



RADIO TEST REPORT

FCC ID : UIDNVG678XY
Equipment : XGS-PON GATEWAY
Brand Name : ARRIS
Model Name : NVG678XY
Applicant : ARRIS
3871 Lakefield Dr, Suwanee, GA 30024, United States
Manufacturer : ARRIS
3871 Lakefield Dr, Suwanee, GA 30024, United States
Standard : 47 CFR FCC Part 15.407

The product was received on Dec. 16, 2022, and testing was started from Dec. 17, 2022 and completed on Feb. 25, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this 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

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Photographs of EUT v01



History of this test report

Report No.	Version	Description	Issued Date
FR262432AC	01	Initial issue of report	Mar. 07, 2023



Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Sam Chen**Report Producer: Sophia Shiung**



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
UNII 5-8	ax (HEW20)	20	4TX
UNII 5-8	ax (HEW20)-BF	20	4TX
UNII 5-8	ax (HEW40)	40	4TX
UNII 5-8	ax (HEW40)-BF	40	4TX
UNII 5-8	ax (HEW80)	80	4TX
UNII 5-8	ax (HEW80)-BF	80	4TX
UNII 5-8	ax (HEW160)	160	4TX
UNII 5-8	ax (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.



1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz					
1	1	1	-	Pulse Technology	NVG678XY	PCB	I-Pex	Note 1
2	2	2	-	Pulse Technology	NVG678XY	PCB	I-Pex	
3	3	3	-	Pulse Technology	NVG678XY	PCB	I-Pex	
4	4	4	-	Pulse Technology	NVG678XY	PCB	I-Pex	
5	-	-	1	Pulse Technology	NVG678XY	PCB	I-Pex	
6	-	-	2	Pulse Technology	NVG678XY	PCB	I-Pex	
7	-	-	3	Pulse Technology	NVG678XY	PCB	I-Pex	
8	-	-	4	Pulse Technology	NVG678XY	PCB	I-Pex	
9	-	1	-	Pulse Technology	NVG678XY	PCB	I-Pex	4.16

Note 1:

Ant.	Antenna Gain (dBi)								
	WLAN 2.4GHz	WLAN 5GHz				WLAN 6GHz			
		UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 5	UNII 6	UNII 7	UNII 8
1	2.87	3.7	3.88	4	2.78	-	-	-	-
2	3.24	2.67	2.84	2.05	2.18	-	-	-	-
3	2.93	2.76	3.15	2.08	2.38	-	-	-	-
4	4.12	3.53	3.97	4.25	4.33	-	-	-	-
5	-	-	-	-	-	3.78	3.12	3.87	3.87
6	-	-	-	-	-	2.13	2.61	4.1	4.3
7	-	-	-	-	-	2	2.27	2.94	4.77
8	-	-	-	-	-	3.1	2.54	3.75	3.85

Directional gain (dBi)					
Item	2.4GHz	5GHz UNII 1	5GHz UNII 2A	5GHz UNII 2C	5GHz UNII 3
4T1S	4.86	3.85	4.11	4.39	4.64
4T2S	4.12	3.7	3.97	4.25	4.33
4T4S	4.12	3.7	3.97	4.25	4.33



Directional gain (dBi)				
Item	6GHz UNII 5	6GHz UNII 6	6GHz UNII 7	6GHz UNII 8
4T1S	4.6	4.1	5.71	5.16
4T2S	3.78	3.12	4.1	4.77
4T4S	3.78	3.12	4.1	4.77

Note 2: The above information (except Ant. 1~8 gain and directional gain) was declared by manufacturer. The directional gain is measured which follows the procedure of KDB 662911 D03.

Note 3: Ant. 9 did not function during the tests.

Note 4: The DFS function of EUT was not enabled at this time.

Note 5: **For 2.4GHz function:**

For IEEE 802.11 b/g/n/ax (4TX/4RX):

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11a/n/ac/ax (4TX/4RX):

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

For IEEE 802.11a/n/ac/ax (1RX):

Port 1 (Ant.9) can be used as receiving antenna.

For 6GHz function:

For IEEE 802.11ax (4TX/4RX):

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.



1.1.3 Mode Test Duty Cycle

For Non-beamforming mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.98	0.09	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.966	0.15	780.313u	3k
802.11ax HEW80	0.938	0.28	413.125u	3k
802.11ax HEW160	0.893	0.49	236.25u	10k

For Beamforming mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.956	0.2	2.923m	1k
802.11ax HEW40	0.961	0.17	4.35m	300
802.11ax HEW80	0.949	0.23	4.136m	300
802.11ax HEW160	0.962	0.17	5.142m	300

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for n/ax in 2.4GHz, n/ac/ax in 5GHz and ax in 6GHz.			
Device Type	<input checked="" type="checkbox"/>	Indoor Access Point	<input type="checkbox"/>	Subordinate
	<input type="checkbox"/>	Indoor Client	<input type="checkbox"/>	Standard Power Access Point
	<input type="checkbox"/>	Dual Client	<input type="checkbox"/>	Standard Client
	<input type="checkbox"/>	Fixed Client		
Channel Puncturing Function	<input type="checkbox"/>	Supported	<input checked="" type="checkbox"/>	Unsupported
Support RU	<input checked="" type="checkbox"/>	Full RU	<input type="checkbox"/>	Partial RU
Test Software Version	accessMtool 3.2.1.0			
Software / Firmware Version for CBP	5.04L.04p1rc2			

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 D03 v01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted (Other test items)	TH03-CB	Eason chen	22.5~24.1 / 62~64	Dec. 26, 2022~ Jan. 12, 2023
Radiated < 1GHz	03CH03-CB	Simmon Cheng	20.2~21.3 / 56~59	Feb. 09, 2023
Radiated > 1GHz	03CH02-CB	Ken Yeh	21.2~23.1 / 65~68	Dec. 17, 2022~ Jan. 30, 2023
	03CH04-CB		22.2~23.6 / 65~69	
AC Conduction	CO01-CB	Elvin Yeh	22~24 / 55~58	Feb. 13, 2023
RF Conducted (Contention-Based Protocol test)	DF02-CB	Nyle Chnag	18.8~20.2 / 61~67	Feb. 23, 2023~ Feb. 25, 2023



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



2 Test Configuration of EUT

2.1 Test Channel Mode

For Non-beamforming mode:

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5955MHz	37
6175MHz	31
6415MHz	31
6435MHz	31
6475MHz	33
6515MHz	35
6535MHz	31
6695MHz	29
6855MHz	31
6875MHz Straddle 6.525-6.875GHz	33
6875MHz Straddle 6.875-7.125GHz	
6895MHz	31
6995MHz	36
7095MHz	38
7115MHz	13
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5965MHz	46
6165MHz	43
6405MHz	41
6445MHz	44
6485MHz	44
6525MHz Straddle 6.425-6.525GHz	41
6525MHz Straddle 6.525-6.875GHz	
6565MHz	39
6685MHz	41
6845MHz	39
6885MHz Straddle 6.525-6.875GHz	39
6885MHz Straddle 6.875-7.125GHz	
6925MHz	45
7005MHz	45
7085MHz	46
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5985MHz	58



Mode	Power Setting
6145MHz	61
6385MHz	57
6465MHz	56
6545MHz Straddle 6.425-6.525GHz	51
6545MHz Straddle 6.525-6.875GHz	
6625MHz	54
6705MHz	55
6785MHz	52
6865MHz Straddle 6.525-6.875GHz	51
6865MHz Straddle 6.875-7.125GHz	
6945MHz	51
7025MHz	51
802.11ax HEW160_Nss1,(MCS0)_4TX	-
6025MHz	67
6185MHz	67
6345MHz	65
6505MHz Straddle 6.425-6.525GHz	63
6505MHz Straddle 6.525-6.875GHz	
6665MHz	62
6825MHz Straddle 6.525-6.875GHz	62
6825MHz Straddle 6.875-7.125GHz	
6985MHz	62



For Beamforming mode:

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5955MHz	31
6175MHz	28
6415MHz	29
6435MHz	24
6475MHz	30
6515MHz	25
6535MHz	25
6695MHz	30
6855MHz	25
6875MHz Straddle 6.525-6.875GHz	25
6875MHz Straddle 6.875-7.125GHz	
6895MHz	30
6995MHz	30
7095MHz	26
7115MHz	-10
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5965MHz	43
6165MHz	39
6405MHz	40
6445MHz	42
6485MHz	40
6525MHz Straddle 6.425-6.525GHz	43
6525MHz Straddle 6.525-6.875GHz	
6565MHz	42
6685MHz	42
6845MHz	38
6885MHz Straddle 6.525-6.875GHz	36
6885MHz Straddle 6.875-7.125GHz	
6925MHz	42
7005MHz	37
7085MHz	37
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5985MHz	55
6145MHz	55
6385MHz	49
6465MHz	53
6545MHz Straddle 6.425-6.525GHz	49



Mode	Power Setting
6545MHz Straddle 6.525-6.875GHz	
6625MHz	45
6705MHz	50
6785MHz	49
6865MHz Straddle 6.525-6.875GHz	45
6865MHz Straddle 6.875-7.125GHz	
6945MHz	45
7025MHz	47
802.11ax HEW160_Nss1,(MCS0)_4TX	-
6025MHz	61
6185MHz	61
6345MHz	57
6505MHz Straddle 6.425-6.525GHz	58
6505MHz Straddle 6.525-6.875GHz	
6665MHz	53
6825MHz Straddle 6.525-6.875GHz	57
6825MHz Straddle 6.875-7.125GHz	
6985MHz	51



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 + Adapter 1
2	EUT + Adapter 2
For operating mode 1 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Contention Based Protocol
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	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode	CTX After evaluating, 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	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
	After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis + Adapter 1
2	EUT in Y axis + Adapter 2
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis_WLAN 6GHz

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	WLAN 2.4GHz + WLAN 5GHz UNII 1 and UNII 3 + WLAN 6GHz
Refer to Sporton Test Report No.: FA262432 for Co-location RF Exposure Evaluation.	



2.3 EUT Operation during Test

For CTX Mode:

Non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

Beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

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

The program was executed as follows:

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

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter 1	APD	WA-45A12FU	Input: 100-120V~, 60Hz, 1.2A Max Output: 12V, 3.75A
Adapter 2	MOSO	MSS-V3500AR120-042A0-US	Input: 100-120V~50/60Hz, 1.2A max. Output: 12.0V, 3.5A



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN 10G NB	DELL	E6430	N/A
B	Flash disk3.0	Transcend	639205 7755	N/A
C	Wifi 2.4G NB	DELL	E6430	N/A
D	Wifi 5G NB	DELL	E6430	N/A
E	Wifi 6G NB	DELL	E6430	N/A
F	Phone	PHILIPS	M20	N/A
G	Phone	PHILIPS	M20	N/A
H	Terminal system NB	DELL	E6430	N/A
I	LAN 2.5G NB	DELL	E6430	N/A
J	Terminal system	Huawei	SmartAX MA5800-X2	N/A

For Radiated below 1GHz:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Wifi 2.4G NB	DELL	E4300	N/A
B	Wifi 5G NB	DELL	E4300	N/A
C	Wifi 6G NB	DELL	E4300	N/A
D	2.5G LAN PC	DELL	T3400	N/A
E	10G LAN PC	DELL	T3400	N/A
F	Terminal system PC	DELL	T3400	N/A
G	Terminal system	HUAWEI	SmartAX MA5800-X2	N/A
H	Flash disk3.0	Transcend	JetFlash-700	N/A
I	Phone	PHILIPS	M20	N/A
J	Phone	PHILIPS	M20	N/A

For Radiated above 1GHz:
<Non-beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A



<Beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	WLAN module (6E)	Intel	AX210NGW	PD9AX210NG

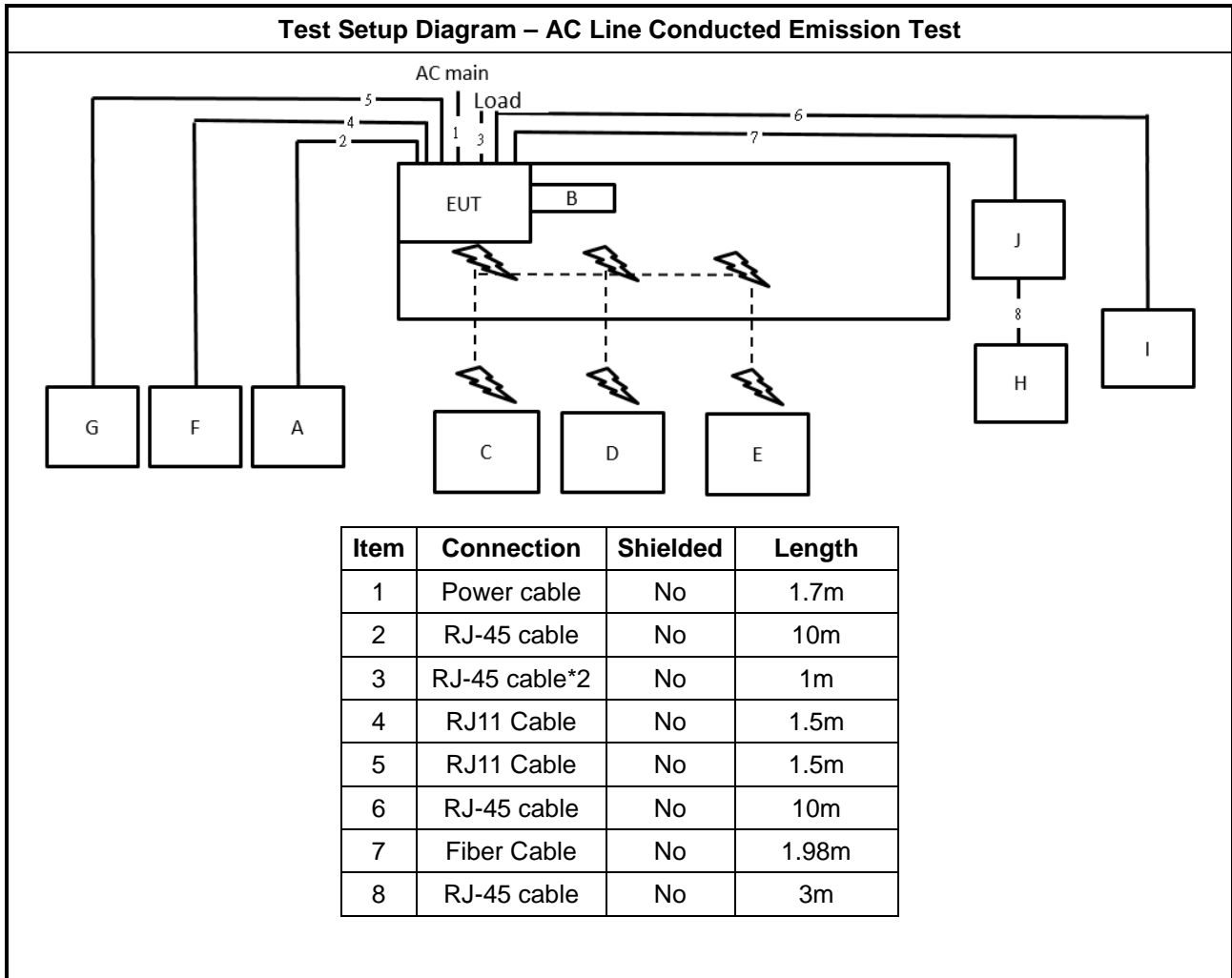
For RF Conducted (Other test items):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

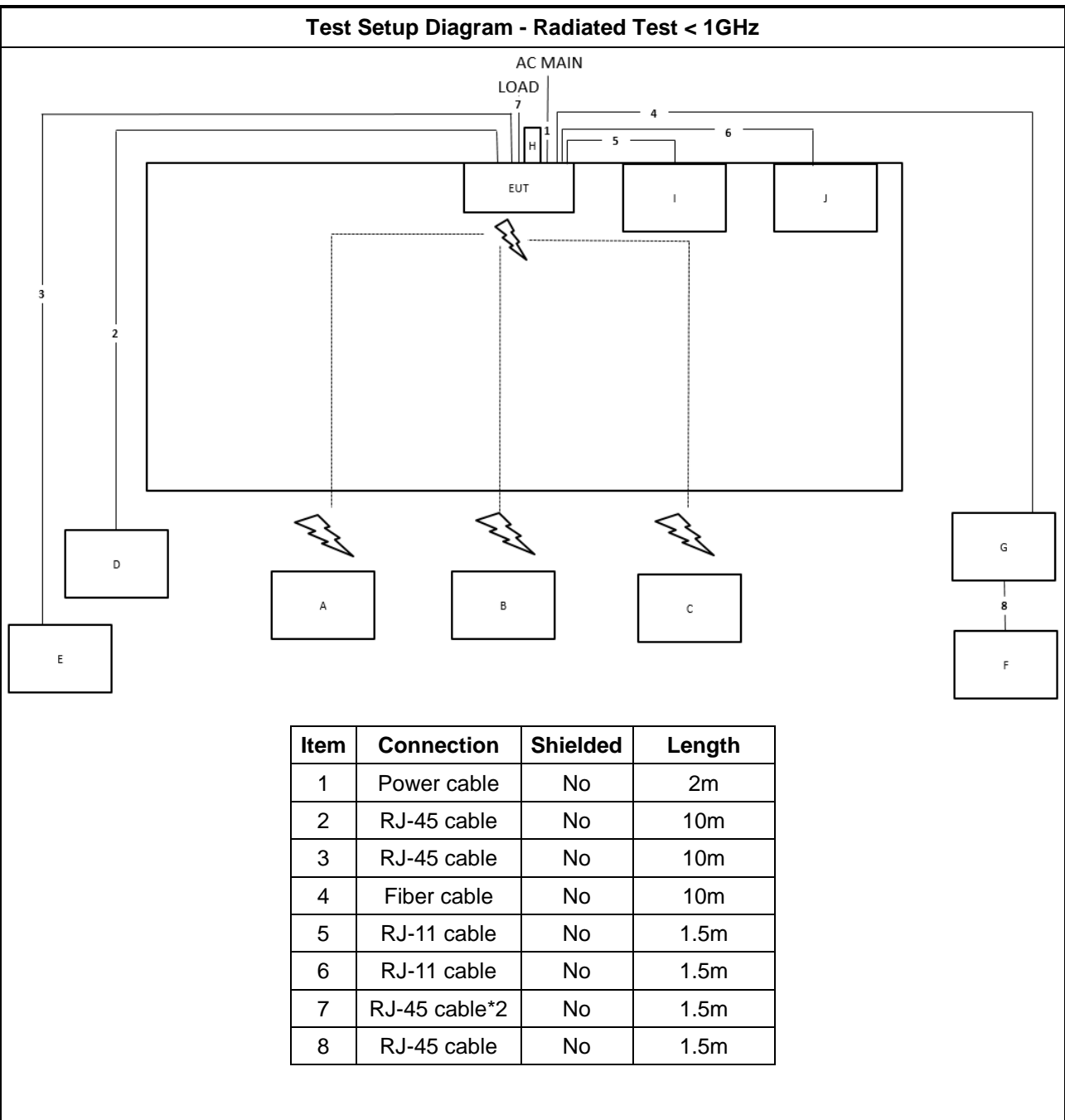
For RF Conducted (Contention Based Protocol test):

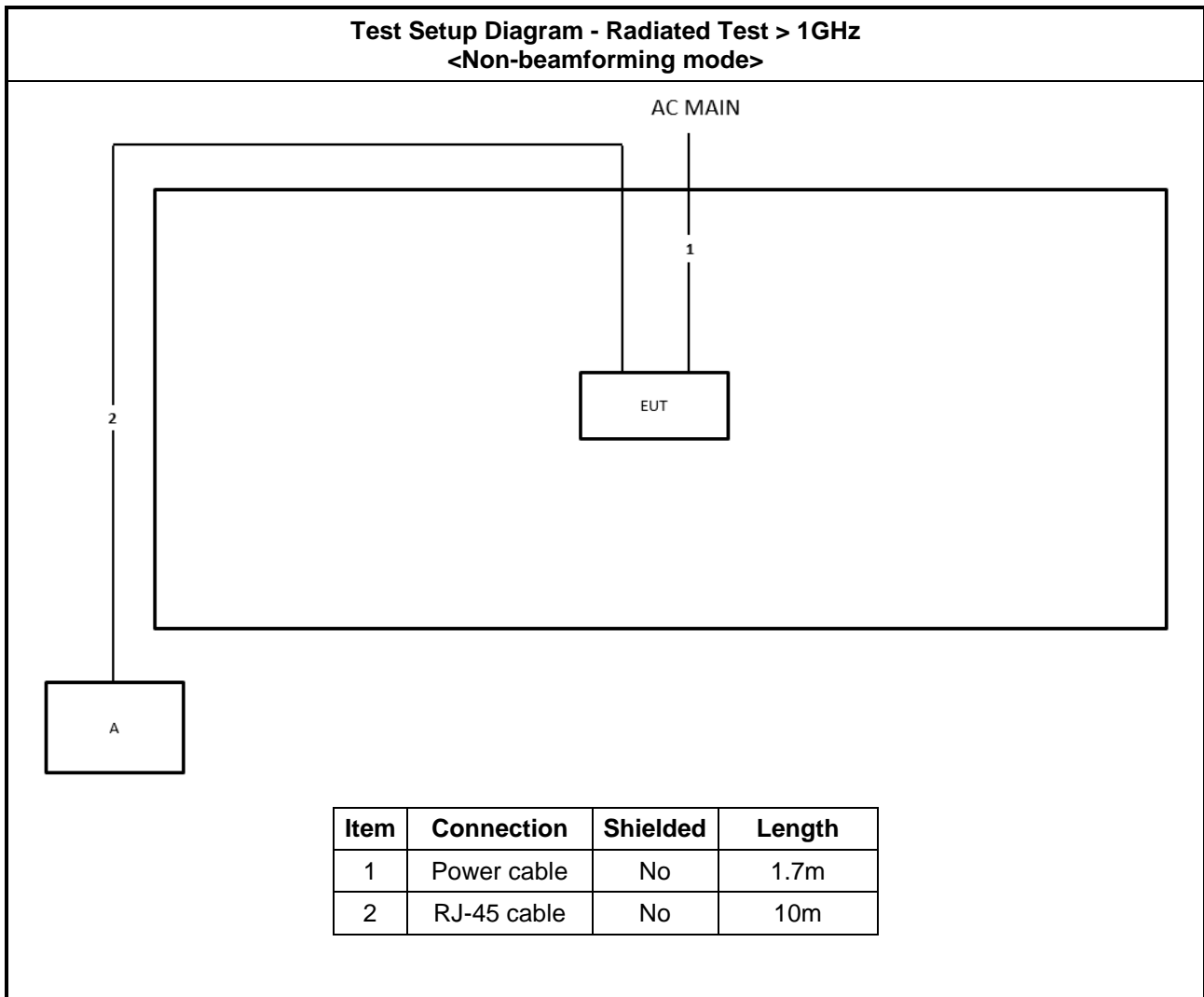
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E6230	N/A
C	WLAN module	Intel	AX210NGW	PD9AX210NG

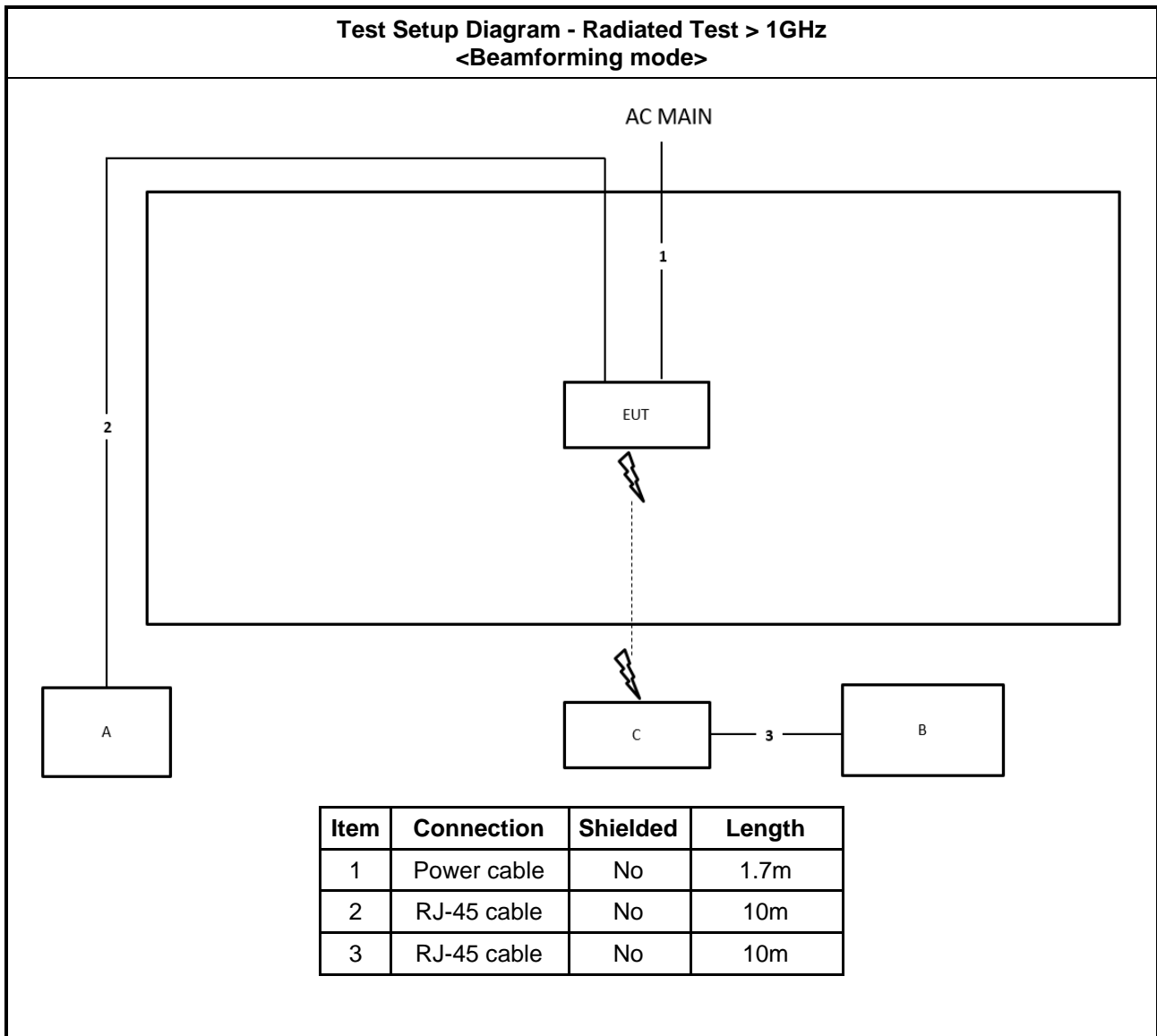
2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz









3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

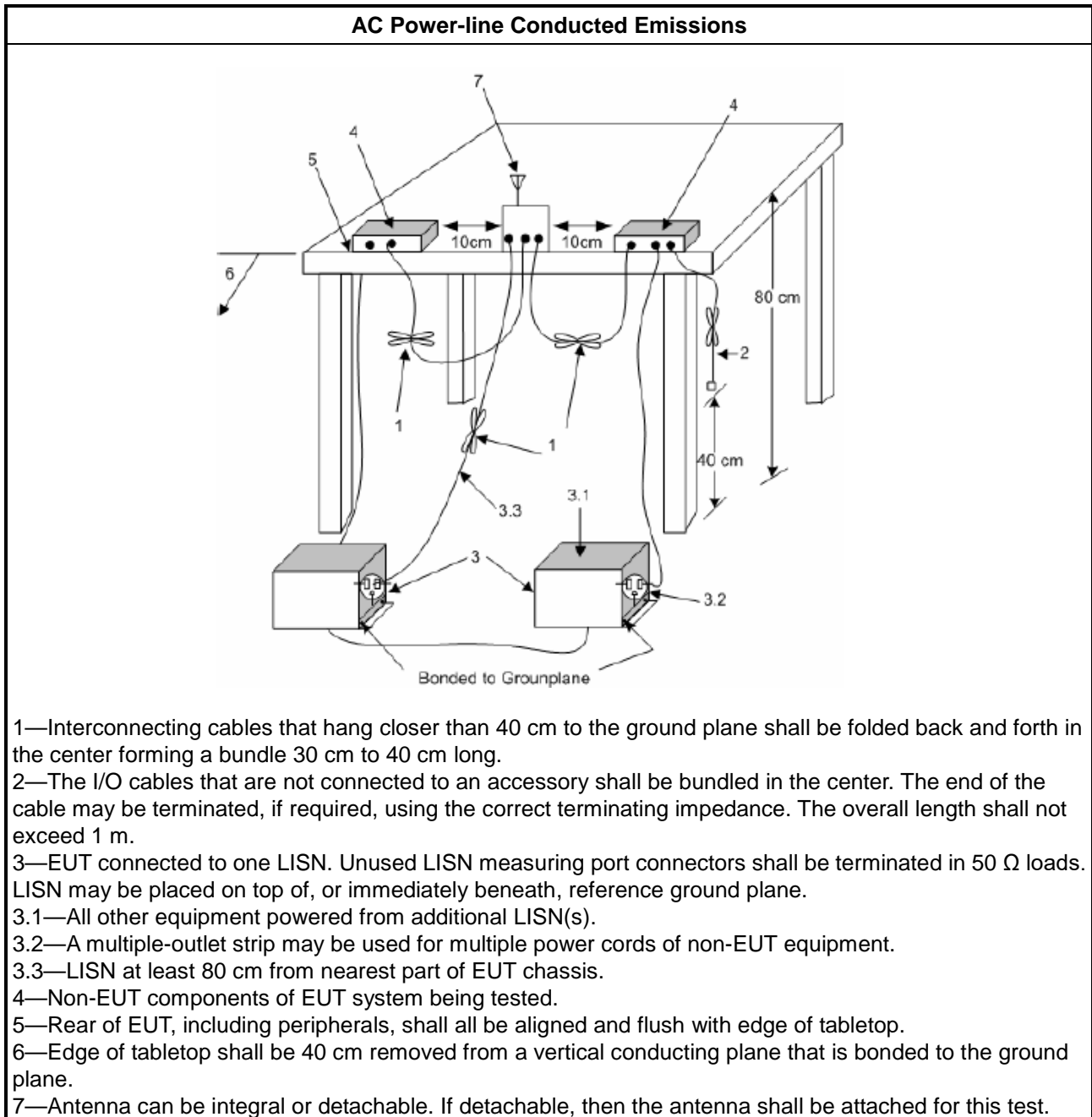
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

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

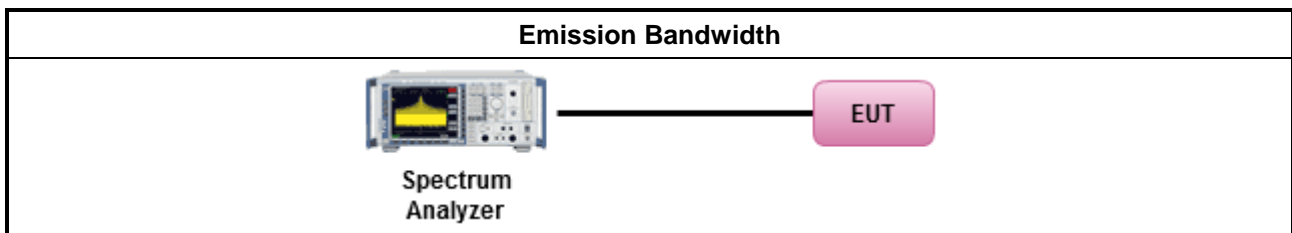
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	According to FCC KDB 987594 D02 clause II.C, measurement procedure shall refer to FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



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

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

Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.925 ~ 6.425 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm). ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of a standard power access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
<input checked="" type="checkbox"/>	For the 6.425 ~ 6.525 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
<input checked="" type="checkbox"/>	For the 6.525 ~ 6.875 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm). ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of a standard power access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
<input checked="" type="checkbox"/>	For the 6.875 ~ 7.125 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For indoor access point : e.i.r.p < 30 dBm. ▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
RLAN Devices	
<input type="checkbox"/>	For the 5.925 ~ 7.125 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For low-power indoor access-points & indoor subordinate devices < 30 dBm . ▪ For low-power client devices < 24 dBm.
<input type="checkbox"/>	For the 5.925 ~ 6.875 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ For standard-power access points & fixed client devices < 36 dBm. ▪ For standard client devices < 30 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	
<ul style="list-style-type: none"> ▪ According to FCC KDB 987594 D02 clause II.E, the test measurement procedure shall refer to KDB 789033. 	
Average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging). Spectrum analyzer setting: RBW/VBW : 1/3MHz ; Detector : RMS ; Trace mode : Average ; Sweep Count 100.
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
Wideband RF power meter and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).
<input type="checkbox"/> For conducted measurement.	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	
<input checked="" type="checkbox"/> For radiated measurement.	
<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing" ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. ▪ Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation. 	

Note :

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

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

EIRP Formula :

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

where;

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

LP : Free Space Loss(dB)

PR Formula :

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

where;

P Meas(dBm) : Power measurement level

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

LC(dB) : Measurement cable loss (dB)

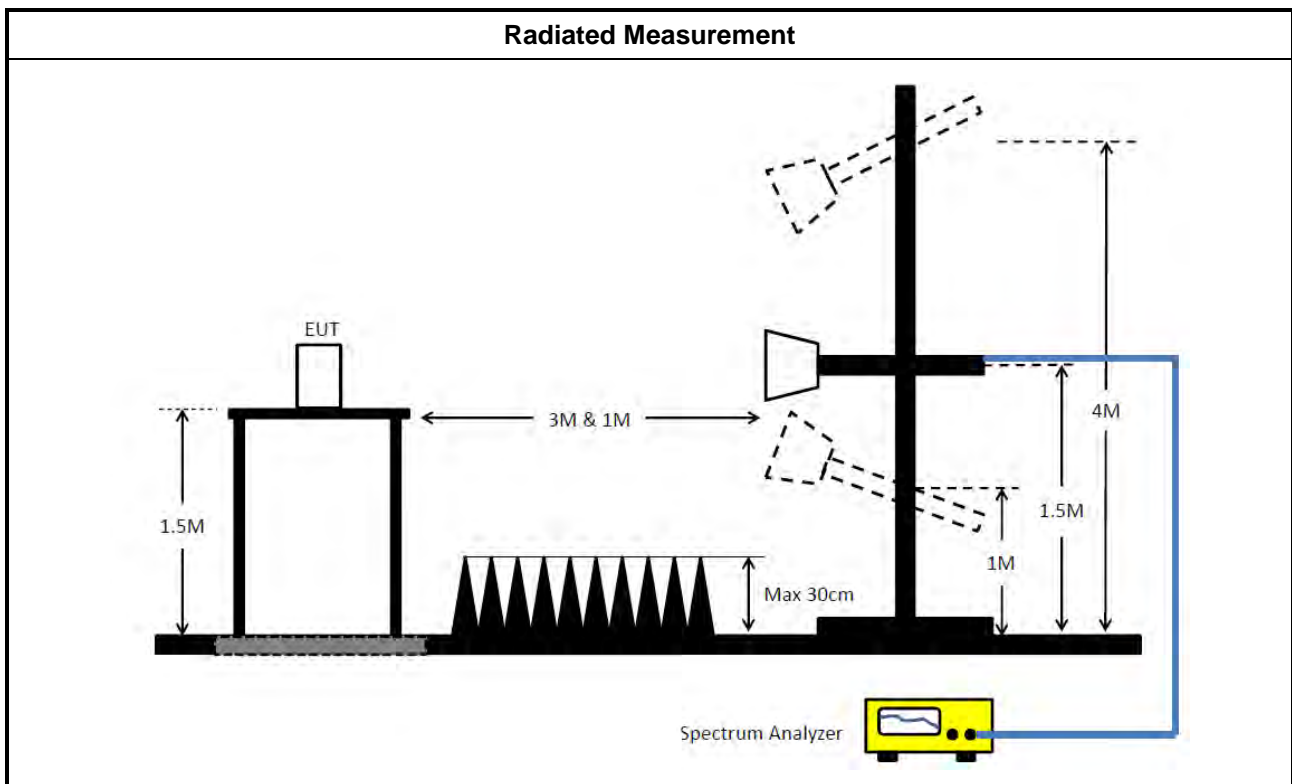
LP(FSL factor) Formula :
 $LP(dB) = 20 \log F + 20 \log D - 27.54$
 where;
 F(MHz) : EUT center frequency
 D(m) : Measurement distance

For Example:
 Test mode nonTXBF HE20 5955MHz EIRP measurement
 PR Formula :
 $PR(dBm) = -37.88 - 10.50 + 5.05 = -43.33$

LP(FSL factor) Formula :
 $LP(dB) = 20 \log(5955) + 20 \log(3) - 27.5 = 57.54$

EIRP Formula :
 $EIRP(dBm) = -43.33 + 57.54 = 14.21$

3.3.4 Test Setup



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

Refer as Appendix C



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

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

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

3.4.2 Measuring Instruments

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



3.4.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ According to FCC KDB 987594 D02 clause II.F, the measurement procedure shall refer to KDB 789033. Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
	[duty cycle ≥ 98% or external video / power trigger]
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<input type="checkbox"/>	For conducted measurement.
	<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below:
<input type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
	<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$



<input checked="" type="checkbox"/>	For radiated measurement.
<input type="checkbox"/>	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
<input type="checkbox"/>	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

Note :

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

EIRP PSD Formula :

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

where;

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

LP : Free Space Loss(dB)

PR Formula :

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

where;

P Meas(dBm/MHz) : PSD measurement level

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

LC(dB) : Measurement cable loss (dB)

LP(FSL factor) Formula :

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

where;

F(MHz) : EUT center frequency

D(m) : Measurement distance

For Example:

Test mode HE20 6135MHz EIRP PSD measurement

PR Formula :

$$\text{PR(dBm/MHz)} = -46.03 - 11.50 + 4.98 = -52.56$$

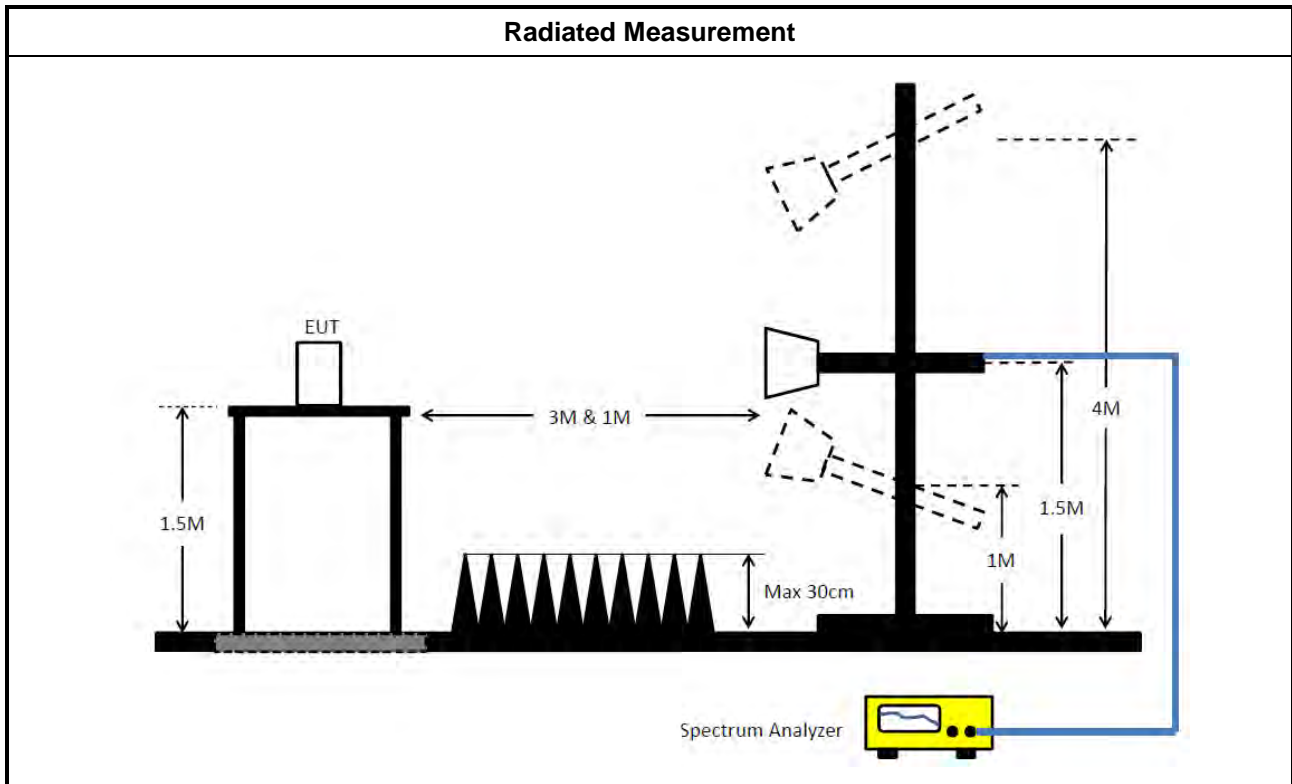
LP(FSL factor) Formula :

$$\text{LP(dB)} = 20 \log(5952.3) + 20 \log(3) - 27.5 = 57.54$$

EIRP PSD Formula

$$\text{EIRP PSD(dBm/MHz)} = -52.56 + 57.54 = 4.98$$

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).

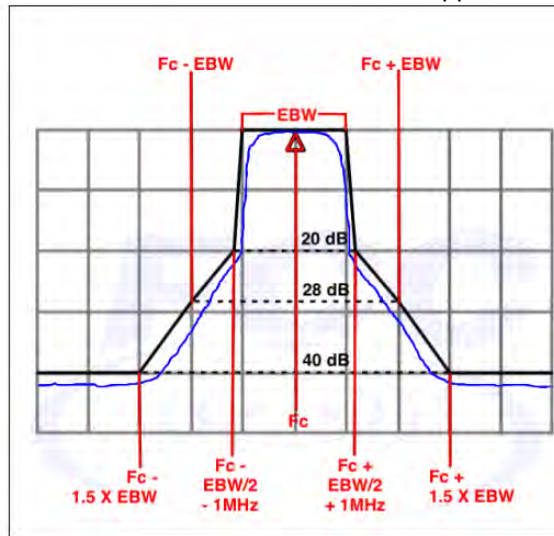
Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, 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) = $54\text{dBuV/m at } 3\text{m} + 9.54\text{dB} = 63.54\text{ dBuV/m at } 1\text{m}$.

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) = $68.2\text{dBuV/m at } 3\text{m} + 9.54\text{dB} = 77.74\text{ dBuV/m at } 1\text{m}$. 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.





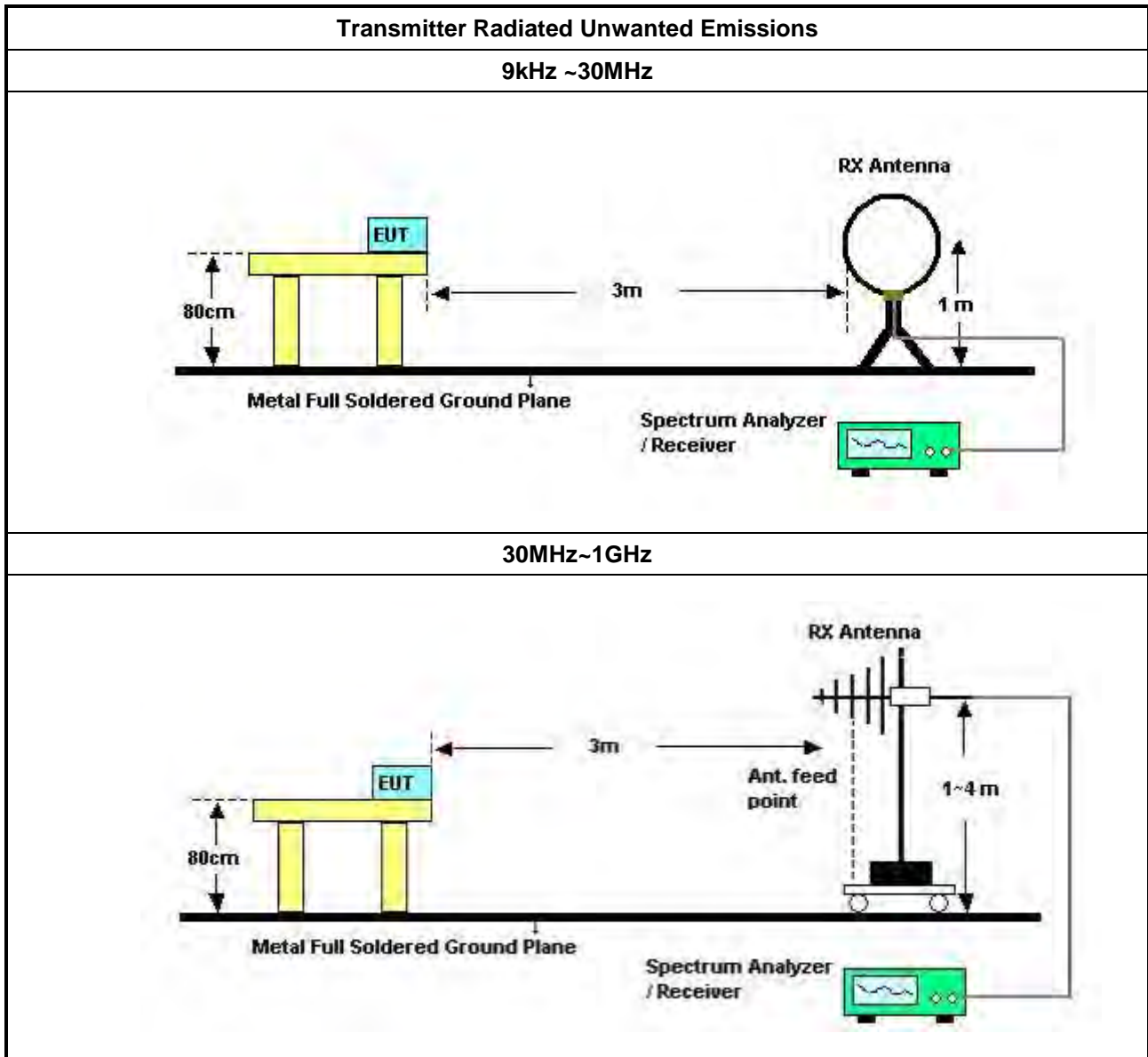
3.5.2 Measuring Instruments

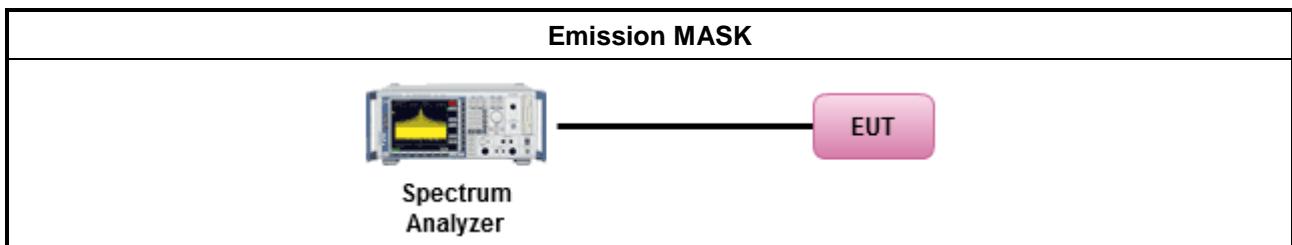
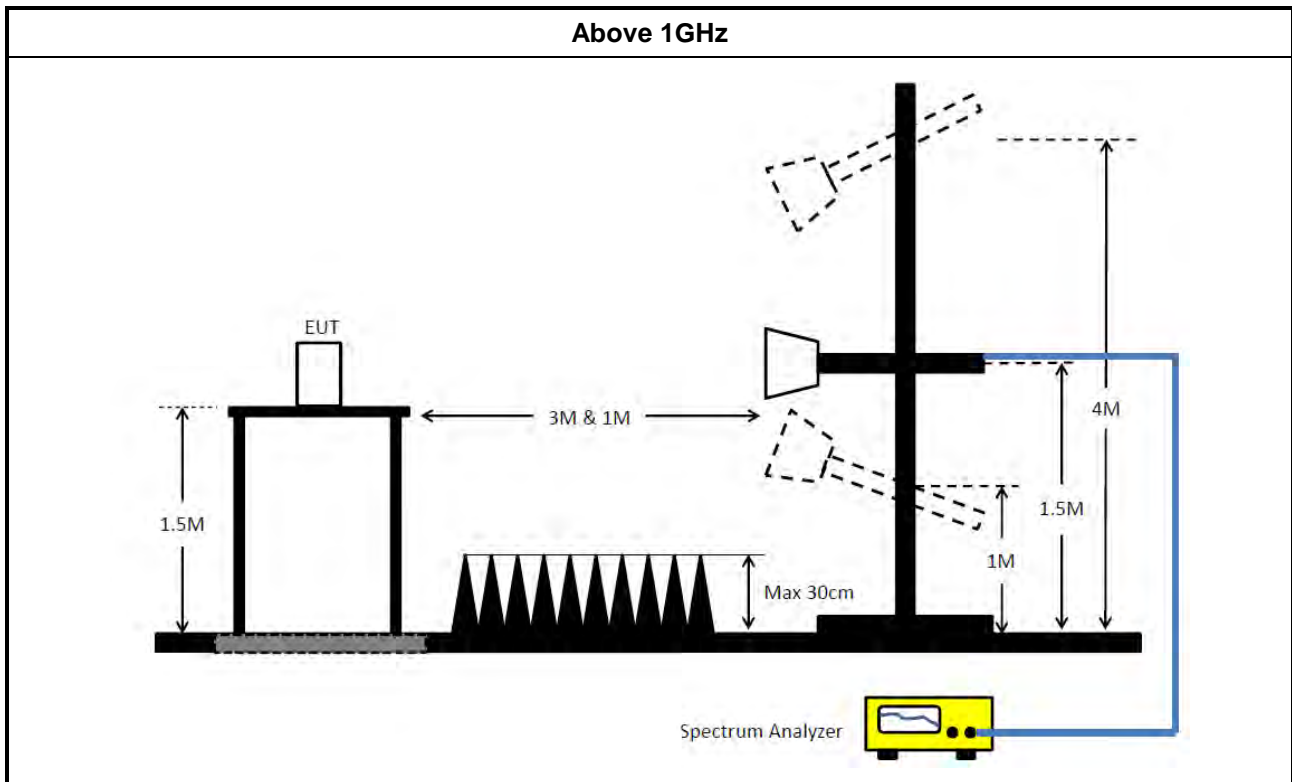
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method		
<ul style="list-style-type: none"> ▪ According to FCC KDB 987594 D02 II.G. the unwanted emission measurement procedure shall refer to KDB 789300(except emission MASK). Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). 		
<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor]. 		
<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: 		
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands. 	
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands. 	
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)	
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).	
	<input checked="" type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). $VBW \geq 1/T$, where T is pulse time.(For restricted band average measurement)	
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.	
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.	
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.	
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)3)d)ii) for Band edge Integration measurements. 	
	<ul style="list-style-type: none"> ▪ For emission MASK shall be measured using following options below: 	
	<input checked="" type="checkbox"/> Refer as FCC KDB 987594 D02, J) In-Band Emissions	
<ul style="list-style-type: none"> ▪ For radiated measurement. 		
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. 	
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. 	
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 	
<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level. 		
<ul style="list-style-type: none"> ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported. 		

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Contention Based Protocol

3.6.1 Contention Based Protocol Limit

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

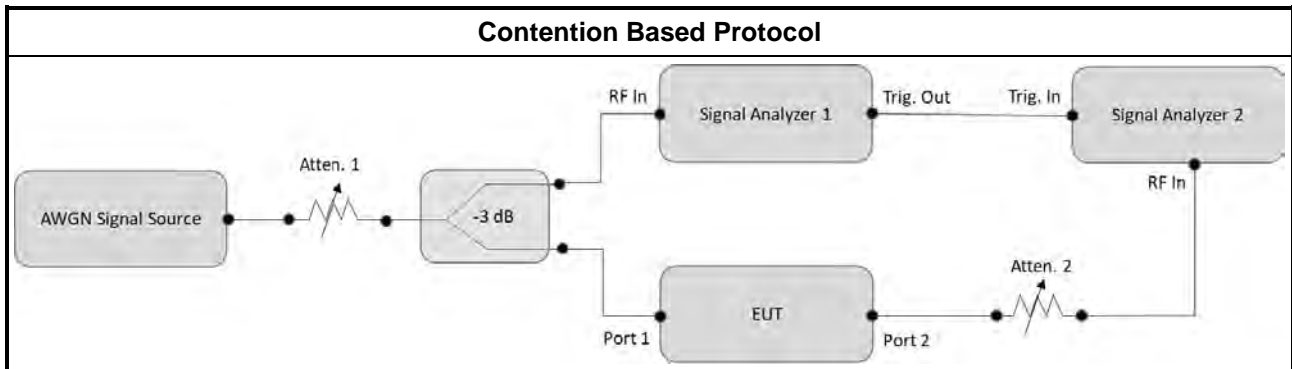
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

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	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Dec. 20, 2022	Dec. 19, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	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	May 14, 2022	May 13, 2023	Radiation (03CH03-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH03-CB	30 MHz ~ 1 GHz	Jan. 17, 2023	Jan. 16, 2024	Radiation (03CH03-CB)
Bilog Antenna with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	2928 & AT-N0608	20MHz ~ 2GHz	Feb. 21, 2022	Feb. 20, 2023	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8447D	2944A10259	9kHz ~ 1.3GHz	Jan. 09, 2023	Jan. 08, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 10, 2022	Jun. 09, 2023	Radiation (03CH03-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH03-CB)
RF Cable-low	Woken	RG402	Low Cable-02+29	30MHz ~ 1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 26, 2022	Mar. 25, 2023	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 19, 2022	Apr. 18, 2023	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Dec. 05, 2022	Dec. 04, 2023	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH04-CB)
Horn Antenna	ETS-Lindgren	3115	00143147	750MHz~18GHz z	Oct. 12, 2022	Oct. 11, 2023	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 28, 2022	Mar. 27, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz z	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz z	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)
Spectrum Analyzer	R&S	FSV40	101025	9kHz ~ 40GHz	Oct. 28, 2022	Oct. 27, 2023	Conducted (DF02-CB)
Signal generator	R&S	SMB100A	181239	1MHz-40GHz	Dec. 30, 2022	Dec. 29, 2023	Conducted (DF02-CB)
Vector Signal generator	R&S	SMW200A	109426	100kHz- 7.5GHz	Dec. 29, 2022	Dec. 28, 2023	Conducted (DF02-CB)
RF Power Divider	STI	2 Way	DV-2way -05	1GHz ~ 8GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (DF02-CB)
RF Power Divider	STI	2 Way	DV-2way -06	1GHz ~ 8GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (DF02-CB)
RF Power Divider	STI	2 Way	DV-2way -07	1GHz ~ 8GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (DF02-CB)
RF Power Divider	STI	2 Way	DV-2way -08	1GHz ~ 8GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
100MS/s Digitizer	N.I	USB-5133	01BFB476	N/A	Apr. 17, 2022	Apr. 16, 2023	Conducted (DF02-CB)

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

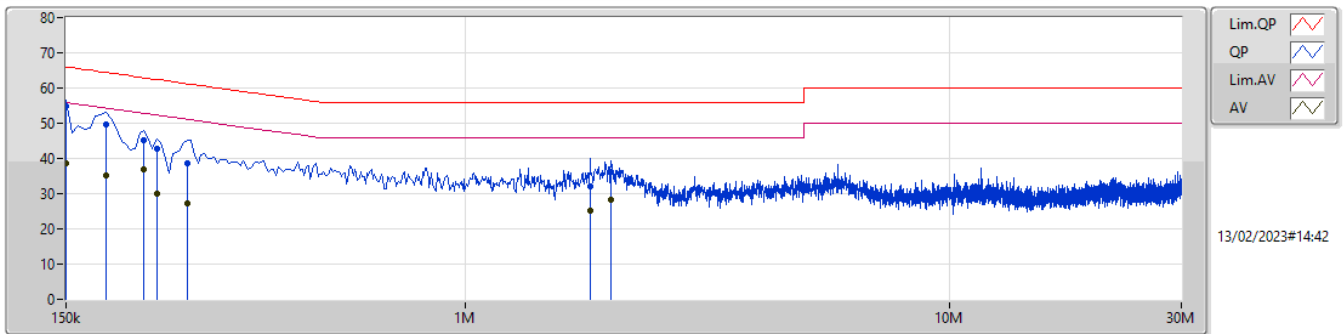
NCR means Non-Calibration required.



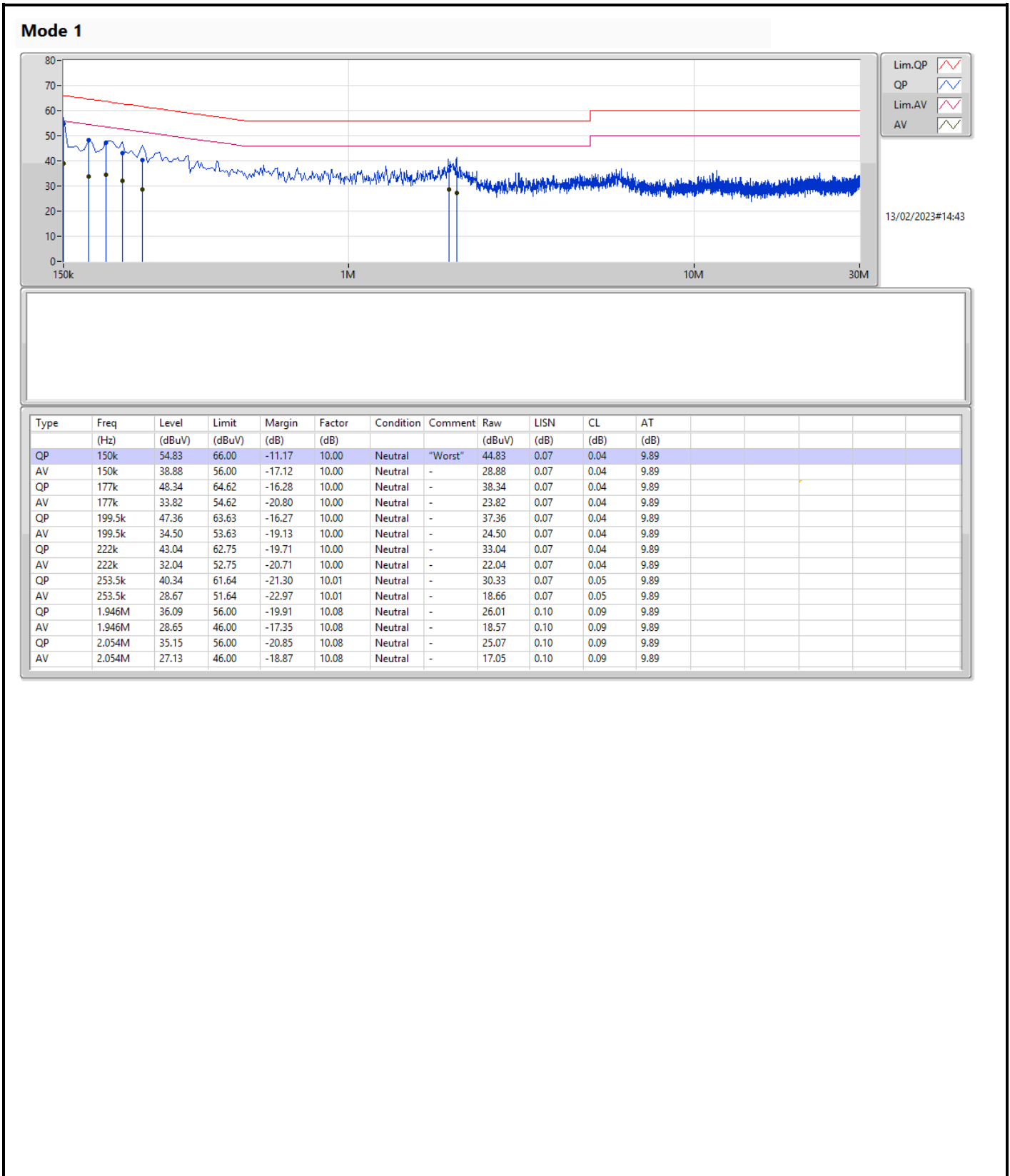
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150k	54.90	66.00	-11.10	Line

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	54.90	66.00	-11.10	9.99	Line	"Worst"	44.91	0.06	0.04	9.89
AV	150k	38.69	56.00	-17.31	9.99	Line	-	28.70	0.06	0.04	9.89
QP	181.5k	49.52	64.41	-14.89	9.99	Line	-	39.53	0.06	0.04	9.89
AV	181.5k	35.06	54.41	-19.35	9.99	Line	-	25.07	0.06	0.04	9.89
QP	217.5k	45.24	62.92	-17.68	9.99	Line	-	35.25	0.06	0.04	9.89
AV	217.5k	36.99	52.92	-15.93	9.99	Line	-	27.00	0.06	0.04	9.89
QP	231k	42.83	62.41	-19.58	9.99	Line	-	32.84	0.06	0.04	9.89
AV	231k	30.01	52.41	-22.40	9.99	Line	-	20.02	0.06	0.04	9.89
QP	267k	38.53	61.20	-22.67	10.00	Line	-	28.53	0.06	0.05	9.89
AV	267k	27.11	51.20	-24.09	10.00	Line	-	17.11	0.06	0.05	9.89
QP	1.806M	32.02	56.00	-23.98	10.06	Line	-	21.96	0.09	0.08	9.89
AV	1.806M	25.24	46.00	-20.76	10.06	Line	-	15.18	0.09	0.08	9.89
QP	1.995M	36.19	56.00	-19.81	10.07	Line	-	26.12	0.09	0.09	9.89
AV	1.995M	28.25	46.00	-17.75	10.07	Line	-	18.18	0.09	0.09	9.89





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	27.522M	19.22M	19M2D1D	21.978M	19.13M
802.11ax HEW40_Nss1,(MCS0)_4TX	43.56M	37.901M	37M9D1D	41.316M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	86.328M	77.481M	77M5D1D	82.104M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.792M	156.882M	157MD1D	164.736M	156.162M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	24.882M	19.19M	19M2D1D	21.912M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	44.25M	37.901M	37M9D1D	41.052M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	90.288M	77.601M	77M6D1D	82.368M	77.301M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.6M	156.282M	156MD1D	165.24M	156.162M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	27.522M	19.19M	19M2D1D	22.044M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	43.44M	37.961M	38MOD1D	40.524M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	95.832M	77.601M	77M6D1D	82.368M	77.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.84M	156.642M	157MD1D	164.736M	156.162M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	27.654M	19.19M	19M2D1D	22.11M	19.13M
802.11ax HEW40_Nss1,(MCS0)_4TX	45.804M	37.901M	37M9D1D	41.448M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	87.648M	77.601M	77M6D1D	82.104M	77.481M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.264M	156.402M	156MD1D	164.208M	155.922M

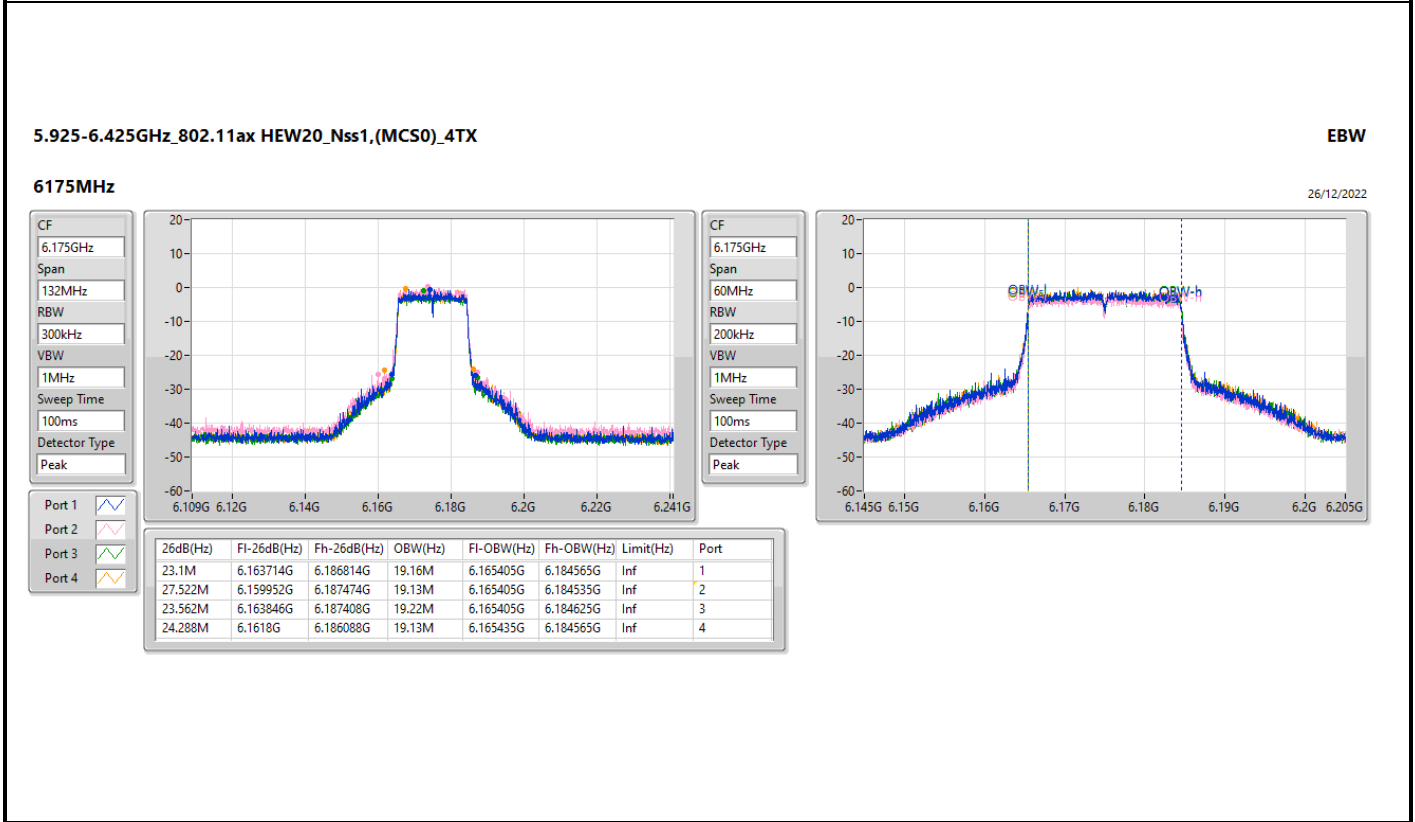
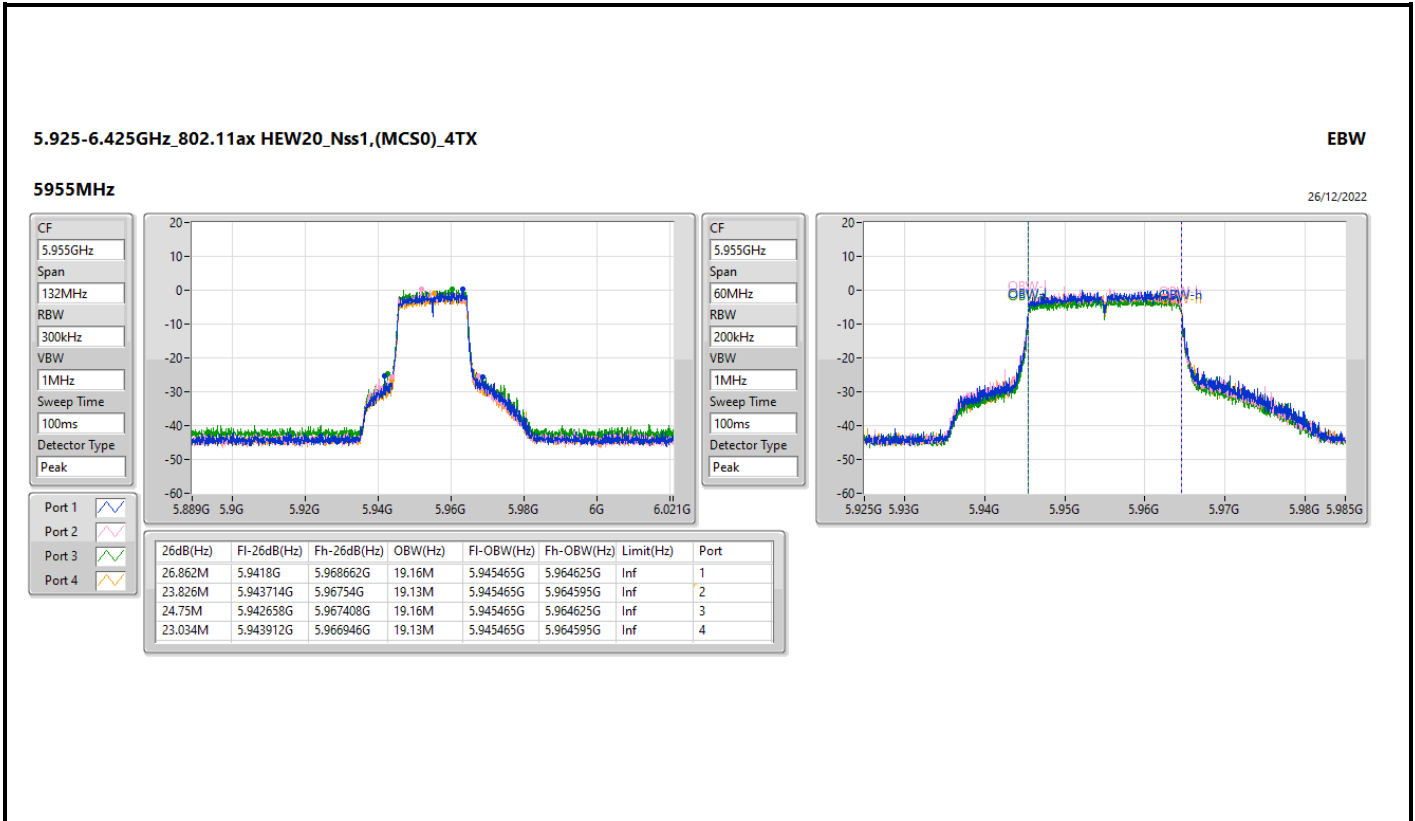
Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Max-OBW = Maximum 99% occupied bandwidth;
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Min-OBW = Minimum 99% occupied bandwidth



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	26.862M	19.16M	23.826M	19.13M	24.75M	19.16M	23.034M	19.13M
6175MHz	Pass	Inf	23.1M	19.16M	27.522M	19.13M	23.562M	19.22M	24.288M	19.13M
6415MHz	Pass	Inf	21.978M	19.16M	22.242M	19.13M	22.44M	19.13M	23.892M	19.13M
6435MHz	Pass	Inf	22.11M	19.16M	24.09M	19.16M	23.166M	19.19M	22.506M	19.16M
6475MHz	Pass	Inf	24.882M	19.16M	23.892M	19.13M	23.628M	19.1M	23.496M	19.13M
6515MHz	Pass	Inf	23.232M	19.19M	21.912M	19.16M	21.978M	19.19M	22.572M	19.13M
6535MHz	Pass	Inf	23.1M	19.13M	22.968M	19.13M	23.166M	19.19M	27.522M	19.16M
6695MHz	Pass	Inf	27.522M	19.16M	24.552M	19.19M	22.044M	19.13M	24.486M	19.13M
6855MHz	Pass	Inf	24.09M	19.16M	23.628M	19.13M	22.836M	19.19M	24.288M	19.16M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	24.915M	19.1M	24.27M	19.1M	24.81M	19.145M	24.48M	19.1M
6895MHz	Pass	Inf	26.4M	19.16M	26.202M	19.19M	23.298M	19.13M	24.42M	19.13M
6995MHz	Pass	Inf	27.654M	19.13M	22.638M	19.16M	22.968M	19.16M	23.826M	19.13M
7095MHz	Pass	Inf	22.638M	19.16M	24.156M	19.16M	22.374M	19.19M	24.816M	19.16M
7115MHz	Pass	Inf	22.506M	19.19M	22.11M	19.13M	25.344M	19.19M	23.43M	19.13M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	43.56M	37.781M	42.768M	37.781M	41.976M	37.841M	42.504M	37.781M
6165MHz	Pass	Inf	43.032M	37.841M	42.372M	37.901M	42.504M	37.841M	41.58M	37.901M
6405MHz	Pass	Inf	42.504M	37.841M	41.976M	37.901M	41.316M	37.841M	41.976M	37.901M
6445MHz	Pass	Inf	41.052M	37.841M	41.712M	37.841M	41.976M	37.781M	43.032M	37.841M
6485MHz	Pass	Inf	41.976M	37.841M	42.108M	37.901M	41.976M	37.781M	42.108M	37.901M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	41.19M	37.811M	44.25M	37.811M	41.97M	37.781M	41.94M	37.811M
6565MHz	Pass	Inf	42.108M	37.841M	42.504M	37.841M	42.504M	37.841M	42.108M	37.901M
6685MHz	Pass	Inf	41.712M	37.901M	41.316M	37.841M	43.428M	37.841M	41.976M	37.961M
6845MHz	Pass	Inf	41.712M	37.901M	42.372M	37.901M	40.524M	37.841M	42.636M	37.841M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	43.44M	37.841M	42.42M	37.781M	42.33M	37.841M	42.27M	37.781M
6925MHz	Pass	Inf	42.768M	37.841M	42.372M	37.781M	42.108M	37.841M	41.448M	37.841M
7005MHz	Pass	Inf	41.448M	37.901M	41.58M	37.841M	44.616M	37.841M	42.372M	37.841M
7085MHz	Pass	Inf	45.804M	37.901M	43.56M	37.841M	43.032M	37.901M	43.032M	37.841M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	85.536M	77.241M	84.48M	77.241M	83.424M	77.241M	86.328M	77.241M
6145MHz	Pass	Inf	82.368M	77.241M	82.896M	77.361M	83.424M	77.361M	82.632M	77.361M
6385MHz	Pass	Inf	83.688M	77.481M	83.688M	77.481M	84.48M	77.361M	82.104M	77.481M
6465MHz	Pass	Inf	83.952M	77.481M	82.368M	77.481M	82.632M	77.361M	90.288M	77.601M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	86.04M	77.361M	87.72M	77.301M	85.56M	77.301M	85.02M	77.361M
6625MHz	Pass	Inf	86.856M	77.481M	83.688M	77.481M	83.424M	77.361M	83.952M	77.481M
6705MHz	Pass	Inf	83.424M	77.481M	87.384M	77.481M	84.744M	77.601M	82.368M	77.601M
6785MHz	Pass	Inf	95.832M	77.481M	83.424M	77.481M	84.744M	77.361M	82.632M	77.481M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	85.74M	77.421M	88.5M	77.421M	84.66M	77.361M	88.62M	77.421M
6945MHz	Pass	Inf	85.272M	77.481M	83.424M	77.481M	84.744M	77.481M	86.592M	77.601M
7025MHz	Pass	Inf	87.648M	77.481M	83.424M	77.601M	82.104M	77.481M	84.216M	77.601M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	164.736M	156.162M	165.792M	156.882M	165.792M	156.162M	164.736M	156.402M
6185MHz	Pass	Inf	164.736M	156.402M	165.264M	156.402M	165.264M	156.402M	164.736M	156.642M
6345MHz	Pass	Inf	164.736M	156.402M	164.736M	156.642M	165.264M	156.162M	165.792M	156.402M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	165.36M	156.282M	165.6M	156.282M	165.6M	156.162M	165.24M	156.282M
6665MHz	Pass	Inf	164.736M	156.402M	165.264M	156.162M	164.736M	156.162M	165.264M	156.642M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	165.84M	156.282M	165.6M	156.282M	165.24M	156.282M	165.12M	156.282M
6985MHz	Pass	Inf	164.736M	156.162M	164.736M	156.402M	164.208M	155.922M	165.264M	156.162M

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

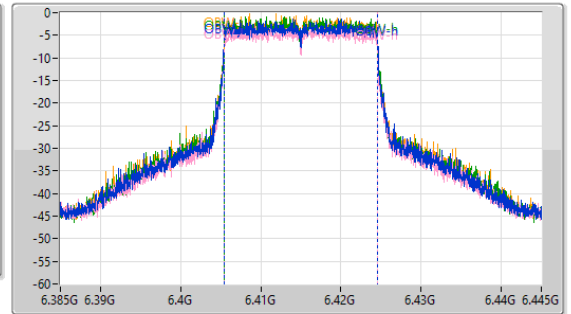
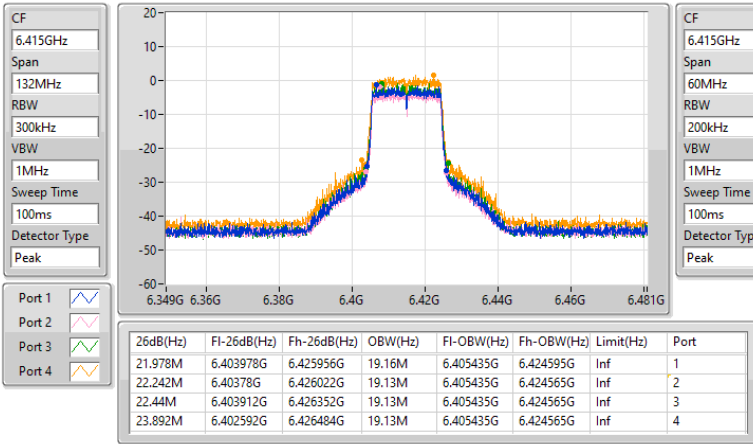


5.925-6.425GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6415MHz

26/12/2022

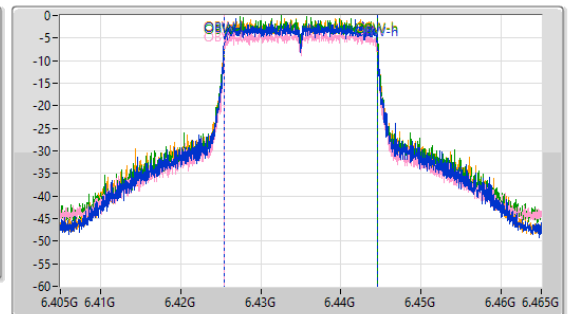
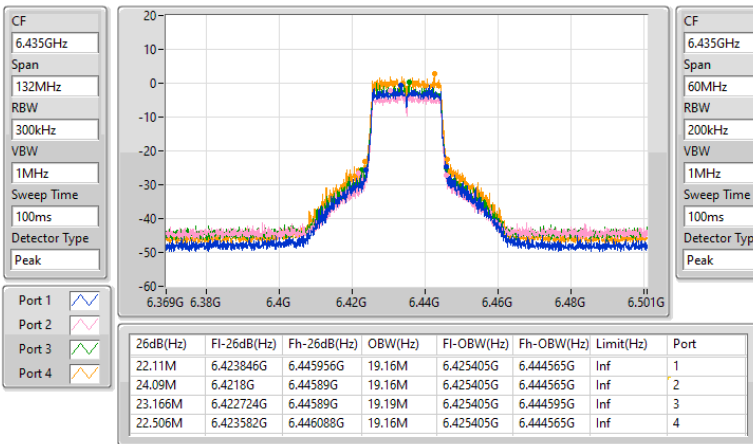


6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6435MHz

26/12/2022

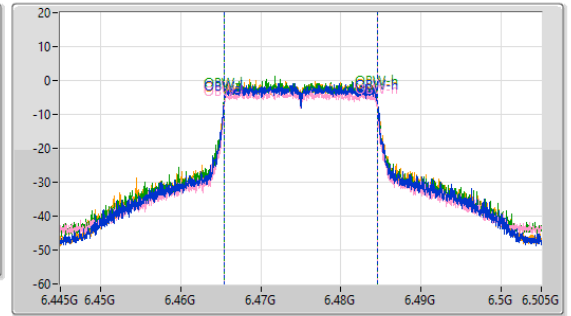
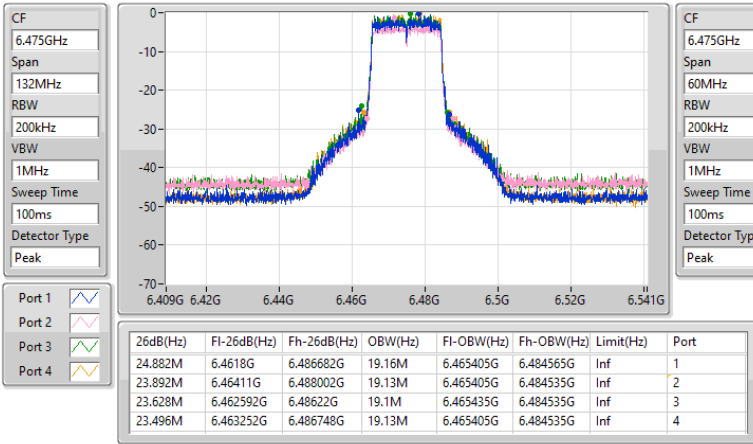


6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6475MHz

26/12/2022

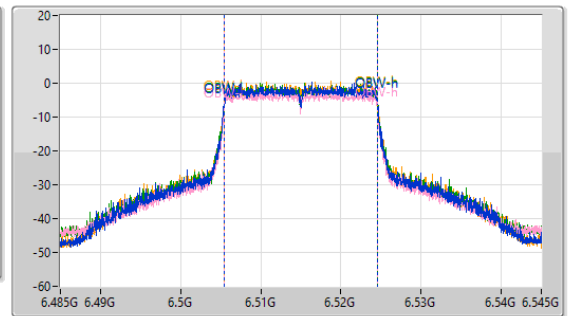
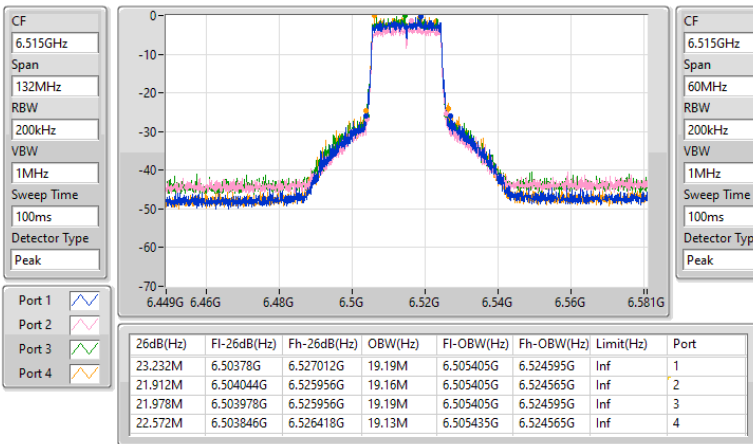


6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6515MHz

26/12/2022



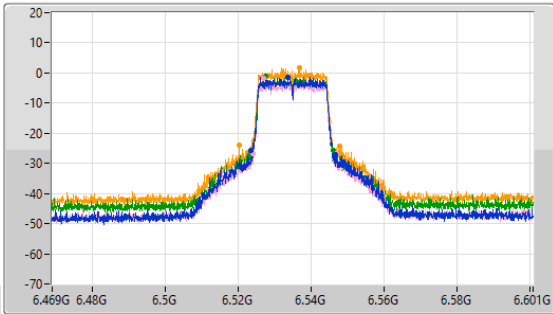
6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

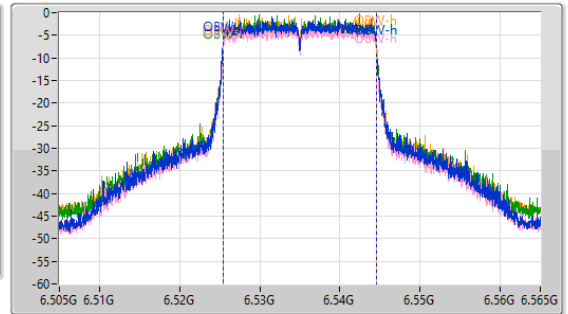
6535MHz

26/12/2022

CF
6.535GHz
Span
132MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.535GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.1M	6.523648G	6.546748G	19.13M	6.525405G	6.544535G	Inf	1
22.968M	6.524176G	6.547144G	19.13M	6.525435G	6.544565G	Inf	2
23.166M	6.52312G	6.546286G	19.19M	6.525405G	6.544595G	Inf	3
27.522M	6.520348G	6.54787G	19.16M	6.525405G	6.544565G	Inf	4

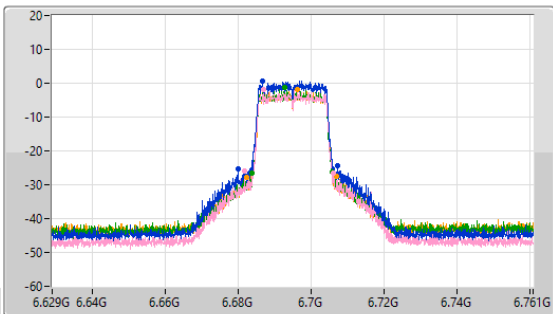
6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

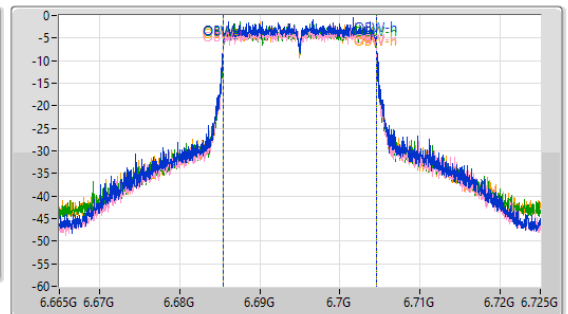
6695MHz

26/12/2022

CF
6.695GHz
Span
132MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.695GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

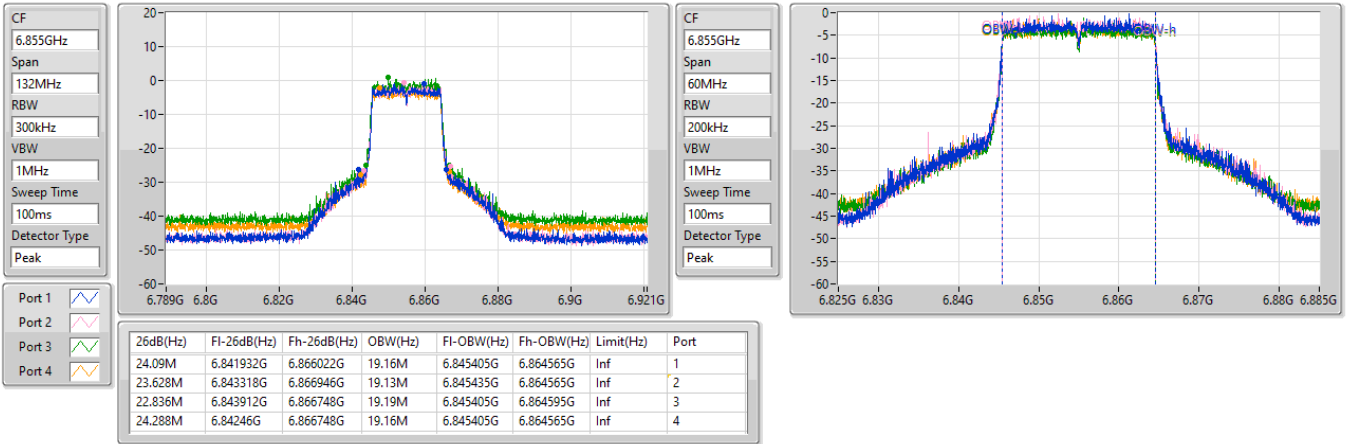
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
27.522M	6.679952G	6.707474G	19.16M	6.685405G	6.704565G	Inf	1
24.552M	6.681734G	6.706286G	19.19M	6.685375G	6.704565G	Inf	2
22.044M	6.683846G	6.70589G	19.13M	6.685435G	6.704565G	Inf	3
24.486M	6.68246G	6.706946G	19.13M	6.685435G	6.704565G	Inf	4

6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6855MHz

26/12/2022

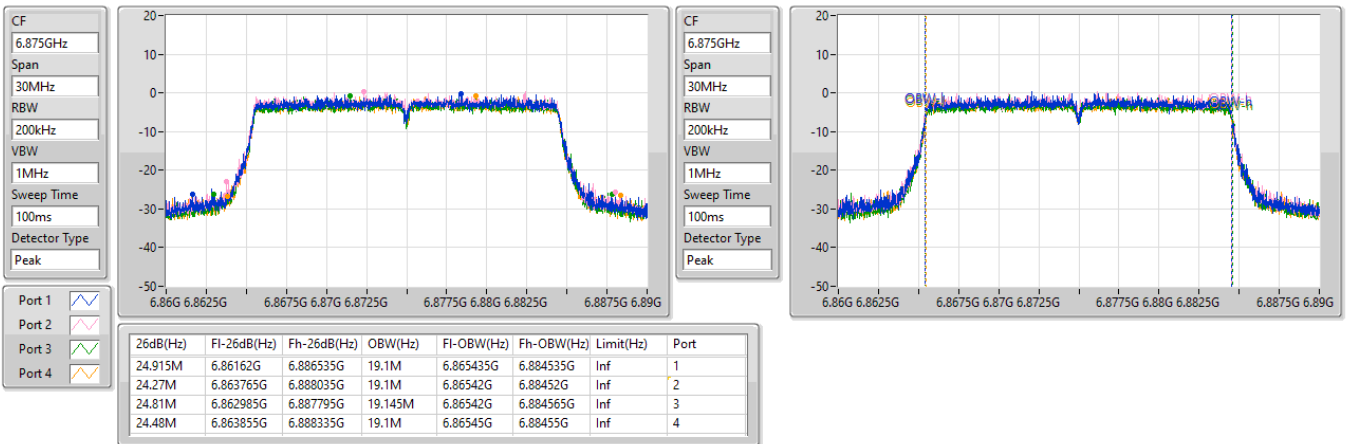


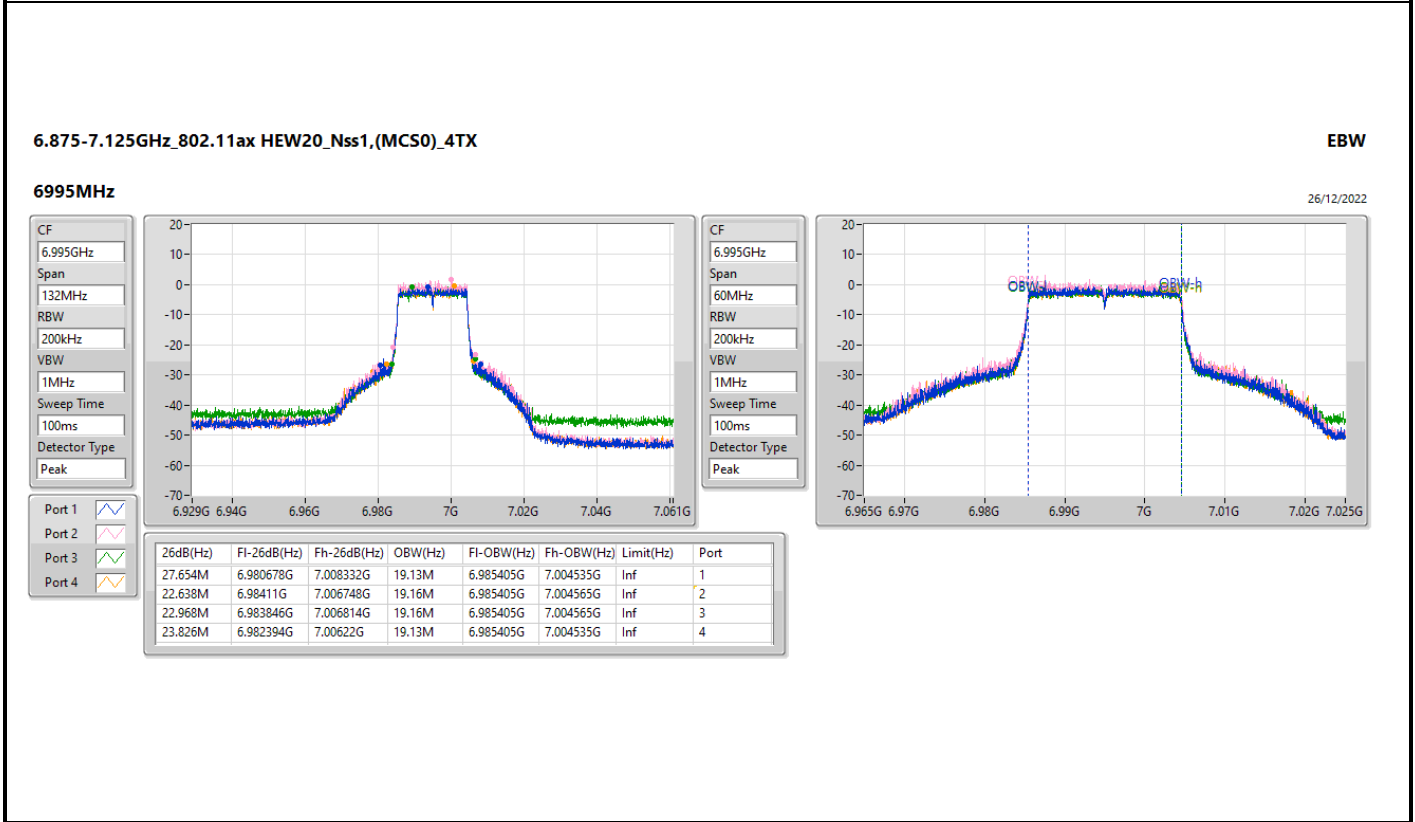
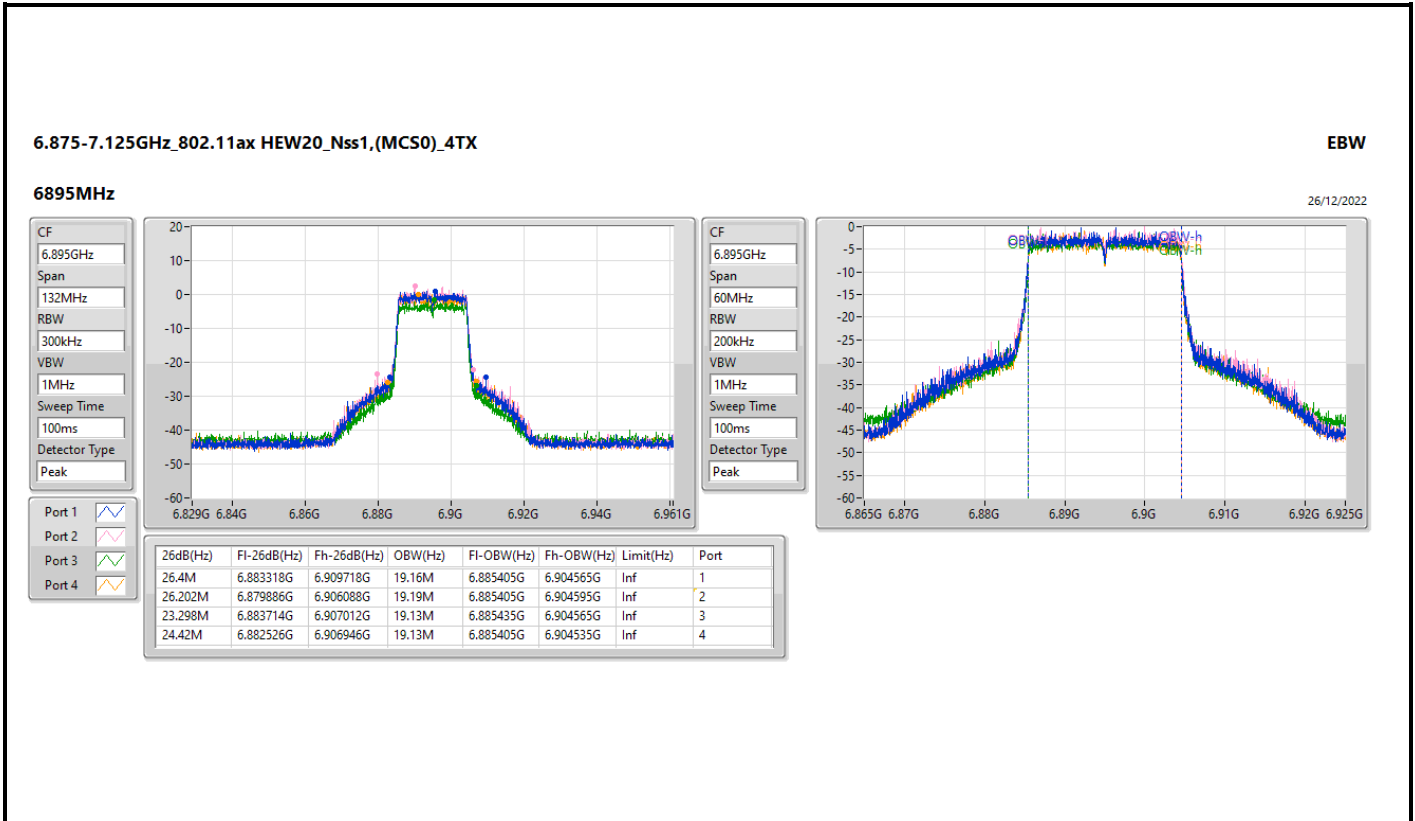
6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6875MHz Straddle 6.525-6.875GHz

26/12/2022





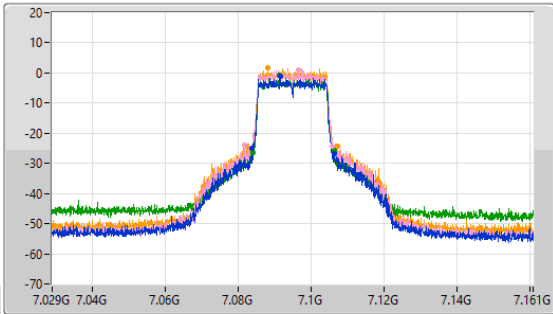
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

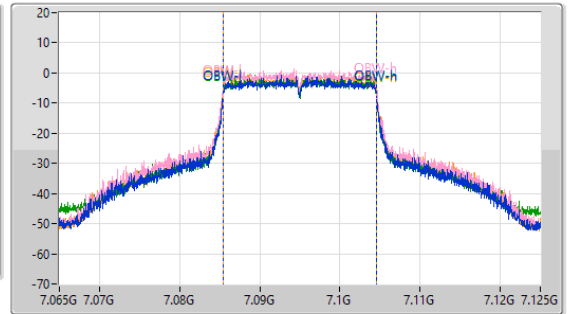
7095MHz

26/12/2022

CF: 7.095GHz
 Span: 132MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 7.095GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.638M	7.083846G	7.106484G	19.16M	7.085405G	7.104565G	Inf	1
24.156M	7.081866G	7.106022G	19.16M	7.085405G	7.104565G	Inf	2
22.374M	7.083978G	7.106352G	19.19M	7.085375G	7.104565G	Inf	3
24.816M	7.082394G	7.10721G	19.16M	7.085405G	7.104565G	Inf	4

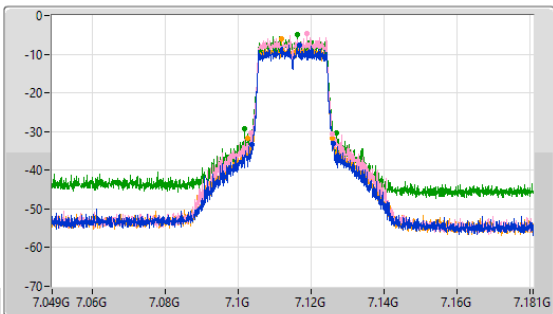
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

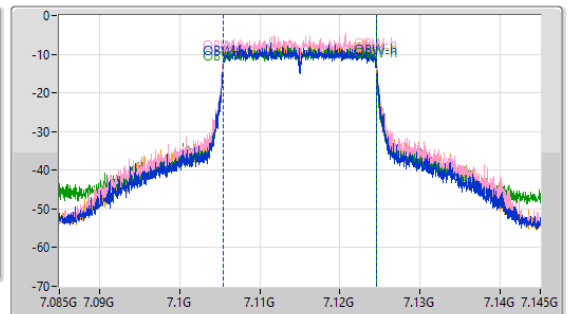
7115MHz

26/12/2022

CF: 7.115GHz
 Span: 132MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 7.115GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.506M	7.10378G	7.126286G	19.19M	7.105405G	7.124595G	Inf	1
22.11M	7.103648G	7.125758G	19.13M	7.105405G	7.124535G	Inf	2
25.344M	7.1018G	7.127144G	19.19M	7.105375G	7.124565G	Inf	3
23.43M	7.102592G	7.126022G	19.13M	7.105405G	7.124535G	Inf	4

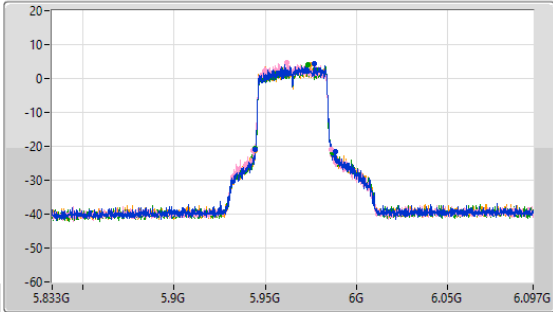
5.925-6.425GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

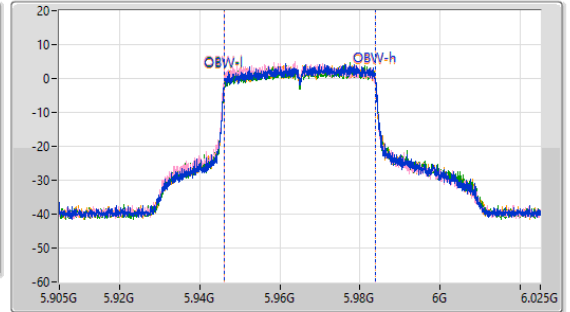
5965MHz

26/12/2022

CF: 5.965GHz
 Span: 264MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



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



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.56M	5.944672G	5.988232G	37.781M	5.946169G	5.983951G	Inf	1
42.768M	5.943484G	5.986252G	37.781M	5.946109G	5.983891G	Inf	2
41.976M	5.944672G	5.986648G	37.841M	5.946109G	5.983951G	Inf	3
42.504M	5.944144G	5.986648G	37.781M	5.946169G	5.983951G	Inf	4

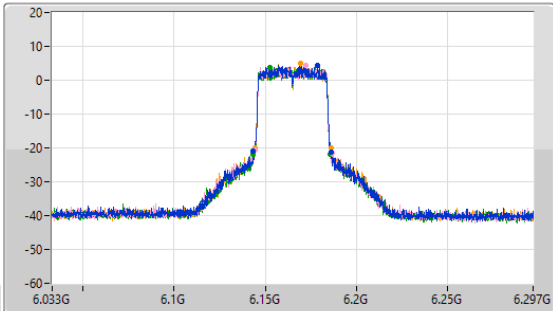
5.925-6.425GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

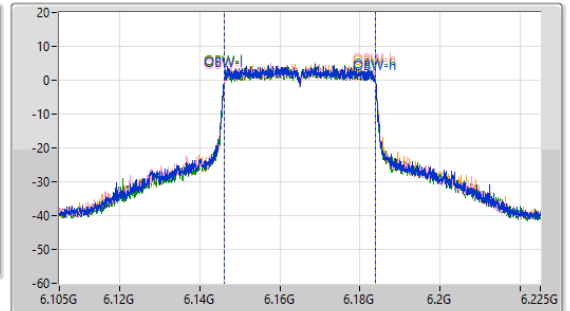
6165MHz

26/12/2022

CF: 6.165GHz
 Span: 264MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



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



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.032M	6.143352G	6.186384G	37.841M	6.146049G	6.183891G	Inf	1
42.372M	6.144144G	6.186516G	37.901M	6.146049G	6.183951G	Inf	2
42.504M	6.14322G	6.185724G	37.841M	6.146049G	6.183891G	Inf	3
41.58M	6.144408G	6.185988G	37.901M	6.146049G	6.183951G	Inf	4

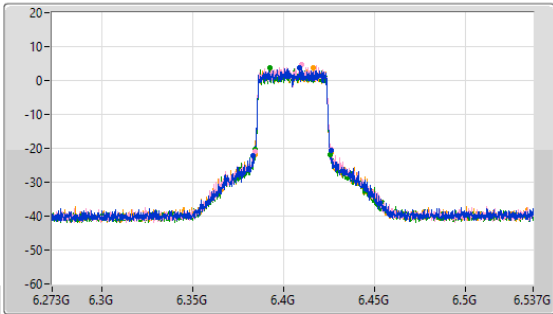
5.925-6.425GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

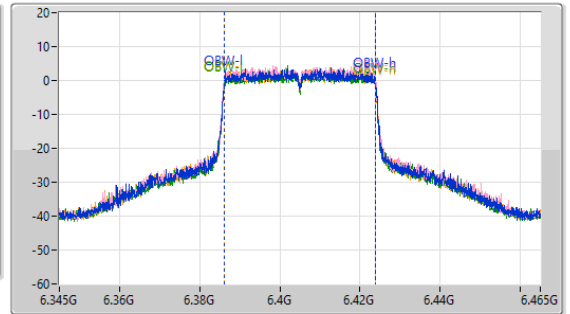
6405MHz

26/12/2022

CF
6.405GHz
Span
264MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.405GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.504M	6.383484G	6.425988G	37.841M	6.386109G	6.423951G	Inf	1
41.976M	6.384144G	6.42612G	37.901M	6.386049G	6.423951G	Inf	2
41.316M	6.384276G	6.42592G	37.841M	6.386049G	6.423891G	Inf	3
41.976M	6.384408G	6.426384G	37.901M	6.386049G	6.423951G	Inf	4

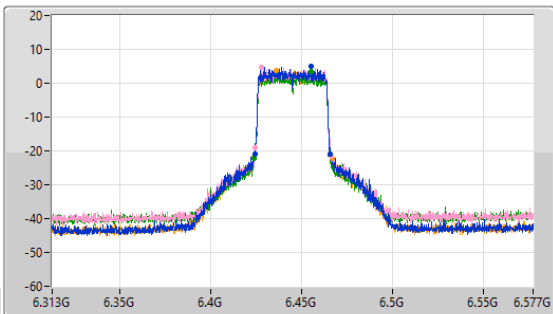
6.425-6.525GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

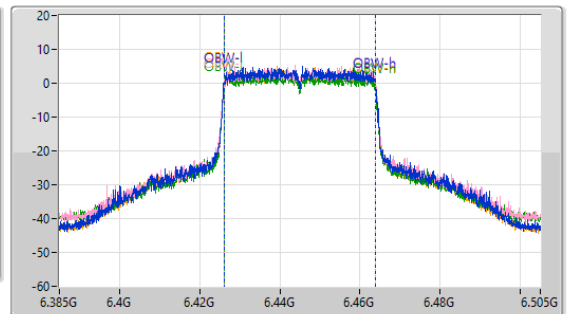
6445MHz

26/12/2022

CF
6.445GHz
Span
264MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
6.445GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.052M	6.424408G	6.46546G	37.841M	6.426049G	6.463891G	Inf	1
41.712M	6.424276G	6.465988G	37.841M	6.426109G	6.463951G	Inf	2
41.976M	6.423616G	6.46592G	37.781M	6.426049G	6.463831G	Inf	3
43.032M	6.423748G	6.46678G	37.841M	6.426049G	6.463891G	Inf	4

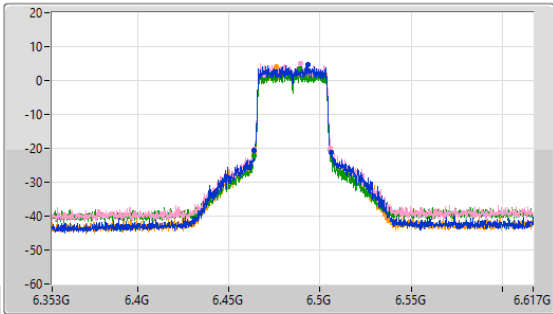
6.425-6.525GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

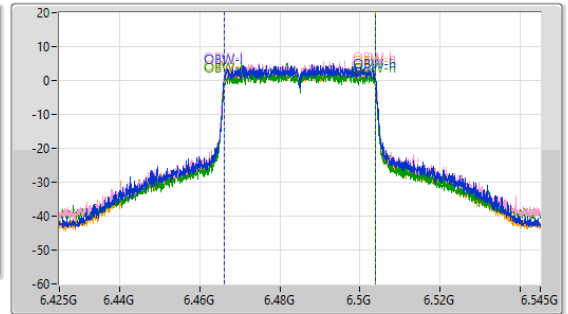
6485MHz

26/12/2022

CF: 6.485GHz
 Span: 264MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



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



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.976M	6.464012G	6.505988G	37.841M	6.466049G	6.503891G	Inf	1
42.108M	6.463748G	6.505856G	37.901M	6.466049G	6.503951G	Inf	2
41.976M	6.463616G	6.50592G	37.781M	6.466109G	6.503891G	Inf	3
42.108M	6.46388G	6.505988G	37.901M	6.466049G	6.503951G	Inf	4

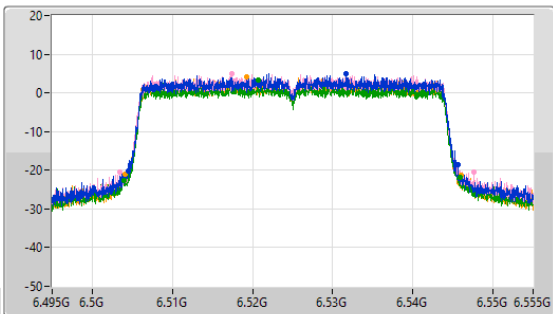
6.425-6.525GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

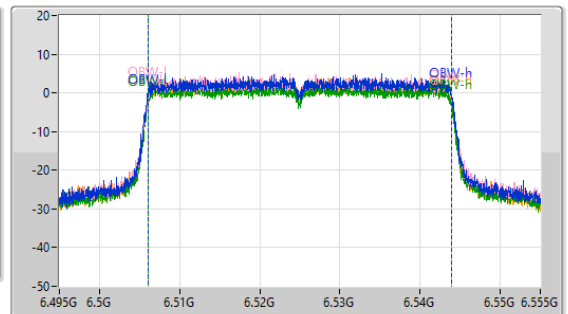
6525MHz Straddle 6.425-6.525GHz

26/12/2022

CF: 6.525GHz
 Span: 60MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 6.525GHz
 Span: 60MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.19M	6.50445G	6.54564G	37.811M	6.506079G	6.543891G	Inf	1
44.25M	6.50343G	6.54768G	37.811M	6.506109G	6.543921G	Inf	2
41.97M	6.50391G	6.54588G	37.781M	6.506079G	6.543861G	Inf	3
41.94M	6.50412G	6.54606G	37.811M	6.506049G	6.543861G	Inf	4

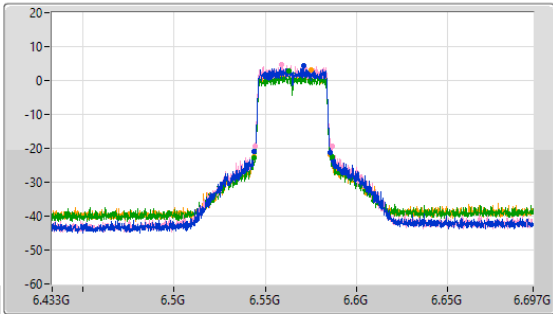
6.525-6.875GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

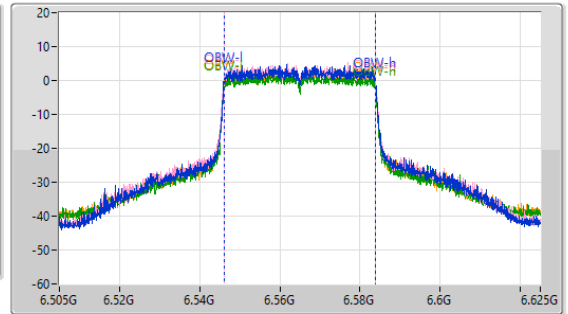
6565MHz

26/12/2022

CF
6.565GHz
Span
264MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



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



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.108M	6.543748G	6.585856G	37.841M	6.546049G	6.583891G	Inf	1
42.504M	6.544144G	6.586648G	37.841M	6.546049G	6.583891G	Inf	2
42.504M	6.544012G	6.586516G	37.841M	6.546049G	6.583891G	Inf	3
42.108M	6.543748G	6.585856G	37.901M	6.546049G	6.583951G	Inf	4

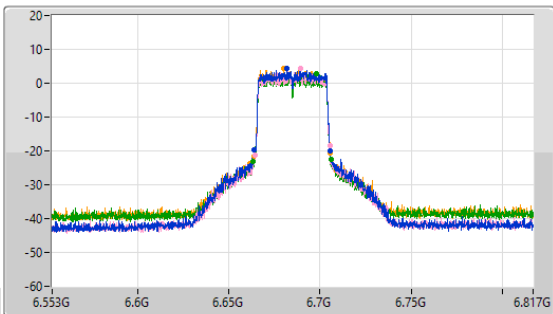
6.525-6.875GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

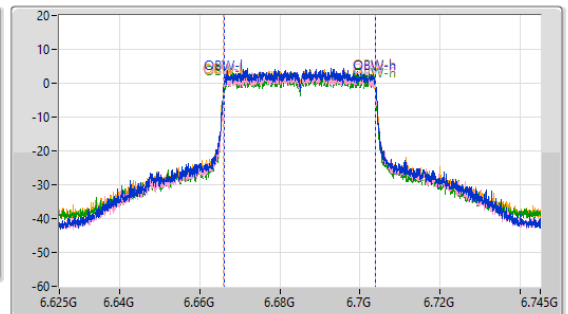
6685MHz

26/12/2022

CF
6.685GHz
Span
264MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



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



Port 1
Port 2
Port 3
Port 4

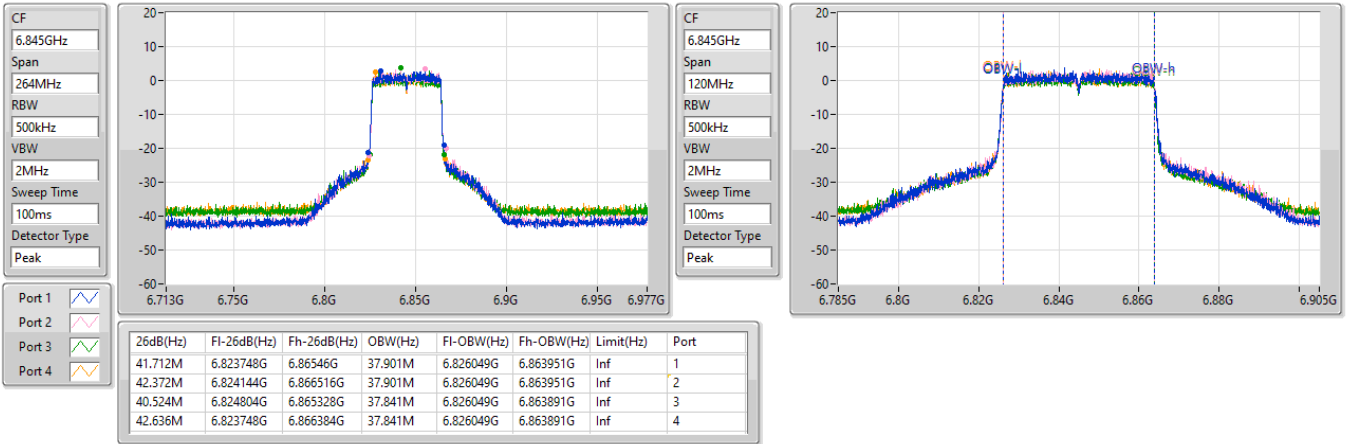
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.712M	6.664012G	6.705724G	37.901M	6.666049G	6.703951G	Inf	1
41.316M	6.664276G	6.70592G	37.841M	6.666049G	6.703891G	Inf	2
43.428M	6.662956G	6.706384G	37.841M	6.666049G	6.703891G	Inf	3
41.976M	6.66388G	6.705856G	37.961M	6.66599G	6.703951G	Inf	4

6.525-6.875GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6845MHz

26/12/2022

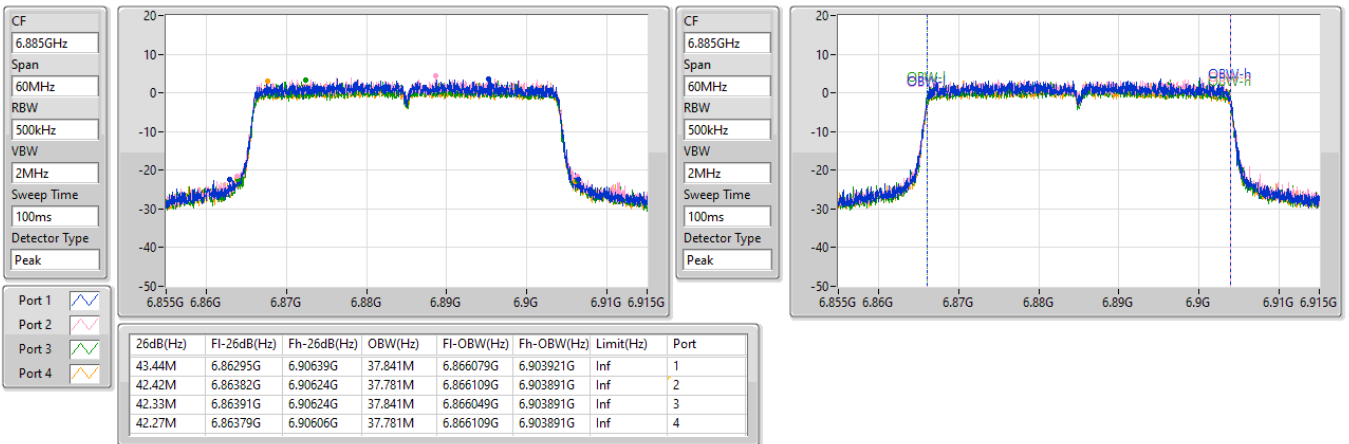


6.525-6.875GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6885MHz Straddle 6.525-6.875GHz

26/12/2022

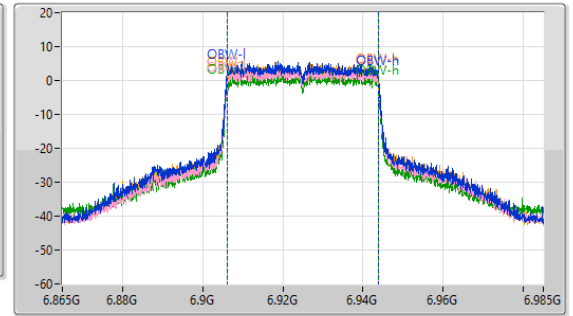
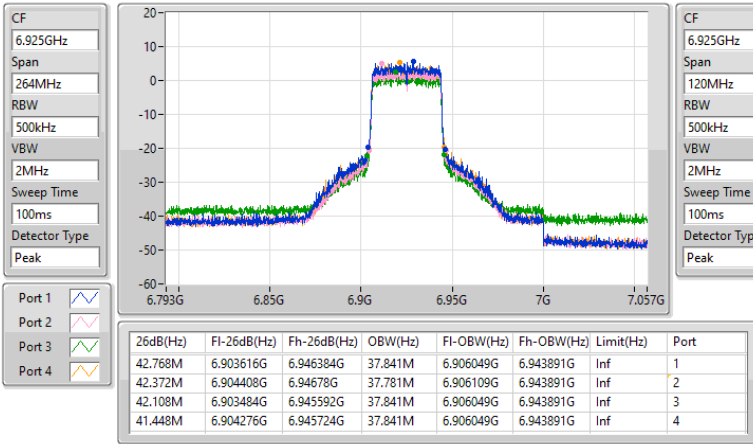


6.875-7.125GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6925MHz

26/12/2022

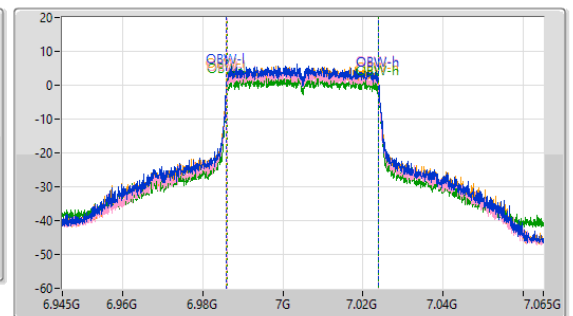
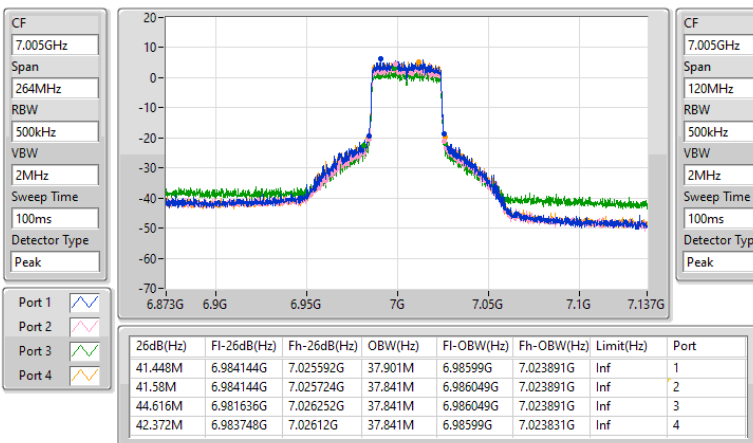


6.875-7.125GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

7005MHz

26/12/2022

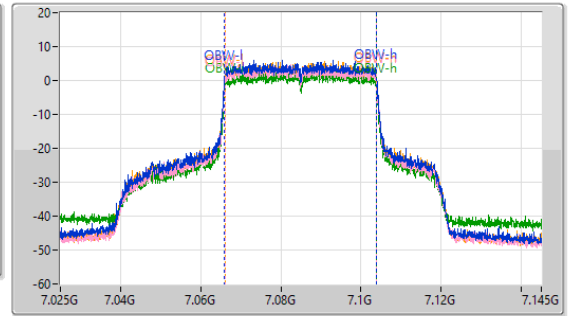
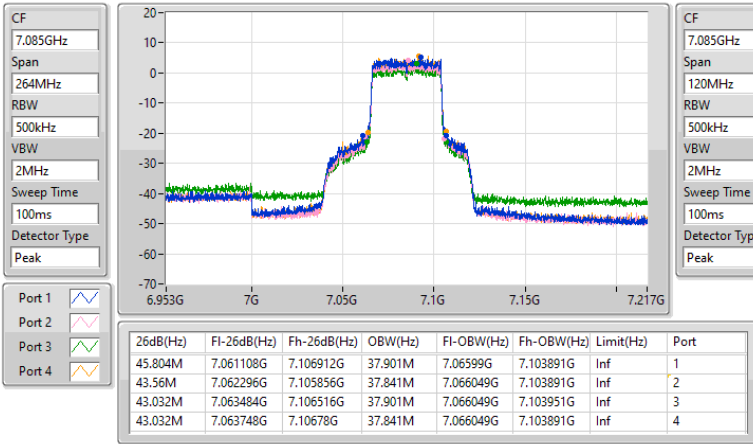


6.875-7.125GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

7085MHz

26/12/2022

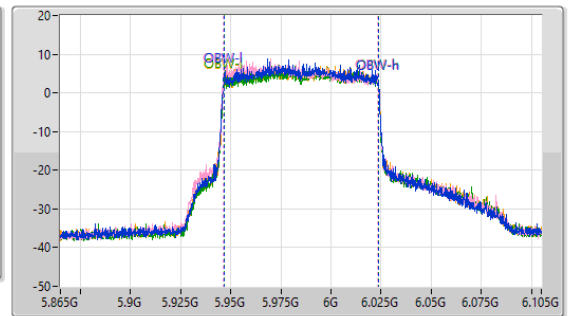
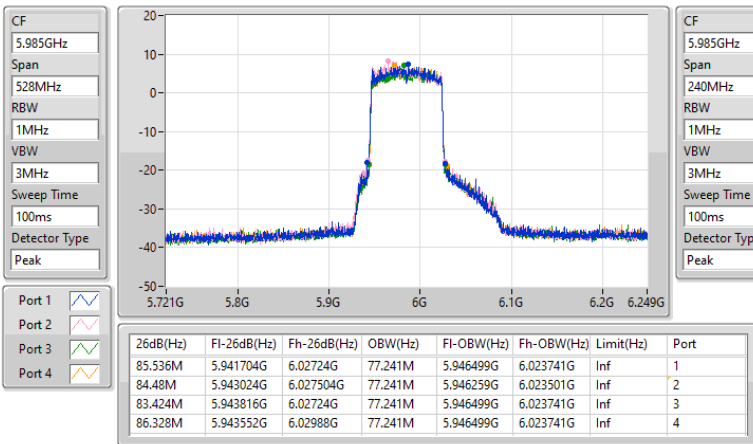


5.925-6.425GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5985MHz

26/12/2022

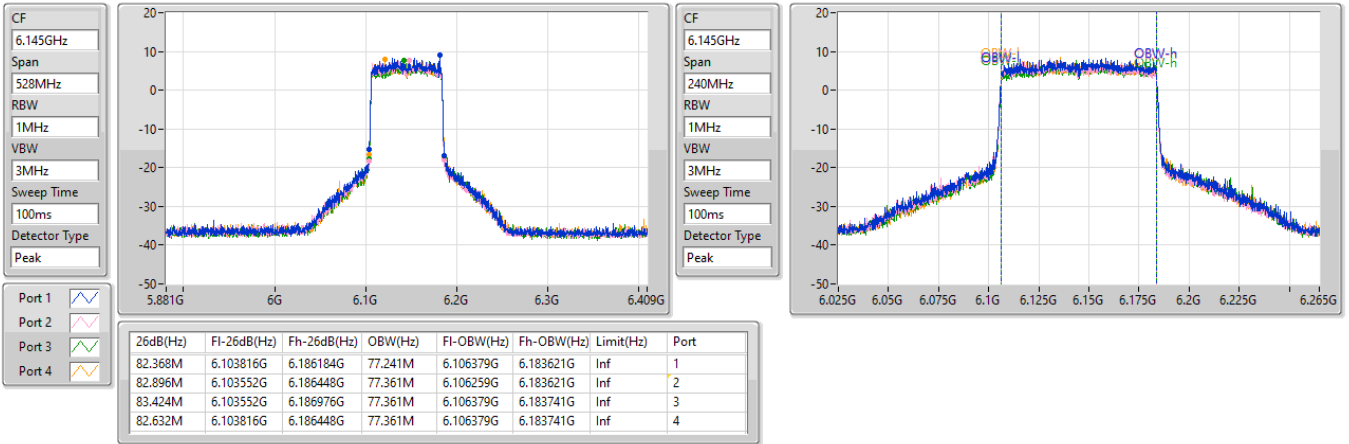


5.925-6.425GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

6145MHz

26/12/2022

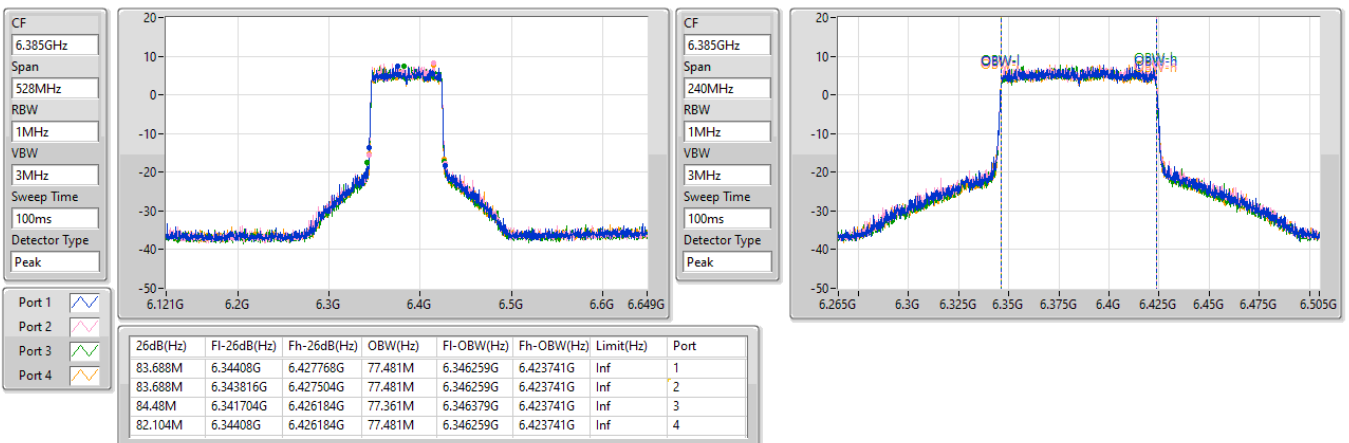


5.925-6.425GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

6385MHz

26/12/2022

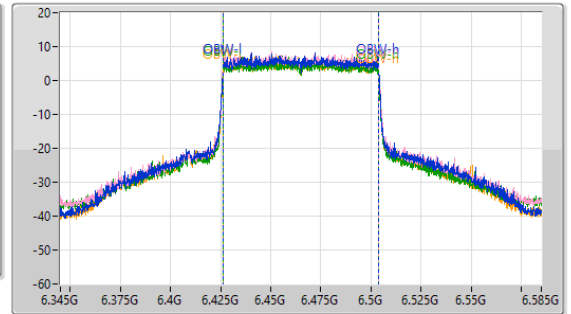
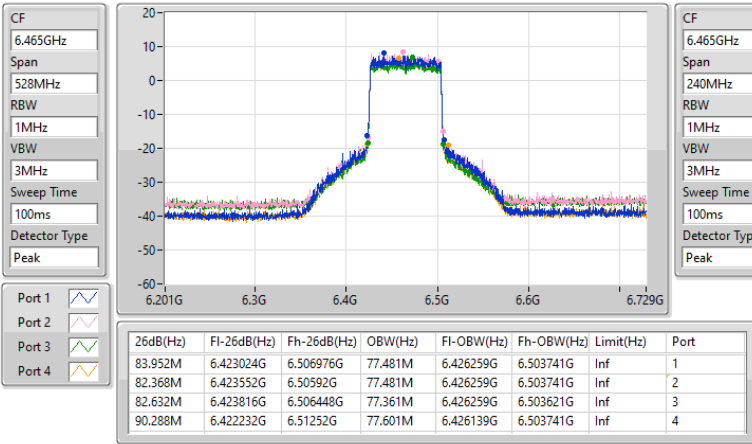


6.425-6.525GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

6465MHz

26/12/2022

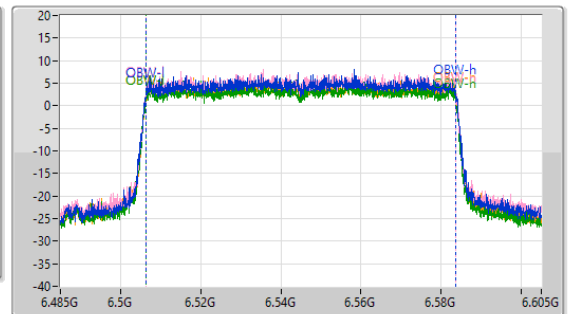
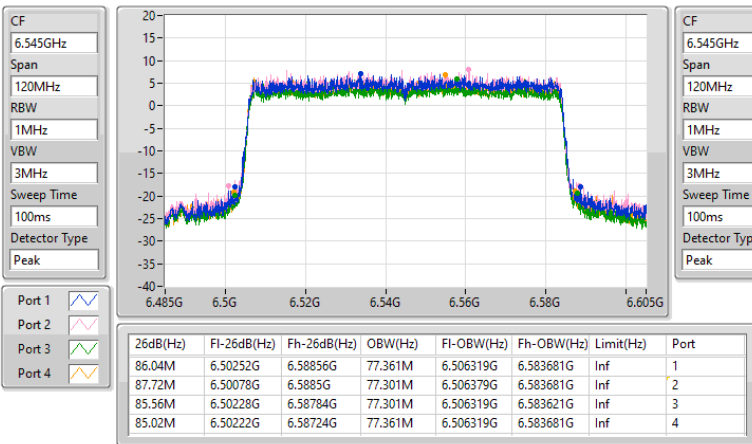


6.425-6.525GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

6545MHz Straddle 6.425-6.525GHz

26/12/2022



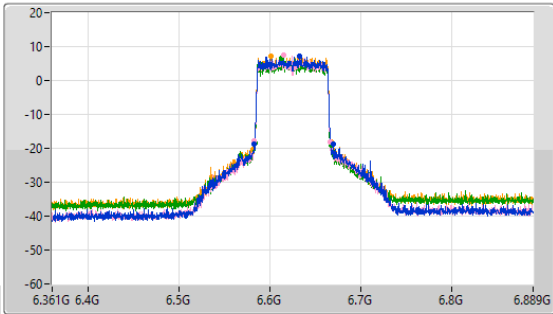
6.525-6.875GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

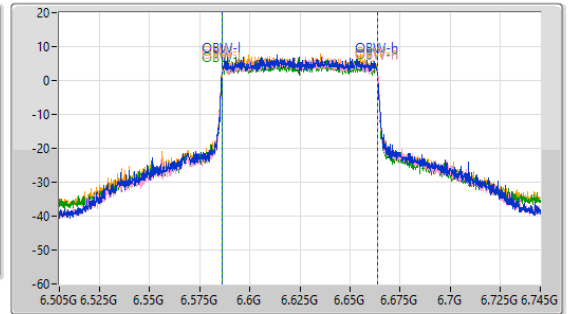
6625MHz

26/12/2022

CF: 6.625GHz
 Span: 528MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



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



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

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
86.856M	6.583024G	6.66988G	77.481M	6.586259G	6.663741G	Inf	1
83.688M	6.582496G	6.666184G	77.481M	6.586259G	6.663741G	Inf	2
83.424M	6.583816G	6.66724G	77.361M	6.586259G	6.663621G	Inf	3
83.952M	6.583024G	6.666976G	77.481M	6.586139G	6.663621G	Inf	4

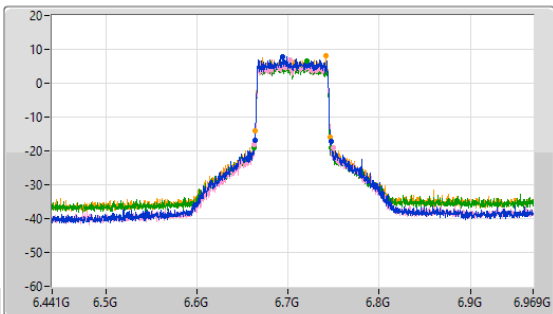
6.525-6.875GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

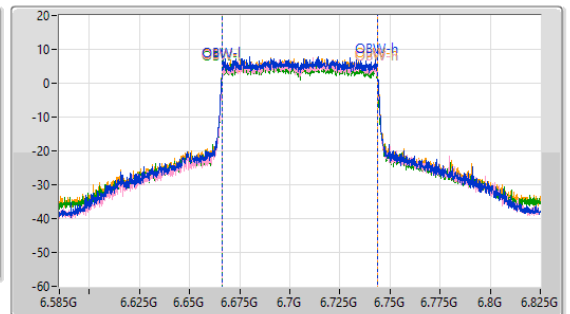
6705MHz

26/12/2022

CF: 6.705GHz
 Span: 528MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



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



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

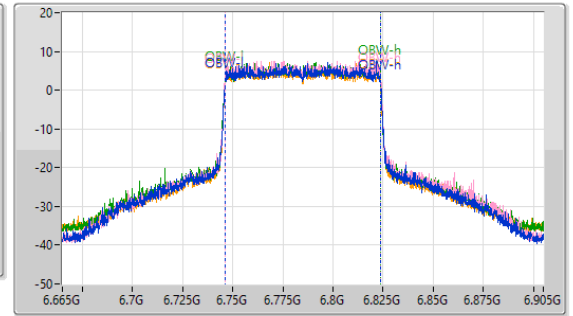
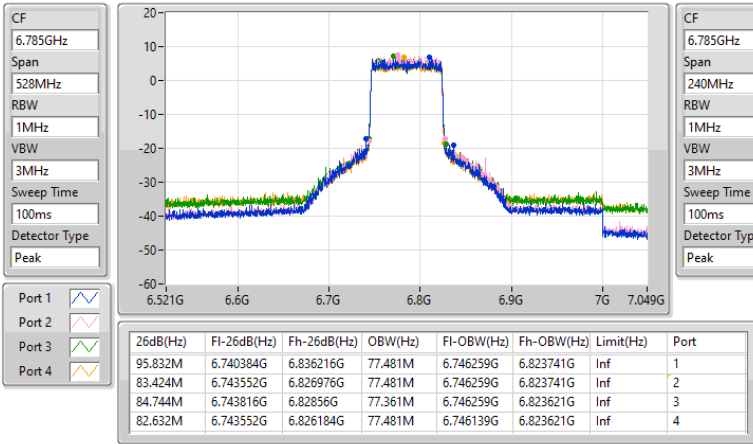
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.424M	6.663552G	6.746976G	77.481M	6.666259G	6.743741G	Inf	1
87.384M	6.66276G	6.750144G	77.481M	6.666259G	6.743741G	Inf	2
84.744M	6.663024G	6.747768G	77.601M	6.666139G	6.743741G	Inf	3
82.368M	6.663816G	6.746184G	77.601M	6.666139G	6.743741G	Inf	4

6.525-6.875GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

6785MHz

26/12/2022

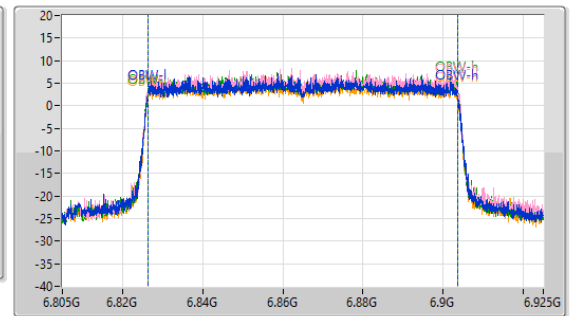
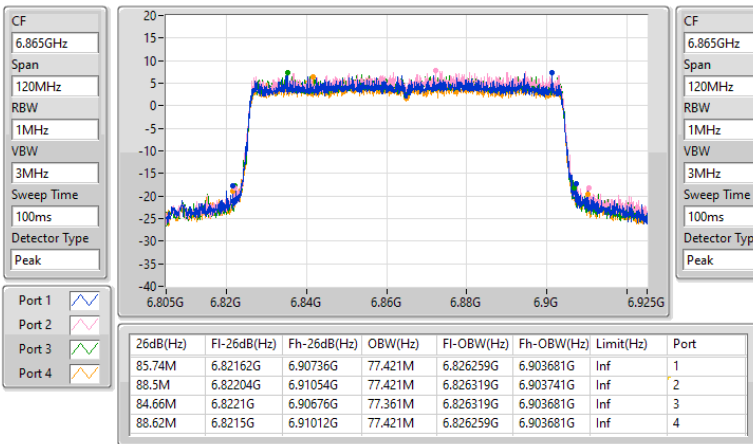


6.525-6.875GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

6865MHz Straddle 6.525-6.875GHz

26/12/2022

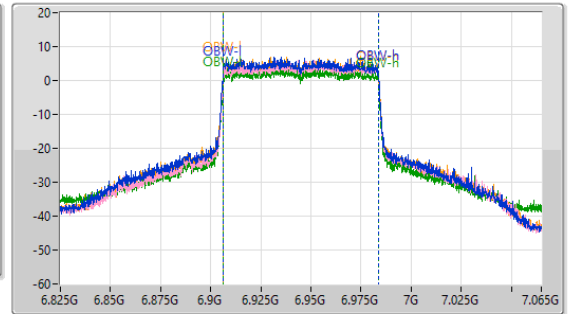
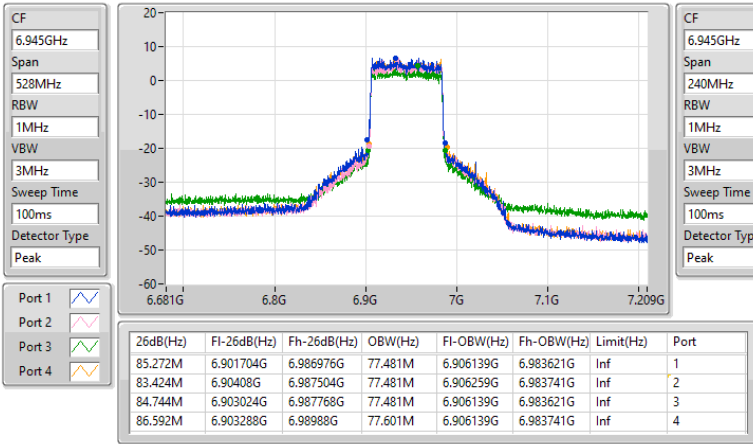


6.875-7.125GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

6945MHz

26/12/2022

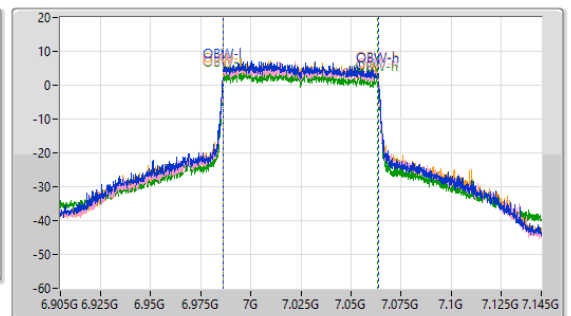
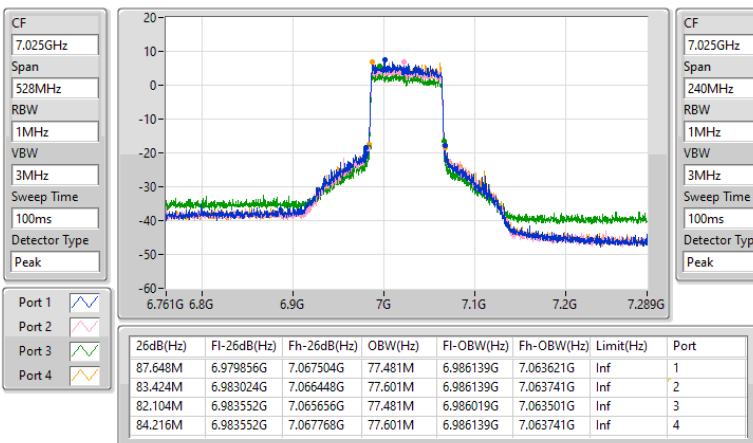


6.875-7.125GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

7025MHz

26/12/2022

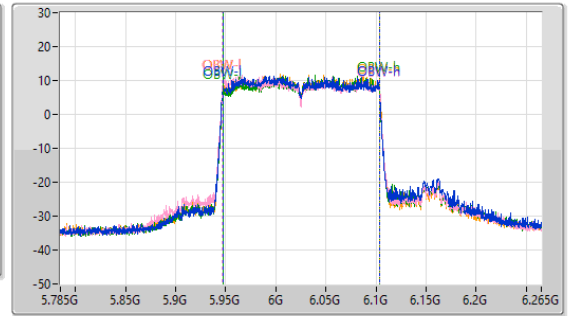
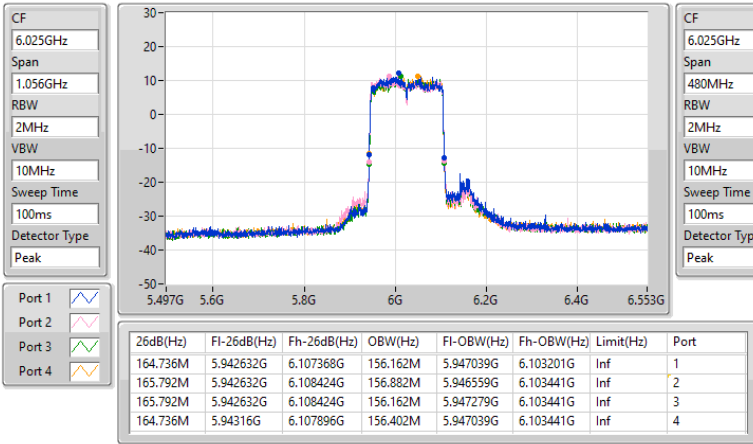


5.925-6.425GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

6025MHz

26/12/2022

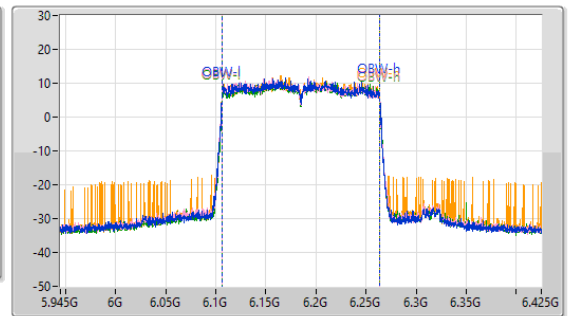
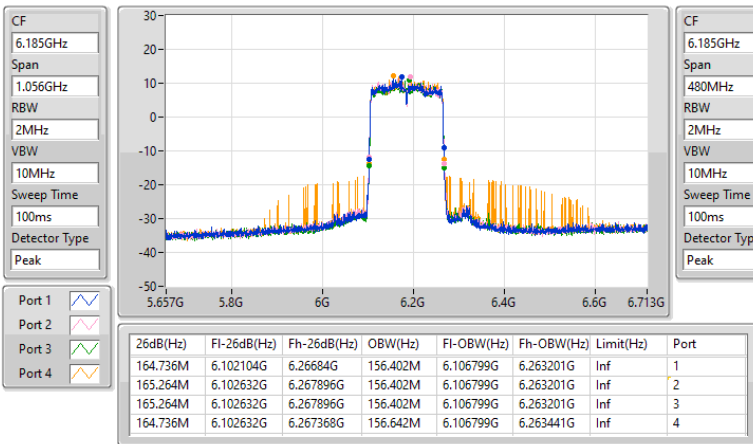


5.925-6.425GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

6185MHz

26/12/2022

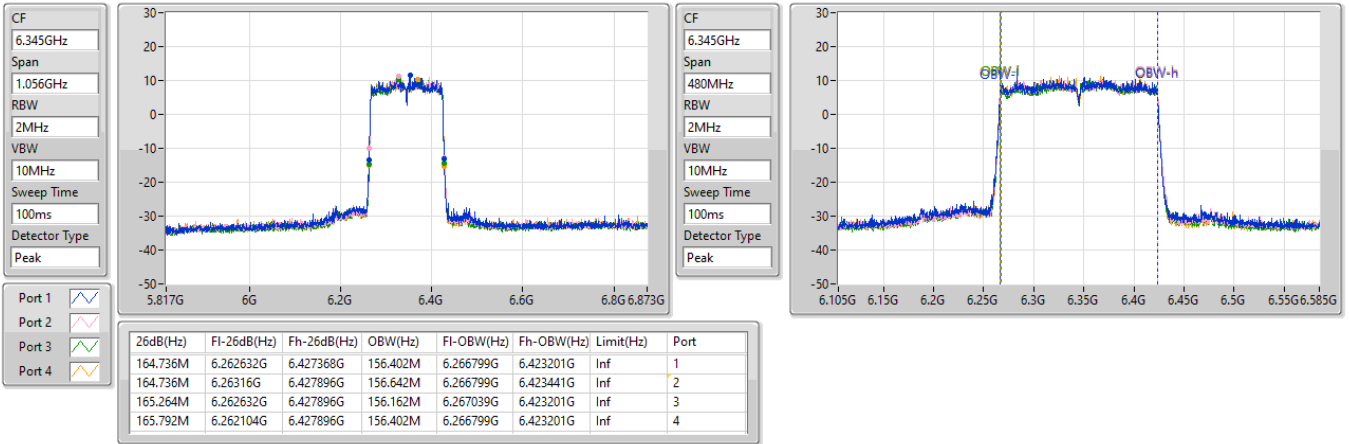


5.925-6.425GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

6345MHz

26/12/2022

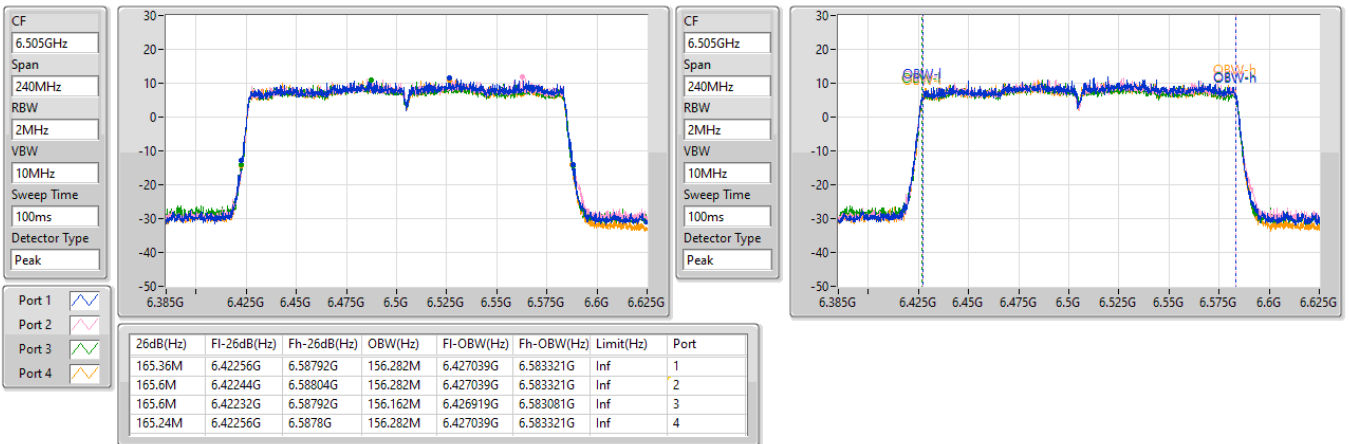


6.425-6.525GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

6505MHz Straddle 6.425-6.525GHz

26/12/2022

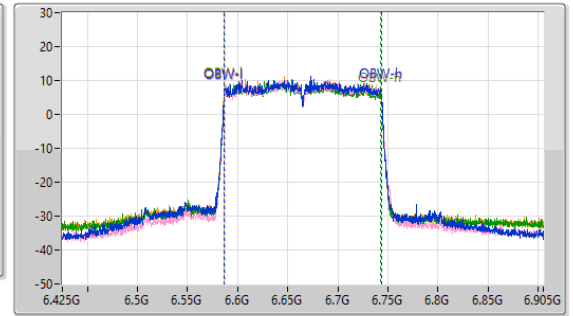
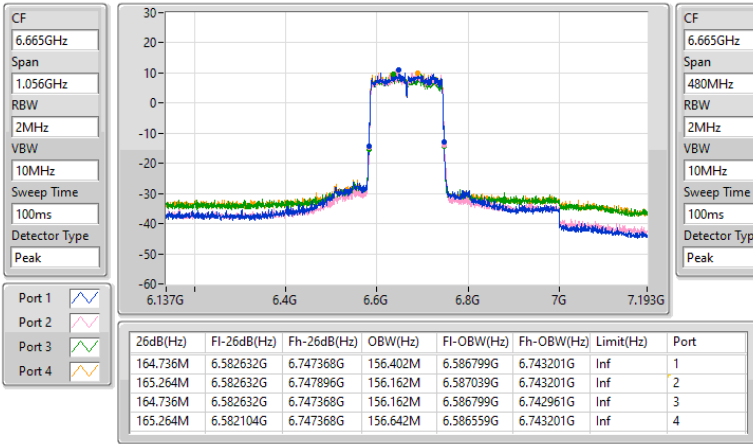


6.525-6.875GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

6665MHz

26/12/2022

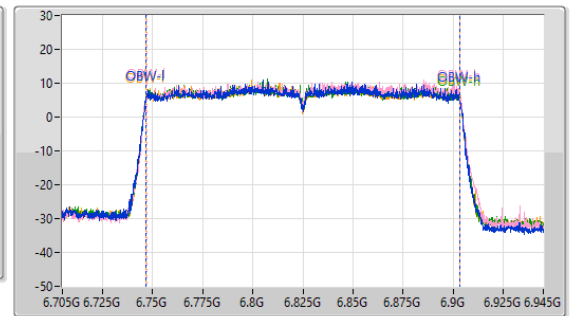
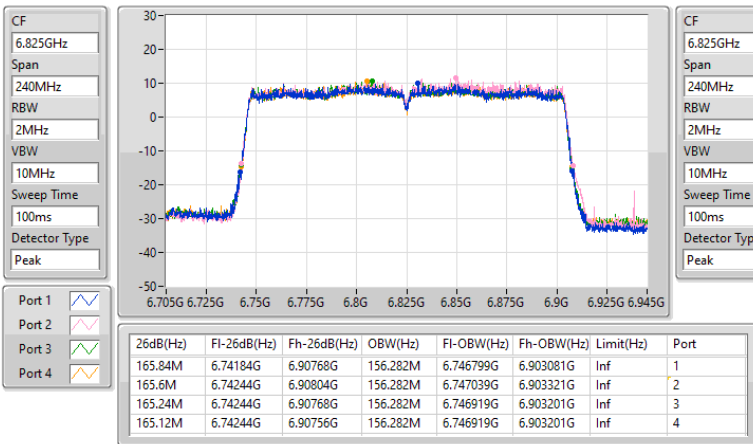


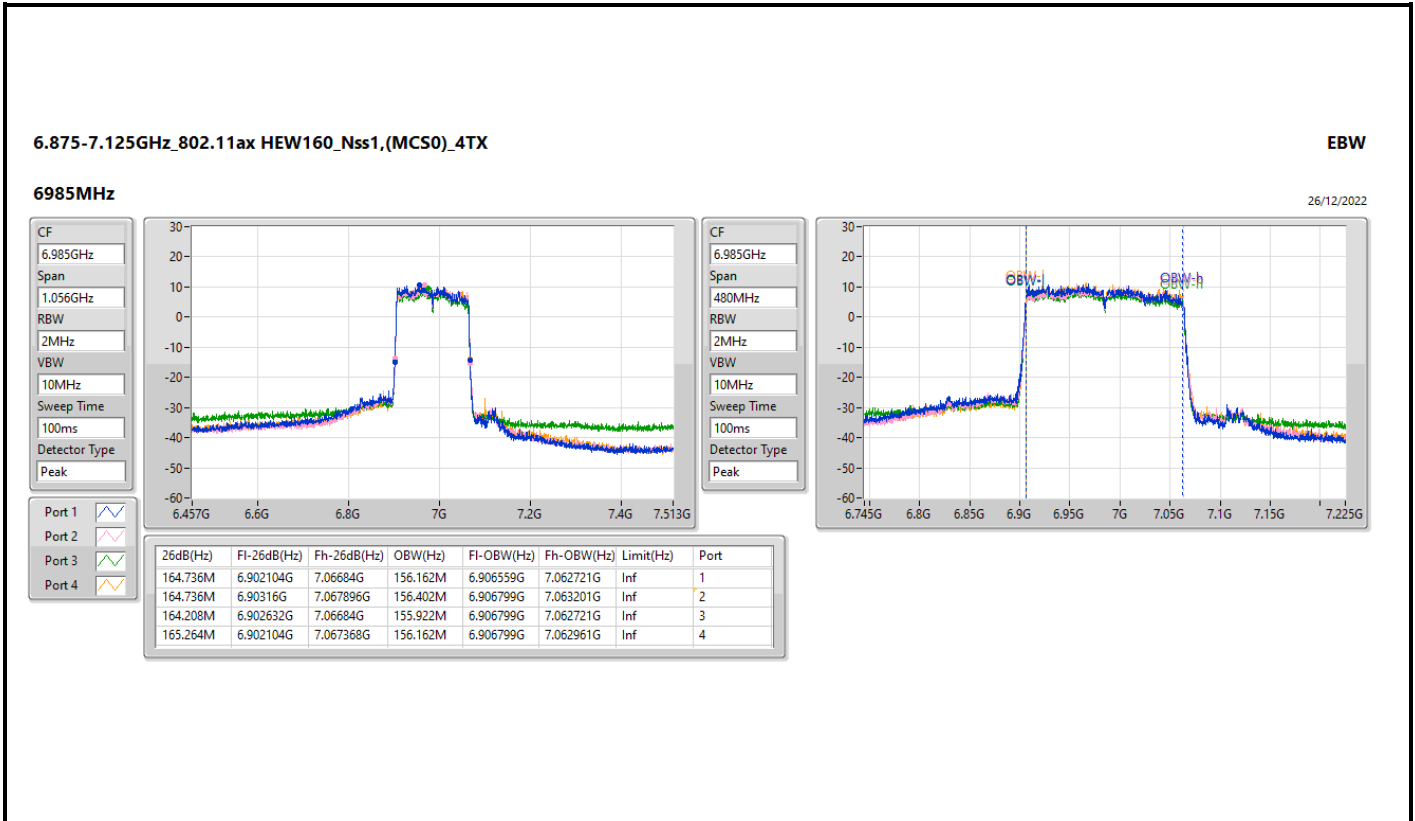
6.525-6.875GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

6825MHz Straddle 6.525-6.875GHz

26/12/2022







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	25.35M	19.179M	19M2D1D	22.11M	19.103M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	46.98M	37.86M	37M9D1D	41.4M	37.779M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	86.28M	77.489M	77M5D1D	81.96M	77.053M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	167.52M	156.947M	157MD1D	166.56M	156.115M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	27.51M	19.191M	19M2D1D	22.29M	19.103M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	44.88M	37.904M	37M9D1D	41.46M	37.801M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	86.28M	77.498M	77M5D1D	83.52M	77.328M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	167.52M	156.307M	156MD1D	166.56M	156.248M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	27.63M	19.164M	19M2D1D	22.11M	19.119M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	44.04M	37.911M	37M9D1D	40.98M	37.79M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	91.68M	77.557M	77M6D1D	82.92M	77.329M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	168M	156.392M	156MD1D	166.08M	156.141M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	27.69M	19.168M	19M2D1D	22.02M	19.094M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	47.28M	37.92M	37M9D1D	41.34M	37.798M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	91.68M	77.484M	77M5D1D	83.16M	77.365M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	167.52M	156.35M	156MD1D	166.56M	156.251M

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	24.78M	19.173M	22.62M	19.151M	23.37M	19.179M	24.9M	19.103M
6175MHz	Pass	Inf	24.48M	19.169M	23.85M	19.114M	22.11M	19.137M	23.25M	19.13M
6415MHz	Pass	Inf	23.37M	19.107M	24.03M	19.164M	22.29M	19.117M	25.35M	19.121M
6435MHz	Pass	Inf	24.72M	19.158M	23.97M	19.131M	23.79M	19.191M	25.2M	19.145M
6475MHz	Pass	Inf	26.97M	19.124M	23.55M	19.121M	22.29M	19.125M	24.54M	19.103M
6515MHz	Pass	Inf	27.51M	19.129M	24.63M	19.179M	25.23M	19.13M	25.59M	19.158M
6535MHz	Pass	Inf	22.11M	19.163M	24.72M	19.132M	25.35M	19.134M	24.03M	19.12M
6695MHz	Pass	Inf	25.62M	19.143M	23.43M	19.135M	26.25M	19.146M	23.37M	19.144M
6855MHz	Pass	Inf	25.05M	19.153M	25.14M	19.137M	27.63M	19.164M	25.38M	19.155M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	23.46M	19.128M	24.84M	19.149M	24.57M	19.119M	25.29M	19.125M
6875MHz Straddle 6.875-7.125GHz										
6895MHz	Pass	Inf	23.37M	19.14M	26.7M	19.168M	23.67M	19.15M	27.21M	19.154M
6995MHz	Pass	Inf	23.67M	19.155M	25.11M	19.115M	22.02M	19.123M	22.29M	19.127M
7095MHz	Pass	Inf	27.69M	19.11M	23.34M	19.155M	23.58M	19.114M	24.66M	19.155M
7115MHz	Pass	Inf	23.28M	19.121M	22.68M	19.117M	22.08M	19.094M	24.18M	19.15M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	42.36M	37.779M	41.58M	37.812M	43.56M	37.797M	42.36M	37.779M
6165MHz	Pass	Inf	43.38M	37.84M	42.24M	37.843M	42.06M	37.832M	41.4M	37.807M
6405MHz	Pass	Inf	46.98M	37.83M	41.76M	37.86M	42.54M	37.844M	42.66M	37.847M
6445MHz	Pass	Inf	41.94M	37.853M	43.2M	37.872M	42.6M	37.841M	43.44M	37.82M
6485MHz	Pass	Inf	41.46M	37.811M	42.24M	37.904M	44.28M	37.801M	44.88M	37.873M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	43.62M	37.863M	43.74M	37.848M	42.06M	37.809M	42.3M	37.825M
6525MHz Straddle 6.525-6.875GHz										
6565MHz	Pass	Inf	42.3M	37.859M	42.18M	37.87M	42.54M	37.79M	41.82M	37.838M
6685MHz	Pass	Inf	41.64M	37.857M	43.5M	37.834M	41.58M	37.872M	42.54M	37.819M
6845MHz	Pass	Inf	42.12M	37.861M	42.3M	37.911M	44.04M	37.824M	42.78M	37.827M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	42.6M	37.851M	41.7M	37.823M	40.98M	37.9M	42M	37.867M
6885MHz Straddle 6.875-7.125GHz										
6925MHz	Pass	Inf	41.94M	37.81M	41.64M	37.898M	42.6M	37.798M	42.18M	37.823M
7005MHz	Pass	Inf	43.2M	37.885M	41.34M	37.863M	42.72M	37.871M	41.76M	37.864M
7085MHz	Pass	Inf	44.7M	37.92M	42.78M	37.863M	45.42M	37.834M	47.28M	37.841M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	82.92M	77.053M	83.4M	77.221M	84M	77.248M	84.12M	77.318M
6145MHz	Pass	Inf	81.96M	77.271M	83.28M	77.344M	82.92M	77.403M	83.52M	77.345M
6385MHz	Pass	Inf	83.4M	77.473M	86.28M	77.449M	82.92M	77.411M	85.08M	77.489M
6465MHz	Pass	Inf	83.52M	77.371M	83.64M	77.328M	86.28M	77.388M	84.12M	77.399M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	85.92M	77.488M	85.2M	77.356M	83.76M	77.498M	84.72M	77.381M
6545MHz Straddle 6.525-6.875GHz										
6625MHz	Pass	Inf	85.32M	77.478M	84.48M	77.415M	87.48M	77.465M	84.24M	77.459M
6705MHz	Pass	Inf	83.16M	77.453M	84.72M	77.475M	86.52M	77.329M	84.6M	77.557M
6785MHz	Pass	Inf	85.2M	77.494M	84.36M	77.368M	82.92M	77.449M	84.96M	77.474M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	84.84M	77.437M	84.48M	77.379M	84.6M	77.498M	91.68M	77.554M
6865MHz Straddle 6.875-7.125GHz										
6945MHz	Pass	Inf	91.68M	77.477M	83.16M	77.393M	83.52M	77.484M	84.24M	77.412M
7025MHz	Pass	Inf	83.52M	77.411M	83.76M	77.454M	83.76M	77.365M	83.76M	77.478M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	166.56M	156.393M	167.04M	156.861M	167.52M	156.152M	167.04M	156.115M
6185MHz	Pass	Inf	166.8M	156.487M	167.28M	156.266M	166.8M	156.535M	167.04M	156.947M
6345MHz	Pass	Inf	166.56M	156.372M	167.28M	156.44M	166.56M	156.254M	166.56M	156.464M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	166.8M	156.27M	167.52M	156.28M	167.04M	156.248M	166.56M	156.307M
6505MHz Straddle 6.525-6.875GHz										
6665MHz	Pass	Inf	167.28M	156.28M	168M	156.392M	166.56M	156.168M	166.08M	156.331M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	166.32M	156.303M	167.52M	156.141M	166.32M	156.291M	167.04M	156.327M
6825MHz Straddle 6.875-7.125GHz										



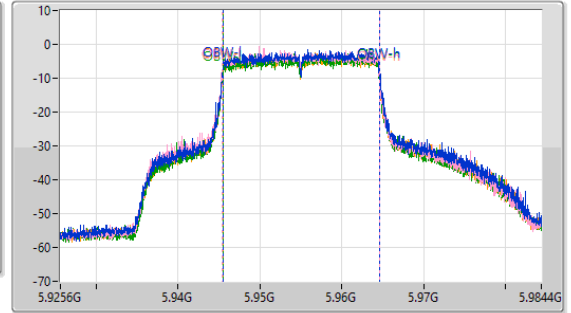
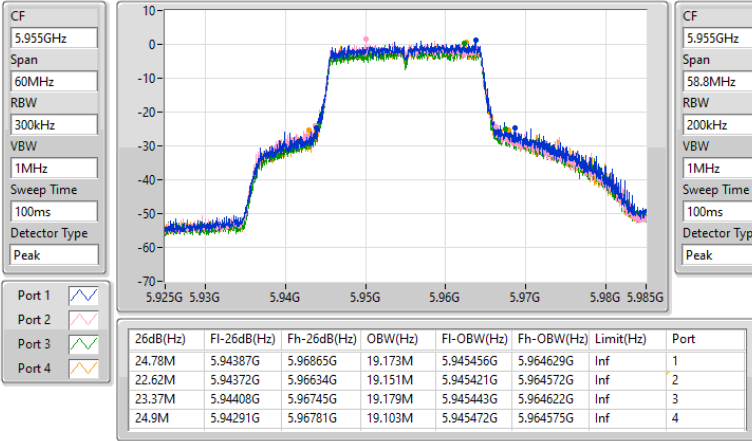
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
6985MHz	Pass	Inf	167.52M	156.35M	167.04M	156.251M	167.28M	156.27M	166.56M	156.284M

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

5.925-6.425GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
5955MHz

EBW

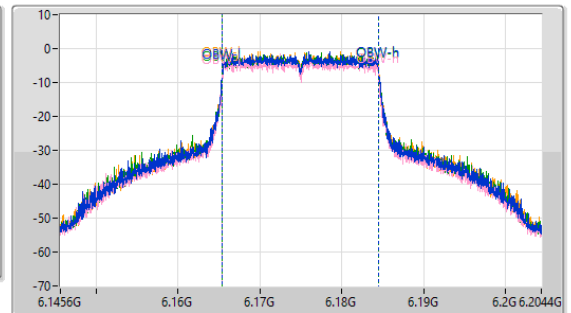
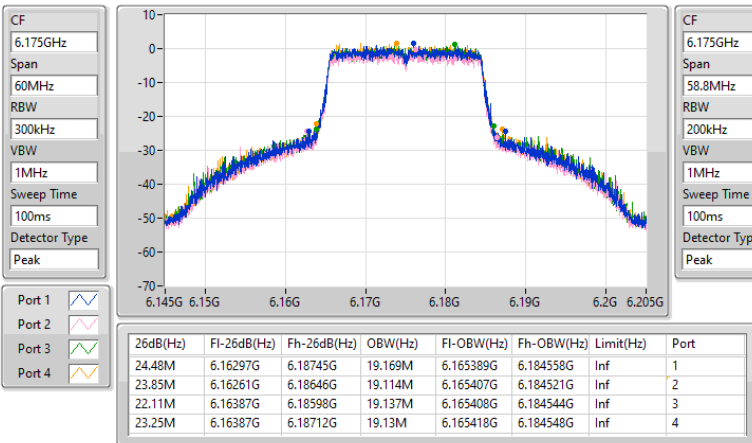
11/01/2023



5.925-6.425GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
6175MHz

EBW

11/01/2023

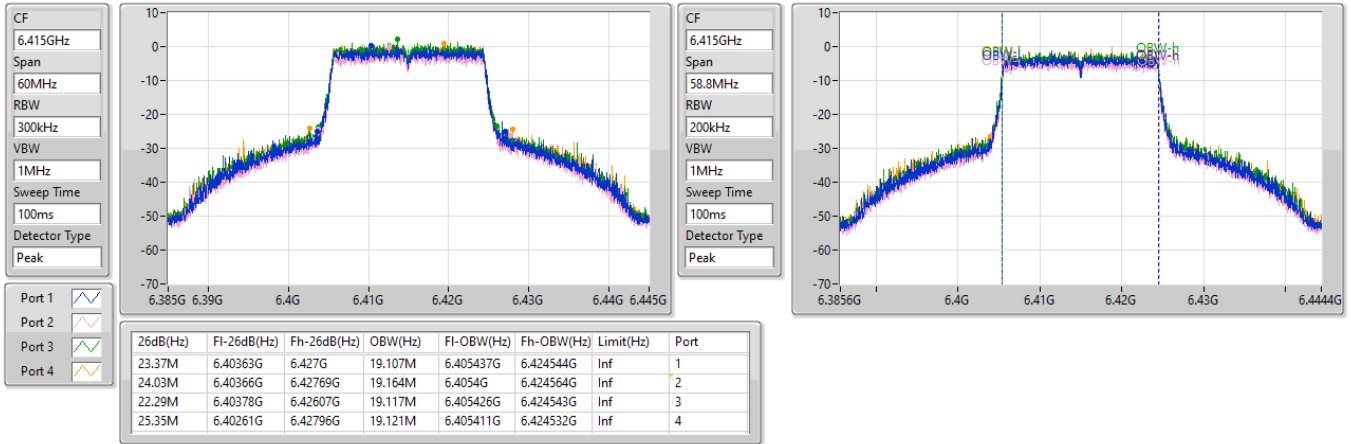


5.925-6.425GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

6415MHz

11/01/2023

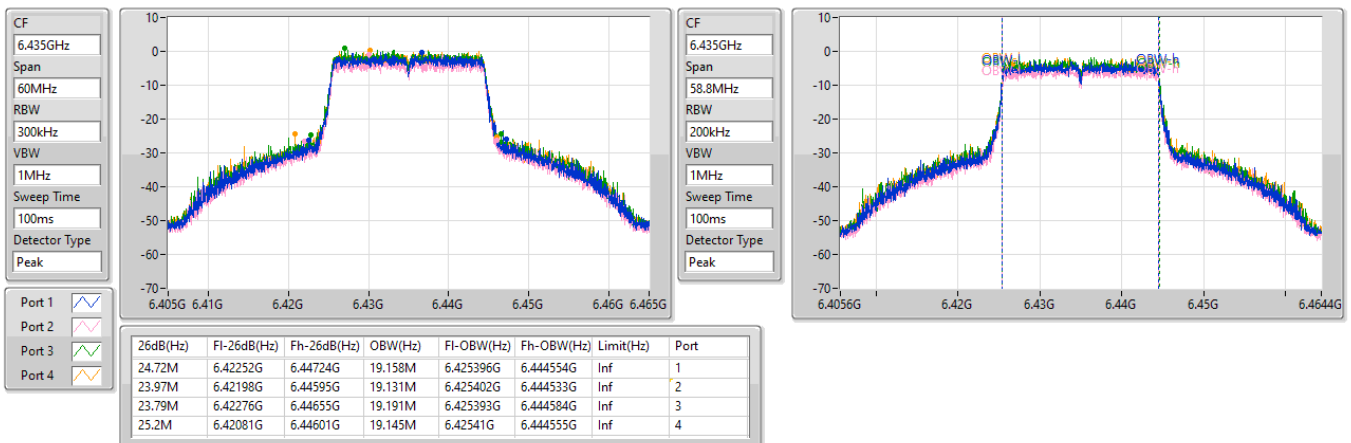


6.425-6.525GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

6435MHz

11/01/2023

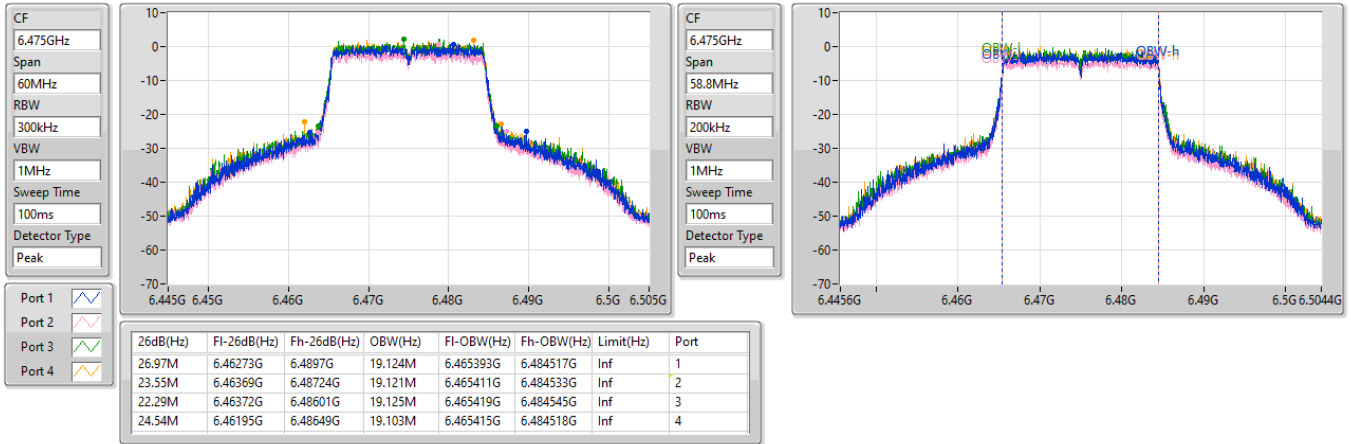


6.425-6.525GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

6475MHz

11/01/2023

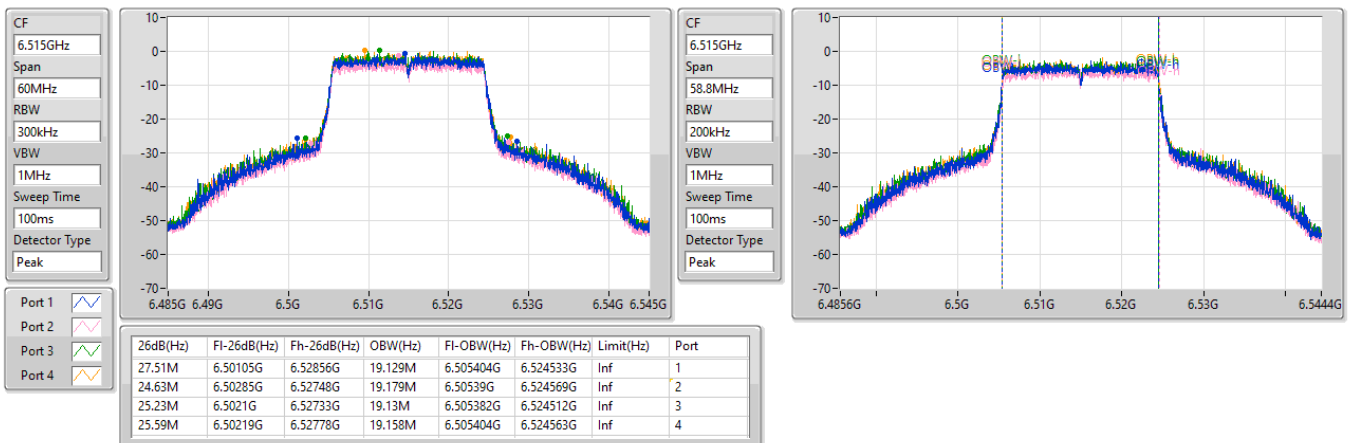


6.425-6.525GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

6515MHz

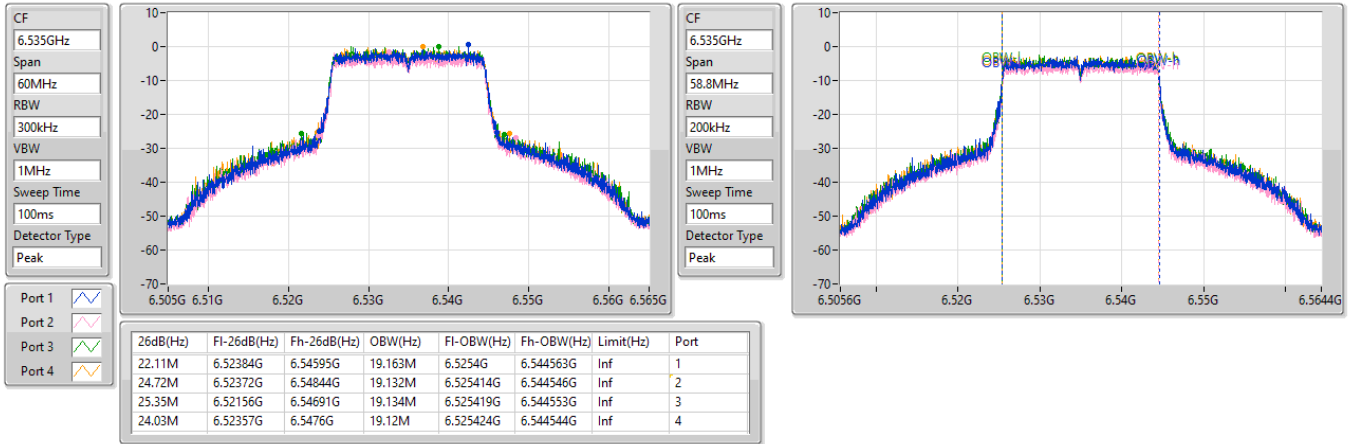
11/01/2023



6.525-6.875GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
6535MHz

EBW

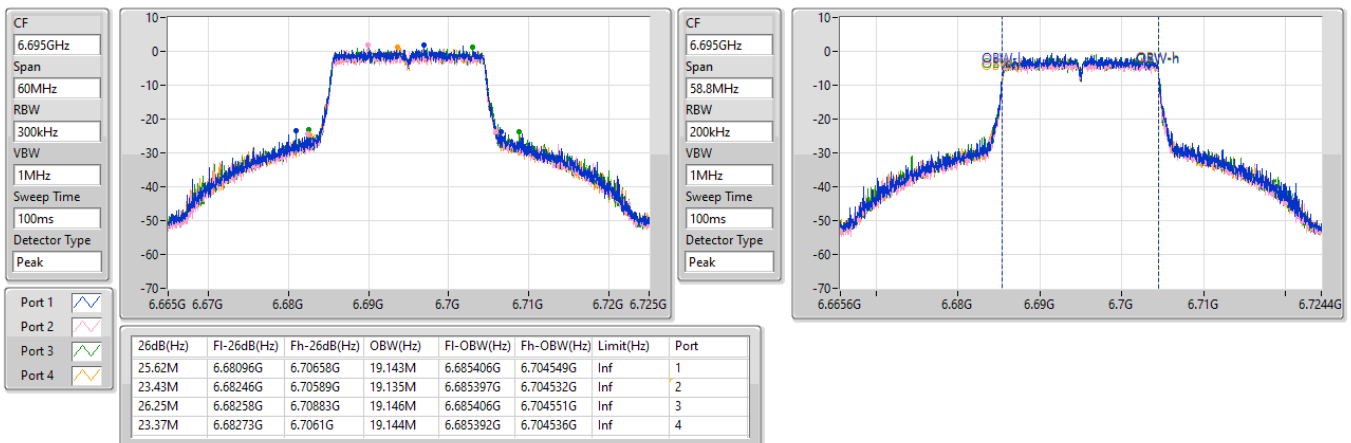
11/01/2023



6.525-6.875GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
6695MHz

EBW

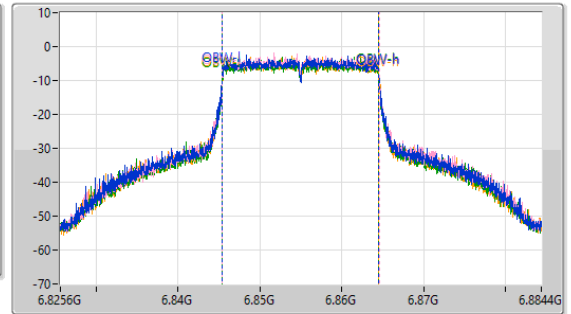
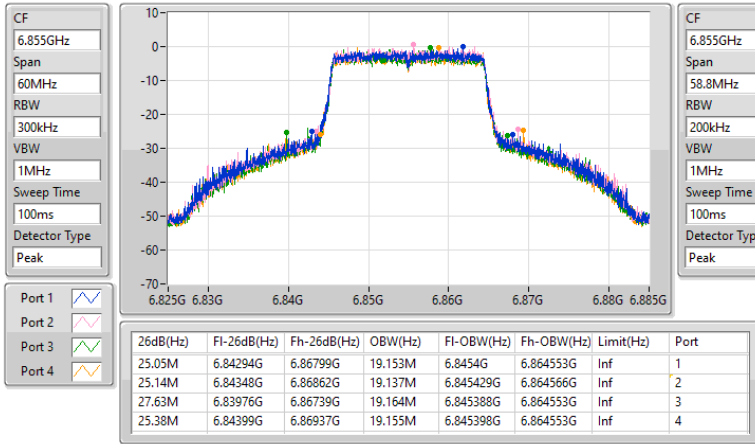
11/01/2023



6.525-6.875GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
6855MHz

EBW

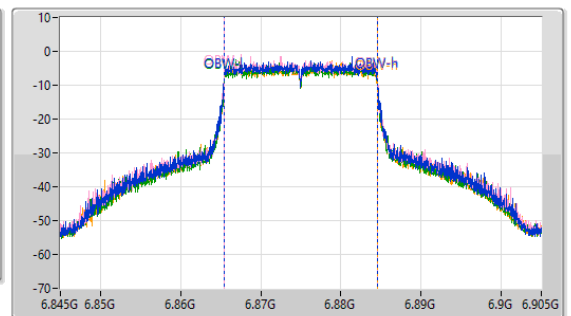
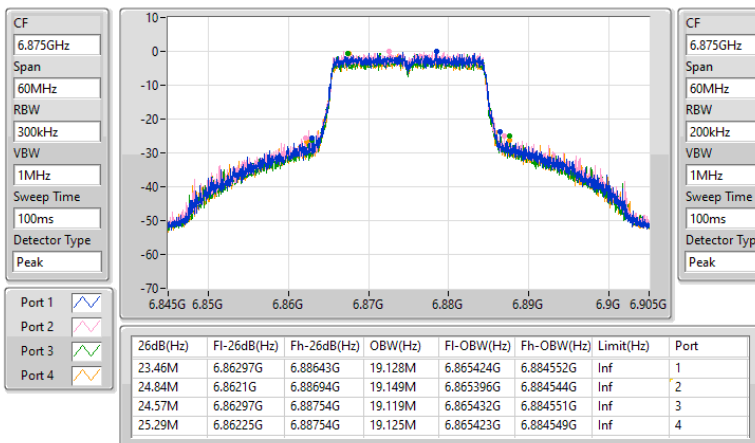
11/01/2023



6.525-6.875GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
6875MHz Straddle 6.525-6.875GHz

EBW

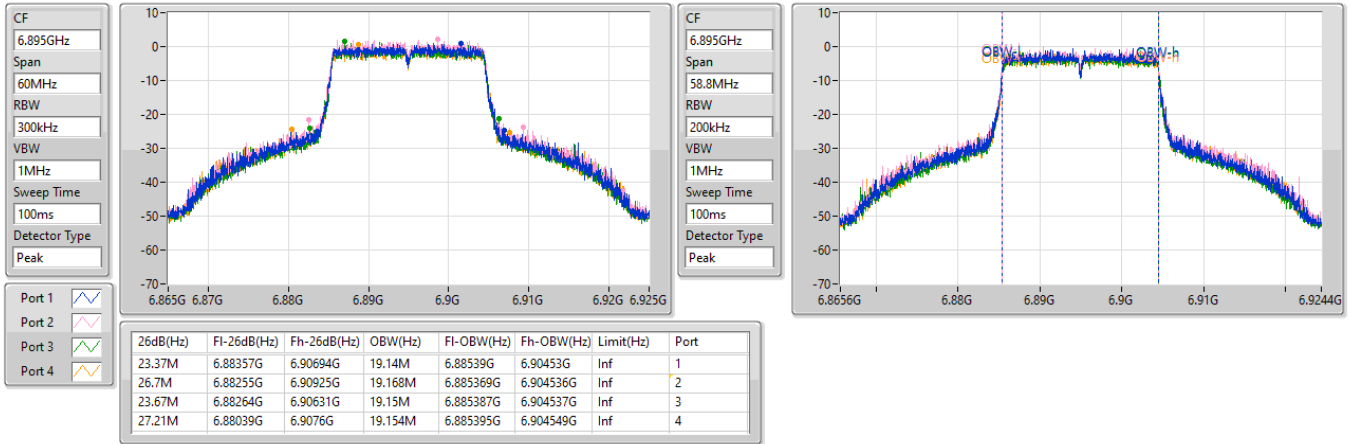
11/01/2023



6.875-7.125GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
6895MHz

EBW

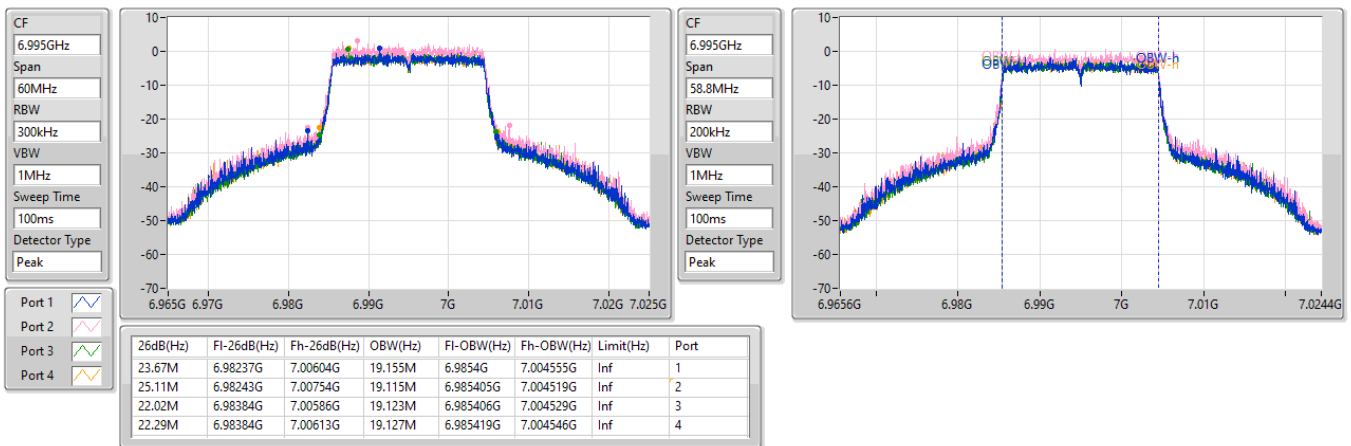
11/01/2023



6.875-7.125GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
6995MHz

EBW

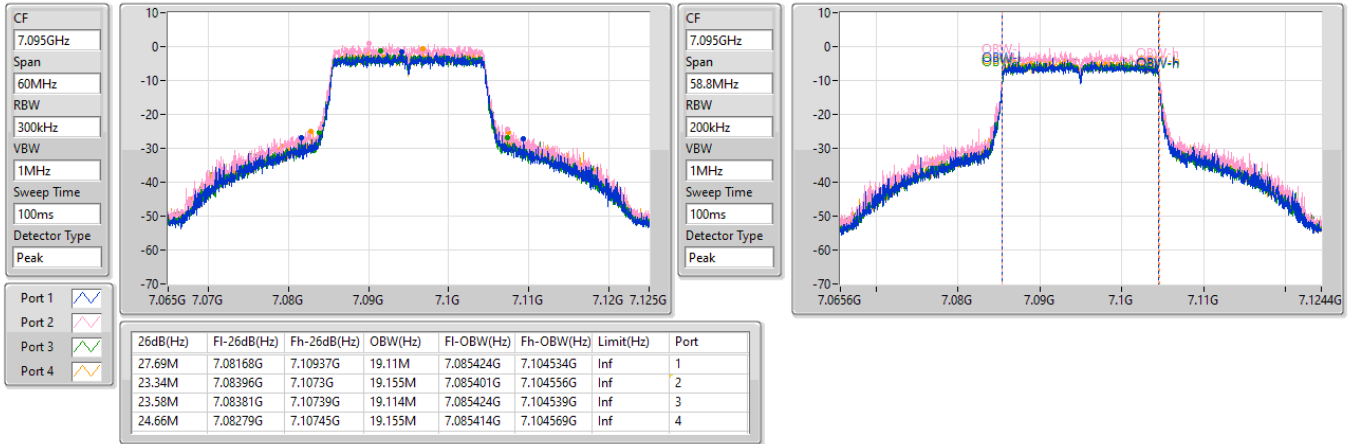
11/01/2023



6.875-7.125GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
7095MHz

EBW

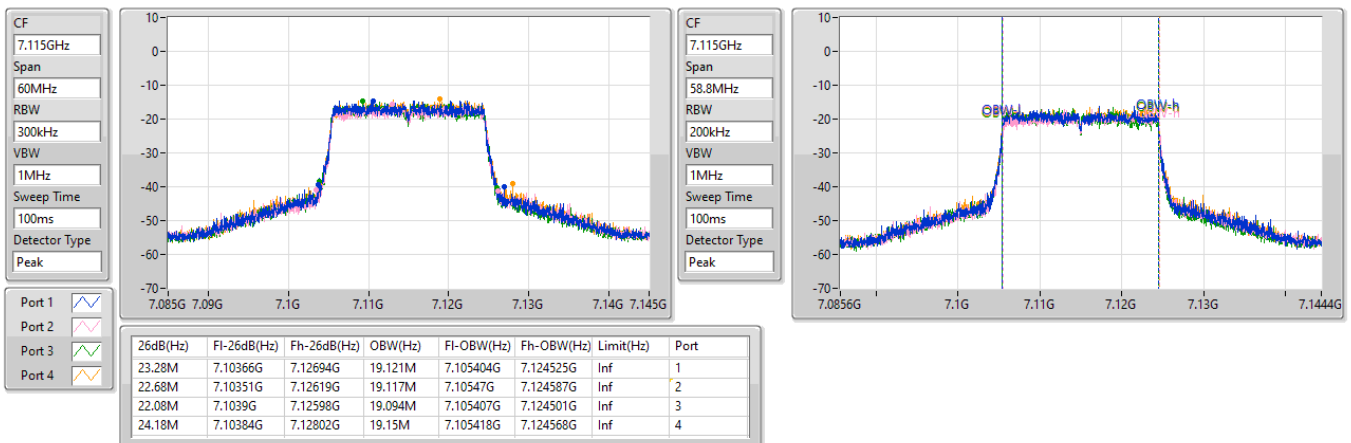
11/01/2023



6.875-7.125GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX
7115MHz

EBW

12/01/2023

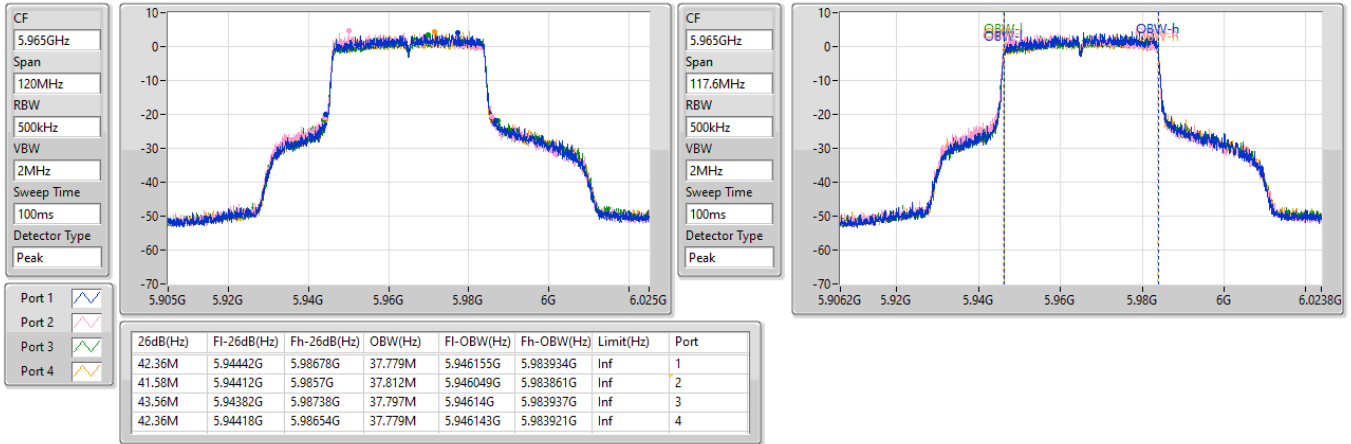


5.925-6.425GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

5965MHz

11/01/2023

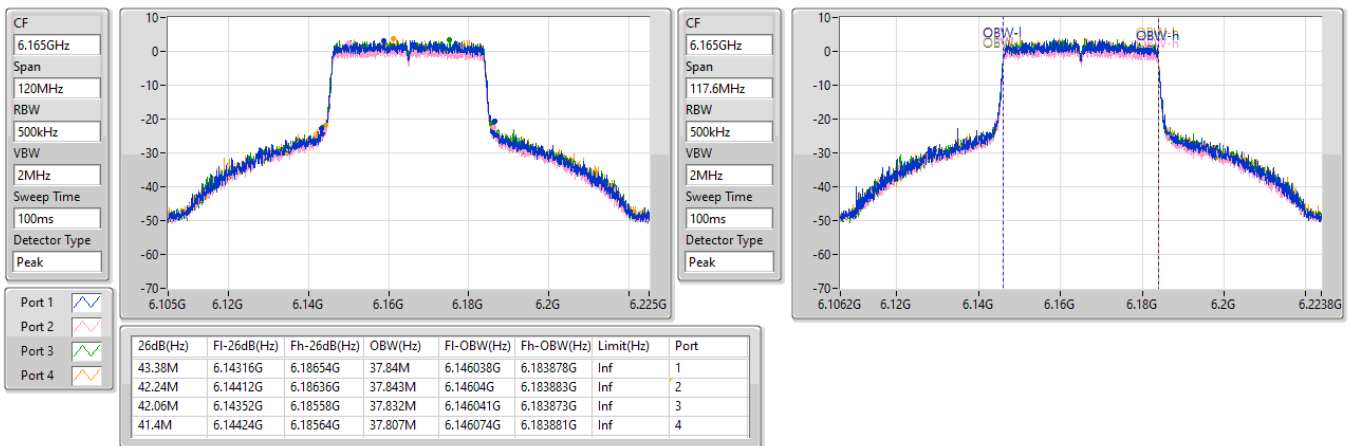


5.925-6.425GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

6165MHz

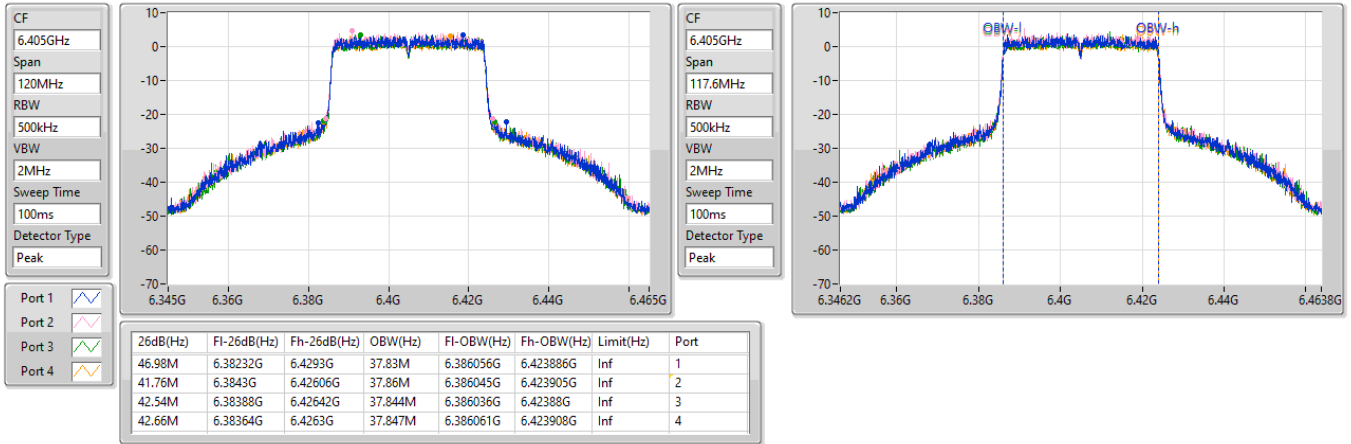
11/01/2023



5.925-6.425GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
6405MHz

EBW

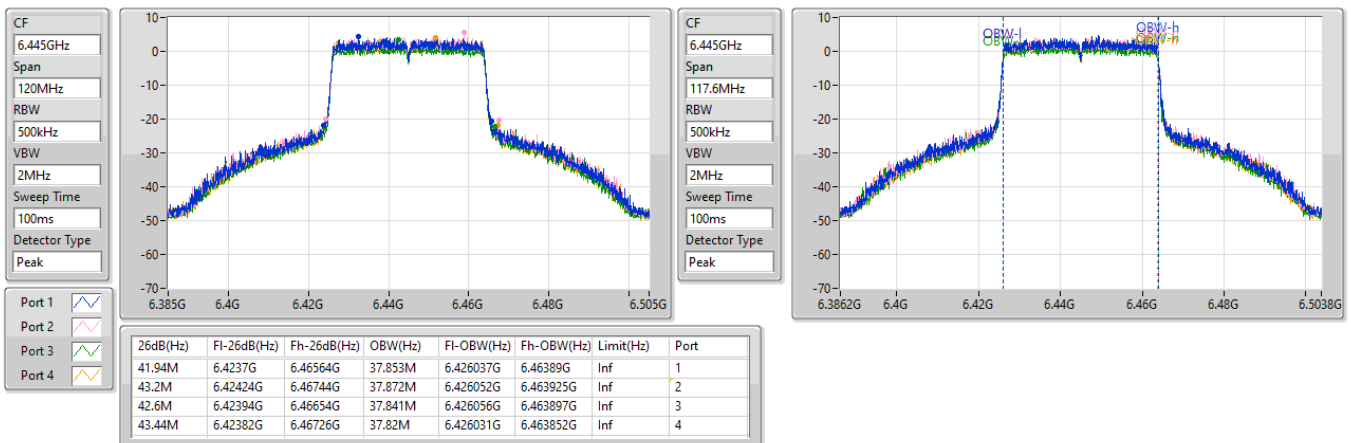
11/01/2023



6.425-6.525GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
6445MHz

EBW

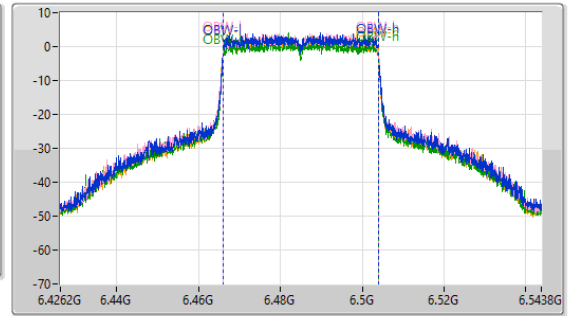
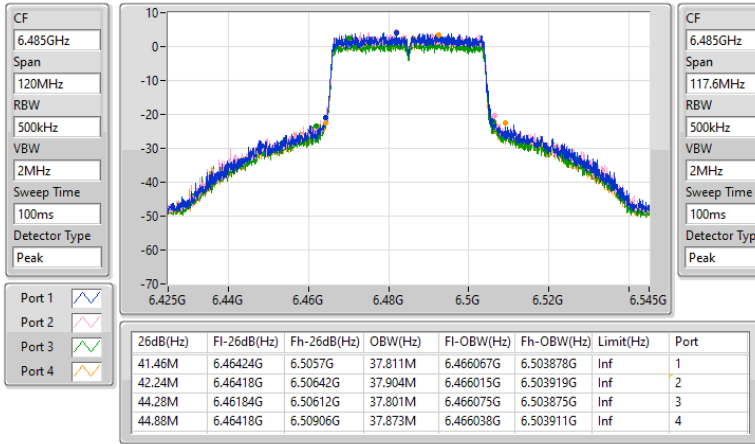
11/01/2023



6.425-6.525GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
6485MHz

EBW

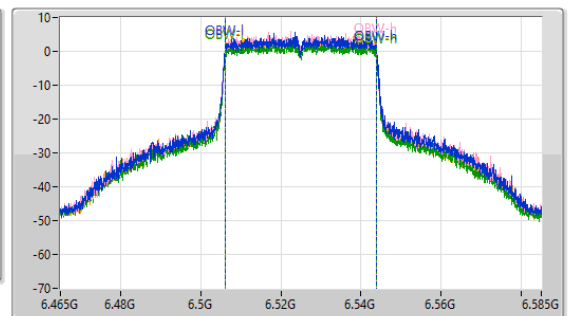
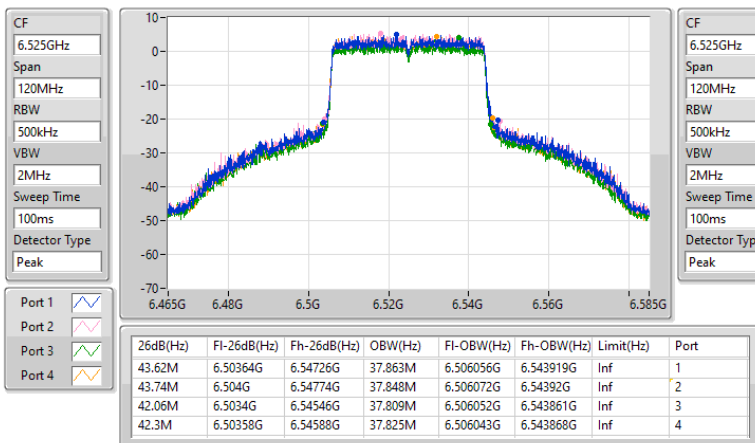
11/01/2023



6.425-6.525GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
6525MHz Straddle 6.425-6.525GHz

EBW

11/01/2023

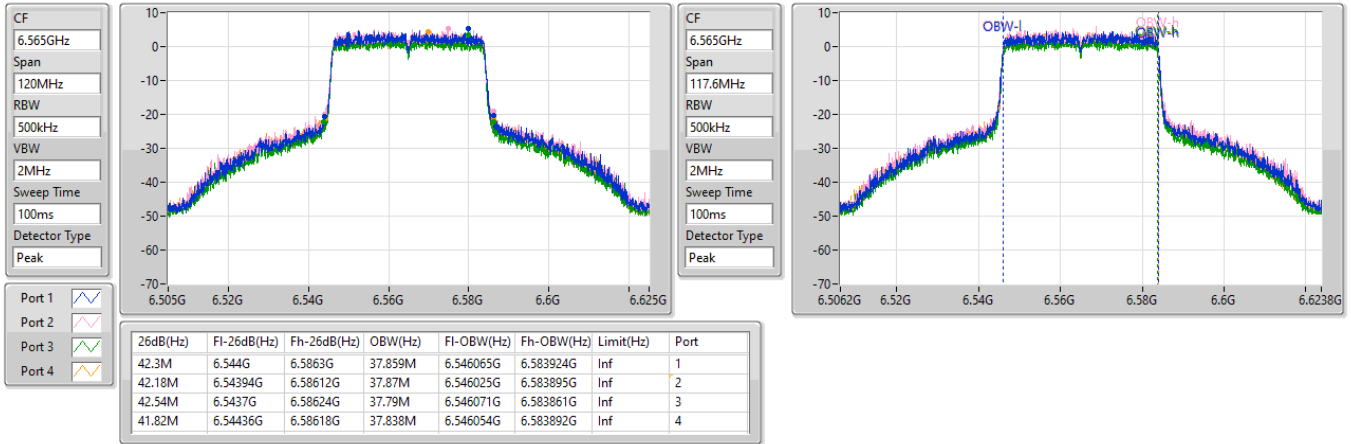


6.525-6.875GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

6565MHz

11/01/2023

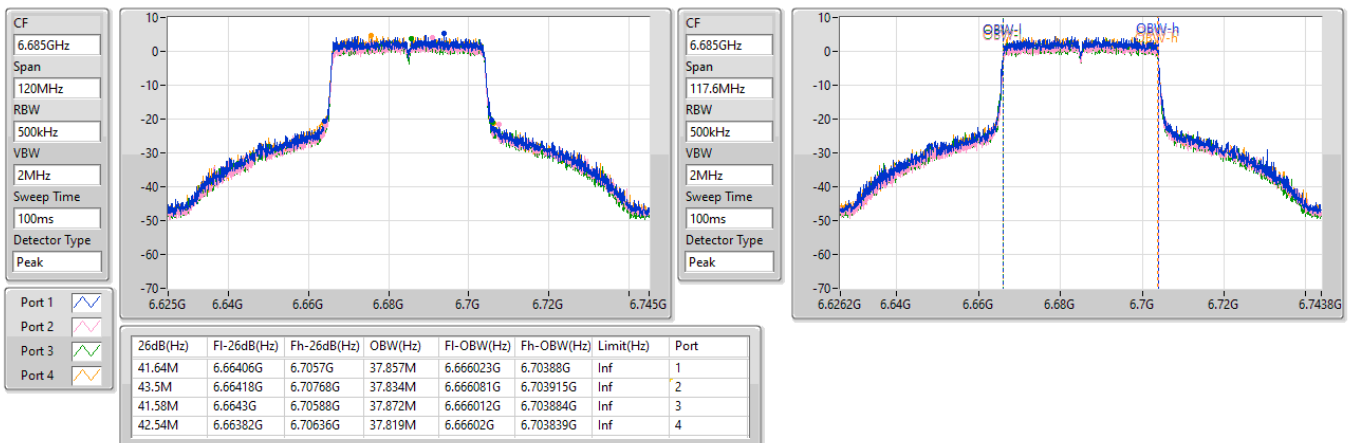


6.525-6.875GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

6685MHz

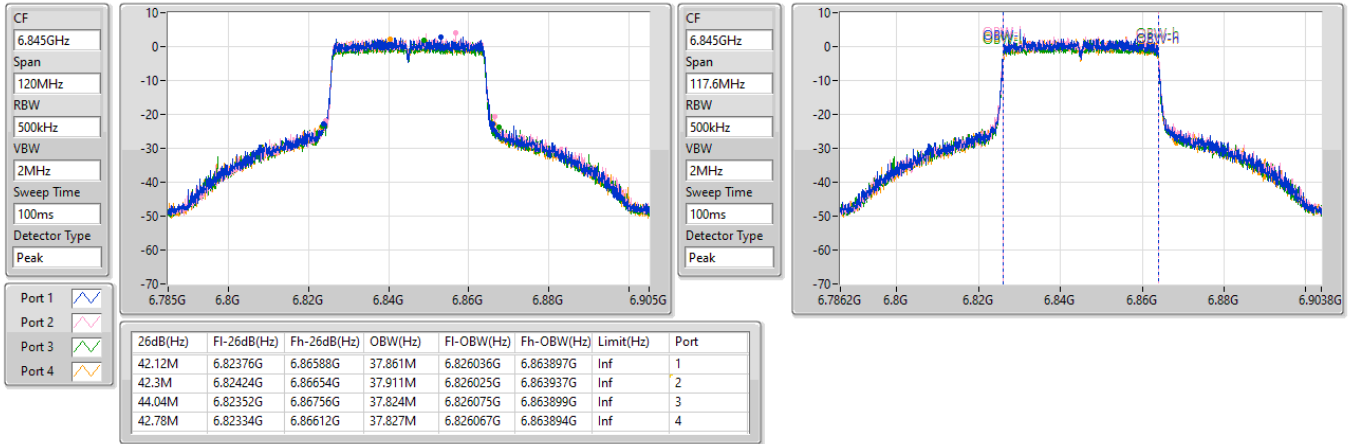
11/01/2023



6.525-6.875GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
6845MHz

EBW

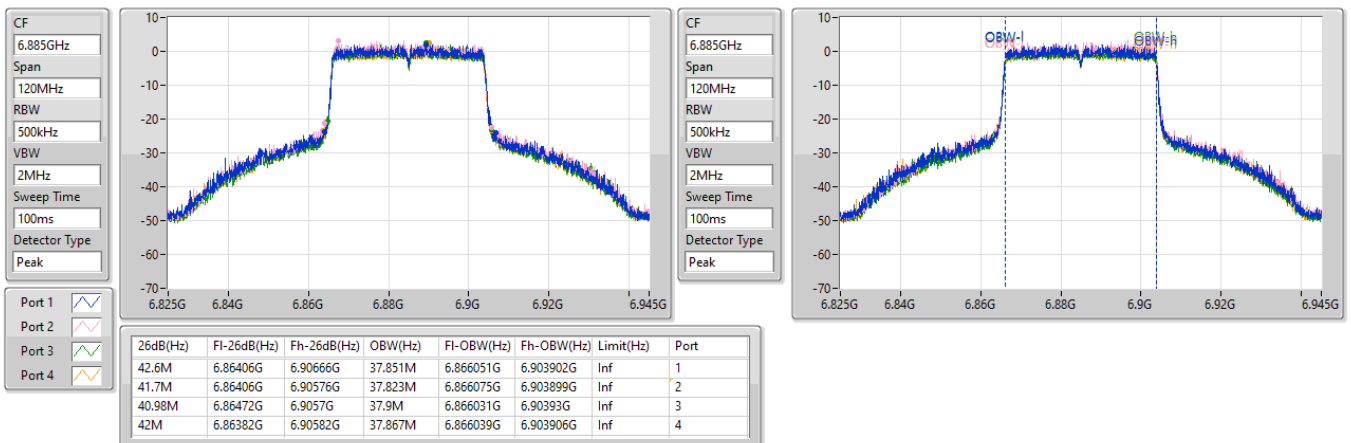
11/01/2023



6.525-6.875GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
6885MHz Straddle 6.525-6.875GHz

EBW

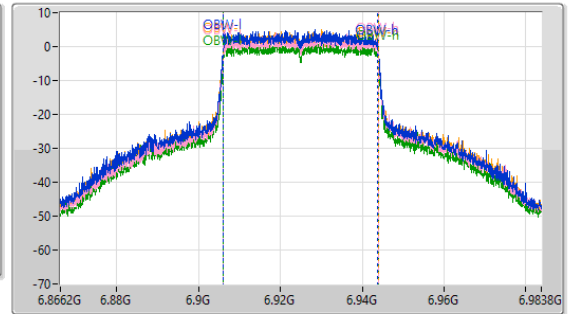
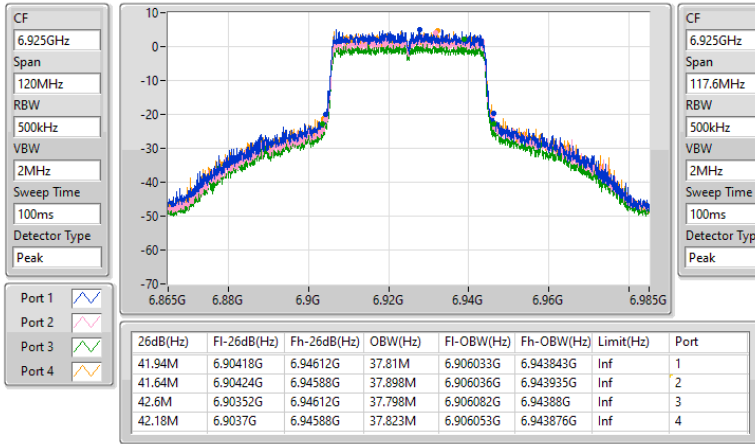
11/01/2023



6.875-7.125GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
6925MHz

EBW

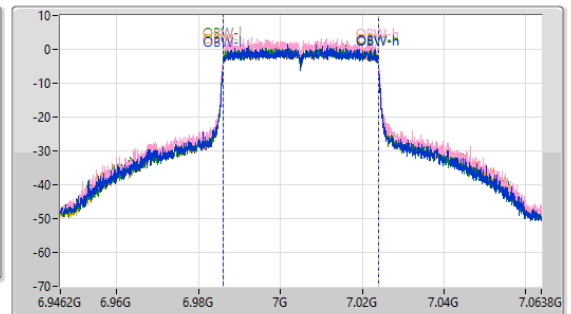
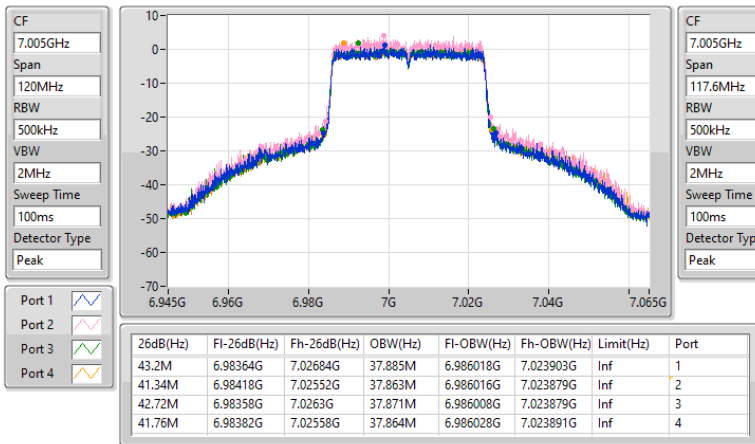
11/01/2023



6.875-7.125GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
7005MHz

EBW

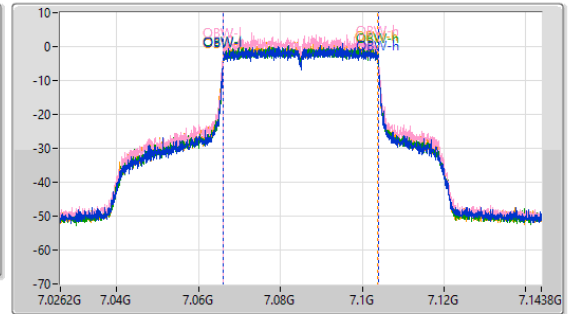
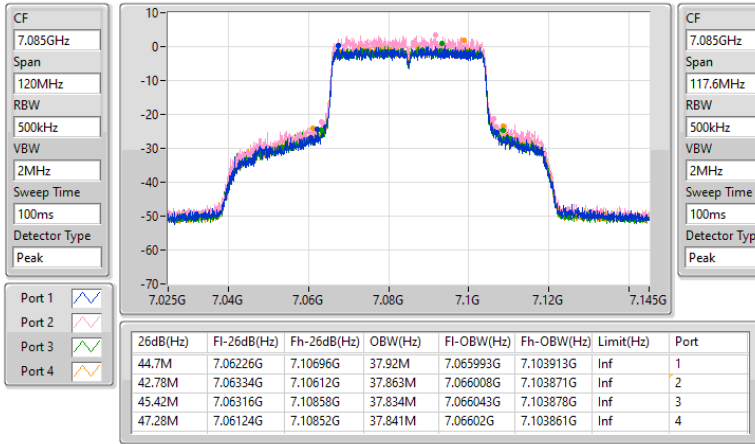
11/01/2023



6.875-7.125GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX
7085MHz

EBW

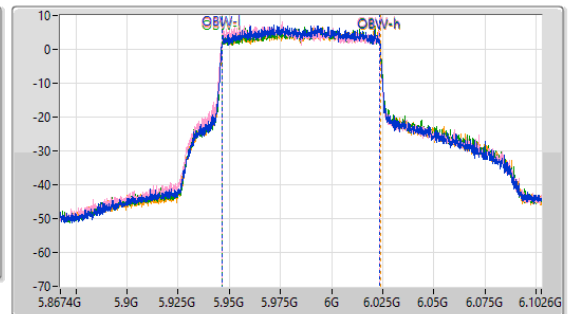
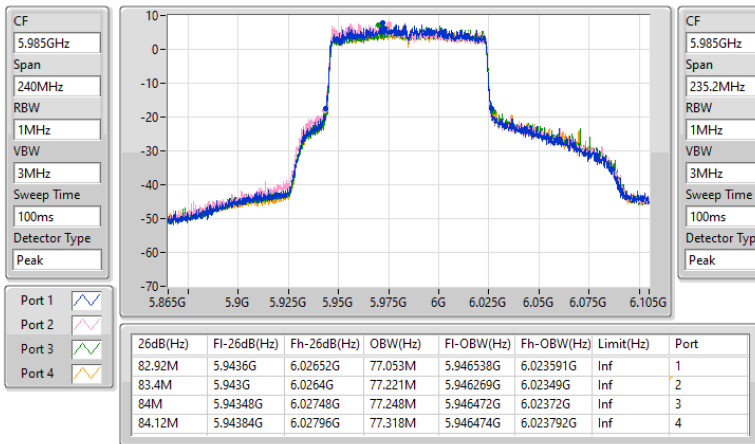
11/01/2023



5.925-6.425GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
5985MHz

EBW

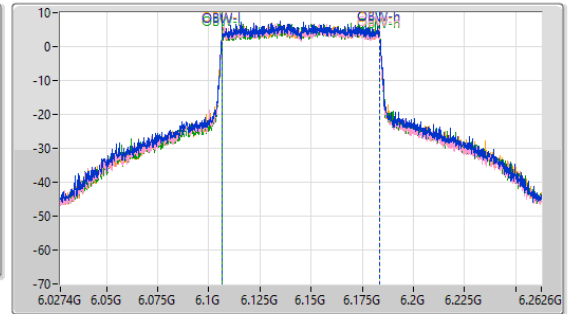
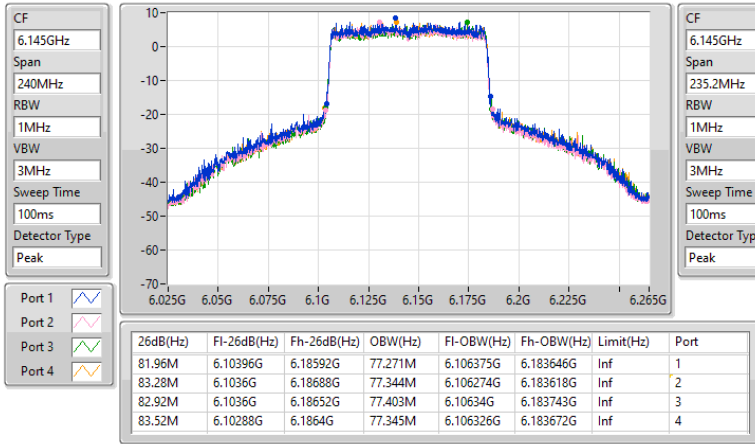
11/01/2023



5.925-6.425GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6145MHz

EBW

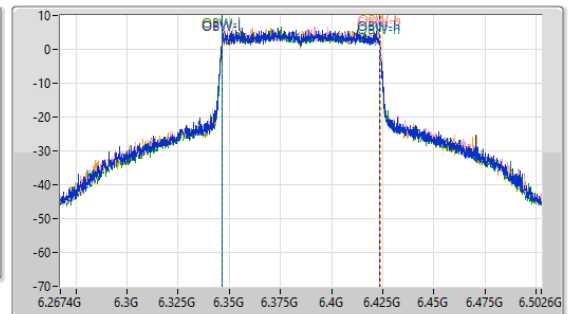
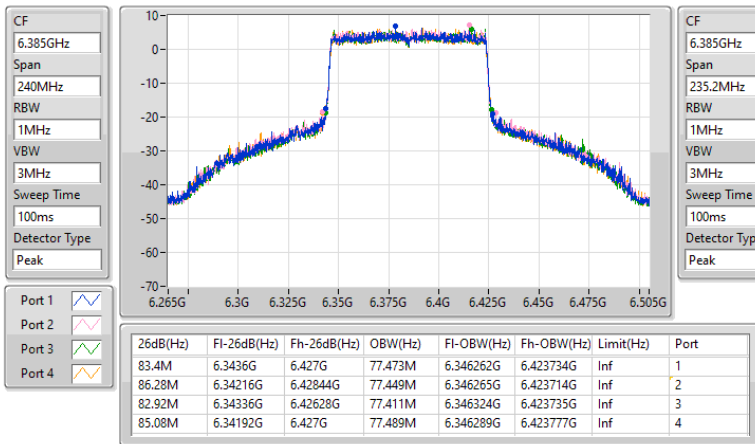
11/01/2023



5.925-6.425GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6385MHz

EBW

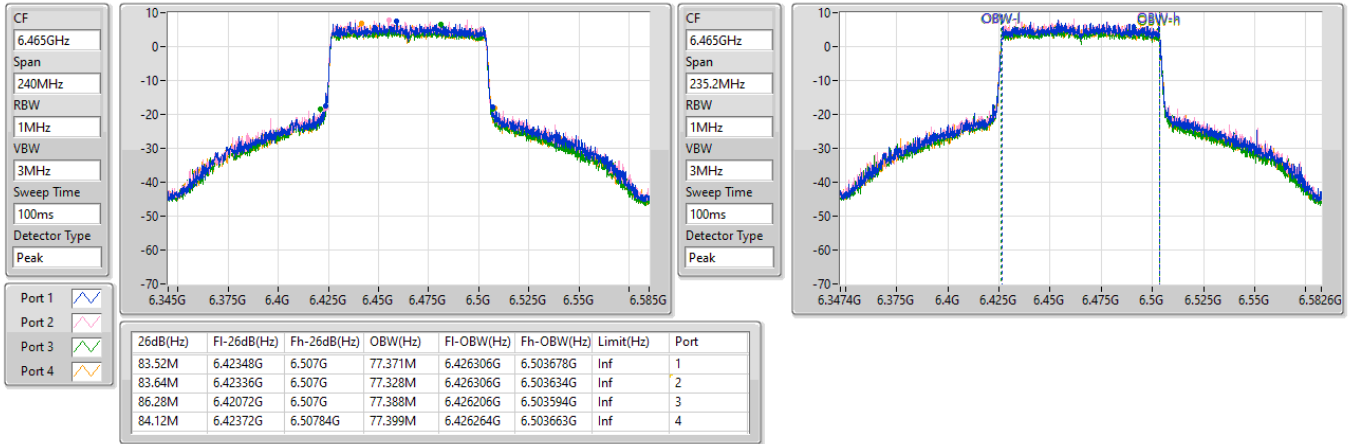
11/01/2023



6.425-6.525GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6465MHz

EBW

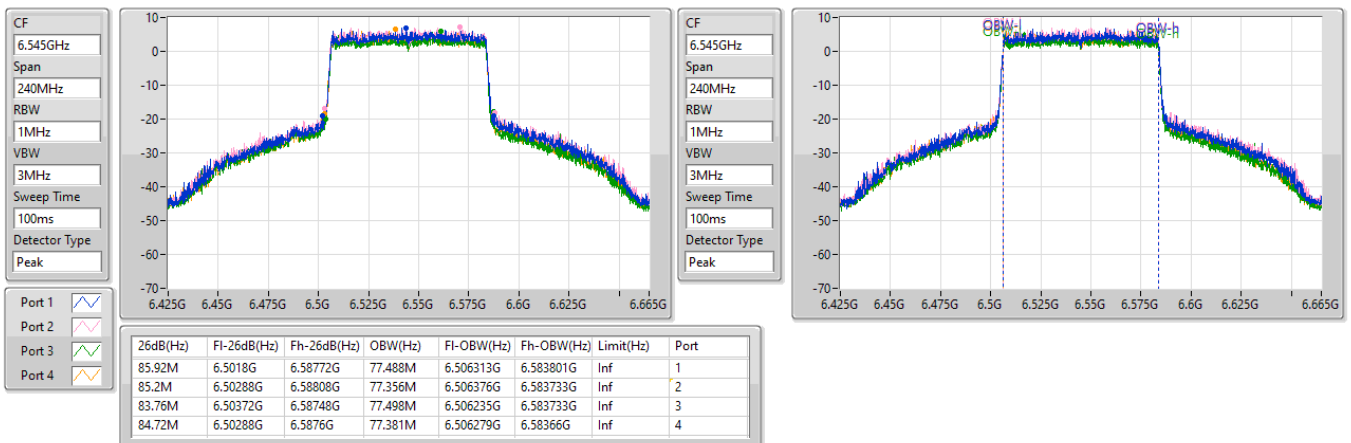
11/01/2023



6.425-6.525GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6545MHz Straddle 6.425-6.525GHz

EBW

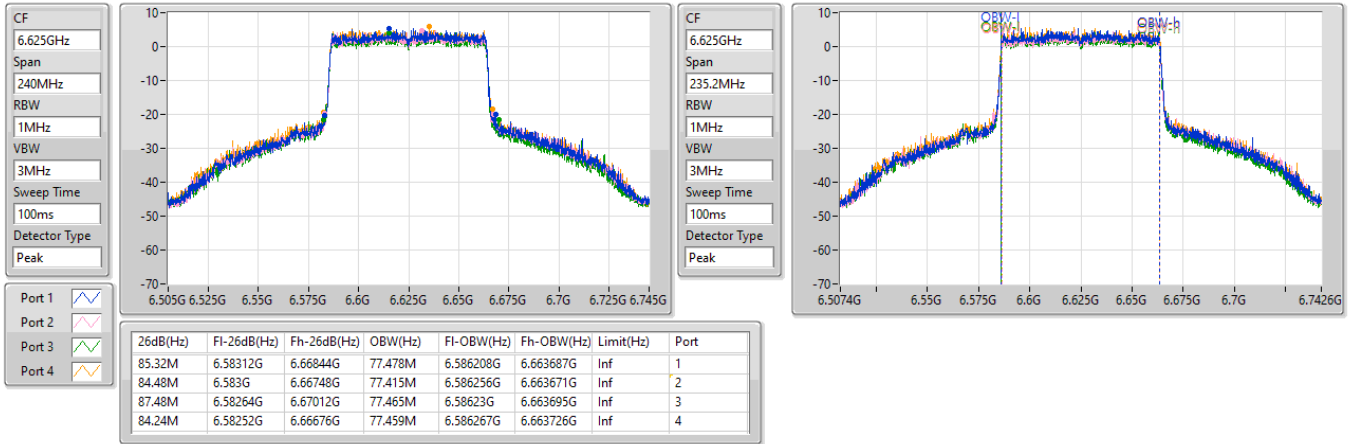
11/01/2023



6.525-6.875GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6625MHz

EBW

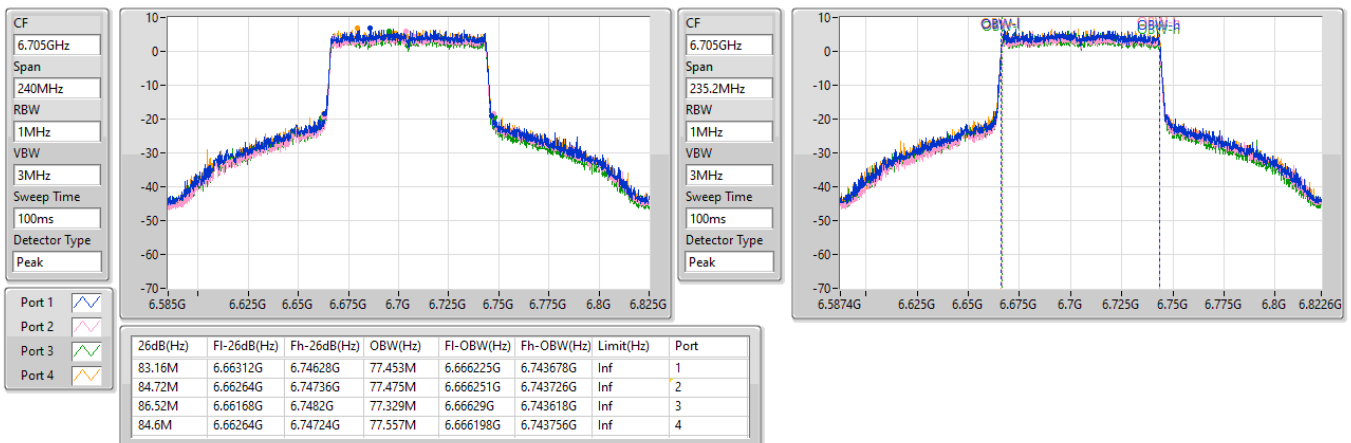
11/01/2023



6.525-6.875GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6705MHz

EBW

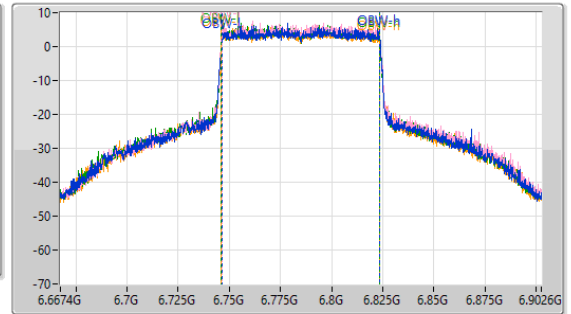
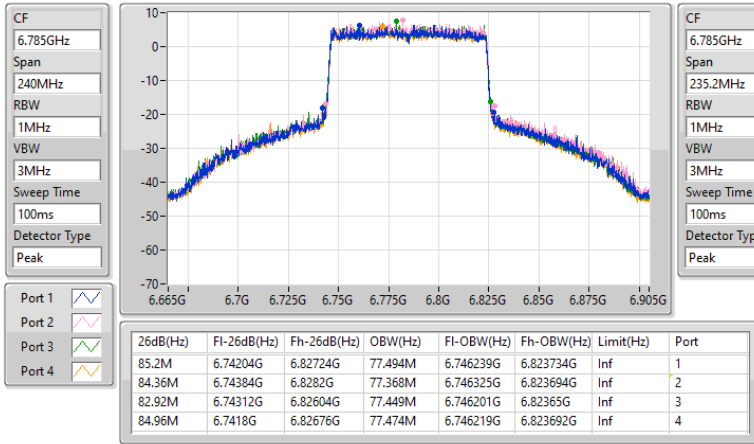
11/01/2023



6.525-6.875GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6785MHz

EBW

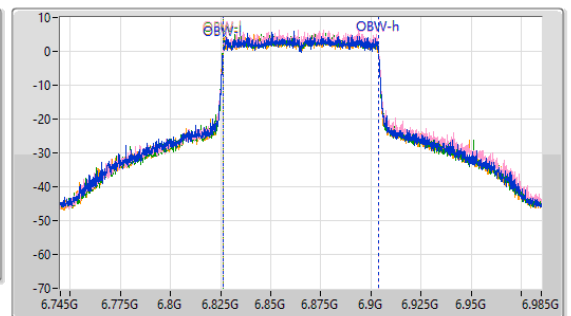
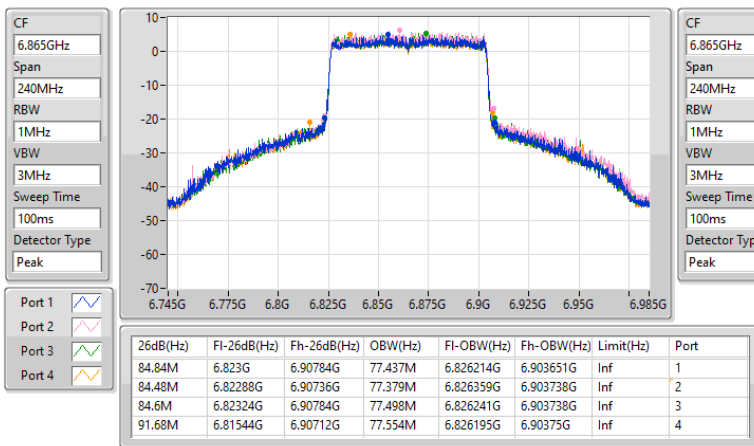
11/01/2023



6.525-6.875GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6865MHz Straddle 6.525-6.875GHz

EBW

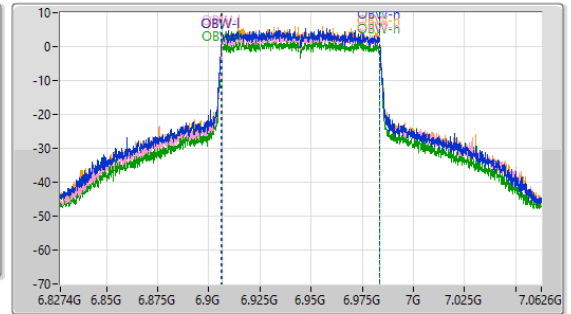
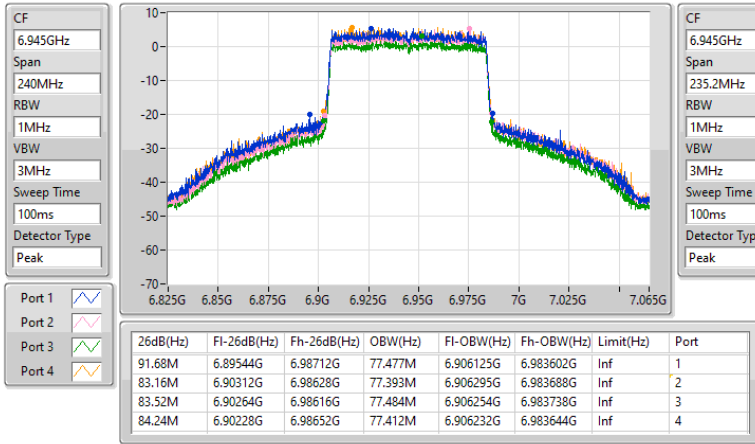
11/01/2023



6.875-7.125GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
6945MHz

EBW

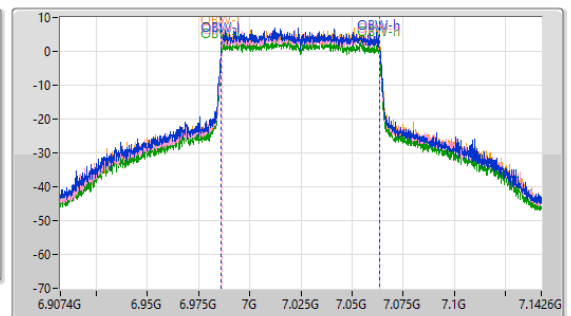
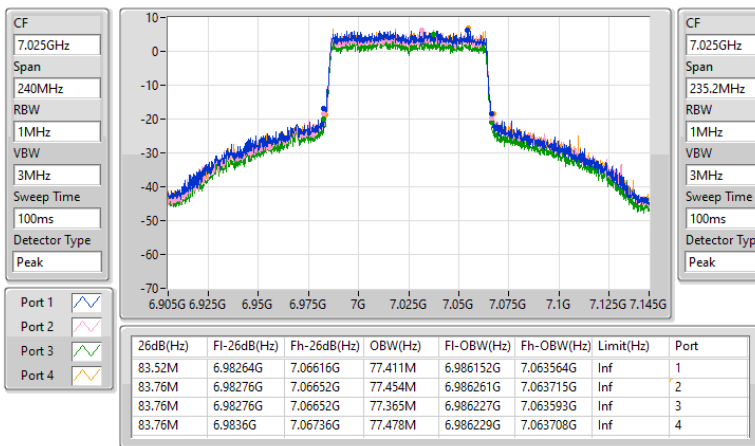
11/01/2023



6.875-7.125GHz_802.11ax HEW80-BF_Nss1,(MCS0)_4TX
7025MHz

EBW

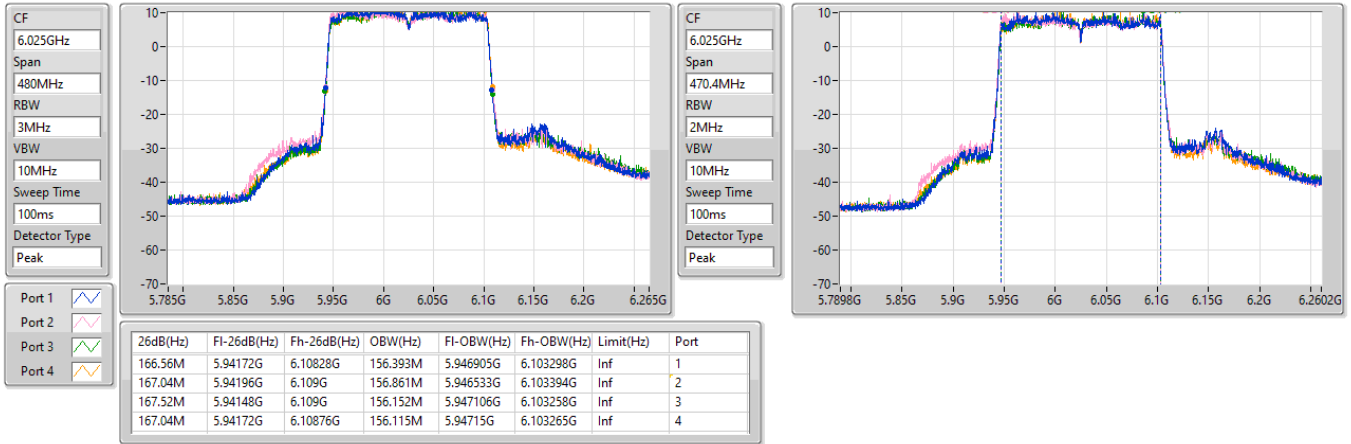
11/01/2023



5.925-6.425GHz_802.11ax HEW160-BF_Nss1,(MCS0)_4TX
6025MHz

EBW

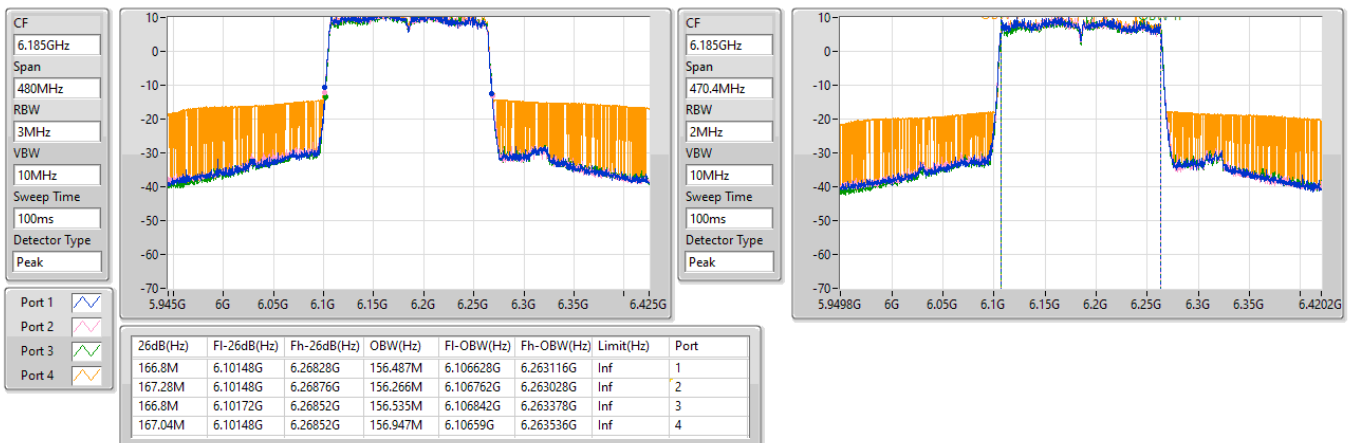
12/01/2023



5.925-6.425GHz_802.11ax HEW160-BF_Nss1,(MCS0)_4TX
6185MHz

EBW

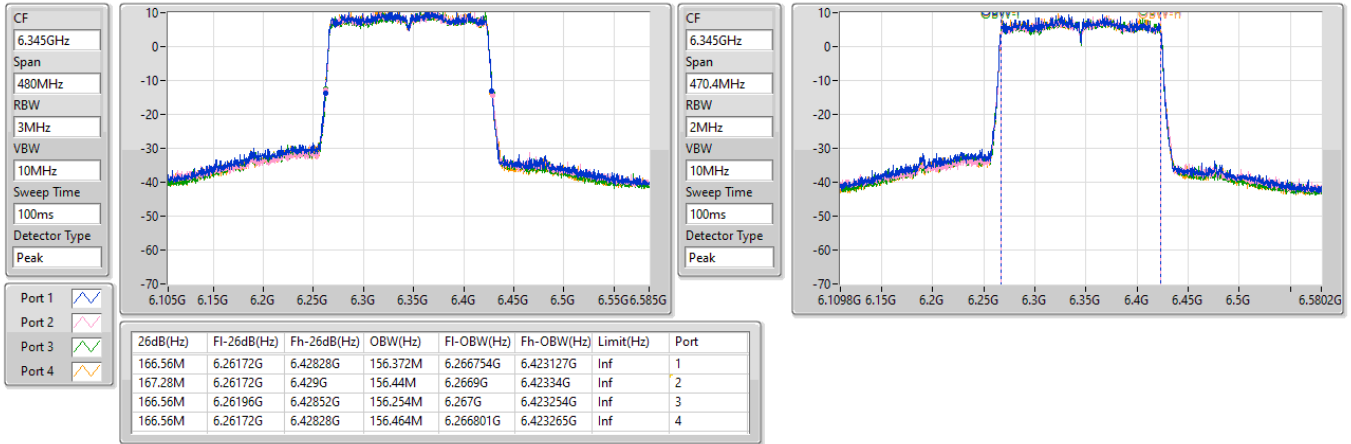
12/01/2023



5.925-6.425GHz_802.11ax HEW160-BF_Nss1,(MCS0)_4TX
6345MHz

EBW

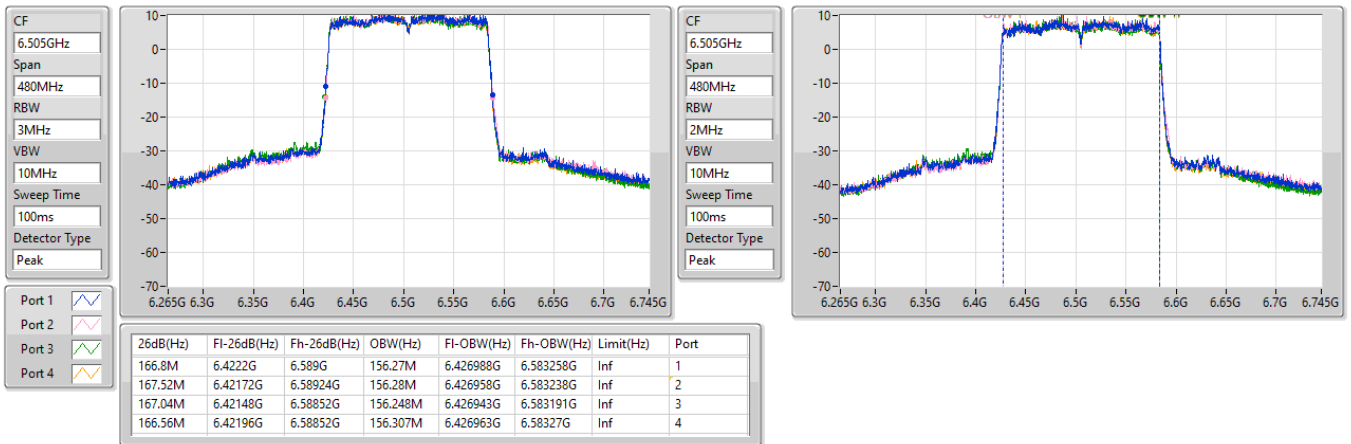
12/01/2023



6.425-6.525GHz_802.11ax HEW160-BF_Nss1,(MCS0)_4TX
6505MHz Straddle 6.425-6.525GHz

EBW

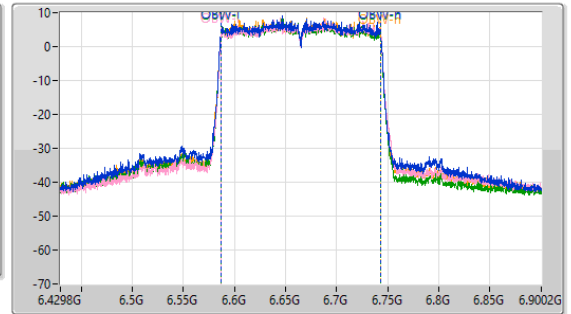
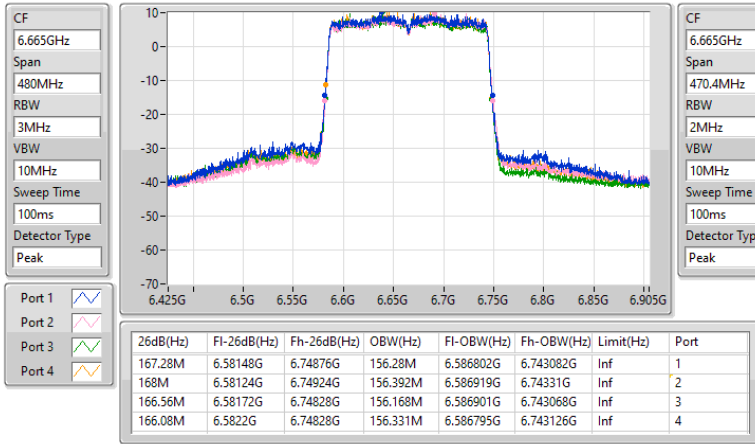
12/01/2023



6.525-6.875GHz_802.11ax HEW160-BF_Nss1,(MCS0)_4TX
6665MHz

EBW

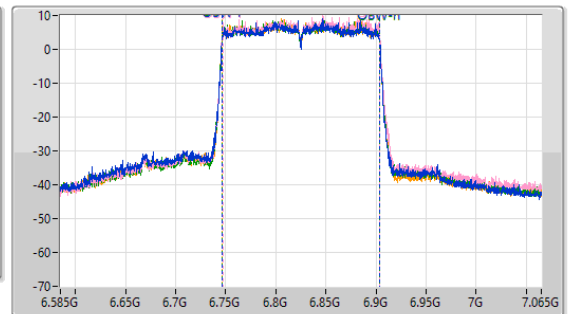
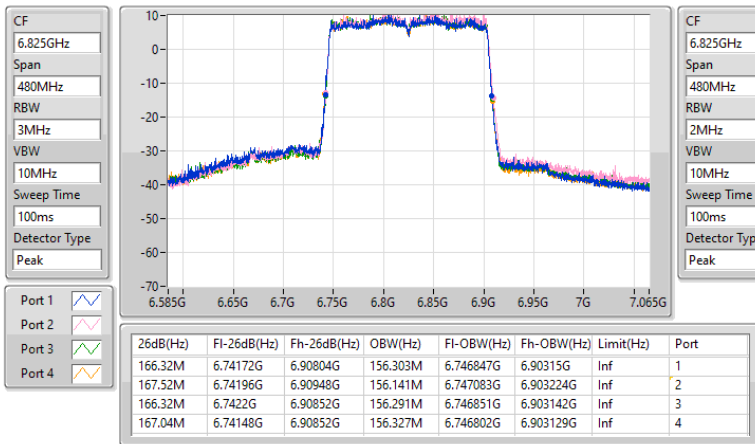
12/01/2023



6.525-6.875GHz_802.11ax HEW160-BF_Nss1,(MCS0)_4TX
6825MHz Straddle 6.525-6.875GHz

EBW

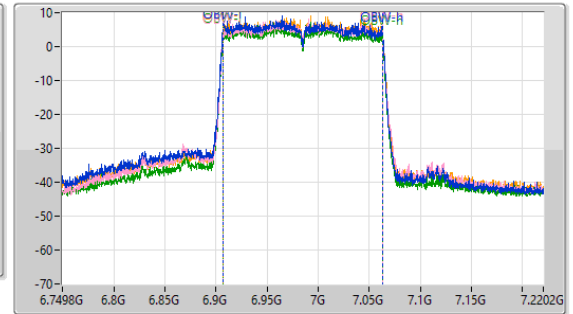
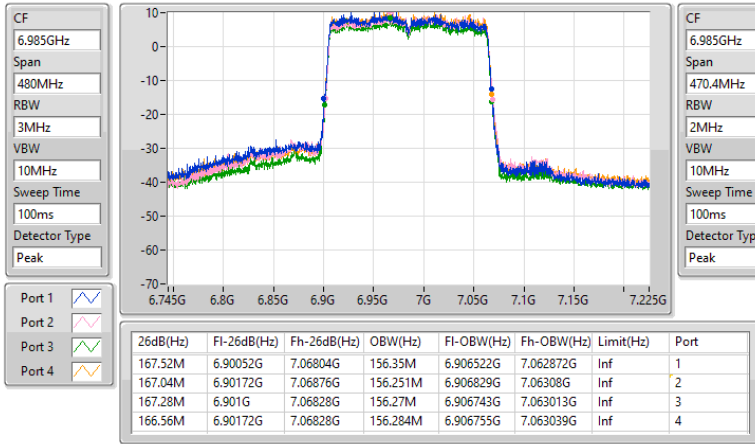
12/01/2023



6.875-7.125GHz_802.11ax HEW160-BF_Nss1,(MCS0)_4TX
6985MHz

EBW

12/01/2023





Summary

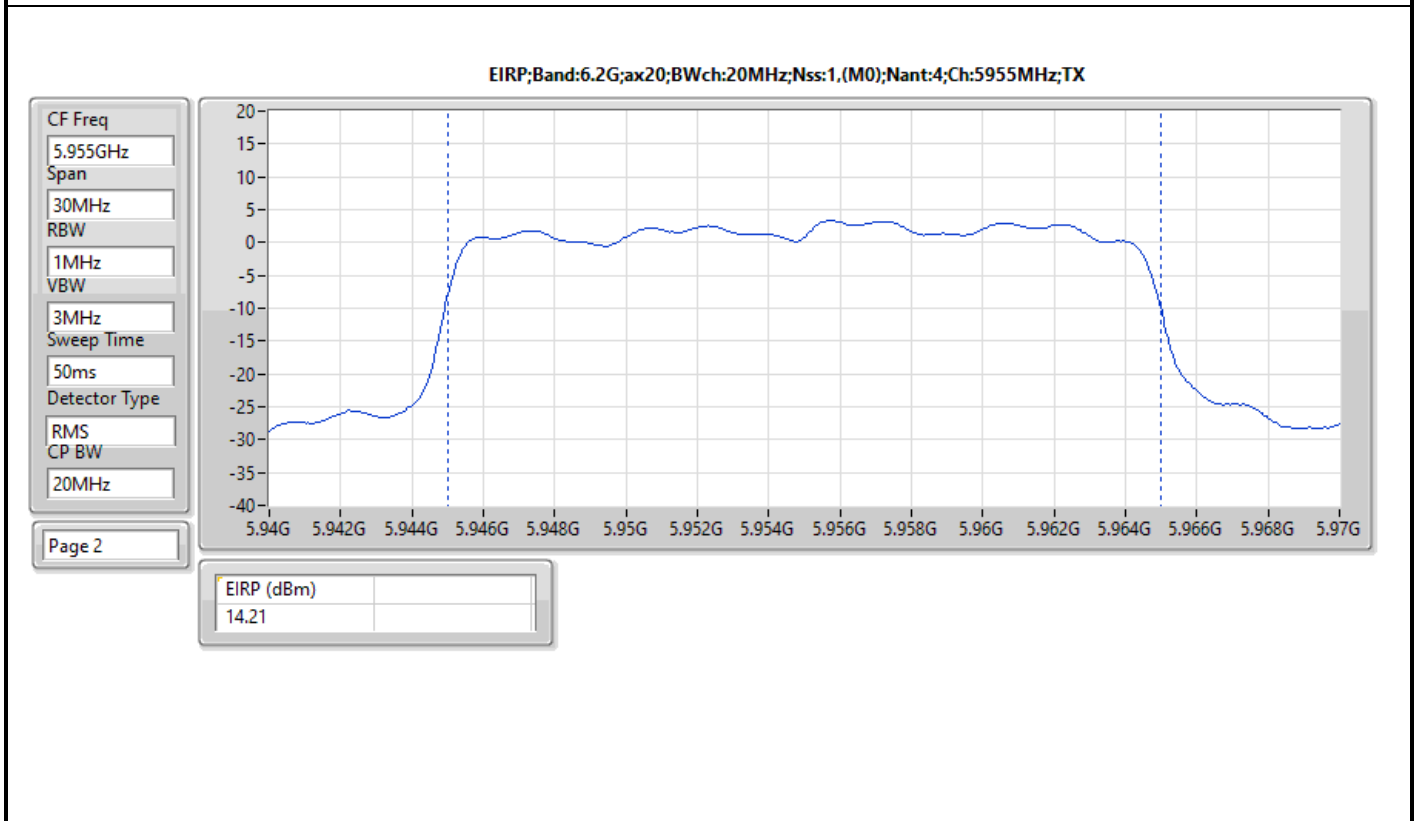
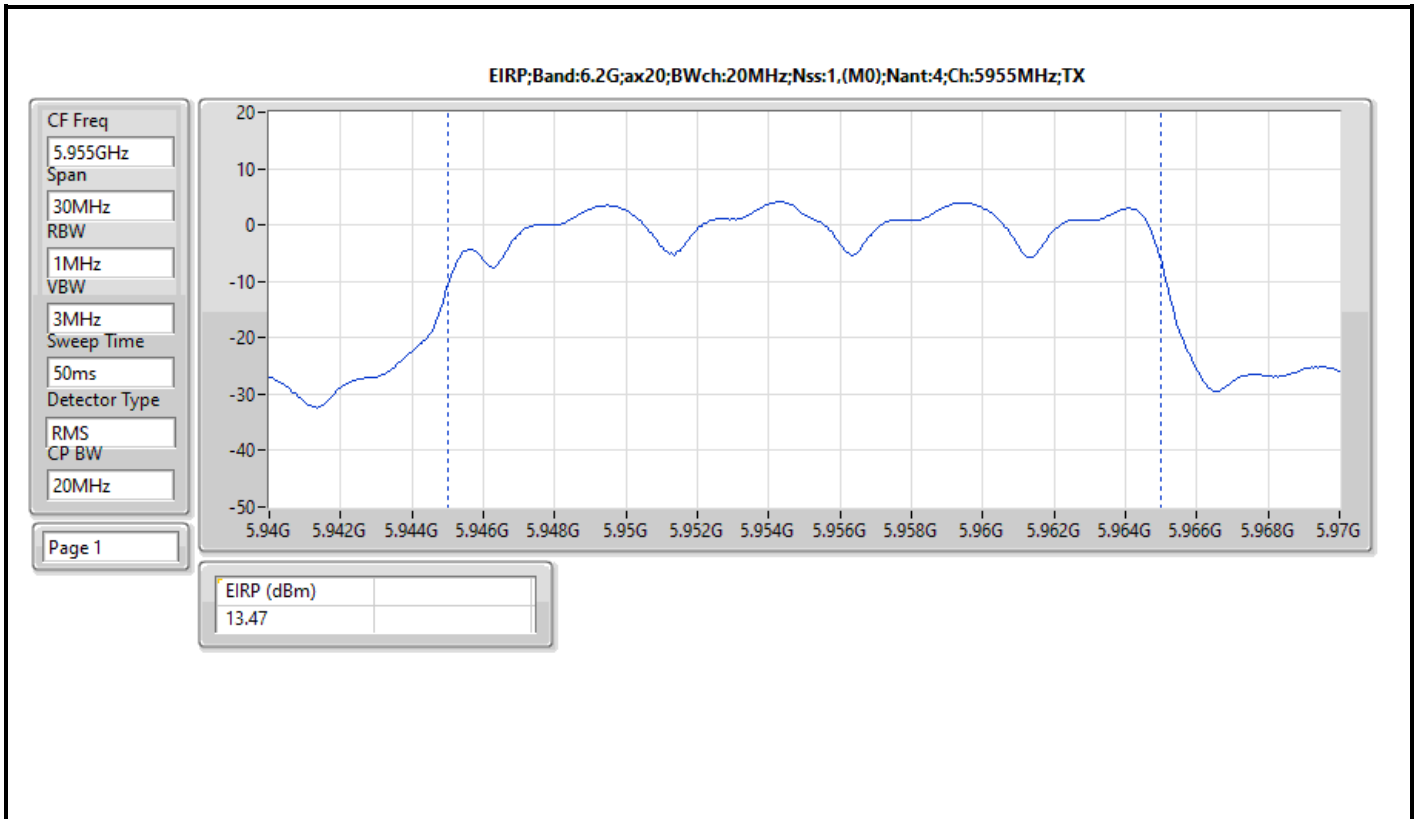
Mode	EIRP (dBm)
5.925-6.425GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	14.21
802.11ax HEW40_Nss1,(MCS0)_4TX	17.74
802.11ax HEW80_Nss1,(MCS0)_4TX	21.56
802.11ax HEW160_Nss1,(MCS0)_4TX	23.25
6.425-6.525GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	15.37
802.11ax HEW40_Nss1,(MCS0)_4TX	19.16
802.11ax HEW80_Nss1,(MCS0)_4TX	21.82
802.11ax HEW160_Nss1,(MCS0)_4TX	24.12
6.525-6.875GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	15.83
802.11ax HEW40_Nss1,(MCS0)_4TX	17.86
802.11ax HEW80_Nss1,(MCS0)_4TX	21.78
802.11ax HEW160_Nss1,(MCS0)_4TX	23.67
6.875-7.125GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	16.86
802.11ax HEW40_Nss1,(MCS0)_4TX	18.65
802.11ax HEW80_Nss1,(MCS0)_4TX	19.99
802.11ax HEW160_Nss1,(MCS0)_4TX	23.21

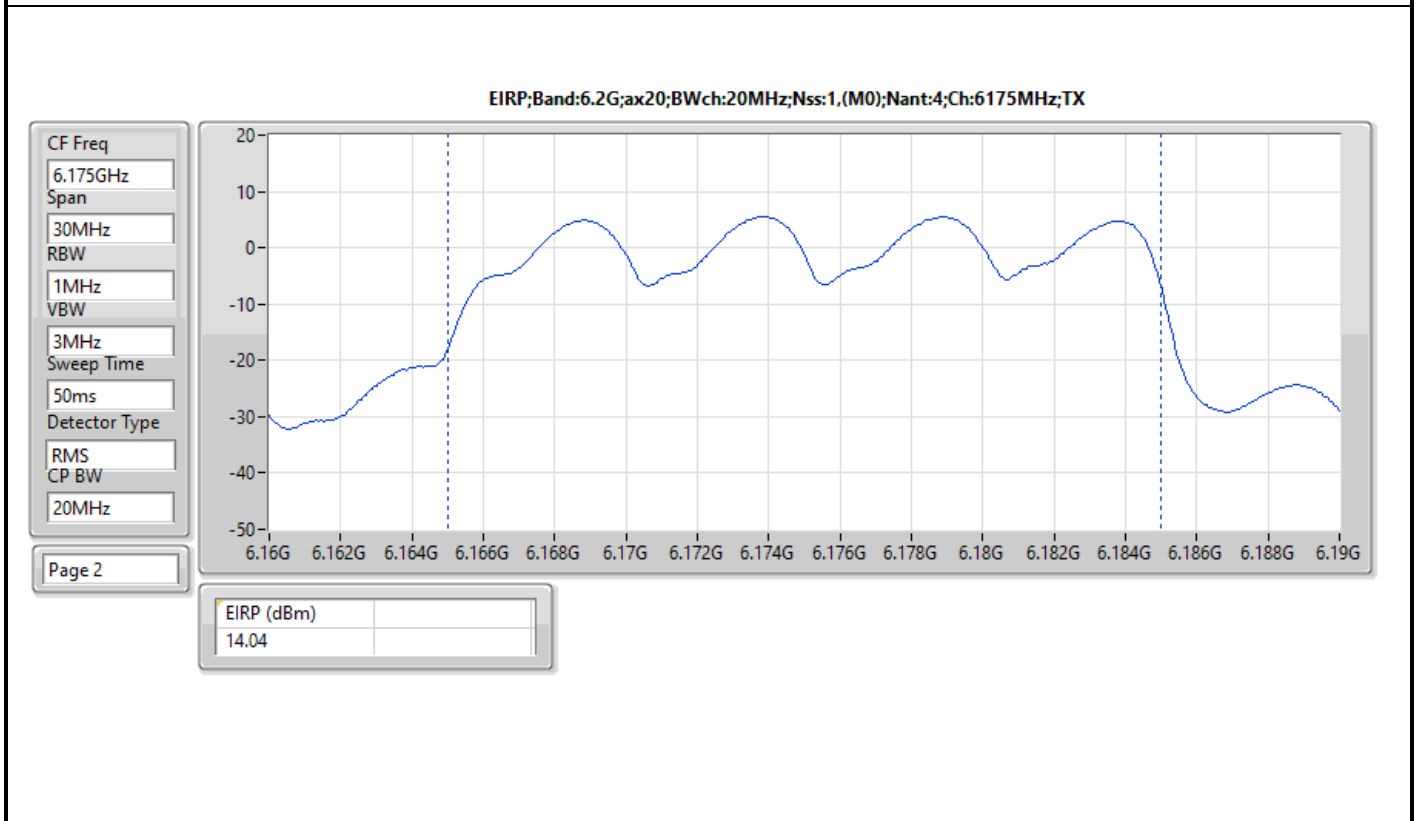
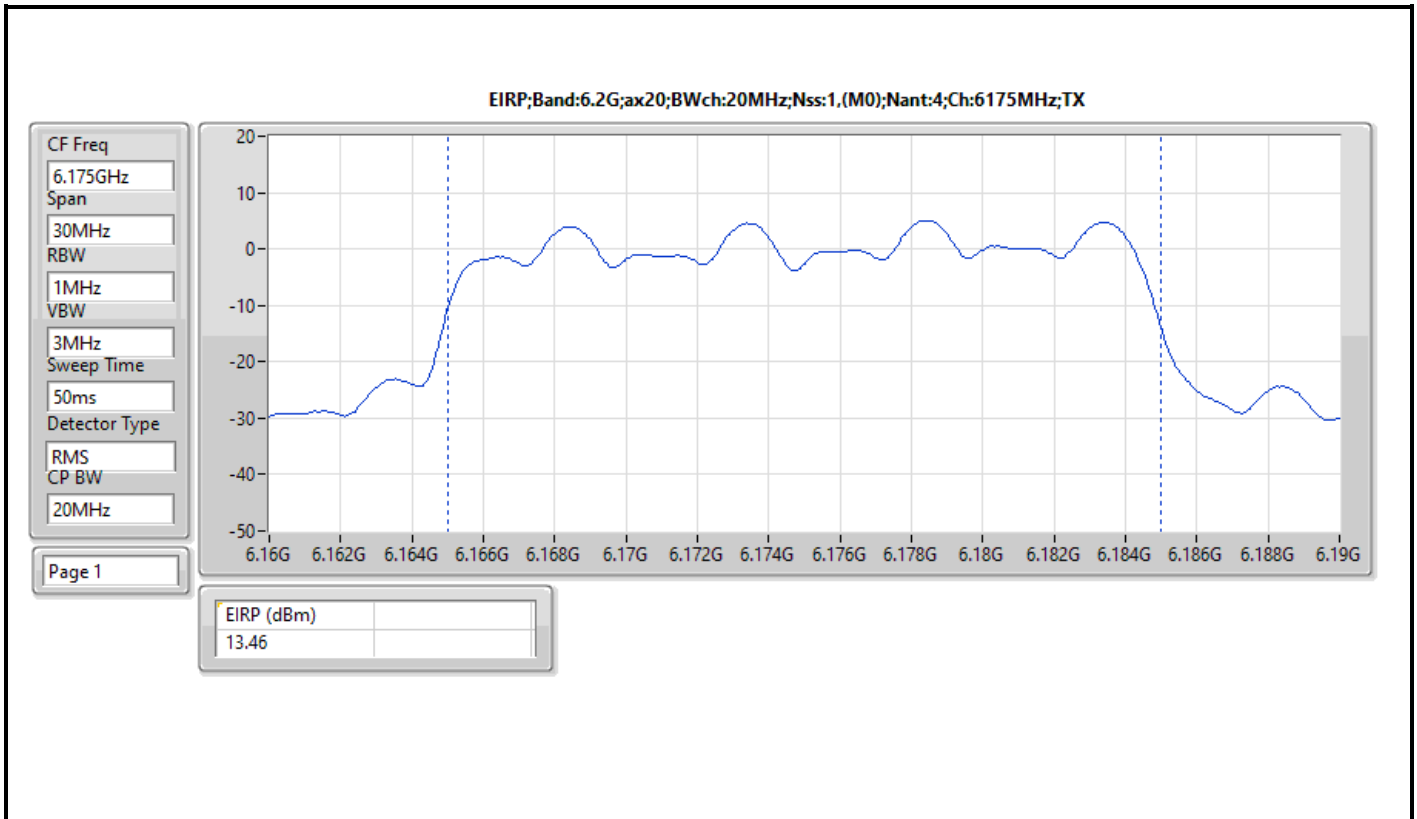


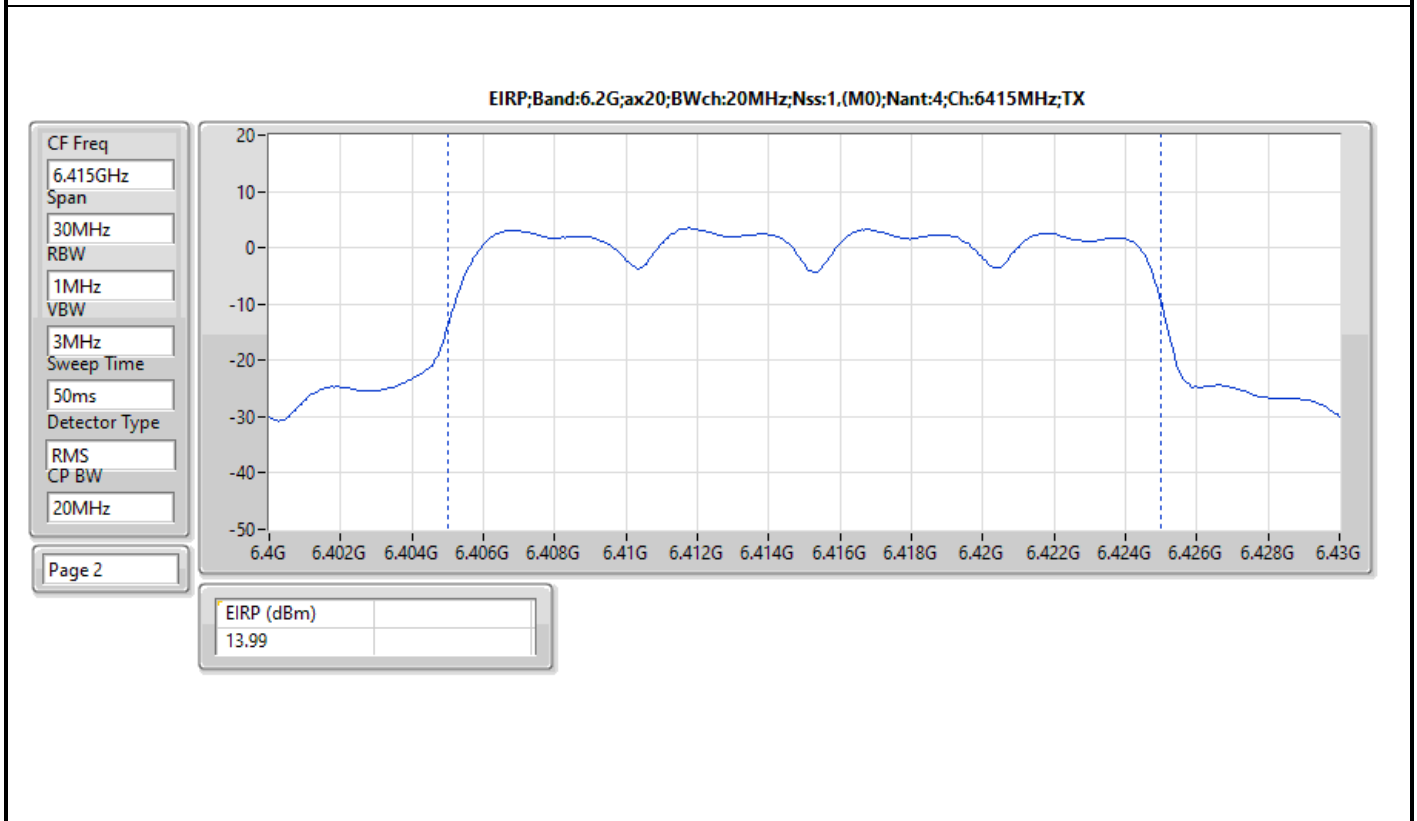
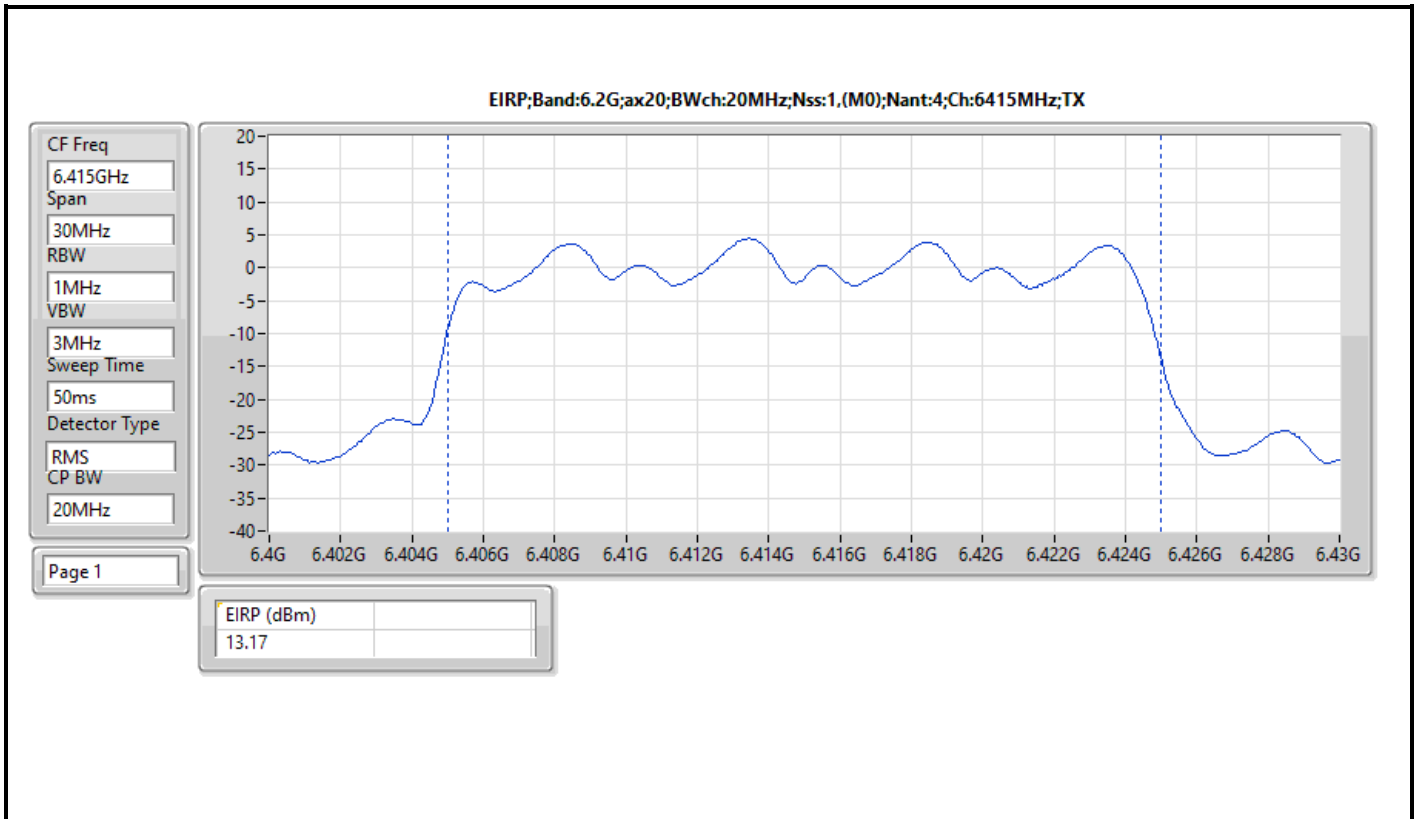
Result

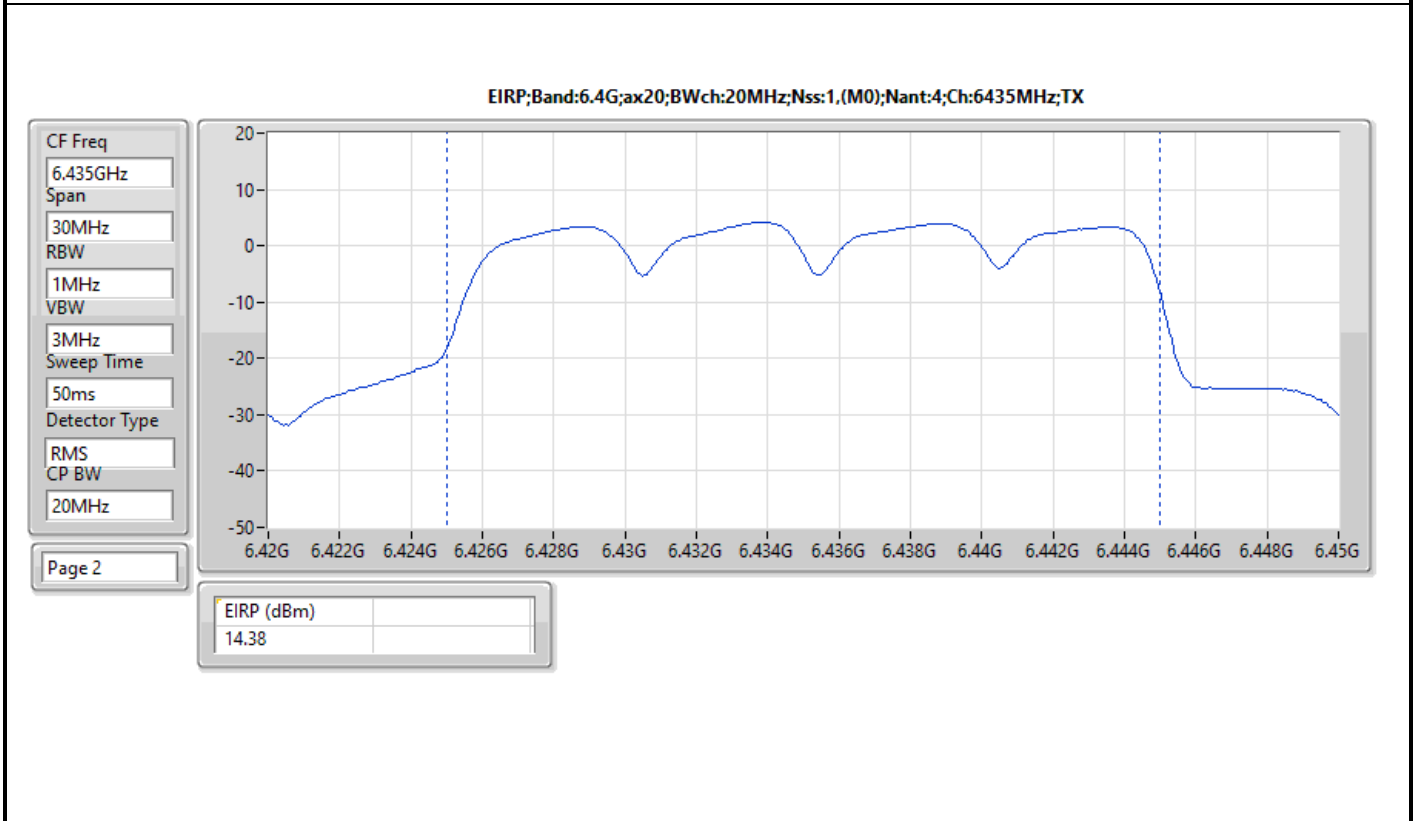
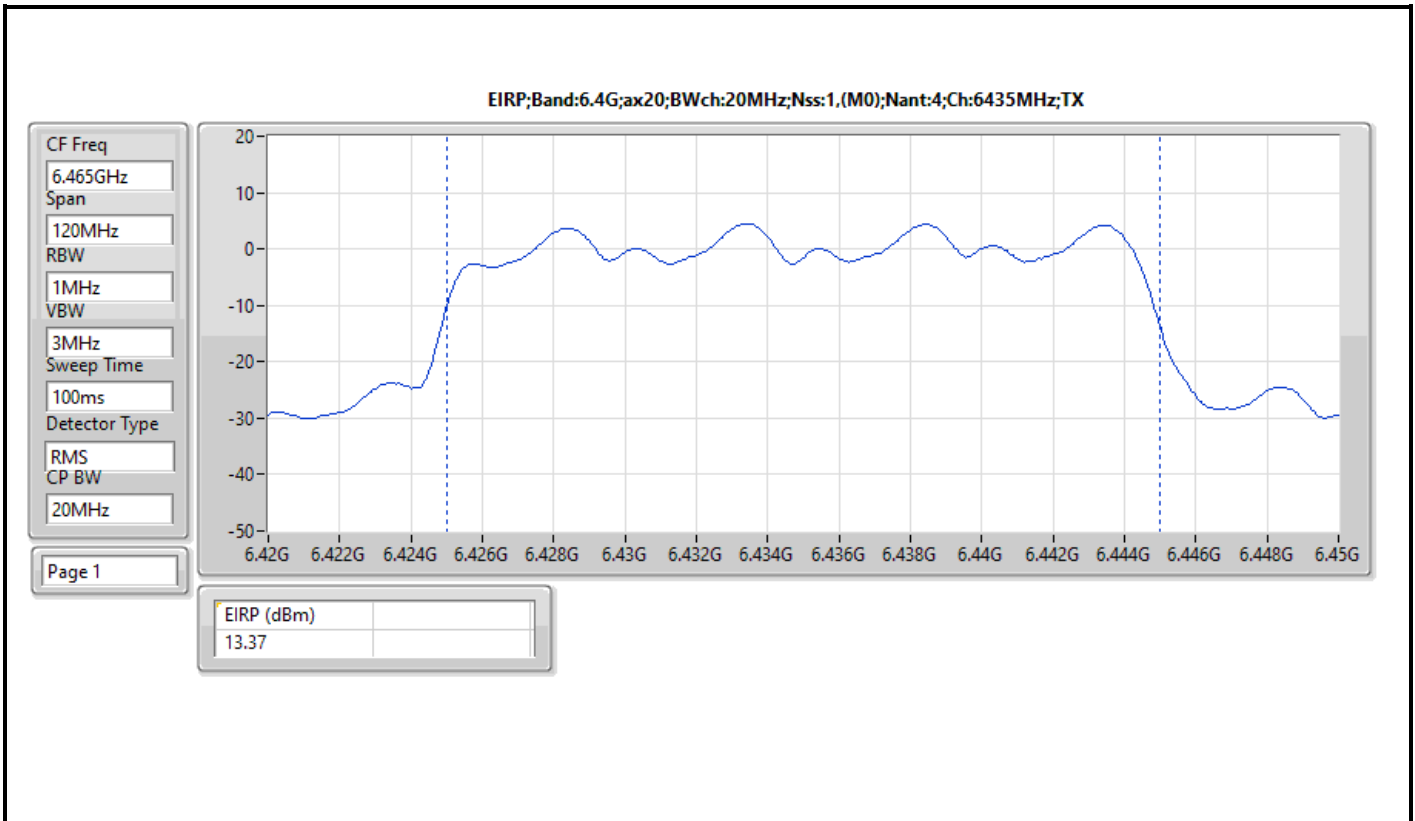
Mode	Result	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-
5955MHz	Pass	14.21	30.00
6175MHz	Pass	14.04	30.00
6415MHz	Pass	13.99	30.00
6435MHz	Pass	14.38	30.00
6475MHz	Pass	15.13	30.00
6515MHz	Pass	15.37	30.00
6535MHz	Pass	14.21	30.00
6695MHz	Pass	14.52	30.00
6855MHz	Pass	15.11	30.00
6875MHz Straddle 6.525-6.875GHz	Pass	15.83	30.00
6895MHz	Pass	15.19	30.00
6995MHz	Pass	16.86	30.00
7095MHz	Pass	15.55	30.00
7115MHz	Pass	8.57	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-
5965MHz	Pass	16.96	30.00
6165MHz	Pass	16.99	30.00
6405MHz	Pass	17.74	30.00
6445MHz	Pass	17.98	30.00
6485MHz	Pass	19.16	30.00
6525MHz Straddle 6.425-6.525GHz	Pass	18.41	30.00
6565MHz	Pass	16.53	30.00
6685MHz	Pass	17.86	30.00
6845MHz	Pass	17.01	30.00
6885MHz Straddle 6.525-6.875GHz	Pass	15.37	30.00
6925MHz	Pass	17.98	30.00
7005MHz	Pass	18.12	30.00
7085MHz	Pass	18.65	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-
5985MHz	Pass	19.39	30.00
6145MHz	Pass	20.39	30.00
6385MHz	Pass	21.56	30.00
6465MHz	Pass	21.82	30.00
6545MHz Straddle 6.425-6.525GHz	Pass	21.04	30.00
6625MHz	Pass	21.29	30.00
6705MHz	Pass	21.02	30.00
6785MHz	Pass	21.46	30.00
6865MHz Straddle 6.525-6.875GHz	Pass	21.78	30.00
6945MHz	Pass	19.99	30.00
7025MHz	Pass	19.90	30.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-
6025MHz	Pass	23.25	30.00
6185MHz	Pass	22.70	30.00
6345MHz	Pass	23.19	30.00
6505MHz Straddle 6.425-6.525GHz	Pass	24.12	30.00
6665MHz	Pass	23.44	30.00
6825MHz Straddle 6.525-6.875GHz	Pass	23.67	30.00
6985MHz	Pass	23.21	30.00

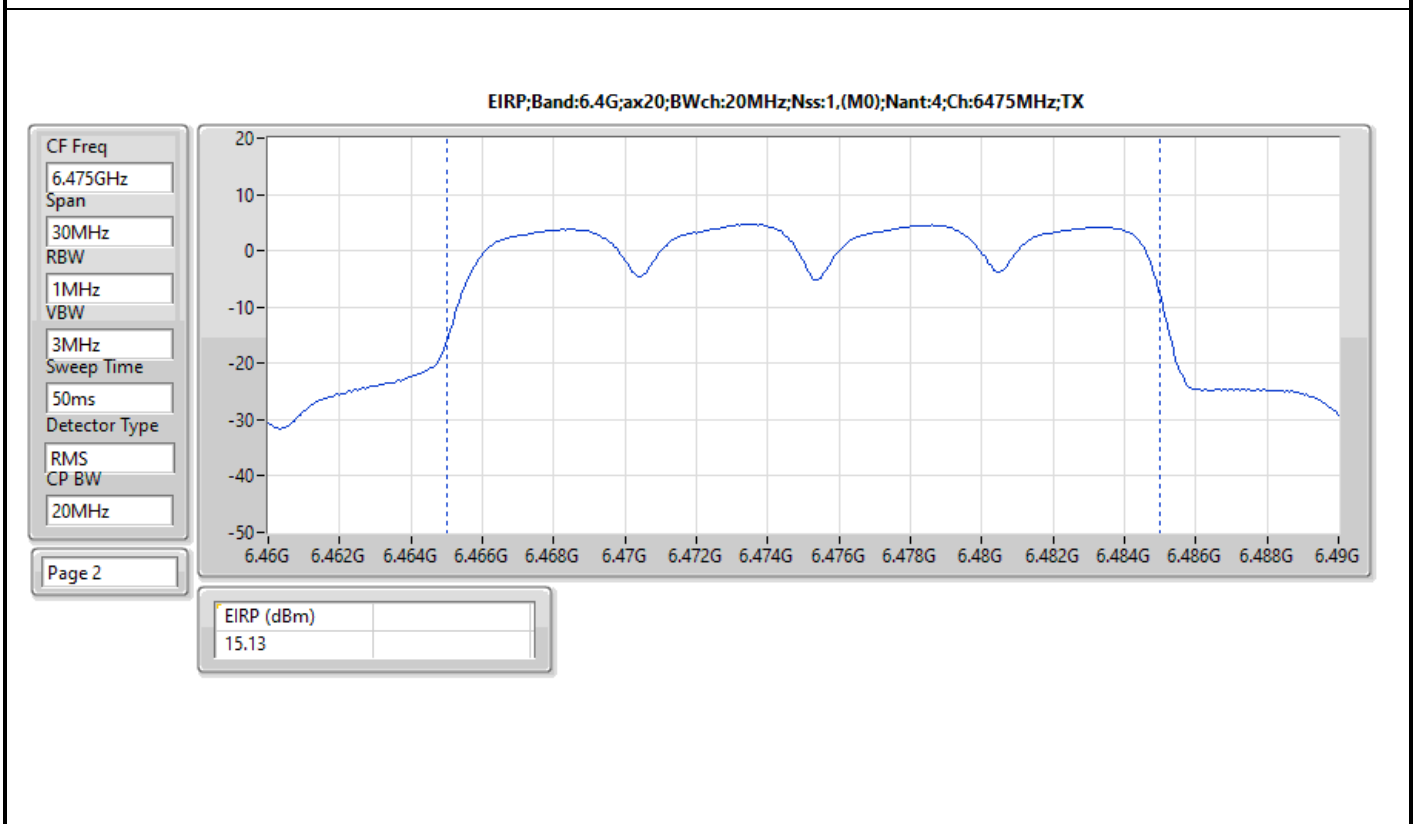
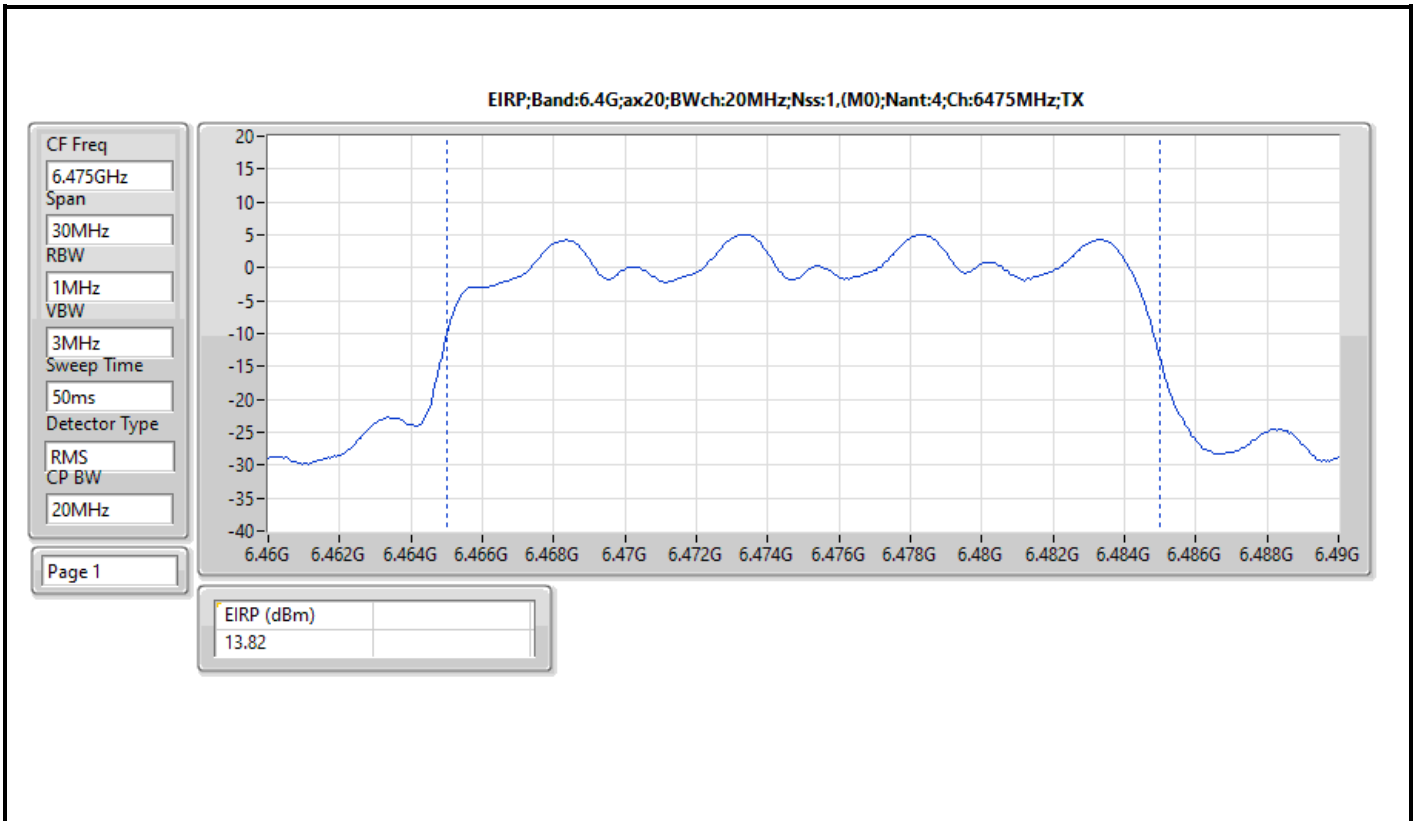
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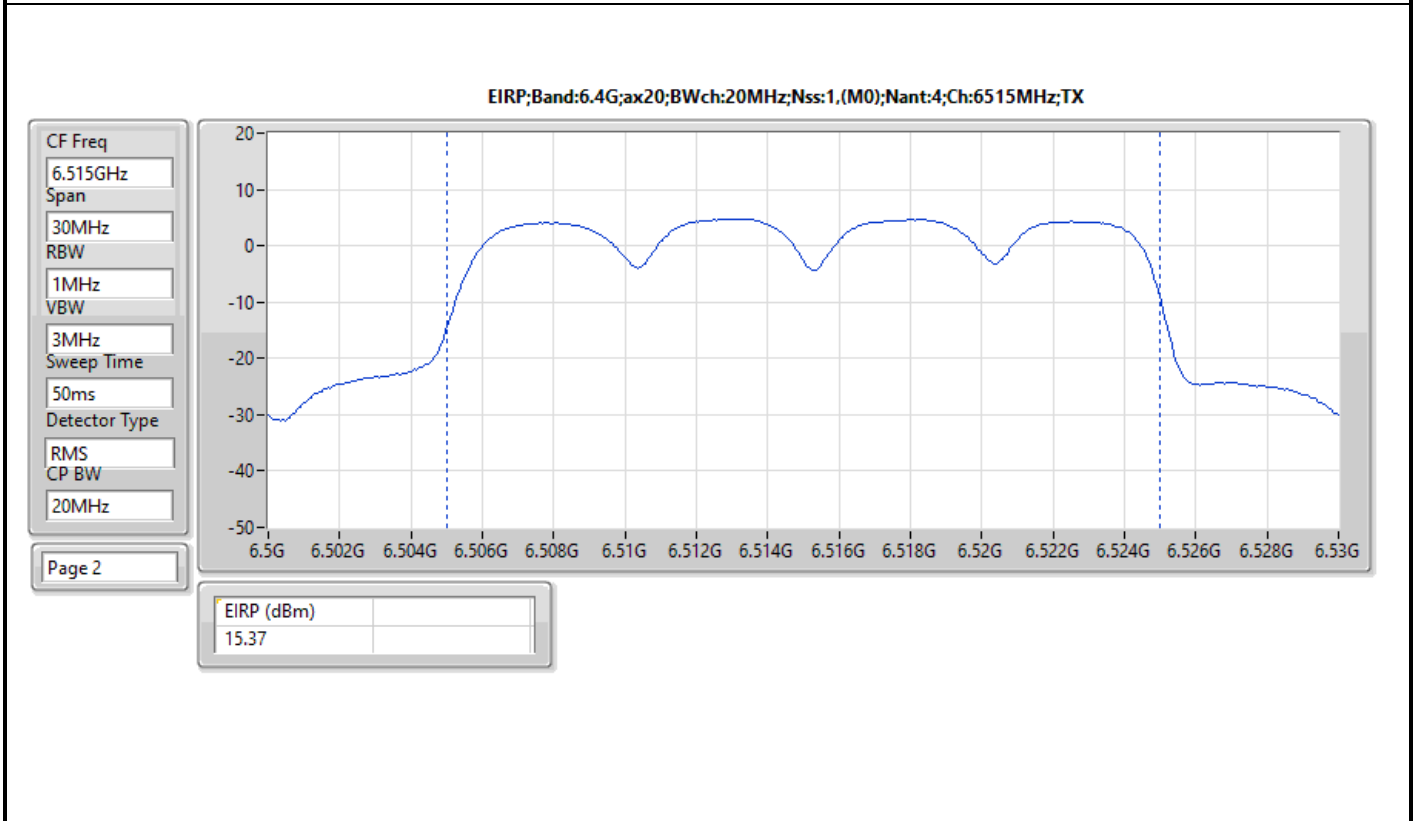
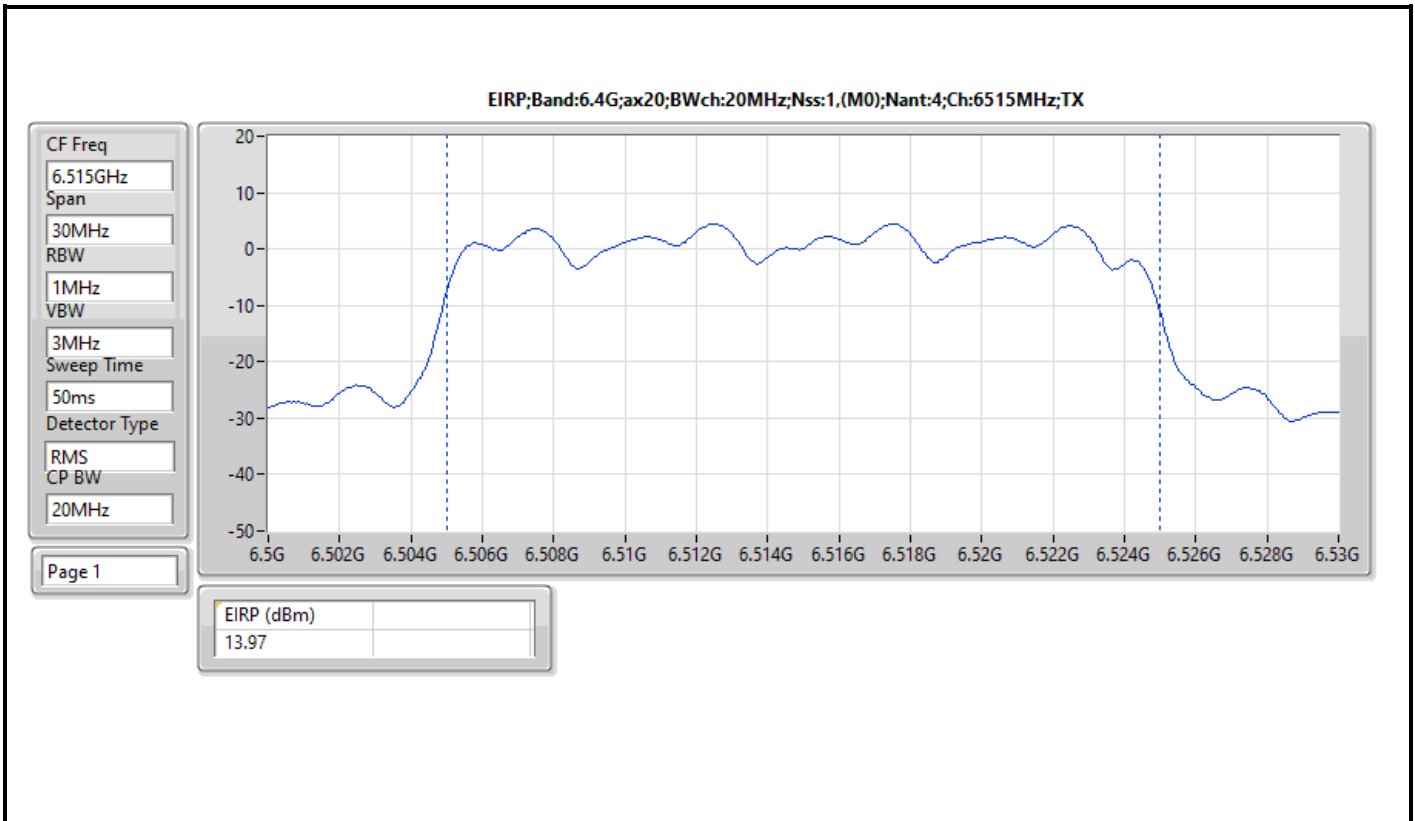


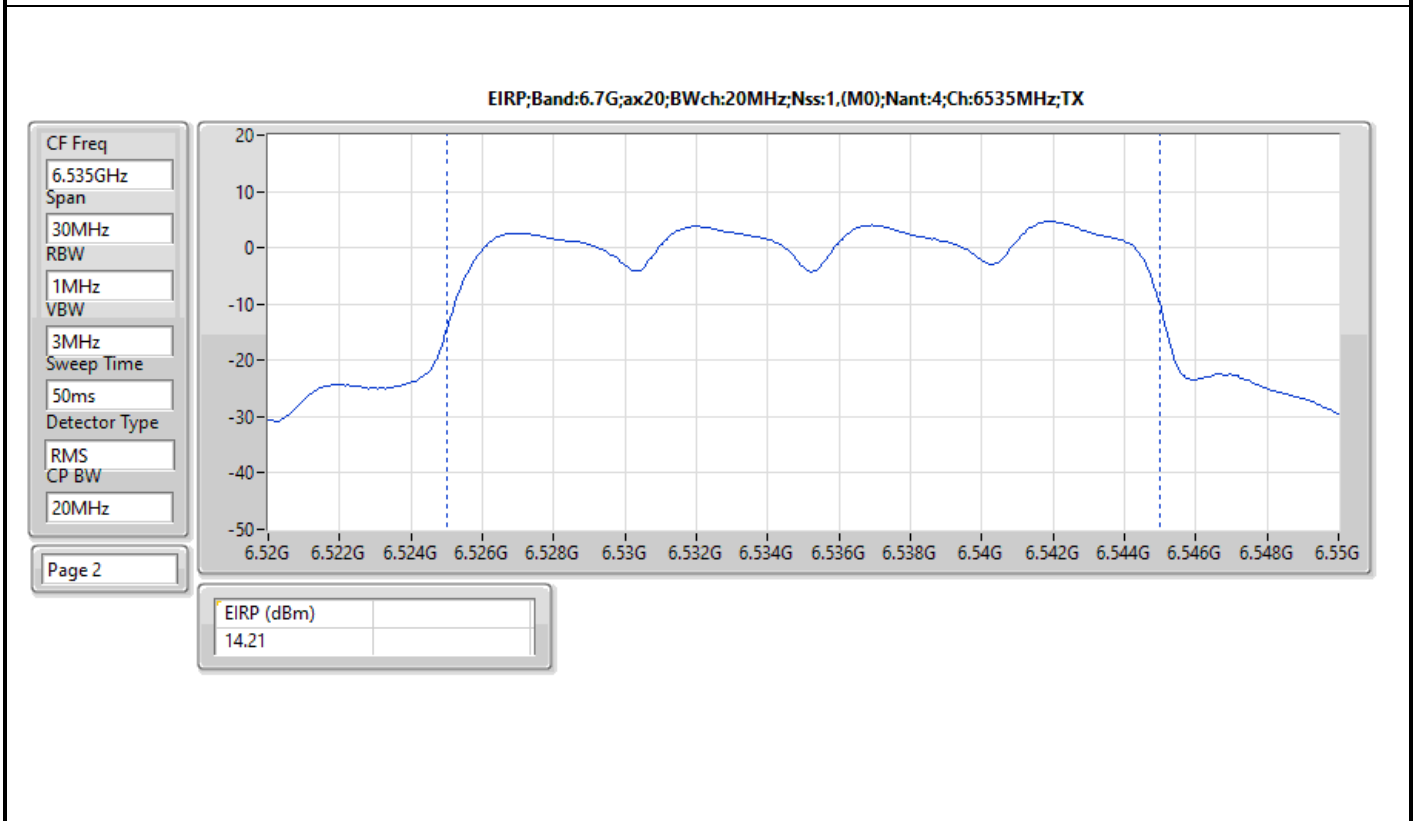
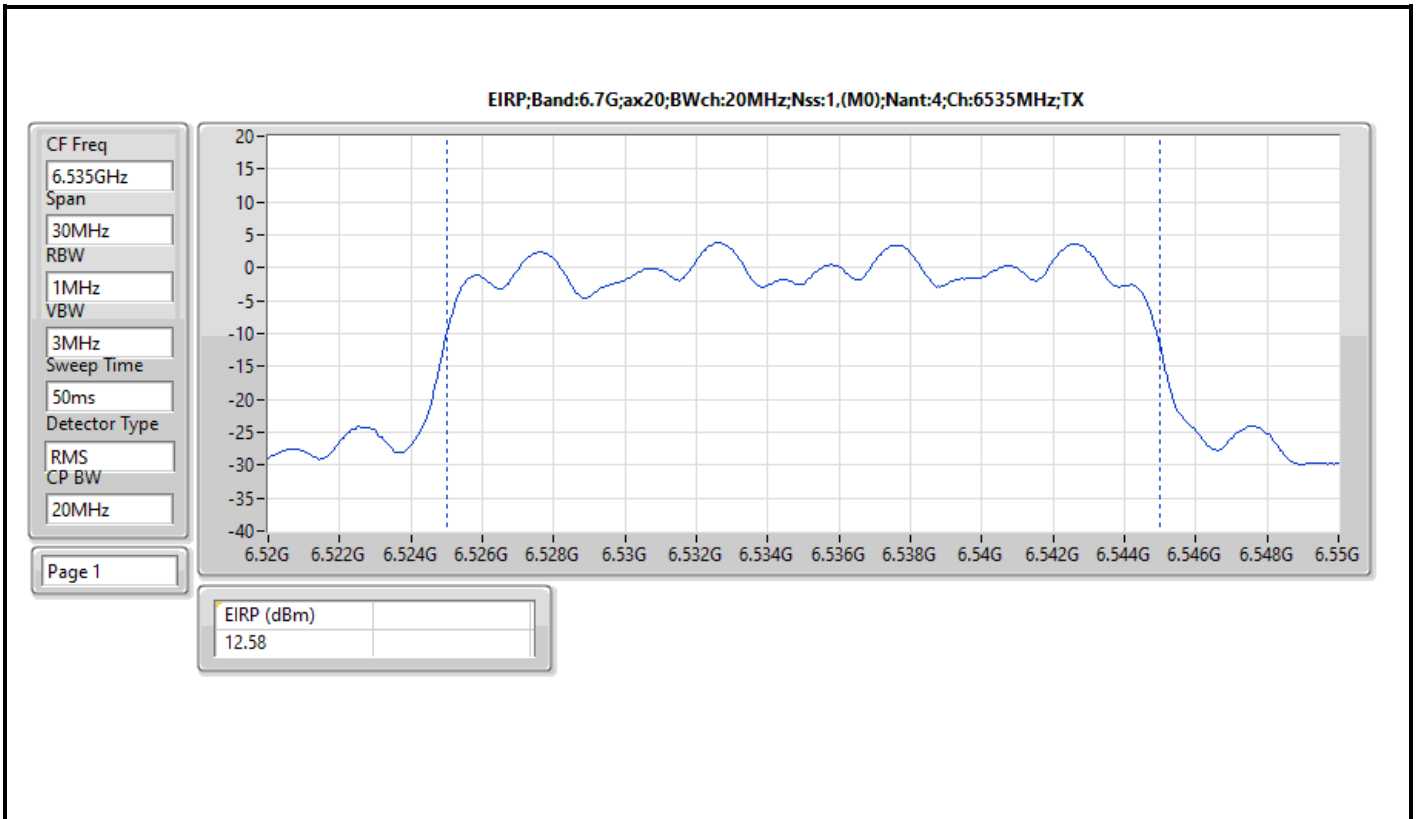


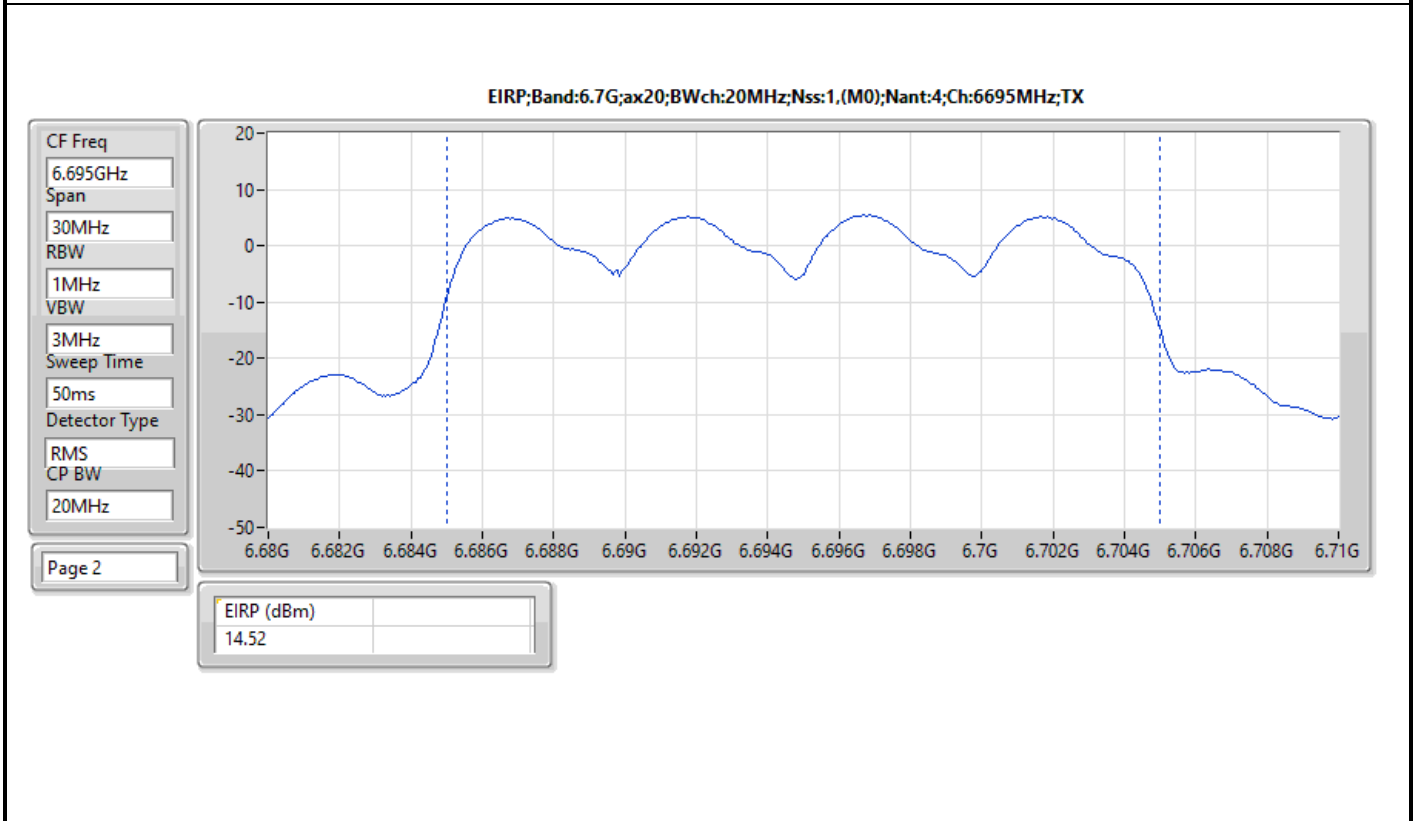
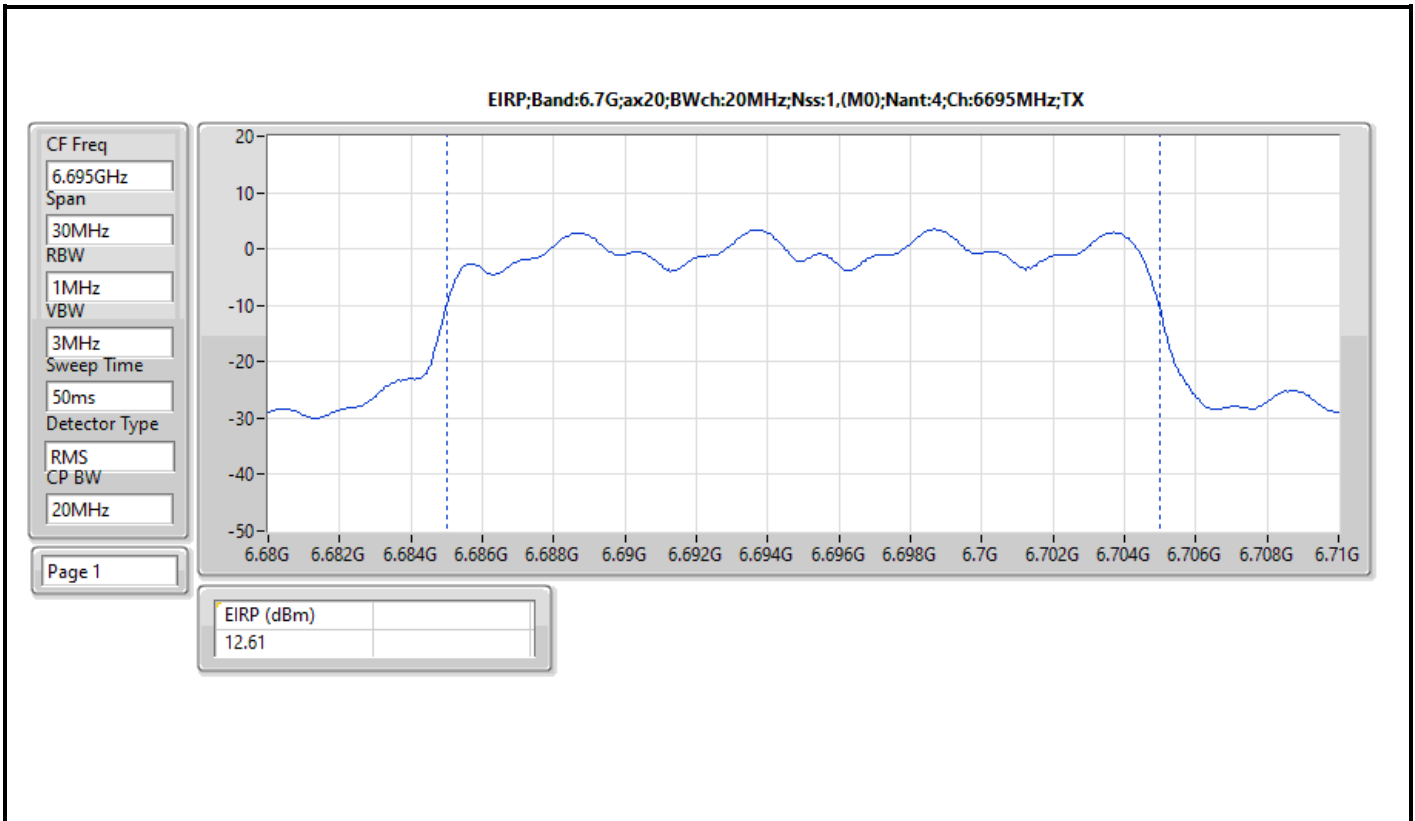


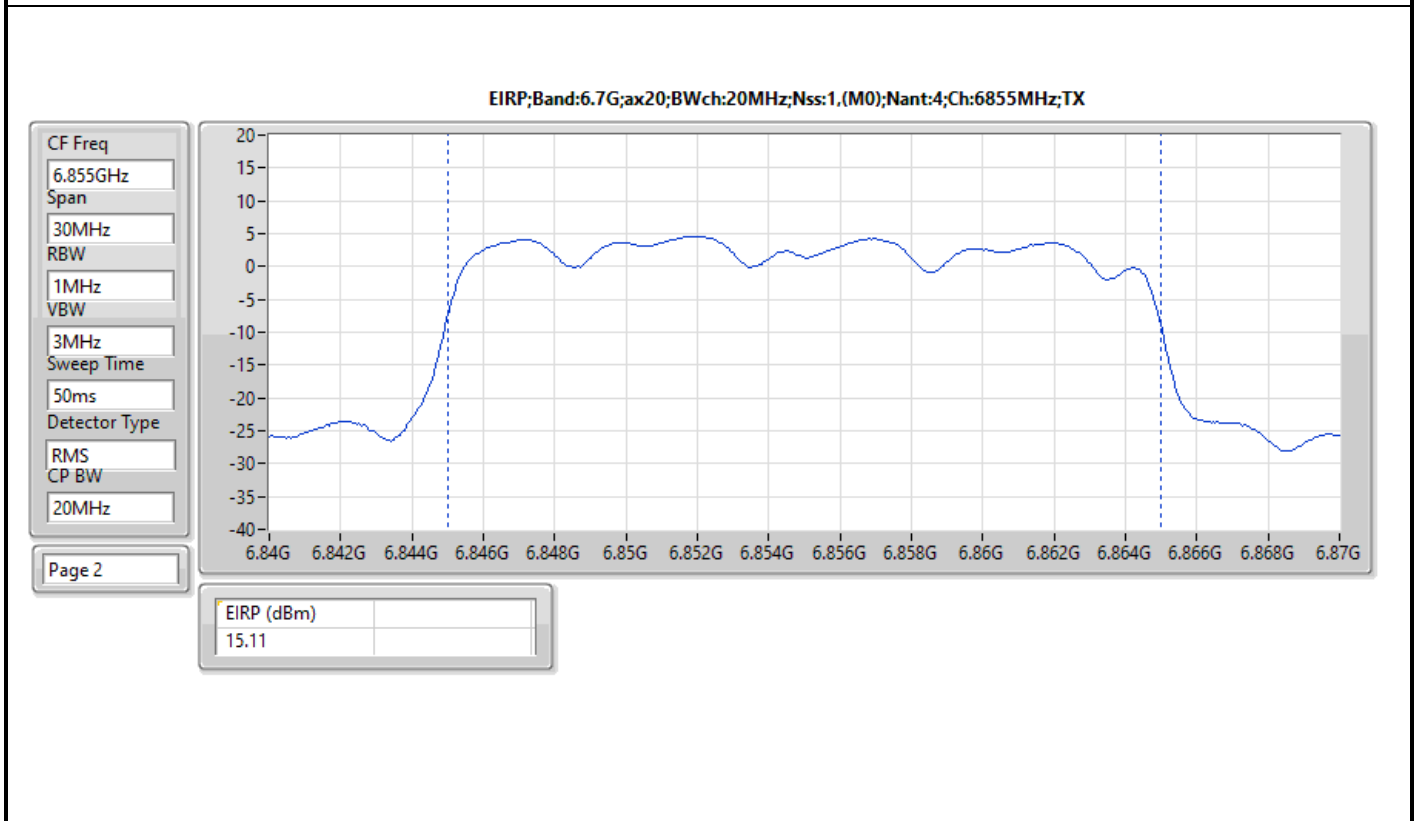
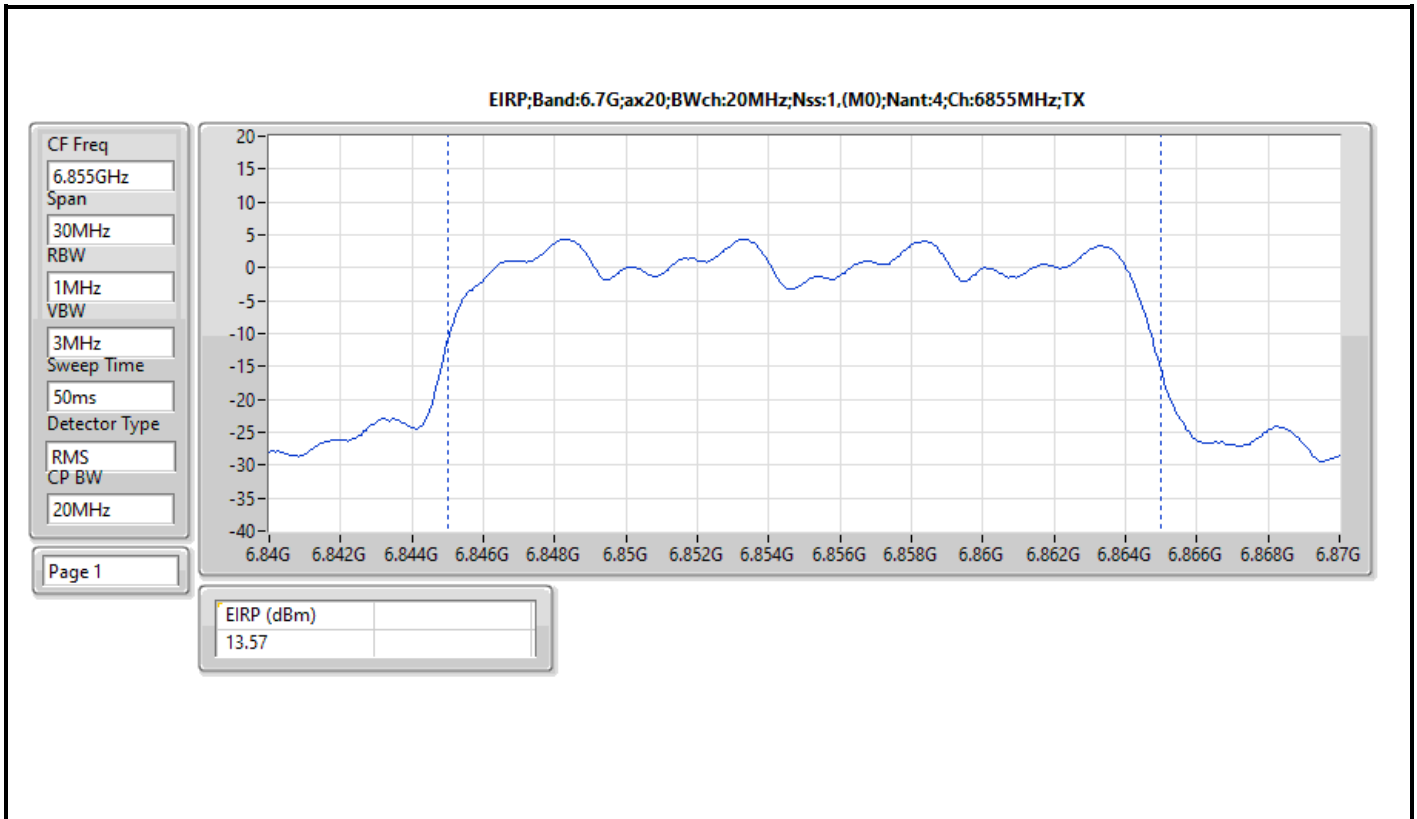


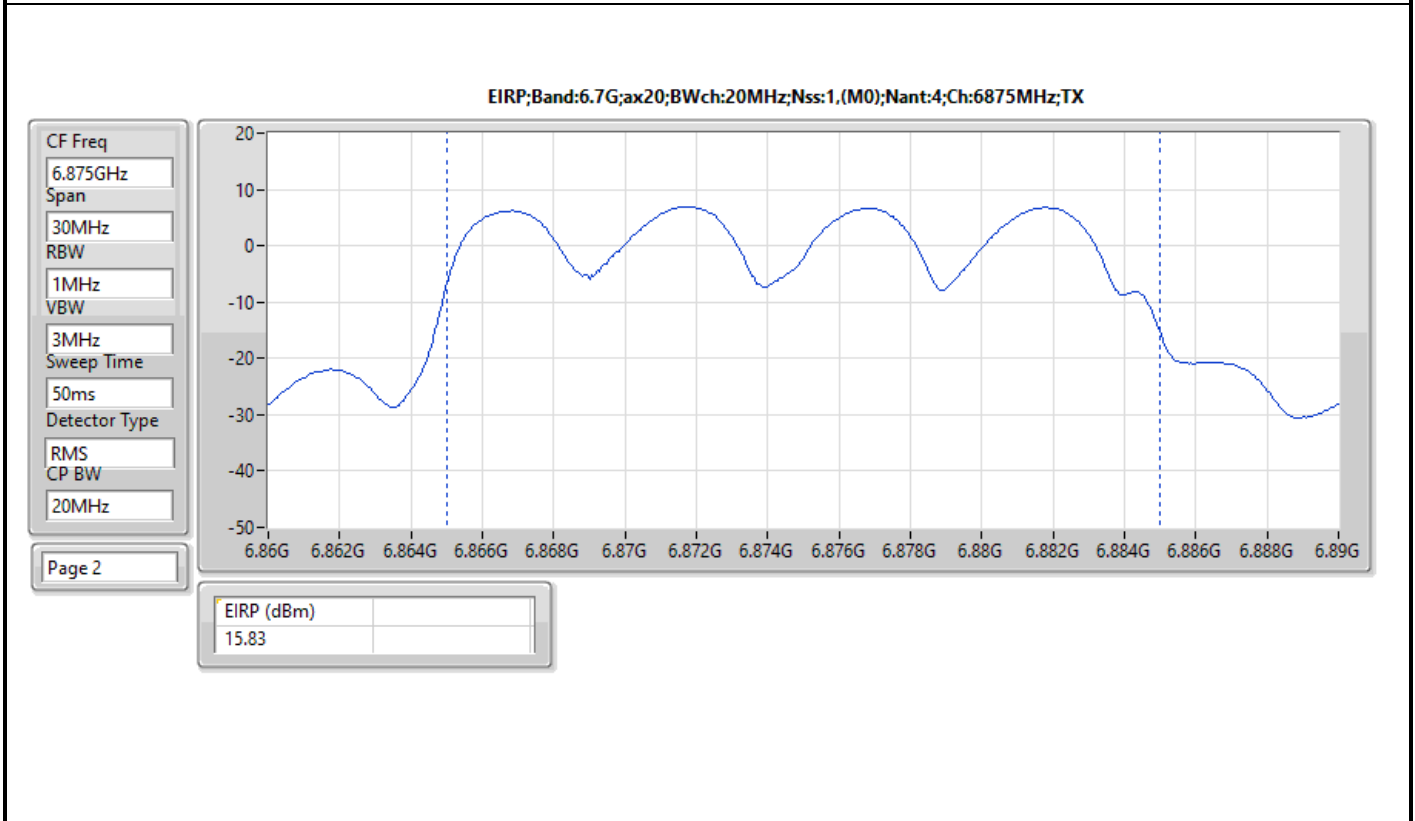
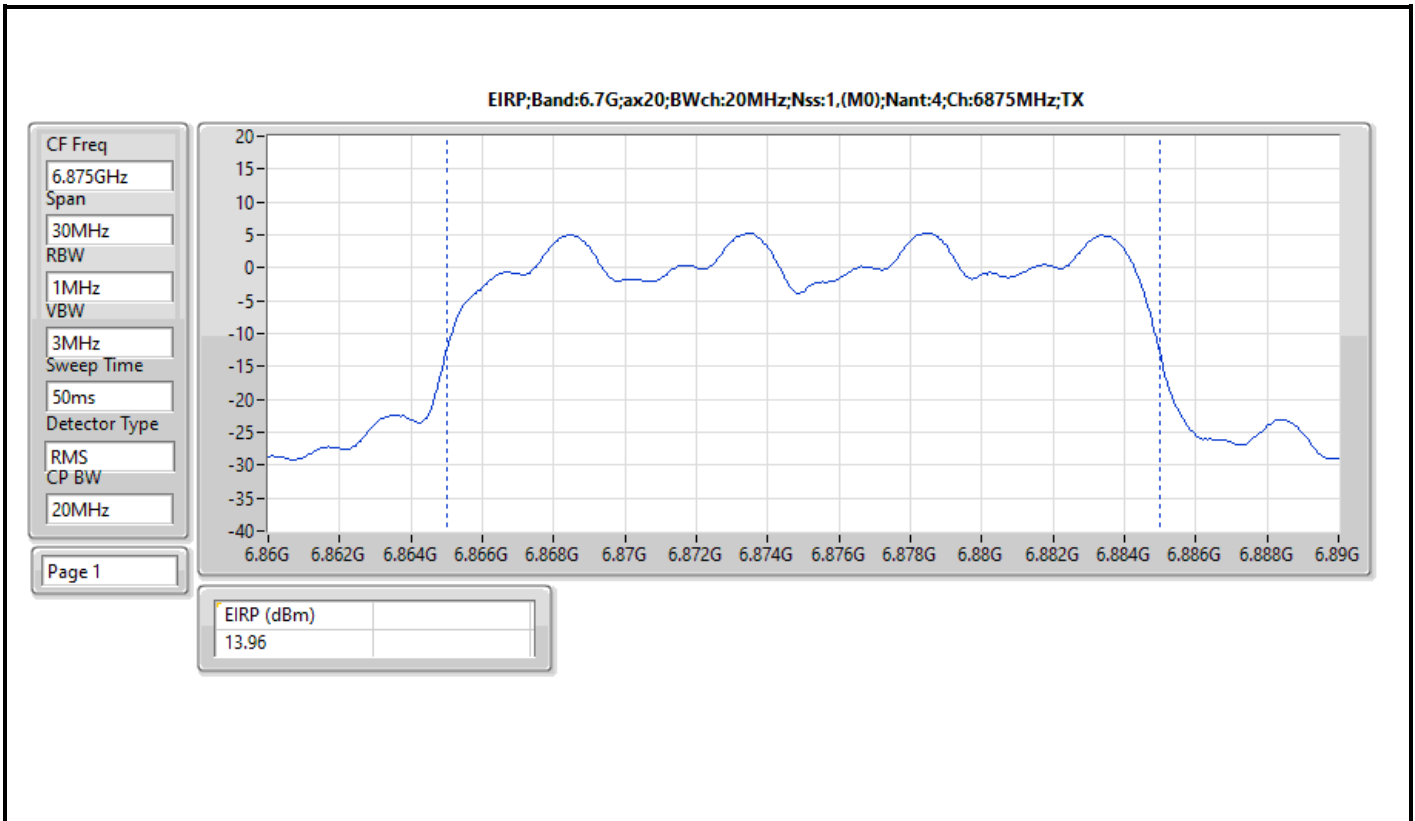


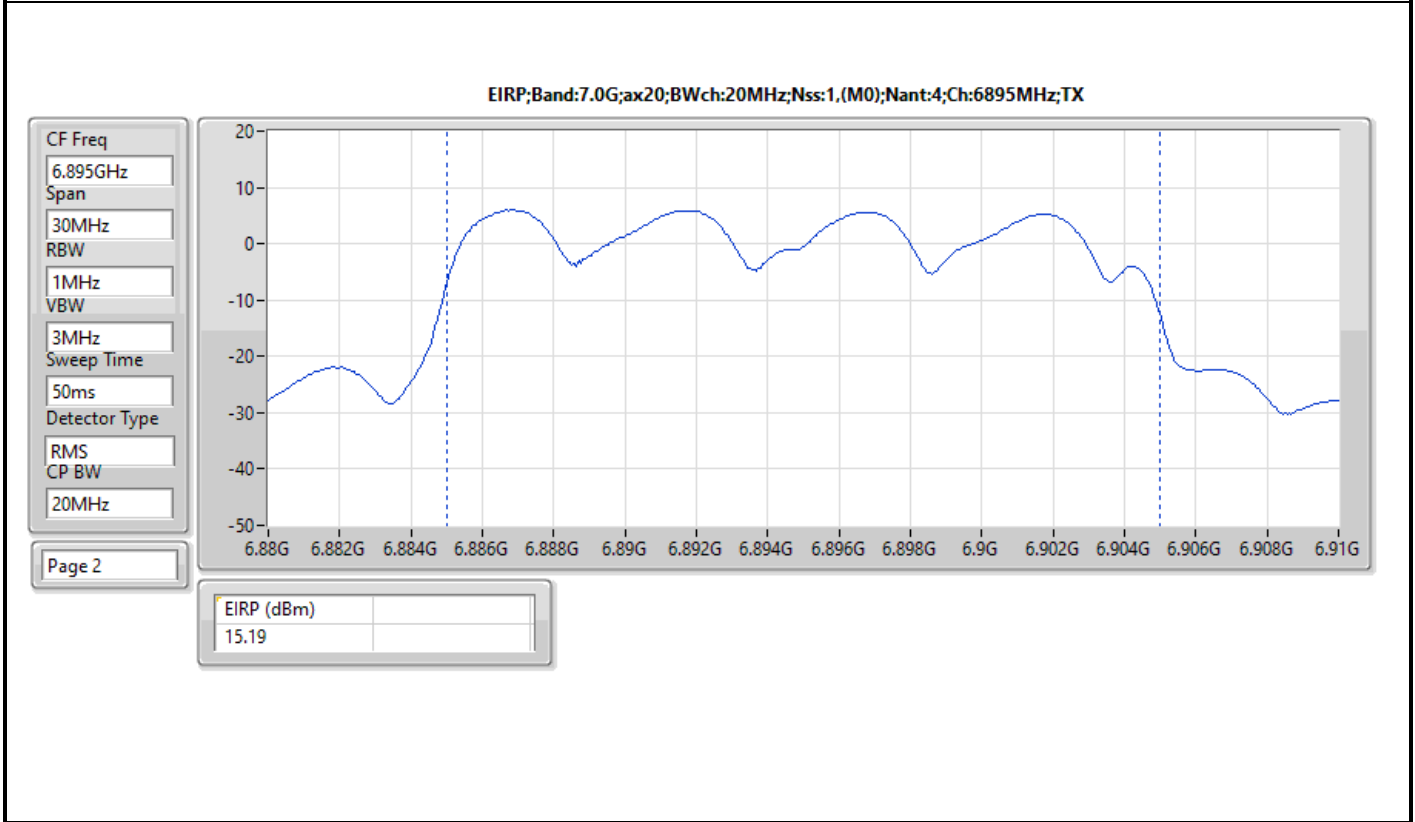
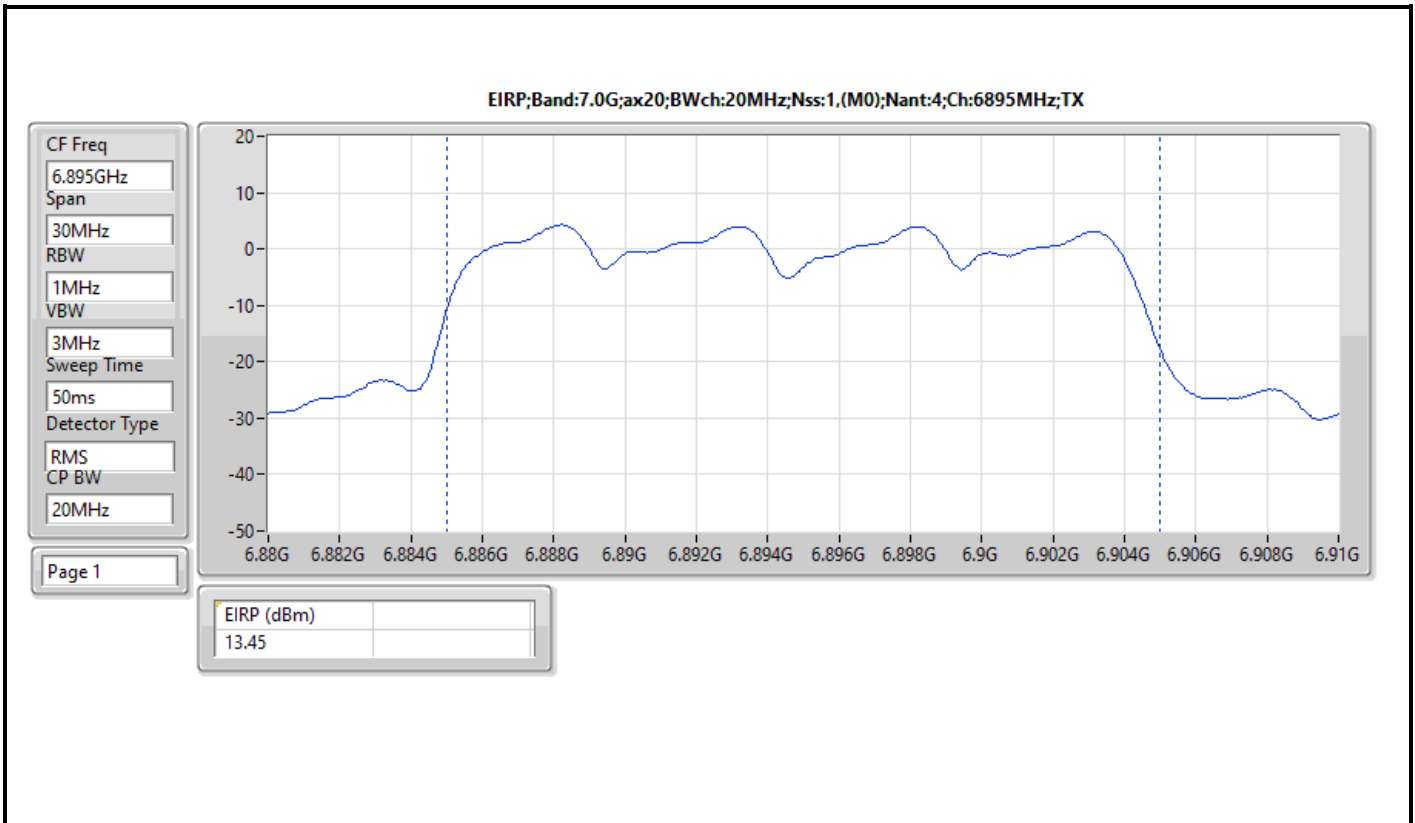


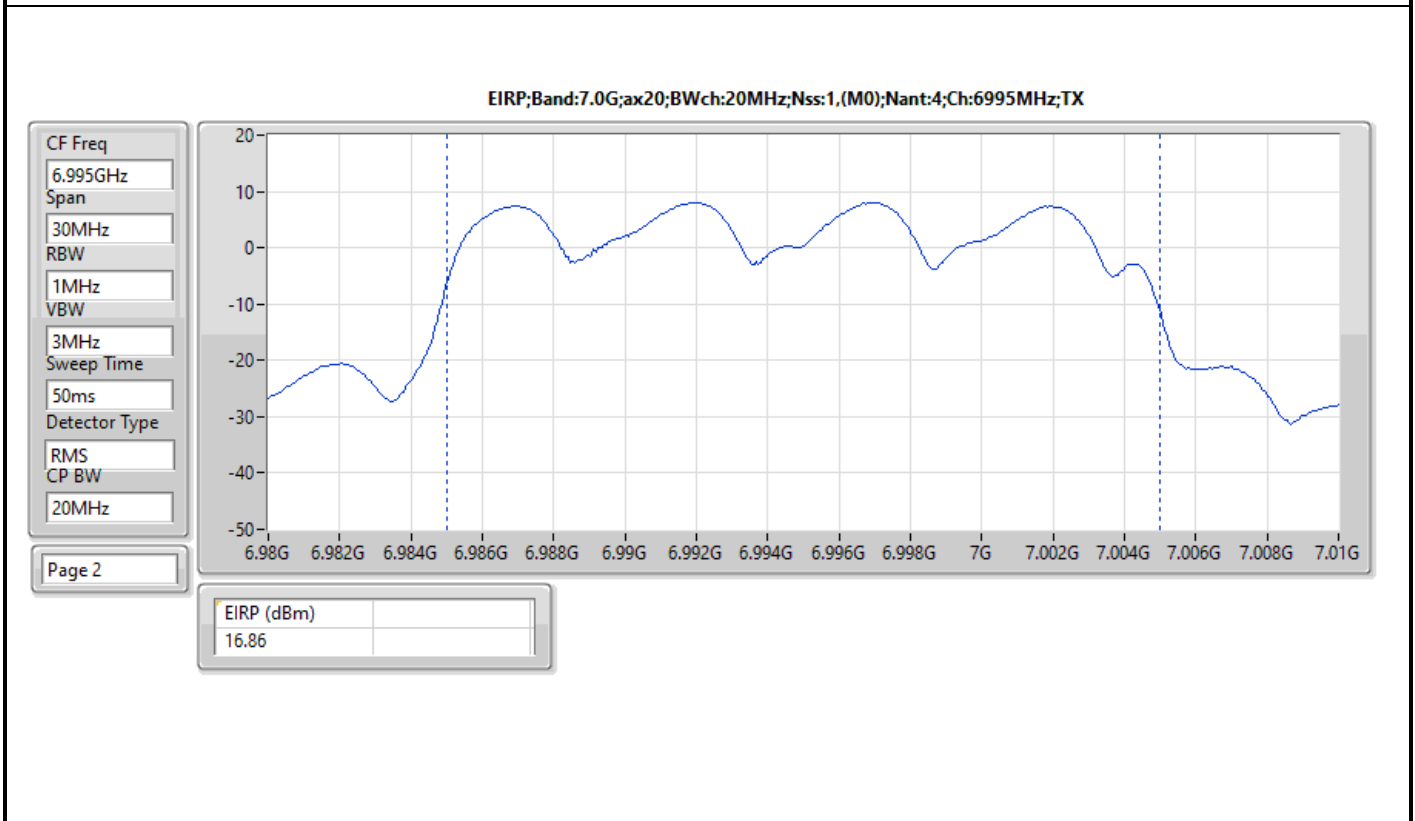
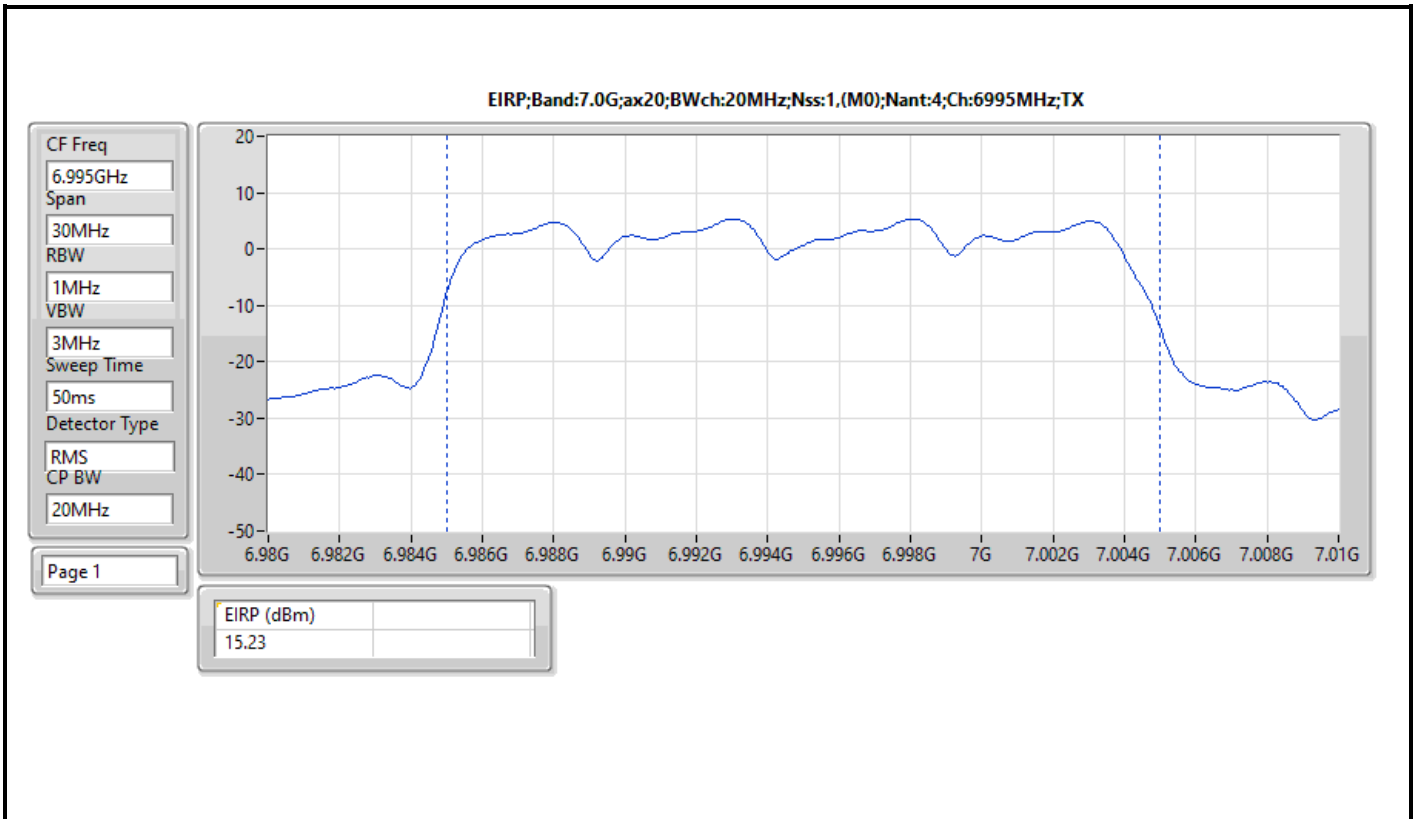


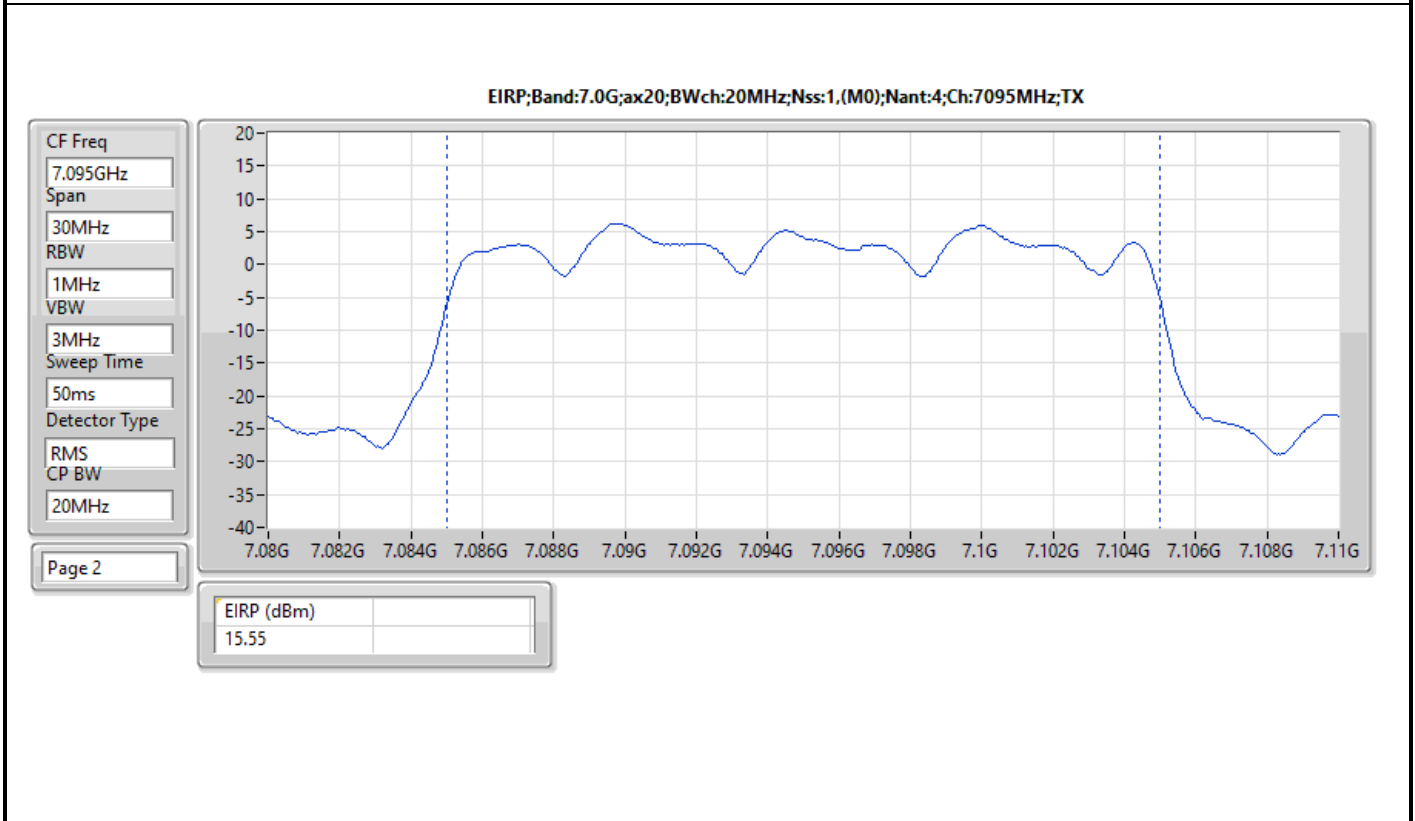
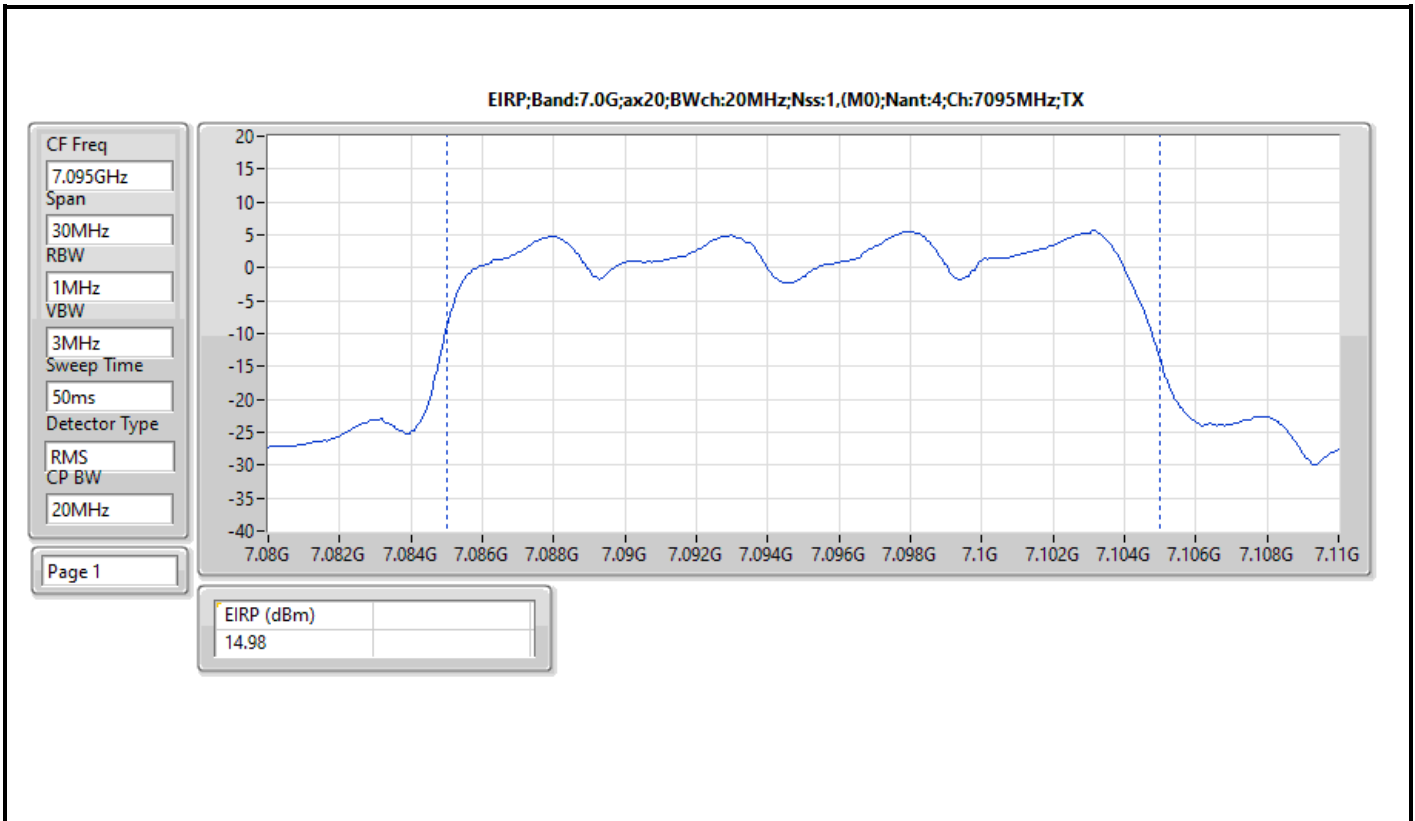


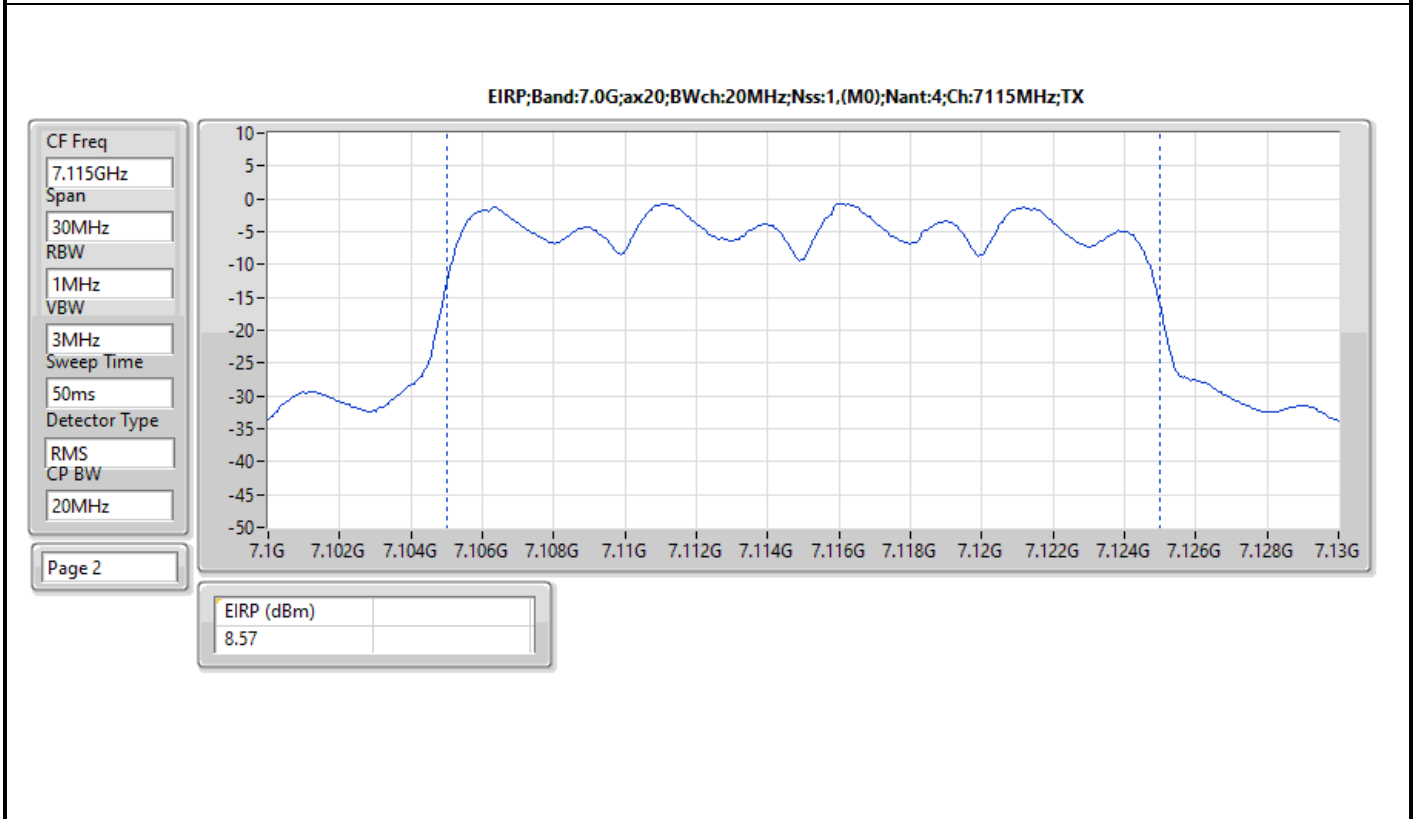
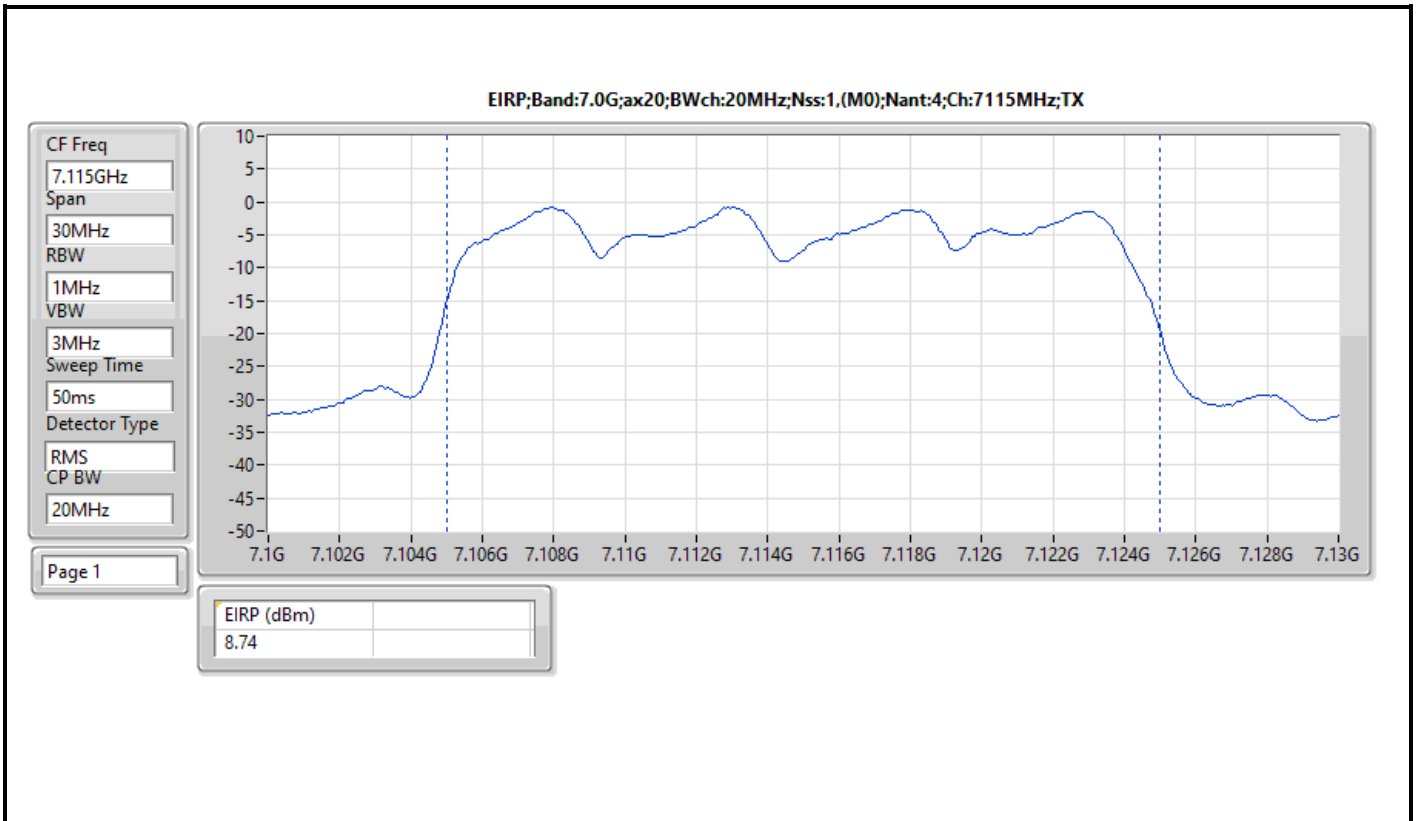


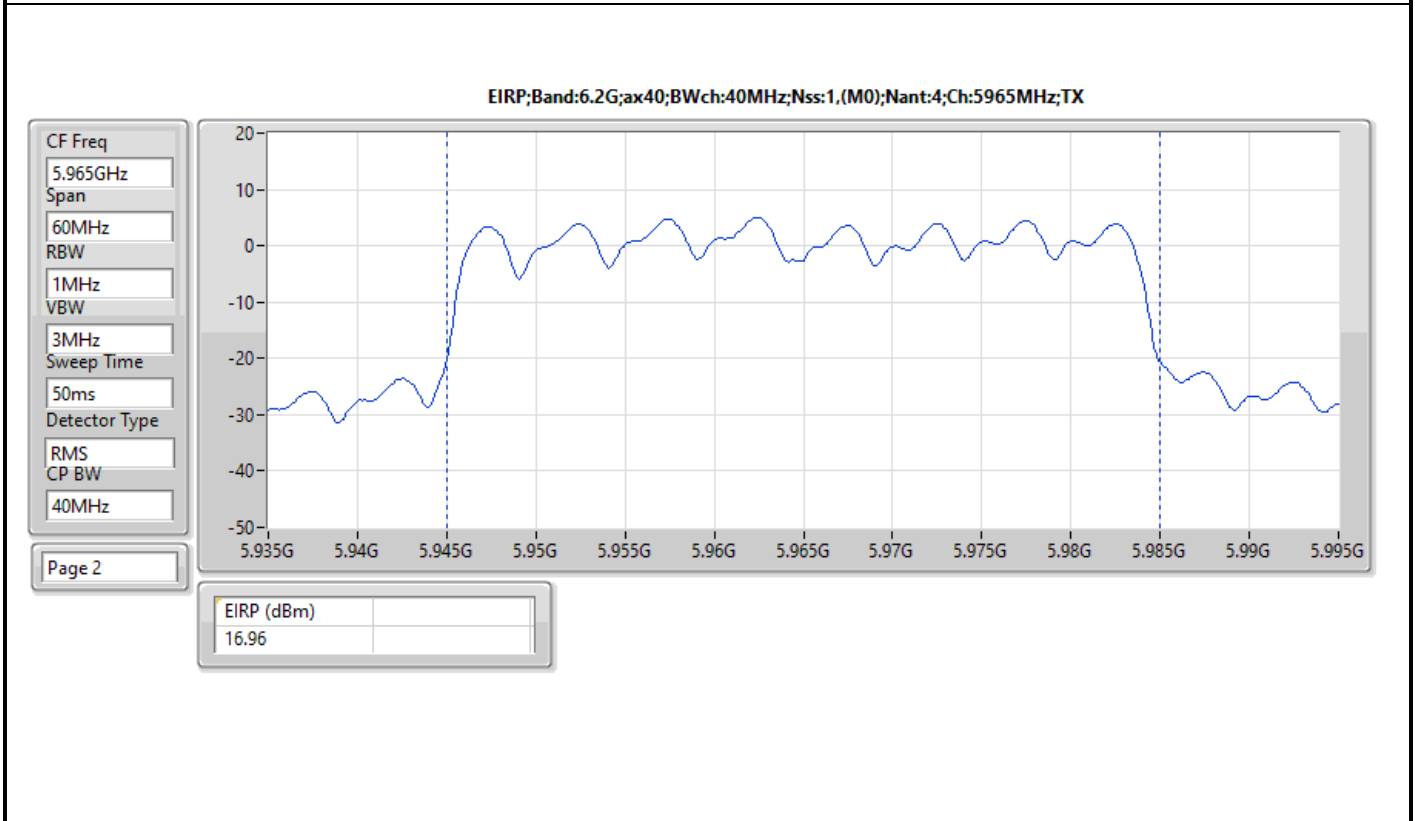
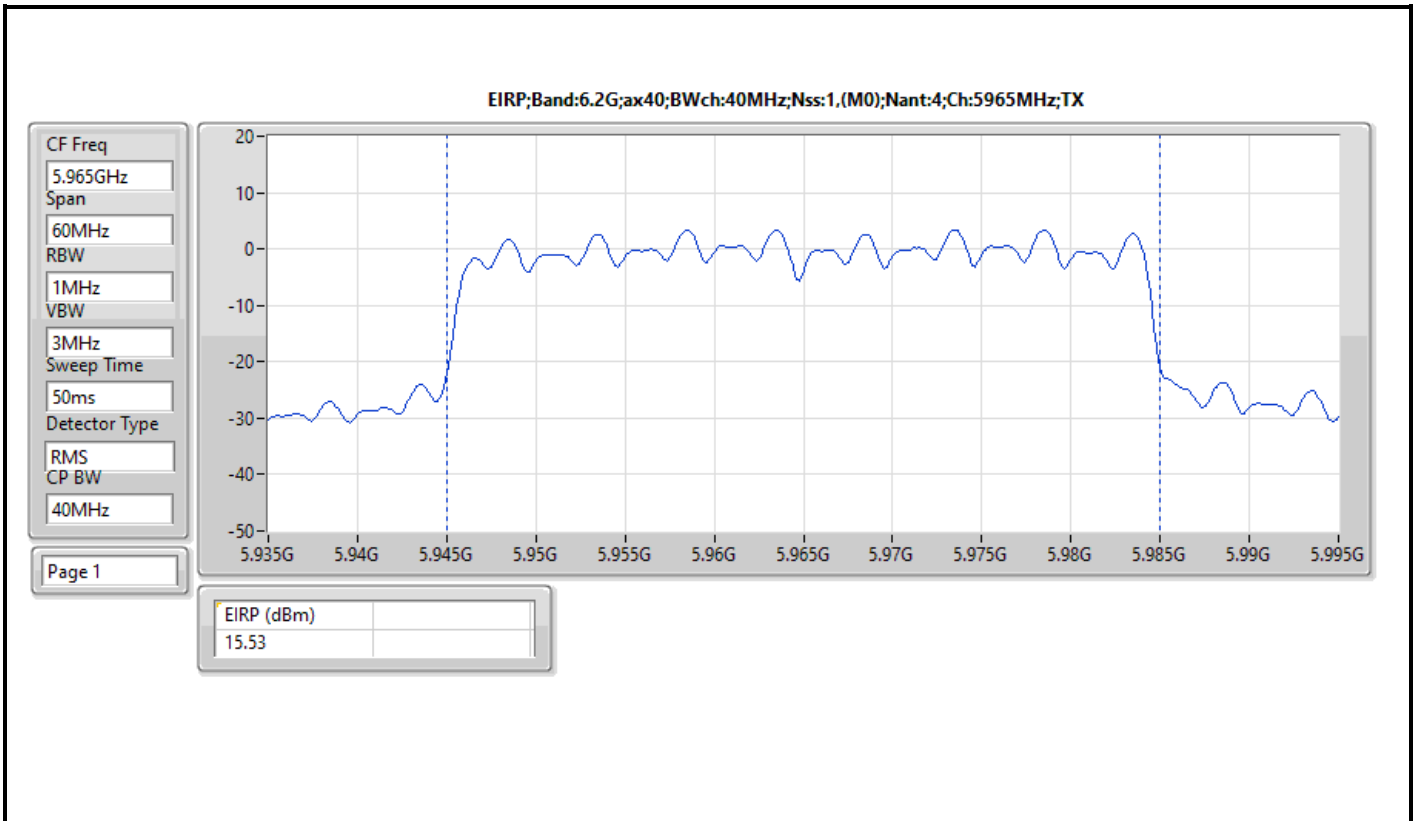


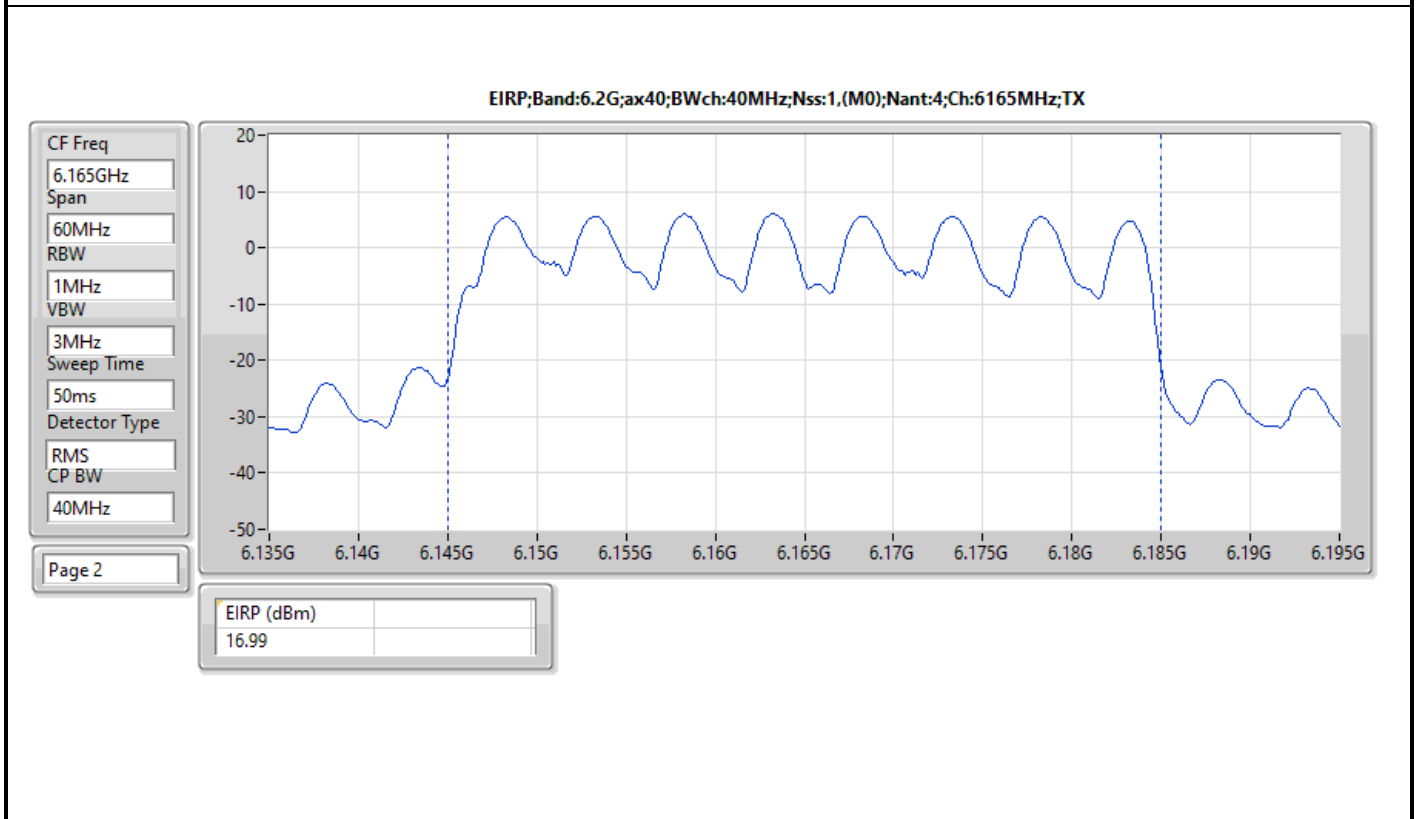
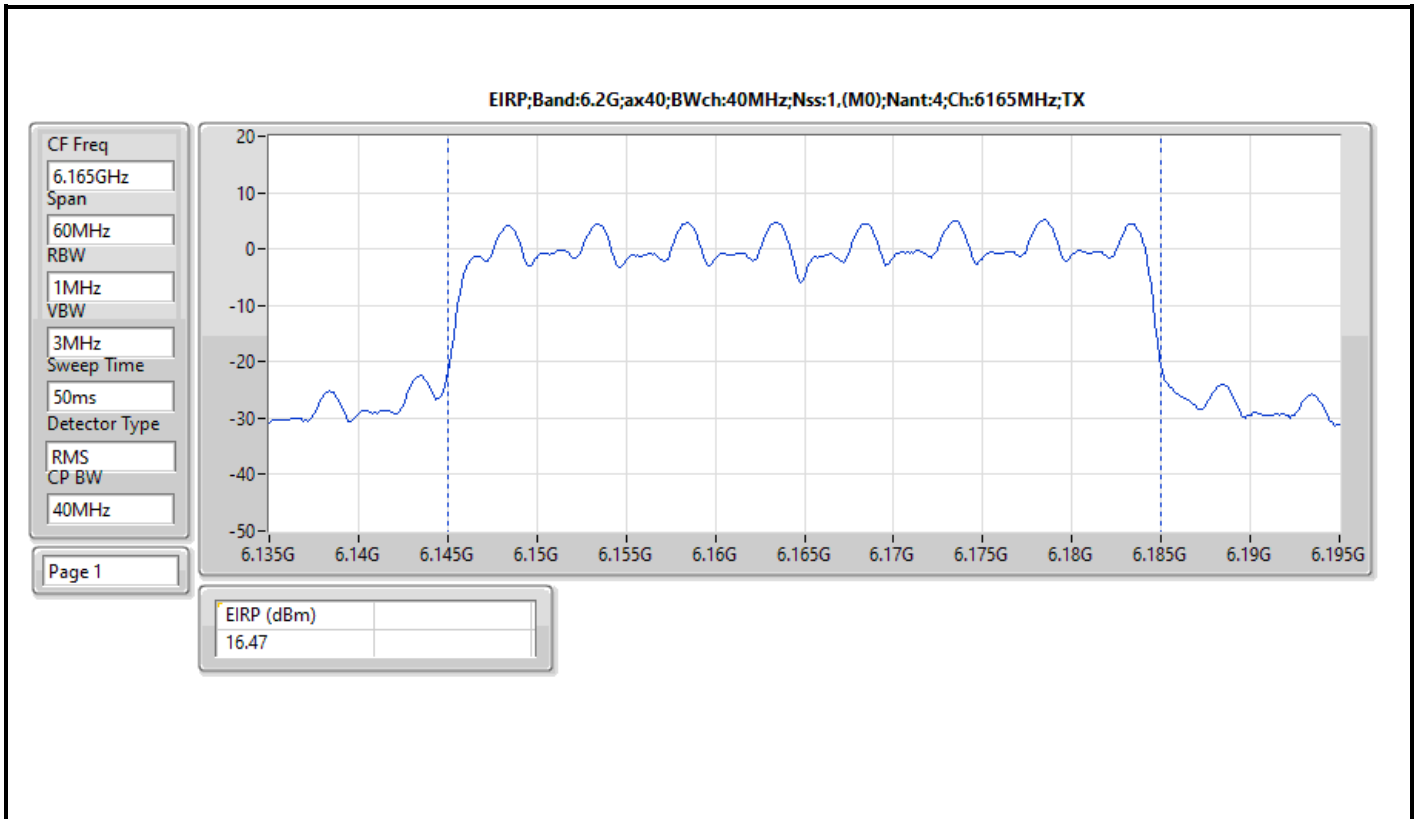


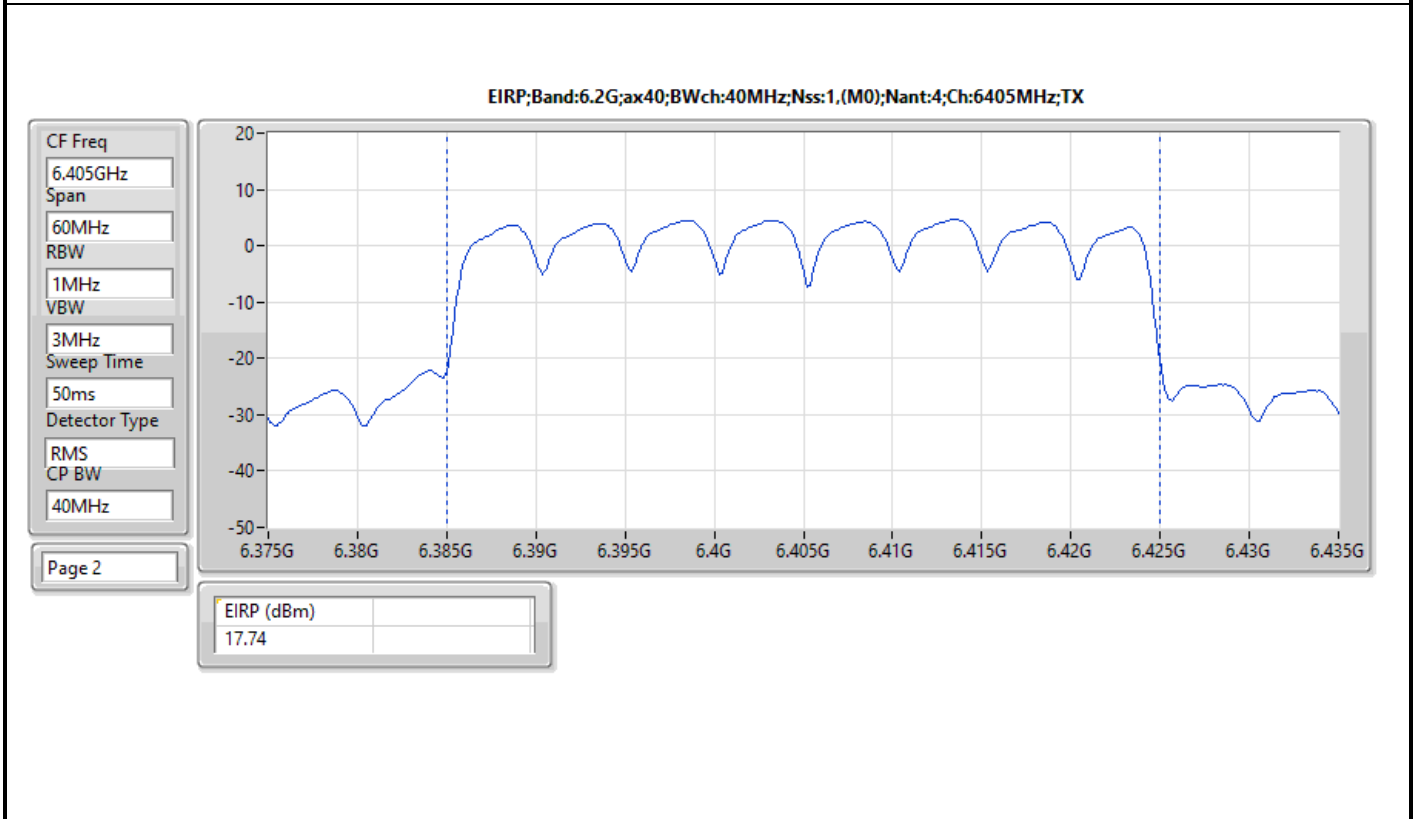
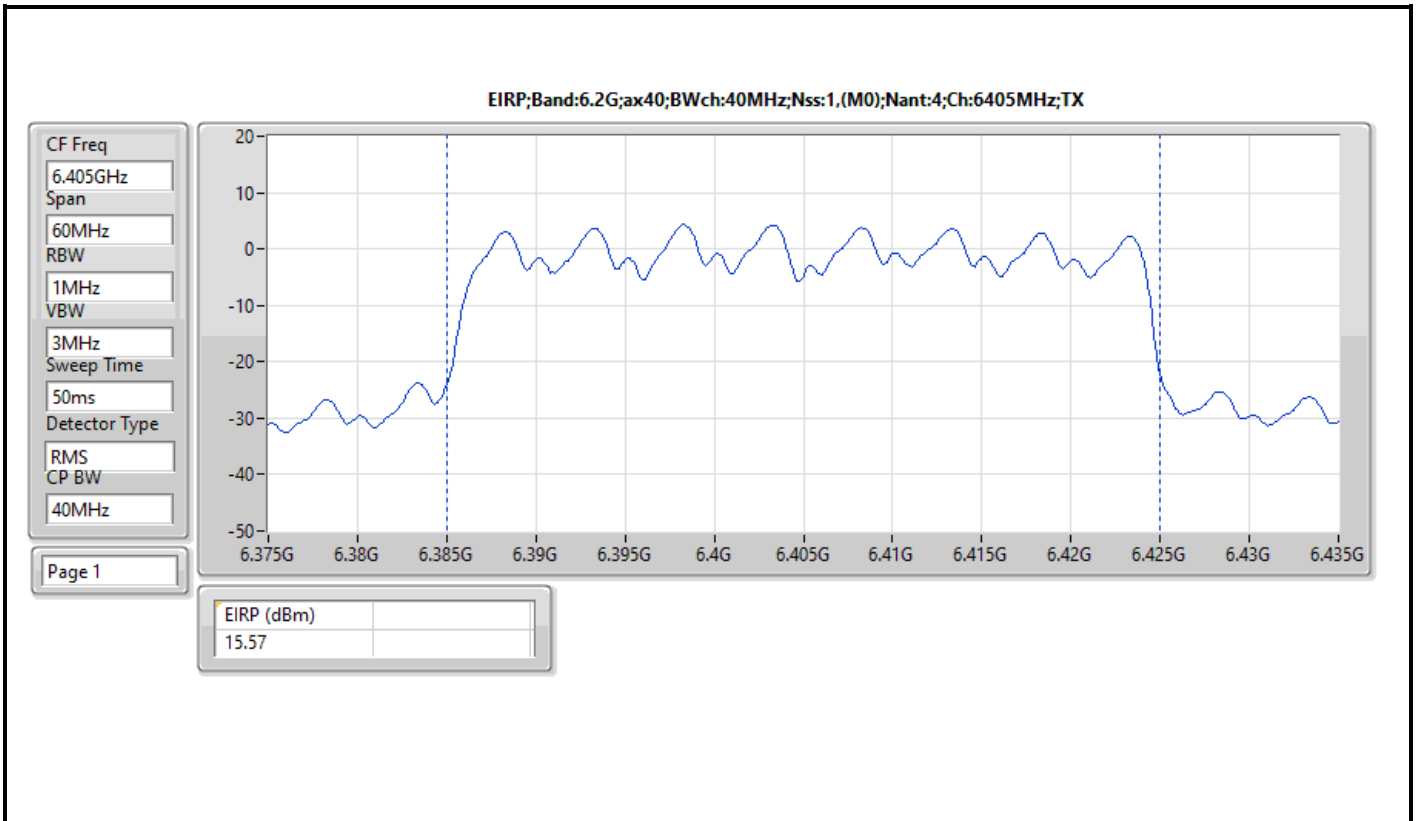


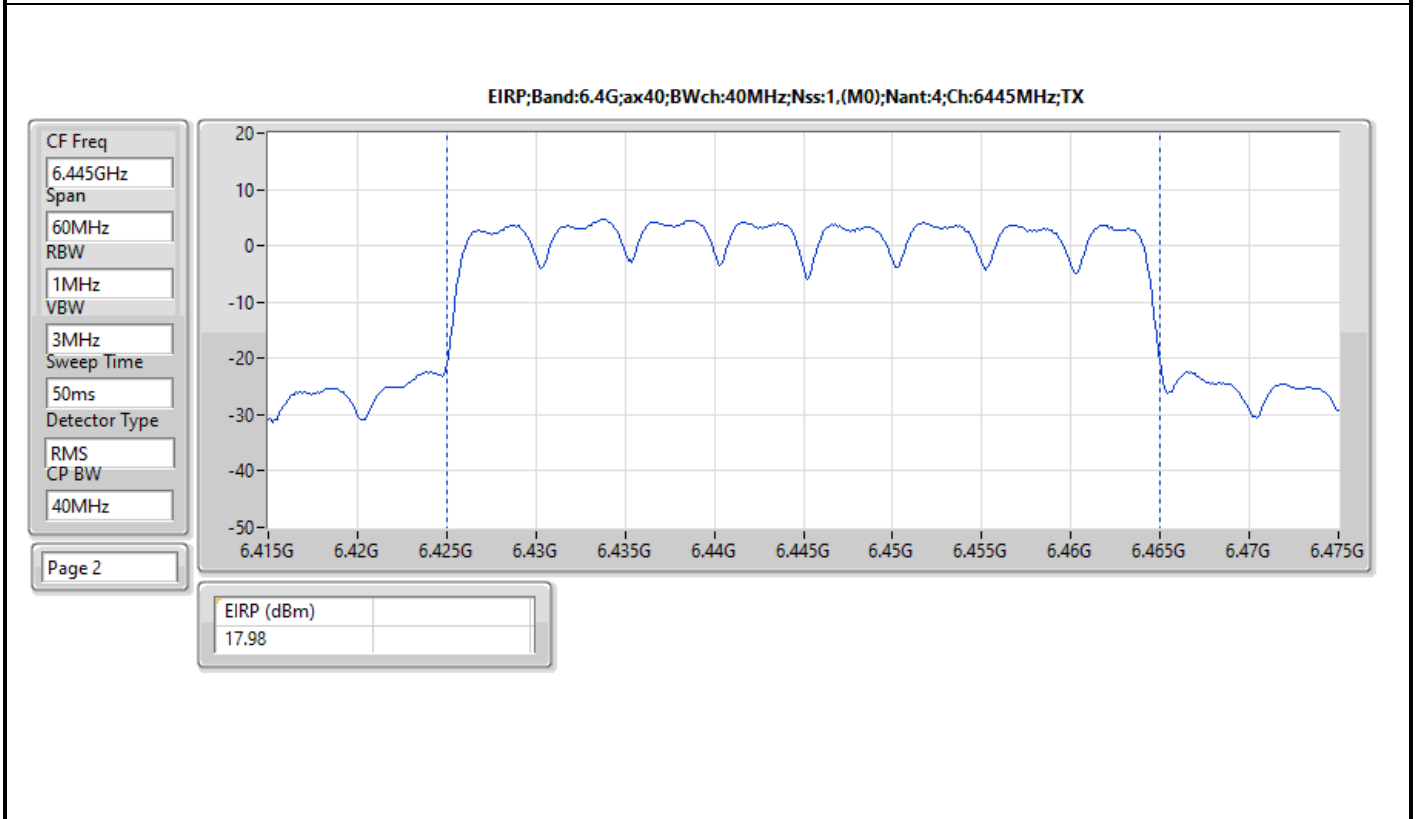
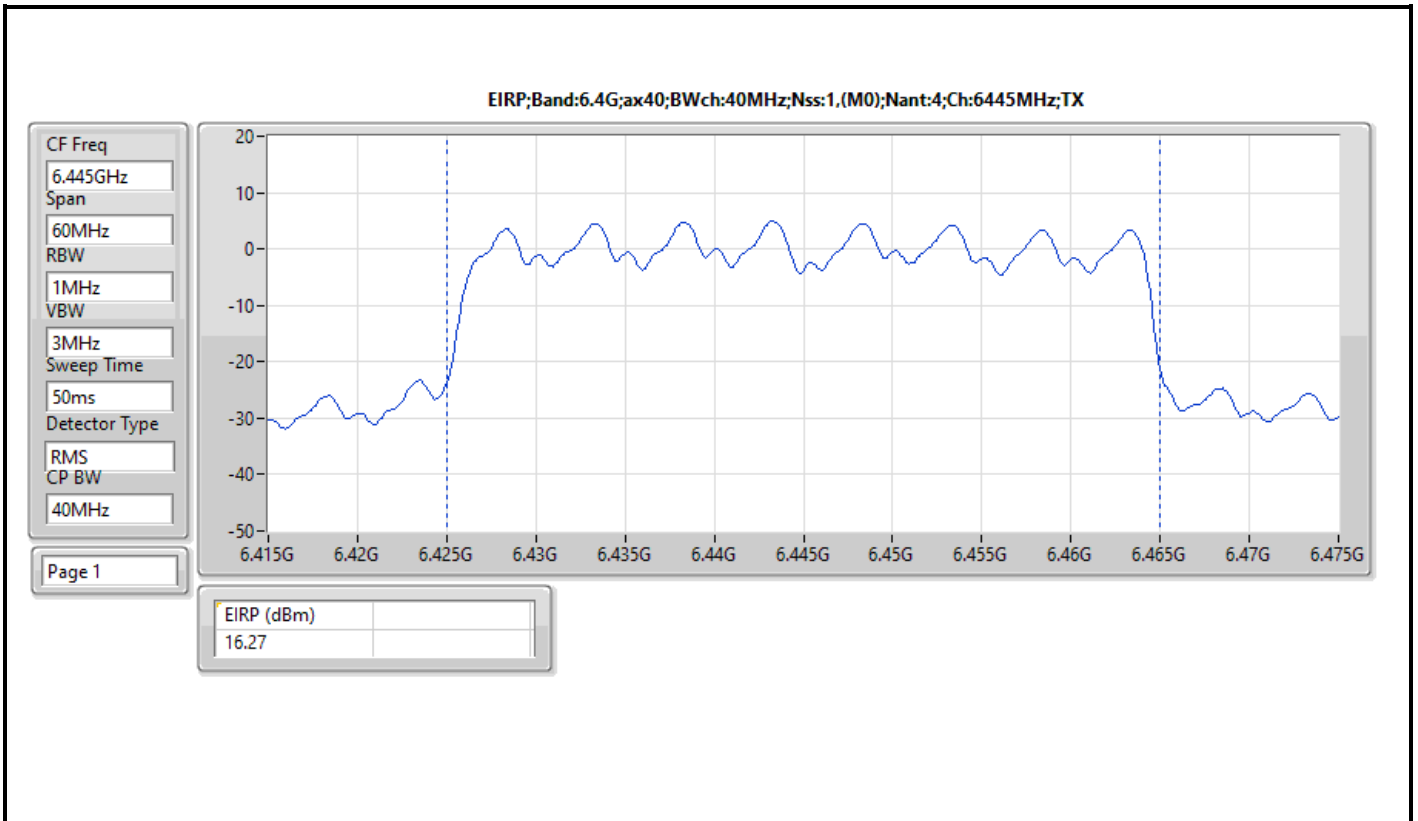


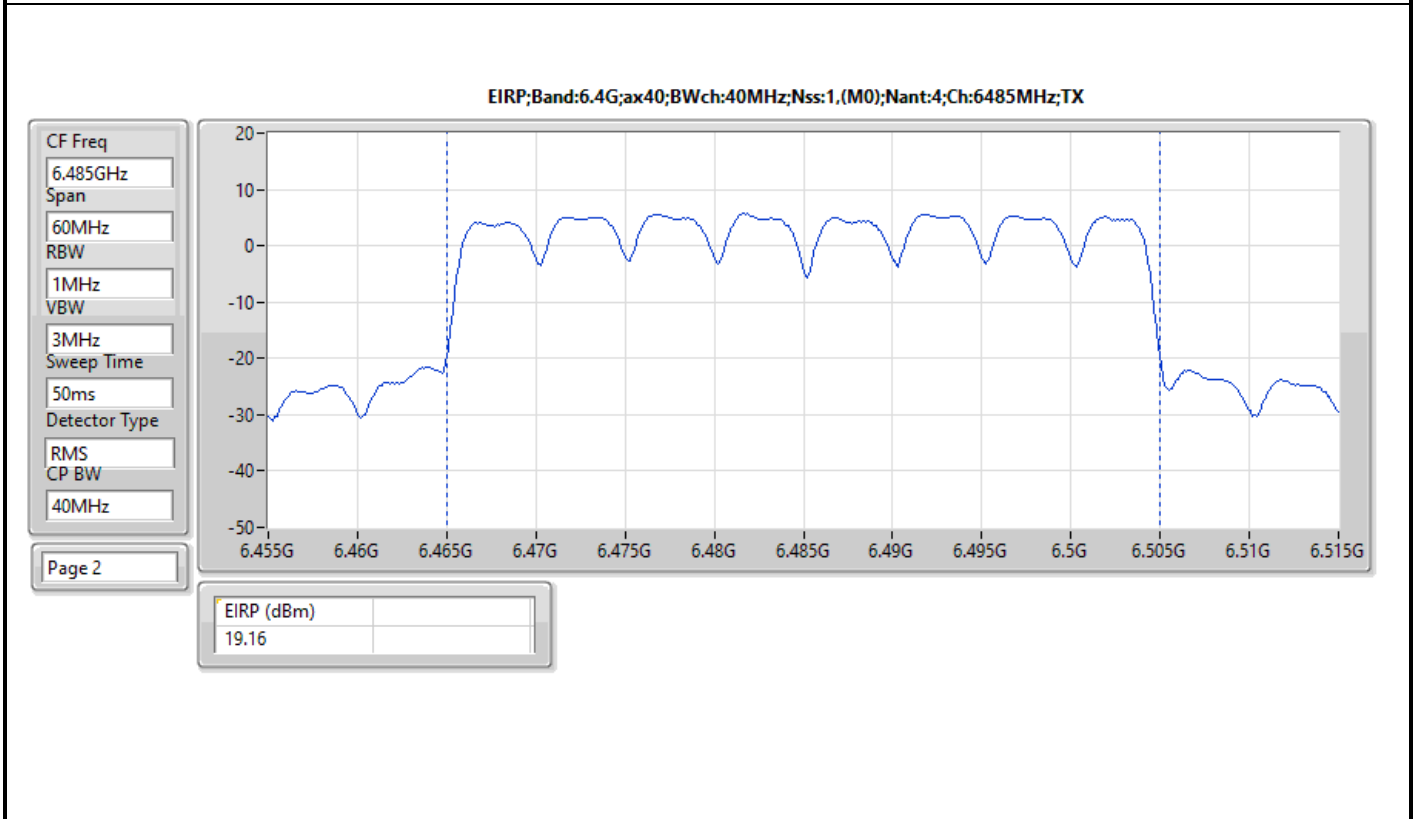
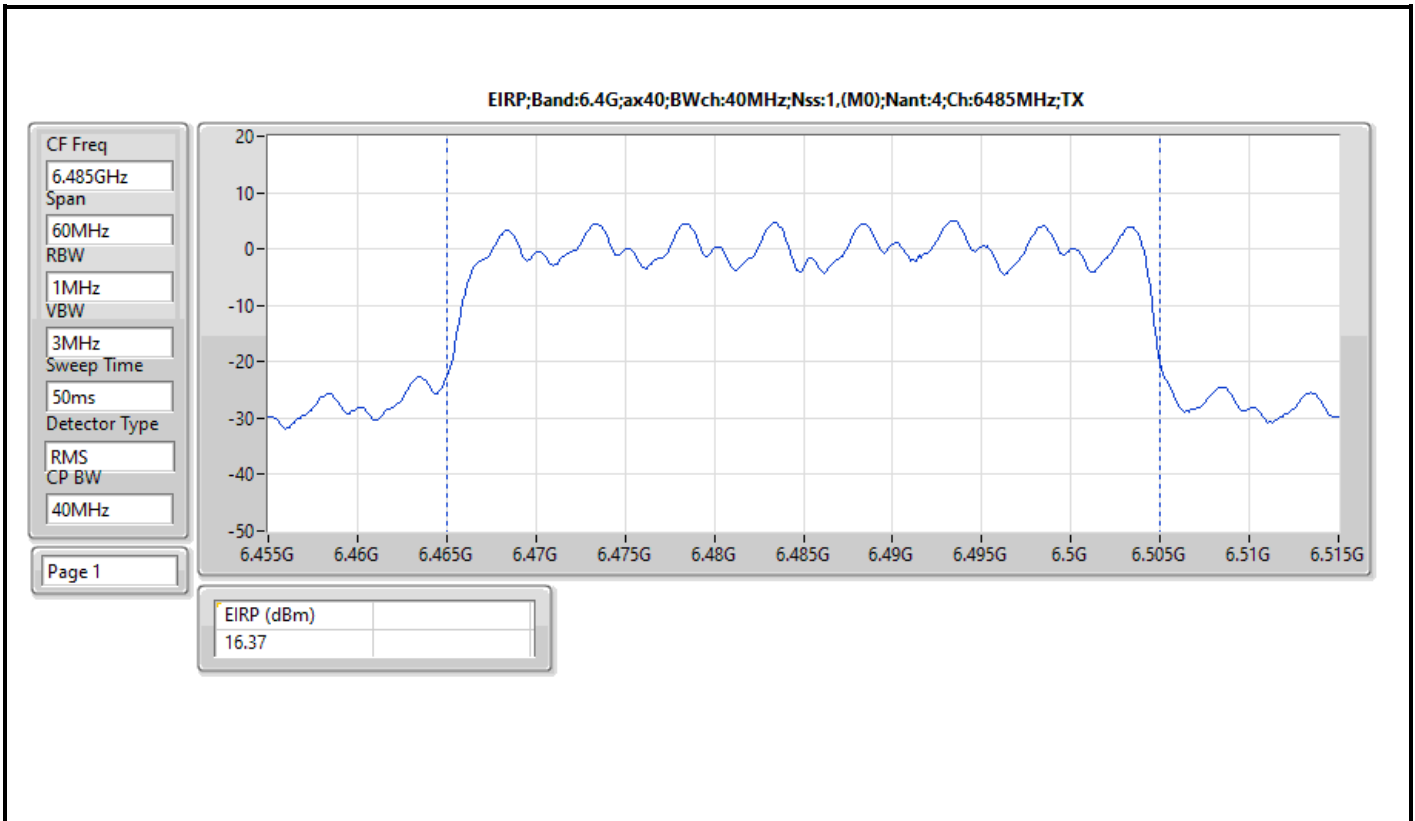


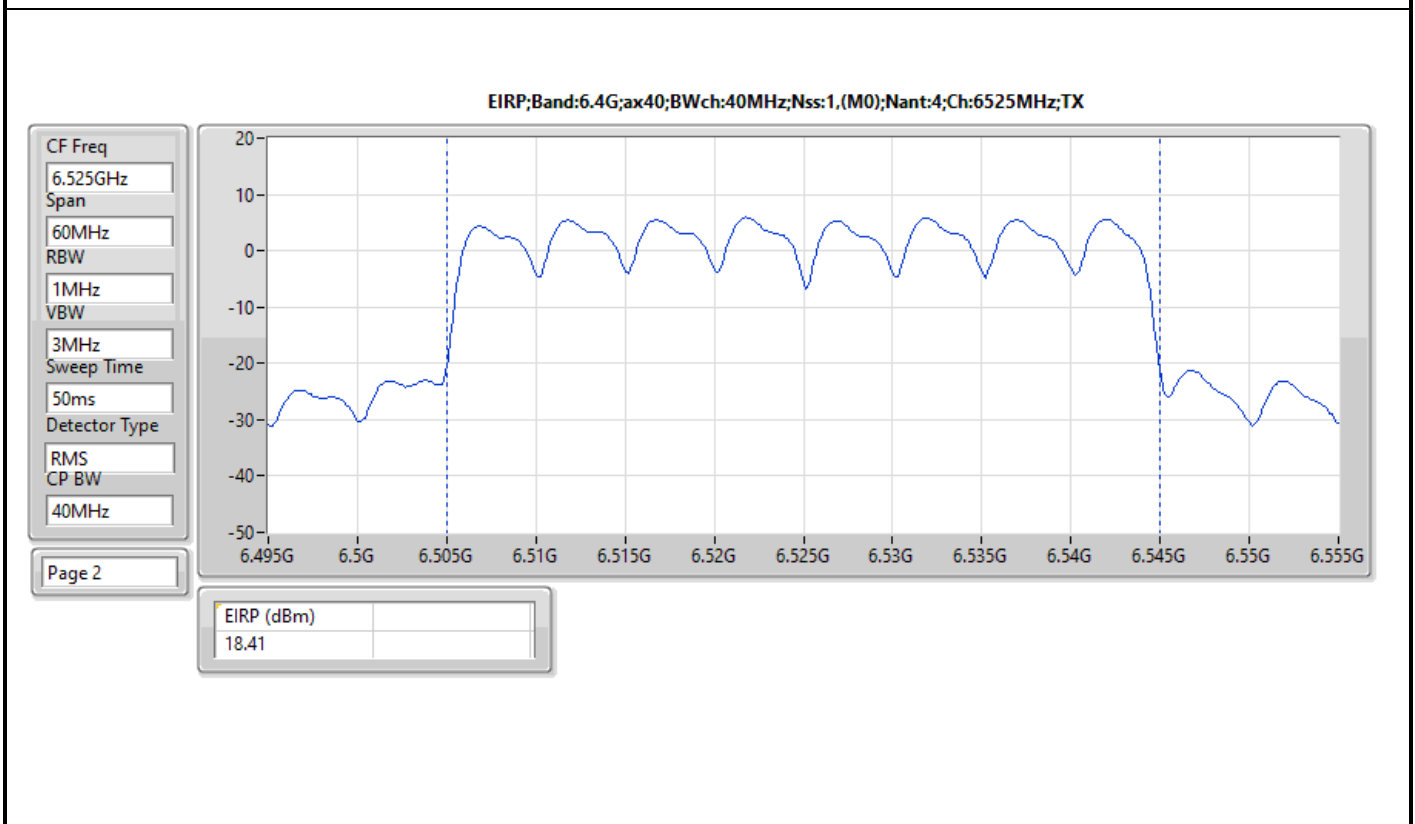
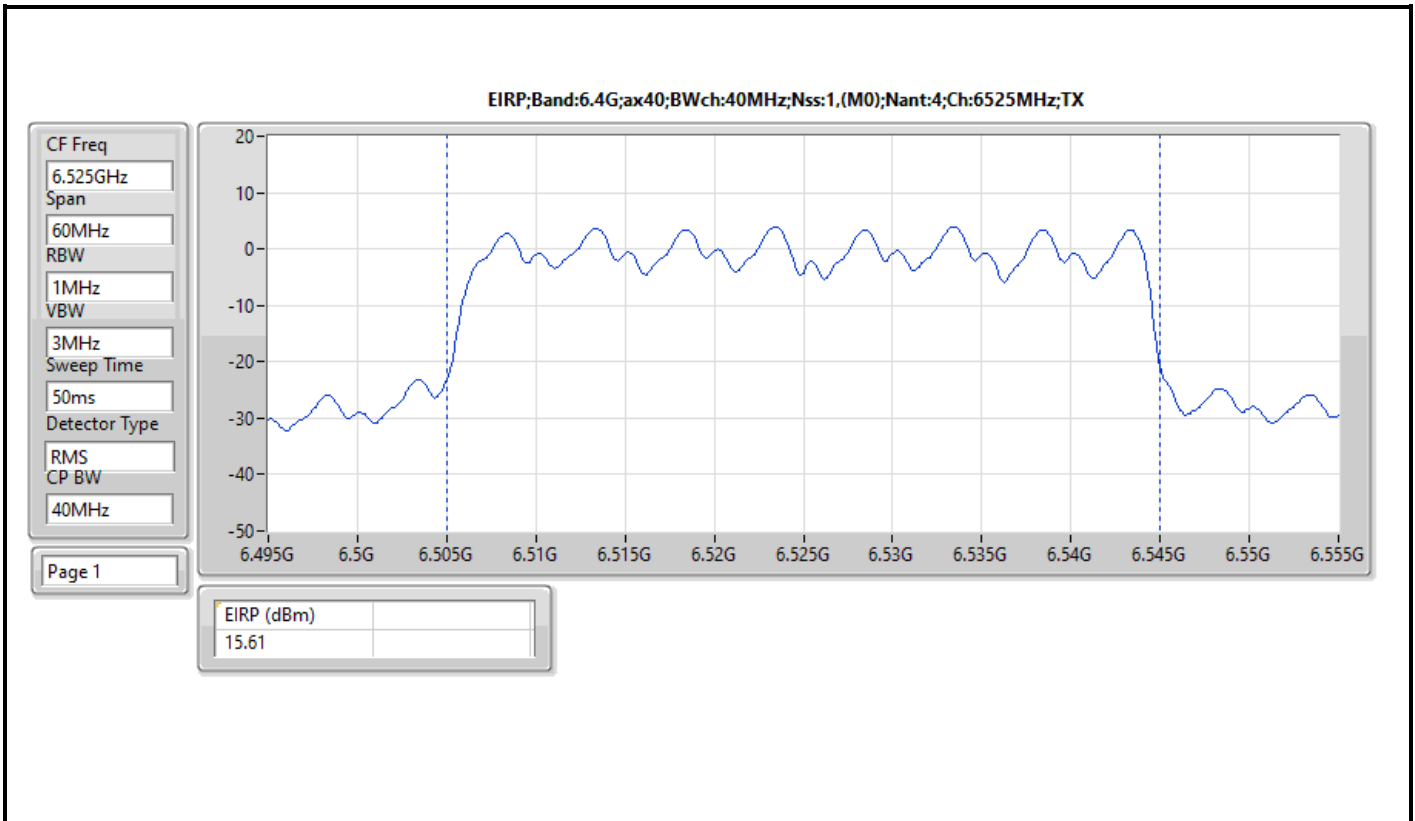


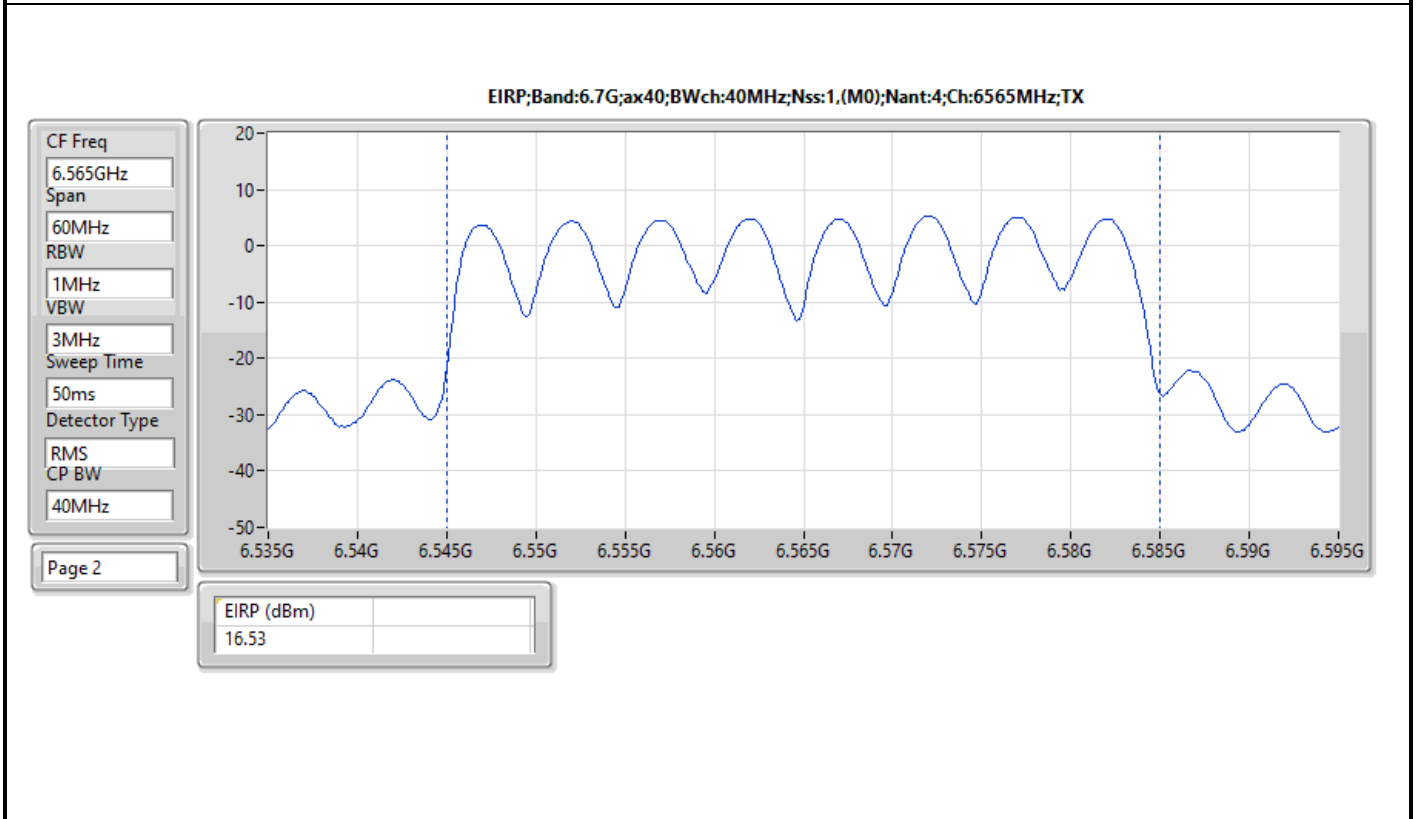
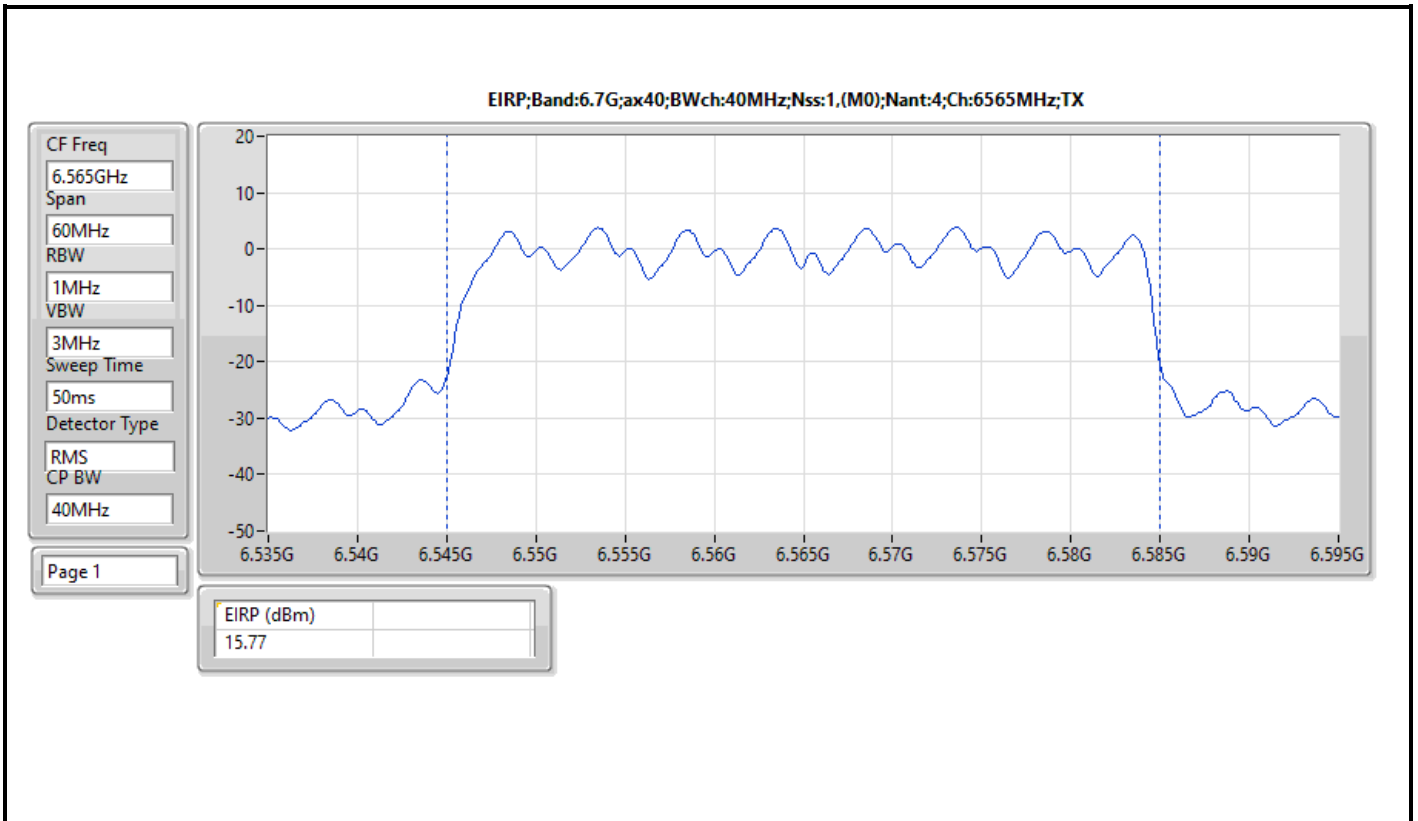


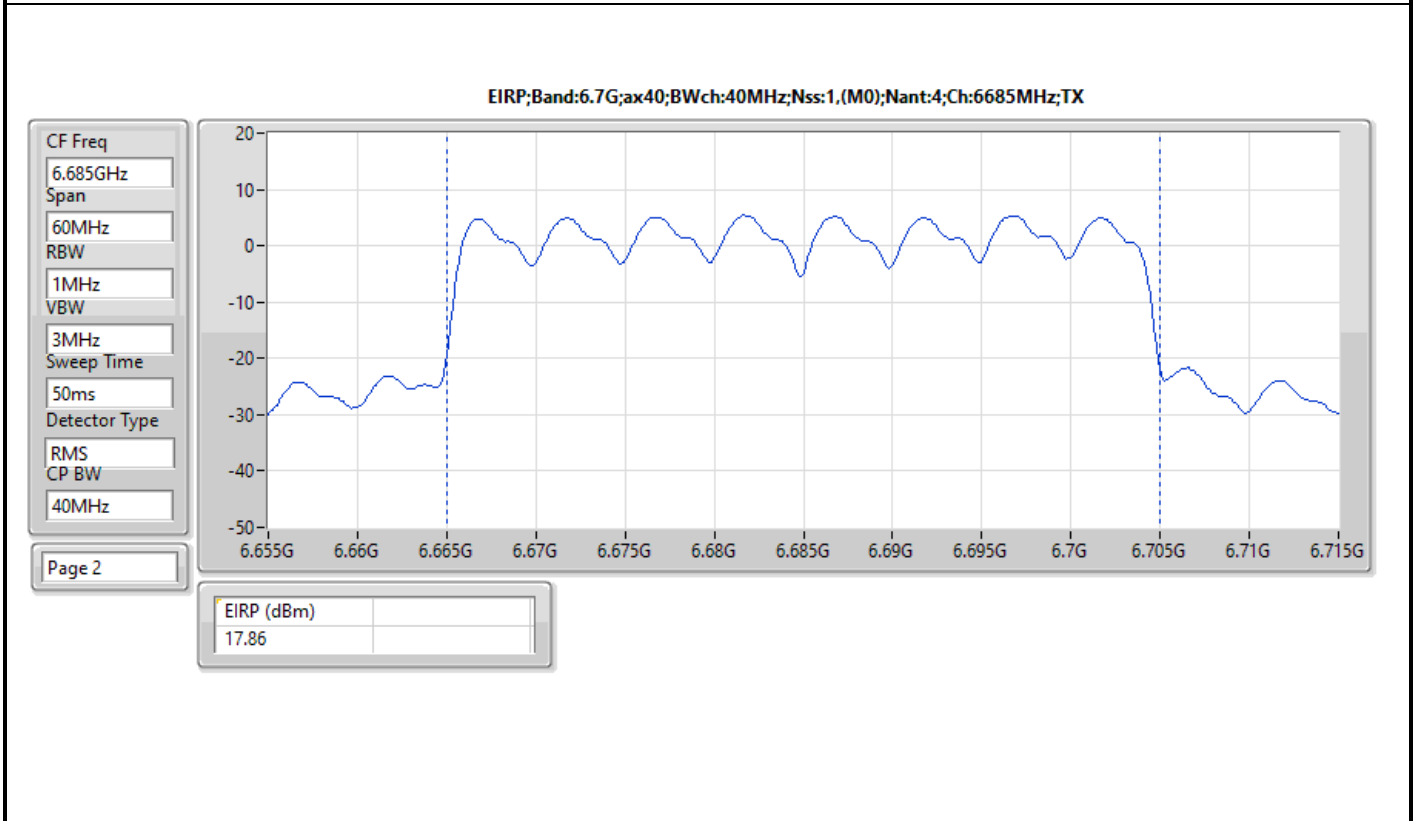
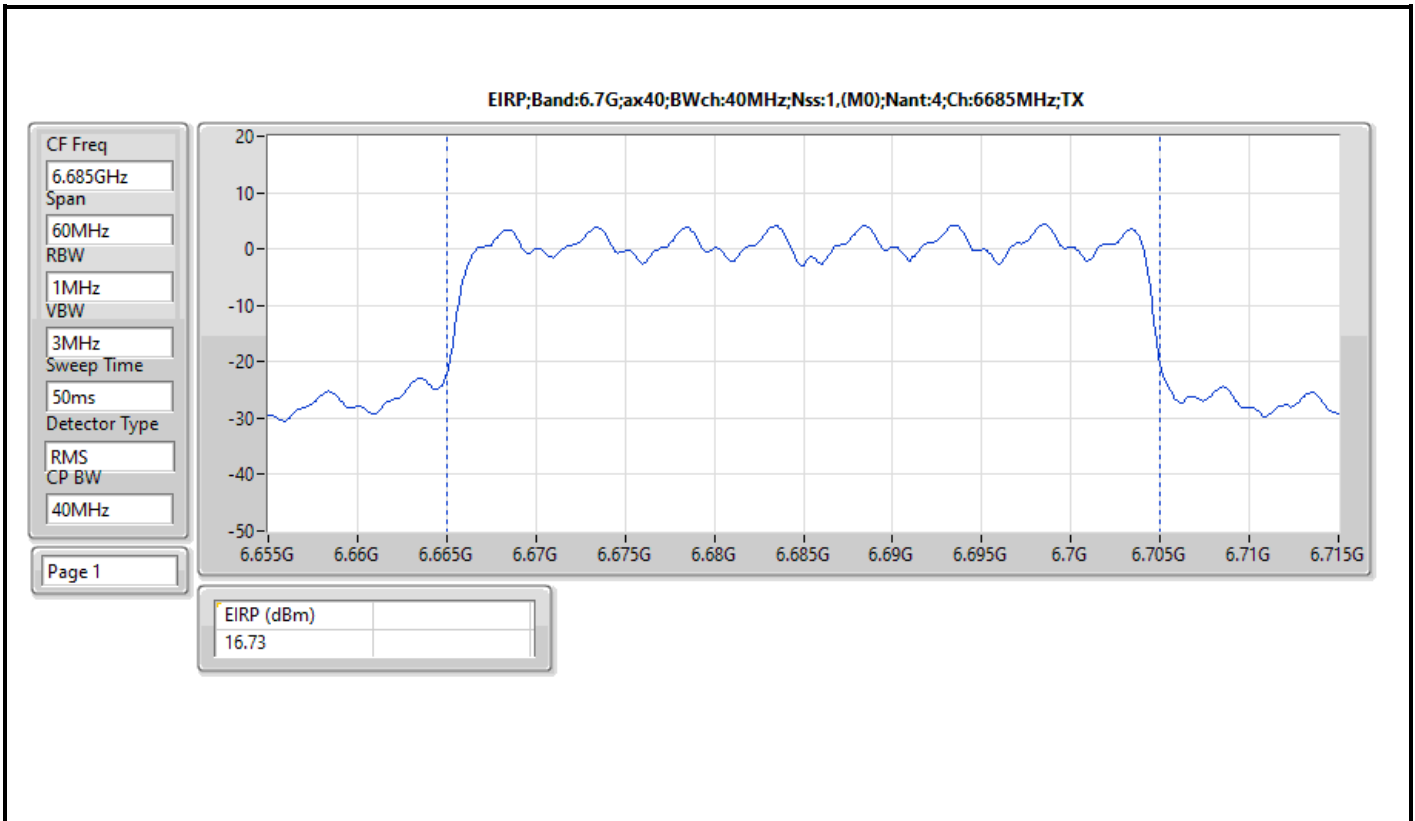


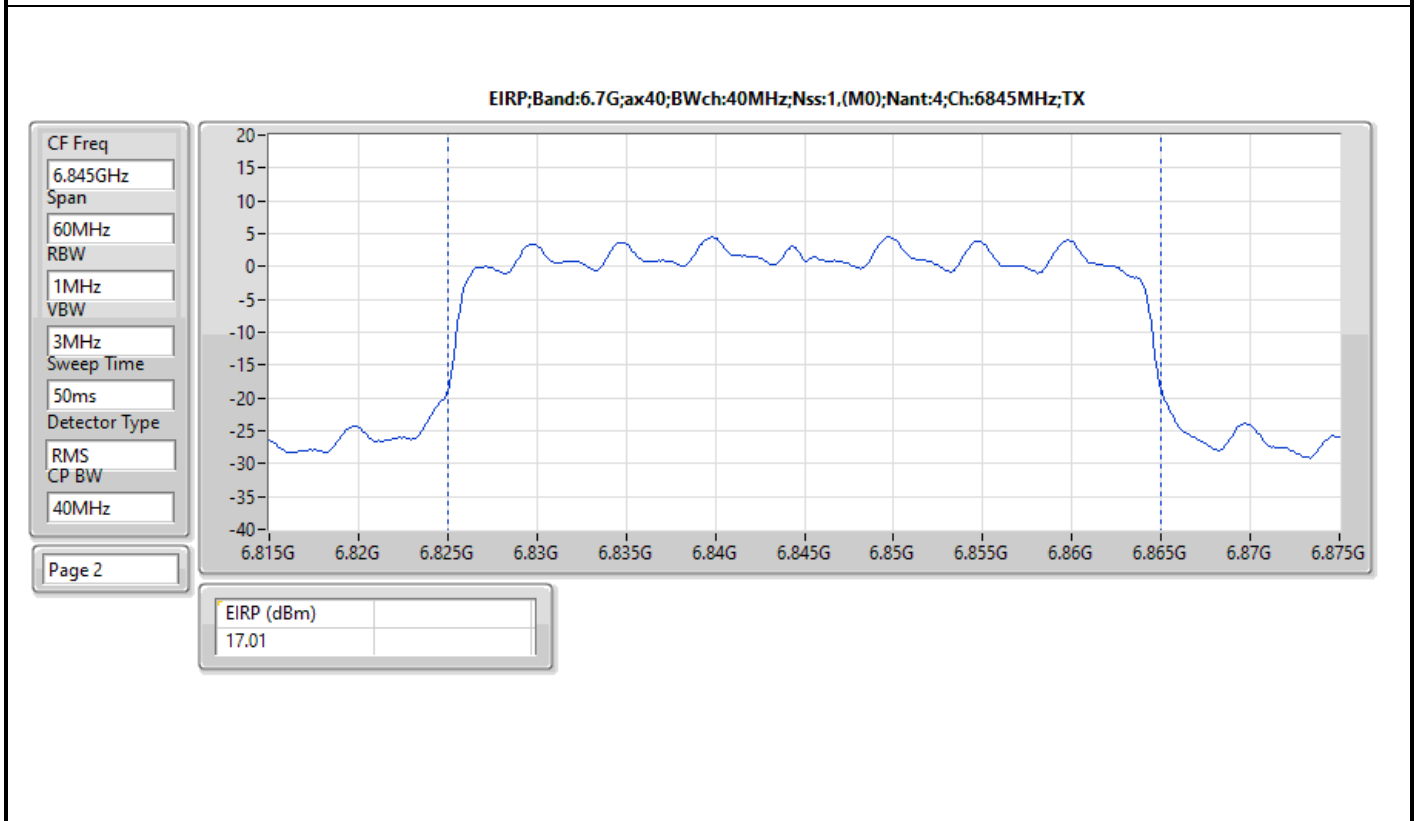
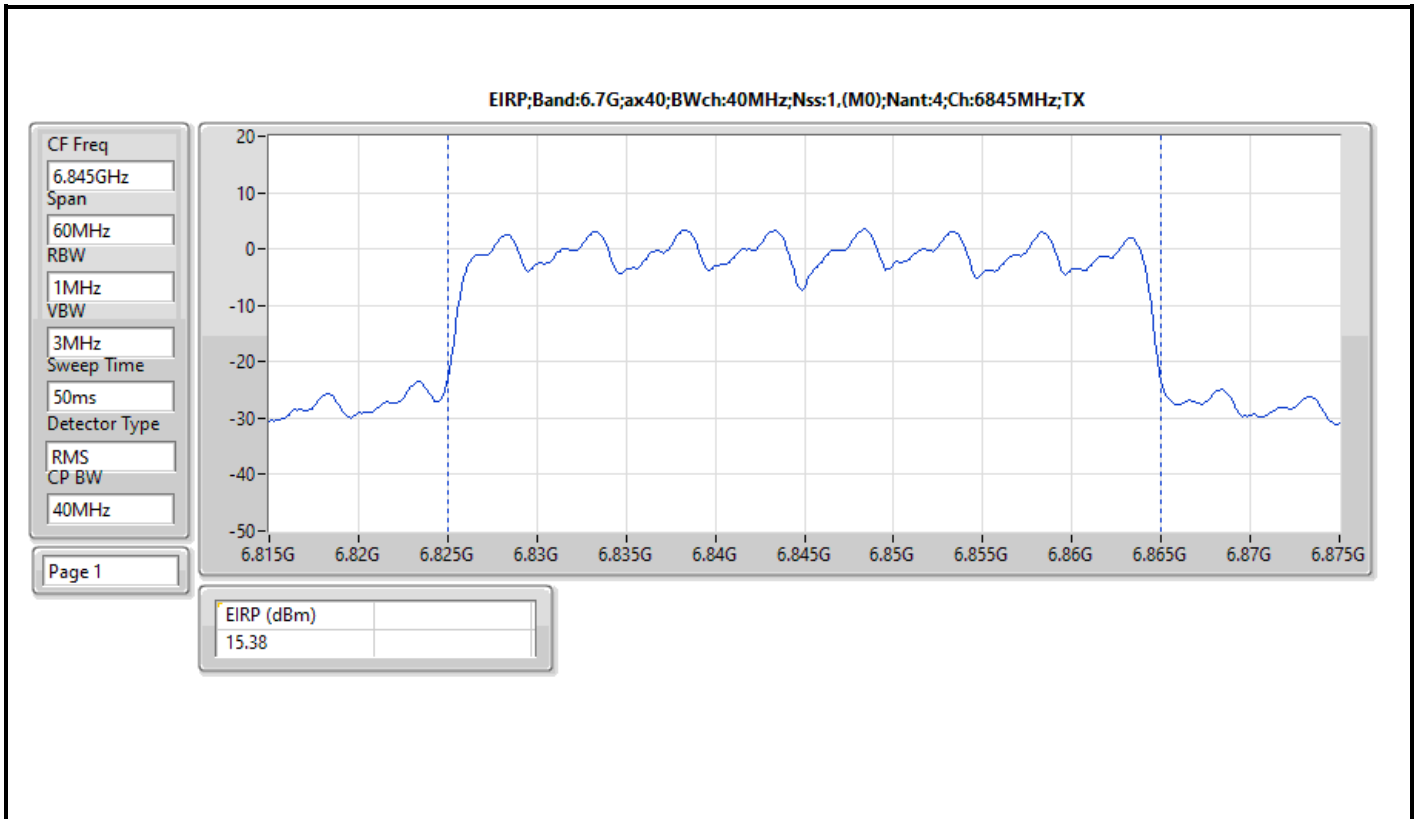


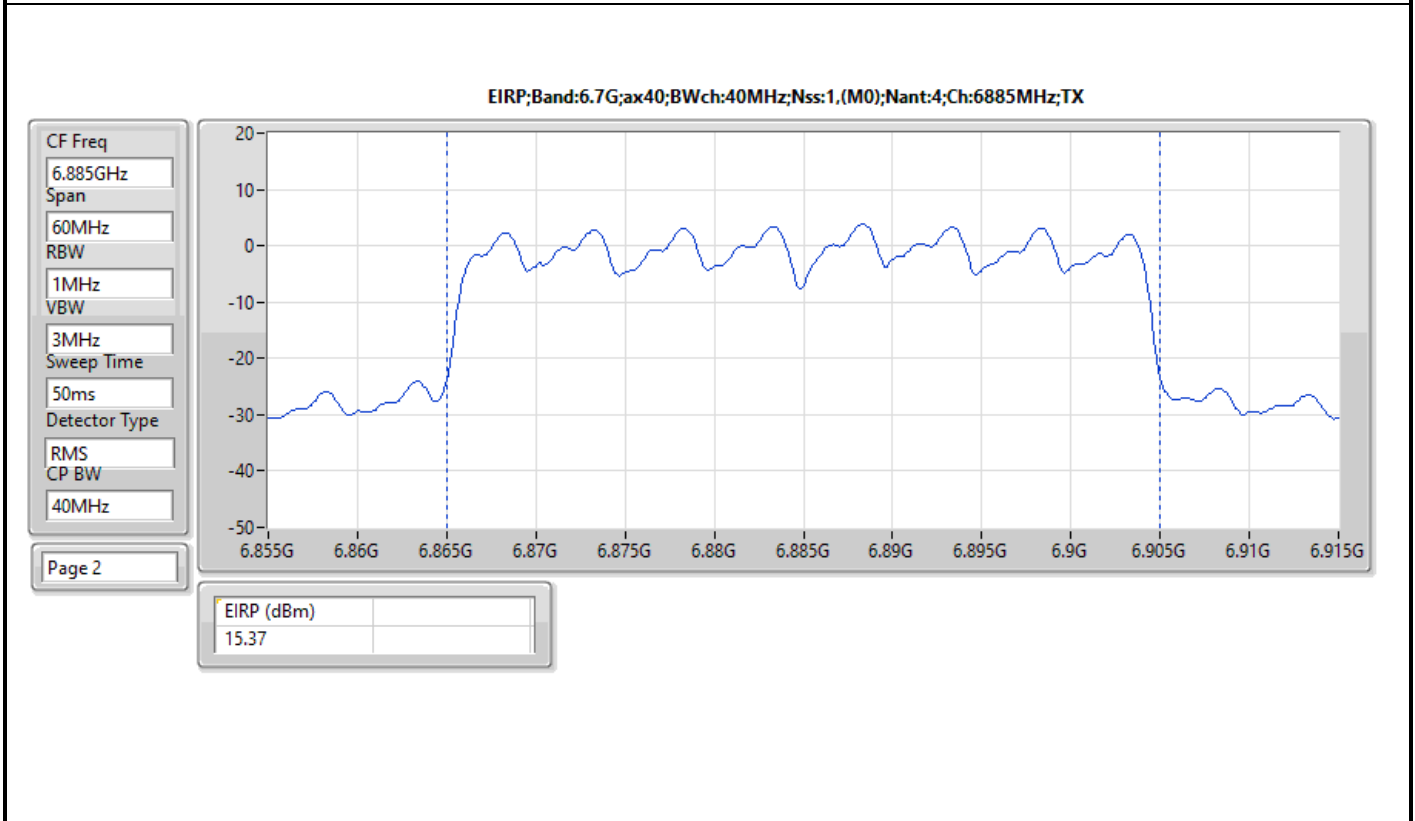
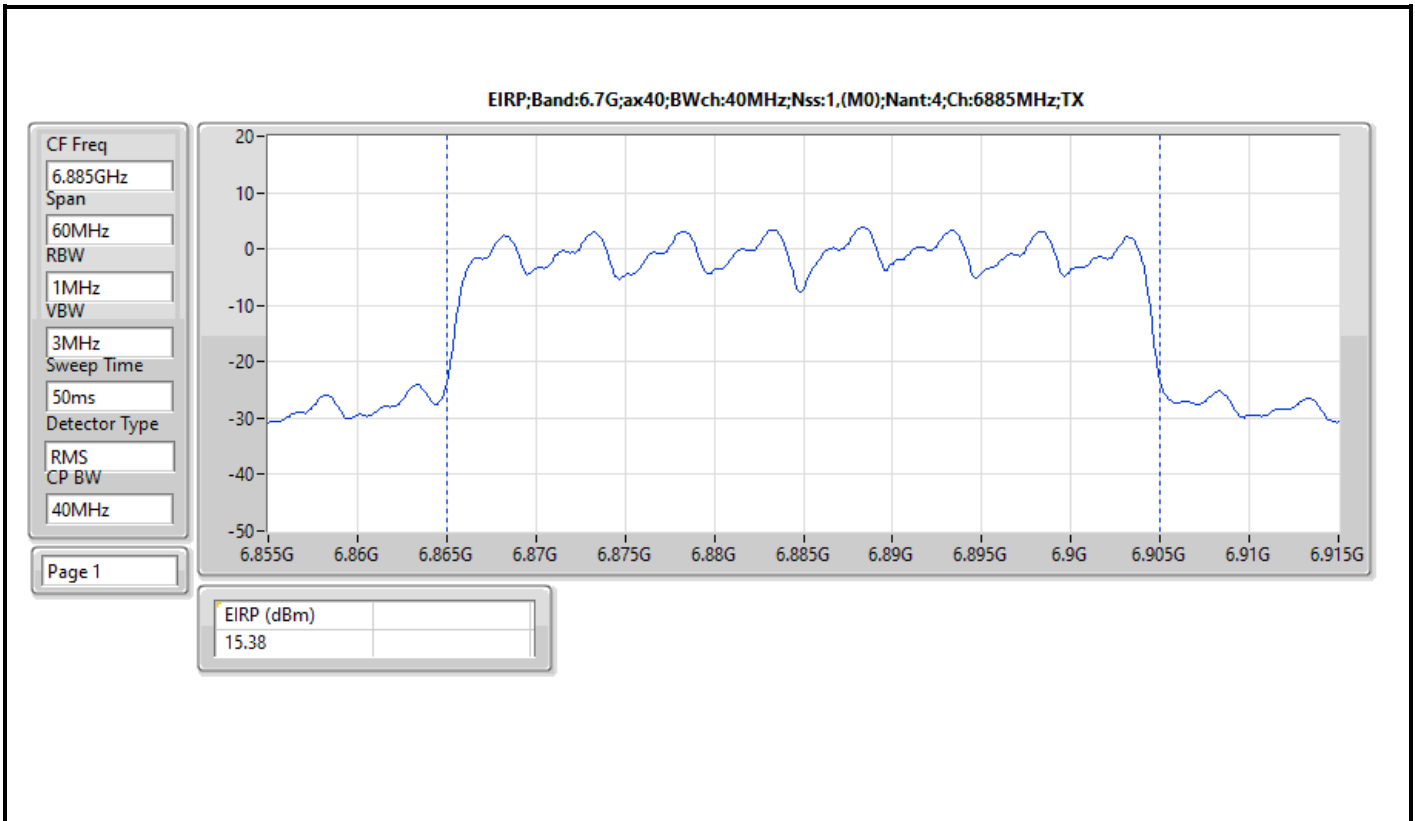


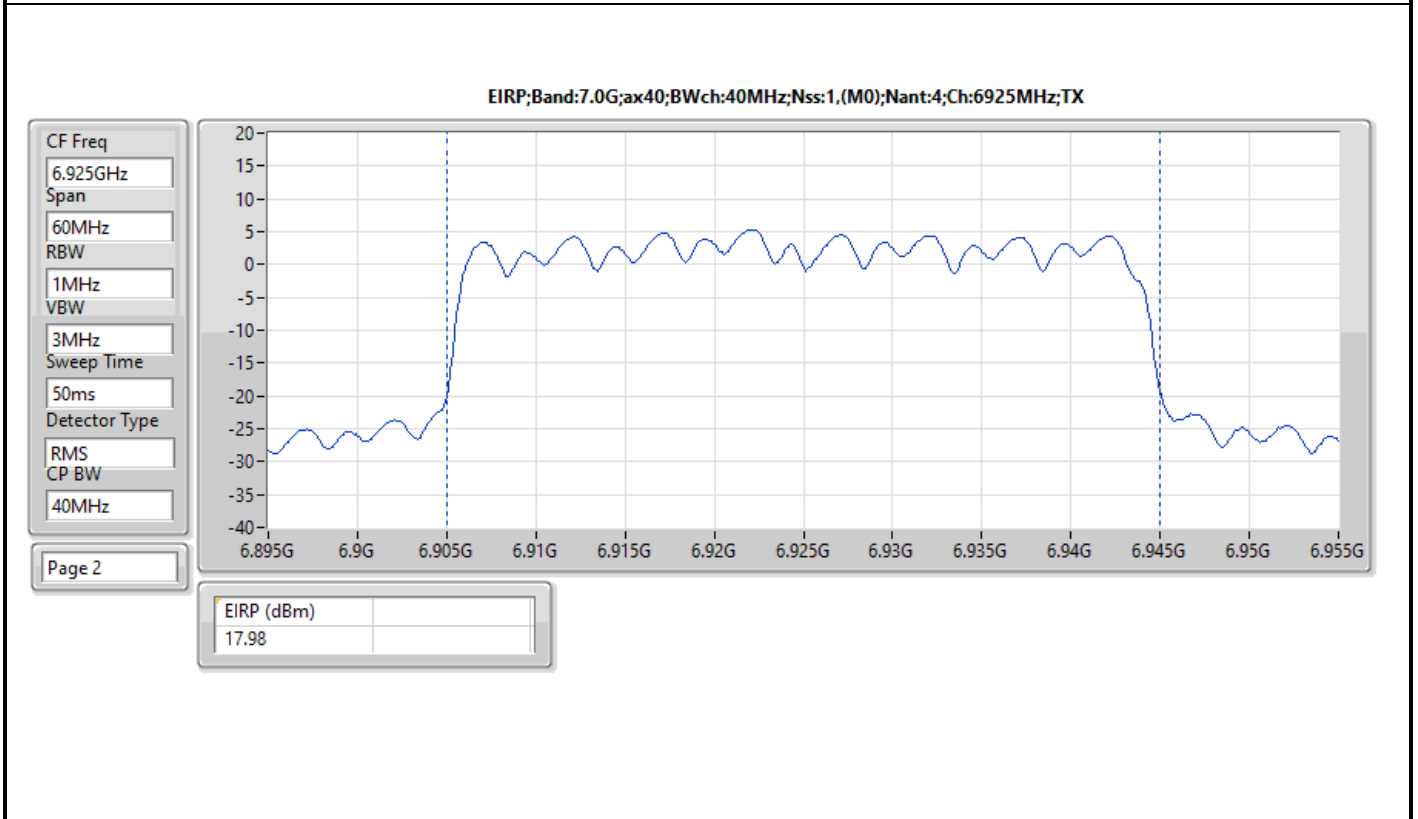
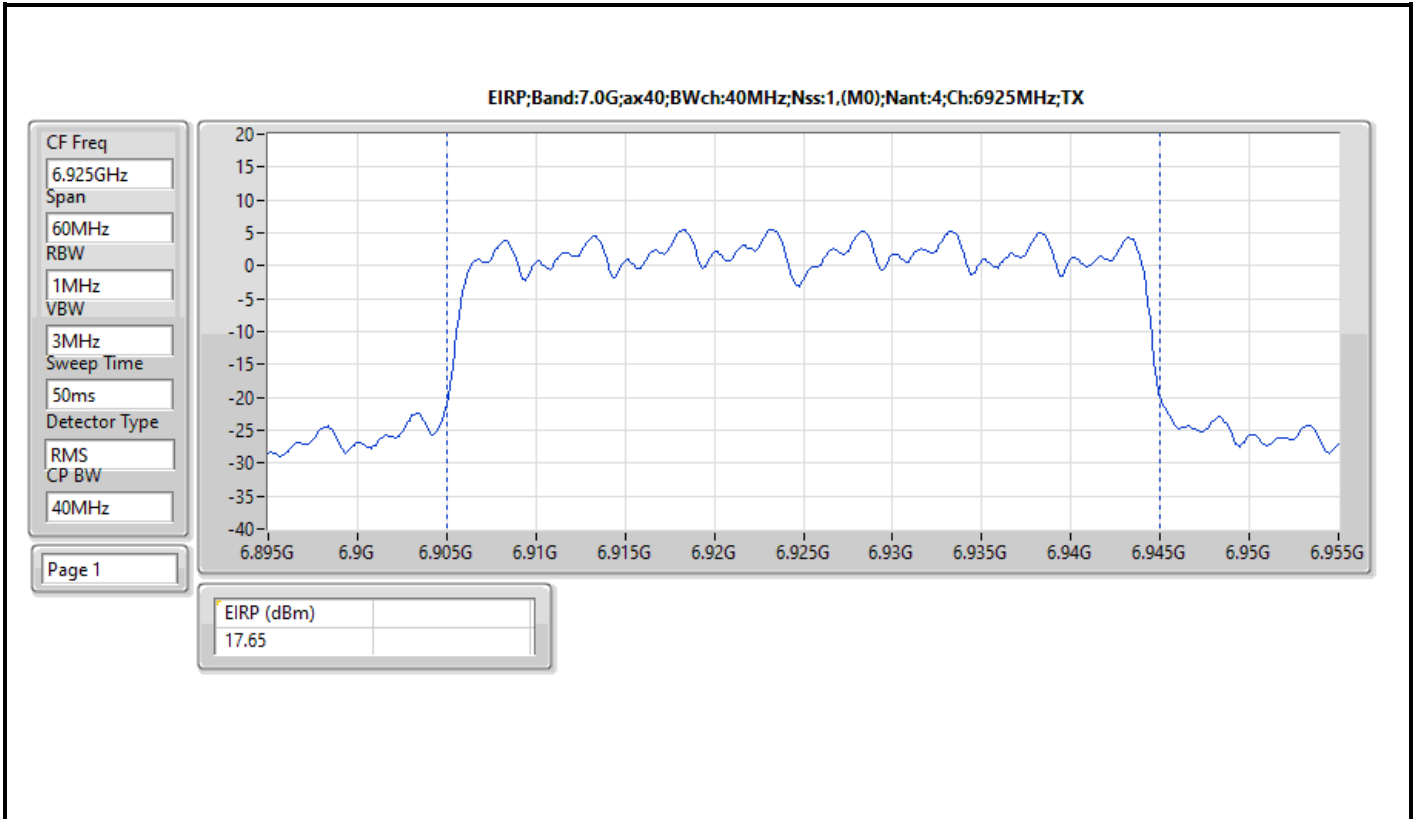


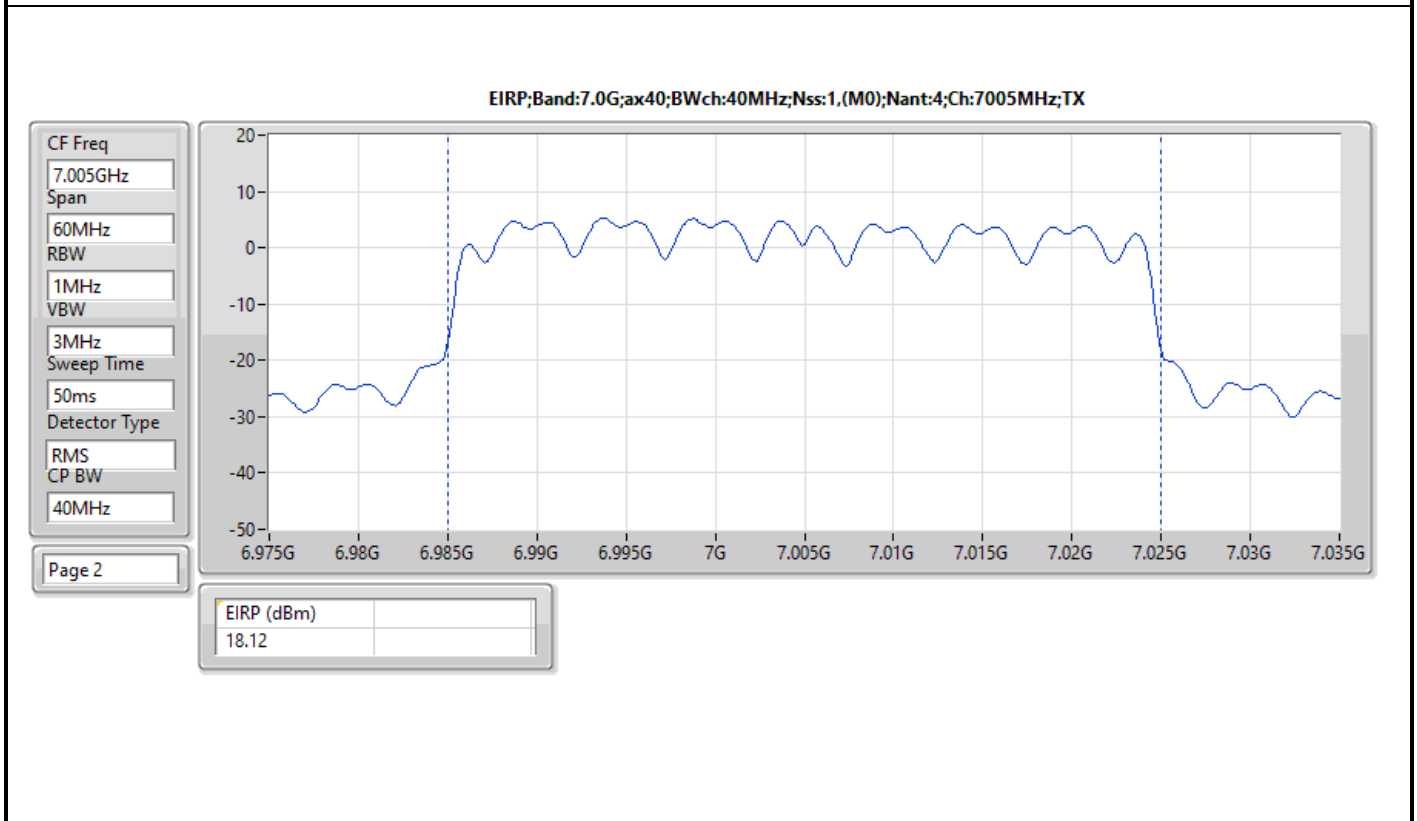
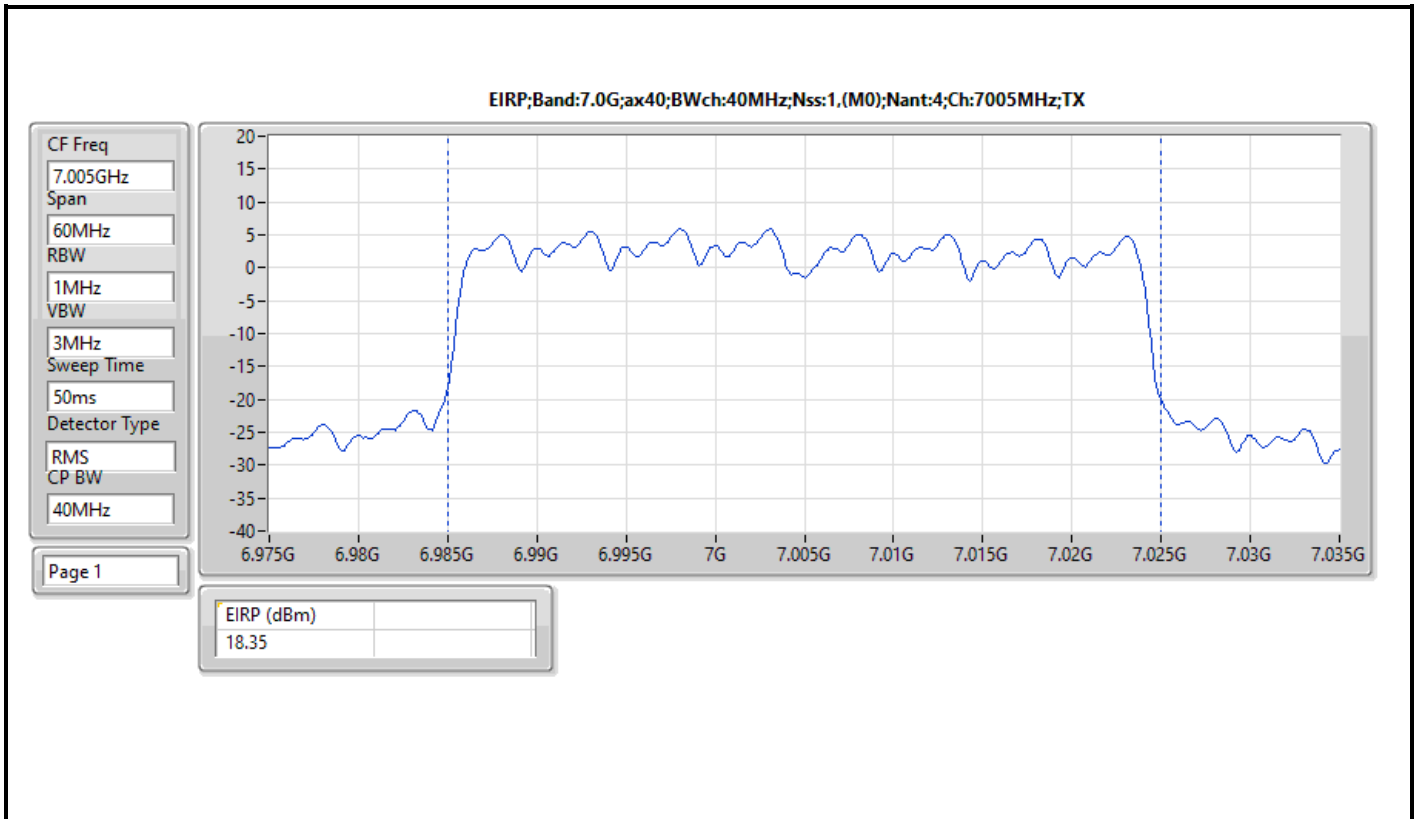


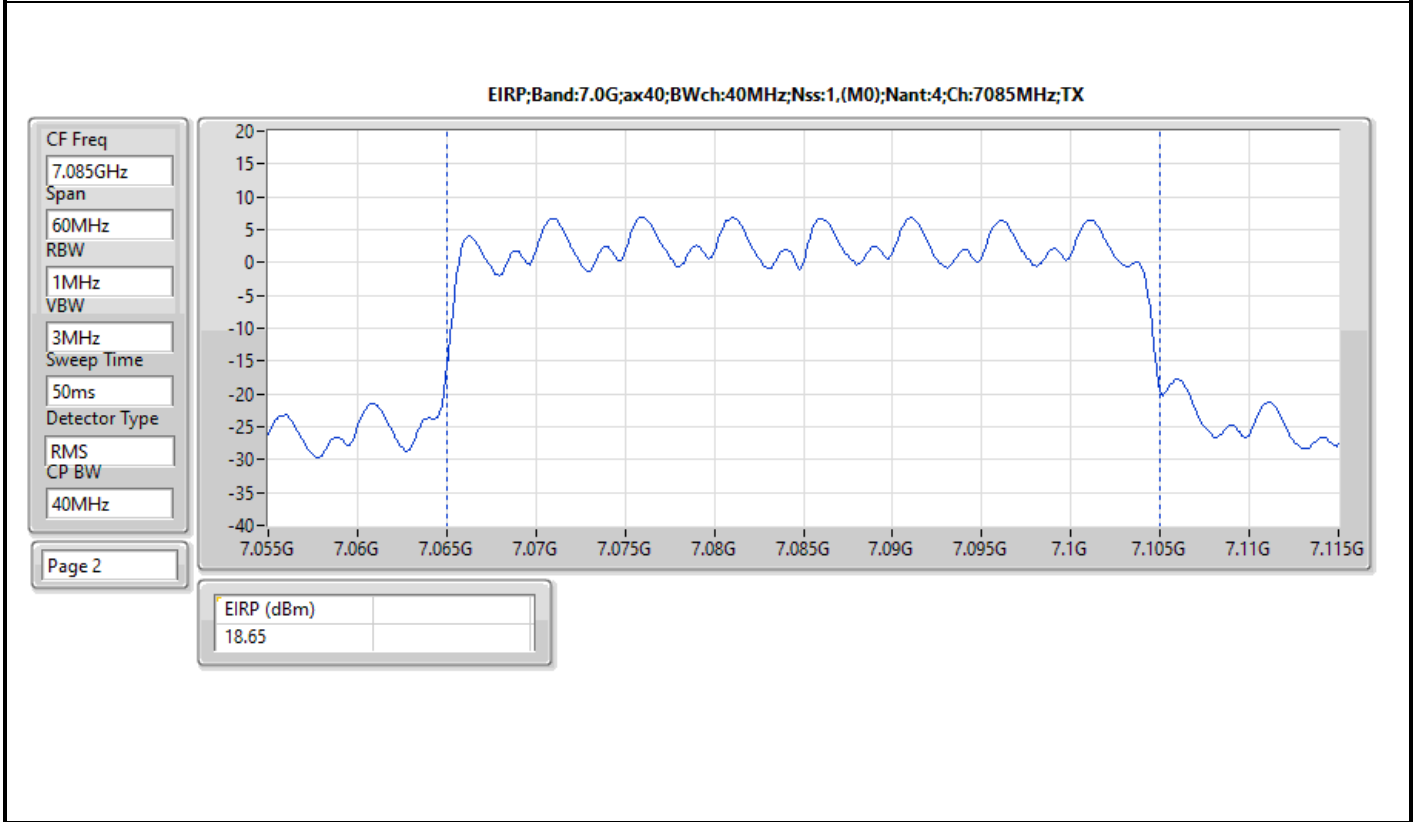
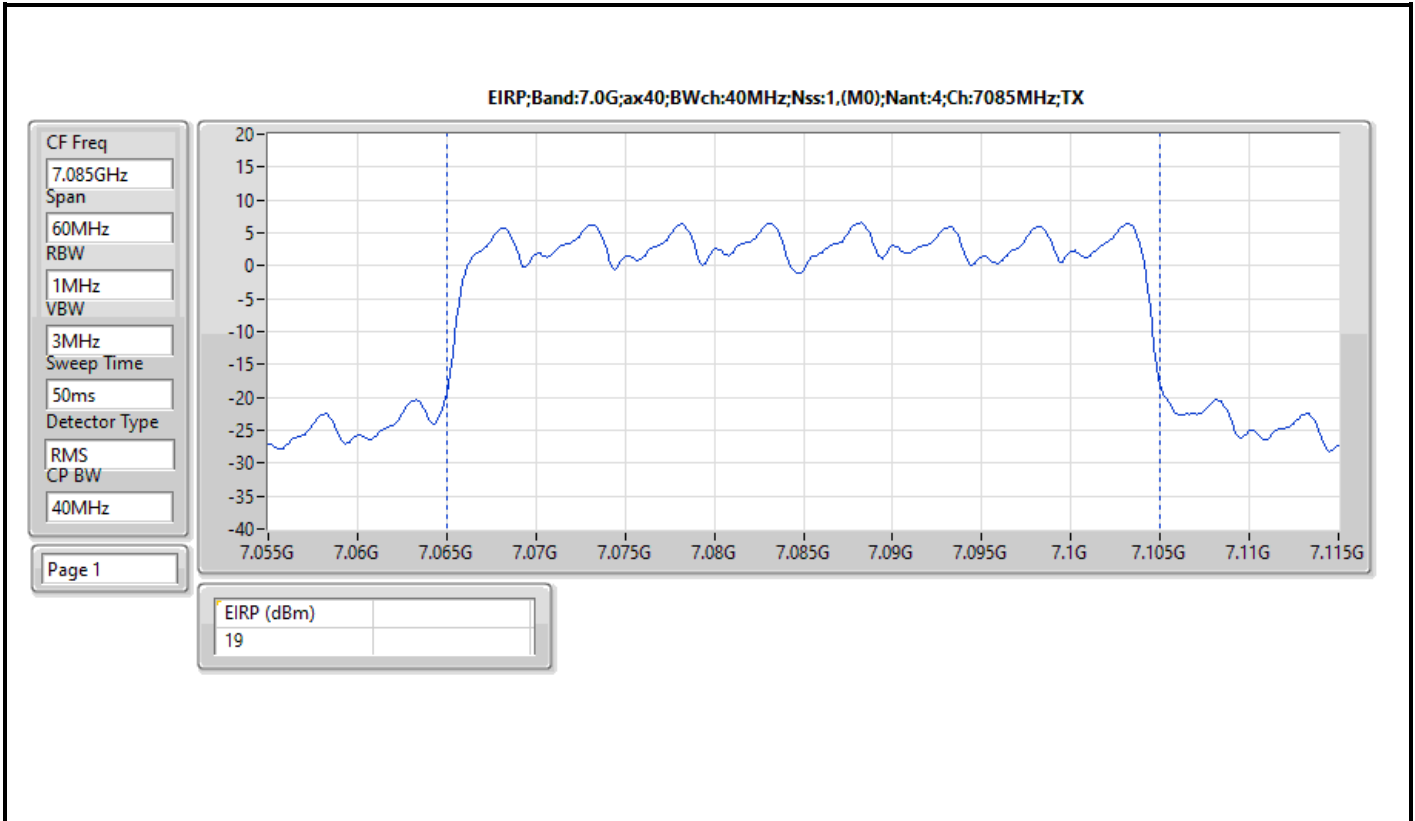


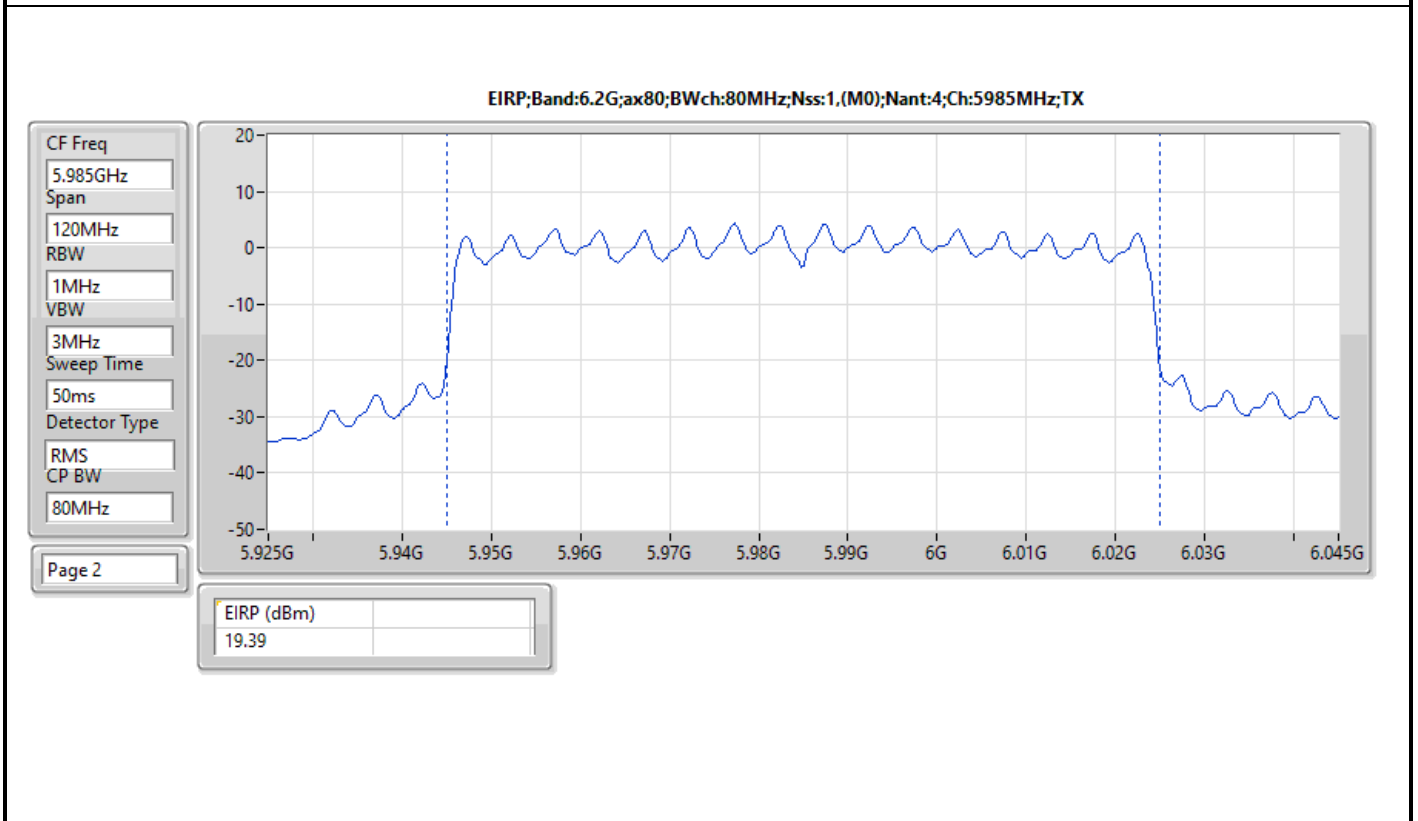
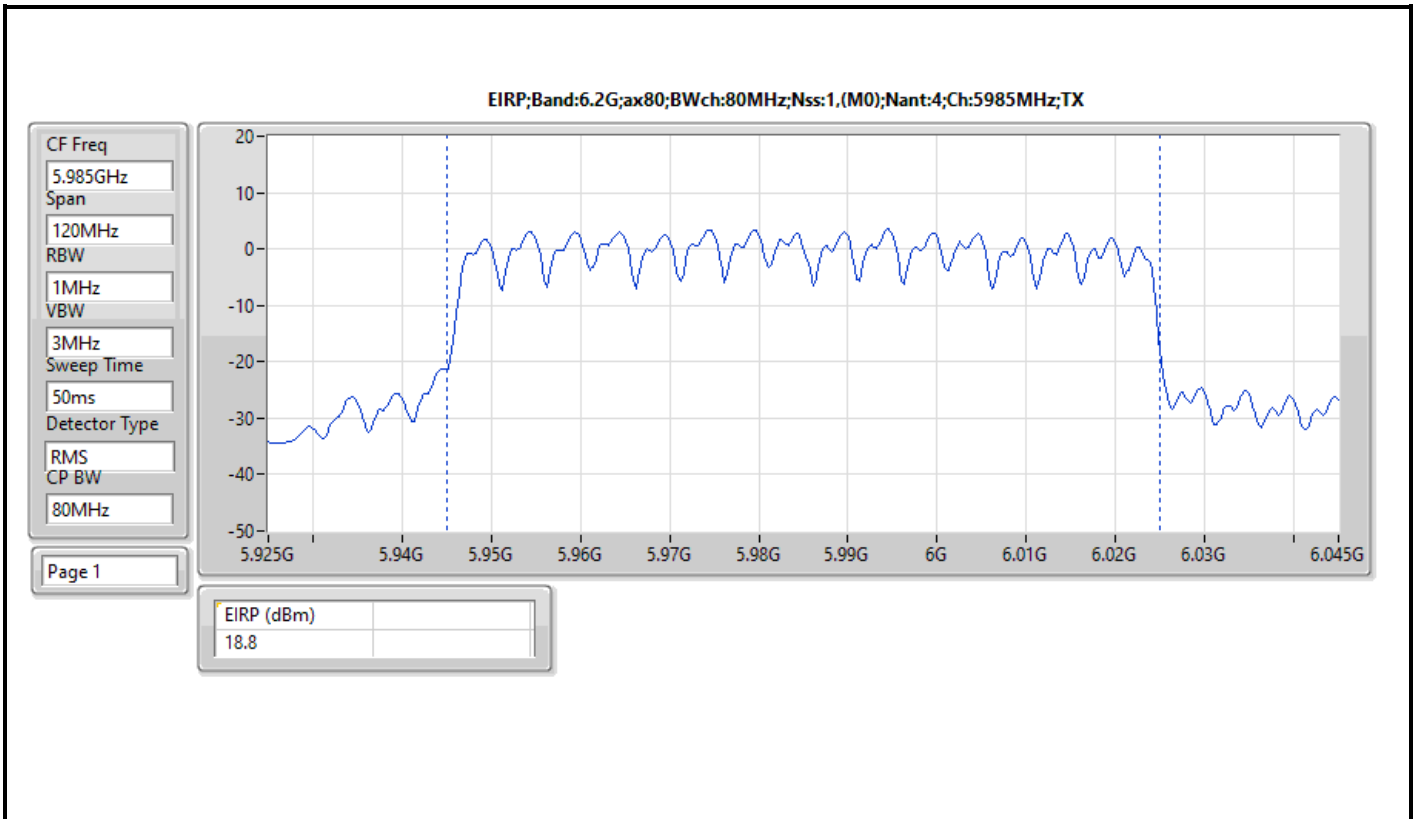


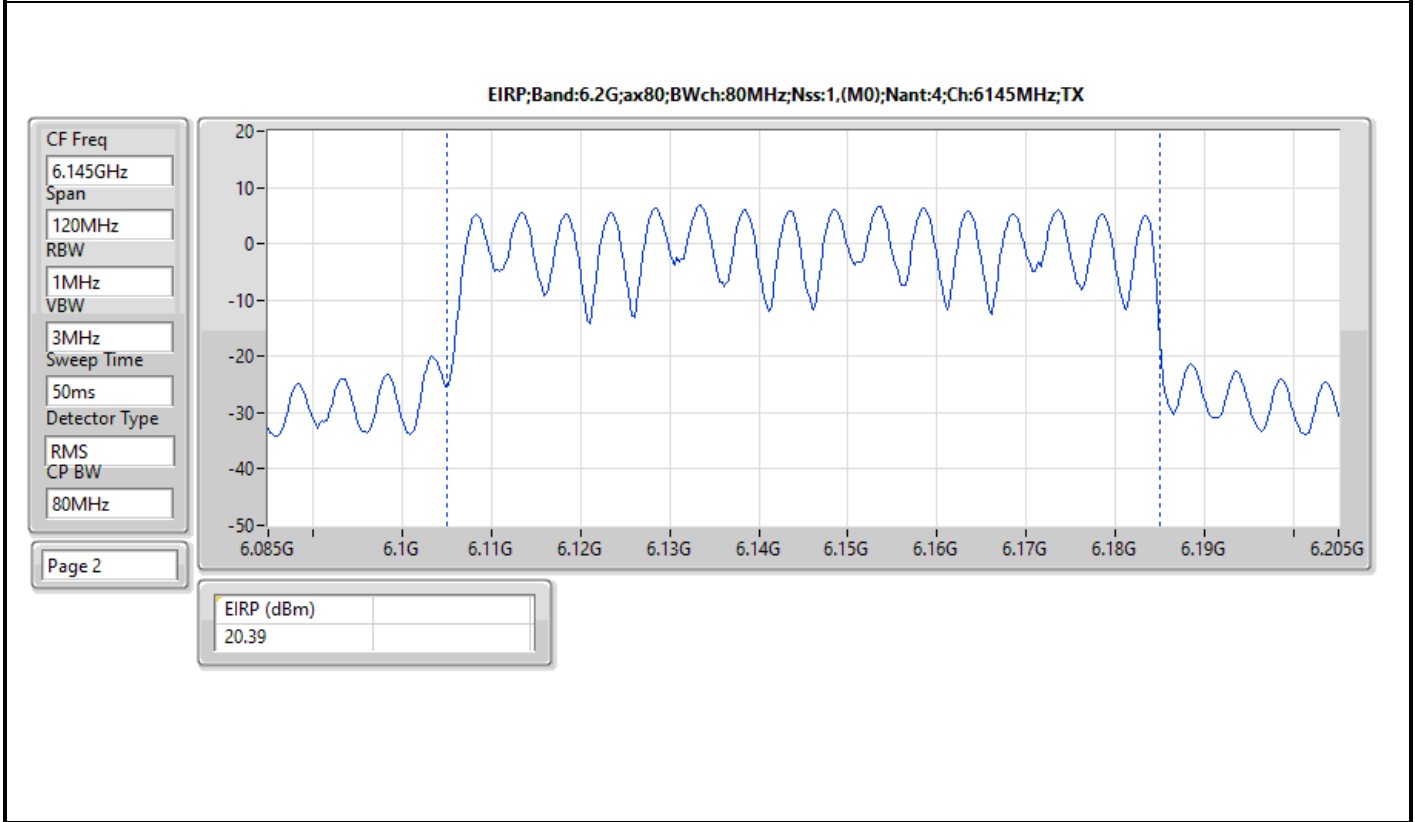
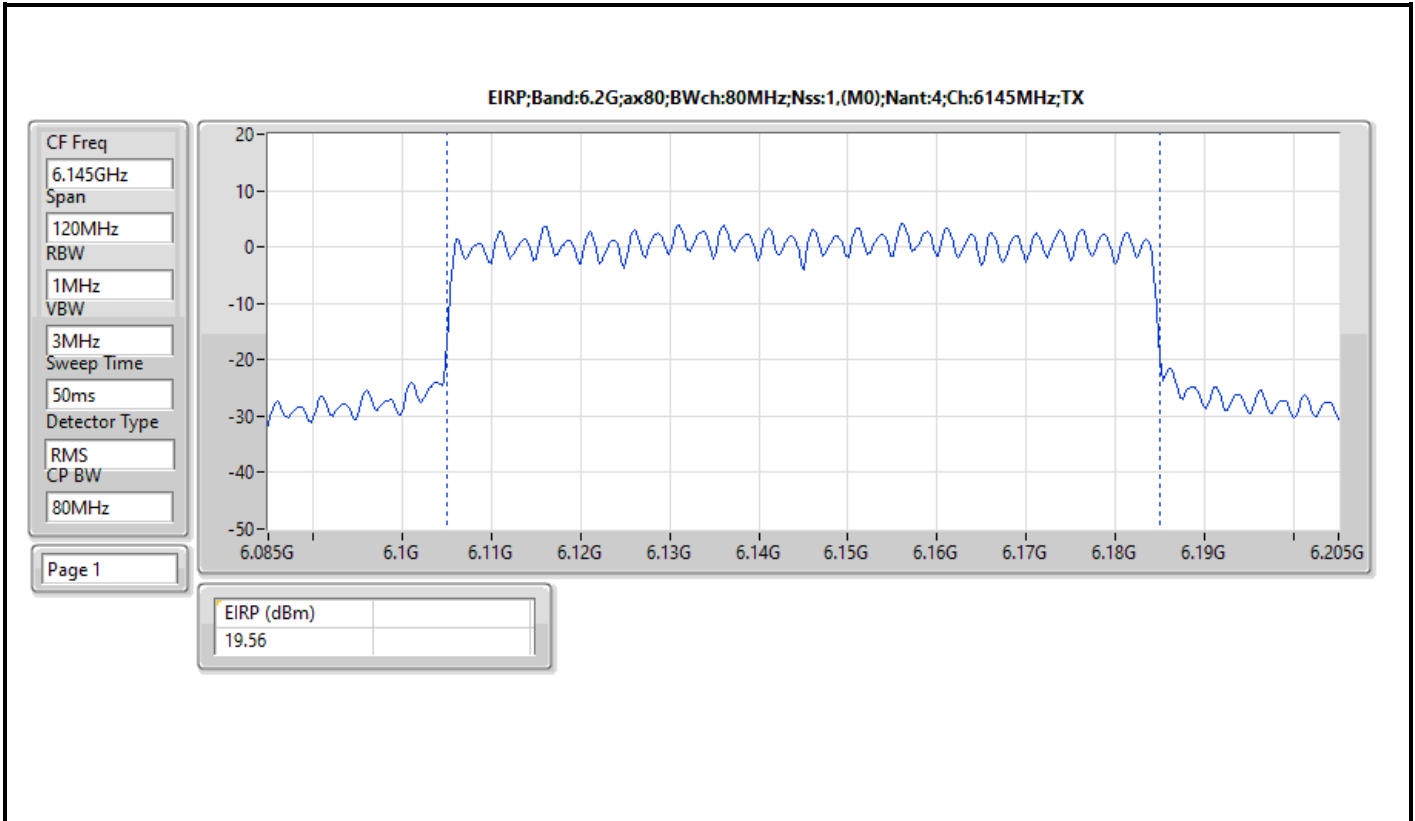


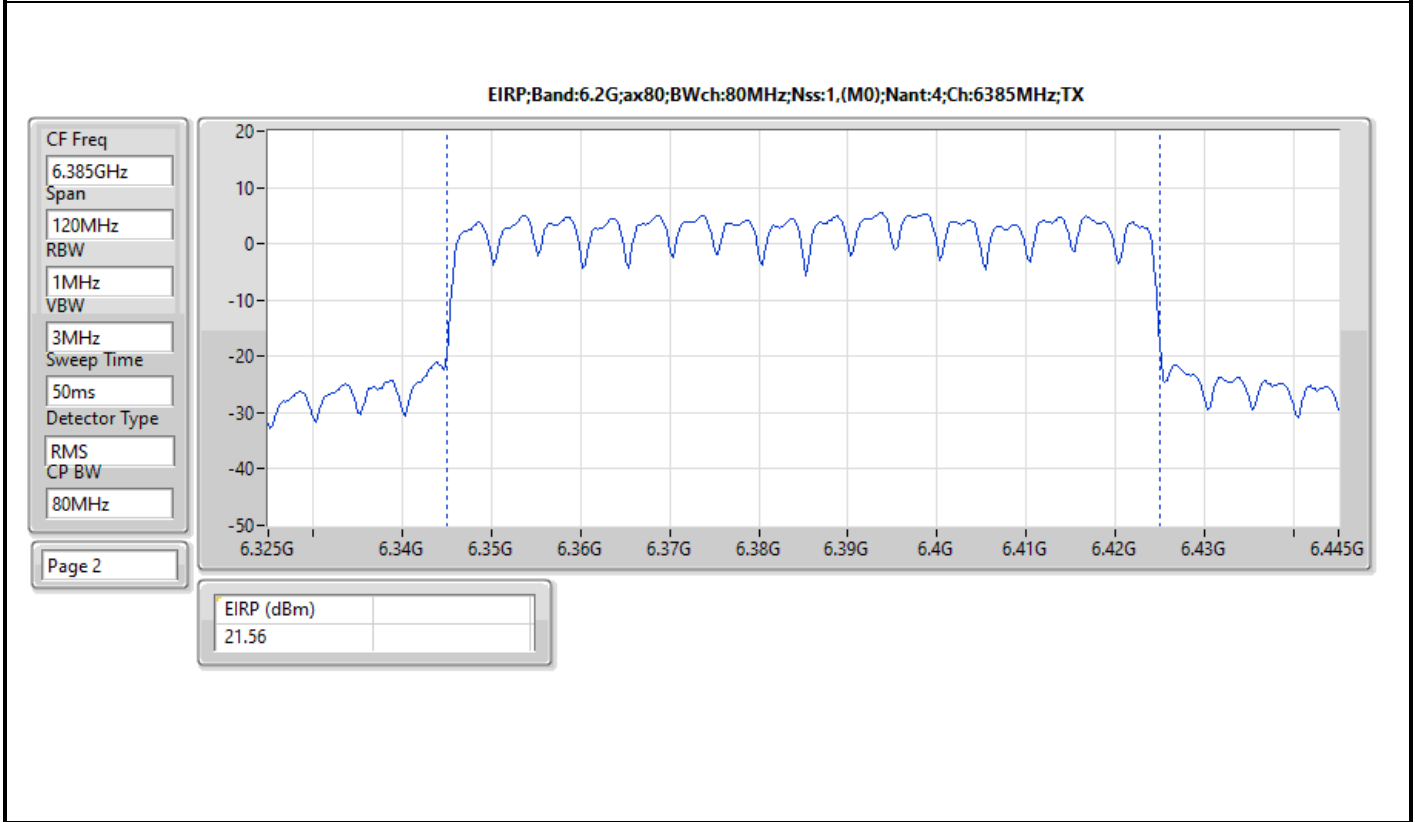
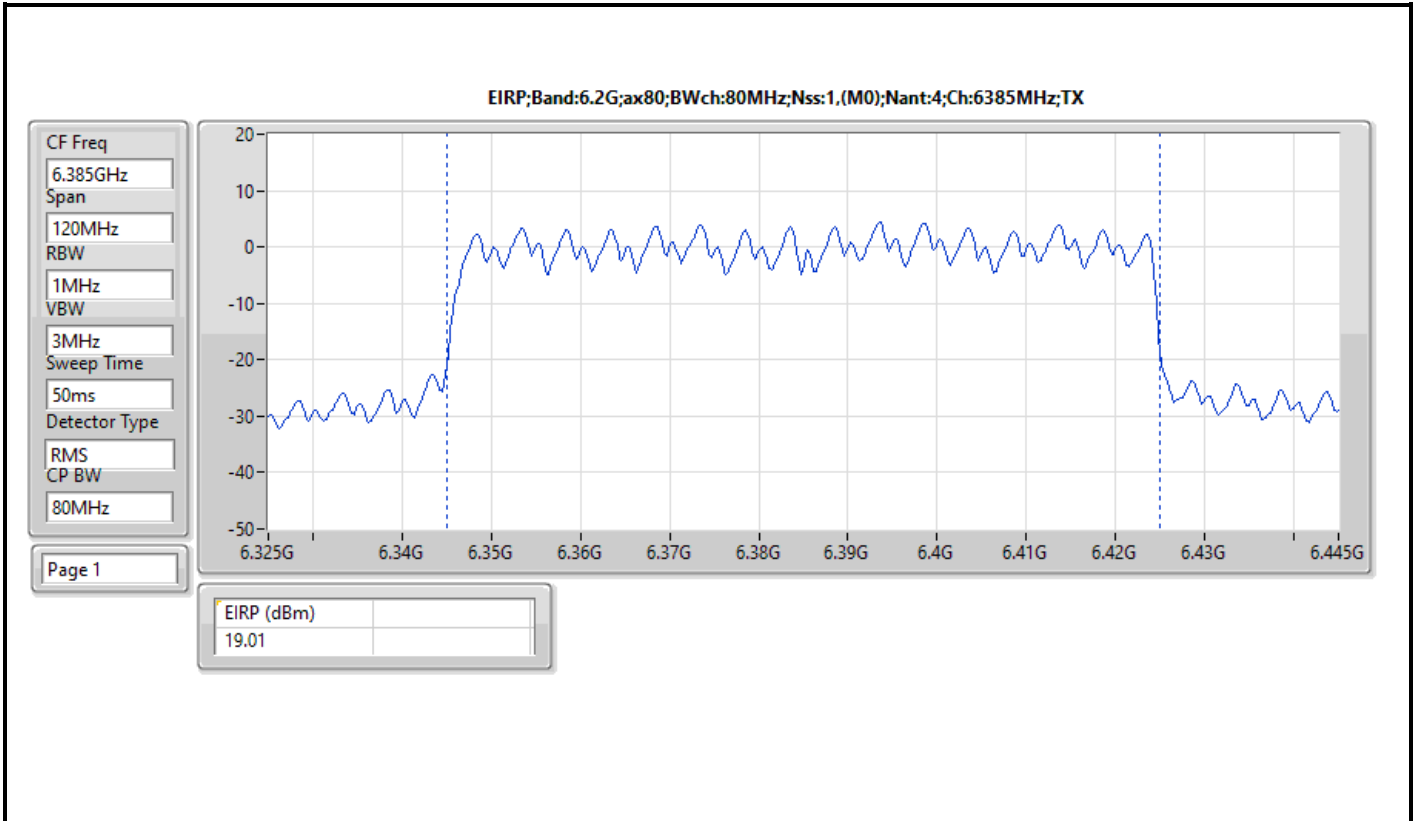


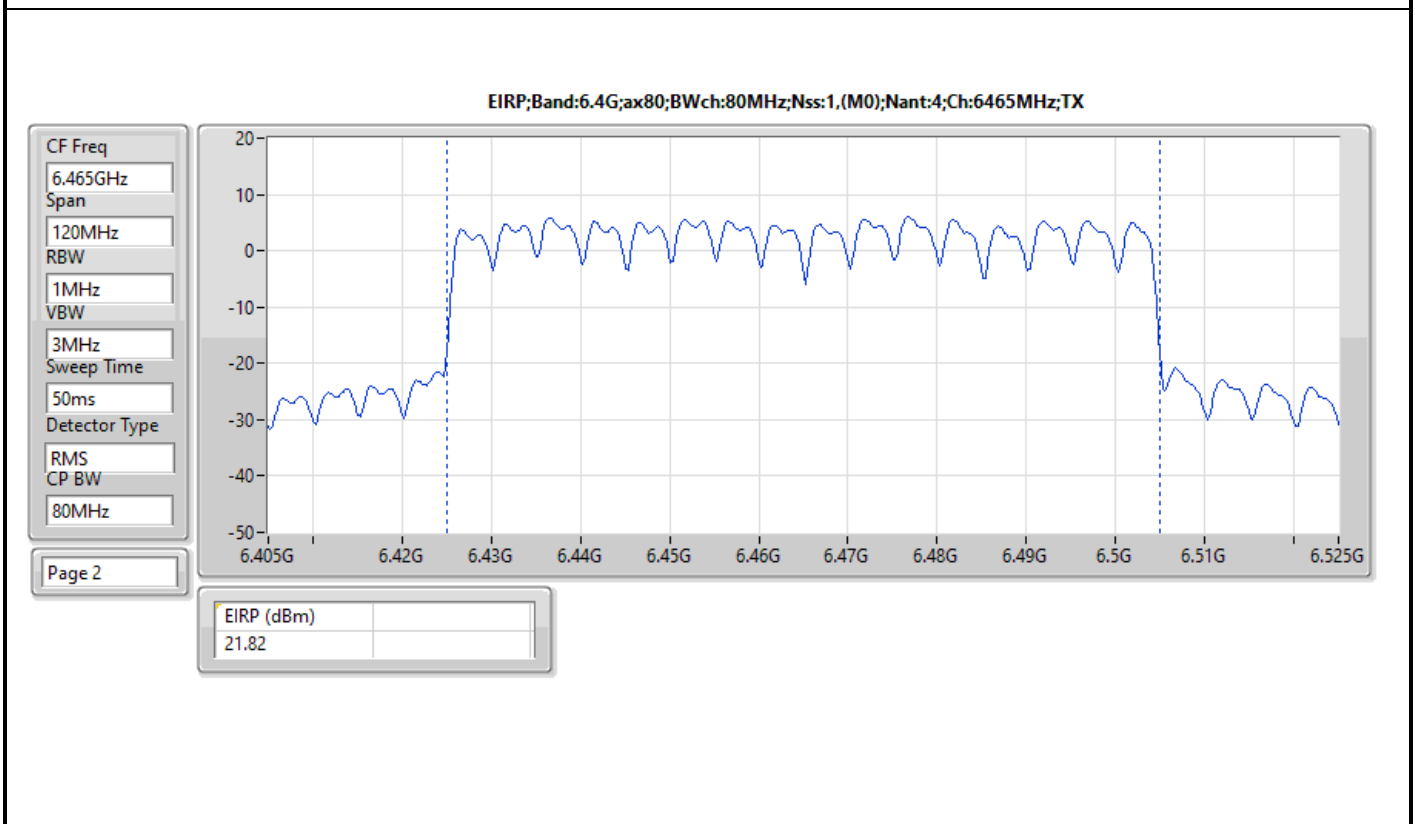
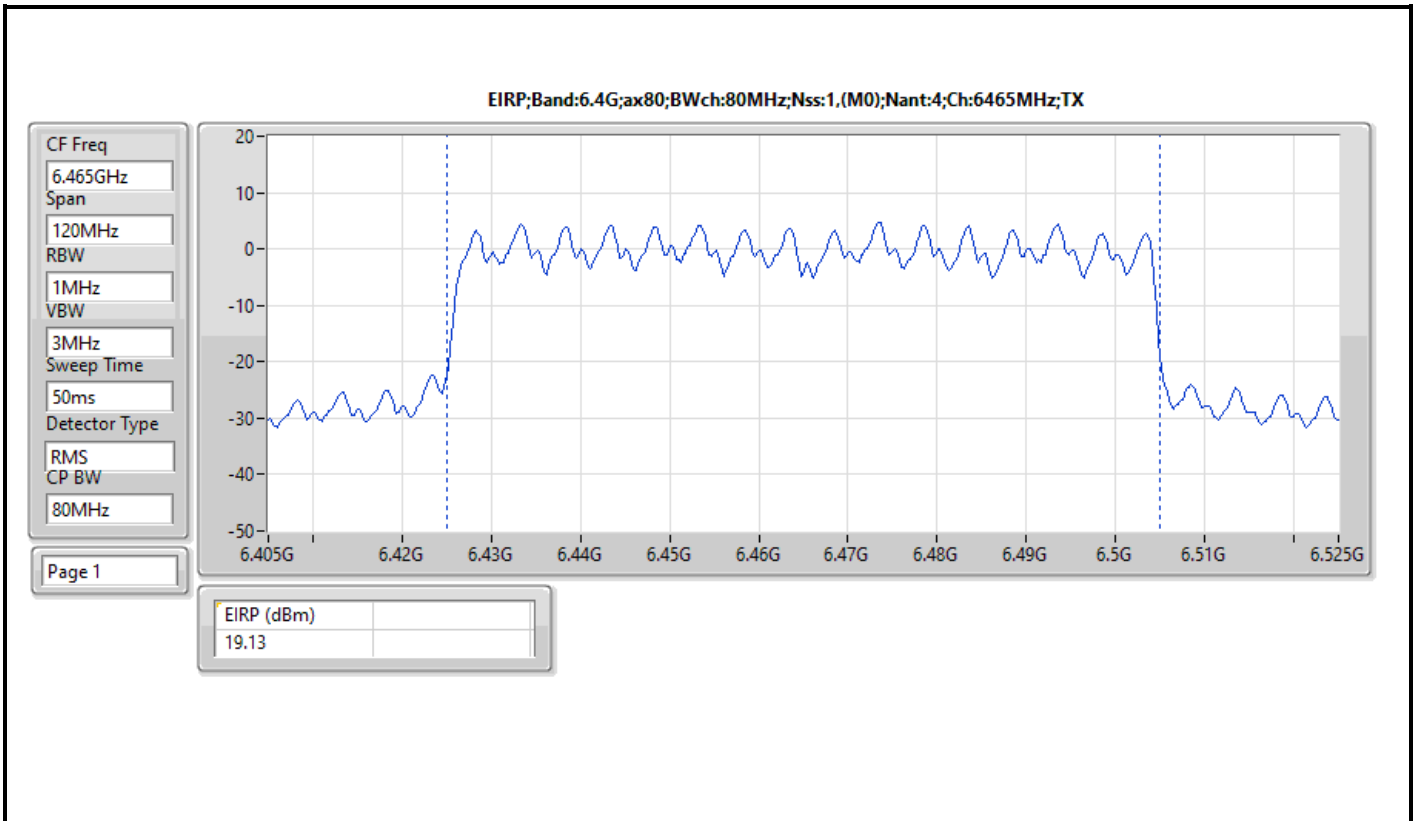


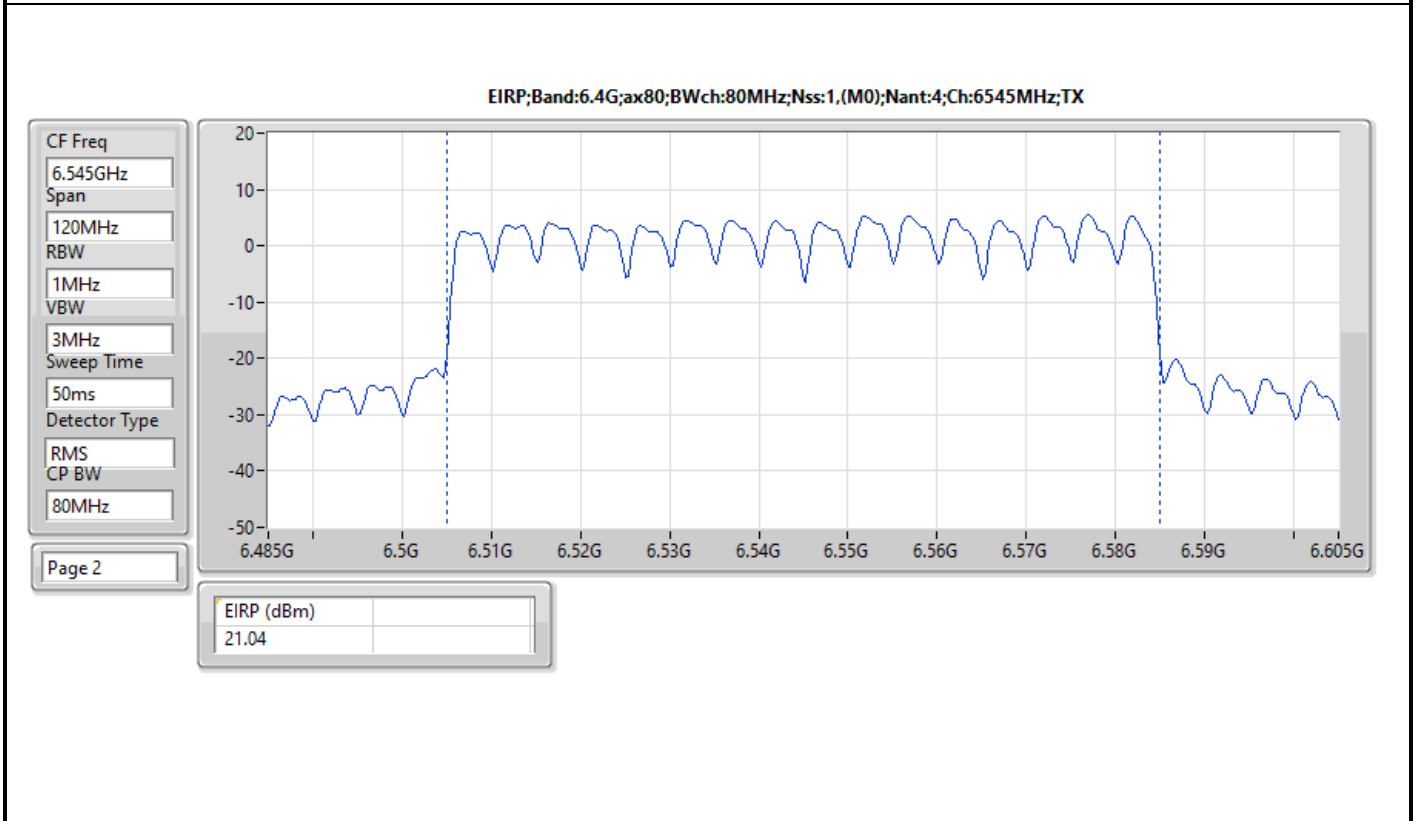
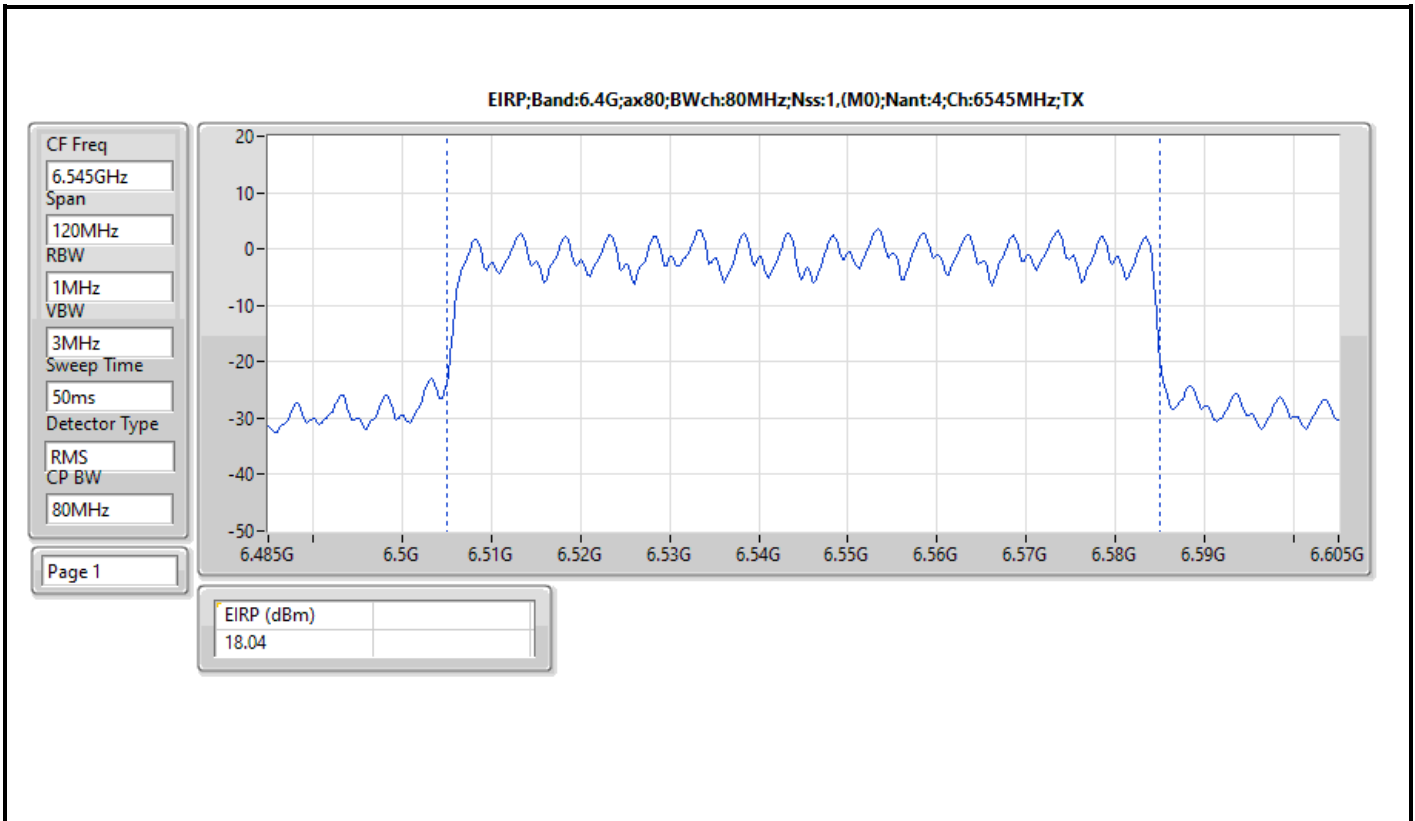


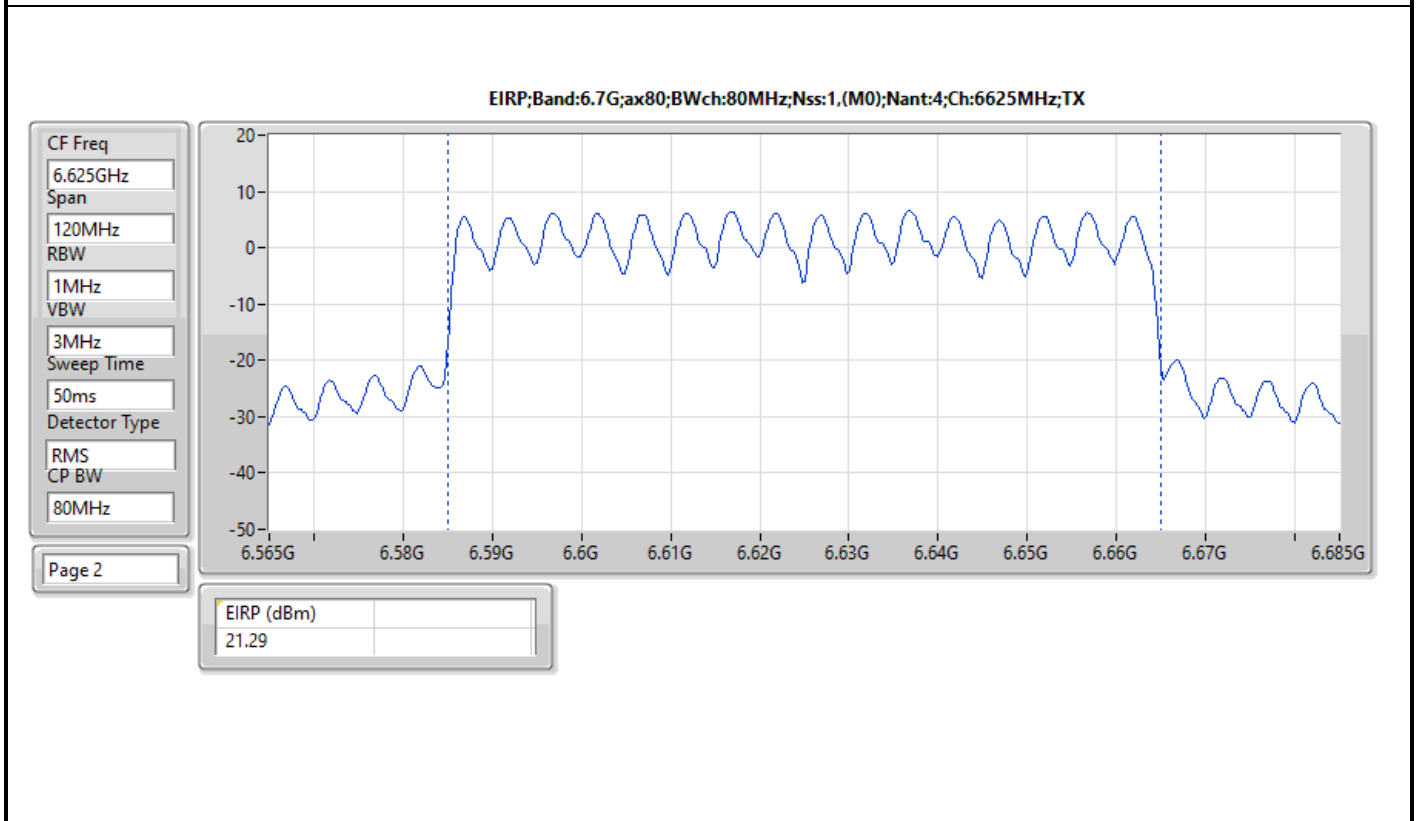
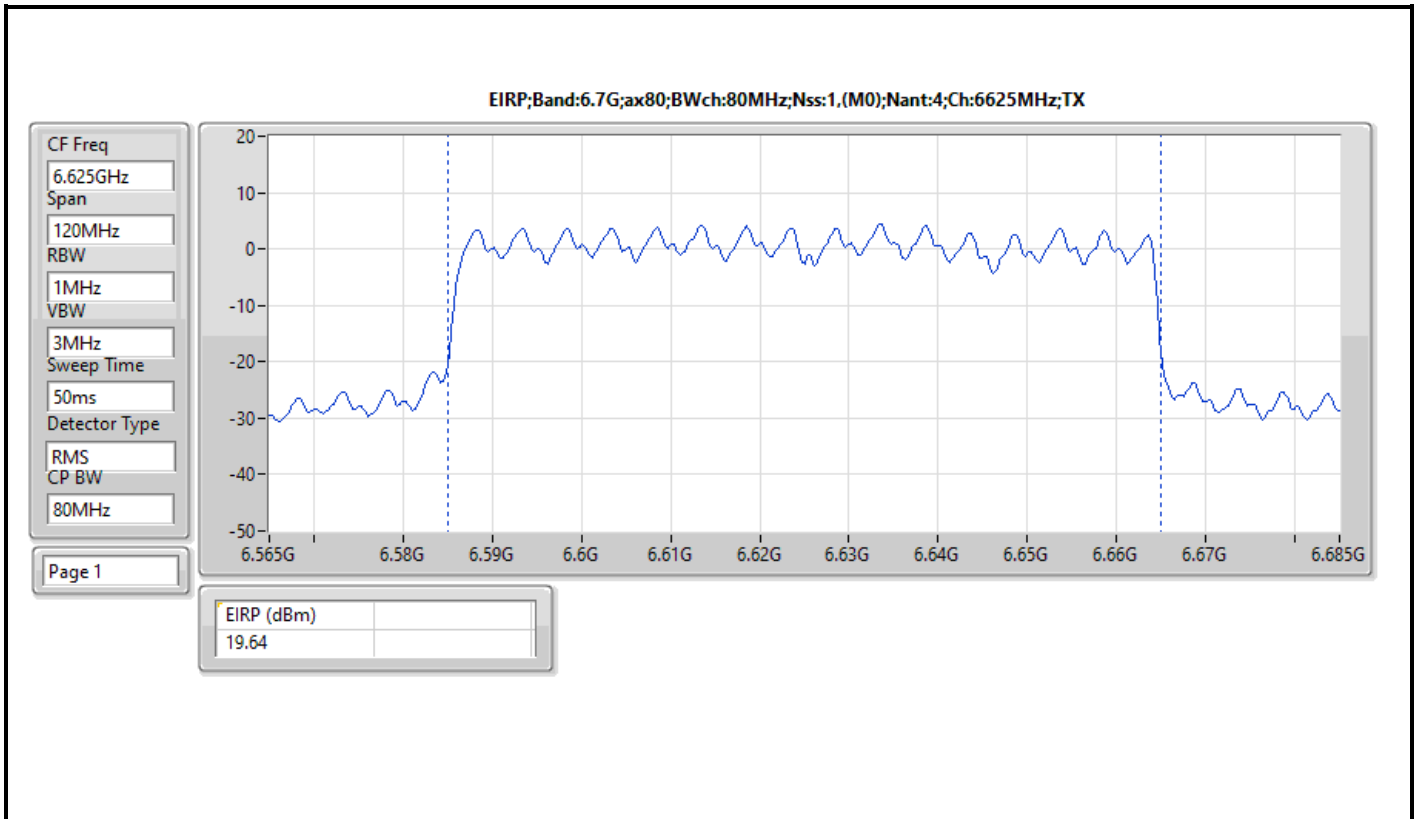


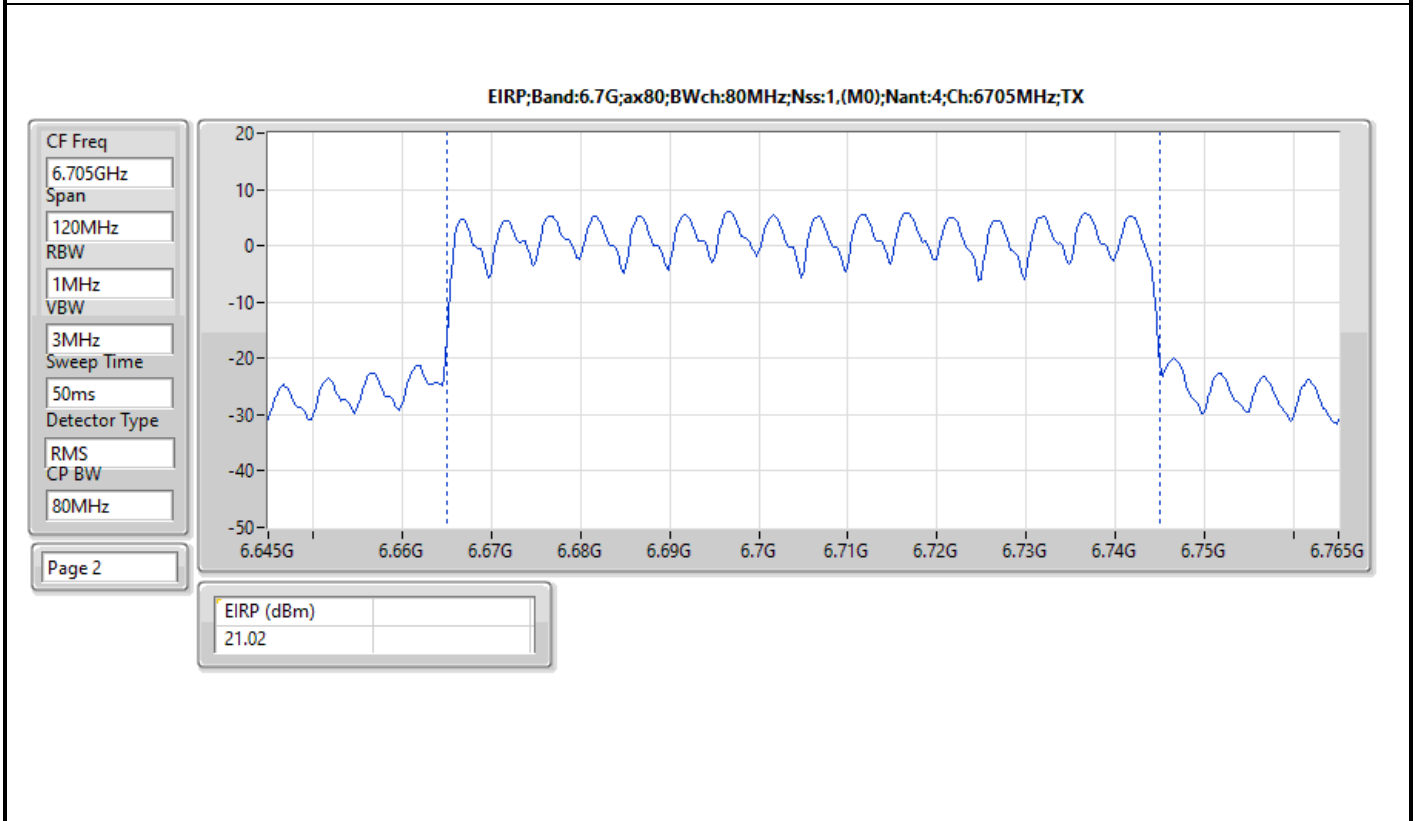
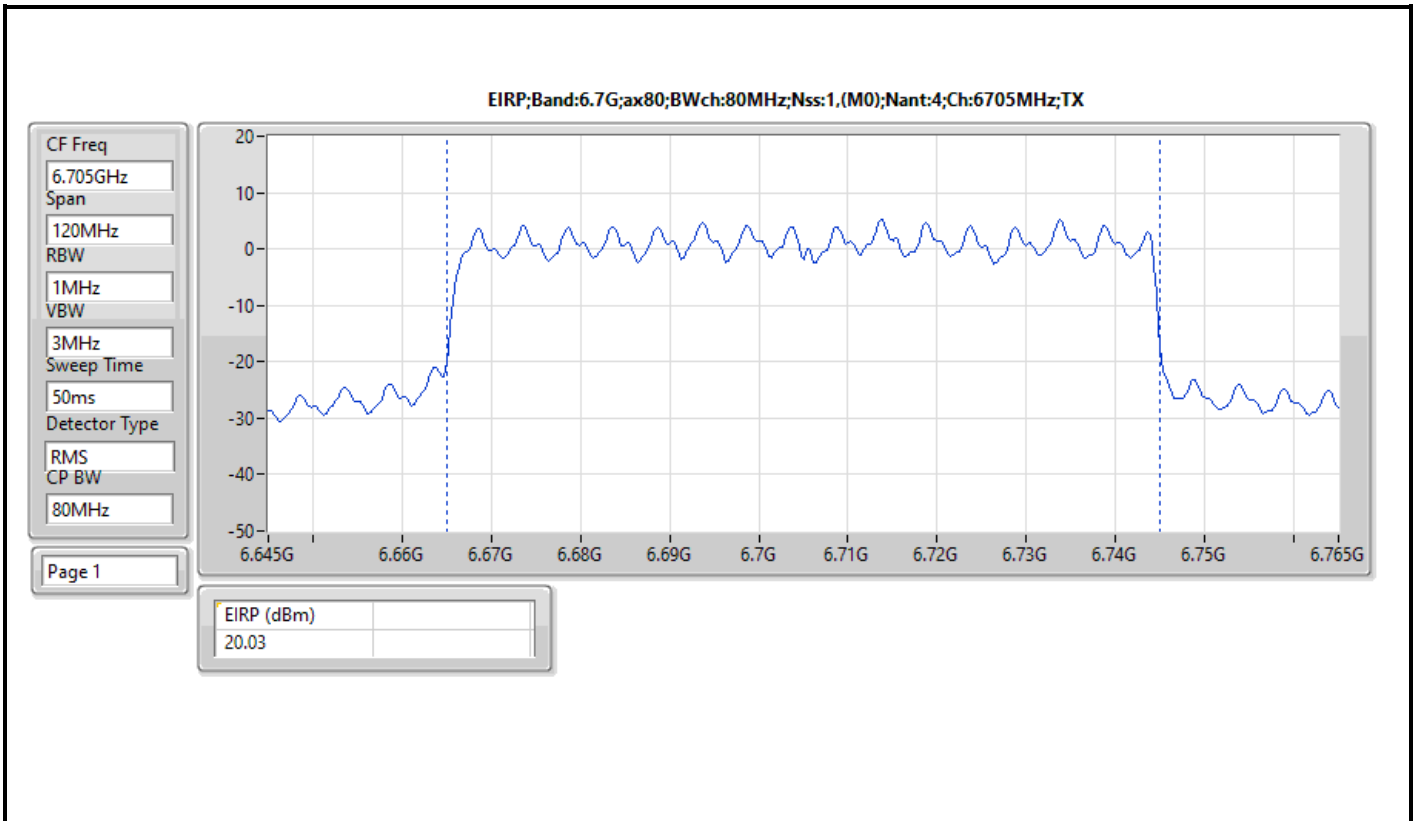


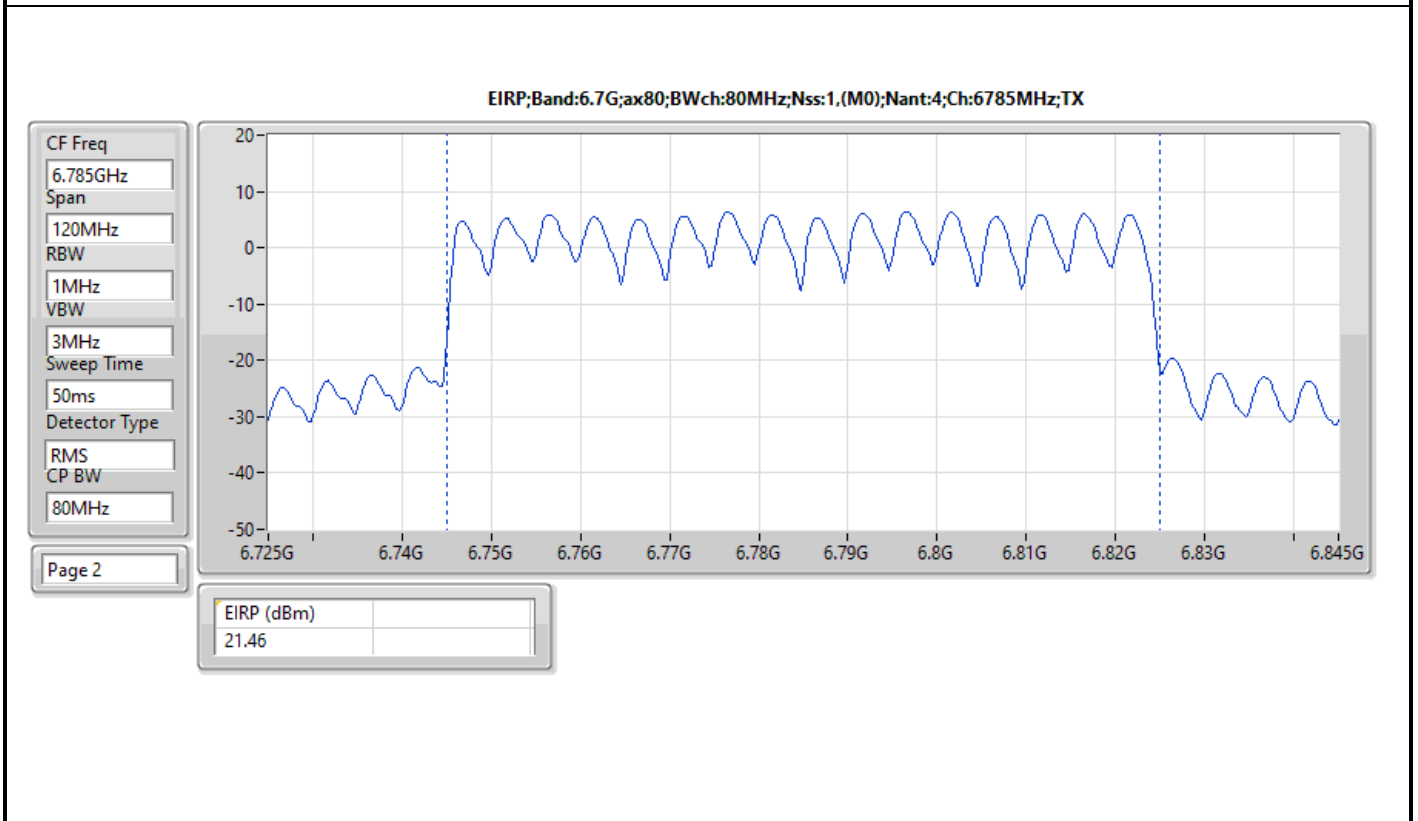
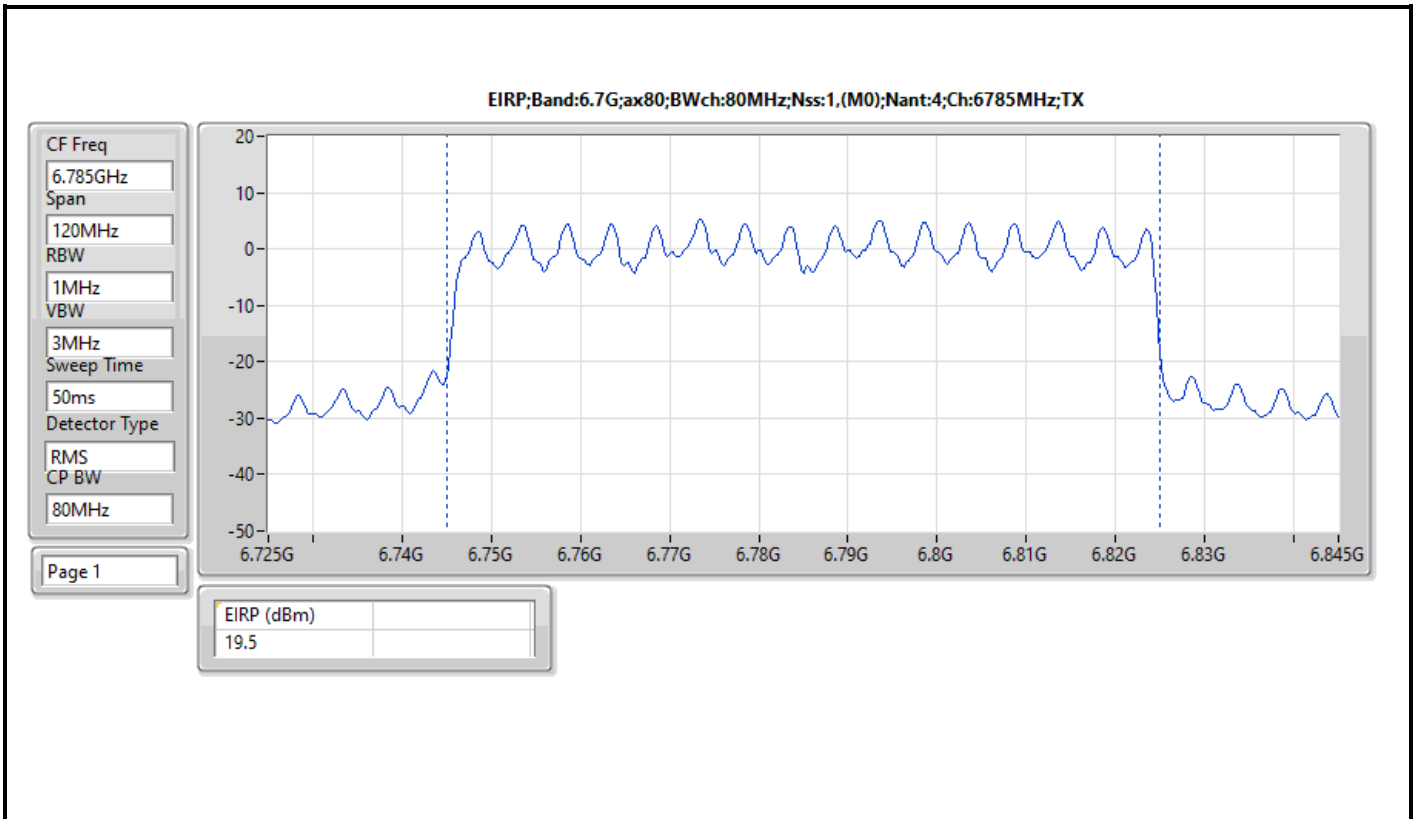


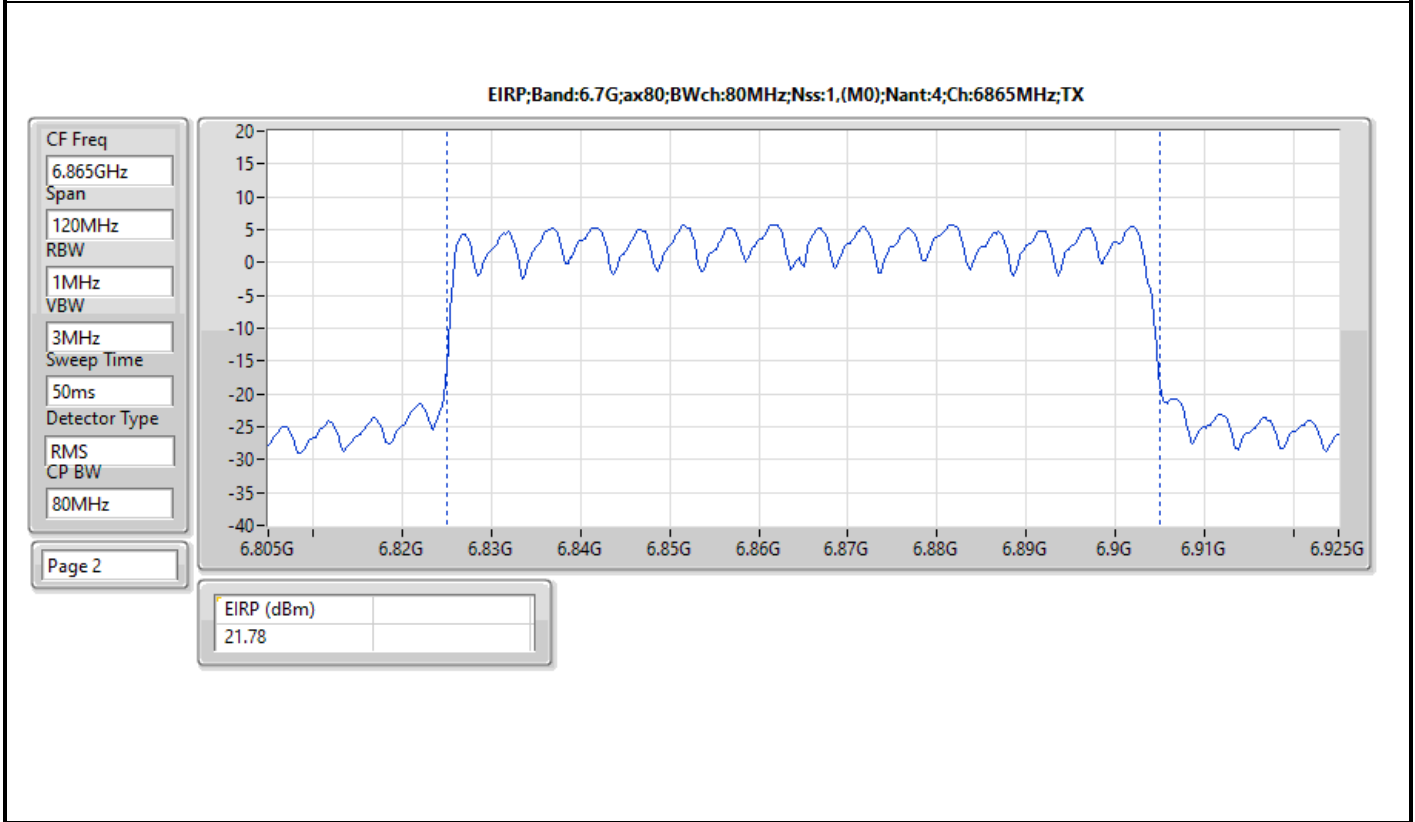
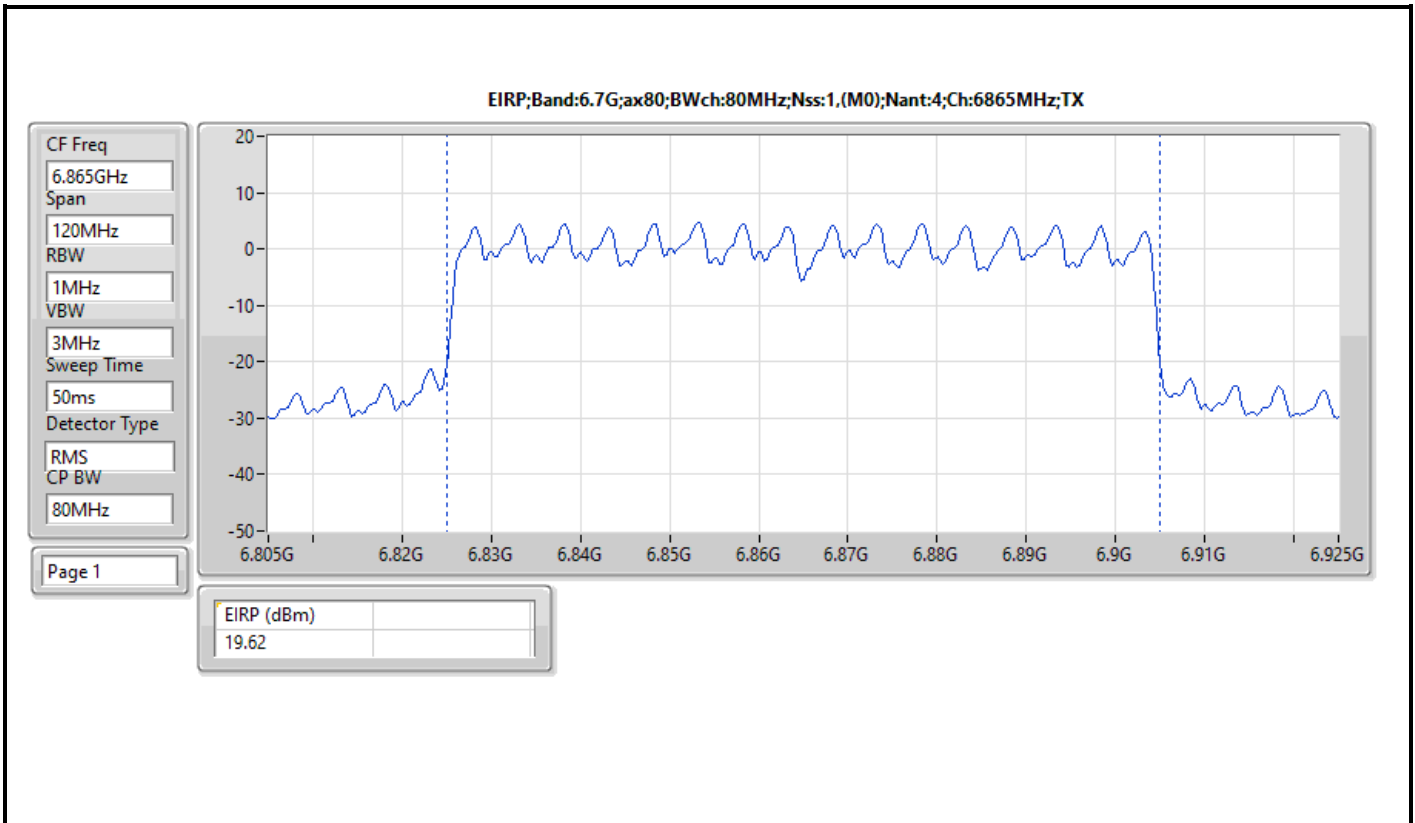


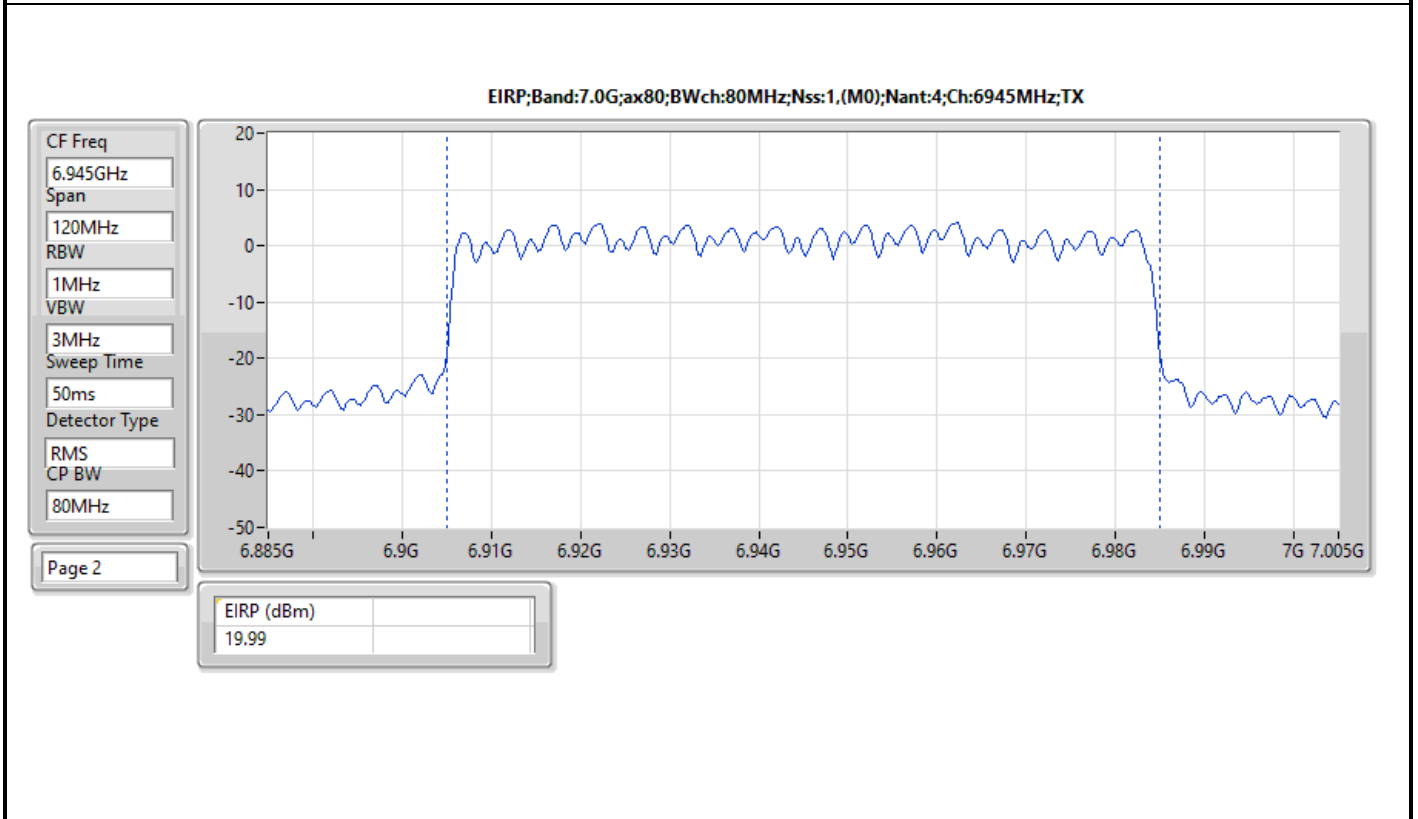
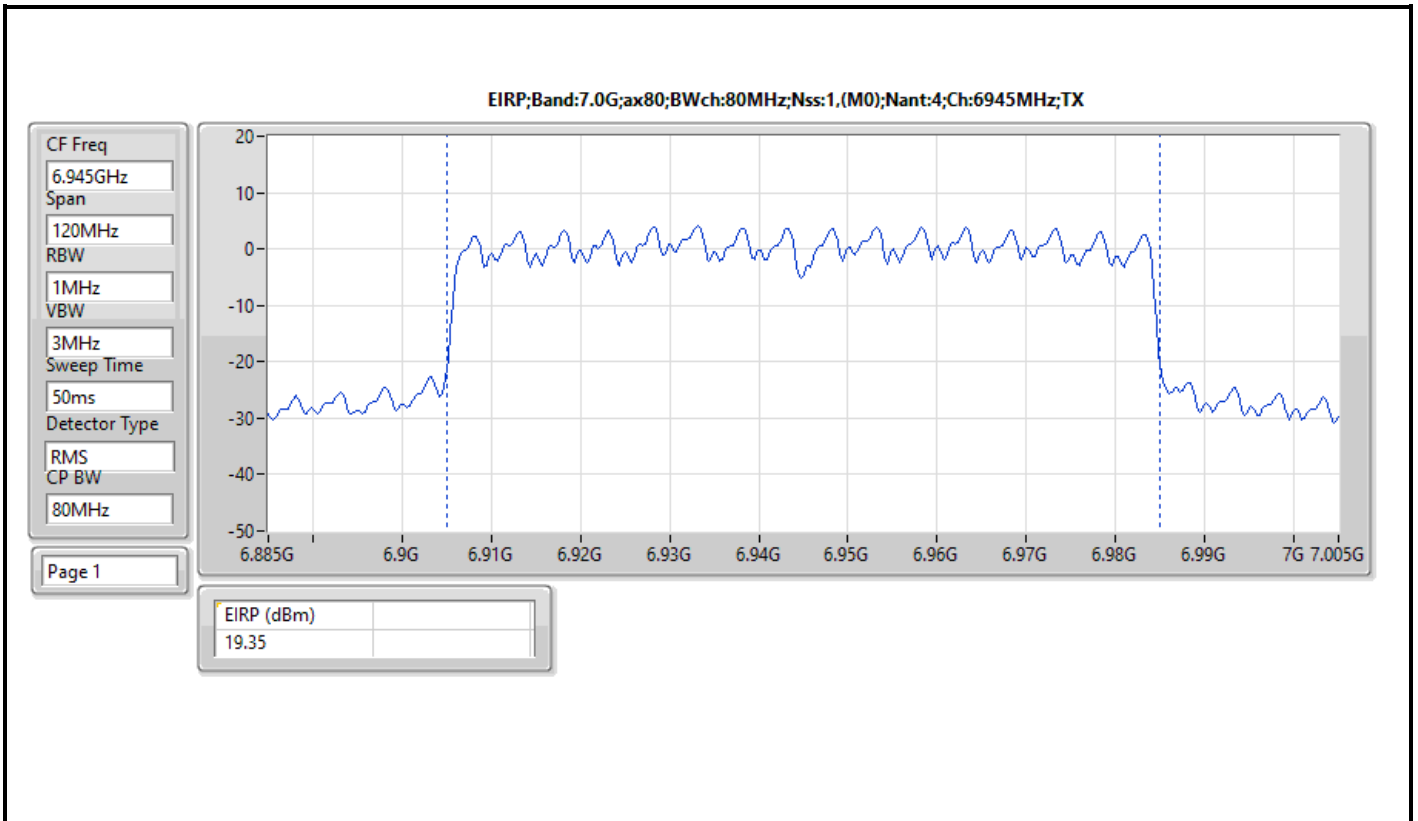


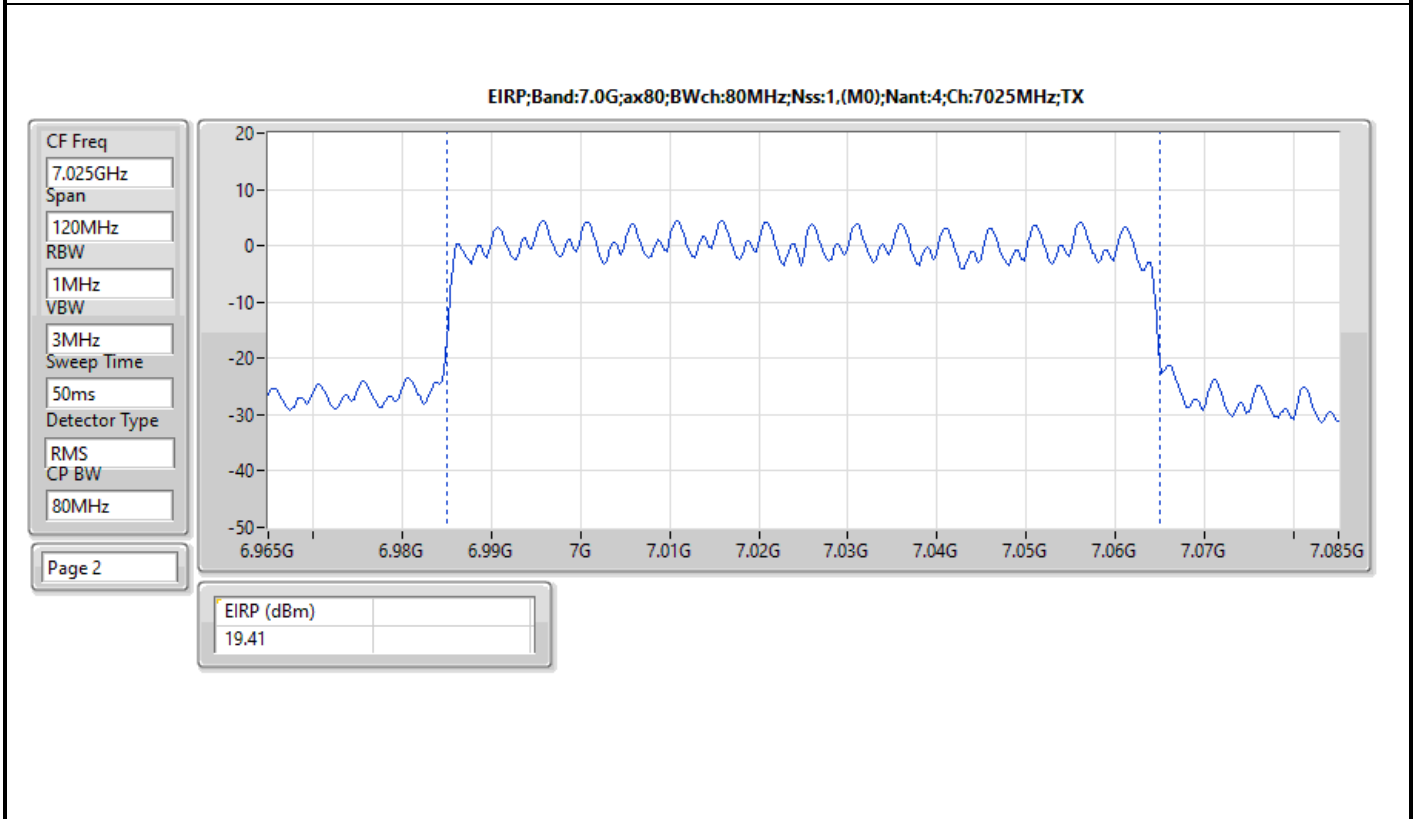
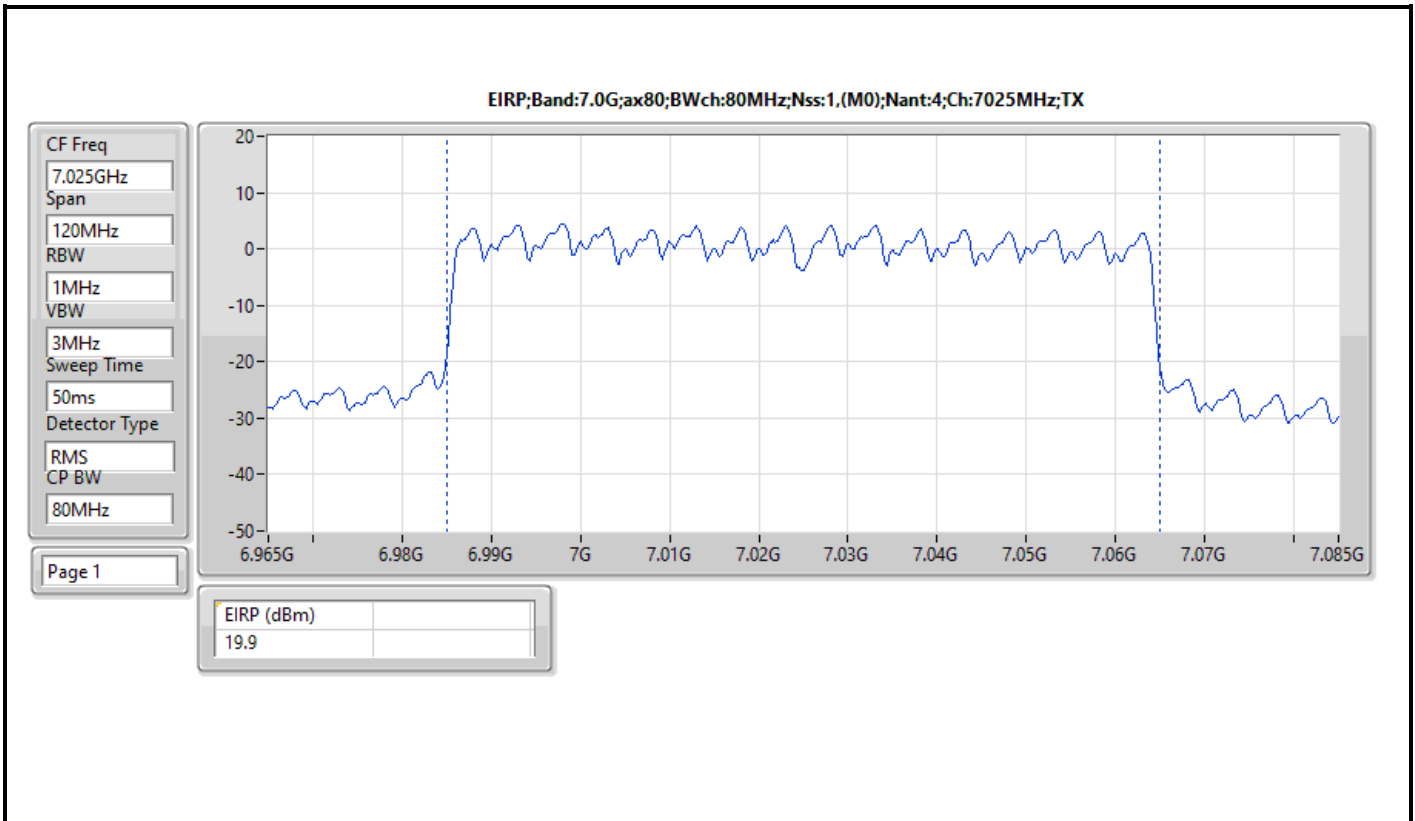


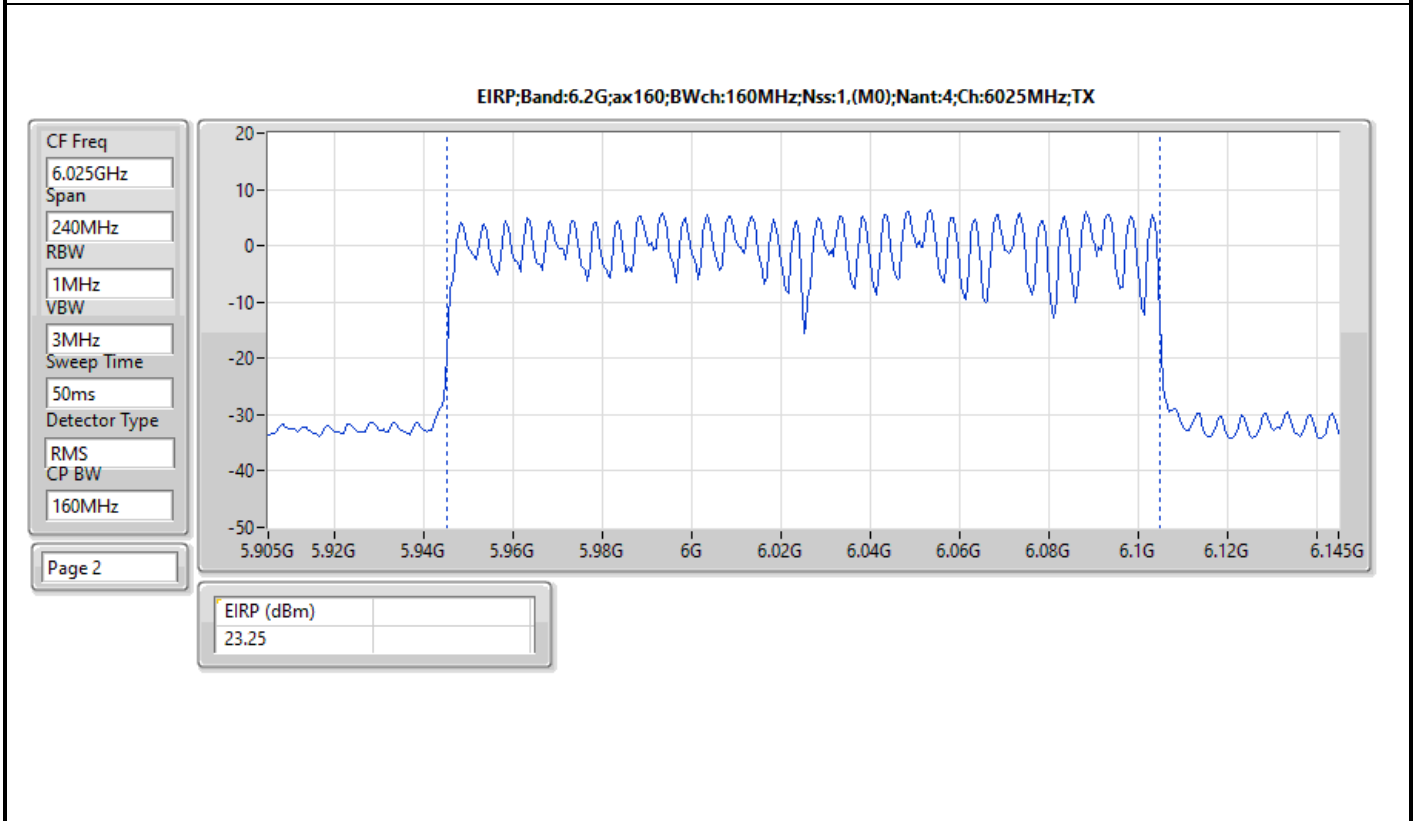
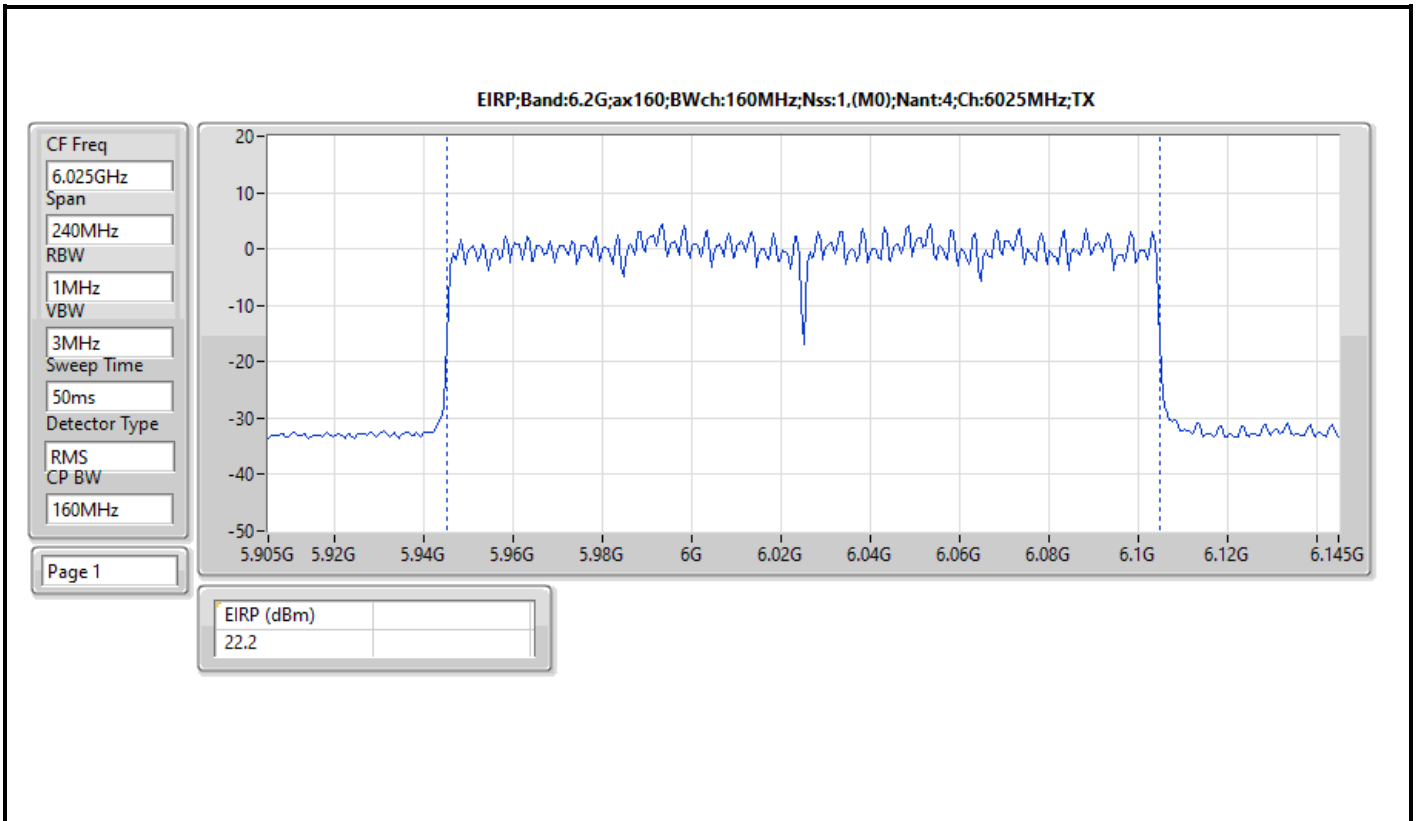


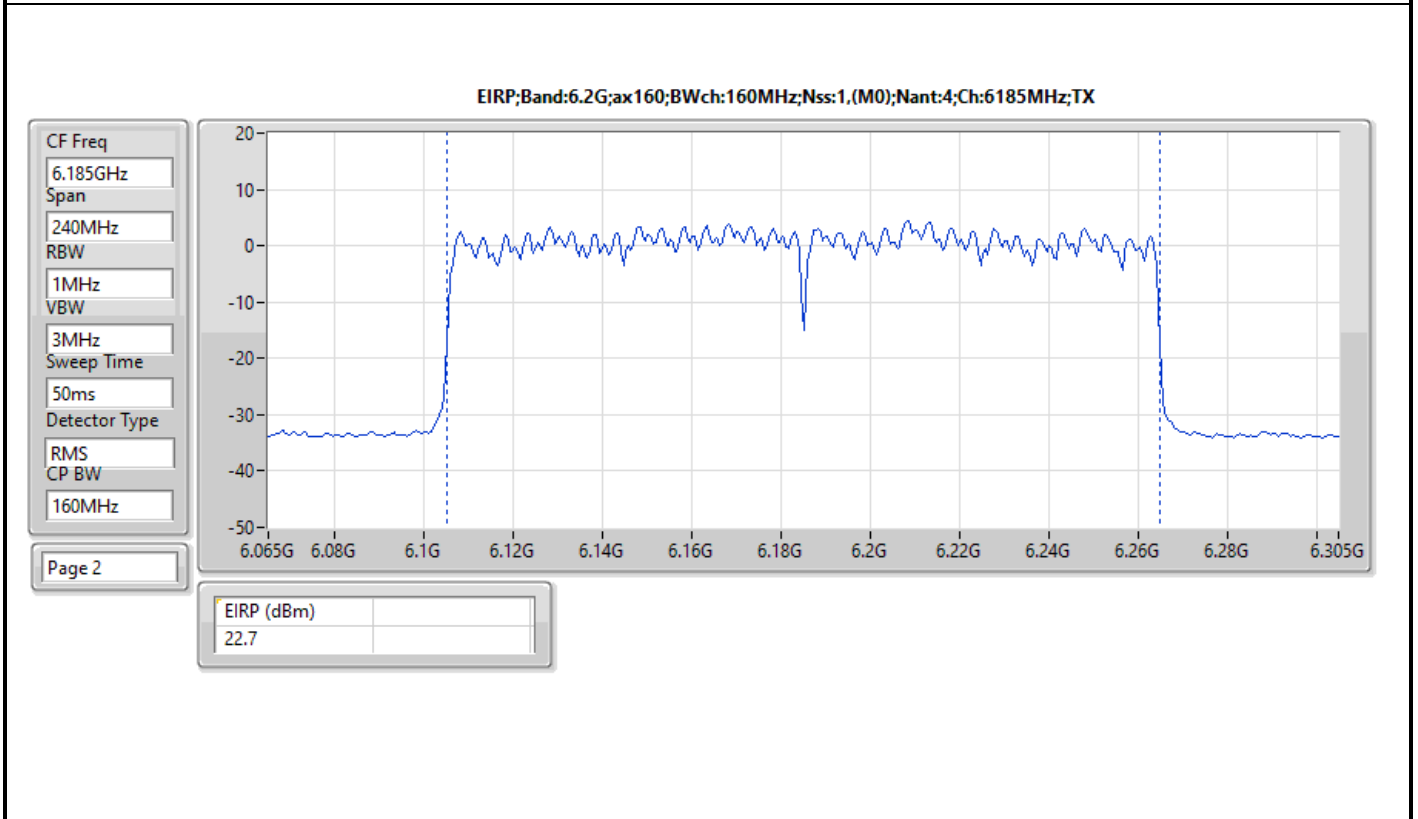
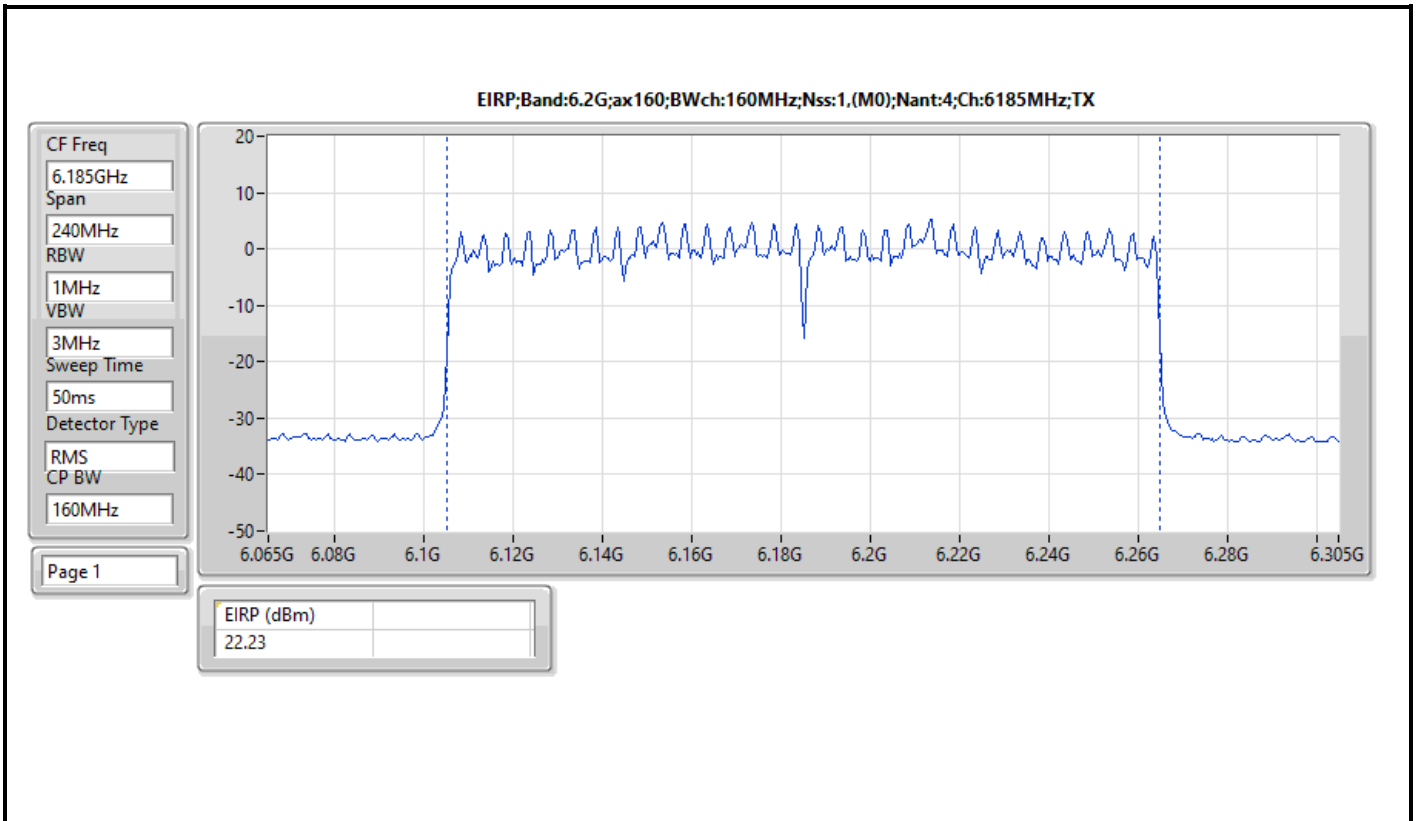


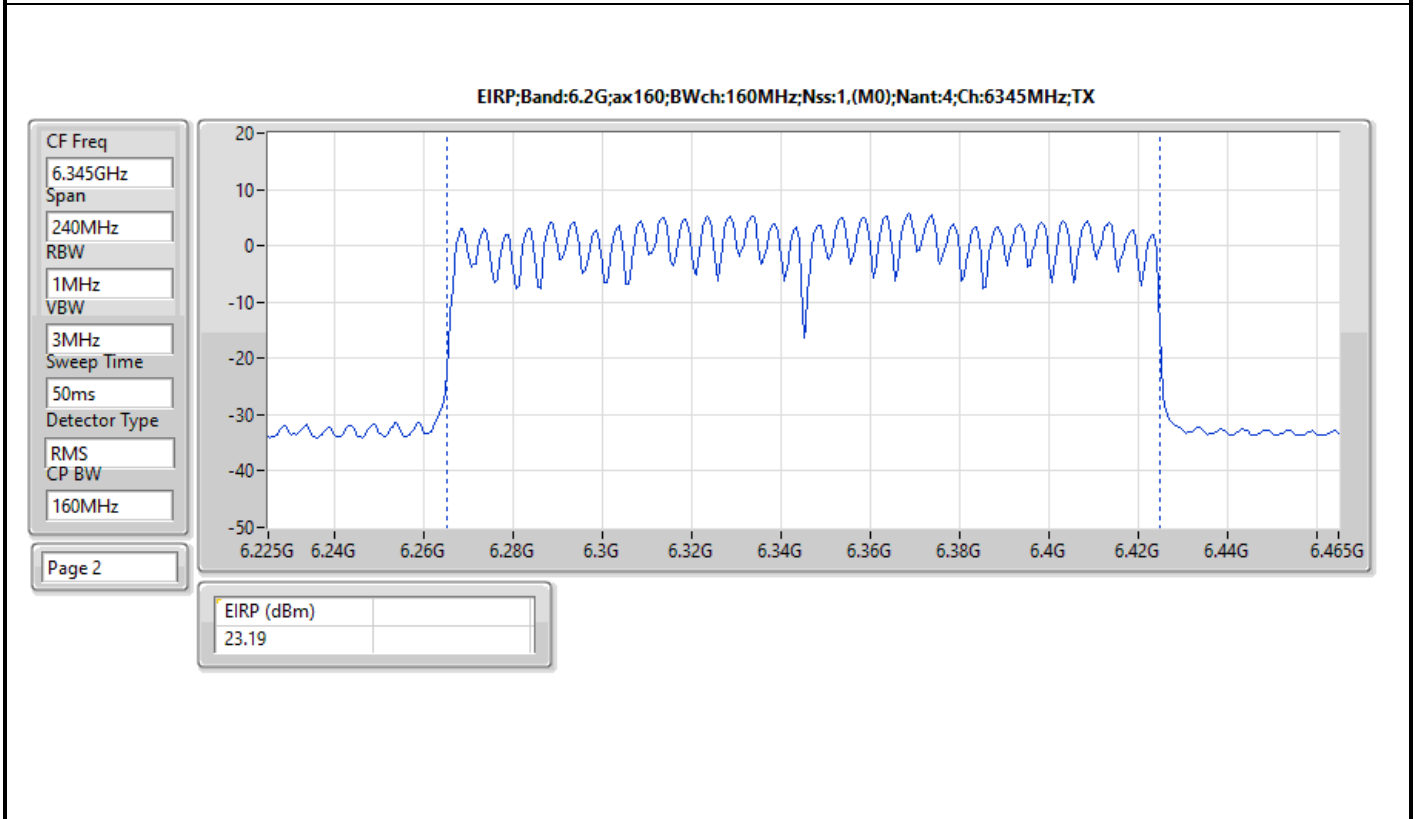
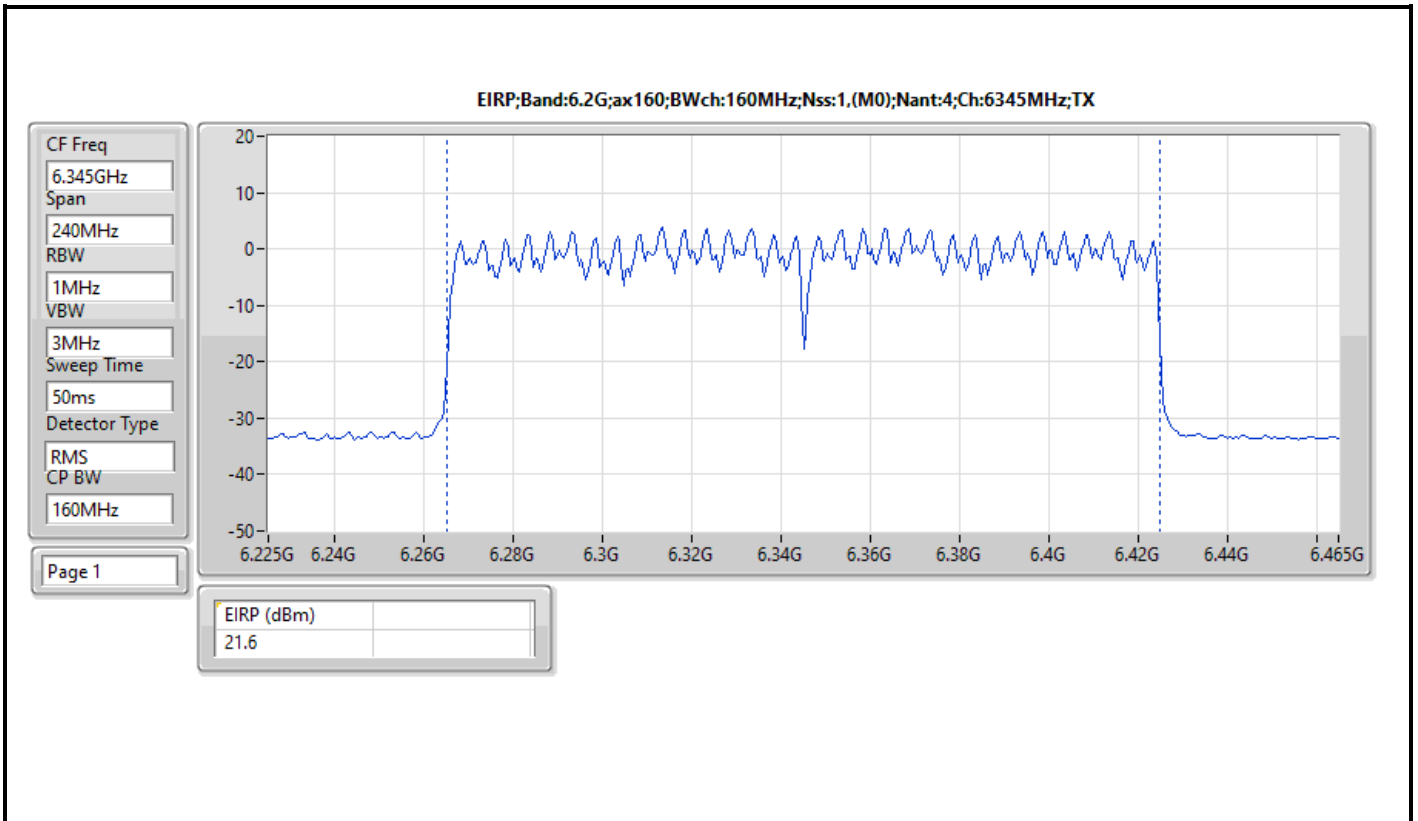


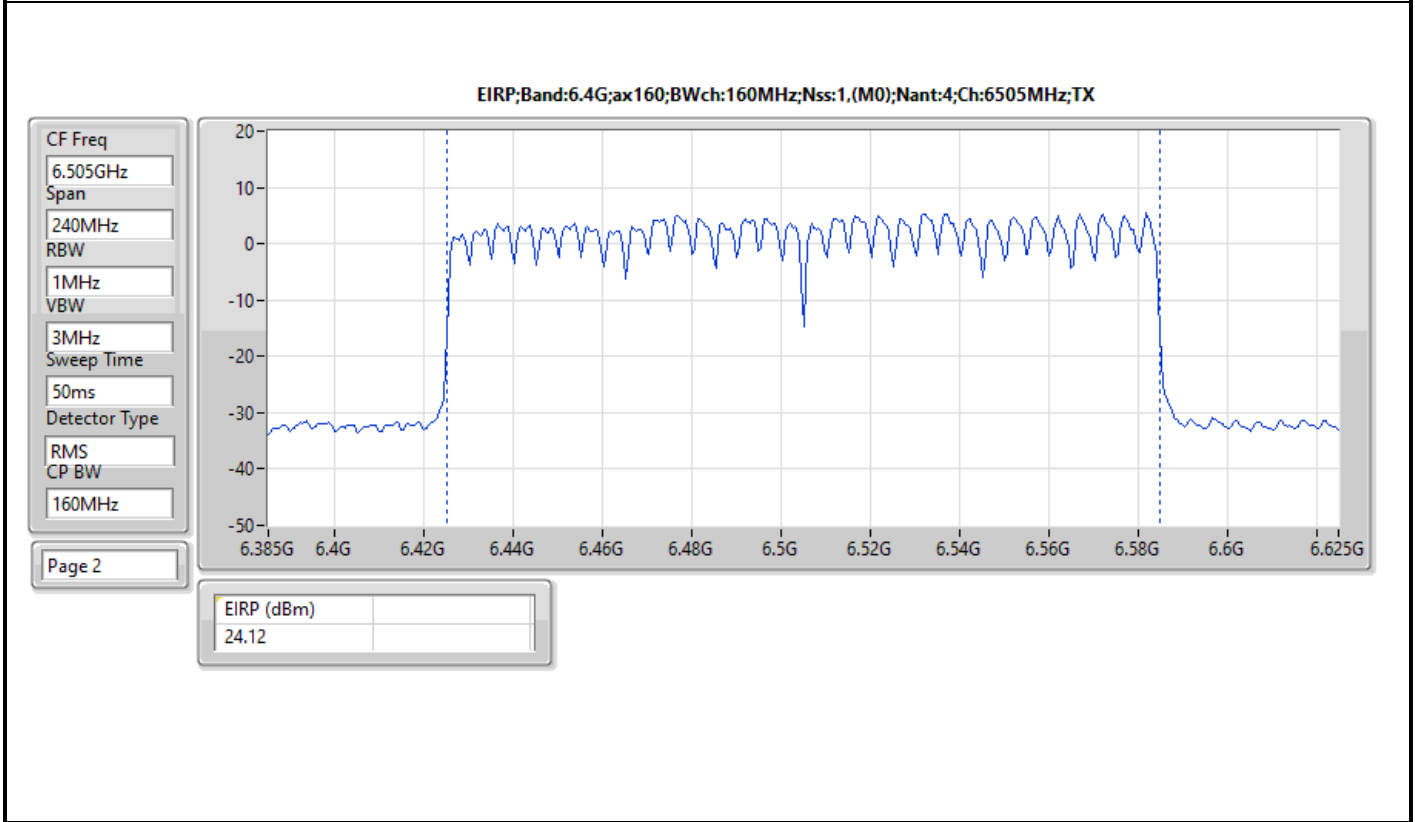
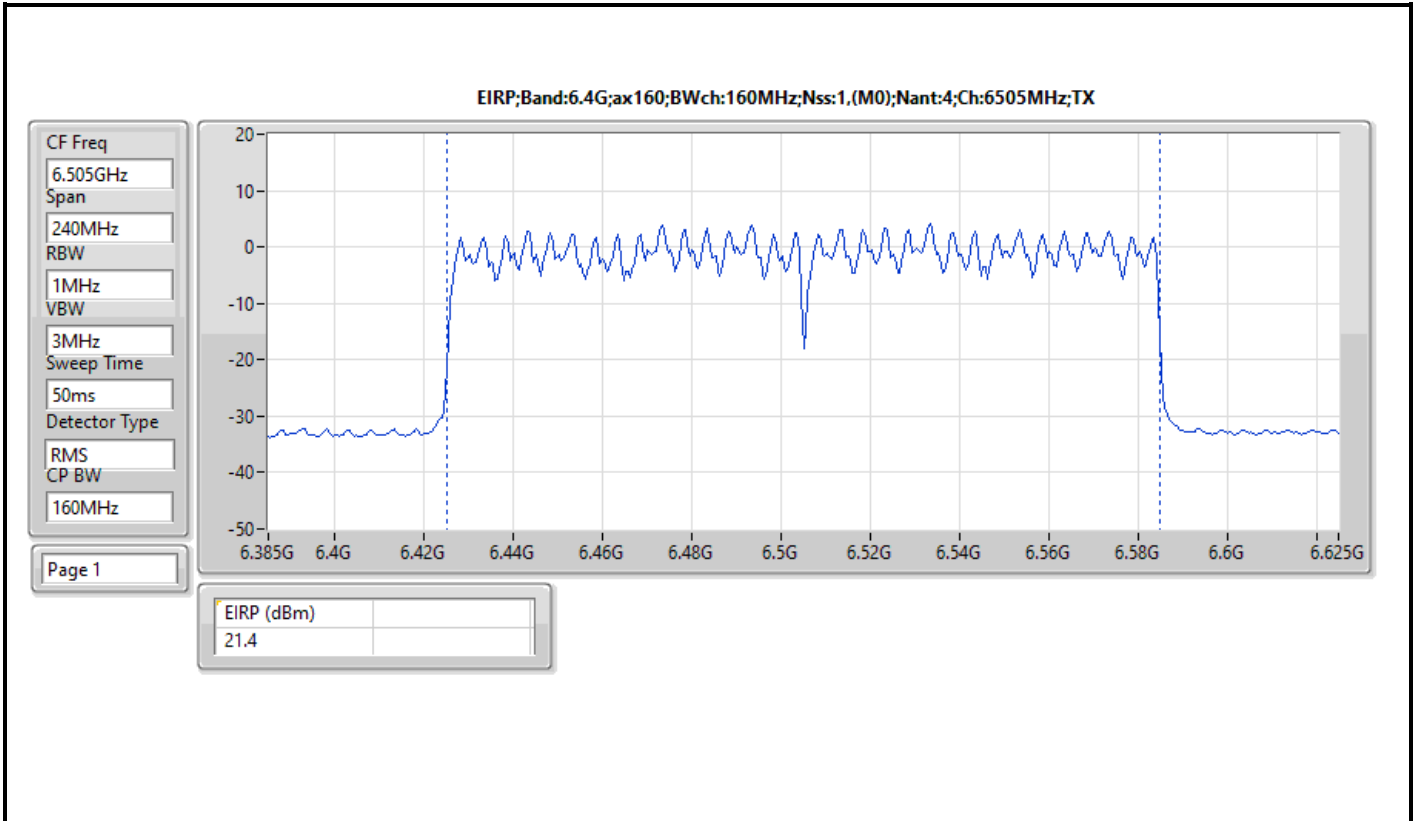


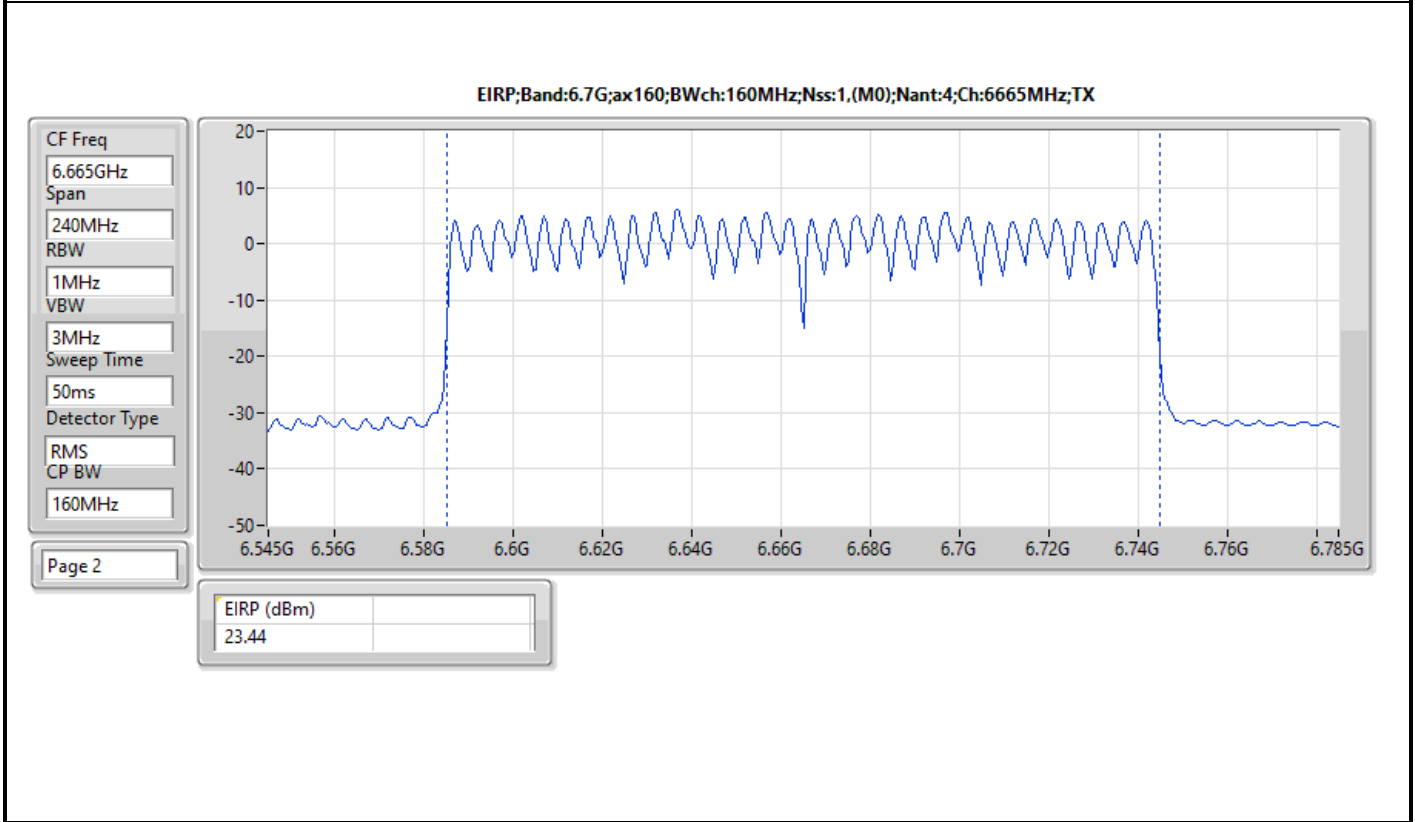
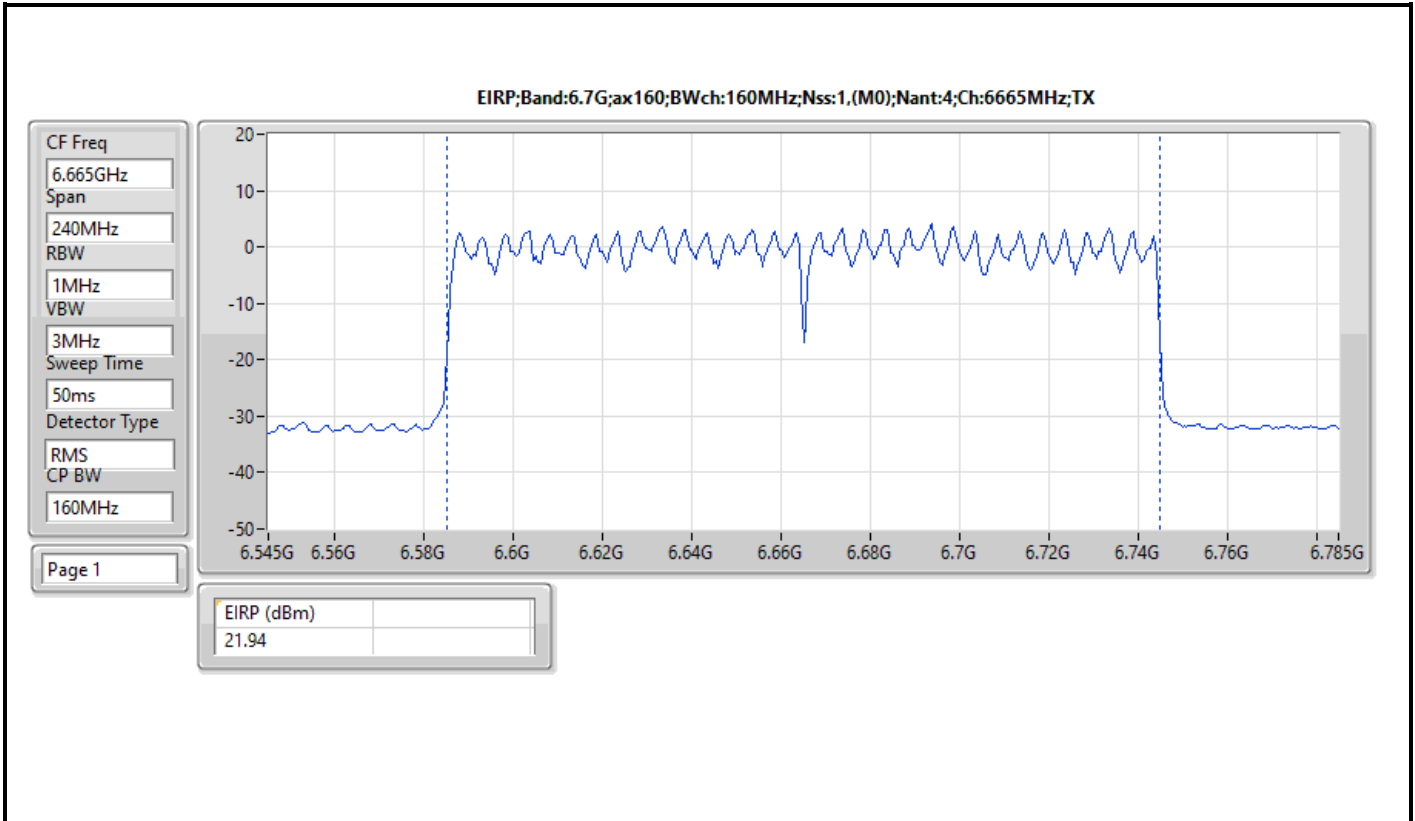


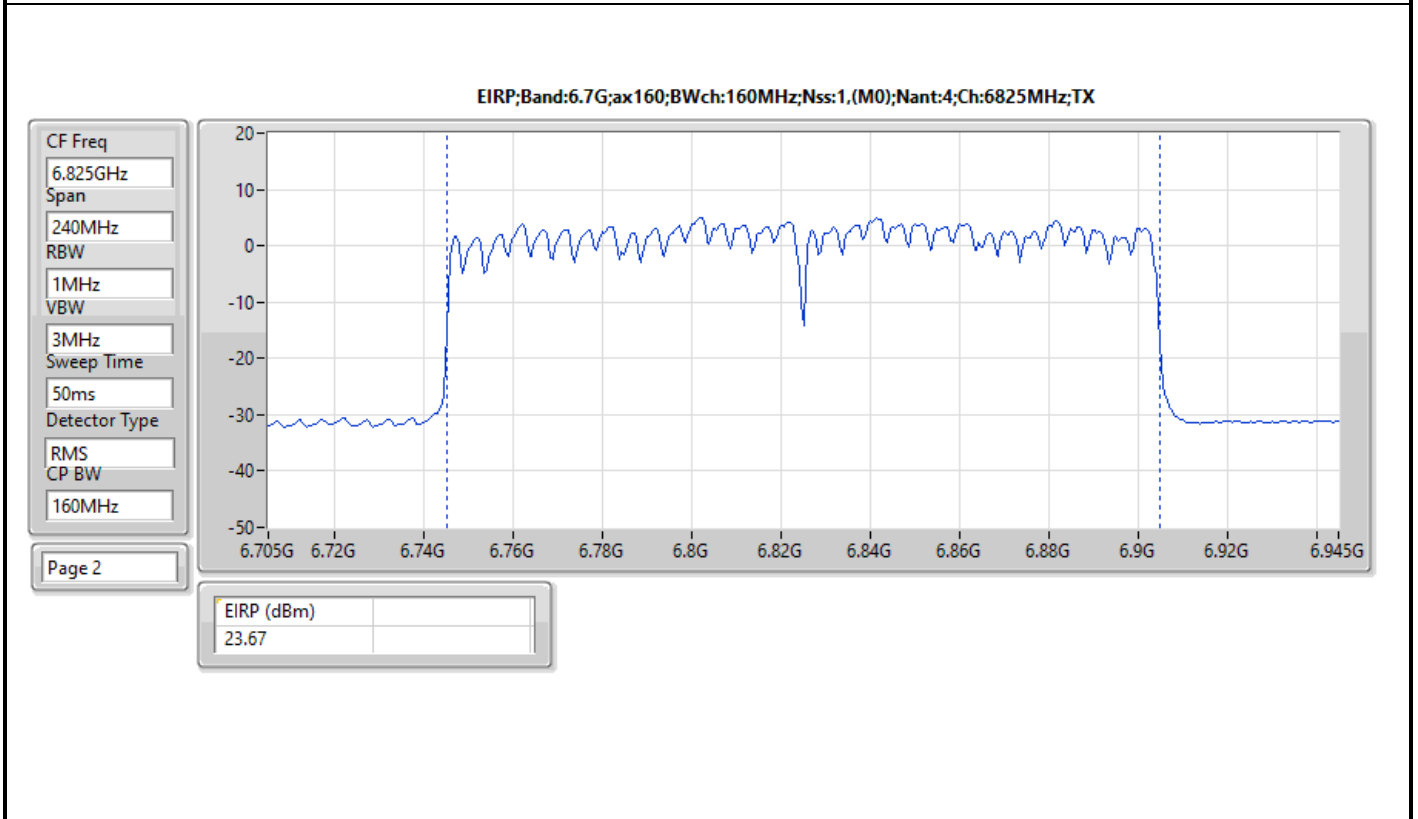
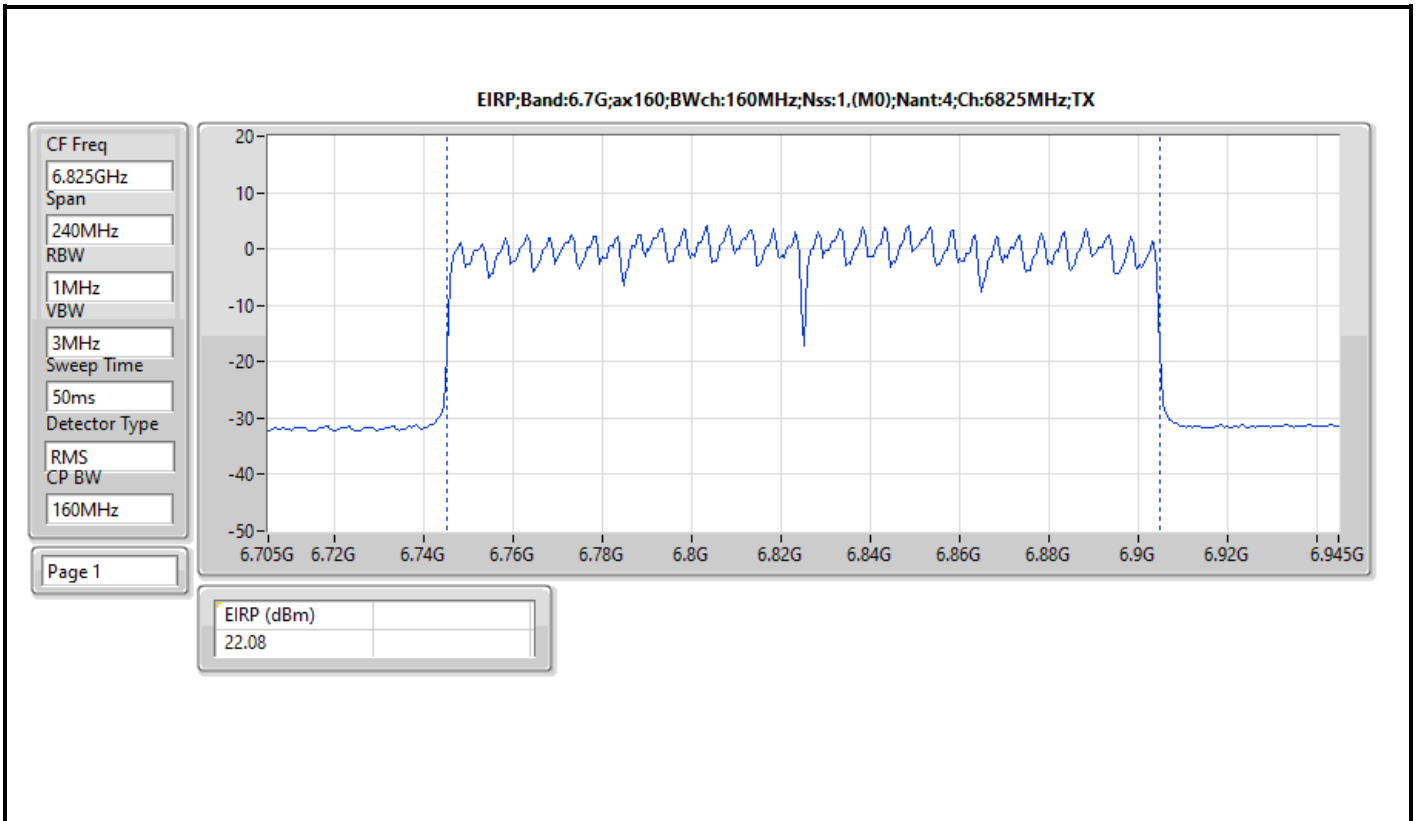


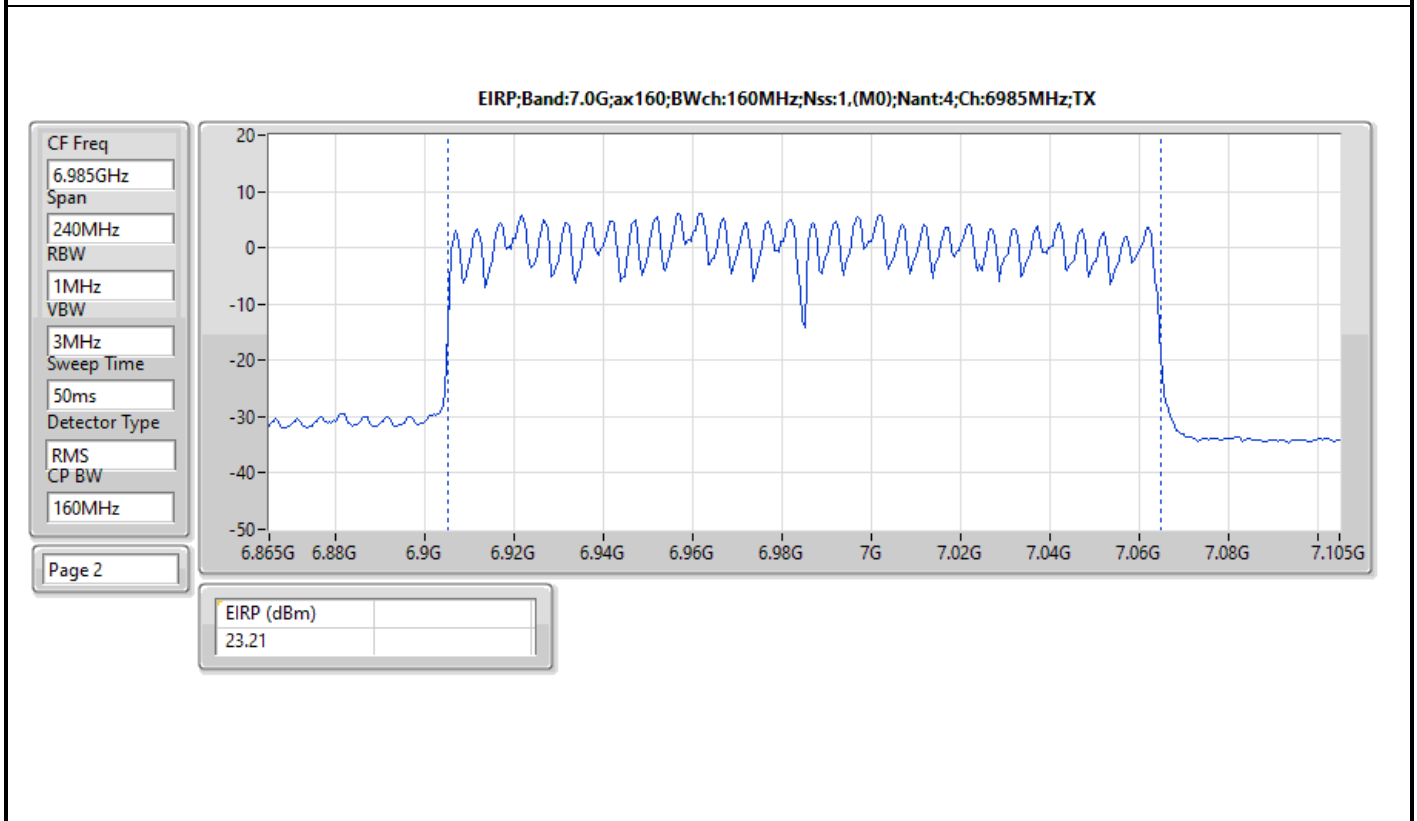
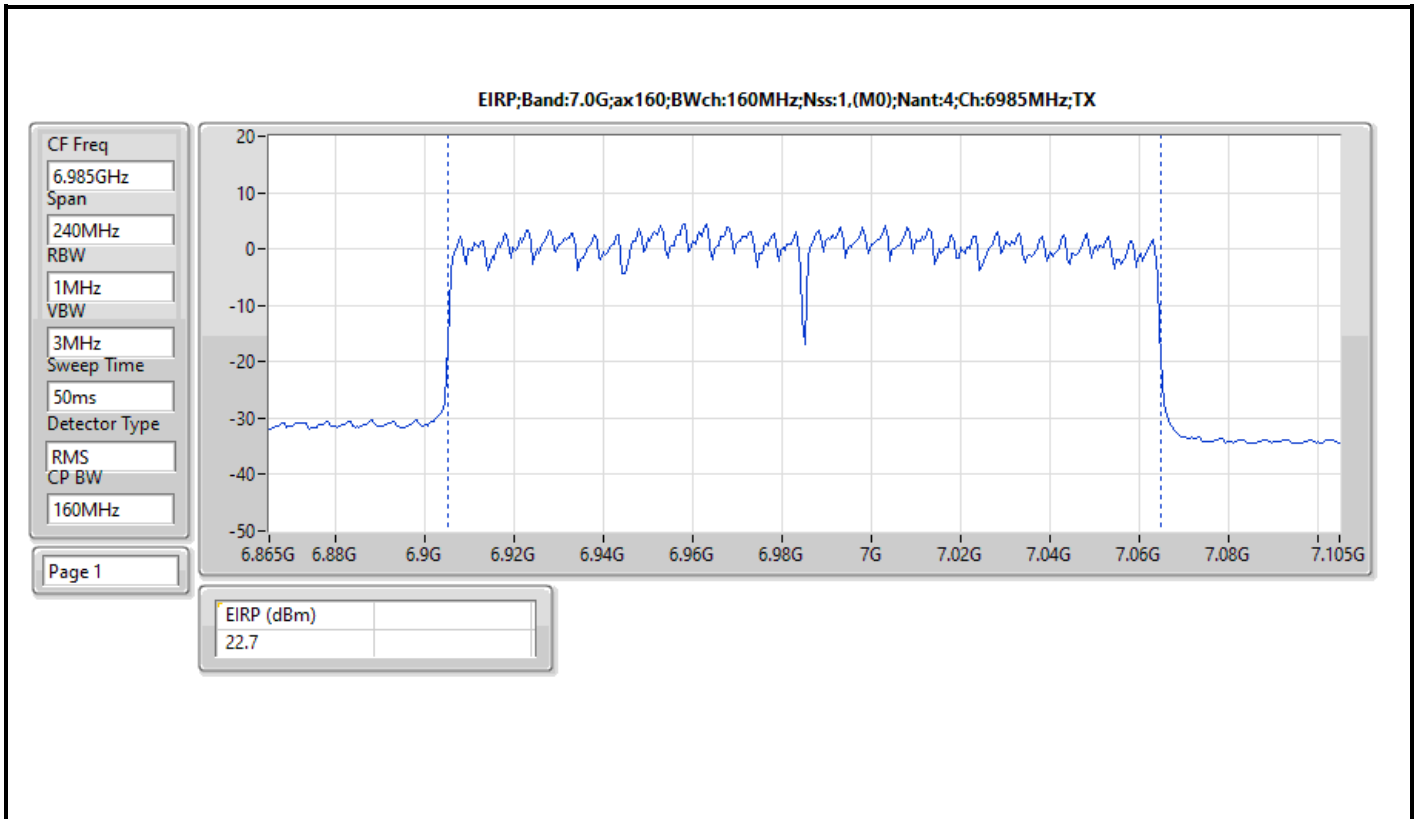














Summary

Mode	EIRP (dBm)
5.925-6.425GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	17.10
802.11ax HEW40_Nss1,(MCS0)_4TX	19.89
802.11ax HEW80_Nss1,(MCS0)_4TX	21.56
802.11ax HEW160_Nss1,(MCS0)_4TX	23.82
6.425-6.525GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	17.46
802.11ax HEW40_Nss1,(MCS0)_4TX	19.92
802.11ax HEW80_Nss1,(MCS0)_4TX	21.60
802.11ax HEW160_Nss1,(MCS0)_4TX	22.92
6.525-6.875GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	17.90
802.11ax HEW40_Nss1,(MCS0)_4TX	21.58
802.11ax HEW80_Nss1,(MCS0)_4TX	22.61
802.11ax HEW160_Nss1,(MCS0)_4TX	24.27
6.875-7.125GHz	-
802.11ax HEW20_Nss1,(MCS0)_4TX	17.07
802.11ax HEW40_Nss1,(MCS0)_4TX	20.55
802.11ax HEW80_Nss1,(MCS0)_4TX	21.71
802.11ax HEW160_Nss1,(MCS0)_4TX	23.25



Result

Mode	Result	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-
5955MHz	Pass	17.10	30.00
6175MHz	Pass	15.97	30.00
6415MHz	Pass	15.61	30.00
6435MHz	Pass	15.85	30.00
6475MHz	Pass	17.46	30.00
6515MHz	Pass	15.61	30.00
6535MHz	Pass	16.79	30.00
6695MHz	Pass	17.47	30.00
6855MHz	Pass	17.57	30.00
6875MHz Straddle 6.525-6.875GHz	Pass	17.90	30.00
6895MHz	Pass	16.95	30.00
6995MHz	Pass	17.07	30.00
7095MHz	Pass	15.93	30.00
7115MHz	Pass	4.98	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-
5965MHz	Pass	18.90	30.00
6165MHz	Pass	19.89	30.00
6405MHz	Pass	19.33	30.00
6445MHz	Pass	19.65	30.00
6485MHz	Pass	19.92	30.00
6525MHz Straddle 6.425-6.525GHz	Pass	19.85	30.00
6565MHz	Pass	20.70	30.00
6685MHz	Pass	21.58	30.00
6845MHz	Pass	19.55	30.00
6885MHz Straddle 6.525-6.875GHz	Pass	19.93	30.00
6925MHz	Pass	20.55	30.00
7005MHz	Pass	19.47	30.00
7085MHz	Pass	19.14	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-
5985MHz	Pass	21.31	30.00
6145MHz	Pass	21.39	30.00
6385MHz	Pass	21.56	30.00
6465MHz	Pass	20.27	30.00
6545MHz Straddle 6.425-6.525GHz	Pass	21.60	30.00
6625MHz	Pass	21.36	30.00
6705MHz	Pass	22.61	30.00
6785MHz	Pass	22.04	30.00
6865MHz Straddle 6.525-6.875GHz	Pass	21.99	30.00
6945MHz	Pass	21.00	30.00
7025MHz	Pass	21.71	30.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-
6025MHz	Pass	23.03	30.00
6185MHz	Pass	23.82	30.00
6345MHz	Pass	23.57	30.00
6505MHz Straddle 6.425-6.525GHz	Pass	22.92	30.00
6665MHz	Pass	23.63	30.00
6825MHz Straddle 6.525-6.875GHz	Pass	24.27	30.00
6985MHz	Pass	23.25	30.00

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

