





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 USA

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.

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

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: Dec. 04, 2023

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History of this test report

Report No.: FR350423AA

Report No.	Version	Description	Issued Date
FR350423AA	01	Initial issue of report	Nov. 01, 2023
FR350423AA	02	Remove the un-necessary note of Appendix C.1/C.2/D.1/D.2 Update the test result of Standard power 6185MHz for Appendix B.1/E.3 Remove the un-necessary information of summary and result of Appendix E.3	Nov. 13, 2023
FR350423AA	03	Update the related test result due to degrading the Standard power.	Nov. 22, 2023
FR350423AA	04	Adding Test Result of 802.11a mode on Appendix B~E. Adding the Channel Bandwidth Reduction Mechanism for section1.1.4	Dec. 04, 2023

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Summary of Test Result

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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

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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]

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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	6.87
3	3	MAG. LAYERS	EDA-1410-6G0R2-A2-RT	Dipole Antenna	I-PEX	0.07
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.

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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

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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
802.11ax HEW160	0.9	0.46	245u	10k

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

1.1.4 EUT Operational Condition

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

Note: The above information was declared by manufacturer.

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1.2 Applicable Standards

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

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- 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

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

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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)

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Test Date: Date Before May 31, 2023

Test Items	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%

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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

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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
6205MHz	34
6405MHz	40

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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

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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	

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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	Test Condition Conducted measurement at transmit chains	
Operating 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

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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.	
	CTX	
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	

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Note: The test item is performed with the Maximum setting.

The Worst Case Mode for Following Conformance Tests		
Tests Item Emission MASK		
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	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.

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2.4 Accessories

Accessories				
Equipment Brand Name 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				

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2.5 Support Equipment

For AC Conduction:

	Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID	
Α	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):

	To Hadiatod and H. Conducted (Ctrior tools).				
	Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID	
Α	Notebook	DELL	E4300	N/A	

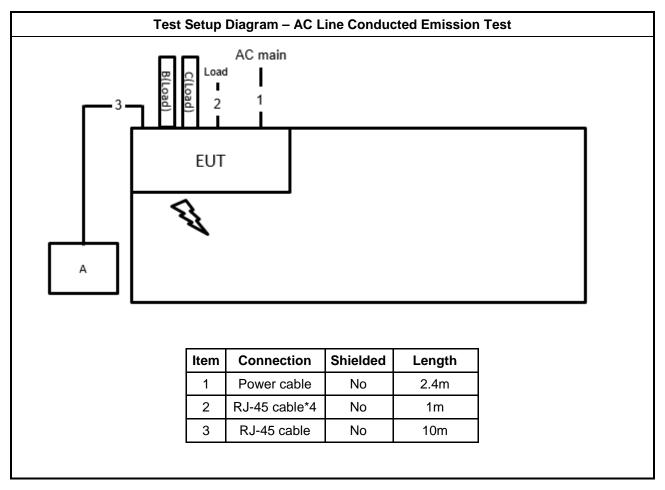
For RF Conducted (Contention Based Protocol test):

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

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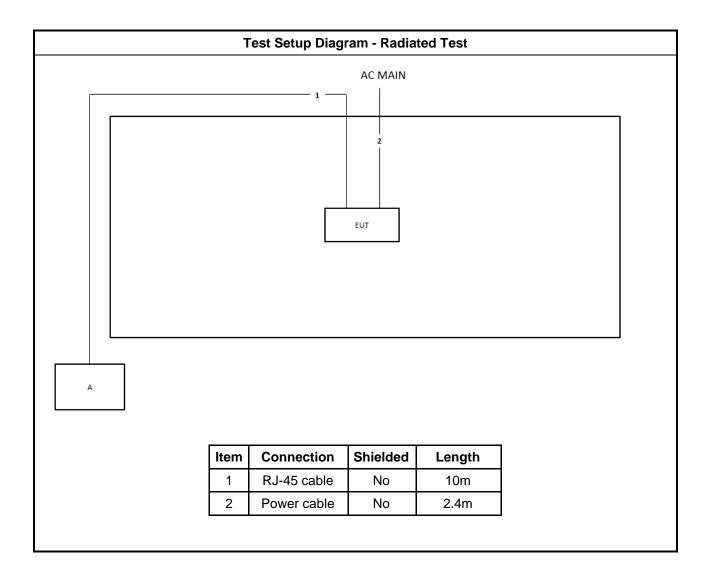


2.6 Test Setup Diagram



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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.			

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3.1.2 Measuring Instruments

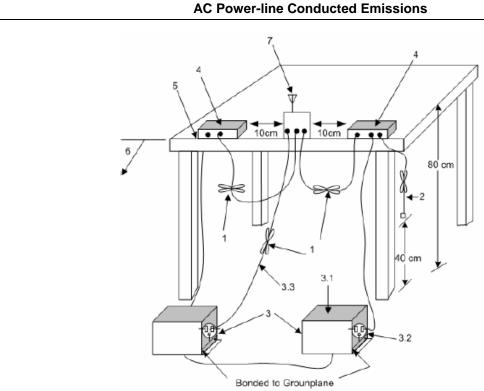
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

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3.1.4 Test Setup



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.

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- 2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- 3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
- 3.1—All other equipment powered from additional LISN(s).
- 3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
- 3.3—LISN at least 80 cm from nearest part of EUT chassis.
- 4—Non-EUT components of EUT system being tested.
- 5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
- 6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
- 7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

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3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

	Emission Bandwidth Limit			
UNI	UNII Devices			
\boxtimes	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			
RL	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			

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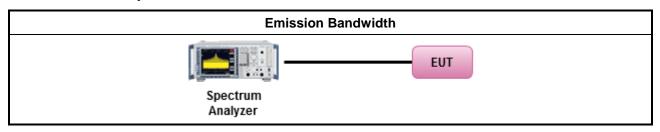
3.2.2 Measuring Instruments

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

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

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

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

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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.		
	Ave	rage 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)	
	Wid	eband 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.	
	•	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
	•	If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	
\boxtimes	For	radiated measurement.	
	•	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	
	•	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
	•	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.	

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Note:

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

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

EIRP Formula:

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

where;

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

LP: Free Space Loss(dB)

PR Formula:

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

where:

P Meas(dBm): Power measurement level

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

LC(dB): Measurement cable loss (dB)

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LP(FSL factor) Formula:

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

where;

F(MHz): EUT center frequency D(m): Measurement distance

For Example:

Test mode LPI Non TXBF ax20 5955MHz EIRP measurement

PR Formula:

PR(dBm) = -40.24 - 10.21 + 5.48 = -44.97

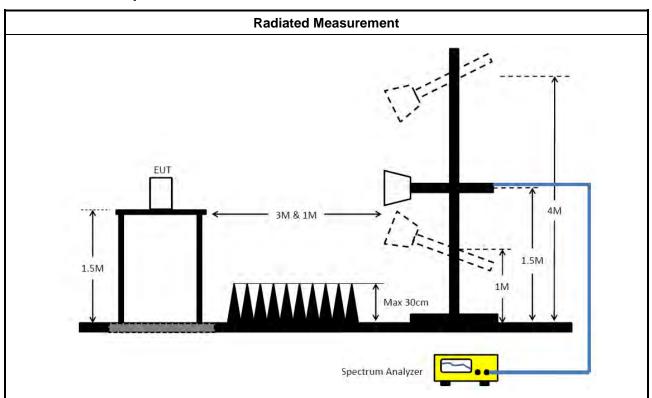
LP(FSL factor) Formula:

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

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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					
UNI	UNII Devices					
\boxtimes						
	•	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.				
	•	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.				
	•	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.				
	•	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.				
	•	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.				
	For	the 6.425 ~ 6.525 GHz band:				
	•	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.				
	•	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.				
	For	the 6.525 ~ 6.875 GHz band:				
	•	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.				
	•	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.				
	•	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.				
	•	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.				
	•	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.				
	For	the 6.875 ~ 7.125 GHz band:				
	•	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.				
	•	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.				
RL	AN D	evices				
	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:				
	•	For standard-power access points & fixed client devices < 23 dBm / MHz.				
	•	For standard client devices < 17 dBm / MHz.				

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3.4.2 Measuring Instruments

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

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3.4.3 Test Procedures

		Test Method
•	Pea outp	ording to FCC KDB 987594 D02 clause II.F, the measurement procedure shall refer to KDB 789033. It power spectral density procedures that the same method as used to determine the conducted pout power shall be used to determine the peak power spectral density and use the peak search cition on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density II 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
	[dut	y cycle ≥ 98% or external video / power trigger]
	\boxtimes	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.
	•	If the EUT supports multiple transmit chains using options given below:
		Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
		Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
	•	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $ PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n \\ (calculated in linear unit [mW] and transfer to log unit [dBm]) \\ EIRP_{total} = PPSD_{total} + DG $
\boxtimes	For	radiated measurement.
	•	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"
	•	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.

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Test Method

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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:

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

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:

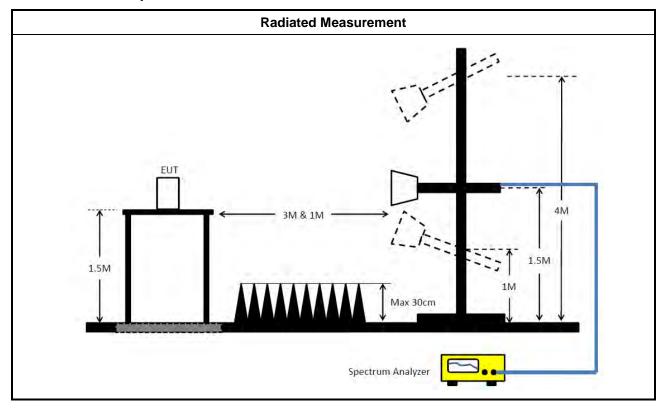
LP(dB) = 20log(5967.64) + 20log(3) -27.5 = 57.54

EIRP PSD Formula

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

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3.4.4 Test Setup



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

Refer as Appendix D

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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				

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- 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	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. EX. Above 18GHz emission limit calculation (3m to 1m) = 68.2dBuV/m at 3m + 9.54dB = 77.74 dBuV/m at 1m. Note 2:-27 dBm EIRP 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.					

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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 oneand one-half times the channel bandwidth must be suppressed by at least 40 dB. Fc - EBW Fc + EBW 28 dB 40 dB Fc + 1.5 X EBW EBW/2 - 1MHz 1.5 X EBW + 1MHz

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3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method

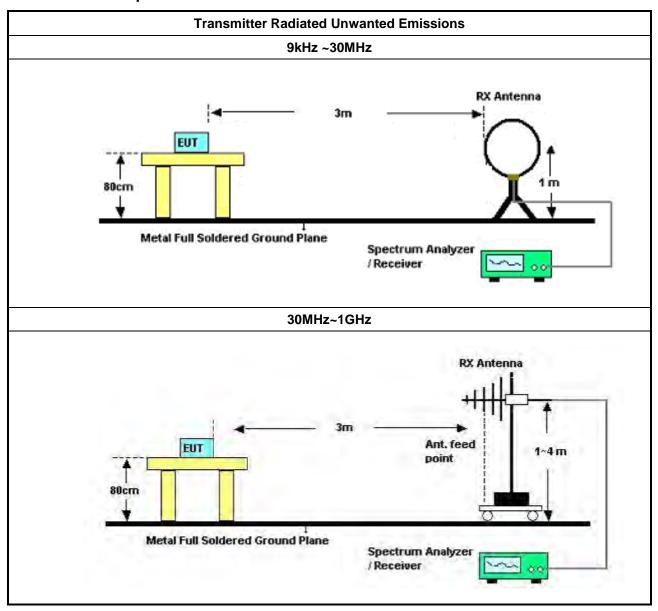
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- According to FCC KDB 987594 D02 II.G. the unwanted emission measurement procedure shall refer to KDB 789300(except emission MASK).
 - Measurements may be performed at a distance other than the limit distance provided they are not performed in the 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 ≥ 98 or duty factor].
- For the transmitter unwanted emissions shall be measured using following options below:
 - Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.
 - Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.
 - Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)
 - 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.
 - Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
 - Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
 - Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
- The any unwanted emissions level shall not exceed the fundamental emission level.
- All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

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3.5.4 Test Setup



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Above 1GHz

SM & 1M

Max 30cm

Max 30cm

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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

Spectrum Analyzer

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

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3.6 Contention Based Protocol

3.6.1 Contention Based Protocol Limit

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

3.6.2 Measuring Instruments

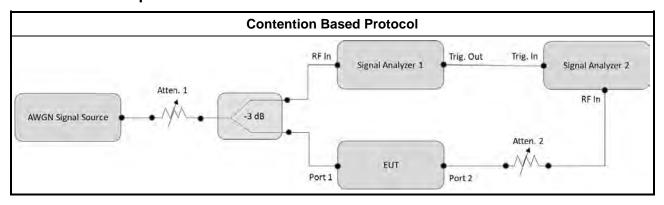
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method						
	For Contention Based Protocol shall be measured using following options below:					
\boxtimes	Refer as FCC KDB 987594 D02, I) Contention Based Protocol.					

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3.6.4 Test Setup



3.6.5 Test Result of Contention Based Protocol

Refer as Appendix F

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Test Equipment and Calibration Data 4

Instrument	Brand	Model No.	Serial No.	Characteristics Calibratic		Calibration 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	TDK	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 3m Feb. 23, 202		Feb. 22, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	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	May 23, 2023	May 22, 2024	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	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)

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Calibration Calibration Instrument **Brand** Model No. Serial No. Characteristics Remark **Due Date** Date Radiation High Cable Woken WCA0929M 40G#5 1GHz ~ 40 GHz Dec. 07, 2022 Dec. 06, 2023 (03CH04-CB) Radiation High Cable Woken WCA0929M 40G#6 1GHz ~ 40 GHz Dec. 07, 2022 Dec. 06, 2023 (03CH04-CB) Radiation Test Software SPORTON SENSE V5.10 N.C.R. N.C.R. (03CH04-CB) 3m Semi Anechoic Radiation SAC-3M 03CH02-CB 1GHz ~18GHz Mar. 25, 2023 RIKFN Mar. 24, 2024 Chamber (03CH02-CB) **VSWR** Radiation **EMCO** 9610-4976 1GHz ~ 18GHz Horn Antenna 3115 Apr. 18, 2023 Apr. 17, 2024 (03CH02-CB) Radiation **BBHA 9170** BBHA9170252 15GHz ~ 40GHz Horn Antenna Schwarzbeck Sep. 04, 2023 Sep. 03, 2024 (03CH02-CB) 1GHz ~ Radiation Pre-Amplifier Agilent 83017A MY39501305 Jun. 30, 2023 Jun. 29, 2024 26.5GHz (03CH02-CB) Radiation Pre-Amplifier SGH **SGH184** 20221107-3 18GHz ~ 40GHz Nov. 16, 2022 Nov. 15, 2023 (03CH02-CB) Radiation Spectrum **FSU** 100015 9kHz~26GHz R&S Dec. 05, 2022 Dec. 04, 2023 analyzer (03CH02-CB) Radiation RF Cable-high Woken RG402 High Cable-18 1GHz ~ 18GHz Oct. 02, 2023 Oct. 01, 2024 (03CH02-CB) Radiation Hiah RF Cable-high Woken RG402 1GHz ~ 18GHz Oct. 02, 2023 Oct. 01, 2024 Cable-18+19 (03CH02-CB) Radiation High Cable Woken WCA0929M 40G#5+6 1GHz ~ 40 GHz Oct. 02, 2023 Oct. 01, 2024 (03CH02-CB) Radiation High Cable WCA0929M 40G#5 1GHz ~ 40 GHz Oct. 02, 2023 Oct. 01, 2024 Woken (03CH02-CB) Radiation Oct. 01, 2024 1GHz ~ 40 GHz Oct. 02, 2023 High Cable Woken WCA0929M 40G#6 (03CH02-CB) Radiation **Test Software SPORTON** SENSE N.C.R. N.C.R. V5.10 (03CH02-CB) Spectrum Conducted R&S FSV40 100979 9kHz~40GHz May 29, 2023 May 28, 2024 analyzer (TH01-CB) 6G Band Conducted **Band Rejector** MTJ CB6G-BRJ-01 1GHz ~ 7.4GHz Oct. 04, 2022 Oct. 03, 2023 (TH01-CB) Rejector 6G Band Conducted 6G-BRJ-01 1 ~ 18GHz Oct. 03, 2023 Oct. 02, 2024 **Band Rejector** MTJ (TH01-CB) Rejector 6G Band Conducted MTJ CB6G-BRJ-02 1GHz ~ 8GHz Oct. 04, 2022 Oct. 03, 2023 **Band Rejector** Rejector (TH01-CB) 6G Band Conducted 6G-BRJ-02 1~ 18GHz Oct. 03, 2023 Oct. 02, 2024 **Band Rejector** MTJ Rejector (TH01-CB) 1 GHz -Conducted Switch **SPTCB** SP-SWI **SWI-01** Oct. 04, 2022 Oct. 03, 2023 26.5 GHz (TH01-CB) Conducted **SPTCB** SP-SWI SWI-01 1~26.5 GHz Oct. 03, 2023 Switch Oct. 02, 2024 (TH01-CB)

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Calibration Calibration Instrument **Brand** Model No. Serial No. Characteristics Remark Date **Due Date** Conducted RF Cable-high Woken RG402 High Cable-06 1 GHz - 18 GHz Oct. 03, 2022 Oct. 02, 2023 (TH01-CB) Conducted RF Cable-high Woken RG402 High Cable-06 1 GHz - 18 GHz Oct. 02, 2023 Oct. 01, 2024 (TH01-CB) Conducted RG402 1 GHz - 18 GHz Oct. 03, 2022 Oct. 02, 2023 RF Cable-high Woken High Cable-07 (TH01-CB) Conducted RG402 Oct. 02, 2023 Oct. 01, 2024 RF Cable-high Woken High Cable-07 1 GHz - 18 GHz (TH01-CB) Conducted RF Cable-high Woken RG402 High Cable-08 1 GHz - 18 GHz Oct. 03, 2022 Oct. 02, 2023 (TH01-CB) Conducted RF Cable-high Woken RG402 High Cable-08 1 GHz - 18 GHz Oct. 02, 2023 Oct. 01, 2024 (TH01-CB) Conducted RG402 1 GHz - 18 GHz Oct. 03, 2022 Oct. 02, 2023 RF Cable-high Woken High Cable-09 (TH01-CB) Conducted RG402 1 GHz - 18 GHz Oct. 02, 2023 Oct. 01, 2024 RF Cable-high Woken High Cable-09 (TH01-CB) Conducted RF Cable-high Woken RG402 High Cable-10 1 GHz - 18 GHz Oct. 03, 2022 Oct. 02, 2023 (TH01-CB) Conducted RF Cable-high Woken RG402 High Cable-10 1 GHz - 18 GHz Oct. 02, 2023 Oct. 01, 2024 (TH01-CB) Conducted RF Cable-high Woken RG402 High Cable-30 1 GHz - 18 GHz Oct. 03, 2022 Oct. 02, 2023 (TH01-CB) Conducted RG402 1 GHz - 18 GHz Oct. 02, 2023 Oct. 01, 2024 RF Cable-high Woken High Cable-30 (TH01-CB) Conducted Power Sensor E9327A US40442088 50MHz~18GHz Feb. 22, 2023 Feb. 21, 2024 Aailent (TH01-CB) Conducted E4416A GB41291199 50MHz~18GHz Feb. 22, 2023 Feb. 21, 2024 Power Meter Agilent (TH01-CB) Conducted **Test Software SPORTON** SENSE V5.10 N.C.R. N.C.R. (TH01-CB) Spectrum Conducted Oct. 27, 2023 R&S FSV40 101025 9kHz ~ 40GHz Oct. 28, 2022 Analyzer (DF02-CB) Vector Signal Conducted R&S SMU200A 105352 25MHz-6GHz Jul. 17, 2023 Jul. 16, 2024 (DF02-CB) generator Vector Signal Conducted SMW200A 109426 100kHz- 7.5GHz Dec. 29, 2022 Dec. 28, 2023 R&S generator (DF02-CB) **RF** Power Conducted STI 2 Way DV-2way -05 1GHz ~ 8GHz Oct. 04, 2022 Oct. 03, 2023 Divider (DF02-CB) RF Power Conducted STI 2 Way DV-2way -06 1GHz ~ 8GHz Oct. 04, 2022 Oct. 03, 2023 Divider (DF02-CB) RF Power Conducted 1GHz ~ 8GHz STI 2 Way DV-2way -07 Oct. 04, 2022 Oct. 03, 2023 (DF02-CB) Divider RF Power Conducted STI 2 Way DV-2way -08 1GHz ~ 8GHz Oct. 04, 2022 Oct. 03, 2023 Divider (DF02-CB) Conducted RF Cable-high Woken RG402 High Cable-60 1 GHz -18 GHz Oct. 03, 2022 Oct. 02, 2023 (DF02-CB) Conducted RG402 1 GHz - 18 GHz Oct. 03, 2022 Oct. 02, 2023 RF Cable-high Woken High Cable-61 (DF02-CB)

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TEL: 886-3-656-9065 Page Number : 34 of 35
FAX: 886-3-656-9085 Issued Date : Dec. 04, 2023

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)

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

NCR means Non-Calibration required.

TEL: 886-3-656-9065 Page Number : 35 of 35 FAX: 886-3-656-9085 Issued Date : Dec. 04, 2023



Conducted Emissions at Powerline

Appendix A

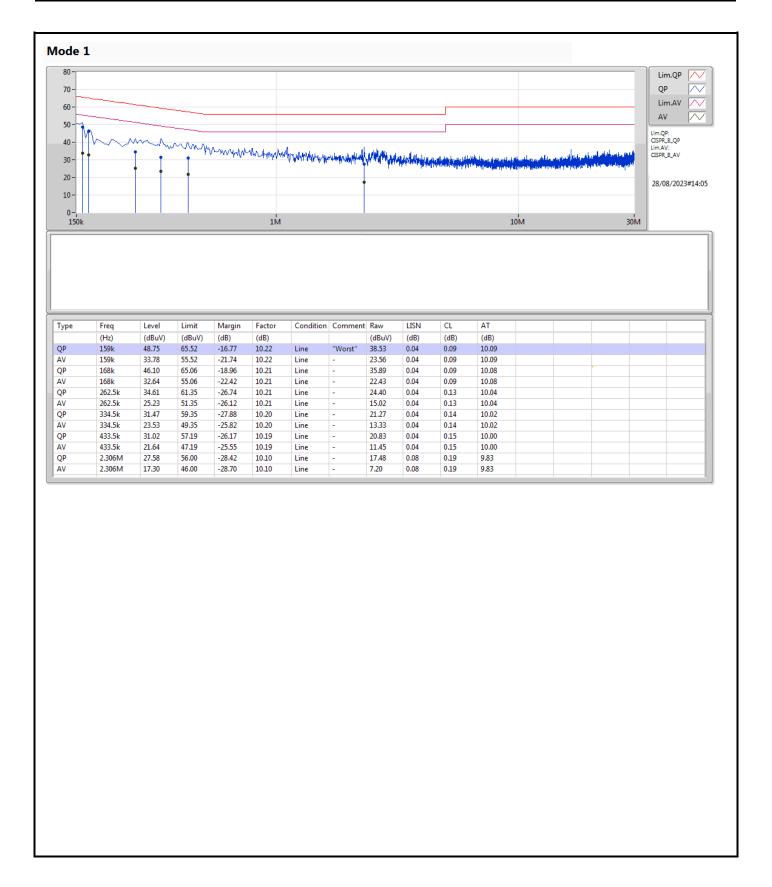
Summary

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

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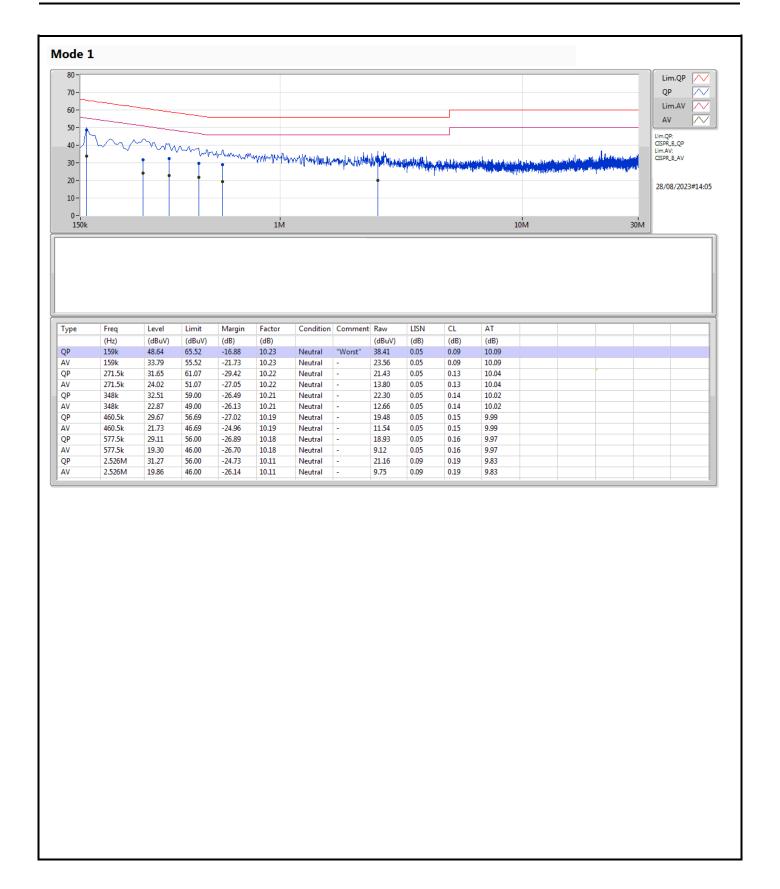
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EBW_For Standard Power Device

Appendix B.1

Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.925-6.425GHz	-	=	·	ū	-
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

 $\label{eq:max-NdB} \mbox{ Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;} \\ \mbox{ Max-OBW = Maximum 99% occupied bandwidth;} \\ \mbox{Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;} \\ \mbox{Min-OBW = Minimum 99% occupied bandwidth}$

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EBW_For Standard Power Device

Appendix B.1

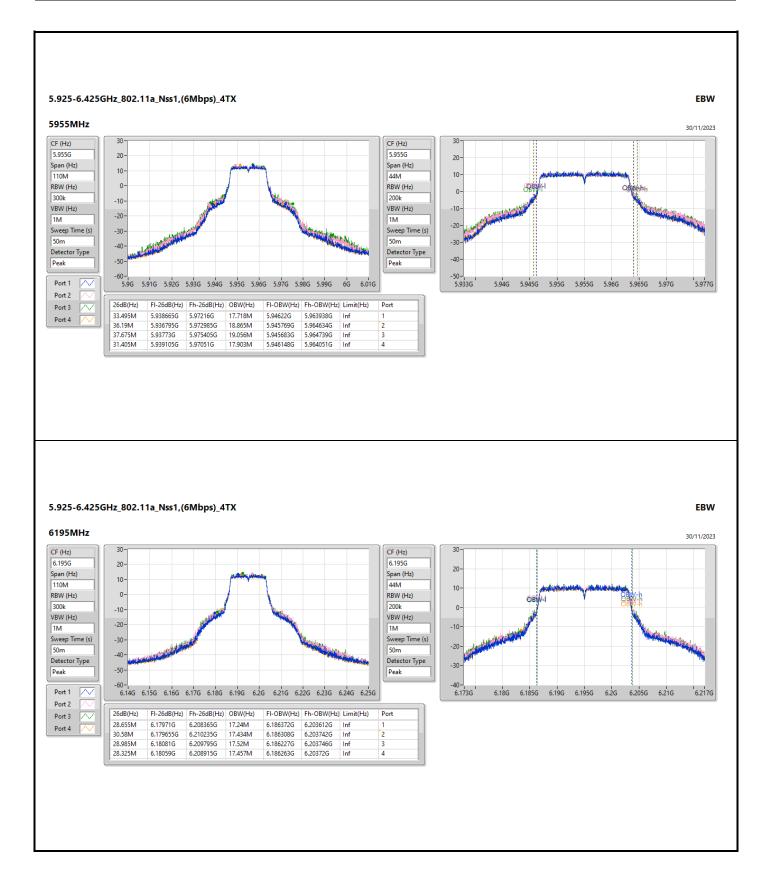
Result

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

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

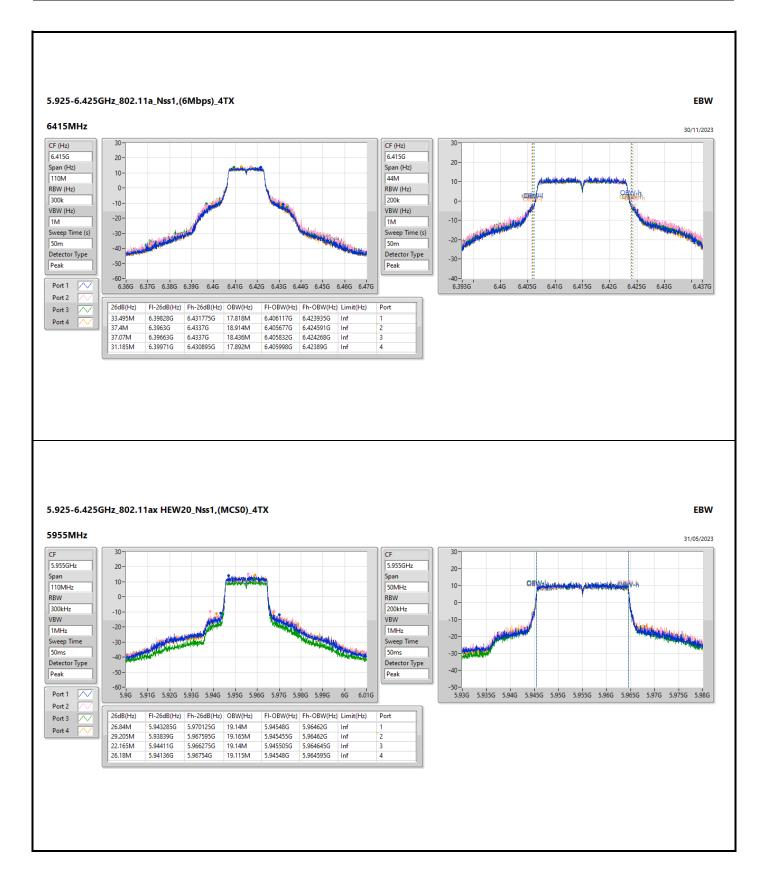
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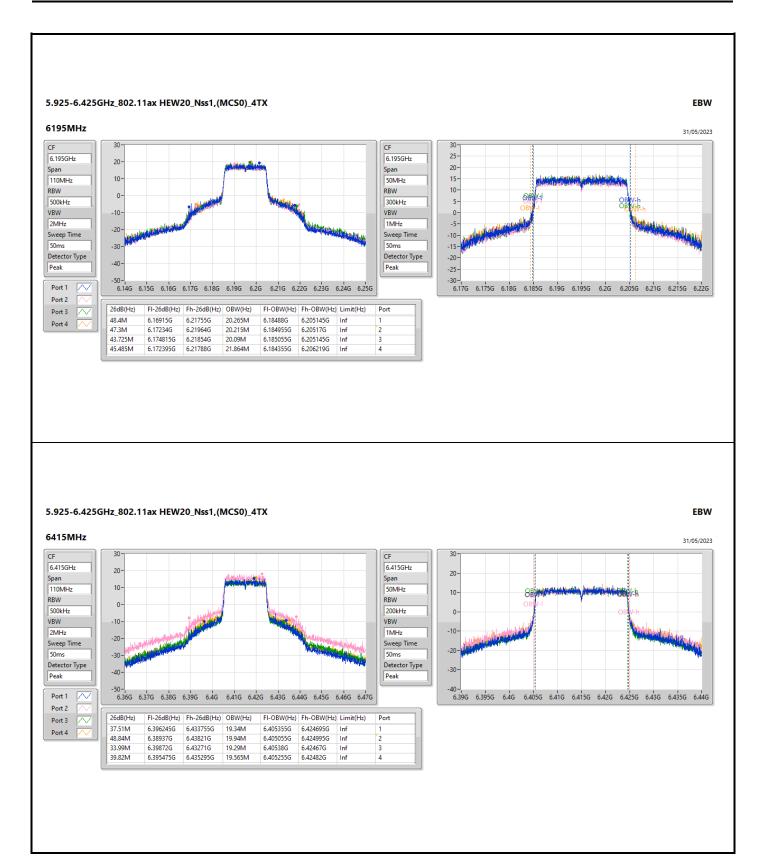
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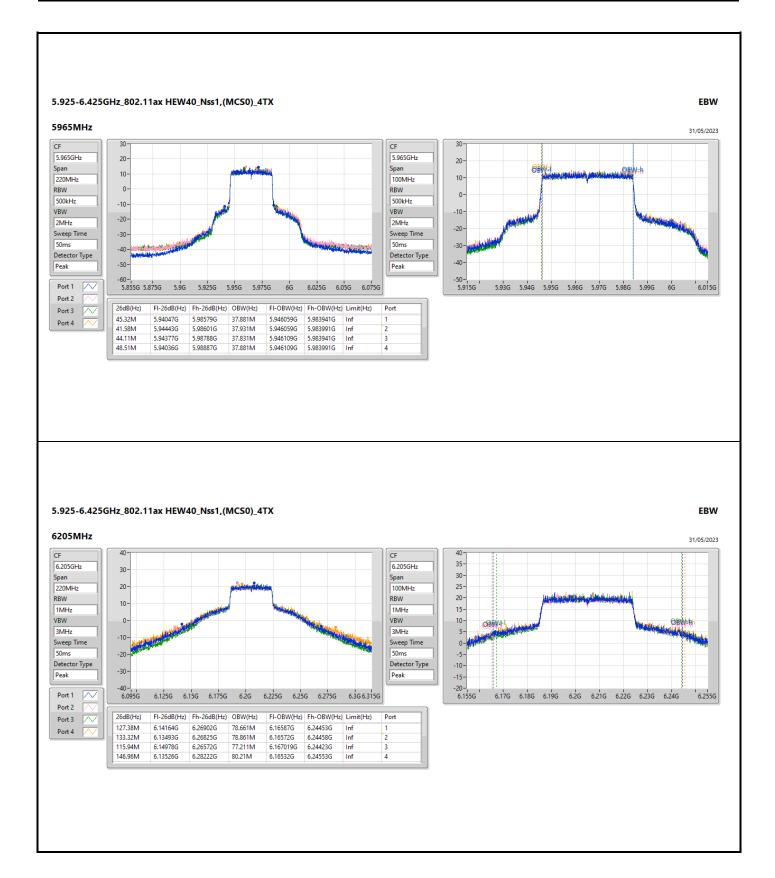
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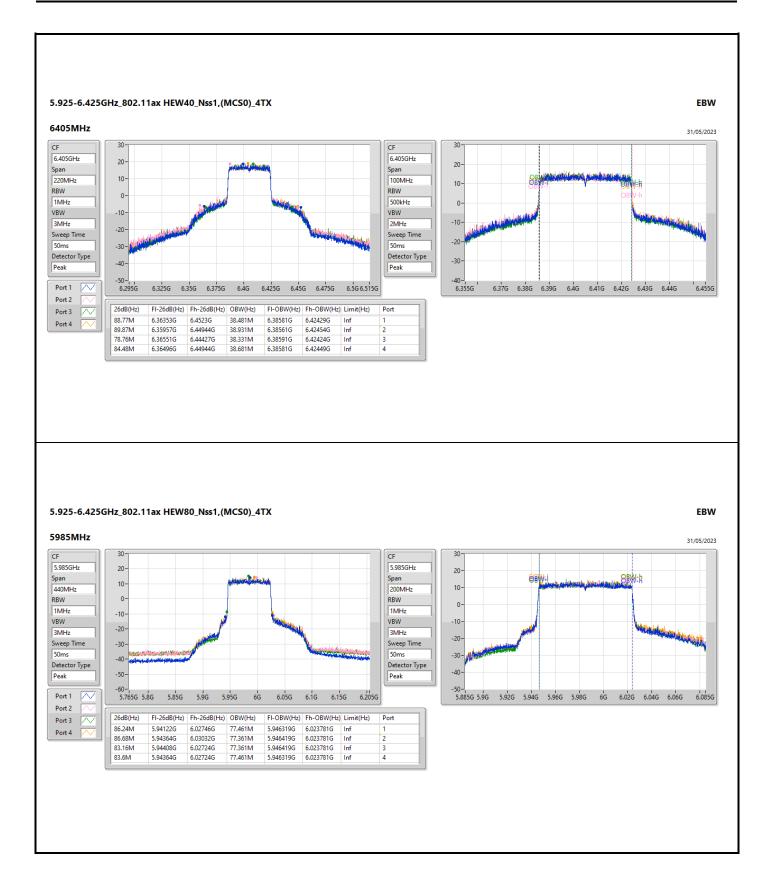
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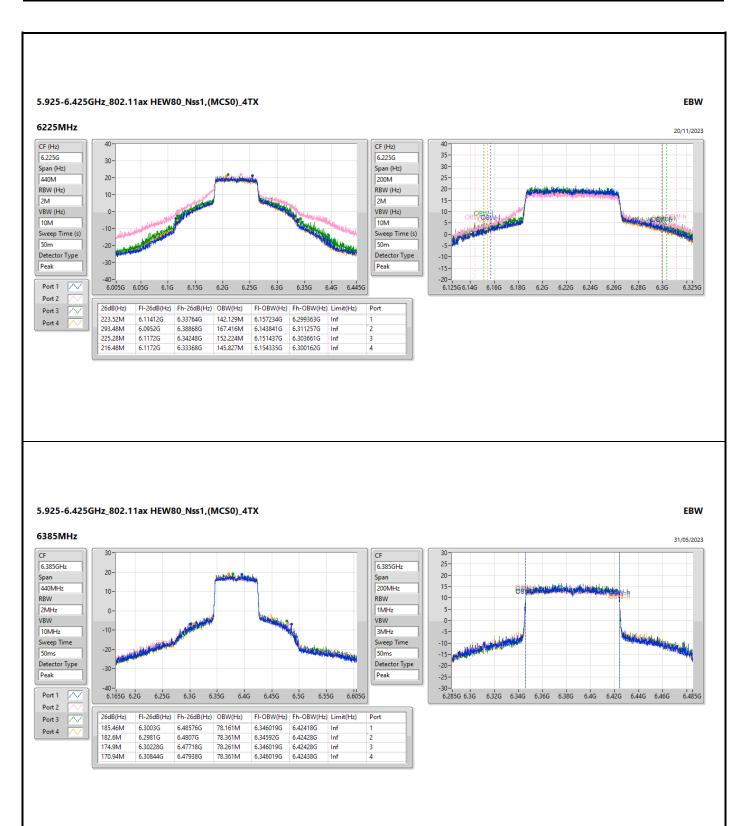




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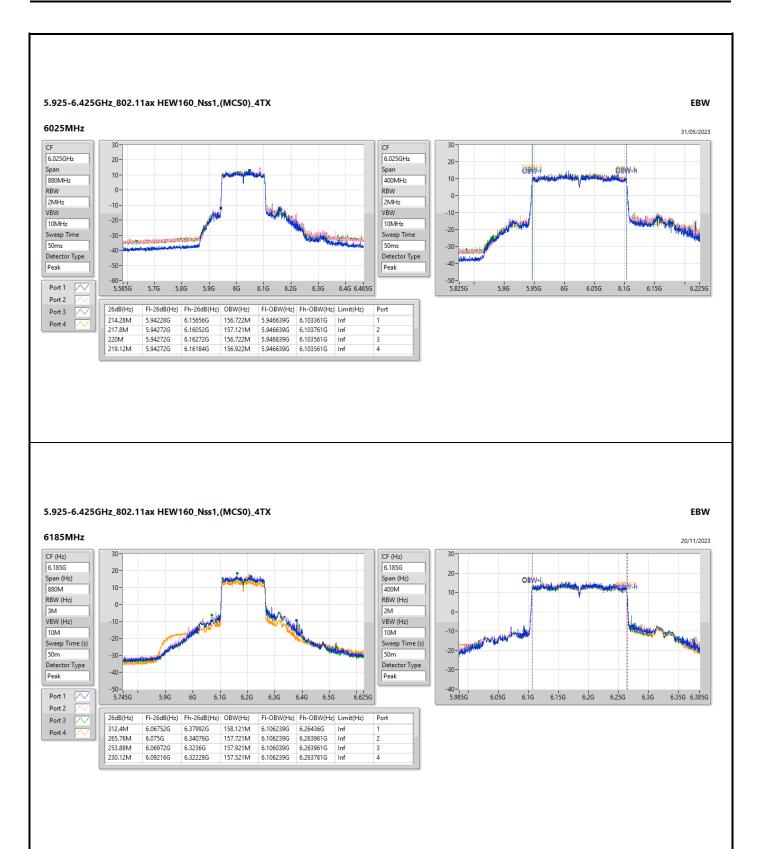




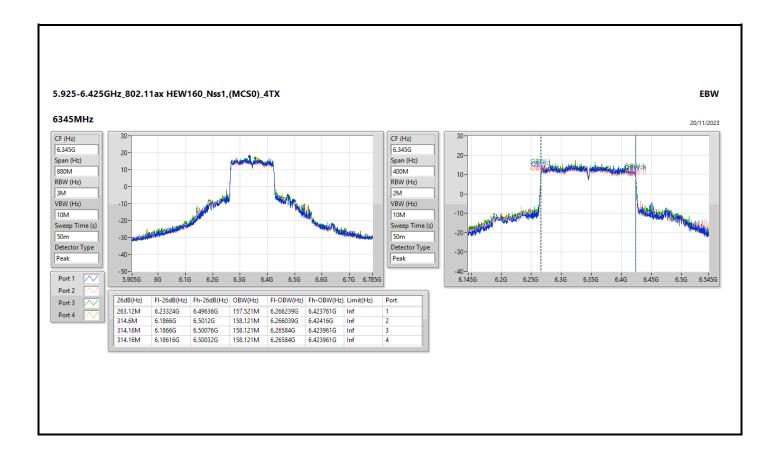
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EBW_For Low Power Indoor Device

Appendix B.2

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

 $\label{eq:max-NdB} \mbox{ Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;} \\ \mbox{ Max-OBW = Maximum 99% occupied bandwidth;} \\ \mbox{Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;} \\ \mbox{Min-OBW = Minimum 99% occupied bandwidth}$

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EBW_For Low Power Indoor Device

Appendix B.2

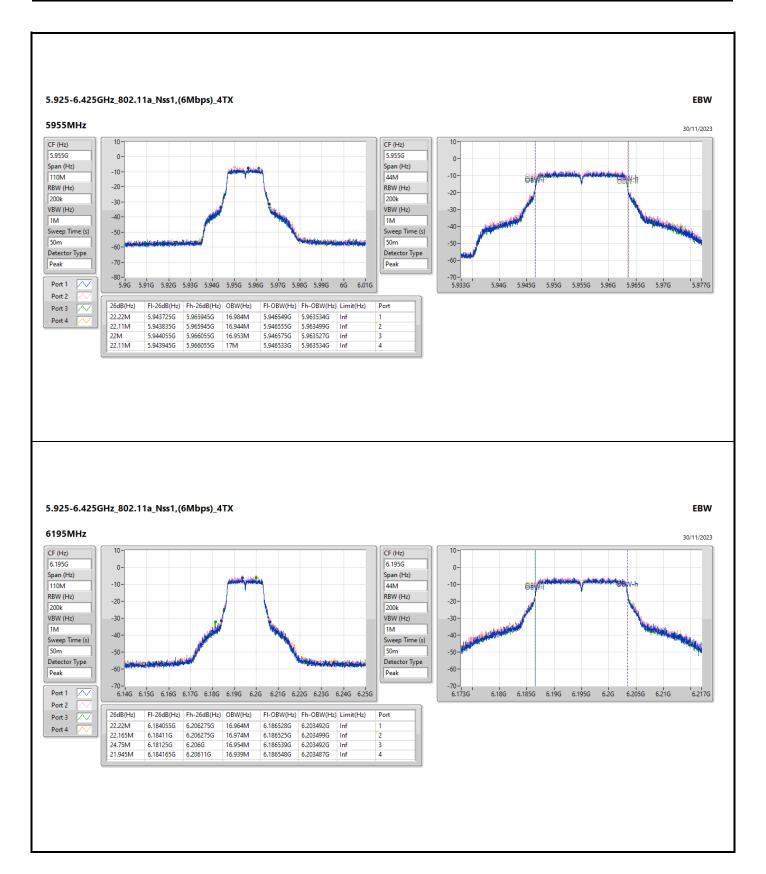
Result

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

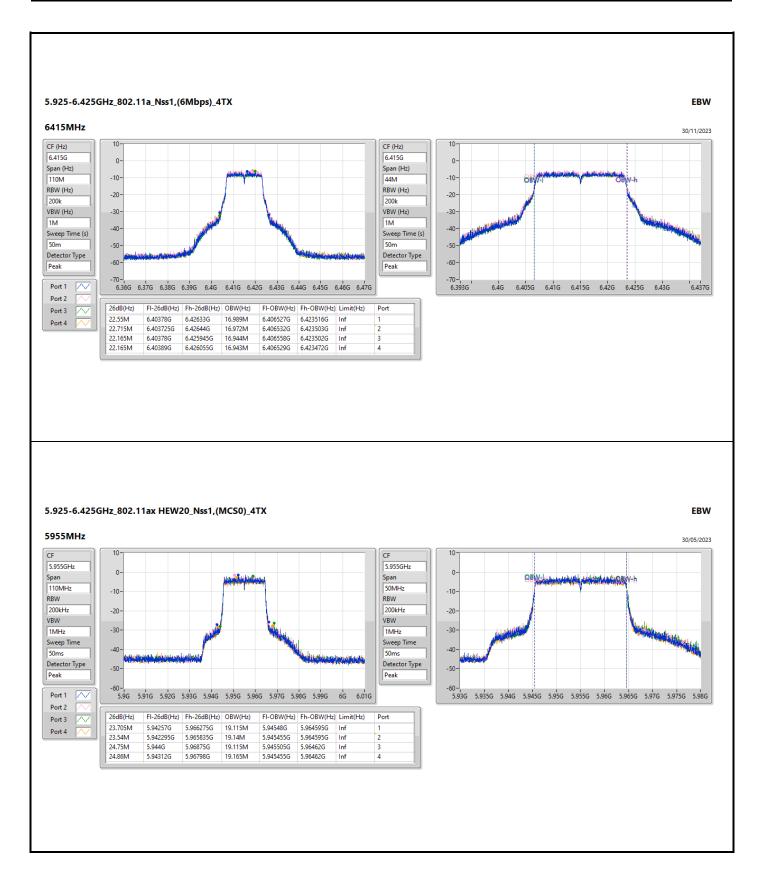
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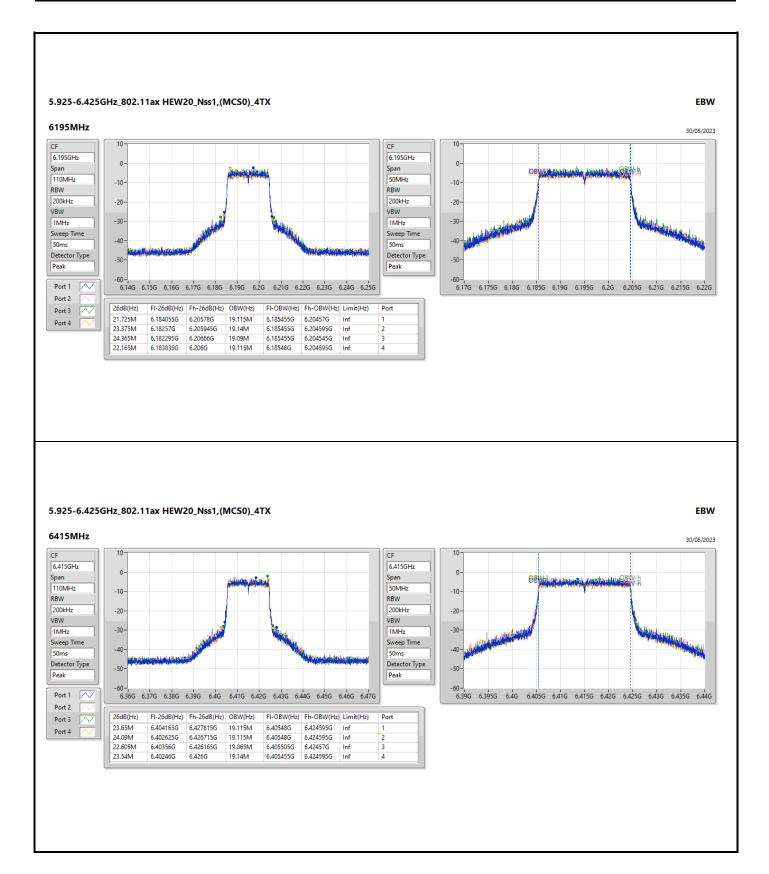
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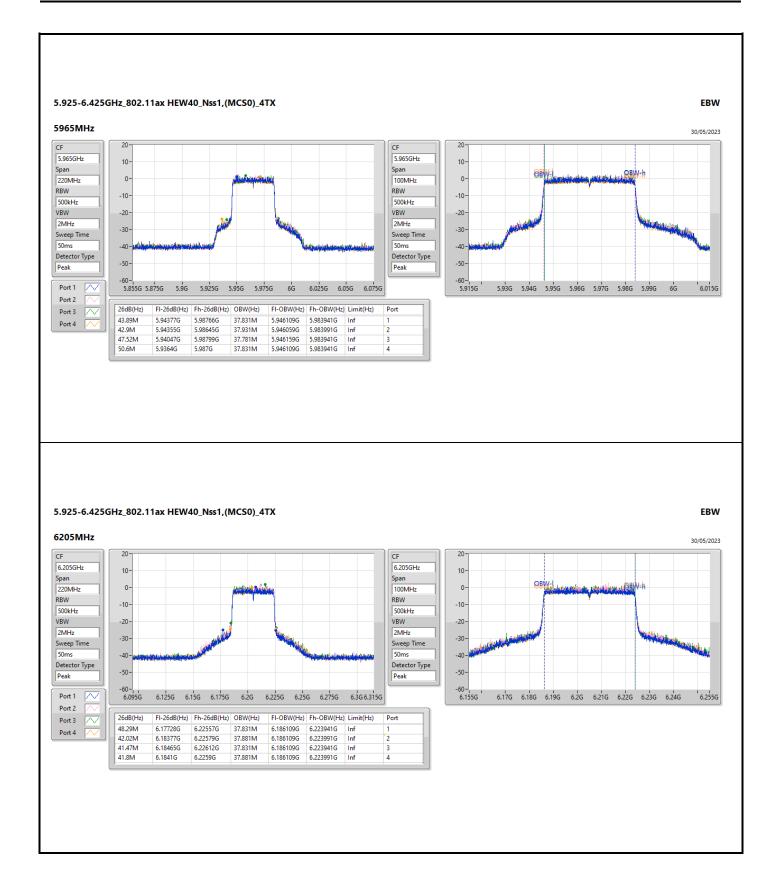




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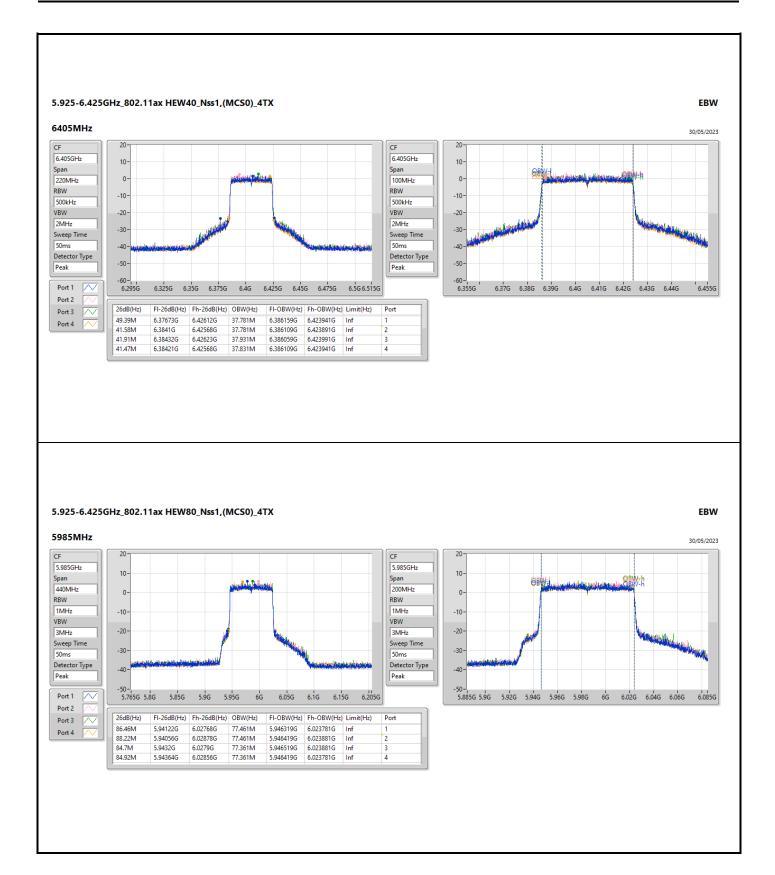




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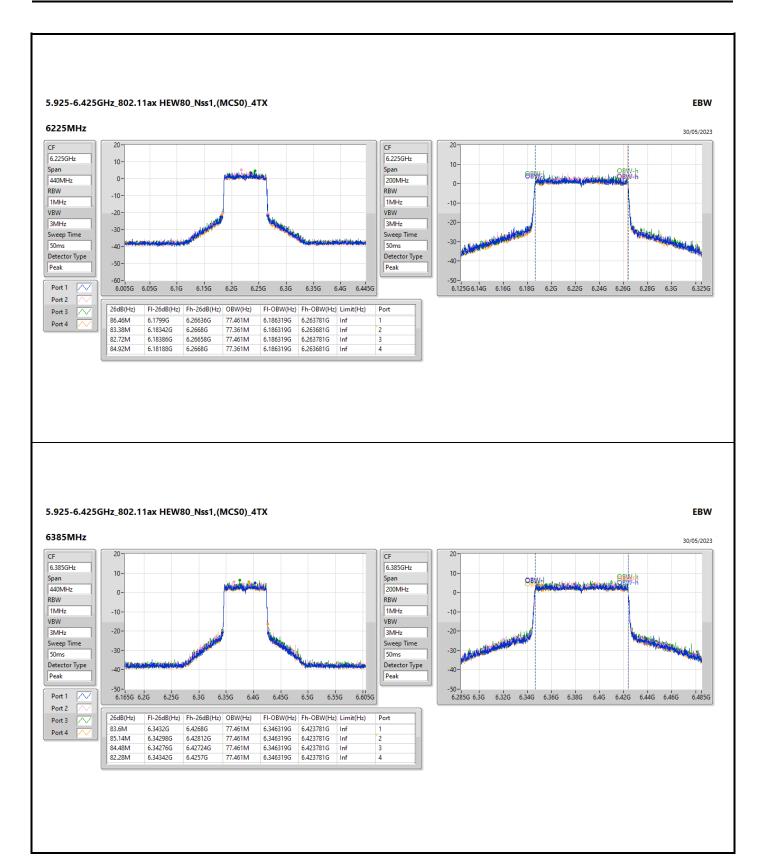




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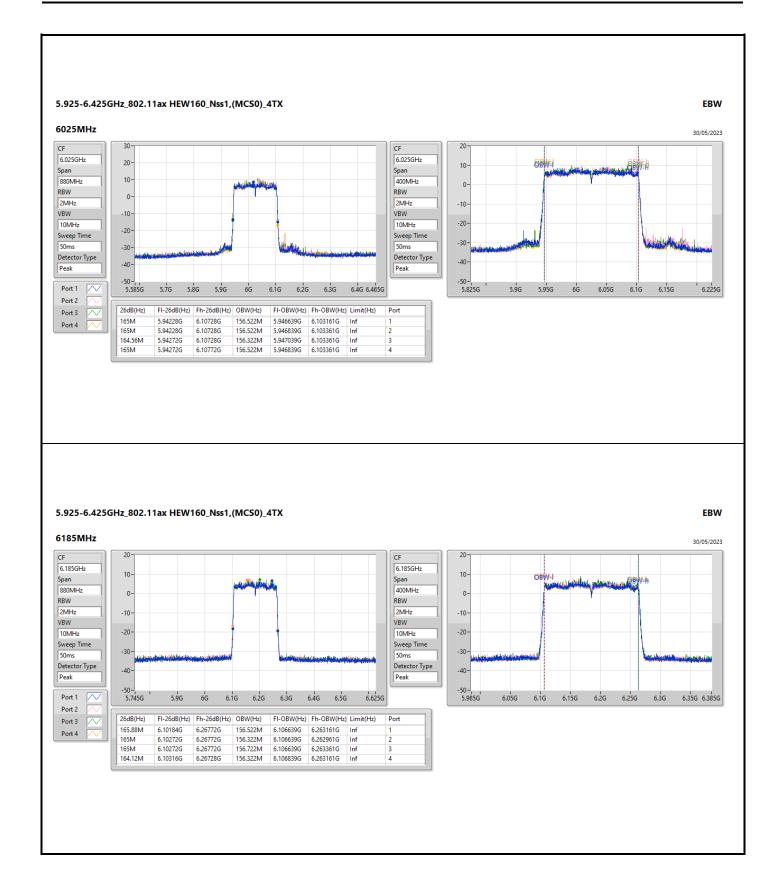




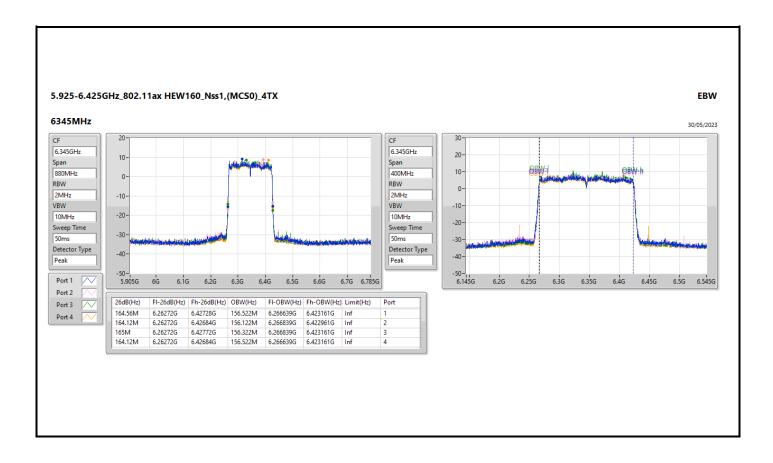
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Average Power_For Standard Power Device

Appendix C.1

Summary

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

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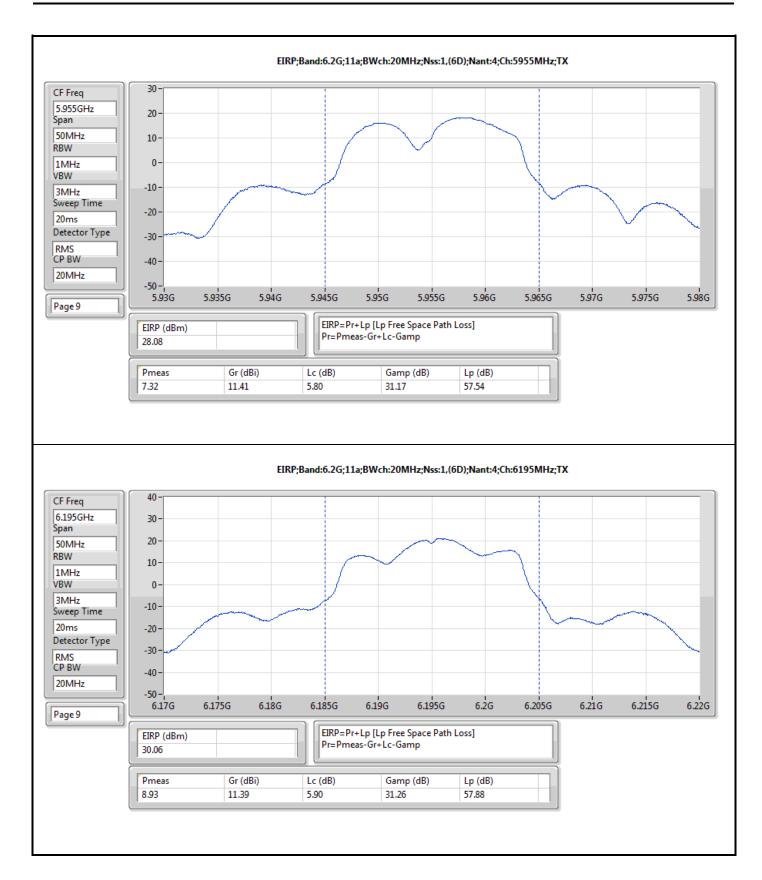
Result

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

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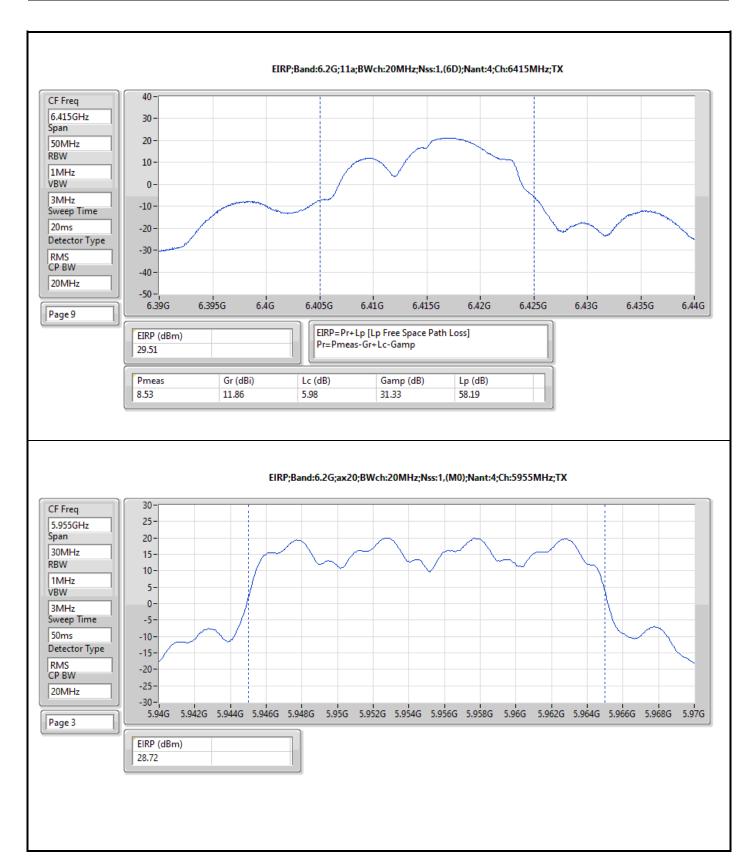
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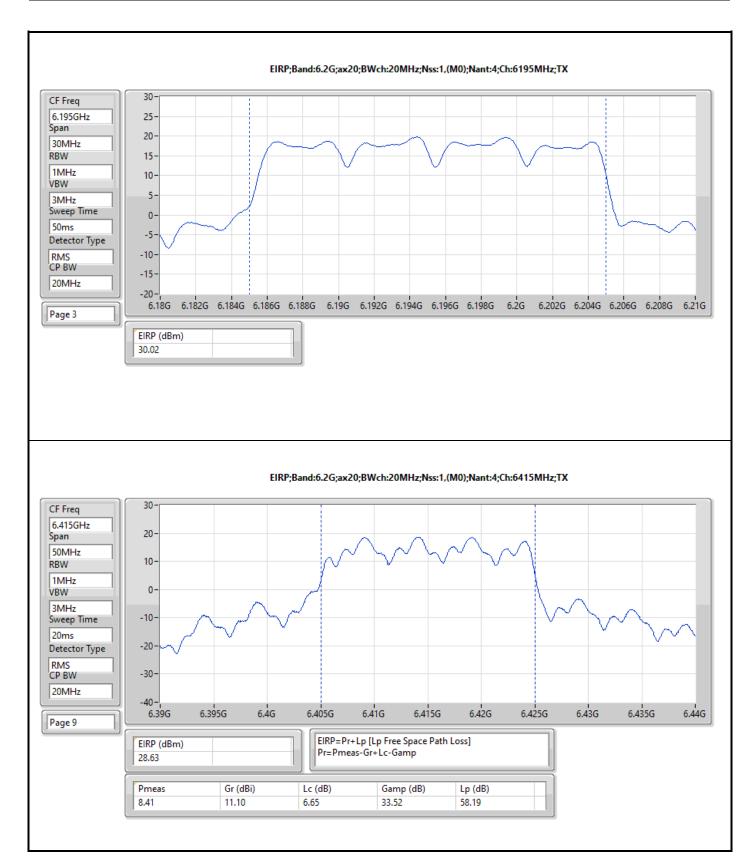
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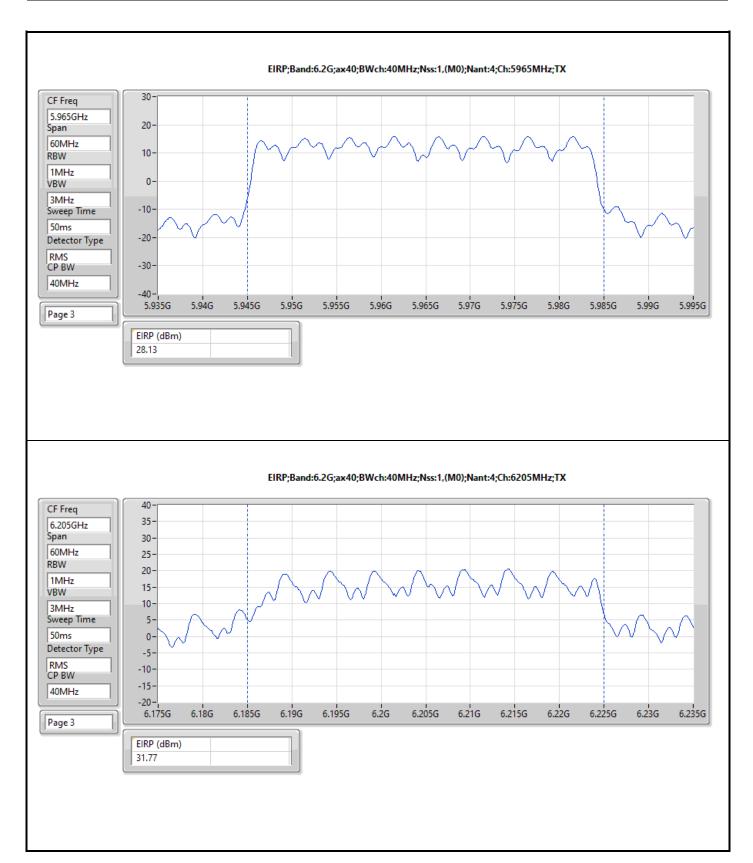




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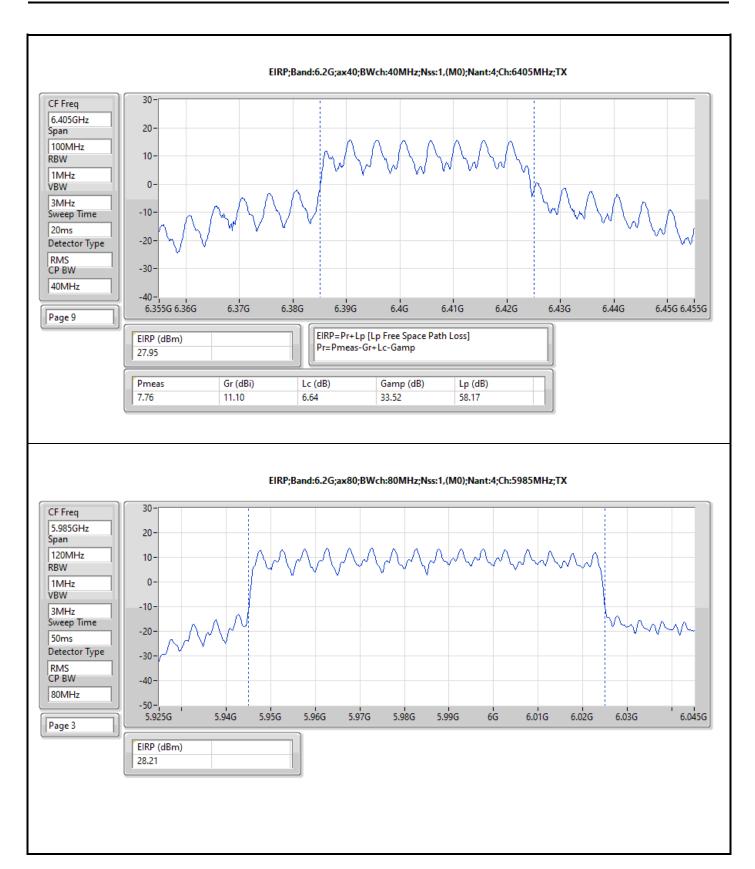
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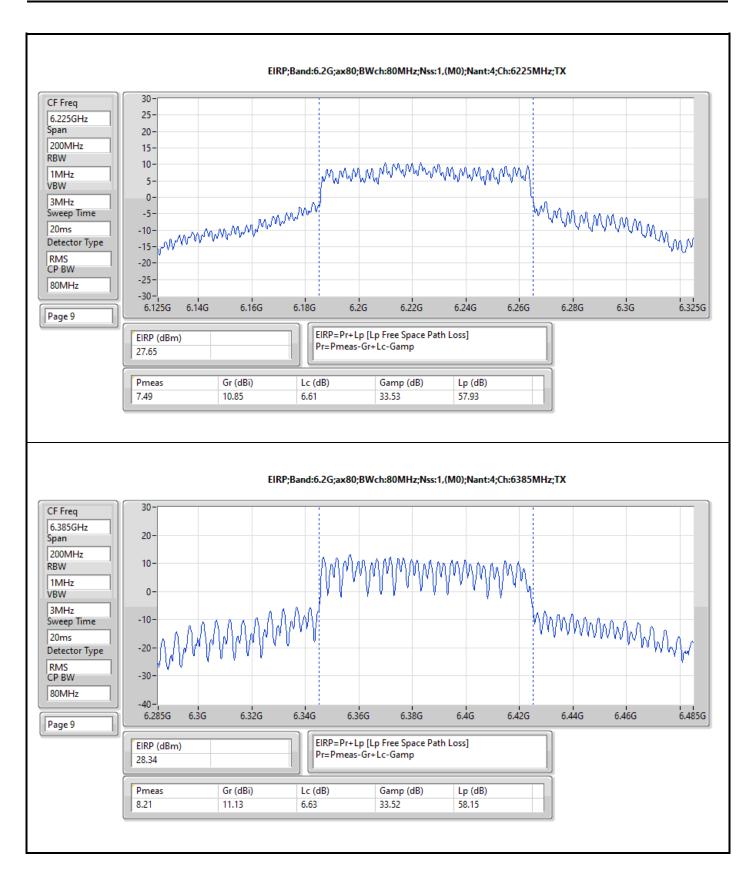
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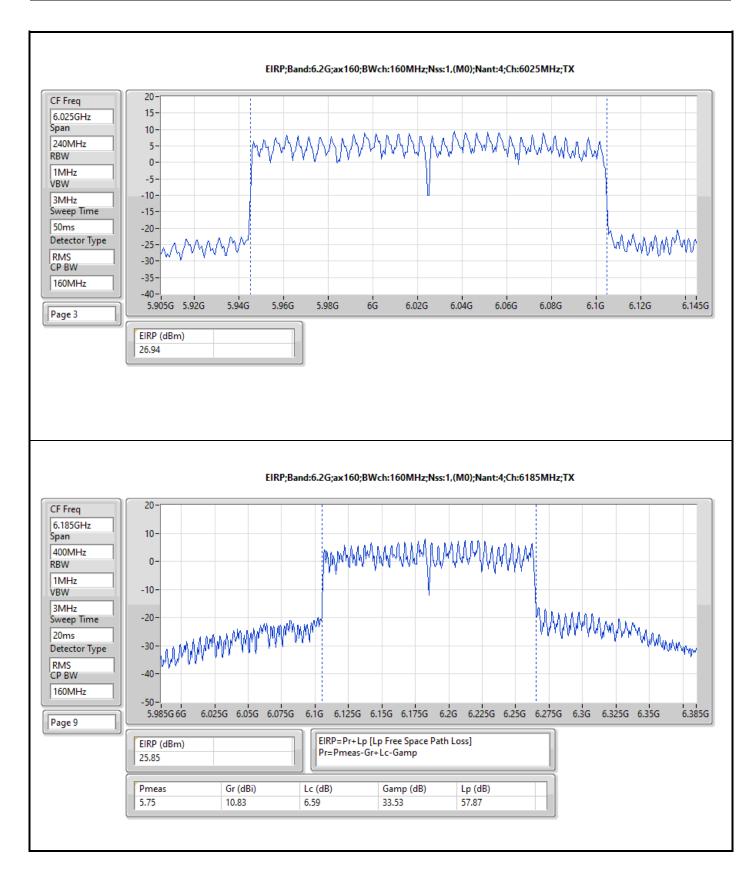
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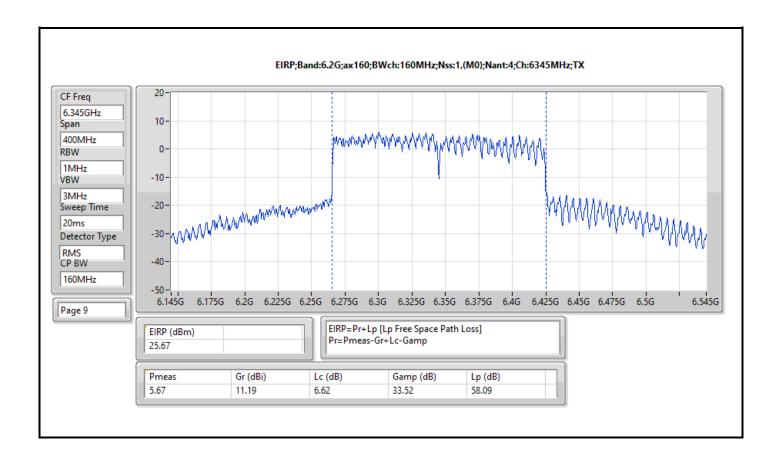


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Average Power_For Low Power Indoor Device

Appendix C.2

Summary

Mode	EIRP	EIRP
	(dBm)	(W)
5.925-6.425GHz	ī	-
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

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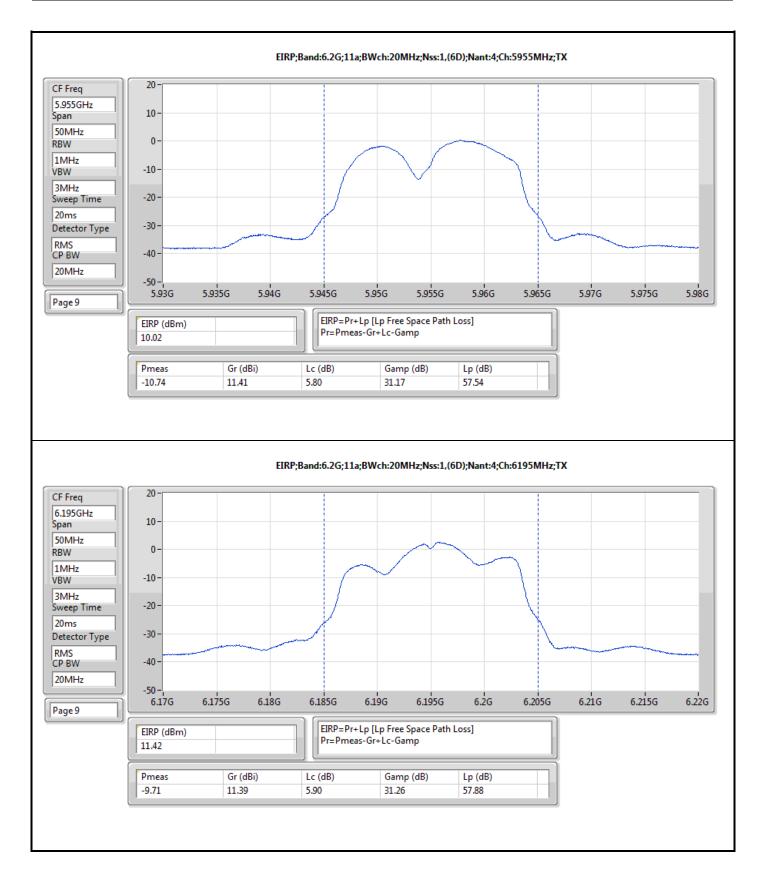
Result

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	=	÷	ī
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

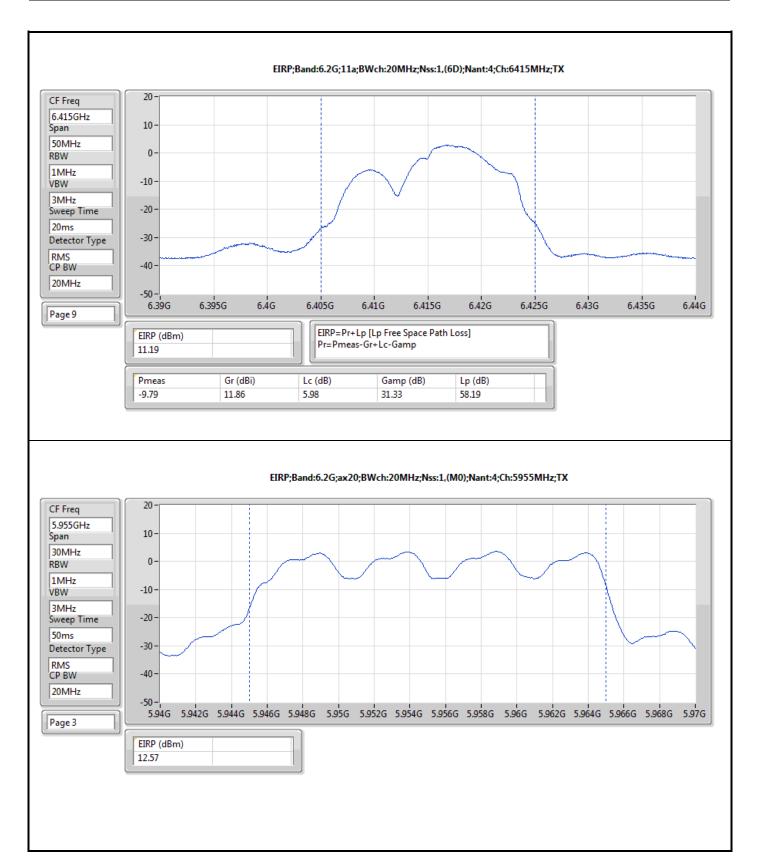
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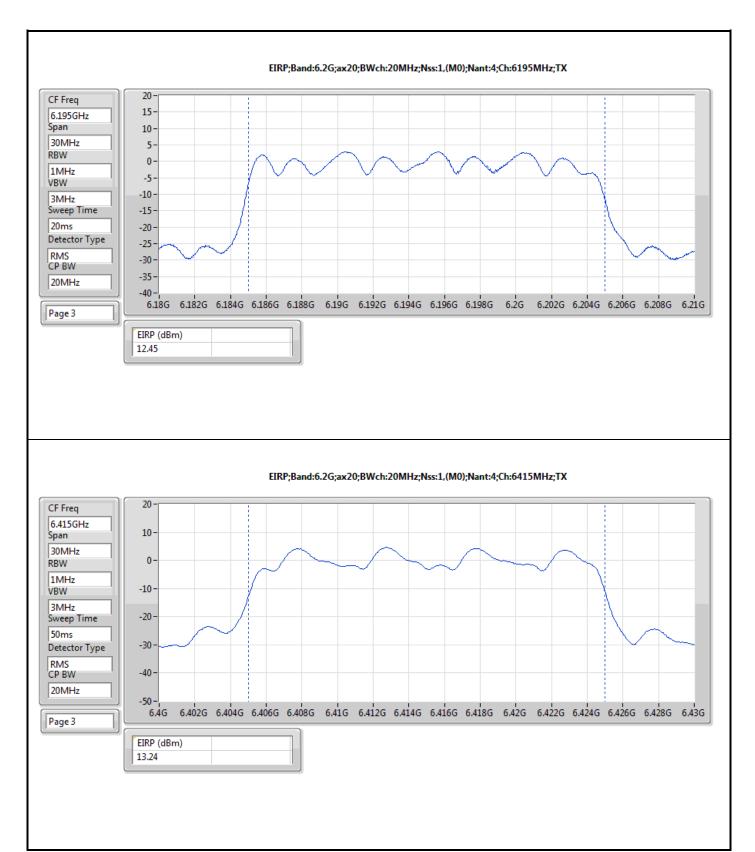
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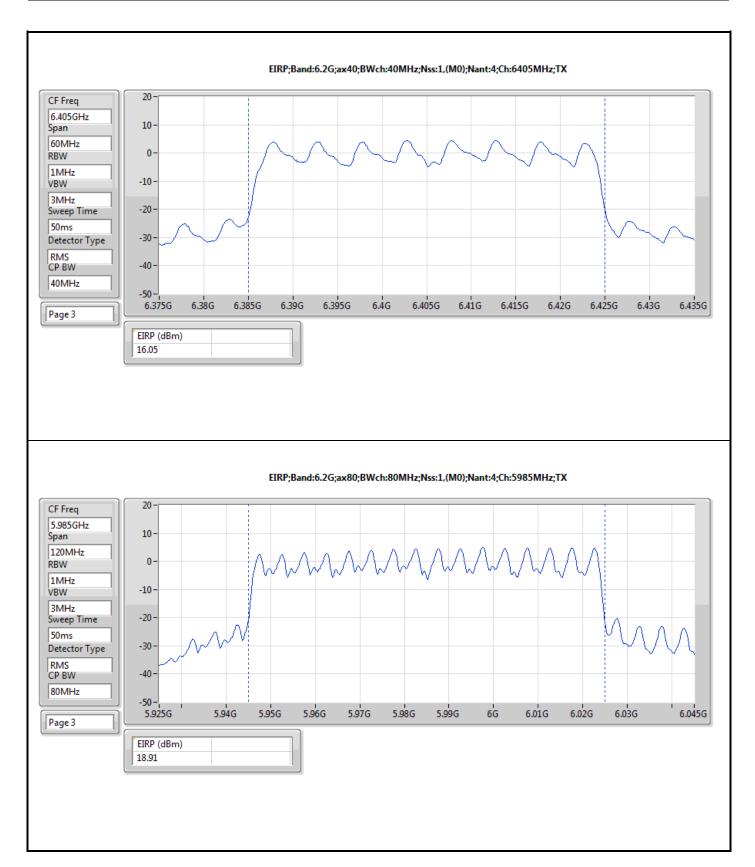
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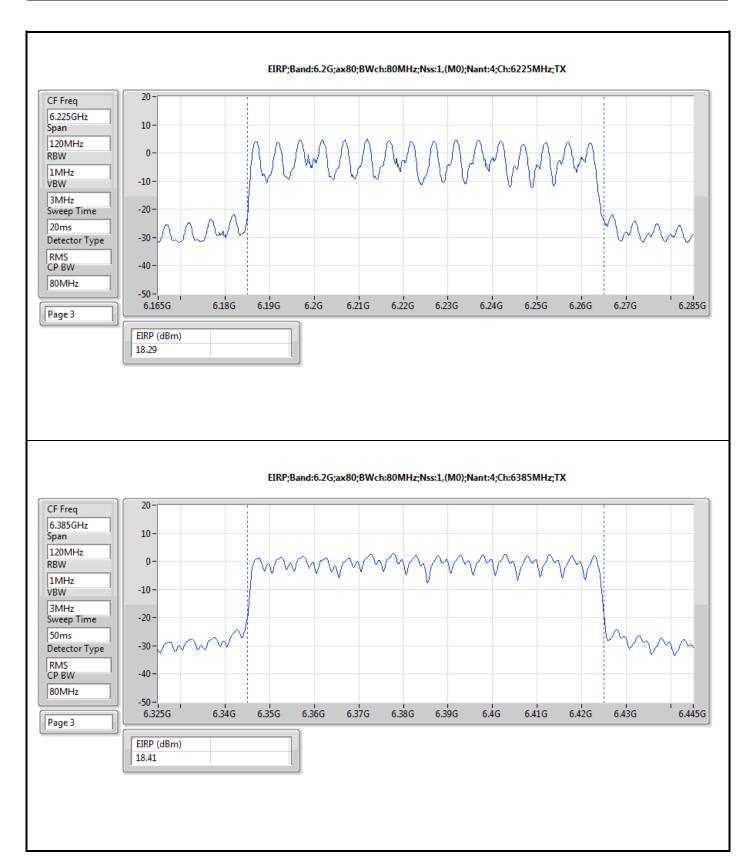




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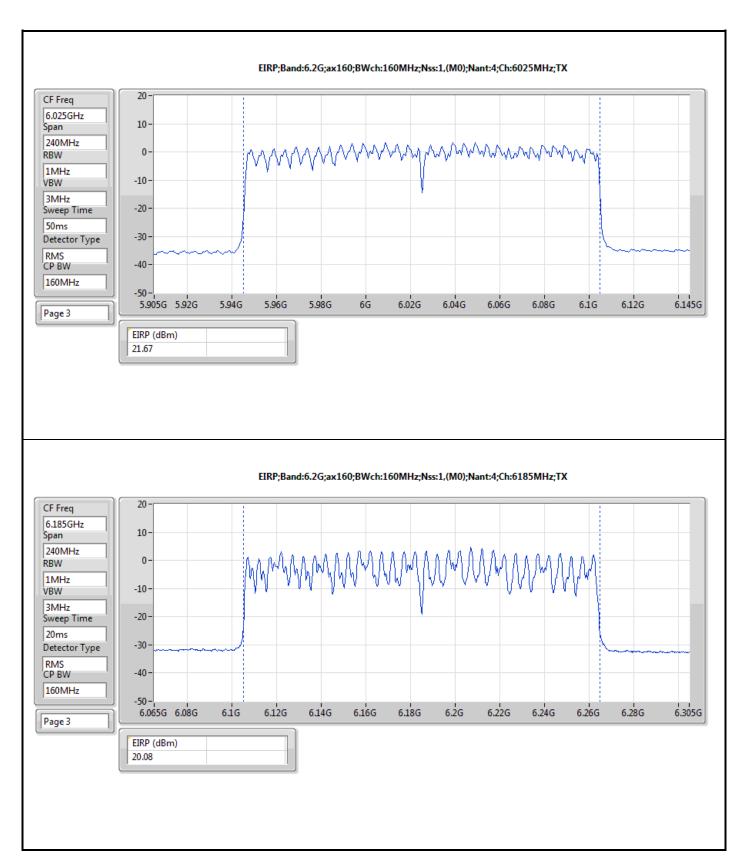




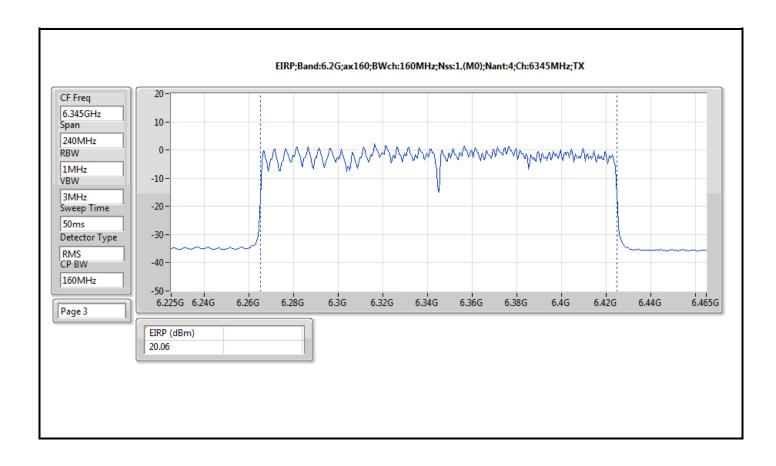
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PSD_For Standard Power Device

Appendix D.1

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

 $RBW = 500kHz \ for \ 5.725\text{-}5.85GHz \ band \ / \ 1MHz \ for \ other \ band;$

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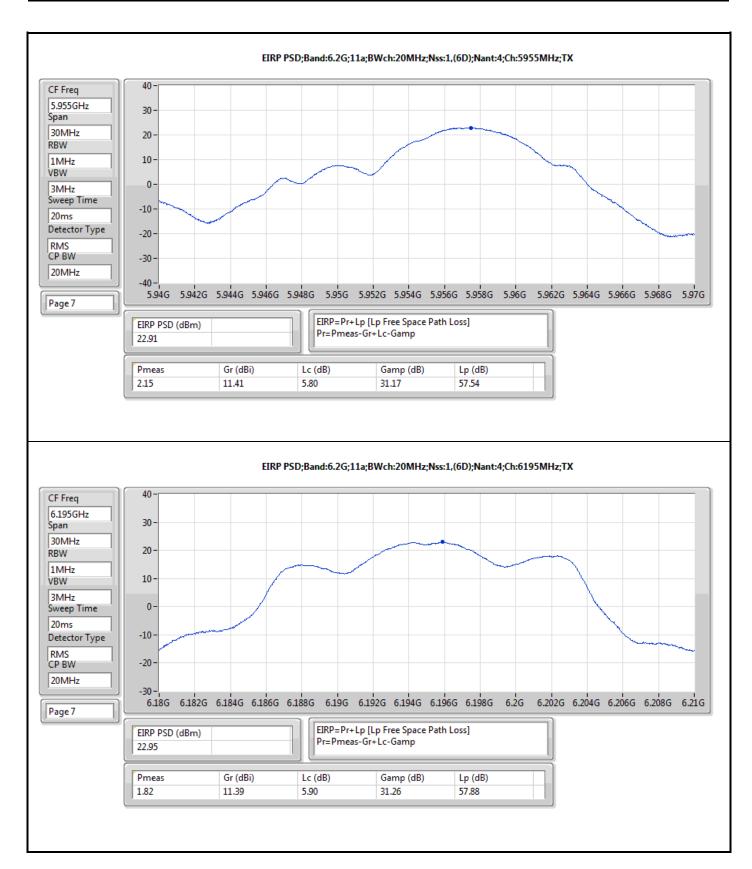
Result

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			

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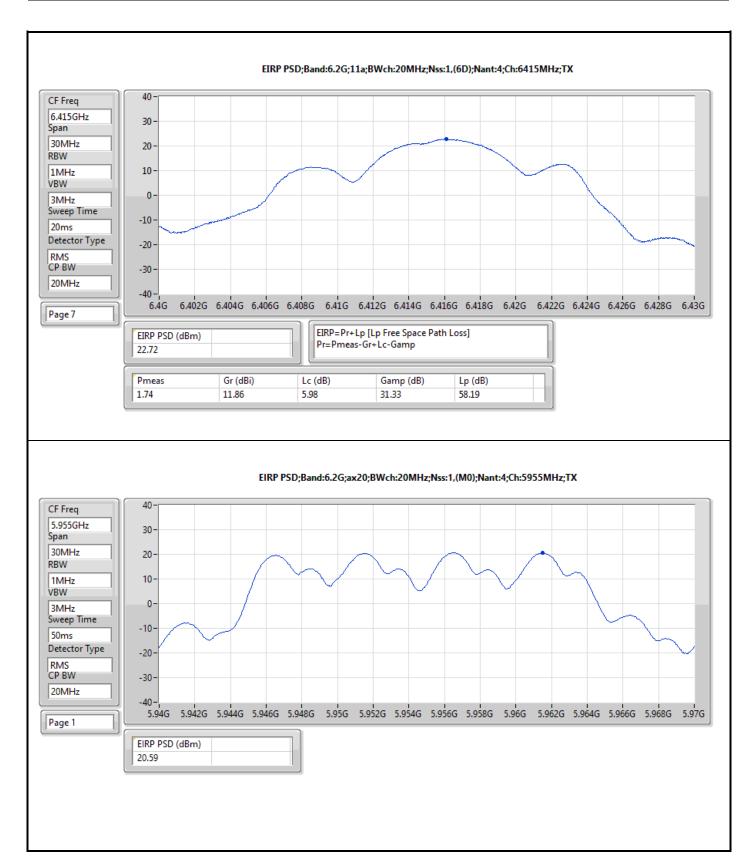
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band; PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;





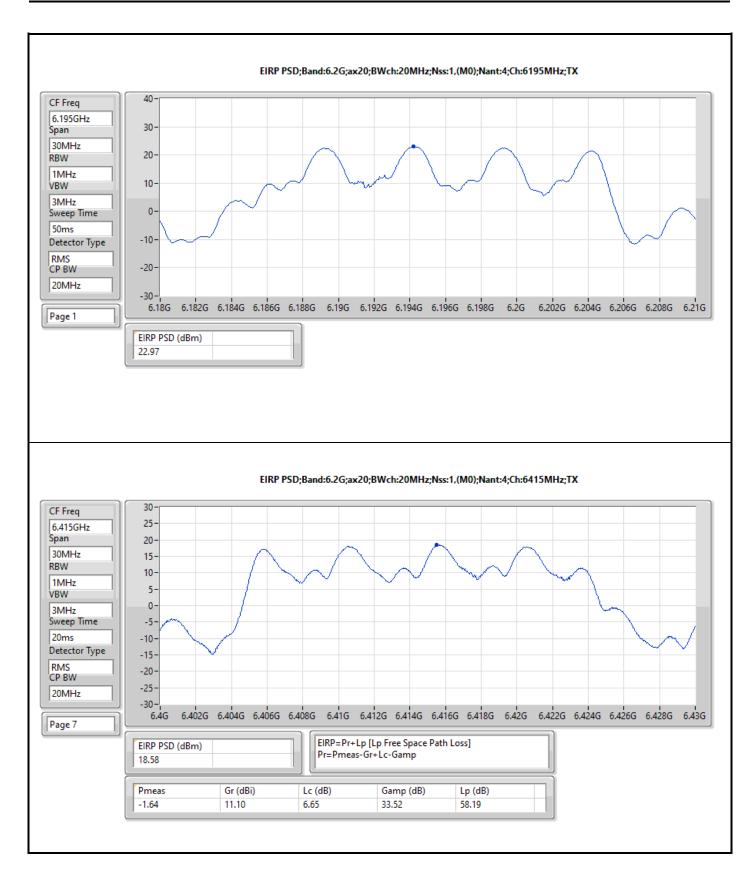
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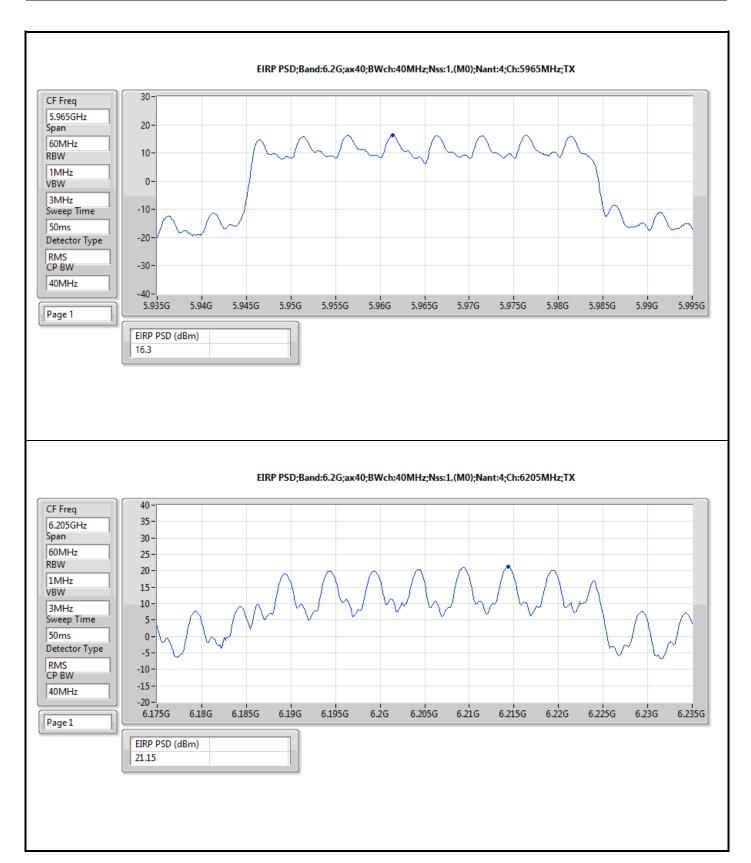




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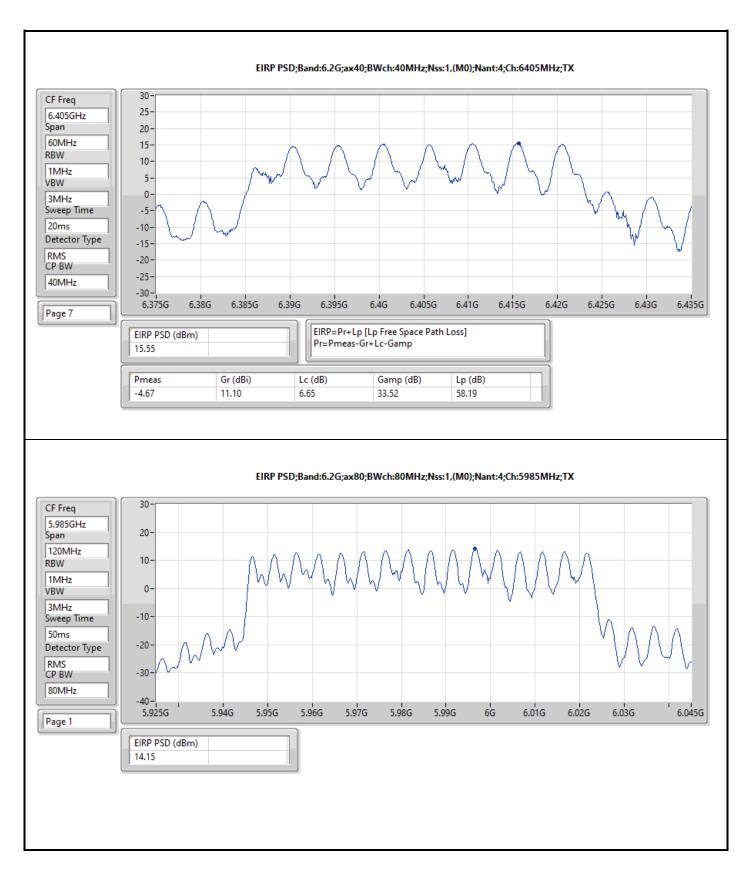
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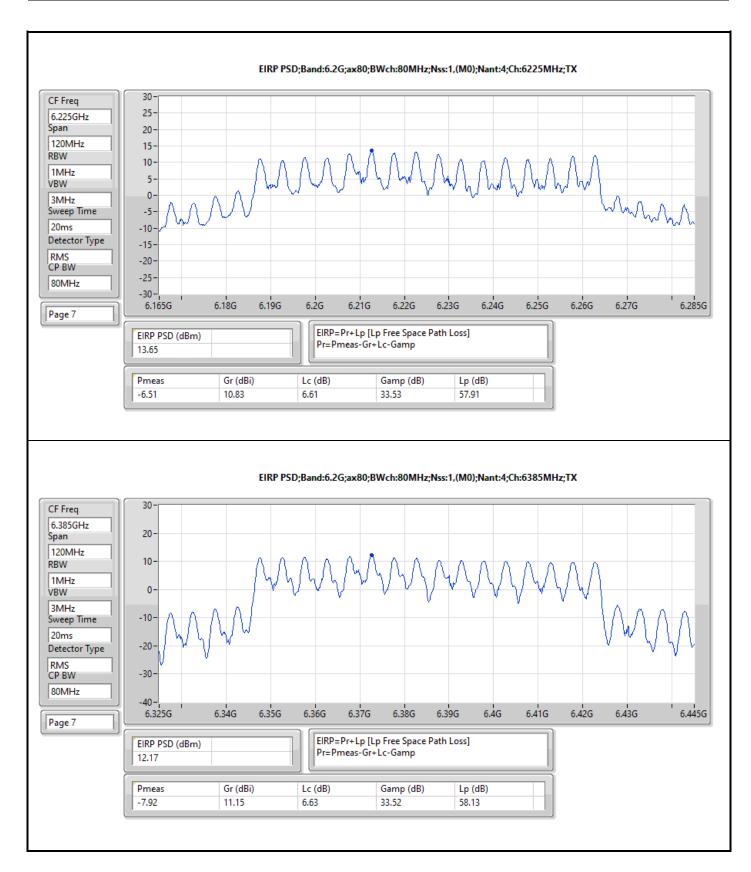




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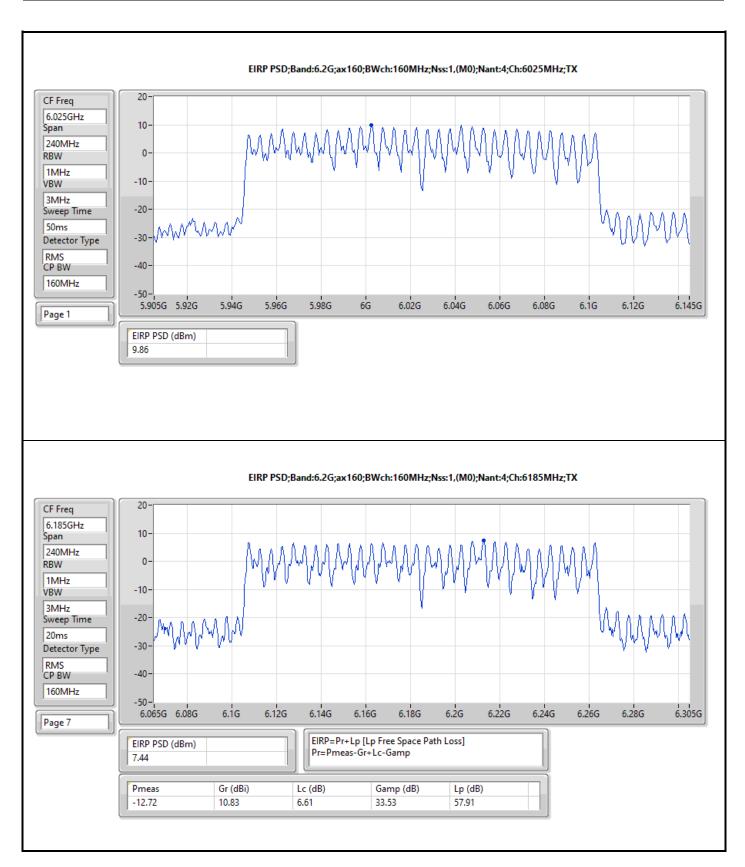
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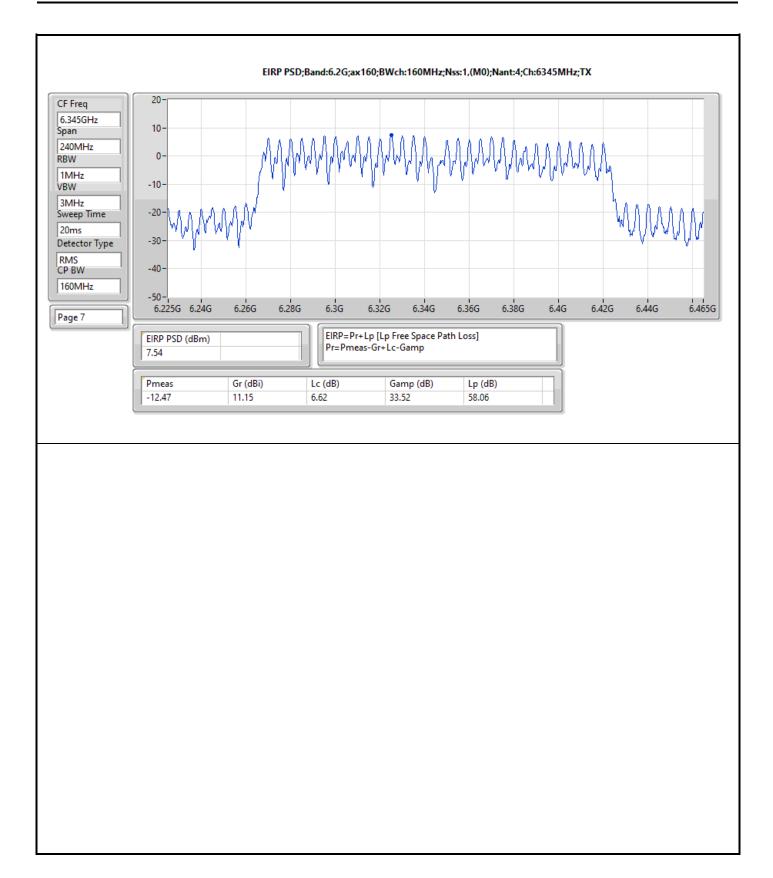


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PSD_For Low Power Indoor Device

Appendix D.2

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

 $RBW = 500kHz \ for \ 5.725\text{-}5.85GHz \ band \ / \ 1MHz \ for \ other \ band;$

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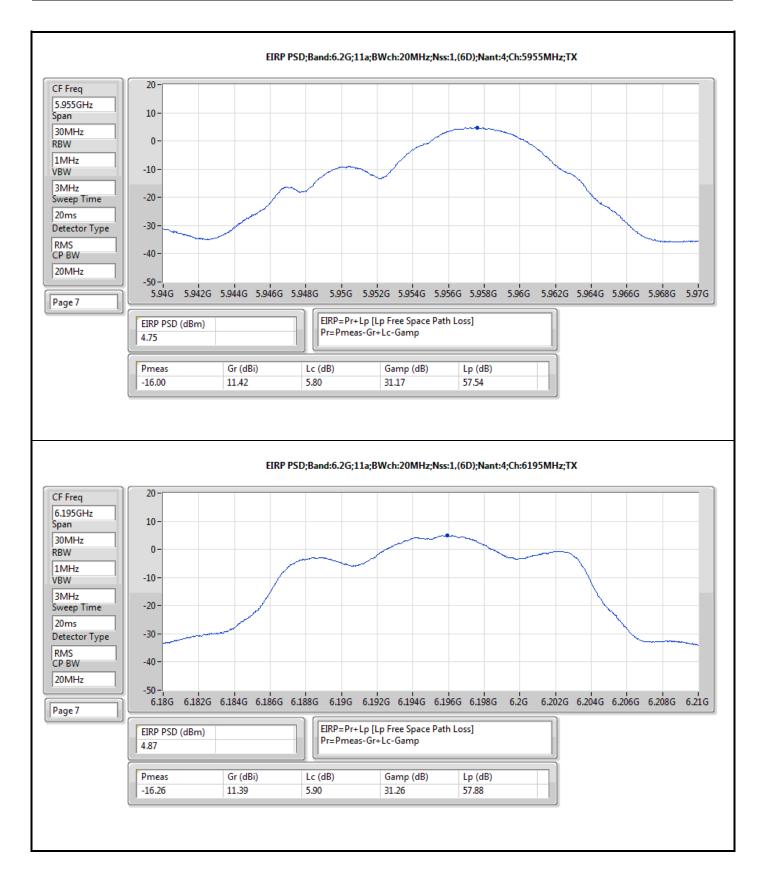
Result

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		

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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;

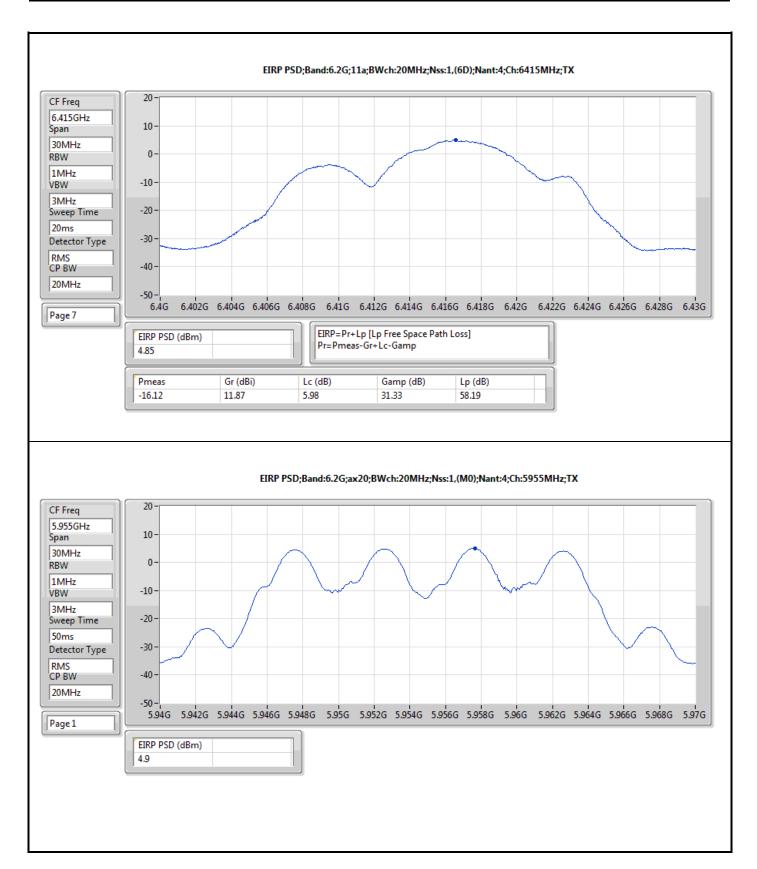




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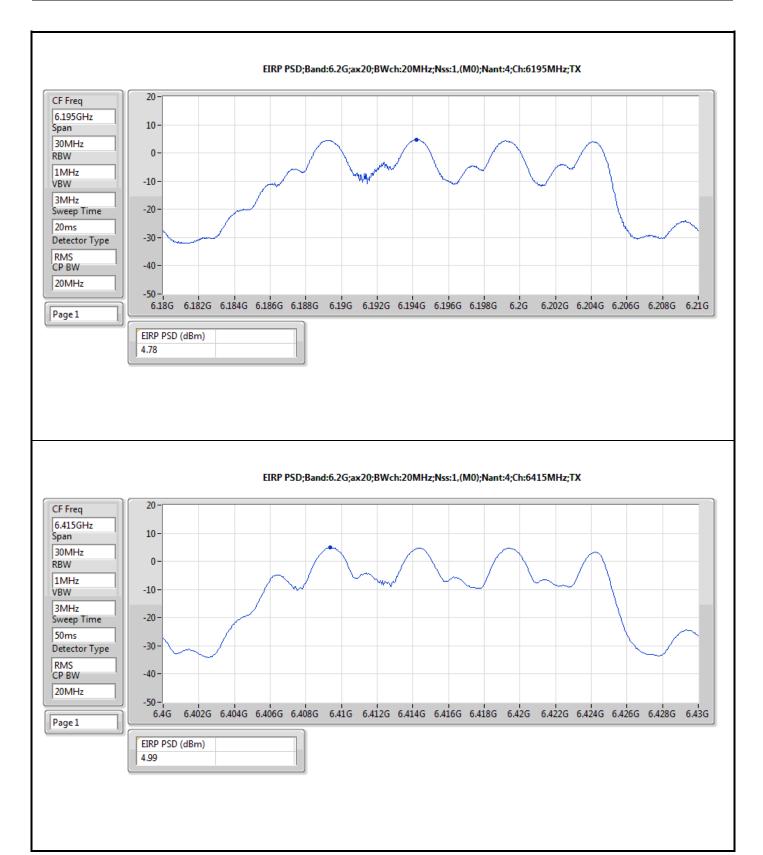
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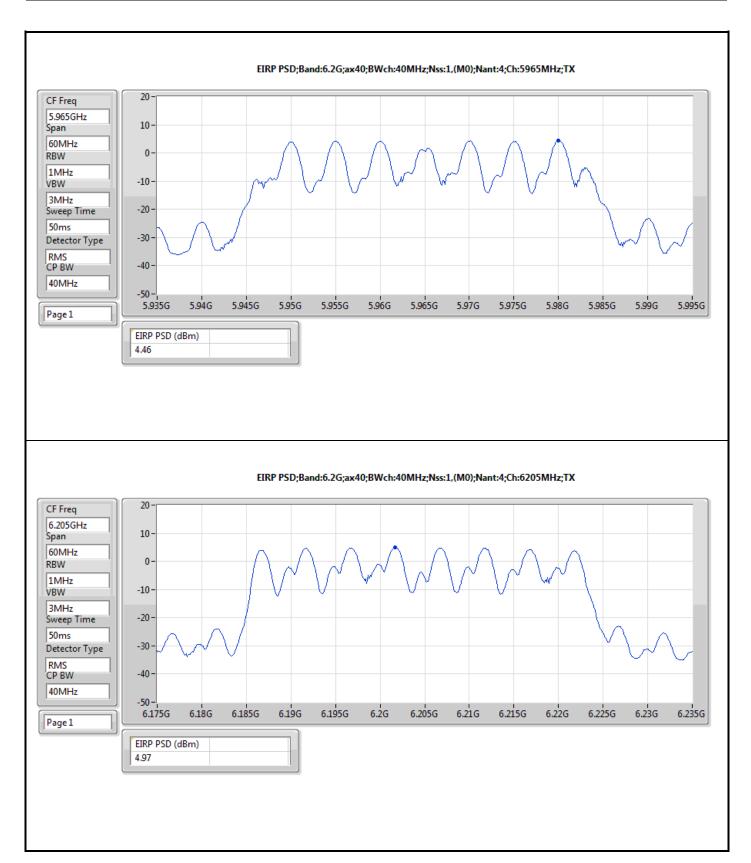
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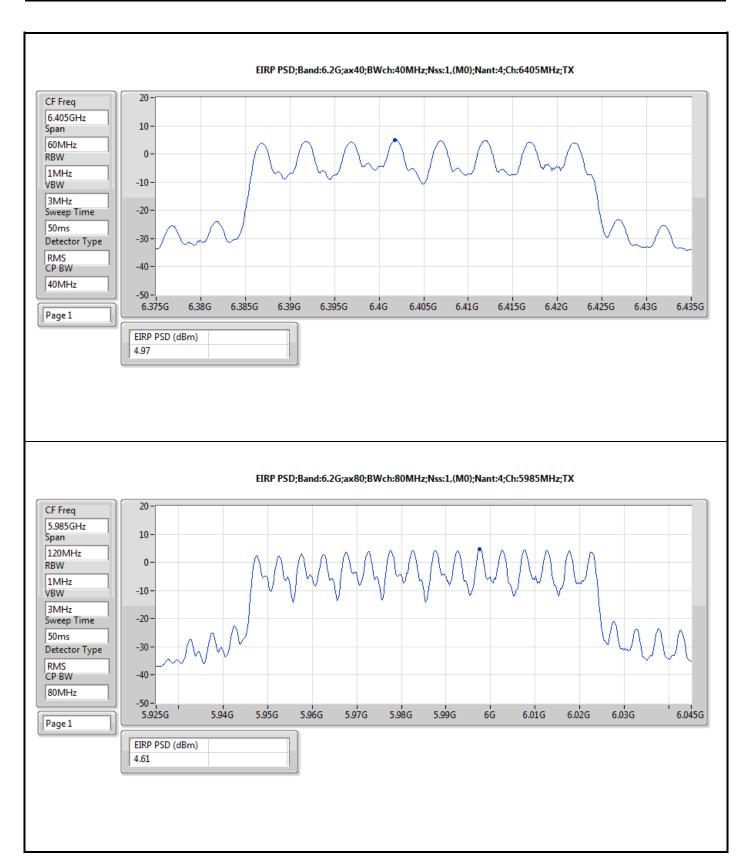




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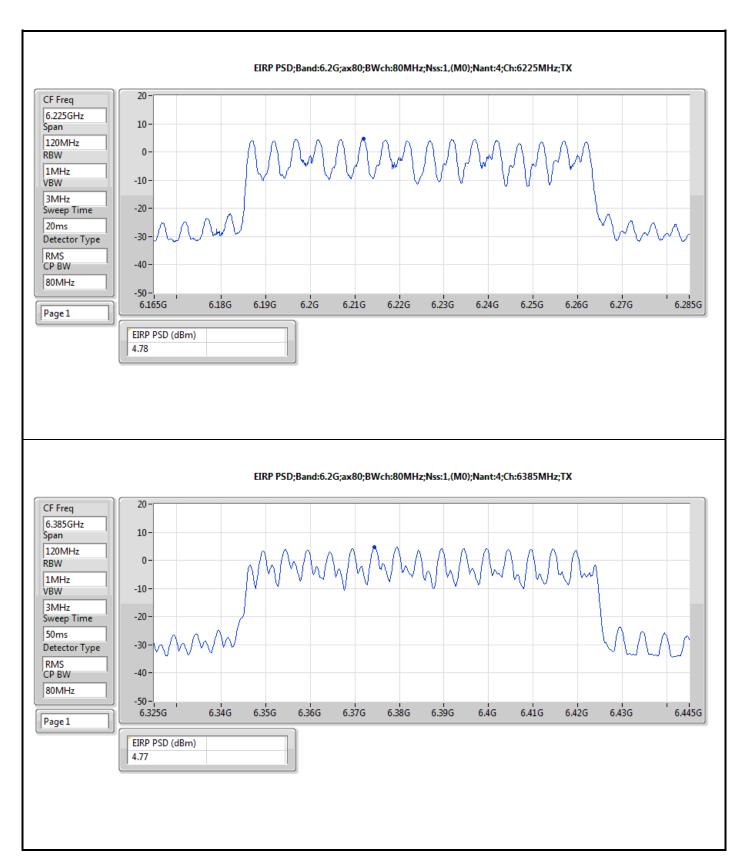




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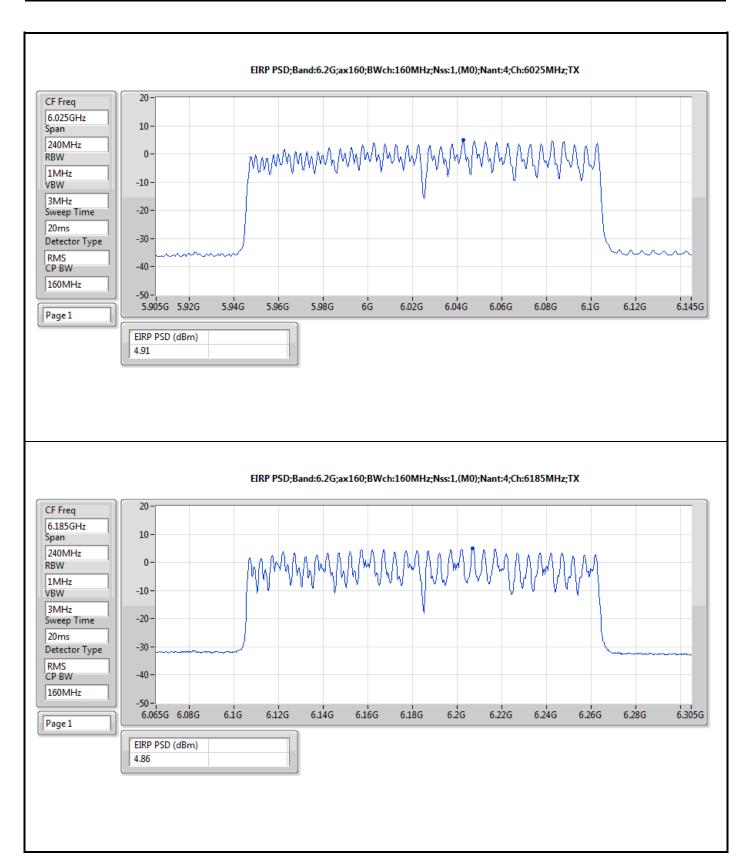




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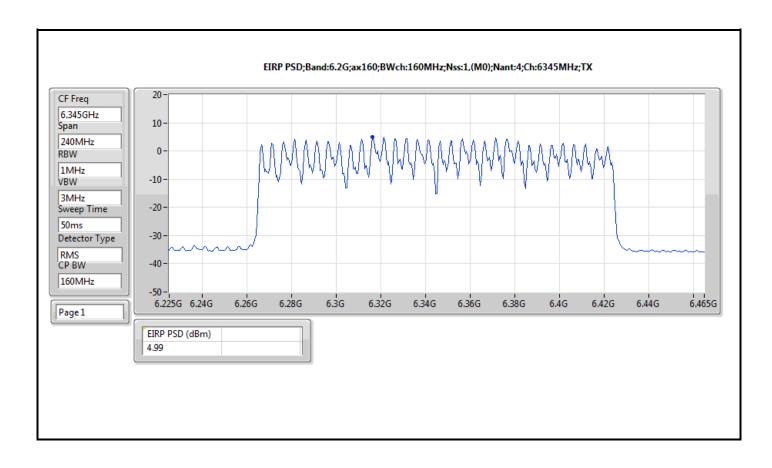
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Radiated Emissions below 1GHz

Appendix E.1

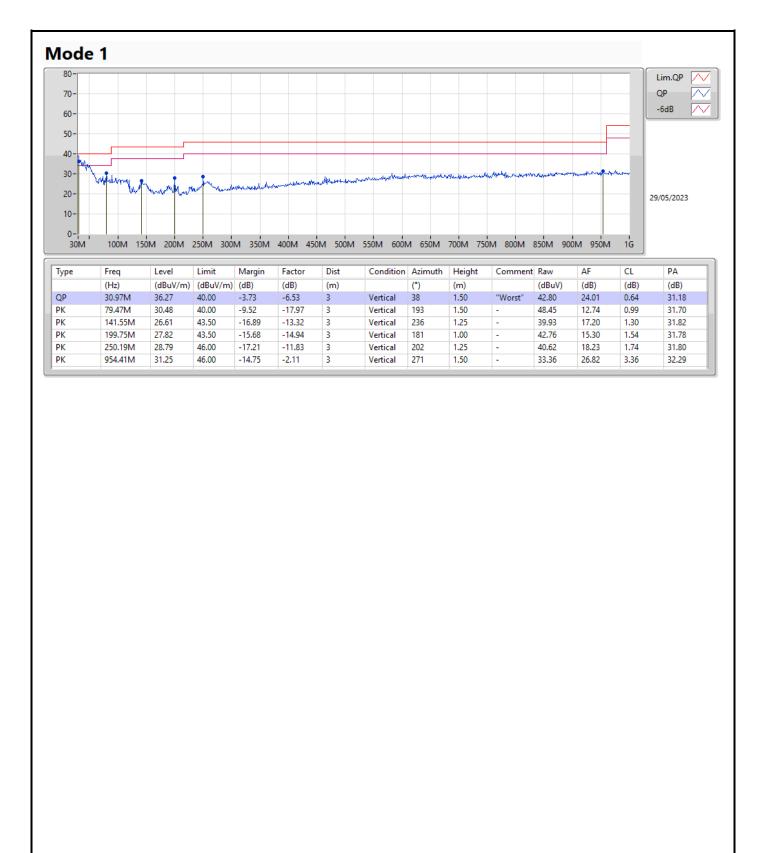
Summary

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

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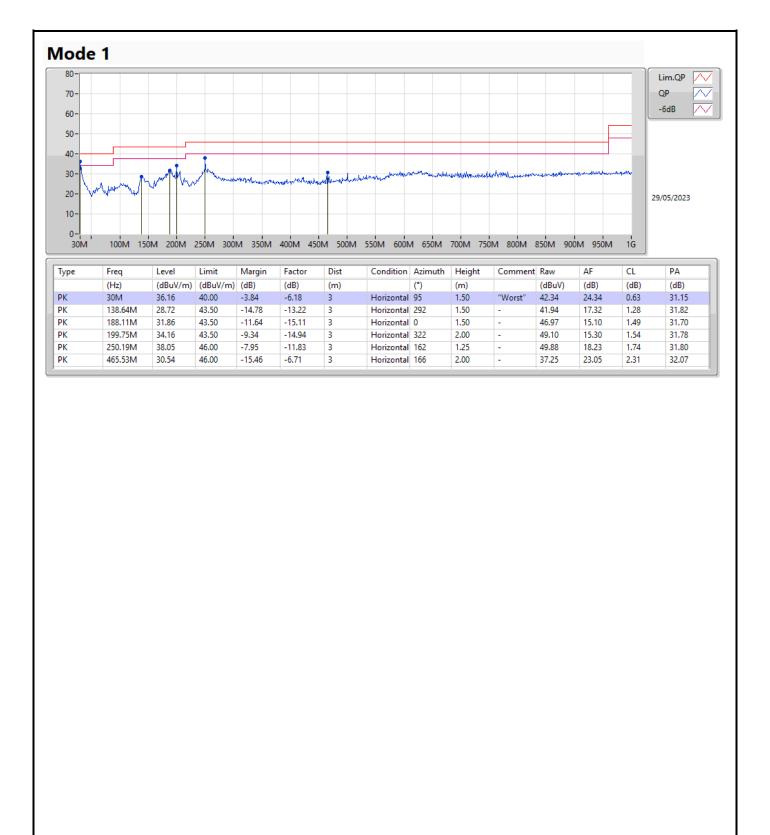




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RSE TX above 1GHz

Appendix E.2

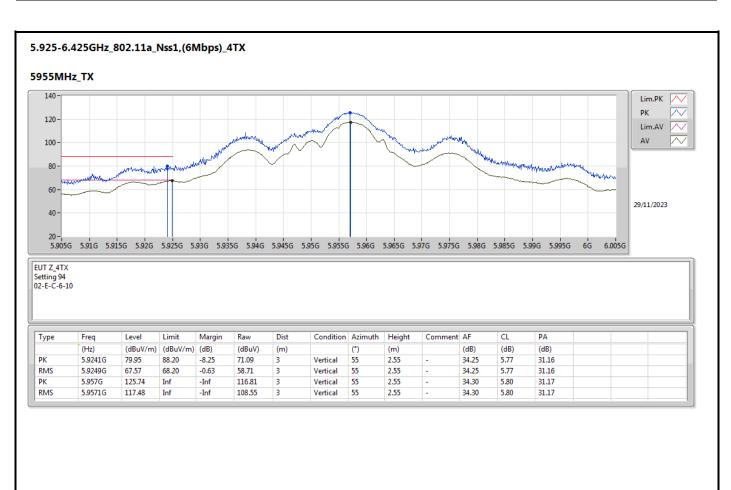
Summary

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	-

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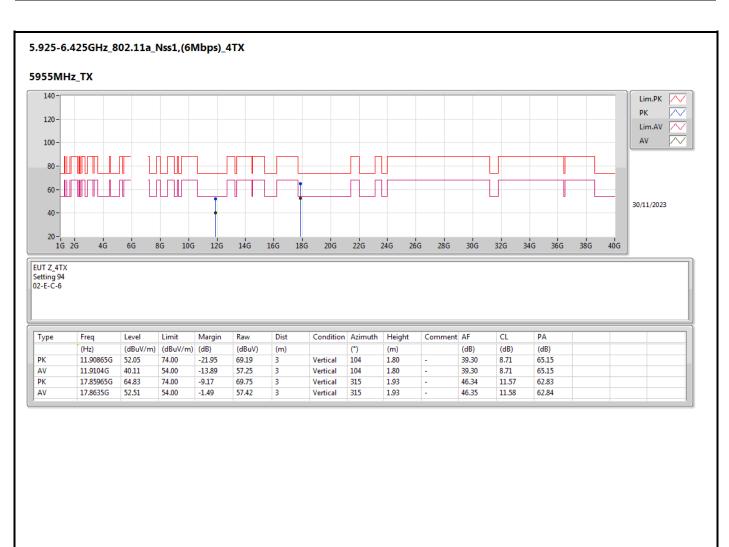




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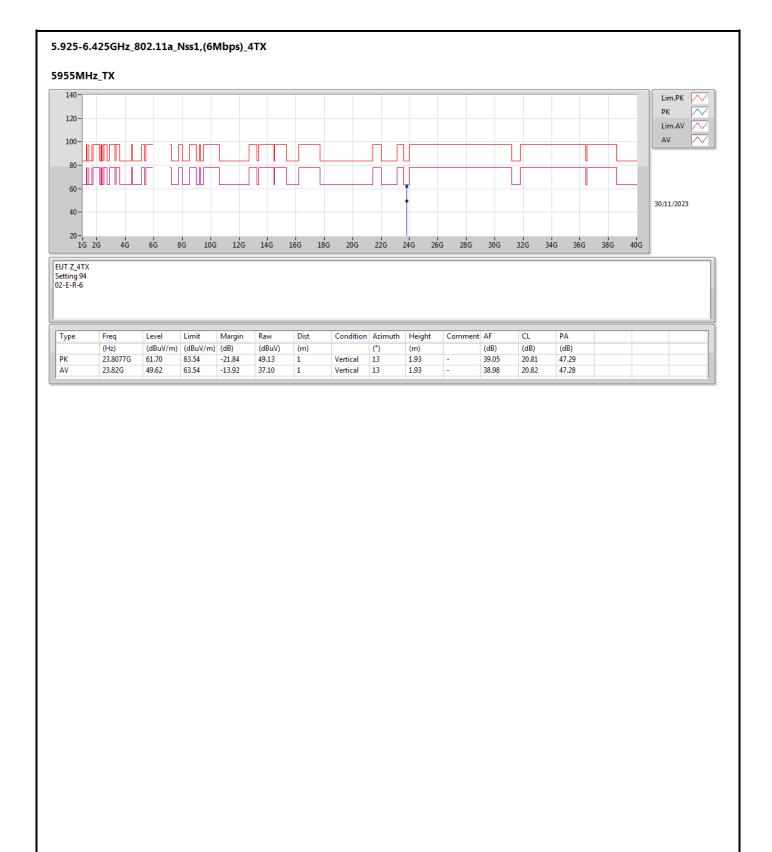




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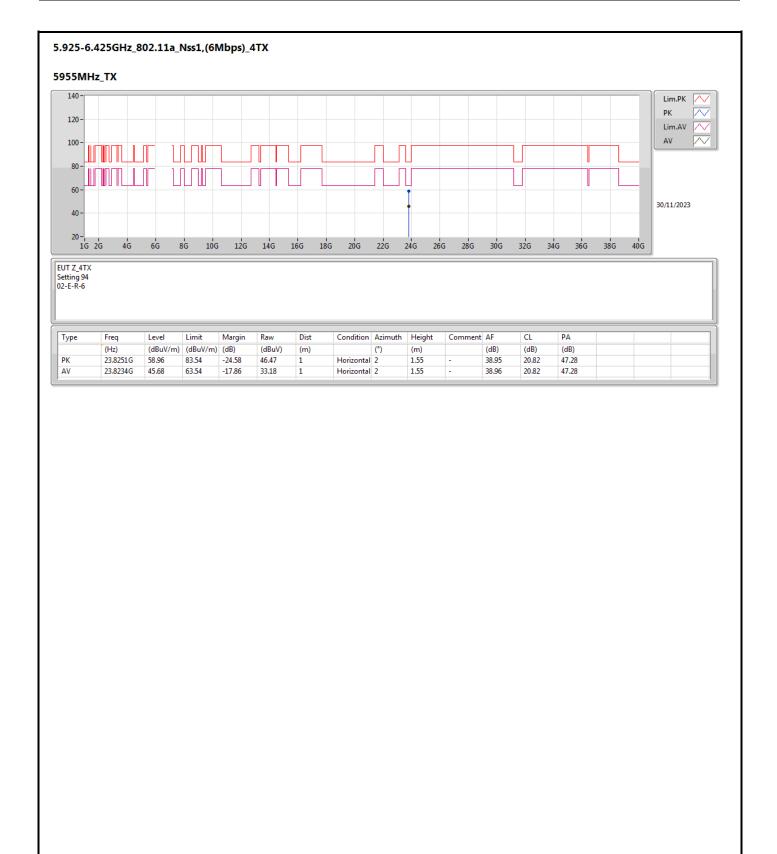




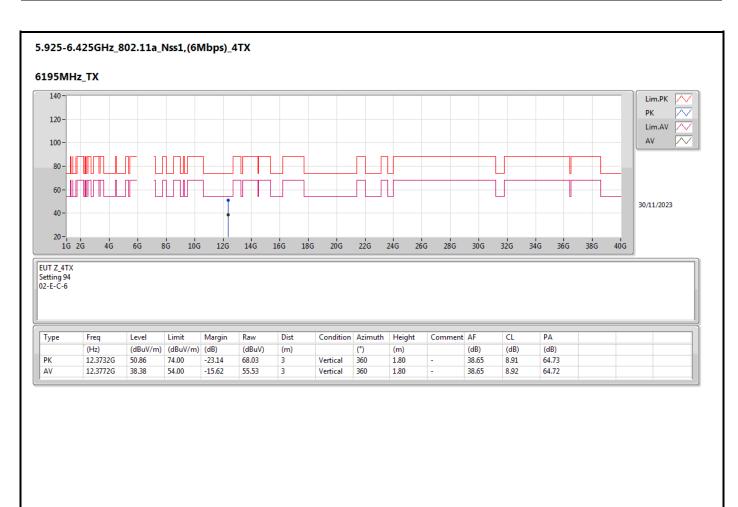
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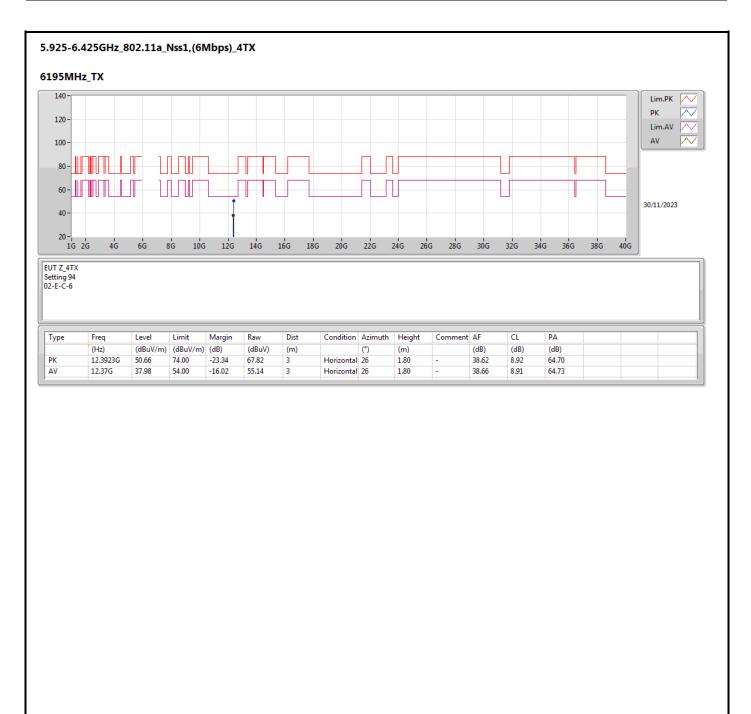




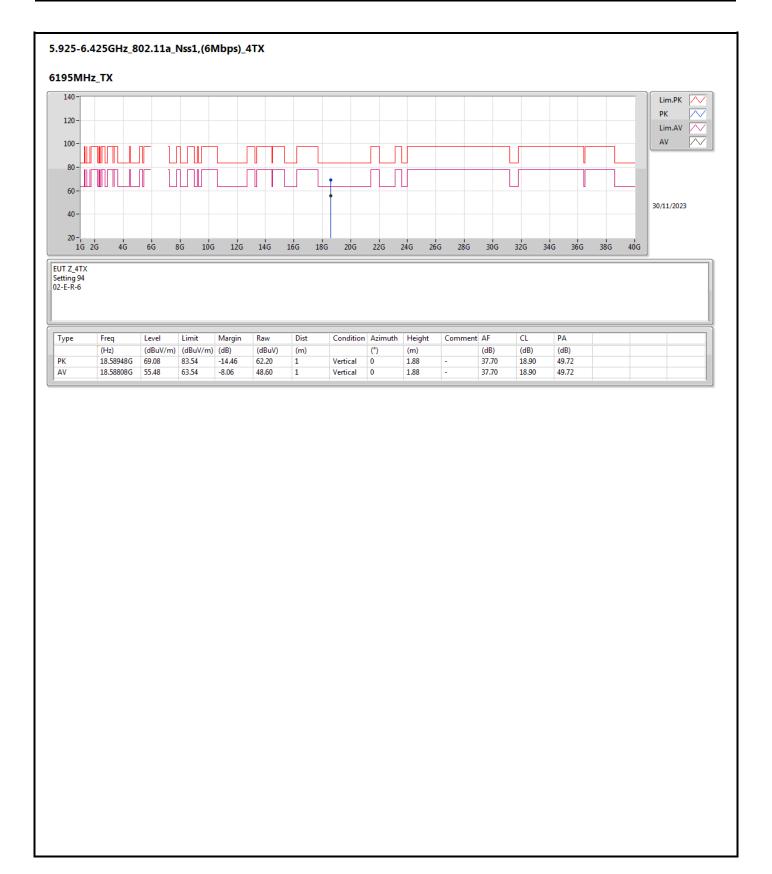
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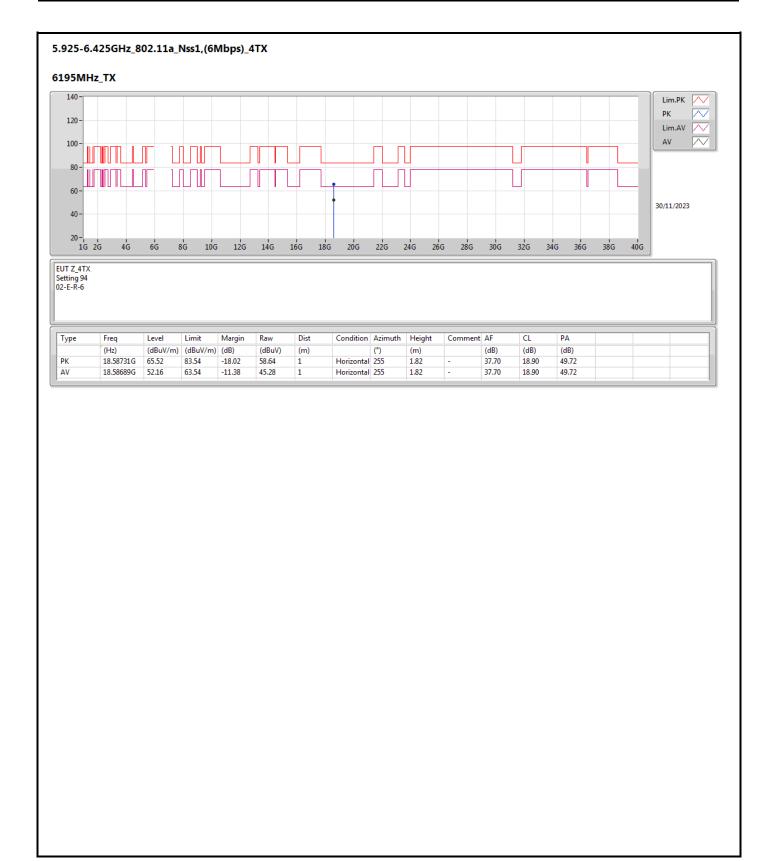




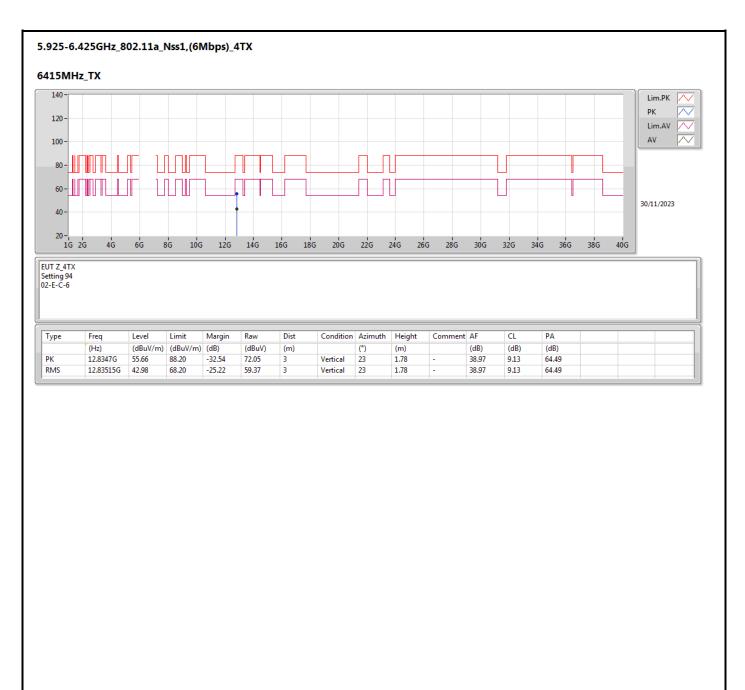
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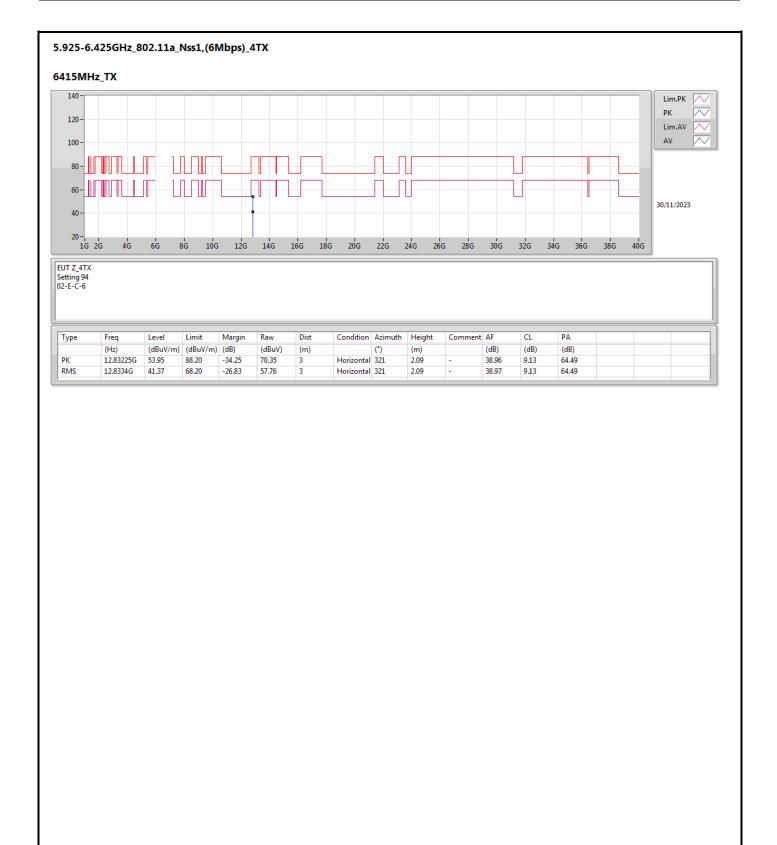








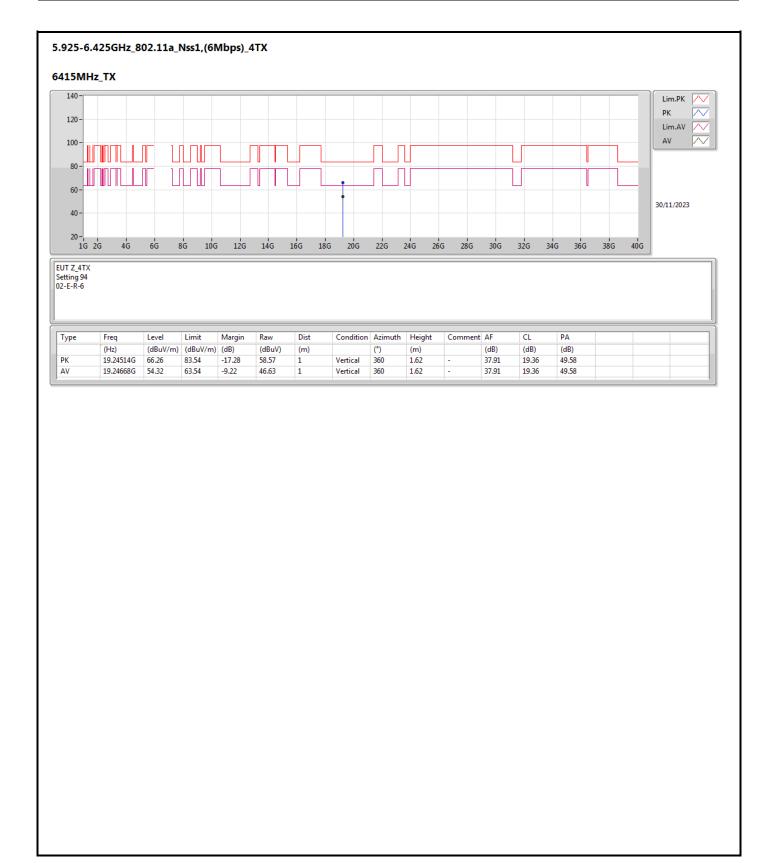




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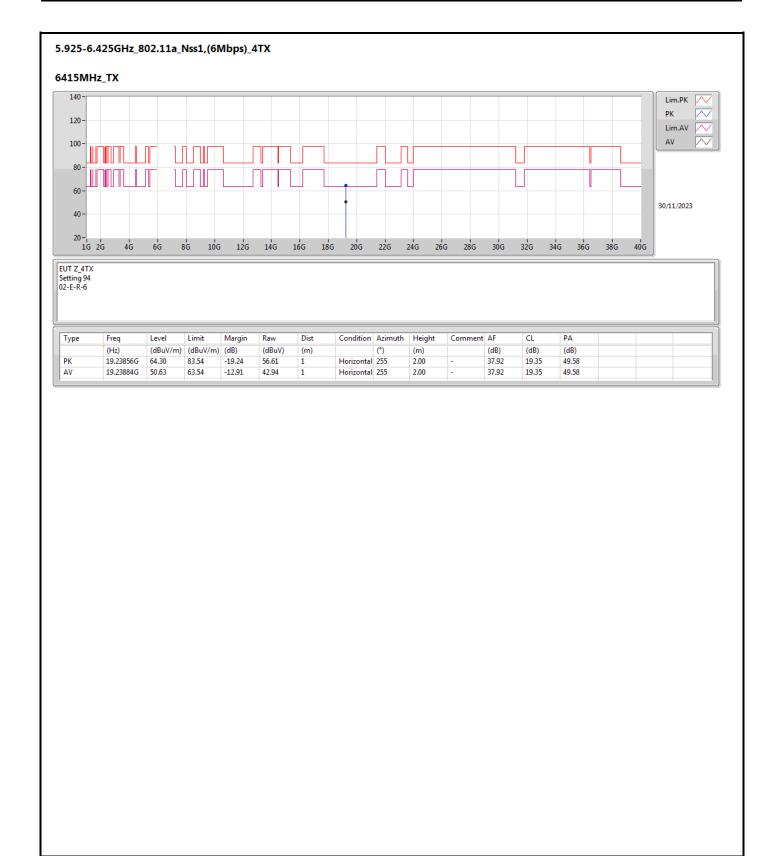




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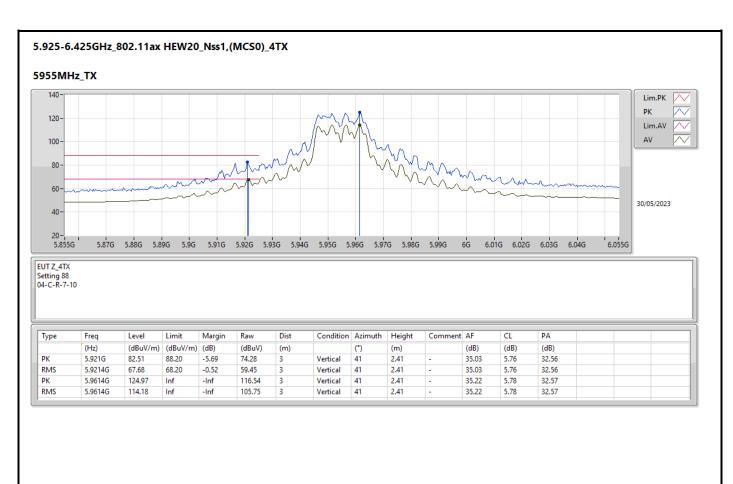




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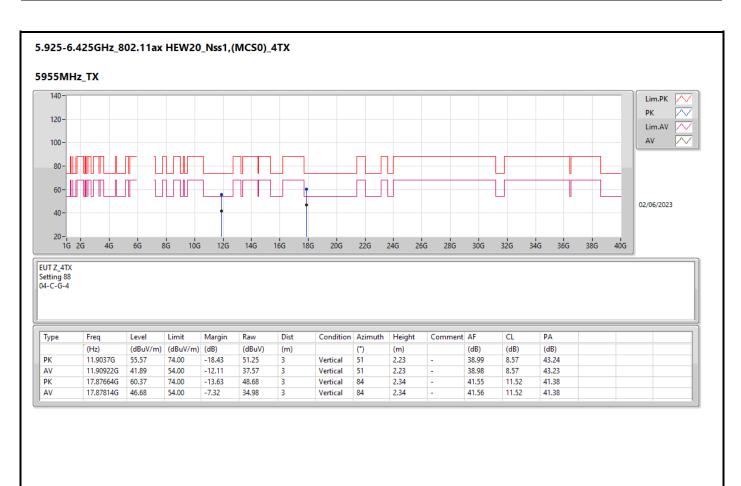




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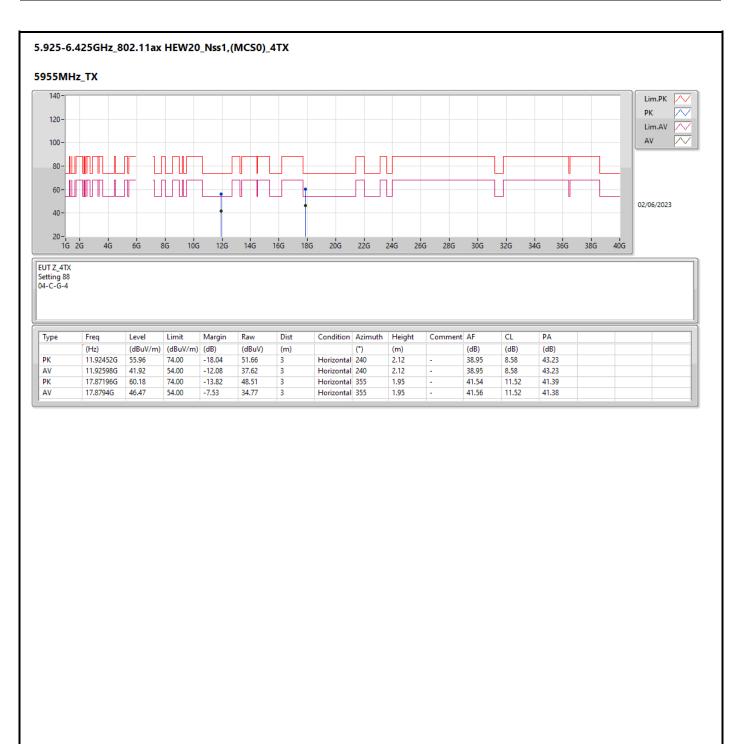




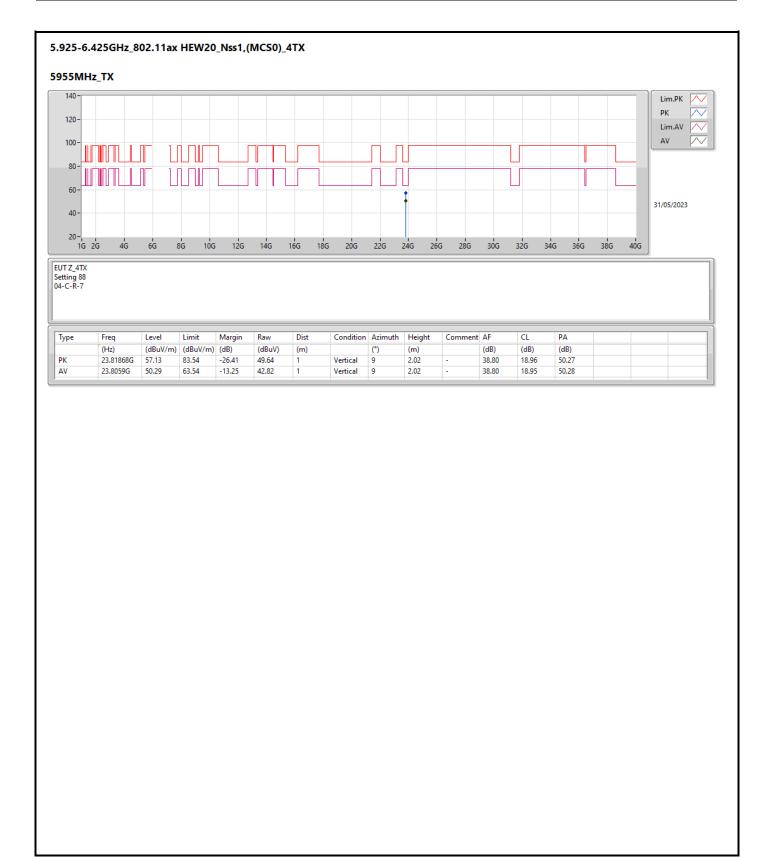
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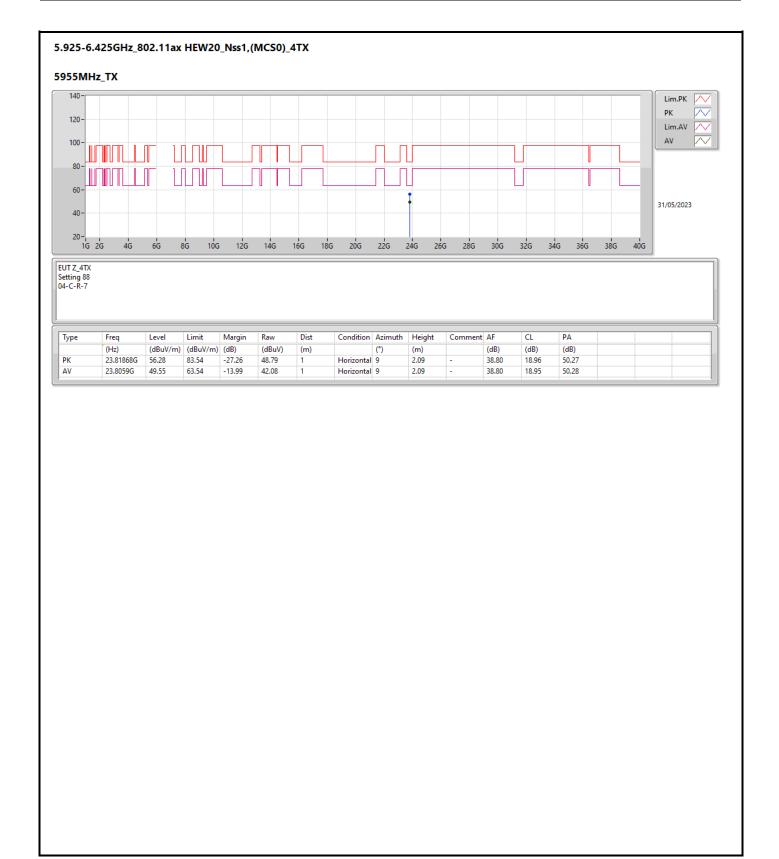




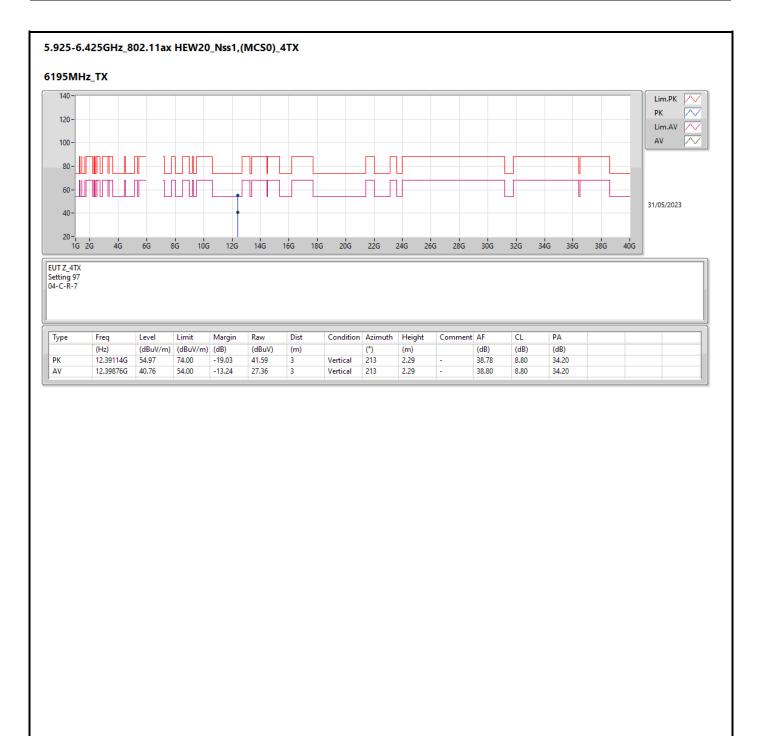








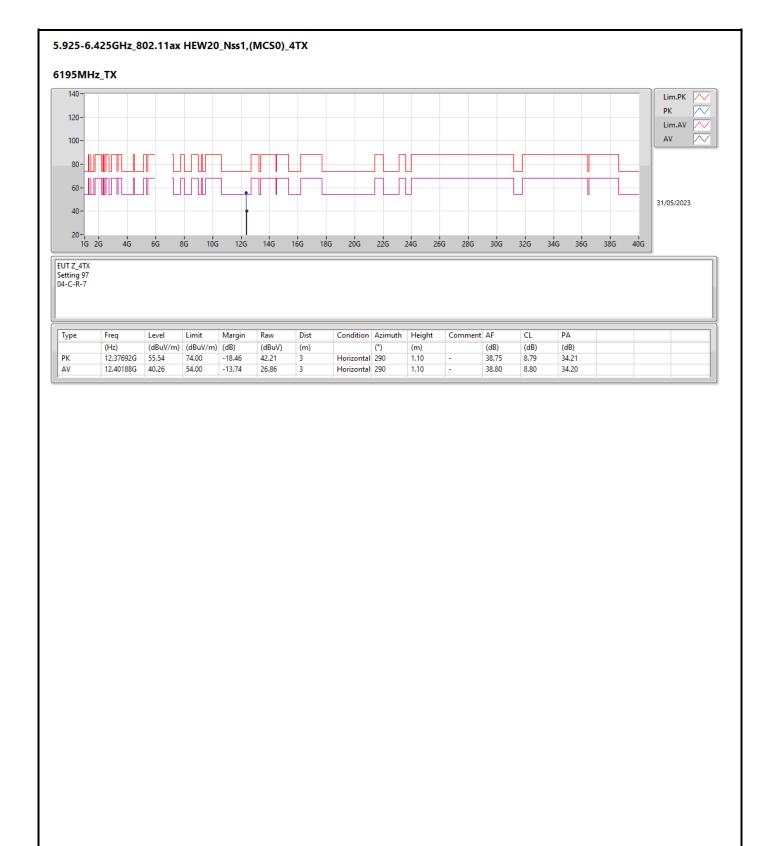




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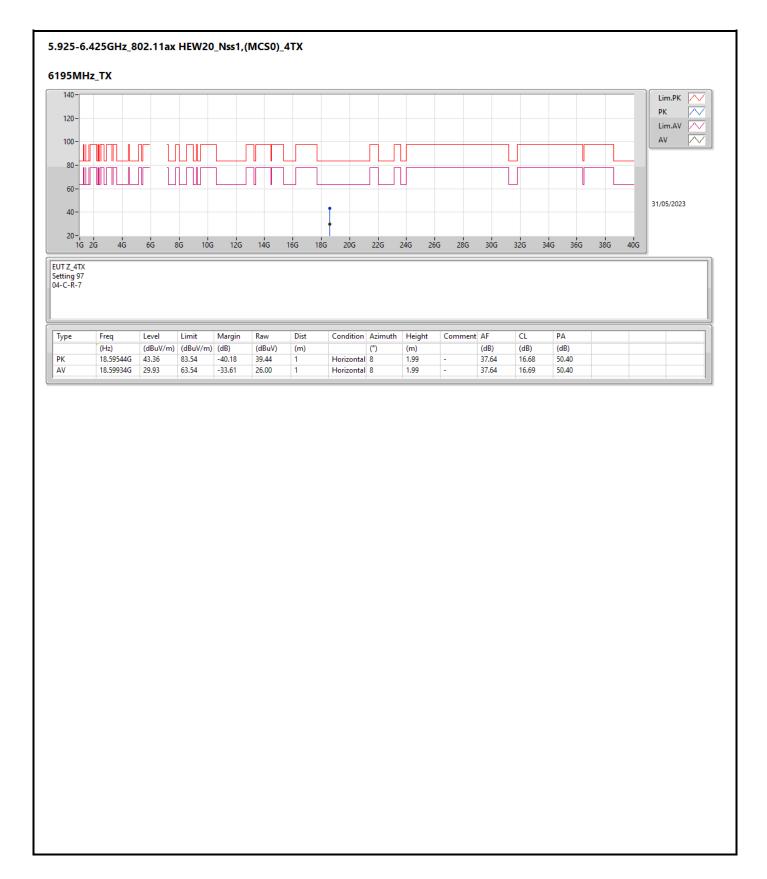




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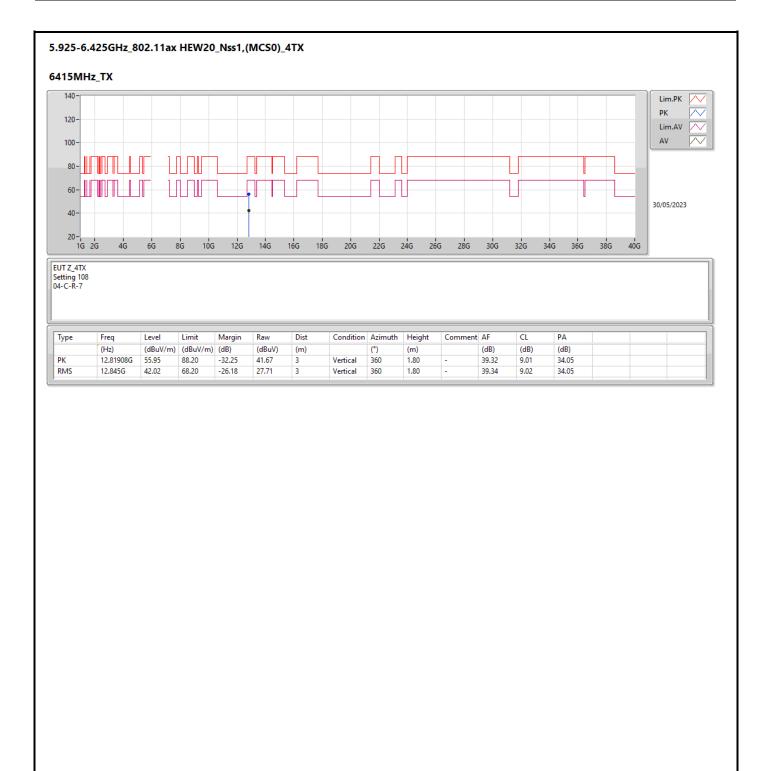




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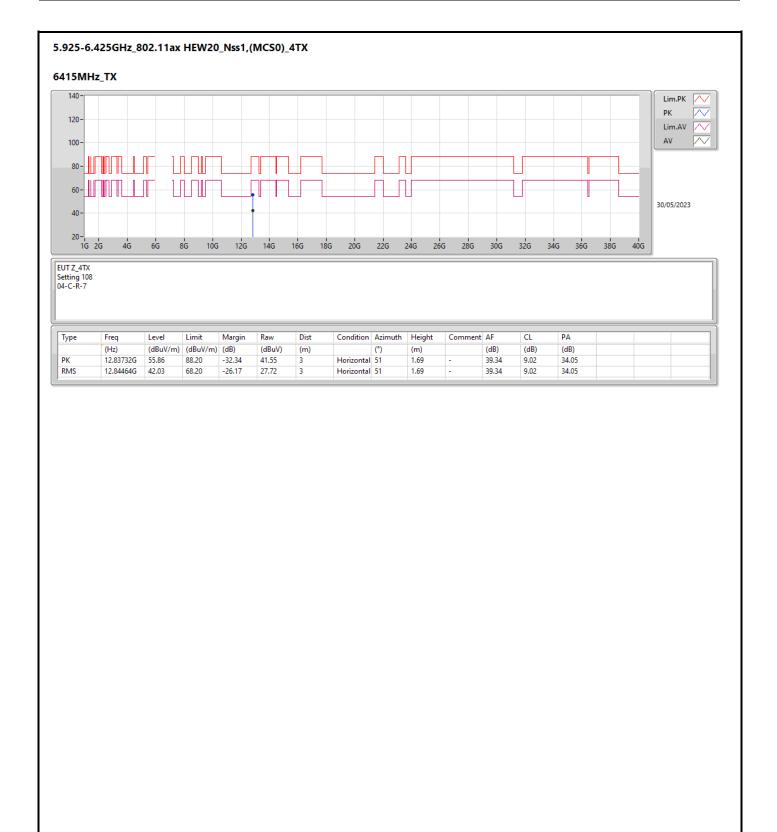




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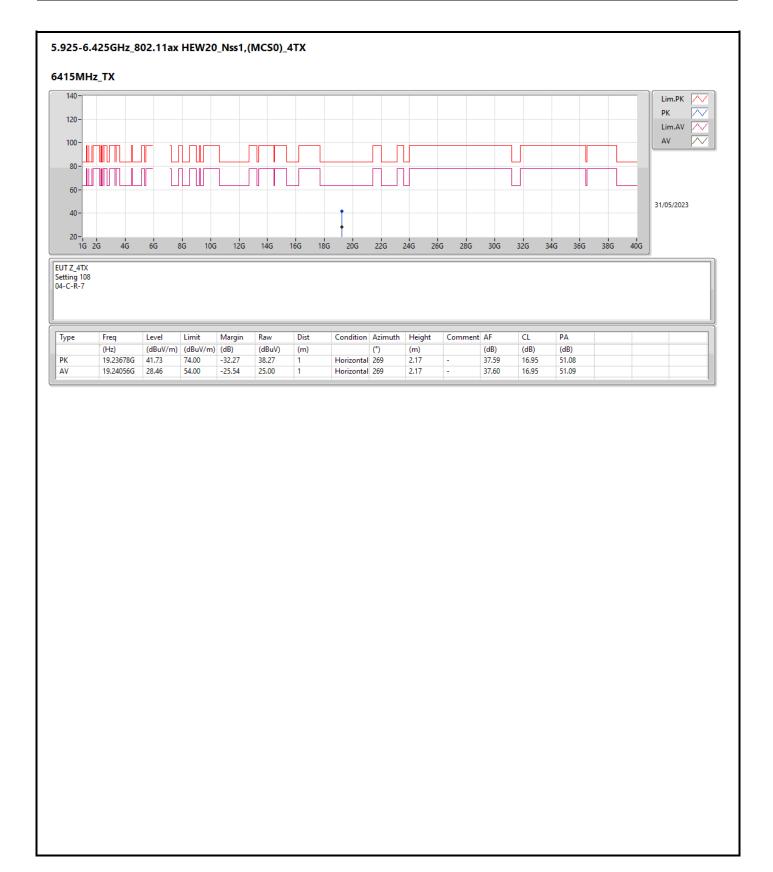
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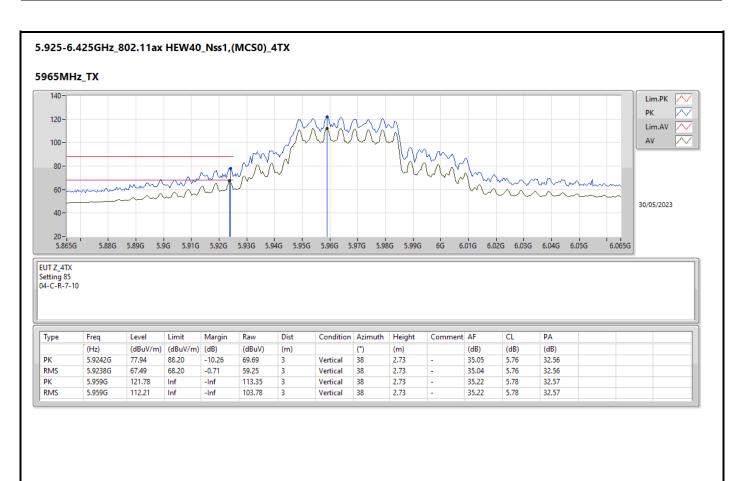




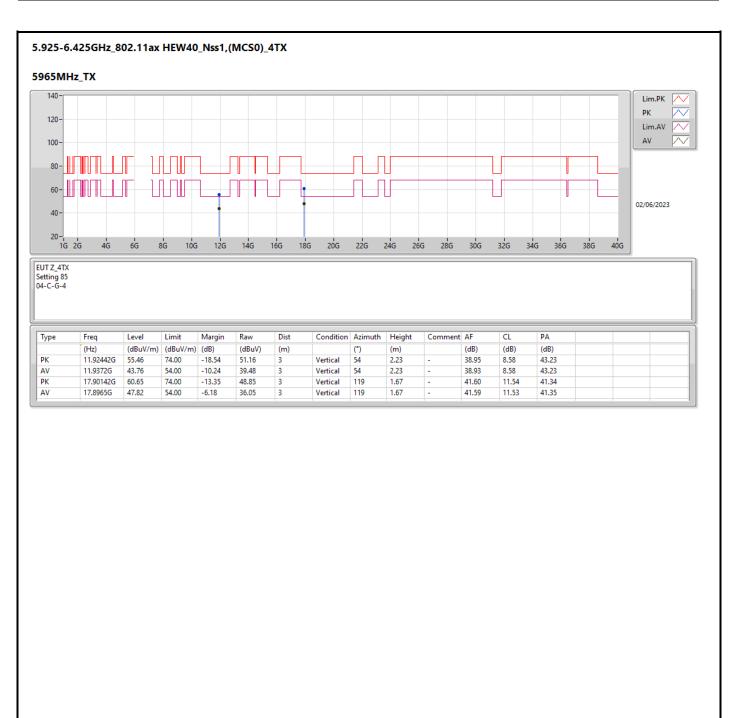








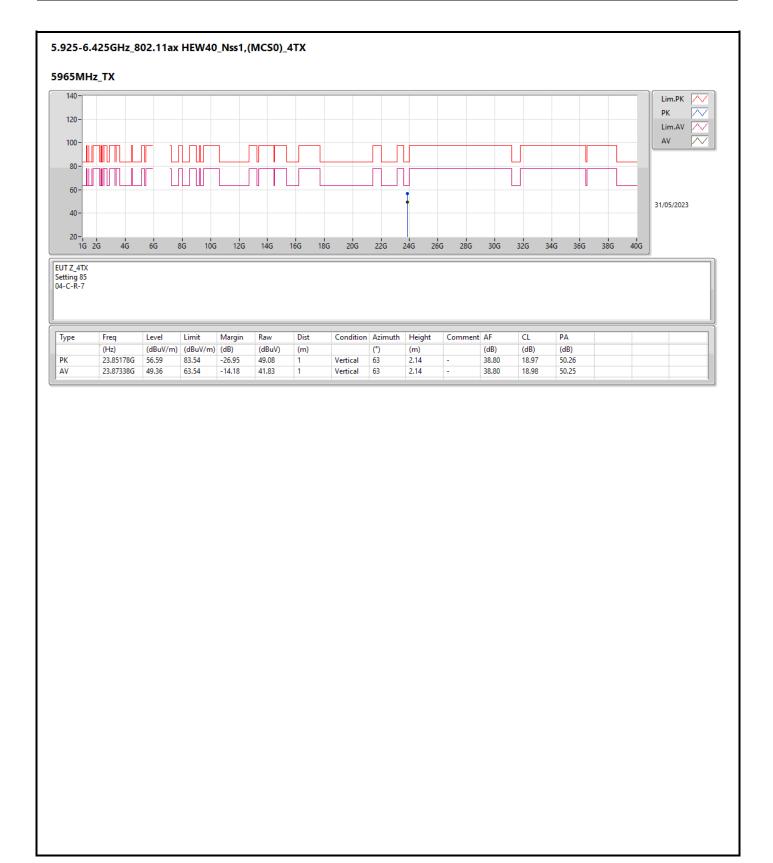












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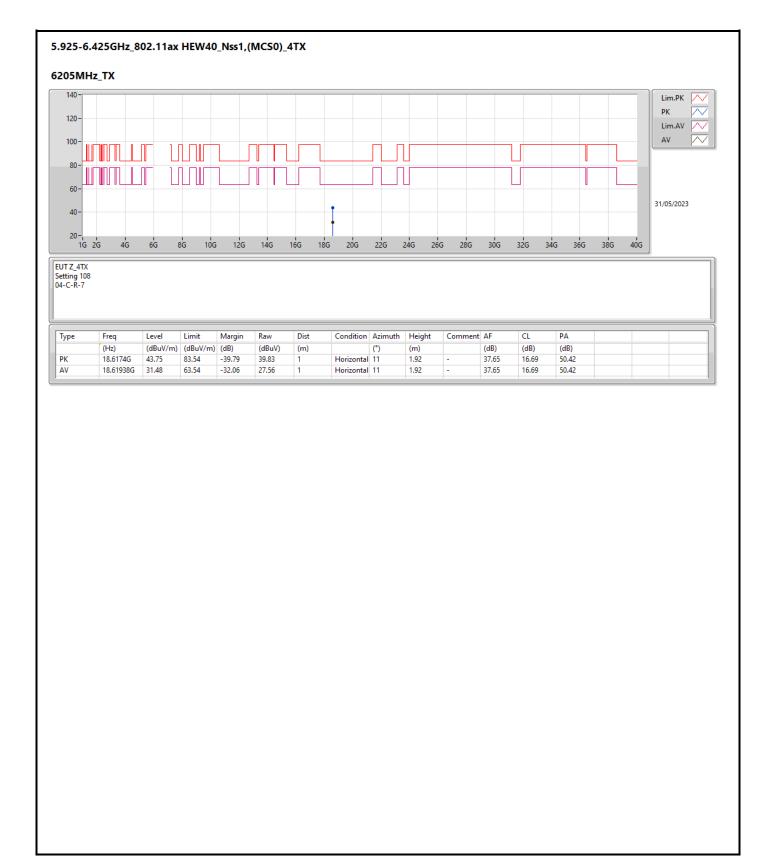




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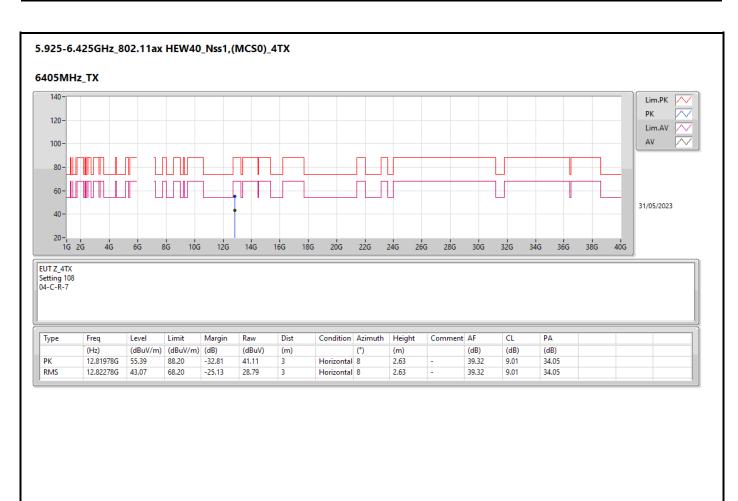








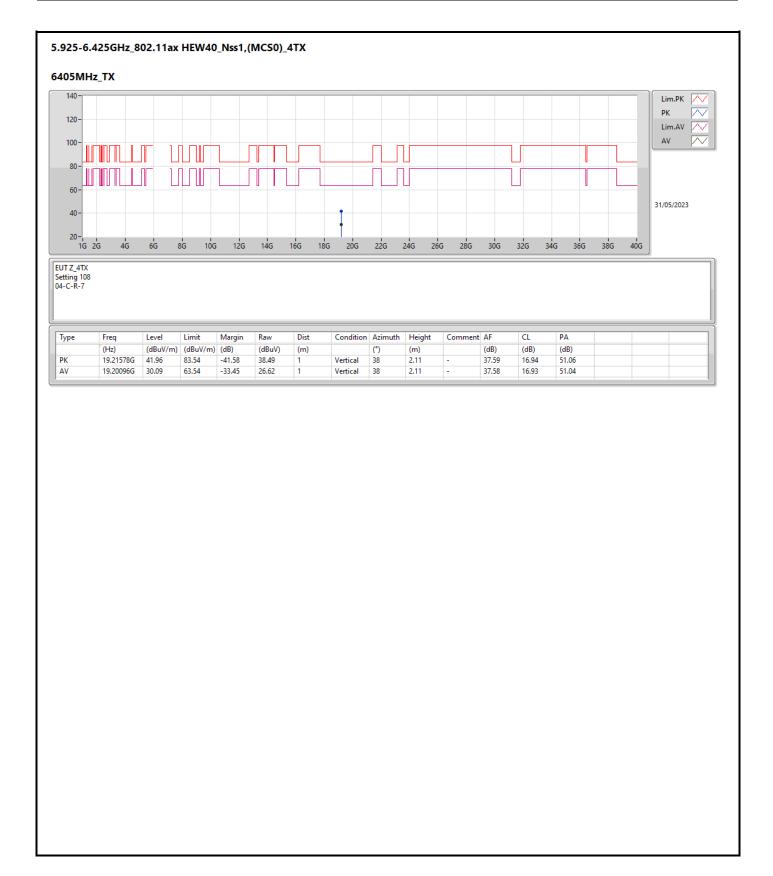




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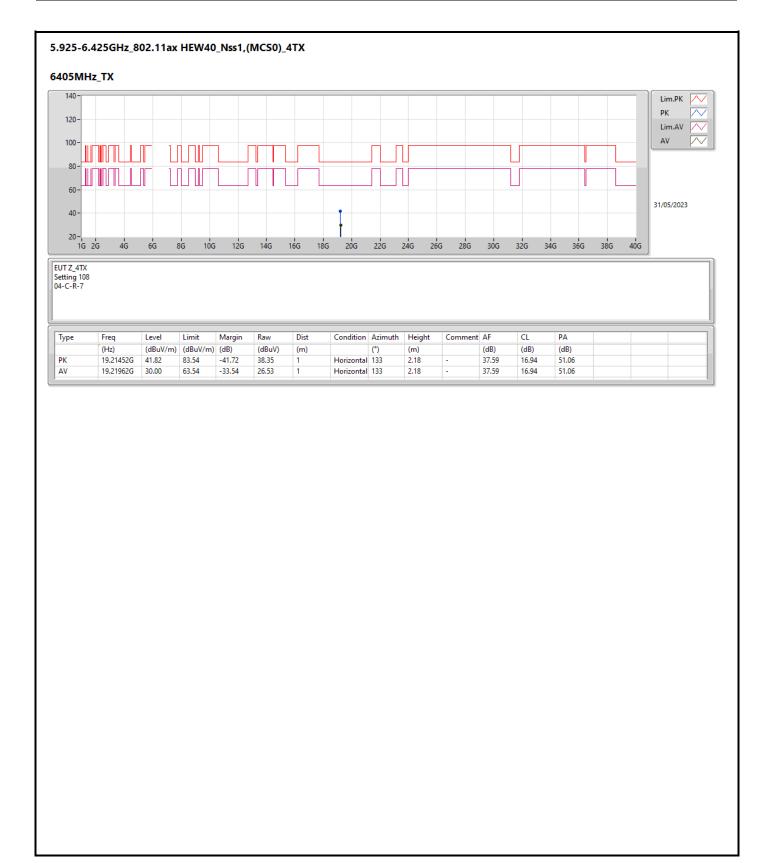




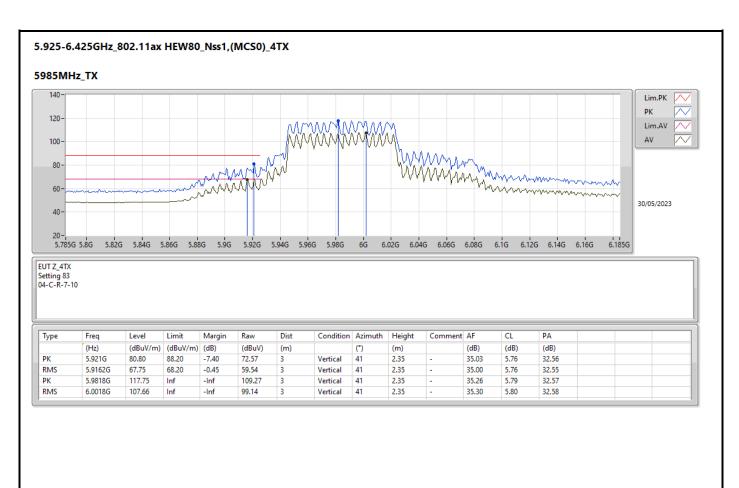
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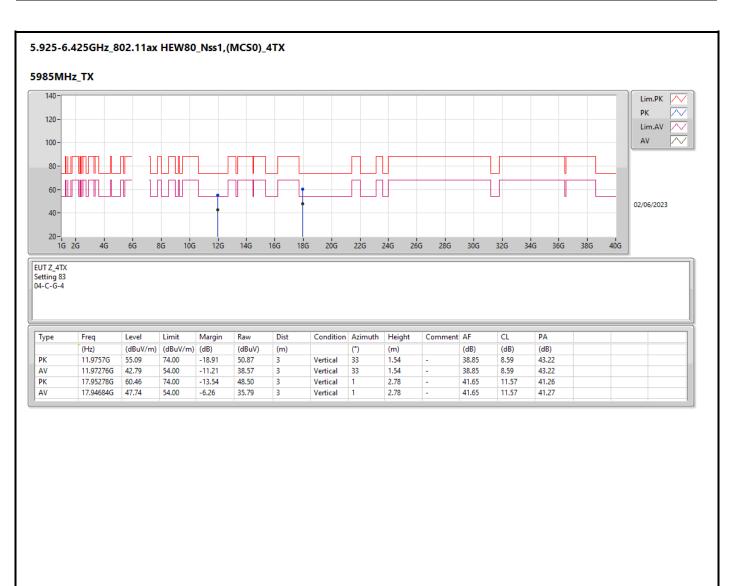




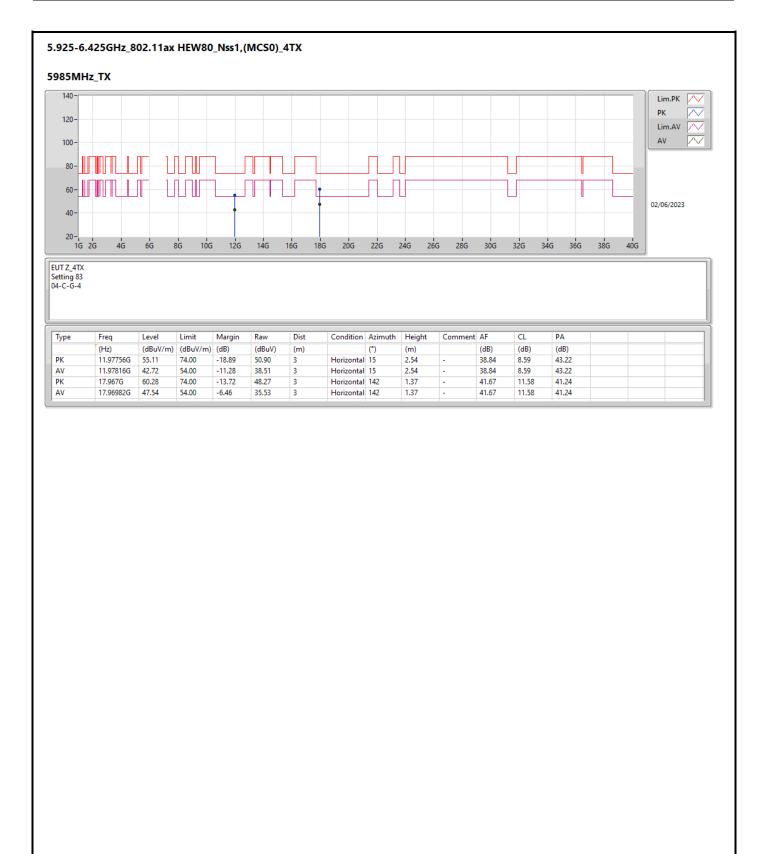












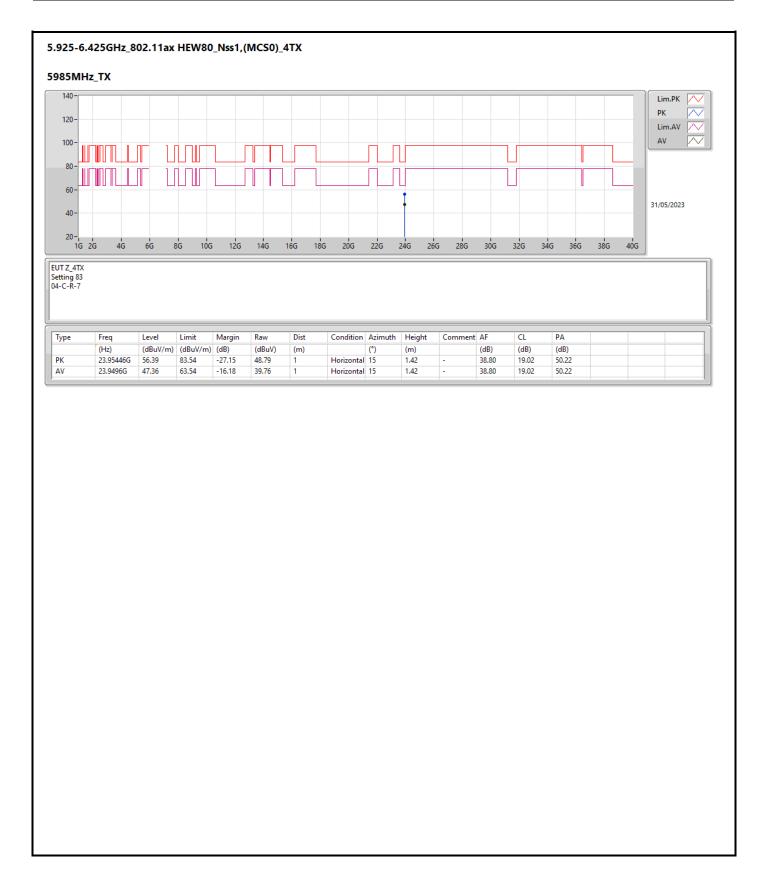
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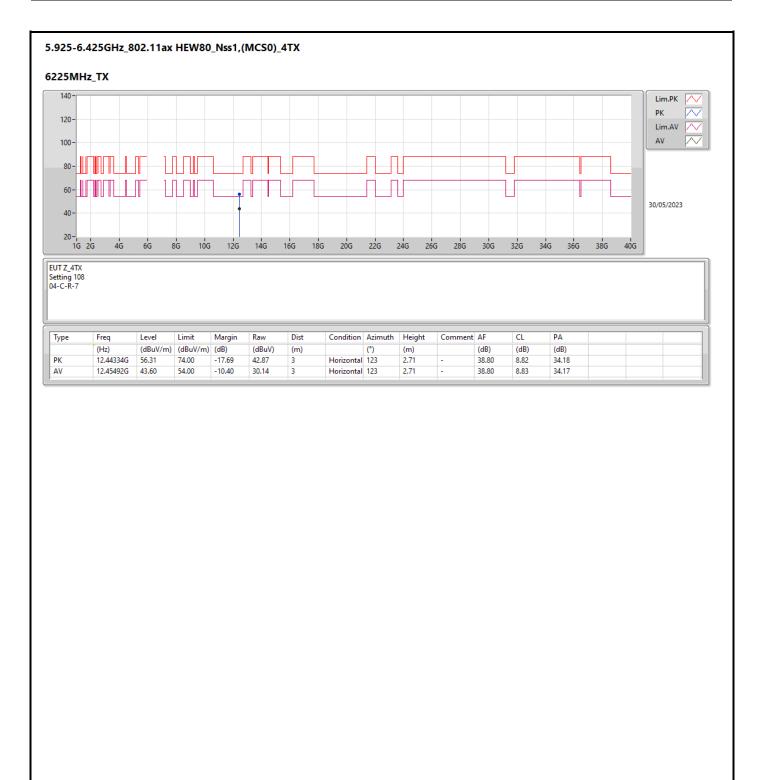








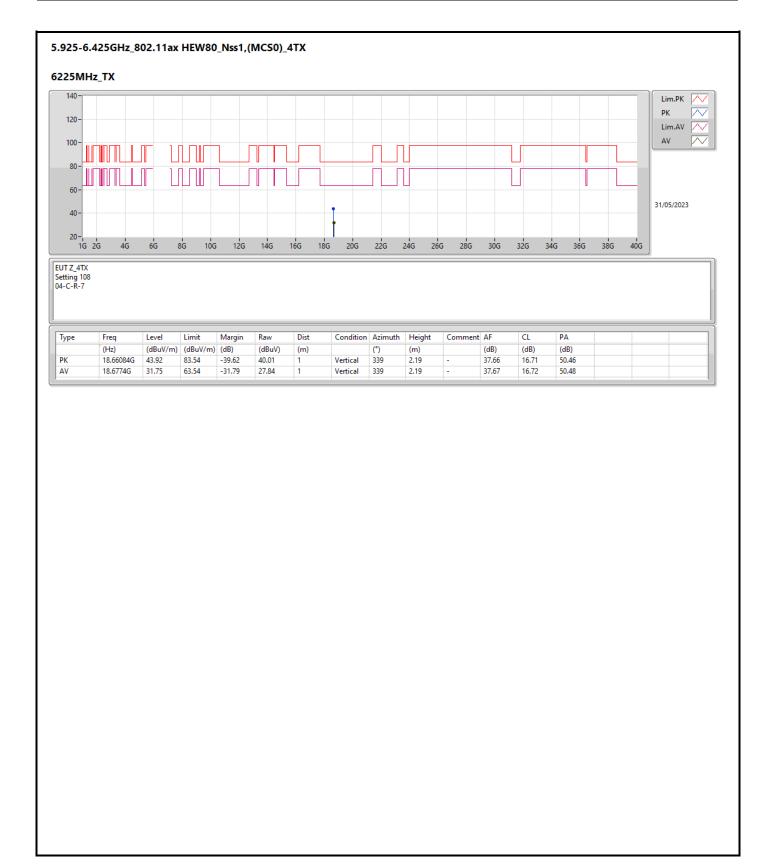




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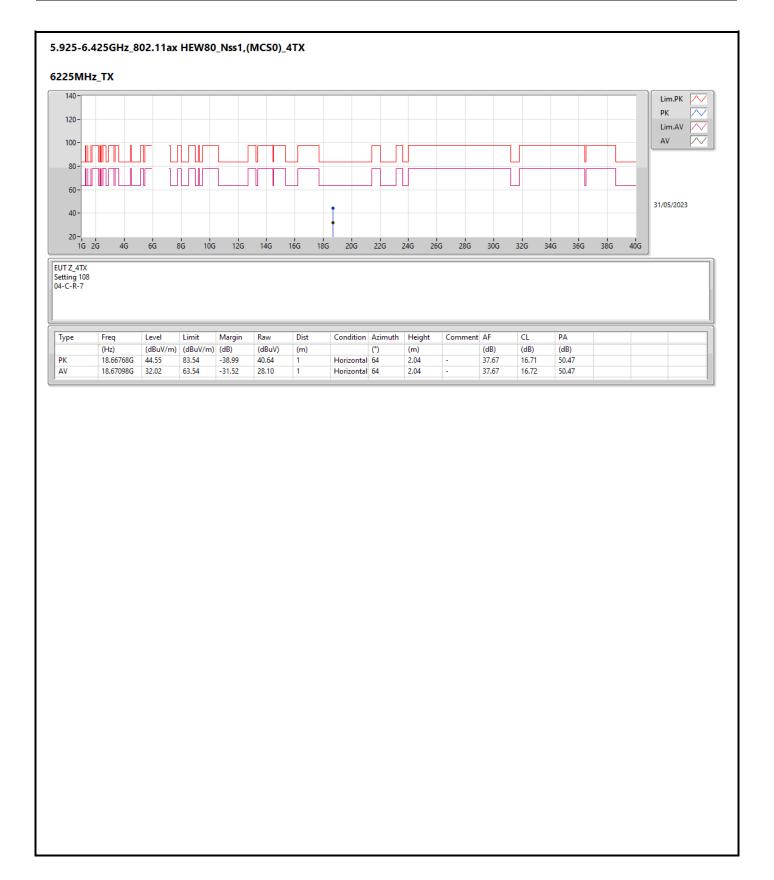




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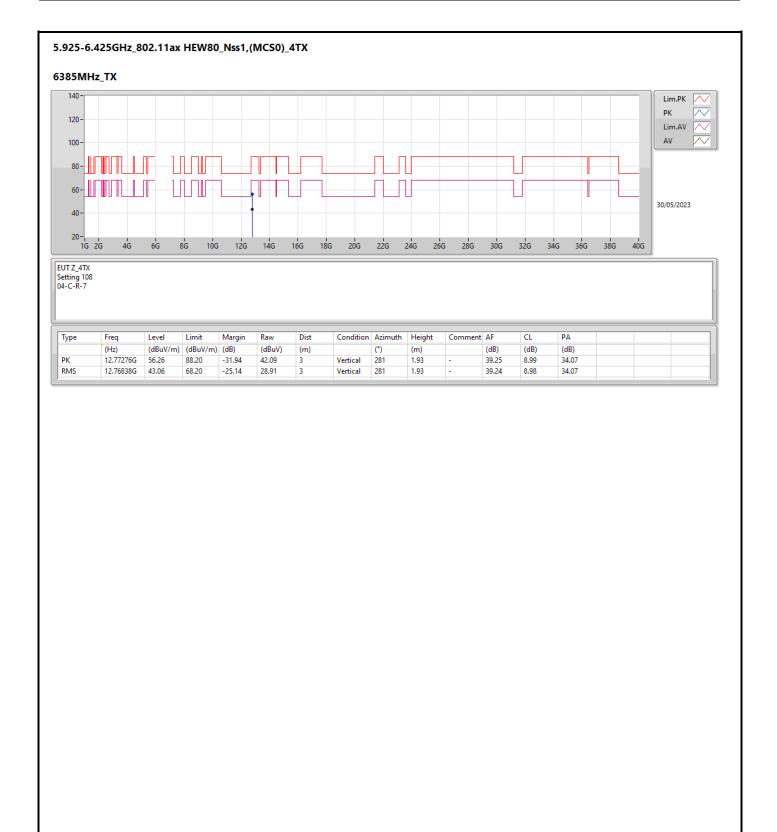




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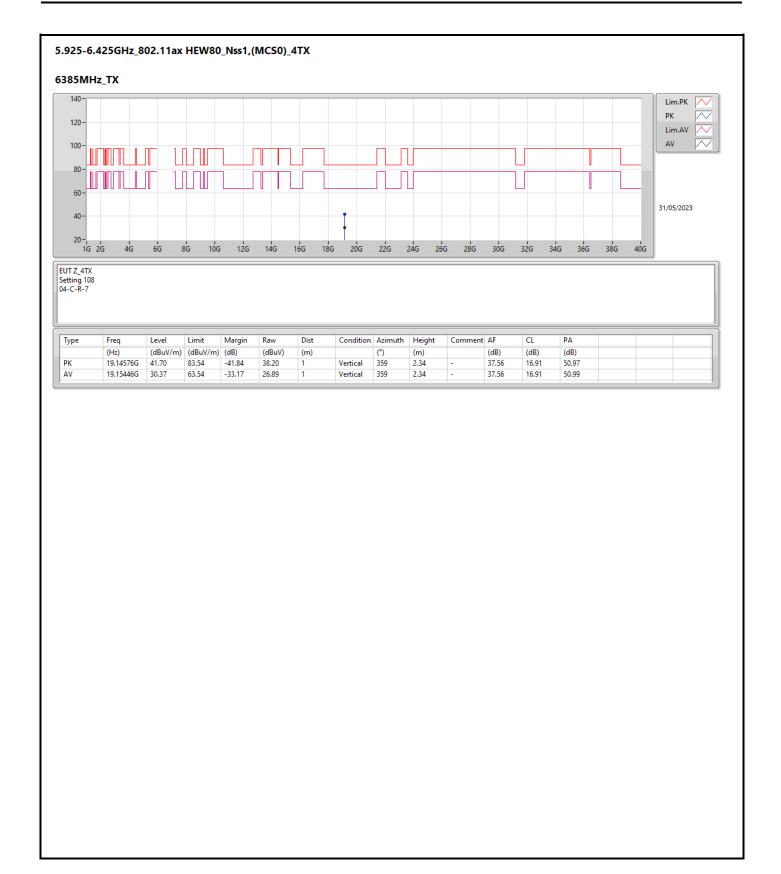


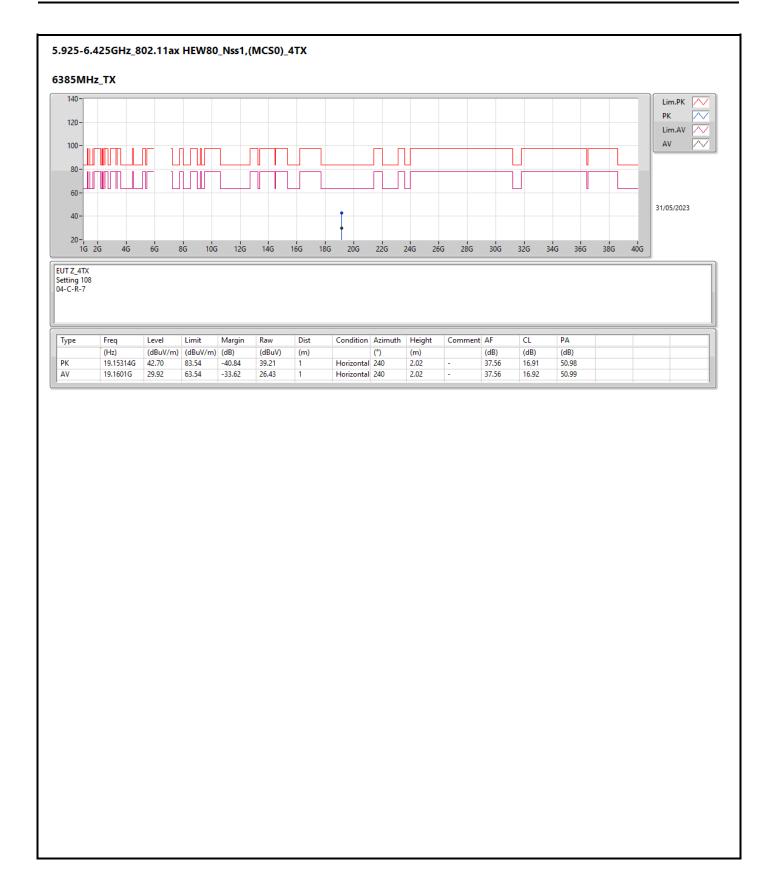
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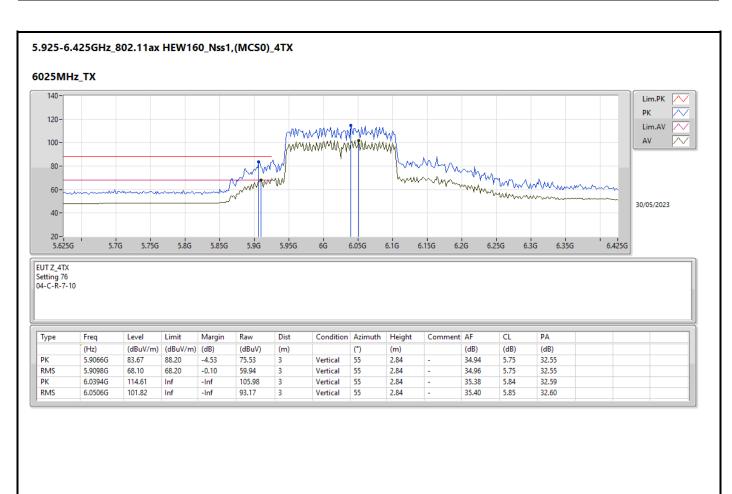








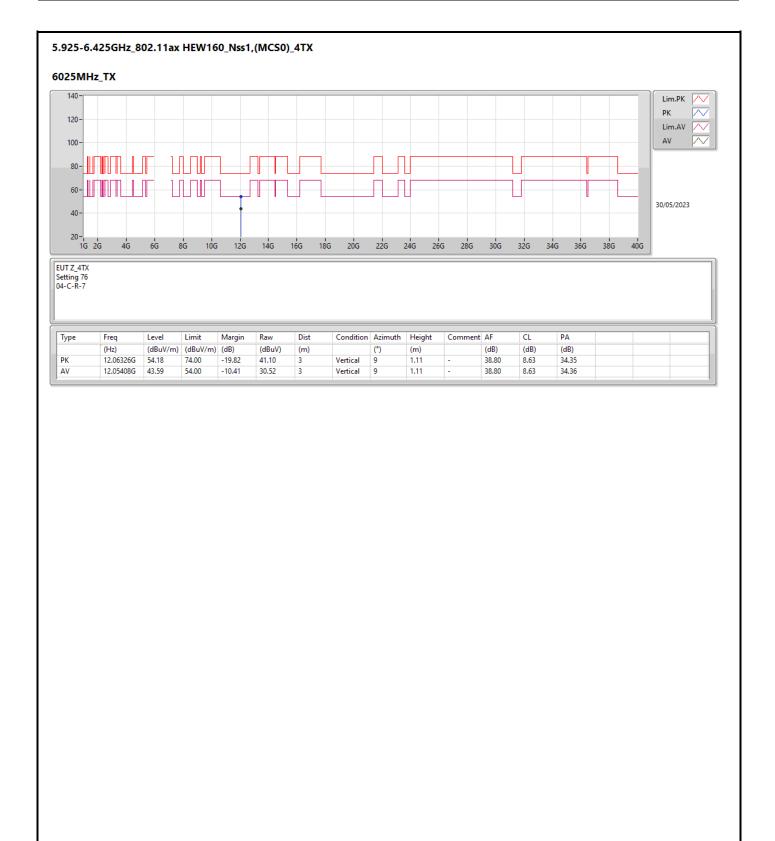




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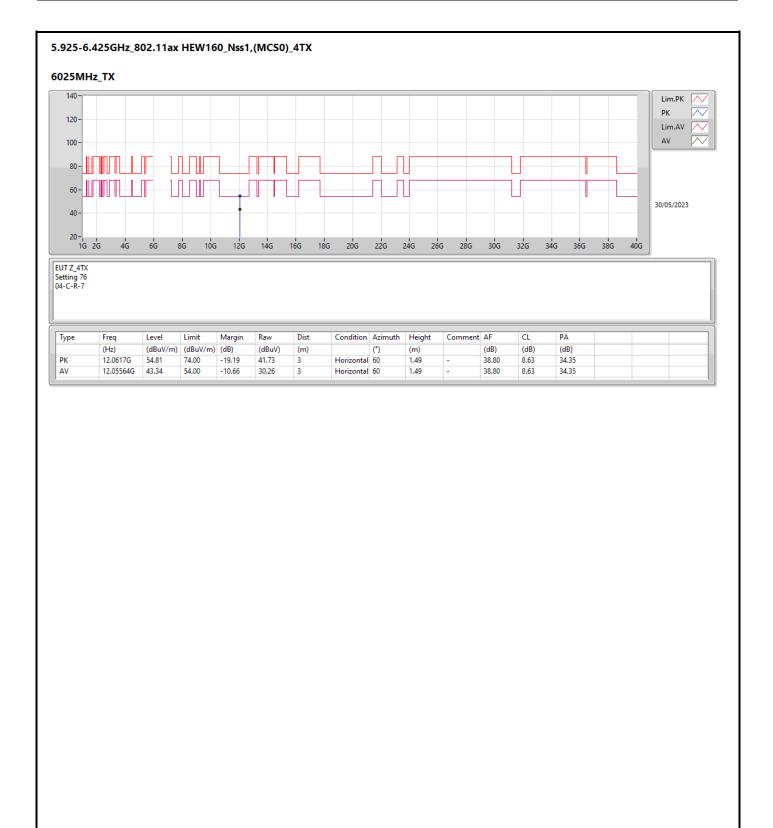




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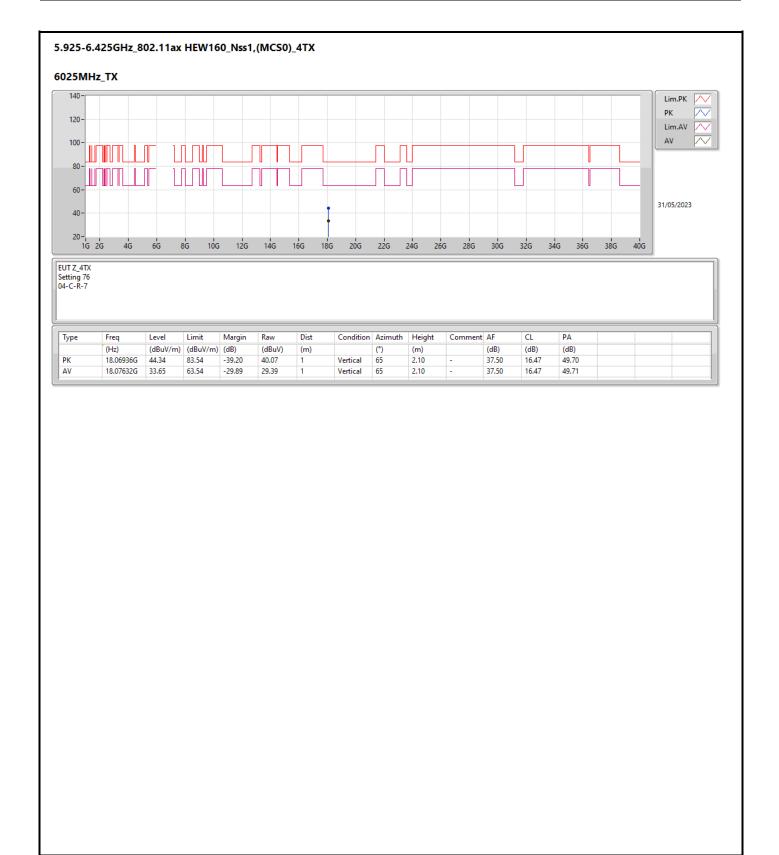




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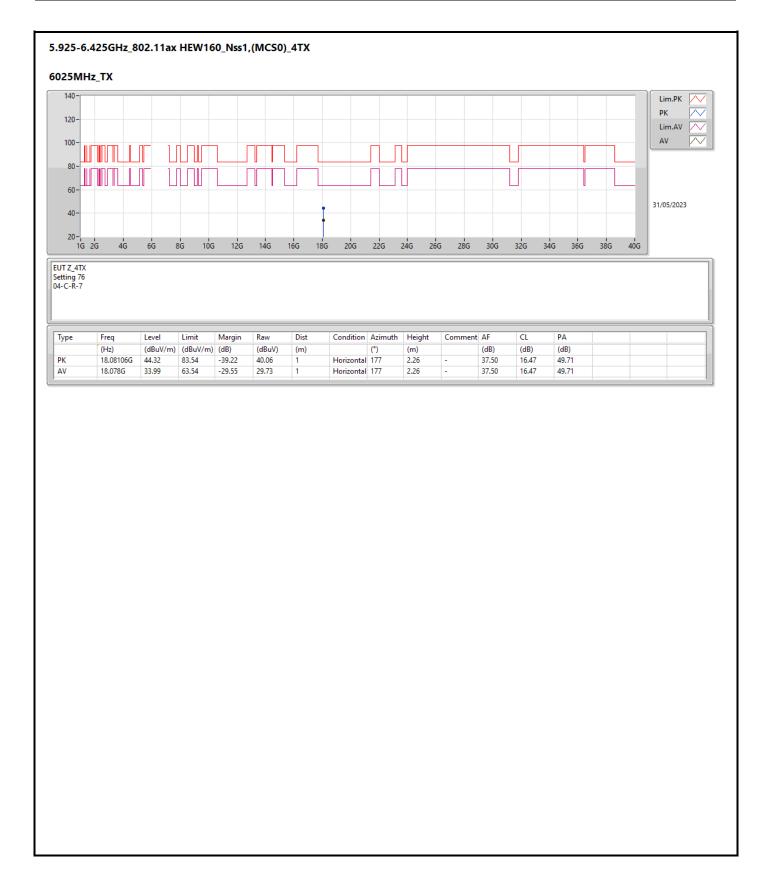




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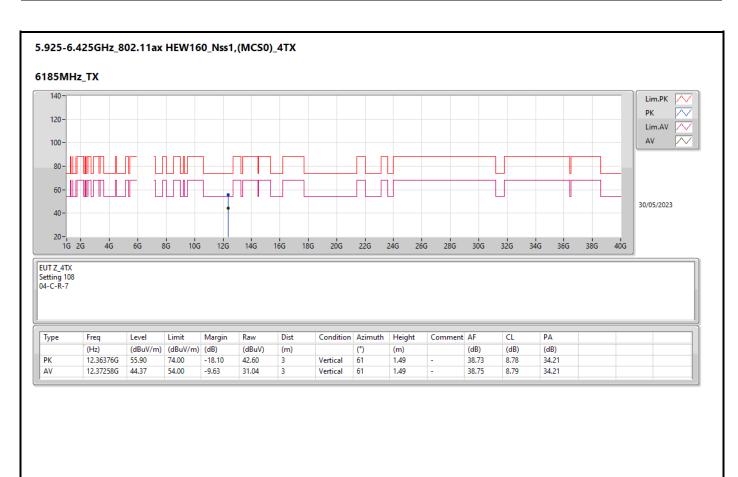




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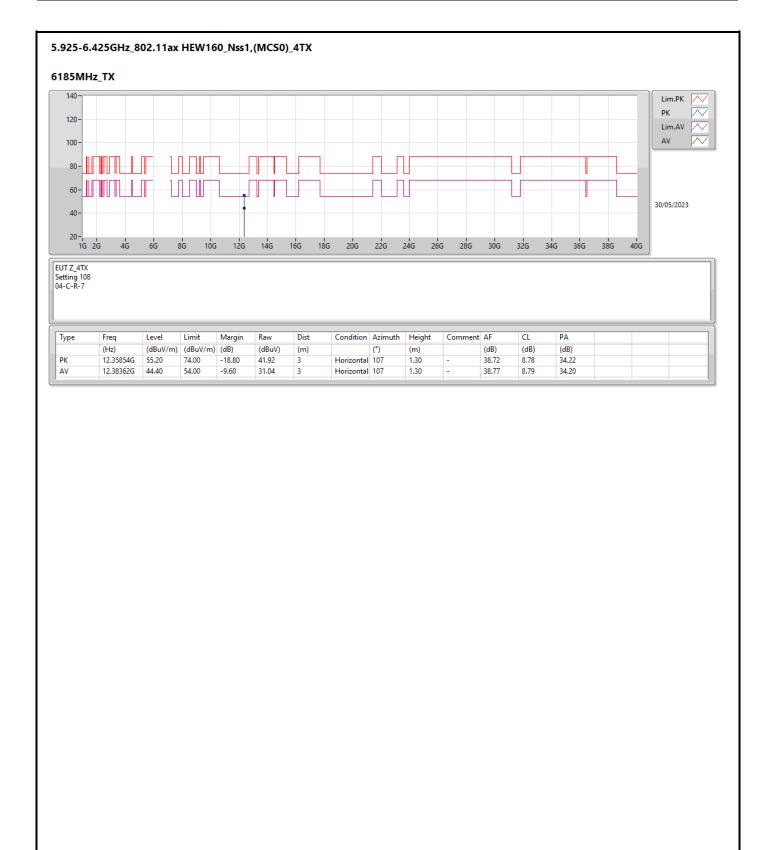




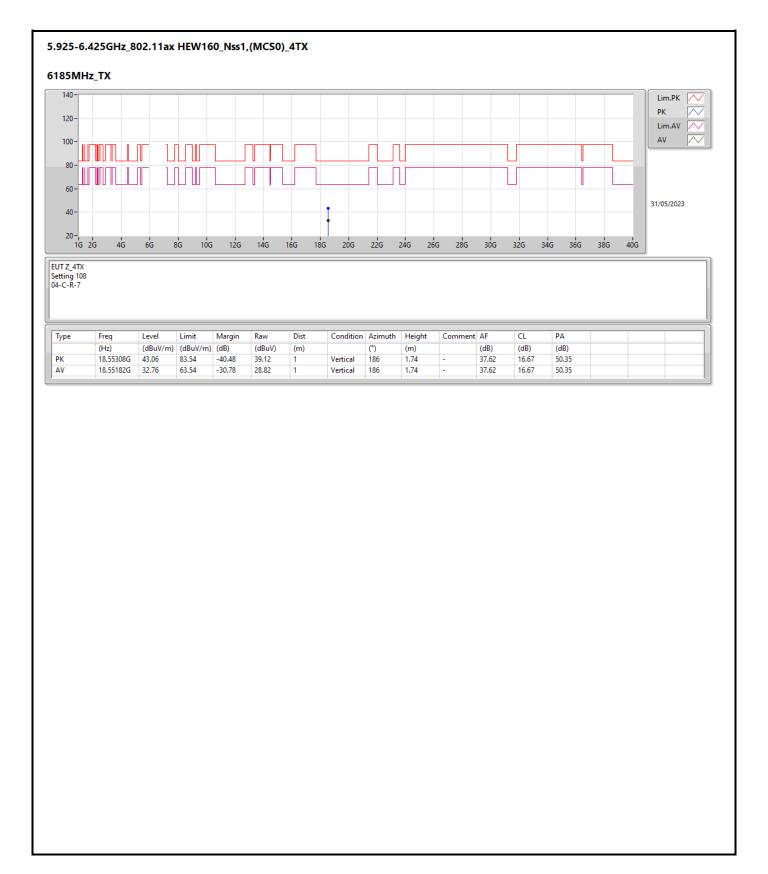
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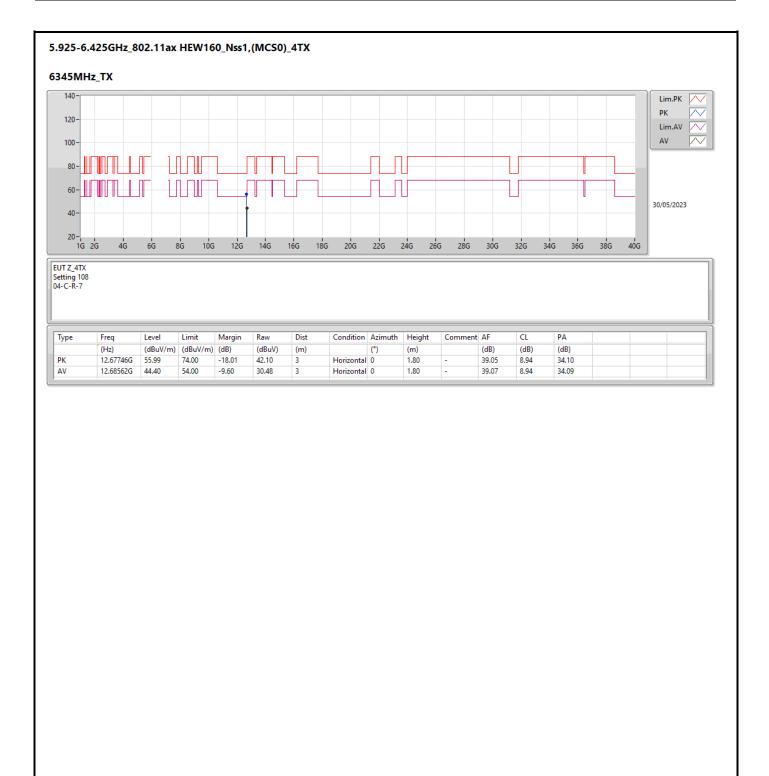
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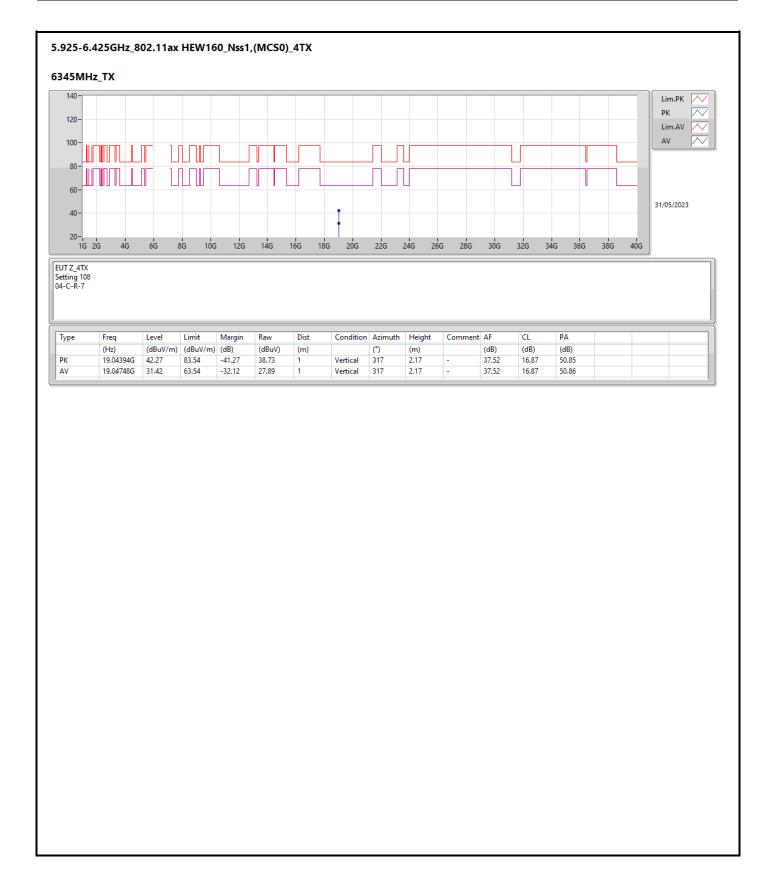




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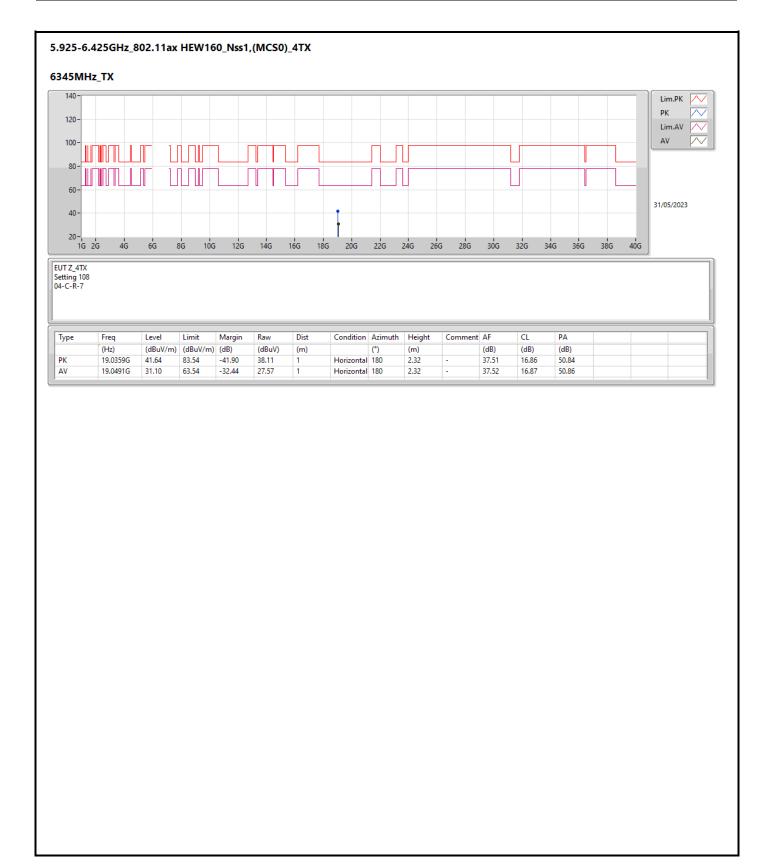




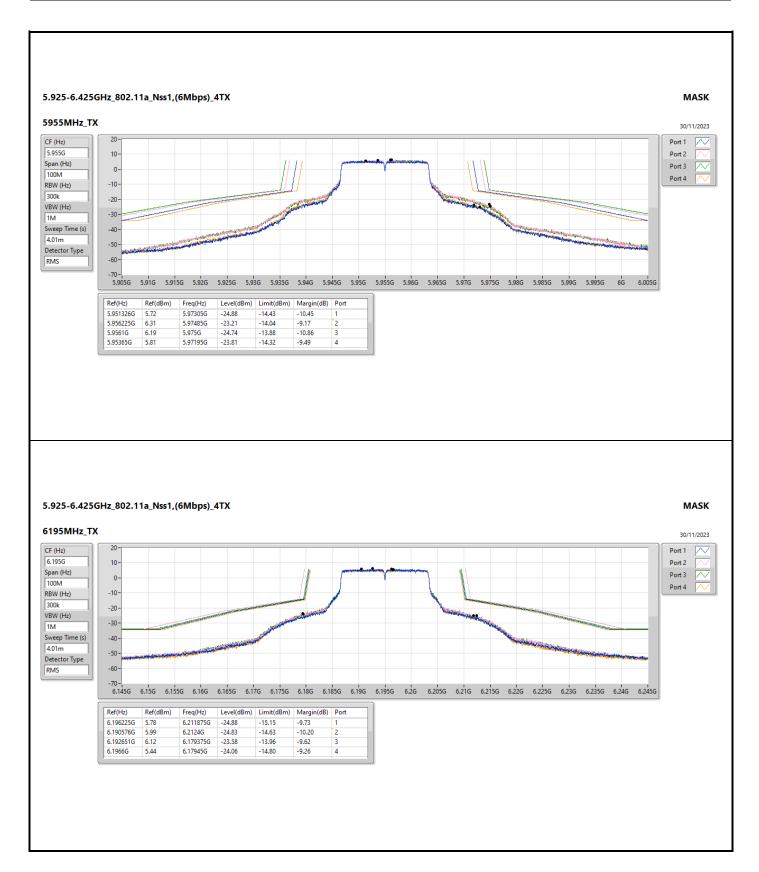
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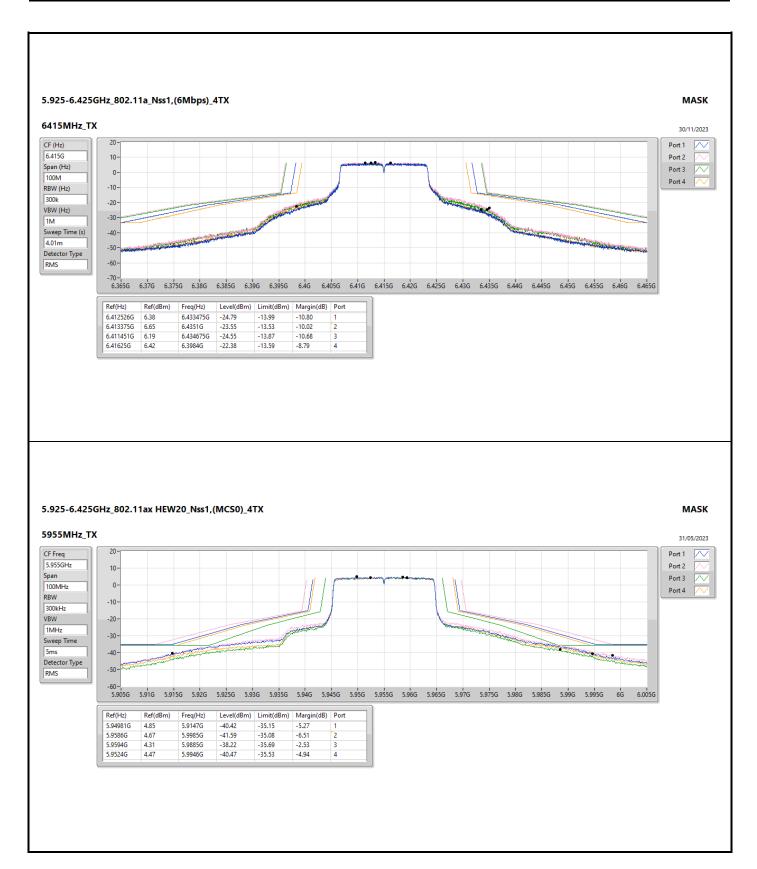




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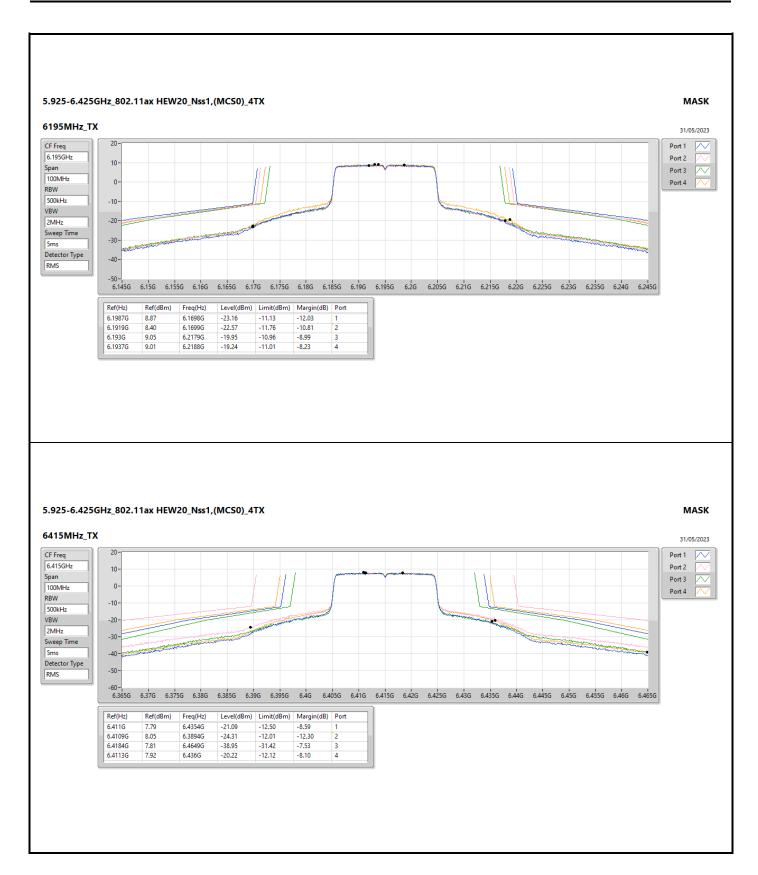




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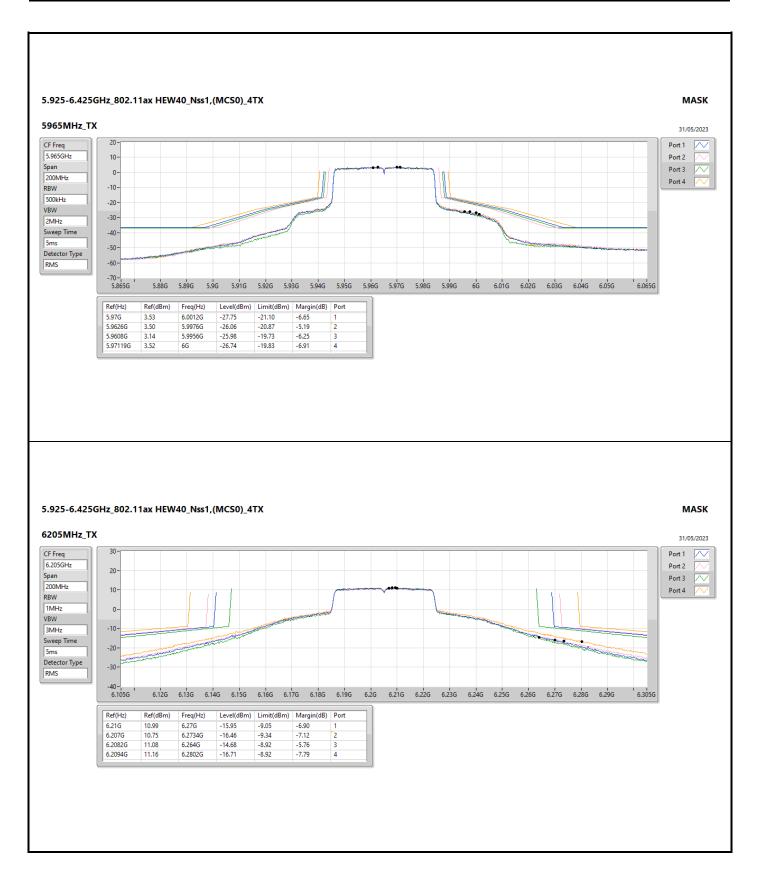




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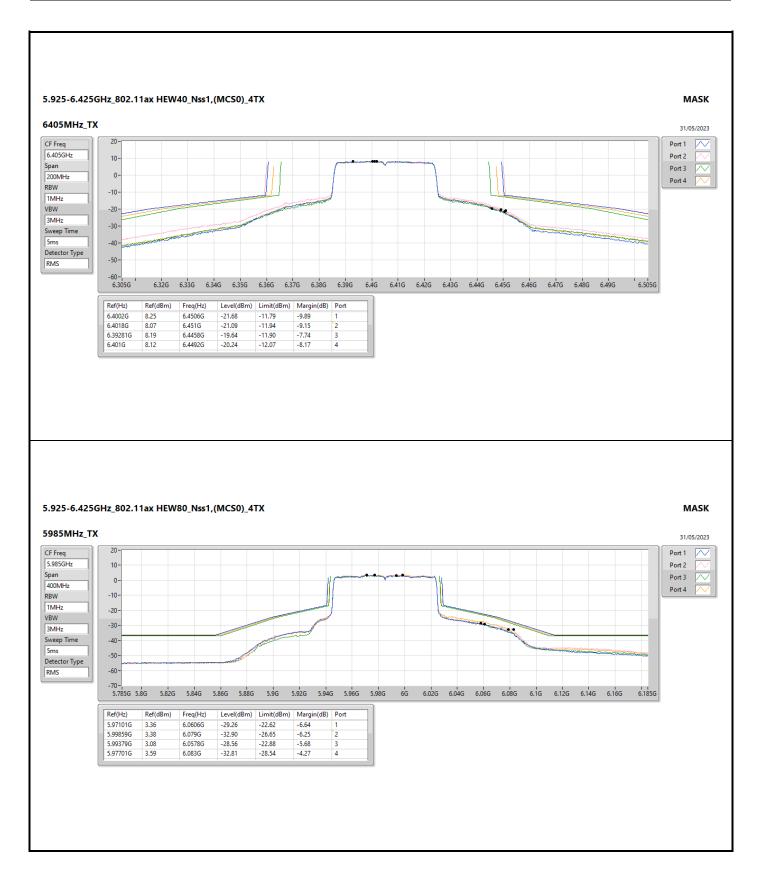




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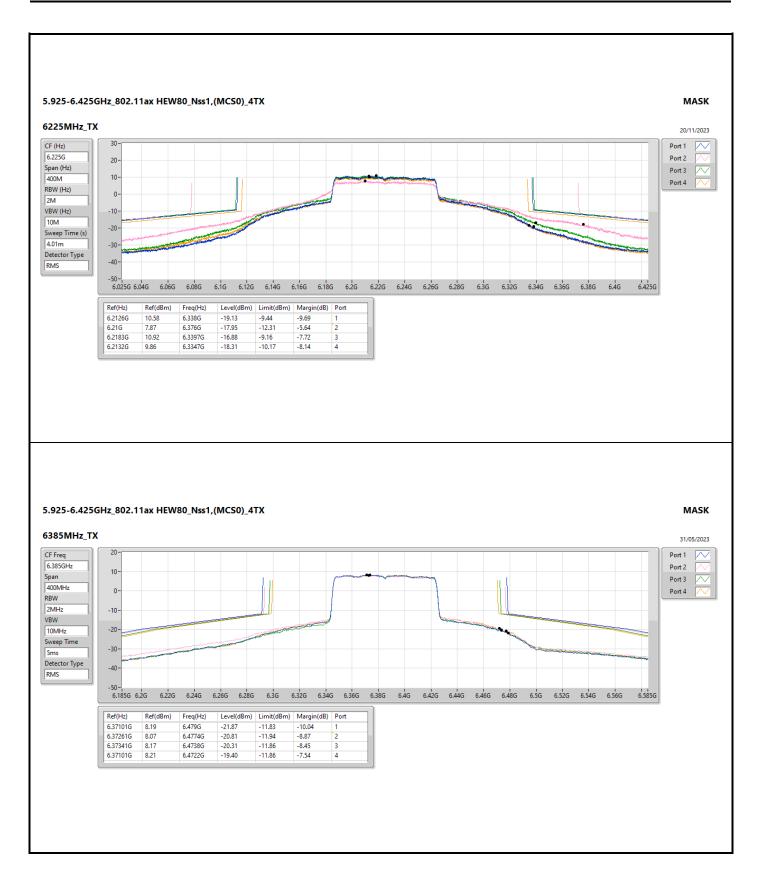




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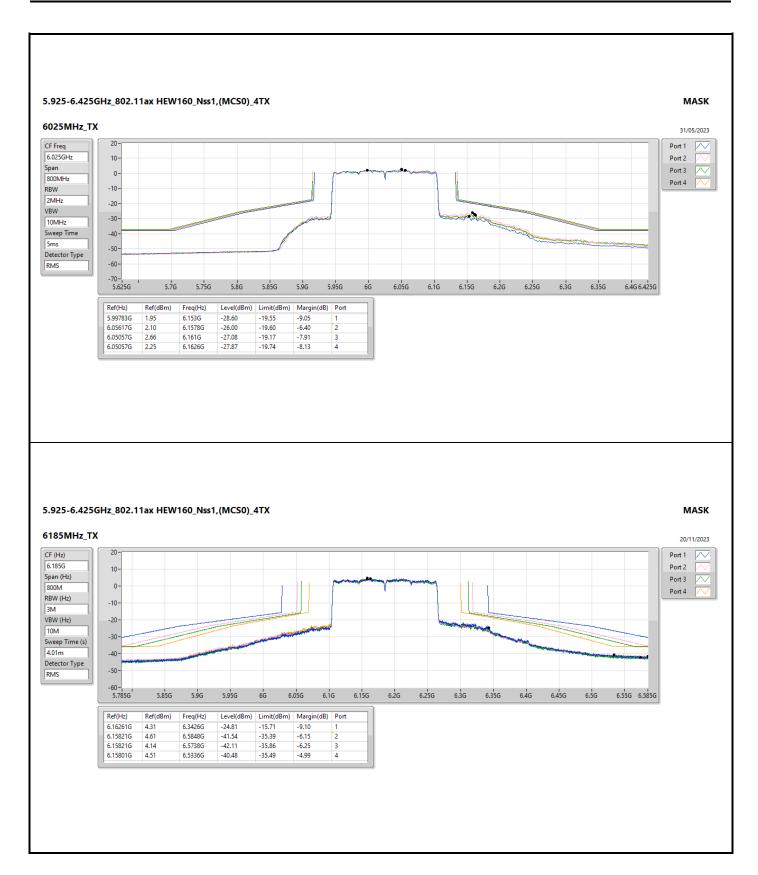




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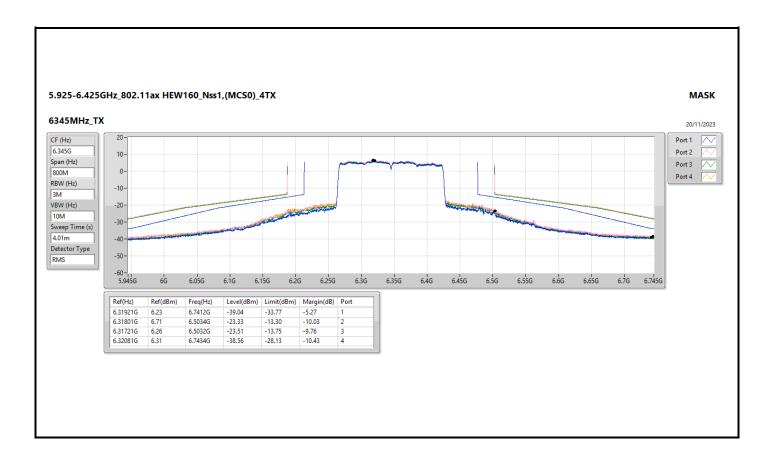
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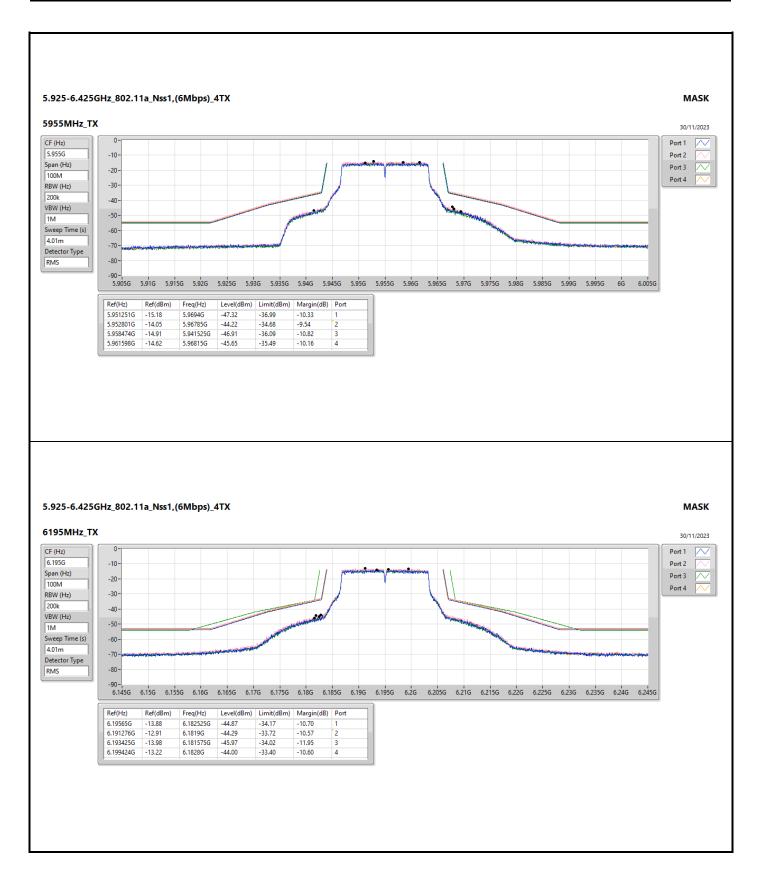
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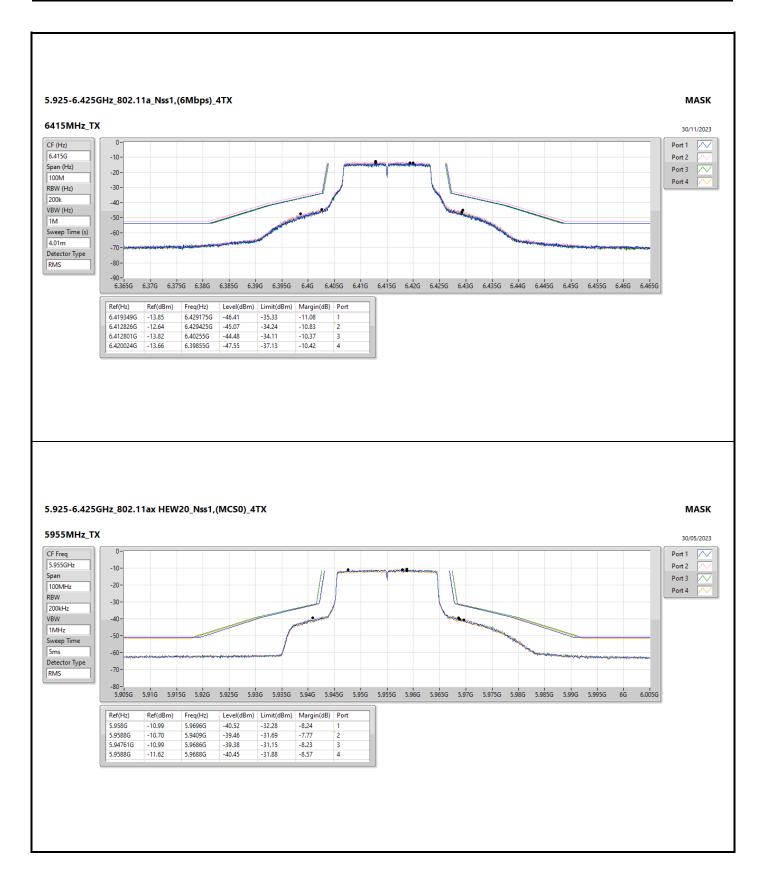




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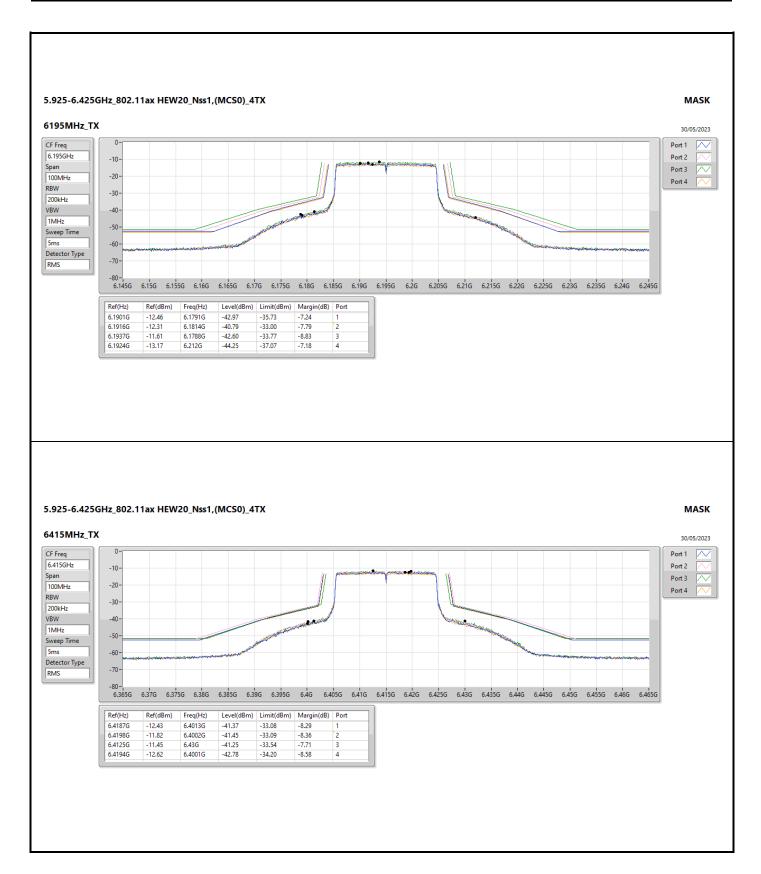




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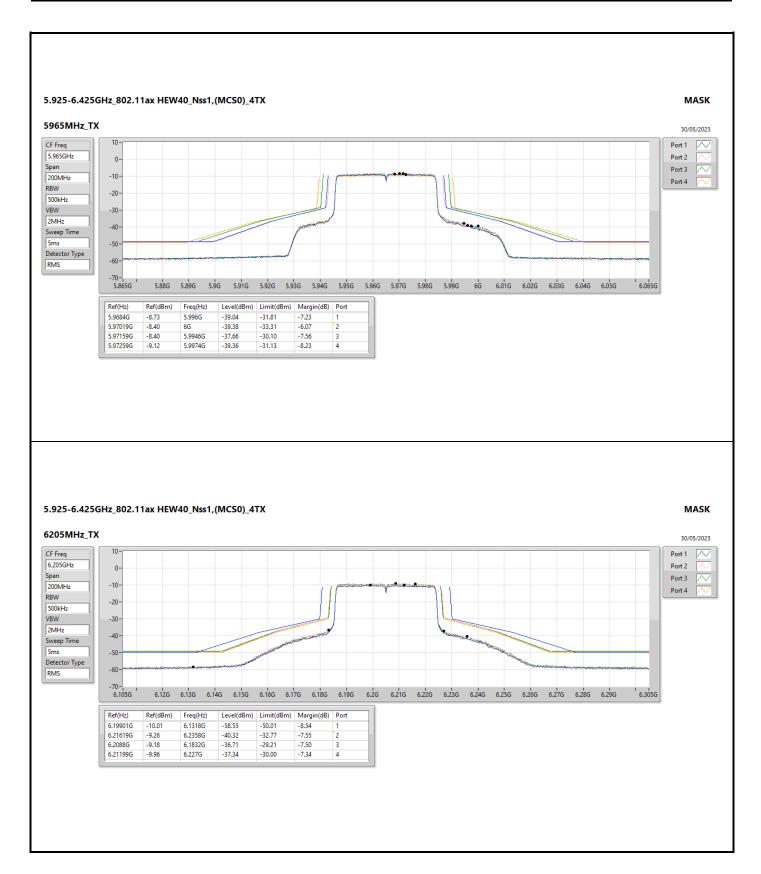




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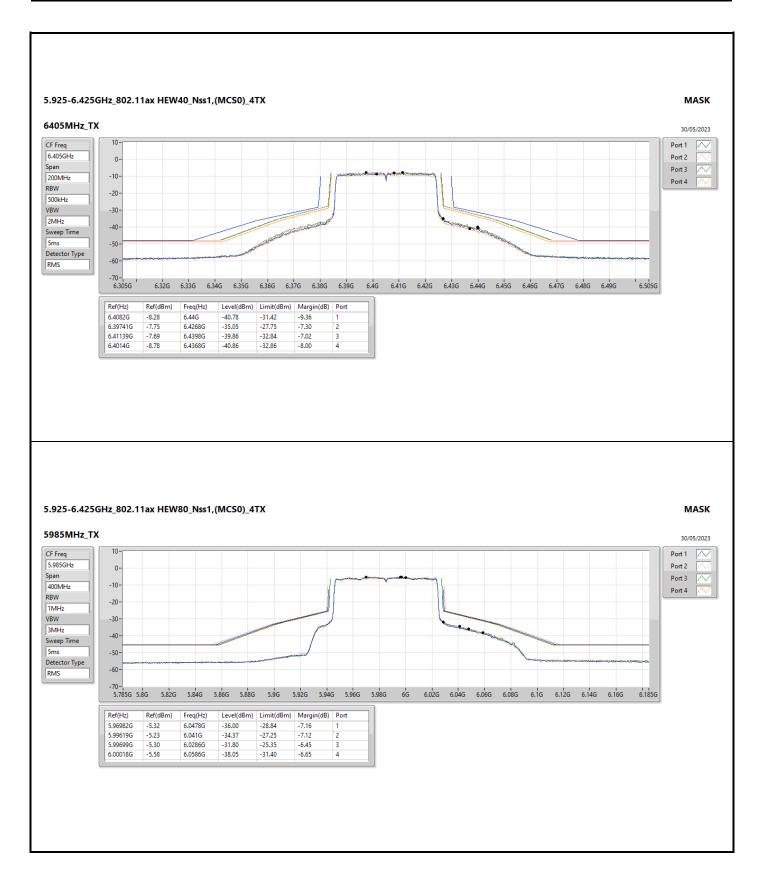
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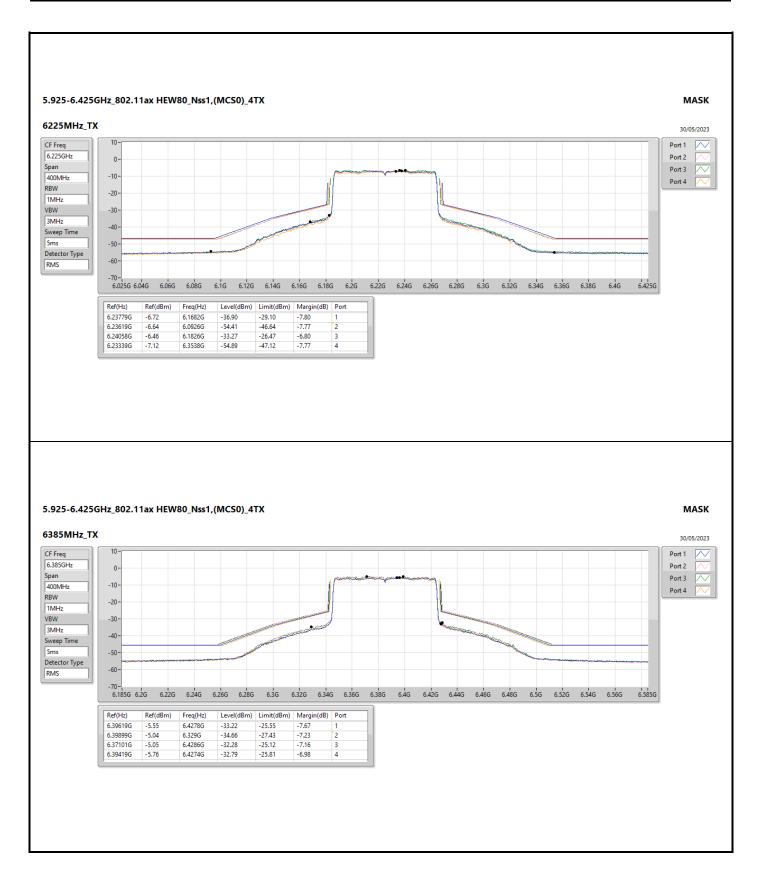




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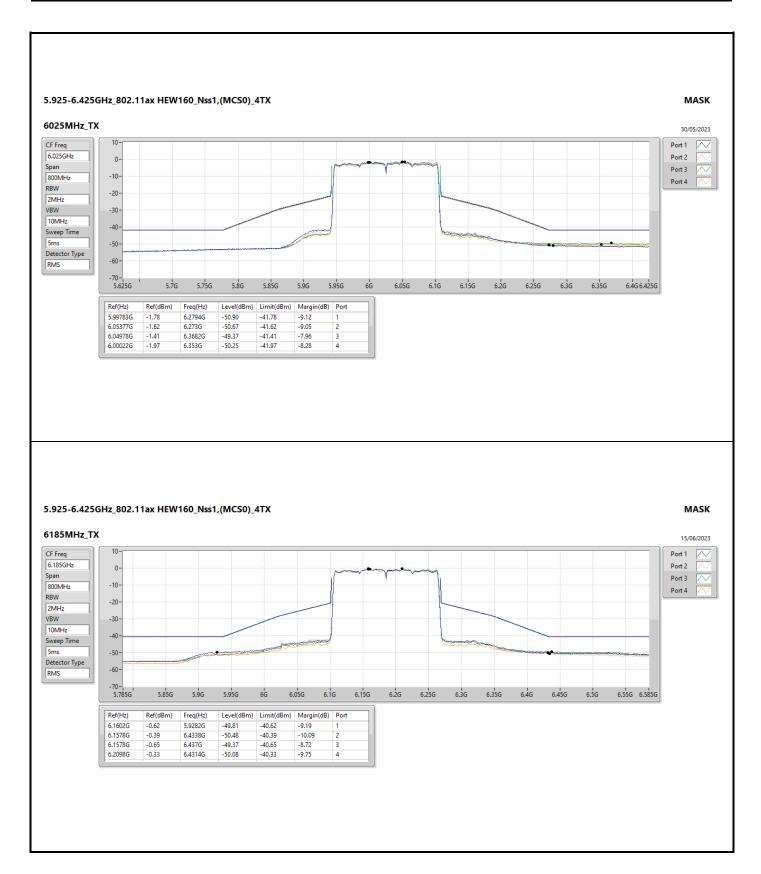
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	Contention Based Protocol Threshold Level 802.11ax HEW20													
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	trequ		EUT Status	Injected AWGN Power (dBm)	Ant Gain (dBi)	Detection Power(dBm)	Detection Limit (dBm)				
	53	20	6215	Center	6215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

•			Conto	ention B	ased Pro	tocol Threshold	l Level 802.11ax HE	EW160			
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)	
	47	160	6185	Laur	6110	OFF	-72.13	6.87	-79.04	≤ -62	
				Low		Minimal	-73.13	6.87	-80.00	≤ -62	
				edge		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	
				High 6260 edge	6260	OFF	-73.13	6.87	-80.07	≤ -62	
						Minimal	-74.13	6.87	-81.00	≤ -62	
						ON	-75.13	6.87	-82.00	≤ -62	

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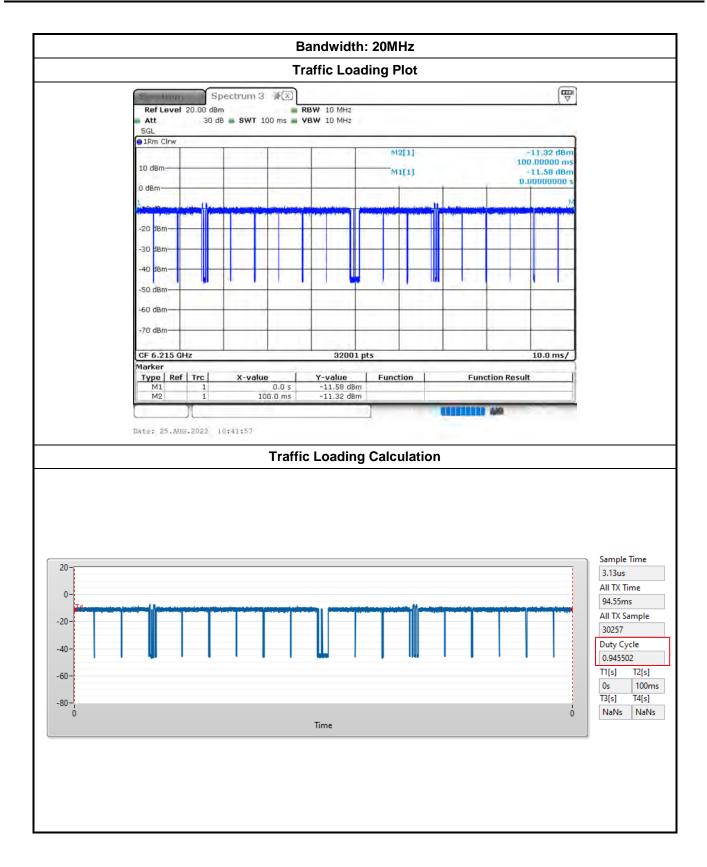
	Contention Based protocol 802.11ax HEW20													
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		AWGN Threshold Level (dBm)	EUT Status	Number of Detected (out of 10 times)	Detection Probability (%)	Limit (%)	Test Result			
5	53	20	6215	Center	6215	-80.05	OFF	10	100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

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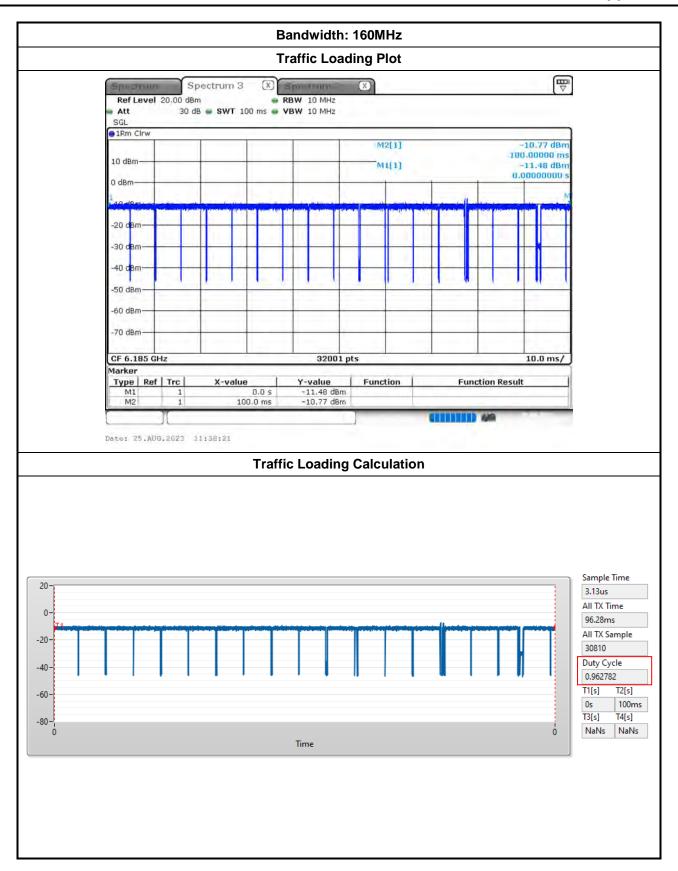
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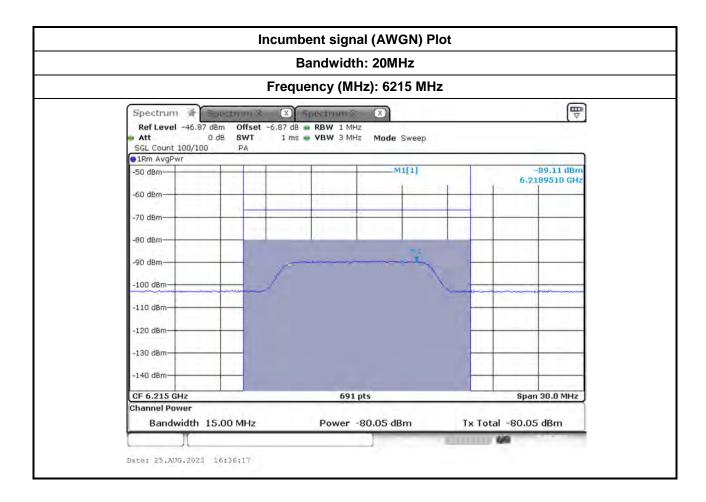
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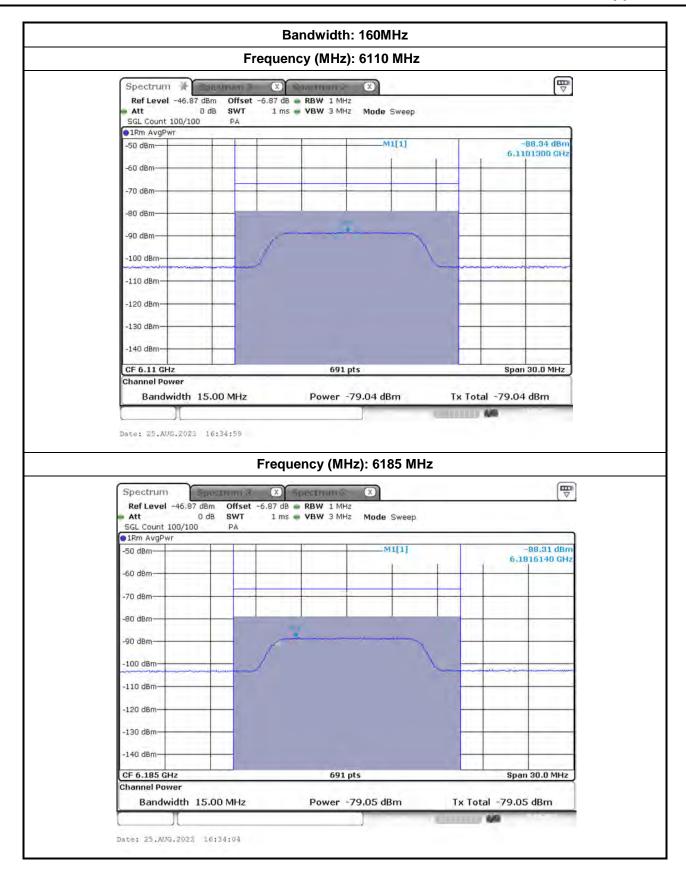


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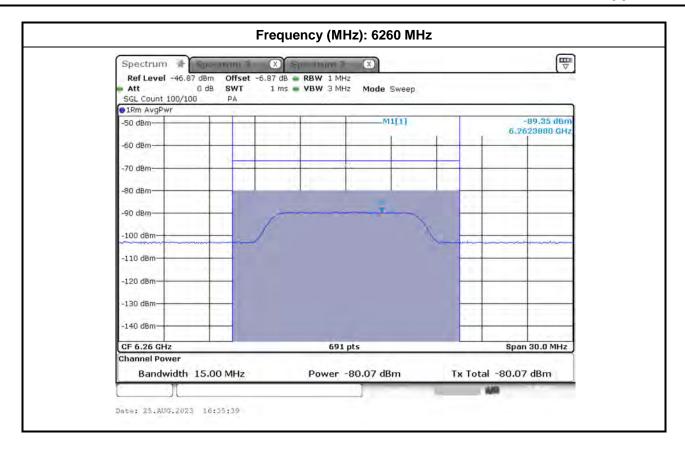


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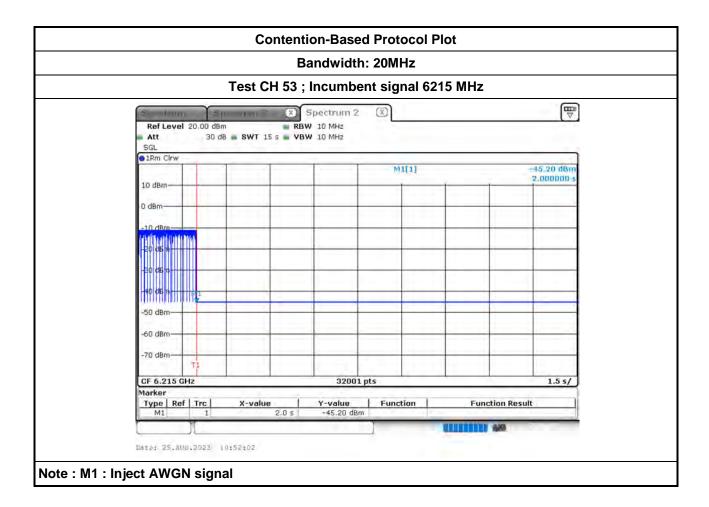
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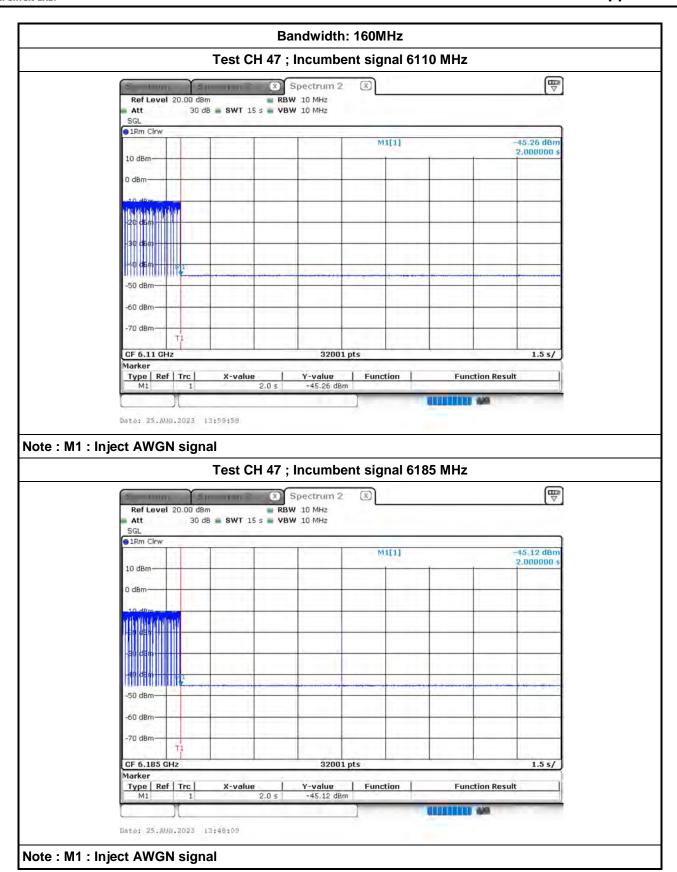


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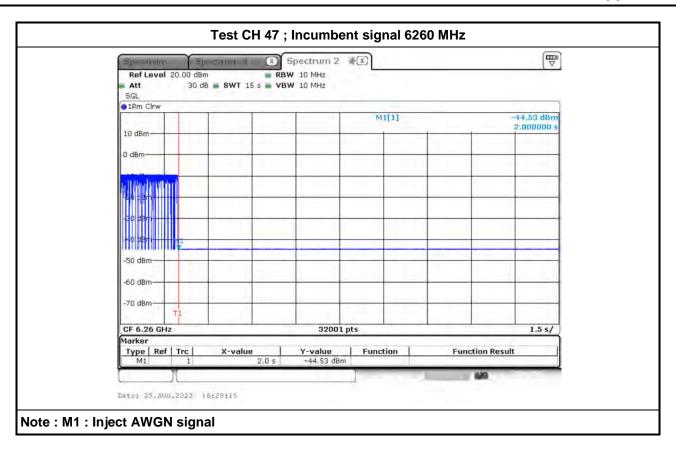


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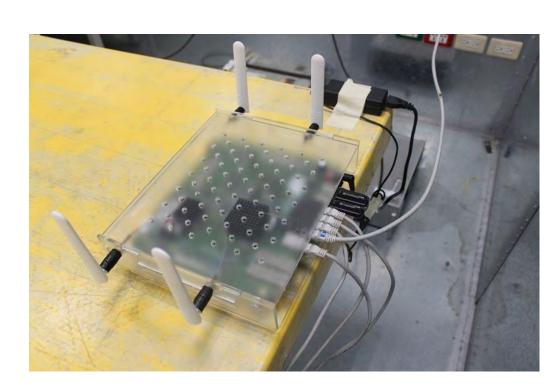


Test Photos Appendix G

1. Photographs of Conducted Emissions Test Configuration



FRONT VIEW



REAR VIEW

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Test Photos Appendix G

2. Photographs of Radiated Emissions Test Configuration

Test Configuration: 30MHz~1GHz



FRONT VIEW



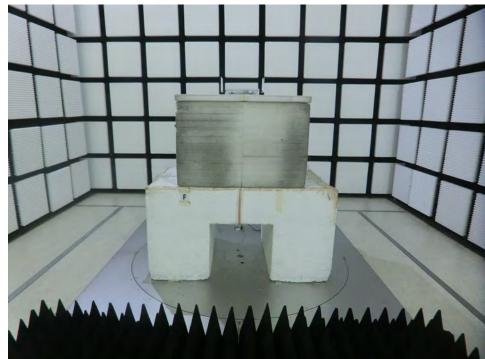
REAR VIEW

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Test Configuration: Above 1GHz



FRONT VIEW



REAR VIEW

-THE END-----

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