385MHz	14
6465MHz	14
6545MHz Straddle 6.425-6.525GHz	14
6625MHz	14
6705MHz	13
6785MHz	12.5
6865MHz Straddle 6.525-6.875GHz	12.5
6945MHz	13
7025MHz	14
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5985MHz	14
6145MHz	14
6385MHz	14
6465MHz	14
6545MHz Straddle 6.425-6.525GHz	14



Mode	Power Setting
6625MHz	14
6705MHz	14
6785MHz	14
6865MHz Straddle 6.525-6.875GHz	14
6945MHz	14
7025MHz	14
802.11ax HEW160_Nss1,(MCS0)_4TX	-
6025MHz	16.5
6185MHz	16.5
6345MHz	17
6505MHz Straddle 6.425-6.525GHz	16.5
6665MHz	15.5
6825MHz Straddle 6.525-6.875GHz	15
6985MHz	15.5
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
6025MHz	17
6185MHz	17
6345MHz	17
6505MHz Straddle 6.425-6.525GHz	17
6665MHz	17
6825MHz Straddle 6.525-6.875GHz	17
6985MHz	17

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
1	EUT+PoE

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Contention Based Protocol
Test Condition	Conducted measurement at transmit chains

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	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
	Radiated measurement

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.
	Normal Link
Operating Mode < 1GHz	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Z axis. So the measurement will follow this same test configuration.
1	EUT in Z axis+PoE
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis



The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission MASK
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Radio 1: WLAN 2.4GHz + WLAN 5GHz + Radio 2: WLAN 5GHz + WLAN 6GHz + Radio 3: Bluetooth
Refer to Sporton Test Report No.: FA140924-01 for Co-location RF Exposure Evaluation.	

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

Support Unit	Brand	Model
PoE	Cambium	NET-P60-56IN

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 10 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 WLAN AP and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the following programs under Win 7 were executed:

The remote PC executed "ping.exe" to link with the EUT to maintain the connection by LAN.

The remote notebook executed "ping.exe" to link with the EUT to maintain the connection by LAN and WLAN 2.4GHz and WLAN 5GHz.

The remote notebook executed "Telnet" to enable the Bluetooth function of EUT.

The remote Smart phone executed "nRF Connect" to link with the EUT to maintain the connection by Bluetooth.

2.4 Accessories

Wall Bracket*1



2.5 Support Equipment

For AC Conduction and Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 2.5G PC	DELL	T3400	N/A
B	LAN NB	DELL	E6430	N/A
C	R1 NB-1	DELL	E6430	N/A
D	PoE	Cambium	NET-P60-56IN	N/A
E	Smart phone	Samsung	Galaxy J2	N/A
F	Flash disk3.0	Transcend	JetFlash-700	N/A
G	R1 NB-2	DELL	E6430	N/A
H	R2 NB	DELL	E6430	N/A

For Radiated (above 1GHz)

For Non-beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	Cambium	NET-P60-56IN	N/A
B	Notebook	DELL	E4300	N/A

For Beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	Cambium	NET-P60-56IN	N/A
C	WLAN AP	Cambium Networks	XE3-4	Z8H-89FT0067
D	Notebook	DELL	E4300	N/A

**For RF Conducted:****For Non-beamforming mode:**

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE	Cambium	NET-P60-56IN	N/A

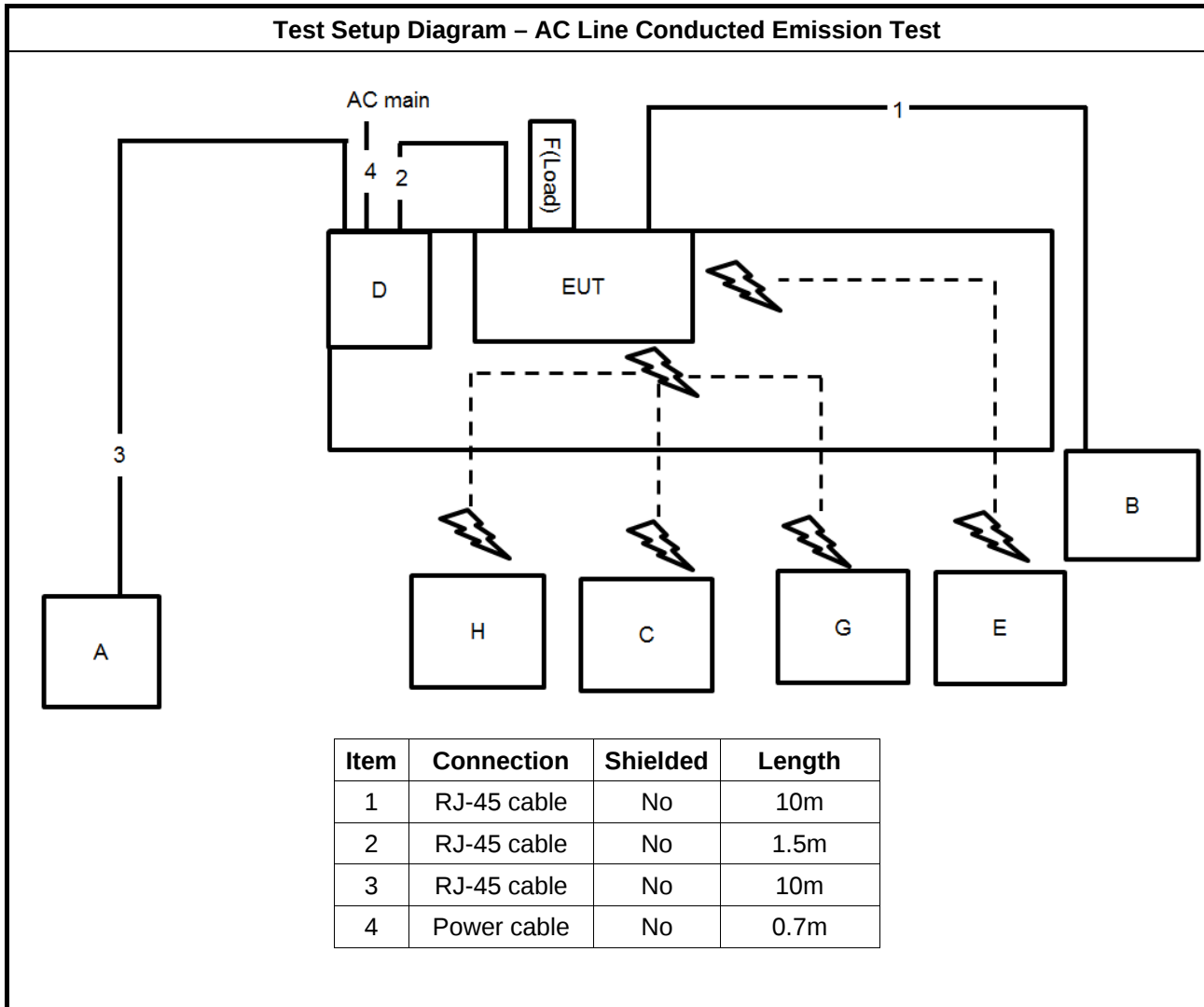
For Beamforming mode:

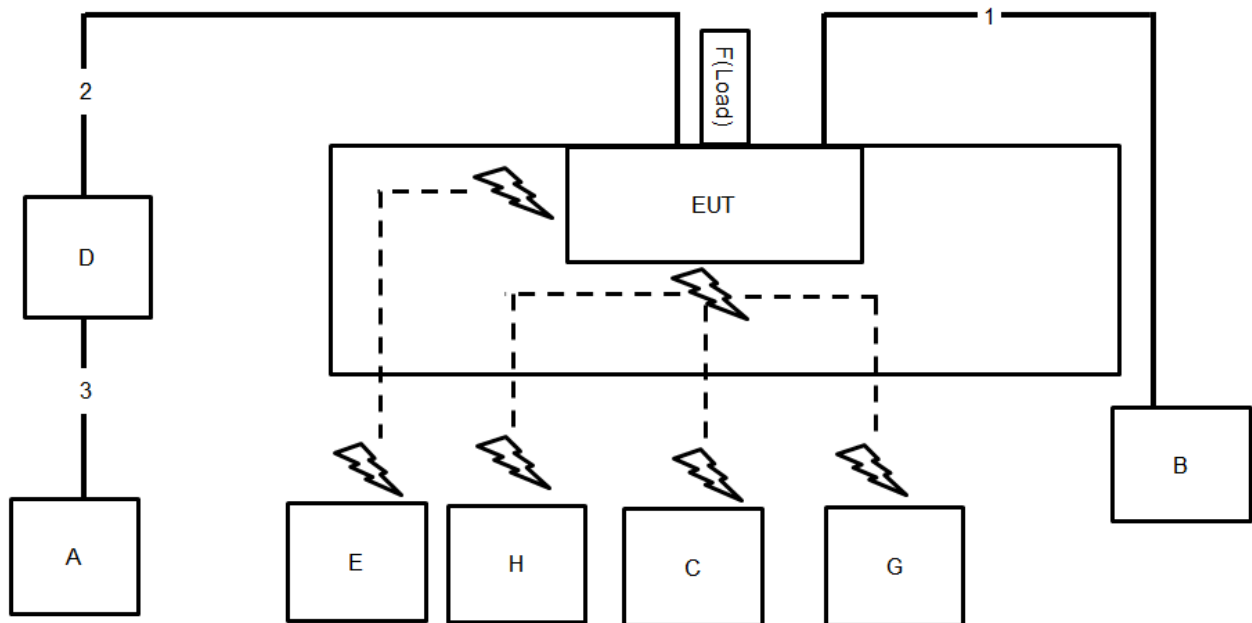
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE	Cambium Netwoks	NET-P60-56IN	N/A
C	WLAN AP	Cambium Networks	XE3-4	Z8H-89FT0067
D	Notebook	DELL	E4300	N/A

For RF Conducted (Contention Based Protocol test):

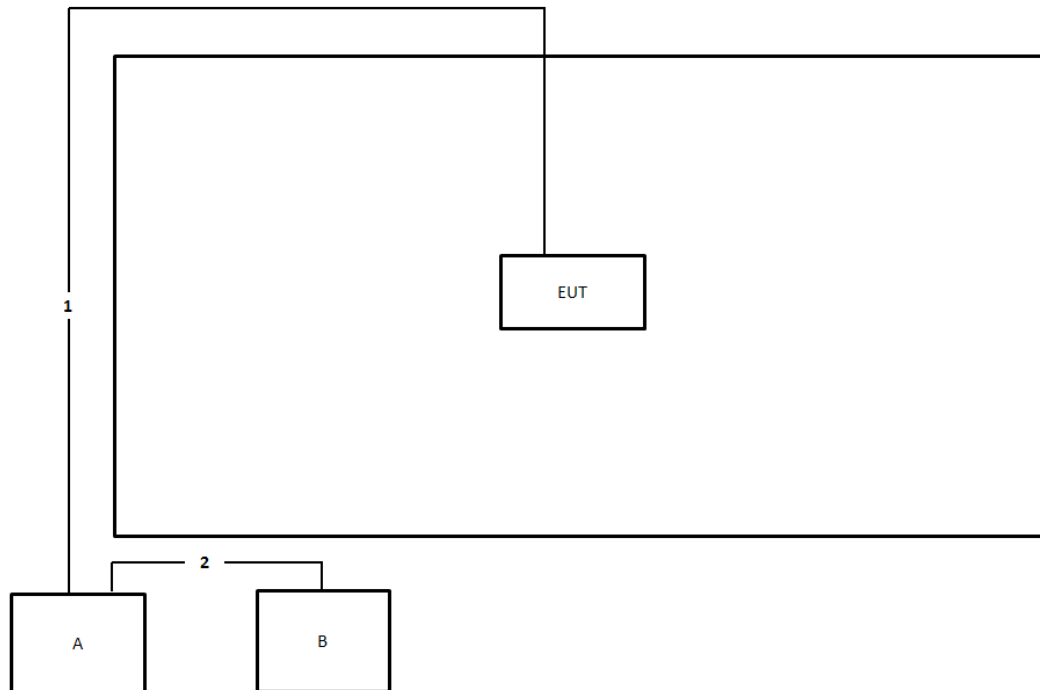
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	WLAN AP	Cambium Networks	XE3-4	Z8H-89FT0067
D	PoE	Cambium	NET-P60-56IN	N/A

2.6 Test Setup Diagram

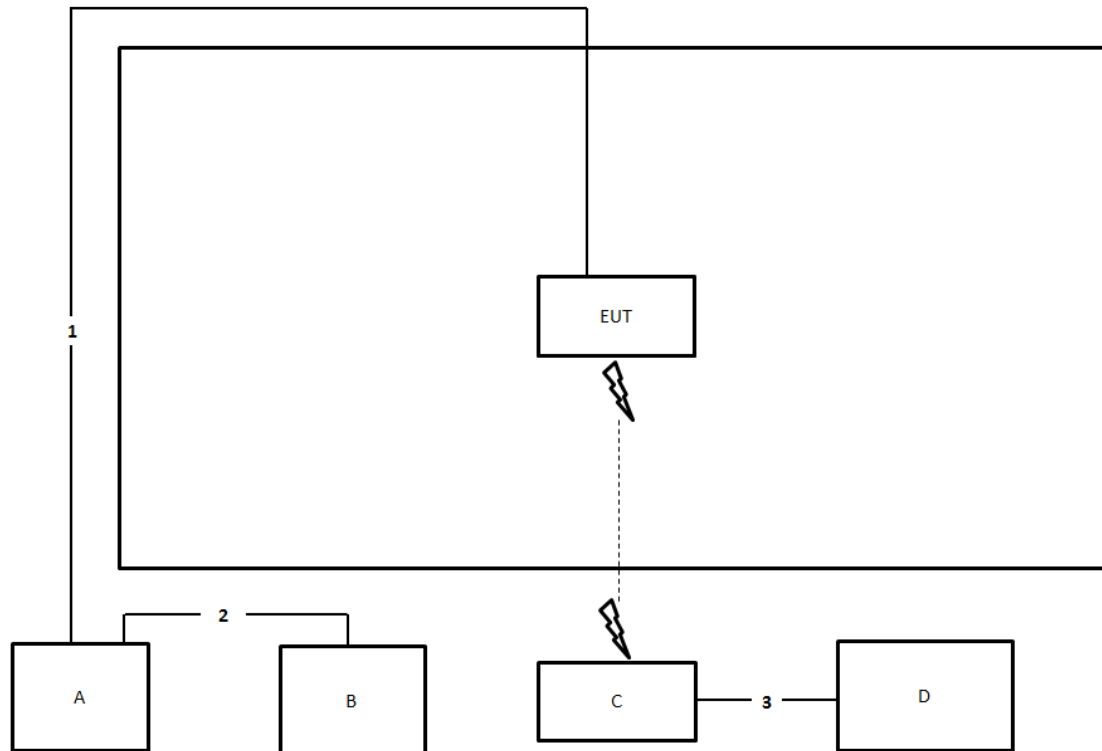


Test Setup Diagram - Radiated Test < 1GHz


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

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


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

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


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



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

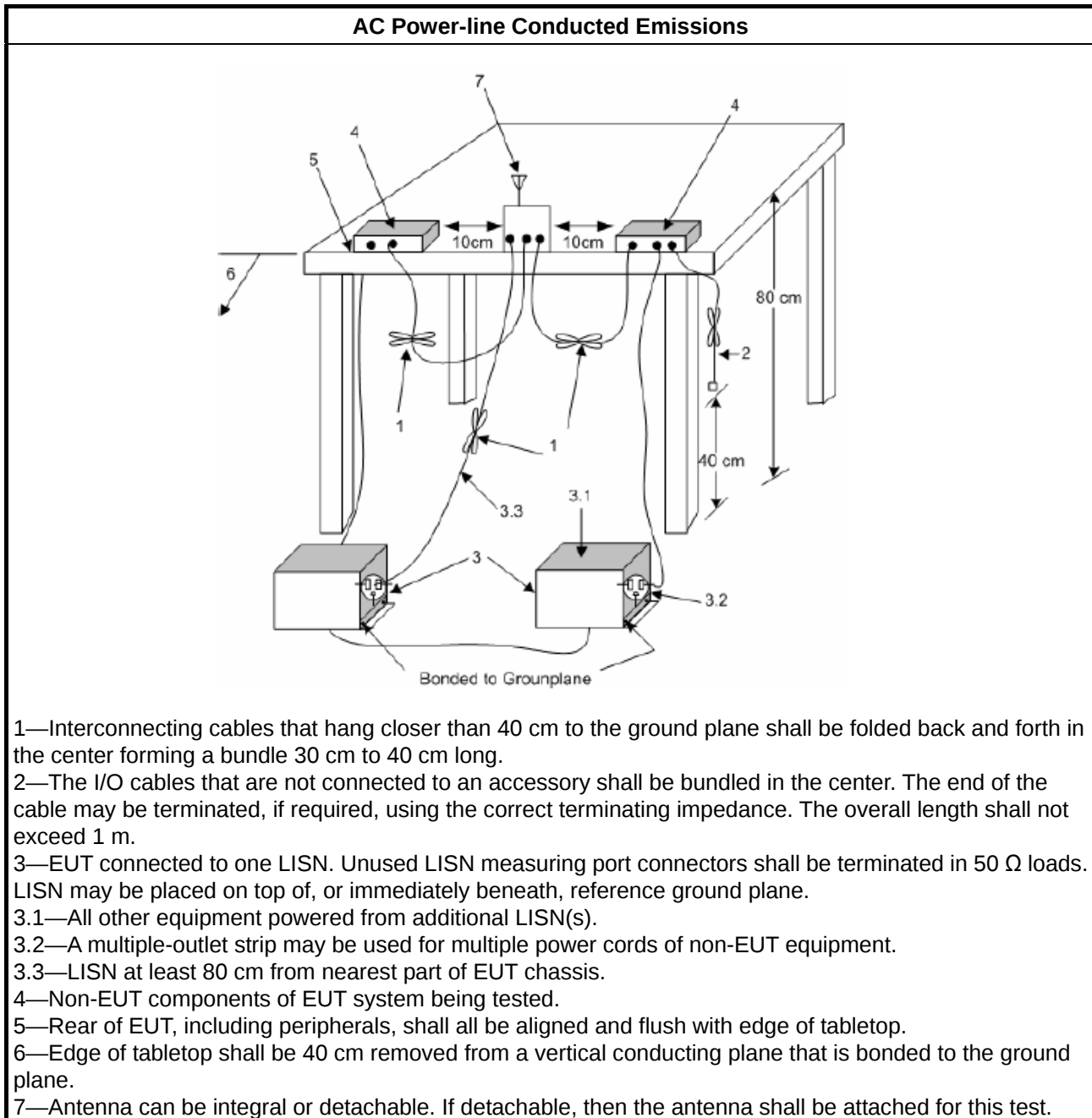
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- 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	
☒	For the 5925-6425 GHz band, N/A
☒	For the 6425-6525 GHz band, N/A
☒	For the 6525-6875 GHz band, N/A
☒	For the 6875-7125 GHz band, N/A

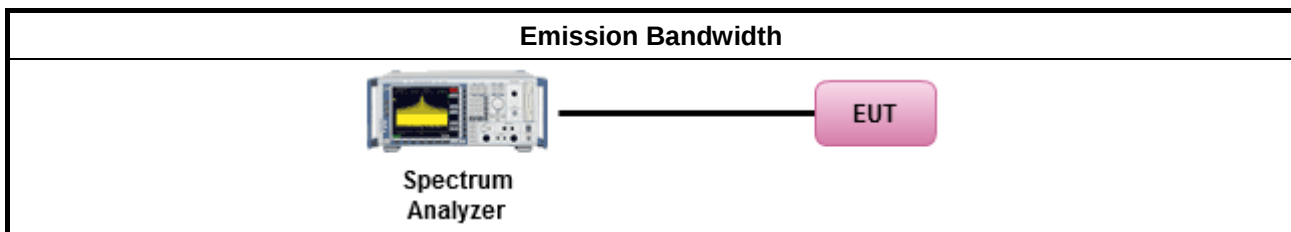
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	According to KDB 987594 D02 clause II.C, measurement procedure shall refer to FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

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

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

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



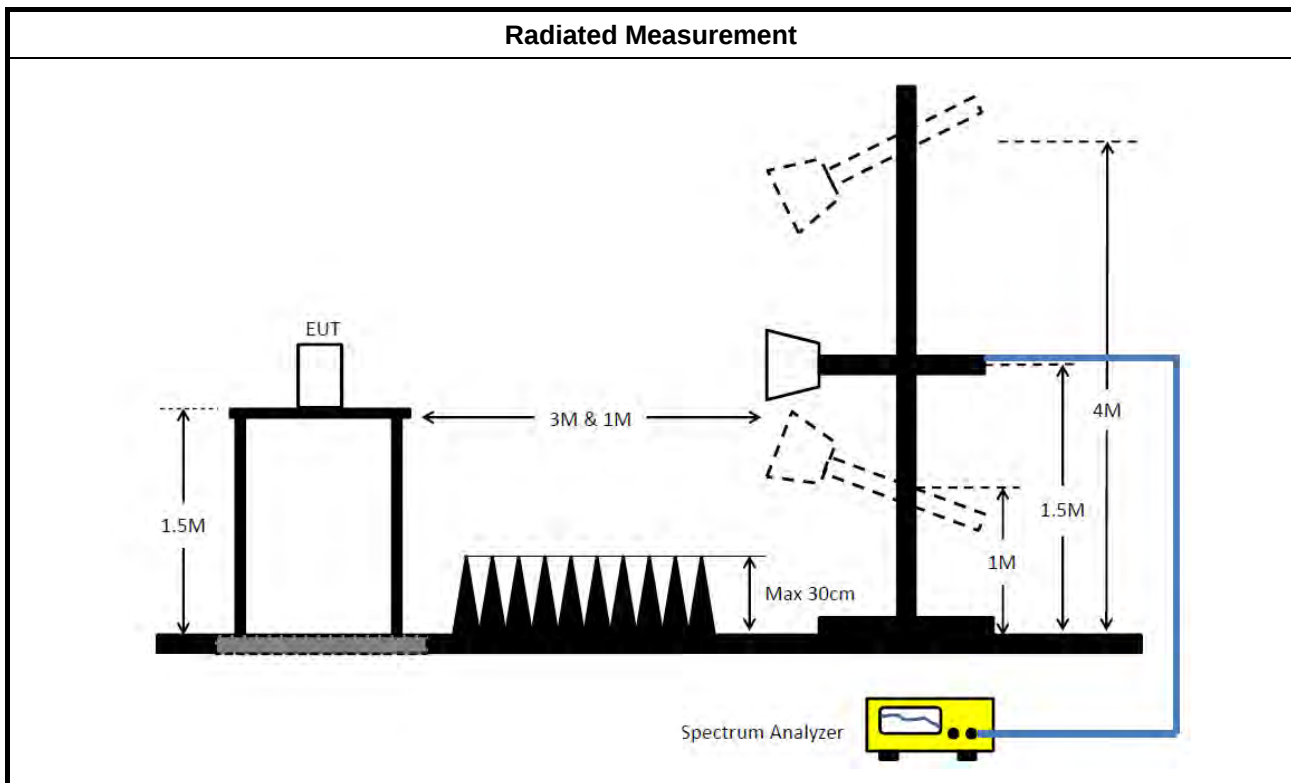
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
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
	☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☒ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☐	☐ Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
☐ For conducted measurement.	
☒	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$
☒ For radiated measurement.	
☒	Refer as FCC KDB 987594 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.3.4 Test Setup



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

Refer as Appendix C

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

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

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

3.4.2 Measuring Instruments

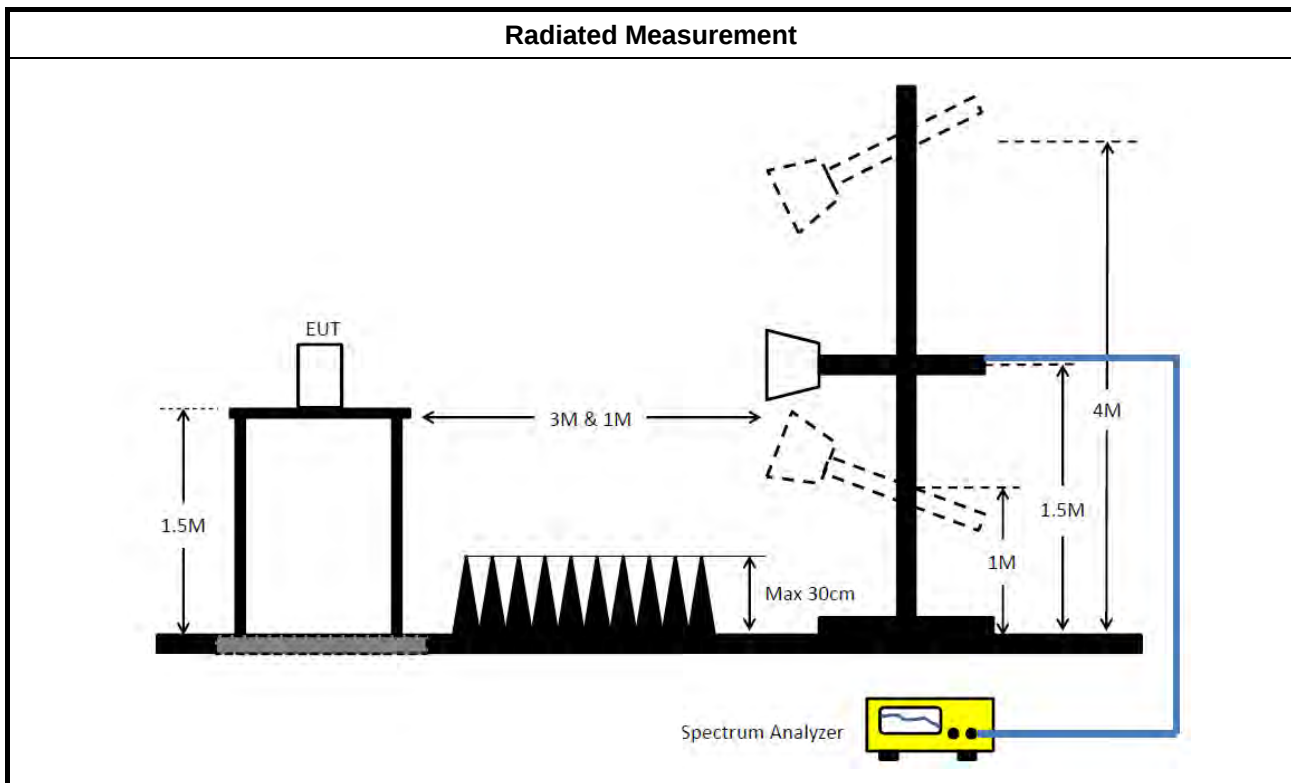
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method	
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:	
☐	Refer as FCC KDB 789033, F5) 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]	
☒	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
☒	For conducted measurement.
If the EUT supports multiple transmit chains using options given below:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	
☐	For radiated measurement.
Refer as FCC KDB 987594 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	
Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.	

3.4.4 Test Setup



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

Refer as Appendix D

3.5 Unwanted Emissions

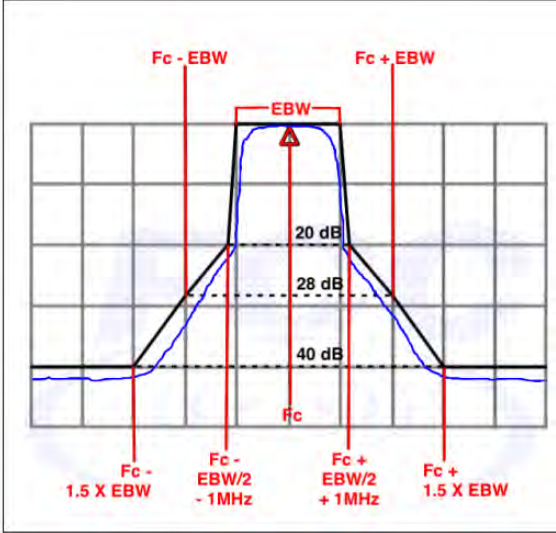
3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Frequency	Limit
Any outside the 5.945 – 7.125 GHz emission	e.i.r.p. -27 dBm [68.2 dBuV/m@3m] Note 1: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m($20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$. EX. Above 18GHz emission limit calculation (3m to 1m) = 68.2dBuV/m at 3m + 9.54dB = 77.74 dBuV/m at 1m. Note 2:-27 dBm EIRP OOB 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.
Frequency	Emission MASK Limit
5.945 – 7.125 GHz	Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.  The diagram illustrates the Emission MASK Limit. It shows a power spectral density curve (blue line) on a grid. The channel center is labeled F_c. The channel bandwidth is labeled EBW. The diagram shows the suppression levels (20 dB, 28 dB, 40 dB) relative to the channel center and bandwidth. The suppression levels are 20 dB at 1 MHz outside the channel edge, 28 dB at one channel bandwidth from the channel center, and 40 dB at one- and one-half times the channel bandwidth away from channel center. The diagram also shows the channel edge at $F_c - EBW$ and $F_c + EBW$, and the channel center at F_c. The suppression levels are 20 dB at 1 MHz outside the channel edge, 28 dB at one channel bandwidth from the channel center, and 40 dB at one- and one-half times the channel bandwidth away from channel center.



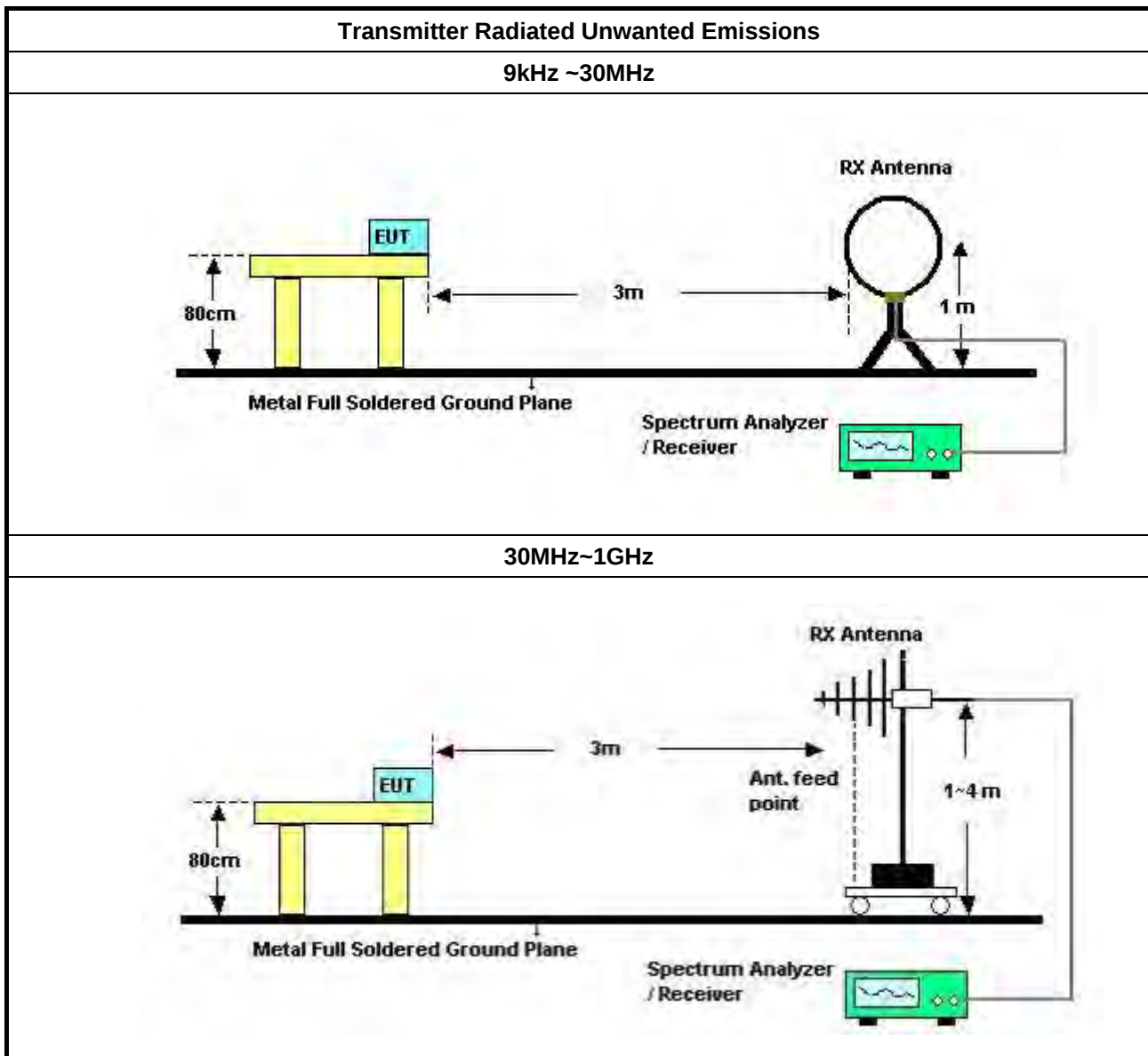
3.5.2 Measuring Instruments

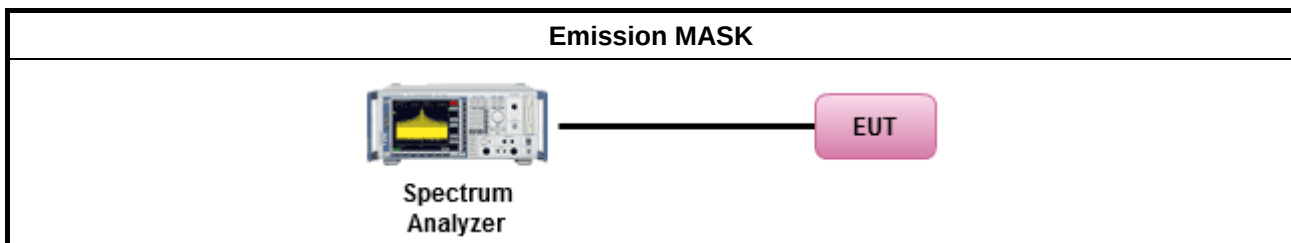
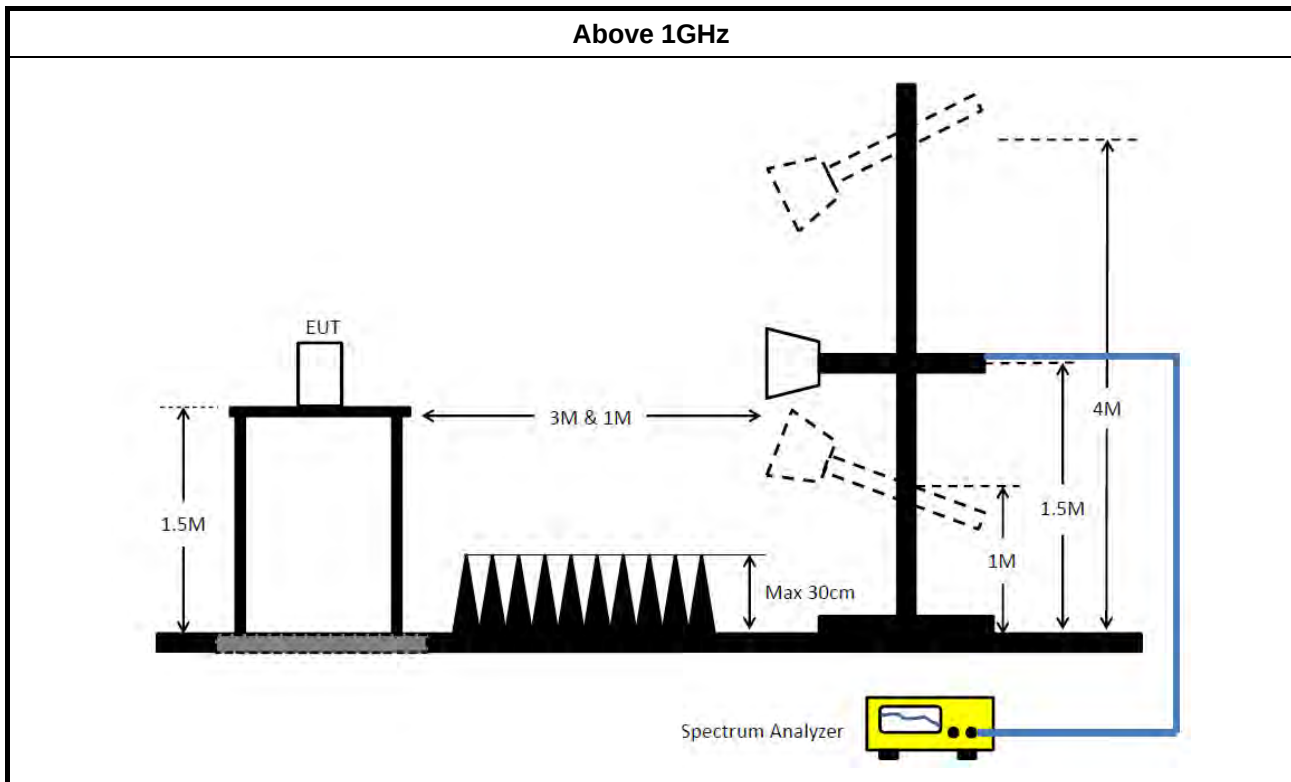
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
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).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☒ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)
	☐ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☒ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.(For restricted band average measurement)
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
	☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
For emission MASK shall be measured using following options below:	
	☒ Refer as FCC draft KDB 987594 D02, J) In-Band Emissions
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

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.

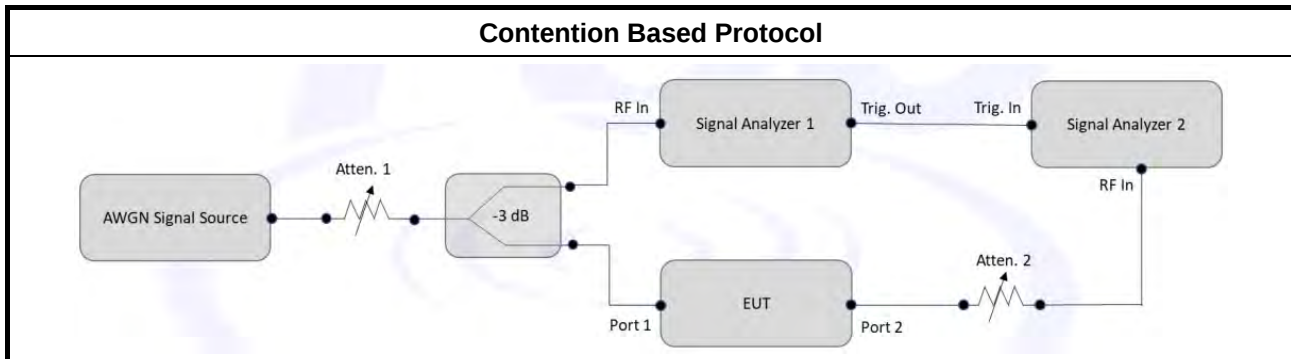
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
■	For Contention Based Protocol shall be measured using following options below:
☒	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



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	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	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	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (10CH01-CB)
10m Semi Anechoic Chamber NSA	TDK	SAC-10M	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 28, 2021	Jan. 27, 2022	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 11, 2021	Mar. 10, 2022	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 11, 2021	Mar. 10, 2022	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 20, 2020	Oct. 19, 2021	Radiation (10CH01-CB)
High Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 20, 2020	Oct. 19, 2021	Radiation (10CH01-CB)
Bilog Antenna with 6dB Attenuator	Chase & EMCI	CBL6111A &N-6-06	1543 &AT-N0609	30MHz ~ 1GHz	Jul. 01, 2021	Jun. 30, 2022	Radiation (10CH01-CB)
EMI Test Receiver	Rohde&Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (10CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 03, 2021	May 02, 2022	Radiation (10CH01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 25, 2021	Feb. 24, 2022	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 23, 2020	Oct. 22, 2021	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 18, 2021	Jun. 17, 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-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Feb. 19, 2021	Feb. 18, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Nov. 05, 2020	Nov. 04, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGR EN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2020	Nov. 05, 2021	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-H G	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)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 21, 2021	May 20, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~ 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)
Spectrum Analyzer	R&S	FSV40	101026	9kHz~40GHz	Dec. 01, 2020	Nov. 30, 2021	Conducted (DF01-CB)
Signal generator	R&S	SMB100A	177785	1MHz~40GHz	Sep. 23, 2021	Sep. 22, 2022	Conducted (DF01-CB)
Vector Signal generator	R&S	SMU200A	102782	100kHz~6GHz	Jun. 24, 2021	Jun. 23, 2022	Conducted (DF01-CB)
RF Power Divider	STI	2 Way	DV-2way -05	1GHz ~ 8GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Power Divider	STI	2 Way	DV-2way -06	1GHz ~ 8GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Power Divider	MTJ	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-52	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-53	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-54	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-56	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
100MS/s Digitizer	N.I	USB-5133	F65206	N/A	Nov. 15, 2020	Nov. 14, 2021	Conducted (DF01-CB)

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

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



Conducted Emissions at Powerline

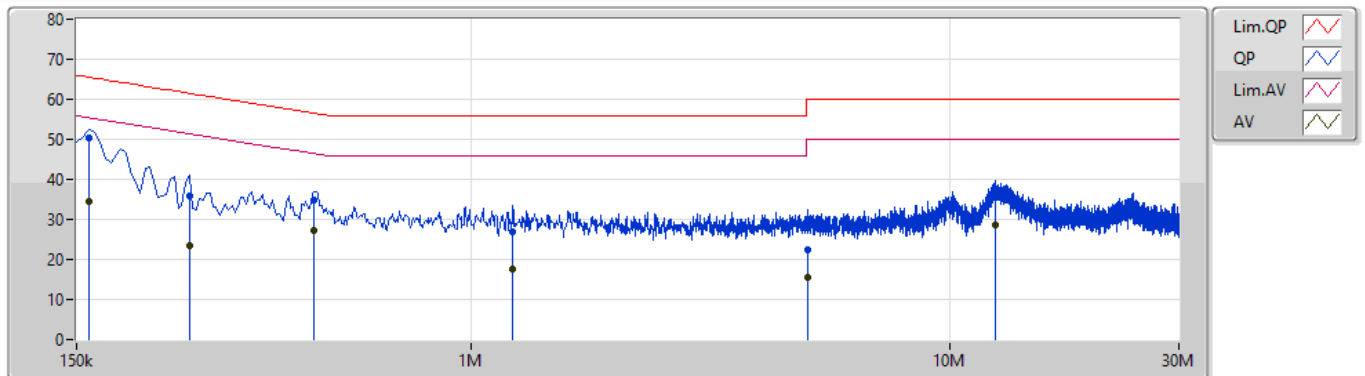
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	447k	32.80	46.94	-14.14	Neutral

Mode 1

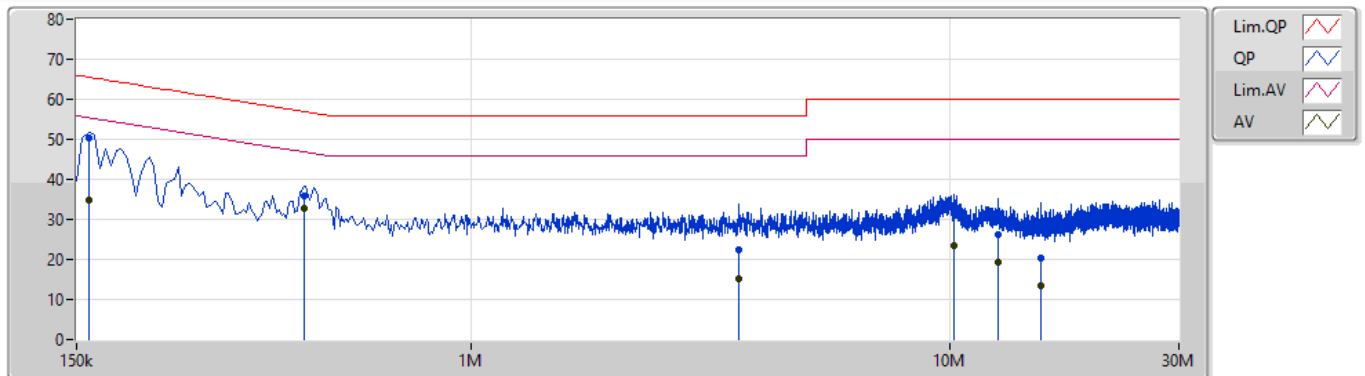
18/08/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159k	50.49	65.52	-15.03	9.89	Line	"Worst"	40.60	0.04	0.04	9.81			
AV	159k	34.36	55.52	-21.16	9.89	Line	-	24.47	0.04	0.04	9.81			
QP	258k	35.76	61.49	-25.73	9.89	Line	-	25.87	0.04	0.04	9.81			
AV	258k	23.36	51.49	-28.13	9.89	Line	-	13.47	0.04	0.04	9.81			
QP	469.5k	34.79	56.52	-21.73	9.90	Line	-	24.89	0.04	0.04	9.82			
AV	469.5k	27.15	46.52	-19.37	9.90	Line	-	17.25	0.04	0.04	9.82			
QP	1.221M	26.85	56.00	-29.15	9.95	Line	-	16.90	0.07	0.05	9.83			
AV	1.221M	17.55	46.00	-28.45	9.95	Line	-	7.60	0.07	0.05	9.83			
QP	5.037M	22.46	60.00	-37.54	10.16	Line	-	12.30	0.15	0.13	9.88			
AV	5.037M	15.62	50.00	-34.38	10.16	Line	-	5.46	0.15	0.13	9.88			
QP	12.426M	35.41	60.00	-24.59	10.33	Line	-	25.08	0.25	0.17	9.91			
AV	12.426M	28.56	50.00	-21.44	10.33	Line	-	18.23	0.25	0.17	9.91			

Mode 1

18/08/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159k	50.45	65.52	-15.07	9.88	Neutral	-	40.57	0.03	0.04	9.81			
AV	159k	34.83	55.52	-20.69	9.88	Neutral	-	24.95	0.03	0.04	9.81			
QP	447k	35.84	56.94	-21.10	9.89	Neutral	-	25.95	0.03	0.04	9.82			
AV	447k	32.80	46.94	-14.14	9.89	Neutral	"Worst"	22.91	0.03	0.04	9.82			
QP	3.611M	22.38	56.00	-33.62	10.07	Neutral	-	12.31	0.10	0.11	9.86			
AV	3.611M	15.28	46.00	-30.72	10.07	Neutral	-	5.21	0.10	0.11	9.86			
QP	10.158M	31.49	60.00	-28.51	10.26	Neutral	-	21.23	0.20	0.16	9.90			
AV	10.158M	23.49	50.00	-26.51	10.26	Neutral	-	13.23	0.20	0.16	9.90			
QP	12.57M	26.21	60.00	-33.79	10.31	Neutral	-	15.90	0.23	0.17	9.91			
AV	12.57M	19.24	50.00	-30.76	10.31	Neutral	-	8.93	0.23	0.17	9.91			
QP	15.437M	20.28	60.00	-39.72	10.36	Neutral	-	9.92	0.26	0.18	9.92			
AV	15.437M	13.33	50.00	-36.67	10.36	Neutral	-	2.97	0.26	0.18	9.92			

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)_4TX	22.5M	19.13M	19M1D1D	21.51M	19.01M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.62M	37.901M	37M9D1D	40.2M	37.661M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.68M	77.601M	77M6D1D	81.84M	77.121M
802.11ax HEW160_Nss1,(MCS0)_4TX	166.08M	155.922M	156MD1D	164.16M	154.723M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	22.41M	19.16M	19M2D1D	21.75M	19.07M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.62M	37.901M	37M9D1D	40.08M	37.601M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.44M	77.361M	77M4D1D	81.84M	76.882M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.36M	154.963M	155MD1D	164.16M	154.483M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	22.41M	19.22M	19M2D1D	21.66M	19.07M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.62M	37.901M	37M9D1D	39.9M	37.421M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.56M	77.481M	77M5D1D	81.48M	76.762M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.12M	155.442M	155MD1D	164.16M	154.483M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	22.56M	19.22M	19M2D1D	21.57M	18.951M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.74M	37.961M	38M0D1D	39.84M	37.481M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.44M	77.601M	77M6D1D	81.6M	76.882M
802.11ax HEW160_Nss1,(MCS0)_4TX	164.88M	155.682M	156MD1D	163.92M	154.003M

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

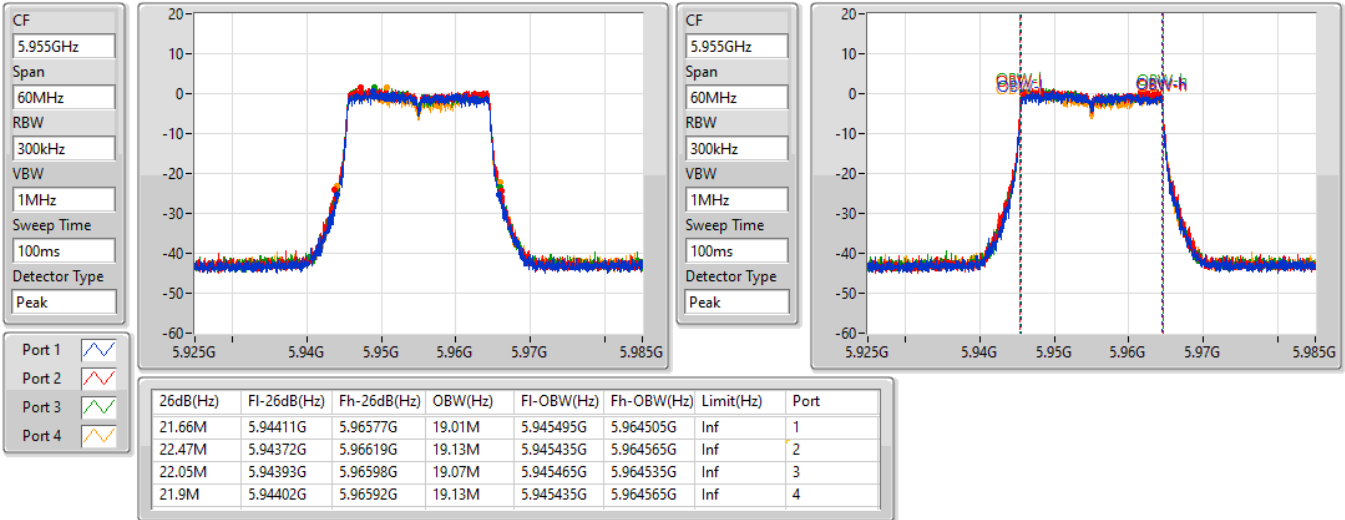
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	21.66M	19.01M	22.47M	19.13M	22.05M	19.07M	21.9M	19.13M
6175MHz	Pass	Inf	21.66M	19.01M	22.32M	19.07M	21.99M	19.1M	22.5M	19.13M
6415MHz	Pass	Inf	21.51M	19.04M	22.35M	19.07M	21.75M	19.13M	22.17M	19.1M
6435MHz	Pass	Inf	21.87M	19.1M	22.29M	19.07M	22.14M	19.1M	22.23M	19.1M
6475MHz	Pass	Inf	21.96M	19.1M	22.17M	19.1M	22.29M	19.1M	22.41M	19.13M
6515MHz	Pass	Inf	21.75M	19.16M	22.29M	19.07M	21.93M	19.13M	22.05M	19.13M
6535MHz	Pass	Inf	22.05M	19.16M	22.41M	19.07M	22.11M	19.13M	21.99M	19.16M
6695MHz	Pass	Inf	22.35M	19.19M	22.17M	19.13M	22.38M	19.1M	22.29M	19.13M
6855MHz	Pass	Inf	22.05M	19.19M	22.17M	19.22M	22.17M	19.07M	22.29M	19.1M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	21.66M	19.19M	22.23M	19.22M	21.87M	19.1M	22.14M	19.1M
6895MHz	Pass	Inf	21.96M	19.16M	22.56M	19.19M	22.17M	19.1M	22.26M	19.1M
6995MHz	Pass	Inf	21.75M	19.04M	22.26M	19.22M	22.23M	19.04M	21.93M	19.04M
7095MHz	Pass	Inf	21.75M	18.981M	22.26M	19.22M	22.05M	19.04M	21.81M	19.04M
7115MHz	Pass	Inf	21.57M	18.951M	22.14M	19.16M	22.29M	19.01M	22.2M	19.04M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	40.56M	37.901M	40.38M	37.841M	40.62M	37.781M	40.56M	37.721M
6165MHz	Pass	Inf	40.2M	37.901M	40.32M	37.901M	40.2M	37.781M	40.5M	37.781M
6405MHz	Pass	Inf	40.26M	37.901M	40.44M	37.841M	40.38M	37.661M	40.2M	37.721M
6445MHz	Pass	Inf	40.38M	37.781M	40.38M	37.901M	40.14M	37.661M	40.32M	37.661M
6485MHz	Pass	Inf	40.26M	37.661M	40.38M	37.901M	40.08M	37.661M	40.32M	37.661M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	40.32M	37.661M	40.62M	37.841M	40.26M	37.601M	40.26M	37.661M
6565MHz	Pass	Inf	40.2M	37.601M	40.5M	37.841M	40.2M	37.601M	40.32M	37.721M
6685MHz	Pass	Inf	40.08M	37.481M	40.5M	37.781M	40.2M	37.661M	40.32M	37.781M
6845MHz	Pass	Inf	39.9M	37.421M	40.08M	37.661M	40.38M	37.841M	40.62M	37.901M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	40.2M	37.481M	40.02M	37.661M	40.38M	37.841M	40.32M	37.841M
6925MHz	Pass	Inf	40.02M	37.541M	40.44M	37.541M	40.32M	37.961M	40.74M	37.961M
7005MHz	Pass	Inf	40.32M	37.781M	39.84M	37.481M	40.32M	37.841M	40.56M	37.961M
7085MHz	Pass	Inf	40.38M	37.961M	40.26M	37.541M	40.68M	37.901M	40.32M	37.961M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	82.44M	77.481M	82.56M	77.481M	82.08M	77.601M	82.08M	77.241M
6145MHz	Pass	Inf	82.2M	77.481M	82.68M	77.361M	81.84M	77.241M	82.32M	77.121M
6385MHz	Pass	Inf	82.08M	77.481M	82.2M	77.601M	82.32M	77.121M	82.08M	77.121M
6465MHz	Pass	Inf	82.08M	77.241M	82.08M	77.361M	82.44M	77.121M	81.84M	77.121M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	82.08M	77.001M	82.44M	77.241M	81.96M	77.001M	82.08M	76.882M
6625MHz	Pass	Inf	82.2M	76.882M	82.44M	77.361M	81.84M	76.762M	82.56M	77.361M
6705MHz	Pass	Inf	81.48M	76.762M	82.32M	77.241M	81.48M	76.882M	81.84M	77.361M
6785MHz	Pass	Inf	81.6M	76.762M	82.44M	77.241M	82.56M	77.361M	82.08M	77.481M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	81.6M	76.882M	81.72M	77.001M	82.44M	77.361M	82.44M	77.481M
6945MHz	Pass	Inf	82.44M	76.882M	81.72M	76.882M	82.32M	77.601M	82.32M	77.601M
7025MHz	Pass	Inf	81.6M	77.361M	81.6M	76.882M	82.2M	77.361M	82.44M	77.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	165.36M	155.922M	164.16M	155.202M	164.64M	155.202M	164.4M	155.202M
6185MHz	Pass	Inf	166.08M	155.202M	165.12M	155.202M	166.08M	155.202M	164.64M	154.723M
6345MHz	Pass	Inf	165.12M	155.442M	164.16M	155.442M	165.12M	155.202M	165.36M	154.963M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	164.16M	154.963M	165.36M	154.963M	164.4M	154.723M	164.16M	154.483M
6665MHz	Pass	Inf	164.64M	154.483M	164.4M	154.963M	164.16M	154.483M	164.88M	154.963M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	164.88M	154.963M	164.4M	154.723M	164.4M	155.202M	165.12M	155.442M
6985MHz	Pass	Inf	163.92M	154.483M	164.16M	154.003M	164.88M	154.723M	164.64M	155.682M

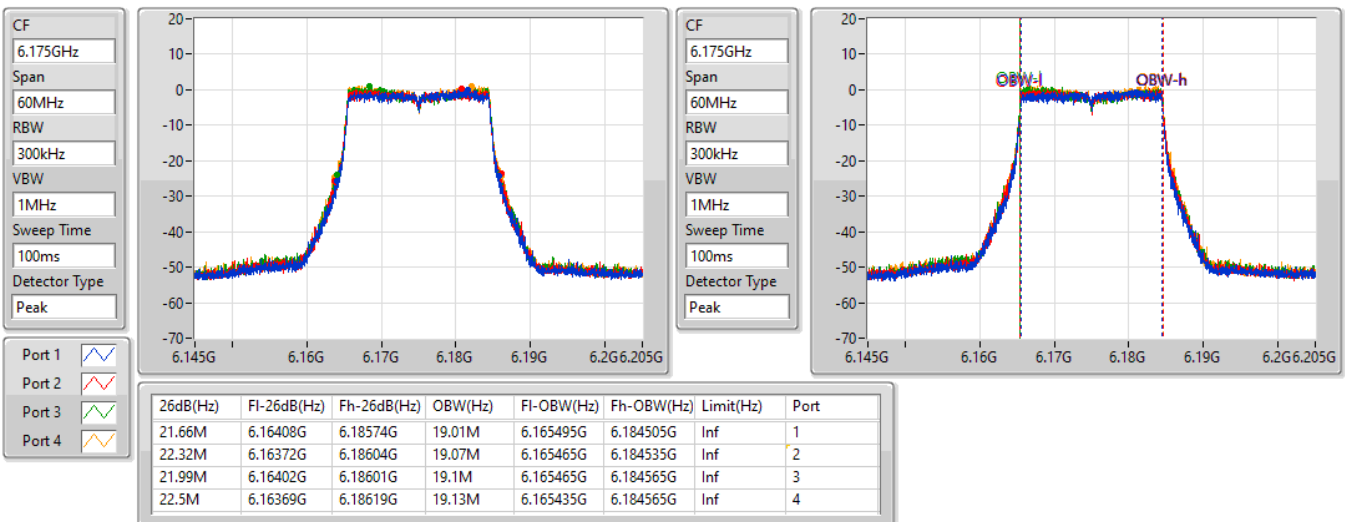
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5955MHz

20/09/2021

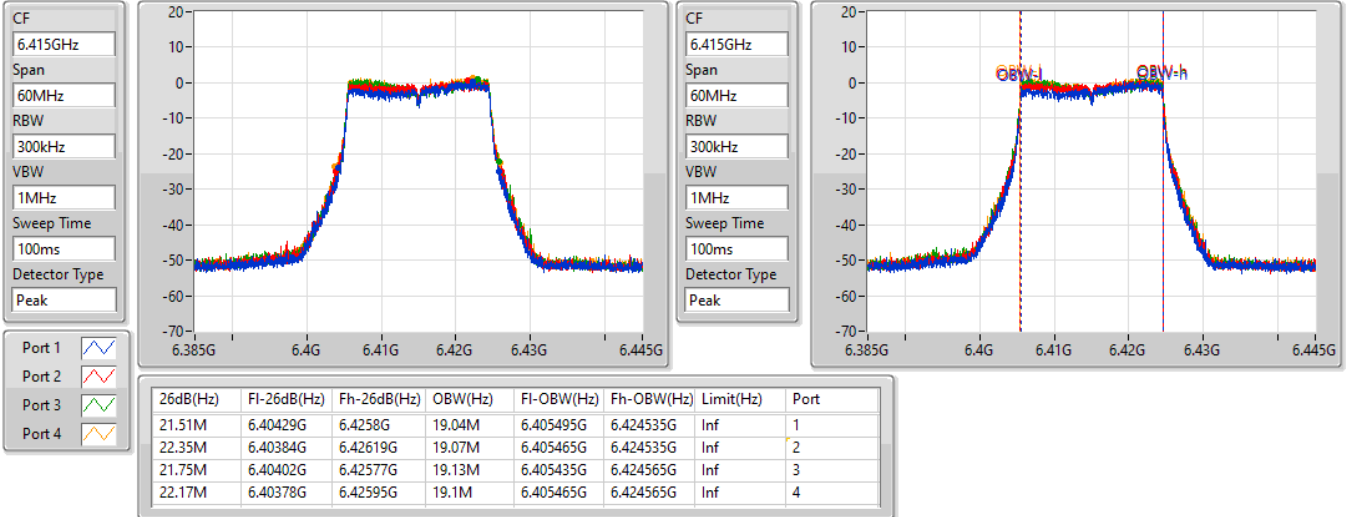

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6175MHz

20/09/2021

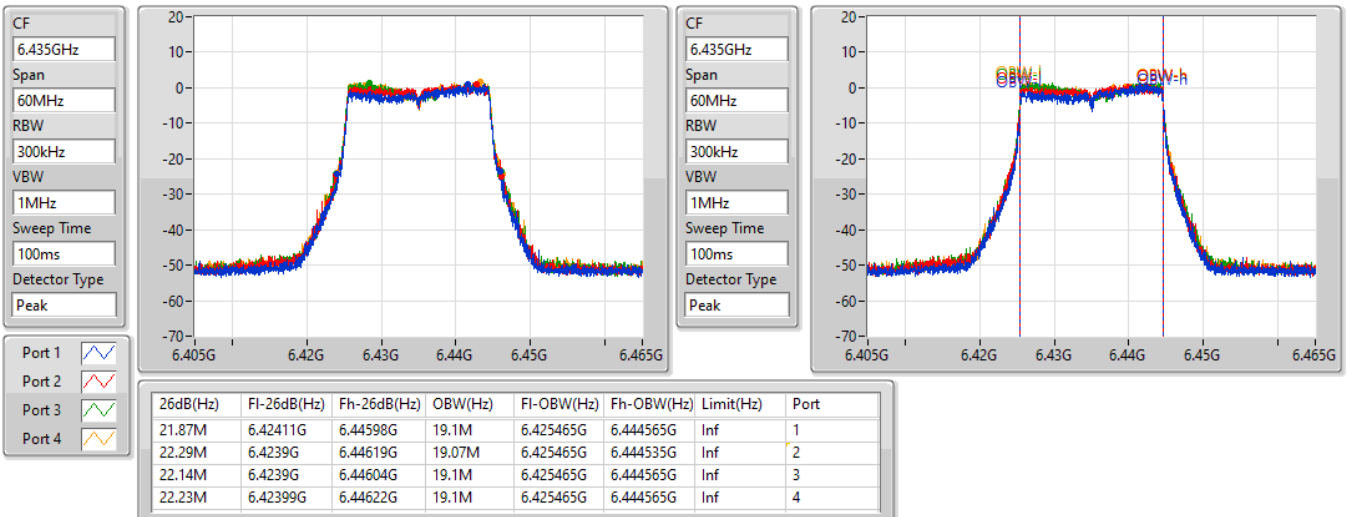


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6415MHz

20/09/2021

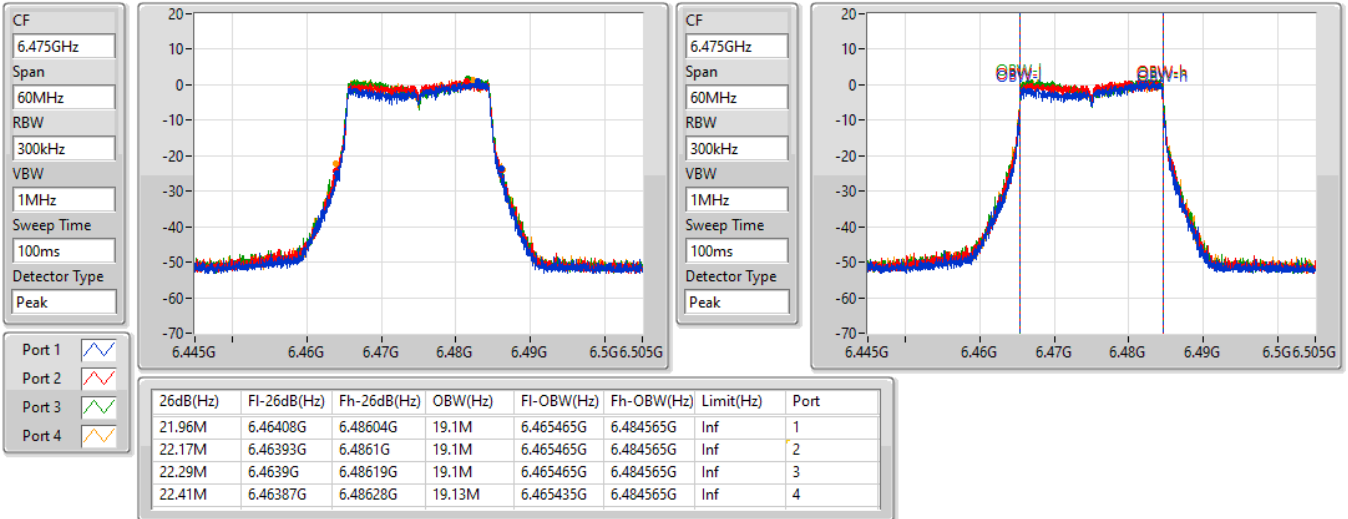

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6435MHz

20/09/2021

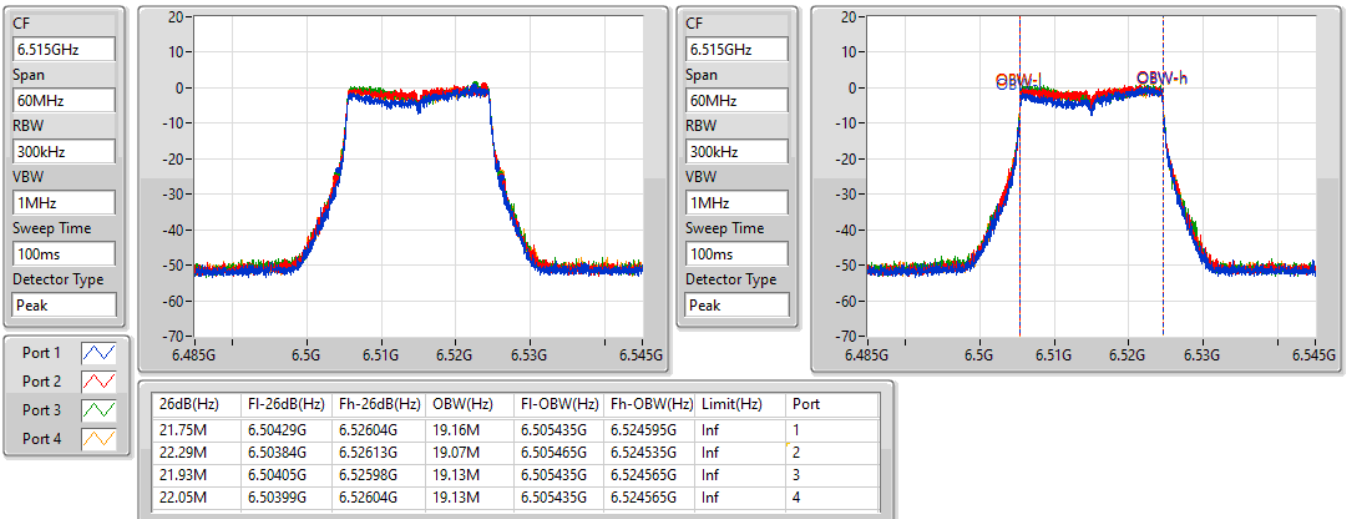


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6475MHz

20/09/2021

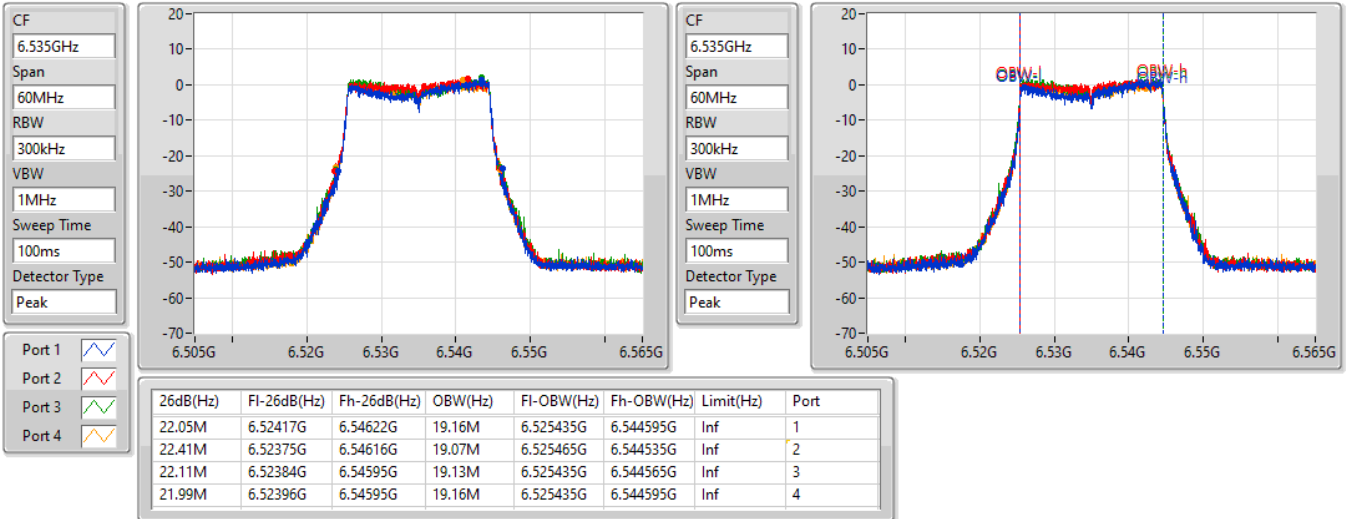

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6515MHz

20/09/2021

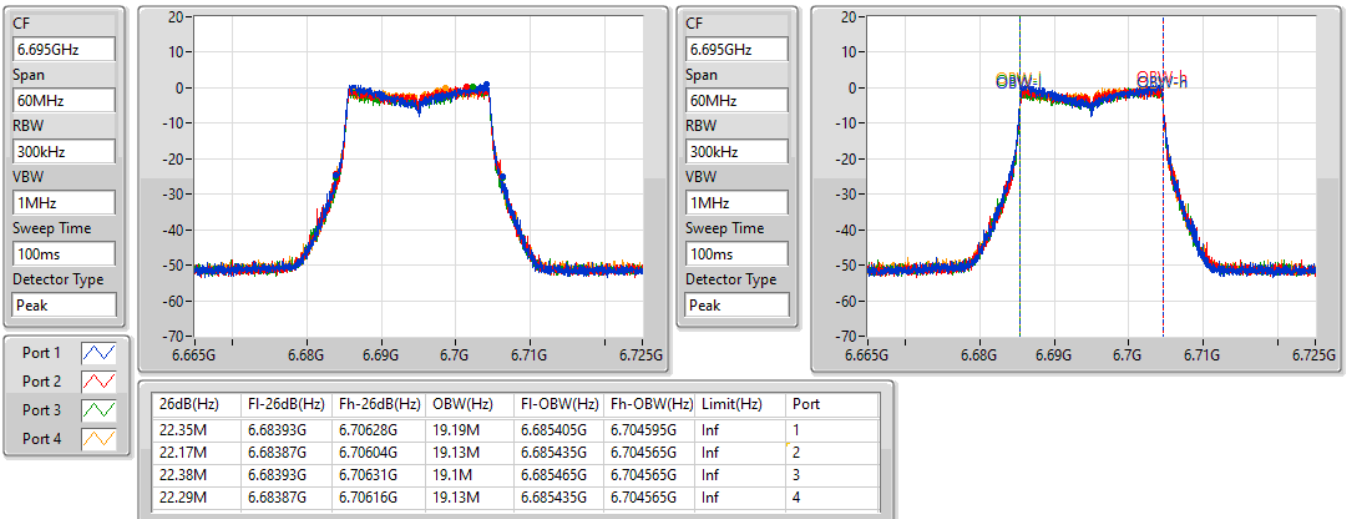


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6535MHz

20/09/2021

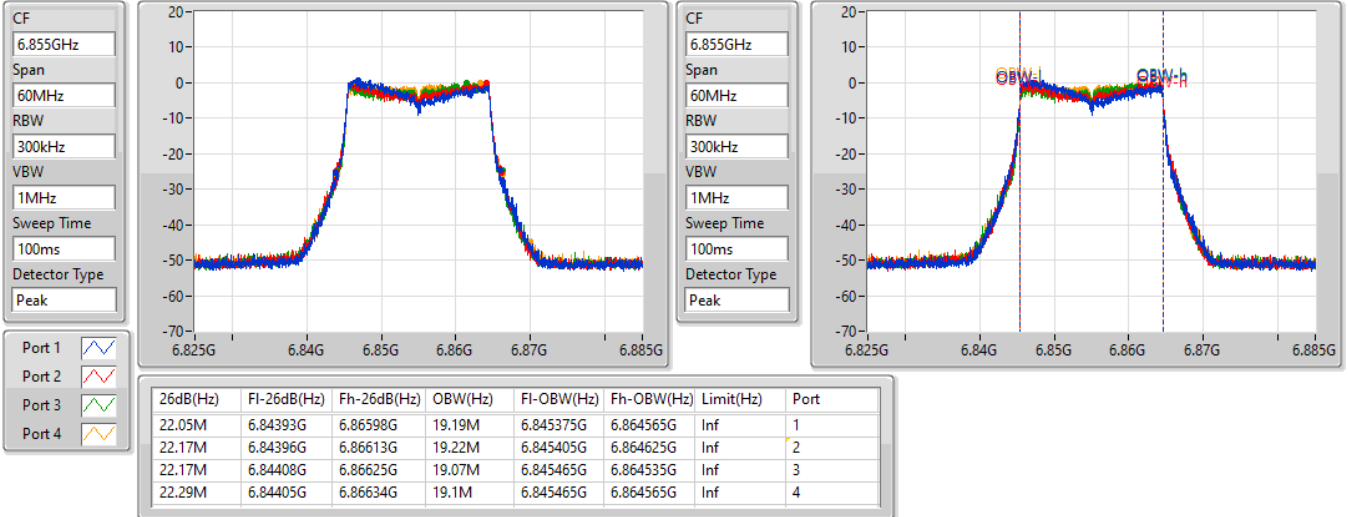

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6695MHz

20/09/2021

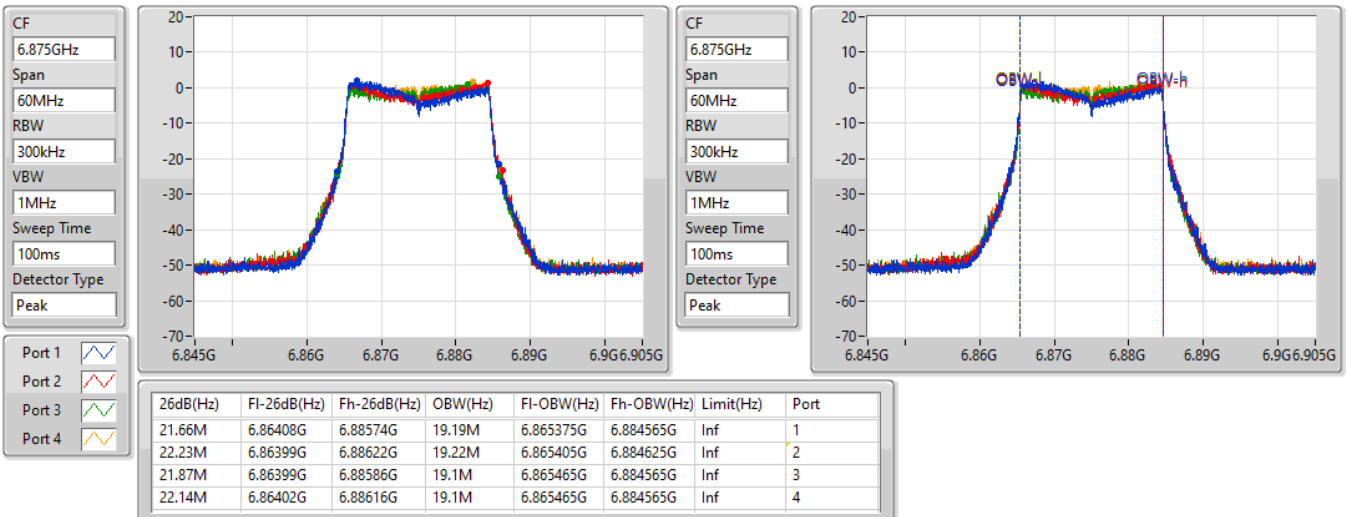


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6855MHz

20/09/2021

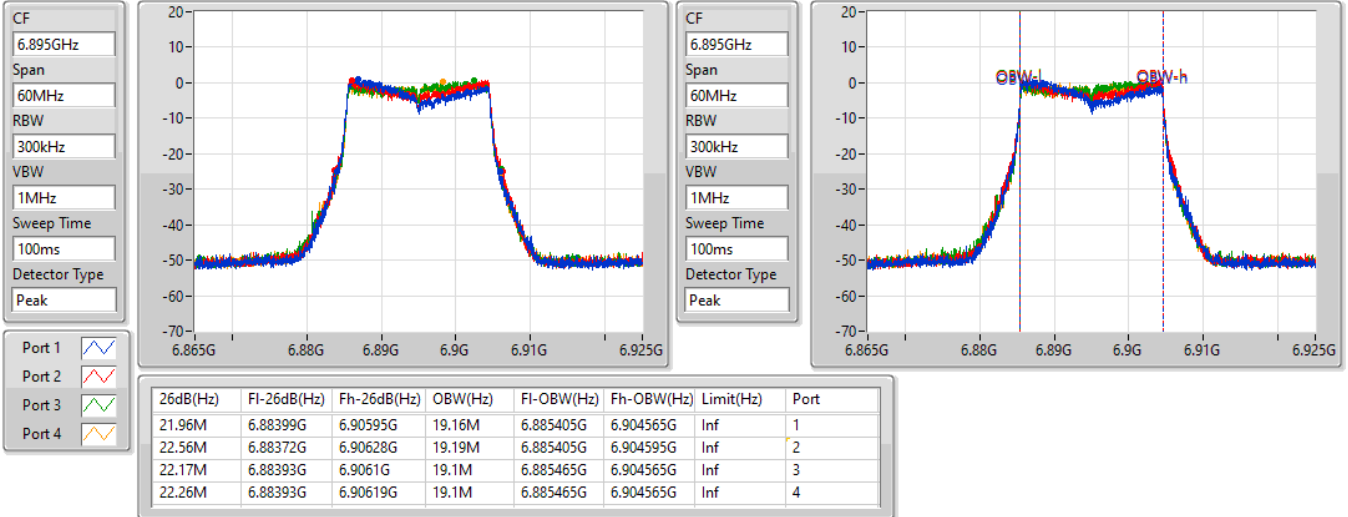

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6875MHz Straddle 6.525-6.875GHz

20/09/2021

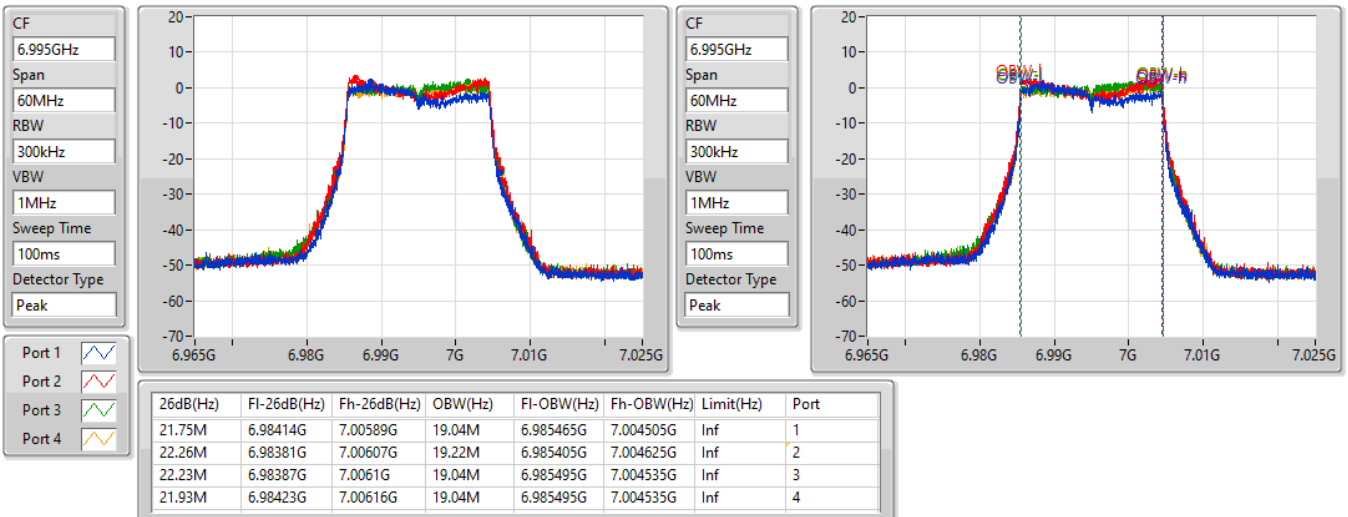


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6895MHz

20/09/2021

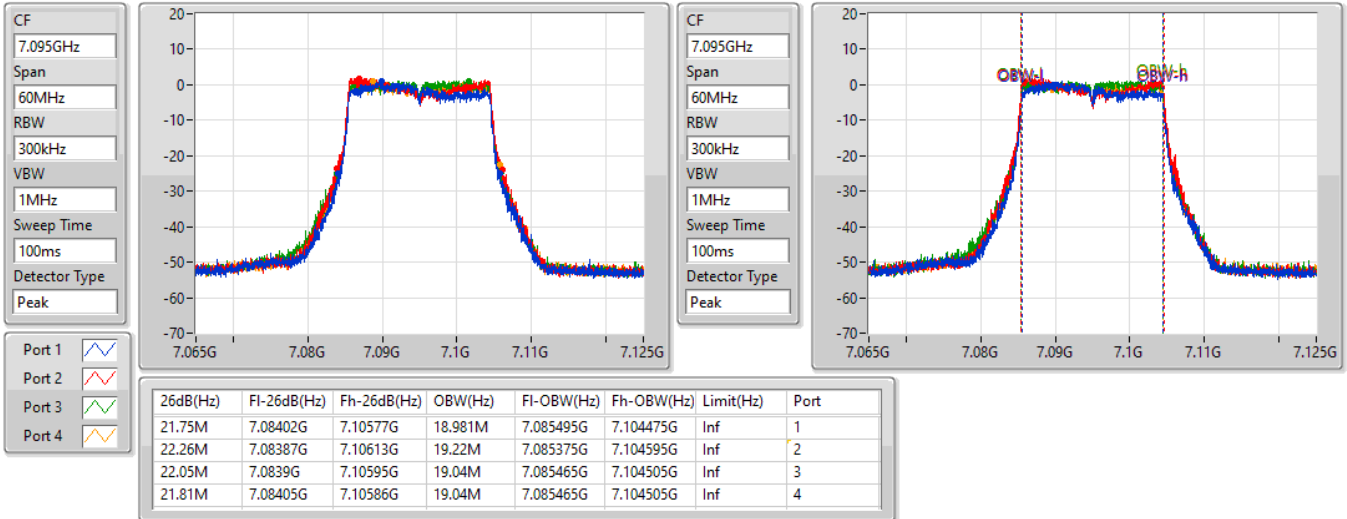

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6995MHz

20/09/2021

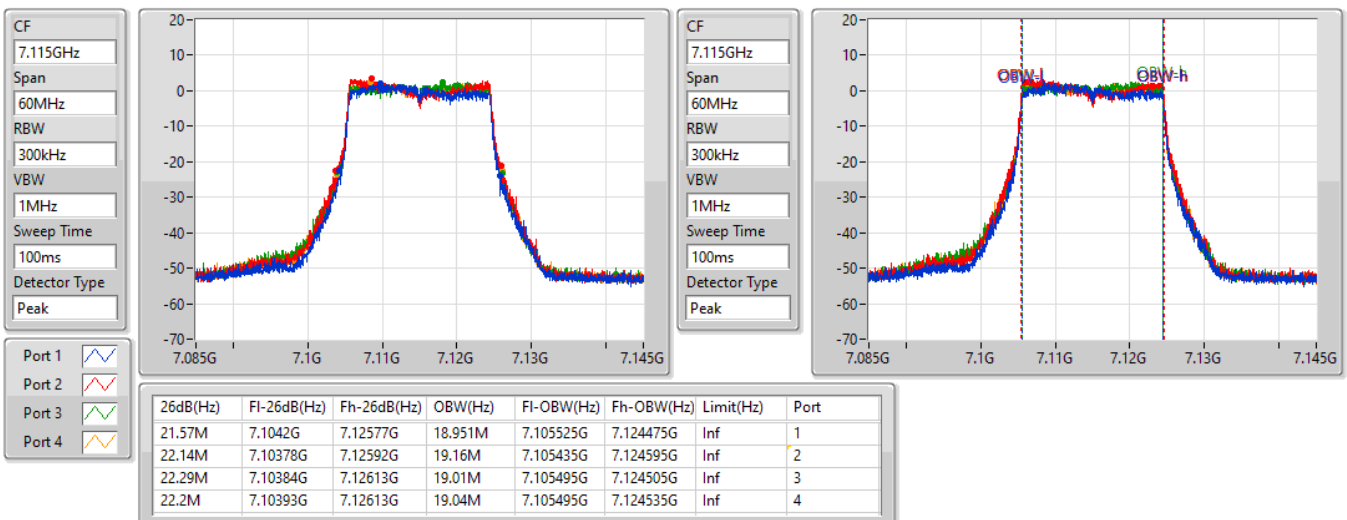


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
7095MHz

20/09/2021

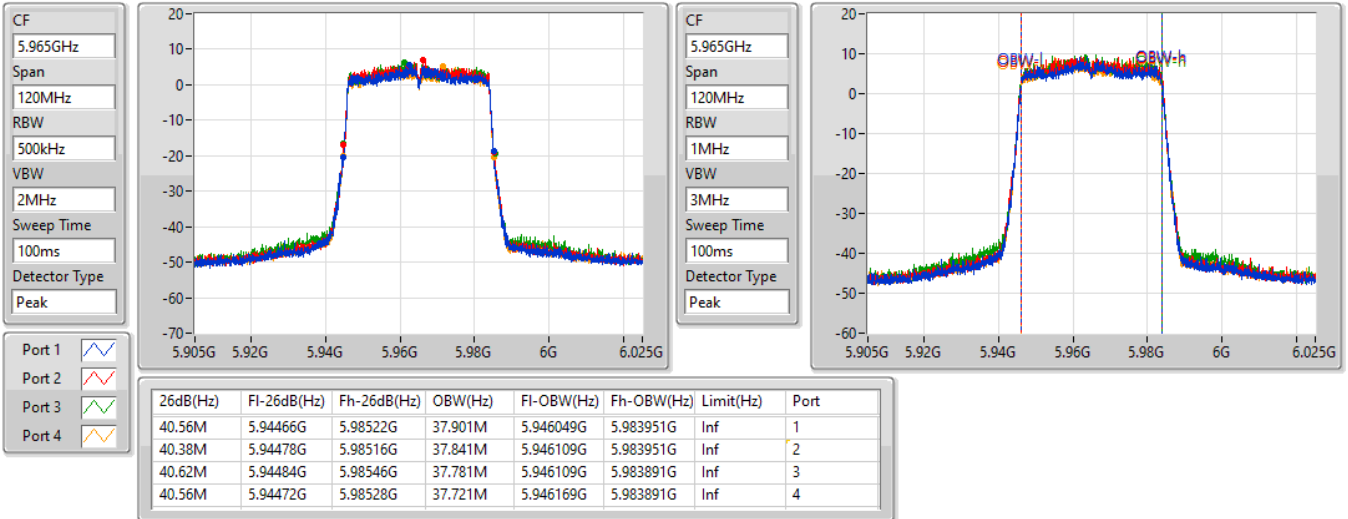

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
7115MHz

20/09/2021

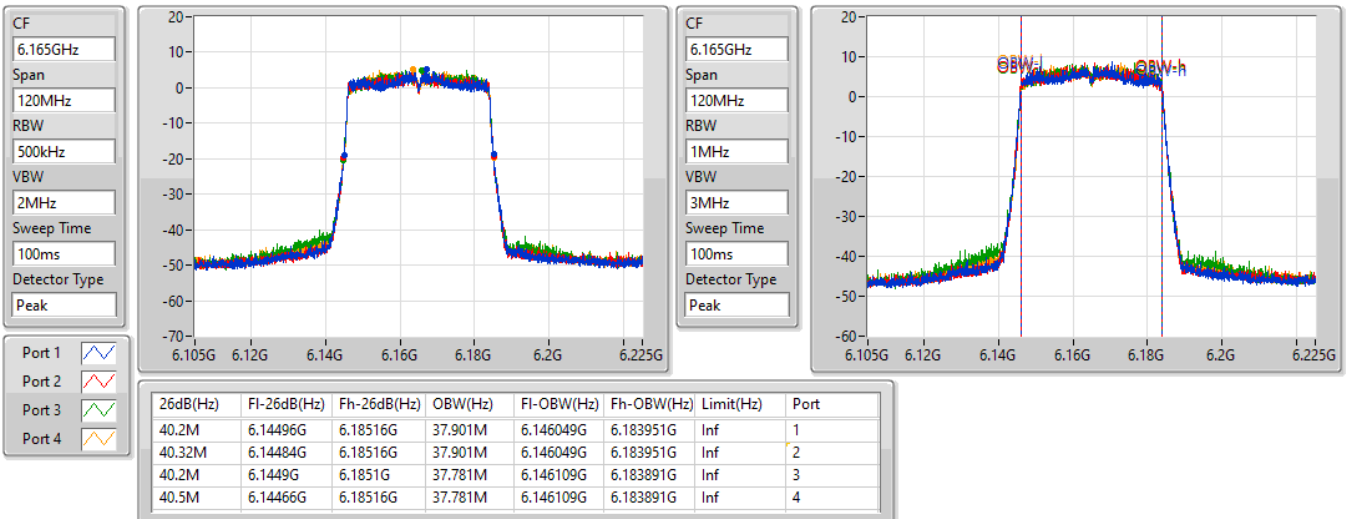


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5965MHz

20/09/2021

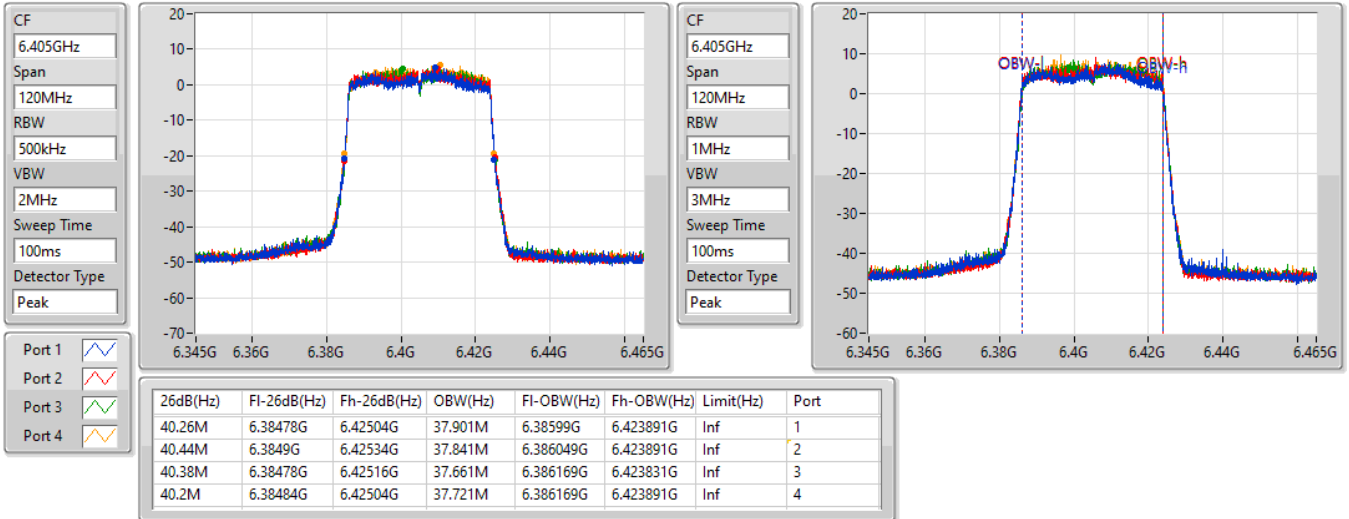

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6165MHz

20/09/2021

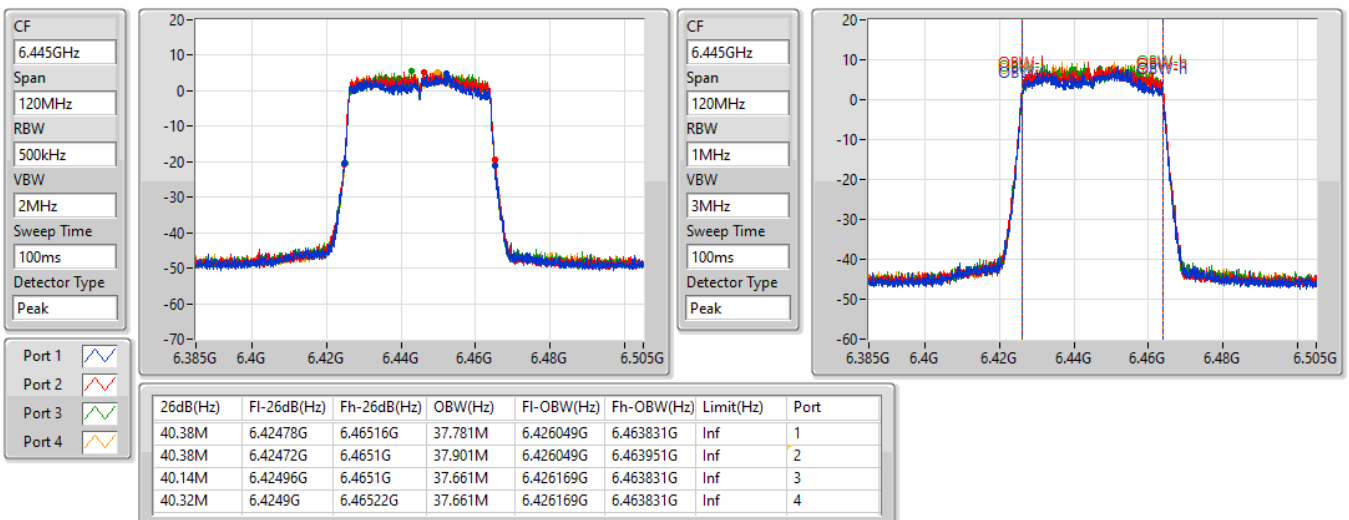


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6405MHz

20/09/2021

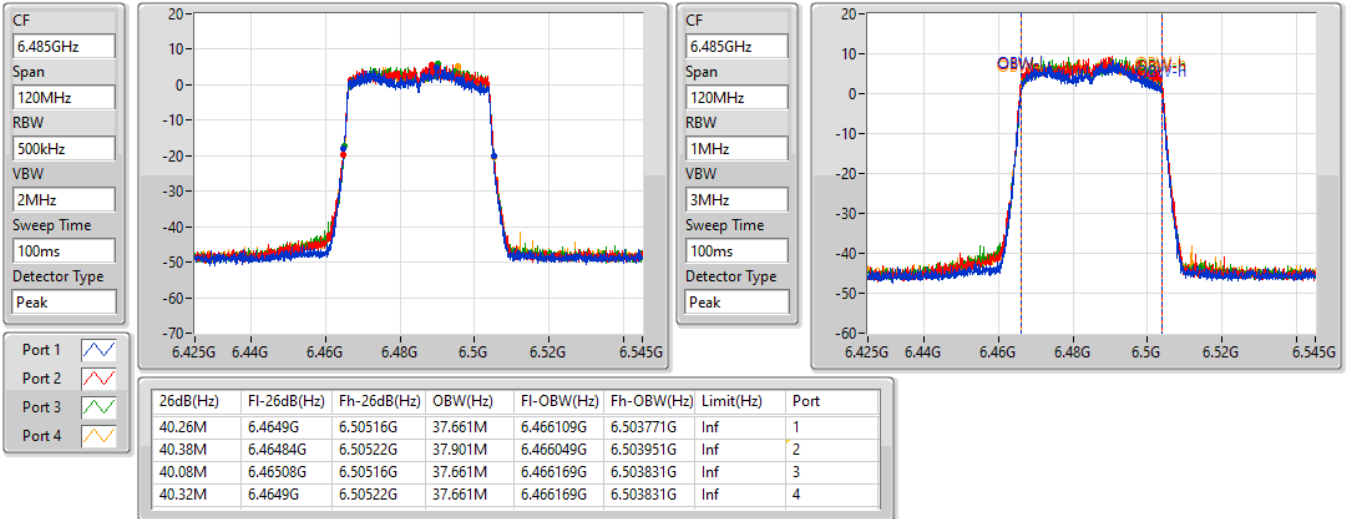

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6445MHz

20/09/2021

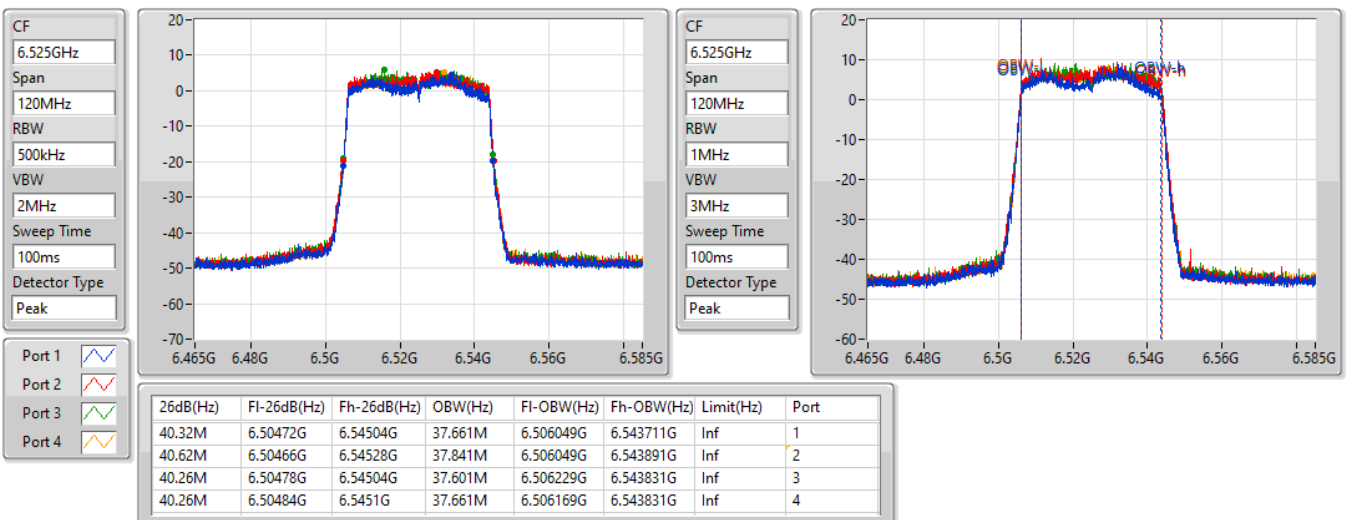


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6485MHz

20/09/2021

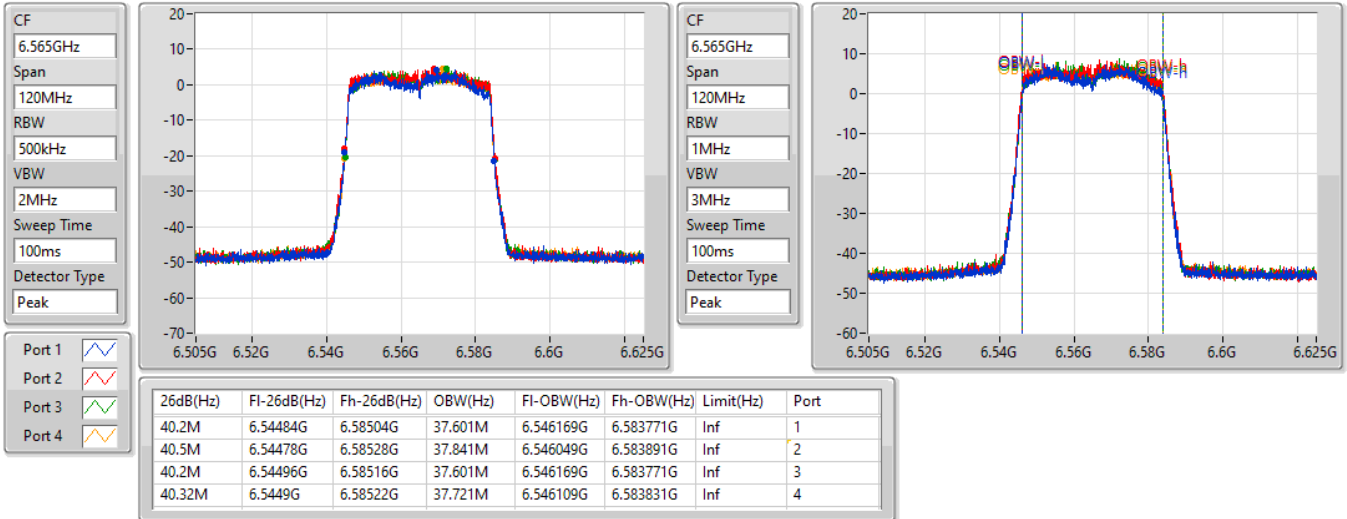

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6525MHz Straddle 6.425-6.525GHz

20/09/2021

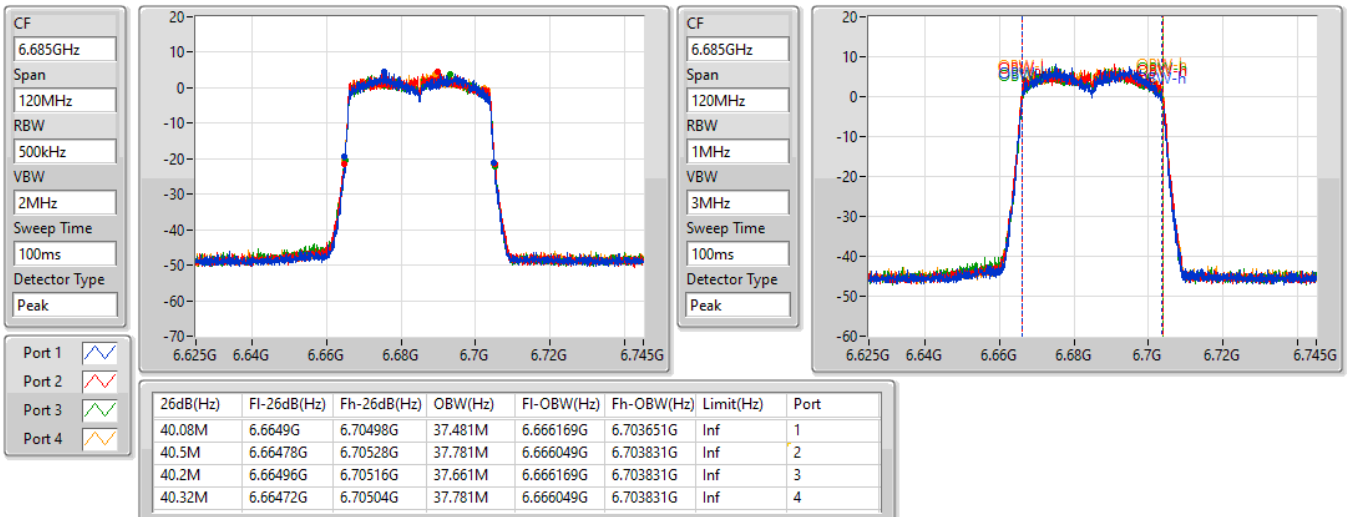


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6565MHz

20/09/2021

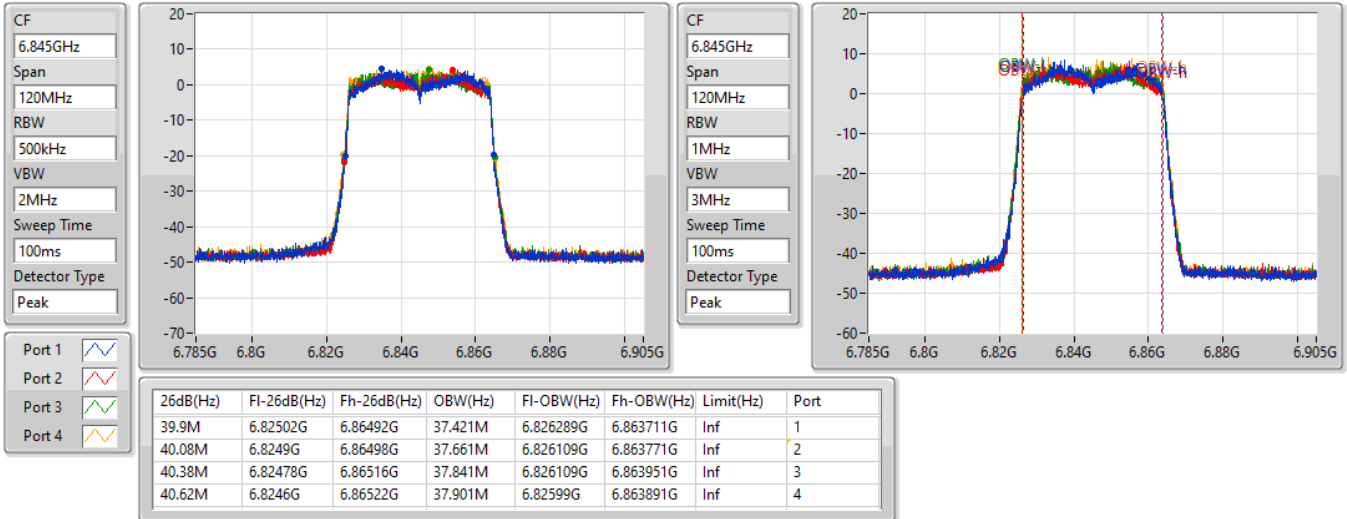

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6685MHz

20/09/2021

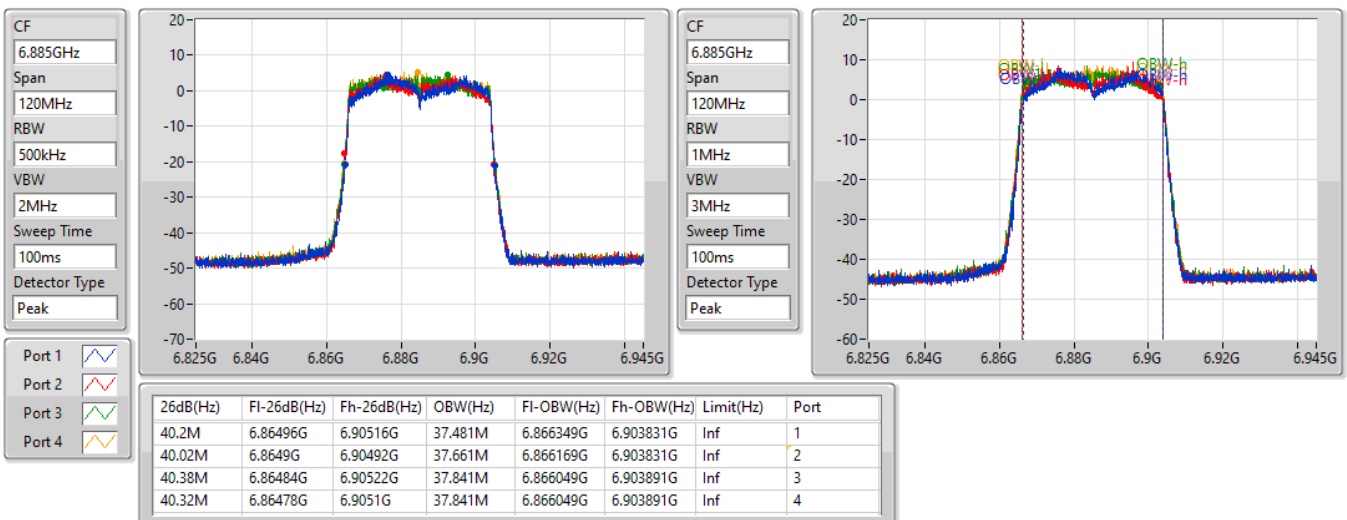


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6845MHz

20/09/2021

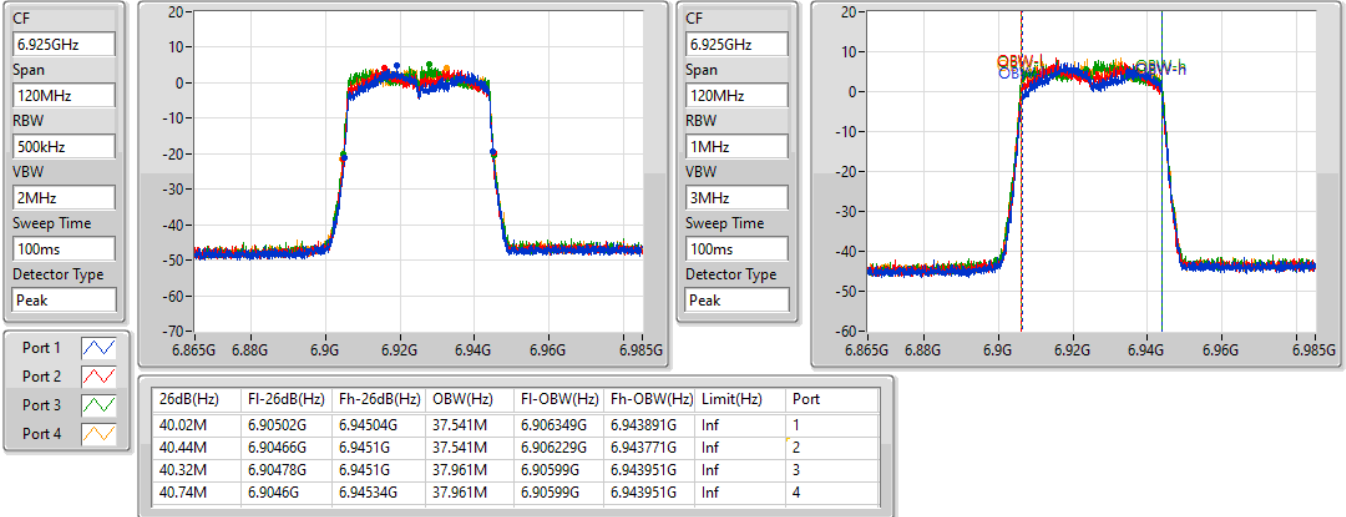

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6885MHz Straddle 6.525-6.875GHz

20/09/2021

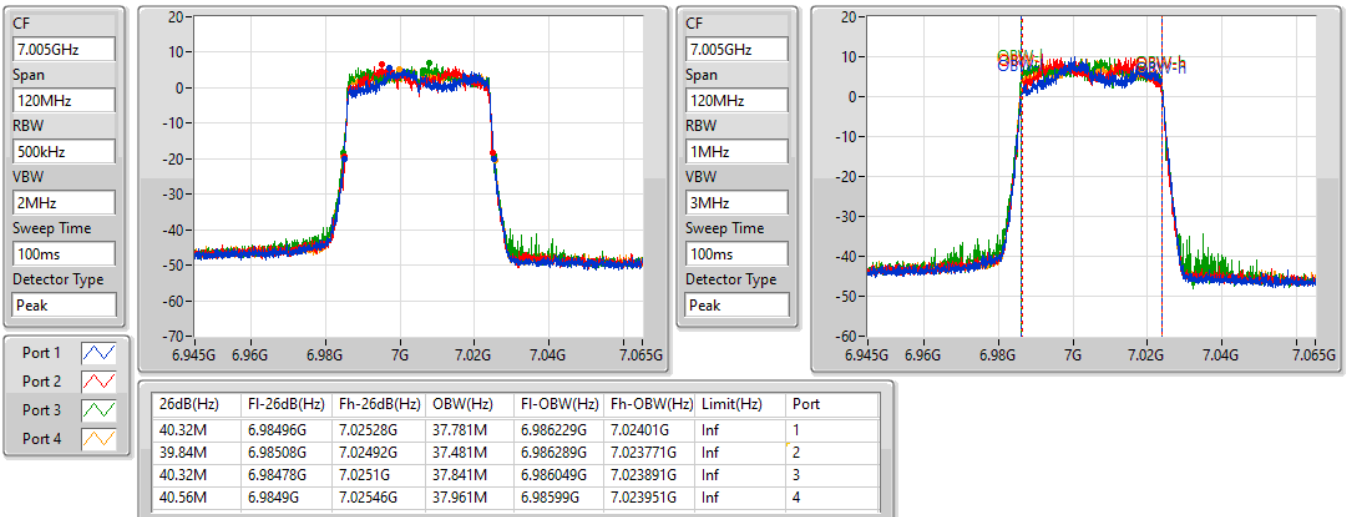


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6925MHz

20/09/2021

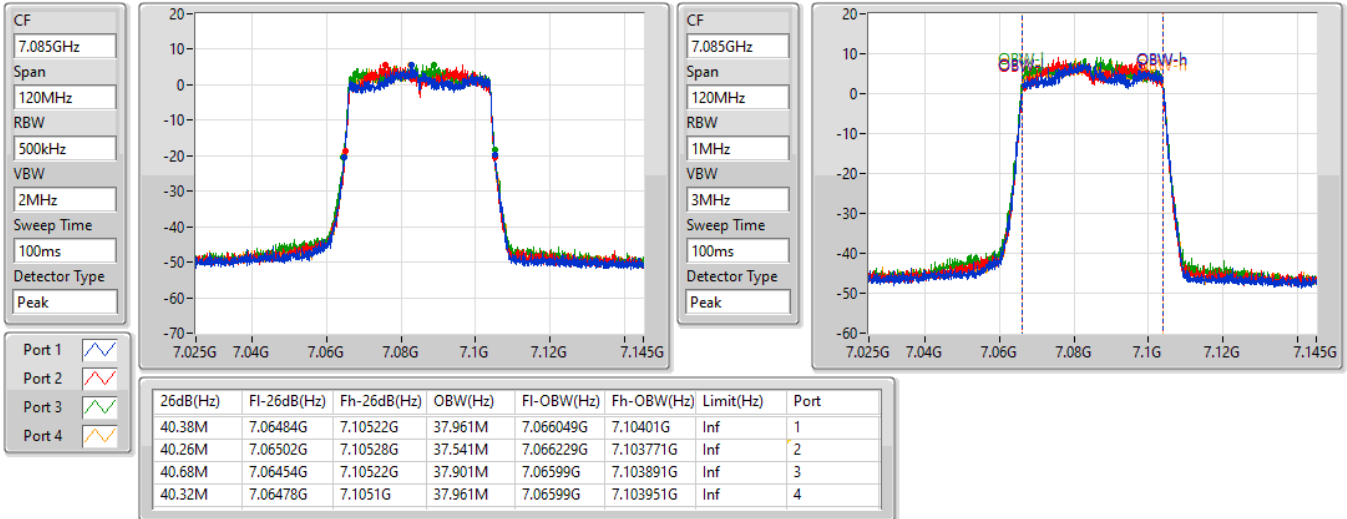

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
7005MHz

20/09/2021

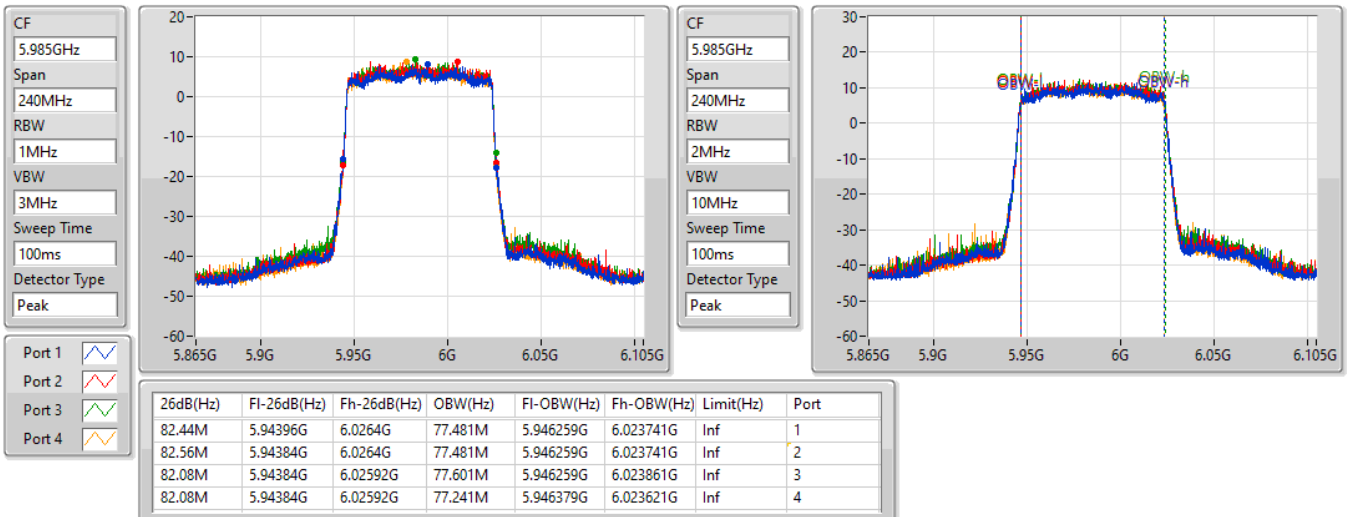


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
7085MHz

20/09/2021

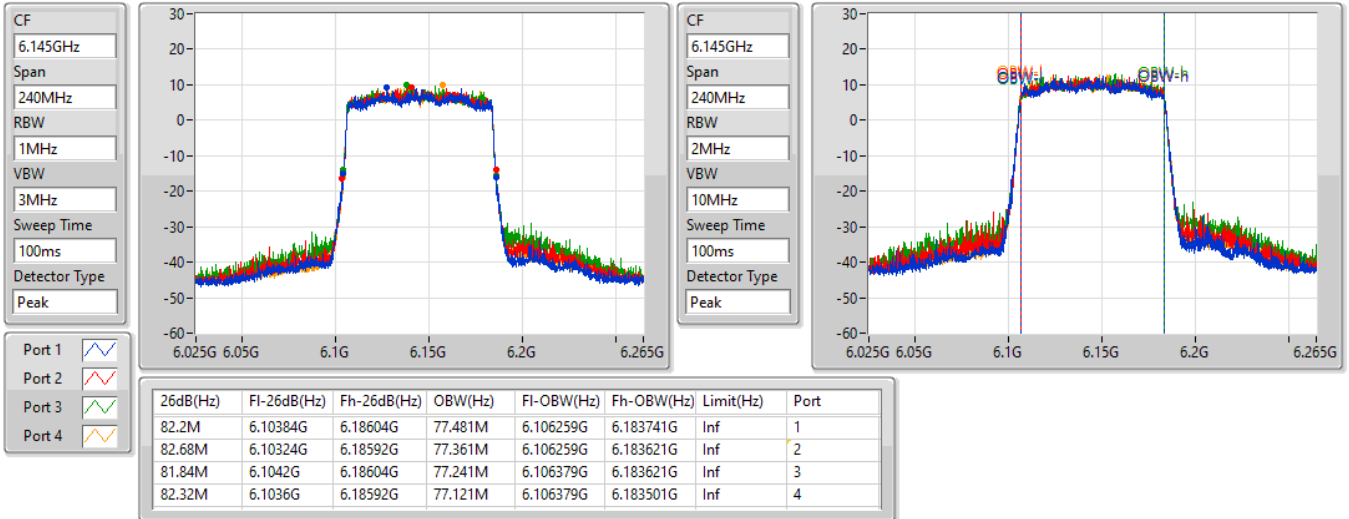

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5985MHz

20/09/2021

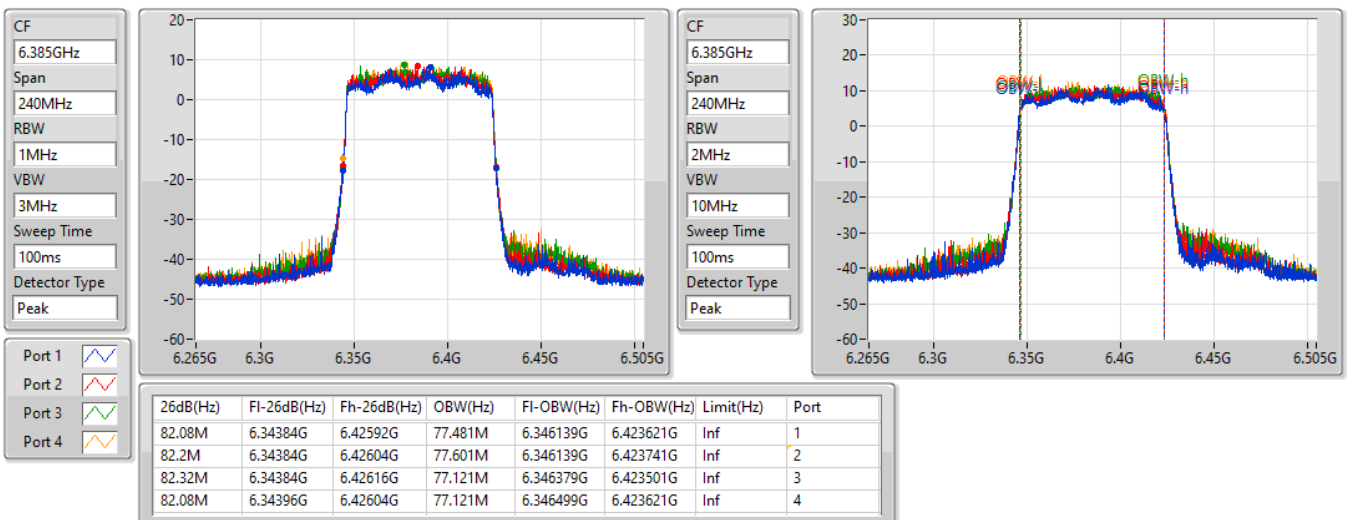


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6145MHz

20/09/2021

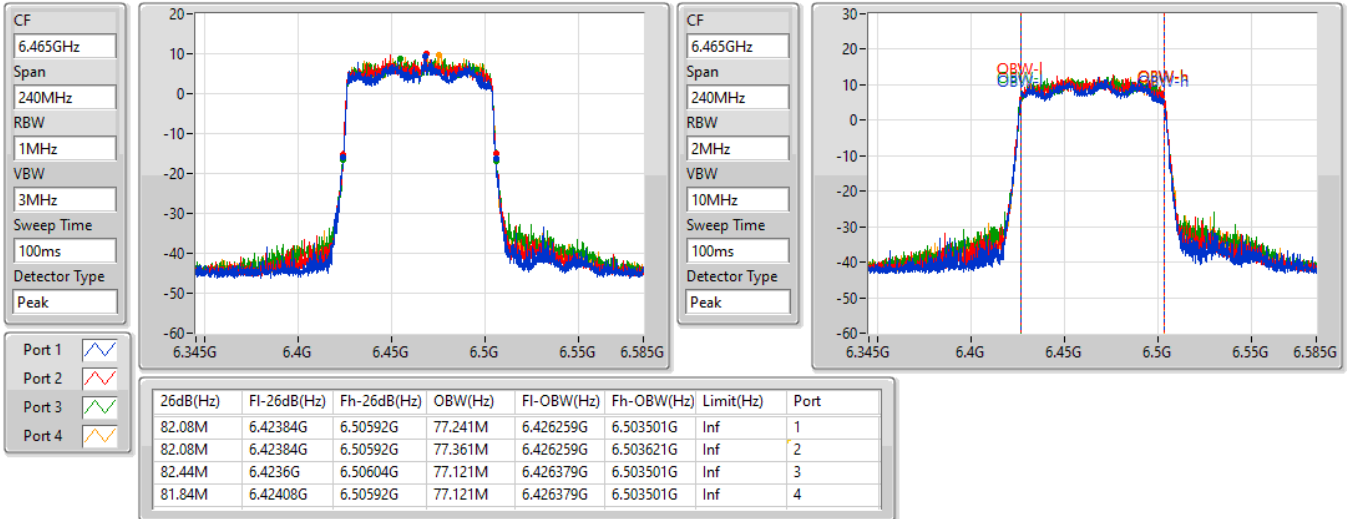

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6385MHz

20/09/2021

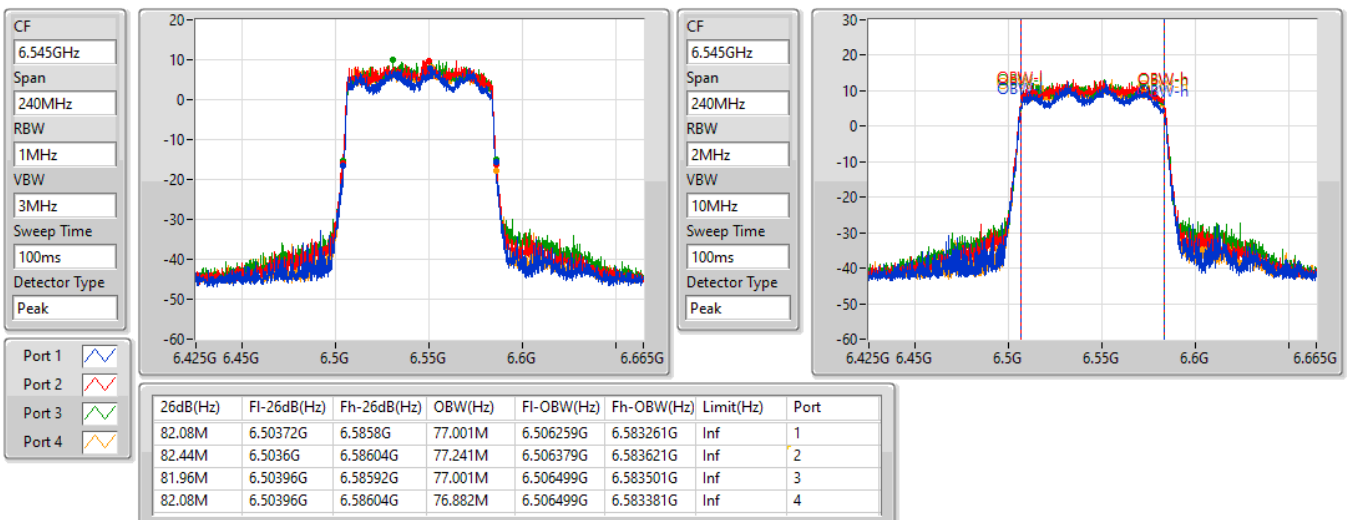


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6465MHz

20/09/2021

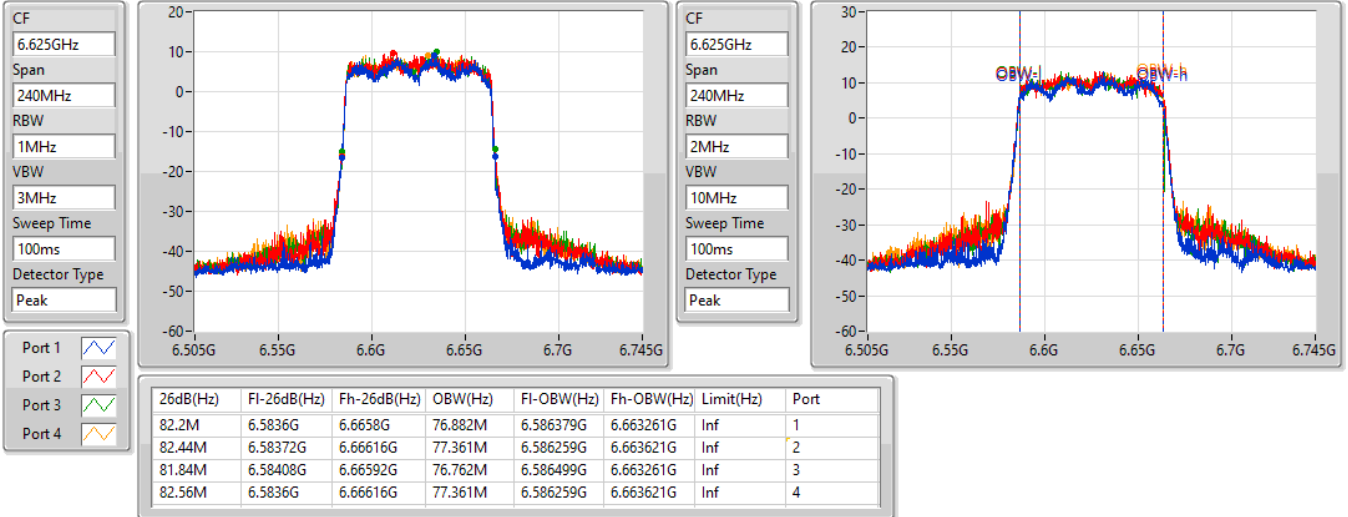

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6545MHz Straddle 6.425-6.525GHz

20/09/2021

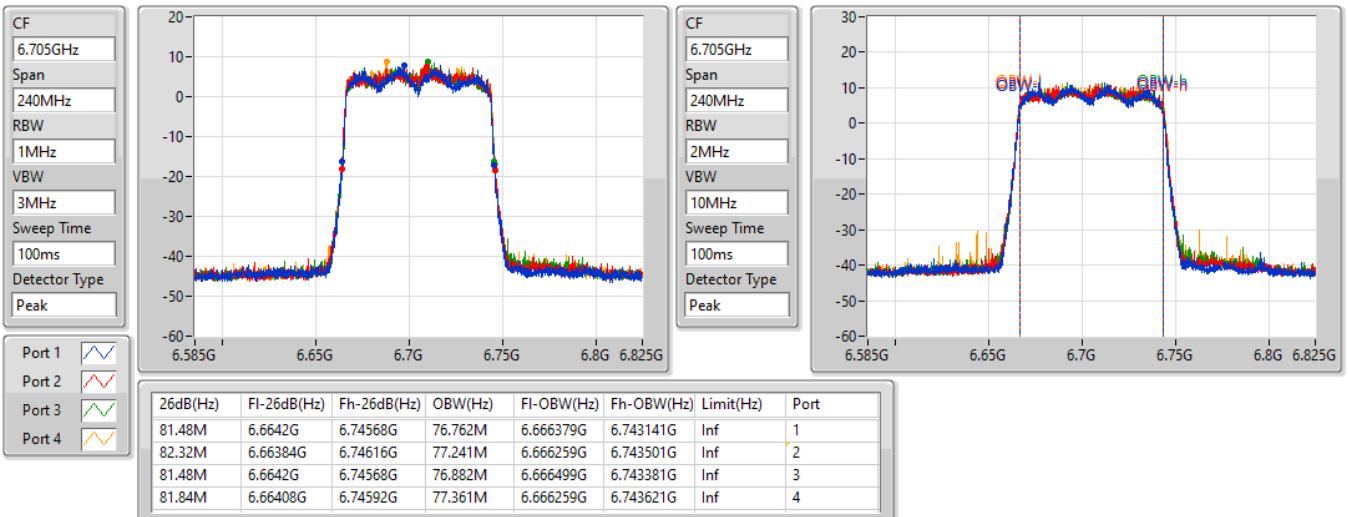


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6625MHz

20/09/2021

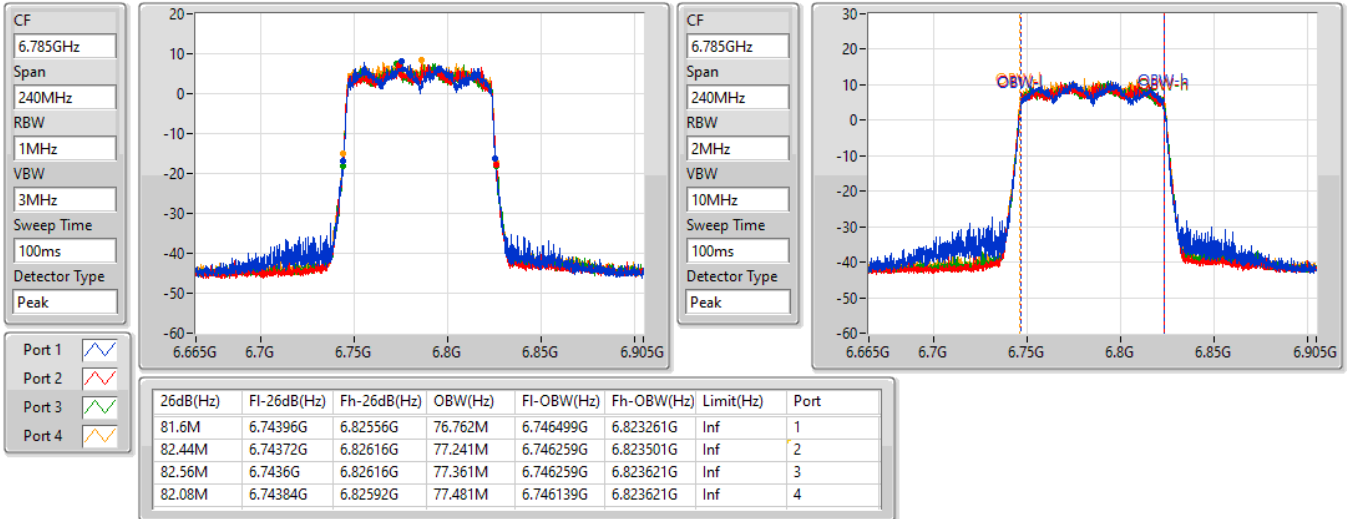

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6705MHz

20/09/2021

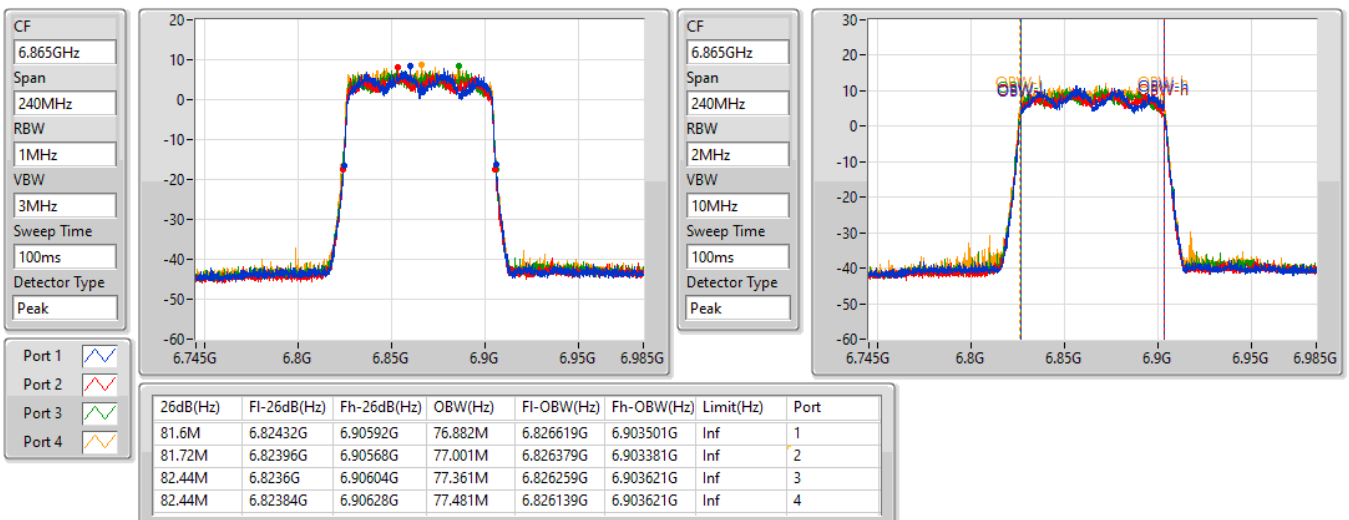


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6785MHz

20/09/2021

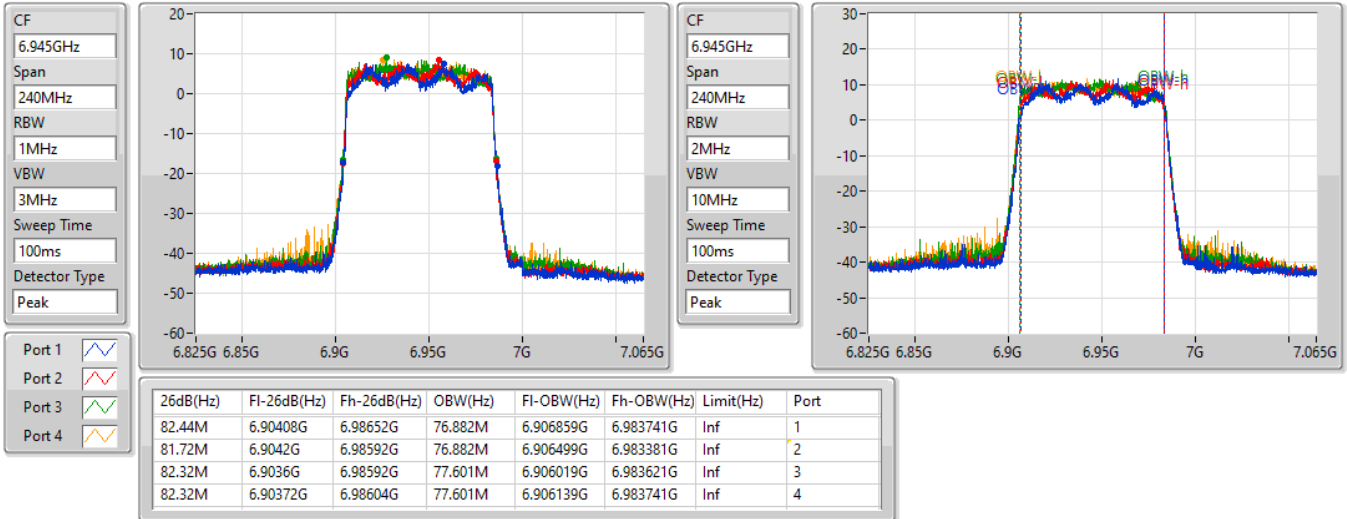

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6865MHz Straddle 6.525-6.875GHz

20/09/2021

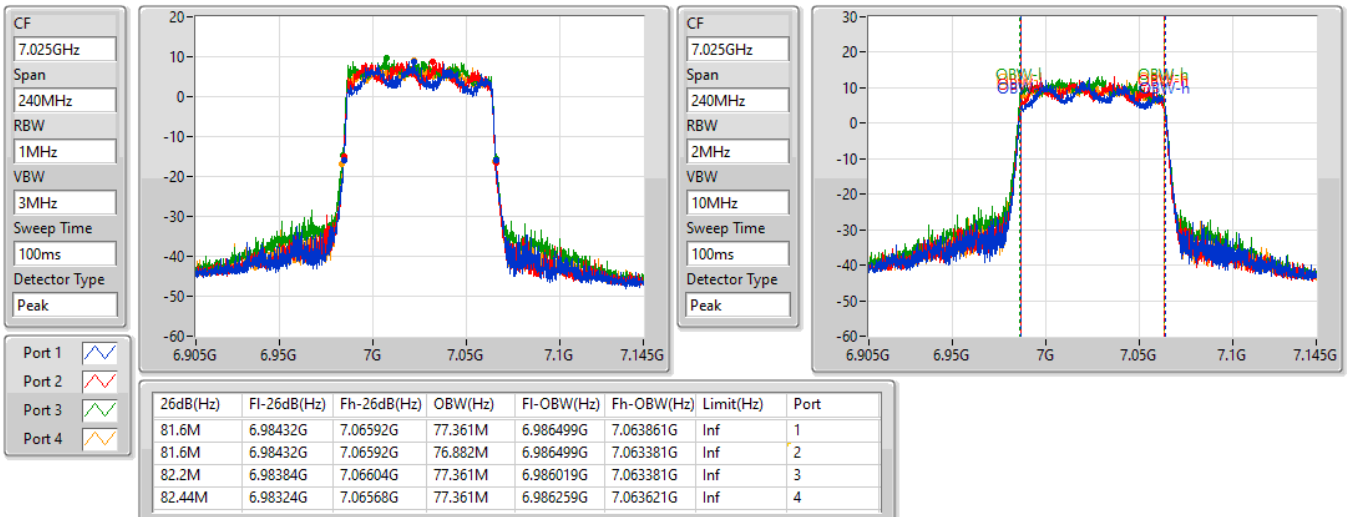


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6945MHz

20/09/2021

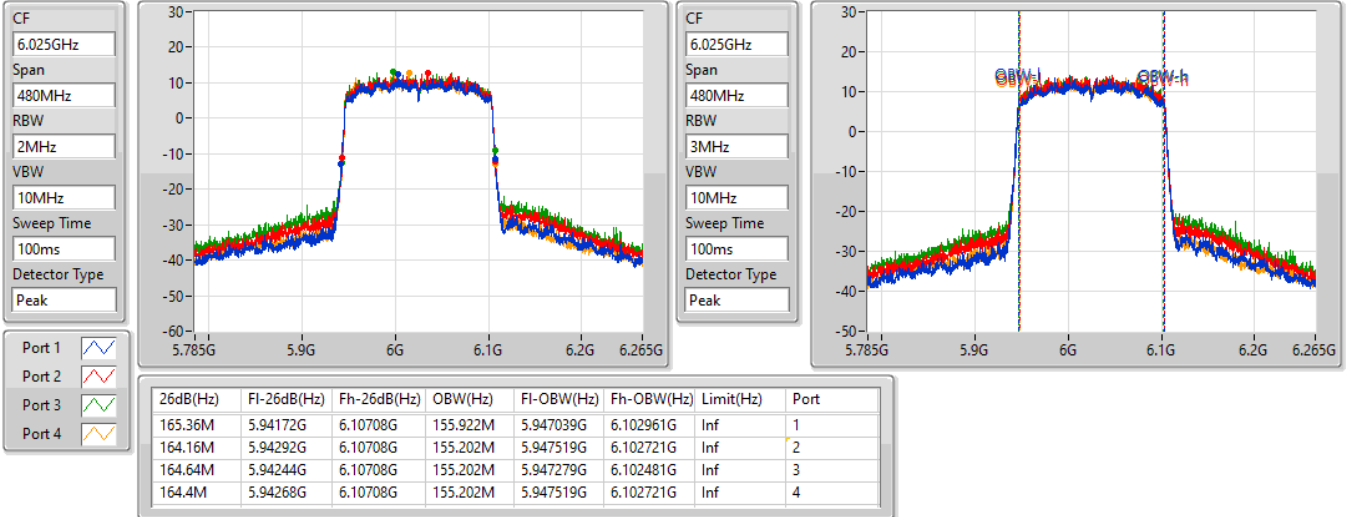

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
7025MHz

20/09/2021

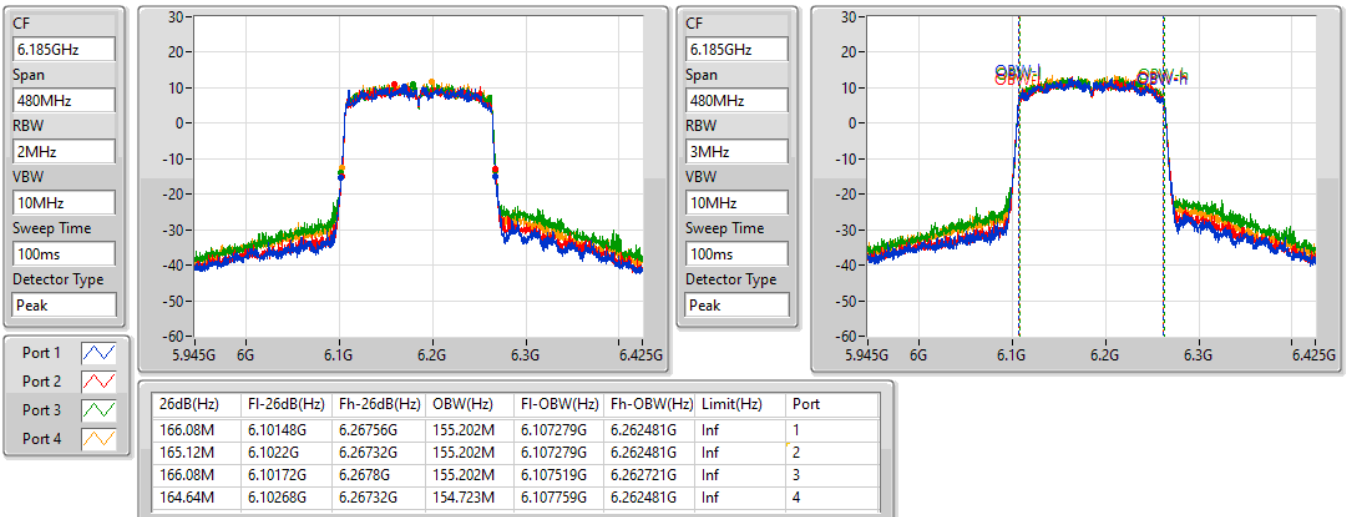


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6025MHz

20/09/2021

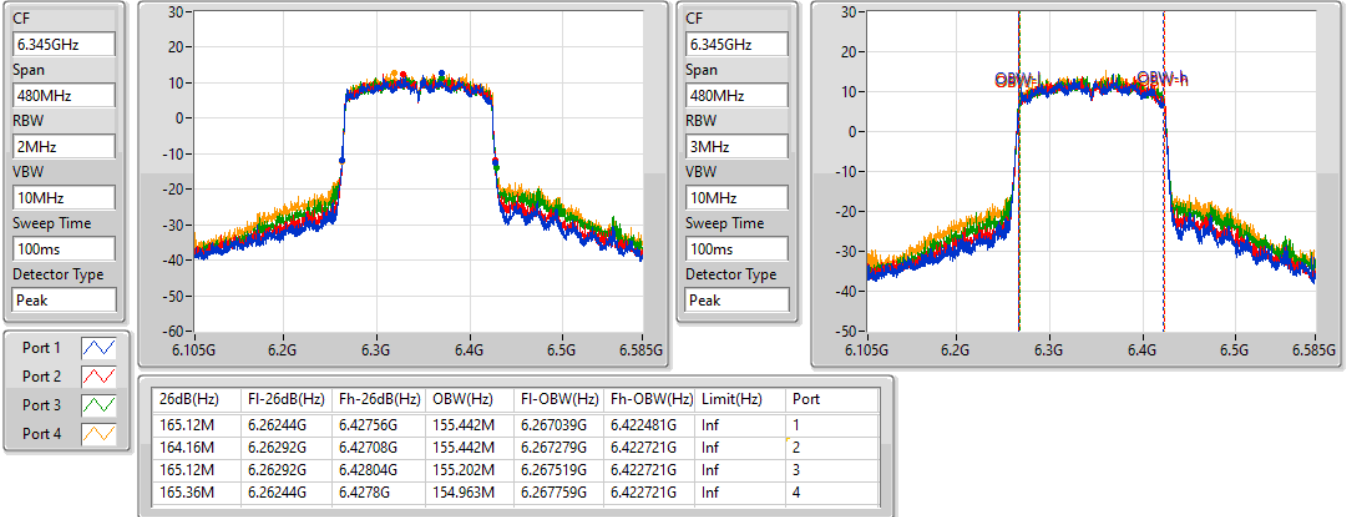

802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6185MHz

20/09/2021

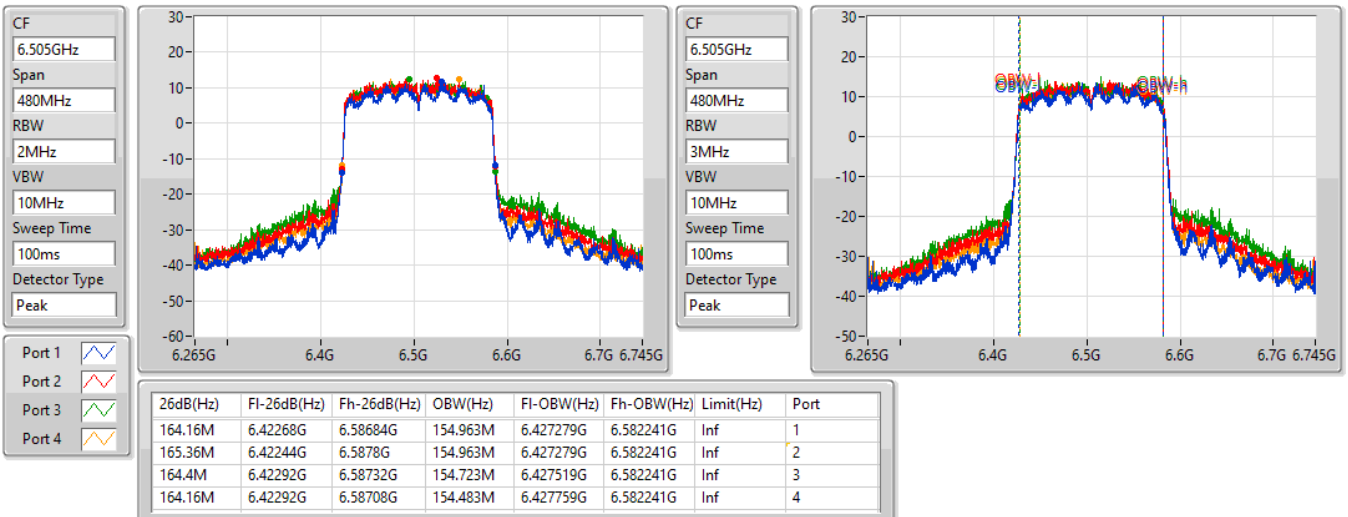


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6345MHz

20/09/2021

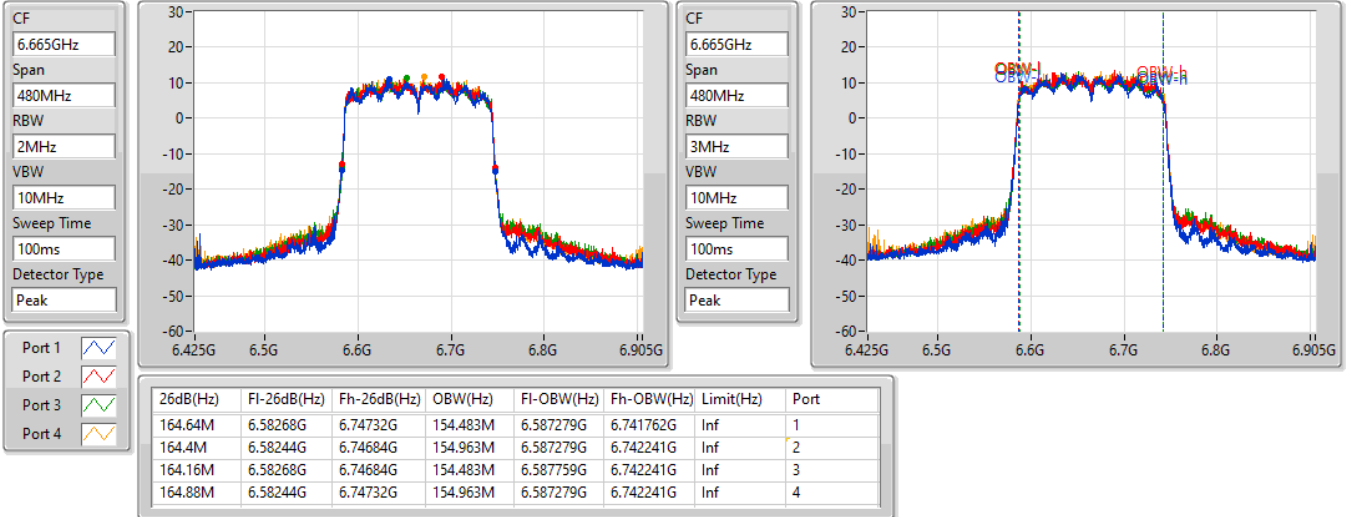

802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6505MHz Straddle 6.425-6.525GHz

20/09/2021

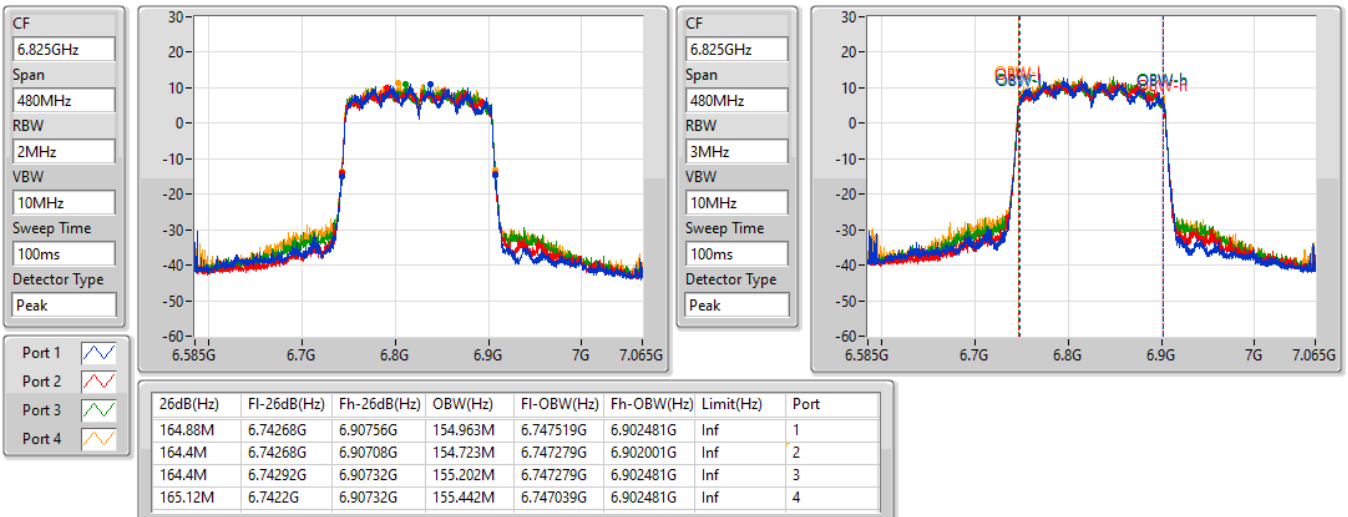


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6665MHz

20/09/2021

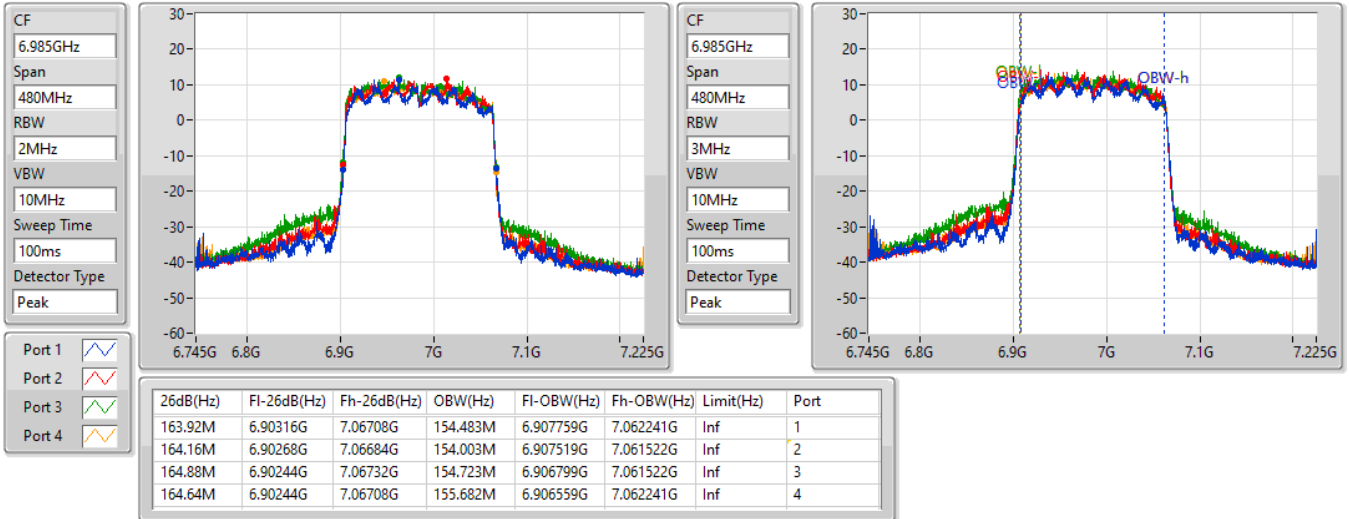

802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6825MHz Straddle 6.525-6.875GHz

20/09/2021



802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6985MHz

20/09/2021



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)_4TX	22.47M	19.16M	19M2D1D	21.6M	19.01M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.74M	37.961M	38M0D1D	39.96M	37.601M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.56M	77.601M	77M6D1D	81.6M	77.121M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	165.12M	155.442M	155MD1D	163.44M	154.723M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.53M	19.16M	19M2D1D	21.42M	19.04M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.5M	37.901M	37M9D1D	39.84M	37.541M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.32M	77.481M	77M5D1D	81.6M	76.882M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	164.64M	155.202M	155MD1D	163.2M	154.483M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.5M	19.22M	19M2D1D	21.54M	19.07M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.68M	37.901M	37M9D1D	39.78M	37.241M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.08M	77.601M	77M6D1D	81M	76.402M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	164.88M	155.442M	155MD1D	163.92M	154.243M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.2M	19.22M	19M2D1D	21.18M	18.981M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.62M	38.021M	38M0D1D	39.66M	37.241M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.32M	77.601M	77M6D1D	80.88M	76.522M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	164.4M	155.442M	155MD1D	162.48M	154.243M

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

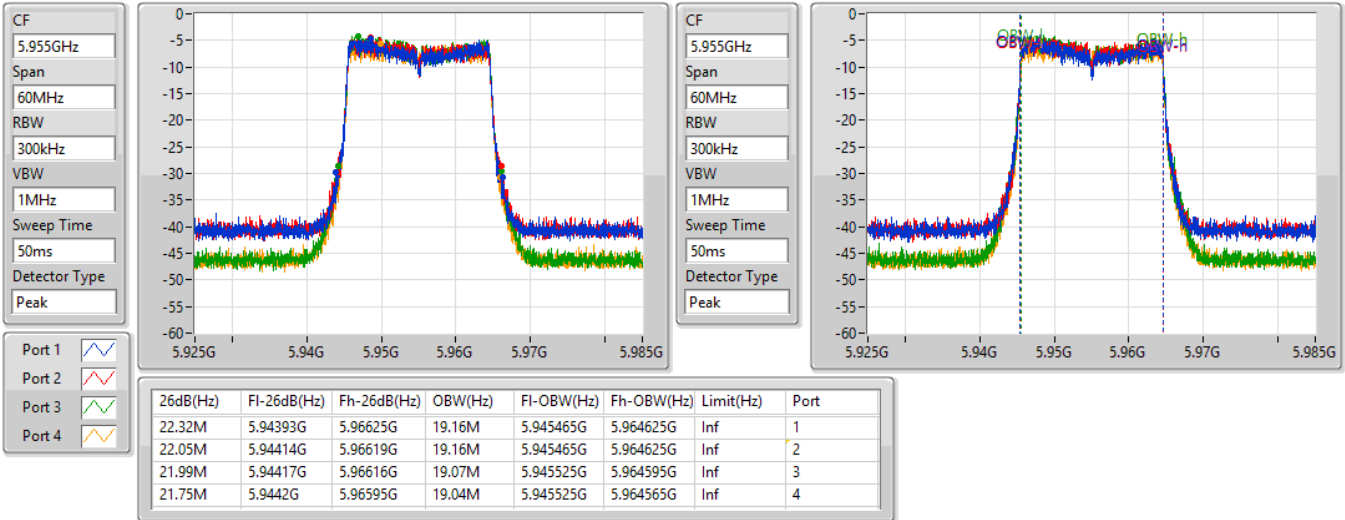
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	22.32M	19.16M	22.05M	19.16M	21.99M	19.07M	21.75M	19.04M
6175MHz	Pass	Inf	22.38M	19.16M	22.38M	19.07M	21.99M	19.13M	21.66M	19.01M
6415MHz	Pass	Inf	22.47M	19.16M	22.14M	19.1M	21.93M	19.13M	21.6M	19.07M
6435MHz	Pass	Inf	22.08M	19.13M	22.38M	19.07M	22.53M	19.13M	21.6M	19.1M
6475MHz	Pass	Inf	22.14M	19.13M	22.23M	19.1M	22.47M	19.16M	21.78M	19.07M
6515MHz	Pass	Inf	22.02M	19.1M	22.08M	19.04M	21.9M	19.16M	21.42M	19.07M
6535MHz	Pass	Inf	22.14M	19.13M	22.08M	19.1M	21.99M	19.16M	21.63M	19.1M
6695MHz	Pass	Inf	22.35M	19.1M	22.26M	19.1M	21.66M	19.16M	22.38M	19.19M
6855MHz	Pass	Inf	22.05M	19.07M	22.5M	19.19M	22.14M	19.1M	22.11M	19.22M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	21.69M	19.07M	21.96M	19.16M	22.08M	19.1M	21.54M	19.22M
6895MHz	Pass	Inf	22.02M	19.07M	22.08M	19.19M	21.87M	19.1M	21.96M	19.22M
6995MHz	Pass	Inf	22.2M	19.07M	22.08M	19.19M	21.81M	19.07M	21.3M	19.13M
7095MHz	Pass	Inf	21.72M	19.07M	22.14M	19.19M	22.02M	19.01M	21.42M	18.981M
7115MHz	Pass	Inf	21.99M	19.04M	21.96M	19.19M	21.9M	19.04M	21.18M	18.981M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	40.56M	37.781M	40.74M	37.841M	40.44M	37.901M	40.44M	37.901M
6165MHz	Pass	Inf	40.14M	37.781M	40.5M	37.841M	40.08M	37.781M	40.5M	37.901M
6405MHz	Pass	Inf	40.02M	37.661M	40.44M	37.961M	39.96M	37.601M	40.56M	37.901M
6445MHz	Pass	Inf	40.5M	37.661M	40.38M	37.901M	40.02M	37.661M	40.32M	37.901M
6485MHz	Pass	Inf	40.02M	37.781M	40.38M	37.841M	40.14M	37.541M	40.26M	37.781M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	39.84M	37.721M	40.26M	37.781M	40.08M	37.601M	40.26M	37.721M
6565MHz	Pass	Inf	40.38M	37.721M	40.14M	37.841M	40.08M	37.541M	40.38M	37.661M
6685MHz	Pass	Inf	40.32M	37.781M	40.32M	37.901M	39.78M	37.601M	39.9M	37.481M
6845MHz	Pass	Inf	40.68M	37.901M	40.26M	37.721M	40.38M	37.781M	39.84M	37.241M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	40.2M	37.901M	40.14M	37.781M	39.9M	37.901M	39.78M	37.241M
6925MHz	Pass	Inf	40.44M	37.901M	40.14M	37.541M	40.32M	37.841M	39.66M	37.241M
7005MHz	Pass	Inf	40.32M	37.901M	40.14M	37.541M	40.62M	38.021M	40.08M	37.721M
7085MHz	Pass	Inf	40.5M	37.841M	39.78M	37.601M	40.26M	38.021M	40.32M	38.021M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	81.96M	77.241M	82.08M	77.361M	81.6M	77.361M	82.56M	77.481M
6145MHz	Pass	Inf	82.08M	77.241M	82.08M	77.361M	81.6M	77.361M	81.72M	77.481M
6385MHz	Pass	Inf	81.6M	77.121M	81.84M	77.481M	81.96M	77.121M	81.84M	77.601M
6465MHz	Pass	Inf	82.32M	77.121M	81.72M	77.361M	81.6M	76.882M	81.84M	77.481M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	81.72M	77.001M	81.84M	77.361M	81.6M	77.001M	81.72M	77.121M
6625MHz	Pass	Inf	81.48M	77.241M	81.72M	77.361M	81.6M	77.001M	81.48M	76.762M
6705MHz	Pass	Inf	81.48M	77.121M	81.84M	77.121M	81.84M	77.001M	81.36M	76.762M
6785MHz	Pass	Inf	82.08M	77.361M	81.12M	77.121M	81.72M	77.121M	81M	76.402M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	82.08M	77.601M	81.6M	76.882M	81.72M	77.241M	81.12M	76.642M
6945MHz	Pass	Inf	82.32M	77.481M	81.6M	76.762M	82.2M	77.481M	81.12M	76.522M
7025MHz	Pass	Inf	82.08M	77.361M	81.36M	76.762M	81.48M	77.601M	80.88M	77.001M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	164.16M	154.963M	164.64M	154.963M	163.92M	154.723M	163.44M	155.442M
6185MHz	Pass	Inf	164.16M	155.202M	164.4M	155.202M	164.16M	154.963M	164.64M	155.442M
6345MHz	Pass	Inf	164.4M	154.723M	164.4M	155.202M	165.12M	154.723M	164.64M	155.202M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	163.2M	154.723M	163.92M	155.202M	163.2M	154.483M	164.64M	154.723M
6665MHz	Pass	Inf	164.64M	155.202M	163.92M	155.442M	164.64M	154.723M	163.92M	154.243M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	164.88M	155.202M	164.4M	154.483M	164.16M	154.963M	163.92M	154.483M
6985MHz	Pass	Inf	164.16M	155.442M	162.48M	154.243M	164.4M	154.723M	163.68M	154.723M

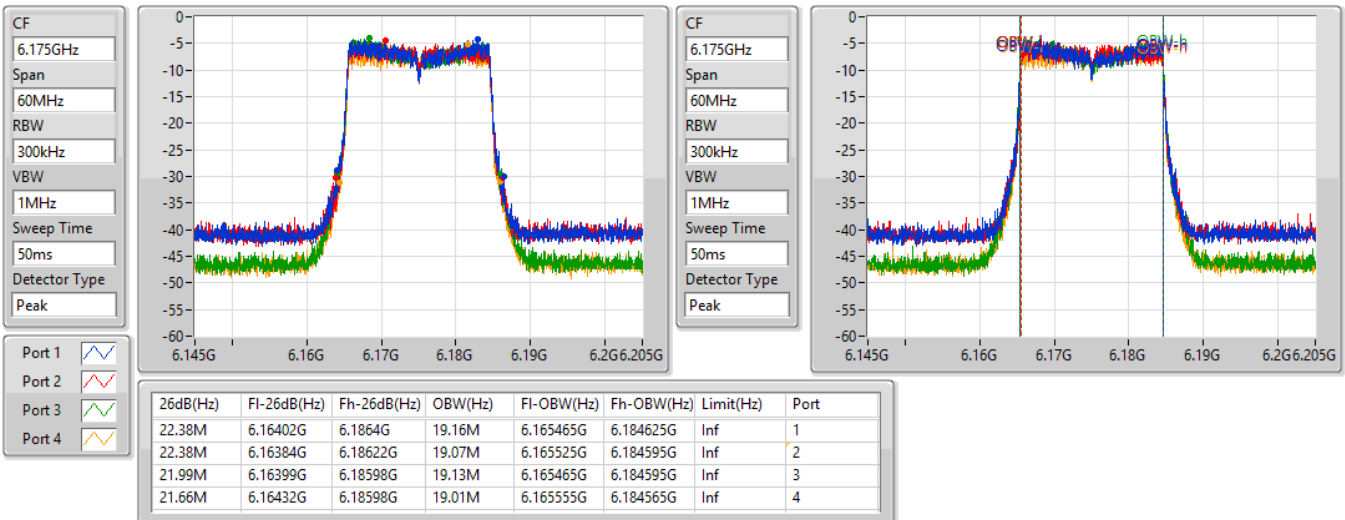
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5955MHz

27/09/2021

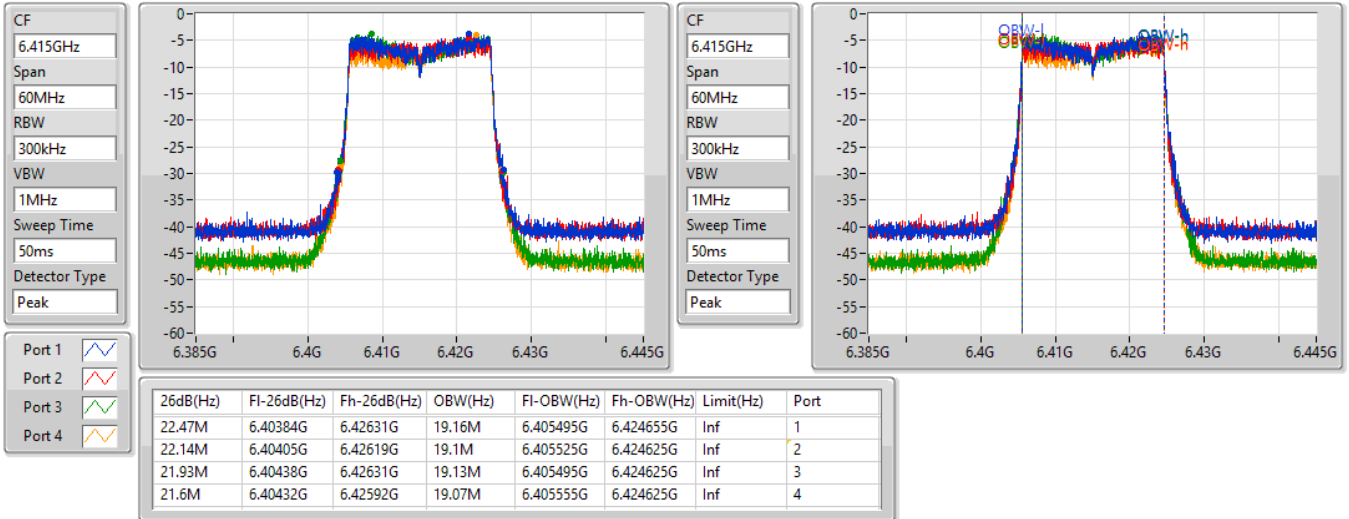

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6175MHz

27/09/2021

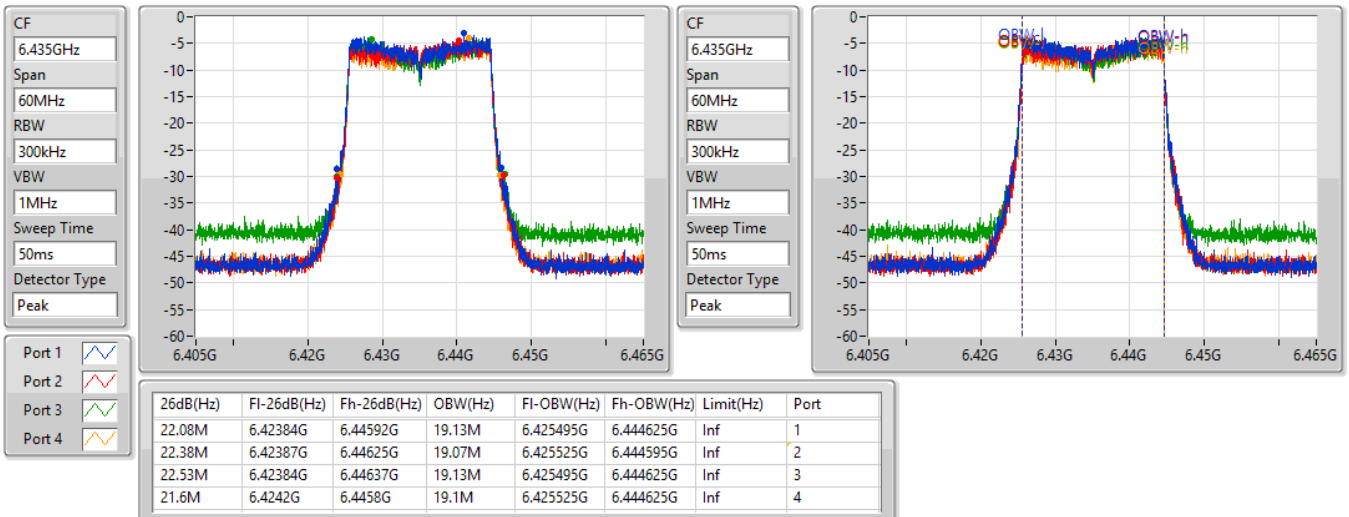


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6415MHz

27/09/2021

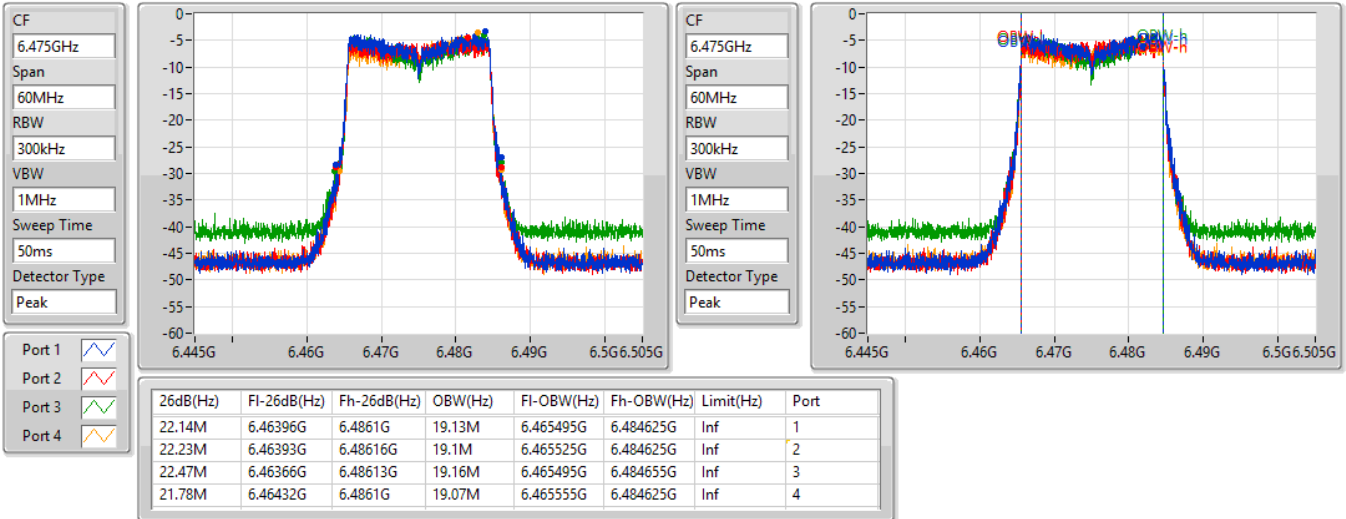

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6435MHz

27/09/2021

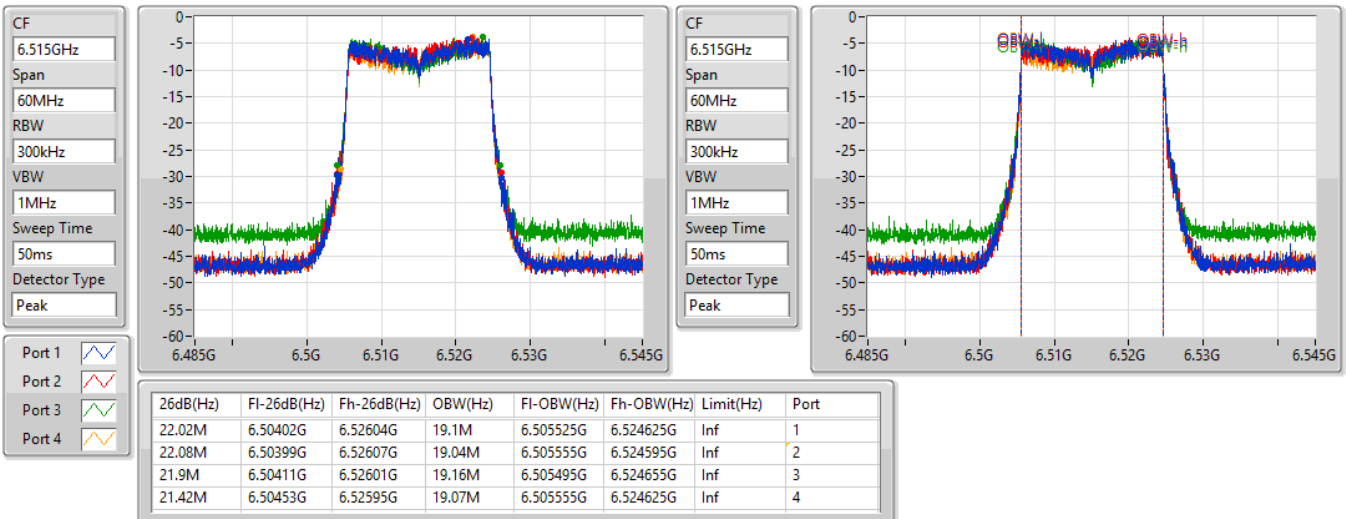


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6475MHz

27/09/2021

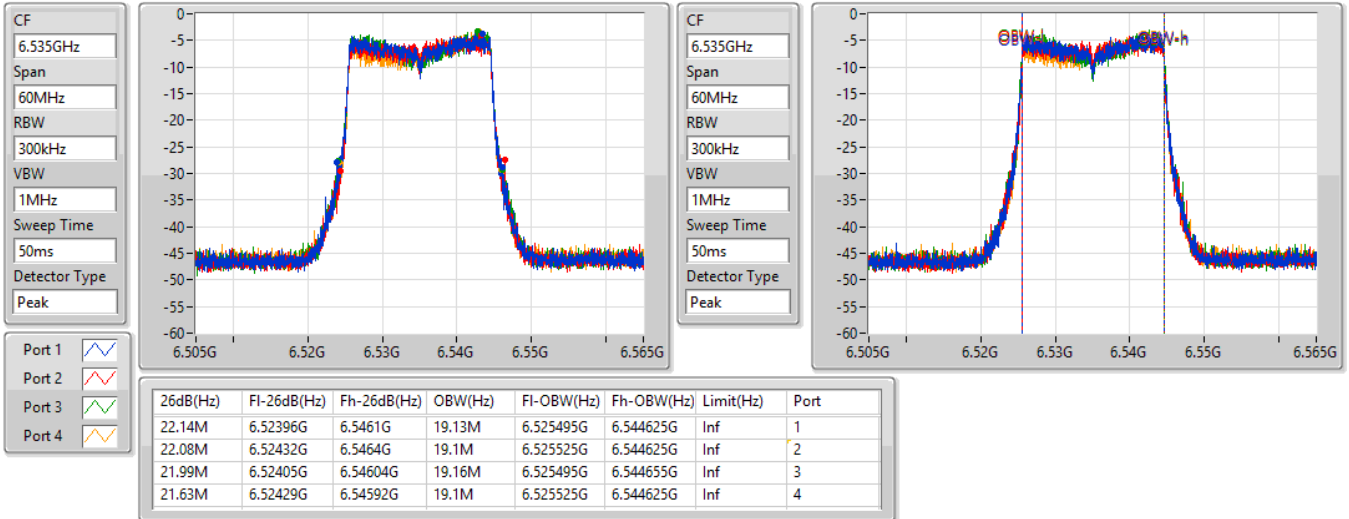

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6515MHz

27/09/2021

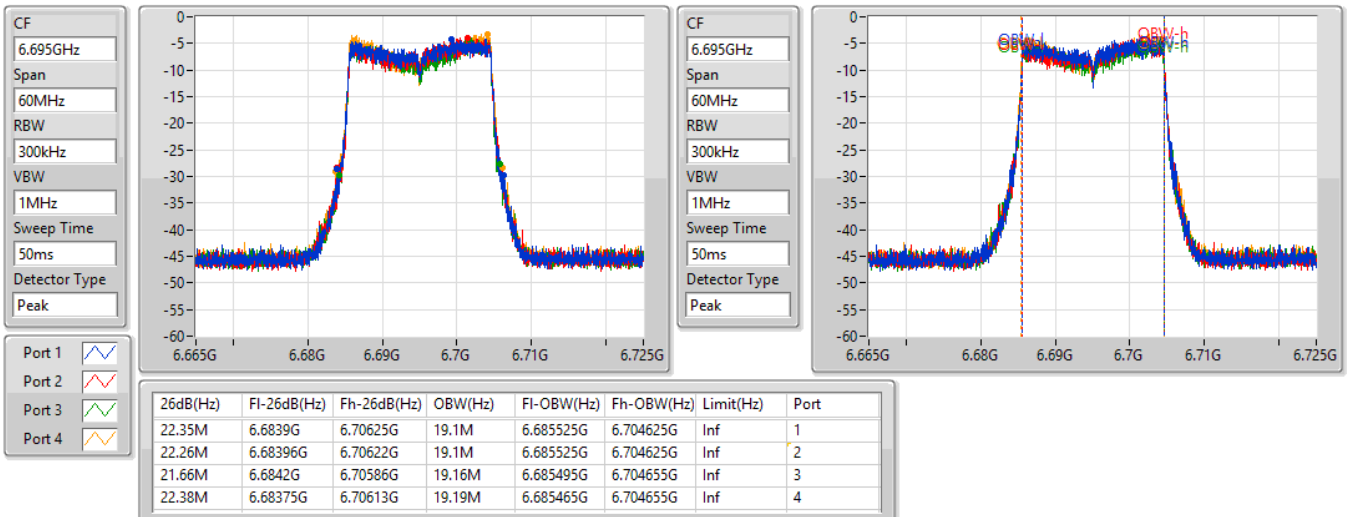


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6535MHz

27/09/2021

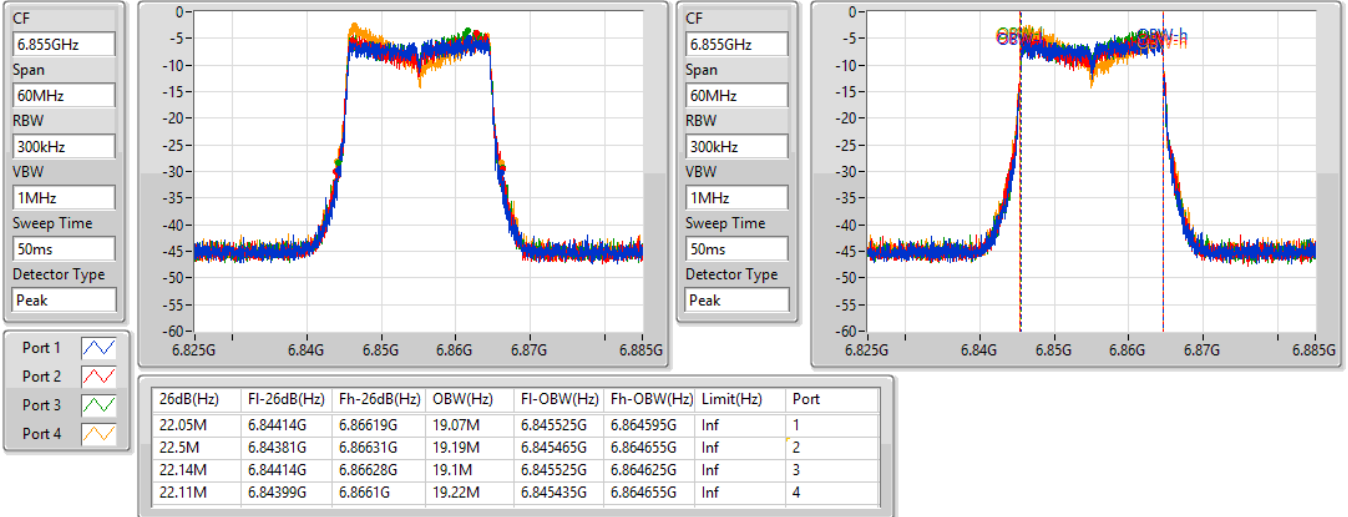

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6695MHz

27/09/2021

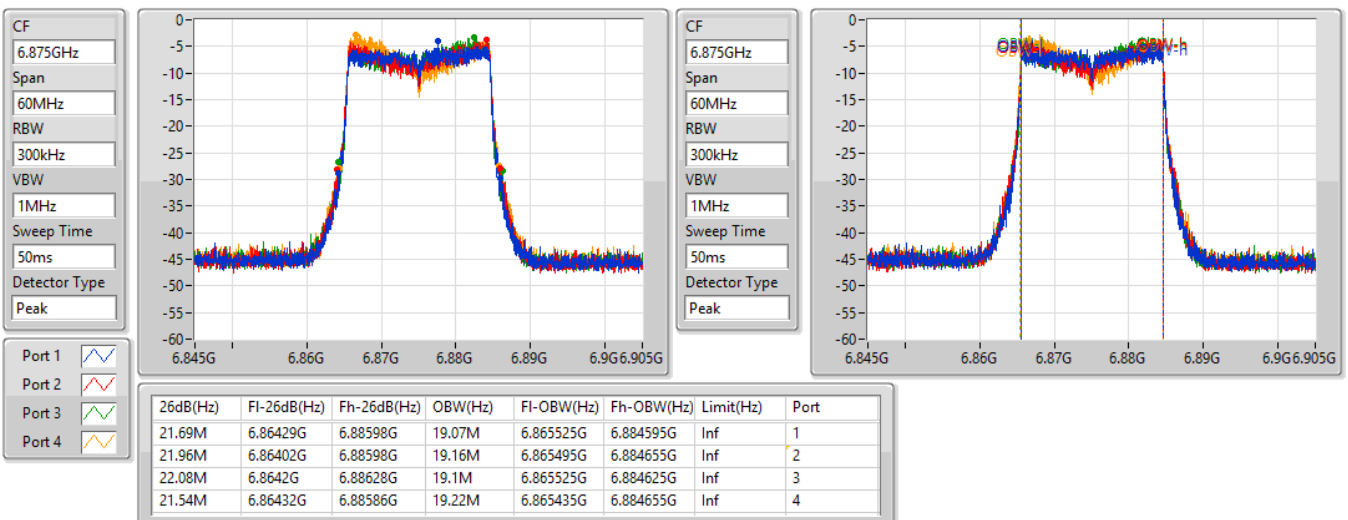


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6855MHz

27/09/2021

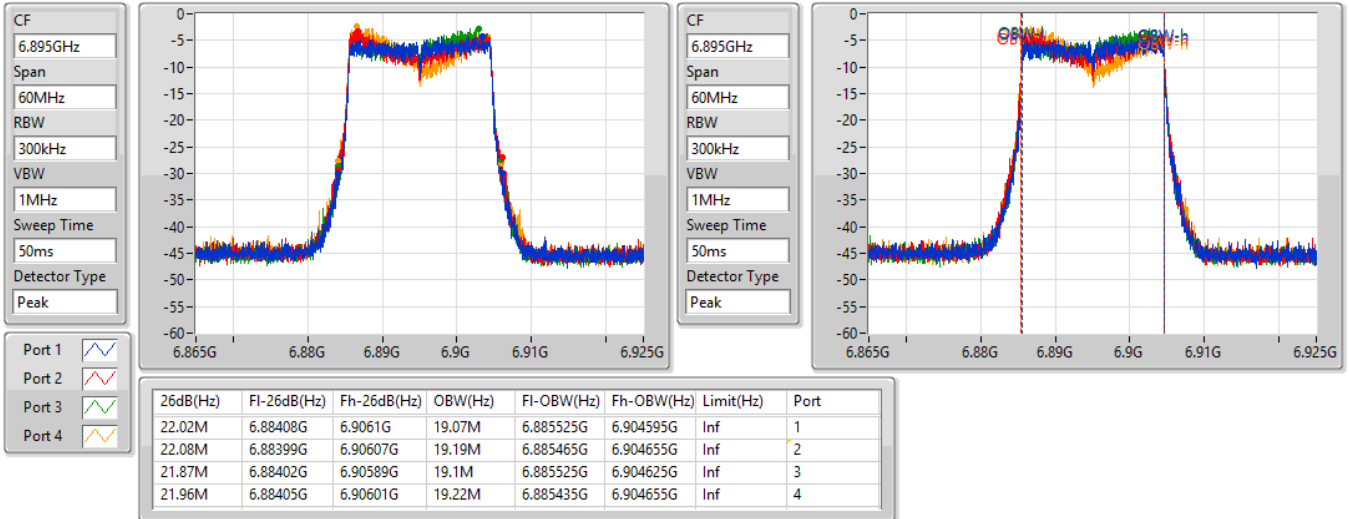

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6875MHz Straddle 6.525-6.875GHz

27/09/2021

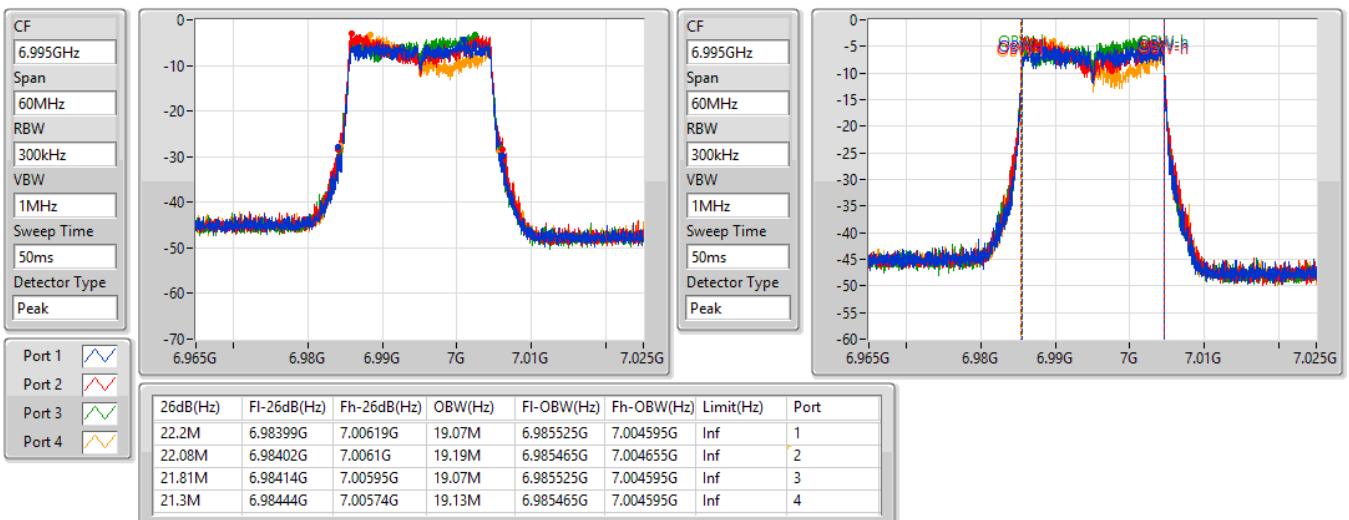


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6895MHz

27/09/2021

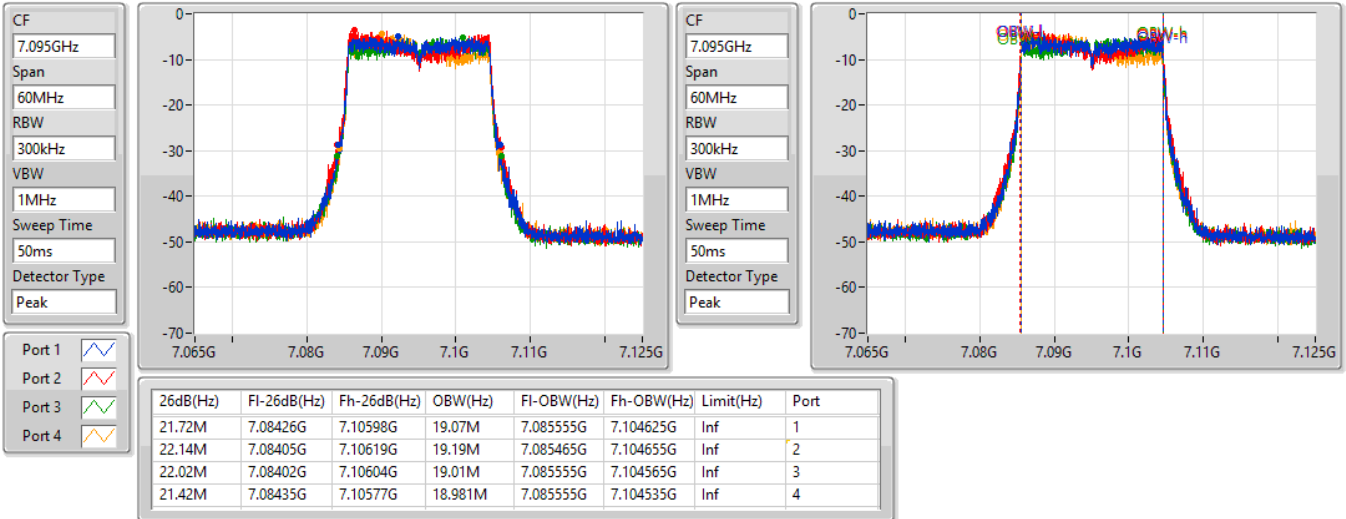

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
6995MHz

27/09/2021

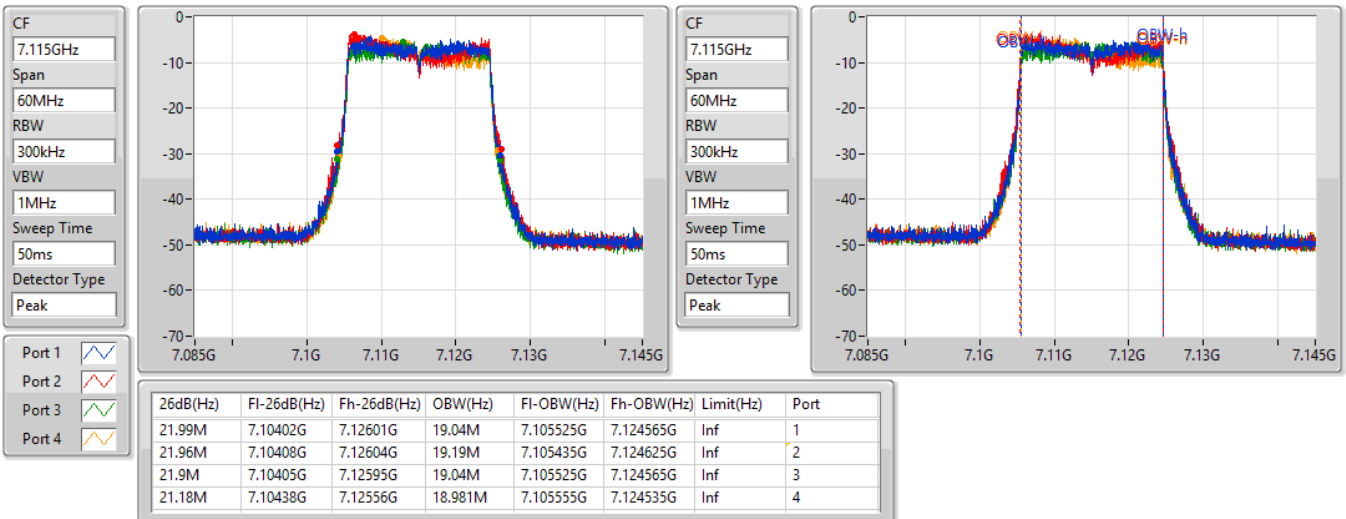


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
7095MHz

27/09/2021

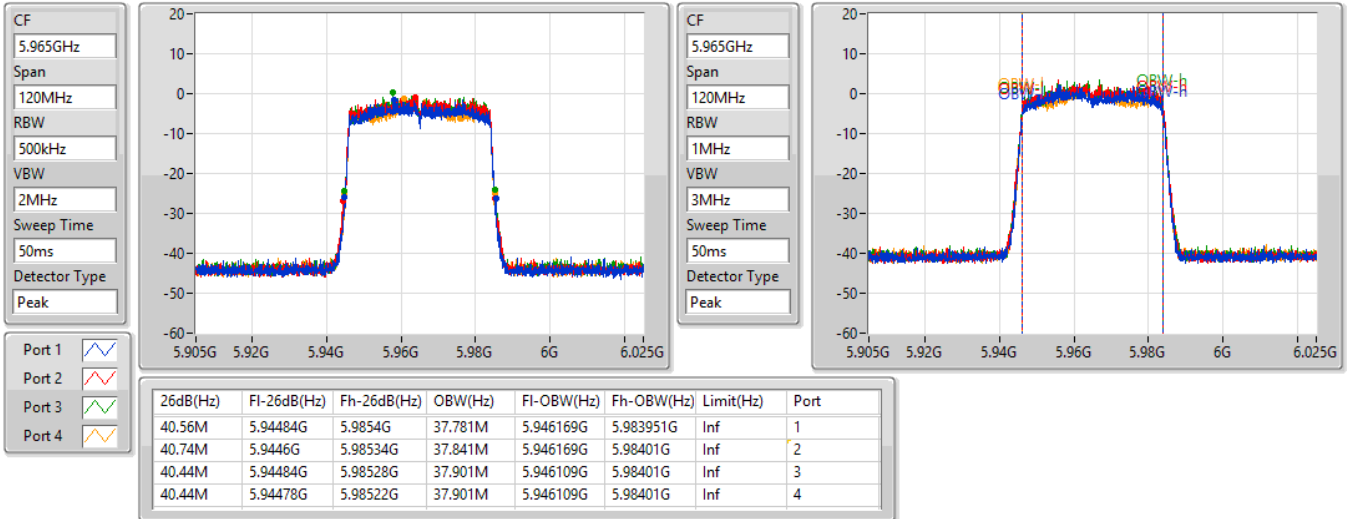

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
7115MHz

27/09/2021

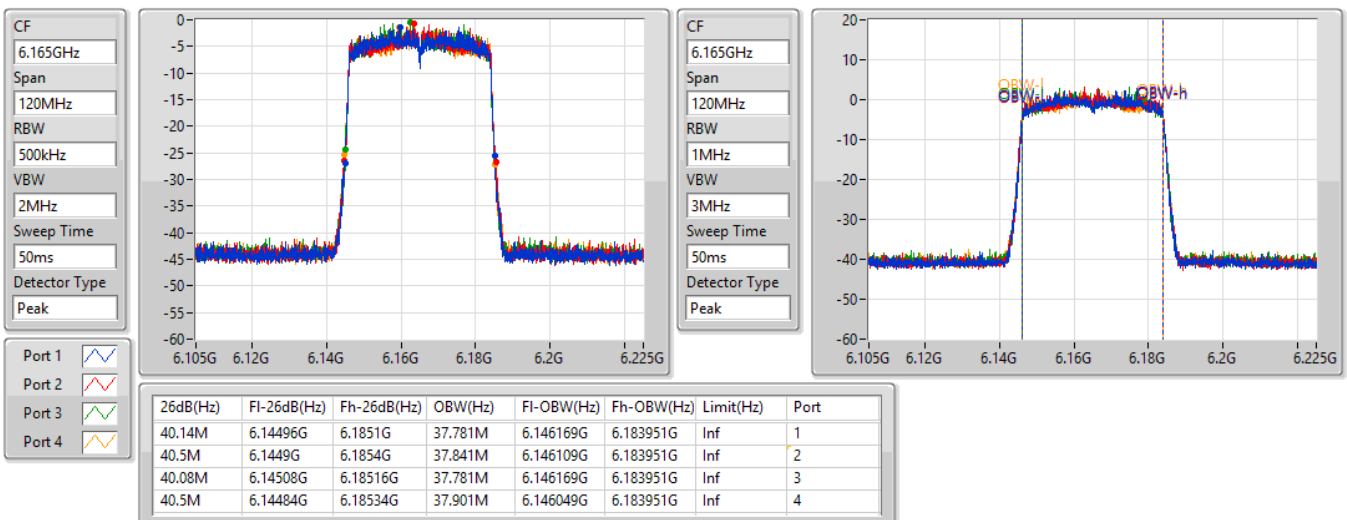


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5965MHz

27/09/2021

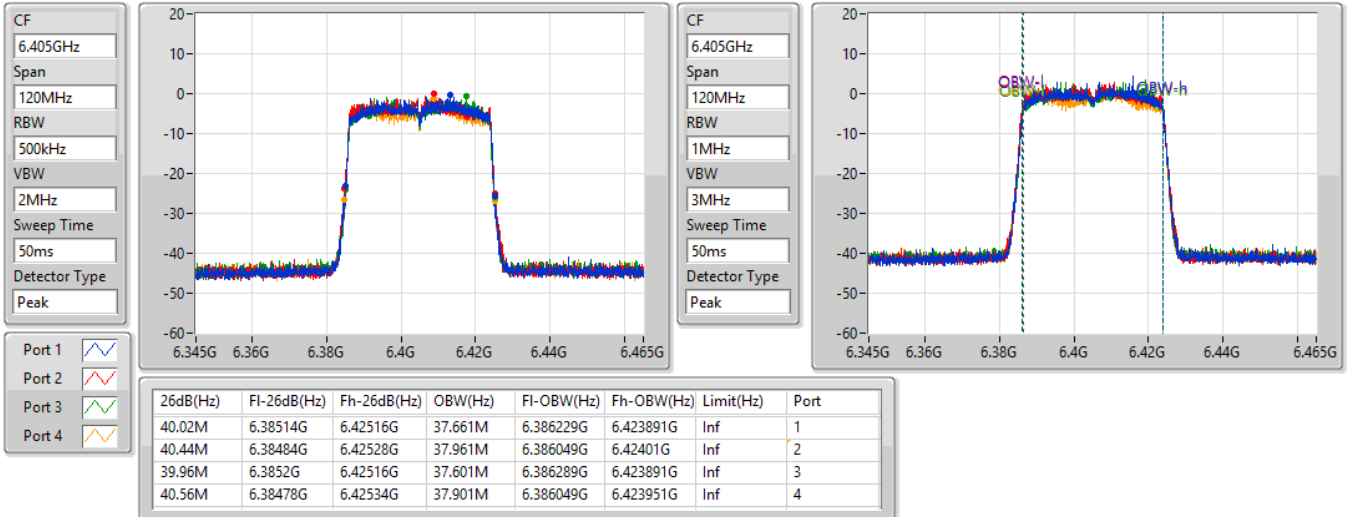

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6165MHz

27/09/2021

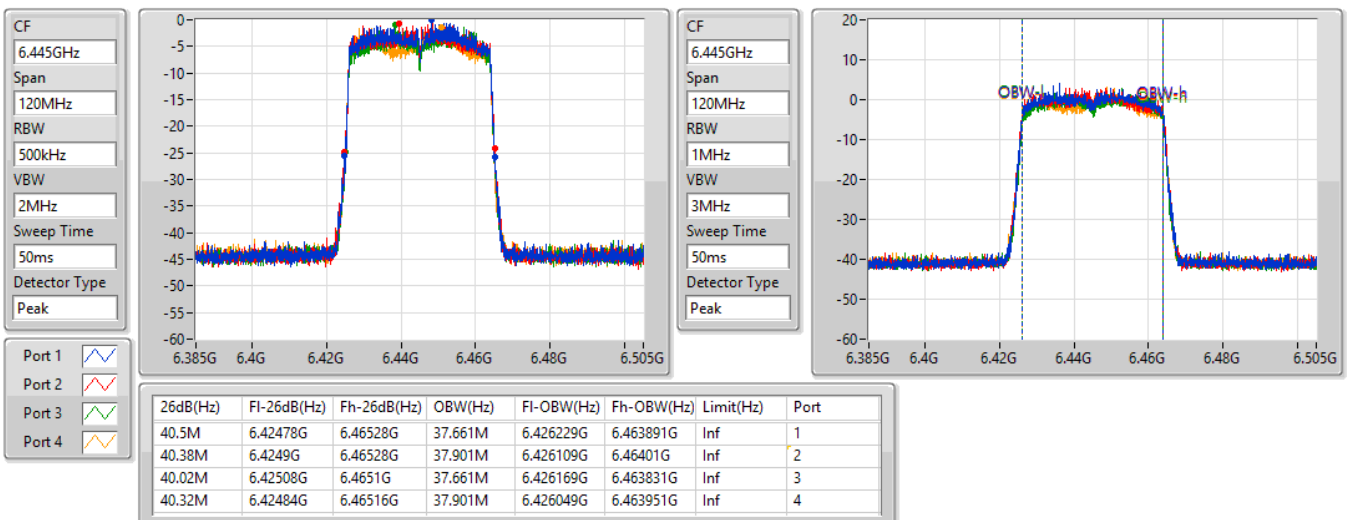


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6405MHz

27/09/2021

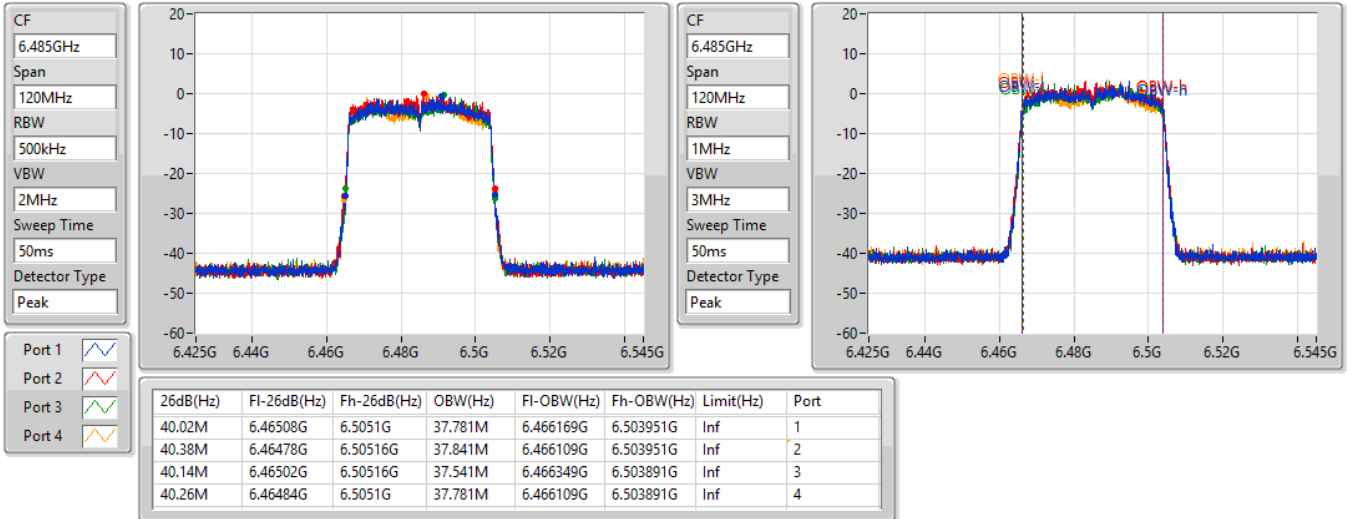

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6445MHz

27/09/2021

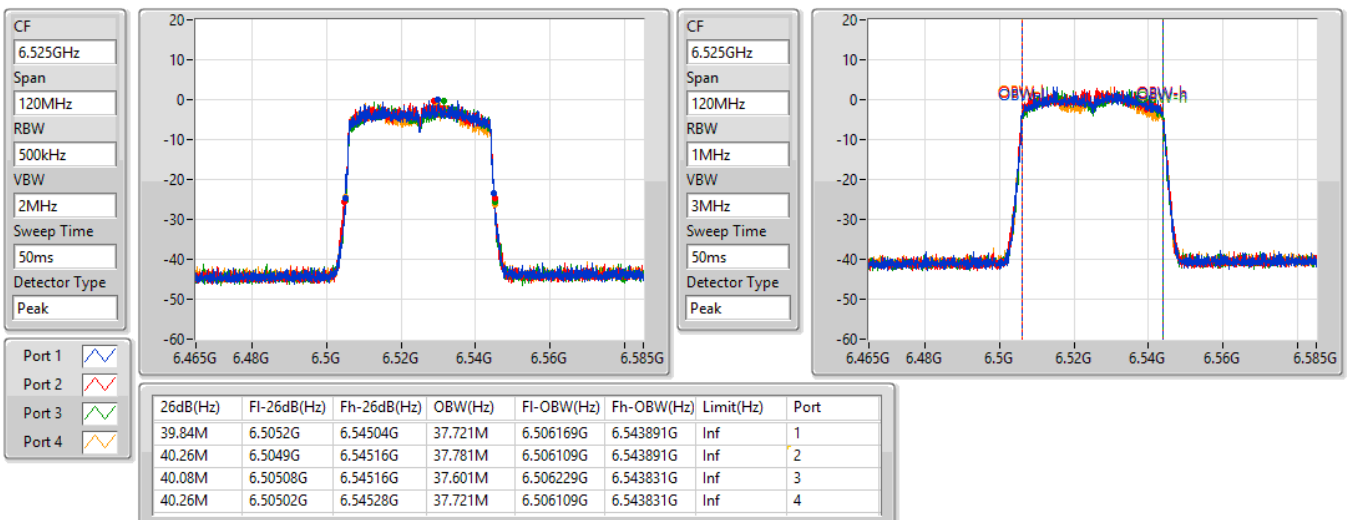


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6485MHz

27/09/2021

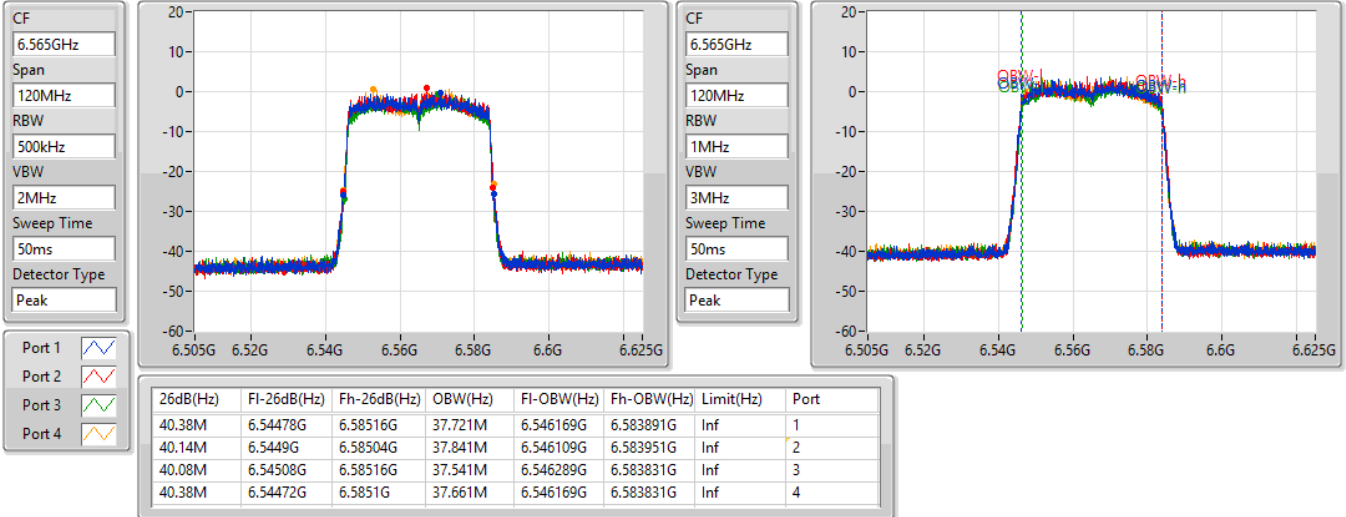

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6525MHz Straddle 6.425-6.525GHz

27/09/2021

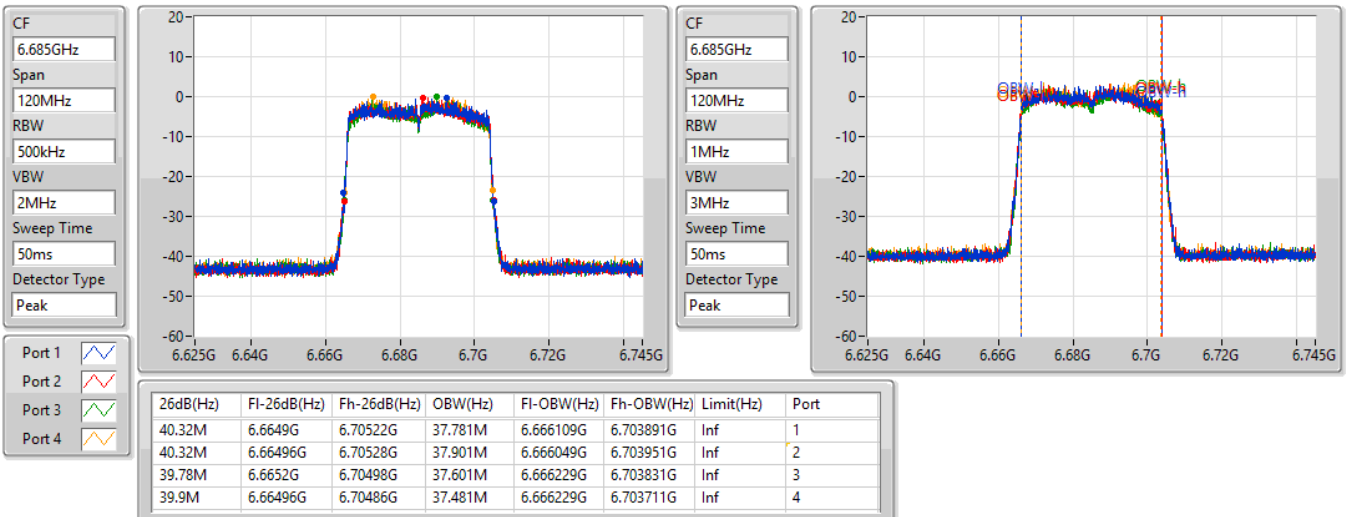


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6565MHz

27/09/2021

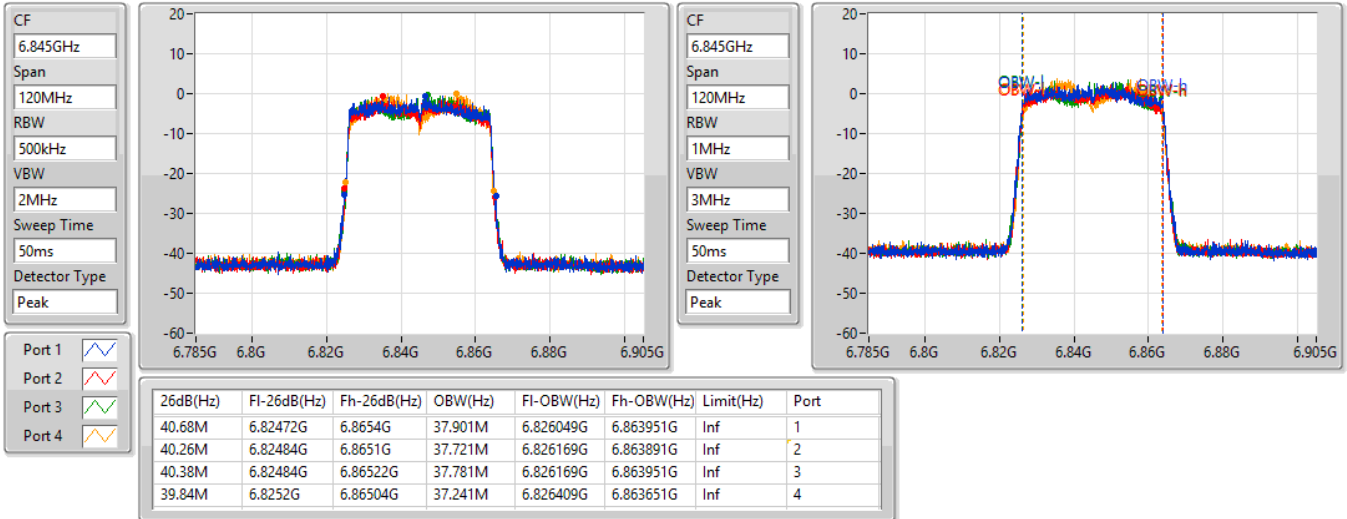

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6685MHz

27/09/2021

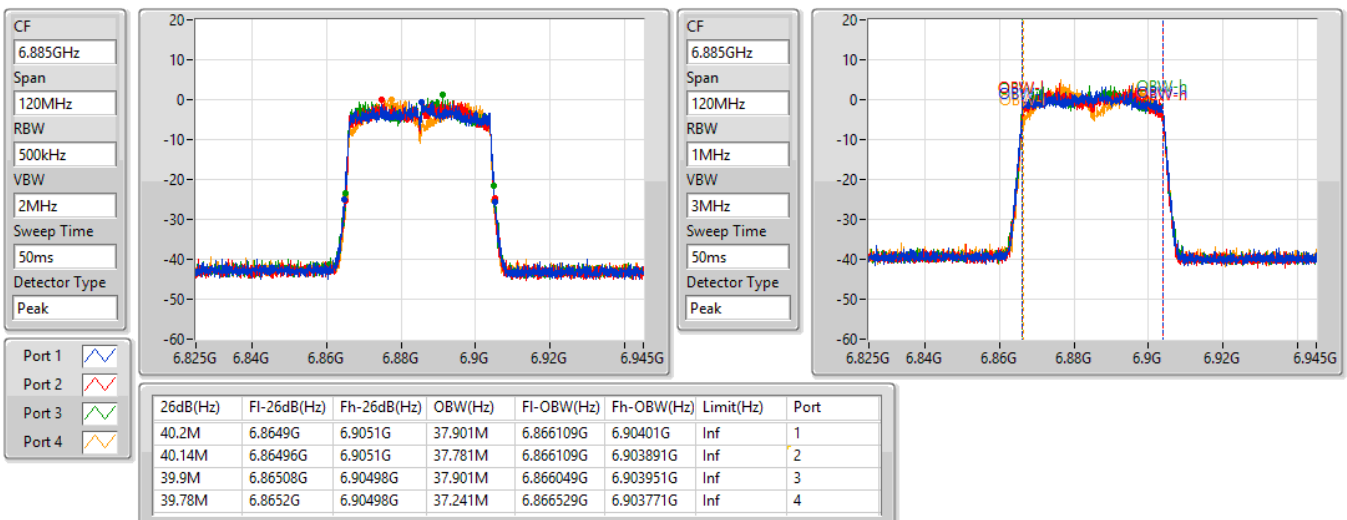


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6845MHz

27/09/2021

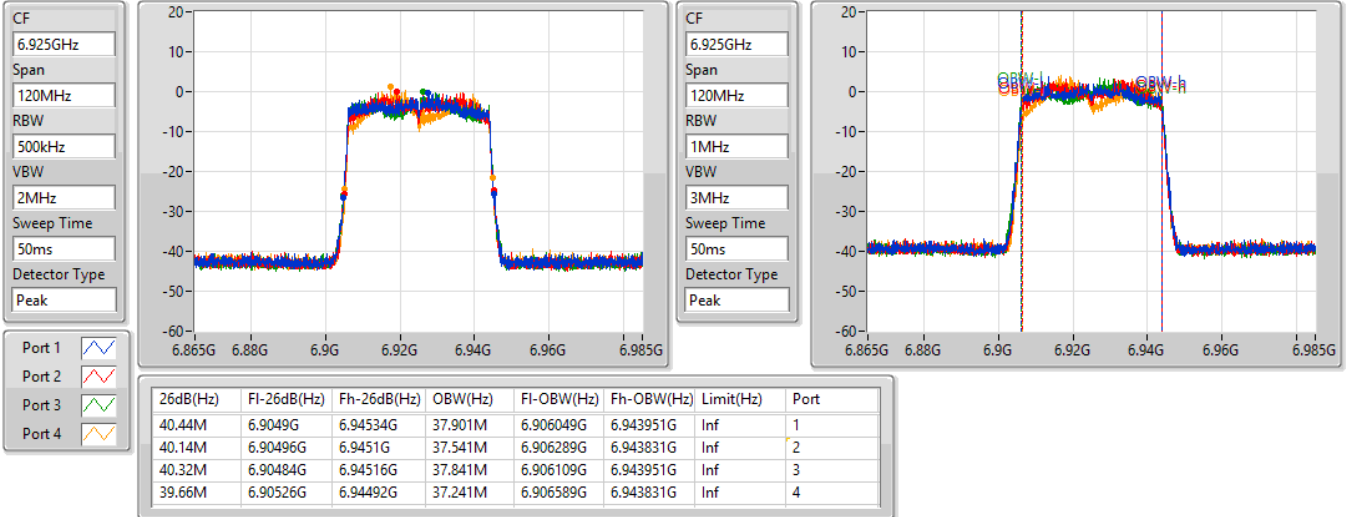

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6885MHz Straddle 6.525-6.875GHz

27/09/2021

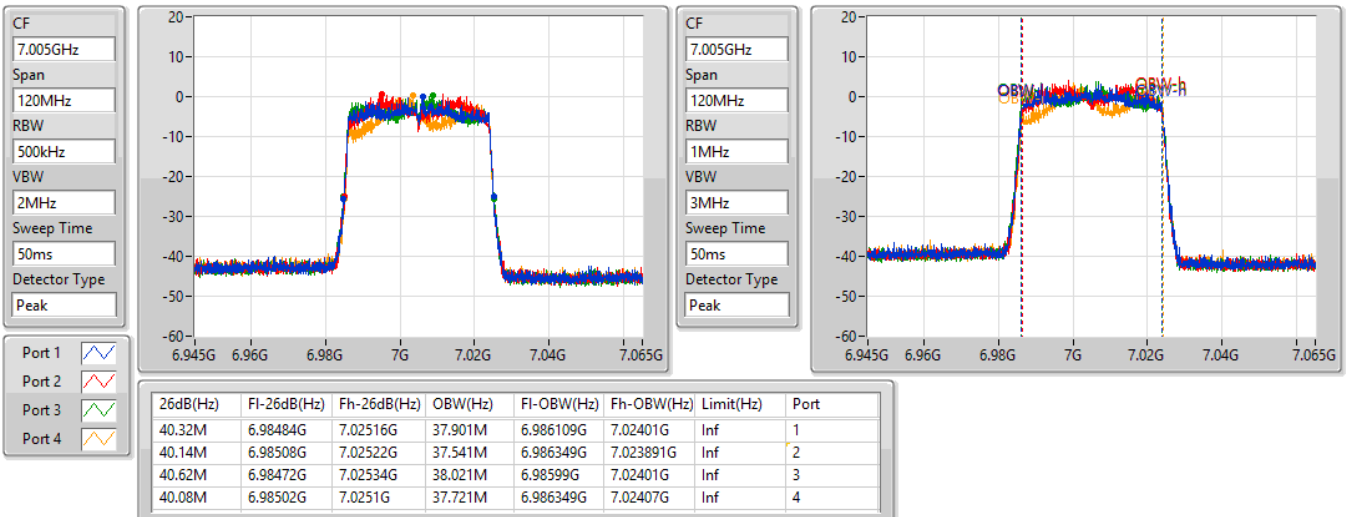


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
6925MHz

27/09/2021

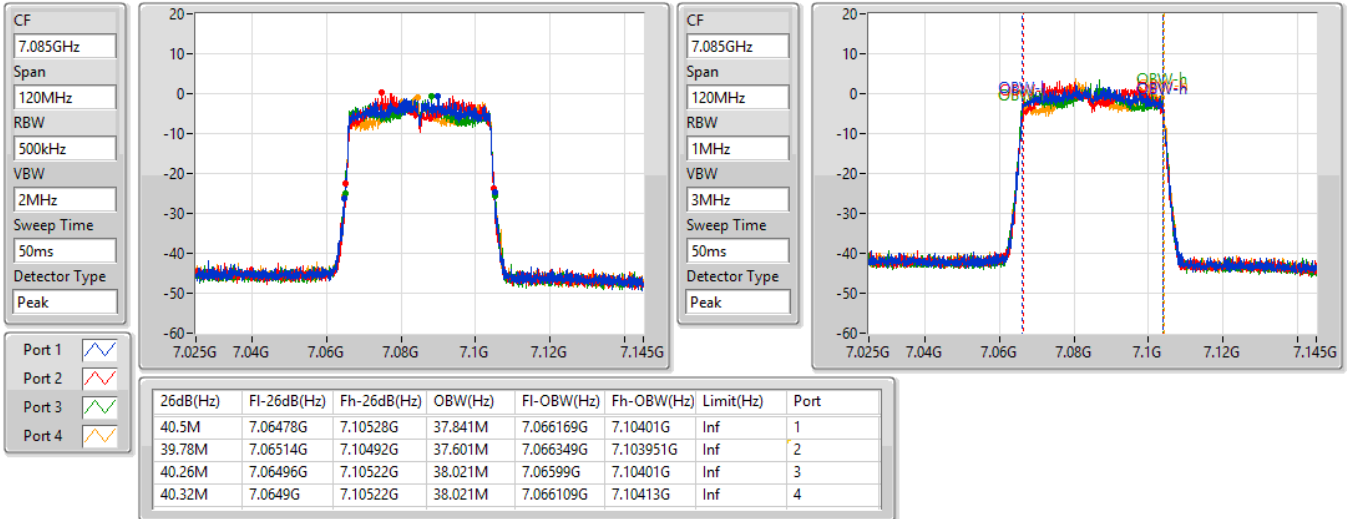

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
7005MHz

27/09/2021

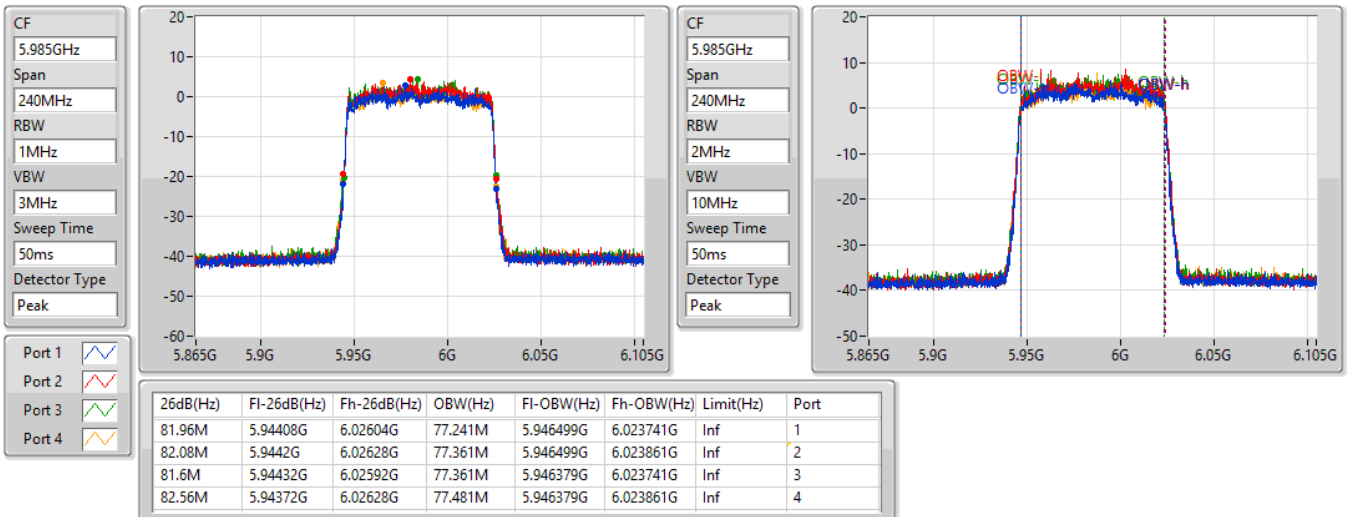


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
7085MHz

27/09/2021

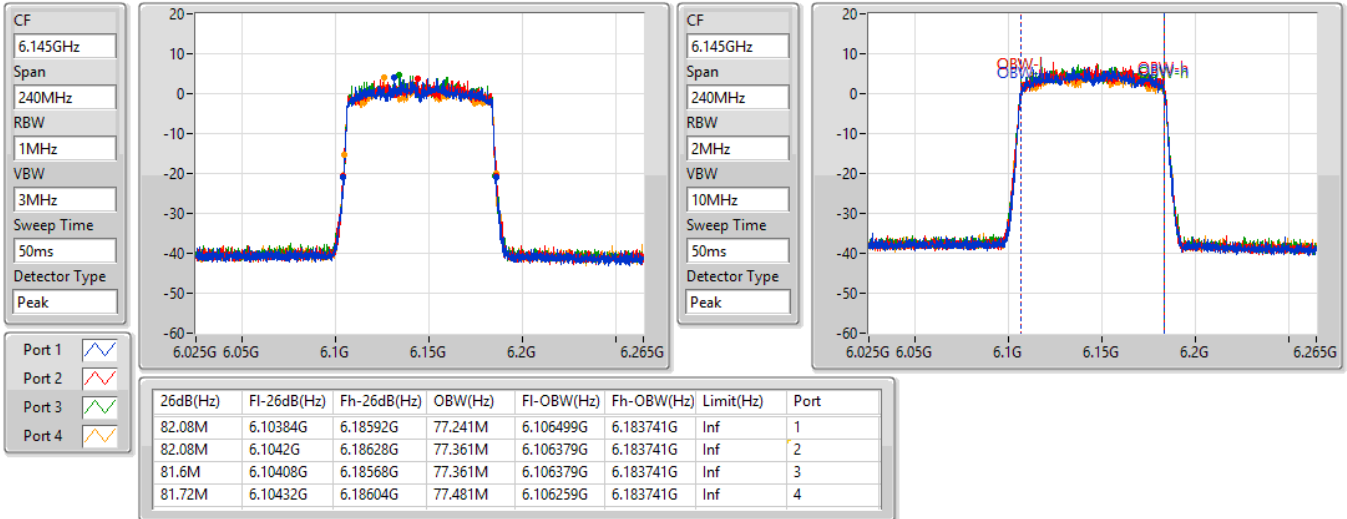

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5985MHz

27/09/2021

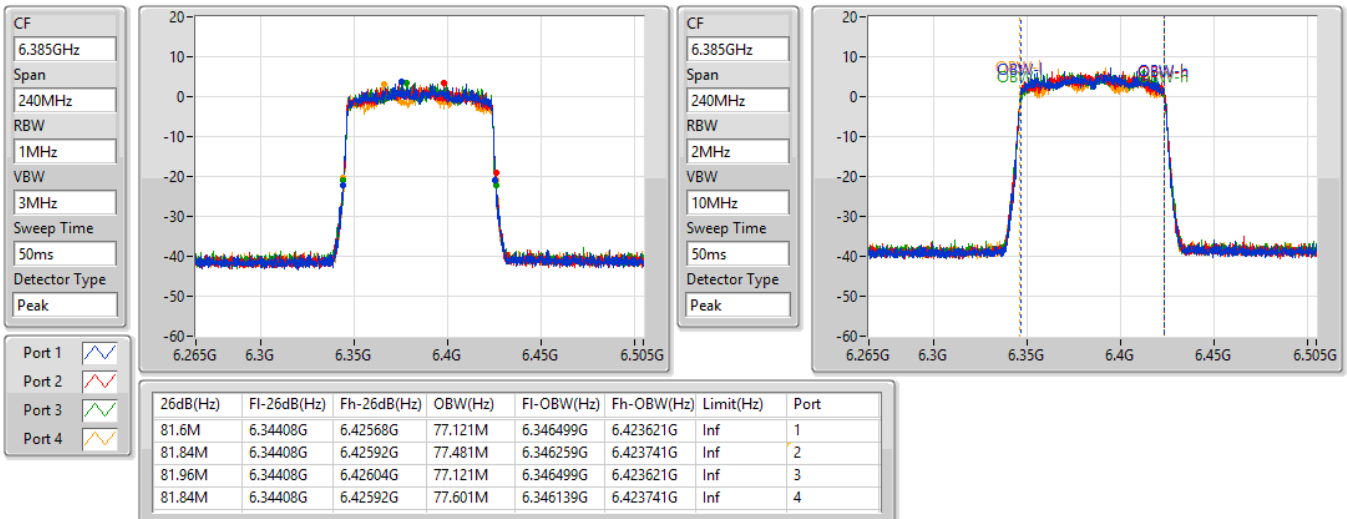


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6145MHz

27/09/2021

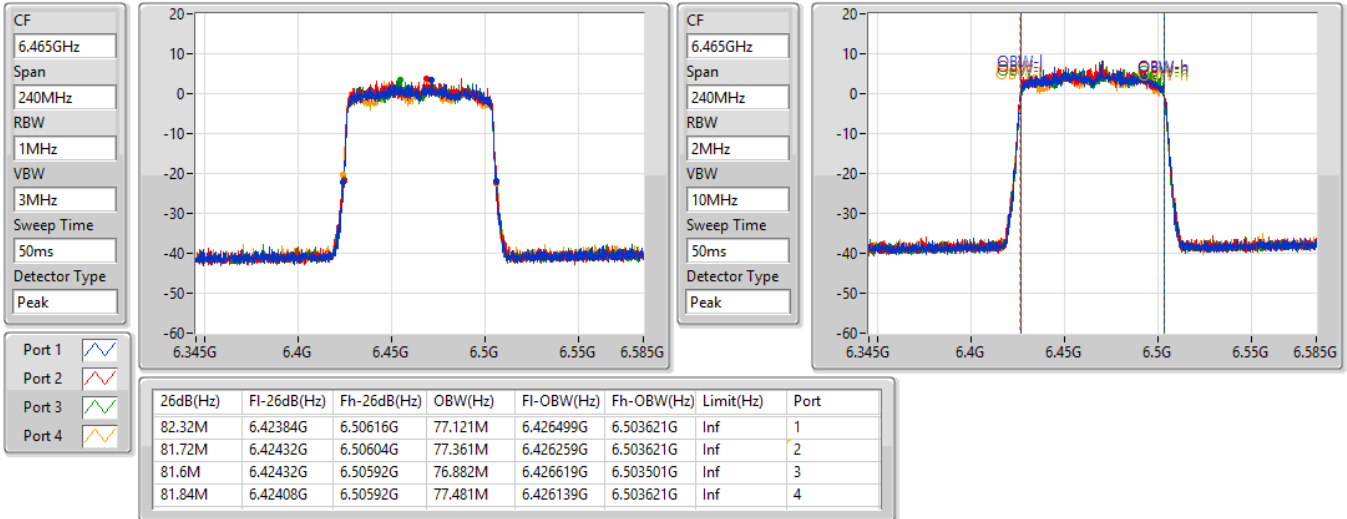

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6385MHz

27/09/2021

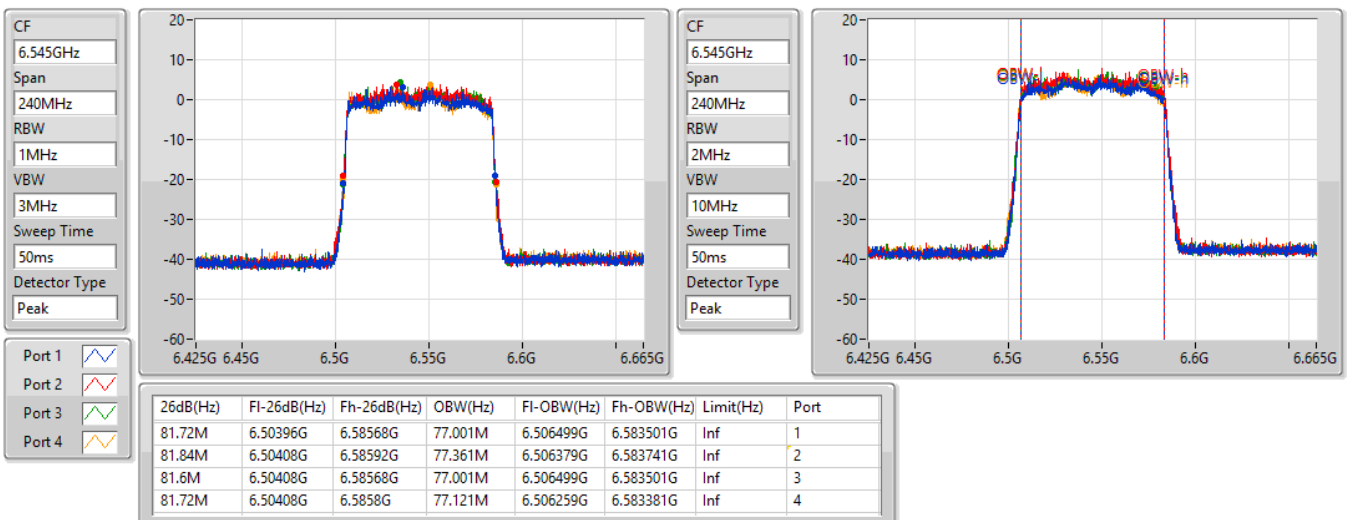


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6465MHz

27/09/2021

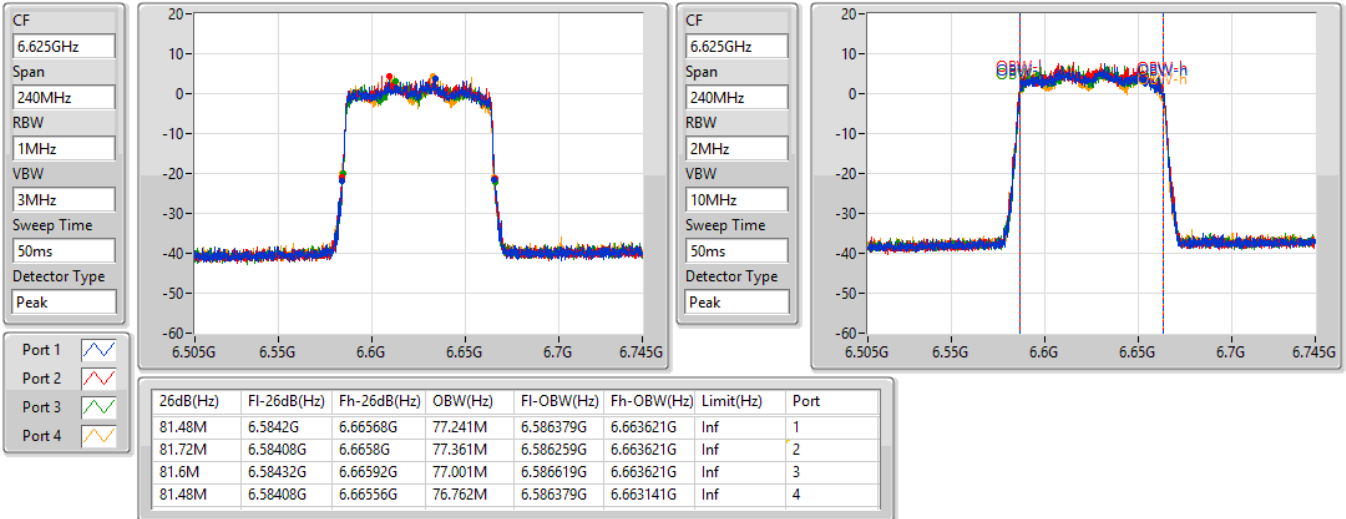

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6545MHz Straddle 6.425-6.525GHz

27/09/2021

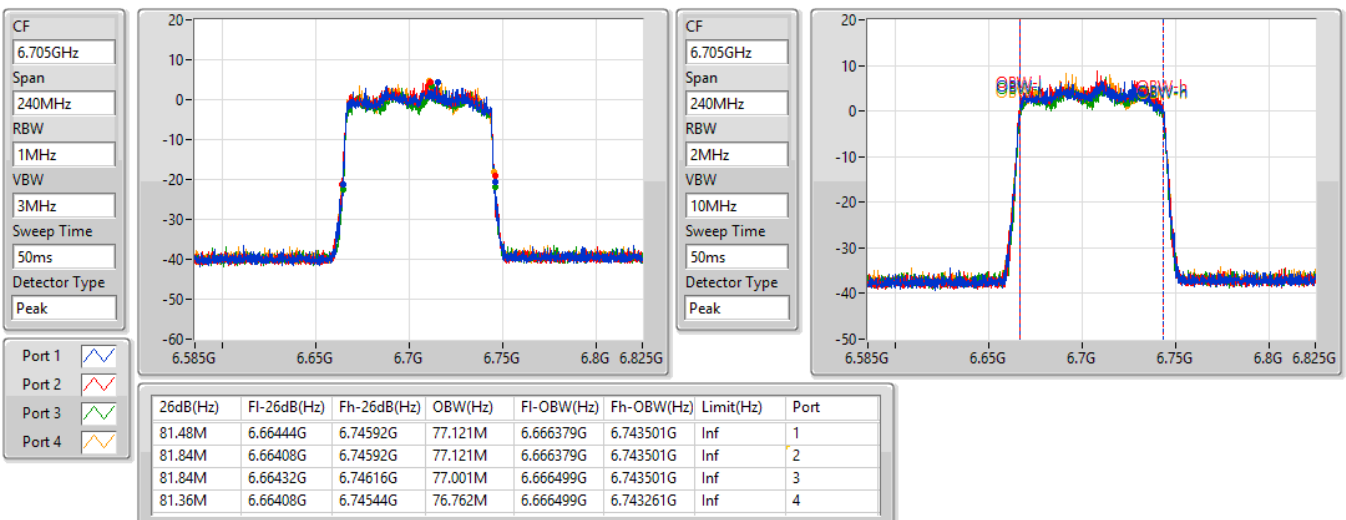


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6625MHz

27/09/2021

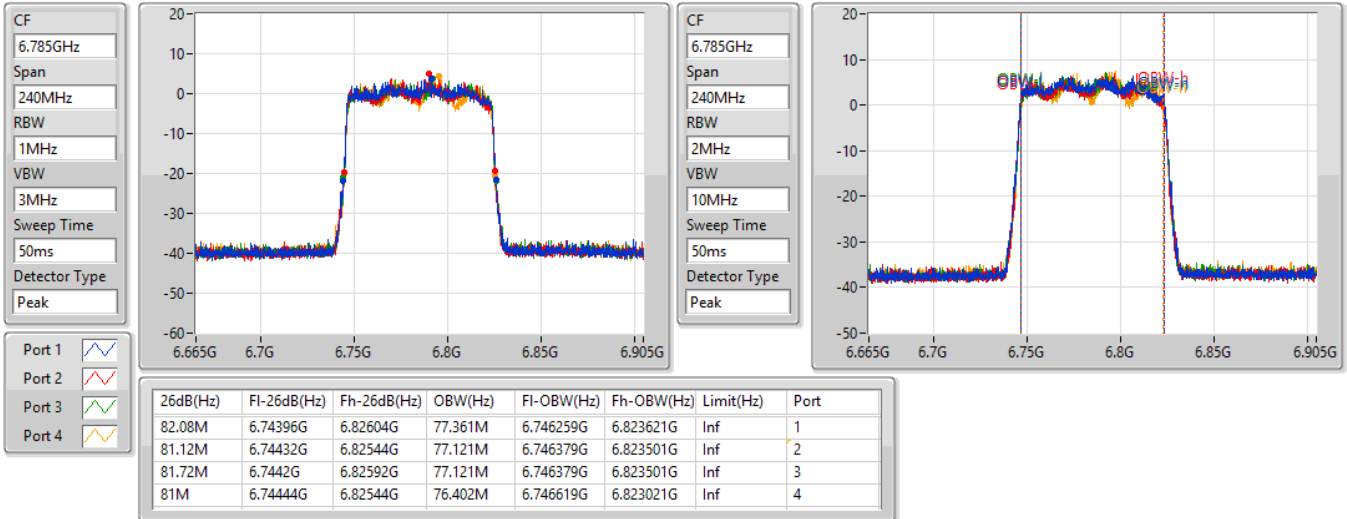

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6705MHz

27/09/2021

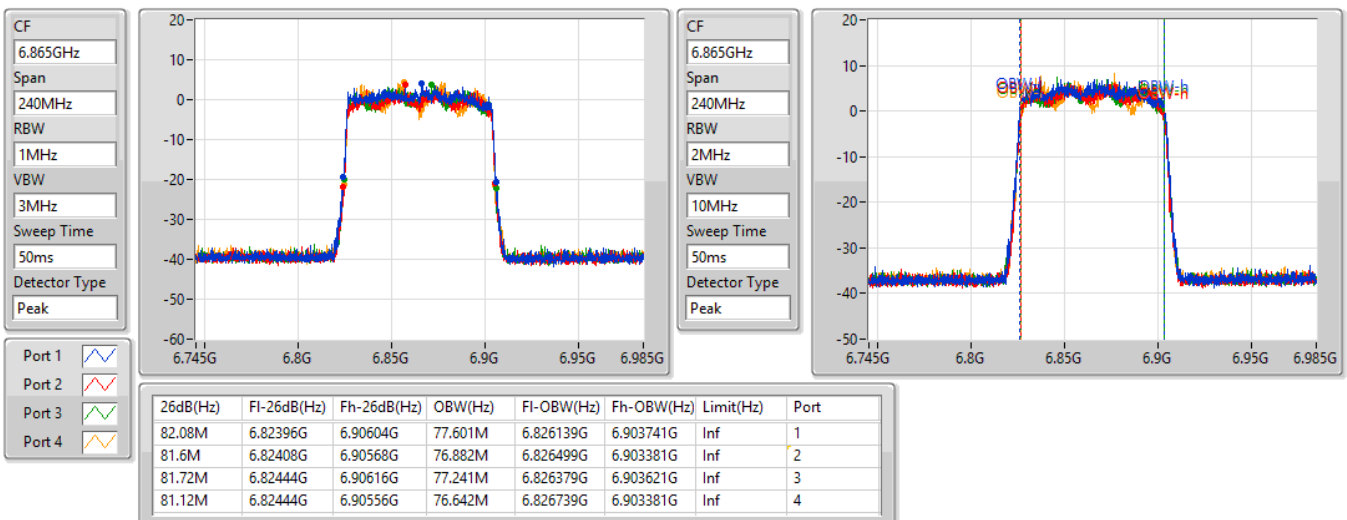


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6785MHz

27/09/2021

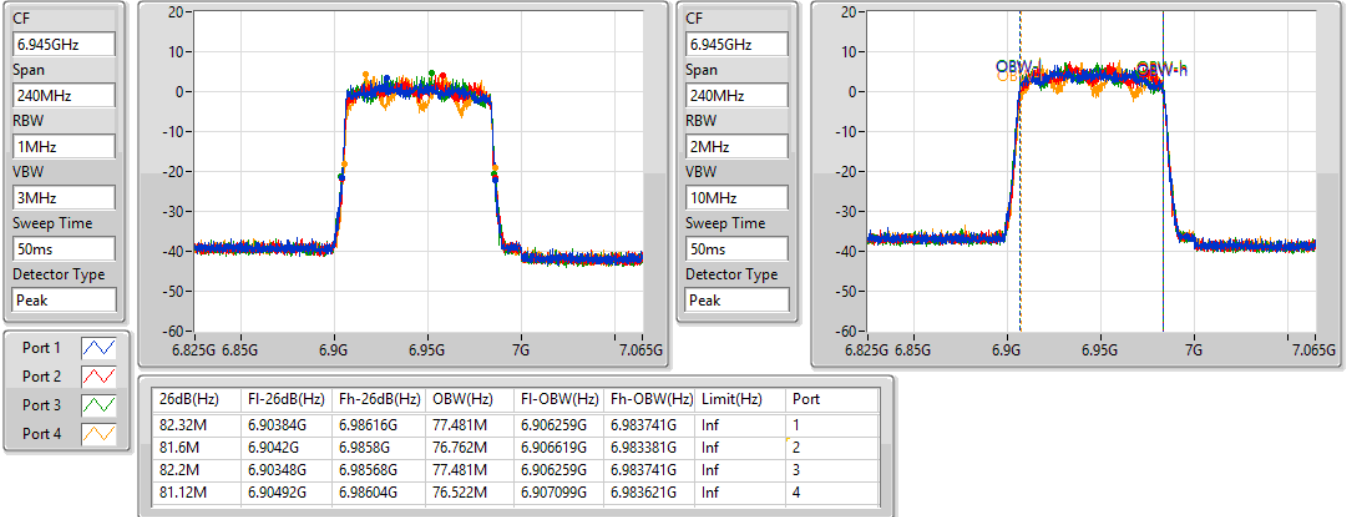

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6865MHz Straddle 6.525-6.875GHz

27/09/2021

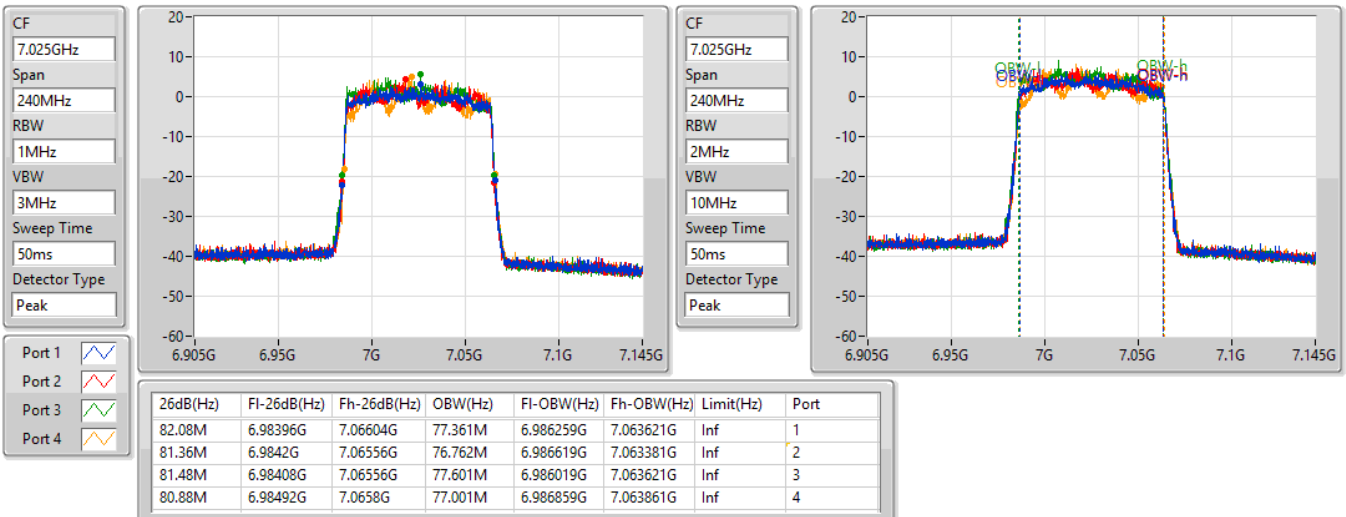


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
6945MHz

27/09/2021

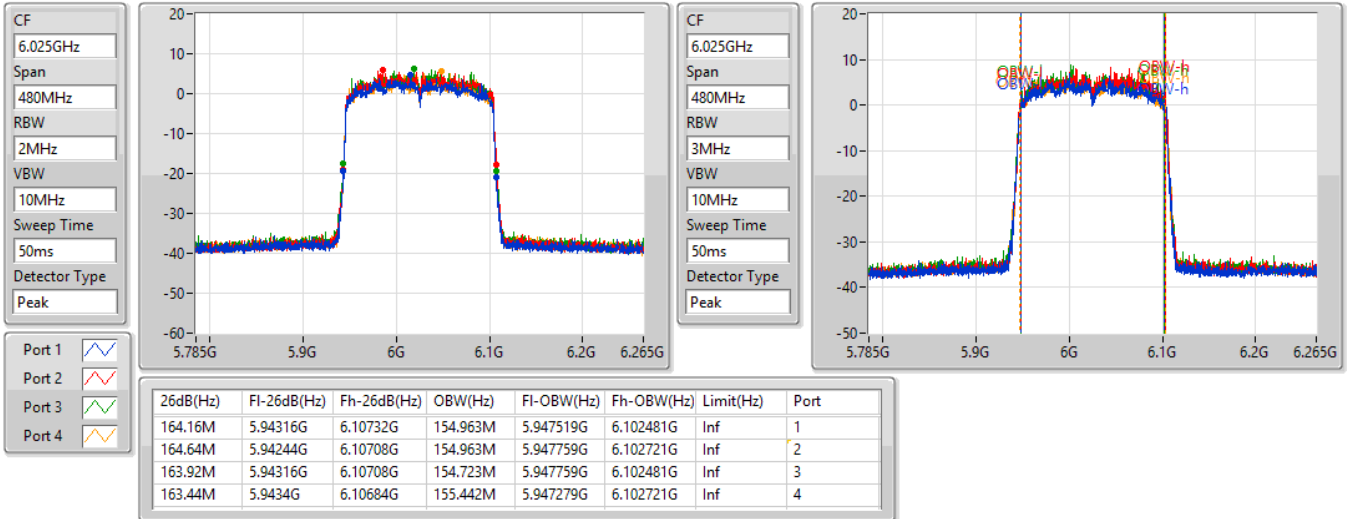

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
7025MHz

27/09/2021

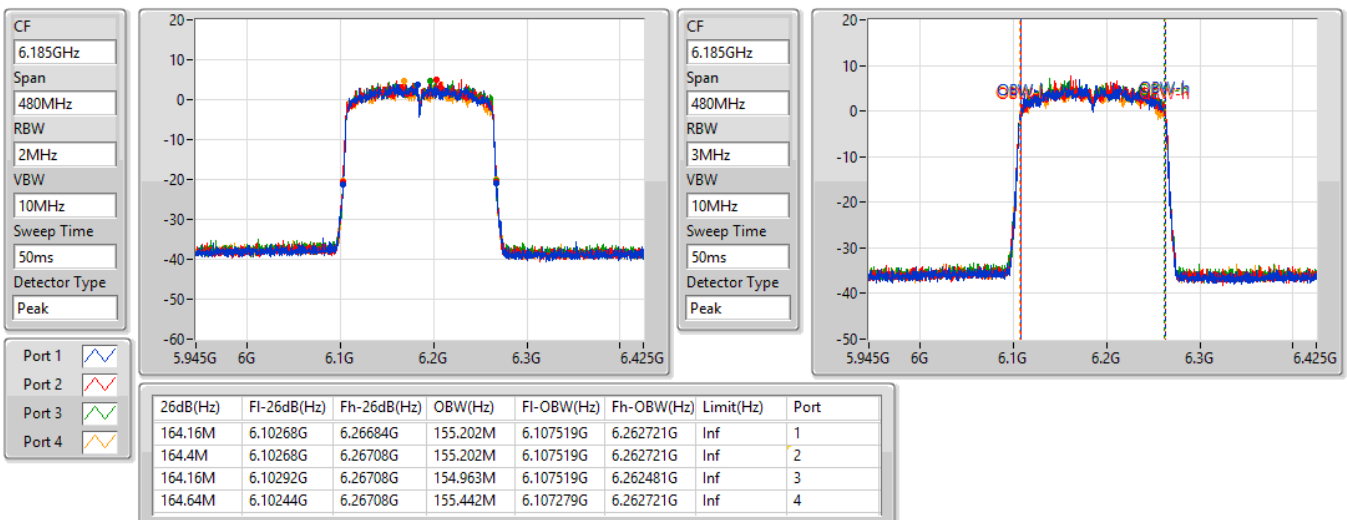


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
6025MHz

27/09/2021

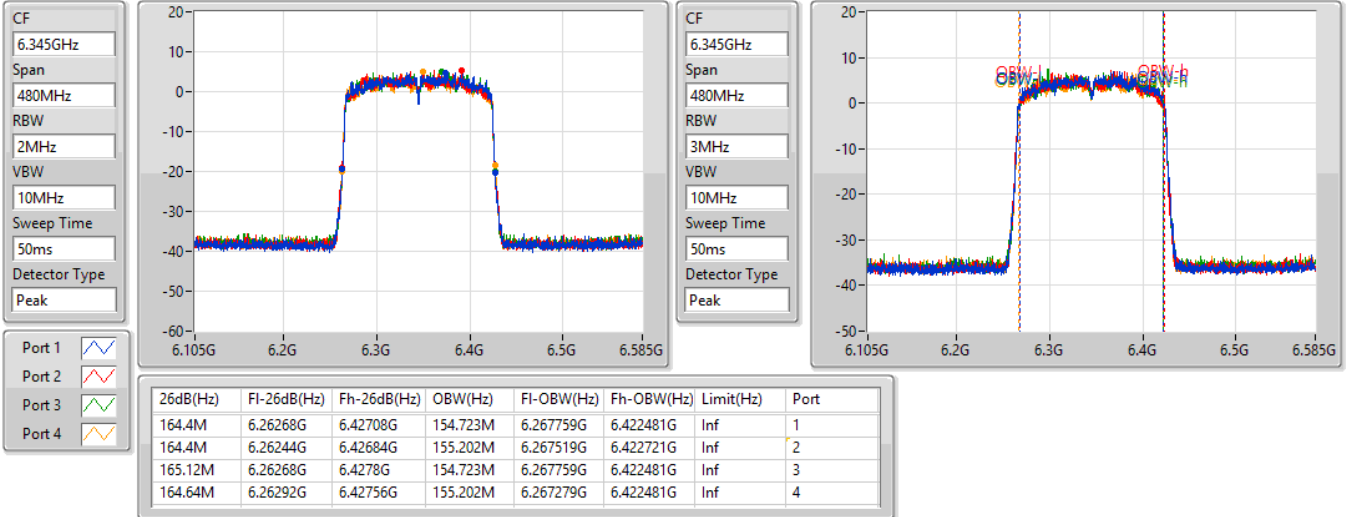

802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
6185MHz

27/09/2021

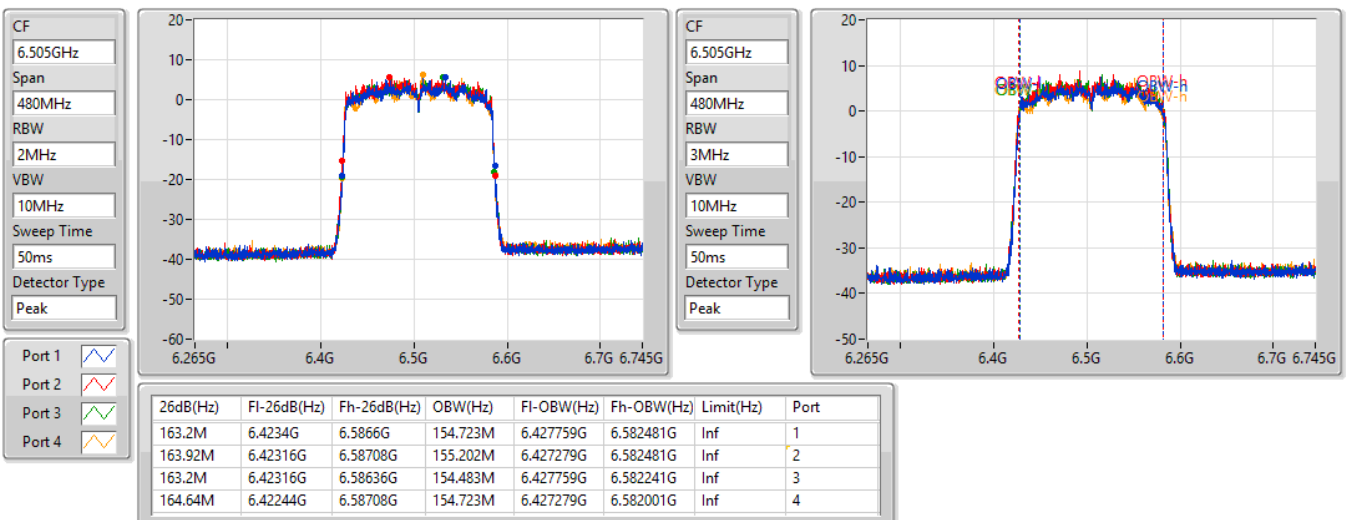


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
6345MHz

27/09/2021

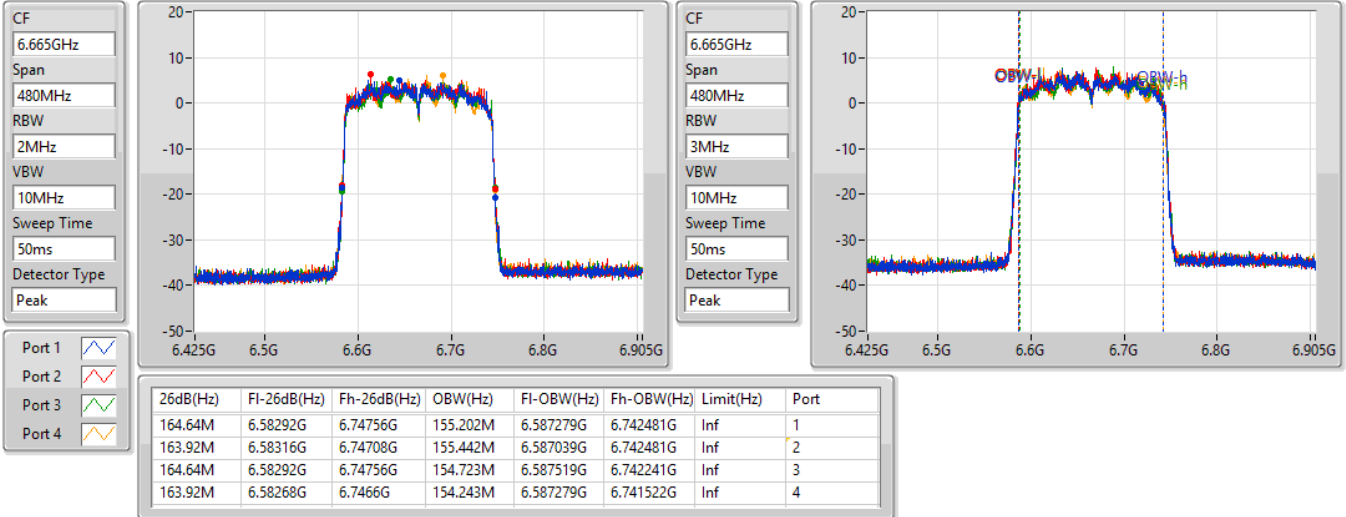

802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
6505MHz Straddle 6.425-6.525GHz

27/09/2021

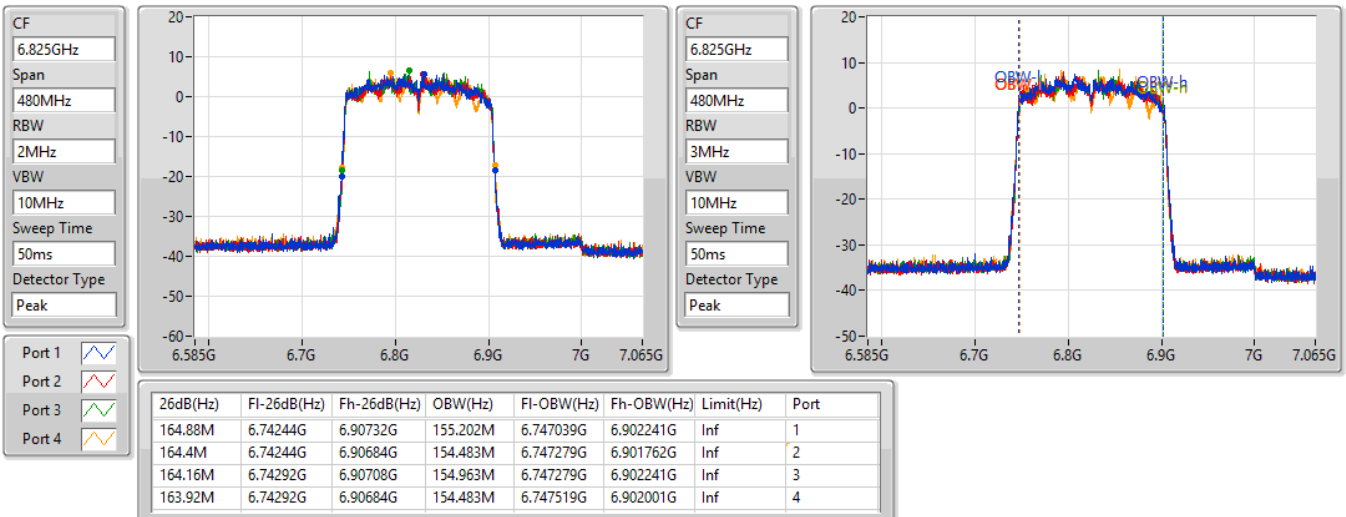


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
6665MHz

27/09/2021


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
6825MHz Straddle 6.525-6.875GHz

27/09/2021

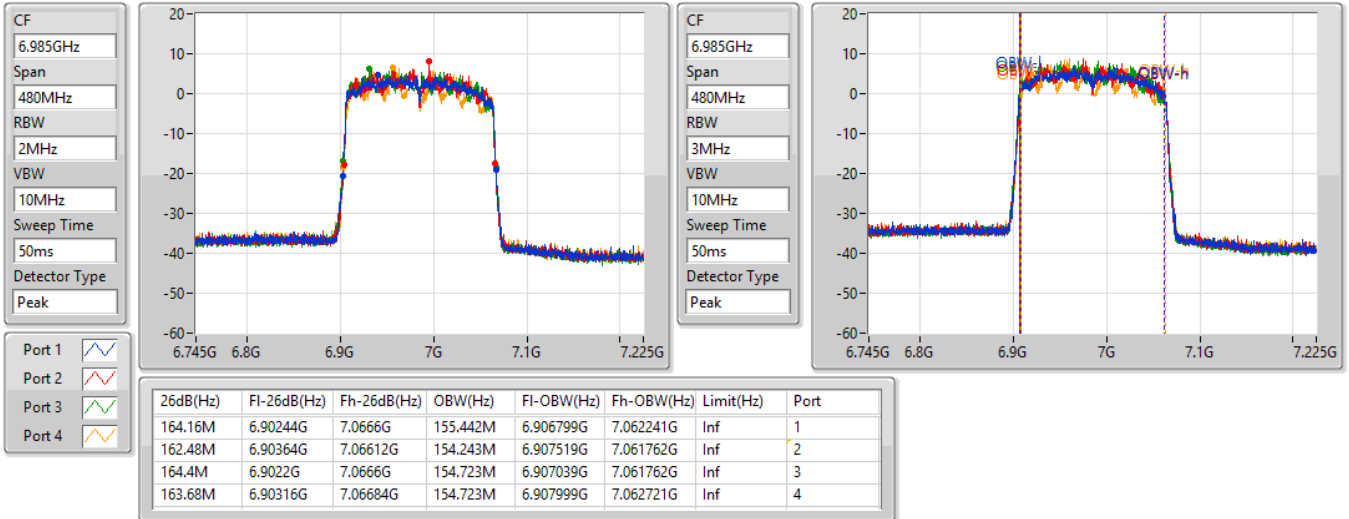


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

6985MHz

27/09/2021



Summary

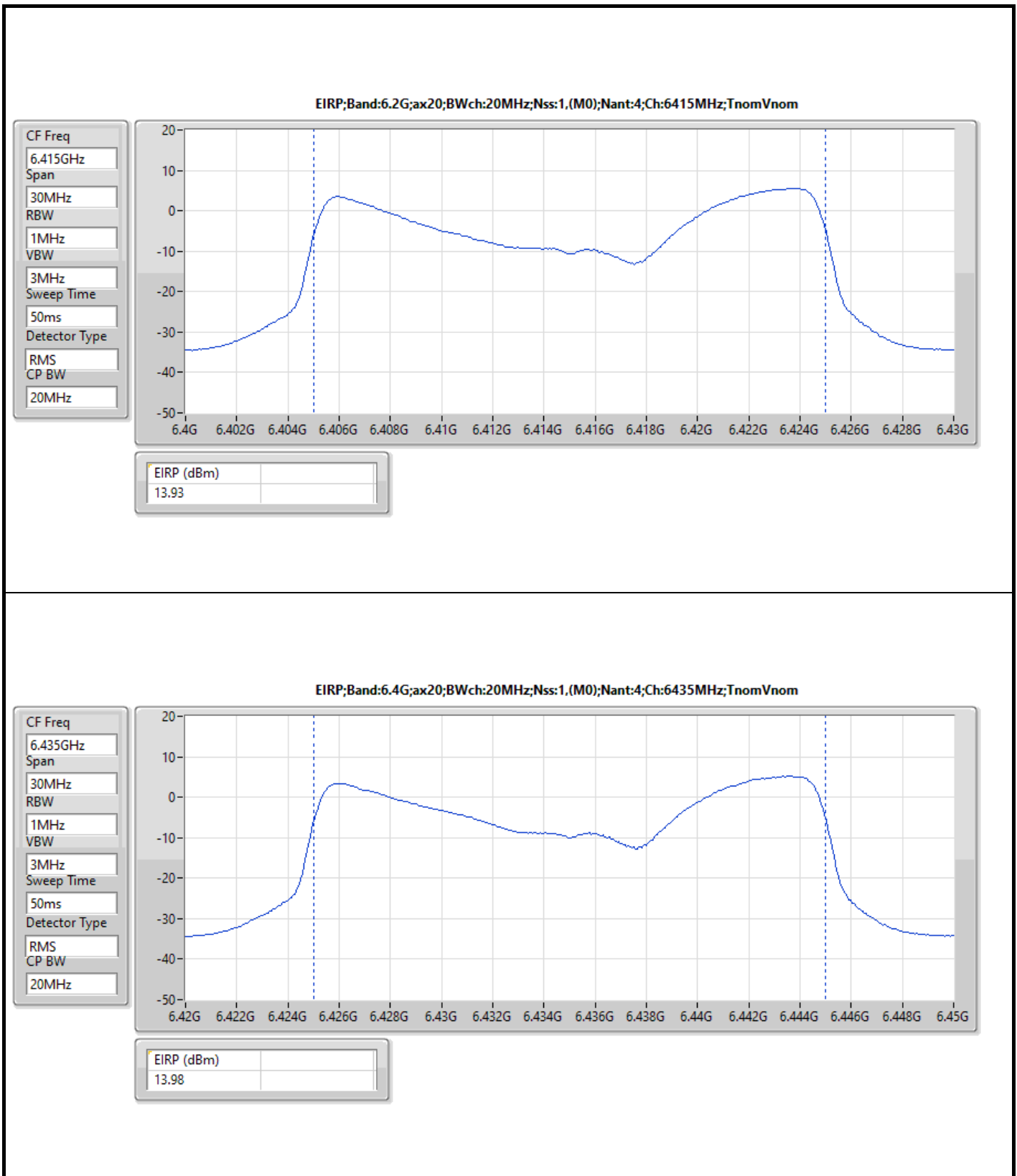
Mode	EIRP (dBm)	EIRP (W)
5.925-6.425GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	13.93	0.02472
802.11ax HEW40_Nss1,(MCS0)_4TX	17.23	0.05284
802.11ax HEW80_Nss1,(MCS0)_4TX	20.91	0.12331
802.11ax HEW160_Nss1,(MCS0)_4TX	23.45	0.22131
6.425-6.525GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	13.98	0.02500
802.11ax HEW40_Nss1,(MCS0)_4TX	17.32	0.05395
802.11ax HEW80_Nss1,(MCS0)_4TX	20.17	0.10399
802.11ax HEW160_Nss1,(MCS0)_4TX	22.61	0.18239
6.525-6.875GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	13.74	0.02366
802.11ax HEW40_Nss1,(MCS0)_4TX	17.00	0.05012
802.11ax HEW80_Nss1,(MCS0)_4TX	20.42	0.11015
802.11ax HEW160_Nss1,(MCS0)_4TX	22.21	0.16634
6.875-7.125GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	13.63	0.02307
802.11ax HEW40_Nss1,(MCS0)_4TX	16.83	0.04819
802.11ax HEW80_Nss1,(MCS0)_4TX	19.88	0.09727
802.11ax HEW160_Nss1,(MCS0)_4TX	21.81	0.15171

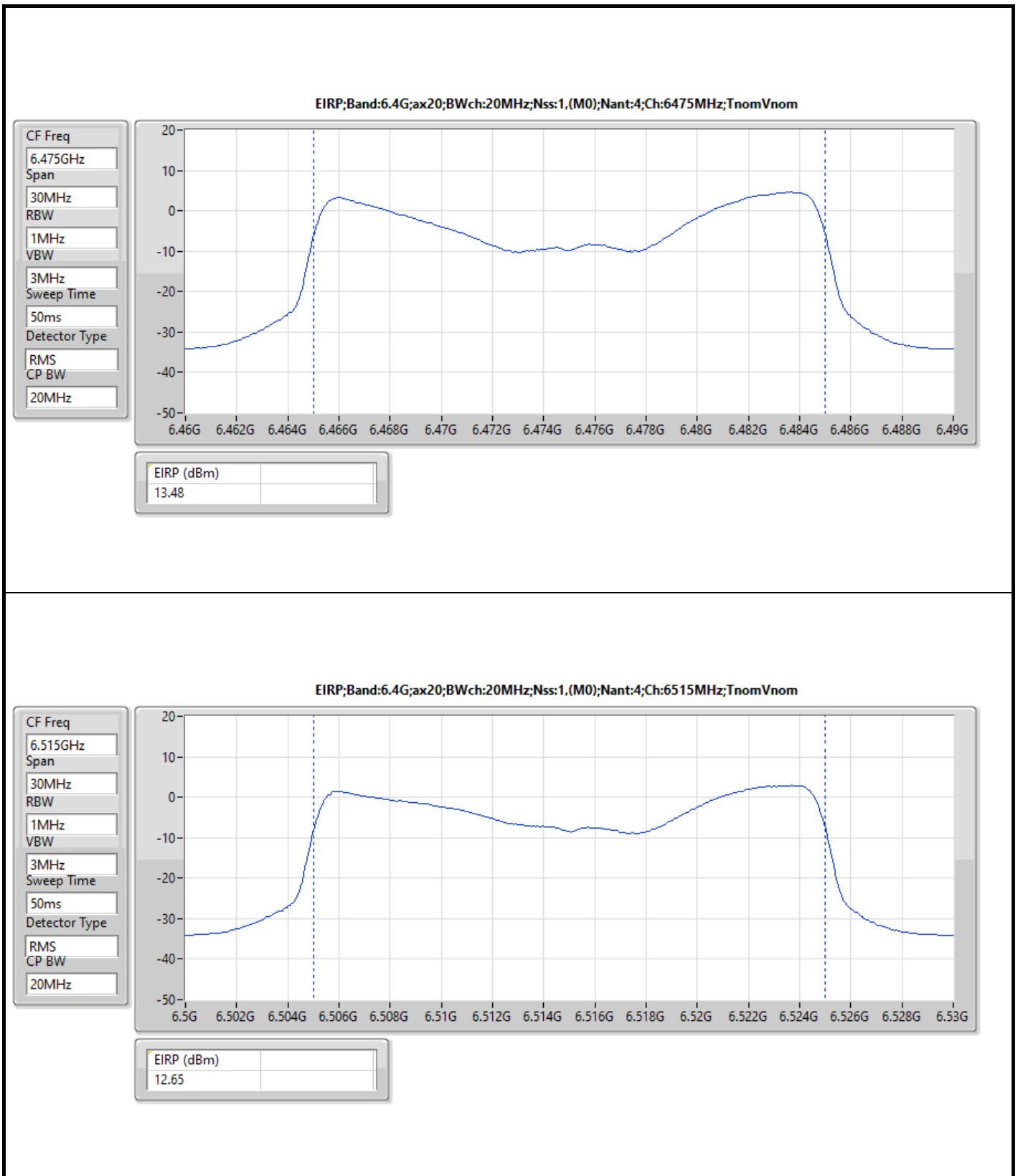
Result

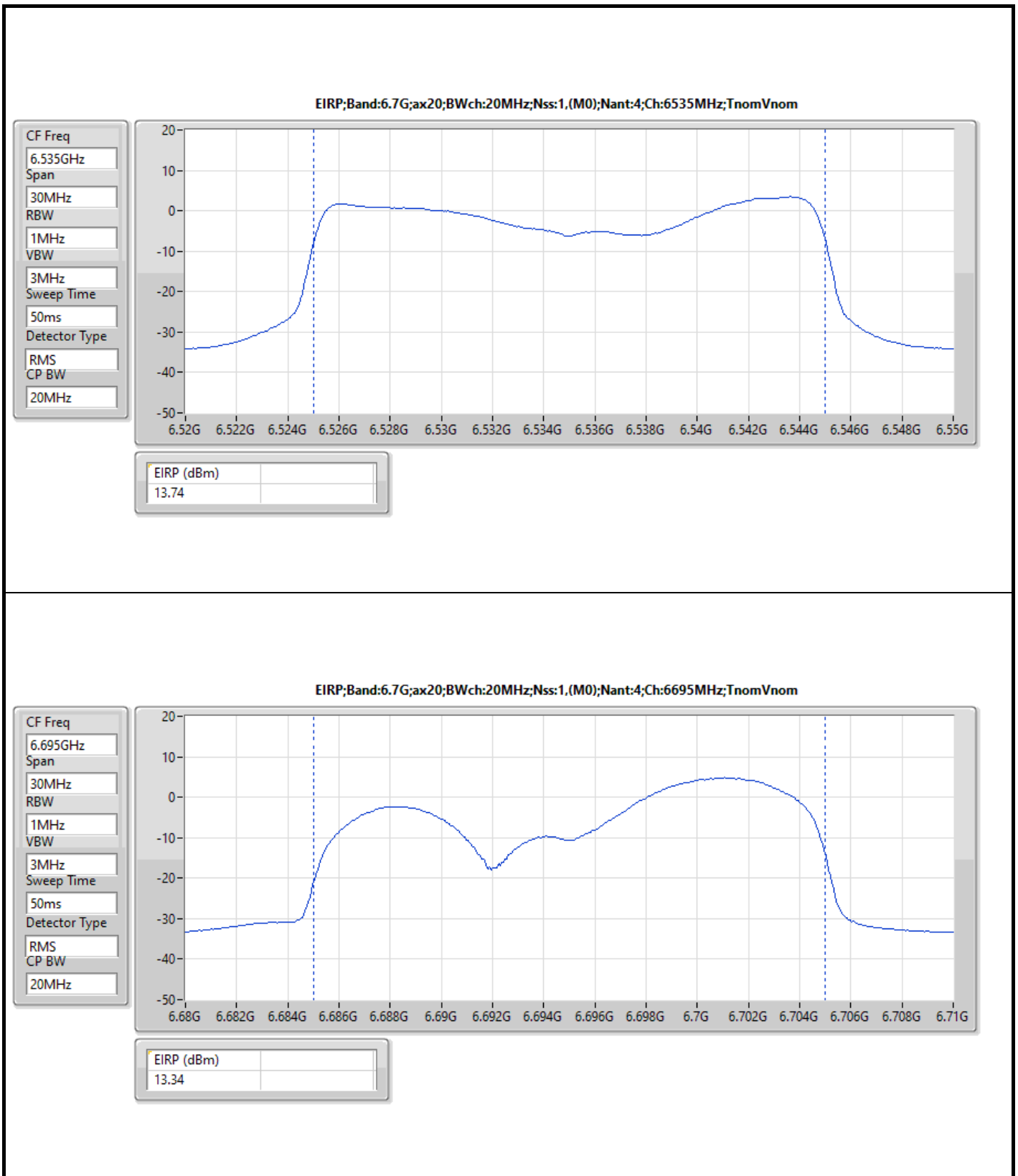
Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-
5955MHz	Pass	6.29	13.74	30.00
6175MHz	Pass	6.29	13.08	30.00
6415MHz	Pass	6.29	13.93	30.00
6435MHz	Pass	6.29	13.98	30.00
6475MHz	Pass	6.29	13.48	30.00
6515MHz	Pass	6.29	12.65	30.00
6535MHz	Pass	6.29	13.74	30.00
6695MHz	Pass	6.29	13.34	30.00
6855MHz	Pass	6.29	12.49	30.00
6875MHz Straddle 6.525-6.875GHz	Pass	6.29	13.66	30.00
6895MHz	Pass	6.29	12.81	30.00
6995MHz	Pass	6.29	13.63	30.00
7095MHz	Pass	6.29	13.10	30.00
7115 MHz	Pass	6.29	13.44	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-
5965MHz	Pass	6.29	17.23	30.00
6165MHz	Pass	6.29	15.98	30.00
6405MHz	Pass	6.29	16.19	30.00
6445MHz	Pass	6.29	16.98	30.00
6485MHz	Pass	6.29	17.13	30.00
6525MHz Straddle 6.425-6.525GHz	Pass	6.29	17.32	30.00
6565MHz	Pass	6.29	16.86	30.00
6685MHz	Pass	6.29	15.72	30.00
6845MHz	Pass	6.29	16.44	30.00
6885MHz Straddle 6.525-6.875GHz	Pass	6.29	17	30.00
6925MHz	Pass	6.29	16.14	30.00
7005MHz	Pass	6.29	16.83	30.00
7085MHz	Pass	6.29	16.78	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-
5985MHz	Pass	6.29	19.92	30.00
6145MHz	Pass	6.29	20.91	30.00
6385MHz	Pass	6.29	19.22	30.00
6465MHz	Pass	6.29	19.89	30.00
6545MHz Straddle 6.425-6.525GHz	Pass	6.29	20.17	30.00
6625MHz	Pass	6.29	20.42	30.00
6705MHz	Pass	6.29	19.61	30.00
6785MHz	Pass	6.29	19.78	30.00
6865MHz Straddle 6.525-6.875GHz	Pass	6.29	19.60	30.00
6945MHz	Pass	6.29	19.30	30.00
7025MHz	Pass	6.29	19.88	30.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-
6025MHz	Pass	6.29	23.45	30.00
6185MHz	Pass	6.29	22.37	30.00
6345MHz	Pass	6.29	22.81	30.00
6505MHz Straddle 6.425-6.525GHz	Pass	6.29	22.61	30.00
6665MHz	Pass	6.29	21.61	30.00
6825MHz Straddle 6.525-6.875GHz	Pass	6.29	22.21	30.00
6985MHz	Pass	6.29	21.81	30.00

Note: DG = Directional Gain
The test result used radiated measurement.

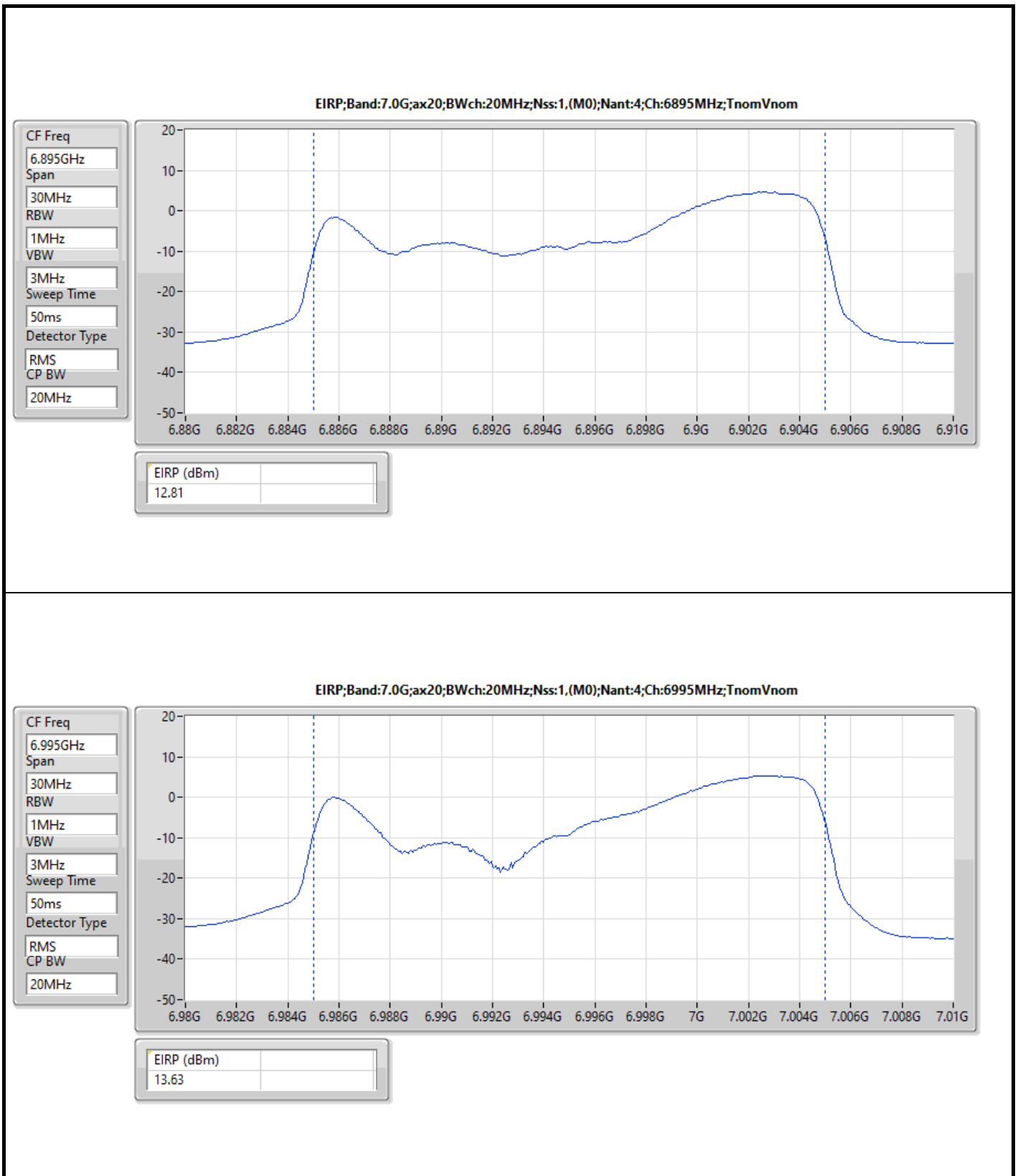








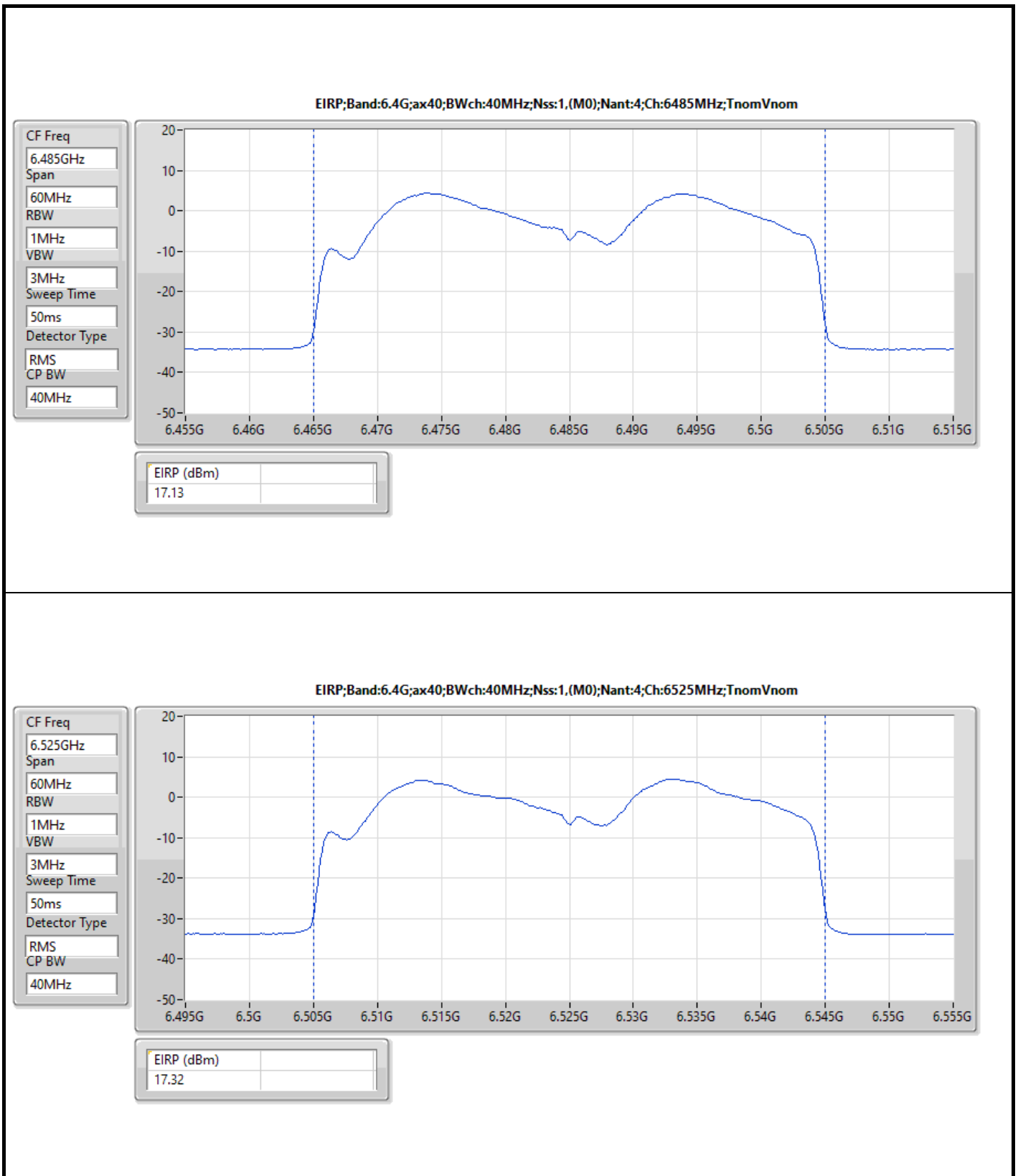


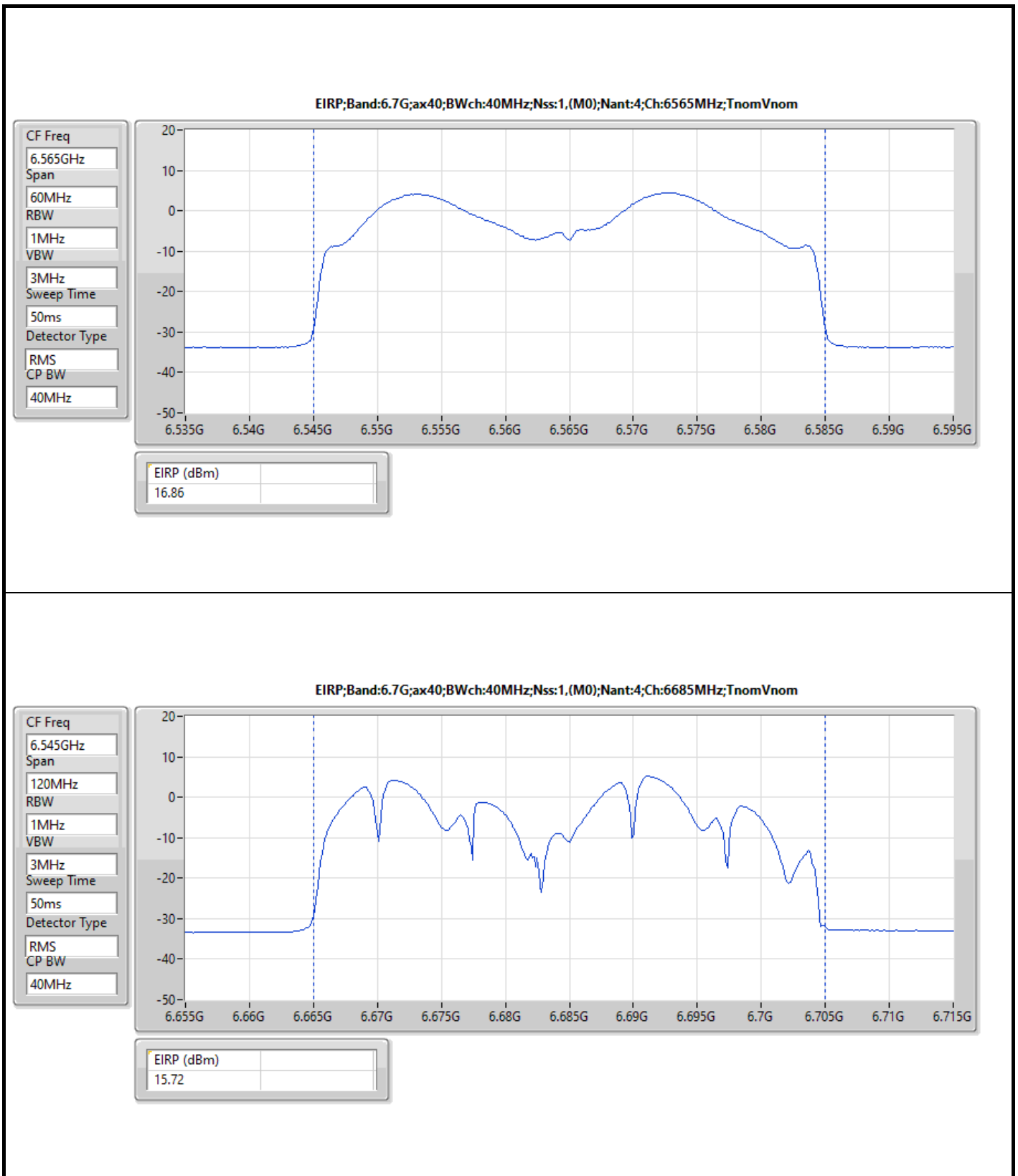




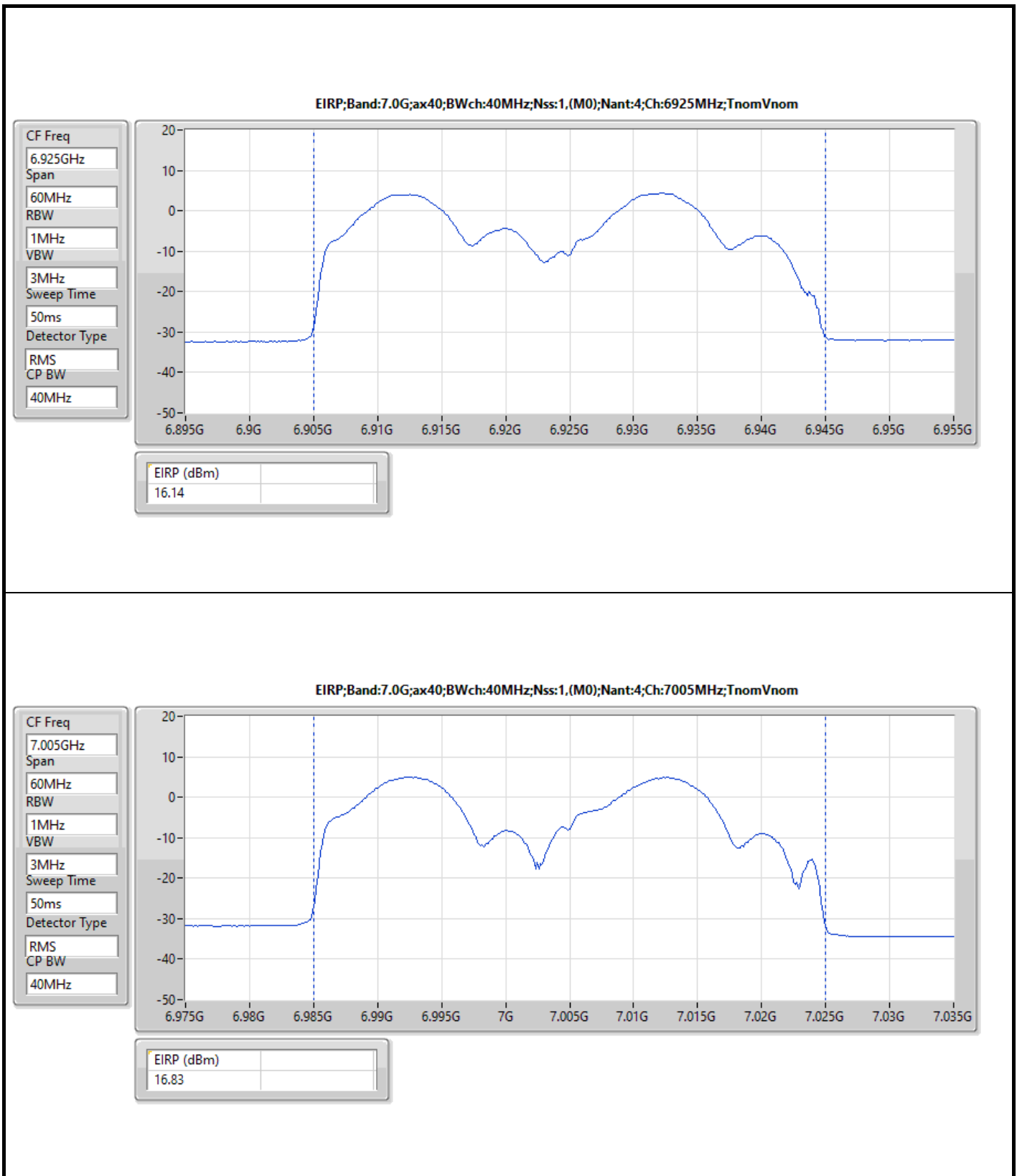


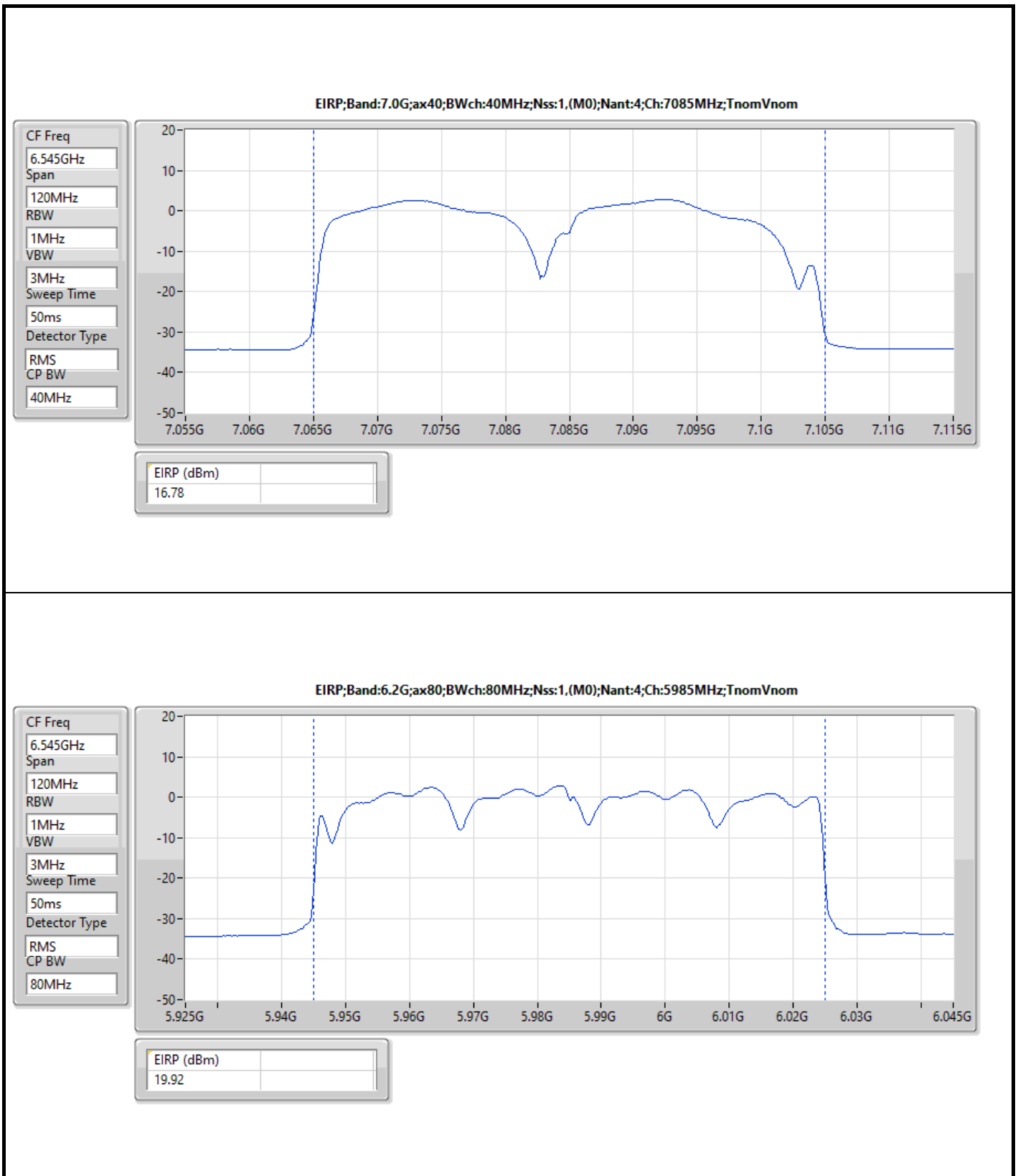


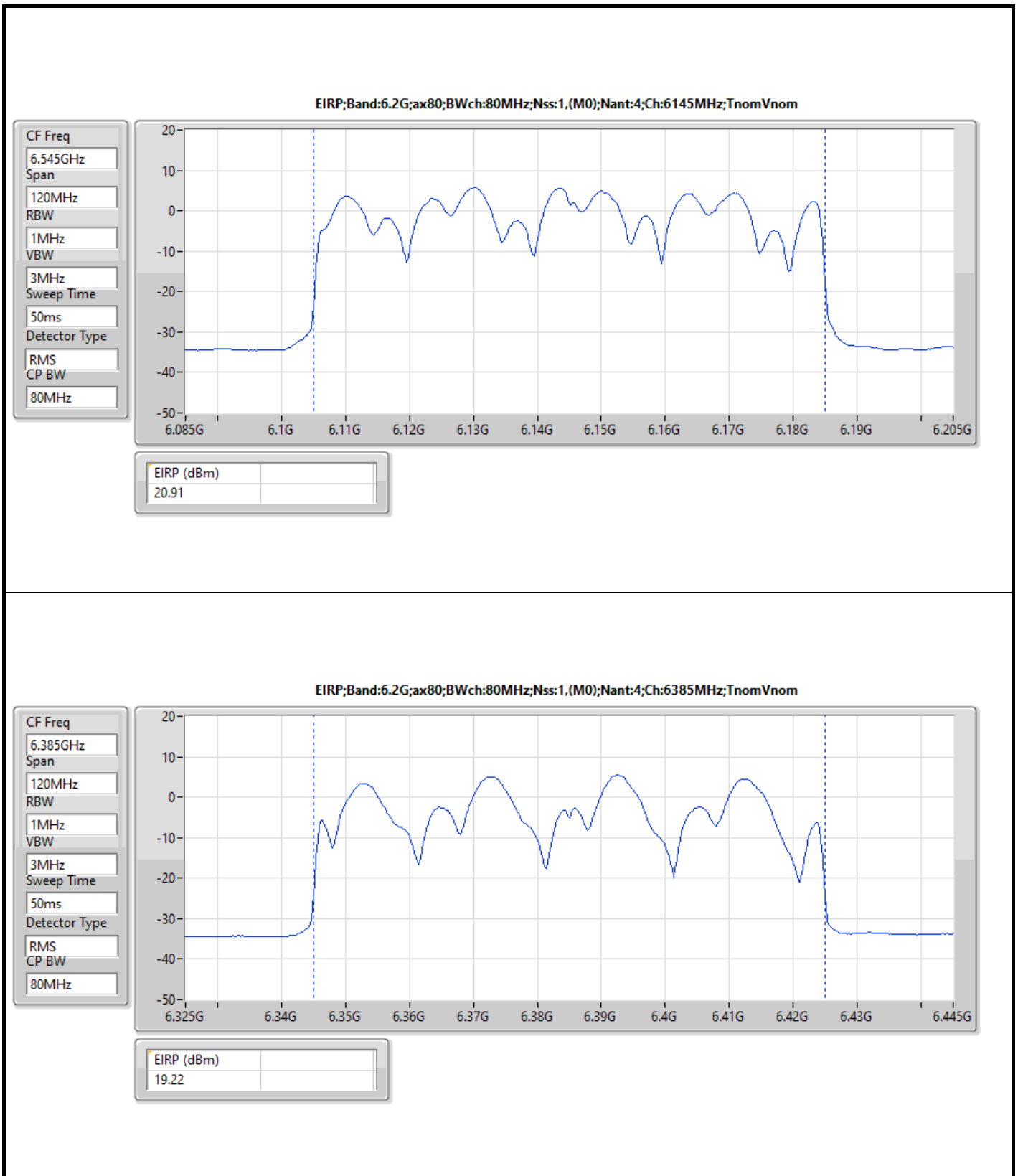


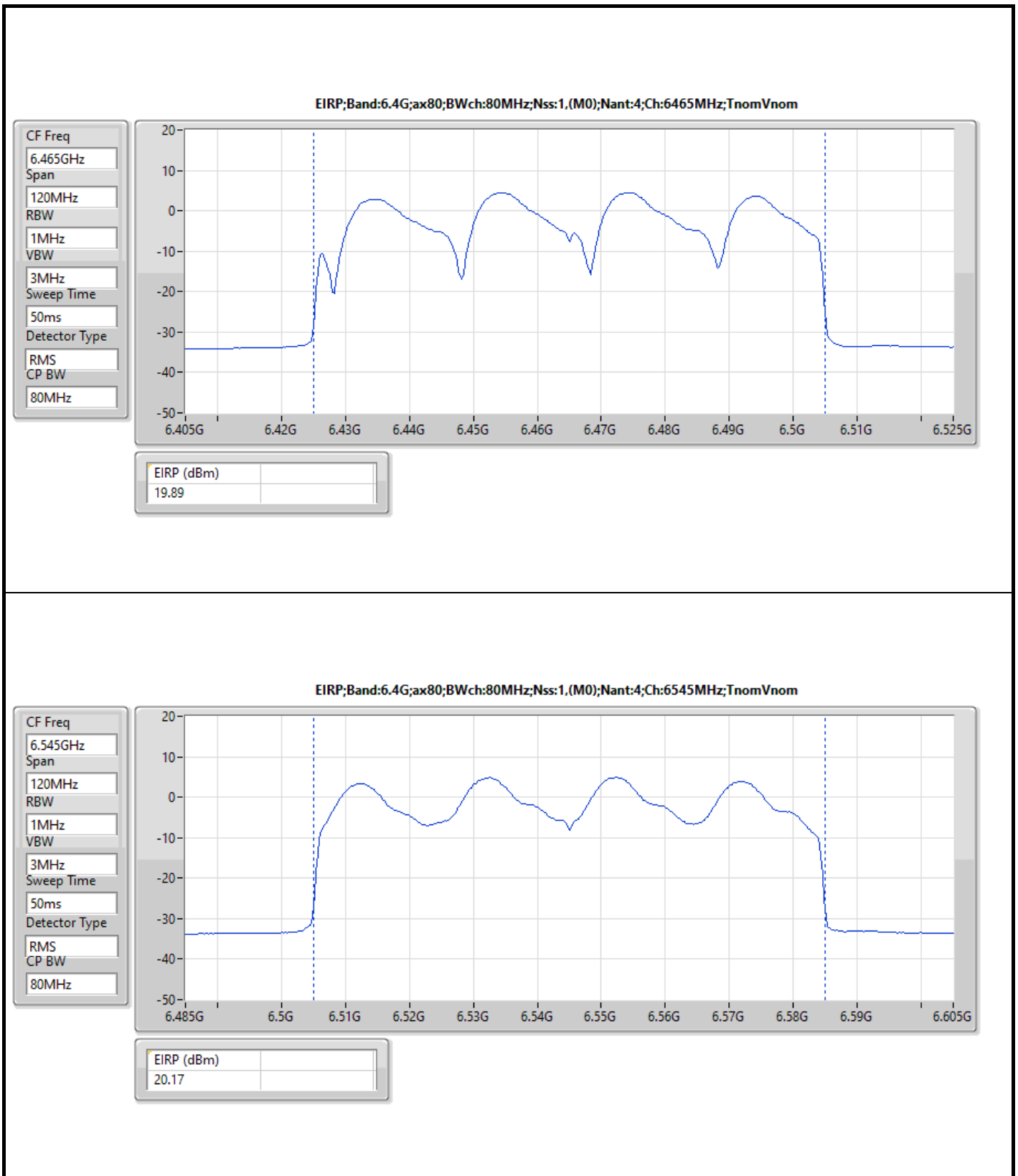


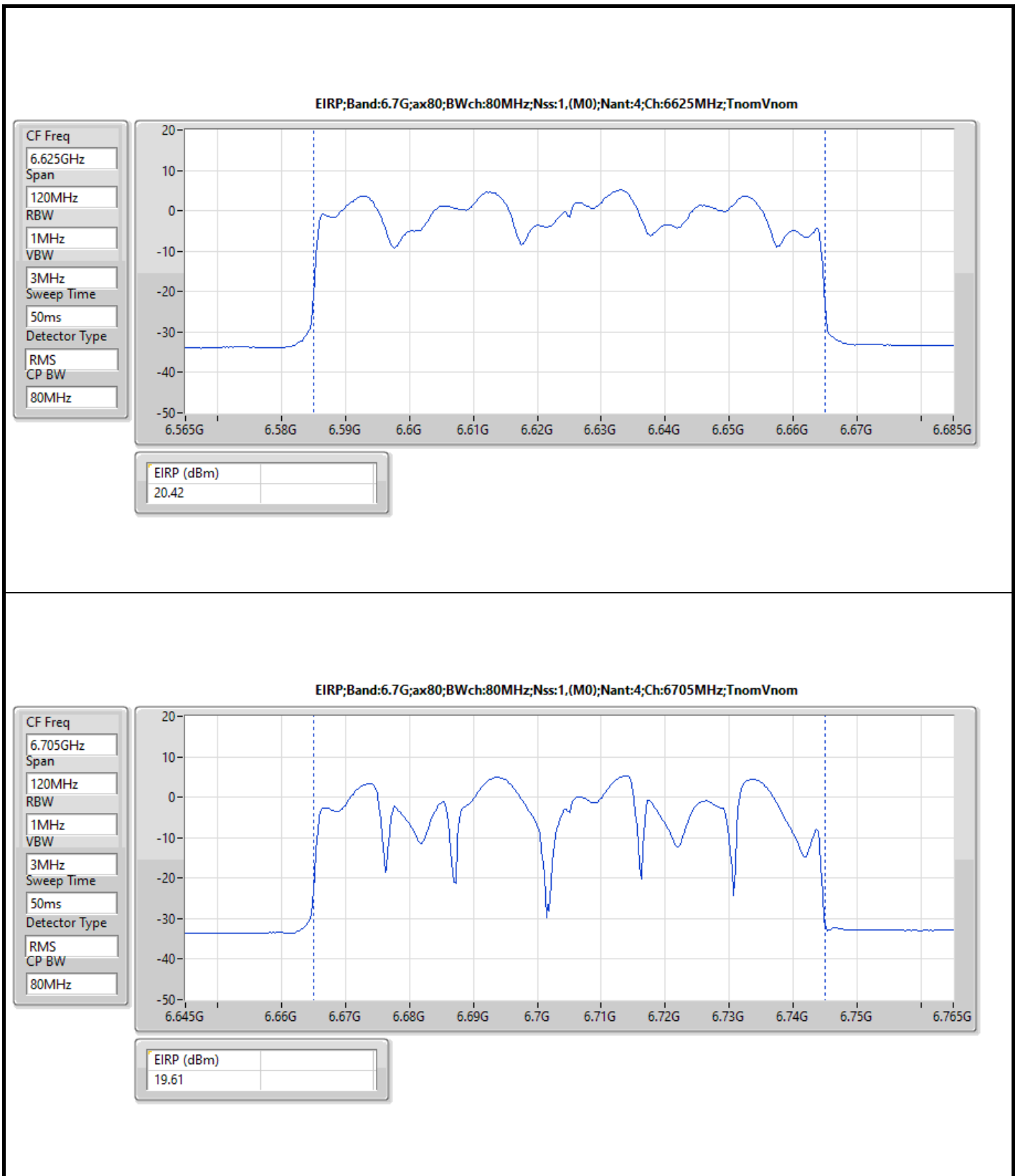


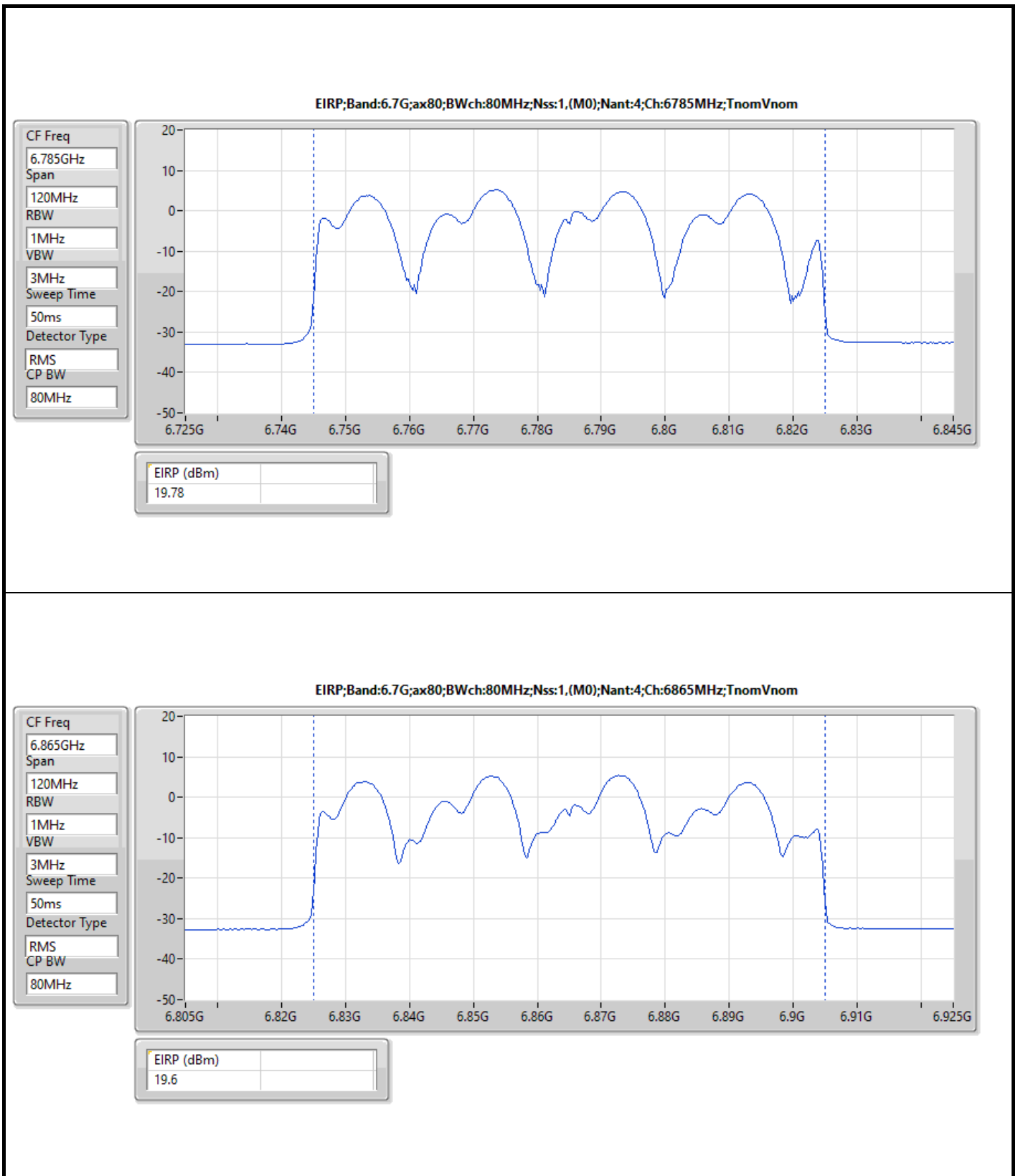


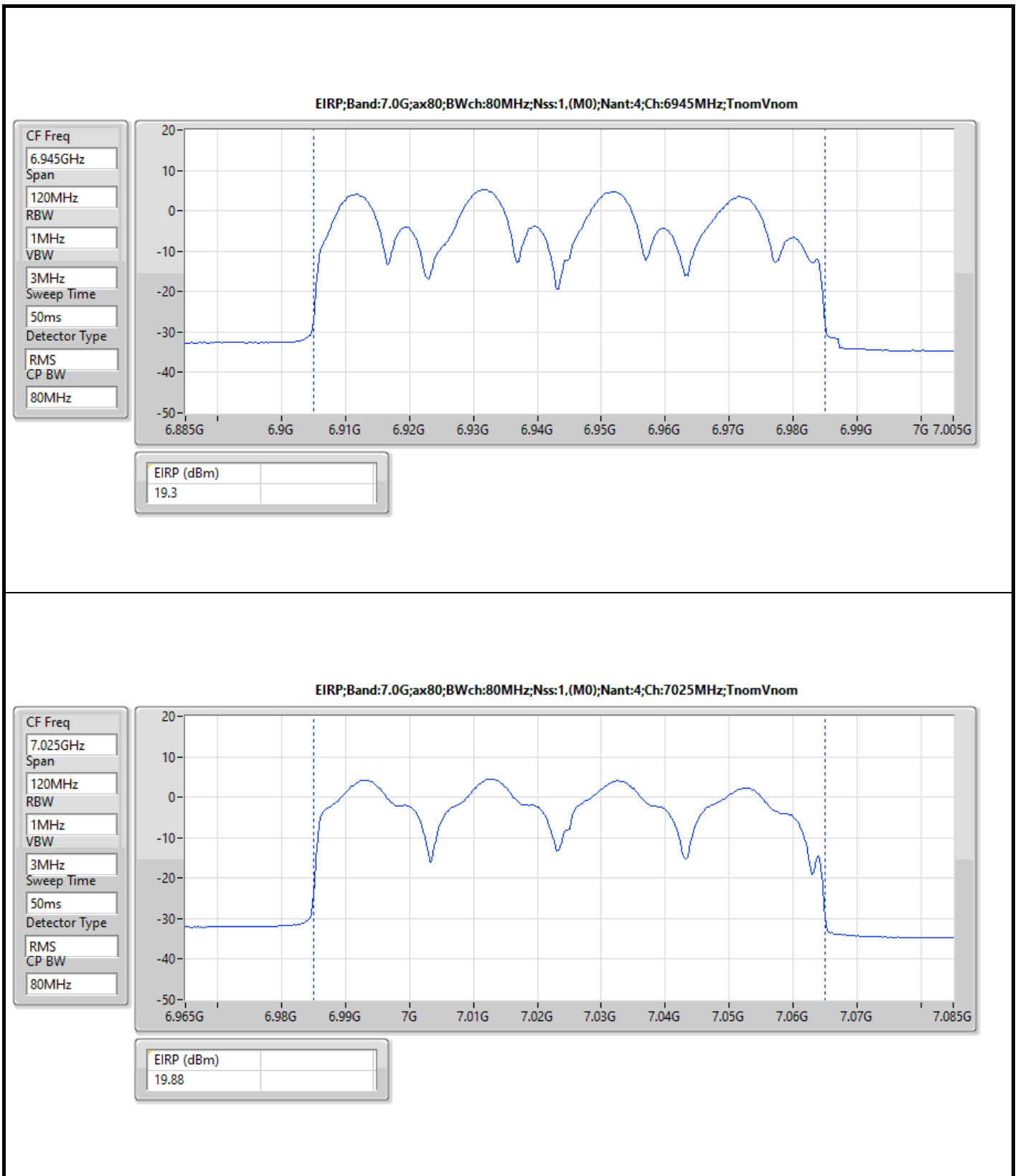


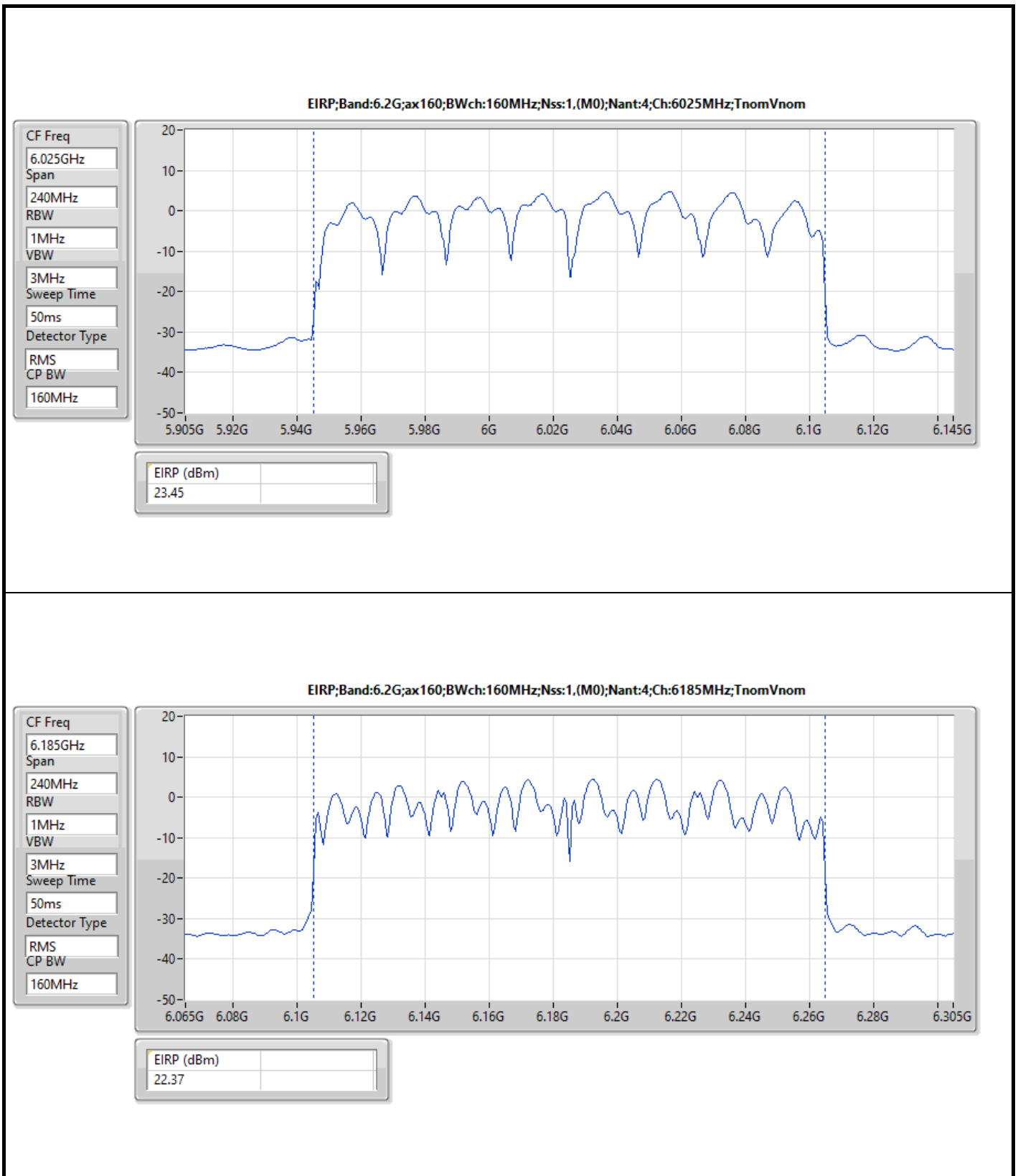


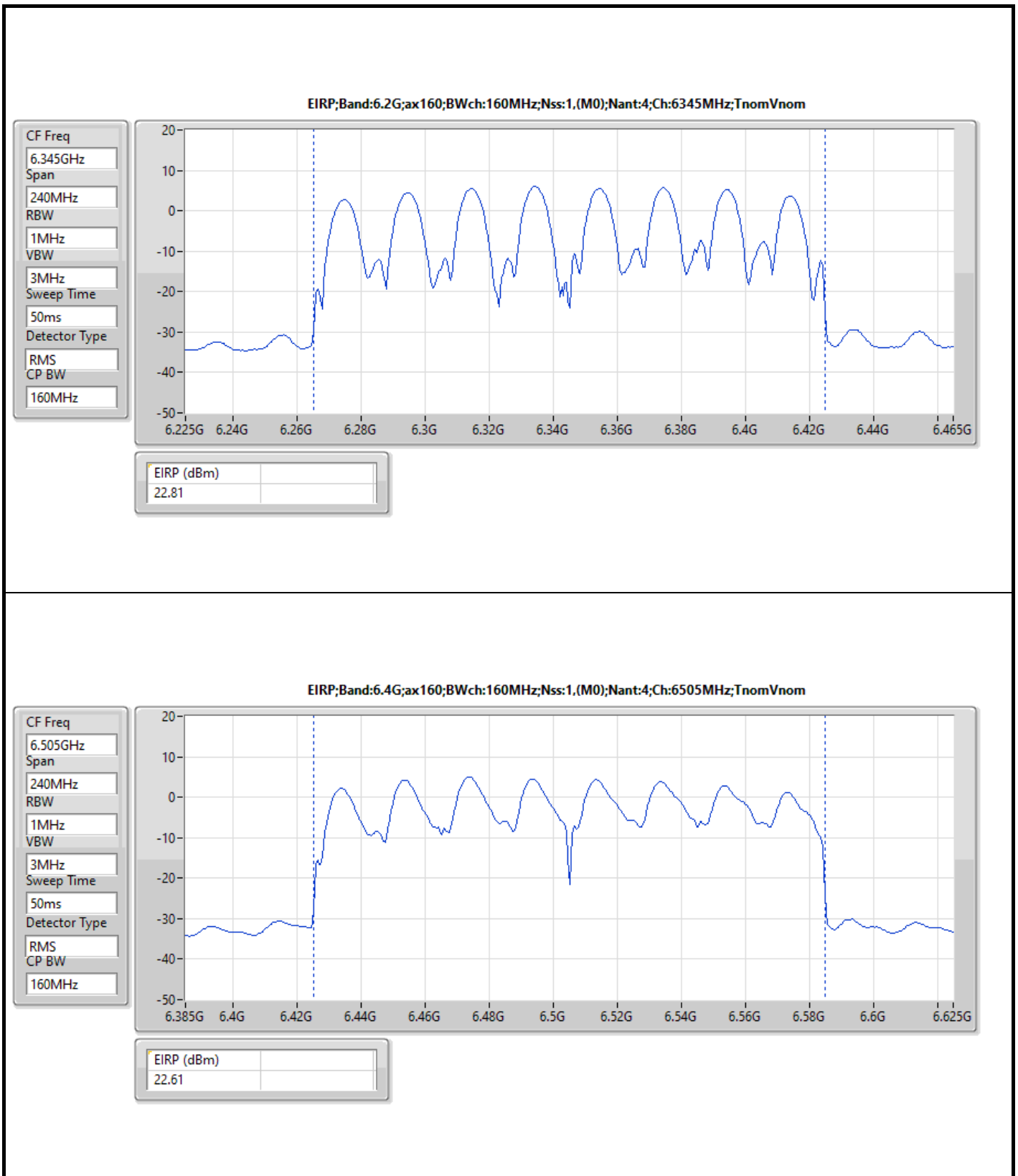


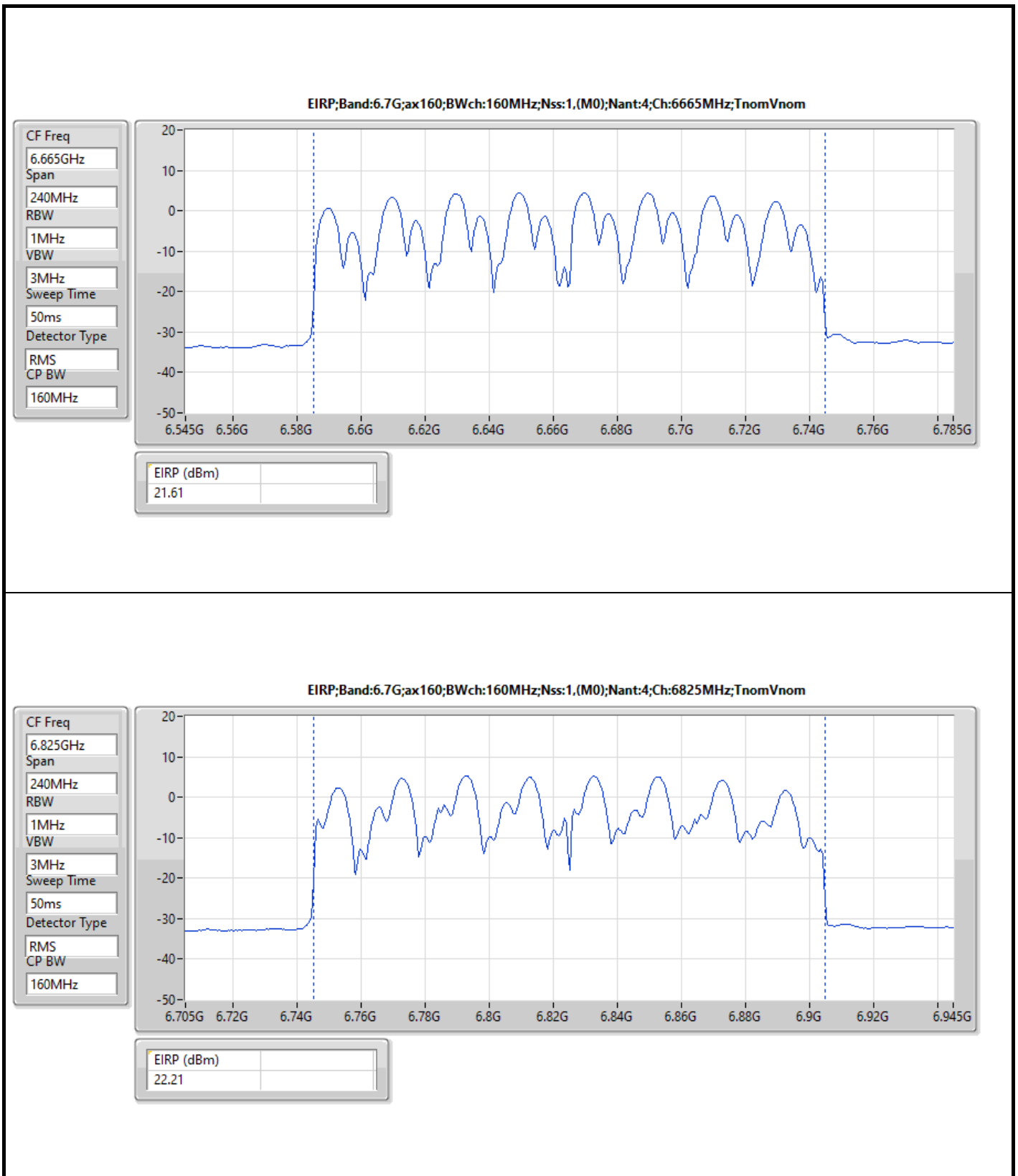


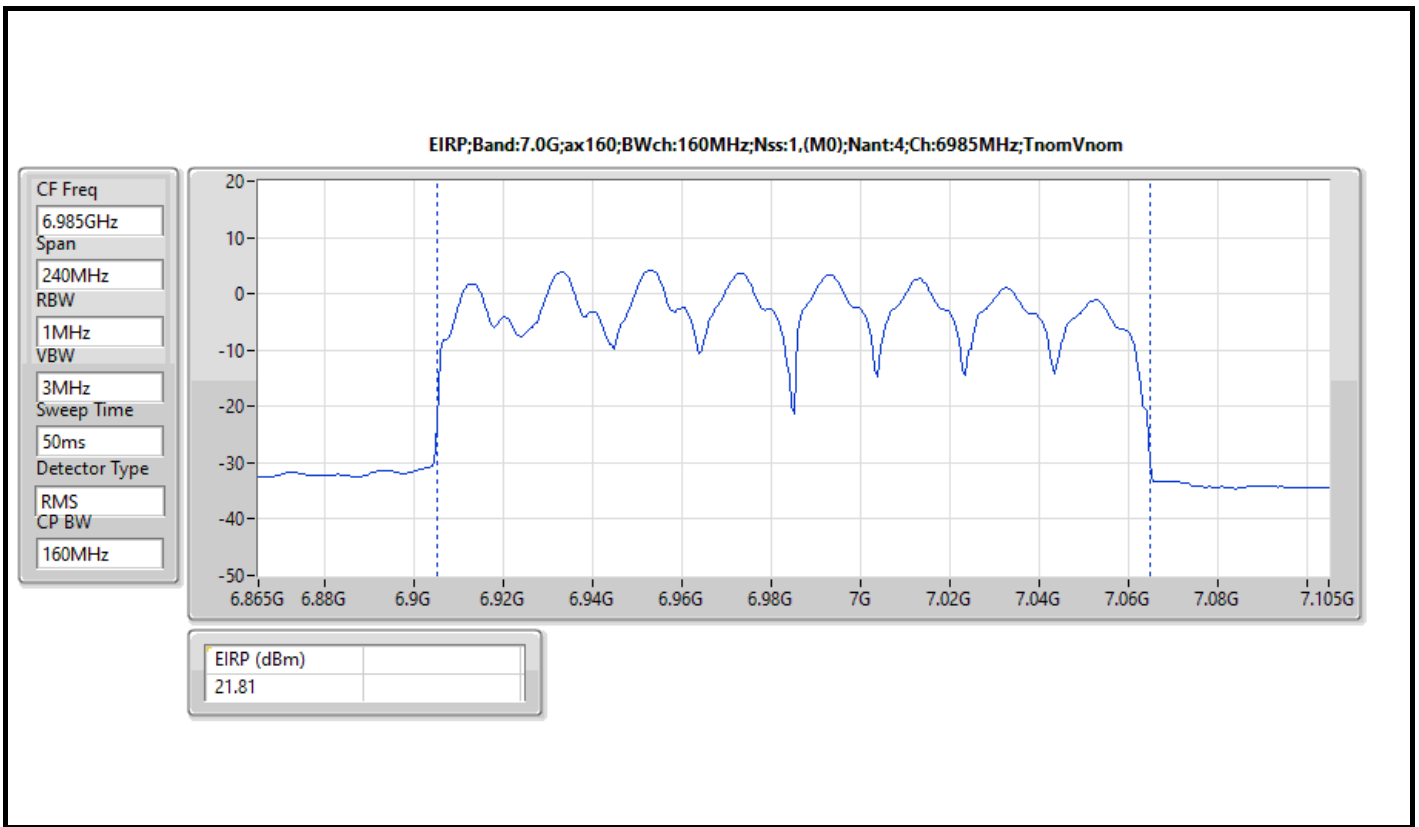












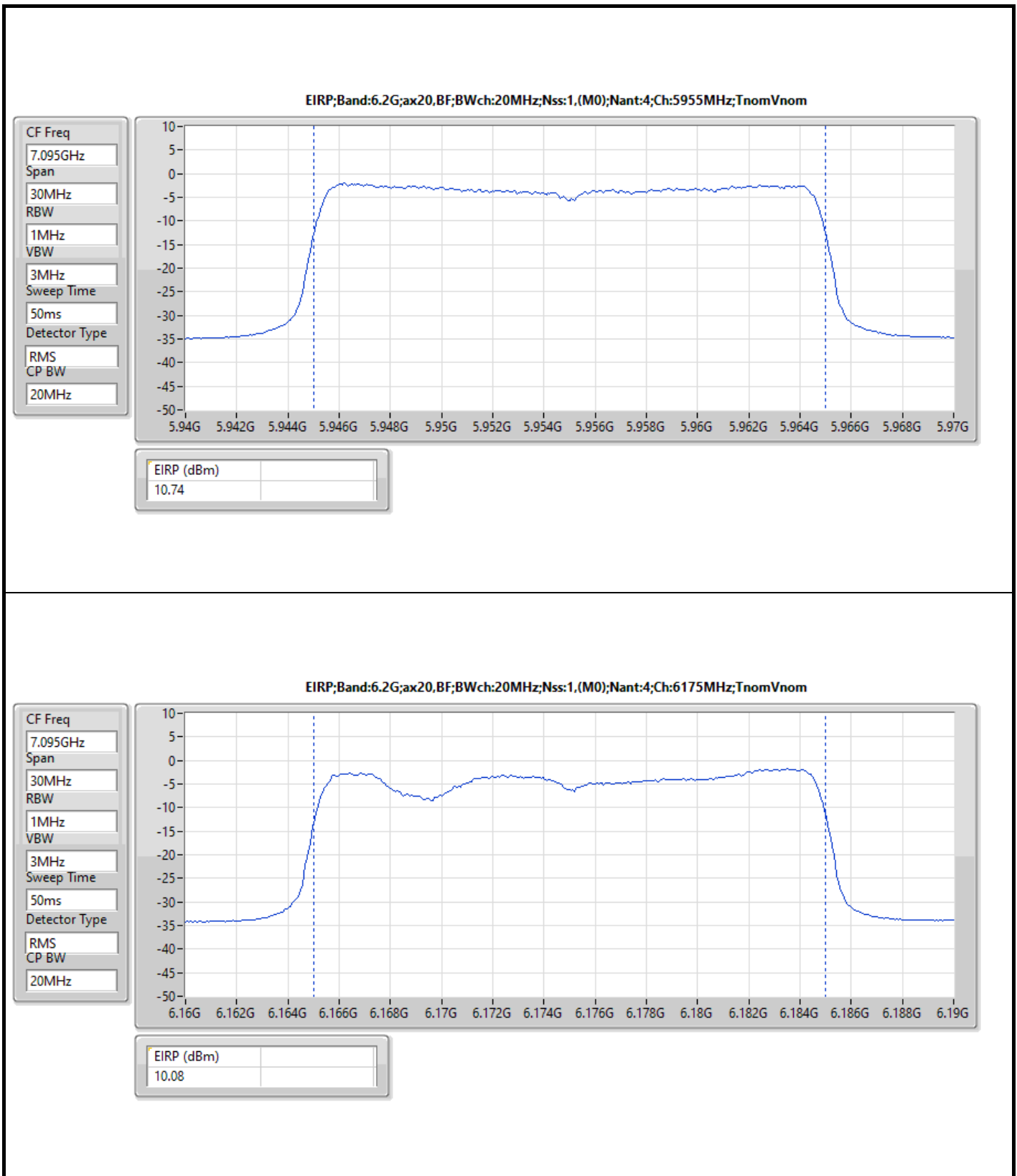
Summary

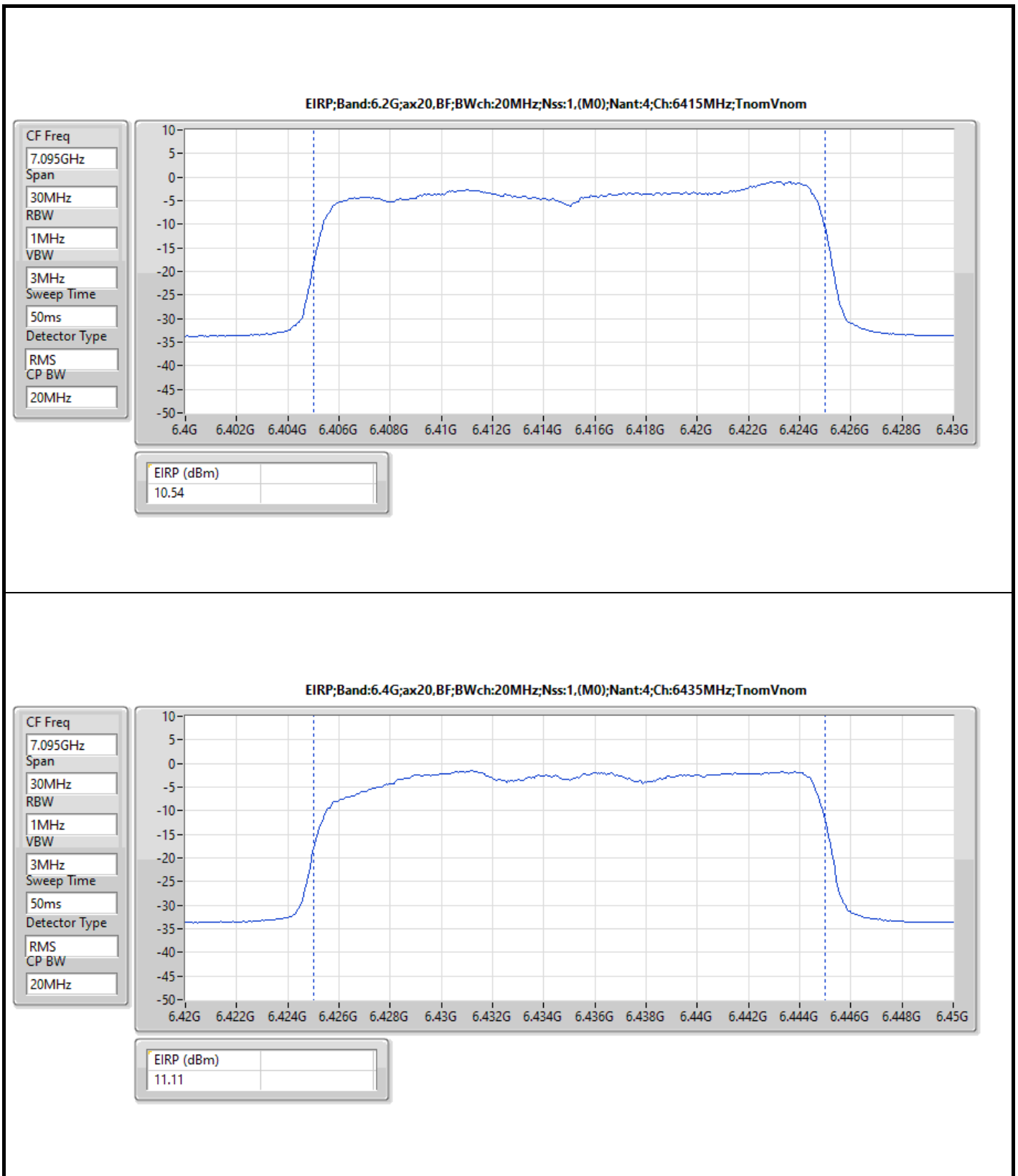
Mode	EIRP (dBm)	EIRP (W)
5.925-6.425GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	10.74	0.01186
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	14.22	0.02642
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	17.00	0.05012
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	21.33	0.13583
6.425-6.525GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	11.11	0.01291
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	13.99	0.02506
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	17.58	0.05728
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	20.67	0.11668
6.525-6.875GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	12.71	0.01866
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	16.18	0.04150
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	19.34	0.08590
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	21.15	0.13032
6.875-7.125GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	12.16	0.01644
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	16.12	0.04093
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	17.62	0.05781
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	20.74	0.11858

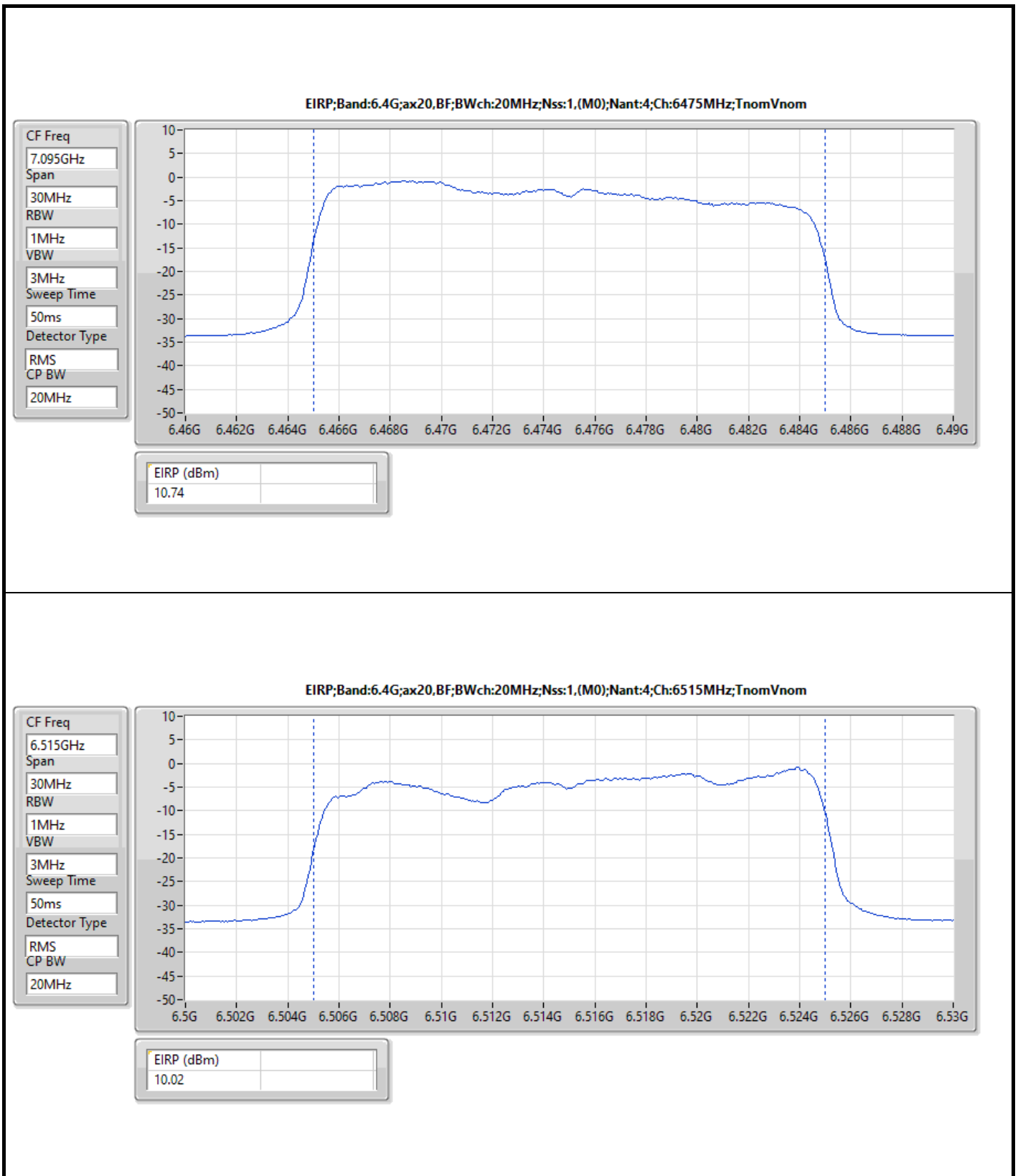
Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-
5955MHz	Pass	12.07	10.74	30.00
6175MHz	Pass	12.07	10.08	30.00
6415MHz	Pass	12.07	10.54	30.00
6435MHz	Pass	12.07	11.11	30.00
6475MHz	Pass	12.07	10.74	30.00
6515MHz	Pass	12.07	10.02	30.00
6535MHz	Pass	12.07	11.01	30.00
6695MHz	Pass	12.07	10.6	30.00
6855MHz	Pass	12.07	10.97	30.00
6875MHz Straddle 6.525-6.875GHz	Pass	12.07	12.71	30.00
6895MHz	Pass	12.07	11.58	30.00
6995MHz	Pass	12.07	12.16	30.00
7095MHz	Pass	12.07	10.01	30.00
7115 MHz	Pass	12.07	10.3	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-
5965MHz	Pass	12.07	13.72	30.00
6165MHz	Pass	12.07	13.38	30.00
6405MHz	Pass	12.07	14.22	30.00
6445MHz	Pass	12.07	13.33	30.00
6485MHz	Pass	12.07	13.99	30.00
6525MHz Straddle 6.425-6.525GHz	Pass	12.07	13.56	30.00
6565MHz	Pass	12.07	14.71	30.00
6685MHz	Pass	12.07	16.13	30.00
6845MHz	Pass	12.07	16.18	30.00
6885MHz Straddle 6.525-6.875GHz	Pass	12.07	15.62	30.00
6925MHz	Pass	12.07	16.12	30.00
7005MHz	Pass	12.07	14.40	30.00
7085MHz	Pass	12.07	13.76	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-
5985MHz	Pass	12.07	16.45	30.00
6145MHz	Pass	12.07	17	30.00
6385MHz	Pass	12.07	15.79	30.00
6465MHz	Pass	12.07	16.75	30.00
6545MHz Straddle 6.425-6.525GHz	Pass	12.07	17.58	30.00
6625MHz	Pass	12.07	17.05	30.00
6705MHz	Pass	12.07	19.03	30.00
6785MHz	Pass	12.07	18.05	30.00
6865MHz Straddle 6.525-6.875GHz	Pass	12.07	19.34	30.00
6945MHz	Pass	12.07	17.62	30.00
7025MHz	Pass	12.07	15.47	30.00
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-
6025MHz	Pass	12.07	21.33	30.00
6185MHz	Pass	12.07	20.36	30.00
6345MHz	Pass	12.07	19.38	30.00
6505MHz Straddle 6.425-6.525GHz	Pass	12.07	20.67	30.00
6665MHz	Pass	12.07	21.15	30.00
6825MHz Straddle 6.525-6.875GHz	Pass	12.07	20.17	30.00
6985MHz	Pass	12.07	20.74	30.00

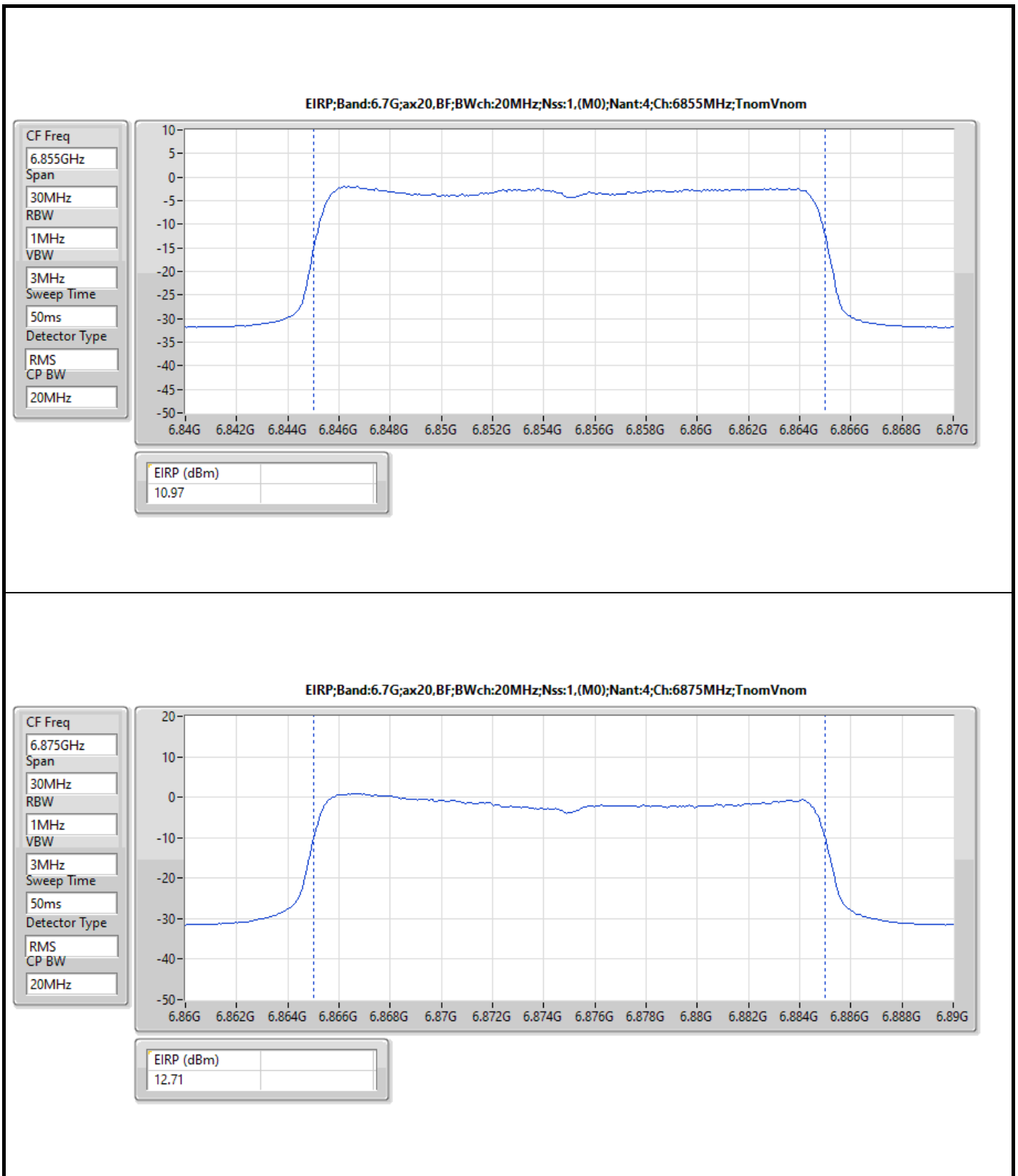
Note: DG = Directional Gain
The test result used radiated measurement.

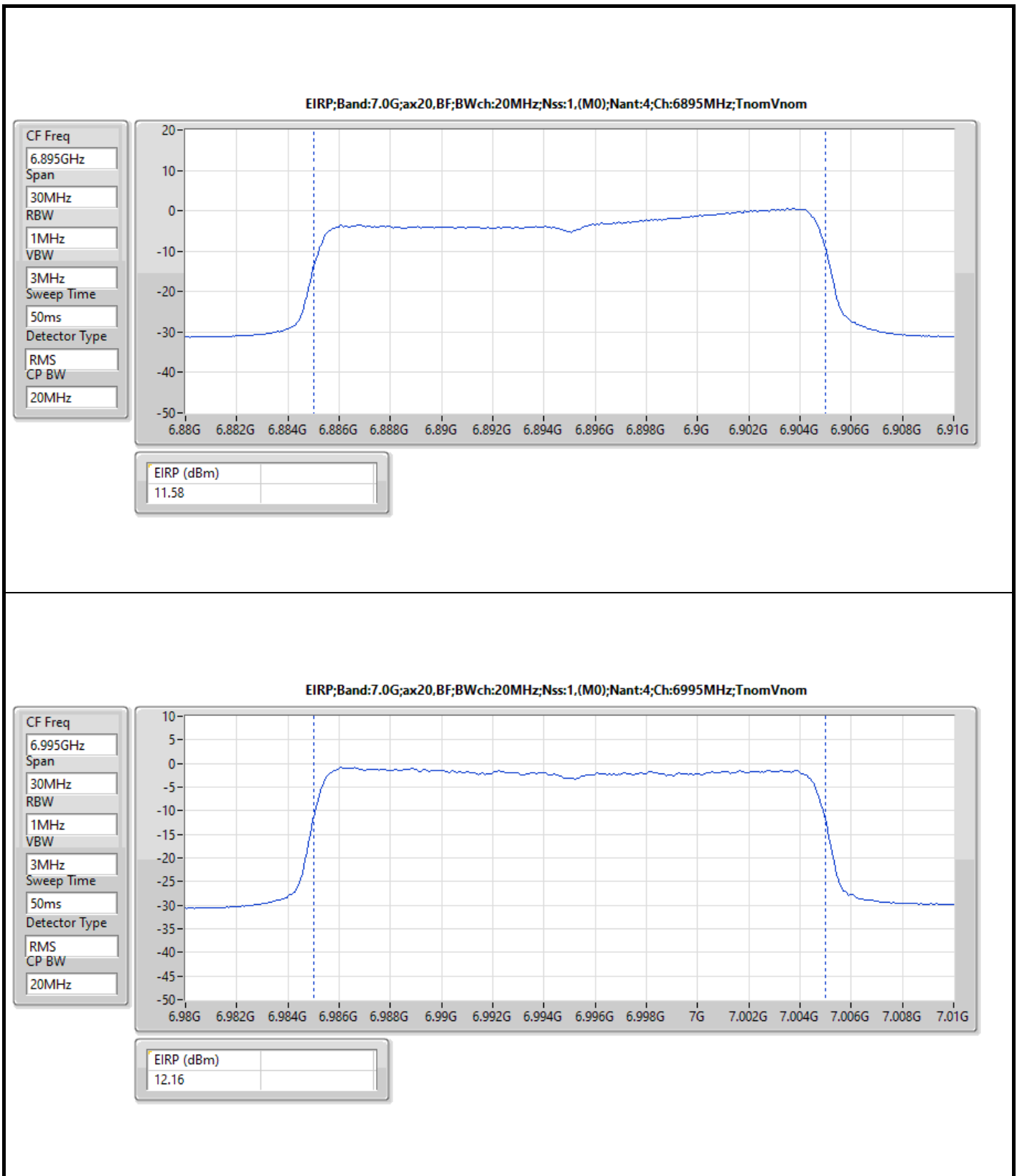








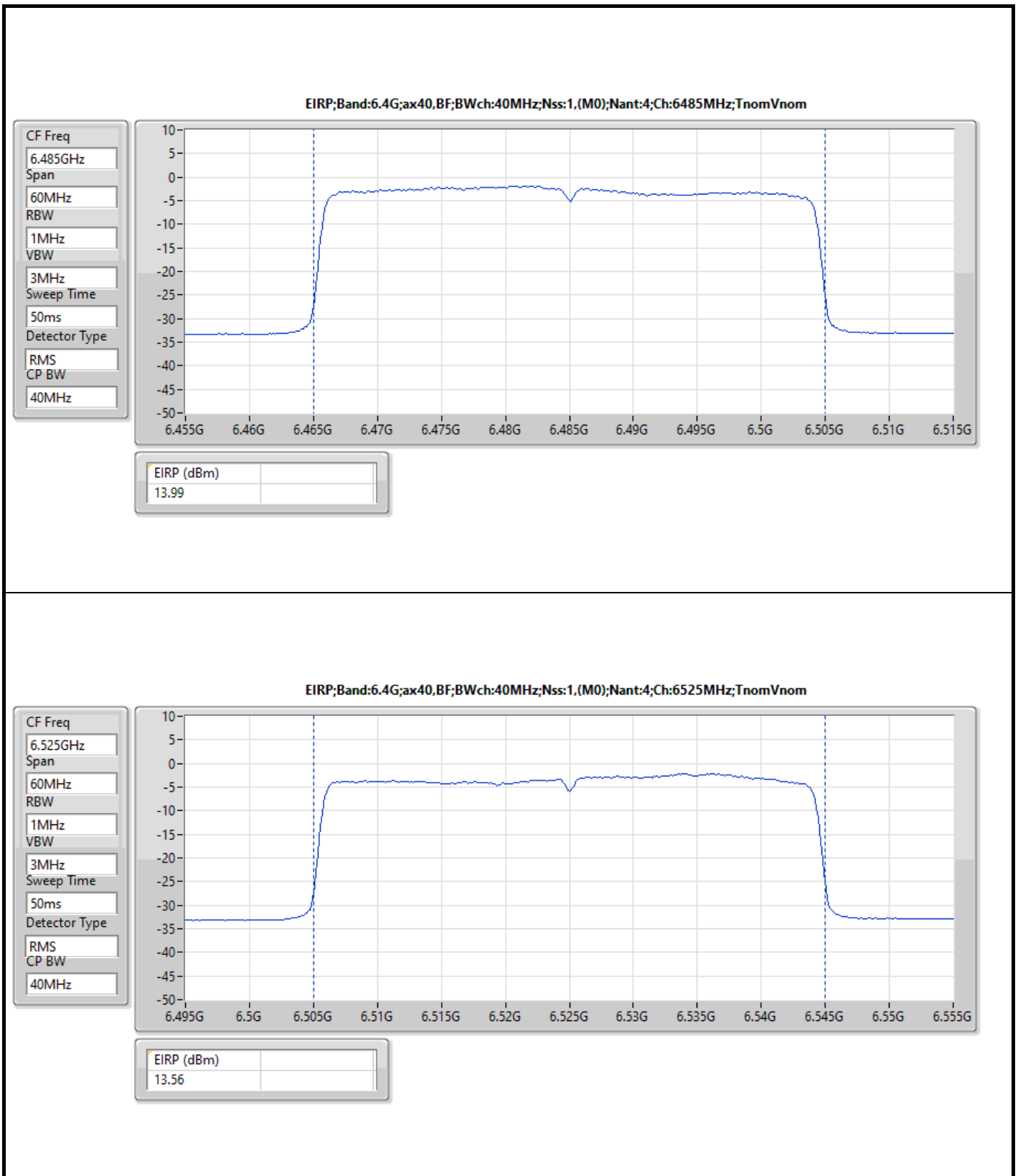






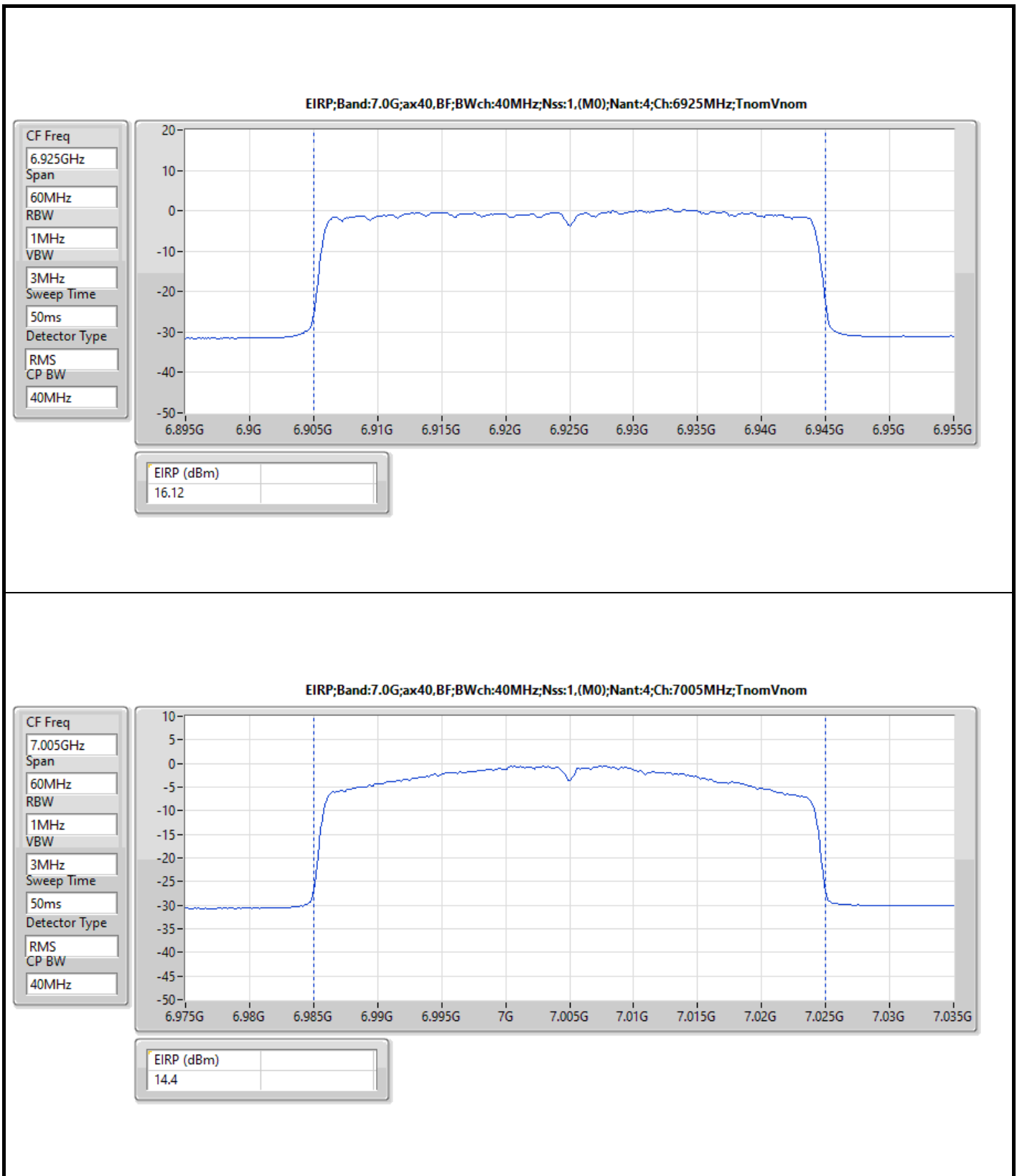




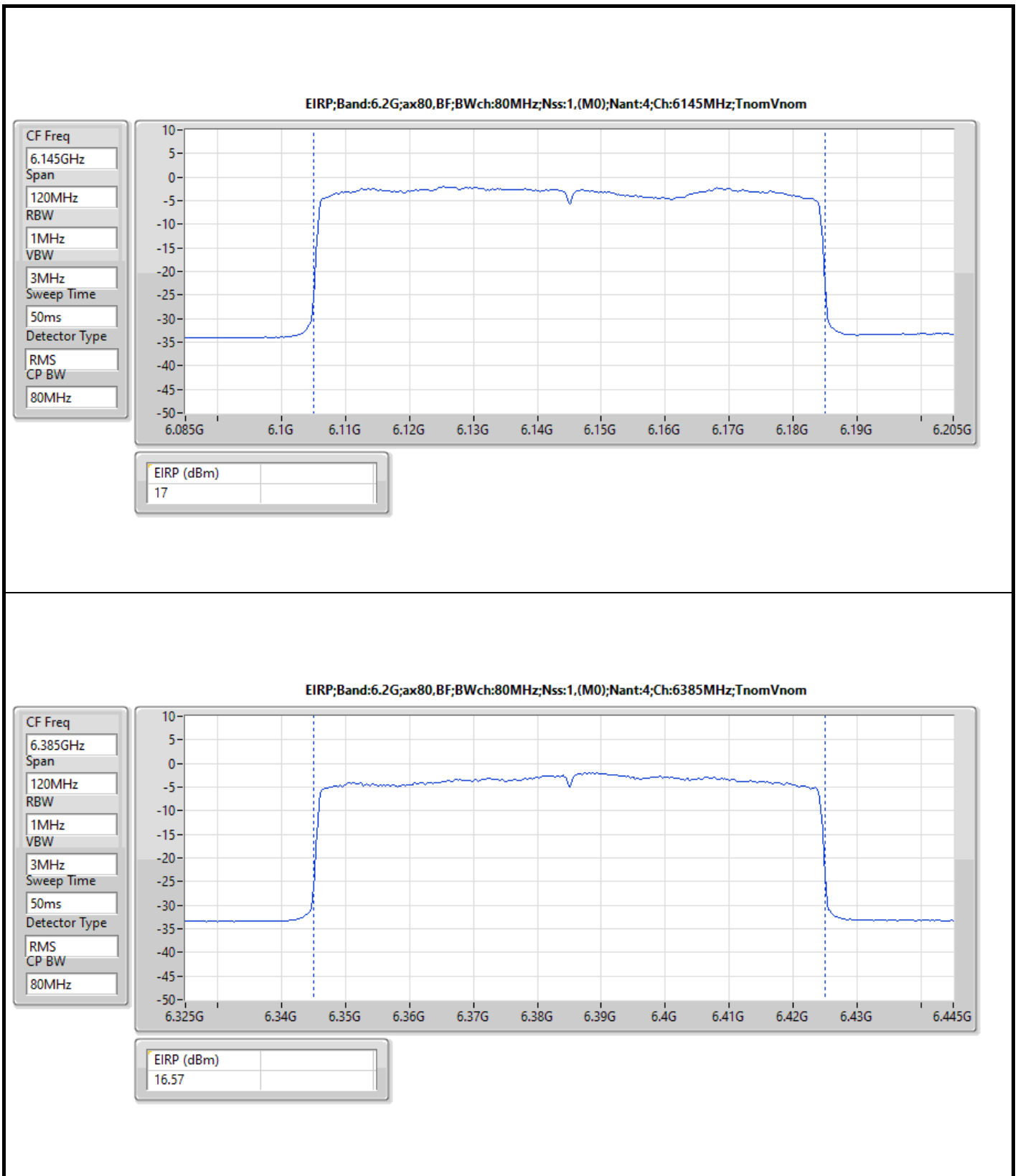


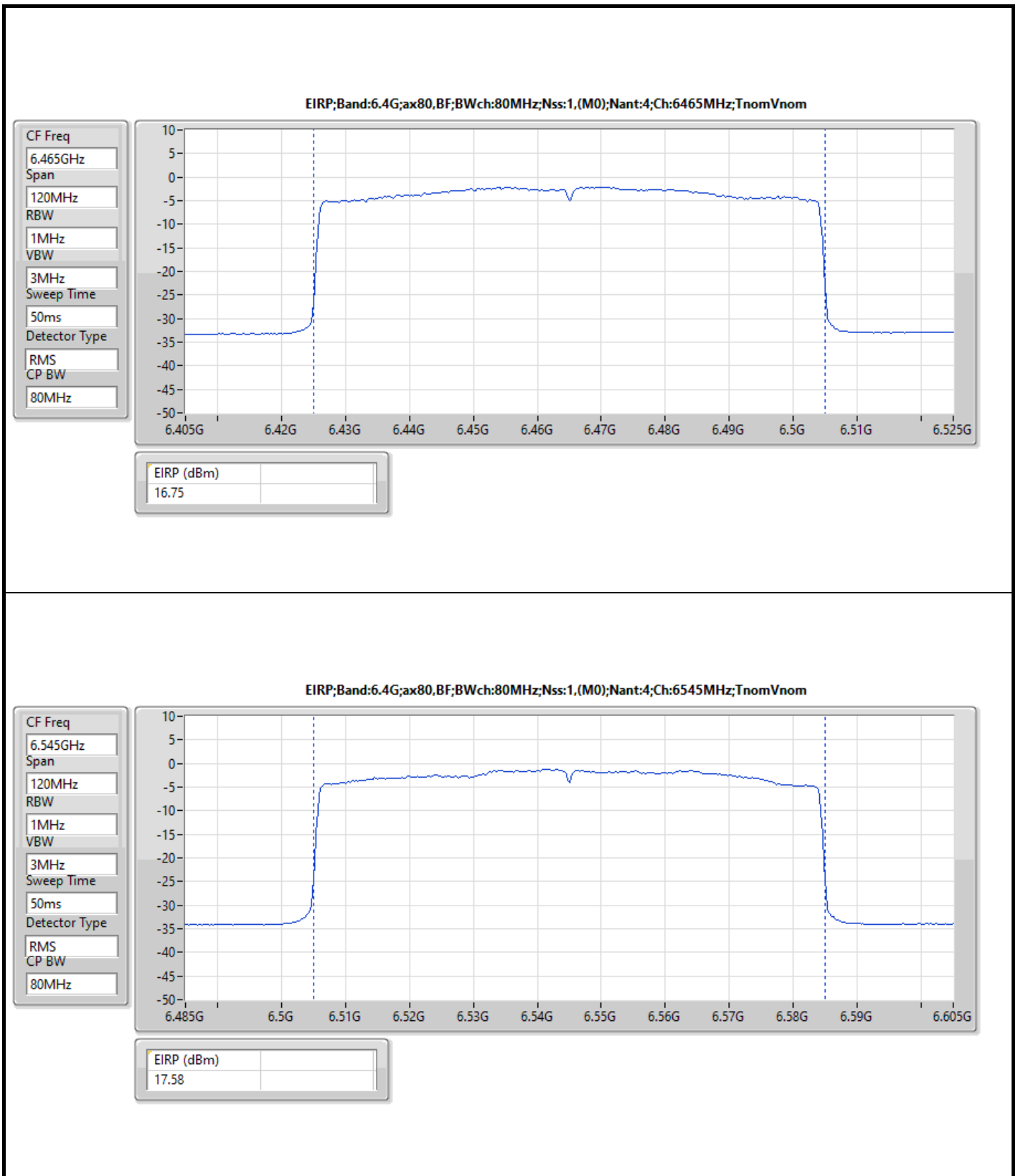


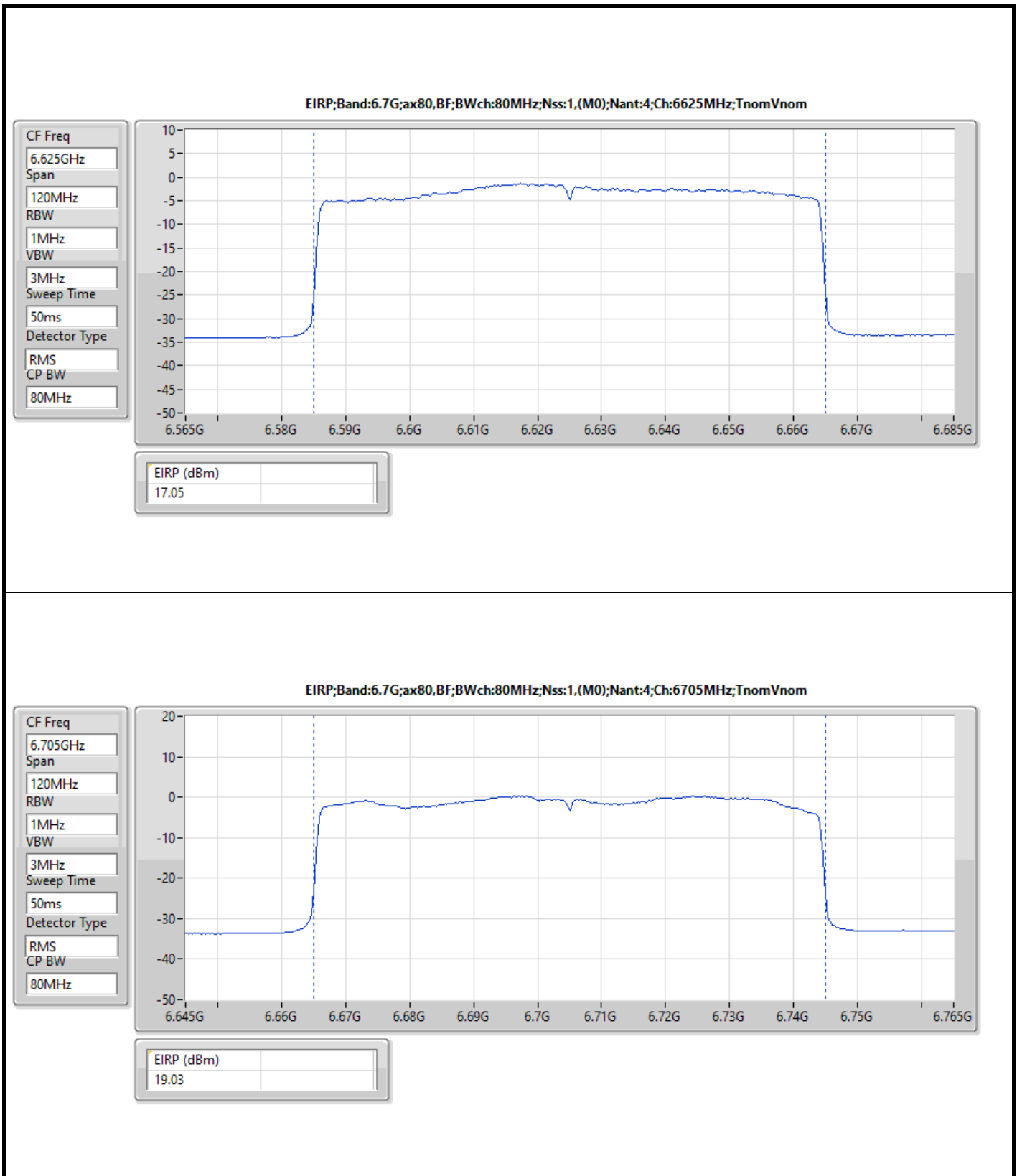


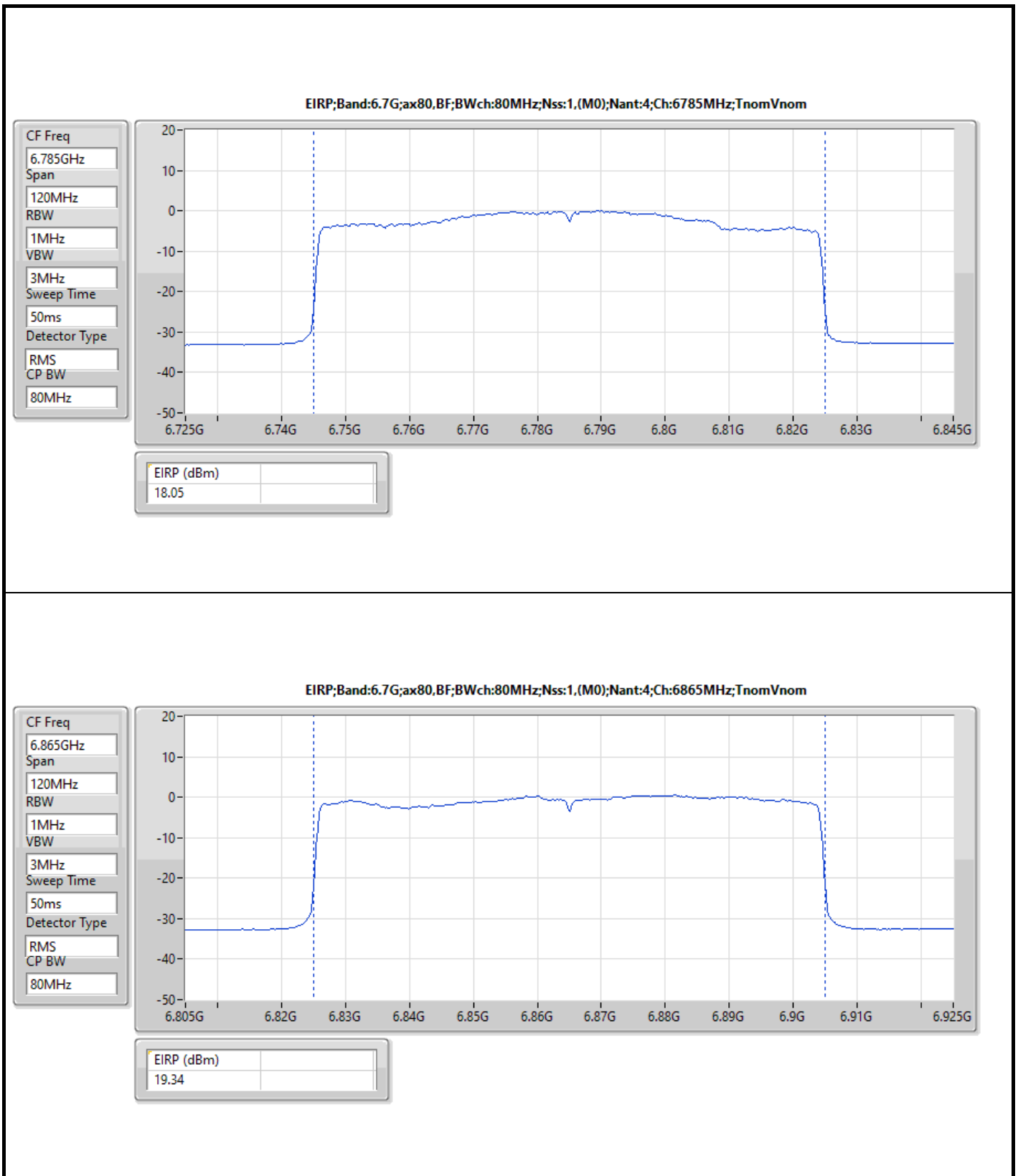


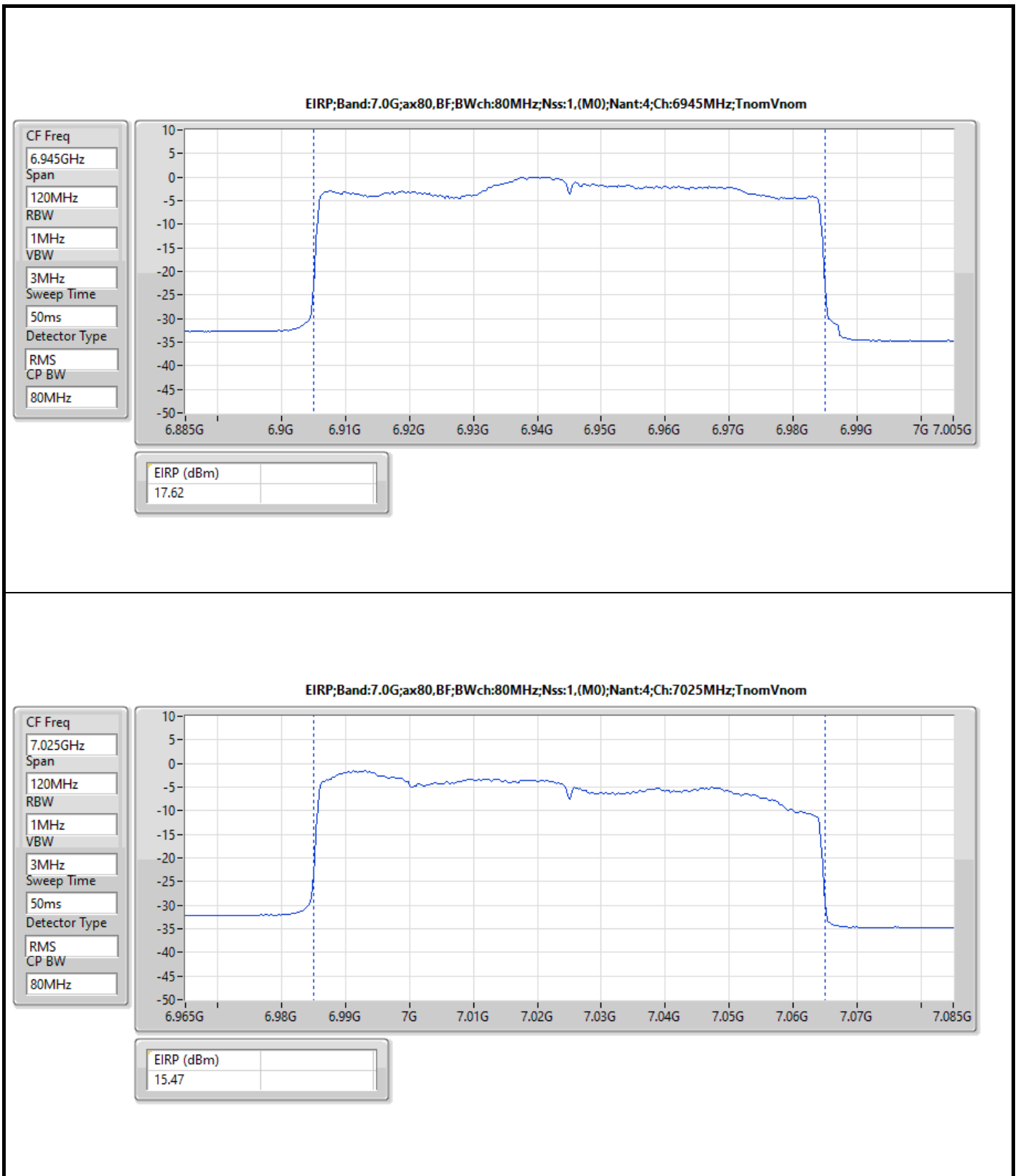




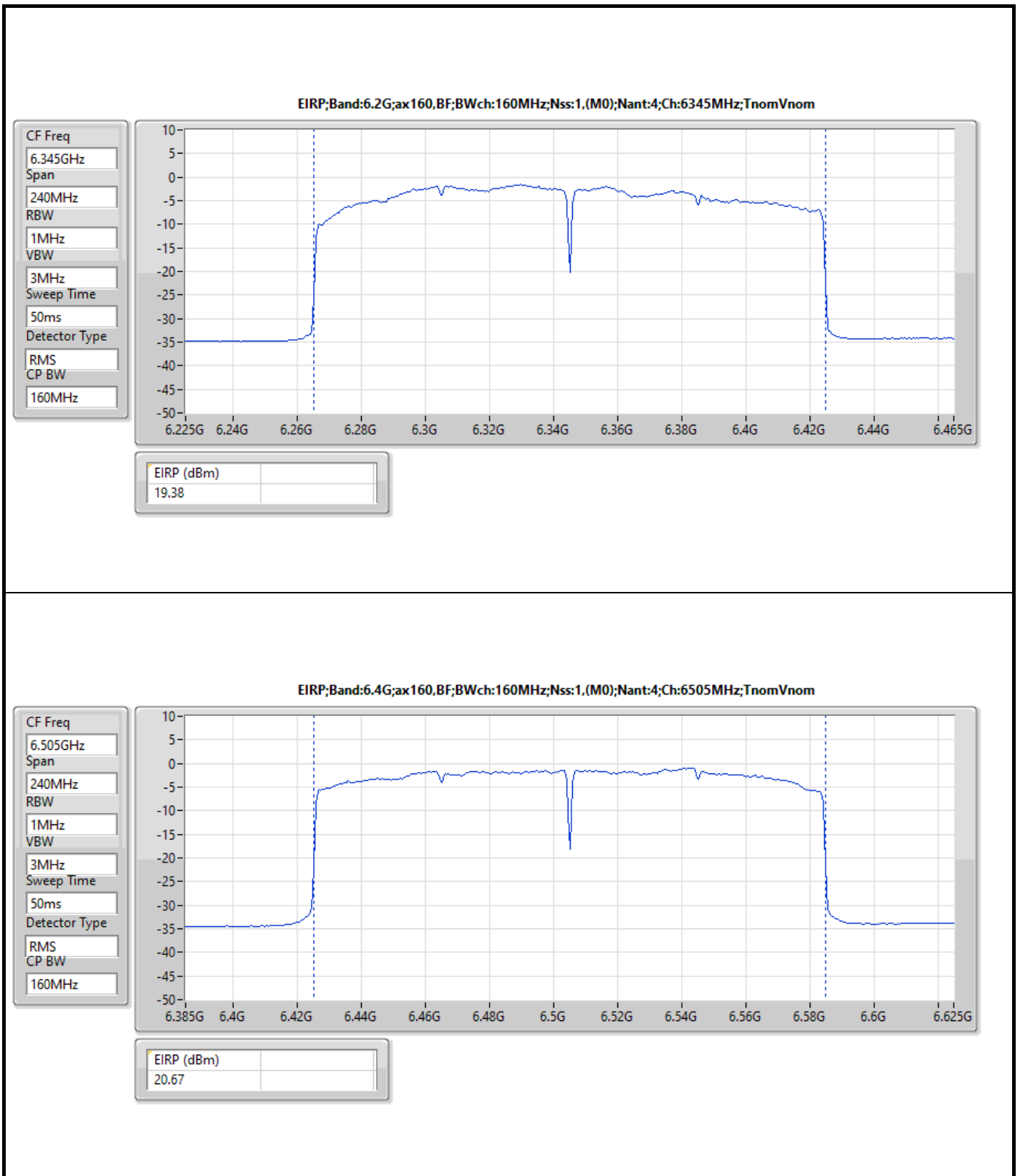




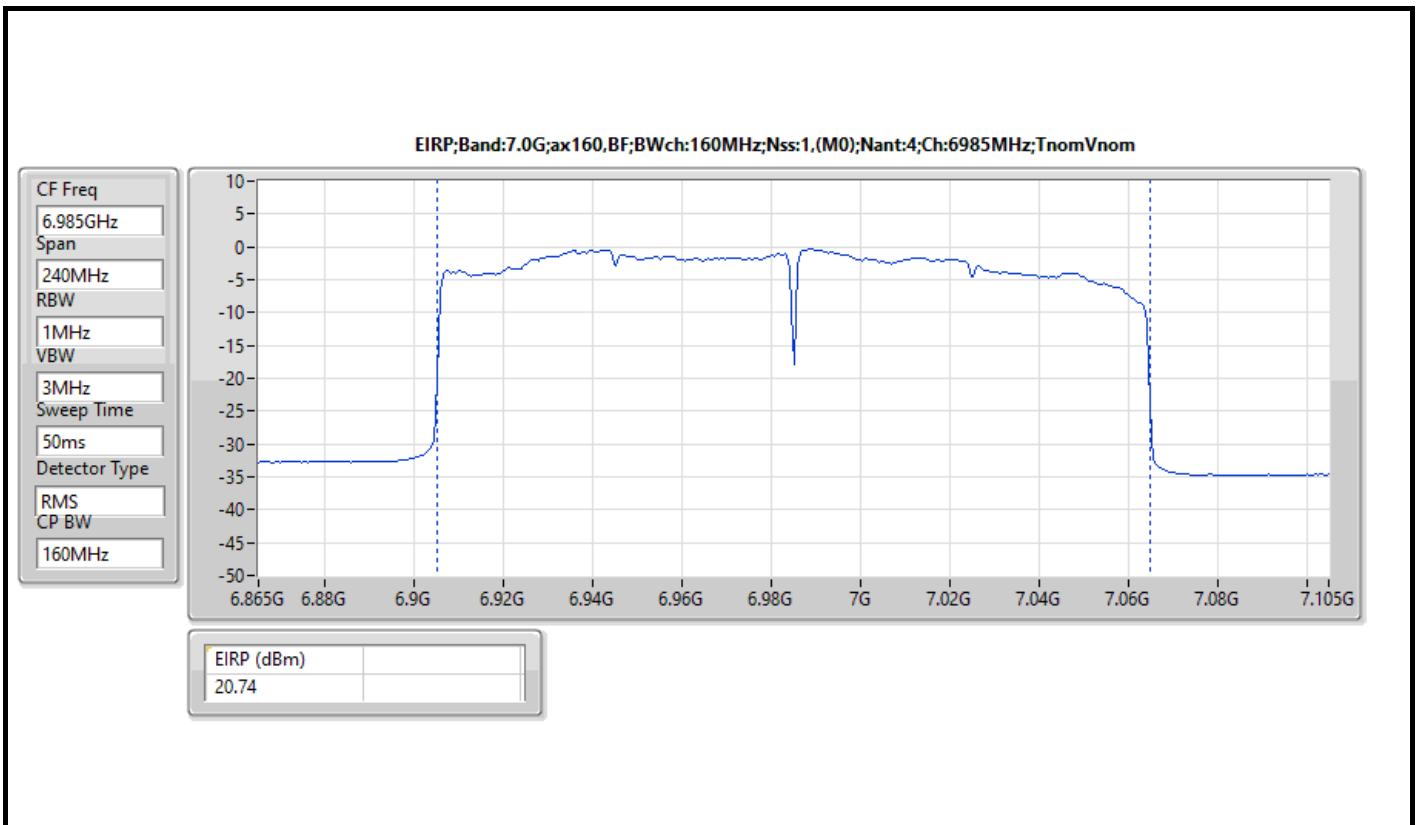












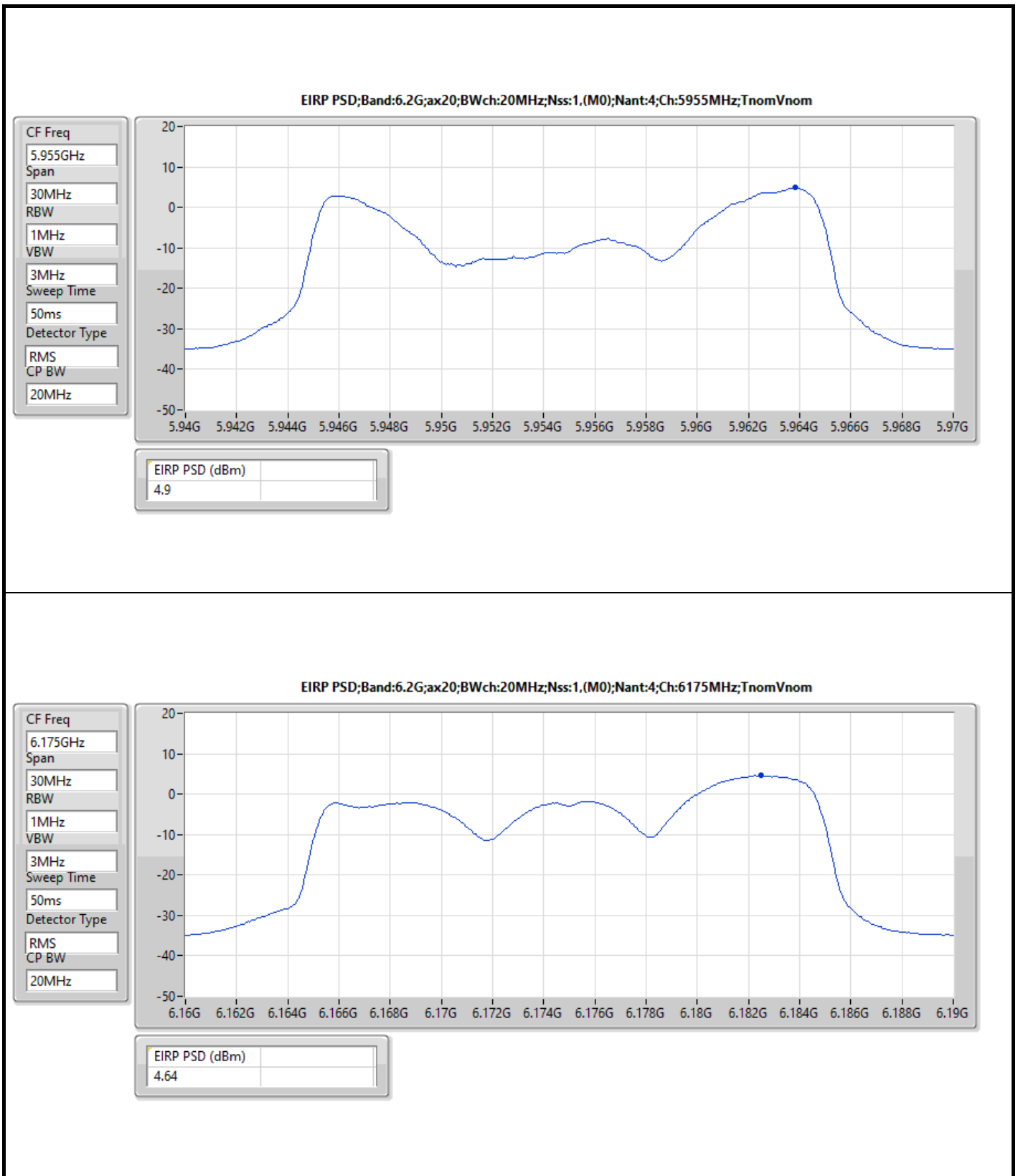
Summary

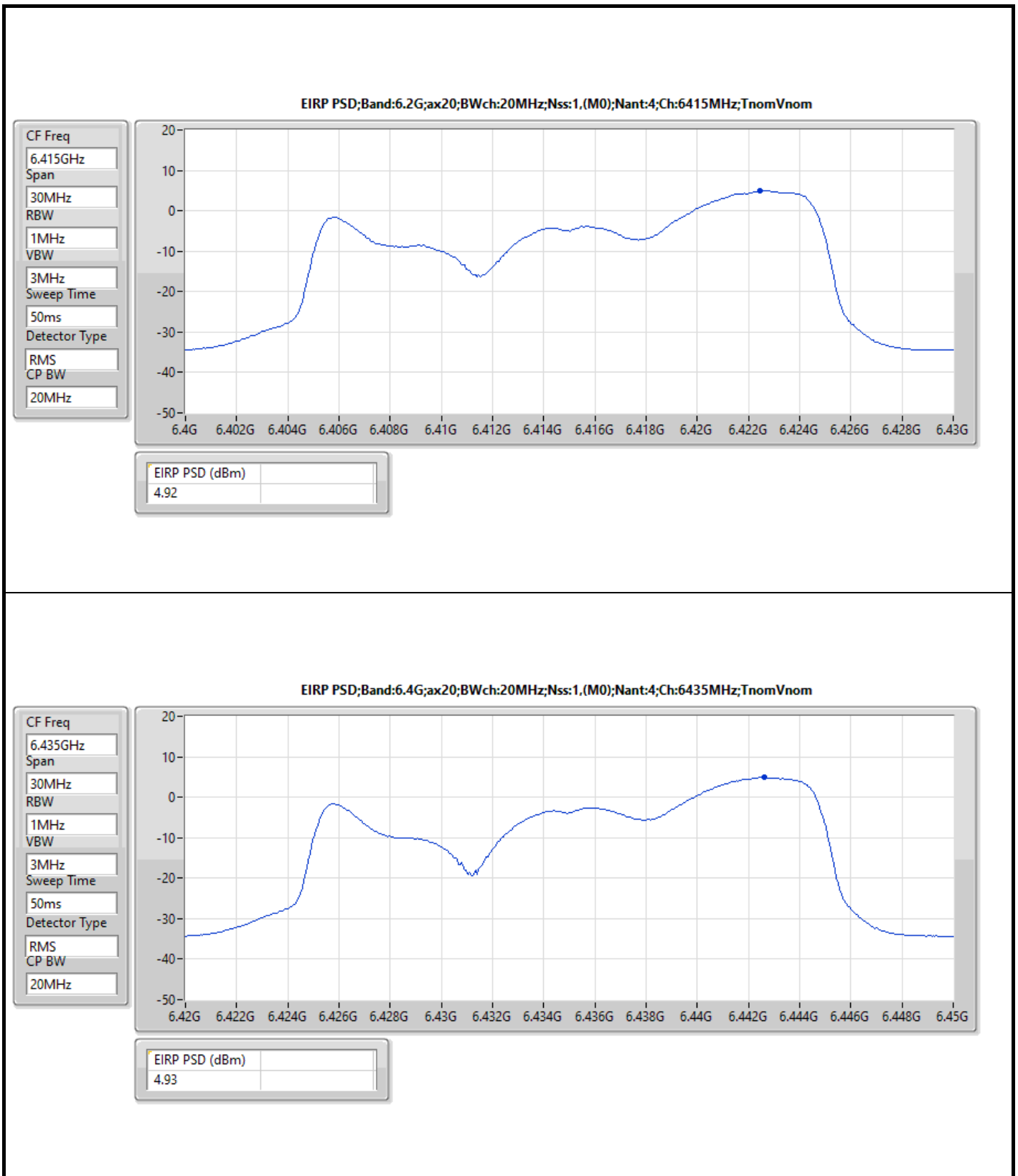
Mode	EIRP PD (dBm/RBW)
5.925-6.425GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	4.92
802.11ax HEW40_Nss1,(MCS0)_4TX	4.89
802.11ax HEW80_Nss1,(MCS0)_4TX	4.77
802.11ax HEW160_Nss1,(MCS0)_4TX	4.99
6.425-6.525GHz	
802.11ax HEW20_Nss1,(MCS0)_4TX	4.98
802.11ax HEW40_Nss1,(MCS0)_4TX	4.89
802.11ax HEW80_Nss1,(MCS0)_4TX	4.95
802.11ax HEW160_Nss1,(MCS0)_4TX	4.85
6.525-6.875GHz	
802.11ax HEW20_Nss1,(MCS0)_4TX	4.99
802.11ax HEW40_Nss1,(MCS0)_4TX	4.91
802.11ax HEW80_Nss1,(MCS0)_4TX	4.93
802.11ax HEW160_Nss1,(MCS0)_4TX	4.77
6.875-7.125GHz	
802.11ax HEW20_Nss1,(MCS0)_4TX	4.85
802.11ax HEW40_Nss1,(MCS0)_4TX	4.99
802.11ax HEW80_Nss1,(MCS0)_4TX	4.67
802.11ax HEW160_Nss1,(MCS0)_4TX	4.80

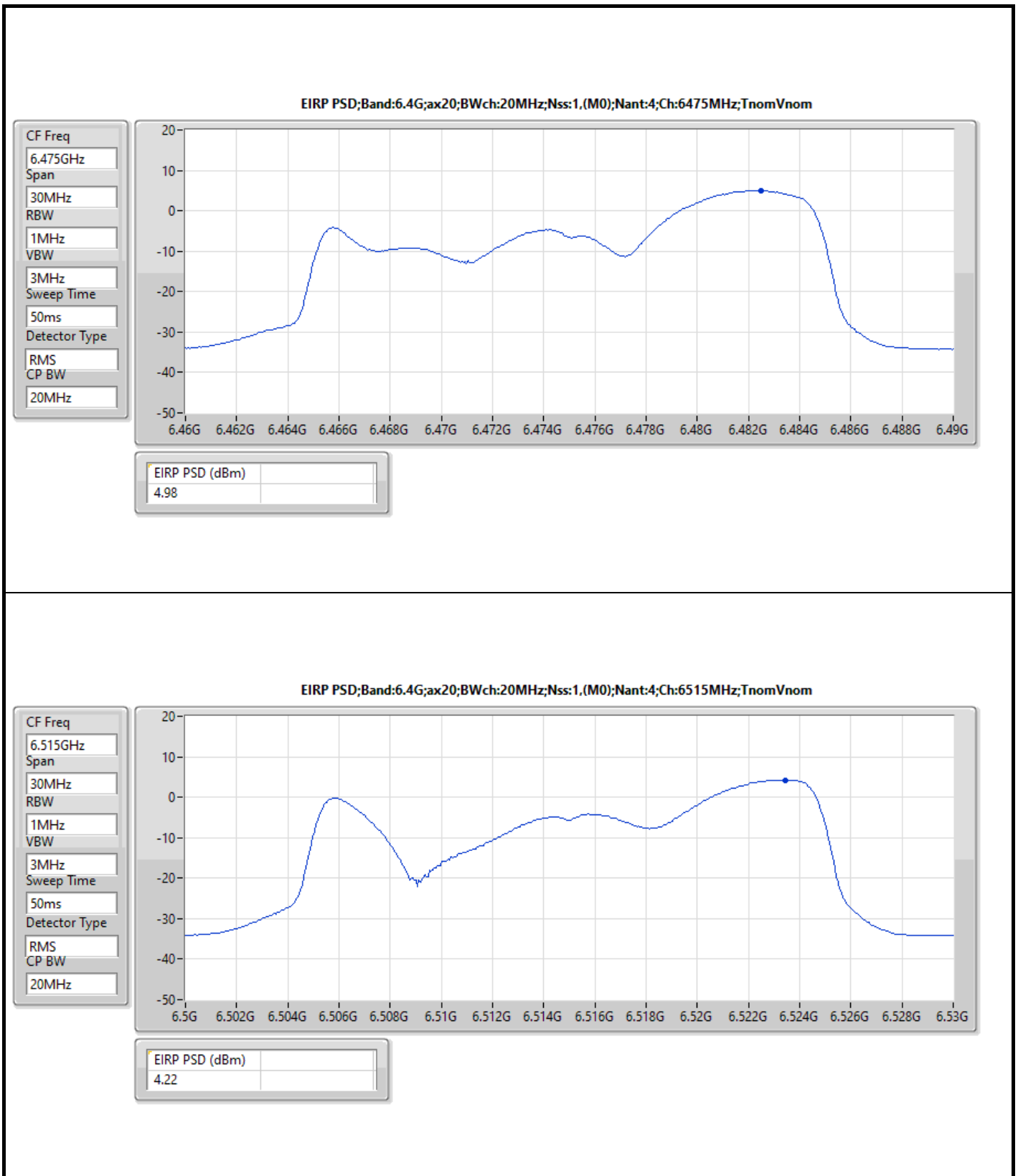
Result

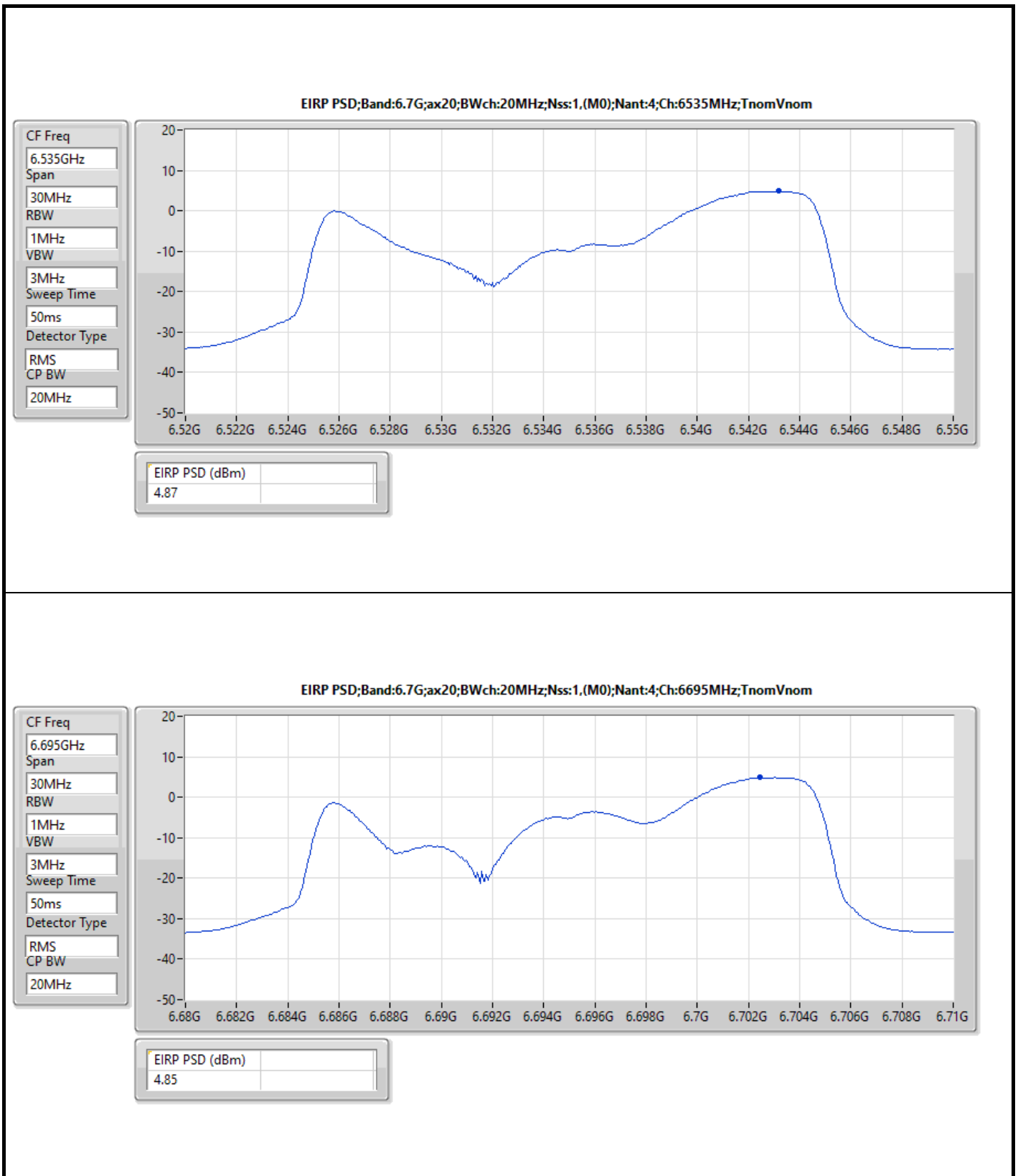
Mode	Result	DG (dBi)	EIRP PSD (dBm/RBW)	EIRP PSD Limit (dBm/RBW)
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-
5955MHz	Pass	12.07	4.90	5.00
6175MHz	Pass	12.07	4.64	5.00
6415MHz	Pass	12.07	4.92	5.00
6435MHz	Pass	12.07	4.93	5.00
6475MHz	Pass	12.07	4.98	5.00
6515MHz	Pass	12.07	4.22	5.00
6535MHz	Pass	12.07	4.87	5.00
6695MHz	Pass	12.07	4.85	5.00
6855MHz	Pass	12.07	4.43	5.00
6875MHz Straddle 6.525-6.875GHz	Pass	12.07	4.99	5.00
6895MHz	Pass	12.07	4.58	5.00
6995MHz	Pass	12.07	4.85	5.00
7095MHz	Pass	12.07	4.51	5.00
7115 MHz	Pass	12.07	4.71	5.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-
5965MHz	Pass	12.07	4.89	5.00
6165MHz	Pass	12.07	4.61	5.00
6405MHz	Pass	12.07	4.57	5.00
6445MHz	Pass	12.07	4.66	5.00
6485MHz	Pass	12.07	4.65	5.00
6525MHz Straddle 6.425-6.525GHz	Pass	12.07	4.89	5.00
6565MHz	Pass	12.07	4.59	5.00
6685MHz	Pass	12.07	4.91	5.00
6845MHz	Pass	12.07	4.70	5.00
6885MHz Straddle 6.525-6.875GHz	Pass	12.07	4.88	5.00
6925MHz	Pass	12.07	4.58	5.00
7005MHz	Pass	12.07	4.99	5.00
7085MHz	Pass	12.07	4.96	5.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-
5985MHz	Pass	12.07	4.77	5.00
6145MHz	Pass	12.07	4.77	5.00
6385MHz	Pass	12.07	4.51	5.00
6465MHz	Pass	12.07	4.95	5.00
6545MHz Straddle 6.425-6.525GHz	Pass	12.07	4.90	5.00
6625MHz	Pass	12.07	4.63	5.00
6705MHz	Pass	12.07	4.61	5.00
6785MHz	Pass	12.07	4.93	5.00
6865MHz Straddle 6.525-6.875GHz	Pass	12.07	4.62	5.00
6945MHz	Pass	12.07	4.67	5.00
7025MHz	Pass	12.07	4.62	5.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-
6025MHz	Pass	12.07	4.99	5.00
6185MHz	Pass	12.07	4.57	5.00
6345MHz	Pass	12.07	4.87	5.00
6505MHz Straddle 6.425-6.525GHz	Pass	12.07	4.85	5.00
6665MHz	Pass	12.07	4.59	5.00
6825MHz Straddle 6.525-6.875GHz	Pass	12.07	4.77	5.00
6985MHz	Pass	12.07	4.80	5.00

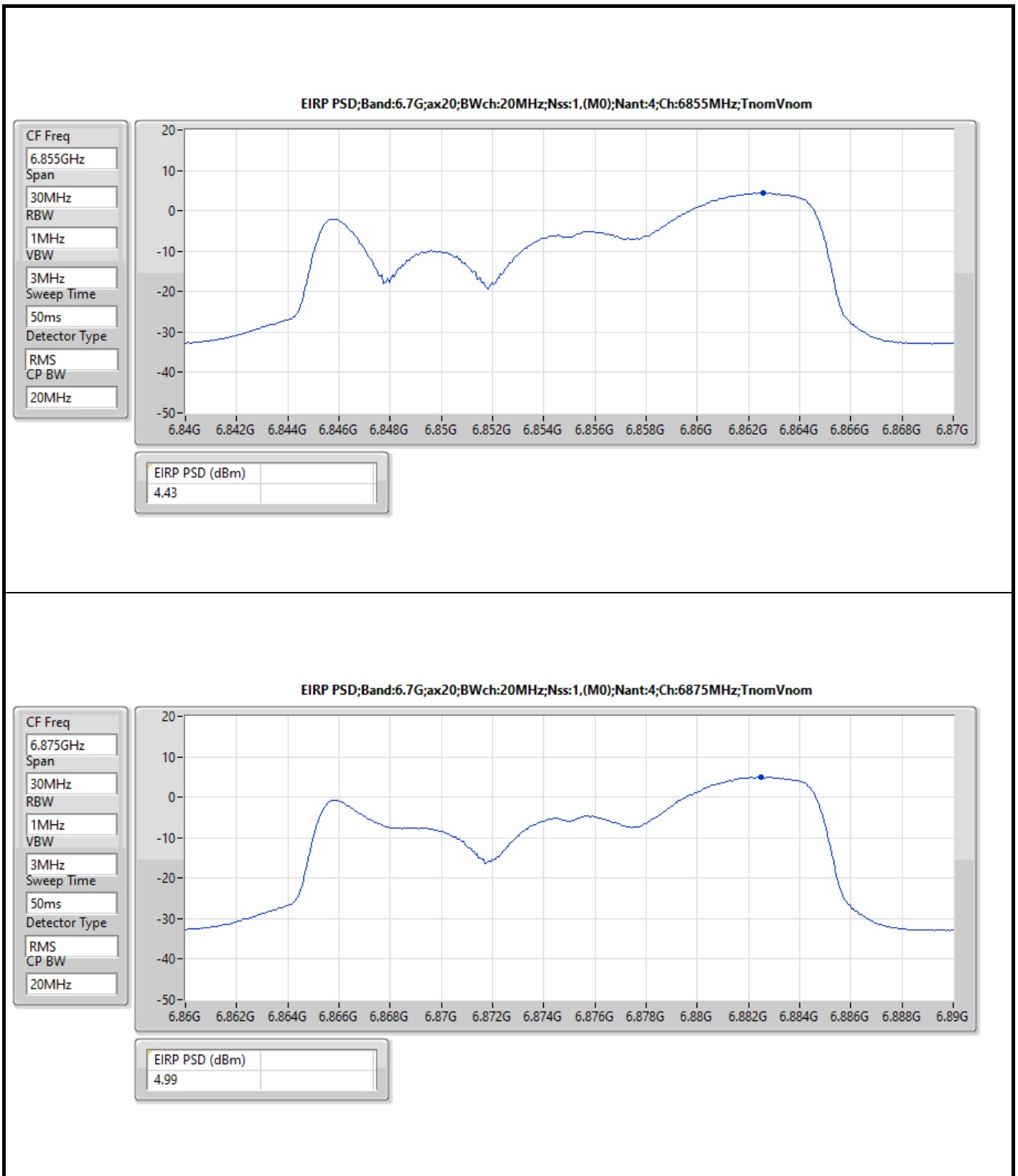
Note: The test result used radiated measurement.

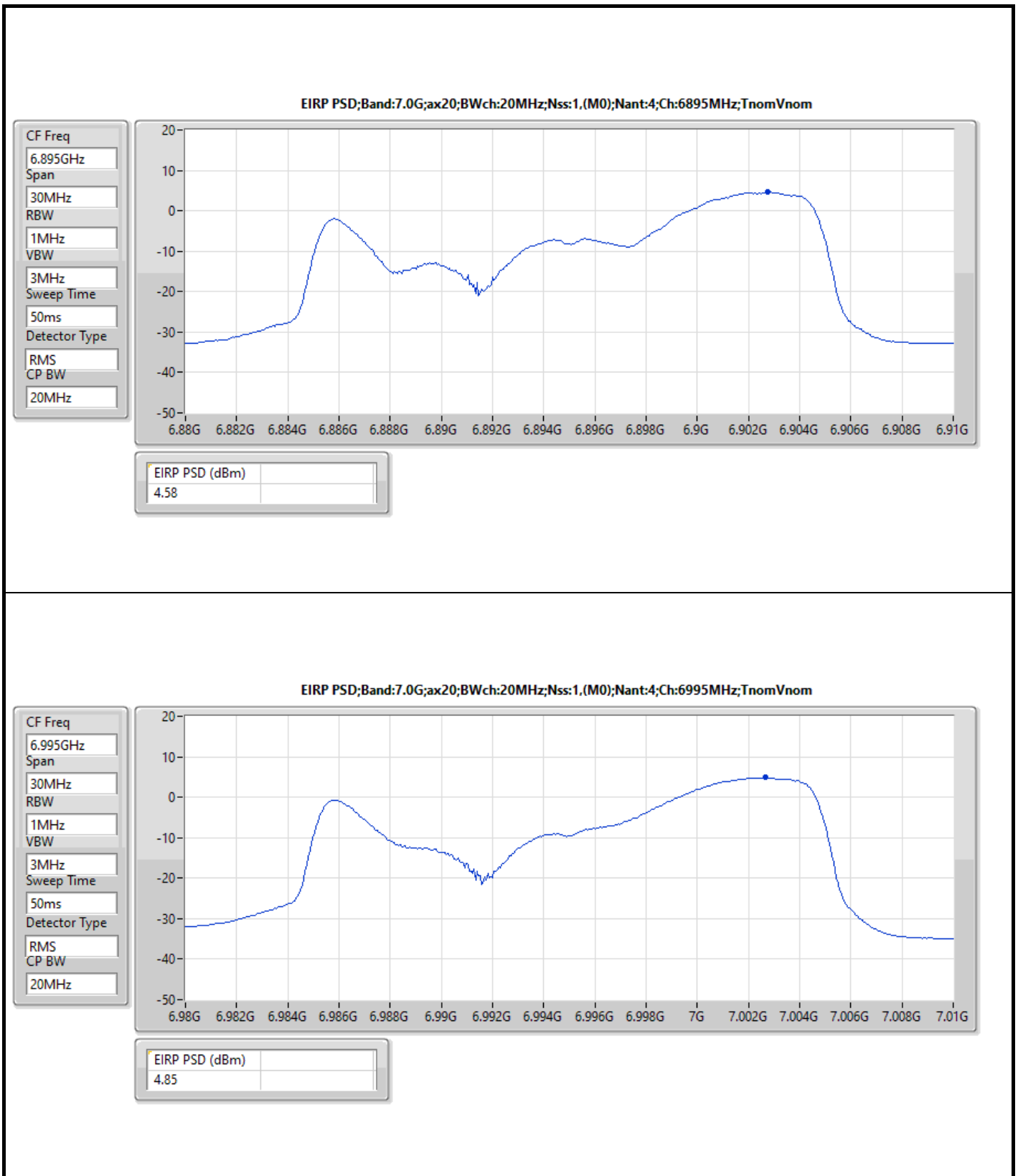


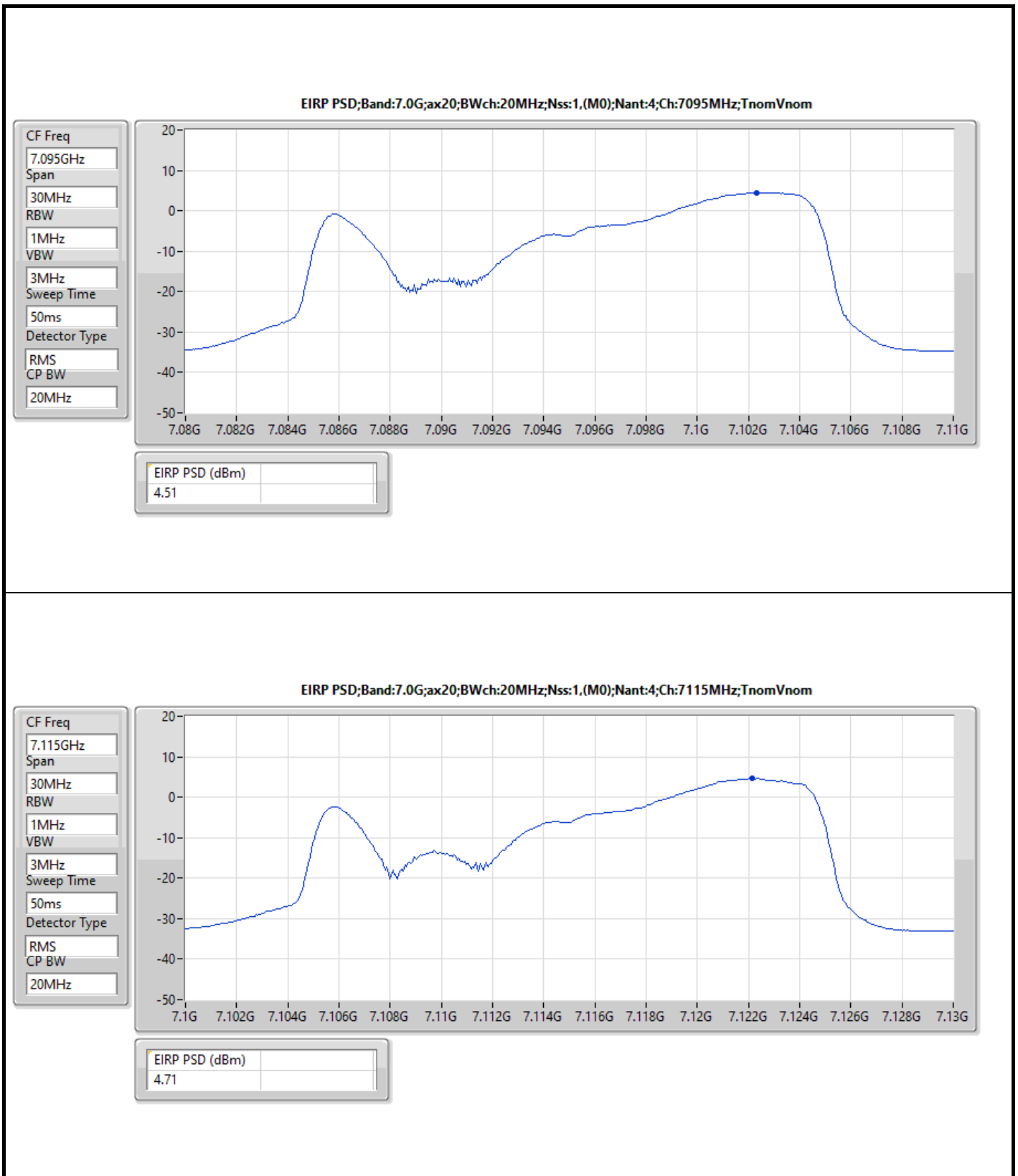


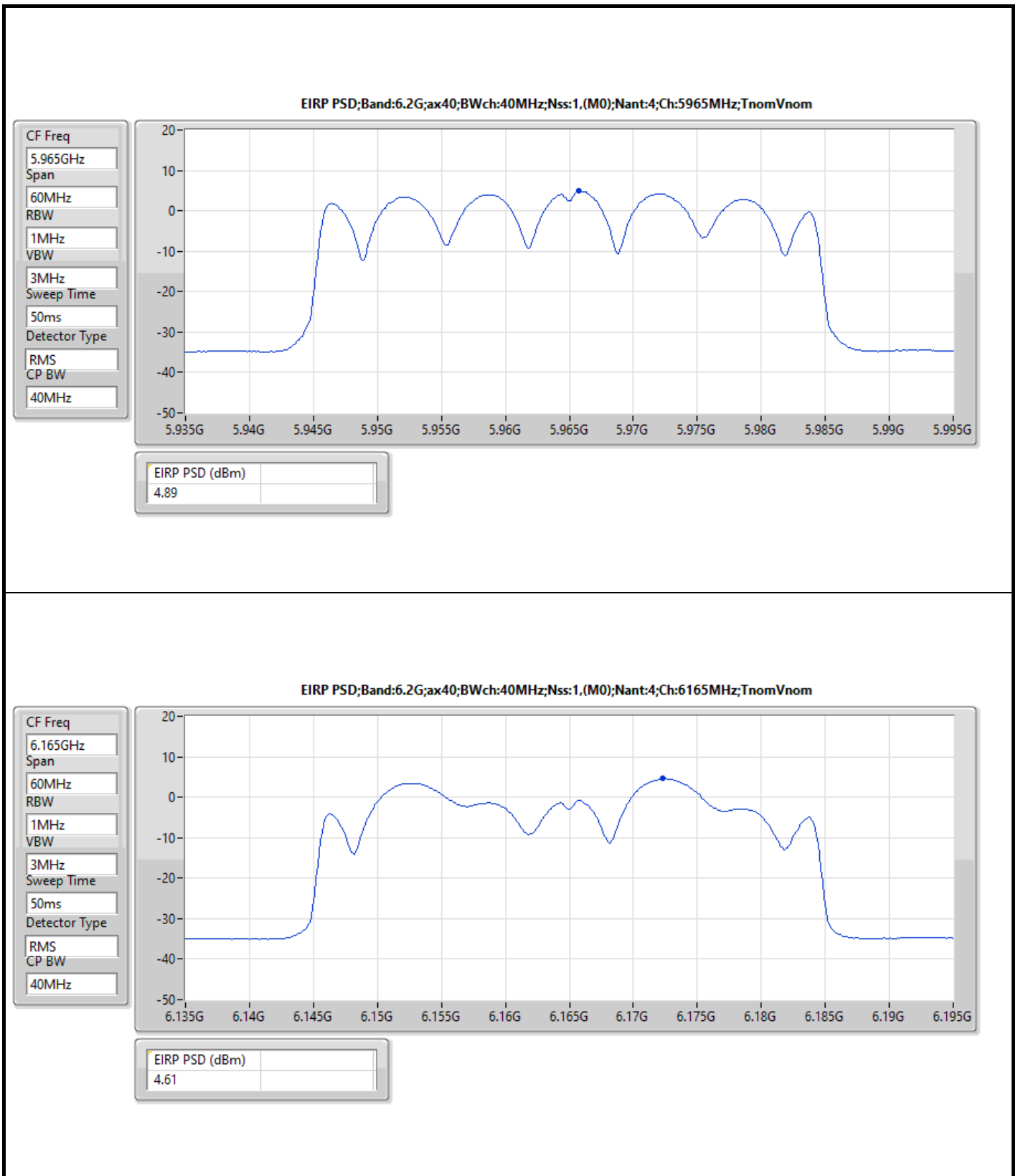






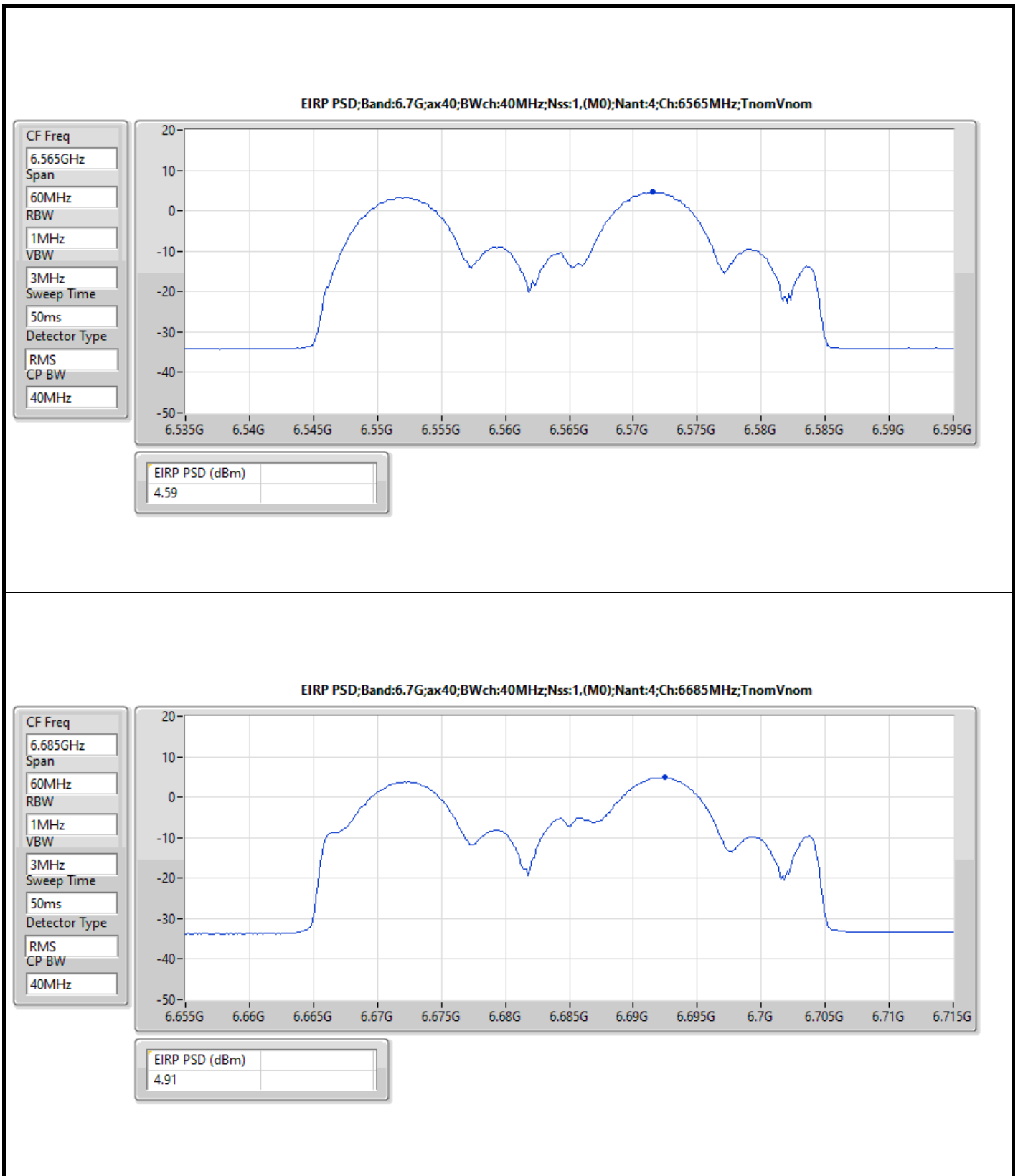






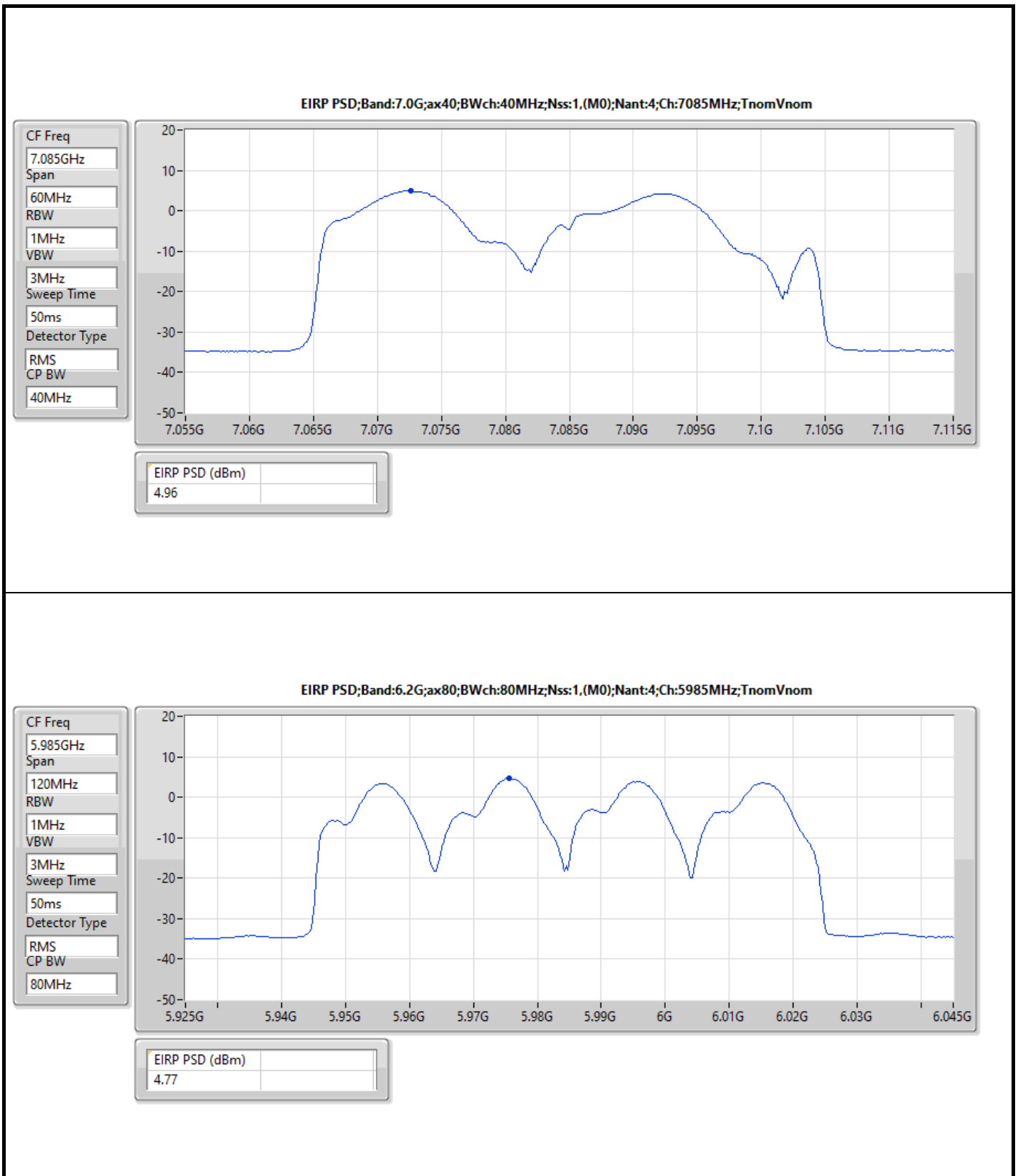


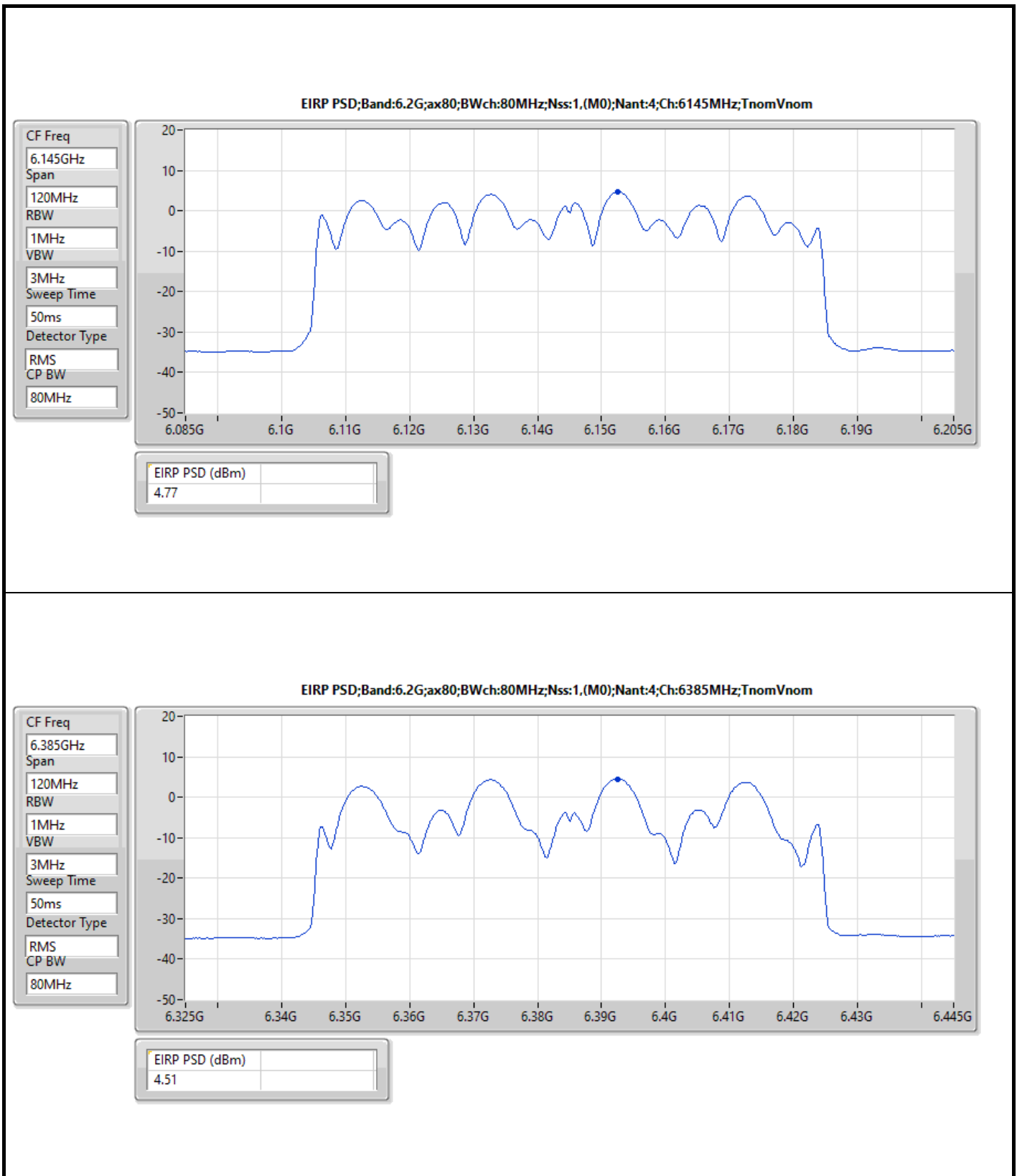




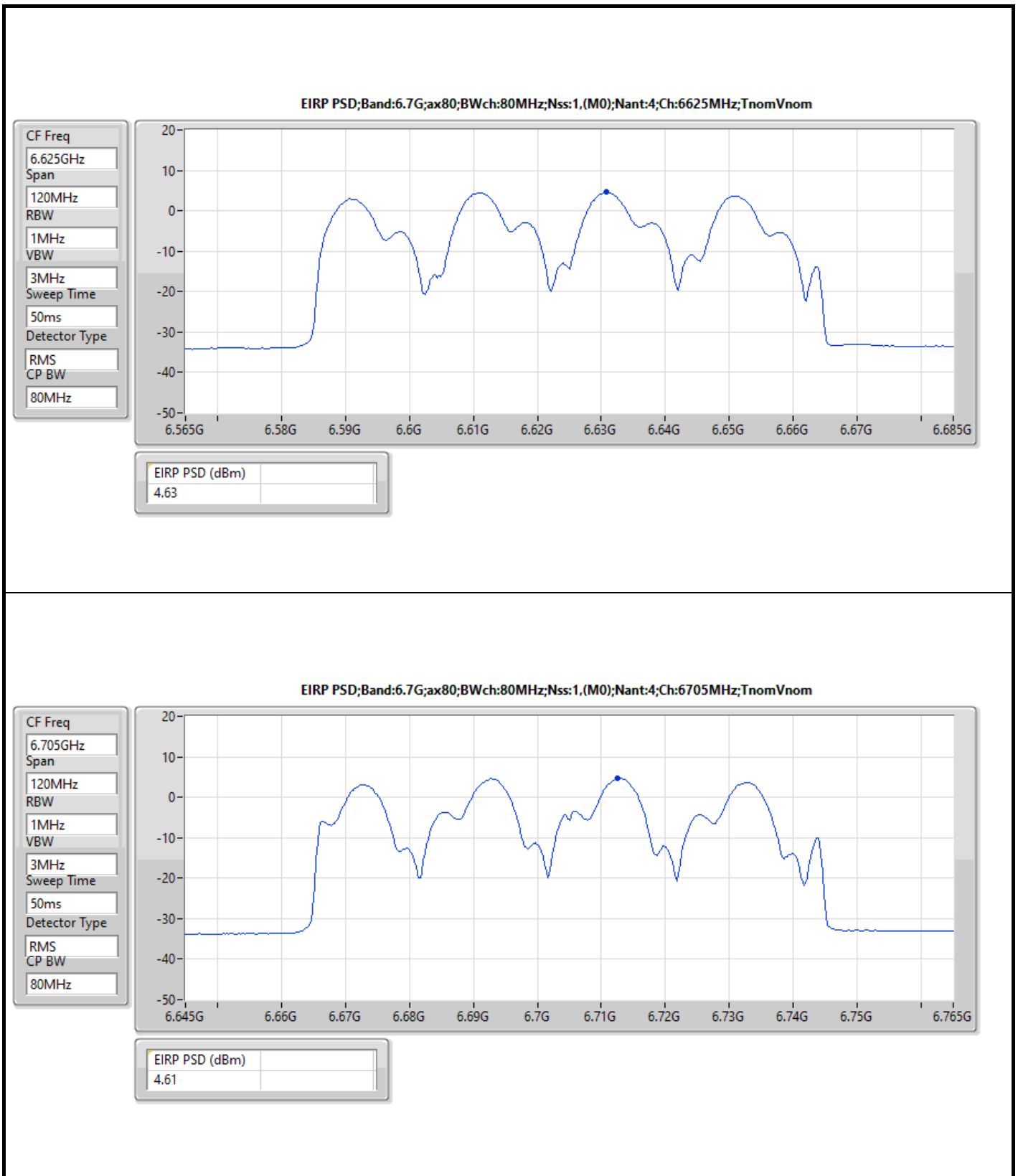




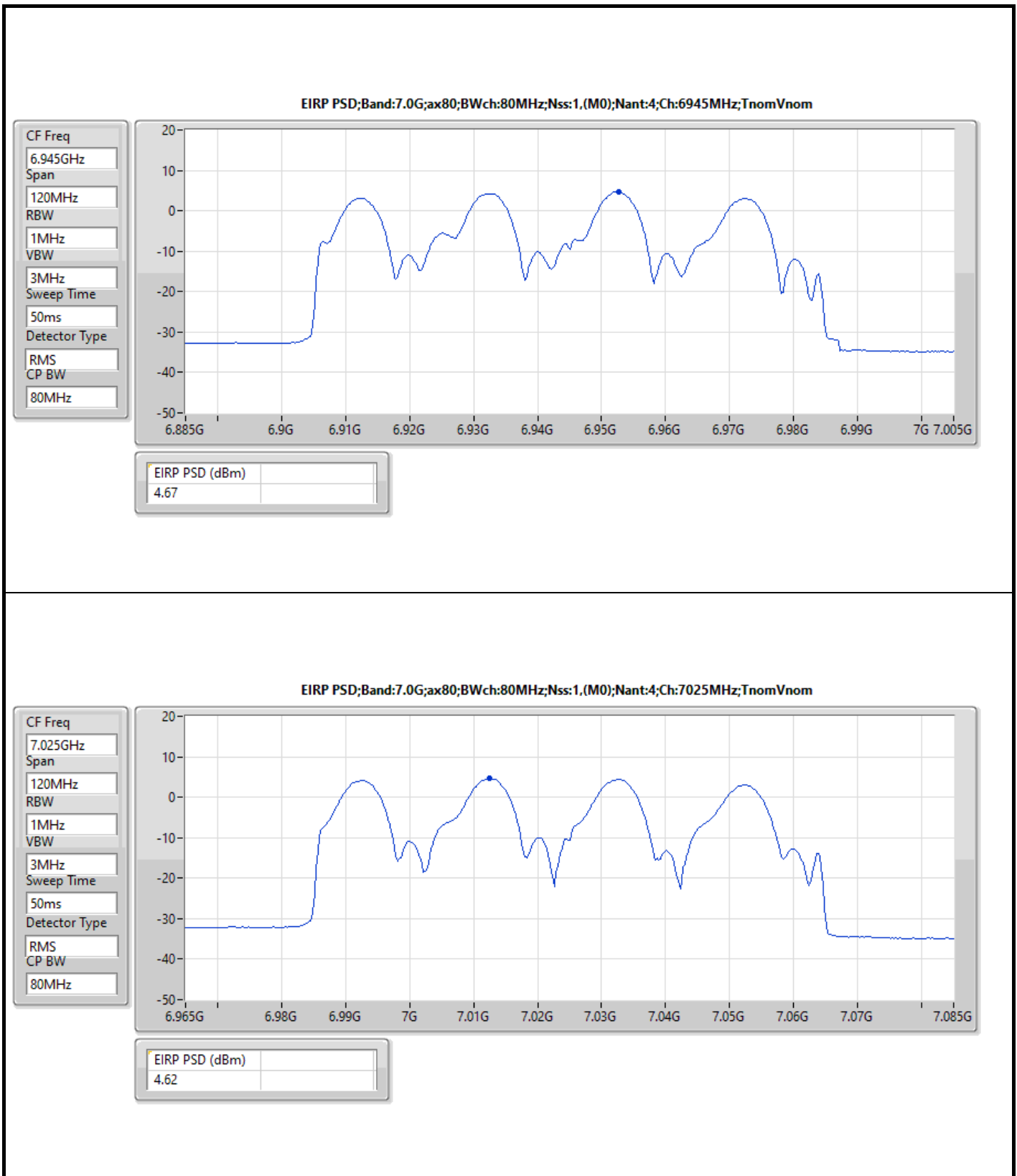






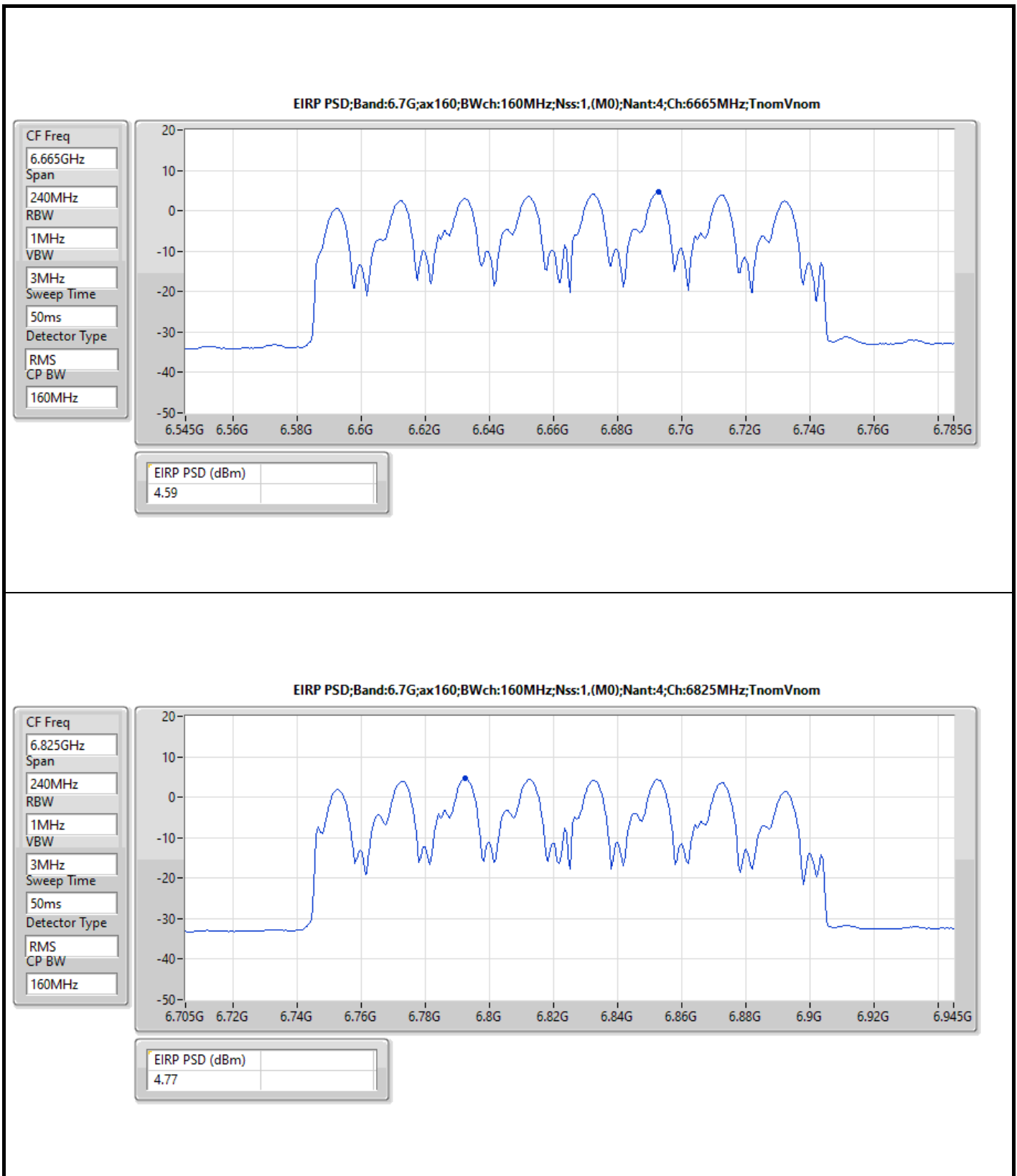


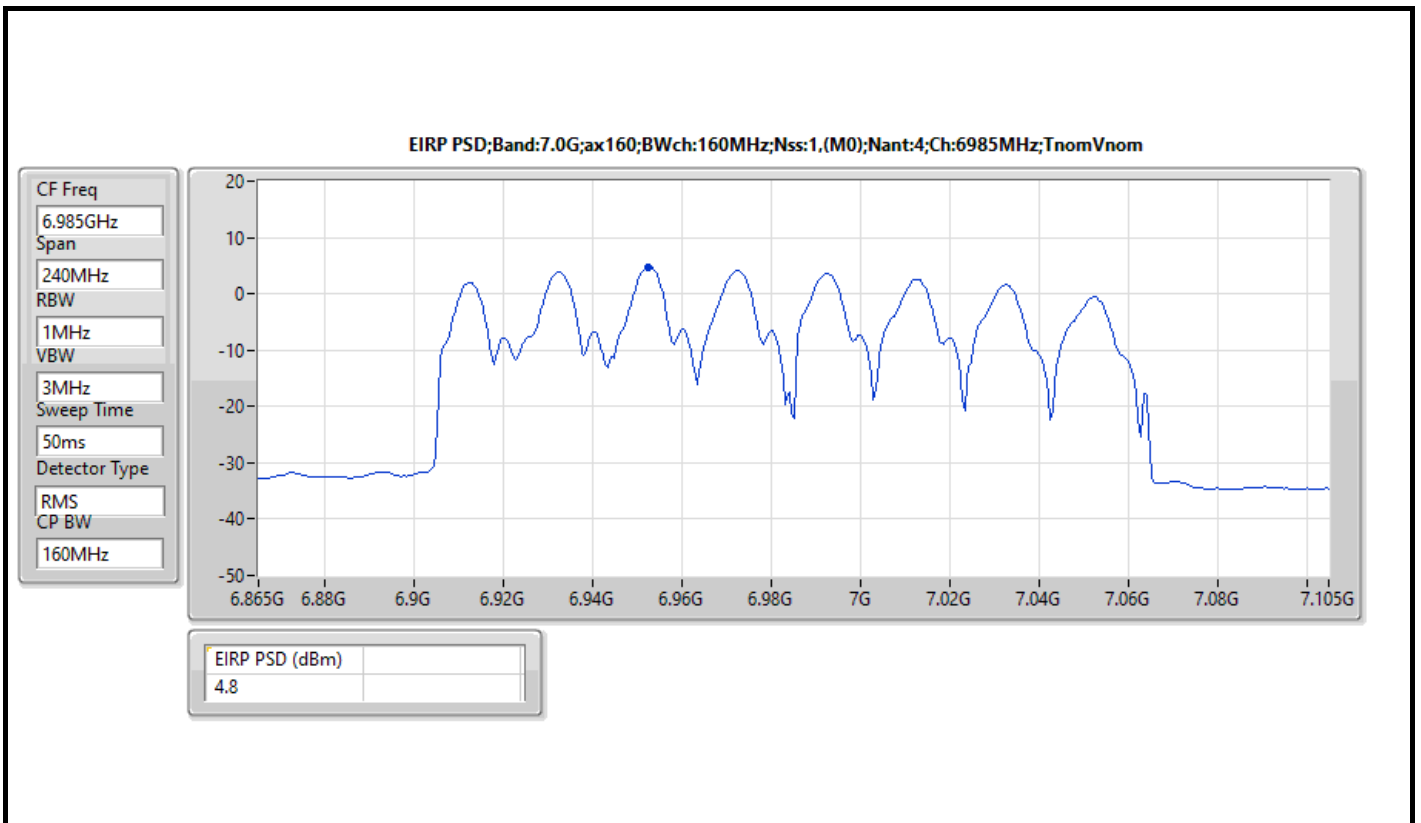












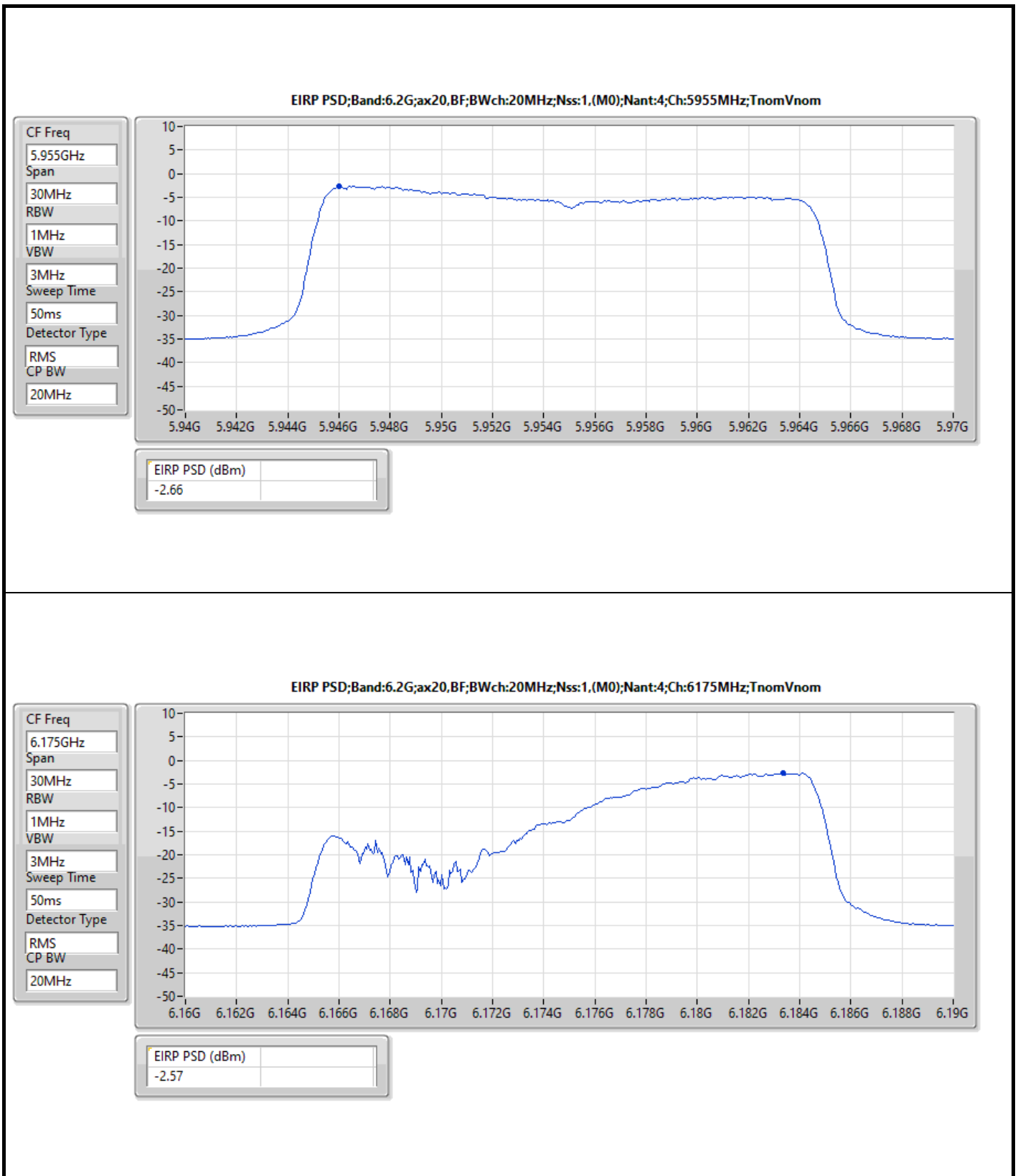
Summary

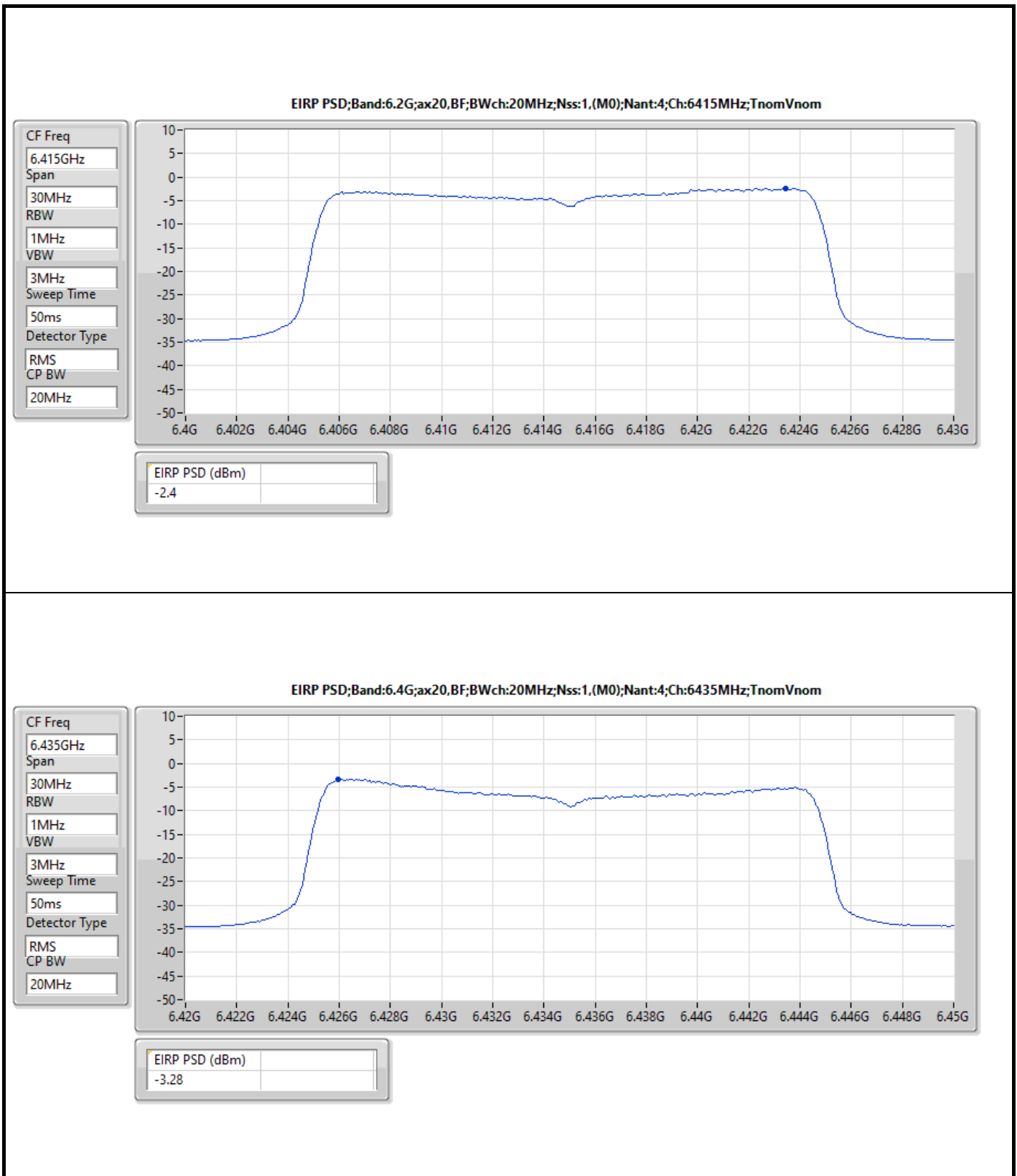
Mode	EIRP PD (dBm/RBW)
5.925-6.425GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-2.40
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-0.68
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	0.24
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	0.17
6.425-6.525GHz	
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-2.88
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-1.70
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-0.64
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-1.59
6.525-6.875GHz	
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.11
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	0.78
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	0.90
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	0.48
6.875-7.125GHz	
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-0.31
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	0.11
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	0.84
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	1.12

Result

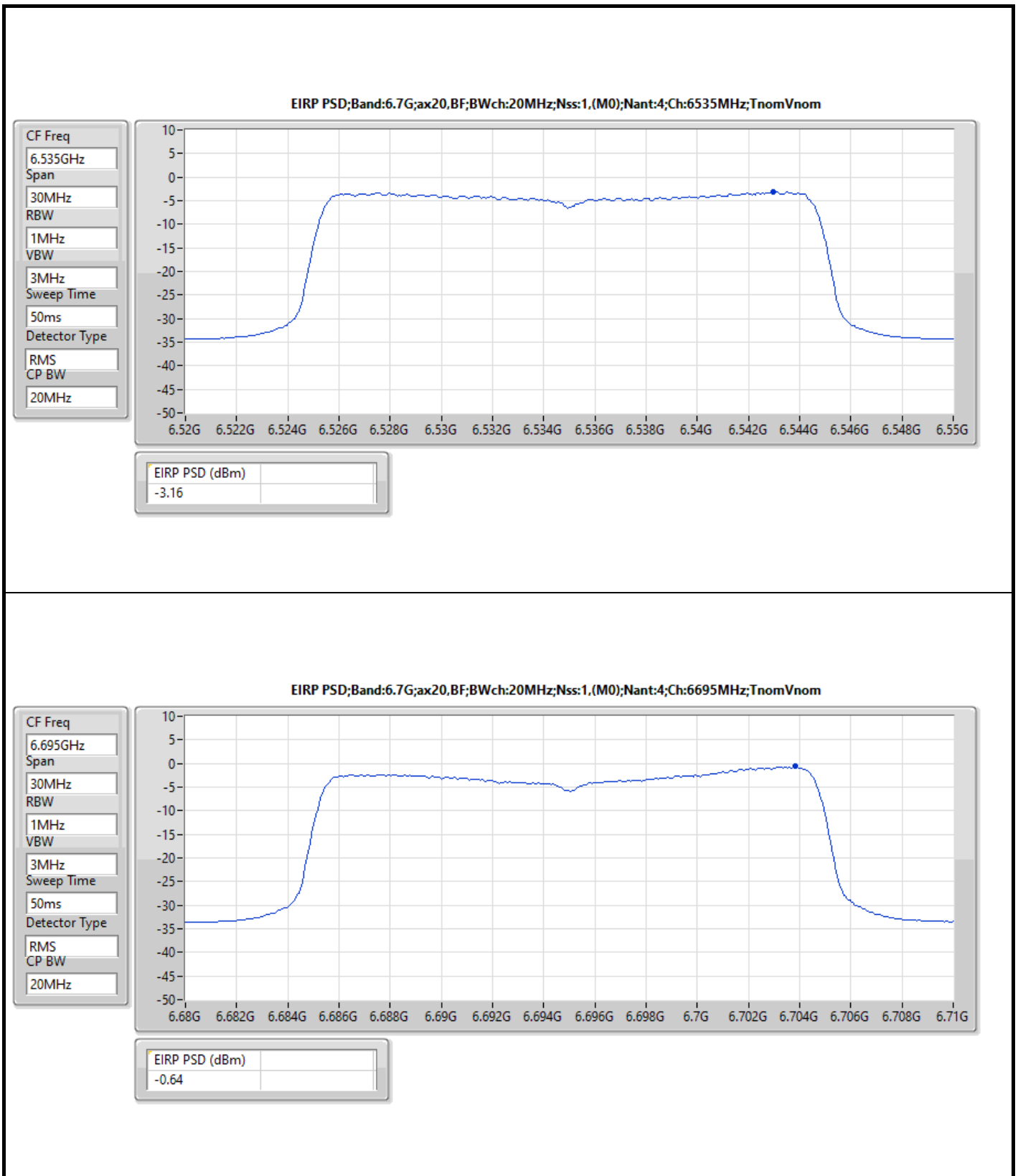
Mode	Result	DG (dBi)	EIRP PSD (dBm/RBW)	EIRP PSD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-
5955MHz	Pass	12.07	-2.66	5.00
6175MHz	Pass	12.07	-2.57	5.00
6415MHz	Pass	12.07	-2.40	5.00
6435MHz	Pass	12.07	-3.28	5.00
6475MHz	Pass	12.07	-3.1	5.00
6515MHz	Pass	12.07	-2.88	5.00
6535MHz	Pass	12.07	-3.16	5.00
6695MHz	Pass	12.07	-0.64	5.00
6855MHz	Pass	12.07	0.11	5.00
6875MHz Straddle 6.525-6.875GHz	Pass	12.07	-0.36	5.00
6895MHz	Pass	12.07	-0.31	5.00
6995MHz	Pass	12.07	-2.75	5.00
7095MHz	Pass	12.07	-2.04	5.00
7115 MHz	Pass	12.07	-3.02	5.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-
5965MHz	Pass	12.07	-0.95	5.00
6165MHz	Pass	12.07	-1.34	5.00
6405MHz	Pass	12.07	-0.68	5.00
6445MHz	Pass	12.07	-3.03	5.00
6485MHz	Pass	12.07	-2.57	5.00
6525MHz Straddle 6.425-6.525GHz	Pass	12.07	-1.7	5.00
6565MHz	Pass	12.07	-0.93	5.00
6685MHz	Pass	12.07	-1.78	5.00
6845MHz	Pass	12.07	0.78	5.00
6885MHz Straddle 6.525-6.875GHz	Pass	12.07	0.65	5.00
6925MHz	Pass	12.07	0.11	5.00
7005MHz	Pass	12.07	-1.59	5.00
7085MHz	Pass	12.07	-1.59	5.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-
5985MHz	Pass	12.07	-0.66	5.00
6145MHz	Pass	12.07	0.24	5.00
6385MHz	Pass	12.07	-0.54	5.00
6465MHz	Pass	12.07	-1.75	5.00
6545MHz Straddle 6.425-6.525GHz	Pass	12.07	-0.64	5.00
6625MHz	Pass	12.07	-0.94	5.00
6705MHz	Pass	12.07	0.47	5.00
6785MHz	Pass	12.07	0.9	5.00
6865MHz Straddle 6.525-6.875GHz	Pass	12.07	0.31	5.00
6945MHz	Pass	12.07	0.84	5.00
7025MHz	Pass	12.07	-0.97	5.00
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-
6025MHz	Pass	12.07	0.17	5.00
6185MHz	Pass	12.07	-0.07	5.00
6345MHz	Pass	12.07	0.1	5.00
6505MHz Straddle 6.425-6.525GHz	Pass	12.07	-1.59	5.00
6665MHz	Pass	12.07	0.48	5.00
6825MHz Straddle 6.525-6.875GHz	Pass	12.07	0.1	5.00
6985MHz	Pass	12.07	1.12	5.00

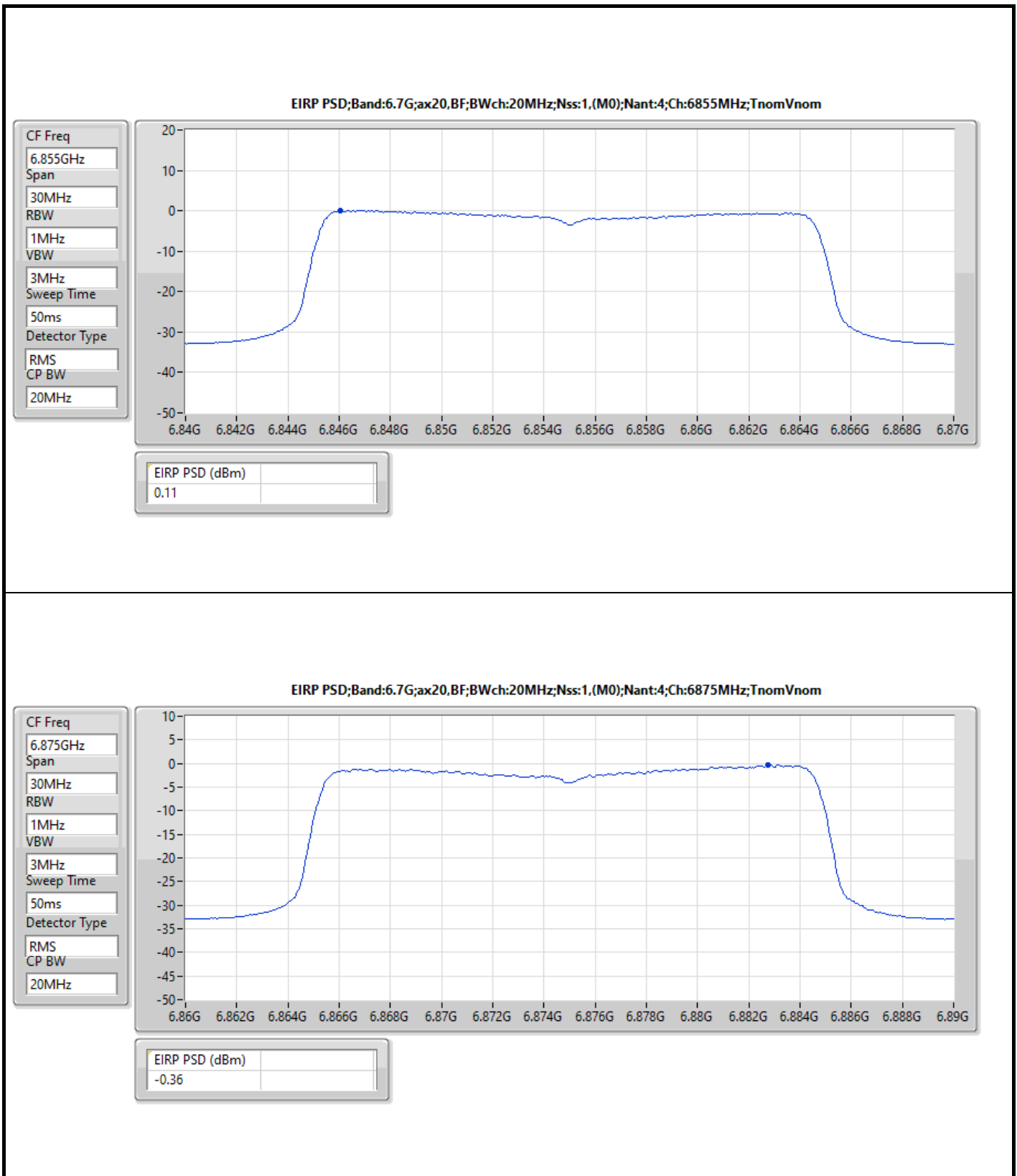
Note: The test result used radiated measurement.

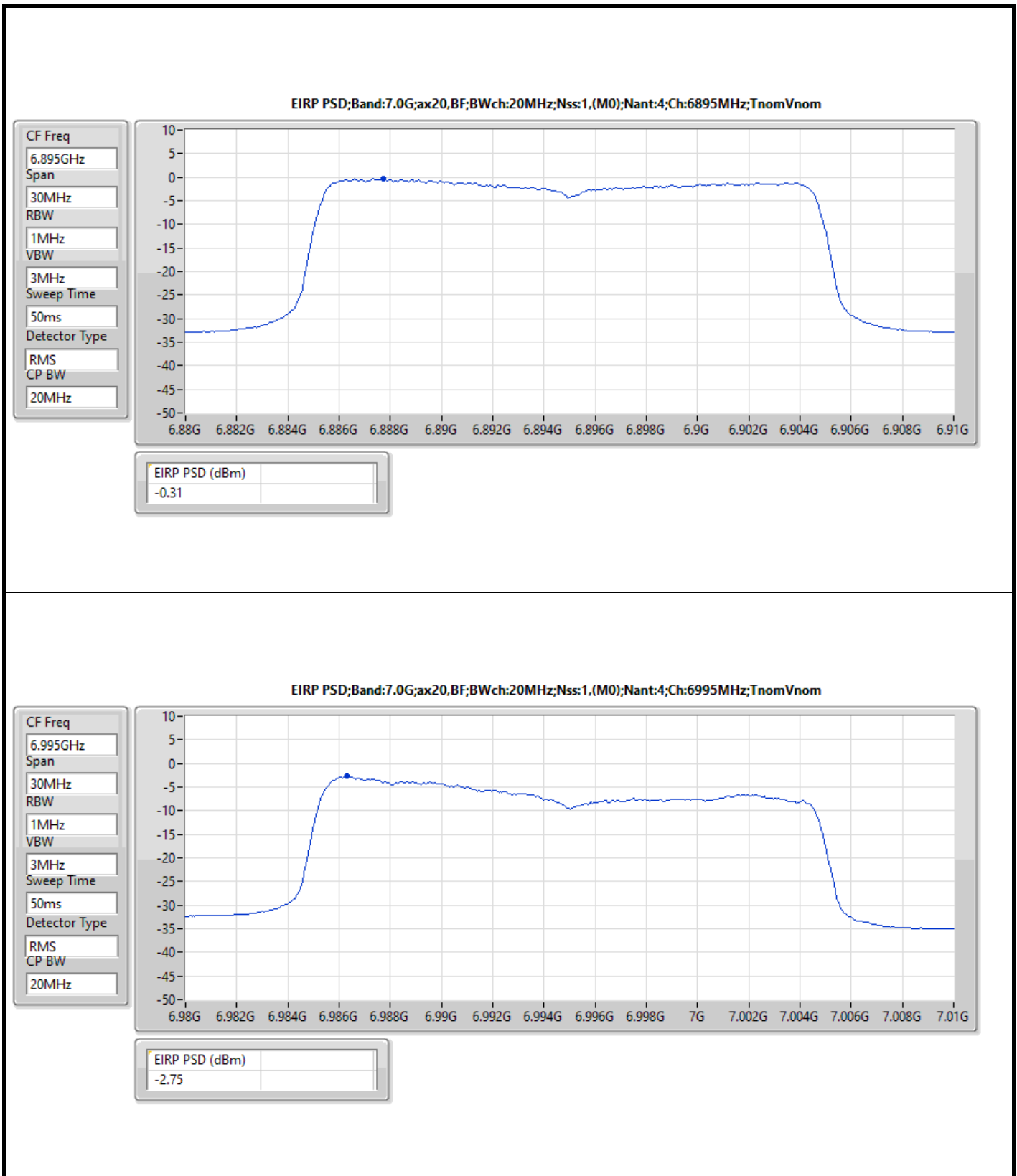








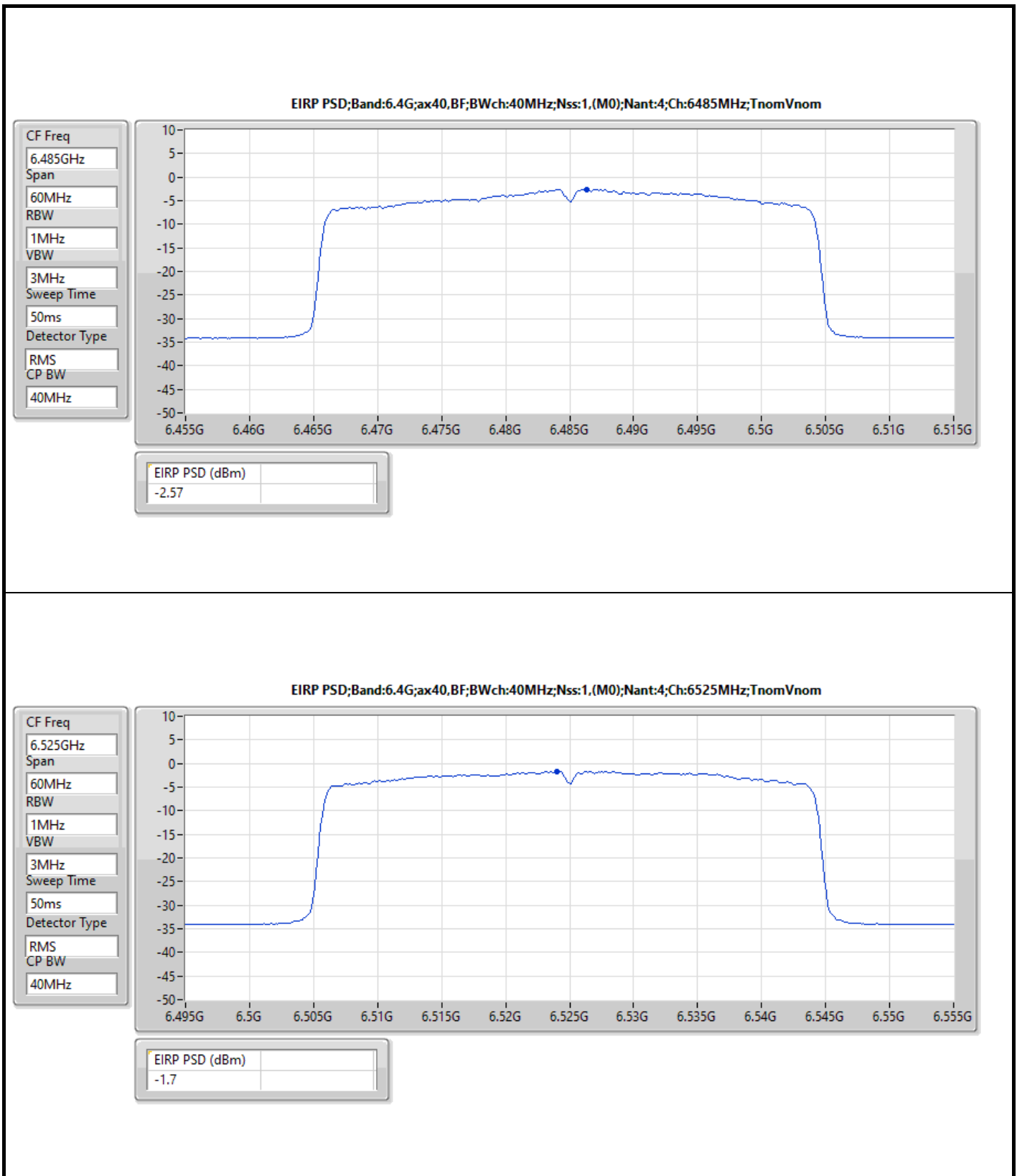


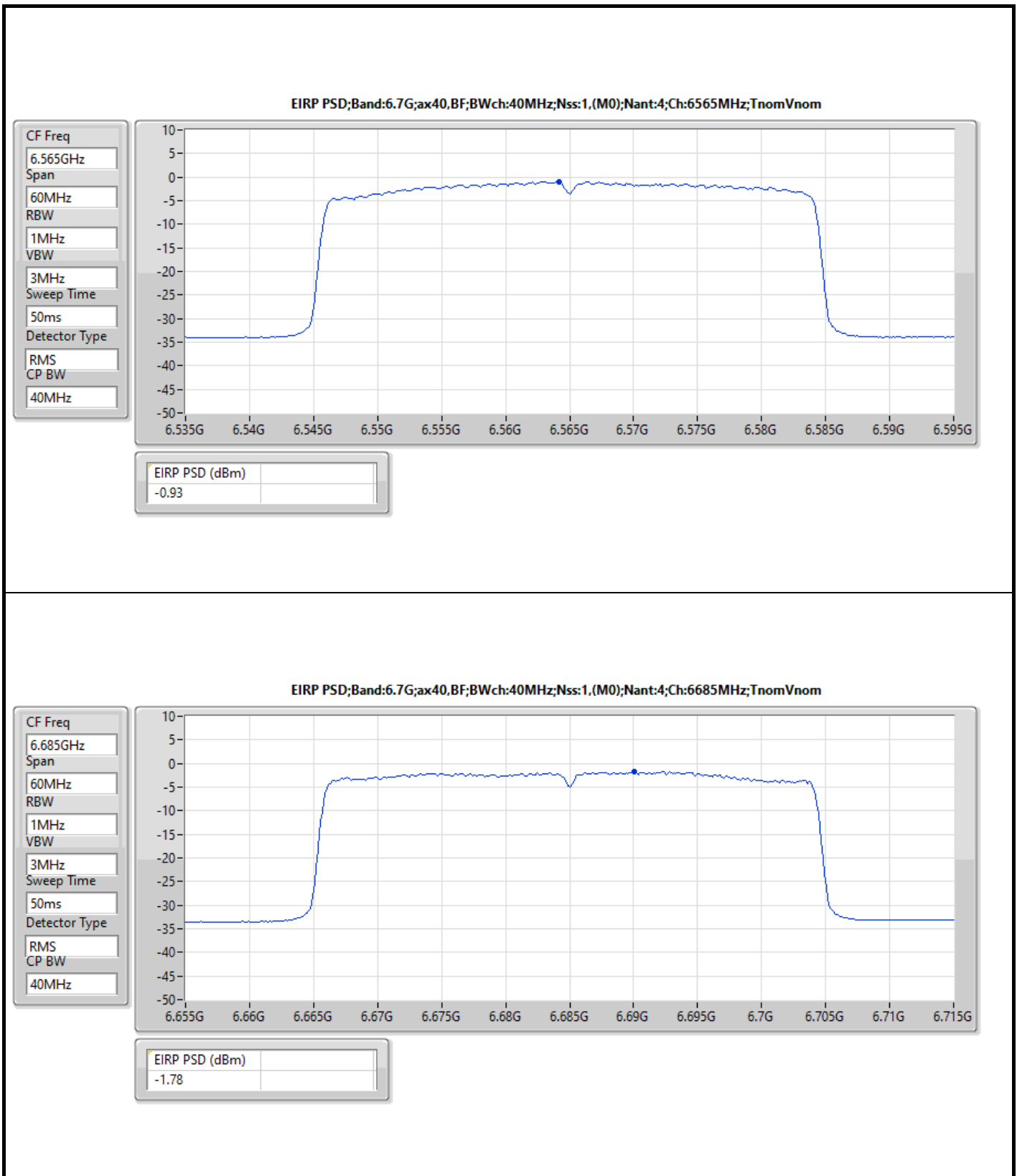


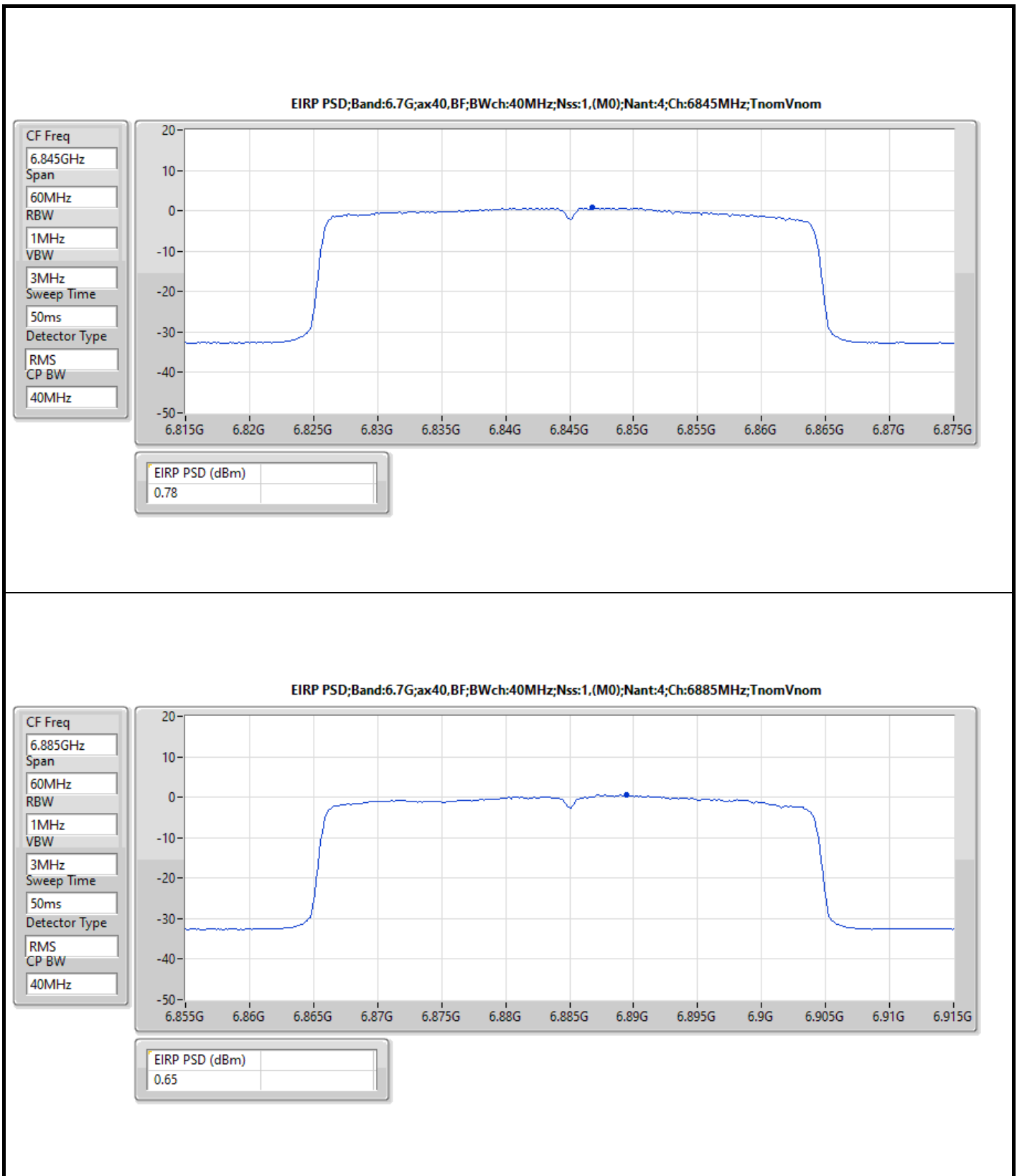


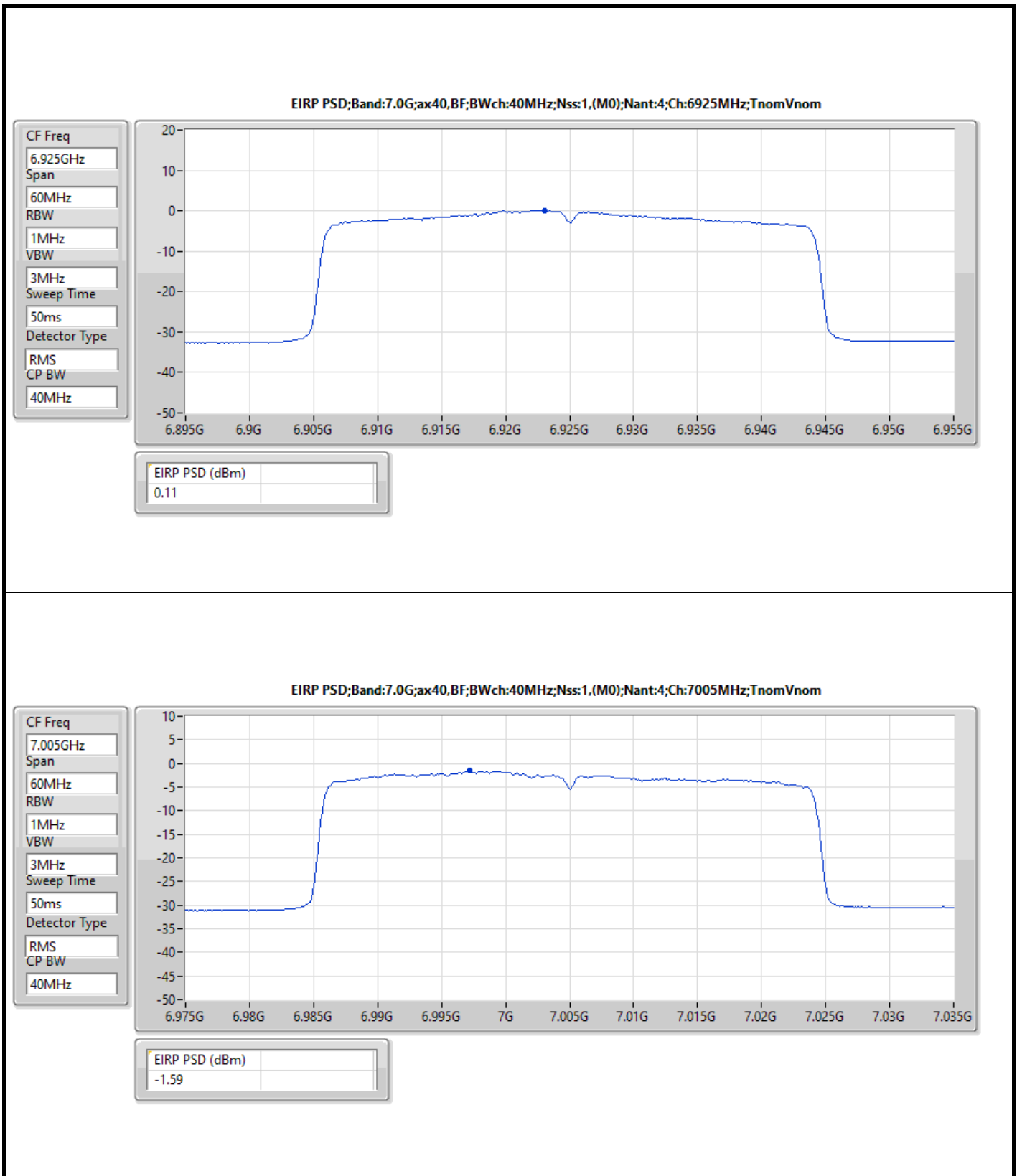


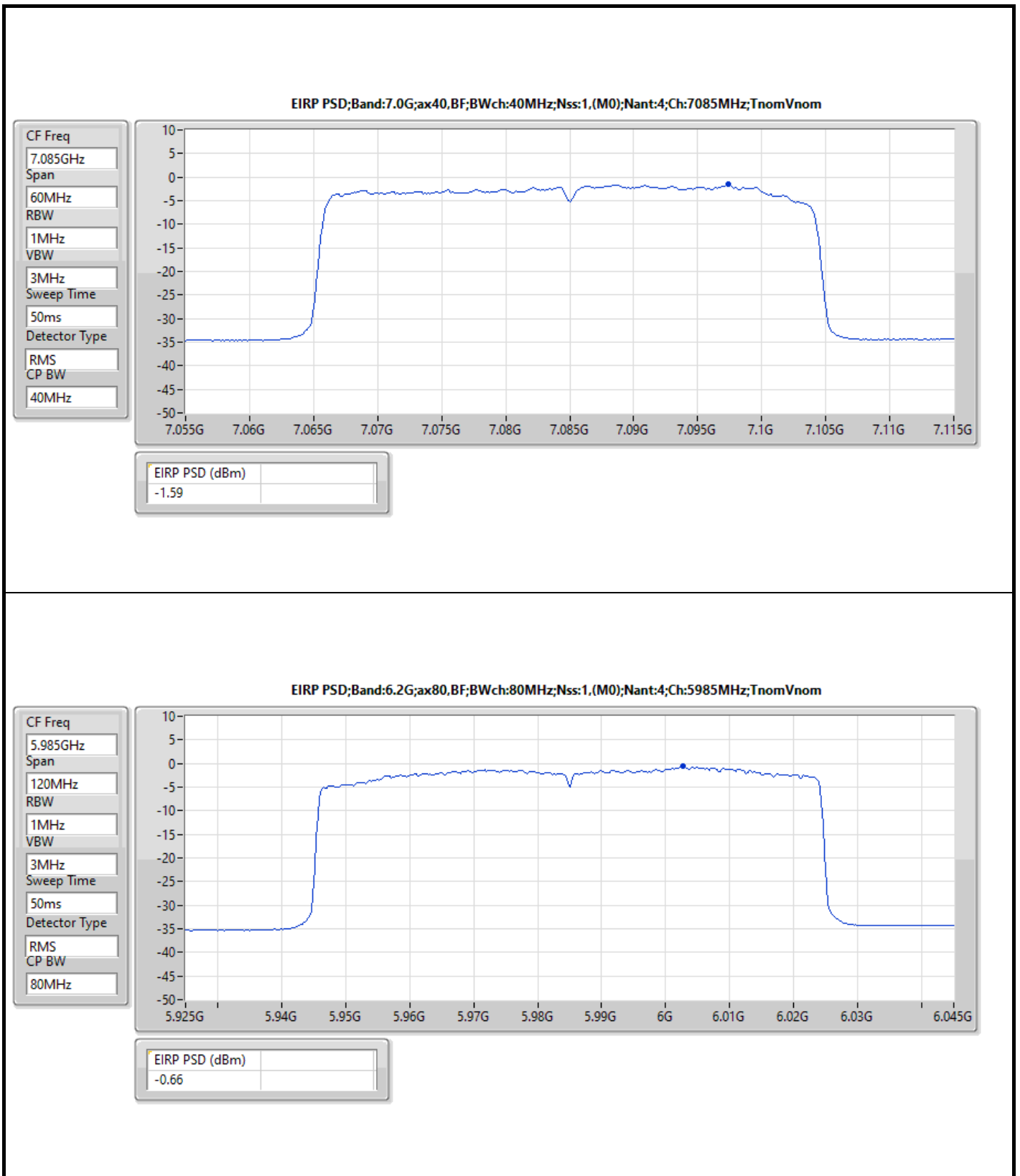


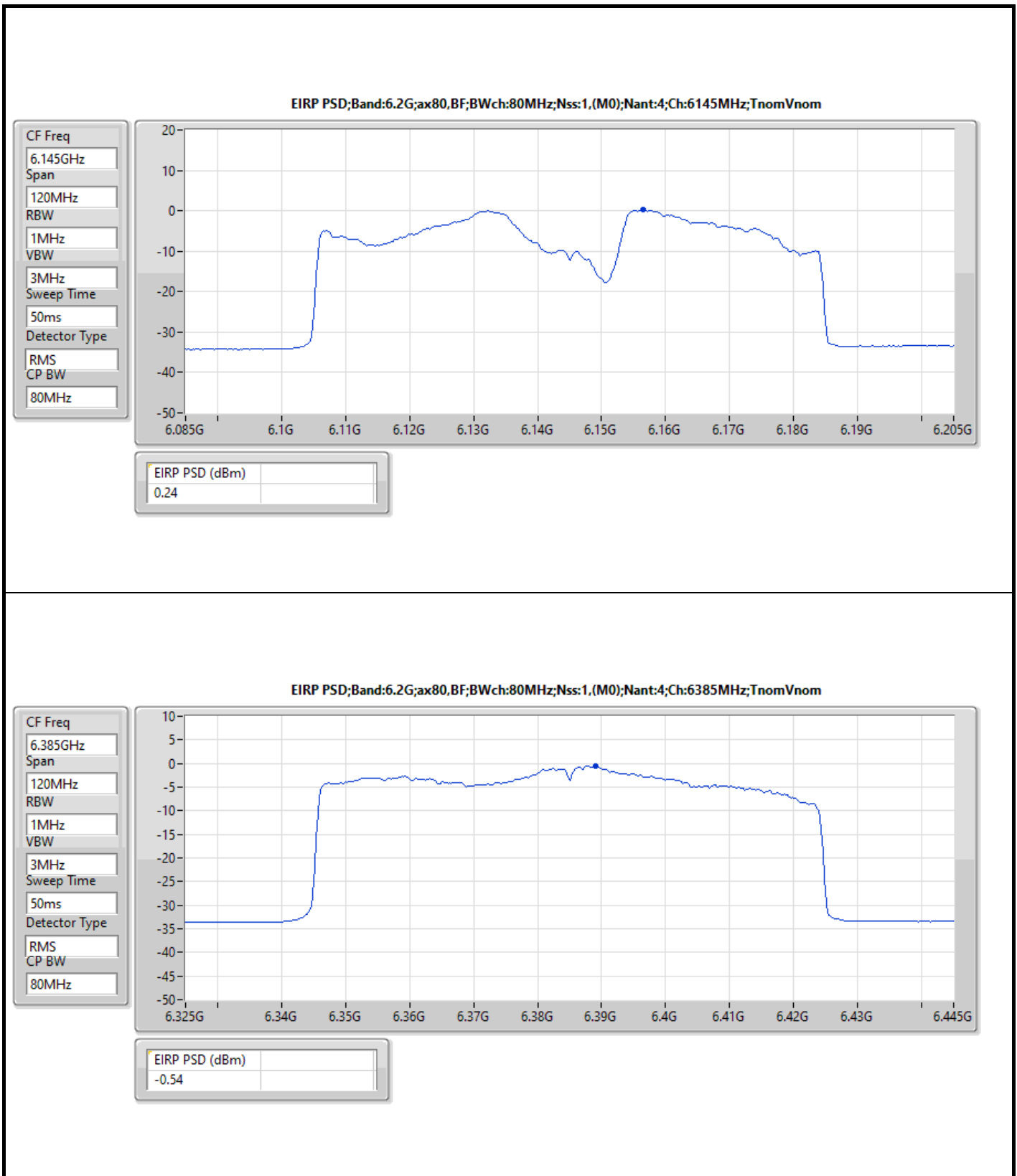


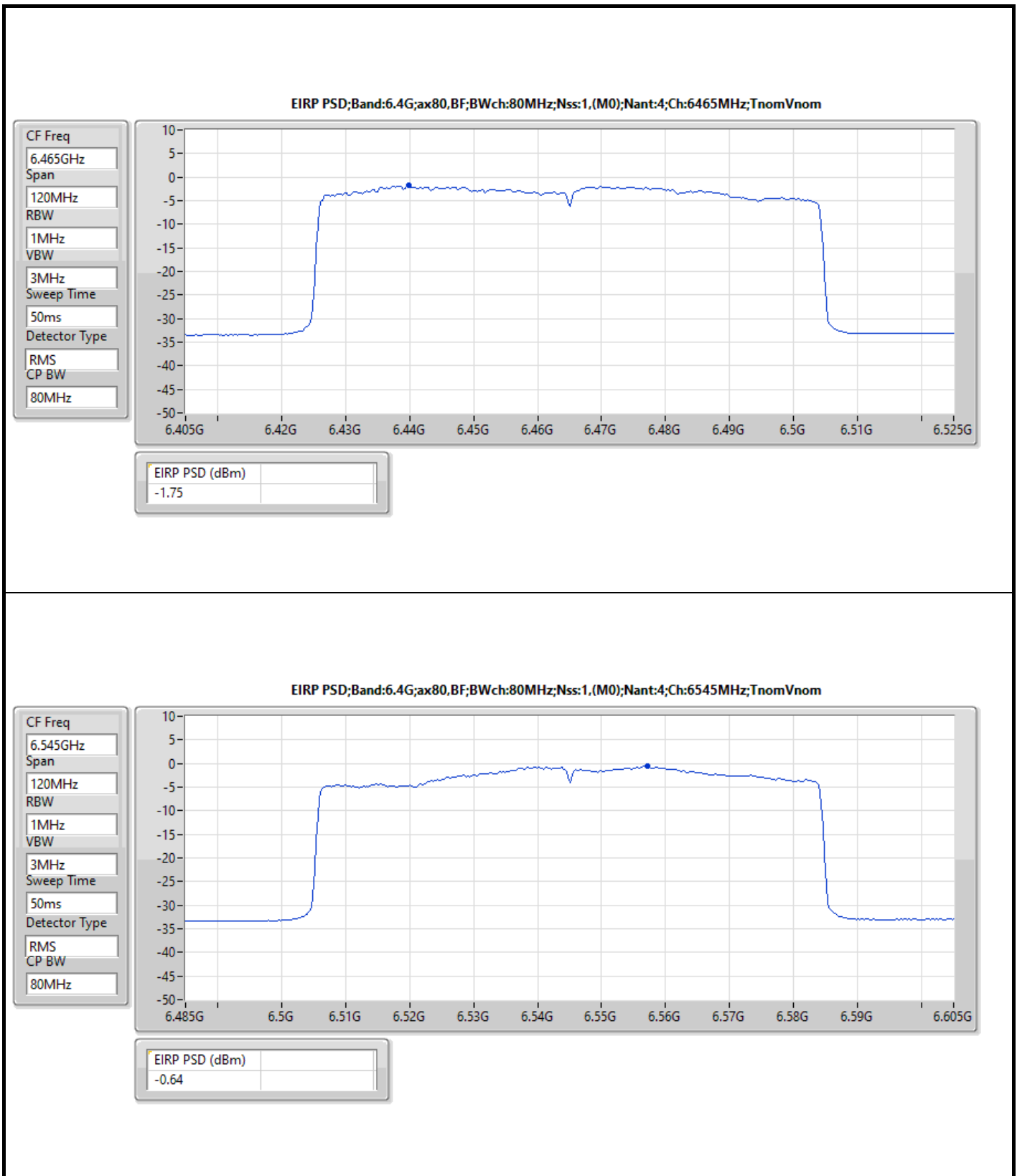


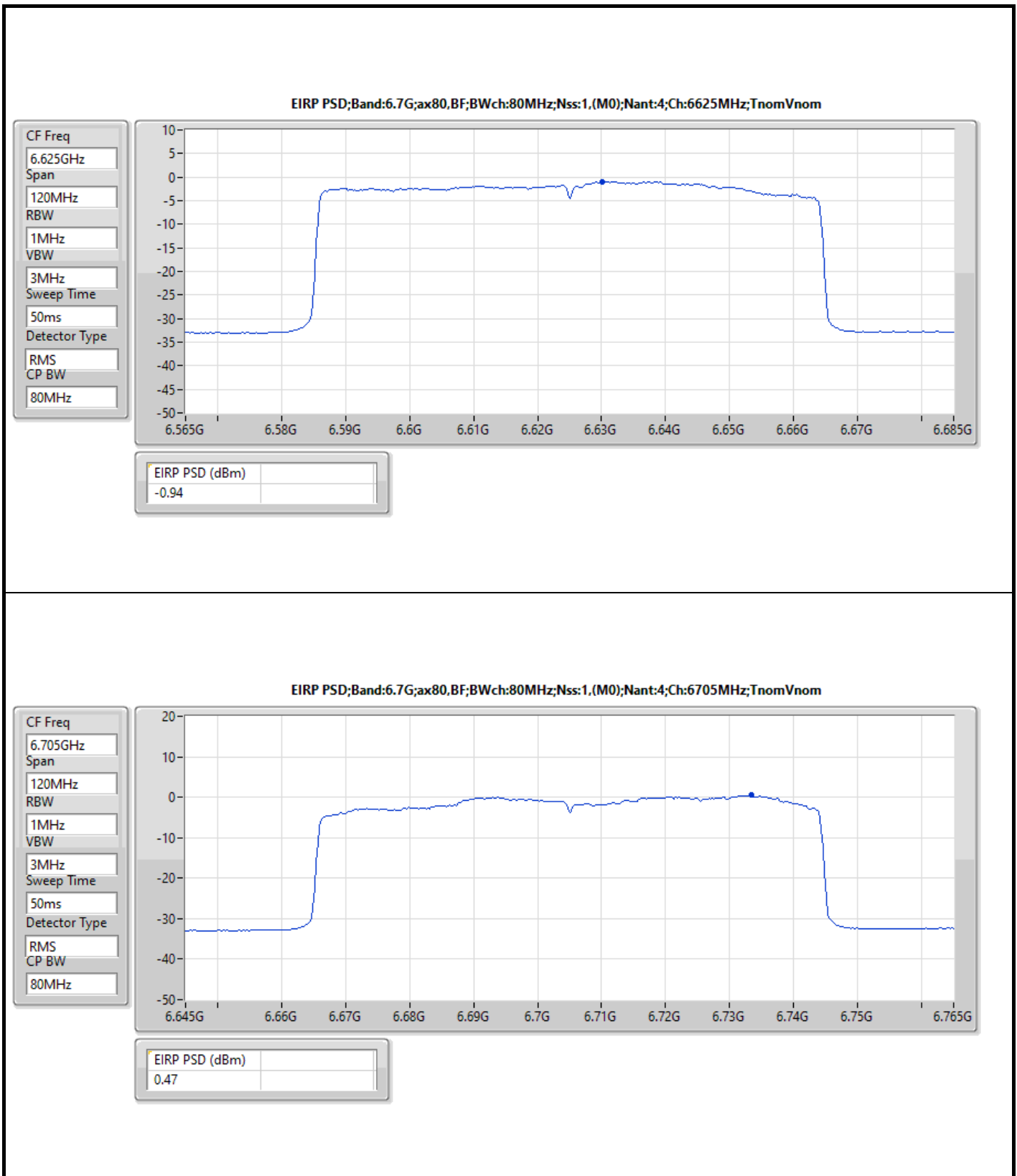


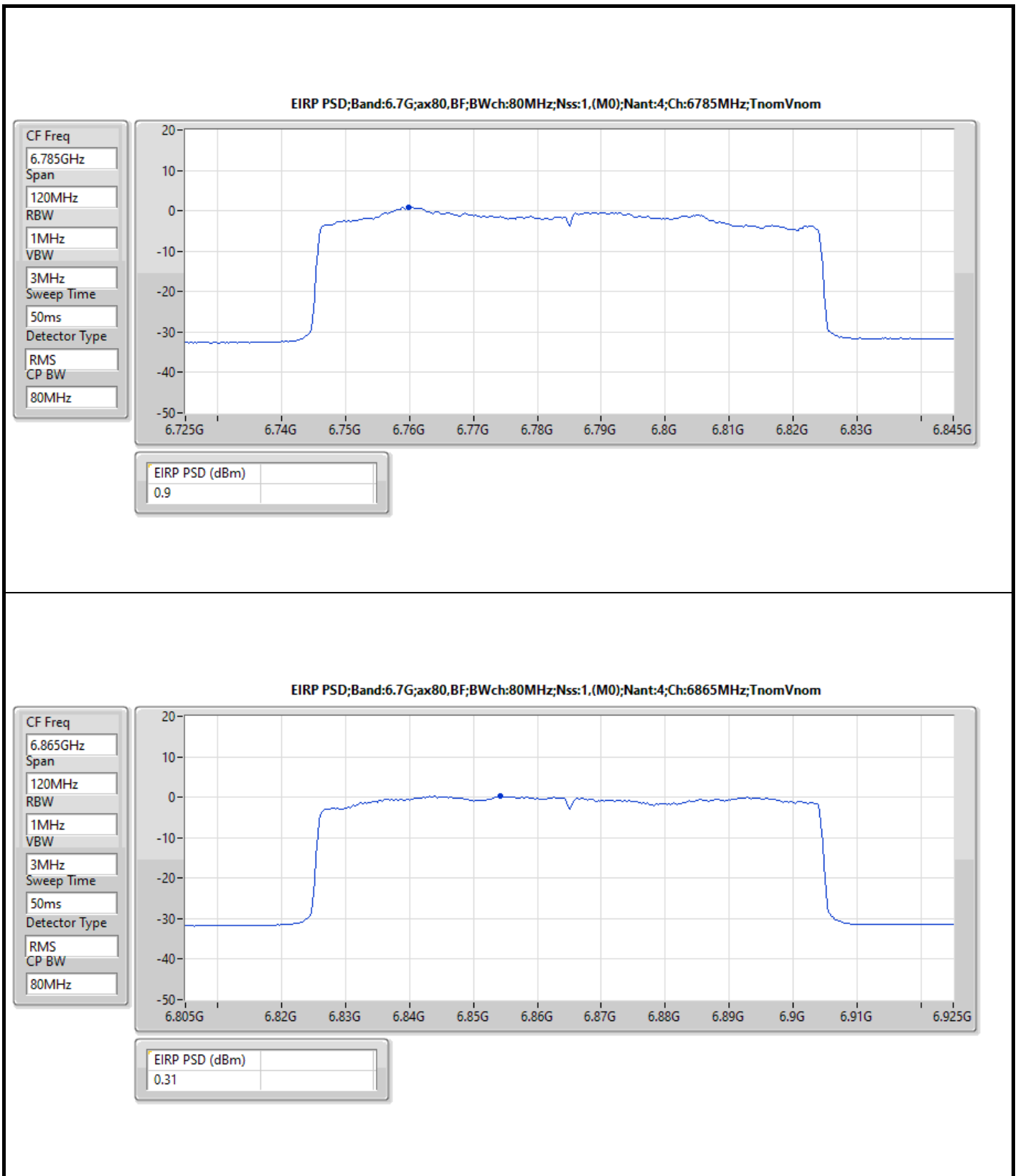




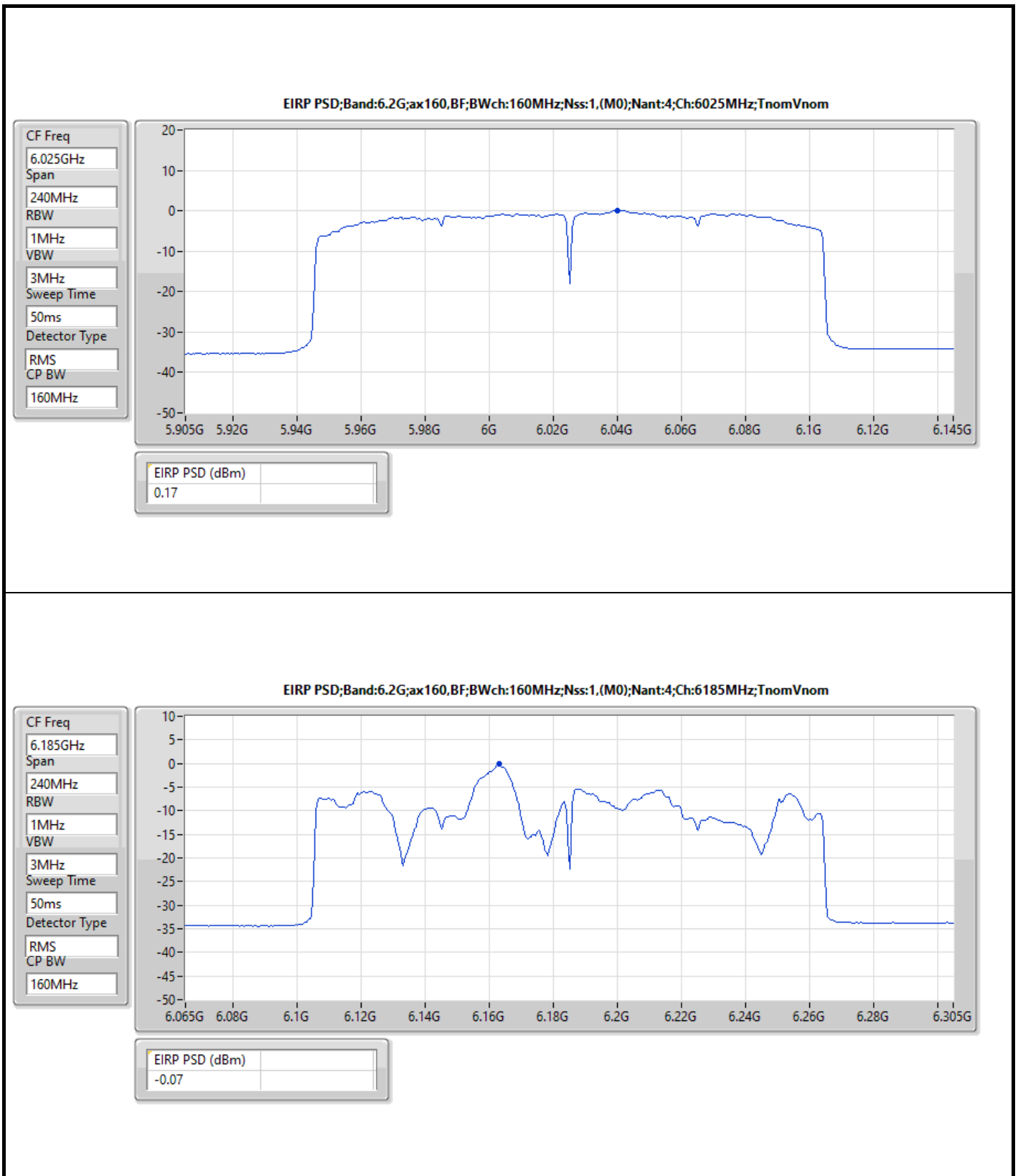






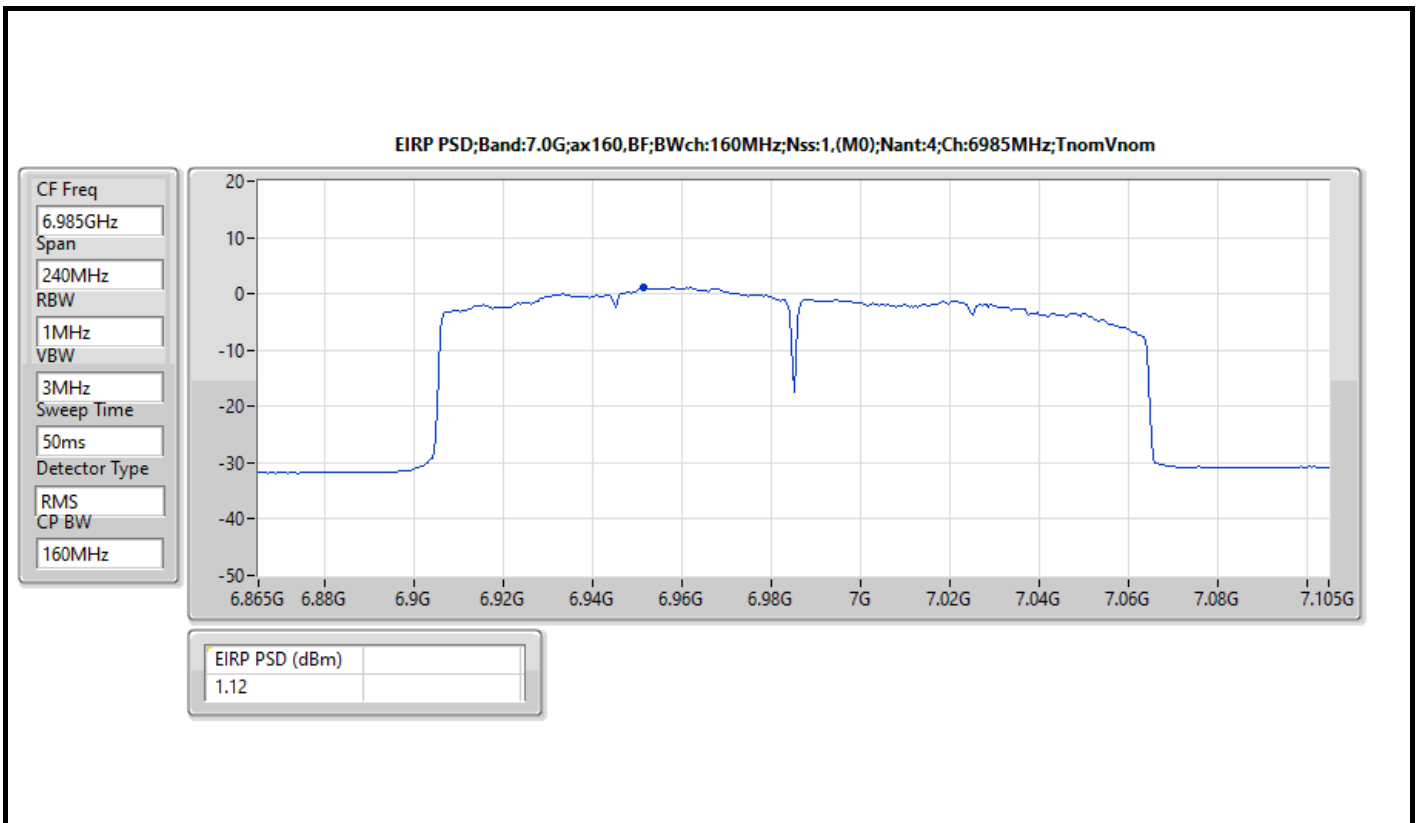














Radiated Emissions below 1GHz

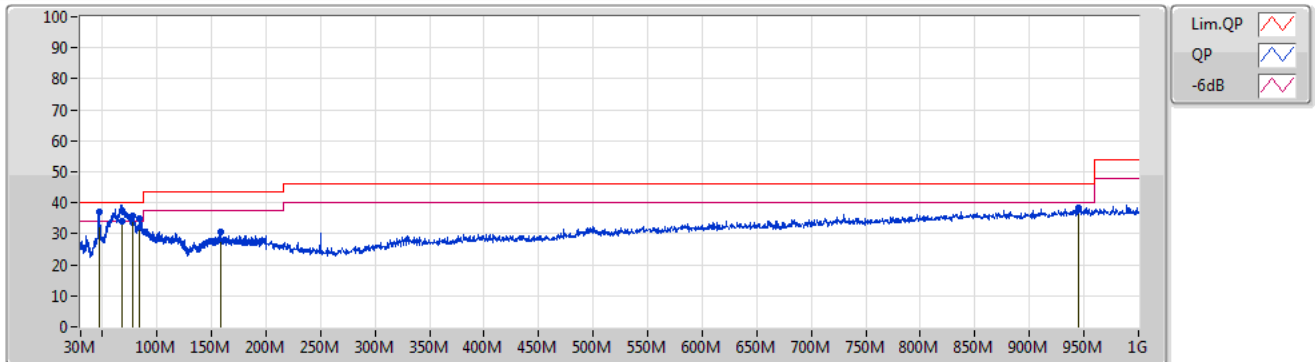
Appendix E.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	46.66M	37.00	40.00	-3.00	Vertical

17/08/2021

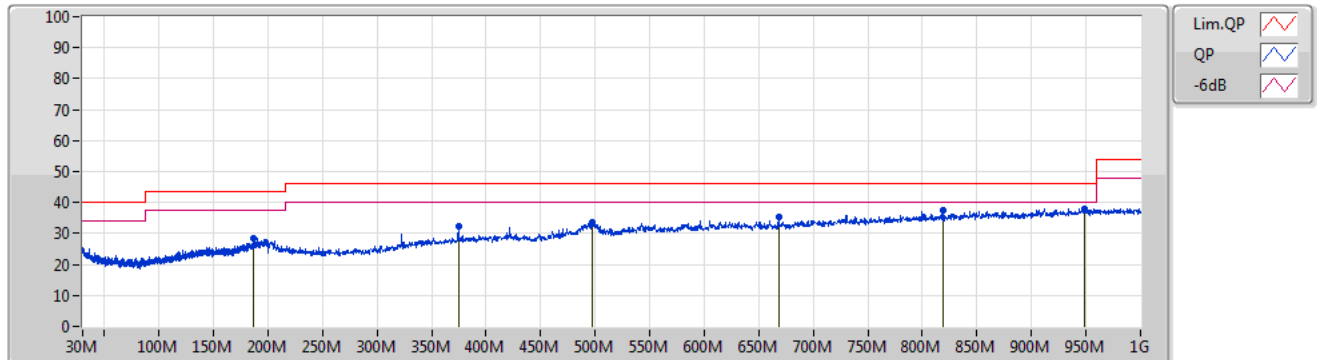
Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	46.66M	37.00	40.00	-3.00	-15.77	3	Vertical	353	2.00	"Worst"	52.77	10.74	1.43	27.94
QP	67.83M	34.00	40.00	-6.00	-16.64	3	Vertical	272	2.00	-	50.64	9.33	1.86	27.83
PK	77.6M	35.76	40.00	-4.24	-16.70	3	Vertical	156	2.00	-	52.46	9.08	2.05	27.83
PK	83.98M	34.91	40.00	-5.09	-16.47	3	Vertical	351	4.00	-	51.38	9.20	2.18	27.85
PK	158.61M	30.74	43.50	-12.76	-12.43	3	Vertical	112	1.00	-	43.17	11.90	3.19	27.52
PK	944.8M	38.48	46.00	-7.52	2.82	3	Vertical	109	4.00	-	35.66	22.23	6.96	26.37

17/08/2021

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	186.32M	28.40	43.50	-15.10	-10.15	3	Horizontal	162	2.00	-	38.55	13.63	3.56	27.34
PK	374.4M	32.29	46.00	-13.71	-7.38	3	Horizontal	0	1.00	-	39.67	15.53	4.20	27.11
PK	497.6M	33.83	46.00	-12.17	-5.64	3	Horizontal	164	2.00	-	39.47	17.46	4.79	27.89
PK	668.4M	35.42	46.00	-10.58	-2.72	3	Horizontal	108	3.00	-	38.14	19.32	5.67	27.71
PK	819.2M	37.56	46.00	-8.44	0.31	3	Horizontal	311	1.00	-	37.25	20.95	6.38	27.02
PK	948.8M	38.04	46.00	-7.96	2.81	3	Horizontal	356	4.00	"Worst"	35.23	22.17	6.99	26.35

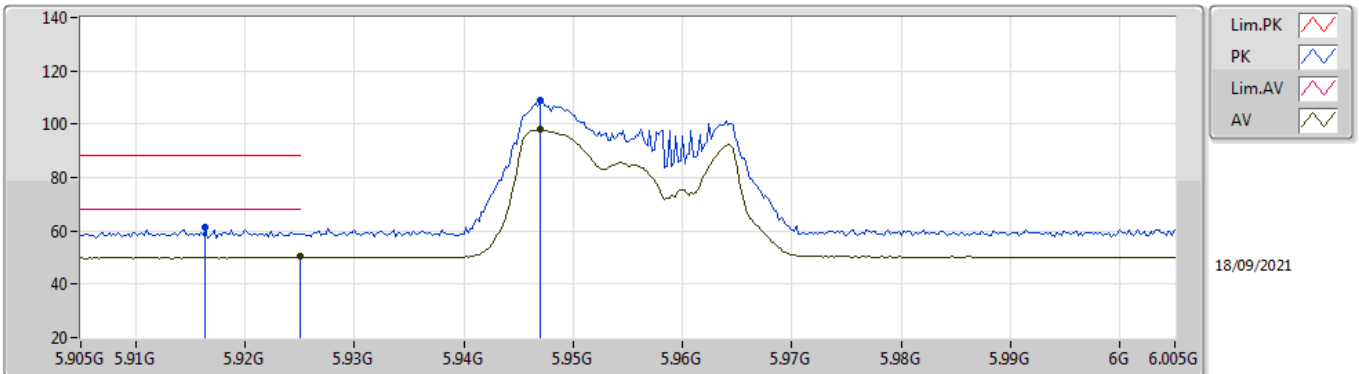


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.925-6.425GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	AV	17.95722G	51.25	54.00	-2.75	3	Horizontal	11	1.68	-

802.11ax HEW20_Nss1,(MCS0)_4TX

5955MHz_TnomVnom

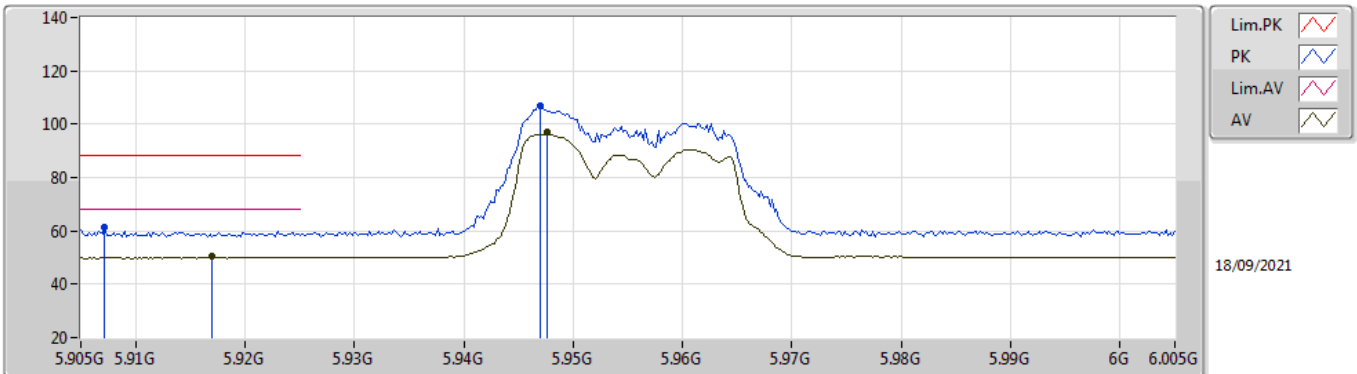


EUT Y_4TX
Setting 8.5
04-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	5.9164G	61.33	88.20	-26.87	53.69	3	Vertical	326	2.32	-	34.87	6.12	33.35	
RMS	5.925G	50.47	68.20	-17.73	42.80	3	Vertical	326	2.32	-	34.90	6.12	33.35	
PK	5.947G	108.97	Inf	-Inf	101.19	3	Vertical	326	2.32	-	34.99	6.15	33.36	
RMS	5.947G	98.23	Inf	-Inf	90.45	3	Vertical	326	2.32	-	34.99	6.15	33.36	

802.11ax HEW20_Nss1,(MCS0)_4TX

5955MHz_TnomVnom

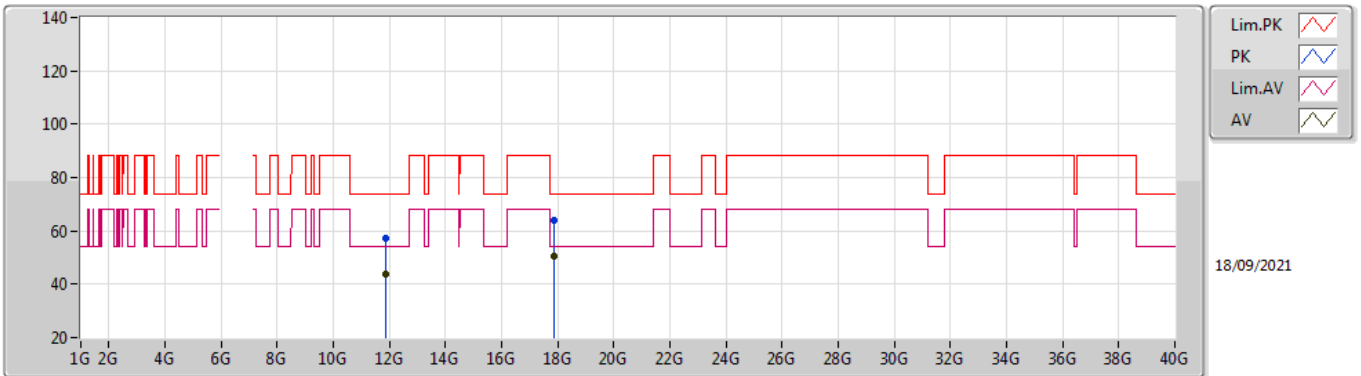


EUT Y_4TX
Setting 8.5
04-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	5.9072G	61.31	88.20	-26.89	53.71	3	Horizontal	74	1.80	-	34.83	6.11	33.34	
RMS	5.917G	50.45	68.20	-17.75	42.81	3	Horizontal	74	1.80	-	34.87	6.12	33.35	
PK	5.947G	107.09	Inf	-Inf	99.31	3	Horizontal	74	1.80	-	34.99	6.15	33.36	
RMS	5.9476G	96.86	Inf	-Inf	89.08	3	Horizontal	74	1.80	-	34.99	6.15	33.36	

802.11ax HEW20_Nss1,(MCS0)_4TX

5955MHz_TnomVnom

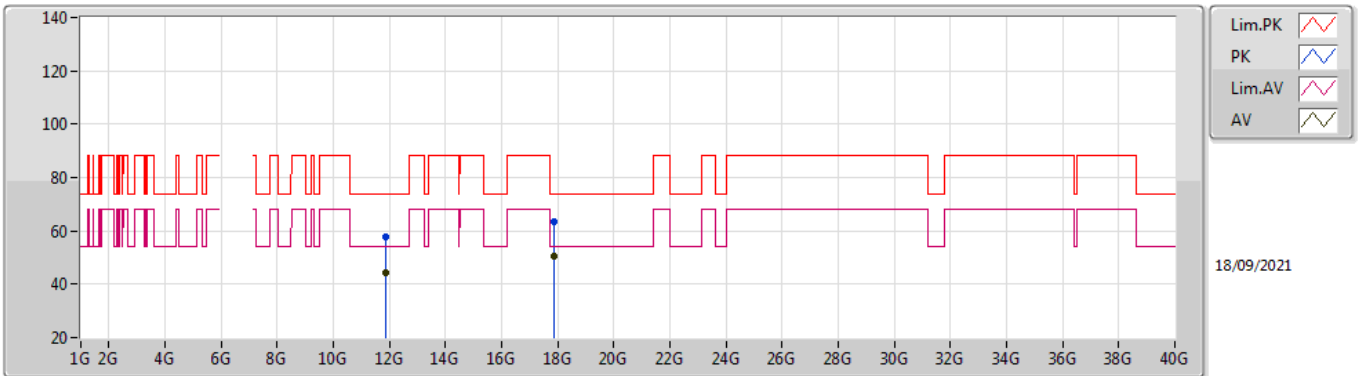


EUT Y_4TX
Setting 8.5
04-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	11.8918G	57.02	74.00	-16.98	43.48	3	Vertical	122	1.80	-	38.90	9.55	34.91	
AV	11.8774G	44.04	54.00	-9.96	30.50	3	Vertical	122	1.80	-	38.90	9.54	34.90	
PK	17.8746G	64.09	74.00	-9.91	43.60	3	Vertical	238	2.23	-	41.65	13.60	34.76	
AV	17.87934G	50.28	54.00	-3.72	29.78	3	Vertical	238	2.23	-	41.66	13.60	34.76	

802.11ax HEW20_Nss1,(MCS0)_4TX

5955MHz_TnomVnom

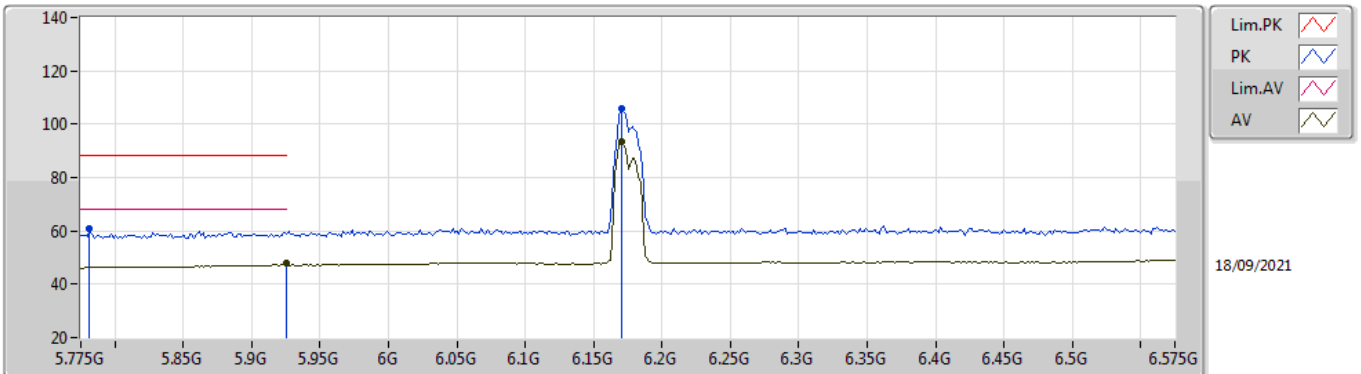


EUT Y_4TX
Setting 8.5
04-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	11.8882G	57.63	74.00	-16.37	44.10	3	Horizontal	335	2.89	-	38.90	9.54	34.91	
AV	11.8914G	44.33	54.00	-9.67	30.79	3	Horizontal	335	2.89	-	38.90	9.55	34.91	
PK	17.87364G	63.56	74.00	-10.44	43.07	3	Horizontal	184	2.77	-	41.65	13.60	34.76	
AV	17.87052G	50.26	54.00	-3.74	29.77	3	Horizontal	184	2.77	-	41.64	13.60	34.75	

802.11ax HEW20_Nss1,(MCS0)_4TX

6175MHz_TnomVnom

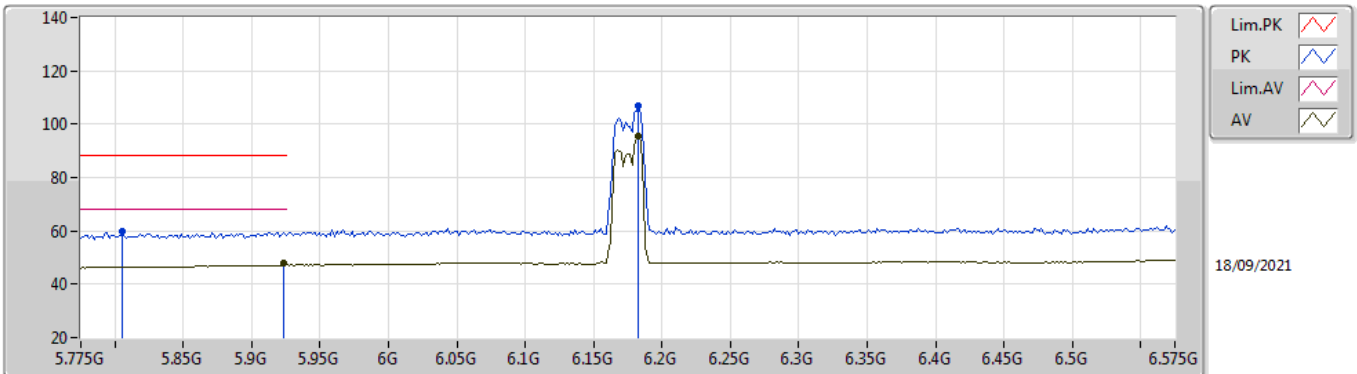


EUT Y_4TX
Setting 8
04-C-B-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	5.7814G	60.62	88.20	-27.58	53.72	3	Vertical	39	2.17	-	34.20	5.99	33.29	
RMS	5.925G	47.79	68.20	-20.41	40.12	3	Vertical	39	2.17	-	34.90	6.12	33.35	
PK	6.1702G	105.81	Inf	-Inf	97.49	3	Vertical	39	2.17	-	35.38	6.20	33.26	
RMS	6.1702G	93.37	Inf	-Inf	85.05	3	Vertical	39	2.17	-	35.38	6.20	33.26	

802.11ax HEW20_Nss1,(MCS0)_4TX

6175MHz_TnomVnom



EUT Y_4TX
Setting 8
04-C-B-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	5.8054G	60.06	88.20	-28.14	53.12	3	Horizontal	324	1.80	-	34.23	6.01	33.30	
RMS	5.9238G	47.77	68.20	-20.43	40.10	3	Horizontal	324	1.80	-	34.90	6.12	33.35	
PK	6.183G	107.08	Inf	-Inf	98.71	3	Horizontal	324	1.80	-	35.43	6.20	33.26	
RMS	6.183G	95.34	Inf	-Inf	86.97	3	Horizontal	324	1.80	-	35.43	6.20	33.26	