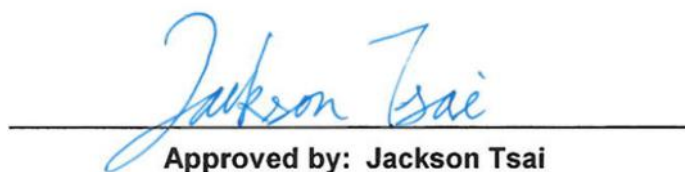


FCC Radio Test Report

FCC ID : QXO-AP4020FX
Equipment : Access Point
Brand Name : Extreme Networks
Model Name : AP4020FX
Applicant : Extreme Networks, Inc.
2121 RDU Center Drive Morrisville North Carolina
United States 27560
Manufacturer : Extreme Networks, Inc.
2121 RDU Center Drive Morrisville North Carolina
United States 27560
Standard : 47 CFR FCC Part 15.407

The product was received on Jan. 20, 2025, and testing was started from Mar. 05, 2025 and completed on Jun. 19, 2025. We, SPORTON INTERNATIONAL INC. Hsinhua 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. Hsinhua Laboratory, the test report shall not be reproduced except in full.


Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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History of this test report

[illegible]

Summary of Test Result

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

Declaration of Conformity:

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

Comments and explanations:

The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

Reviewed by: Barry Hsiao

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20), be (EHT20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
Straddle 5720		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40), be (EHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
Straddle 5710		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80) , be (EHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
Straddle 5690		5690	138 [1]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160), ax (HEW160), be (EHT160)	5250	50 [1]
5470-5725		5570	114 [1]

**Non-Beamforming_Radio 2_Dipole Antenna_1T1S**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	1TX
5.25-5.35GHz	802.11a	20	1TX
5.47-5.725GHz	802.11a	20	1TX
5.725-5.85GHz	802.11a	20	1TX
5.15-5.25GHz	802.11be EHT20	20	1TX
5.25-5.35GHz	802.11be EHT20	20	1TX
5.47-5.725GHz	802.11be EHT20	20	1TX
5.725-5.85GHz	802.11be EHT20	20	1TX
5.15-5.25GHz	802.11be EHT40	40	1TX
5.25-5.35GHz	802.11be EHT40	40	1TX
5.47-5.725GHz	802.11be EHT40	40	1TX
5.725-5.85GHz	802.11be EHT40	40	1TX
5.15-5.25GHz	802.11be EHT80	80	1TX
5.25-5.35GHz	802.11be EHT80	80	1TX
5.47-5.725GHz	802.11be EHT80	80	1TX
5.725-5.85GHz	802.11be EHT80	80	1TX
5.15-5.25GHz	802.11be EHT160	160	1TX
5.25-5.35GHz	802.11be EHT160	160	1TX
5.47-5.725GHz	802.11be EHT160	160	1TX

Non-Beamforming_Radio 2_Dipole Antenna_2T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	2TX
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.47-5.725GHz	802.11be EHT20	20	2TX
5.725-5.85GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.47-5.725GHz	802.11be EHT40	40	2TX
5.725-5.85GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX
5.47-5.725GHz	802.11be EHT80	80	2TX
5.725-5.85GHz	802.11be EHT80	80	2TX
5.15-5.25GHz	802.11be EHT160	160	2TX
5.25-5.35GHz	802.11be EHT160	160	2TX
5.47-5.725GHz	802.11be EHT160	160	2TX

**Non-Beamforming_Radio 2_Dipole Antenna_2T2S**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.47-5.725GHz	802.11be EHT20	20	2TX
5.725-5.85GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.47-5.725GHz	802.11be EHT40	40	2TX
5.725-5.85GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX
5.47-5.725GHz	802.11be EHT80	80	2TX
5.725-5.85GHz	802.11be EHT80	80	2TX
5.15-5.25GHz	802.11be EHT160	160	2TX
5.25-5.35GHz	802.11be EHT160	160	2TX
5.47-5.725GHz	802.11be EHT160	160	2TX

Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_1T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	1TX
5.25-5.35GHz	802.11a	20	1TX
5.47-5.725GHz	802.11a	20	1TX
5.725-5.85GHz	802.11a	20	1TX
5.15-5.25GHz	802.11be EHT20	20	1TX
5.25-5.35GHz	802.11be EHT20	20	1TX
5.47-5.725GHz	802.11be EHT20	20	1TX
5.725-5.85GHz	802.11be EHT20	20	1TX
5.15-5.25GHz	802.11be EHT40	40	1TX
5.25-5.35GHz	802.11be EHT40	40	1TX
5.47-5.725GHz	802.11be EHT40	40	1TX
5.725-5.85GHz	802.11be EHT40	40	1TX
5.15-5.25GHz	802.11be EHT80	80	1TX
5.25-5.35GHz	802.11be EHT80	80	1TX
5.47-5.725GHz	802.11be EHT80	80	1TX
5.725-5.85GHz	802.11be EHT80	80	1TX
5.15-5.25GHz	802.11be EHT160	160	1TX
5.25-5.35GHz	802.11be EHT160	160	1TX
5.47-5.725GHz	802.11be EHT160	160	1TX

**Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_2T1S**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	2TX
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.47-5.725GHz	802.11be EHT20	20	2TX
5.725-5.85GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.47-5.725GHz	802.11be EHT40	40	2TX
5.725-5.85GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX
5.47-5.725GHz	802.11be EHT80	80	2TX
5.725-5.85GHz	802.11be EHT80	80	2TX
5.15-5.25GHz	802.11be EHT160	160	2TX
5.25-5.35GHz	802.11be EHT160	160	2TX
5.47-5.725GHz	802.11be EHT160	160	2TX

Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_2T2S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.47-5.725GHz	802.11be EHT20	20	2TX
5.725-5.85GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.47-5.725GHz	802.11be EHT40	40	2TX
5.725-5.85GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX
5.47-5.725GHz	802.11be EHT80	80	2TX
5.725-5.85GHz	802.11be EHT80	80	2TX
5.15-5.25GHz	802.11be EHT160	160	2TX
5.25-5.35GHz	802.11be EHT160	160	2TX
5.47-5.725GHz	802.11be EHT160	160	2TX

**Non-Beamforming_Radio 2_Panel Antenna_1T1S**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	1TX
5.25-5.35GHz	802.11a	20	1TX
5.47-5.725GHz	802.11a	20	1TX
5.725-5.85GHz	802.11a	20	1TX
5.15-5.25GHz	802.11be EHT20	20	1TX
5.25-5.35GHz	802.11be EHT20	20	1TX
5.47-5.725GHz	802.11be EHT20	20	1TX
5.725-5.85GHz	802.11be EHT20	20	1TX
5.15-5.25GHz	802.11be EHT40	40	1TX
5.25-5.35GHz	802.11be EHT40	40	1TX
5.47-5.725GHz	802.11be EHT40	40	1TX
5.725-5.85GHz	802.11be EHT40	40	1TX
5.15-5.25GHz	802.11be EHT80	80	1TX
5.25-5.35GHz	802.11be EHT80	80	1TX
5.47-5.725GHz	802.11be EHT80	80	1TX
5.725-5.85GHz	802.11be EHT80	80	1TX
5.15-5.25GHz	802.11be EHT160	160	1TX
5.25-5.35GHz	802.11be EHT160	160	1TX
5.47-5.725GHz	802.11be EHT160	160	1TX

Non-Beamforming_Radio 2_Panel Antenna_2T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	2TX
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.47-5.725GHz	802.11be EHT20	20	2TX
5.725-5.85GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.47-5.725GHz	802.11be EHT40	40	2TX
5.725-5.85GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX
5.47-5.725GHz	802.11be EHT80	80	2TX
5.725-5.85GHz	802.11be EHT80	80	2TX
5.15-5.25GHz	802.11be EHT160	160	2TX
5.25-5.35GHz	802.11be EHT160	160	2TX
5.47-5.725GHz	802.11be EHT160	160	2TX

**Non-Beamforming_Radio 2_Panel Antenna_2T2S**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.47-5.725GHz	802.11be EHT20	20	2TX
5.725-5.85GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.47-5.725GHz	802.11be EHT40	40	2TX
5.725-5.85GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX
5.47-5.725GHz	802.11be EHT80	80	2TX
5.725-5.85GHz	802.11be EHT80	80	2TX
5.15-5.25GHz	802.11be EHT160	160	2TX
5.25-5.35GHz	802.11be EHT160	160	2TX
5.47-5.725GHz	802.11be EHT160	160	2TX

Non-Beamforming_Radio 3_Dipole Antenna_1T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	1TX
5.25-5.35GHz	802.11a	20	1TX
5.15-5.25GHz	802.11be EHT20	20	1TX
5.25-5.35GHz	802.11be EHT20	20	1TX
5.15-5.25GHz	802.11be EHT40	40	1TX
5.25-5.35GHz	802.11be EHT40	40	1TX
5.15-5.25GHz	802.11be EHT80	80	1TX
5.25-5.35GHz	802.11be EHT80	80	1TX

Non-Beamforming_Radio 3_Dipole Antenna_2T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	2TX
5.25-5.35GHz	802.11a	20	2TX
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX

**Non-Beamforming_Radio 3_Dipole Antenna_2T2S**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_1T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	1TX
5.25-5.35GHz	802.11a	20	1TX
5.15-5.25GHz	802.11be EHT20	20	1TX
5.25-5.35GHz	802.11be EHT20	20	1TX
5.15-5.25GHz	802.11be EHT40	40	1TX
5.25-5.35GHz	802.11be EHT40	40	1TX
5.15-5.25GHz	802.11be EHT80	80	1TX
5.25-5.35GHz	802.11be EHT80	80	1TX

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_2T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	2TX
5.25-5.35GHz	802.11a	20	2TX
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_2T2S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX

**Non-Beamforming_Radio 3_Panel Antenna_1T1S**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	1TX
5.25-5.35GHz	802.11a	20	1TX
5.15-5.25GHz	802.11be EHT20	20	1TX
5.25-5.35GHz	802.11be EHT20	20	1TX
5.15-5.25GHz	802.11be EHT40	40	1TX
5.25-5.35GHz	802.11be EHT40	40	1TX
5.15-5.25GHz	802.11be EHT80	80	1TX
5.25-5.35GHz	802.11be EHT80	80	1TX

Non-Beamforming_Radio 3_Panel Antenna_2T1S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11a	20	2TX
5.25-5.35GHz	802.11a	20	2TX
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX

Non-Beamforming_Radio 3_Panel Antenna_2T2S

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20	20	2TX
5.25-5.35GHz	802.11be EHT20	20	2TX
5.15-5.25GHz	802.11be EHT40	40	2TX
5.25-5.35GHz	802.11be EHT40	40	2TX
5.15-5.25GHz	802.11be EHT80	80	2TX
5.25-5.35GHz	802.11be EHT80	80	2TX

**Beamforming_Radio 2_Dipole Antenna**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20-BF	20	2TX
5.25-5.35GHz	802.11be EHT20-BF	20	2TX
5.47-5.725GHz	802.11be EHT20-BF	20	2TX
5.725-5.85GHz	802.11be EHT20-BF	20	2TX
5.15-5.25GHz	802.11be EHT40-BF	40	2TX
5.25-5.35GHz	802.11be EHT40-BF	40	2TX
5.47-5.725GHz	802.11be EHT40-BF	40	2TX
5.725-5.85GHz	802.11be EHT40-BF	40	2TX
5.15-5.25GHz	802.11be EHT80-BF	80	2TX
5.25-5.35GHz	802.11be EHT80-BF	80	2TX
5.47-5.725GHz	802.11be EHT80-BF	80	2TX
5.725-5.85GHz	802.11be EHT80-BF	80	2TX
5.15-5.25GHz	802.11be EHT160-BF	160	2TX
5.25-5.35GHz	802.11be EHT160-BF	160	2TX
5.47-5.725GHz	802.11be EHT160-BF	160	2TX

Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20-BF	20	2TX
5.25-5.35GHz	802.11be EHT20-BF	20	2TX
5.47-5.725GHz	802.11be EHT20-BF	20	2TX
5.725-5.85GHz	802.11be EHT20-BF	20	2TX
5.15-5.25GHz	802.11be EHT40-BF	40	2TX
5.25-5.35GHz	802.11be EHT40-BF	40	2TX
5.47-5.725GHz	802.11be EHT40-BF	40	2TX
5.725-5.85GHz	802.11be EHT40-BF	40	2TX
5.15-5.25GHz	802.11be EHT80-BF	80	2TX
5.25-5.35GHz	802.11be EHT80-BF	80	2TX
5.47-5.725GHz	802.11be EHT80-BF	80	2TX
5.725-5.85GHz	802.11be EHT80-BF	80	2TX
5.15-5.25GHz	802.11be EHT160-BF	160	2TX
5.25-5.35GHz	802.11be EHT160-BF	160	2TX
5.47-5.725GHz	802.11be EHT160-BF	160	2TX

**Beamforming_Radio 2_Panel Antenna**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20-BF	20	2TX
5.25-5.35GHz	802.11be EHT20-BF	20	2TX
5.47-5.725GHz	802.11be EHT20-BF	20	2TX
5.725-5.85GHz	802.11be EHT20-BF	20	2TX
5.15-5.25GHz	802.11be EHT40-BF	40	2TX
5.25-5.35GHz	802.11be EHT40-BF	40	2TX
5.47-5.725GHz	802.11be EHT40-BF	40	2TX
5.725-5.85GHz	802.11be EHT40-BF	40	2TX
5.15-5.25GHz	802.11be EHT80-BF	80	2TX
5.25-5.35GHz	802.11be EHT80-BF	80	2TX
5.47-5.725GHz	802.11be EHT80-BF	80	2TX
5.725-5.85GHz	802.11be EHT80-BF	80	2TX
5.15-5.25GHz	802.11be EHT160-BF	160	2TX
5.25-5.35GHz	802.11be EHT160-BF	160	2TX
5.47-5.725GHz	802.11be EHT160-BF	160	2TX

Beamforming_Radio 3_Dipole Antenna

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20-BF	20	2TX
5.25-5.35GHz	802.11be EHT20-BF	20	2TX
5.15-5.25GHz	802.11be EHT40-BF	40	2TX
5.25-5.35GHz	802.11be EHT40-BF	40	2TX
5.15-5.25GHz	802.11be EHT80-BF	80	2TX
5.25-5.35GHz	802.11be EHT80-BF	80	2TX

Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20-BF	20	2TX
5.25-5.35GHz	802.11be EHT20-BF	20	2TX
5.15-5.25GHz	802.11be EHT40-BF	40	2TX
5.25-5.35GHz	802.11be EHT40-BF	40	2TX
5.15-5.25GHz	802.11be EHT80-BF	80	2TX
5.25-5.35GHz	802.11be EHT80-BF	80	2TX

**Beamforming_Radio 3_Panel Antenna**

Band	Mode	BWch	Nant
5.15-5.25GHz	802.11be EHT20-BF	20	2TX
5.25-5.35GHz	802.11be EHT20-BF	20	2TX
5.15-5.25GHz	802.11be EHT40-BF	40	2TX
5.25-5.35GHz	802.11be EHT40-BF	40	2TX
5.15-5.25GHz	802.11be EHT80-BF	80	2TX
5.25-5.35GHz	802.11be EHT80-BF	80	2TX

Non-Beamforming_Radio1_Scan

Band	Mode	BWch	Nant
5.15-5.25GHz	a20	20	1TX
5.25-5.35GHz	a20	20	1TX
5.47-5.725GHz	a20	20	1TX
5.725-5.85GHz	a20	20	1TX
5.15-5.25GHz	a40	40	1TX
5.25-5.35GHz	a40	40	1TX
5.47-5.725GHz	a40	40	1TX
5.725-5.85GHz	a40	40	1TX
5.15-5.25GHz	a80	80	1TX
5.25-5.35GHz	a80	80	1TX
5.47-5.725GHz	a80	80	1TX
5.725-5.85GHz	a80	80	1TX
5.15-5.25GHz	a160	160	1TX
5.25-5.35GHz	a160	160	1TX
5.47-5.725GHz	a160	160	1TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ EHT20, EHT40, EHT80 and EHT160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Evaluated EHT20/EHT40/EHT80/EHT160 mode only due to the similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160/HEW20/HEW40/HEW80/HEW160 mode are the same or lower than EHT20/EHT40/EHT80/EHT160.

**1.1.2 Antenna Information**

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	AWAN	AW158SM002	Dipole	Reverse SMA	2.4G+5G	Radio 1_2.4G
						Radio 2_5G
2	AWAN	AW158SM002	Dipole	Reverse SMA	2.4G+5G	Radio 1_2.4G
						Radio 2_5G
3	AWAN	AW158SM002	Dipole	Reverse SMA	5G	Radio 3_5G
4	AWAN	AW158SM002	Dipole	Reverse SMA	5G+BT	Radio 3_5G
						BLE_chain 0_E
5	AWAN	AW158SM002	Dipole	Reverse SMA	6G	Radio 3_6G
6	AWAN	AW158SM002	Dipole	Reverse SMA	6G	Radio 3_6G
7	Sercomm	6172005QWA03	PIFA	I-Pex	2.4G+5G+6G	Radio 1_Scan
8	Sercomm	6172005QWA08	PIFA	I-Pex	BT	BLE_chain 0_I
9	Sercomm	6172005QWA09	PIFA	I-Pex	BT	BLE_chain 1_H
10	Sercomm	6172005QWA10	PIFA	I-Pex	BT	BLE_chain 1_V
11	Sercomm	6172005QWA11	PIFA	I-Pex	GPS	N/A
12	Extreme	WX6PB6508R	Dual-Polarized MIMO Panel	Reverse SMA	2.4G+5G+6G+BT	Radio 1_2.4G
						Radio 2_5G
						Radio 3_5G
						Radio 3_6G
						BLE_chain 0_E
13	Signal Plus	61723018SG	Panel	Reverse SMA	2.4G+5G+6G+BT	Radio 1_2.4G
						Radio 2_5G
						Radio 3_5G
						Radio 3_6G
						BLE_chain 0_E

Ant.	Port	Gain (dBi)													
		2.4G	5G				6G				BT0-E	BT0-I	BT1-H	BT1-V	GPS
			UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8					
1	1	2.28	5.59	5.59	5.61	5.53	-	-	-	-	-	-	-	-	-
2	2	2.28	5.59	5.59	5.61	5.53	-	-	-	-	-	-	-	-	-
3	1	-	5.59	5.59	-	-	-	-	-	-	-	-	-	-	-
4	2	-	5.59	5.59	-	-	-	-	-	-	2.28	-	-	-	-
5	1	-	-	-	-	-	5.56	5.24	5.32	5.21	-	-	-	-	-
6	2	-	-	-	-	-	5.56	5.24	5.32	5.21	-	-	-	-	-
7	1	4.5	5	5	5	5	5	5	5	5	-	-	-	-	-
8	1	-	-	-	-	-	-	-	-	-	-	4.9	-	-	-
9	1	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-
10	2	-	-	-	-	-	-	-	-	-	-	-	-	3.7	-
11	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8
12-1	1	8	8	8	8	8	-	-	-	-	-	-	-	-	-
12-2	2	8	8	8	8	8	-	-	-	-	-	-	-	-	-
12-3	1	-	8	8	-	-	-	-	-	-	-	-	-	-	-
12-4	2	-	8	8	-	-	-	-	-	-	8	-	-	-	-
12-5	1	-	-	-	-	-	8	8	8	8	-	-	-	-	-
12-6	2	-	-	-	-	-	8	8	8	8	-	-	-	-	-
13-1	1	12.52	12.19	12.18	12.42	12.36	-	-	-	-	-	-	-	-	-
13-2	2	12.52	12.19	12.18	12.42	12.36	-	-	-	-	-	-	-	-	-
13-3	1	-	12.19	12.18	-	-	-	-	-	-	-	-	-	-	-
13-4	2	-	12.19	12.18	-	-	-	-	-	-	12.52	-	-	-	-
13-5	1	-	-	-	-	-	12.46	11.8	12.45	12.41	-	-	-	-	-
13-6	2	-	-	-	-	-	12.46	11.8	12.45	12.41	-	-	-	-	-

Note 1: The EUT has thirteen antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax/be mode (1TX/2RX) (Radio 1)

Ant. 1 (port 1) could transmit/receive.

Ant. 12-1 (port 1) could transmit/receive.

Ant. 13-1 (port 1) could transmit/receive

For IEEE 802.11 b/g/n/VHT/ax/be mode (2TX/2RX) (Radio 1)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

Ant. 12-1 (port 1) and Ant. 12-2 (port 2) could transmit/receive simultaneously.

Ant. 13-1 (port 1) and Ant. 13-2 (port 2) could transmit/receive simultaneously.

For b20, g20 mode (1TX/1RX) (Radio 1_Scan)

Ant. 7 (port 1) could transmit/receive.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax/be mode (1TX/2RX) (Radio 2)

Ant. 1 (port 1) could transmit/receive.

Ant. 12-1 (port 1) could transmit/receive.

Ant. 13-1 (port 1) could transmit/receive.

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

Ant. 12-1 (port 1) and Ant. 12-2 (port 2) could transmit/receive simultaneously.

Ant. 13-1 (port 1) and Ant. 13-2 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 a/n/ac/ax/be mode (1TX/2RX) (Radio 3)

Ant. 3 (port 1) could transmit/receive.

Ant. 12-3 (port 1) could transmit/receive.

Ant. 13-3 (port 1) could transmit/receive.

For IEEE 802.11 a/n/ac/ax/be mode (2TX/2RX) (Radio 3)

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.

Ant. 12-3 (port 1) and Ant. 12-4 (port 2) could transmit/receive simultaneously.

Ant. 13-3 (port 1) and Ant. 13-4 (port 2) could transmit/receive simultaneously.

For a20, a40, a80, a160 (1TX/1RX) (Radio 1_Scan)

Ant. 7 (port 1) could transmit/receive.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX) (Chain 0)

Ant. 4 (port 2) could transmit/receive.

Ant. 8 (port 1) could transmit/receive.

Ant. 12-4 (port 2) could transmit/receive.

Ant. 13-4 (port 2) could transmit/receive.

For IEEE 802.15.1 Bluetooth mode (1TX/2RX) (Chain 1)

Ant. 9 (port 1) or Ant. 10 (port 2) could transmit/receive

Support diversity function and pre-tested on each single chain, the worst case was Ant. 9 (port 1) and it was recorded in this test report.

Note 2: Directional gain information

	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter / PoE		
EUT Function	☐	Outdoor AP	☒ Indoor AP
	☐	Fixed P2P AP	☐ Client
Beamforming Function	☒	With beamforming	☐ Without beamforming
TPC Function	☒	With TPC Function	☐ Without TPC Function
Weather Band	☒	With 5600~5650MHz	☐ Without 5600~5650MHz
Resource Unit	☒	Full RU	☐ Partial RU
	☐	MRU(static preamble puncturing)	☐ MRU(dynamic preamble puncturing)
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:		...
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		
☐	Other:		

1.1.4 Mode Test Duty Cycle

Non-Beamforming_Radio 2_Dipole Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_1TX	0.99	0.04	3.012m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_1TX	0.989	0.05	2.869m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_1TX	0.989	0.05	2.853m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_1TX	0.989	0.05	2.847m	10Hz (DC>=0.98)
802.11be EHT160_Nss1,(MCS0)_1TX	0.981	0.08	1.913m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 2_Dipole Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_2TX	0.99	0.04	3.012m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_2TX	0.989	0.05	2.869m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_2TX	0.989	0.05	2.853m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_2TX	0.989	0.05	2.847m	10Hz (DC>=0.98)
802.11be EHT160_Nss1,(MCS0)_2TX	0.982	0.08	1.913m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

**Non-Beamforming_Radio 2_Dipole Antenna_2T2S**

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20_Nss2,(MCS0)_2TX	0.989	0.05	2.856m	10Hz (DC>=0.98)
802.11be EHT40_Nss2,(MCS0)_2TX	0.989	0.05	2.85m	10Hz (DC>=0.98)
802.11be EHT80_Nss2,(MCS0)_2TX	0.979	0.09	1.466m	1k
802.11be EHT160_Nss2,(MCS0)_2TX	0.98	0.09	1.466m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_1TX	0.99	0.04	3.012m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_1TX	0.989	0.05	2.869m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_1TX	0.989	0.05	2.853m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_1TX	0.989	0.05	2.847m	10Hz (DC>=0.98)
802.11be EHT160_Nss1,(MCS0)_1TX	0.981	0.08	1.913m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss 1,(6D)	0.99	0.04	3.012m	10Hz (DC>=0.98)
802.11be EHT20_Nss 1,(M0)	0.989	0.05	2.869m	10Hz (DC>=0.98)
802.11be EHT40_Nss 1,(M0)	0.989	0.05	2.853m	10Hz (DC>=0.98)
802.11be EHT80_Nss 1,(M0)	0.989	0.05	2.847m	10Hz (DC>=0.98)
802.11be EHT160_Nss 1,(M0)	0.982	0.08	1.913m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_2T2S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20_Nss2,(MCS0)_2TX	0.989	0.05	2.856m	10Hz (DC>=0.98)
802.11be EHT40_Nss2,(MCS0)_2TX	0.989	0.05	2.85m	10Hz (DC>=0.98)
802.11be EHT80_Nss2,(MCS0)_2TX	0.979	0.09	1.466m	1k
802.11be EHT160_Nss2,(MCS0)_2TX	0.98	0.09	1.466m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

**Non-Beamforming_Radio 2_Panel Antenna_1T1S**

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_1TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_1TX	0.988	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_1TX	0.988	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_1TX	0.989	0.05	2.842m	10Hz (DC>=0.98)
802.11be EHT160_Nss1,(MCS0)_1TX	0.988	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 2_Panel Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_2TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_2TX	0.988	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_2TX	0.988	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_2TX	0.989	0.05	2.842m	10Hz (DC>=0.98)
802.11be EHT160_Nss1,(MCS0)_2TX	0.988	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 2_Panel Antenna_2T2S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20_Nss2,(MCS0)_2TX	0.988	0.05	2.853m	10Hz (DC>=0.98)
802.11be EHT40_Nss2,(MCS0)_2TX	0.989	0.05	2.847m	10Hz (DC>=0.98)
802.11be EHT80_Nss2,(MCS0)_2TX	0.978	0.1	1.464m	1k
802.11be EHT160_Nss2,(MCS0)_2TX	0.979	0.09	1.464m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Dipole Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_1TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_1TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_1TX	0.989	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_1TX	0.988	0.05	2.843m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Dipole Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_2TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_2TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_2TX	0.989	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_2TX	0.989	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

**Non-Beamforming_Radio 3_Dipole Antenna_2T2S**

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20_Nss2,(MCS0)_2TX	0.989	0.05	2.852m	10Hz (DC>=0.98)
802.11be EHT40_Nss2,(MCS0)_2TX	0.989	0.05	2.846m	10Hz (DC>=0.98)
802.11be EHT80_Nss2,(MCS0)_2TX	0.978	0.1	1.463m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_1TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_1TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_1TX	0.989	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_1TX	0.988	0.05	2.843m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_2TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_2TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_2TX	0.989	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_2TX	0.989	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_2T2S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20_Nss2,(MCS0)_2TX	0.989	0.05	2.852m	10Hz (DC>=0.98)
802.11be EHT40_Nss2,(MCS0)_2TX	0.989	0.05	2.846m	10Hz (DC>=0.98)
802.11be EHT80_Nss2,(MCS0)_2TX	0.978	0.1	1.463m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Panel Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_1TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_1TX	0.988	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_1TX	0.988	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_1TX	0.988	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Panel Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11a_Nss1,(6Mbps)_2TX	0.989	0.05	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_2TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40_Nss1,(MCS0)_2TX	0.988	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80_Nss1,(MCS0)_2TX	0.989	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio 3_Panel Antenna_2T2S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20_Nss2,(MCS0)_2TX	0.988	0.05	2.852m	10Hz (DC>=0.98)
802.11be EHT40_Nss2,(MCS0)_2TX	0.989	0.05	2.846m	10Hz (DC>=0.98)
802.11be EHT80_Nss2,(MCS0)_2TX	0.989	0.05	2.846m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Beamforming_Radio 2_Dipole Antenna

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.869m	10Hz (DC>=0.98)
802.11be EHT40-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.853m	10Hz (DC>=0.98)
802.11be EHT80-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.847m	10Hz (DC>=0.98)
802.11be EHT160-BF_Nss1,(MCS0)_2TX	0.982	0.08	1.913m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.869m	10Hz (DC>=0.98)
802.11be EHT40-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.853m	10Hz (DC>=0.98)
802.11be EHT80-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.847m	10Hz (DC>=0.98)
802.11be EHT160-BF_Nss1,(MCS0)_2TX	0.982	0.08	1.913m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Beamforming_Radio 2_Panel Antenna

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20-BF_Nss1,(MCS0)_2TX	1	0	1m	10Hz (DC>=0.98)
802.11be EHT40-BF_Nss1,(MCS0)_2TX	1	0	1m	10Hz (DC>=0.98)
802.11be EHT80-BF_Nss1,(MCS0)_2TX	1	0	1m	10Hz (DC>=0.98)
802.11be EHT160-BF_Nss1,(MCS0)_2TX	1	0	1m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

**eamforming_Radio 3_Dipole Antenna**

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Beamforming_Radio 3_Panel Antenna

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.866m	10Hz (DC>=0.98)
802.11be EHT40-BF_Nss1,(MCS0)_2TX	0.988	0.05	2.848m	10Hz (DC>=0.98)
802.11be EHT80-BF_Nss1,(MCS0)_2TX	0.989	0.05	2.842m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Non-Beamforming_Radio1_Scan

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
a20_Nss1,(6Mbps)_1TX	0.548	2.61	128.437u	10k
a40_Nss1,(6Mbps)_1TX	0.547	2.62	128.437u	10k
a80_Nss1,(6Mbps)_1TX	0.542	2.66	128.437u	10k
a160_Nss1,(6Mbps)_1TX	0.533	2.73	128.125u	10k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ KDB 789033 D02 v02r01

The following reference test guidance is not within the scope of accreditation of TAF:

- ♦ KDB 662911 D01 v02r01
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Lego Lin	22.5~23.2°C / 52~64%	17/Jun/2025
Radiated (Co-location)	03CH02-HY	Vasari Huang	20.9~23.1°C / 57~65%	17/Jun/2025~19/Jun/2025
☒ Wenhua 3rd. (TAF: 3785)	ADD: No. 58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist. Taoyuan City 333, Taiwan (R.O.C.)			
	TEL: 886-3-327-0868			
Test site Designation No. TW0036 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Johnny Yu	21.6~22.3°C / 52~55%	17/Mar/2025~09/May/2025
Radiated (Other Antenna)	03CH26-HY	Andy Wang	19.8~22.0°C / 51~56%	05/Mar/2025~24/Mar/2025
☒ Wen 33rd. St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated (Panel Antenna)	03CH09-HY	Lego Lin	22.5~25.9°C / 52~57%	28/Apr/2025~08/May/2025
Radiated (Scan Below 1GHz)	03CH09-HY	Edward Wang	19.2~21.1°C / 55~63%	15/Mar/2025
Radiated (Scan Above 1GHz)	03CH09-HY	Edward Wang	19.2~21.1°C / 55~63%	06/Mar/2025~23/Apr/2025

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Emission Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Power Spectral Density	2 dB	Confidence levels of 95%
Unwanted Emissions	4.8 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	accessMTool_REL_3_3_0_4
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Non-Beamforming_Radio 2_Dipole Antenna_1T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	80
5580MHz	80
5700MHz	61
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT20_Nss1,(MCS0)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	77
5580MHz	80
5700MHz	59
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss1,(MCS0)_1TX	-
5190MHz	79
5230MHz	80
5270MHz	80
5310MHz	80



5510MHz	69
5550MHz	80
5670MHz	80
5710MHz Straddle 5.47-5.725GHz	80
5710MHz Straddle 5.725-5.85GHz	80
5755MHz	80
5795MHz	80
802.11be EHT80_Nss1,(MCS0)_1TX	-
5210MHz	79
5290MHz	80
5530MHz	72
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80
5775MHz	80
802.11be EHT160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	67
5250MHz Straddle 5.25-5.35GHz	67
5570MHz	64

Non-Beamforming_Radio 2_Dipole Antenna_2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	80
5580MHz	80
5700MHz	60
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT20_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80



5320MHz	80
5500MHz	80
5580MHz	80
5700MHz	56
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss1,(MCS0)_2TX	-
5190MHz	80
5230MHz	80
5270MHz	80
5310MHz	80
5510MHz	72
5550MHz	80
5670MHz	80
5710MHz Straddle 5.47-5.725GHz	80
5710MHz Straddle 5.725-5.85GHz	80
5755MHz	80
5795MHz	80
802.11be EHT80_Nss1,(MCS0)_2TX	-
5210MHz	80
5290MHz	80
5530MHz	74
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80
5775MHz	80
802.11be EHT160_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	67
5250MHz Straddle 5.25-5.35GHz	67
5570MHz	65

**Non-Beamforming_Radio 2_Dipole Antenna_2T2S**

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	79
5500MHz	79
5580MHz	80
5700MHz	55
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss2,(MCS0)_2TX	-
5190MHz	80
5230MHz	80
5270MHz	80
5310MHz	80
5510MHz	74
5550MHz	80
5670MHz	80
5710MHz Straddle 5.47-5.725GHz	80
5710MHz Straddle 5.725-5.85GHz	80
5755MHz	80
5795MHz	80
802.11be EHT80_Nss2,(MCS0)_2TX	-
5210MHz	80
5290MHz	80
5530MHz	74
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80
5775MHz	80
802.11be EHT160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	67
5250MHz Straddle 5.25-5.35GHz	67
5570MHz	64

**Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_1T1S**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	80
5580MHz	80
5700MHz	68
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT20_Nss1,(MCS0)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	80
5580MHz	80
5700MHz	62
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss1,(MCS0)_1TX	-
5190MHz	80
5230MHz	80
5270MHz	80
5310MHz	80
5510MHz	75
5550MHz	80
5670MHz	80
5710MHz Straddle 5.47-5.725GHz	80
5710MHz Straddle 5.725-5.85GHz	80
5755MHz	80



5795MHz	80
802.11be EHT80_Nss1,(MCS0)_1TX	-
5210MHz	80
5290MHz	80
5530MHz	79
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80
5775MHz	80
802.11be EHT160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	72
5250MHz Straddle 5.25-5.35GHz	72
5570MHz	69

Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	73
5300MHz	75
5320MHz	75
5500MHz	71
5580MHz	74
5700MHz	60
5720MHz Straddle 5.47-5.725GHz	72
5720MHz Straddle 5.725-5.85GHz	72
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT20_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	75
5300MHz	77
5320MHz	77
5500MHz	73
5580MHz	76
5700MHz	56
5720MHz Straddle 5.47-5.725GHz	74
5720MHz Straddle 5.725-5.85GHz	74



5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss1,(MCS0)_2TX	-
5190MHz	80
5230MHz	80
5270MHz	80
5310MHz	80
5510MHz	72
5550MHz	80
5670MHz	80
5710MHz Straddle 5.47-5.725GHz	80
5710MHz Straddle 5.725-5.85GHz	80
5755MHz	80
5795MHz	80
802.11be EHT80_Nss1,(MCS0)_2TX	-
5210MHz	80
5290MHz	80
5530MHz	74
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80
5775MHz	80
802.11be EHT160_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	67
5250MHz Straddle 5.25-5.35GHz	67
5570MHz	65

**Non-Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna_2T2S**

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	80
5580MHz	80
5700MHz	58
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss2,(MCS0)_2TX	-
5190MHz	80
5230MHz	80
5270MHz	80
5310MHz	80
5510MHz	75
5550MHz	80
5670MHz	80
5710MHz Straddle 5.47-5.725GHz	80
5710MHz Straddle 5.725-5.85GHz	80
5755MHz	80
5795MHz	80
802.11be EHT80_Nss2,(MCS0)_2TX	-
5210MHz	80
5290MHz	80
5530MHz	77
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80
5775MHz	80
802.11be EHT160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	69
5250MHz Straddle 5.25-5.35GHz	69
5570MHz	65

**Non-Beamforming_Radio 2_Panel Antenna_1T1S**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	77
5580MHz	80
5700MHz	54
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT20_Nss1,(MCS0)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	78
5500MHz	76
5580MHz	80
5700MHz	52
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss1,(MCS0)_1TX	-
5190MHz	71
5230MHz	80
5270MHz	79
5310MHz	66
5510MHz	65
5550MHz	78
5670MHz	69
5710MHz Straddle 5.47-5.725GHz	78
5710MHz Straddle 5.725-5.85GHz	78
5755MHz	80



5795MHz	80
802.11be EHT80_Nss1,(MCS0)_1TX	-
5210MHz	71
5290MHz	72
5530MHz	71
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	75
5690MHz Straddle 5.725-5.85GHz	75
5775MHz	80
802.11be EHT160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	67
5250MHz Straddle 5.25-5.35GHz	67
5570MHz	60

Non-Beamforming_Radio 2_Panel Antenna_2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	54
5300MHz	59
5320MHz	59
5500MHz	54
5580MHz	58
5700MHz	52
5720MHz Straddle 5.47-5.725GHz	55
5720MHz Straddle 5.725-5.85GHz	55
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT20_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	57
5300MHz	61
5320MHz	61
5500MHz	55
5580MHz	59
5700MHz	50
5720MHz Straddle 5.47-5.725GHz	58
5720MHz Straddle 5.725-5.85GHz	58



5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss1,(MCS0)_2TX	-
5190MHz	70
5230MHz	80
5270MHz	65
5310MHz	67
5510MHz	63
5550MHz	64
5670MHz	65
5710MHz Straddle 5.47-5.725GHz	65
5710MHz Straddle 5.725-5.85GHz	65
5755MHz	80
5795MHz	80
802.11be EHT80_Nss1,(MCS0)_2TX	-
5210MHz	67
5290MHz	67
5530MHz	66
5610MHz	66
5690MHz Straddle 5.47-5.725GHz	63
5690MHz Straddle 5.725-5.85GHz	63
5775MHz	80
802.11be EHT160_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	59
5250MHz Straddle 5.25-5.35GHz	59
5570MHz	59

**Non-Beamforming_Radio 2_Panel Antenna_2T2S**

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	67
5300MHz	69
5320MHz	69
5500MHz	63
5580MHz	67
5700MHz	52
5720MHz Straddle 5.47-5.725GHz	67
5720MHz Straddle 5.725-5.85GHz	67
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40_Nss2,(MCS0)_2TX	-
5190MHz	68
5230MHz	80
5270MHz	65
5310MHz	67
5510MHz	63
5550MHz	65
5670MHz	65
5710MHz Straddle 5.47-5.725GHz	67
5710MHz Straddle 5.725-5.85GHz	67
5755MHz	80
5795MHz	80
802.11be EHT80_Nss2,(MCS0)_2TX	-
5210MHz	69
5290MHz	67
5530MHz	64
5610MHz	66
5690MHz Straddle 5.47-5.725GHz	64
5690MHz Straddle 5.725-5.85GHz	64
5775MHz	80
802.11be EHT160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	59
5250MHz Straddle 5.25-5.35GHz	59
5570MHz	60

**Non-Beamforming_Radio 3_Dipole Antenna_1T1S**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
802.11be EHT20_Nss1,(MCS0)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
802.11be EHT40_Nss1,(MCS0)_1TX	-
5190MHz	80
5230MHz	80
5270MHz	80
5310MHz	78
802.11be EHT80_Nss1,(MCS0)_1TX	-
5210MHz	75
5290MHz	76

Non-Beamforming_Radio 3_Dipole Antenna_2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	75
5320MHz	75
802.11be EHT20_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	78
5320MHz	79
802.11be EHT40_Nss1,(MCS0)_2TX	-
5190MHz	73
5230MHz	80



5270MHz	80
5310MHz	71
802.11be EHT80_Nss1,(MCS0)_2TX	-
5210MHz	68
5290MHz	66

Non-Beamforming_Radio 3_Dipole Antenna_2T2S

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
802.11be EHT40_Nss2,(MCS0)_2TX	-
5190MHz	73
5230MHz	80
5270MHz	80
5310MHz	72
802.11be EHT80_Nss2,(MCS0)_2TX	-
5210MHz	69
5290MHz	69

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
802.11be EHT20_Nss1,(MCS0)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
802.11be EHT40_Nss1,(MCS0)_1TX	-
5190MHz	80
5230MHz	80
5270MHz	80



5310MHz	80
802.11be EHT80_Nss1,(MCS0)_1TX	-
5210MHz	76
5290MHz	80

Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	68
5300MHz	63
5320MHz	63
802.11be EHT20_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	70
5300MHz	66
5320MHz	66
802.11be EHT40_Nss1,(MCS0)_2TX	-
5190MHz	70
5230MHz	80
5270MHz	78
5310MHz	75
802.11be EHT80_Nss1,(MCS0)_2TX	-
5210MHz	69
5290MHz	73

**Non-Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna_2T2S**

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	77
5320MHz	77
802.11be EHT40_Nss2,(MCS0)_2TX	-
5190MHz	70
5230MHz	80
5270MHz	80
5310MHz	73
802.11be EHT80_Nss2,(MCS0)_2TX	-
5210MHz	66
5290MHz	72

Non-Beamforming_Radio 3_Panel Antenna_1T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	78
5300MHz	74
5320MHz	72
802.11be EHT20_Nss1,(MCS0)_1TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	78
5300MHz	73
5320MHz	72
802.11be EHT40_Nss1,(MCS0)_1TX	-
5190MHz	80
5230MHz	80
5270MHz	76
5310MHz	65
802.11be EHT80_Nss1,(MCS0)_1TX	-
5210MHz	68
5290MHz	67

**Non-Beamforming_Radio 3_Panel Antenna_2T1S**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	56
5300MHz	51
5320MHz	51
802.11be EHT20_Nss1,(MCS0)_2TX	-
5180MHz	79
5200MHz	80
5240MHz	80
5260MHz	58
5300MHz	53
5320MHz	54
802.11be EHT40_Nss1,(MCS0)_2TX	-
5190MHz	69
5230MHz	80
5270MHz	64
5310MHz	61
802.11be EHT80_Nss1,(MCS0)_2TX	-
5210MHz	65
5290MHz	60

Non-Beamforming_Radio 3_Panel Antenna_2T2S

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
5180MHz	77
5200MHz	80
5240MHz	80
5260MHz	66
5300MHz	61
5320MHz	62
802.11be EHT40_Nss2,(MCS0)_2TX	-
5190MHz	69
5230MHz	80
5270MHz	65
5310MHz	61
802.11be EHT80_Nss2,(MCS0)_2TX	-
5210MHz	77
5290MHz	62

**Beamforming_Radio 2_Dipole Antenna**

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	78
5580MHz	80
5700MHz	56
5720MHz Straddle 5.47-5.725GHz	80
5720MHz Straddle 5.725-5.85GHz	80
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	80
5230MHz	79
5270MHz	79
5310MHz	80
5510MHz	72
5550MHz	79
5670MHz	79
5710MHz Straddle 5.47-5.725GHz	80
5710MHz Straddle 5.725-5.85GHz	80
5755MHz	80
5795MHz	80
802.11be EHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	80
5290MHz	80
5530MHz	74
5610MHz	80
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80
5775MHz	80
802.11be EHT160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	67
5250MHz Straddle 5.25-5.35GHz	67
5570MHz	65

**Beamforming_Radio 2_Dual-Polarized MIMO Panel Antenna**

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	70
5300MHz	71
5320MHz	71
5500MHz	68
5580MHz	72
5700MHz	59
5720MHz Straddle 5.47-5.725GHz	74
5720MHz Straddle 5.725-5.85GHz	74
5745MHz	80
5785MHz	80
5825MHz	80
802.11be EHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	80
5230MHz	80
5270MHz	69
5310MHz	70
5510MHz	68
5550MHz	70
5670MHz	66
5710MHz Straddle 5.47-5.725GHz	70
5710MHz Straddle 5.725-5.85GHz	70
5755MHz	80
5795MHz	80
802.11be EHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	80
5290MHz	71
5530MHz	72
5610MHz	71
5690MHz Straddle 5.47-5.725GHz	71
5690MHz Straddle 5.725-5.85GHz	71
5775MHz	80
802.11be EHT160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	69
5250MHz Straddle 5.25-5.35GHz	69
5570MHz	66

**Beamforming_Radio 2_Panel Antenna**

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	53
5300MHz	56
5320MHz	57
5500MHz	51
5580MHz	54
5700MHz	48
5720MHz Straddle 5.47-5.725GHz	51
5720MHz Straddle 5.725-5.85GHz	51
5745MHz	76
5785MHz	80
5825MHz	80
802.11be EHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	70
5230MHz	80
5270MHz	53
5310MHz	56
5510MHz	51
5550MHz	53
5670MHz	53
5710MHz Straddle 5.47-5.725GHz	55
5710MHz Straddle 5.725-5.85GHz	55
5755MHz	78
5795MHz	80
802.11be EHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	67
5290MHz	56
5530MHz	54
5610MHz	54
5690MHz Straddle 5.47-5.725GHz	53
5690MHz Straddle 5.725-5.85GHz	53
5775MHz	80
802.11be EHT160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	59
5250MHz Straddle 5.25-5.35GHz	59
5570MHz	51

**Beamforming_Radio 3_Dipole Antenna**

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	78
5300MHz	74
5320MHz	75
802.11be EHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	73
5230MHz	80
5270MHz	76
5310MHz	71
802.11be EHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	68
5290MHz	66

Beamforming_Radio 3_Dual-Polarized MIMO Panel Antenna

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	80
5240MHz	80
5260MHz	66
5300MHz	61
5320MHz	62
802.11be EHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	70
5230MHz	80
5270MHz	66
5310MHz	64
802.11be EHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	69
5290MHz	64

**Beamforming_Radio 3_Panel Antenna**

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	79
5200MHz	80
5240MHz	80
5260MHz	53
5300MHz	48
5320MHz	49
802.11be EHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	69
5230MHz	80
5270MHz	52
5310MHz	49
802.11be EHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	65
5290MHz	51

Non-Beamforming_Radio1_Scan

Test Software Version	PuTTY Release 0.62
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Mode	Power Setting
a20_Nss1,(6Mbps)_1TX	-
5180MHz	57
5200MHz	71
5240MHz	77
5260MHz	76
5300MHz	76
5320MHz	69
5500MHz	60
5580MHz	76
5700MHz	59
5745MHz	80
5785MHz	80
5825MHz	80
a40_Nss1,(6Mbps)_1TX	-
5190MHz	40
5230MHz	59
5270MHz	58
5310MHz	39
5510MHz	42
5550MHz	65
5670MHz	61
5755MHz	78



5795MHz	80
a80_Nss1,(6Mbps)_1TX	-
5210MHz	43
5290MHz	43
5530MHz	43
5610MHz	66
5775MHz	77
a160_Nss1,(6Mbps)_1TX	-
5250MHz Straddle 5.15-5.25GHz	36
5250MHz Straddle 5.25-5.35GHz	36
5570MHz	40

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	CTX
1	Adapter Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Unwanted Emissions		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Adapter Mode ; Radio 2_Dipole Antenna		
2	Adapter Mode ; Radio 2_Dual-Polarized MIMO Panel Antenna		
3	Adapter Mode ; Radio 2_Panel Antenna		
4	Adapter Mode ; Radio 3_Dipole Antenna		
5	Adapter Mode ; Radio 3_Dual-Polarized MIMO Panel Antenna		
6	Adapter Mode ; Radio 3_Panel Antenna		
7	Adapter Mode ; Radio 1_Scan		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT			
Dipole Antenna_1T1S	V (Radio 3)		V (Radio 2)
Dipole Antenna_2T1S			V (Radio 2,3)
Dipole Antenna_2T2S			V (Radio 2,3)
Dual-Polarized MIMO Panel Antenna			V (Radio 2,3)
Panel Antenna			V (Radio 2,3)
Radio 1_Scan	V		



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	CTX
1	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G+BT(chain 0)
2	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT(chain 0)
3	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G+BT(chain 1)
4	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT(chain 1)
5	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G+BT-E(chain 0)
6	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT-E(chain 0)
Refer to Sporton Test Report No.: FA462705-03 for Co-location RF Exposure Evaluation and Appendix F for Radiated Emission Co-location.	

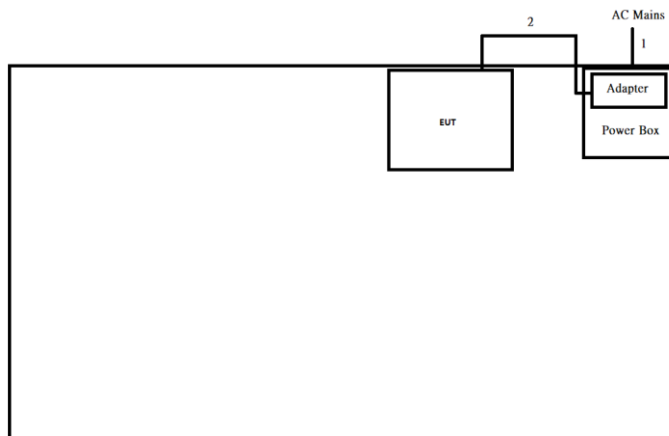
2.3 Support Equipment

Support Equipment – AC Conduction and Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	Powertron	PA1045-120HIB300	-	Provided by Customer

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	PoE	PHIHONG	POE60U-1BT-X	-	Provided by Customer

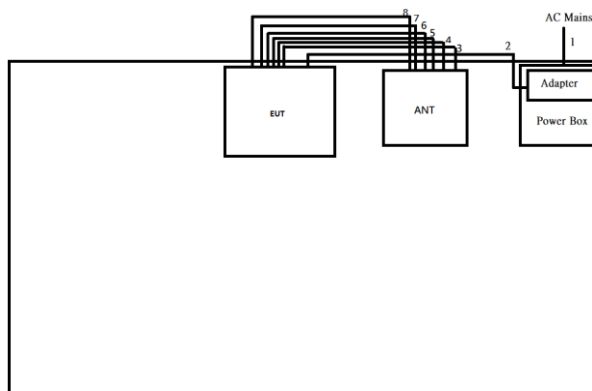
2.4 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (Dipole Antenna)

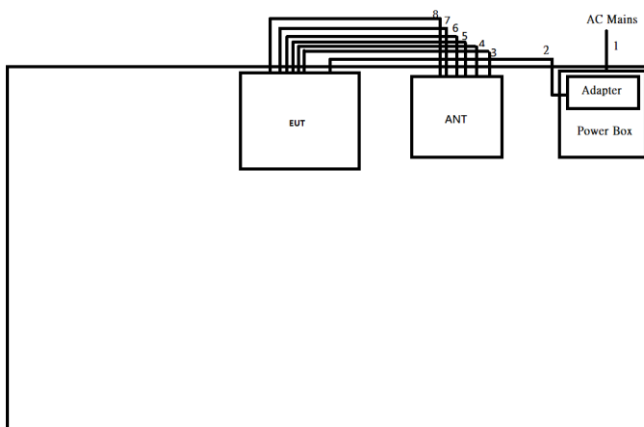


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-

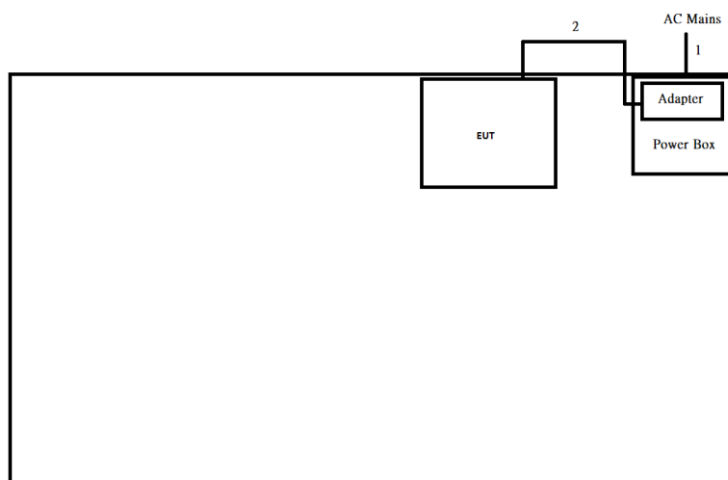
Test Setup Diagram – AC Line Conducted Emission Test (Dual-Polarized MIMO Panel Antenna)



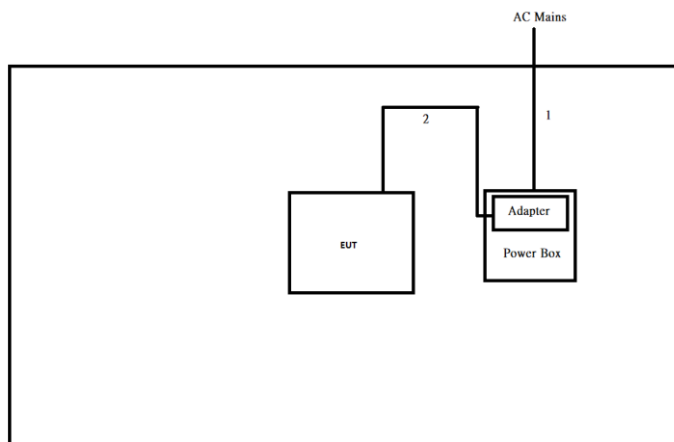
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8m	-
2	DC Power Cable	No	1.5m	-
3	RF Cable	No	1.0m	-
4	RF Cable	No	1.0m	-
5	RF Cable	No	1.0m	-
6	RF Cable	No	1.0m	-
7	RF Cable	No	1.0m	-
8	RF Cable	No	1.0m	-

Test Setup Diagram – AC Line Conducted Emission Test (Panel Antenna)


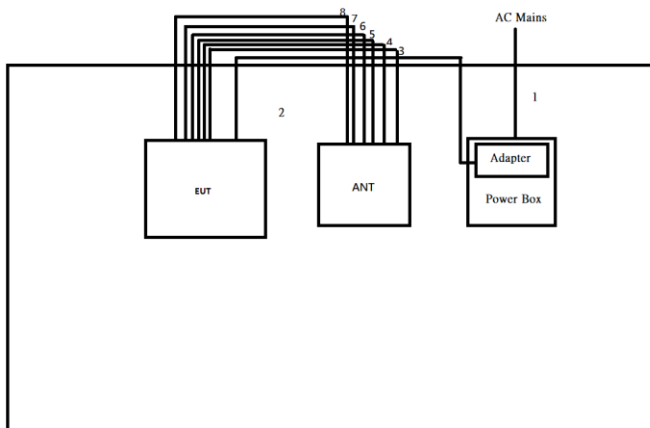
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-
3	RF Cable	No	1.0	-
4	RF Cable	No	1.0	-
5	RF Cable	No	1.0	-
6	RF Cable	No	1.0	-
7	RF Cable	No	1.0	-
8	RF Cable	No	1.0	-

Test Setup Diagram – AC Line Conducted Emission Test (Radio 1_Scan)


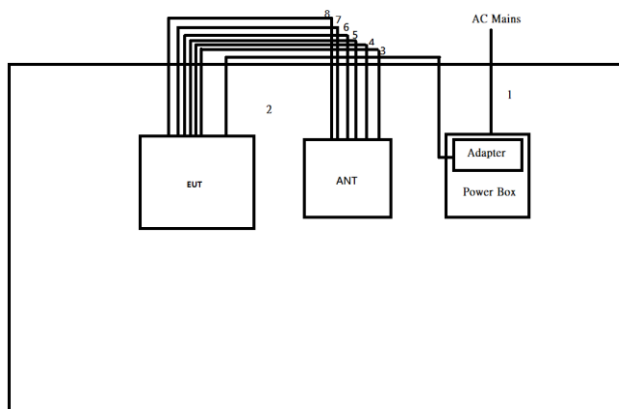
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-

Test Setup Diagram – Radiated Test (Dipole Antenna)


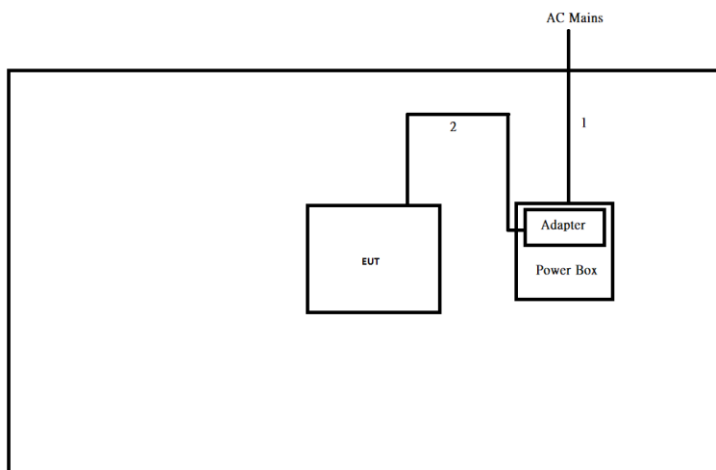
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-

Test Setup Diagram – Radiated Test (Dual-Polarized MIMO Panel Antenna)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-
3	RF Cable	No	1.0	-
4	RF Cable	No	1.0	-
5	RF Cable	No	1.0	-
6	RF Cable	No	1.0	-
7	RF Cable	No	1.0	-
8	RF Cable	No	1.0	-

Test Setup Diagram – Radiated Test (Panel Antenna)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-
3	RF Cable	No	1.0	-
4	RF Cable	No	1.0	-
5	RF Cable	No	1.0	-
6	RF Cable	No	1.0	-
7	RF Cable	No	1.0	-
8	RF Cable	No	1.0	-

Test Setup Diagram – Radiated Test (Radio 1_Scan)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

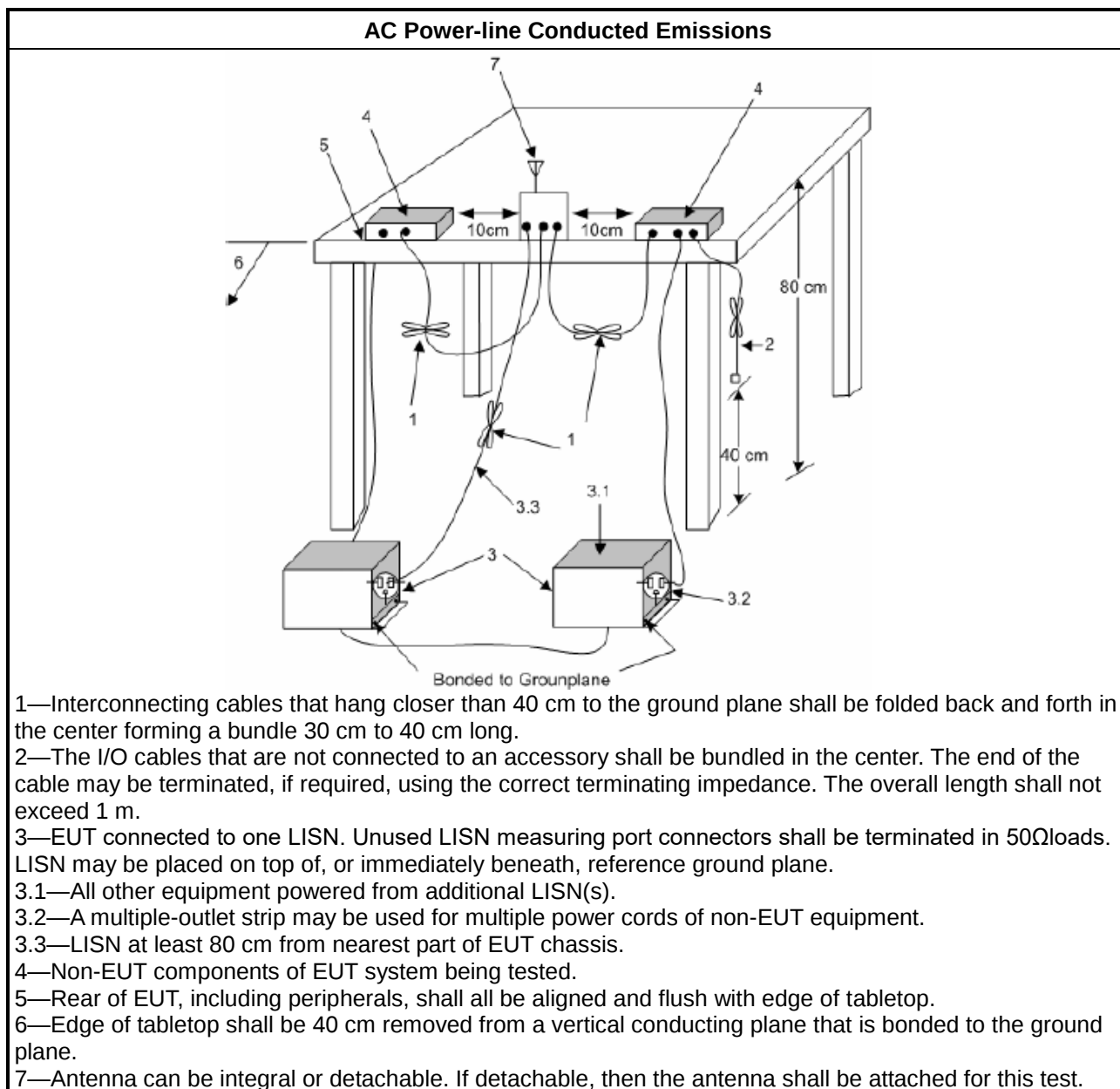
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☒	For the 5.25-5.35 GHz band, N/A
☒	For the 5.47-5.725 GHz band, N/A
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

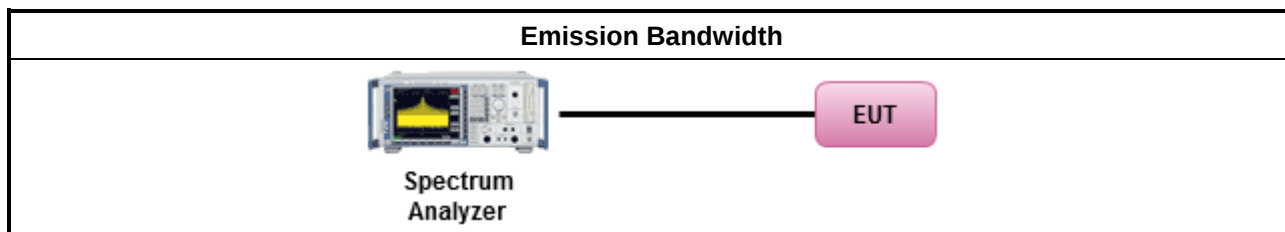
3.2.2 Measuring Instruments

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:	
☒	Refer as KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
☐	Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
☐	Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
☐	Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$.
☐	Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒	For the 5.725-5.85 GHz band:
☐	Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$.
☐	Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

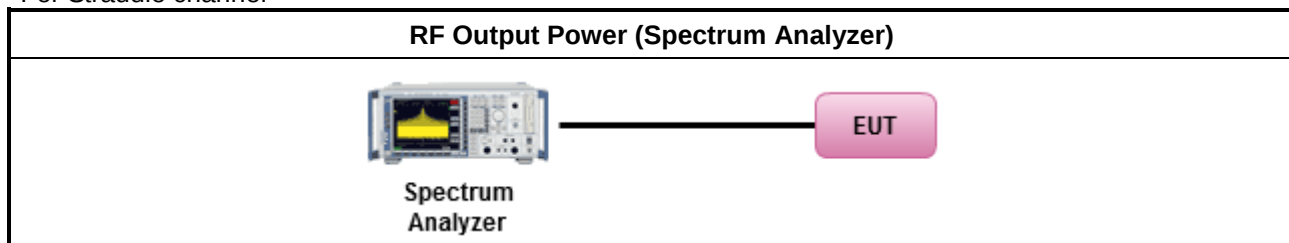
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

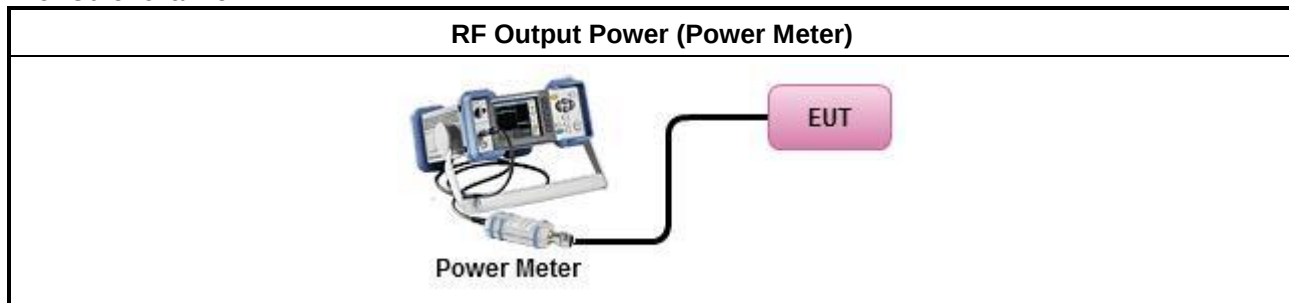
Test Method	
Maximum Conducted Output Power	
	Duty cycle $\geq 98\%$
☒	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle $< 98\%$
☒	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as KDB 789033, clause E Method PM (using an RF average power meter).
For conducted measurement.	
	If the EUT supports multiple transmit chains using options given below: Refer as 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: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$

3.3.4 Test Setup

For Straddle channel



For Other channel



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
	Outdoor AP: the peak power spectral density (PPSD) shall not exceed 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
	Indoor AP: the peak power spectral density (PPSD) shall not exceed 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.
	Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.
	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

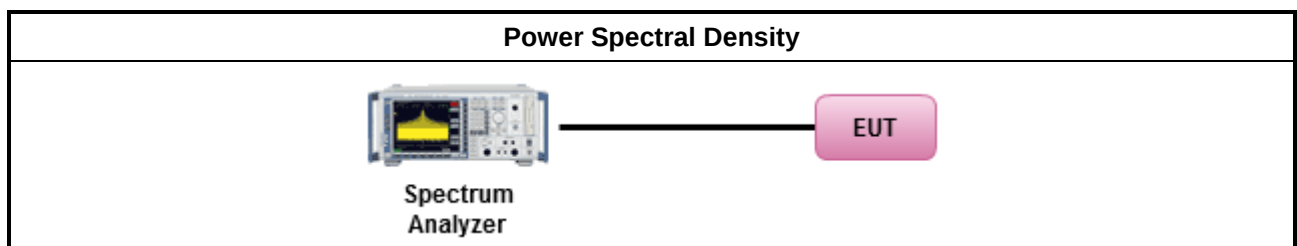
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐ Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth Duty cycle ≥ 98%	
☒ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging). Duty cycle < 98%	
☒ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
- Measure and sum the spectra across the outputs. Refer as 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.	
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

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

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

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

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: 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).

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

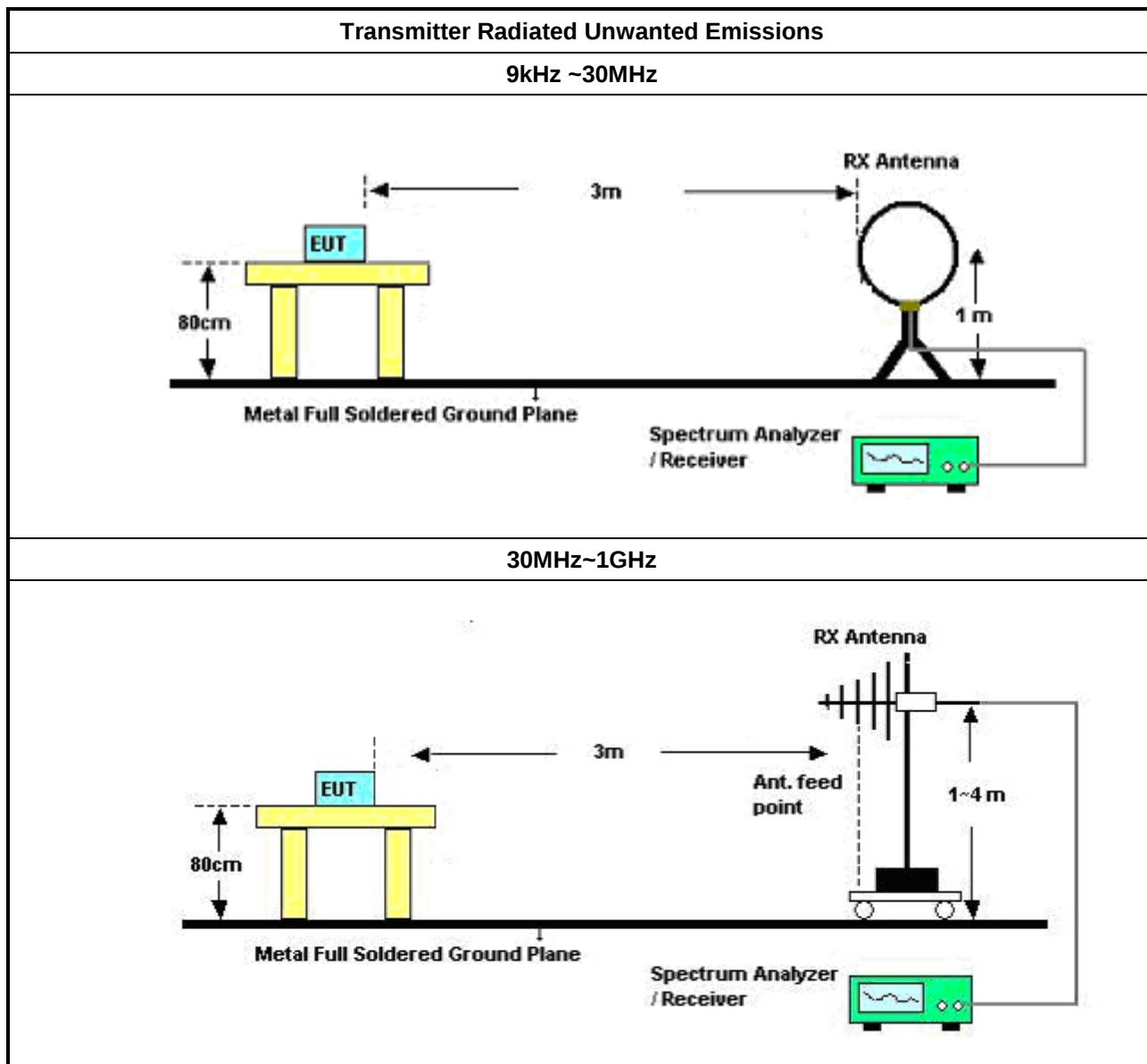
Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
☒	Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
☒	Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
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.	
Use the following spectrum analyzer settings:	
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

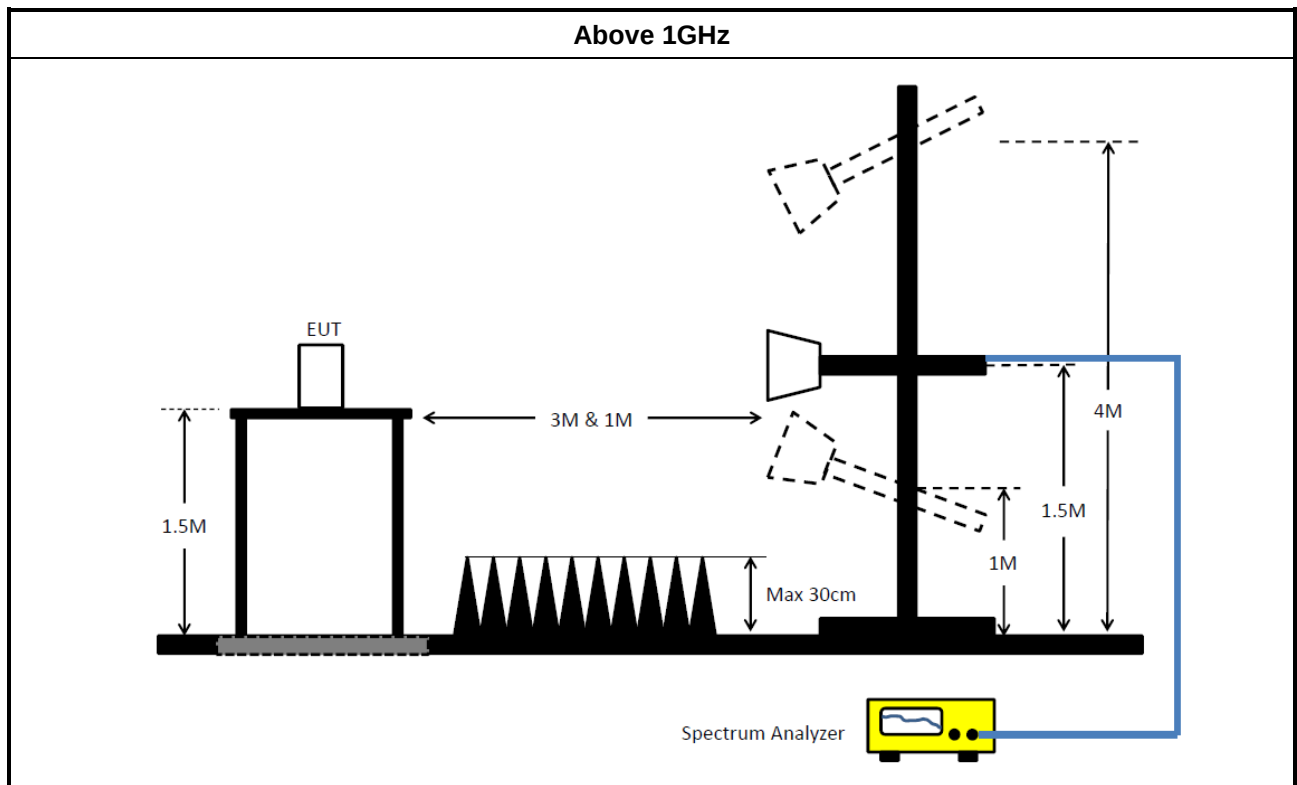
3.5.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.5.5 Test Setup





3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	ROHDE & SCHWARZ	ESR3	102051	9kHz ~ 3.6GHz	21/May/2025	20/May/2026
Two-Line V-Network	ROHDE & SCHWARZ	ENV 216	100003	9kHz ~ 30MHz	18/Apr/2025	17/Apr/2026
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	26/Feb/2025	25/Feb/2026
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	17/Oct/2024	16/Oct/2025
Software	Sporton	SENSE-EMI	V5.11.3	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	28/Oct/2024	27/Oct/2025
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	16/Oct/2024	15/Oct/2025
Power Meter	Anritsu	ML2495A	949003	300MHz~40GHz	13/Feb/2025	12/Feb/2026
Pulse Sensor	Anritsu	MA2411B	917017	300MHz~40GHz	13/Feb/2025	12/Feb/2026
SENSE-15407_NII	Sporton	V5.11.23	N/A	N/A	N/A	N/A

Instrument for Radiated Test (03CH02-HY)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Site V.S.W.R	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3M	14/Jul/2024	13/Jul/2025
Signal Analyzer	ROHDE&SCHWARZ	FSV3044	101750	10Hz~44GHz	10/Apr/2025	09/Apr/2026
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2024	22/Sep/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	04/Oct/2024	03/Oct/2025
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX 104	03CH02-cable-01	1GHz~40GHz	13/Feb/2025	12/Feb/2026
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	01/Oct/2024	30/Sep/2025
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~40GHz	26/Apr/2025	25/Apr/2026
SENSE-EMI	Sporton	V5.11.9	N/A	N/A	26/Apr/2025	25/Apr/2026

**Instrument for Radiated Test (03CH26-HY)**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH26-HY	30MHz~1GHz 3m	07/Aug/2024	06/Aug/2025
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH26-HY	1GHz~18GHz 3m	07/Aug/2024	06/Aug/2025
EMI Test Receiver	ROHDE & SCHWARZ	ESR	102318	9kHz~3.6GHz	06/Dec/2024	05/Dec/2025
Signal Analyzer	ROHDE&SCHWARZ	FSV3044	101411	10Hz~44GHz	09/Oct/2024	08/Oct/2025
Loop Antenna	TESEQ	HLA 6121	65417	9kHz~30MHz	17/Oct/2024	16/Oct/2025
Bilog Antenna & 6dB Attenuator	TESEQ & VGT	CBL 6111D & VFA 04002-06	63540/002	30MHz~1GHz	05/Jun/2024	04/Jun/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02877	1GHz~18GHz	11/Jul/2024	10/Jul/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	04/Oct/2024	03/Oct/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	CB009	9kHz~1GHz	21/Oct/2024	20/Oct/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	CB009	1GHz~40GHz	21/Oct/2024	20/Oct/2025
Preamplifier	SGH	PRAMP 903	20230515-2	30MHz~1GHz	24/May/2024	23/May/2025
Preamplifier	SGH	PRAMP 118-H	20230515-4	1GHz ~18GHz	24/May/2024	23/May/2025
Microwave Preamplifier	Agilent	8449B	3008A02602	1GHz ~18GHz	15/Mar/2024	14/Mar/2025
Microwave Preamplifier	Agilent	8449B	3008A02602	1GHz ~18GHz	12/Mar/2025	11/Mar/2026
Amplifier	EM	EM18G40G	060874	18GHz ~ 40GHz	15/Apr/2024	14/Apr/2025
SENSE-15407-NII	Sporton	V5.11.23	NA	NA	NA	NA

Instrument for Radiated Test (03CH09-HY) (Scan_Below 1GHz)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	07/Mar/2025	06/Mar/2026
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	03/May/2024	02/May/2025
Signal Analyzer	R&S	FSV40	101500	10Hz-40GHz	01/Nov/2024	31/Oct/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	19/Mar/2024	18/Mar/2025
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MTJ6 102-05	35418 & 3	30MHz~1GHz	26/Aug/2024	25/Aug/2025
RF Cable-R03m	Jye Bao	RG142	03CH09-cable-01	9kHz~1GHz	19/Feb/2025	18/Feb/2026
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	08/Apr/2024	07/Apr/2025
SENSE-15407_NII	Sporton	V5.11.21	NA	NA	NA	NA

**Instrument for Radiated Test (03CH09-HY) (Scan_Above 1GHz)**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Site V.S.W.R	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	06/Mar/2025	05/Mar/2026
Signal Analyzer	R&S	FSV40	101500	10Hz-40GHz	01/Nov/2024	31/Oct/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	20/Dec/2024	19/Dec/2025
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	19/Jul/2024	18/Jul/2025
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	03CH09-cable -02	1GHz~40GHz	07/Oct/2024	06/Oct/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	04/Oct/2024	03/Oct/2025
Amplifier	EMEC	EM18G40GA	060887	18GHz~40GHz	07/Oct/2024	06/Oct/2025
SENSE-15407_NII	Sporton	V5.11.21	NA	NA	NA	NA

Instrument for Radiated Test (03CH09-HY) (Panel Antenna)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	07/Mar/2025	06/Mar/2026
Site V.S.W.R	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	06/Mar/2025	05/Mar/2026
EMI Test Receiver	ROHDE & SCHWARZ	ESR	102318	9kHz~3.6GHz	06/Dec/2024	05/Dec/2025
Signal Analyzer	R&S	FSV40	101500	10Hz-40GHz	01/Nov/2024	31/Oct/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	20/Mar/2025	19/Mar/2026
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MTJ6 102-05	35418 & 3	30MHz~1GHz	26/Aug/2024	25/Aug/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	20/Dec/2024	19/Dec/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	04/Oct/2024	03/Oct/2025
RF Cable-R03m	Jye Bao	RG142	03CH09-cable -01	9kHz~1GHz	19/Feb/2025	18/Feb/2026
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	03CH09-cable -02	1GHz~40GHz	07/Oct/2024	06/Oct/2025
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	09/Apr/2025	08/Apr/2026
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	19/Jul/2024	18/Jul/2025
Amplifier	EM	EM18G40GA	060874	18GHz~40GHz	18/Apr/2025	17/Apr/2026
SENSE-15407_NII	Sporton	V5.11.23	NA	NA	NA	NA



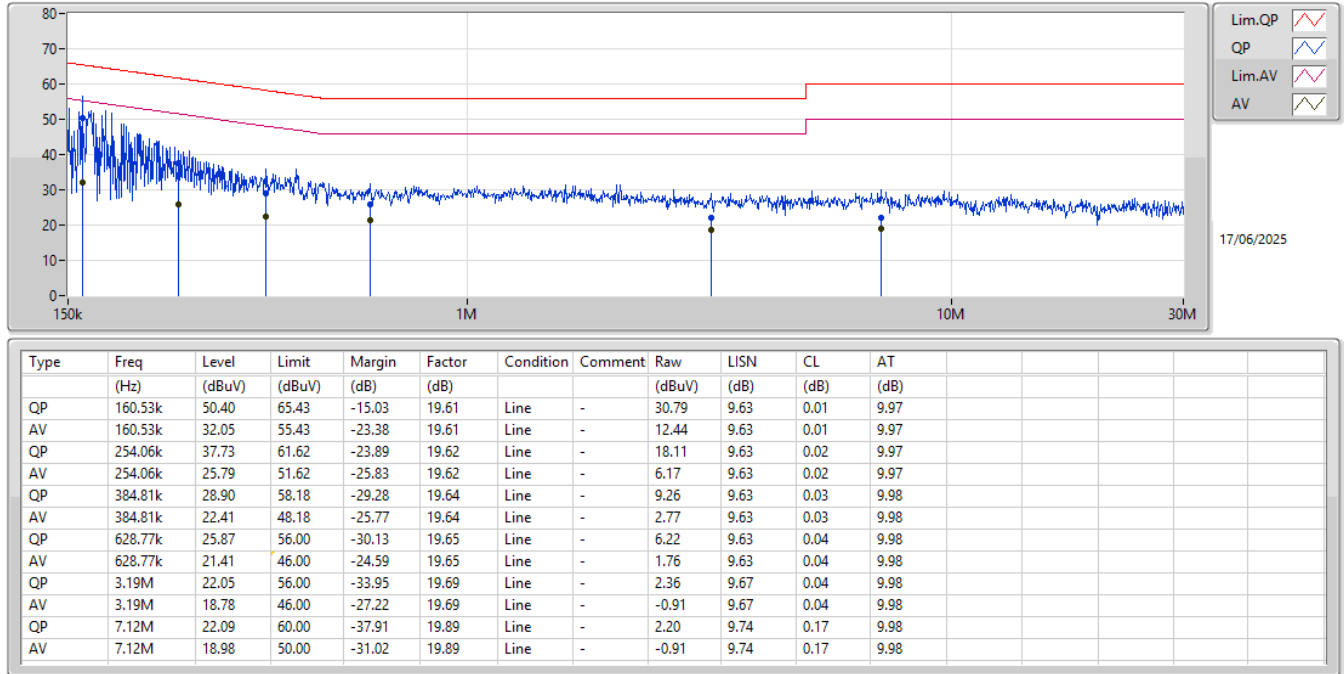
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	157.36k	51.85	65.60	-13.75	Neutral

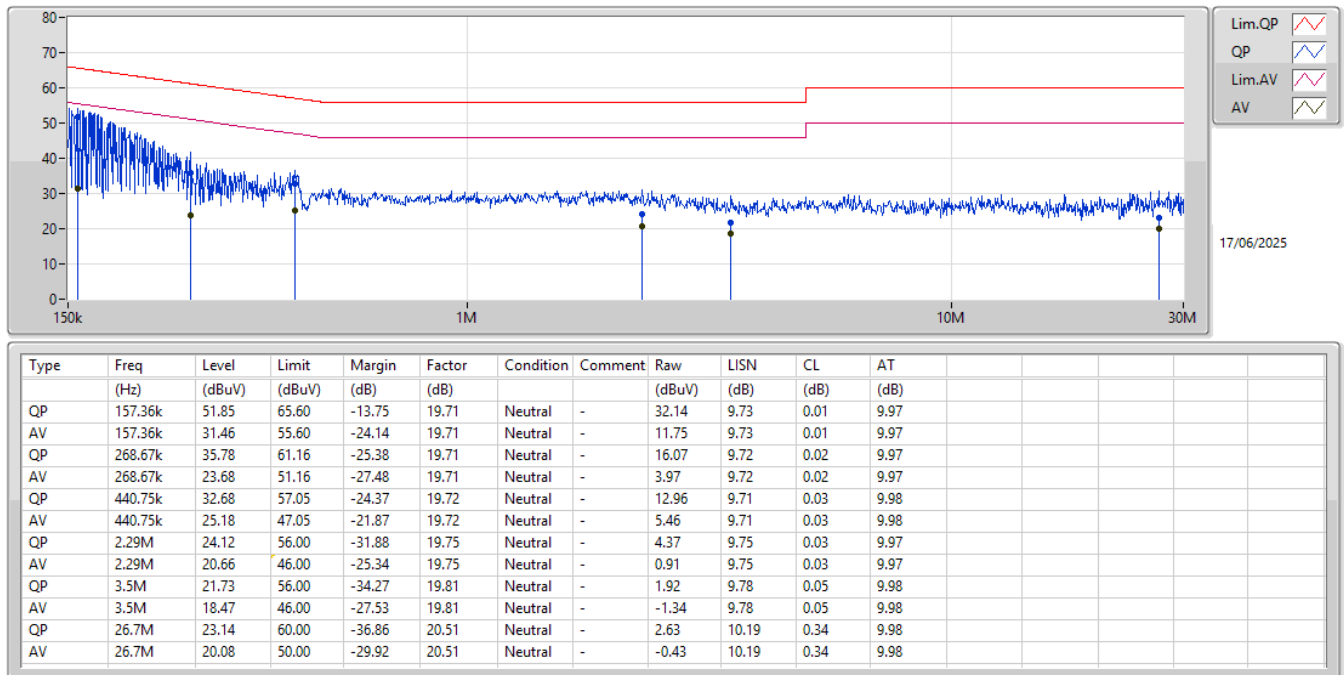
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	160.53k	50.40	65.43	-15.03	Line
Mode 1	Pass	AV	160.53k	32.05	55.43	-23.38	Line
Mode 1	Pass	QP	254.06k	37.73	61.62	-23.89	Line
Mode 1	Pass	AV	254.06k	25.79	51.62	-25.83	Line
Mode 1	Pass	QP	384.81k	28.90	58.18	-29.28	Line
Mode 1	Pass	AV	384.81k	22.41	48.18	-25.77	Line
Mode 1	Pass	QP	628.77k	25.87	56.00	-30.13	Line
Mode 1	Pass	AV	628.77k	21.41	46.00	-24.59	Line
Mode 1	Pass	QP	3.19M	22.05	56.00	-33.95	Line
Mode 1	Pass	AV	3.19M	18.78	46.00	-27.22	Line
Mode 1	Pass	QP	7.12M	22.09	60.00	-37.91	Line
Mode 1	Pass	AV	7.12M	18.98	50.00	-31.02	Line
Mode 1	Pass	QP	157.36k	51.85	65.60	-13.75	Neutral
Mode 1	Pass	AV	157.36k	31.46	55.60	-24.14	Neutral
Mode 1	Pass	QP	268.67k	35.78	61.16	-25.38	Neutral
Mode 1	Pass	AV	268.67k	23.68	51.16	-27.48	Neutral
Mode 1	Pass	QP	440.75k	32.68	57.05	-24.37	Neutral
Mode 1	Pass	AV	440.75k	25.18	47.05	-21.87	Neutral
Mode 1	Pass	QP	2.29M	24.12	56.00	-31.88	Neutral
Mode 1	Pass	AV	2.29M	20.66	46.00	-25.34	Neutral
Mode 1	Pass	QP	3.5M	21.73	56.00	-34.27	Neutral
Mode 1	Pass	AV	3.5M	18.47	46.00	-27.53	Neutral
Mode 1	Pass	QP	26.7M	23.14	60.00	-36.86	Neutral
Mode 1	Pass	AV	26.7M	20.08	50.00	-29.92	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1





Conducted Emissions at Powerline_Radio 2_ Dual-Polarized MIMO Panel Antenna

Appendix A.2

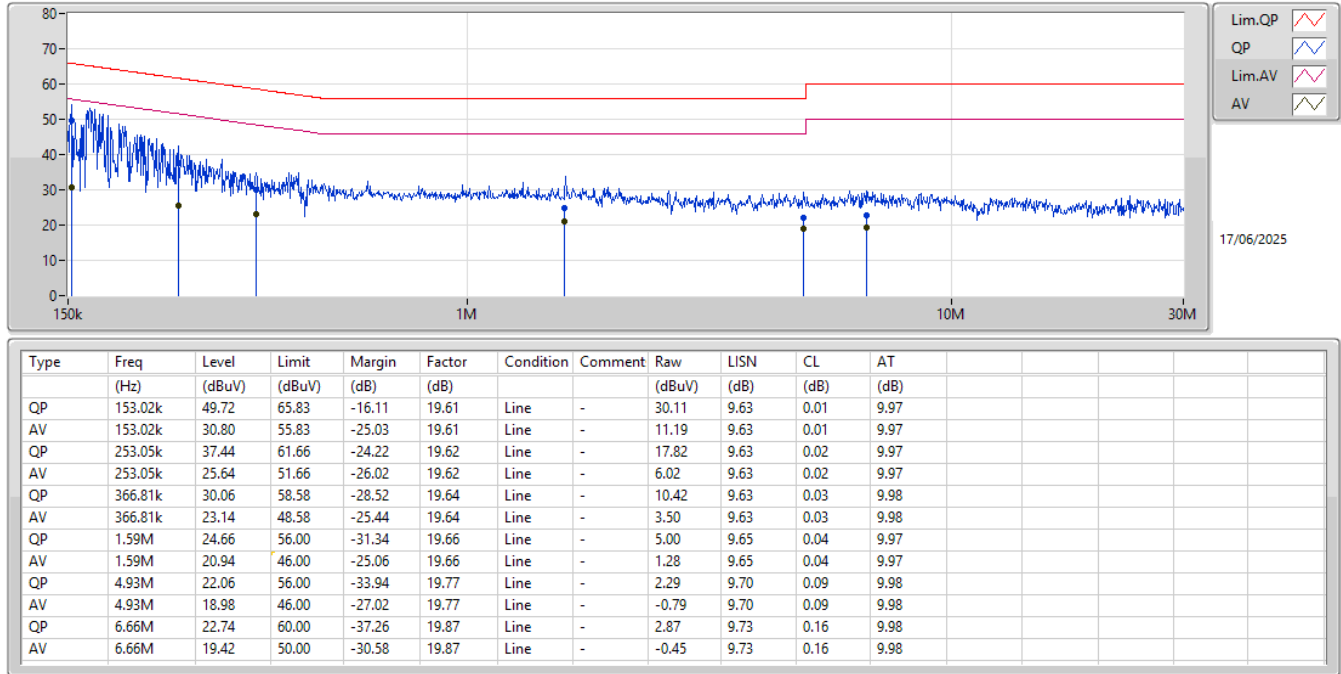
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	159.26k	50.96	65.50	-14.54	Neutral

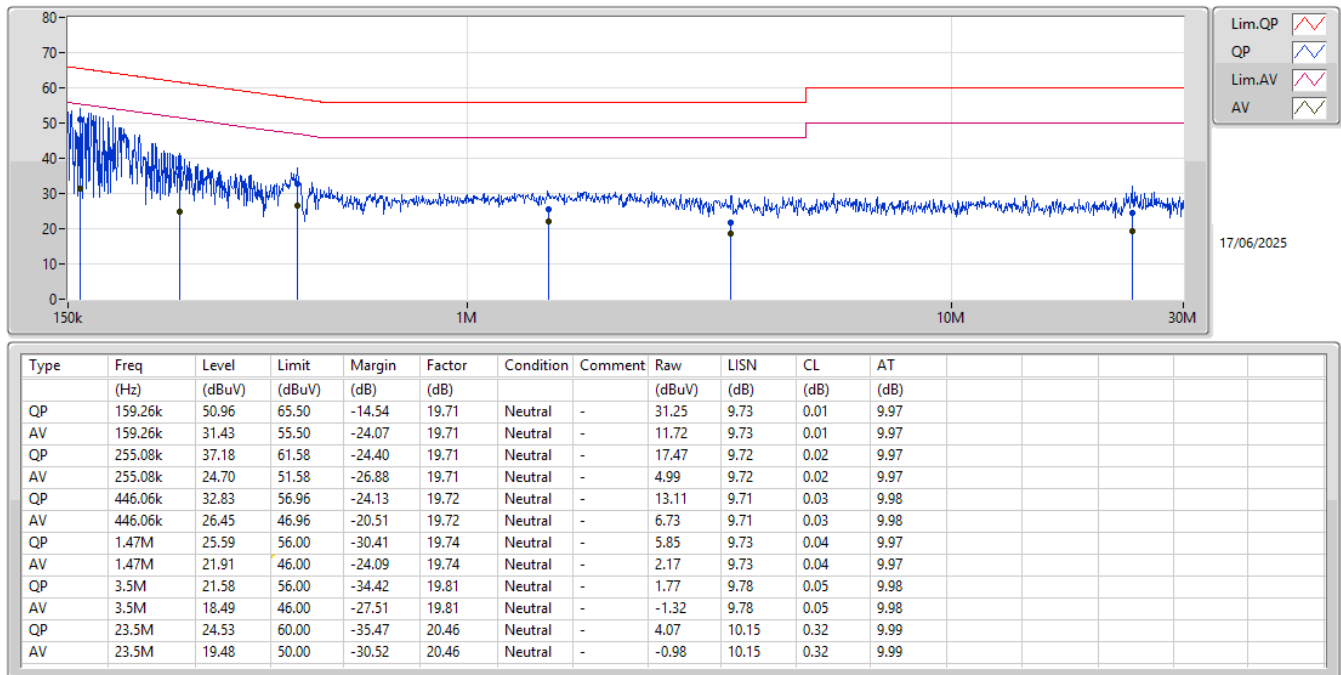
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.02k	49.72	65.83	-16.11	Line
Mode 1	Pass	AV	153.02k	30.80	55.83	-25.03	Line
Mode 1	Pass	QP	253.05k	37.44	61.66	-24.22	Line
Mode 1	Pass	AV	253.05k	25.64	51.66	-26.02	Line
Mode 1	Pass	QP	366.81k	30.06	58.58	-28.52	Line
Mode 1	Pass	AV	366.81k	23.14	48.58	-25.44	Line
Mode 1	Pass	QP	1.59M	24.66	56.00	-31.34	Line
Mode 1	Pass	AV	1.59M	20.94	46.00	-25.06	Line
Mode 1	Pass	QP	4.93M	22.06	56.00	-33.94	Line
Mode 1	Pass	AV	4.93M	18.98	46.00	-27.02	Line
Mode 1	Pass	QP	6.66M	22.74	60.00	-37.26	Line
Mode 1	Pass	AV	6.66M	19.42	50.00	-30.58	Line
Mode 1	Pass	QP	159.26k	50.96	65.50	-14.54	Neutral
Mode 1	Pass	AV	159.26k	31.43	55.50	-24.07	Neutral
Mode 1	Pass	QP	255.08k	37.18	61.58	-24.40	Neutral
Mode 1	Pass	AV	255.08k	24.70	51.58	-26.88	Neutral
Mode 1	Pass	QP	446.06k	32.83	56.96	-24.13	Neutral
Mode 1	Pass	AV	446.06k	26.45	46.96	-20.51	Neutral
Mode 1	Pass	QP	1.47M	25.59	56.00	-30.41	Neutral
Mode 1	Pass	AV	1.47M	21.91	46.00	-24.09	Neutral
Mode 1	Pass	QP	3.5M	21.58	56.00	-34.42	Neutral
Mode 1	Pass	AV	3.5M	18.49	46.00	-27.51	Neutral
Mode 1	Pass	QP	23.5M	24.53	60.00	-35.47	Neutral
Mode 1	Pass	AV	23.5M	19.48	50.00	-30.52	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1





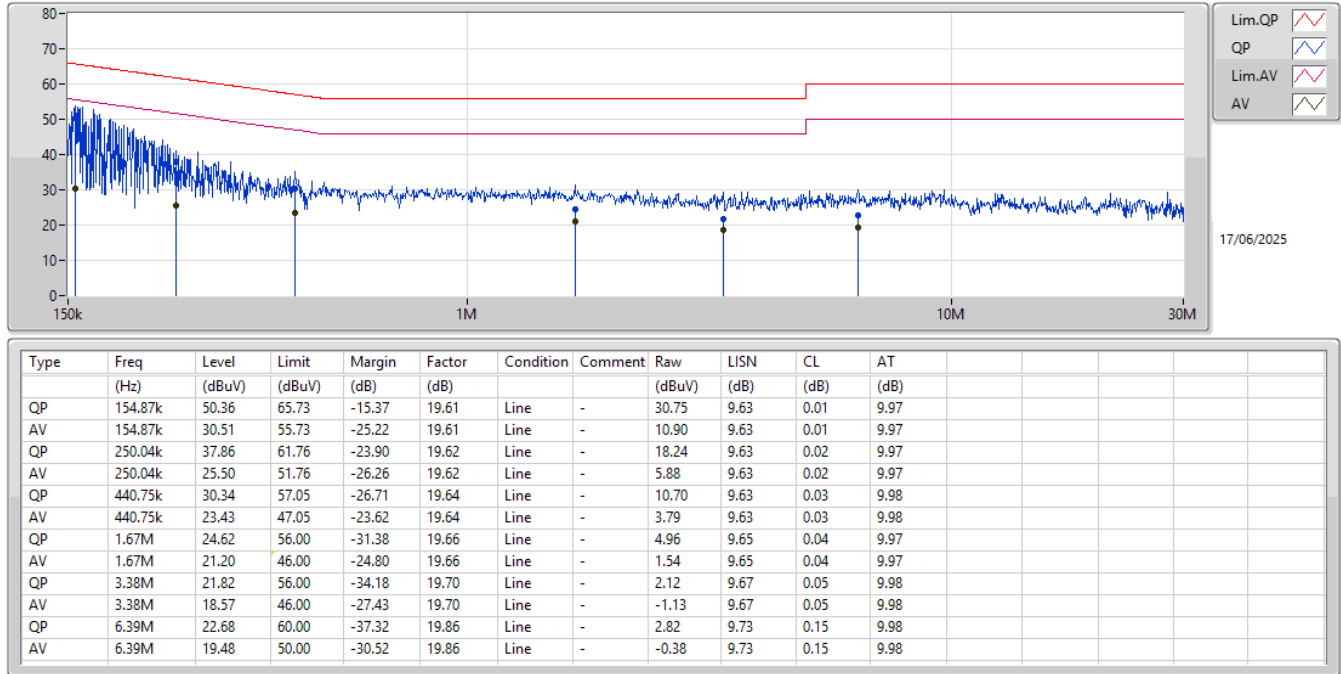
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	154.87k	50.36	65.73	-15.37	Line

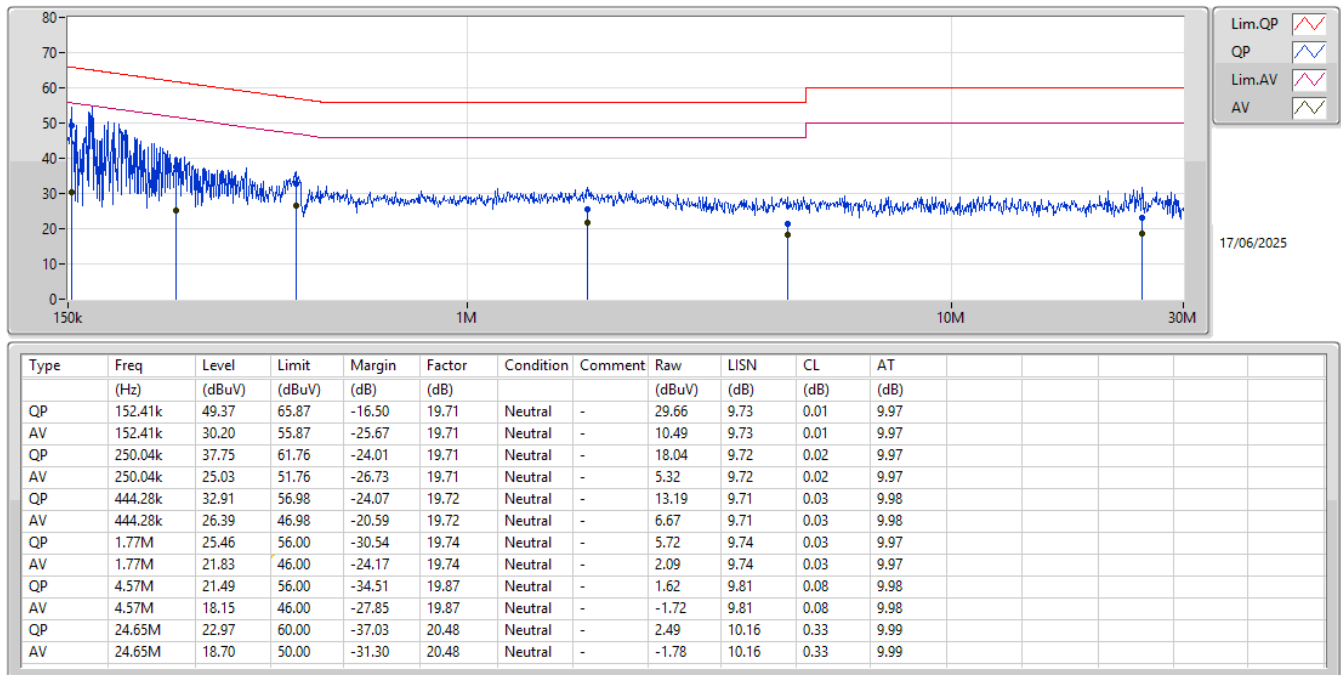
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	154.87k	50.36	65.73	-15.37	Line
Mode 1	Pass	AV	154.87k	30.51	55.73	-25.22	Line
Mode 1	Pass	QP	250.04k	37.86	61.76	-23.90	Line
Mode 1	Pass	AV	250.04k	25.50	51.76	-26.26	Line
Mode 1	Pass	QP	440.75k	30.34	57.05	-26.71	Line
Mode 1	Pass	AV	440.75k	23.43	47.05	-23.62	Line
Mode 1	Pass	QP	1.67M	24.62	56.00	-31.38	Line
Mode 1	Pass	AV	1.67M	21.20	46.00	-24.80	Line
Mode 1	Pass	QP	3.38M	21.82	56.00	-34.18	Line
Mode 1	Pass	AV	3.38M	18.57	46.00	-27.43	Line
Mode 1	Pass	QP	6.39M	22.68	60.00	-37.32	Line
Mode 1	Pass	AV	6.39M	19.48	50.00	-30.52	Line
Mode 1	Pass	QP	152.41k	49.37	65.87	-16.50	Neutral
Mode 1	Pass	AV	152.41k	30.20	55.87	-25.67	Neutral
Mode 1	Pass	QP	250.04k	37.75	61.76	-24.01	Neutral
Mode 1	Pass	AV	250.04k	25.03	51.76	-26.73	Neutral
Mode 1	Pass	QP	444.28k	32.91	56.98	-24.07	Neutral
Mode 1	Pass	AV	444.28k	26.39	46.98	-20.59	Neutral
Mode 1	Pass	QP	1.77M	25.46	56.00	-30.54	Neutral
Mode 1	Pass	AV	1.77M	21.83	46.00	-24.17	Neutral
Mode 1	Pass	QP	4.57M	21.49	56.00	-34.51	Neutral
Mode 1	Pass	AV	4.57M	18.15	46.00	-27.85	Neutral
Mode 1	Pass	QP	24.65M	22.97	60.00	-37.03	Neutral
Mode 1	Pass	AV	24.65M	18.70	50.00	-31.30	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1





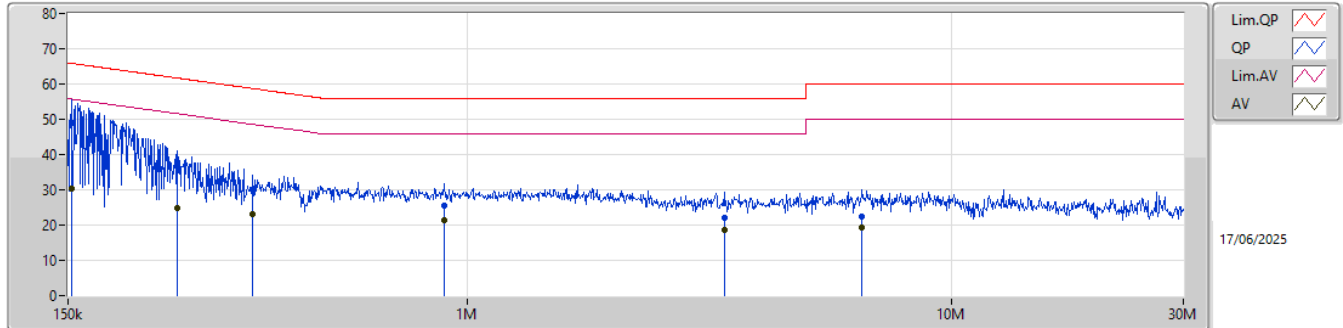
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	157.36k	51.30	65.60	-14.30	Neutral

Result

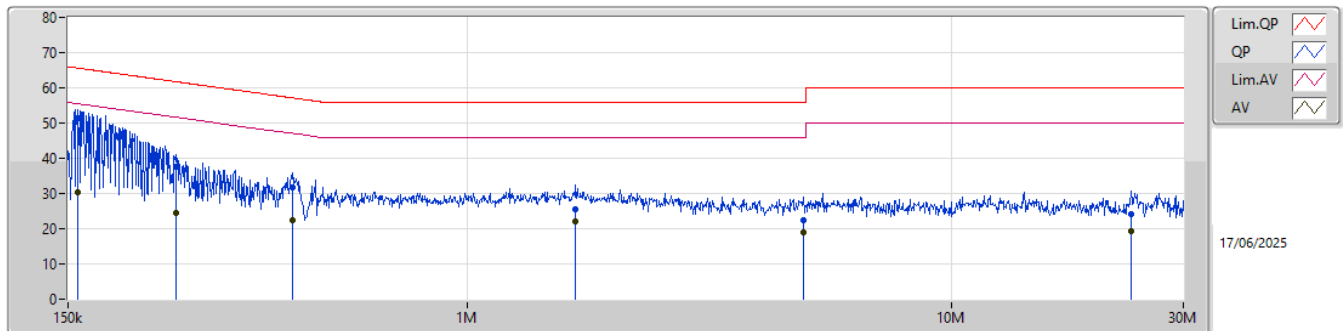
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	152.41k	48.99	65.87	-16.88	Line
Mode 1	Pass	AV	152.41k	30.25	55.87	-25.62	Line
Mode 1	Pass	QP	252.04k	37.59	61.70	-24.11	Line
Mode 1	Pass	AV	252.04k	24.85	51.70	-26.85	Line
Mode 1	Pass	QP	361k	29.84	58.70	-28.86	Line
Mode 1	Pass	AV	361k	23.02	48.70	-25.68	Line
Mode 1	Pass	QP	893.43k	25.65	56.00	-30.35	Line
Mode 1	Pass	AV	893.43k	21.50	46.00	-24.50	Line
Mode 1	Pass	QP	3.39M	21.90	56.00	-34.10	Line
Mode 1	Pass	AV	3.39M	18.67	46.00	-27.33	Line
Mode 1	Pass	QP	6.52M	22.51	60.00	-37.49	Line
Mode 1	Pass	AV	6.52M	19.36	50.00	-30.64	Line
Mode 1	Pass	QP	157.36k	51.30	65.60	-14.30	Neutral
Mode 1	Pass	AV	157.36k	30.26	55.60	-25.34	Neutral
Mode 1	Pass	QP	250.04k	37.59	61.76	-24.17	Neutral
Mode 1	Pass	AV	250.04k	24.47	51.76	-27.29	Neutral
Mode 1	Pass	QP	435.5k	31.69	57.15	-25.46	Neutral
Mode 1	Pass	AV	435.5k	22.56	47.15	-24.59	Neutral
Mode 1	Pass	QP	1.67M	25.58	56.00	-30.42	Neutral
Mode 1	Pass	AV	1.67M	21.95	46.00	-24.05	Neutral
Mode 1	Pass	QP	4.93M	22.36	56.00	-33.64	Neutral
Mode 1	Pass	AV	4.93M	18.85	46.00	-27.15	Neutral
Mode 1	Pass	QP	23.4M	24.11	60.00	-35.89	Neutral
Mode 1	Pass	AV	23.4M	19.37	50.00	-30.63	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	152.41k	48.99	65.87	-16.88	19.61	Line	-	29.38	9.63	0.01	9.97						
AV	152.41k	30.25	55.87	-25.62	19.61	Line	-	10.64	9.63	0.01	9.97						
QP	252.04k	37.59	61.70	-24.11	19.62	Line	-	17.97	9.63	0.02	9.97						
AV	252.04k	24.85	51.70	-26.85	19.62	Line	-	5.23	9.63	0.02	9.97						
QP	361k	29.84	58.70	-28.86	19.64	Line	-	10.20	9.63	0.03	9.98						
AV	361k	23.02	48.70	-25.68	19.64	Line	-	3.38	9.63	0.03	9.98						
QP	893.43k	25.65	56.00	-30.35	19.67	Line	-	5.98	9.64	0.05	9.98						
AV	893.43k	21.50	46.00	-24.50	19.67	Line	-	1.83	9.64	0.05	9.98						
QP	3.39M	21.90	56.00	-34.10	19.70	Line	-	2.20	9.67	0.05	9.98						
AV	3.39M	18.67	46.00	-27.33	19.70	Line	-	-1.03	9.67	0.05	9.98						
QP	6.52M	22.51	60.00	-37.49	19.86	Line	-	2.65	9.73	0.15	9.98						
AV	6.52M	19.36	50.00	-30.64	19.86	Line	-	-0.50	9.73	0.15	9.98						

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	157.36k	51.30	65.60	-14.30	19.71	Neutral	-	31.59	9.73	0.01	9.97						
AV	157.36k	30.26	55.60	-25.34	19.71	Neutral	-	10.55	9.73	0.01	9.97						
QP	250.04k	37.59	61.76	-24.17	19.71	Neutral	-	17.88	9.72	0.02	9.97						
AV	250.04k	24.47	51.76	-27.29	19.71	Neutral	-	4.76	9.72	0.02	9.97						
QP	435.5k	31.69	57.15	-25.46	19.72	Neutral	-	11.97	9.71	0.03	9.98						
AV	435.5k	22.56	47.15	-24.59	19.72	Neutral	-	2.84	9.71	0.03	9.98						
QP	1.67M	25.58	56.00	-30.42	19.74	Neutral	-	5.84	9.73	0.04	9.97						
AV	1.67M	21.95	46.00	-24.05	19.74	Neutral	-	2.21	9.73	0.04	9.97						
QP	4.93M	22.36	56.00	-33.64	19.90	Neutral	-	2.46	9.83	0.09	9.98						
AV	4.93M	18.85	46.00	-27.15	19.90	Neutral	-	-1.05	9.83	0.09	9.98						
QP	23.4M	24.11	60.00	-35.89	20.45	Neutral	-	3.66	10.14	0.32	9.99						
AV	23.4M	19.37	50.00	-30.63	20.45	Neutral	-	-1.08	10.14	0.32	9.99						



**Conducted Emissions at Powerline_Radio 3_
Dual-Polarized MIMO Panel Antenna**

Appendix A.5

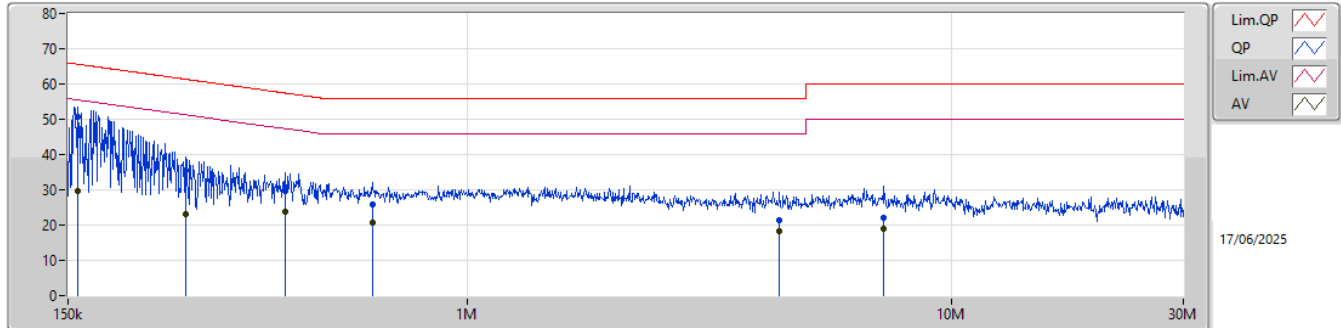
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	156.73k	51.13	65.64	-14.51	Neutral

Result

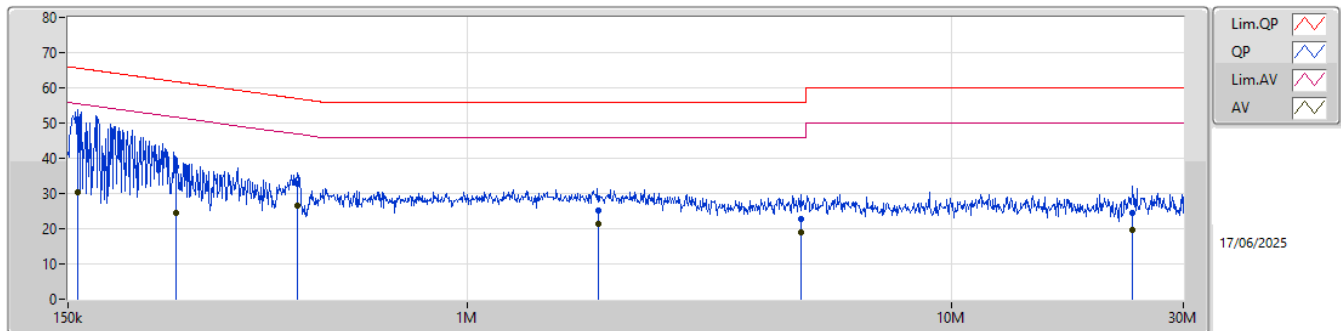
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	156.73k	50.79	65.64	-14.85	Line
Mode 1	Pass	AV	156.73k	29.57	55.64	-26.07	Line
Mode 1	Pass	QP	262.31k	35.61	61.35	-25.74	Line
Mode 1	Pass	AV	262.31k	23.25	51.35	-28.10	Line
Mode 1	Pass	QP	420.14k	29.77	57.45	-27.68	Line
Mode 1	Pass	AV	420.14k	23.74	47.45	-23.71	Line
Mode 1	Pass	QP	636.35k	25.87	56.00	-30.13	Line
Mode 1	Pass	AV	636.35k	20.72	46.00	-25.28	Line
Mode 1	Pass	QP	4.41M	21.53	56.00	-34.47	Line
Mode 1	Pass	AV	4.41M	18.44	46.00	-27.56	Line
Mode 1	Pass	QP	7.24M	22.20	60.00	-37.80	Line
Mode 1	Pass	AV	7.24M	18.98	50.00	-31.02	Line
Mode 1	Pass	QP	156.73k	51.13	65.64	-14.51	Neutral
Mode 1	Pass	AV	156.73k	30.37	55.64	-25.27	Neutral
Mode 1	Pass	QP	251.04k	37.59	61.72	-24.13	Neutral
Mode 1	Pass	AV	251.04k	24.47	51.72	-27.25	Neutral
Mode 1	Pass	QP	446.06k	32.65	56.96	-24.31	Neutral
Mode 1	Pass	AV	446.06k	26.39	46.96	-20.57	Neutral
Mode 1	Pass	QP	1.86M	25.05	56.00	-30.95	Neutral
Mode 1	Pass	AV	1.86M	21.45	46.00	-24.55	Neutral
Mode 1	Pass	QP	4.87M	22.70	56.00	-33.30	Neutral
Mode 1	Pass	AV	4.87M	18.90	46.00	-27.10	Neutral
Mode 1	Pass	QP	23.59M	24.55	60.00	-35.45	Neutral
Mode 1	Pass	AV	23.59M	19.60	50.00	-30.40	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)								
QP	156.73k	50.79	65.64	-14.85	19.61	Line	-	31.18	9.63	0.01	9.97								
AV	156.73k	29.57	55.64	-26.07	19.61	Line	-	9.96	9.63	0.01	9.97								
QP	262.31k	35.61	61.35	-25.74	19.62	Line	-	15.99	9.63	0.02	9.97								
AV	262.31k	23.25	51.35	-28.10	19.62	Line	-	3.63	9.63	0.02	9.97								
QP	420.14k	29.77	57.45	-27.68	19.64	Line	-	10.13	9.63	0.03	9.98								
AV	420.14k	23.74	47.45	-23.71	19.64	Line	-	4.10	9.63	0.03	9.98								
QP	636.35k	25.87	56.00	-30.13	19.66	Line	-	6.21	9.64	0.04	9.98								
AV	636.35k	20.72	46.00	-25.28	19.66	Line	-	1.06	9.64	0.04	9.98								
QP	4.41M	21.53	56.00	-34.47	19.73	Line	-	1.80	9.68	0.07	9.98								
AV	4.41M	18.44	46.00	-27.56	19.73	Line	-	-1.29	9.68	0.07	9.98								
QP	7.24M	22.20	60.00	-37.80	19.89	Line	-	2.31	9.74	0.17	9.98								
AV	7.24M	18.98	50.00	-31.02	19.89	Line	-	-0.91	9.74	0.17	9.98								

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)								
QP	156.73k	51.13	65.64	-14.51	19.71	Neutral	-	31.42	9.73	0.01	9.97								
AV	156.73k	30.37	55.64	-25.27	19.71	Neutral	-	10.66	9.73	0.01	9.97								
QP	251.04k	37.59	61.72	-24.13	19.71	Neutral	-	17.88	9.72	0.02	9.97								
AV	251.04k	24.47	51.72	-27.25	19.71	Neutral	-	4.76	9.72	0.02	9.97								
QP	446.06k	32.65	56.96	-24.31	19.72	Neutral	-	12.93	9.71	0.03	9.98								
AV	446.06k	26.39	46.96	-20.57	19.72	Neutral	-	6.67	9.71	0.03	9.98								
QP	1.86M	25.05	56.00	-30.95	19.74	Neutral	-	5.31	9.74	0.03	9.97								
AV	1.86M	21.45	46.00	-24.55	19.74	Neutral	-	1.71	9.74	0.03	9.97								
QP	4.87M	22.70	56.00	-33.30	19.90	Neutral	-	2.80	9.83	0.09	9.98								
AV	4.87M	18.90	46.00	-27.10	19.90	Neutral	-	-1.00	9.83	0.09	9.98								
QP	23.59M	24.55	60.00	-35.45	20.46	Neutral	-	4.09	10.15	0.32	9.99								
AV	23.59M	19.60	50.00	-30.40	20.46	Neutral	-	-0.86	10.15	0.32	9.99								



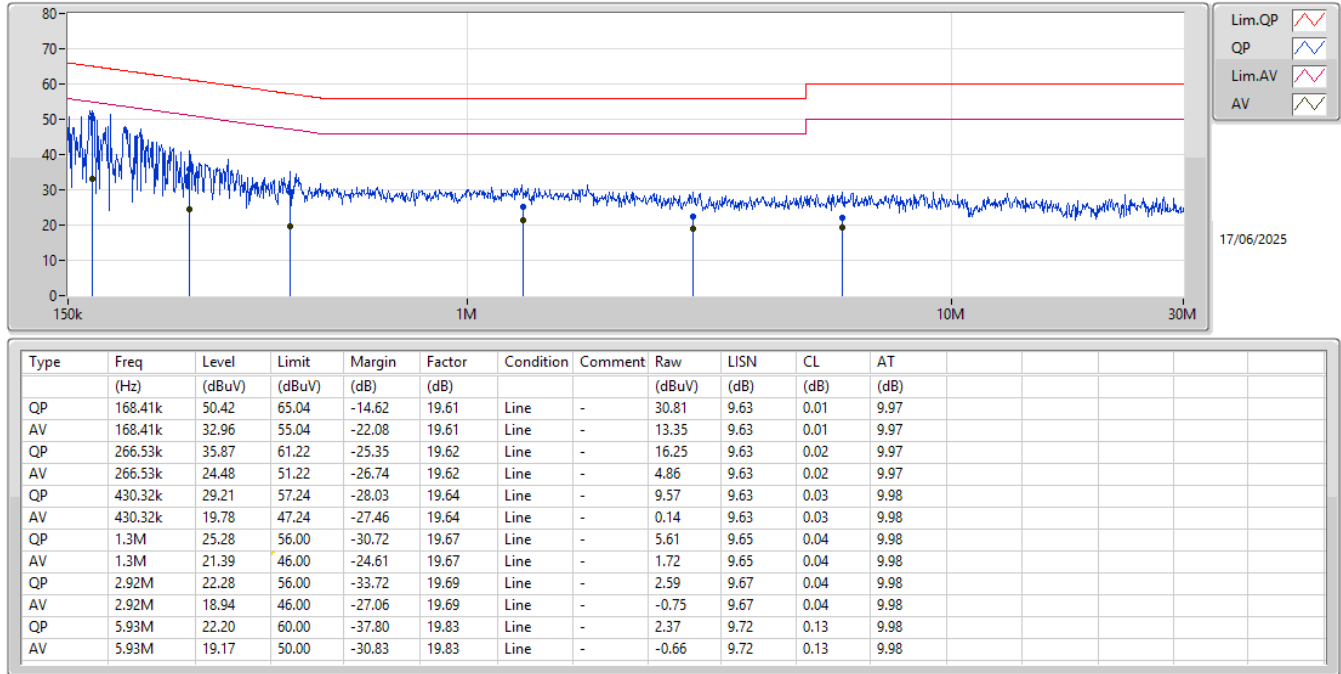
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	166.41k	50.86	65.14	-14.28	Neutral

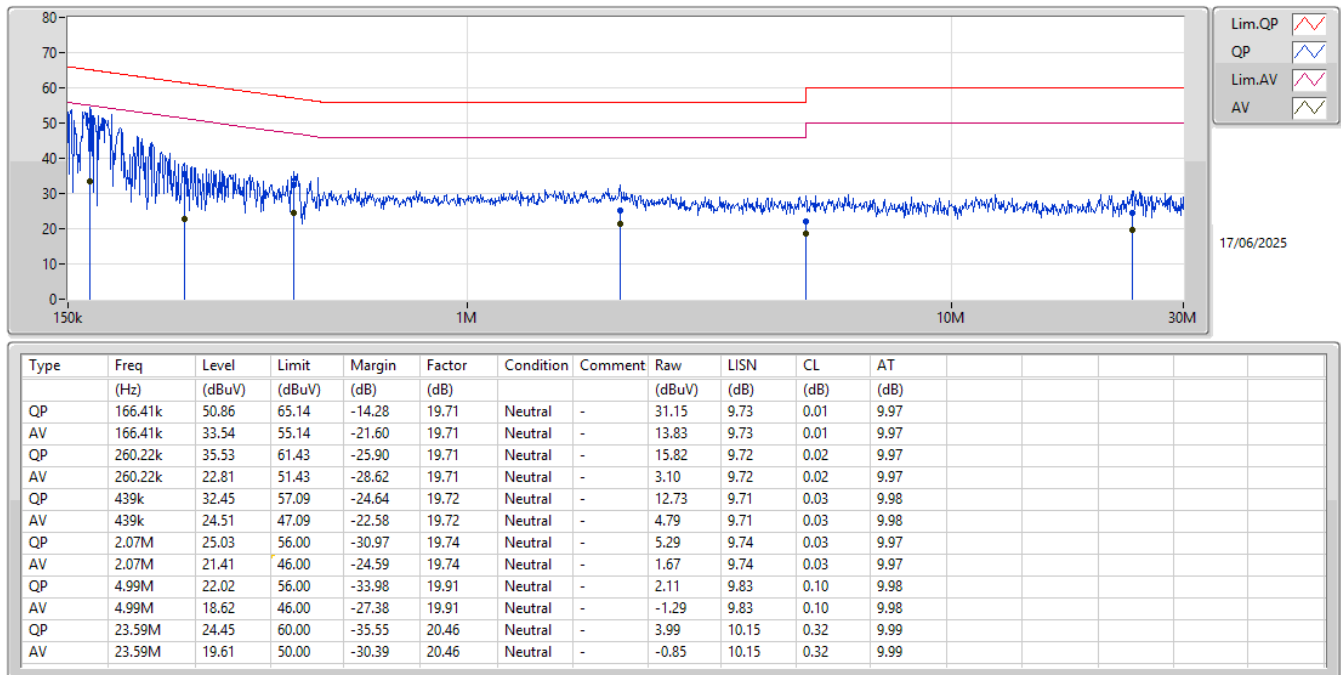
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	168.41k	50.42	65.04	-14.62	Line
Mode 1	Pass	AV	168.41k	32.96	55.04	-22.08	Line
Mode 1	Pass	QP	266.53k	35.87	61.22	-25.35	Line
Mode 1	Pass	AV	266.53k	24.48	51.22	-26.74	Line
Mode 1	Pass	QP	430.32k	29.21	57.24	-28.03	Line
Mode 1	Pass	AV	430.32k	19.78	47.24	-27.46	Line
Mode 1	Pass	QP	1.3M	25.28	56.00	-30.72	Line
Mode 1	Pass	AV	1.3M	21.39	46.00	-24.61	Line
Mode 1	Pass	QP	2.92M	22.28	56.00	-33.72	Line
Mode 1	Pass	AV	2.92M	18.94	46.00	-27.06	Line
Mode 1	Pass	QP	5.93M	22.20	60.00	-37.80	Line
Mode 1	Pass	AV	5.93M	19.17	50.00	-30.83	Line
Mode 1	Pass	QP	166.41k	50.86	65.14	-14.28	Neutral
Mode 1	Pass	AV	166.41k	33.54	55.14	-21.60	Neutral
Mode 1	Pass	QP	260.22k	35.53	61.43	-25.90	Neutral
Mode 1	Pass	AV	260.22k	22.81	51.43	-28.62	Neutral
Mode 1	Pass	QP	439k	32.45	57.09	-24.64	Neutral
Mode 1	Pass	AV	439k	24.51	47.09	-22.58	Neutral
Mode 1	Pass	QP	2.07M	25.03	56.00	-30.97	Neutral
Mode 1	Pass	AV	2.07M	21.41	46.00	-24.59	Neutral
Mode 1	Pass	QP	4.99M	22.02	56.00	-33.98	Neutral
Mode 1	Pass	AV	4.99M	18.62	46.00	-27.38	Neutral
Mode 1	Pass	QP	23.59M	24.45	60.00	-35.55	Neutral
Mode 1	Pass	AV	23.59M	19.61	50.00	-30.39	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1





Conducted Emissions at Powerline_Radio 1_Scan

Appendix A.7

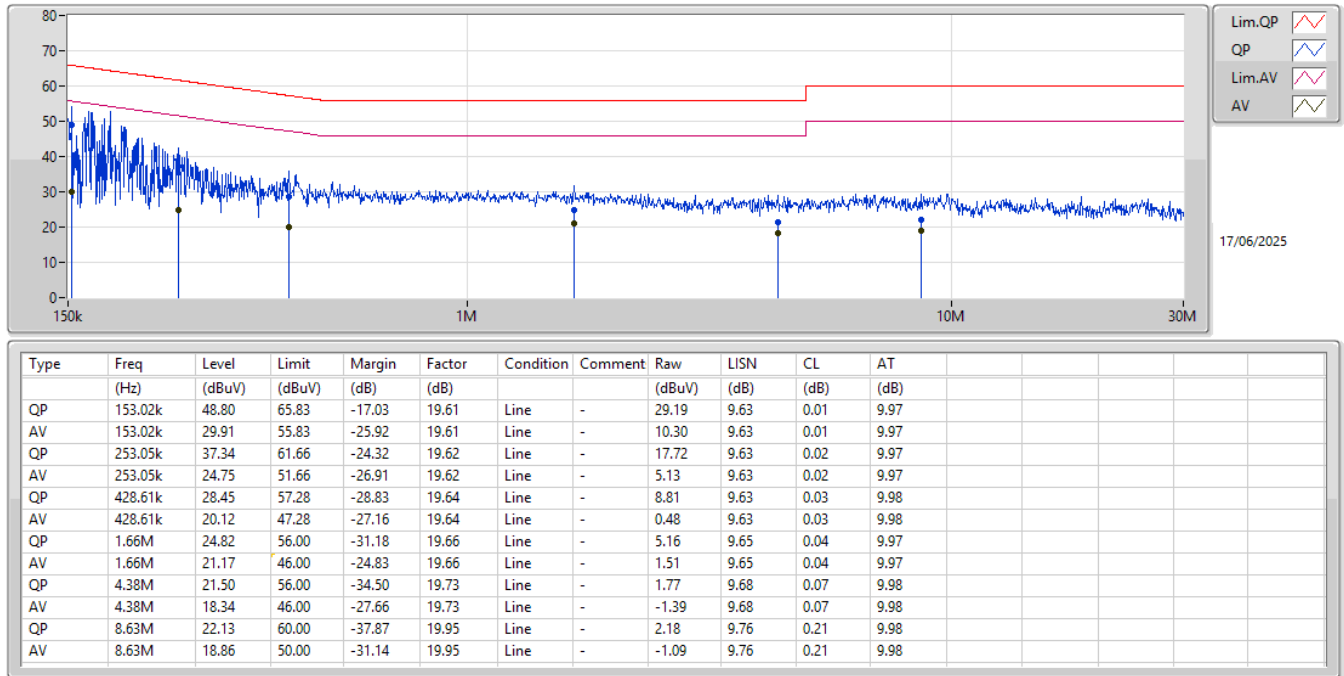
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150.6k	51.41	65.96	-14.55	Neutral

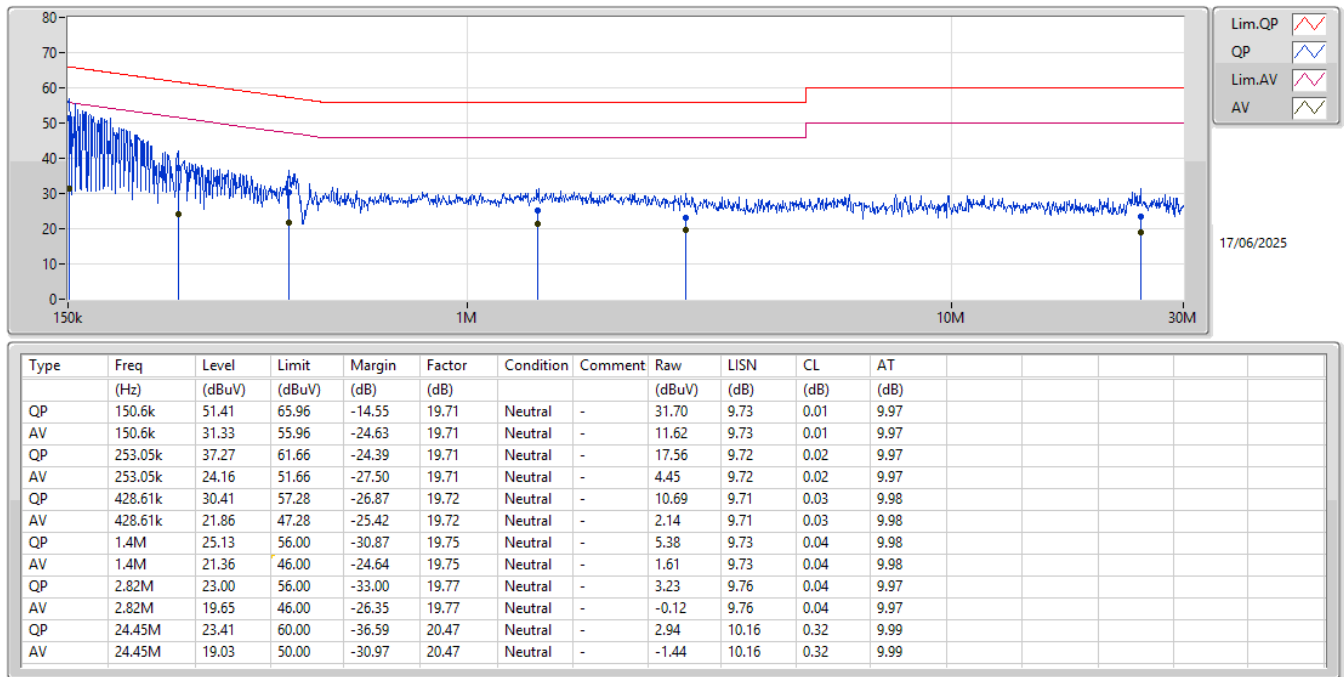
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.02k	48.80	65.83	-17.03	Line
Mode 1	Pass	AV	153.02k	29.91	55.83	-25.92	Line
Mode 1	Pass	QP	253.05k	37.34	61.66	-24.32	Line
Mode 1	Pass	AV	253.05k	24.75	51.66	-26.91	Line
Mode 1	Pass	QP	428.61k	28.45	57.28	-28.83	Line
Mode 1	Pass	AV	428.61k	20.12	47.28	-27.16	Line
Mode 1	Pass	QP	1.66M	24.82	56.00	-31.18	Line
Mode 1	Pass	AV	1.66M	21.17	46.00	-24.83	Line
Mode 1	Pass	QP	4.38M	21.50	56.00	-34.50	Line
Mode 1	Pass	AV	4.38M	18.34	46.00	-27.66	Line
Mode 1	Pass	QP	8.63M	22.13	60.00	-37.87	Line
Mode 1	Pass	AV	8.63M	18.86	50.00	-31.14	Line
Mode 1	Pass	QP	150.6k	51.41	65.96	-14.55	Neutral
Mode 1	Pass	AV	150.6k	31.33	55.96	-24.63	Neutral
Mode 1	Pass	QP	253.05k	37.27	61.66	-24.39	Neutral
Mode 1	Pass	AV	253.05k	24.16	51.66	-27.50	Neutral
Mode 1	Pass	QP	428.61k	30.41	57.28	-26.87	Neutral
Mode 1	Pass	AV	428.61k	21.86	47.28	-25.42	Neutral
Mode 1	Pass	QP	1.4M	25.13	56.00	-30.87	Neutral
Mode 1	Pass	AV	1.4M	21.36	46.00	-24.64	Neutral
Mode 1	Pass	QP	2.82M	23.00	56.00	-33.00	Neutral
Mode 1	Pass	AV	2.82M	19.65	46.00	-26.35	Neutral
Mode 1	Pass	QP	24.45M	23.41	60.00	-36.59	Neutral
Mode 1	Pass	AV	24.45M	19.03	50.00	-30.97	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	23.705M	16.976M	17M0D1D	21.175M	16.888M
802.11be EHT20_Nss1,(MCS0)_1TX	27.775M	19.115M	19M1D1D	25.74M	19.065M
802.11be EHT40_Nss1,(MCS0)_1TX	51.81M	37.931M	37M9D1D	51.15M	37.831M
802.11be EHT80_Nss1,(MCS0)_1TX	82.5M	77.061M	77M1D1D	82.5M	77.061M
802.11be EHT160_Nss1,(MCS0)_1TX	80.96M	77.241M	77M2D1D	80.96M	77.241M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	24.475M	16.954M	17M0D1D	21.945M	16.844M
802.11be EHT20_Nss1,(MCS0)_1TX	26.125M	19.165M	19M2D1D	22.33M	19.065M
802.11be EHT40_Nss1,(MCS0)_1TX	42.46M	37.881M	37M9D1D	41.14M	37.831M
802.11be EHT80_Nss1,(MCS0)_1TX	82.5M	77.461M	77M5D1D	82.5M	77.461M
802.11be EHT160_Nss1,(MCS0)_1TX	80.64M	77.321M	77M3D1D	80.64M	77.321M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	29.425M	17.239M	17M2D1D	16.245M	13.568M
802.11be EHT20_Nss1,(MCS0)_1TX	28.27M	19.19M	19M2D1D	17.34M	14.528M
802.11be EHT40_Nss1,(MCS0)_1TX	48.73M	37.881M	37M9D1D	36.05M	33.723M
802.11be EHT80_Nss1,(MCS0)_1TX	82.72M	77.361M	77M4D1D	76.2M	73.238M
802.11be EHT160_Nss1,(MCS0)_1TX	164.56M	156.322M	156MD1D	164.56M	156.322M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.5M	17.041M	17M0D1D	3.28M	5.317M
802.11be EHT20_Nss1,(MCS0)_1TX	19.03M	19.115M	19M1D1D	4.58M	6.317M
802.11be EHT40_Nss1,(MCS0)_1TX	38.06M	37.831M	37M8D1D	3.1M	11.574M
802.11be EHT80_Nss1,(MCS0)_1TX	76.34M	77.461M	77M5D1D	3.68M	22.789M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	23.705M	16.954M
5200MHz	Pass	Inf	23.705M	16.888M
5240MHz	Pass	Inf	21.175M	16.976M
5260MHz	Pass	Inf	22.77M	16.844M
5300MHz	Pass	Inf	21.945M	16.888M
5320MHz	Pass	Inf	24.475M	16.954M
5500MHz	Pass	Inf	29.425M	17.239M
5580MHz	Pass	Inf	21.505M	16.8M
5700MHz	Pass	Inf	20.79M	16.69M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.245M	13.568M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.28M	5.317M
5745MHz	Pass	500k	16.5M	17.041M
5785MHz	Pass	500k	16.5M	16.822M
5825MHz	Pass	500k	16.5M	16.822M
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	27.445M	19.09M
5200MHz	Pass	Inf	25.74M	19.065M
5240MHz	Pass	Inf	27.775M	19.115M
5260MHz	Pass	Inf	25.63M	19.165M
5300MHz	Pass	Inf	26.125M	19.065M
5320MHz	Pass	Inf	22.33M	19.115M
5500MHz	Pass	Inf	28.27M	19.19M
5580MHz	Pass	Inf	24.585M	19.14M
5700MHz	Pass	Inf	21.065M	19.04M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.34M	14.528M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.58M	6.317M
5745MHz	Pass	500k	18.755M	19.115M
5785MHz	Pass	500k	18.92M	19.065M
5825MHz	Pass	500k	19.03M	19.115M
802.11be EHT40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	51.81M	37.931M
5230MHz	Pass	Inf	51.15M	37.831M
5270MHz	Pass	Inf	42.46M	37.831M
5310MHz	Pass	Inf	41.14M	37.881M
5510MHz	Pass	Inf	48.73M	37.831M
5550MHz	Pass	Inf	42.79M	37.881M
5670MHz	Pass	Inf	42.68M	37.881M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.05M	33.723M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	11.574M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
5755MHz	Pass	500k	38.06M	37.831M
5795MHz	Pass	500k	37.18M	37.831M
802.11be EHT80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	82.5M	77.061M
5290MHz	Pass	Inf	82.5M	77.461M
5530MHz	Pass	Inf	82.72M	77.261M
5610MHz	Pass	Inf	82.5M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.68M	22.789M
5775MHz	Pass	500k	76.34M	77.461M
802.11be EHT160_Nss1,(MCS0)_1TX	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.96M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	80.64M	77.321M
5570MHz	Pass	Inf	164.56M	156.322M

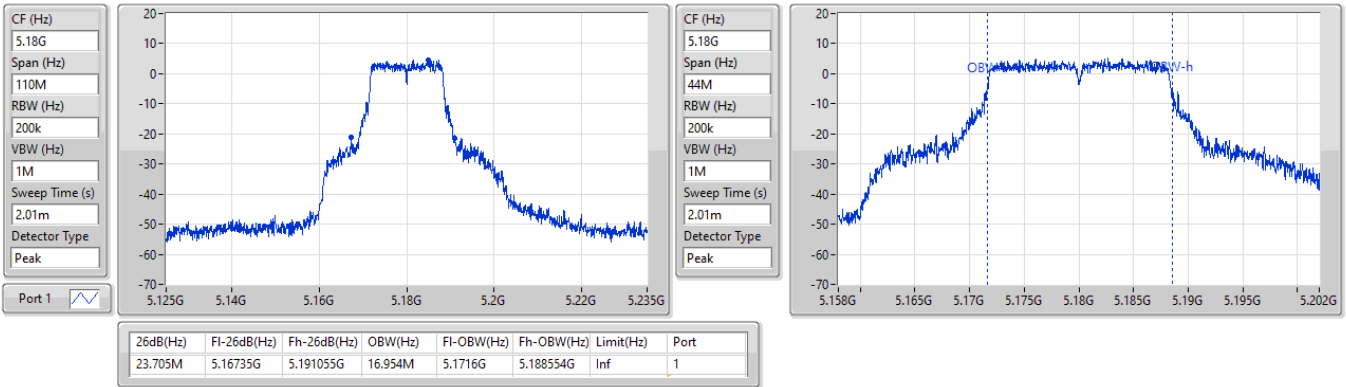
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5180MHz

21/03/2025

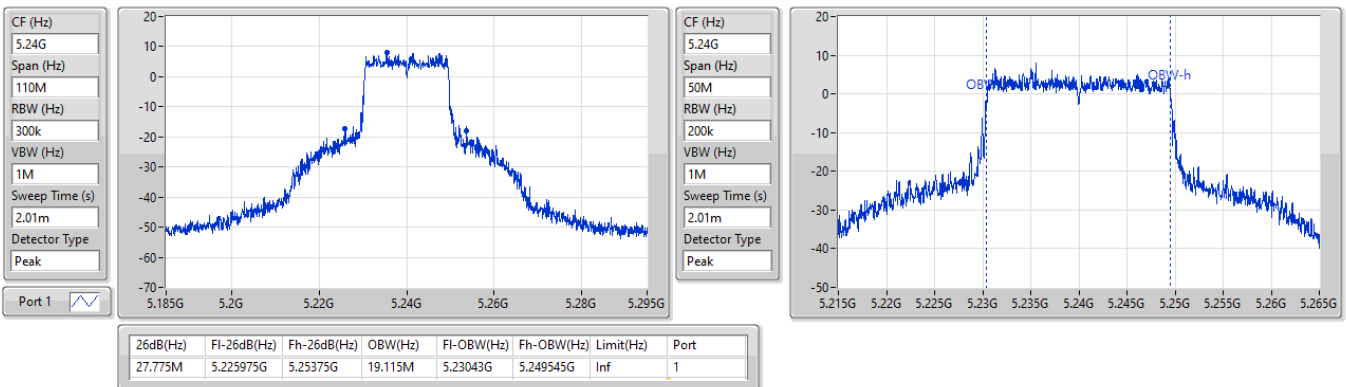


5.15-5.25GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5240MHz

21/03/2025

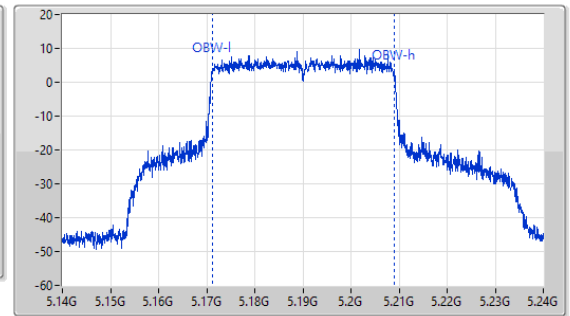
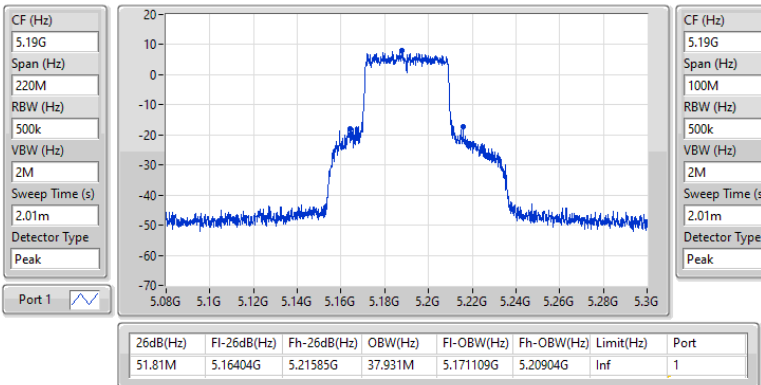


5.15-5.25GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5190MHz

21/03/2025

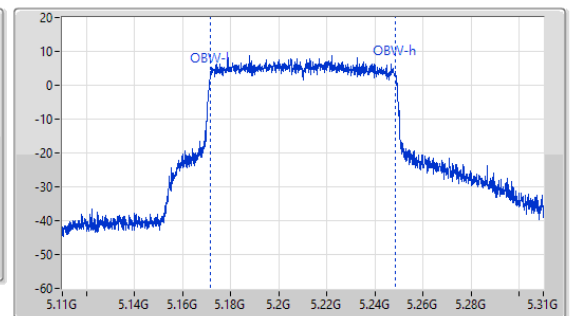
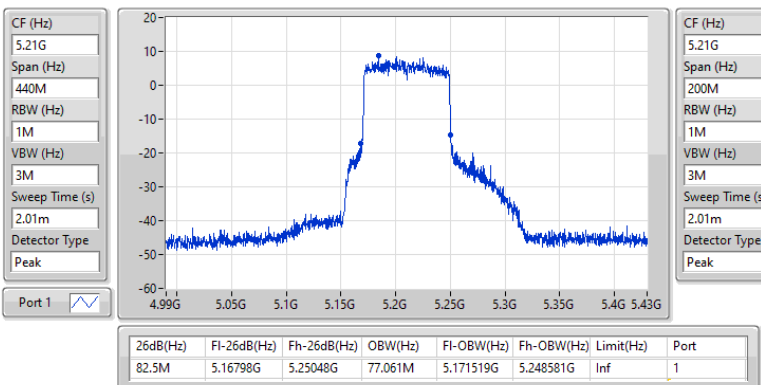


5.15-5.25GHz_802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5210MHz

21/03/2025

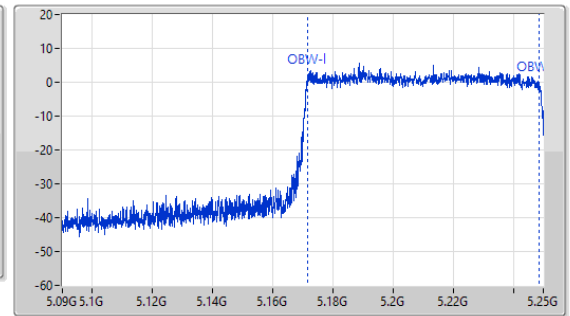
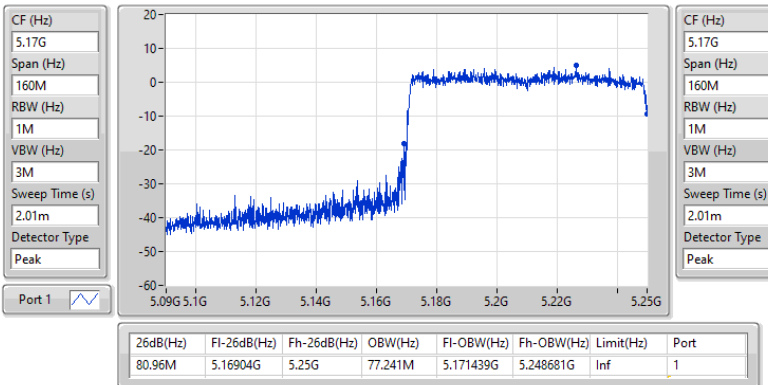


5.15-5.25GHz 802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5250MHz Straddle 5.15-5.25GHz

21/03/2025

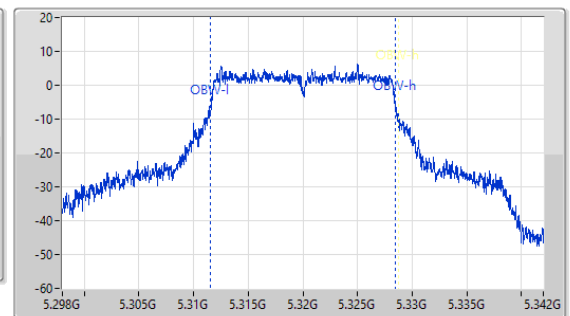
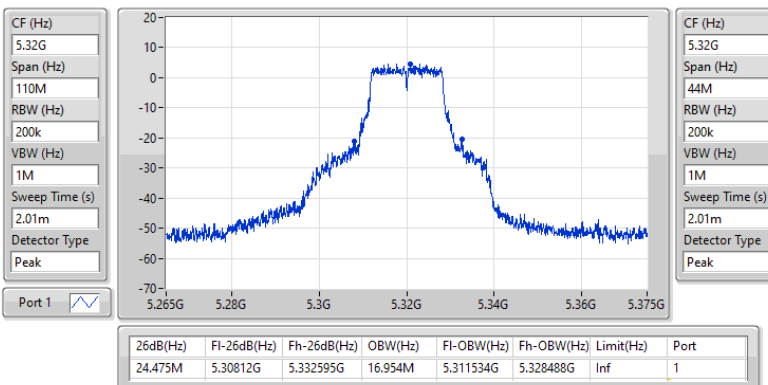


5.25-5.35GHz 802.11a_Nss1,(6Mbps)_1TX

EBW

5320MHz

21/03/2025

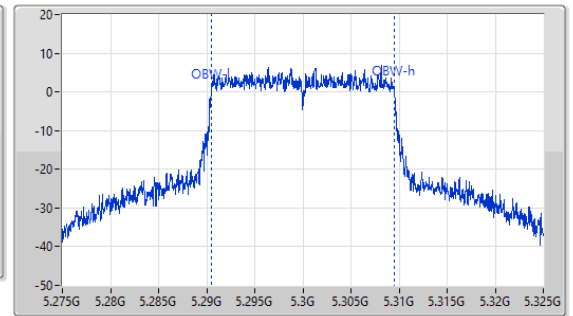
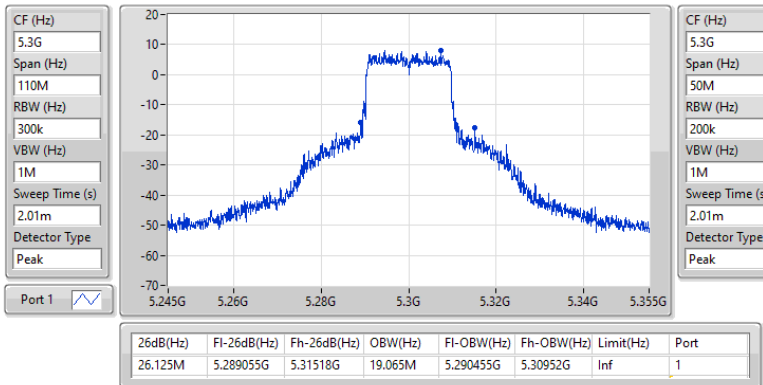


5.25-5.35GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5300MHz

21/03/2025

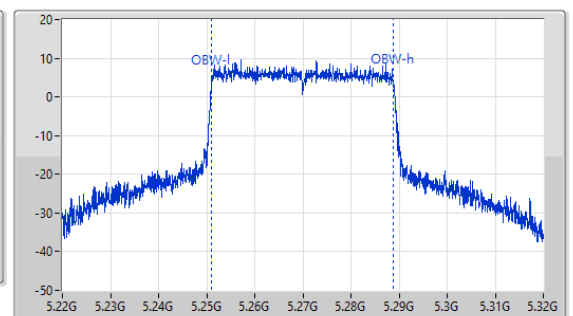
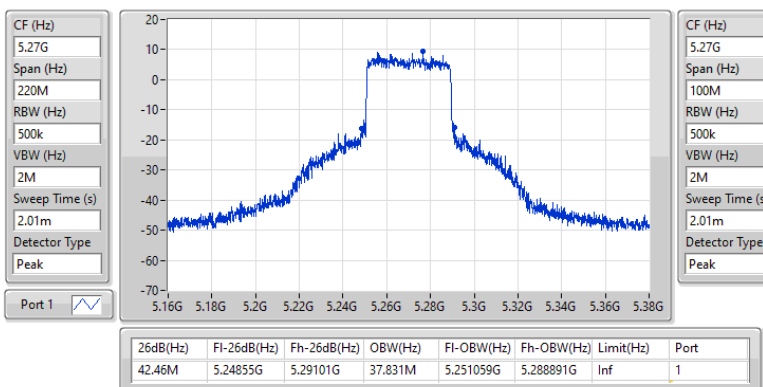


5.25-5.35GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5270MHz

21/03/2025

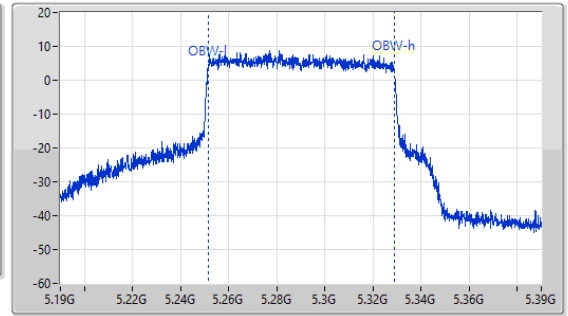
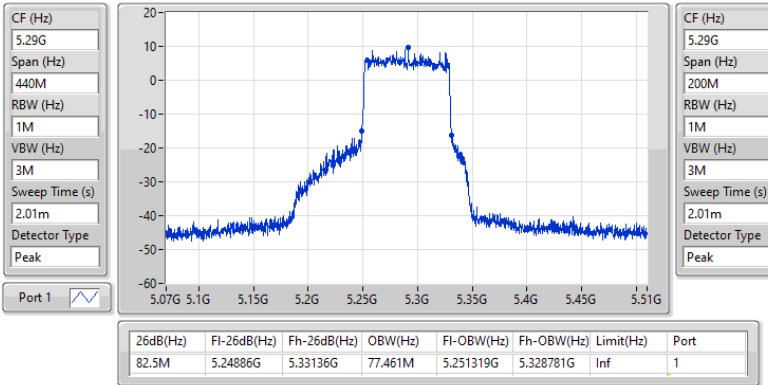


5.25-5.35GHz 802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5290MHz

21/03/2025

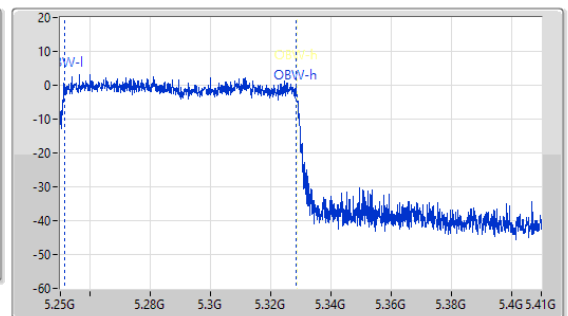
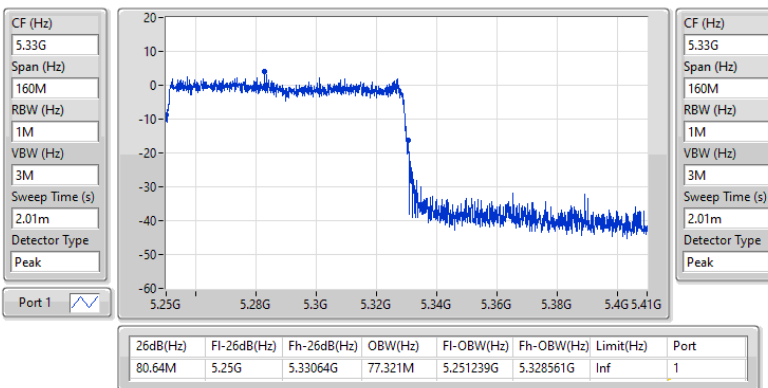


5.25-5.35GHz 802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5250MHz Straddle 5.25-5.35GHz

21/03/2025

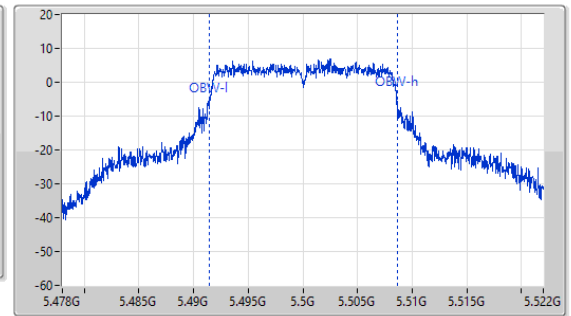
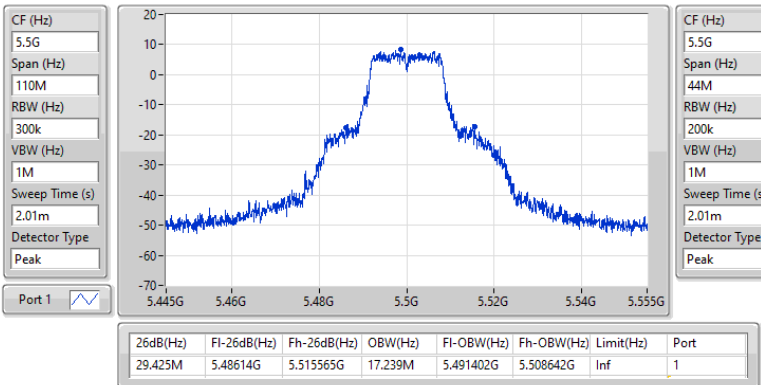


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5500MHz

21/03/2025

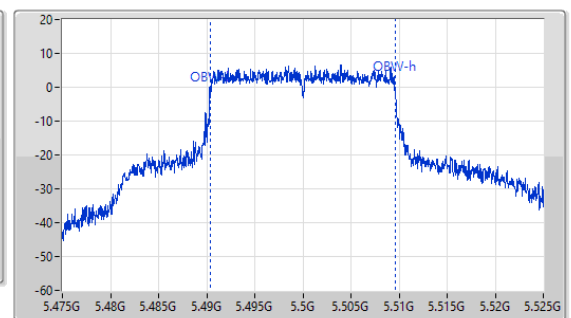
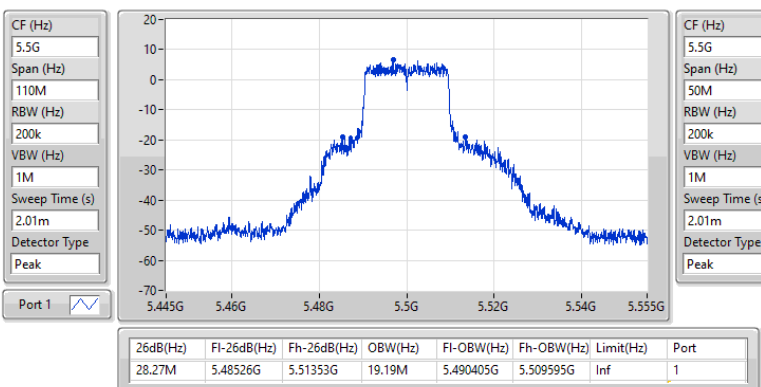


5.47-5.725GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

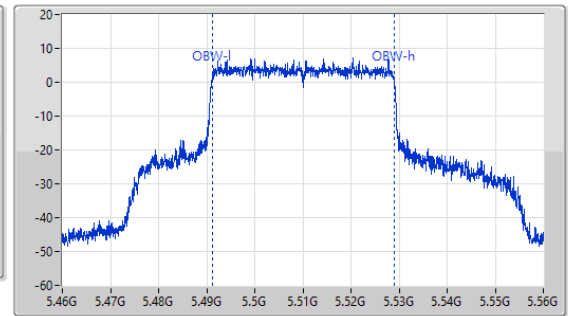
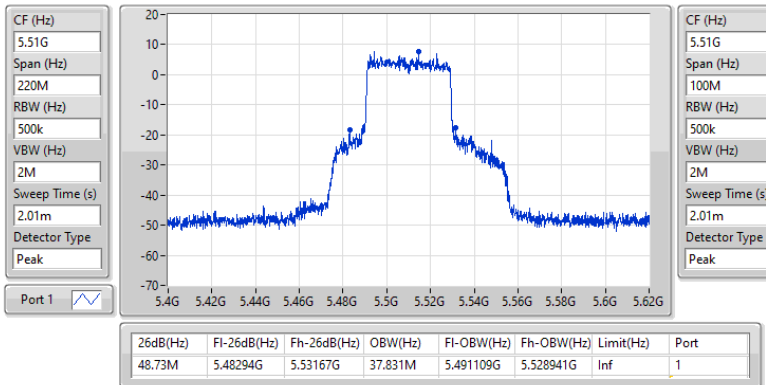
5500MHz

21/03/2025

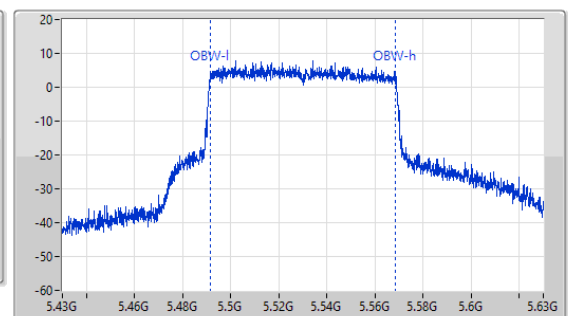
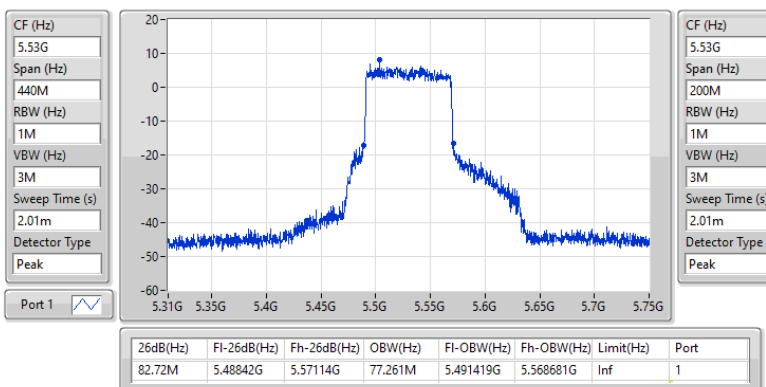


5.47-5.725GHz_802.11be EHT40_Nss1,(MCS0)_1TX
EBW
5510MHz

21/03/2025


5.47-5.725GHz_802.11be EHT80_Nss1,(MCS0)_1TX
EBW
5530MHz

21/03/2025

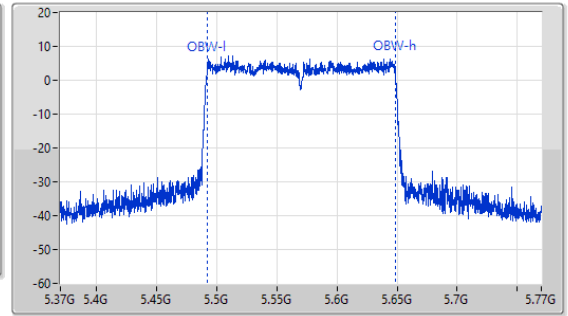
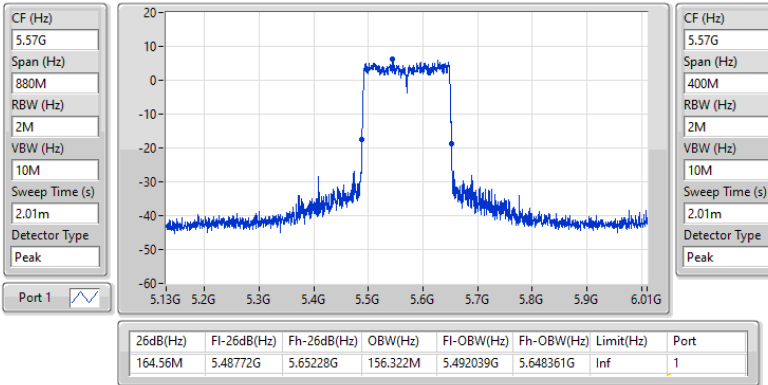


5.47-5.725GHz_802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5570MHz

21/03/2025

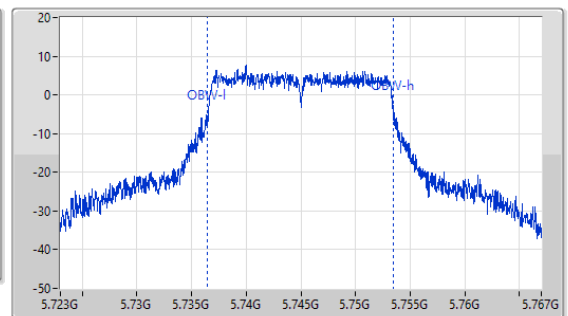
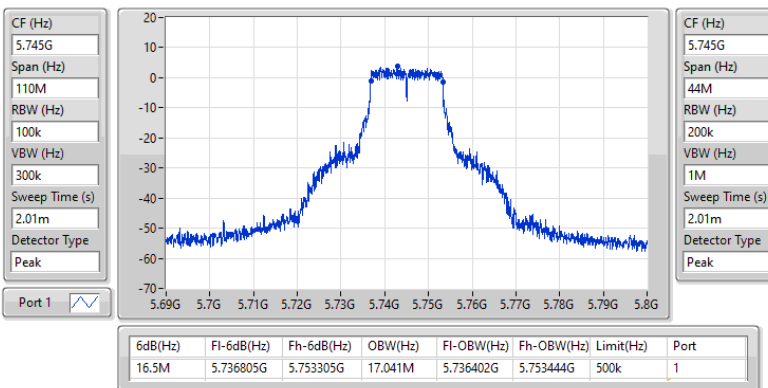


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

21/03/2025



5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

21/03/2025

CF (Hz)
5.745G

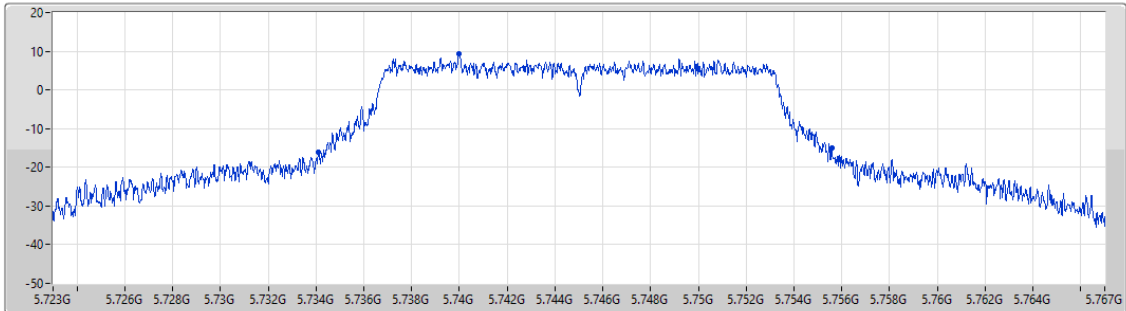
Span (Hz)
44M

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
2.01m

Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
21.494M	5.734088G	5.755582G	Inf	1

5.725-5.85GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5825MHz

21/03/2025

CF (Hz)
5.825G

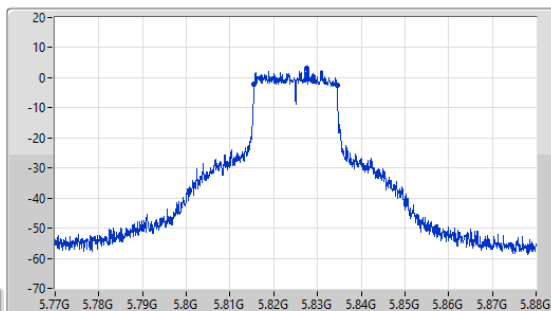
Span (Hz)
110M

RBW (Hz)
100k

VBW (Hz)
300k

Sweep Time (s)
2.01m

Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.03M	5.815485G	5.834515G	19.115M	5.815455G	5.83457G	500k	1

CF (Hz)
5.825G

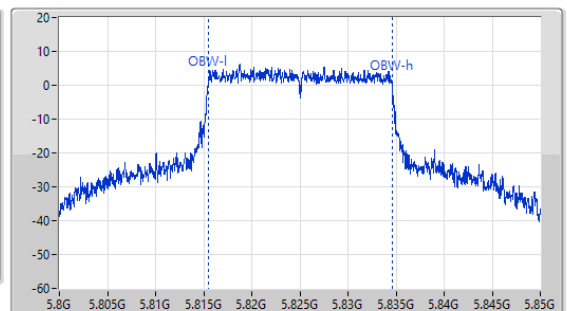
Span (Hz)
50M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
2.01m

Detector Type
Peak

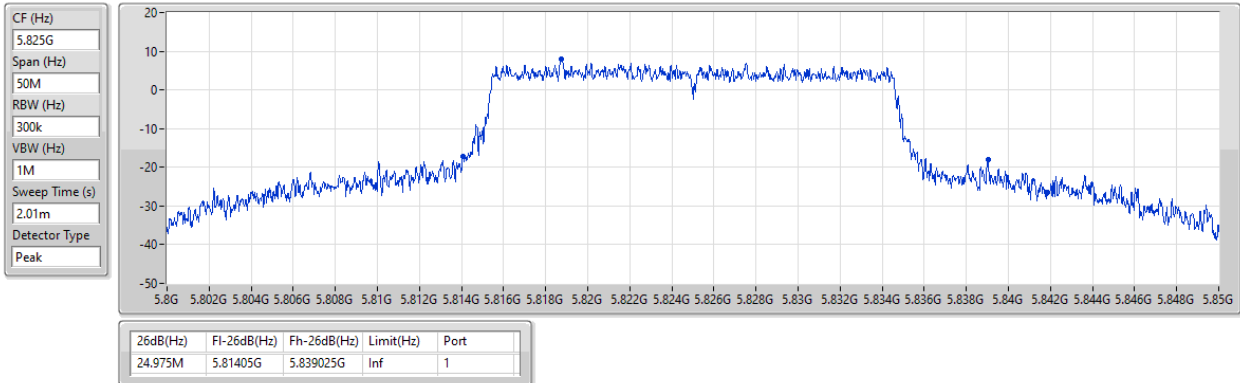


5.725-5.85GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5825MHz

21/03/2025

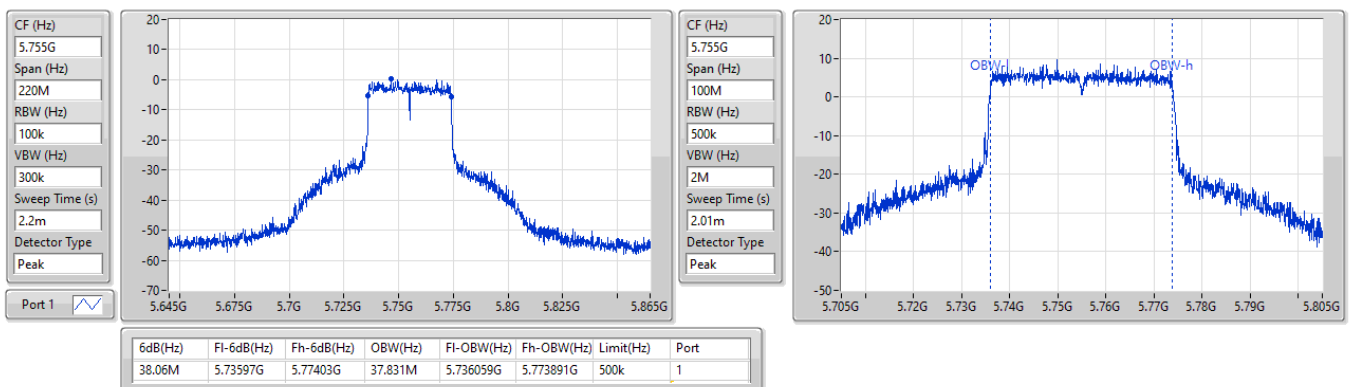


5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5755MHz

21/03/2025



5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5755MHz

21/03/2025

CF (Hz)
5.755G

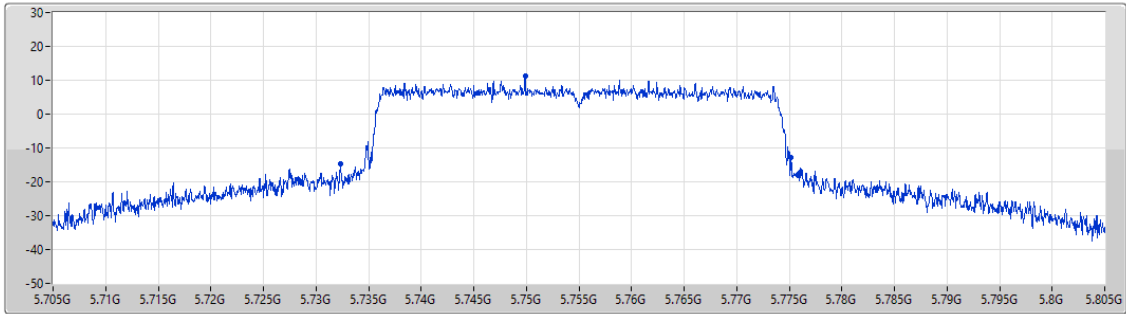
Span (Hz)
100M

RBW (Hz)
500k

VBW (Hz)
2M

Sweep Time (s)
2.01m

Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
42.9M	5.7323G	5.7752G	Inf	1

5.725-5.85GHz_802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5775MHz

21/03/2025

CF (Hz)
5.775G

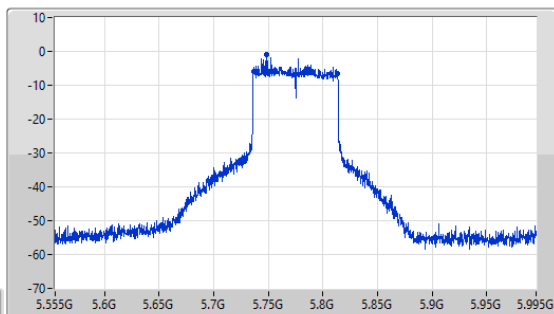
Span (Hz)
440M

RBW (Hz)
100k

VBW (Hz)
300k

Sweep Time (s)
4.4m

Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.34M	5.7365G	5.81284G	77.461M	5.736219G	5.813681G	500k	1

CF (Hz)
5.775G

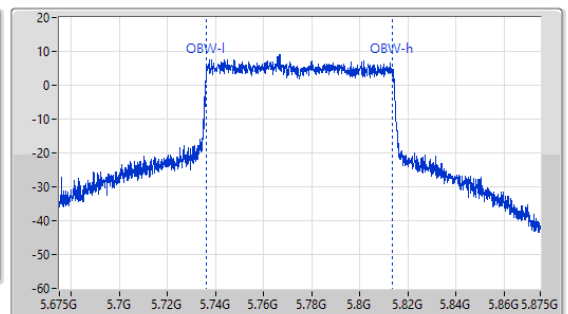
Span (Hz)
200M

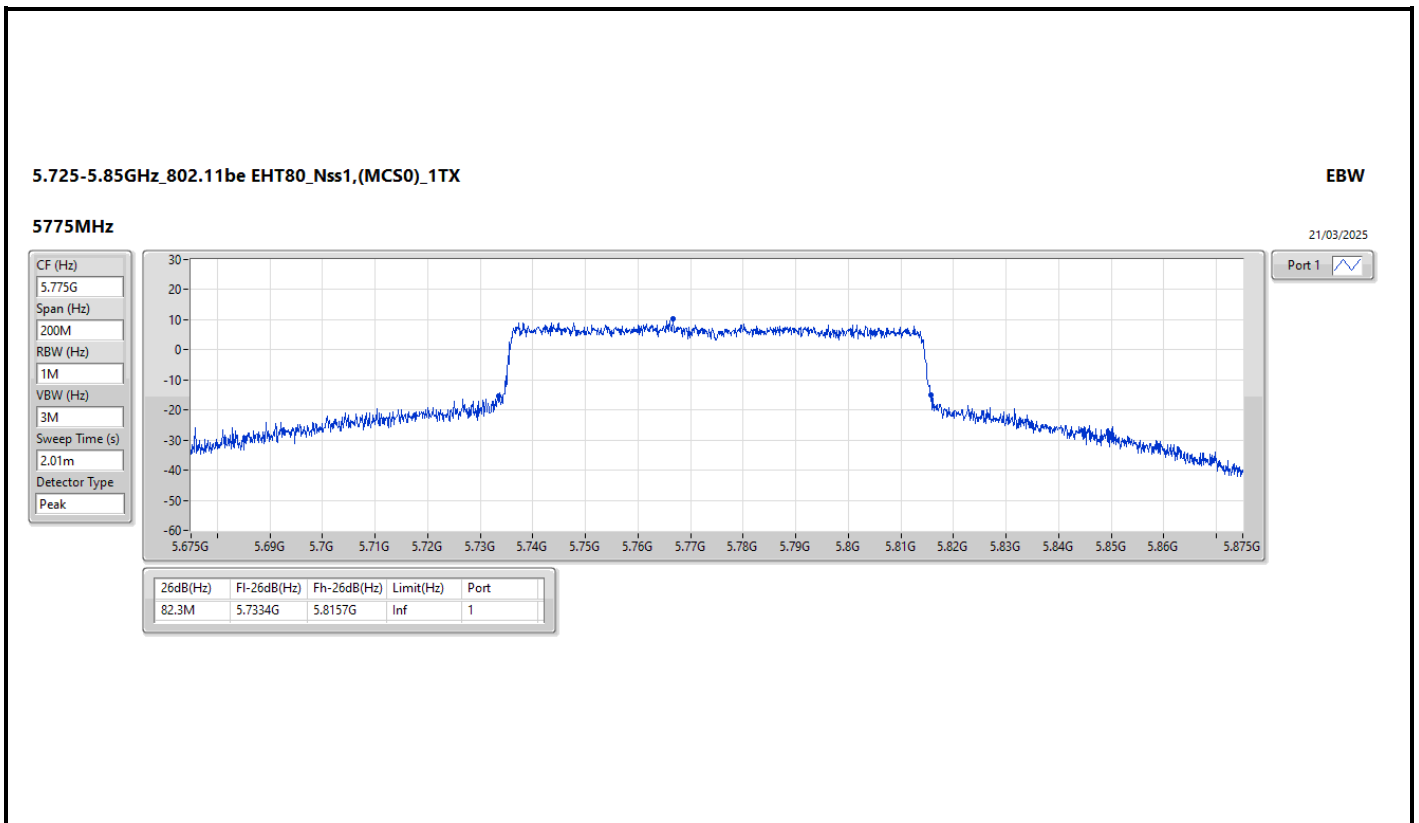
RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
2.01m

Detector Type
Peak





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.11M	16.888M	16M9D1D	21.285M	16.778M
802.11be EHT20_Nss1,(MCS0)_2TX	23.485M	19.215M	19M2D1D	21.12M	19.04M
802.11be EHT40_Nss1,(MCS0)_2TX	42.79M	37.931M	37M9D1D	40.26M	37.731M
802.11be EHT80_Nss1,(MCS0)_2TX	84.92M	77.261M	77M3D1D	83.6M	77.161M
802.11be EHT160_Nss1,(MCS0)_2TX	81.12M	77.241M	77M2D1D	80.96M	77.241M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.44M	16.932M	16M9D1D	21.23M	16.844M
802.11be EHT20_Nss1,(MCS0)_2TX	25.905M	19.19M	19M2D1D	21.56M	19.09M
802.11be EHT40_Nss1,(MCS0)_2TX	44.99M	37.881M	37M9D1D	40.59M	37.781M
802.11be EHT80_Nss1,(MCS0)_2TX	85.36M	77.361M	77M4D1D	82.28M	77.261M
802.11be EHT160_Nss1,(MCS0)_2TX	81.44M	77.481M	77M5D1D	81.12M	77.321M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	29.37M	17.261M	17M3D1D	16.95M	13.568M
802.11be EHT20_Nss1,(MCS0)_2TX	30.965M	19.215M	19M2D1D	17.985M	14.513M
802.11be EHT40_Nss1,(MCS0)_2TX	48.4M	37.881M	37M9D1D	37.695M	33.758M
802.11be EHT80_Nss1,(MCS0)_2TX	82.5M	77.461M	77M5D1D	76.275M	73.088M
802.11be EHT160_Nss1,(MCS0)_2TX	162.36M	156.722M	157MD1D	162.36M	156.322M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.555M	17.019M	17M0D1D	3.26M	5.217M
802.11be EHT20_Nss1,(MCS0)_2TX	19.14M	19.165M	19M2D1D	4.52M	6.097M
802.11be EHT40_Nss1,(MCS0)_2TX	37.84M	37.881M	37M9D1D	4M	11.874M
802.11be EHT80_Nss1,(MCS0)_2TX	77.66M	77.561M	77M6D1D	4.04M	18.551M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.78M	16.822M	21.285M	16.888M
5200MHz	Pass	Inf	21.945M	16.866M	21.89M	16.778M
5240MHz	Pass	Inf	21.285M	16.866M	22.11M	16.866M
5260MHz	Pass	Inf	21.45M	16.91M	21.56M	16.844M
5300MHz	Pass	Inf	21.78M	16.844M	21.23M	16.932M
5320MHz	Pass	Inf	21.34M	16.844M	22.44M	16.91M
5500MHz	Pass	Inf	29.37M	17.261M	22.715M	16.91M
5580MHz	Pass	Inf	25.19M	16.888M	22.275M	16.844M
5700MHz	Pass	Inf	21.065M	16.668M	21.175M	16.646M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	20.88M	13.658M	16.95M	13.568M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.26M	5.217M	3.28M	5.317M
5745MHz	Pass	500k	16.445M	16.866M	16.335M	17.019M
5785MHz	Pass	500k	16.555M	16.888M	16.5M	16.91M
5825MHz	Pass	500k	16.335M	16.888M	16.335M	16.91M
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.715M	19.215M	22.385M	19.065M
5200MHz	Pass	Inf	21.89M	19.14M	23.485M	19.04M
5240MHz	Pass	Inf	21.12M	19.14M	21.12M	19.065M
5260MHz	Pass	Inf	22.715M	19.165M	21.56M	19.19M
5300MHz	Pass	Inf	22.275M	19.165M	23.21M	19.115M
5320MHz	Pass	Inf	23.76M	19.09M	25.905M	19.14M
5500MHz	Pass	Inf	30.965M	19.215M	26.235M	19.09M
5580MHz	Pass	Inf	21.835M	19.09M	21.835M	19.115M
5700MHz	Pass	Inf	21.285M	19.065M	21.395M	19.015M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.985M	14.513M	19.995M	14.618M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.52M	6.517M	4.54M	6.097M
5745MHz	Pass	500k	19.03M	19.165M	18.7M	19.115M
5785MHz	Pass	500k	18.975M	19.14M	19.03M	19.115M
5825MHz	Pass	500k	19.03M	19.065M	19.14M	19.09M
802.11be EHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	42.35M	37.731M	42.79M	37.831M
5230MHz	Pass	Inf	42.68M	37.931M	40.26M	37.881M
5270MHz	Pass	Inf	40.59M	37.781M	41.03M	37.831M
5310MHz	Pass	Inf	44.99M	37.881M	42.13M	37.881M
5510MHz	Pass	Inf	48.4M	37.881M	44.55M	37.831M
5550MHz	Pass	Inf	47.63M	37.881M	42.13M	37.831M
5670MHz	Pass	Inf	40.26M	37.831M	42.68M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	40.39M	33.793M	37.695M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	11.874M	4M	11.954M
5755MHz	Pass	500k	37.62M	37.881M	37.84M	37.881M
5795MHz	Pass	500k	37.73M	37.831M	37.51M	37.881M
802.11be EHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.6M	77.161M	84.92M	77.261M
5290MHz	Pass	Inf	82.28M	77.261M	85.36M	77.361M
5530MHz	Pass	Inf	82.5M	77.361M	81.84M	77.261M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5610MHz	Pass	Inf	80.74M	77.461M	81.18M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.725M	73.088M	76.275M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	23.488M	4.06M	18.551M
5775MHz	Pass	500k	77.66M	77.561M	77.22M	77.461M
802.11be EHT160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.96M	77.241M	81.12M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.12M	77.321M	81.44M	77.481M
5570MHz	Pass	Inf	162.36M	156.722M	162.36M	156.322M

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

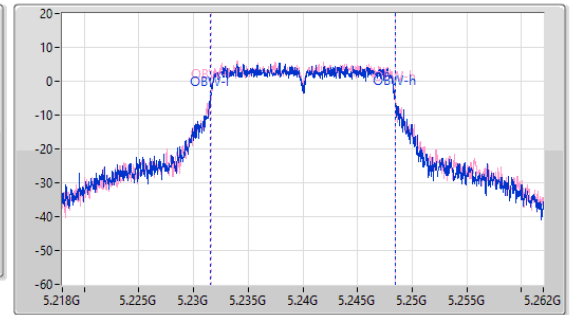
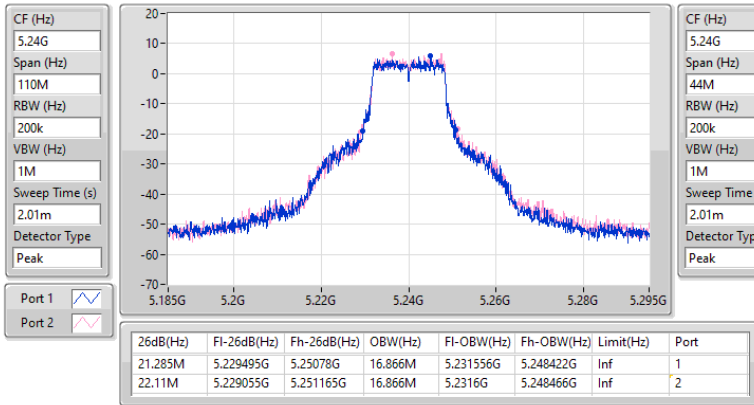
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5240MHz

22/03/2025

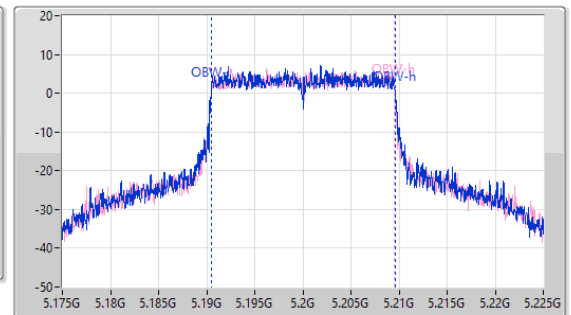
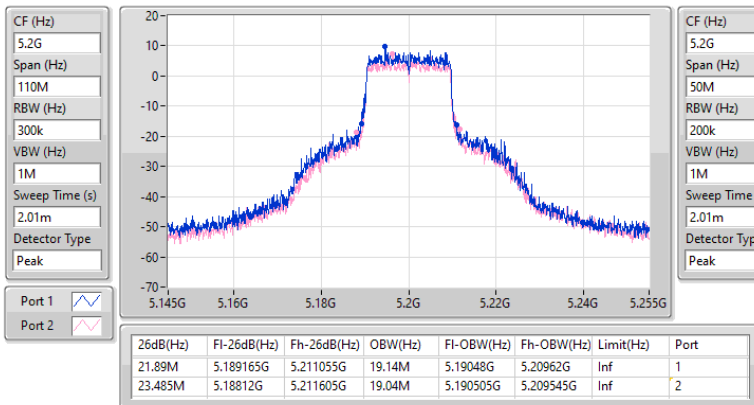


5.15-5.25GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5200MHz

22/03/2025

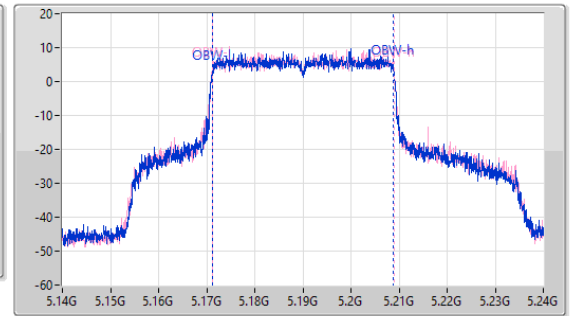
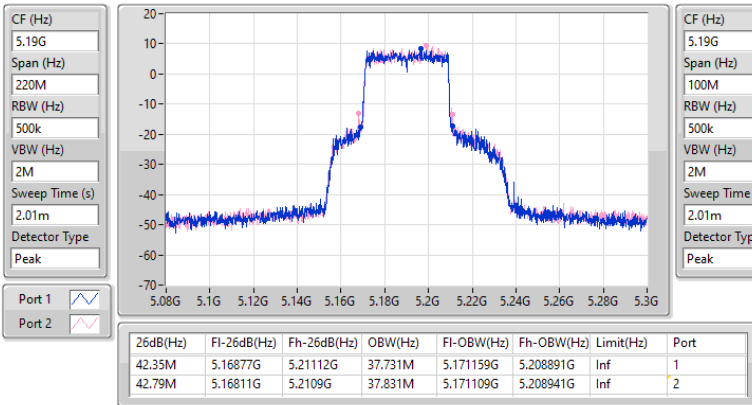


5.15-5.25GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5190MHz

22/03/2025

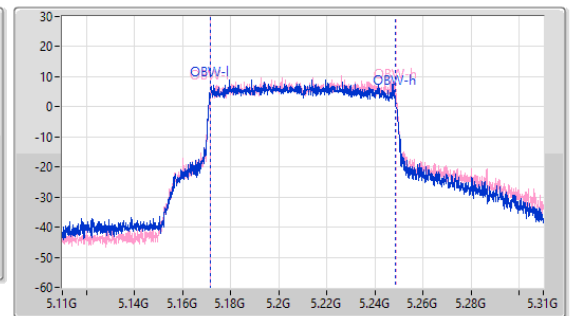
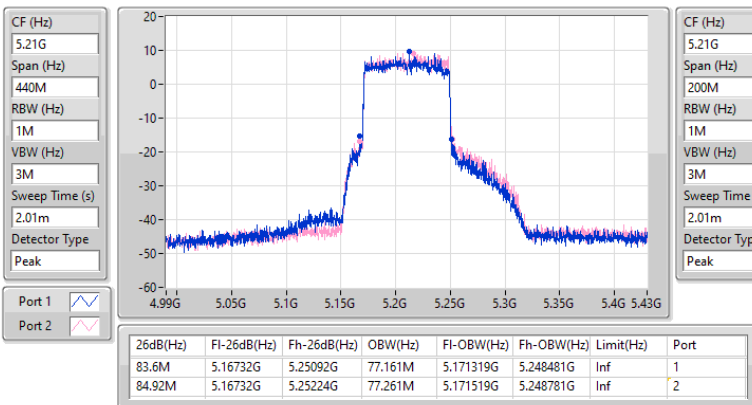


5.15-5.25GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5210MHz

22/03/2025

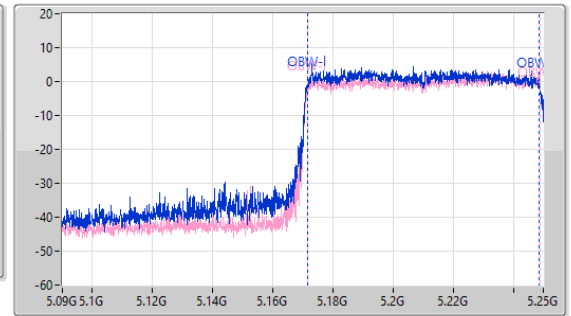
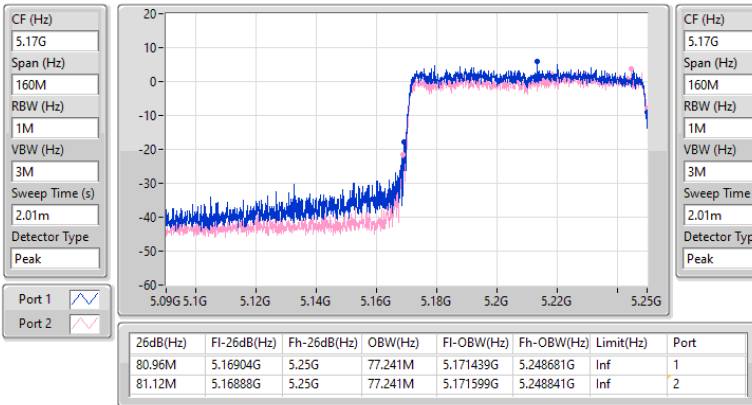


5.15-5.25GHz_802.11be EHT160_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

22/03/2025

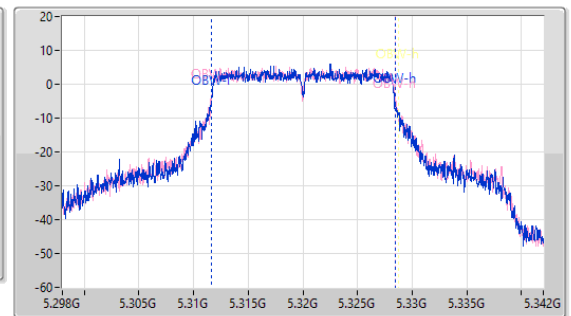
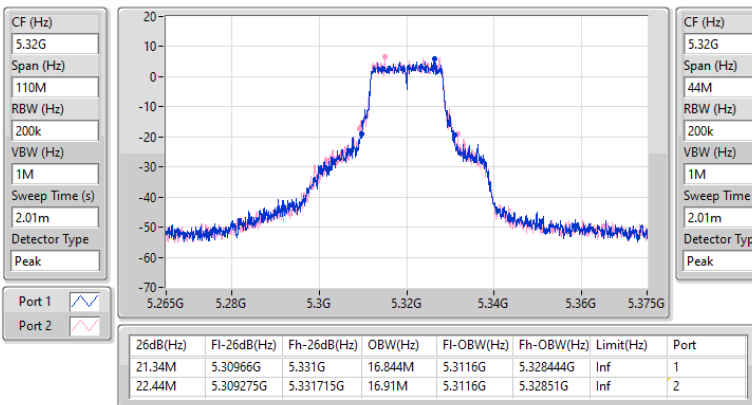


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5320MHz

22/03/2025

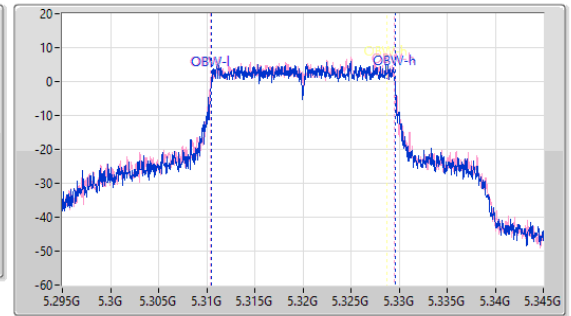
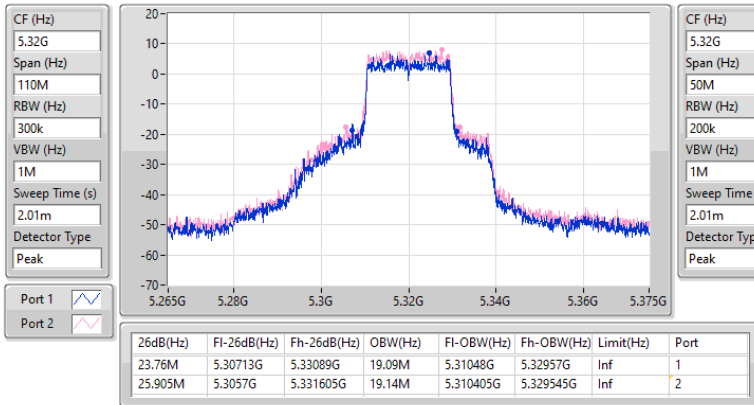


5.25-5.35GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5320MHz

22/03/2025

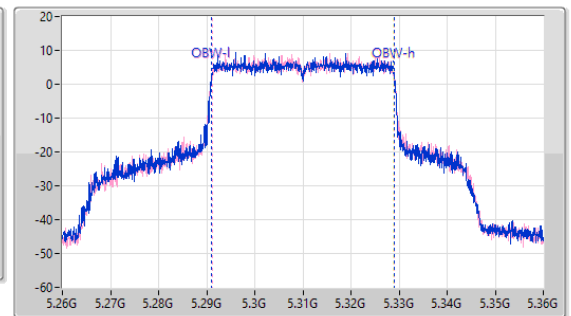
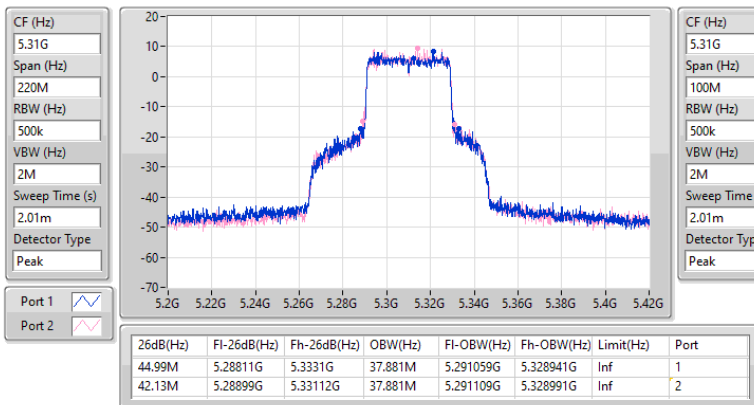


5.25-5.35GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5310MHz

22/03/2025

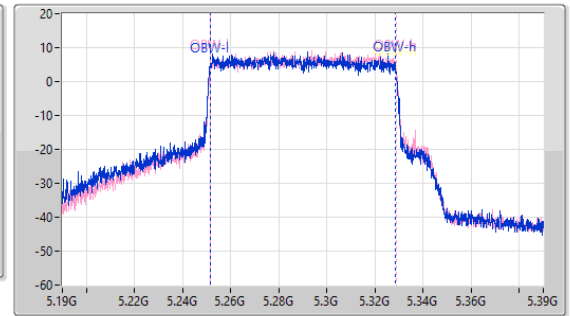
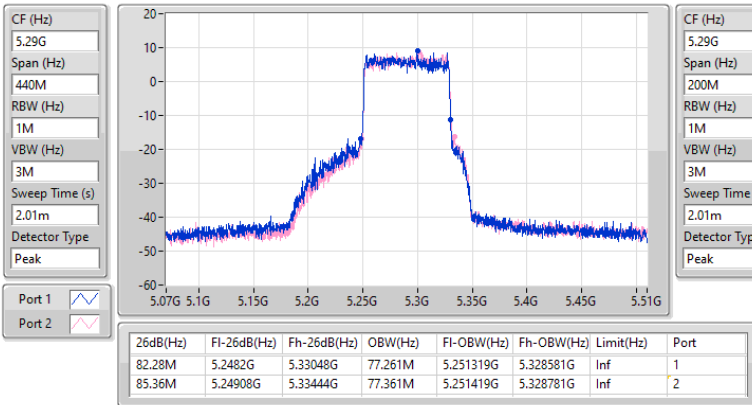


5.25-5.35GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5290MHz

22/03/2025

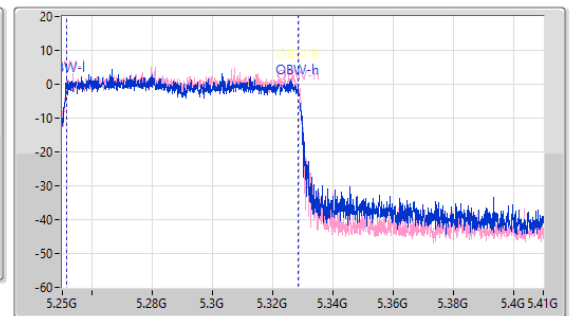
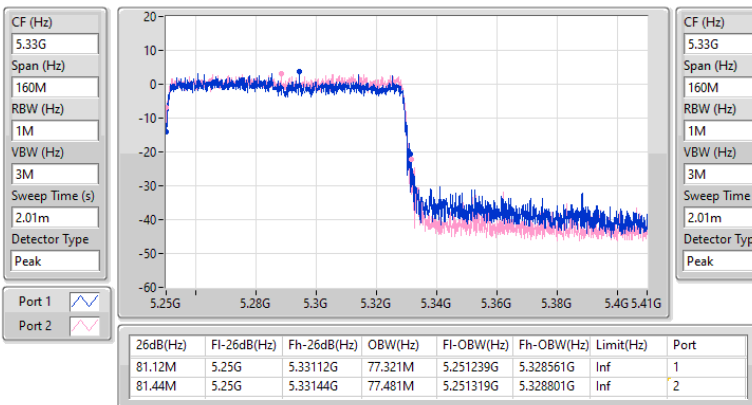


5.25-5.35GHz_802.11be EHT160_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

22/03/2025

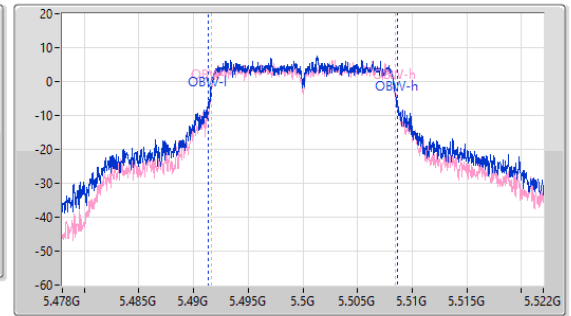
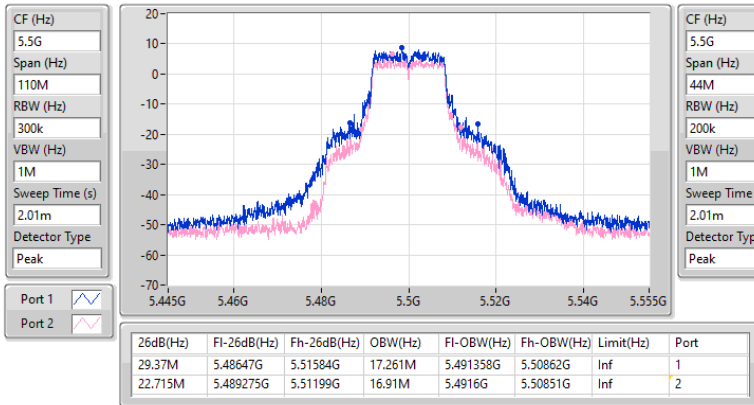


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

22/03/2025

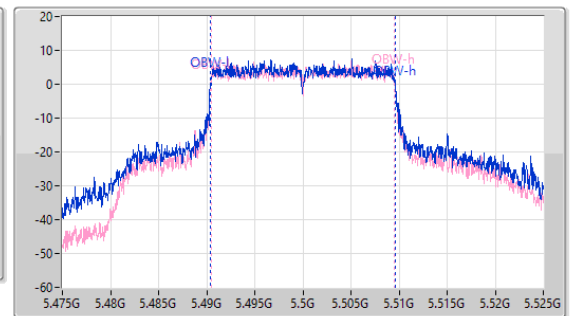
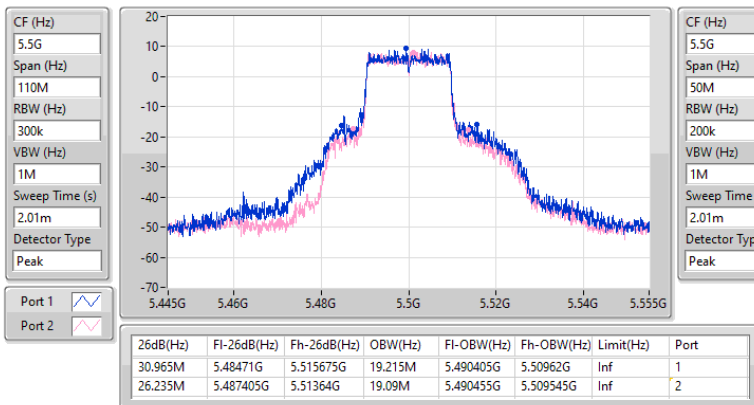


5.47-5.725GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5500MHz

22/03/2025

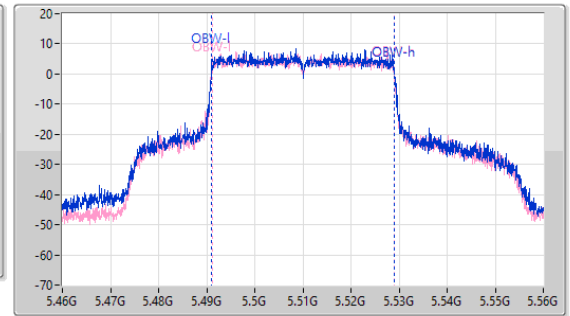
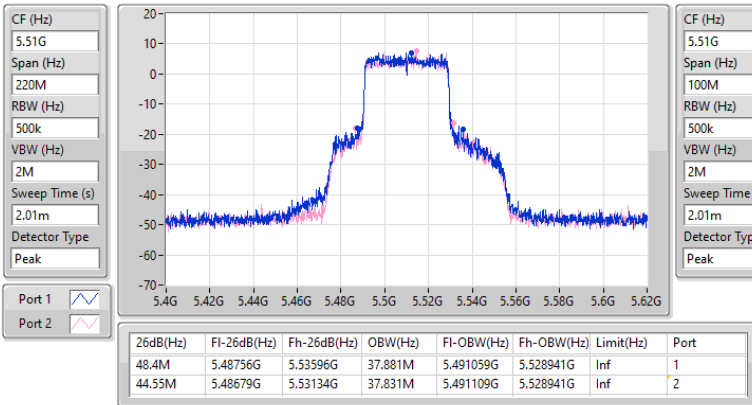


5.47-5.725GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5510MHz

22/03/2025

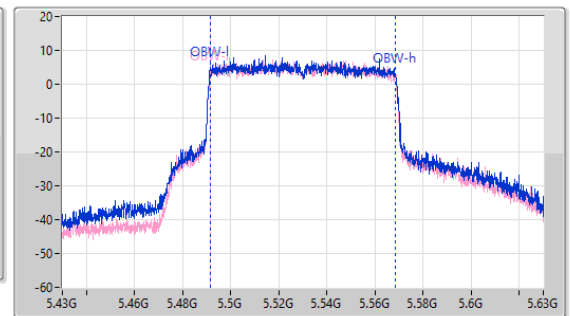
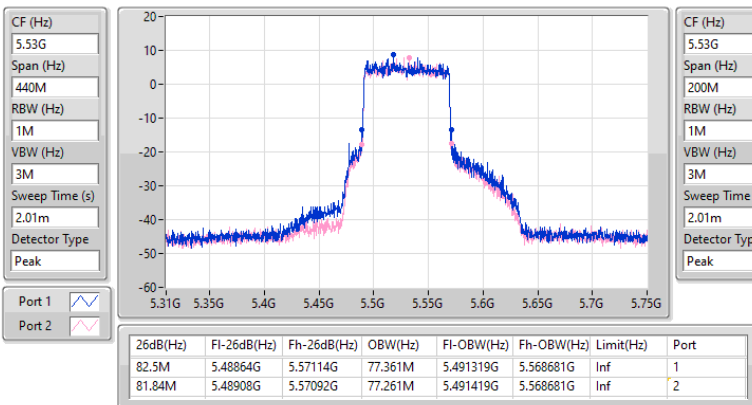


5.47-5.725GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5530MHz

22/03/2025

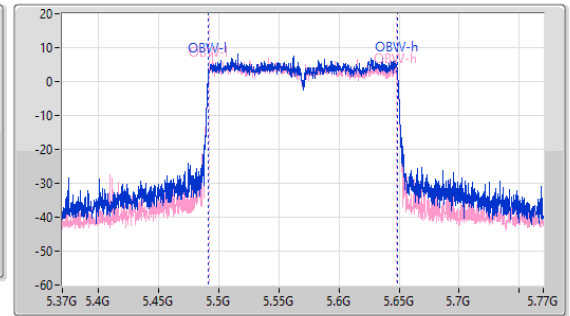
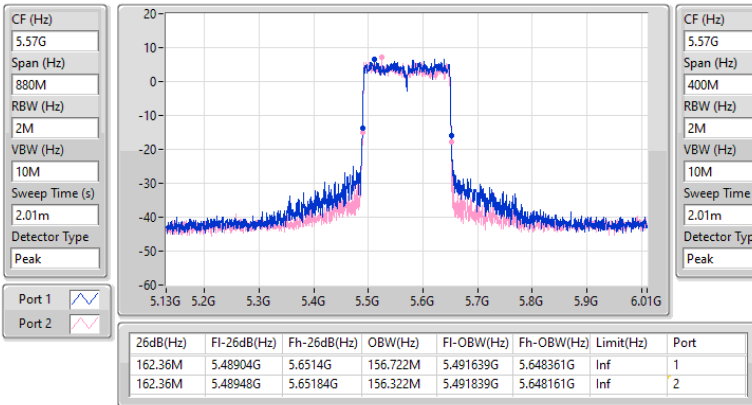


5.47-5.725GHz_802.11be EHT160_Nss1,(MCS0)_2TX

EBW

5570MHz

22/03/2025

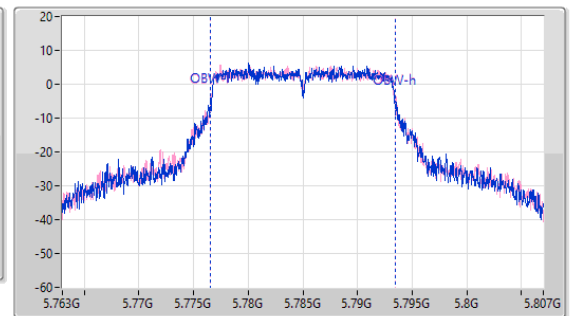
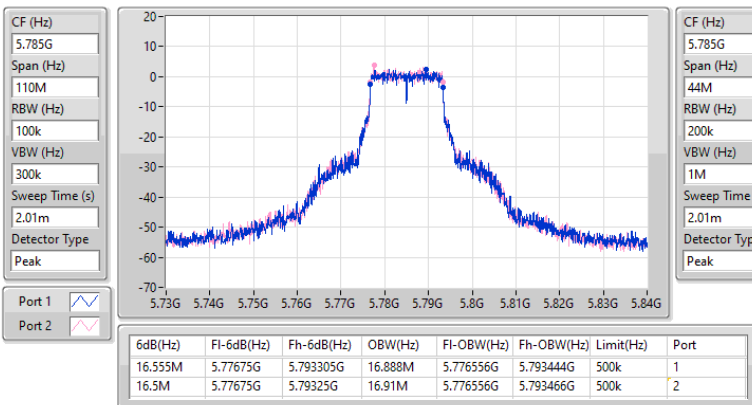


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

22/03/2025

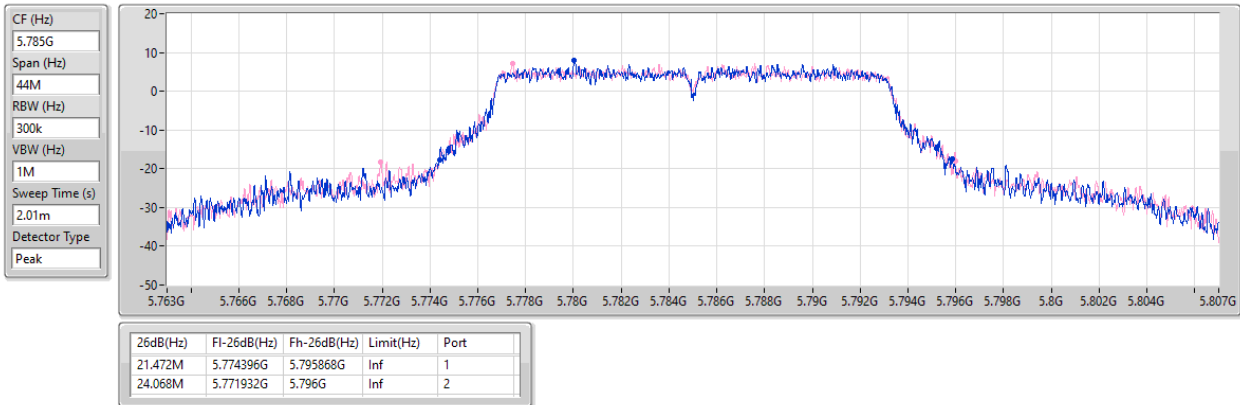


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

22/03/2025

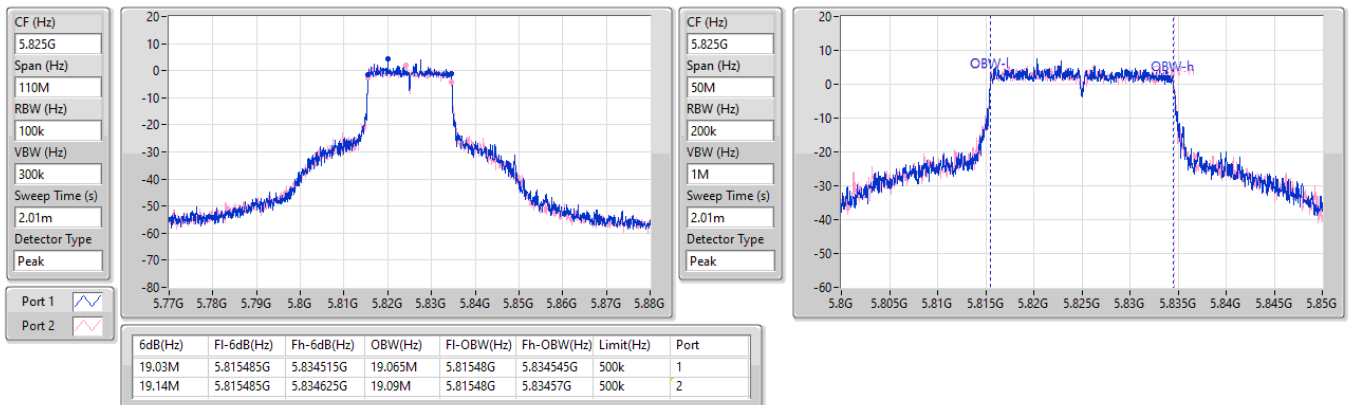


5.725-5.85GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5825MHz

22/03/2025

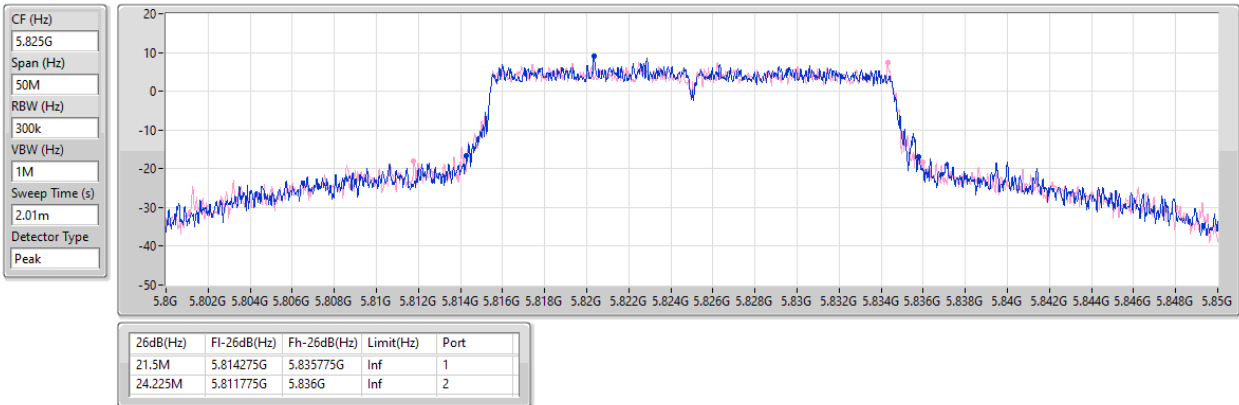


5.725-5.85GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5825MHz

22/03/2025

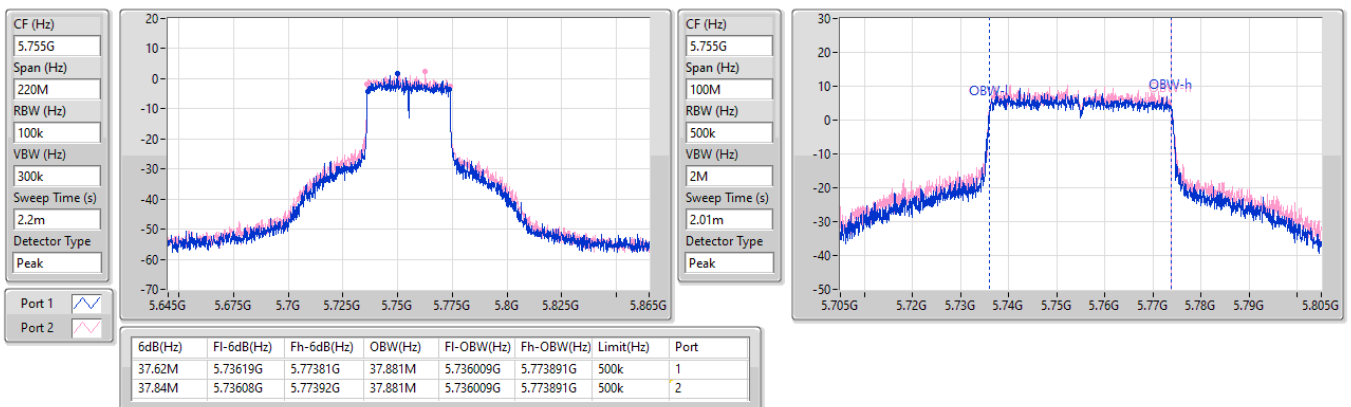


5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

22/03/2025

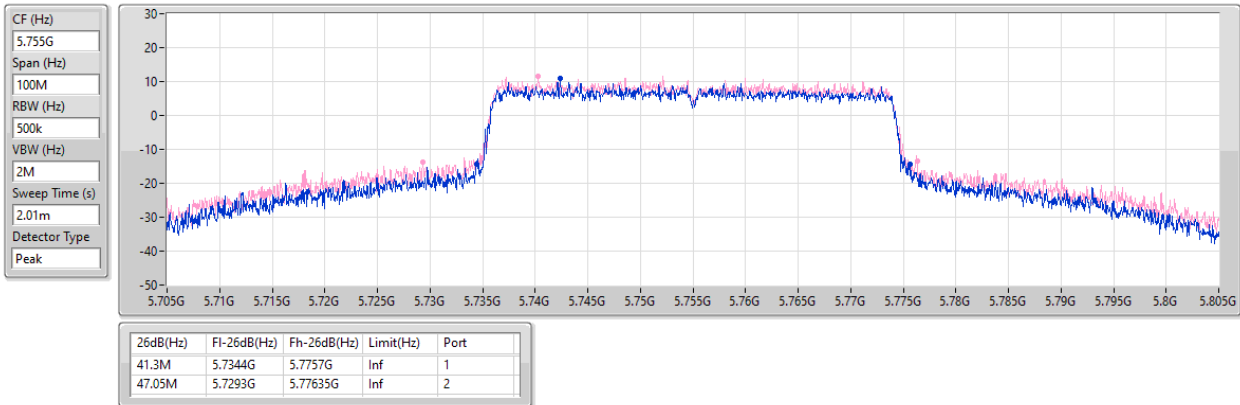


5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

22/03/2025

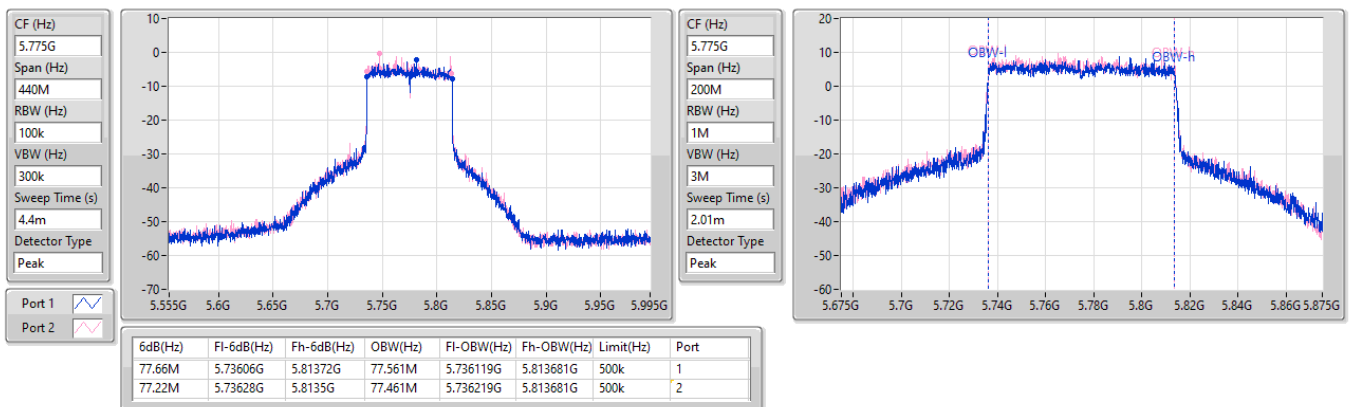


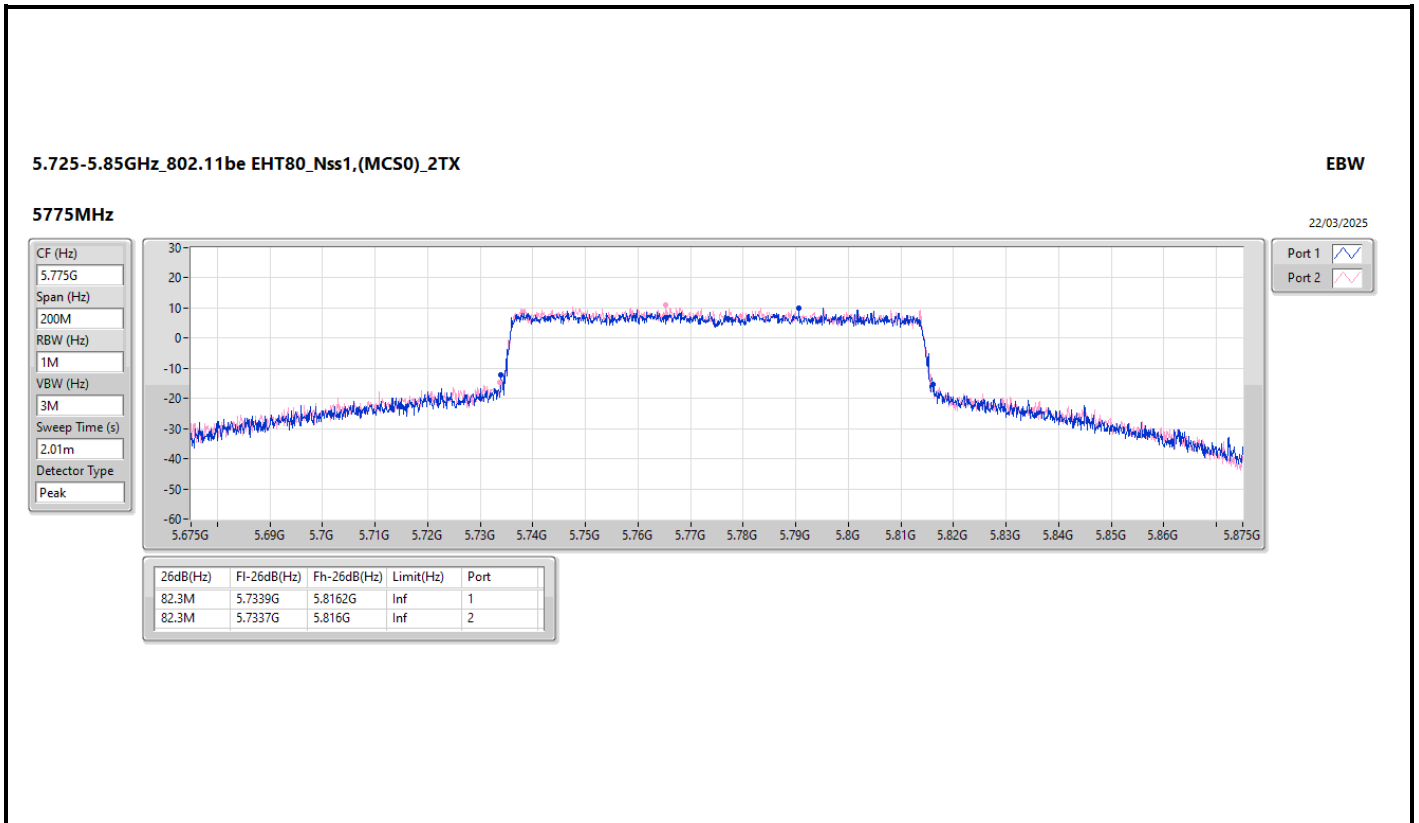
5.725-5.85GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5775MHz

22/03/2025





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	29.59M	19.19M	19M2D1D	22.22M	19.115M
802.11be EHT40_Nss2,(MCS0)_2TX	59.62M	37.831M	37M8D1D	40.7M	37.781M
802.11be EHT80_Nss2,(MCS0)_2TX	88.44M	77.261M	77M3D1D	82.94M	77.261M
802.11be EHT160_Nss2,(MCS0)_2TX	81.12M	77.241M	77M2D1D	80.72M	77.161M
5.25-5.35GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	30.14M	19.165M	19M2D1D	21.78M	19.09M
802.11be EHT40_Nss2,(MCS0)_2TX	46.42M	37.881M	37M9D1D	41.8M	37.781M
802.11be EHT80_Nss2,(MCS0)_2TX	90.2M	77.361M	77M4D1D	82.28M	77.361M
802.11be EHT160_Nss2,(MCS0)_2TX	81.92M	77.401M	77M4D1D	81.28M	77.241M
5.47-5.725GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	31.955M	19.19M	19M2D1D	16.185M	14.498M
802.11be EHT40_Nss2,(MCS0)_2TX	48.51M	37.881M	37M9D1D	35.21M	33.793M
802.11be EHT80_Nss2,(MCS0)_2TX	83.38M	77.361M	77M4D1D	77.4M	73.088M
802.11be EHT160_Nss2,(MCS0)_2TX	163.68M	156.522M	157MD1D	162.36M	156.322M
5.725-5.85GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	19.03M	19.14M	19M1D1D	4.5M	6.597M
802.11be EHT40_Nss2,(MCS0)_2TX	37.84M	37.931M	37M9D1D	3.62M	12.294M
802.11be EHT80_Nss2,(MCS0)_2TX	77.44M	77.561M	77M6D1D	3.28M	18.651M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	23.155M	19.165M	22.44M	19.115M
5200MHz	Pass	Inf	29.59M	19.19M	22.385M	19.115M
5240MHz	Pass	Inf	22.275M	19.19M	22.22M	19.115M
5260MHz	Pass	Inf	22M	19.09M	25.355M	19.09M
5300MHz	Pass	Inf	27.06M	19.09M	21.78M	19.165M
5320MHz	Pass	Inf	25.41M	19.115M	30.14M	19.14M
5500MHz	Pass	Inf	31.955M	19.14M	27.335M	19.09M
5580MHz	Pass	Inf	22.165M	19.19M	23.1M	19.065M
5700MHz	Pass	Inf	20.955M	18.991M	21.065M	19.04M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	18.555M	14.498M	16.185M	14.573M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.58M	6.897M	4.5M	6.597M
5745MHz	Pass	500k	19.03M	19.14M	18.975M	19.14M
5785MHz	Pass	500k	18.975M	19.065M	18.975M	19.14M
5825MHz	Pass	500k	18.865M	19.065M	18.865M	19.065M
802.11be EHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	42.02M	37.831M	59.62M	37.831M
5230MHz	Pass	Inf	48.95M	37.781M	40.7M	37.831M
5270MHz	Pass	Inf	41.91M	37.881M	41.8M	37.781M
5310MHz	Pass	Inf	46.2M	37.881M	46.42M	37.781M
5510MHz	Pass	Inf	48.51M	37.831M	42.57M	37.881M
5550MHz	Pass	Inf	43.23M	37.831M	48.4M	37.831M
5670MHz	Pass	Inf	41.47M	37.781M	41.8M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	40.775M	33.828M	35.21M	33.793M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	12.294M	3.62M	12.714M
5755MHz	Pass	500k	37.51M	37.781M	37.51M	37.931M
5795MHz	Pass	500k	37.84M	37.831M	37.07M	37.881M
802.11be EHT80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.94M	77.261M	88.44M	77.261M
5290MHz	Pass	Inf	90.2M	77.361M	82.28M	77.361M
5530MHz	Pass	Inf	82.94M	77.361M	83.16M	77.161M
5610MHz	Pass	Inf	83.38M	77.261M	82.28M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	77.4M	73.238M	77.55M	73.088M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.28M	23.828M	3.94M	18.651M
5775MHz	Pass	500k	77.44M	77.561M	76.34M	77.361M
802.11be EHT160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.72M	77.161M	81.12M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.92M	77.401M	81.28M	77.241M
5570MHz	Pass	Inf	163.68M	156.522M	162.36M	156.322M

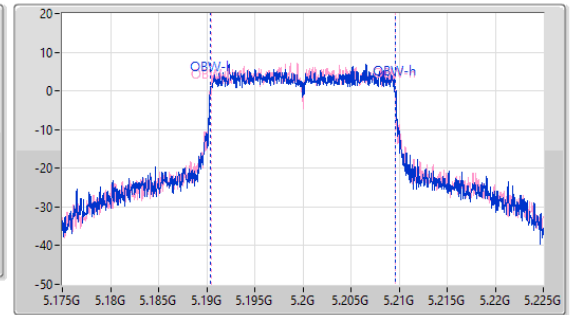
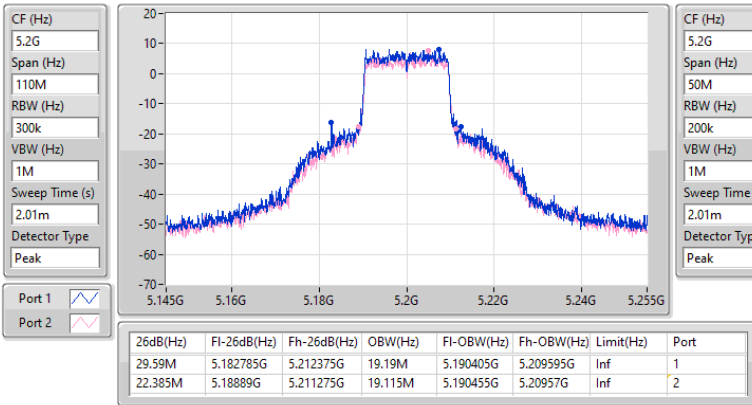
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5200MHz

25/03/2025

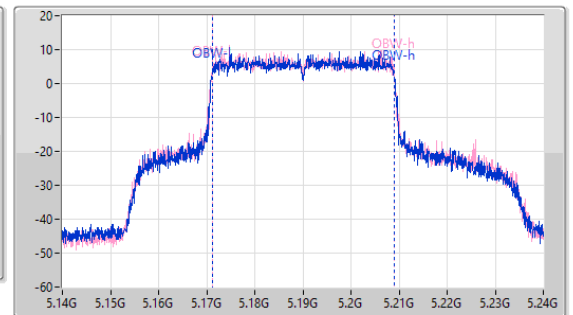
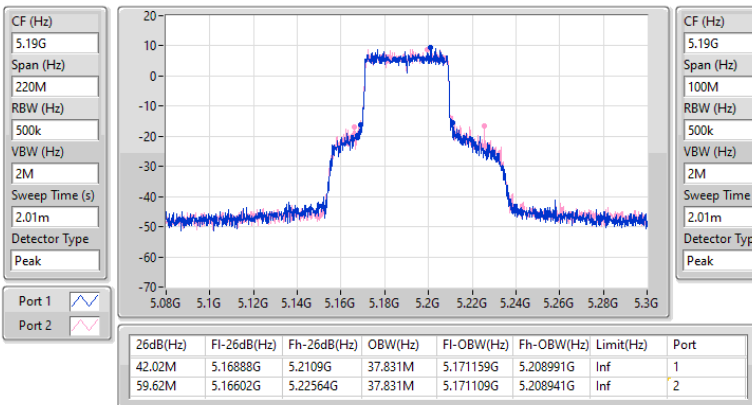


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EBW

5190MHz

25/03/2025

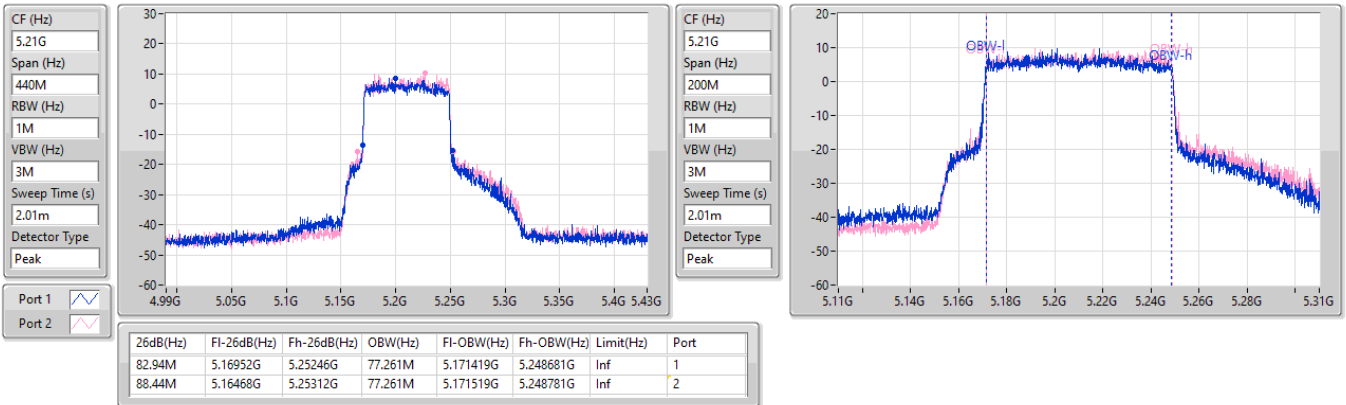


5.15-5.25GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5210MHz

25/03/2025

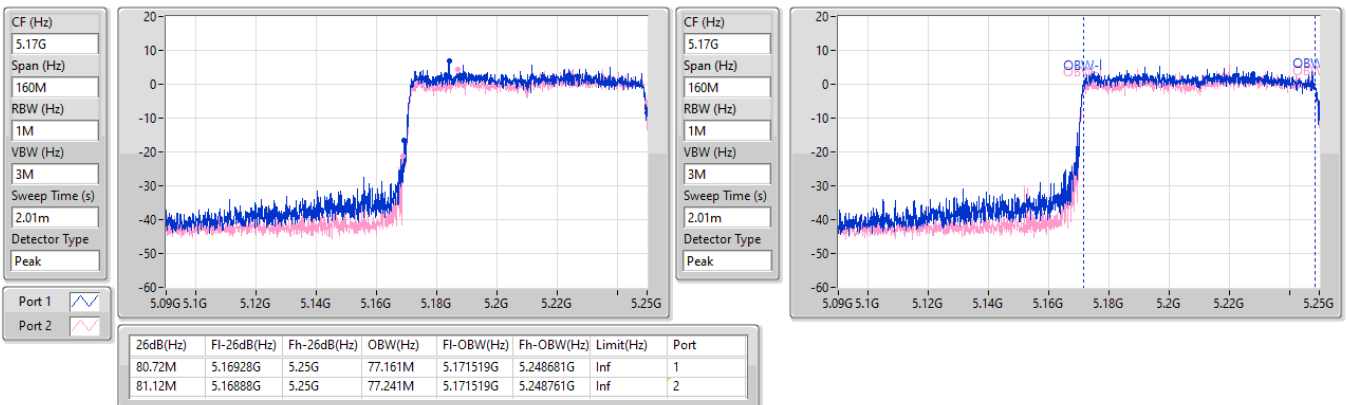


5.15-5.25GHz_802.11be EHT160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

25/03/2025

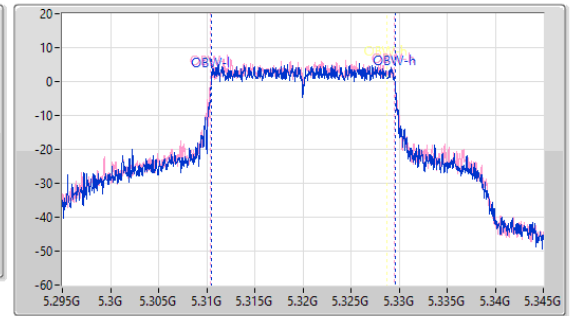
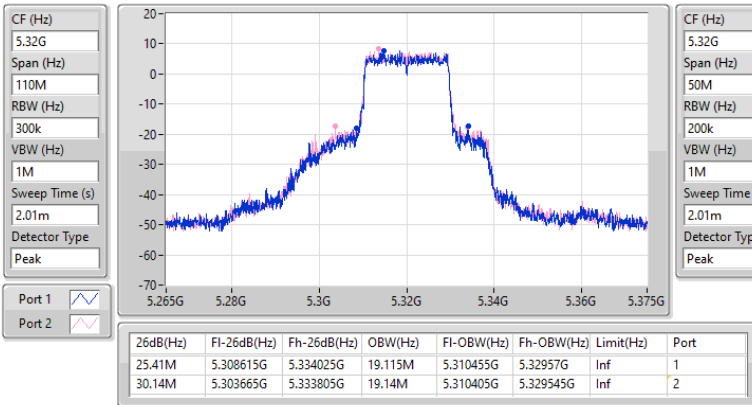


5.25-5.35GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5320MHz

25/03/2025

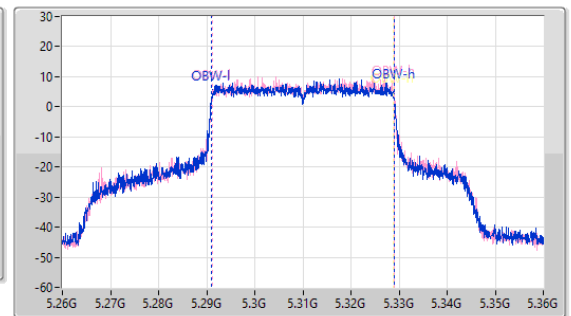
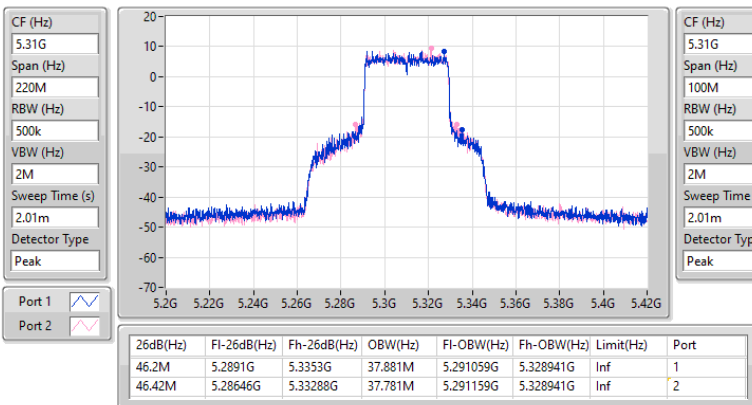


5.25-5.35GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5310MHz

25/03/2025

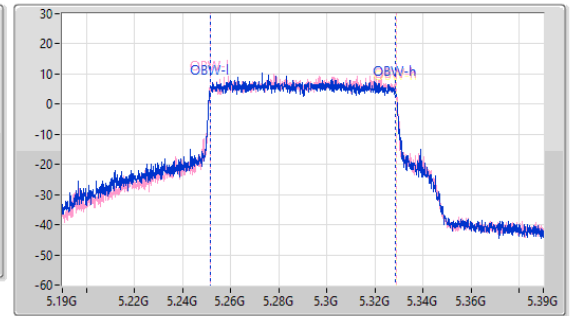
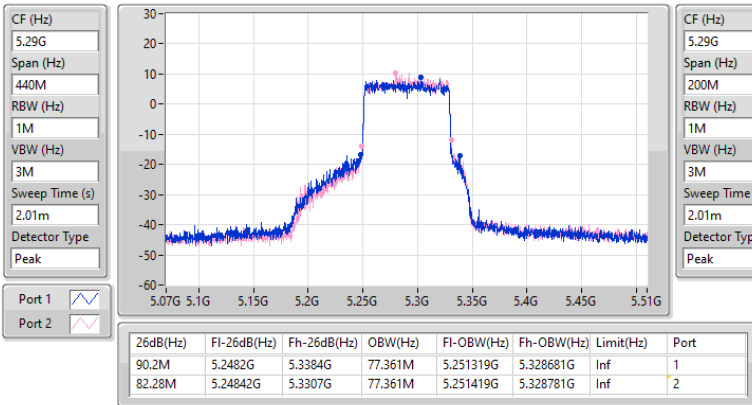


5.25-5.35GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5290MHz

25/03/2025

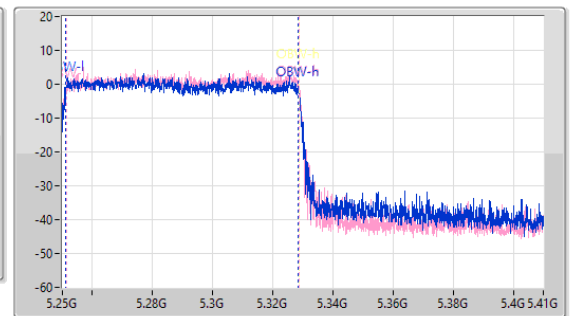
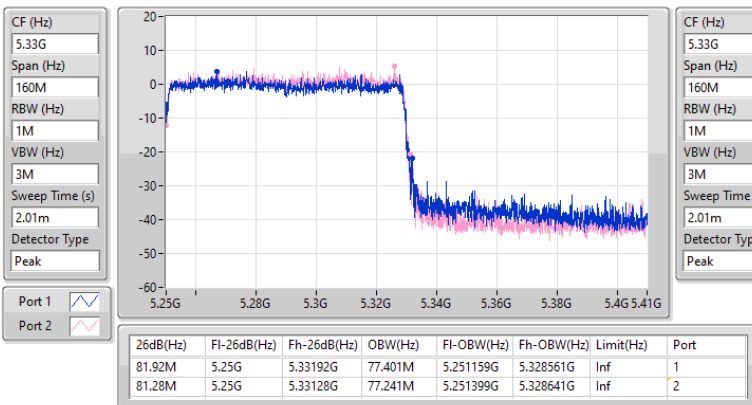


5.25-5.35GHz_802.11be EHT160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

25/03/2025

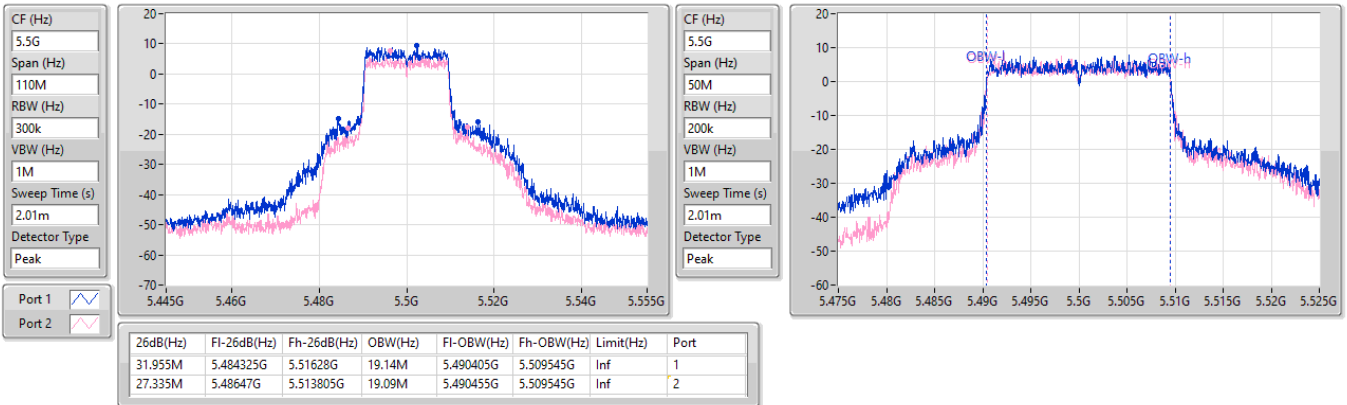


5.47-5.725GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5500MHz

25/03/2025

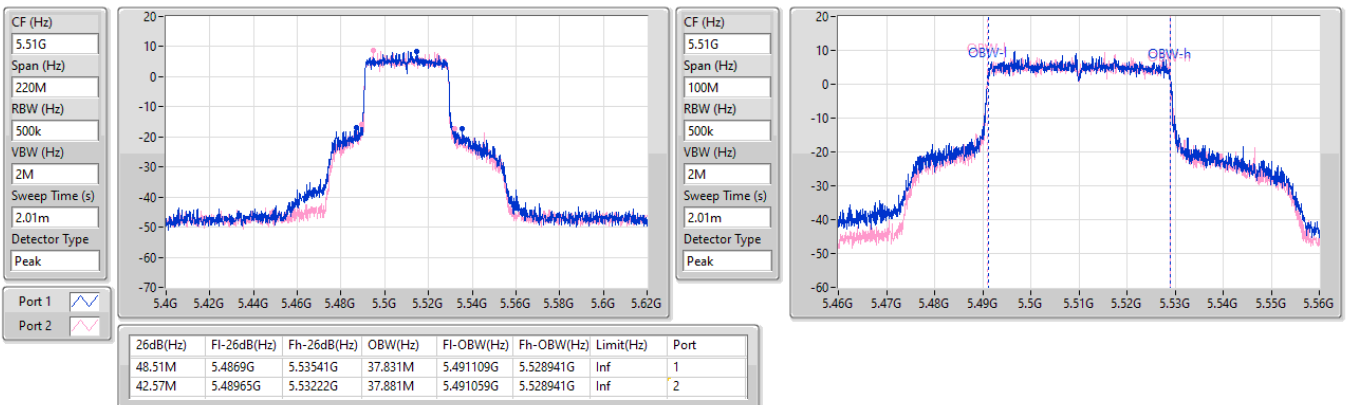


5.47-5.725GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5510MHz

25/03/2025

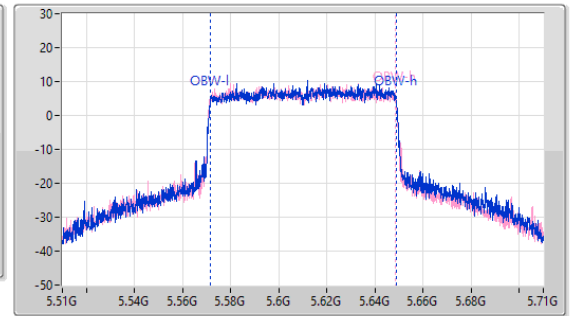
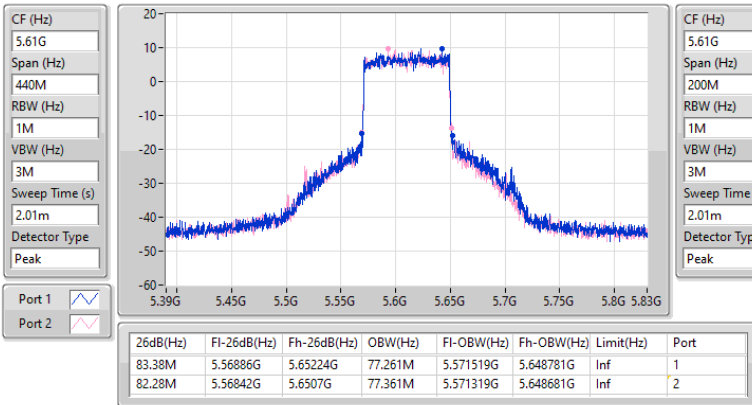


5.47-5.725GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5610MHz

25/03/2025

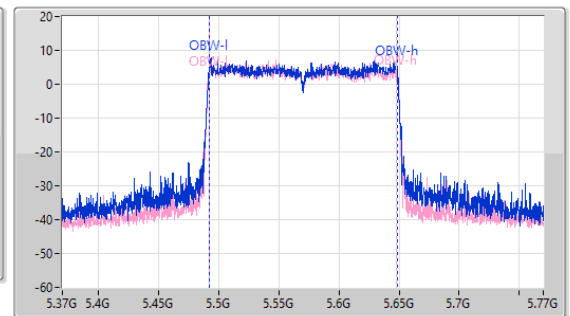
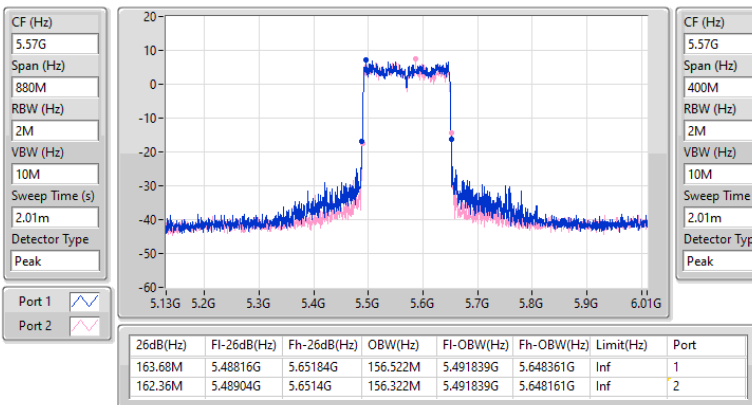


5.47-5.725GHz_802.11be EHT160_Nss2,(MCS0)_2TX

EBW

5570MHz

25/03/2025

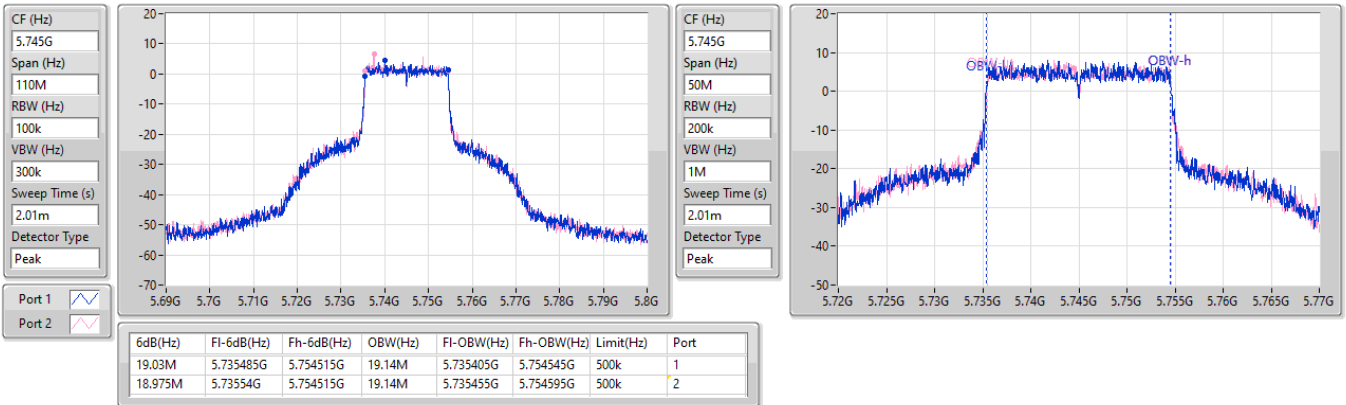


5.725-5.85GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5745MHz

25/03/2025

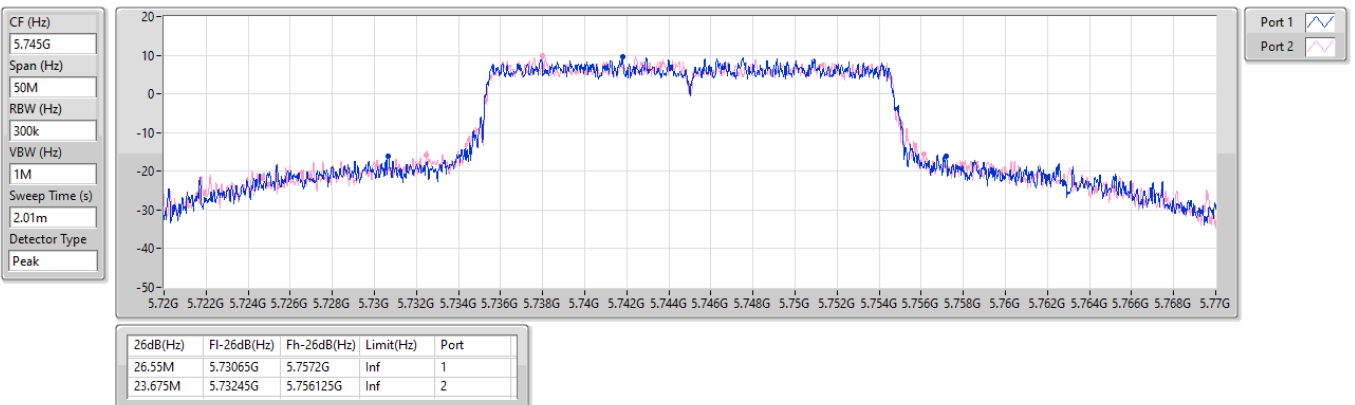


5.725-5.85GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5745MHz

25/03/2025

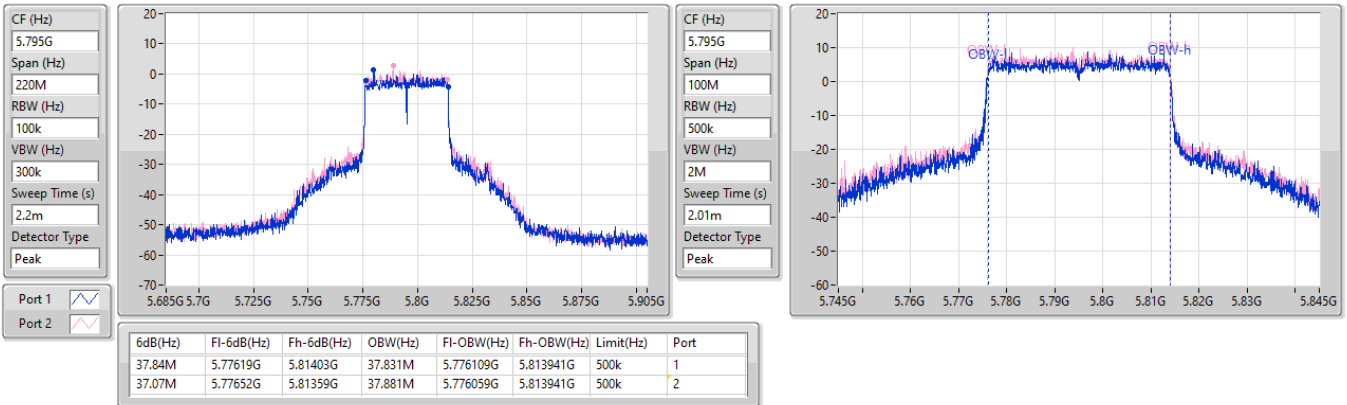


5.725-5.85GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5795MHz

25/03/2025

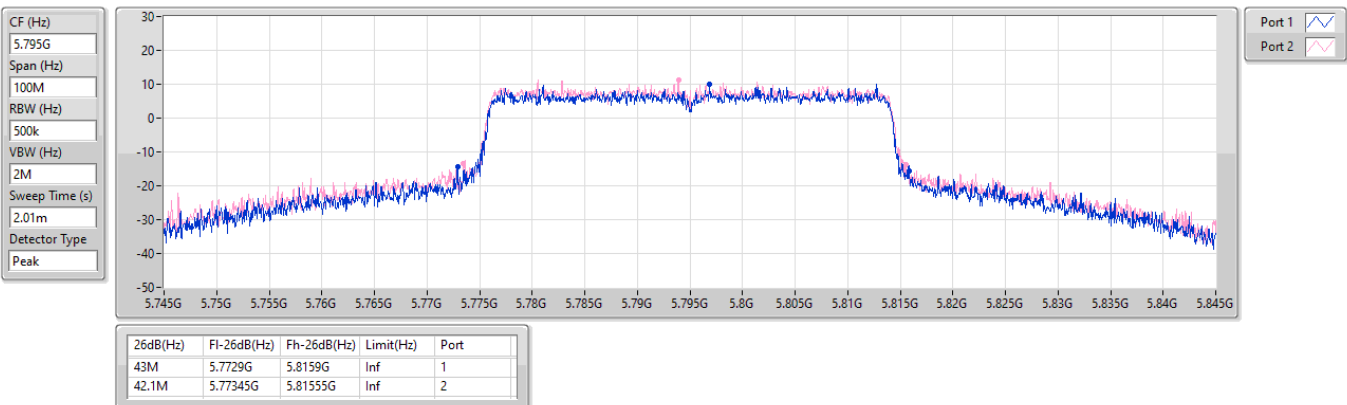


5.725-5.85GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5795MHz

25/03/2025

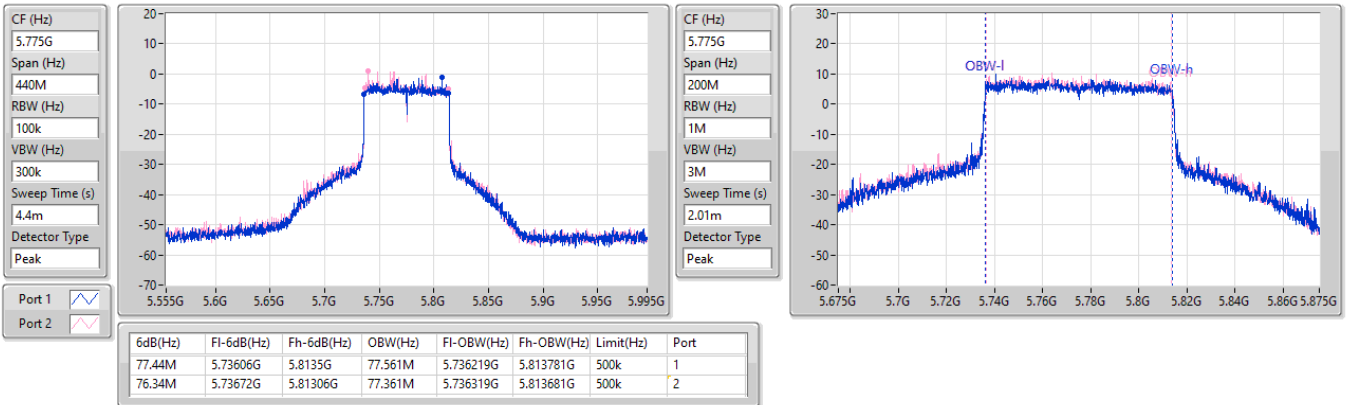


5.725-5.85GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5775MHz

25/03/2025

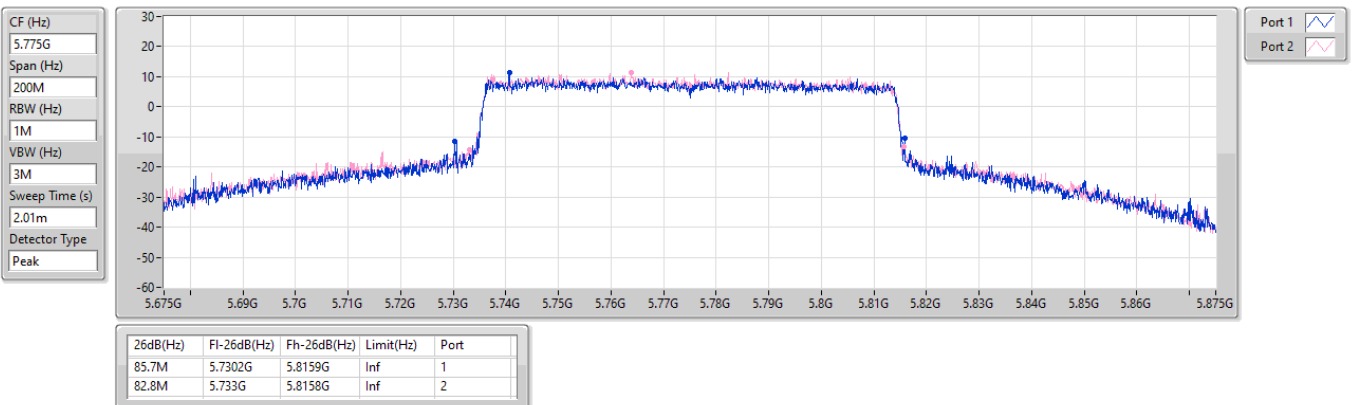


5.725-5.85GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5775MHz

25/03/2025





EBW_Non-Beamforming_Radio 2_ Dual-Polarized MIMO Panel Antenna_1T1S

Appendix B.4

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	23.705M	16.976M	17M0D1D	21.175M	16.888M
802.11be EHT20_Nss1,(MCS0)_1TX	27.775M	19.115M	19M1D1D	25.74M	19.065M
802.11be EHT40_Nss1,(MCS0)_1TX	51.15M	37.831M	37M8D1D	41.14M	37.831M
802.11be EHT80_Nss1,(MCS0)_1TX	81.18M	77.161M	77M2D1D	81.18M	77.161M
802.11be EHT160_Nss1,(MCS0)_1TX	81.2M	77.241M	77M2D1D	81.2M	77.241M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	24.475M	16.954M	17M0D1D	21.945M	16.844M
802.11be EHT20_Nss1,(MCS0)_1TX	26.125M	19.165M	19M2D1D	22.33M	19.065M
802.11be EHT40_Nss1,(MCS0)_1TX	42.46M	37.881M	37M9D1D	41.14M	37.831M
802.11be EHT80_Nss1,(MCS0)_1TX	82.5M	77.461M	77M5D1D	82.5M	77.461M
802.11be EHT160_Nss1,(MCS0)_1TX	81.28M	77.481M	77M5D1D	81.28M	77.481M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	29.425M	17.239M	17M2D1D	16.245M	13.568M
802.11be EHT20_Nss1,(MCS0)_1TX	30.91M	19.165M	19M2D1D	17.34M	14.528M
802.11be EHT40_Nss1,(MCS0)_1TX	43.01M	37.881M	37M9D1D	36.05M	33.723M
802.11be EHT80_Nss1,(MCS0)_1TX	89.1M	77.461M	77M5D1D	76.2M	73.238M
802.11be EHT160_Nss1,(MCS0)_1TX	162.8M	156.722M	157MD1D	162.8M	156.722M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.5M	17.041M	17M0D1D	3.28M	5.317M
802.11be EHT20_Nss1,(MCS0)_1TX	19.03M	19.115M	19M1D1D	4.58M	6.317M
802.11be EHT40_Nss1,(MCS0)_1TX	38.06M	37.831M	37M8D1D	3.1M	11.574M
802.11be EHT80_Nss1,(MCS0)_1TX	76.34M	77.461M	77M5D1D	3.68M	22.789M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	23.705M	16.954M
5200MHz	Pass	Inf	23.705M	16.888M
5240MHz	Pass	Inf	21.175M	16.976M
5260MHz	Pass	Inf	22.77M	16.844M
5300MHz	Pass	Inf	21.945M	16.888M
5320MHz	Pass	Inf	24.475M	16.954M
5500MHz	Pass	Inf	29.425M	17.239M
5580MHz	Pass	Inf	21.505M	16.8M
5700MHz	Pass	Inf	21.065M	16.668M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.245M	13.568M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.28M	5.317M
5745MHz	Pass	500k	16.5M	17.041M
5785MHz	Pass	500k	16.5M	16.822M
5825MHz	Pass	500k	16.5M	16.822M
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	27.445M	19.09M
5200MHz	Pass	Inf	25.74M	19.065M
5240MHz	Pass	Inf	27.775M	19.115M
5260MHz	Pass	Inf	25.63M	19.165M
5300MHz	Pass	Inf	26.125M	19.065M
5320MHz	Pass	Inf	22.33M	19.115M
5500MHz	Pass	Inf	30.91M	19.165M
5580MHz	Pass	Inf	24.585M	19.14M
5700MHz	Pass	Inf	20.955M	19.065M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.34M	14.528M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.58M	6.317M
5745MHz	Pass	500k	18.755M	19.115M
5785MHz	Pass	500k	18.92M	19.065M
5825MHz	Pass	500k	19.03M	19.115M
802.11be EHT40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	41.14M	37.831M
5230MHz	Pass	Inf	51.15M	37.831M
5270MHz	Pass	Inf	42.46M	37.831M
5310MHz	Pass	Inf	41.14M	37.881M
5510MHz	Pass	Inf	43.01M	37.881M
5550MHz	Pass	Inf	42.79M	37.881M
5670MHz	Pass	Inf	42.68M	37.881M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.05M	33.723M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	11.574M
5755MHz	Pass	500k	38.06M	37.831M
5795MHz	Pass	500k	37.18M	37.831M
802.11be EHT80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	81.18M	77.161M
5290MHz	Pass	Inf	82.5M	77.461M
5530MHz	Pass	Inf	89.1M	77.461M



EBW_Non-Beamforming_Radio 2_ Dual-Polarized MIMO Panel Antenna_1T1S

Appendix B.4

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
5610MHz	Pass	Inf	82.5M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.68M	22.789M
5775MHz	Pass	500k	76.34M	77.461M
802.11be EHT160_Nss1,(MCS0)_1TX	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.2M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.28M	77.481M
5570MHz	Pass	Inf	162.8M	156.722M

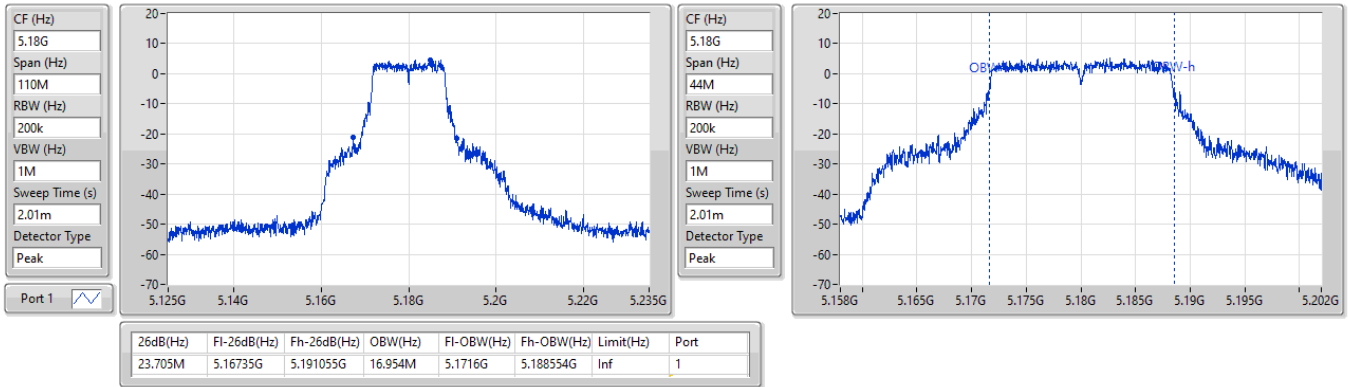
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5180MHz

21/03/2025

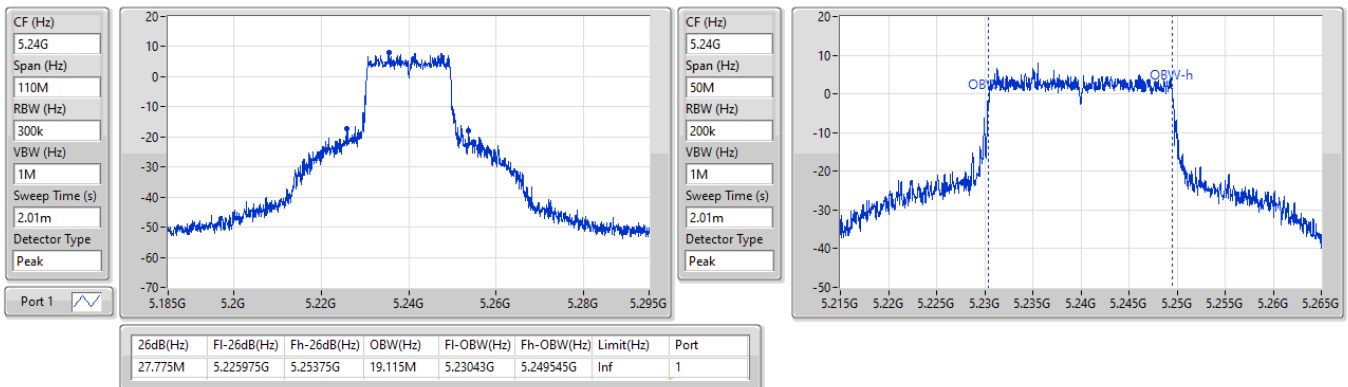


5.15-5.25GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5240MHz

21/03/2025

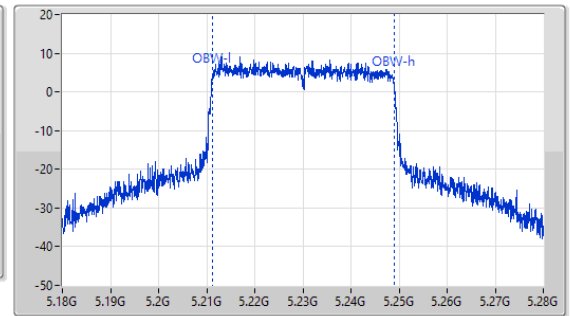
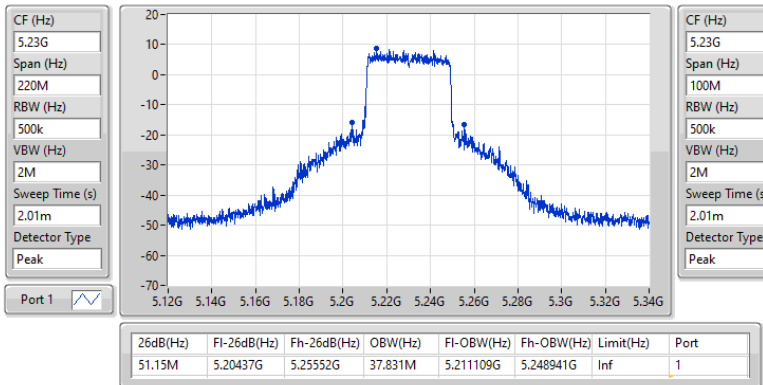


5.15-5.25GHz 802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5230MHz

21/03/2025

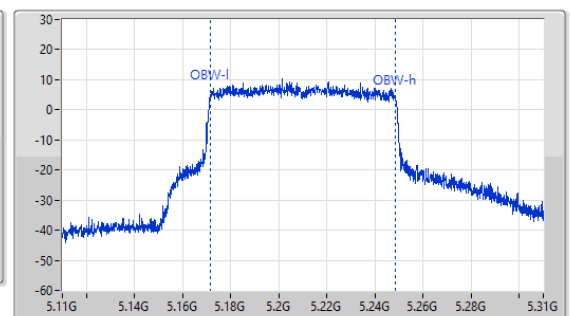
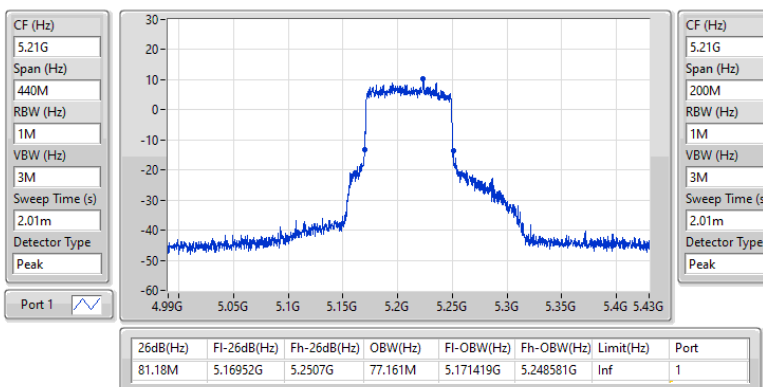


5.15-5.25GHz 802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5210MHz

25/03/2025

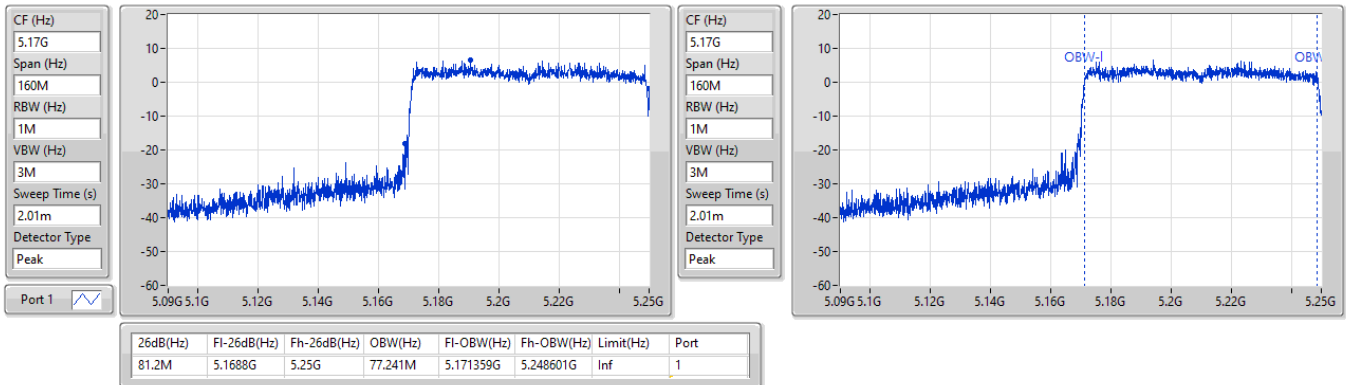


5.15-5.25GHz_802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5250MHz Straddle 5.15-5.25GHz

25/03/2025

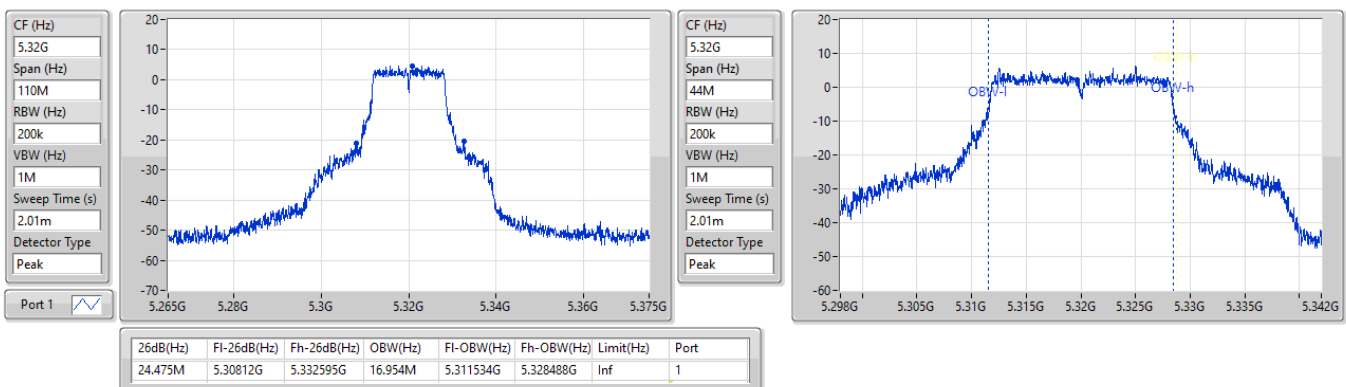


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5320MHz

21/03/2025

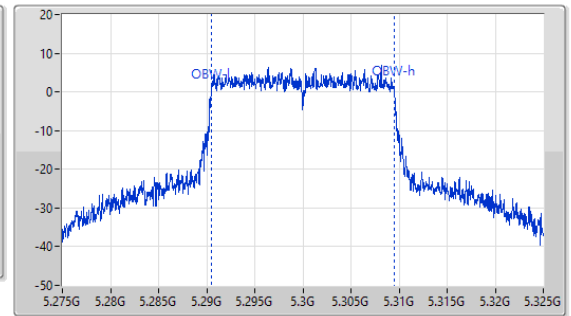
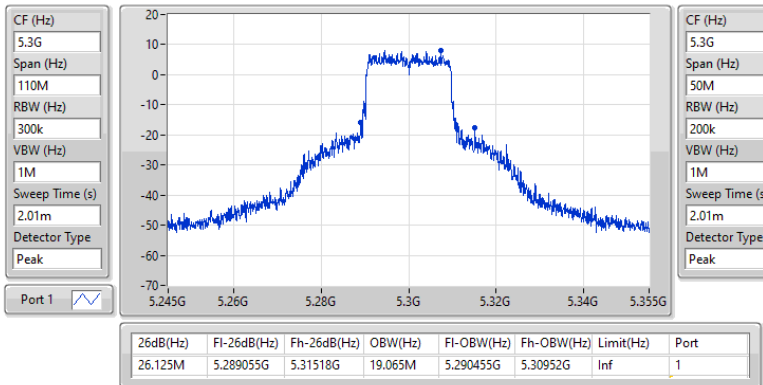


5.25-5.35GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5300MHz

21/03/2025

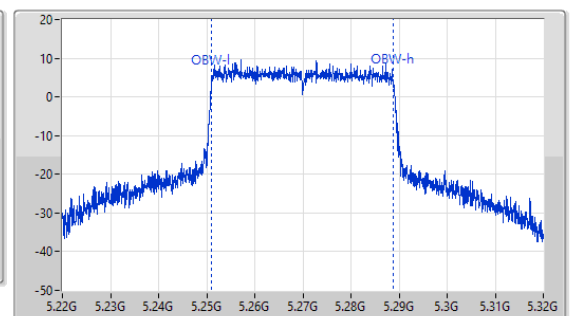
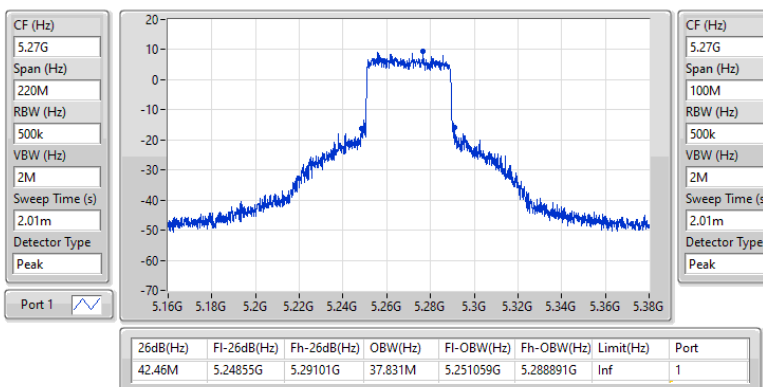


5.25-5.35GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5270MHz

21/03/2025

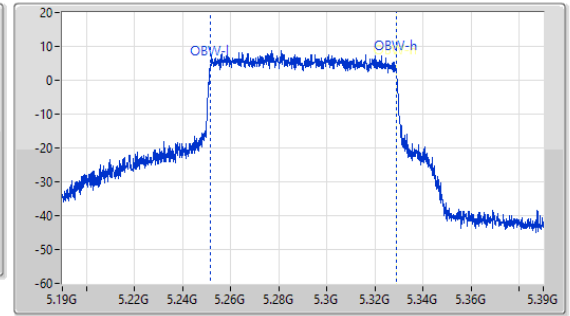
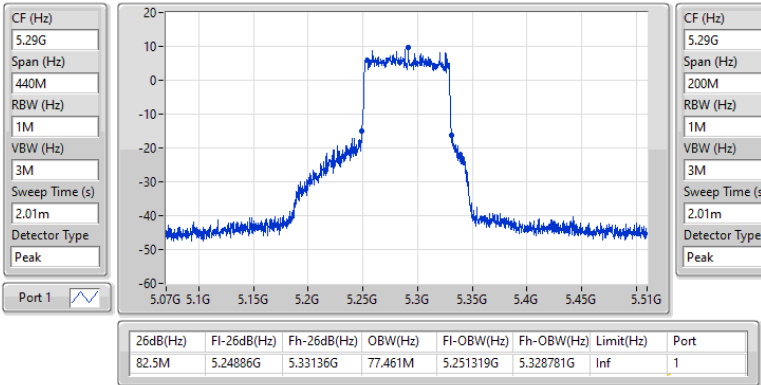


5.25-5.35GHz_802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5290MHz

21/03/2025

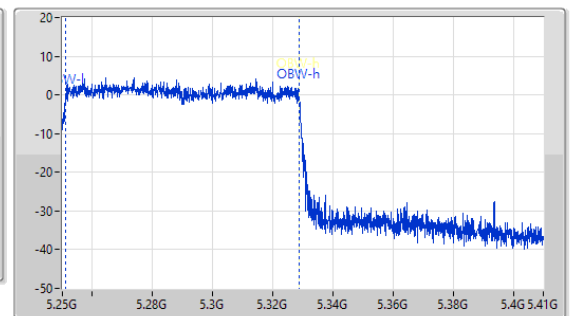
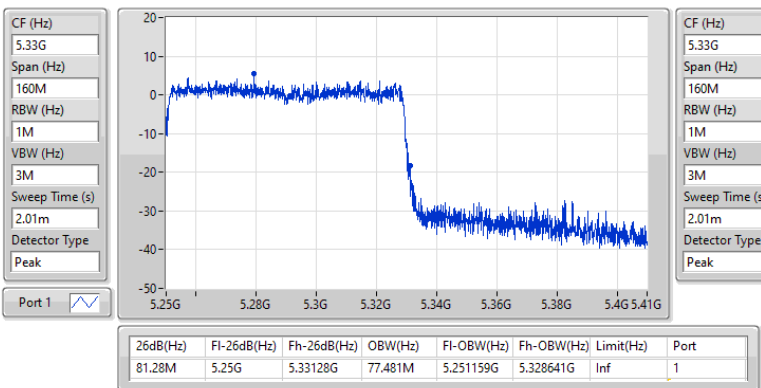


5.25-5.35GHz_802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5250MHz Straddle 5.25-5.35GHz

25/03/2025

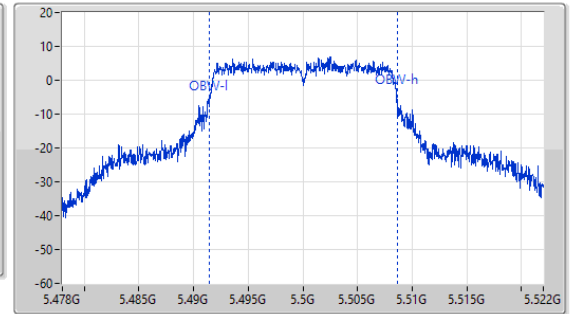
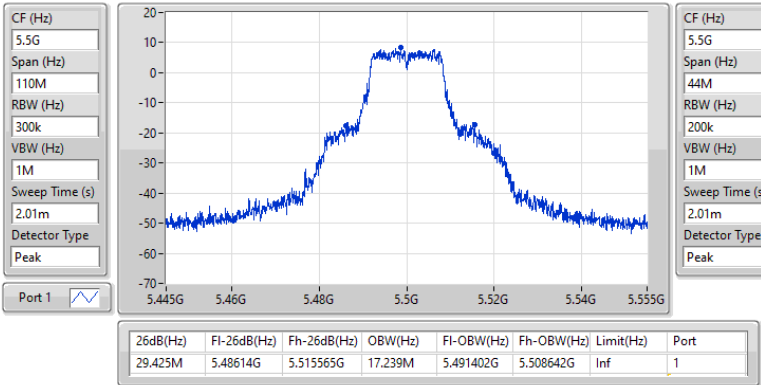


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5500MHz

21/03/2025

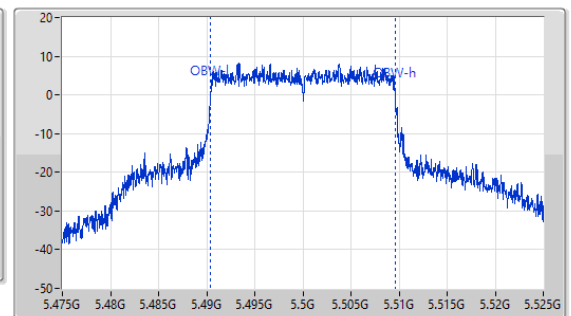
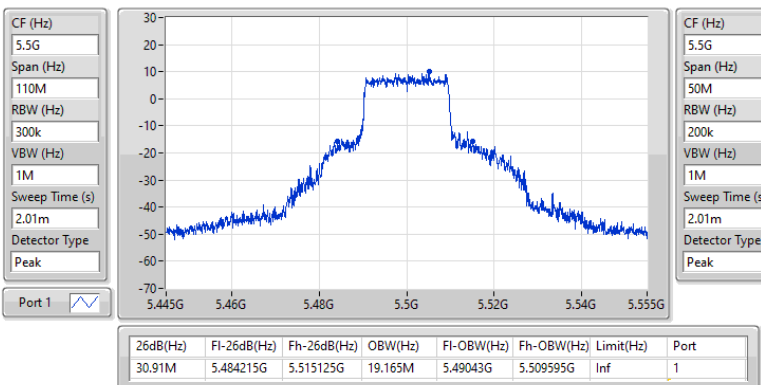


5.47-5.725GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5500MHz

25/03/2025

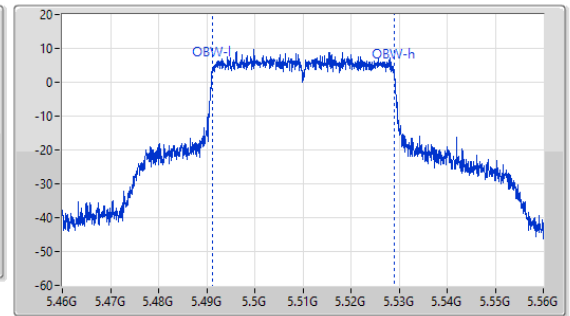
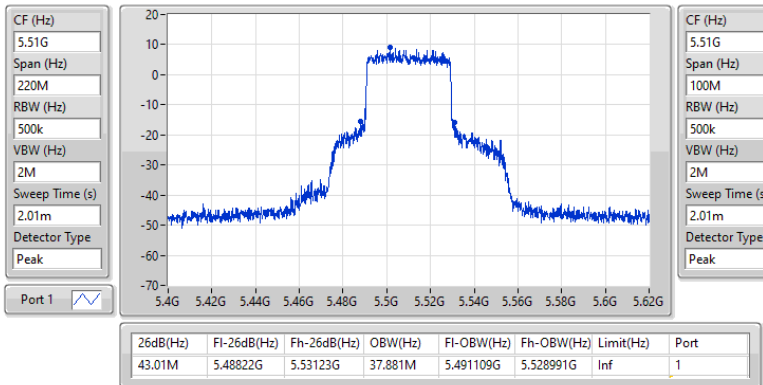


5.47-5.725GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5510MHz

25/03/2025

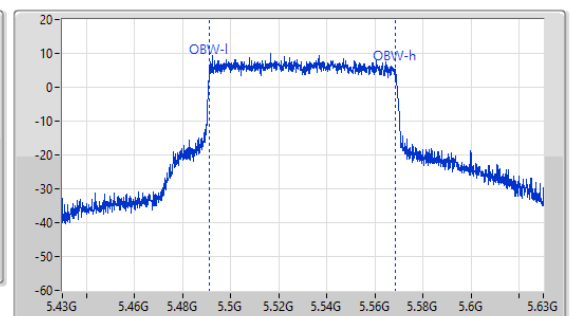
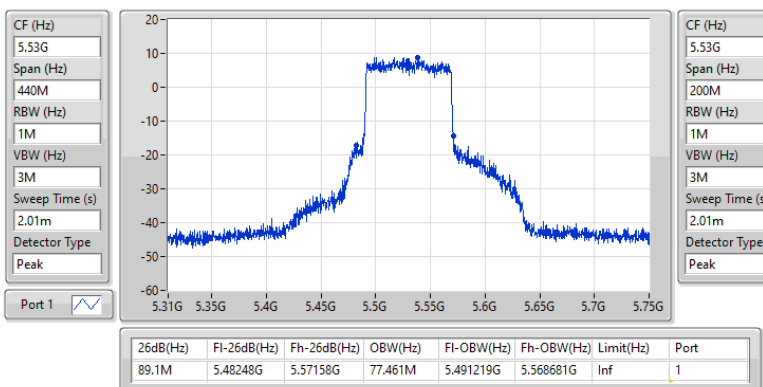


5.47-5.725GHz_802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5530MHz

25/03/2025

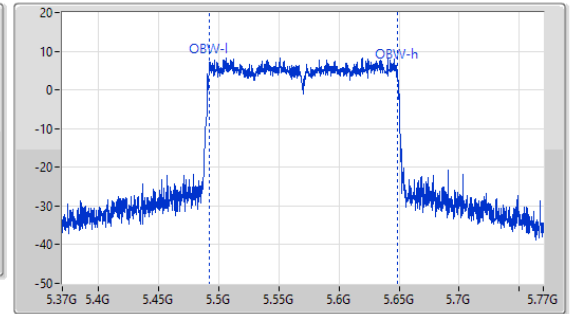
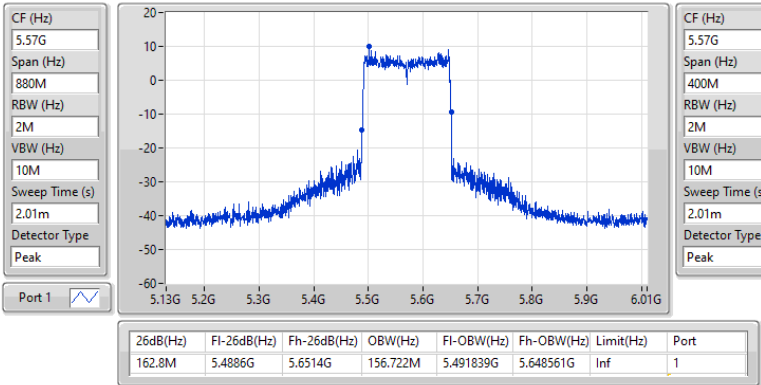


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EBW

5570MHz

25/03/2025

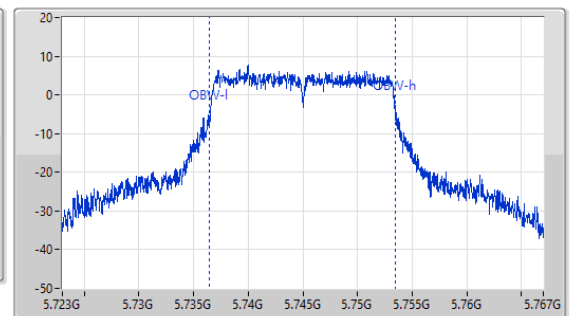
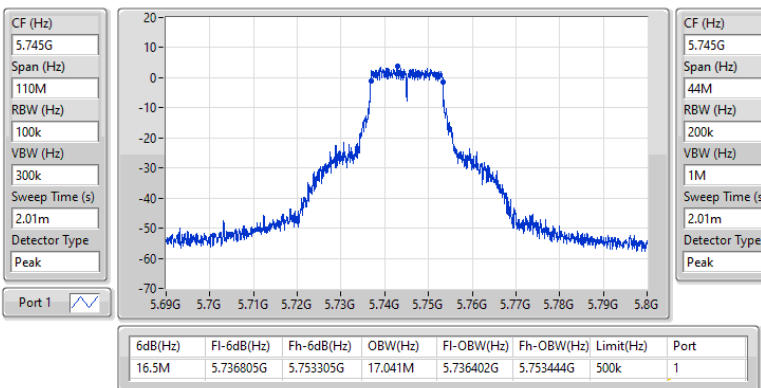


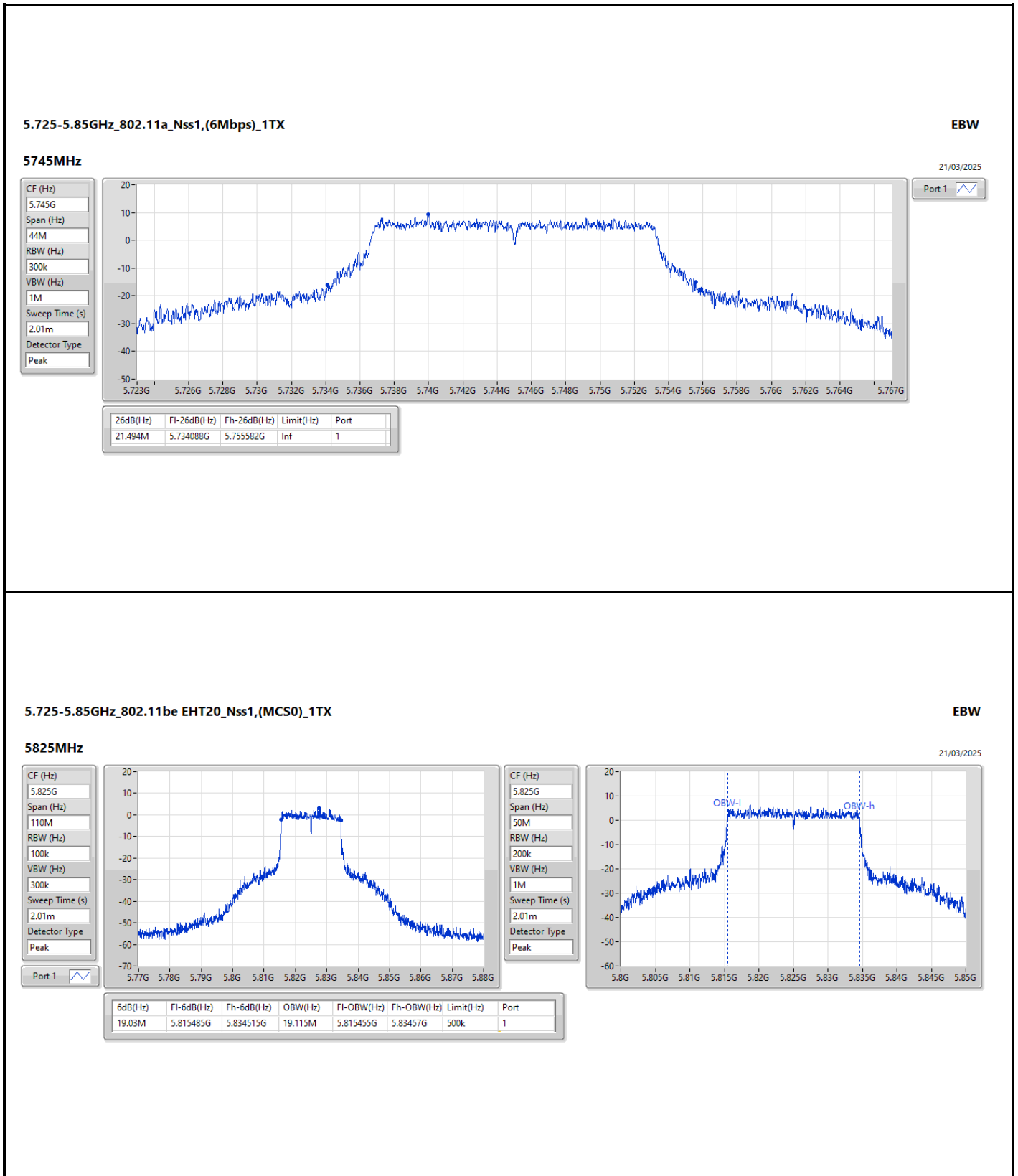
5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

21/03/2025





5.725-5.85GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5825MHz

21/03/2025

CF (Hz)
5.825G

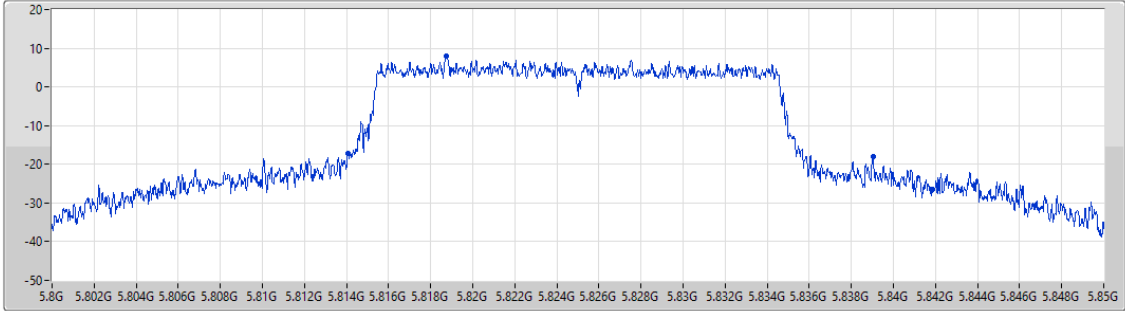
Span (Hz)
50M

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
2.01m

Detector Type
Peak



Port 1

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
24.975M	5.81405G	5.839025G	Inf	1

5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5755MHz

21/03/2025

CF (Hz)
5.755G

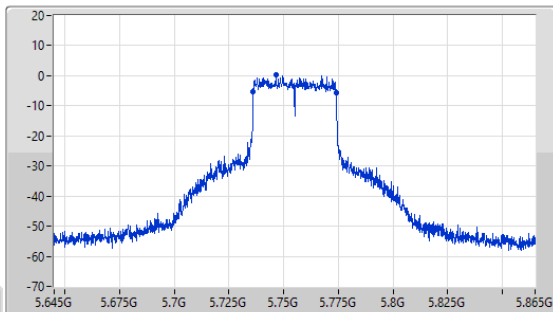
Span (Hz)
220M

RBW (Hz)
100k

VBW (Hz)
300k

Sweep Time (s)
2.2m

Detector Type
Peak



Port 1

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.06M	5.73597G	5.77403G	37.831M	5.736059G	5.773891G	500k	1

CF (Hz)
5.755G

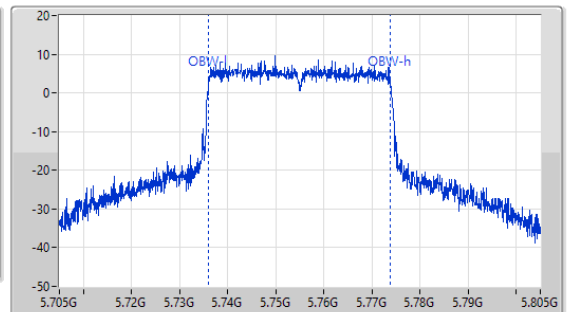
Span (Hz)
100M

RBW (Hz)
500k

VBW (Hz)
2M

Sweep Time (s)
2.01m

Detector Type
Peak

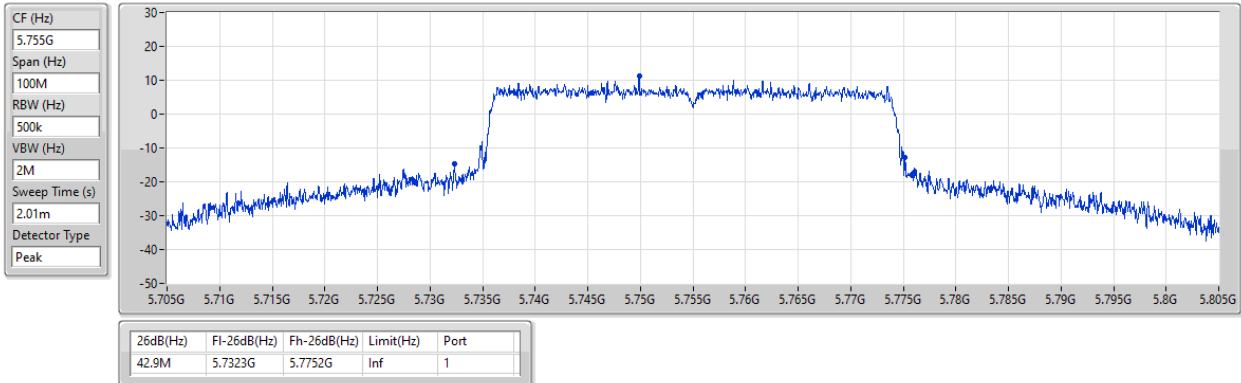


5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5755MHz

21/03/2025

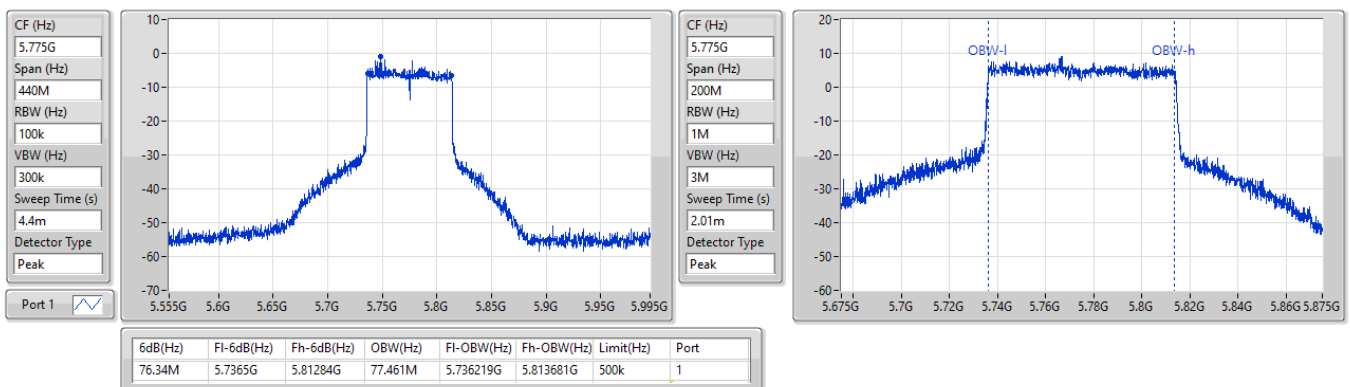


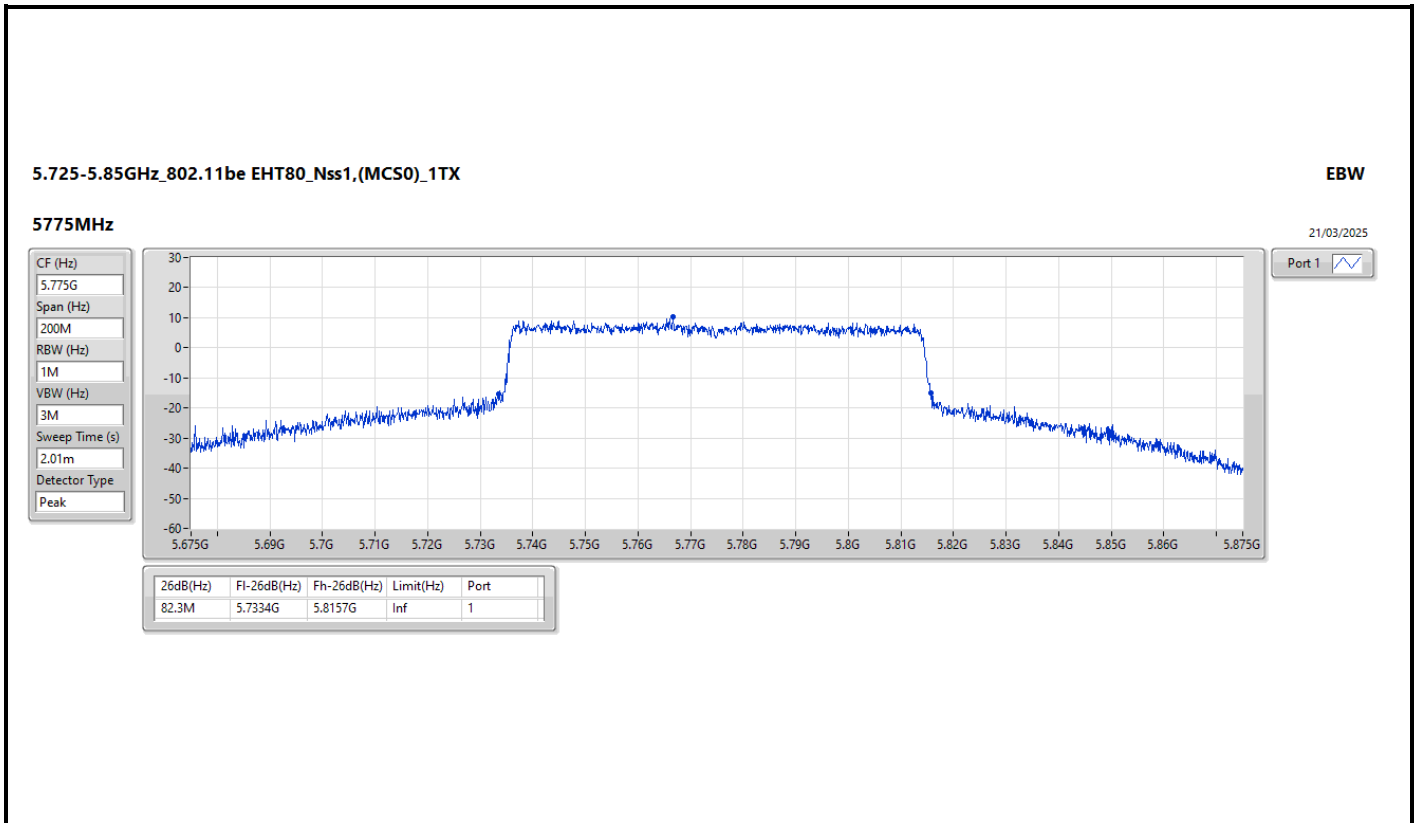
5.725-5.85GHz_802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5775MHz

21/03/2025







EBW_Non-Beamforming_Radio 2_ Dual-Polarized MIMO Panel Antenna_2T1S

Appendix B.5

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.33M	16.91M	16M9D1D	21.285M	16.778M
802.11be EHT20_Nss1,(MCS0)_2TX	23.485M	19.215M	19M2D1D	21.12M	19.04M
802.11be EHT40_Nss1,(MCS0)_2TX	42.79M	37.931M	37M9D1D	40.26M	37.731M
802.11be EHT80_Nss1,(MCS0)_2TX	84.92M	77.261M	77M3D1D	83.6M	77.161M
802.11be EHT160_Nss1,(MCS0)_2TX	81.12M	77.241M	77M2D1D	80.96M	77.241M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.77M	16.932M	16M9D1D	21.23M	16.8M
802.11be EHT20_Nss1,(MCS0)_2TX	29.425M	19.165M	19M2D1D	21.34M	19.065M
802.11be EHT40_Nss1,(MCS0)_2TX	44.99M	37.881M	37M9D1D	40.59M	37.781M
802.11be EHT80_Nss1,(MCS0)_2TX	85.36M	77.361M	77M4D1D	82.28M	77.261M
802.11be EHT160_Nss1,(MCS0)_2TX	81.44M	77.481M	77M5D1D	81.12M	77.321M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	23.155M	16.888M	16M9D1D	16.26M	13.598M
802.11be EHT20_Nss1,(MCS0)_2TX	29.7M	19.14M	19M1D1D	18.435M	14.528M
802.11be EHT40_Nss1,(MCS0)_2TX	48.4M	37.881M	37M9D1D	37.695M	33.758M
802.11be EHT80_Nss1,(MCS0)_2TX	82.5M	77.461M	77M5D1D	76.275M	73.088M
802.11be EHT160_Nss1,(MCS0)_2TX	162.36M	156.722M	157MD1D	162.36M	156.322M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.555M	17.019M	17M0D1D	3.16M	4.938M
802.11be EHT20_Nss1,(MCS0)_2TX	19.14M	19.165M	19M2D1D	4.52M	5.457M
802.11be EHT40_Nss1,(MCS0)_2TX	37.84M	37.881M	37M9D1D	4M	11.874M
802.11be EHT80_Nss1,(MCS0)_2TX	77.66M	77.561M	77M6D1D	4.04M	18.551M

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



EBW_Non-Beamforming_Radio 2_ Dual-Polarized MIMO Panel Antenna_2T1S

Appendix B.5

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.34M	16.91M	22.33M	16.888M
5200MHz	Pass	Inf	21.945M	16.866M	21.89M	16.778M
5240MHz	Pass	Inf	21.285M	16.866M	22.11M	16.866M
5260MHz	Pass	Inf	21.34M	16.932M	21.835M	16.844M
5300MHz	Pass	Inf	22.33M	16.888M	22.77M	16.8M
5320MHz	Pass	Inf	21.395M	16.91M	21.23M	16.888M
5500MHz	Pass	Inf	23.155M	16.866M	21.56M	16.888M
5580MHz	Pass	Inf	21.505M	16.822M	21.615M	16.822M
5700MHz	Pass	Inf	21.065M	16.668M	21.175M	16.646M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.355M	13.643M	16.26M	13.598M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.28M	4.978M	3.16M	4.938M
5745MHz	Pass	500k	16.445M	16.866M	16.335M	17.019M
5785MHz	Pass	500k	16.555M	16.888M	16.5M	16.91M
5825MHz	Pass	500k	16.335M	16.888M	16.335M	16.91M
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.715M	19.215M	22.385M	19.065M
5200MHz	Pass	Inf	21.89M	19.14M	23.485M	19.04M
5240MHz	Pass	Inf	21.12M	19.14M	21.12M	19.065M
5260MHz	Pass	Inf	24.53M	19.115M	21.34M	19.065M
5300MHz	Pass	Inf	22.22M	19.065M	21.56M	19.165M
5320MHz	Pass	Inf	27.555M	19.14M	29.425M	19.115M
5500MHz	Pass	Inf	29.535M	19.14M	29.7M	19.065M
5580MHz	Pass	Inf	27.775M	19.14M	28.05M	19.115M
5700MHz	Pass	Inf	21.285M	19.065M	21.395M	19.015M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	21.12M	14.528M	18.435M	14.573M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.56M	5.477M	4.52M	5.457M
5745MHz	Pass	500k	19.03M	19.165M	18.7M	19.115M
5785MHz	Pass	500k	18.975M	19.14M	19.03M	19.115M
5825MHz	Pass	500k	19.03M	19.065M	19.14M	19.09M
802.11be EHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	42.35M	37.731M	42.79M	37.831M
5230MHz	Pass	Inf	42.68M	37.931M	40.26M	37.881M
5270MHz	Pass	Inf	40.59M	37.781M	41.03M	37.831M
5310MHz	Pass	Inf	44.99M	37.881M	42.13M	37.881M
5510MHz	Pass	Inf	48.4M	37.881M	44.55M	37.831M
5550MHz	Pass	Inf	47.63M	37.881M	42.13M	37.831M
5670MHz	Pass	Inf	40.26M	37.831M	42.68M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	40.39M	33.793M	37.695M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	11.874M	4M	11.954M
5755MHz	Pass	500k	37.62M	37.881M	37.84M	37.881M
5795MHz	Pass	500k	37.73M	37.831M	37.51M	37.881M
802.11be EHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.6M	77.161M	84.92M	77.261M
5290MHz	Pass	Inf	82.28M	77.261M	85.36M	77.361M
5530MHz	Pass	Inf	82.5M	77.361M	81.84M	77.261M



EBW_Non-Beamforming_Radio 2_ Dual-Polarized MIMO Panel Antenna_2T1S

Appendix B.5

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5610MHz	Pass	Inf	80.74M	77.461M	81.18M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.725M	73.088M	76.275M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	23.488M	4.06M	18.551M
5775MHz	Pass	500k	77.66M	77.561M	77.22M	77.461M
802.11be EHT160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.96M	77.241M	81.12M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.12M	77.321M	81.44M	77.481M
5570MHz	Pass	Inf	162.36M	156.722M	162.36M	156.322M

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

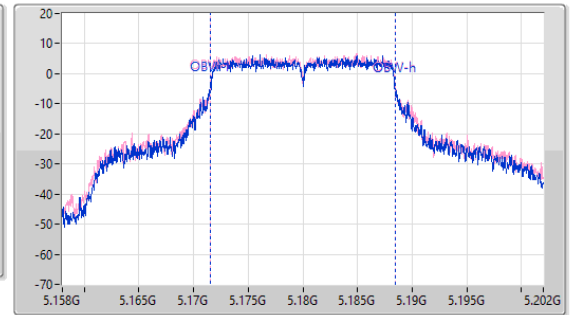
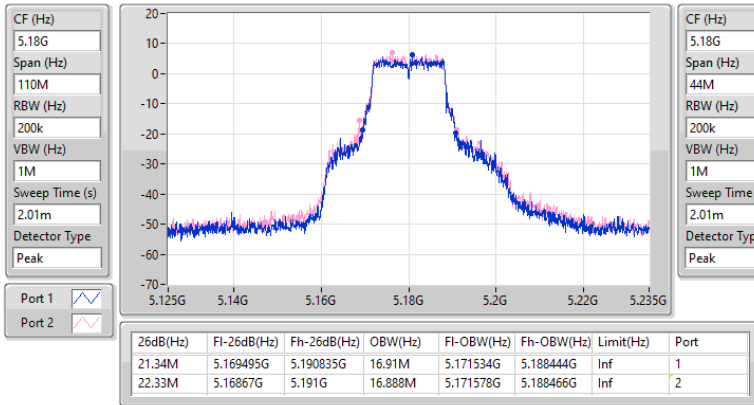
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5180MHz

27/03/2025

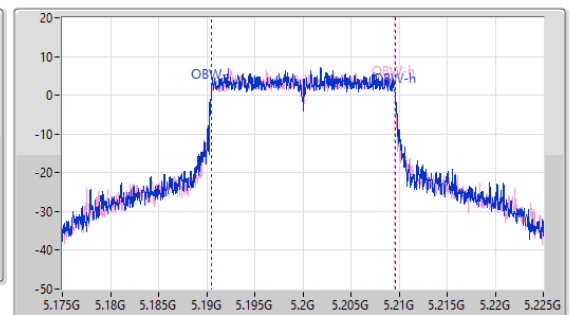
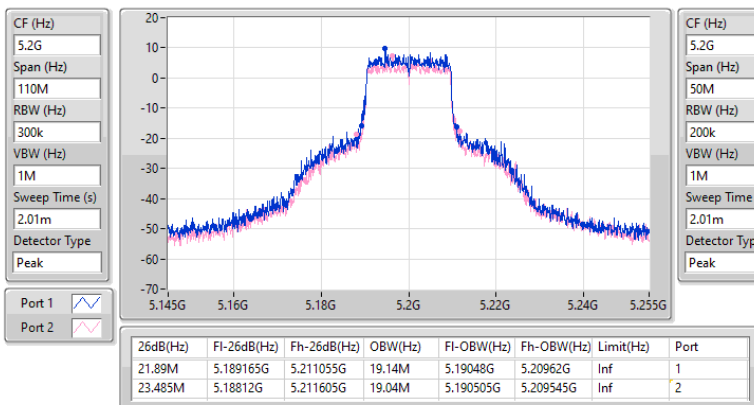


5.15-5.25GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5200MHz

22/03/2025

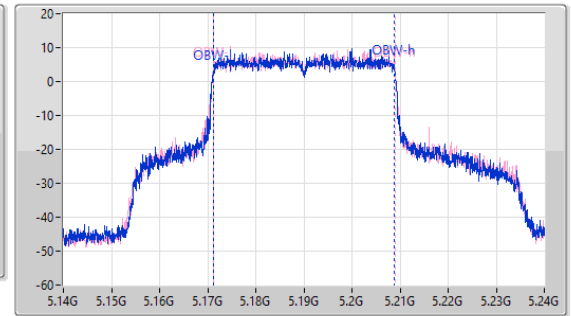
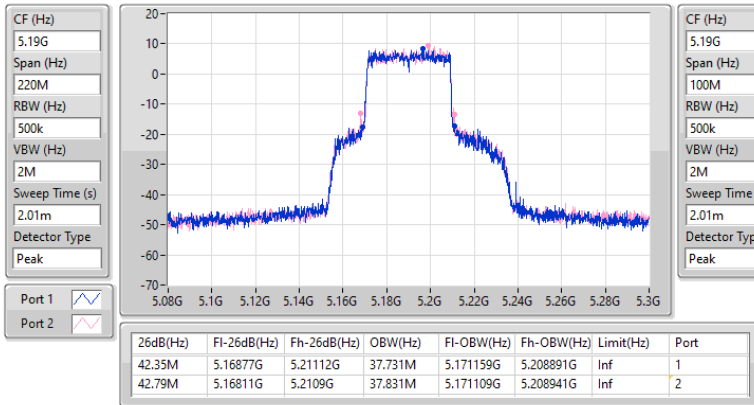


5.15-5.25GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5190MHz

22/03/2025

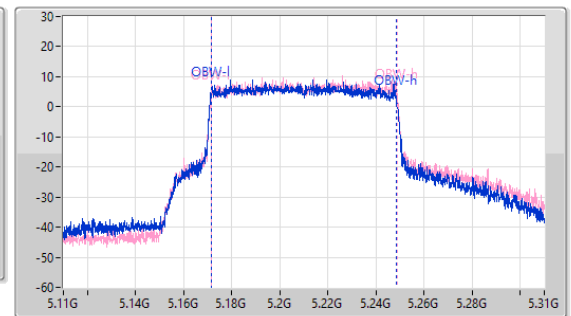
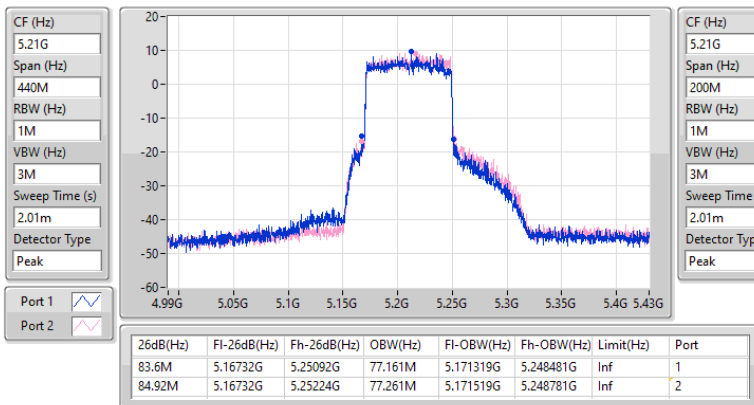


5.15-5.25GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5210MHz

22/03/2025

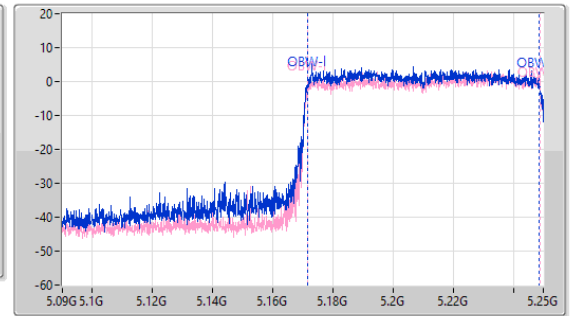
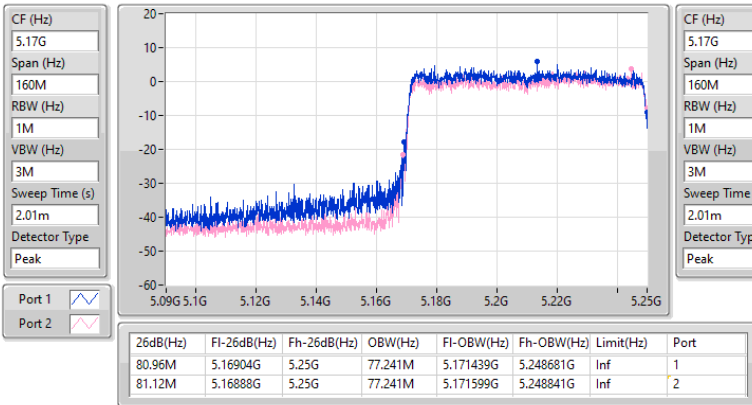


5.15-5.25GHz_802.11be EHT160_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

22/03/2025

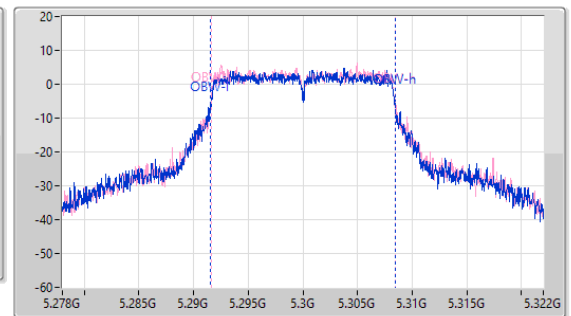
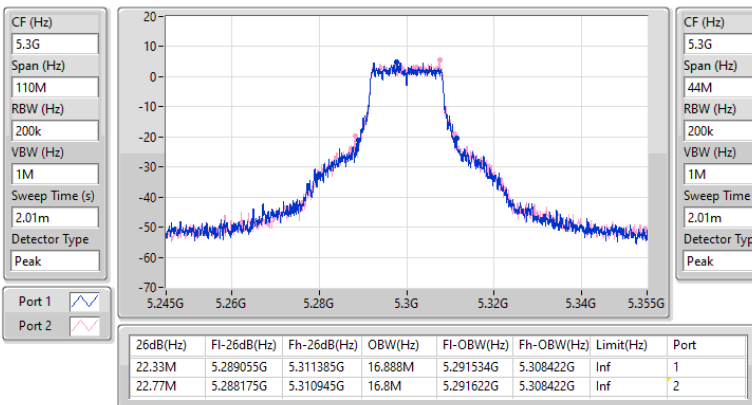


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5300MHz

27/03/2025

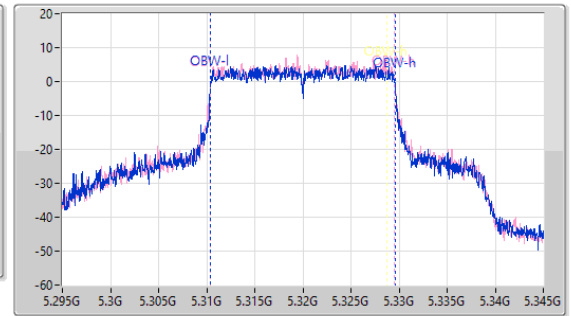
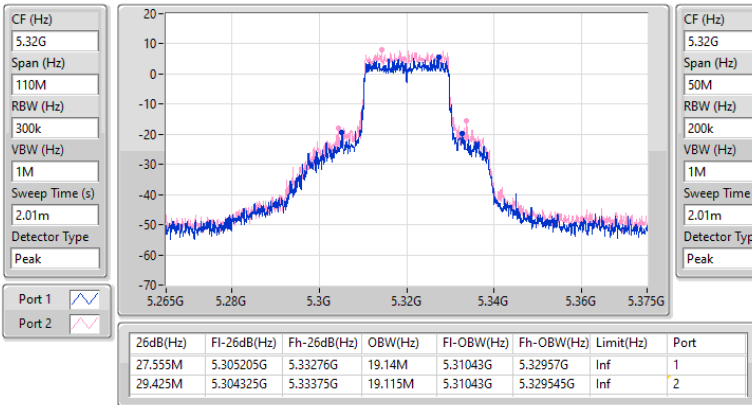


5.25-5.35GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5320MHz

27/03/2025

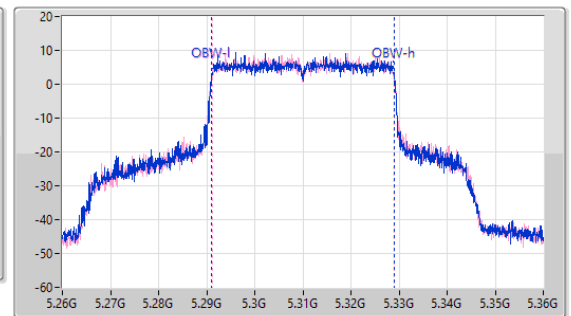
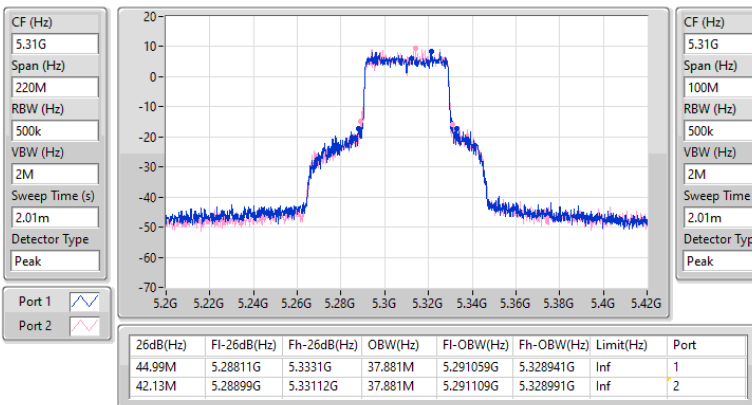


5.25-5.35GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5310MHz

22/03/2025

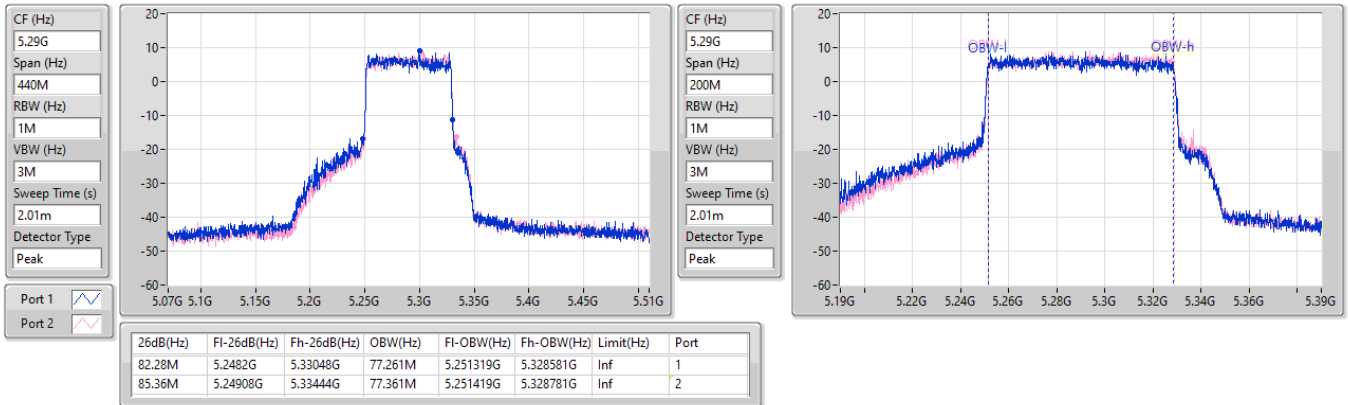


5.25-5.35GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5290MHz

22/03/2025

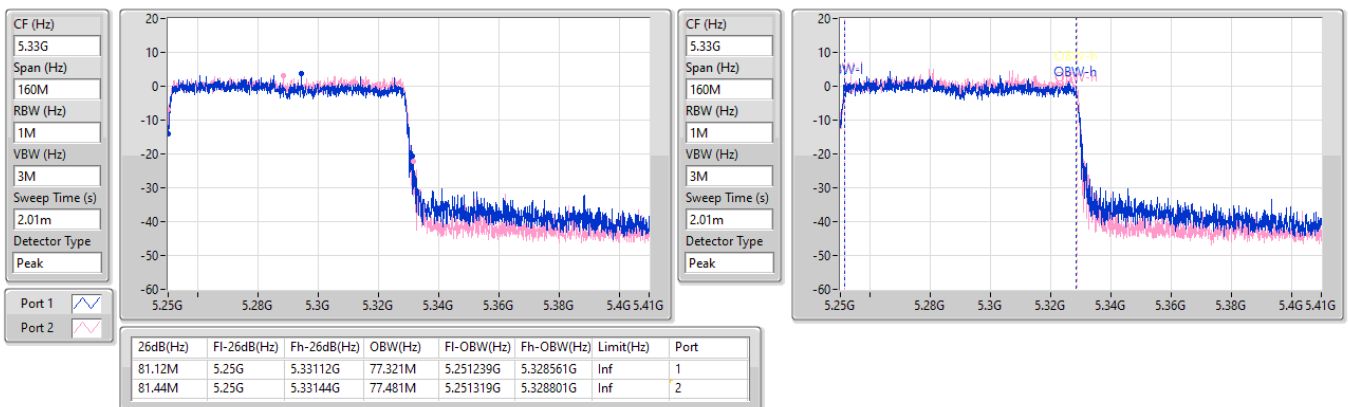


5.25-5.35GHz_802.11be EHT160_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

22/03/2025

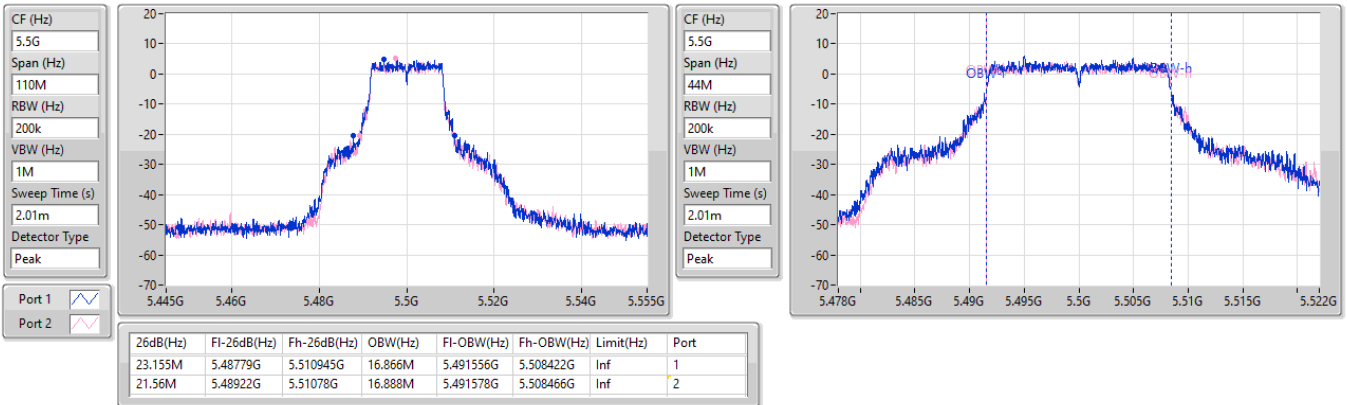


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

27/03/2025

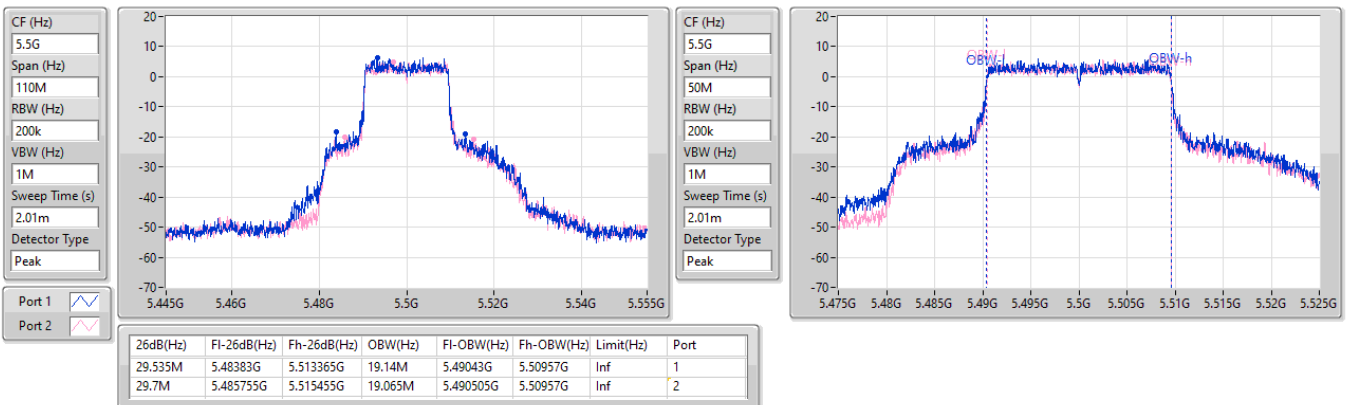


5.47-5.725GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5500MHz

27/03/2025

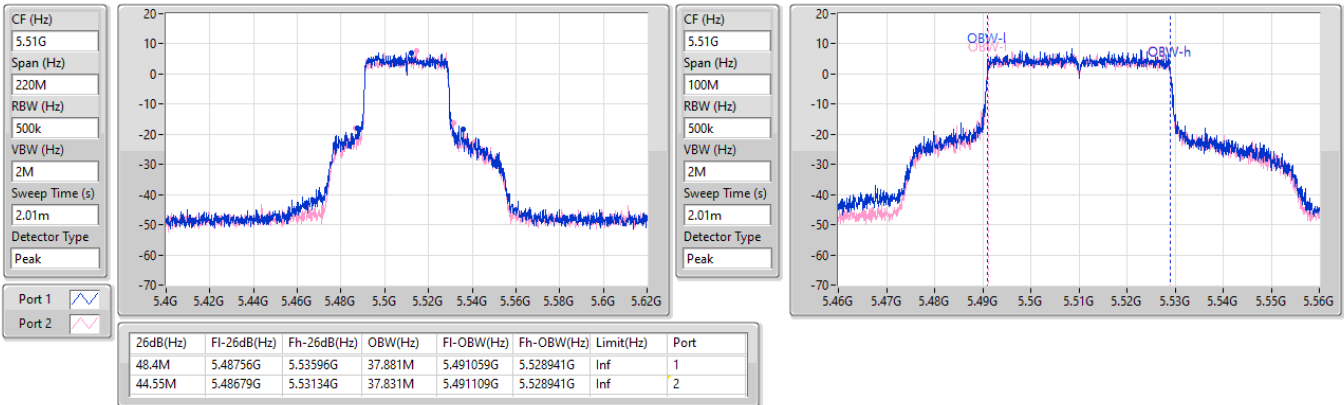


5.47-5.725GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5510MHz

22/03/2025

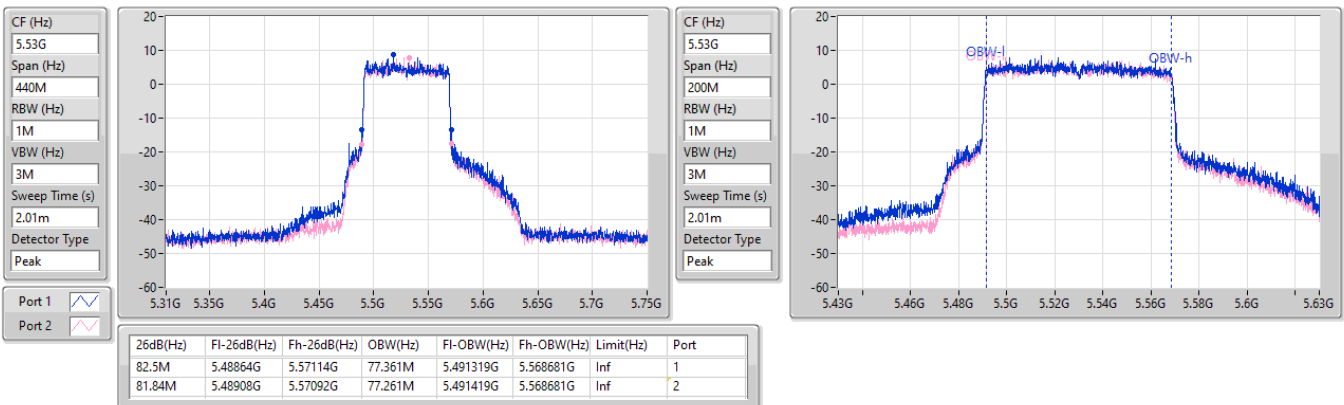


5.47-5.725GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5530MHz

22/03/2025

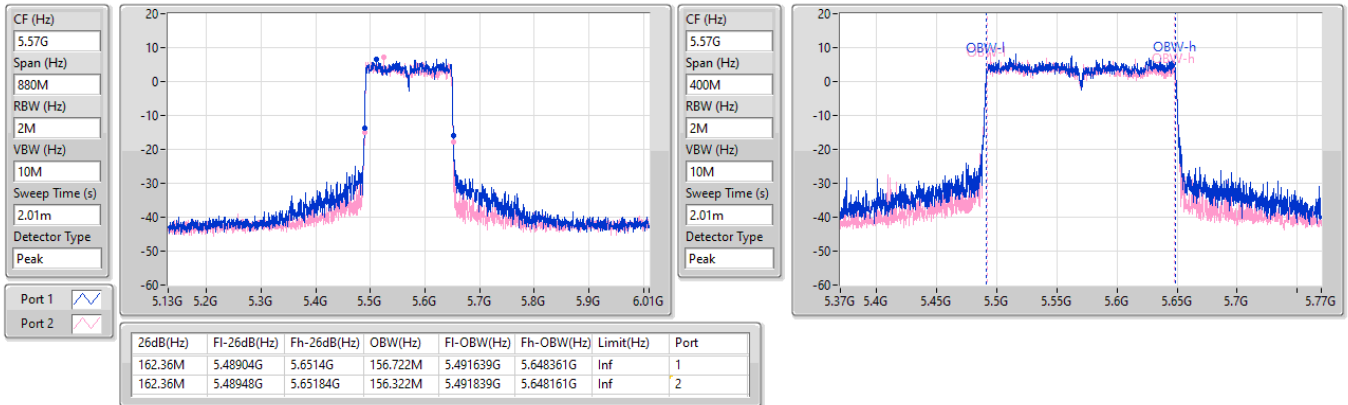


5.47-5.725GHz_802.11be EHT160_Nss1,(MCS0)_2TX

EBW

5570MHz

22/03/2025

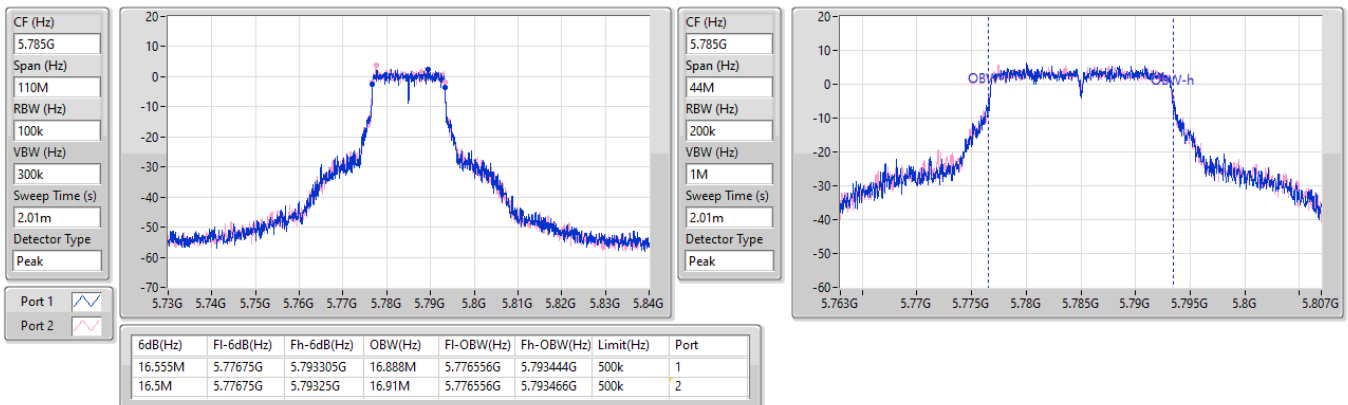


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

22/03/2025

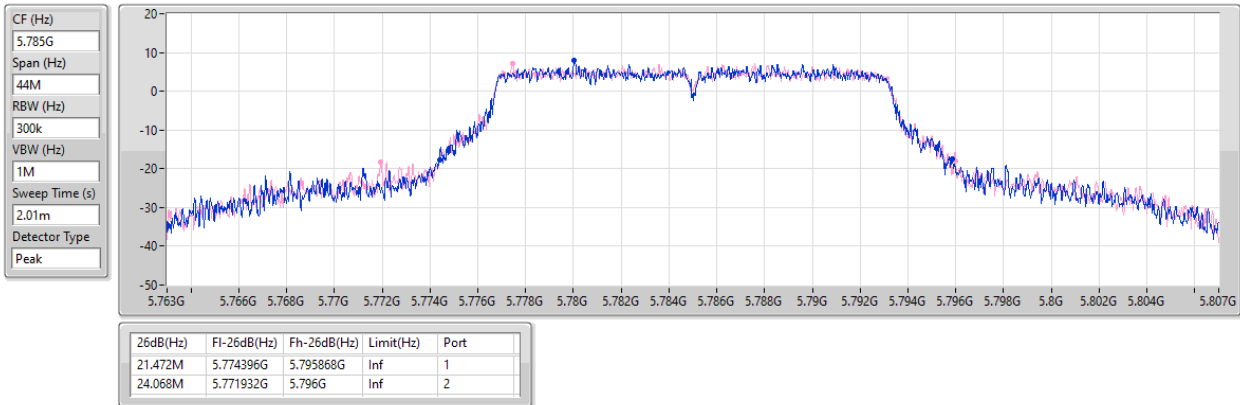


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

22/03/2025

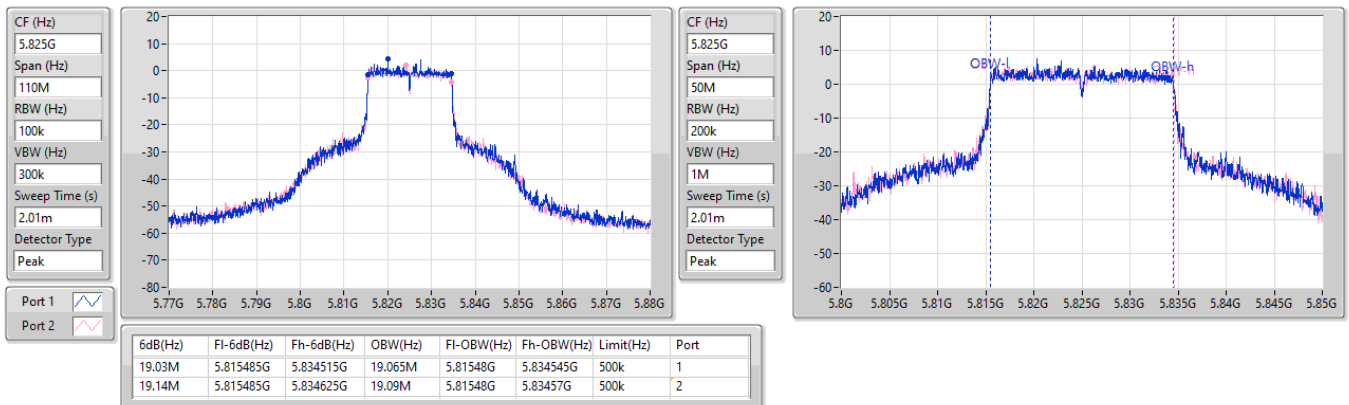


5.725-5.85GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5825MHz

22/03/2025

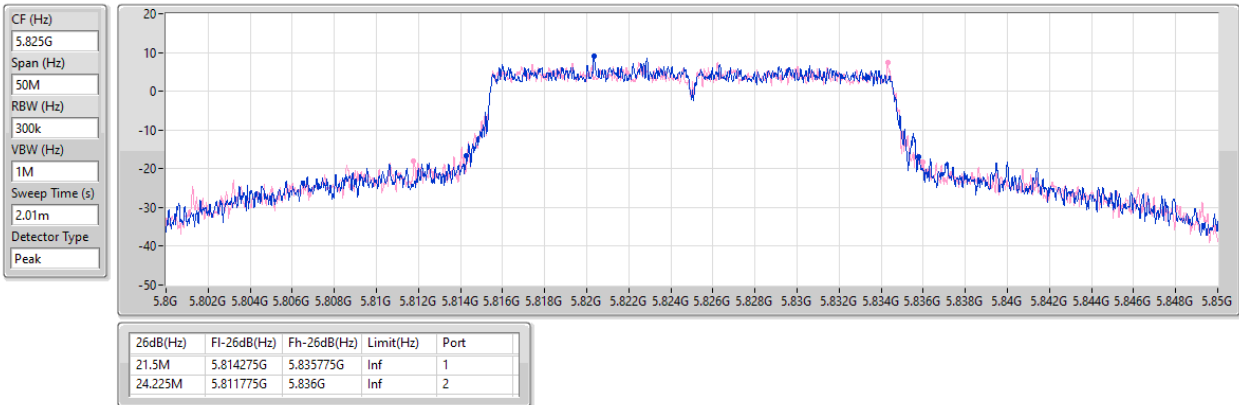


5.725-5.85GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

5825MHz

22/03/2025

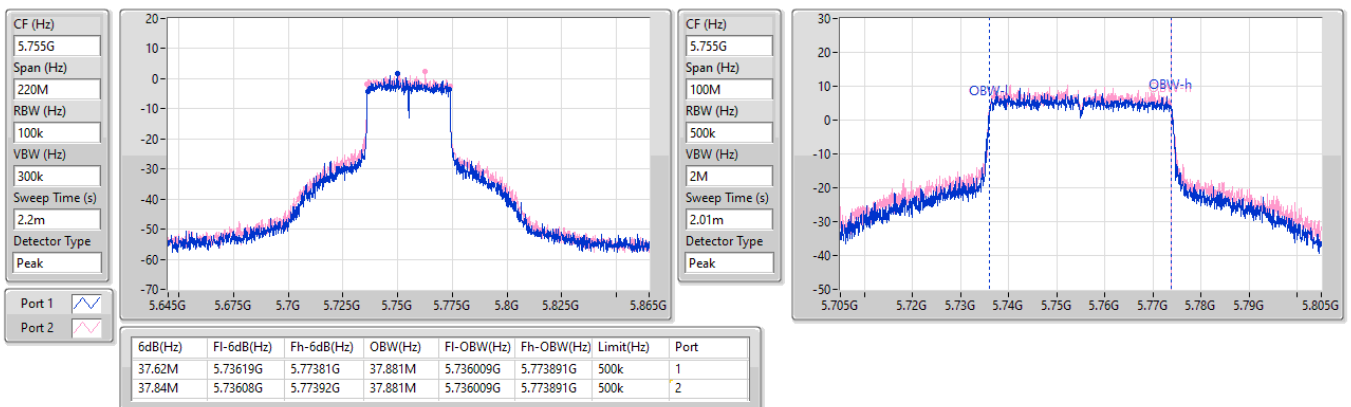


5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

22/03/2025

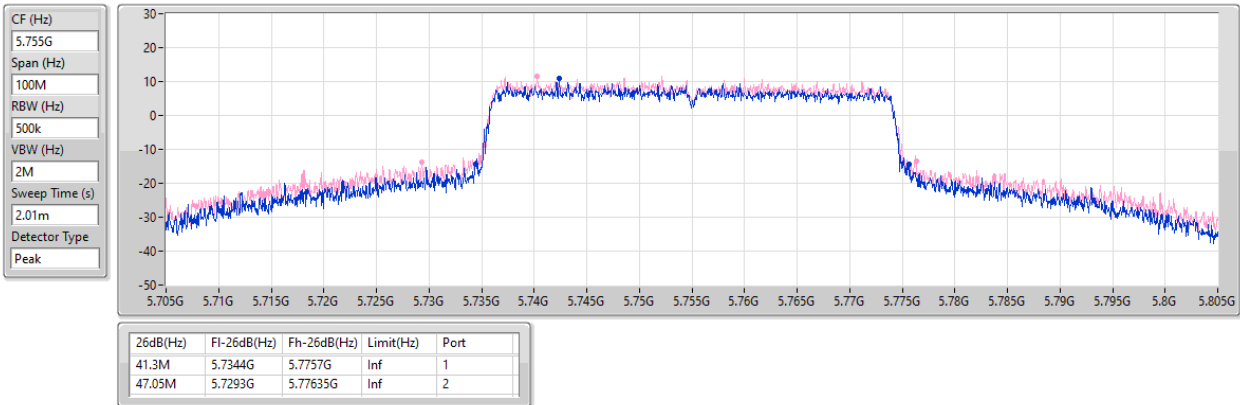


5.725-5.85GHz_802.11be EHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

22/03/2025

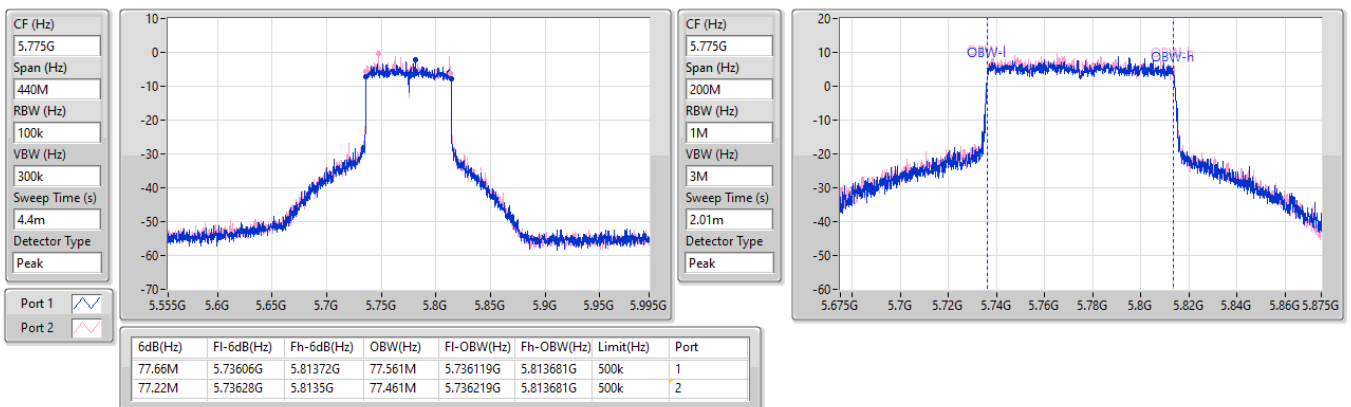


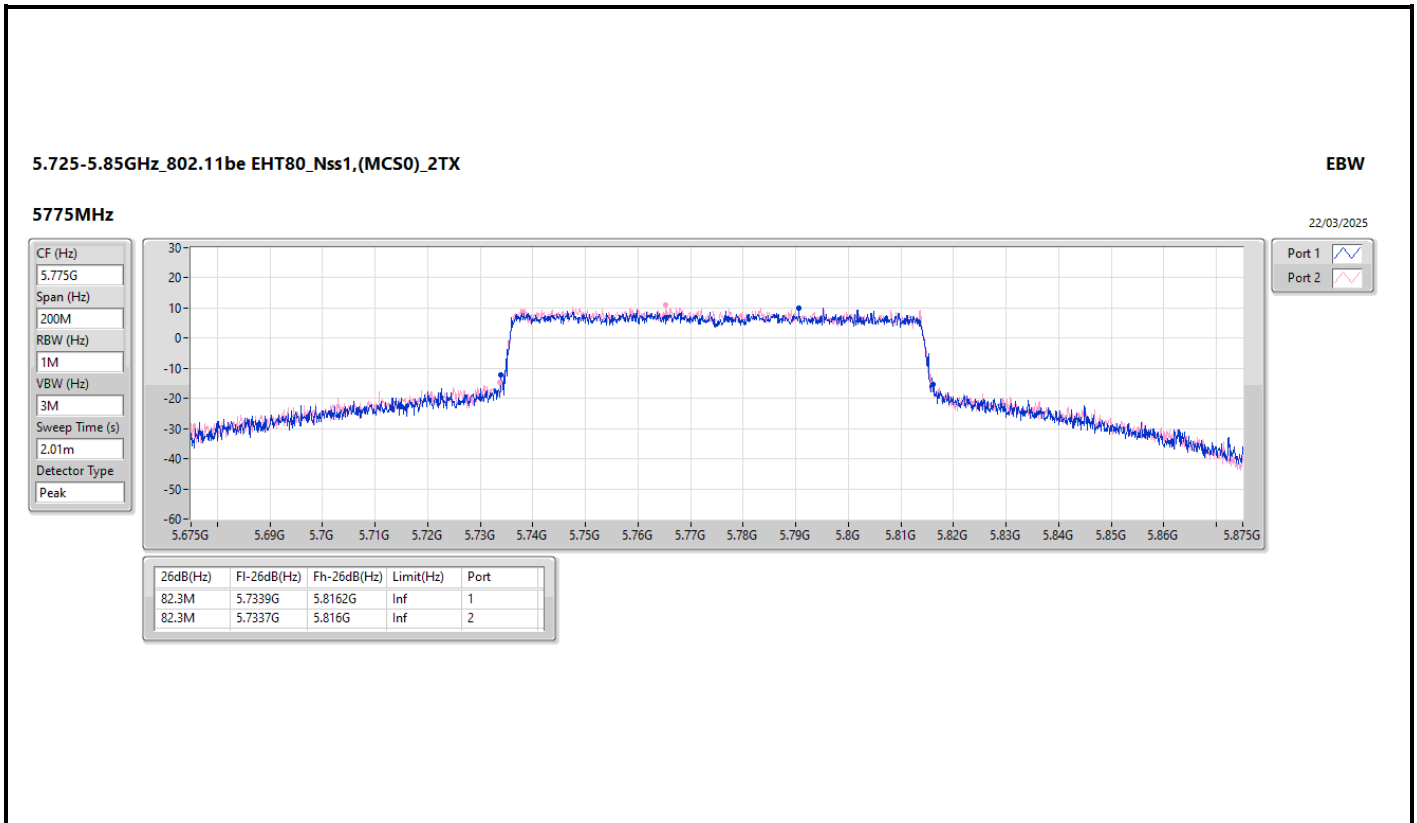
5.725-5.85GHz_802.11be EHT80_Nss1,(MCS0)_2TX

EBW

5775MHz

22/03/2025







EBW_Non-Beamforming_Radio 2_ Dual-Polarized MIMO Panel Antenna_2T2S

Appendix B.6

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	29.59M	19.19M	19M2D1D	22.22M	19.115M
802.11be EHT40_Nss2,(MCS0)_2TX	59.62M	37.831M	37M8D1D	40.7M	37.781M
802.11be EHT80_Nss2,(MCS0)_2TX	88.44M	77.261M	77M3D1D	82.94M	77.261M
802.11be EHT160_Nss2,(MCS0)_2TX	81.12M	77.241M	77M2D1D	80.72M	77.161M
5.25-5.35GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	30.14M	19.165M	19M2D1D	21.78M	19.09M
802.11be EHT40_Nss2,(MCS0)_2TX	46.42M	37.881M	37M9D1D	41.8M	37.781M
802.11be EHT80_Nss2,(MCS0)_2TX	90.2M	77.361M	77M4D1D	82.28M	77.361M
802.11be EHT160_Nss2,(MCS0)_2TX	81.92M	77.401M	77M4D1D	81.28M	77.241M
5.47-5.725GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	31.955M	19.19M	19M2D1D	16.185M	14.498M
802.11be EHT40_Nss2,(MCS0)_2TX	48.51M	37.881M	37M9D1D	35.21M	33.793M
802.11be EHT80_Nss2,(MCS0)_2TX	83.38M	77.361M	77M4D1D	77.4M	73.088M
802.11be EHT160_Nss2,(MCS0)_2TX	163.68M	156.522M	157MD1D	162.36M	156.322M
5.725-5.85GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	19.03M	19.14M	19M1D1D	4.5M	6.597M
802.11be EHT40_Nss2,(MCS0)_2TX	37.84M	37.931M	37M9D1D	3.62M	12.294M
802.11be EHT80_Nss2,(MCS0)_2TX	77.44M	77.561M	77M6D1D	3.28M	18.651M

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



EBW_Non-Beamforming_Radio 2_ Dual-Polarized MIMO Panel Antenna_2T2S

Appendix B.6

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	23.155M	19.165M	22.44M	19.115M
5200MHz	Pass	Inf	29.59M	19.19M	22.385M	19.115M
5240MHz	Pass	Inf	22.275M	19.19M	22.22M	19.115M
5260MHz	Pass	Inf	22M	19.09M	25.355M	19.09M
5300MHz	Pass	Inf	27.06M	19.09M	21.78M	19.165M
5320MHz	Pass	Inf	25.41M	19.115M	30.14M	19.14M
5500MHz	Pass	Inf	31.955M	19.14M	27.335M	19.09M
5580MHz	Pass	Inf	22.165M	19.19M	23.1M	19.065M
5700MHz	Pass	Inf	20.955M	18.991M	21.065M	19.04M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	18.555M	14.498M	16.185M	14.573M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.58M	6.897M	4.5M	6.597M
5745MHz	Pass	500k	19.03M	19.14M	18.975M	19.14M
5785MHz	Pass	500k	18.975M	19.065M	18.975M	19.14M
5825MHz	Pass	500k	18.865M	19.065M	18.865M	19.065M
802.11be EHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	42.02M	37.831M	59.62M	37.831M
5230MHz	Pass	Inf	48.95M	37.781M	40.7M	37.831M
5270MHz	Pass	Inf	41.91M	37.881M	41.8M	37.781M
5310MHz	Pass	Inf	46.2M	37.881M	46.42M	37.781M
5510MHz	Pass	Inf	48.51M	37.831M	42.57M	37.881M
5550MHz	Pass	Inf	43.23M	37.831M	48.4M	37.831M
5670MHz	Pass	Inf	41.47M	37.781M	41.8M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	40.775M	33.828M	35.21M	33.793M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	12.294M	3.62M	12.714M
5755MHz	Pass	500k	37.51M	37.781M	37.51M	37.931M
5795MHz	Pass	500k	37.84M	37.831M	37.07M	37.881M
802.11be EHT80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.94M	77.261M	88.44M	77.261M
5290MHz	Pass	Inf	90.2M	77.361M	82.28M	77.361M
5530MHz	Pass	Inf	82.94M	77.361M	83.16M	77.161M
5610MHz	Pass	Inf	83.38M	77.261M	82.28M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	77.4M	73.238M	77.55M	73.088M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.28M	23.828M	3.94M	18.651M
5775MHz	Pass	500k	77.44M	77.561M	76.34M	77.361M
802.11be EHT160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.72M	77.161M	81.12M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.92M	77.401M	81.28M	77.241M
5570MHz	Pass	Inf	163.68M	156.522M	162.36M	156.322M

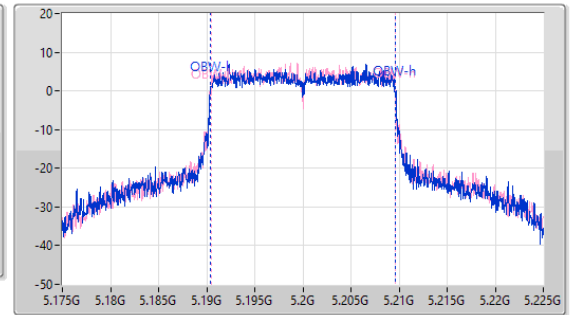
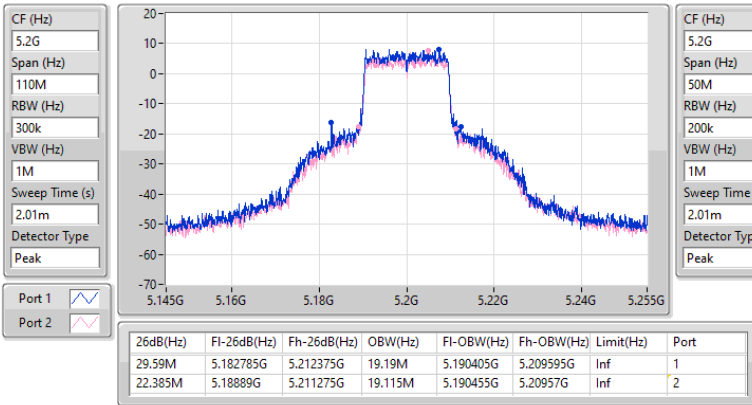
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5200MHz

25/03/2025

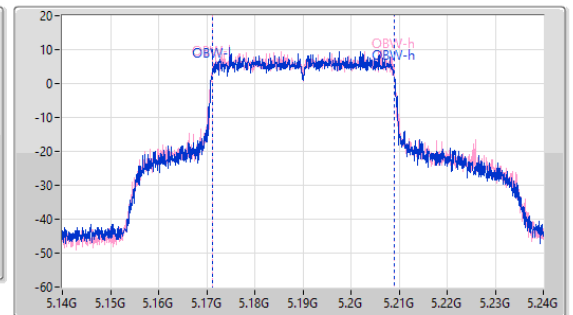
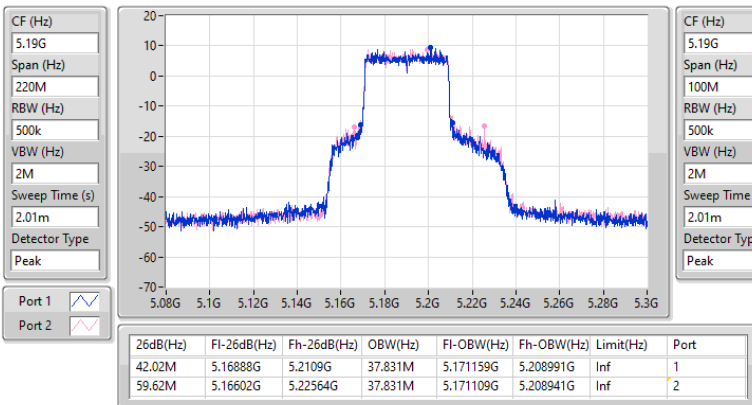


5.15-5.25GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5190MHz

25/03/2025

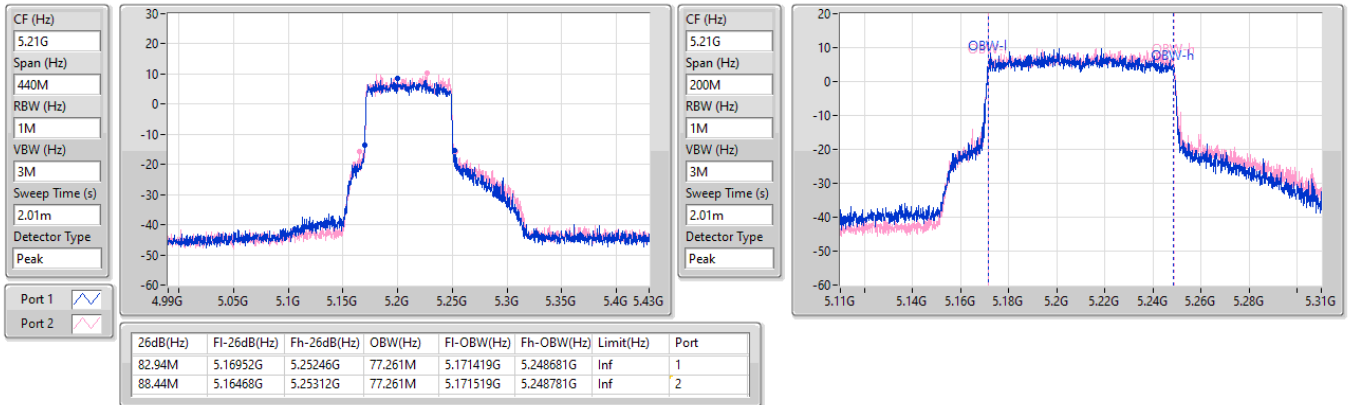


5.15-5.25GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5210MHz

25/03/2025

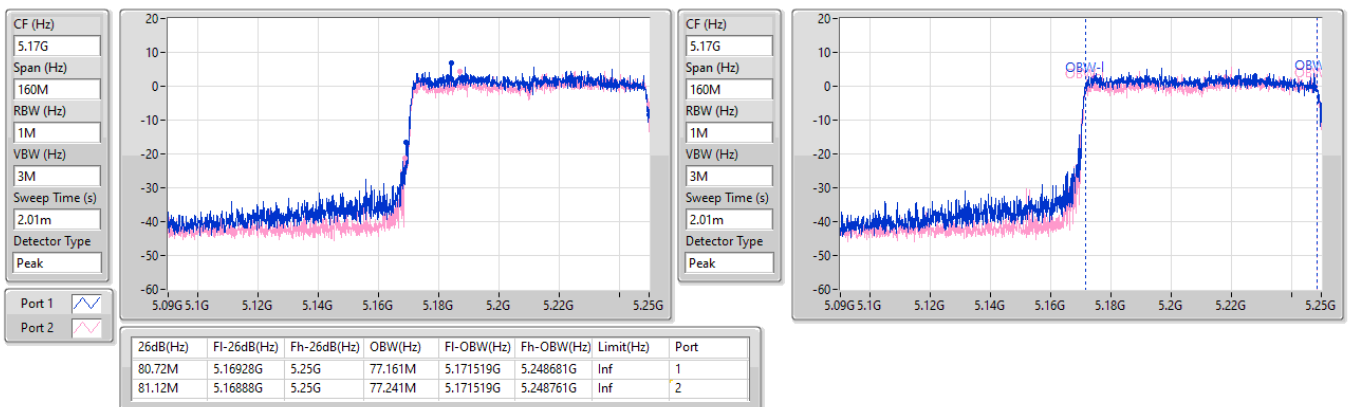


5.15-5.25GHz_802.11be EHT160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

25/03/2025

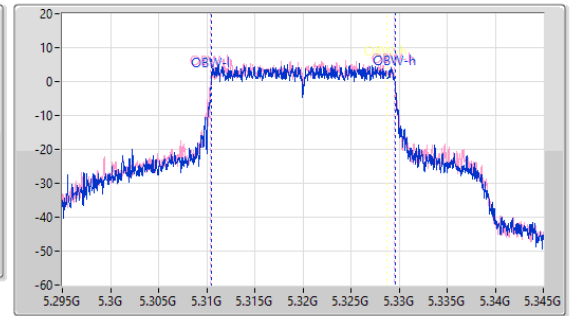
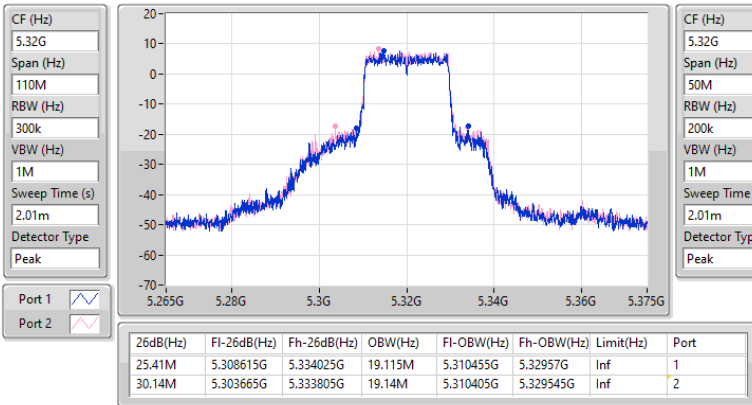


5.25-5.35GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5320MHz

25/03/2025

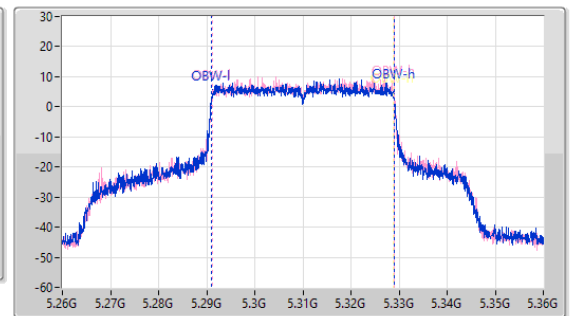
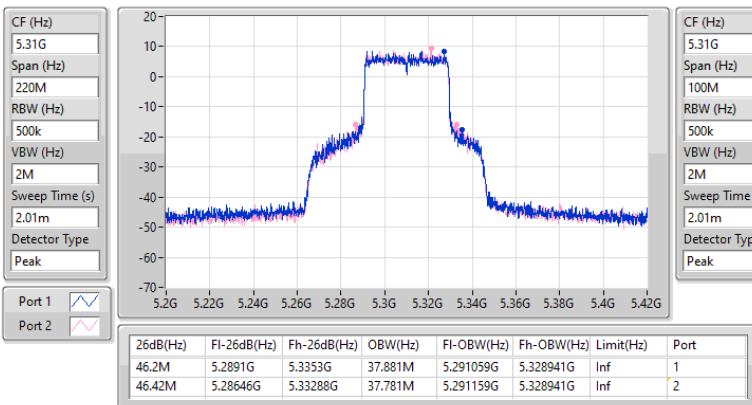


5.25-5.35GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5310MHz

25/03/2025

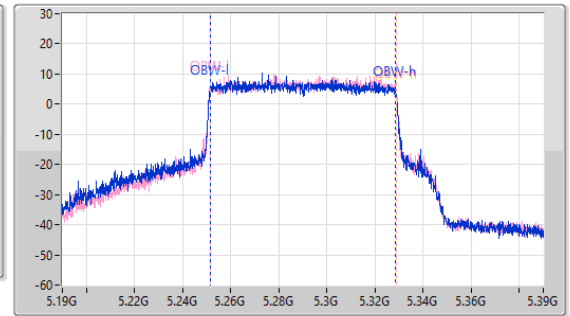
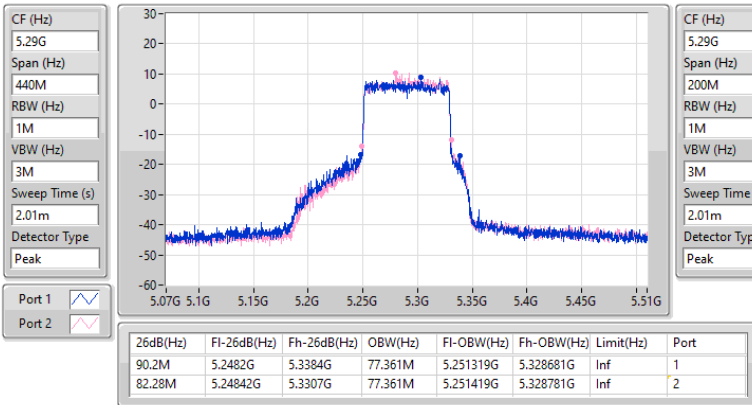


5.25-5.35GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5290MHz

25/03/2025

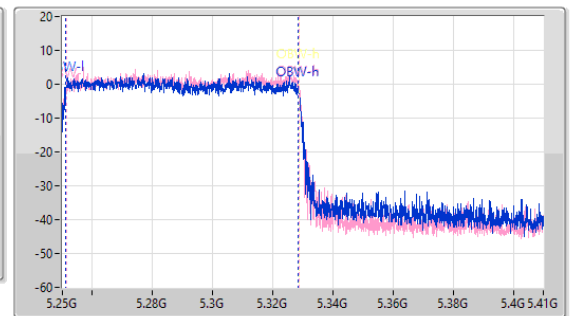
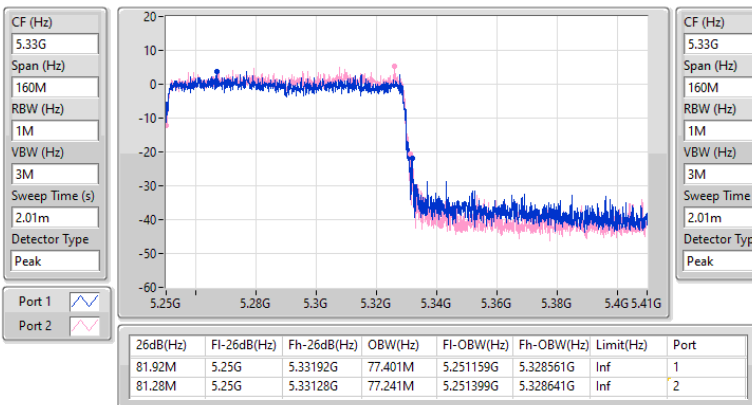


5.25-5.35GHz_802.11be EHT160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

25/03/2025

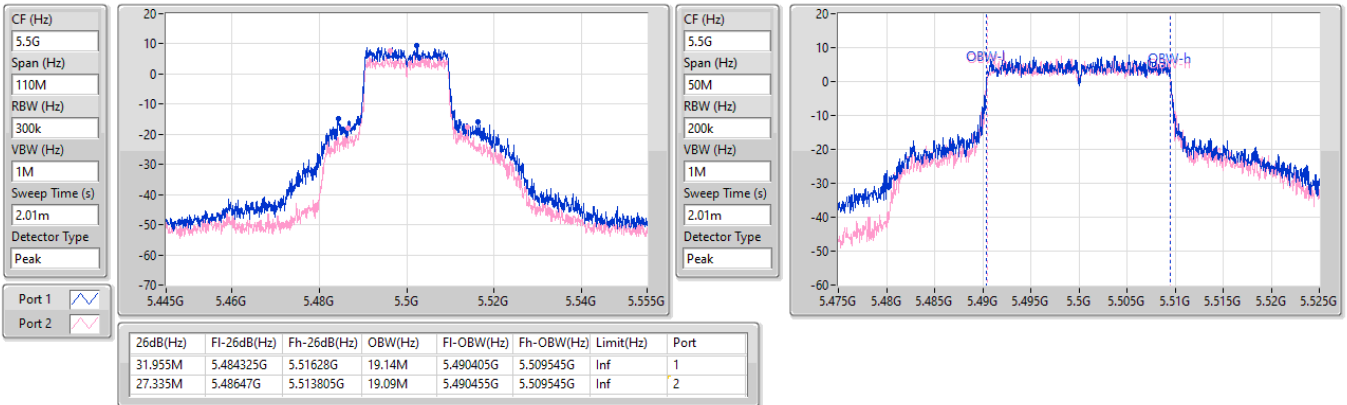


5.47-5.725GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5500MHz

25/03/2025

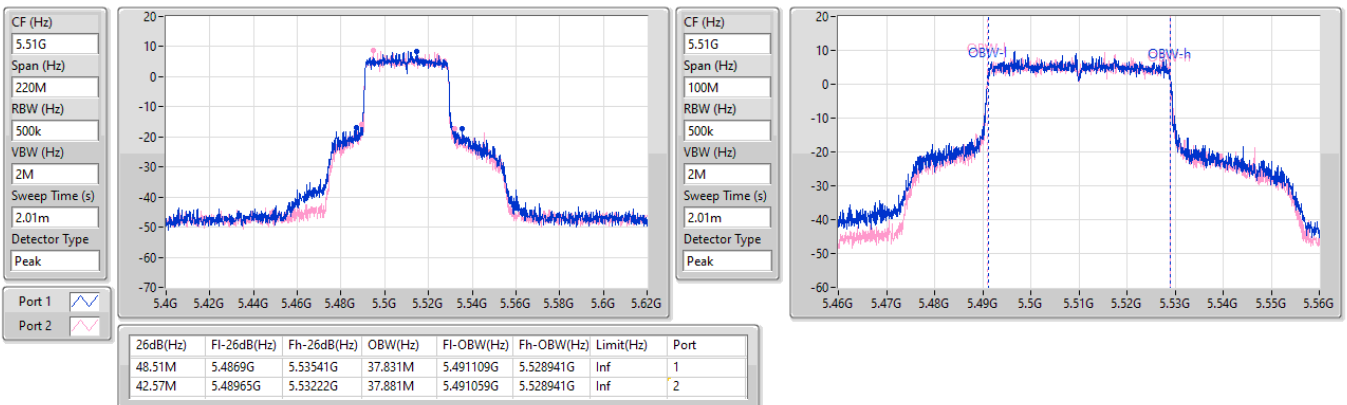


5.47-5.725GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5510MHz

25/03/2025

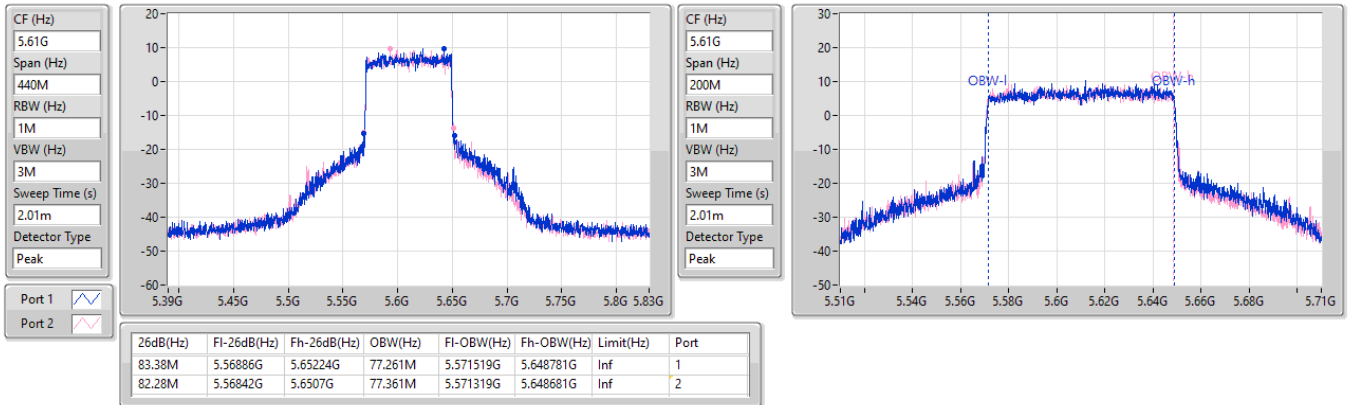


5.47-5.725GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5610MHz

25/03/2025

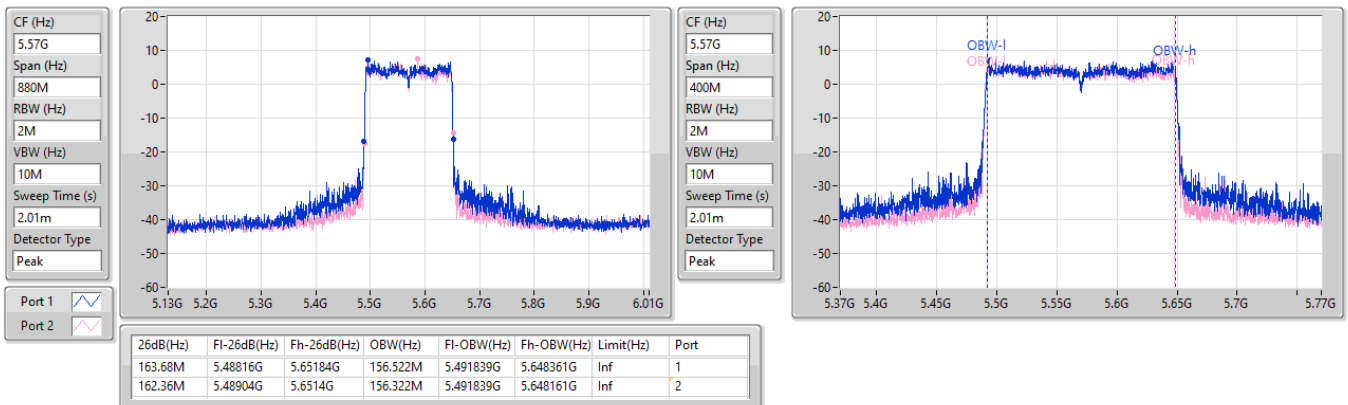


5.47-5.725GHz_802.11be EHT160_Nss2,(MCS0)_2TX

EBW

5570MHz

25/03/2025

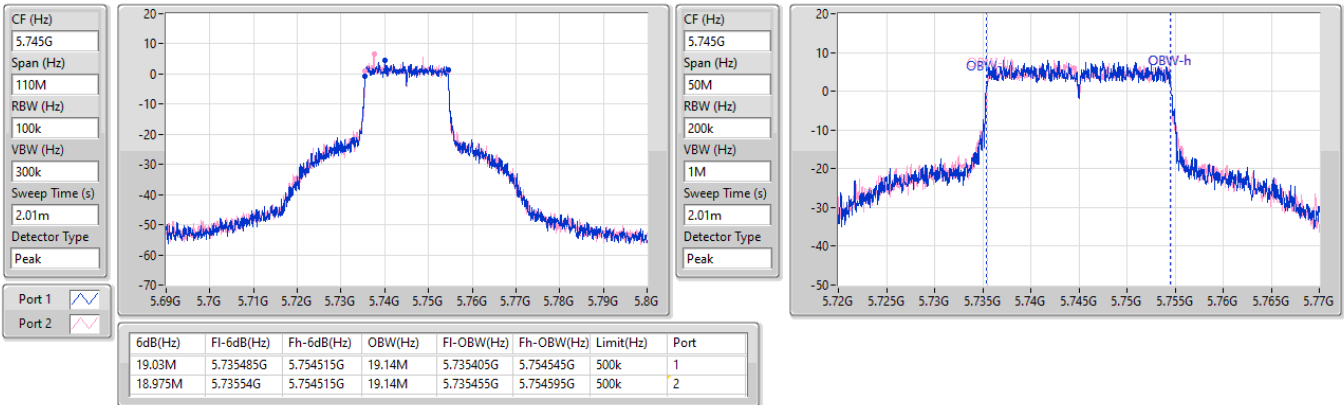


5.725-5.85GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5745MHz

25/03/2025

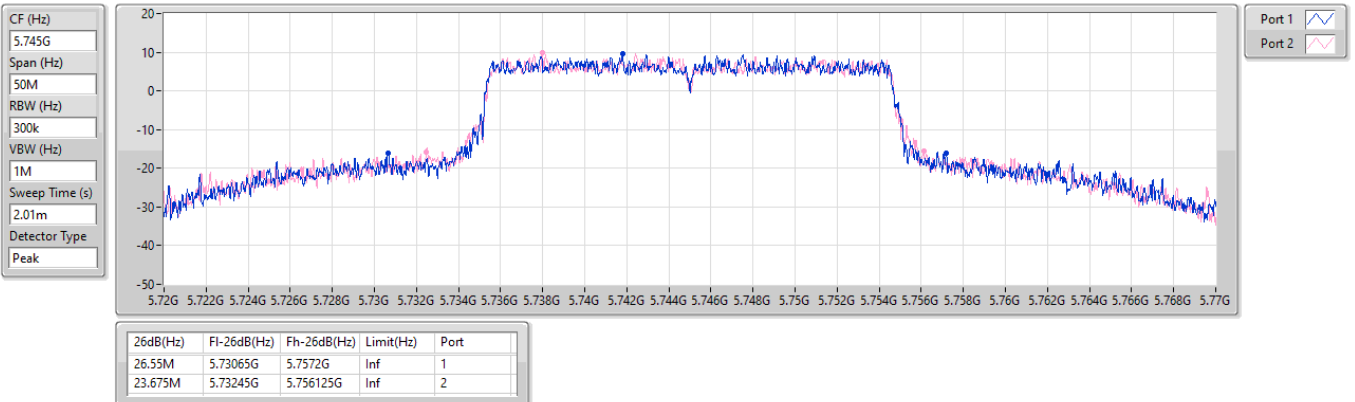


5.725-5.85GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

5745MHz

25/03/2025

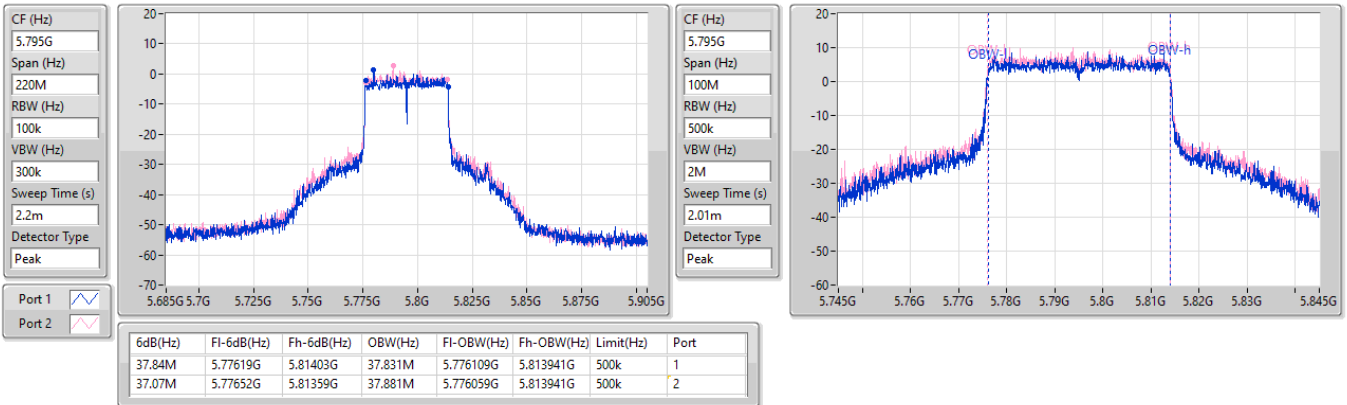


5.725-5.85GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5795MHz

25/03/2025

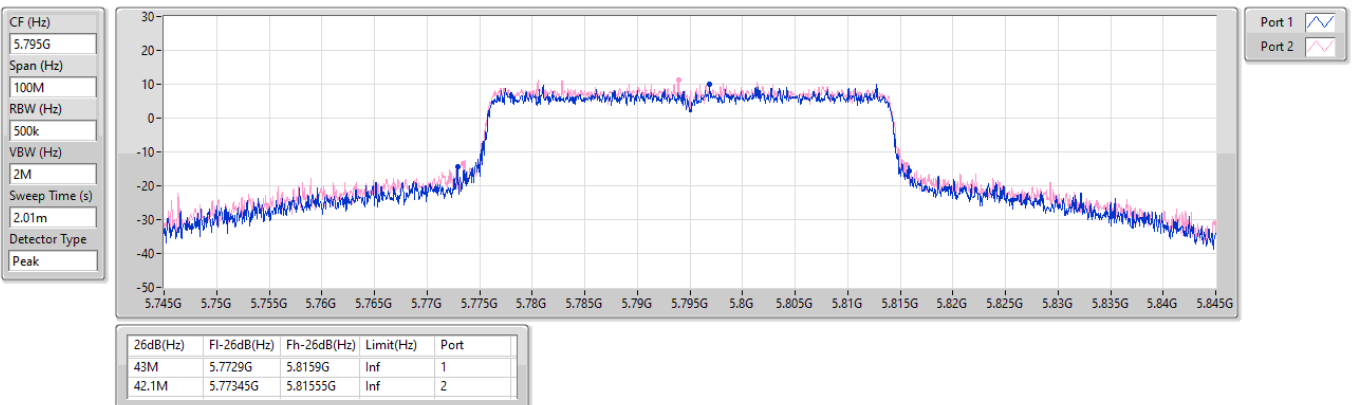


5.725-5.85GHz_802.11be EHT40_Nss2,(MCS0)_2TX

EBW

5795MHz

25/03/2025

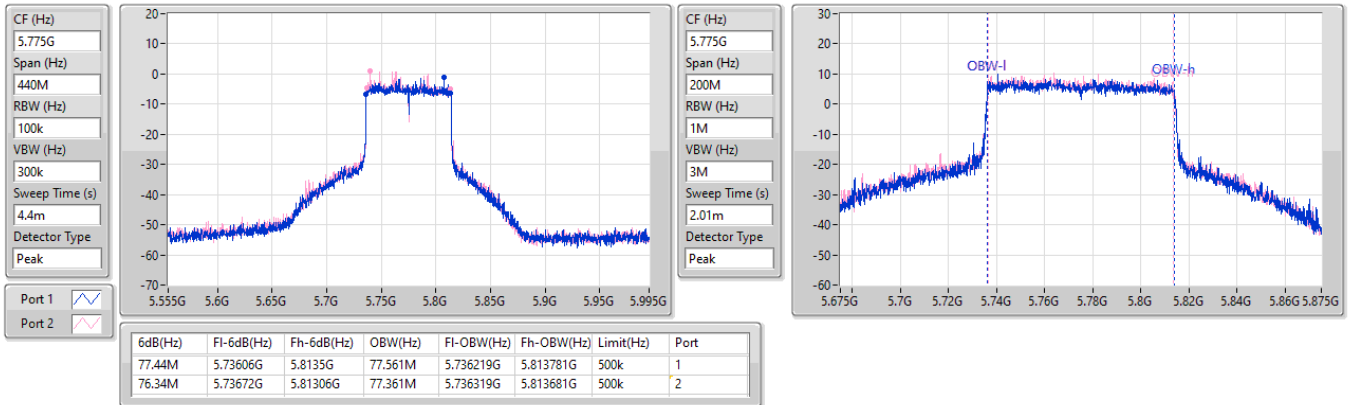


5.725-5.85GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5775MHz

25/03/2025

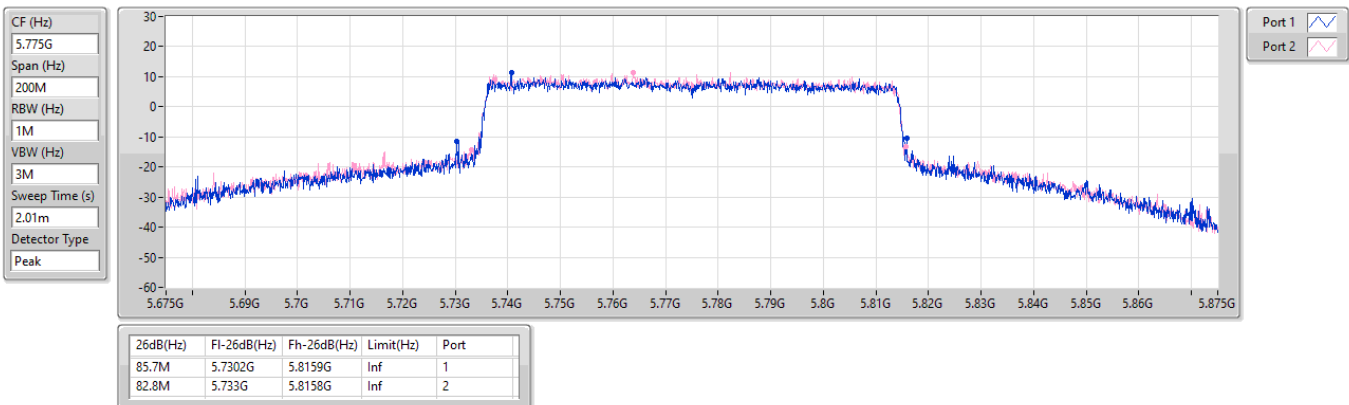


5.725-5.85GHz_802.11be EHT80_Nss2,(MCS0)_2TX

EBW

5775MHz

25/03/2025





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	23.21M	16.932M	16M9D1D	21.945M	16.822M
802.11be EHT20_Nss1,(MCS0)_1TX	28.545M	19.14M	19M1D1D	25.3M	19.09M
802.11be EHT40_Nss1,(MCS0)_1TX	41.69M	37.881M	37M9D1D	40.48M	37.831M
802.11be EHT80_Nss1,(MCS0)_1TX	81.84M	77.261M	77M3D1D	81.84M	77.261M
802.11be EHT160_Nss1,(MCS0)_1TX	81.84M	77.161M	77M2D1D	81.84M	77.161M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	22.935M	16.954M	17M0D1D	21.23M	16.866M
802.11be EHT20_Nss1,(MCS0)_1TX	24.365M	19.09M	19M1D1D	22.385M	19.065M
802.11be EHT40_Nss1,(MCS0)_1TX	48.62M	37.931M	37M9D1D	41.03M	37.881M
802.11be EHT80_Nss1,(MCS0)_1TX	84.26M	77.461M	77M5D1D	84.26M	77.461M
802.11be EHT160_Nss1,(MCS0)_1TX	81.04M	77.321M	77M3D1D	81.04M	77.321M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	26.895M	17.129M	17M1D1D	16.155M	13.568M
802.11be EHT20_Nss1,(MCS0)_1TX	29.37M	19.165M	19M2D1D	18.975M	14.558M
802.11be EHT40_Nss1,(MCS0)_1TX	46.75M	37.931M	37M9D1D	36.295M	33.758M
802.11be EHT80_Nss1,(MCS0)_1TX	87.78M	77.461M	77M5D1D	81.4M	73.088M
802.11be EHT160_Nss1,(MCS0)_1TX	163.24M	156.322M	156MD1D	163.24M	156.322M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.555M	16.998M	17M0D1D	3.24M	5.137M
802.11be EHT20_Nss1,(MCS0)_1TX	19.085M	19.09M	19M1D1D	4.32M	5.617M
802.11be EHT40_Nss1,(MCS0)_1TX	37.73M	37.831M	37M8D1D	3.96M	10.715M
802.11be EHT80_Nss1,(MCS0)_1TX	76.78M	77.361M	77M4D1D	4.08M	17.991M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	23.21M	16.932M
5200MHz	Pass	Inf	21.945M	16.822M
5240MHz	Pass	Inf	22.99M	16.932M
5260MHz	Pass	Inf	22.935M	16.866M
5300MHz	Pass	Inf	22.165M	16.954M
5320MHz	Pass	Inf	21.23M	16.932M
5500MHz	Pass	Inf	26.895M	17.129M
5580MHz	Pass	Inf	22.66M	16.822M
5700MHz	Pass	Inf	20.955M	16.734M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.155M	13.568M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.24M	5.137M
5745MHz	Pass	500k	16.335M	16.998M
5785MHz	Pass	500k	16.555M	16.976M
5825MHz	Pass	500k	16.335M	16.866M
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	27.225M	19.115M
5200MHz	Pass	Inf	25.3M	19.09M
5240MHz	Pass	Inf	28.545M	19.14M
5260MHz	Pass	Inf	22.385M	19.09M
5300MHz	Pass	Inf	23.76M	19.065M
5320MHz	Pass	Inf	24.365M	19.09M
5500MHz	Pass	Inf	29.37M	19.14M
5580MHz	Pass	Inf	22.99M	19.165M
5700MHz	Pass	Inf	21.23M	19.065M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	18.975M	14.558M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.32M	5.617M
5745MHz	Pass	500k	19.085M	19.09M
5785MHz	Pass	500k	19.03M	19.09M
5825MHz	Pass	500k	19.085M	19.04M
802.11be EHT40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	41.69M	37.831M
5230MHz	Pass	Inf	40.48M	37.881M
5270MHz	Pass	Inf	41.03M	37.881M
5310MHz	Pass	Inf	48.62M	37.931M
5510MHz	Pass	Inf	46.75M	37.781M
5550MHz	Pass	Inf	41.8M	37.931M
5670MHz	Pass	Inf	41.14M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.295M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	10.715M
5755MHz	Pass	500k	37.73M	37.831M
5795MHz	Pass	500k	37.62M	37.781M
802.11be EHT80_Nss1,(MCS0)_1TX	-	-	-	-



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
5210MHz	Pass	Inf	81.84M	77.261M
5290MHz	Pass	Inf	84.26M	77.461M
5530MHz	Pass	Inf	87.78M	77.461M
5610MHz	Pass	Inf	81.4M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	85.05M	73.088M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.08M	17.991M
5775MHz	Pass	500k	76.78M	77.361M
802.11be EHT160_Nss1,(MCS0)_1TX	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.84M	77.161M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.04M	77.321M
5570MHz	Pass	Inf	163.24M	156.322M

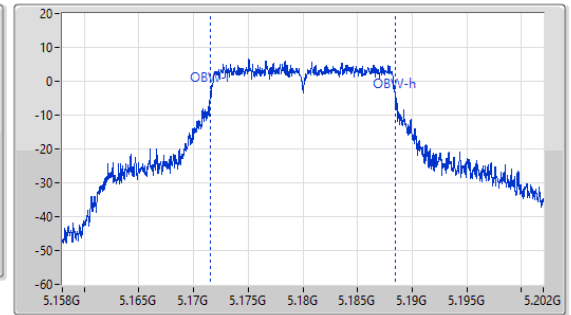
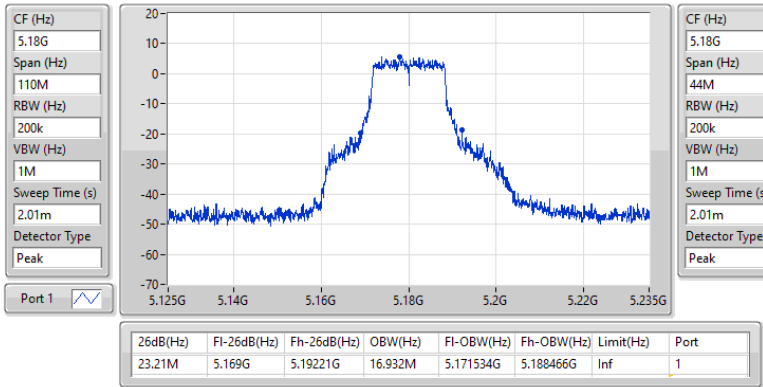
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5180MHz

06/05/2025

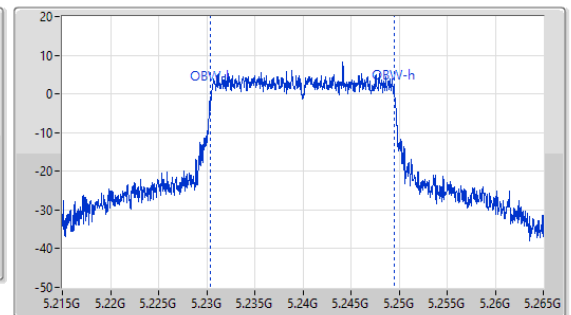
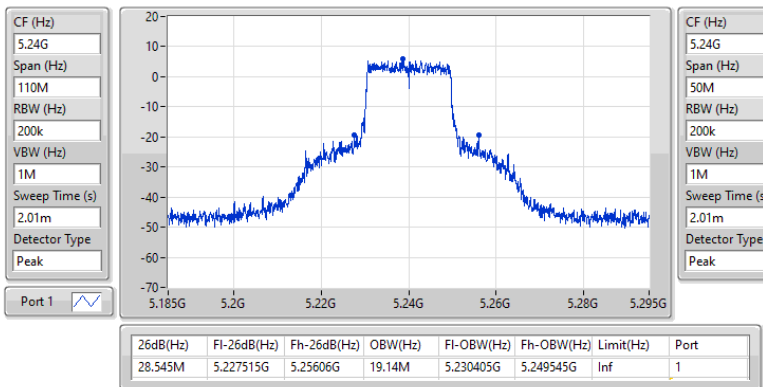


5.15-5.25GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5240MHz

06/05/2025

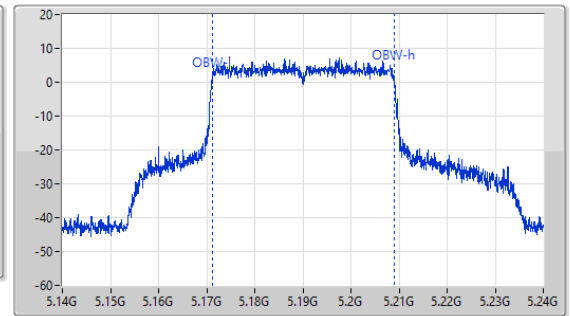
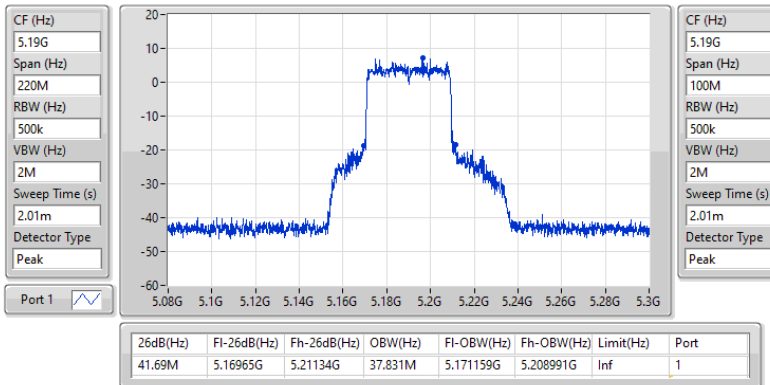


5.15-5.25GHz 802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5190MHz

06/05/2025

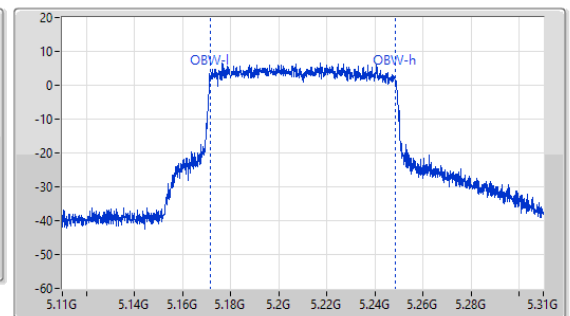
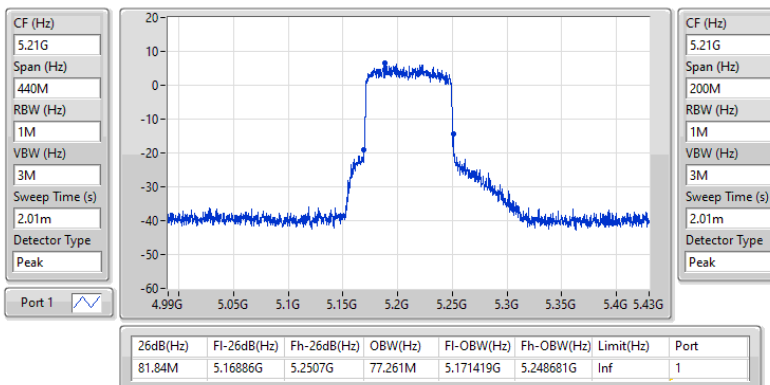


5.15-5.25GHz 802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5210MHz

06/05/2025

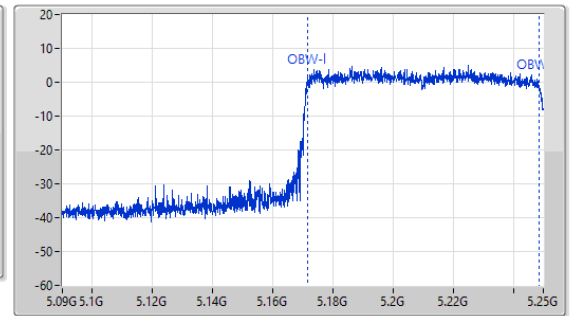
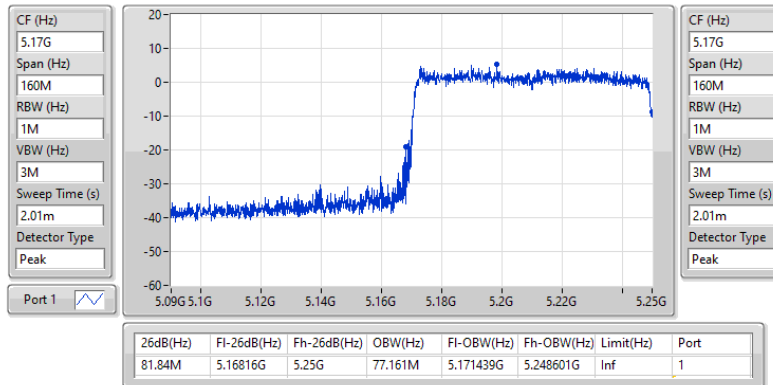


5.15-5.25GHz_802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5250MHz Straddle 5.15-5.25GHz

06/05/2025

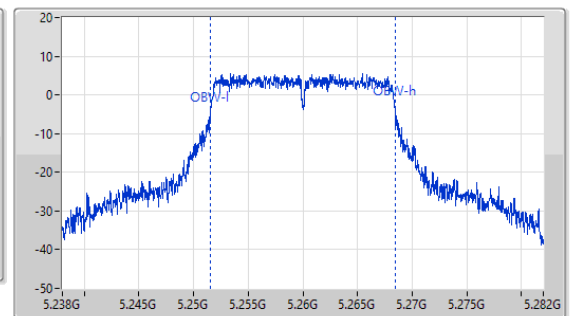
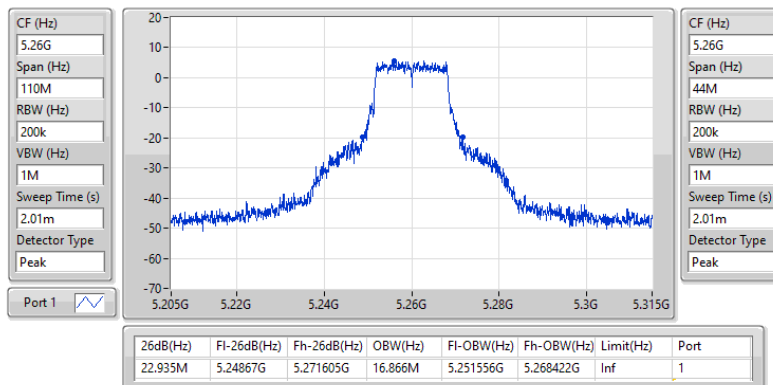


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5260MHz

06/05/2025

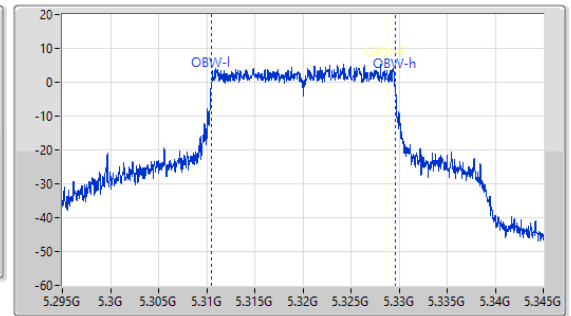
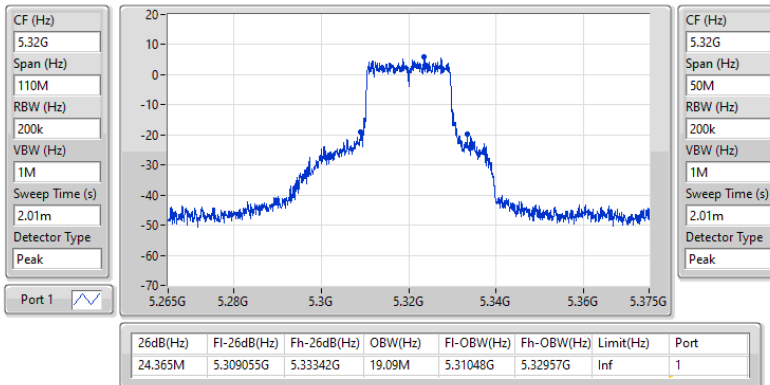


5.25-5.35GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5320MHz

06/05/2025

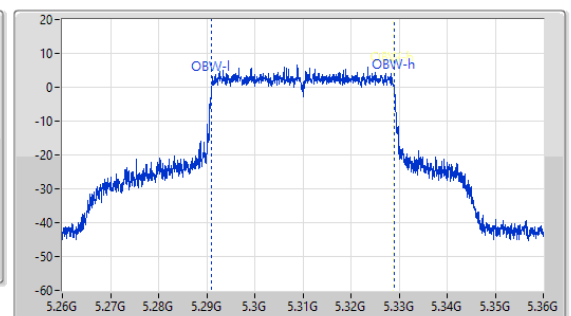
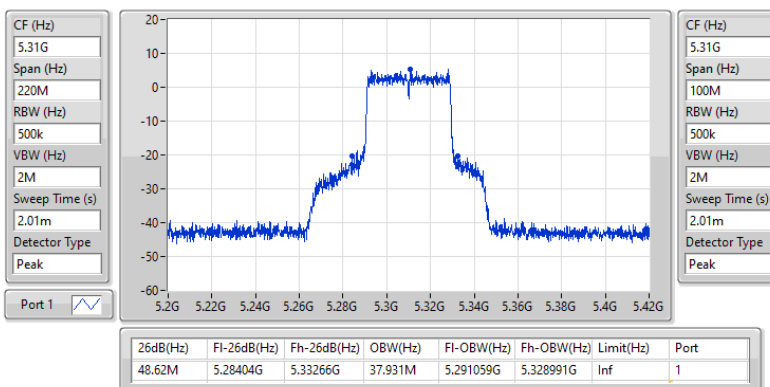


5.25-5.35GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5310MHz

06/05/2025

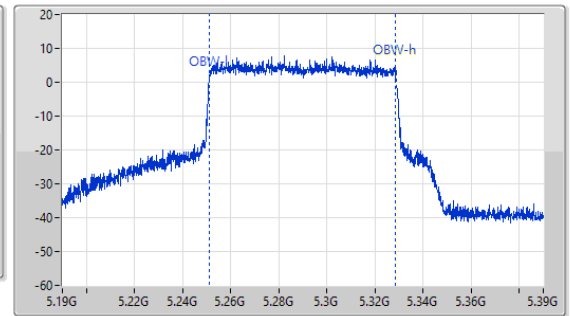
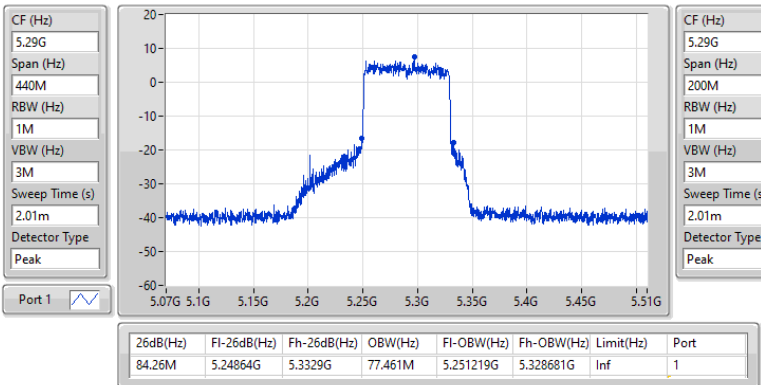


5.25-5.35GHz 802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5290MHz

06/05/2025

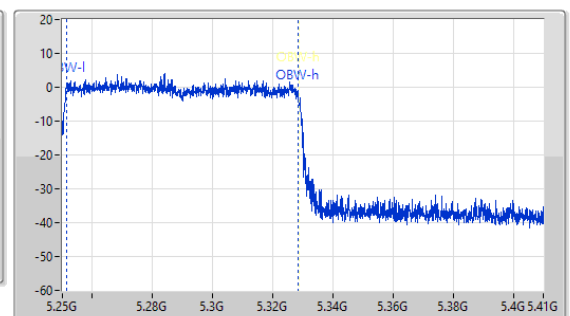
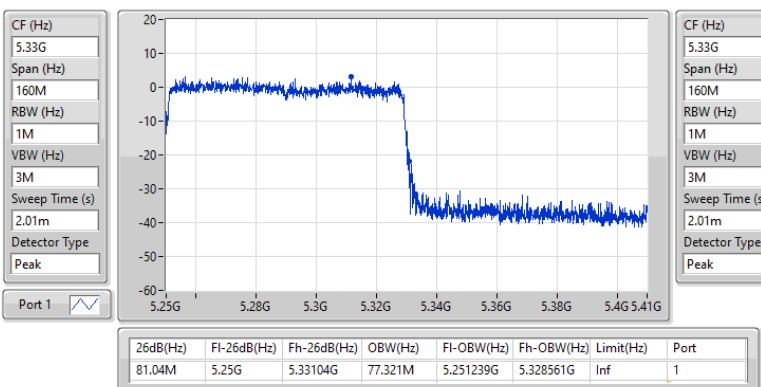


5.25-5.35GHz 802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5250MHz Straddle 5.25-5.35GHz

06/05/2025

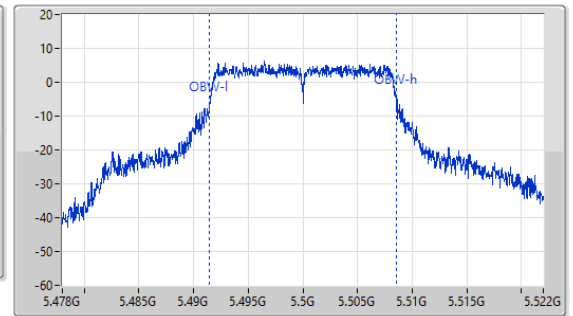
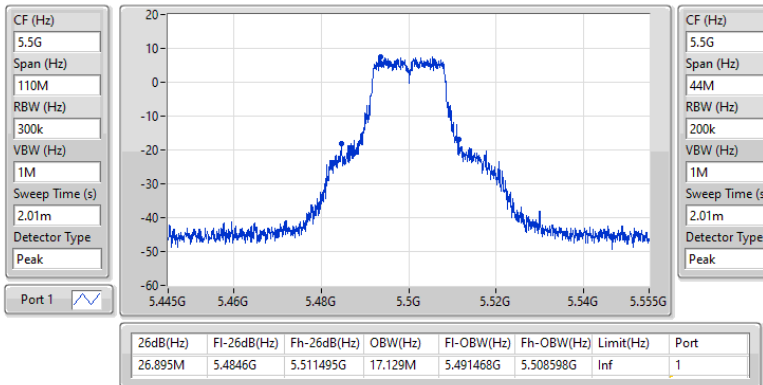


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5500MHz

06/05/2025

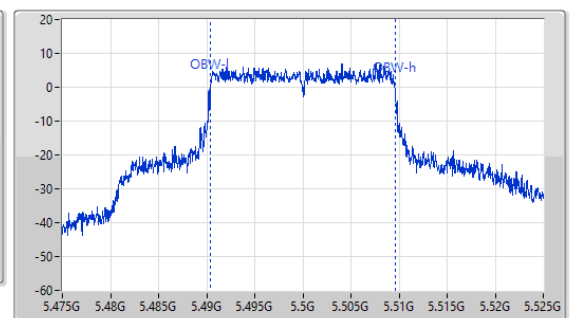
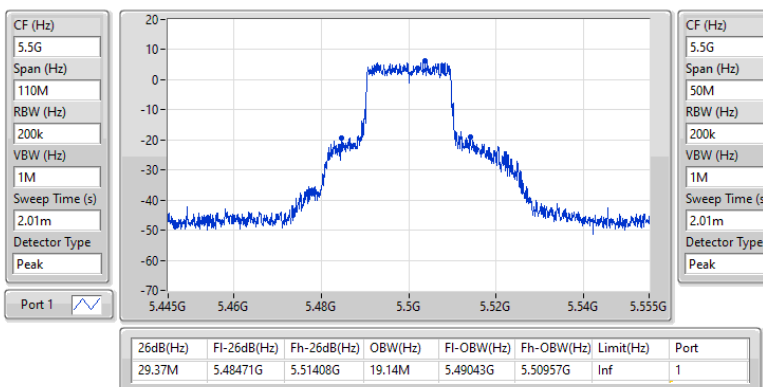


5.47-5.725GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

5500MHz

06/05/2025

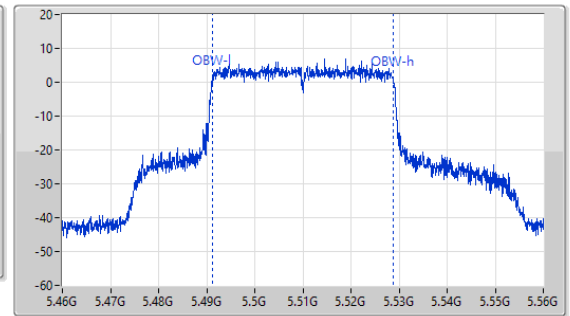
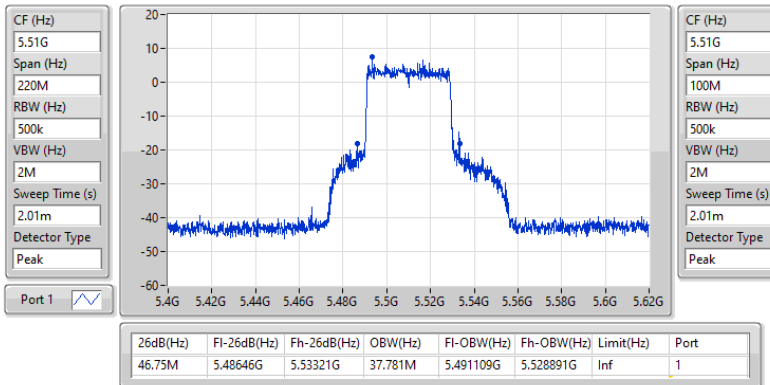


5.47-5.725GHz_802.11be EHT40_Nss1,(MCS0)_1TX

EBW

5510MHz

06/05/2025

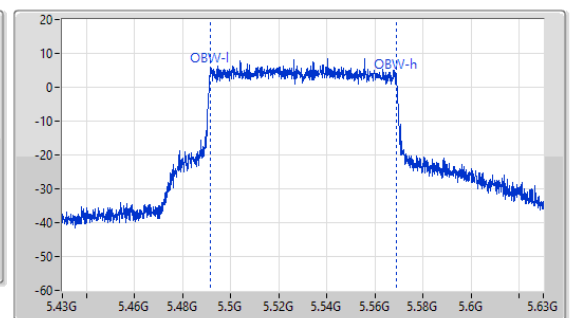
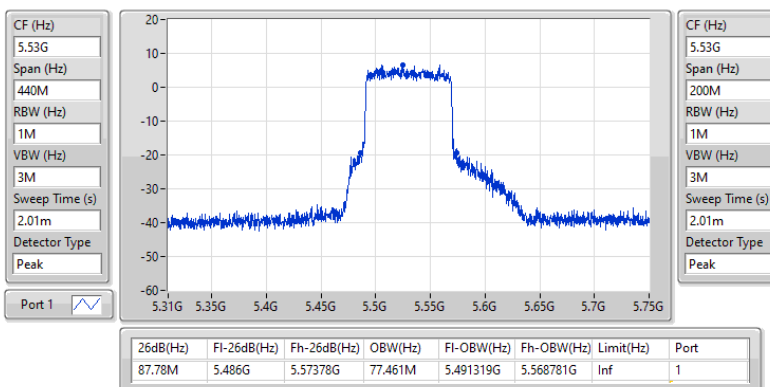


5.47-5.725GHz_802.11be EHT80_Nss1,(MCS0)_1TX

EBW

5530MHz

06/05/2025

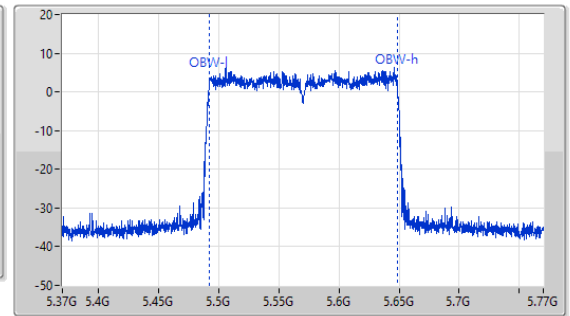
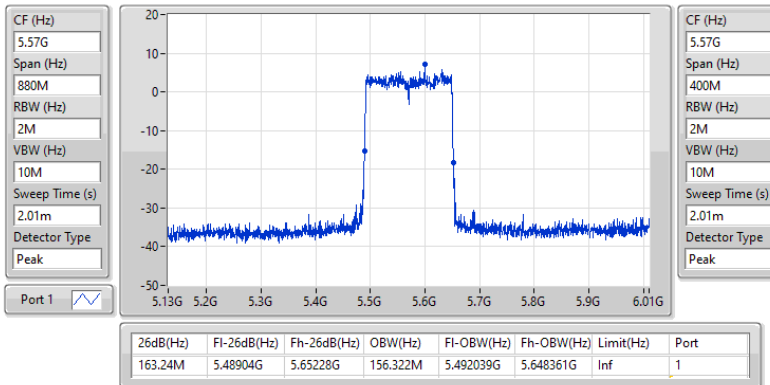


5.47-5.725GHz_802.11be EHT160_Nss1,(MCS0)_1TX

EBW

5570MHz

06/05/2025



5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

06/05/2025

