SPORTON LAB. RADIO TEST REPORT

Report No. : FR230414-02



# **RADIO TEST REPORT**

FCC ID	: 2ABLKU6HE
Equipment	: GigaPro™ GPR2032H
Brand Name	: Calix
Model Name	: GPR2032H
Applicant	: Calix Inc. 1035 N. McDowell Blvd. Petaluma, CA94954 U.S.A.
Manufacturer	: Calix Inc. 1035 N. McDowell Blvd. Petaluma, CA94954 U.S.A.
Standard	: 47 CFR FCC Part 15.407

The product was received on Oct. 25, 2023, and testing was started from Oct. 28, 2023 and completed on Dec 22, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

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

TEL : 886-3-656-9065 FAX : 886-3-656-9085 Report Template No.: CB-A12\_5 Ver1.1 Page Number: 1 of 33Issued Date: Jul. 17, 2024Report Version: 01



## **Table of Contents**

Histor	y of this test report	3					
Summ	ary of Test Result	4					
1	General Description	5					
1.1 1.2 1.3 1.4	Information Applicable Standards Testing Location Information Measurement Uncertainty	9 9					
2	Test Configuration of EUT	10					
2.1 2.2 2.3 2.4 2.5 2.6	Test Channel Mode The Worst Case Measurement Configuration EUT Operation during Test Accessories Support Equipment Test Setup Diagram	11 13 13 14					
3	Transmitter Test Result	18					
3.1 3.2 3.3 3.4 3.5	AC Power-line Conducted Emissions Emission Bandwidth Maximum Equivalent Isotopically Radiated Power (E.I.R.P.) Peak Power Spectral Density (E.I.R.P.). Unwanted Emissions	20 21 24					
4	Test Equipment and Calibration Data	32					
Appen	idix A. Test Results of AC Power-line Conducted Emissions						
Appen	idix B. Test Results of Emission Bandwidth						
Appen	dix C. Test Results of Maximum Equivalent Isotopically Radiated Power (E.I.R.P.)						
Appen	Appendix D. Test Results of Peak Power Spectral Density (E.I.R.P.)						
Appen	Appendix E. Test Results of Unwanted Emissions						
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Appendix F. Test Photos

Photographs of EUT v01



## History of this test report

Report No.	Version	Description	Issued Date
FR230414-02	01	Initial issue of report	Jul. 17, 2024

Standard

Power AP w/o test

N/A



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

## **Summary of Test Result**

#### **Conformity Assessment Condition:**

**Contention-Based Protocol** 

15.407(d)

- 1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- 2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

#### **Disclaimer:**

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen Report Producer: Vicky Huang



#### **General Description** 1

#### 1.1 Information

#### **RF General Information** 1.1.1

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925-6425	ax (HEW20)	5955-6415	1-93 [24]
6525-6875		6535-6855	117-181 [17]
5925-6425	ax (HEW40)	5965-6405	3-91 [12]
6525-6875		6565-6845	123-179 [8]
5925-6425	ax (HEW80)	5985-6385	7-87 [6]
6525-6875		6625-6785	135-167 [3]
5925-6425	ax (HEW160)	6025-6345	15-79 [3]
6525-6875		6665	143 [1]

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	802.11ax HEW20	20	2TX
5.925-6.425GHz	802.11ax HEW20-BF	20	2TX
5.925-6.425GHz	802.11ax HEW40	40	2TX
5.925-6.425GHz	802.11ax HEW40-BF	40	2TX
5.925-6.425GHz	802.11ax HEW80	80	2TX
5.925-6.425GHz	802.11ax HEW80-BF	80	2TX
5.925-6.425GHz	802.11ax HEW160	160	2TX
5.925-6.425GHz	802.11ax HEW160-BF	160	2TX
6.525-6.875GHz	802.11ax HEW20	20	2TX
6.525-6.875GHz	802.11ax HEW20-BF	20	2TX
6.525-6.875GHz	802.11ax HEW40	40	2TX
6.525-6.875GHz	802.11ax HEW40-BF	40	2TX
6.525-6.875GHz	802.11ax HEW80	80	2TX
6.525-6.875GHz	802.11ax HEW80-BF	80	2TX
6.525-6.875GHz	802.11ax HEW160	160	2TX
6.525-6.875GHz	802.11ax HEW160-BF	160	2TX

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

		Port						0	
Ant.	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Remark
1	2	2	-	Galtronics	60-2891-03-2	PCB antenna	I-PEX		
2	1	1	-	Galtronics	60-2914-03-1	PCB antenna	I-PEX	Noto1	
3	-	-	1	Hong Bo	290-50254	PCB Antenna	I-PEX	Note1	WLAN Ant.
4	-	-	2	Hong Bo	290-50255	PCB Antenna	I-PEX		

		Port						0	
Ant.	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	Brand	Model Name	Antenna Type	Connector	Gain (dBic)	Remark
5	-	-	-	u-blox	SAM-M8Q	Ceramic Patch Antenna	N/A	3	GPS Ant.

Note 1:

#### <Antenna Gain>

		Port			Antenna Gain (dBi)					
Ant.	WLAN	WLAN	WLAN	WLAN		WLAN 5GHz			WLAN 6GHz	
	2.4GHz	5GHz	6GHz	2.4GHz	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 5	UNII 7
1	2	2	-	5.62	1.36	2.03	2.64	1.84	-	-
2	1	1	-	4.97	2.22	2.77	4.1	3.65	-	-
3	-	-	1	-	-	-	-	-	5.2	5.6
4	-	-	2	-	-	-	-	-	7.5	5.8

#### < Directional Gain>

Directional Gain (dBi)								
Item	WLAN 2.4GHz		WLAN 5GHz					
		UNII 1	UNII 2A	UNII 2C	UNII 3			
2T1S	6.88	4.15	4.15	5.81	5.74			

Note 2: The above information (except 2.4GHz/5GHz gain) was declared by manufacturer.

For 2.4GHz/5GHz: The directional gain is measured which follows the procedure of KDB 662911 D03. **WLAN 2.4GHz function>** 

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

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

Pot 1, Port 2 could transmit/receive simultaneously.

#### <WLAN 5GHz function>

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

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

Pot 1, Port 2 could transmit/receive simultaneously.

#### <WLAN 6GHz function>

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

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

Pot 1, Port 2 could transmit/receive simultaneously.



#### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF	0.873	0.59	1.78m	1k
802.11ax HEW40-BF	0.876	0.57	1.78m	1k
802.11ax HEW80-BF	0.917	0.38	1.908m	1k
802.11ax HEW160-BF	0.928	0.32	1.904m	1k

Note:

• DC is Duty Cycle.

DCF is Duty Cycle Factor.

#### 1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE					
	$\boxtimes$	With beamforming		Without beamforming		
Beamforming Function	The product has beamforming function for 11n/VHT/ax in 2.4GHz, 11n/ac/ax in 5GHz and ax in 6GHz.					
		Indoor Access Point		Subordinate		
Device Type		Indoor Client	$\boxtimes$	Standard Power Access Point		
Device Type		Dual Client		Standard Client		
		Fixed Client				
Condition of EUT		Indoor	$\boxtimes$	Outdoor		
Channel Puncturing Function		Supported	$\boxtimes$	Unsupported		
Support RU	$\boxtimes$	Full RU		Partial RU		
Test Software Version	DOS[ver 6.1.7601]					

Note: The above information was declared by manufacturer.

#### 1.1.5 Table for EUT supports functions

Function	Support Band
AP	2.4GHz / 5GHz UNII 1~UNII 3 / 6GHz UNII 5, UNII 7
Extender	2.4GHz / 5GHz UNII 1~UNII 3

Note: The above information was declared by manufacturer.



### 1.1.6 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: 230414 Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Changing the Firmware Version to "22.4.500"	
from "13725.5.5".	After testing, this change is a Class I change.
2. Changing the design for the digital board.	
3. Changing equipment name to "GigaPro™ GPR2032H"	It does not offect the test results
from "GigaPro GPR2032H"	It does not affect the test results.
4. Adding 6GHz UNII 5 and UNII 7 (5925~6425 MHz,	All test items.
6525~6875 MHz) for this device.	All lest lients.



### **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 v02r01
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

### **1.3 Testing Location Information**

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	KJ Chang	20.2~21.3 / 63~69	Oct. 28, 2023~ Nov. 24, 2023
Radiated Below 1G	10CH01-CB	Ryan Huang	18~19 / 49~50	Dec. 22, 2023
Radiated (E.I.R.P. Power/PSD/ above 1GHz)	03CH03-CB	Ederson Huang	22.7~23.8 / 56~59	Nov. 21, 2023~ Nov. 23, 2023
AC Conduction	CO01-CB	Gray Lee	20~21 / 50~51	Dec. 22, 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)	5.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%

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FAX : 886-3-656-9085

Report Template No.: CB-A12\_5 Ver1.1

Page Number: 9 of 33Issued Date: Jul. 17, 2024Report Version: 01



## 2 Test Configuration of EUT

## 2.1 Test Channel Mode

Mode
802.11ax HEW20-BF_Nss1,(MCS0)_2TX
5955MHz
6175MHz
6415MHz
6535MHz
6695MHz
6855MHz
802.11ax HEW40-BF_Nss1,(MCS0)_2TX
5965MHz
6165MHz
6405MHz
6565MHz
6685MHz
6845MHz
802.11ax HEW80-BF_Nss1,(MCS0)_2TX
5985MHz
6145MHz
6385MHz
6625MHz
6705MHz
6785MHz
802.11ax HEW160-BF_Nss1,(MCS0)_2TX
6025MHz
6185MHz
6345MHz
6665MHz

#### Note:

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The EUT supports non-beamforming and beamforming modes, after evaluating, the beamforming mode has been evaluated to be the worst case, so it was selected to test.



## 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	
	СТХ	
Operating Mode	There are two modes of EUT, one is EUT + Adapter, the other is EUT + PoE. EUT + PoE mode has been evaluated to be the worst case after evaluating. So the AC power-line conducted emissions test will follow this same test configuration.	
1	EUT + PoE	

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

The Worst Case Mode for Following Conformance Tests		
Tests Item	Maximum Equivalent Isotopically 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.	
	СТХ	
Operating Mode	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	E.I.R.P. at any elevation angle above 30 degrees	
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	СТХ	
	After evaluating, the worst case was found at X axis. So the measurement will follow this same test configuration.	
1	EUT in X 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.	
	СТХ	
Operating Mode < 1GHz	<ol> <li>After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.</li> <li>There are two modes of EUT, one is EUT + Adapter, the other is EUT + PoE. EUT + PoE mode has been evaluated to be the worst case after evaluating. So the Unwanted Emissions below 1GHz test will follow this same test configuration.</li> </ol>	
1	EUT in Y axis + PoE	
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	

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 + WLAN 6GHz		
Refer to Sporton Test Report No.: FA 230414-02 for Co-location RF Exposure Evaluation.		

Note: The PoE was for measurement only and would not be marketed.

Its information is shown as below:

Equipment	Brand Name	Model Name
PoE	PROCET	PT-PSE106GBR-10L



## 2.3 EUT Operation during Test

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 Client and transmit duty cycle no less than 98%.

### 2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	Rating	
Adapter	AMIGO	AMS157-1203000F2	Input: 100-240V~50/60Hz, 1A Output: 12V, 3.0A	
		Others		
Power cord*1: Non-	shielded, 1.5m			
Grounding wire*1: Non-shielded, 0.35m				
I/O Cover*1				

### 2.5 Support Equipment

#### For AC Conduction:

	Support Equipment				
No.	No. Equipment Brand Name Model Name FCC ID			FCC ID	
А	PoE	PROCET	PT-PSE106GBR-10L	N/A	
В	LAN NB	DELL	E6430	N/A	
С	Device NB	DELL	E6430	N/A	
D	Device	Cybertan	Elijah-O	N/A	

#### For Radiated (below 1GHz):

	Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID	
А	PoE	PROCET	PT-PSE106GBR-10L	N/A	
В	LAN PC	ASUS	S300TA	TX2-RTL8821CE	
С	Device	Cybertan	Elijah-O	N/A	
D	Device NB	DELL	E6430	N/A	

## For Radiated (above 1GHz), Radiated (Maximum Equivalent Isotopically Radiated Power (E.I.R.P.) and Peak Power Spectral Density (E.I.R.P.):

	Support Equipment			
No.	No. Equipment Brand Name Model Name FCC ID			
А	NB	DELL	E4300	N/A
В	Client	Cybertan	Elijah-O	N/A
С	NB	DELL	E4300	N/A

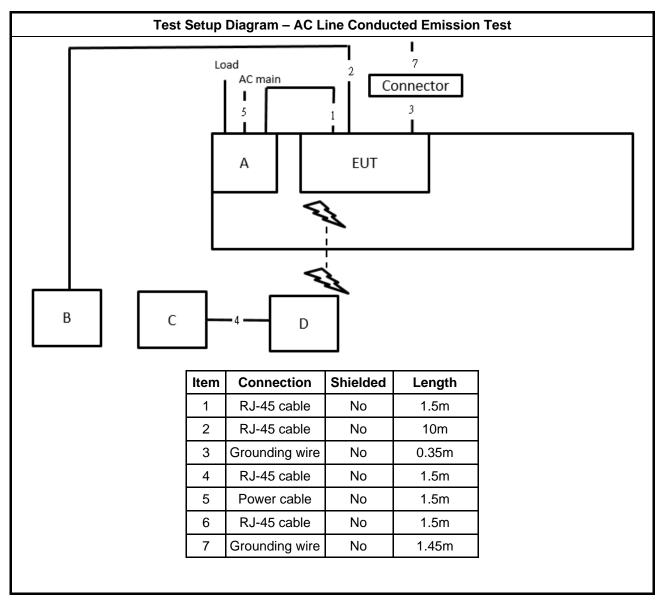
#### For RF Conducted:

	Support Equipment			
No.	Equipment	Brand Name	Model Name	FCC ID
А	NB	DELL	E4300	N/A
В	Client	Cybertan	Elijah-O	N/A
С	NB	DELL	E4300	N/A



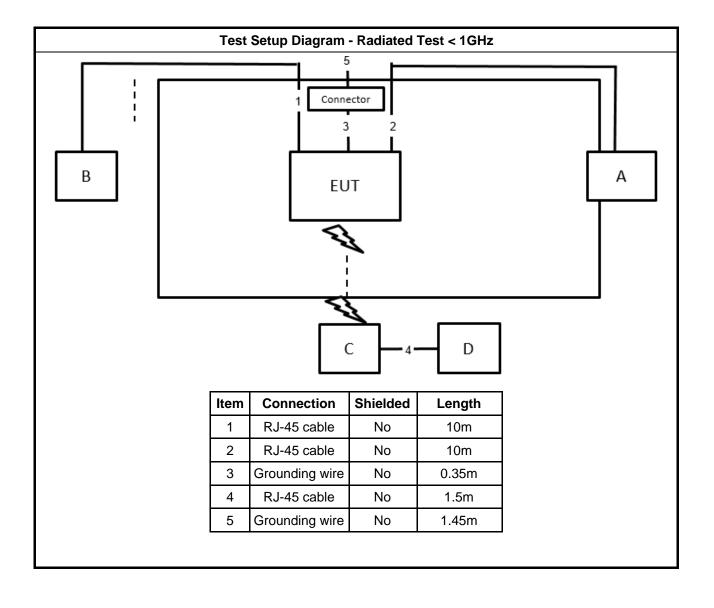


## 2.6 Test Setup Diagram

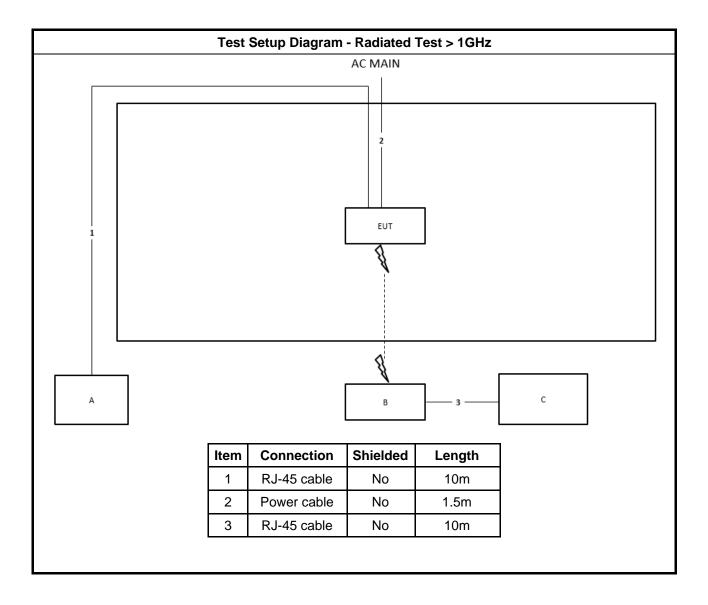














## 3 Transmitter Test Result

### 3.1 AC Power-line Conducted Emissions

#### 3.1.1 AC Power-line Conducted Emissions Limit

AC Powe	er-line Conducted Emissions L	_imit		
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.				

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#### 3.1.2 Measuring Instruments

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

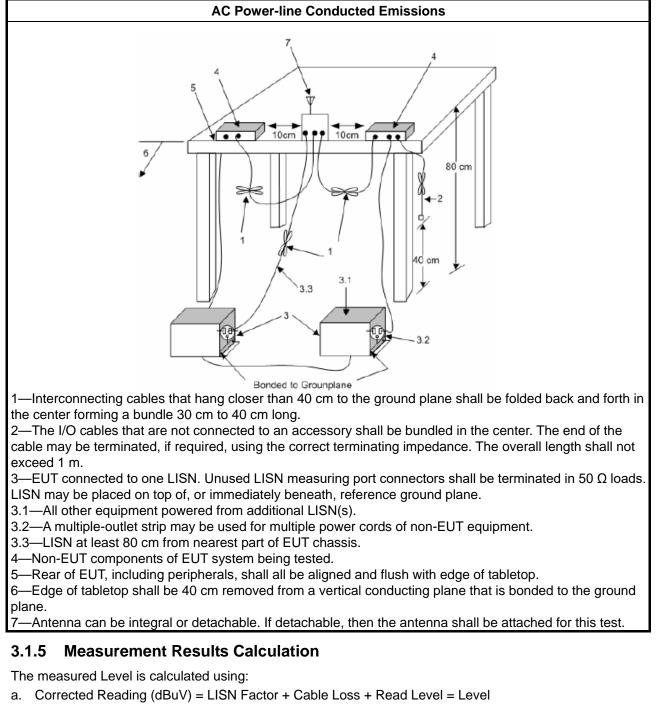
#### 3.1.3 Test Procedures

**Test Method** 

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



#### 3.1.4 Test Setup



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		
For the 5925-6425 GHz band, N/A		
For the 6425-6525 GHz band, N/A		
For the 6525-6875 GHz band, N/A		
For the 6875-7125 GHz band, N/A		
RLAN Devices		
For the 5925-6425 GHz band, N/A		
For the 6425-6525 GHz band, N/A		
For the 6525-6875 GHz band, N/A		
For the 6875-7125 GHz band, N/A		

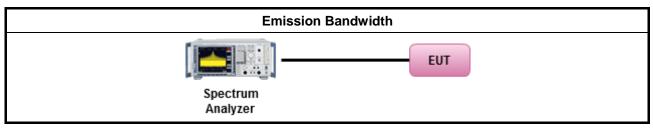
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

		Test Method	
•	<ul> <li>For the emission bandwidth shall be measured using one of the options below:</li> </ul>		
	$\boxtimes$	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.	
		Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.	
		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 Isotopically Radiated Power (E.I.R.P.)

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

	Maximum Equivalent Isotopically Radiated Power (E.I.R.P.) Limit				
UN	UNII Devices				
$\boxtimes$	For the 5.925 ~ 6.425 GHz band:				
	<ul> <li>For standard power access point and fixed client device : e.i.r.p &lt; 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).</li> </ul>				
	<ul> <li>For indoor access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For subordinate device control of an indoor access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For client device control of a standard power access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul>				
	For the 6.425 ~ 6.525 GHz band:				
	<ul> <li>For indoor access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul>				
$\boxtimes$	For the 6.525 ~ 6.875 GHz band:				
	<ul> <li>For standard power access point and fixed client device : e.i.r.p &lt; 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).</li> </ul>				
	<ul> <li>For indoor access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For subordinate device control of an indoor access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For client device control of a standard power access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul>				
	For the 6.875 ~ 7.125 GHz band:				
	<ul> <li>For indoor access point : e.i.r.p &lt; 30 dBm.</li> </ul>				
	<ul> <li>For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul>				
RL	AN Devices				
	For the 5.925 ~ 7.125 GHz band:				
	<ul> <li>For low-power indoor access-points &amp; indoor subordinate devices &lt; 30 dBm.</li> </ul>				
	For low-power client devices < 24 dBm.				
	For the 5.925 ~ 6.875 GHz band:				
	<ul> <li>For standard-power access points &amp; fixed client devices &lt; 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).</li> </ul>				
	<ul> <li>For standard client devices &lt; 30 dBm.</li> </ul>				



### 3.3.2 Measuring Instruments

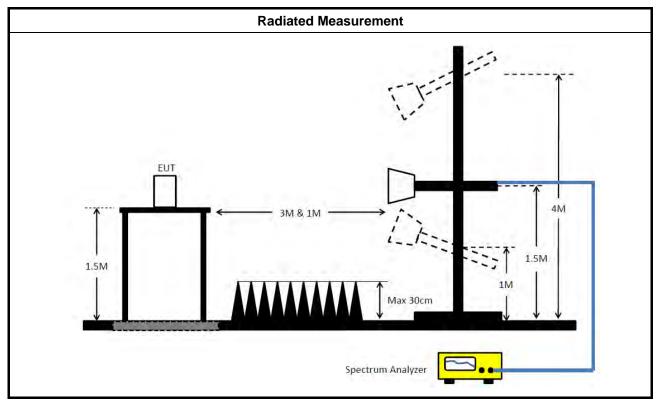
Refer a test equipment and calibration data table in this test report.

#### 3.3.3 Test Procedures

	Test Method		
•	According to FCC KDB 987594 D02 clause II.E, the test measurement procedure shall refer to KDE 789033.		
	Average over on/off periods with duty factor		
	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.		
	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)		
	Nideband RF power meter and average over on/off periods with duty factor		
	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).		
	For conducted measurement.		
	<ul> <li>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.</li> </ul>		
	<ul> <li>If multiple transmit chains, EIRP calculation could be following as methods: P<sub>total</sub> = P<sub>1</sub> + P<sub>2</sub> + + P<sub>n</sub> (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP<sub>total</sub> = P<sub>total</sub> + DG     </li> </ul>		
$\square$	For radiated measurement.		
	<ul> <li>Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> </ul>		
	<ul> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>		
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.		



### 3.3.4 Test Setup



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

Refer as Appendix C



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

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

UNII Devices         Image: For the 5.925 ~ 6.425 GHz band:         Image: For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.         Image: For indoor access point : e.i.r.p PSD < 5 dBm/MHz.         Image: For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.         Image: For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.         Image: For client device control of an indoor access point : e.i.r.p PSD < 17 dBm/MHz.         Image: For the 6.425 ~ 6.525 GHz band:         Image: For indoor access point : e.i.r.p PSD < 5 dBm/MHz.							
<ul> <li>For standard power access point and fixed client device : e.i.r.p PSD &lt; 23 dBm/MHz.</li> <li>For indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> <li>For subordinate device control of an indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> <li>For client device control of a standard power access point : e.i.r.p PSD &lt; 17 dBm/MHz.</li> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> <li>For the 6.425 ~ 6.525 GHz band:</li> </ul>							
<ul> <li>For indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> <li>For subordinate device control of an indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> <li>For client device control of a standard power access point : e.i.r.p PSD &lt; 17 dBm/MHz.</li> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> <li>For the 6.425 ~ 6.525 GHz band:</li> </ul>							
<ul> <li>For subordinate device control of an indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> <li>For client device control of a standard power access point : e.i.r.p PSD &lt; 17 dBm/MHz.</li> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> <li>For the 6.425 ~ 6.525 GHz band:</li> </ul>							
<ul> <li>For client device control of a standard power access point : e.i.r.p PSD &lt; 17 dBm/MHz.</li> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> <li>For the 6.425 ~ 6.525 GHz band:</li> </ul>							
<ul> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> <li>For the 6.425 ~ 6.525 GHz band:</li> </ul>							
For the 6.425 ~ 6.525 GHz band:							
- For indeer access point : $a$ is $n PSD < 5 dBm/MHz$							
• Torindoor access point : e.i.i.p F3D < 3 dbin/minz.							
<ul> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> </ul>							
For the 6.525 ~ 6.875 GHz band:							
• For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.							
<ul> <li>For indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> </ul>							
<ul> <li>For subordinate device control of an indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> </ul>							
<ul> <li>For client device control of a standard power access point : e.i.r.p PSD &lt; 17 dBm/MHz.</li> </ul>							
<ul> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> </ul>							
For the 6.875 ~ 7.125 GHz band:							
<ul> <li>For indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> </ul>							
<ul> <li>For client device control of an indoor access point : e.i.r.p PSD &lt; -1 dBm/MHz.</li> </ul>							
RLAN Devices							
For the 5.925 ~ 7.125 GHz band:							
<ul> <li>For low-power indoor access-points &amp; indoor subordinate devices &lt; 5 dBm / MHz.</li> </ul>							
<ul> <li>For low-power client devices &lt; -1 dBm / MHz.</li> </ul>							
For the 5.925 ~ 6.875 GHz band:							
<ul> <li>For standard-power access points &amp; fixed client devices &lt; 23 dBm / MHz.</li> </ul>							
<ul> <li>For standard client devices &lt; 17 dBm / MHz.</li> </ul>							

#### 3.4.2 Measuring Instruments

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



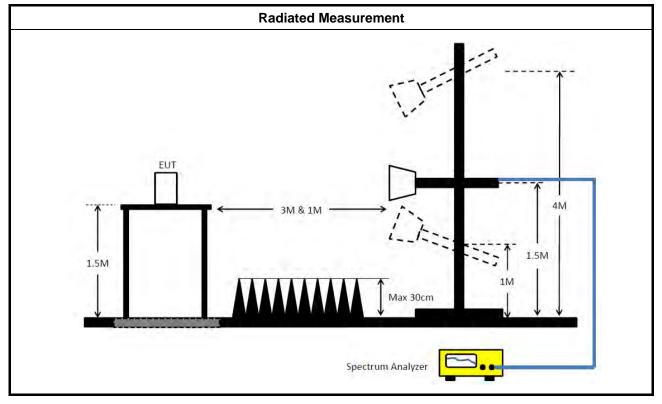
#### 3.4.3 Test Procedures

		Test Method						
•	<ul> <li>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:</li> </ul>							
		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 o	cycle ≥ 98% or external video / power trigger]						
<ul> <li>Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).</li> <li>Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow speed)</li> </ul>								
	K F	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).						
		Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)						
	For co	onducted measurement.						
	• [	f the EUT supports multiple transmit chains using options given below:						
		Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.						
		Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,						
		Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.						
<ul> <li>If multiple transmit chains, EIRP PPSD calculation could be following as methods: PPSD<sub>total</sub> = PPSD<sub>1</sub> + PPSD<sub>2</sub> + + PPSD<sub>n</sub> (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP<sub>total</sub> = PPSD<sub>total</sub> + DG     </li> </ul>								
$\square$	For ra	diated measurement.						
	• F	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"						
	• F	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.						
	• F	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.						
TEL	: 886-3-6	556-9065 Page Number : 25 of 33						

TEL : 886-3-656-9065 FAX : 886-3-656-9085



### 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 x log (standard distance/ test distance) = 20log(3/1) = 9.54dB. EX. Above 18GHz emission limit calculation (3m to 1m) = 54dBuV/m at 3m + 9.54dB = 63.54 dBuV/m at 1m.

Un-restricted band emissions above 1GHz Limit							
Frequency	Limit						
Any outside the 5.945 -	e.i.r.p27 dBm [68.2 dBuV/m@3m]						
7.125 GHz emission	<ul> <li>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 x log (standard distance/ test distance) = 20log(3/1) = 9.54dB.</li> <li>EX. Above 18GHz emission limit calculation (3m to 1m) = 68.2dBuV/m at 3m + 9.54dB = 77.74 dBuV/m at 1m.</li> <li>Note 2:-27 dBm EIRP OOBE is measured RMS which is a deviation from the current 15E rules for 5 GHz bands. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.</li> </ul>						



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

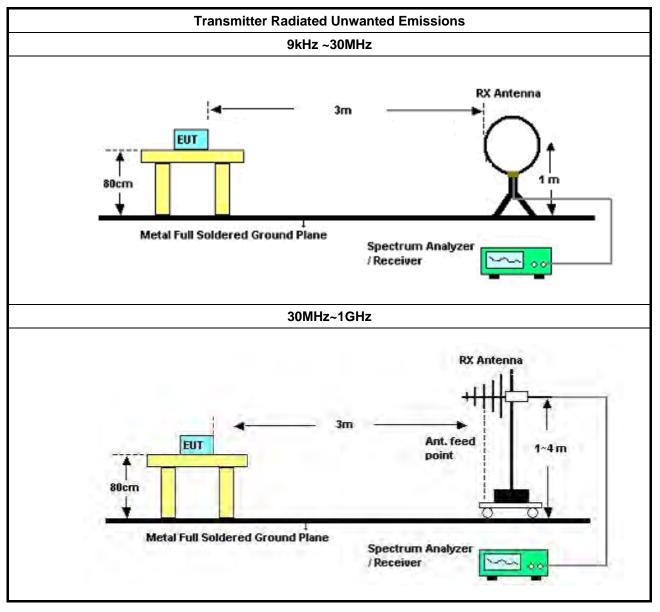
Refer a test equipment and calibration data table in this test report.

### 3.5.3 Test Procedures

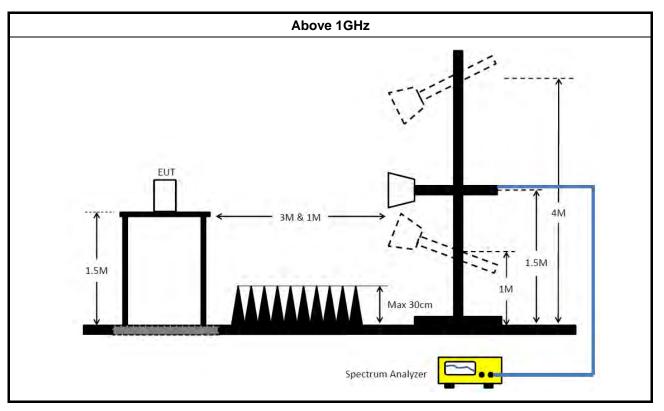
	Test Method								
•	KDB Mea perfo equi abov are i be e dista	brding to FCC KDB 987594 D02 II.G. the unwanted emission measurement procedure shall refer to 789300(except emission MASK). surements may be performed at a distance other than the limit distance provided they are not prmed in the near field and the emissions to be measured can be detected by the measurement pment. Measurements shall not be performed at a distance greater than 30 m for frequencies ve 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less mpractical. When performing measurements at a distance other than that specified, the results shall xtrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear ince for field-strength measurements, inverse of linear distance-squared for power-density surements).							
•	The	average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].							
•	For	the transmitter unwanted emissions shall be measured using following options below:							
	•	Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.							
	•	Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.							
	Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)								
	<ul> <li>□ Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).</li> <li>□ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where <sup>-</sup> time.( For restricted band average measurement)</li> </ul>								
	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.								
		Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.							
		Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.							
	■ Re	fer as FCC KDB 789033 D02, clause G)3)d)ii) for Band edge Integration measurements.							
•	For	emission MASK shall be measured using following options below:							
		Refer as FCC KDB 987594 D02, J) In-Band Emissions							
•	For	radiated measurement.							
	•	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.							
	•	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.							
	<ul> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>								
•	The	any unwanted emissions level shall not exceed the fundamental emission level.							
•	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.								



### 3.5.4 Test Setup







#### 3.5.5 Measurement Results Calculation

The measured Level is calculated using:

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

#### 3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

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

#### 3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



## 4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics Calibration Calibration Date Due Date		Remark	
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz~100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	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. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (10CH01-CB)
10m Semi Anechoic Chamber NSA	Anechoic TDK Chamber		10CH01-CB	30MHz~1GHz 10m,3m	Jan. 18, 2023	Jan. 17, 2024	Radiation (10CH01-CB)
Amplifier	Agilent	lent 8447D 2944A10783 9kHz ~ 1.3GHz Mar. 10, 2023 Mar. 0		Mar. 09, 2024	Radiation (10CH01-CB)		
Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 10, 2023	Mar. 09, 2024	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 17, 2023	Oct. 16, 2024	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 17, 2023	Oct. 16, 2024	Radiation (10CH01-CB)
EMI Test Receiver	Rohde&Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 11, 2023	Jul. 10, 2024	Radiation (10CH01-CB)
Spectrum Analyzer	Rohde&Schwarz	FSV30	101026	9kHz ~ 30GHz	Apr. 19, 2023	Apr. 18, 2024	Radiation (10CH01-CB)
Bilog Antenna with 6dB Attenator	Schaffner & EMCI	CBL6112B& N-6-06	2888&AT -N0605	30MHz ~ 1GHz	Jan. 19, 2023	Jan. 18, 2024	Radiation (10CH01-CB)
Amplifier	EM         EM101         060703         10MHz ~ 1GHz         Oct. 18, 2023         Oct. 17, 2		Oct. 17, 2024	Radiation (10CH01-CB)			
Low Cable	TITAN         T318E         Iow cable-03         30MHz ~ 1GHz         Nov. 23, 2023         Nov. 22, 2024		Radiation (10CH01-CB)				
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	TDK SAC-3M 03CH03-CB 1GHz ~18GHz May 04, 2023 May 03,		May 03, 2024	Radiation (03CH03-CB)		
Horn Antenna	ETS · Lindgren	3115	6821	750MHz~18GHz	Feb. 03, 2023	Feb. 02, 2024	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH03-CB)

TEL: 886-3-656-9065

FAX : 886-3-656-9085

Report Template No.: CB-A12\_5 Ver1.1

Page Number: 32 of 33Issued Date: Jul. 17, 2024Report Version: 01



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz~26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20230109-3	18~40GHz	Jan. 13, 2023	Jan. 12, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 12, 2023	Jun. 11, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
High Cable	able Woken WCA0929M 40G#6 1GHz ~ 40 GHz Oct. 02, 2023 Oct.		Oct. 01, 2024	Radiation (03CH03-CB)			
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S FSV40 100979 9kHz~40GHz May 29, 2023 M		May 28, 2024	Conducted (TH01-CB)			
Switch	SPTCB	SP-SWI	SWI-01	1~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	US40442088 50MHz~18GHz Feb. 22, 2023		Feb. 21, 2024	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 22, 2023	Feb. 21, 2024	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

NCR means Non-Calibration required.



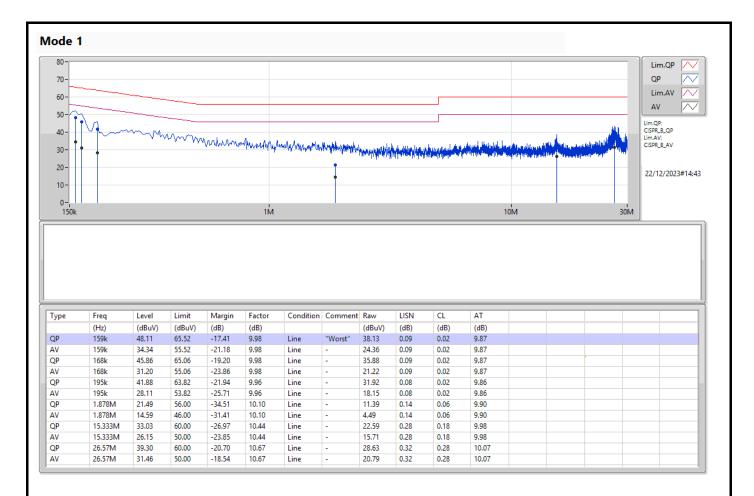
### Conducted Emissions at Powerline

## Appendix A

Summary									
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition		
			(Hz)	(dBuV)	(dBuV)	(dB)			
Mode 1	Pass	AV	27.002M	33.50	50.00	-16.50	Neutral		

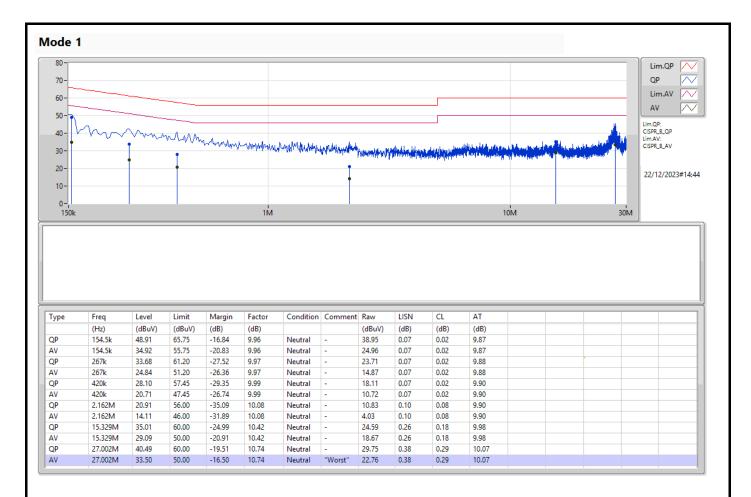


### Appendix A





### Appendix A





Sporton International Inc. Hsinchu Laboratory

Page No.

Report No.

: 1 of 13

: FR230414-02

#### Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.955M	19.114M	19M1D1D	20.68M	18.961M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	39.6M	37.895M	37M9D1D	38.83M	37.507M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	80.96M	77.423M	77M4D1D	80.08M	76.817M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	163.68M	155.47M	155MD1D	161.92M	154.045M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	21.175M	19.077M	19M1D1D	19.965M	19.014M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	39.6M	37.769M	37M8D1D	38.83M	37.546M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	81.4M	77.182M	77M2D1D	80.08M	76.664M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	161.92M	155.596M	156MD1D	161.48M	154.106M

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



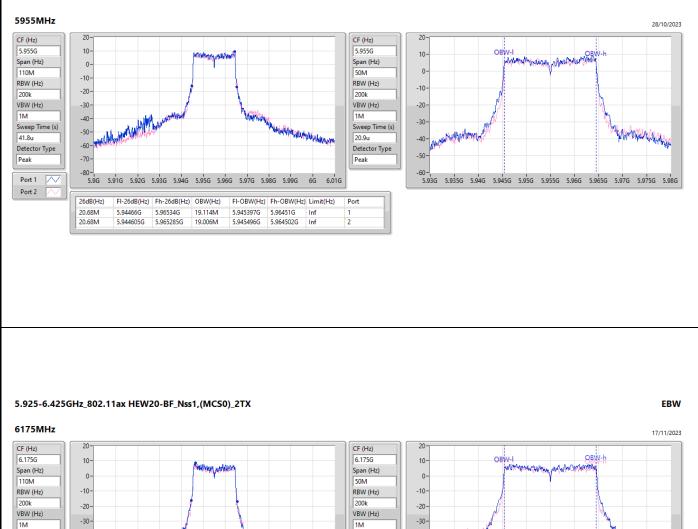
#### Result

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5955MHz	Pass	Inf	20.68M	19.114M	20.68M	19.006M
6175MHz	Pass	Inf	20.955M	19.108M	20.9M	19.031M
6415MHz	Pass	Inf	20.735M	18.961M	20.735M	19.055M
6535MHz	Pass	Inf	20.24M	19.014M	19.965M	19.052M
6695MHz	Pass	Inf	20.68M	19.066M	20.955M	19.077M
6855MHz	Pass	Inf	21.175M	19.029M	21.175M	19.065M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5965MHz	Pass	Inf	39.49M	37.663M	38.83M	37.507M
6165MHz	Pass	Inf	39.6M	37.895M	39.16M	37.664M
6405MHz	Pass	Inf	39.27M	37.633M	39.05M	37.645M
6565MHz	Pass	Inf	39.27M	37.769M	38.83M	37.702M
6685MHz	Pass	Inf	39.49M	37.604M	39.38M	37.546M
6845MHz	Pass	Inf	39.16M	37.618M	39.6M	37.677M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5985MHz	Pass	Inf	80.3M	77.234M	80.74M	77.175M
6145MHz	Pass	Inf	80.3M	77.423M	80.08M	77.094M
6385MHz	Pass	Inf	80.96M	77.192M	80.74M	76.817M
6625MHz	Pass	Inf	81.4M	77.182M	80.74M	76.977M
6705MHz	Pass	Inf	81.4M	76.664M	80.74M	77.112M
6785MHz	Pass	Inf	80.08M	77.086M	80.08M	77.011M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	161.92M	154.045M	161.92M	155.175M
6185MHz	Pass	Inf	163.68M	155.089M	161.92M	154.586M
6345MHz	Pass	Inf	161.92M	154.903M	161.92M	155.47M
6665MHz	Pass	Inf	161.92M	155.596M	161.48M	154.106M

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)\_2TX



Sweep Time (s)

Detector Type

20.9u

Peak

Port

2

Mad conservation where

FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz)

6.184539G 6.184481G

Inf

Inf

6.165431G

6.16545G

-70-6.12G 6.13G 6.14G 6.15G 6.16G 6.17G 6.18G 6.19G 6.2G 6.21G 6.22G 6.23G

19.108M

19.031M

FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz)

6.18545G

6.18523G

MARANA

-40

-50

-60

EBW

Sweep Time (s)

Detector Type

41.8u

Peak

Port 1 Port 2 -40

-50-

-60

26dB(Hz)

20.955M

20.9M

6.164495G

6.16433G

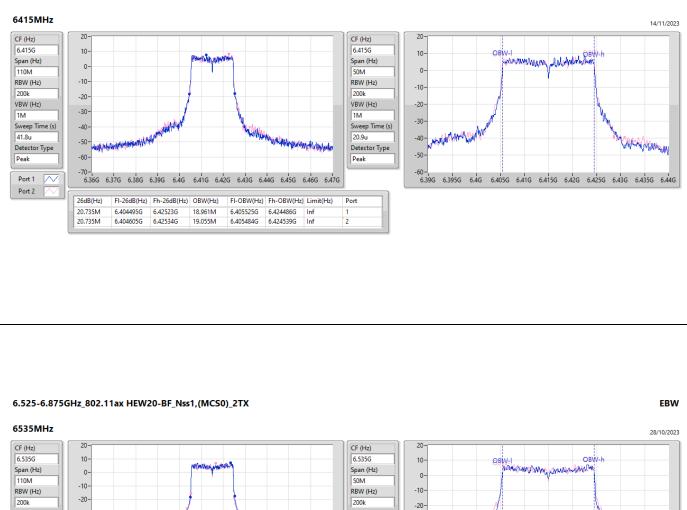
-70-1 6.15G 6.155G 6.16G 6.165G 6.175G 6.175G 6.18G 6.185G 6.195G 6.2G

MWC White Mary



#### 5.925-6.425GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW



VBW (Hz)

Sweep Time (s)

Detector Type

1M

20.9u

Peak

Port

A particular to the second second

FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz)

6.544476G

6.544503G

Inf

Inf

6.525462G

6.525452G

-80-6.48G 6.49G 6.5G 6.51G 6.52G 6.53G 6.54G 6.55G 6.56G 6.57G 6.58G 6.59G

19.014M

19.052M

FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz)

6.545175G

6.54512G

6.524935G

6.525155G

-30-

-40

-50

-60

1.ML

-70-6.51G 6.515G 6.52G 6.525G 6.53G 6.535G 6.54G 6.545G 6.555G 6.555G 6.56G

VBW (Hz)

Sweep Time (s)

Detector Type

1M

41.8u

Peak

Port 1 Port 2 -30

-40-

-50

-60-

-70

26dB(Hz)

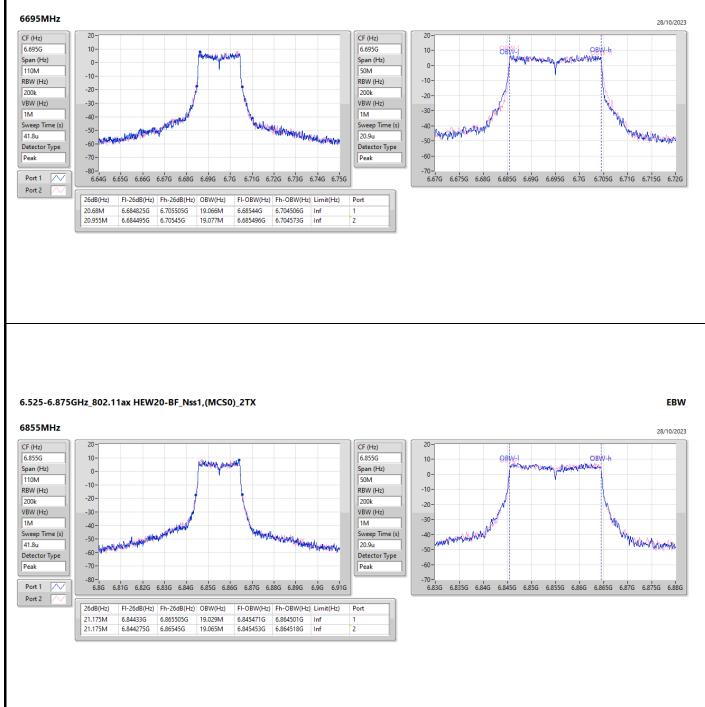
20.24M

19.965M

Marcharlerman



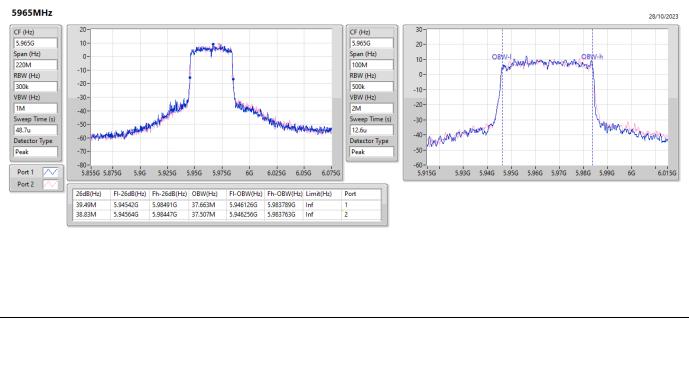
#### 6.525-6.875GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX



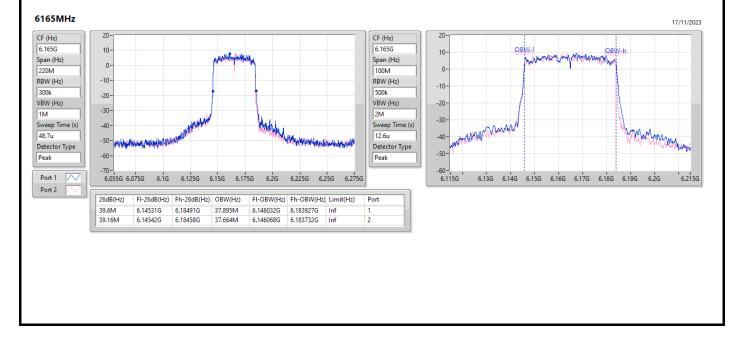


#### 5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

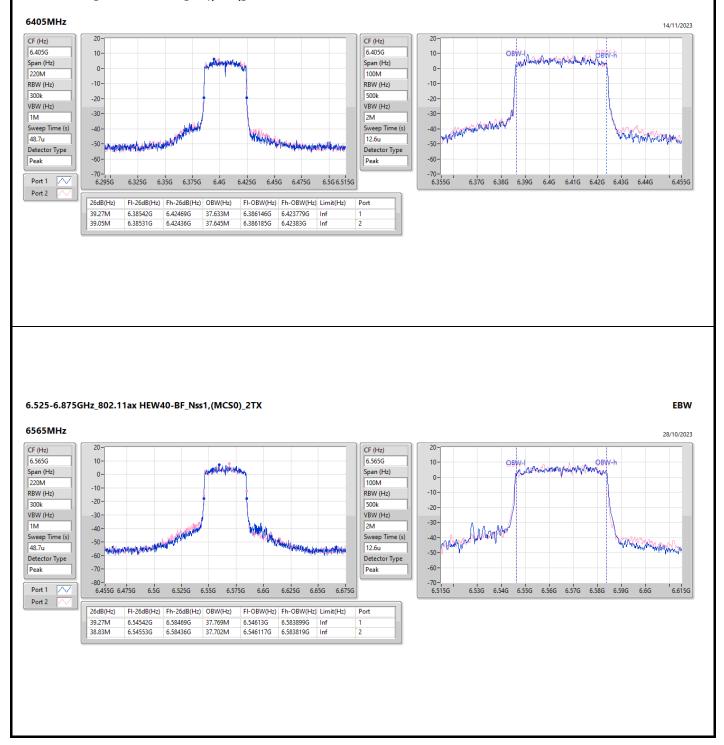


#### 5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX





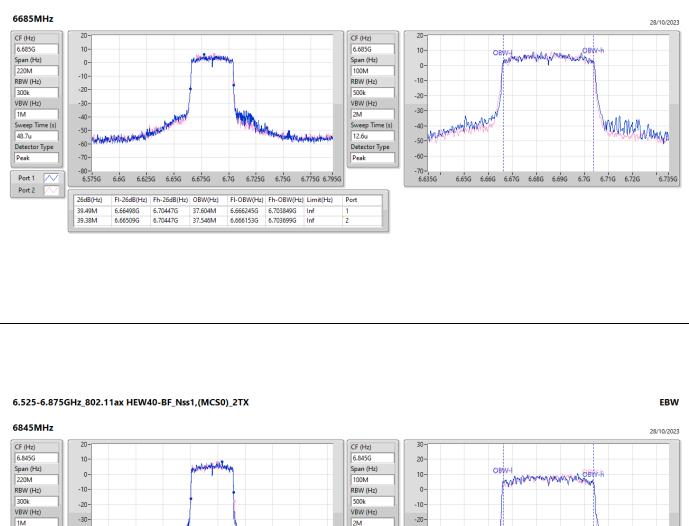
#### 5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX





#### 6.525-6.875GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW



Sweep Time (s)

Detector Type

12.6u

Peak

Port

-30-

-40

- 50 -

-60-6.795G

water

Sweep Time (s)

Detector Type

48.7u

Peak

Port 1

Port 2

-40-

-50-

-60-

-70-6.735G

26dB(Hz)

39.16M

39.6M

MAN

6.8G

FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz)

6.86436G

6.86502G

6.825G 6.85G

37.618M

37.677M

6.775G

6.8252G

6.82542G

with the section of

6.9G 6.925G

FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz)

6.863734G

6.863875G

6.875G

6.826117G

6.826198G

MM

Inf

Inf

6.955G

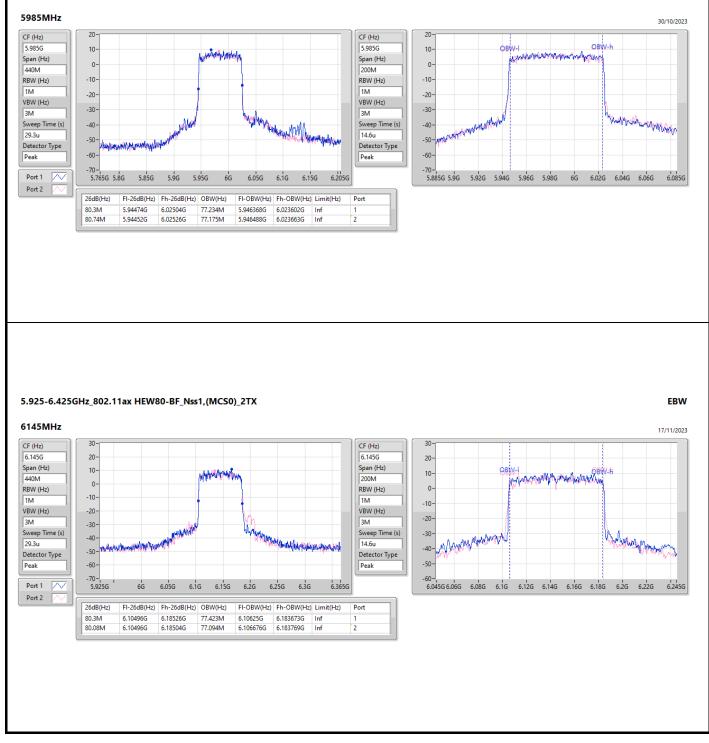
6.81G 6.82G 6.83G 6.84G 6.85G 6.86G 6.87G 6.88G

hanivadorahanatur

6.895G

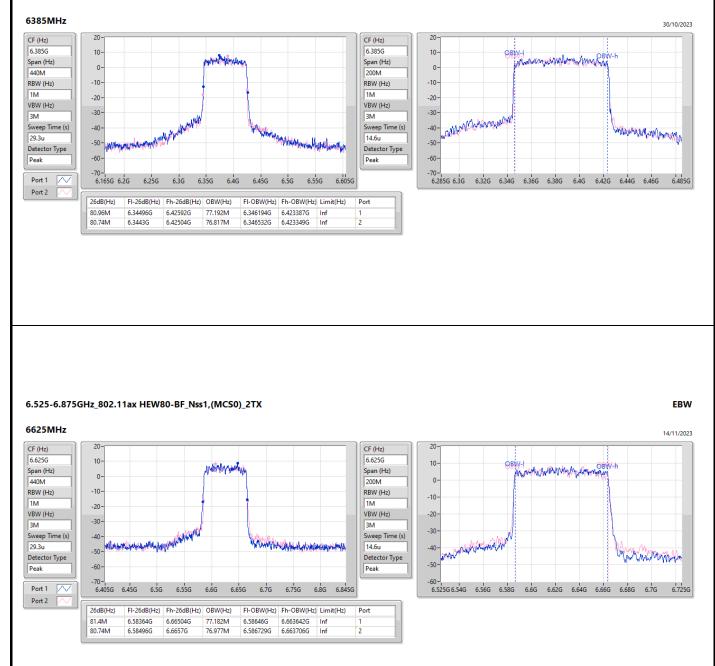


#### 5.925-6.425GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX





#### 5.925-6.425GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX



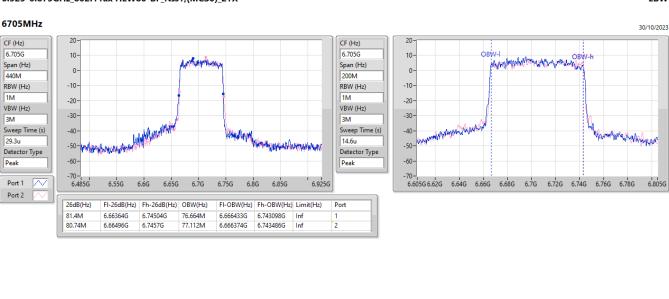


1M

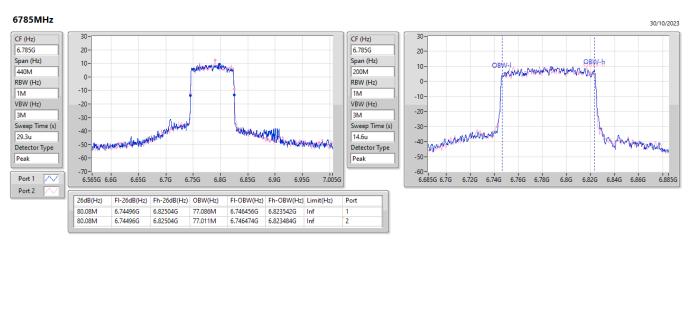
3M

Peak

#### 6.525-6.875GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX



#### 6.525-6.875GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

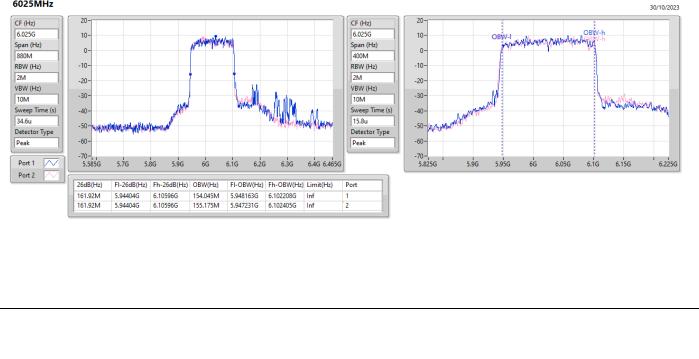


EBW



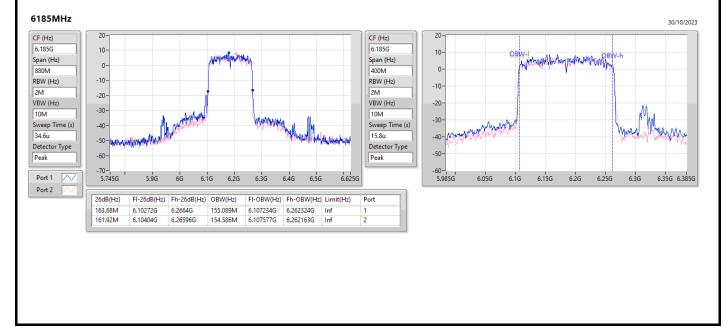
#### 5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

6025MHz



#### 5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

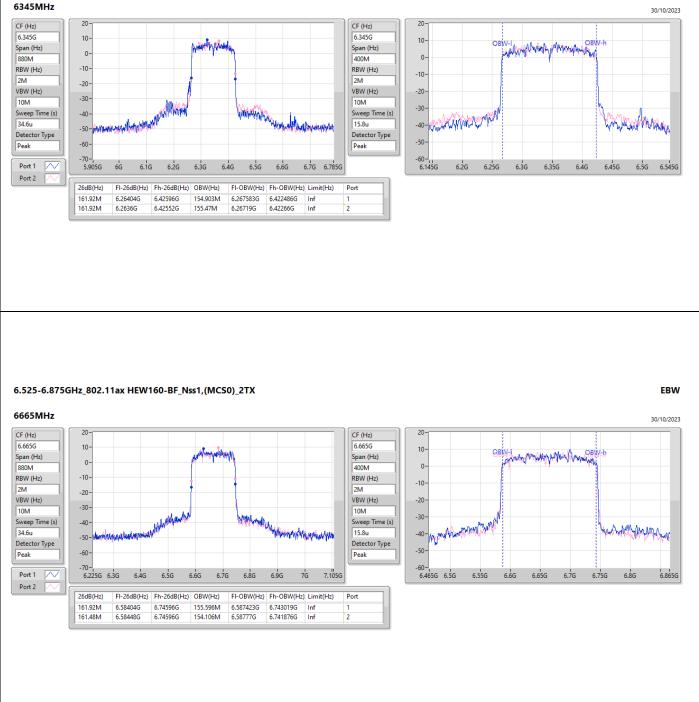
EBW





#### 5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

6345MHz





# Average Power

## Summary

Mode	Radiated EIRP / EIRP [Phi 30°]	Radiated EIRP / EIRP [Phi 30°]	
	(dBm)	(W)	
5.925-6.425GHz	-	-	
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	24.09	0.25645	
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	23.80	0.23988	
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.75	0.23714	
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	22.84	0.19231	
6.525-6.875GHz	-	-	
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	24.28	0.26792	
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	24.77	0.29992	
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.83	0.24155	
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	23.06	0.20230	



# Average Power

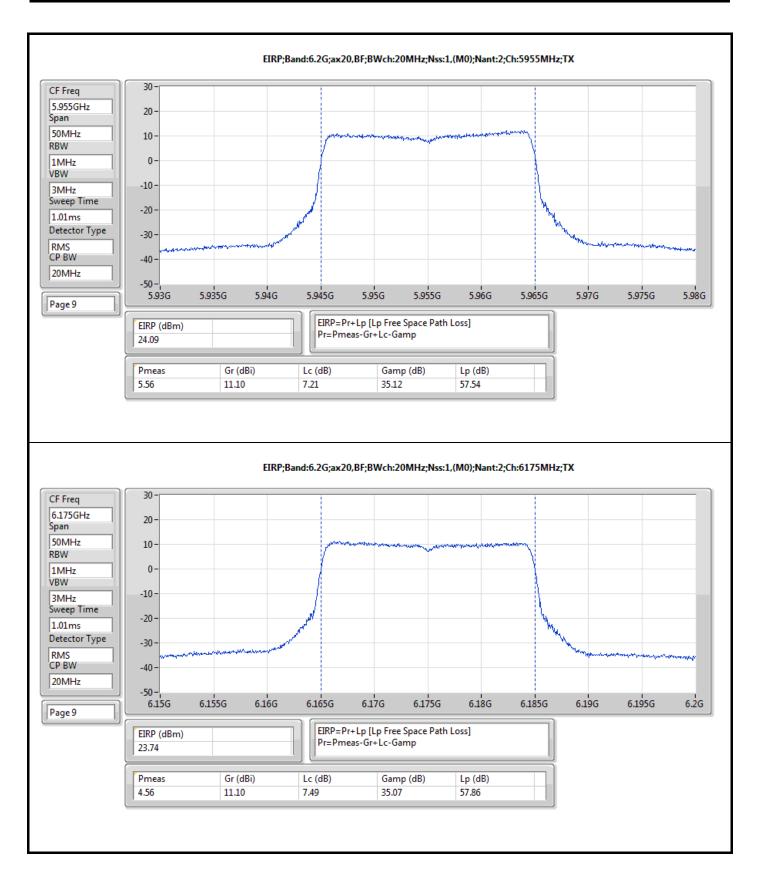
# Appendix C

# Result

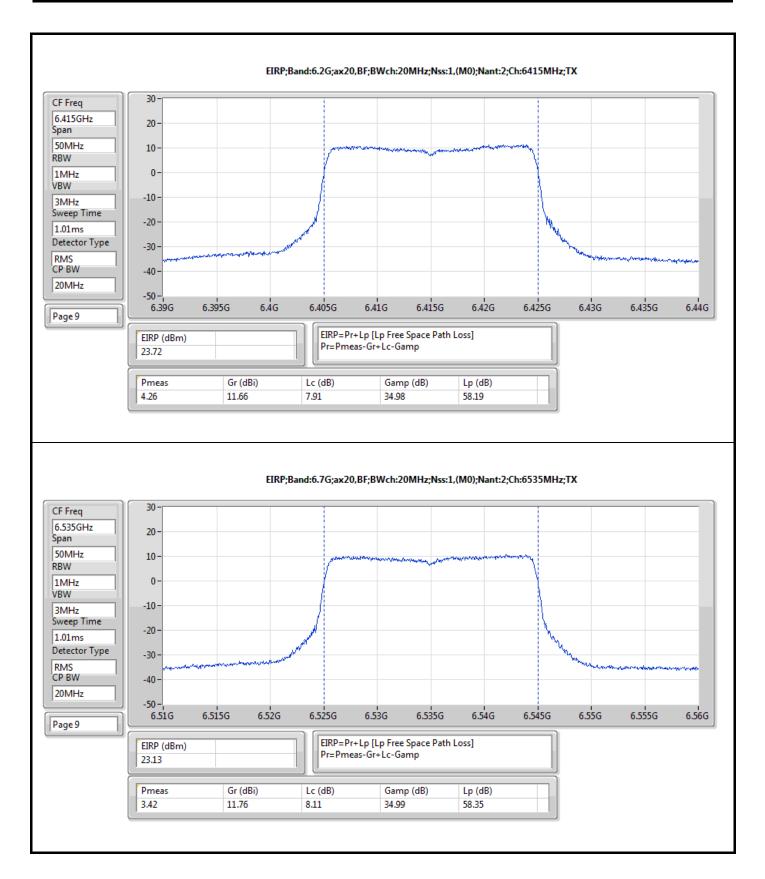
Mode	Result	EIRP / EIRP [Phi 30°]	EIRP Limit / EIRP Limit [Phi 30°]
		(dBm)	(dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-
5955MHz	Pass	24.09/20.47	36.00/21.00
6175MHz	Pass	23.74/20.71	36.00/21.00
6415MHz	Pass	23.72/20.97	36.00/21.00
6535MHz	Pass	23.13/20.66	36.00/21.00
6695MHz	Pass	23.56/20.64	36.00/21.00
6855MHz	Pass	24.28/20.19	36.00/21.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-
5965MHz	Pass	23.50/20.65	36.00/21.00
6165MHz	Pass	23.80/20.96	36.00/21.00
6405MHz	Pass	22.77/20.54	36.00/21.00
6565MHz	Pass	22.74/20.31	36.00/21.00
6685MHz	Pass	23.08/20.16	36.00/21.00
6845MHz	Pass	24.77/20.26	36.00/21.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-
5985MHz	Pass	23.47/20.81	36.00/21.00
6145MHz	Pass	23.75/20.45	36.00/21.00
6385MHz	Pass	23.69/20.19	36.00/21.00
6625MHz	Pass	23.23/20.92	36.00/21.00
6705MHz	Pass	23.82/20.13	36.00/21.00
6785MHz	Pass	23.83/20.91	36.00/21.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-
6025MHz	Pass	22.48/20.56	36.00/21.00
6185MHz	Pass	22.58/20.53	36.00/21.00
6345MHz	Pass	22.84/20.63	36.00/21.00
6665MHz	Pass	23.06/20.64	36.00/21.00

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

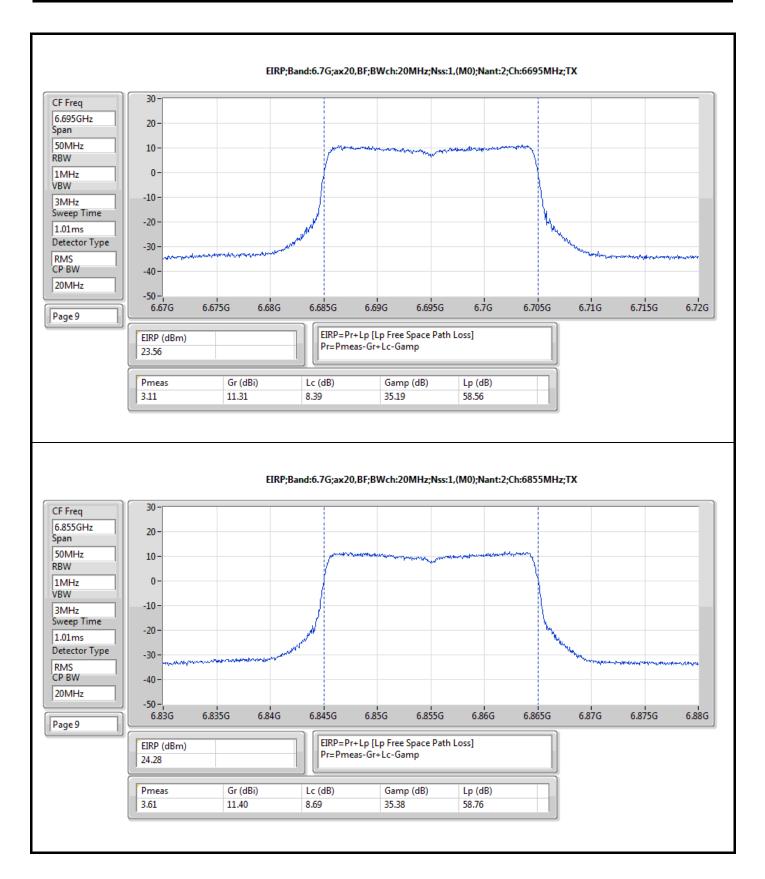




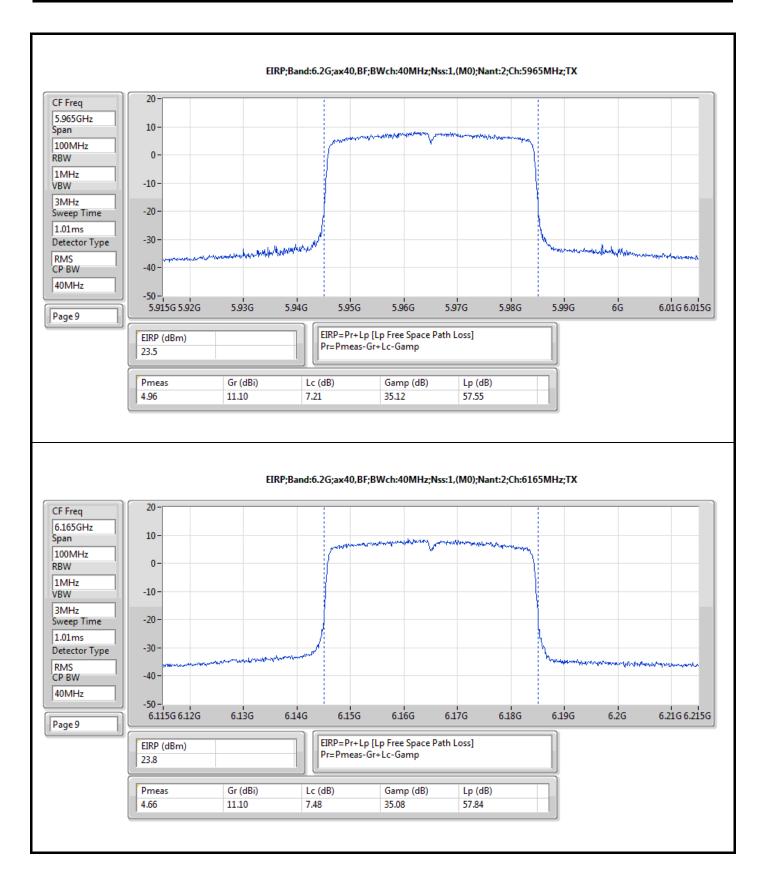




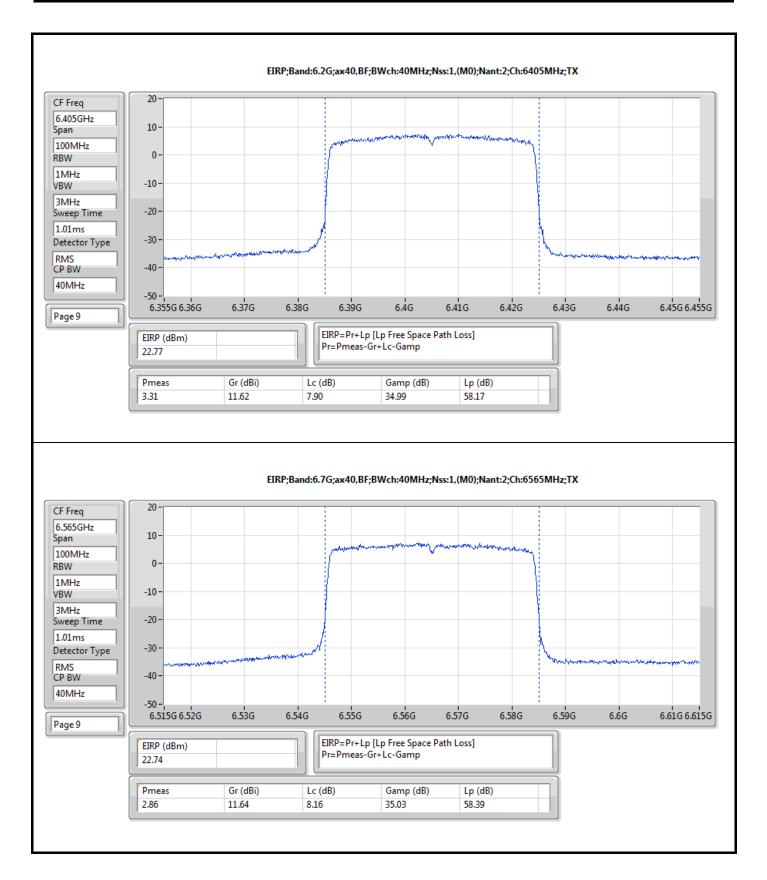




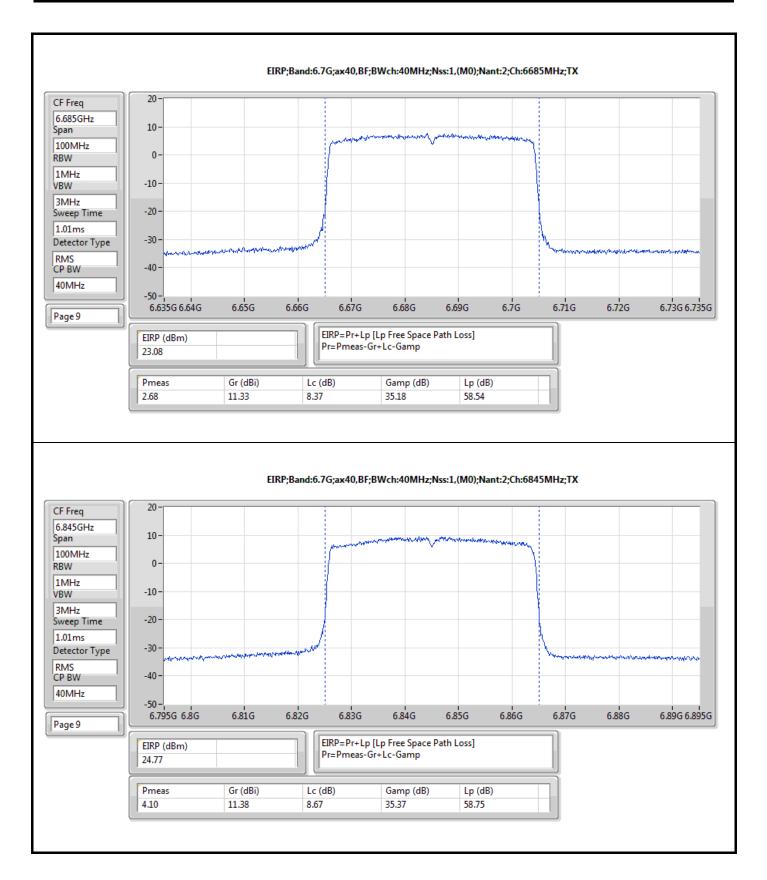




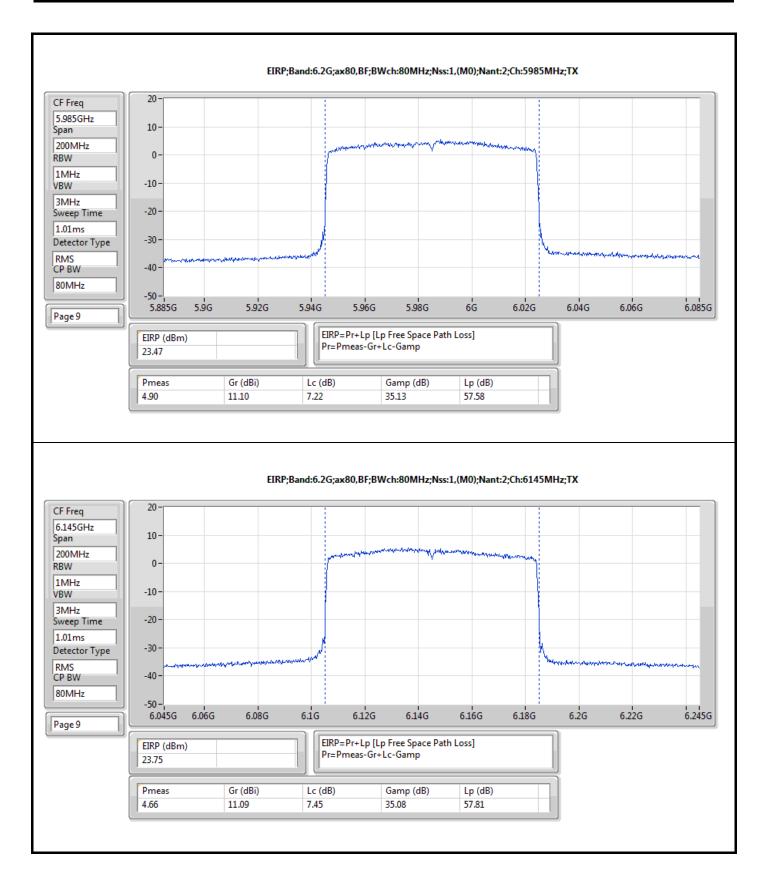




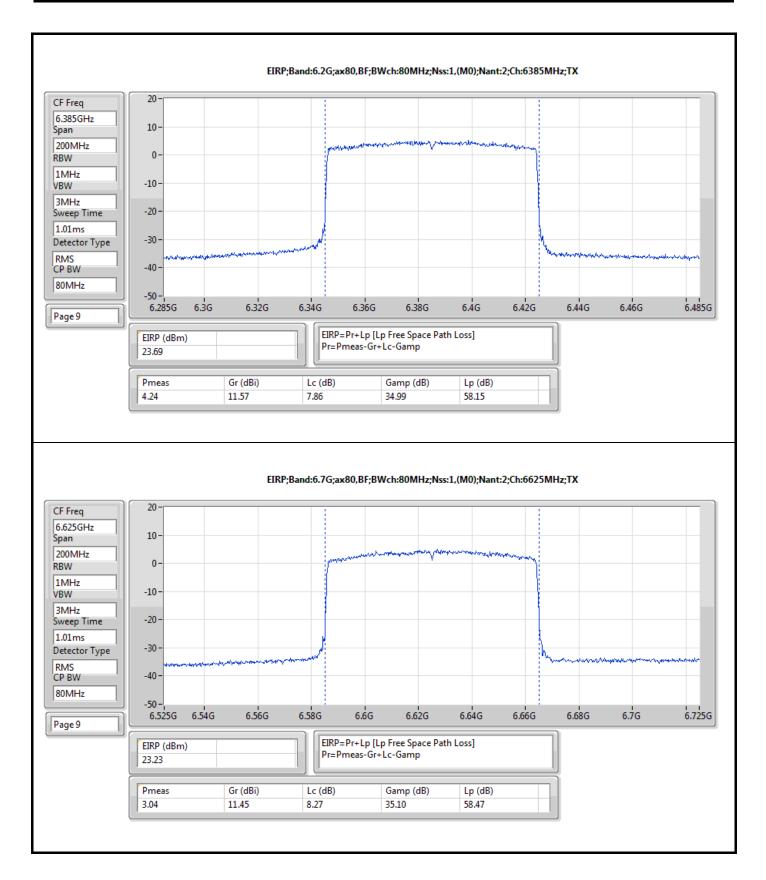




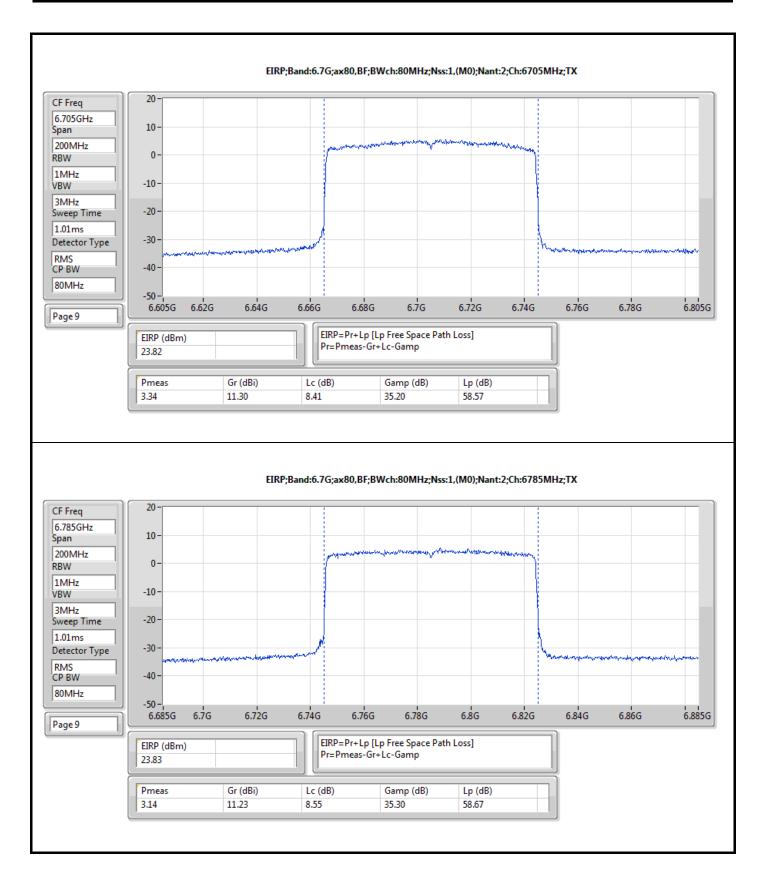




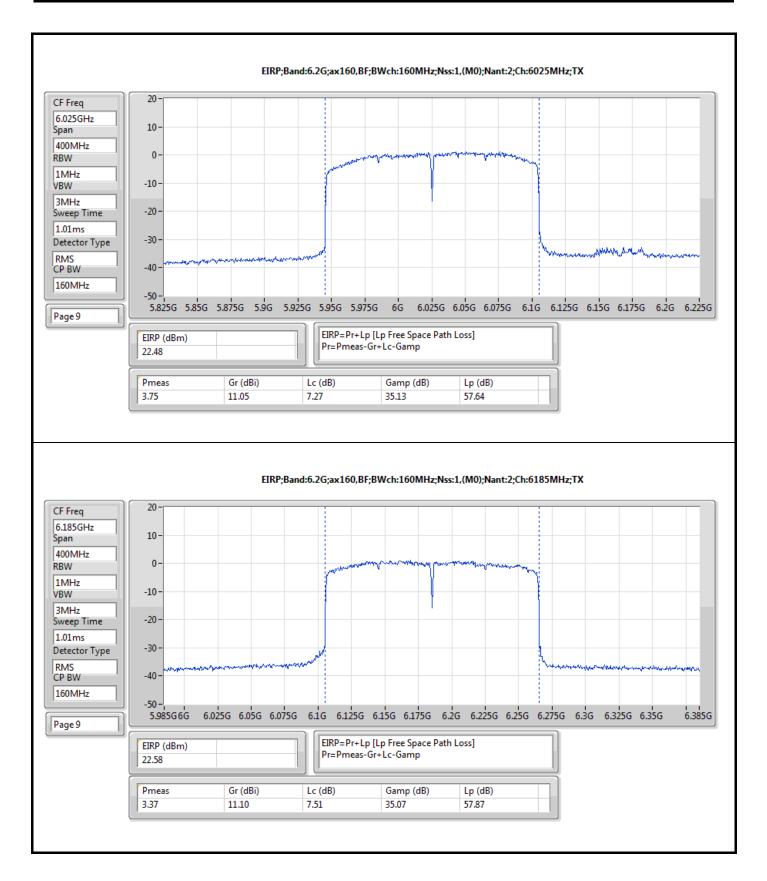




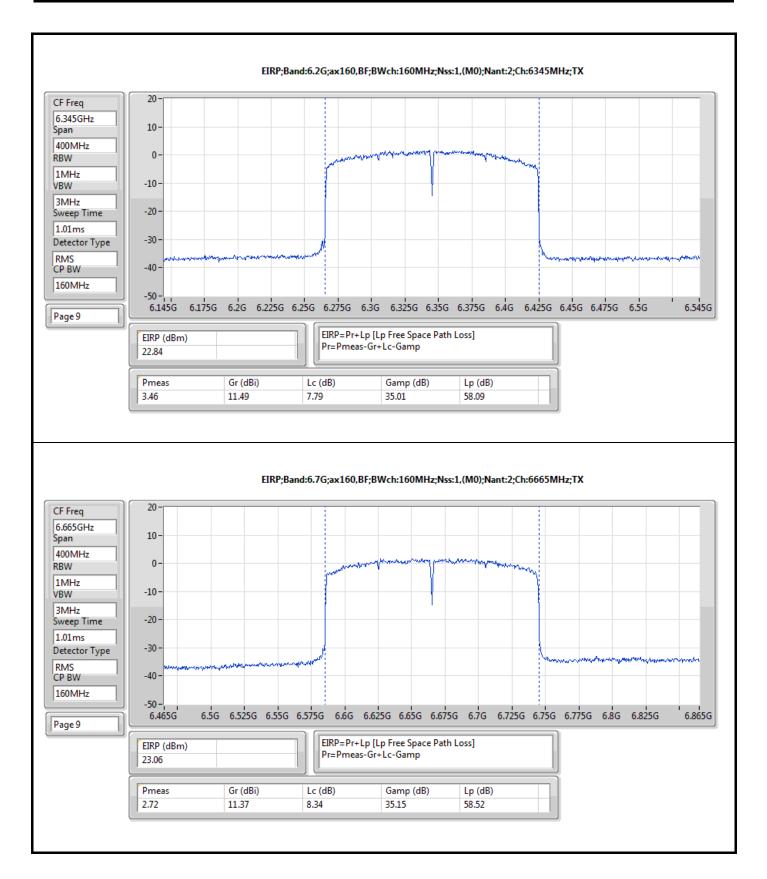














### Summary

Mode	EIRP PD (dBm/RBW)
5.925-6.425GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	12.43
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	7.13
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.52
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	1.45
6.525-6.875GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	11.56
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	7.91
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.01
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	1.08

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

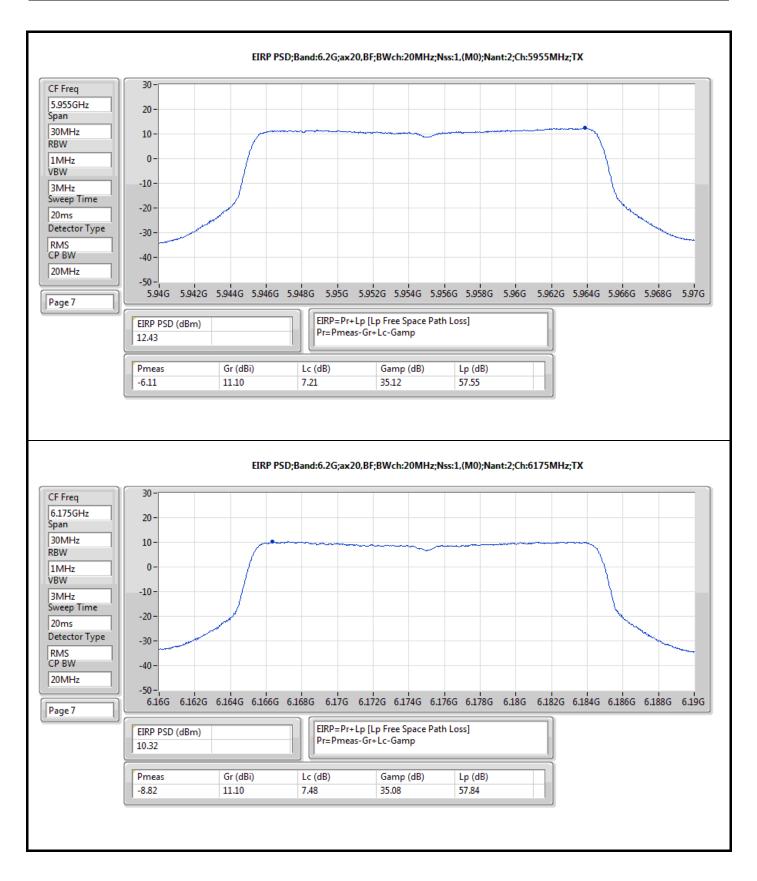


## Result

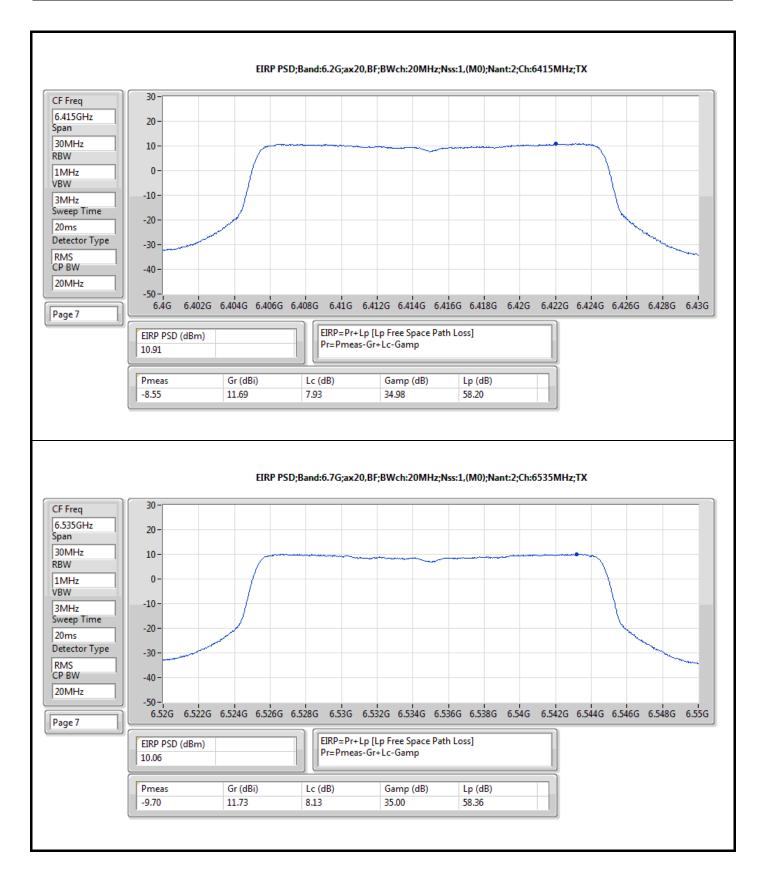
Mode	Result	EIRP PD	EIRP PD Limit
		(dBm/RBW)	(dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-
5955MHz	Pass	12.43	23.00
6175MHz	Pass	10.32	23.00
6415MHz	Pass	10.91	23.00
6535MHz	Pass	10.06	23.00
6695MHz	Pass	9.56	23.00
6855MHz	Pass	11.56	23.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-
5965MHz	Pass	6.78	23.00
6165MHz	Pass	7.13	23.00
6405MHz	Pass	5.02	23.00
6565MHz	Pass	5.51	23.00
6685MHz	Pass	6.84	23.00
6845MHz	Pass	7.91	23.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-
5985MHz	Pass	3.30	23.00
6145MHz	Pass	4.52	23.00
6385MHz	Pass	4.23	23.00
6625MHz	Pass	2.17	23.00
6705MHz	Pass	4.01	23.00
6785MHz	Pass	3.70	23.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-
6025MHz	Pass	0.82	23.00
6185MHz	Pass	0.15	23.00
6345MHz	Pass	1.45	23.00
6665MHz	Pass	1.08	23.00

DG = Directional Gain: RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band: PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

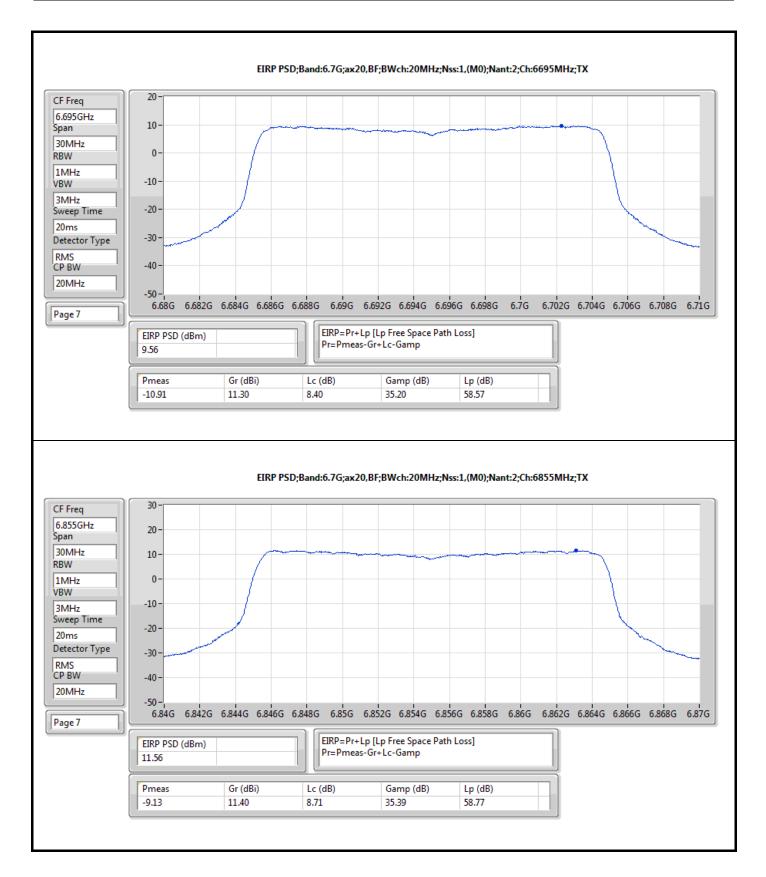




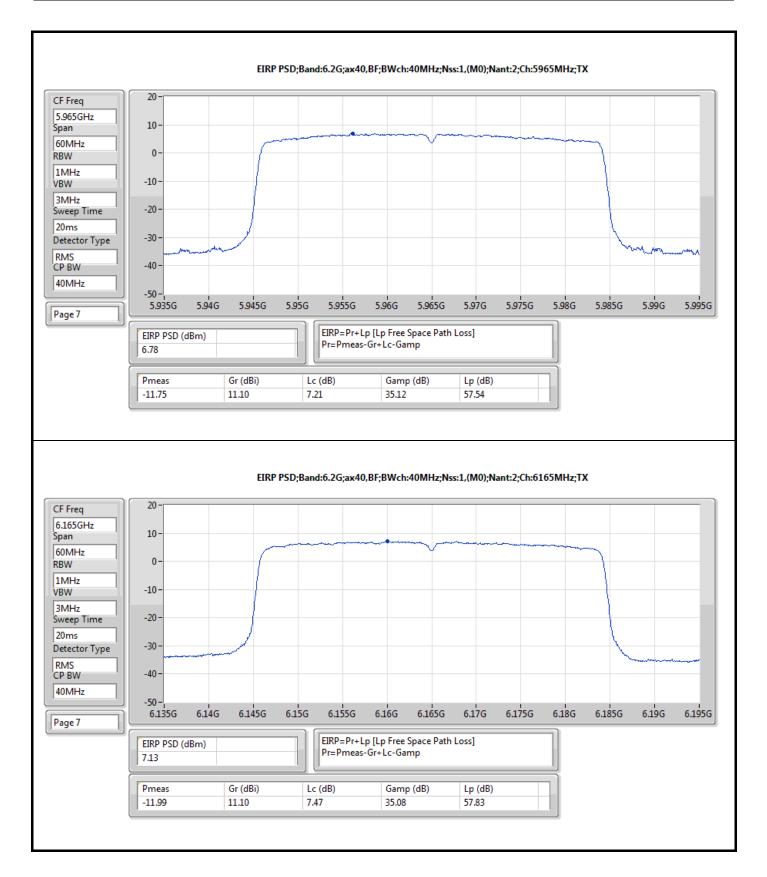




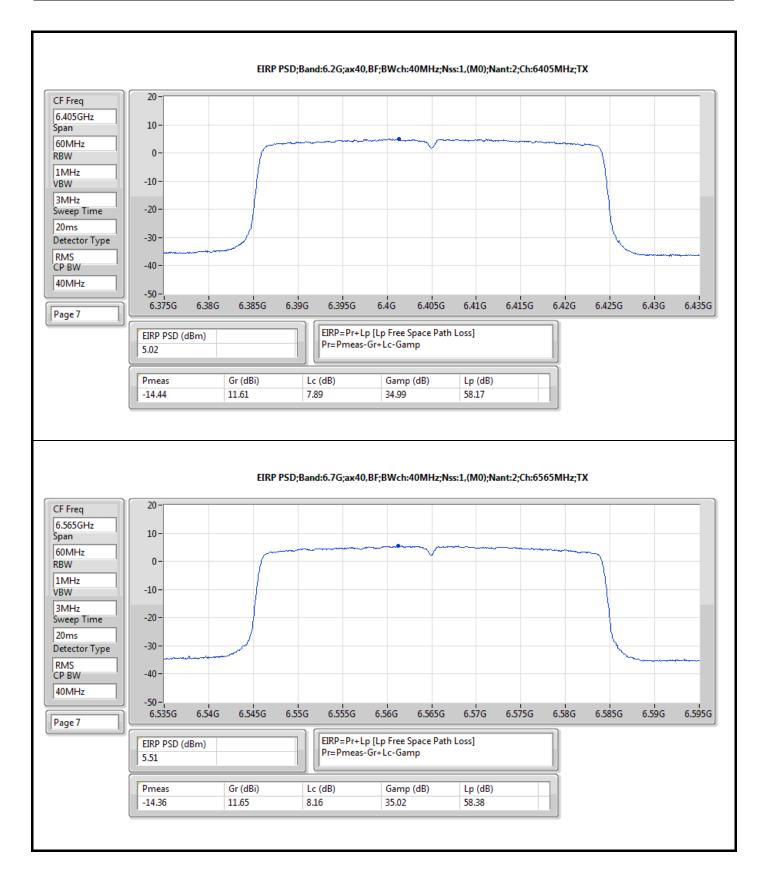




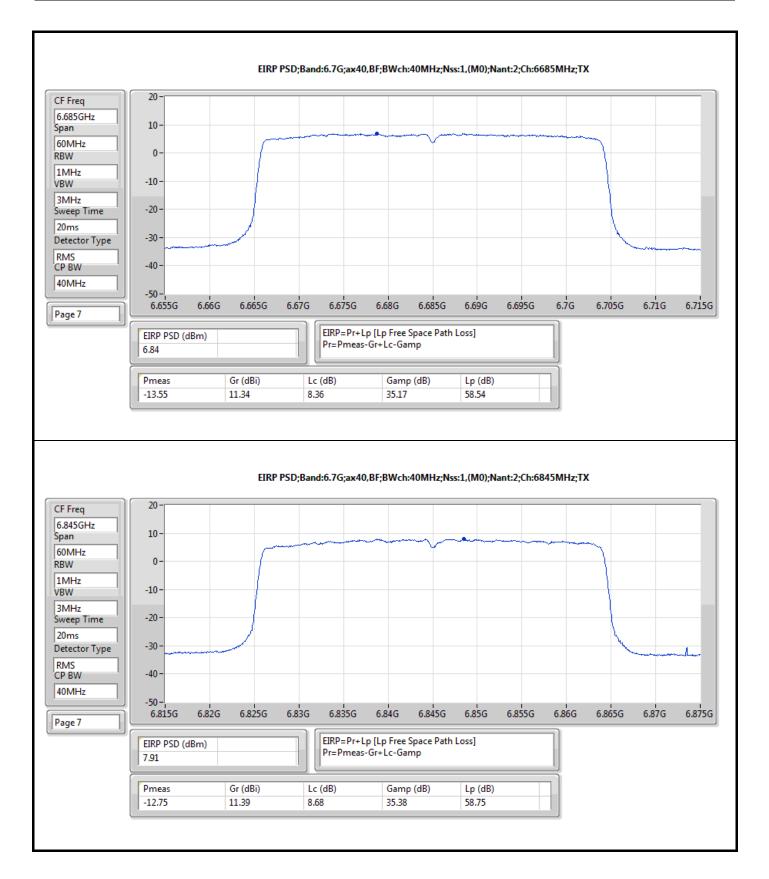




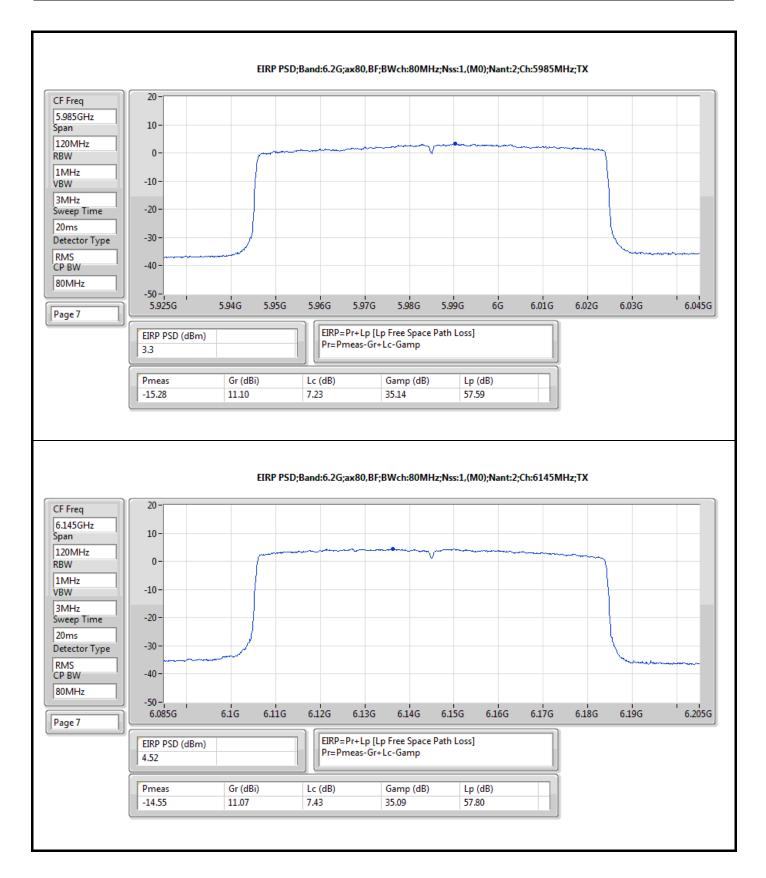




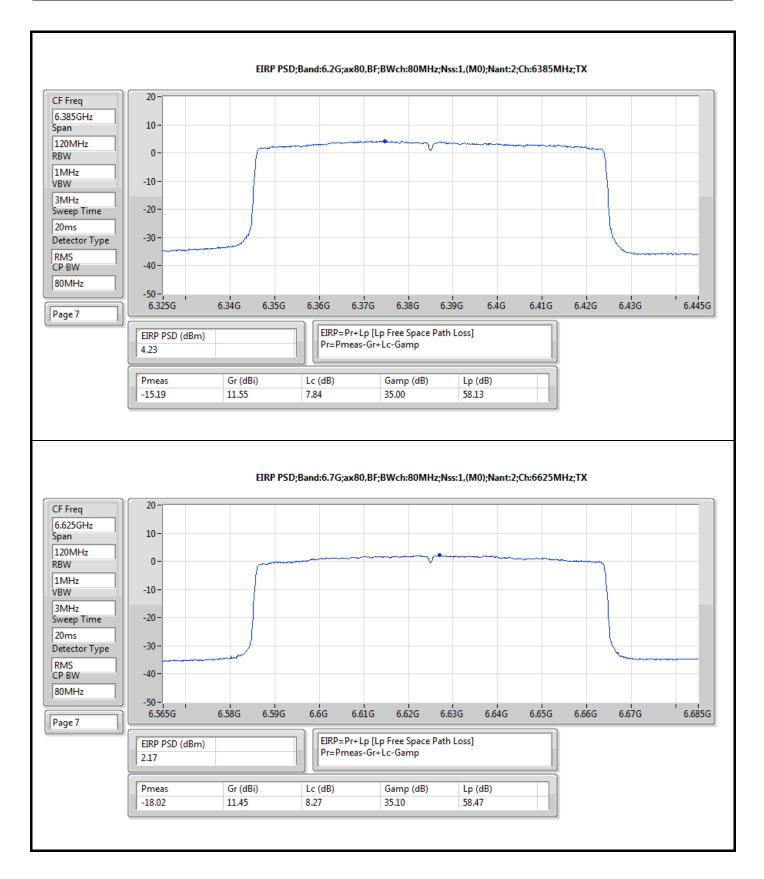




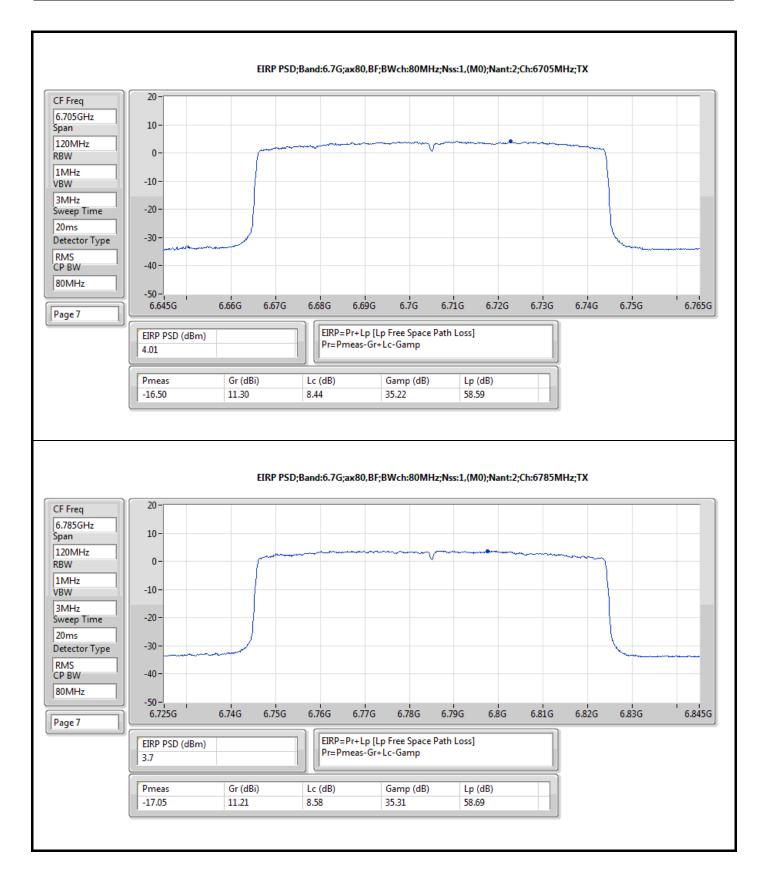




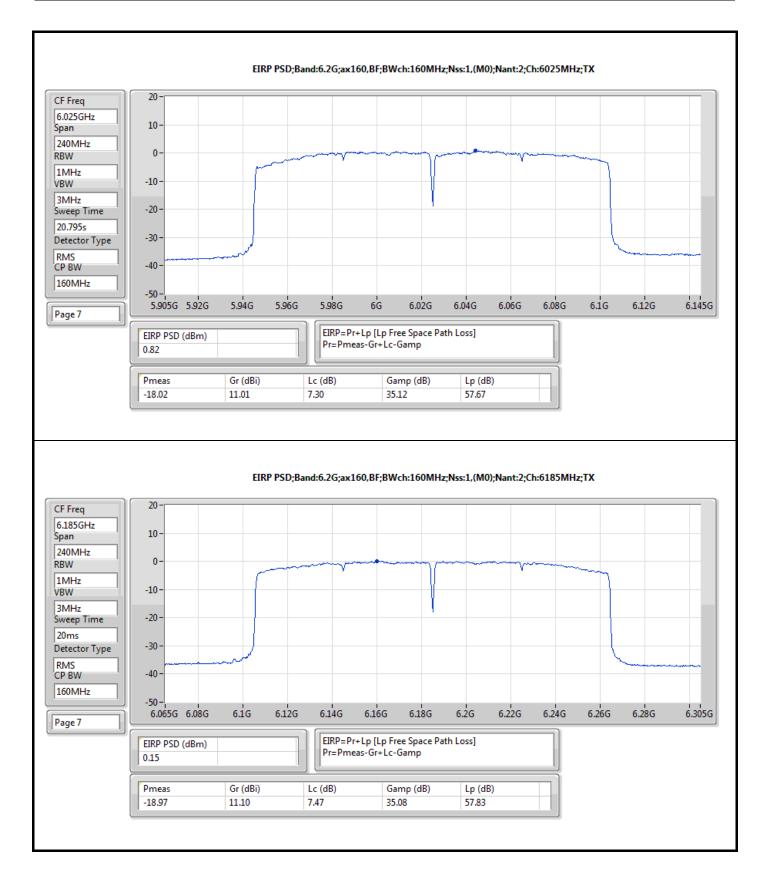




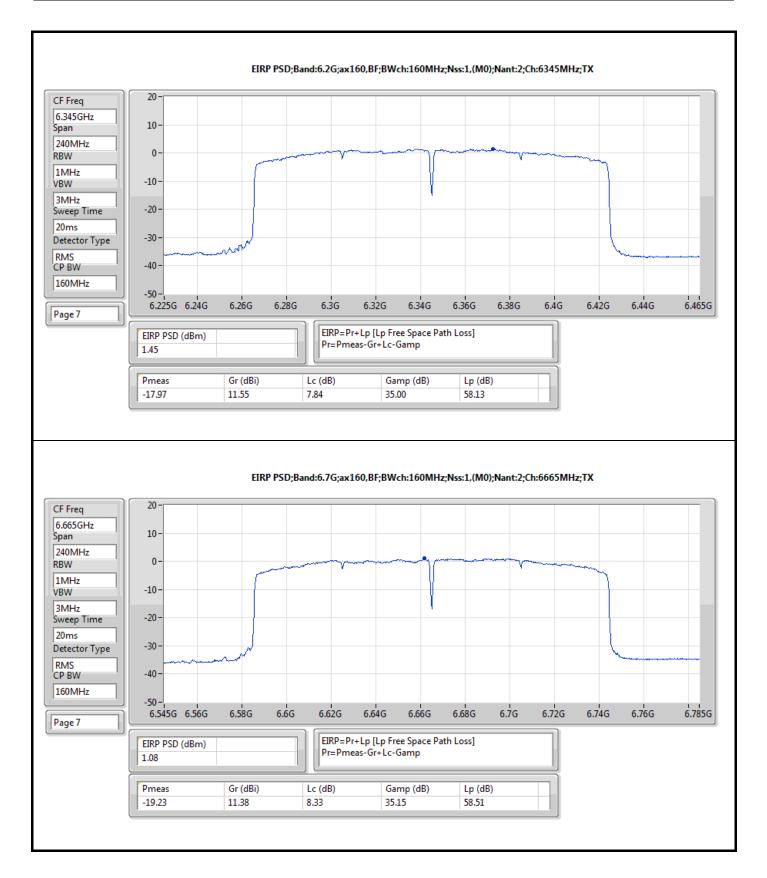












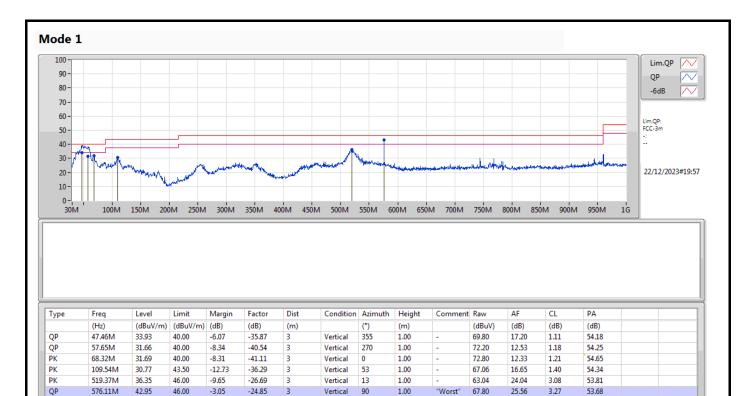


## Radiated Emissions below 1GHz

Summary							
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	
Mode 1	Pass	QP	576.11M	42.95	46.00	-3.05	Vertical

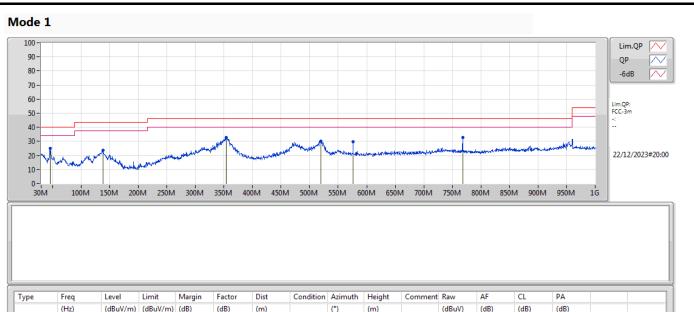


#### Radiated Emissions below 1GHz





#### Radiated Emissions below 1GHz



Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)	
PK	45.52M	24.84	40.00	-15.16	-34.68	3	Horizontal	0	1.00	-	59.52	18.36	1.10	54.14	
PK	138.16M	23.50	43.50	-20.00	-34.91	3	Horizontal	345	1.00	-	58.41	17.77	1.66	54.34	
PK	354.47M	32.76	46.00	-13.24	-31.36	3	Horizontal	98	1.00	"Worst"	64.12	20.40	2.48	54.24	
РК	519.85M	30.12	46.00	-15.88	-26.68	3	Horizontal	103	1.00	-	56.80	24.05	3.08	53.81	
РК	576.11M	29.74	46.00	-16.26	-24.85	3	Horizontal	0	2.00	-	54.59	25.56	3.27	53.68	
РК	768.17M	32.71	46.00	-13.29	-21.14	3	Horizontal	20	1.00	-	53.85	28.18	3.75	53.07	



### RSE TX above 1GHz

# Appendix E.2

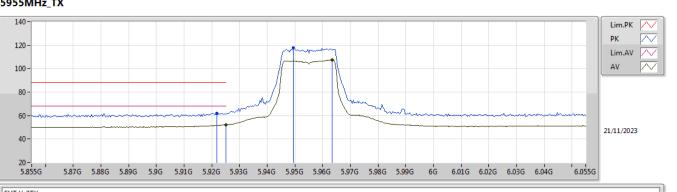
#### Summary

Mode	Result	Туре	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.925-6.425GHz	-	-	-			-	-		-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	AV	17.85498G	52.58	54.00	-1.42	3	Vertical	98	1.80	-





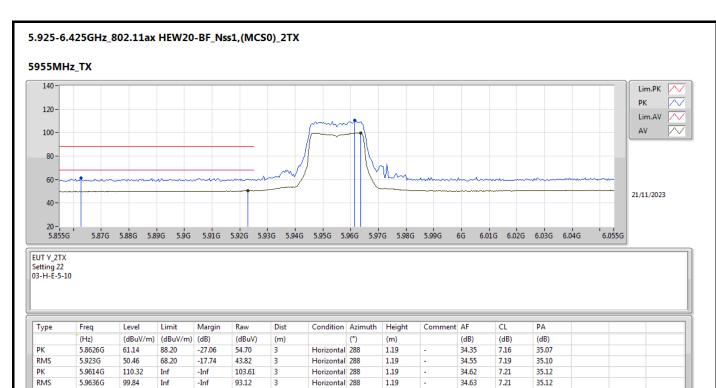




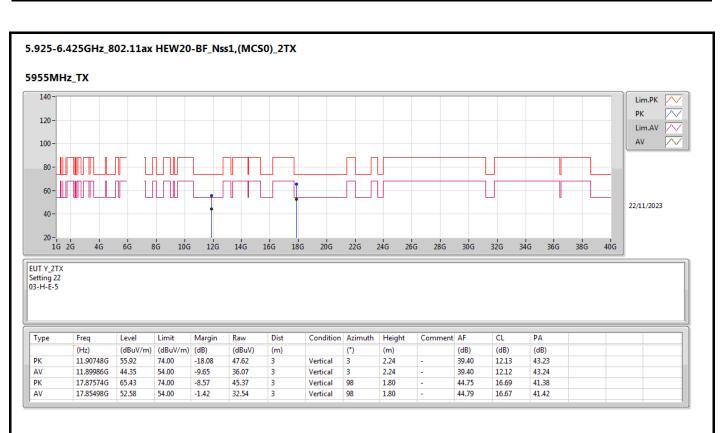
EUT Y\_2TX Setting 22 03-H-E-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)		
PK	5.9218G	62.06	88.20	-26.14	55.43	3	Vertical	6	2.08	-	34.54	7.19	35.10		
RMS	5.925G	52.12	68.20	-16.08	45.48	3	Vertical	6	2.08	-	34.55	7.19	35.10		
PK	5.9494G	117.70	Inf	-Inf	111.02	3	Vertical	6	2.08	-	34.60	7.20	35.12		
RMS	5.9634G	107.51	Inf	-Inf	100.79	3	Vertical	6	2.08	-	34.63	7.21	35.12		

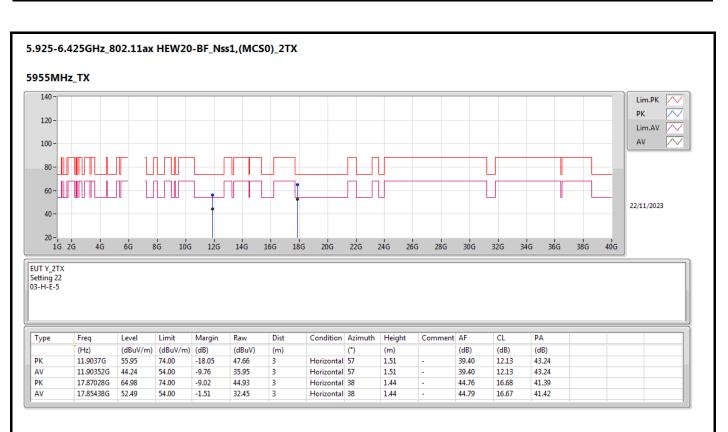




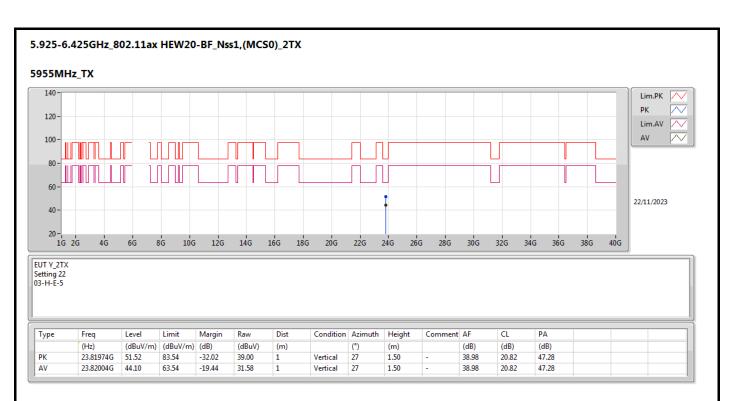




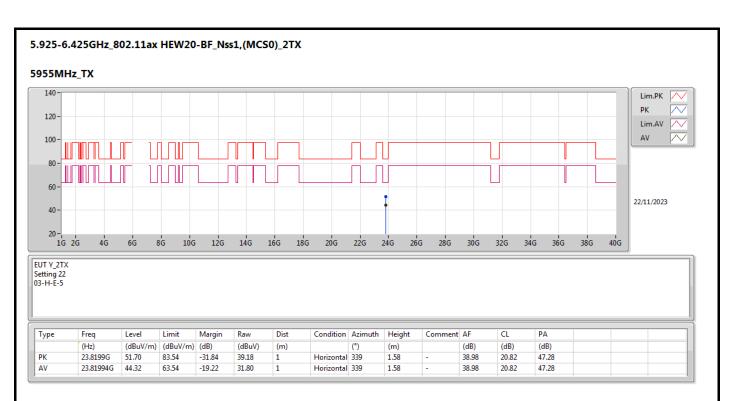




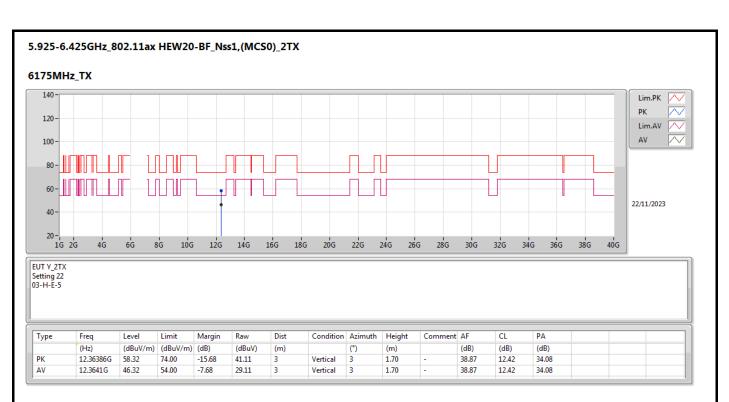




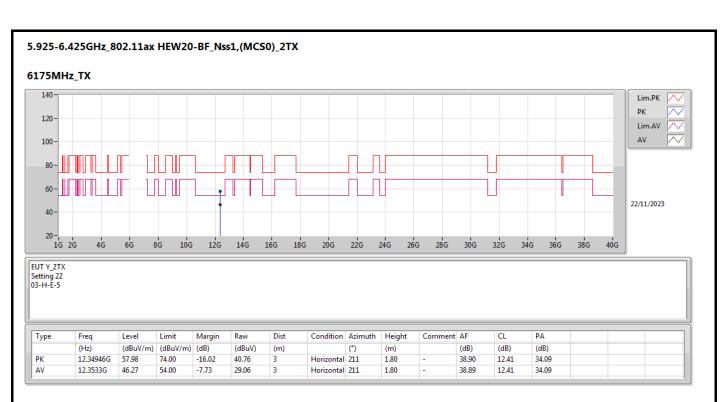




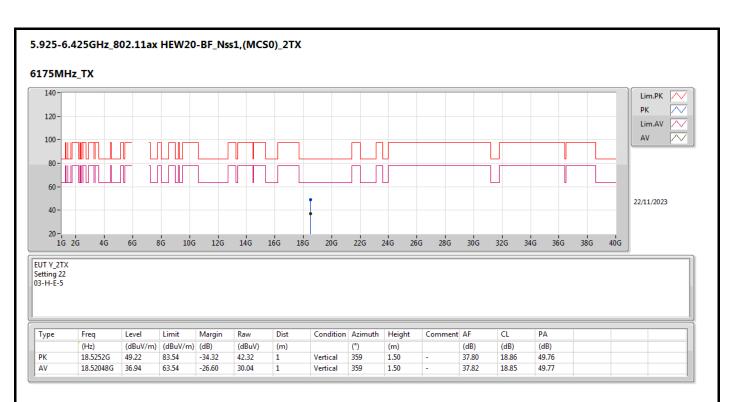




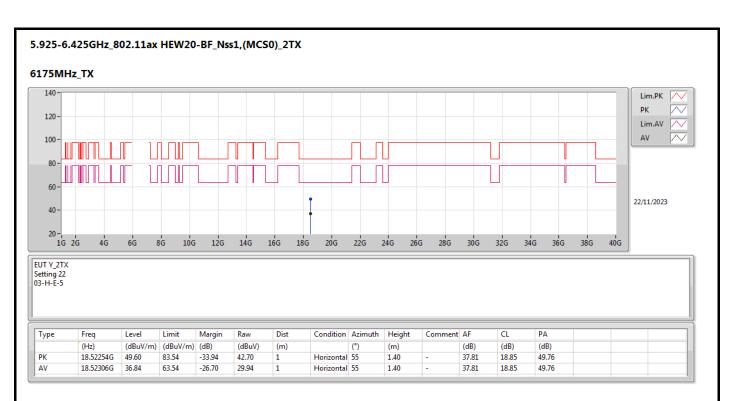




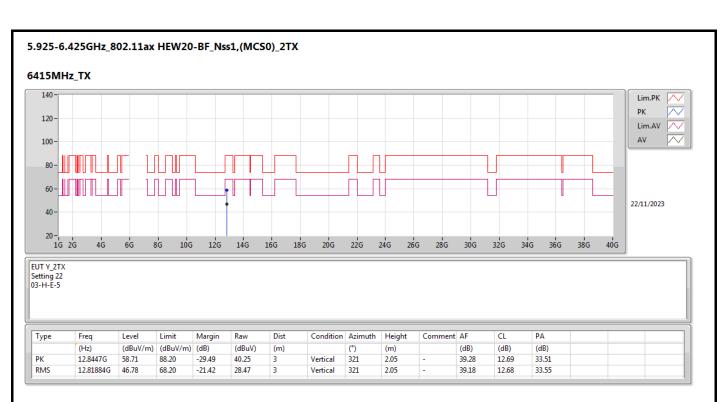




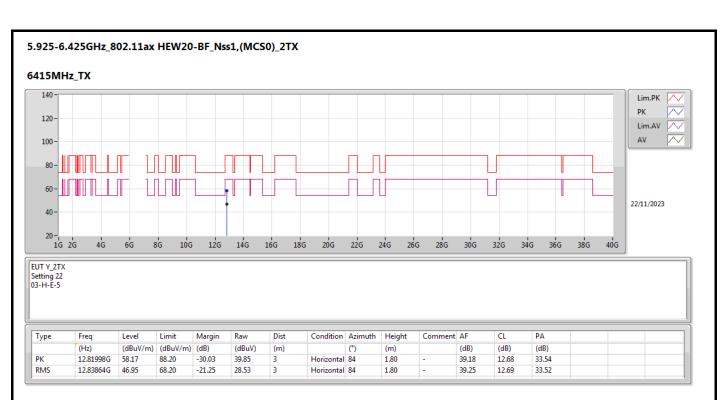




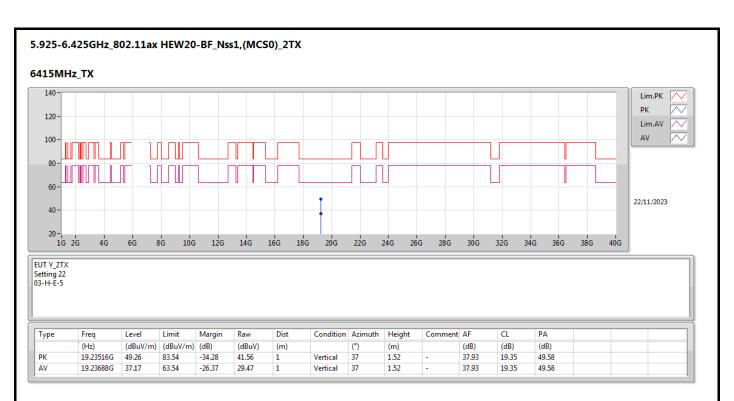




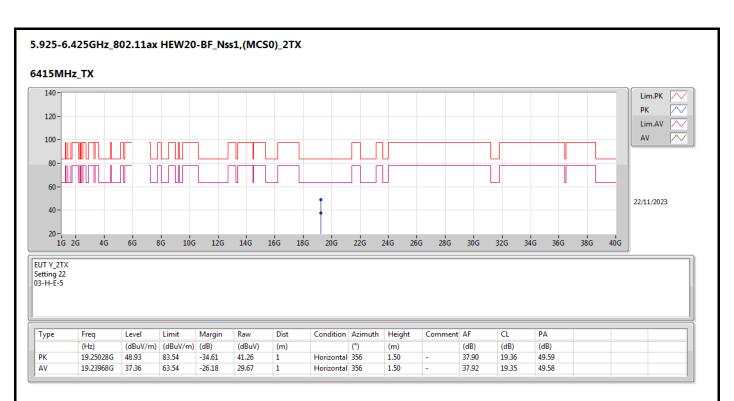




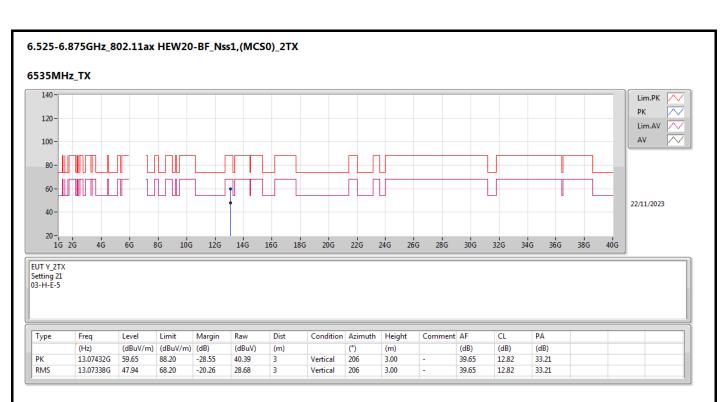




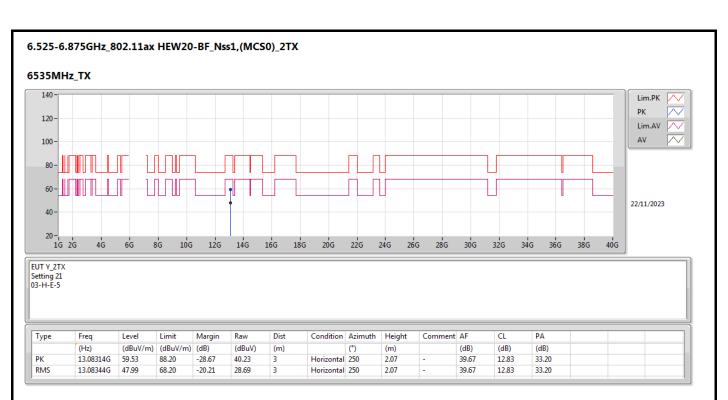




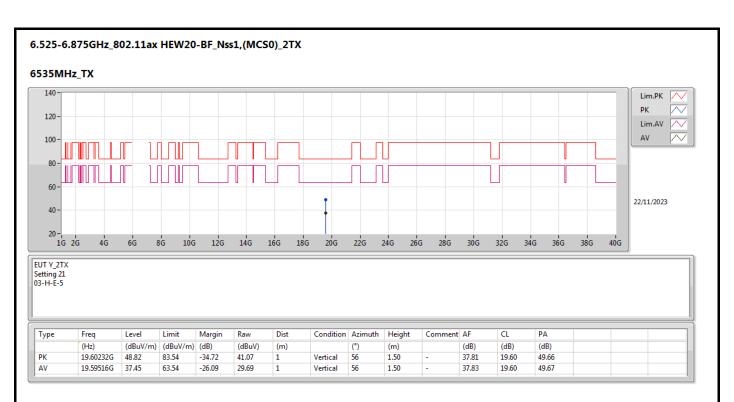




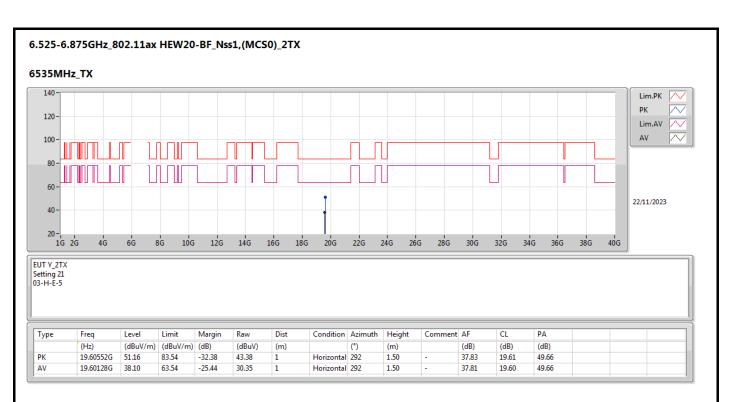




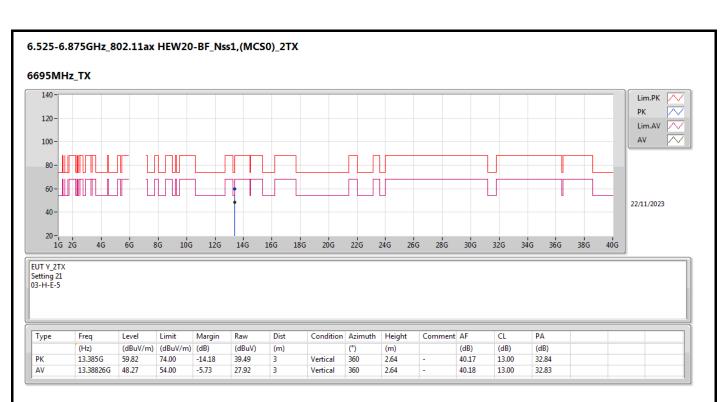




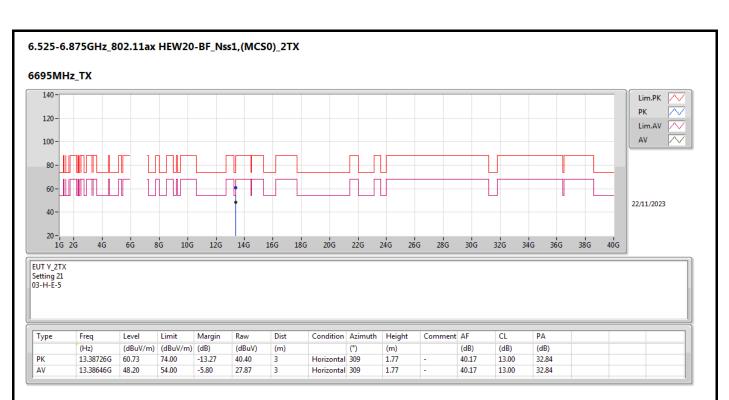




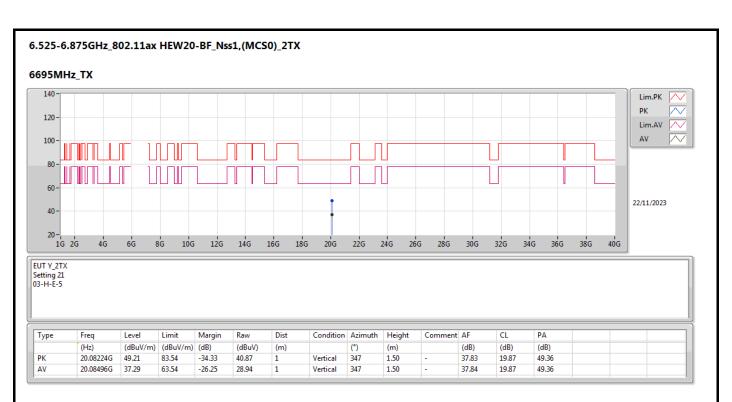




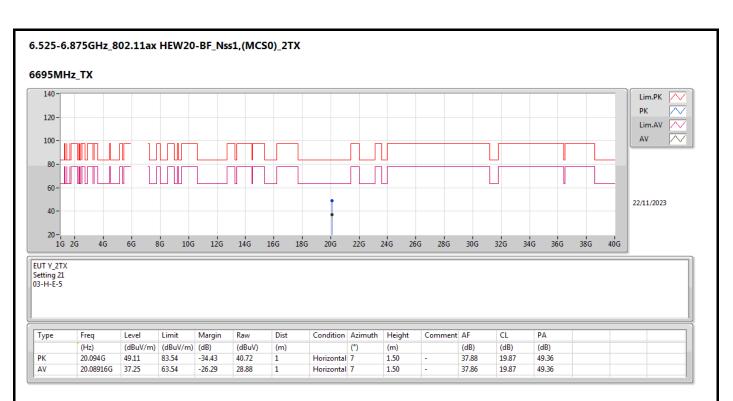




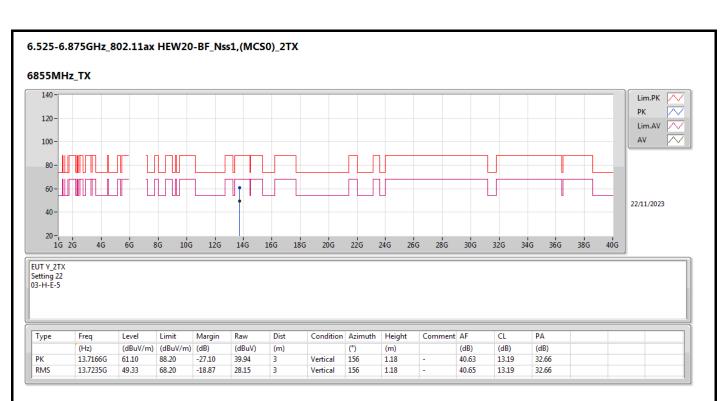




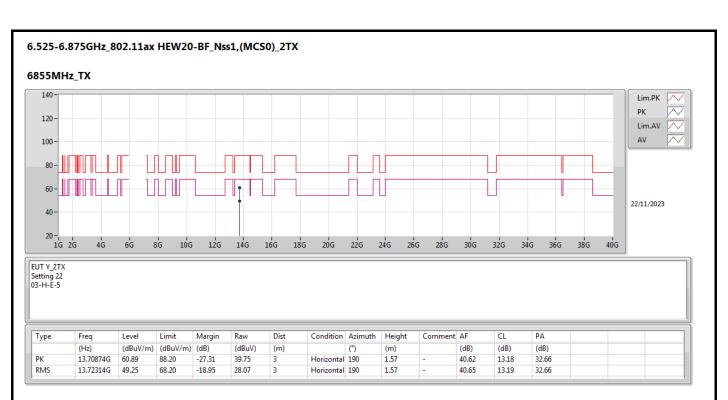




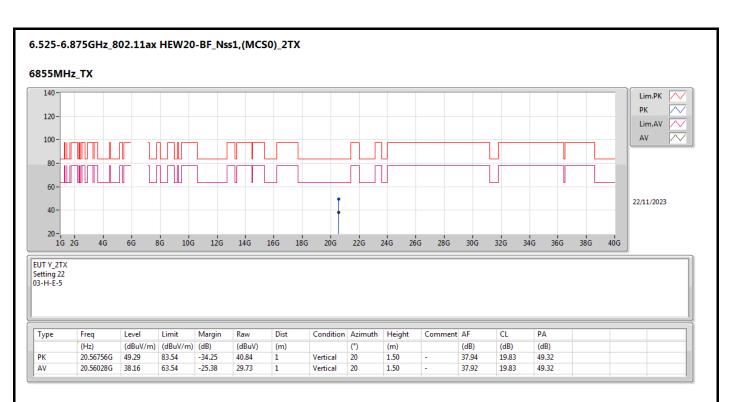




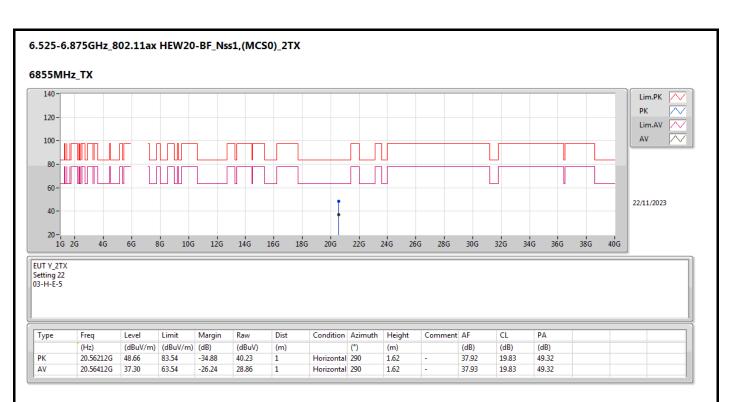








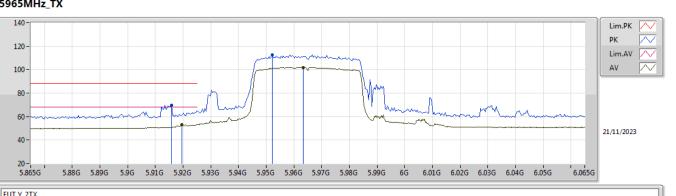






#### 5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX





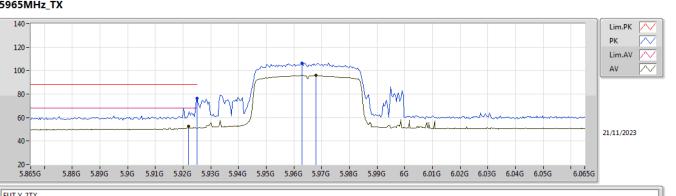
EUT Y\_2TX Setting 22 03-H-E-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)		
PK	5.9158G	69.90	88.20	-18.30	63.28	3	Vertical	340	1.45	-	34.53	7.19	35.10		
RMS	5.9196G	53.00	68.20	-15.20	46.37	3	Vertical	340	1.45	-	34.54	7.19	35.10		
PK	5.9522G	112.69	Inf	-Inf	106.00	3	Vertical	340	1.45	-	34.60	7.21	35.12		
RMS	5.9634G	101.93	Inf	-Inf	95.21	3	Vertical	340	1.45	-	34.63	7.21	35.12		





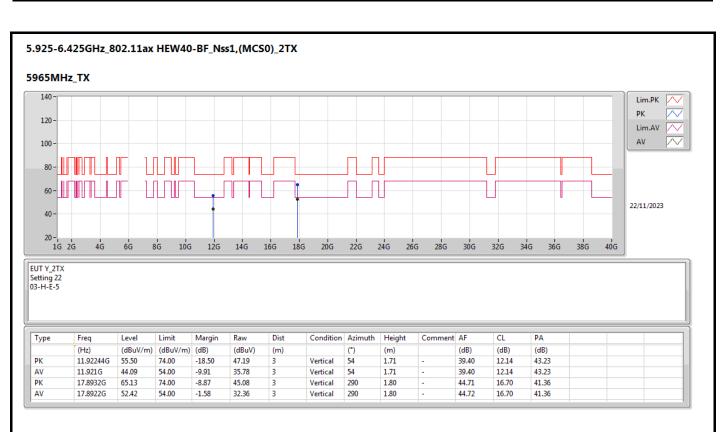




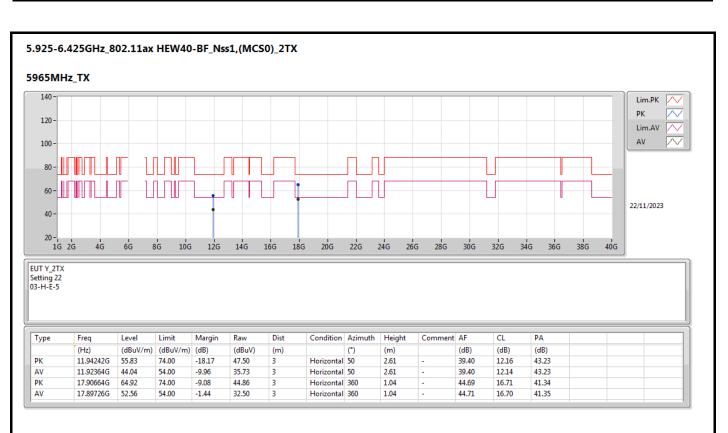
EUT Y\_2TX Setting 22 03-H-E-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)		
РК	5.925G	76.33	88.20	-11.87	69.69	3	Horizontal	288	1.00	-	34.55	7.19	35.10		
RMS	5.922G	52.48	68.20	-15.72	45.85	3	Horizontal	288	1.00	-	34.54	7.19	35.10		
РК	5.963G	106.39	Inf	-Inf	99.67	3	Horizontal	288	1.00	-	34.63	7.21	35.12		
RMS	5.968G	96.01	Inf	-Inf	89.28	3	Horizontal	288	1.00	-	34.64	7.21	35.12		

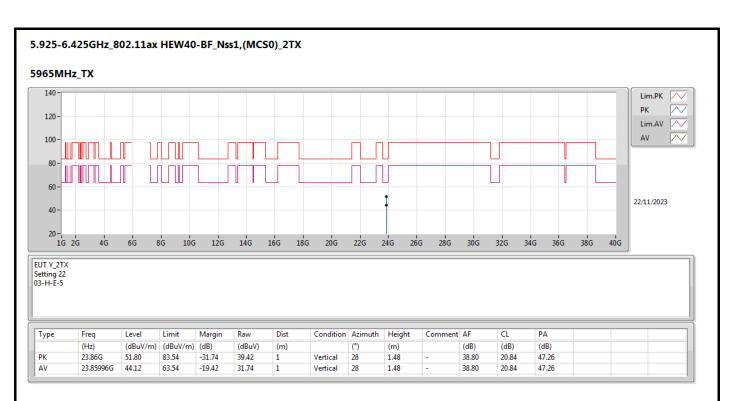




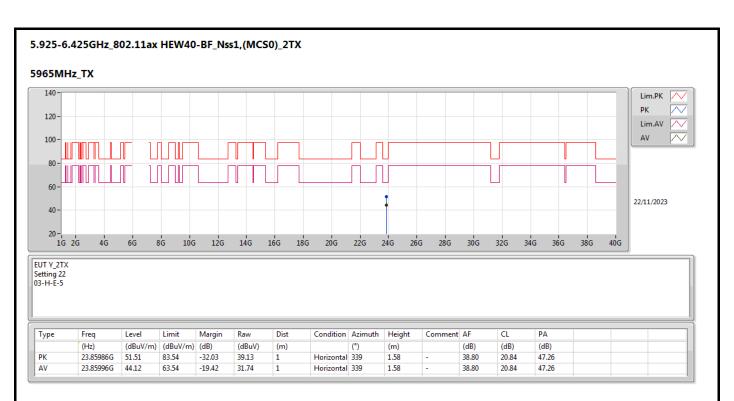




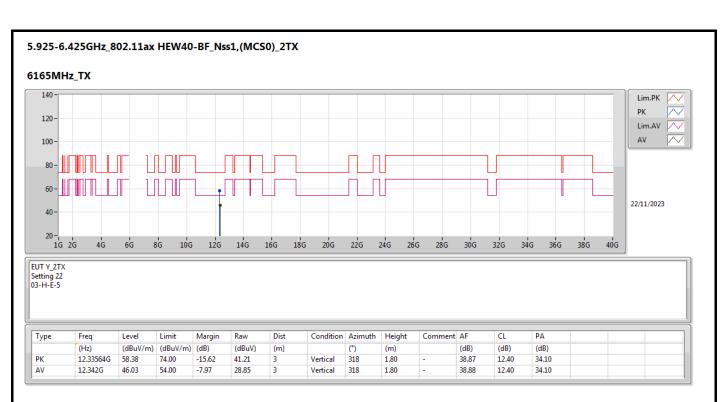




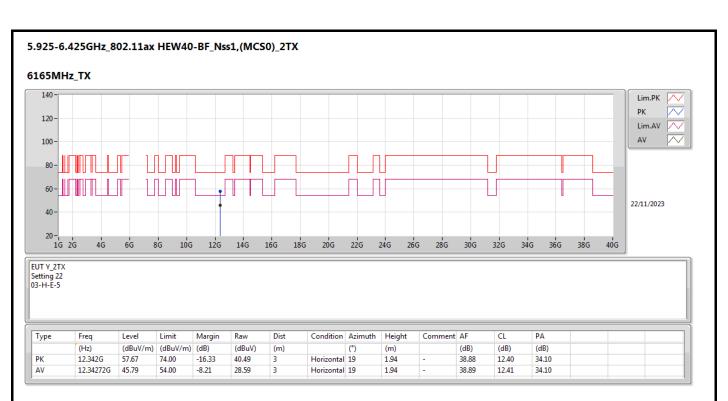




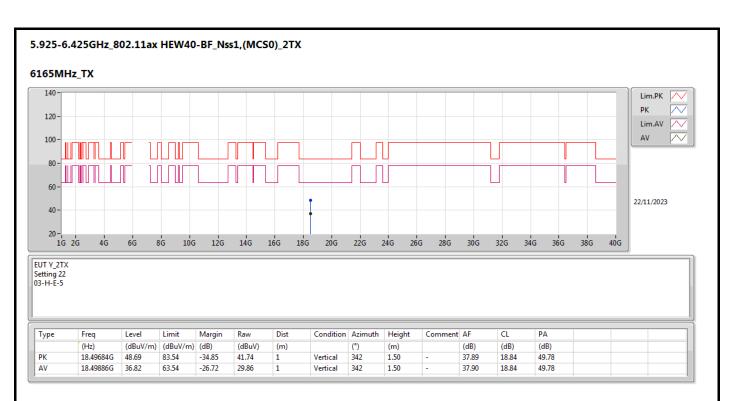




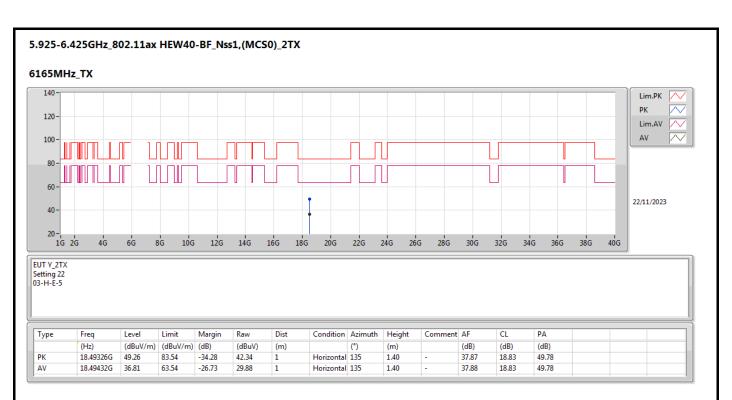




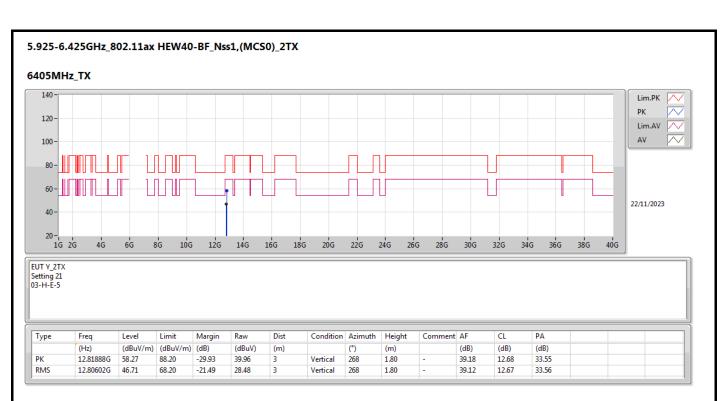




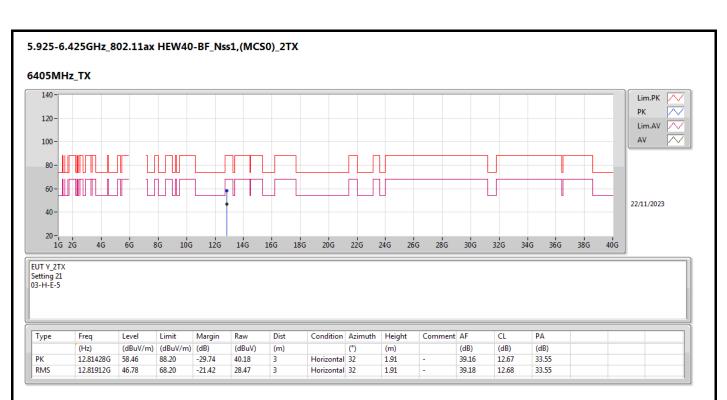




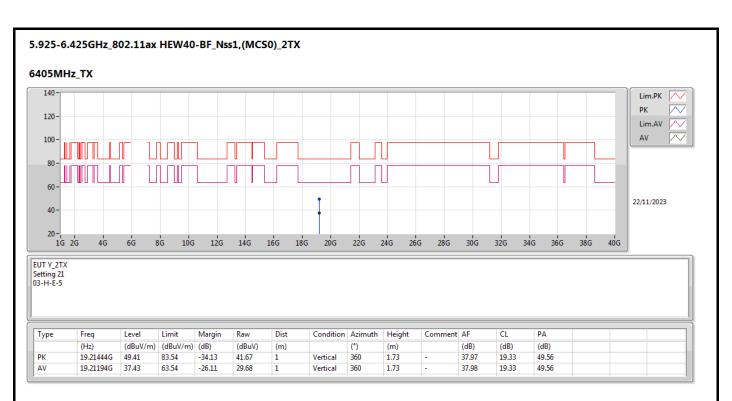




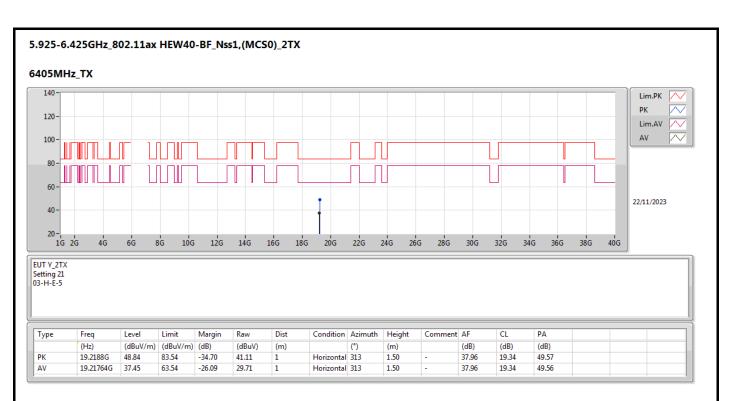




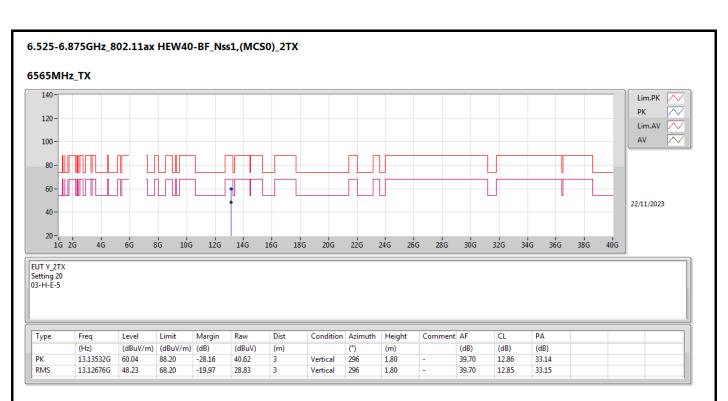




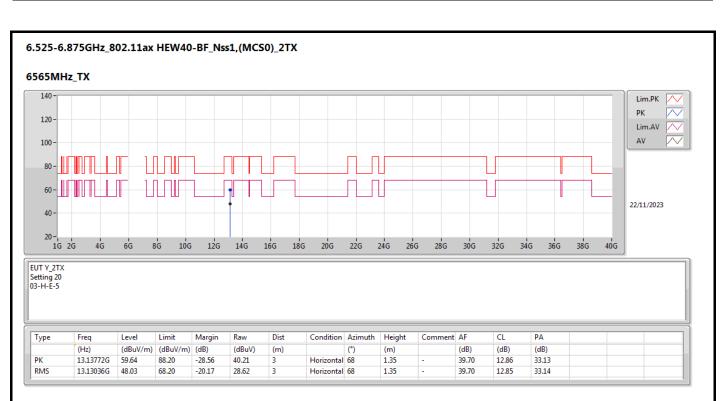




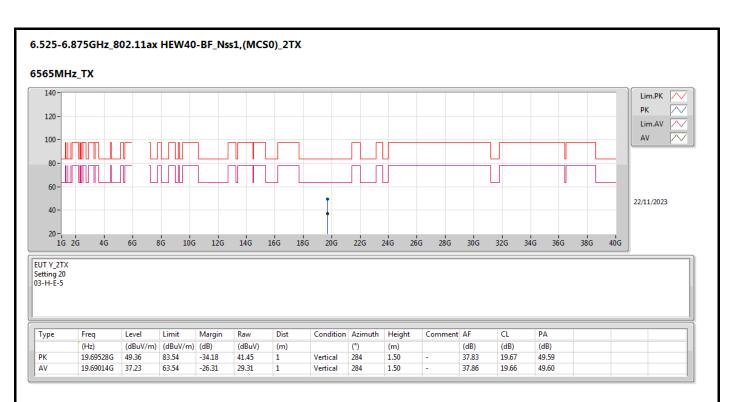




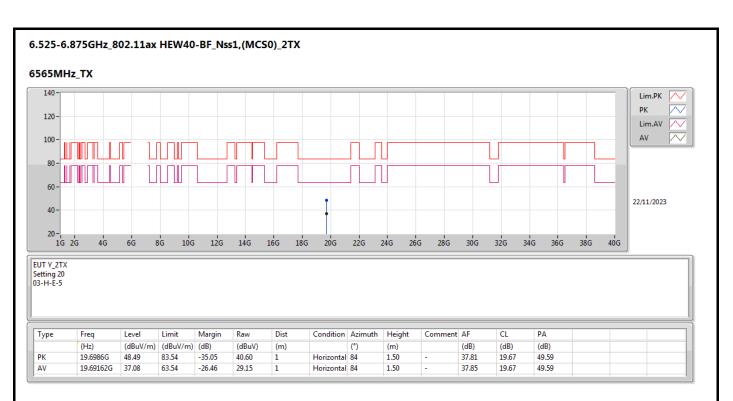




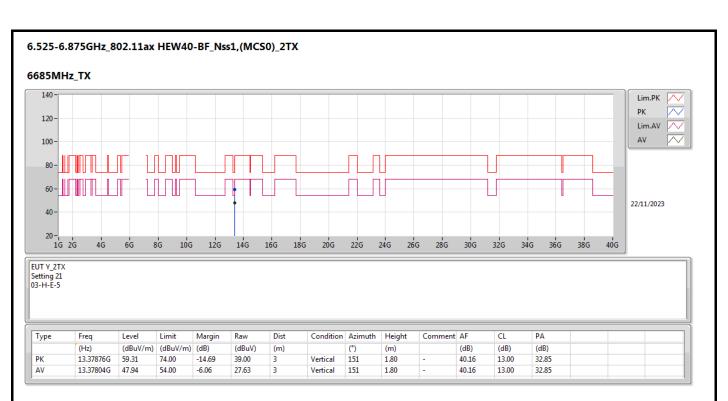




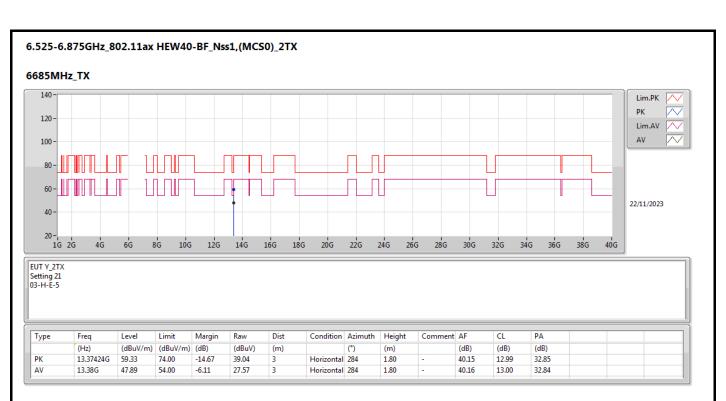




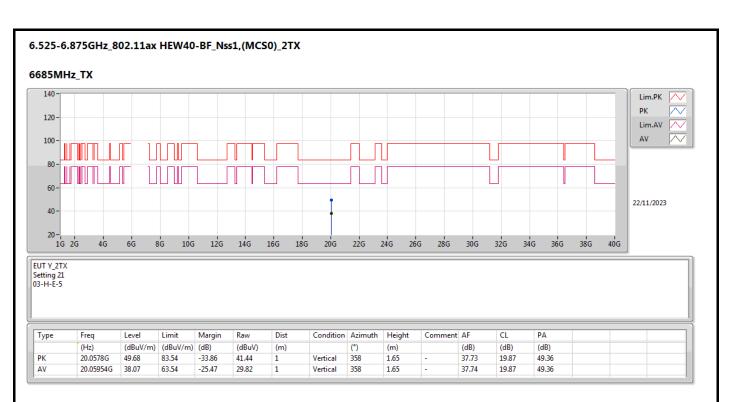




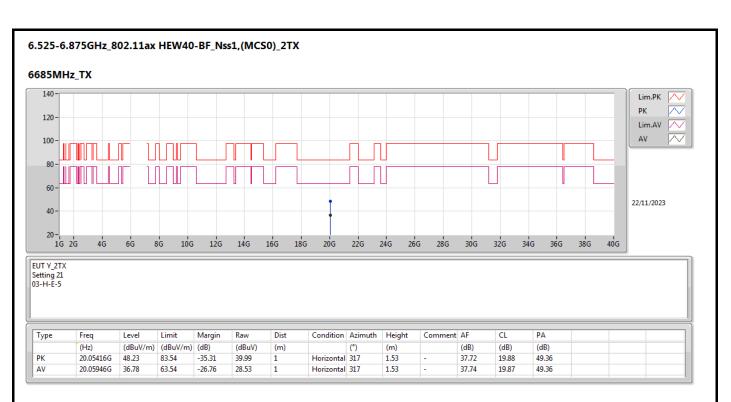




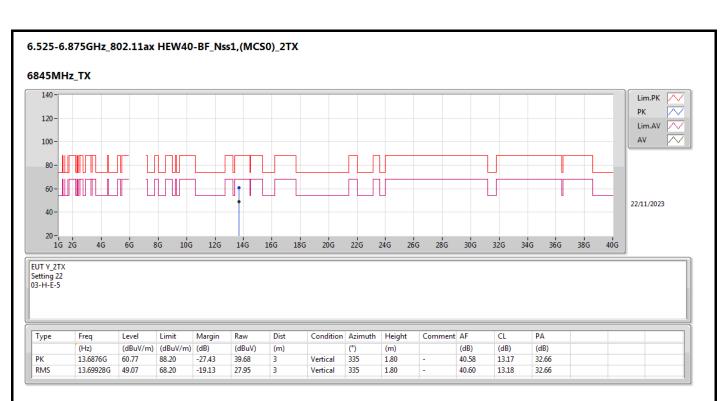




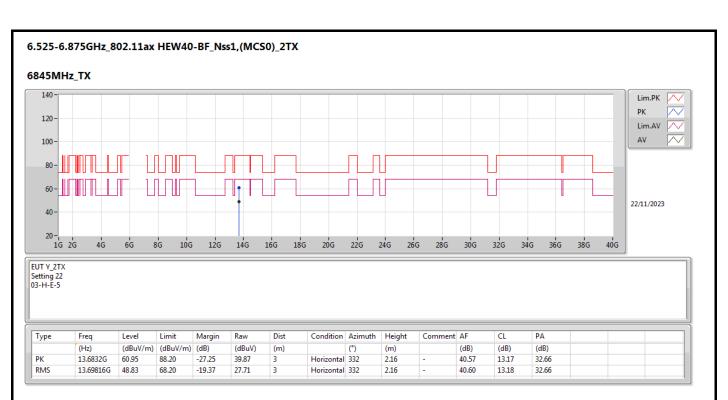




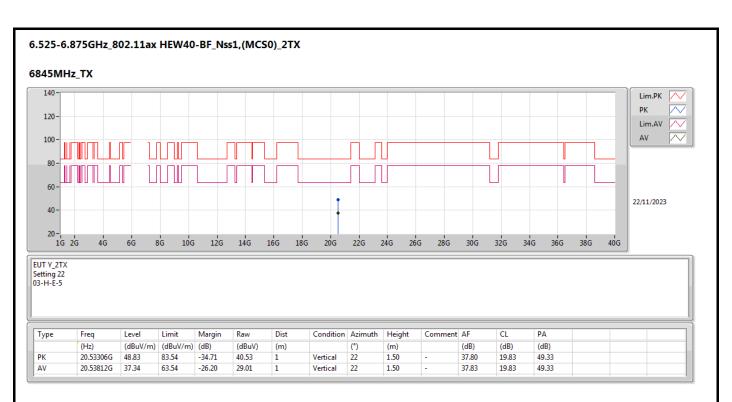




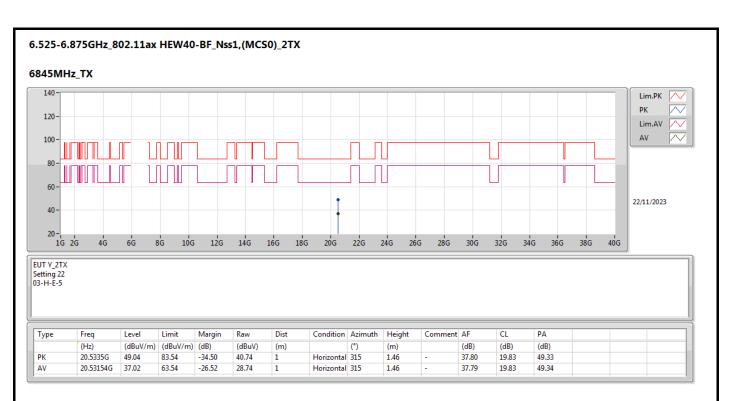




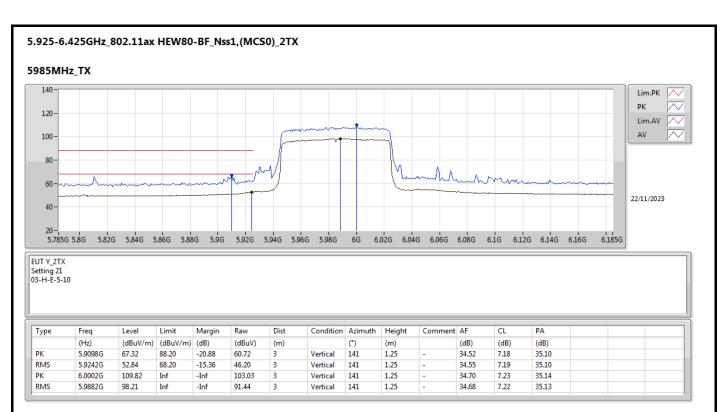




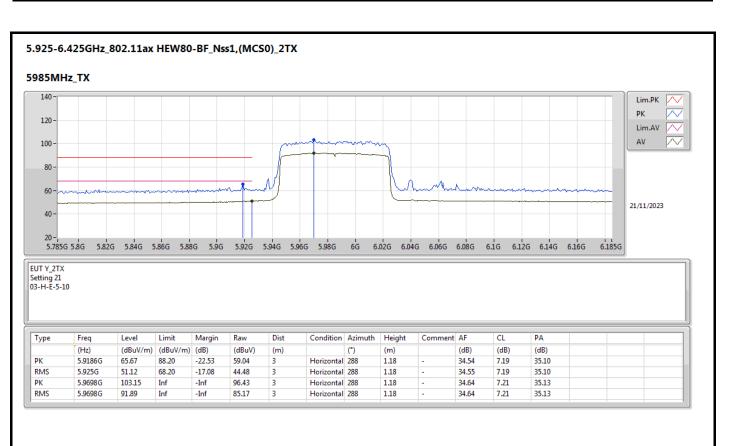




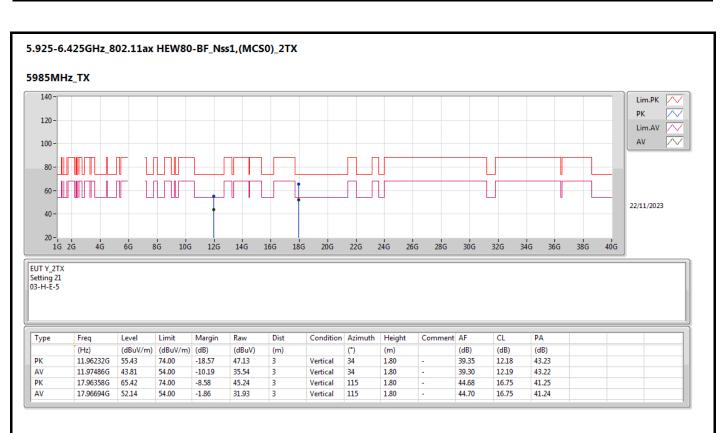




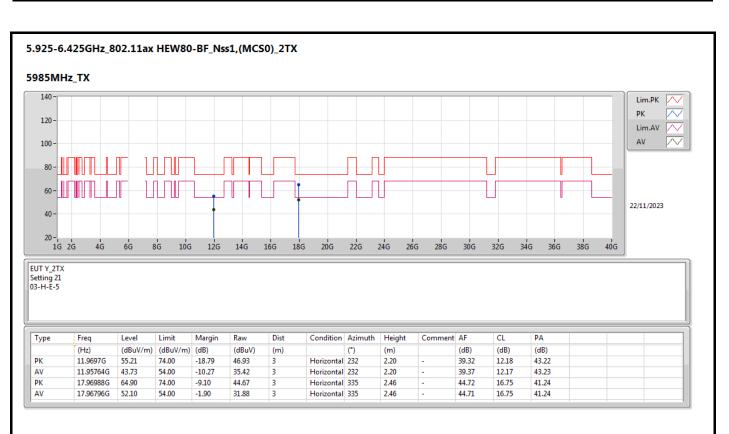




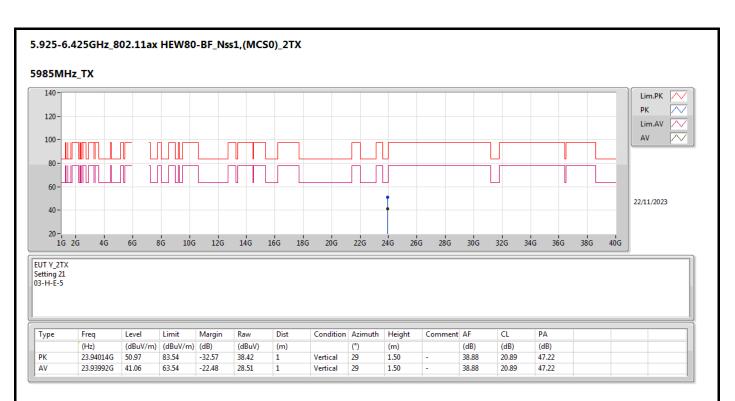




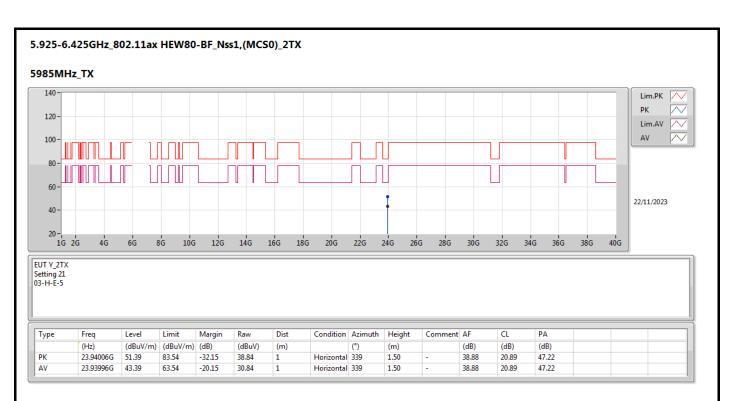




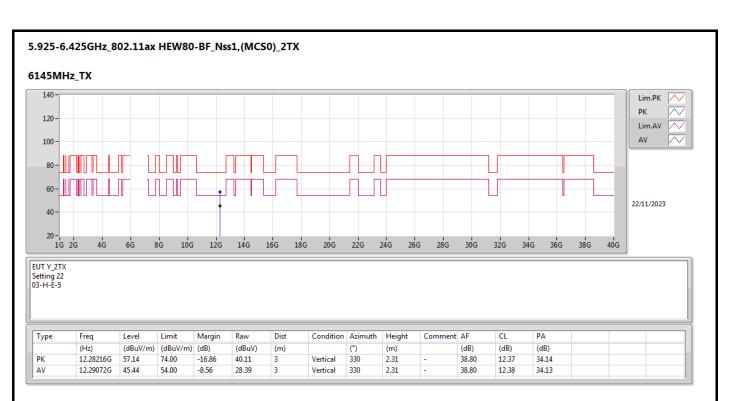




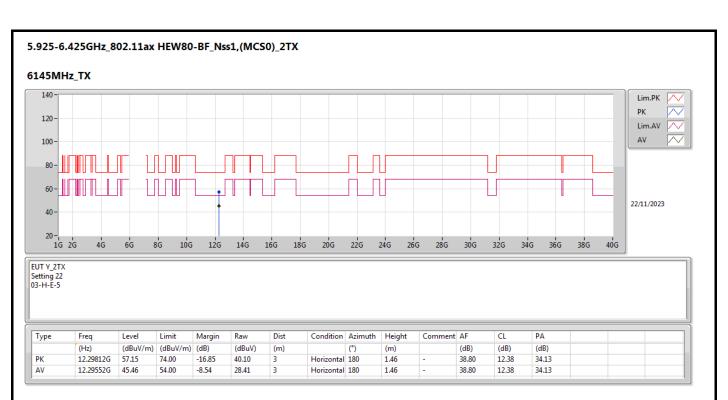




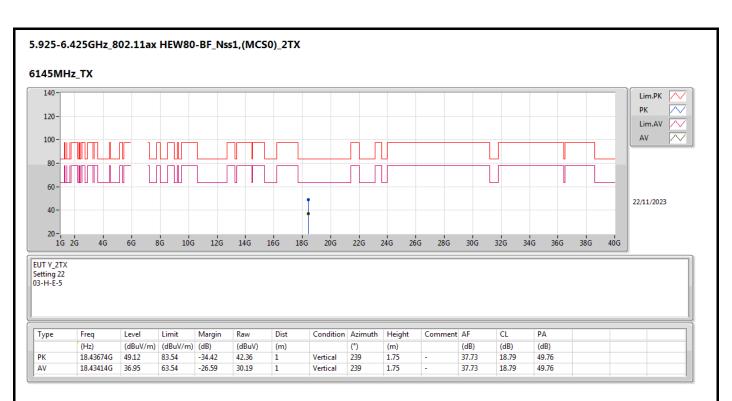




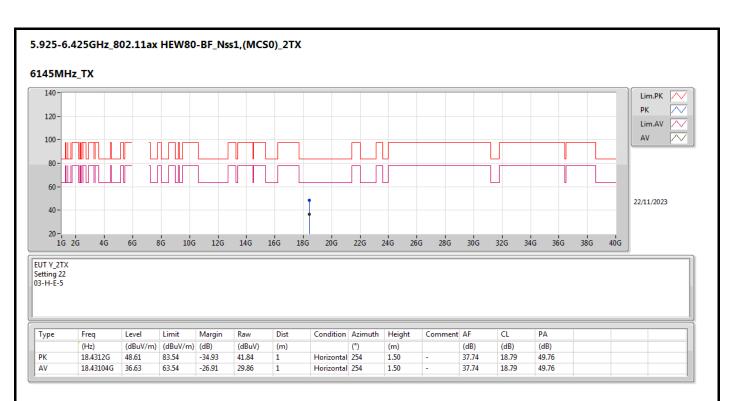




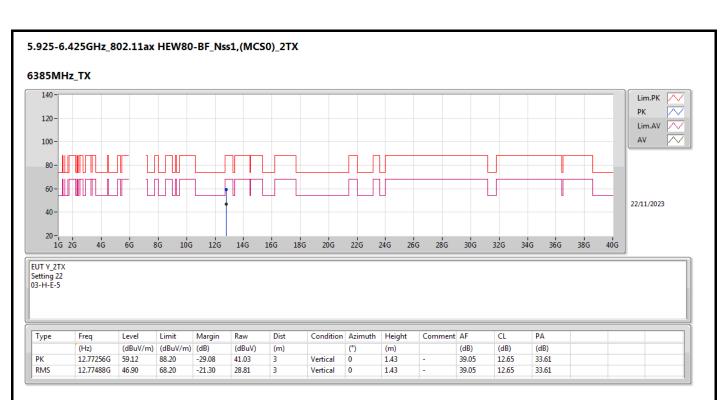




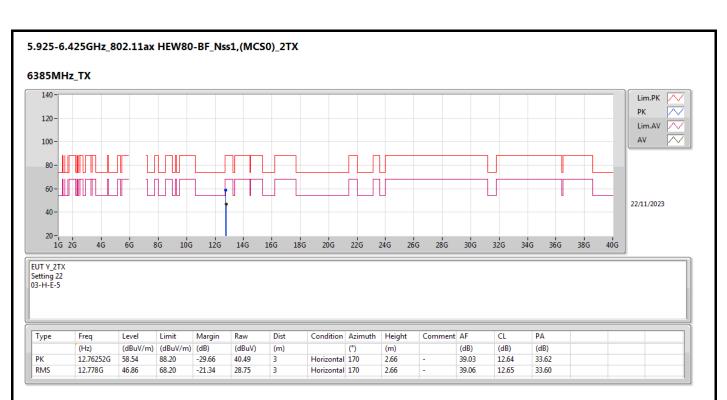




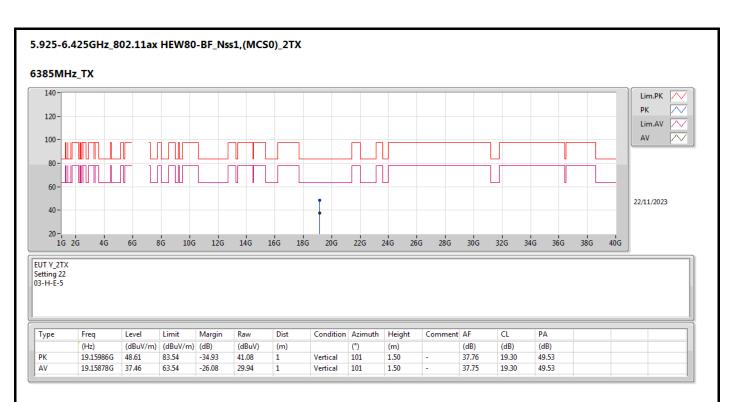




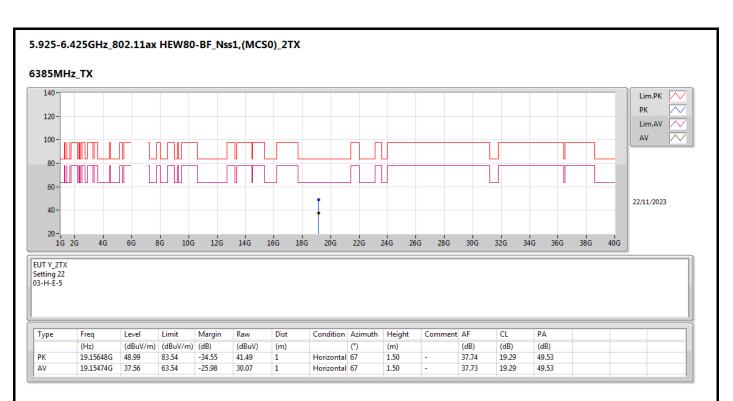




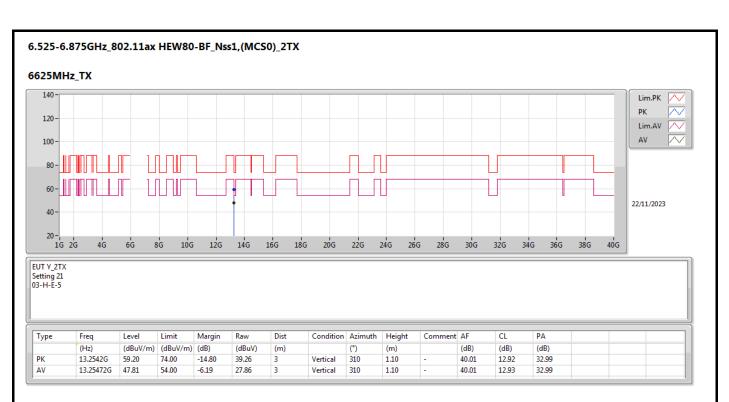




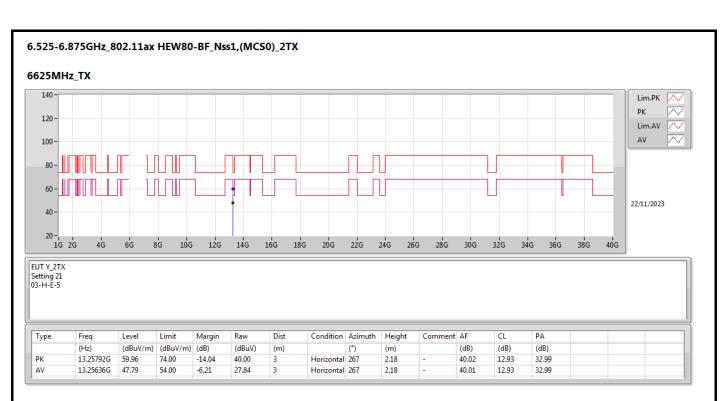




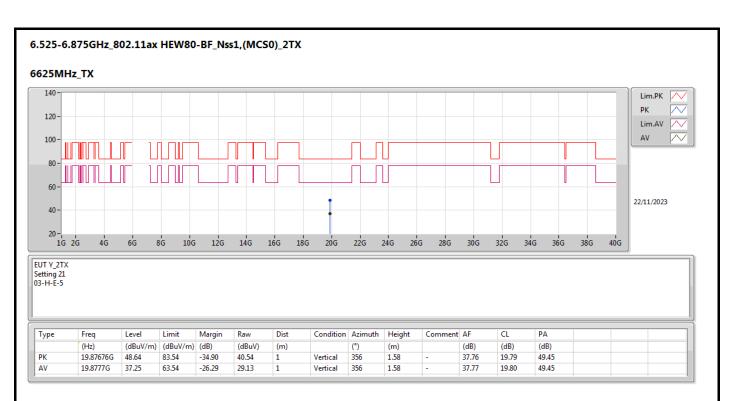




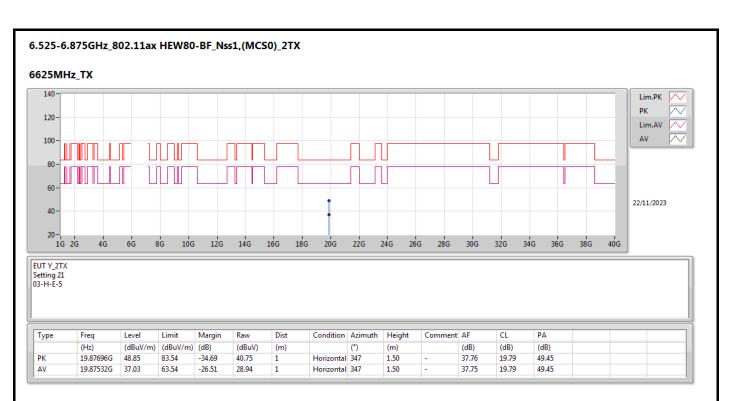




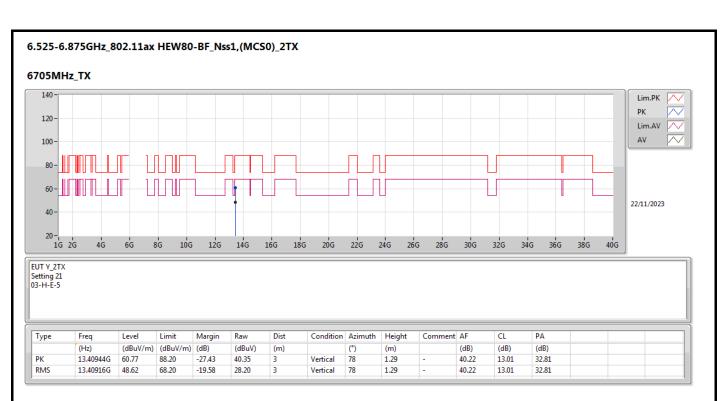




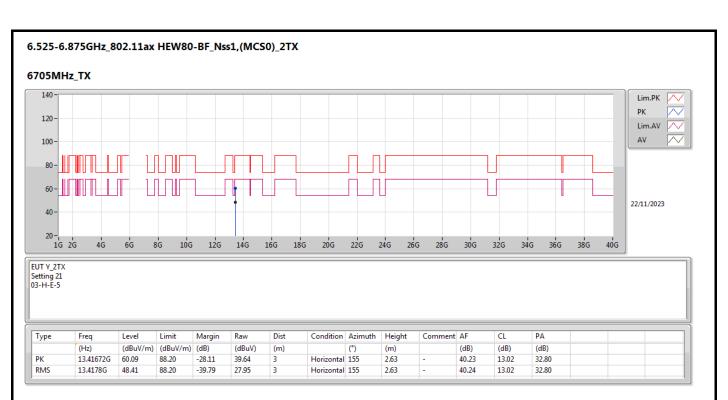




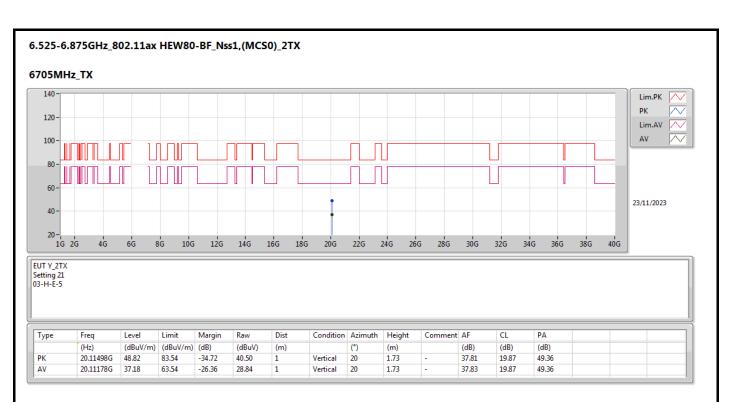




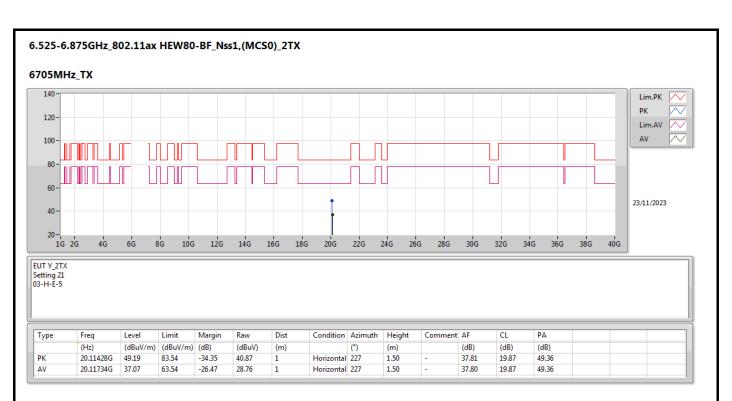




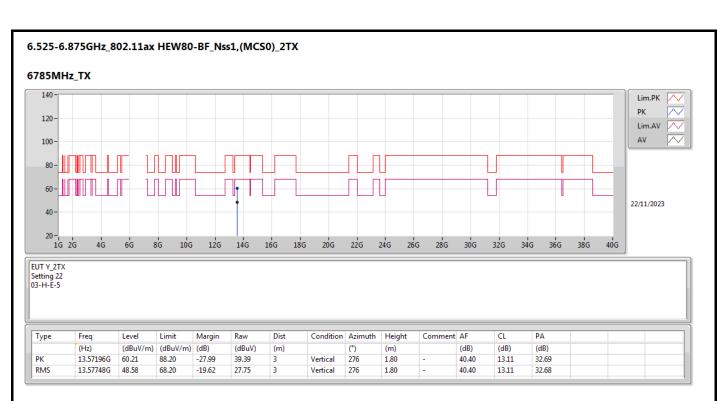




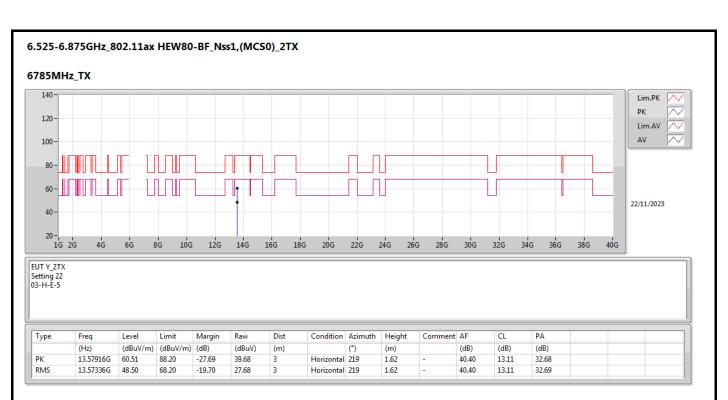




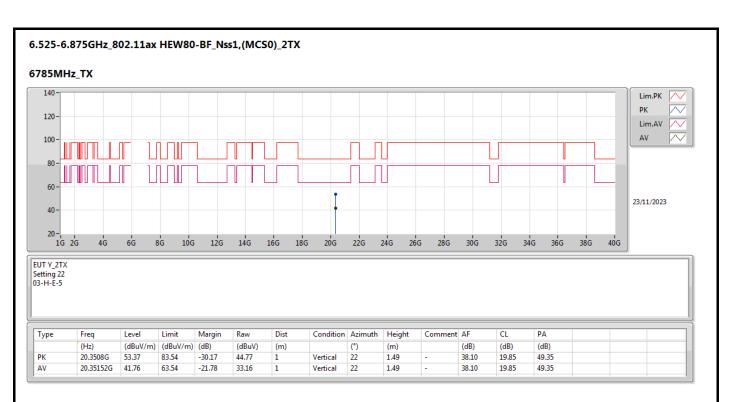




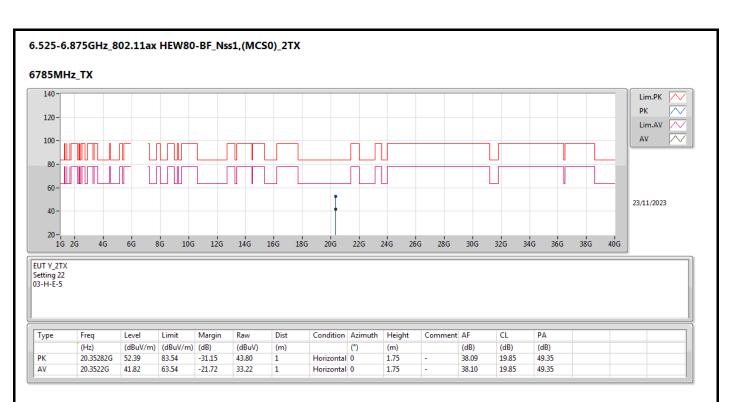








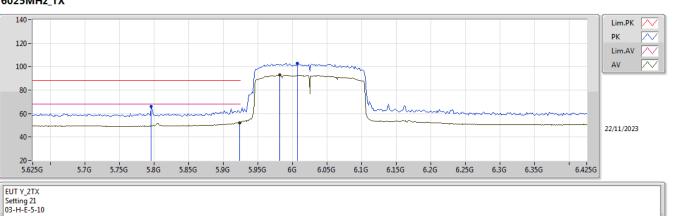








#### 6025MHz\_TX



Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)		
PK	5.7962G	66.06	88.20	-22.14	59.68	3	Vertical	345	1.80	-	34.29	7.13	35.04		
RMS	5.9242G	52.32	68.20	-15.88	45.68	3	Vertical	345	1.80	-	34.55	7.19	35.10		
PK	6.0074G	102.72	Inf	-Inf	95.91	3	Vertical	345	1.80	-	34.71	7.24	35.14		
RMS	5.9818G	92.71	Inf	-Inf	85.96	3	Vertical	345	1.80	-	34.66	7.22	35.13		



РК

RMS

6.0506G

6.0338G

98.17

87.11

Inf

Inf

-Inf

-Inf

91.18

80.19

3

3

Horizontal 0

Horizontal 0

1.80

1.80

34.80

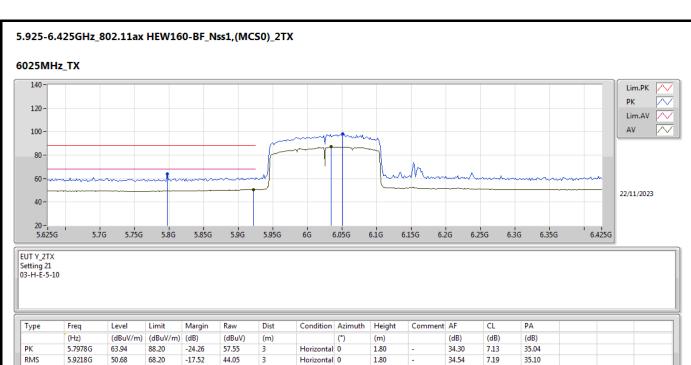
34.77

7.31

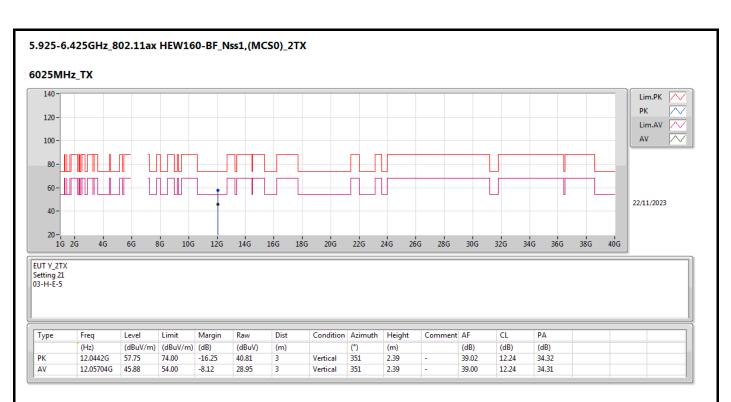
7.28

35.12

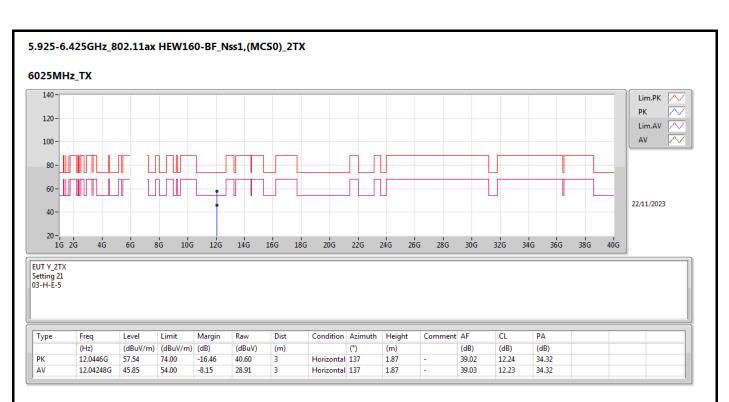
35.13



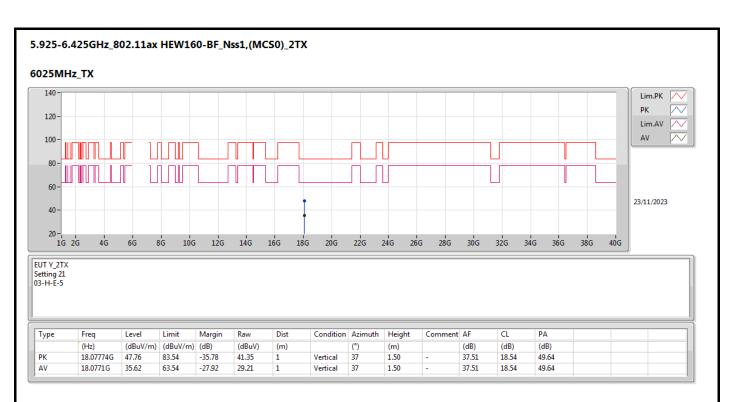




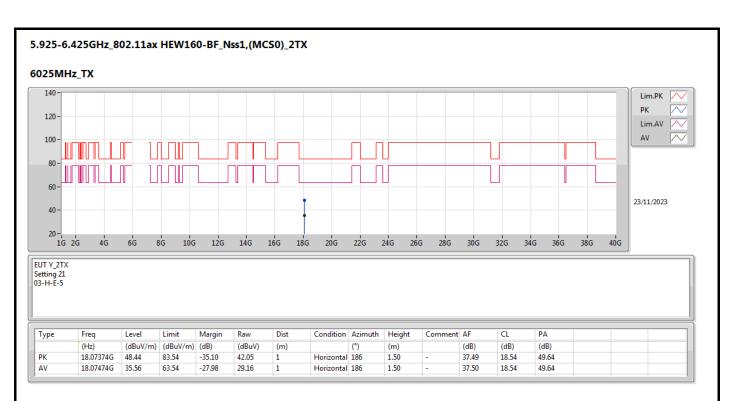




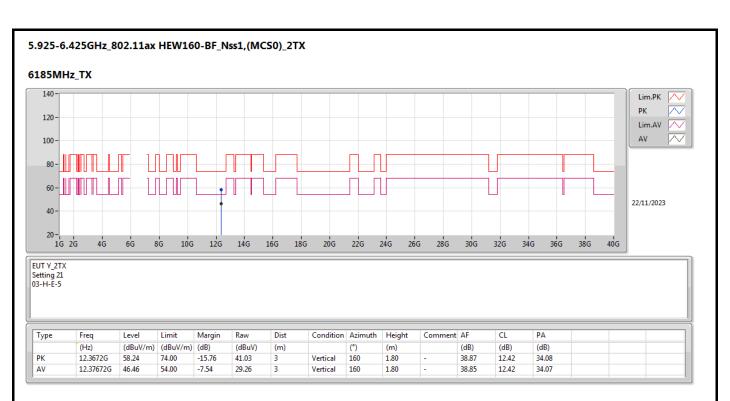




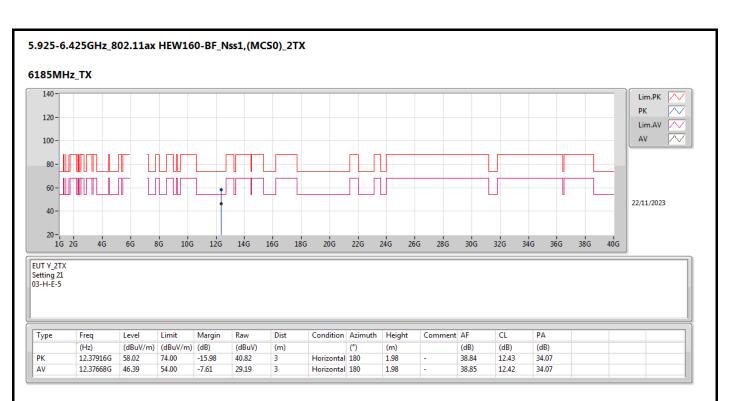








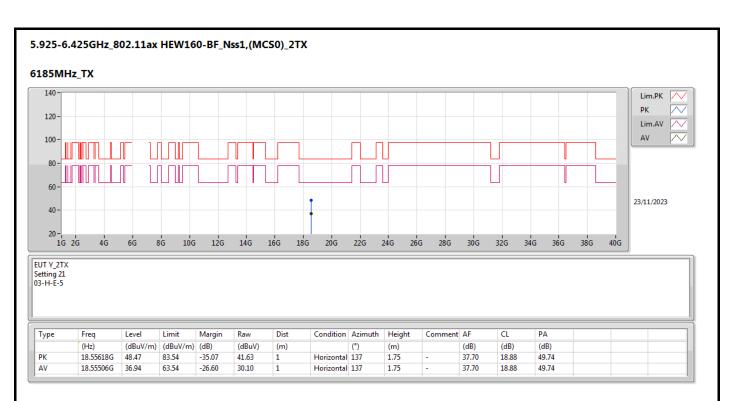




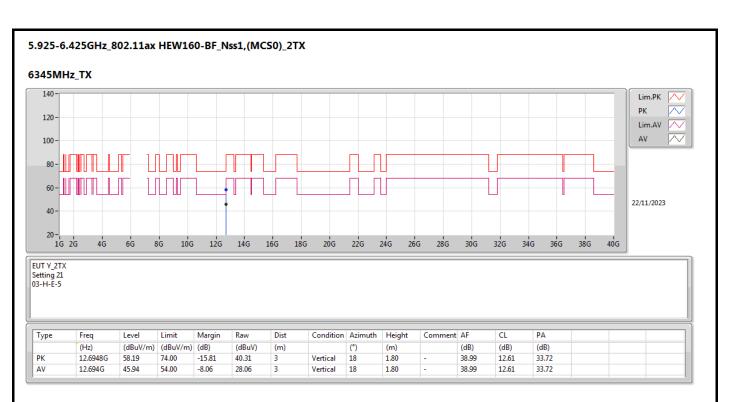




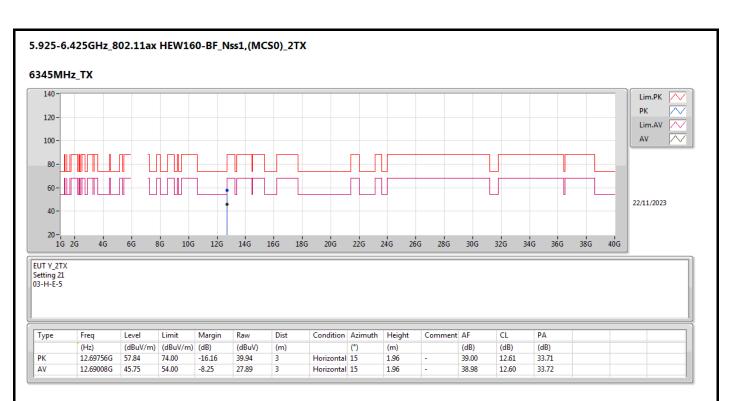




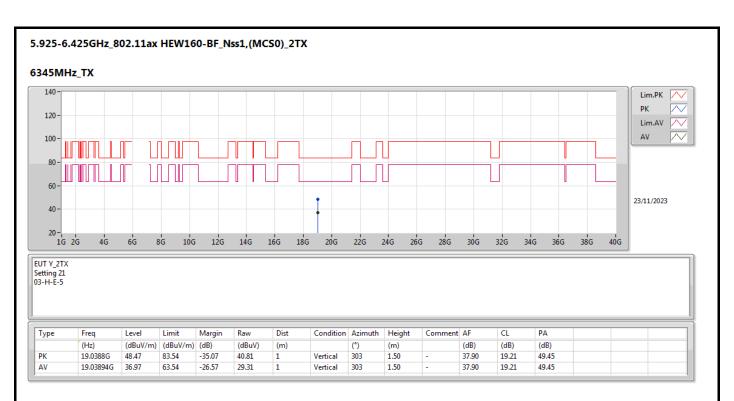




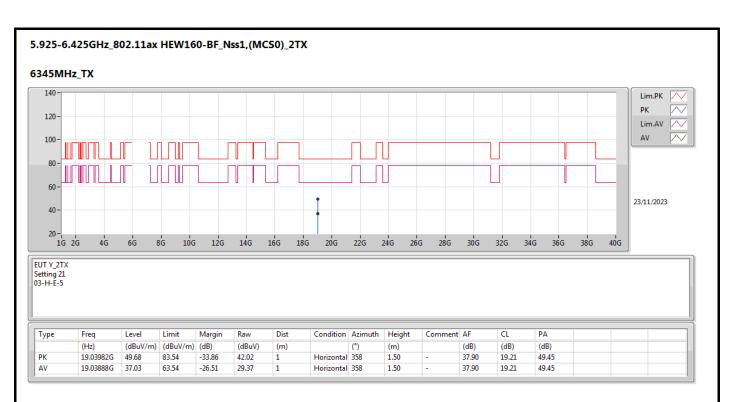




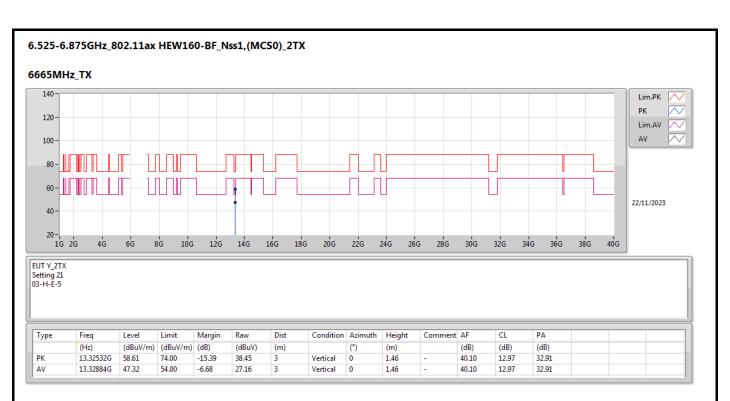




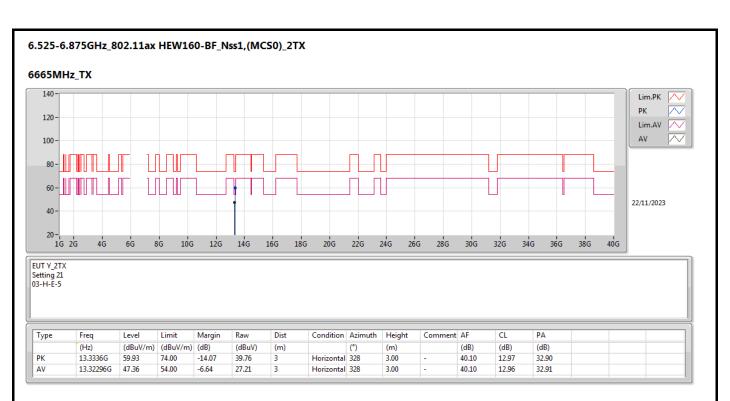




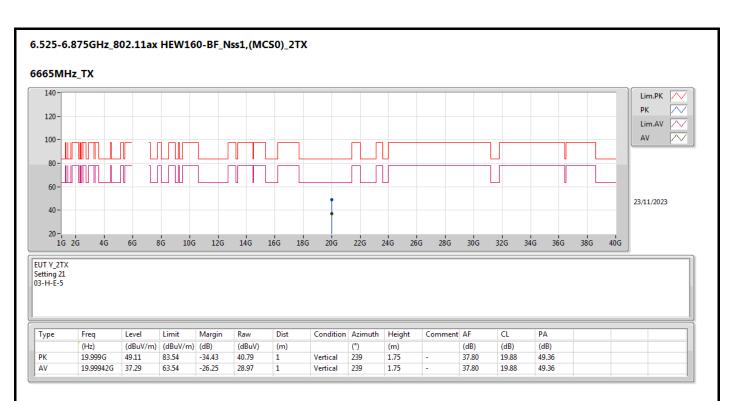




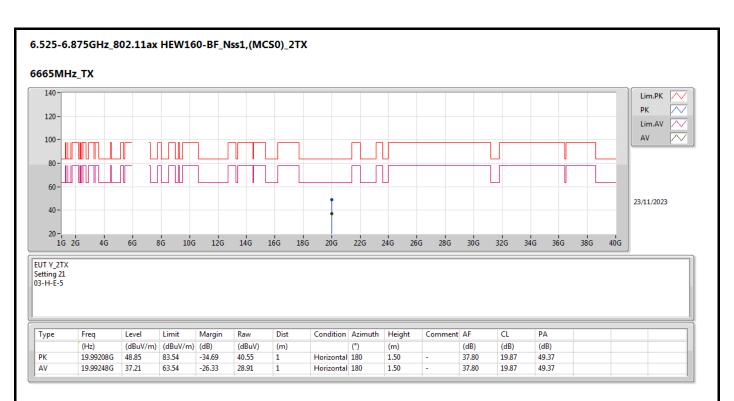






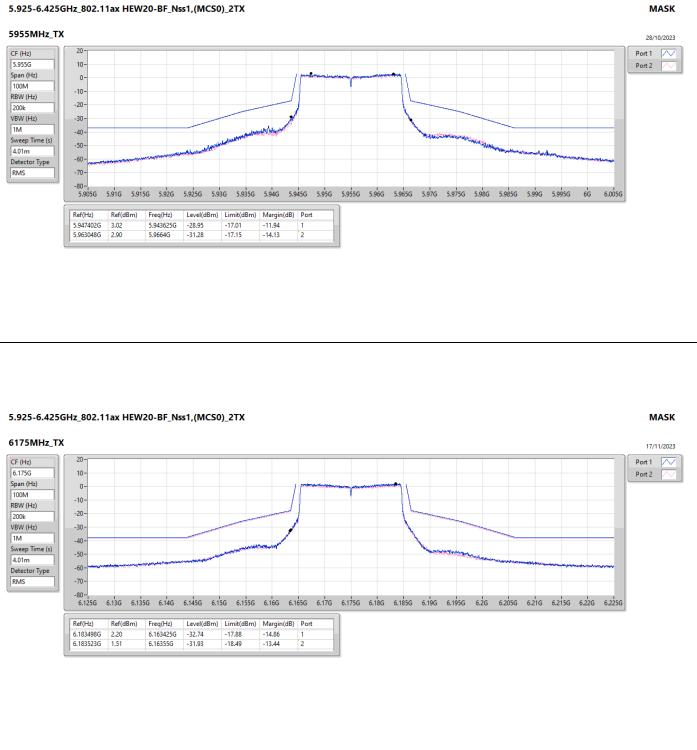






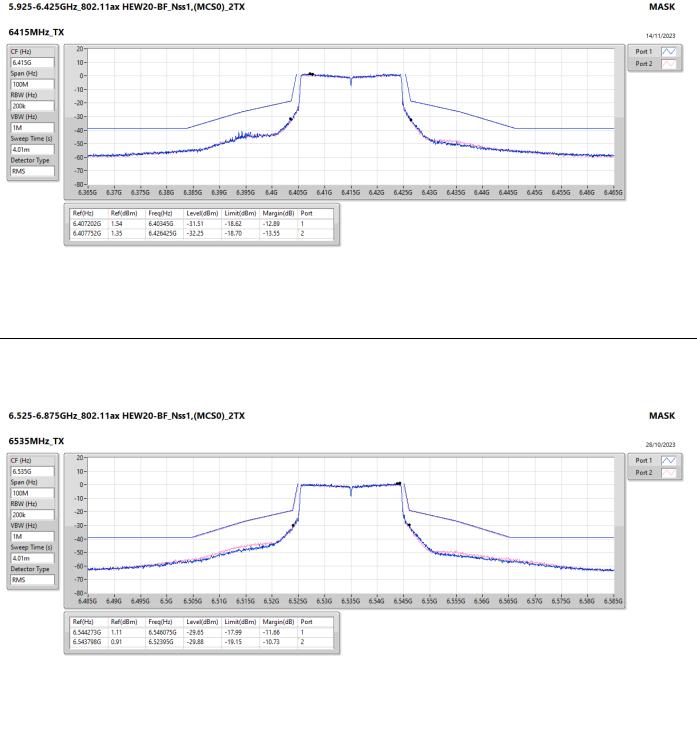


#### 5.925-6.425GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX



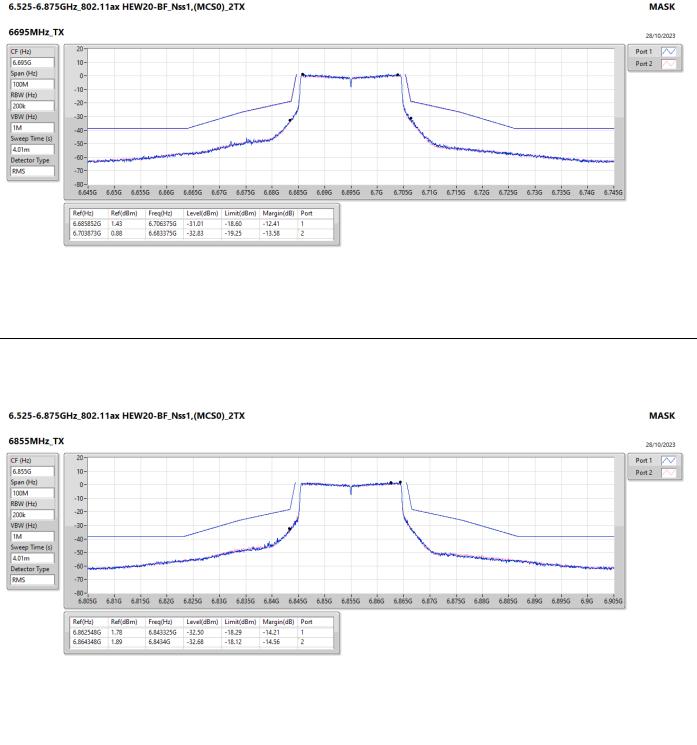


#### 5.925-6.425GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX



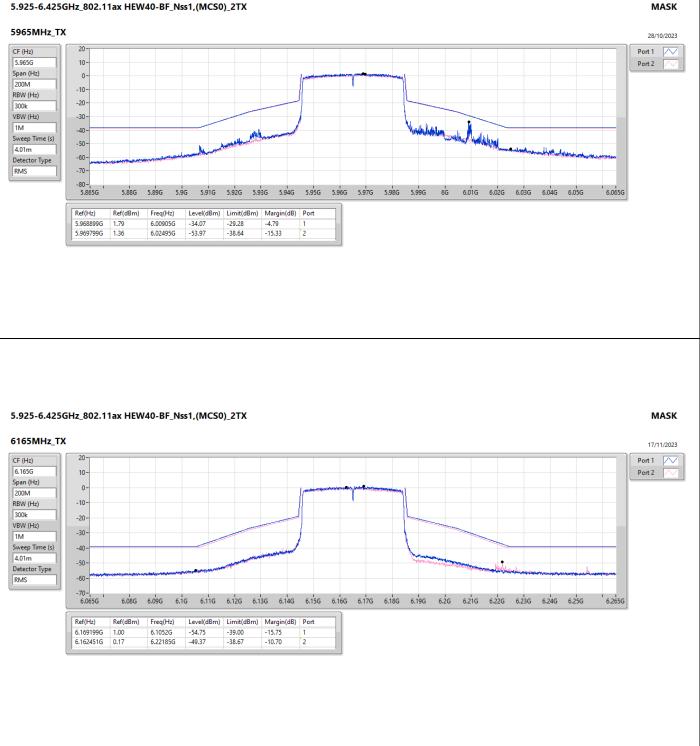


#### 6.525-6.875GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX



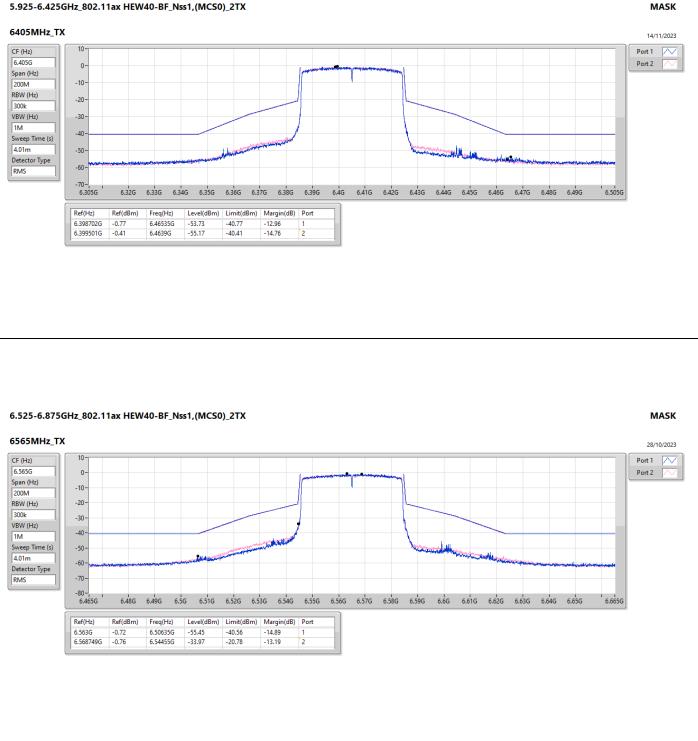


#### 5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX



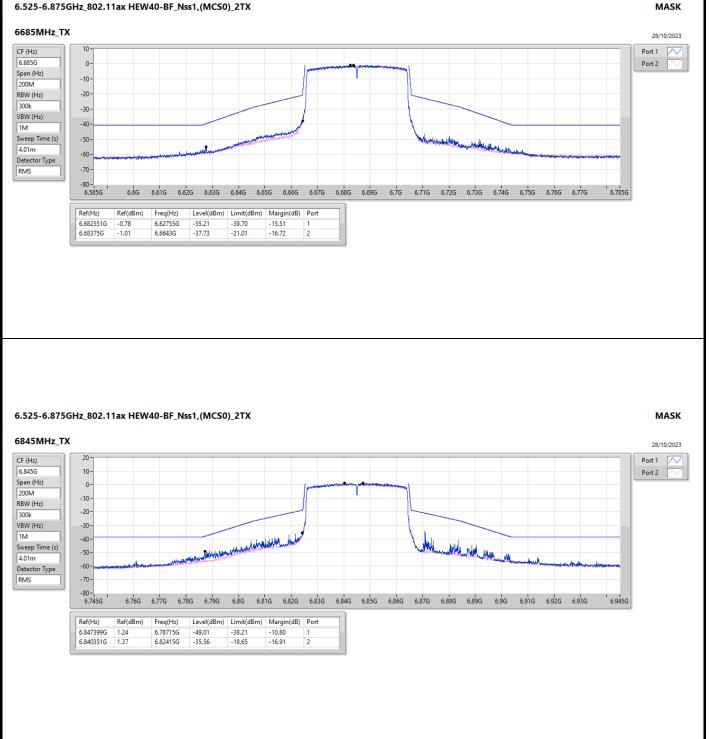


#### 5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX



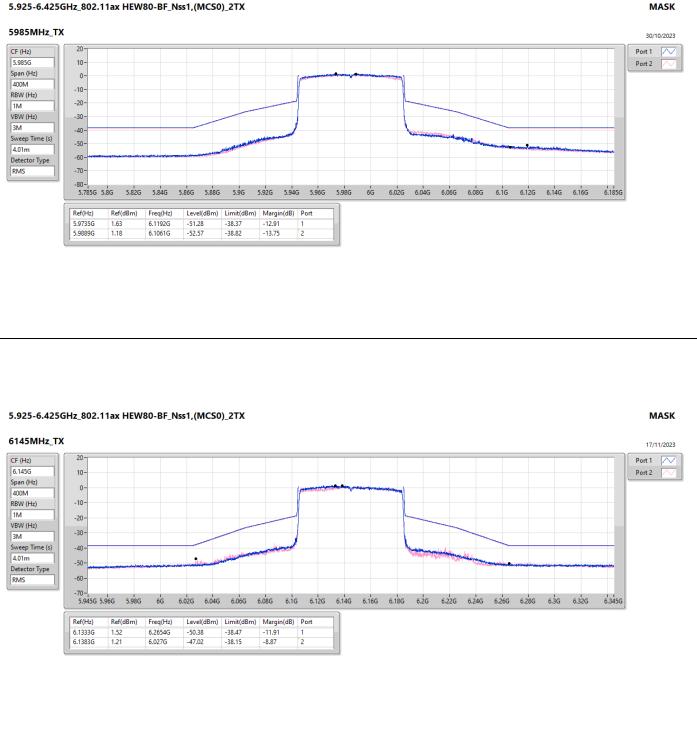


#### 6.525-6.875GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX



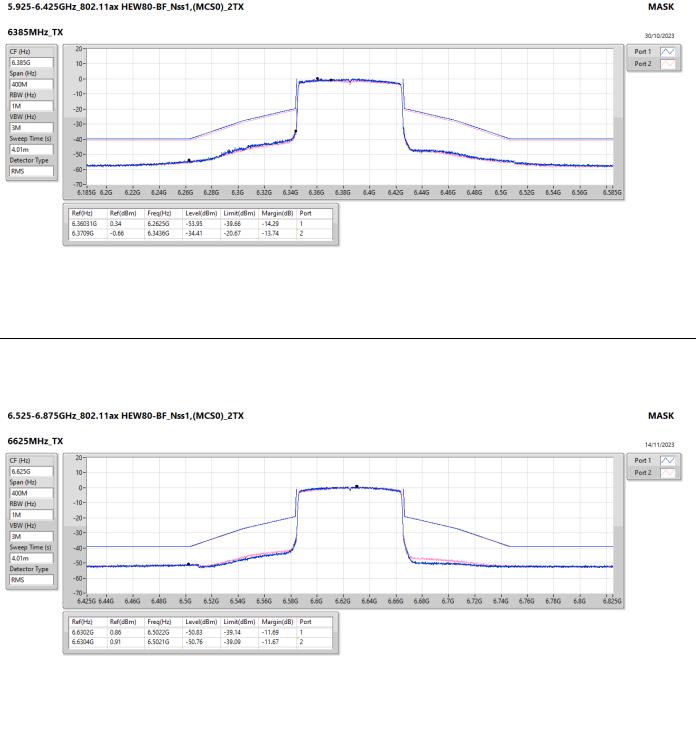


#### 5.925-6.425GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX



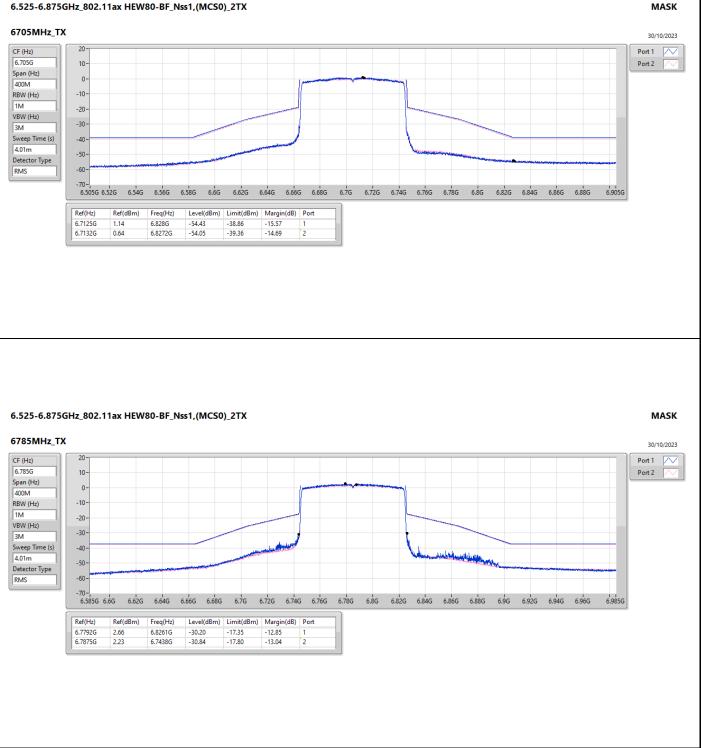


#### 5.925-6.425GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX



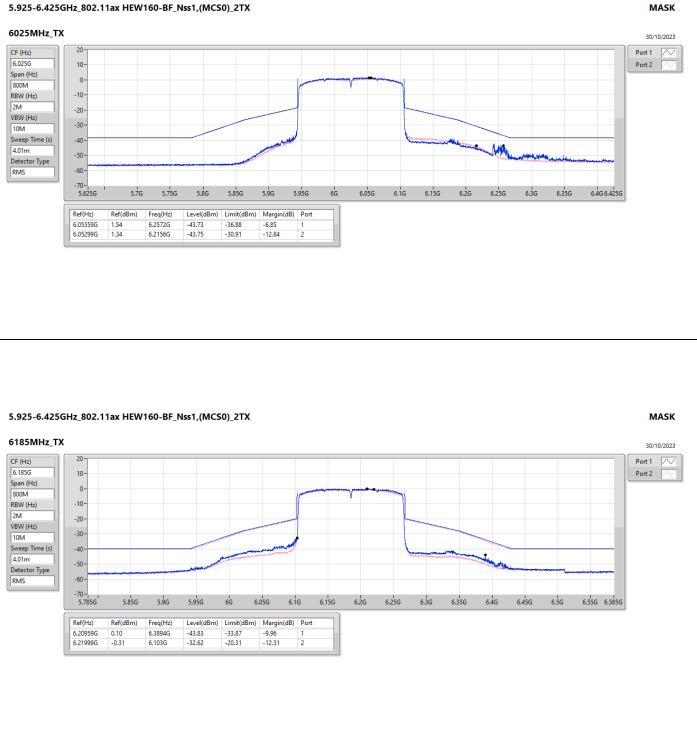


#### 6.525-6.875GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX





#### 5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX





#### 5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

