



FCC Radio Test Report

FCC ID : QXO-AP4020
Equipment : Access Point
Brand Name : Extreme Networks
Model Name : AP4020X
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 15.247

The product was received on Dec. 13, 2024, and testing was started from Jan. 15, 2025 and completed on May 09, 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 variant 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.)



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Testing Applied Standards	14
1.3 Testing Location Information	14
1.4 Measurement Uncertainty	14
2 TEST CONFIGURATION OF EUT.....	15
2.1 Test Channel Mode	15
2.2 The Worst Case Measurement Configuration	21
2.3 Support Equipment.....	22
2.4 Test Setup Diagram	23
3 TRANSMITTER TEST RESULT	27
3.1 AC Power-line Conducted Emissions	27
3.2 DTS Bandwidth.....	29
3.3 Maximum Conducted Output Power	30
3.4 Power Spectral Density	32
3.5 Emissions in Non-restricted Frequency Bands	33
3.6 Emissions in Restricted Frequency Bands.....	34
4 TEST EQUIPMENT AND CALIBRATION DATA.....	38
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF DTS BANDWIDTH	
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY	
APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS	
APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS	
APPENDIX G. TEST RESULTS OF RADIATED EMISSION CO-LOCATION	
APPENDIX H. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	



History of this test report

Report No.	Version	Description	Issued Date
FR462705-02AC	01	Initial issue of report	Jun. 04, 2025

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	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	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
2400-2483.5	b, g, n (HT20), VHT20, ax(HEW20), be(EHT20)	2412-2462	1-11 [11]

Non-Beamforming_Radio 1_Dipole Antenna_1T1S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11be EHT20	20	1TX

Non-Beamforming_Radio 1_Dipole Antenna_2T1S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11be EHT20	20	2TX

Non-Beamforming_Radio 1_Dipole Antenna_2T2S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11be EHT20	20	2TX

Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_1T1S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11be EHT20	20	1TX

Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_2T1S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11be EHT20	20	2TX

Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_2T2S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11be EHT20	20	2TX

**Non-Beamforming_Radio 1_MIMO-directional Antenna_1T1S**

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11be EHT20	20	1TX

Non-Beamforming_Radio 1_MIMO-directional Antenna_2T1S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11be EHT20	20	2TX

Non-Beamforming_Radio 1_MIMO-directional Antenna_2T2S

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11be EHT20	20	2TX

Beamforming_Radio 1_Dipole Antenna

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11be EHT20-BF	20	2TX

Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11be EHT20-BF	20	2TX

Beamforming_Radio 1_MIMO-directional Antenna

Band	Mode	BWch	Nant
2.4-2.4835GHz	802.11be EHT20-BF	20	2TX

Beamforming_Radio 1_Scan

Band	Mode	BWch	Nant
2.4-2.4835GHz	b20	20	1TX
2.4-2.4835GHz	g20	20	1TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ EHT20 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Evaluated EHT20 mode only due to the similar modulation. The power setting of HT20/VHT20/HEW20 mode are the same or lower than EHT20.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	AWAN	AW135SM003	Dipole	Reverse SMA	2.4G+5G	Radio 1_2.4G
						Radio 2_5G
2	AWAN	AW135SM003	Dipole	Reverse SMA	2.4G+5G	Radio 1_2.4G
						Radio 2_5G
3	AWAN	AW135SM003	Dipole	Reverse SMA	5G	Radio 3_5G
4	AWAN	AW135SM003	Dipole	Reverse SMA	5G+BT	Radio 3_5G
						BLE_chain 0 External
5	AWAN	AW158SM001-00	Dipole	I-Pex	6G	Radio 3_6G
6	AWAN	AW158SM001-00	Dipole	I-Pex	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 Internal
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	WX4PB6508R	Dual-Polarized MIMO Panel	Reverse SMA	2.4G+5G+BT	Radio 1_2.4G
						Radio 2_5G
						Radio 3_5G
						BLE_chain 0 External
13	Extreme	AIO-DQ15021	MIMO-directional	Reverse SMA	2.4G+5G+BT	Radio 1_2.4G
						Radio 2_5G
						Radio 3_5G
						BLE_chain 0 External



Ant.	Port	Gain (dBi)												
		2.4G	5G				6G				BT0 External	BT0 Internal	BT1-H	BT1-V
			UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8				
1	1	3.14	5.19	5.33	5.29	5.16	-	-	-	-	-	-	-	-
2	2	3.14	5.19	5.33	5.29	5.16	-	-	-	-	-	-	-	-
3	1	-	5.19	5.33	-	-	-	-	-	-	-	-	-	-
4	2	-	5.19	5.33	-	-	-	-	-	-	3.14	-	-	-
5	1	-	-	-	-	-	5.13	4.95	5.36	5.44	-	-	-	-
6	2	-	-	-	-	-	5.13	4.95	5.36	5.44	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-
13-1	1	11.1	15	15	15	15	-	-	-	-	-	-	-	-
13-2	2	11.1	15	15	15	15	-	-	-	-	-	-	-	-
13-3	1	-	15	15	-	-	-	-	-	-	-	-	-	-
13-4	2	-	15	15	-	-	-	-	-	-	11.1	-	-	-

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.

For 6GHz function:

For IEEE 802.11 a/ax/be mode (1TX/2RX) (Radio3)

Ant. 5 (port 1) could transmit/receive.

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

Ant. 5 (port 1) and Ant. 6 (port 2) could transmit/receive simultaneously.

For 11a20, 11a40, 11a80, 11a160 (1TX/1RX) (Radio 1_Scan)

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

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		
Beamforming Function	☒ With beamforming	☐ Without beamforming	
Resource Unit	☒ Full RU	☐ Partial RU	
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 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR462705AC

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Model name was added. (AP4020X) (Wi-Fi Antenna change to External Antenna)	All test items.

1.1.5 Mode Test Duty Cycle

Non-Beamforming_Radio 1_Dipole Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_1TX	0.99	0.04	3.197m	10Hz (DC>=0.98)
802.11g_Nss1,(6Mbps)_1TX	0.989	0.05	3.012m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_1TX	0.989	0.05	2.869m	10Hz (DC>=0.98)

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

Non-Beamforming_Radio 1_Dipole Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_2TX	0.99	0.04	3.197m	10Hz (DC>=0.98)
802.11g_Nss1,(6Mbps)_2TX	0.989	0.05	3.012m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_2TX	0.989	0.05	2.869m	10Hz (DC>=0.98)

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

Non-Beamforming_Radio 1_Dipole 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)

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

Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_1TX	0.99	0.04	3.194m	10Hz (DC>=0.98)
802.11g_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)

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

Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_2TX	0.988	0.05	3.194m	10Hz (DC>=0.98)
802.11g_Nss1,(6Mbps)_2TX	0.99	0.04	3.009m	10Hz (DC>=0.98)
802.11be EHT20_Nss1,(MCS0)_2TX	0.987	0.06	2.866m	10Hz (DC>=0.98)

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

Non-Beamforming_Radio 1_Dual-Polarized MIMO 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)

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

Non-Beamforming_Radio 1_MIMO-directional Antenna_1T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_1TX	0.99	0.04	3.194m	10Hz (DC>=0.98)
802.11g_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)

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

Non-Beamforming_Radio 1_MIMO-directional Antenna_2T1S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_2TX	0.989	0.05	3.194m	10Hz (DC>=0.98)
802.11g_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)

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

Non-Beamforming_Radio 1_MIMO-directional Antenna_2T2S

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20_Nss2,(MCS0)_2TX	0.987	0.06	2.852m	10Hz (DC>=0.98)

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

Beamforming_Radio 1_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)

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

Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11be EHT20-BF_Nss1,(MCS0)_2TX	0.987	0.06	2.866m	10Hz (DC>=0.98)

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

**Beamforming_Radio 1_MIMO-directional Antenna**

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

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

Beamforming_Radio 1_Scan

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
b20_Nss1,(1Mbps)_1TX	0.936	0.29	8.418m	200
g20_Nss1,(6Mbps)_1TX	0.693	1.59	1.399m	1k

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

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

- ♦ KDB 558074 D01 v05r02
- ♦ 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	Simon Cheng	22.5~24.6°C / 52~55%	08/May/2025~09/May/2025
Radiated (Radio 1 Scan)	03CH02-HY	Vasari Huang	22.2~23.4°C / 50~52%	19/Jan/2025~20/Jan/2025
Radiated (Co-location)	03CH02-HY	Vasari Huang	20.1~21.3°C / 52~56%	05/Feb/2025~07/Feb/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	21.6~23.3°C / 53~62%	15/Jan/2025~06/Feb/2025
Radiated	03CH24-HY	Billy Wang	21.5~22.6°C / 51~52%	16/Jan/2025~05/Feb/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%
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%
Emissions in Non-restricted Frequency Bands	0.14 dB	Confidence levels of 95%
Emissions in Restricted Frequency Bands	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
-----------------------	-------------------------

Non-Beamforming_Radio 1_Dipole Antenna_1T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	80
2437MHz	80
2457MHz	77
2462MHz	76
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	77
2417MHz	77
2437MHz	80
2457MHz	75
2462MHz	74
802.11be EHT20_Nss1,(MCS0)_1TX	-
2412MHz	77
2417MHz	77
2437MHz	80
2457MHz	75
2462MHz	74

**Non-Beamforming_Radio 1_Dipole Antenna_2T1S**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	75
2417MHz	80
2437MHz	80
2457MHz	73
2462MHz	77
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	76
2417MHz	77
2437MHz	80
2457MHz	72
2462MHz	72
802.11be EHT20_Nss1,(MCS0)_2TX	-
2412MHz	75
2417MHz	75
2437MHz	78
2457MHz	73
2462MHz	71

Non-Beamforming_Radio 1_Dipole Antenna_2T2S

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
2412MHz	75
2417MHz	75
2437MHz	78
2457MHz	73
2462MHz	71

**Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_1T1S**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	80
2437MHz	80
2457MHz	74
2462MHz	71
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	76
2417MHz	70
2437MHz	80
2457MHz	72
2462MHz	71
802.11be EHT20_Nss1,(MCS0)_1TX	-
2412MHz	74
2417MHz	72
2437MHz	79
2457MHz	73
2462MHz	71

Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	69
2417MHz	71
2437MHz	80
2457MHz	69
2462MHz	69
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	76
2417MHz	74
2437MHz	77
2457MHz	73
2462MHz	71
802.11be EHT20_Nss1,(MCS0)_2TX	-
2412MHz	73
2417MHz	71
2437MHz	75
2457MHz	70
2462MHz	68

**Non-Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna_2T2S**

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
2412MHz	74
2417MHz	71
2437MHz	76
2457MHz	71
2462MHz	69

Non-Beamforming_Radio 1_MIMO-directional Antenna_1T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	74
2417MHz	76
2437MHz	80
2457MHz	72
2462MHz	69
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	72
2417MHz	55
2437MHz	75
2457MHz	70
2462MHz	66
802.11be EHT20_Nss1,(MCS0)_1TX	-
2412MHz	73
2417MHz	59
2437MHz	75
2457MHz	70
2462MHz	66

**Non-Beamforming_Radio 1_MIMO-directional Antenna_2T1S**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	68
2417MHz	70
2437MHz	80
2457MHz	69
2462MHz	67
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	72
2417MHz	60
2437MHz	73
2457MHz	69
2462MHz	67
802.11be EHT20_Nss1,(MCS0)_2TX	-
2412MHz	69
2417MHz	59
2437MHz	72
2457MHz	70
2462MHz	65

Non-Beamforming_Radio 1_MIMO-directional Antenna_2T2S

Mode	Power Setting
802.11be EHT20_Nss2,(MCS0)_2TX	-
2412MHz	69
2417MHz	58
2437MHz	72
2457MHz	69
2462MHz	65

Beamforming_Radio 1_Dipole Antenna

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	75
2417MHz	75
2437MHz	78
2457MHz	73
2462MHz	71

**Beamforming_Radio 1_Dual-Polarized MIMO Panel Antenna**

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	73
2417MHz	71
2437MHz	75
2457MHz	70
2462MHz	68

Beamforming_Radio 1_MIMO-directional Antenna

Mode	Power Setting
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	69
2417MHz	59
2437MHz	72
2457MHz	70
2462MHz	65

Beamforming_Radio 1_Scan

Test Software Version	PuTTY Release 0.62
------------------------------	--------------------

Mode	Power Setting
b20_Nss1,(1Mbps)_1TX	-
2412MHz	57
2417MHz	62
2437MHz	62
2462MHz	61
g20_Nss1,(6Mbps)_1TX	-
2412MHz	59
2417MHz	65
2437MHz	80
2457MHz	71
2462MHz	59

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	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
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 ; Dipole Antenna		
2	Adapter Mode ; Dual-Polarized MIMO Panel Antenna		
3	Adapter Mode ; MIMO-directional Antenna		
4	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
Dipole Antenna_2T1S	V		
Dipole Antenna_2T2S		V	
Dual-Polarized MIMO Panel Antenna			V
MIMO-directional Antenna			V
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+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G +R1:Scan 6G+BT(chain0)
2	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +R1:Scan 6G+BT(chain0)
3	R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G +R1:Scan 6G+BT(chain1)
4	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +R1:Scan 6G+BT(chain1)
5	R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G +R1:Scan 6G+BT(chain0)
6	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +R1:Scan 6G+BT(chain0)
Refer to Sporton Test Report No.: FA462705-02 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 Support Equipment

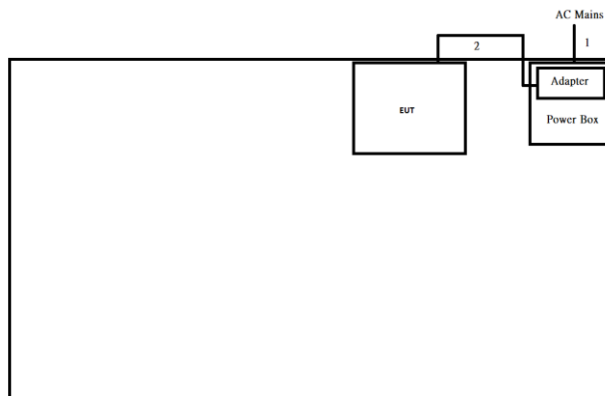
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	Powertron	PA1045-120HIB300	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ-45 Cable	Power sync	CAT-6E-10	-	-
2	Notebook	HP	5220M	-	-
3	Adapter	Powertron	PA1045-120HIB300	-	-
4	Client	Extreme	AP4020X	-	Provided by Customer/ Remote

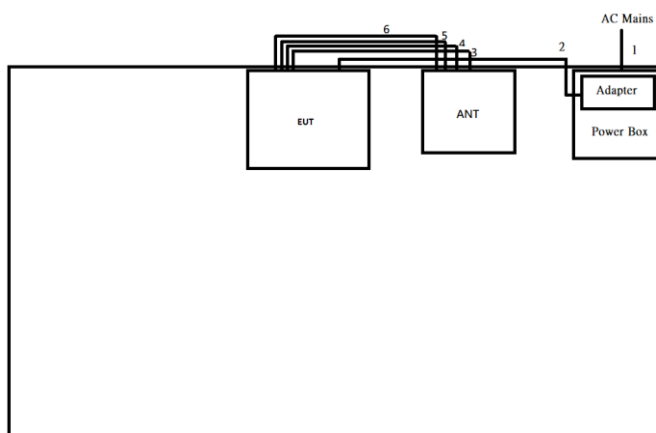
2.4 Test Setup Diagram

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

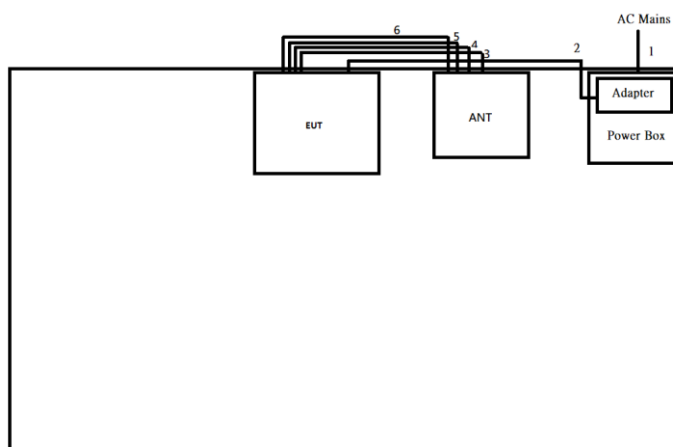


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-

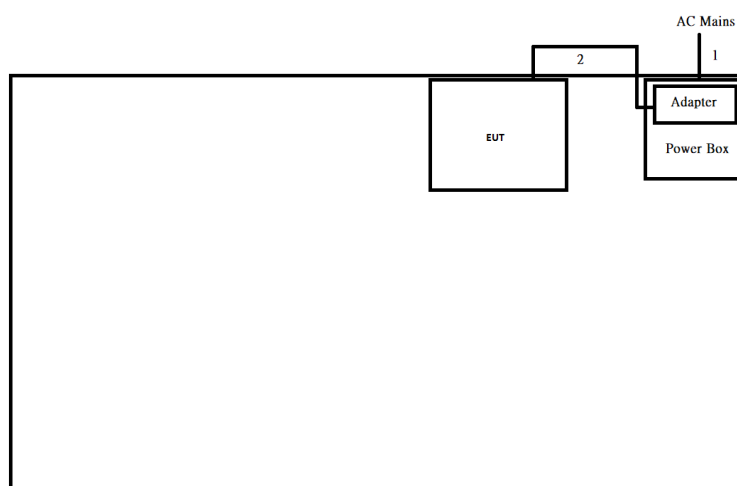
Test Setup Diagram – AC Line Conducted Emission Test (Dual-Polarized MIMO Panel Antenna)



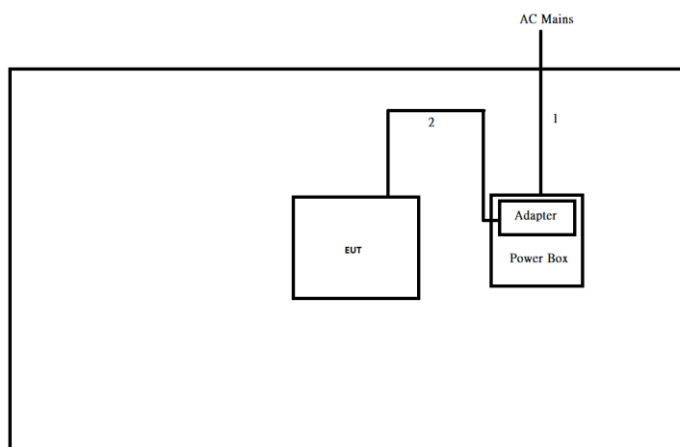
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-
3	RF Cable	No	1.0	-
4	RF Cable	No	1.0	-
5	RF Cable	No	1.0	-
6	RF Cable	No	1.0	-

Test Setup Diagram – AC Line Conducted Emission Test (MIMO-directional Antenna)


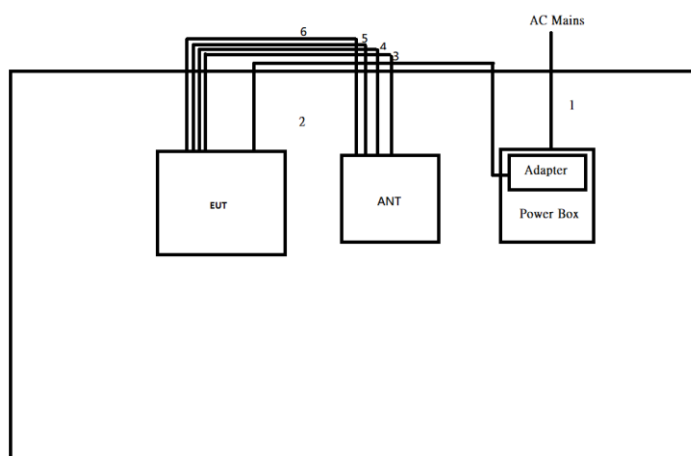
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-
3	RF Cable	No	1.0	-
4	RF Cable	No	1.0	-
5	RF Cable	No	1.0	-
6	RF Cable	No	1.0	-

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


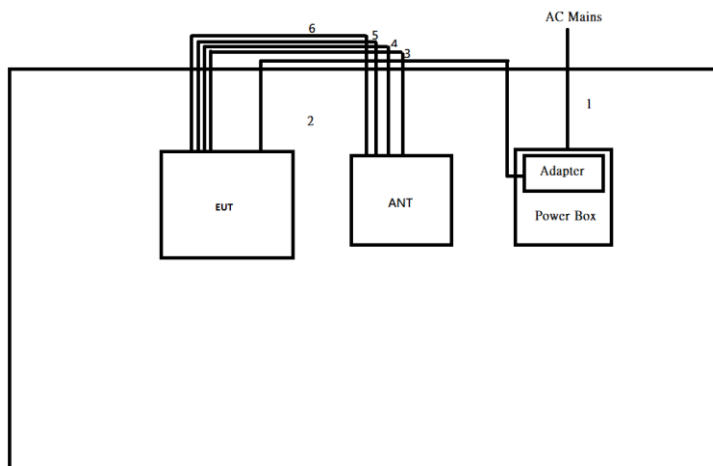
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	1.5	-

Test Setup Diagram – Radiated Test (Dipole Antenna)


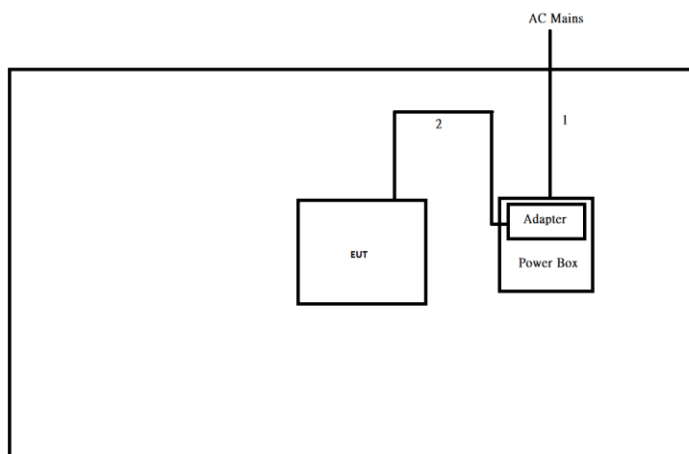
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	0.8	-

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	0.8	-
3	RF Cable	No	1.0	-
4	RF Cable	No	1.0	-
5	RF Cable	No	1.0	-
6	RF Cable	No	1.0	-

Test Setup Diagram – Radiated Test (MIMO-directional Antenna)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.8	-
2	DC Power Cable	No	0.8	-
3	RF Cable	No	1.0	-
4	RF Cable	No	1.0	-
5	RF Cable	No	1.0	-
6	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	0.8	-

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

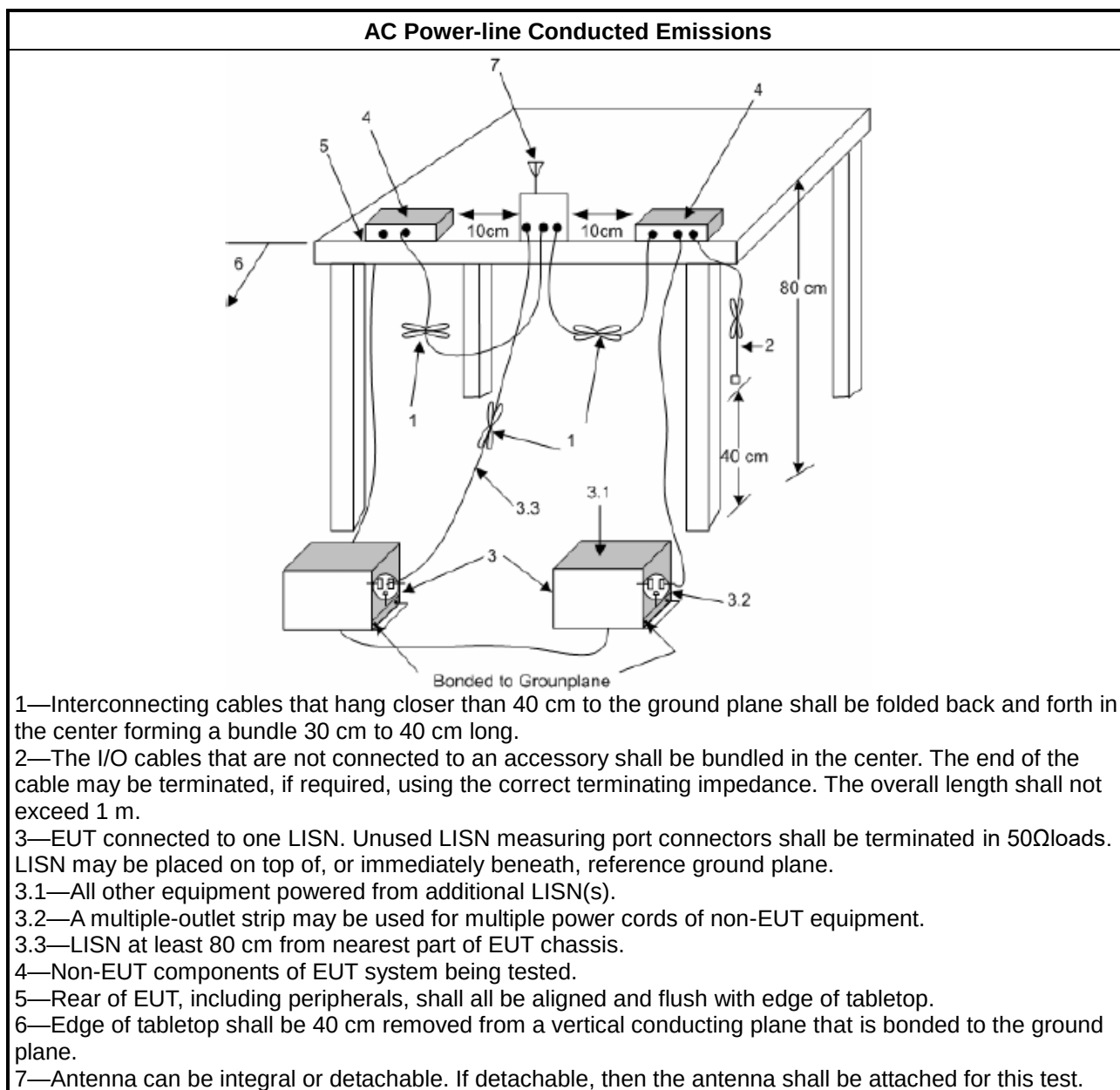
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

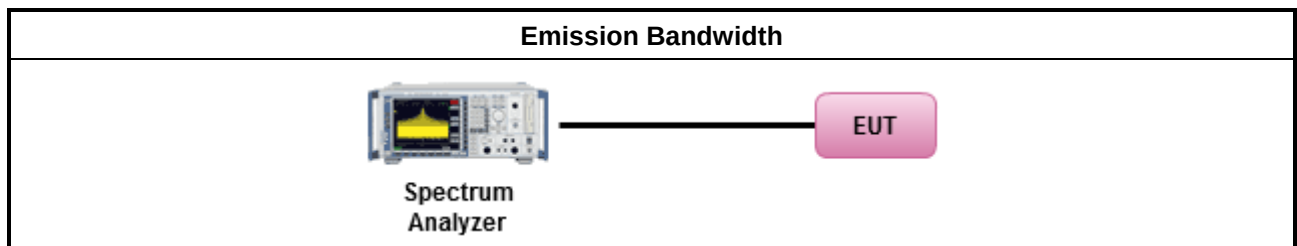
3.2.2 Measuring Instruments

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 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied 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	
	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dBm
e.i.r.p. Power Limit:	
	2400-2483.5 MHz Band
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

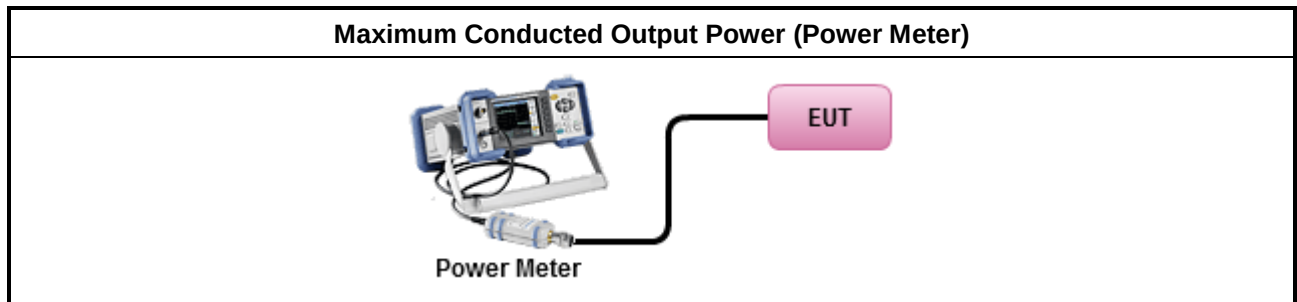
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a 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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit	
▪	Power Spectral Density (PSD) ≤ 8 dBm/3kHz

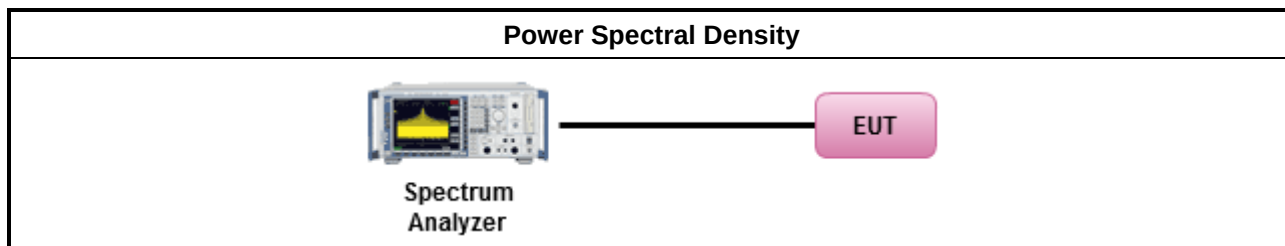
3.4.2 Measuring Instruments

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. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪	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.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.	

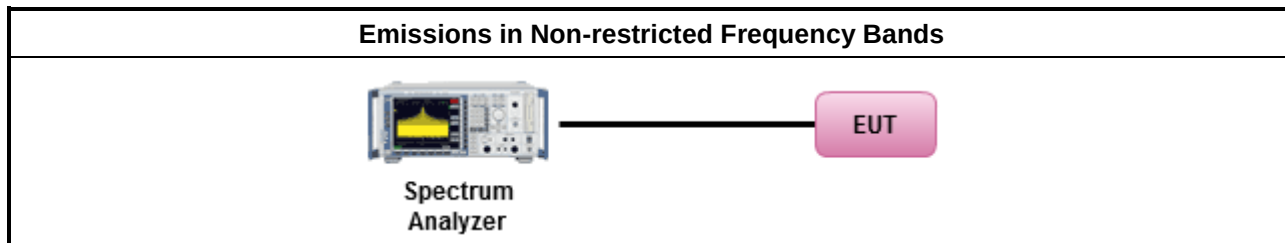
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions 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.

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

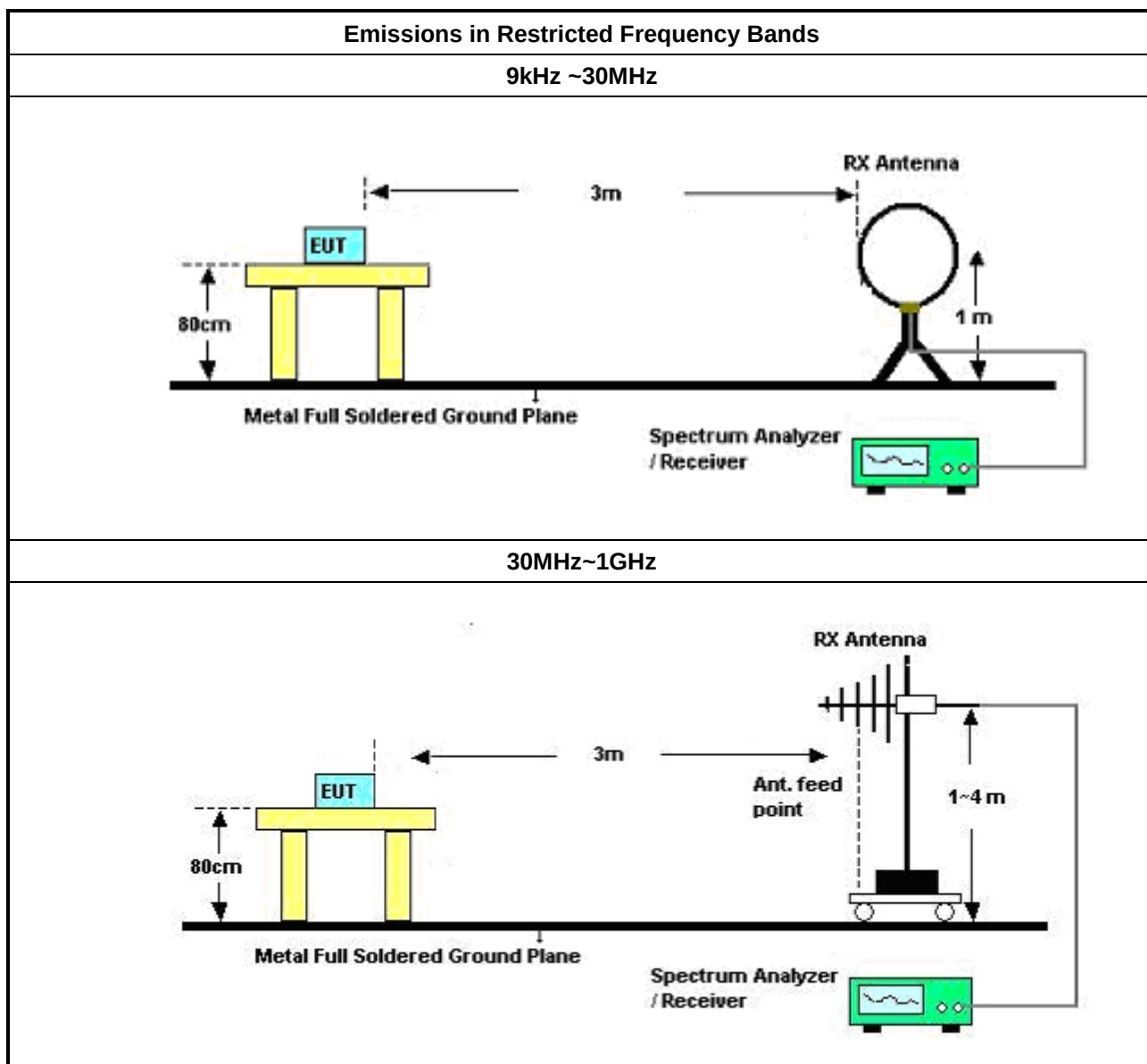
Test Method	
▪	The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].
	Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
▪	For the transmitter unwanted emissions shall be measured using following options below:
	Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
▪	For the transmitter band-edge emissions shall be measured using following options below:
	Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
▪	Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
▪	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.

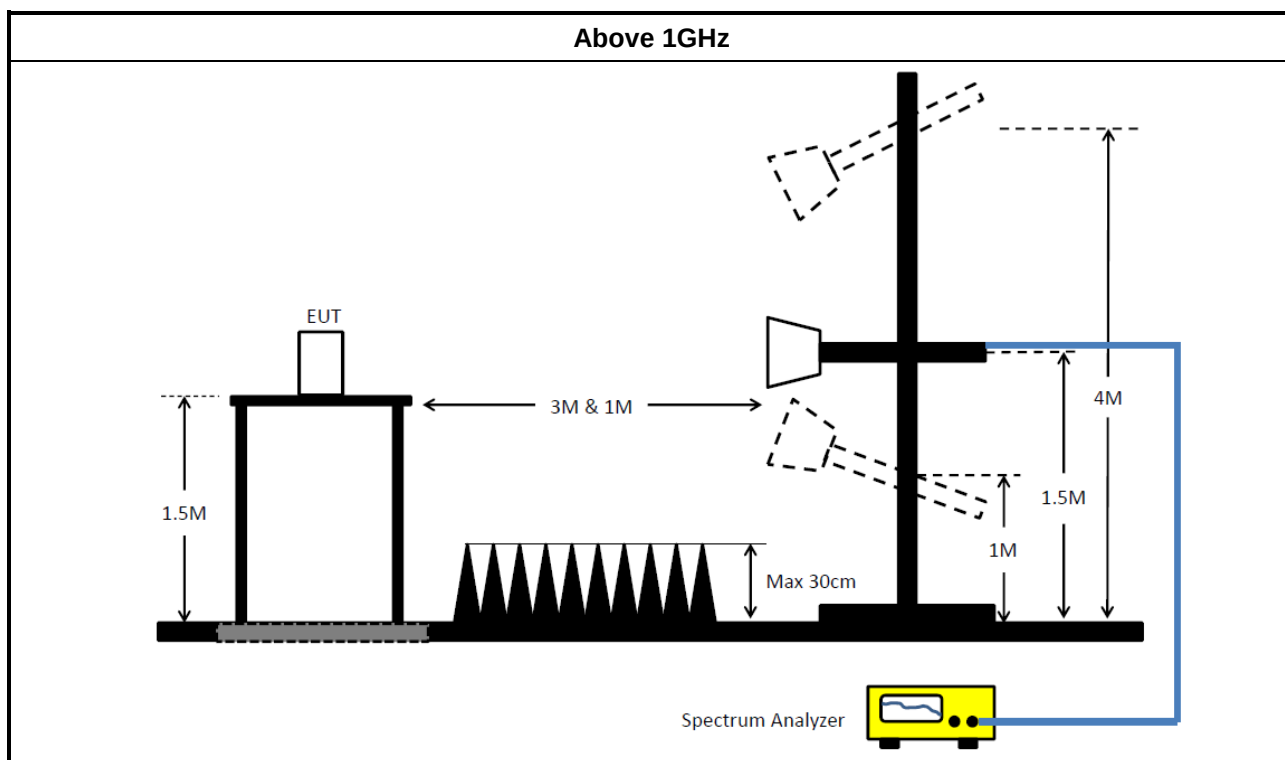
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.5 Test Setup





3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

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	17/May/2024	16/May/2025
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	1124009	300MHz~40GHz	01/Apr/2024	31/Mar/2025
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	02/Apr/2024	01/Apr/2025
SENSE-15247_DTS	Sporton	V5.11.21	N/A	N/A	N/A	N/A

Instrument for Radiated Test (03CH02-HY) (Co-location)

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	R&S	FSP 40	100593	9kHz~40GHz	11/Mar/2024	10/Mar/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2024	22/Sep/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	04/Jun/2024	03/Jun/2025
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX 104	03CH02-cable-01	1GHz~40GHz	15/Feb/2024	14/Feb/2025
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	01/Oct/2024	30/Sep/2025
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~40GHz	19/Apr/2024	18/Apr/2025
SENSE-EMI	Sporton	V5.11.9	N/A	N/A	N/A	N/A

**Instrument for Radiated Test (03CH02-HY) (Radio 1_Scan)**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
N.S.A. Measurement	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3M	14/Jul/2024	13/Jul/2025
Site V.S.W.R	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3M	14/Jul/2024	13/Jul/2025
EMI Test Receiver	R&S	ESR	102052	9kHz~3.6GHz	03/May/2024	02/May/2025
Signal Analyzer	R&S	FSP 40	100593	9kHz~40GHz	11/Mar/2024	10/Mar/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	19/Mar/2024	18/Mar/2025
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723/2	30MHz~1GHz	26/Aug/2024	25/Aug/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2024	22/Sep/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	04/Jun/2024	03/Jun/2025
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	9kHz~30MHz	26/Nov/2024	25/Nov/2025
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	30MHz~1GHz	26/Nov/2024	25/Nov/2025
RF Cable-R03m	HUBER+ SUHNER	SUCOFLEX 104	03CH02-cable-01	1GHz~40GHz	15/Feb/2024	14/Feb/2025
Amplifier	Agilent	8447D	2944A11149	100kHz~ 1.3GHz	29/Jun/2024	28/Jun/2025
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	01/Oct/2024	30/Sep/2025
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~40GHz	19/Apr/2024	18/Apr/2025
SENSE-15247-DTS	Sporton	V5.11.20	NA	NA	19/Apr/2024	18/Apr/2025

**Instrument for Radiated Test (03CH24-HY)**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH24-HY	30MHz~1GHz 3m	16/Aug/2024	15/Aug/2025
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH24-HY	1GHz~18GHz 3m	30/Jul/2024	29/Jul/2025
EMI Test Receiver	ROHDE & SCHWARZ	ESR	102318	9kHz~3.6GHz	06/Dec/2024	05/Dec/2025
Signal Analyzer	ROHDE& SCHWARZ	FSV3044	101345	10Hz~44GHz	27/Aug/2024	26/Aug/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	19/Mar/2024	18/Mar/2025
Bilog Antenna & 6dB Attenuator	TESEQ / Woken	CBL 6112D / 00800N1D01N-06	35376 / 02	30MHz~1GHz	14/Apr/2024	13/Apr/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02744	1GHz~18GHz	15/Aug/2024	14/Aug/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	04/Jun/2024	05/Jun/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	03CH24-cable -01	9kHz~40GHz	01/Oct/2024	30/Sep/2025
Pre-Amplifier	Aglient	8447D	2944A06292	30MHz~1GHz	18/Apr/2024	17/Apr/2025
Amplifier	EM	EM01G18G	060870	1GHz ~18GHz	12/Aug/2024	11/Aug/2025
Amplifier	EM	EM18G40GA	060874	18GHz ~40GHz	15/Apr/2024	14/Apr/2025
SENSE-15247-DTS	Sporton	V5.11.20	NA	NA	NA	NA



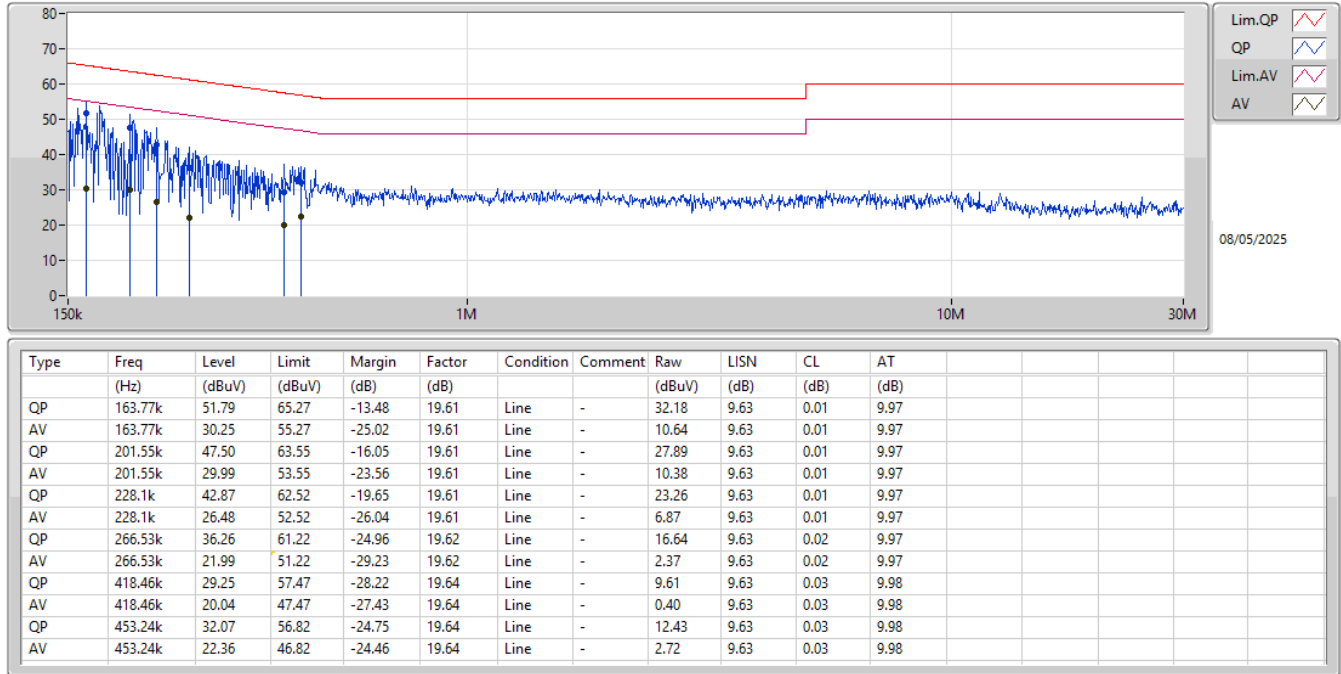
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.02k	53.84	65.83	-11.99	Neutral

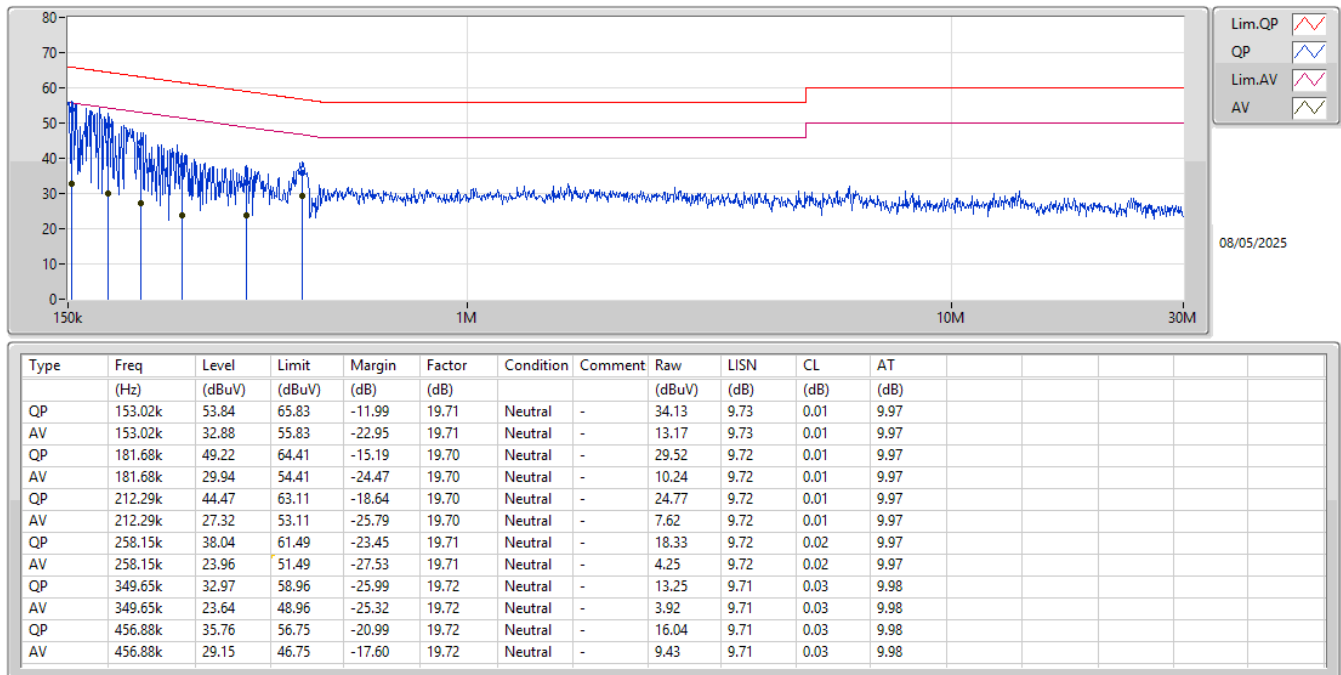
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	163.77k	51.79	65.27	-13.48	Line
Mode 1	Pass	AV	163.77k	30.25	55.27	-25.02	Line
Mode 1	Pass	QP	201.55k	47.50	63.55	-16.05	Line
Mode 1	Pass	AV	201.55k	29.99	53.55	-23.56	Line
Mode 1	Pass	QP	228.1k	42.87	62.52	-19.65	Line
Mode 1	Pass	AV	228.1k	26.48	52.52	-26.04	Line
Mode 1	Pass	QP	266.53k	36.26	61.22	-24.96	Line
Mode 1	Pass	AV	266.53k	21.99	51.22	-29.23	Line
Mode 1	Pass	QP	418.46k	29.25	57.47	-28.22	Line
Mode 1	Pass	AV	418.46k	20.04	47.47	-27.43	Line
Mode 1	Pass	QP	453.24k	32.07	56.82	-24.75	Line
Mode 1	Pass	AV	453.24k	22.36	46.82	-24.46	Line
Mode 1	Pass	QP	153.02k	53.84	65.83	-11.99	Neutral
Mode 1	Pass	AV	153.02k	32.88	55.83	-22.95	Neutral
Mode 1	Pass	QP	181.68k	49.22	64.41	-15.19	Neutral
Mode 1	Pass	AV	181.68k	29.94	54.41	-24.47	Neutral
Mode 1	Pass	QP	212.29k	44.47	63.11	-18.64	Neutral
Mode 1	Pass	AV	212.29k	27.32	53.11	-25.79	Neutral
Mode 1	Pass	QP	258.15k	38.04	61.49	-23.45	Neutral
Mode 1	Pass	AV	258.15k	23.96	51.49	-27.53	Neutral
Mode 1	Pass	QP	349.65k	32.97	58.96	-25.99	Neutral
Mode 1	Pass	AV	349.65k	23.64	48.96	-25.32	Neutral
Mode 1	Pass	QP	456.88k	35.76	56.75	-20.99	Neutral
Mode 1	Pass	AV	456.88k	29.15	46.75	-17.60	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1





**Conducted Emissions at Powerline_
Dual-Polarized MIMO Panel Antenna**

Appendix A.2

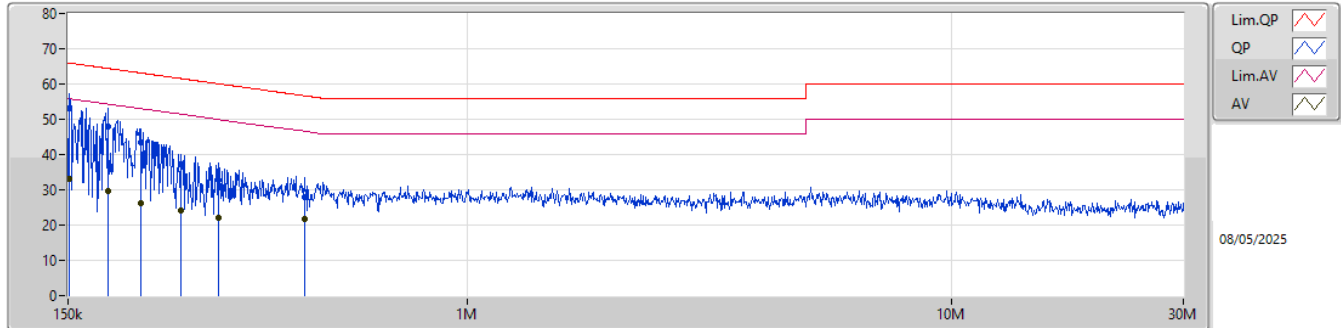
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	151.2k	53.41	65.92	-12.51	Neutral

Result

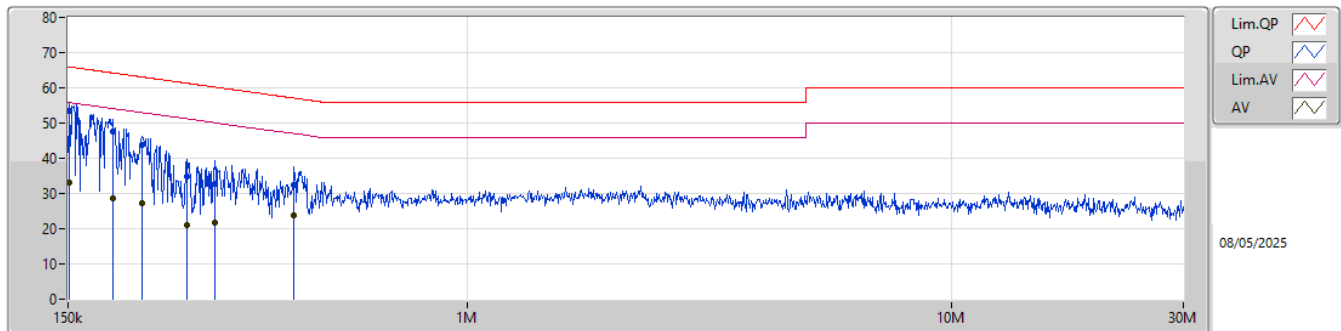
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	151.2k	53.03	65.92	-12.89	Line
Mode 1	Pass	AV	151.2k	33.16	55.92	-22.76	Line
Mode 1	Pass	QP	180.96k	48.03	64.43	-16.40	Line
Mode 1	Pass	AV	180.96k	29.53	54.43	-24.90	Line
Mode 1	Pass	QP	212.29k	43.61	63.11	-19.50	Line
Mode 1	Pass	AV	212.29k	26.35	53.11	-26.76	Line
Mode 1	Pass	QP	256.1k	37.12	61.56	-24.44	Line
Mode 1	Pass	AV	256.1k	24.25	51.56	-27.31	Line
Mode 1	Pass	QP	306.5k	32.85	60.07	-27.22	Line
Mode 1	Pass	AV	306.5k	22.06	50.07	-28.01	Line
Mode 1	Pass	QP	460.54k	28.09	56.69	-28.60	Line
Mode 1	Pass	AV	460.54k	21.73	46.69	-24.96	Line
Mode 1	Pass	QP	151.2k	53.41	65.92	-12.51	Neutral
Mode 1	Pass	AV	151.2k	33.00	55.92	-22.92	Neutral
Mode 1	Pass	QP	185.34k	47.46	64.24	-16.78	Neutral
Mode 1	Pass	AV	185.34k	28.51	54.24	-25.73	Neutral
Mode 1	Pass	QP	213.14k	43.64	63.07	-19.43	Neutral
Mode 1	Pass	AV	213.14k	27.22	53.07	-25.85	Neutral
Mode 1	Pass	QP	264.41k	34.70	61.30	-26.60	Neutral
Mode 1	Pass	AV	264.41k	21.01	51.30	-30.29	Neutral
Mode 1	Pass	QP	301.64k	32.86	60.21	-27.35	Neutral
Mode 1	Pass	AV	301.64k	21.58	50.21	-28.63	Neutral
Mode 1	Pass	QP	439k	32.35	57.09	-24.74	Neutral
Mode 1	Pass	AV	439k	23.68	47.09	-23.41	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	151.2k	53.03	65.92	-12.89	19.61	Line	-	33.42	9.63	0.01	9.97						
AV	151.2k	33.16	55.92	-22.76	19.61	Line	-	13.55	9.63	0.01	9.97						
QP	180.96k	48.03	64.43	-16.40	19.61	Line	-	28.42	9.63	0.01	9.97						
AV	180.96k	29.53	54.43	-24.90	19.61	Line	-	9.92	9.63	0.01	9.97						
QP	212.29k	43.61	63.11	-19.50	19.61	Line	-	24.00	9.63	0.01	9.97						
AV	212.29k	26.35	53.11	-26.76	19.61	Line	-	6.74	9.63	0.01	9.97						
QP	256.1k	37.12	61.56	-24.44	19.62	Line	-	17.50	9.63	0.02	9.97						
AV	256.1k	24.25	51.56	-27.31	19.62	Line	-	4.63	9.63	0.02	9.97						
QP	306.5k	32.85	60.07	-27.22	19.63	Line	-	13.22	9.63	0.02	9.98						
AV	306.5k	22.06	50.07	-28.01	19.63	Line	-	2.43	9.63	0.02	9.98						
QP	460.54k	28.09	56.69	-28.60	19.64	Line	-	8.45	9.63	0.03	9.98						
AV	460.54k	21.73	46.69	-24.96	19.64	Line	-	2.09	9.63	0.03	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	151.2k	53.41	65.92	-12.51	19.71	Neutral	-	33.70	9.73	0.01	9.97						
AV	151.2k	33.00	55.92	-22.92	19.71	Neutral	-	13.29	9.73	0.01	9.97						
QP	185.34k	47.46	64.24	-16.78	19.70	Neutral	-	27.76	9.72	0.01	9.97						
AV	185.34k	28.51	54.24	-25.73	19.70	Neutral	-	8.81	9.72	0.01	9.97						
QP	213.14k	43.64	63.07	-19.43	19.70	Neutral	-	23.94	9.72	0.01	9.97						
AV	213.14k	27.22	53.07	-25.85	19.70	Neutral	-	7.52	9.72	0.01	9.97						
QP	264.41k	34.70	61.30	-26.60	19.71	Neutral	-	14.99	9.72	0.02	9.97						
AV	264.41k	21.01	51.30	-30.29	19.71	Neutral	-	1.30	9.72	0.02	9.97						
QP	301.64k	32.86	60.21	-27.35	19.71	Neutral	-	13.15	9.71	0.02	9.98						
AV	301.64k	21.58	50.21	-28.63	19.71	Neutral	-	1.87	9.71	0.02	9.98						
QP	439k	32.35	57.09	-24.74	19.72	Neutral	-	12.63	9.71	0.03	9.98						
AV	439k	23.68	47.09	-23.41	19.72	Neutral	-	3.96	9.71	0.03	9.98						



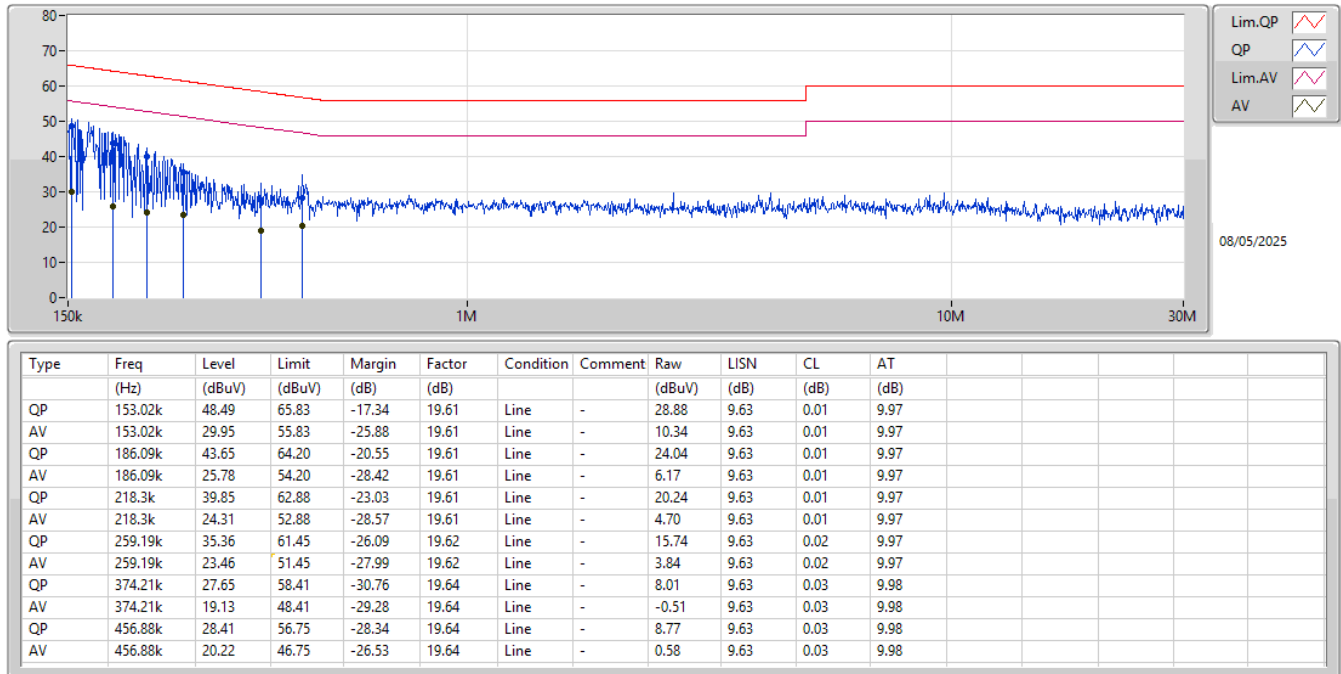
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.02k	52.59	65.83	-13.24	Neutral

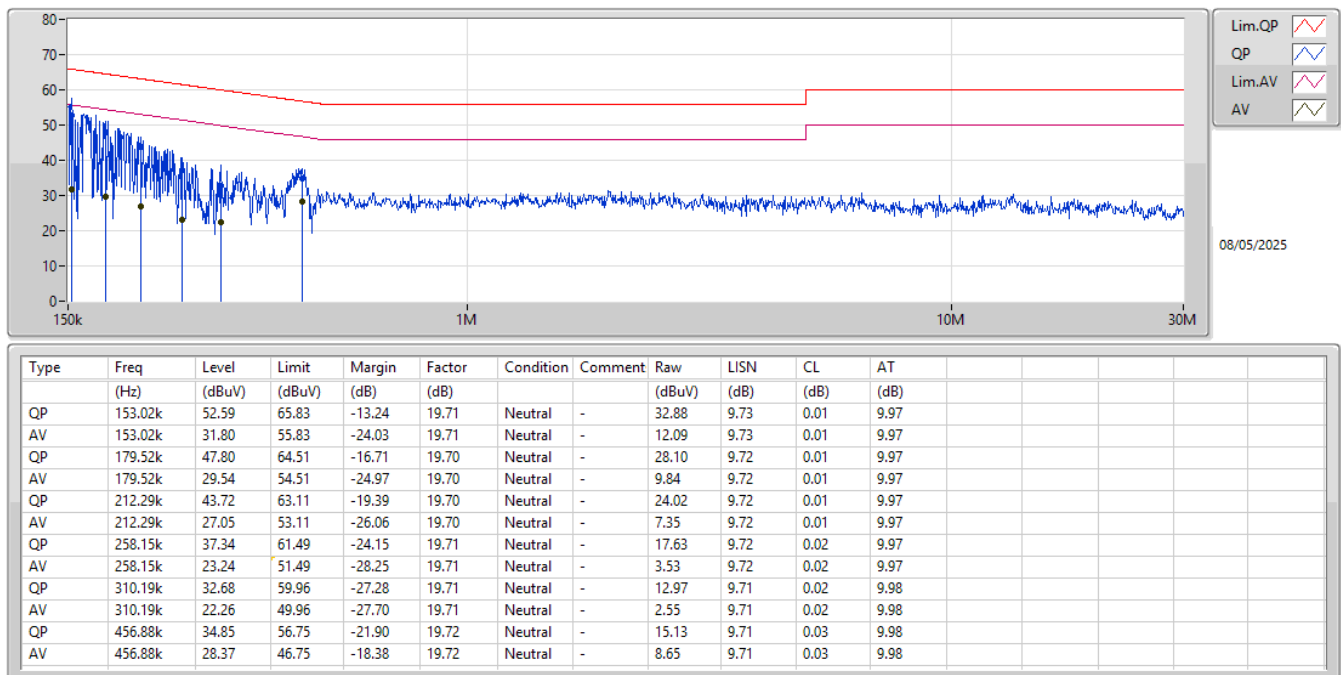
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.02k	48.49	65.83	-17.34	Line
Mode 1	Pass	AV	153.02k	29.95	55.83	-25.88	Line
Mode 1	Pass	QP	186.09k	43.65	64.20	-20.55	Line
Mode 1	Pass	AV	186.09k	25.78	54.20	-28.42	Line
Mode 1	Pass	QP	218.3k	39.85	62.88	-23.03	Line
Mode 1	Pass	AV	218.3k	24.31	52.88	-28.57	Line
Mode 1	Pass	QP	259.19k	35.36	61.45	-26.09	Line
Mode 1	Pass	AV	259.19k	23.46	51.45	-27.99	Line
Mode 1	Pass	QP	374.21k	27.65	58.41	-30.76	Line
Mode 1	Pass	AV	374.21k	19.13	48.41	-29.28	Line
Mode 1	Pass	QP	456.88k	28.41	56.75	-28.34	Line
Mode 1	Pass	AV	456.88k	20.22	46.75	-26.53	Line
Mode 1	Pass	QP	153.02k	52.59	65.83	-13.24	Neutral
Mode 1	Pass	AV	153.02k	31.80	55.83	-24.03	Neutral
Mode 1	Pass	QP	179.52k	47.80	64.51	-16.71	Neutral
Mode 1	Pass	AV	179.52k	29.54	54.51	-24.97	Neutral
Mode 1	Pass	QP	212.29k	43.72	63.11	-19.39	Neutral
Mode 1	Pass	AV	212.29k	27.05	53.11	-26.06	Neutral
Mode 1	Pass	QP	258.15k	37.34	61.49	-24.15	Neutral
Mode 1	Pass	AV	258.15k	23.24	51.49	-28.25	Neutral
Mode 1	Pass	QP	310.19k	32.68	59.96	-27.28	Neutral
Mode 1	Pass	AV	310.19k	22.26	49.96	-27.70	Neutral
Mode 1	Pass	QP	456.88k	34.85	56.75	-21.90	Neutral
Mode 1	Pass	AV	456.88k	28.37	46.75	-18.38	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1





Conducted Emissions at Powerline_Radio 1_Scan

Appendix A.4

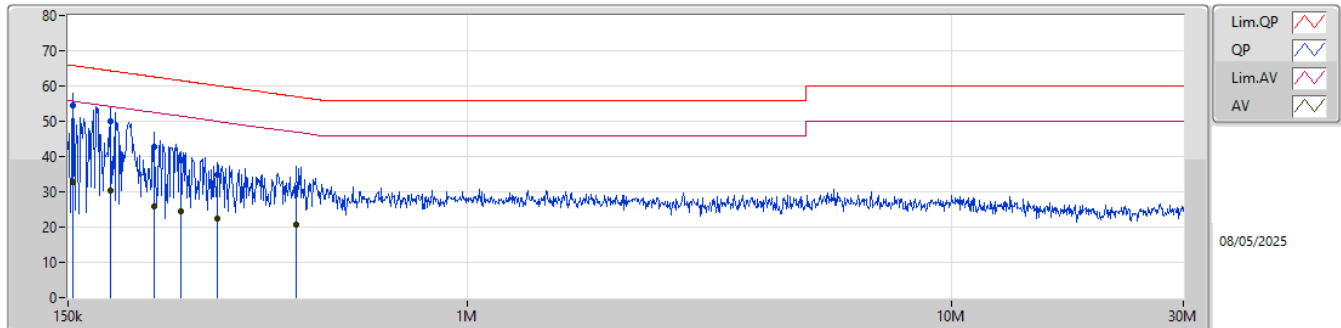
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.64k	54.44	65.81	-11.37	Line

Result

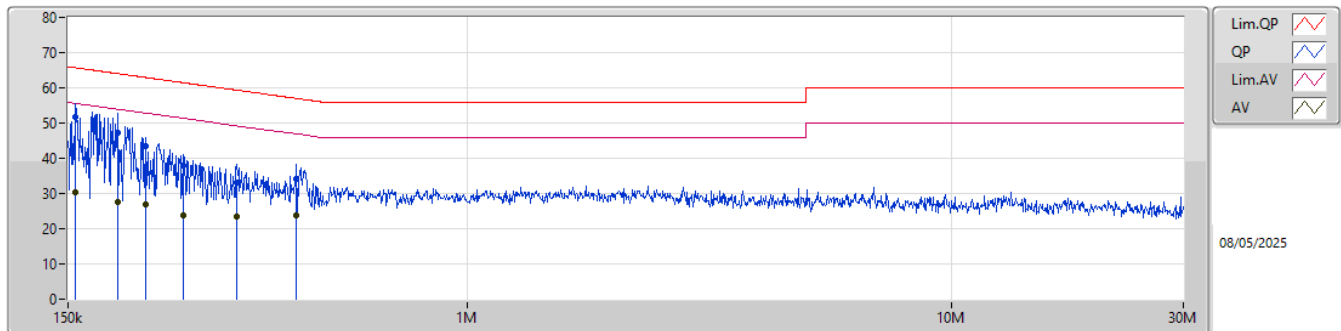
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.64k	54.44	65.81	-11.37	Line
Mode 1	Pass	AV	153.64k	32.61	55.81	-23.20	Line
Mode 1	Pass	QP	183.14k	49.95	64.34	-14.39	Line
Mode 1	Pass	AV	183.14k	30.23	54.34	-24.11	Line
Mode 1	Pass	QP	225.39k	42.73	62.62	-19.89	Line
Mode 1	Pass	AV	225.39k	25.69	52.62	-26.93	Line
Mode 1	Pass	QP	257.12k	38.85	61.53	-22.68	Line
Mode 1	Pass	AV	257.12k	24.47	51.53	-27.06	Line
Mode 1	Pass	QP	305.28k	34.79	60.09	-25.30	Line
Mode 1	Pass	AV	305.28k	22.40	50.09	-27.69	Line
Mode 1	Pass	QP	444.28k	30.87	56.98	-26.11	Line
Mode 1	Pass	AV	444.28k	20.66	46.98	-26.32	Line
Mode 1	Pass	QP	155.49k	51.85	65.69	-13.84	Neutral
Mode 1	Pass	AV	155.49k	30.24	55.69	-25.45	Neutral
Mode 1	Pass	QP	189.84k	47.15	64.05	-16.90	Neutral
Mode 1	Pass	AV	189.84k	27.52	54.05	-26.53	Neutral
Mode 1	Pass	QP	217.43k	43.56	62.92	-19.36	Neutral
Mode 1	Pass	AV	217.43k	26.86	52.92	-26.06	Neutral
Mode 1	Pass	QP	259.19k	37.96	61.45	-23.49	Neutral
Mode 1	Pass	AV	259.19k	23.86	51.45	-27.59	Neutral
Mode 1	Pass	QP	334.63k	33.16	59.33	-26.17	Neutral
Mode 1	Pass	AV	334.63k	23.60	49.33	-25.73	Neutral
Mode 1	Pass	QP	444.28k	34.11	56.98	-22.87	Neutral
Mode 1	Pass	AV	444.28k	23.71	46.98	-23.27	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	153.64k	54.44	65.81	-11.37	19.61	Line	-	34.83	9.63	0.01	9.97						
AV	153.64k	32.61	55.81	-23.20	19.61	Line	-	13.00	9.63	0.01	9.97						
QP	183.14k	49.95	64.34	-14.39	19.61	Line	-	30.34	9.63	0.01	9.97						
AV	183.14k	30.23	54.34	-24.11	19.61	Line	-	10.62	9.63	0.01	9.97						
QP	225.39k	42.73	62.62	-19.89	19.61	Line	-	23.12	9.63	0.01	9.97						
AV	225.39k	25.69	52.62	-26.93	19.61	Line	-	6.08	9.63	0.01	9.97						
QP	257.12k	38.85	61.53	-22.68	19.62	Line	-	19.23	9.63	0.02	9.97						
AV	257.12k	24.47	51.53	-27.06	19.62	Line	-	4.85	9.63	0.02	9.97						
QP	305.28k	34.79	60.09	-25.30	19.63	Line	-	15.16	9.63	0.02	9.98						
AV	305.28k	22.40	50.09	-27.69	19.63	Line	-	2.77	9.63	0.02	9.98						
QP	444.28k	30.87	56.98	-26.11	19.64	Line	-	11.23	9.63	0.03	9.98						
AV	444.28k	20.66	46.98	-26.32	19.64	Line	-	1.02	9.63	0.03	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	155.49k	51.85	65.69	-13.84	19.71	Neutral	-	32.14	9.73	0.01	9.97						
AV	155.49k	30.24	55.69	-25.45	19.71	Neutral	-	10.53	9.73	0.01	9.97						
QP	189.84k	47.15	64.05	-16.90	19.70	Neutral	-	27.45	9.72	0.01	9.97						
AV	189.84k	27.52	54.05	-26.53	19.70	Neutral	-	7.82	9.72	0.01	9.97						
QP	217.43k	43.56	62.92	-19.36	19.70	Neutral	-	23.86	9.72	0.01	9.97						
AV	217.43k	26.86	52.92	-26.06	19.70	Neutral	-	7.16	9.72	0.01	9.97						
QP	259.19k	37.96	61.45	-23.49	19.71	Neutral	-	18.25	9.72	0.02	9.97						
AV	259.19k	23.86	51.45	-27.59	19.71	Neutral	-	4.15	9.72	0.02	9.97						
QP	334.63k	33.16	59.33	-26.17	19.71	Neutral	-	13.45	9.71	0.02	9.98						
AV	334.63k	23.60	49.33	-25.73	19.71	Neutral	-	3.89	9.71	0.02	9.98						
QP	444.28k	34.11	56.98	-22.87	19.72	Neutral	-	14.39	9.71	0.03	9.98						
AV	444.28k	23.71	46.98	-23.27	19.72	Neutral	-	3.99	9.71	0.03	9.98						

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	7.1M	11.979M	12M0G1D	6.625M	10.435M
802.11g_Nss1,(6Mbps)_1TX	16.475M	17.261M	17M3D1D	16.35M	16.976M
802.11be EHT20_Nss1,(MCS0)_1TX	19.15M	19.09M	19M1D1D	19.075M	19.04M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.1M	10.435M
2437MHz	Pass	500k	6.725M	10.735M
2462MHz	Pass	500k	6.625M	11.979M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.375M	16.998M
2437MHz	Pass	500k	16.475M	16.976M
2462MHz	Pass	500k	16.35M	17.261M
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	19.075M	19.04M
2437MHz	Pass	500k	19.15M	19.04M
2462MHz	Pass	500k	19.1M	19.09M

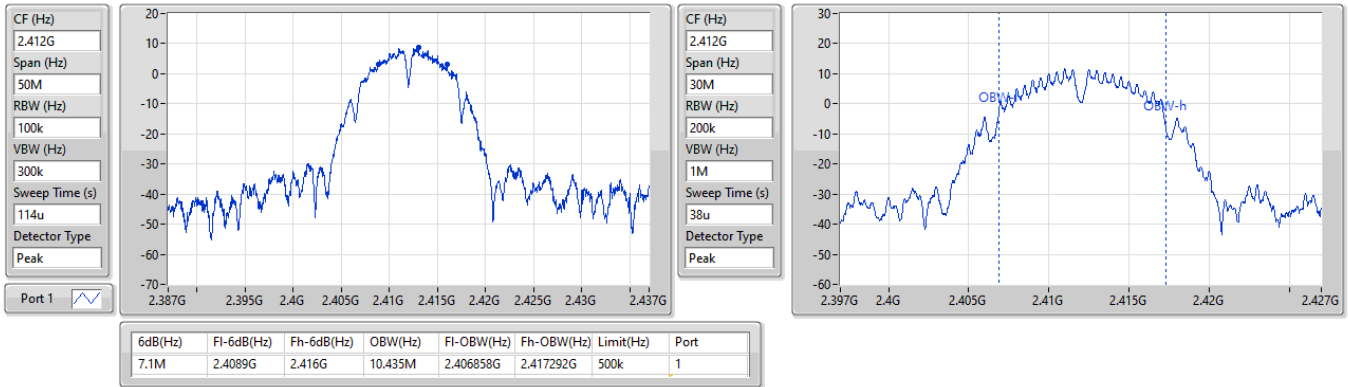
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

15/01/2025

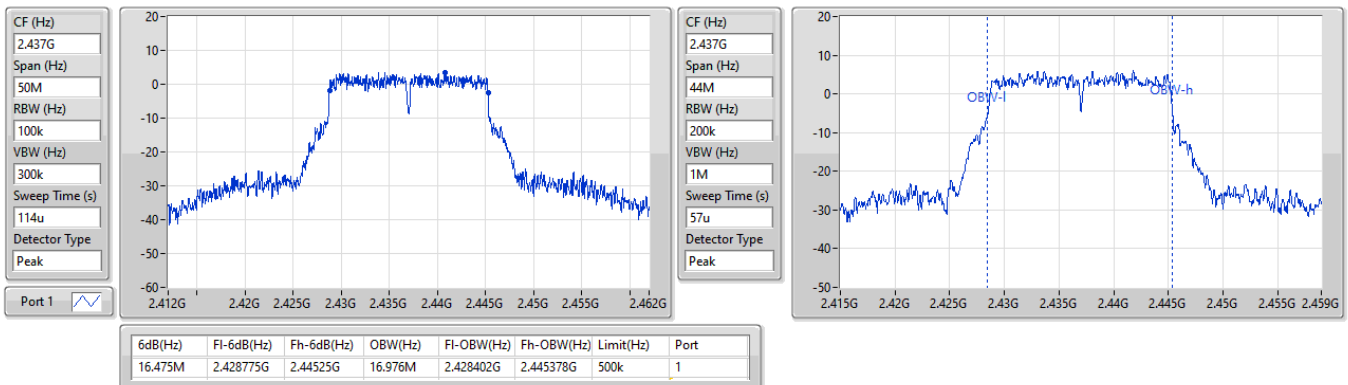


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

15/01/2025

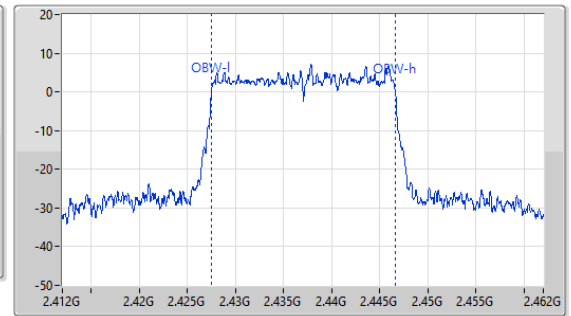
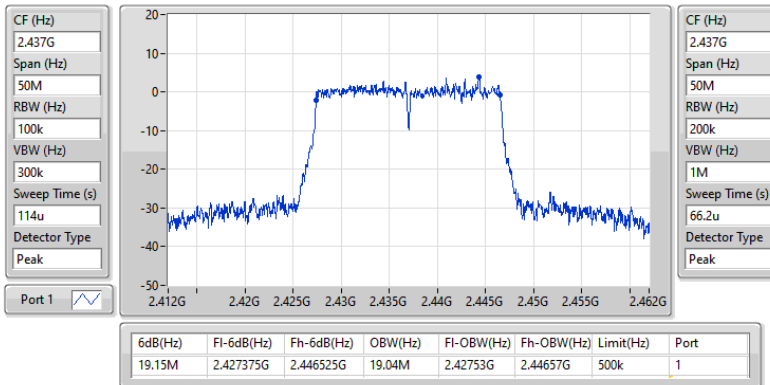


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

2437MHz

15/01/2025



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.05M	13.178M	13M2G1D	6.75M	10.255M
802.11g_Nss1,(6Mbps)_2TX	16.425M	18.757M	18M8D1D	16.35M	16.668M
802.11be EHT20_Nss1,(MCS0)_2TX	19.125M	19.965M	20M0D1D	18.3M	18.941M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; 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)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.05M	10.255M	7.025M	10.99M
2437MHz	Pass	500k	7.1M	10.36M	8.05M	13.178M
2462MHz	Pass	500k	6.85M	11.904M	6.75M	12.624M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.425M	16.69M	16.375M	17.085M
2437MHz	Pass	500k	16.35M	17.129M	16.425M	18.757M
2462MHz	Pass	500k	16.375M	16.668M	16.375M	16.778M
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.3M	18.966M	18.425M	19.165M
2437MHz	Pass	500k	19.125M	19.165M	19.125M	19.965M
2462MHz	Pass	500k	19.1M	18.941M	19.025M	19.19M

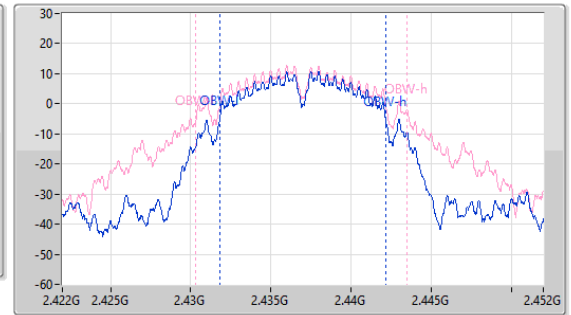
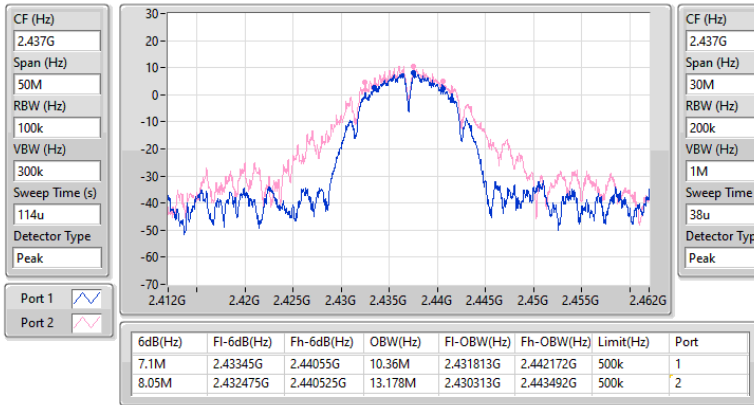
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

15/01/2025

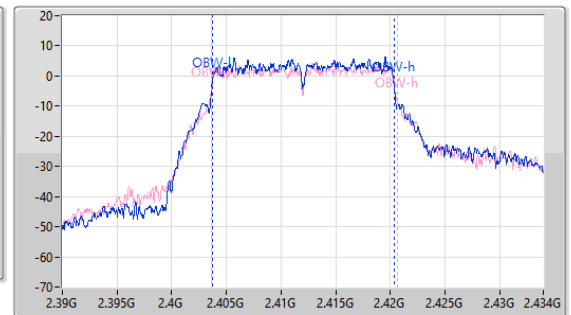
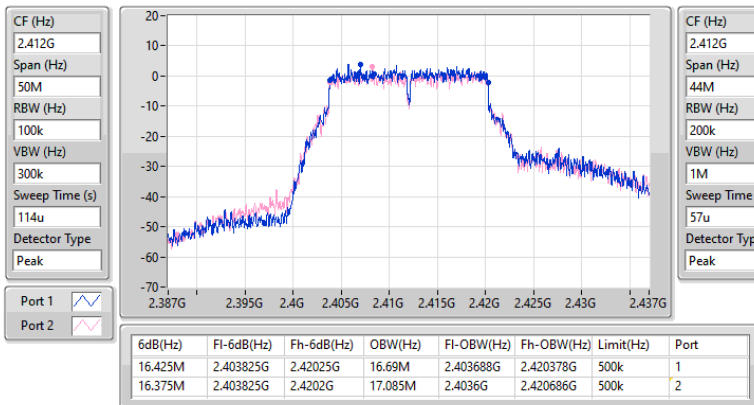


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

15/01/2025

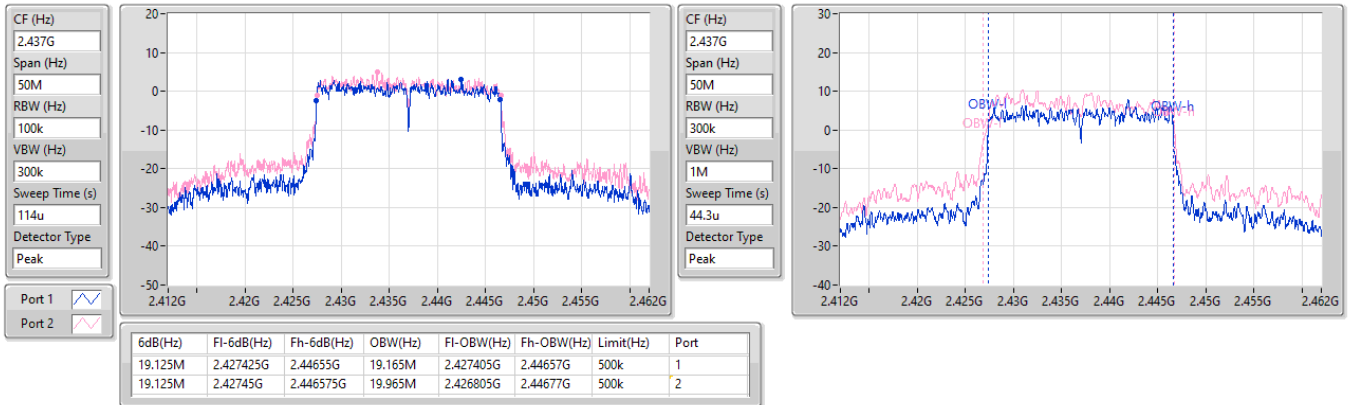


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

2437MHz

05/02/2025



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	19.175M	20.215M	20M2D1D	15M	18.966M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; 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	-	-	-	-	-	-
2412MHz	Pass	500k	19.025M	19.215M	18.425M	19.165M
2437MHz	Pass	500k	19.175M	19.24M	19.075M	20.215M
2462MHz	Pass	500k	19.05M	18.966M	15M	18.991M

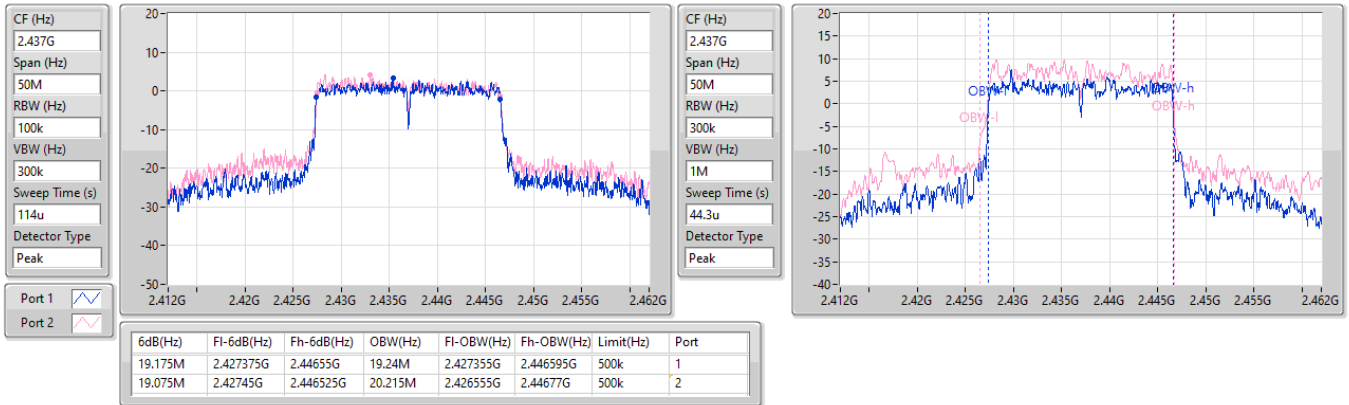
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

2437MHz

05/02/2025





EBW_Non-Beamforming_Radio 1_ 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)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	7.1M	10.735M	10M7G1D	6.35M	10.21M
802.11g_Nss1,(6Mbps)_1TX	16.475M	16.976M	17M0D1D	15.95M	16.844M
802.11be EHT20_Nss1,(MCS0)_1TX	19.075M	19.19M	19M2D1D	18.825M	18.966M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



EBW_Non-Beamforming_Radio 1
Dual-Polarized MIMO Panel Antenna_1T1S

Appendix B.4

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.1M	10.435M
2437MHz	Pass	500k	6.725M	10.735M
2462MHz	Pass	500k	6.35M	10.21M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	15.95M	16.866M
2437MHz	Pass	500k	16.475M	16.976M
2462MHz	Pass	500k	16.4M	16.844M
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.825M	19.19M
2437MHz	Pass	500k	19.075M	19.19M
2462MHz	Pass	500k	19.05M	18.966M

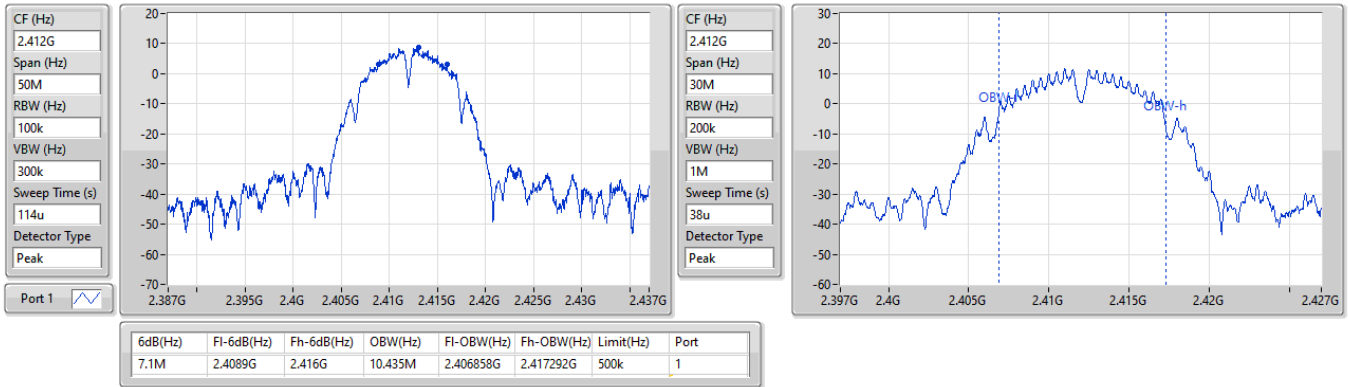
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

15/01/2025

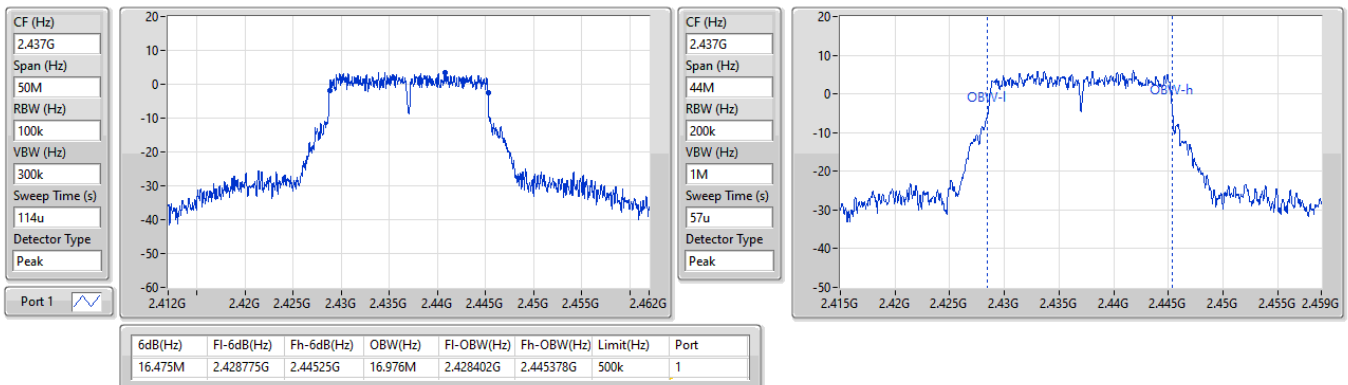


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

15/01/2025

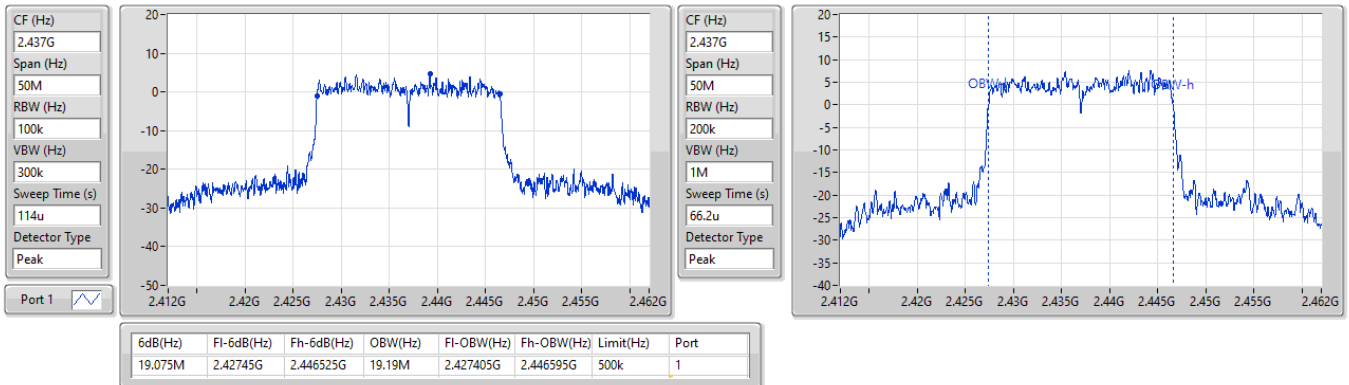


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

2437MHz

05/02/2025





EBW_Non-Beamforming_Radio 1_ 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)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.05M	13.178M	13M2G1D	5.9M	10.18M
802.11g_Nss1,(6Mbps)_2TX	16.5M	18.119M	18M1D1D	16.375M	16.69M
802.11be EHT20_Nss1,(MCS0)_2TX	19.175M	19.215M	19M2D1D	18.975M	18.916M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



**EBW_Non-Beamforming_Radio 1_
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)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	6.575M	10.21M	6.575M	10.36M
2437MHz	Pass	500k	7.1M	10.36M	8.05M	13.178M
2462MHz	Pass	500k	5.9M	10.18M	6.1M	10.315M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.425M	16.69M	16.375M	17.085M
2437MHz	Pass	500k	16.5M	17.767M	16.4M	18.119M
2462MHz	Pass	500k	16.45M	16.91M	16.45M	16.734M
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	19.1M	19.04M	19.175M	19.215M
2437MHz	Pass	500k	19.075M	19.09M	19.1M	19.115M
2462MHz	Pass	500k	18.975M	18.916M	19.075M	19.015M

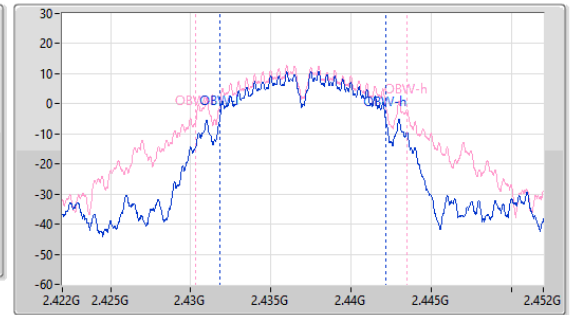
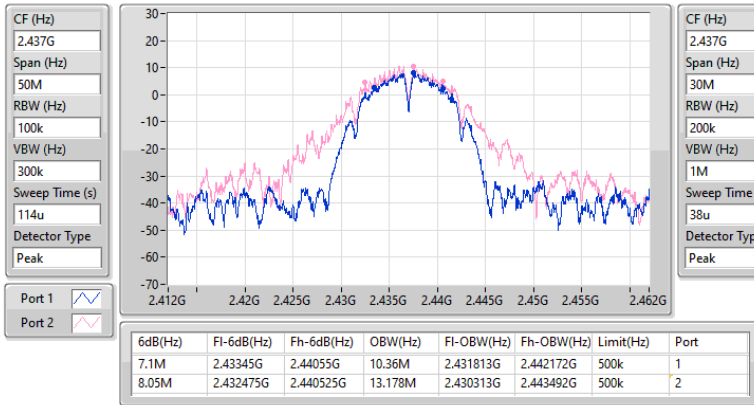
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

15/01/2025

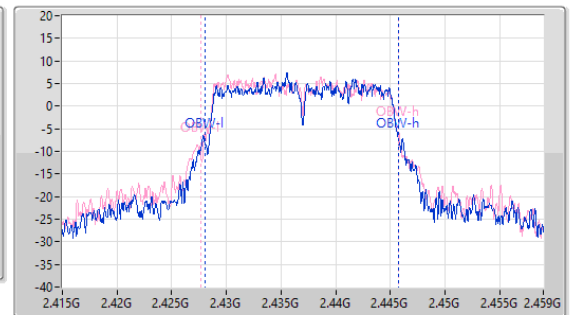
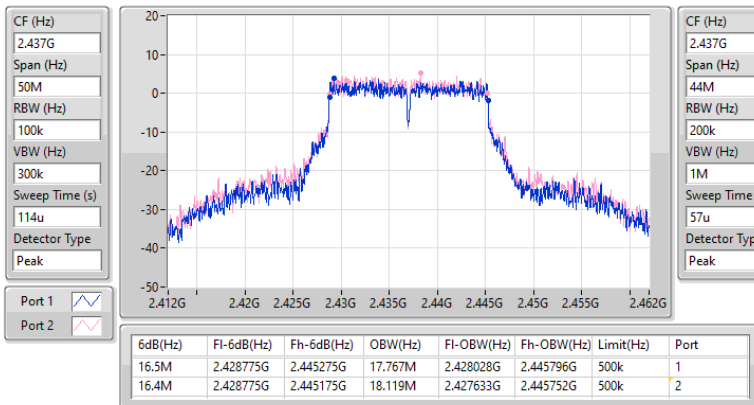


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

2437MHz

05/02/2025



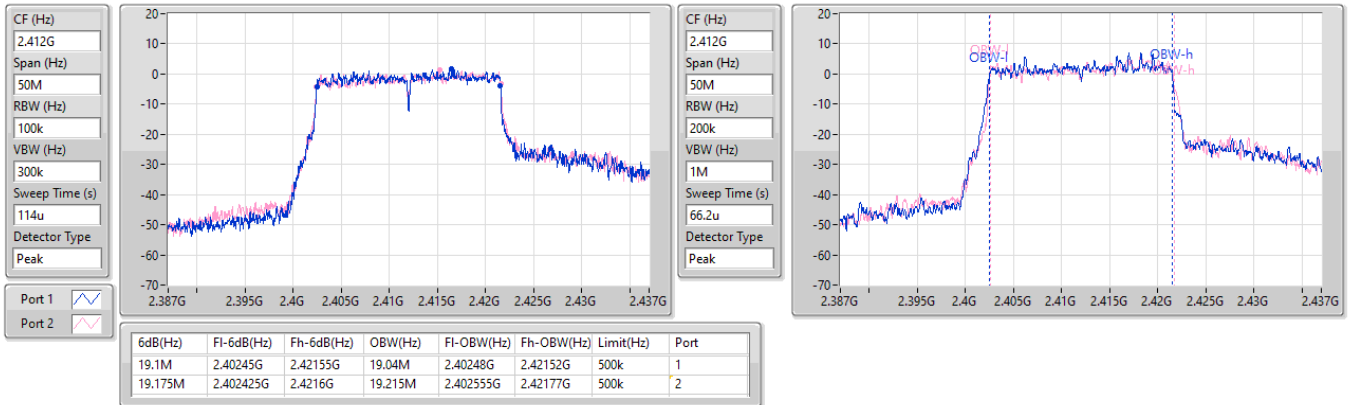


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

2412MHz

05/02/2025





**EBW_Non-Beamforming_Radio 1_
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)
2.4-2.4835GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	19.2M	19.215M	19M2D1D	19M	18.991M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



**EBW_Non-Beamforming_Radio 1_
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	-	-	-	-	-	-
2412MHz	Pass	500k	19.05M	19.215M	19.075M	19.09M
2437MHz	Pass	500k	19.05M	19.015M	19.2M	19.165M
2462MHz	Pass	500k	19.175M	19.015M	19M	18.991M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

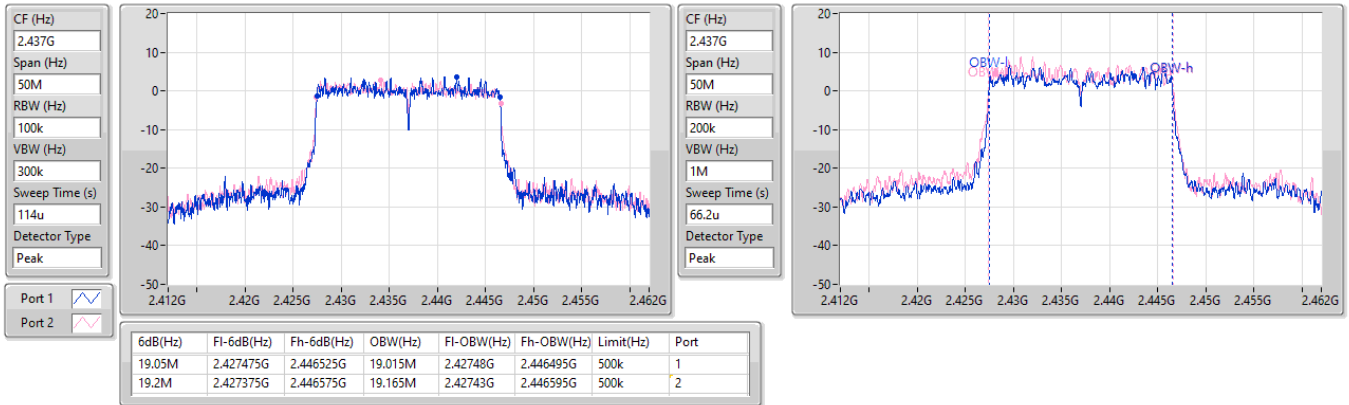


2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

2437MHz

05/02/2025



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	7.075M	10.735M	10M7G1D	6.5M	10.21M
802.11g_Nss1,(6Mbps)_1TX	16.45M	16.756M	16M8D1D	16.375M	16.712M
802.11be EHT20_Nss1,(MCS0)_1TX	19.1M	19.165M	19M2D1D	19.05M	18.941M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.075M	10.24M
2437MHz	Pass	500k	6.725M	10.735M
2462MHz	Pass	500k	6.5M	10.21M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.45M	16.756M
2437MHz	Pass	500k	16.425M	16.756M
2462MHz	Pass	500k	16.375M	16.712M
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	19.05M	19.04M
2437MHz	Pass	500k	19.1M	19.165M
2462MHz	Pass	500k	19.075M	18.941M

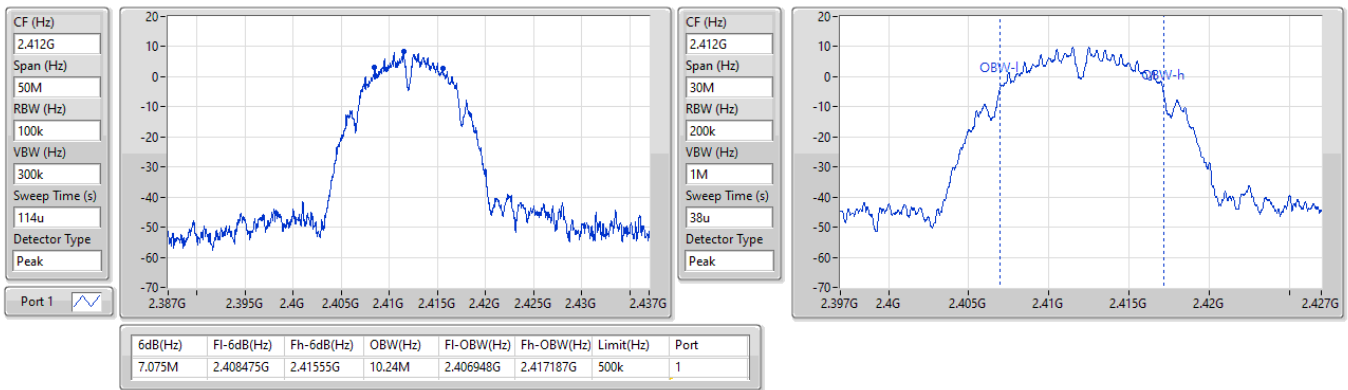
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

06/02/2025

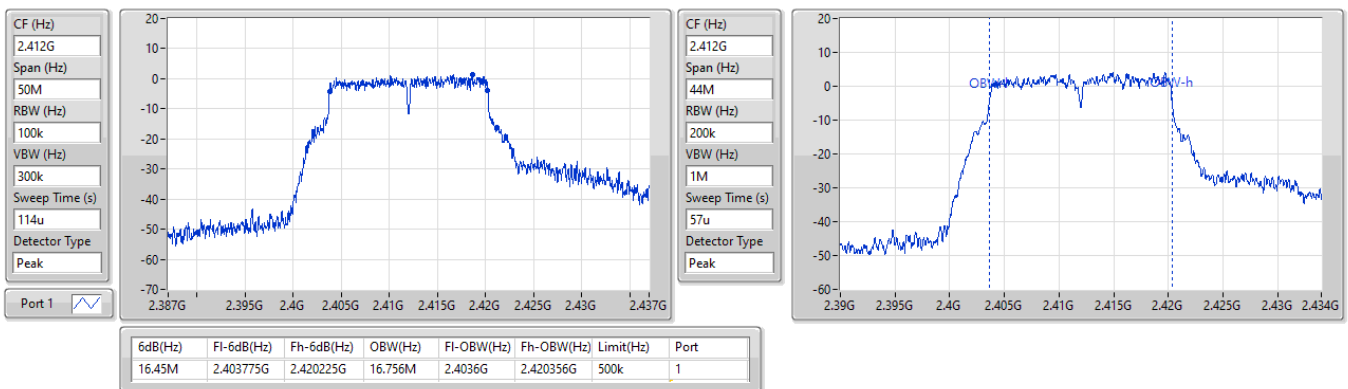


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

EBW

2412MHz

06/02/2025





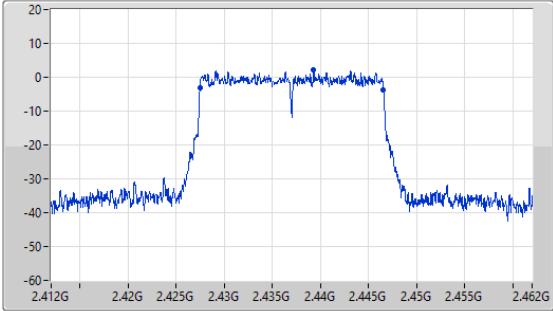
2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

EBW

2437MHz

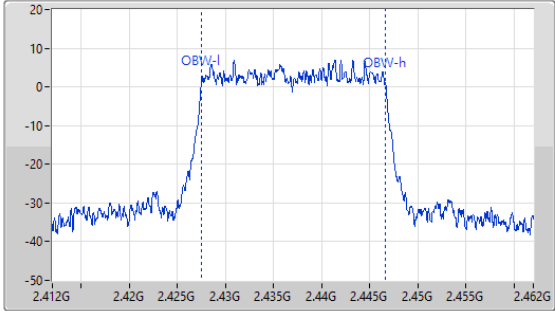
06/02/2025

CF (Hz)
2.437G
Span (Hz)
50M
RBW (Hz)
100k
VBW (Hz)
300k
Sweep Time (s)
114u
Detector Type
Peak
Port 1



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.1M	2.42745G	2.44655G	19.165M	2.42748G	2.446645G	500k	1

CF (Hz)
2.437G
Span (Hz)
50M
RBW (Hz)
200k
VBW (Hz)
1M
Sweep Time (s)
66.2u
Detector Type
Peak





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.05M	13.178M	13M2G1D	5.65M	10.15M
802.11g_Nss1,(6Mbps)_2TX	16.55M	17.217M	17M2D1D	16.35M	16.602M
802.11be EHT20_Nss1,(MCS0)_2TX	19.2M	19.14M	19M1D1D	18.9M	18.966M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; 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)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.05M	10.255M	7.025M	10.3M
2437MHz	Pass	500k	7.1M	10.36M	8.05M	13.178M
2462MHz	Pass	500k	5.65M	10.15M	5.875M	10.27M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.4M	16.91M	16.425M	17.217M
2437MHz	Pass	500k	16.55M	16.602M	16.425M	16.712M
2462MHz	Pass	500k	16.425M	16.69M	16.35M	16.954M
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	19.075M	18.966M	19.075M	19.14M
2437MHz	Pass	500k	19.125M	18.991M	19.2M	18.991M
2462MHz	Pass	500k	19.075M	19.015M	18.9M	18.966M

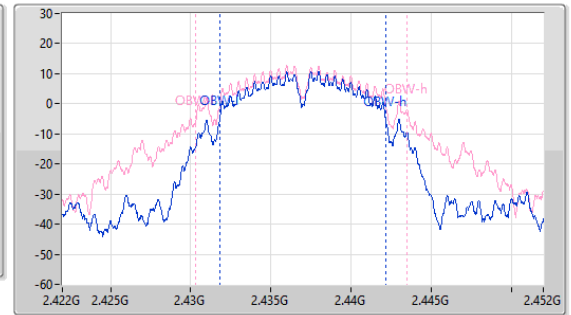
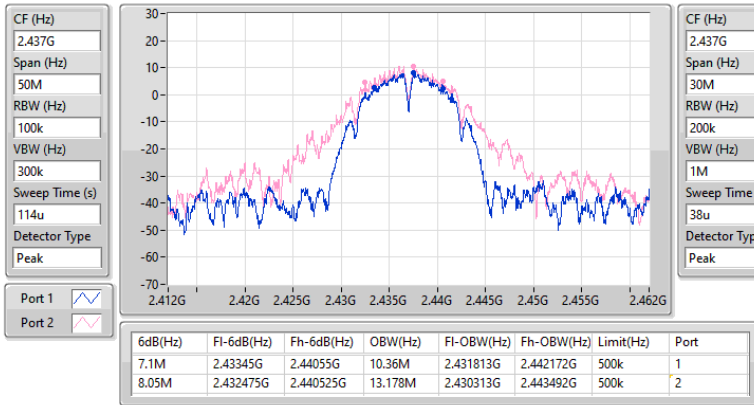
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

15/01/2025

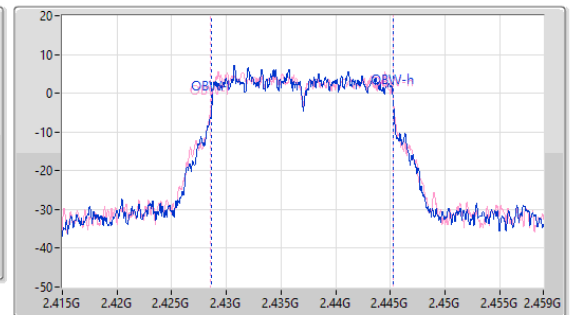
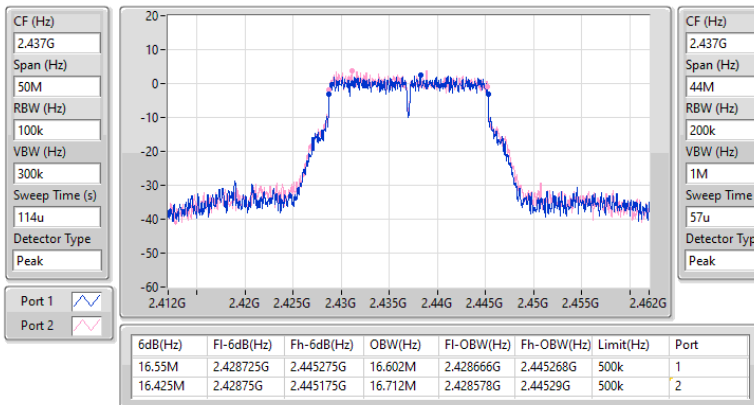


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

2437MHz

06/02/2025

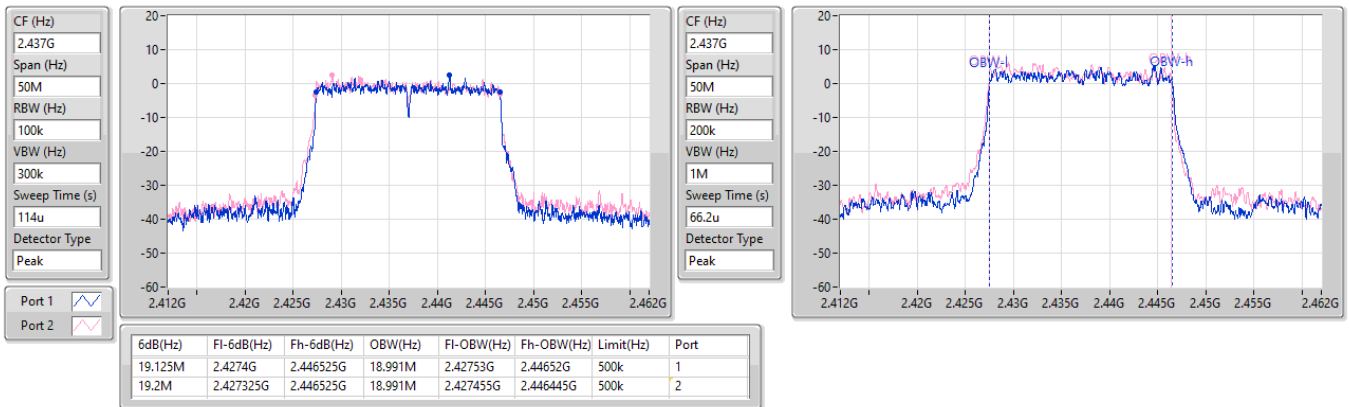


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

EBW

2437MHz

06/02/2025





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	19.125M	19.09M	19M1D1D	17.1M	18.866M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; 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	-	-	-	-	-	-
2412MHz	Pass	500k	19.1M	19.09M	17.1M	18.991M
2437MHz	Pass	500k	19.125M	19.015M	19M	18.866M
2462MHz	Pass	500k	19.075M	18.941M	19.025M	19.09M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth



2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

EBW

2437MHz

06/02/2025

CF (Hz)
2.437G

Span (Hz)
50M

RBW (Hz)
100k

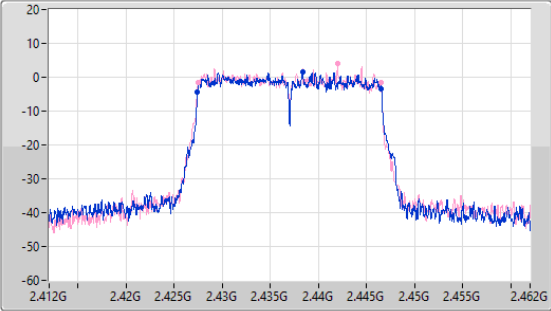
VBW (Hz)
300k

Sweep Time (s)
114u

Detector Type
Peak

Port 1

Port 2



CF (Hz)
2.437G

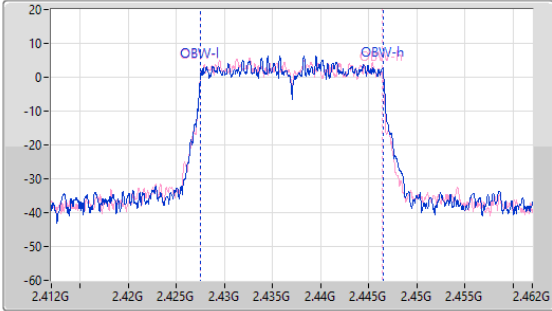
Span (Hz)
50M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
66.2u

Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.125M	2.427425G	2.44655G	19.015M	2.427505G	2.44652G	500k	1
19M	2.4275G	2.4465G	18.866M	2.42753G	2.446395G	500k	2

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
b20_Nss1,(1Mbps)_1TX	8.575M	13.118M	13M1G1D	8.05M	13.073M
g20_Nss1,(6Mbps)_1TX	16.475M	17.107M	17M1D1D	15.725M	16.624M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
b20_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	8.575M	13.073M
2437MHz	Pass	500k	8.1M	13.118M
2462MHz	Pass	500k	8.05M	13.088M
g20_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.4M	17.019M
2437MHz	Pass	500k	16.475M	17.107M
2462MHz	Pass	500k	15.725M	16.624M

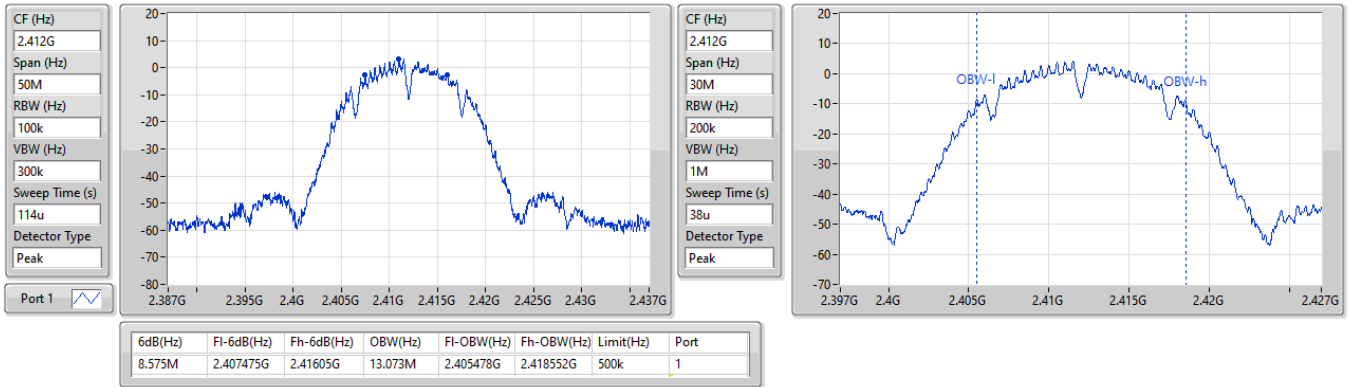
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_b20_Nss1,(1Mbps)_1TX

EBW

2412MHz

16/01/2025

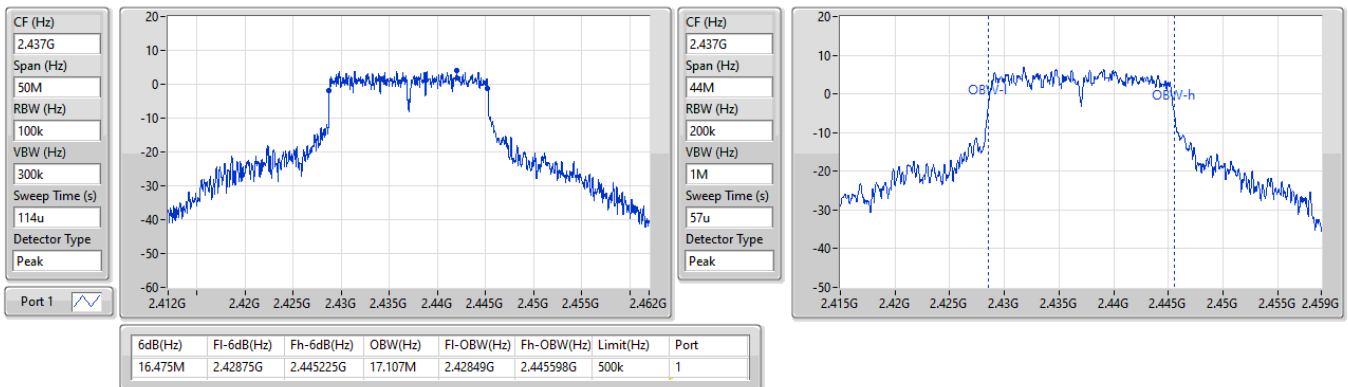


2.4-2.4835GHz_g20_Nss1,(6Mbps)_1TX

EBW

2437MHz

16/01/2025





**Average Power_Non-Beamforming_Radio 1_
Dipole Antenna_1T1S**

Appendix C.1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	19.39	0.08690
802.11g_Nss1,(6Mbps)_1TX	18.17	0.06561
802.11be EHT20_Nss1,(MCS0)_1TX	18.34	0.06823



Average Power_Non-Beamforming_Radio 1
Dipole Antenna_1T1S

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.14	19.14	19.14	30.00
2437MHz	Pass	3.14	18.85	18.85	30.00
2457MHz	Pass	3.14	19.39	19.39	30.00
2462MHz	Pass	3.14	19.05	19.05	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.14	17.45	17.45	30.00
2417MHz	Pass	3.14	17.67	17.67	30.00
2437MHz	Pass	3.14	18.17	18.17	30.00
2457MHz	Pass	3.14	17.74	17.74	30.00
2462MHz	Pass	3.14	17.77	17.77	30.00
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	3.14	17.37	17.37	30.00
2417MHz	Pass	3.14	17.59	17.59	30.00
2437MHz	Pass	3.14	18.34	18.34	30.00
2457MHz	Pass	3.14	17.68	17.68	30.00
2462MHz	Pass	3.14	17.73	17.73	30.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power_Non-Beamforming_Radio 1_
Dipole Antenna_2T1S**

Appendix C.2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	22.73	0.18750
802.11g_Nss1,(6Mbps)_2TX	22.18	0.16520
802.11be EHT20_Nss1,(MCS0)_2TX	21.59	0.14421



**Average Power_Non-Beamforming_Radio 1_
Dipole Antenna_2T1S**

Appendix C.2

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.14	17.16	18.97	21.17	30.00
2417MHz	Pass	3.14	18.99	20.34	22.73	30.00
2437MHz	Pass	3.14	18.45	20.36	22.52	30.00
2457MHz	Pass	3.14	17.98	18.43	21.22	30.00
2462MHz	Pass	3.14	18.88	19.17	22.04	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.14	17.45	16.95	20.22	30.00
2417MHz	Pass	3.14	17.97	17.97	20.98	30.00
2437MHz	Pass	3.14	18.51	19.74	22.18	30.00
2457MHz	Pass	3.14	17.14	16.65	19.91	30.00
2462MHz	Pass	3.14	17.45	16.71	20.11	30.00
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.14	17.18	16.53	19.88	30.00
2417MHz	Pass	3.14	17.18	16.95	20.08	30.00
2437MHz	Pass	3.14	18.13	18.99	21.59	30.00
2457MHz	Pass	3.14	17.23	16.69	19.98	30.00
2462MHz	Pass	3.14	16.89	16.38	19.65	30.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power_Non-Beamforming_Radio 1_
Dipole Antenna_2T2S**

Appendix C.3

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	21.44	0.13932



**Average Power_Non-Beamforming_Radio 1_
Dipole Antenna_2T2S**

Appendix C.3

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.14	16.96	16.69	19.84	30.00
2417MHz	Pass	3.14	17.25	17.12	20.20	30.00
2437MHz	Pass	3.14	17.98	18.84	21.44	30.00
2457MHz	Pass	3.14	17.65	16.59	20.16	30.00
2462MHz	Pass	3.14	16.89	16.40	19.66	30.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_1T1S**

Appendix C.4

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	19.14	0.08204
802.11g_Nss1,(6Mbps)_1TX	18.17	0.06561
802.11be EHT20_Nss1,(MCS0)_1TX	18.15	0.06531



**Average Power_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_1T1S**

Appendix C.4

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	8.00	19.14	19.14	28.00
2437MHz	Pass	8.00	18.85	18.85	28.00
2457MHz	Pass	8.00	18.26	18.26	28.00
2462MHz	Pass	8.00	17.91	17.91	28.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	8.00	17.03	17.03	28.00
2417MHz	Pass	8.00	15.63	15.63	28.00
2437MHz	Pass	8.00	18.17	18.17	28.00
2457MHz	Pass	8.00	16.90	16.90	28.00
2462MHz	Pass	8.00	16.70	16.70	28.00
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	8.00	16.47	16.47	28.00
2417MHz	Pass	8.00	16.00	16.00	28.00
2437MHz	Pass	8.00	18.15	18.15	28.00
2457MHz	Pass	8.00	16.97	16.97	28.00
2462MHz	Pass	8.00	16.67	16.67	28.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T1S**

Appendix C.5

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	22.52	0.17865
802.11g_Nss1,(6Mbps)_2TX	21.12	0.12942
802.11be EHT20_Nss1,(MCS0)_2TX	20.54	0.11324



**Average Power_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T1S**

Appendix C.5

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	15.18	16.85	19.11	28.00
2417MHz	Pass	8.00	16.15	17.96	20.16	28.00
2437MHz	Pass	8.00	18.45	20.36	22.52	28.00
2457MHz	Pass	8.00	16.34	17.53	19.99	28.00
2462MHz	Pass	8.00	16.77	17.78	20.31	28.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	17.45	16.95	20.22	28.00
2417MHz	Pass	8.00	17.07	16.90	20.00	28.00
2437MHz	Pass	8.00	17.77	18.43	21.12	28.00
2457MHz	Pass	8.00	17.31	16.54	19.95	28.00
2462MHz	Pass	8.00	16.98	16.40	19.71	28.00
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	16.39	16.13	19.27	28.00
2417MHz	Pass	8.00	15.84	15.76	18.81	28.00
2437MHz	Pass	8.00	17.33	17.72	20.54	28.00
2457MHz	Pass	8.00	16.51	15.73	19.15	28.00
2462MHz	Pass	8.00	16.21	15.58	18.92	28.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T2S**

Appendix C.6

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	20.89	0.12274



**Average Power_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T2S**

Appendix C.6

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	16.57	16.31	19.45	28.00
2417MHz	Pass	8.00	16.12	15.75	18.95	28.00
2437MHz	Pass	8.00	17.59	18.16	20.89	28.00
2457MHz	Pass	8.00	16.60	15.87	19.26	28.00
2462MHz	Pass	8.00	16.32	15.69	19.03	28.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



Average Power_Non-Beamforming_Radio 1_ MIMO-directional Antenna_1T1S

Appendix C.7

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	18.85	0.07674
802.11g_Nss1,(6Mbps)_1TX	16.97	0.04977
802.11be EHT20_Nss1,(MCS0)_1TX	17.00	0.05012



**Average Power_Non-Beamforming_Radio 1_
MIMO-directional Antenna_1T1S**

Appendix C.7

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	11.10	17.24	17.24	24.90
2417MHz	Pass	11.10	18.22	18.22	24.90
2437MHz	Pass	11.10	18.85	18.85	24.90
2457MHz	Pass	11.10	17.62	17.62	24.90
2462MHz	Pass	11.10	17.39	17.39	24.90
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	11.10	16.02	16.02	24.90
2417MHz	Pass	11.10	12.22	12.22	24.90
2437MHz	Pass	11.10	16.97	16.97	24.90
2457MHz	Pass	11.10	16.13	16.13	24.90
2462MHz	Pass	11.10	15.41	15.41	24.90
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	11.10	16.33	16.33	24.90
2417MHz	Pass	11.10	13.16	13.16	24.90
2437MHz	Pass	11.10	17.00	17.00	24.90
2457MHz	Pass	11.10	16.21	16.21	24.90
2462MHz	Pass	11.10	15.38	15.38	24.90

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power_Non-Beamforming_Radio 1_
MIMO-directional Antenna_2T1S**

Appendix C.8

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	22.52	0.17865
802.11g_Nss1,(6Mbps)_2TX	20.04	0.10093
802.11be EHT20_Nss1,(MCS0)_2TX	19.66	0.09247



Average Power_Non-Beamforming_Radio 1_ MIMO-directional Antenna_2T1S

Appendix C.8

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.10	14.93	16.43	18.75	24.90
2417MHz	Pass	11.10	16.07	17.81	20.04	24.90
2437MHz	Pass	11.10	18.45	20.36	22.52	24.90
2457MHz	Pass	11.10	16.34	17.53	19.99	24.90
2462MHz	Pass	11.10	16.18	17.16	19.71	24.90
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.10	16.22	15.78	19.02	24.90
2417MHz	Pass	11.10	13.53	13.46	16.51	24.90
2437MHz	Pass	11.10	16.78	17.27	20.04	24.90
2457MHz	Pass	11.10	16.27	15.86	19.08	24.90
2462MHz	Pass	11.10	16.18	15.33	18.79	24.90
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.10	15.37	15.20	18.30	24.90
2417MHz	Pass	11.10	13.20	13.26	16.24	24.90
2437MHz	Pass	11.10	16.27	17.00	19.66	24.90
2457MHz	Pass	11.10	16.51	15.73	19.15	24.90
2462MHz	Pass	11.10	15.17	14.88	18.04	24.90

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power_Non-Beamforming_Radio 1_
MIMO-directional Antenna_2T2S**

Appendix C.9

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	19.38	0.08670



Average Power_Non-Beamforming_Radio 1_ MIMO-directional Antenna_2T2S

Appendix C.9

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.10	15.05	14.67	17.87	24.90
2417MHz	Pass	11.10	12.74	12.51	15.64	24.90
2437MHz	Pass	11.10	16.14	16.58	19.38	24.90
2457MHz	Pass	11.10	16.03	15.45	18.76	24.90
2462MHz	Pass	11.10	15.03	14.49	17.78	24.90

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20-BF_Nss1,(MCS0)_2TX	21.59	0.14421

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.15	17.18	16.53	19.88	29.85
2417MHz	Pass	6.15	17.18	16.95	20.08	29.85
2437MHz	Pass	6.15	18.13	18.99	21.59	29.85
2457MHz	Pass	6.15	17.23	16.69	19.98	29.85
2462MHz	Pass	6.15	16.89	16.38	19.65	29.85

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



**Average Power Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna**

Appendix C.11

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20-BF_Nss1,(MCS0)_2TX	20.54	0.11324



Average Power Beamforming_Radio 1_ Dual-Polarized MIMO Panel Antenna

Appendix C.11

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)	Port 1 (dBm)	Port 2 (dBm)
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.01	19.27	24.99	16.39	16.13
2417MHz	Pass	11.01	18.81	24.99	15.84	15.76
2437MHz	Pass	11.01	20.54	24.99	17.33	17.72
2457MHz	Pass	11.01	19.15	24.99	16.51	15.73
2462MHz	Pass	11.01	18.92	24.99	16.21	15.58

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



Average Power_Beamforming_Radio 1_ MIMO-directional Antenna

Appendix C.12

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20-BF_Nss1,(MCS0)_2TX	19.66	0.09247



Average Power_Beamforming_Radio 1_ MIMO-directional Antenna

Appendix C.12

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)	Port 1 (dBm)	Port 2 (dBm)
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.11	18.30	21.89	15.37	15.20
2417MHz	Pass	14.11	16.24	21.89	13.20	13.26
2437MHz	Pass	14.11	19.66	21.89	16.27	17.00
2457MHz	Pass	14.11	19.15	21.89	16.51	15.73
2462MHz	Pass	14.11	18.04	21.89	15.17	14.88

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
b20_Nss1,(1Mbps)_1TX	14.08	0.02559
g20_Nss1,(6Mbps)_1TX	18.70	0.07413

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
b20_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.50	12.41	12.41	30.00
2417MHz	Pass	4.50	14.08	14.08	30.00
2437MHz	Pass	4.50	14.05	14.05	30.00
2462MHz	Pass	4.50	13.77	13.77	30.00
g20_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.50	13.63	13.63	30.00
2417MHz	Pass	4.50	15.10	15.10	30.00
2437MHz	Pass	4.50	18.70	18.70	30.00
2457MHz	Pass	4.50	16.42	16.42	30.00
2462MHz	Pass	4.50	13.33	13.33	30.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-3.78
802.11g_Nss1,(6Mbps)_1TX	-7.08
802.11be EHT20_Nss1,(MCS0)_1TX	-8.61

RBW = 3kHz;

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.14	-4.68	-4.68	8.00
2437MHz	Pass	3.14	-4.62	-4.62	8.00
2462MHz	Pass	3.14	-3.78	-3.78	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.14	-7.56	-7.56	8.00
2437MHz	Pass	3.14	-7.20	-7.20	8.00
2462MHz	Pass	3.14	-7.08	-7.08	8.00
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	3.14	-10.30	-10.30	8.00
2437MHz	Pass	3.14	-8.61	-8.61	8.00
2462MHz	Pass	3.14	-9.36	-9.36	8.00

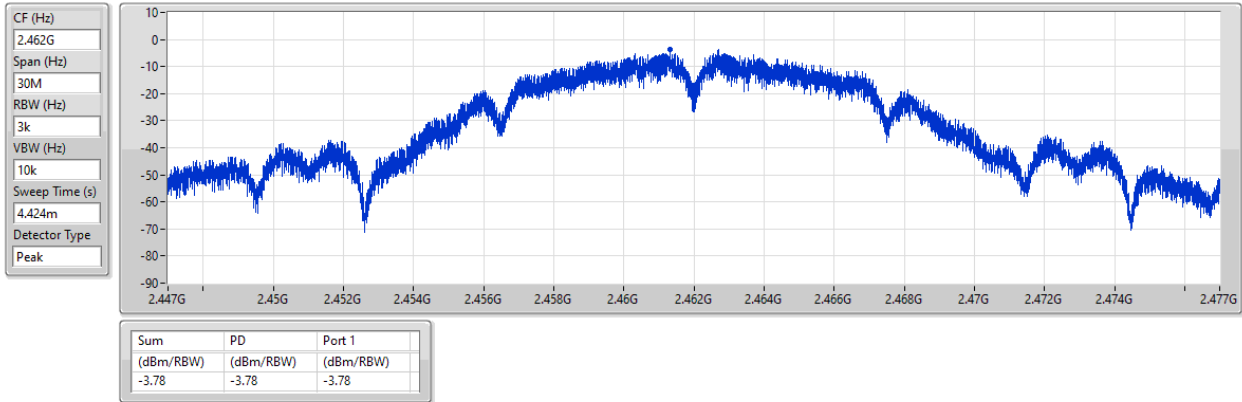
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

2462MHz

05/02/2025

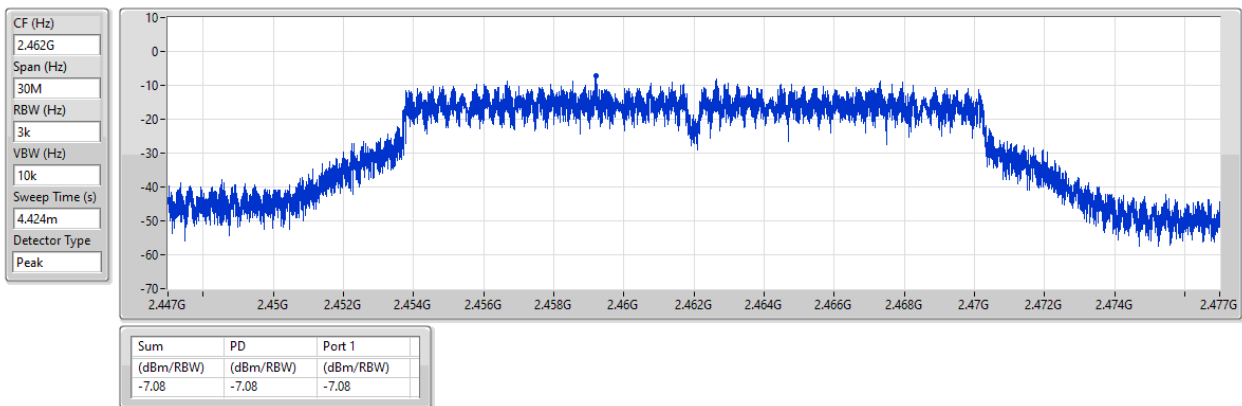


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2462MHz

05/02/2025

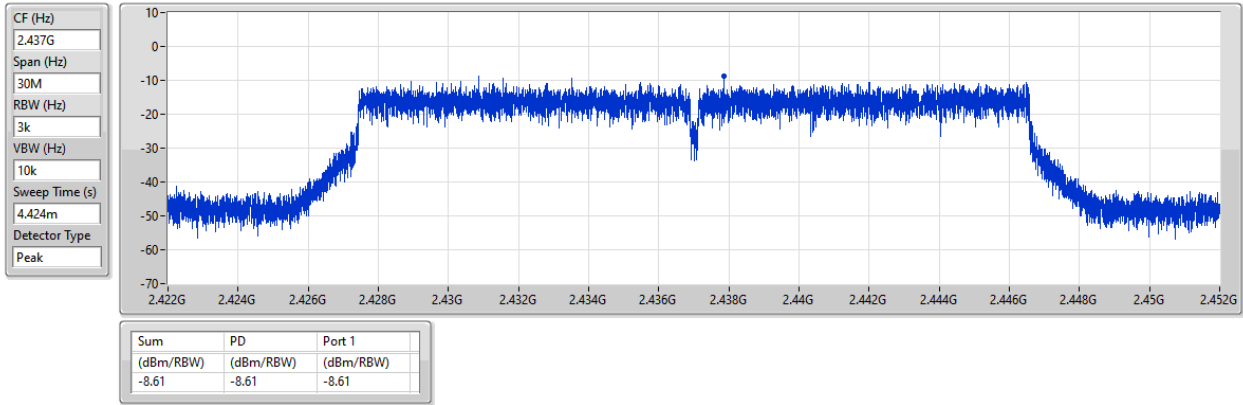


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

PSD

2437MHz

15/01/2025





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-1.33
802.11g_Nss1,(6Mbps)_2TX	-4.97
802.11be EHT20_Nss1,(MCS0)_2TX	-5.60

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.15	-5.27	-4.74	-2.39	7.85
2437MHz	Pass	6.15	-4.46	-3.03	-1.33	7.85
2462MHz	Pass	6.15	-4.48	-4.58	-2.51	7.85
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.15	-9.27	-10.02	-7.16	7.85
2437MHz	Pass	6.15	-8.17	-6.90	-4.97	7.85
2462MHz	Pass	6.15	-9.00	-8.56	-7.66	7.85
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.15	-10.36	-10.43	-8.60	7.85
2437MHz	Pass	6.15	-8.80	-6.38	-5.60	7.85
2462MHz	Pass	6.15	-8.84	-9.45	-8.36	7.85

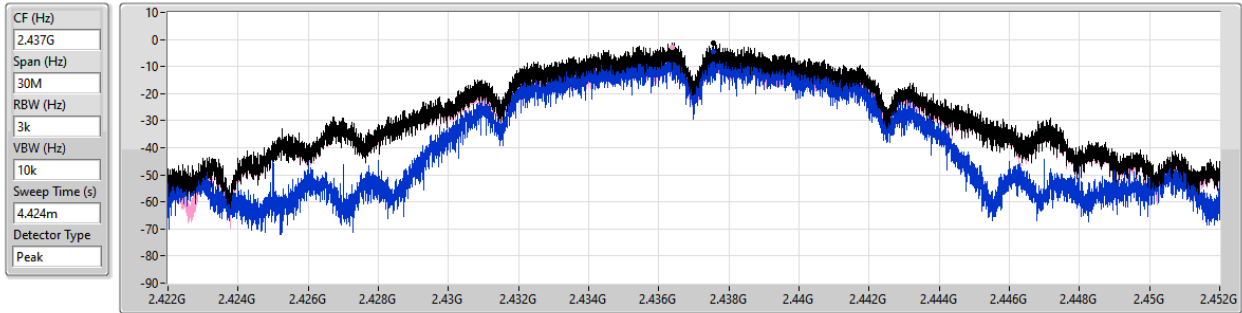
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

15/01/2025



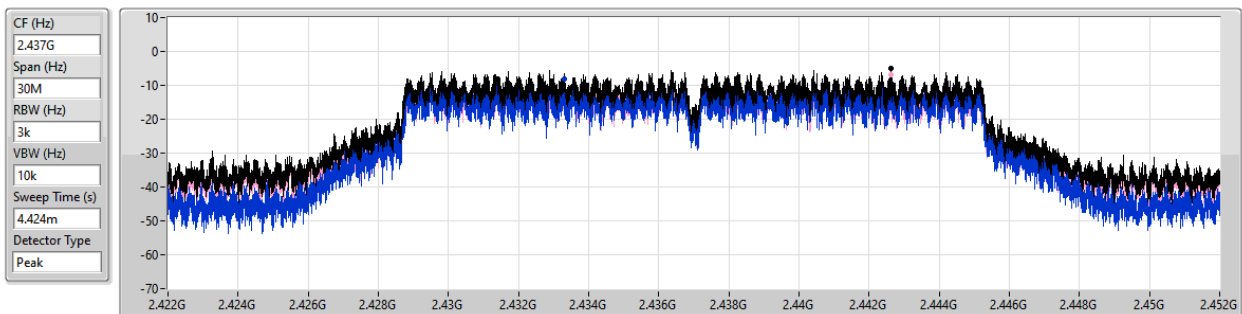
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.33	-1.33	-4.46	-3.03

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

15/01/2025



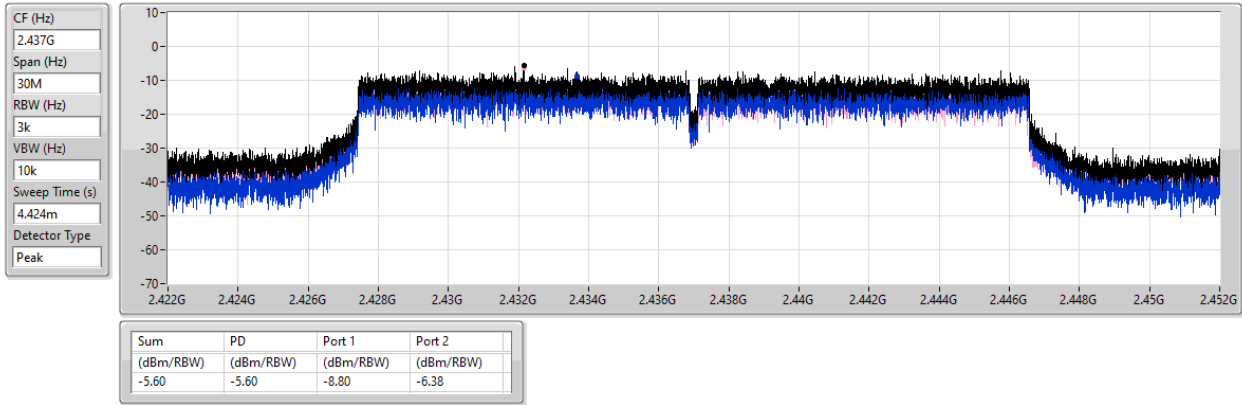
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.97	-4.97	-8.17	-6.90

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

PSD

2437MHz

05/02/2025





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11be EHT20_Nss2,(MCS0)_2TX	-6.24

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.14	-10.57	-8.48	-8.05	8.00
2437MHz	Pass	3.14	-8.57	-6.63	-6.24	8.00
2462MHz	Pass	3.14	-10.30	-10.26	-8.87	8.00

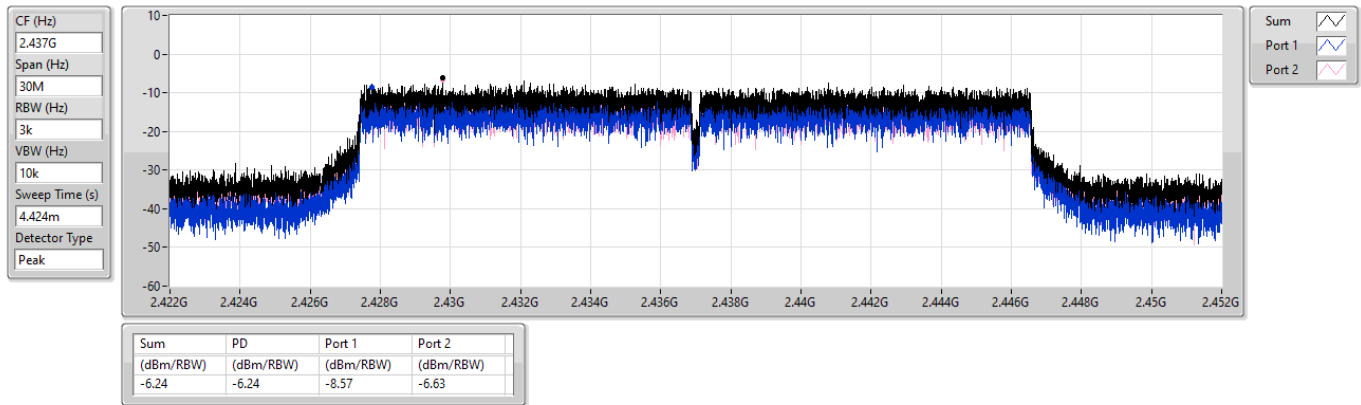
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

PSD

2437MHz

05/02/2025





**PSD_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_1T1S**

Appendix D.4

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-4.62
802.11g_Nss1,(6Mbps)_1TX	-7.20
802.11be EHT20_Nss1,(MCS0)_1TX	-8.78

RBW = 3kHz;



**PSD_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_1T1S**

Appendix D.4

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	8.00	-4.68	-4.68	6.00
2437MHz	Pass	8.00	-4.62	-4.62	6.00
2462MHz	Pass	8.00	-5.09	-5.09	6.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	8.00	-8.73	-8.73	6.00
2437MHz	Pass	8.00	-7.20	-7.20	6.00
2462MHz	Pass	8.00	-8.97	-8.97	6.00
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	8.00	-10.92	-10.92	6.00
2437MHz	Pass	8.00	-9.08	-9.08	6.00
2462MHz	Pass	8.00	-8.78	-8.78	6.00

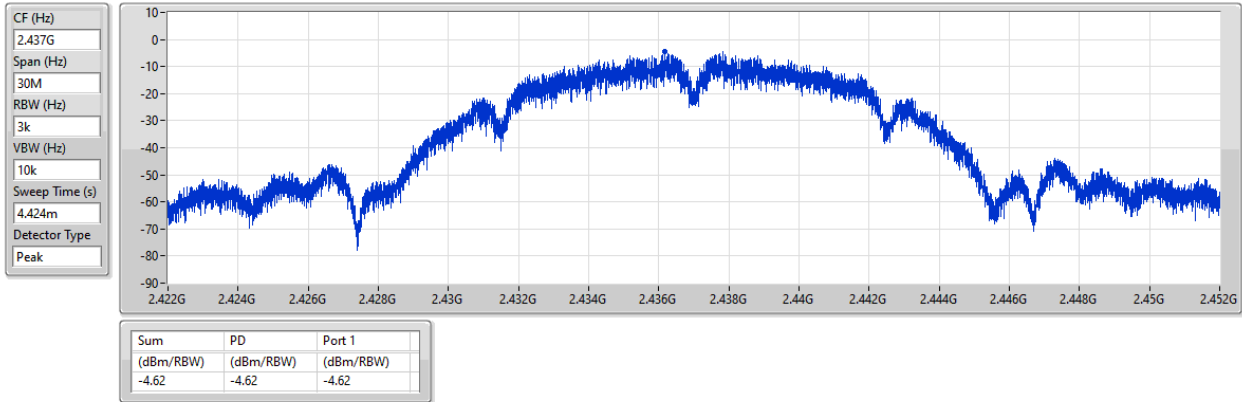
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

2437MHz

15/01/2025

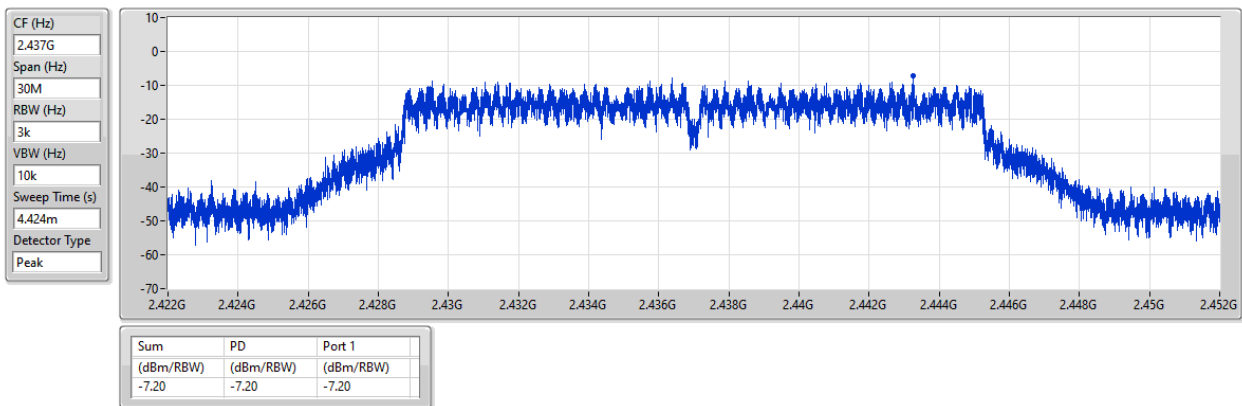


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2437MHz

15/01/2025

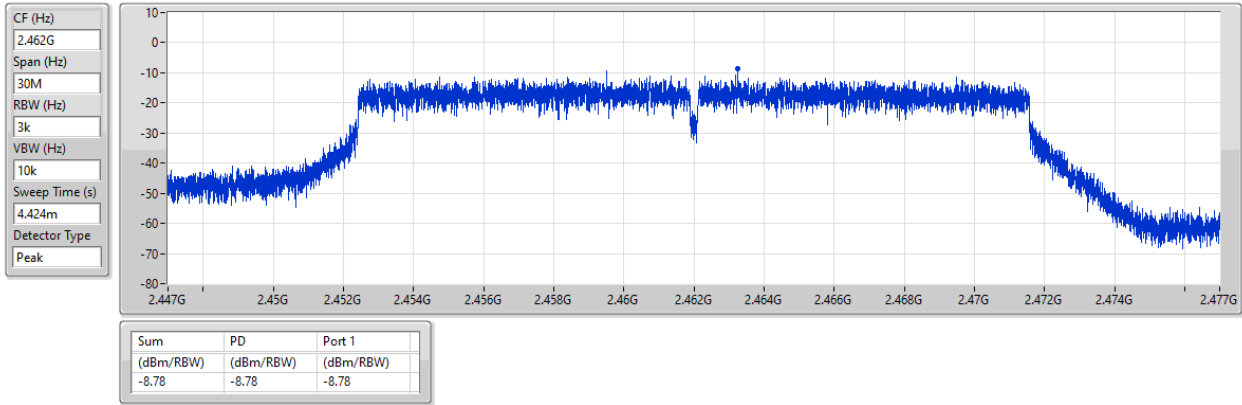


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

PSD

2462MHz

05/02/2025





**PSD_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T1S**

Appendix D.5

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-1.33
802.11g_Nss1,(6Mbps)_2TX	-4.87
802.11be EHT20_Nss1,(MCS0)_2TX	-7.97

RBW = 3kHz;



**PSD_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T1S**

Appendix D.5

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.01	-8.07	-5.98	-5.17	2.99
2437MHz	Pass	11.01	-4.46	-3.03	-1.33	2.99
2462MHz	Pass	11.01	-5.89	-5.36	-2.66	2.99
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.01	-9.27	-10.02	-7.16	2.99
2437MHz	Pass	11.01	-7.88	-6.30	-4.87	2.99
2462MHz	Pass	11.01	-9.42	-9.34	-7.36	2.99
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.01	-9.44	-10.25	-8.20	2.99
2437MHz	Pass	11.01	-10.01	-8.84	-7.97	2.99
2462MHz	Pass	11.01	-11.50	-12.07	-9.57	2.99

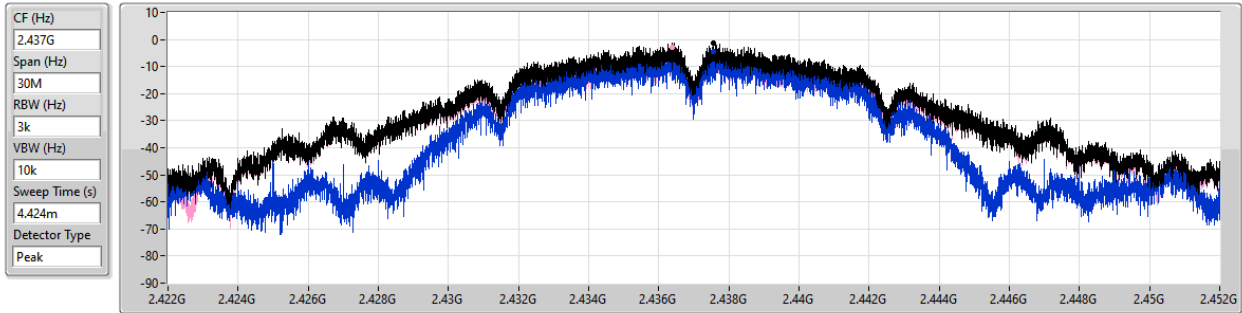
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

15/01/2025



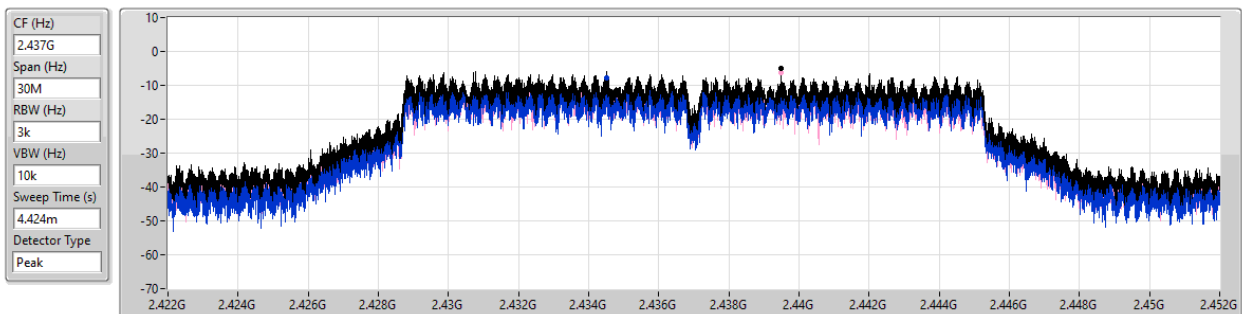
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.33	-1.33	-4.46	-3.03

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

05/02/2025



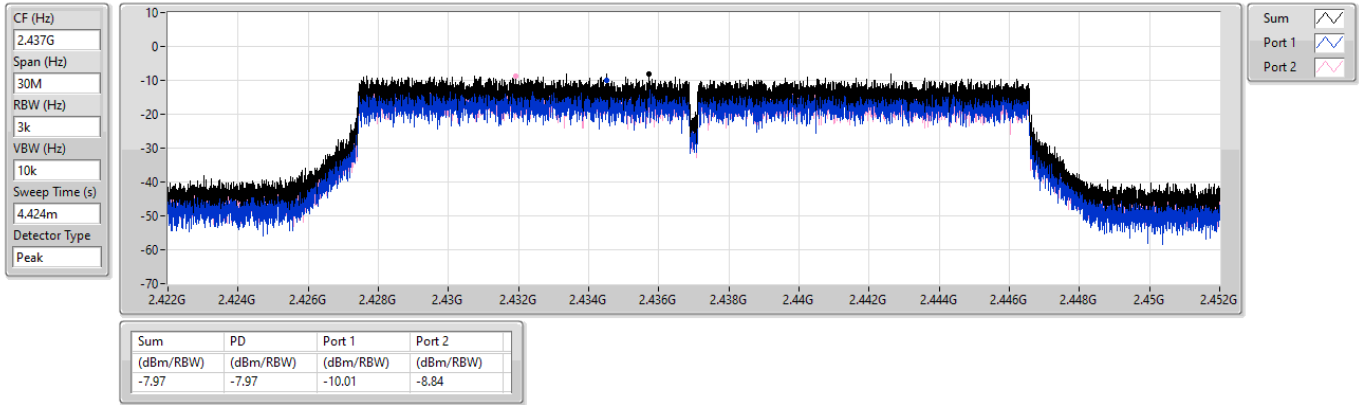
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.87	-4.87	-7.88	-6.30

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

PSD

2437MHz

05/02/2025





**PSD_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T2S**

Appendix D.6

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11be EHT20_Nss2,(MCS0)_2TX	-7.56

RBW = 3kHz;



**PSD_Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T2S**

Appendix D.6

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-10.23	-11.01	-8.52	6.00
2437MHz	Pass	8.00	-8.59	-8.98	-7.56	6.00
2462MHz	Pass	8.00	-10.20	-10.25	-7.86	6.00

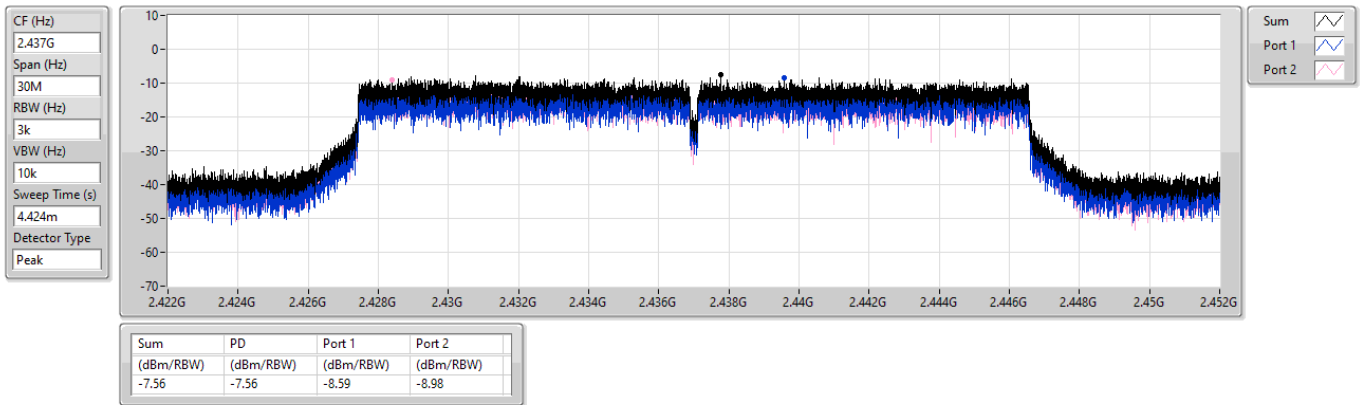
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

PSD

2437MHz

05/02/2025





**PSD_Non-Beamforming_Radio 1_
MIMO-directional Antenna_1T1S**

Appendix D.7

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-4.62
802.11g_Nss1,(6Mbps)_1TX	-8.86
802.11be EHT20_Nss1,(MCS0)_1TX	-9.36

RBW = 3kHz;



**PSD_Non-Beamforming_Radio 1_
MIMO-directional Antenna_1T1S**

Appendix D.7

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	11.10	-5.71	-5.71	2.90
2437MHz	Pass	11.10	-4.62	-4.62	2.90
2462MHz	Pass	11.10	-6.06	-6.06	2.90
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	11.10	-10.64	-10.64	2.90
2437MHz	Pass	11.10	-8.86	-8.86	2.90
2462MHz	Pass	11.10	-10.54	-10.54	2.90
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	11.10	-10.45	-10.45	2.90
2437MHz	Pass	11.10	-9.36	-9.36	2.90
2462MHz	Pass	11.10	-12.50	-12.50	2.90

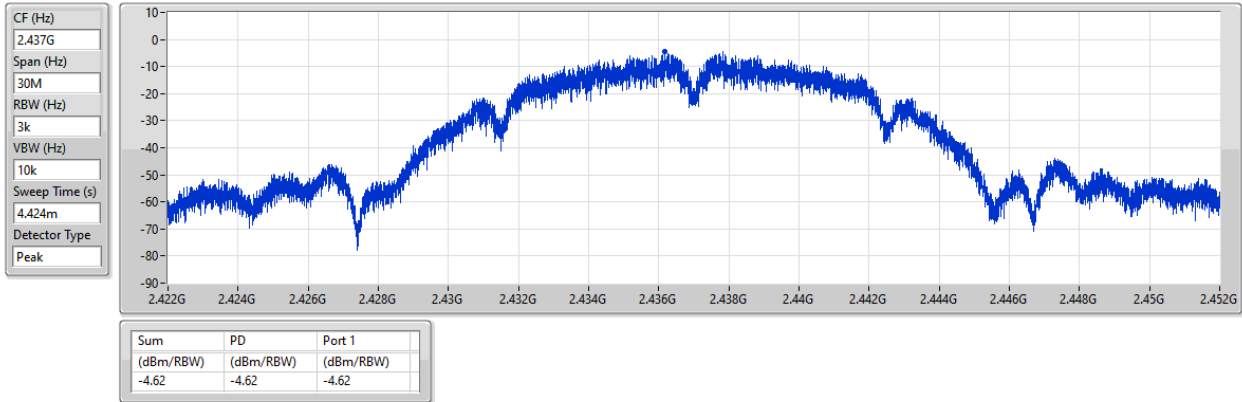
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

2437MHz

15/01/2025

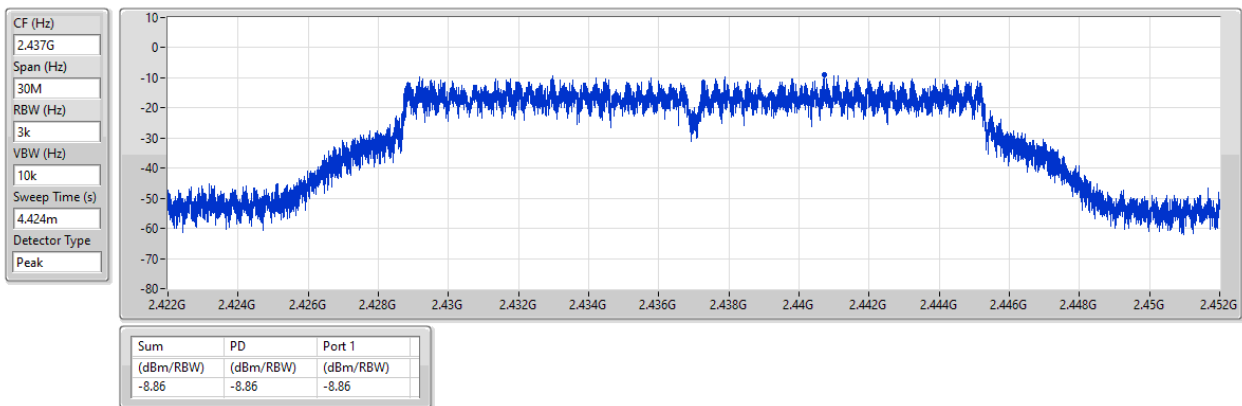


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2437MHz

06/02/2025



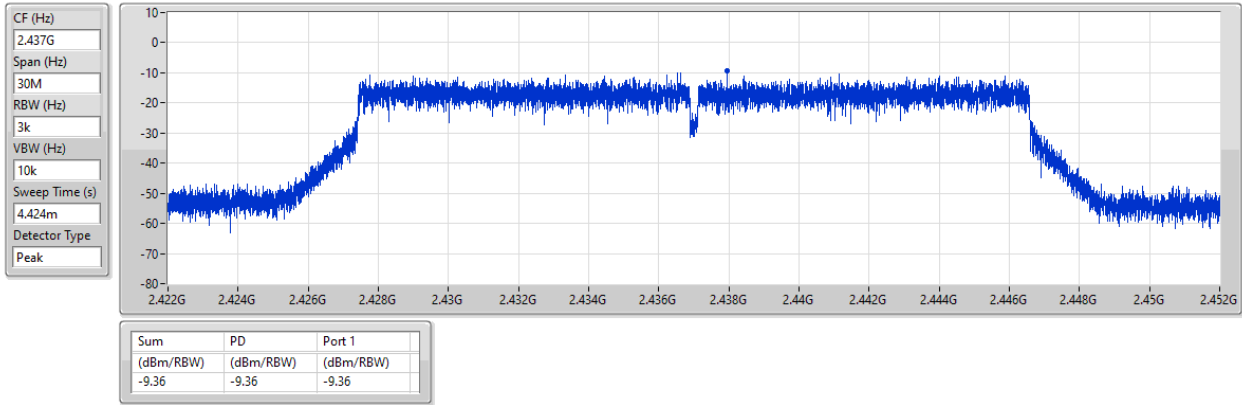


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

PSD

2437MHz

06/02/2025





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-1.33
802.11g_Nss1,(6Mbps)_2TX	-7.20
802.11be EHT20_Nss1,(MCS0)_2TX	-8.67

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.11	-8.19	-7.66	-5.98	-0.11
2437MHz	Pass	14.11	-4.46	-3.03	-1.33	-0.11
2462MHz	Pass	14.11	-6.55	-5.75	-3.16	-0.11
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.11	-9.77	-9.73	-8.42	-0.11
2437MHz	Pass	14.11	-9.05	-8.76	-7.20	-0.11
2462MHz	Pass	14.11	-10.02	-9.84	-7.81	-0.11
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.11	-11.65	-12.09	-9.94	-0.11
2437MHz	Pass	14.11	-10.89	-10.18	-8.67	-0.11
2462MHz	Pass	14.11	-11.79	-12.22	-10.63	-0.11

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

15/01/2025

CF (Hz)
2.437G

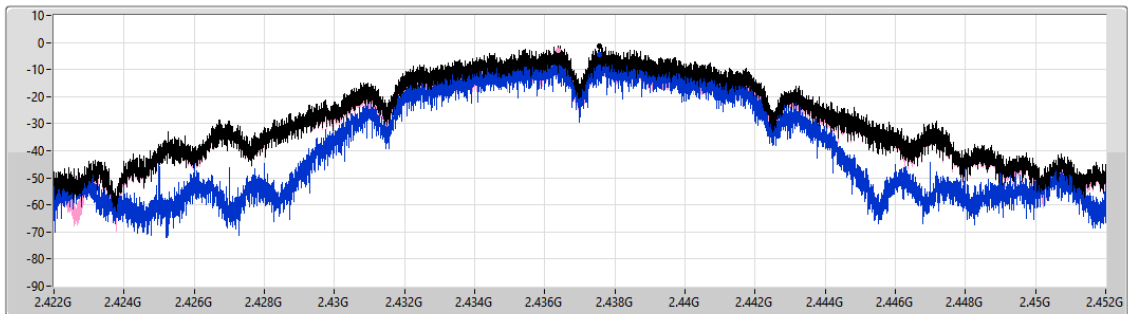
Span (Hz)
30M

RBW (Hz)
3k

VBW (Hz)
10k

Sweep Time (s)
4.424m

Detector Type
Peak



Sum 

Port 1 

Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.33	-1.33	-4.46	-3.03

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

06/02/2025

CF (Hz)
2.437G

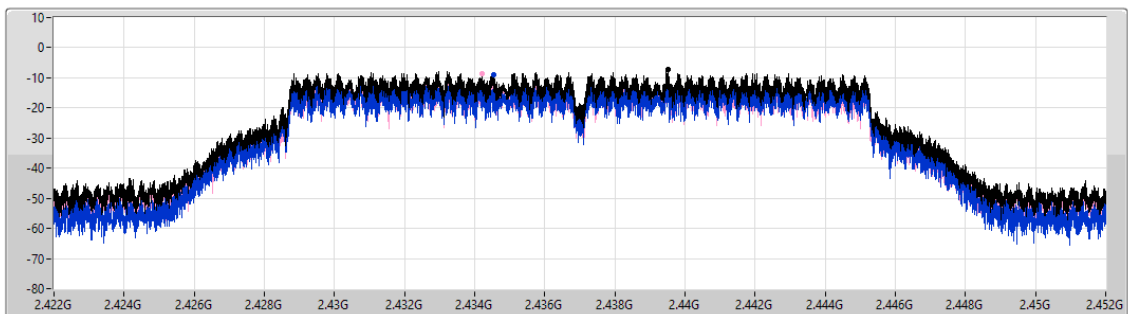
Span (Hz)
30M

RBW (Hz)
3k

VBW (Hz)
10k

Sweep Time (s)
4.424m

Detector Type
Peak

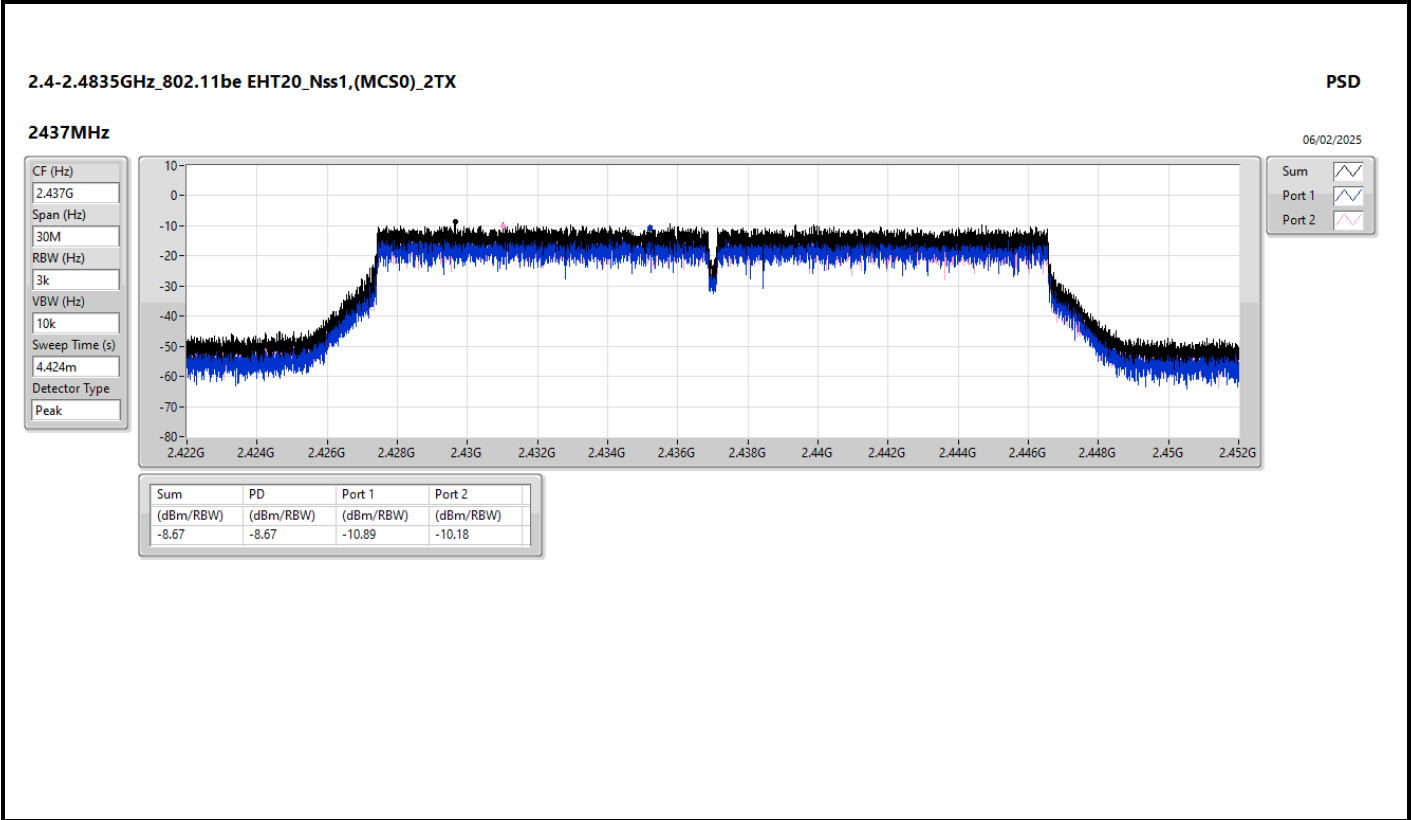


Sum 

Port 1 

Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.20	-7.20	-9.05	-8.76





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11be EHT20_Nss2,(MCS0)_2TX	-8.24

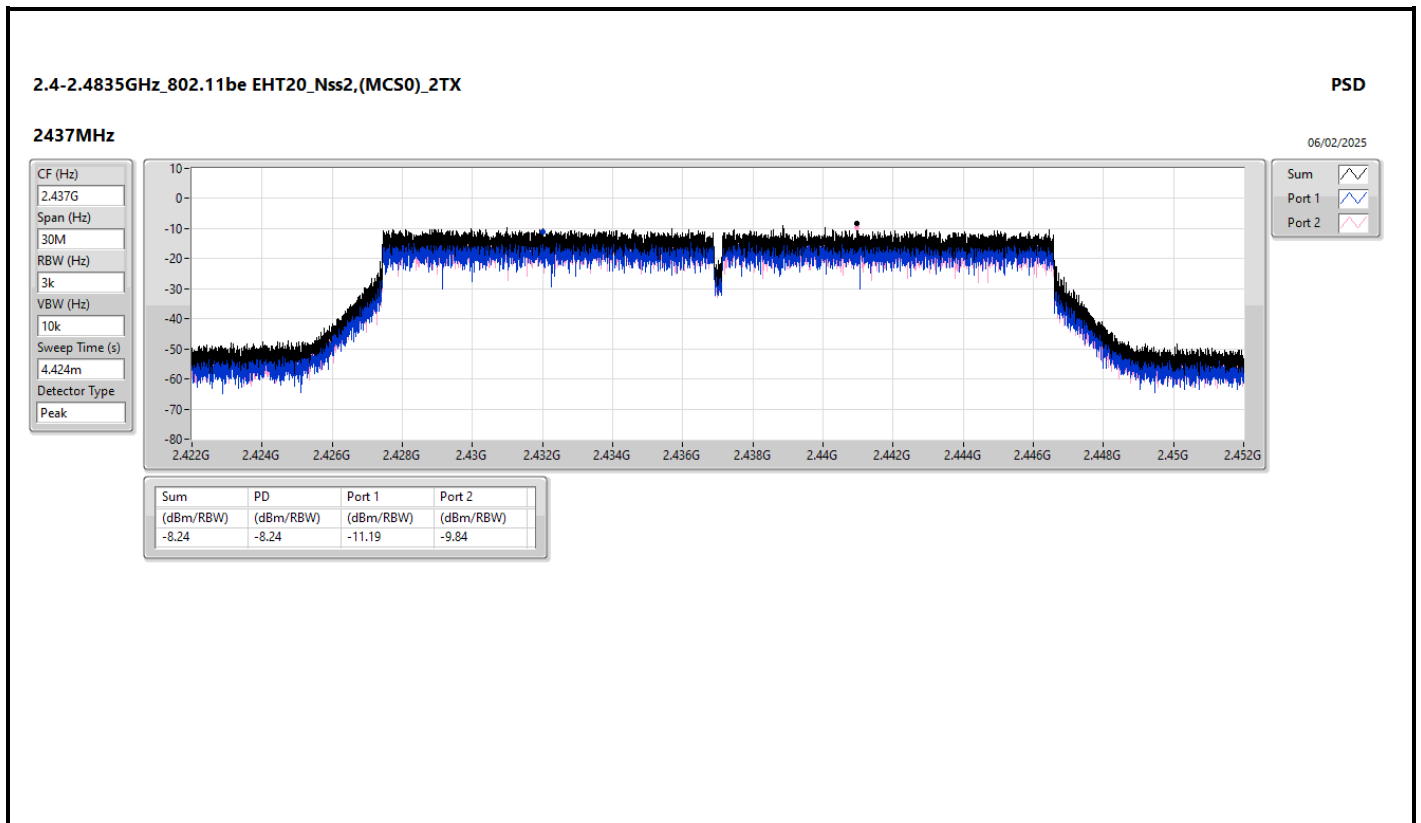
RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.10	-11.37	-12.49	-9.71	2.90
2437MHz	Pass	11.10	-11.19	-9.84	-8.24	2.90
2462MHz	Pass	11.10	-11.75	-11.14	-8.52	2.90

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
b20_Nss1,(1Mbps)_1TX	-10.73
g20_Nss1,(6Mbps)_1TX	-7.45

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
b20_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.50	-11.32	-11.32	8.00
2437MHz	Pass	4.50	-10.79	-10.79	8.00
2462MHz	Pass	4.50	-10.73	-10.73	8.00
g20_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.50	-12.96	-12.96	8.00
2437MHz	Pass	4.50	-7.45	-7.45	8.00
2462MHz	Pass	4.50	-13.29	-13.29	8.00

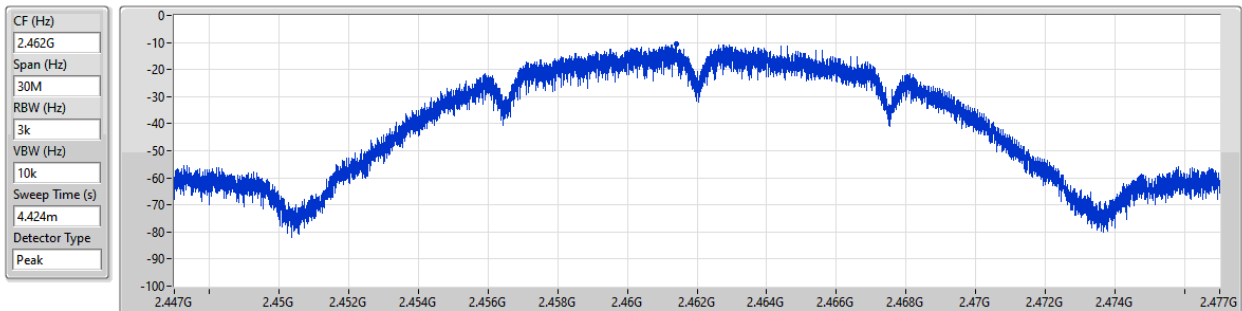
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_b20_Nss1,(1Mbps)_1TX

PSD

2462MHz

16/01/2025

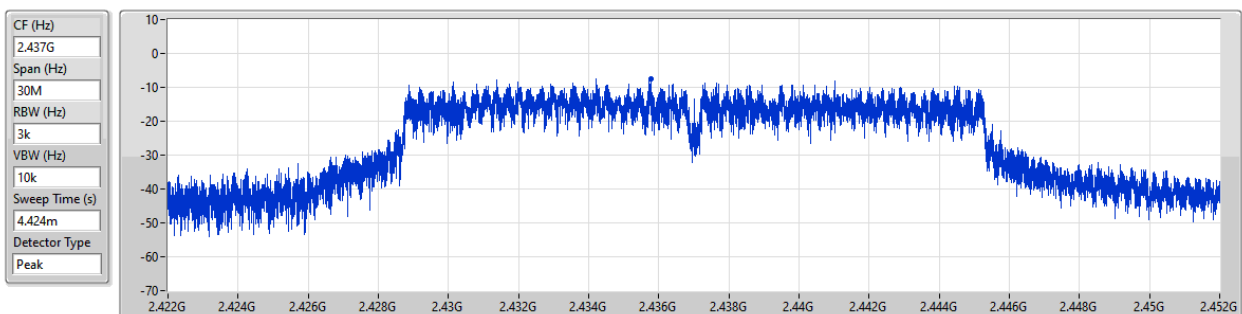


2.4-2.4835GHz_g20_Nss1,(6Mbps)_1TX

PSD

2437MHz

16/01/2025





**CSE (NdB Down)_Non-Beamforming_Radio 1_
Dipole Antenna_1T1S**

Appendix E.1

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41253G	10.89	-19.11	2.09322G	-56.77	2.4G	-25.62	2.4G	-26.27	2.51974G	-54.83	21.63695G	-42.62	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.4319G	7.92	-22.08	1.98837G	-57.47	2.39824G	-25.97	2.4G	-25.76	2.50886G	-54.47	23.35079G	-42.60	1
802.11be EHT20_Nss1,(MCS0)_1TX	Pass	2.43073G	7.58	-22.42	2.12118G	-57.36	2.39952G	-28.25	2.4G	-28.08	2.5103G	-54.52	16.25945G	-42.70	1



CSE (NdB Down) Non-Beamforming Radio 1
Dipole Antenna 1T1S

Appendix E.1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41253G	10.89	-19.11	2.09322G	-56.77	2.4G	-25.62	2.4G	-26.27	2.51974G	-54.83	21.63695G	-42.62	1
2437MHz	Pass	2.41253G	10.89	-19.11	943.36M	-57.19	2.39648G	-47.23	2.4G	-52.41	2.5111G	-54.38	17.65018G	-42.53	1
2462MHz	Pass	2.41253G	10.89	-19.11	2.11652G	-57.15	2.39952G	-52.62	2.4G	-54.19	2.50854G	-54.67	16.48984G	-43.36	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4319G	7.92	-22.08	1.98837G	-57.47	2.39824G	-25.97	2.4G	-25.76	2.50886G	-54.47	23.35079G	-42.60	1
2437MHz	Pass	2.4319G	7.92	-22.08	869.97M	-56.93	2.39832G	-39.64	2.4G	-40.99	2.50422G	-55.10	23.28898G	-42.34	1
2462MHz	Pass	2.4319G	7.92	-22.08	2.30408G	-56.95	2.39904G	-52.92	2.4G	-51.79	2.51822G	-54.64	24.5589G	-42.65	1
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	7.58	-22.42	2.12118G	-57.36	2.39952G	-28.25	2.4G	-28.08	2.5103G	-54.52	16.25945G	-42.70	1
2437MHz	Pass	2.43073G	7.58	-22.42	2.13283G	-57.06	2.39976G	-37.46	2.4G	-40.16	2.50694G	-54.66	16.31564G	-42.46	1
2462MHz	Pass	2.43073G	7.58	-22.42	2.07574G	-56.40	2.3988G	-51.65	2.4G	-52.72	2.50246G	-54.46	16.29598G	-43.17	1

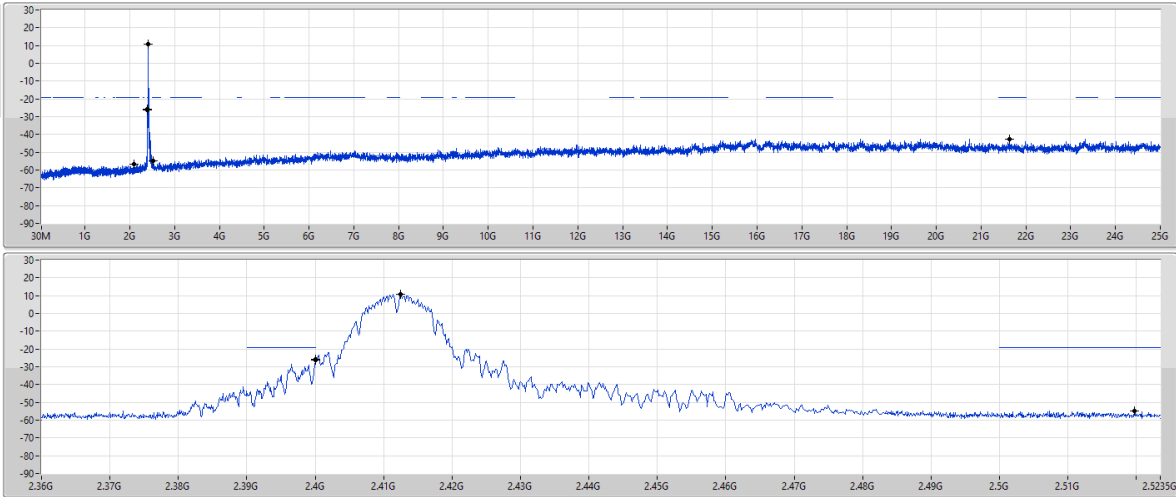
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

CSEndB

2412MHz

05/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak



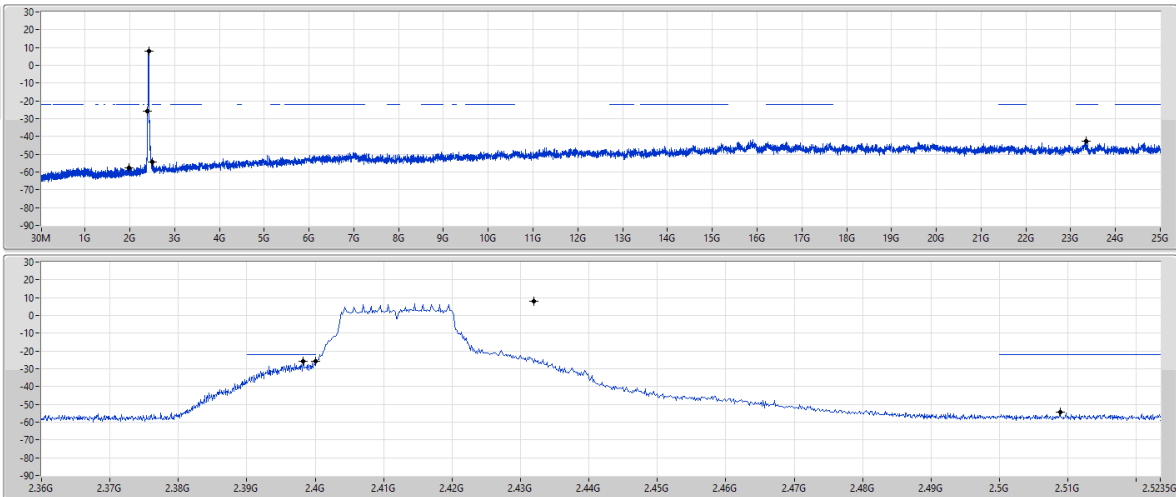
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

2412MHz

05/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

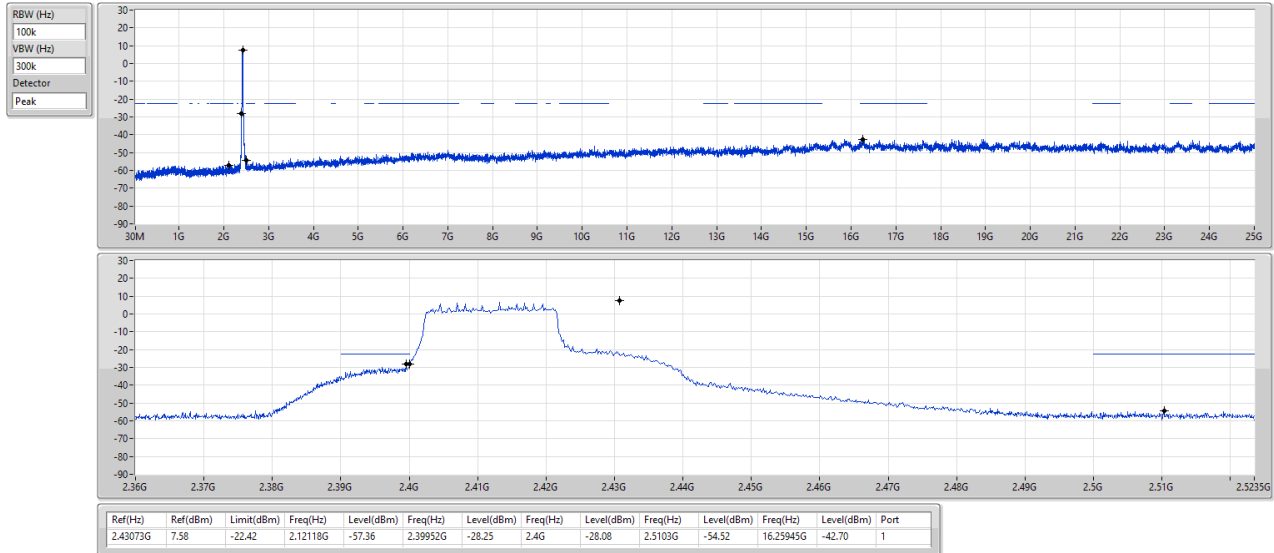


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

CSEndB

2412MHz

05/02/2025





**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dipole Antenna_2T1S**

Appendix E.2

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43641G	12.40	-17.60	931.71M	-57.40	2.4G	-26.75	2.4G	-26.94	2.51614G	-54.51	17.22875G	-42.05	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43073G	9.33	-20.67	1.97788G	-54.73	2.4G	-37.54	2.4G	-33.40	2.51838G	-53.69	15.02886G	-42.83	1
802.11be EHT20_Nss1,(MCS0)_2TX	Pass	2.43073G	9.15	-20.85	1.99186G	-56.95	2.4G	-29.94	2.4G	-31.68	2.51438G	-54.36	16.2454G	-42.41	1



**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dipole Antenna_2T1S**

Appendix E.2

Result

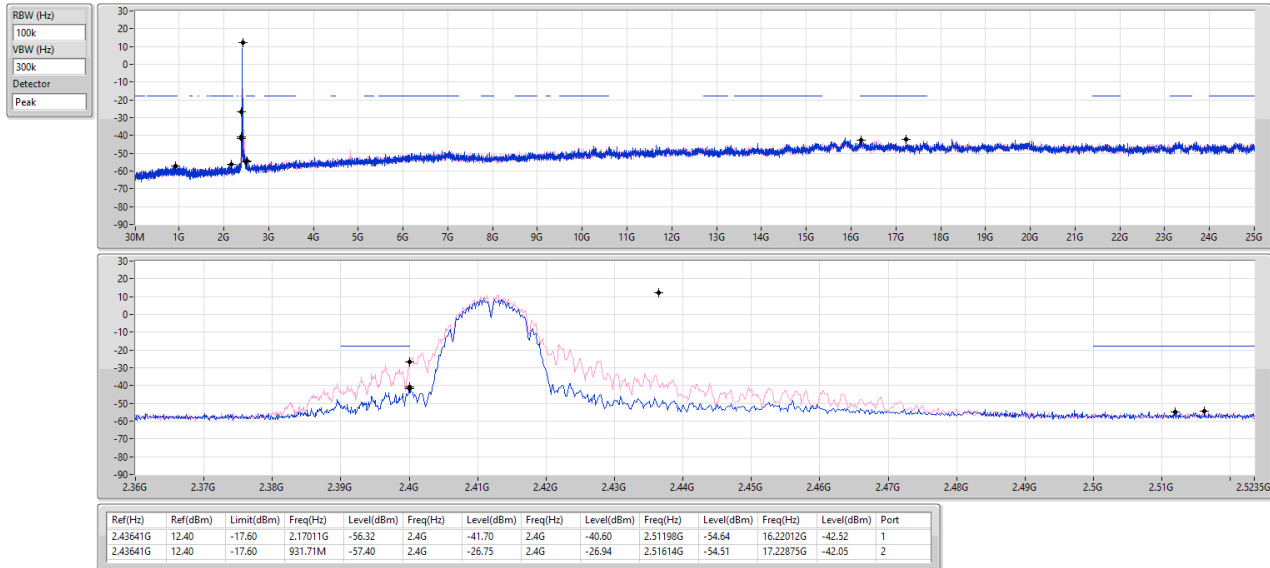
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43641G	12.40	-17.60	2.17011G	-56.32	2.4G	-41.70	2.4G	-40.60	2.51198G	-54.64	16.22012G	-42.52	1
2412MHz	Pass	2.43641G	12.40	-17.60	931.71M	-57.40	2.4G	-26.75	2.4G	-26.94	2.51614G	-54.51	17.22875G	-42.05	2
2437MHz	Pass	2.43641G	12.40	-17.60	2.08506G	-56.86	2.39952G	-41.06	2.4G	-46.26	2.50502G	-54.67	24.92695G	-42.56	1
2437MHz	Pass	2.43641G	12.40	-17.60	2.30991G	-56.45	2.39952G	-36.77	2.4G	-45.36	2.5163G	-54.77	15.24801G	-42.63	2
2462MHz	Pass	2.43641G	12.40	-17.60	2.07924G	-56.80	2.39952G	-50.84	2.4G	-53.04	2.5103G	-54.76	16.20326G	-43.24	1
2462MHz	Pass	2.43641G	12.40	-17.60	2.11535G	-56.47	2.39952G	-52.06	2.4G	-55.54	2.51054G	-53.89	17.64737G	-42.91	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	9.33	-20.67	1.97788G	-54.73	2.4G	-37.54	2.4G	-33.40	2.51838G	-53.69	15.02886G	-42.83	1
2412MHz	Pass	2.43073G	9.33	-20.67	2.30641G	-55.38	2.39984G	-35.96	2.4G	-33.64	2.52038G	-53.03	23.21031G	-41.90	2
2437MHz	Pass	2.43073G	9.33	-20.67	2.11419G	-55.71	2.39928G	-38.46	2.4G	-42.19	2.51582G	-53.12	16.69774G	-42.68	1
2437MHz	Pass	2.43073G	9.33	-20.67	2.10487G	-55.80	2.39952G	-34.08	2.4G	-35.62	2.51102G	-53.44	21.91229G	-42.30	2
2462MHz	Pass	2.43073G	9.33	-20.67	2.13516G	-54.65	2.3996G	-53.49	2.4G	-53.81	2.5023G	-54.15	16.55165G	-42.38	1
2462MHz	Pass	2.43073G	9.33	-20.67	2.13399G	-55.04	2.3948G	-53.42	2.4G	-55.50	2.51886G	-52.96	16.87194G	-42.10	2
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	9.15	-20.85	1.99186G	-56.95	2.4G	-29.94	2.4G	-31.68	2.51438G	-54.36	16.2454G	-42.41	1
2412MHz	Pass	2.43073G	9.15	-20.85	815.21M	-56.85	2.39992G	-34.12	2.4G	-33.28	2.51558G	-54.85	17.66423G	-43.32	2
2437MHz	Pass	2.43073G	9.15	-20.85	2.1771G	-56.76	2.39976G	-37.78	2.4G	-38.81	2.50662G	-54.13	16.23417G	-43.12	1
2437MHz	Pass	2.43073G	9.15	-20.85	2.15496G	-57.28	2.39872G	-34.14	2.4G	-35.64	2.50526G	-54.67	17.65299G	-43.26	2
2462MHz	Pass	2.43073G	9.15	-20.85	2.00468G	-56.65	2.3964G	-52.65	2.4G	-54.34	2.50334G	-54.60	17.65861G	-43.06	1
2462MHz	Pass	2.43073G	9.15	-20.85	1.86488G	-56.69	2.39552G	-54.83	2.4G	-56.62	2.52238G	-54.35	16.25102G	-43.39	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

CSEndB

2412MHz

05/02/2025

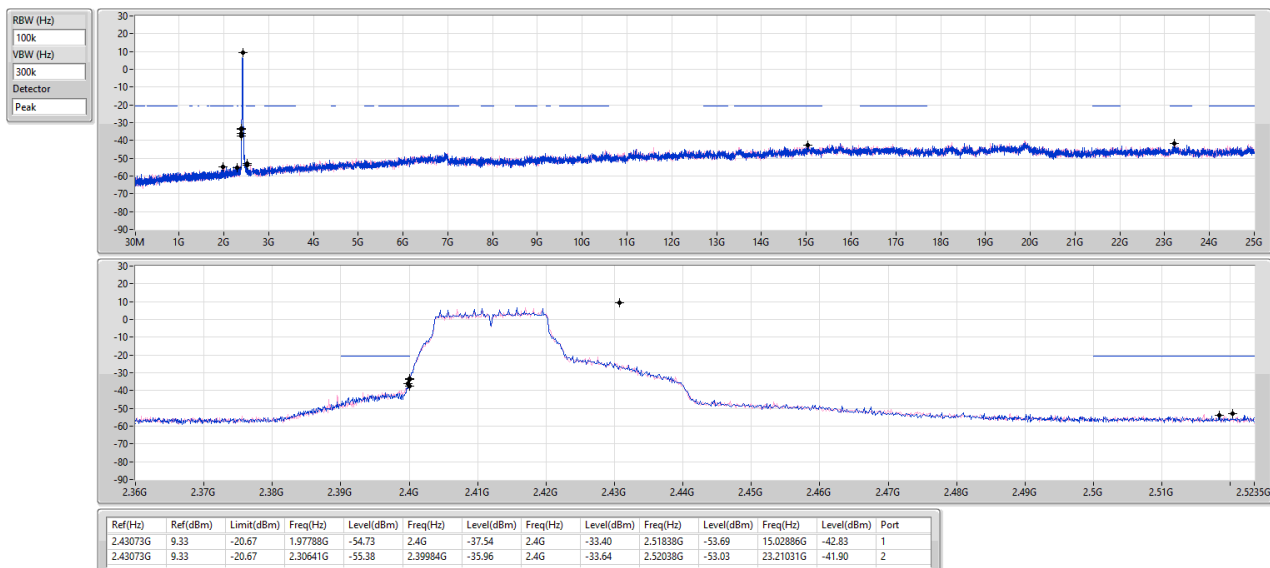


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

CSEndB

2412MHz

15/01/2025



2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

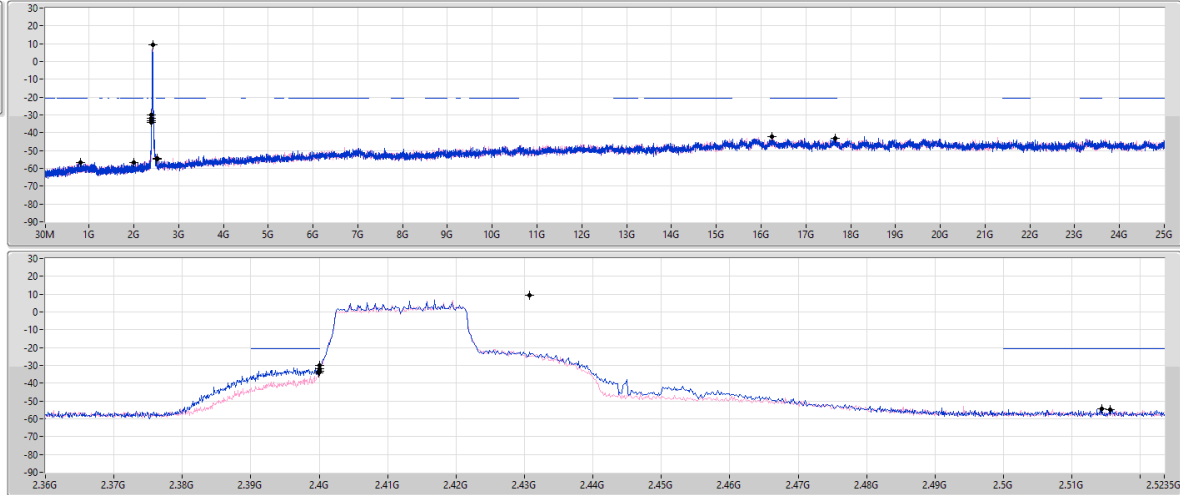
CSEndB

2412MHz

05/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Port 1
Port 2



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43079G	9.15	-20.85	1.99186G	-56.95	2.4G	-29.94	2.4G	-31.68	2.51438G	-54.36	16.2454G	-42.41	1
2.43079G	9.15	-20.85	815.21M	-56.85	2.39992G	-34.12	2.4G	-33.28	2.51558G	-54.85	17.66423G	-43.32	2



**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dipole Antenna_2T2S**

Appendix E.3

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	Pass	2.44192G	9.35	-20.65	936.37M	-57.32	2.4G	-31.63	2.4G	-31.45	2.50166G	-54.89	15.20867G	-42.59	1



**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dipole Antenna_2T2S**

Appendix E.3

Result

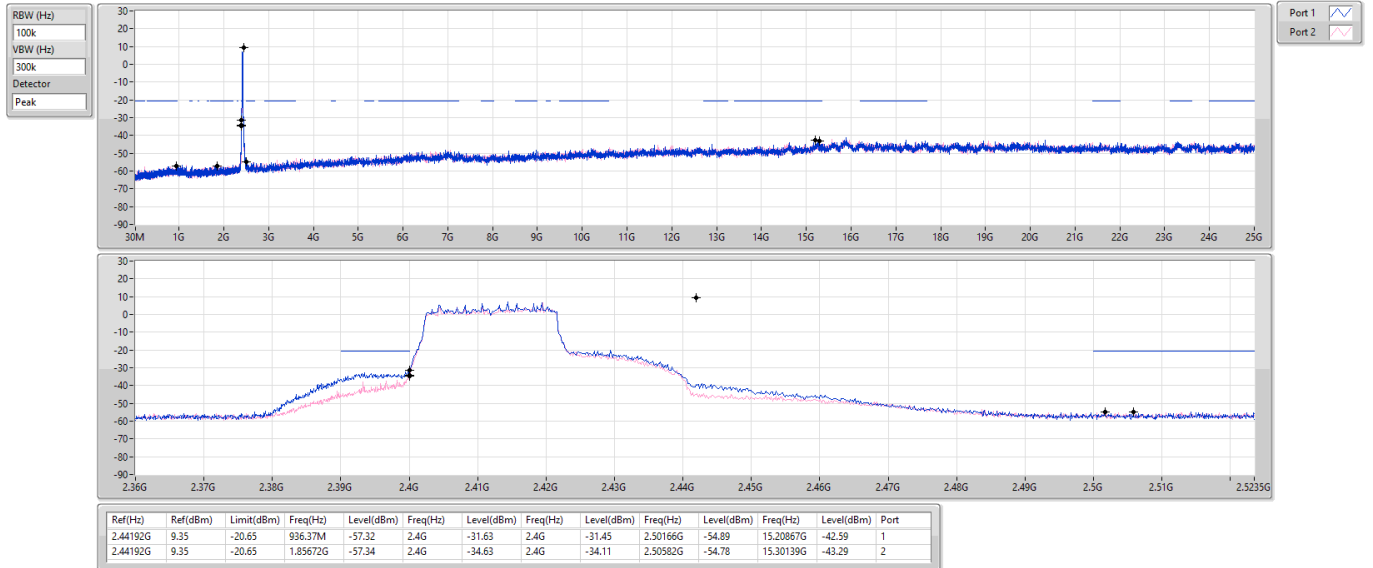
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11be EHT20_Nss2.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44192G	9.35	-20.65	936.37M	-57.32	2.4G	-31.63	2.4G	-31.45	2.50166G	-54.89	15.20867G	-42.59	1
2412MHz	Pass	2.44192G	9.35	-20.65	1.85672G	-57.34	2.4G	-34.63	2.4G	-34.11	2.50582G	-54.78	15.30139G	-43.29	2
2437MHz	Pass	2.44192G	9.35	-20.65	1.94876G	-56.38	2.39952G	-37.65	2.4G	-39.63	2.5015G	-54.46	16.28193G	-42.59	1
2437MHz	Pass	2.44192G	9.35	-20.65	2.13399G	-56.89	2.39824G	-35.07	2.4G	-35.35	2.50606G	-54.68	16.29036G	-42.61	2
2462MHz	Pass	2.44192G	9.35	-20.65	2.30292G	-55.86	2.39824G	-52.94	2.4G	-53.83	2.51814G	-54.43	16.26226G	-42.12	1
2462MHz	Pass	2.44192G	9.35	-20.65	2.00701G	-56.93	2.396G	-54.21	2.4G	-54.54	2.50342G	-55.17	24.61228G	-43.36	2

2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

CSEndB

2412MHz

05/02/2025





**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_1T1S**

Appendix E.4

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41253G	10.97	-19.03	2.30991G	-56.62	2.4G	-26.69	2.4G	-25.98	2.51678G	-54.18	16.57974G	-42.88	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43073G	8.28	-21.72	2.01982G	-57.01	2.39576G	-30.29	2.4G	-29.48	2.50174G	-54.85	16.23697G	-43.59	1
802.11be EHT20_Nss1,(MCS0)_1TX	Pass	2.43073G	8.12	-21.88	2.14448G	-56.89	2.4G	-32.71	2.4G	-32.44	2.52158G	-54.96	23.31426G	-43.20	1



**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_1T1S**

Appendix E.4

Result

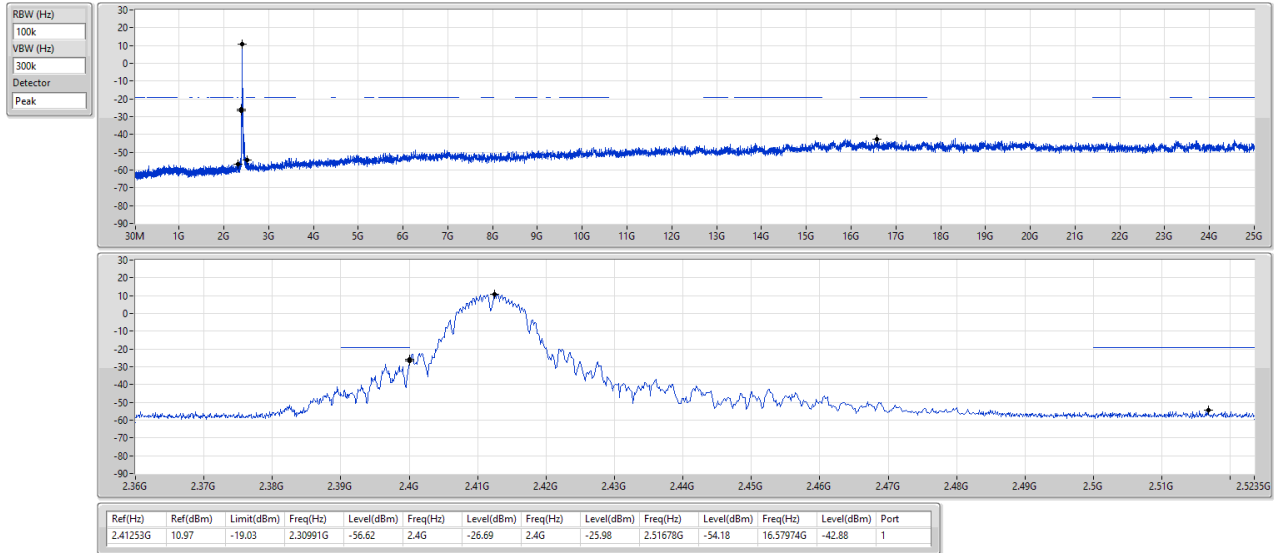
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41253G	10.97	-19.03	2.30991G	-56.62	2.4G	-26.69	2.4G	-25.98	2.51678G	-54.18	16.57974G	-42.88	1
2437MHz	Pass	2.41253G	10.97	-19.03	890.94M	-56.52	2.39952G	-44.00	2.4G	-52.80	2.50598G	-55.17	23.28336G	-42.47	1
2462MHz	Pass	2.41253G	10.97	-19.03	2.14331G	-57.03	2.39512G	-54.79	2.4G	-55.16	2.51638G	-55.29	16.32688G	-43.53	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	8.28	-21.72	2.01982G	-57.01	2.39576G	-30.29	2.4G	-29.48	2.50174G	-54.85	16.23697G	-43.59	1
2437MHz	Pass	2.43073G	8.28	-21.72	2.30292G	-57.06	2.39952G	-38.85	2.4G	-39.03	2.51894G	-54.50	17.65018G	-42.74	1
2462MHz	Pass	2.43073G	8.28	-21.72	2.30175G	-56.88	2.39832G	-52.30	2.4G	-53.15	2.50182G	-54.25	16.34093G	-43.34	1
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	8.12	-21.88	2.14448G	-56.89	2.4G	-32.71	2.4G	-32.44	2.52158G	-54.96	23.31426G	-43.20	1
2437MHz	Pass	2.43073G	8.12	-21.88	762.79M	-56.88	2.39888G	-38.20	2.4G	-38.36	2.51686G	-54.23	16.56569G	-43.00	1
2462MHz	Pass	2.43073G	8.12	-21.88	2.1037G	-56.79	2.39768G	-54.16	2.4G	-55.07	2.5151G	-55.03	23.31988G	-42.87	1

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

CSEndB

2412MHz

05/02/2025

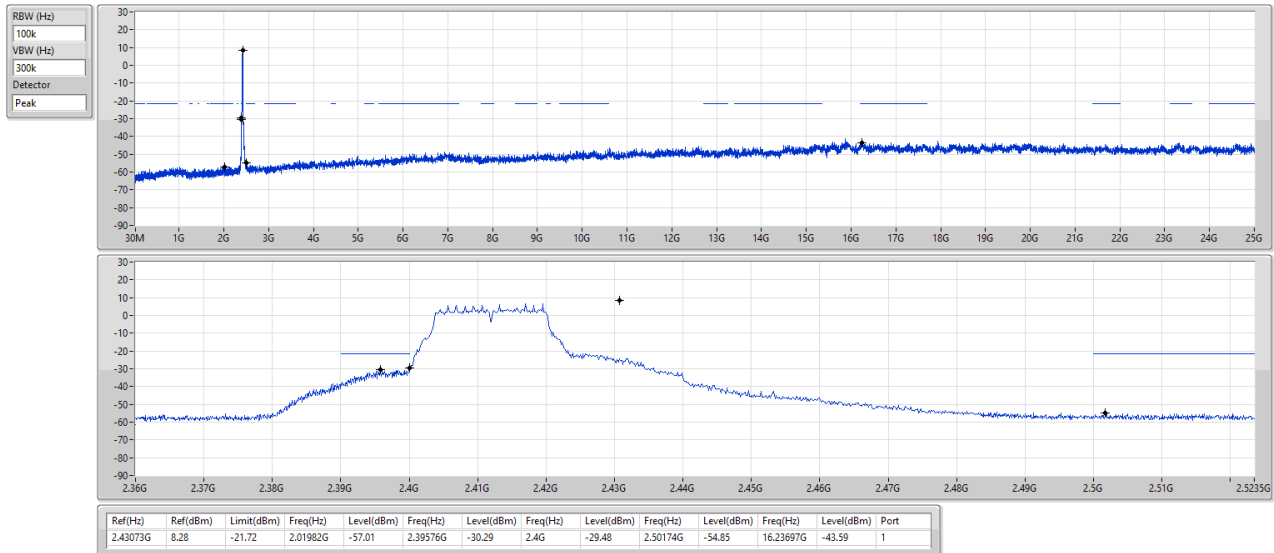


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

2412MHz

05/02/2025

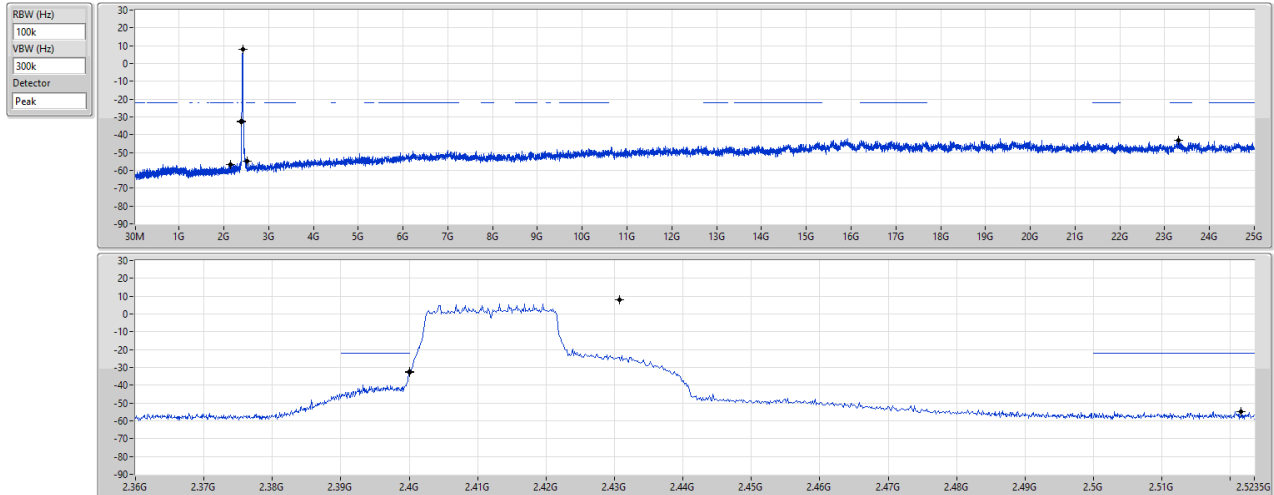


2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

CSEndB

2412MHz

05/02/2025





**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T1S**

Appendix E.5

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43741G	12.44	-17.56	2.13166G	-56.18	2.39904G	-36.90	2.4G	-44.98	2.50894G	-55.25	16.33531G	-42.95	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43073G	8.64	-21.36	2.30758G	-56.66	2.39832G	-24.45	2.4G	-24.47	2.52254G	-54.83	17.60242G	-42.95	1
802.11be EHT20_Nss1,(MCS0)_2TX	Pass	2.4319G	7.90	-22.10	887.44M	-56.95	2.4G	-36.70	2.4G	-32.90	2.51366G	-53.91	17.64457G	-42.63	2



**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T1S**

Appendix E.5

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43741G	12.44	-17.56	2.08157G	-56.60	2.3996G	-48.18	2.4G	-48.80	2.51894G	-54.84	24.56171G	-41.80	1
2412MHz	Pass	2.43741G	12.44	-17.56	2.30059G	-56.70	2.39856G	-42.56	2.4G	-43.55	2.51838G	-55.09	16.20607G	-43.12	2
2437MHz	Pass	2.43741G	12.44	-17.56	699.88M	-56.95	2.39952G	-40.18	2.4G	-45.18	2.51278G	-54.30	23.28055G	-42.65	1
2437MHz	Pass	2.43741G	12.44	-17.56	2.13166G	-56.18	2.39904G	-36.90	2.4G	-44.98	2.50894G	-55.25	16.33531G	-42.95	2
2462MHz	Pass	2.43741G	12.44	-17.56	2.1503G	-56.62	2.39256G	-54.33	2.4G	-56.21	2.51766G	-54.39	24.94943G	-43.53	1
2462MHz	Pass	2.43741G	12.44	-17.56	2.30758G	-57.43	2.39528G	-53.92	2.4G	-56.01	2.51134G	-53.89	17.61085G	-43.18	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	8.64	-21.36	2.30758G	-56.66	2.39832G	-24.45	2.4G	-24.47	2.52254G	-54.83	17.60242G	-42.95	1
2412MHz	Pass	2.43073G	8.64	-21.36	1.99652G	-56.79	2.39944G	-31.50	2.4G	-30.60	2.5071G	-55.26	16.2735G	-42.86	2
2437MHz	Pass	2.43073G	8.64	-21.36	2.15147G	-55.96	2.39952G	-39.83	2.4G	-41.68	2.51158G	-54.39	16.86913G	-42.11	1
2437MHz	Pass	2.43073G	8.64	-21.36	1.95342G	-56.96	2.39952G	-35.97	2.4G	-38.04	2.50446G	-54.09	16.2735G	-42.00	2
2462MHz	Pass	2.43073G	8.64	-21.36	2.11535G	-56.33	2.39936G	-53.15	2.4G	-55.27	2.52022G	-55.14	17.63614G	-43.34	1
2462MHz	Pass	2.43073G	8.64	-21.36	1.6377G	-56.95	2.39408G	-54.44	2.4G	-55.64	2.51838G	-54.52	16.24259G	-42.55	2
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4319G	7.90	-22.10	1.97672G	-56.71	2.39992G	-36.09	2.4G	-34.99	2.52142G	-54.56	16.31002G	-43.35	1
2412MHz	Pass	2.4319G	7.90	-22.10	887.44M	-56.95	2.4G	-36.70	2.4G	-32.90	2.51366G	-53.91	17.64457G	-42.63	2
2437MHz	Pass	2.4319G	7.90	-22.10	2.30641G	-56.67	2.39736G	-38.63	2.4G	-40.99	2.50446G	-54.22	21.72686G	-43.27	1
2437MHz	Pass	2.4319G	7.90	-22.10	715.02M	-56.53	2.3996G	-37.99	2.4G	-38.95	2.50702G	-55.00	24.98314G	-43.42	2
2462MHz	Pass	2.4319G	7.90	-22.10	2.30874G	-56.59	2.39824G	-53.87	2.4G	-54.70	2.51942G	-54.02	23.29179G	-43.00	1
2462MHz	Pass	2.4319G	7.90	-22.10	1.91031G	-57.08	2.39544G	-54.66	2.4G	-56.16	2.52262G	-55.09	23.36483G	-42.25	2

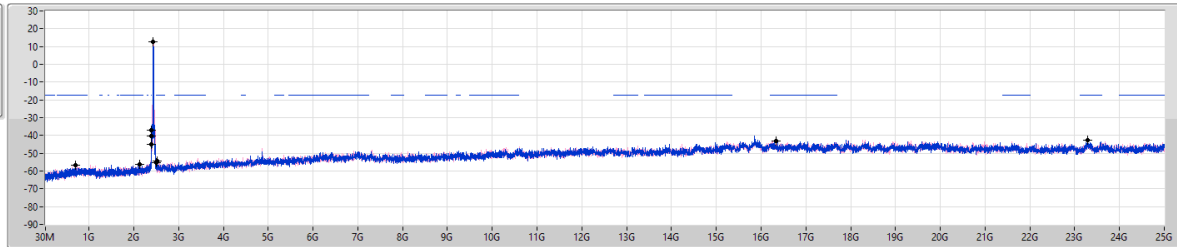
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

CSEndB

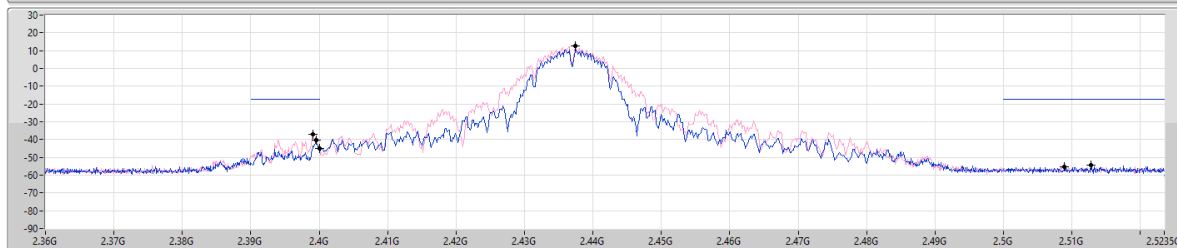
2437MHz

05/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak



Port 1
Port 2



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43741G	12.44	-17.56	699.88M	-56.95	2.39952G	-40.18	2.4G	-45.18	2.51278G	-54.30	23.28055G	-42.65	1
2.43741G	12.44	-17.56	2.13166G	-56.18	2.39904G	-36.90	2.4G	-44.98	2.50894G	-55.25	16.33331G	-42.95	2

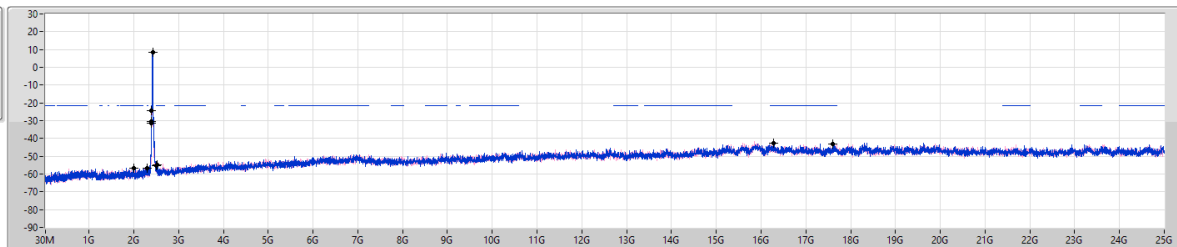
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

CSEndB

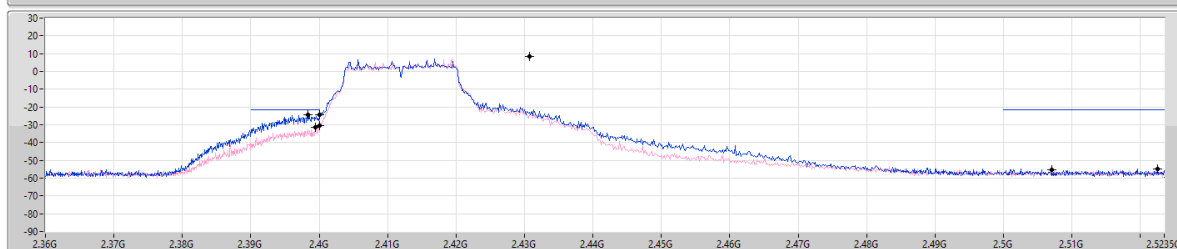
2412MHz

05/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak



Port 1
Port 2



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43073G	8.64	-21.36	2.30758G	-56.66	2.39832G	-24.45	2.4G	-24.47	2.52254G	-54.83	17.60242G	-42.95	1
2.43073G	8.64	-21.36	1.99652G	-56.79	2.39944G	-31.50	2.4G	-30.60	2.5071G	-55.26	16.2735G	-42.86	2

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

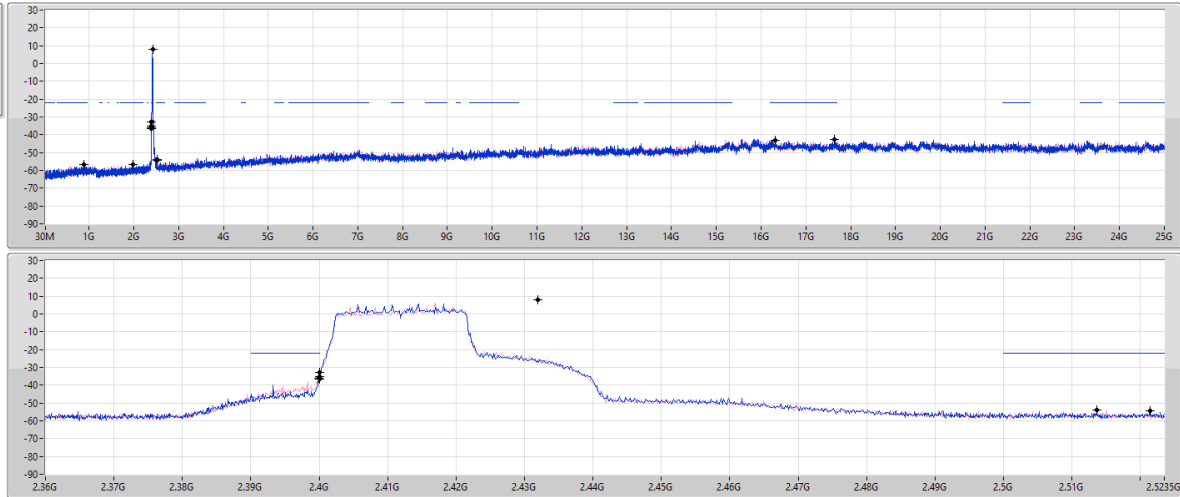
CSEndB

2412MHz

05/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Port 1
Port 2



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4319G	7.90	-22.10	1.97672G	-56.71	2.39992G	-36.09	2.4G	-34.99	2.52142G	-54.56	16.31002G	-43.35	1
2.4319G	7.90	-22.10	887.44M	-56.95	2.4G	-36.70	2.4G	-32.90	2.51366G	-53.91	17.64457G	-42.63	2



**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T2S**

Appendix E.6

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	Pass	2.43073G	8.10	-21.90	2.19457G	-56.49	2.4G	-34.25	2.4G	-32.35	2.50334G	-55.08	16.22293G	-43.50	2



**CSE (NdB Down) _Non-Beamforming_Radio 1_
Dual-Polarized MIMO Panel Antenna_2T2S**

Appendix E.6

Result

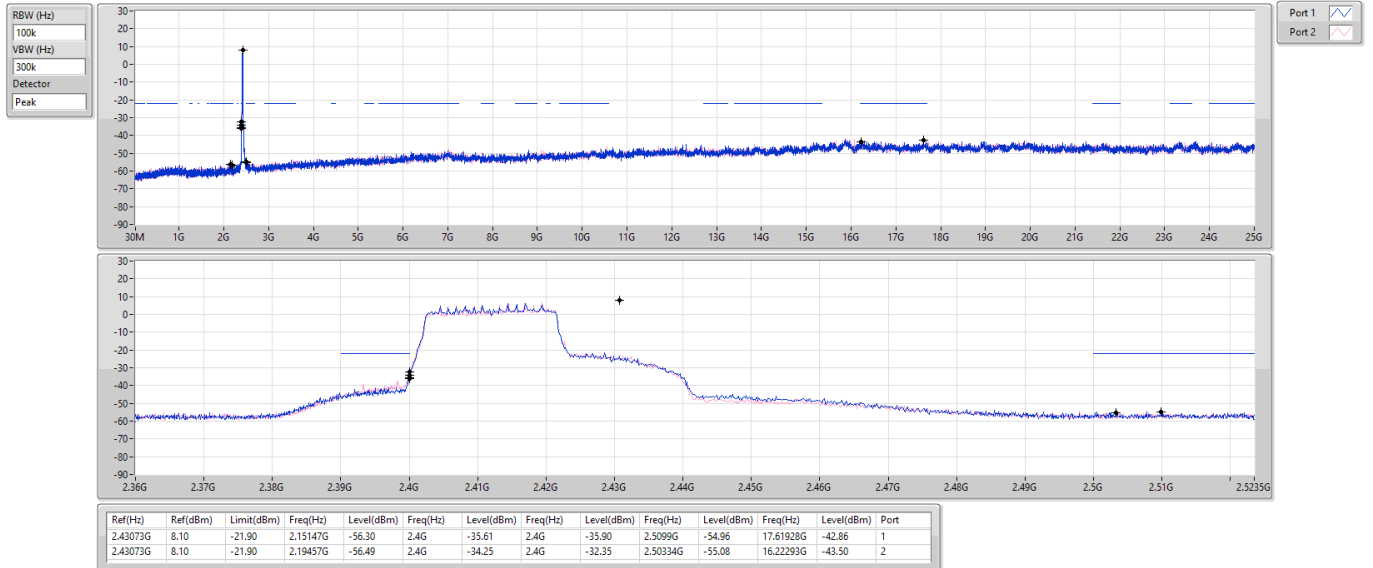
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	8.10	-21.90	2.15147G	-56.30	2.4G	-35.61	2.4G	-35.90	2.5099G	-54.96	17.61928G	-42.86	1
2412MHz	Pass	2.43073G	8.10	-21.90	2.19457G	-56.49	2.4G	-34.25	2.4G	-32.35	2.50334G	-55.08	16.22293G	-43.50	2
2437MHz	Pass	2.43073G	8.10	-21.90	2.30874G	-56.81	2.39912G	-39.85	2.4G	-40.03	2.51342G	-54.41	17.65018G	-42.94	1
2437MHz	Pass	2.43073G	8.10	-21.90	1.94992G	-56.30	2.39896G	-37.58	2.4G	-38.06	2.52054G	-54.50	16.88879G	-43.08	2
2462MHz	Pass	2.43073G	8.10	-21.90	2.18642G	-56.73	2.39576G	-53.71	2.4G	-56.06	2.51726G	-54.70	16.28193G	-43.08	1
2462MHz	Pass	2.43073G	8.10	-21.90	2.17127G	-56.84	2.39944G	-54.08	2.4G	-54.37	2.52022G	-54.86	16.88598G	-42.55	2

2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

CSEndB

2412MHz

05/02/2025





**CSE (NdB Down) _Non-Beamforming_Radio 1_
MIMO-directional Antenna_1T1S**

Appendix E.7

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.43758G	11.19	-18.81	2.1736G	-56.41	2.39848G	-41.50	2.4G	-42.10	2.51598G	-54.38	23.30864G	-43.11	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43073G	6.63	-23.37	2.15729G	-56.16	2.4G	-40.77	2.4G	-37.65	2.50462G	-54.96	23.30302G	-42.96	1
802.11be EHT20_Nss1,(MCS0)_1TX	Pass	2.44192G	5.88	-24.12	805.89M	-57.03	2.4G	-36.32	2.4G	-34.69	2.5087G	-54.43	16.32126G	-41.79	1



**CSE (NdB Down) _Non-Beamforming_Radio 1_
MIMO-directional Antenna_1T1S**

Appendix E.7

Result

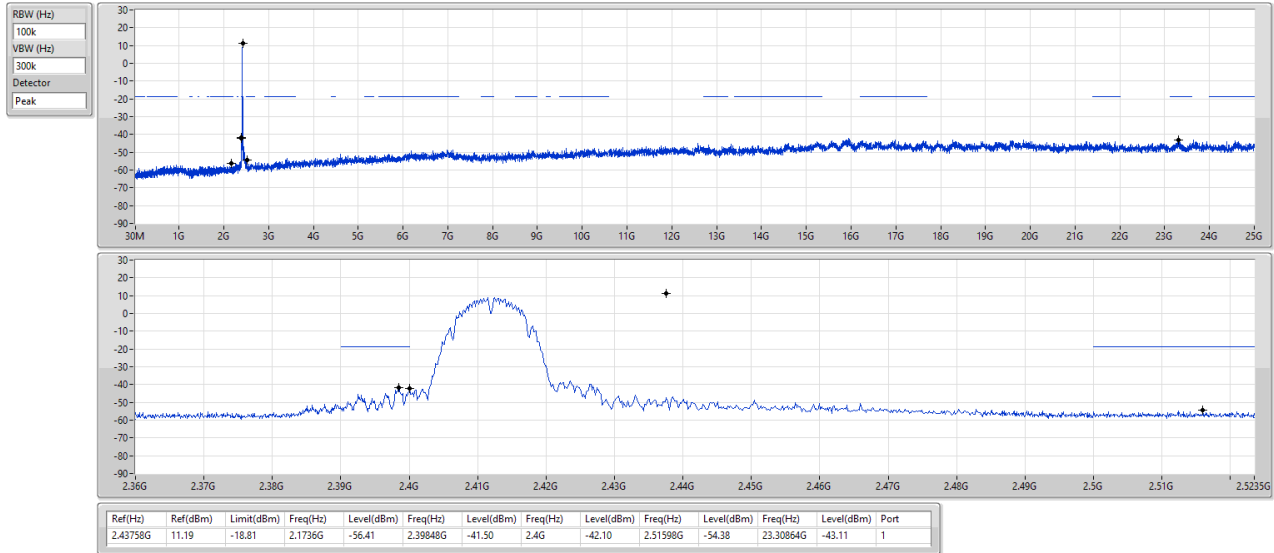
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43758G	11.19	-18.81	2.1736G	-56.41	2.39848G	-41.50	2.4G	-42.10	2.51598G	-54.38	23.30864G	-43.11	1
2437MHz	Pass	2.43758G	11.19	-18.81	2.13865G	-56.78	2.3996G	-42.03	2.4G	-46.83	2.50886G	-54.90	17.60523G	-43.20	1
2462MHz	Pass	2.43758G	11.19	-18.81	2.30758G	-56.26	2.398G	-54.09	2.4G	-56.17	2.50062G	-54.63	21.60043G	-42.95	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	6.63	-23.37	2.15729G	-56.16	2.4G	-40.77	2.4G	-37.65	2.50462G	-54.96	23.30302G	-42.96	1
2437MHz	Pass	2.43073G	6.63	-23.37	931.71M	-57.22	2.39864G	-43.01	2.4G	-44.66	2.50814G	-55.15	17.60804G	-42.90	1
2462MHz	Pass	2.43073G	6.63	-23.37	2.07574G	-56.95	2.3988G	-54.27	2.4G	-57.30	2.50606G	-54.59	16.2735G	-42.19	1
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44192G	5.88	-24.12	805.89M	-57.03	2.4G	-36.32	2.4G	-34.69	2.5087G	-54.43	16.32126G	-41.79	1
2437MHz	Pass	2.44192G	5.88	-24.12	2.18991G	-56.87	2.4G	-42.70	2.4G	-42.92	2.51886G	-54.50	17.61366G	-42.48	1
2462MHz	Pass	2.44192G	5.88	-24.12	2.30175G	-56.27	2.39816G	-54.11	2.4G	-55.28	2.50694G	-54.06	16.2145G	-43.08	1

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

CSEndB

2412MHz

06/02/2025

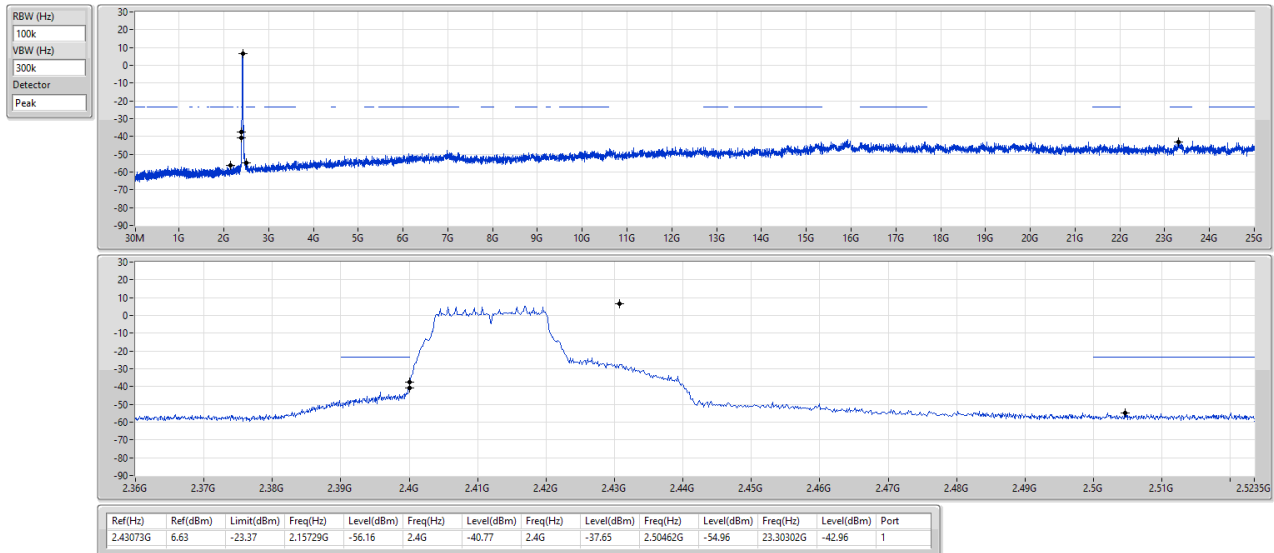


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

2412MHz

06/02/2025





2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

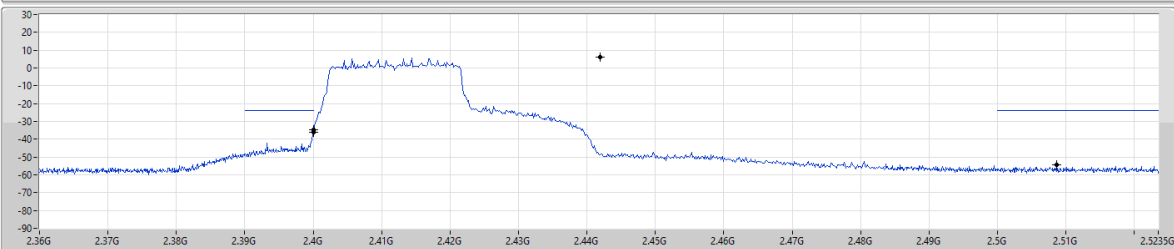
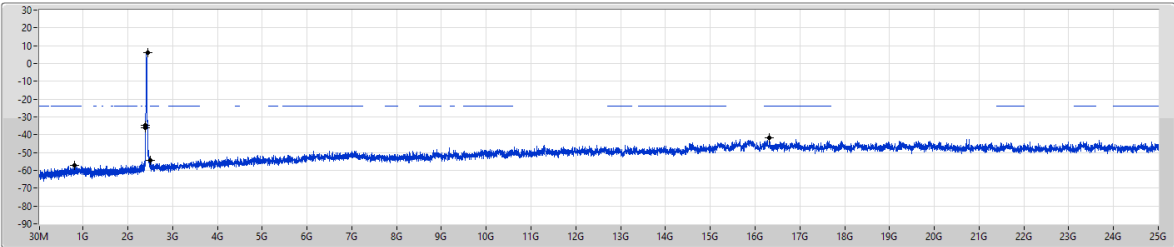
CSEndB

2412MHz

06/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Port 1



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44192G	5.88	-24.12	805.89M	-57.03	2.4G	-36.32	2.4G	-34.69	2.5087G	-54.43	16.32126G	-41.79	1



**CSE (NdB Down) _Non-Beamforming_Radio 1_
MIMO-directional Antenna_2T1S**

Appendix E.8

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43758G	12.08	-17.92	2.00934G	-56.62	2.39904G	-37.21	2.4G	-44.17	2.5183G	-55.21	17.68952G	-43.14	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.4319G	7.42	-22.58	2.30758G	-55.79	2.39992G	-37.38	2.4G	-33.39	2.51638G	-53.93	24.60947G	-42.35	2
802.11be EHT20_Nss1,(MCS0)_2TX	Pass	2.42956G	6.54	-23.46	2.01982G	-56.76	2.4G	-38.05	2.4G	-36.01	2.5071G	-54.22	24.65442G	-42.69	2



**CSE (NdB Down) _Non-Beamforming_Radio 1_
MIMO-directional Antenna_2T1S**

Appendix E.8

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43758G	12.08	-17.92	2.12933G	-56.08	2.39952G	-47.33	2.4G	-50.69	2.5079G	-54.78	23.39012G	-43.07	1
2412MHz	Pass	2.43758G	12.08	-17.92	2.30175G	-56.42	2.396G	-41.51	2.4G	-45.39	2.50982G	-54.62	23.28898G	-42.94	2
2437MHz	Pass	2.43758G	12.08	-17.92	2.1771G	-57.33	2.39952G	-39.80	2.4G	-44.30	2.51758G	-54.61	16.20326G	-42.84	1
2437MHz	Pass	2.43758G	12.08	-17.92	2.00934G	-56.62	2.39904G	-37.21	2.4G	-44.17	2.5183G	-55.21	17.68952G	-43.14	2
2462MHz	Pass	2.43758G	12.08	-17.92	2.13749G	-56.80	2.39768G	-54.68	2.4G	-56.74	2.51038G	-54.74	17.55185G	-42.63	1
2462MHz	Pass	2.43758G	12.08	-17.92	2.10953G	-56.75	2.3968G	-54.57	2.4G	-55.82	2.50102G	-54.34	16.30159G	-41.70	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4319G	7.42	-22.58	1.83808G	-57.06	2.4G	-40.70	2.4G	-36.72	2.52022G	-55.00	17.63052G	-42.89	1
2412MHz	Pass	2.4319G	7.42	-22.58	2.30758G	-55.79	2.39992G	-37.38	2.4G	-33.39	2.51638G	-53.93	24.60947G	-42.35	2
2437MHz	Pass	2.4319G	7.42	-22.58	2.08157G	-56.54	2.39712G	-42.26	2.4G	-43.90	2.50478G	-55.22	16.5966G	-42.16	1
2437MHz	Pass	2.4319G	7.42	-22.58	2.01866G	-56.68	2.39856G	-41.67	2.4G	-42.41	2.50158G	-54.59	24.60947G	-43.11	2
2462MHz	Pass	2.4319G	7.42	-22.58	859.48M	-57.01	2.39824G	-53.99	2.4G	-56.09	2.50782G	-54.78	17.63052G	-42.96	1
2462MHz	Pass	2.4319G	7.42	-22.58	789.58M	-56.24	2.3968G	-54.63	2.4G	-55.89	2.5191G	-54.26	17.59961G	-43.13	2
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.42956G	6.54	-23.46	2.16312G	-56.92	2.4G	-40.87	2.4G	-38.49	2.5211G	-54.78	16.24821G	-42.07	1
2412MHz	Pass	2.42956G	6.54	-23.46	2.01982G	-56.76	2.4G	-38.05	2.4G	-36.01	2.5071G	-54.22	24.65442G	-42.69	2
2437MHz	Pass	2.42956G	6.54	-23.46	1.99303G	-56.94	2.39888G	-43.97	2.4G	-45.76	2.5171G	-54.26	23.59803G	-42.81	1
2437MHz	Pass	2.42956G	6.54	-23.46	2.014G	-56.91	2.3988G	-42.53	2.4G	-42.64	2.51054G	-54.83	16.96746G	-43.32	2
2462MHz	Pass	2.42956G	6.54	-23.46	2.16079G	-57.19	2.39512G	-54.66	2.4G	-56.55	2.5111G	-54.79	17.25685G	-41.79	1
2462MHz	Pass	2.42956G	6.54	-23.46	2.18525G	-57.00	2.39352G	-54.98	2.4G	-57.53	2.52206G	-54.92	16.24821G	-42.84	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

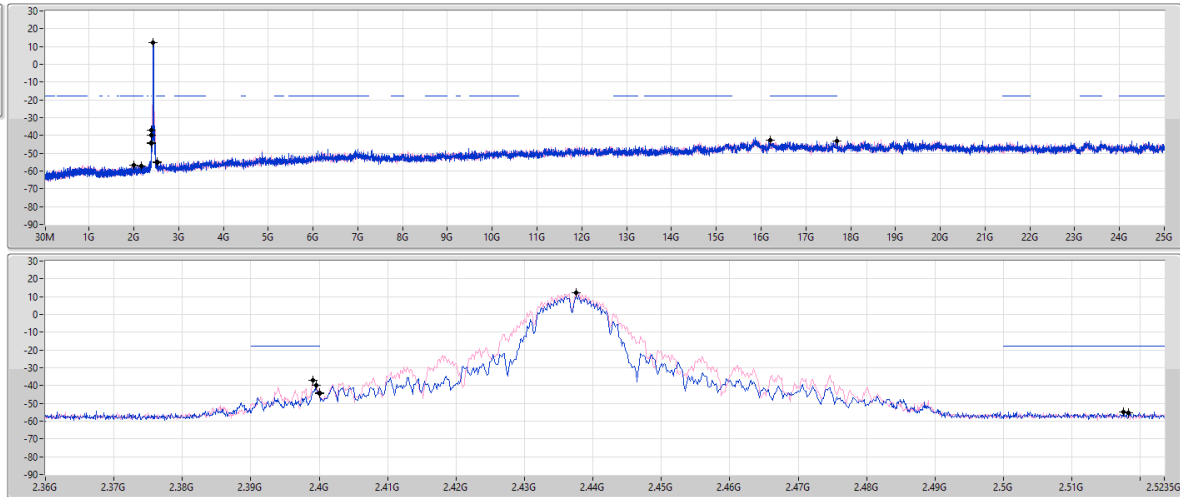
CSEndB

2437MHz

06/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Port 1
Port 2



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

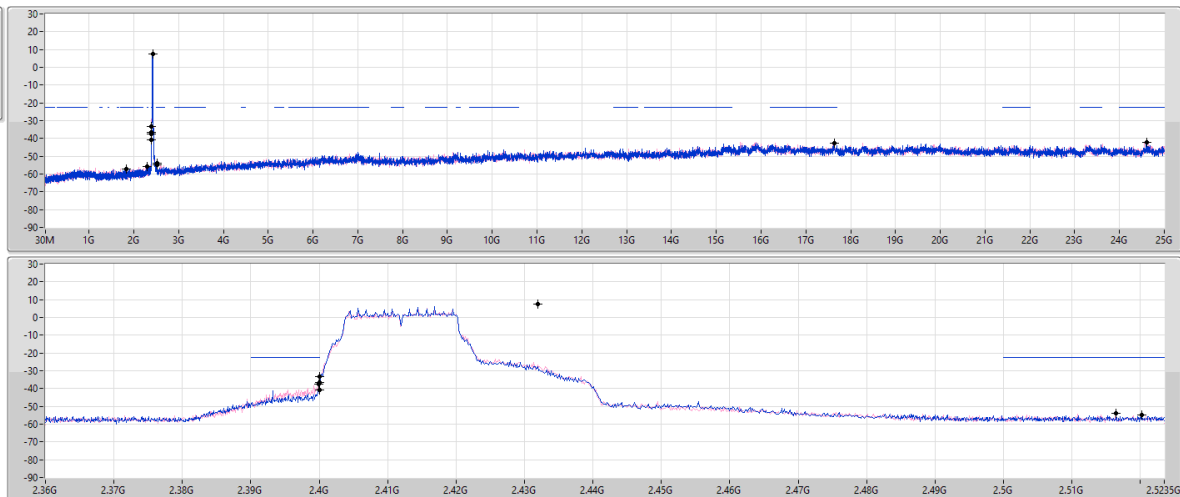
CSEndB

2412MHz

06/02/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Port 1
Port 2



2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

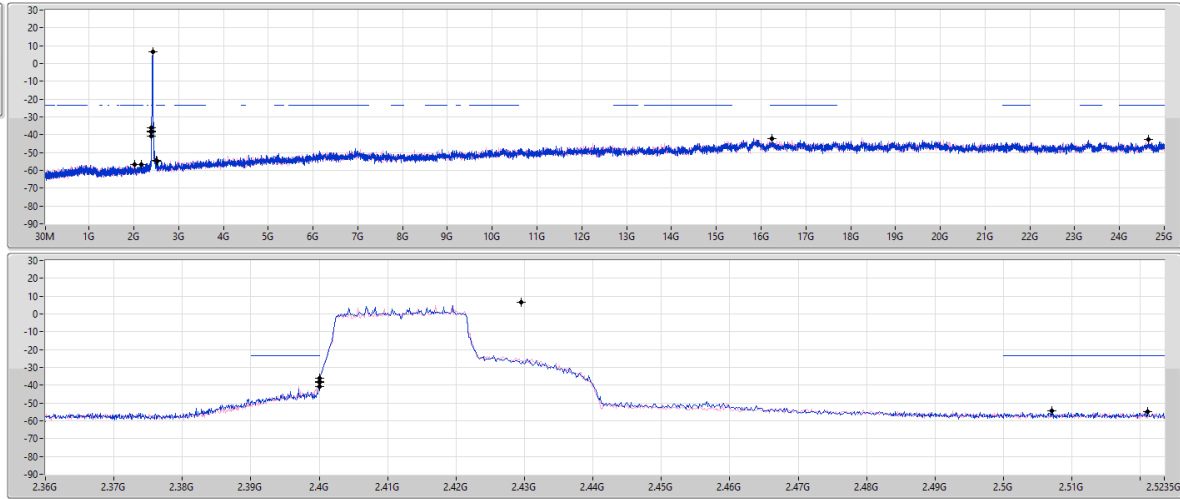
CSEndB

2412MHz

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

06/02/2025

Port 1
Port 2



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42956G	6.54	-23.46	2.16312G	-56.92	2.4G	-40.87	2.4G	-38.49	2.5211G	-54.78	16.24821G	-42.07	1
2.42956G	6.54	-23.46	2.01982G	-56.76	2.4G	-38.05	2.4G	-36.01	2.5071G	-54.22	24.65442G	-42.69	2



**CSE (NdB Down) _Non-Beamforming_Radio 1_
MIMO-directional Antenna_2T2S**

Appendix E.9

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11be EHT20_Nss2,(MCS0)_2TX	Pass	2.43073G	6.46	-23.54	1.76003G	-56.25	2.4G	-39.04	2.4G	-35.69	2.5075G	-54.54	17.66704G	-42.49	2



**CSE (NdB Down) _Non-Beamforming_Radio 1_
MIMO-directional Antenna_2T2S**

Appendix E.9

Result

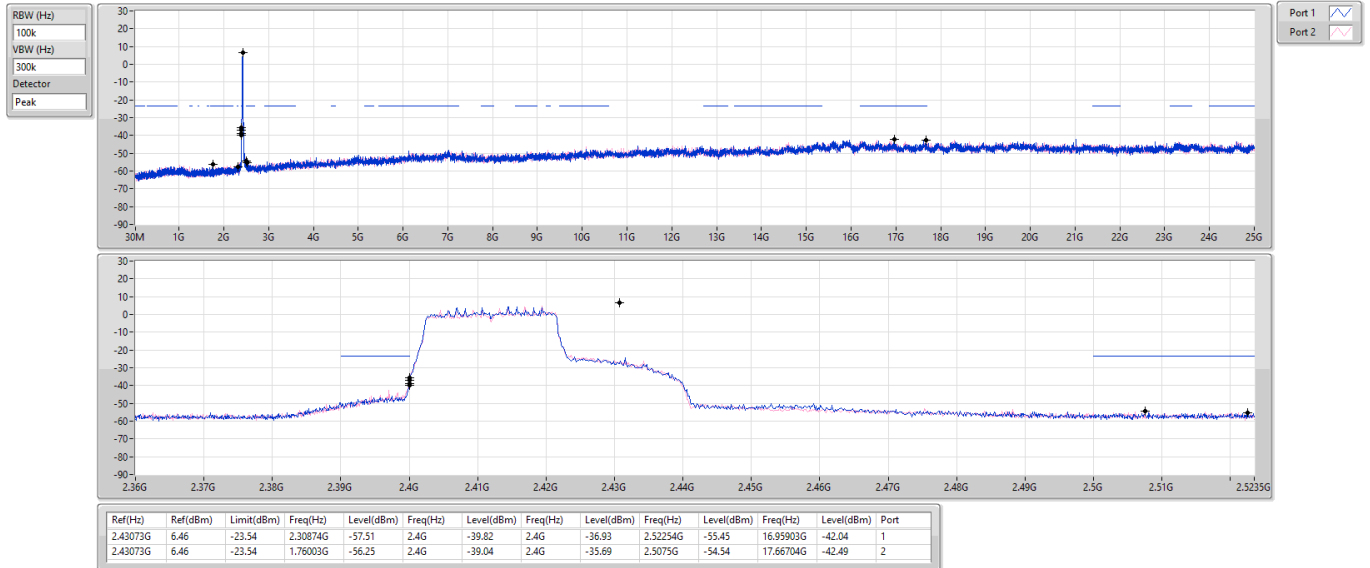
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11be EHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	6.46	-23.54	2.30874G	-57.51	2.4G	-39.82	2.4G	-36.93	2.52254G	-55.45	16.95903G	-42.04	1
2412MHz	Pass	2.43073G	6.46	-23.54	1.76003G	-56.25	2.4G	-39.04	2.4G	-35.69	2.5075G	-54.54	17.66704G	-42.49	2
2437MHz	Pass	2.43073G	6.46	-23.54	2.18409G	-56.43	2.39848G	-45.02	2.4G	-45.11	2.5059G	-55.02	16.38026G	-43.20	1
2437MHz	Pass	2.43073G	6.46	-23.54	2.30292G	-55.95	2.39824G	-43.57	2.4G	-45.07	2.51382G	-55.13	16.48422G	-42.86	2
2462MHz	Pass	2.43073G	6.46	-23.54	1.93245G	-56.50	2.39912G	-54.55	2.4G	-55.83	2.51686G	-55.16	15.34072G	-42.37	1
2462MHz	Pass	2.43073G	6.46	-23.54	2.1503G	-57.19	2.39912G	-54.71	2.4G	-57.44	2.50118G	-55.28	16.48984G	-42.03	2

2.4-2.4835GHz_802.11be EHT20_Nss2,(MCS0)_2TX

CSEndB

2412MHz

06/02/2025



**Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
b20_Nss1,(1Mbps)_1TX	Pass	2.43791G	4.92	-25.08	2.14564G	-55.32	2.39704G	-43.01	2.4G	-42.98	2.50006G	-53.25	16.54603G	-42.10	1
g20_Nss1,(6Mbps)_1TX	Pass	2.43958G	7.29	-22.71	2.16661G	-55.04	2.39992G	-30.49	2.4G	-32.51	2.5063G	-52.92	24.93819G	-42.65	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
b20_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43791G	4.92	-25.08	2.14564G	-55.32	2.39704G	-43.01	2.4G	-42.98	2.50006G	-53.25	16.54603G	-42.10	1
2437MHz	Pass	2.43791G	4.92	-25.08	2.12467G	-54.42	2.39496G	-51.51	2.4G	-51.23	2.50094G	-53.14	16.25945G	-43.00	1
2462MHz	Pass	2.43791G	4.92	-25.08	2.30292G	-54.99	2.39088G	-53.98	2.4G	-55.79	2.52014G	-52.28	17.00679G	-42.74	1
g20_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43958G	7.29	-22.71	2.16661G	-55.04	2.39992G	-30.49	2.4G	-32.51	2.5063G	-52.92	24.93819G	-42.65	1
2437MHz	Pass	2.43958G	7.29	-22.71	1.98487G	-55.60	2.39736G	-41.17	2.4G	-41.44	2.5063G	-47.04	23.28336G	-42.74	1
2462MHz	Pass	2.43958G	7.29	-22.71	2.1305G	-55.17	2.39176G	-53.29	2.4G	-54.24	2.50782G	-52.10	24.91852G	-42.25	1

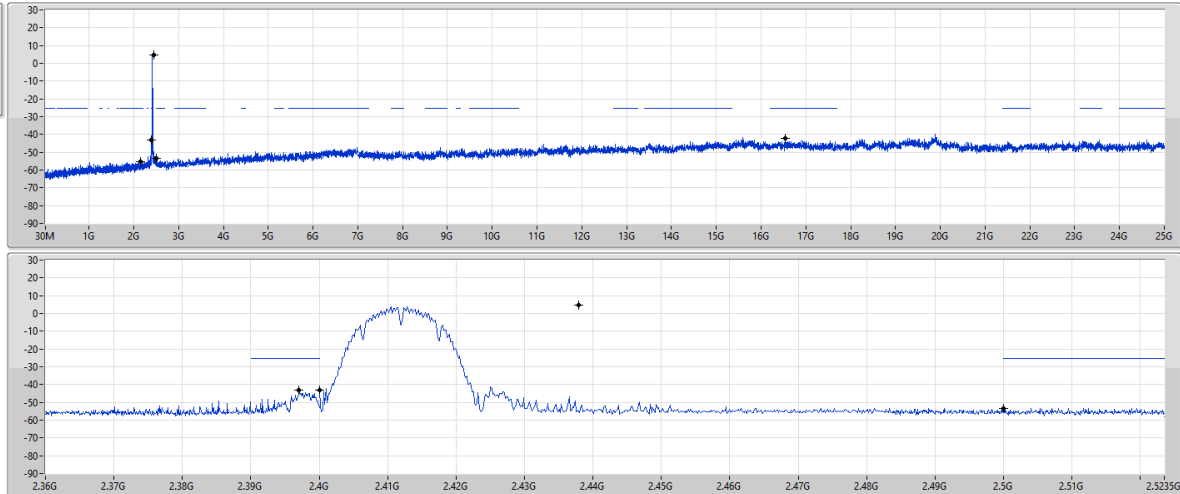
2.4-2.4835GHz_b20_Nss1,(1Mbps)_1TX

CSEndB

2412MHz

16/01/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak



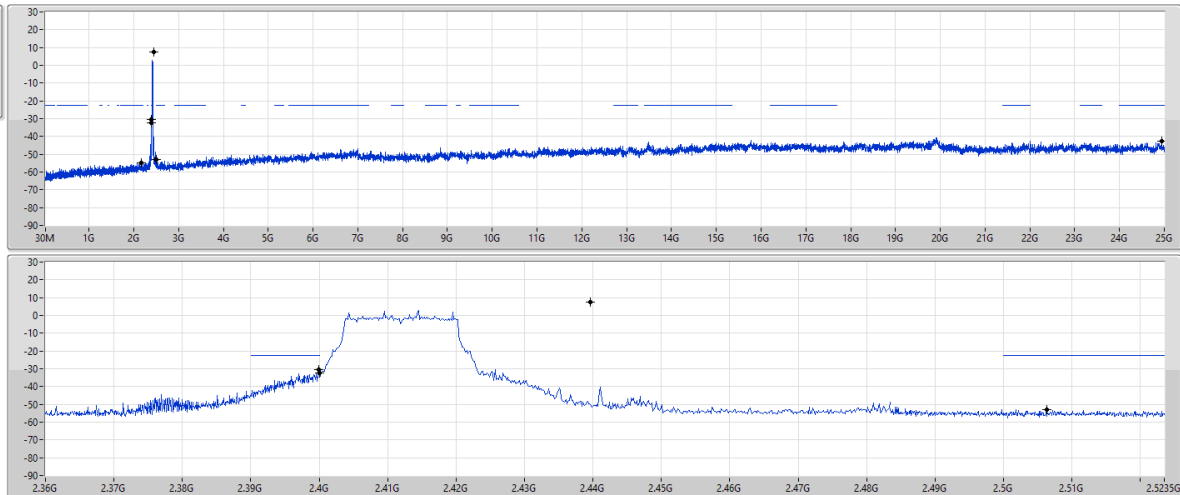
2.4-2.4835GHz_g20_Nss1,(6Mbps)_1TX

CSEndB

2412MHz

21/01/2025

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak





**RSE TX below 1GHz_Non-Beamforming_Radio 1_
Dipole Antenna_1T1S**

Appendix E.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11be EHT20_Nss1,(MCS0)_1TX	Pass	PK	47.46M	34.14	40.00	-5.86	3	Vertical	0	1.00



**RSE TX below 1GHz_Non-Beamforming_Radio 1_
Dipole Antenna_1T1S**

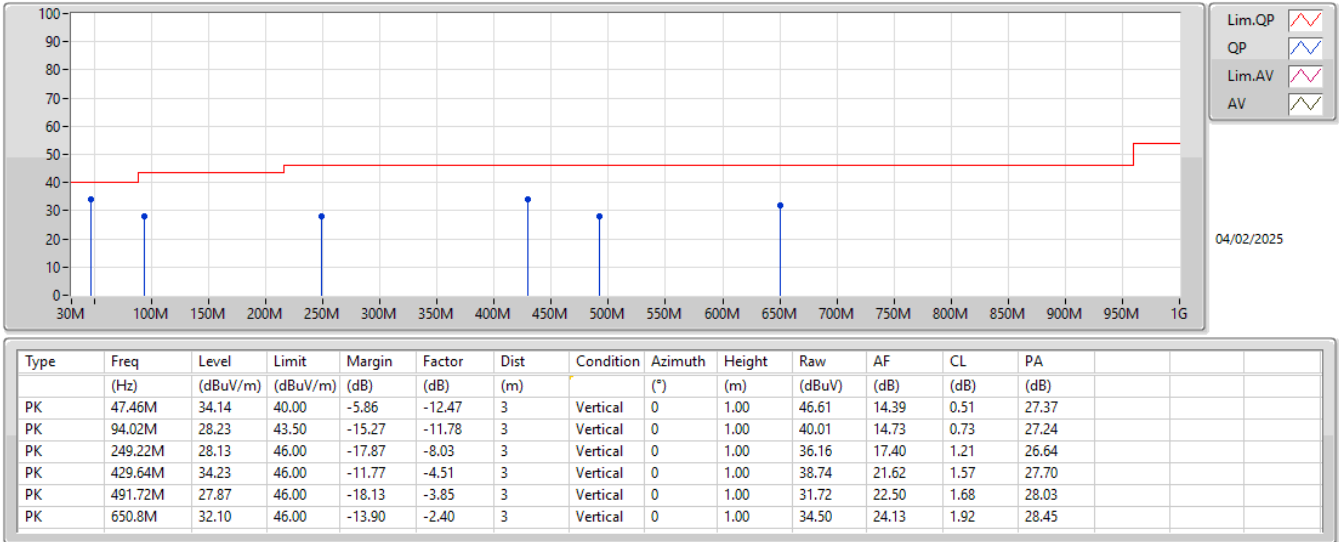
Appendix E.1

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
2437MHz_Adapter	Pass	PK	47.46M	34.14	40.00	-5.86	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	94.02M	28.23	43.50	-15.27	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	249.22M	28.13	46.00	-17.87	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	429.64M	34.23	46.00	-11.77	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	491.72M	27.87	46.00	-18.13	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	650.8M	32.10	46.00	-13.90	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	30M	31.09	40.00	-8.91	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	97.9M	28.41	43.50	-15.09	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	249.22M	34.02	46.00	-11.98	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	317.12M	22.71	46.00	-23.29	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	495.6M	27.26	46.00	-18.74	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	650.8M	26.87	46.00	-19.13	3	Horizontal	360	1.00

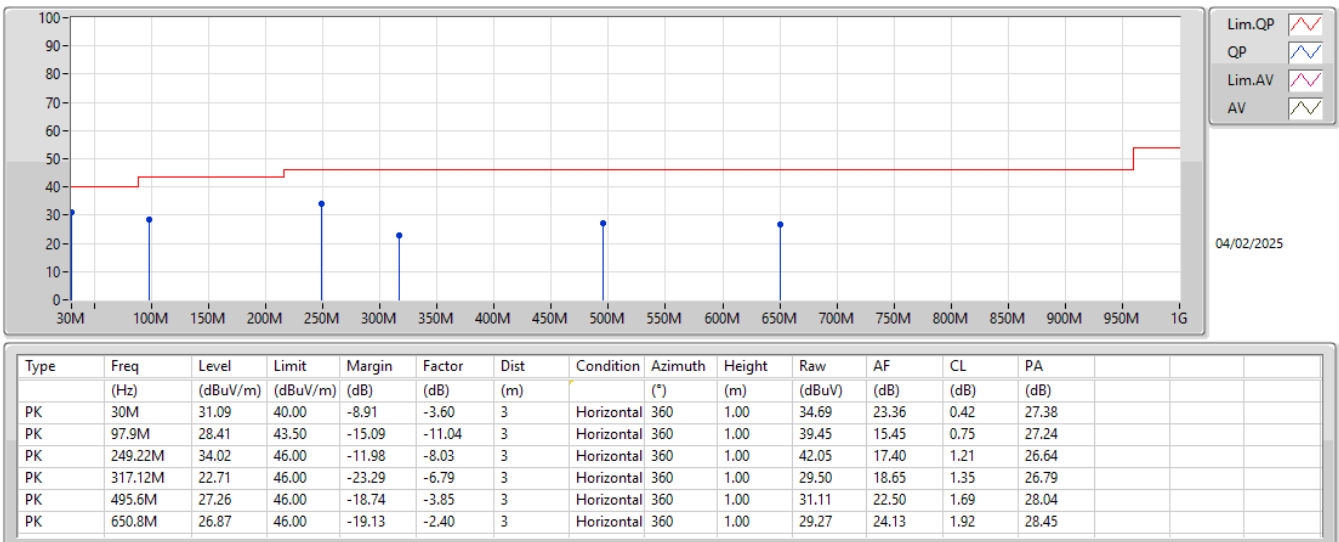
2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

2437MHz_Adapter



2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

2437MHz_Adapter





**RSE TX above 1GHz_Non-Beamforming_Radio 1_
Dipole Antenna_1T1S**

Appendix F.2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	AV	2.4835G	53.40	54.00	-0.60	3	Horizontal	309	1.56
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.39G	53.31	54.00	-0.69	3	Horizontal	303	1.34
802.11be EHT20_Nss1,(MCS0)_1TX	Pass	AV	2.39G	53.44	54.00	-0.56	3	Horizontal	303	1.33

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3852G	52.03	54.00	-1.97	3	Horizontal	306	1.33
2412MHz	Pass	AV	2.4112G	108.03	Inf	-Inf	3	Horizontal	306	1.33
2412MHz	Pass	PK	2.3896G	65.29	74.00	-8.71	3	Horizontal	306	1.33
2412MHz	Pass	PK	2.4128G	111.29	Inf	-Inf	3	Horizontal	306	1.33
2412MHz	Pass	AV	4.824G	32.61	54.00	-21.39	3	Vertical	115	1.85
2412MHz	Pass	PK	4.82428G	41.77	74.00	-32.23	3	Vertical	115	1.85
2412MHz	Pass	AV	4.82404G	29.46	54.00	-24.54	3	Horizontal	106	1.12
2412MHz	Pass	PK	4.82384G	40.81	74.00	-33.19	3	Horizontal	106	1.12
2437MHz	Pass	AV	2.3886G	43.63	54.00	-10.37	3	Horizontal	304	1.01
2437MHz	Pass	AV	2.4362G	108.83	Inf	-Inf	3	Horizontal	304	1.01
2437MHz	Pass	AV	2.4858G	44.55	54.00	-9.45	3	Horizontal	304	1.01
2437MHz	Pass	PK	2.3886G	57.95	74.00	-16.05	3	Horizontal	304	1.01
2437MHz	Pass	PK	2.4362G	111.58	Inf	-Inf	3	Horizontal	304	1.01
2437MHz	Pass	PK	2.4866G	57.18	74.00	-16.82	3	Horizontal	304	1.01
2437MHz	Pass	AV	4.874G	36.28	54.00	-17.72	3	Vertical	116	3.00
2437MHz	Pass	PK	4.8739G	43.30	74.00	-30.70	3	Vertical	116	3.00
2437MHz	Pass	AV	4.874G	33.27	54.00	-20.73	3	Horizontal	48	2.52
2437MHz	Pass	PK	4.87398G	42.12	74.00	-31.88	3	Horizontal	48	2.52
2457MHz	Pass	AV	2.4578G	108.54	Inf	-Inf	3	Horizontal	308	1.55
2457MHz	Pass	AV	2.485G	50.20	54.00	-3.80	3	Horizontal	308	1.55
2457MHz	Pass	PK	2.4578G	111.28	Inf	-Inf	3	Horizontal	308	1.55
2457MHz	Pass	PK	2.4852G	61.87	74.00	-12.13	3	Horizontal	308	1.55
2462MHz	Pass	AV	2.4612G	108.19	Inf	-Inf	3	Horizontal	309	1.56
2462MHz	Pass	AV	2.4835G	53.40	54.00	-0.60	3	Horizontal	309	1.56
2462MHz	Pass	PK	2.4612G	111.08	Inf	-Inf	3	Horizontal	309	1.56
2462MHz	Pass	PK	2.4836G	63.12	74.00	-10.88	3	Horizontal	309	1.56
2462MHz	Pass	AV	4.92398G	37.55	54.00	-16.45	3	Vertical	116	2.88
2462MHz	Pass	PK	4.92404G	44.36	74.00	-29.64	3	Vertical	116	2.88
2462MHz	Pass	AV	4.92402G	33.29	54.00	-20.71	3	Horizontal	39	2.66
2462MHz	Pass	PK	4.92394G	43.02	74.00	-30.98	3	Horizontal	39	2.66
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.31	54.00	-0.69	3	Horizontal	303	1.34
2412MHz	Pass	AV	2.4088G	100.47	Inf	-Inf	3	Horizontal	303	1.34
2412MHz	Pass	PK	2.3898G	71.51	74.00	-2.49	3	Horizontal	303	1.34
2412MHz	Pass	PK	2.4092G	111.49	Inf	-Inf	3	Horizontal	303	1.34
2412MHz	Pass	AV	4.8287G	26.69	54.00	-27.31	3	Vertical	116	1.61
2412MHz	Pass	PK	4.8274G	40.59	74.00	-33.41	3	Vertical	116	1.61
2412MHz	Pass	AV	4.82388G	26.57	54.00	-27.43	3	Horizontal	49	2.74
2412MHz	Pass	PK	4.8284G	40.92	74.00	-33.08	3	Horizontal	49	2.74
2417MHz	Pass	AV	2.39G	53.15	54.00	-0.85	3	Horizontal	302	1.33
2417MHz	Pass	AV	2.4134G	100.01	Inf	-Inf	3	Horizontal	302	1.33
2417MHz	Pass	PK	2.3898G	67.12	74.00	-6.88	3	Horizontal	302	1.33
2417MHz	Pass	PK	2.4148G	112.10	Inf	-Inf	3	Horizontal	302	1.33
2437MHz	Pass	AV	2.3898G	46.83	54.00	-7.17	3	Horizontal	304	1.50
2437MHz	Pass	AV	2.4378G	101.37	Inf	-Inf	3	Horizontal	304	1.50
2437MHz	Pass	AV	2.4835G	48.82	54.00	-5.18	3	Horizontal	304	1.50
2437MHz	Pass	PK	2.3898G	61.04	74.00	-12.96	3	Horizontal	304	1.50
2437MHz	Pass	PK	2.439G	112.41	Inf	-Inf	3	Horizontal	304	1.50
2437MHz	Pass	PK	2.4835G	63.49	74.00	-10.51	3	Horizontal	304	1.50
2437MHz	Pass	AV	4.87712G	27.48	54.00	-26.52	3	Vertical	120	2.84
2437MHz	Pass	PK	4.87894G	41.98	74.00	-32.02	3	Vertical	120	2.84
2437MHz	Pass	AV	4.87652G	27.02	54.00	-26.98	3	Horizontal	50	2.52
2437MHz	Pass	PK	4.87802G	41.31	74.00	-32.69	3	Horizontal	50	2.52
2457MHz	Pass	AV	2.458G	100.37	Inf	-Inf	3	Horizontal	307	1.00
2457MHz	Pass	AV	2.4835G	52.56	54.00	-1.44	3	Horizontal	307	1.00
2457MHz	Pass	PK	2.4588G	111.10	Inf	-Inf	3	Horizontal	307	1.00
2457MHz	Pass	PK	2.4856G	65.02	74.00	-8.98	3	Horizontal	307	1.00
2462MHz	Pass	AV	2.4572G	100.37	Inf	-Inf	3	Horizontal	308	1.56
2462MHz	Pass	AV	2.4838G	52.54	54.00	-1.46	3	Horizontal	308	1.56
2462MHz	Pass	PK	2.4576G	111.66	Inf	-Inf	3	Horizontal	308	1.56



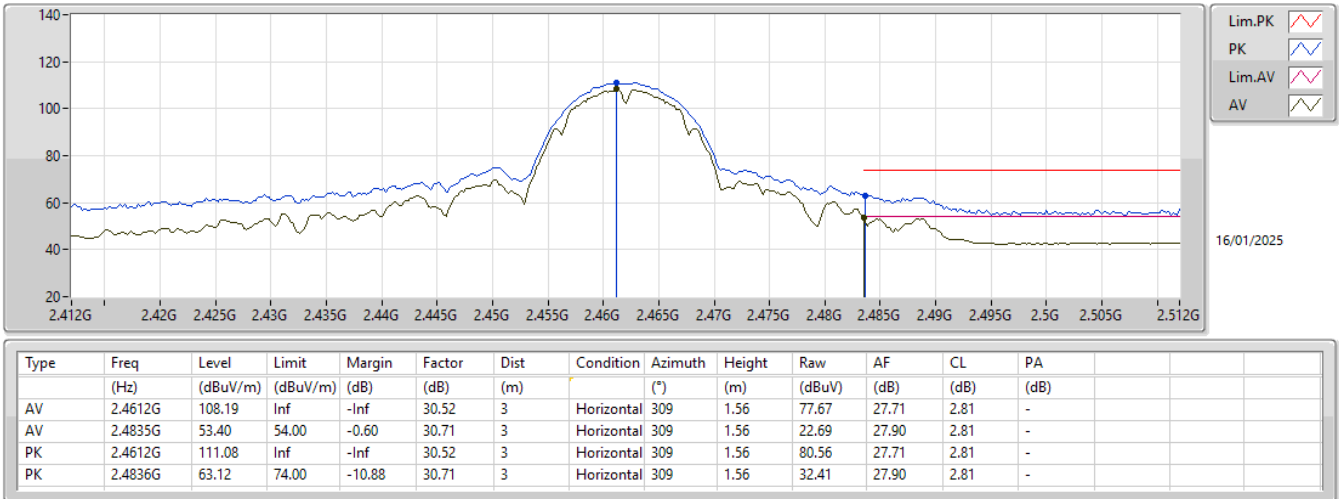
RSE TX above 1GHz_Non-Beamforming_Radio 1 Dipole Antenna_1T1S

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2462MHz	Pass	PK	2.4835G	68.66	74.00	-5.34	3	Horizontal	308	1.56
2462MHz	Pass	AV	4.92332G	28.03	54.00	-25.97	3	Vertical	117	2.90
2462MHz	Pass	PK	4.92572G	42.53	74.00	-31.47	3	Vertical	117	2.90
2462MHz	Pass	AV	4.92448G	27.07	54.00	-26.93	3	Horizontal	182	2.64
2462MHz	Pass	PK	4.92756G	41.21	74.00	-32.79	3	Horizontal	182	2.64
802.11be EHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	52.75	54.00	-1.25	3	Horizontal	303	1.32
2412MHz	Pass	AV	2.4108G	99.62	Inf	-Inf	3	Horizontal	303	1.32
2412MHz	Pass	PK	2.3876G	67.04	74.00	-6.96	3	Horizontal	303	1.32
2412MHz	Pass	PK	2.407G	114.39	Inf	-Inf	3	Horizontal	303	1.32
2412MHz	Pass	AV	4.81584G	26.15	54.00	-27.85	3	Vertical	202	1.50
2412MHz	Pass	PK	4.81776G	40.81	74.00	-33.19	3	Vertical	202	1.50
2412MHz	Pass	AV	4.81668G	26.25	54.00	-27.75	3	Horizontal	131	2.79
2412MHz	Pass	PK	4.82256G	40.42	74.00	-33.58	3	Horizontal	131	2.79
2417MHz	Pass	AV	2.39G	53.44	54.00	-0.56	3	Horizontal	303	1.33
2417MHz	Pass	AV	2.4128G	99.67	Inf	-Inf	3	Horizontal	303	1.33
2417MHz	Pass	PK	2.39G	67.71	74.00	-6.29	3	Horizontal	303	1.33
2417MHz	Pass	PK	2.4148G	113.31	Inf	-Inf	3	Horizontal	303	1.33
2437MHz	Pass	AV	2.3898G	48.44	54.00	-5.56	3	Horizontal	305	1.01
2437MHz	Pass	AV	2.4354G	100.95	Inf	-Inf	3	Horizontal	305	1.01
2437MHz	Pass	AV	2.4835G	49.64	54.00	-4.36	3	Horizontal	305	1.01
2437MHz	Pass	PK	2.3894G	64.69	74.00	-9.31	3	Horizontal	305	1.01
2437MHz	Pass	PK	2.4354G	115.13	Inf	-Inf	3	Horizontal	305	1.01
2437MHz	Pass	PK	2.4835G	64.68	74.00	-9.32	3	Horizontal	305	1.01
2437MHz	Pass	AV	4.87712G	27.46	54.00	-26.54	3	Vertical	116	3.00
2437MHz	Pass	PK	4.87376G	41.34	74.00	-32.66	3	Vertical	116	3.00
2437MHz	Pass	AV	4.8782G	26.67	54.00	-27.33	3	Horizontal	130	1.50
2437MHz	Pass	PK	4.88426G	40.95	74.00	-33.05	3	Horizontal	130	1.50
2457MHz	Pass	AV	2.4558G	99.59	Inf	-Inf	3	Horizontal	311	1.11
2457MHz	Pass	AV	2.4835G	52.94	54.00	-1.06	3	Horizontal	311	1.11
2457MHz	Pass	PK	2.4482G	113.30	Inf	-Inf	3	Horizontal	311	1.11
2457MHz	Pass	PK	2.4835G	67.89	74.00	-6.11	3	Horizontal	311	1.11
2462MHz	Pass	AV	2.4582G	99.53	Inf	-Inf	3	Horizontal	308	1.57
2462MHz	Pass	AV	2.4835G	50.70	54.00	-3.30	3	Horizontal	308	1.57
2462MHz	Pass	PK	2.4578G	113.61	Inf	-Inf	3	Horizontal	308	1.57
2462MHz	Pass	PK	2.4864G	65.35	74.00	-8.65	3	Horizontal	308	1.57
2462MHz	Pass	AV	4.92274G	27.83	54.00	-26.17	3	Vertical	112	2.87
2462MHz	Pass	PK	4.927G	42.27	74.00	-31.73	3	Vertical	112	2.87
2462MHz	Pass	AV	4.9093G	26.79	54.00	-27.21	3	Horizontal	230	1.05
2462MHz	Pass	PK	4.93168G	41.70	74.00	-32.30	3	Horizontal	230	1.05

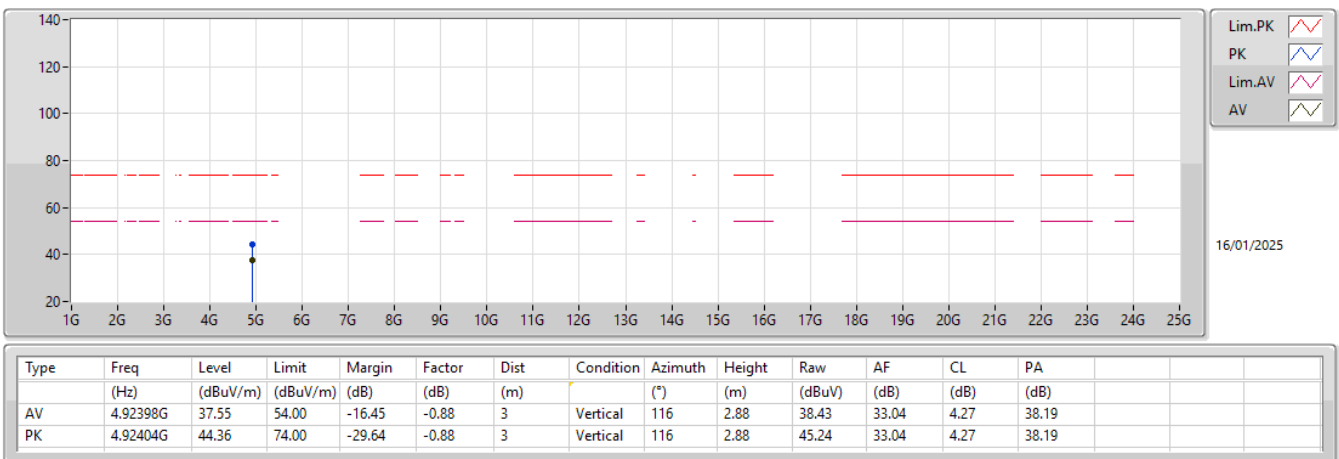
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX



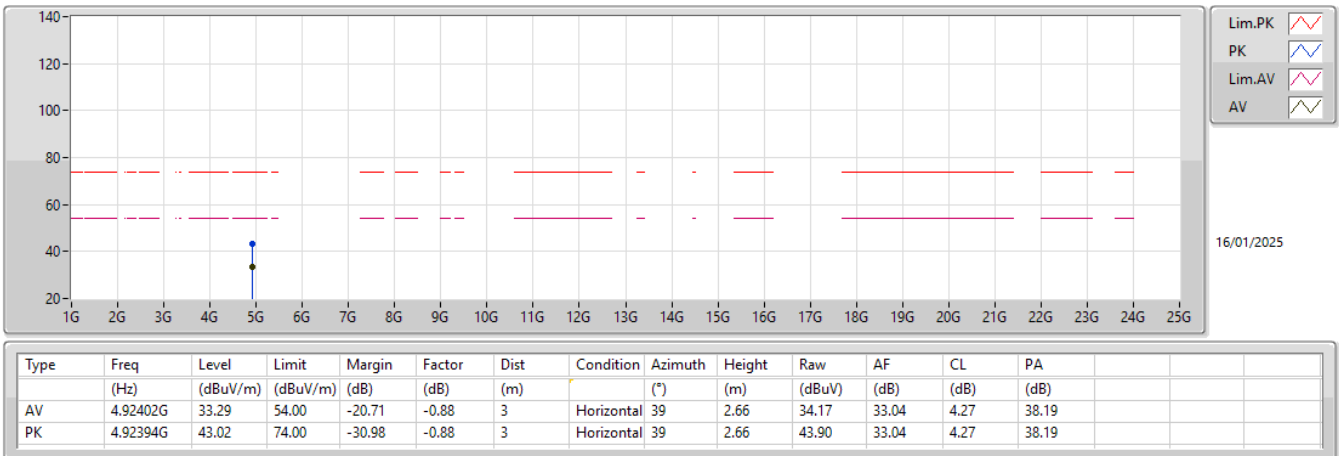
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX



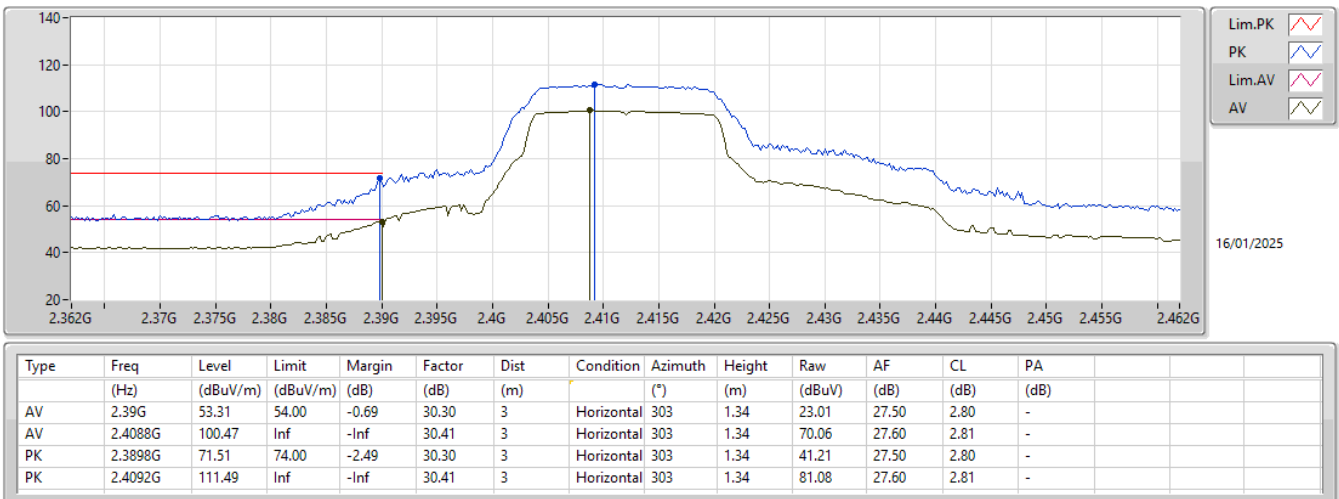
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX



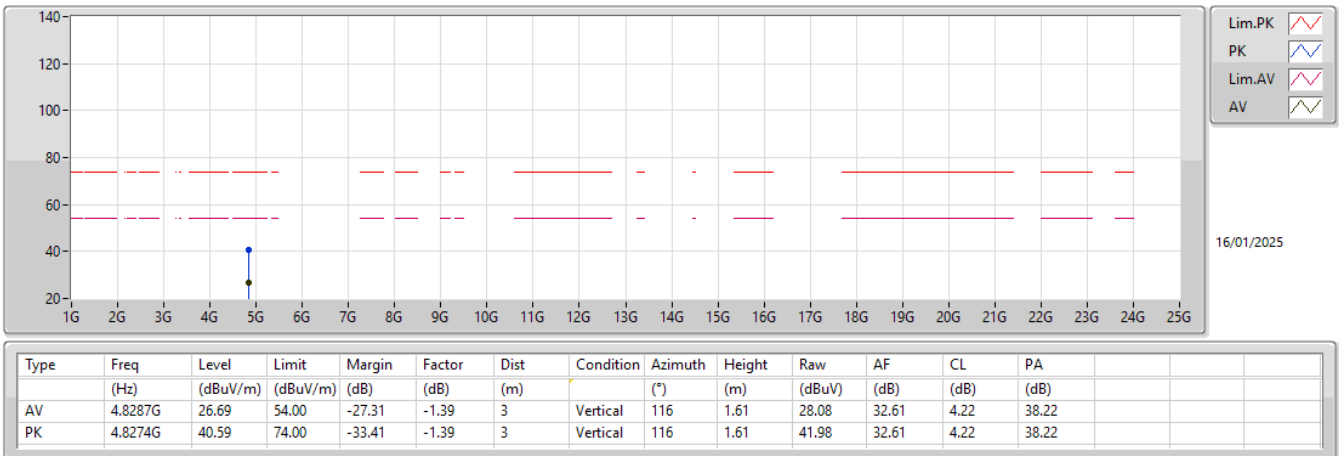
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX



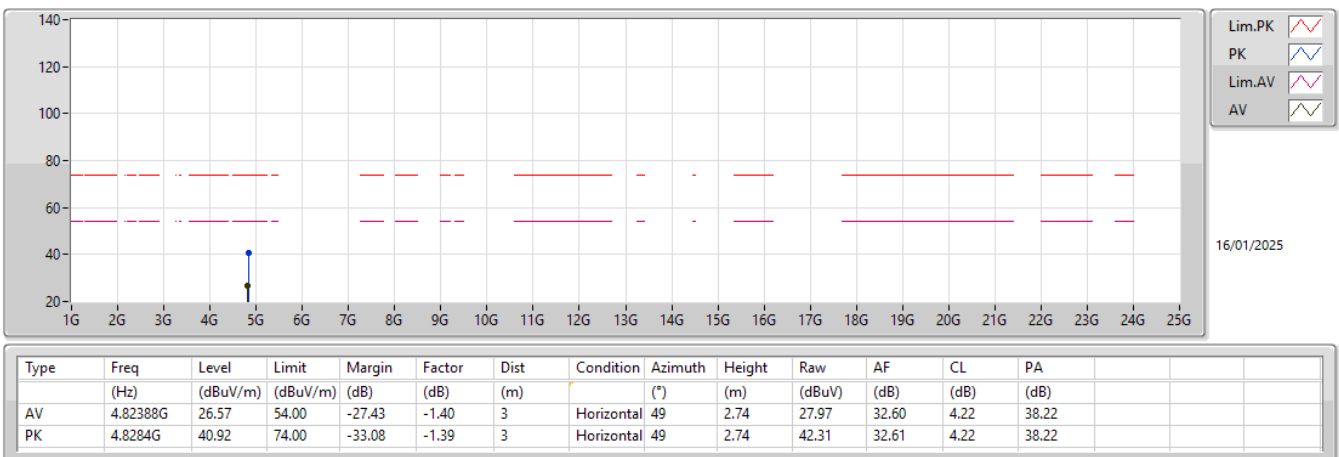
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX



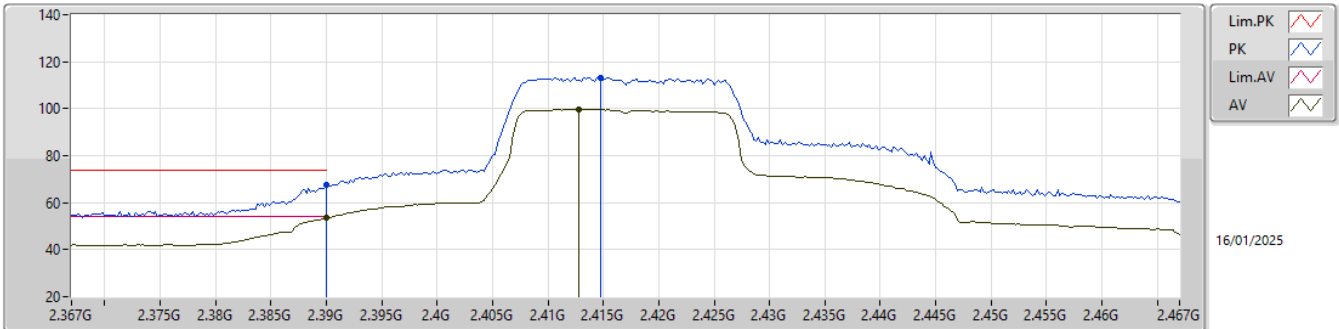
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX



2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_1TX

2417MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)			
AV	2.39G	53.44	54.00	-0.56	30.30	3	Horizontal	303	1.33	23.14	27.50	2.80	-			
AV	2.4128G	99.67	Inf	-Inf	30.44	3	Horizontal	303	1.33	69.23	27.63	2.81	-			
PK	2.39G	67.71	74.00	-6.29	30.30	3	Horizontal	303	1.33	37.41	27.50	2.80	-			
PK	2.4148G	113.31	Inf	-Inf	30.46	3	Horizontal	303	1.33	82.85	27.65	2.81	-			



**RSE TX below 1GHz_Non-Beamforming_Radio 1_
Dipole Antenna_2T1S**

Appendix F.3

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11be EHT20_Nss1,(MCS0)_2TX	Pass	PK	47.46M	34.40	40.00	-5.60	3	Vertical	360	1.00



**RSE TX below 1GHz_Non-Beamforming_Radio 1_
Dipole Antenna_2T1S**

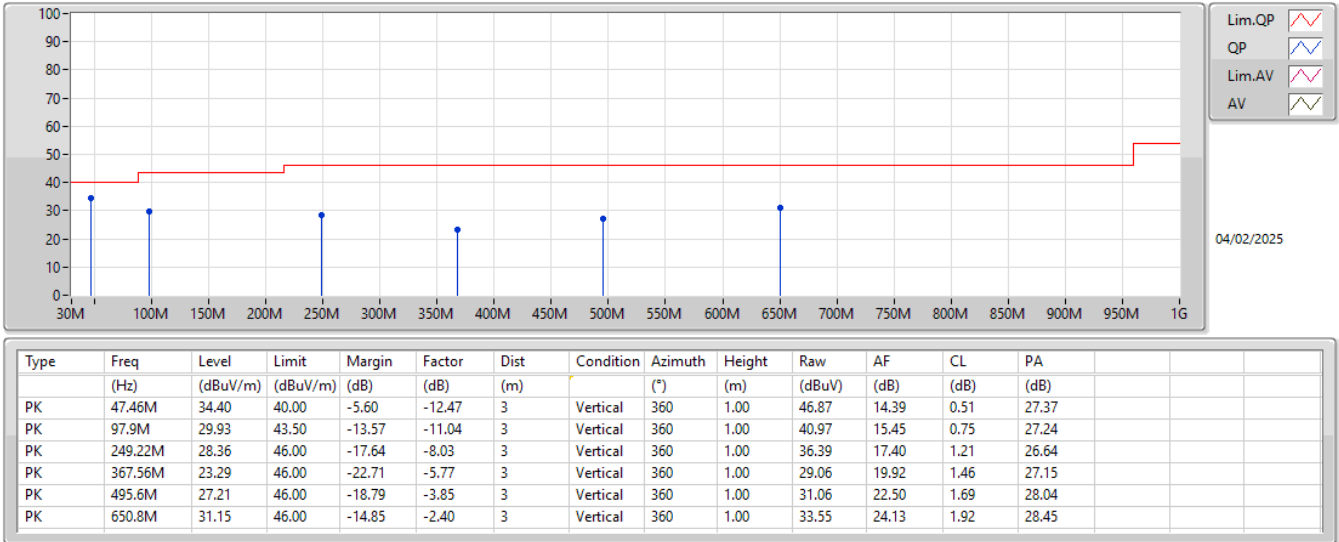
Appendix F.3

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
2437MHz_Adapter	Pass	PK	47.46M	34.40	40.00	-5.60	3	Vertical	360	1.00
2437MHz_Adapter	Pass	PK	97.9M	29.93	43.50	-13.57	3	Vertical	360	1.00
2437MHz_Adapter	Pass	PK	249.22M	28.36	46.00	-17.64	3	Vertical	360	1.00
2437MHz_Adapter	Pass	PK	367.56M	23.29	46.00	-22.71	3	Vertical	360	1.00
2437MHz_Adapter	Pass	PK	495.6M	27.21	46.00	-18.79	3	Vertical	360	1.00
2437MHz_Adapter	Pass	PK	650.8M	31.15	46.00	-14.85	3	Vertical	360	1.00
2437MHz_Adapter	Pass	PK	30M	31.50	40.00	-8.50	3	Horizontal	0	1.00
2437MHz_Adapter	Pass	PK	97.9M	29.12	43.50	-14.38	3	Horizontal	0	1.00
2437MHz_Adapter	Pass	PK	249.22M	32.73	46.00	-13.27	3	Horizontal	0	1.00
2437MHz_Adapter	Pass	PK	429.64M	32.88	46.00	-13.12	3	Horizontal	0	1.00
2437MHz_Adapter	Pass	PK	573.2M	25.82	46.00	-20.18	3	Horizontal	0	1.00
2437MHz_Adapter	Pass	PK	650.8M	28.36	46.00	-17.64	3	Horizontal	0	1.00

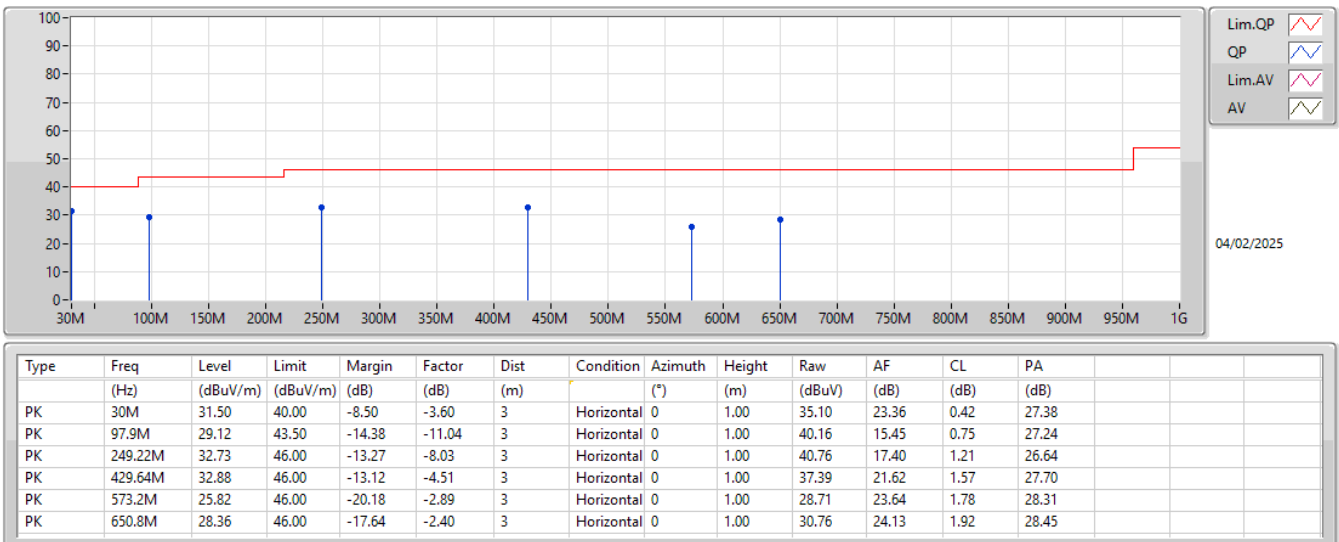
2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

2437MHz_Adapter



2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX

2437MHz_Adapter





**RSE TX above 1GHz_Non-Beamforming_Radio 1_
Dipole Antenna_2T1S**

Appendix F.4

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.4838G	53.12	54.00	-0.88	3	Horizontal	185	1.40
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.39G	53.66	54.00	-0.34	3	Horizontal	179	2.63
802.11be EHT20_Nss1,(MCS0)_2TX	Pass	AV	2.3894G	53.84	54.00	-0.16	3	Horizontal	180	2.66

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3868G	46.97	54.00	-7.03	3	Horizontal	186	1.35
2412MHz	Pass	AV	2.4128G	112.21	Inf	-Inf	3	Horizontal	186	1.35
2412MHz	Pass	PK	2.3878G	57.58	74.00	-16.42	3	Horizontal	186	1.35
2412MHz	Pass	PK	2.4128G	115.22	Inf	-Inf	3	Horizontal	186	1.35
2412MHz	Pass	AV	4.824G	36.27	54.00	-17.73	3	Vertical	24	1.30
2412MHz	Pass	PK	4.824G	43.40	74.00	-30.60	3	Vertical	24	1.30
2412MHz	Pass	AV	4.824G	42.06	54.00	-11.94	3	Horizontal	340	1.81
2412MHz	Pass	PK	4.824G	46.74	74.00	-27.26	3	Horizontal	340	1.81
2417MHz	Pass	AV	2.3886G	52.66	54.00	-1.34	3	Horizontal	185	1.32
2417MHz	Pass	AV	2.4162G	113.00	Inf	-Inf	3	Horizontal	185	1.32
2417MHz	Pass	PK	2.39G	60.04	74.00	-13.96	3	Horizontal	185	1.32
2417MHz	Pass	PK	2.4162G	115.77	Inf	-Inf	3	Horizontal	185	1.32
2437MHz	Pass	AV	2.3882G	46.47	54.00	-7.53	3	Horizontal	186	1.38
2437MHz	Pass	AV	2.4362G	113.91	Inf	-Inf	3	Horizontal	186	1.38
2437MHz	Pass	AV	2.489G	47.83	54.00	-6.17	3	Horizontal	186	1.38
2437MHz	Pass	PK	2.3882G	58.03	74.00	-15.97	3	Horizontal	186	1.38
2437MHz	Pass	PK	2.4362G	116.64	Inf	-Inf	3	Horizontal	186	1.38
2437MHz	Pass	PK	2.485G	59.29	74.00	-14.71	3	Horizontal	186	1.38
2437MHz	Pass	AV	4.874G	35.43	54.00	-18.57	3	Vertical	310	1.64
2437MHz	Pass	AV	7.31022G	40.08	54.00	-13.92	3	Vertical	3	1.30
2437MHz	Pass	PK	4.87388G	43.59	74.00	-30.41	3	Vertical	310	1.64
2437MHz	Pass	PK	7.3098G	50.01	74.00	-23.99	3	Vertical	3	1.30
2437MHz	Pass	AV	4.874G	42.21	54.00	-11.79	3	Horizontal	341	1.65
2437MHz	Pass	AV	7.31028G	46.06	54.00	-7.94	3	Horizontal	306	1.82
2437MHz	Pass	PK	4.87388G	46.68	74.00	-27.32	3	Horizontal	341	1.65
2437MHz	Pass	PK	7.31184G	52.80	74.00	-21.20	3	Horizontal	306	1.82
2457MHz	Pass	AV	2.4578G	110.84	Inf	-Inf	3	Horizontal	187	1.49
2457MHz	Pass	AV	2.4835G	53.04	54.00	-0.96	3	Horizontal	187	1.49
2457MHz	Pass	PK	2.458G	113.67	Inf	-Inf	3	Horizontal	187	1.49
2457MHz	Pass	PK	2.4872G	60.63	74.00	-13.37	3	Horizontal	187	1.49
2462MHz	Pass	AV	2.4628G	111.31	Inf	-Inf	3	Horizontal	185	1.40
2462MHz	Pass	AV	2.4838G	53.12	54.00	-0.88	3	Horizontal	185	1.40
2462MHz	Pass	PK	2.463G	114.01	Inf	-Inf	3	Horizontal	185	1.40
2462MHz	Pass	PK	2.4846G	62.60	74.00	-11.40	3	Horizontal	185	1.40
2462MHz	Pass	AV	4.924G	39.99	54.00	-14.01	3	Vertical	306	1.27
2462MHz	Pass	AV	7.38678G	38.37	54.00	-15.63	3	Vertical	4	1.34
2462MHz	Pass	PK	4.92412G	45.07	74.00	-28.93	3	Vertical	306	1.27
2462MHz	Pass	PK	7.3818G	48.79	74.00	-25.21	3	Vertical	4	1.34
2462MHz	Pass	AV	4.924G	43.82	54.00	-10.18	3	Horizontal	338	1.62
2462MHz	Pass	AV	7.38678G	44.36	54.00	-9.64	3	Horizontal	299	1.78
2462MHz	Pass	PK	4.924G	47.54	74.00	-26.46	3	Horizontal	338	1.62
2462MHz	Pass	PK	7.38642G	51.27	74.00	-22.73	3	Horizontal	299	1.78
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3894G	53.24	54.00	-0.76	3	Horizontal	182	1.70
2412MHz	Pass	AV	2.4186G	105.00	Inf	-Inf	3	Horizontal	182	1.70
2412MHz	Pass	PK	2.3898G	70.37	74.00	-3.63	3	Horizontal	182	1.70
2412MHz	Pass	PK	2.4186G	115.55	Inf	-Inf	3	Horizontal	182	1.70
2412MHz	Pass	AV	4.82244G	27.93	54.00	-26.07	3	Vertical	302	1.64
2412MHz	Pass	PK	4.82808G	42.03	74.00	-31.97	3	Vertical	302	1.64
2412MHz	Pass	AV	4.82286G	30.84	54.00	-23.16	3	Horizontal	340	1.81
2412MHz	Pass	PK	4.82742G	44.71	74.00	-29.29	3	Horizontal	340	1.81
2417MHz	Pass	AV	2.39G	53.66	54.00	-0.34	3	Horizontal	179	2.63
2417MHz	Pass	AV	2.4218G	105.91	Inf	-Inf	3	Horizontal	179	2.63
2417MHz	Pass	PK	2.3876G	69.77	74.00	-4.23	3	Horizontal	179	2.63
2417MHz	Pass	PK	2.4218G	117.04	Inf	-Inf	3	Horizontal	179	2.63
2437MHz	Pass	AV	2.3898G	51.91	54.00	-2.09	3	Horizontal	180	2.23
2437MHz	Pass	AV	2.4358G	107.14	Inf	-Inf	3	Horizontal	180	2.23
2437MHz	Pass	AV	2.4835G	52.61	54.00	-1.39	3	Horizontal	180	2.23
2437MHz	Pass	PK	2.3898G	67.84	74.00	-6.16	3	Horizontal	180	2.23
2437MHz	Pass	PK	2.4358G	118.30	Inf	-Inf	3	Horizontal	180	2.23