



FCC Radio Test Report

FCC ID : LDKMU6CR2417
Equipment : Cisco Catalyst 9136I Access Point
Brand Name : Cisco
Model Name : C9136I-B
Applicant : Cisco Systems Inc
125 West Tasman Drive , San Jose, CA 95134, USA.
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134, USA.
Standard : 47 CFR FCC Part 15.247

The product was received on Aug. 09, 2021, and testing was started from Aug. 12, 2021 and completed on Sep. 30, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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



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History of this test report

Report No.	Version	Description	Issued Date
FR180526AC	01	Initial issue of report	Oct. 25, 2021

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:

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

Comments and explanations:

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

Reviewed by: Ben Tseng

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax(HEW20)	2412-2462	1-11 [11]

<Serving Radio>

Non-Beamforming_1T1S

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX

Non-Beamforming_2T1S

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11ax HEW20	20	2TX

Non-Beamforming_4T1S

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	4TX
2.4-2.4835GHz	802.11g	20	4TX
2.4-2.4835GHz	802.11ax HEW20	20	4TX

Beamforming_2T1S

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ax HEW20-BF	20	2TX

Beamforming_4T1S

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ax HEW20-BF	20	4TX

**<Scanning Radio>****Non-Beamforming_1T1S**

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX

Non-Beamforming_2T1S

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11ax HEW20	20	2TX

Beamforming_2T1S

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ax HEW20-BF	20	2TX

Note:

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

**1.1.2 Antenna Information**

Ant.	Brand	Model Name	Antenna Type	Connector
1	Foxconn	361.01530.005	PIFA	I-PEX
2	Foxconn	361.01530.005	PIFA	I-PEX
3	Foxconn	361.01530.005	PIFA	I-PEX
4	Foxconn	361.01530.005	PIFA	I-PEX
5	Foxconn	361.01530.005	Dipole	I-PEX
6	Foxconn	361.01530.005	Dipole	I-PEX
7	Foxconn	361.01530.005	Dipole	I-PEX
8	Foxconn	361.01530.005	Dipole	I-PEX
9	Foxconn	361.01530.005	PIFA	I-PEX
10	Foxconn	361.01530.005	PIFA	I-PEX
11	Foxconn	361.01530.005	PIFA	I-PEX
12	Foxconn	361.01530.005	PIFA	I-PEX
13	Foxconn	361.01530.005	PIFA	I-PEX
14	Foxconn	361.01530.005	PIFA	I-PEX
15	Foxconn	361.01530.005	PIFA	I-PEX

Serving Radio

Ant.	Port	Gain (dBi)					
		2.4G	5G Primary	5G Secondary	5G Dual	6G	BT
1	1	4	5	-	5	-	-
2	2	4	5	-	5	-	-
3	3	4	5	-	5	-	-
4	4	4	5	-	5	-	-
5	5	-	-	5	5	-	-
6	6	-	-	5	5	-	-
7	7	-	-	5	5	-	-
8	8	-	-	5	5	-	-
9	1	-	-			6	-
10	2	-	-			6	-
11	3	-	-			6	-
12	4	-	-			6	-

**Scanning Radio**

Ant.	Port	Gain (dBi)			
		2.4G	5G	6G	BT
13	1	6	6	6	-
14	2	6	6	6	-

Ant.	Port	Gain (dBi)			
		2.4G	5G	6G	BT
15	1	-	-	-	5

Note 1: The EUT has fifteen antennas.

Note 2: The antenna for dual mode is cross polarized.

For 2.4GHz function:

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

Ant. 13 (port 1) and Ant. 14 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 b/g/n/VHT/ax mode (4TX/4RX)

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

For BT function:

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

Only Ant. 15 (port 1) can be used as transmitting/receiving antenna.

For 5GHz function:

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

Ant. 13 (port 1) and Ant. 14 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 a/n/ac/ax mode (4TX/4RX)

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

Ant. 5 (port 5), Ant. 6 (port 6), Ant. 7 (port 7) and Ant. 8 (port 8) could transmit/receive simultaneously.

For IEEE 802.11 a/n/ac/ax mode (8TX/8RX)

Ant. 1 (port 1), Ant. 2 (port 2), Ant. 3 (port 3), Ant. 4 (port 4), Ant. 5 (port 5), Ant. 6 (port 6), Ant. 7 (port 7), and Ant. 8 (port 8) could transmit/receive simultaneously.

For 6GHz function:

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

Ant. 13 (port 1) and Ant. 14 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 a/ax mode (4TX/4RX)

Ant. 9 (port 1), Ant. 10 (port 2), Ant. 11 (port 3) and Ant. 12 (port 4) could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From PoE		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
Beamforming Function	☒ With beamforming	☐ Without beamforming	
Resource Unit (802.11ax)	☒ Full RU	☐ Partial RU	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:		...
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		...
☐	Other:		

1.1.4 Mode Test Duty Cycle
Non-Beamforming_Serving Radio Primary_1T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_1TX	0.907	0.42	7.025m	300
802.11g_Nss1,(6Mbps)_1TX	0.949	0.23	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.937	0.28	5.446m	300

Non-Beamforming_Serving Radio Primary_2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_2TX	0.907	0.42	7.025m	300
802.11g_Nss1,(6Mbps)_2TX	0.949	0.23	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.937	0.28	5.446m	300

Non-Beamforming_Serving Radio Primary_4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_4TX	0.907	0.42	7.025m	300
802.11g_Nss1,(6Mbps)_4TX	0.949	0.23	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.937	0.28	5.446m	300

**Non-Beamforming_Scanning Radio_1T1S**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_1TX	0.943	0.25	7.025m	300
802.11g_Nss1,(6Mbps)_1TX	0.926	0.33	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.944	0.25	5.446m	300

Non-Beamforming_Scanning Radio_2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_2TX	0.943	0.25	7.025m	300
802.11g_Nss1,(6Mbps)_2TX	0.926	0.33	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.944	0.25	5.446m	300

Beamforming_Serving Radio Primary_2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.937	0.28	5.446m	300

Beamforming_Serving Radio Primary_4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.937	0.28	5.446m	300

Beamforming_Scanning Radio_2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.944	0.25	5.446m	300

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

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

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

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

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Tony Chang	22.1~23.7°C / 51~60%	27/Aug/2021
RF Conducted	TH01-HY	Barry Hsiao	24.2~26.9°C / 49~60%	12/Aug/2021~28/Sep/2021
Radiated	03CH03-HY	Justin Pan	24.6~26.9°C / 50~55%	13/Aug/2021~30/Sep/2021
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

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)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software	Putty
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Non-Beamforming_Serving Radio Primary_1T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	17
2437MHz	17
2462MHz	17
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	17
2437MHz	17
2462MHz	16
802.11ax HEW20_Nss1,(MCS0)_1TX	-
2412MHz	17
2437MHz	17
2462MHz	15

Non-Beamforming_Serving Radio Primary_2T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	17
2437MHz	17
2462MHz	17
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	17
2437MHz	17
2462MHz	15
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	16
2437MHz	17
2462MHz	14

**Non-Beamforming_Serving Radio Primary_4T1S**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	17
2437MHz	17
2462MHz	17
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	15
2437MHz	17
2462MHz	13
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	14
2437MHz	17
2462MHz	11

Non-Beamforming_Scanning Radio_1T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	17
2437MHz	16
2462MHz	12
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	16
2437MHz	17
2462MHz	15
802.11ax HEW20_Nss1,(MCS0)_1TX	-
2412MHz	13
2437MHz	17
2462MHz	13

**Non-Beamforming_Scanning Radio_2T1S**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	17
2437MHz	17
2462MHz	17
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	14
2437MHz	17
2462MHz	13
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	12
2437MHz	17
2462MHz	11

Beamforming_Serving Radio Primary_2T1S

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	16
2437MHz	17
2462MHz	14

Beamforming_Serving Radio Primary_4T1S

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
2412MHz	14
2437MHz	17
2462MHz	11

Beamforming_Scanning Radio_2T1S

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	12
2437MHz	17
2462MHz	11

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	PoE mode; Scanning Radio_2T1S
2	PoE mode; Serving Radio Primary_4T1S

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 Emissions in Restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	PoE mode; Serving Radio Primary_4T1S		
2	PoE mode; Scanning Radio_2T1S		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary)
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary)+ WLAN 5G (Serving Radio Secondary)+ WLAN 6G+ Bluetooth
Refer to Sporton Test Report No.: FA180526 for Co-location RF Exposure Evaluation.	

2.3 Accessories

Accessories				
PoE	Brand Name	DELTA	Model Name	ADH-65AR B
	Power Rating	I/P: 100 - 240 Vac, 2.0 A, O/P: 56 Vdc, 1.161 A		

Reminder: Regarding to more detail and other information, please refer to user manual.

2.4 Support Equipment

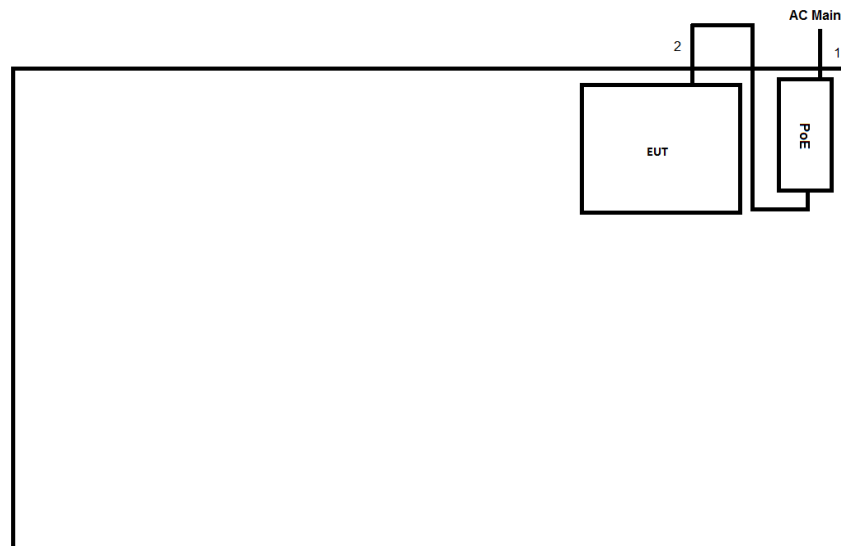
Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	Remark
1	RJ45 cable	Power sync	CAT-6E-10	-

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

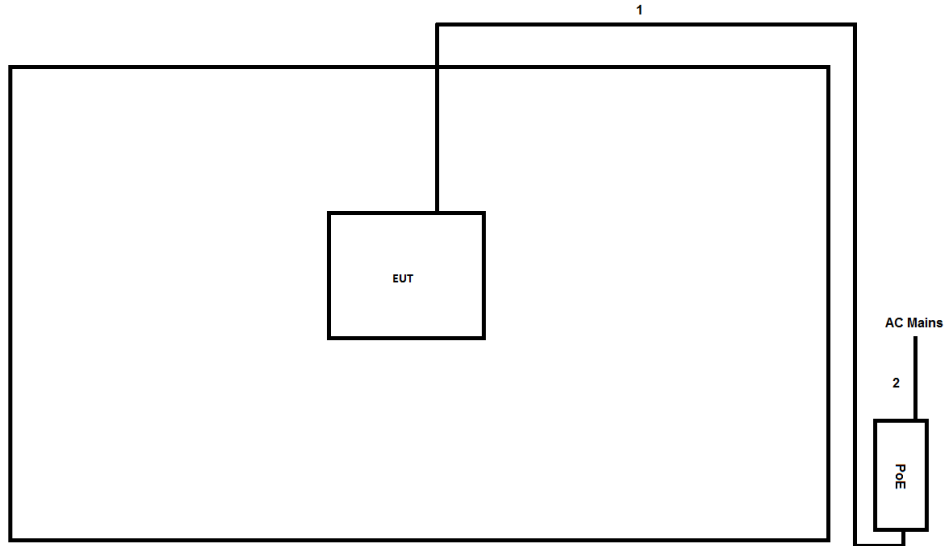
Support Equipment – Radiated				
No.	Equipment	Brand Name	Model Name	Remark
1	RJ45 cable	Power sync	CAT-6E-10	-

2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	RJ45 cable	No	10	-

Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	RJ45 cable	No	10	-
2	AC power cable	No	1.8	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

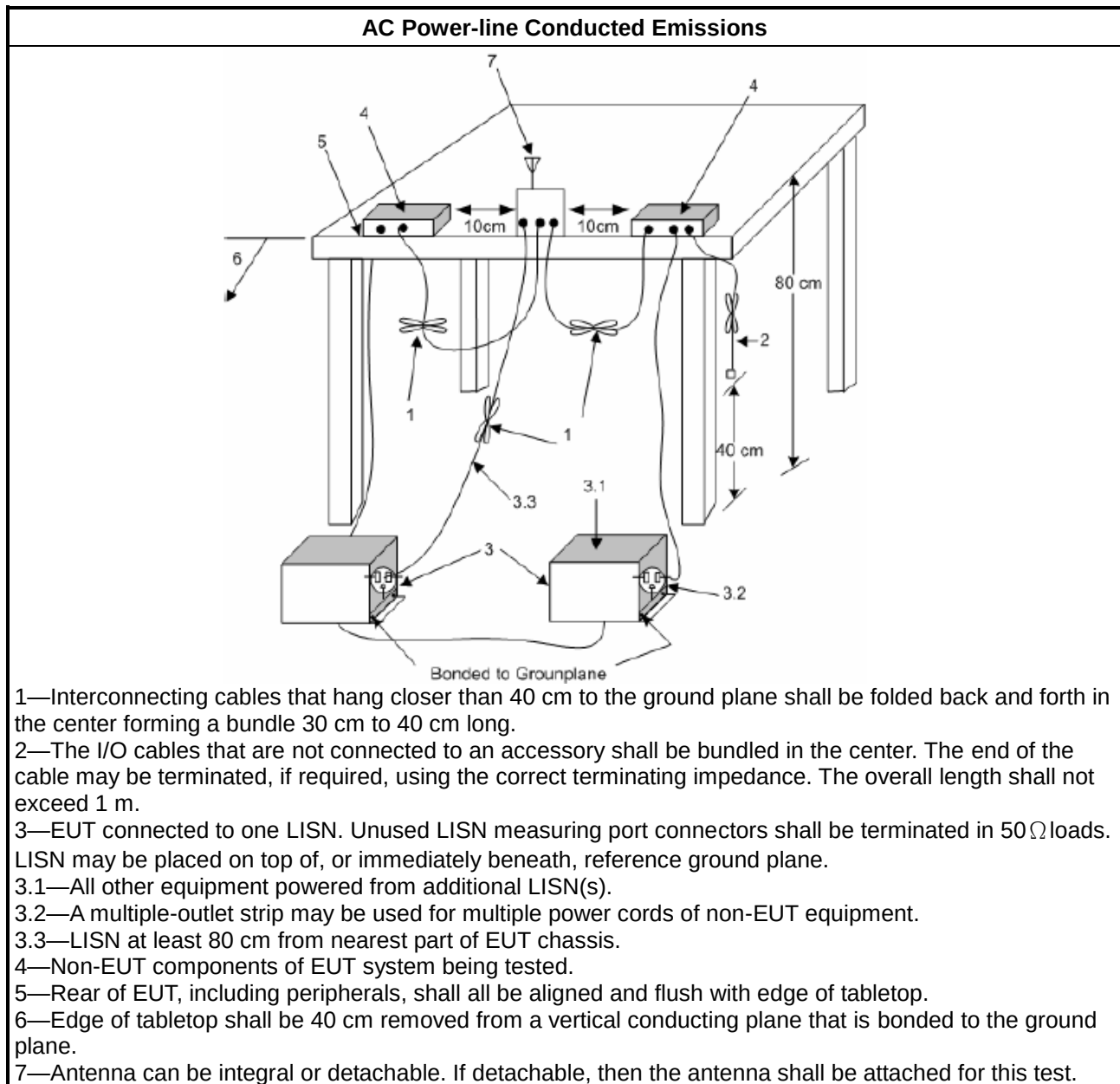
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

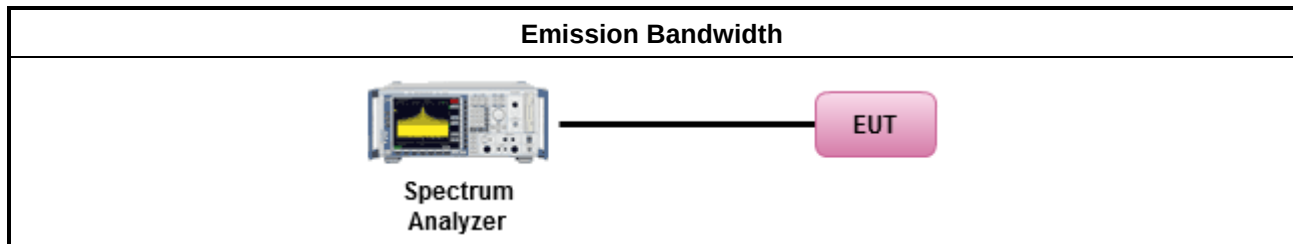
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit		
	▪	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪	Smart antenna system (SAS):
	-	Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	-	Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	-	Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:		
	▪	2400-2483.5 MHz Band
	▪	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	▪	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	▪	Smart antenna system (SAS)
	-	Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.		

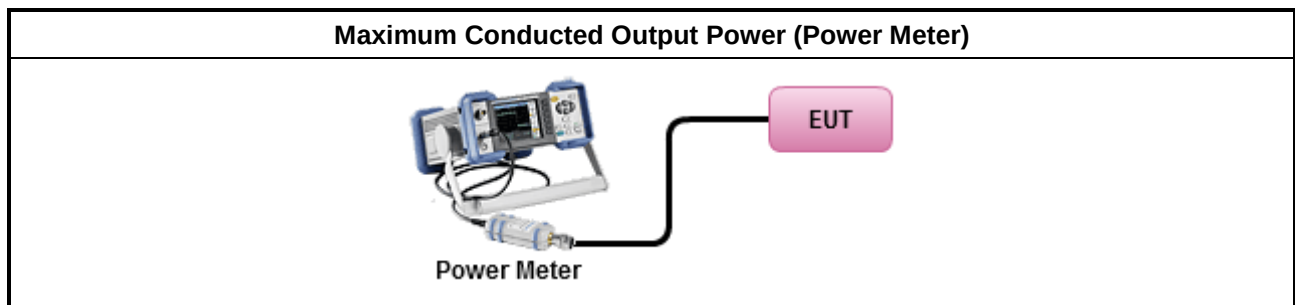
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

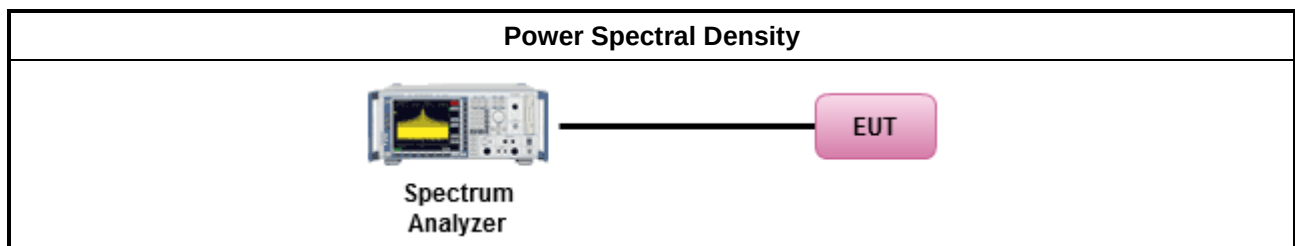
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
▪	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
▪	Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

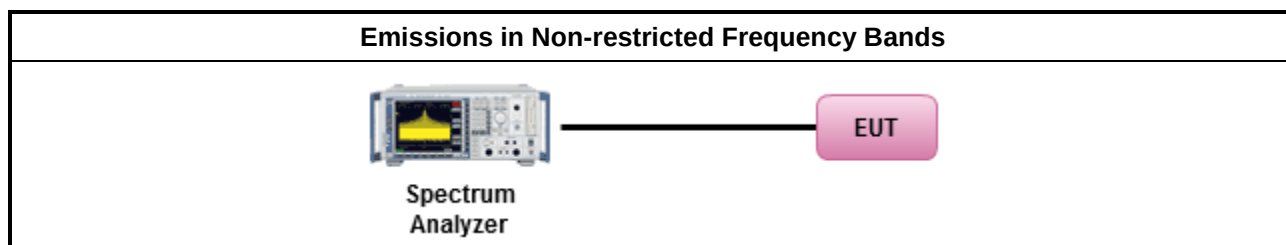
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

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

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

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

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

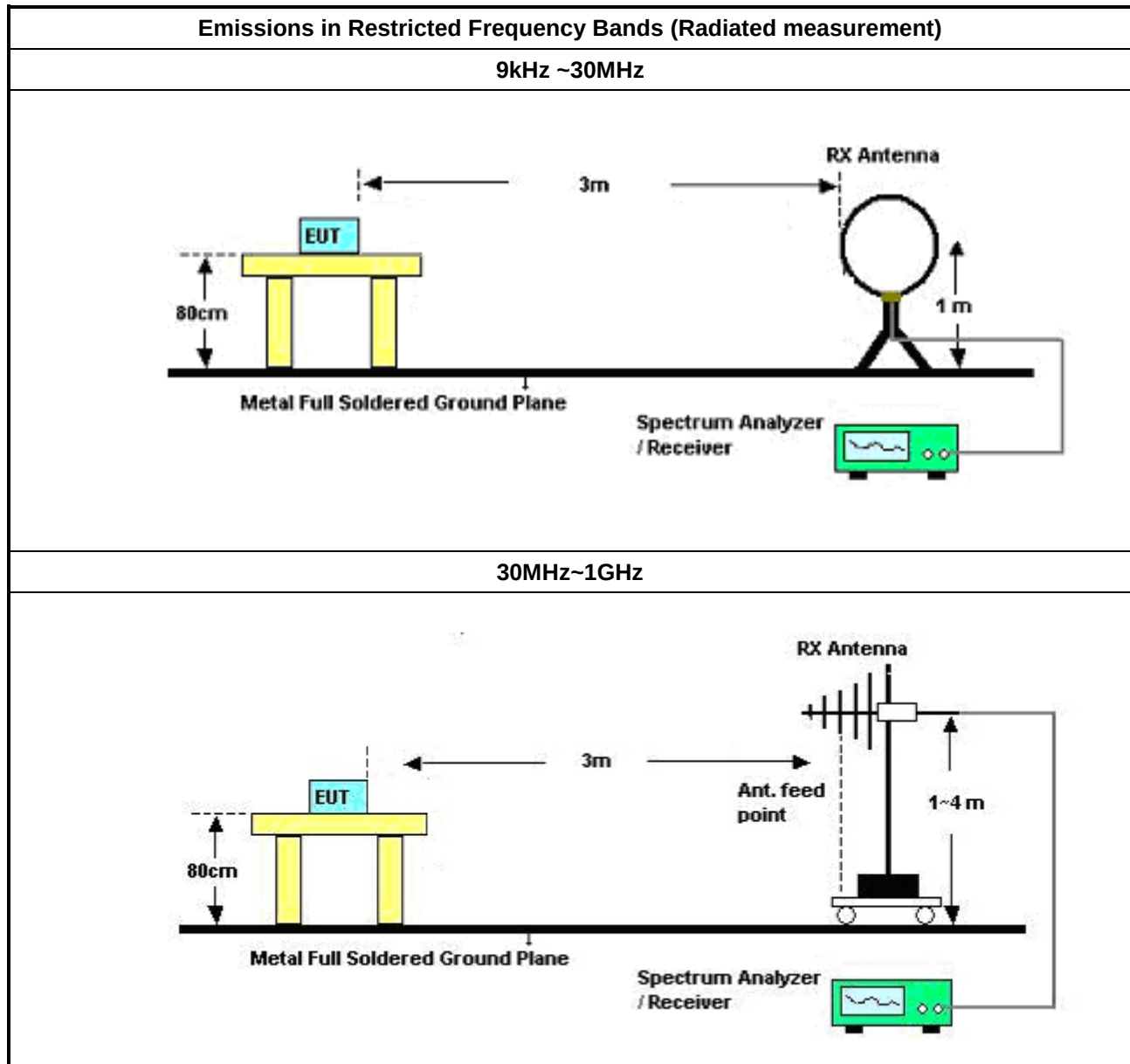
Test Method	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
Use the following spectrum analyzer settings:	
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.
For conducted and cabinet radiation measurement, refer as KDB 558074, clause 3 (12.7.4.2 of ANSI C63.10).	
	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 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.

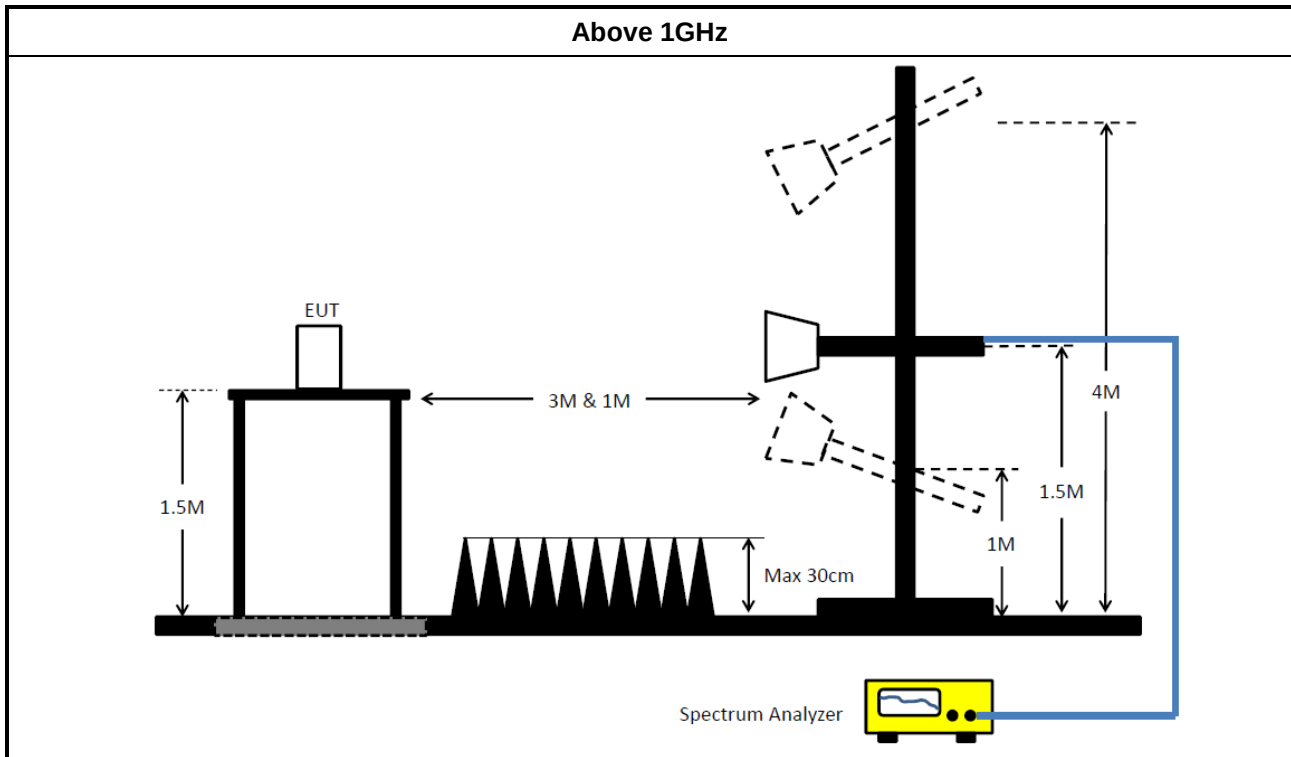
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

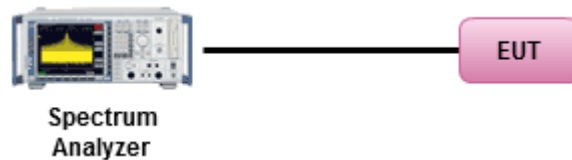
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





Emissions in Restricted Frequency Bands (Conducted measurement)



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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	19/Apr/2021	18/Apr/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	11/Nov/2020	10/Nov/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	21/Sep/2020	20/Sep/2021

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	30/Mar/2021	29/Mar/2022
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2021
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	23/Feb/2021	22/Feb/2022
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	23/Feb/2021	22/Feb/2022

**Instrument for Radiated Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	03/Aug/2021	02/Aug/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	03/Aug/2021	02/Aug/2022
Signal Analyzer	R&S	FSV 40	101515	10Hz~40GHz	26/Mar/2021	25/Mar/2022
Amplifier	HP	8447D	2944A08033	10kHz~1.3GHz	13/Apr/2021	12/Apr/2022
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz~26.5GHz	06/Oct/2020	05/Oct/2021
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	06/Sep/2020	05/Sep/2021
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	24/Mar/2021	23/Mar/2022
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	16/Jun/2021	15/Jun/2022
RF Cable-R03m	Jye Bao	RG142	MY37335/4+CB021-1+CB021-2	30MHz~1GHz	17/Mar/2021	16/Mar/2022
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN MY38596/4+SN 804300/4	1GHz~40GHz	28/Jul/2021	27/Jul/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	11/Mar/2021	10/Mar/2022
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	09/Mar/2021	08/Mar/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022

Instrument for Radiated Emission Co-location

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	03/Aug/2021	02/Aug/2022
Signal Analyzer	R&S	FSV40	101515	9kHz~40GHz	26/Mar/2021	25/Mar/2022
Microwave Preamplifier	Agilent	8449B	3008A02326	1GHz~26.5GHz	15/Jul/2021	14/Jul/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	24/Mar/2021	23/Mar/2022
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN MY38596/4+SN 804300/4	1GHz~40GHz	28/Jul/2021	27/Jul/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	11/Mar/2021	10/Mar/2022
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	09/Mar/2021	08/Mar/2022



**Conducted Emissions at Powerline_
Non-Beamforming_Scanning Radio_2T1S**

Appendix A.1

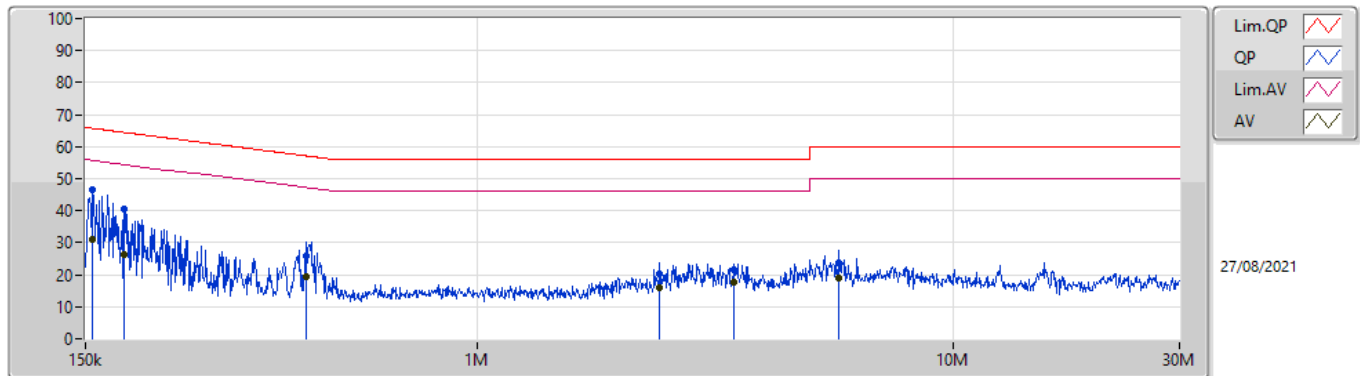
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	151.807k	47.06	65.90	-18.84	Neutral

Result

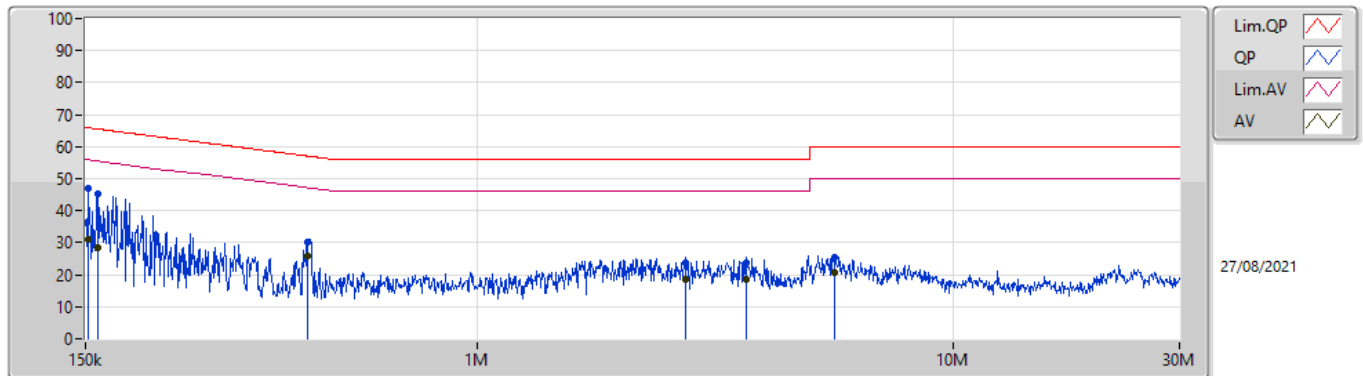
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	154.868k	46.40	65.73	-19.33	Line	-
Mode 1	Pass	AV	154.868k	31.18	55.73	-24.55	Line	-
Mode 1	Pass	QP	180.957k	40.51	64.43	-23.92	Line	-
Mode 1	Pass	AV	180.957k	26.30	54.43	-28.13	Line	-
Mode 1	Pass	QP	435.504k	25.87	57.15	-31.28	Line	-
Mode 1	Pass	AV	435.504k	19.39	47.15	-27.76	Line	-
Mode 1	Pass	QP	2.424M	20.43	56.00	-35.57	Line	-
Mode 1	Pass	AV	2.424M	16.16	46.00	-29.84	Line	-
Mode 1	Pass	QP	3.472M	21.46	56.00	-34.54	Line	-
Mode 1	Pass	AV	3.472M	17.61	46.00	-28.39	Line	-
Mode 1	Pass	QP	5.764M	23.91	60.00	-36.09	Line	-
Mode 1	Pass	AV	5.764M	18.90	50.00	-31.10	Line	-
Mode 1	Pass	QP	151.807k	47.06	65.90	-18.84	Neutral	-
Mode 1	Pass	AV	151.807k	31.05	55.90	-24.85	Neutral	-
Mode 1	Pass	QP	159.256k	45.20	65.50	-20.30	Neutral	-
Mode 1	Pass	AV	159.256k	28.27	55.50	-27.23	Neutral	-
Mode 1	Pass	QP	438.995k	30.04	57.09	-27.05	Neutral	-
Mode 1	Pass	AV	438.995k	26.03	47.09	-21.06	Neutral	-
Mode 1	Pass	QP	2.743M	23.75	56.00	-32.25	Neutral	-
Mode 1	Pass	AV	2.743M	18.71	46.00	-27.29	Neutral	-
Mode 1	Pass	QP	3.671M	23.64	56.00	-32.36	Neutral	-
Mode 1	Pass	AV	3.671M	18.72	46.00	-27.28	Neutral	-
Mode 1	Pass	QP	5.65M	25.48	60.00	-34.52	Neutral	-
Mode 1	Pass	AV	5.65M	20.52	50.00	-29.48	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	154.868k	46.40	65.73	-19.33	19.63	Line	-	26.77	9.69	0.04	9.90			
AV	154.868k	31.18	55.73	-24.55	19.63	Line	-	11.55	9.69	0.04	9.90			
QP	180.957k	40.51	64.43	-23.92	19.62	Line	-	20.89	9.68	0.04	9.90			
AV	180.957k	26.30	54.43	-28.13	19.62	Line	-	6.68	9.68	0.04	9.90			
QP	435.504k	25.87	57.15	-31.28	19.62	Line	-	6.25	9.67	0.06	9.89			
AV	435.504k	19.39	47.15	-27.76	19.62	Line	-	-0.23	9.67	0.06	9.89			
QP	2.424M	20.43	56.00	-35.57	19.62	Line	-	0.81	9.68	0.11	9.83			
AV	2.424M	16.16	46.00	-29.84	19.62	Line	-	-3.46	9.68	0.11	9.83			
QP	3.472M	21.46	56.00	-34.54	19.70	Line	-	1.76	9.69	0.13	9.88			
AV	3.472M	17.61	46.00	-28.39	19.70	Line	-	-2.09	9.69	0.13	9.88			
QP	5.764M	23.91	60.00	-36.09	19.76	Line	-	4.15	9.70	0.16	9.90			
AV	5.764M	18.90	50.00	-31.10	19.76	Line	-	-0.86	9.70	0.16	9.90			

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	151.807k	47.06	65.90	-18.84	19.63	Neutral	-	27.43	9.69	0.04	9.90			
AV	151.807k	31.05	55.90	-24.85	19.63	Neutral	-	11.42	9.69	0.04	9.90			
QP	159.256k	45.20	65.50	-20.30	19.63	Neutral	-	25.57	9.69	0.04	9.90			
AV	159.256k	28.27	55.50	-27.23	19.63	Neutral	-	8.64	9.69	0.04	9.90			
QP	438.995k	30.04	57.09	-27.05	19.62	Neutral	-	10.42	9.67	0.06	9.89			
AV	438.995k	26.03	47.09	-21.06	19.62	Neutral	-	6.41	9.67	0.06	9.89			
QP	2.743M	23.75	56.00	-32.25	19.65	Neutral	-	4.10	9.68	0.12	9.85			
AV	2.743M	18.71	46.00	-27.29	19.65	Neutral	-	-0.94	9.68	0.12	9.85			
QP	3.671M	23.64	56.00	-32.36	19.72	Neutral	-	3.92	9.69	0.14	9.89			
AV	3.671M	18.72	46.00	-27.28	19.72	Neutral	-	-1.00	9.69	0.14	9.89			
QP	5.65M	25.48	60.00	-34.52	19.77	Neutral	-	5.71	9.71	0.16	9.90			
AV	5.65M	20.52	50.00	-29.48	19.77	Neutral	-	0.75	9.71	0.16	9.90			



**Conducted Emissions at Powerline_
Non-Beamforming_Serving Radio Primary_4T1S**

Appendix A.2

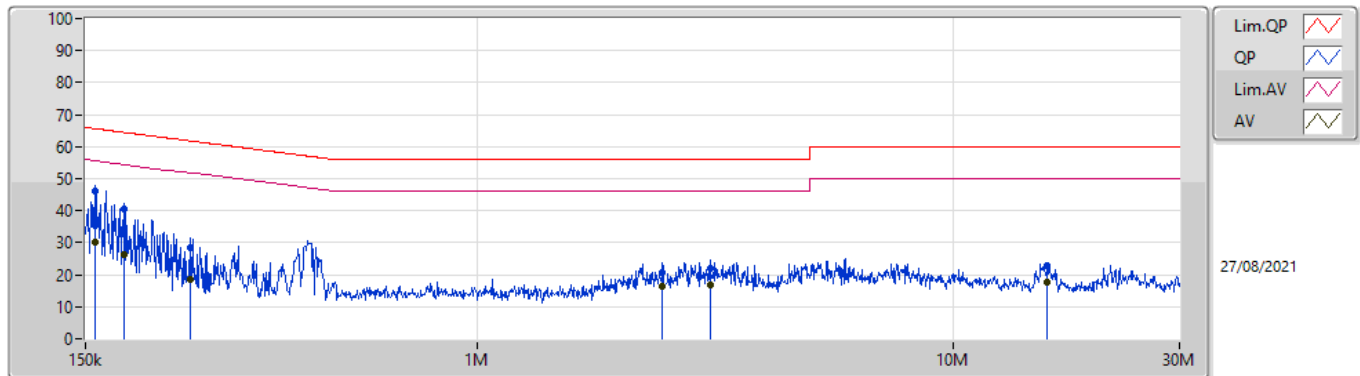
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	154.868k	46.28	65.73	-19.45	Neutral

Result

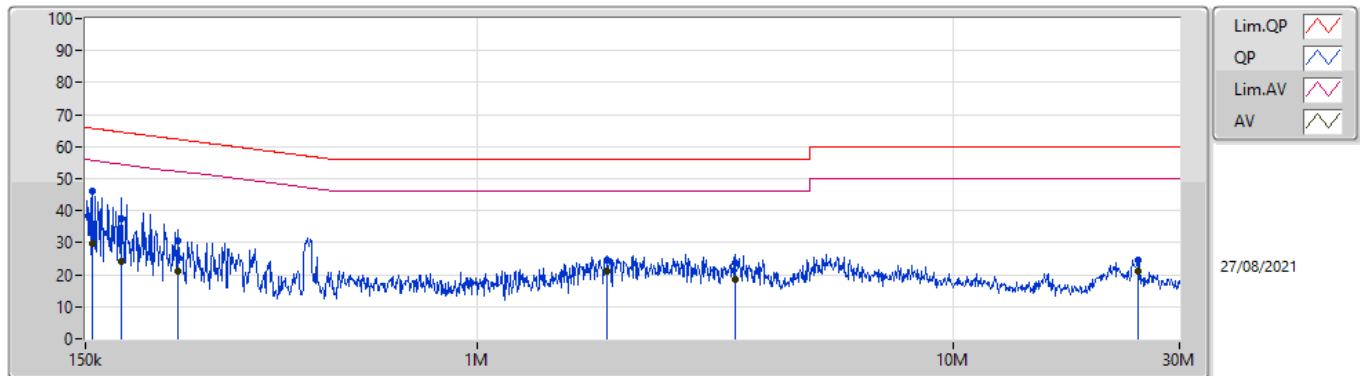
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	156.734k	46.07	65.64	-19.57	Line	-
Mode 1	Pass	AV	156.734k	30.15	55.64	-25.49	Line	-
Mode 1	Pass	QP	180.957k	40.47	64.43	-23.96	Line	-
Mode 1	Pass	AV	180.957k	26.38	54.43	-28.05	Line	-
Mode 1	Pass	QP	249.042k	28.47	61.79	-33.32	Line	-
Mode 1	Pass	AV	249.042k	18.62	51.79	-33.17	Line	-
Mode 1	Pass	QP	2.453M	20.50	56.00	-35.50	Line	-
Mode 1	Pass	AV	2.453M	16.51	46.00	-29.49	Line	-
Mode 1	Pass	QP	3.092M	21.90	56.00	-34.10	Line	-
Mode 1	Pass	AV	3.092M	16.83	46.00	-29.17	Line	-
Mode 1	Pass	QP	15.825M	23.00	60.00	-37.00	Line	-
Mode 1	Pass	AV	15.825M	17.70	50.00	-32.30	Line	-
Mode 1	Pass	QP	154.868k	46.28	65.73	-19.45	Neutral	-
Mode 1	Pass	AV	154.868k	29.64	55.73	-26.09	Neutral	-
Mode 1	Pass	QP	178.091k	37.47	64.57	-27.10	Neutral	-
Mode 1	Pass	AV	178.091k	24.22	54.57	-30.35	Neutral	-
Mode 1	Pass	QP	234.567k	30.62	62.29	-31.67	Neutral	-
Mode 1	Pass	AV	234.567k	21.15	52.29	-31.14	Neutral	-
Mode 1	Pass	QP	1.877M	24.78	56.00	-31.22	Neutral	-
Mode 1	Pass	AV	1.877M	21.08	46.00	-24.92	Neutral	-
Mode 1	Pass	QP	3.485M	23.71	56.00	-32.29	Neutral	-
Mode 1	Pass	AV	3.485M	18.72	46.00	-27.28	Neutral	-
Mode 1	Pass	QP	24.549M	24.74	60.00	-35.26	Neutral	-
Mode 1	Pass	AV	24.549M	21.29	50.00	-28.71	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	156.734k	46.07	65.64	-19.57	19.63	Line	-	26.44	9.69	0.04	9.90			
AV	156.734k	30.15	55.64	-25.49	19.63	Line	-	10.52	9.69	0.04	9.90			
QP	180.957k	40.47	64.43	-23.96	19.62	Line	-	20.85	9.68	0.04	9.90			
AV	180.957k	26.38	54.43	-28.05	19.62	Line	-	6.76	9.68	0.04	9.90			
QP	249.042k	28.47	61.79	-33.32	19.63	Line	-	8.84	9.68	0.05	9.90			
AV	249.042k	18.62	51.79	-33.17	19.63	Line	-	-1.01	9.68	0.05	9.90			
QP	2.453M	20.50	56.00	-35.50	19.62	Line	-	0.88	9.68	0.11	9.83			
AV	2.453M	16.51	46.00	-29.49	19.62	Line	-	-3.11	9.68	0.11	9.83			
QP	3.092M	21.90	56.00	-34.10	19.68	Line	-	2.22	9.69	0.13	9.86			
AV	3.092M	16.83	46.00	-29.17	19.68	Line	-	-2.85	9.69	0.13	9.86			
QP	15.825M	23.00	60.00	-37.00	19.85	Line	-	3.15	9.69	0.26	9.90			
AV	15.825M	17.70	50.00	-32.30	19.85	Line	-	-2.15	9.69	0.26	9.90			

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	154.868k	46.28	65.73	-19.45	19.63	Neutral	-	26.65	9.69	0.04	9.90			
AV	154.868k	29.64	55.73	-26.09	19.63	Neutral	-	10.01	9.69	0.04	9.90			
QP	178.091k	37.47	64.57	-27.10	19.62	Neutral	-	17.85	9.68	0.04	9.90			
AV	178.091k	24.22	54.57	-30.35	19.62	Neutral	-	4.60	9.68	0.04	9.90			
QP	234.567k	30.62	62.29	-31.67	19.62	Neutral	-	11.00	9.68	0.04	9.90			
AV	234.567k	21.15	52.29	-31.14	19.62	Neutral	-	1.53	9.68	0.04	9.90			
QP	1.877M	24.78	56.00	-31.22	19.58	Neutral	-	5.20	9.68	0.10	9.80			
AV	1.877M	21.08	46.00	-24.92	19.58	Neutral	-	1.50	9.68	0.10	9.80			
QP	3.485M	23.71	56.00	-32.29	19.70	Neutral	-	4.01	9.69	0.13	9.88			
AV	3.485M	18.72	46.00	-27.28	19.70	Neutral	-	-0.98	9.69	0.13	9.88			
QP	24.549M	24.74	60.00	-35.26	19.94	Neutral	-	4.80	9.72	0.32	9.90			
AV	24.549M	21.29	50.00	-28.71	19.94	Neutral	-	1.35	9.72	0.32	9.90			

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	8.075M	13.218M	13M2G1D	8.05M	12.894M
802.11g_Nss1,(6Mbps)_1TX	16.325M	16.567M	16M6D1D	16.275M	16.467M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.875M	18.966M	19M0D1D	18.75M	18.916M

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

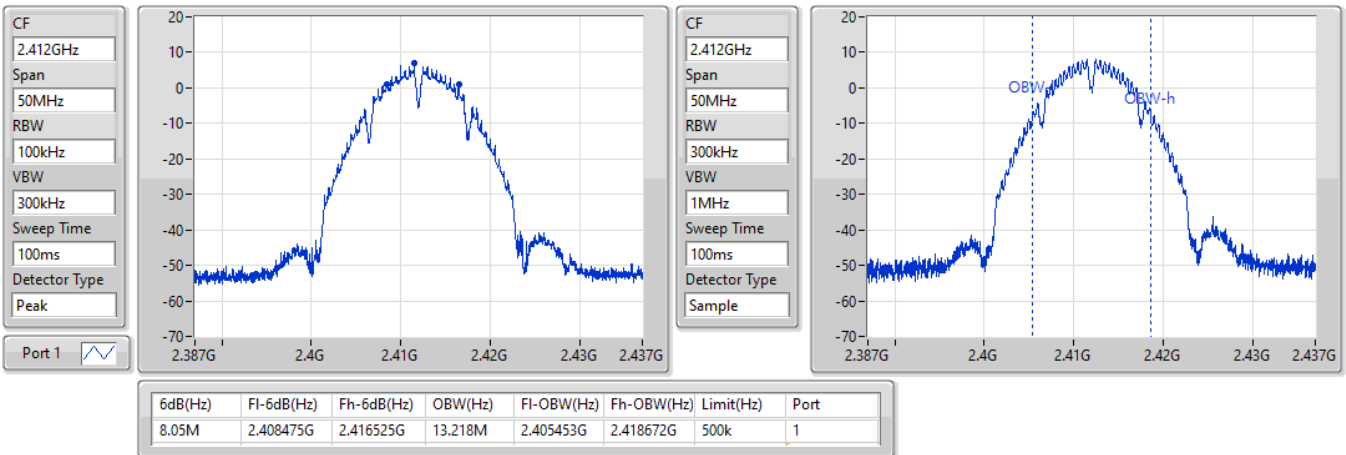
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	8.05M	13.218M
2437MHz	Pass	500k	8.075M	13.018M
2462MHz	Pass	500k	8.075M	12.894M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.325M	16.567M
2437MHz	Pass	500k	16.325M	16.492M
2462MHz	Pass	500k	16.275M	16.467M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.85M	18.966M
2437MHz	Pass	500k	18.875M	18.941M
2462MHz	Pass	500k	18.75M	18.916M

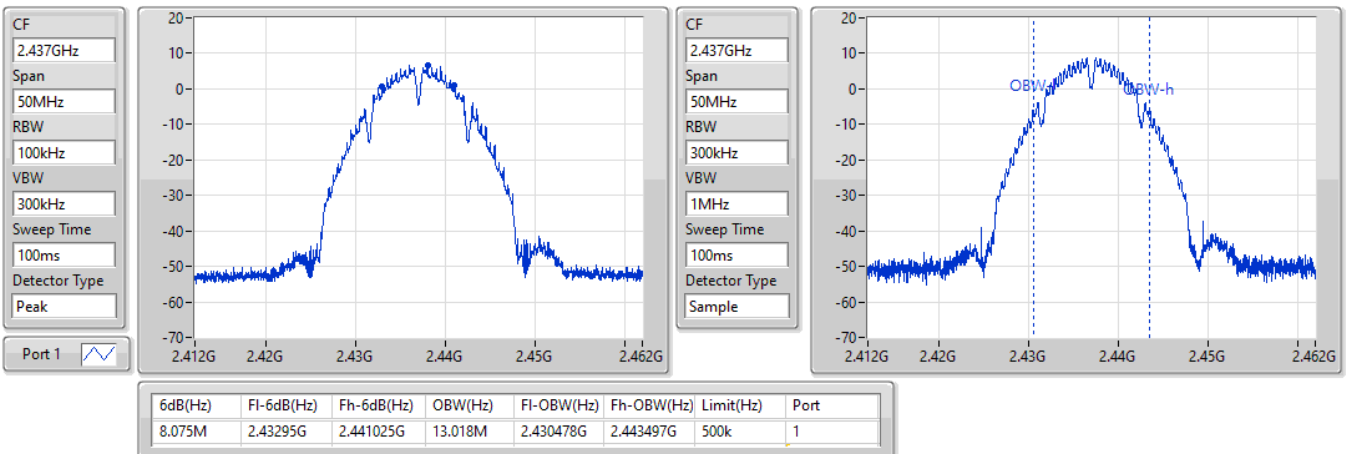
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX
EBW
2412MHz

12/08/2021


802.11b_Nss1,(1Mbps)_1TX
EBW
2437MHz

12/08/2021

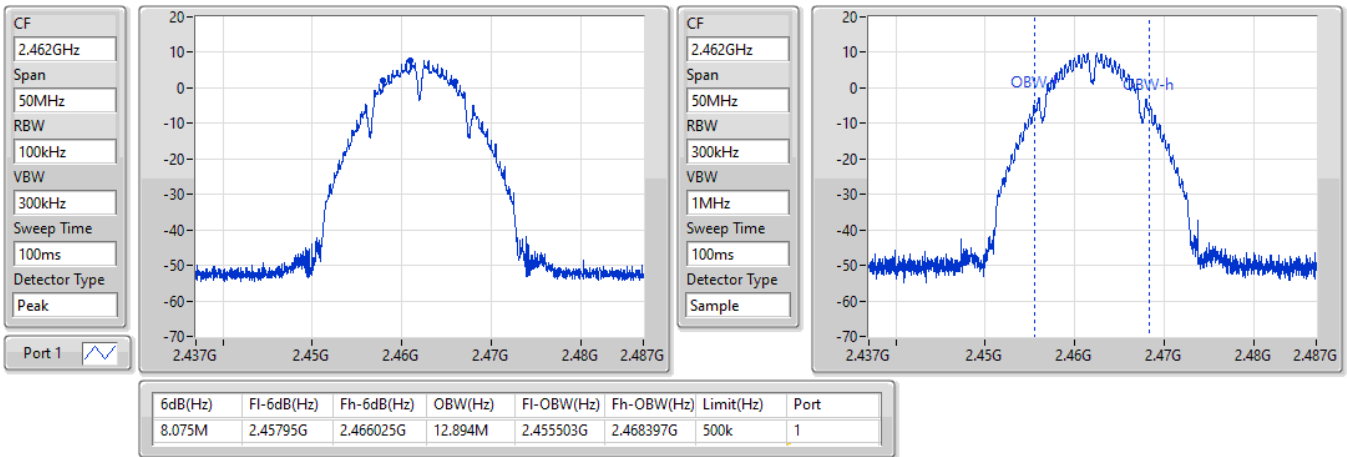


802.11b_Nss1,(1Mbps)_1TX

EBW

2462MHz

12/08/2021

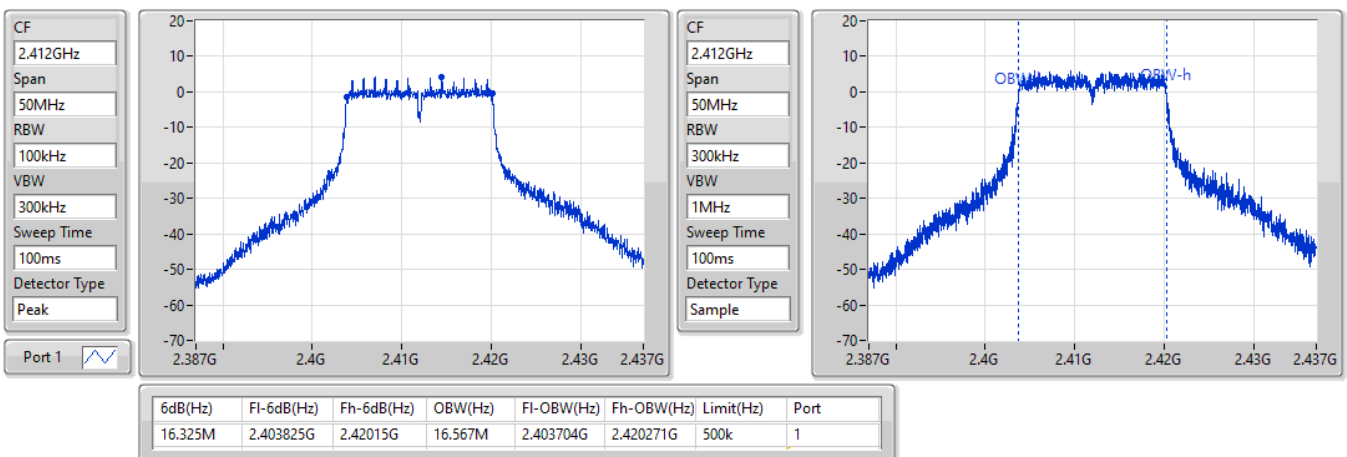


802.11g_Nss1,(6Mbps)_1TX

EBW

2412MHz

12/08/2021

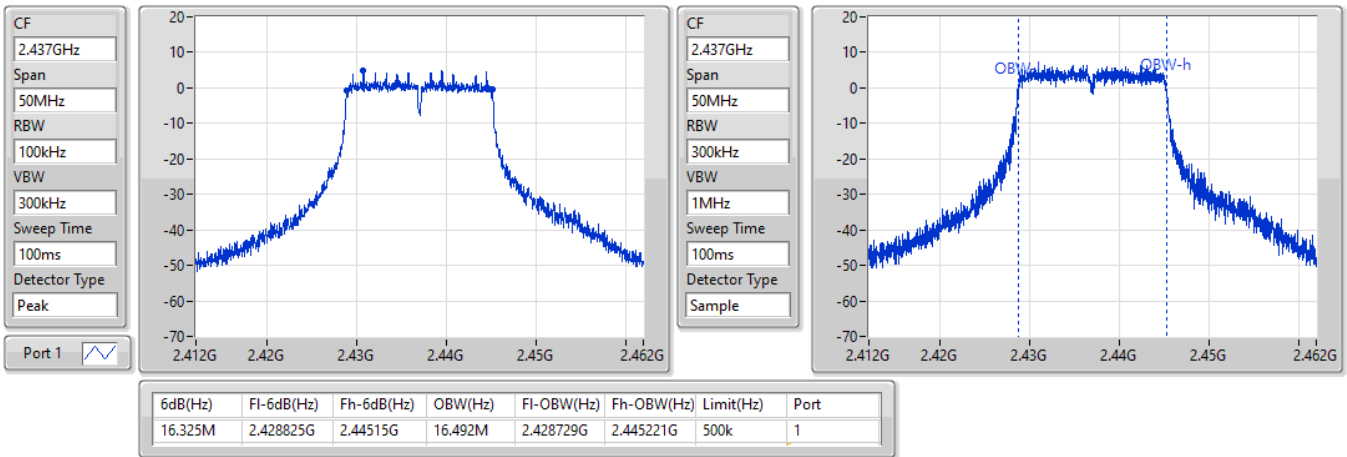


802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

12/08/2021

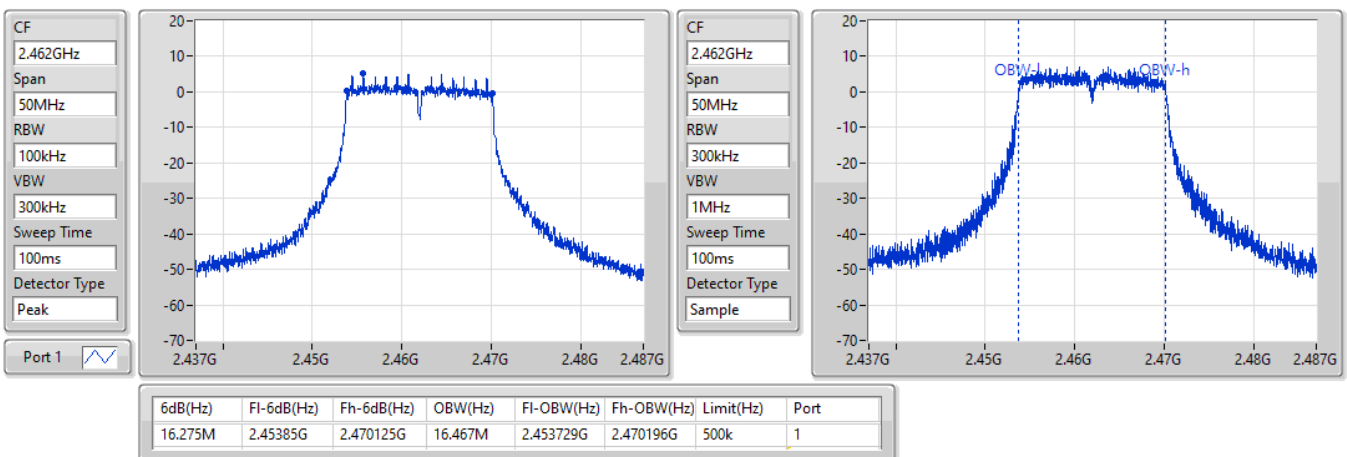


802.11g_Nss1,(6Mbps)_1TX

EBW

2462MHz

12/08/2021

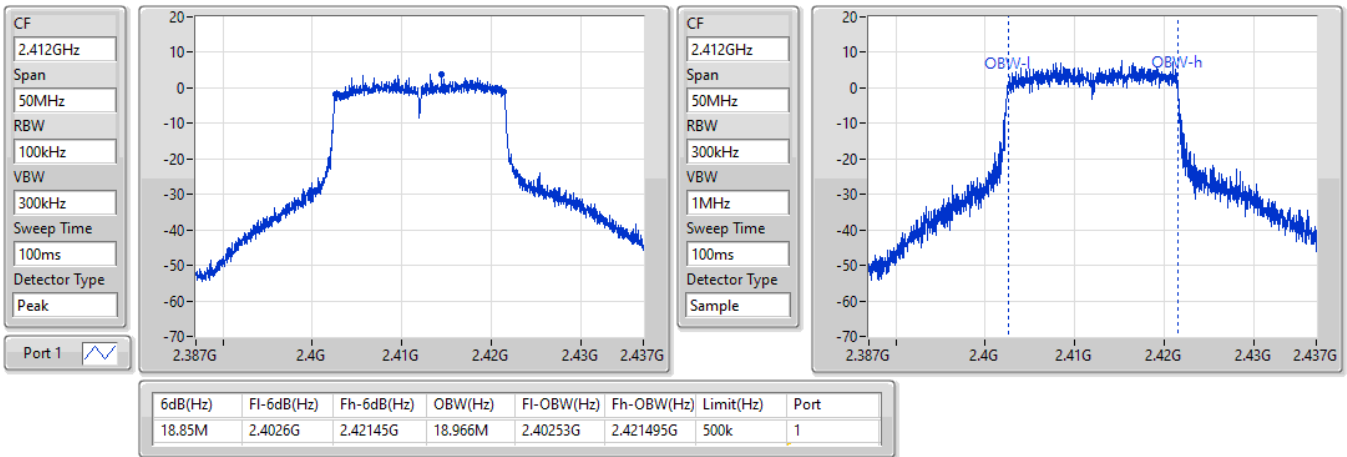


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2412MHz

12/08/2021

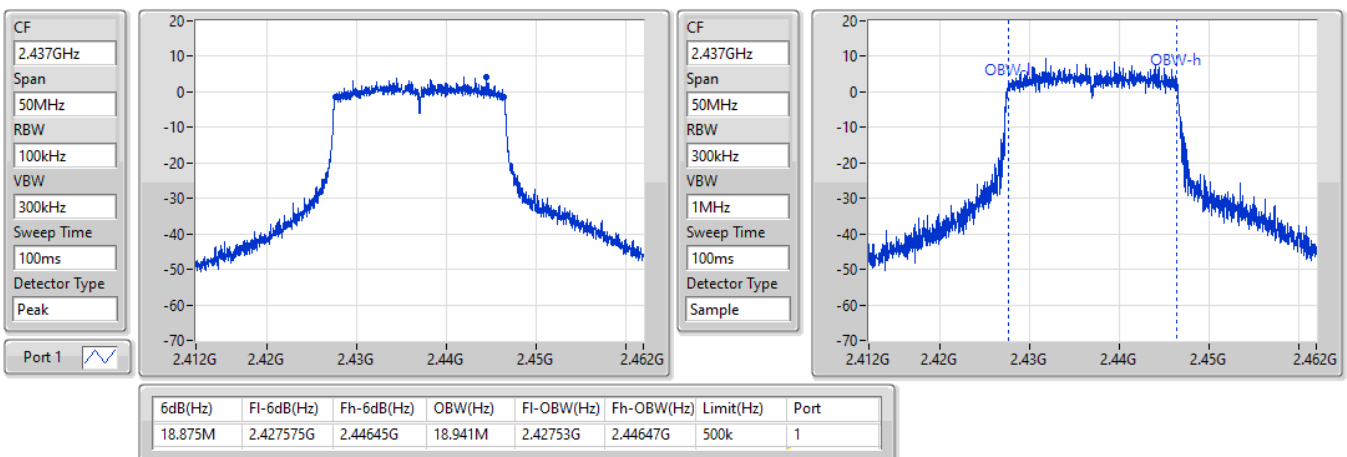


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2437MHz

12/08/2021

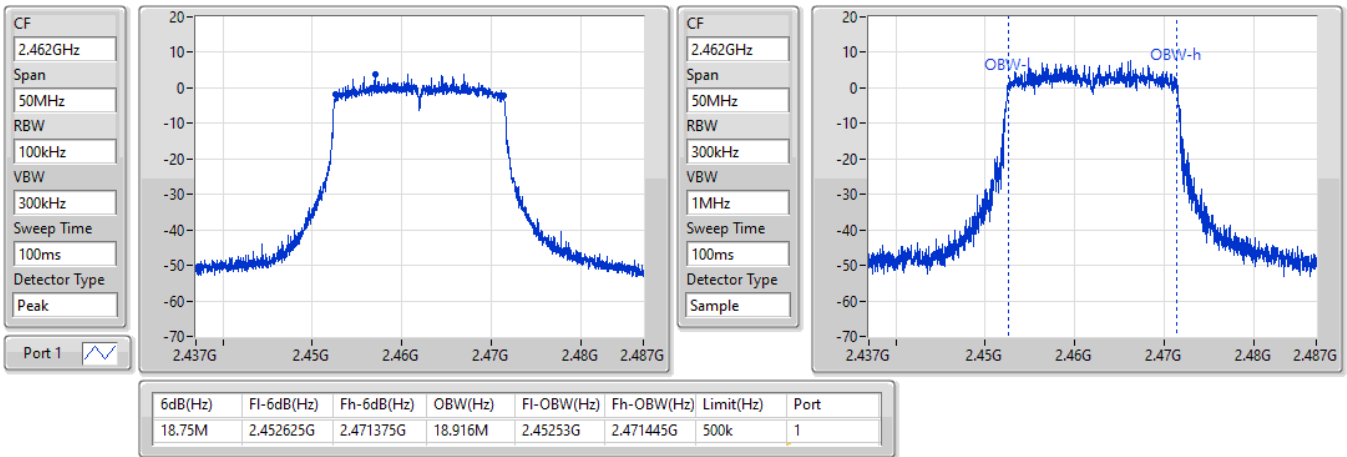


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2462MHz

12/08/2021



**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	8.075M	13.243M	13M2G1D	6.575M	12.944M
802.11g_Nss1,(6Mbps)_2TX	16.325M	16.542M	16M5D1D	15.95M	16.442M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.975M	18.991M	19M0D1D	18.75M	18.891M

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	8.075M	13.243M	8.05M	13.243M
2437MHz	Pass	500k	6.575M	13.018M	7.075M	13.043M
2462MHz	Pass	500k	6.575M	12.944M	6.575M	12.944M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.517M	15.95M	16.542M
2437MHz	Pass	500k	16.3M	16.467M	16.325M	16.442M
2462MHz	Pass	500k	16.3M	16.442M	16.325M	16.442M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.75M	18.991M	18.925M	18.966M
2437MHz	Pass	500k	18.875M	18.941M	18.975M	18.991M
2462MHz	Pass	500k	18.825M	18.891M	18.75M	18.941M

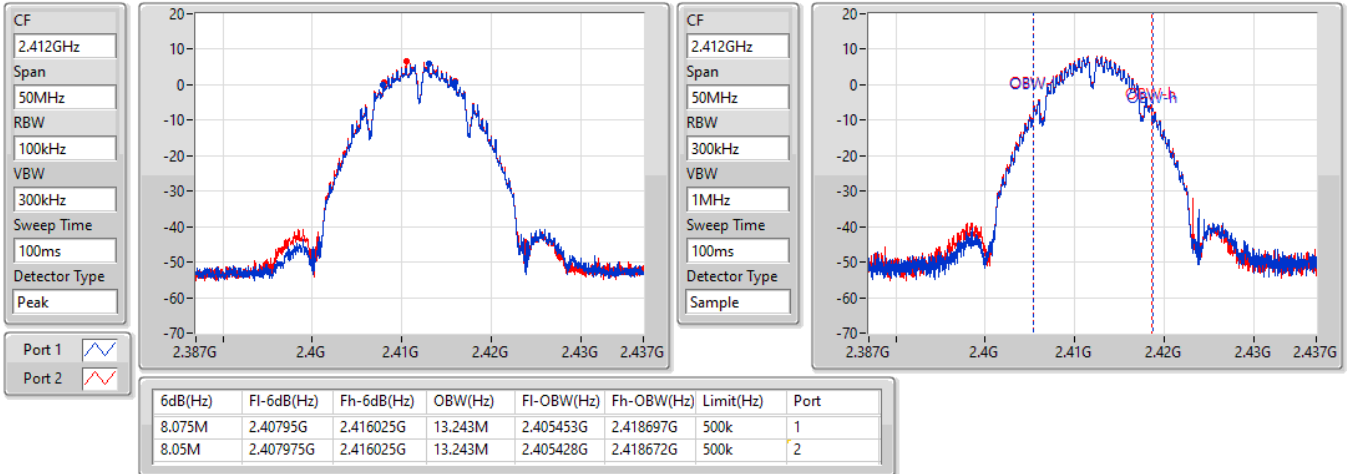
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_2TX

EBW

2412MHz

12/08/2021

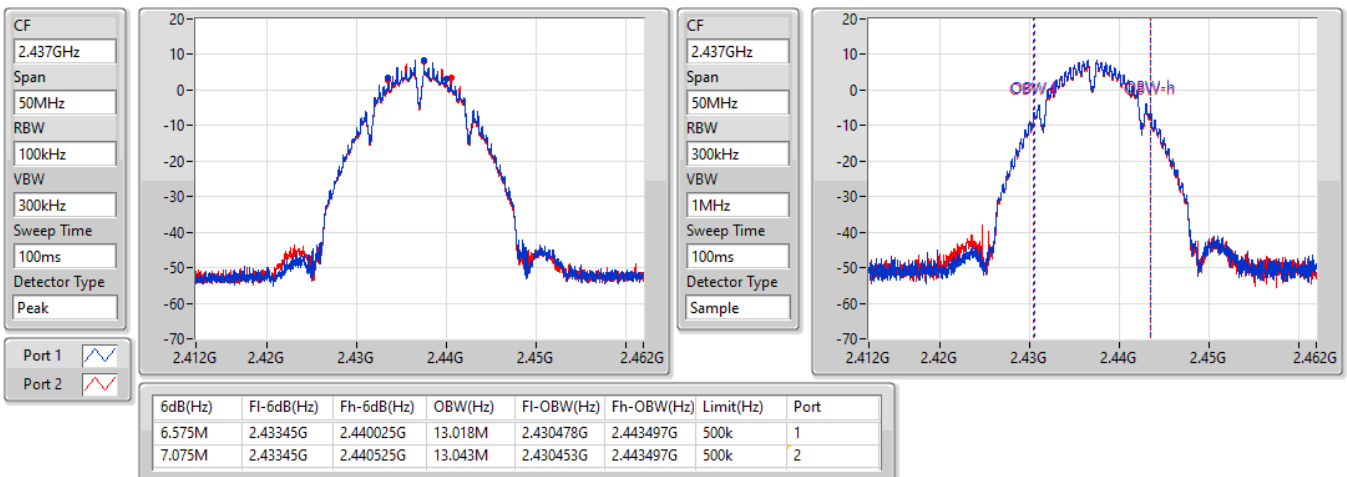


802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

12/08/2021

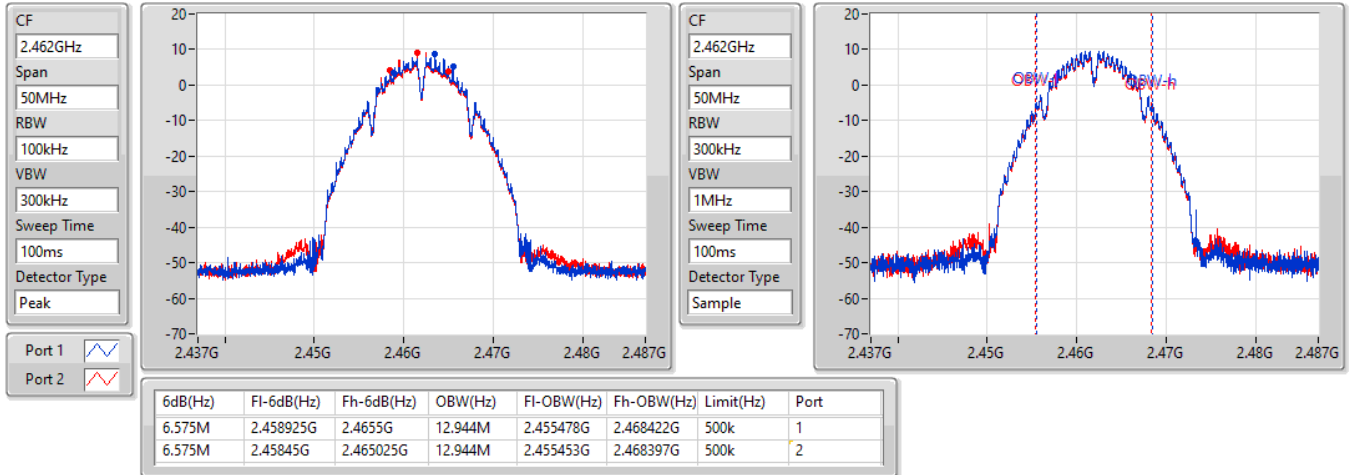


802.11b_Nss1,(1Mbps)_2TX

EBW

2462MHz

12/08/2021

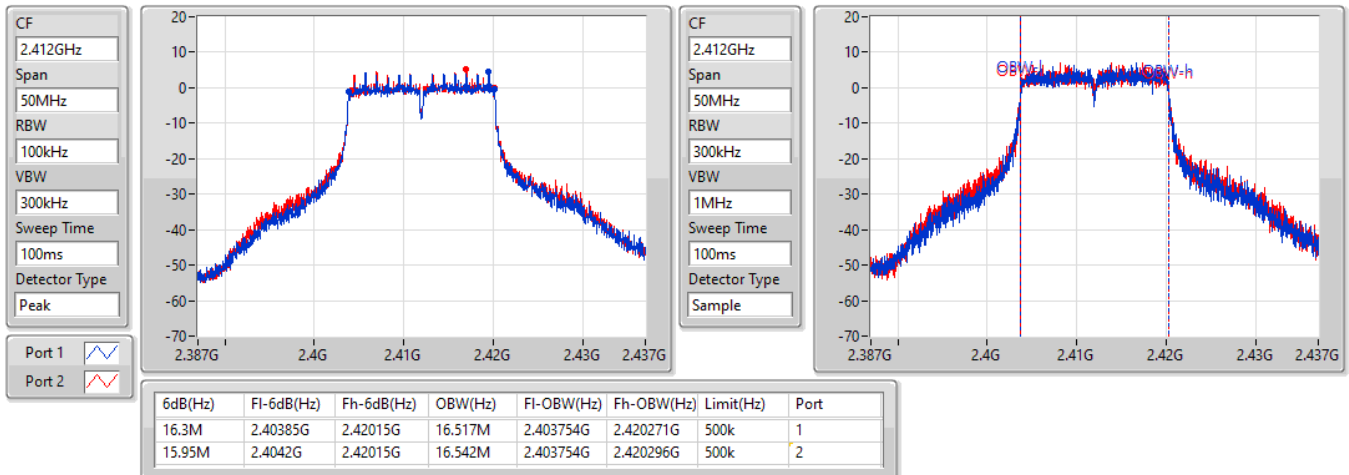


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

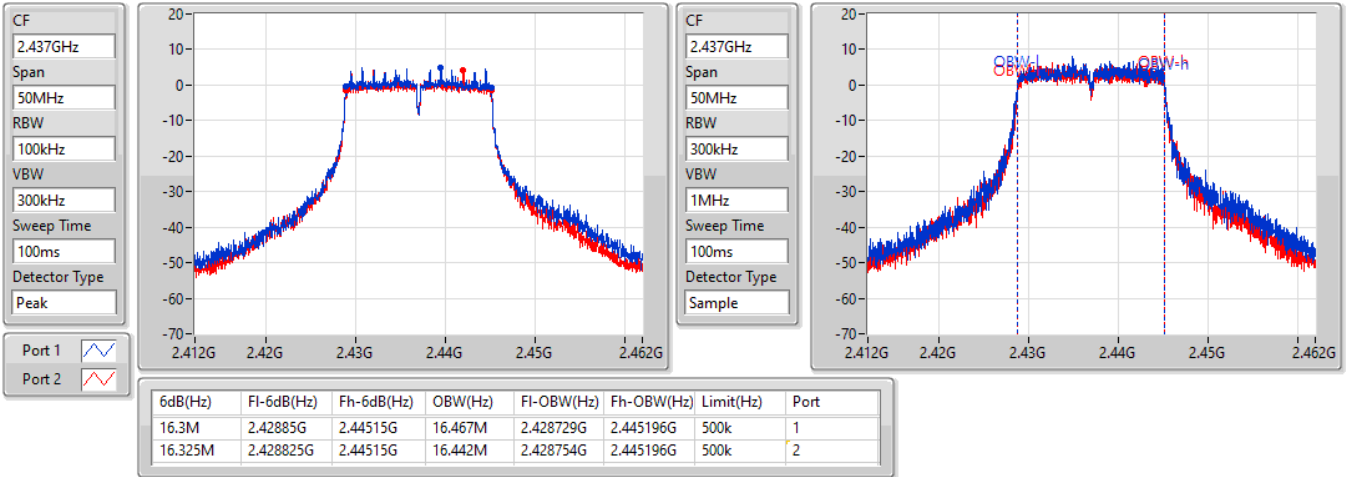
12/08/2021



802.11g_Nss1,(6Mbps)_2TX

2437MHz

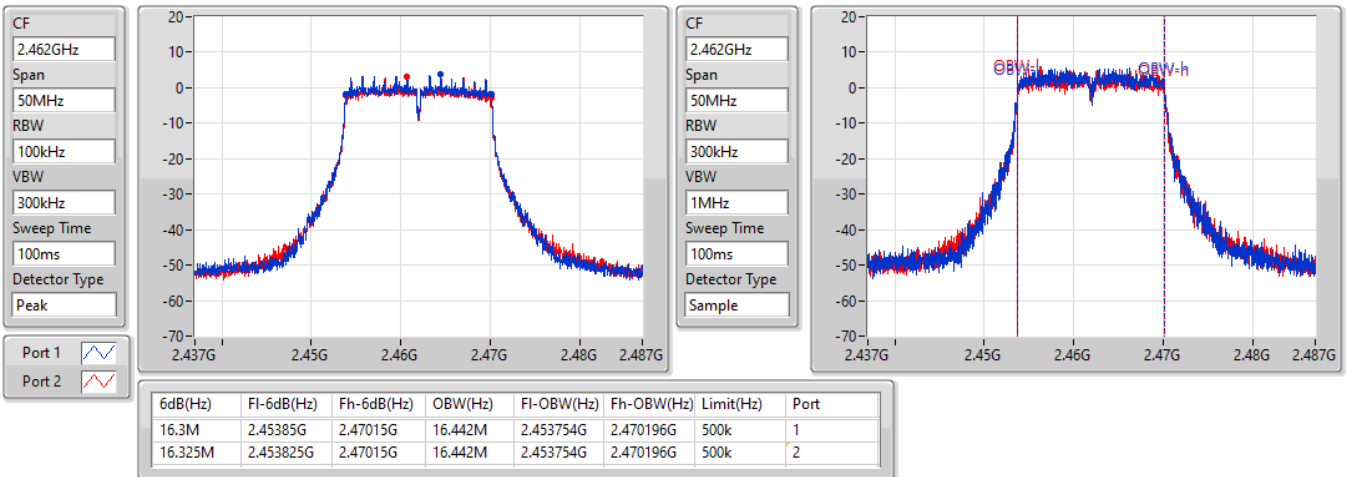
12/08/2021



802.11g_Nss1,(6Mbps)_2TX

2462MHz

12/08/2021

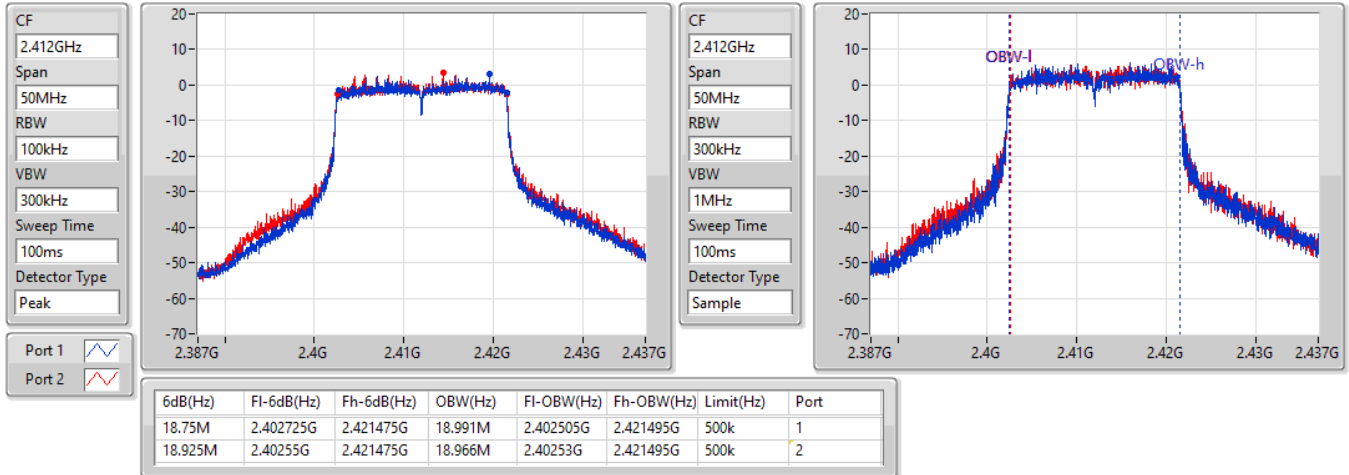


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2412MHz

12/08/2021

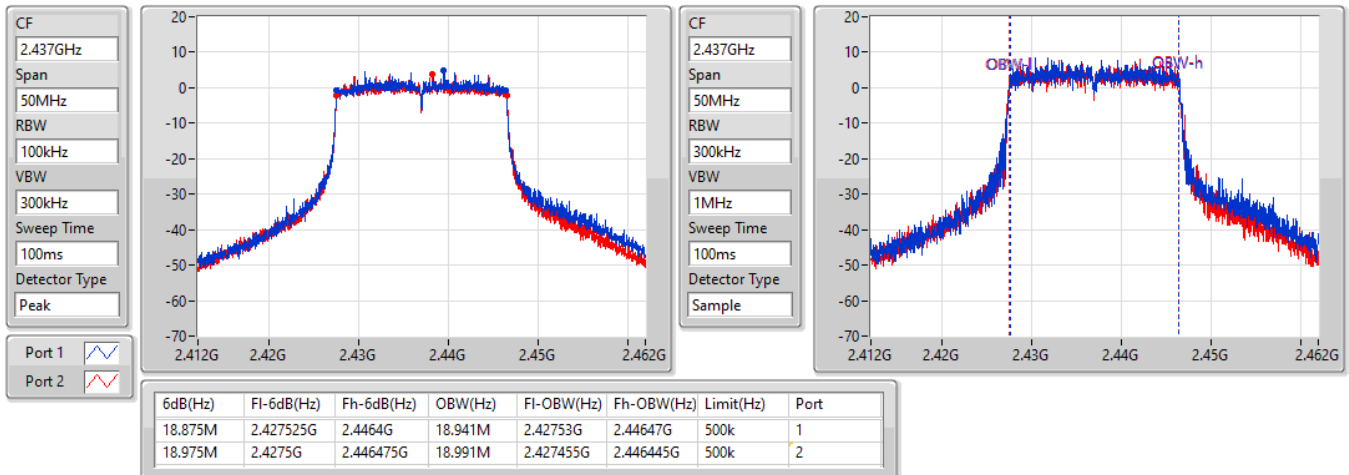


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

12/08/2021

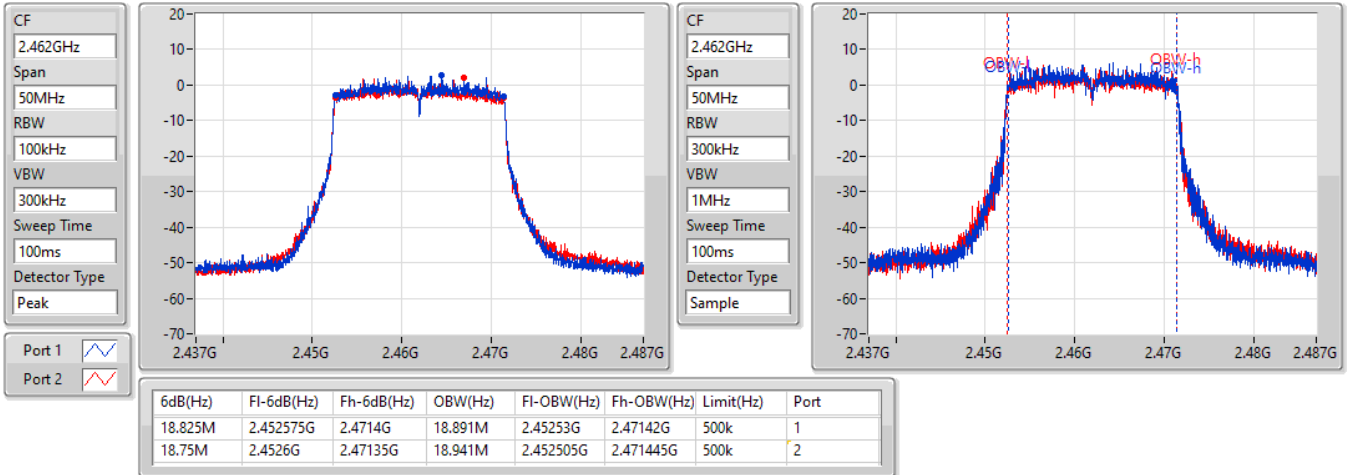


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2462MHz

12/08/2021



**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)_4TX	8.55M	13.243M	13M2G1D	6.55M	12.844M
802.11g_Nss1,(6Mbps)_4TX	16.325M	16.517M	16M5D1D	15.9M	16.417M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.95M	18.966M	19M0D1D	18.525M	18.841M

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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	6.975M	13.243M	8.55M	13.243M	7.025M	13.018M	6.55M	13.068M
2437MHz	Pass	500k	8.075M	13.018M	6.575M	13.043M	6.575M	12.994M	8.075M	12.844M
2462MHz	Pass	500k	8.025M	12.944M	6.575M	12.919M	8.05M	13.018M	7.05M	12.969M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.517M	16.3M	16.467M	16.325M	16.467M	16.325M	16.467M
2437MHz	Pass	500k	16.325M	16.517M	16.125M	16.442M	16.3M	16.492M	16.3M	16.417M
2462MHz	Pass	500k	16.325M	16.467M	15.9M	16.417M	16.3M	16.467M	16.275M	16.417M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.625M	18.916M	18.85M	18.966M	18.7M	18.916M	18.95M	18.916M
2437MHz	Pass	500k	18.925M	18.891M	18.8M	18.966M	18.7M	18.941M	18.55M	18.916M
2462MHz	Pass	500k	18.775M	18.841M	18.875M	18.941M	18.525M	18.891M	18.725M	18.891M

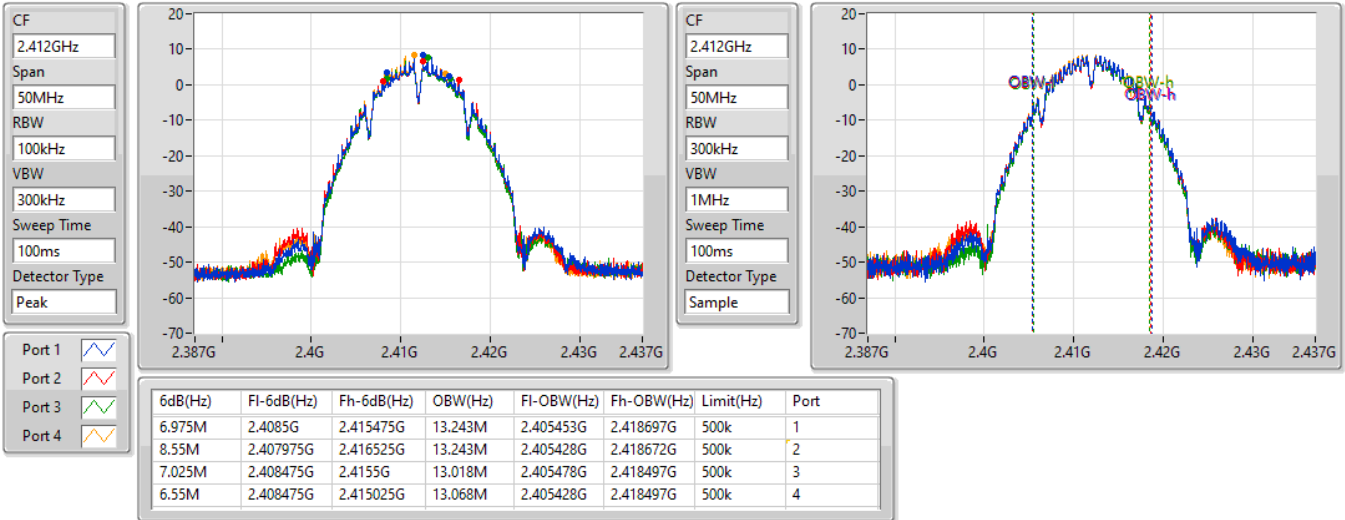
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_4TX

EBW

2412MHz

12/08/2021

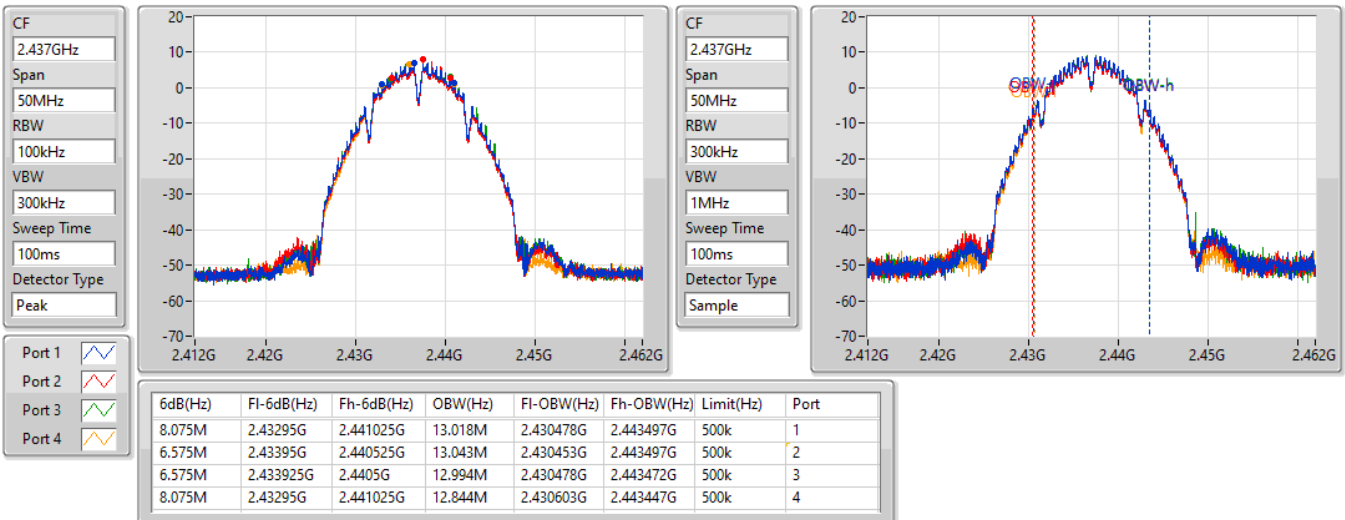


802.11b_Nss1,(1Mbps)_4TX

EBW

2437MHz

12/08/2021

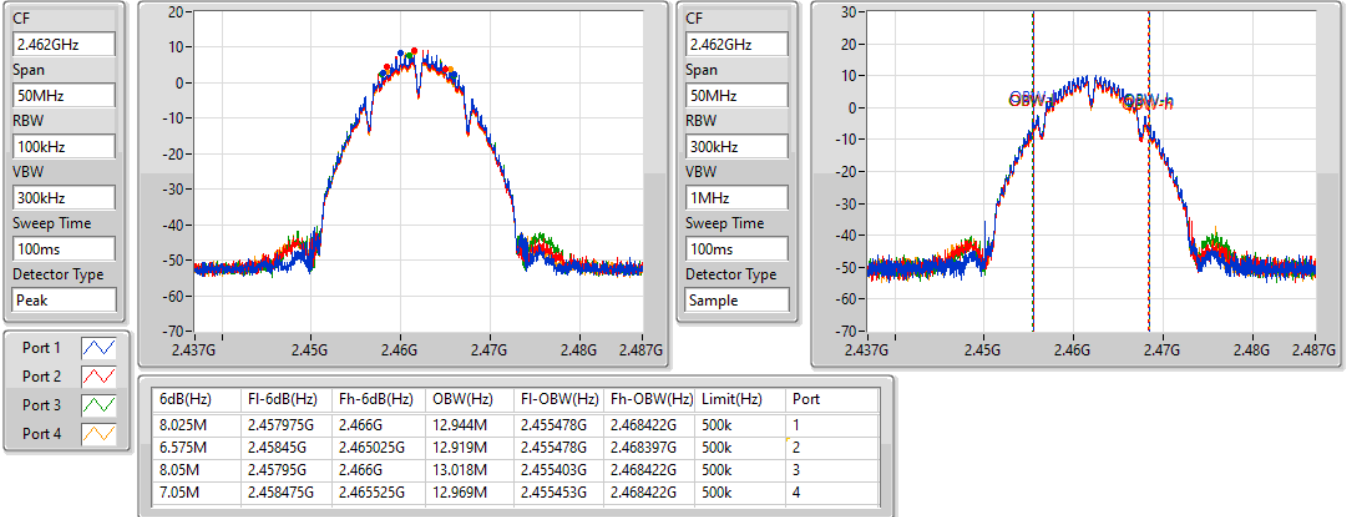


802.11b_Nss1,(1Mbps)_4TX

EBW

2462MHz

12/08/2021

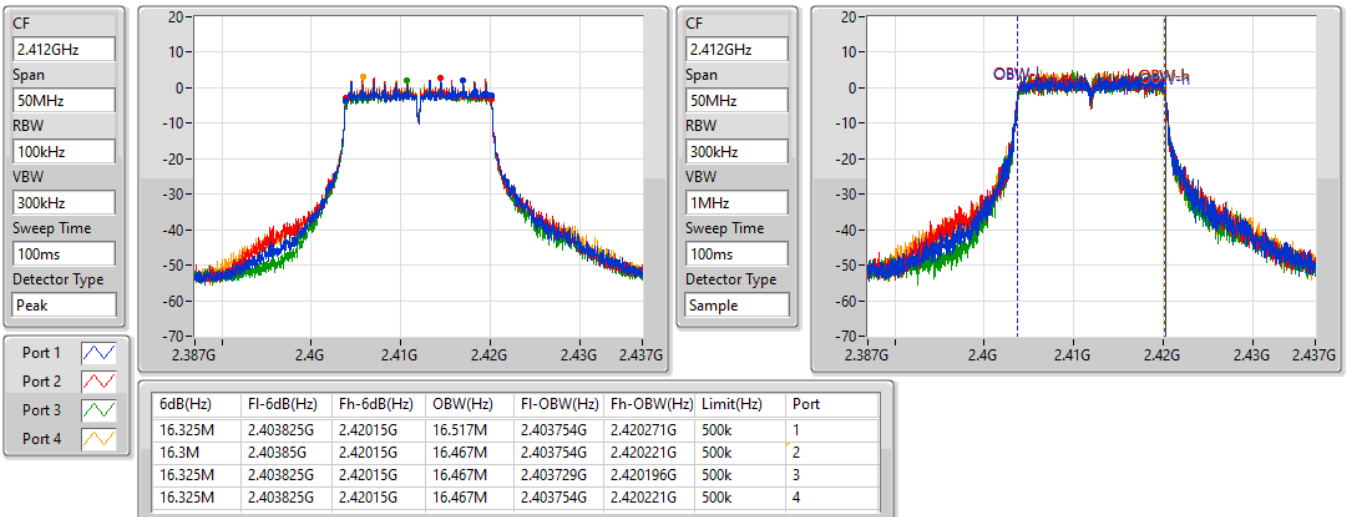


802.11g_Nss1,(6Mbps)_4TX

EBW

2412MHz

12/08/2021

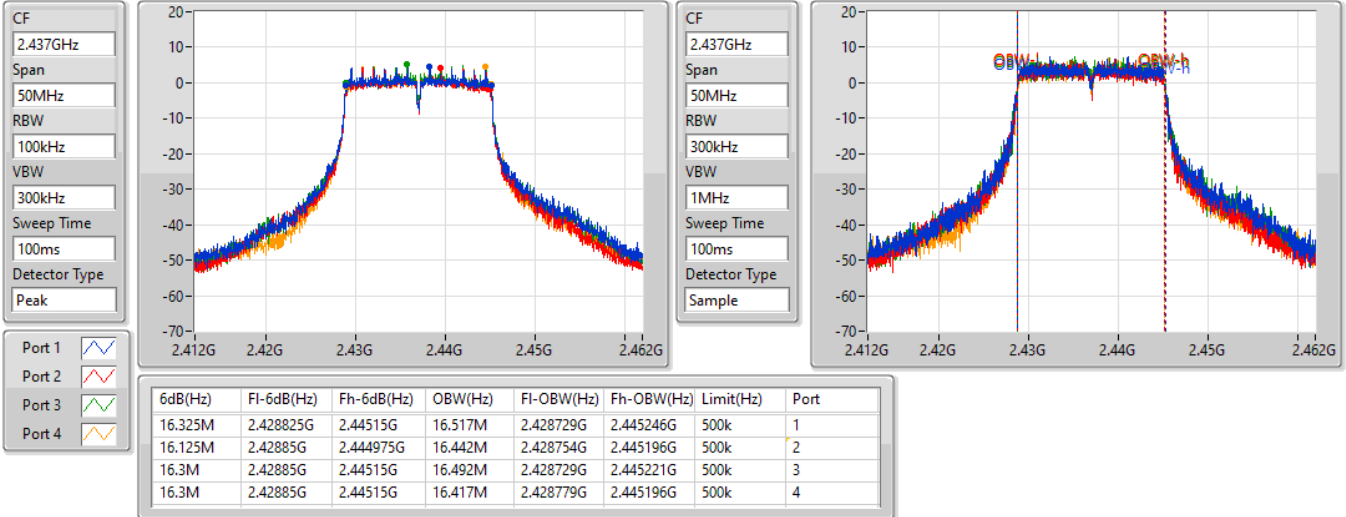


802.11g_Nss1,(6Mbps)_4TX

EBW

2437MHz

12/08/2021

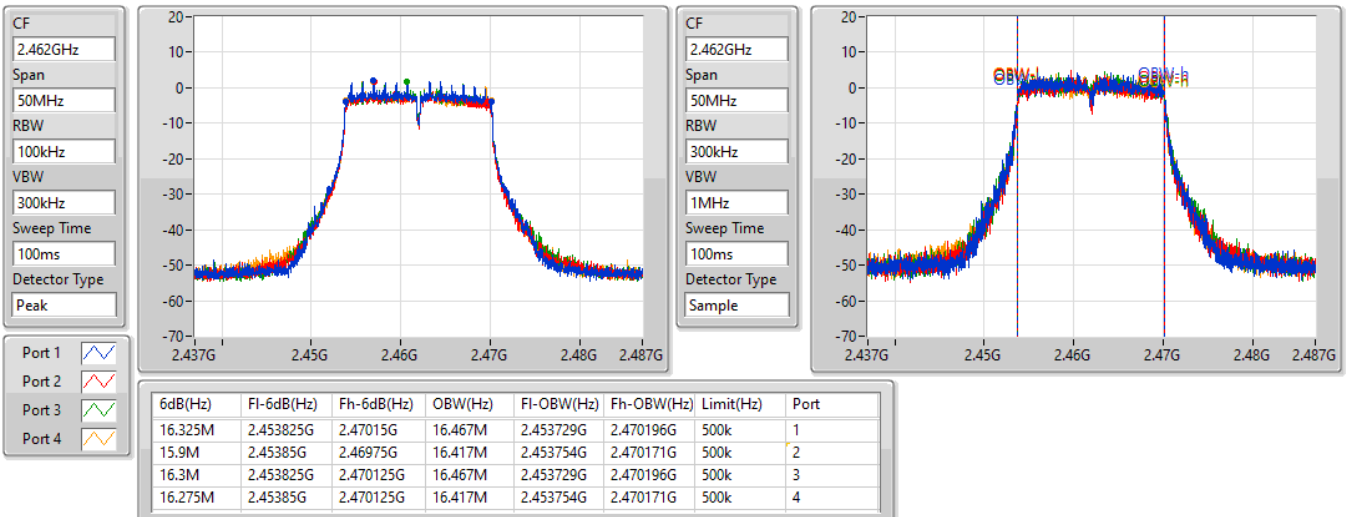


802.11g_Nss1,(6Mbps)_4TX

EBW

2462MHz

12/08/2021

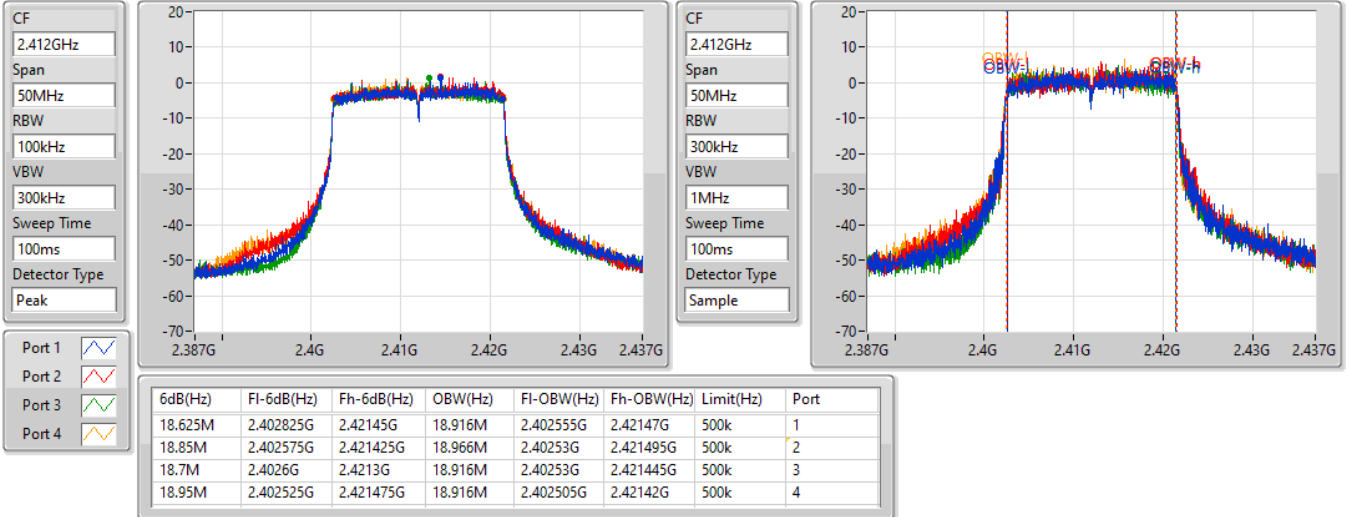


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

2412MHz

12/08/2021

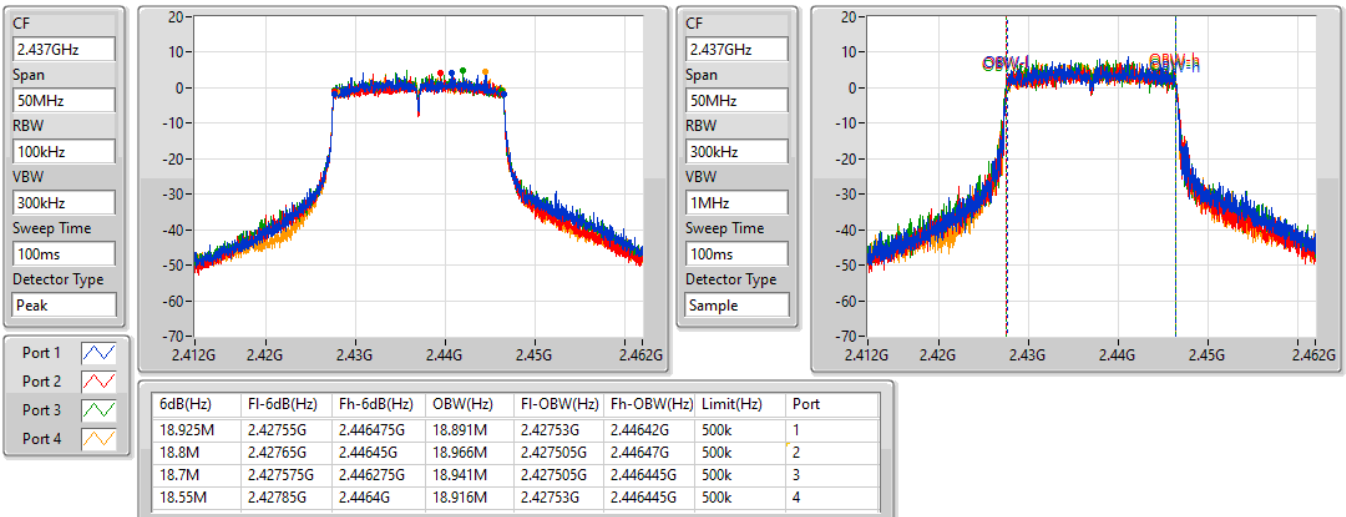


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

2437MHz

12/08/2021

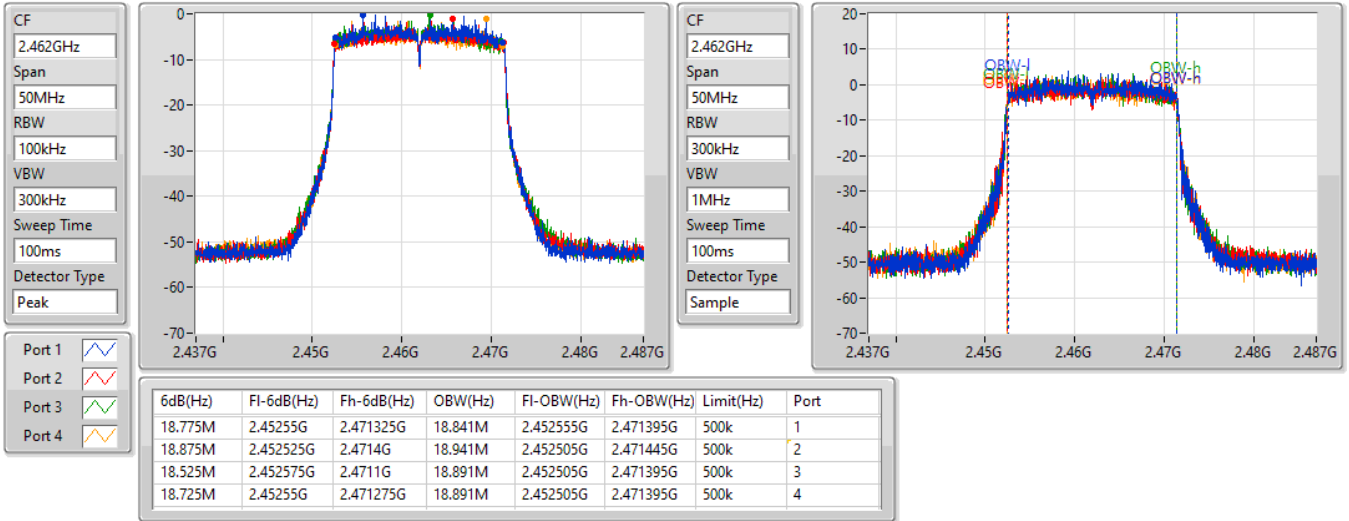


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

2462MHz

12/08/2021



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	8.075M	13.093M	13M1G1D	8.05M	13.043M
802.11g_Nss1,(6Mbps)_1TX	16.35M	16.617M	16M6D1D	16.325M	16.567M
802.11ax HEW20_Nss1,(MCS0)_1TX	19.05M	19.115M	19M1D1D	19M	19.04M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	8.05M	13.093M
2437MHz	Pass	500k	8.075M	13.093M
2462MHz	Pass	500k	8.075M	13.043M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.325M	16.617M
2437MHz	Pass	500k	16.35M	16.567M
2462MHz	Pass	500k	16.325M	16.617M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	19.025M	19.115M
2437MHz	Pass	500k	19M	19.115M
2462MHz	Pass	500k	19.05M	19.04M

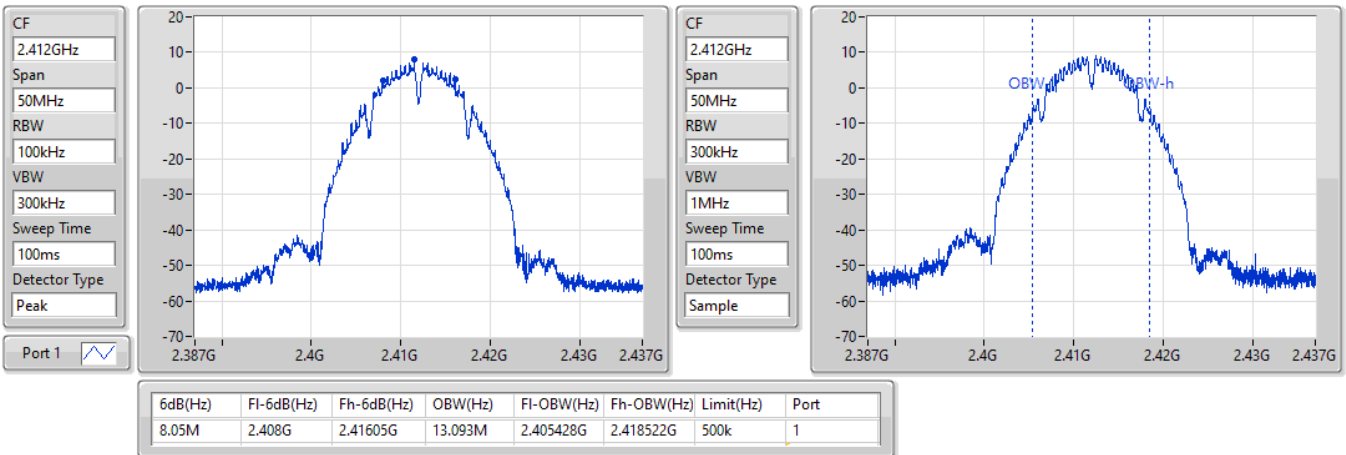
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

26/08/2021

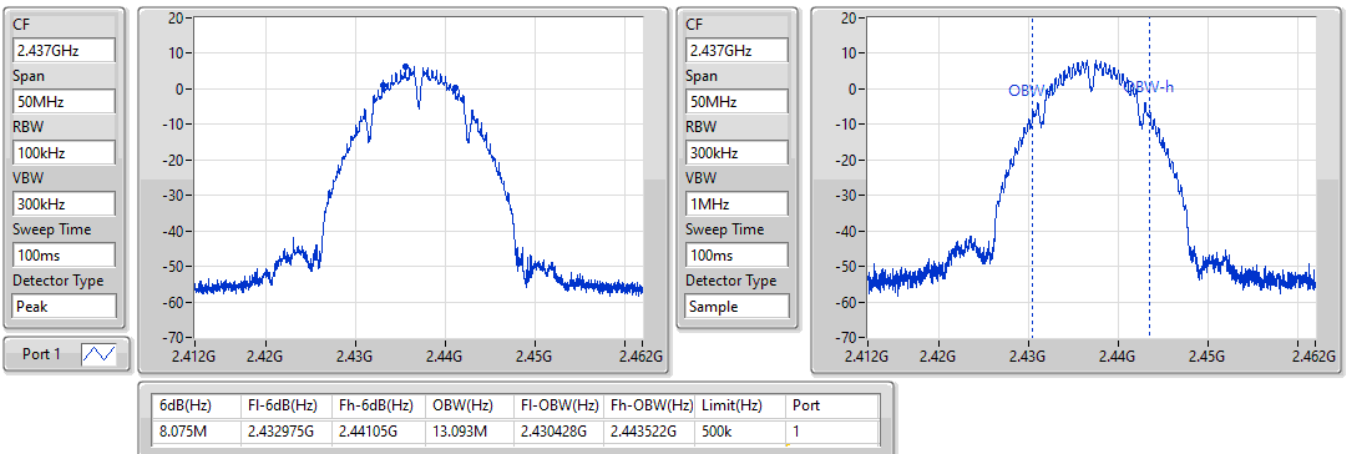


802.11b_Nss1,(1Mbps)_1TX

EBW

2437MHz

26/08/2021

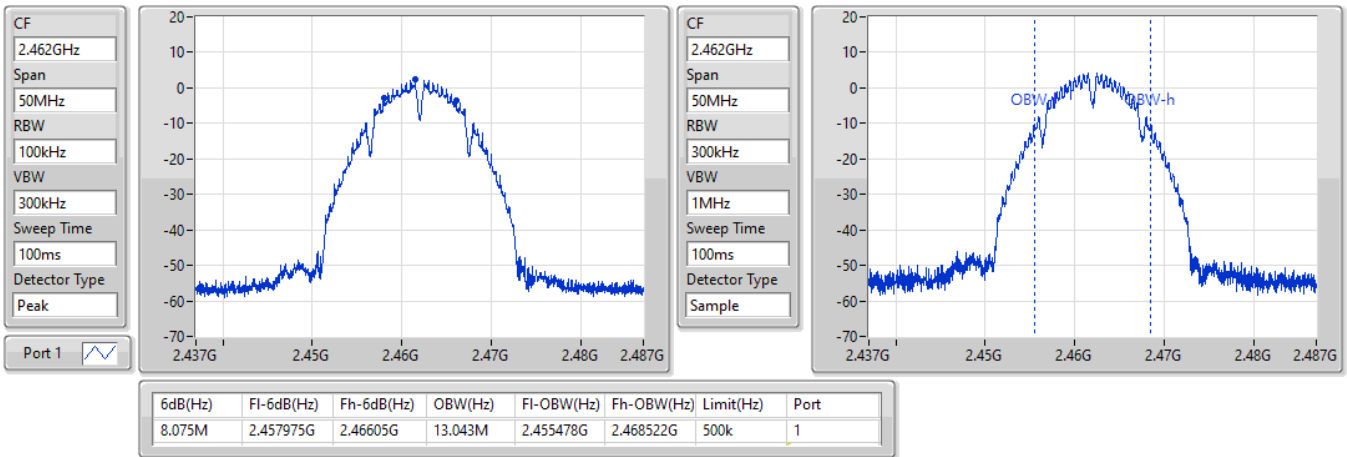


802.11b_Nss1,(1Mbps)_1TX

EBW

2462MHz

26/08/2021

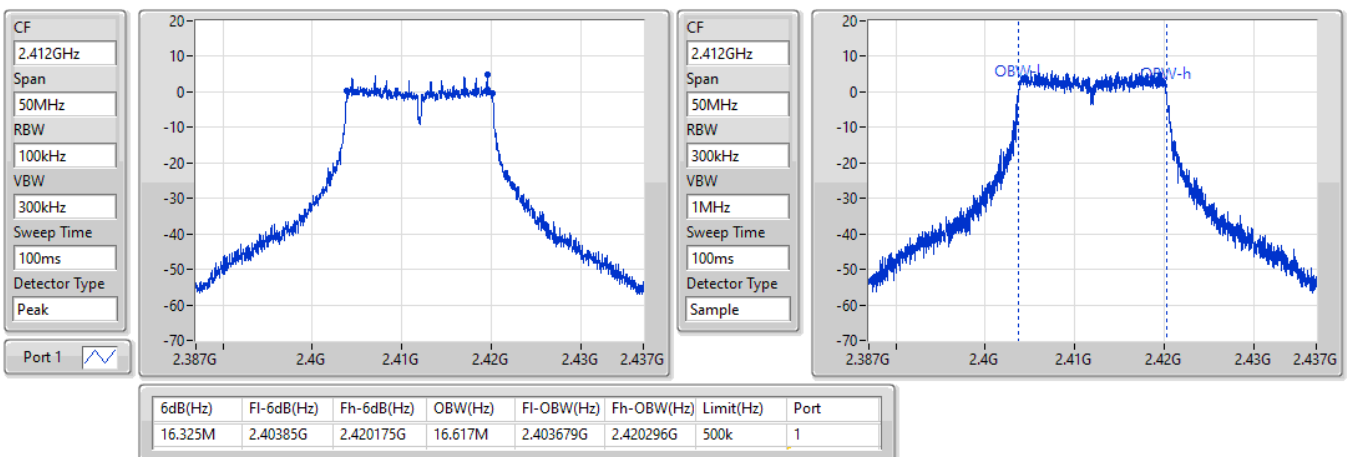


802.11g_Nss1,(6Mbps)_1TX

EBW

2412MHz

26/08/2021

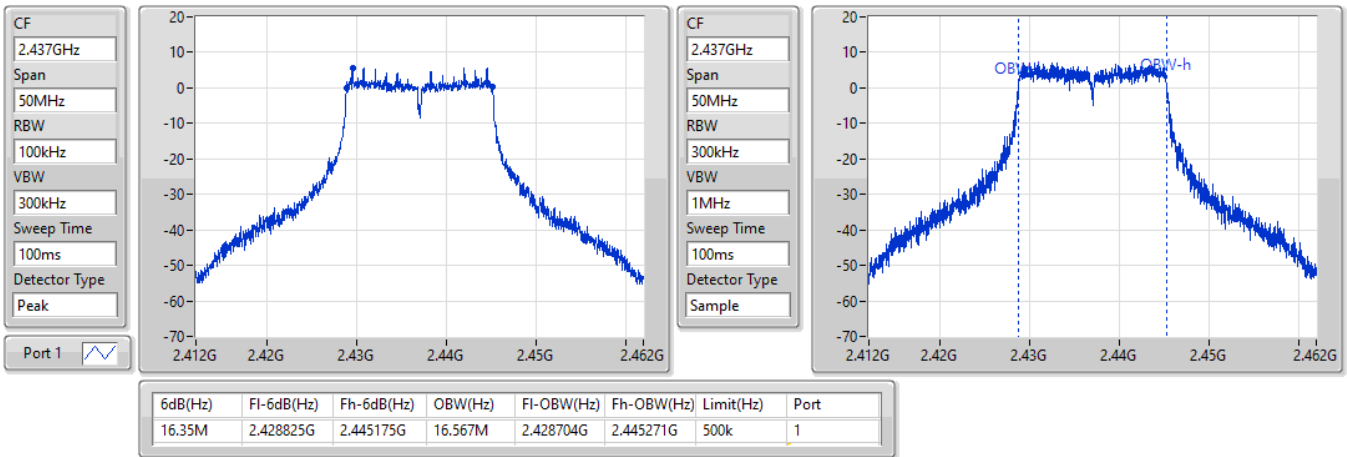


802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

26/08/2021

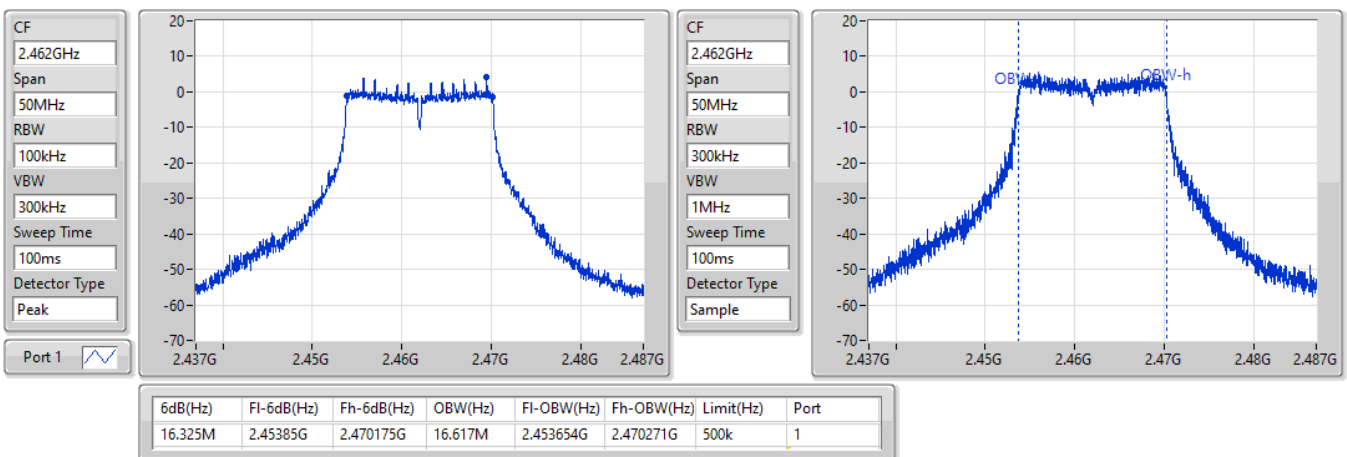


802.11g_Nss1,(6Mbps)_1TX

EBW

2462MHz

26/08/2021

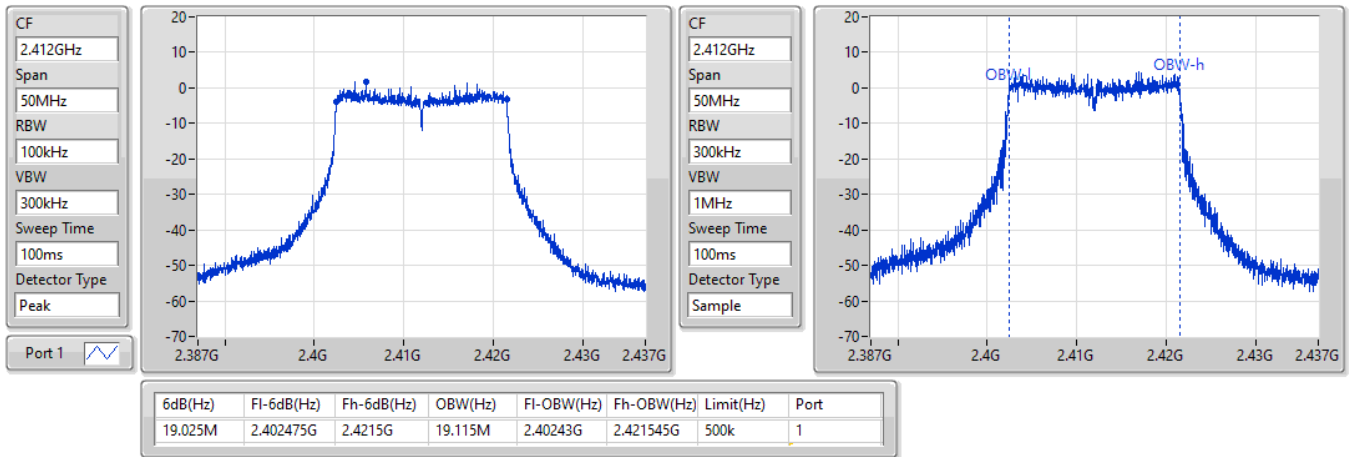


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2412MHz

26/08/2021

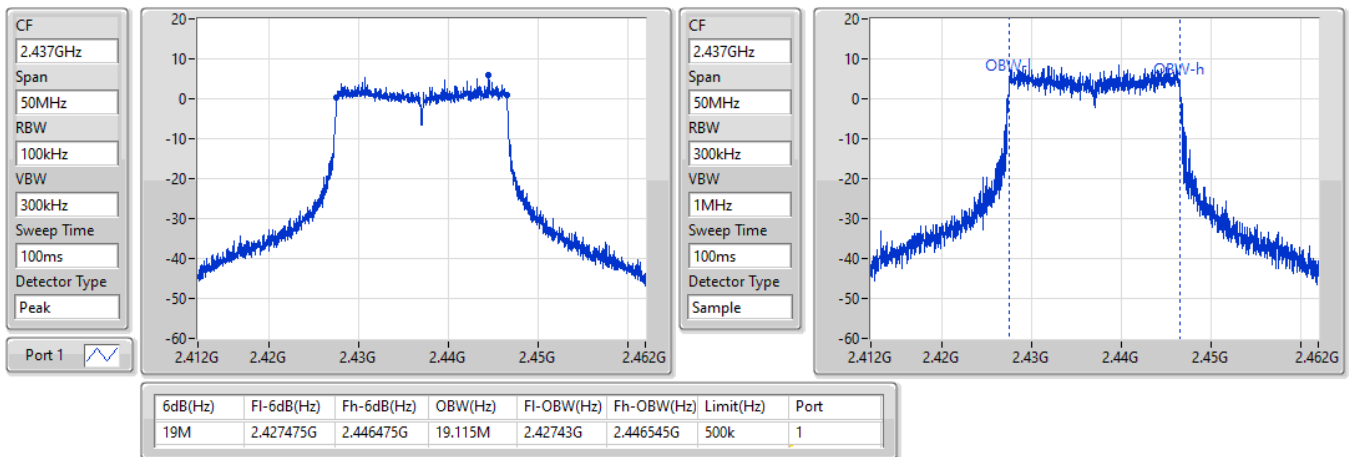


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2437MHz

26/08/2021

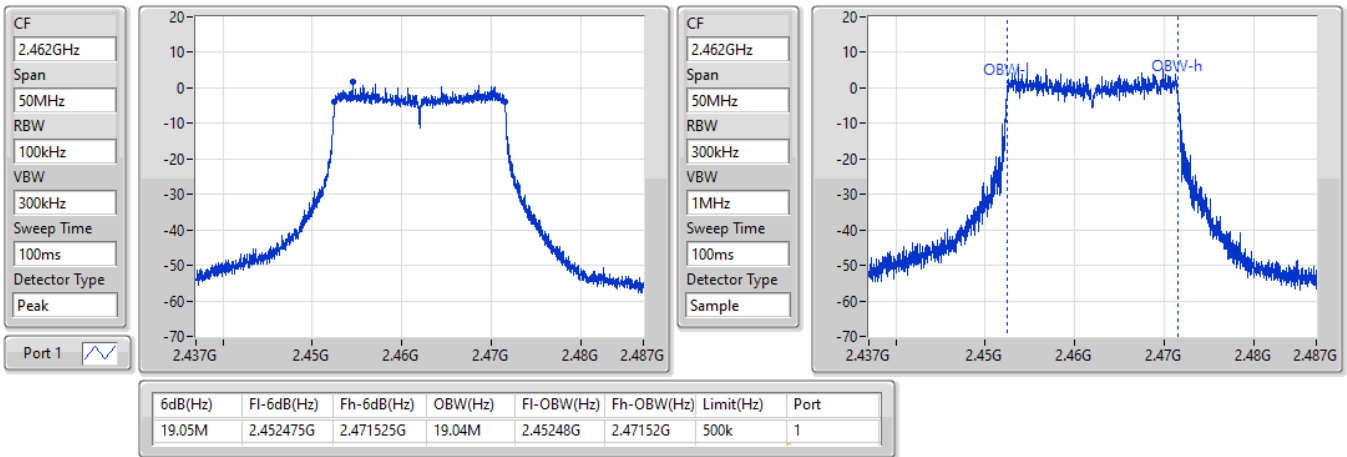


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2462MHz

26/08/2021



**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	8.575M	13.118M	13M1G1D	6.575M	13.068M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.617M	16M6D1D	16.325M	16.592M
802.11ax HEW20_Nss1,(MCS0)_2TX	19.025M	19.09M	19M1D1D	18.9M	19.04M

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

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.075M	13.118M	7M	13.068M
2437MHz	Pass	500k	8.55M	13.093M	8.575M	13.093M
2462MHz	Pass	500k	6.575M	13.093M	8.05M	13.068M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.592M	16.35M	16.617M
2437MHz	Pass	500k	16.325M	16.592M	16.325M	16.617M
2462MHz	Pass	500k	16.35M	16.617M	16.35M	16.592M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	19.025M	19.065M	18.975M	19.09M
2437MHz	Pass	500k	19.025M	19.04M	19.025M	19.065M
2462MHz	Pass	500k	19.025M	19.065M	18.9M	19.065M

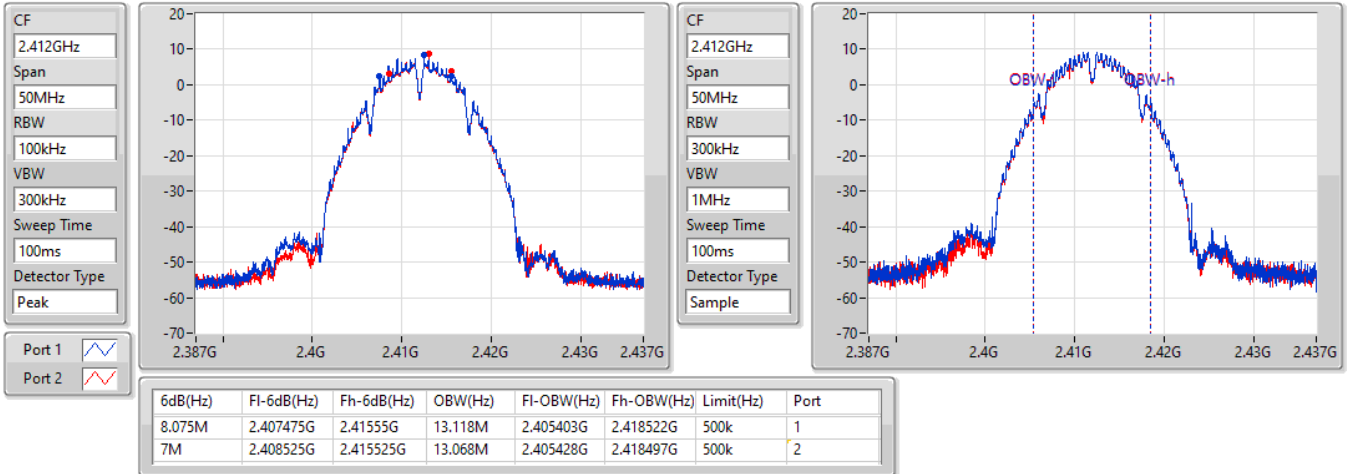
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_2TX

EBW

2412MHz

27/09/2021

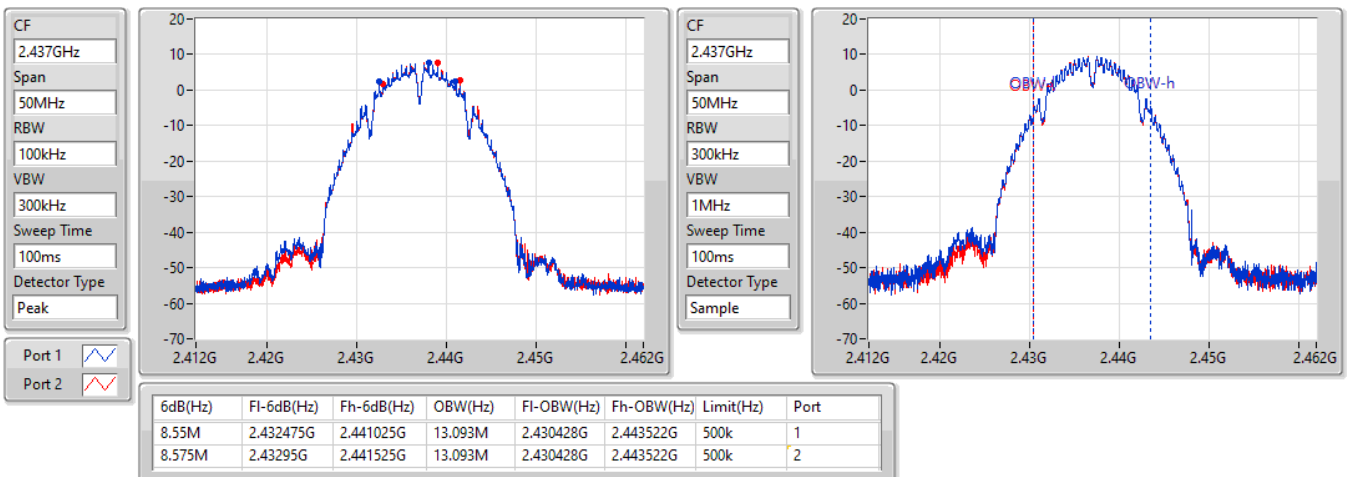


802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

27/09/2021

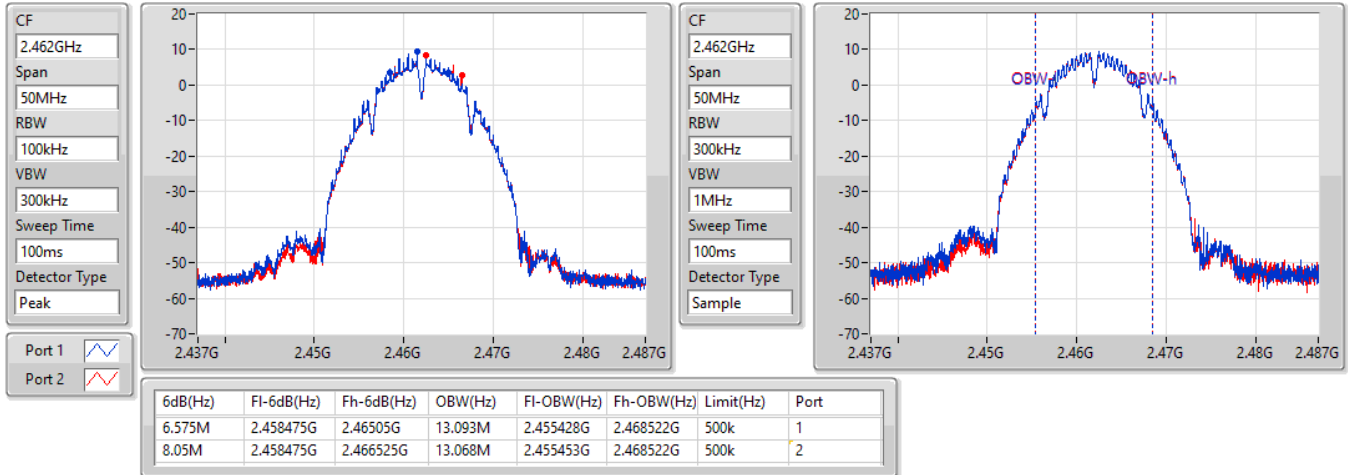


802.11b_Nss1,(1Mbps)_2TX

EBW

2462MHz

27/09/2021

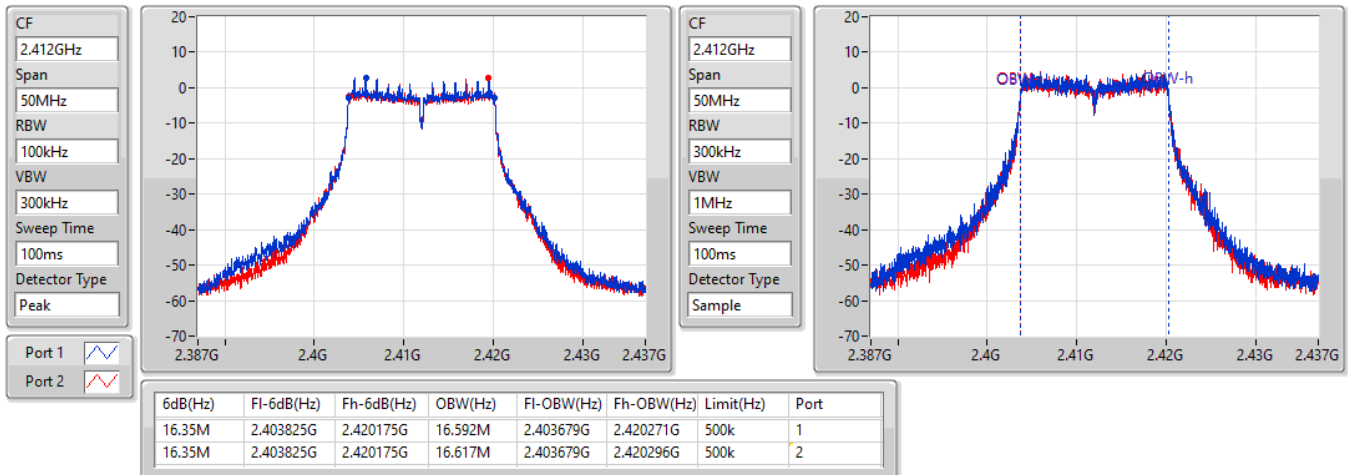


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

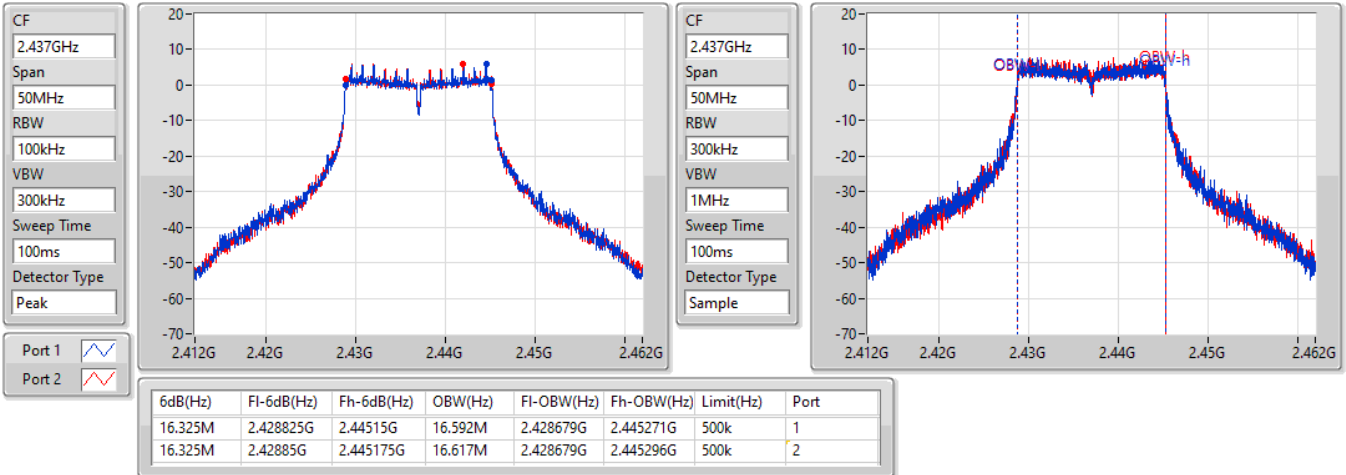
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802.11g_Nss1,(6Mbps)_2TX

2437MHz

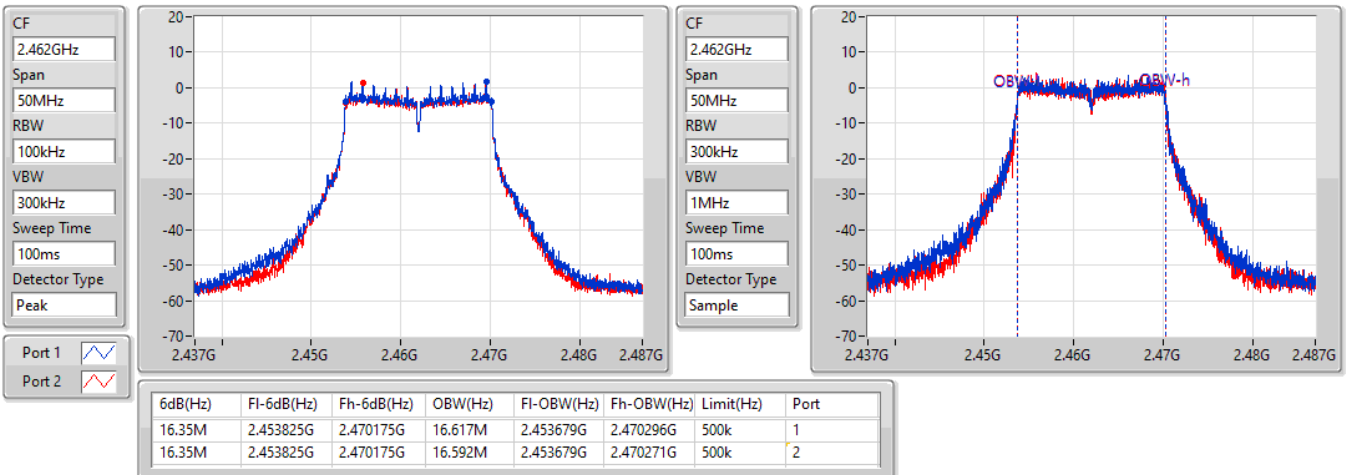
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802.11g_Nss1,(6Mbps)_2TX

2462MHz

26/08/2021

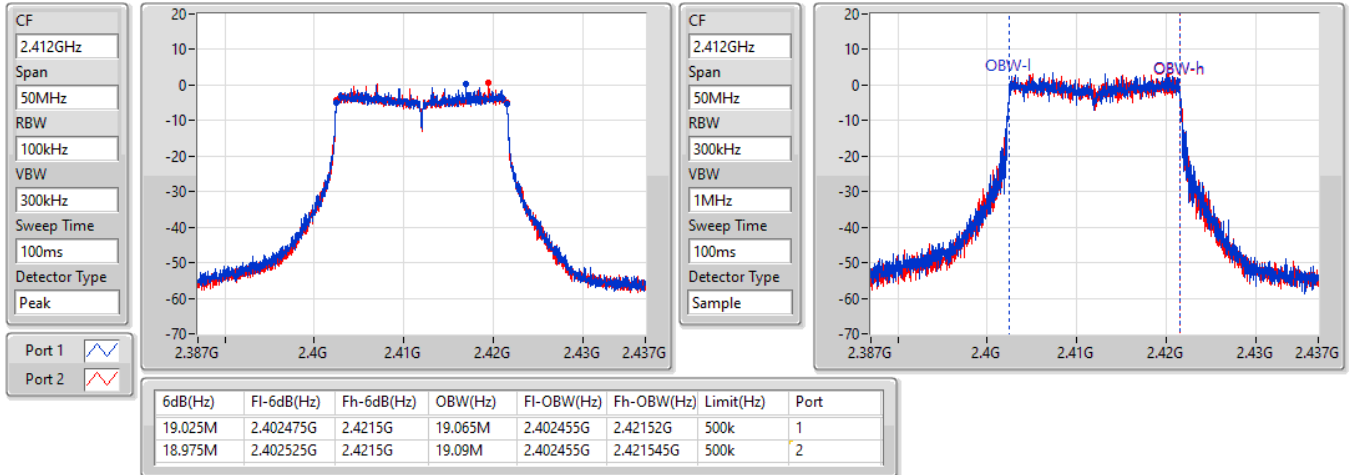


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2412MHz

26/08/2021

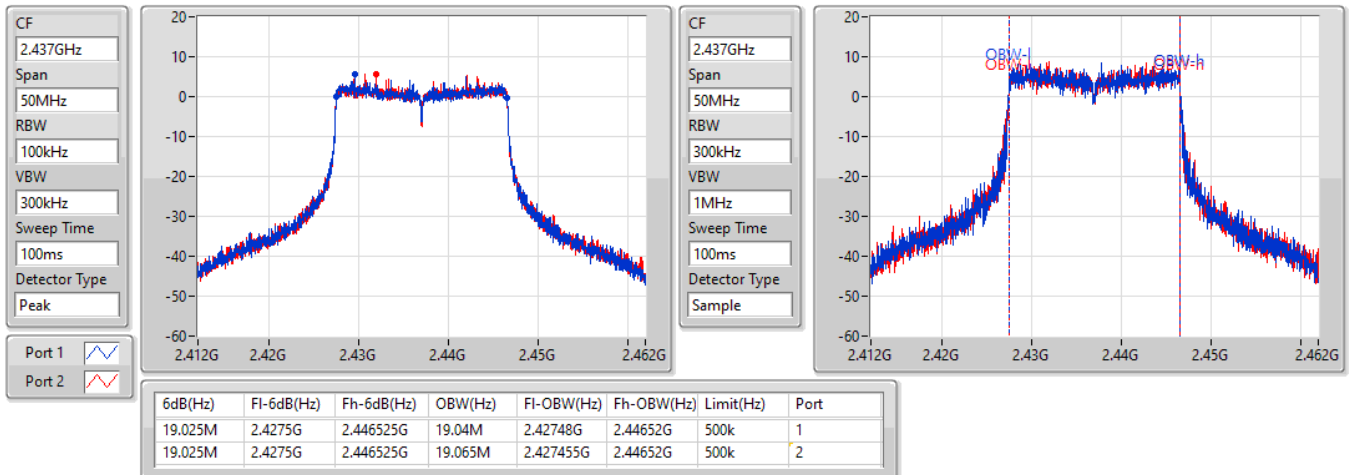


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

26/08/2021

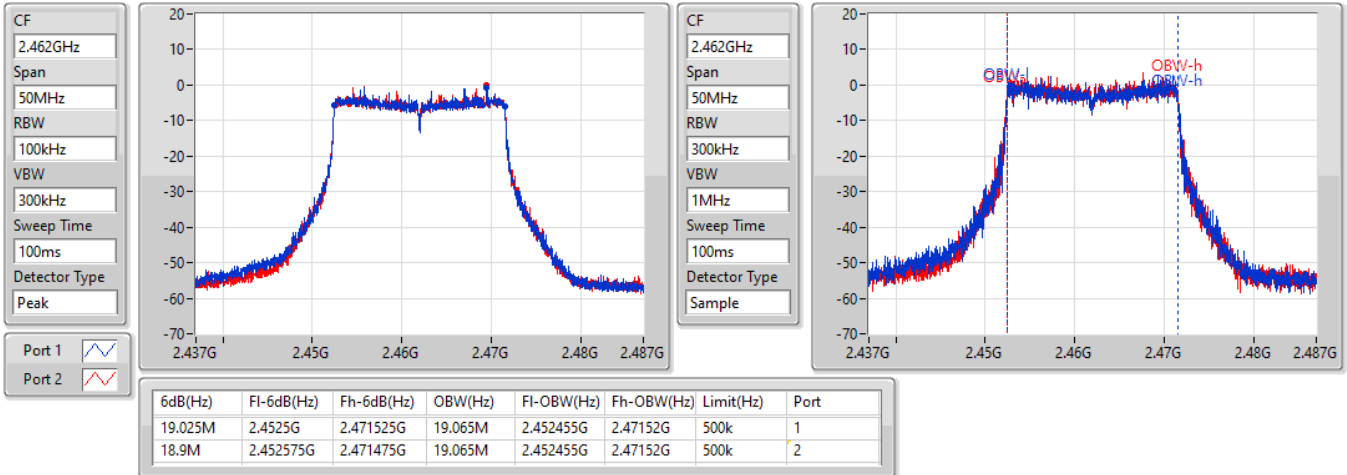


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2462MHz

26/08/2021





Average Power_Non-Beamforming_Serving Radio Primary_1T1S Appendix C.1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	17.45	0.05559
802.11g_Nss1,(6Mbps)_1TX	16.25	0.04217
802.11ax HEW20_Nss1,(MCS0)_1TX	16.32	0.04285



Average Power_Non-Beamforming_Serving Radio Primary_1T1S Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.00	15.79	15.79	30.00
2437MHz	Pass	4.00	16.41	16.41	30.00
2462MHz	Pass	4.00	17.45	17.45	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.00	15.59	15.59	30.00
2437MHz	Pass	4.00	16.10	16.10	30.00
2462MHz	Pass	4.00	16.25	16.25	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	4.00	15.77	15.77	30.00
2437MHz	Pass	4.00	16.32	16.32	30.00
2462MHz	Pass	4.00	15.41	15.41	30.00

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



Average Power_Non-Beamforming_Serving Radio Primary_2T1S Appendix C.2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	19.95	0.09886
802.11g_Nss1,(6Mbps)_2TX	18.77	0.07534
802.11ax HEW20_Nss1,(MCS0)_2TX	18.96	0.07870



Average Power_Non-Beamforming_Serving Radio Primary_2T1S Appendix C.2

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	15.54	15.85	18.71	30.00
2437MHz	Pass	4.00	16.19	15.65	18.94	30.00
2462MHz	Pass	4.00	17.17	16.70	19.95	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	15.49	15.74	18.63	30.00
2437MHz	Pass	4.00	16.02	15.48	18.77	30.00
2462MHz	Pass	4.00	15.00	14.50	17.77	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	14.76	15.14	17.96	30.00
2437MHz	Pass	4.00	16.19	15.69	18.96	30.00
2462MHz	Pass	4.00	14.20	13.69	16.96	30.00

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)_4TX	23.21	0.20941
802.11g_Nss1,(6Mbps)_4TX	22.09	0.16181
802.11ax HEW20_Nss1,(MCS0)_4TX	22.25	0.16788



Average Power_Non-Beamforming_Serving Radio Primary_4T1S Appendix C.3

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	16.00	16.03	15.71	16.24	22.02	30.00
2437MHz	Pass	4.00	16.68	15.92	16.76	16.18	22.42	30.00
2462MHz	Pass	4.00	17.79	16.84	17.41	16.63	23.21	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	13.77	14.01	13.57	14.23	19.92	30.00
2437MHz	Pass	4.00	16.14	15.58	16.45	16.08	22.09	30.00
2462MHz	Pass	4.00	13.37	12.72	12.97	12.80	18.99	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	12.92	13.34	12.68	13.39	19.11	30.00
2437MHz	Pass	4.00	16.30	15.75	16.54	16.29	22.25	30.00
2462MHz	Pass	4.00	11.45	10.86	11.21	10.86	17.12	30.00

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)_1TX	17.15	0.05188
802.11g_Nss1,(6Mbps)_1TX	17.05	0.05070
802.11ax HEW20_Nss1,(MCS0)_1TX	17.56	0.05702

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	6.00	17.15	17.15	30.00
2437MHz	Pass	6.00	16.29	16.29	30.00
2462MHz	Pass	6.00	12.43	12.43	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	6.00	15.93	15.93	30.00
2437MHz	Pass	6.00	17.05	17.05	30.00
2462MHz	Pass	6.00	15.11	15.11	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	6.00	13.59	13.59	30.00
2437MHz	Pass	6.00	17.56	17.56	30.00
2462MHz	Pass	6.00	13.59	13.59	30.00

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	20.42	0.11015
802.11g_Nss1,(6Mbps)_2TX	20.41	0.10990
802.11ax HEW20_Nss1,(MCS0)_2TX	20.73	0.11830

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.00	17.12	17.06	20.10	30.00
2437MHz	Pass	6.00	17.46	17.35	20.42	30.00
2462MHz	Pass	6.00	17.25	17.29	20.28	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.00	14.20	13.87	17.05	30.00
2437MHz	Pass	6.00	17.43	17.36	20.41	30.00
2462MHz	Pass	6.00	13.22	12.94	16.09	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.00	11.87	12.42	15.16	30.00
2437MHz	Pass	6.00	17.69	17.74	20.73	30.00
2462MHz	Pass	6.00	11.55	11.69	14.63	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	18.96	0.07870



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	7.01	14.76	15.14	17.96	28.99
2437MHz	Pass	7.01	16.19	15.69	18.96	28.99
2462MHz	Pass	7.01	14.20	13.69	16.96	28.99

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)_4TX	22.25	0.16788



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.02	12.92	13.34	12.68	13.39	19.11	25.98
2437MHz	Pass	10.02	16.30	15.75	16.54	16.29	22.25	25.98
2462MHz	Pass	10.02	11.45	10.86	11.21	10.86	17.12	25.98

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	20.73	0.11830



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	9.01	11.87	12.42	15.16	26.99
2437MHz	Pass	9.01	17.69	17.74	20.73	26.99
2462MHz	Pass	9.01	11.55	11.69	14.63	26.99

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	6.15
802.11g_Nss1,(6Mbps)_1TX	-10.39
802.11ax HEW20_Nss1,(MCS0)_1TX	-10.05

RBW = 3kHz;