Report No. : FR350423AA





# **RADIO TEST REPORT**

FCC ID	: QDS-BRCM1097
Equipment	: 802.11 a/ax WLAN Router
Brand Name	: Broadcom
Model Name	: BCM94912REF1D
Applicant : Broadcom Corporation 270 Innovation Drive San Jose California	
Manufacturer	: Broadcom Corporation 270 Innovation Drive San Jose California USA
Standard	: 47 CFR FCC Part 15.407

The product was received on May 05, 2023, and testing was started from May 29, 2023 and completed on Nov. 30, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this 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.

ym

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 35 Issued Date : Dec. 04, 2023 Report Version : 04



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# History of this test report

Report No.	Version	Description	Issued Date
FR350423AA	01	Initial issue of report	Nov. 01, 2023
FR350423AA	02	<ol> <li>Remove the un-necessary note of Appendix C.1/C.2/D.1/D.2</li> <li>Update the test result of Standard power 6185MHz for Appendix B.1/E.3</li> <li>Remove the un-necessary information of summary and result of Appendix E.3</li> </ol>	Nov. 13, 2023
FR350423AA	03	Update the related test result due to degrading the Standard power.	Nov. 22, 2023
FR350423AA	04	<ol> <li>Adding Test Result of 802.11a mode on Appendix B~E.</li> <li>Adding the Channel Bandwidth Reduction Mechanism for section1.1.4</li> </ol>	Dec. 04, 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 Isotopically Radiated Power (E.I.R.P.)	PASS	-
3.4	15.407(a)	Peak Power Spectral Density (E.I.R.P.)	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-
3.6	15.407(d)	Contention-Based Protocol	PASS	-

#### Conformity Assessment Condition:

- 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: Cathy Chiu



# **1** General Description

### 1.1 Information

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

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925-6425	a, ax (HEW20)	5955-6415	1-93 [24]
5925-6425	ax (HEW40)	5965-6405	3-91 [12]
5925-6425	ax (HEW80)	5985-6385	7-87 [6]
5925-6425	ax (HEW160)	6025-6345	15-79 [3]

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	802.11a	20	4TX
5.925-6.425GHz	802.11ax HEW20	20	4TX
5.925-6.425GHz	802.11ax HEW40	40	4TX
5.925-6.425GHz	802.11ax HEW80	80	4TX
5.925-6.425GHz	802.11ax HEW160	160	4TX

Note:

• 11a use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

• HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.

• BWch is the nominal channel bandwidth.

#### 1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	MAG. LAYERS	EDA-1410-6G0R2-A2-RT	Dipole Antenna	I-PEX	
2	2	MAG. LAYERS	EDA-1410-6G0R2-A2-RT	Dipole Antenna	I-PEX	6.97
3	3	MAG. LAYERS	EDA-1410-6G0R2-A2-RT	Dipole Antenna	I-PEX	6.87
4	4	MAG. LAYERS	EDA-1410-6G0R2-A2-RT	Dipole Antenna	I-PEX	

Note: The above information was declared by manufacturer.

#### For 6GHz function:

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

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

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



10k

### 1.1.3 Mode Test Duty Cycle

#### For Standard Power Device:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.952	0.21	2.065m	1k
802.11ax HEW20	0.981	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.967	0.15	787.5u	3k
802.11ax HEW80	0.925	0.34	407.5u	3k
802.11ax HEW160	0.899	0.46	242.5u	10k
For Low Power Indoor Device:				
Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.952	0.21	2.065m	1k
802.11ax HEW20	0.983	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.967	0.15	787.5u	3k
802.11ax HEW80	0.939	0.27	407.5u	3k

0.9

0.46

245u

Note:

• DC is Duty Cycle.

DCF is Duty Cycle Factor.

#### 1.1.4 EUT Operational Condition

802.11ax HEW160

EUT Power Type	From	Power Adapter		
Beamforming Function	\ ا	With beamforming	$\boxtimes$	Without beamforming
		Indoor Access Point		Subordinate
		Indoor Client	$\boxtimes$	Standard Power Access Point
Device Type		Dual Client		Standard Client
		Fixed Client		
Channel Puncturing Function		Supported	$\boxtimes$	Unsupported
Channel Bandwidth Reduction		Reduce Bandwidth	$\boxtimes$	Incumbent channel transmission ceases
Support RU		Full RU		Partial RU
Test Software Version acces		ssMtool(V3.3.0.4)		
Software / Firmware Version for CBP		5.04L.04p2		

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 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 (For other tests)	TH01-CB	Jay Lo	22.2~23.5 / 69~76	May 29, 2023~ Jun. 20, 2023
RF Conducted (For EBW/Mask of Standard power 6185MHz)	TH01-CB	Jay Lo	20.8~21.8 / 65~69	Nov. 09, 2023
RF Conducted (Degraded the Standard power)	TH01-CB	Jay Lo	20.6~20.9 / 66~67	Nov. 20, 2023
RF Conducted (For other tests_ 802.11a mode)	TH01-CB	Jay Lo	20.2~21.5 / 63~67	Nov. 29, 2023~ Nov. 30, 2023
RF Radiated (E.I.R.P. Power/PSD)	03CH04-CB	Gordon Hung	22.3~22.9 / 57~63	May 29, 2023~ Jun. 02, 2023
Radiated (For other tests)	03CH04-CB	Gordon Hung	22.3~22.9 / 57~63	May 29, 2023~ Jun. 02, 2023
Radiated (Above 1GHz_ 802.11a mode)	03CH02-CB	Gordon Hung	22.5~22.9 / 55~61	Nov. 29, 2023~ Nov. 30, 2023
AC Conduction	CO02-CB	Peter Wu	24~25 / 58~59	Aug. 28, 2023
RF Conducted (Contention-Based Protocol test)	DF02-CB	Edmund Tsai	22.2~23.2 / 64~68	Aug. 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 Date: Date Before May 31, 2023

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

#### Test Date: Date After Jun. 01, 2023

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 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%



# 2 Test Configuration of EUT

# 2.1 Test Channel Mode

#### For Standard Power Device:

Mode	Power Setting	
802.11a_Nss1,(6Mbps)_4TX	-	
5955MHz	88	
6195MHz	88	
6415MHz	90	
802.11ax HEW20_Nss1,(MCS0)_4TX	-	
5955MHz	88	
6195MHz	97	
6415MHz	92	
802.11ax HEW40_Nss1,(MCS0)_4TX	-	
5965MHz	85	
6205MHz	108	
6405MHz	94	
802.11ax HEW80_Nss1,(MCS0)_4TX	-	
5985MHz	83	
6225MHz	100	
6385MHz	94	
802.11ax HEW160_Nss1,(MCS0)_4TX	-	
6025MHz	76	
6185MHz	81	
6345MHz	81	
For Low Power Indoor Device:		
Mode	Power Setting	
802.11a_Nss1,(6Mbps)_4TX	-	
5955MHz	17	
6195MHz	18	
6415MHz	18	
802.11ax HEW20_Nss1,(MCS0)_4TX	-	
5955MHz	32	
6195MHz	33	
6415MHz	29	
	-	
802.11ax HEW40_Nss1,(MCS0)_4TX		
5965MHz	39	
	39 34	

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Mode	Power Setting
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5985MHz	48
6225MHz	48
6385MHz	52
802.11ax HEW160_Nss1,(MCS0)_4TX	-
6025MHz	59
6185MHz	54
6345MHz	57



# 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	СТХ		
1	EUT + CTX 6GHz		

The Worst Case Mode for Following Conformance Tests			
Tests Item Emission Bandwidth			
Test Condition	Conducted measurement at transmit chains		
Operating Mode	1 Standard Power Device		
	2 Low Power Indoor Device		

The Worst Case Mode for Following Conformance Tests			
Tests Item Contention Based Protocol			
Test Condition	Conducted measurement at transmit chains		
Operating Mode	Mode         1         Low Power Indoor Device		

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		
	After evaluating, the worst case was found at Z axis. So the measurement will follow this same test configuration.		
Operating Mode	1 Standard Power Device		
	2 Low Power Indoor Device		



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	After evaluating, the worst case was found at Z axis. So the measurement will follow this same test configuration.		
1	EUT in Z-axis + CTX 6GHz		
	СТХ		
Operating Mode > 1GHz	After evaluating, the worst case was found at Z axis. So the measurement will follow this same test configuration.		
1	EUT in Z-axis + CTX 6GHz		
Note: The test item is performed with the Maximum setting.			

The Worst Case Mode for Following Conformance Tests			
Tests Item	Tests Item Emission MASK		
Test Condition	Conducted measurement at transmit chains		
Operating Mode	1 Standard Power Device		
	2	2 Low Power Indoor Device	

The Worst Case Mode for Following Conformance Tests				
Tests Item         Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation				
Operating Mode				
1 WLAN 6GHz				
Refer to Sporton Test Report No.: FA350423 for Co-location RF Exposure Evaluation.				

# 2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.



# 2.4 Accessories

	Accessories				
Equipment Name	Brand Name	Model Name	Rating	DC Power Line	
Adapter	FSP	FSP065-REB	INPUT: 100-240V~, 1.5A, 50-60Hz OUTPUT: 19V, 3.42A	Non-shielded, 1.5m	
Other					
Power cord*1, Non-shielded, 0.9m					

# 2.5 Support Equipment

#### For AC Conduction:

	Support Equipment						
No.	No. Equipment Brand Name Model Name FCC ID						
А	LAN NB	DELL	E6430	N/A			
В	Flash disk3.0	Transcend	JetFlash-700	N/A			
С	Flash disk3.0	Transcend	JetFlash-700	N/A			

#### For Radiated and RF Conducted (Other tests):

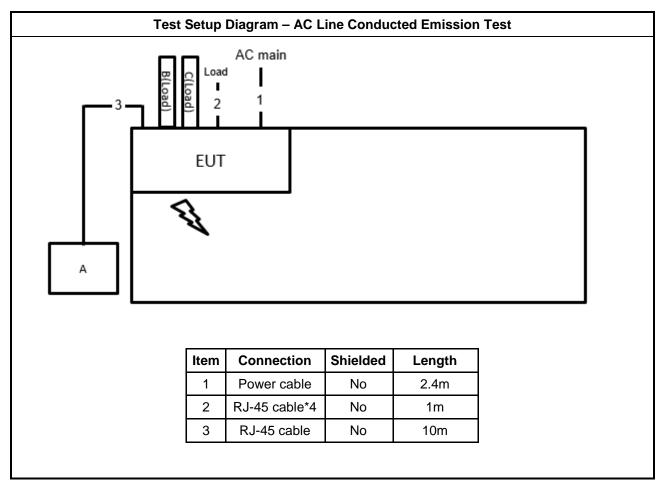
	Support Equipment				
No.	No. Equipment Brand Name Model Name FCC ID				
А	Notebook	DELL	E4300	N/A	

#### For RF Conducted (Contention Based Protocol test):

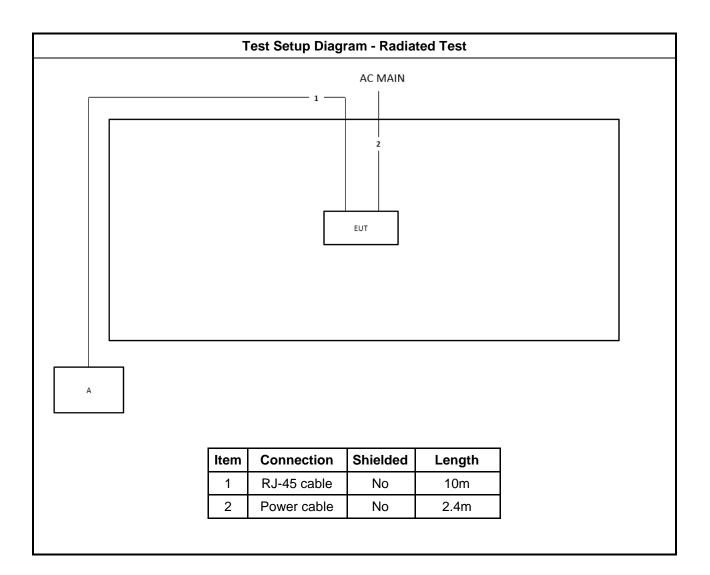
	Support Equipment			
No.	Equipment	Brand Name	Model Name	FCC ID
А	Notebook	DELL	E4300	N/A
В	Notebook	DELL	E6430	N/A
С	WLAN module	Intel	AX210NGW	PD9AX210NG



# 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 Power-line Conducted Emissions Limit				
Frequency Emission (MHz) Quasi-Peak Average				
0.15-0.5 66 - 56 * 56 - 46 *				
0.5-5	56	46		
5-30	60	50		
Note 1: * Decreases with the logarithm of the frequency.				

### 3.1.2 Measuring Instruments

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

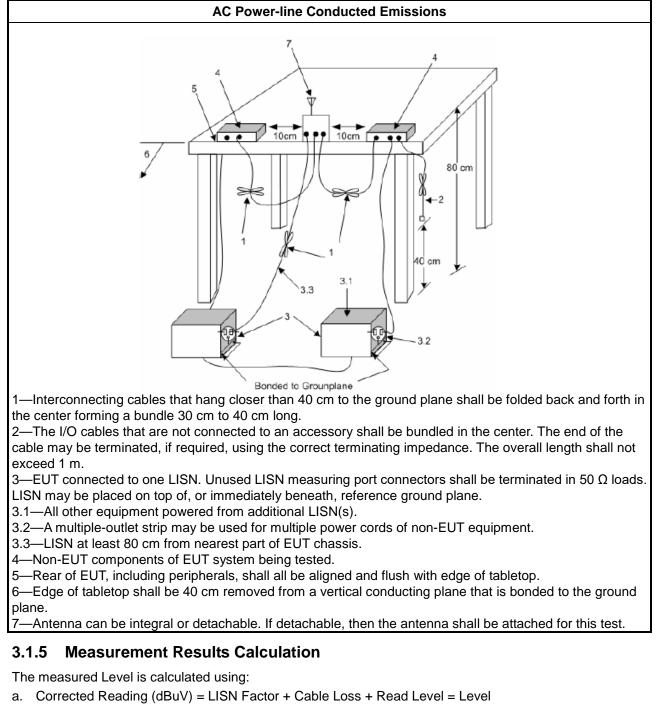
#### 3.1.3 Test Procedures

**Test Method** 

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



#### 3.1.4 Test Setup



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		

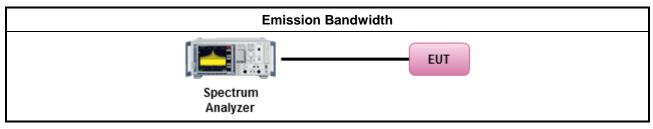
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

	Test Method		
•	For the emission bandwidth shall be measured using one of the options below:		
		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	II 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>		
	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>		
	<ul> <li>For low-power client devices &lt; 24 dBm.</li> </ul>		
	For the 5.925 ~ 6.875 GHz band:		
	<ul> <li>For standard-power access points &amp; fixed client devices &lt; 36 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 KDB 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)		
	Wideband 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>		
$\boxtimes$	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>		
	<ul> <li>Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.</li> </ul>		
The			

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

where;

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

LP : Free Space Loss(dB)

PR Formula : PR(dBm) = P Meas(dBm) – GR(dBi) + LC(dB) where; P Meas(dBm) : Power measurement level GR(dBi) : Gain of the receive(measurement) antenna (dBi) LC(dB) : Measurement cable loss (dB)



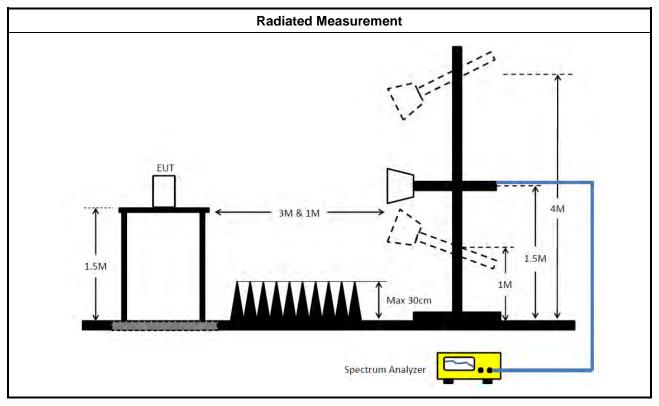
LP(FSL factor) Formula : LP(dB)= 20 logF + 20 logD-27.54 where; F(MHz) : EUT center frequency D(m) : Measurement distance

For Example: Test mode LPI Non TXBF ax20 5955MHz EIRP measurement PR Formula : PR(dBm)= -40.24 - 10.21 + 5.48 = -44.97

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

EIRP Formula : EIRP(dBm) = -44.97 + 57.54 = 12.57

#### 3.3.4 Test Setup



**3.3.5 Test Result of Maximum Equivalent Isotopically Radiated Power (E.I.R.P)** Refer as Appendix C



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

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

	Peak Power Spectral Density (E.I.R.P.) Limit		
UN	II Devices		
$\boxtimes$	For the 5.925 ~ 6.425 GHz band:		
	• For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.		
	<ul> <li>For indoor access point : e.i.r.p PSD &lt; 5 dBm/MHz.</li> </ul>		
	• For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.		
	<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 6.425 ~ 6.525 GHz band:		
	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.		
	<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:		
	<ul> <li>For standard power access point and fixed client device : e.i.r.p PSD &lt; 23 dBm/MHz.</li> </ul>		
	<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>		
RL	AN Devices		
	For the 5.925 ~ 7.125 GHz band:		
	For low-power indoor access-points & indoor subordinate devices < 5 dBm / MHz.		
	For low-power client devices < -1 dBm / MHz.		
	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>		
	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		
•	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:		
	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]		
	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).		
	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		
	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 conducted measurement.		
	<ul> <li>If the EUT supports multiple transmit chains using options given below:</li> </ul>		
	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 radiated measurement.		
	<ul> <li>Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> </ul>		



#### Test Method

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

Note :

The test is the final test result, It includes antenna /cable loss factor & FSL factor. The EIRP PSD calculation refer to "KDB 412172 D01 Determining ERP and EIRP v01r01" EIRP PSD Formula : EIRP PSD(dBm/MHz) = PR(dBm/MHz) + LP(FSL factor) where; PR(dBm/MHz) : Power measurement level include antenna/cable loss LP : Free Space Loss(dB) PR Formula : PR(dBm/MHz) = P Meas(dBm/MHz) – GR(dBi) + 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 : LP(dB)= 20 logF + 20 logD-27.54 where; F(MHz) : EUT center frequency D(m) : Measurement distance

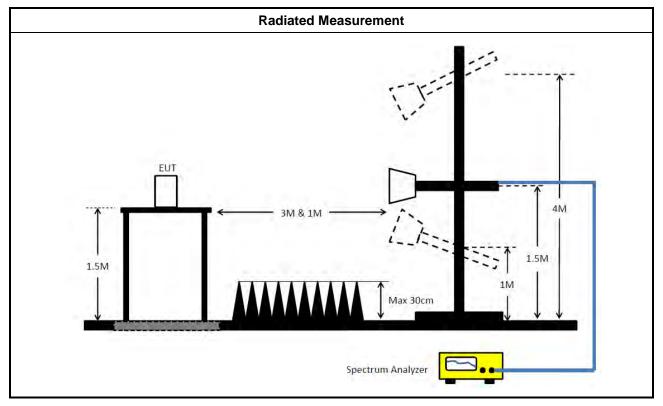
For Example: Test mode LPI Non TXBF ax20 5955MHz EIRP PSD measurement PR Formula : PR(dBm/MHz)= -47.91 - 10.21 + 5.48 = -52.64

LP(FSL factor) Formula : LP(dB) = 20log(5967.64) + 20log(3) -27.5 = 57.54

EIRP PSD Formula EIRP PSD(dBm/MHz) = -52.64 + 57.54 = 4.90



### 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

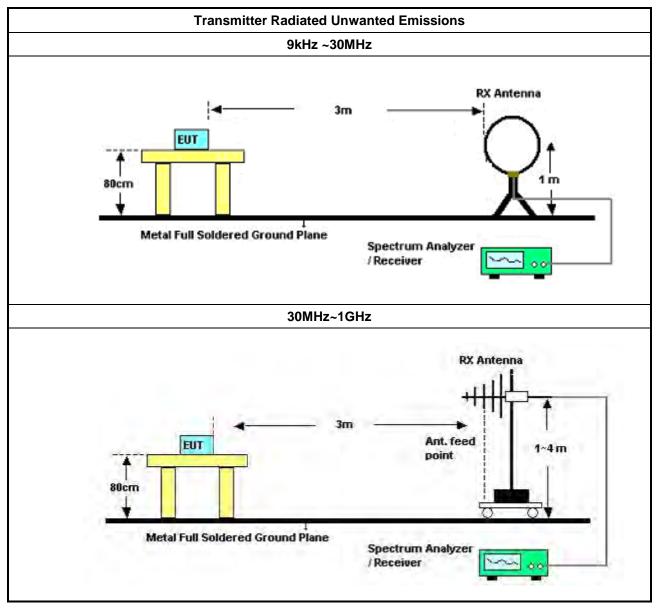
Refer a test equipment and calibration data table in this test report.

#### 3.5.3 Test Procedures

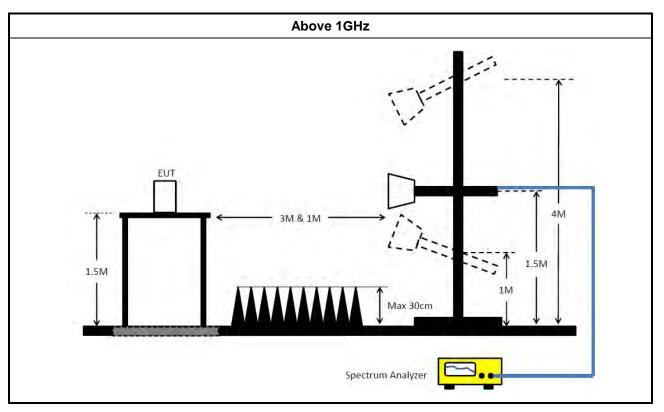
	Test Method
•	According to FCC KDB 987594 D02 II.G. the unwanted emission measurement procedure shall refer to KDB 789300(except emission MASK). Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured 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).
•	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:
	<ul> <li>Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.</li> </ul>
	<ul> <li>Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.</li> </ul>
	<ul> <li>Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).</li> <li>(For unrestricted band measurement)</li> </ul>
	Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).
	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.( For restricted band average measurement)
	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.
	Refer 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.
	<ul> <li>Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.</li> </ul>
	• 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



### 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.

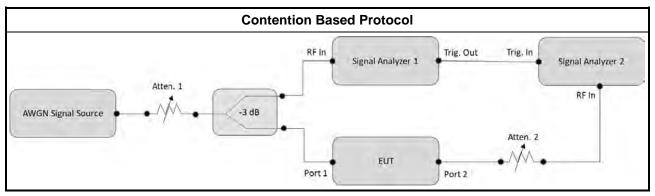
#### 3.6.2 Measuring Instruments

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

#### 3.6.3 Test Procedures

Test Method							
<ul> <li>For Contention Based Protocol shall be measured using following options below:</li> </ul>							
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



#### **Test Equipment and Calibration Data** 4

Instrument	Brand	Model No.	Serial No.	Characteristics	teristics Calibration Calibration Date Due Date		Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Apr. 06, 2023	Apr. 05, 2024	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Dec. 20, 2022	Dec. 19, 2023	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 18, 2023	May 17, 2024	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	ТDК	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 02, 2022	Aug. 01, 2023	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz         Feb. 23, 2023         Feb. 22, 2024		Radiation (03CH04-CB)	
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	30MHz ~ 1GHz Oct. 08, 2022 Oct. 07, 2023		Radiation (03CH04-CB)
Horn Antenna	ETS·Lindgren	3115	00143147	750MHz~ 18GHz 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	EMCI	EMC330N	980391	20MHz ~ 3GHz			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. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz Jun. 17, 2022 Jun. 16, 2023		Jun. 16, 2023	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz Oct. 03, 2022 Oct. 02, 2023		Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz Oct. 03, 2022 Oct. 02, 2023		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)

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Instrument	Brand	Model No.	Serial No.	Characteristics Calibration Date		Calibration Due Date	Remark
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)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 25, 2023	Mar. 24, 2024	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	20.5GHZ		Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz Dec. 05, 2022 Dec. 04, 202		Dec. 04, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz Oct. 02, 2023		Oct. 01, 2024	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz Oct. 02, 2023 (		Oct. 01, 2024	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz Oct. 02, 2023 (		Oct. 01, 2024	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 29, 2023	May 28, 2024	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	CB6G-BRJ-01	1GHz ~ 7.4GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	6G-BRJ-01	1 ~ 18GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	CB6G-BRJ-02	1GHz ~ 8GHz Oct. 04, 2022 Oct		Oct. 03, 2023	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	6G-BRJ-02	1~ 18GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1 GHz – 26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)

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Instrument	Brand	Model No.	Serial No.	Characteristics Calibration Date		Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	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. 03, 2022	Oct. 02, 2023	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. 03, 2022	Oct. 02, 2023	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	Iz       Oct. 03, 2022       Oct. 02, 2023         Iz       Oct. 02, 2023       Oct. 01, 2024         Iz       Oct. 03, 2022       Oct. 02, 2023         Iz       Oct. 03, 2022       Oct. 02, 2023         Iz       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. 03, 2022	Oct. 02, 2023	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. 03, 2022	Oct. 02, 2023	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	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)
Spectrum Analyzer	R&S	FSV40	101025	9kHz ~ 40GHz	Oct. 28, 2022	Oct. 27, 2023	Conducted (DF02-CB)
Vector Signal generator	R&S	SMU200A	105352	25MHz-6GHz	Jul. 17, 2023	Jul. 16, 2024	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, 202		Oct. 03, 2023	Conducted (DF02-CB)
RF Power Divider	STI	2 Way	DV-2way -07	1GHz ~ 8GHz Oct. 04, 2022 Oct. 03, 2023		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-60	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-61	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)

TEL: 886-3-656-9065

FAX : 886-3-656-9085

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

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Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-62	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-63	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-66	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (DF02-CB)

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



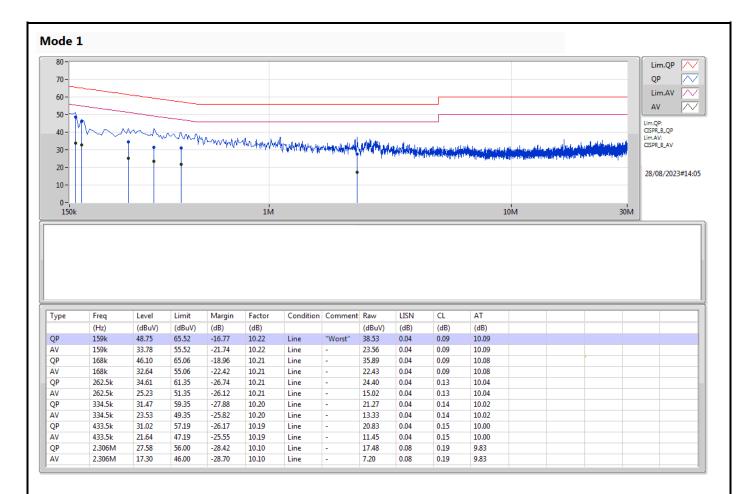
### **Conducted Emissions at Powerline**

# Appendix A

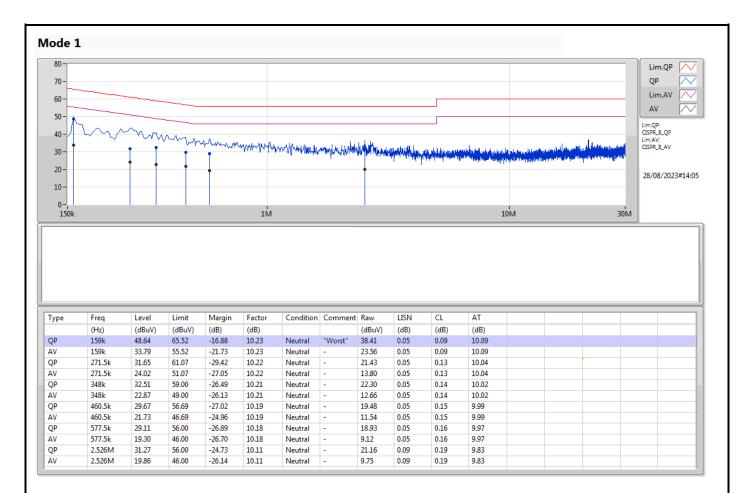
Summary	Summary										
Mode	Result	Туре	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition				
			(112)	(uBuV)	(uBuV)	(ub)					
Mode 1	Pass	QP	159k	48.75	65.52	-16.77	Line				













# EBW\_For Standard Power Device

#### Summarv

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.925-6.425GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	37.675M	19.056M	19M1D1D	28.325M	17.24M
802.11ax HEW20_Nss1,(MCS0)_4TX	48.84M	21.864M	21M9D1D	22.165M	19.115M
802.11ax HEW40_Nss1,(MCS0)_4TX	146.96M	80.21M	80M2D1D	41.58M	37.831M
802.11ax HEW80_Nss1,(MCS0)_4TX	293.48M	167.416M	167MD1D	83.16M	77.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	314.6M	158.121M	158MD1D	214.28M	156.722M

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



# EBW\_For Standard Power Device

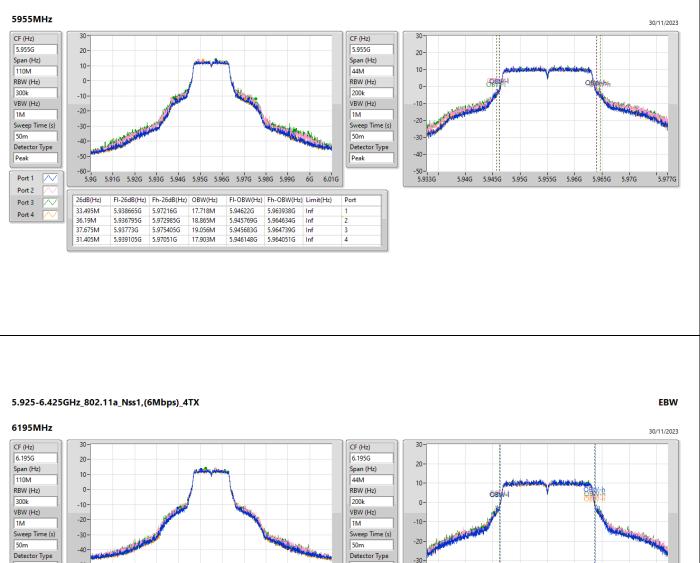
## Result

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW	Port 3-N dB	Port 3-OBW	Port 4-N dB	Port 4-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	33.495M	17.718M	36.19M	18.865M	37.675M	19.056M	31.405M	17.903M
6195MHz	Pass	Inf	28.655M	17.24M	30.58M	17.434M	28.985M	17.52M	28.325M	17.457M
6415MHz	Pass	Inf	33.495M	17.818M	37.4M	18.914M	37.07M	18.436M	31.185M	17.892M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	26.84M	19.14M	29.205M	19.165M	22.165M	19.14M	26.18M	19.115M
6195MHz	Pass	Inf	48.4M	20.265M	47.3M	20.215M	43.725M	20.09M	45.485M	21.864M
6415MHz	Pass	Inf	37.51M	19.34M	48.84M	19.94M	33.99M	19.29M	39.82M	19.565M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	45.32M	37.881M	41.58M	37.931M	44.11M	37.831M	48.51M	37.881M
6205MHz	Pass	Inf	127.38M	78.661M	133.32M	78.861M	115.94M	77.211M	146.96M	80.21M
6405MHz	Pass	Inf	88.77M	38.481M	89.87M	38.931M	78.76M	38.331M	84.48M	38.681M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	86.24M	77.461M	86.68M	77.361M	83.16M	77.361M	83.6M	77.461M
6225MHz	Pass	Inf	223.52M	142.129M	293.48M	167.416M	225.28M	152.224M	216.48M	145.827M
6385MHz	Pass	Inf	185.46M	78.161M	182.6M	78.361M	174.9M	78.261M	170.94M	78.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	214.28M	156.722M	217.8M	157.121M	220M	156.722M	219.12M	156.922M
6185MHz	Pass	Inf	312.4M	158.121M	265.76M	157.721M	253.88M	157.921M	230.12M	157.521M
6345MHz	Pass	Inf	263.12M	157.521M	314.6M	158.121M	314.16M	158.121M	314.16M	158.121M

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\_802.11a\_Nss1,(6Mbps)\_4TX



Peak

Port

4

40

6.173G

6.18G 6.185G

-50

26dB(Hz)

28.655M

30.58M

28.985M

28.325M

6.17971G

6.179655G

6.18081G

6.18059G

-60-6.14G 6.15G 6.16G 6.17G 6.18G 6.19G 6.2G 6.21G 6.22G 6.23G 6.24G 6.25G

17.24M

17.434M

17.52M

17.457M

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

6.203742G

6.203746G

6.20372G

6.203612G Inf

Inf

Inf

Inf

6.186372G

6.186308G

6.186227G

6.186263G

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

6.208365G

6.210235G

6.209795G

6.208915G

Peak

Port 1

Port 2 Port 3

Port 4

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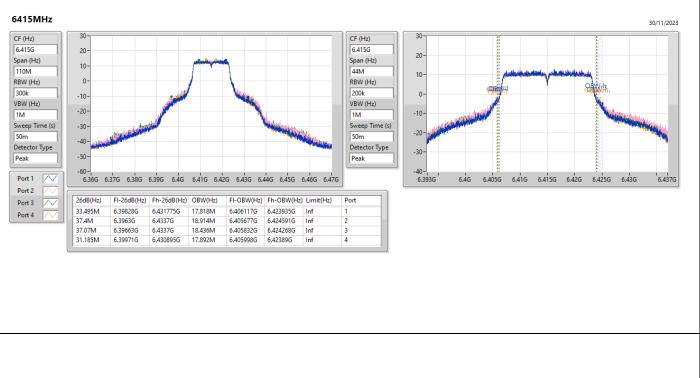
6.205G 6.21G

6.217G

6.19G 6.195G 6.2G



### 5.925-6.425GHz\_802.11a\_Nss1,(6Mbps)\_4TX



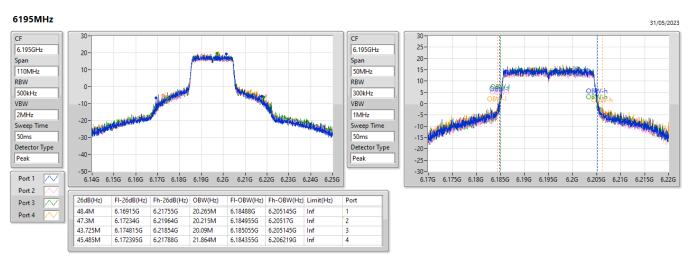
#### 5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

EBW





### 5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX



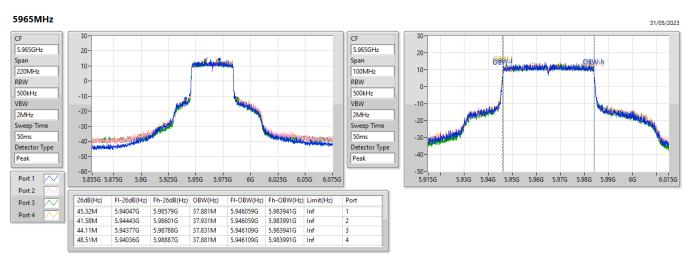
## 5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

6415MHz 31/05/2023 CF 30 CF 6.415GHz 6.415GHz 20 20 Span Span 10-110MHz 50MHz 10 RBW RBW 0. 500kHz 200kHz 0 VBW -10-VBW and the little de -10 2MHz 1MHz -20-Sweep Time Sweep Time -20 50ms 50ms -30 Detector Type Detector Type -30 -40 Peak Peak -50-6.36G 6.37G 6.38G 6.39G 6.4G 6.41G 6.42G 6.43G 6.44G 6.45G 6.46G 6.47G -40 40 6.39G 6.395G 6.4G 6.405G 6.41G 6.415G 6.42G 6.425G 6.43G 6.435G 6.44G Port 1 Port 2 26dB(Hz) FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz) FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz) Port Port 3 37.51M 6.396245G 6.433755G 19.34M 6.405355G 6.424695G Inf Port 4 48.84M 6.38937G 6.43821G 19.94M 6.405055G 6.424995G Inf 2 33.99M 6.39872G 6.43271G 19.29M 6.40538G 6.42467G Inf 39.82M 6.395475G 6.435295G 19.565M 6.405255G 6.42482G Inf 4

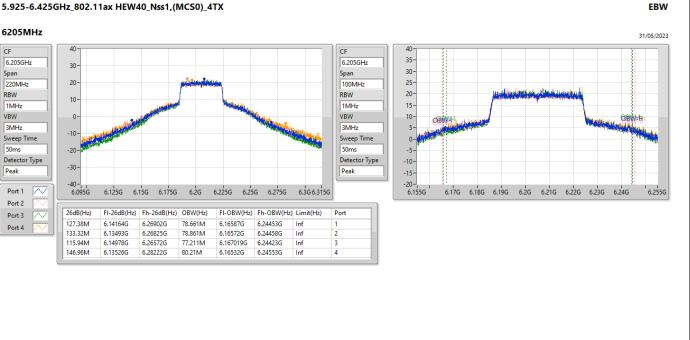
EBW



### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

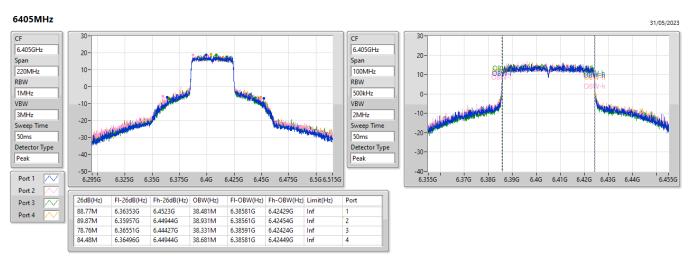


#### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

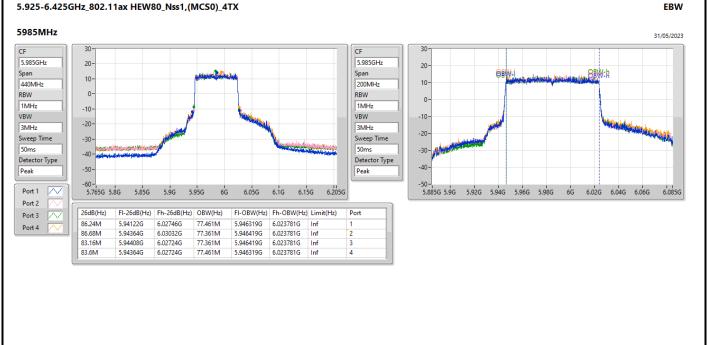




### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX



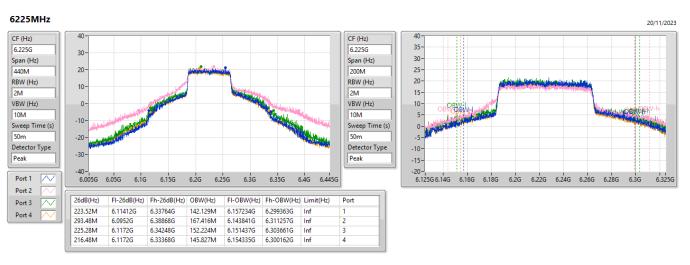
#### 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX



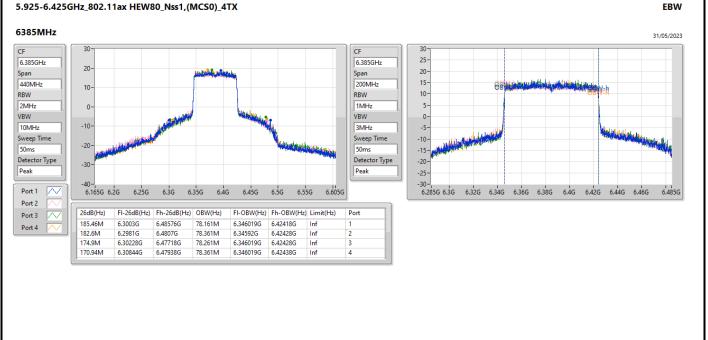
**FBW** 



#### 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX

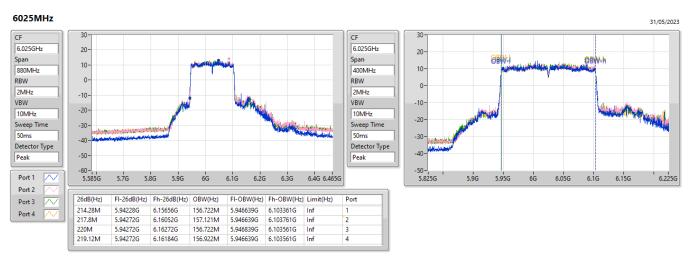


## 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX

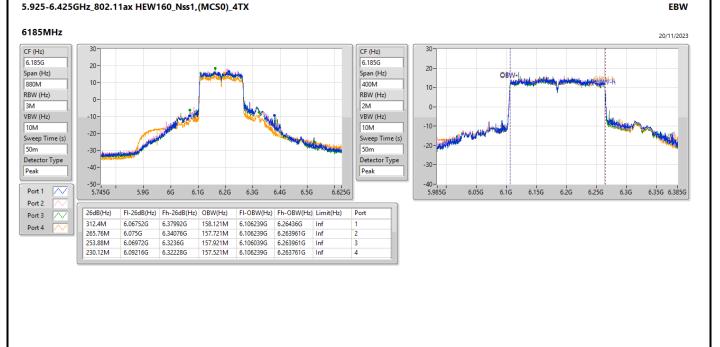




### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX



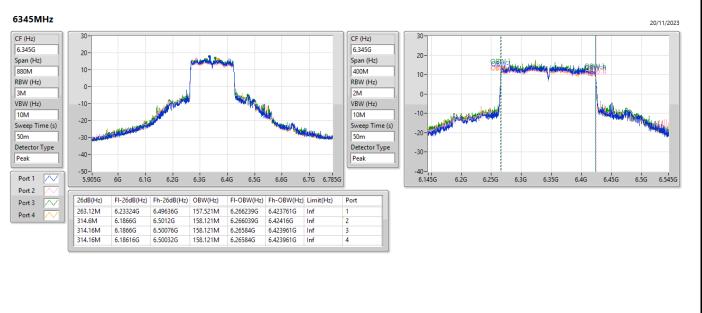
#### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX





EBW

#### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX





# EBW\_For Low Power Indoor Device

#### Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.925-6.425GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	24.75M	17M	17M0D1D	21.945M	16.939M
802.11ax HEW20_Nss1,(MCS0)_4TX	24.86M	19.165M	19M2D1D	21.725M	19.065M
802.11ax HEW40_Nss1,(MCS0)_4TX	50.6M	37.931M	37M9D1D	41.47M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	88.22M	77.461M	77M5D1D	82.28M	77.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.88M	156.722M	157MD1D	164.12M	156.122M

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	Port 3-N dB	Port 3-OBW	Port 4-N dB	Port 4-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	22.22M	16.984M	22.11M	16.944M	22M	16.953M	22.11M	17M
6195MHz	Pass	Inf	22.22M	16.964M	22.165M	16.974M	24.75M	16.954M	21.945M	16.939M
6415MHz	Pass	Inf	22.55M	16.989M	22.715M	16.972M	22.165M	16.944M	22.165M	16.943M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	23.705M	19.115M	23.54M	19.14M	24.75M	19.115M	24.86M	19.165M
6195MHz	Pass	Inf	21.725M	19.115M	23.375M	19.14M	24.365M	19.09M	22.165M	19.115M
6415MHz	Pass	Inf	23.65M	19.115M	24.09M	19.115M	22.605M	19.065M	23.54M	19.14M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	43.89M	37.831M	42.9M	37.931M	47.52M	37.781M	50.6M	37.831M
6205MHz	Pass	Inf	48.29M	37.831M	42.02M	37.881M	41.47M	37.831M	41.8M	37.881M
6405MHz	Pass	Inf	49.39M	37.781M	41.58M	37.781M	41.91M	37.931M	41.47M	37.831M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	86.46M	77.461M	88.22M	77.461M	84.7M	77.361M	84.92M	77.361M
6225MHz	Pass	Inf	86.46M	77.461M	83.38M	77.361M	82.72M	77.461M	84.92M	77.361M
6385MHz	Pass	Inf	83.6M	77.461M	85.14M	77.461M	84.48M	77.461M	82.28M	77.461M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	165M	156.522M	165M	156.522M	164.56M	156.322M	165M	156.522M
6185MHz	Pass	Inf	165.88M	156.522M	165M	156.322M	165M	156.722M	164.12M	156.322M
6345MHz	Pass	Inf	164.56M	156.522M	164.12M	156.122M	165M	156.322M	164.12M	156.522M

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

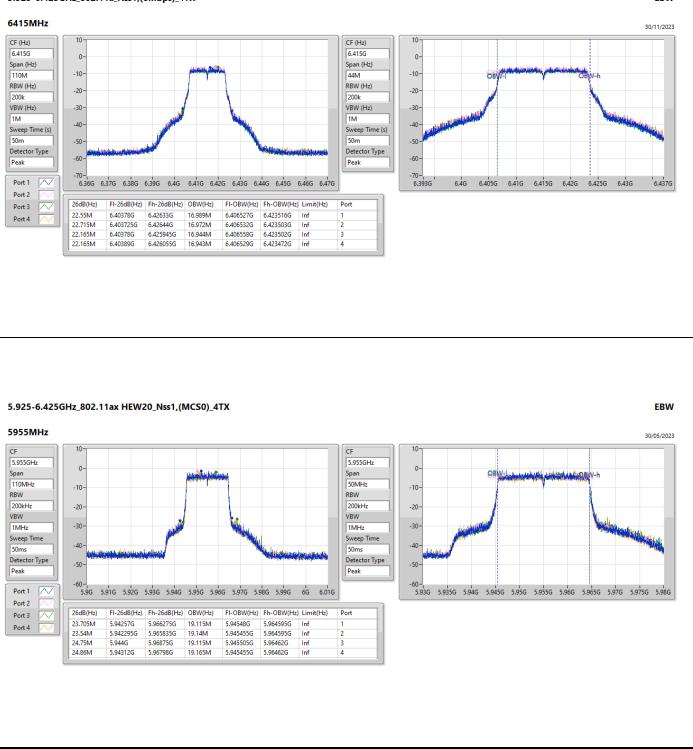


#### 5.925-6.425GHz\_802.11a\_Nss1,(6Mbps)\_4TX



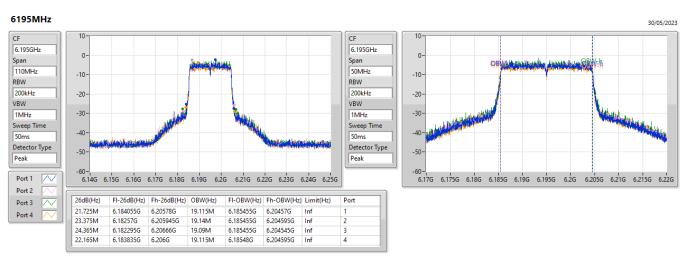


#### 5.925-6.425GHz\_802.11a\_Nss1,(6Mbps)\_4TX

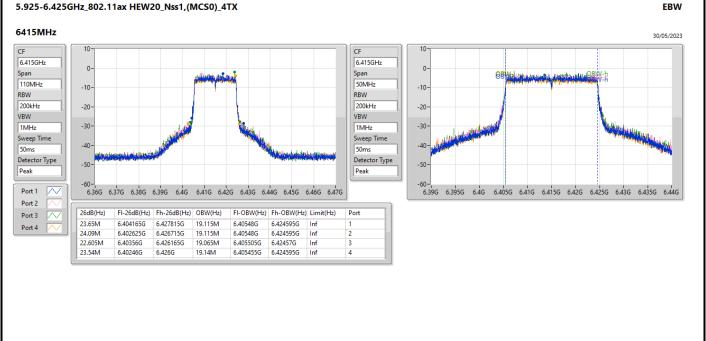




### 5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

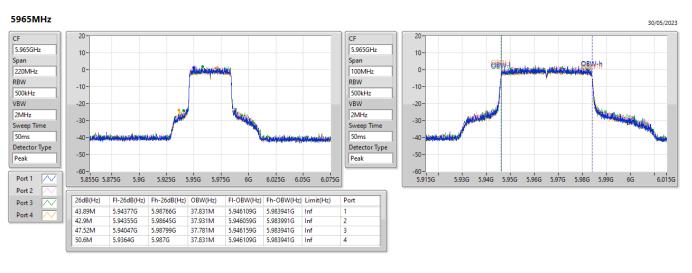


## 5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX





#### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX



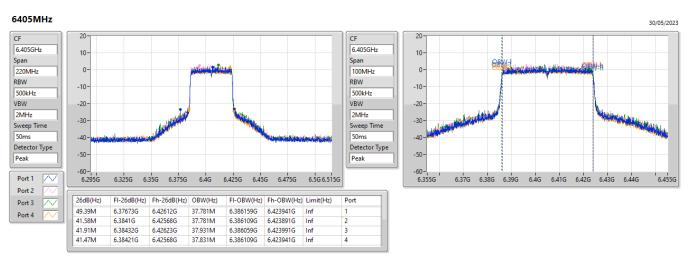
## 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

6205MHz 30/05/2023 20 CF CF 6.205GHz 6.205GHz 10-10-Span Span OBW When a Reven 0. 0. 220MHz 100MHz RBW RBW -10--10-500kHz 500kHz VBW -20 VBW -20 2MHz 2MHz A States -30--30 Sweep Time Sweep Time 50ms 50ms -40 -40 Detector Type Detector Type -50 -50 Peak Peak -60-6.095G -60-6.155G 6.17G 6.18G 6.19G 6.2G 6.21G 6.22G 6.23G 6.24G Port 1 6.125G 6.15G 6.175G 6.2G 6.225G 6.25G 6.275G 6.3G 6.315G 6.255G Port 2 26dB(Hz) FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz) FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz) Port Port 3 48.29M 6.17728G 6.22557G 37.831M 6.186109G 6.223941G Inf Port 4 42.02M 6.18377G 6.22579G 37.881M 6.186109G 6.223991G Inf 2 41.47M 6.18465G 6.22612G 37.831M 6.186109G 6.223941G Inf 41.8M 6.1841G 6.2259G 37.881M 6.186109G 6.223991G Inf 4

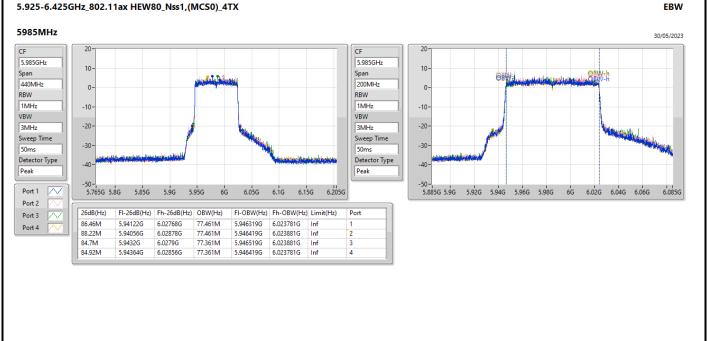
EBW



### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

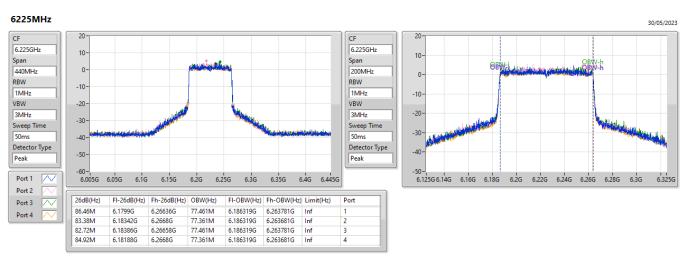


#### 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX





#### 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX



## 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX

6385MHz 30/05/2023 20 CF CF 6.385GHz 6.385GHz 10-10 Span Span 88Willing outpitions to Kellow ut the 440MHz 200MHz 0-0 RBW RBW 1MHz -10-1MHz -10 VBW VBW -20 -20 3MHz 3MHz A CARLENDER OF THE OWNER Sweep Time Sweep Time -30 -30 50ms 50ms Detector Type Detector Type -40 40 Peak Peak -50-1 6.285G 6.3G 6.32G 6.34G 6.36G 6.38G 6.4G 6.42G 6.44G 6.46G -50-6.165G 6.2G 6.4G Port 1 6.25G 6.3G 6.485G 6.35G 6.45G 6.5G 6.55G 6.605G Port 2 26dB(Hz) FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz) FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz) Port Port 3 83.6M 6.3432G 6.4268G 77.461M 6.346319G 6.423781G Inf Port 4 85.14M 6.34298G 6.42812G 77.461M 6.346319G 6.423781G Inf 2 84.48M 6.34276G 6.42724G 77.461M 6.346319G 6.423781G Inf 82.28M 6.34342G 6.4257G 77.461M 6.346319G 6.423781G Inf 4

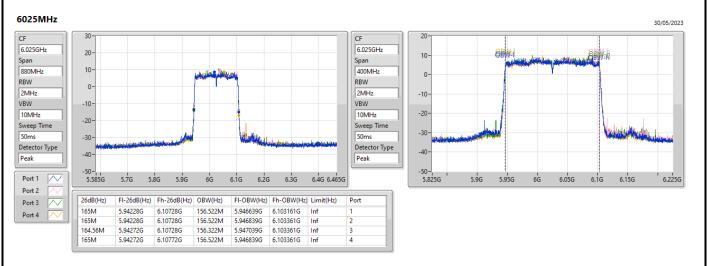
EBW



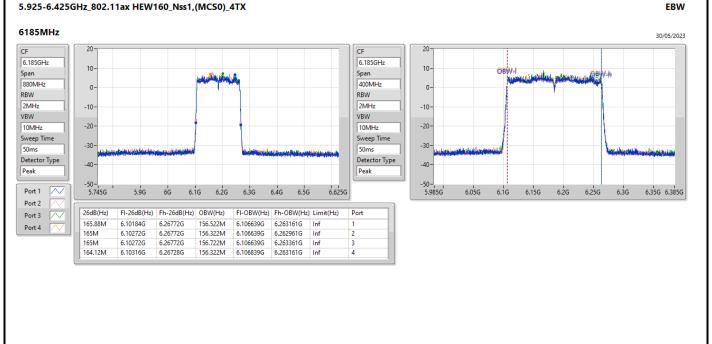
# Appendix B.2

EBW

#### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX



#### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX





#### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX EBW 6345MHz 30/05/2023 20 CF CF 6.345GHz 6.345GHz 20-10-Span Span 10-OBW-880MHz 400MHz 0-RBW RBW 0 2MHz 2MHz -10-VBW VBW -10 10MHz -20-10MHz -20 Sweep Time Sweep Time -30-50ms 50ms -30-Detector Type Detector Type -40--40 Peak Peak -50-6.145G -50-5.905G Port 1 6G 6.1G 6.2G 6.3G 6.4G 6.5G 6.6G 6.7G 6.785G 6.2G 6.25G 6.3G 6.35G 6.4G 6.45G 6.5G 6.545G Port 2 26dB(Hz) FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz) FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz) Port Port 3 $\sim$ 164.56M 164.12M 6.26272G 6.26272G 6.42728G 6.42684G 156.522M 156.122M 6.423161G 6.422961G Inf Inf 6.266639G Port 4 6.266839G 2 6.26272G 6.26272G 6.42772G 6.42684G 156.322M 156.522M 6.266839G 6.266639G Inf Inf 165M 6.423161G 164.12M 6.423161G 4

Sporton International Inc. Hsinchu Laboratory



Summary

,	FIRD	FIRD
Mode	EIRP	EIRP
	(dBm)	(W)
5.925-6.425GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	30.06	1.01391
802.11ax HEW20_Nss1,(MCS0)_4TX	30.02	1.00462
802.11ax HEW40_Nss1,(MCS0)_4TX	31.77	1.50314
802.11ax HEW80_Nss1,(MCS0)_4TX	28.34	0.68234
802.11ax HEW160_Nss1,(MCS0)_4TX	26.94	0.49431

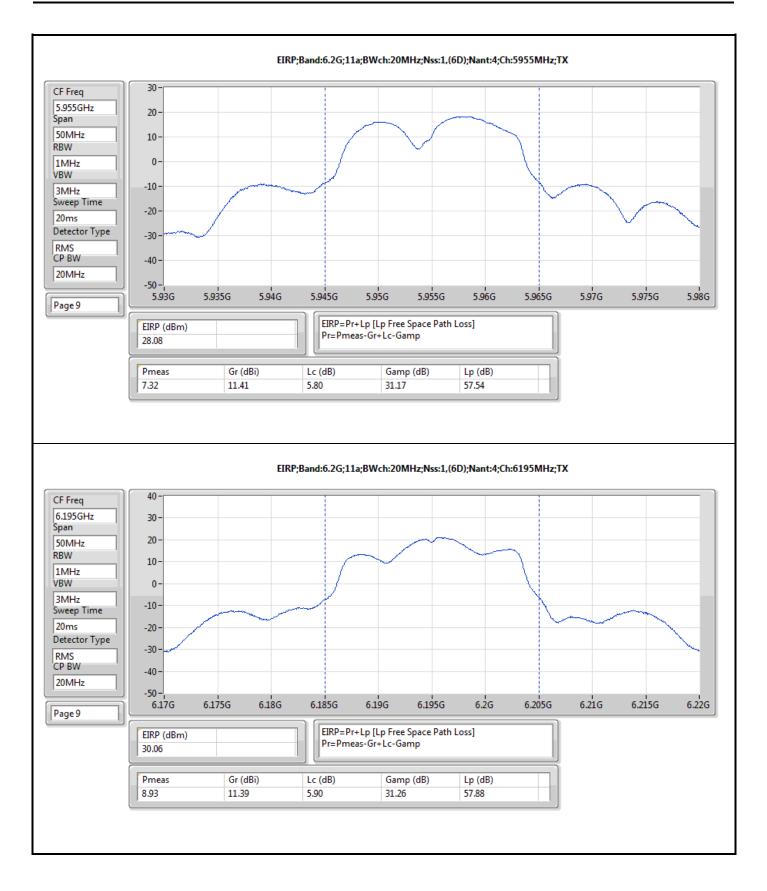


## Result

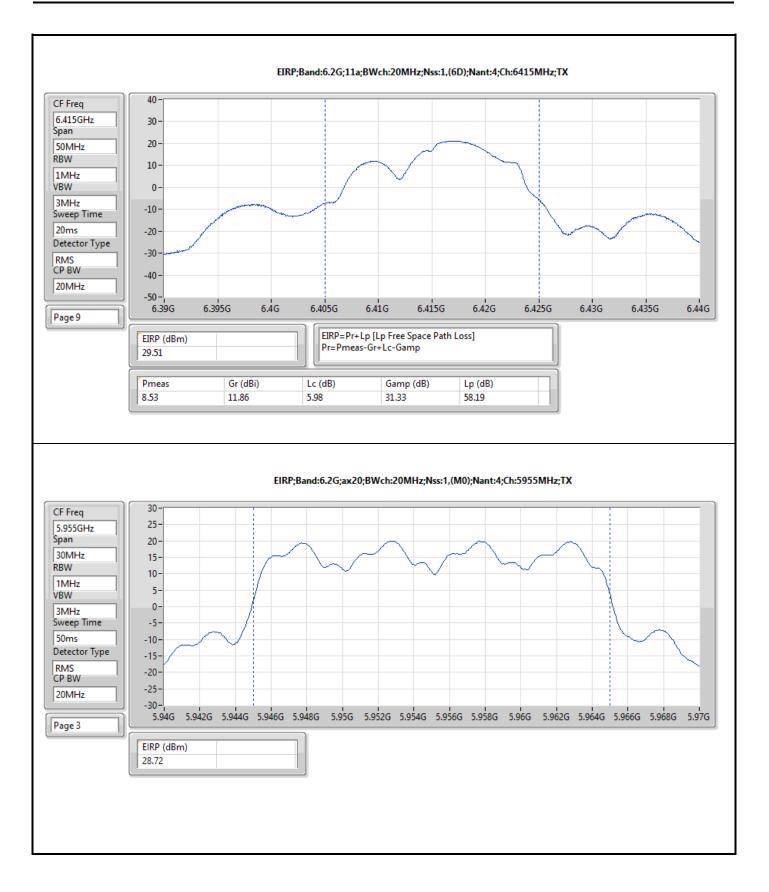
Mode	Result	EIRP	EIRP Limit
		(dBm)	(dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-
5955MHz	Pass	28.08	36.00
6195MHz	Pass	30.06	36.00
6415MHz	Pass	29.51	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-
5955MHz	Pass	28.72	36.00
6195MHz	Pass	30.02	36.00
6415MHz	Pass	28.63	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-
5965MHz	Pass	28.13	36.00
6205MHz	Pass	31.77	36.00
6405MHz	Pass	27.95	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-
5985MHz	Pass	28.21	36.00
6225MHz	Pass	27.65	36.00
6385MHz	Pass	28.34	36.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-
6025MHz	Pass	26.94	36.00
6185MHz	Pass	25.85	36.00
6345MHz	Pass	25.67	36.00

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

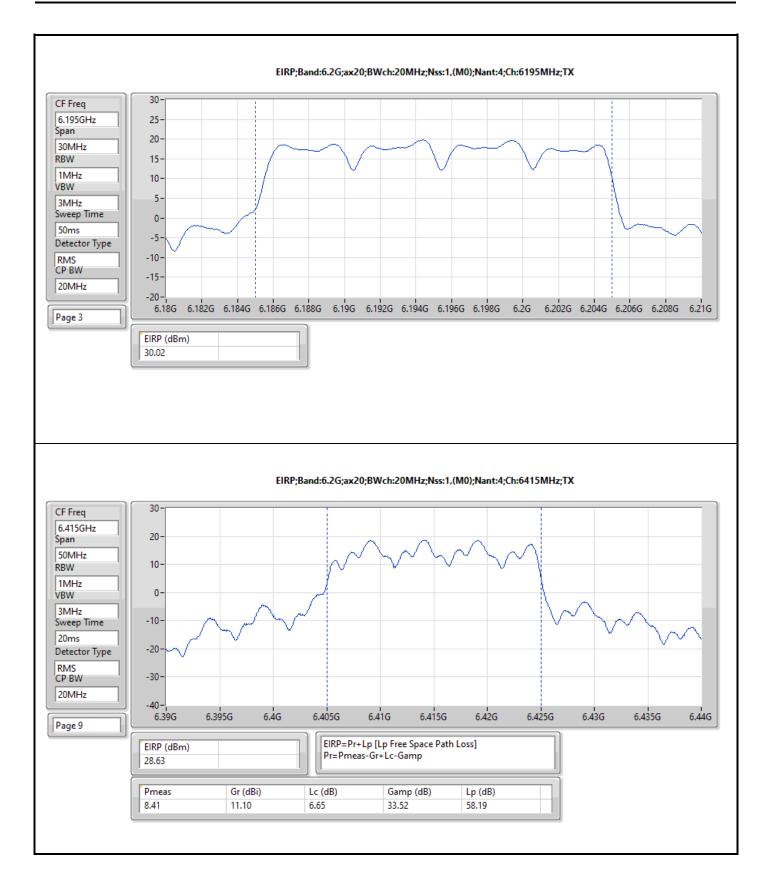




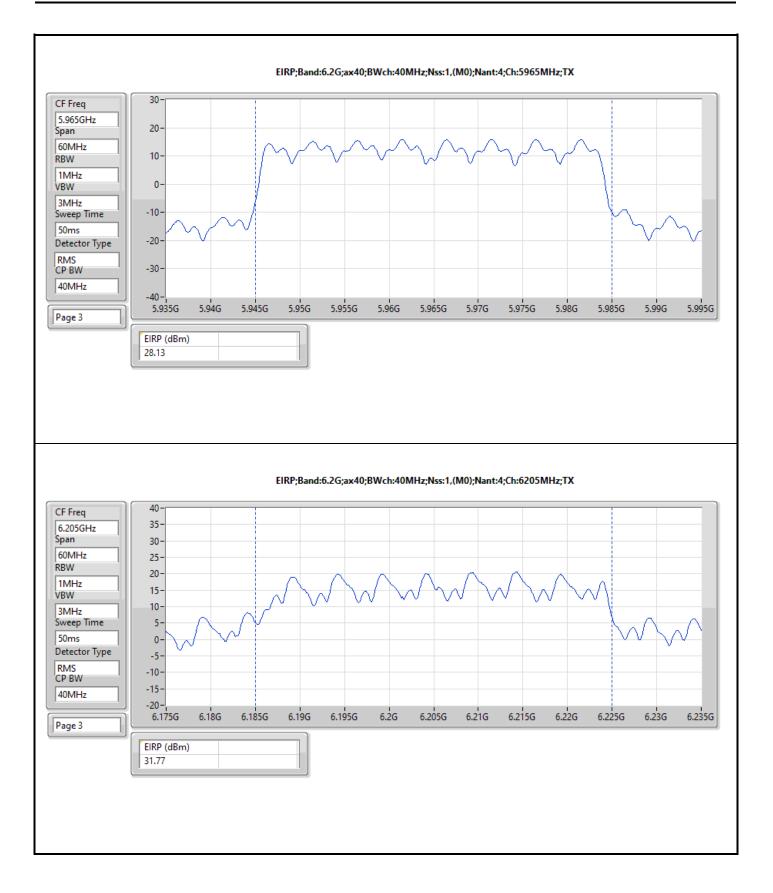




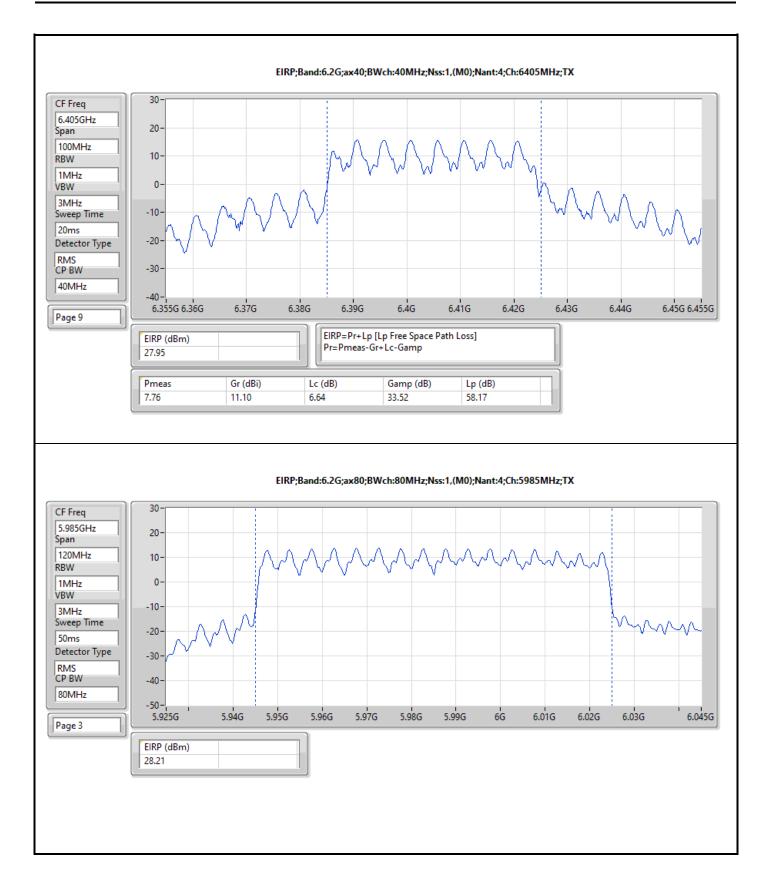




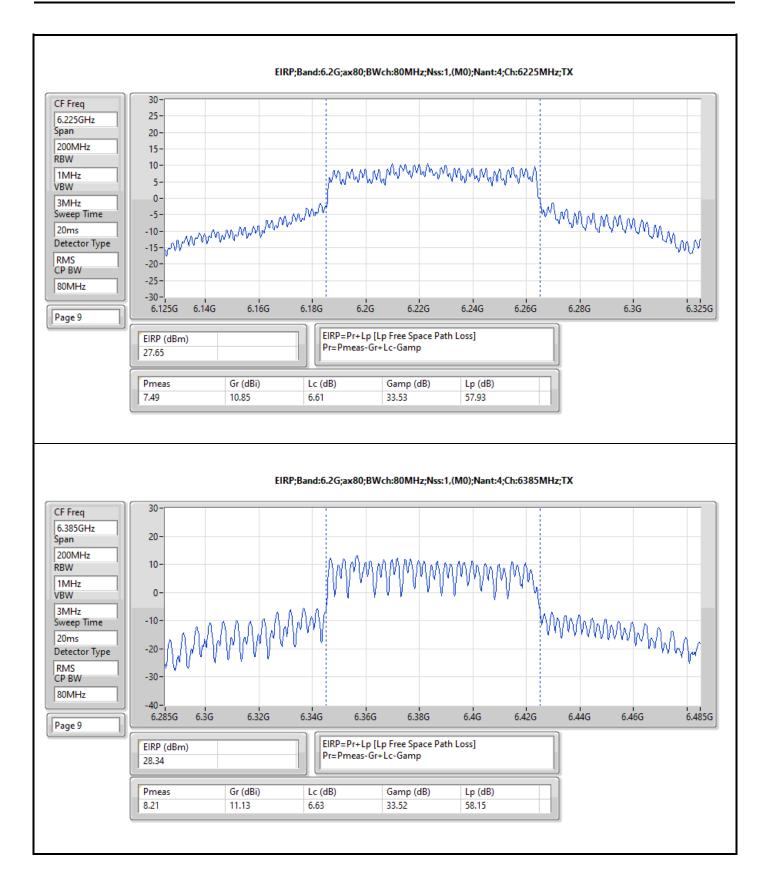




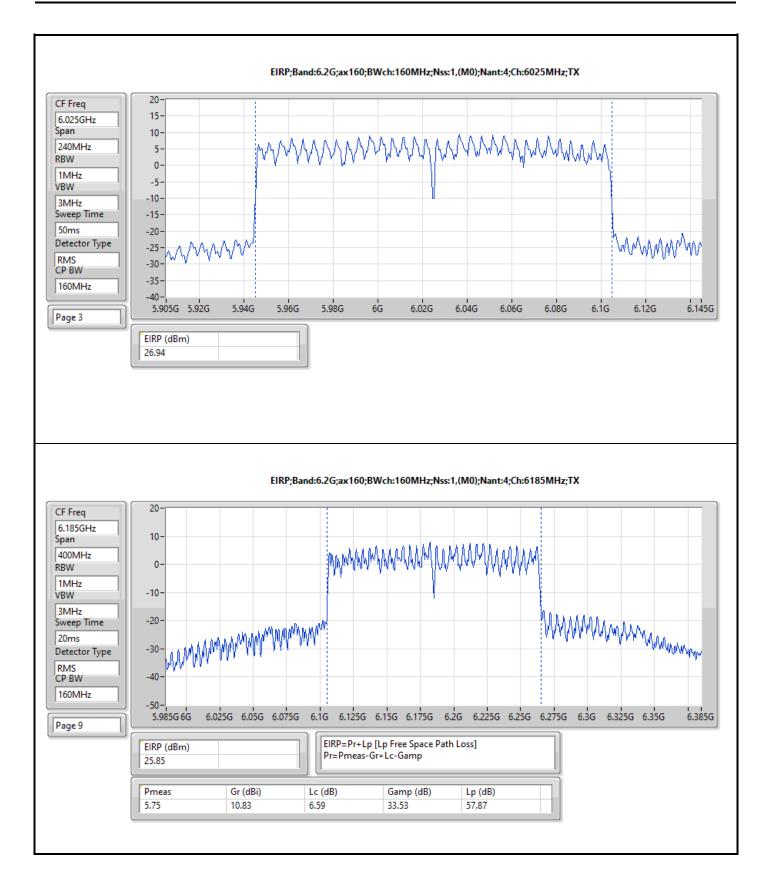




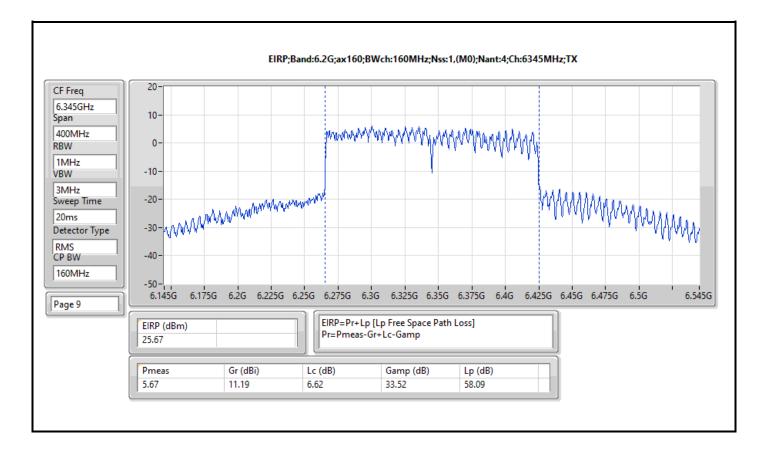














Summary

Mode	EIRP (dBm)	EIRP (W)
5.925-6.425GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	11.42	0.01387
802.11ax HEW20_Nss1,(MCS0)_4TX	13.24	0.02109
802.11ax HEW40_Nss1,(MCS0)_4TX	16.05	0.04027
802.11ax HEW80_Nss1,(MCS0)_4TX	18.91	0.07780
802.11ax HEW160_Nss1,(MCS0)_4TX	21.67	0.14689

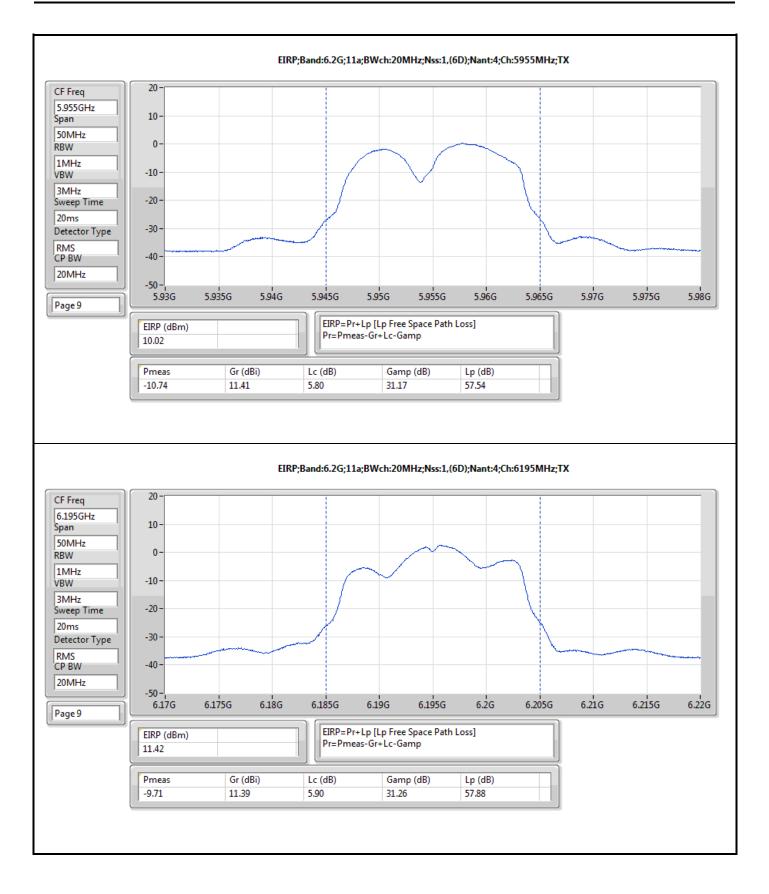


## Result

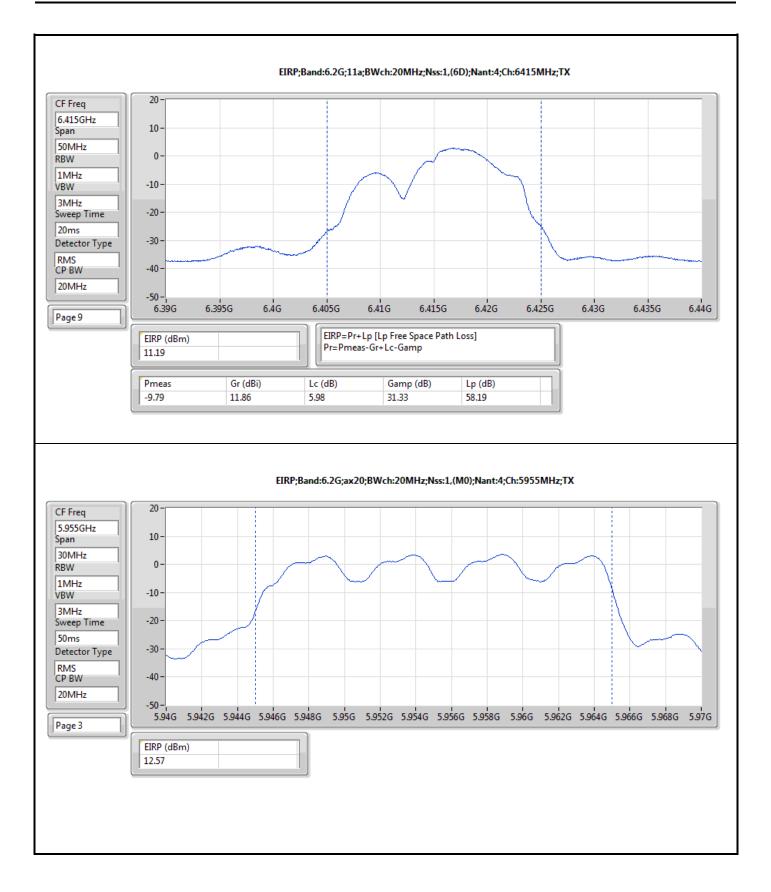
Mode	Result	EIRP	EIRP Limit
		(dBm)	(dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-
5955MHz	Pass	10.02	30.00
6195MHz	Pass	11.42	30.00
6415MHz	Pass	11.19	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-
5955MHz	Pass	12.57	30.00
6195MHz	Pass	12.45	30.00
6415MHz	Pass	13.24	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-
5965MHz	Pass	14.68	30.00
6205MHz	Pass	14.88	30.00
6405MHz	Pass	16.05	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-
5985MHz	Pass	18.91	30.00
6225MHz	Pass	18.29	30.00
6385MHz	Pass	18.41	30.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-
6025MHz	Pass	21.67	30.00
6185MHz	Pass	20.08	30.00
6345MHz	Pass	20.06	30.00

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

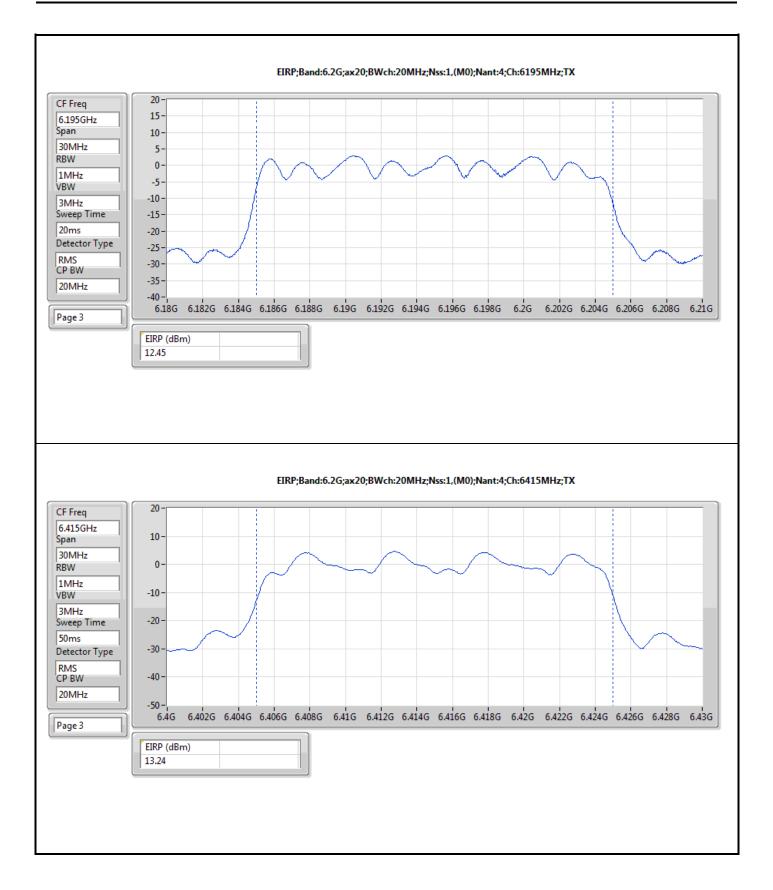




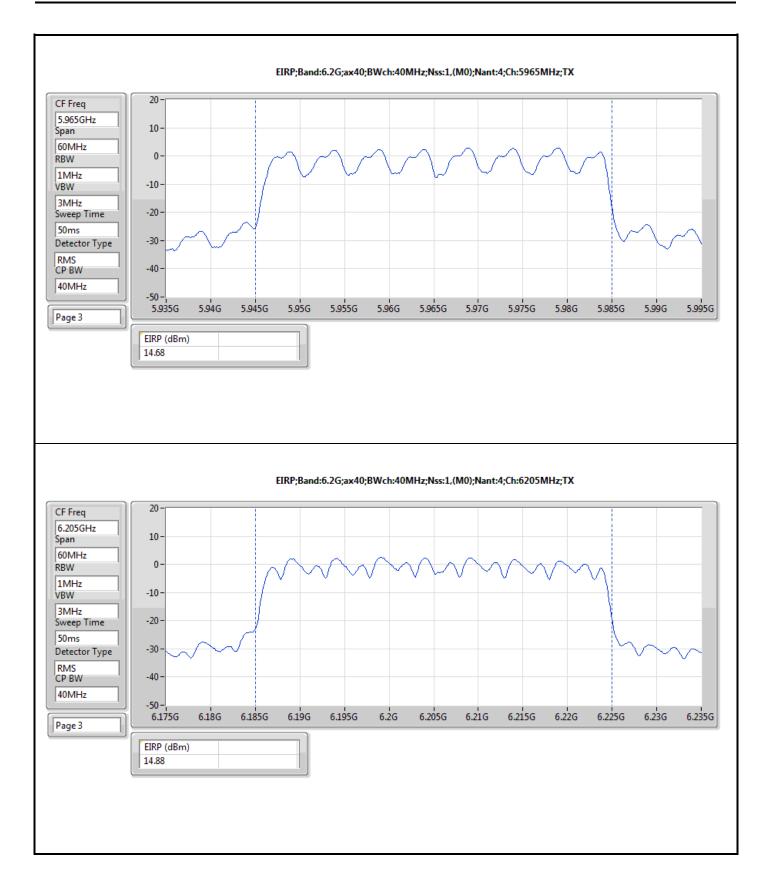




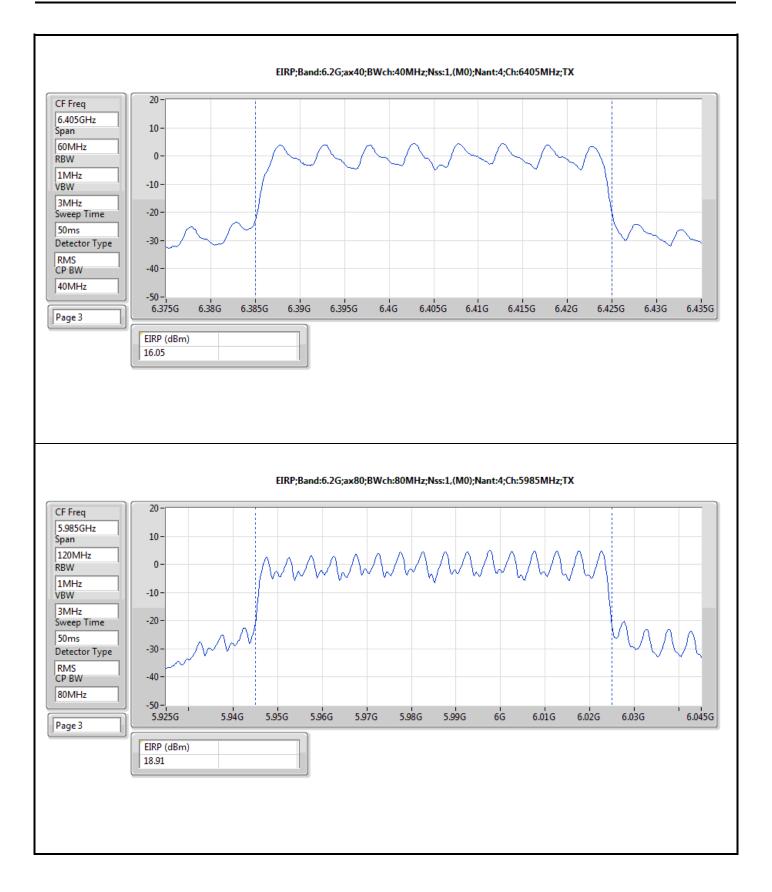




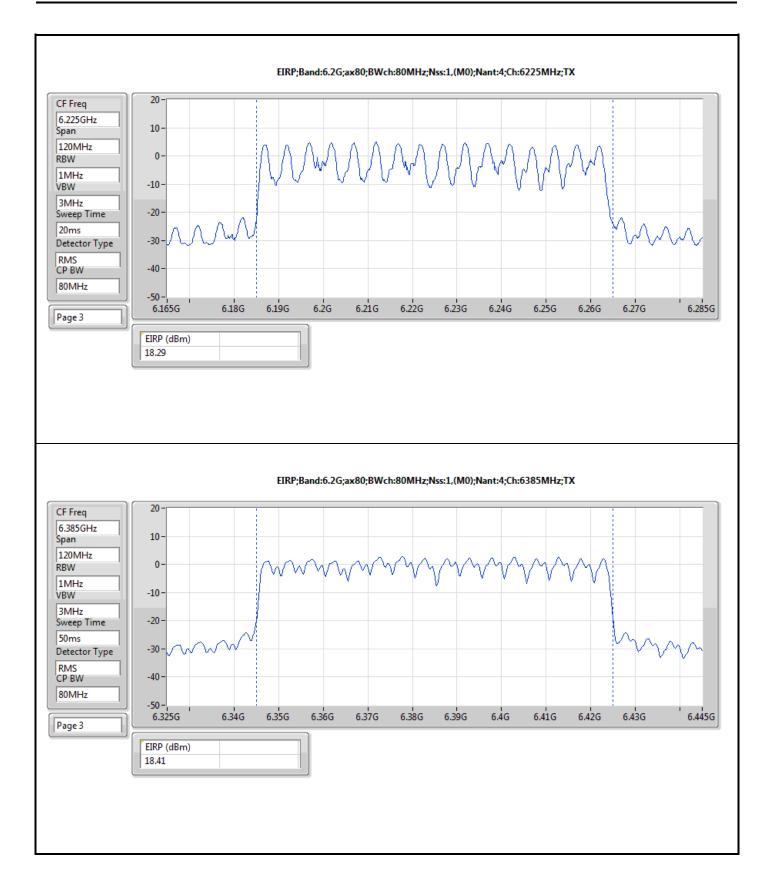




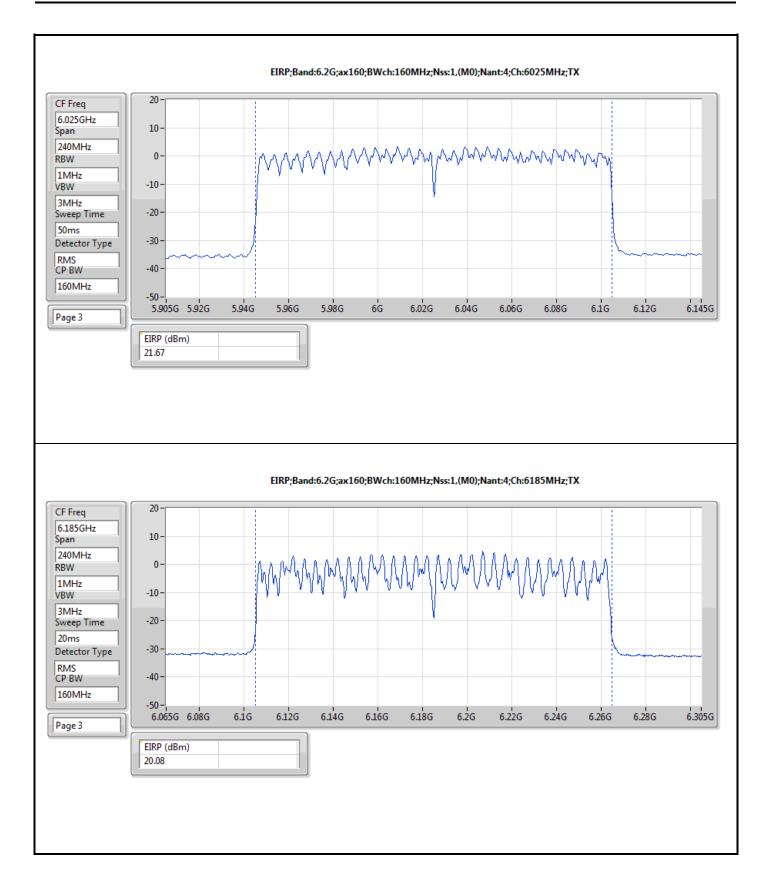




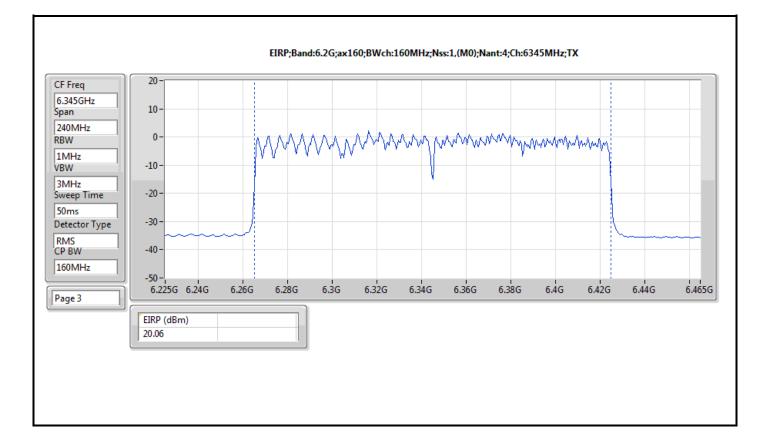














#### Summary

Mode	EIRP PD (dBm/RBW)
5.925-6.425GHz	-
802.11a_Nss1,(6Mbps)_4TX	22.95
802.11ax HEW20_Nss1,(MCS0)_4TX	22.97
802.11ax HEW40_Nss1,(MCS0)_4TX	21.15
802.11ax HEW80_Nss1,(MCS0)_4TX	14.15
802.11ax HEW160_Nss1,(MCS0)_4TX	9.86

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

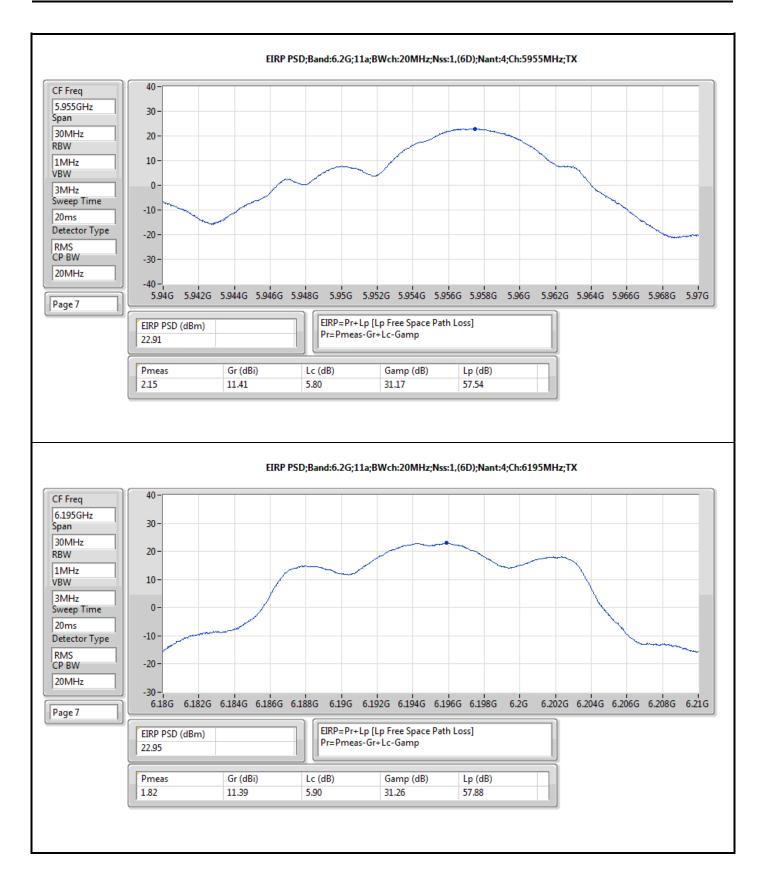


#### Result

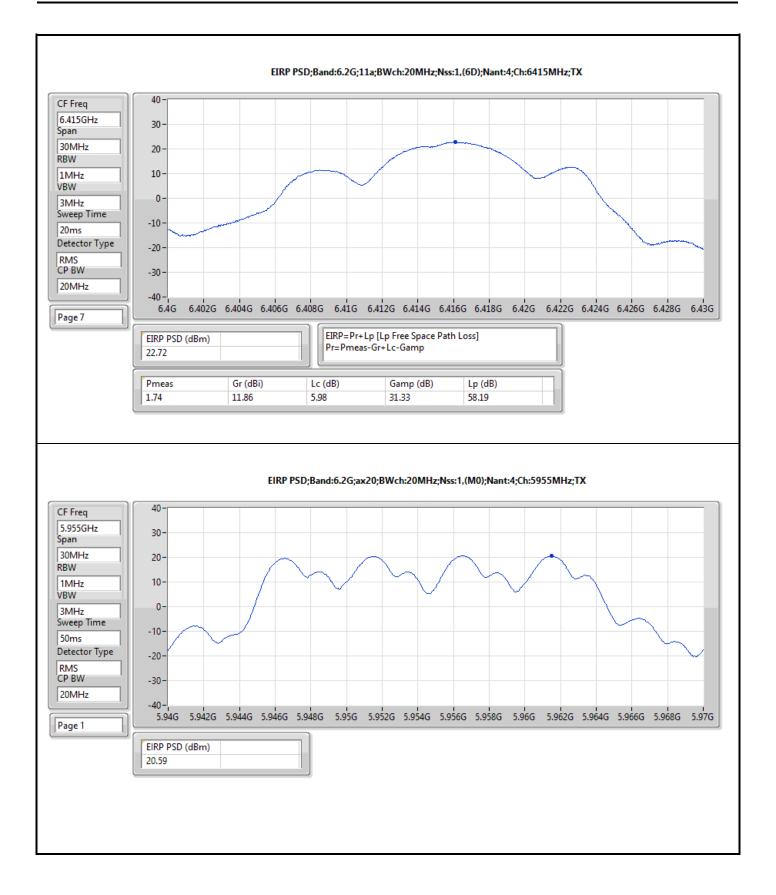
Mode	Result	EIRP PD	EIRP PD Limit		
		(dBm/RBW)	(dBm/RBW)		
802.11a_Nss1,(6Mbps)_4TX	-	-	-		
5955MHz	Pass	22.91	23.00		
6195MHz	Pass	22.95	23.00		
6415MHz	Pass	22.72	23.00		
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-		
5955MHz	Pass	20.59	23.00		
6195MHz	Pass	22.97	23.00		
6415MHz	Pass	18.58	23.00		
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-		
5965MHz	Pass	16.30	23.00		
6205MHz	Pass	21.15	23.00		
6405MHz	Pass	15.55	23.00		
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-		
5985MHz	Pass	14.15	23.00		
6225MHz	Pass	13.65	23.00		
6385MHz	Pass	12.17	23.00		
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-		
6025MHz	Pass	9.86	23.00		
6185MHz	Pass	7.44	23.00		
6345MHz	Pass	7.54	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;

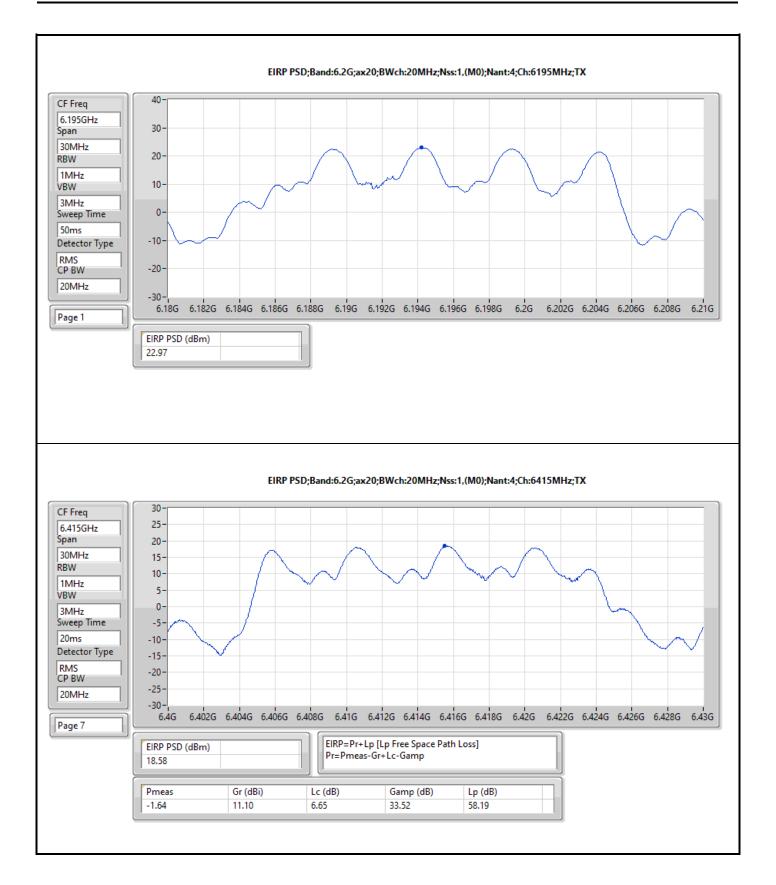




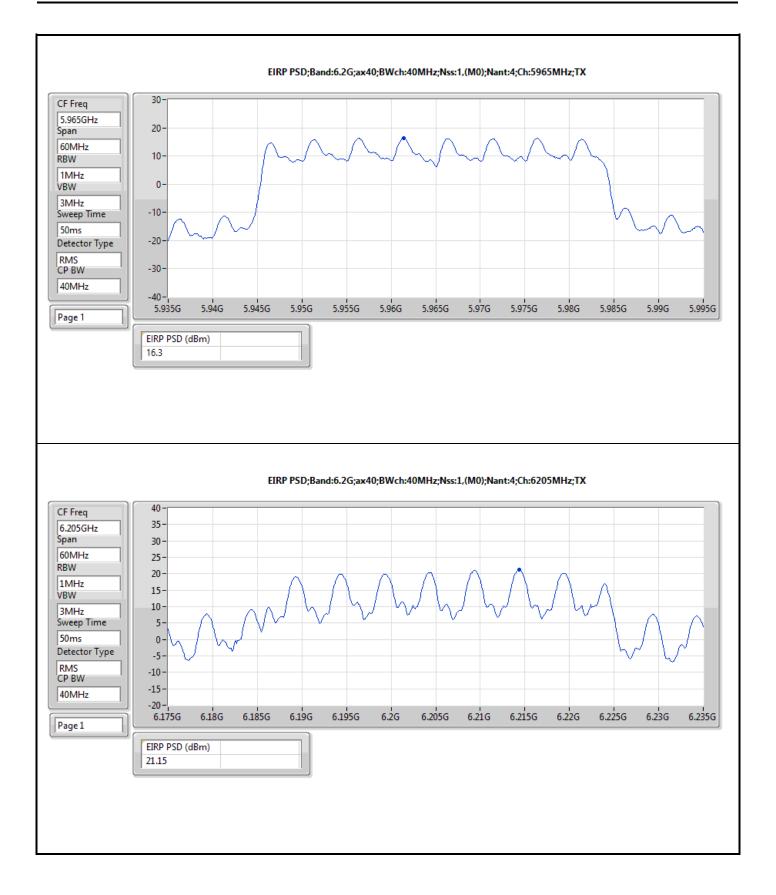




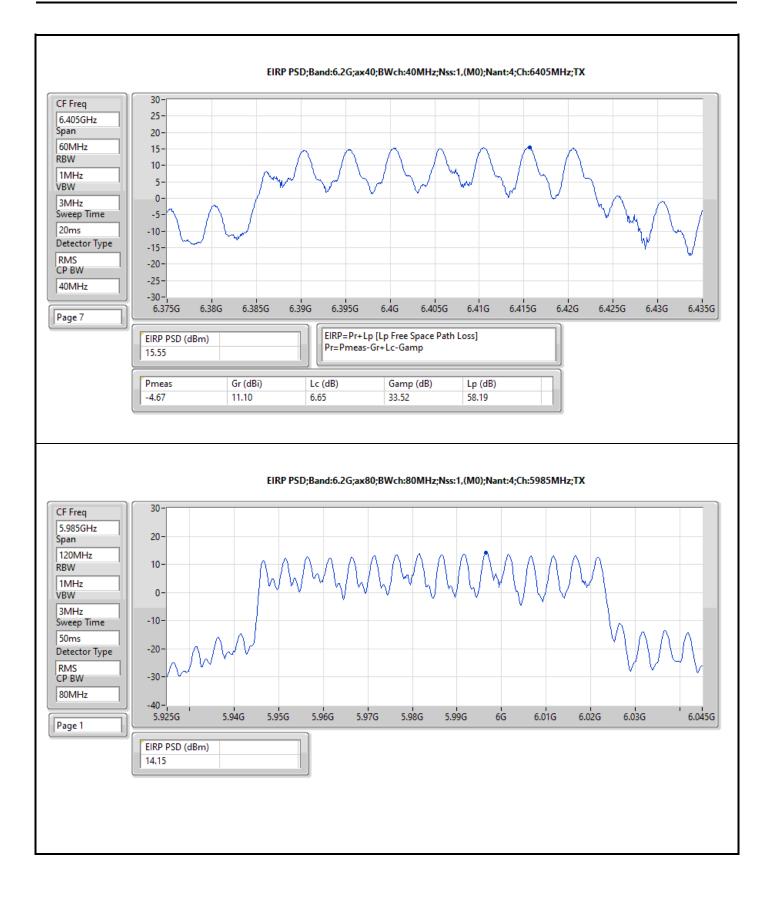




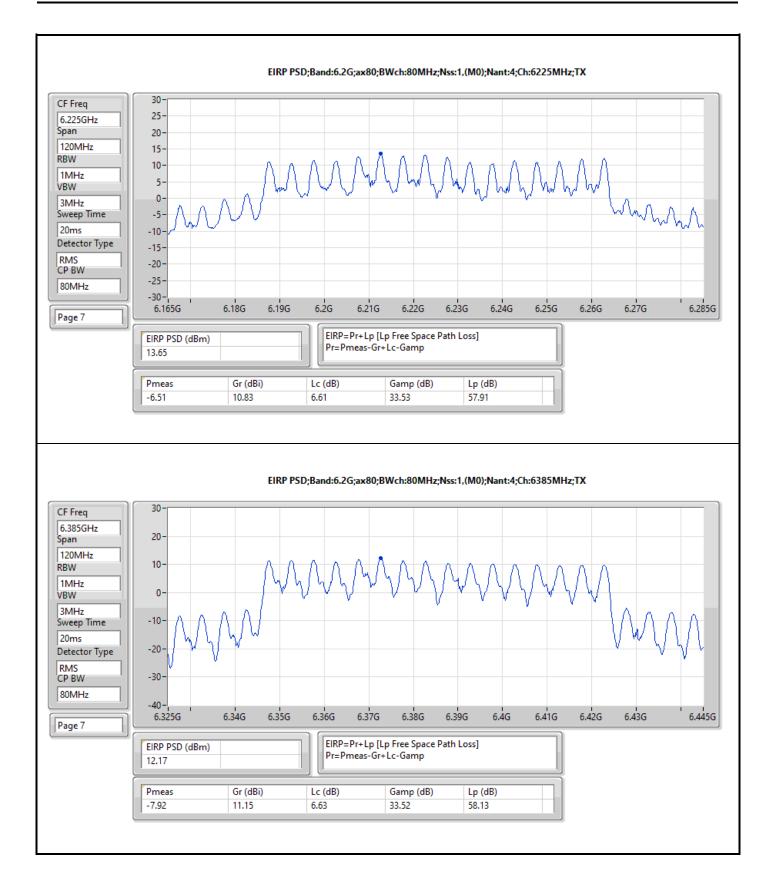




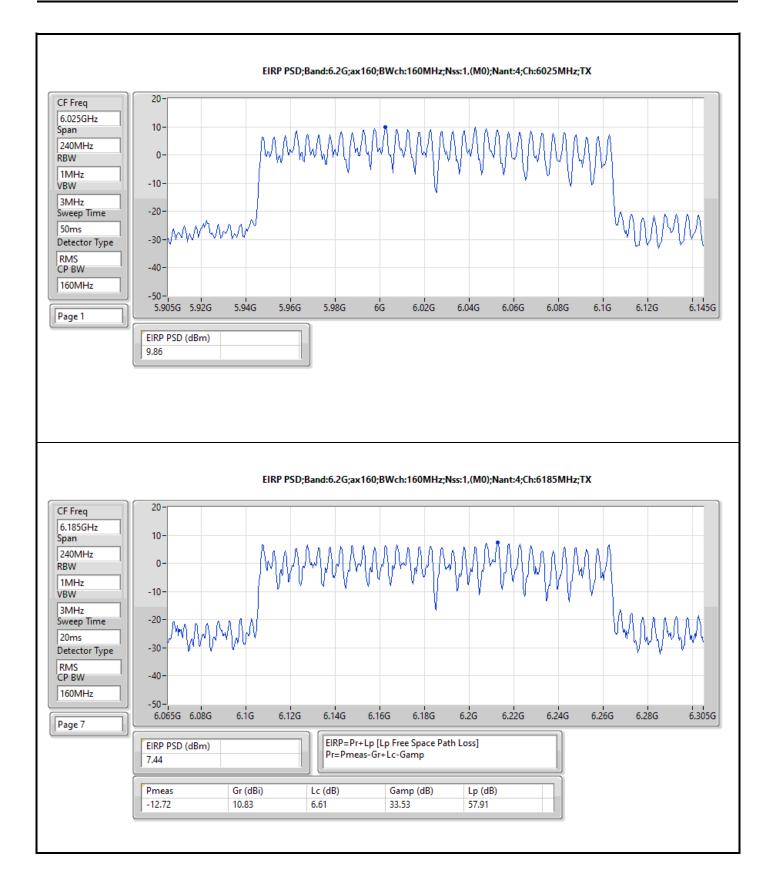




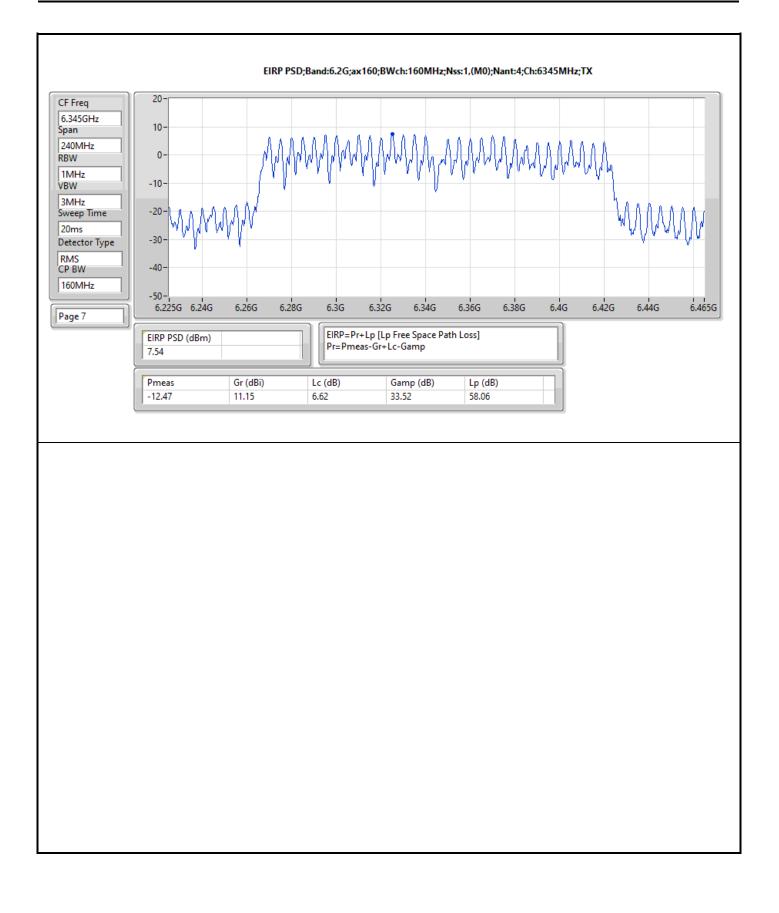














#### Summary

Mode	EIRP PD (dBm/RBW)
5.925-6.425GHz	-
802.11a_Nss1,(6Mbps)_4TX	4.87
802.11ax HEW20_Nss1,(MCS0)_4TX	4.99
802.11ax HEW40_Nss1,(MCS0)_4TX	4.97
802.11ax HEW80_Nss1,(MCS0)_4TX	4.78
802.11ax HEW160_Nss1,(MCS0)_4TX	4.99

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

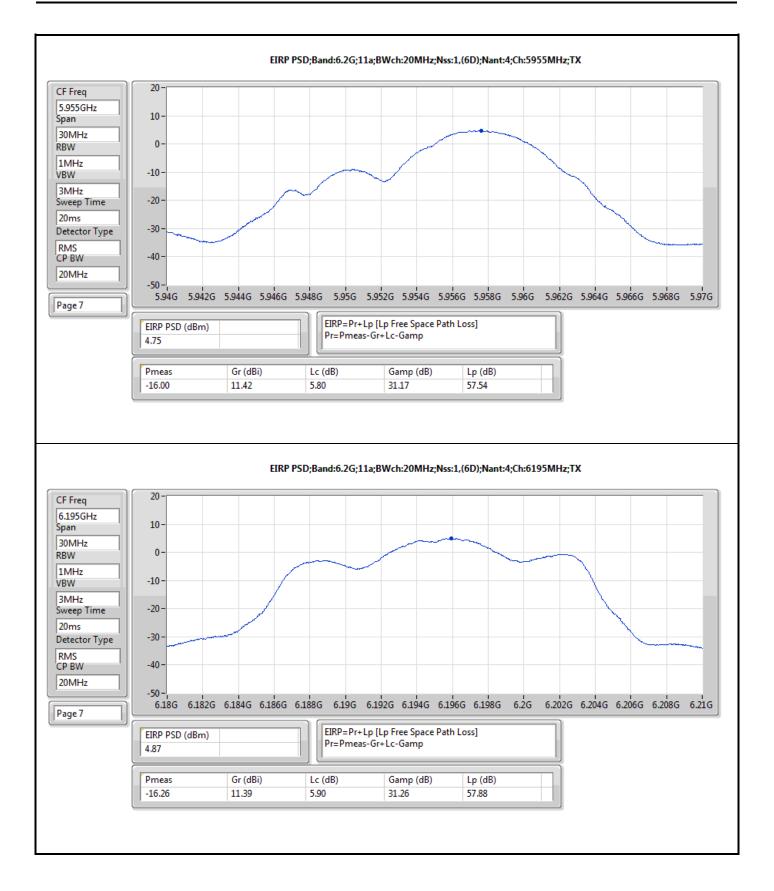


#### Result

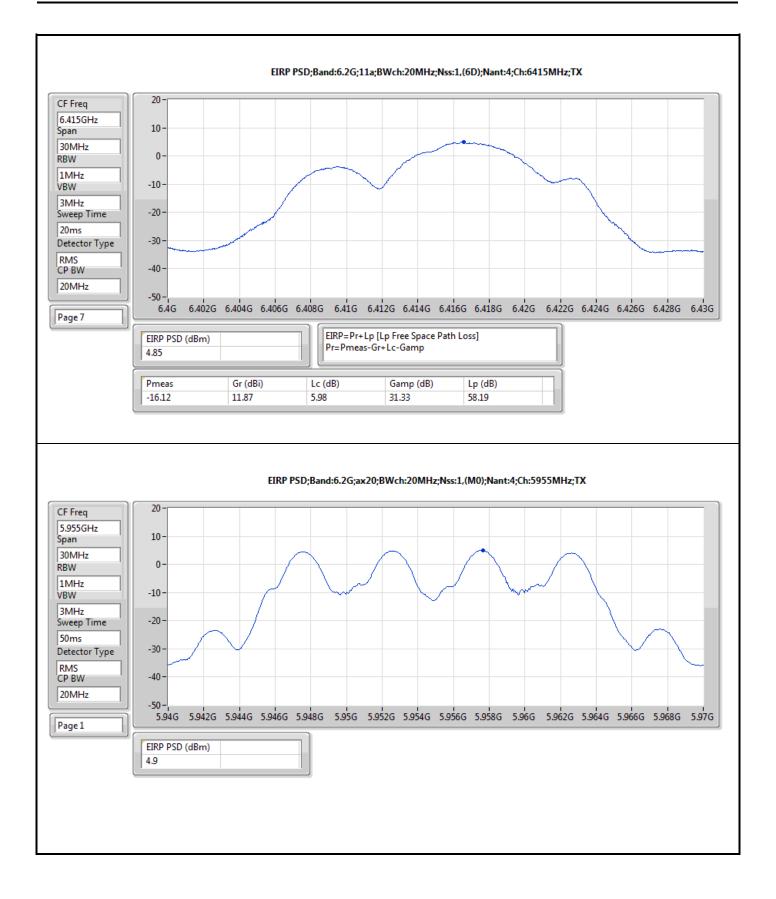
Mode	Result	EIRP PD	EIRP PD Limit
		(dBm/RBW)	(dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-
5955MHz	Pass	4.75	5.00
6195MHz	Pass	4.87	5.00
6415MHz	Pass	4.85	5.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-
5955MHz	Pass	4.90	5.00
6195MHz	Pass	4.78	5.00
6415MHz	Pass	4.99	5.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-
5965MHz	Pass	4.46	5.00
6205MHz	Pass	4.97	5.00
6405MHz	Pass	4.97	5.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-
5985MHz	Pass	4.61	5.00
6225MHz	Pass	4.78	5.00
6385MHz	Pass	4.77	5.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-
6025MHz	Pass	4.91	5.00
6185MHz	Pass	4.86	5.00
6345MHz	Pass	4.99	5.00

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;

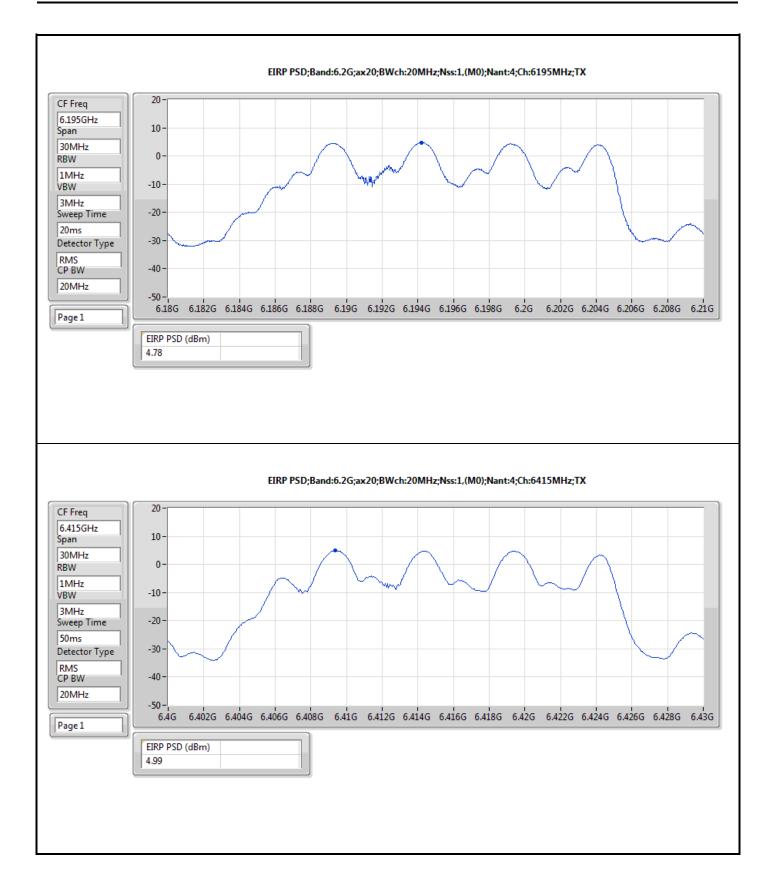




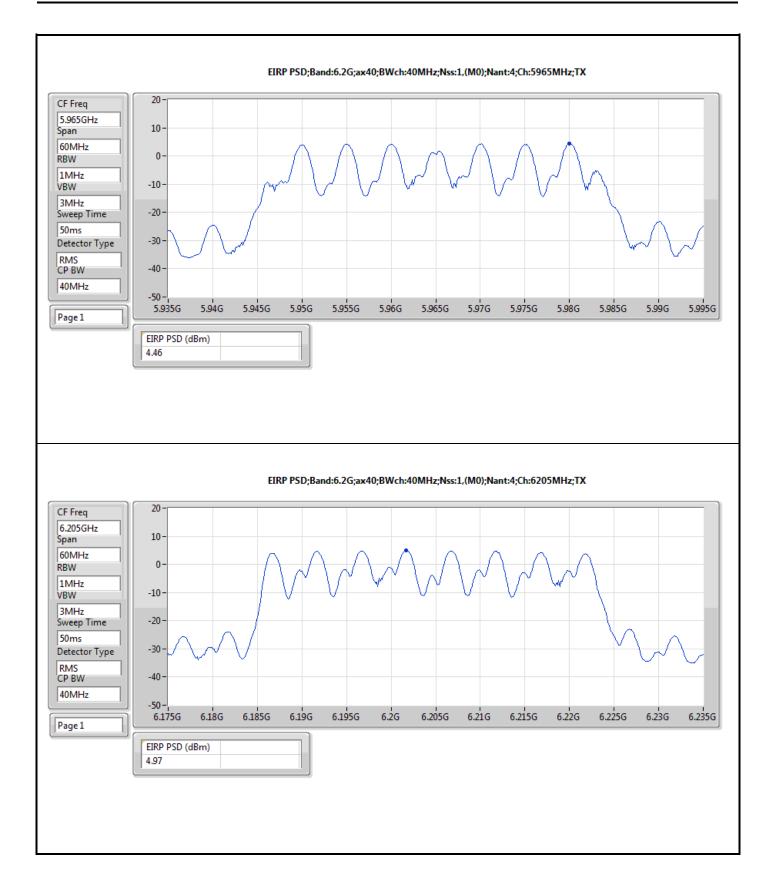




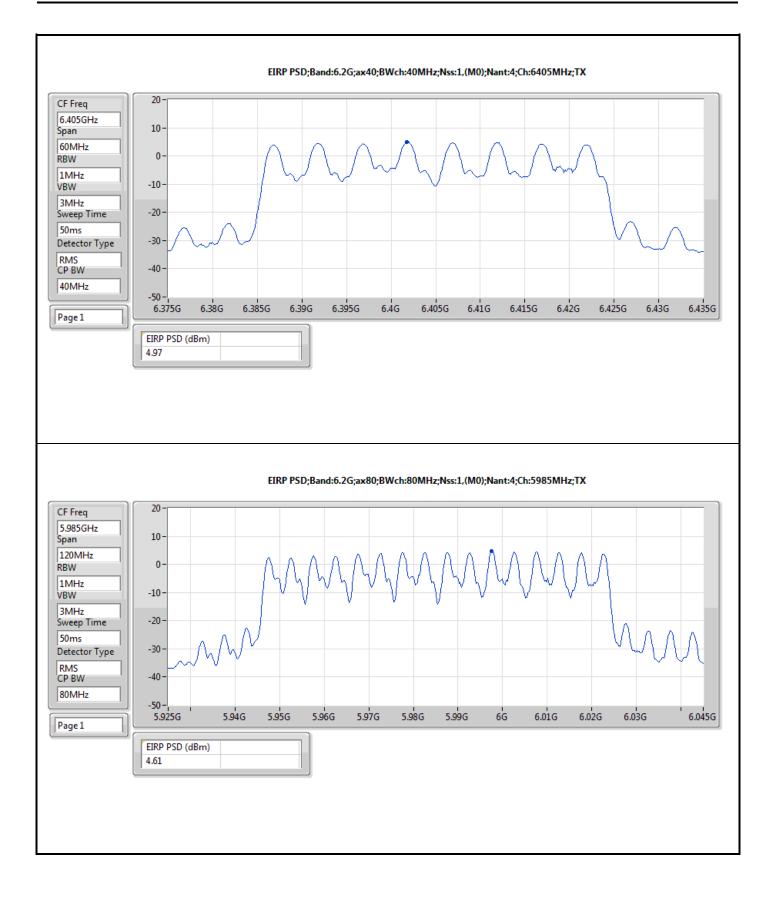




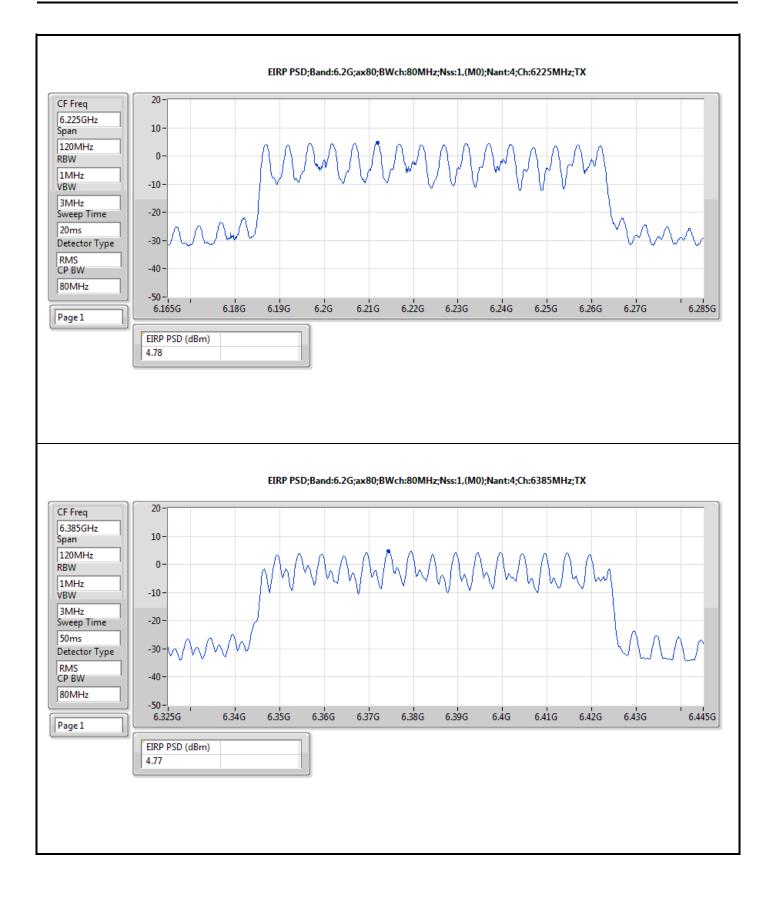




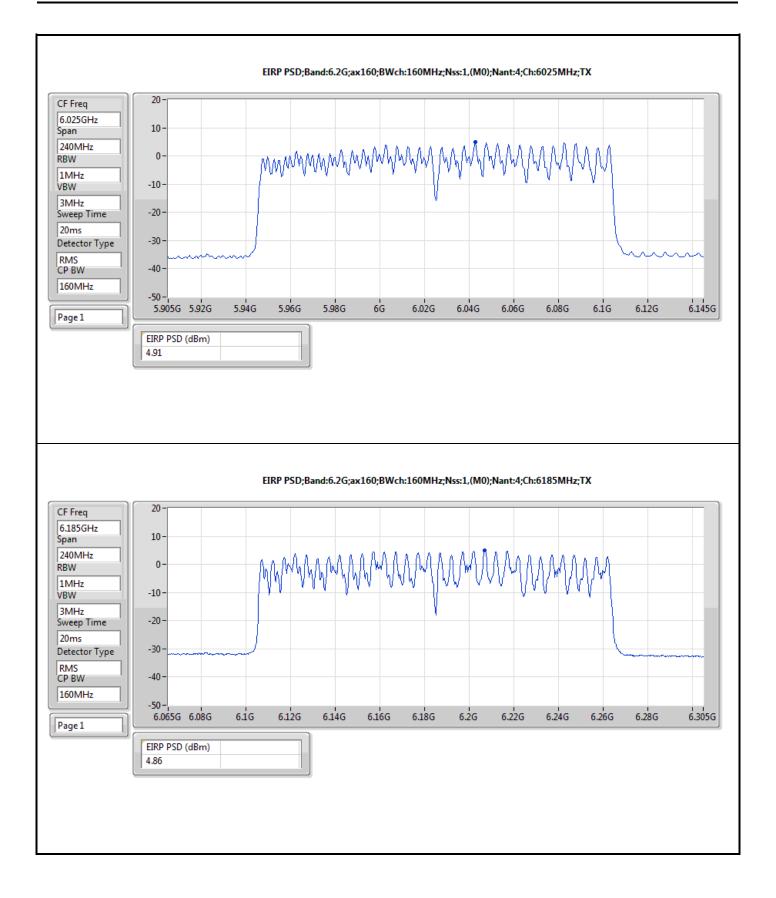




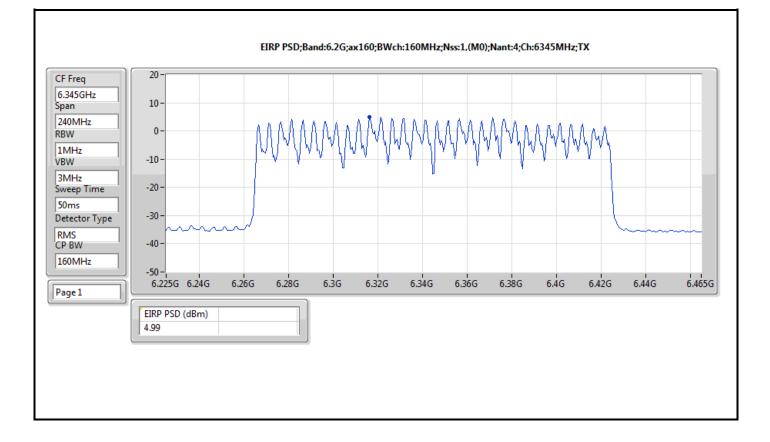














## Radiated Emissions below 1GHz

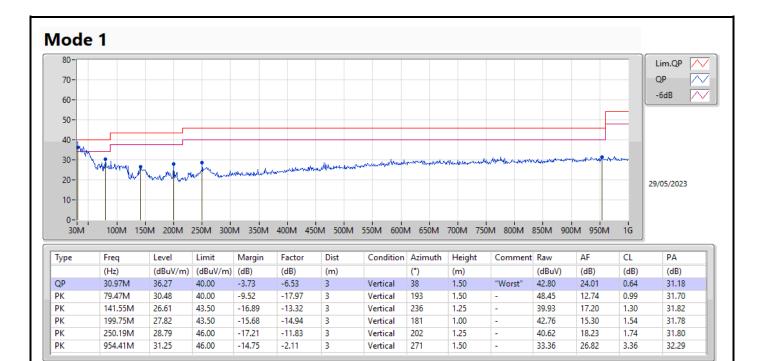
# Appendix E.1

Summary							
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	
Mode 1	Pass	QP	30.97M	36.27	40.00	-3.73	Vertical



### Radiated Emissions below 1GHz

# Appendix E.1





### Radiated Emissions below 1GHz

#### Mode 1 80-Lim.QP $\sim$ 70-QP $\sim$ -6dB 60-50-40-30-20-29/05/2023 10-0-30M 100M 150M 200M 250M 300M 350M 400M 450M 500M 550M 600M 650M 700M 750M 800M 850M 900M 950M 1G Туре ٦Ì PΔ Limit Margin Factor Dist Condition Azimuth Height Comment Raw ΔF CI Level

Freq	Level	Limit	iviargin	Factor	Dist	Condition	Azimuth	Height	Comment	NdW	AF	CL .	PA
(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
30M	36.16	40.00	-3.84	-6.18	3	Horizontal	95	1.50	"Worst"	42.34	24.34	0.63	31.15
138.64M	28.72	43.50	-14.78	-13.22	3	Horizontal	292	1.50	-	41.94	17.32	1.28	31.82
188.11M	31.86	43.50	-11.64	-15.11	3	Horizontal	0	1.50	-	46.97	15.10	1.49	31.70
199.75M	34.16	43.50	-9.34	-14.94	3	Horizontal	322	2.00	-	49.10	15.30	1.54	31.78
250.19M	38.05	46.00	-7.95	-11.83	3	Horizontal	162	1.25	-	49.88	18.23	1.74	31.80
465.53M	30.54	46.00	-15.46	-6.71	3	Horizontal	166	2.00	-	37.25	23.05	2.31	32.07
	(Hz) 30M 138.64M 188.11M 199.75M 250.19M	(Hz)         (dBuV/m)           30M         36.16           138.64M         28.72           188.11M         31.86           199.75M         34.16           250.19M         38.05	(Hz)         (dBuV/m)         (dBuV/m)           30M         36.16         40.00           138.64M         28.72         43.50           188.11M         31.86         43.50           199.75M         34.16         43.50           250.19M         38.05         46.00	(Hz)         (dBuV/m)         (dBuV/m)         (dBuV/m)           30M         36.16         40.00         -3.84           138.64M         28.72         43.50         -14.78           188.11M         31.86         43.50         -11.64           199.75M         34.16         43.50         -9.34           250.19M         38.05         46.00         -7.95	(Hz)         (dBuV/m)         (dB)         (dB)           30M         36.16         40.00         -3.84         -6.18           138.64M         28.72         43.50         -14.78         -13.22           188.11M         31.86         43.50         -11.64         -15.11           199.75M         34.16         43.50         -9.34         -14.94           250.19M         38.05         46.00         -7.95         -11.83	(Hz)         (dBuV/m)         (dB)         (dB)         (m)           30M         36.16         40.00         -3.84         -6.18         3           138.64M         28.72         43.50         -14.78         -13.22         3           188.11M         31.86         43.50         -11.64         -15.11         3           199.75M         34.16         43.50         -9.34         -14.94         3           250.19M         38.05         46.00         -7.95         -11.83         3	(Hz)         (dBuV/m)         (dB)         (dB)         (m)           30M         36.16         40.00         -3.84         -6.18         3         Horizontal           138.64M         28.72         43.50         -14.78         -13.22         3         Horizontal           188.11M         31.86         43.50         -11.64         -15.11         3         Horizontal           199.75M         34.16         43.50         -9.34         -14.94         3         Horizontal           250.19M         38.05         46.00         -7.95         -11.83         3         Horizontal	(Hz)         (dBuV/m)         (dB)         (dB)         (m)         (°)           30M         36.16         40.00         -3.84         -6.18         3         Horizontal 95           138.64M         28.72         43.50         -14.78         -13.22         3         Horizontal 292           188.11M         31.86         43.50         -11.64         -15.11         3         Horizontal 0           199.75M         34.16         43.50         -9.34         -14.94         3         Horizontal 322           250.19M         38.05         46.00         -7.95         -11.83         3         Horizontal 162	(Hz)         (dBuV/m)         (dB)         (dB)         (m)         (*)         (m)           30M         36.16         40.00         -3.84         -6.18         3         Horizontal         95         1.50           138.64M         28.72         43.50         -14.78         -13.22         3         Horizontal         292         1.50           188.11M         31.86         43.50         -11.64         -15.11         3         Horizontal         0         1.50           199.75M         34.16         43.50         -9.34         -14.94         3         Horizontal         322         2.00           250.19M         38.05         46.00         -7.95         -11.83         3         Horizontal         162         1.25	(Hz)         (dBuV/m)         (dB)         (dB)         (m)         (°)         (m)           30M         36.16         40.00         -3.84         -6.18         3         Horizontal         95         1.50         "Worst"           138.64M         28.72         43.50         -14.78         -13.22         3         Horizontal         292         1.50         -           188.11M         31.86         43.50         -11.64         -15.11         3         Horizontal         0         1.50         -           199.75M         34.16         43.50         -9.34         -14.94         3         Horizontal         322         2.00         -           250.19M         38.05         46.00         -7.95         -11.83         3         Horizontal         162         1.25         -	(Hz)         (dBuV/m)         (dB)         (dB)         (m)         (°)         (m)         (dBuV)           30M         36.16         40.00         -3.84         -6.18         3         Horizontal         95         1.50         "Worst"         42.34           138.64M         28.72         43.50         -14.78         -13.22         3         Horizontal         292         1.50         -         41.94           188.11M         31.86         43.50         -11.64         -15.11         3         Horizontal         0         1.50         -         46.97           199.75M         34.16         43.50         -9.34         -14.94         3         Horizontal         322         2.00         -         49.10           250.19M         38.05         46.00         -7.95         -11.83         3         Horizontal         162         1.25         -         49.88	(Hz)         (dBuV/m)         (dB)         (dB)         (m)         (°)         (m)         (dBuV)         (dB)         (dB)           30M         36.16         40.00         -3.84         -6.18         3         Horizontal         95         1.50         "Worst"         42.34         24.34           138.64M         28.72         43.50         -14.78         -13.22         3         Horizontal         292         1.50         -         41.94         17.32           188.11M         31.86         43.50         -11.64         -15.11         3         Horizontal         0         1.50         -         46.97         15.10           199.75M         34.16         43.50         -9.34         -14.94         3         Horizontal         322         2.00         -         49.10         15.30           250.19M         38.05         46.00         -7.95         -11.83         3         Horizontal         162         1.25         -         49.88         18.23	(Hz)         (dBuV/m)         (dBuV/m)         (dB)         (dB)         (m)         (°)         (m)         (dBuV)         (dB)         (dB)         (dB)         (m)         (°)         (m)         (dBuV)         (dB)         (dB)         (dB)         (m)         (°)         (m)         (dBuV)         (dB)         (dB)         (dB)         (m)         <



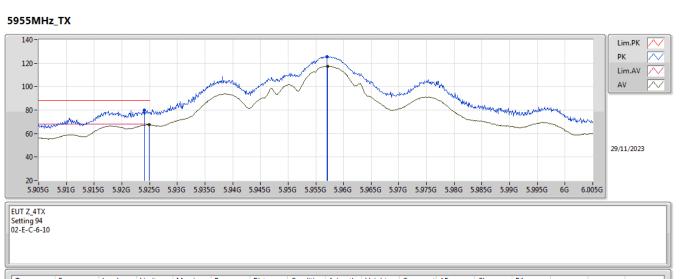
### RSE TX above 1GHz

# 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 HEW160_Nss1,(MCS0)_4TX	Pass	RMS	5.9098G	68.10	68.20	-0.10	3	Vertical	55	2.84	-

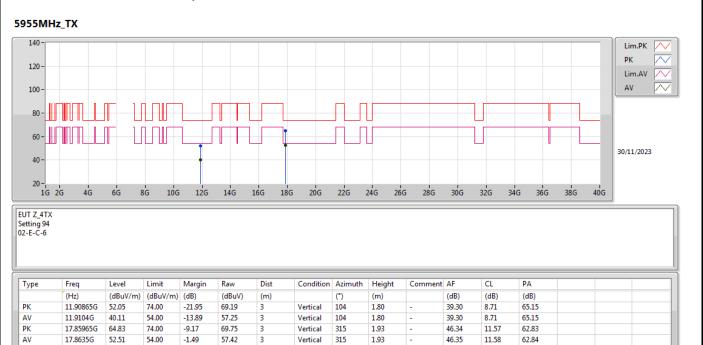




Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)		
PK	5.9241G	79.95	88.20	-8.25	71.09	3	Vertical	55	2.55	-	34.25	5.77	31.16		
RMS	5.9249G	67.57	68.20	-0.63	58.71	3	Vertical	55	2.55	-	34.25	5.77	31.16		
PK	5.957G	125.74	Inf	-Inf	116.81	3	Vertical	55	2.55	-	34.30	5.80	31.17		
RMS	5.9571G	117.48	Inf	-Inf	108.55	3	Vertical	55	2.55	-	34.30	5.80	31.17		



### Appendix E.2





AV

17.8408G

50.99

54.00

-3.01

55.96

3

Horizontal 326

2.10

### Appendix E.2

#### 5.925-6.425GHz\_802.11a\_Nss1,(6Mbps)\_4TX



46.28

11.56

62.81











### Appendix E.2



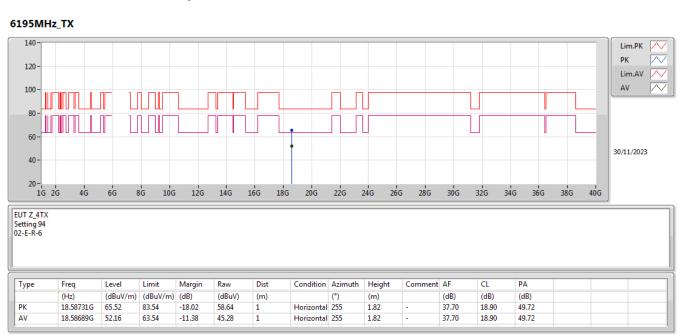






















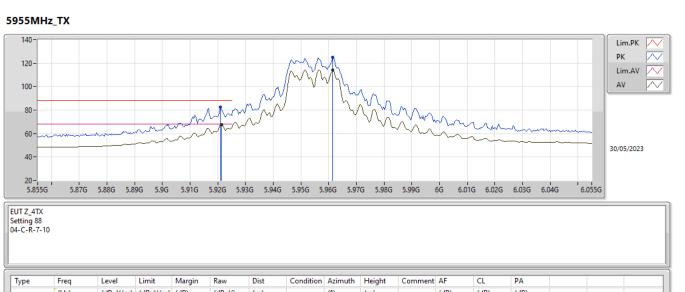






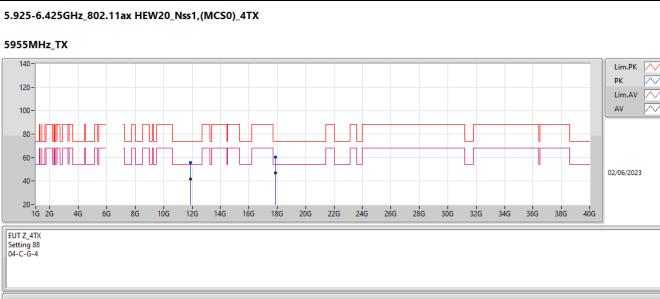


#### 5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX



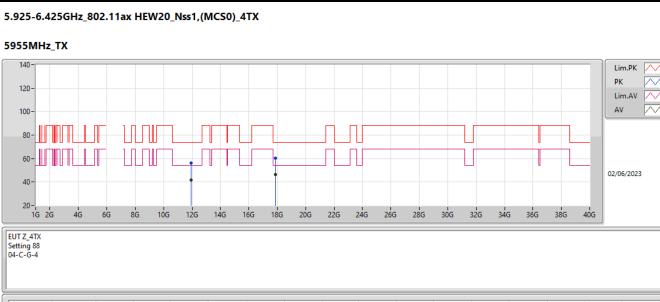
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)		
PK	5.921G	82.51	88.20	-5.69	74.28	3	Vertical	41	2.41	-	35.03	5.76	32.56		
RMS	5.9214G	67.68	68.20	-0.52	59.45	3	Vertical	41	2.41	-	35.03	5.76	32.56		
PK	5.9614G	124.97	Inf	-Inf	116.54	3	Vertical	41	2.41	-	35.22	5.78	32.57		
RMS	5.9614G	114.18	Inf	-Inf	105.75	3	Vertical	41	2.41	-	35.22	5.78	32.57		





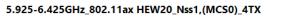
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)		
РК	11.9037G	55.57	74.00	-18.43	51.25	3	Vertical	51	2.23	-	38.99	8.57	43.24		
AV	11.90922G	41.89	54.00	-12.11	37.57	3	Vertical	51	2.23	-	38.98	8.57	43.23		
PK	17.87664G	60.37	74.00	-13.63	48.68	3	Vertical	84	2.34	-	41.55	11.52	41.38		
AV	17.87814G	46.68	54.00	-7.32	34.98	3	Vertical	84	2.34	-	41.56	11.52	41.38		





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	11.92452G	55.96	74.00	-18.04	51.66	3	Horizontal	240	2.12	-	38.95	8.58	43.23		
AV	11.92598G	41.92	54.00	-12.08	37.62	3	Horizontal	240	2.12	-	38.95	8.58	43.23		
PK	17.87196G	60.18	74.00	-13.82	48.51	3	Horizontal	355	1.95	-	41.54	11.52	41.39		
AV	17.8794G	46.47	54.00	-7.53	34.77	3	Horizontal	355	1.95	-	41.56	11.52	41.38		





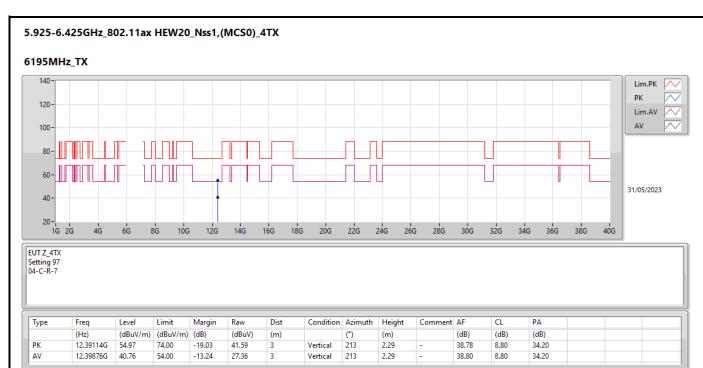




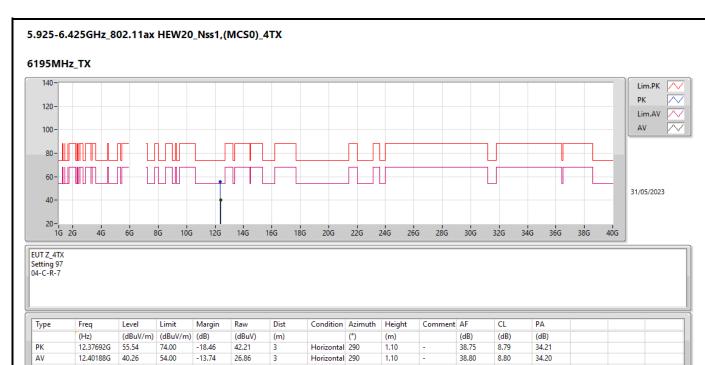












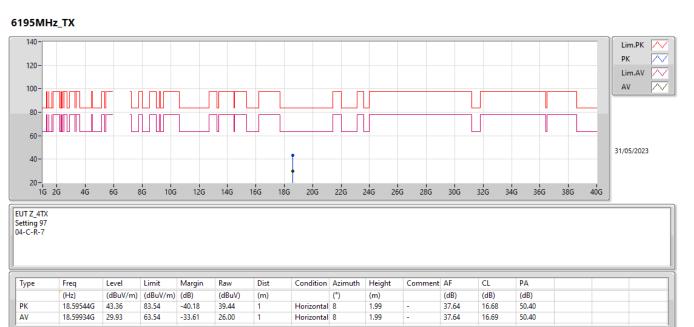












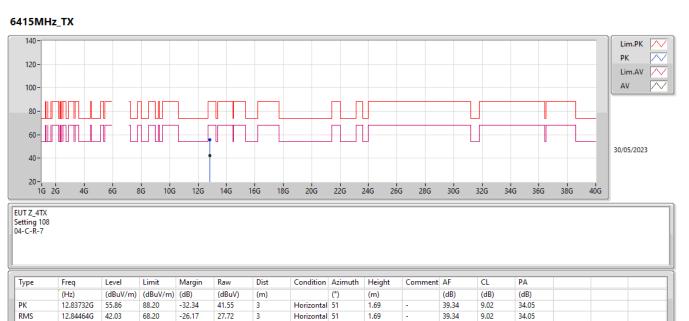


























RMS

5.959G

112.21

Inf

-Inf

103.78

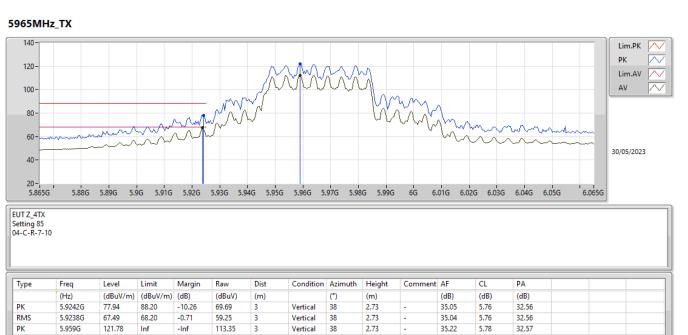
3

Vertical

38

# Appendix E.2

#### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX



2.73

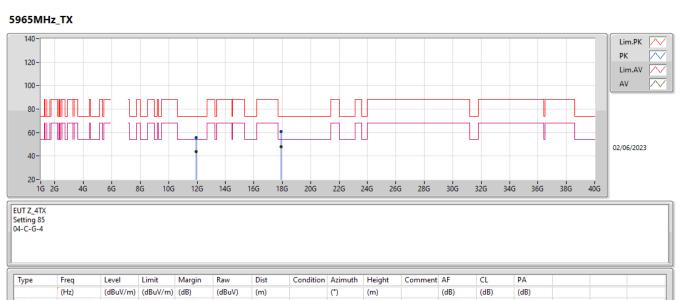
35.22

5.78

32.57







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	11.92442G	55.46	74.00	-18.54	51.16	3	Vertical	54	2.23	-	38.95	8.58	43.23		
AV	11.9372G	43.76	54.00	-10.24	39.48	3	Vertical	54	2.23	-	38.93	8.58	43.23		
PK	17.90142G	60.65	74.00	-13.35	48.85	3	Vertical	119	1.67	-	41.60	11.54	41.34		
AV	17.8965G	47.82	54.00	-6.18	36.05	3	Vertical	119	1.67	-	41.59	11.53	41.35		



AV

PK

AV

11.92514G

17.89416G

17.90664G

43.46

60.41

47.65

54.00

74.00

54.00

-10.54

-13.59

-6.35

39.16

48.65

35.84

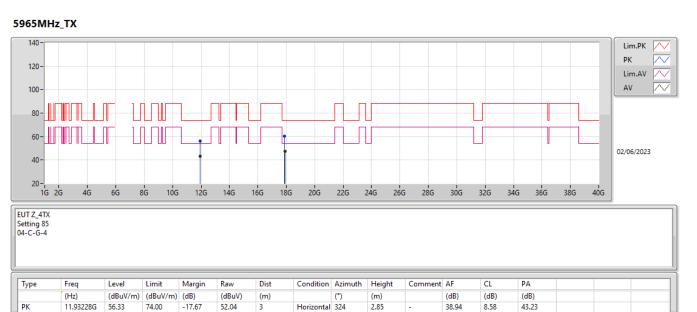
3

3

3

# Appendix E.2





Horizontal 324

Horizontal 78.6

Horizontal 78.6

2.85

2.08

2.08

38.95

41.59

41.61

8.58

11.53

11.54

43.23

41.36

41.34

























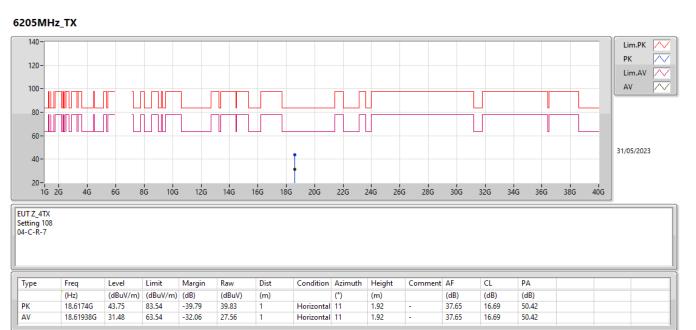
















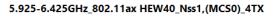






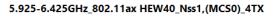








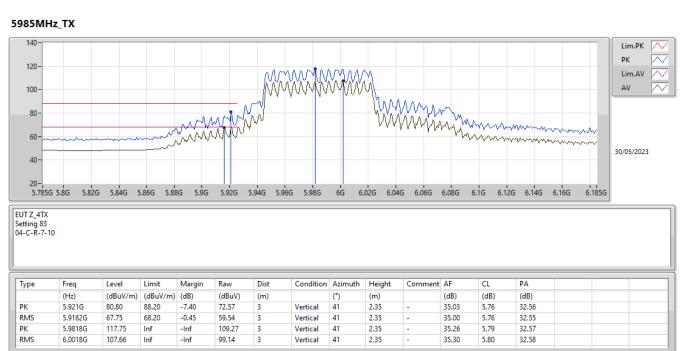






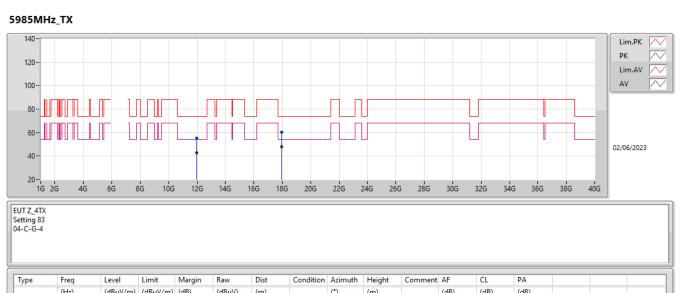


#### 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX









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	11.9757G	55.09	74.00	-18.91	50.87	3	Vertical	33	1.54	-	38.85	8.59	43.22		
AV	11.97276G	42.79	54.00	-11.21	38.57	3	Vertical	33	1.54	-	38.85	8.59	43.22		
РК	17.95278G	60.46	74.00	-13.54	48.50	3	Vertical	1	2.78	-	41.65	11.57	41.26		
AV	17.94684G	47.74	54.00	-6.26	35.79	3	Vertical	1	2.78	-	41.65	11.57	41.27		
1															







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	11.97756G	55.11	74.00	-18.89	50.90	3	Horizontal	15	2.54	-	38.84	8.59	43.22		
AV	11.97816G	42.72	54.00	-11.28	38.51	3	Horizontal	15	2.54	-	38.84	8.59	43.22		
PK	17.967G	60.28	74.00	-13.72	48.27	3	Horizontal	142	1.37	-	41.67	11.58	41.24		
AV	17.96982G	47.54	54.00	-6.46	35.53	3	Horizontal	142	1.37	-	41.67	11.58	41.24		















AV

12.44052G 43.57

54.00

-10.43

30.13

3

Vertical

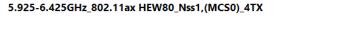
271

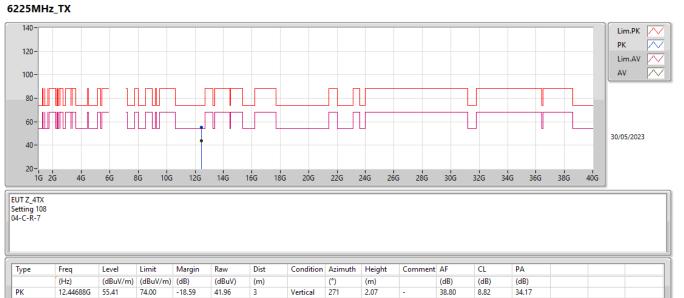
2.07

38.80

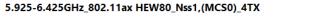
8.82

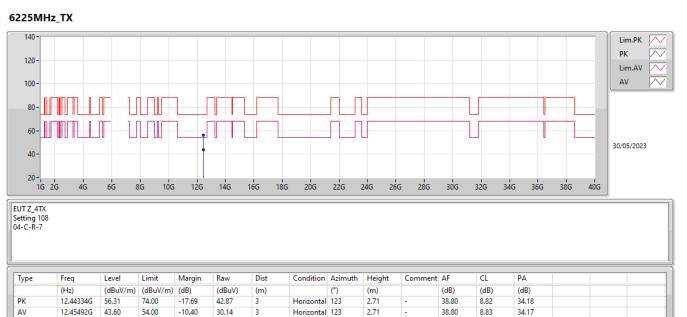
34.18





















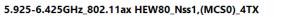


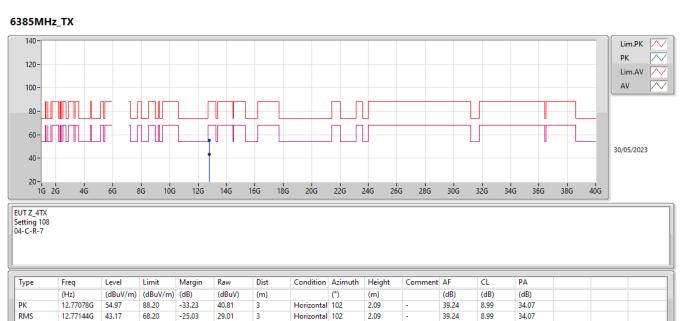




















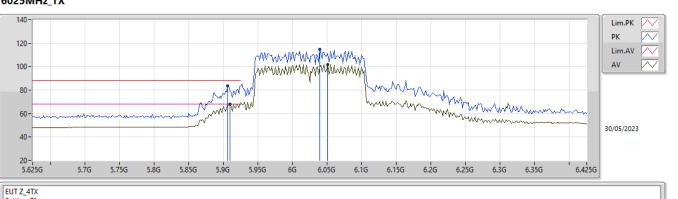






#### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX

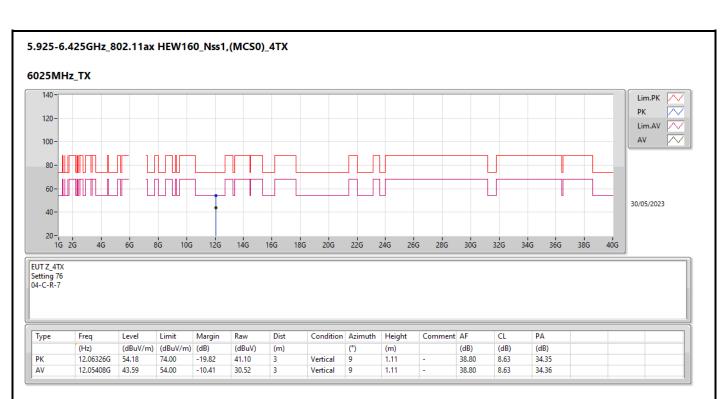




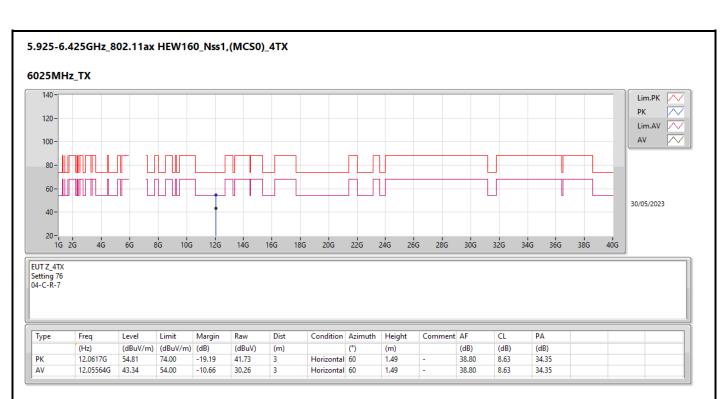
#### Setting 76 04-C-R-7-10

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	5.9066G	83.67	88.20	-4.53	75.53	3	Vertical	55	2.84	-	34.94	5.75	32.55		
RMS	5.9098G	68.10	68.20	-0.10	59.94	3	Vertical	55	2.84	-	34.96	5.75	32.55		
РК	6.0394G	114.61	Inf	-Inf	105.98	3	Vertical	55	2.84	-	35.38	5.84	32.59		
RMS	6.0506G	101.82	Inf	-Inf	93.17	3	Vertical	55	2.84	-	35.40	5.85	32.60		

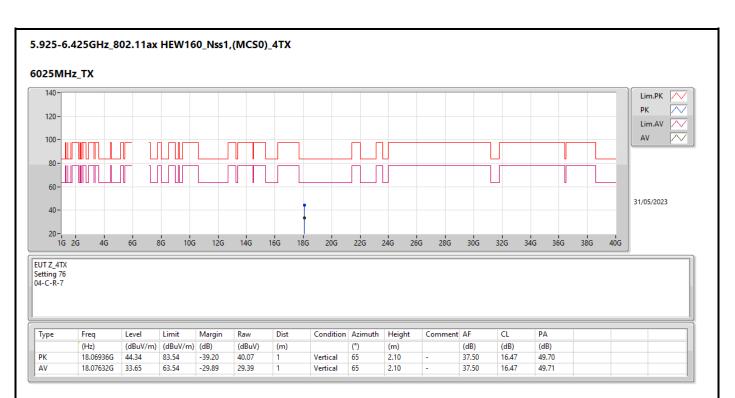




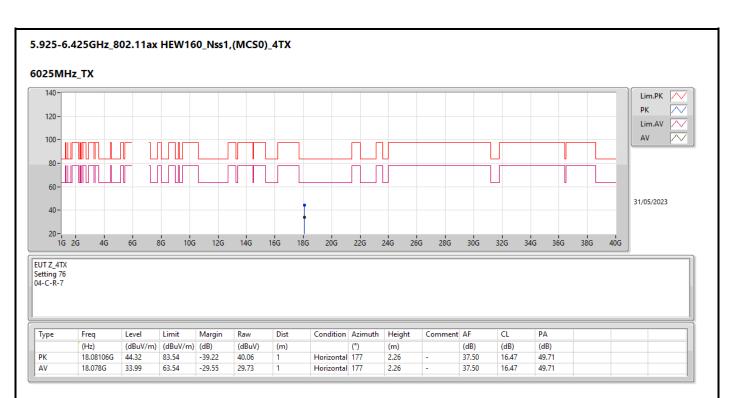




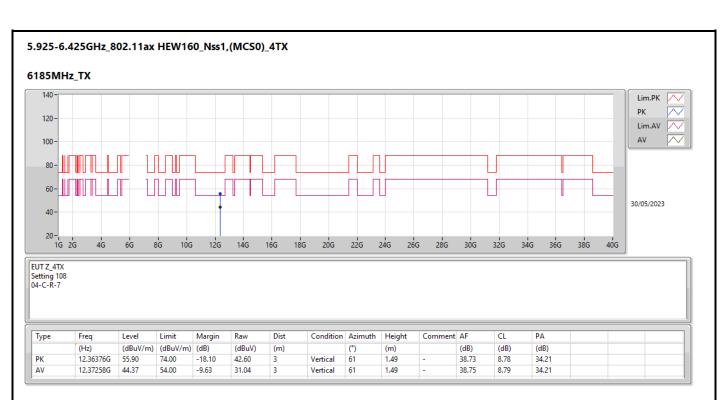




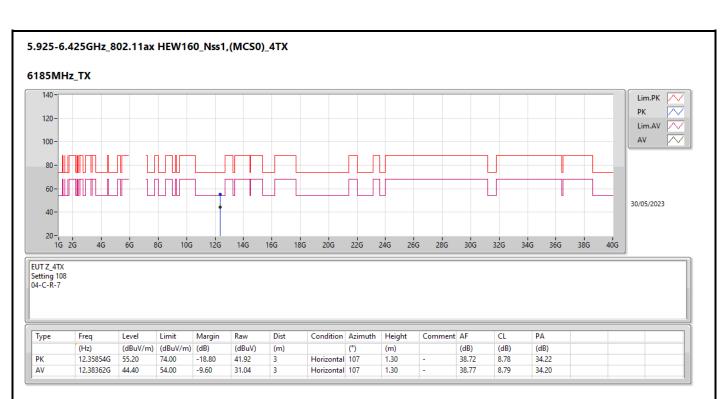












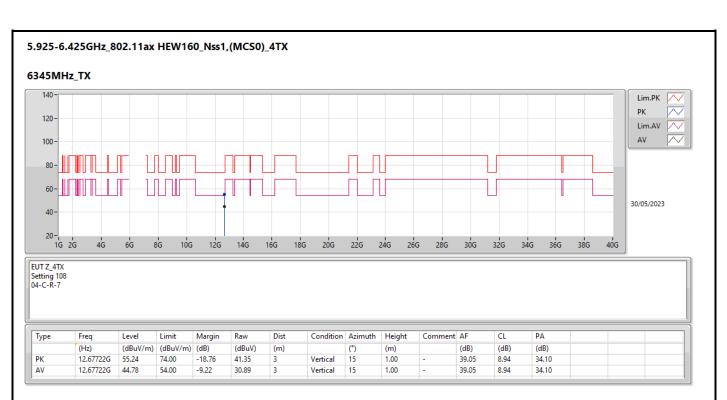




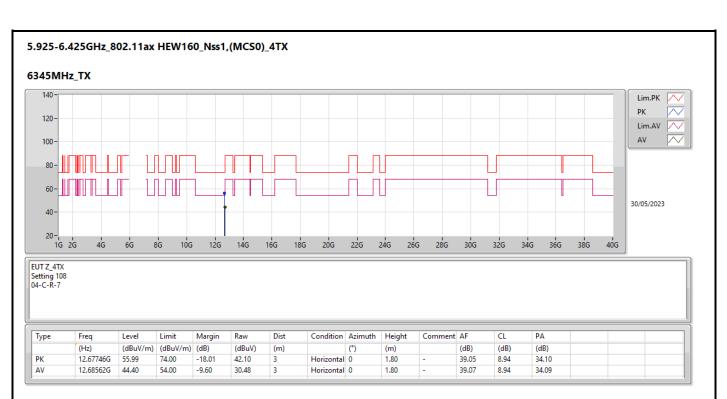








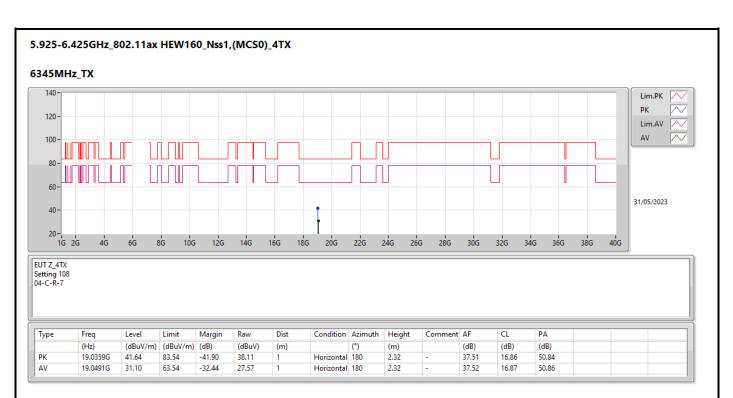




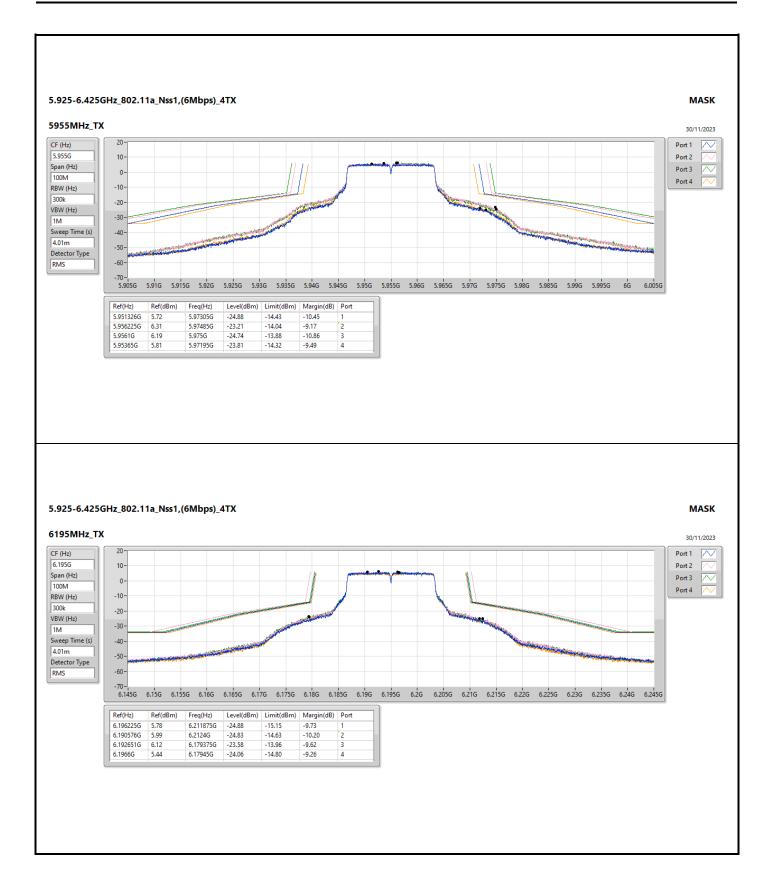




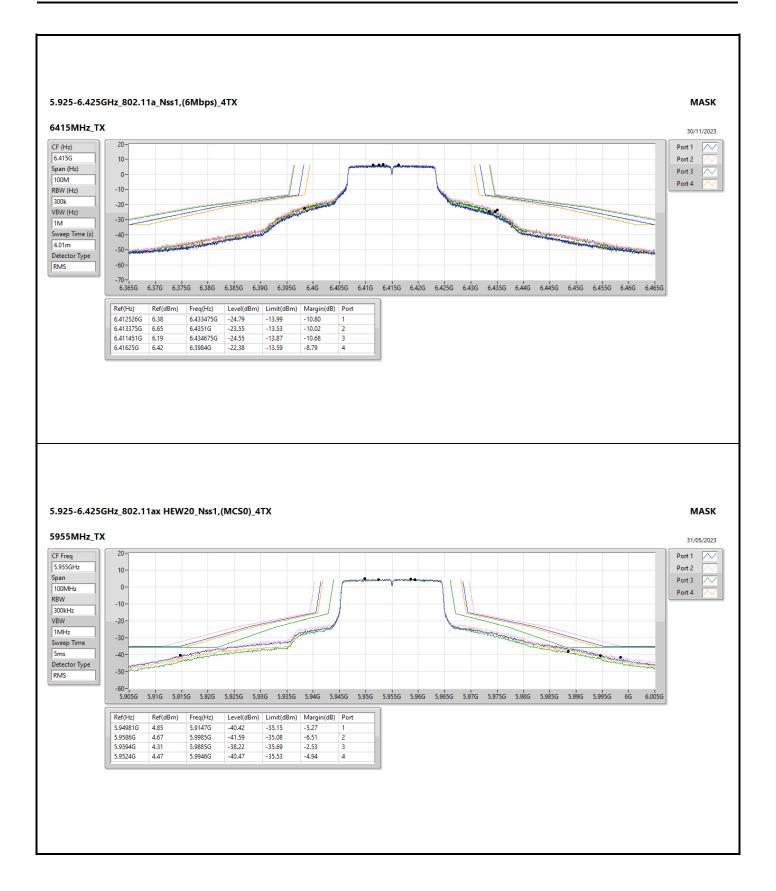




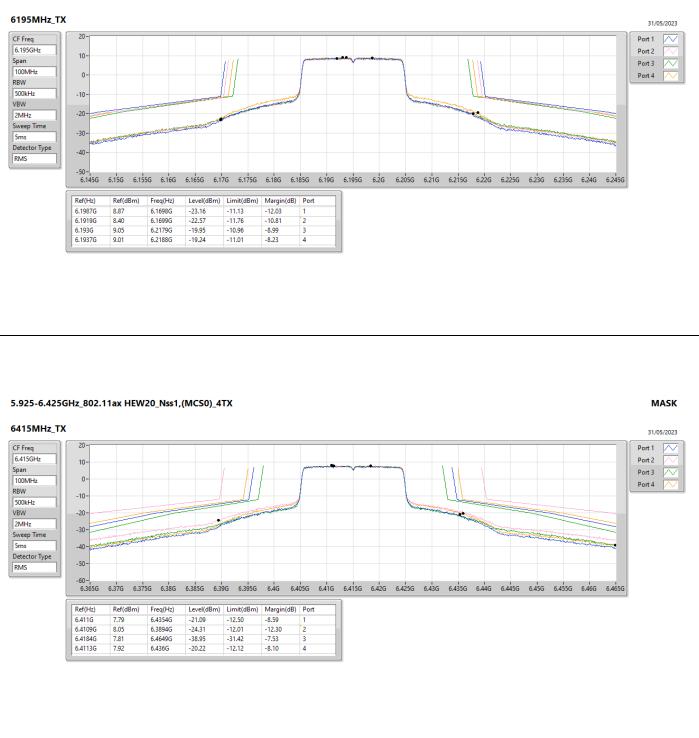












MASK

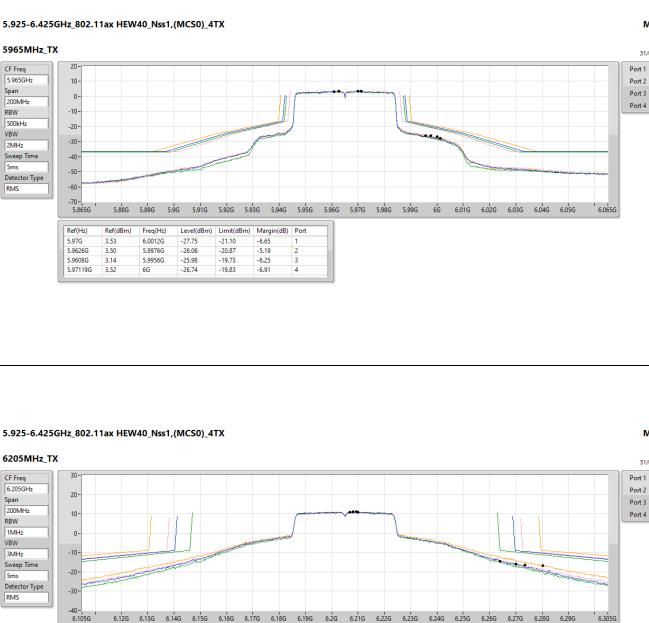


MASK

31/05/2023

MASK

31/05/2023



Ref(Hz)

6.21G

6.207G

6.2082G

6.2094G

Ref(dBm)

10.99

10.75

11.08

11.16

Freg(Hz)

6.2734G

6.264G

6.2802G

-15.95

-16.46

-14.68

-16.71

6.27G

Level(dBm) Limit(dBm) Margin(dB) Port

-6.90

-7.12

-5.76

-7.79

3

Λ

-9.05

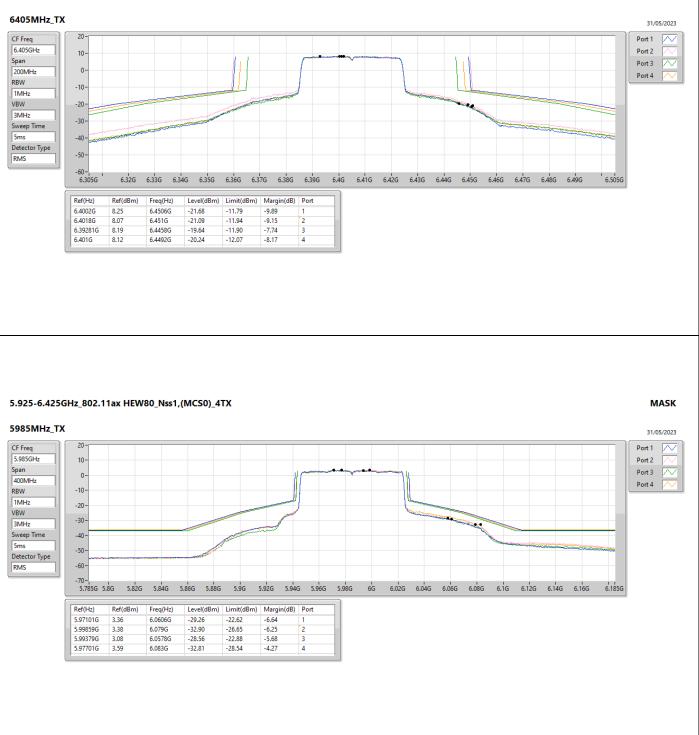
-9.34

-8.92

-8.92



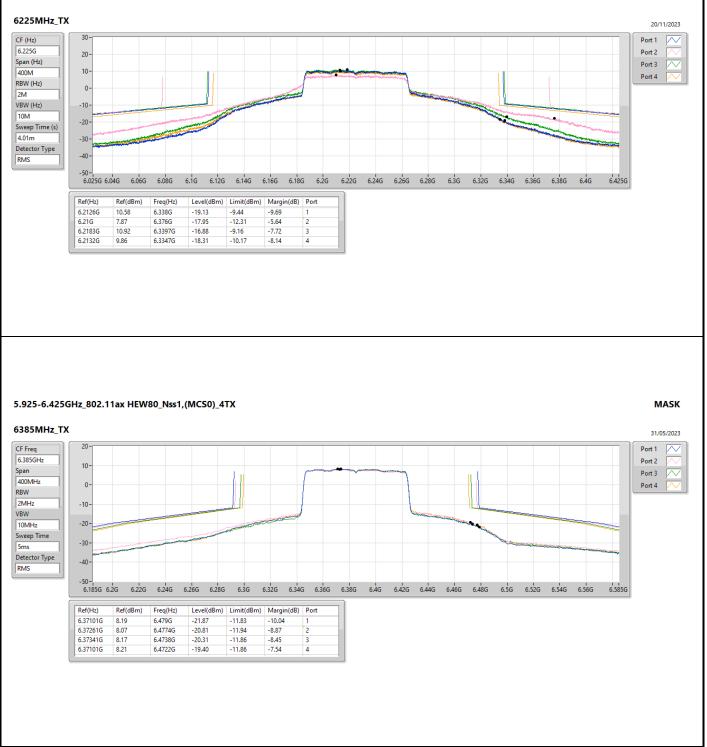
#### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX



MASK



#### 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX

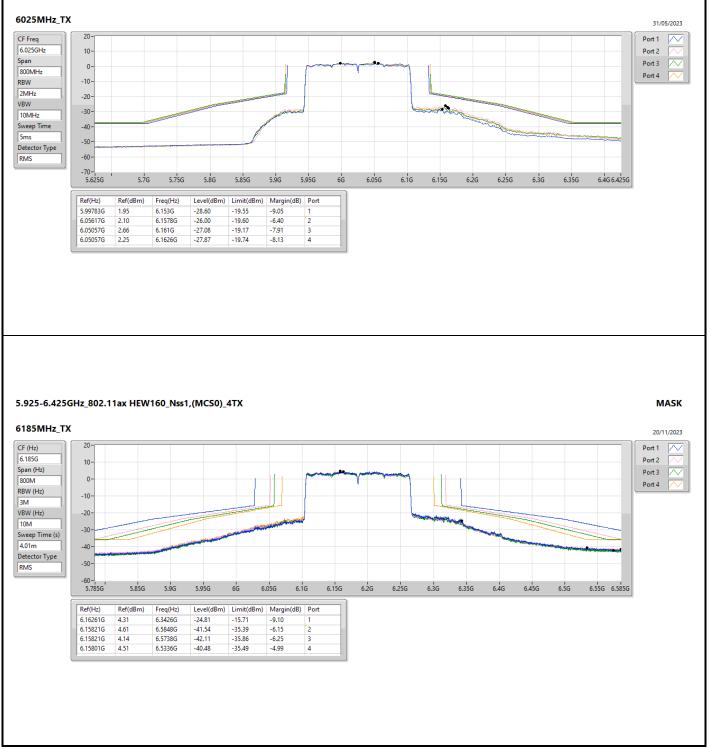


MASK

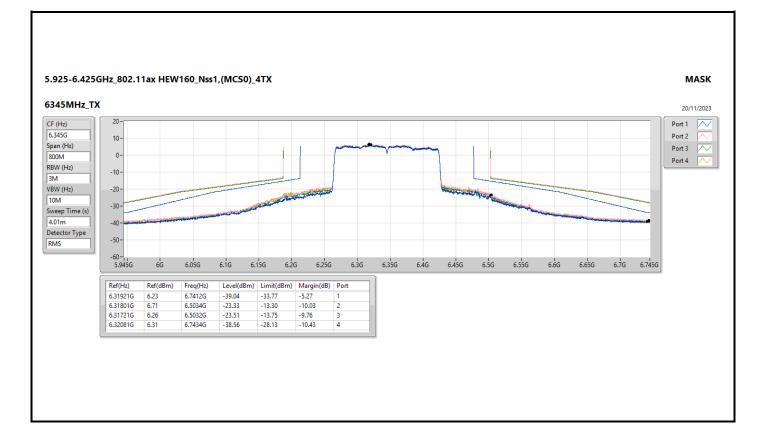


MASK

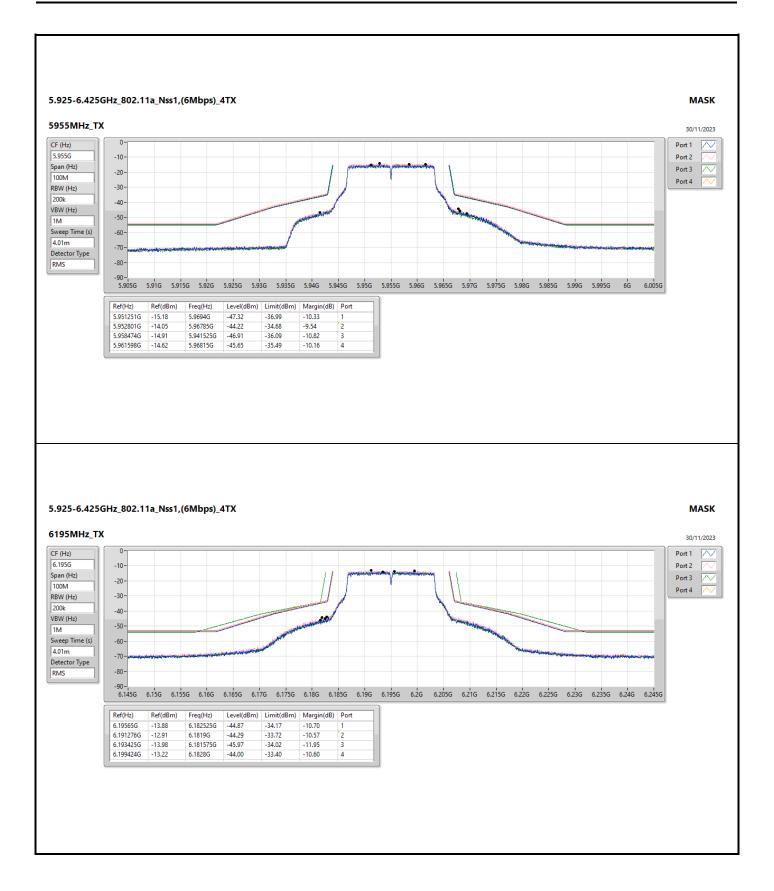
#### 5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_4TX



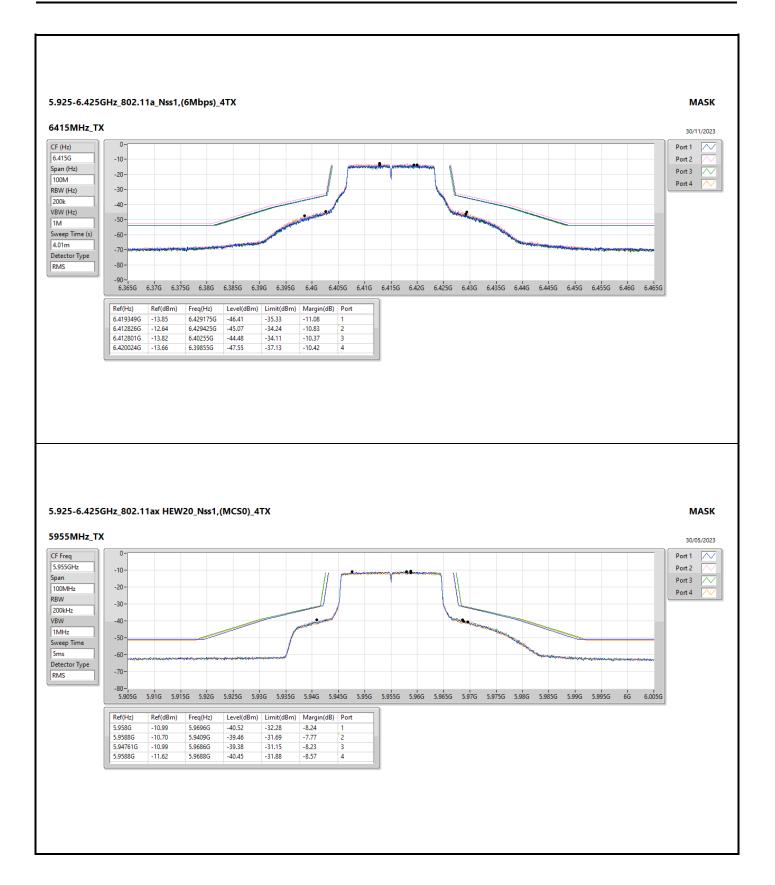






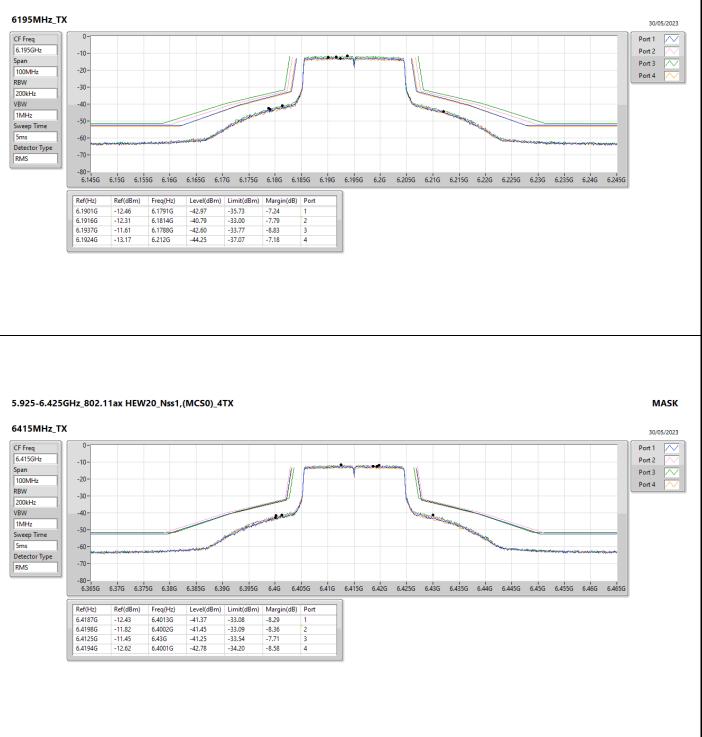








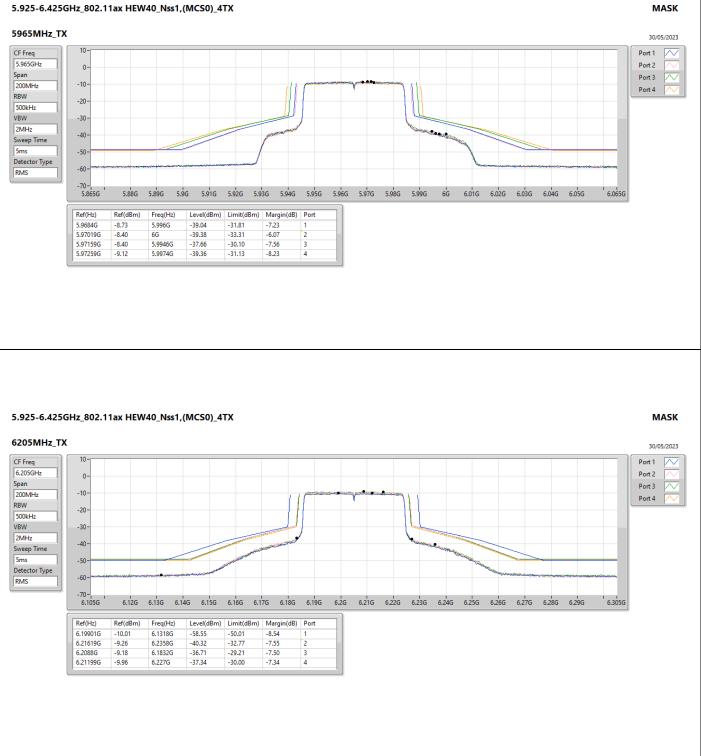
#### 5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX



MASK

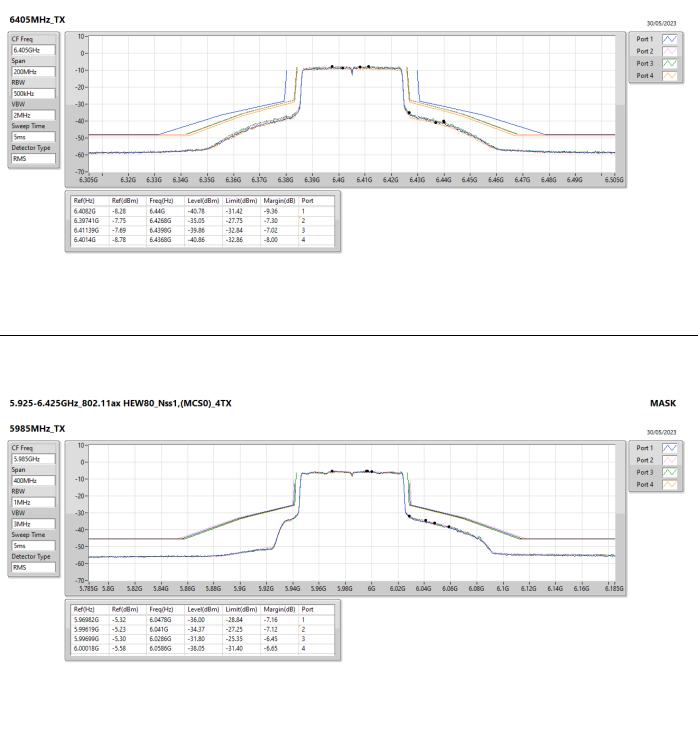








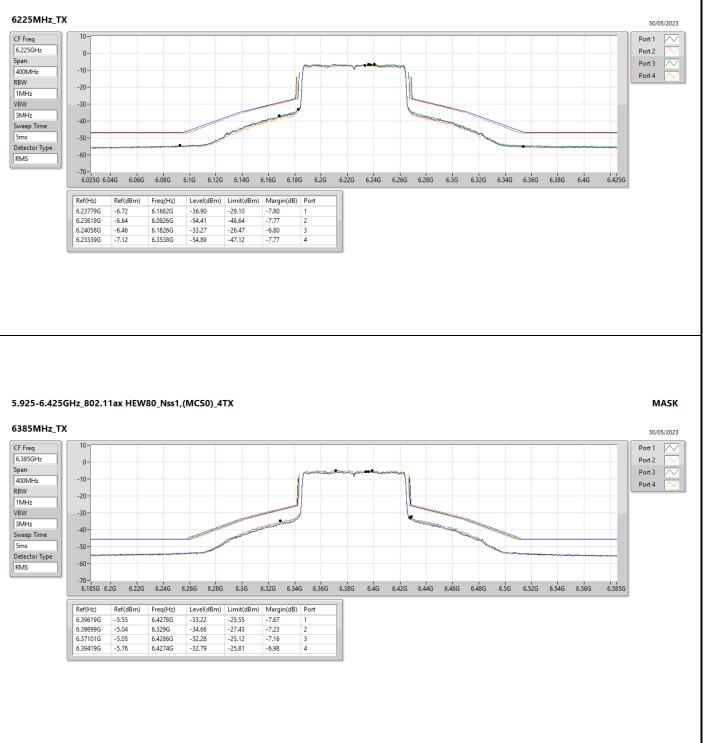
#### 5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX



MASK

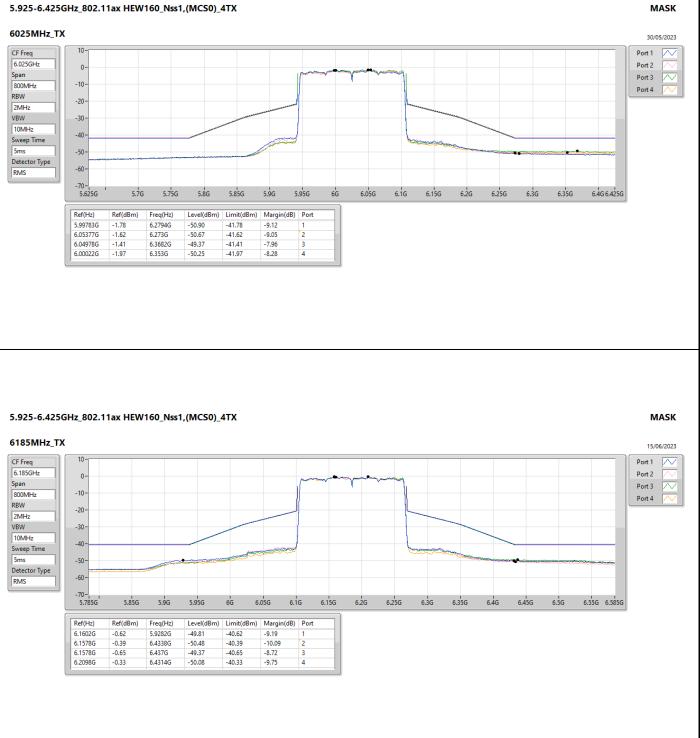


## 5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_4TX

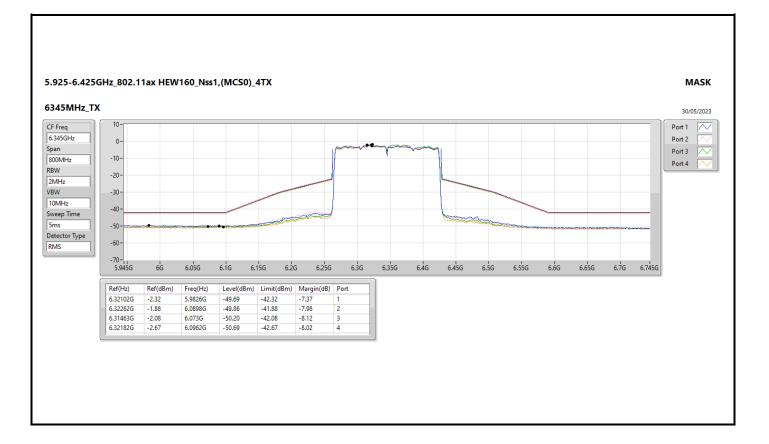


MASK











Contention Based Protocol Threshold Level 802.11ax HEW20													
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Ant Gain (dBi)	Detection Power(dBm)	Detection Limit (dBm)			
	53	20	6215		nter 6215	OFF	-73.13	6.87	-80.05	≤ -62			
5				Center		Minimal	-74.13	6.87	-81.00	≤ -62			
						ON	-75.13	6.87	-82.00	≤ -62			

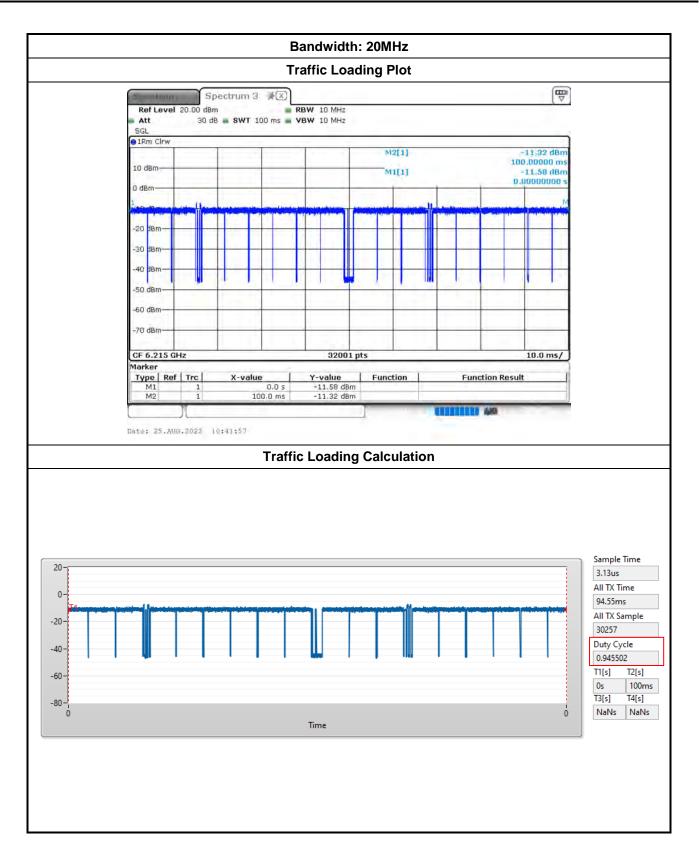
Contention Based Protocol Threshold Level 802.11ax HEW160												
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interfe frequ (MI	ency	EUT Status	Injected AWGN Power (dBm)	Ant Gain (dBi)	Detection Power(dBm)	Detection Limit (dBm)		
	47	47         160         6185         Center         6185         Minimal         -73           0N         -75         0N         -75           0N         -75         0FF         -72           0N         -75         0N         -75           0N         -75         0N         -75           0N         -75         0N         -75           0N         -75         0N         -75           0N         -75         0N         -75	6185	Low	6110	OFF	-72.13	6.87	-79.04	≤ -62		
						Minimal	-73.13	6.87	-80.00	≤ -62		
				euge		ON	-75.13	6.87	-82.00	≤ -62		
				Center	6185	OFF	-72.13	6.87	-79.05	≤ -62		
5						Minimal	-73.13	6.87	-80.00	≤ -62		
						ON	-75.13	6.87	-82.00	≤ -62		
			-73.13	6.87	-80.07	≤ -62						
				High edge	6260	Minimal	-74.13	6.87	-81.00	≤ -62		
						ON	-75.13	6.87	-82.00	≤ -62		



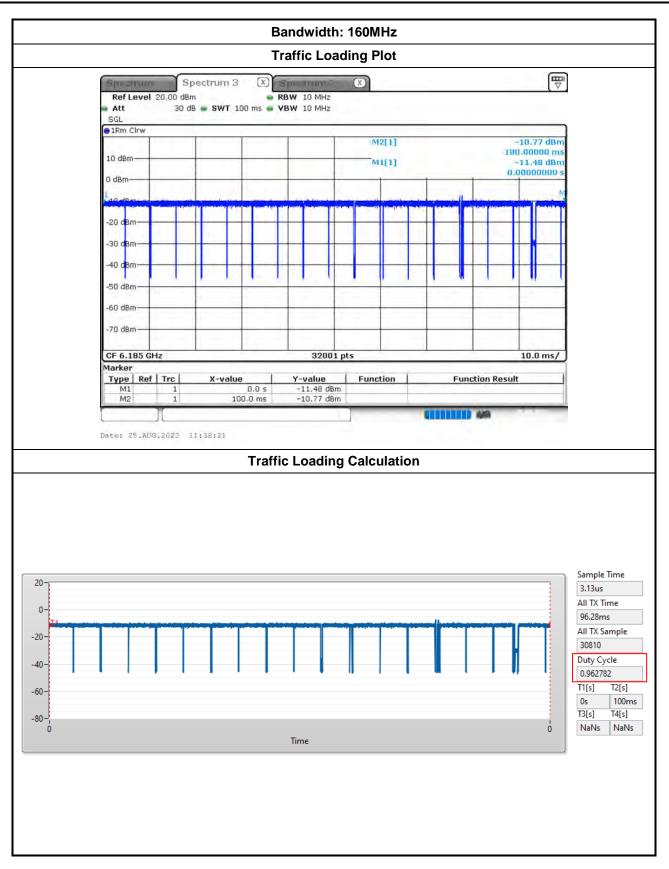
	Contention Based protocol 802.11ax HEW20												
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		AWGN Threshold Level (dBm)	EUT Status	Number of Detected (out of 10 times)	Detection Probability (%)	Limit (%)	Test Result		
5	53	20	6215	Center	6215	-80.05	OFF	10	100	90	PASS		

	Contention Based protocol 802.11ax HEW160													
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		AWGN Threshold Level (dBm)	EUT Status	Number of Detected (out of 10 times)	Detection Probability (%)	Limit (%)	Test Result			
	47	160	6185	Low edge	6110	-79.04	OFF	10	100	90	PASS			
5				Center	6185	-79.05	OFF	9	90	90	PASS			
				High edge	6260	-80.07	OFF	9	90	90	PASS			

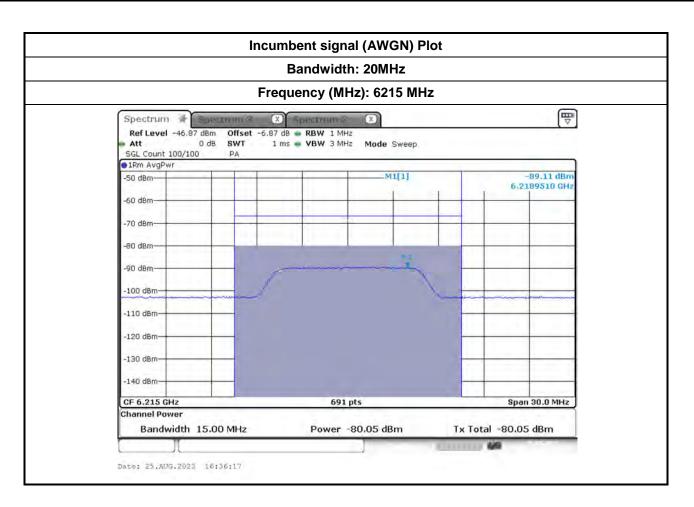




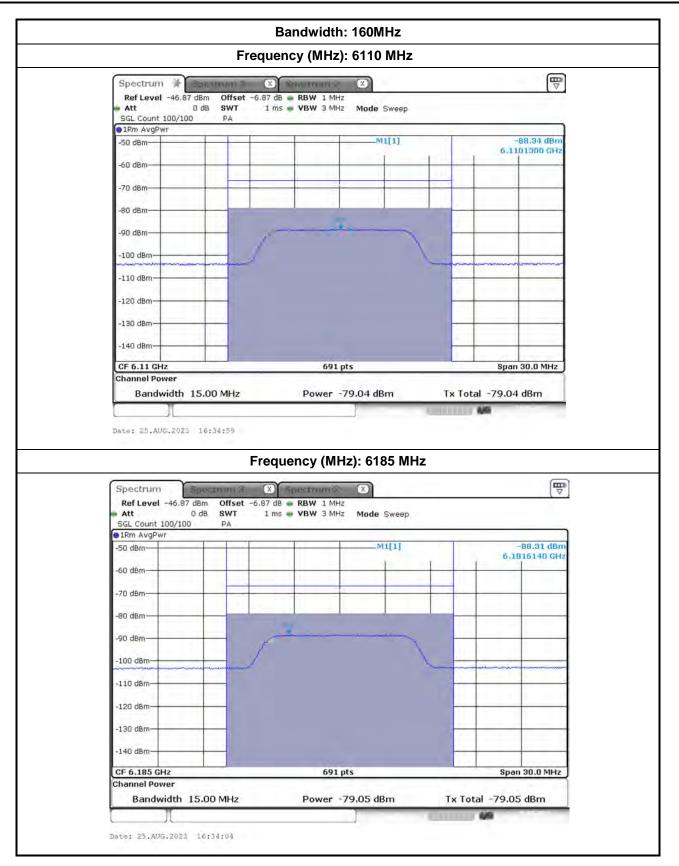




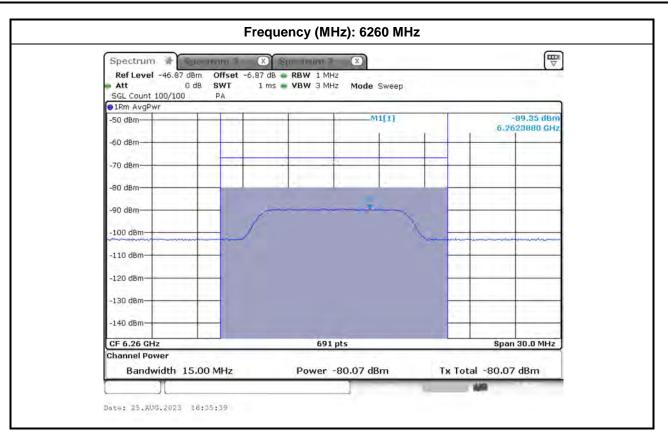




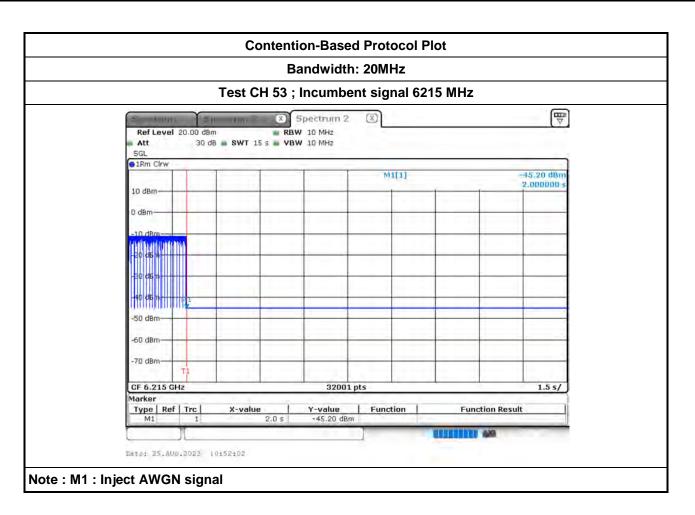




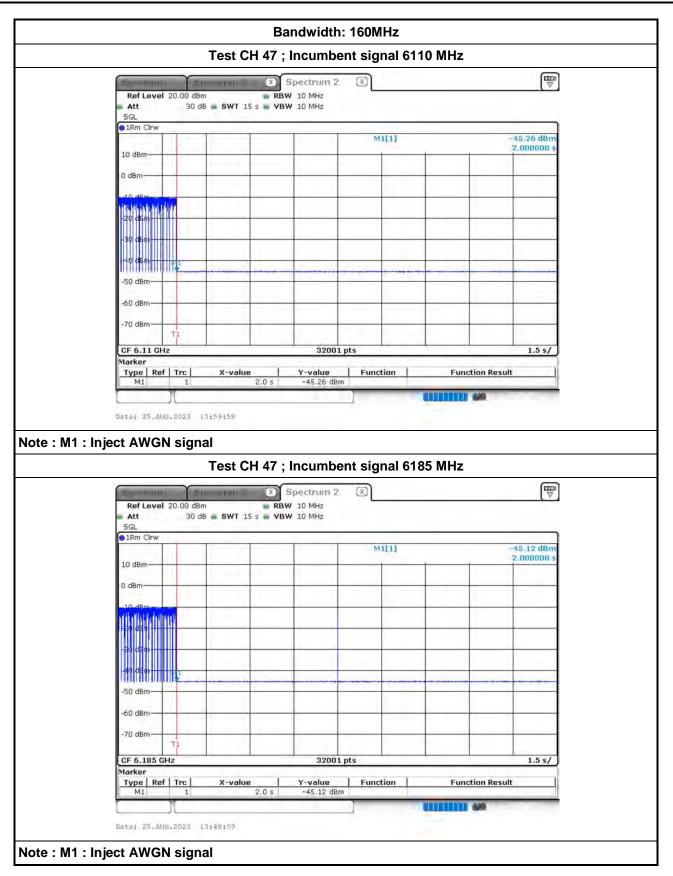




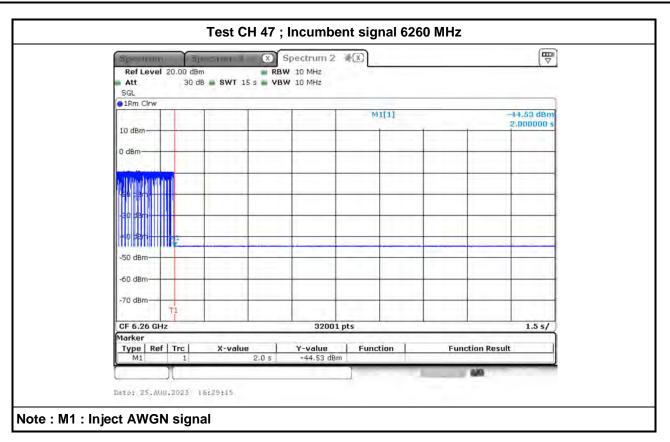








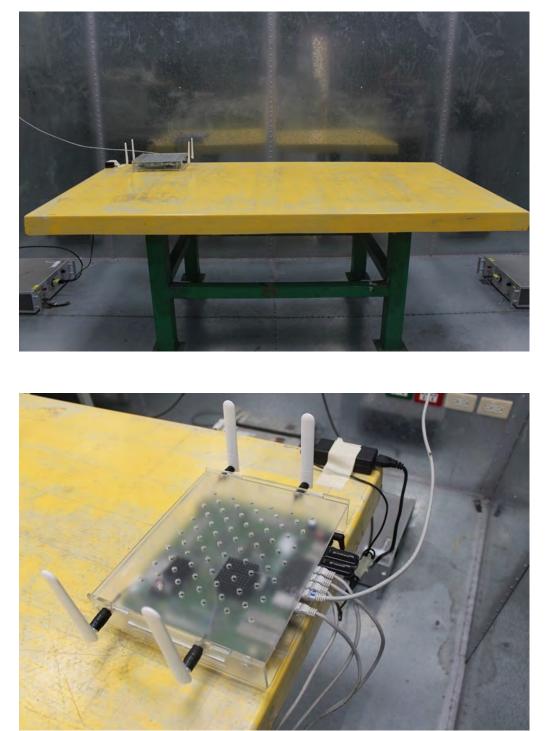








## 1. Photographs of Conducted Emissions Test Configuration



FRONT VIEW

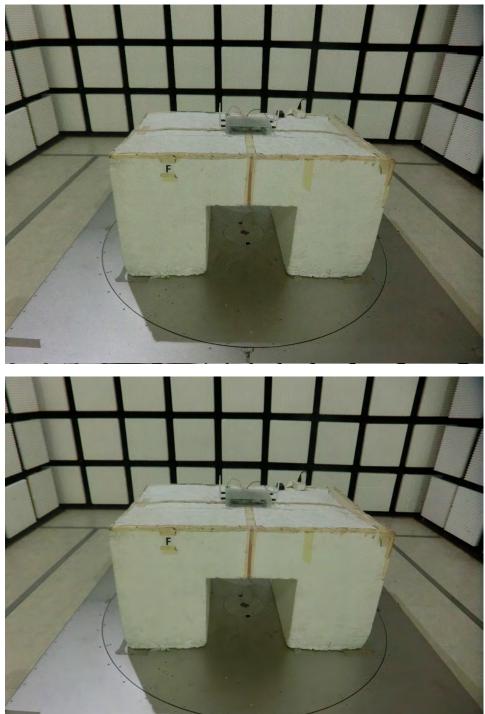
**REAR VIEW** 





## 2. Photographs of Radiated Emissions Test Configuration

Test Configuration: 30MHz~1GHz



FRONT VIEW

**REAR VIEW** 



Appendix G

Test Configuration: Above 1GHz

