



RADIO TEST REPORT

FCC ID : Z8H89FT0073
Equipment : XE3-4TN Outdoor Wi-Fi 6e 4x4 Access Point with SDR
Brand Name : Cambium Networks
Model Name : XE3-4T
Applicant : Cambium Networks Inc.
3800 Golf Road Suite 360 Rolling Meadows IL United States 60008
Manufacturer : LITE-ON Technology Corp. Networking Plant
5F, No. 101, Neihuan N. Rd., Nanzih Dist., Kaohsiung City 811, Taiwan, R.O.C.
Standard : 47 CFR FCC Part 15.247

The product was received on Aug. 02, 2022, and testing was started from Aug. 02, 2022 and completed on Dec. 15, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	12
1.3 Testing Location Information	12
1.4 Measurement Uncertainty	12
2 Test Configuration of EUT	13
2.1 Test Channel Mode	13
2.2 The Worst Case Measurement Configuration	15
2.3 EUT Operation during Test	18
2.4 Accessories	18
2.5 Support Equipment.....	19
2.6 Test Setup Diagram	20
3 Transmitter Test Result	24
3.1 AC Power-line Conducted Emissions	24
3.2 DTS Bandwidth.....	26
3.3 Maximum Conducted Output Power	27
3.4 Power Spectral Density	30
3.5 Emissions in Non-restricted Frequency Bands	32
3.6 Emissions in Restricted Frequency Bands.....	33
4 Test Equipment and Calibration Data	37
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	



TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_10 Ver1.3



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:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Viola Huang



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)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), VHT40, ax (HEW40)	2422-2452	3-9 [7]

For Radio 1

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2
2.4-2.4835GHz	802.11g	20	2
2.4-2.4835GHz	802.11n HT20	20	2
2.4-2.4835GHz	802.11n HT20-BF	20	2
2.4-2.4835GHz	VHT20	20	2
2.4-2.4835GHz	VHT20-BF	20	2
2.4-2.4835GHz	802.11ax HEW20	20	2
2.4-2.4835GHz	802.11ax HEW20-BF	20	2
2.4-2.4835GHz	802.11n HT40	40	2
2.4-2.4835GHz	802.11n HT40-BF	40	2
2.4-2.4835GHz	VHT40	40	2
2.4-2.4835GHz	VHT40-BF	40	2
2.4-2.4835GHz	802.11ax HEW40	40	2
2.4-2.4835GHz	802.11ax HEW40-BF	40	2

Note:

- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.


1.1.2 Antenna Information

Set	Port					Brand Name	Part Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz (Radio 1)	WLAN 5GHz (Radio 2)	WLAN 5GHz (Radio 3)	BT (Radio 4)	GPS (Radio 5)					
1	1	1	2	-	-	LYNwave	ALX22X-121050-00	Dipole	N-Type	Note 1
	2	2	4	-	-					
	-	-	1	-	-					
	-	-	3	-	-					
2	1	1	2	-	-	SmartAnt	SAA19-220130	Dipole	N-Type	
	2	2	4	-	-					
	-	-	1	-	-					
	-	-	3	-	-					
3	-	-	2	-	-	LYNwave	OLX22X-127130-A	Patch	N-Type	
	-	-	4	-	-					
	-	-	1	-	-					
	-	-	3	-	-					
4	1	-	-	-	-	EAHiSON	ANT-DIR15-2X2-2.4 G-01	Panel	N-Female	
	2	-	-	-	-					
5	-	1	2	-	-	KBT	ANT-DIR15-2X2-5.0 G-01	Panel	N-Female	
	-	2	4	-	-					
	-	-	1	-	-					
	-	-	3	-	-					
6	-	-	-	-	1	Cirocomm	03V0134913Z010T	Marine GPS	SMA	
7	-	-	-	1	-	INPAQ	RFPCA403422IMAB 702	PCB	I-PEX	



Note 1:

Set	Antenna Gain (dBi)				Cable loss (dB)				Net Gain (dBi)			
	WLAN 2.4GHz (Radio 1)	BT (Radio 4)	GPS (Radio 5)		WLAN 2.4GHz (Radio 1)	BT (Radio 4)	GPS (Radio 5)		WLAN 2.4GHz (Radio 1)	BT (Radio 4)	GPS (Radio 5)	
			1575.42 MHz	1602 MHz			1575.42 MHz	1602 MHz			1575.42 MHz	1602 MHz
1	4.4	-	-	-	-	-	-	-	4.4	-	-	-
2	3	-	-	-	-	-	-	-	3	-	-	-
4	18	-	-	-	0.77	-	-	-	17.23	-	-	-
6	-	-	3	4.5	-	-	-	-	-	-	3	4.5
7	-	3.73	-	-	-	-	-	-	-	3.73	-	-

Set	Antenna Gain (dBi)								Cable loss (dB)								Net Gain (dBi)							
	WLAN 5GHz (Radio 2)				WLAN 5GHz (Radio 3)				WLAN 5GHz (Radio 2)				WLAN 5GHz (Radio 3)				WLAN 5GHz (Radio 2)				WLAN 5GHz (Radio 3)			
	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3
1	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	-	-	-	-	-	-	-	-	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
2	5	5	6	6	5	5	6	6	-	-	-	-	-	-	-	-	5	5	6	6	5	5	6	6
3	-	-	-	-	11	11	11	11	-	-	-	-	1.45	1.45	1.6	1.6	-	-	-	-	9.55	9.55	9.4	9.4
5	18	18	18	18	18	18	18	18	1.45	1.45	1.6	1.6	1.45	1.45	1.6	1.6	16.55	16.55	16.4	16.4	16.55	16.55	16.4	16.4

Note 2: The EUT has five sets of antenna for WLAN and one set of antenna for GPS and Bluetooth.

Note 3: The above information was declared by manufacturer.

Note 4: The antenna set 1 and set 2 are the same antenna type, only the highest gain antenna (antenna set 1 for 2.4GHz and 5GHz UNII 1, antenna set 2 for 5GHz UNII 3) were selected to test and record in this report.

Note 5: The EUT doesn't enable the DFS band.

Note 6: Polarization of antenna set 3: 2*Horizontal, 2*Vertical. so array gain only adds 10log (2).

Polarization of antenna set 4: 1*Horizontal, 1*Vertical. so the array gain is 0dBi.

Polarization of antenna set 5: Radio 2: 1*Horizontal, 1*Vertical. so the array gain is 0dBi.

Radio 3: 2*Horizontal, 2*Vertical. so array gain only adds 10log (2).

Note 7: Directional gain information.

Type	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 ≤ 4	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ant}} \left[\sum_{k=1}^{N_{ant}} g_{j,k} \right]^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ant}} \left[\sum_{k=1}^{N_{ant}} g_{j,k} \right]^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ant}} \left[\sum_{k=1}^{N_{ant}} g_{j,k} \right]^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ant}} \left[\sum_{k=1}^{N_{ant}} g_{j,k} \right]^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,3) = 10^{G3/20} ; NSS1(g1,4) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10$$

$$\log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where ;

Antenna set 1

2.4G G1 = 4.4 dBi; G2 = 4.4 dBi ;DG = 4.4 dBi

5G Band1 G1 = 5.5 dBi; G2 = 5.5 dBi; G3 = 5.5 dBi; G4 = 5.5 dBi;DG = 5.5 dBi

5G Band2 G1 = 5.5 dBi; G2 = 5.5 dBi; G3 = 5.5 dBi; G4 = 5.5 dBi;DG = 5.5 dBi

2.4G DG = 7.41 dBi

For 2TX

Radio 2 5G Band1 DG = 8.51 dBi

Radio 2 5G Band2 DG = 8.51 dBi

For 4TX

Radio 3 5G Band1 DG = 11.52 dBi

Radio 3 5G Band2 DG = 11.52 dBi

Antenna set 2

5G Band3 G1 = 6 dBi; G2 = 6 dBi; G3 = 6 dBi; G4 = 6 dBi;DG = 6 dBi

5G Band4 G1 = 6 dBi; G2 = 6 dBi; G3 = 6 dBi; G4 = 6 dBi;DG = 6 dBi

For 2TX

Radio 2 5G Band3 DG = 9.01 dBi

Radio 2 5G Band4 DG = 9.01 dBi

For 4TX

Radio 3 5G Band3 DG = 12.02 dBi

Radio 3 5G Band4 DG = 12.02 dBi

**Antenna set 3(Cross-Polarized Antenna)**

5G Band1 G1 = 9.55 dBi; G2 = 9.55 dBi; G3 = 9.55 dBi; G4 = 9.55 dBi; DG = 9.55 dBi

5G Band2 G1 = 9.55 dBi; G2 = 9.55 dBi; G3 = 9.55 dBi; G4 = 9.55 dBi; DG = 9.55 dBi

5G Band3 G1 = 9.4 dBi; G2 = 9.4 dBi; G3 = 9.4 dBi; G4 = 9.4 dBi; DG = 9.4 dBi

5G Band4 G1 = 9.4 dBi; G2 = 9.4 dBi; G3 = 9.4 dBi; G4 = 9.4 dBi; DG = 9.4 dBi

Radio 3 5G Band1 DG = 12.56 dBi

Radio 3 5G Band2 DG = 12.56 dBi

Radio 3 5G Band3 DG = 12.41 dBi

Radio 3 5G Band4 DG = 12.41 dBi

Antenna set 4(Cross-Polarized Antenna)

2.4G G1 = 17.23 dBi; G2 = 17.23 dBi

DG = 17.23 dBi

Antenna set 5(Cross-Polarized Antenna)

5G Band1 G1 = 16.55 dBi; G2 = 16.55 dBi; G3 = 16.55 dBi; G4 = 16.55 dBi; DG = 16.55 dBi

5G Band2 G1 = 16.55 dBi; G2 = 16.55 dBi; G3 = 16.55 dBi; G4 = 16.55 dBi; DG = 16.55 dBi

5G Band3 G1 = 16.4 dBi; G2 = 16.4 dBi; G3 = 16.4 dBi; G4 = 16.4 dBi; DG = 16.4 dBi

5G Band4 G1 = 16.4 dBi; G2 = 16.4 dBi; G3 = 16.4 dBi; G4 = 16.4 dBi; DG = 16.4 dBi

For 2TX

Radio 2 5G Band1 DG = 16.55 dBi

Radio 2 5G Band2 DG = 16.55 dBi

Radio 2 5G Band3 DG = 16.40 dBi

Radio 2 5G Band4 DG = 16.40 dBi

For 4TX

Radio 3 5G Band1 DG = 19.56 dBi

Radio 3 5G Band2 DG = 19.56 dBi

Radio 3 5G Band3 DG = 19.41 dBi

Radio 3 5G Band4 DG = 19.41 dBi

For Radio 1**For 2.4GHz:****For IEEE 802.11b/g/n/VHT/ax mode (2TX/2RX):**

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

Port 1 and Port 2 could transmit/receive simultaneously.

For Radio 2**For 5GHz UNII 1, 3:****For IEEE 802.11a/n/ac/ax mode (2TX/2RX):**

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

Port 1 and Port 2 could transmit/receive simultaneously.

For Radio 3**For 5GHz UNII 1, 3:****For IEEE 802.11a/n/ac/ax mode (4TX/4RX):**

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

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

For Radio 4**Bluetooth (1TX/1RX):**

Only Port 1 can be used as transmitting/receiving antenna.

For Radio 5**GPS (1RX):**

Only Port 1 can be used as receiving antenna.



1.1.3 Mode Test Duty Cycle

For Radio 1

For antenna set 1

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.622	2.06	648.75u	3k
802.11g	0.926	0.33	1.433m	1k
802.11ax HEW20	0.956	0.2	5.448m	300
802.11ax HEW20-BF	0.963	0.16	1.964m	1k
802.11ax HEW40	0.941	0.26	5.448m	300
802.11ax HEW40-BF	0.935	0.29	1.761m	1k

For antenna set 4

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.62	2.08	652.5u	3k
802.11g	0.926	0.33	1.435m	1k
802.11ax HEW20	0.937	0.28	5.448m	300
802.11ax HEW20-BF	0.973	0.12	1.78m	1k
802.11ax HEW40	0.954	0.2	5.448m	300
802.11ax HEW40-BF	0.931	0.31	1.78m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for 11n/VHT/11ax in radio 1 2.4GHz, 11n/11ac/11ax in radio 2 5GHz and radio 3 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	QSPR_v5.0-00199			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT support function

Function
AP
Mesh
Bridge

Note1: For above table list, only AP mode was tested and recorded in this test.

Note2: The above information was declared by manufacturer.

1.1.6 Table for Radio function

Radio (R)	WLAN 2.4GHz	5GHz	Bluetooth	GPS
R1	V	-	-	-
R2	-	V (20/40/80MHz)	-	-
R3	-	V (20/40/80MHz)	-	-
R4	-	-	V	-
R5	-	-	-	V

Note: The above information was declared by manufacturer.

1.1.7 Table for Multiple Listing

EUT	DDR		GPS	
	Brand	Model	Brand	Model
1	MICRON	MT41K256M16TW-107	ST	TESEO-LIV3F
2	ISSI	IS43TR16256B-107MBL	Quectel	LC76G

Note 1: From the above models, model: EUT 1 was selected as representative EUT for other test and its data was recorded in this report ; EUT 2 was selected as representative EUT for AC Power-line Conducted and Emissions in Restricted Frequency Bands below 1GHz and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15.247
- ♦ ANSI C63.10-2013

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

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	23.5~24.1 / 61~65	Aug. 05, 2022~Oct. 14, 2022
Radiated below 1GHz & above 1GHz (Co-location)	03CH05-CB	Simmon Cheng	23.1~24.3 / 57~60	Aug. 02, 2022~Dec. 15, 2022
Radiated above 1GHz (For other tests)	03CH01-CB	Simmon Cheng	23~23.9 / 55~58	Aug. 02, 2022~Nov. 07, 2022
	03CH02-CB	Simmon Cheng	22.4~24.3 / 56~59	Aug. 02, 2022~Nov. 07, 2022
	03CH03-CB	Simmon Cheng	23.2~24.5 / 57~59	Aug. 02, 2022~Nov. 07, 2022
AC Conduction	CO01-CB	Tim Chen	23~24 / 58~59	Nov. 08, 2022~Dec. 15, 2022

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For Radio 1

For antenna set 1

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	27.5
2437MHz	27.5
2462MHz	27.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	23
2417MHz	26
2437MHz	27.5
2457MHz	25.5
2462MHz	25
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	21.5
2417MHz	26.5
2437MHz	27.5
2457MHz	25.5
2462MHz	25
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	20.5
2427MHz	22
2437MHz	24
2452MHz	22
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	20
2417MHz	28
2437MHz	28
2457MHz	27
2462MHz	25
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	14
2427MHz	22
2437MHz	24
2447MHz	21
2452MHz	19

**For antenna set 4**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	16
2437MHz	16
2457MHz	15.5
2462MHz	15.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	16
2417MHz	16
2437MHz	16
2462MHz	15.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	15
2417MHz	16.5
2437MHz	16.5
2462MHz	16
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	13.5
2427MHz	13.5
2437MHz	16
2452MHz	15
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	18
2437MHz	18
2457MHz	18
2462MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	15
2437MHz	17
2447MHz	15
2452MHz	14

Note:

- ♦ Evaluated HEW20/HEW40 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40 mode are the same or lower than HEW20/HEW40.

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
	A. The EUT performed testing in the following test mode. 1.EUT 1_R1 + Antenna set 1 2.EUT 1_R2 + Antenna set 2 3.EUT 1_R3 + Antenna set 2 4.EUT 1_R1 + Antenna set 4 5.EUT 1_R2 + Antenna set 5 6.EUT 1_R3 + Antenna set 5 7.EUT 1_R3 + Antenna set 3 8.EUT 1_R4 + Antenna set 7 Mode 7 has been evaluated to be the worst case among Mode 1~8, thus measurement for Mode 9 will follow this same test mode. 9.EUT 2_R3 + Antenna set 3 B. "EUT 2_R3 + Antenna set 3" has been evaluated to be the worst case from above test mode. Thus, the measurement will follow this same test mode.
1	EUT 2_R3 + Antenna set 3 + PoE

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
1	EUT 1_R1 + Antenna set 1
2	EUT 1_R1+ Antenna set 4

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
	A. The EUT was performed at the X axis, Y axis, and Z axis position for Emissions in Restricted Frequency Bands above 1GHz, and the worst case axis was found and listed below. So the measurement will follow this same test configuration. B. The EUT performed testing in the following test mode. 1.EUT 1 in Y axis_R1 + Antenna set 1 2.EUT 1 in X axis_R2 + Antenna set 2 3.EUT 1 in X axis_R3 + Antenna set 2 4.EUT 1 in X axis_R1 + Antenna set 4 5.EUT 1 in Y axis_R2 + Antenna set 5 6.EUT 1 in Y axis_R3 + Antenna set 5 7.EUT 1 in Y axis_R3 + Antenna set 3 8.EUT 1 in X axis_R4 + Antenna set 7 Mode 4 has been evaluated to be the worst case among Mode 1~8, thus measurement for Mode 9 will follow this same test mode. 9.EUT 2 in X axis_R1 + Antenna set 4 C. "EUT 1 in X axis_R1 + Antenna set 4 + PoE" has been evaluated to be the worst case from above test mode. Thus, the measurement will follow this same test mode.
1	EUT 1 in X axis_R1 + Antenna set 4 + PoE
Operating Mode > 1GHz	CTX
	The EUT was performed at the X axis, Y axis, and Z axis position, and the worst case axis was found and listed below. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis_R1 + Antenna set 1
2	EUT 1 in X axis_R1 + Antenna set 4

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
	The EUT was performed at the X axis, Y axis, and Z axis position for Emissions in Restricted Frequency Bands above 1GHz, and the worst case axis was found and listed below. So the measurement will follow this same test configuration.
1	EUT 1 in X axis_R1:WLAN 2.4GHz + R2: WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	R1 (2.4G + antenna set 1) + R2 (5G + antenna set 2) + R3 (5G + antenna set 2) + R4 (Bluetooth + antenna set 7)
2	R1 (2.4G + antenna set 4) + R2 (5G + antenna set 5) + R3 (5G + antenna set 5) + R4 (Bluetooth + antenna set 7)
3	R1 (2.4G + antenna set 4) + R2 (5G + antenna set 5) + R3 (5G + antenna set 3) + R4 (Bluetooth + antenna set 7)
Refer to Sporton Test Report No.: FA290202 for Co-location RF Exposure Evaluation.	

Note: The PoE is for measurement only, would not be marketed.

Their information as below:

Power	Brand	Model
PoE	Cambium	NET-P60-56IN



2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Client and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories
Bracket 1*1 (Only for EUT 1~EUT 2 use)
Bracket 2*1 (Only for Antenna Set 3 use)
Bracket 3*1 (Only for Antenna Set 4 use)
Bracket 4*1 (Only for Antenna Set 5 use)
Antenna cable*6 (Only for Antenna Set 3~5 use)
Sealing collar*1



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	Cambium	NET-P60-56IN	N/A
B	NB	DELL	E6430	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE	Cambium	NET-P60-56IN	N/A

For Radiated (above 1GHz):

For non beamforming mode

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE	Cambium	NET-P60-56IN	N/A

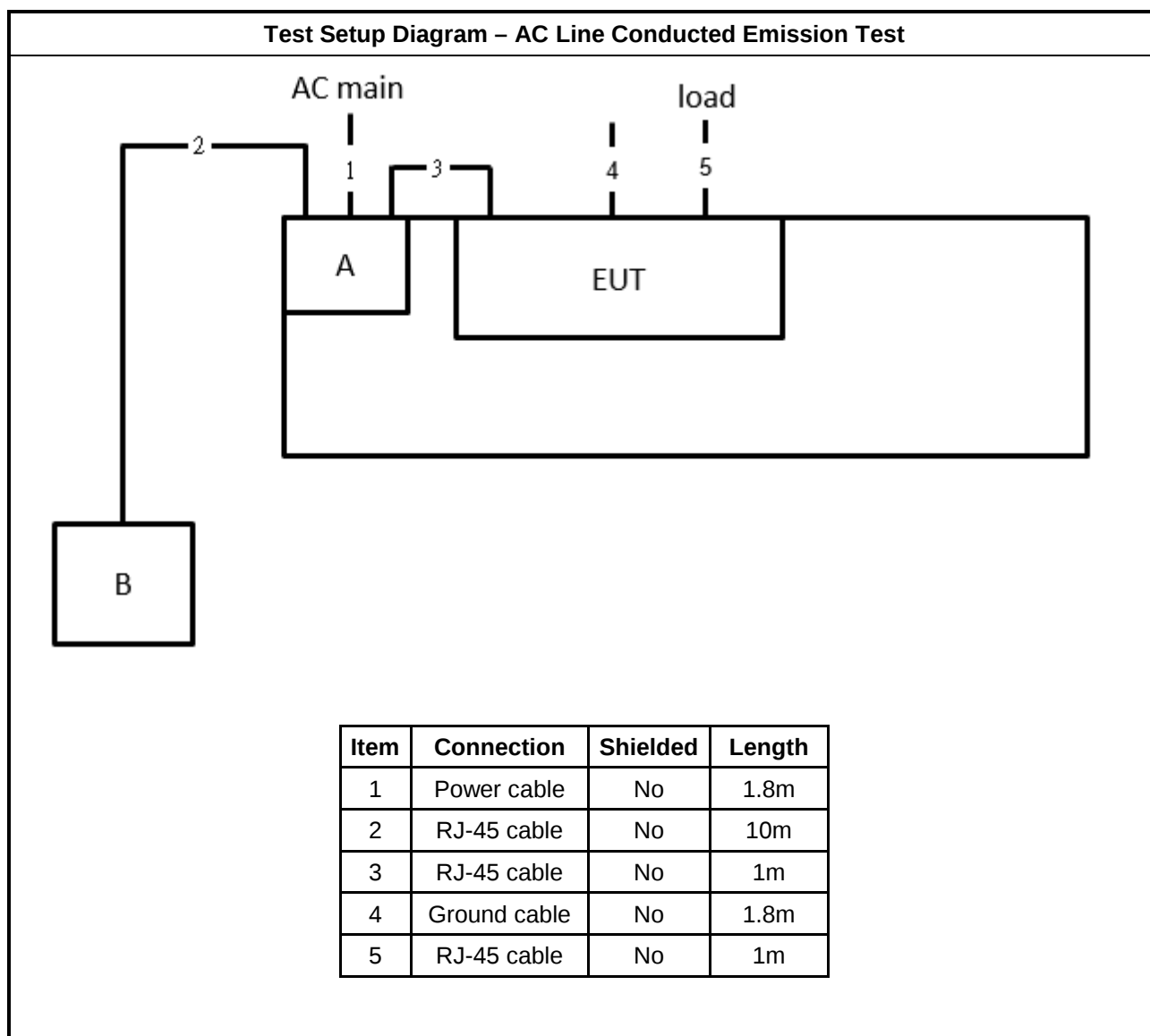
For beamforming mode

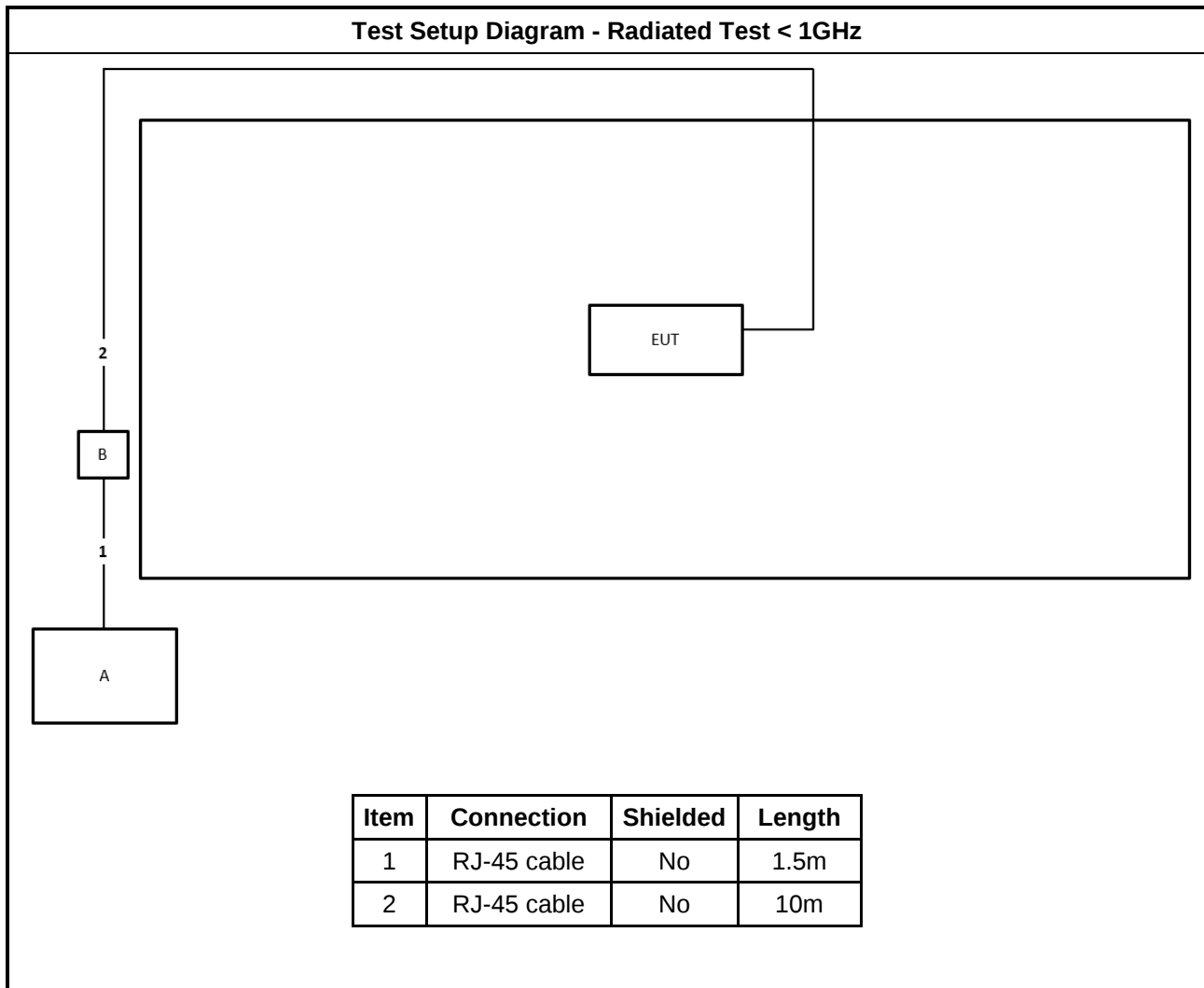
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE	Cambium	NET-P60-56IN	N/A
C	Client	Cambium Networks	CB-EX3-4TN	N/A
D	NB	DELL	E4300	N/A

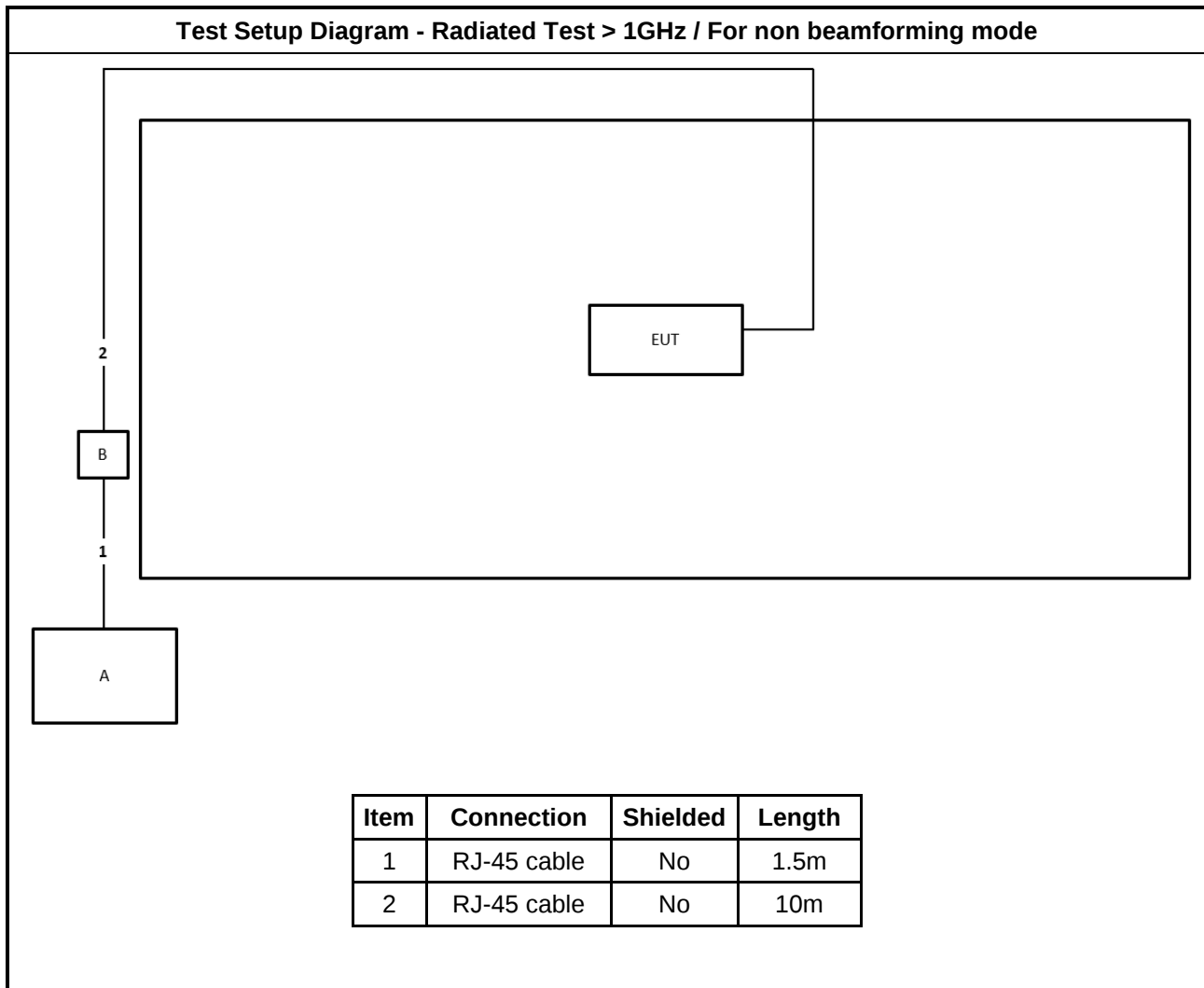
For RF Conducted:

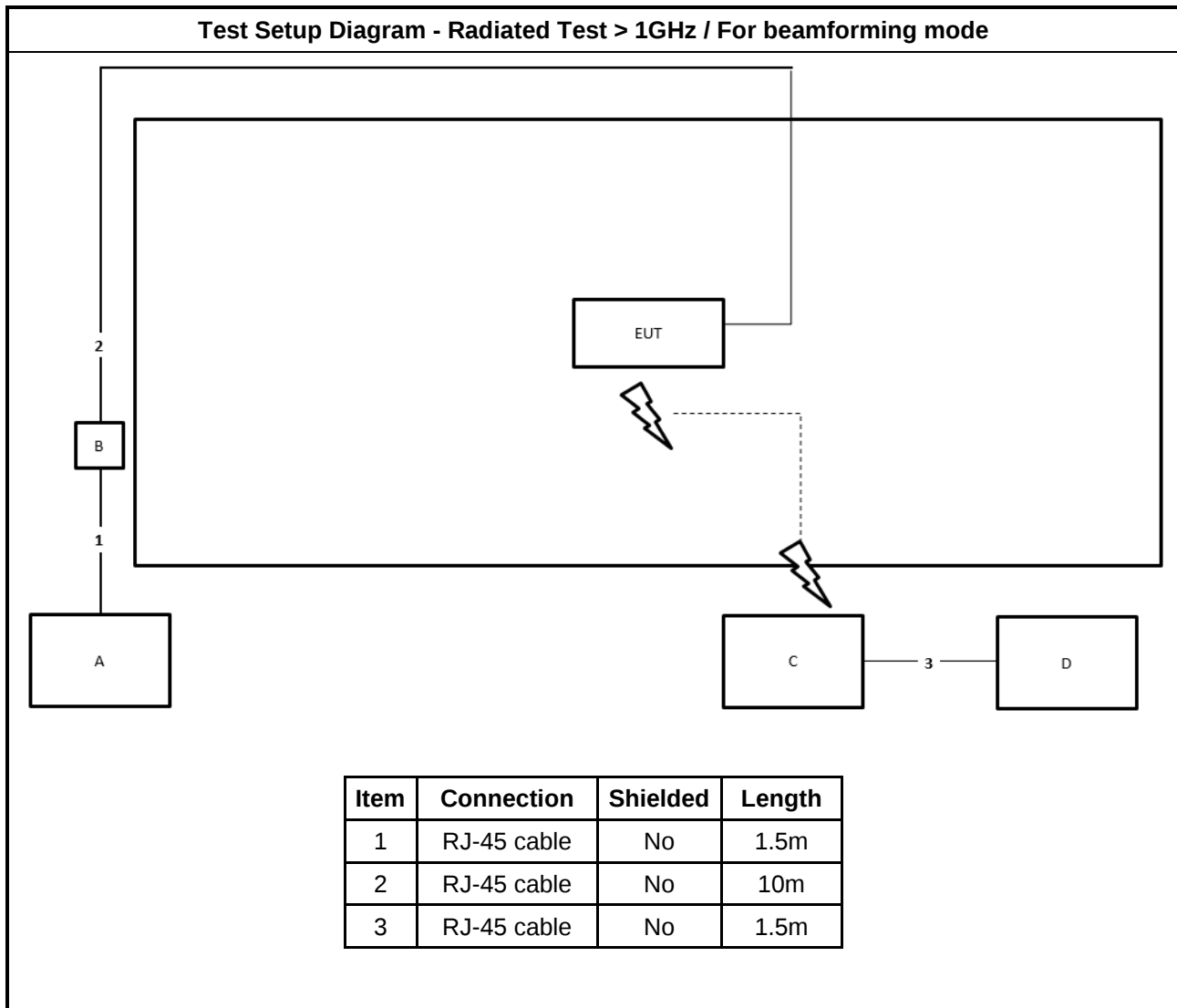
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE	Cambium	NET-P60-56IN	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Test Setup Diagram - Radiated Test > 1GHz / For non beamforming mode


Test Setup Diagram - Radiated Test > 1GHz / For beamforming mode




3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

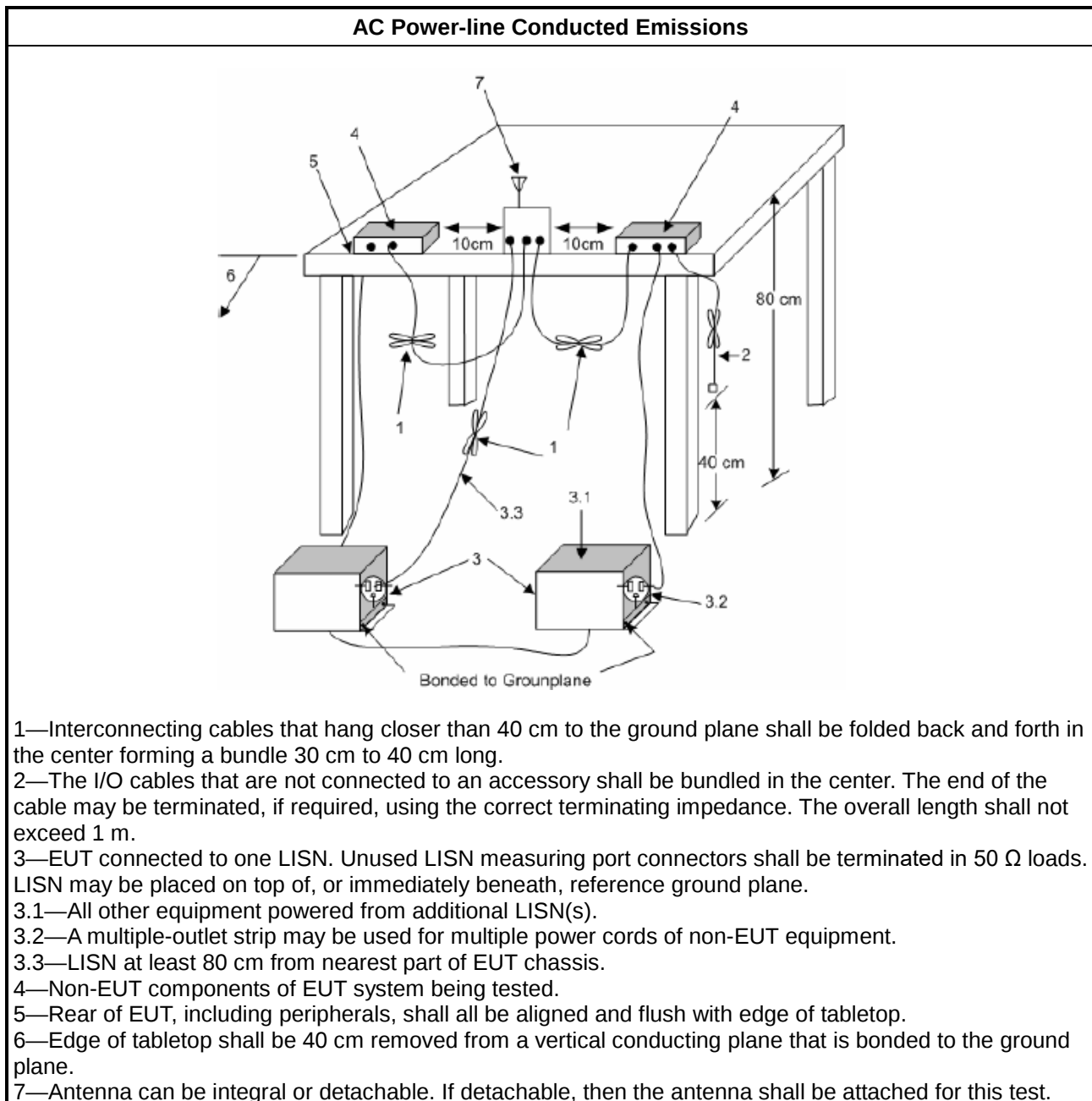
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

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.

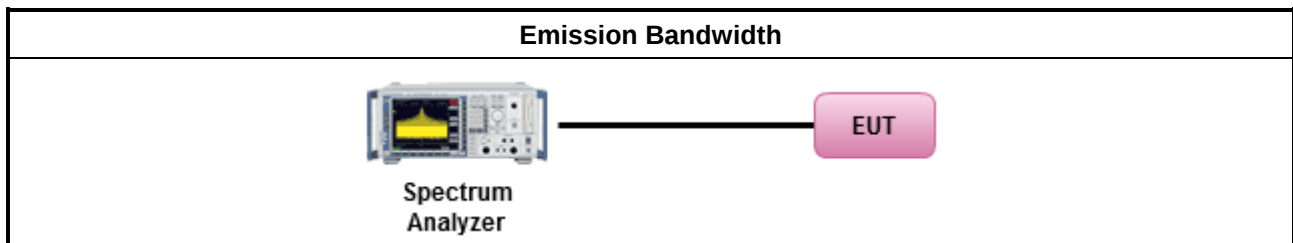
3.2.2 Measuring Instruments

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 FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
☐ Refer as ANSI C63.10, clause 6.9.1 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 $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB 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.	

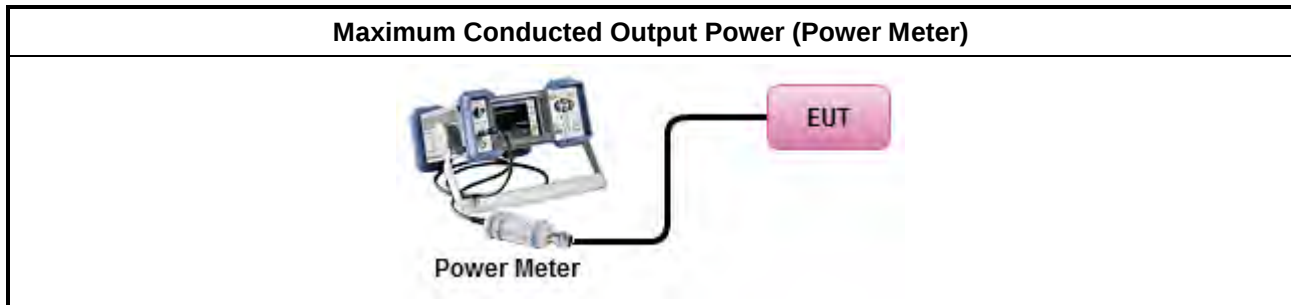
3.3.2 Measuring Instruments

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 FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
☐	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
☒	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (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

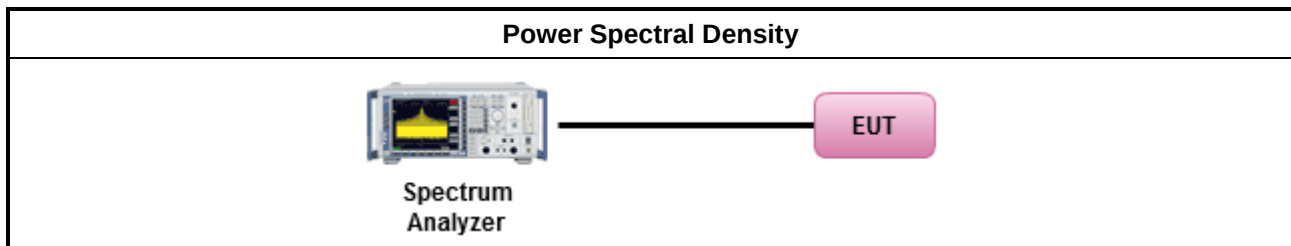
3.4.2 Measuring Instruments

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 FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

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 (dBc)
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 PSD 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 PSD level.	

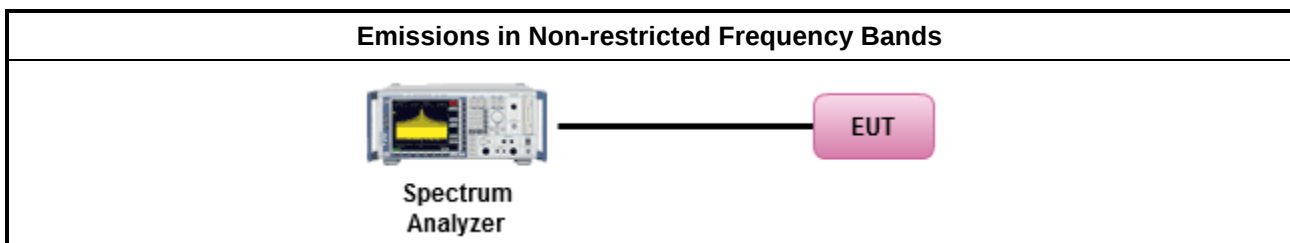
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted 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

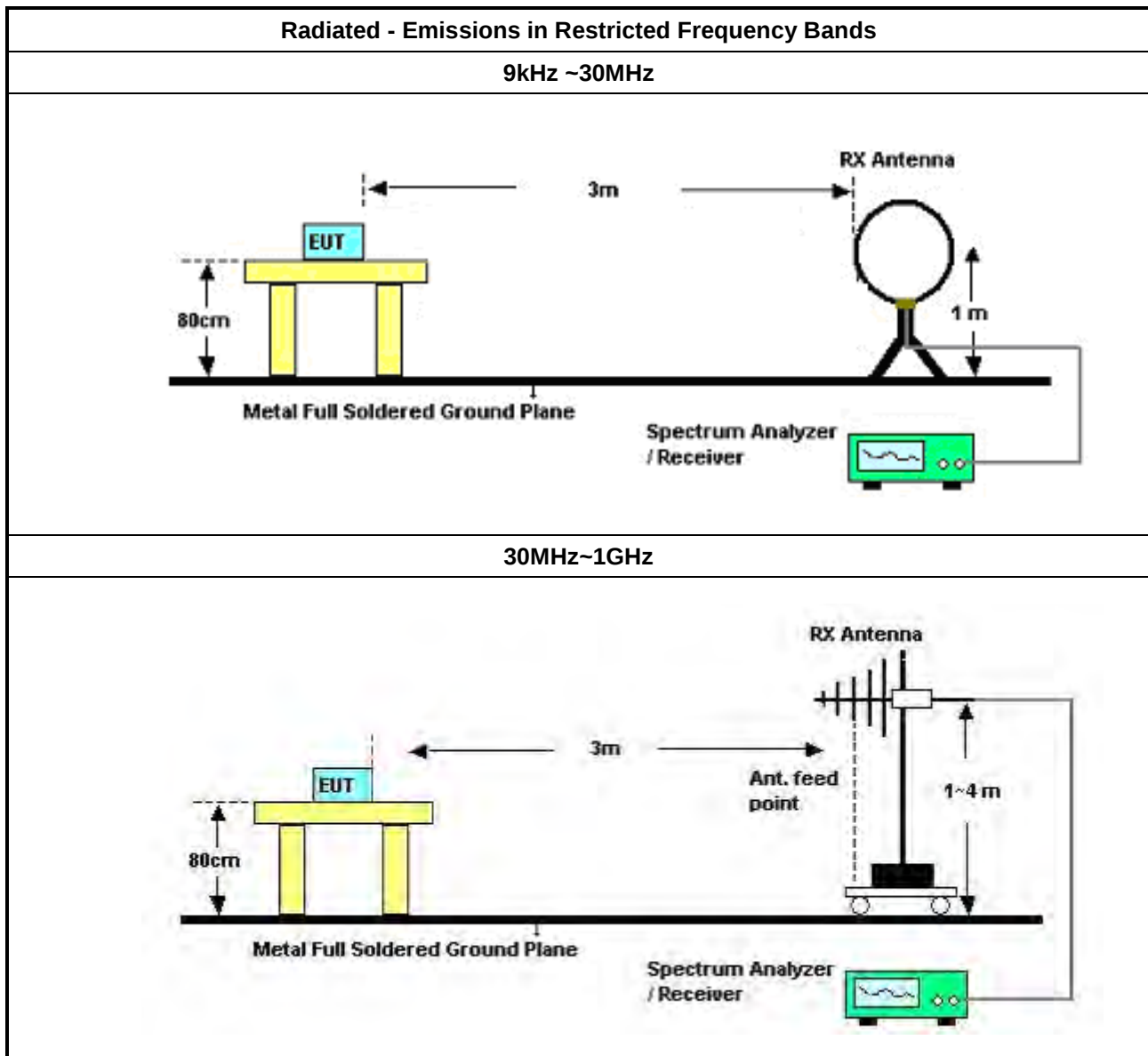
Refer a test equipment and calibration data table in this test report.

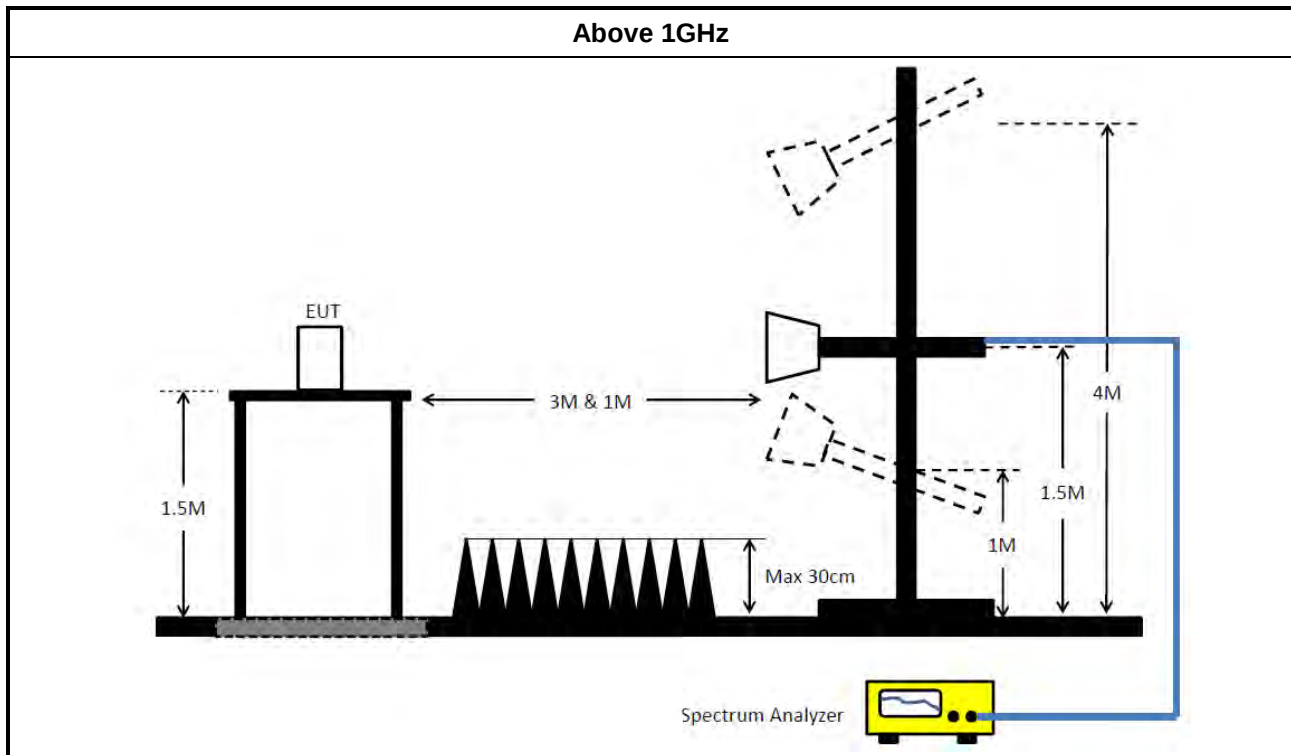


3.6.3 Test Procedures

Test Method	
The average emission levels shall be measured in [duty cycle ≥ 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 FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, 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 FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 07, 2021	Nov. 06, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 06, 2022	Nov. 05, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 05, 2022	Jul. 04, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 20, 2022	Jul. 19, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2021	Nov. 05, 2022	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 04, 2022	Nov. 03, 2023	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 05, 2022	Jul. 04, 2023	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 19, 2022	May 18, 2023	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 20, 2022	Jul. 19, 2023	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 06, 2022	May 05, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 26, 2022	Mar. 25, 2023	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 19, 2022	Apr. 18, 2023	Radiation (03CH02-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 05, 2022	Jul. 04, 2023	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 20, 2022	Jul. 19, 2023	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSP	100593	9kHz~40GHz	Apr. 08, 2022	Apr. 07, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 05, 2022	May 04, 2023	Radiation (03CH03-CB)
Horn Antenna	ETS-Lindgren	3115	6821	750MHz~18GHz	Jan. 21, 2022	Jan. 20, 2023	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 05, 2022	Jul. 04, 2023	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 20, 2022	Jul. 19, 2023	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 10, 2022	Jun. 09, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Jan. 07, 2022	Jan. 06, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1531344	300MHz~40GHz	Jul. 31, 2022	Jul. 30, 2023	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1728002	300MHz~40GHz	Jul. 31, 2022	Jul. 30, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P1	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P2	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P3	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P4	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P5	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

N.C.R. means Non-Calibration required.



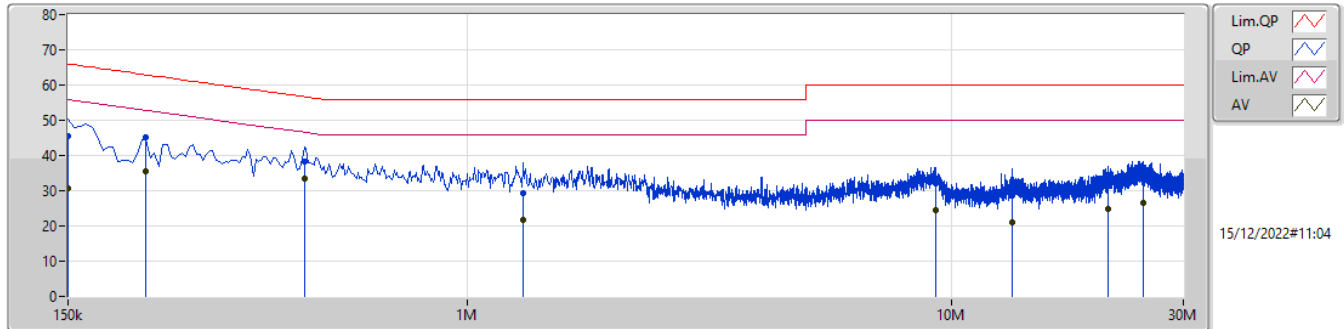
Conducted Emissions at Powerline

Appendix A

Summary

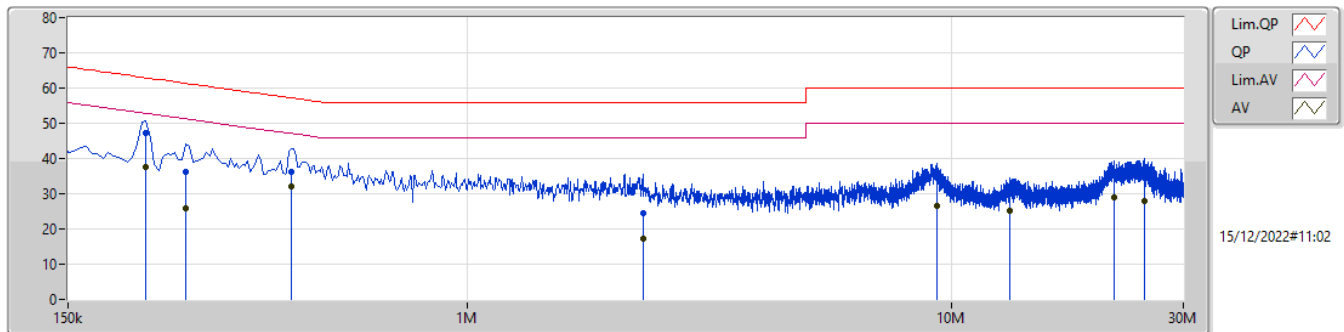
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	460.5k	33.54	46.69	-13.15	Line

Test Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	150k	45.61	66.00	-20.39	9.99	Line	-	35.62	0.06	0.04	9.89						
AV	150k	30.71	56.00	-25.29	9.99	Line	-	20.72	0.06	0.04	9.89						
QP	217.5k	45.34	62.92	-17.58	9.99	Line	-	35.35	0.06	0.04	9.89						
AV	217.5k	35.64	52.92	-17.28	9.99	Line	-	25.65	0.06	0.04	9.89						
QP	460.5k	38.34	56.69	-18.35	10.01	Line	-	28.33	0.06	0.06	9.89						
AV	460.5k	33.54	46.69	-13.15	10.01	Line	"Worst"	23.53	0.06	0.06	9.89						
QP	1.307M	29.15	56.00	-26.85	10.03	Line	-	19.12	0.08	0.06	9.89						
AV	1.307M	21.89	46.00	-24.11	10.03	Line	-	11.86	0.08	0.06	9.89						
QP	9.258M	32.22	60.00	-27.78	10.28	Line	-	21.94	0.21	0.16	9.91						
AV	9.258M	24.45	50.00	-25.55	10.28	Line	-	14.17	0.21	0.16	9.91						
QP	13.308M	28.59	60.00	-31.41	10.35	Line	-	18.24	0.25	0.17	9.93						
AV	13.308M	21.06	50.00	-28.94	10.35	Line	-	10.71	0.25	0.17	9.93						
QP	20.976M	31.35	60.00	-28.65	10.50	Line	-	20.85	0.31	0.23	9.96						
AV	20.976M	24.79	50.00	-25.21	10.50	Line	-	14.29	0.31	0.23	9.96						
QP	24.833M	33.27	60.00	-26.73	10.60	Line	-	22.67	0.35	0.28	9.97						
AV	24.833M	26.42	50.00	-23.58	10.60	Line	-	15.82	0.35	0.28	9.97						

Test Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	217.5k	47.41	62.92	-15.51	10.00	Neutral	-	37.41	0.07	0.04	9.89						
AV	217.5k	37.73	52.92	-15.19	10.00	Neutral	"Worst"	27.73	0.07	0.04	9.89						
QP	262.5k	36.24	61.35	-25.11	10.01	Neutral	-	26.23	0.07	0.05	9.89						
AV	262.5k	26.03	51.35	-25.32	10.01	Neutral	-	16.02	0.07	0.05	9.89						
QP	433.5k	36.12	57.19	-21.07	10.02	Neutral	-	26.10	0.07	0.06	9.89						
AV	433.5k	31.95	47.19	-15.24	10.02	Neutral	-	21.93	0.07	0.06	9.89						
QP	2.301M	24.37	56.00	-31.63	10.09	Neutral	-	14.28	0.11	0.09	9.89						
AV	2.301M	17.13	46.00	-28.87	10.09	Neutral	-	7.04	0.11	0.09	9.89						
QP	9.303M	34.64	60.00	-25.36	10.30	Neutral	-	24.34	0.23	0.16	9.91						
AV	9.303M	26.69	50.00	-23.31	10.30	Neutral	-	16.39	0.23	0.16	9.91						
QP	13.164M	31.91	60.00	-28.09	10.36	Neutral	-	21.55	0.26	0.17	9.93						
AV	13.164M	25.15	50.00	-24.85	10.36	Neutral	-	14.79	0.26	0.17	9.93						
QP	21.62M	35.24	60.00	-24.76	10.50	Neutral	-	24.74	0.30	0.24	9.96						
AV	21.62M	28.94	50.00	-21.06	10.50	Neutral	-	18.44	0.30	0.24	9.96						
QP	24.887M	34.58	60.00	-25.42	10.56	Neutral	-	24.02	0.31	0.28	9.97						
AV	24.887M	28.04	50.00	-21.96	10.56	Neutral	-	17.48	0.31	0.28	9.97						

**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	14.82M	14M8G1D	7.05M	12.892M
802.11g_Nss1,(6Mbps)_2TX	16M	16.535M	16M5D1D	15.375M	16.414M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.55M	19.021M	19M0D1D	17.15M	18.926M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.85M	37.96M	38M0D1D	36.2M	37.859M

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

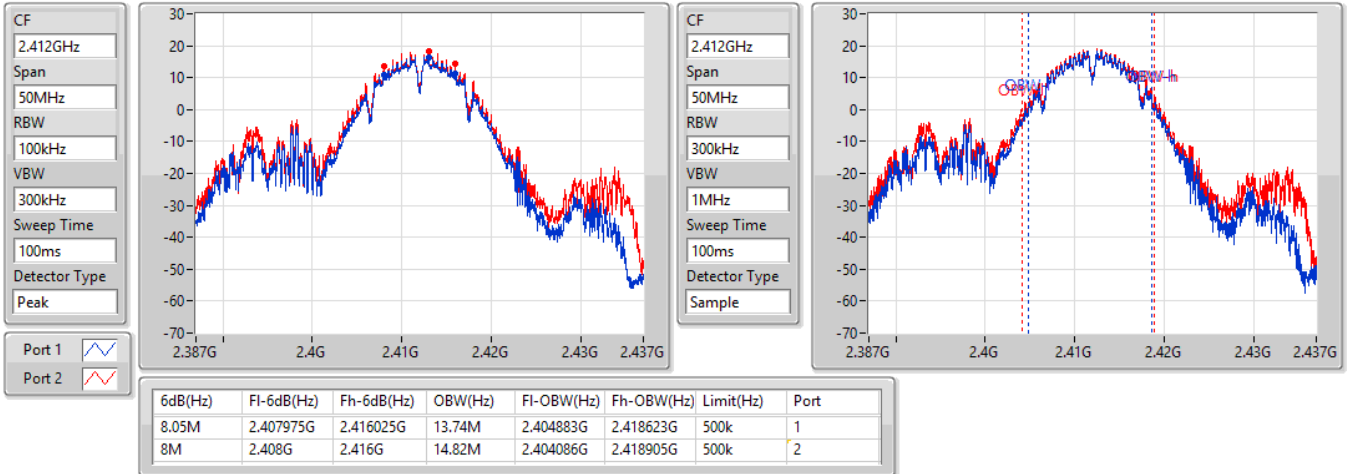
Result

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	8.05M	13.74M	8M	14.82M
2437MHz	Pass	500k	8M	12.955M	8.025M	12.95M
2462MHz	Pass	500k	7.05M	12.983M	7.525M	12.892M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.65M	16.414M	16M	16.437M
2437MHz	Pass	500k	15.425M	16.535M	15.375M	16.509M
2462MHz	Pass	500k	15.5M	16.472M	15.65M	16.456M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.55M	18.974M	17.375M	18.926M
2437MHz	Pass	500k	18.5M	19.021M	18.225M	18.981M
2462MHz	Pass	500k	18.275M	18.934M	17.15M	18.948M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.3M	37.96M	37.15M	37.887M
2437MHz	Pass	500k	37.85M	37.859M	36.5M	37.912M
2452MHz	Pass	500k	37.2M	37.936M	36.2M	37.902M

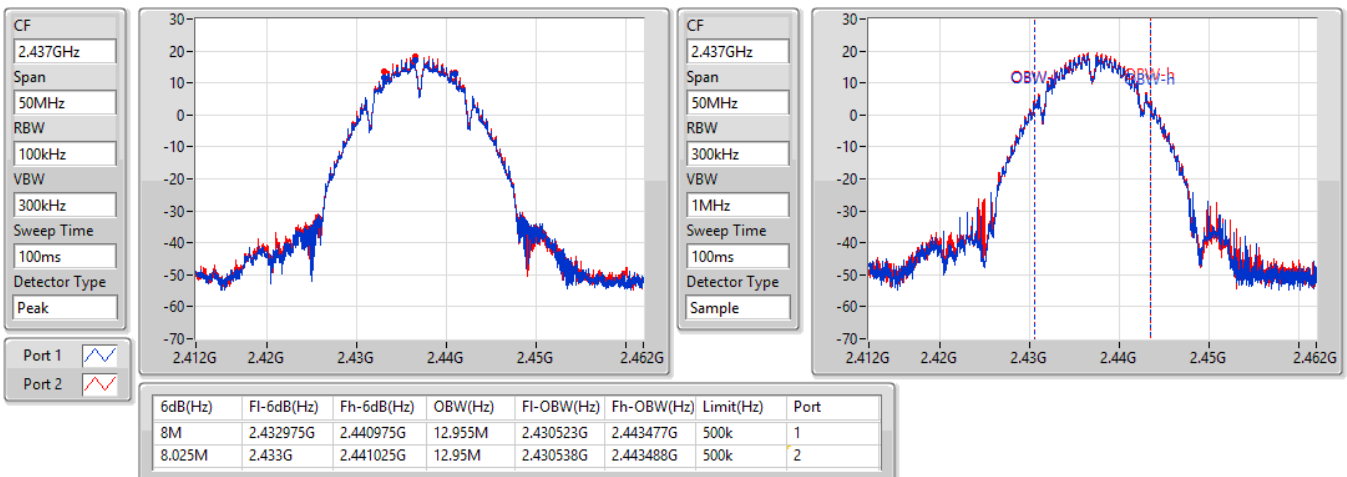
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

05/08/2022

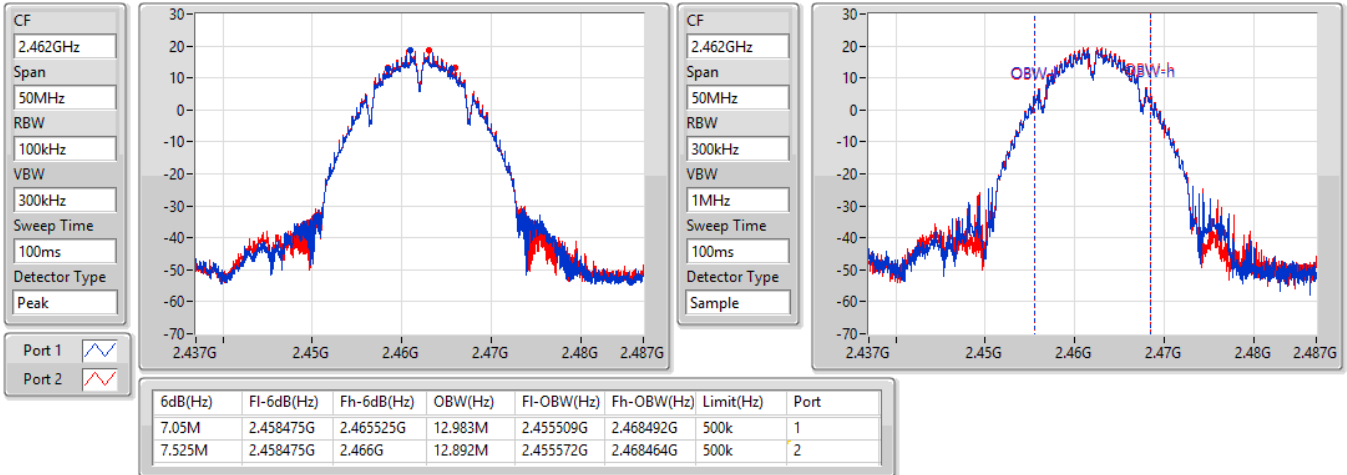

802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

05/08/2022

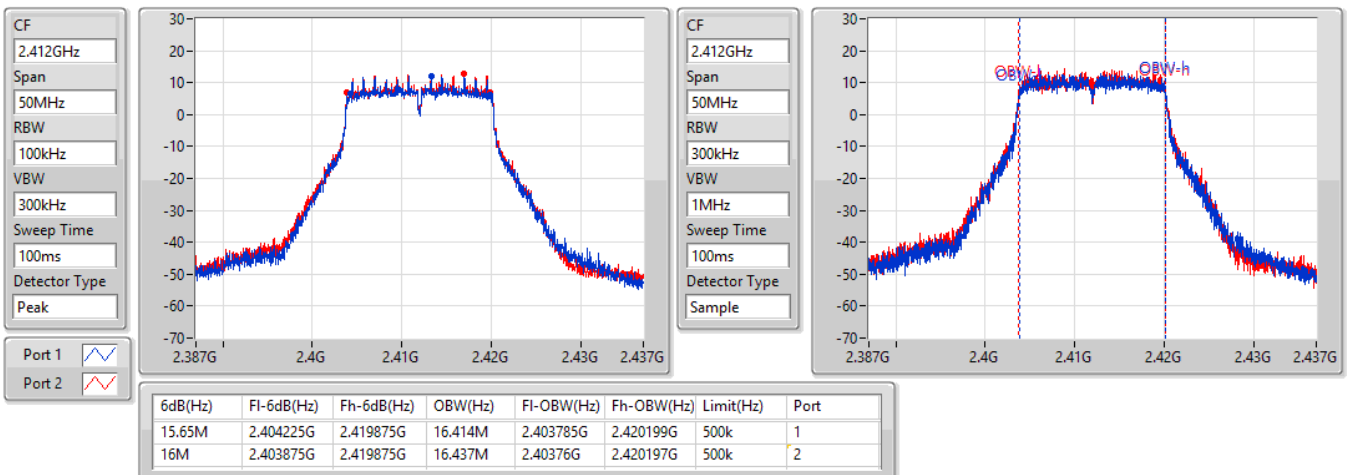


802.11b_Nss1,(1Mbps)_2TX
EBW
2462MHz

05/08/2022

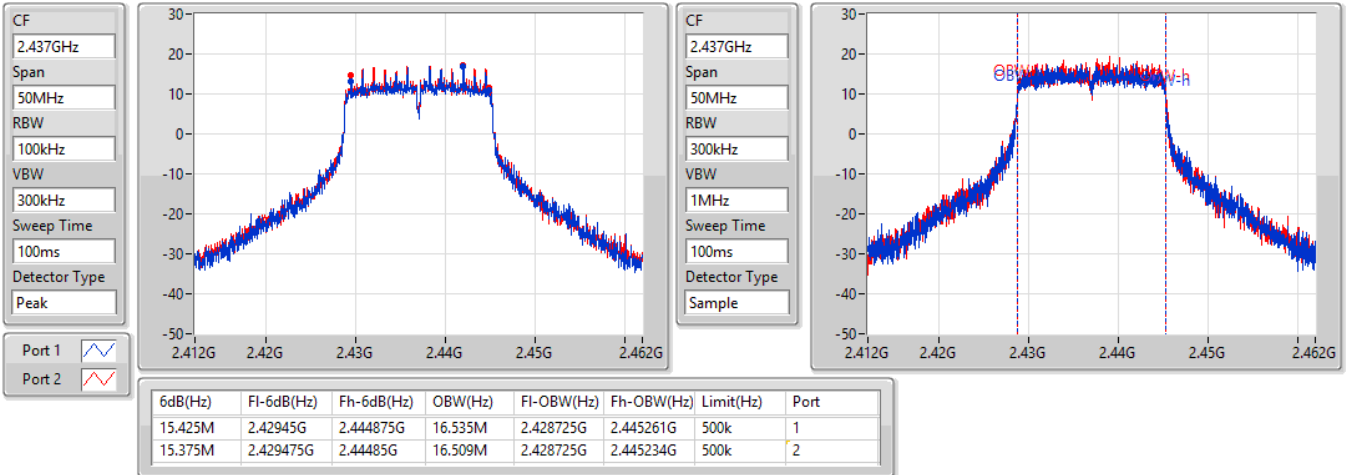

802.11g_Nss1,(6Mbps)_2TX
EBW
2412MHz

05/08/2022

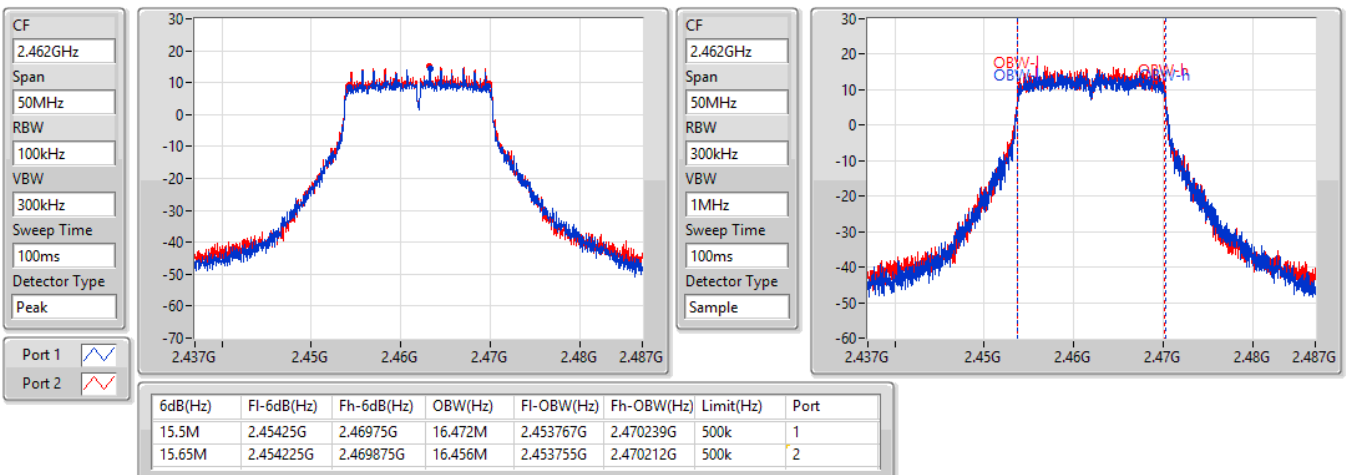


802.11g_Nss1,(6Mbps)_2TX
2437MHz

05/08/2022

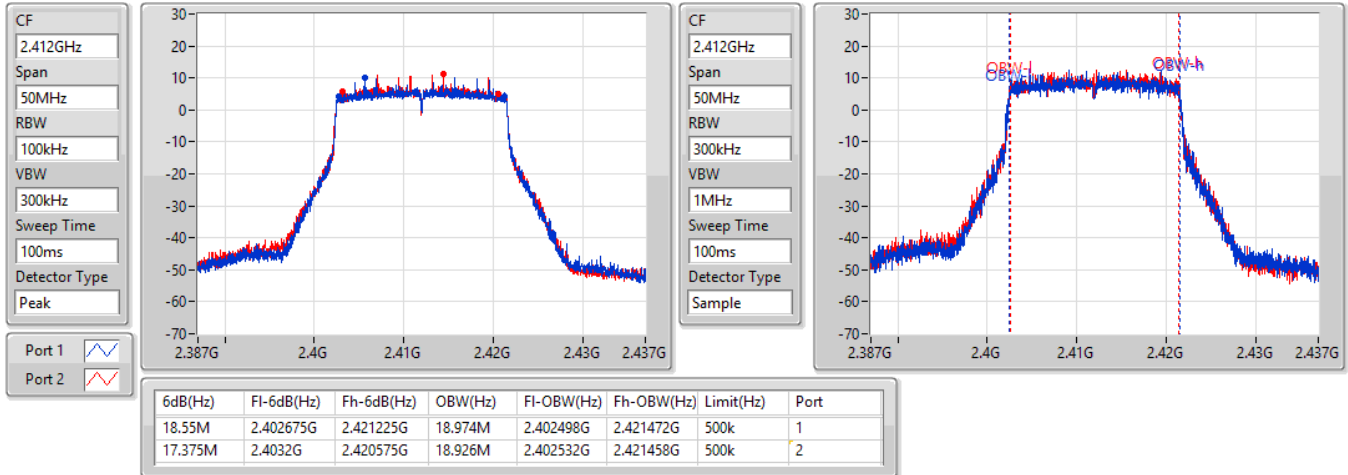

802.11g_Nss1,(6Mbps)_2TX
2462MHz

05/08/2022

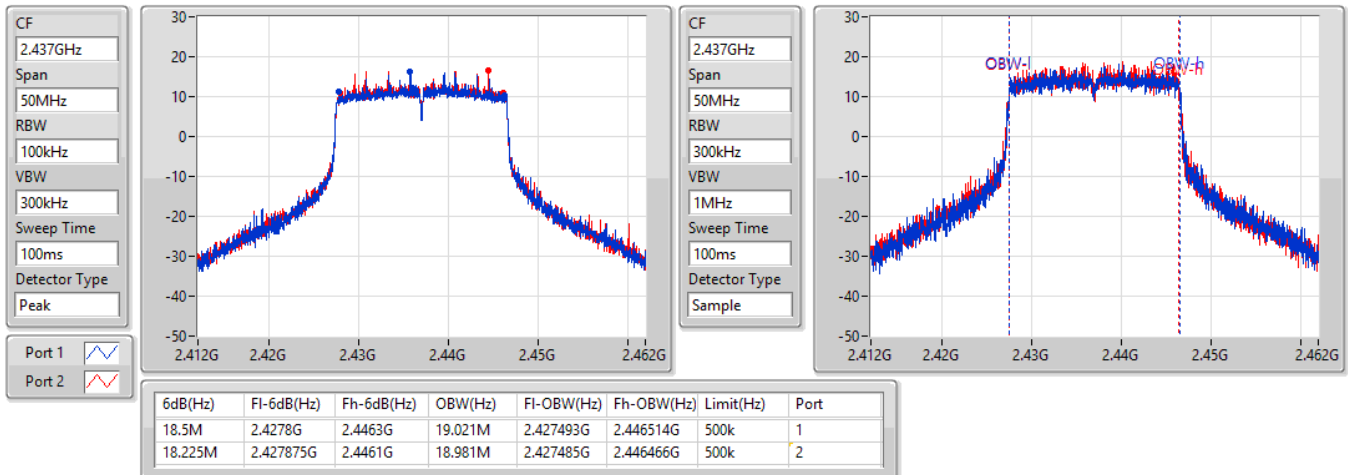


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2412MHz

05/08/2022

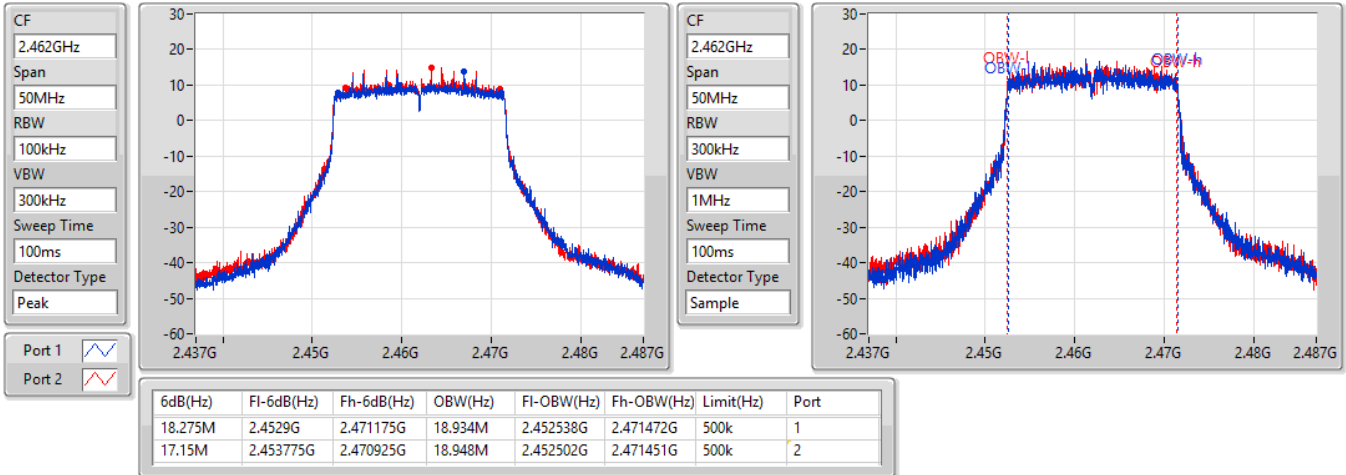

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2437MHz

05/08/2022

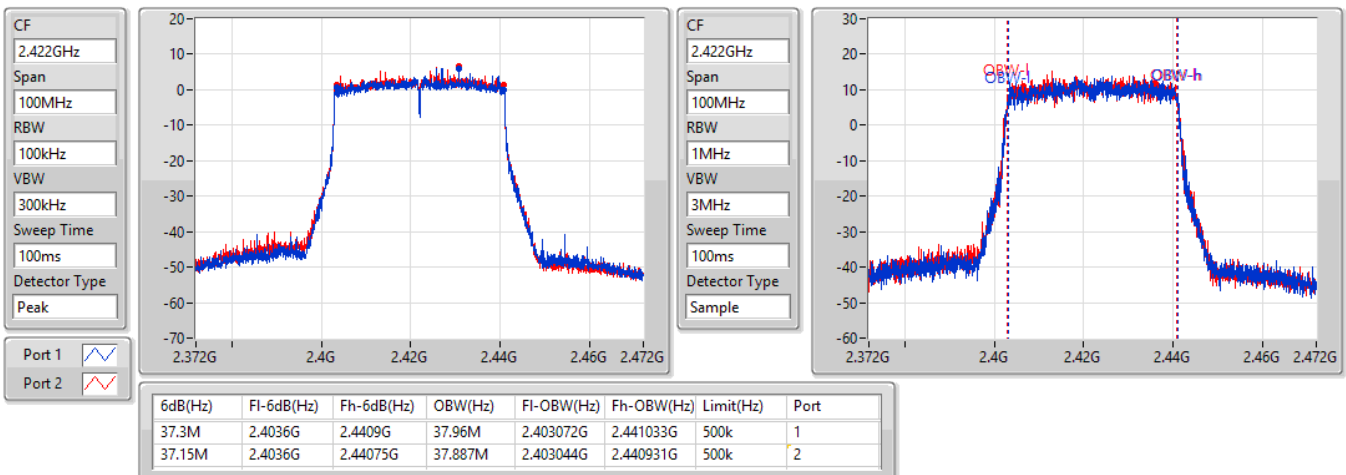


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2462MHz

05/08/2022

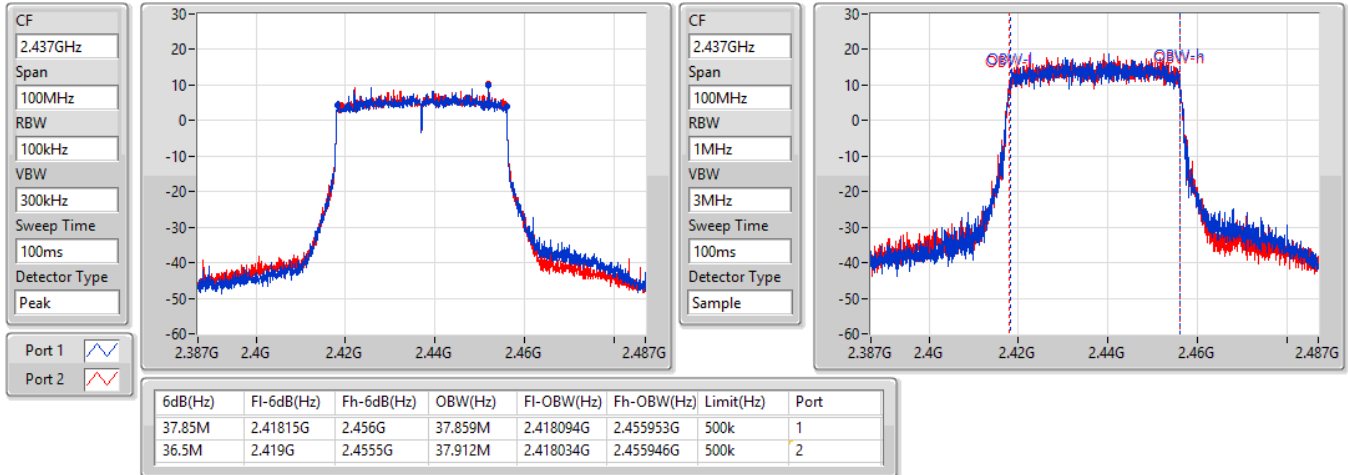

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2422MHz

05/08/2022

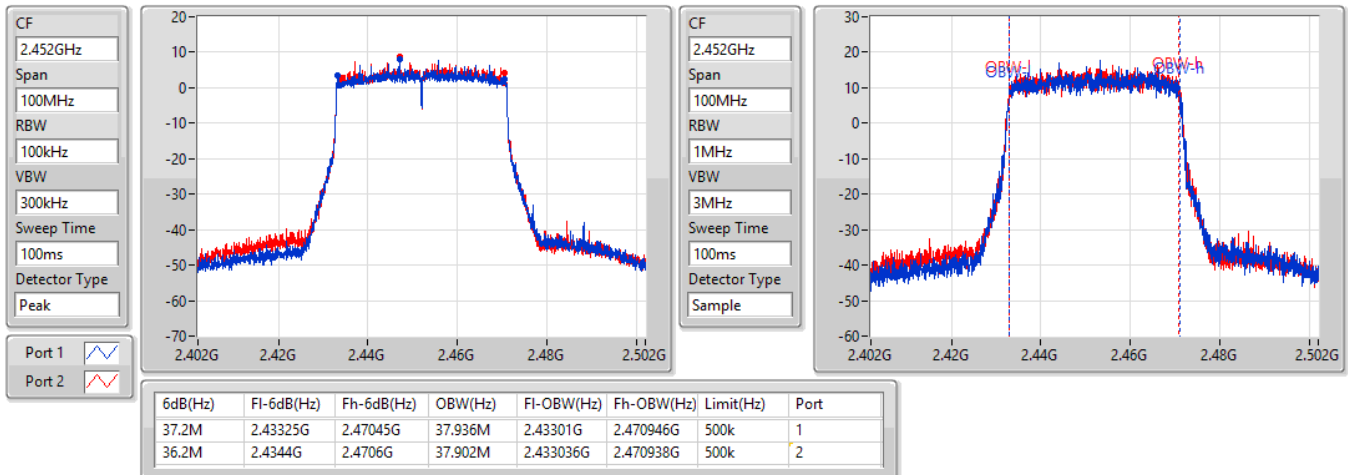


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2437MHz

05/08/2022


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2452MHz

05/08/2022



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.775M	18.916M	19MOD1D	13.825M	18.891M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.3M	37.981M	38MOD1D	31.3M	37.781M

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

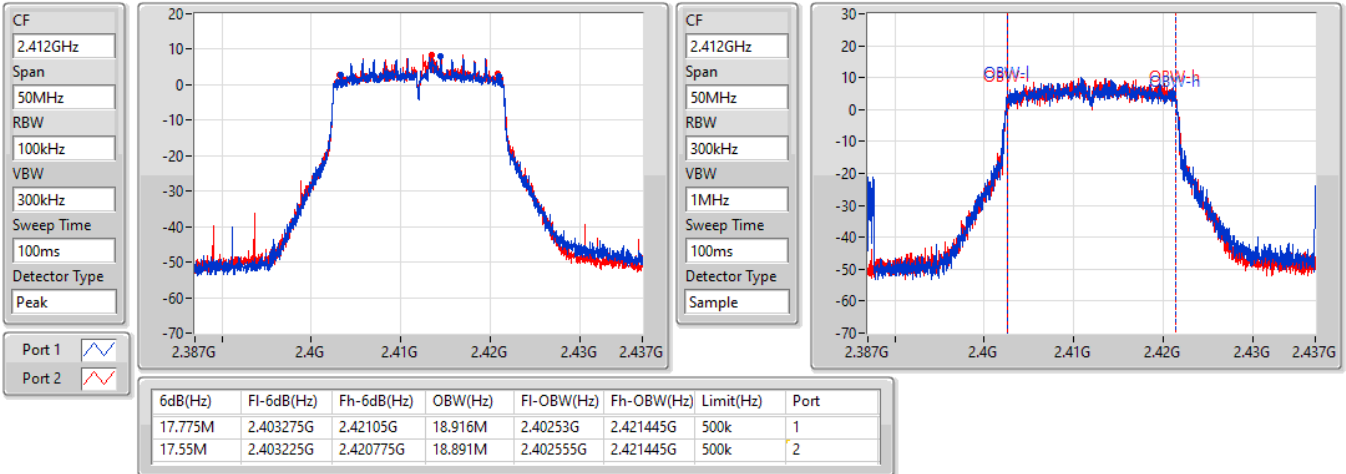
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.775M	18.916M	17.55M	18.891M
2437MHz	Pass	500k	13.825M	18.891M	17.35M	18.916M
2462MHz	Pass	500k	15.075M	18.916M	16.275M	18.891M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	31.3M	37.881M	33.85M	37.781M
2437MHz	Pass	500k	37.3M	37.981M	35.1M	37.931M
2452MHz	Pass	500k	32.55M	37.831M	37.3M	37.831M

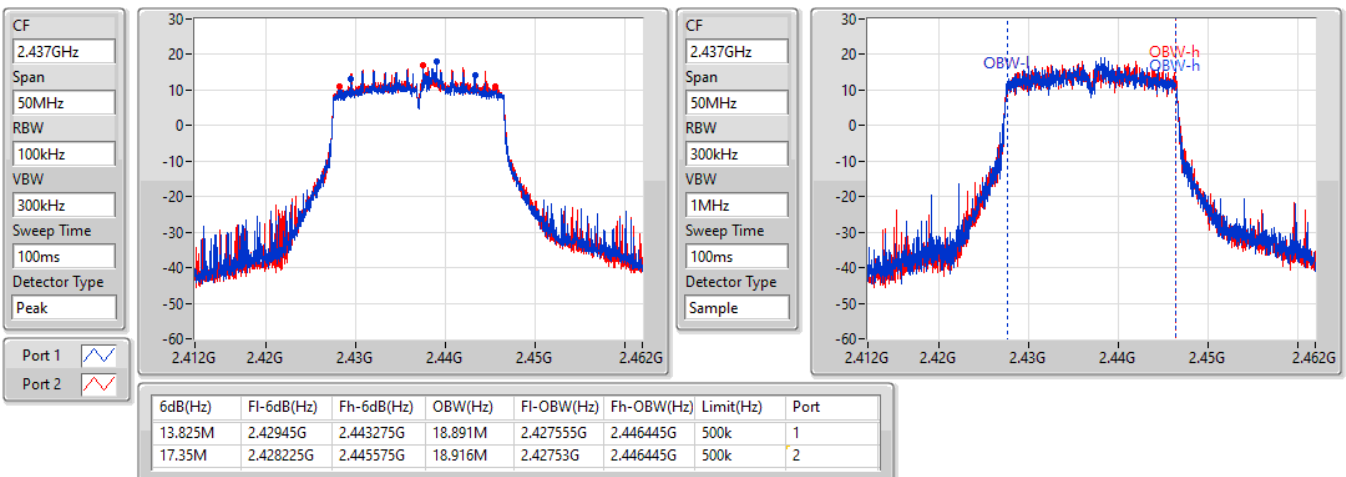
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

15/09/2022

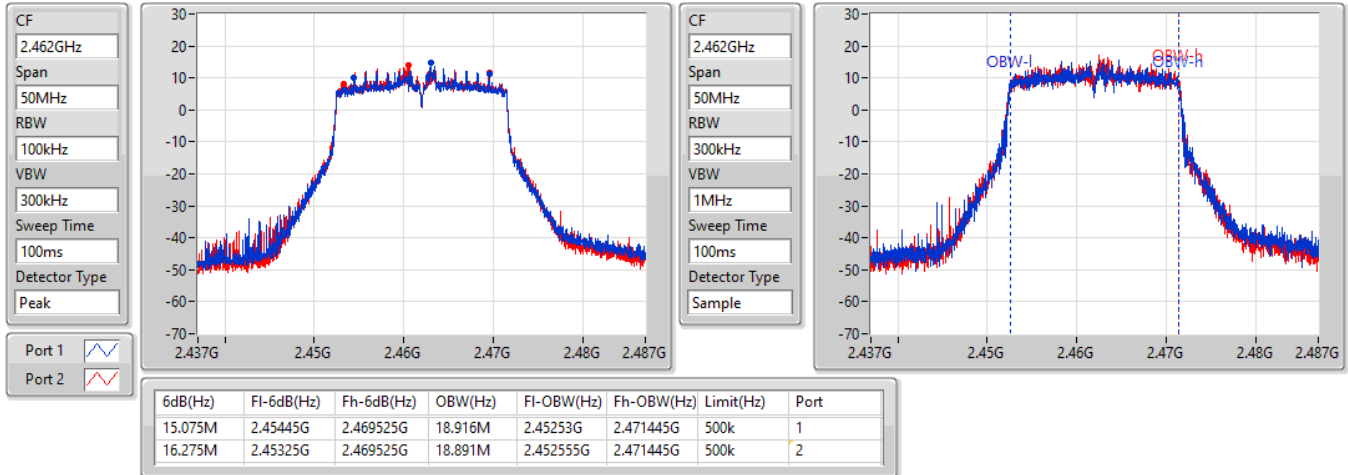

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

15/09/2022

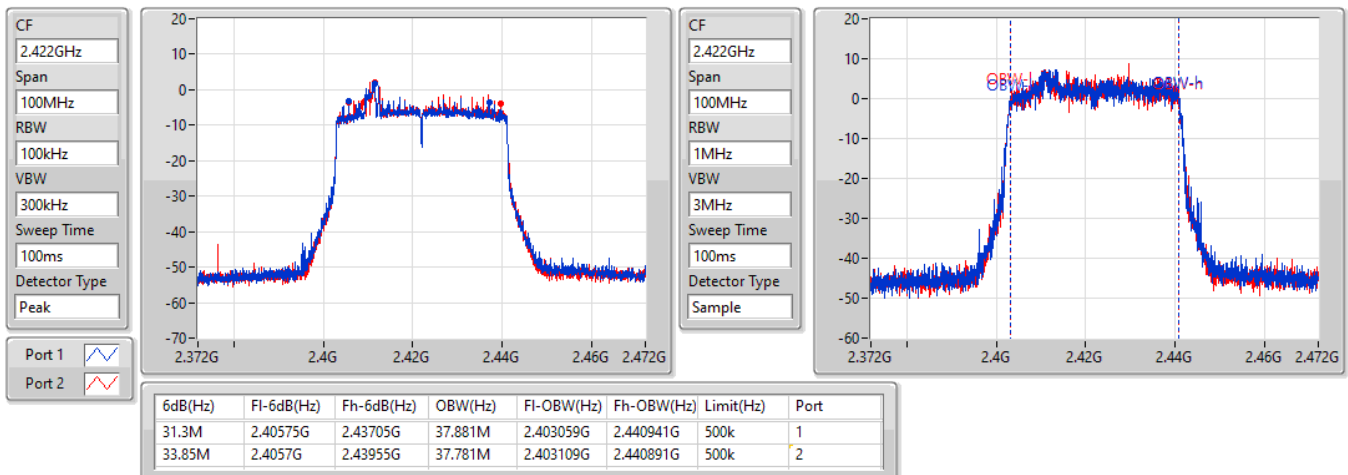


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2462MHz

15/09/2022

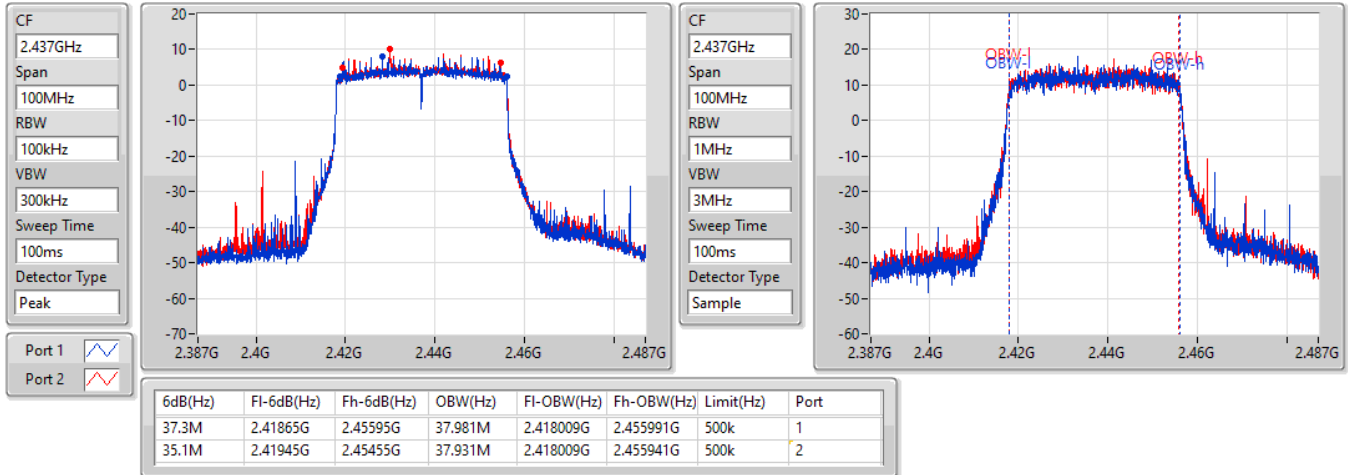

802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2422MHz

15/09/2022

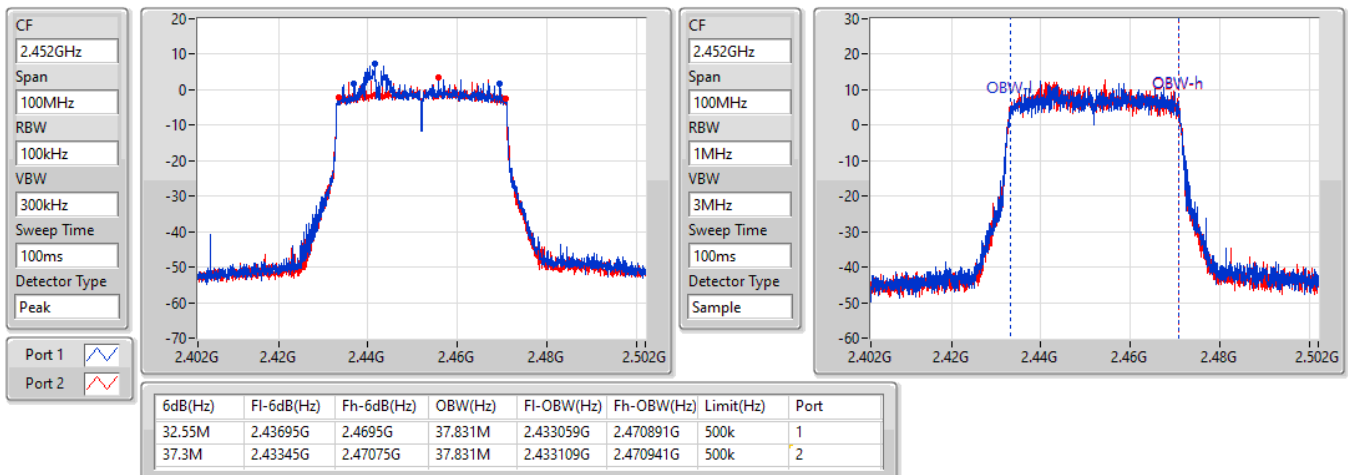


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

15/09/2022


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2452MHz

15/09/2022



**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	12.919M	12M9G1D	7.05M	12.869M
802.11g_Nss1,(6Mbps)_2TX	16.3M	16.467M	16M5D1D	15.6M	16.392M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.35M	18.991M	19M0D1D	17.225M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.9M	37.981M	38M0D1D	36.7M	37.931M

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

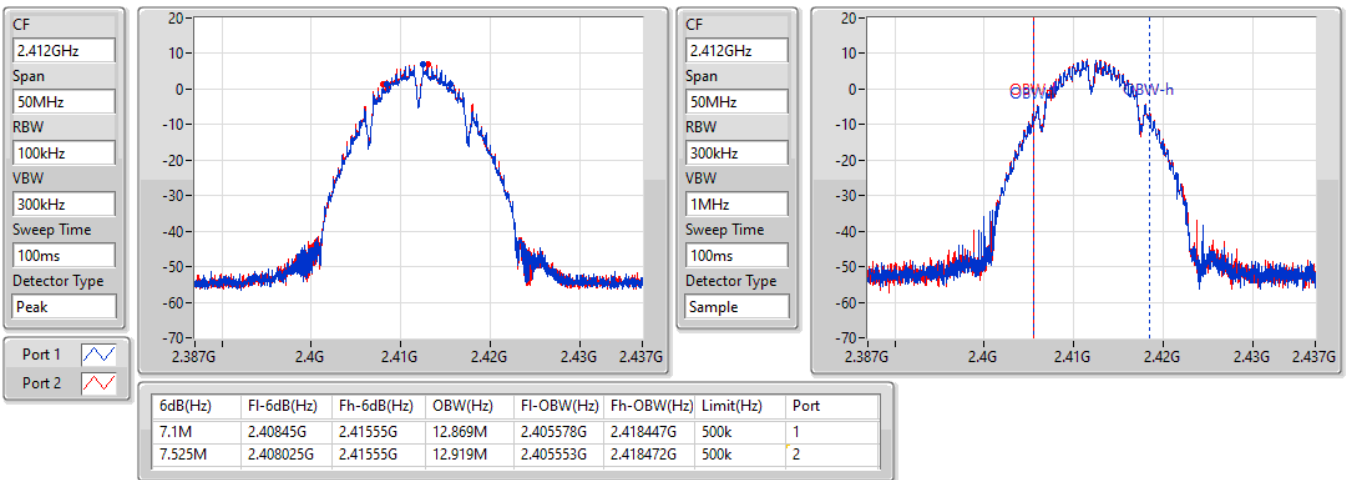
Result

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	7.1M	12.869M	7.525M	12.919M
2437MHz	Pass	500k	8.05M	12.894M	8.025M	12.894M
2462MHz	Pass	500k	7.55M	12.894M	7.05M	12.919M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.625M	16.442M	16.275M	16.442M
2437MHz	Pass	500k	15.625M	16.442M	15.6M	16.467M
2462MHz	Pass	500k	15.65M	16.392M	16.3M	16.467M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.225M	18.966M	18.35M	18.891M
2437MHz	Pass	500k	18.3M	18.991M	17.225M	18.941M
2462MHz	Pass	500k	18.325M	18.941M	18.15M	18.916M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.75M	37.931M	36.7M	37.981M
2437MHz	Pass	500k	37.65M	37.981M	37.9M	37.931M
2452MHz	Pass	500k	37.4M	37.981M	37.75M	37.981M

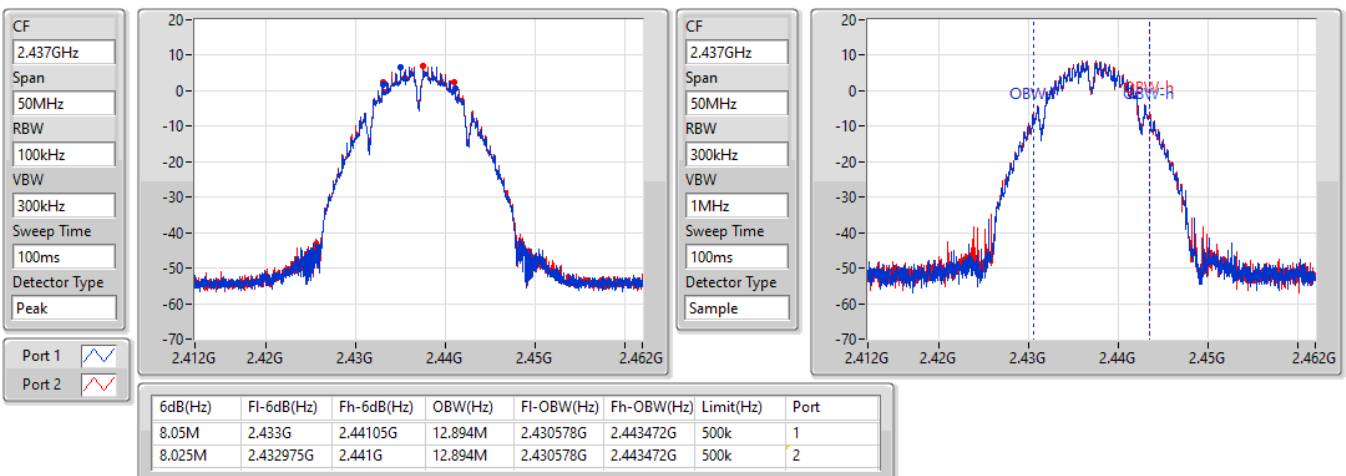
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

07/09/2022

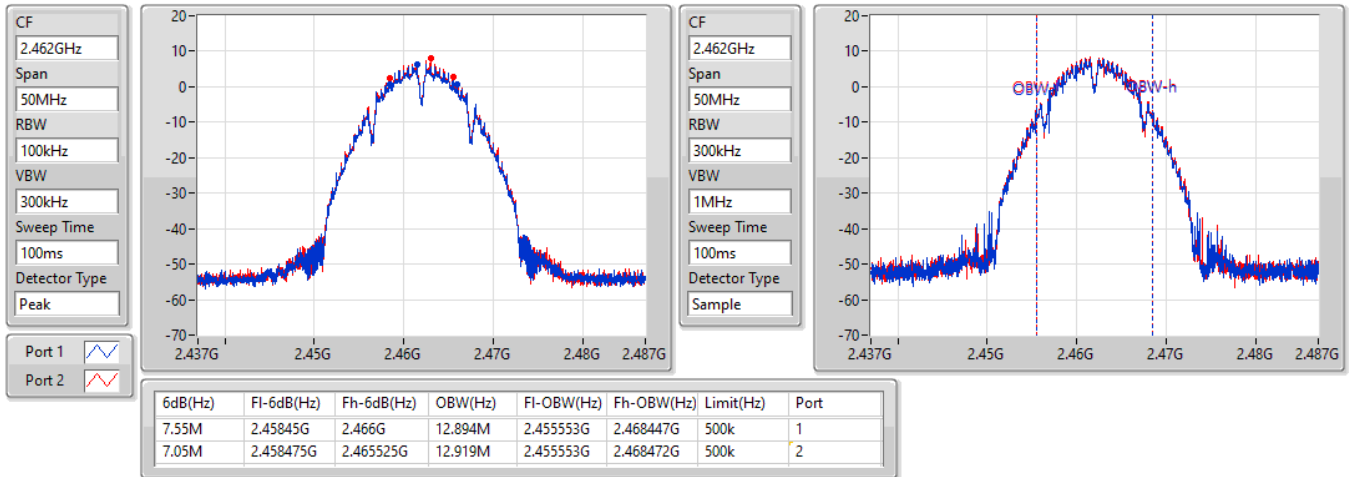

802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

07/09/2022

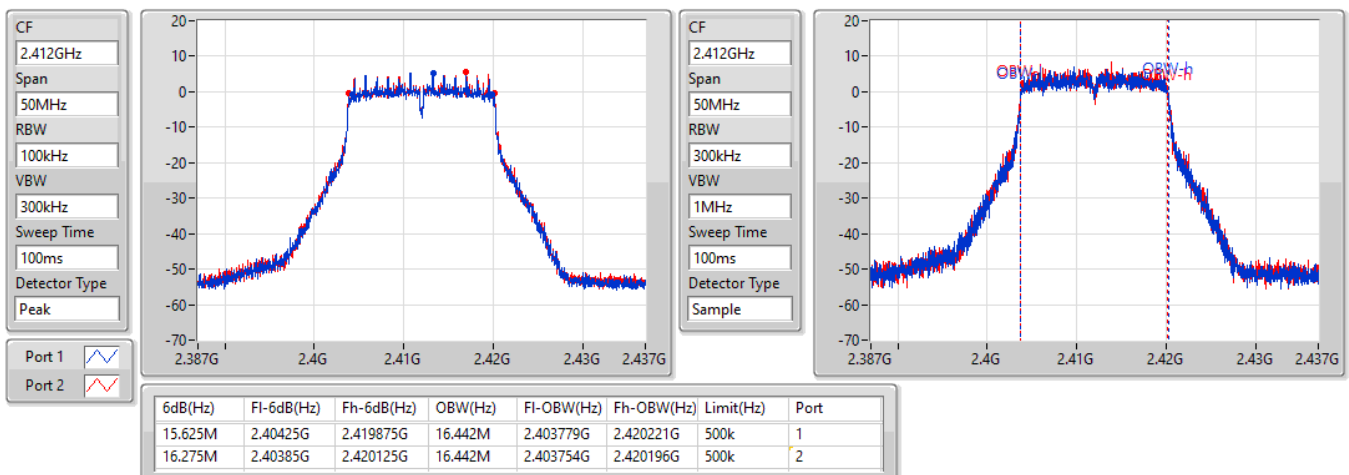


802.11b_Nss1,(1Mbps)_2TX
EBW
2462MHz

07/09/2022


802.11g_Nss1,(6Mbps)_2TX
EBW
2412MHz

07/09/2022

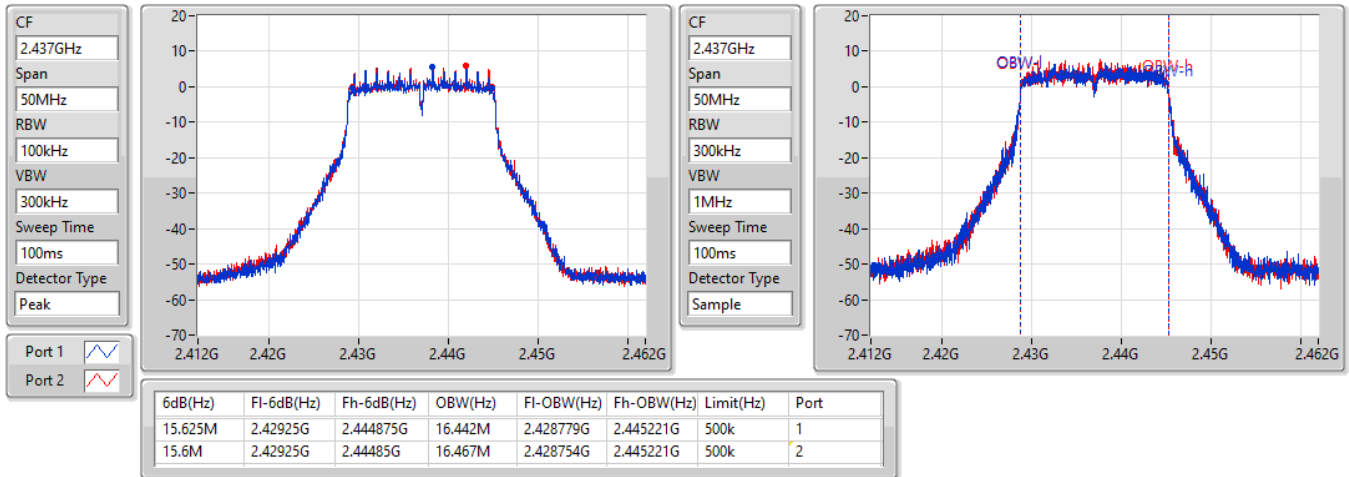


802.11g_Nss1,(6Mbps)_2TX

2437MHz

07/09/2022

EBW

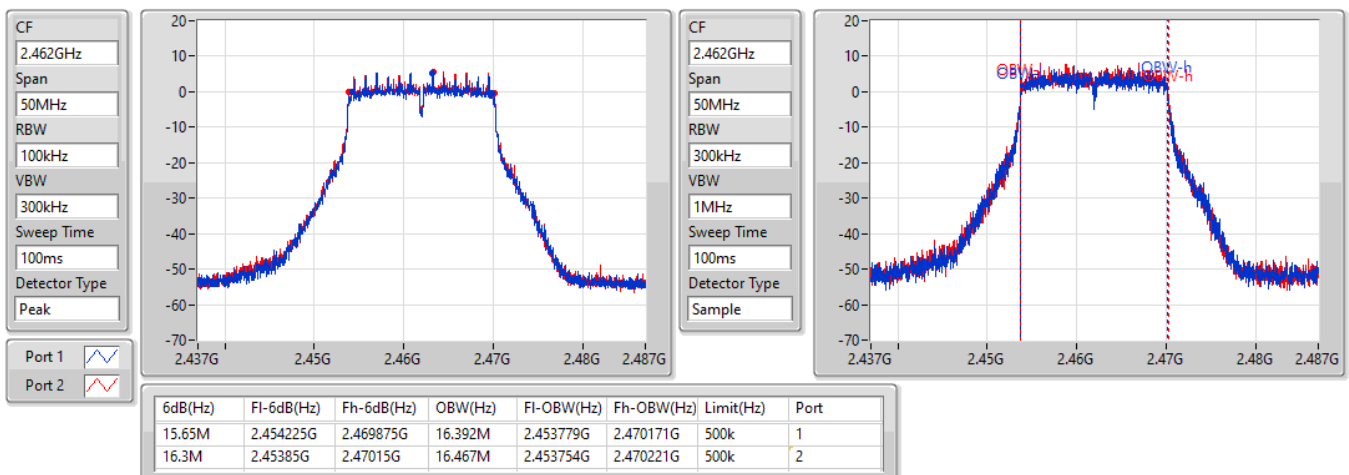


802.11g_Nss1,(6Mbps)_2TX

2462MHz

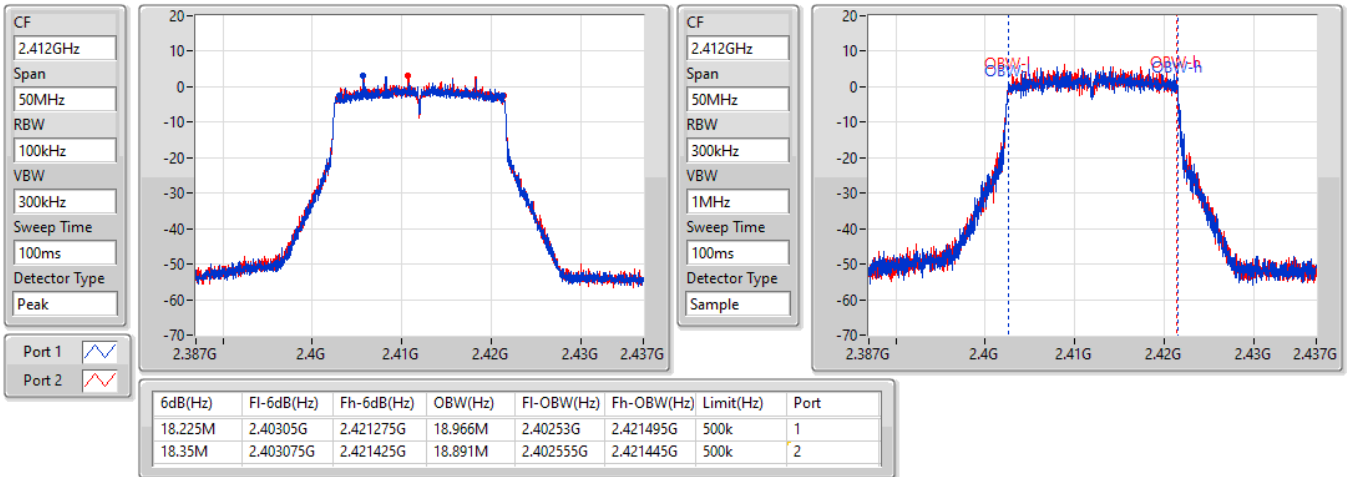
07/09/2022

EBW

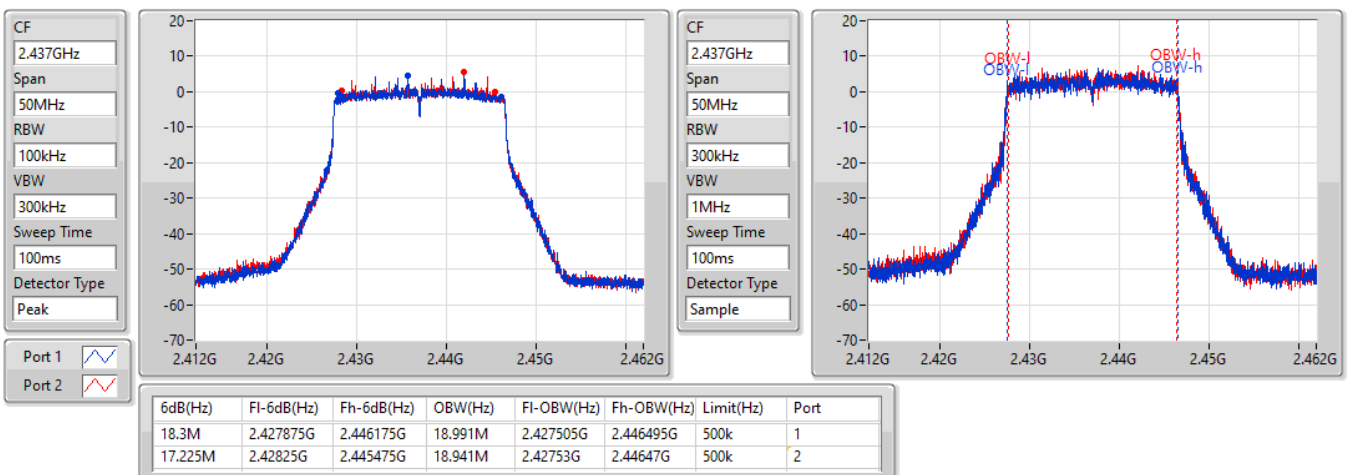


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2412MHz

07/09/2022

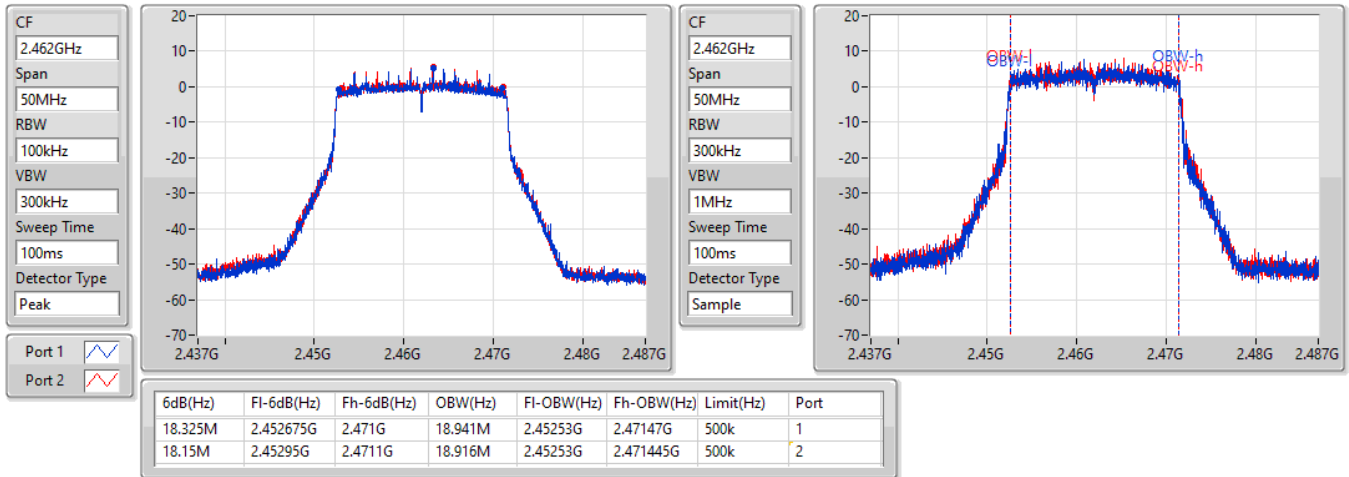

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2437MHz

07/09/2022

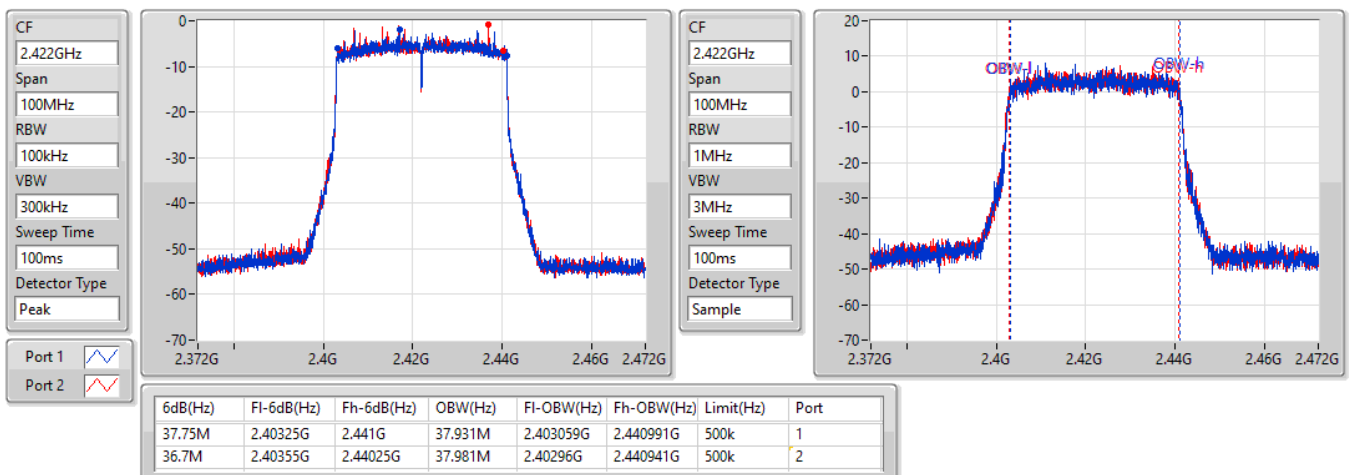


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2462MHz

07/09/2022

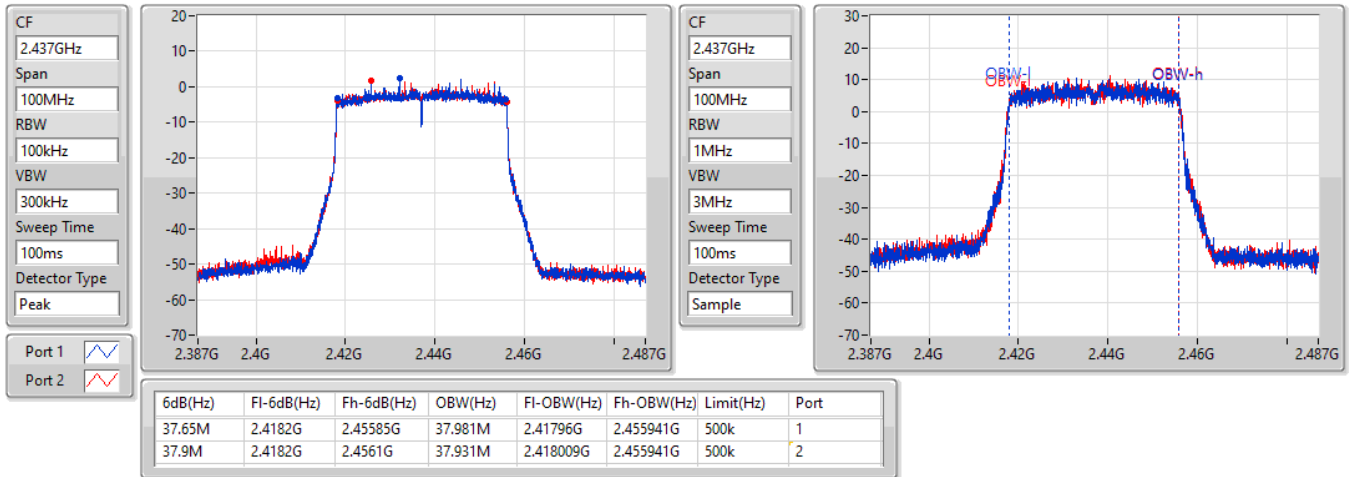

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2422MHz

07/09/2022

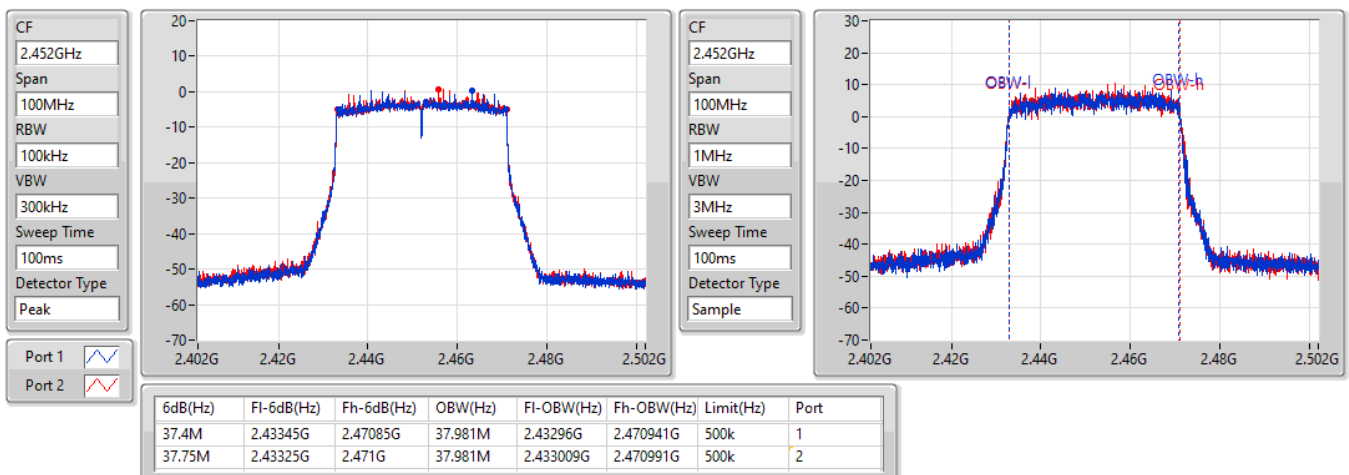


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2437MHz

07/09/2022


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2452MHz

07/09/2022





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.3M	18.929M	18M9D1D	17.5M	18.905M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.7M	37.76M	37M8D1D	36.85M	37.711M

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

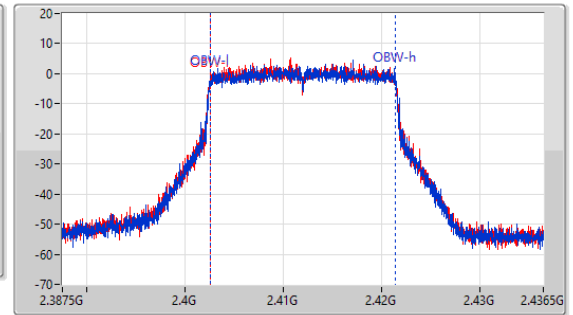
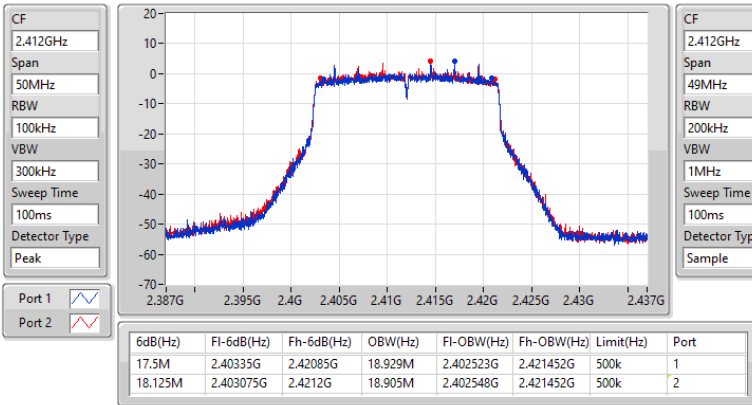
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.5M	18.929M	18.125M	18.905M
2437MHz	Pass	500k	18.175M	18.929M	18.3M	18.905M
2462MHz	Pass	500k	18.075M	18.929M	17.6M	18.929M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.7M	37.76M	36.85M	37.711M
2437MHz	Pass	500k	37.65M	37.76M	37.7M	37.76M
2452MHz	Pass	500k	37.1M	37.76M	37.15M	37.711M

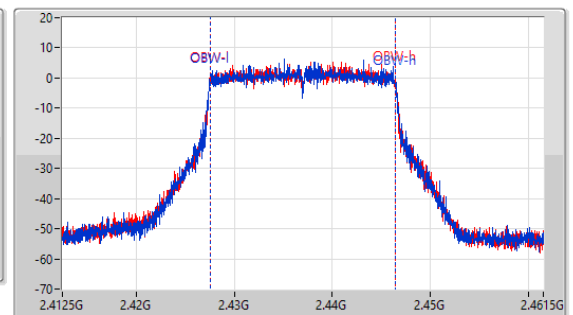
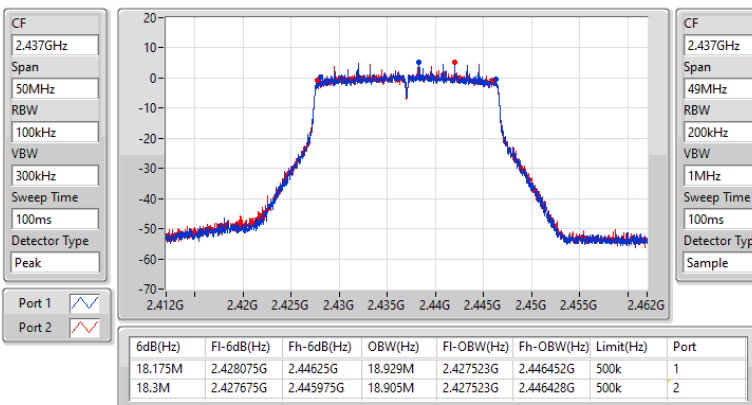
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

15/11/2022

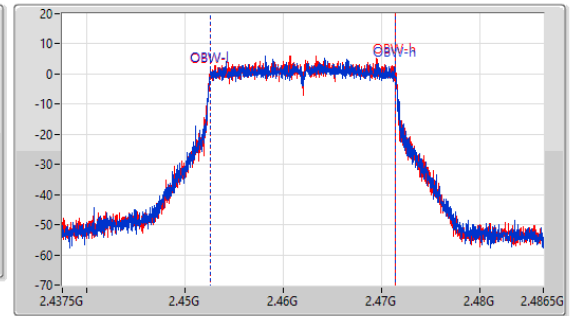
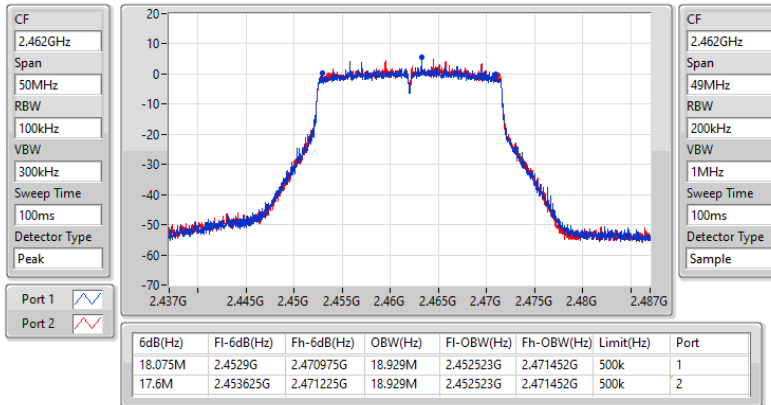

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

15/11/2022

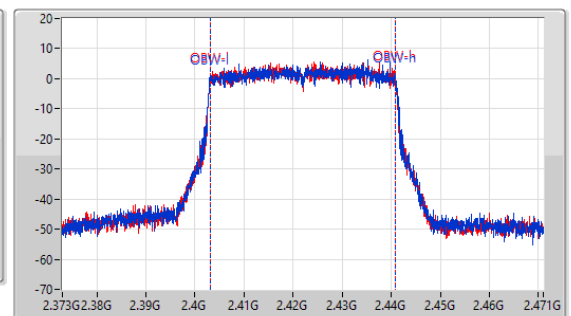
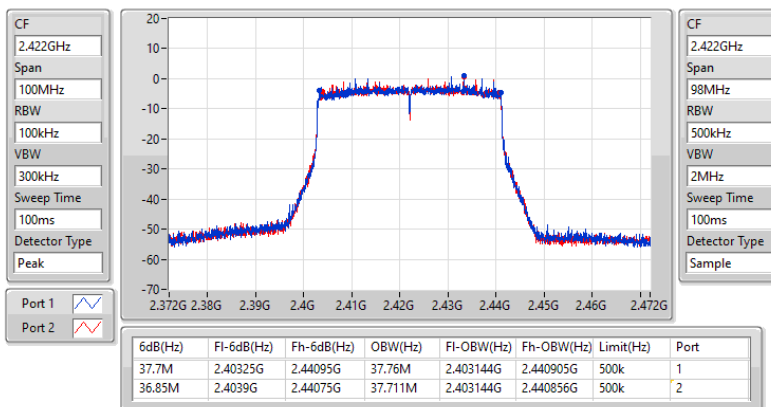


**2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX
2462MHz**
EBW

15/11/2022

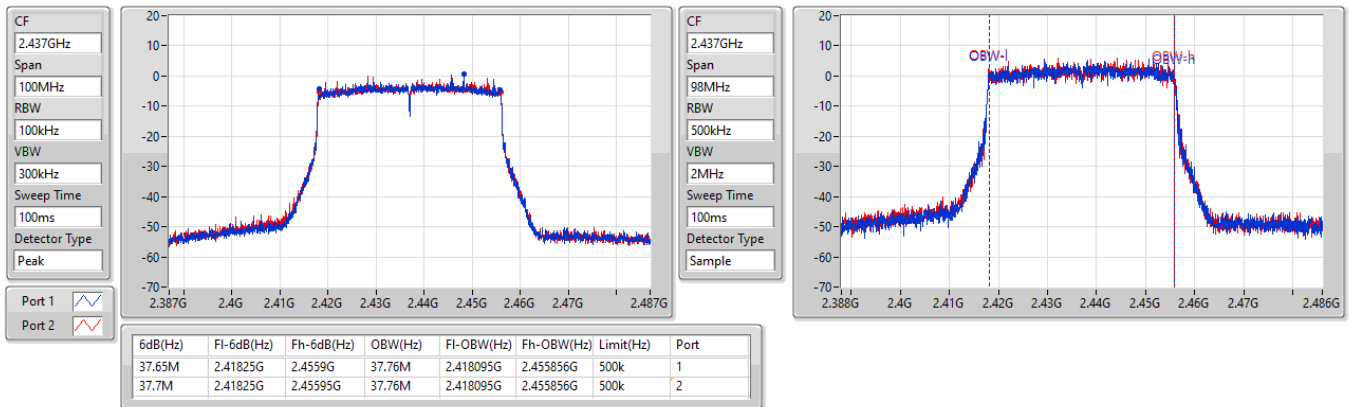

**2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX
2422MHz**
EBW

15/11/2022

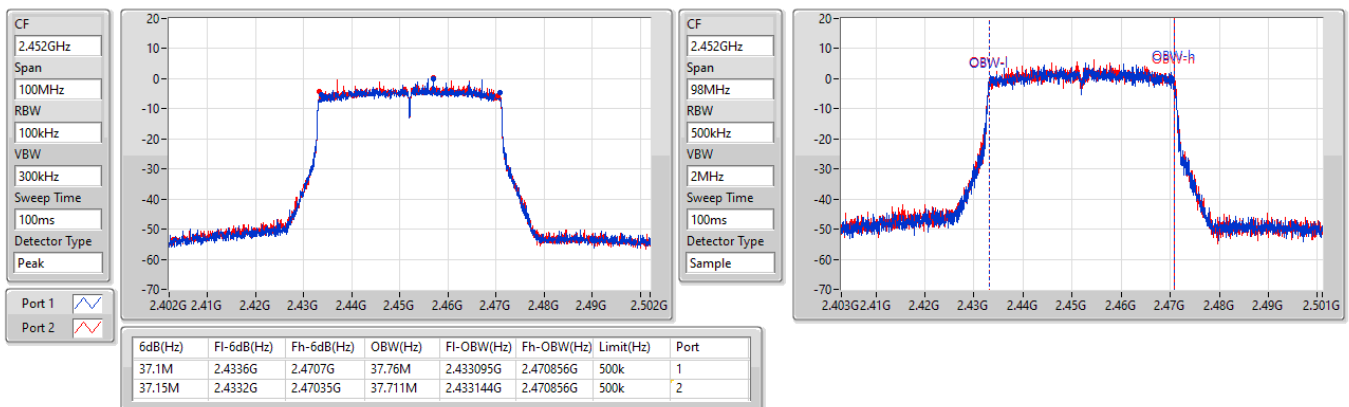


**2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX
2437MHz**
EBW

15/11/2022


**2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX
2452MHz**
EBW

15/11/2022





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	29.95	0.98855
802.11g_Nss1,(6Mbps)_2TX	29.93	0.98401
802.11ax HEW20_Nss1,(MCS0)_2TX	29.60	0.91201
802.11ax HEW40_Nss1,(MCS0)_2TX	24.81	0.30269

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.40	26.28	27.23	29.79	30.00
2437MHz	Pass	4.40	26.63	27.22	29.95	30.00
2462MHz	Pass	4.40	26.39	27.12	29.78	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.40	22.31	22.89	25.62	30.00
2417MHz	Pass	4.40	25.10	25.54	28.34	30.00
2437MHz	Pass	4.40	26.63	27.20	29.93	30.00
2457MHz	Pass	4.40	25.12	25.61	28.38	30.00
2462MHz	Pass	4.40	24.40	25.33	27.90	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.40	20.43	20.81	23.63	30.00
2417MHz	Pass	4.40	25.01	25.94	28.51	30.00
2437MHz	Pass	4.40	26.33	26.83	29.60	30.00
2457MHz	Pass	4.40	24.70	25.10	27.91	30.00
2462MHz	Pass	4.40	23.95	24.75	27.38	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.40	19.88	20.49	23.21	30.00
2427MHz	Pass	4.40	21.32	21.62	24.48	30.00
2437MHz	Pass	4.40	23.68	15.37	24.28	30.00
2452MHz	Pass	4.40	21.52	22.07	24.81	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	28.58	0.72111
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	24.59	0.28774

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.41	17.03	17.62	20.35	28.59
2417MHz	Pass	7.41	25.27	25.62	28.46	28.59
2437MHz	Pass	7.41	25.28	25.85	28.58	28.59
2457MHz	Pass	7.41	24.09	24.91	27.53	28.59
2462MHz	Pass	7.41	22.32	22.84	25.60	28.59
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.41	11.77	12.06	14.93	28.59
2427MHz	Pass	7.41	19.50	19.70	22.61	28.59
2437MHz	Pass	7.41	21.54	21.62	24.59	28.59
2447MHz	Pass	7.41	18.29	18.92	21.63	28.59
2452MHz	Pass	7.41	16.86	16.94	19.91	28.59

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	18.65	0.07328
802.11g_Nss1,(6Mbps)_2TX	18.52	0.07112
802.11ax HEW20_Nss1,(MCS0)_2TX	18.69	0.07396
802.11ax HEW40_Nss1,(MCS0)_2TX	18.56	0.07178

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	17.23	15.30	15.58	18.45	18.77
2437MHz	Pass	17.23	15.38	15.89	18.65	18.77
2457MHz	Pass	17.23	14.97	15.46	18.23	18.77
2462MHz	Pass	17.23	15.00	15.58	18.31	18.77
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	17.23	15.23	15.68	18.47	18.77
2417MHz	Pass	17.23	15.22	15.53	18.39	18.77
2437MHz	Pass	17.23	15.26	15.75	18.52	18.77
2462MHz	Pass	17.23	15.03	15.38	18.22	18.77
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	17.23	13.92	14.13	17.04	18.77
2417MHz	Pass	17.23	15.34	15.64	18.50	18.77
2437MHz	Pass	17.23	15.57	15.78	18.69	18.77
2462MHz	Pass	17.23	15.07	15.61	18.36	18.77
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	17.23	12.83	12.92	15.89	18.77
2427MHz	Pass	17.23	12.83	12.86	15.86	18.77
2437MHz	Pass	17.23	15.51	15.58	18.56	18.77
2452MHz	Pass	17.23	14.54	14.79	17.68	18.77

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.38	0.06887
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	17.27	0.05333

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	17.23	14.11	14.47	17.30	18.77
2417MHz	Pass	17.23	15.03	15.37	18.21	18.77
2437MHz	Pass	17.23	15.24	15.49	18.38	18.77
2457MHz	Pass	17.23	15.21	15.42	18.33	18.77
2462MHz	Pass	17.23	14.17	14.54	17.37	18.77
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	17.23	12.48	12.09	15.30	18.77
2437MHz	Pass	17.23	14.14	14.38	17.27	18.77
2447MHz	Pass	17.23	12.26	12.66	15.47	18.77
2452MHz	Pass	17.23	11.74	11.41	14.59	18.77

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	5.34
802.11g_Nss1,(6Mbps)_2TX	2.19
802.11ax HEW20_Nss1,(MCS0)_2TX	0.62
802.11ax HEW40_Nss1,(MCS0)_2TX	-3.71

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	7.41	2.04	2.68	5.34	7.49
2437MHz	Pass	7.41	2.36	3.22	5.20	7.49
2462MHz	Pass	7.41	1.87	2.83	4.72	7.49
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.41	-4.82	-4.93	-2.86	7.49
2437MHz	Pass	7.41	-0.35	1.06	2.19	7.49
2462MHz	Pass	7.41	-3.34	-2.50	-0.31	7.49
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.41	-6.51	-6.48	-4.76	7.49
2437MHz	Pass	7.41	-0.64	-0.85	0.62	7.49
2462MHz	Pass	7.41	-3.56	-2.53	-0.90	7.49
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.41	-10.19	-8.55	-7.35	7.49
2437MHz	Pass	7.41	-6.04	-4.94	-3.71	7.49
2452MHz	Pass	7.41	-8.64	-8.38	-6.41	7.49

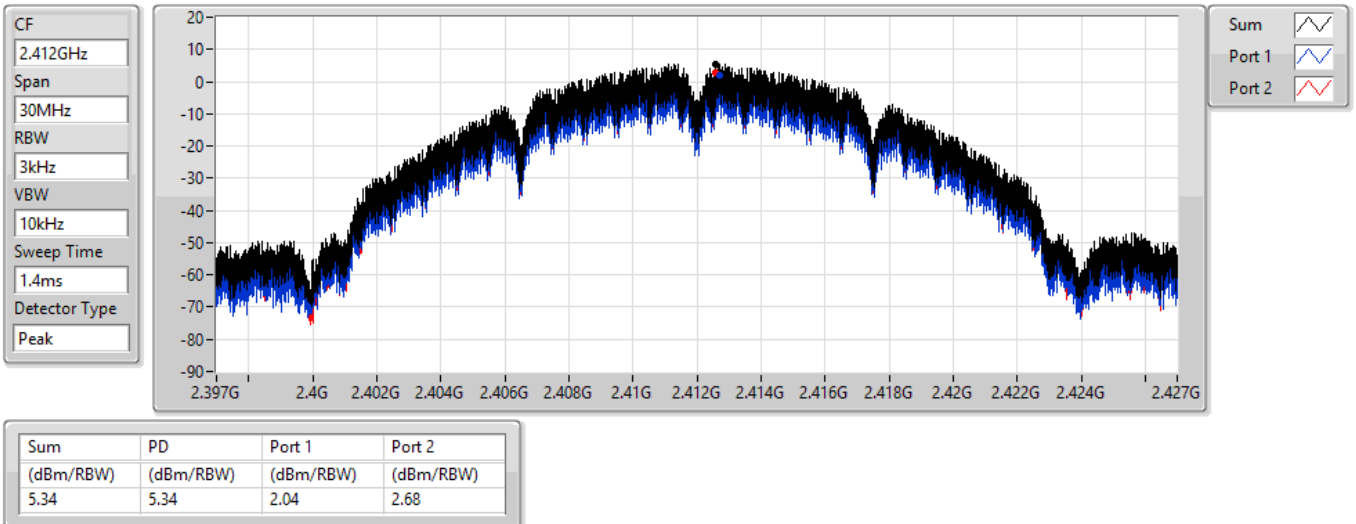
DG = Directional Gain; RBW = 3kHz;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_2TX

2412MHz

PSD

05/08/2022

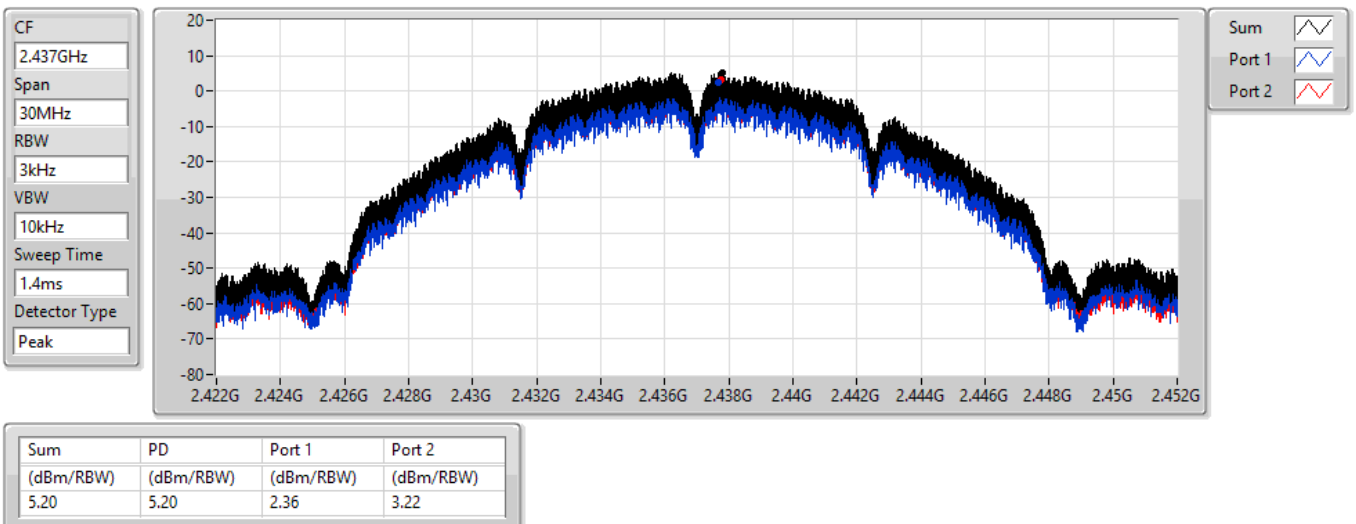


802.11b_Nss1,(1Mbps)_2TX

2437MHz

PSD

05/08/2022

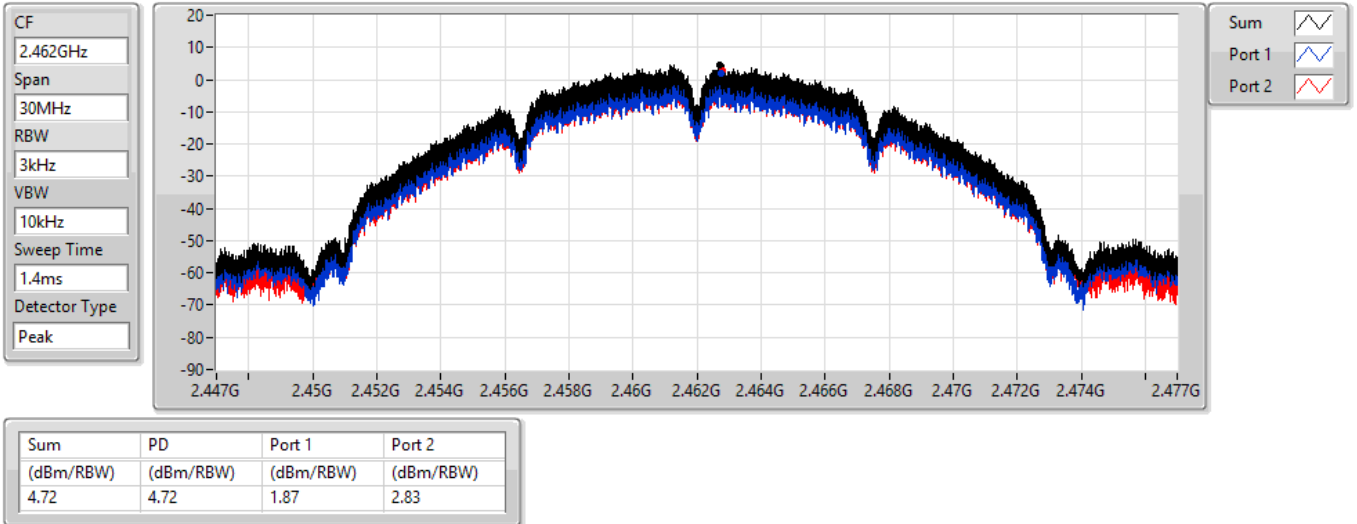


802.11b_Nss1,(1Mbps)_2TX

2462MHz

PSD

05/08/2022

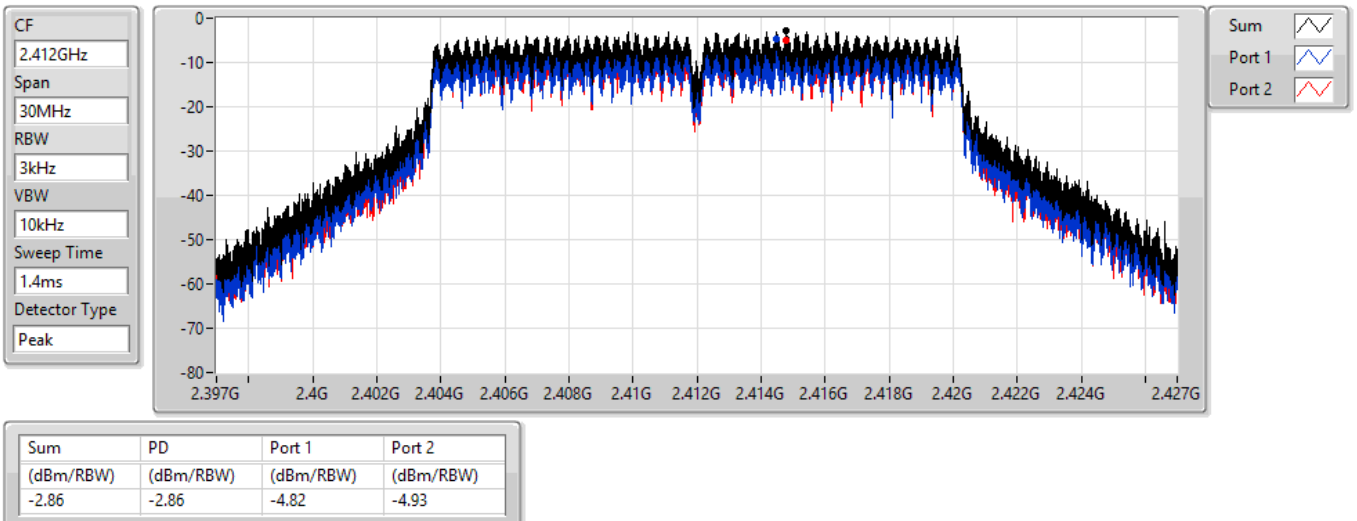


802.11g_Nss1,(6Mbps)_2TX

2412MHz

PSD

05/08/2022

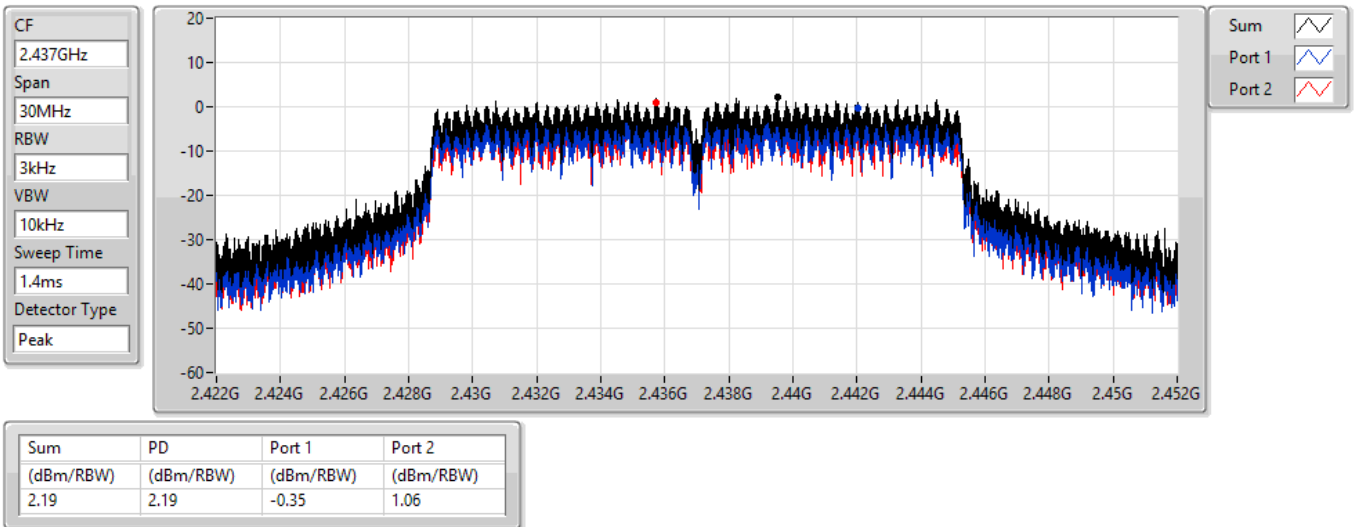


802.11g_Nss1,(6Mbps)_2TX

2437MHz

PSD

05/08/2022

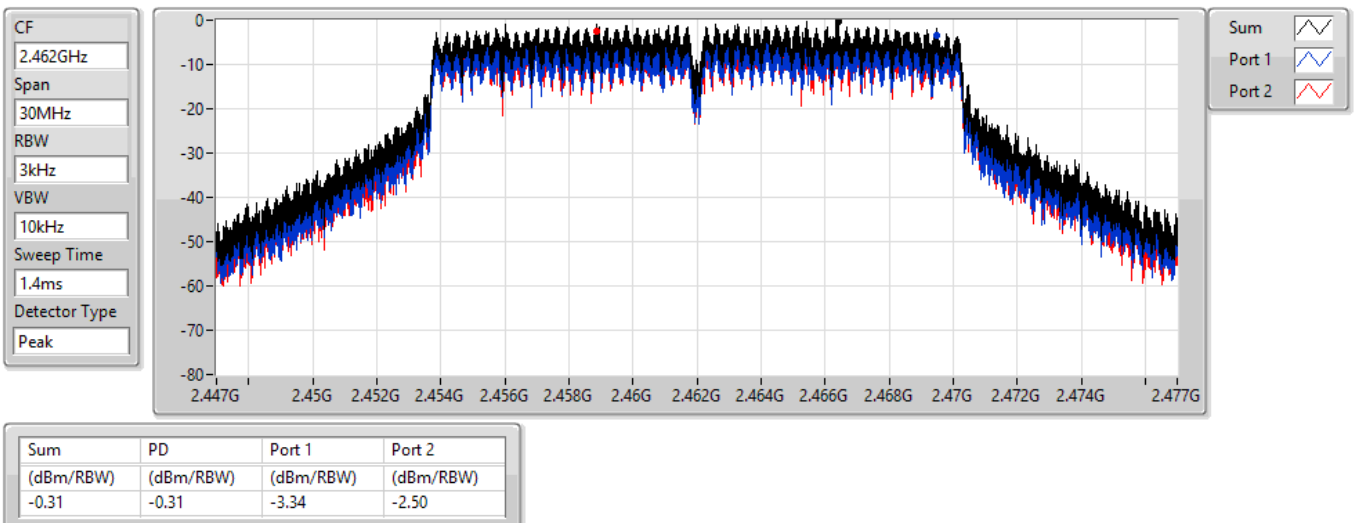


802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

05/08/2022

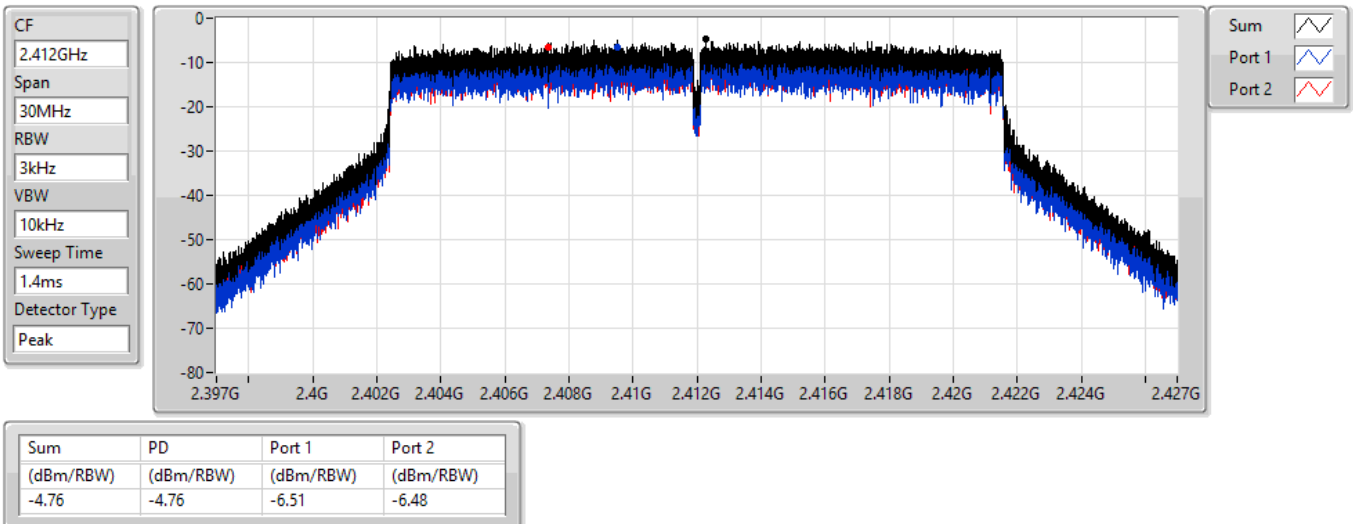


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2412MHz

05/08/2022

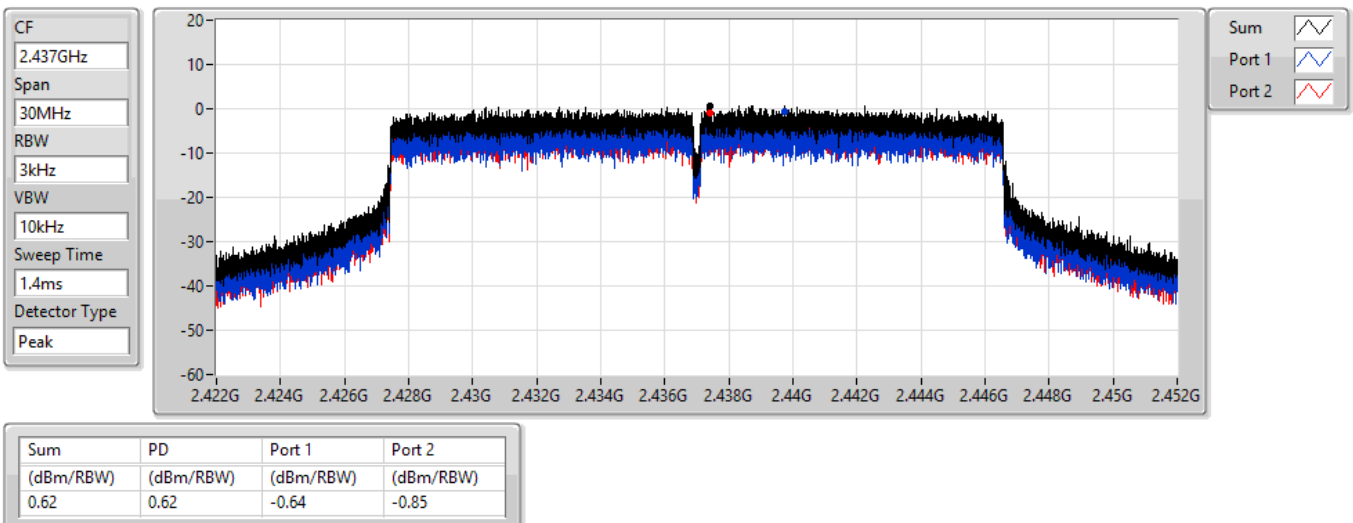


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2437MHz

05/08/2022

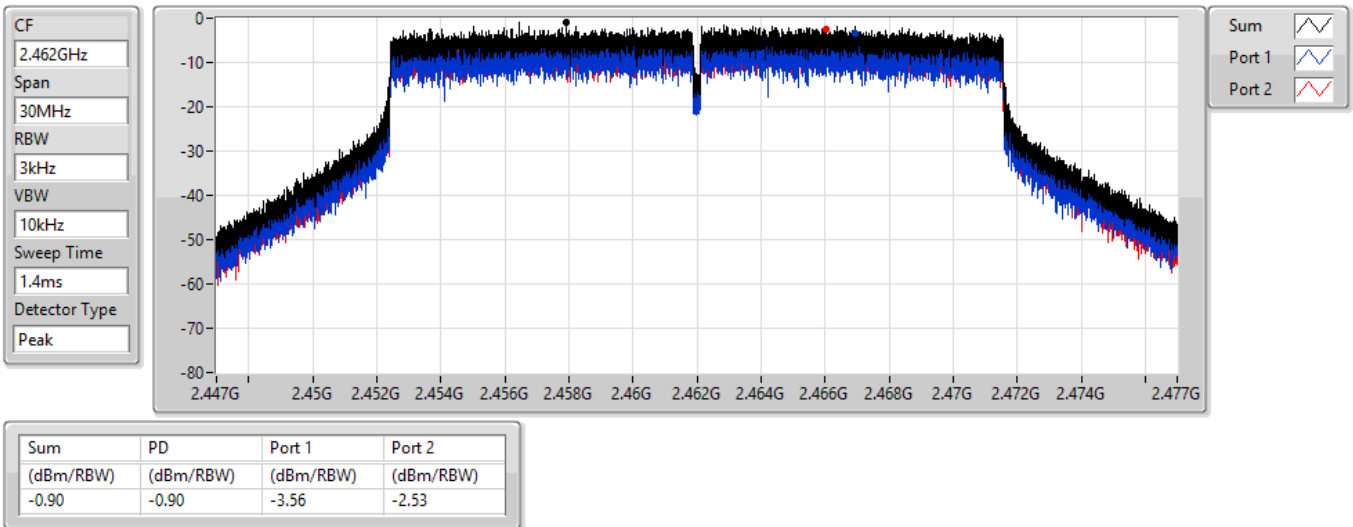


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2462MHz

05/08/2022

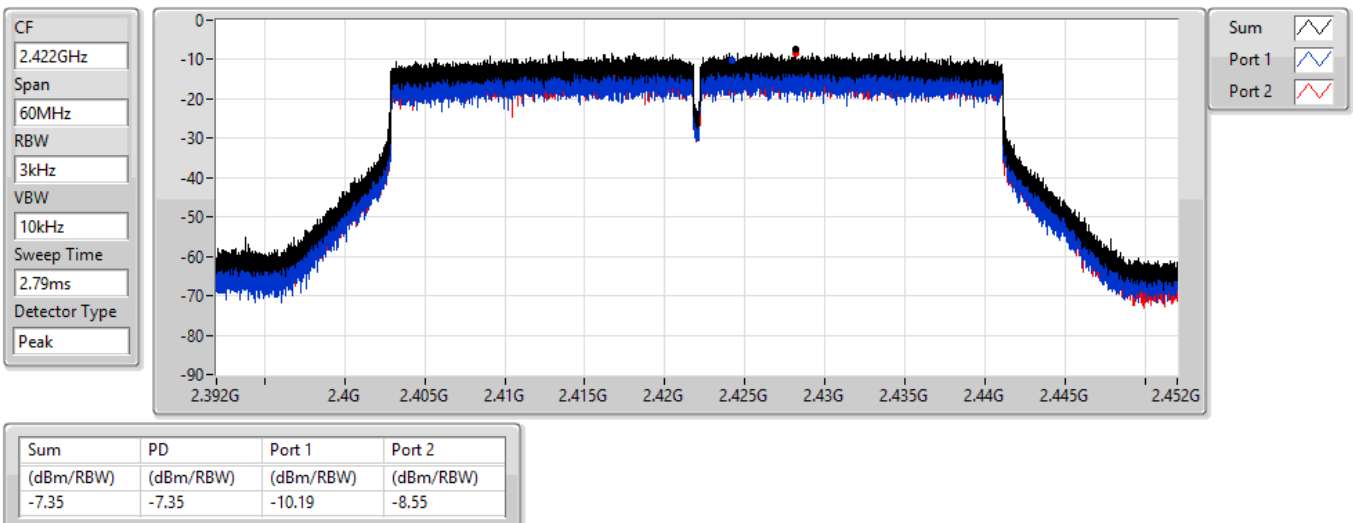


802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

2422MHz

05/08/2022

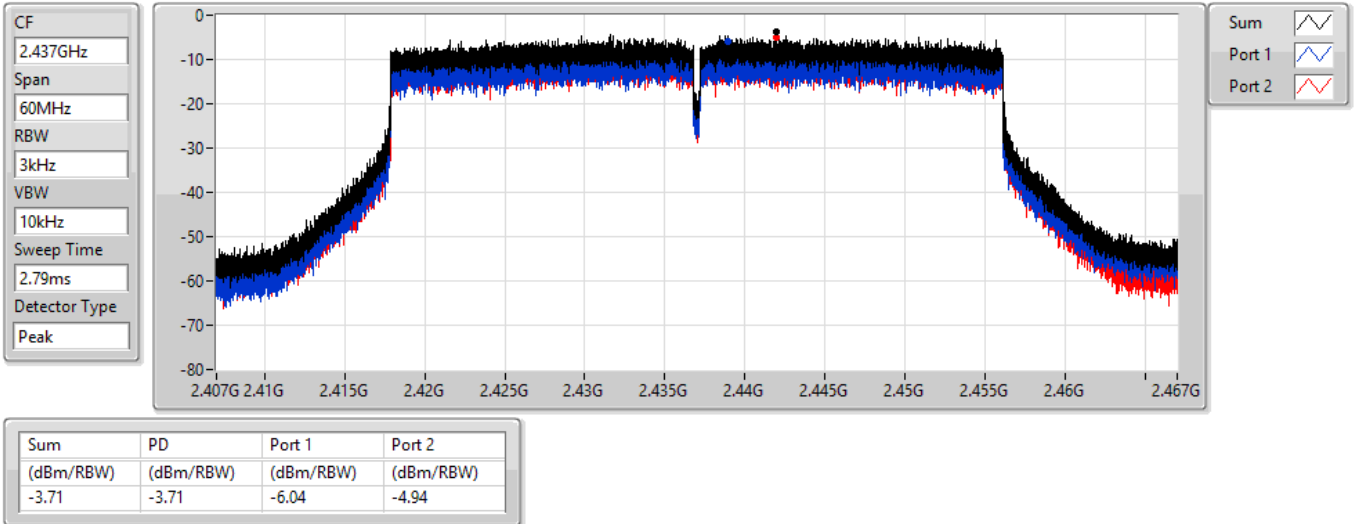


802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz

PSD

05/08/2022

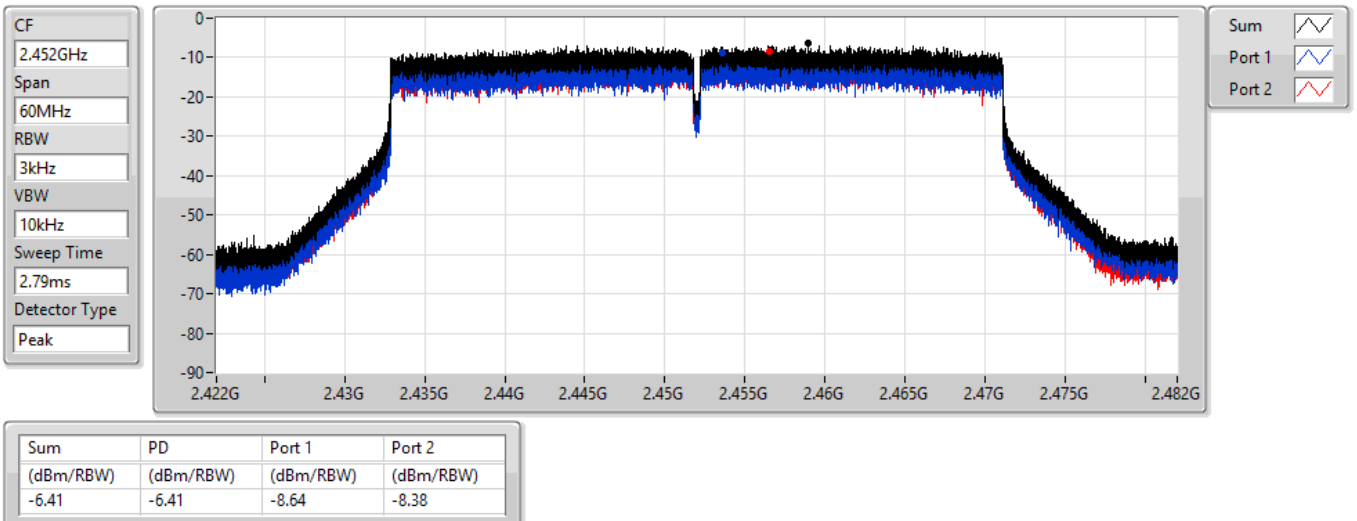


802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz

PSD

05/08/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	1.50
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-0.42

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.41	-8.06	-8.44	-7.11	6.59
2437MHz	Pass	7.41	0.56	-0.83	1.50	6.59
2462MHz	Pass	7.41	-2.20	-2.13	-0.74	6.59
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.41	-16.84	-15.05	-14.06	6.59
2437MHz	Pass	7.41	-0.83	-5.30	-0.42	6.59
2452MHz	Pass	7.41	-8.04	-11.13	-7.80	6.59

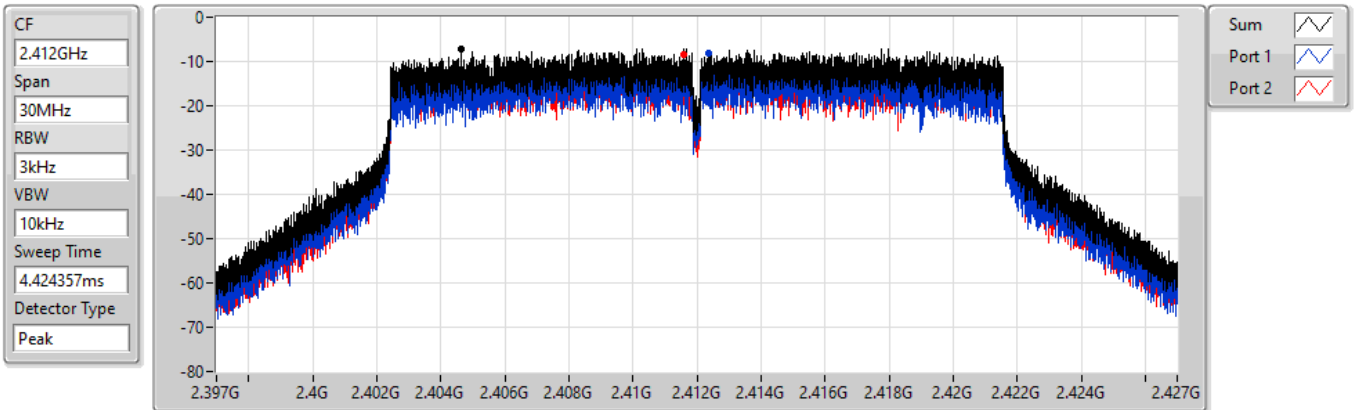
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2412MHz

15/09/2022

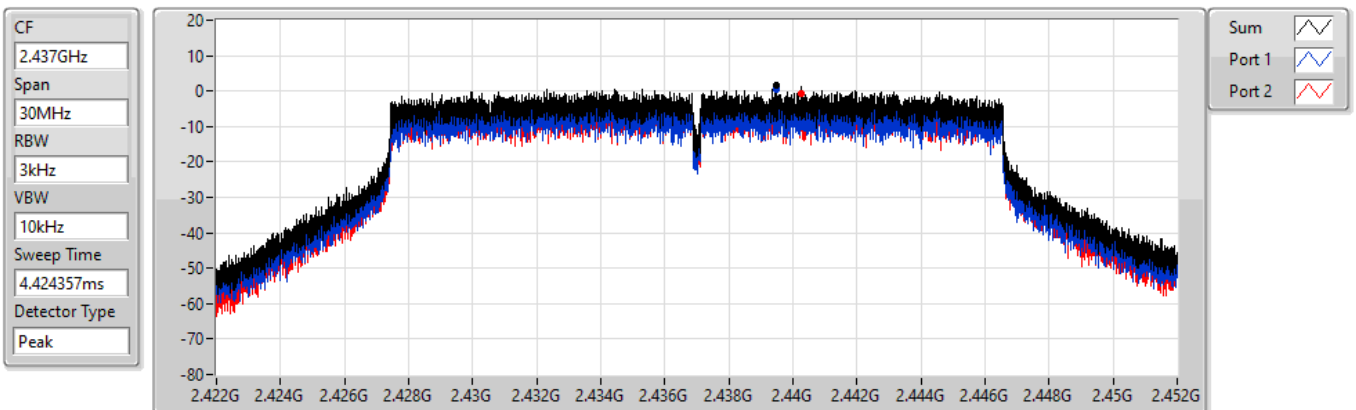


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

15/09/2022

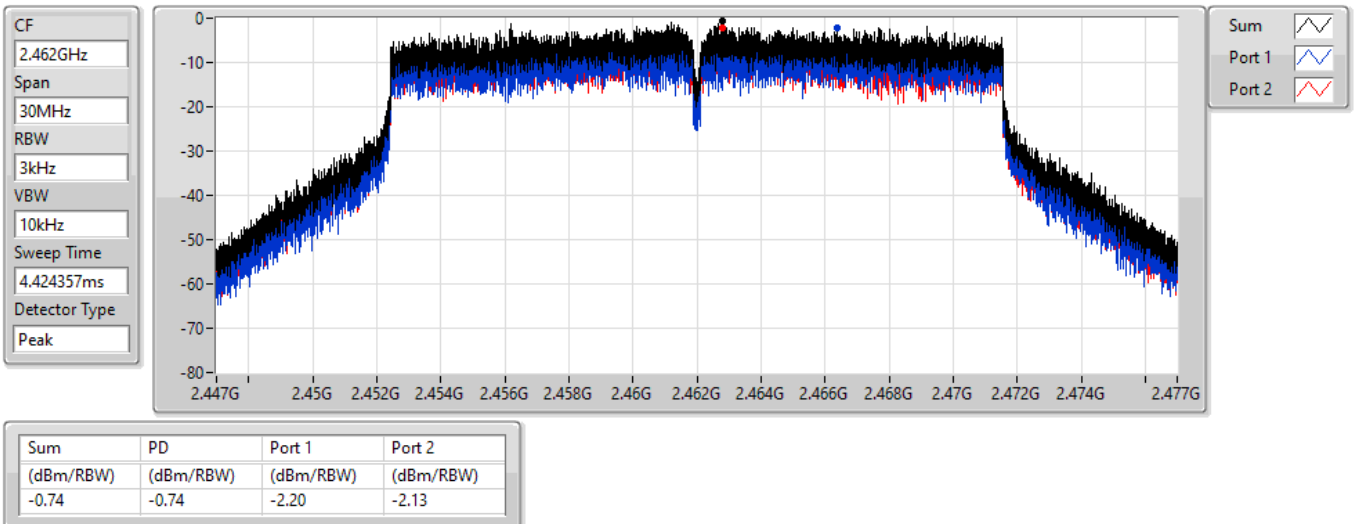


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2462MHz

15/09/2022

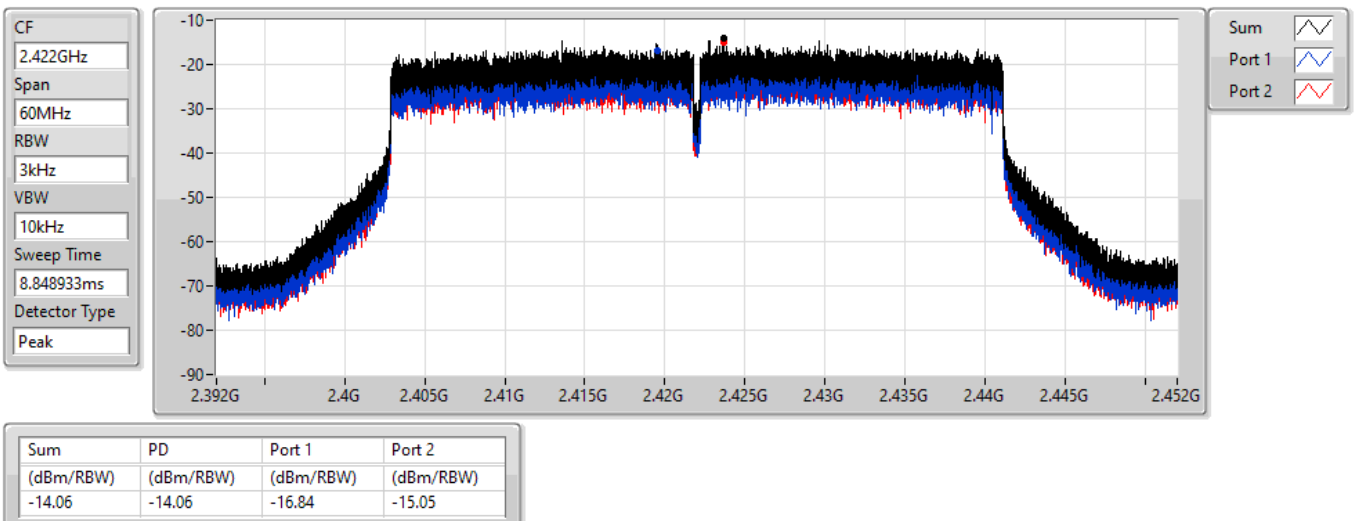


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2422MHz

15/09/2022

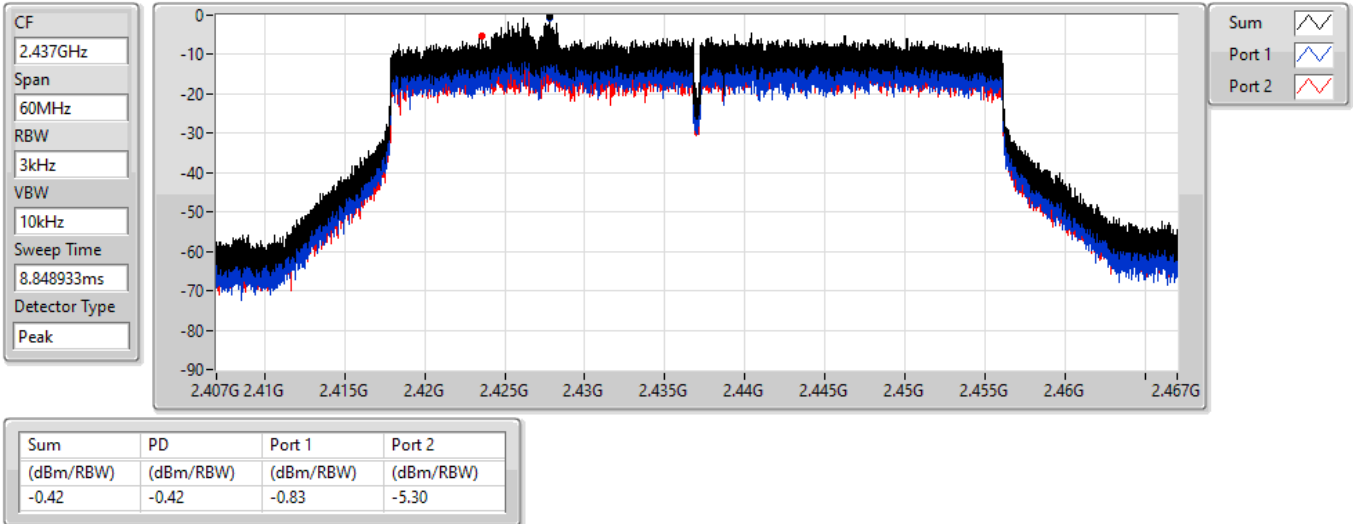


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

15/09/2022

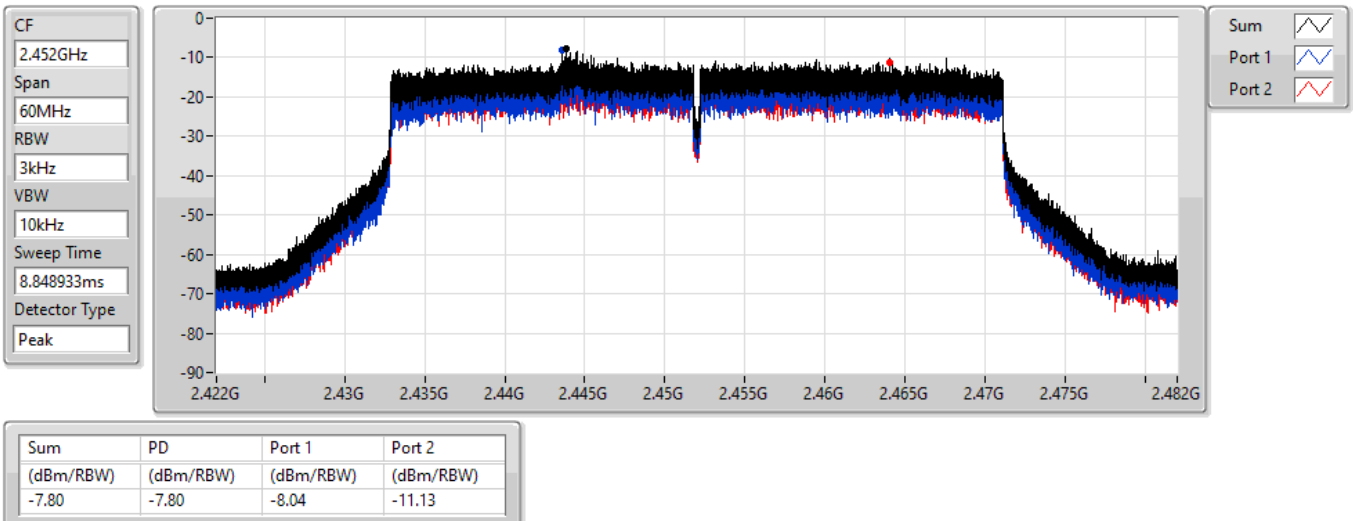


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2452MHz

15/09/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-8.84
802.11g_Nss1,(6Mbps)_2TX	-9.22
802.11ax HEW20_Nss1,(MCS0)_2TX	-8.67
802.11ax HEW40_Nss1,(MCS0)_2TX	-12.32

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	17.23	-14.39	-12.09	-10.22	-3.23
2437MHz	Pass	17.23	-12.19	-11.53	-8.84	-3.23
2462MHz	Pass	17.23	-12.78	-12.11	-9.59	-3.23
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	17.23	-10.21	-10.63	-9.22	-3.23
2437MHz	Pass	17.23	-11.27	-11.69	-9.85	-3.23
2462MHz	Pass	17.23	-12.27	-11.44	-9.87	-3.23
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	17.23	-12.20	-12.44	-10.17	-3.23
2437MHz	Pass	17.23	-10.40	-11.01	-9.11	-3.23
2462MHz	Pass	17.23	-11.32	-9.59	-8.67	-3.23
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	17.23	-16.83	-15.71	-14.49	-3.23
2437MHz	Pass	17.23	-14.18	-14.17	-12.46	-3.23
2452MHz	Pass	17.23	-14.60	-14.23	-12.32	-3.23

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;

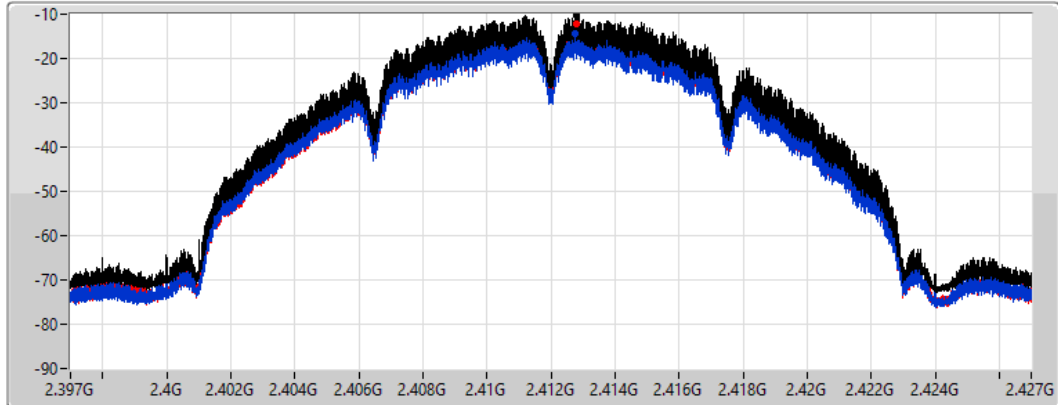
802.11b_Nss1,(1Mbps)_2TX

2412MHz

PSD

07/09/2022

CF
2.412GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
4.424357ms
Detector Type
RMS



Sum 
Port 1 
Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.22	-10.22	-14.39	-12.09

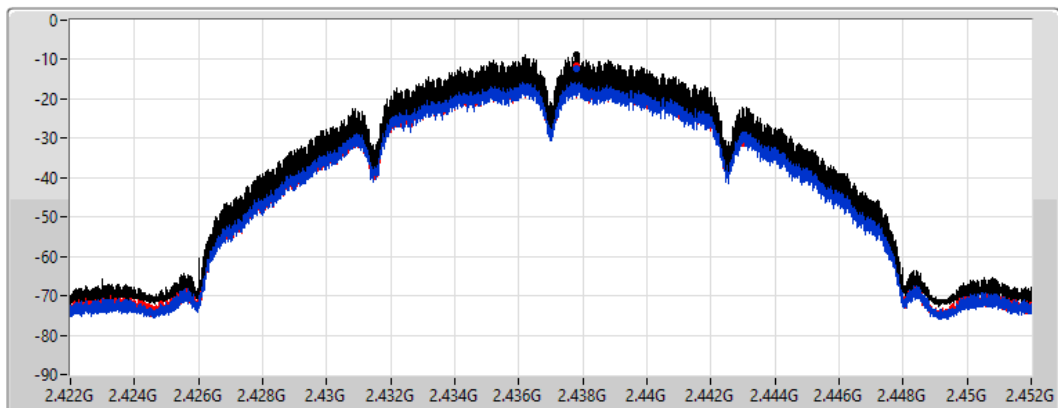
802.11b_Nss1,(1Mbps)_2TX

2437MHz

PSD

07/09/2022

CF
2.437GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
4.424357ms
Detector Type
RMS



Sum 
Port 1 
Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.84	-8.84	-12.19	-11.53

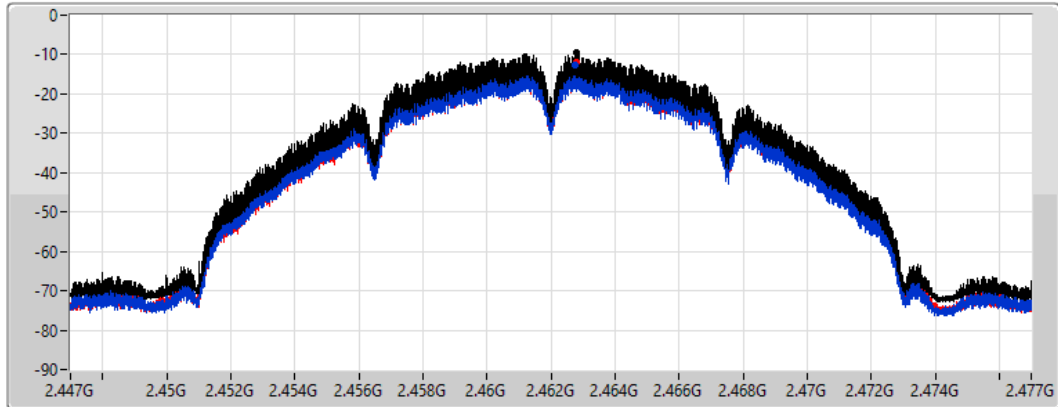
802.11b_Nss1,(1Mbps)_2TX

2462MHz

PSD

07/09/2022

CF
2.462GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
4.424357ms
Detector Type
RMS



Sum ☒
Port 1 ☒
Port 2 ☒

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.59	-9.59	-12.78	-12.11

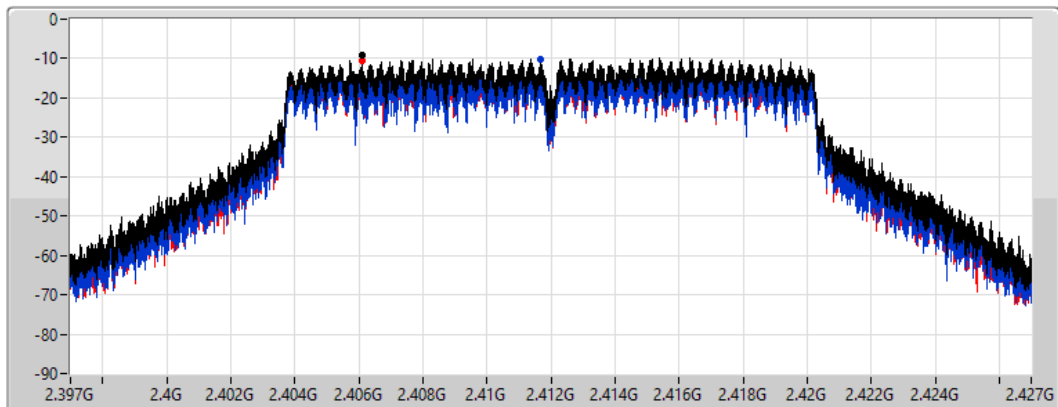
802.11g_Nss1,(6Mbps)_2TX

2412MHz

PSD

07/09/2022

CF
2.412GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
4.424357ms
Detector Type
Peak



Sum ☒
Port 1 ☒
Port 2 ☒

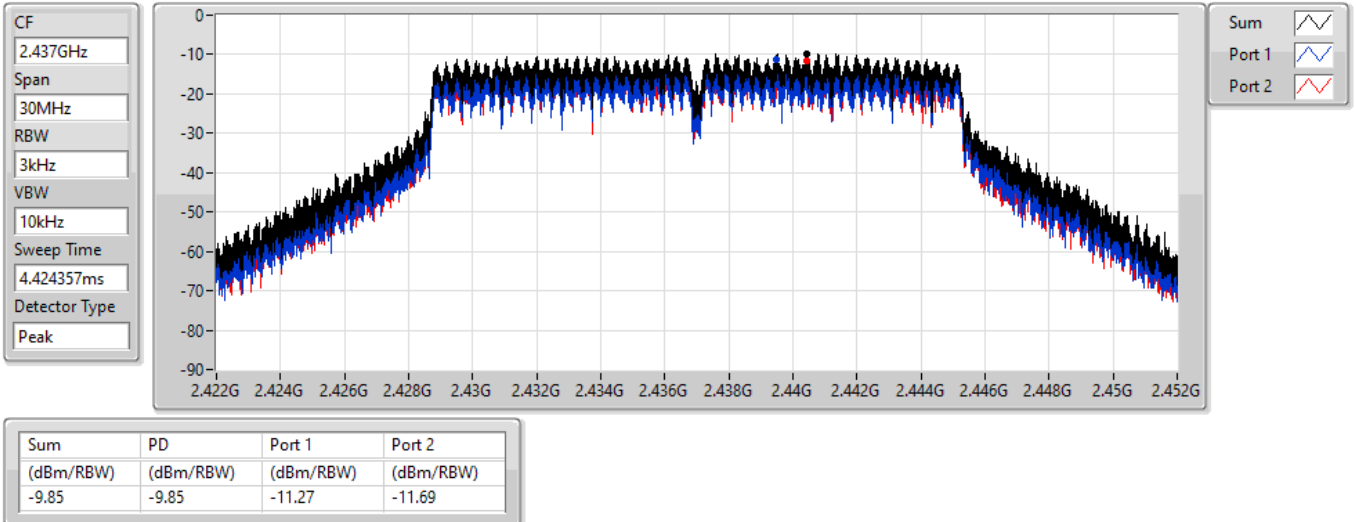
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.22	-9.22	-10.21	-10.63

802.11g_Nss1,(6Mbps)_2TX

2437MHz

PSD

07/09/2022

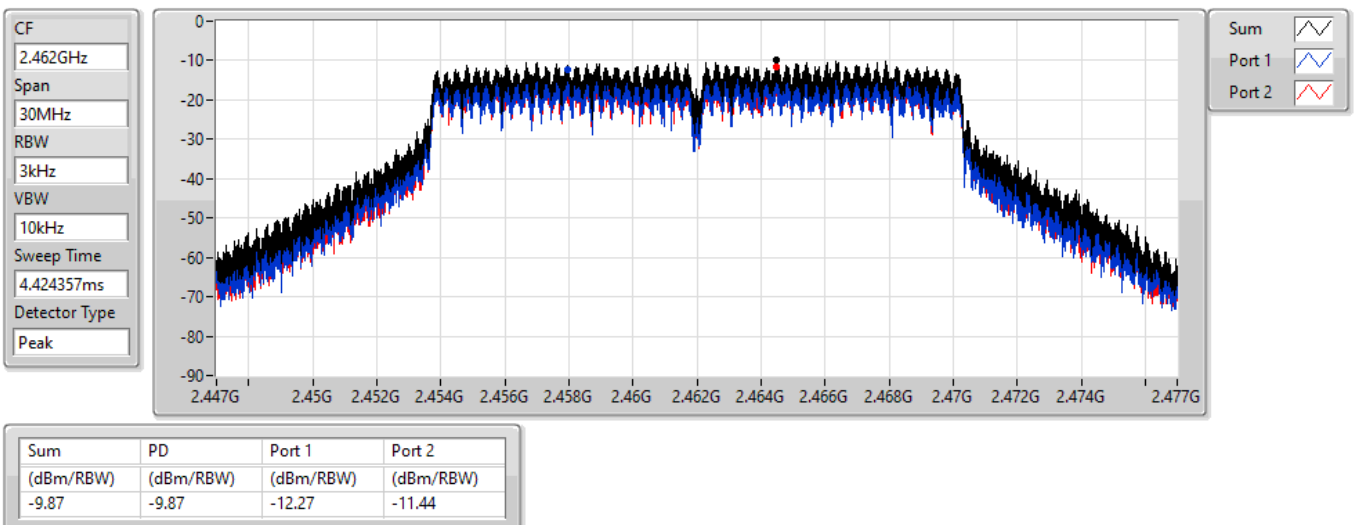


802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

07/09/2022

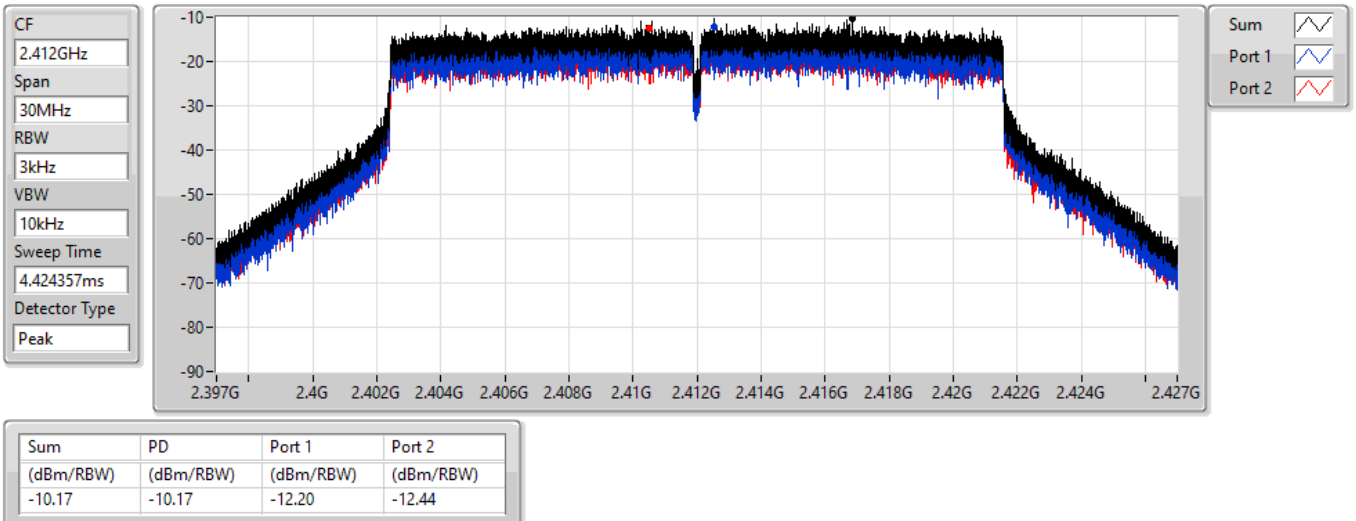


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2412MHz

07/09/2022

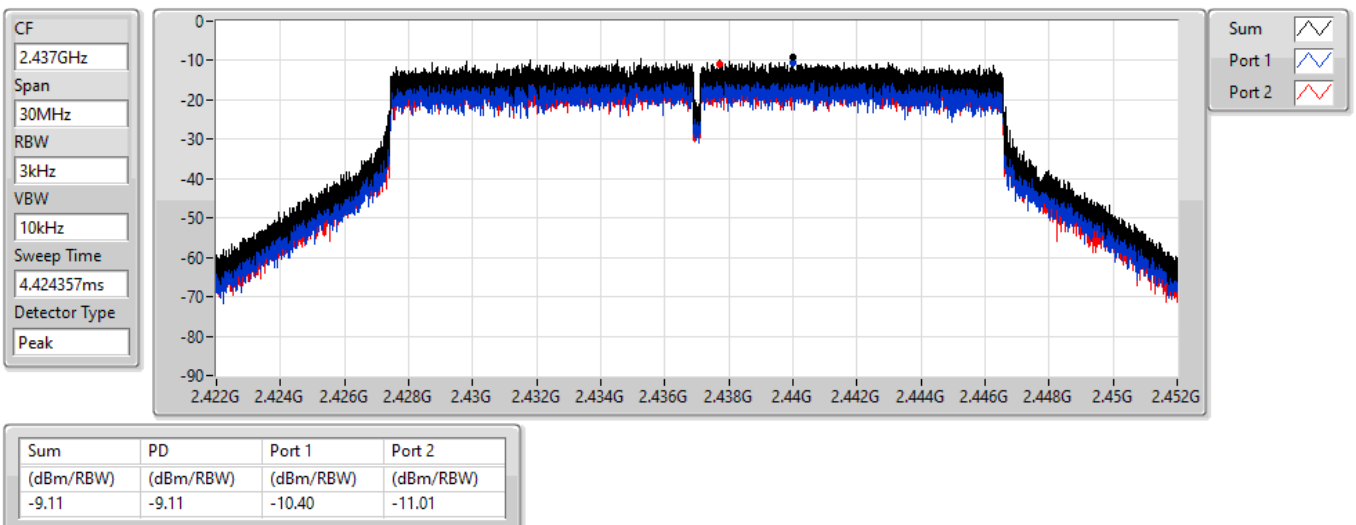


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2437MHz

07/09/2022

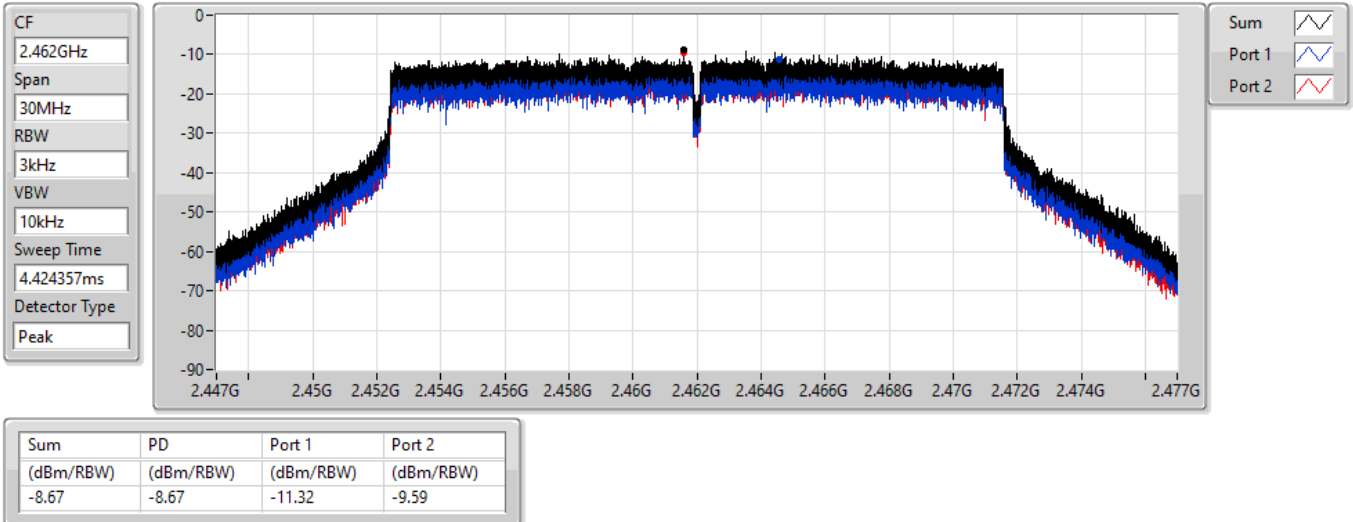


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2462MHz

07/09/2022

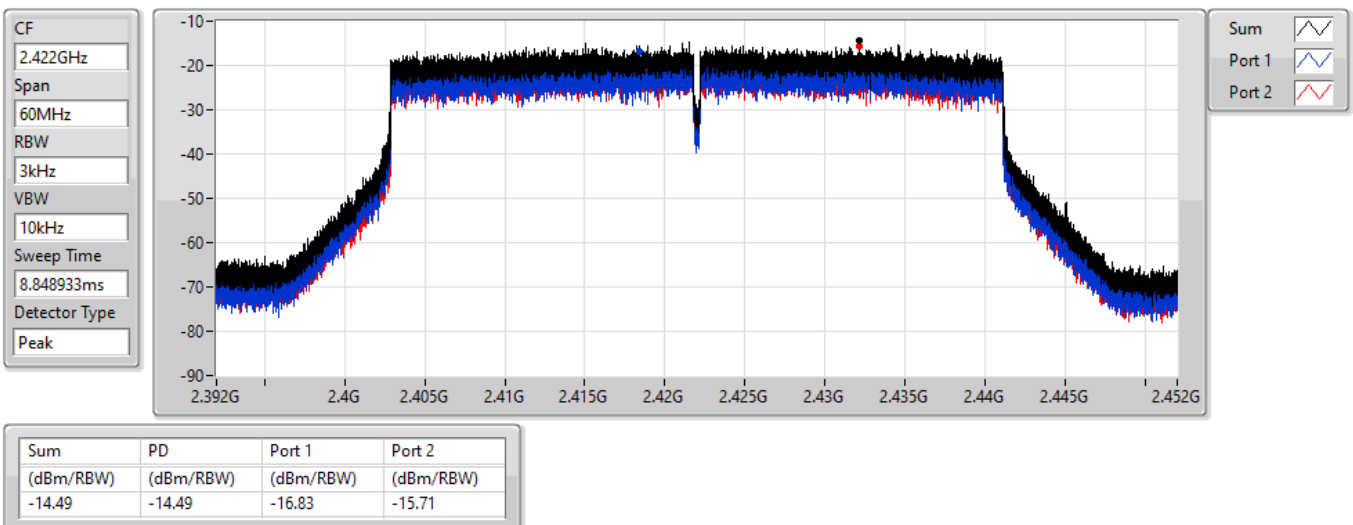


802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

2422MHz

07/09/2022

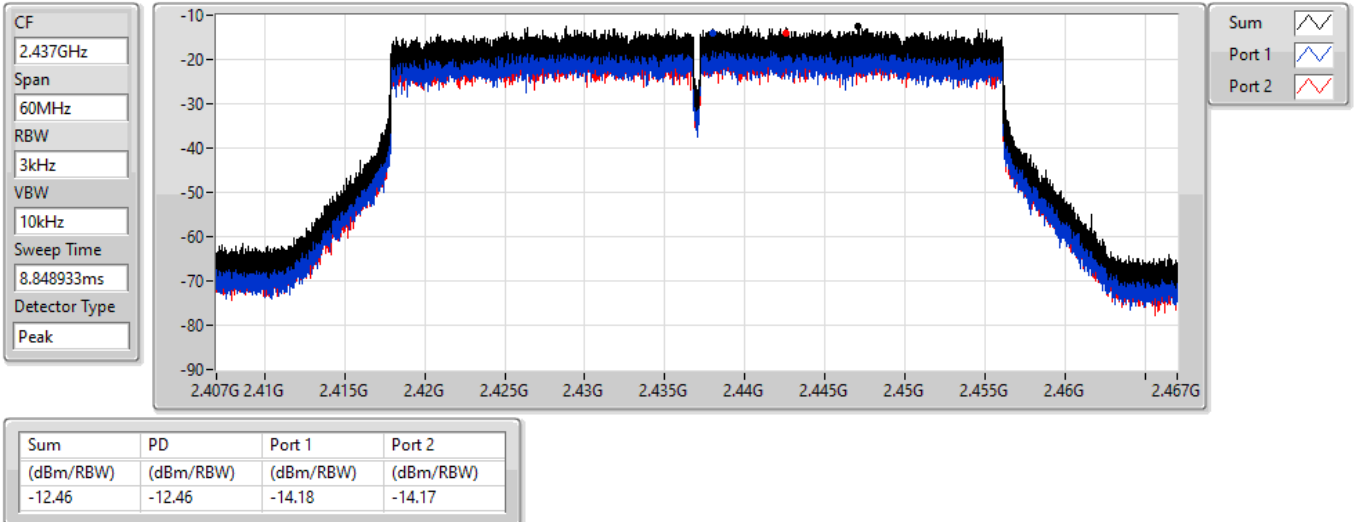


802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

2437MHz

07/09/2022

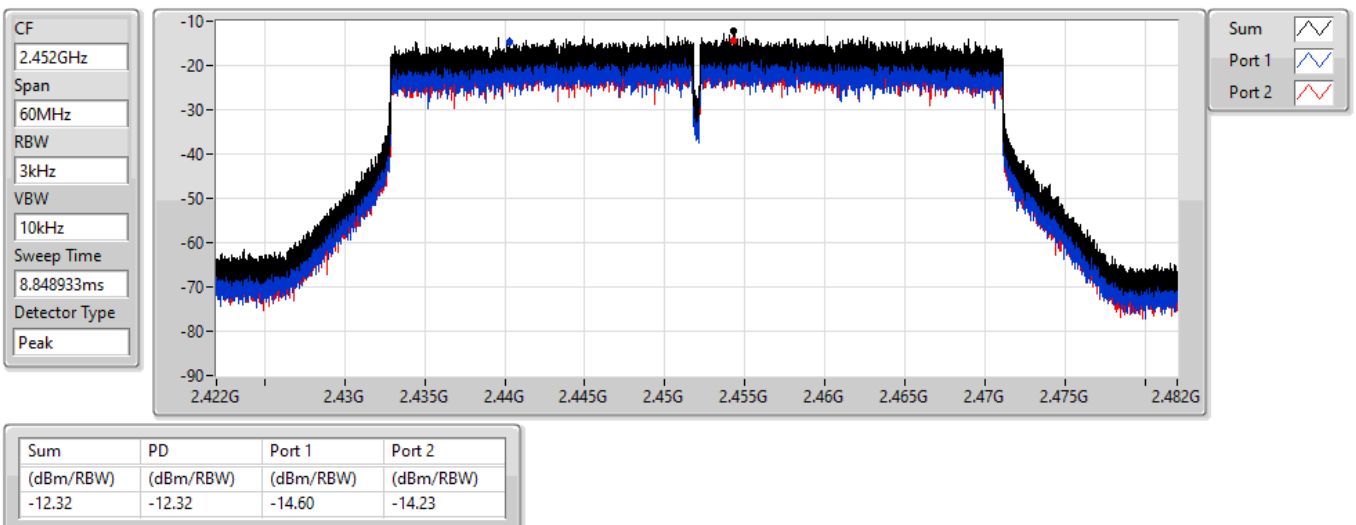


802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

2452MHz

07/09/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-8.22
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-10.66

RBW = 3kHz;



Result

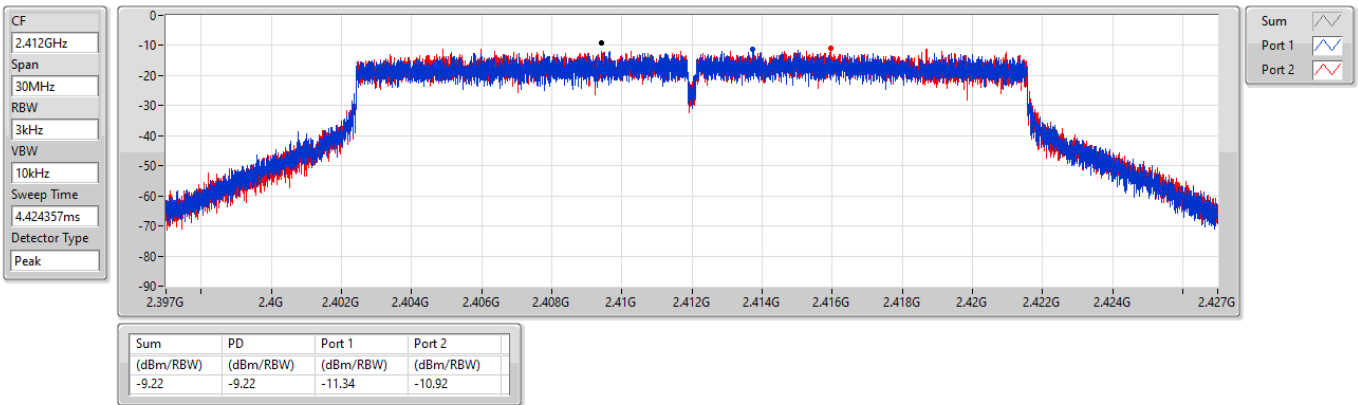
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	17.23	-11.34	-10.92	-9.22	-3.23
2437MHz	Pass	17.23	-10.47	-10.15	-8.22	-3.23
2462MHz	Pass	17.23	-11.00	-10.99	-9.86	-3.23
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	17.23	-14.78	-14.90	-13.54	-3.23
2437MHz	Pass	17.23	-11.48	-12.63	-10.66	-3.23
2452MHz	Pass	17.23	-16.99	-17.08	-15.17	-3.23

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;

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX
2412MHz

PSD

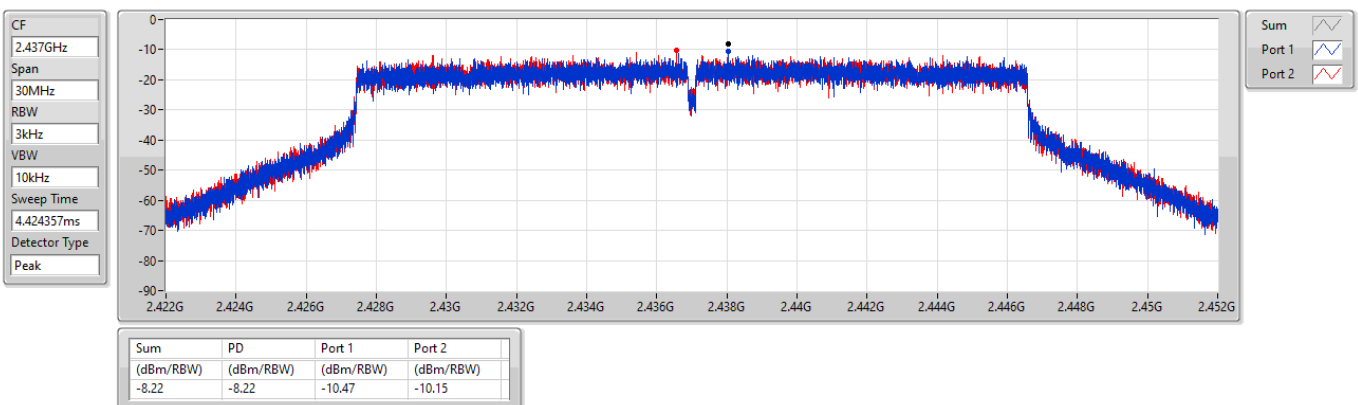
15/11/2022



2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX
2437MHz

PSD

15/11/2022

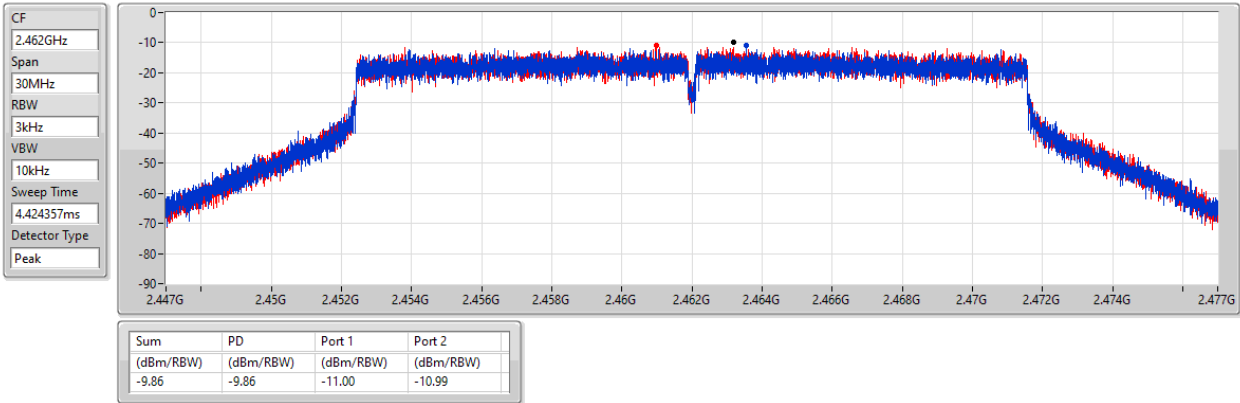


2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz

PSD

15/11/2022

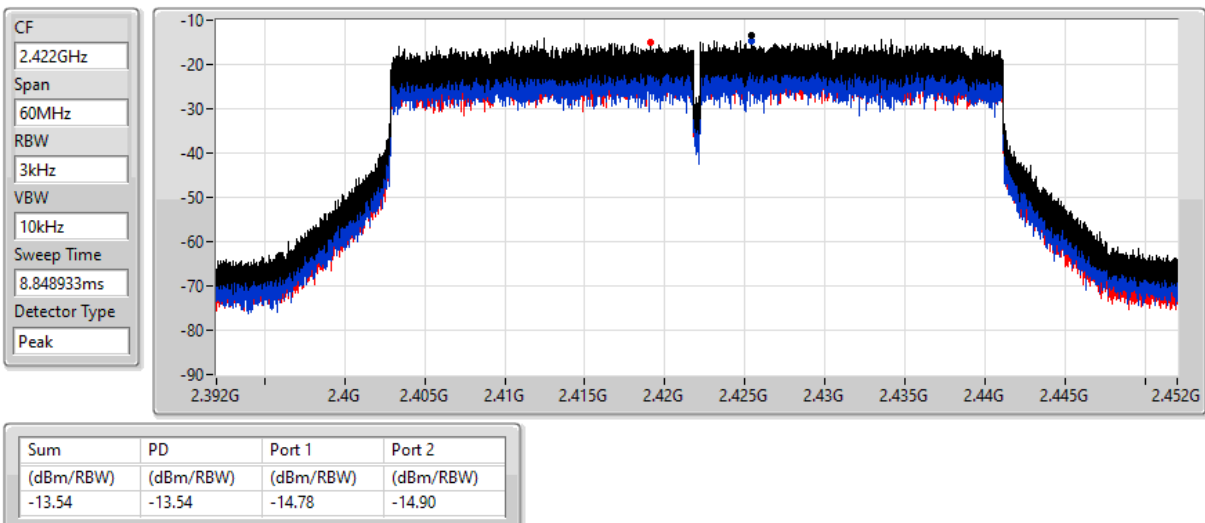


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz

PSD

15/09/2022

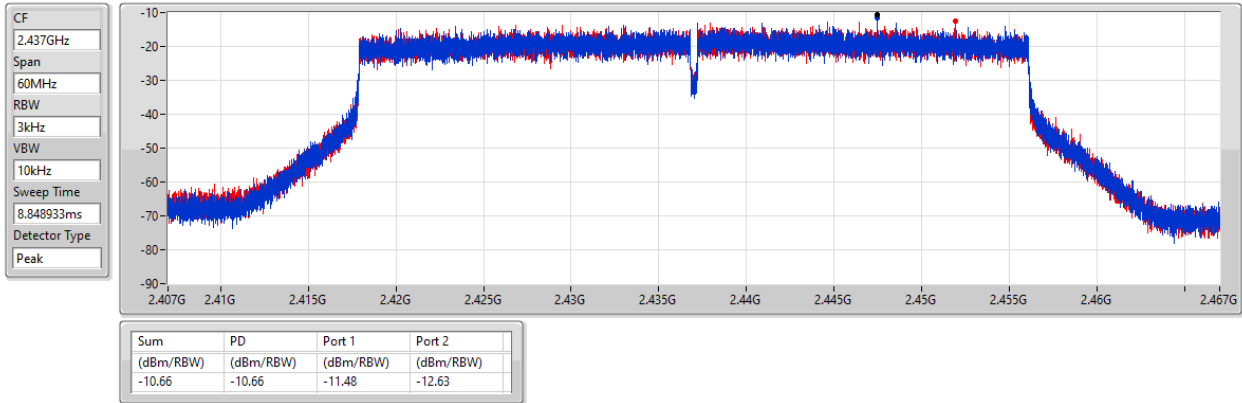


2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz

PSD

15/11/2022

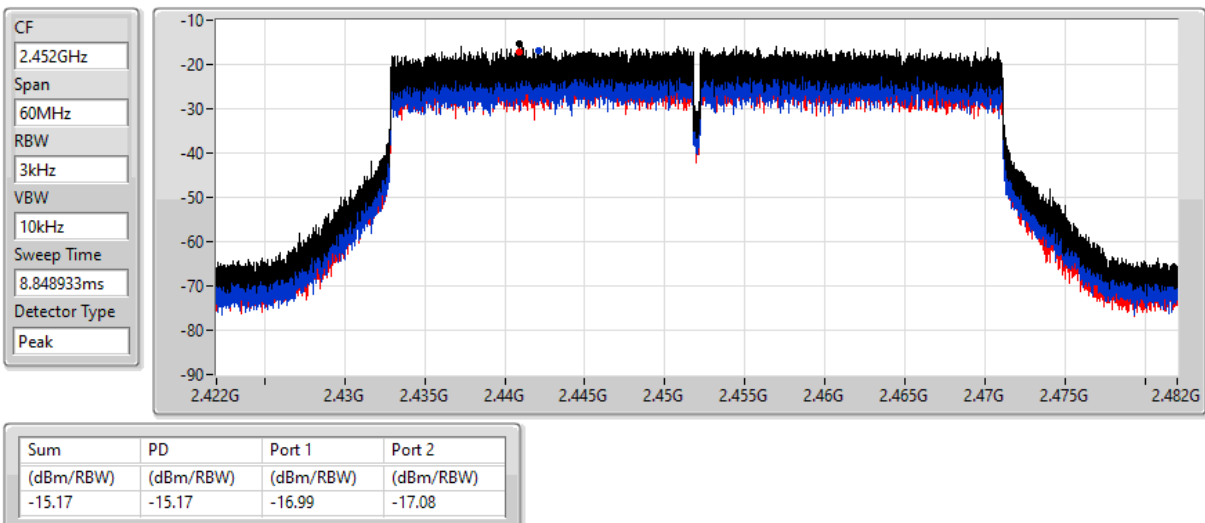


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz

PSD

15/09/2022





CSE (Non-restricted Band)_R1 + Antenna set 1_
Non beamforming mode

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)_2TX	Pass	2.43649G	18.24	-11.76	47.77M	-48.84	2.4G	-32.65	2.4G	-34.92	2.50924G	-47.99	7.23514G	-47.71	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43828G	16.98	-13.02	1.92633G	-49.50	2.39948G	-25.36	2.4G	-25.99	2.49604G	-46.85	21.91229G	-44.09	1
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.43202G	16.23	-13.77	71.94M	-48.78	2.39996G	-24.28	2.4G	-22.46	2.48902G	-47.56	21.66224G	-44.11	2
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	2.442G	10.16	-19.84	47.75M	-48.60	2.4G	-30.80	2.4G	-31.48	2.51886G	-48.23	21.82243G	-44.05	2



CSE (Non-restricted Band)_R1 + Antenna set 1
Non beamforming mode

Appendix E.1

Result

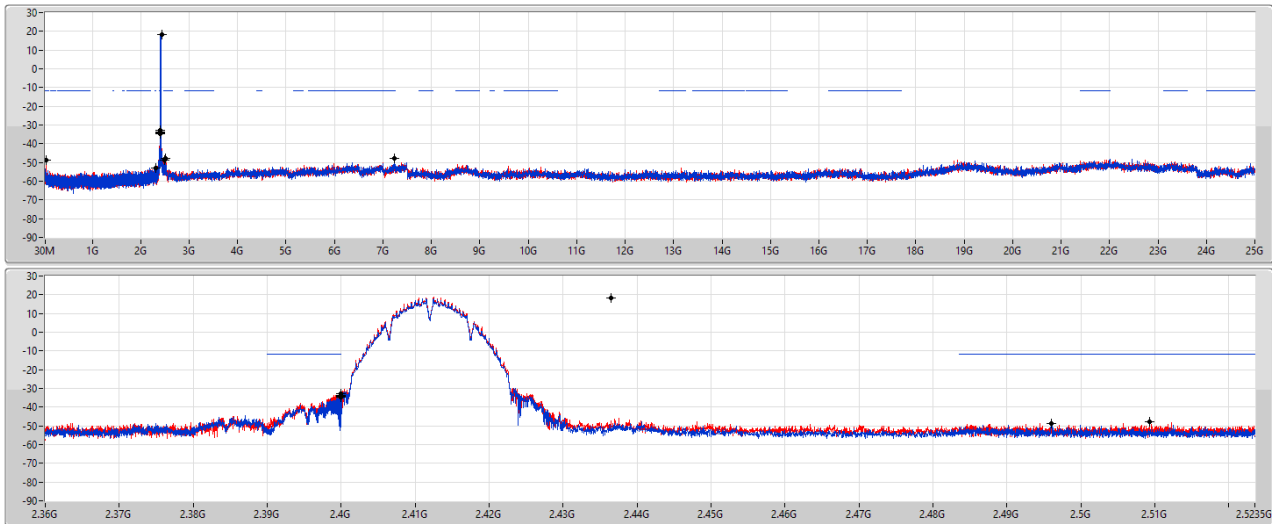
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43649G	18.24	-11.76	2.30408G	-53.13	2.4G	-33.80	2.4G	-34.27	2.49604G	-48.72	7.23514G	-48.03	1
2412MHz	Pass	2.43649G	18.24	-11.76	47.77M	-48.84	2.4G	-32.65	2.4G	-34.92	2.50924G	-47.99	7.23514G	-47.71	2
2437MHz	Pass	2.43649G	18.24	-11.76	227.47M	-53.92	2.39592G	-49.72	2.4G	-51.41	2.49598G	-49.59	21.61448G	-48.69	1
2437MHz	Pass	2.43649G	18.24	-11.76	47.77M	-50.06	2.39998G	-46.74	2.4G	-49.09	2.49118G	-47.92	21.9432G	-49.34	2
2462MHz	Pass	2.43649G	18.24	-11.76	2.18787G	-54.01	2.39348G	-50.48	2.4835G	-52.49	2.48898G	-48.97	21.48243G	-49.15	1
2462MHz	Pass	2.43649G	18.24	-11.76	47.77M	-49.65	2.39306G	-50.06	2.4G	-51.95	2.49566G	-48.16	21.72124G	-48.15	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43828G	16.98	-13.02	1.92633G	-49.50	2.39948G	-25.36	2.4G	-25.99	2.49604G	-46.85	21.91229G	-44.09	1
2412MHz	Pass	2.43828G	16.98	-13.02	47.77M	-46.66	2.3998G	-25.78	2.4G	-25.76	2.49608G	-46.46	21.48805G	-44.46	2
2437MHz	Pass	2.43828G	16.98	-13.02	2.1171G	-53.17	2.39982G	-44.02	2.4G	-46.42	2.4885G	-45.94	21.83643G	-49.17	1
2437MHz	Pass	2.43828G	16.98	-13.02	43.4M	-51.86	2.39952G	-40.83	2.4G	-43.21	2.4857G	-45.59	21.49086G	-48.37	2
2462MHz	Pass	2.43828G	16.98	-13.02	2.13079G	-48.52	2.39704G	-48.24	2.4835G	-43.92	2.4835G	-41.97	21.77181G	-44.60	1
2462MHz	Pass	2.43828G	16.98	-13.02	47.77M	-47.35	2.39494G	-47.33	2.4835G	-42.05	2.48512G	-40.21	21.75776G	-44.07	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43202G	16.23	-13.77	1.76498G	-48.54	2.39984G	-25.70	2.4G	-26.45	2.48552G	-47.75	21.57514G	-43.97	1
2412MHz	Pass	2.43202G	16.23	-13.77	71.94M	-48.78	2.39996G	-24.28	2.4G	-22.46	2.48902G	-47.56	21.66224G	-44.11	2
2437MHz	Pass	2.43202G	16.23	-13.77	2.30991G	-47.86	2.39982G	-39.11	2.4G	-43.67	2.48484G	-44.25	21.96567G	-44.94	1
2437MHz	Pass	2.43202G	16.23	-13.77	47.77M	-48.20	2.39982G	-40.96	2.4G	-42.38	2.48368G	-43.68	21.64538G	-44.46	2
2462MHz	Pass	2.43202G	16.23	-13.77	39.32M	-48.99	2.39612G	-47.58	2.4835G	-42.81	2.48362G	-39.63	21.533G	-44.64	1
2462MHz	Pass	2.43202G	16.23	-13.77	2.01924G	-47.94	2.39336G	-47.16	2.4835G	-40.46	2.48358G	-38.05	21.66224G	-42.75	2
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.442G	10.16	-19.84	2.14253G	-49.01	2.39992G	-31.27	2.4G	-32.93	2.49598G	-48.60	23.21349G	-43.27	1
2422MHz	Pass	2.442G	10.16	-19.84	47.75M	-48.60	2.4G	-30.80	2.4G	-31.48	2.51886G	-48.23	21.82243G	-44.05	2
2427MHz															
2437MHz	Pass	2.442G	10.16	-19.84	94.98M	-49.29	2.3958G	-41.65	2.4835G	-43.55	2.48426G	-42.40	21.63733G	-44.07	1
2437MHz	Pass	2.442G	10.16	-19.84	2.18518G	-48.89	2.39944G	-39.99	2.4G	-40.78	2.48822G	-43.23	21.6822G	-44.76	2
2452MHz	Pass	2.442G	10.16	-19.84	2.07812G	-49.38	2.39828G	-47.24	2.4835G	-41.14	2.48694G	-39.42	21.99631G	-44.19	1
2452MHz	Pass	2.442G	10.16	-19.84	48.03M	-46.58	2.39892G	-46.61	2.4835G	-43.61	2.48826G	-36.81	21.69903G	-44.08	2

802.11b_Nss1,(1Mbps)_2TX

2412MHz

CSENdB

05/08/2022



Port 1
Port 2

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

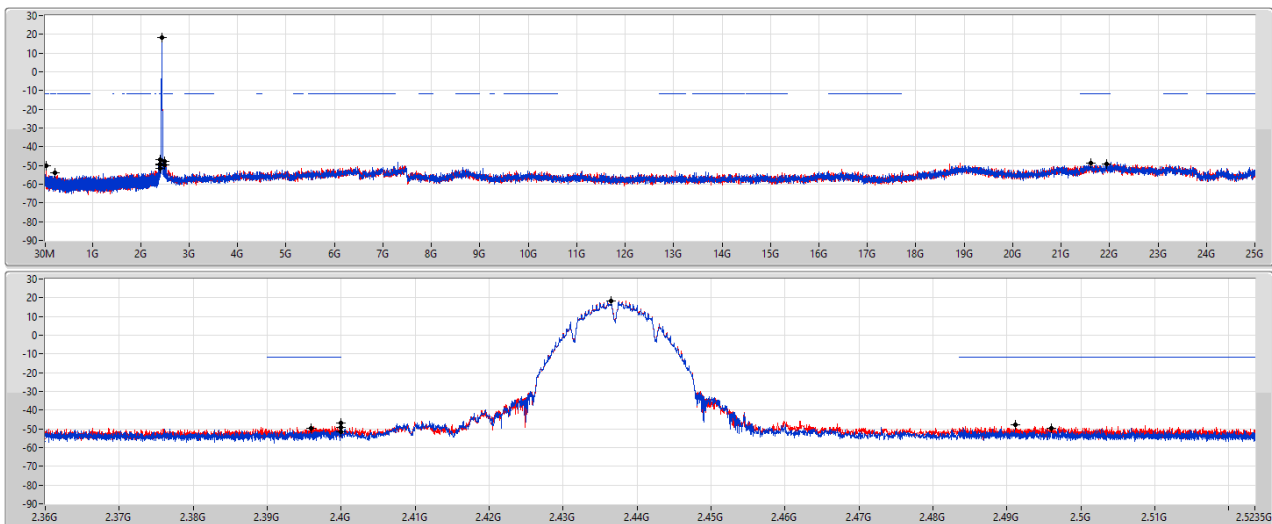
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43649G	18.24	-11.76	2.30408G	-53.13	2.4G	-33.80	2.4G	-34.27	2.49604G	-48.72	7.23514G	-48.03	1
2.43649G	18.24	-11.76	47.77M	-48.84	2.4G	-32.65	2.4G	-34.92	2.50924G	-47.99	7.23514G	-47.71	2

802.11b_Nss1,(1Mbps)_2TX

2437MHz

CSENdB

05/08/2022



Port 1
Port 2

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

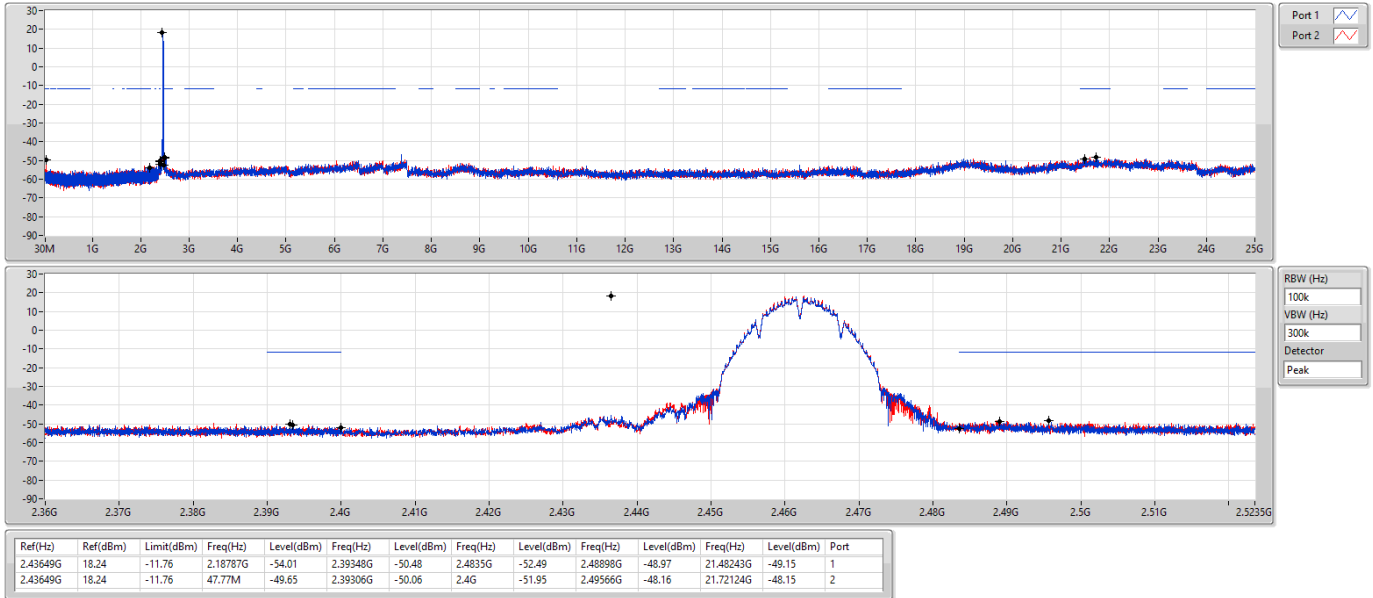
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43649G	18.24	-11.76	227.47M	-53.92	2.39592G	-49.72	2.4G	-51.41	2.49598G	-49.59	21.61448G	-48.69	1
2.43649G	18.24	-11.76	47.77M	-50.06	2.39998G	-46.74	2.4G	-49.09	2.49118G	-47.92	21.9432G	-49.34	2

802.11b_Nss1,(1Mbps)_2TX

2462MHz

CSENdB

05/08/2022

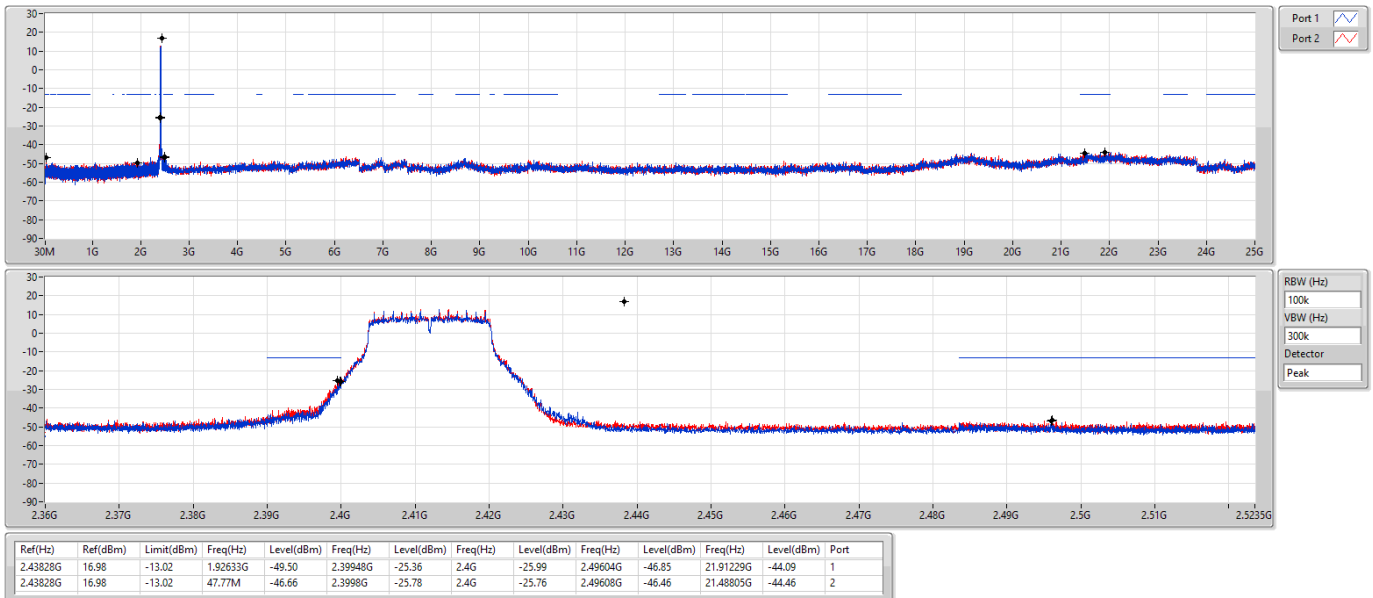


802.11g_Nss1,(6Mbps)_2TX

2412MHz

CSENdB

05/08/2022

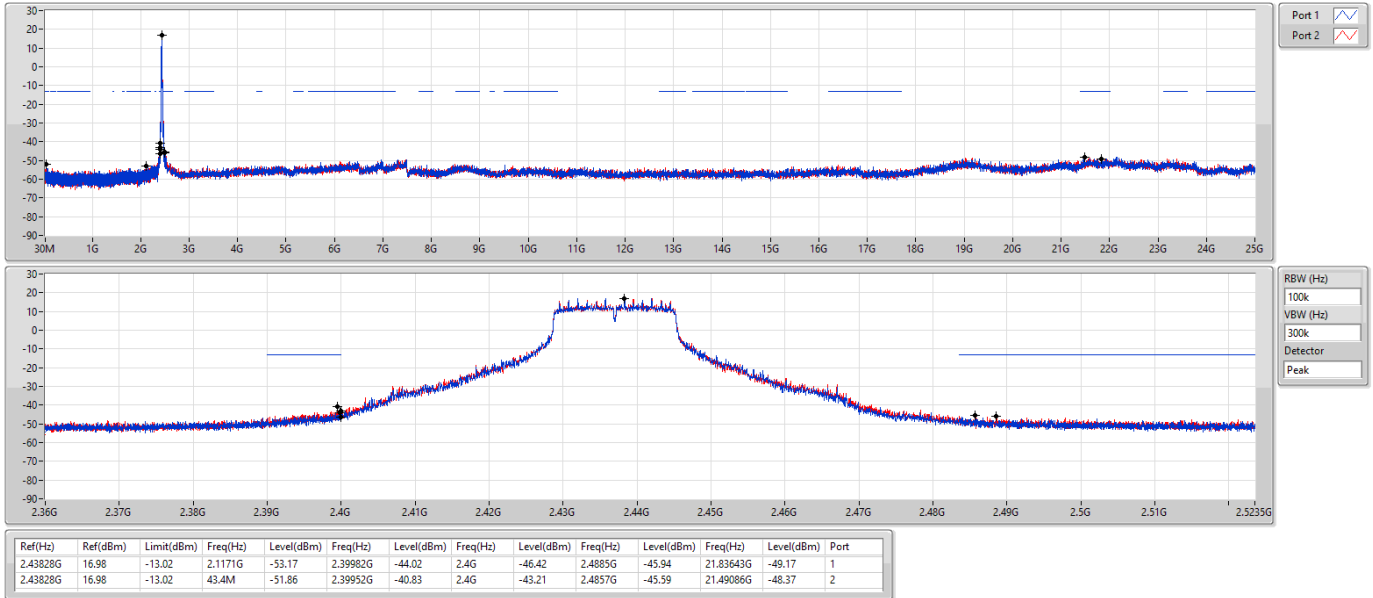


802.11g_Nss1,(6Mbps)_2TX

2437MHz

CSENdB

05/08/2022

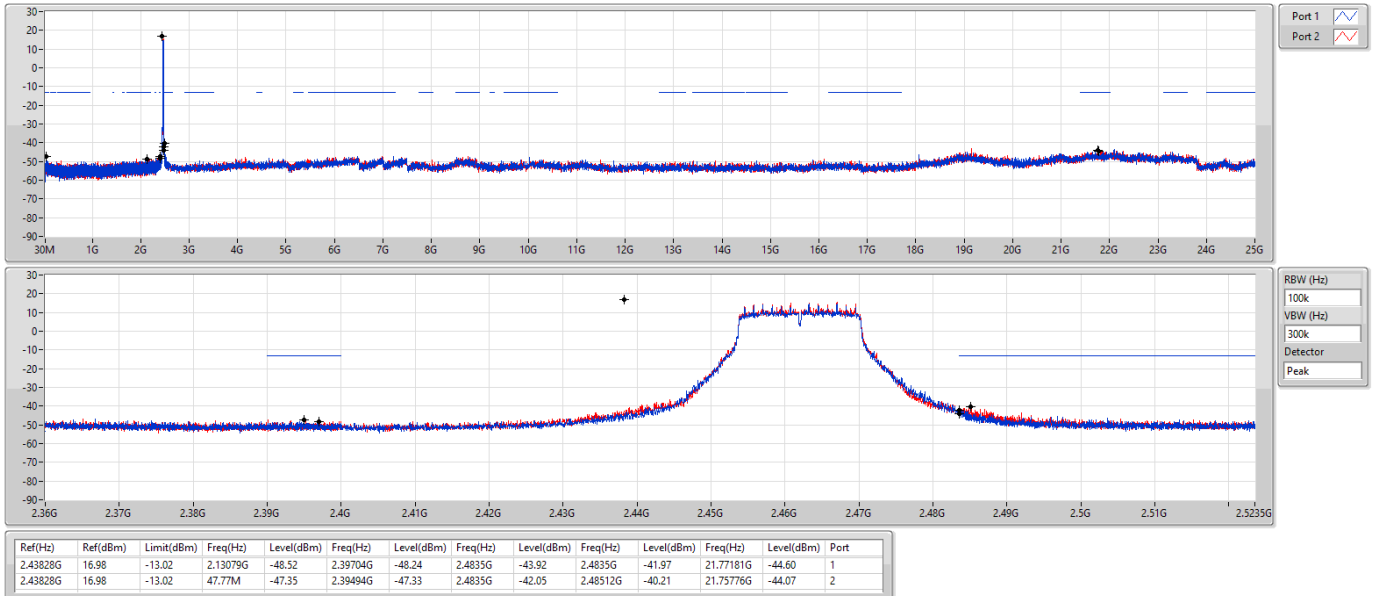


802.11g_Nss1,(6Mbps)_2TX

2462MHz

CSENdB

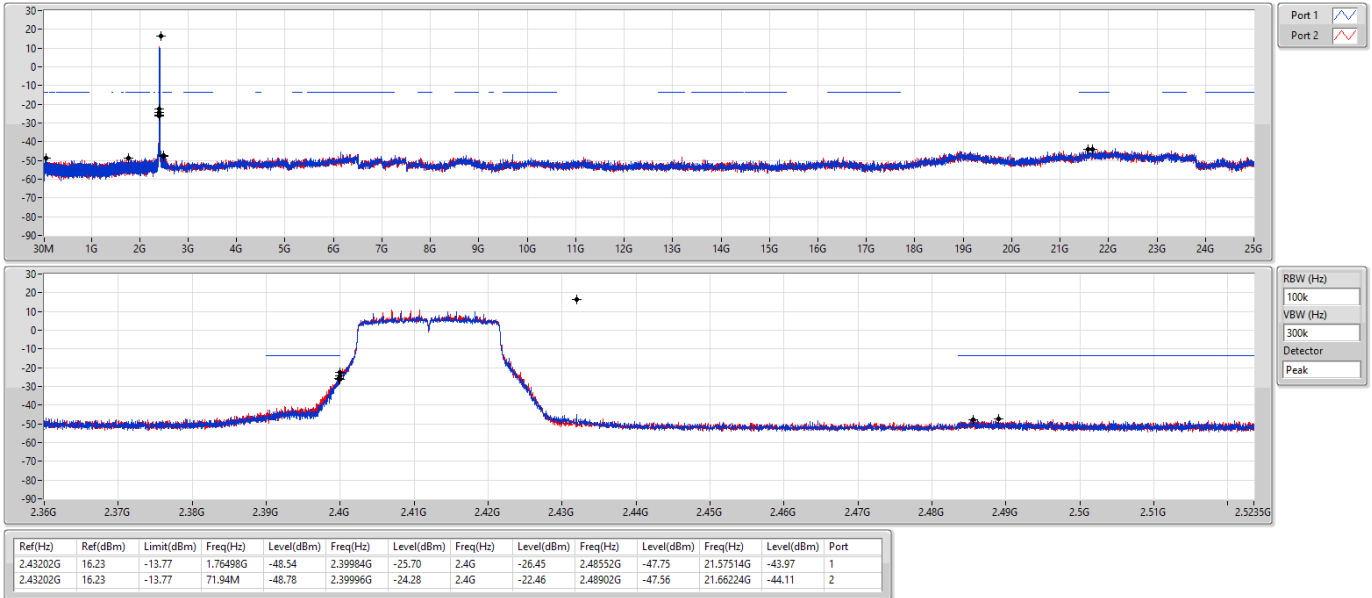
05/08/2022



802.11ax HEW20_Nss1,(MCS0)_2TX

CSENdB

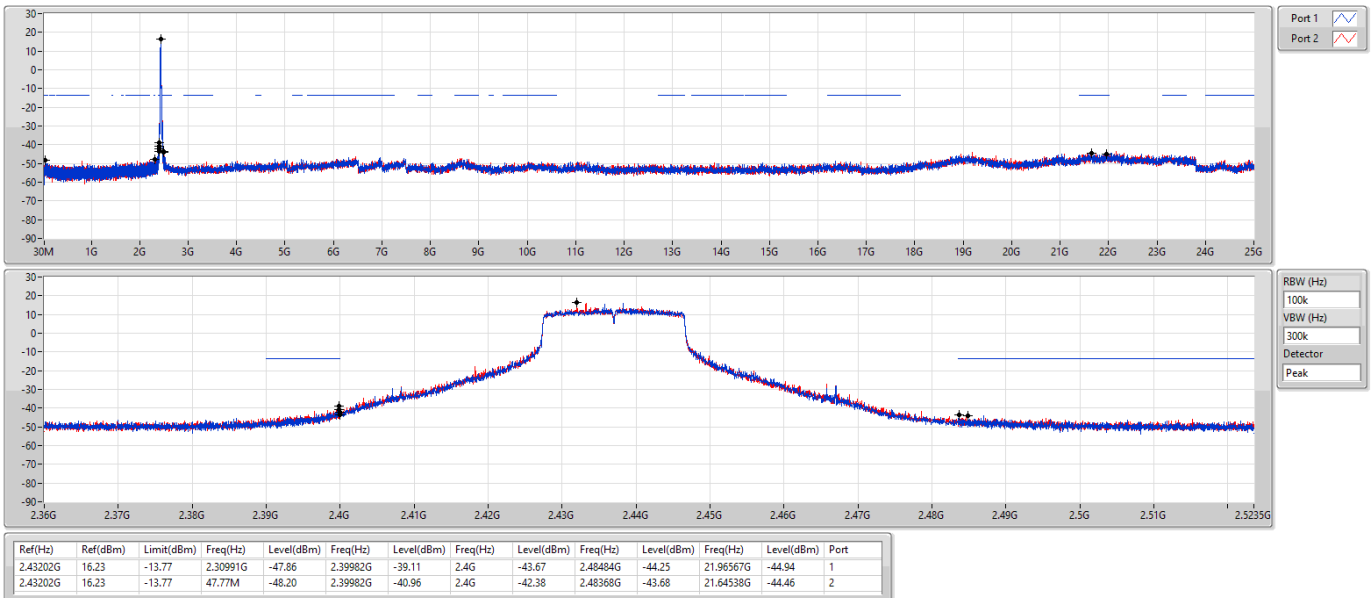
2412MHz



802.11ax HEW20_Nss1,(MCS0)_2TX

CSENdB

2437MHz

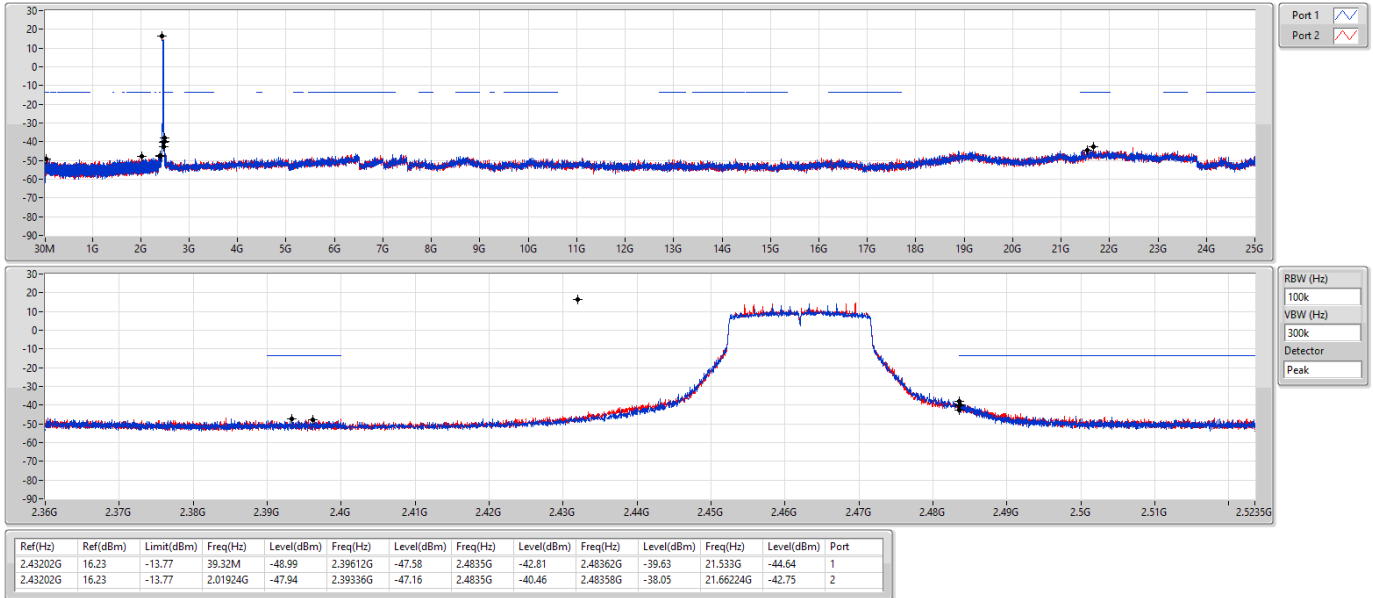


802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz

CSENdB

05/08/2022

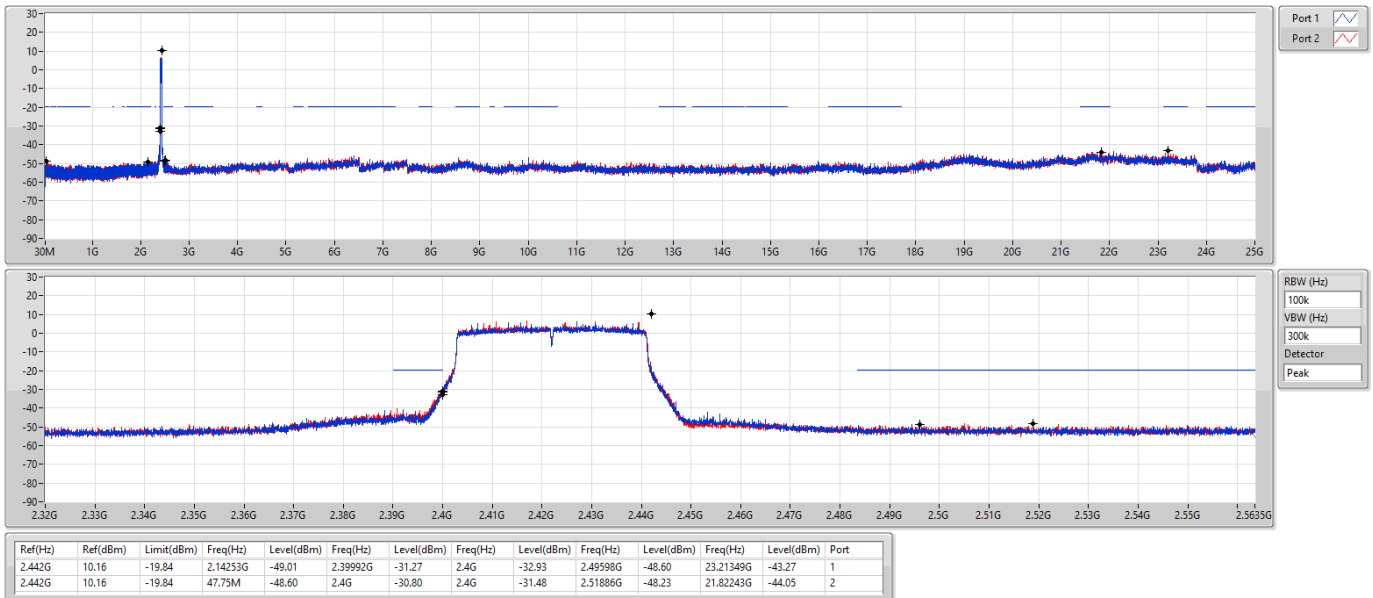


802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz

CSENdB

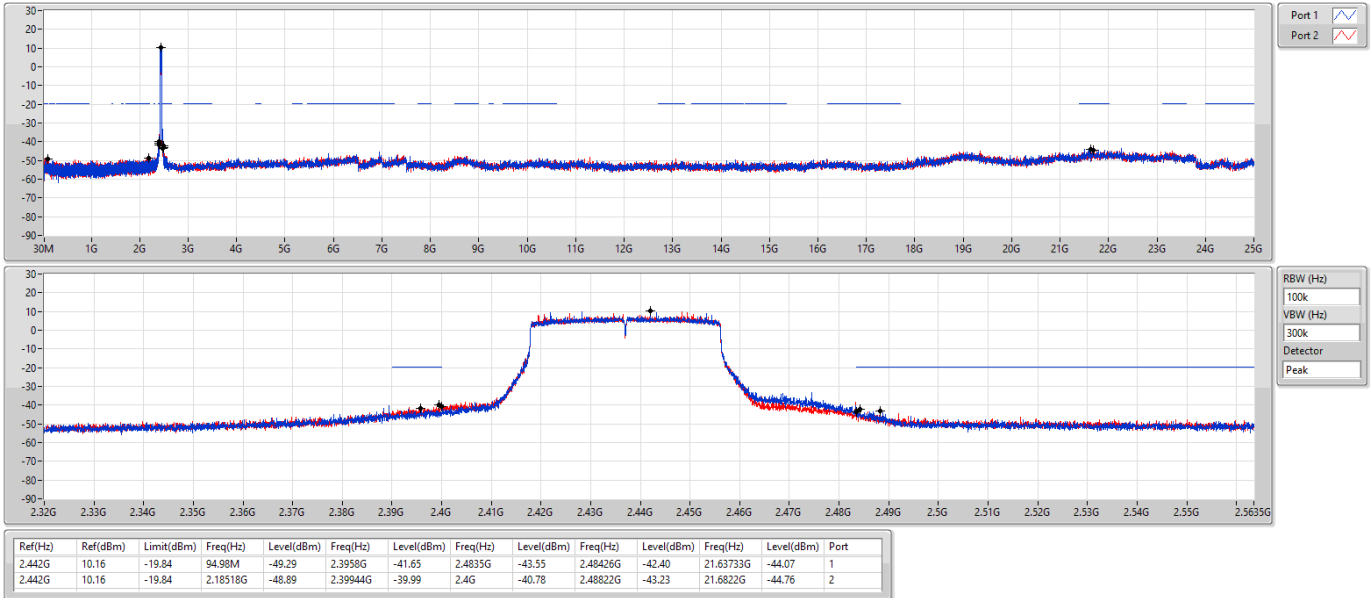
05/08/2022



802.11ax HEW40_Nss1,(MCS0)_2TX

CSENdB

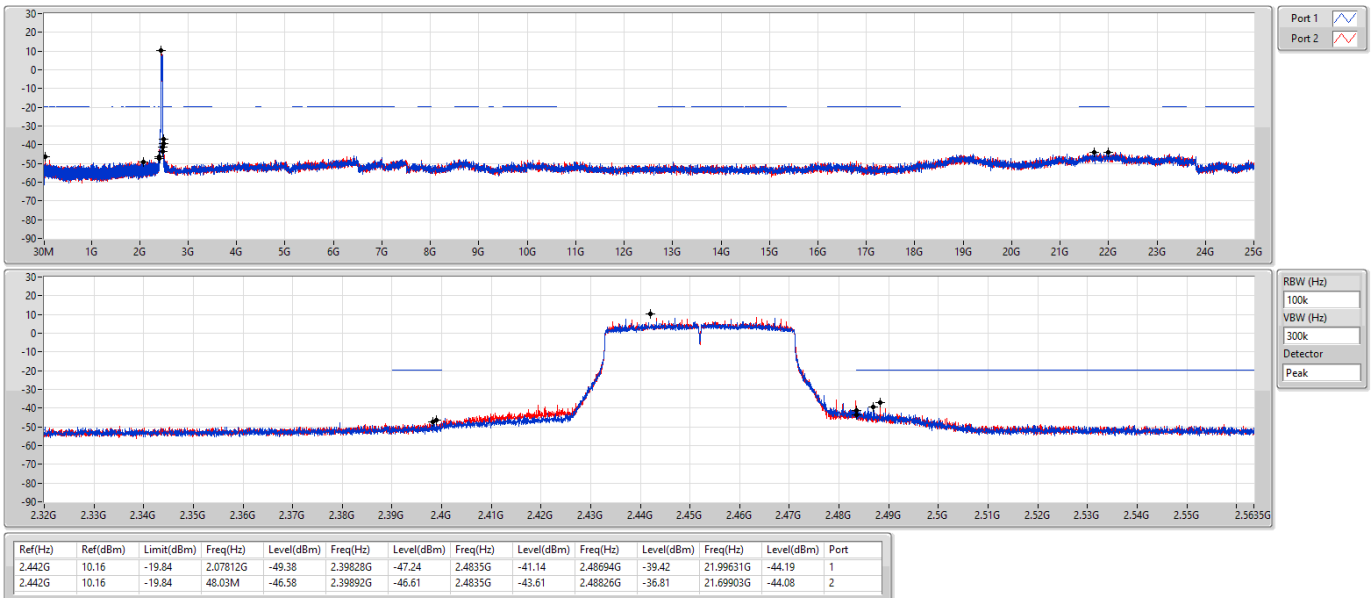
2437MHz



802.11ax HEW40_Nss1,(MCS0)_2TX

CSENdB

2452MHz





CSE (Non-restricted Band)_R1 + Antenna set 1_Beamforming mode 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	2.43741G	16.42	-13.58	874.63M	-47.27	2.39992G	-26.97	2.4G	-28.53	2.50806G	-45.79	24.53642G	-38.70	1
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	Pass	2.42538G	12.93	-17.07	766.24M	-46.72	2.3944G	-32.78	2.4G	-37.77	2.54318G	-31.00	17.32952G	-38.23	2

Result

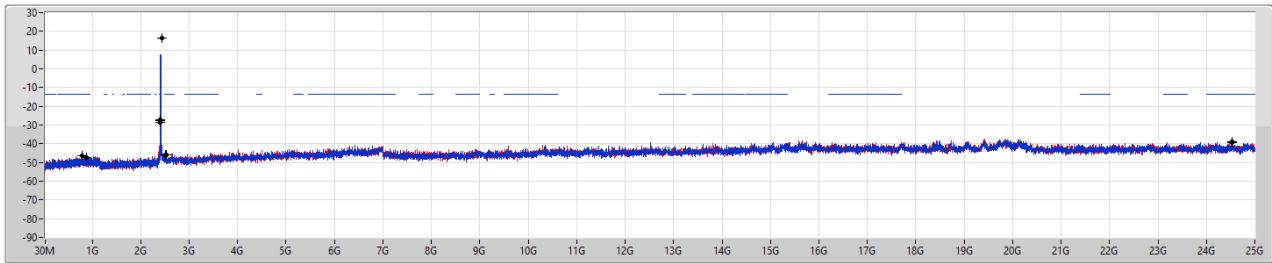
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43741G	16.42	-13.58	874.63M	-47.27	2.39992G	-26.97	2.4G	-28.53	2.50806G	-45.79	24.53642G	-38.70	1
2412MHz	Pass	2.43741G	16.42	-13.58	787.25M	-46.52	2.39992G	-27.37	2.4G	-27.77	2.52254G	-46.01	24.52237G	-39.35	2
2437MHz	Pass	2.43741G	16.42	-13.58	895.6M	-47.01	2.3964G	-40.28	2.4G	-46.74	2.50014G	-45.03	23.45474G	-37.60	1
2437MHz	Pass	2.43741G	16.42	-13.58	839.68M	-46.74	2.39072G	-40.28	2.4G	-45.69	2.50246G	-44.75	24.90447G	-38.52	2
2462MHz	Pass	2.43741G	16.42	-13.58	2.11535G	-47.02	2.39408G	-45.90	2.4G	-48.11	2.50398G	-40.33	15.28172G	-38.92	1
2462MHz	Pass	2.43741G	16.42	-13.58	803.56M	-46.29	2.39232G	-45.87	2.4G	-47.58	2.50438G	-37.13	23.1485G	-38.06	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42538G	12.93	-17.07	711.28M	-46.91	2.39984G	-36.13	2.4G	-36.40	2.51678G	-45.46	23.37335G	-39.25	1
2422MHz	Pass	2.42538G	12.93	-17.07	893.33M	-46.78	2.39968G	-37.22	2.4G	-36.16	2.5275G	-40.25	15.26536G	-39.35	2
2437MHz	Pass	2.42538G	12.93	-17.07	2.12306G	-46.94	2.39936G	-40.41	2.4G	-45.86	2.5611G	-45.36	15.041G	-39.32	1
2437MHz	Pass	2.42538G	12.93	-17.07	766.24M	-46.72	2.3944G	-32.78	2.4G	-37.77	2.54318G	-31.00	17.32952G	-38.23	2
2452MHz	Pass	2.42538G	12.93	-17.07	799.44M	-46.61	2.3952G	-46.74	2.4G	-48.15	2.5003G	-45.88	15.08587G	-38.96	1
2452MHz	Pass	2.42538G	12.93	-17.07	2.10932G	-46.04	2.39232G	-47.25	2.4G	-46.58	2.50302G	-45.28	24.86819G	-39.33	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

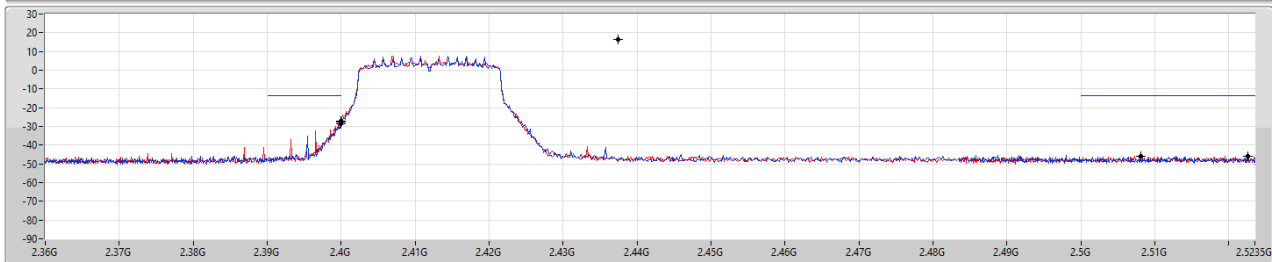
2412MHz

CSENdB

15/09/2022



Port 1
Port 2



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

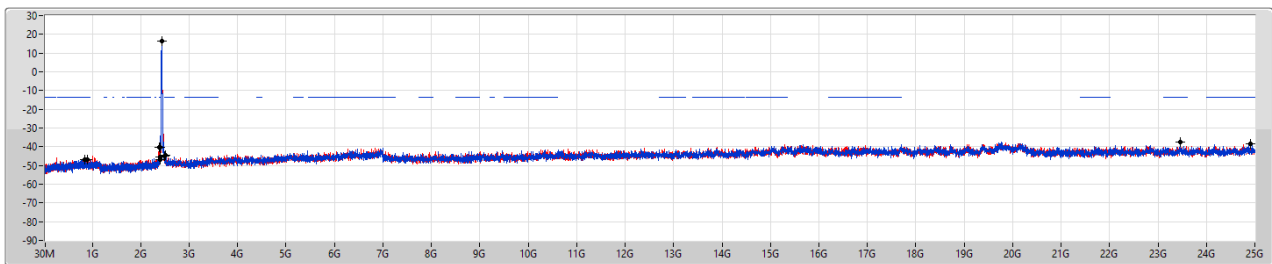
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43741G	16.42	-13.38	874.63M	-47.27	2.39992G	-26.97	2.4G	-28.53	2.50806G	-45.79	24.53642G	-38.70	1
2.43741G	16.42	-13.38	787.25M	-46.52	2.39992G	-27.37	2.4G	-27.77	2.52254G	-46.01	24.52237G	-39.35	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

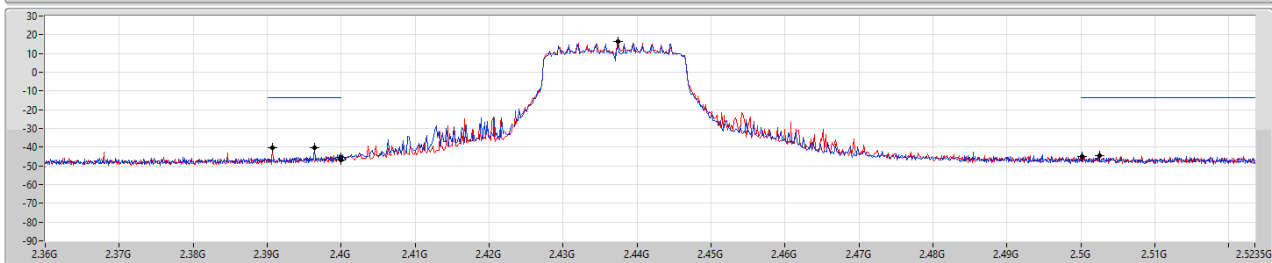
2437MHz

CSENdB

15/09/2022



Port 1
Port 2



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

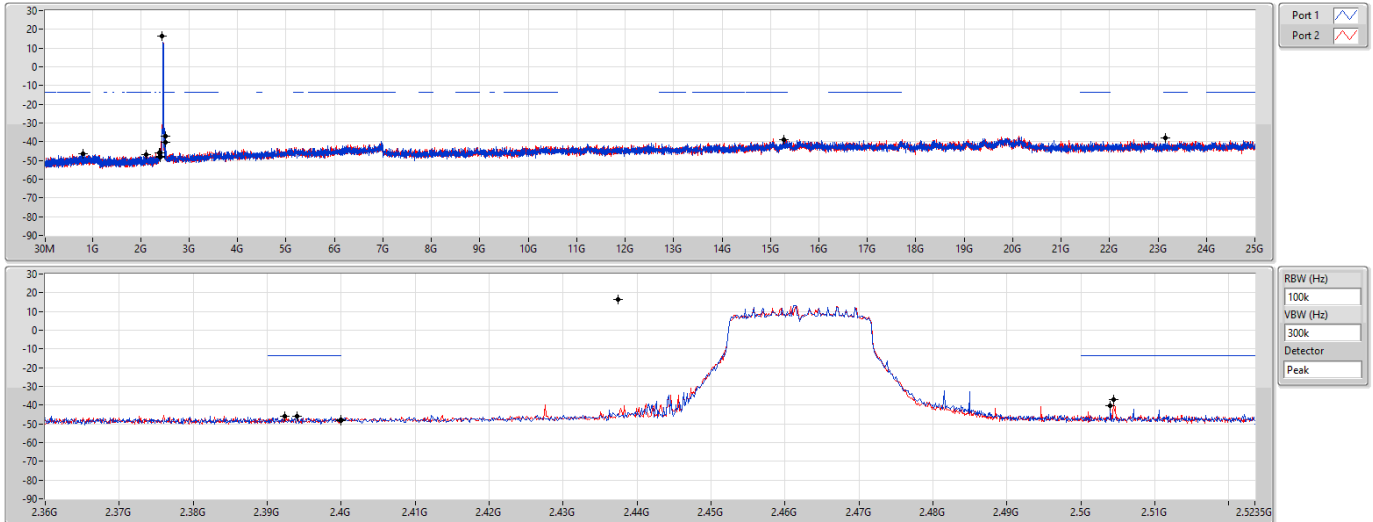
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43741G	16.42	-13.38	895.6M	-47.01	2.3964G	-40.28	2.4G	-46.74	2.50014G	-45.03	23.45474G	-37.60	1
2.43741G	16.42	-13.38	839.68M	-46.74	2.39072G	-40.28	2.4G	-45.69	2.50246G	-44.75	24.90447G	-38.52	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz

CSENdB

15/09/2022



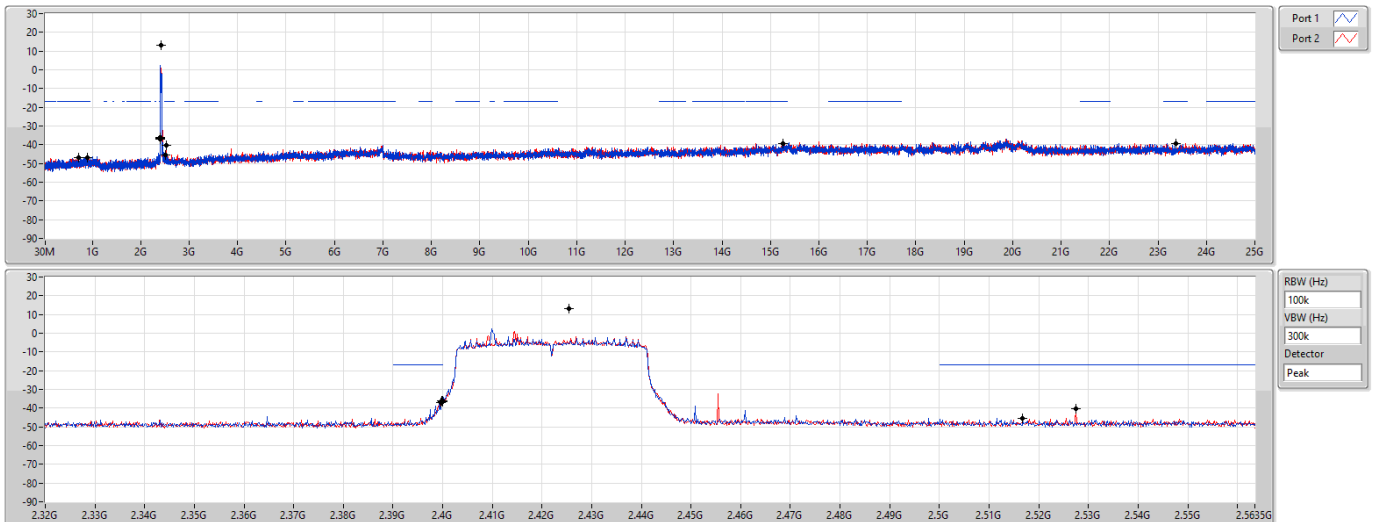
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43741G	16.42	-13.38	2.11535G	-47.02	2.39408G	-45.90	2.4G	-48.11	2.50398G	-40.33	15.28172G	-38.92	1
2.43741G	16.42	-13.38	803.56M	-46.29	2.39232G	-45.87	2.4G	-47.58	2.50438G	-37.13	23.1485G	-38.06	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz

CSENdB

15/09/2022

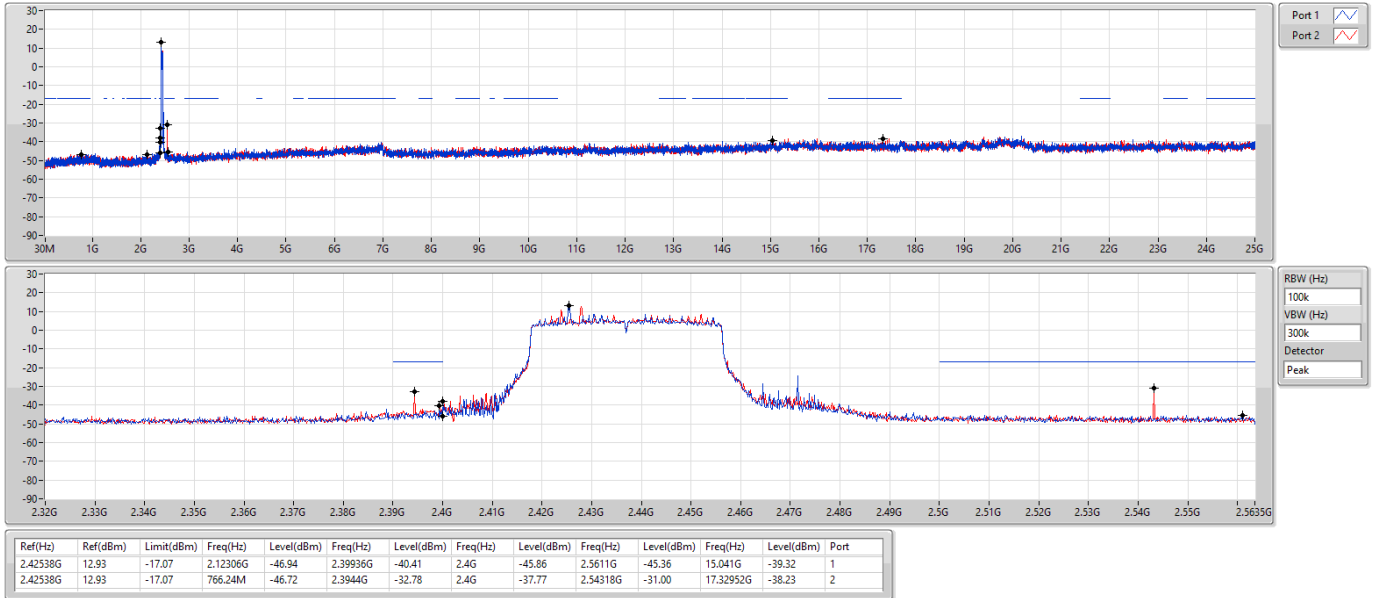


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42538G	12.93	-17.07	711.28M	-46.91	2.39984G	-36.13	2.4G	-36.40	2.51678G	-45.46	23.37335G	-39.25	1
2.42538G	12.93	-17.07	893.33M	-46.78	2.39968G	-37.22	2.4G	-36.16	2.5275G	-40.25	15.26536G	-39.35	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz

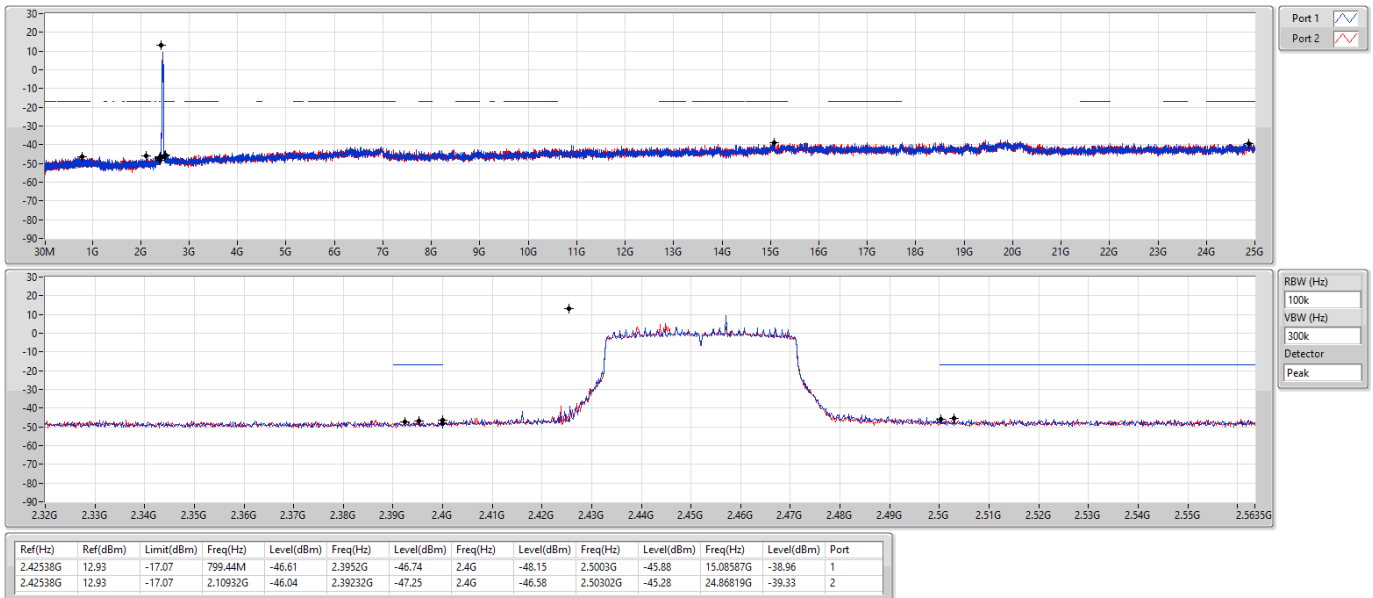
CSENdB



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz

CSENdB





CSE (Non-restricted Band)_R1 + Antenna set 4_
Non beamforming mode

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43649G	7.84	-22.16	859.19M	-52.45	2.39996G	-43.40	2.4G	-44.73	2.49576G	-50.39	5.81069G	-47.50	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.442G	5.93	-24.07	2.30204G	-51.70	2.3999G	-33.26	2.4G	-33.48	2.51482G	-50.99	16.5095G	-47.76	2
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.43828G	5.30	-24.70	1.88468G	-52.59	2.39998G	-31.73	2.4G	-32.94	2.49398G	-51.24	17.64737G	-47.93	2
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	2.43198G	2.65	-27.35	464.24M	-52.19	2.3996G	-36.66	2.4G	-36.46	2.53426G	-51.36	5.90373G	-46.65	1

Result

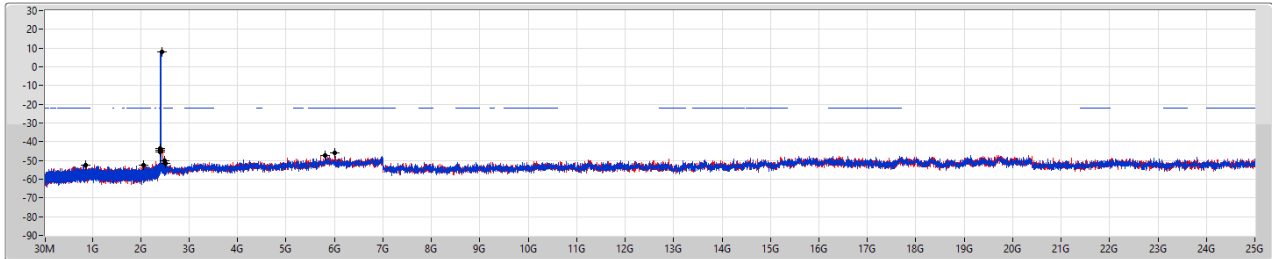
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43649G	7.84	-22.16	2.0606G	-52.60	2.3999G	-43.79	2.4G	-45.36	2.51216G	-51.41	6.01017G	-46.17	1
2412MHz	Pass	2.43649G	7.84	-22.16	859.19M	-52.45	2.39996G	-43.40	2.4G	-44.73	2.49576G	-50.39	5.81069G	-47.50	2
2437MHz	Pass	2.43649G	7.84	-22.16	861.23M	-53.12	2.39872G	-51.37	2.4835G	-54.56	2.48566G	-50.51	6.50746G	-47.48	1
2437MHz	Pass	2.43649G	7.84	-22.16	2.30292G	-52.53	2.39584G	-52.01	2.4835G	-52.52	2.50108G	-49.49	5.86407G	-47.81	2
2462MHz	Pass	2.43649G	7.84	-22.16	2.18176G	-52.35	2.39558G	-51.23	2.4835G	-53.91	2.50108G	-51.13	15.21429G	-48.01	1
2462MHz	Pass	2.43649G	7.84	-22.16	2.09584G	-52.96	2.39166G	-51.06	2.4G	-52.91	2.49948G	-51.32	17.64457G	-46.57	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.442G	5.93	-24.07	561.24M	-52.97	2.39992G	-33.66	2.4G	-33.50	2.51628G	-51.50	16.31002G	-47.55	1
2412MHz	Pass	2.442G	5.93	-24.07	2.30204G	-51.70	2.3999G	-33.26	2.4G	-33.48	2.51482G	-50.99	16.5095G	-47.76	2
2437MHz	Pass	2.442G	5.93	-24.07	2.30233G	-52.33	2.39502G	-50.49	2.4835G	-54.24	2.48392G	-51.28	6.80246G	-47.94	1
2437MHz	Pass	2.442G	5.93	-24.07	2.00118G	-53.24	2.39694G	-51.32	2.4G	-54.50	2.48986G	-50.31	6.01579G	-47.45	2
2462MHz	Pass	2.442G	5.93	-24.07	839.97M	-52.40	2.39312G	-52.16	2.4835G	-54.41	2.50218G	-51.13	5.91464G	-47.73	1
2462MHz	Pass	2.442G	5.93	-24.07	157.28M	-53.35	2.3998G	-51.63	2.4835G	-53.67	2.50392G	-50.51	21.76619G	-48.00	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43828G	5.30	-24.70	2.05361G	-53.25	2.39986G	-31.74	2.4G	-31.82	2.49578G	-51.68	5.97926G	-47.01	1
2412MHz	Pass	2.43828G	5.30	-24.70	1.88468G	-52.59	2.39998G	-31.73	2.4G	-32.94	2.49398G	-51.24	17.64737G	-47.93	2
2437MHz	Pass	2.43828G	5.30	-24.70	731.33M	-52.49	2.39912G	-52.34	2.4G	-55.14	2.4912G	-51.54	5.85564G	-47.96	1
2437MHz	Pass	2.43828G	5.30	-24.70	925.3M	-52.39	2.39064G	-51.65	2.4835G	-54.37	2.4872G	-51.06	17.68952G	-47.59	2
2462MHz	Pass	2.43828G	5.30	-24.70	2.30525G	-52.00	2.3992G	-52.32	2.4835G	-52.47	2.49034G	-51.67	16.6275G	-47.15	1
2462MHz	Pass	2.43828G	5.30	-24.70	2.1471G	-53.25	2.39094G	-51.93	2.4835G	-51.81	2.51488G	-50.63	6.66199G	-47.48	2
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43198G	2.65	-27.35	464.24M	-52.19	2.3996G	-36.66	2.4G	-36.46	2.53426G	-51.36	5.90373G	-46.65	1
2422MHz	Pass	2.43198G	2.65	-27.35	571.01M	-52.88	2.39992G	-37.88	2.4G	-38.04	2.48478G	-51.49	6.94984G	-46.74	2
2437MHz	Pass	2.43198G	2.65	-27.35	1.61783G	-52.55	2.39808G	-49.32	2.4G	-51.03	2.49602G	-50.15	16.94249G	-48.42	1
2437MHz	Pass	2.43198G	2.65	-27.35	1.61754G	-51.48	2.398G	-48.16	2.4G	-49.14	2.5069G	-50.33	16.35353G	-47.08	2
2452MHz	Pass	2.43198G	2.65	-27.35	1.75981G	-52.85	2.39644G	-51.34	2.4835G	-51.10	2.49198G	-50.68	6.77315G	-48.05	1
2452MHz	Pass	2.43198G	2.65	-27.35	955.45M	-51.76	2.3998G	-51.94	2.4835G	-53.17	2.4907G	-50.01	17.6829G	-47.05	2

802.11b_Nss1,(1Mbps)_2TX

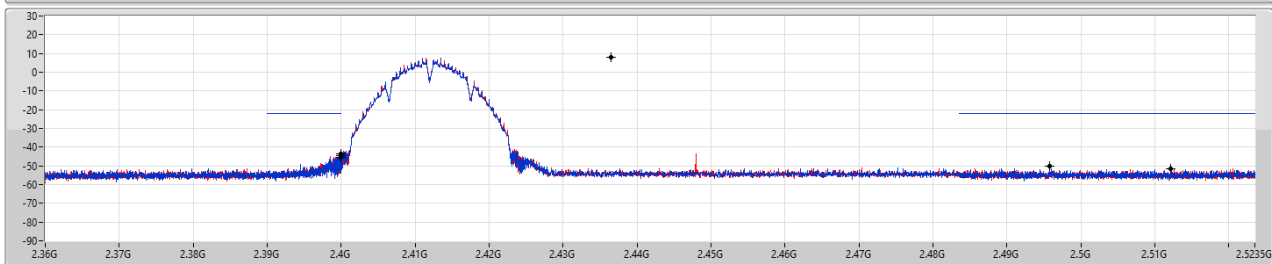
2412MHz

CSENdB

07/09/2022



Port 1
Port 2



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

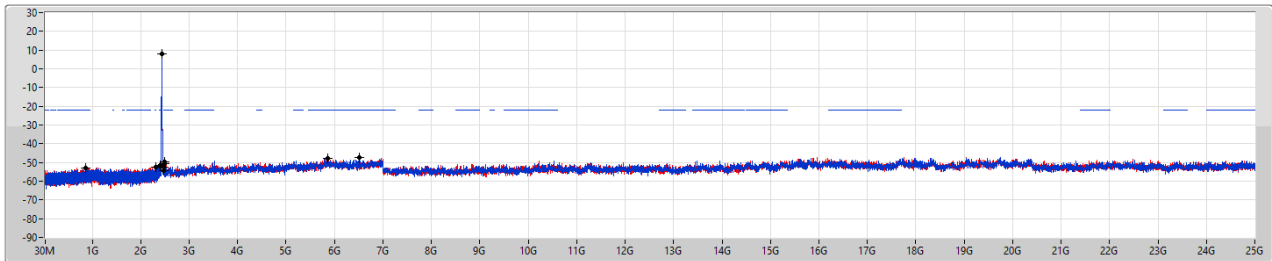
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43649G	7.84	-22.16	2.0606G	-52.60	2.3999G	-43.79	2.4G	-45.36	2.51216G	-51.41	6.01017G	-46.17	1
2.43649G	7.84	-22.16	859.19M	-52.45	2.39996G	-43.40	2.4G	-44.73	2.49576G	-50.39	5.81069G	-47.50	2

802.11b_Nss1,(1Mbps)_2TX

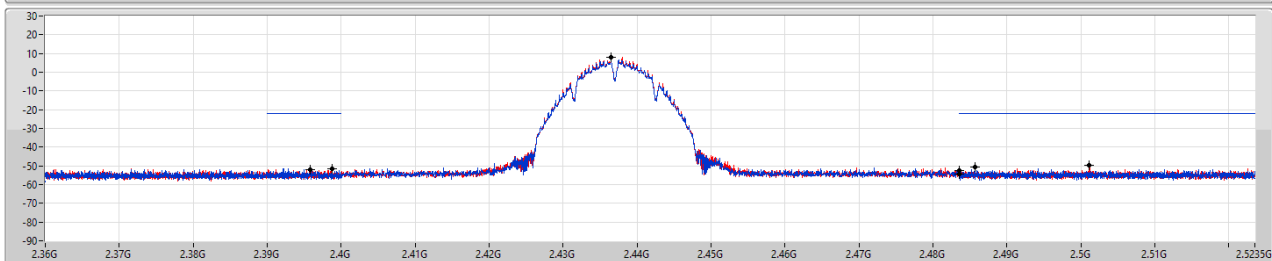
2437MHz

CSENdB

07/09/2022



Port 1
Port 2



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

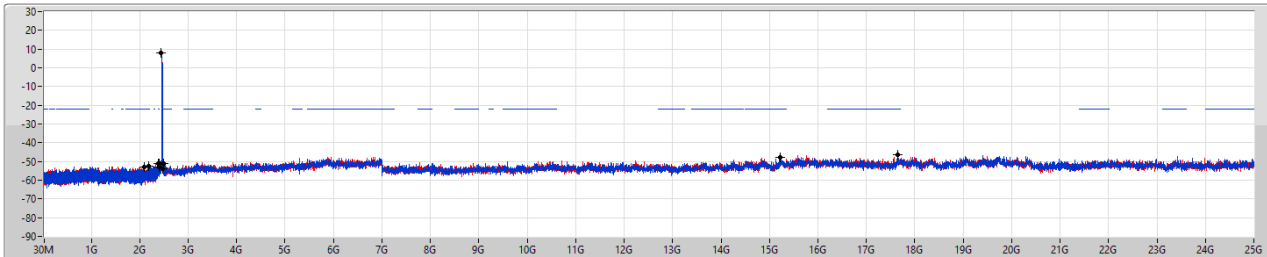
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43649G	7.84	-22.16	861.23M	-53.12	2.39872G	-51.37	2.4835G	-54.56	2.48566G	-50.51	6.50746G	-47.48	1
2.43649G	7.84	-22.16	2.30292G	-52.53	2.39584G	-52.01	2.4835G	-52.52	2.50108G	-49.49	5.86407G	-47.81	2

802.11b_Nss1,(1Mbps)_2TX

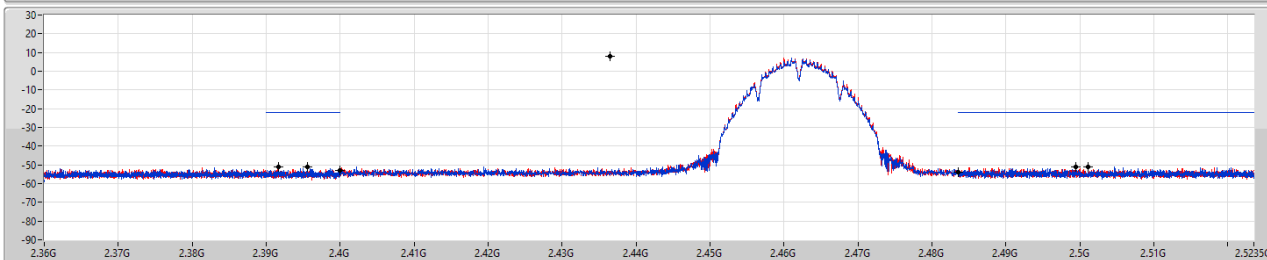
2462MHz

CSEndB

07/09/2022



Port 1
Port 2



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

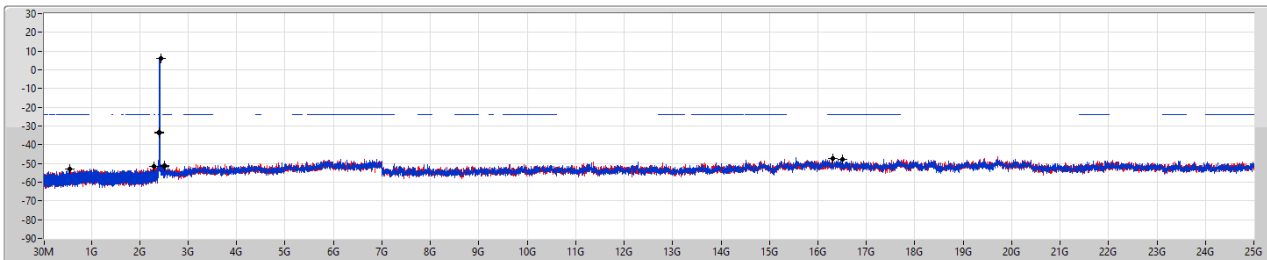
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43649G	7.84	-22.16	2.18176G	-52.35	2.39558G	-51.23	2.4835G	-53.91	2.50108G	-51.13	15.21429G	-48.01	1
2.43649G	7.84	-22.16	2.09584G	-52.96	2.39166G	-51.06	2.4G	-52.91	2.49948G	-51.32	17.64457G	-46.57	2

802.11g_Nss1,(6Mbps)_2TX

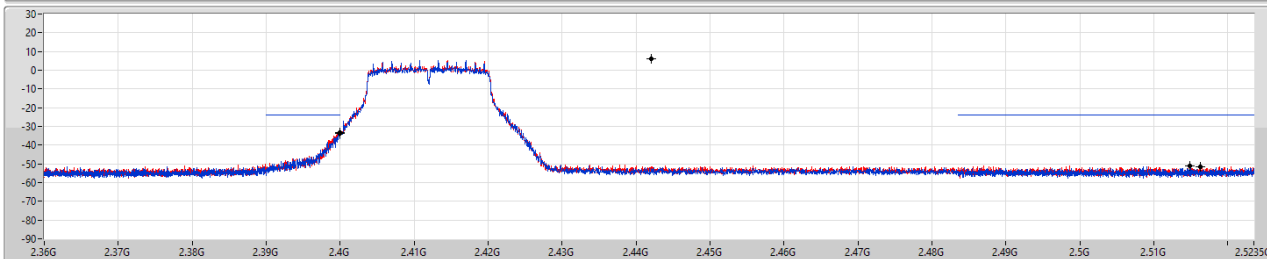
2412MHz

CSEndB

07/09/2022



Port 1
Port 2



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

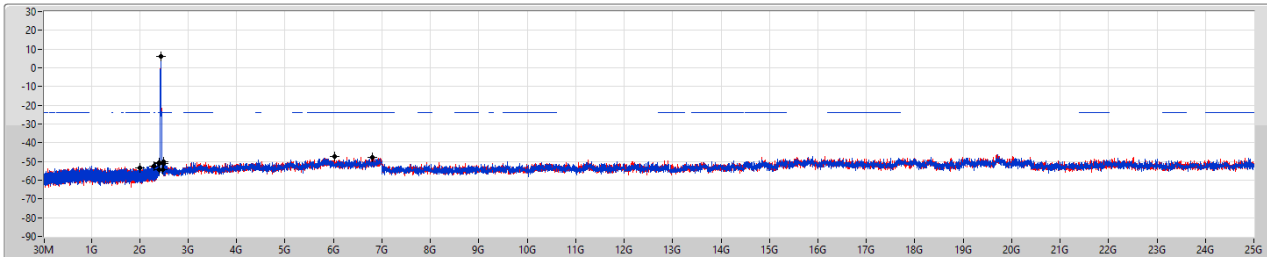
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	5.93	-24.07	561.24M	-52.97	2.39992G	-33.66	2.4G	-33.50	2.51628G	-51.50	16.31002G	-47.55	1
2.442G	5.93	-24.07	2.30204G	-51.70	2.3999G	-33.26	2.4G	-33.48	2.51482G	-50.99	16.5095G	-47.76	2

802.11g_Nss1,(6Mbps)_2TX

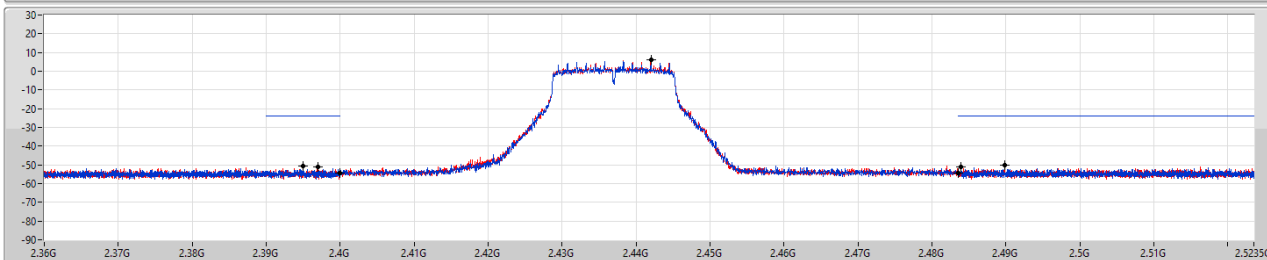
2437MHz

CSEndB

07/09/2022



Port 1
Port 2



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

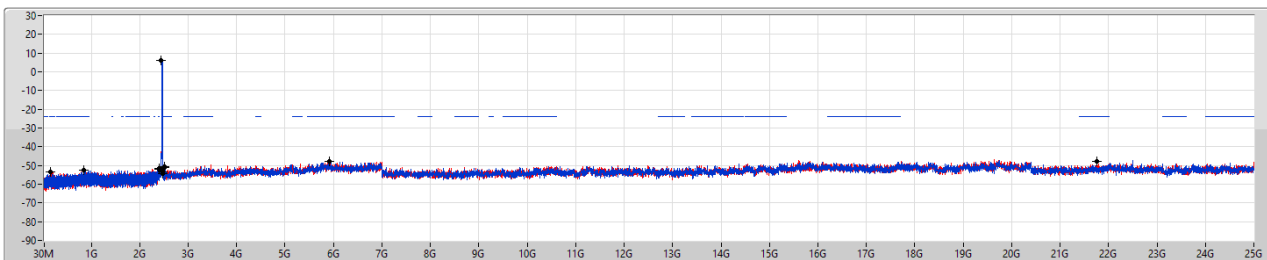
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	5.93	-24.07	2.30233G	-52.33	2.39502G	-50.49	2.4835G	-54.24	2.48392G	-51.28	6.80246G	-47.94	1
2.442G	5.93	-24.07	2.00118G	-53.24	2.39694G	-51.32	2.4G	-54.50	2.48986G	-50.31	6.01579G	-47.45	2

802.11g_Nss1,(6Mbps)_2TX

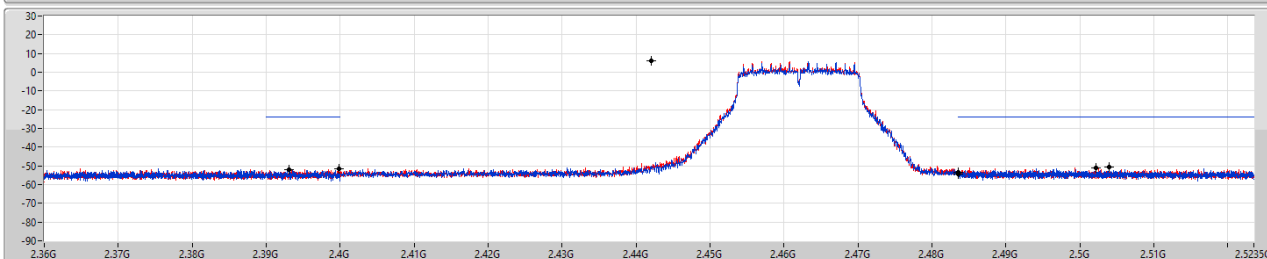
2462MHz

CSEndB

07/09/2022



Port 1
Port 2



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

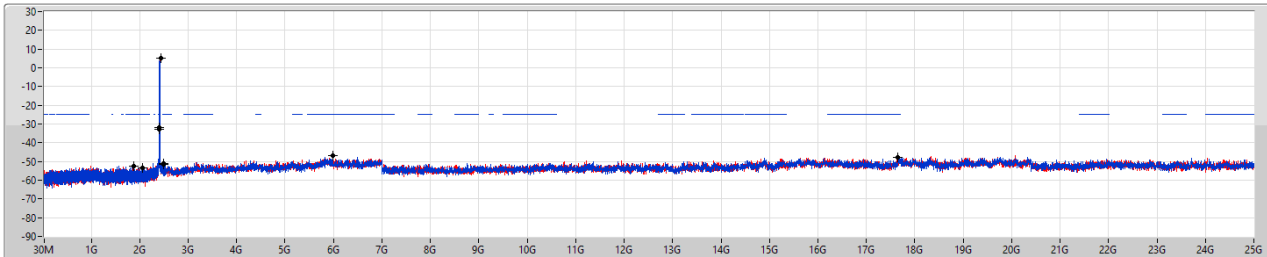
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	5.93	-24.07	839.97M	-52.40	2.39312G	-52.16	2.4835G	-54.41	2.50218G	-51.13	5.91464G	-47.73	1
2.442G	5.93	-24.07	157.28M	-53.35	2.3998G	-51.63	2.4835G	-53.67	2.50392G	-50.51	21.76619G	-48.00	2

802.11ax HEW20_Nss1,(MCS0)_2TX

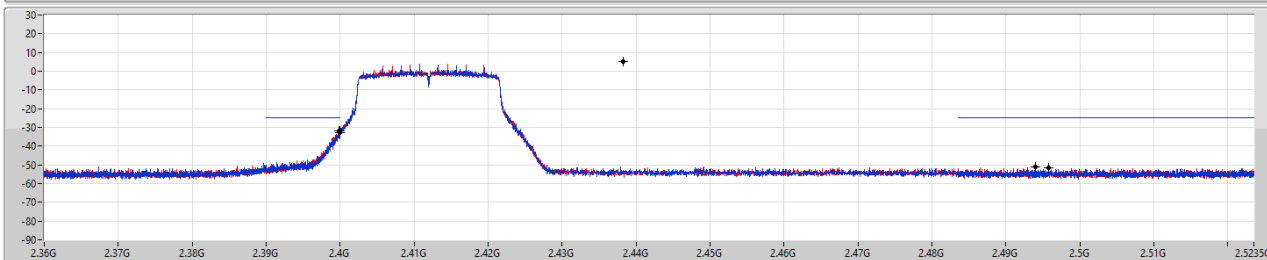
2412MHz

CSENdB

07/09/2022



Port 1
Port 2



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

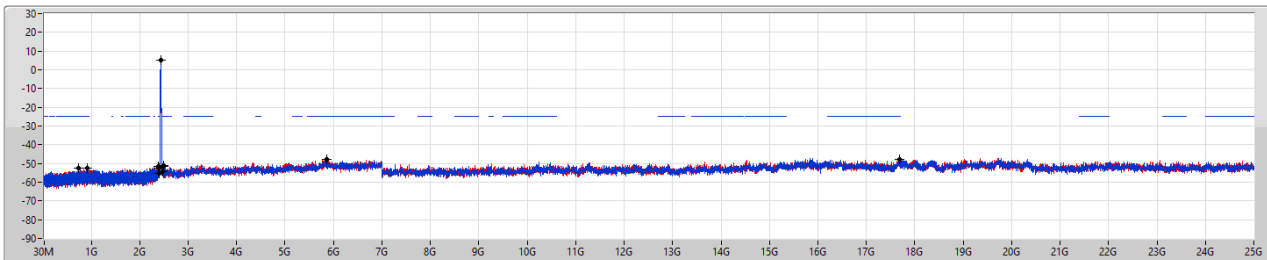
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43828G	5.30	-24.70	2.05361G	-53.25	2.39986G	-31.74	2.4G	-31.82	2.49578G	-51.68	5.97926G	-47.01	1
2.43828G	5.30	-24.70	1.88468G	-52.59	2.39986G	-31.73	2.4G	-32.94	2.49398G	-51.24	17.64737G	-47.93	2

802.11ax HEW20_Nss1,(MCS0)_2TX

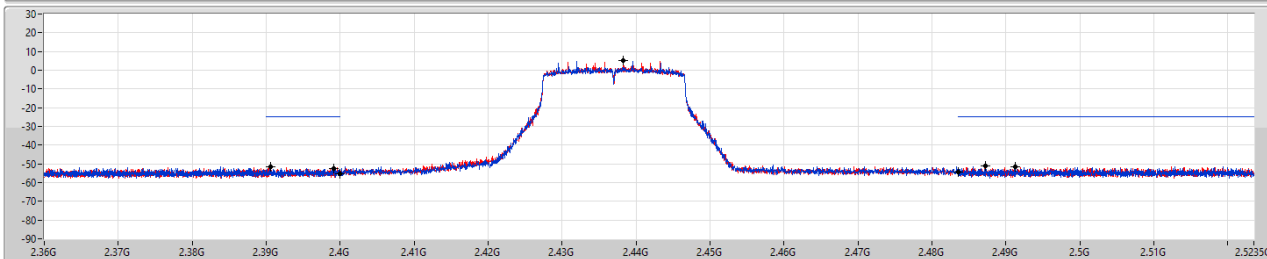
2437MHz

CSENdB

07/09/2022



Port 1
Port 2



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

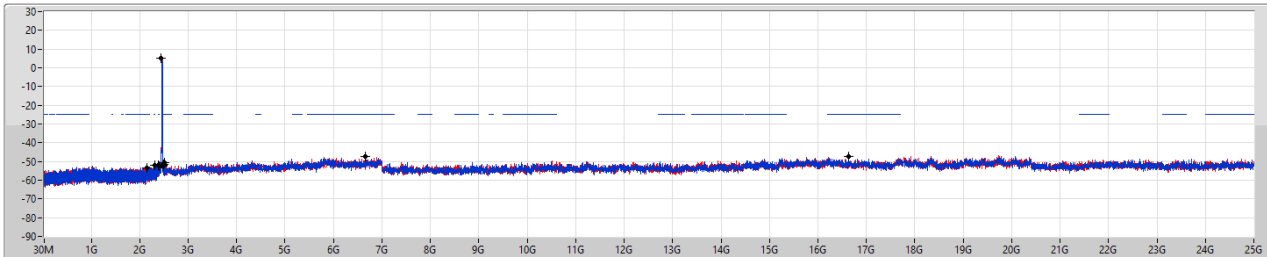
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43828G	5.30	-24.70	731.33M	-52.49	2.39912G	-52.34	2.4G	-55.14	2.4912G	-51.54	5.85564G	-47.96	1
2.43828G	5.30	-24.70	925.3M	-52.39	2.39064G	-51.65	2.4835G	-54.37	2.4872G	-51.06	17.68952G	-47.59	2

802.11ax HEW20_Nss1,(MCS0)_2TX

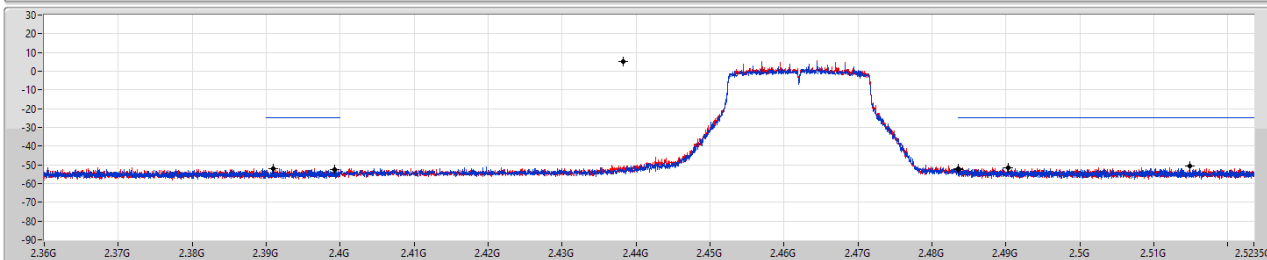
2462MHz

CSEndB

07/09/2022



Port 1
Port 2



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

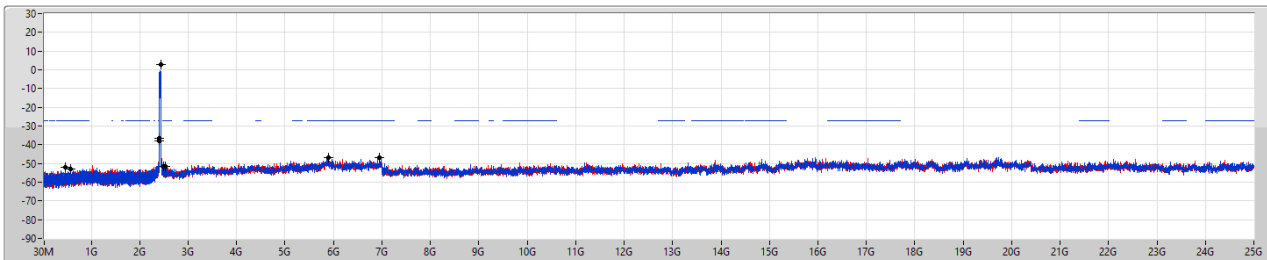
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43828G	5.30	-24.70	2.30525G	-52.00	2.3992G	-52.32	2.4835G	-52.47	2.49034G	-51.67	16.6275G	-47.15	1
2.43828G	5.30	-24.70	2.1471G	-53.25	2.39094G	-51.93	2.4835G	-51.81	2.51488G	-50.63	6.66199G	-47.48	2

802.11ax HEW40_Nss1,(MCS0)_2TX

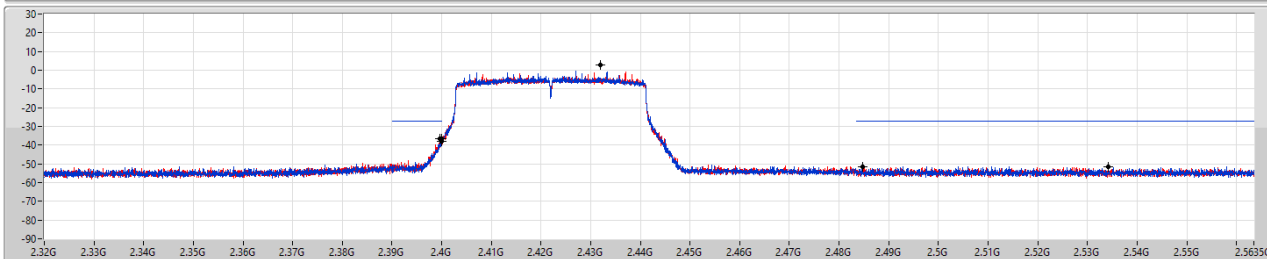
2422MHz

CSEndB

07/09/2022



Port 1
Port 2



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

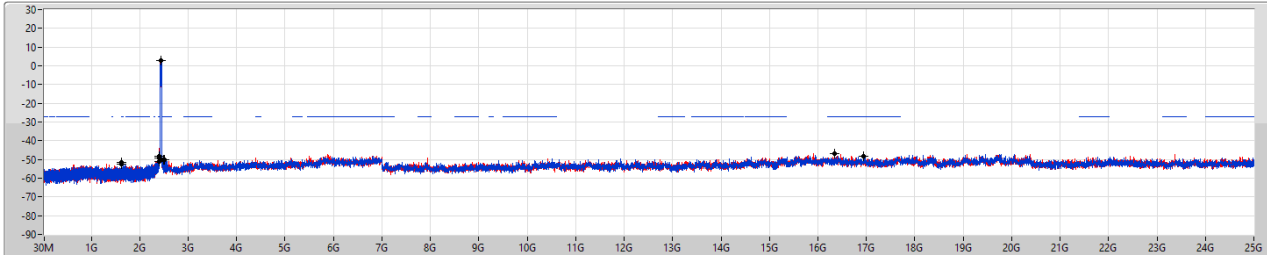
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43198G	2.65	-27.35	464.24M	-52.19	2.3996G	-36.66	2.4G	-36.46	2.53426G	-51.36	5.90373G	-46.65	1
2.43198G	2.65	-27.35	571.01M	-52.88	2.39992G	-37.88	2.4G	-36.04	2.48478G	-51.49	6.94984G	-46.74	2

802.11ax HEW40_Nss1,(MCS0)_2TX

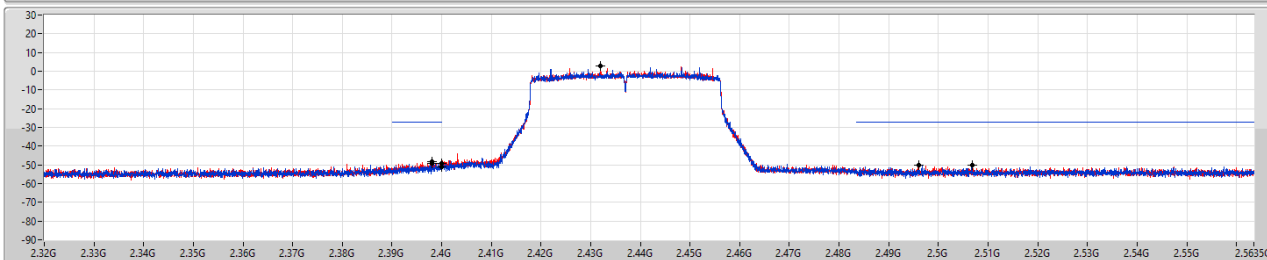
2437MHz

CSENdB

07/09/2022



Port 1
Port 2



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

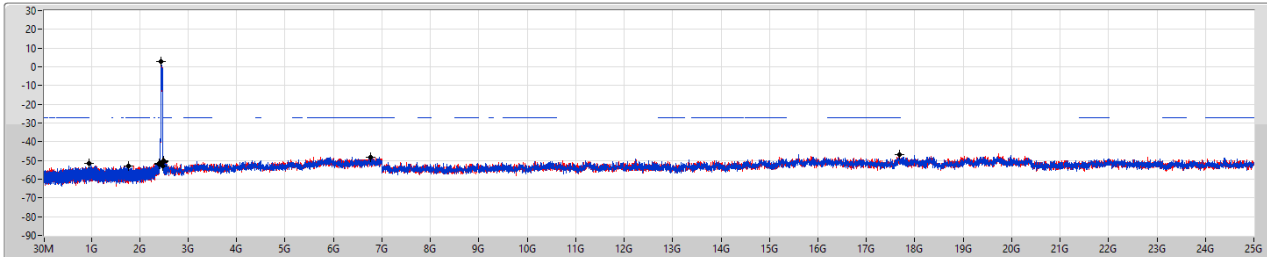
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43198G	2.65	-27.35	1.61783G	-52.55	2.39808G	-49.32	2.4G	-51.03	2.49602G	-50.15	16.94249G	-48.42	1
2.43198G	2.65	-27.35	1.61754G	-51.48	2.398G	-48.16	2.4G	-49.14	2.5069G	-50.33	16.35353G	-47.08	2

802.11ax HEW40_Nss1,(MCS0)_2TX

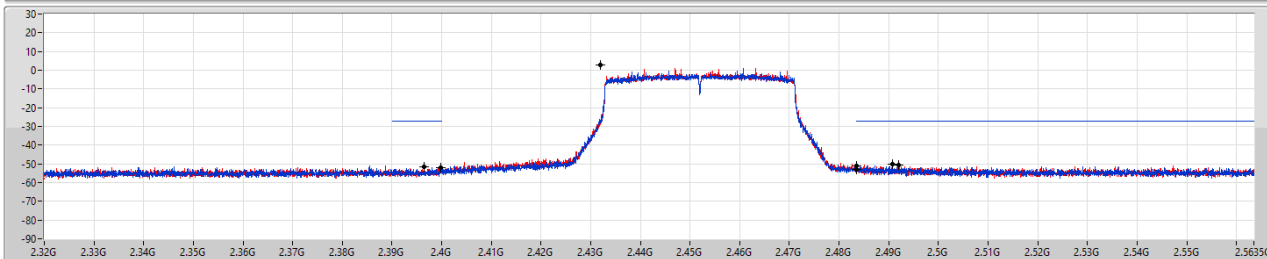
2452MHz

CSENdB

07/09/2022



Port 1
Port 2



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

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
2.43198G	2.65	-27.35	1.75981G	-52.85	2.39644G	-51.34	2.4835G	-51.10	2.49198G	-50.68	6.77315G	-48.05	1
2.43198G	2.65	-27.35	955.45M	-51.76	2.3998G	-51.94	2.4835G	-53.17	2.4907G	-50.01	17.6829G	-47.05	2



CSE (Non-restricted Band)_R1 + Antenna set 4_

Beamforming mode

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	2.43824G	4.90	-25.10	1.89051G	-52.99	2.39984G	-32.48	2.4G	-28.89	2.51086G	-51.67	7.23514G	-45.87	1
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	Pass	2.44192G	2.80	-27.20	2.30512G	-52.55	2.4G	-35.52	2.4G	-35.00	2.51486G	-51.88	5.84203G	-47.44	1

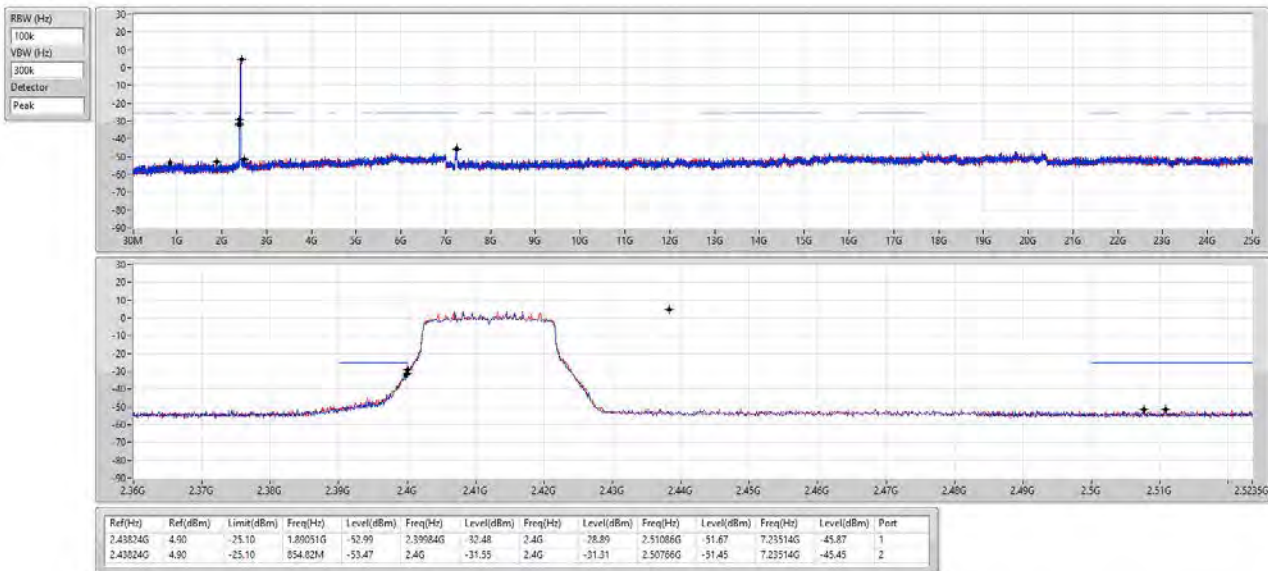
Result

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
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	4.90	-25.10	1.89051G	-52.99	2.39984G	-32.48	2.4G	-28.89	2.51086G	-51.67	7.23514G	-45.87	1
2412MHz	Pass	2.43824G	4.90	-25.10	854.82M	-53.47	2.4G	-31.55	2.4G	-31.31	2.50766G	-51.45	7.23514G	-45.45	2
2437MHz	Pass	2.43824G	4.90	-25.10	1.80546G	-53.37	2.39904G	-52.01	2.4G	-53.26	2.5147G	-51.09	6.74627G	-47.31	1
2437MHz	Pass	2.43824G	4.90	-25.10	1.76818G	-53.31	2.39176G	-52.03	2.4G	-49.75	2.51294G	-51.40	17.01241G	-47.95	2
2462MHz	Pass	2.43824G	4.90	-25.10	2.11652G	-53.96	2.39744G	-51.64	2.4G	-54.07	2.5011G	-51.94	6.84742G	-47.79	1
2462MHz	Pass	2.43824G	4.90	-25.10	857.15M	-53.34	2.39832G	-51.91	2.4G	-53.50	2.50246G	-52.32	5.90902G	-47.23	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.44192G	2.80	-27.20	2.30512G	-52.55	2.4G	-35.52	2.4G	-35.00	2.51486G	-51.88	5.84203G	-47.44	1
2422MHz	Pass	2.44192G	2.80	-27.20	2.10474G	-53.05	2.4G	-35.66	2.4G	-35.88	2.55022G	-50.97	17.66046G	-47.60	2
2437MHz	Pass	2.44192G	2.80	-27.20	1.90208G	-52.45	2.39728G	-48.66	2.4G	-50.47	2.54878G	-50.97	16.90884G	-48.22	1
2437MHz	Pass	2.44192G	2.80	-27.20	791.43M	-53.73	2.39632G	-47.47	2.4G	-49.53	2.54382G	-50.94	6.73108G	-48.12	2
2452MHz	Pass	2.44192G	2.80	-27.20	1.25057G	-52.30	2.3936G	-52.06	2.4G	-53.99	2.54046G	-51.28	16.93969G	-48.17	1
2452MHz	Pass	2.44192G	2.80	-27.20	2.30855G	-52.90	2.39808G	-52.01	2.4G	-53.03	2.54654G	-51.95	21.45503G	-48.29	2

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSENdB

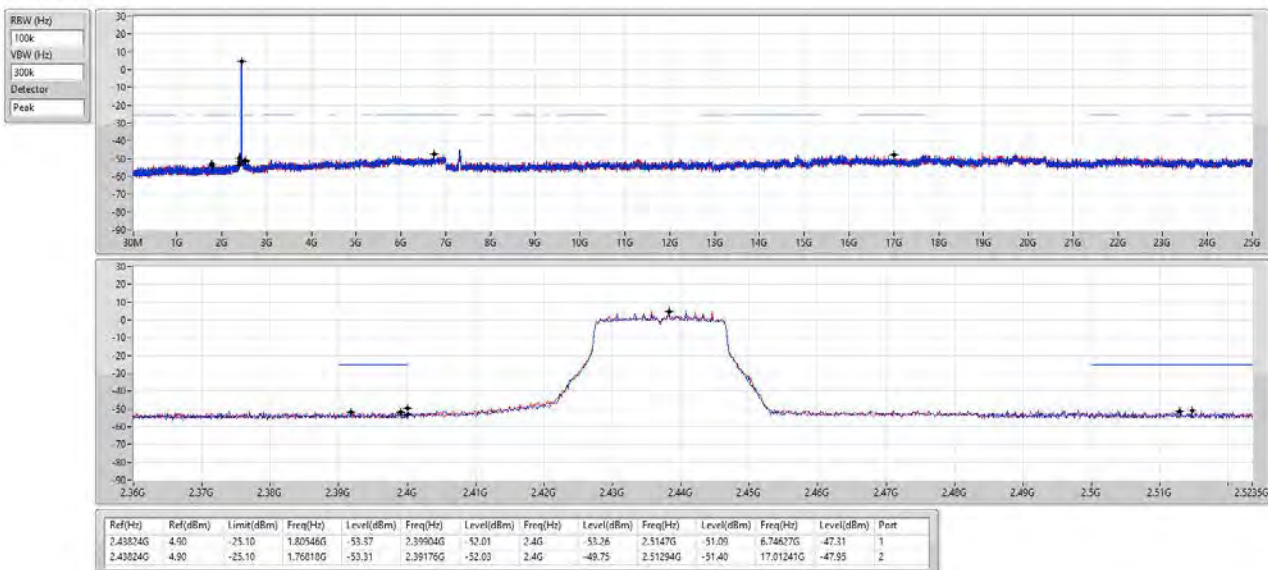
2412MHz



2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSENdB

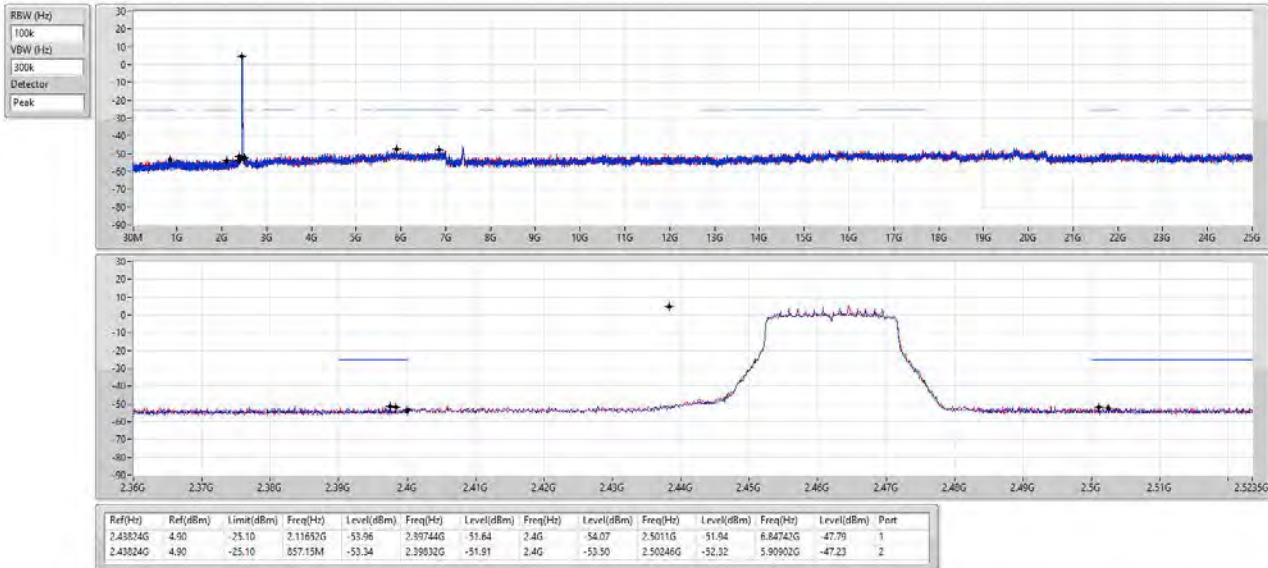
2437MHz



2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSEndB

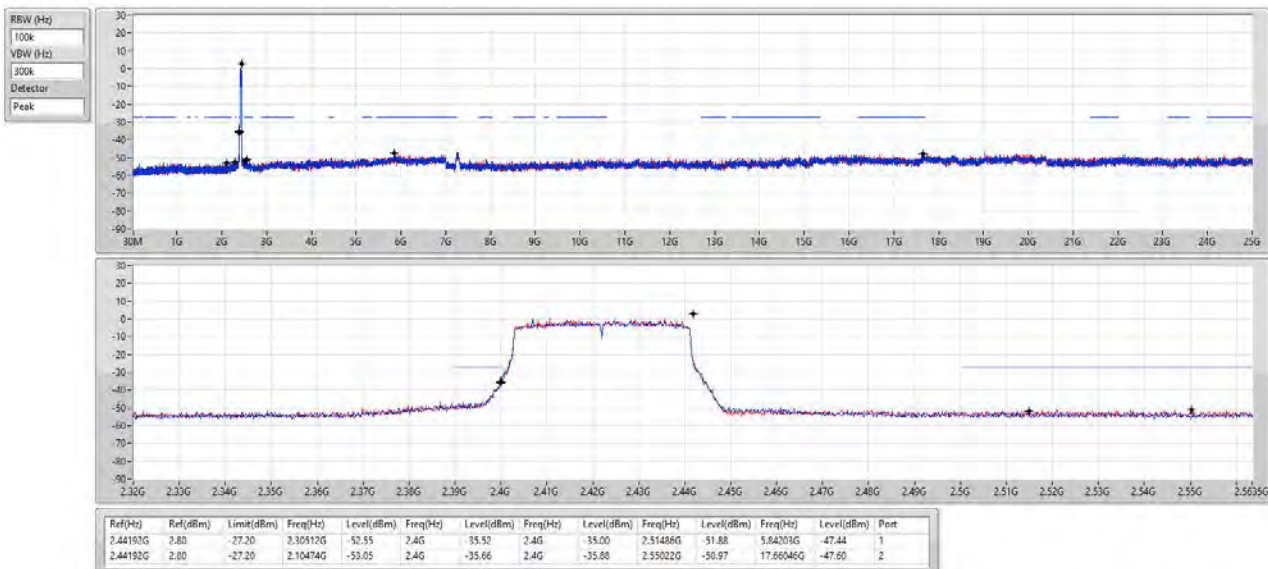
2462MHz



2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

CSEndB

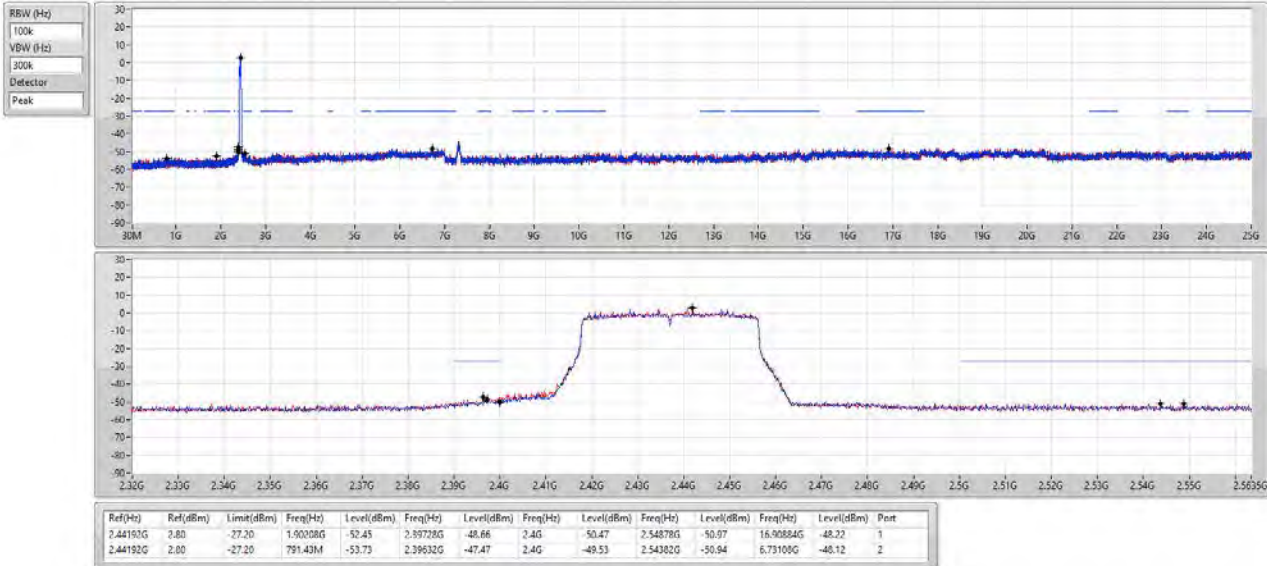
2422MHz



2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

CSEndB

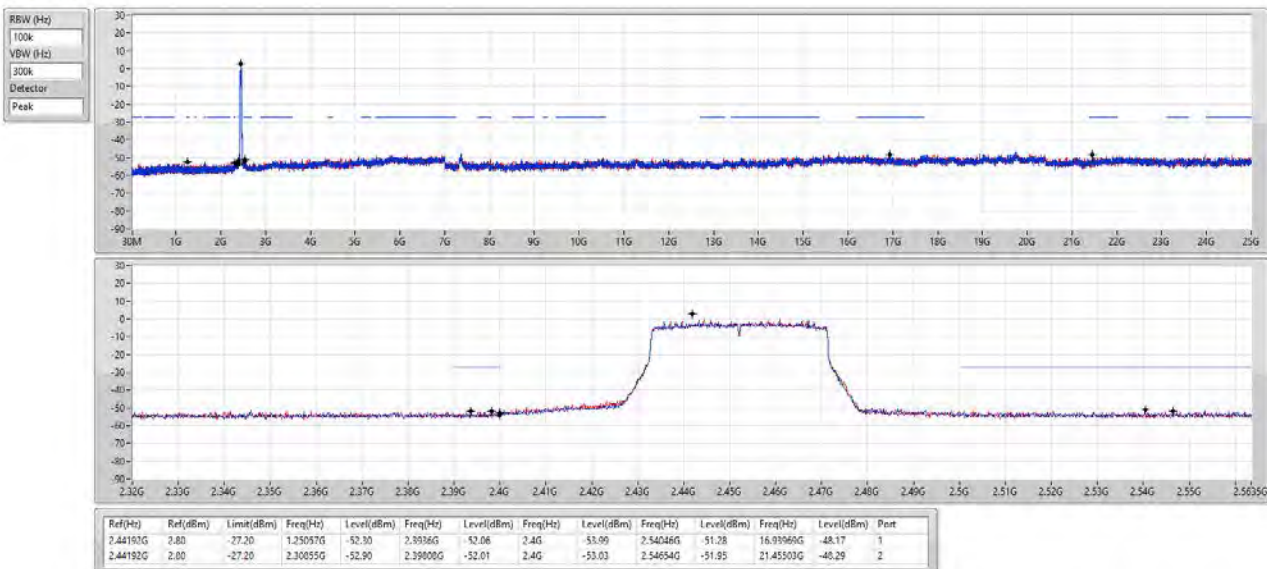
2437MHz



2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

CSEndB

2452MHz





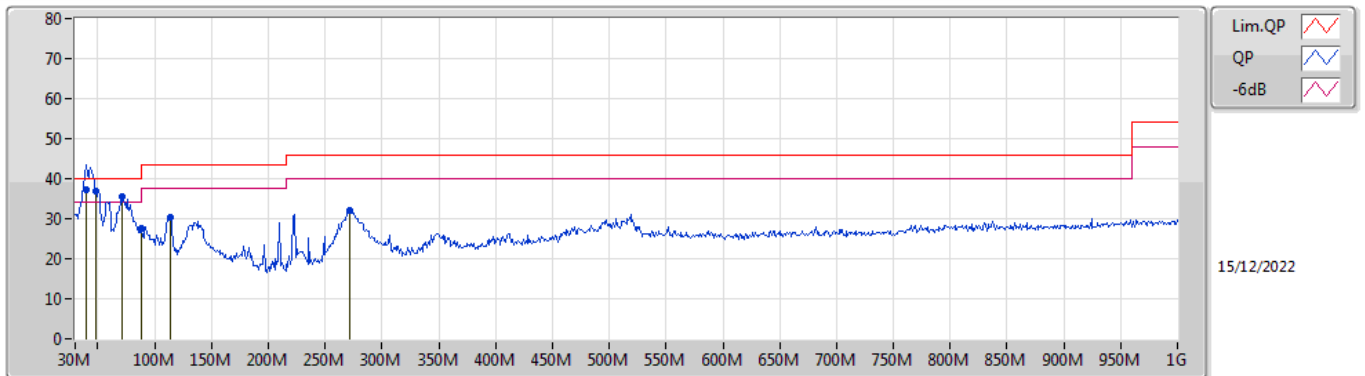
Radiated Emissions below 1GHz

Appendix F.1

Summary

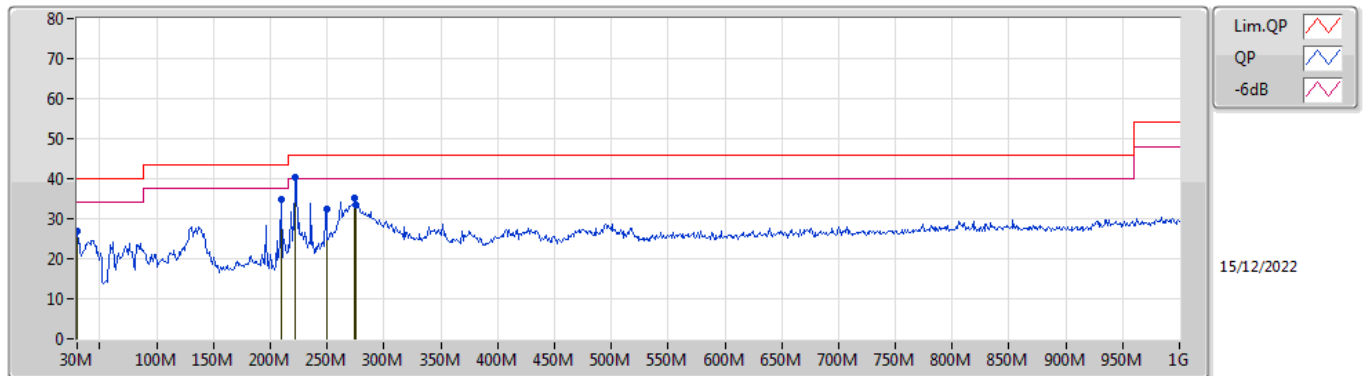
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	39.7M	37.38	40.00	-2.62	Vertical

Test Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
QP	39.7M	37.38	40.00	-2.62	-12.42	3	Vertical	126	1.00	"Worst"	49.80	18.78	0.55	31.75
PK	48.43M	36.86	40.00	-3.14	-16.61	3	Vertical	294	1.00	-	53.47	14.59	0.65	31.85
PK	70.74M	35.66	40.00	-4.34	-18.95	3	Vertical	283	2.00	-	54.61	12.16	0.86	31.97
PK	88M	27.51	43.50	-15.99	-16.80	3	Vertical	0	1.25	-	44.31	14.15	1.00	31.95
PK	113.42M	30.22	43.50	-13.28	-12.98	3	Vertical	192	1.00	-	43.20	17.79	1.20	31.97
PK	271.53M	32.13	46.00	-13.87	-11.38	3	Vertical	360	1.25	-	43.51	18.57	2.10	32.05

Test Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	30M	26.78	40.00	-13.22	-7.12	3	Horizontal	226	3.00	-	33.90	23.99	0.44	31.55
PK	209.45M	34.85	43.50	-8.65	-15.31	3	Horizontal	172	1.25	-	50.16	14.93	1.78	32.02
PK	222.06M	40.22	46.00	-5.78	-15.03	3	Horizontal	172	1.25	"Worst"	55.25	15.13	1.85	32.01
PK	249.22M	32.26	46.00	-13.74	-11.89	3	Horizontal	180	1.00	-	44.15	18.11	2.00	32.00
PK	274.44M	35.06	46.00	-10.94	-11.37	3	Horizontal	172	1.00	-	46.43	18.56	2.12	32.05
PK	275.41M	33.53	46.00	-12.47	-11.37	3	Horizontal	180	1.00	-	44.90	18.57	2.12	32.06

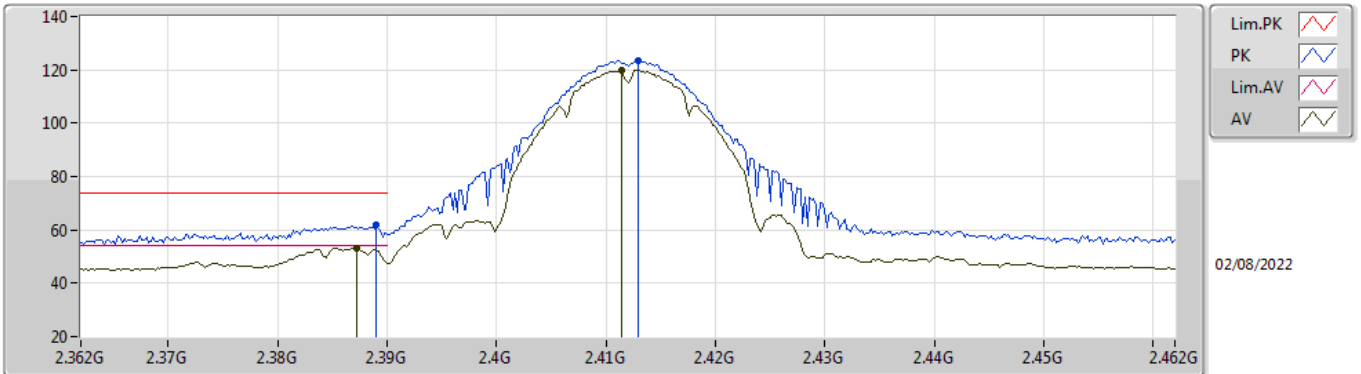


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1.(6Mbps)_2TX	Pass	AV	2.39G	53.94	54.00	-0.06	3	Vertical	22	2.18	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

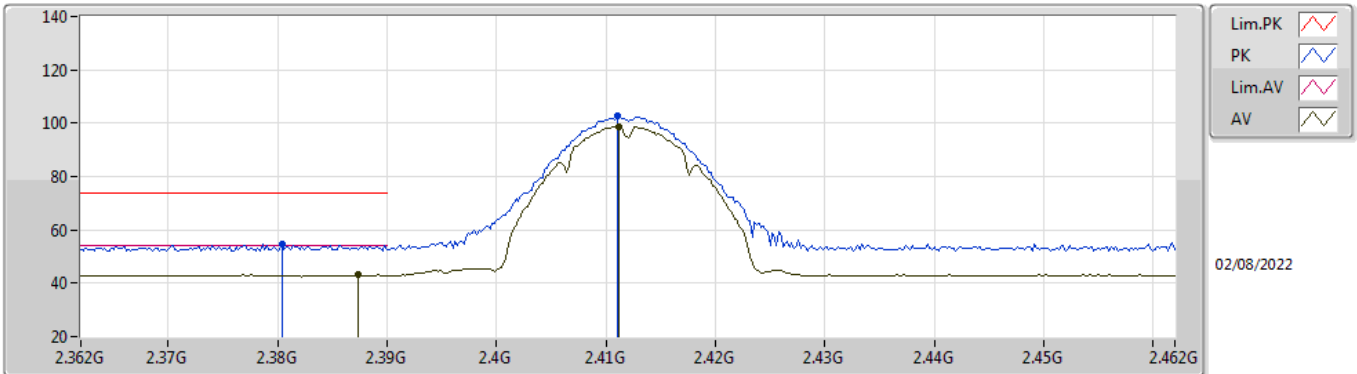


EUT Y_2TX
Setting 27.5
01-A-G-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	61.68	74.00	-12.32	30.32	3	Vertical	233	2.06	-	27.56	3.80	-
AV	2.3872G	53.29	54.00	-0.71	21.94	3	Vertical	233	2.06	-	27.55	3.80	-
PK	2.413G	123.62	Inf	-Inf	92.24	3	Vertical	233	2.06	-	27.57	3.81	-
AV	2.4114G	120.04	Inf	-Inf	88.65	3	Vertical	233	2.06	-	27.58	3.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

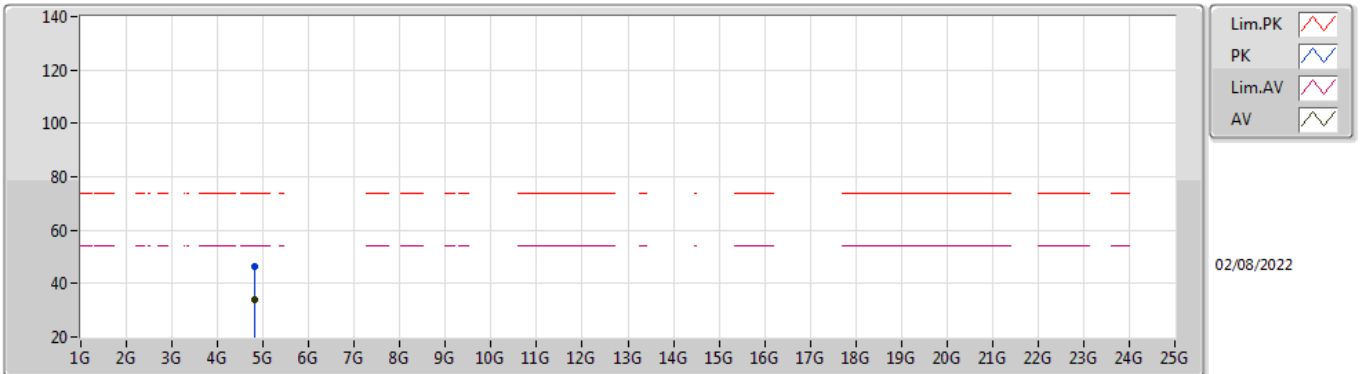


EUT V_2TX
Setting 27.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3804G	54.61	74.00	-19.39	23.29	3	Horizontal	176	1.73	-	27.52	3.80	-
AV	2.3874G	43.10	54.00	-10.90	11.75	3	Horizontal	176	1.73	-	27.55	3.80	-
PK	2.411G	102.62	Inf	-Inf	71.23	3	Horizontal	176	1.73	-	27.58	3.81	-
AV	2.4112G	98.86	Inf	-Inf	67.47	3	Horizontal	176	1.73	-	27.58	3.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

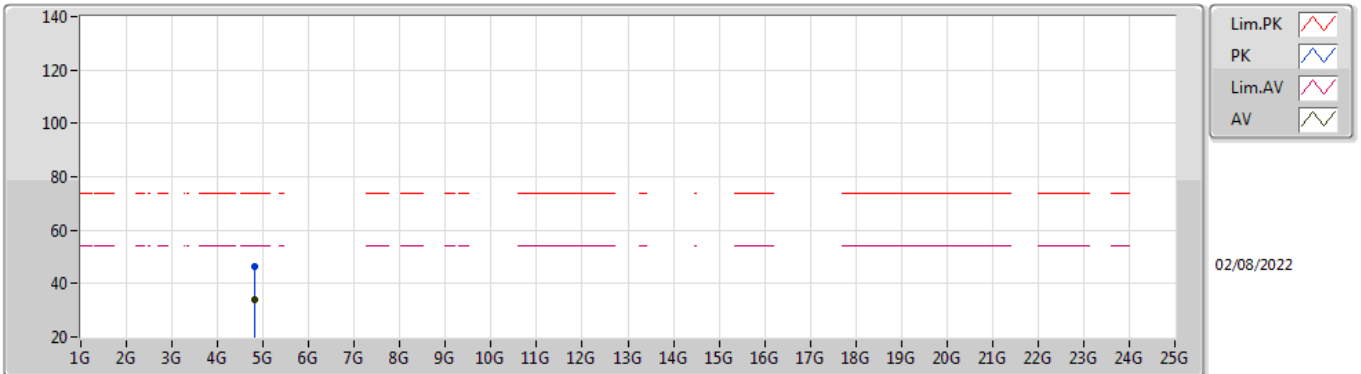


EUT Y_2TX
Setting 27.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82046G	46.42	74.00	-27.58	40.57	3	Vertical	4	2.79	-	32.44	6.30	32.89
AV	4.82472G	33.74	54.00	-20.26	27.88	3	Vertical	4	2.79	-	32.45	6.30	32.89

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

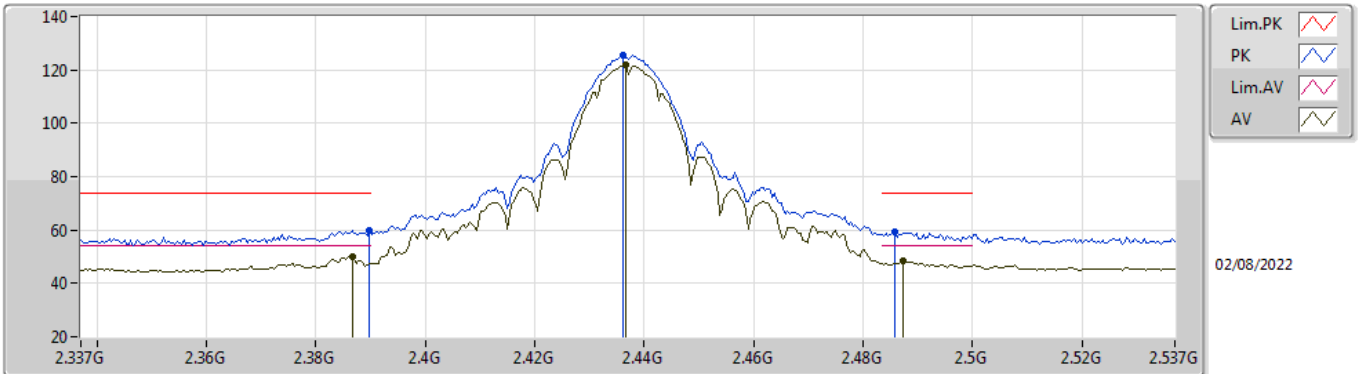


EUT Y_2TX
Setting 27.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.82348G	46.37	74.00	-27.63	40.51	3	Horizontal	249	2.45	-	32.45	6.30	32.89	
AV	4.82392G	33.72	54.00	-20.28	27.86	3	Horizontal	249	2.45	-	32.45	6.30	32.89	

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

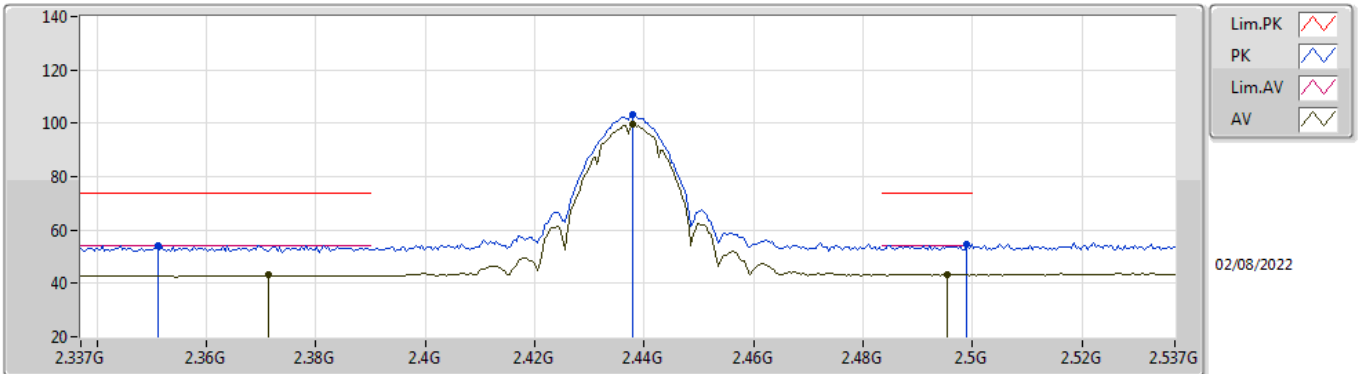


EUT_V_2TX
Setting 29.5
01-A-G-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	60.06	74.00	-13.94	28.70	3	Vertical	310	1.86	-	27.56	3.80	-
AV	2.3866G	50.10	54.00	-3.90	18.75	3	Vertical	310	1.86	-	27.55	3.80	-
PK	2.4362G	125.34	Inf	-Inf	93.99	3	Vertical	310	1.86	-	27.53	3.82	-
AV	2.4366G	121.73	Inf	-Inf	90.38	3	Vertical	310	1.86	-	27.53	3.82	-
PK	2.4858G	59.07	74.00	-14.93	27.52	3	Vertical	310	1.86	-	27.71	3.84	-
AV	2.4874G	48.65	54.00	-5.35	17.09	3	Vertical	310	1.86	-	27.72	3.84	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

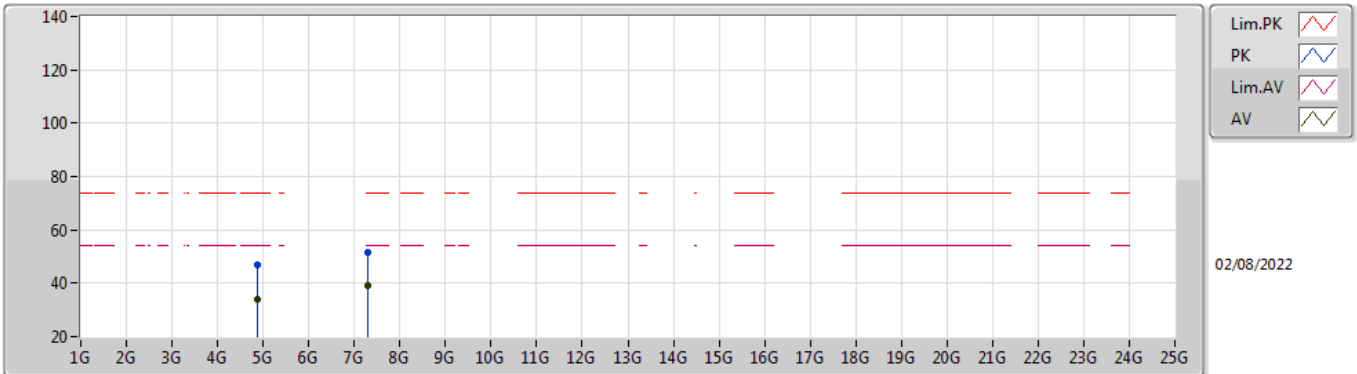


EUT_V_2TX
Setting 29.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.351G	54.20	74.00	-19.80	23.00	3	Horizontal	54	1.78	-	27.40	3.80	-
AV	2.3714G	43.10	54.00	-10.90	11.81	3	Horizontal	54	1.78	-	27.49	3.80	-
PK	2.4378G	103.14	Inf	-Inf	71.80	3	Horizontal	54	1.78	-	27.52	3.82	-
AV	2.4378G	99.42	Inf	-Inf	68.08	3	Horizontal	54	1.78	-	27.52	3.82	-
PK	2.499G	54.75	74.00	-19.25	23.11	3	Horizontal	54	1.78	-	27.79	3.85	-
AV	2.4954G	43.46	54.00	-10.54	11.84	3	Horizontal	54	1.78	-	27.77	3.85	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

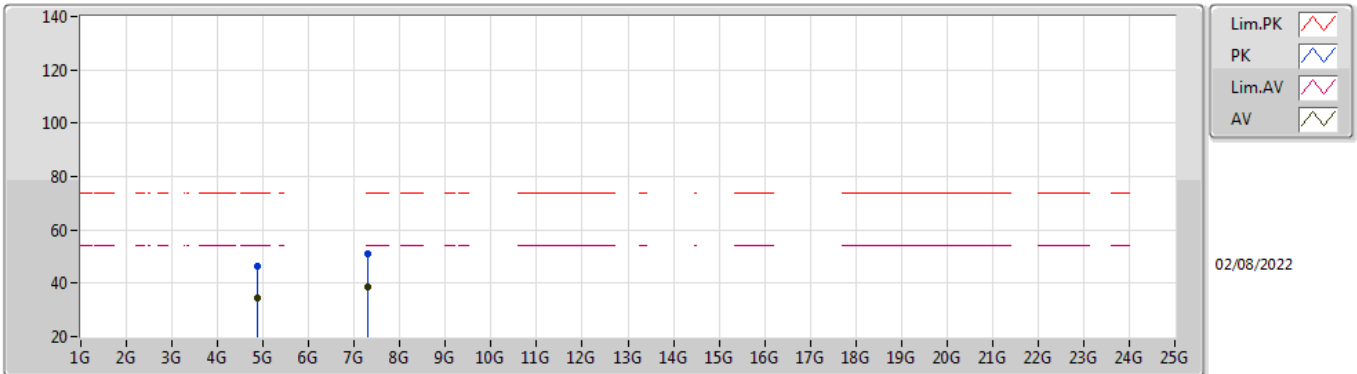


EUT_V_2TX
Setting 29.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87778G	46.67	74.00	-27.33	40.68	3	Vertical	169	2.75	-	32.56	6.30	32.87
AV	4.87594G	34.15	54.00	-19.85	28.17	3	Vertical	169	2.75	-	32.55	6.30	32.87
PK	7.30776G	51.61	74.00	-22.39	40.20	3	Vertical	10	2.17	-	37.28	7.31	33.18
AV	7.30642G	39.05	54.00	-14.95	27.63	3	Vertical	10	2.17	-	37.29	7.31	33.18

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

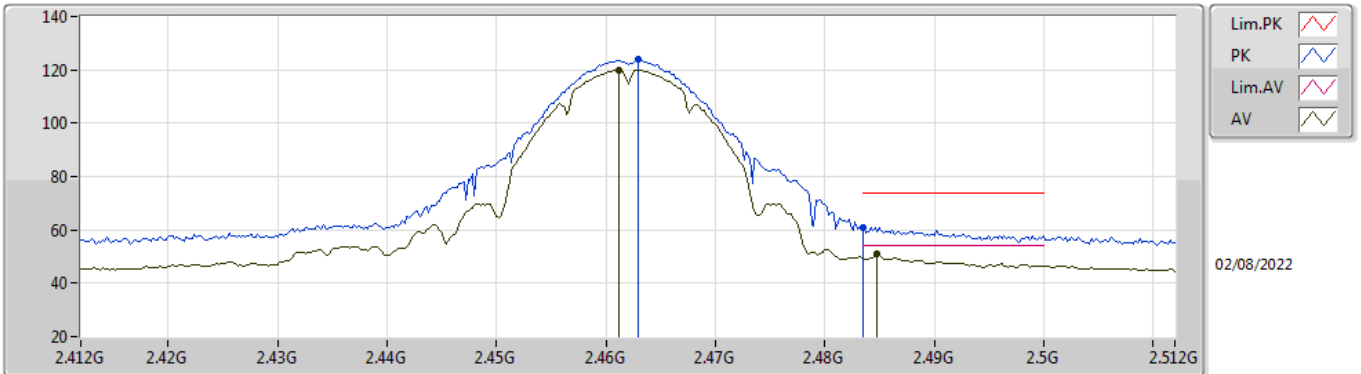


EUT Y_2TX
Setting 29.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87728G	46.58	74.00	-27.42	40.60	3	Horizontal	211	2.46	-	32.55	6.30	32.87
AV	4.87142G	34.41	54.00	-19.59	28.45	3	Horizontal	211	2.46	-	32.54	6.30	32.88
PK	7.30644G	50.89	74.00	-23.11	39.47	3	Horizontal	81	2.77	-	37.29	7.31	33.18
AV	7.30664G	38.78	54.00	-15.22	27.36	3	Horizontal	81	2.77	-	37.29	7.31	33.18

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

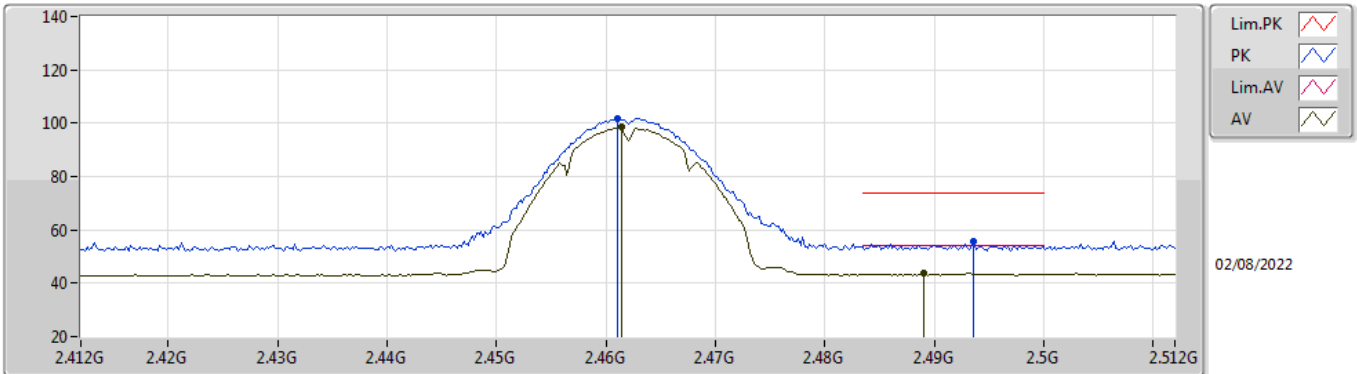


EUT_V_2TX
Setting 27.5
01-A-G-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	123.78	Inf	-Inf	92.37	3	Vertical	315	1.98	-	27.58	3.83	-
AV	2.4612G	120.08	Inf	-Inf	88.68	3	Vertical	315	1.98	-	27.57	3.83	-
PK	2.4835G	60.90	74.00	-13.10	29.36	3	Vertical	315	1.98	-	27.70	3.84	-
AV	2.4848G	50.91	54.00	-3.09	19.36	3	Vertical	315	1.98	-	27.71	3.84	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

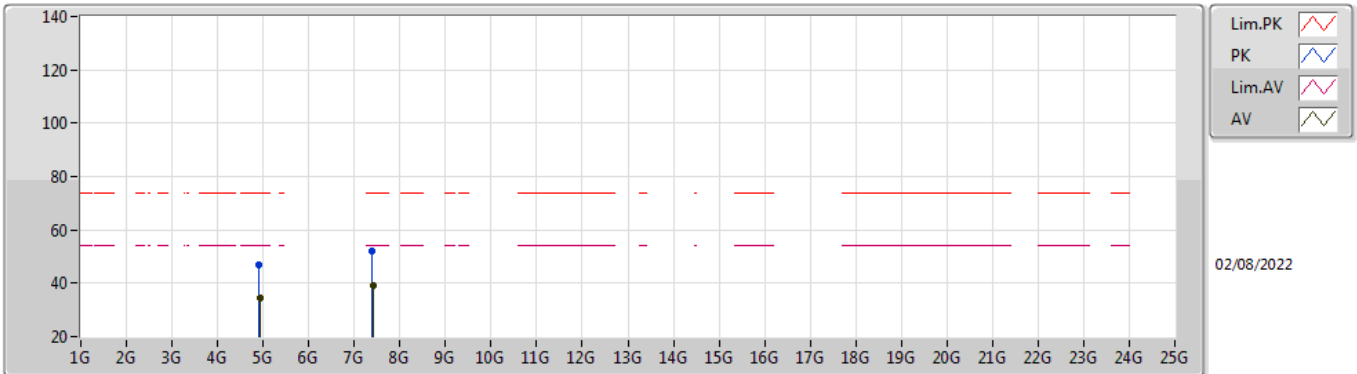


EUT_V_2TX
Setting 27.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.461G	101.91	Inf	-Inf	70.51	3	Horizontal	166	1.78	-	27.57	3.83	-
AV	2.4614G	98.44	Inf	-Inf	67.04	3	Horizontal	166	1.78	-	27.57	3.83	-
PK	2.4936G	55.48	74.00	-18.52	23.87	3	Horizontal	166	1.78	-	27.76	3.85	-
AV	2.489G	43.65	54.00	-10.35	12.08	3	Horizontal	166	1.78	-	27.73	3.84	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

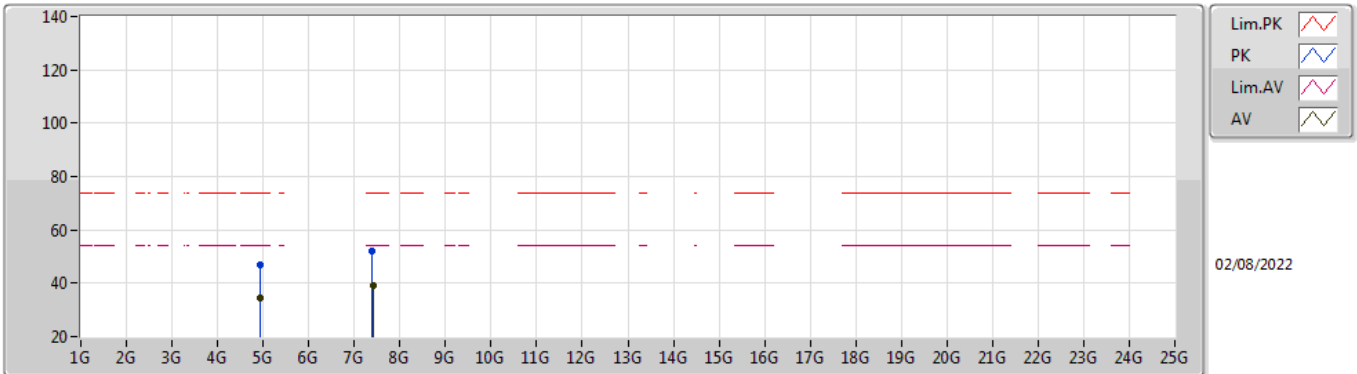


EUT_V_2TX
Setting 27.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9143G	46.90	74.00	-27.10	40.84	3	Vertical	277	1.80	-	32.63	6.30	32.87
AV	4.9323G	34.68	54.00	-19.32	28.58	3	Vertical	277	1.80	-	32.66	6.30	32.86
PK	7.3879G	52.11	74.00	-21.89	40.74	3	Vertical	223	1.80	-	37.20	7.39	33.22
AV	7.4108G	39.28	54.00	-14.72	27.92	3	Vertical	223	1.80	-	37.20	7.39	33.23

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

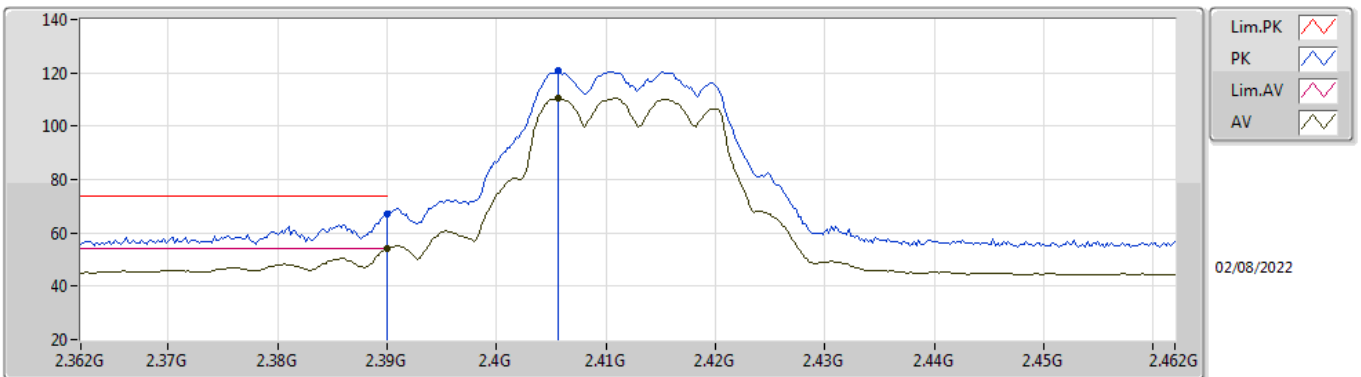


EUT_V_2TX
Setting 27.5
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9336G	46.73	74.00	-27.27	40.62	3	Horizontal	12.9	1.06	-	32.67	6.30	32.86
AV	4.9282G	34.61	54.00	-19.39	28.51	3	Horizontal	12.9	1.06	-	32.66	6.30	32.86
PK	7.3849G	51.94	74.00	-22.06	40.58	3	Horizontal	136	1.80	-	37.20	7.38	33.22
AV	7.4075G	39.26	54.00	-14.74	27.89	3	Horizontal	136	1.80	-	37.20	7.40	33.23

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

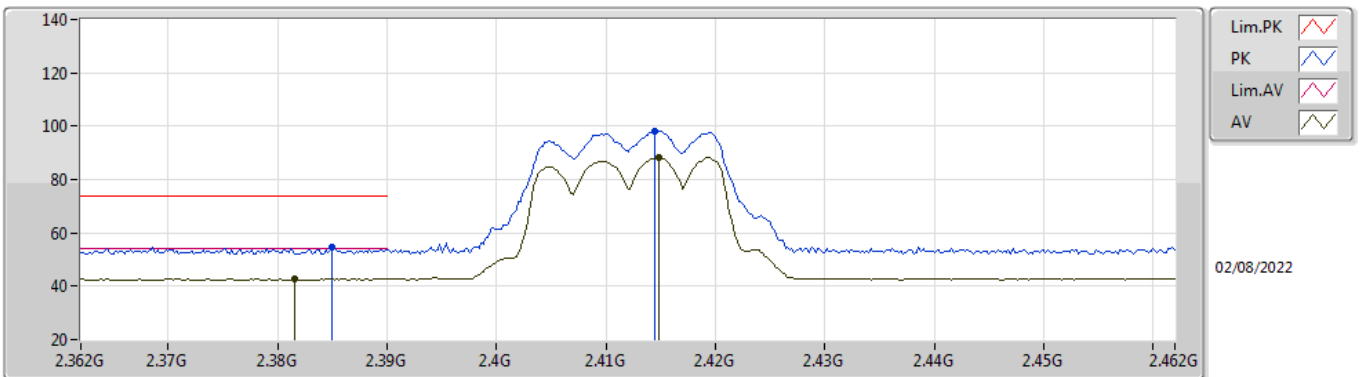


EUT_V_2TX
Setting 23
01-A-G-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.39G	67.11	74.00	-6.89	35.75	3	Vertical	22	2.18	-	27.56	3.80	-	
AV	2.39G	53.94	54.00	-0.06	22.58	3	Vertical	22	2.18	-	27.56	3.80	-	
PK	2.4056G	121.05	Inf	-Inf	89.66	3	Vertical	22	2.18	-	27.59	3.80	-	
AV	2.4056G	110.35	Inf	-Inf	78.96	3	Vertical	22	2.18	-	27.59	3.80	-	

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

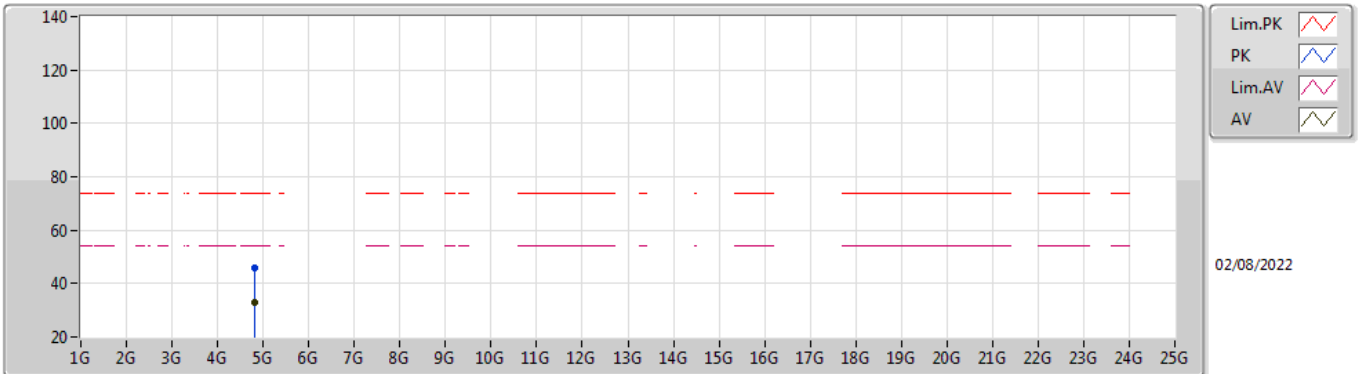


EUT Y_2TX
Setting 23
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.385G	54.84	74.00	-19.16	23.50	3	Horizontal	124	1.94	-	27.54	3.80	-
AV	2.3816G	42.74	54.00	-11.26	11.41	3	Horizontal	124	1.94	-	27.53	3.80	-
PK	2.4144G	98.06	Inf	-Inf	66.68	3	Horizontal	124	1.94	-	27.57	3.81	-
AV	2.4148G	88.19	Inf	-Inf	56.81	3	Horizontal	124	1.94	-	27.57	3.81	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

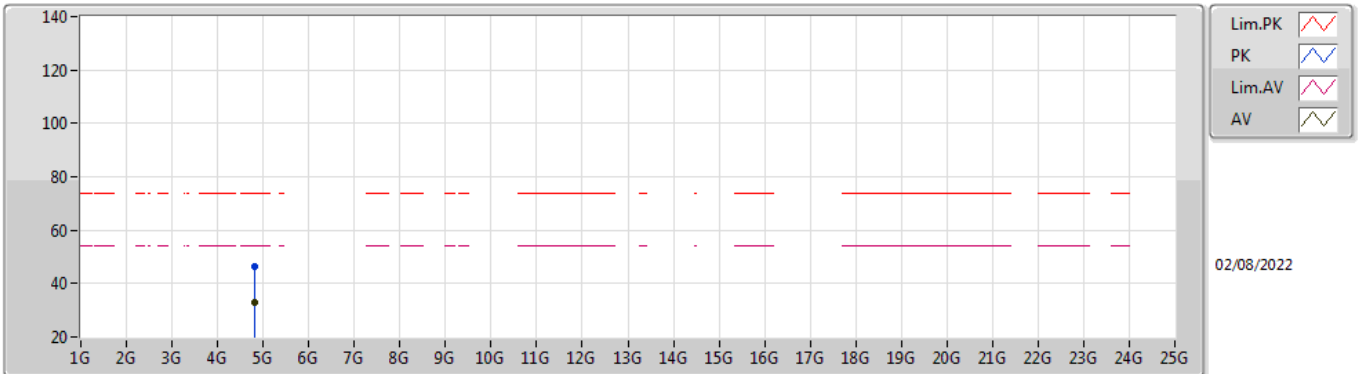


EUT Y_2TX
Setting 23
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82764G	45.99	74.00	-28.01	40.11	3	Vertical	268	2.50	-	32.46	6.30	32.88
AV	4.82348G	32.98	54.00	-21.02	27.12	3	Vertical	268	2.50	-	32.45	6.30	32.89

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX



EUT Y_2TX
Setting 23
01-A-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8257G	46.32	74.00	-27.68	40.45	3	Horizontal	261	1.37	-	32.45	6.30	32.88
AV	4.82562G	32.97	54.00	-21.03	27.10	3	Horizontal	261	1.37	-	32.45	6.30	32.88