




# FCC Test Report

**FCC ID** : QXO-AP360  
**Equipment** : Wireless Access Point  
**Brand Name** :  Extreme Networks  
**Model Name** : AP360i, AP360e  
**Applicant** : Extreme Networks, Inc.  
6480 Via Del Oro, San Jose, CA 95119, United States  
**Manufacturer** : Extreme Networks, Inc.  
6480 Via Del Oro, San Jose, CA 95119, United States  
**Standard** : 47 CFR FCC Part 15.247

The product was received on Nov. 27, 2019, and testing was started from Jan. 23, 2020 and completed on Mar. 07, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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



Approved by: Allen Lin

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**

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### History of this test report

Report No.	Version	Description	Issued Date
FR992618AC	01	Initial issue of report	Apr. 06, 2020



### 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	-

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and explanations:</b>
None

Reviewed by: Sam Tsai  
Report Producer: Ann Hou



# 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]

#### Non-Beamforming

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	VHT20	20	1TX
2.4-2.4835GHz	VHT40	40	1TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX
2.4-2.4835GHz	802.11ax HEW40	40	1TX
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	VHT20	20	2TX
2.4-2.4835GHz	VHT40	40	2TX
2.4-2.4835GHz	802.11ax HEW20	20	2TX
2.4-2.4835GHz	802.11ax HEW40	40	2TX

#### Beamforming

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	VHT20-BF	20	2TX
2.4-2.4835GHz	VHT40-BF	40	2TX
2.4-2.4835GHz	802.11ax HEW20-BF	20	2TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	2TX

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 modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ The resource unit of HEW 20, HEW 40 only support full loading.



1.1.2 Antenna Information

(AP360i) Internal Antenna

Ant.	Brand	Model Number (P/N)	Antenna Type	Connector	Antenna Gain (dBi)			Remark
					2.4GHz	5GHz	BLE/Thread	
1	Senao	5718A0490300	PIFA	IPEX	4.53	4.8	-	Radio 1
2	Senao	5718A0491300	PIFA	IPEX	4.3	5.09	-	Radio 1
3	Senao	5718A0492300	PIFA	IPEX	-	4.94	-	Radio 2
4	Senao	5718A0493300	PIFA	IPEX	-	5.1	-	Radio 2
5	Senao	5718A0494300	PIFA	IPEX	-	-	4.99	Radio 3

(AP360e) External Antenna

Group	Brand	Model Number (P/N)	Antenna Type	Connector	Antenna Gain (dBi)		
					2.4GHz	5GHz	BLE/Thread
1	Extreme	ML-2452-APA2-01	Omni	Reverse SMA	3.17	4.85	-
2	Extreme	ML-2452-HPA5-036	Omni	Reverse SMA	3.9	5.7	-
3	Extreme	ML-2452-HPAG4A6-01	Omni	N-type	4	7.3	-
4	Extreme	ML-2452-PTA4M4-036	Omni	Reverse SMA	5	6.6	-
5	Extreme	ML-2452-HPAG5A8-01	Omni	N-type	5	8	-
6	Extreme	30724 WS-AO-DQ04360N	Omni	N-type	5.5	6	-
7	Extreme	AI-DQ04360S	Omni	Reverse SMA	5.5	6	-
8	Extreme	ML-2452-PNA5-01R	Panel	N-type	4.5	5	-
9	Extreme	ML-2452-SEC6M4-036, WS-AI-DQ05120 (30702)	Panel	Reverse SMA	6.92	7.23	-
10	Extreme	30705 WS-AI-DE07025	Panel	Reverse SMA	7.5	6.5	-
11	Extreme	ML-2452-PNA7-01R	Panel 1	N-type	7.8	10.7	7.8
12	Extreme	30707 WS-AI-DE10055	Panel 2	Reverse SMA	10.5	7.5	-
13	Extreme	ML-2452-APA2-02	Omni	Reverse SMA	3.17	4.85	-
14	Extreme	ML-2499-HPA8-01	Dipole	N-type	-	-	8

Note 1: Group 5, 11 and 12 were measured during the test for WLAN 2.4G Mode.  
 Note 2: Group 11 and 14 were measured during the test for Bluetooth/Thread Mode.  
 Note 3: Group 5 and 11 were measured during the test for WLAN 5G Mode.



**For 2.4GHz function:**

For IEEE 802.11 b/g/n/ac/ax mode (1TX/1RX)  
 Only port 1 can be used as transmitting/receiving antenna.  
 For IEEE 802.11 b/g/n/ac/ax mode (2TX/2RX)  
 Port 1 and port 2 could transmit/receive simultaneously.

**For BT function:**

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)  
 Only port 1 can be used as transmitting/receiving antenna.

**For Thread function:**

For IEEE 802.15.4 Thread mode (1TX/1RX)  
 Only port 1 can be used as transmitting/receiving antenna.

**For 5GHz function:**

For IEEE 802.11 a/n/ac/ax mode (1TX/1RX)  
 Only port 1 can be used as transmitting/receiving antenna.  
 For IEEE 802.11 a/n/ac/ax mode (2TX/2RX)  
 Port 1 and port 2 could transmit/receive simultaneously.

**1.1.3 EUT Information**

Operational Condition				
<b>EUT Power Type</b>	From PoE			
<b>EUT Function</b>	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
<b>Beamforming Function</b>	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
Type of EUT				
<input checked="" type="checkbox"/>	Stand-alone			
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)			
	Combined Equipment - Brand Name / Model No.:		...	
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)			
	Host System - Brand Name / Model No.:		...	
<input type="checkbox"/>	Other:			

**1.1.4 Table for Multiple Listing**

Sample Number	Model Name	Description
1	AP360i	The "i" in AP360i indicates that it comes with internal antennas and
2	AP360e	the "e" in AP360e indicates that the access point comes with external antenna connectors.



### 1.1.5 Mode Test Duty Cycle

#### Non-Beamforming

##### Sample 1\_Radio 1\_1T1S & Sample 2\_Radio 1\_1T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_1TX	0.948	0.23	12.419m	100
802.11g_Nss1,(6Mbps)_1TX	0.951	0.22	2.066m	1k
VHT20_Nss1,(MCS0)_1TX	0.985	0.07	1.93m	10
VHT40_Nss1,(MCS0)_1TX	0.972	0.12	954.688u	3k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.98	0.09	1.489m	10
802.11ax HEW40_Nss1,(MCS0)_1TX	0.963	0.16	775u	3k

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

##### Sample 1\_Radio 1\_2T2S & Sample 2\_Radio 1\_2T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_2TX	0.948	0.23	12.419m	100
802.11g_Nss1,(6Mbps)_2TX	0.951	0.22	2.066m	1k
VHT20_Nss2,(MCS0)_2TX	0.973	0.12	990.625u	3k
VHT40_Nss2,(MCS0)_2TX	0.948	0.23	501.563u	3k
802.11ax HEW20_Nss2,(MCS0)_2TX	0.963	0.16	781.25u	3k
802.11ax HEW40_Nss2,(MCS0)_2TX	0.932	0.31	423.438u	3k

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

#### Beamforming

##### Sample 1\_Radio 1 & Sample 2\_Radio 1

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
VHT20-BF_Nss1,(MCS0)_2TX	0.881	0.55	2.186m	1k
VHT40-BF_Nss1,(MCS0)_2TX	0.907	0.42	2.798m	1k
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.842	0.75	1.503m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.862	0.64	4.381m	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
- ◆ KDB 558074 D01 v05r02
- ◆ KDB 662911 D01 v02r01
- ◆ KDB 414788 D01 v01r01

## 1.3 Testing Location Information

Testing Location		
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456      FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.		
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.) TEL : 886-3-656-9065      FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.		
<input type="checkbox"/>	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL : 886-3-318-0787      FAX : 886-3-318-0287
Test site Designation No. TW1097 with FCC.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward	20.3~21.9°C / 55~69%	07/Mar/2020
RF Conducted	TH01-HY	Barry	25.7~26.3°C / 60~66%	31/Jan/2020~ 25/Feb/2020
Radiated	03CH02-HY	Daniel	22.1~24.6°C / 40~55%	23/Jan/2020~ 26/Feb/2020

## 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 Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

### 2.2 Test Channel Mode

Test Software Version	accessMTool_REL_3_1_0_1 (Non-Beamforming)
	CMD (Beamforming)

#### Non-Beamforming

##### Sample 1\_Radio 1\_1T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	24.75
2437MHz	23.5
2457MHz	23
2462MHz	23
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	19.5
2417MHz	22
2437MHz	25
2457MHz	21.5
2462MHz	19.25
VHT20_Nss1,(MCS0)_1TX	-
2412MHz	20
2417MHz	21
2437MHz	24.25
2457MHz	20.75
2462MHz	18.5
VHT40_Nss1,(MCS0)_1TX	-
2422MHz	19.25
2427MHz	19.75
2437MHz	20
2447MHz	19.25
2452MHz	19
802.11ax HEW20_Nss1,(MCS0)_1TX	-
2412MHz	20
2417MHz	21
2437MHz	24.25
2457MHz	20.75
2462MHz	18.5



Mode	Power Setting
802.11ax HEW40_Nss1,(MCS0)_1TX	-
2422MHz	19.25
2427MHz	19.75
2437MHz	20
2447MHz	19.25
2452MHz	19

**Sample 1\_Radio 1\_2T2S**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	24.5
2437MHz	21.5
2457MHz	21.25
2462MHz	21.25
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	18.75
2417MHz	21.5
2437MHz	24.5
2457MHz	21
2462MHz	18.25
VHT20_Nss2,(MCS0)_2TX	-
2412MHz	19.25
2417MHz	20.25
2437MHz	23.25
2457MHz	19.75
2462MHz	17
VHT40_Nss2,(MCS0)_2TX	-
2422MHz	17.5
2427MHz	17.75
2437MHz	19
2447MHz	17.25
2452MHz	16.75
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	19.25
2417MHz	20.25
2437MHz	23.25
2457MHz	19.75
2462MHz	17
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	17.5
2427MHz	17.75
2437MHz	19
2447MHz	17.25
2452MHz	16.75



Sample 2\_Radio 1\_Omni\_1T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	23.5
2417MHz	24
2437MHz	25
2457MHz	24
2462MHz	23.5
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	18.5
2417MHz	21
2437MHz	24
2457MHz	20.75
2462MHz	18.5
VHT20_Nss1,(MCS0)_1TX	-
2412MHz	18.5
2417MHz	20.25
2437MHz	23
2457MHz	20.25
2462MHz	17
VHT40_Nss1,(MCS0)_1TX	-
2422MHz	18.5
2427MHz	18.75
2437MHz	19.5
2447MHz	18.5
2452MHz	18.25
802.11ax HEW20_Nss1,(MCS0)_1TX	-
2412MHz	18.5
2417MHz	20.25
2437MHz	23
2457MHz	20.25
2462MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
2422MHz	18.5
2427MHz	18.75
2437MHz	19.5
2447MHz	18.5
2452MHz	18.25



**Sample 2\_Radio 1\_Omni\_2T2S**

<b>Mode</b>	<b>Power Setting</b>
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	23
2417MHz	23.5
2437MHz	23.5
2457MHz	22.5
2462MHz	22.25
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	17.5
2417MHz	18.25
2437MHz	22.75
2457MHz	18.75
2462MHz	17.75
VHT20_Nss2,(MCS0)_2TX	-
2412MHz	18
2417MHz	18.75
2437MHz	22
2457MHz	19
2462MHz	17.5
VHT40_Nss2,(MCS0)_2TX	-
2422MHz	17
2427MHz	17.25
2437MHz	18.5
2447MHz	17.25
2452MHz	16.25
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	18
2417MHz	18.75
2437MHz	22
2457MHz	19
2462MHz	17.5
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	17
2427MHz	17.25
2437MHz	18.5
2447MHz	17.25
2452MHz	16.25



**Sample 2\_Radio 1\_Panel 1\_1T1S**

<b>Mode</b>	<b>Power Setting</b>
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	23.5
2417MHz	24
2437MHz	25
2457MHz	23.25
2462MHz	22.75
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	18.75
2417MHz	20.5
2437MHz	24
2457MHz	20.25
2462MHz	17.75
VHT20_Nss1,(MCS0)_1TX	-
2412MHz	19.25
2417MHz	20
2437MHz	23
2457MHz	18
2462MHz	16
VHT40_Nss1,(MCS0)_1TX	-
2422MHz	18
2427MHz	18.5
2437MHz	19.25
2447MHz	18
2452MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
2412MHz	19.25
2417MHz	20
2437MHz	23
2457MHz	19.5
2462MHz	16
802.11ax HEW40_Nss1,(MCS0)_1TX	-
2422MHz	18
2427MHz	18.5
2437MHz	19.25
2447MHz	18
2452MHz	17



Sample 2\_Radio 1\_Panel 1\_2T2S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	23.5
2437MHz	21.25
2462MHz	21.25
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	17.75
2417MHz	19.75
2437MHz	22.75
2457MHz	18.75
2462MHz	17.25
VHT20_Nss2,(MCS0)_2TX	-
2412MHz	18.25
2417MHz	19
2437MHz	21.5
2457MHz	18.75
2462MHz	17.75
VHT40_Nss2,(MCS0)_2TX	-
2422MHz	16.75
2427MHz	17
2437MHz	17.75
2447MHz	17
2452MHz	16.25
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	18.25
2417MHz	19
2437MHz	21.5
2457MHz	18.75
2462MHz	17.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	16.75
2427MHz	17
2437MHz	17.75
2447MHz	17
2452MHz	16.25



Sample 2\_Radio 1\_Panel 2\_1T1S

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	23.75
2437MHz	22.5
2462MHz	23.25
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	18.5
2417MHz	20.5
2437MHz	23.5
2457MHz	20
2462MHz	17.5
VHT20_Nss1,(MCS0)_1TX	-
2412MHz	17.75
2417MHz	20
2437MHz	22.5
2457MHz	19.5
2462MHz	15.75
VHT40_Nss1,(MCS0)_1TX	-
2422MHz	18.5
2427MHz	18.5
2437MHz	19
2447MHz	18
2452MHz	17.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-
2412MHz	17.75
2417MHz	20
2437MHz	22.5
2457MHz	19.5
2462MHz	15.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-
2422MHz	18.5
2427MHz	18.5
2437MHz	19
2447MHz	18
2452MHz	17.5





**Sample 2\_Radio 1\_Panel 2\_2T2S**

<b>Mode</b>	<b>Power Setting</b>
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	21.5
2437MHz	21.25
2462MHz	21.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	17.25
2417MHz	18
2437MHz	21.75
2457MHz	18
2462MHz	16.75
VHT20_Nss2,(MCS0)_2TX	-
2412MHz	17.75
2417MHz	18.5
2437MHz	21
2457MHz	18
2462MHz	16.75
VHT40_Nss2,(MCS0)_2TX	-
2422MHz	16.75
2427MHz	16.75
2437MHz	17.5
2447MHz	16.75
2452MHz	16.5
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	17.75
2417MHz	18.5
2437MHz	21
2457MHz	18
2462MHz	16.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	16.75
2427MHz	16.75
2437MHz	17.5
2447MHz	16.75
2452MHz	16.5



Beamforming  
Sample 1\_Radio 1

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	19
2437MHz	23
2457MHz	19
2462MHz	17
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16.5
2427MHz	17.25
2437MHz	18.25
2447MHz	17.25
2452MHz	16.75
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	19
2437MHz	23
2457MHz	19
2462MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16.5
2427MHz	17.25
2437MHz	18.25
2447MHz	17.25
2452MHz	16.75



Sample 2\_Radio 1\_Omni

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	15.75
2417MHz	16.5
2437MHz	20.75
2457MHz	18
2462MHz	15.5
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	15.75
2427MHz	16
2437MHz	16.75
2447MHz	15.25
2452MHz	14.75
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	15.75
2417MHz	16.5
2437MHz	20.75
2457MHz	18
2462MHz	15.5
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	15.75
2427MHz	16
2437MHz	16.75
2447MHz	15.25
2452MHz	14.75



Sample 2\_Radio 1\_Panel 1

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	17.25
2437MHz	21
2457MHz	16
2462MHz	14.5
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16.5
2427MHz	17
2437MHz	17.25
2447MHz	15.5
2452MHz	15
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	17.25
2437MHz	21
2457MHz	16
2462MHz	14.5
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16.5
2427MHz	17
2437MHz	17.25
2447MHz	15.5
2452MHz	15






Sample 2\_Radio 1\_Panel 2

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17.75
2417MHz	18.25
2437MHz	18.25
2457MHz	18.25
2462MHz	17
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	17.5
2427MHz	17.75
2437MHz	18
2447MHz	16.75
2452MHz	16.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17.75
2417MHz	18.25
2437MHz	18.25
2457MHz	18.25
2462MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	17.5
2427MHz	17.75
2437MHz	18
2447MHz	16.75
2452MHz	16.5

### 2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral
<b>Operating Mode</b>	CTX
1	PoE mode (Non-Beamforming_Sample 1_Radio1)
2	PoE mode (Non-Beamforming_Sample 2_Radio1)
3	PoE mode (Beamforming_Sample 1_Radio1)
4	PoE mode (Beamforming_Sample 2_Radio1)

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
<b>Test Condition</b>	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
<b>Tests Item</b>	Emissions in Restricted Frequency Bands		
<b>Test Condition</b>	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.		
<b>Operating Mode &lt; 1GHz</b>	CTX		
1	PoE mode (Non-Beamforming_Sample 1_Radio1_1T1S)		
2	PoE mode (Non-Beamforming_Sample 1_Radio1_2T2S)		
3	PoE mode (Non-Beamforming_Sample 2_Radio1_Omni_1T1S)		
4	PoE mode (Non-Beamforming_Sample 2_Radio1_Omni_2T2S)		
5	PoE mode (Non-Beamforming_Sample 2_Radio1_Panel 1_1T1S)		
6	PoE mode (Non-Beamforming_Sample 2_Radio1_Panel 1_2T2S)		
7	PoE mode (Non-Beamforming_Sample 2_Radio1_Panel 2_1T1S)		
8	PoE mode (Non-Beamforming_Sample 2_Radio1_Panel 2_2T2S)		
9	PoE mode (Beamforming_Sample 1_Radio1)		
10	PoE mode (Beamforming_Sample 2_Radio1_Omni)		
11	PoE mode (Beamforming_Sample 2_Radio1_Panel 1)		
12	PoE mode (Beamforming_Sample 2_Radio1_Panel 2)		
<b>Operating Mode &gt; 1GHz</b>	CTX		
<b>Orthogonal Planes of EUT</b>	<b>X Plane</b>	<b>Y Plane</b>	<b>Z Plane</b>
			
<b>Worst Planes of EUT</b>	V (Sample 1, Sample 2_Omni, Sample 2_Panel 1)		V (Sample 2_Panel 2)



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	Radio 1(WLAN 2.4GHz)+Radio 2(WLAN 5GHz)+Bluetooth
2	Radio 1(WLAN 2.4GHz)+Radio 2(WLAN 5GHz)+Thread
3	Radio 1(WLAN 5GHz)+Radio 2(WLAN 5GHz)+Bluetooth
4	Radio 1(WLAN 5GHz)+Radio 2(WLAN 5GHz)+Thread
Refer to Sporton Test Report No.: FA992618 for Co-location RF Exposure Evaluation.	

## 2.4 Support Equipment

Support Equipment – AC Conduction (Non- Beamforming)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 Cable	Power Sync	CAT-6E-10	-	-
2	PoE	EnGenius	EPA5006GP	-	-
3	AC Power Cable	Power sync	PW-GPC180-3	-	-

Note 1: Support equipment No. 2 was provided by customer.

Support Equipment – AC Conduction (Beamforming)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 Cable	Power Sync	CAT-6E-01	-	-
2	PoE	EnGenius	EPA5006GP	-	-
3	AC Power Cable	Power sync	PW-GPC180-3	-	-
4	PoE	EnGenius	EPA5006GP	-	Remote
5	AC Power Cable	-	-	-	Remote
6	Notebook	Dell	PP13S	-	Remote
7	RJ45 Cable	Power Sync	CAT-6E-01	-	Remote
8	Adapter for NB	Dell	AA90PM111	-	Remote
9	AC Power Cable for NB	Power sync	PW-GPC180-3	-	Remote

Note 1: Support equipment No. 2, 4, 5 was provided by customer.



Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	PP13S	DoC	-
2	Adapter for NB	DELL	AA90PM111	DoC	-
3	Notebook	DELL	PP13S	DoC	-
4	Adapter for NB	DELL	AA90PM111	DoC	-
5	PoE	EnGenius	EPA5006GP	-	Note 1

Note 1: Support equipment No. 5 was provided by customer.

Support Equipment – Radiated (Non- Beamforming)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
4	RJ45 Cable	Power Sync	CAT-6E-10	-	-

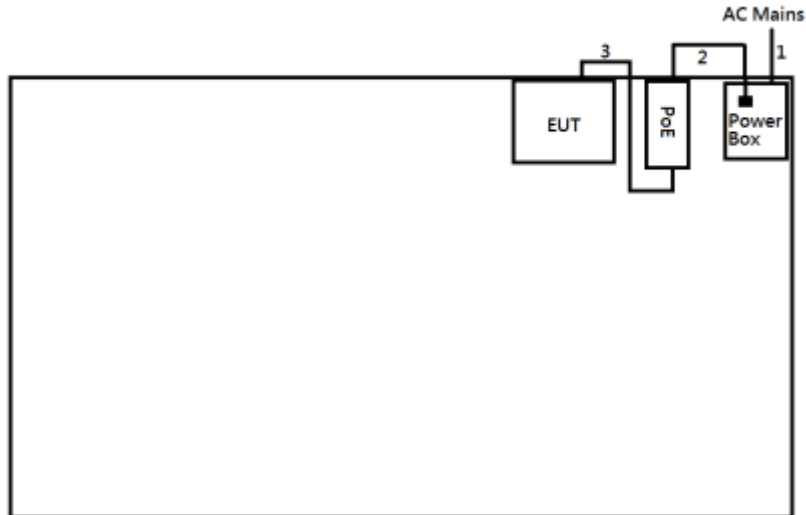
Support Equipment – Radiated (Beamforming)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 Cable	Power Sync	CAT-6E-10	-	-
2	PoE	EnGenius	EPA5006GP	-	Remote
3	PoE	EnGenius	EPA5006GP	-	Remote
4	AC Power Cable	-	-	-	Remote
5	Notebook	Dell	PP13S	-	Remote
6	RJ45 Cable	Power Sync	CAT-6E-01	-	Remote
7	Adapter for NB	Dell	AA90PM111	-	Remote

Note 1: Support equipment No. 2, 3, 4 was provided by customer.



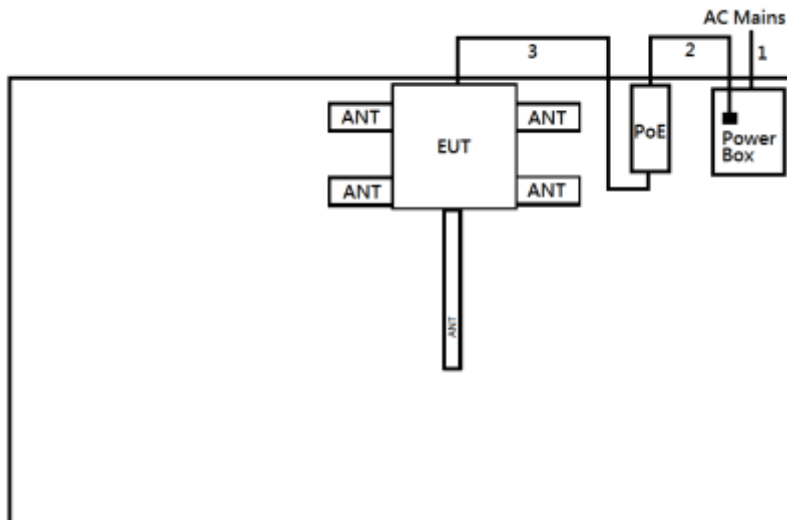
## 2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (Sample 1)



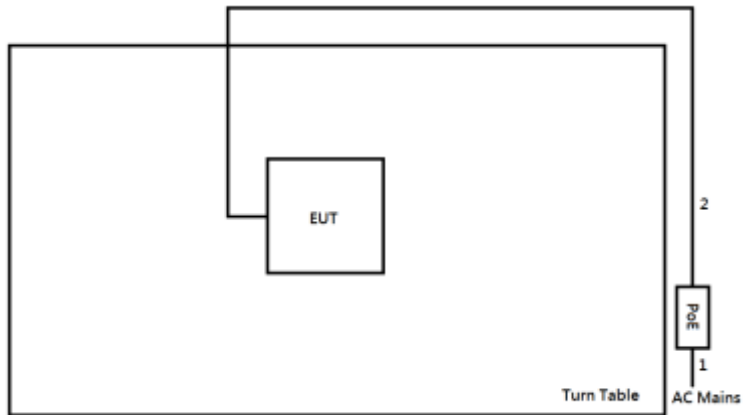
Item	Connection	Shielded	Length(m)
1	AC Power Cable	No	1.5
2	AC Power Cable	No	0.5
3	RJ45 Cable	No	10

Test Setup Diagram – AC Line Conducted Emission Test (Sample 2)



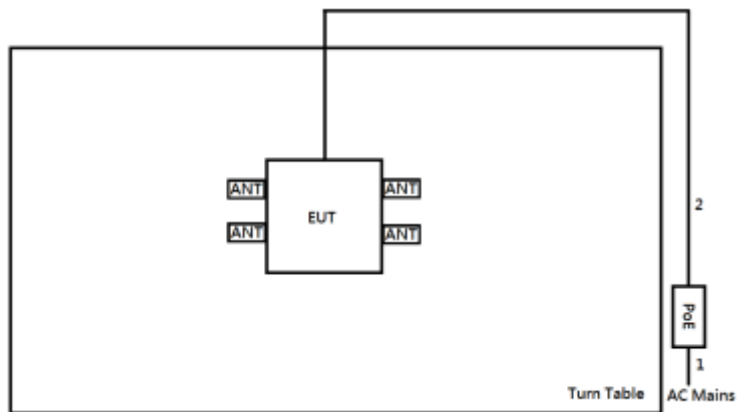
Item	Connection	Shielded	Length(m)
1	AC Power Cable	No	1.5
2	AC Power Cable	No	0.5
3	RJ45 Cable	No	10

**Test Setup Diagram - Radiated Test (Sample 1)**



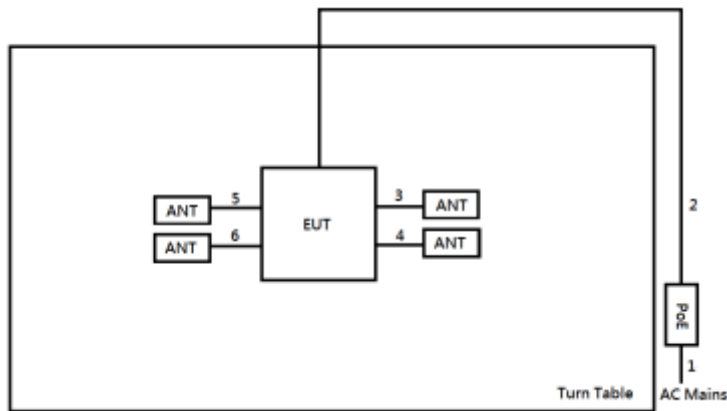
Item	Connection	Shielded	Length(m)
1	AC Power Cable	No	0.5
2	RJ45 Cable	No	10

**Test Setup Diagram - Radiated Test (Sample 2\_Omni)**



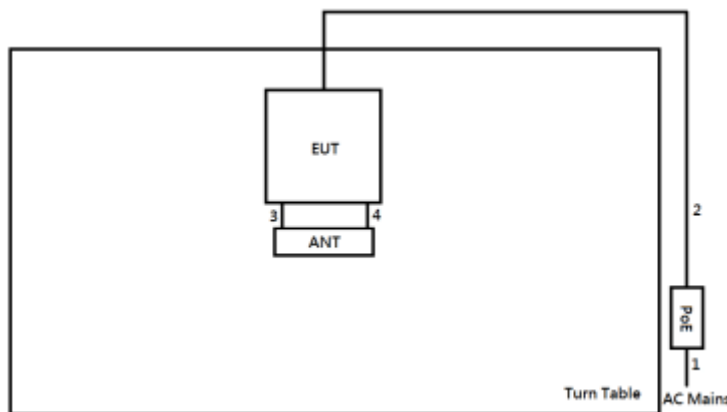
Item	Connection	Shielded	Length(m)
1	AC Power Cable	No	0.5
2	RJ45 Cable	No	10

Test Setup Diagram - Radiated Test (Sample 2\_Panel 1)



Item	Connection	Shielded	Length(m)
1	AC Power Cable	No	0.5
2	RJ45 Cable	No	10
3	Antenna Cable	No	0.3
4	Antenna Cable	No	0.3
5	Antenna Cable	No	0.3
6	Antenna Cable	No	0.3

Test Setup Diagram - Radiated Test (Sample 2\_Panel 2)



Item	Connection	Shielded	Length(m)
1	AC Power Cable	No	0.5
2	RJ45 Cable	No	10
3	Antenna Cable	No	1.6
4	Antenna Cable	No	1.6



### 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.

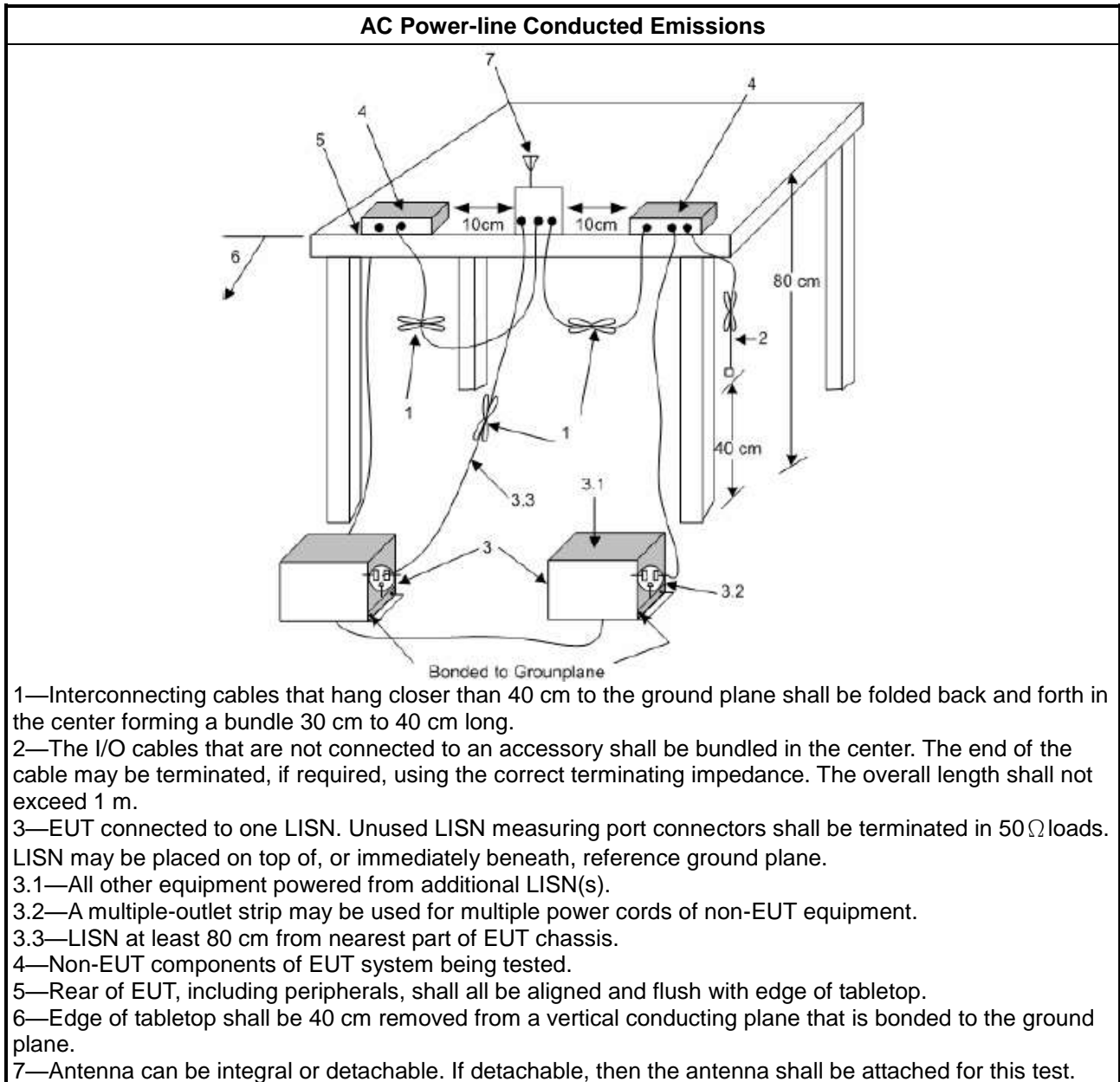
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

### 3.1.4 Test Setup



### 3.1.5 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:	
<ul style="list-style-type: none"> <li>▪ 6 dB bandwidth <math>\geq</math> 500 kHz.</li> </ul>	

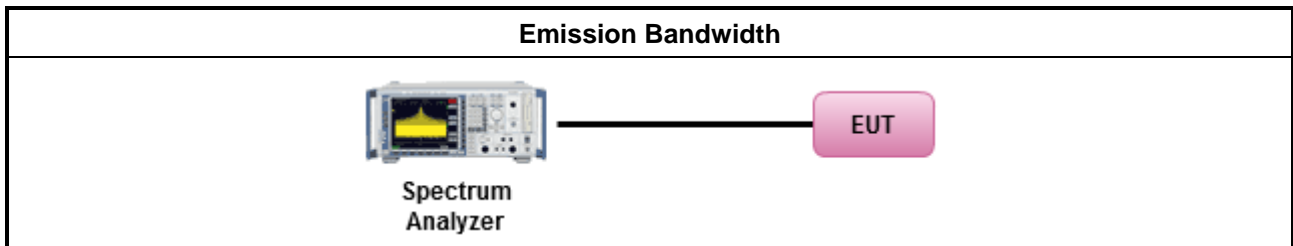
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>▪ For the emission bandwidth shall be measured using one of the options below:</li> </ul>	
<input checked="" type="checkbox"/>	Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
<input type="checkbox"/>	Refer as RSS-Gen, clause 6.7 for for occupied bandwidth testing.
<input type="checkbox"/>	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	
	<ul style="list-style-type: none"> <li>▪ If <math>G_{TX} \leq 6</math> dBi, then <math>P_{Out} \leq 30</math> dBm (1 W)</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Point-to-multipoint systems (P2M): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Point-to-point systems (P2P): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Smart antenna system (SAS):</li> </ul>
	<ul style="list-style-type: none"> <li>- Single beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>- Overlap beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>- Aggregate power on all beams: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3 + 8</math> dB dBm</li> </ul>
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> <li>▪ 2400-2483.5 MHz Band</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Point-to-multipoint systems (P2M): <math>P_{eirp} \leq 36</math> dBm (4 W)</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Point-to-point systems (P2P): <math>P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Smart antenna system (SAS)</li> </ul>
	<ul style="list-style-type: none"> <li>- Single beam: <math>P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>- Overlap beam: <math>P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>- Aggregate power on all beams: <math>P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])</math> dBm</li> </ul>
$P_{Out}$ = maximum peak conducted output power or maximum conducted output power in dBm, $G_{TX}$ = the maximum transmitting antenna directional gain in dBi.	

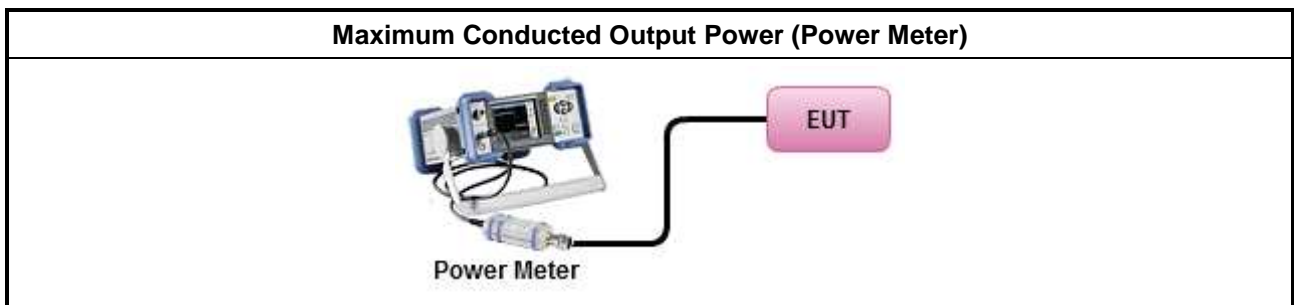
#### 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>▪ Maximum Peak Conducted Output Power</li> </ul>	
	<input type="checkbox"/> Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
	<input type="checkbox"/> Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
	<input type="checkbox"/> Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
<ul style="list-style-type: none"> <li>▪ Maximum Average Conducted Output Power</li> </ul>	
	<input type="checkbox"/> Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
	<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
<ul style="list-style-type: none"> <li>▪ For conducted measurement.</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ If multiple transmit chains, EIRP calculation could be following as methods:  <math>P_{total} = P_1 + P_2 + \dots + P_n</math>            (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>

### 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
<ul style="list-style-type: none"> <li>Power Spectral Density (PSD) <math>\leq</math> 8 dBm/3kHz</li> </ul>

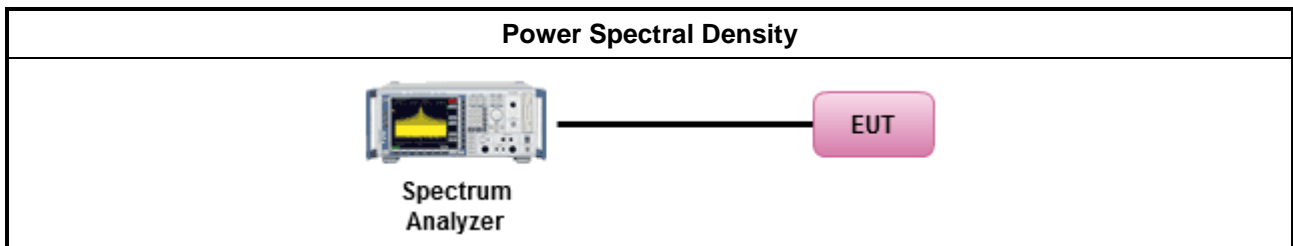
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>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).</li> </ul>
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
<ul style="list-style-type: none"> <li>For conducted measurement.             <ul style="list-style-type: none"> <li>If The EUT supports multiple transmit chains using options given below:                 <ul style="list-style-type: none"> <li>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.</li> </ul> </li> </ul> </li> </ul>

#### 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.

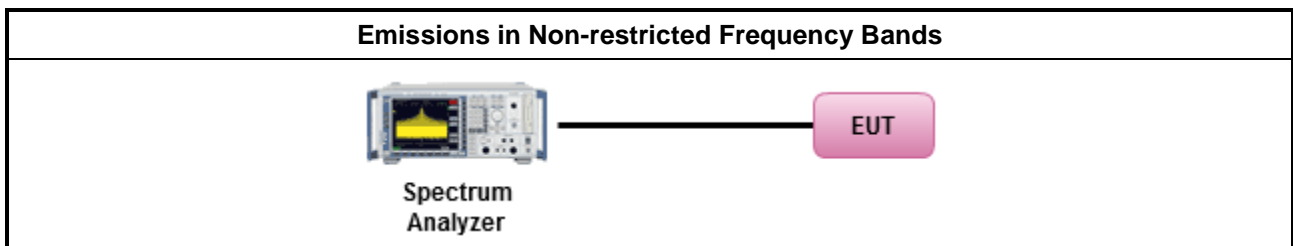
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.</li> </ul>

#### 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

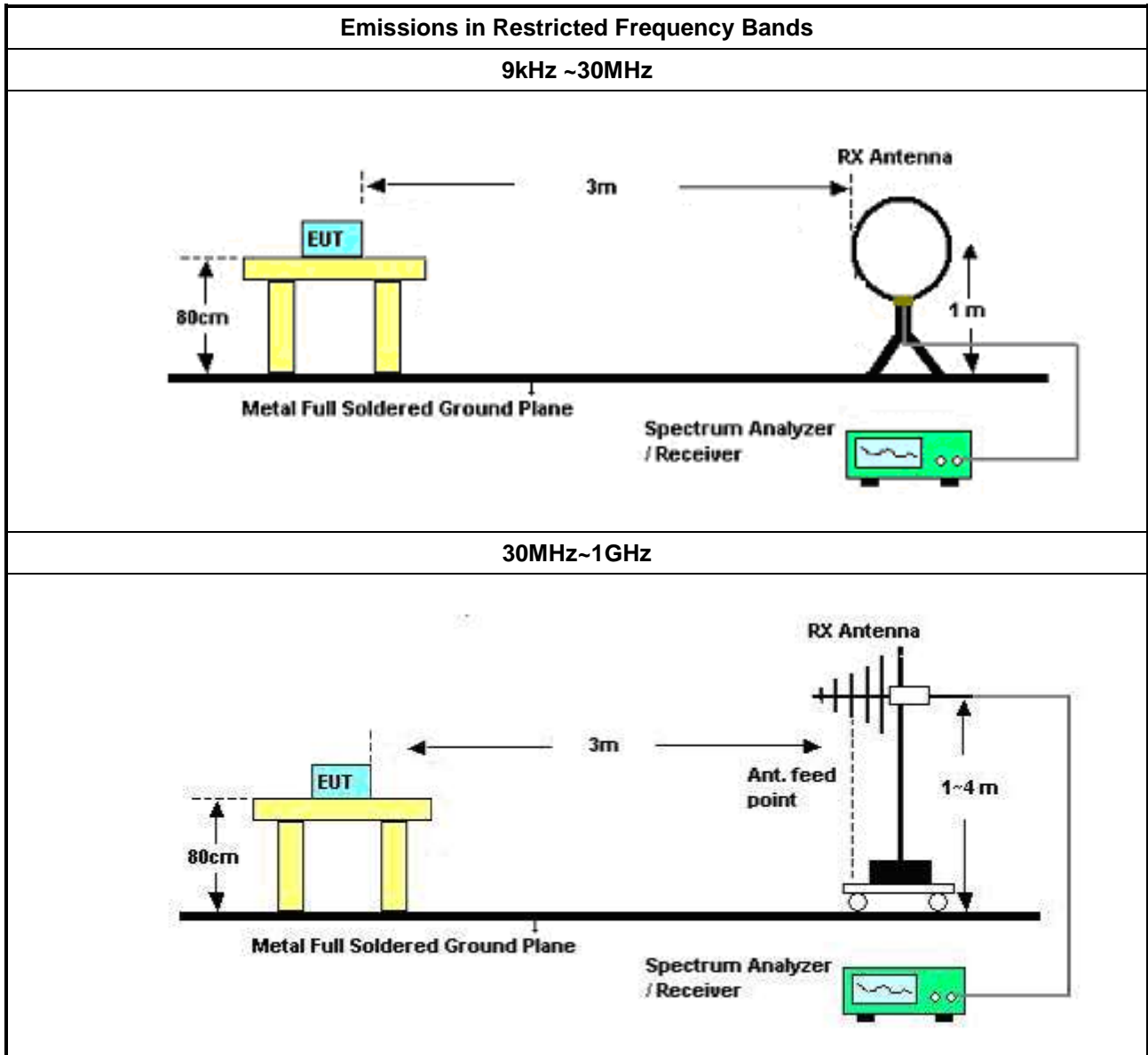
Refer a test equipment and calibration data table in this test report.

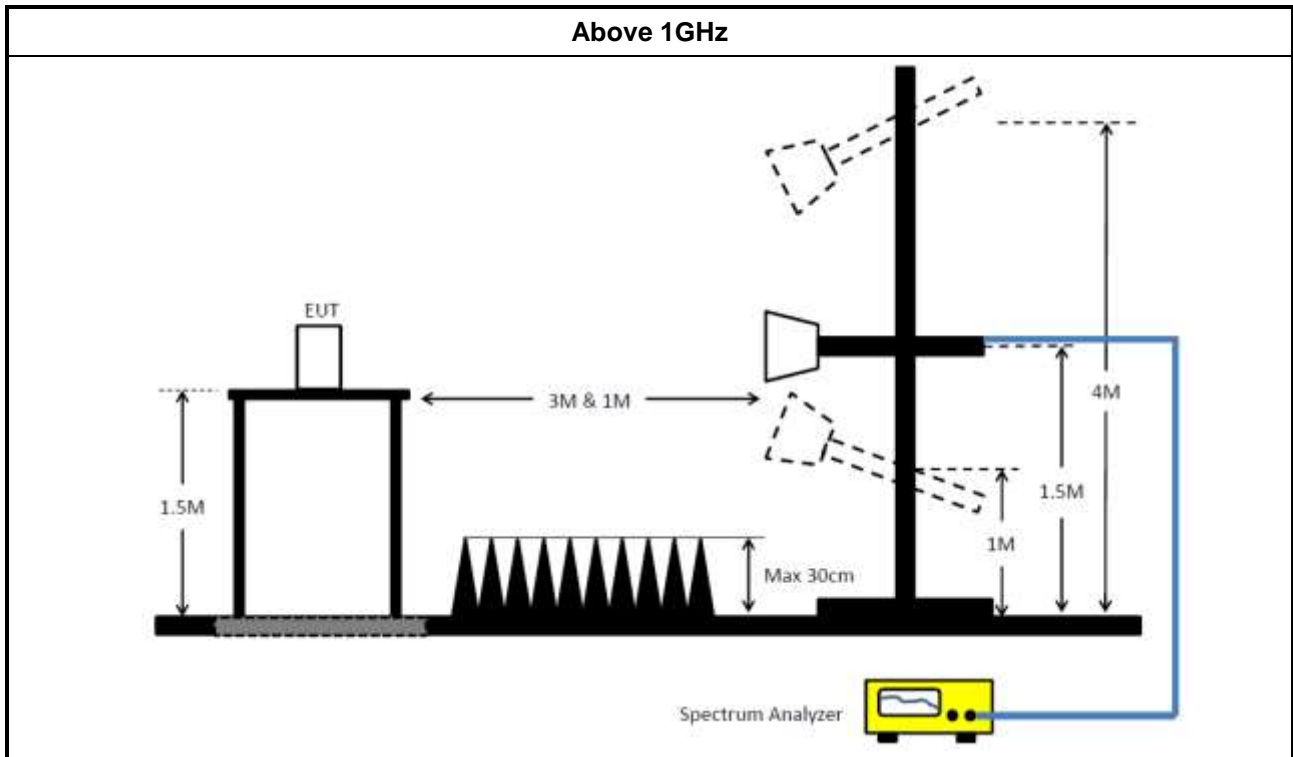


3.6.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> <li>The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<ul style="list-style-type: none"> <li>For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.</li> </ul>
	<ul style="list-style-type: none"> <li>For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.</li> </ul>
	<ul style="list-style-type: none"> <li>Use the following spectrum analyzer settings:</li> </ul>
	<ul style="list-style-type: none"> <li>Set RBW=100 kHz for f &lt; 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> </ul>
	<ul style="list-style-type: none"> <li>Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.</li> </ul>
	<ul style="list-style-type: none"> <li>KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<ul style="list-style-type: none"> <li>Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.</li> </ul>

### 3.6.4 Test Setup





### 3.6.5 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.

### 3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



## 4 Test Equipment and Calibration Data

### Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	04/Nov/2019	05/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	12/Sep/2019	11/Sep/2020
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	24/Sep/2019	23/Sep/2020

NCR: Non-Calibration Require

### Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Pulse Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	14/Mar/2019	13/Mar/2020
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	14/Mar/2019	13/Mar/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

### Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	29/Aug/2019	28/Aug/2020
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	29/Aug/2019	28/Aug/2020
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	02/Jul/2019	01/Jul/2020
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	16/Oct/2019	15/Oct/2020
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40 GHz	15/ Aug/2019	14/ Aug /2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Mar/2019	25/Mar/2020
RF Cable-high 6m	SUHNER	SUCOFLEX104	10567868 / SN805193/4	1GHz~40GHz	09/Apr/2019	08/Apr/2020
RF Cable-high 7m	SUHNER	SUCOFLEX104	10567868 / SN805192/4	1GHz~40GHz	09/Apr/2019	08/Apr/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	11/Oct/2019	10/Oct/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170339	18GHz ~ 40GHz	19/Apr/2019	18/Apr/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	05/Aug/2019	04/Aug/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	03/Jun/2019	02/Jun/2020



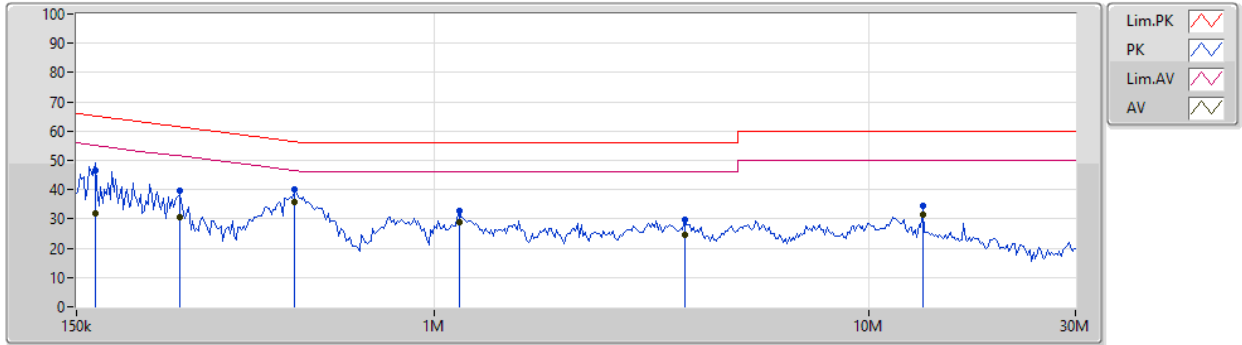
**AC Power-line Conducted Emissions**  
**\_Non-Beamforming\_Sample 1\_Radio1**

Appendix A.1

**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	1	<b>Power Phase</b>	Neutral
<b>Operating Function</b>	Non Beamforming ; Sample 1 ; PoE mode ; Radio1 WIFI 2.4G		

07/03/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	165.693k	46.54	65.18	-18.64	19.63	Neutral	-	26.91	9.65	0.11	9.87
AV	165.693k	32.09	55.18	-23.09	19.63	Neutral	-	12.46	9.65	0.11	9.87
QP	259.279k	39.72	61.45	-21.73	19.63	Neutral	-	20.09	9.64	0.12	9.87
AV	259.279k	30.60	51.45	-20.85	19.63	Neutral	-	10.97	9.64	0.12	9.87
QP	475.741k	40.05	56.42	-16.37	19.63	Neutral	-	20.42	9.63	0.13	9.87
AV	475.741k	35.60	46.42	-10.82	19.63	Neutral	"Worst"	15.97	9.63	0.13	9.87
QP	1.142M	32.61	56.00	-23.39	19.63	Neutral	-	12.98	9.63	0.12	9.88
AV	1.142M	28.91	46.00	-17.09	19.63	Neutral	-	9.28	9.63	0.12	9.88
QP	3.769M	29.94	56.00	-26.06	19.72	Neutral	-	10.22	9.66	0.18	9.88
AV	3.769M	24.78	46.00	-21.22	19.72	Neutral	-	5.06	9.66	0.18	9.88
QP	13.336M	34.60	60.00	-25.40	19.89	Neutral	-	14.71	9.71	0.30	9.88
AV	13.336M	31.45	50.00	-18.55	19.89	Neutral	-	11.56	9.71	0.30	9.88



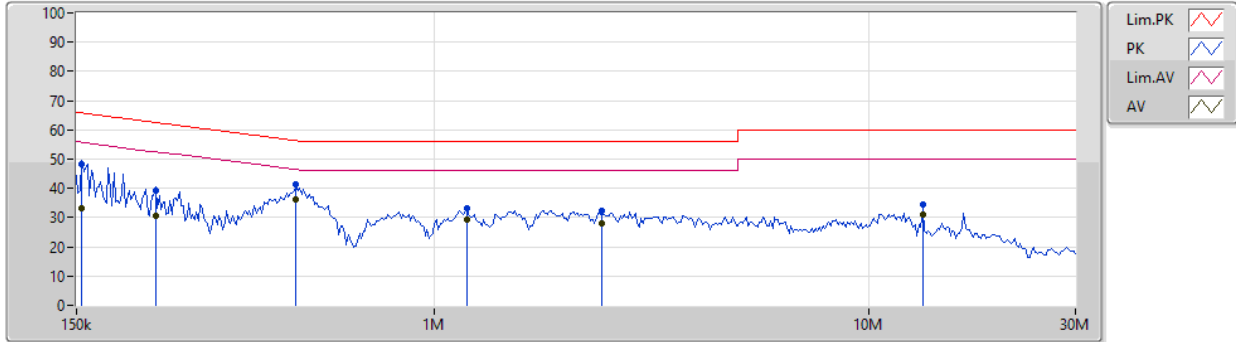


**AC Power-line Conducted Emissions**  
**\_Non-Beamforming\_Sample 1\_Radio1**

**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	1	<b>Power Phase</b>	Line
<b>Operating Function</b>	Non Beamforming ; Sample 1 ; PoE mode ; Radio1 WIFI 2.4G		

07/03/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	154.545k	48.19	65.75	-17.56	19.64	Line	-	28.55	9.66	0.11	9.87
AV	154.545k	33.31	55.75	-22.44	19.64	Line	-	13.67	9.66	0.11	9.87
QP	227.818k	39.14	62.52	-23.38	19.64	Line	-	19.50	9.65	0.12	9.87
AV	227.818k	30.73	52.52	-21.79	19.64	Line	-	11.09	9.65	0.12	9.87
QP	480.498k	41.24	56.33	-15.09	19.64	Line	-	21.60	9.64	0.13	9.87
AV	480.498k	36.39	46.33	-9.94	19.64	Line	"Worst"	16.75	9.64	0.13	9.87
QP	1.188M	33.03	56.00	-22.97	19.64	Line	-	13.39	9.64	0.12	9.88
AV	1.188M	29.41	46.00	-16.59	19.64	Line	-	9.77	9.64	0.12	9.88
QP	2.433M	32.14	56.00	-23.86	19.68	Line	-	12.46	9.65	0.16	9.87
AV	2.433M	27.83	46.00	-18.17	19.68	Line	-	8.15	9.65	0.16	9.87
QP	13.336M	34.54	60.00	-25.46	19.85	Line	-	14.69	9.67	0.30	9.88
AV	13.336M	31.21	50.00	-18.79	19.85	Line	-	11.36	9.67	0.30	9.88



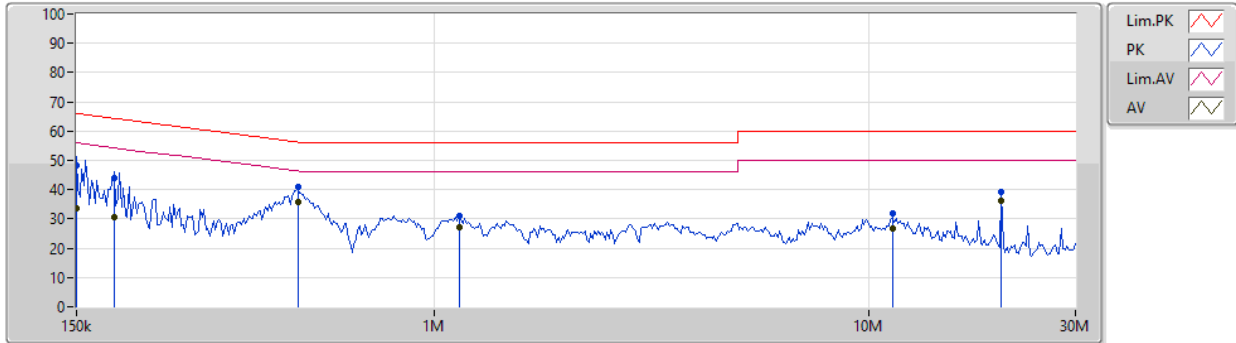
**AC Power-line Conducted Emissions**  
**\_Non-Beamforming\_Sample 2\_Radio1**

Appendix A.2

**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	2	<b>Power Phase</b>	Neutral
<b>Operating Function</b>	Non Beamforming ; Sample 2 ; PoE mode; Radio1 WIFI 2.4G		

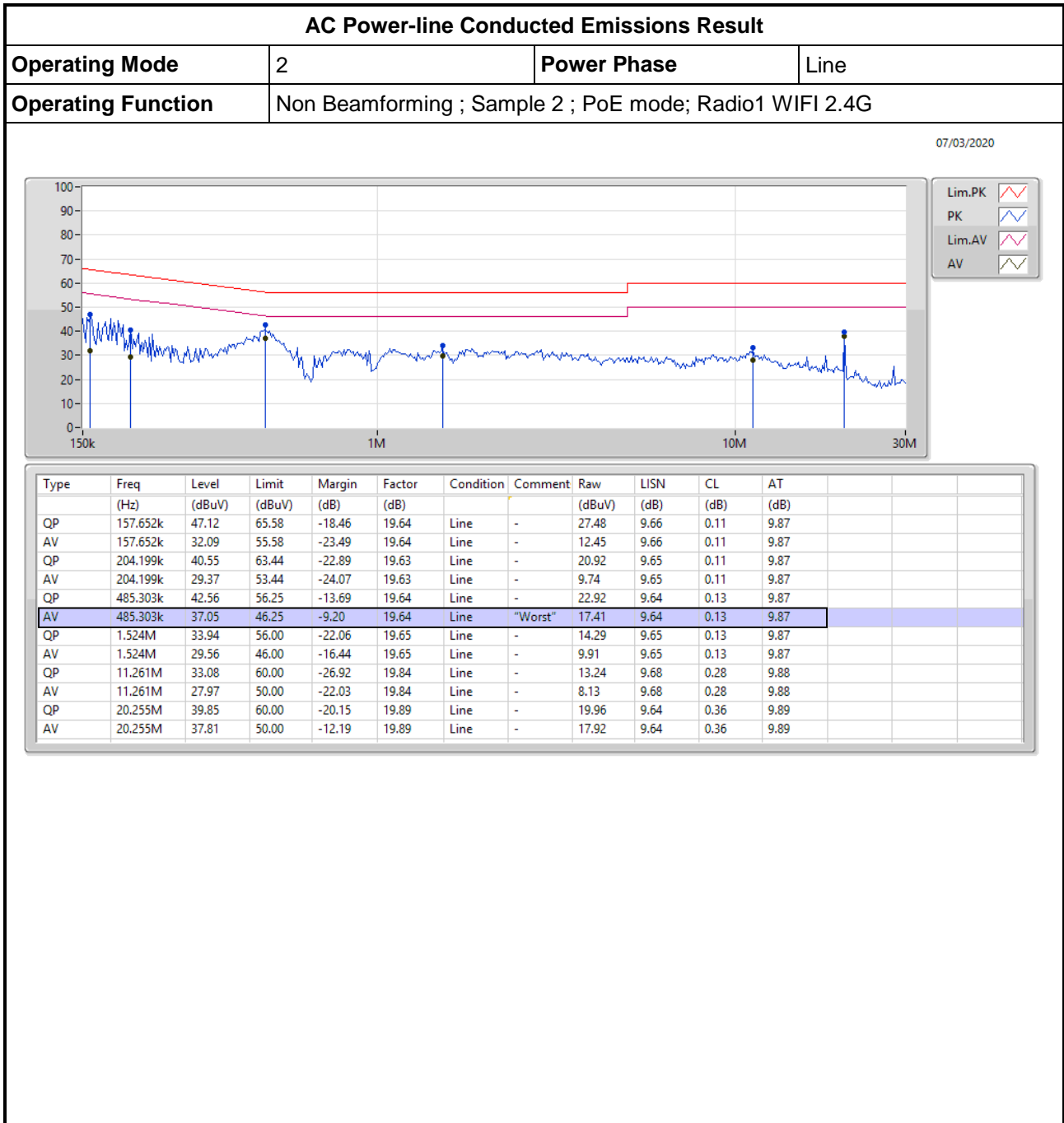
07/03/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	48.32	66.00	-17.68	19.63	Neutral	-	28.69	9.65	0.11	9.87
AV	150k	33.42	56.00	-22.58	19.63	Neutral	-	13.79	9.65	0.11	9.87
QP	183.029k	43.80	64.34	-20.54	19.62	Neutral	-	24.18	9.64	0.11	9.87
AV	183.029k	30.67	54.34	-23.67	19.62	Neutral	-	11.05	9.64	0.11	9.87
QP	485.303k	40.98	56.25	-15.27	19.63	Neutral	-	21.35	9.63	0.13	9.87
AV	485.303k	35.76	46.25	-10.49	19.63	Neutral	"Worst"	16.13	9.63	0.13	9.87
QP	1.142M	30.91	56.00	-25.09	19.63	Neutral	-	11.28	9.63	0.12	9.88
AV	1.142M	27.24	46.00	-18.76	19.63	Neutral	-	7.61	9.63	0.12	9.88
QP	11.373M	31.84	60.00	-28.16	19.86	Neutral	-	11.98	9.70	0.28	9.88
AV	11.373M	26.53	50.00	-23.47	19.86	Neutral	-	6.67	9.70	0.28	9.88
QP	20.255M	39.01	60.00	-20.99	19.97	Neutral	-	19.04	9.72	0.36	9.89
AV	20.255M	36.01	50.00	-13.99	19.97	Neutral	-	16.04	9.72	0.36	9.89



**AC Power-line Conducted Emissions**  
**\_Non-Beamforming\_Sample 2\_Radio1**





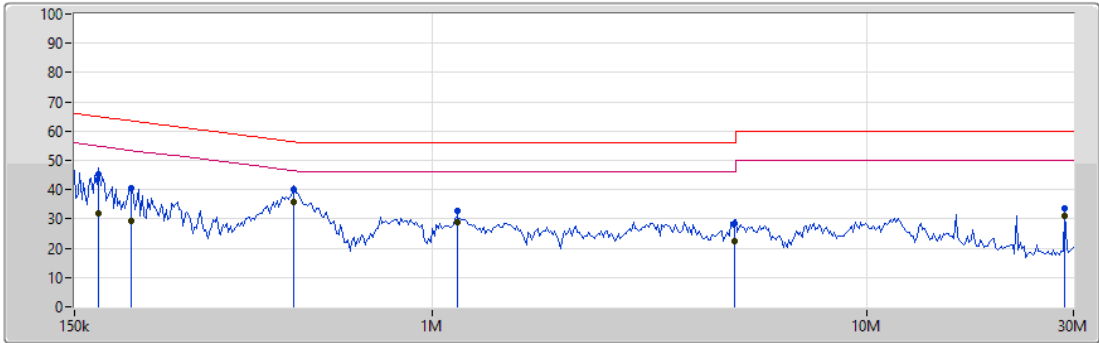
**AC Power-line Conducted Emissions**  
**\_Beamforming\_Sample 1\_Radio1**

Appendix A.3

**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	3	<b>Power Phase</b>	Neutral
<b>Operating Function</b>	Beamforming ; Sample 1 ; PoE mode ; Radio1 WIFI 2.4G		

07/03/2020



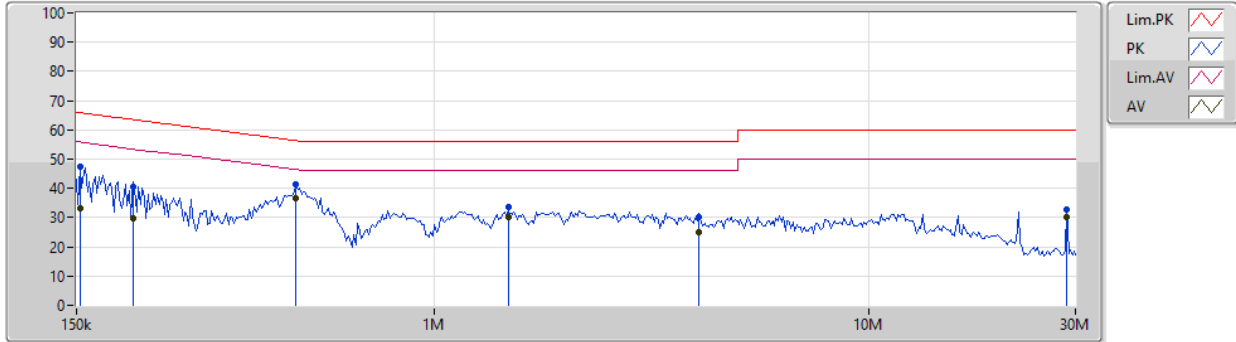
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	170.714k	45.09	64.93	-19.84	19.63	Neutral	-	25.46	9.65	0.11	9.87
AV	170.714k	32.11	54.93	-22.82	19.63	Neutral	-	12.48	9.65	0.11	9.87
QP	202.177k	40.40	63.51	-23.11	19.62	Neutral	-	20.78	9.64	0.11	9.87
AV	202.177k	29.29	53.51	-24.22	19.62	Neutral	-	9.67	9.64	0.11	9.87
QP	480.498k	40.19	56.33	-16.14	19.63	Neutral	-	20.56	9.63	0.13	9.87
AV	480.498k	35.68	46.33	-10.65	19.63	Neutral	"Worst"	16.05	9.63	0.13	9.87
QP	1.142M	32.56	56.00	-23.44	19.63	Neutral	-	12.93	9.63	0.12	9.88
AV	1.142M	28.95	46.00	-17.05	19.63	Neutral	-	9.32	9.63	0.12	9.88
QP	4.98M	28.24	56.00	-27.76	19.75	Neutral	-	8.49	9.67	0.20	9.88
AV	4.98M	22.59	46.00	-23.41	19.75	Neutral	-	2.84	9.67	0.20	9.88
QP	28.693M	33.54	60.00	-26.46	19.99	Neutral	-	13.55	9.67	0.44	9.88
AV	28.693M	30.93	50.00	-19.07	19.99	Neutral	-	10.94	9.67	0.44	9.88



**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	3	<b>Power Phase</b>	Line
<b>Operating Function</b>	Beamforming ; Sample 1 ; PoE mode ; Radio1 WIFI 2.4G		

07/03/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	153.015k	47.61	65.83	-18.22	19.64	Line	-	27.97	9.66	0.11	9.87
AV	153.015k	33.07	55.83	-22.76	19.64	Line	-	13.43	9.66	0.11	9.87
QP	202.177k	40.31	63.51	-23.20	19.63	Line	-	20.68	9.65	0.11	9.87
AV	202.177k	29.70	53.51	-23.81	19.63	Line	-	10.07	9.65	0.11	9.87
QP	480.498k	41.28	56.33	-15.05	19.64	Line	-	21.64	9.64	0.13	9.87
AV	480.498k	36.51	46.33	-9.82	19.64	Line	"Worst"	16.87	9.64	0.13	9.87
QP	1.479M	33.68	56.00	-22.32	19.65	Line	-	14.03	9.65	0.13	9.87
AV	1.479M	30.10	46.00	-15.90	19.65	Line	-	10.45	9.65	0.13	9.87
QP	4.081M	30.28	56.00	-25.72	19.73	Line	-	10.55	9.66	0.19	9.88
AV	4.081M	25.20	46.00	-20.80	19.73	Line	-	5.47	9.66	0.19	9.88
QP	28.693M	32.75	60.00	-27.25	19.84	Line	-	12.91	9.52	0.44	9.88
AV	28.693M	30.09	50.00	-19.91	19.84	Line	-	10.25	9.52	0.44	9.88



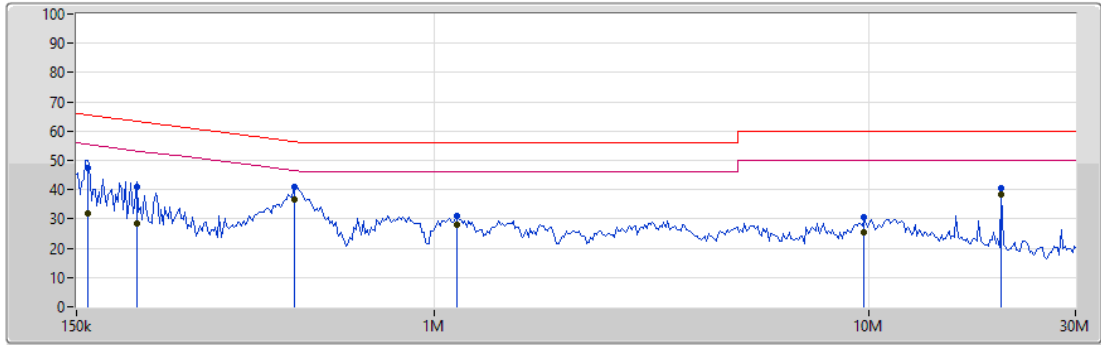
**AC Power-line Conducted Emissions**  
**\_Beamforming\_Sample 2\_Radio1**

Appendix A.4

**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	4	<b>Power Phase</b>	Neutral
<b>Operating Function</b>	Beamforming ; Sample 2 ; PoE mode; Radio1 WIFI 2.4G		

07/03/2020



Lim.PK   
 PK   
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 AV

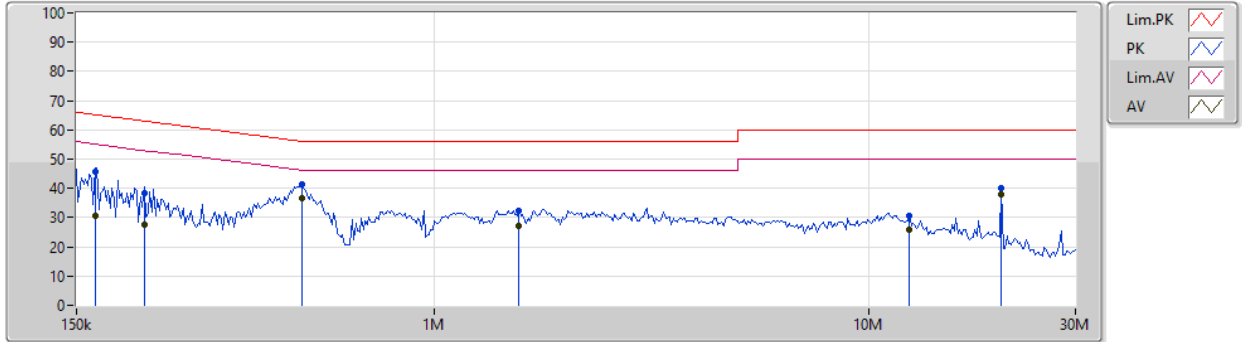
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	159.228k	47.38	65.50	-18.12	19.63	Neutral	-	27.75	9.65	0.11	9.87
AV	159.228k	31.95	55.50	-23.55	19.63	Neutral	-	12.32	9.65	0.11	9.87
QP	206.241k	40.85	63.36	-22.51	19.62	Neutral	-	21.23	9.64	0.11	9.87
AV	206.241k	28.55	53.36	-24.81	19.62	Neutral	-	8.93	9.64	0.11	9.87
QP	475.741k	41.13	56.42	-15.29	19.63	Neutral	-	21.50	9.63	0.13	9.87
AV	475.741k	36.47	46.42	-9.95	19.63	Neutral	"Worst"	16.84	9.63	0.13	9.87
QP	1.131M	31.21	56.00	-24.79	19.63	Neutral	-	11.58	9.63	0.12	9.88
AV	1.131M	27.88	46.00	-18.12	19.63	Neutral	-	8.25	9.63	0.12	9.88
QP	9.796M	30.41	60.00	-29.59	19.85	Neutral	-	10.56	9.70	0.27	9.88
AV	9.796M	25.63	50.00	-24.37	19.85	Neutral	-	5.78	9.70	0.27	9.88
QP	20.255M	40.41	60.00	-19.59	19.97	Neutral	-	20.44	9.72	0.36	9.89
AV	20.255M	38.52	50.00	-11.48	19.97	Neutral	-	18.55	9.72	0.36	9.89



**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	4	<b>Power Phase</b>	Line
<b>Operating Function</b>	Beamforming ; Sample 2 ; PoE mode; Radio1 WIFI 2.4G		

07/03/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	165.693k	45.54	65.18	-19.64	19.64	Line	-	25.90	9.66	0.11	9.87
AV	165.693k	30.74	55.18	-24.44	19.64	Line	-	11.10	9.66	0.11	9.87
QP	214.615k	38.53	63.02	-24.49	19.63	Line	-	18.90	9.65	0.11	9.87
AV	214.615k	27.52	53.02	-25.50	19.63	Line	-	7.89	9.65	0.11	9.87
QP	495.058k	41.54	56.08	-14.54	19.64	Line	-	21.90	9.64	0.13	9.87
AV	495.058k	36.70	46.08	-9.38	19.64	Line	"Worst"	17.06	9.64	0.13	9.87
QP	1.57M	32.49	56.00	-23.51	19.66	Line	-	12.83	9.65	0.14	9.87
AV	1.57M	27.32	46.00	-18.68	19.66	Line	-	7.66	9.65	0.14	9.87
QP	12.439M	30.77	60.00	-29.23	19.84	Line	-	10.93	9.67	0.29	9.88
AV	12.439M	25.78	50.00	-24.22	19.84	Line	-	5.94	9.67	0.29	9.88
QP	20.255M	40.01	60.00	-19.99	19.89	Line	-	20.12	9.64	0.36	9.89
AV	20.255M	37.98	50.00	-12.02	19.89	Line	-	18.09	9.64	0.36	9.89



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	7.5M	11.714M	11M7G1D	7M	10.455M
802.11g_Nss1,(6Mbps)_1TX	16.325M	19.13M	19M1D1D	16.325M	16.752M
VHT20_Nss1,(MCS0)_1TX	17.575M	18.651M	18M7D1D	17.55M	17.851M
VHT40_Nss1,(MCS0)_1TX	36.35M	36.462M	36M5D1D	36.3M	36.462M
802.11ax HEW20_Nss1,(MCS0)_1TX	19M	19.33M	19M3D1D	18.9M	19.03M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.55M	37.541M	37M5D1D	37.5M	37.501M

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





Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.5M	11.714M
2437MHz	Pass	500k	7.05M	10.555M
2462MHz	Pass	500k	7M	10.455M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.325M	16.752M
2437MHz	Pass	500k	16.325M	19.13M
2462MHz	Pass	500k	16.325M	16.752M
VHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.575M	17.871M
2437MHz	Pass	500k	17.55M	18.651M
2462MHz	Pass	500k	17.575M	17.851M
VHT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	36.35M	36.462M
2437MHz	Pass	500k	36.3M	36.462M
2452MHz	Pass	500k	36.3M	36.462M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.95M	19.03M
2437MHz	Pass	500k	18.9M	19.33M
2462MHz	Pass	500k	19M	19.03M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	37.55M	37.541M
2437MHz	Pass	500k	37.5M	37.541M
2452MHz	Pass	500k	37.5M	37.501M

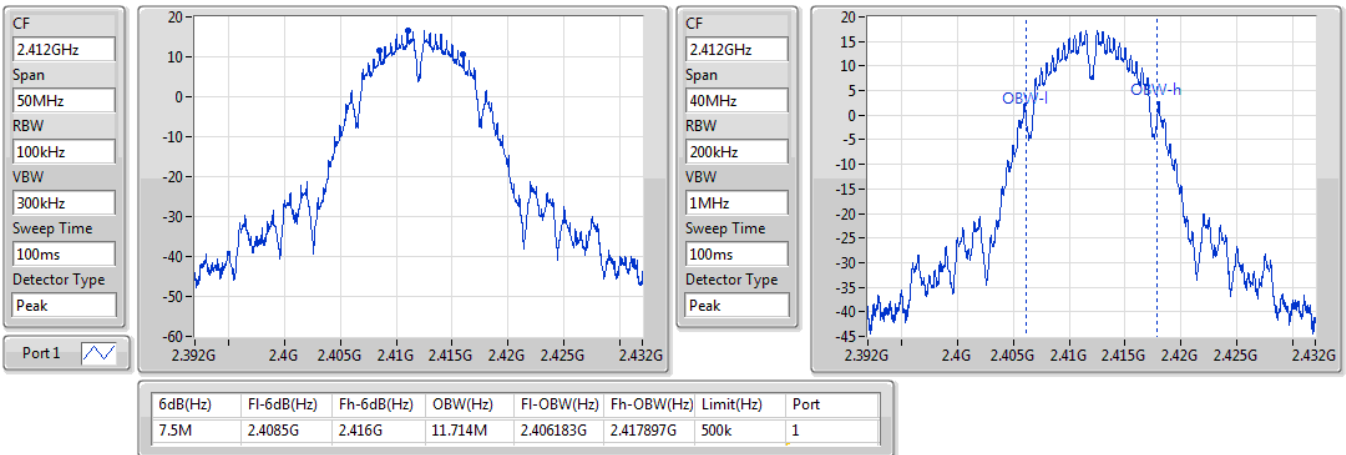
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

06/02/2020

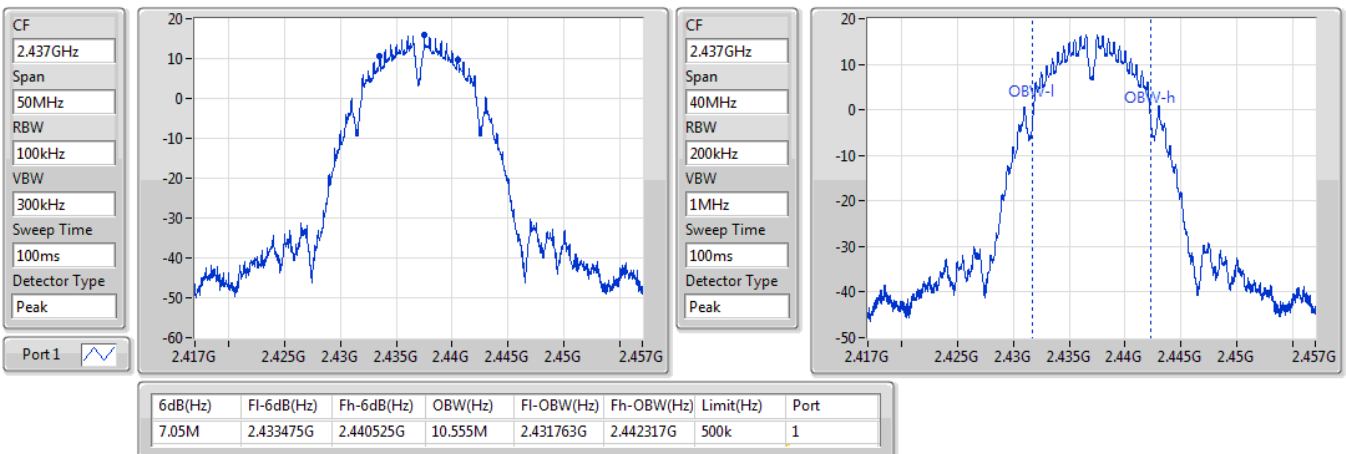


802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

06/02/2020



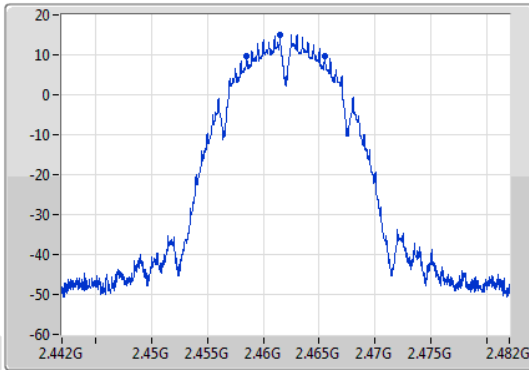
802.11b\_Nss1,(1Mbps)\_1TX

EBW

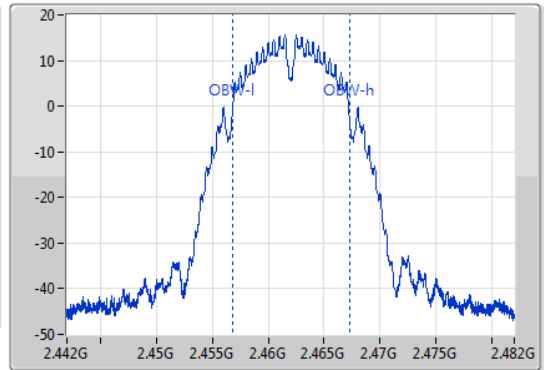
2462MHz

06/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7M	2.4585G	2.4655G	10.455M	2.456783G	2.467237G	500k	1

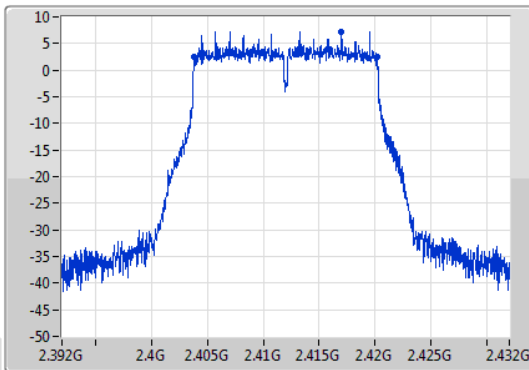
802.11g\_Nss1,(6Mbps)\_1TX

EBW

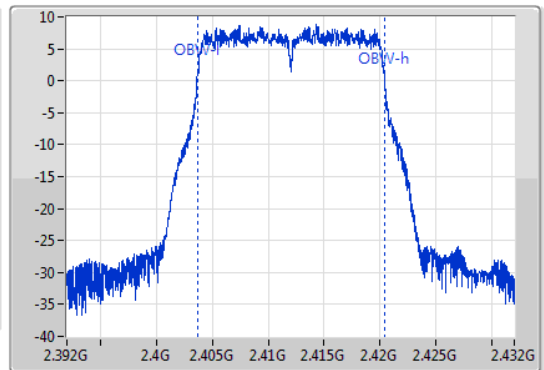
2412MHz

06/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.412GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.40385G	2.420175G	16.752M	2.403664G	2.420416G	500k	1

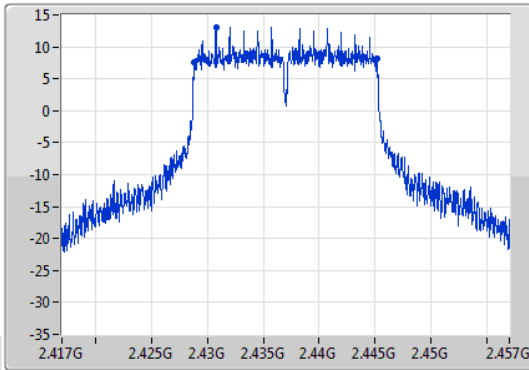
802.11g\_Nss1,(6Mbps)\_1TX

EBW

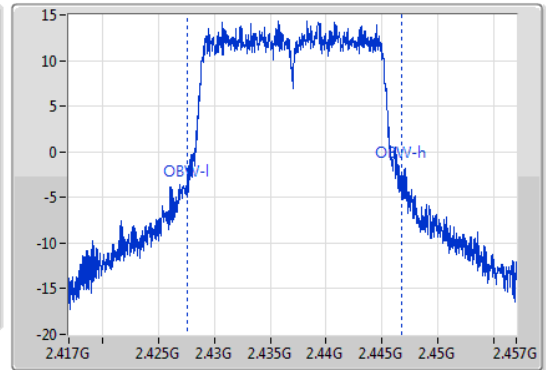
2437MHz

06/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.437GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	19.13M	2.427605G	2.446735G	500k	1

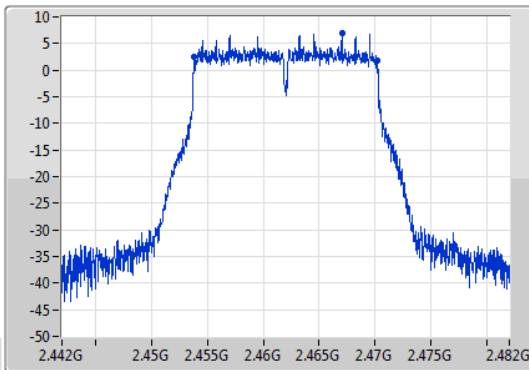
802.11g\_Nss1,(6Mbps)\_1TX

EBW

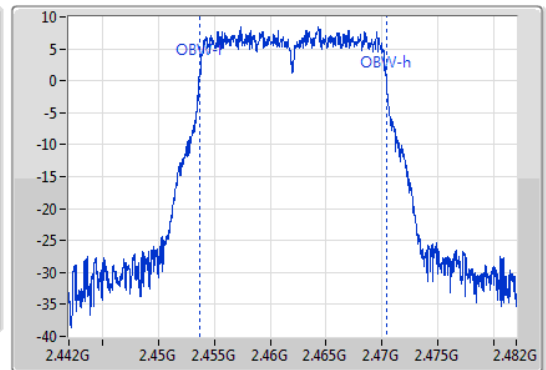
2462MHz

06/02/2020

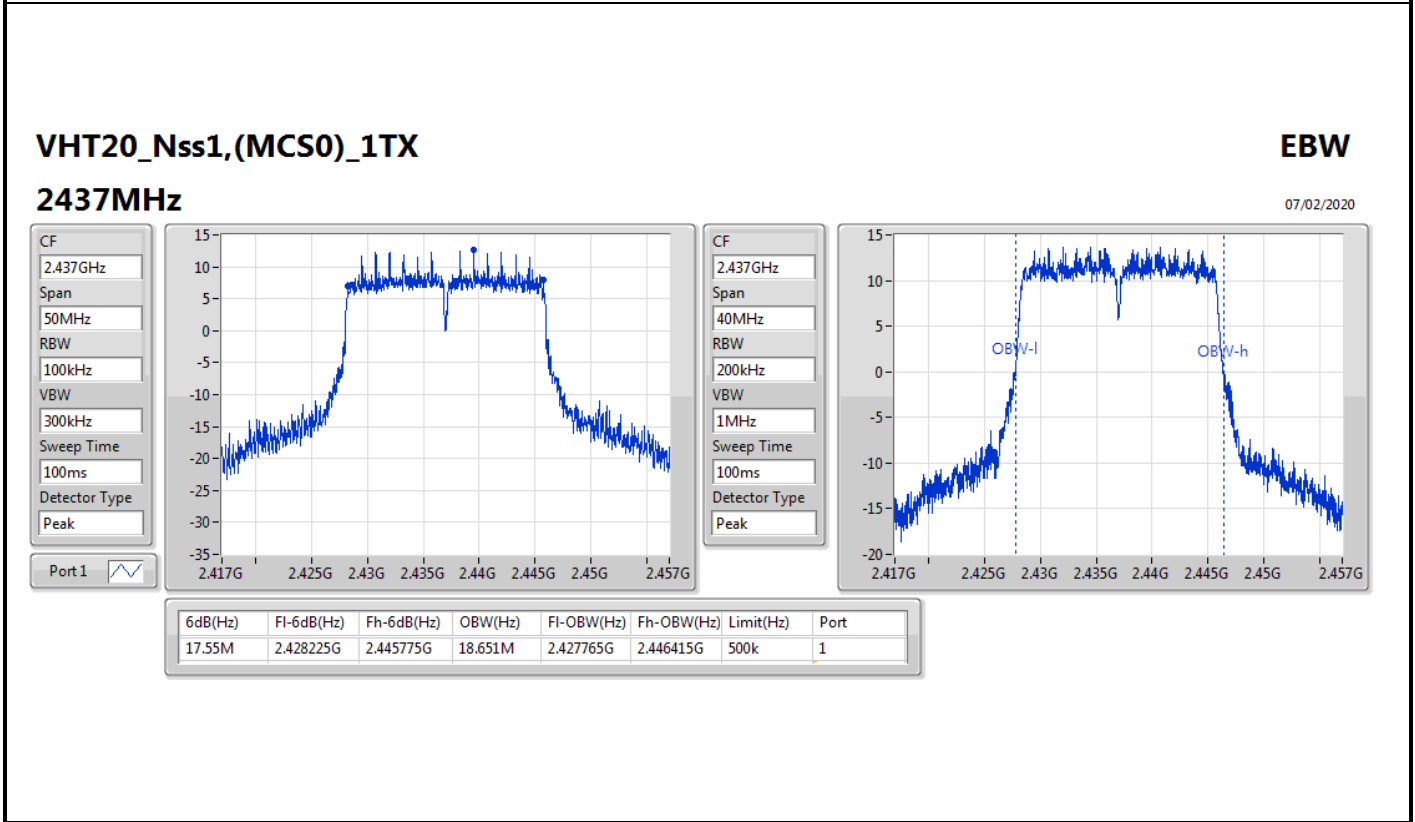
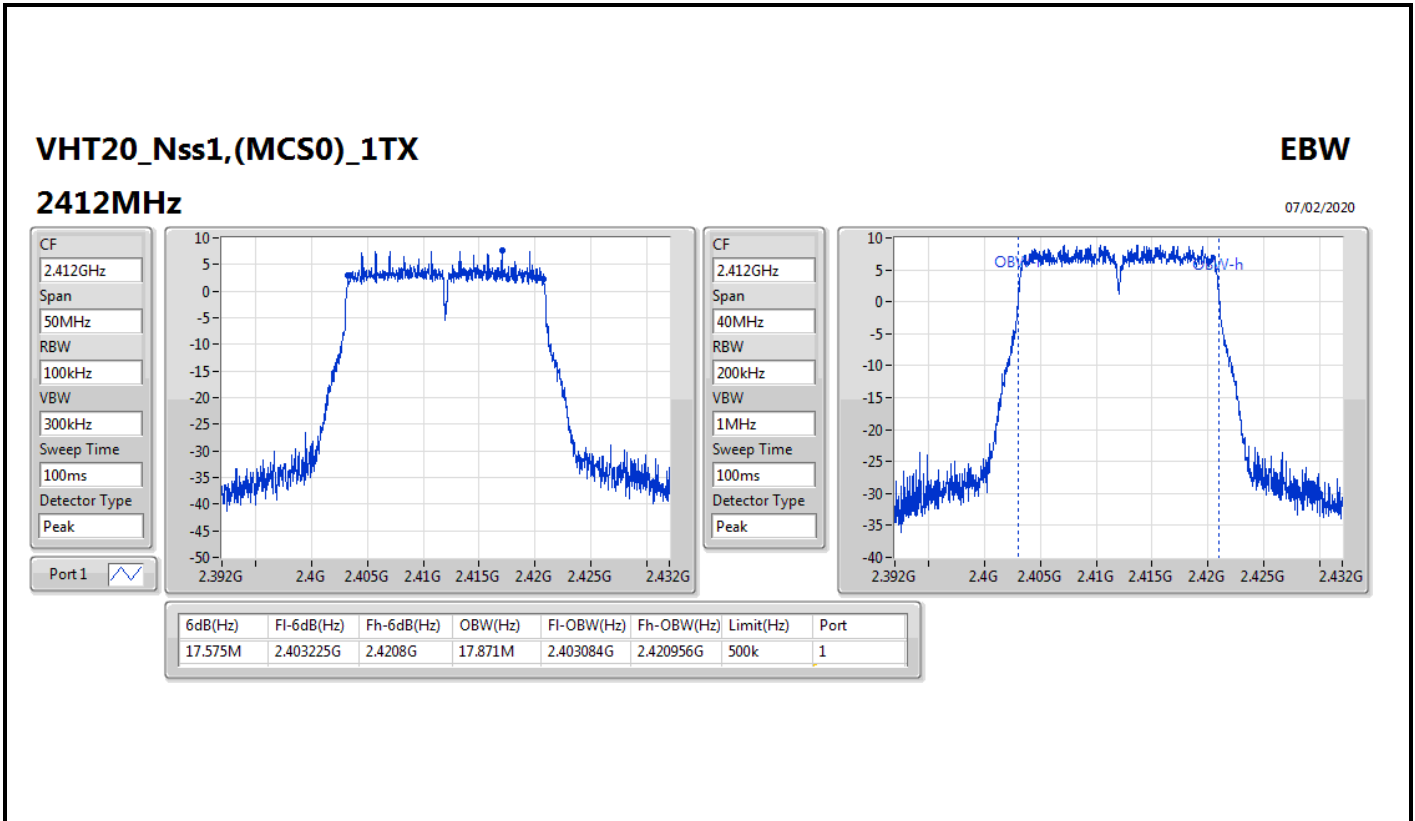
CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.45385G	2.470175G	16.752M	2.453664G	2.470416G	500k	1



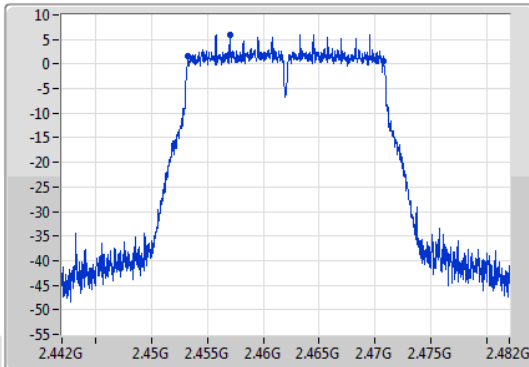
VHT20\_Nss1,(MCS0)\_1TX

EBW

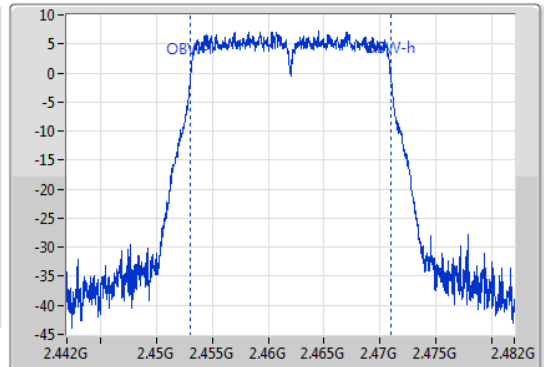
2462MHz

07/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.453225G	2.4708G	17.851M	2.453084G	2.470936G	500k	1

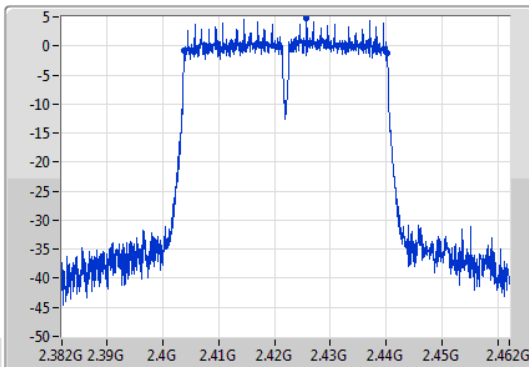
VHT40\_Nss1,(MCS0)\_1TX

EBW

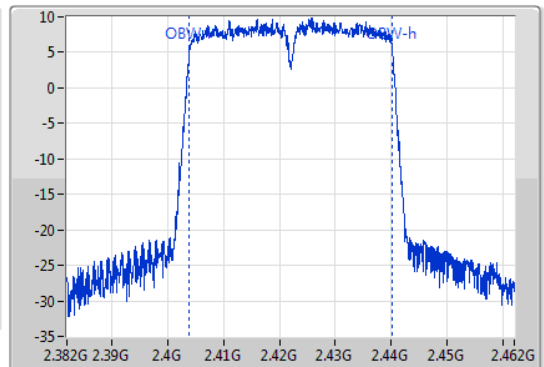
2422MHz

07/02/2020

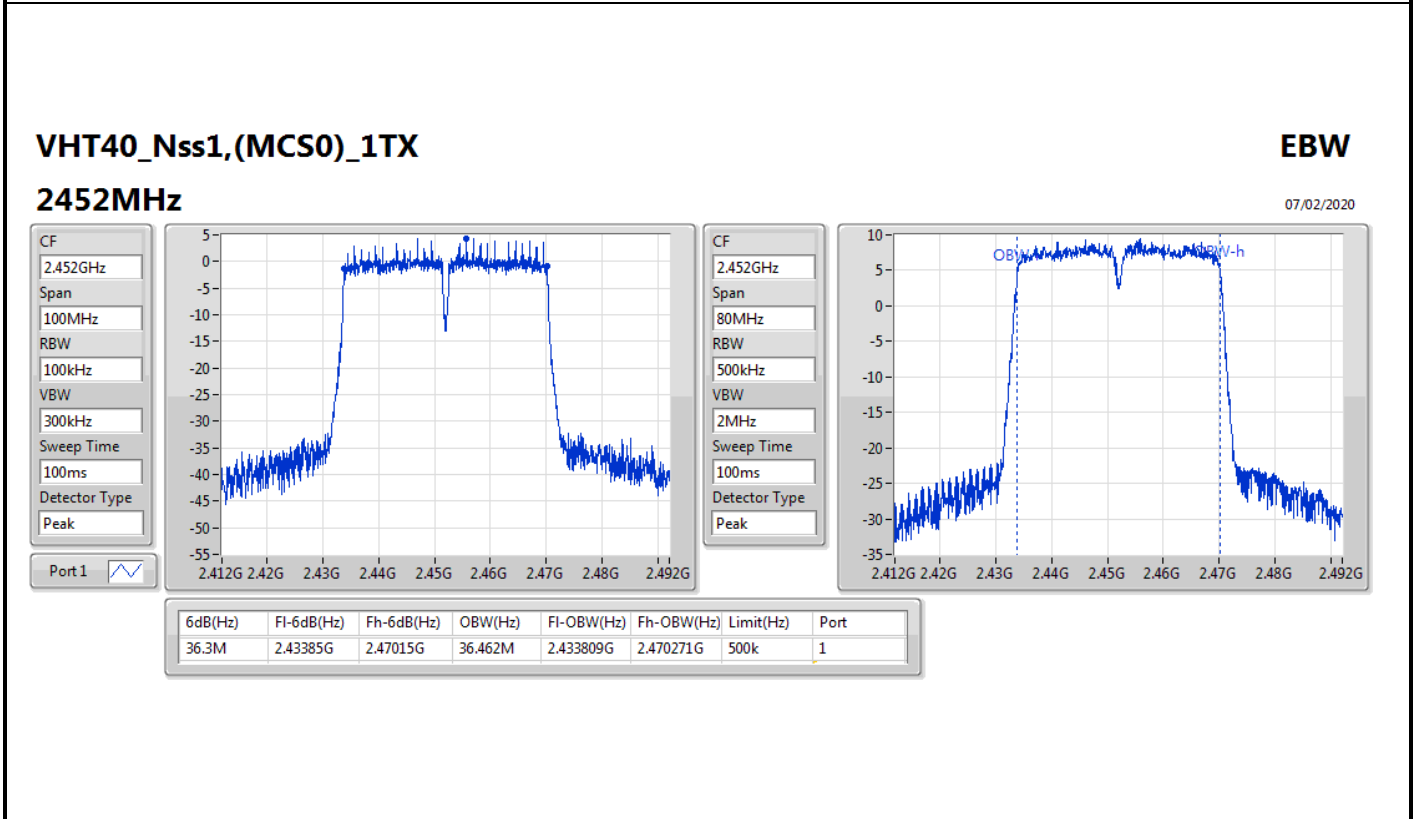
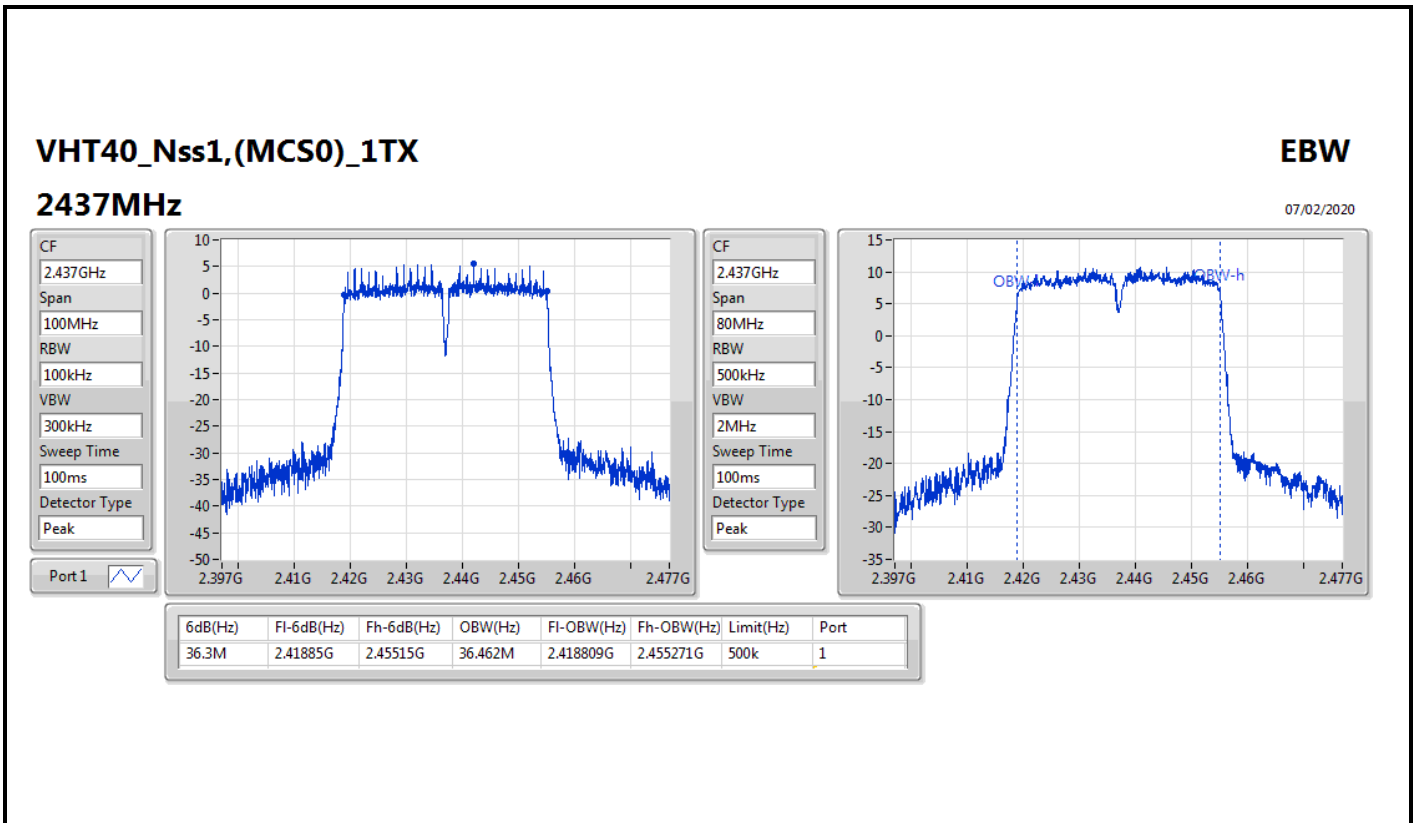
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1

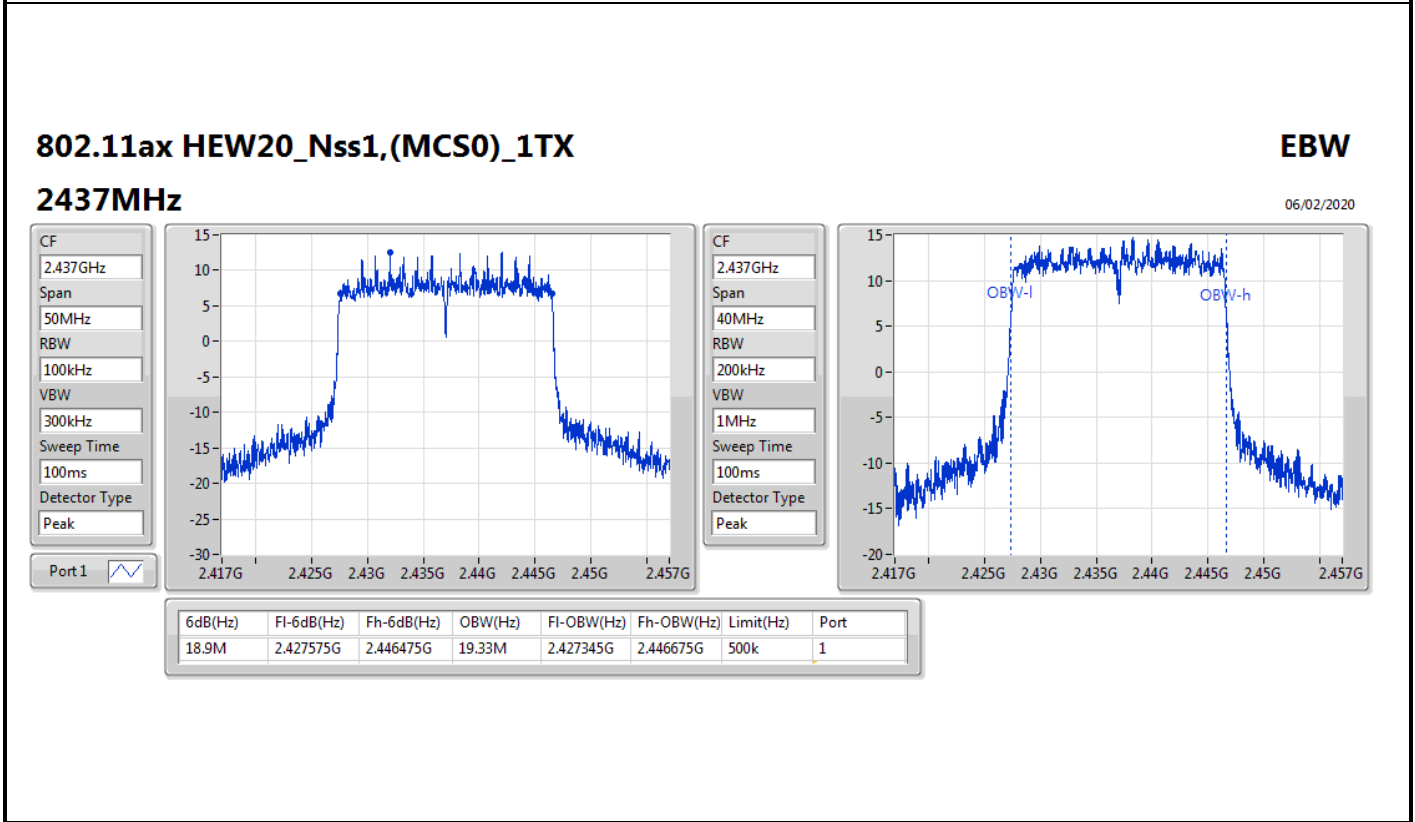
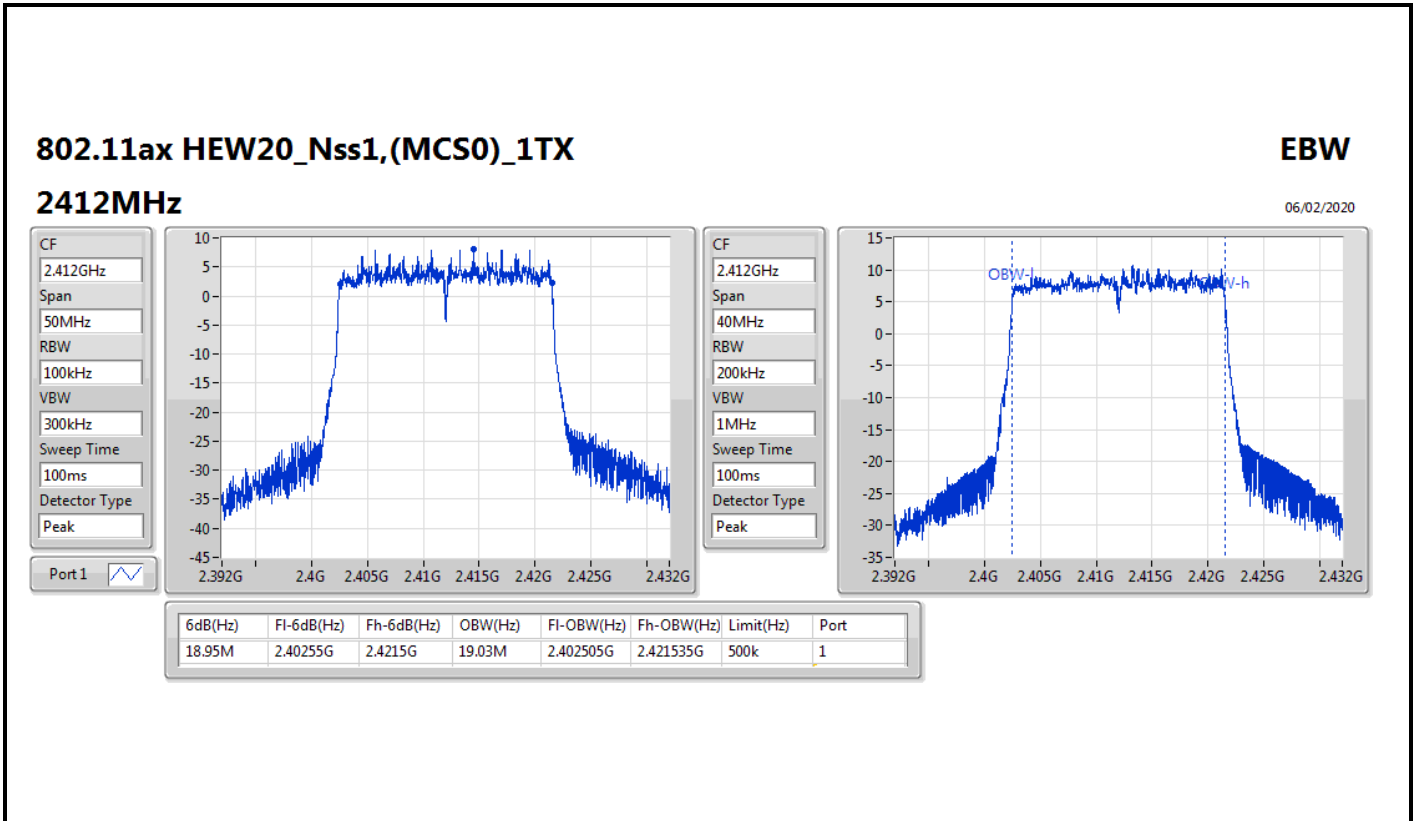


CF  
2.422GHz  
Span  
80MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.35M	2.40385G	2.4402G	36.462M	2.403809G	2.440271G	500k	1







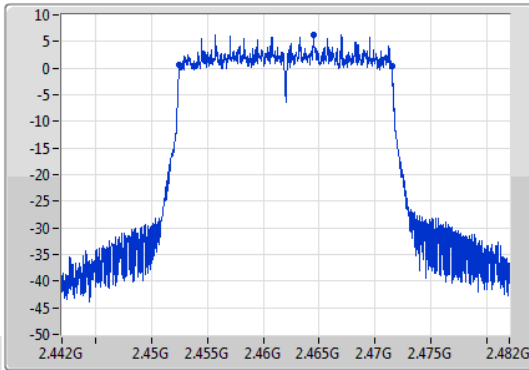
802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

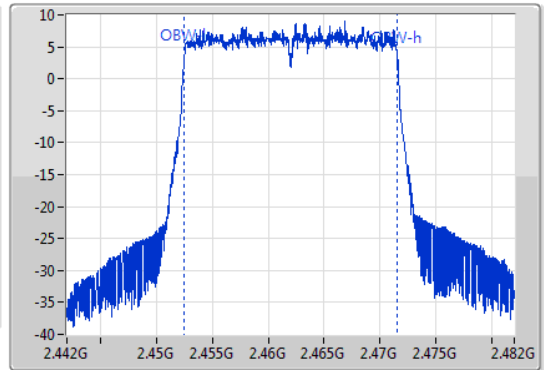
2462MHz

07/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4525G	2.4715G	19.03M	2.452505G	2.471535G	500k	1

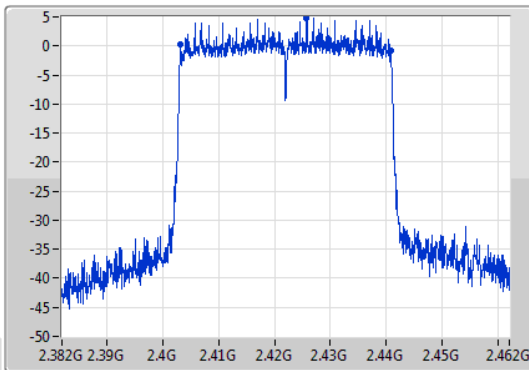
802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

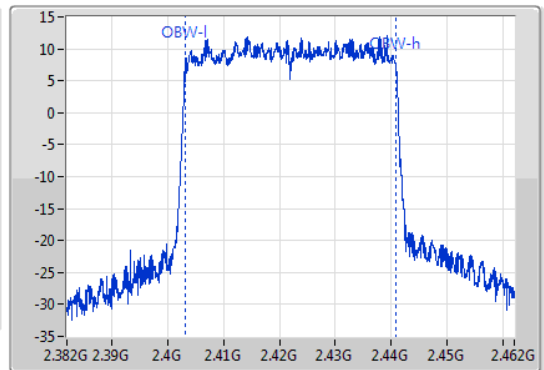
2422MHz

07/02/2020

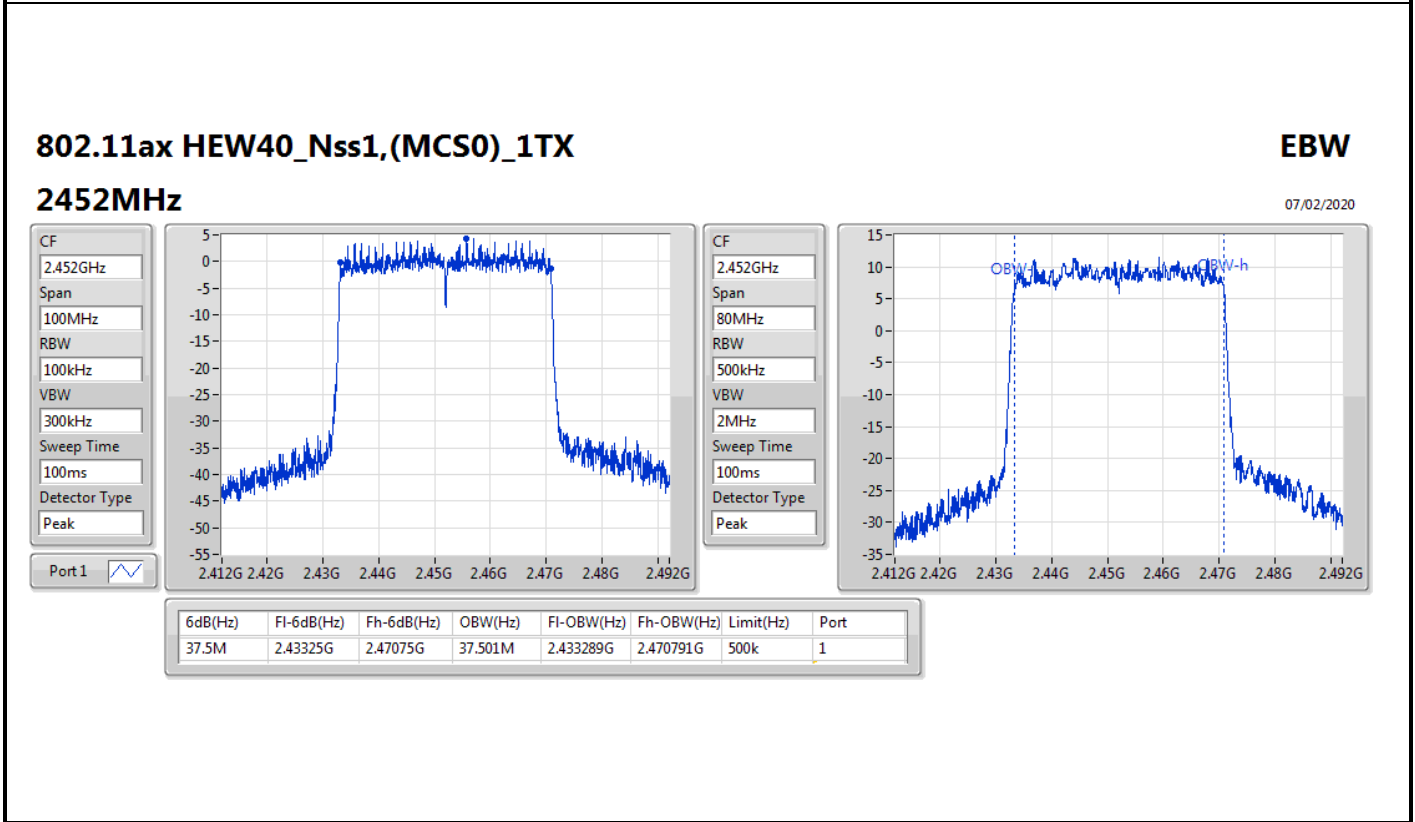
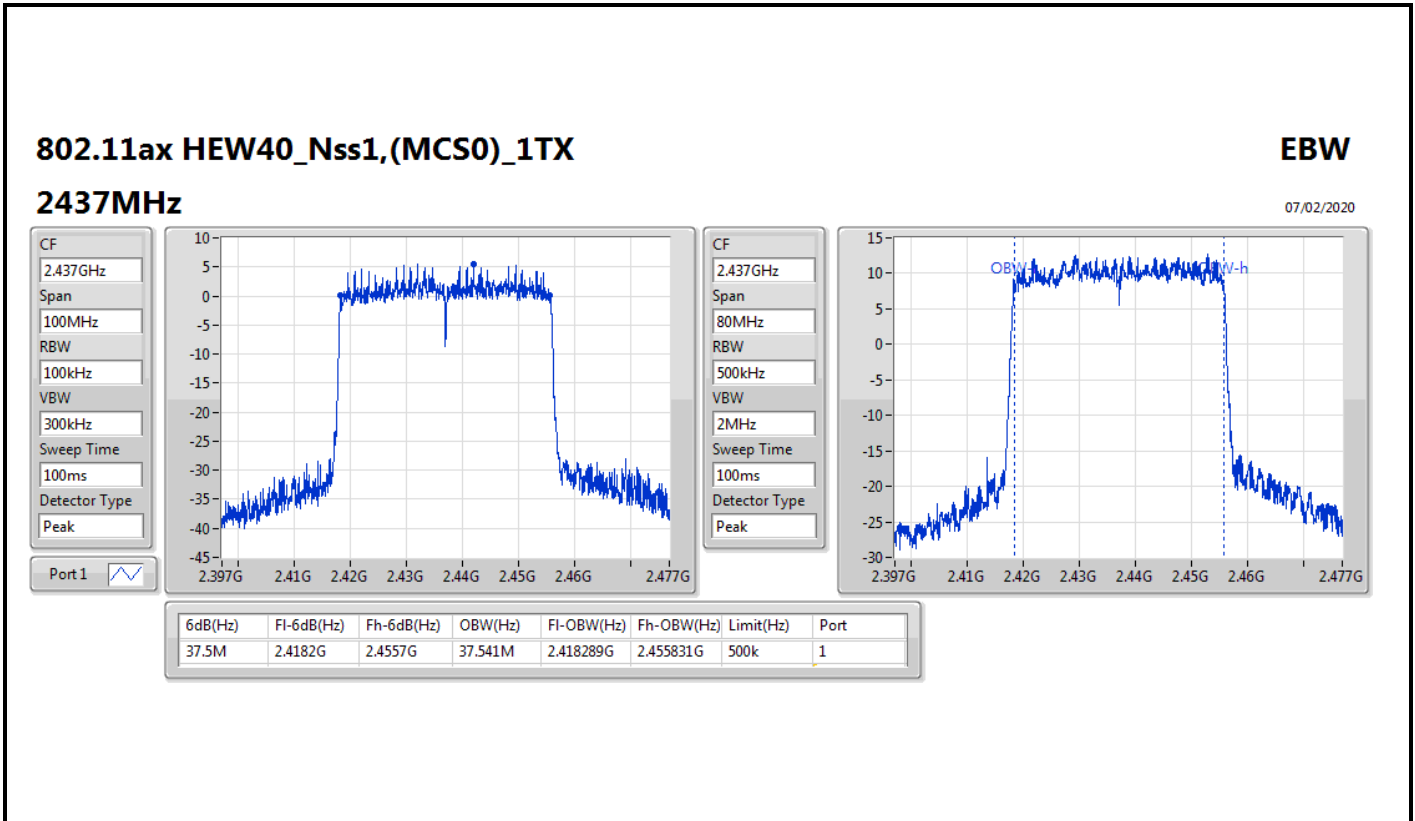
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.422GHz  
Span  
80MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.4032G	2.44075G	37.541M	2.403249G	2.440791G	500k	1





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	8M	11.454M	11M5G1D	6.975M	10.275M
802.11g_Nss1,(6Mbps)_2TX	16.375M	18.371M	18M4D1D	16.325M	16.652M
VHT20_Nss2,(MCS0)_2TX	17.6M	18.211M	18M2D1D	17.55M	17.791M
VHT40_Nss2,(MCS0)_2TX	36.3M	36.382M	36M4D1D	36.3M	36.262M
802.11ax HEW20_Nss2,(MCS0)_2TX	19M	19.15M	19M1D1D	18.85M	19.01M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.55M	37.621M	37M6D1D	37.15M	37.541M

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	8M	11.454M	7.025M	11.014M
2437MHz	Pass	500k	6.975M	10.275M	7M	10.295M
2462MHz	Pass	500k	7.025M	10.335M	7M	10.315M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.752M	16.35M	16.652M
2437MHz	Pass	500k	16.325M	18.371M	16.325M	17.711M
2462MHz	Pass	500k	16.35M	16.752M	16.375M	16.652M
VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.871M	17.6M	17.791M
2437MHz	Pass	500k	17.575M	18.211M	17.6M	17.991M
2462MHz	Pass	500k	17.55M	17.871M	17.6M	17.791M
VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.3M	36.342M	36.3M	36.262M
2437MHz	Pass	500k	36.3M	36.382M	36.3M	36.262M
2452MHz	Pass	500k	36.3M	36.382M	36.3M	36.302M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	19.03M	18.925M	19.03M
2437MHz	Pass	500k	18.975M	19.15M	18.85M	19.15M
2462MHz	Pass	500k	19M	19.01M	18.925M	19.01M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.55M	37.621M	37.5M	37.581M
2437MHz	Pass	500k	37.55M	37.621M	37.5M	37.581M
2452MHz	Pass	500k	37.55M	37.581M	37.15M	37.541M

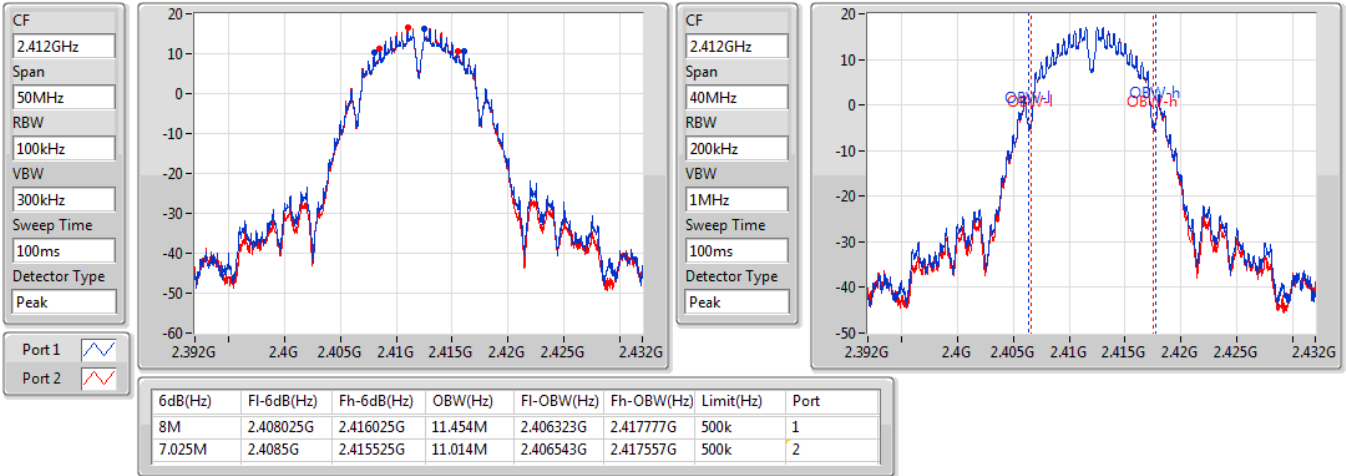
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

802.11b\_Nss1,(1Mbps)\_2TX

EBW

2412MHz

06/02/2020

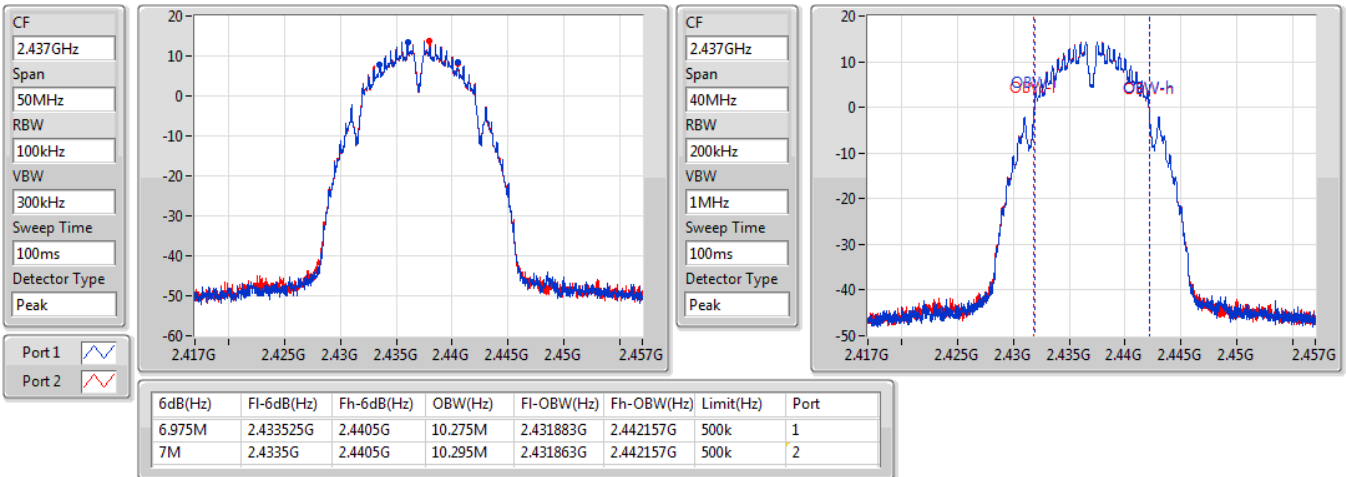


802.11b\_Nss1,(1Mbps)\_2TX

EBW

2437MHz

06/02/2020



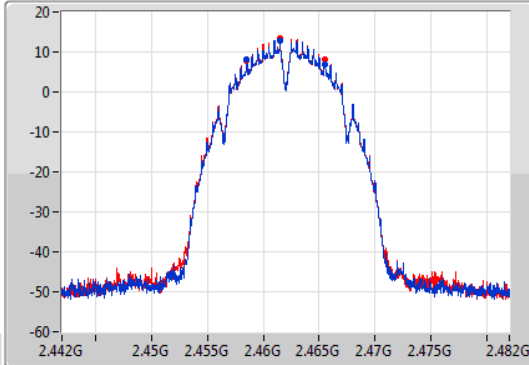
### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

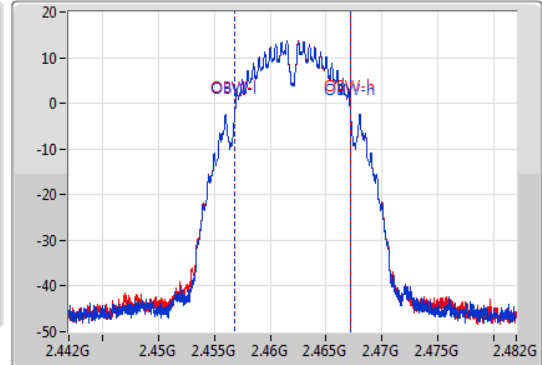
2462MHz

06/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.025M	2.4585G	2.465525G	10.335M	2.456843G	2.467177G	500k	1
7M	2.4585G	2.4655G	10.315M	2.456843G	2.467157G	500k	2

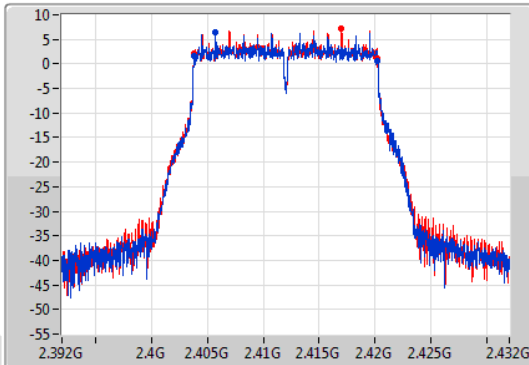
### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

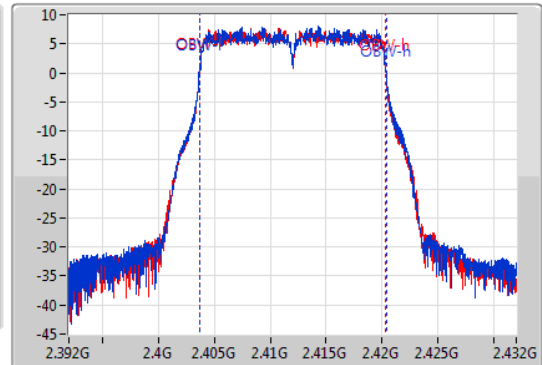
2412MHz

06/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.40385G	2.4202G	16.752M	2.403664G	2.420416G	500k	1
16.35M	2.40385G	2.4202G	16.652M	2.403684G	2.420336G	500k	2

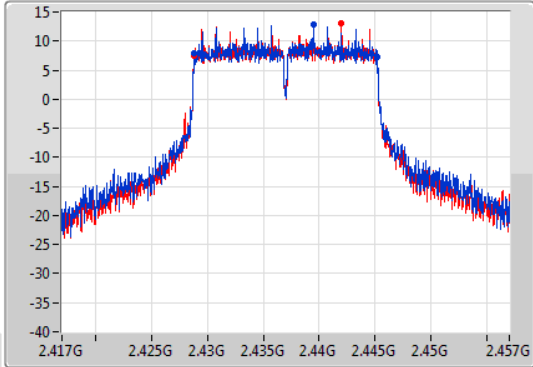
802.11g\_Nss1,(6Mbps)\_2TX

EBW

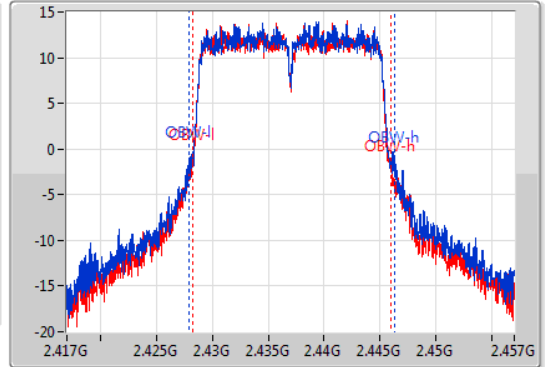
2437MHz

06/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	18.371M	2.427965G	2.446335G	500k	1
16.325M	2.42885G	2.445175G	17.711M	2.428244G	2.445956G	500k	2

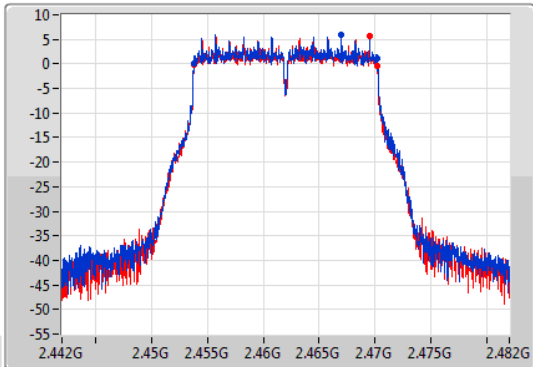
802.11g\_Nss1,(6Mbps)\_2TX

EBW

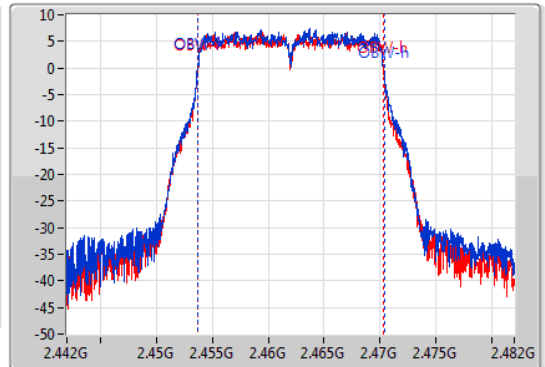
2462MHz

06/02/2020

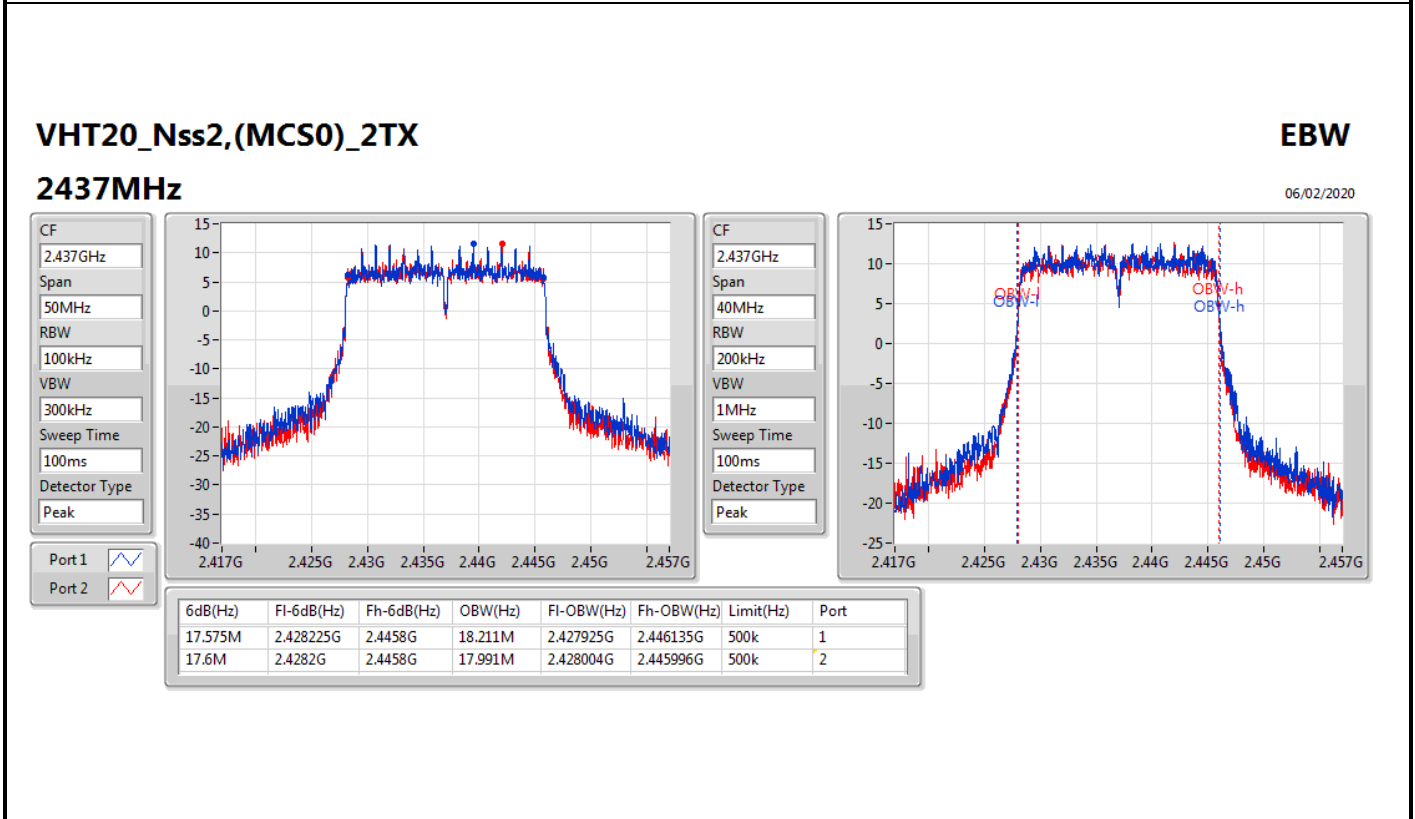
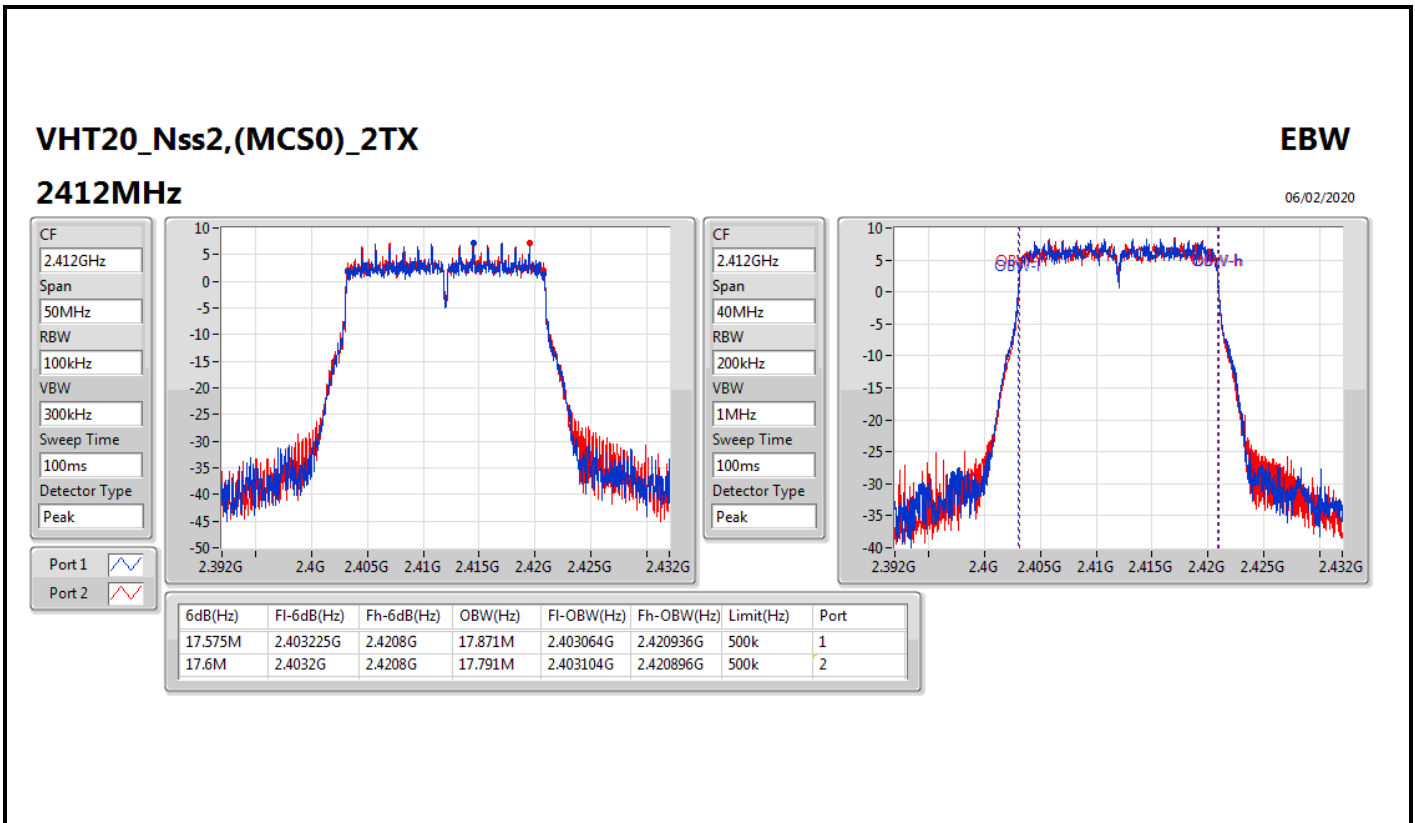
CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.453825G	2.470175G	16.752M	2.453664G	2.470416G	500k	1
16.375M	2.453825G	2.4702G	16.652M	2.453684G	2.470336G	500k	2





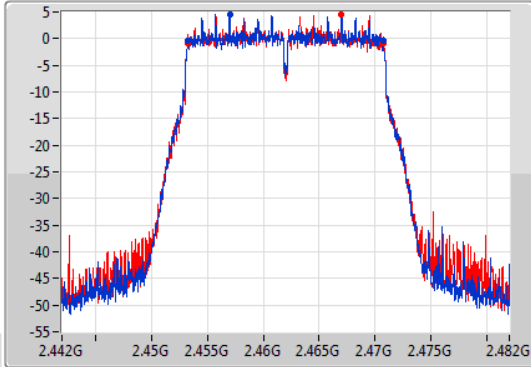
VHT20\_Nss2,(MCS0)\_2TX

EBW

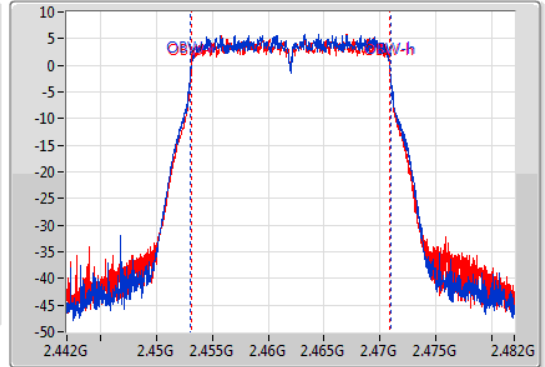
2462MHz

06/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	2.453225G	2.470775G	17.871M	2.453064G	2.470936G	500k	1
17.6M	2.4532G	2.4708G	17.791M	2.453104G	2.470896G	500k	2

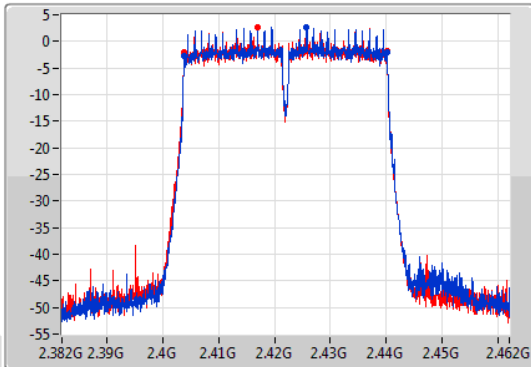
VHT40\_Nss2,(MCS0)\_2TX

EBW

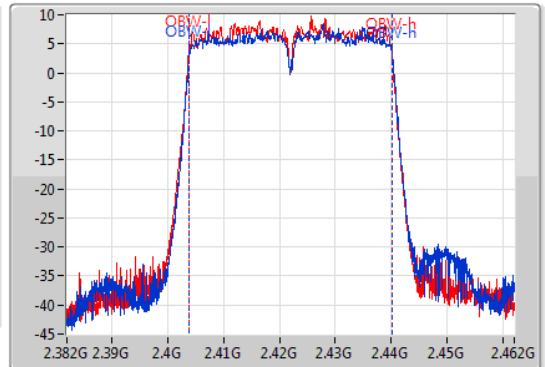
2422MHz

06/02/2020

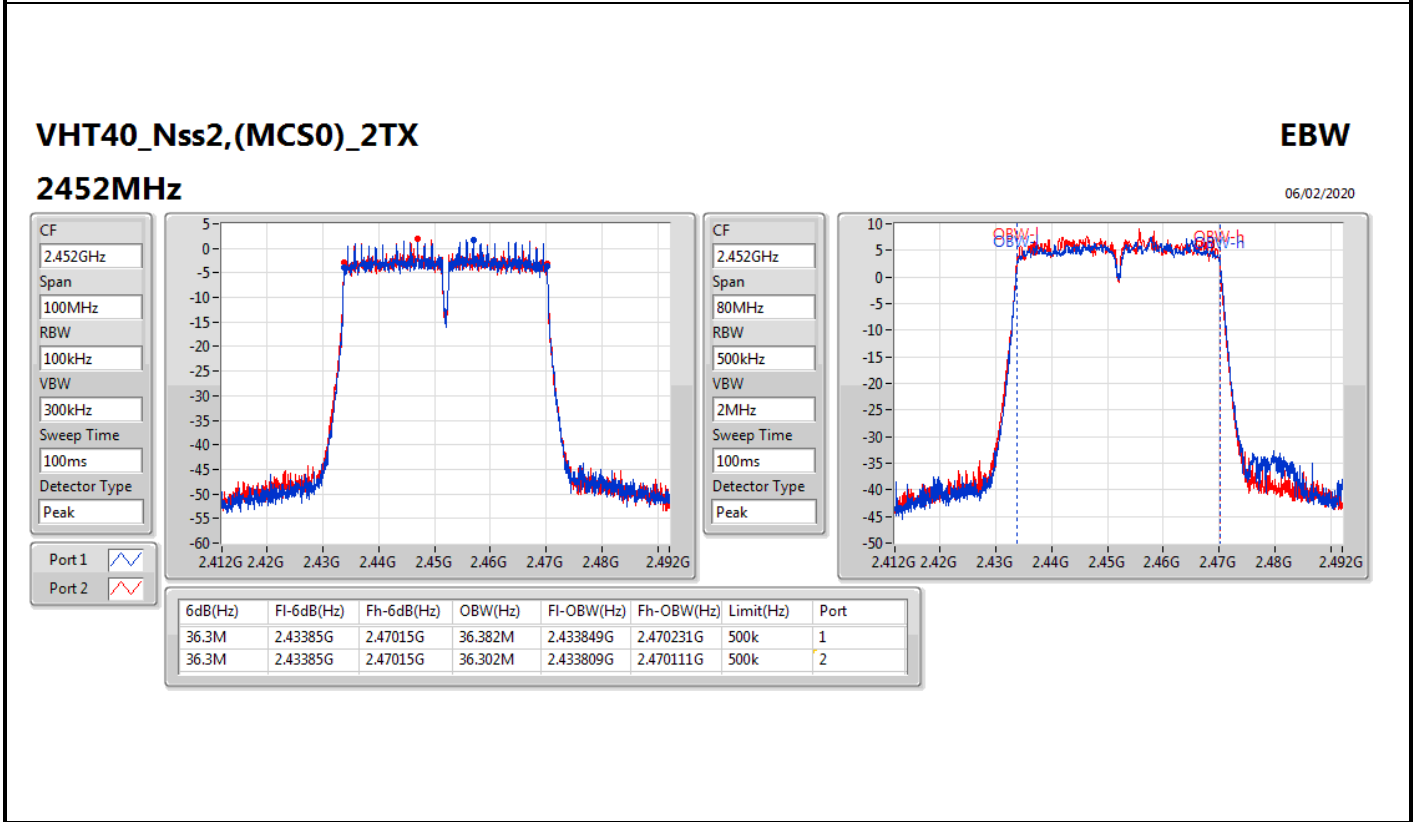
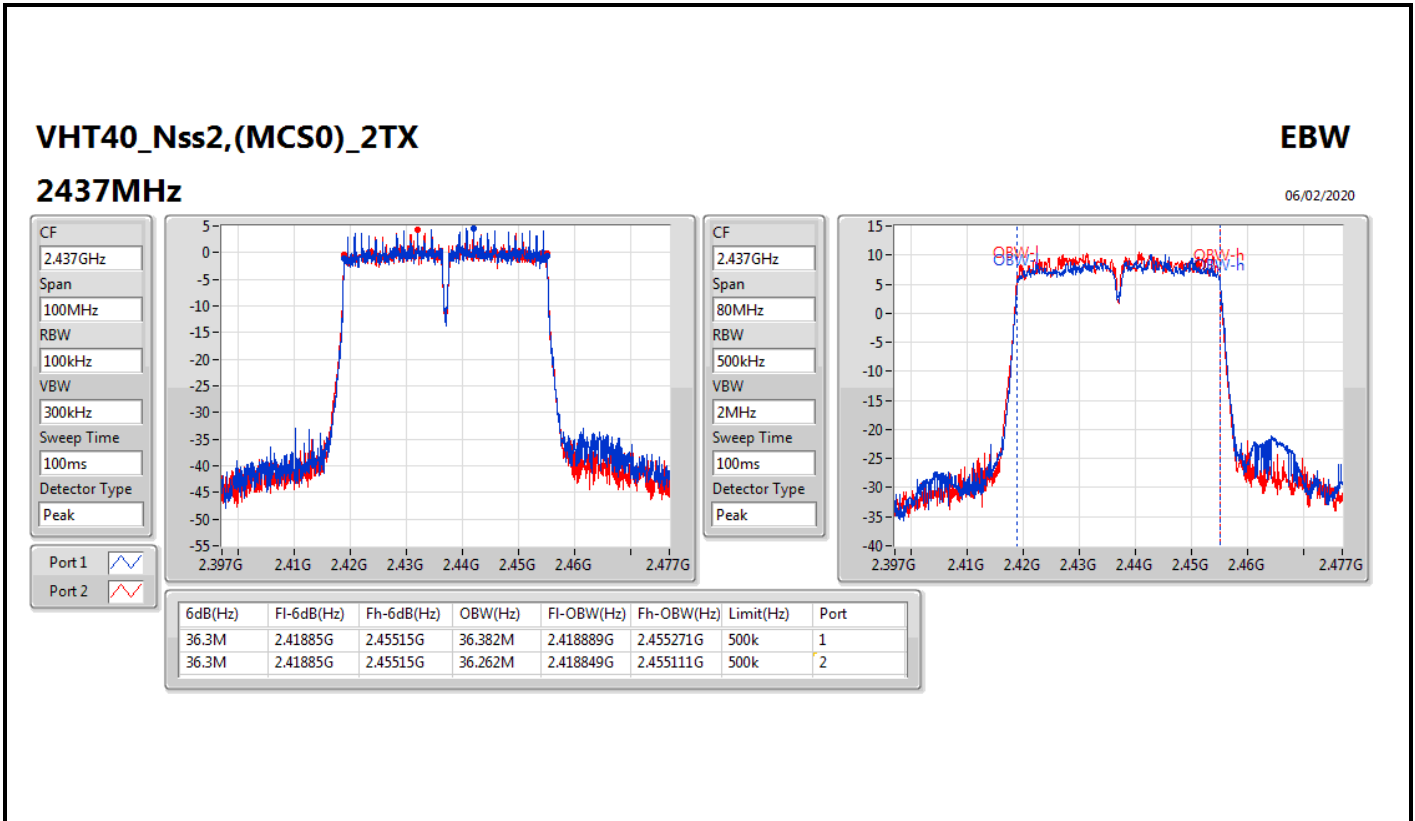
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
80MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	2.40385G	2.44015G	36.342M	2.403889G	2.440231G	500k	1
36.3M	2.40385G	2.44015G	36.262M	2.403849G	2.440111G	500k	2



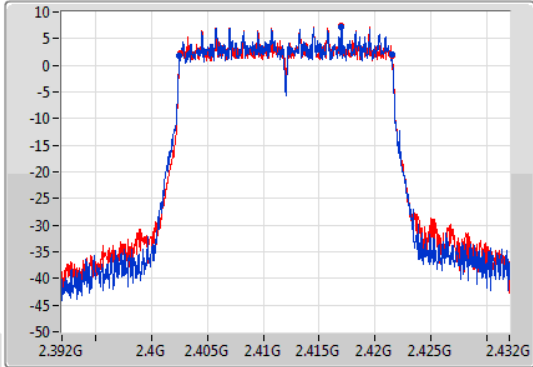
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

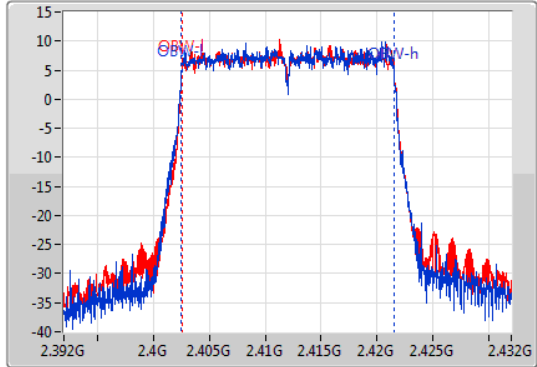
2412MHz

06/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.402525G	2.421475G	19.03M	2.402505G	2.421535G	500k	1
18.925M	2.402575G	2.4215G	19.03M	2.402545G	2.421575G	500k	2

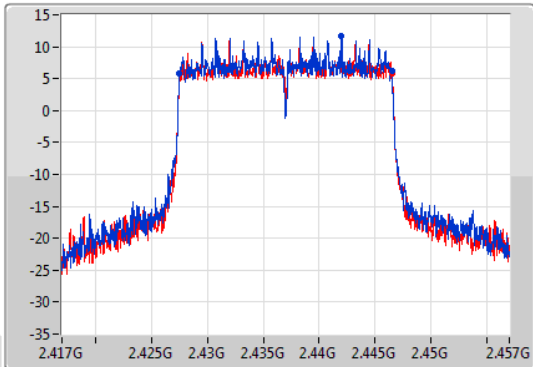
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

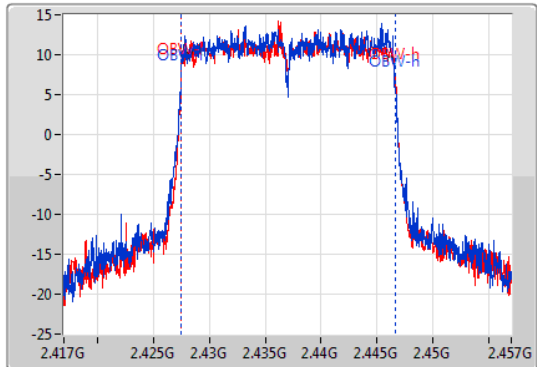
2437MHz

06/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4275G	2.446475G	19.15M	2.427445G	2.446595G	500k	1
18.85M	2.427625G	2.446475G	19.15M	2.427485G	2.446635G	500k	2

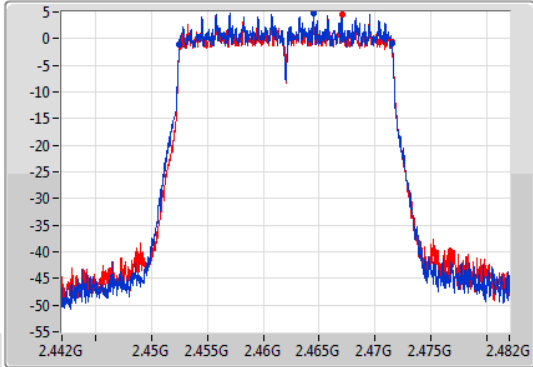
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

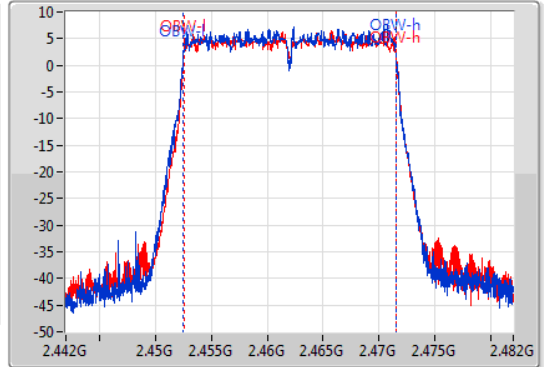
2462MHz

06/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1  
Port 2



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4525G	2.4715G	19.01M	2.452505G	2.471515G	500k	1
18.925M	2.45255G	2.471475G	19.01M	2.452545G	2.471555G	500k	2

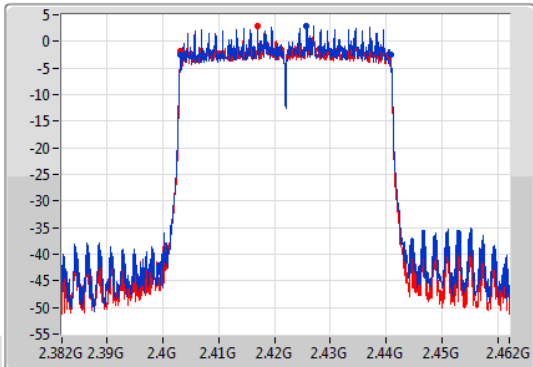
802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

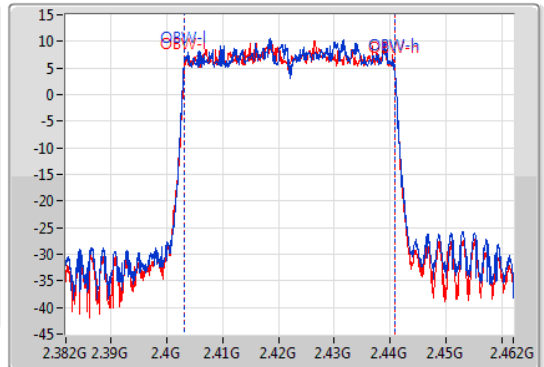
2422MHz

06/02/2020

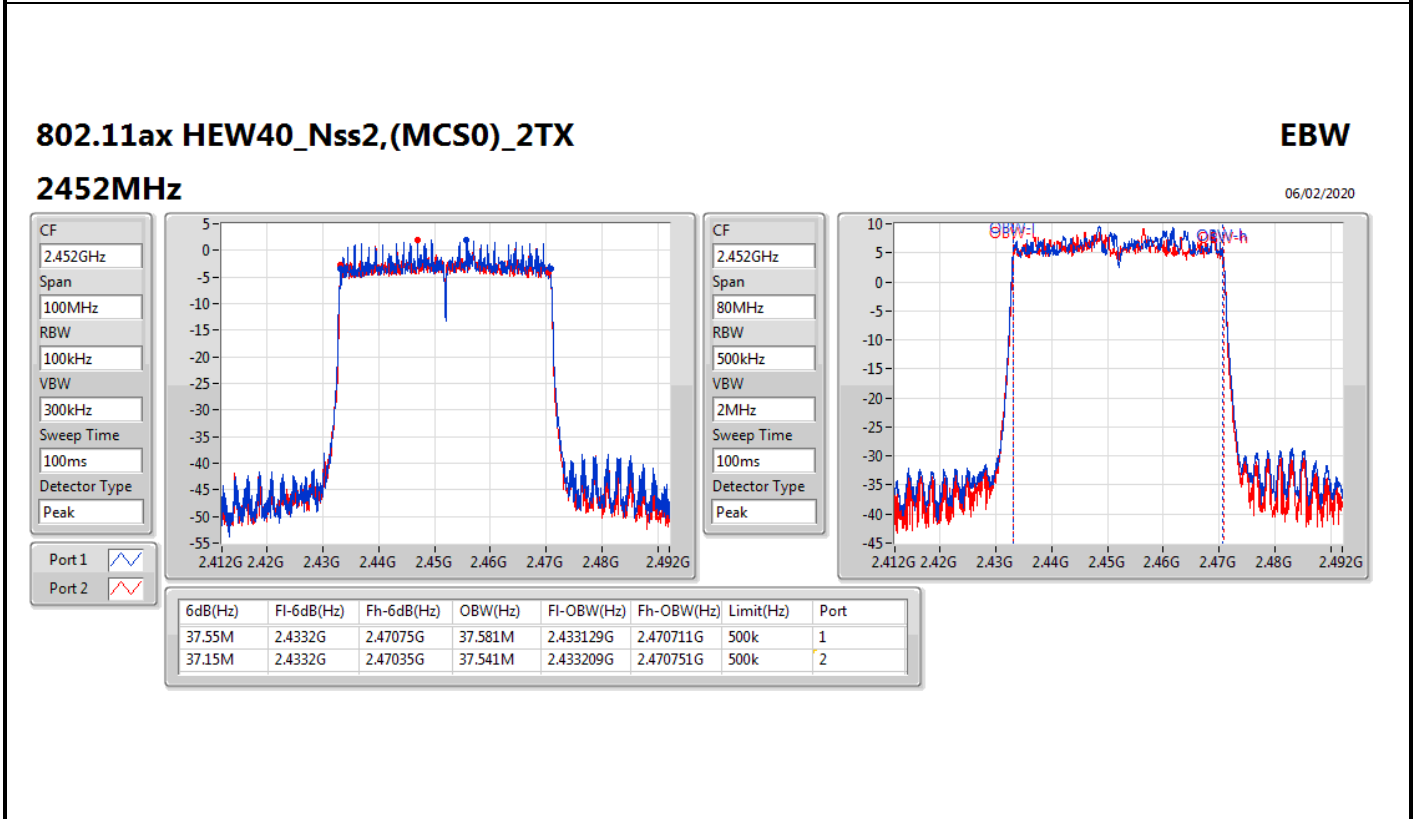
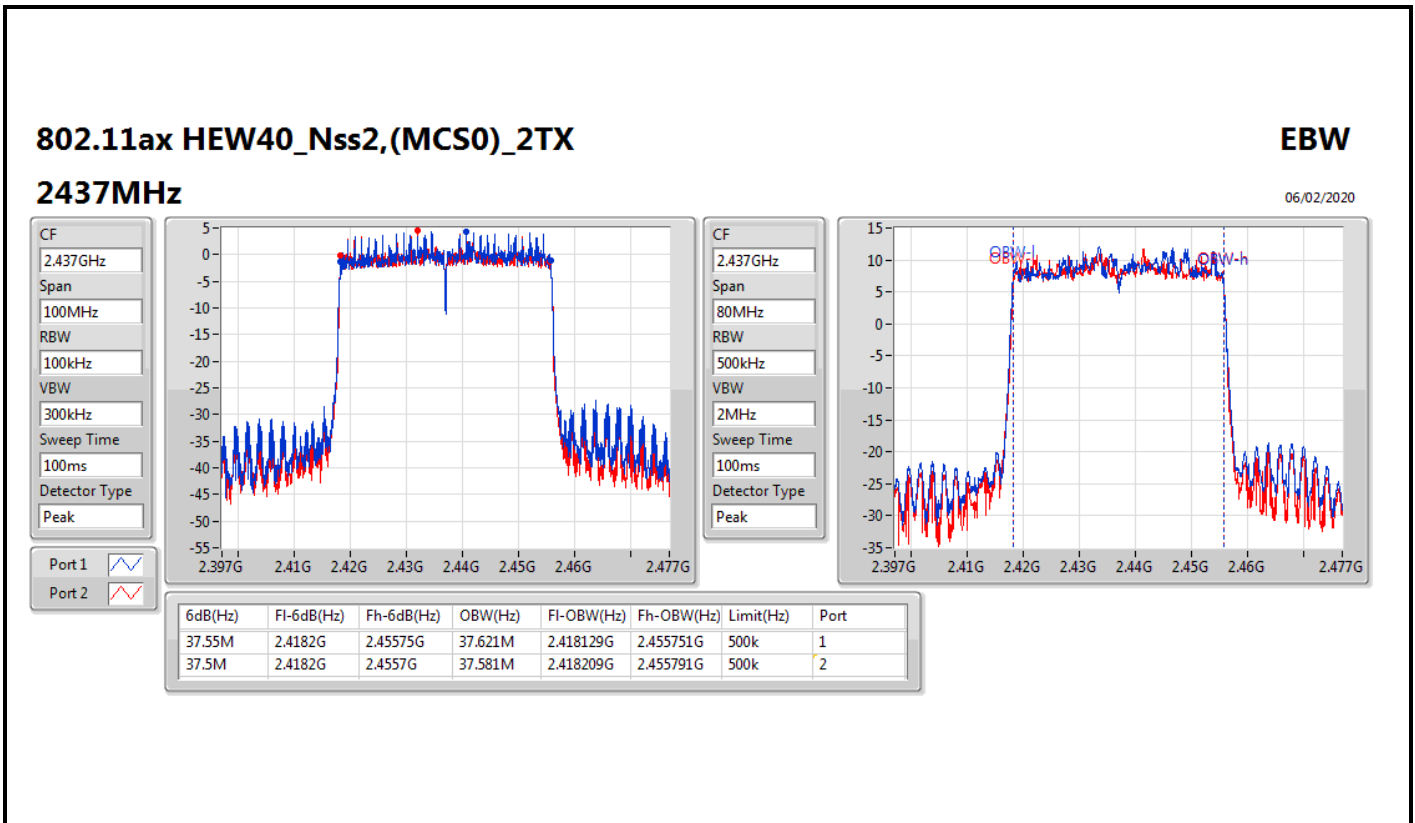
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1  
Port 2



CF  
2.422GHz  
Span  
80MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.4032G	2.44075G	37.621M	2.403129G	2.440751G	500k	1
37.5M	2.4032G	2.4407G	37.581M	2.403209G	2.440791G	500k	2





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	7.05M	11.944M	11M9G1D	6.975M	10.445M
802.11g_Nss1,(6Mbps)_1TX	16.325M	17.616M	17M6D1D	16.325M	16.767M
VHT20_Nss1,(MCS0)_1TX	17.575M	18.141M	18M1D1D	17.575M	17.841M
VHT40_Nss1,(MCS0)_1TX	36.35M	36.432M	36M4D1D	36.3M	36.432M
802.11ax HEW20_Nss1,(MCS0)_1TX	19M	19.215M	19M2D1D	18.9M	19.015M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.6M	37.581M	37M6D1D	37.55M	37.531M

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



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.05M	10.445M
2437MHz	Pass	500k	6.975M	11.944M
2462MHz	Pass	500k	7M	11.394M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.325M	16.767M
2437MHz	Pass	500k	16.325M	17.616M
2462MHz	Pass	500k	16.325M	16.767M
VHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.575M	17.841M
2437MHz	Pass	500k	17.575M	18.141M
2462MHz	Pass	500k	17.575M	17.841M
VHT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	36.3M	36.432M
2437MHz	Pass	500k	36.35M	36.432M
2452MHz	Pass	500k	36.3M	36.432M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	19M	19.015M
2437MHz	Pass	500k	18.9M	19.215M
2462MHz	Pass	500k	18.95M	19.015M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	37.55M	37.531M
2437MHz	Pass	500k	37.6M	37.581M
2452MHz	Pass	500k	37.55M	37.531M

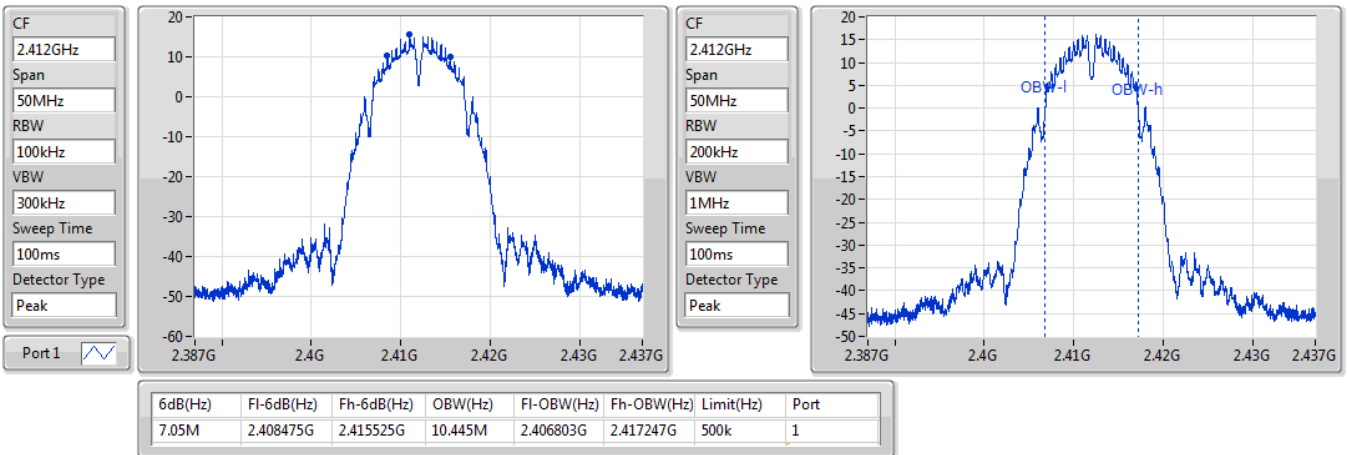
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

03/02/2020

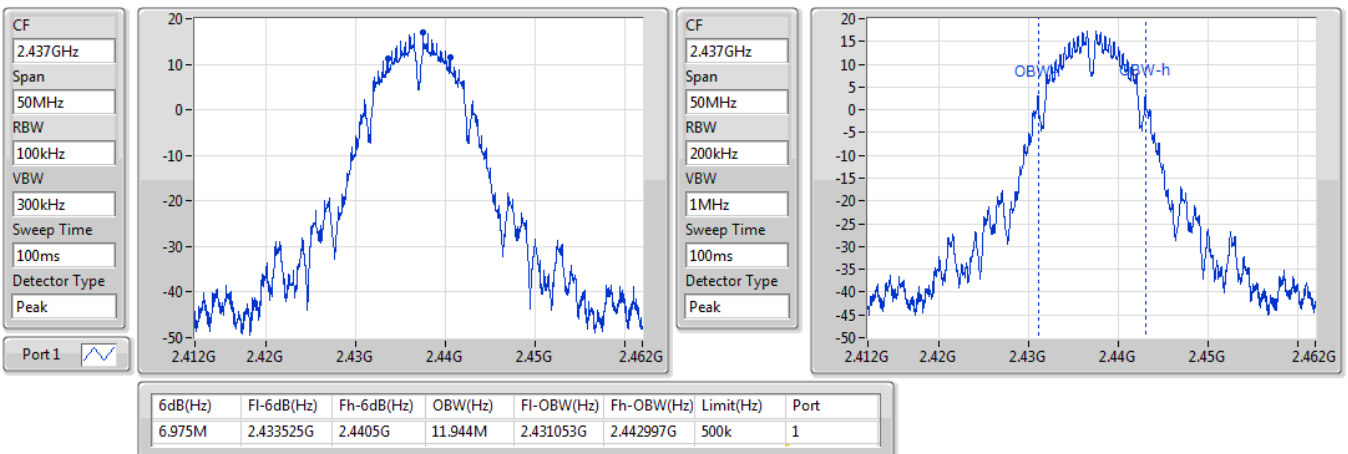


802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

03/02/2020





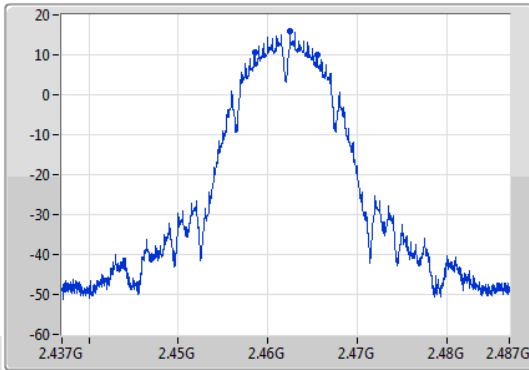
802.11b\_Nss1,(1Mbps)\_1TX

EBW

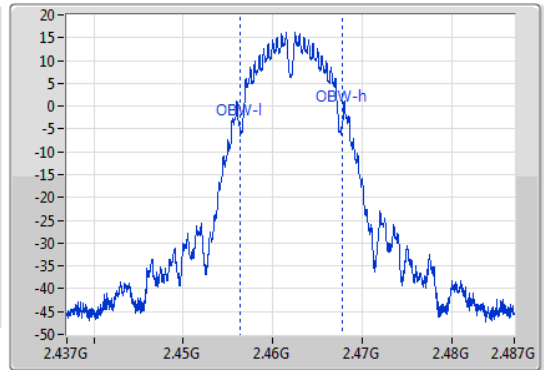
2462MHz

03/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7M	2.458525G	2.465525G	11.394M	2.456403G	2.467797G	500k	1

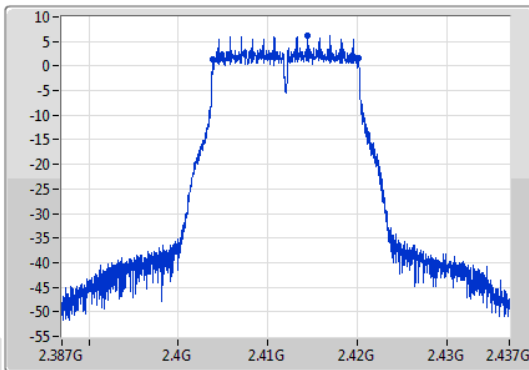
802.11g\_Nss1,(6Mbps)\_1TX

EBW

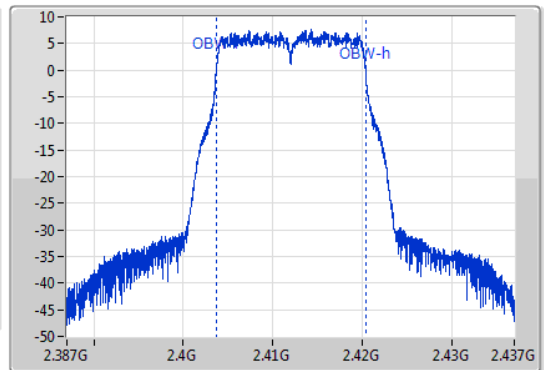
2412MHz

03/02/2020

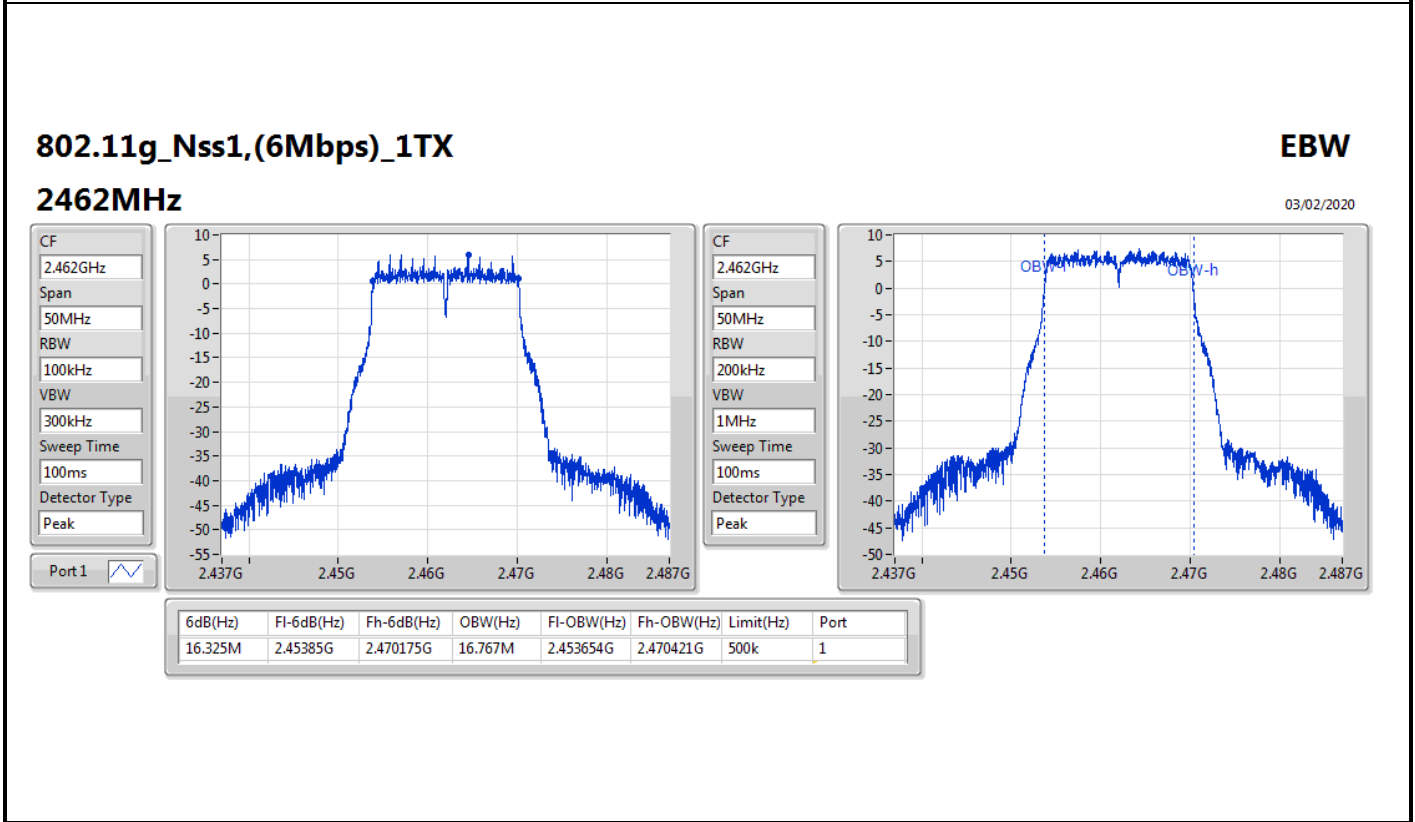
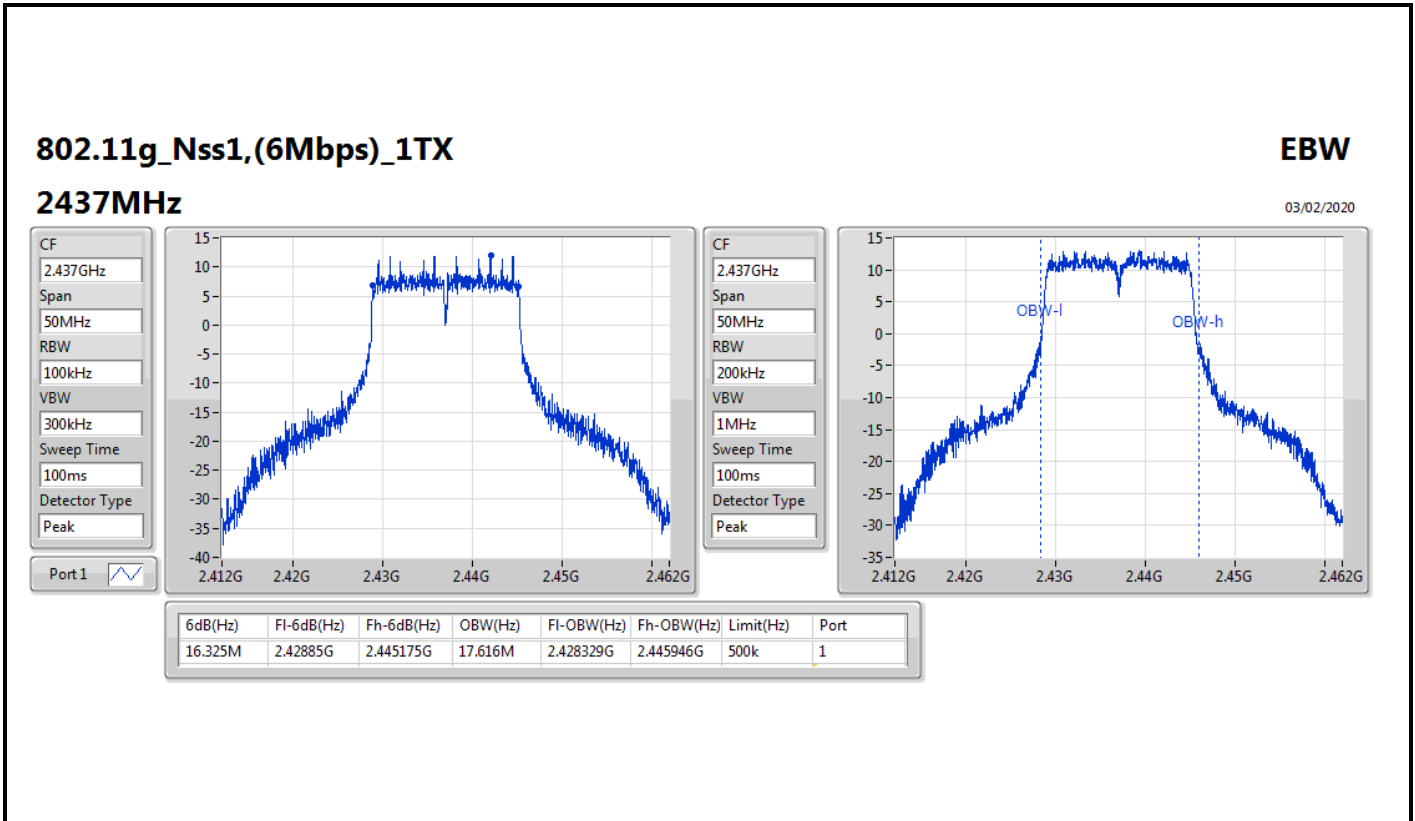
CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1

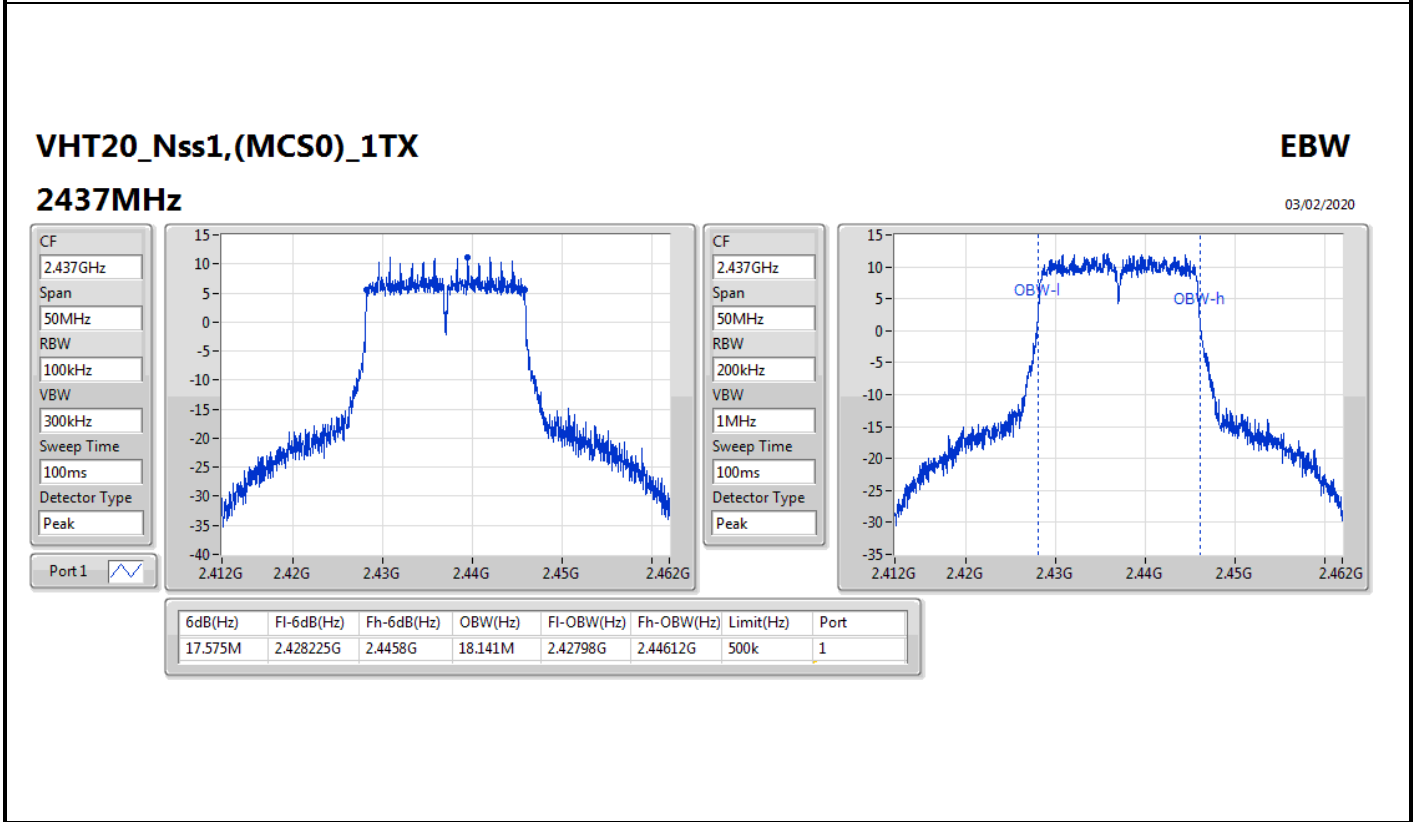
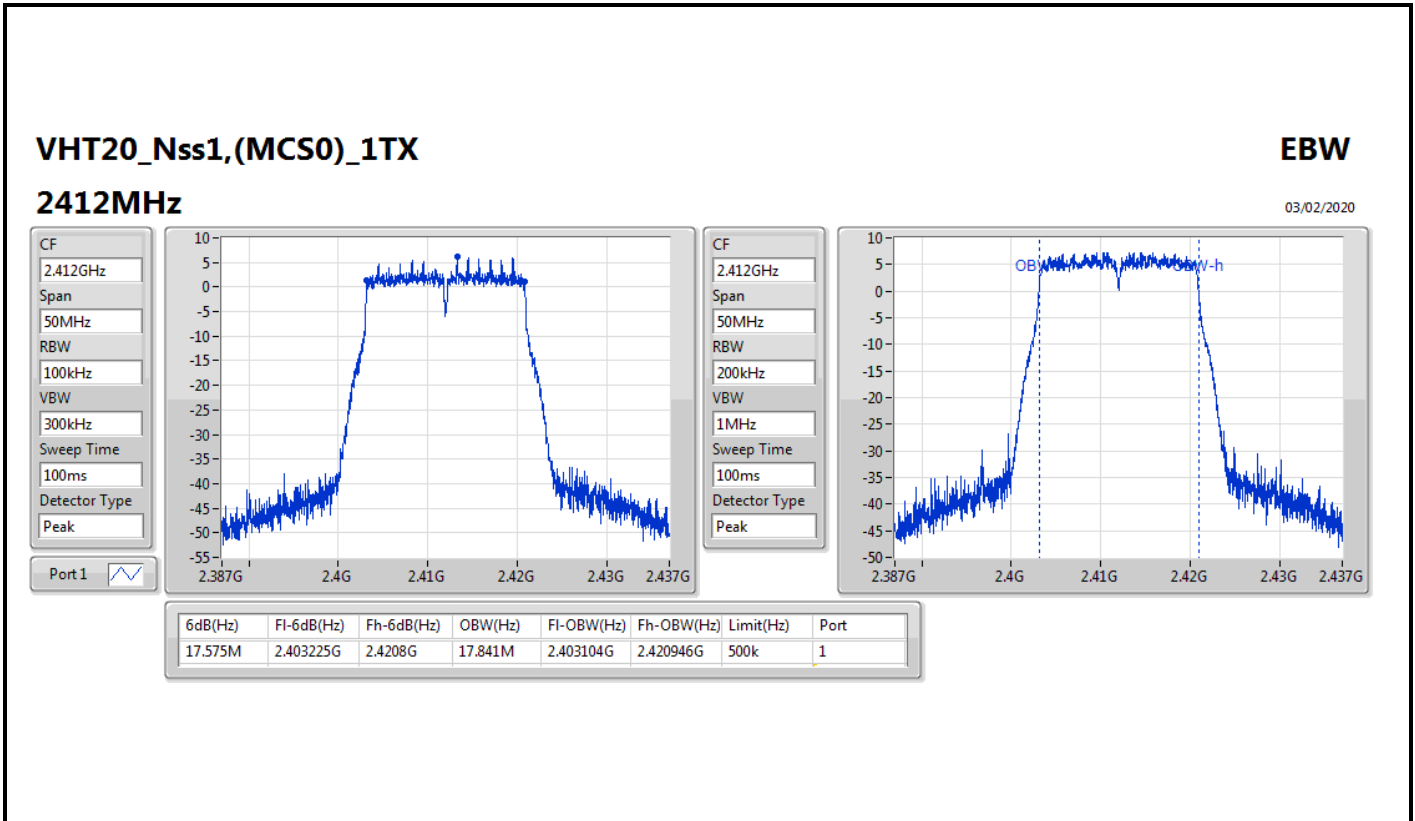


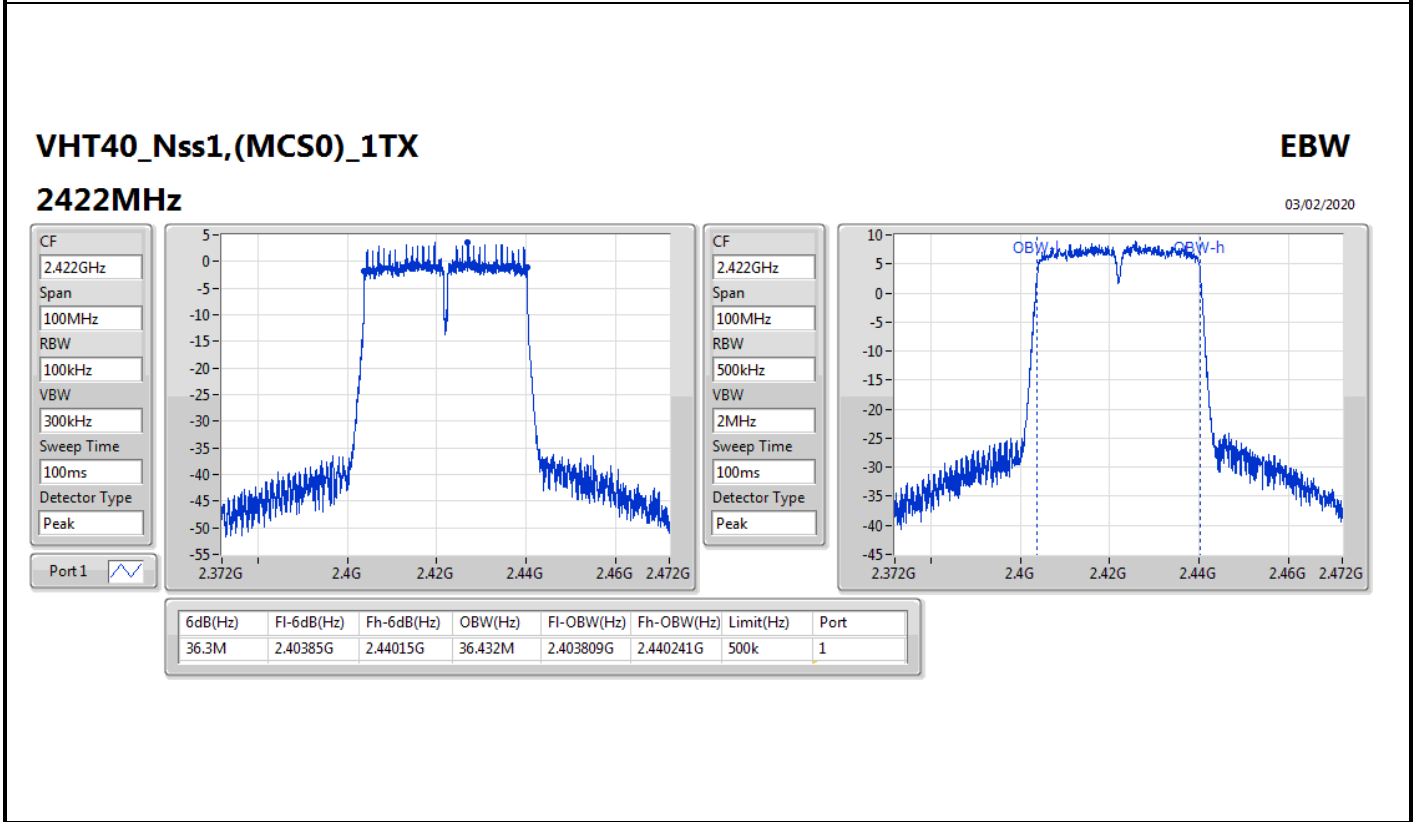
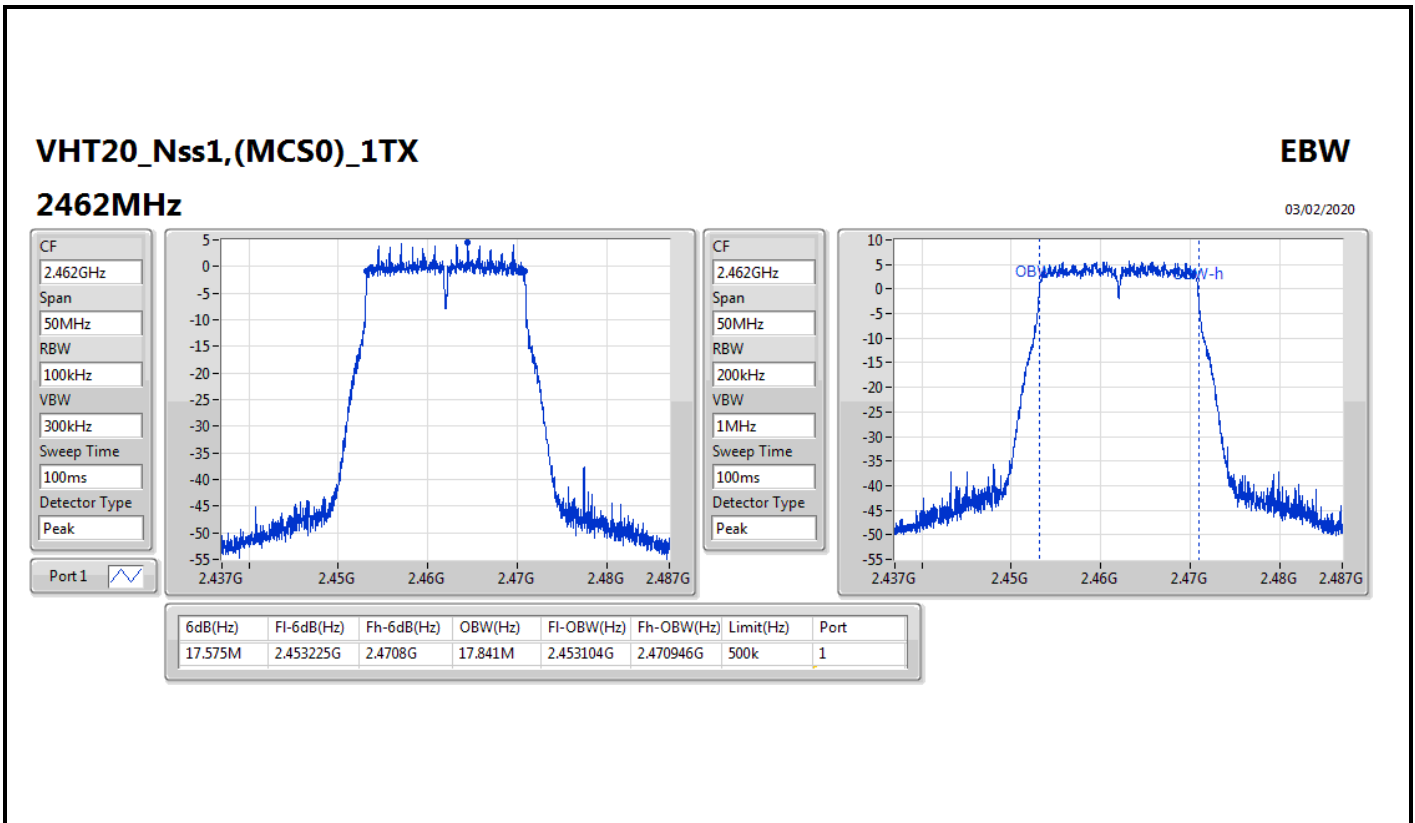
CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak

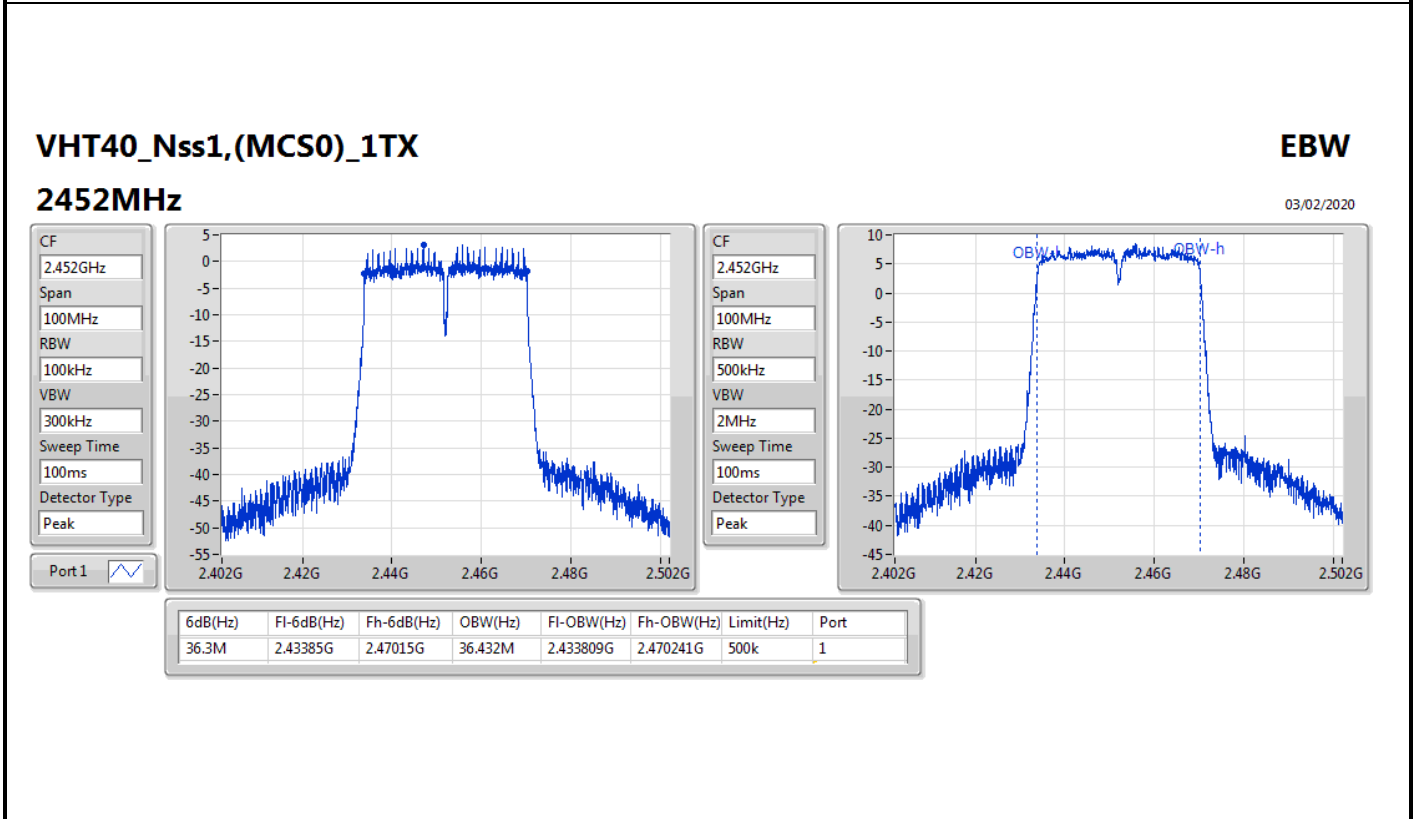
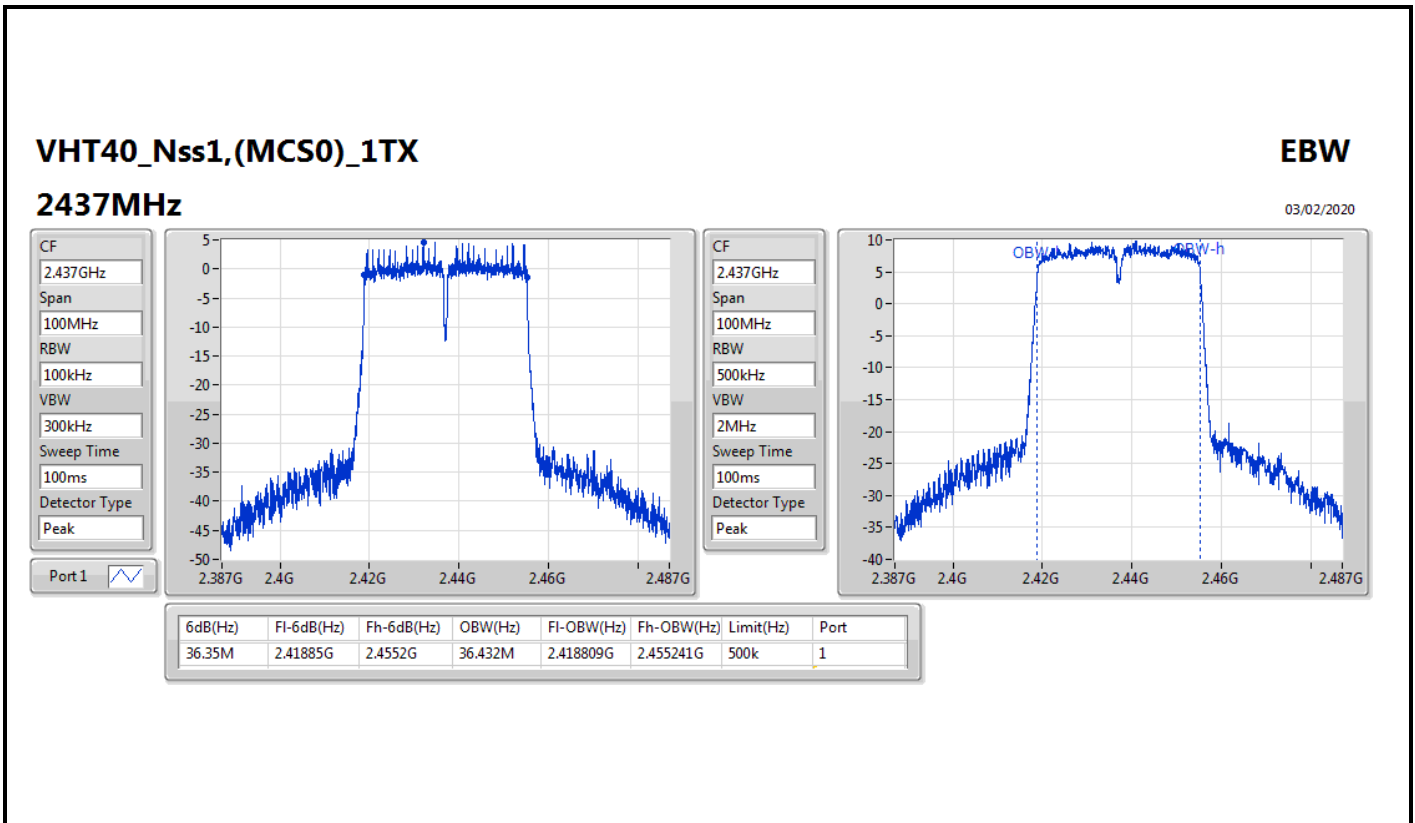


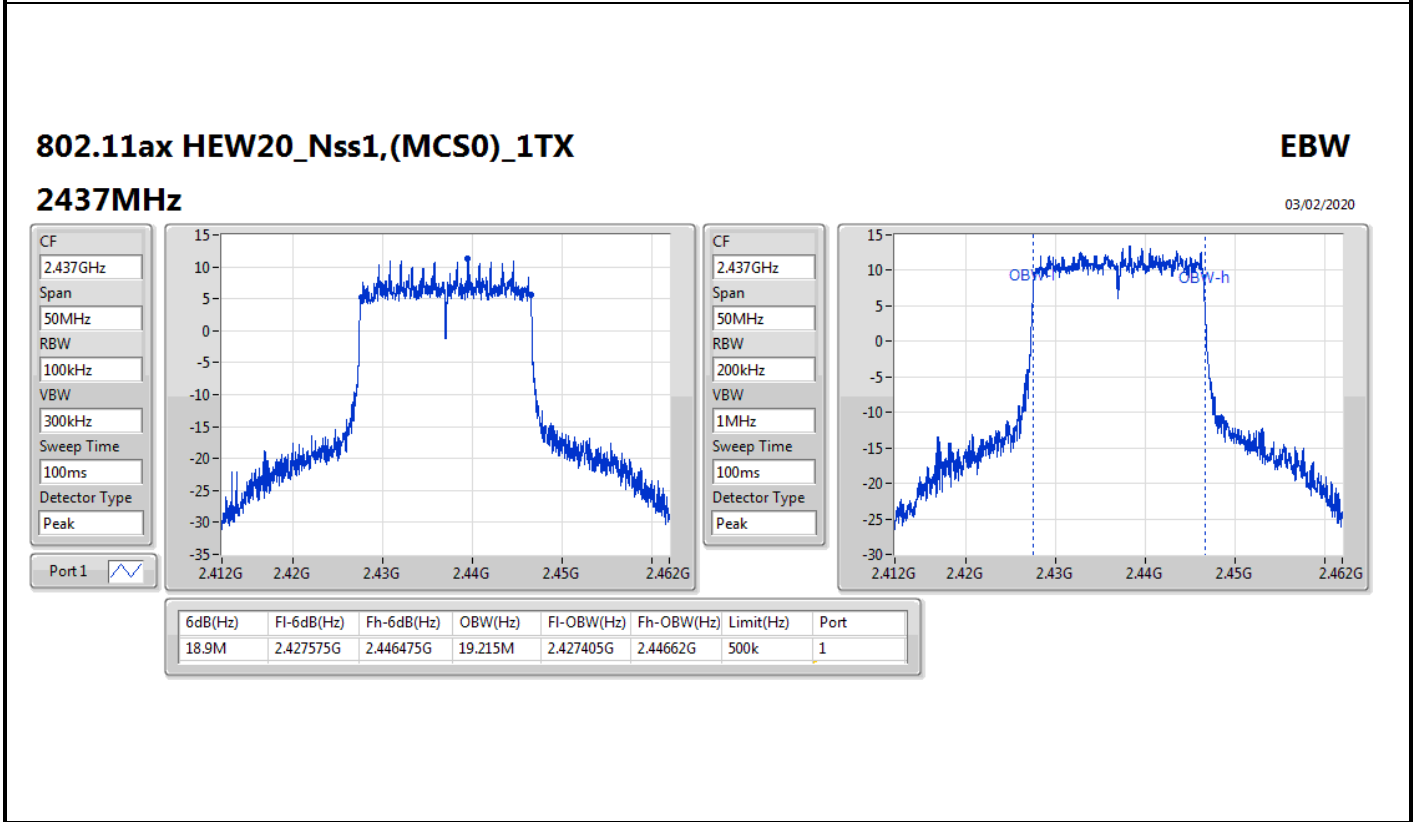
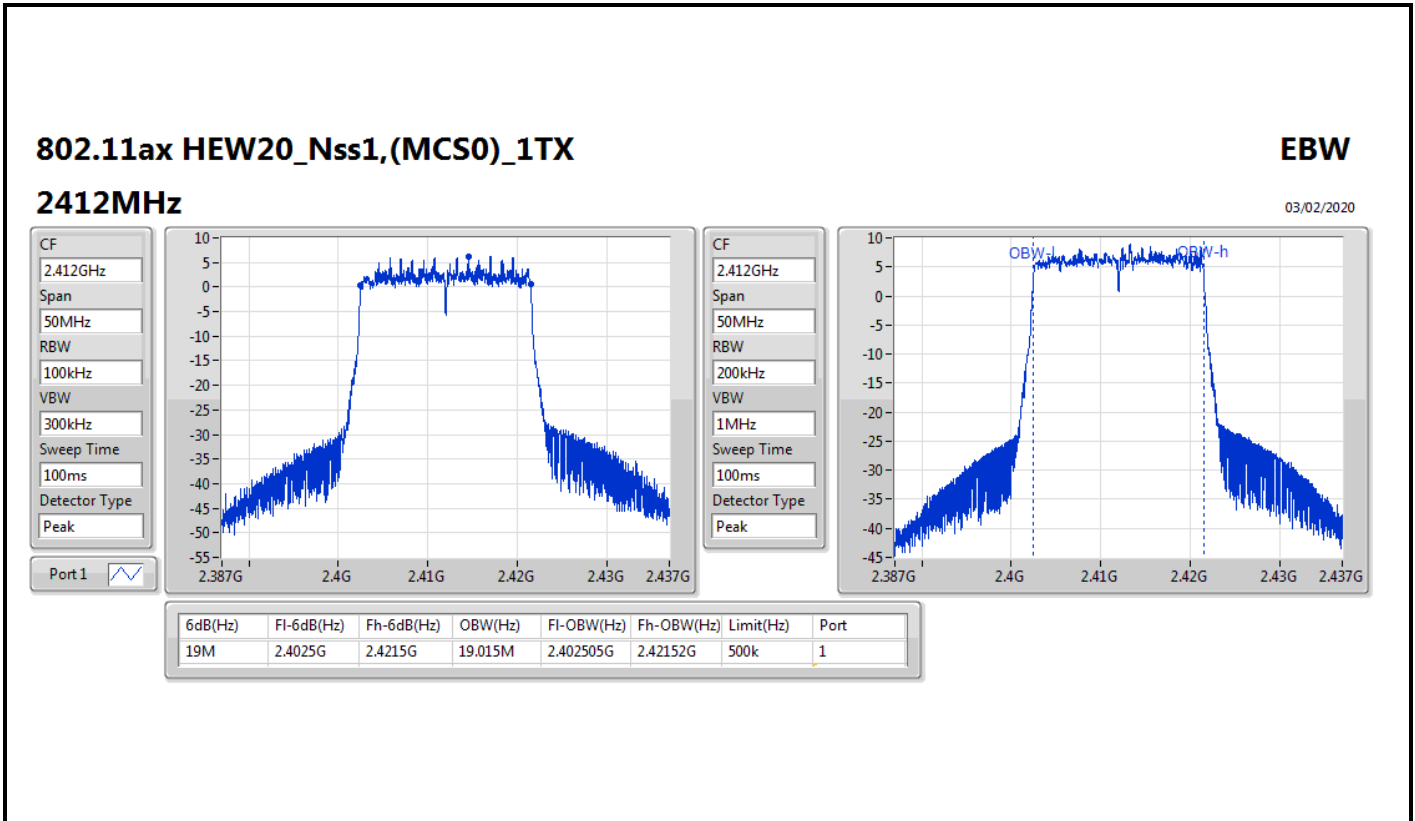
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.40385G	2.420175G	16.767M	2.403679G	2.420446G	500k	1









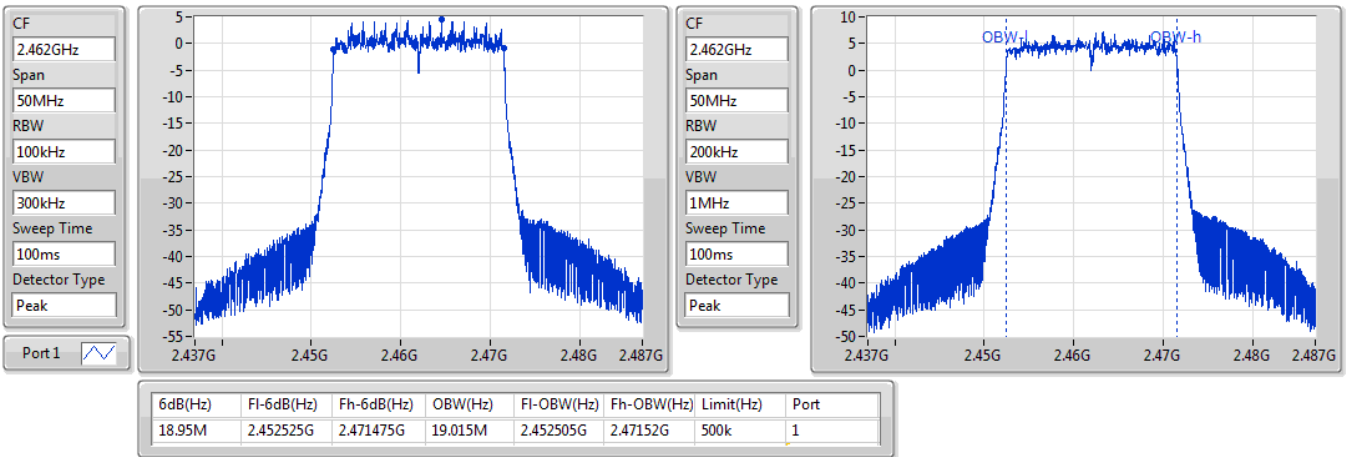


802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

03/02/2020

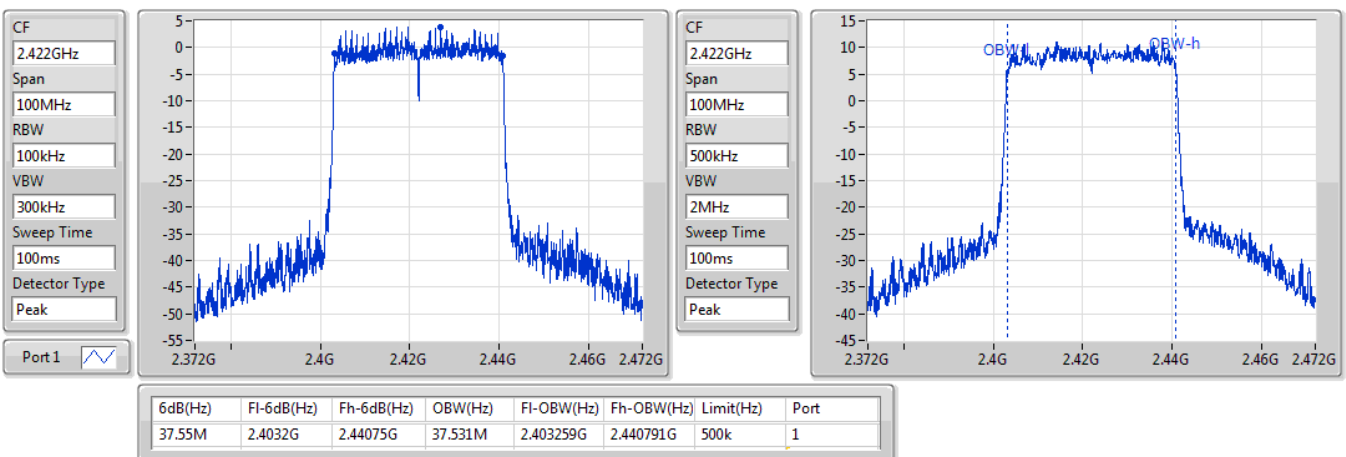


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2422MHz

03/02/2020

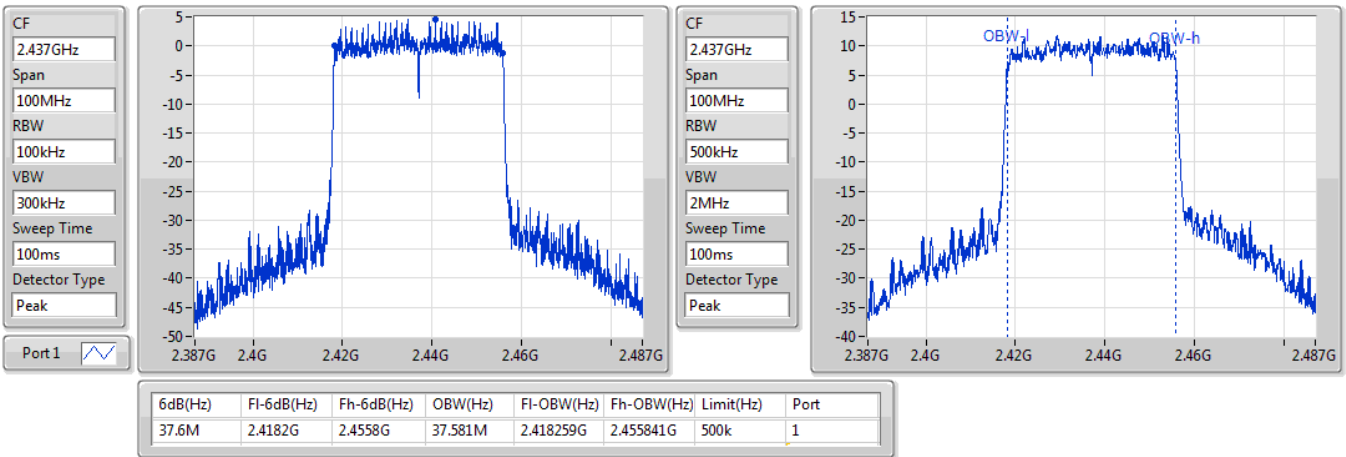


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2437MHz

03/02/2020

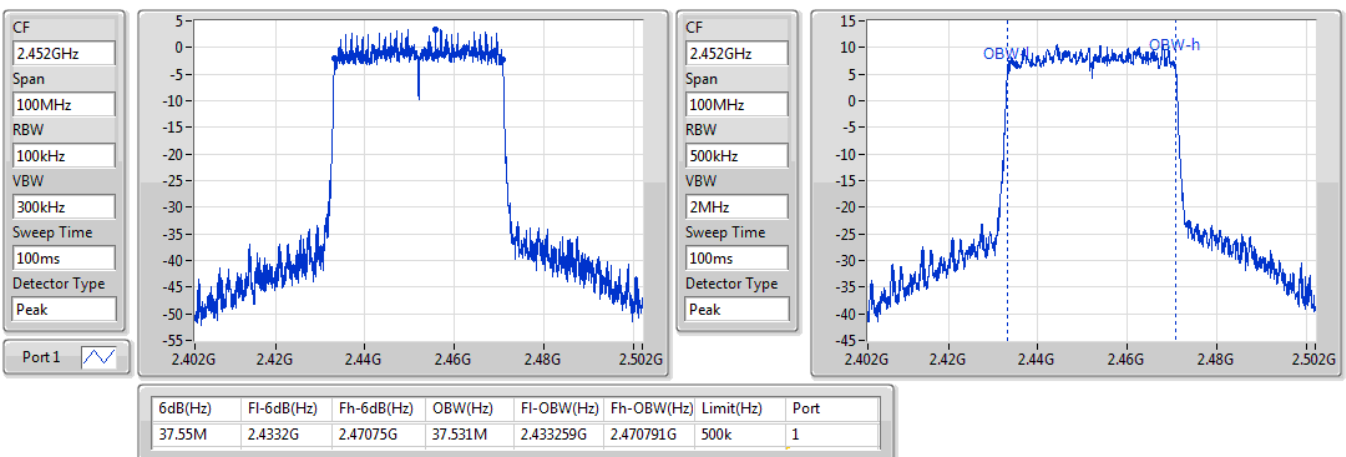


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2452MHz

03/02/2020







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	7.05M	10.57M	10M6G1D	7.025M	10.32M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.967M	17M0D1D	16.325M	16.642M
VHT20_Nss2,(MCS0)_2TX	17.6M	18.016M	18M0D1D	17.55M	17.791M
VHT40_Nss2,(MCS0)_2TX	36.3M	36.382M	36M4D1D	36.25M	36.282M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.975M	19.115M	19M1D1D	18.875M	19.04M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.65M	37.581M	37M6D1D	37.5M	37.531M

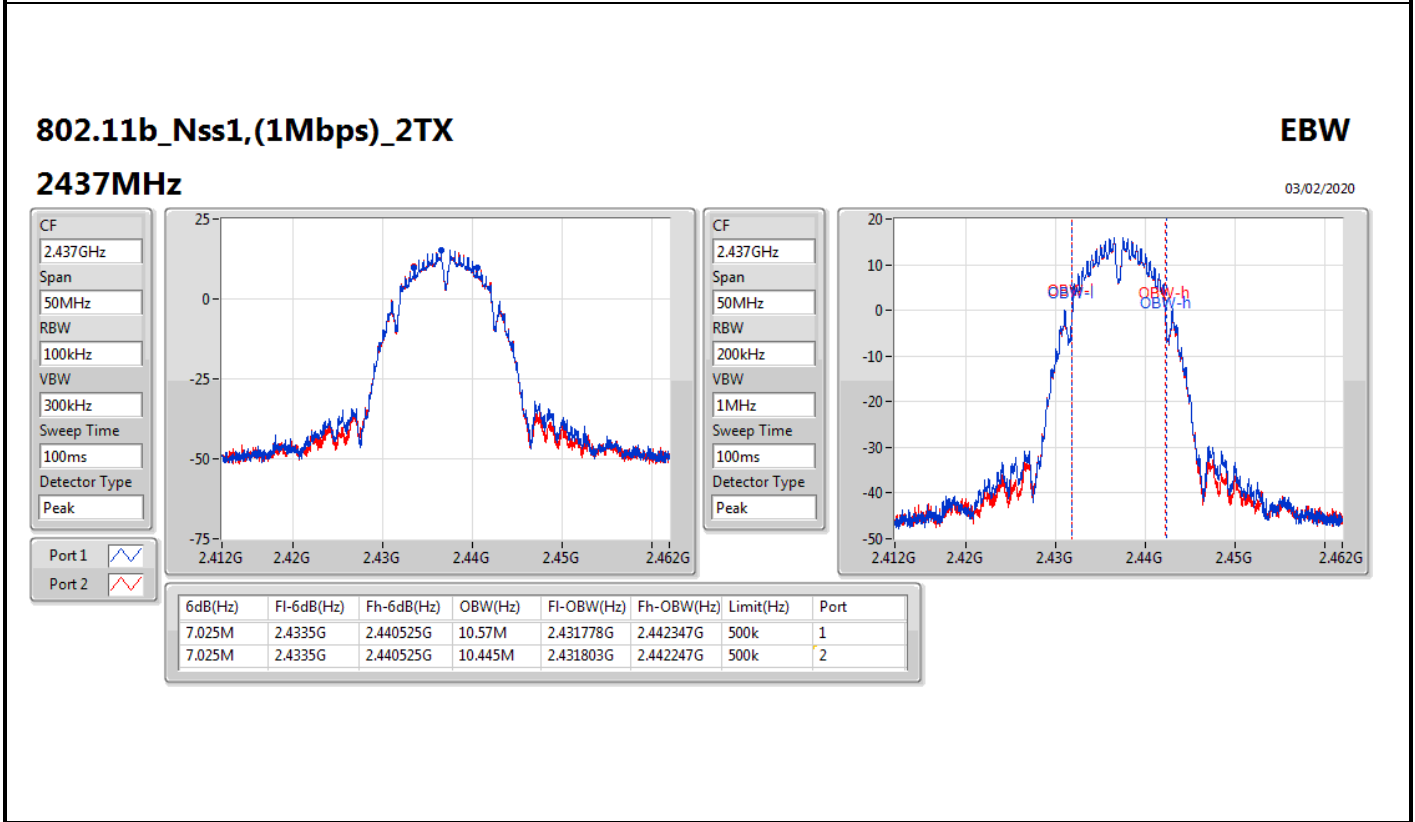
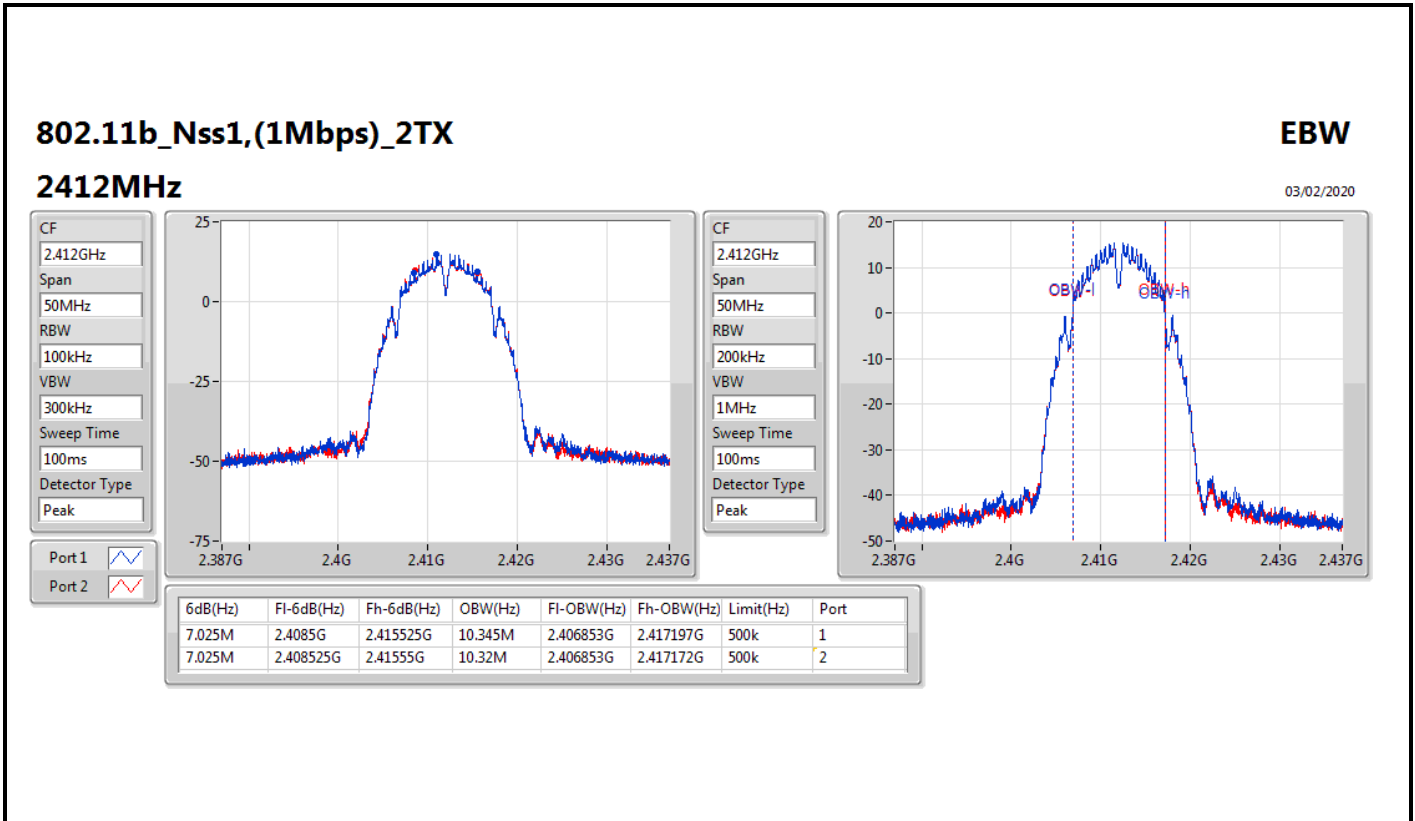
**Max-N dB** = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;  
**Min-N dB** = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;



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	7.025M	10.345M	7.025M	10.32M
2437MHz	Pass	500k	7.025M	10.57M	7.025M	10.445M
2462MHz	Pass	500k	7.05M	10.37M	7.025M	10.345M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.742M	16.35M	16.667M
2437MHz	Pass	500k	16.325M	16.967M	16.35M	16.867M
2462MHz	Pass	500k	16.325M	16.767M	16.35M	16.642M
VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.891M	17.6M	17.791M
2437MHz	Pass	500k	17.55M	18.016M	17.6M	17.916M
2462MHz	Pass	500k	17.6M	17.866M	17.6M	17.791M
VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.3M	36.382M	36.25M	36.282M
2437MHz	Pass	500k	36.3M	36.382M	36.3M	36.332M
2452MHz	Pass	500k	36.3M	36.382M	36.3M	36.282M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	19.04M	18.95M	19.04M
2437MHz	Pass	500k	18.95M	19.065M	18.9M	19.115M
2462MHz	Pass	500k	18.975M	19.04M	18.875M	19.04M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.65M	37.581M	37.5M	37.531M
2437MHz	Pass	500k	37.6M	37.581M	37.5M	37.531M
2452MHz	Pass	500k	37.6M	37.581M	37.5M	37.531M

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



### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

2462MHz

03/02/2020

CF  
2.462GHz

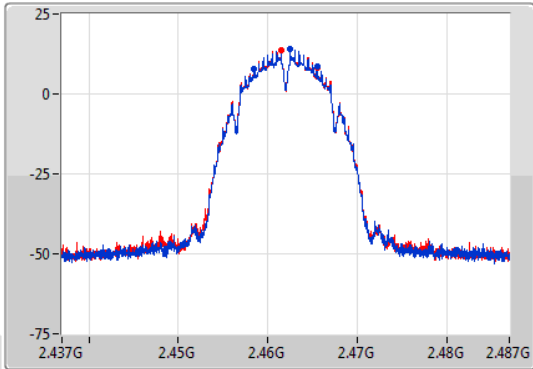
Span  
50MHz

RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak



CF  
2.462GHz

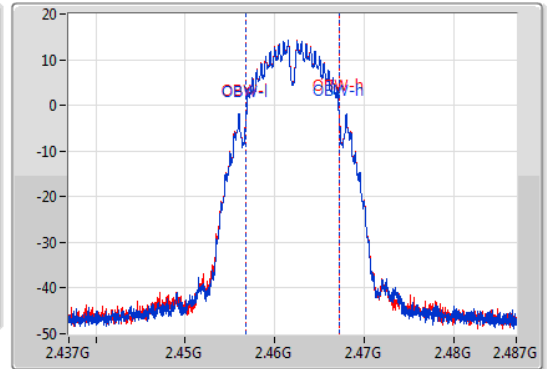
Span  
50MHz

RBW  
200kHz

VBW  
1MHz

Sweep Time  
100ms

Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.458475G	2.465525G	10.37M	2.456828G	2.467197G	500k	1
7.025M	2.4585G	2.465525G	10.345M	2.456828G	2.467172G	500k	2

### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

2412MHz

03/02/2020

CF  
2.412GHz

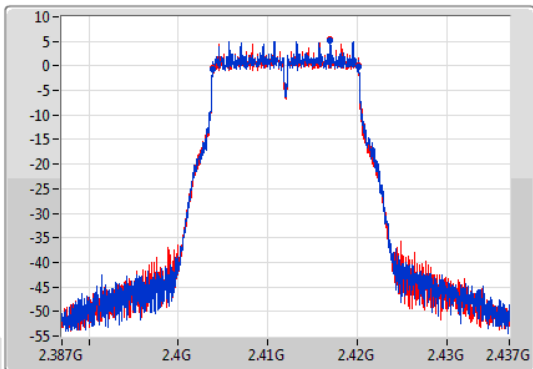
Span  
50MHz

RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak



CF  
2.412GHz

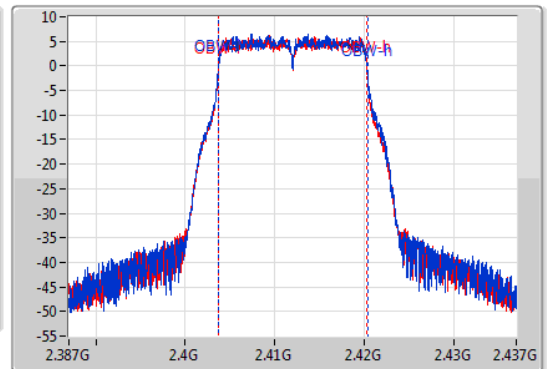
Span  
50MHz

RBW  
200kHz

VBW  
1MHz

Sweep Time  
100ms

Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.403825G	2.420175G	16.742M	2.403654G	2.420396G	500k	1
16.35M	2.403825G	2.420175G	16.667M	2.403679G	2.420346G	500k	2

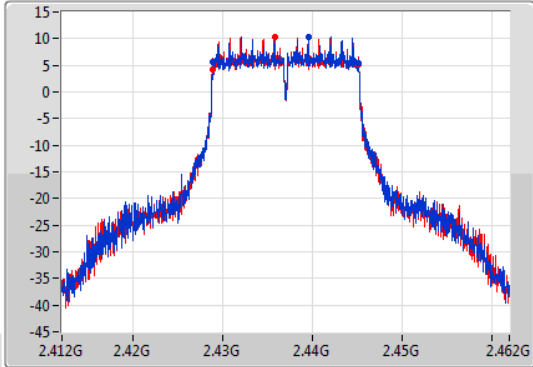
802.11g\_Nss1,(6Mbps)\_2TX

EBW

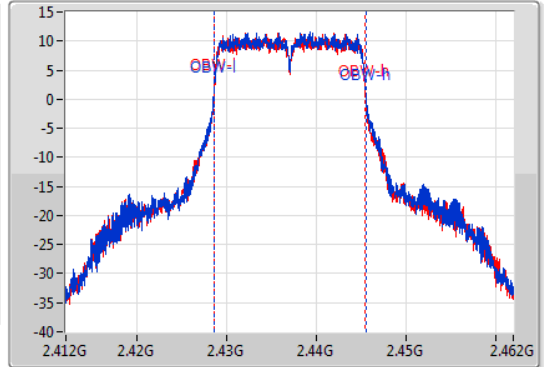
2437MHz

03/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	16.967M	2.428579G	2.445546G	500k	1
16.35M	2.428825G	2.445175G	16.867M	2.428604G	2.445471G	500k	2

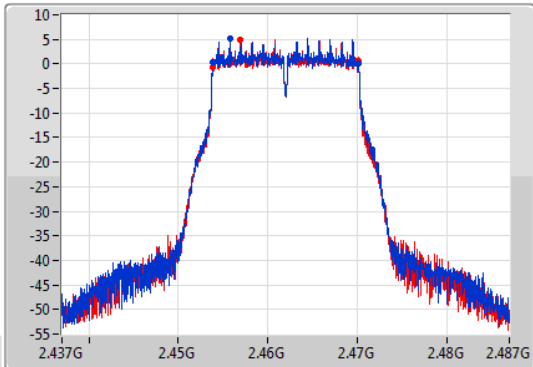
802.11g\_Nss1,(6Mbps)\_2TX

EBW

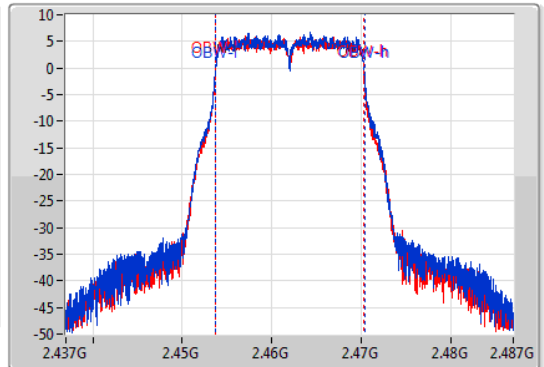
2462MHz

03/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.45385G	2.470175G	16.767M	2.453654G	2.470421G	500k	1
16.35M	2.453825G	2.470175G	16.642M	2.453679G	2.470321G	500k	2

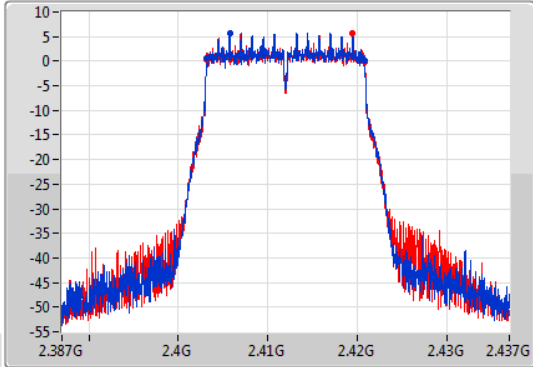
VHT20\_Nss2,(MCS0)\_2TX

EBW

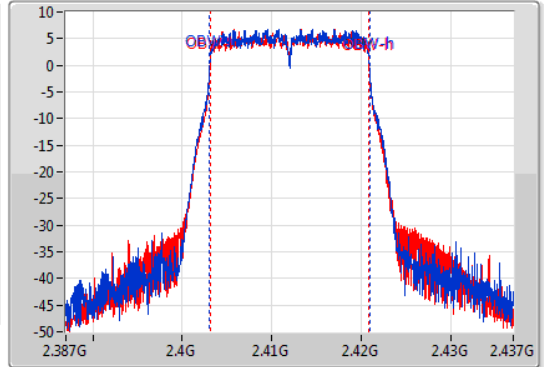
2412MHz

03/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.403225G	2.4208G	17.891M	2.403054G	2.420946G	500k	1
17.6M	2.4032G	2.4208G	17.791M	2.403104G	2.420896G	500k	2

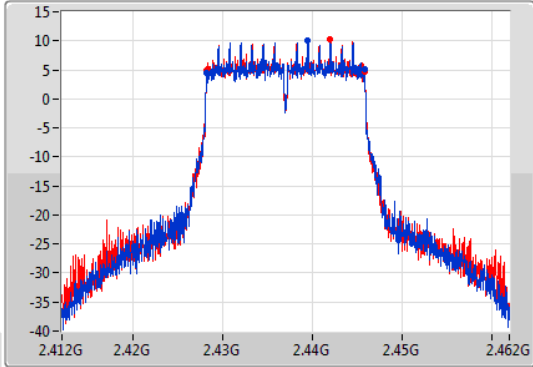
VHT20\_Nss2,(MCS0)\_2TX

EBW

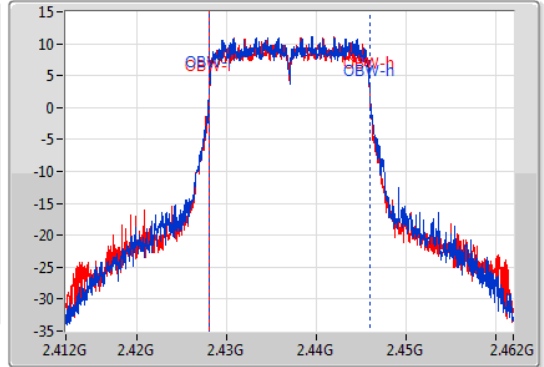
2437MHz

03/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	2.428225G	2.445775G	18.016M	2.428004G	2.44602G	500k	1
17.6M	2.4282G	2.4458G	17.916M	2.428029G	2.445946G	500k	2

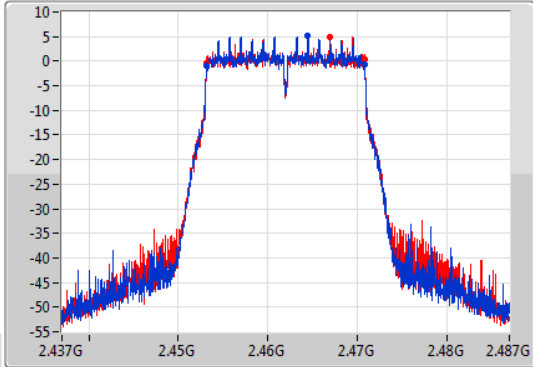
VHT20\_Nss2,(MCS0)\_2TX

EBW

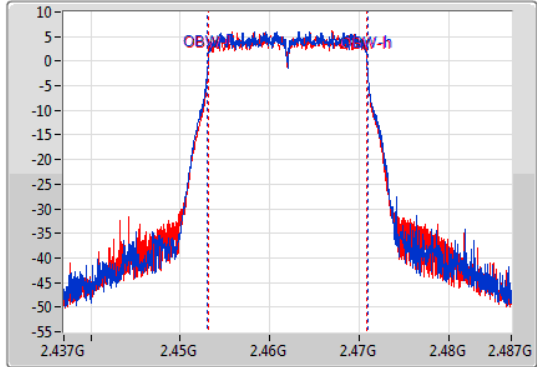
2462MHz

03/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.6M	2.4532G	2.4708G	17.866M	2.453054G	2.470921G	500k	1
17.6M	2.4532G	2.4708G	17.791M	2.453104G	2.470896G	500k	2

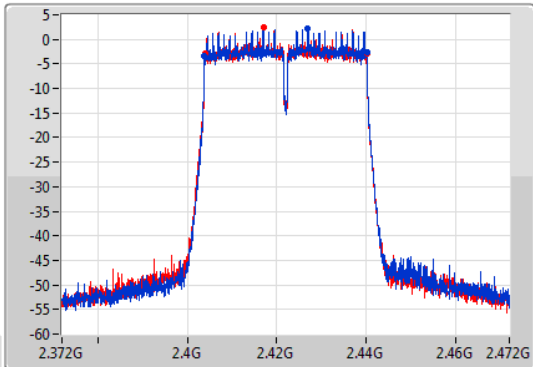
VHT40\_Nss2,(MCS0)\_2TX

EBW

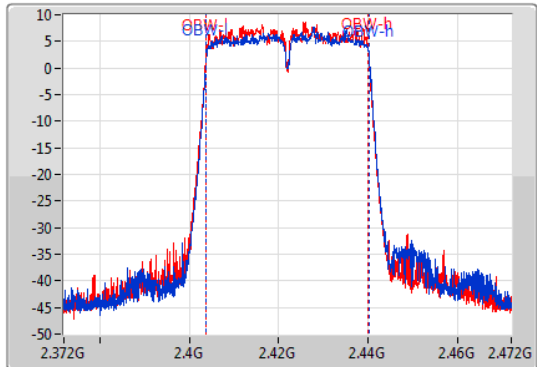
2422MHz

03/02/2020

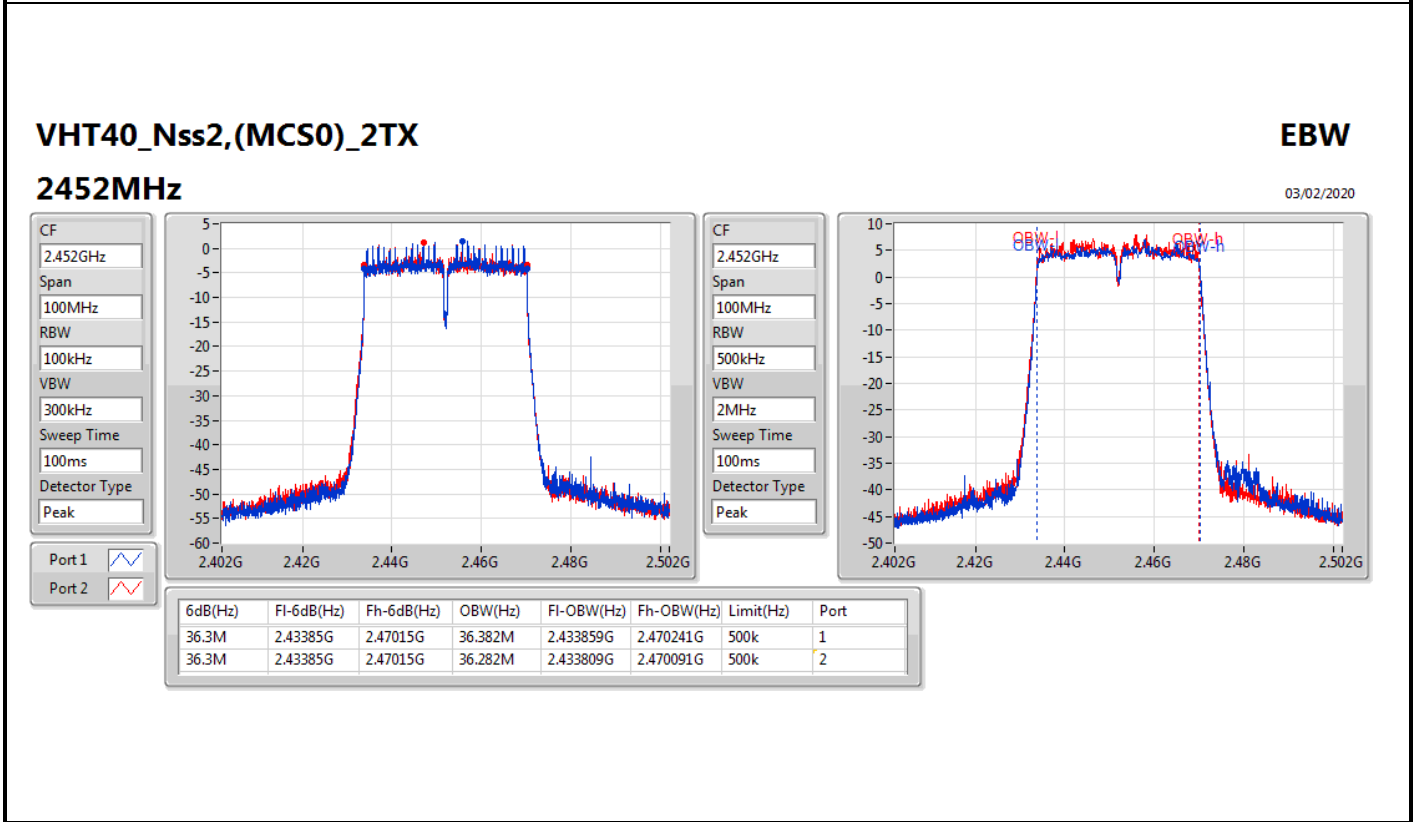
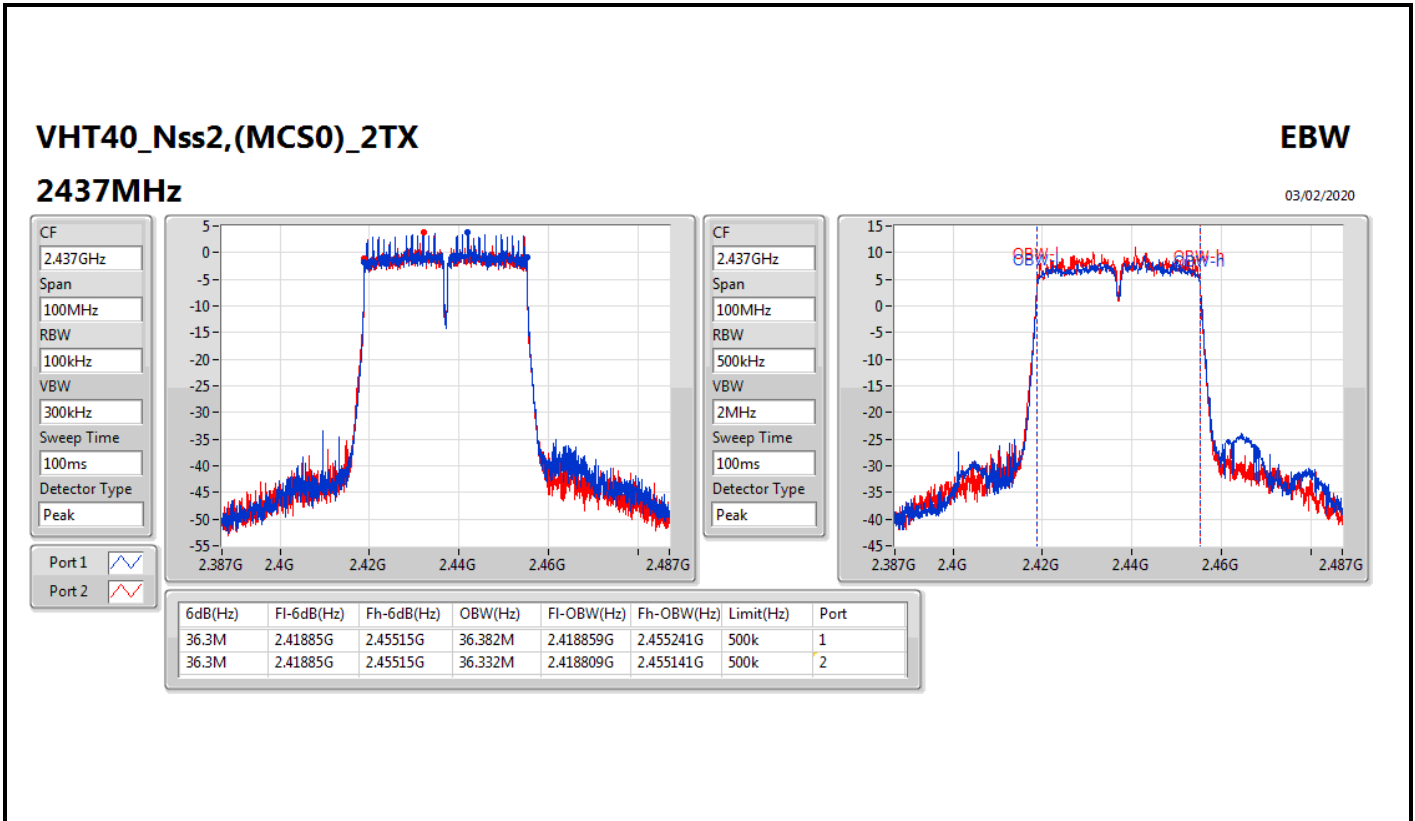
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	2.40385G	2.44015G	36.382M	2.403859G	2.440241G	500k	1
36.25M	2.4039G	2.44015G	36.282M	2.403809G	2.440091G	500k	2





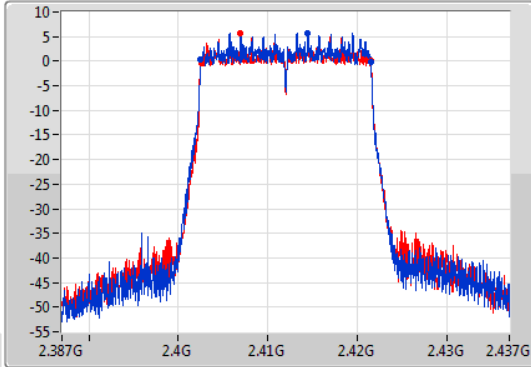
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

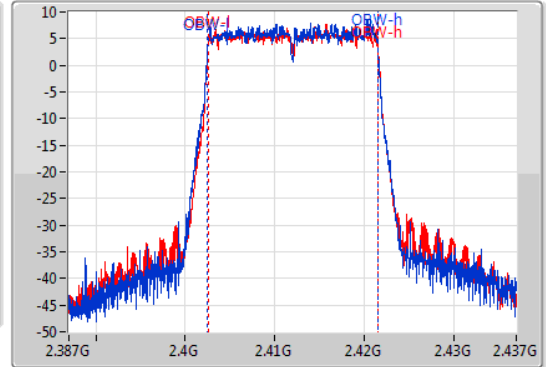
2412MHz

03/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1  
Port 2



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.402525G	2.4215G	19.04M	2.402505G	2.421545G	500k	1
18.95M	2.40255G	2.4215G	19.04M	2.40253G	2.42157G	500k	2

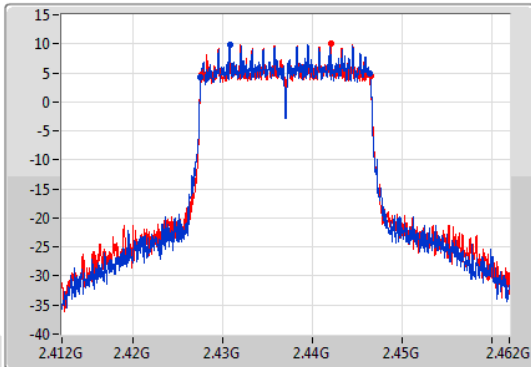
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

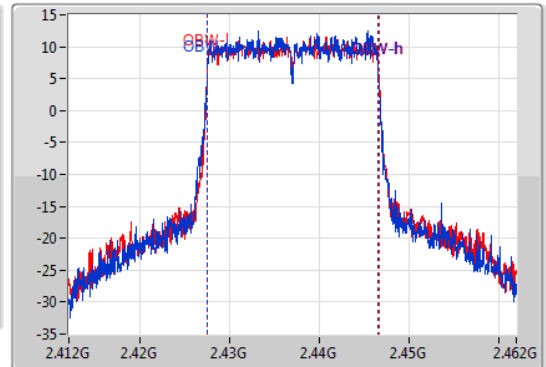
2437MHz

03/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1  
Port 2



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.4275G	2.44645G	19.065M	2.42748G	2.446545G	500k	1
18.9M	2.427575G	2.446475G	19.115M	2.427505G	2.44662G	500k	2

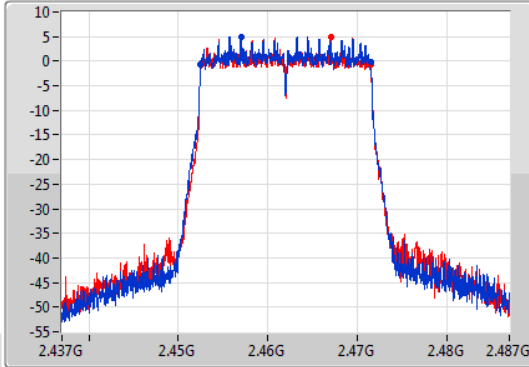
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

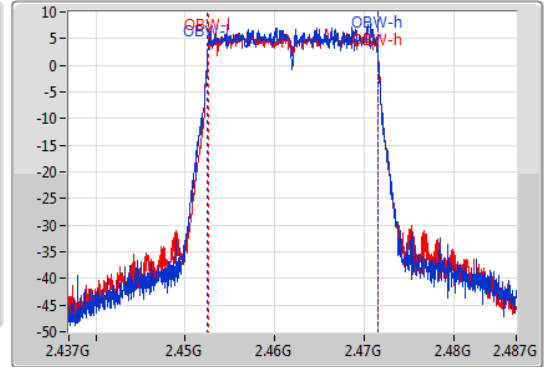
2462MHz

03/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4525G	2.471475G	19.04M	2.45248G	2.47152G	500k	1
18.875M	2.452625G	2.4715G	19.04M	2.45253G	2.47157G	500k	2

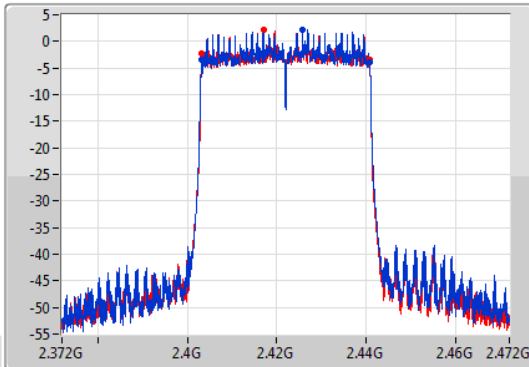
802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

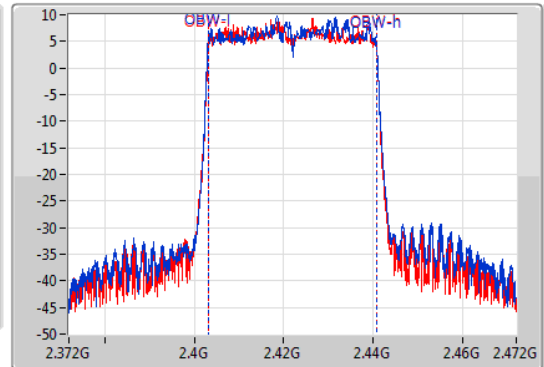
2422MHz

03/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



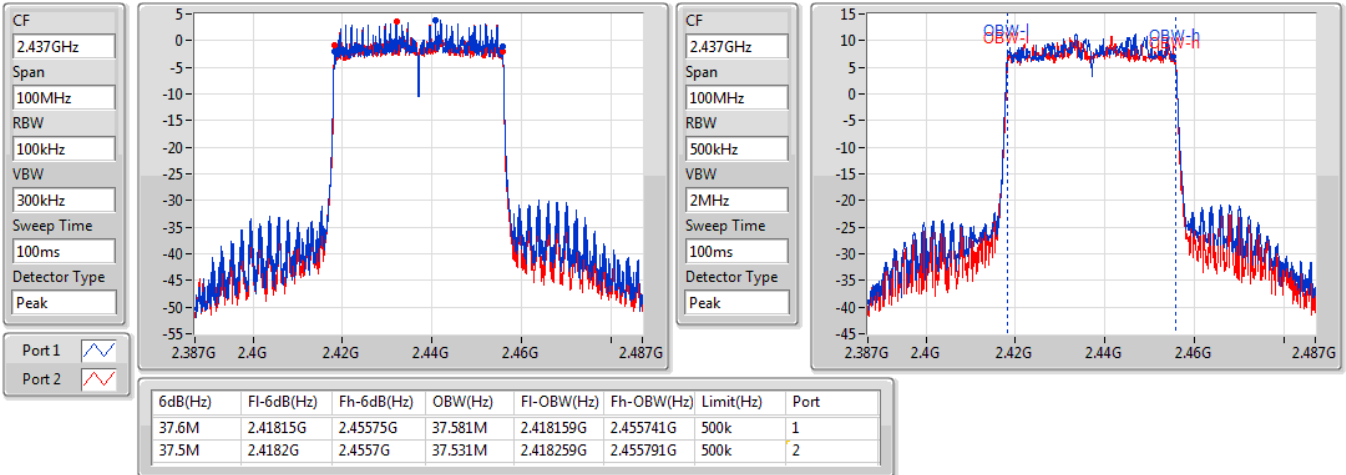
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.65M	2.40315G	2.4408G	37.581M	2.403159G	2.440741G	500k	1
37.5M	2.4032G	2.4407G	37.531M	2.403209G	2.440741G	500k	2

802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

2437MHz

03/02/2020

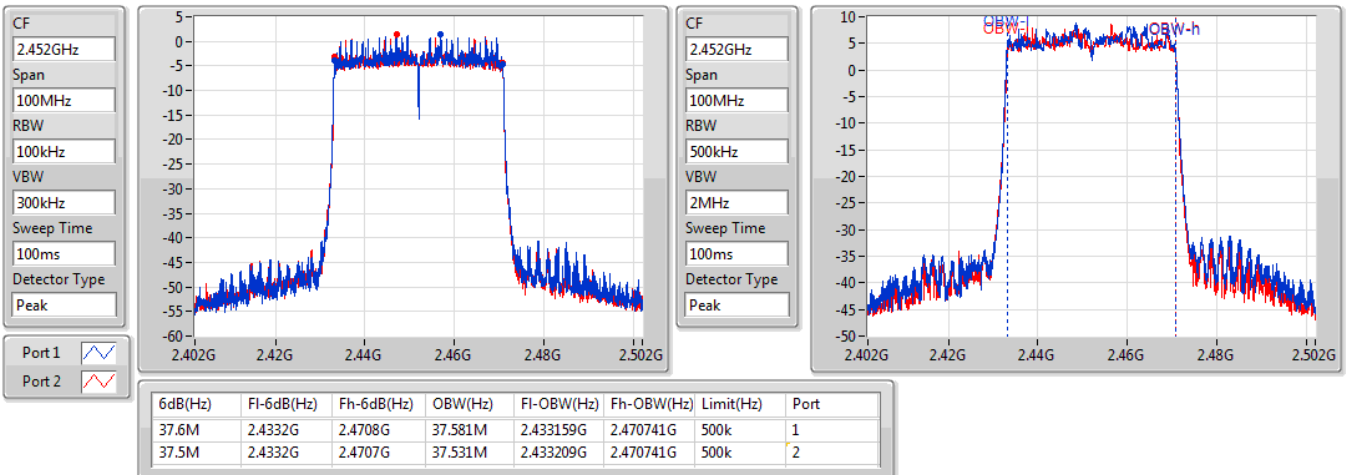


802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

2452MHz

03/02/2020





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	7.075M	11.944M	11M9G1D	7M	10.37M
802.11g_Nss1,(6Mbps)_1TX	16.35M	17.516M	17M5D1D	16.35M	16.742M
VHT20_Nss1,(MCS0)_1TX	17.575M	18.041M	18M0D1D	17.575M	17.841M
VHT40_Nss1,(MCS0)_1TX	36.35M	36.432M	36M4D1D	36.35M	36.432M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.975M	19.14M	19M1D1D	18.9M	19.015M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.6M	37.531M	37M5D1D	37.55M	37.481M

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



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.075M	10.42M
2437MHz	Pass	500k	7M	11.944M
2462MHz	Pass	500k	7M	10.37M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.35M	16.767M
2437MHz	Pass	500k	16.35M	17.516M
2462MHz	Pass	500k	16.35M	16.742M
VHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.575M	17.866M
2437MHz	Pass	500k	17.575M	18.041M
2462MHz	Pass	500k	17.575M	17.841M
VHT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	36.35M	36.432M
2437MHz	Pass	500k	36.35M	36.432M
2452MHz	Pass	500k	36.35M	36.432M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.95M	19.015M
2437MHz	Pass	500k	18.9M	19.14M
2462MHz	Pass	500k	18.975M	19.015M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	37.6M	37.481M
2437MHz	Pass	500k	37.55M	37.531M
2452MHz	Pass	500k	37.55M	37.531M

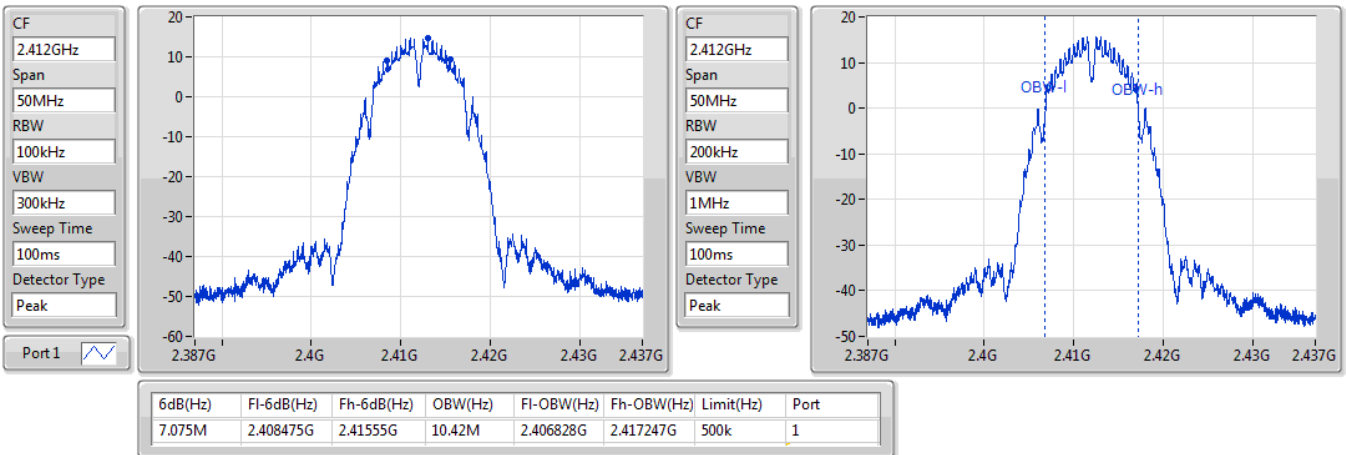
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

07/02/2020

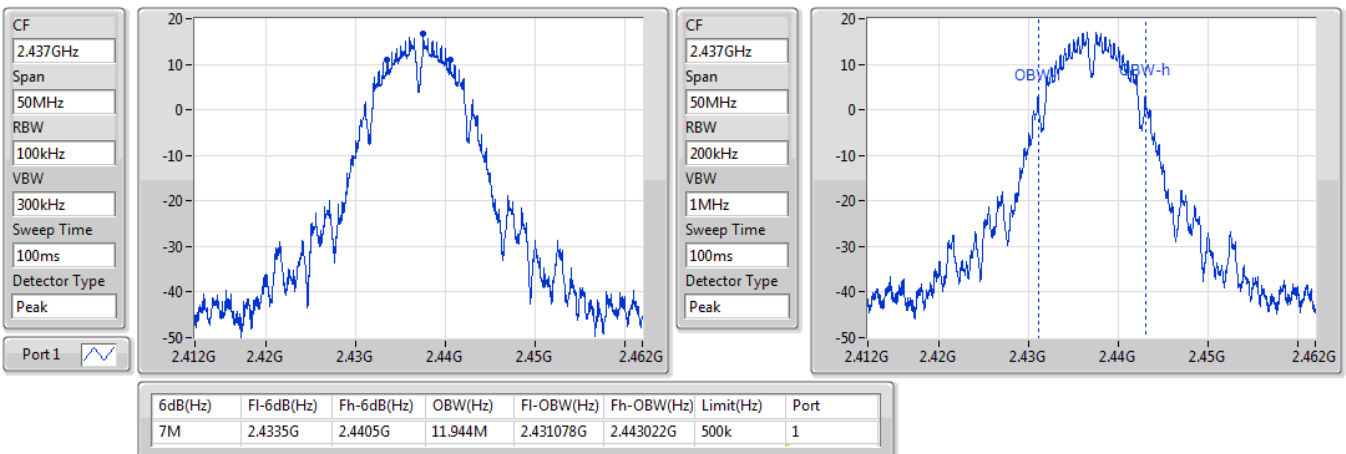


802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

07/02/2020



### 802.11b\_Nss1,(1Mbps)\_1TX

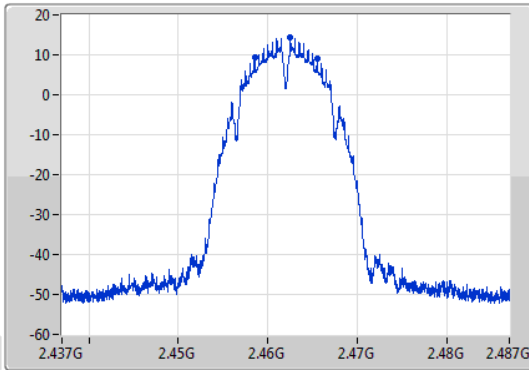
EBW

2462MHz

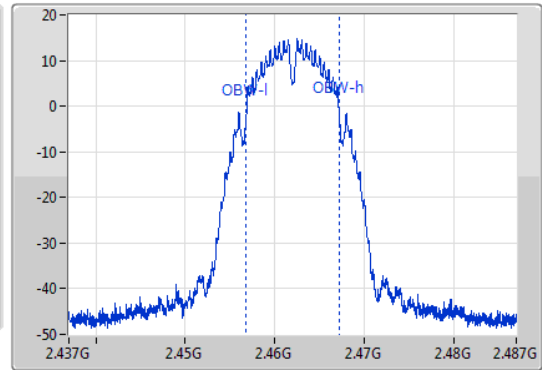
07/02/2020

CF: 2.462GHz  
 Span: 50MHz  
 RBW: 100kHz  
 VBW: 300kHz  
 Sweep Time: 100ms  
 Detector Type: Peak

Port 1



CF: 2.462GHz  
 Span: 50MHz  
 RBW: 200kHz  
 VBW: 1MHz  
 Sweep Time: 100ms  
 Detector Type: Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7M	2.458525G	2.465525G	10.37M	2.456828G	2.467197G	500k	1

### 802.11g\_Nss1,(6Mbps)\_1TX

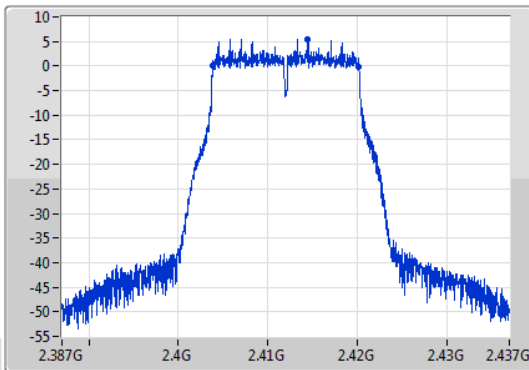
EBW

2412MHz

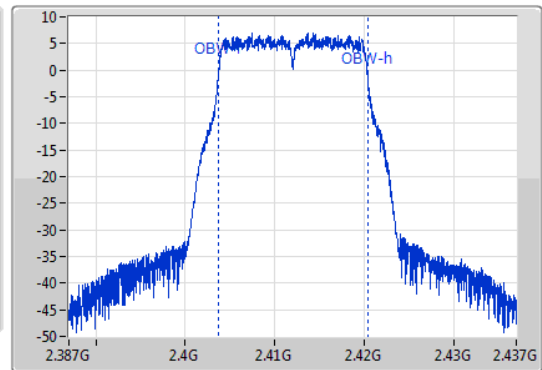
07/02/2020

CF: 2.412GHz  
 Span: 50MHz  
 RBW: 100kHz  
 VBW: 300kHz  
 Sweep Time: 100ms  
 Detector Type: Peak

Port 1



CF: 2.412GHz  
 Span: 50MHz  
 RBW: 200kHz  
 VBW: 1MHz  
 Sweep Time: 100ms  
 Detector Type: Peak



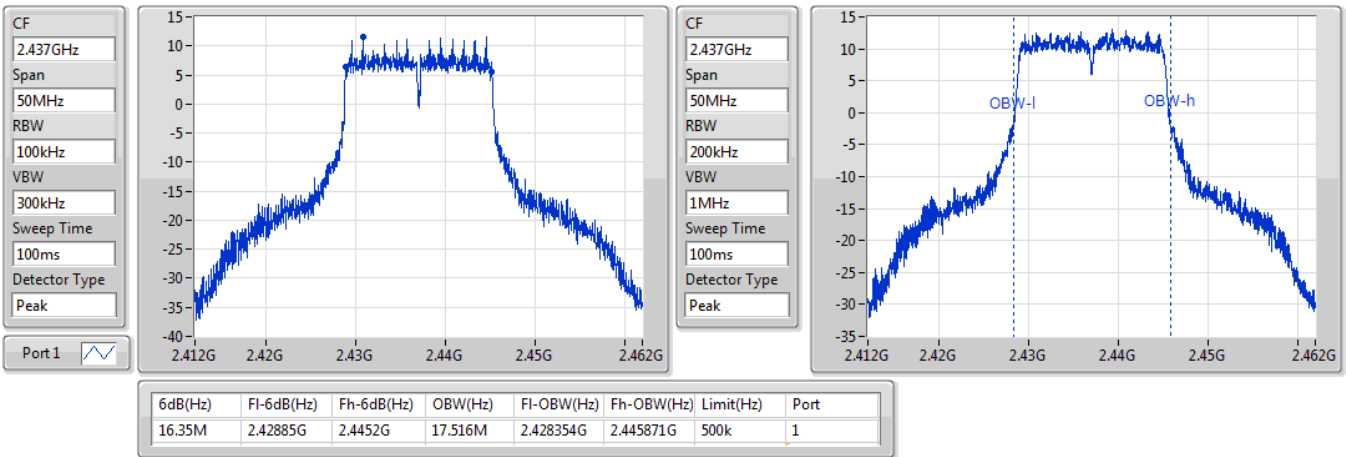
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.40385G	2.4202G	16.767M	2.403679G	2.420446G	500k	1

802.11g\_Nss1,(6Mbps)\_1TX

EBW

2437MHz

07/02/2020

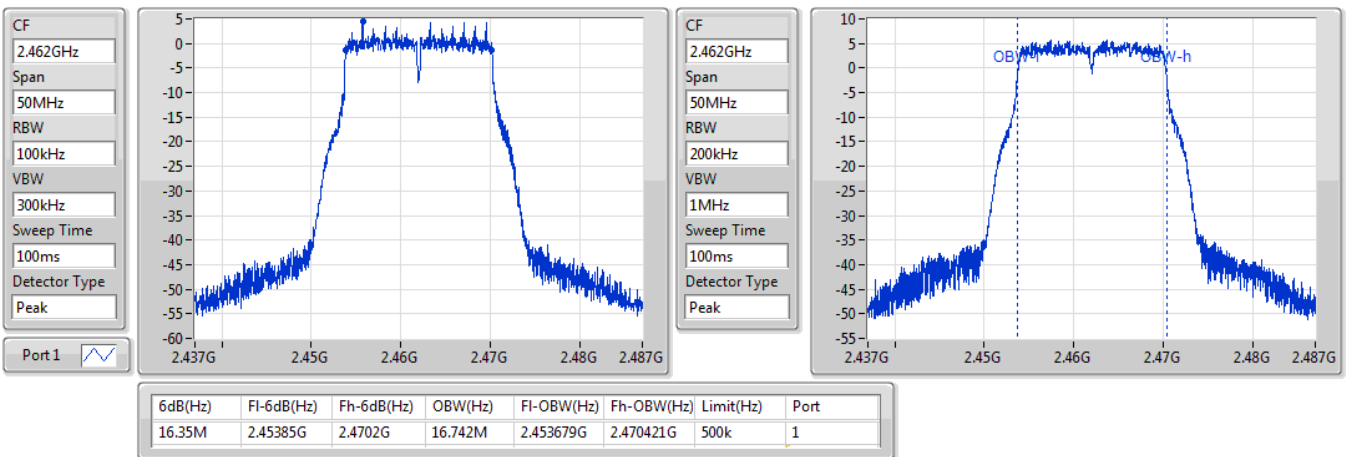


802.11g\_Nss1,(6Mbps)\_1TX

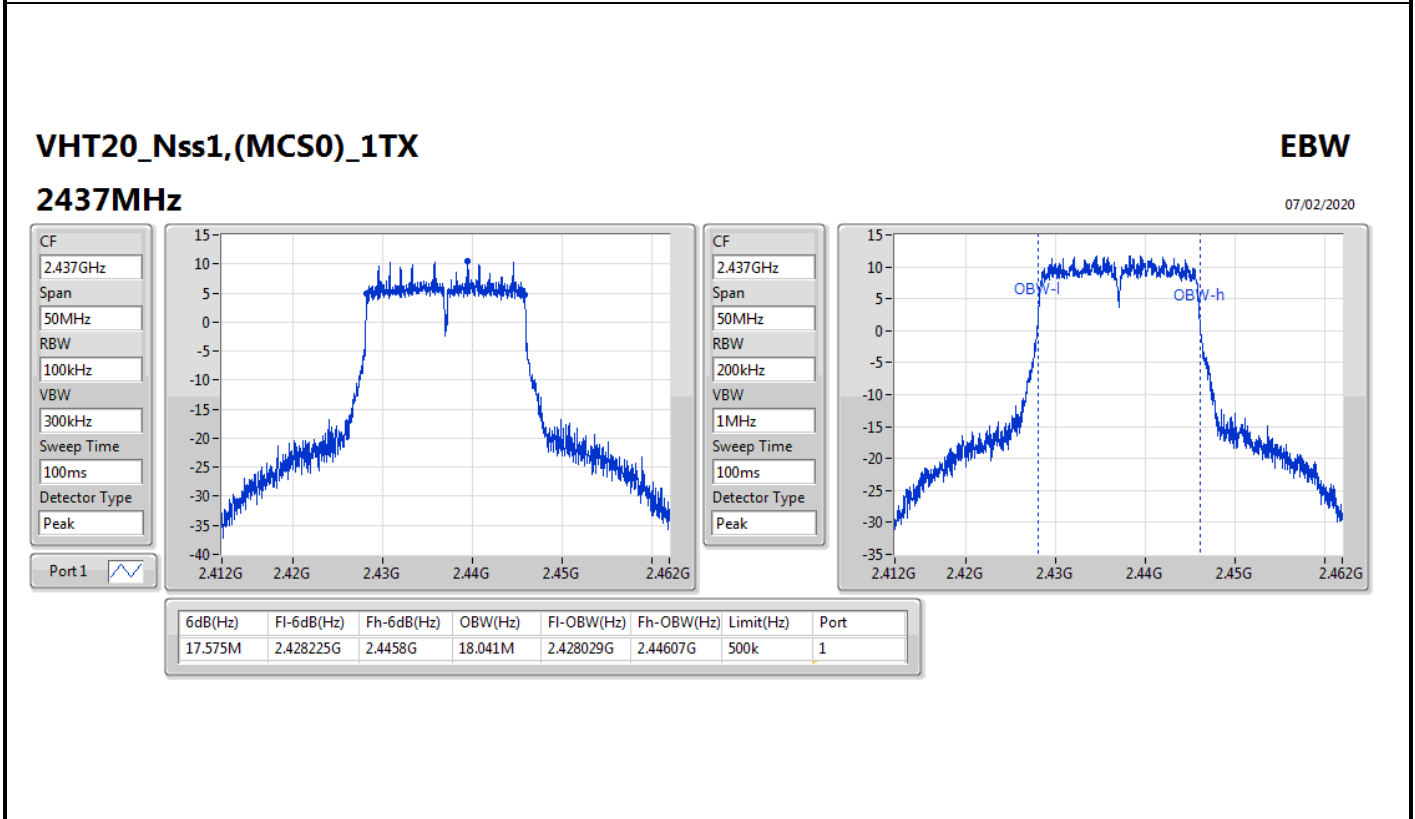
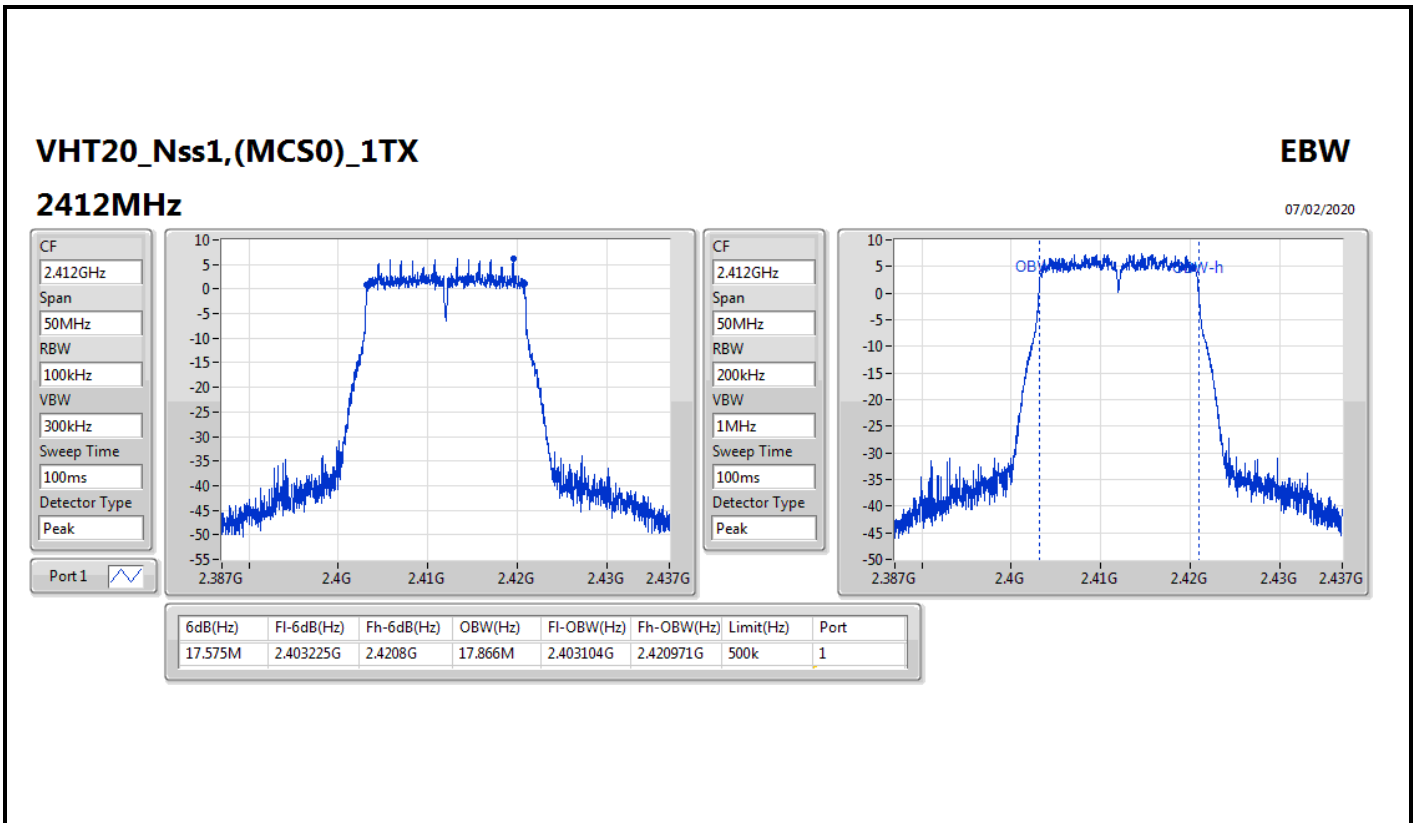
EBW

2462MHz

07/02/2020







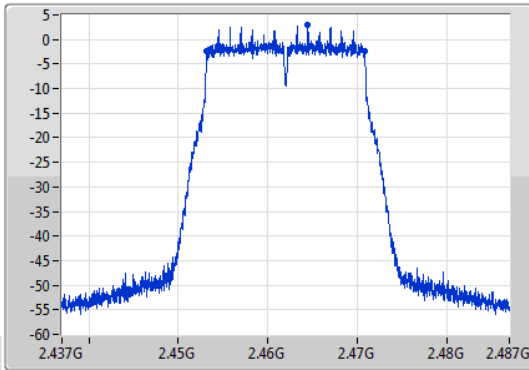
VHT20\_Nss1,(MCS0)\_1TX

EBW

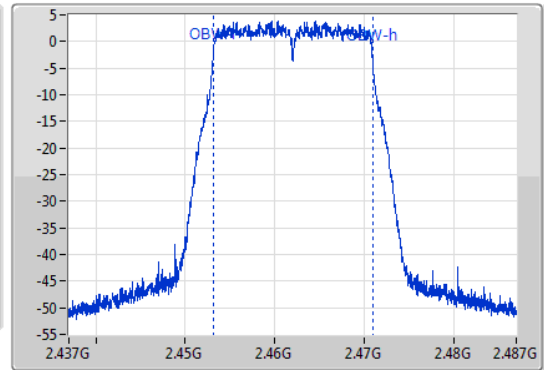
2462MHz

07/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.453225G	2.4708G	17.841M	2.453104G	2.470946G	500k	1

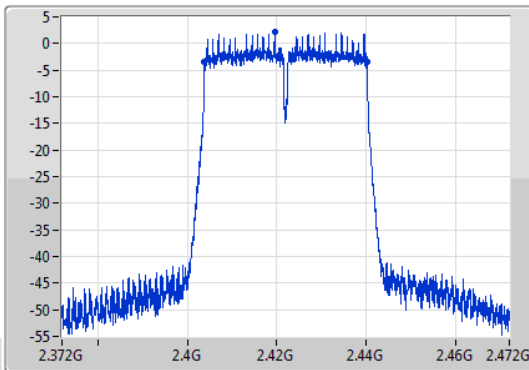
VHT40\_Nss1,(MCS0)\_1TX

EBW

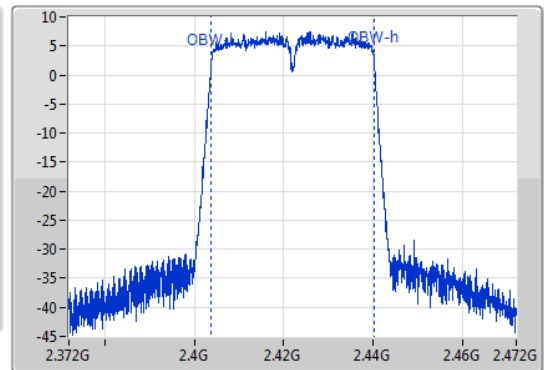
2422MHz

07/02/2020

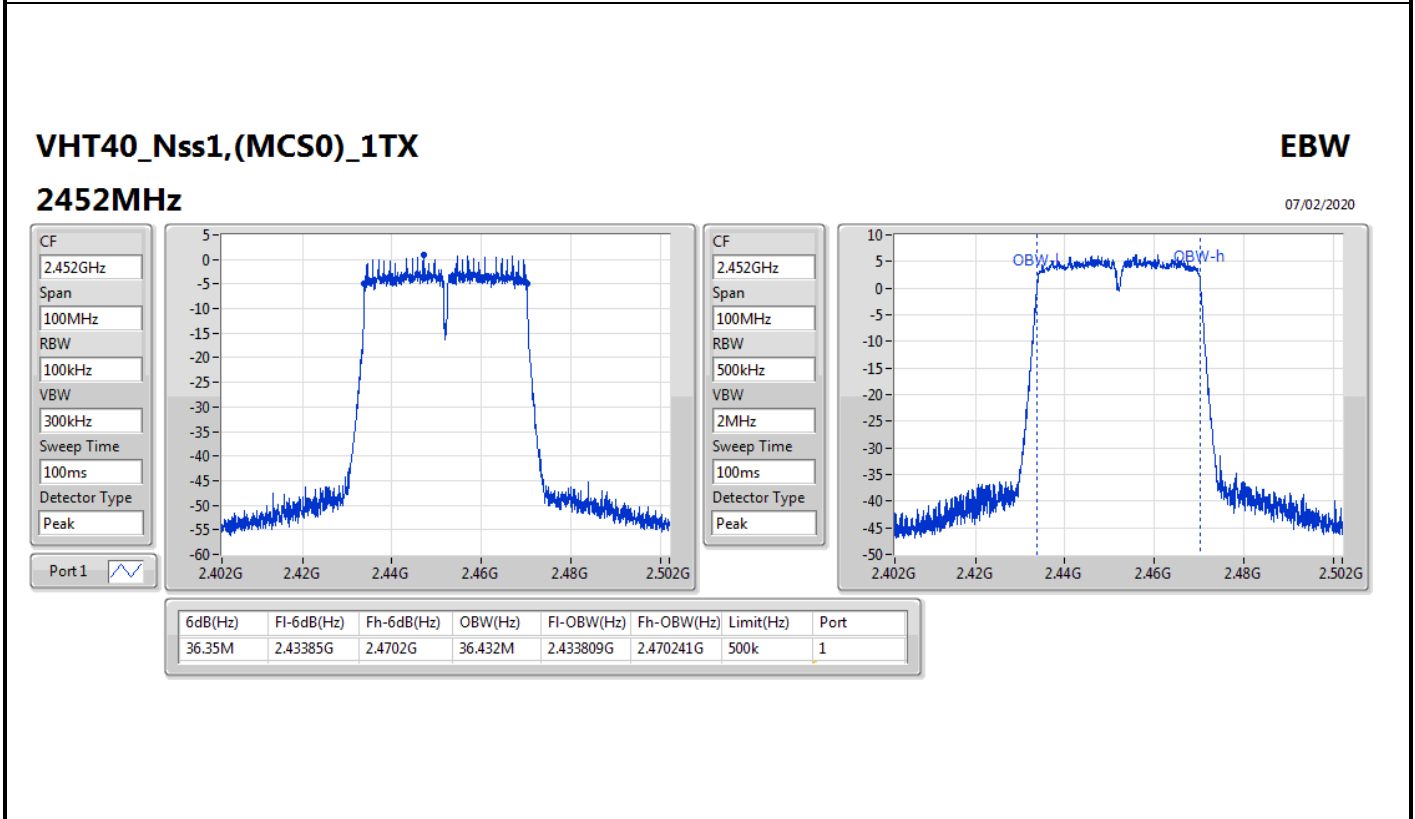
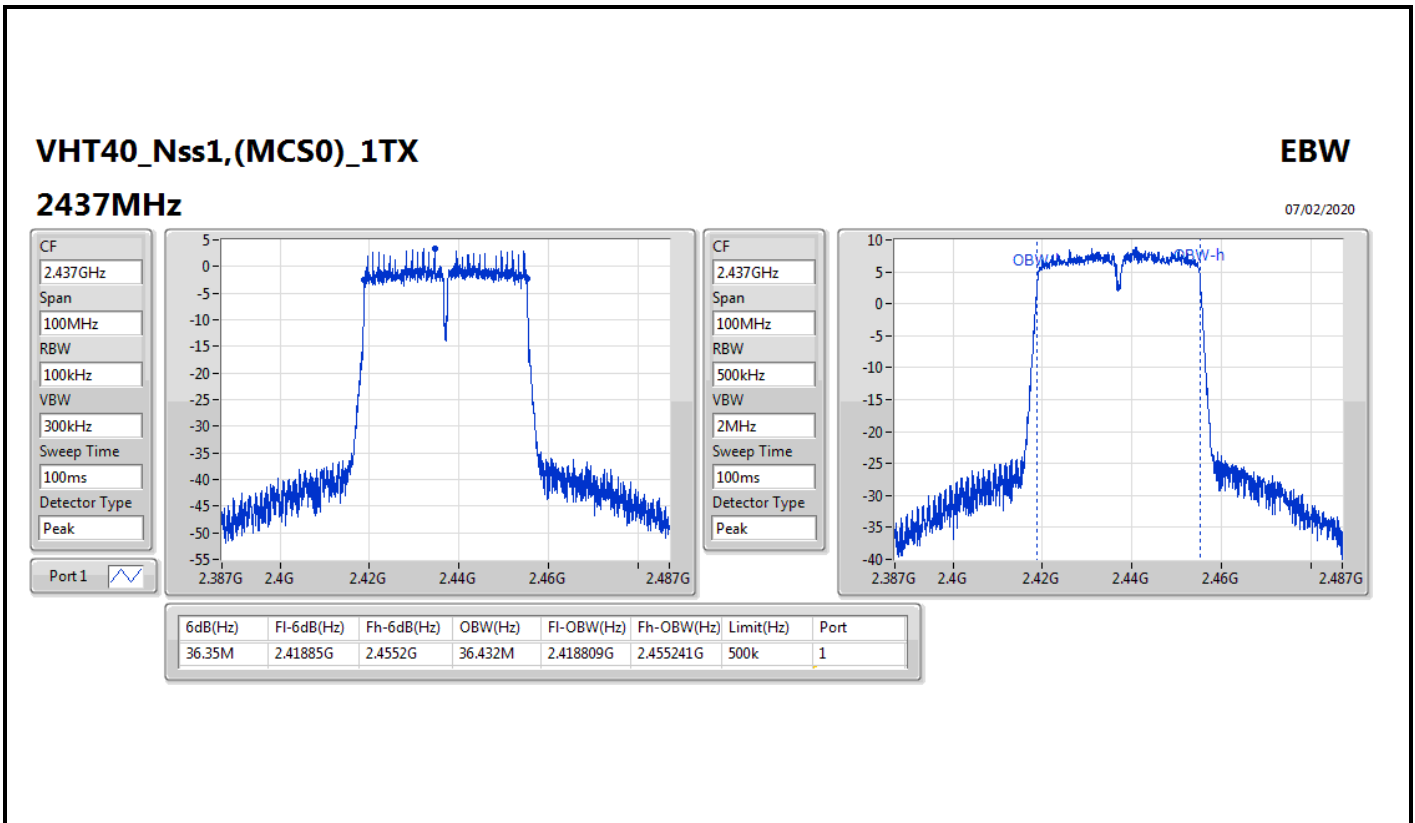
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.35M	2.40385G	2.4402G	36.432M	2.403809G	2.440241G	500k	1

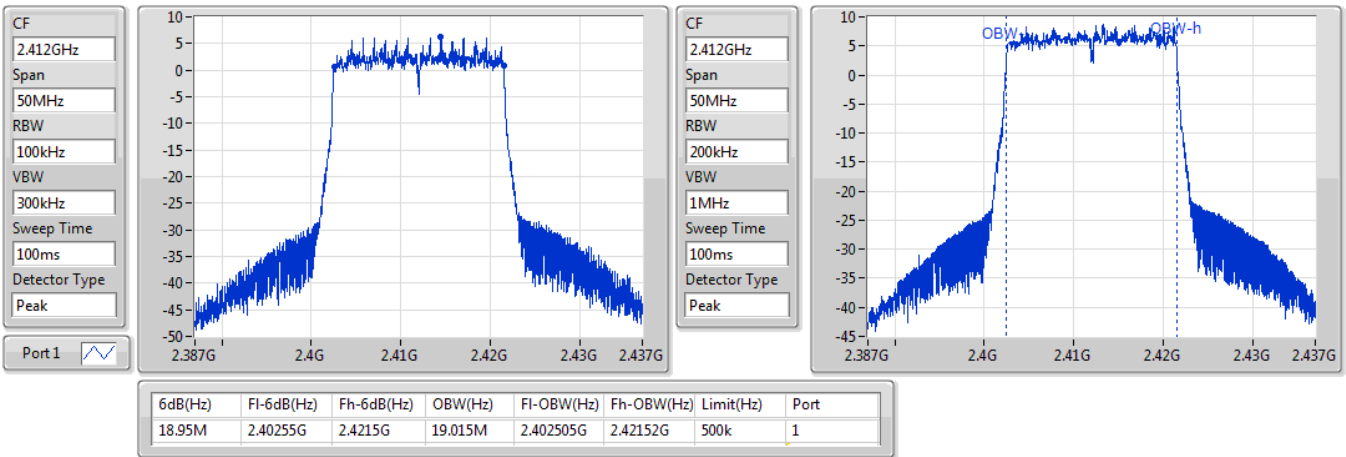


802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2412MHz

07/02/2020

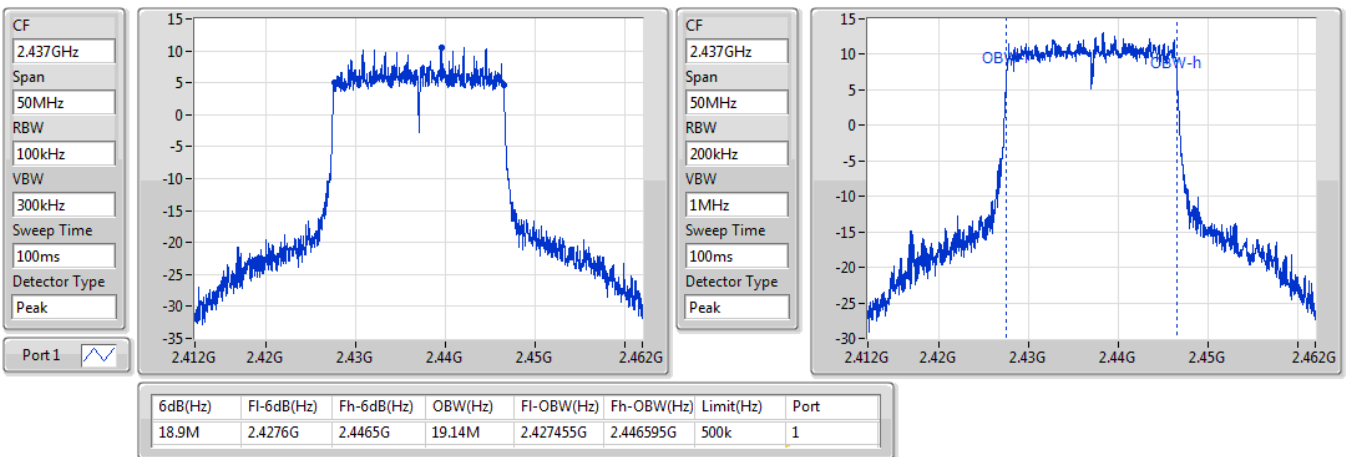


802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2437MHz

07/02/2020

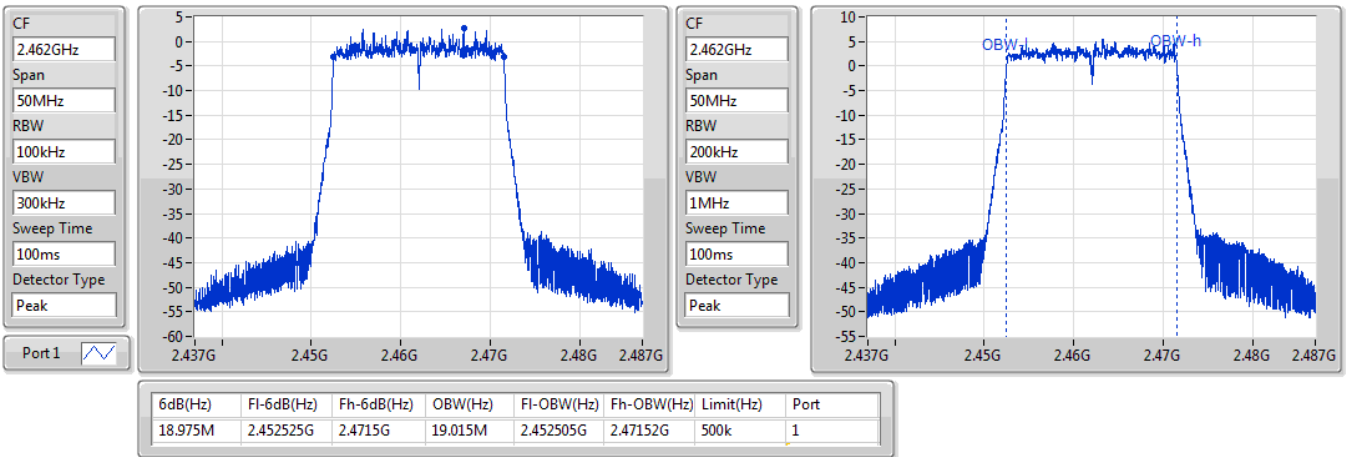


802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

07/02/2020

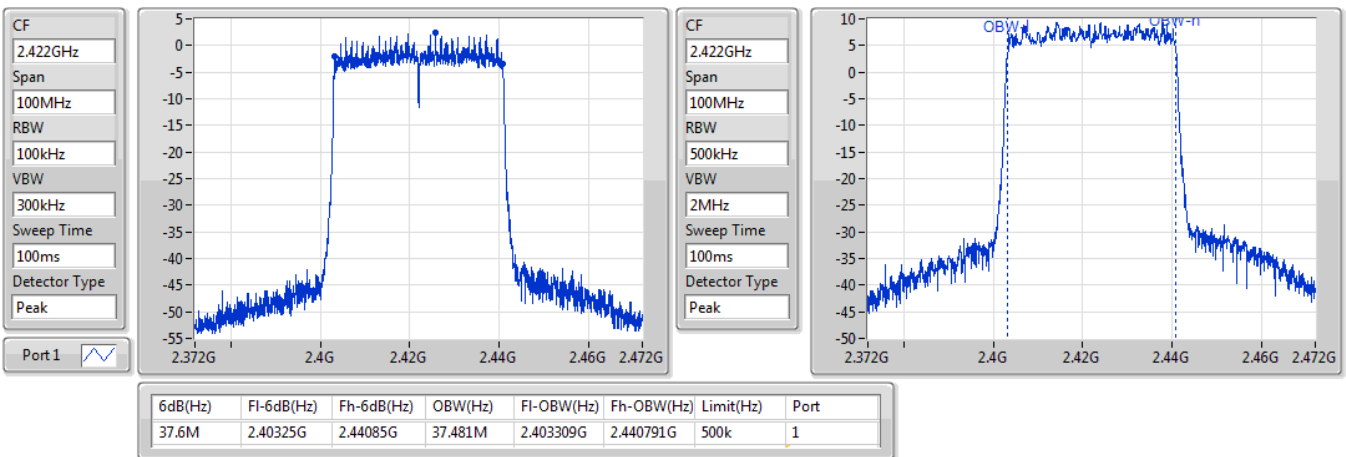


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2422MHz

07/02/2020

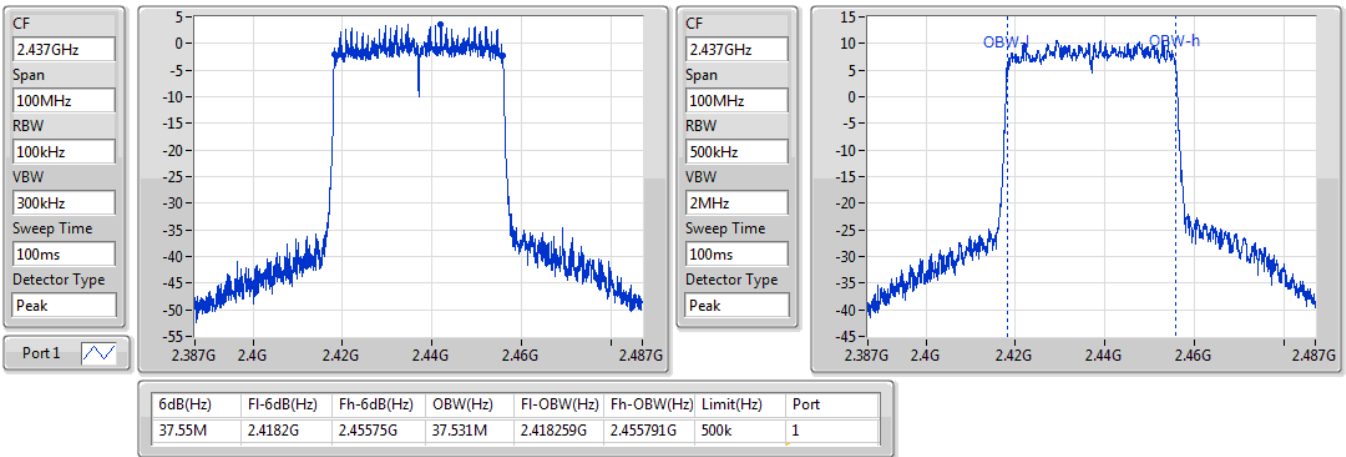


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2437MHz

07/02/2020

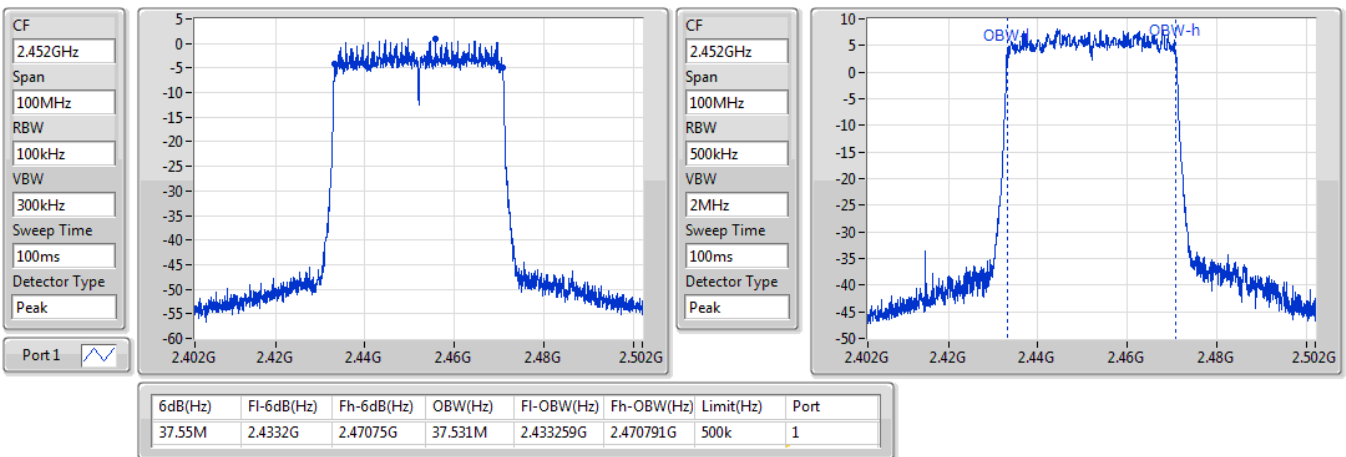


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2452MHz

07/02/2020





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	7.05M	10.495M	10M5G1D	6.975M	10.27M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.967M	17M0D1D	16.325M	16.642M
VHT20_Nss2,(MCS0)_2TX	17.6M	17.966M	18M0D1D	17.575M	17.766M
VHT40_Nss2,(MCS0)_2TX	36.35M	36.382M	36M4D1D	36.3M	36.232M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.975M	19.065M	19M1D1D	18.85M	19.015M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.6M	37.581M	37M6D1D	37M	37.481M

**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	7.025M	10.495M	7.05M	10.32M
2437MHz	Pass	500k	6.975M	10.27M	7.025M	10.27M
2462MHz	Pass	500k	7.05M	10.32M	7.025M	10.27M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.742M	16.325M	16.642M
2437MHz	Pass	500k	16.325M	16.967M	16.325M	16.842M
2462MHz	Pass	500k	16.325M	16.742M	16.35M	16.642M
VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.891M	17.6M	17.766M
2437MHz	Pass	500k	17.575M	17.966M	17.575M	17.841M
2462MHz	Pass	500k	17.575M	17.866M	17.6M	17.791M
VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.3M	36.382M	36.35M	36.282M
2437MHz	Pass	500k	36.35M	36.382M	36.3M	36.282M
2452MHz	Pass	500k	36.3M	36.382M	36.35M	36.232M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	19.015M	18.85M	19.04M
2437MHz	Pass	500k	18.975M	19.065M	18.85M	19.065M
2462MHz	Pass	500k	18.875M	19.015M	18.95M	19.04M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.55M	37.581M	37.05M	37.481M
2437MHz	Pass	500k	37.55M	37.581M	37M	37.581M
2452MHz	Pass	500k	37.6M	37.581M	37.05M	37.481M

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



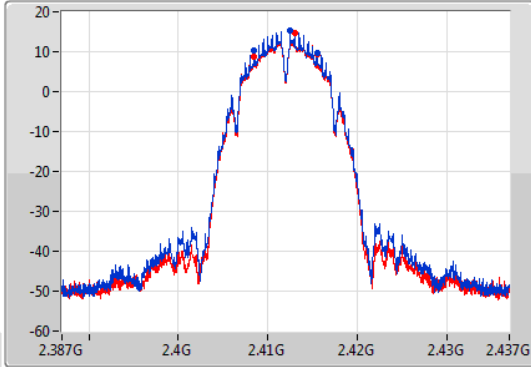
802.11b\_Nss1,(1Mbps)\_2TX

EBW

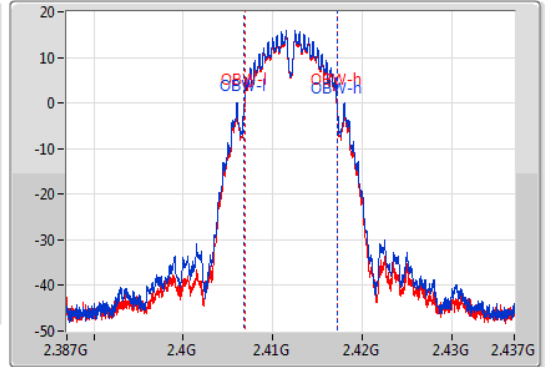
2412MHz

07/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.025M	2.4085G	2.415525G	10.495M	2.406778G	2.417272G	500k	1
7.05M	2.408475G	2.415525G	10.32M	2.406853G	2.417172G	500k	2

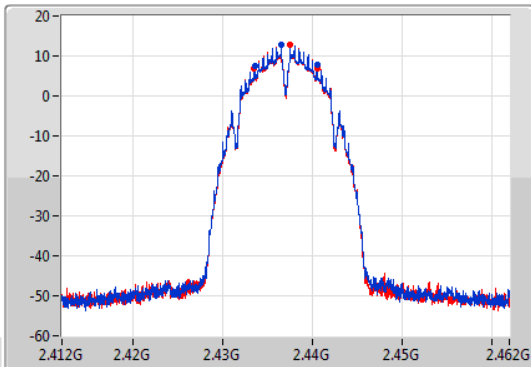
802.11b\_Nss1,(1Mbps)\_2TX

EBW

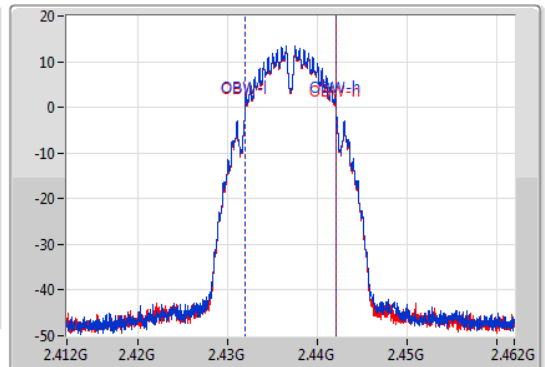
2437MHz

07/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



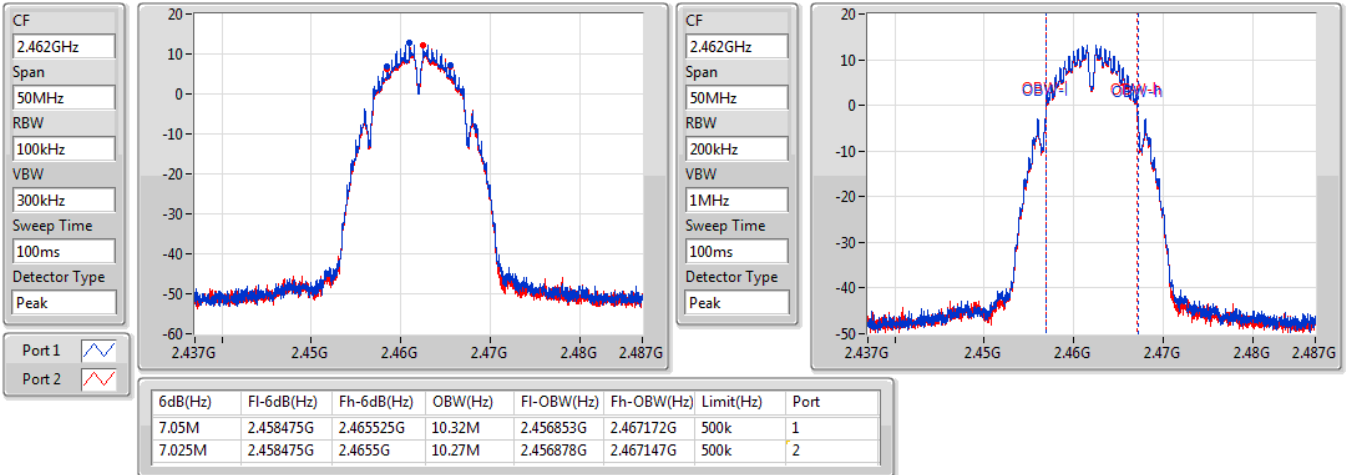
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.975M	2.433525G	2.4405G	10.27M	2.431878G	2.442147G	500k	1
7.025M	2.4335G	2.440525G	10.27M	2.431878G	2.442147G	500k	2

802.11b\_Nss1,(1Mbps)\_2TX

EBW

2462MHz

07/02/2020

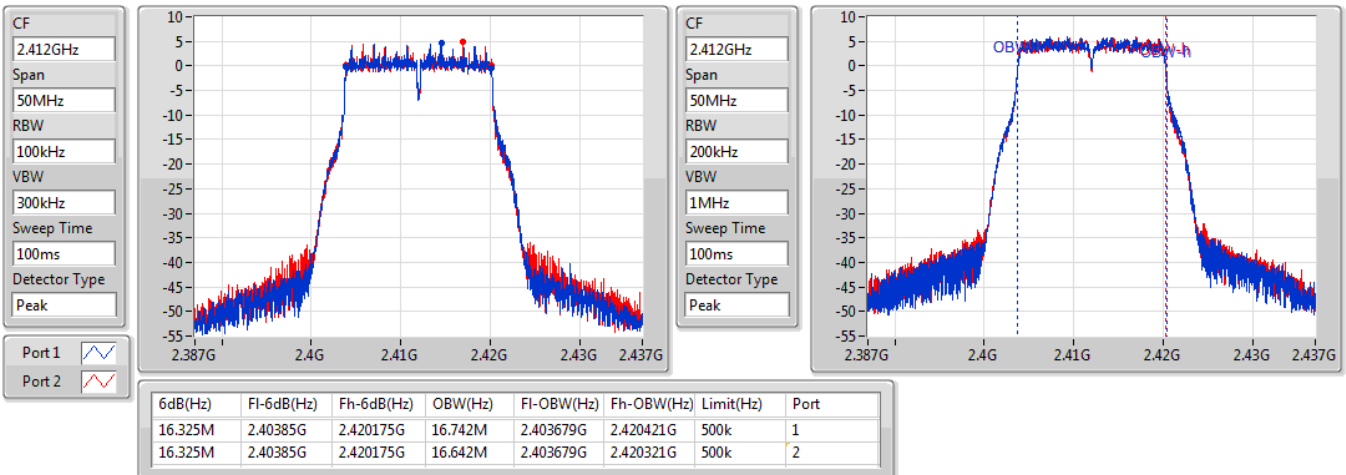


802.11g\_Nss1,(6Mbps)\_2TX

EBW

2412MHz

07/02/2020



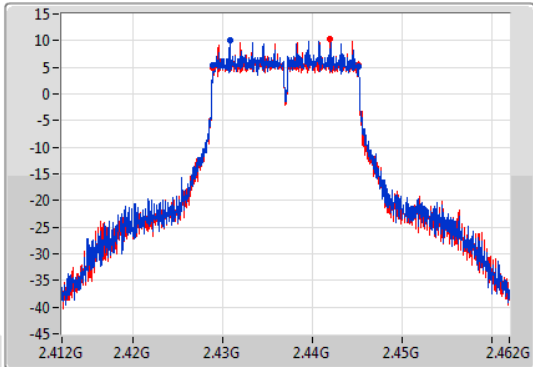
802.11g\_Nss1,(6Mbps)\_2TX

EBW

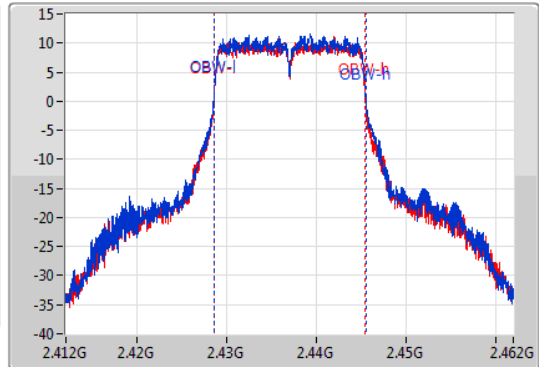
2437MHz

07/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	16.967M	2.428579G	2.445546G	500k	1
16.325M	2.42885G	2.445175G	16.842M	2.428604G	2.445446G	500k	2

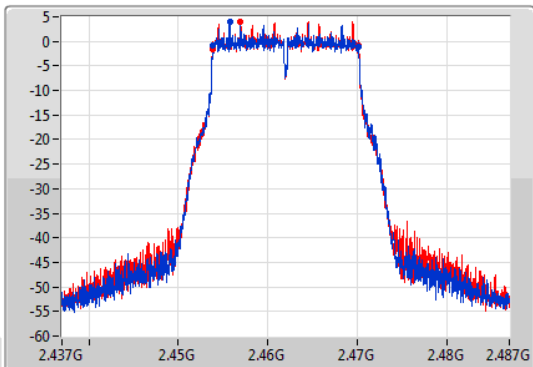
802.11g\_Nss1,(6Mbps)\_2TX

EBW

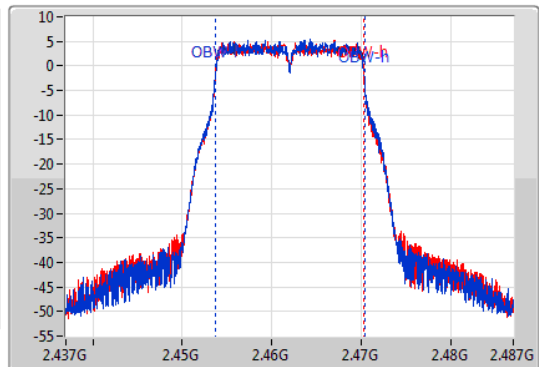
2462MHz

07/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.45385G	2.470175G	16.742M	2.453654G	2.470396G	500k	1
16.35M	2.453825G	2.470175G	16.642M	2.453679G	2.470321G	500k	2

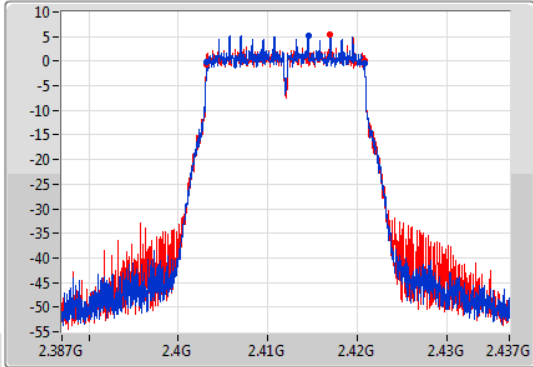
VHT20\_Nss2,(MCS0)\_2TX

EBW

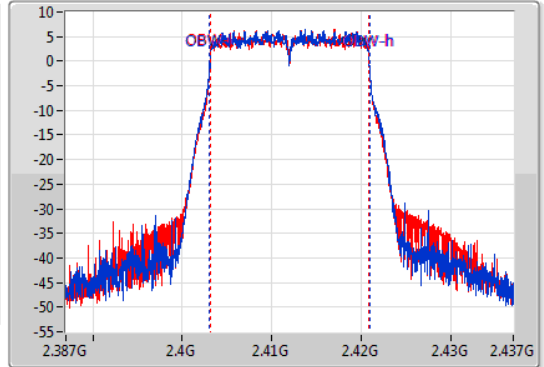
2412MHz

07/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.403225G	2.4208G	17.891M	2.403054G	2.420946G	500k	1
17.6M	2.4032G	2.4208G	17.766M	2.403129G	2.420896G	500k	2

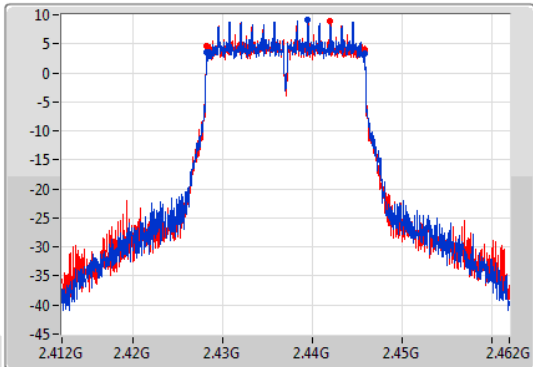
VHT20\_Nss2,(MCS0)\_2TX

EBW

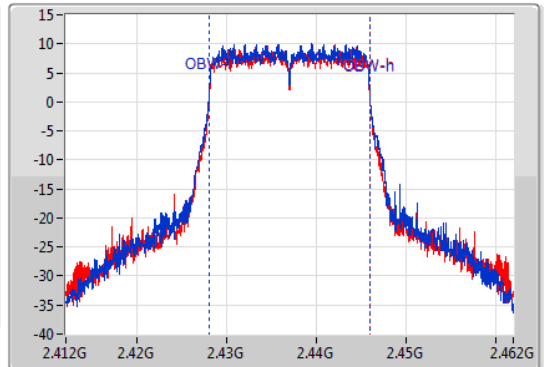
2437MHz

07/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.428225G	2.4458G	17.966M	2.428029G	2.445996G	500k	1
17.575M	2.428225G	2.4458G	17.841M	2.428079G	2.445921G	500k	2

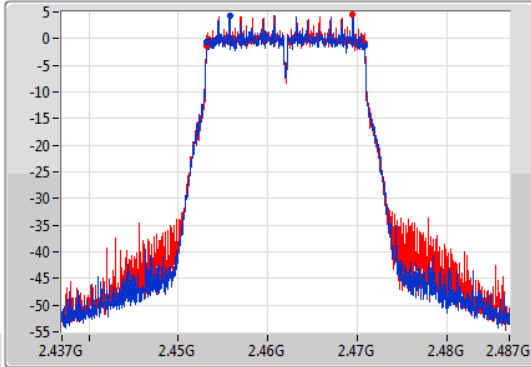
VHT20\_Nss2,(MCS0)\_2TX

EBW

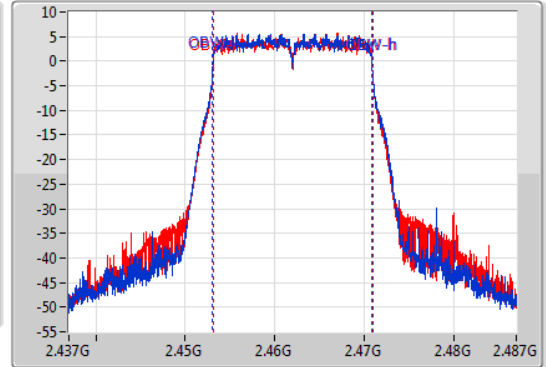
2462MHz

07/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.453225G	2.4708G	17.866M	2.453054G	2.470921G	500k	1
17.6M	2.4532G	2.4708G	17.791M	2.453104G	2.470896G	500k	2

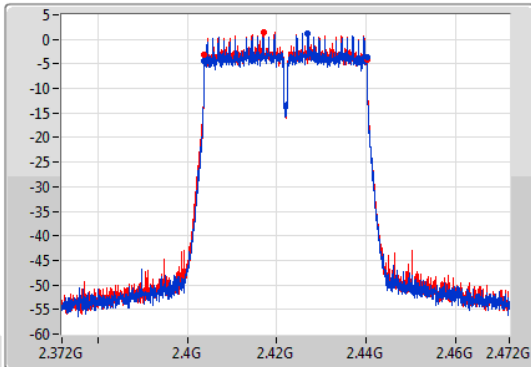
VHT40\_Nss2,(MCS0)\_2TX

EBW

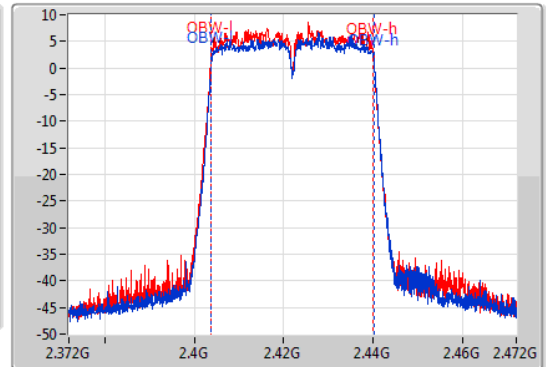
2422MHz

07/02/2020

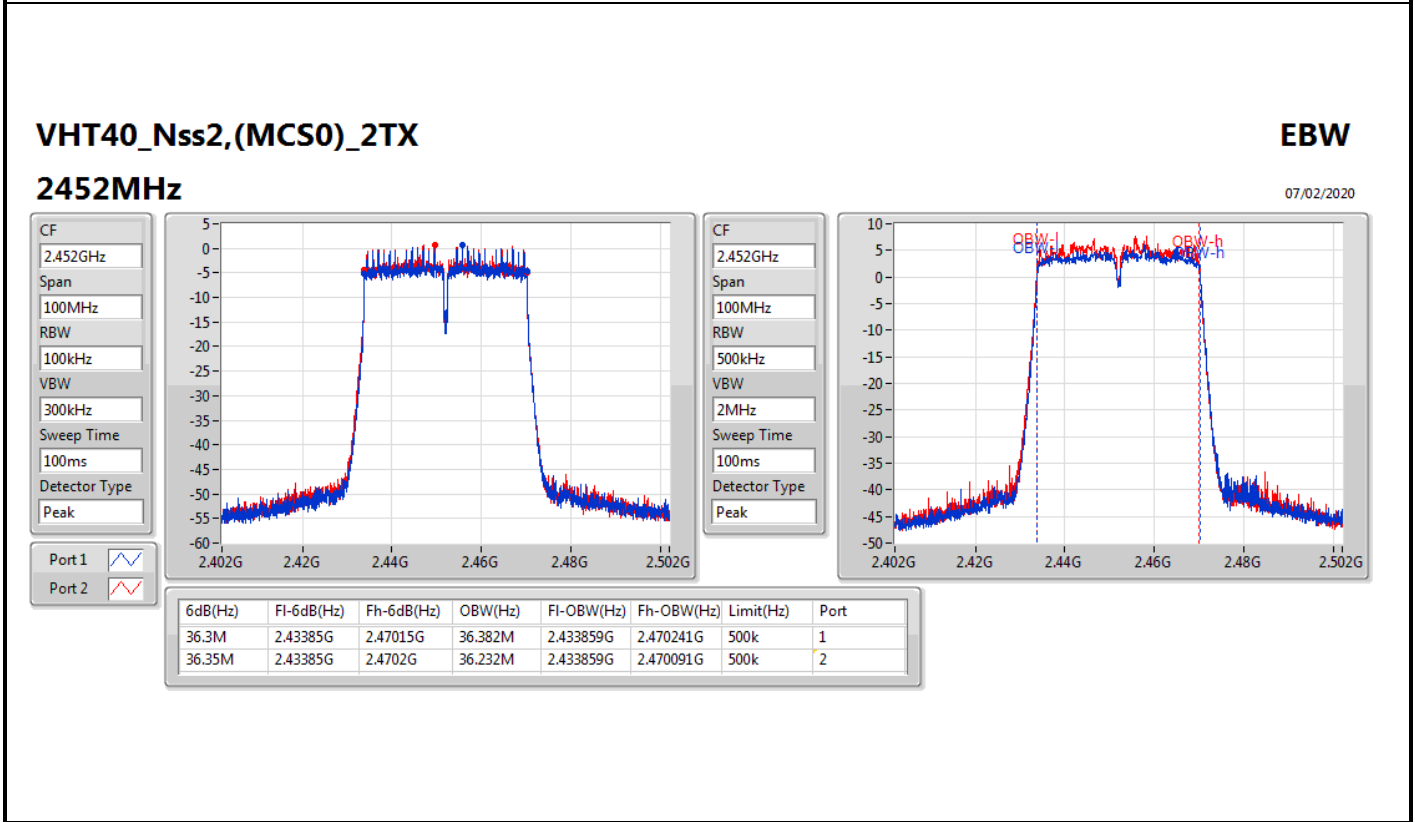
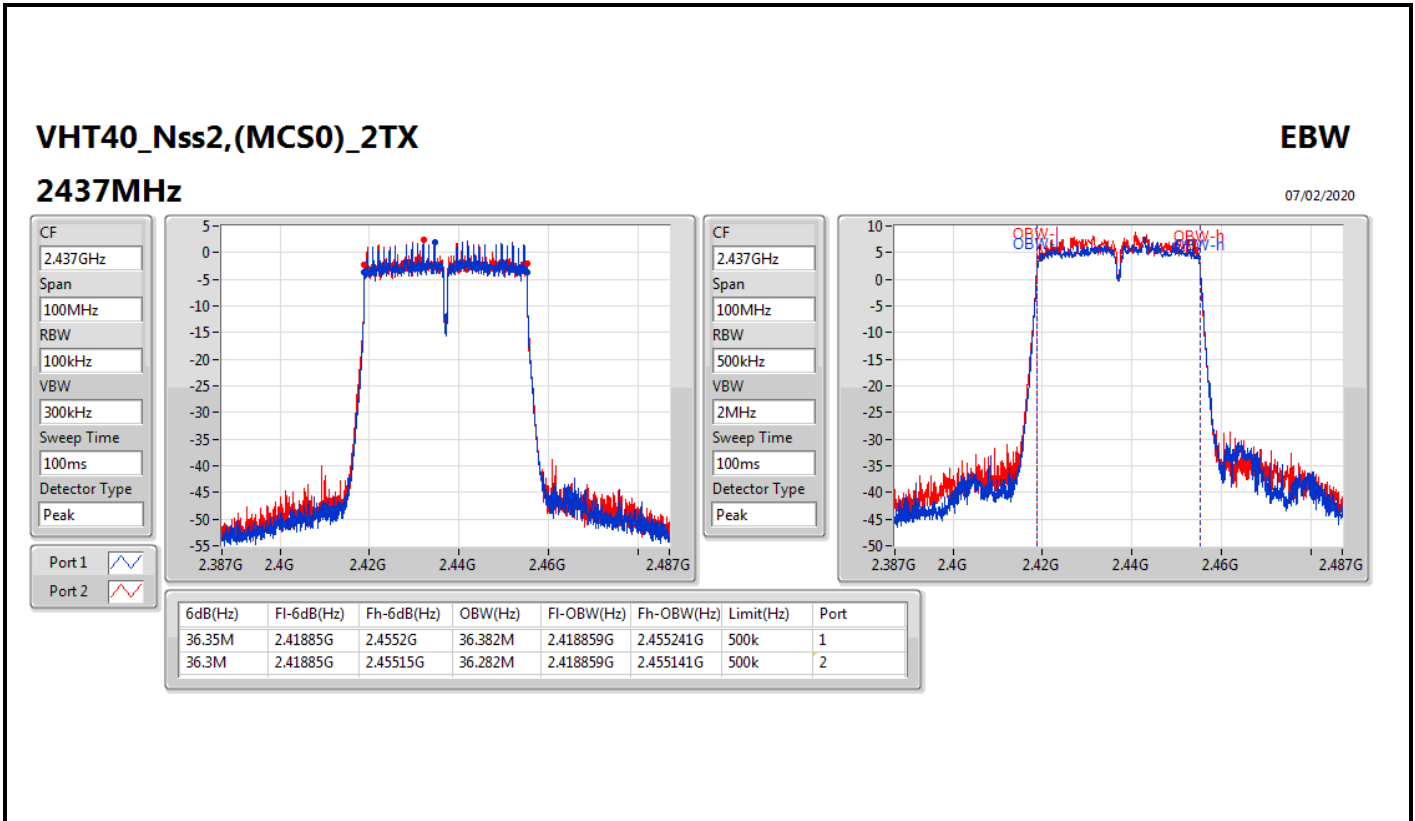
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	2.40385G	2.44015G	36.382M	2.403859G	2.440241G	500k	1
36.35M	2.40385G	2.4402G	36.282M	2.403809G	2.440091G	500k	2



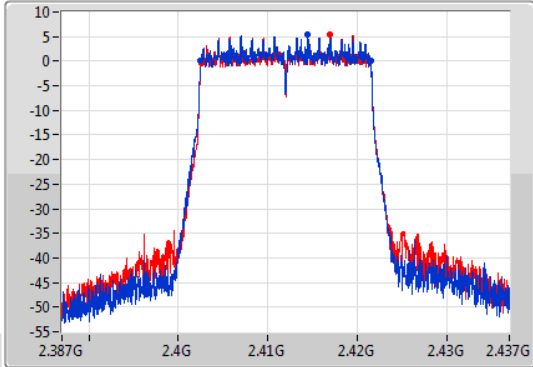
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

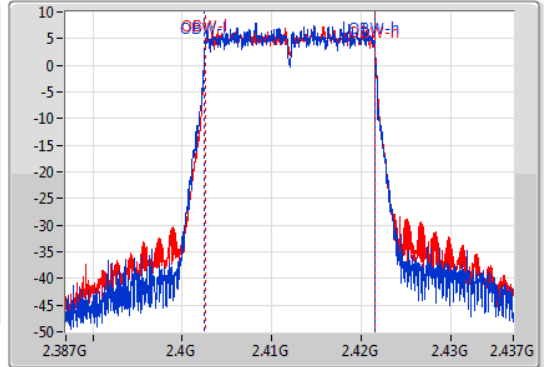
2412MHz

07/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.402525G	2.421475G	19.015M	2.402505G	2.42152G	500k	1
18.85M	2.402625G	2.421475G	19.04M	2.40253G	2.42157G	500k	2

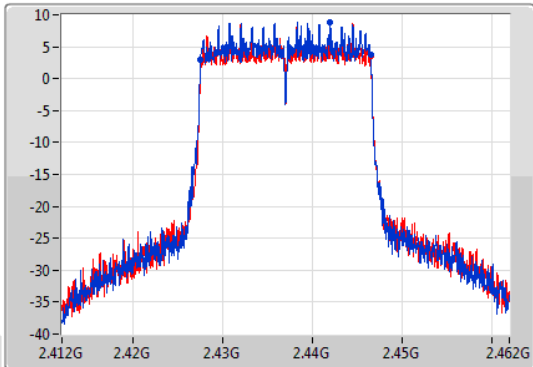
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

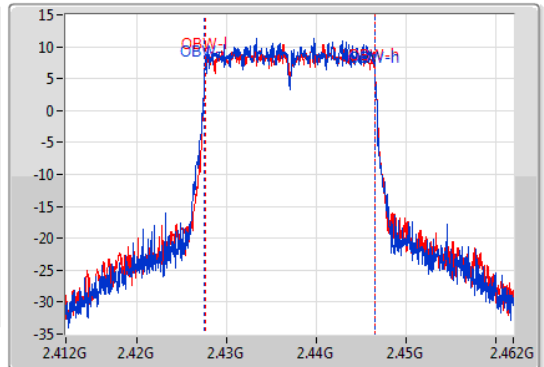
2437MHz

07/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4275G	2.446475G	19.065M	2.42748G	2.446545G	500k	1
18.85M	2.427625G	2.446475G	19.065M	2.42753G	2.446595G	500k	2

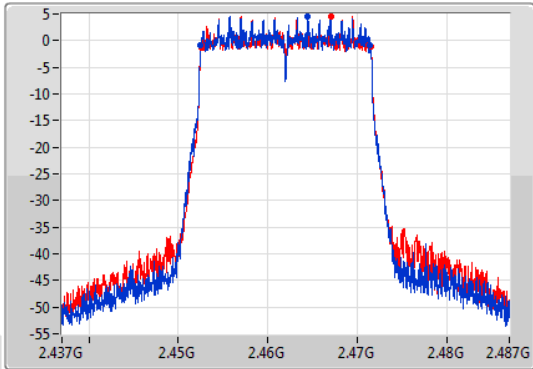
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

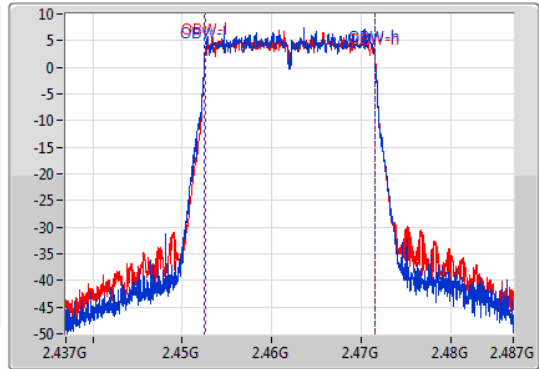
2462MHz

07/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	2.452525G	2.4714G	19.015M	2.452505G	2.47152G	500k	1
18.95M	2.45255G	2.4715G	19.04M	2.45253G	2.47157G	500k	2

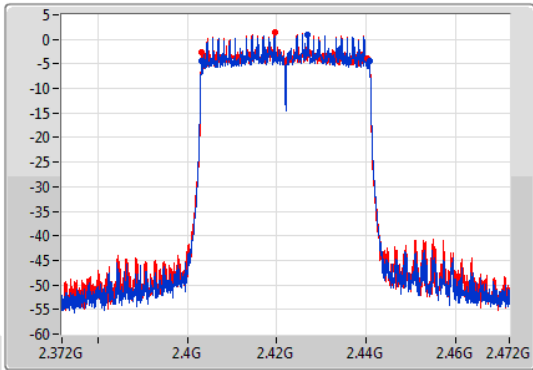
802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

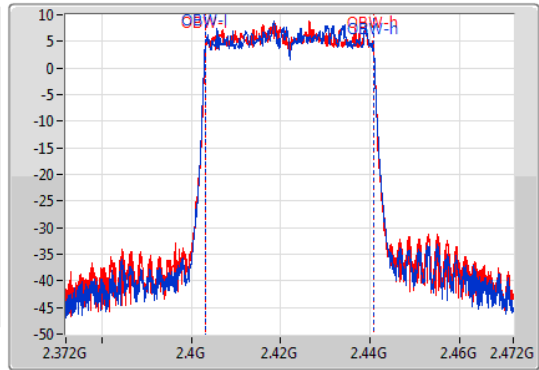
2422MHz

07/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.4032G	2.44075G	37.581M	2.403159G	2.440741G	500k	1
37.05M	2.4032G	2.44025G	37.481M	2.403259G	2.440741G	500k	2

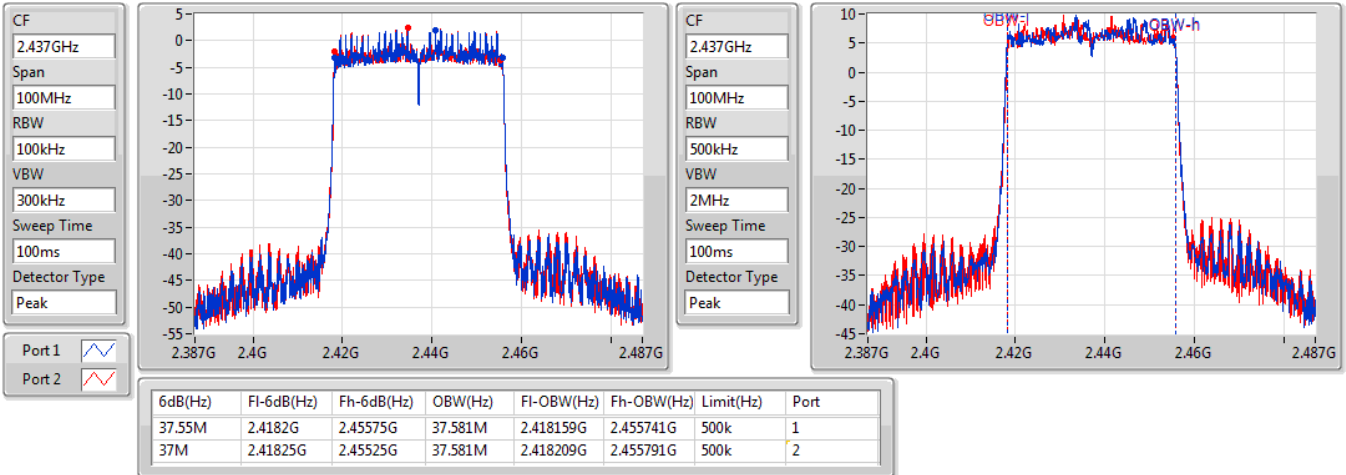


802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

2437MHz

07/02/2020

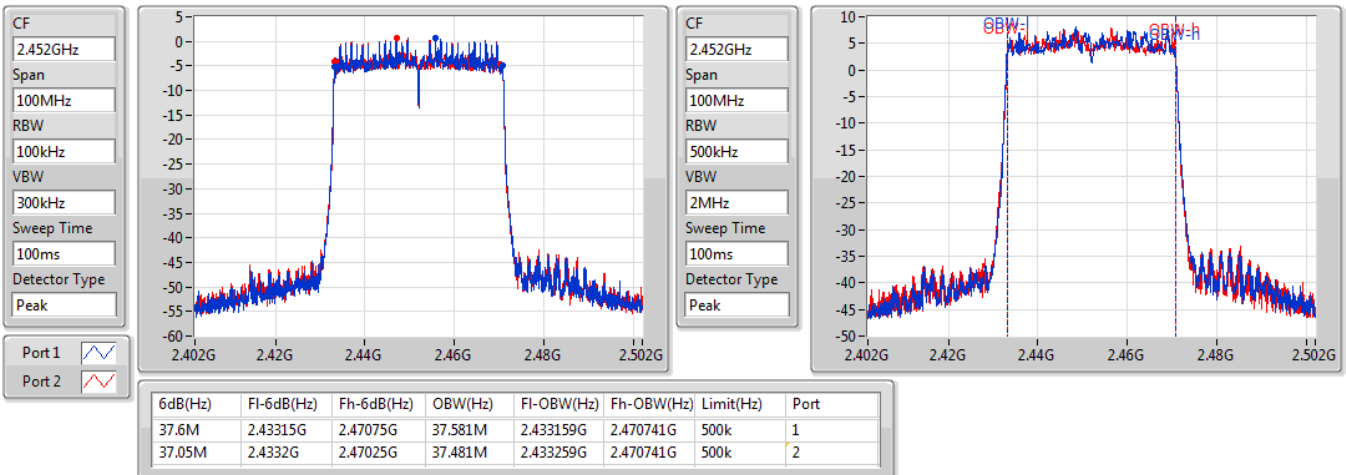


802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

2452MHz

07/02/2020





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	7.075M	10.595M	10M6G1D	6.55M	10.32M
802.11g_Nss1,(6Mbps)_1TX	16.35M	17.191M	17M2D1D	16.325M	16.767M
VHT20_Nss1,(MCS0)_1TX	17.575M	17.966M	18M0D1D	17.575M	17.841M
VHT40_Nss1,(MCS0)_1TX	36.35M	36.482M	36M5D1D	36.35M	36.382M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.975M	19.14M	19M1D1D	18.875M	18.991M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.5M	37.581M	37M6D1D	37.5M	37.531M

**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	6.55M	10.595M
2437MHz	Pass	500k	7.075M	10.32M
2462MHz	Pass	500k	7.075M	10.545M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.35M	16.767M
2437MHz	Pass	500k	16.325M	17.191M
2462MHz	Pass	500k	16.325M	16.767M
VHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.575M	17.866M
2437MHz	Pass	500k	17.575M	17.966M
2462MHz	Pass	500k	17.575M	17.841M
VHT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	36.35M	36.482M
2437MHz	Pass	500k	36.35M	36.382M
2452MHz	Pass	500k	36.35M	36.432M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.95M	18.991M
2437MHz	Pass	500k	18.875M	19.14M
2462MHz	Pass	500k	18.975M	19.015M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	37.5M	37.581M
2437MHz	Pass	500k	37.5M	37.531M
2452MHz	Pass	500k	37.5M	37.531M

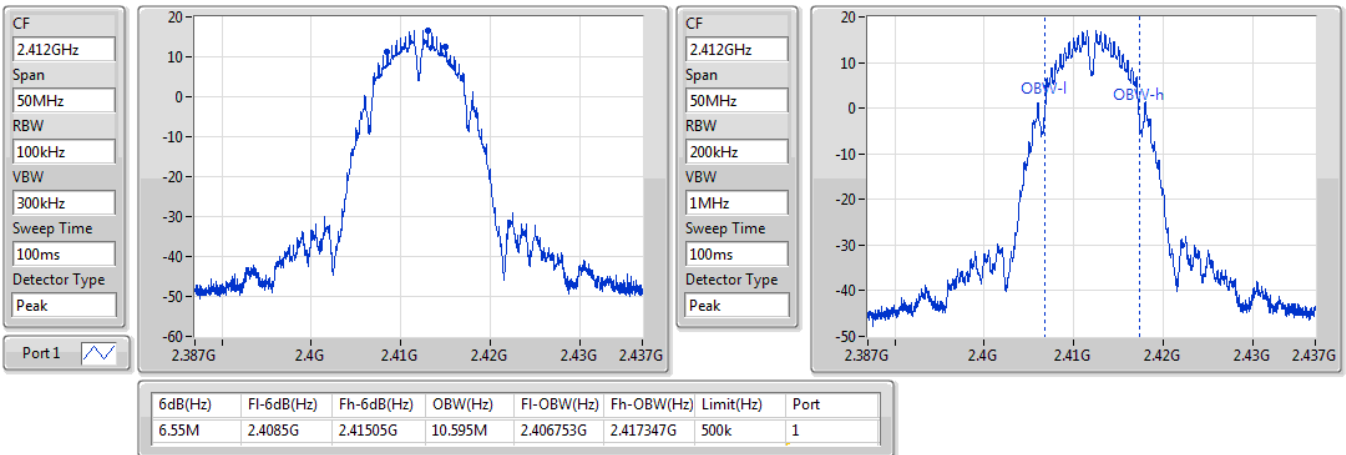
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

16/02/2020

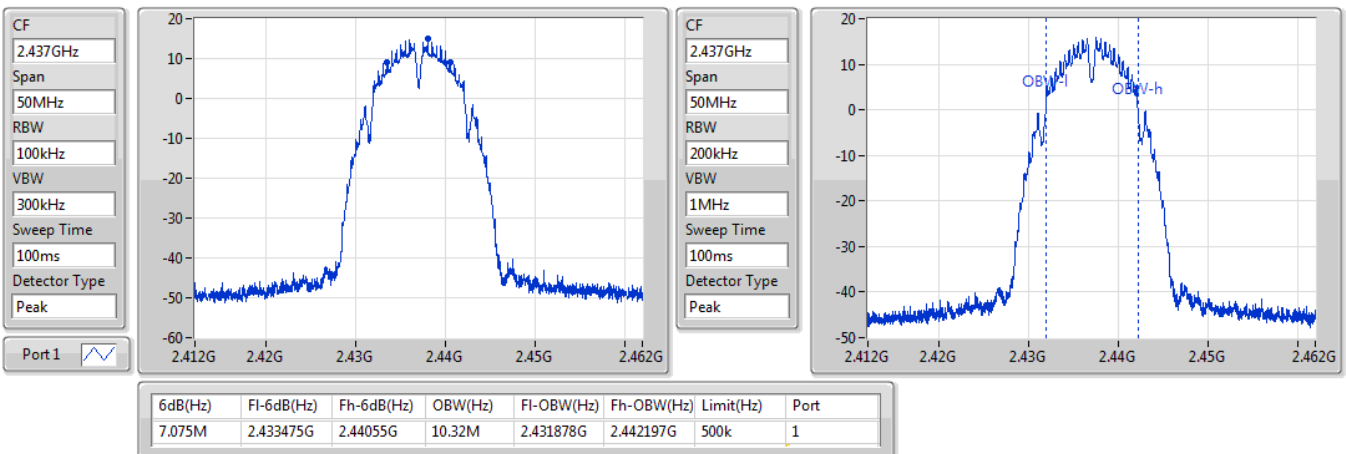


802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

16/02/2020



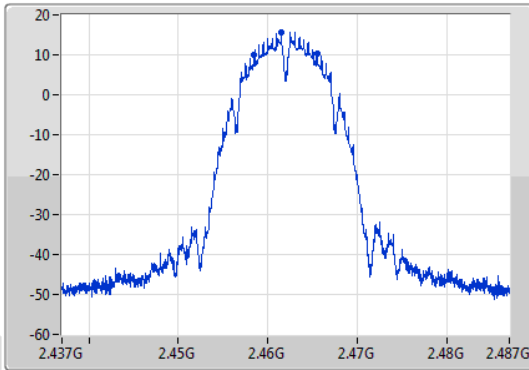
### 802.11b\_Nss1,(1Mbps)\_1TX

EBW

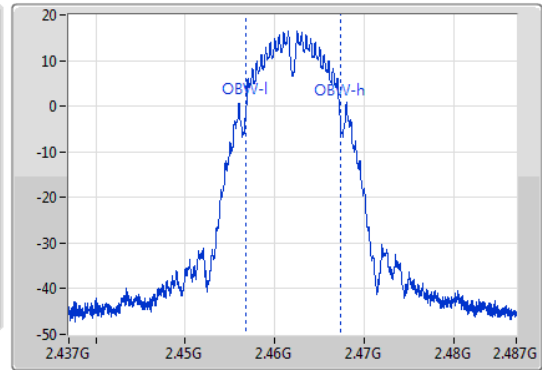
2462MHz

16/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.075M	2.458475G	2.46555G	10.545M	2.456753G	2.467297G	500k	1

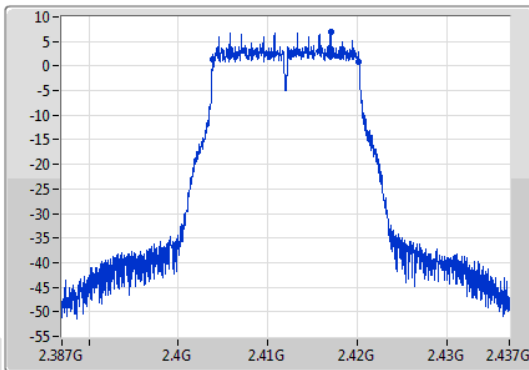
### 802.11g\_Nss1,(6Mbps)\_1TX

EBW

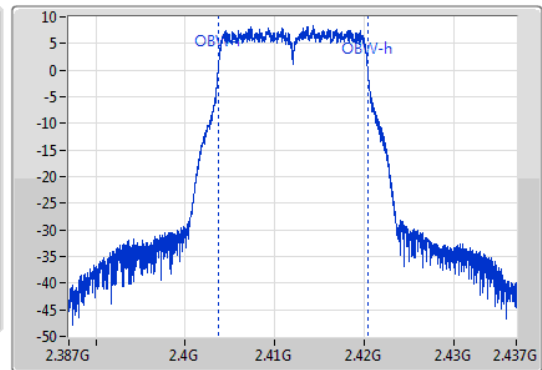
2412MHz

16/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.40385G	2.4202G	16.767M	2.403679G	2.420446G	500k	1

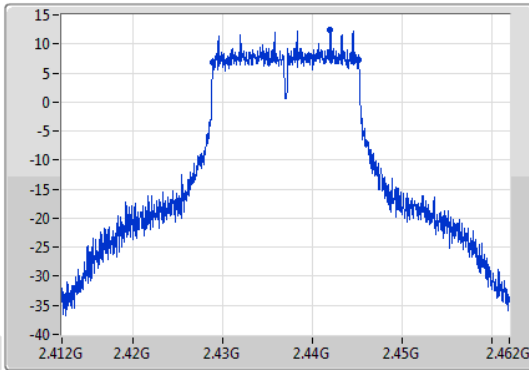
802.11g\_Nss1,(6Mbps)\_1TX

EBW

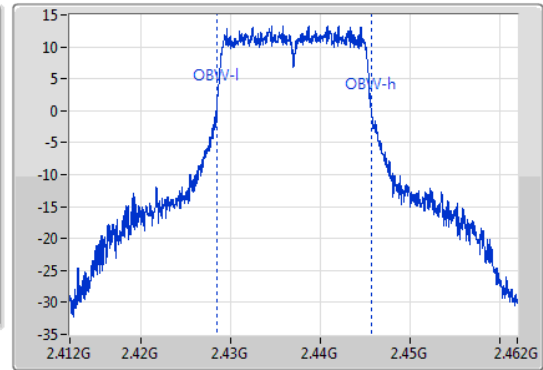
2437MHz

16/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	17.191M	2.428479G	2.445671G	500k	1

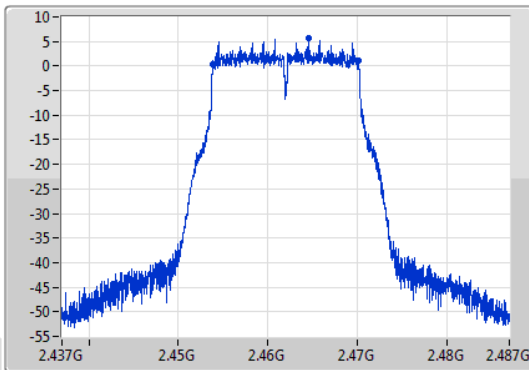
802.11g\_Nss1,(6Mbps)\_1TX

EBW

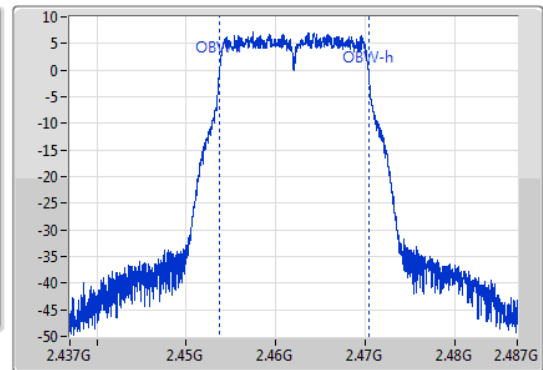
2462MHz

16/02/2020

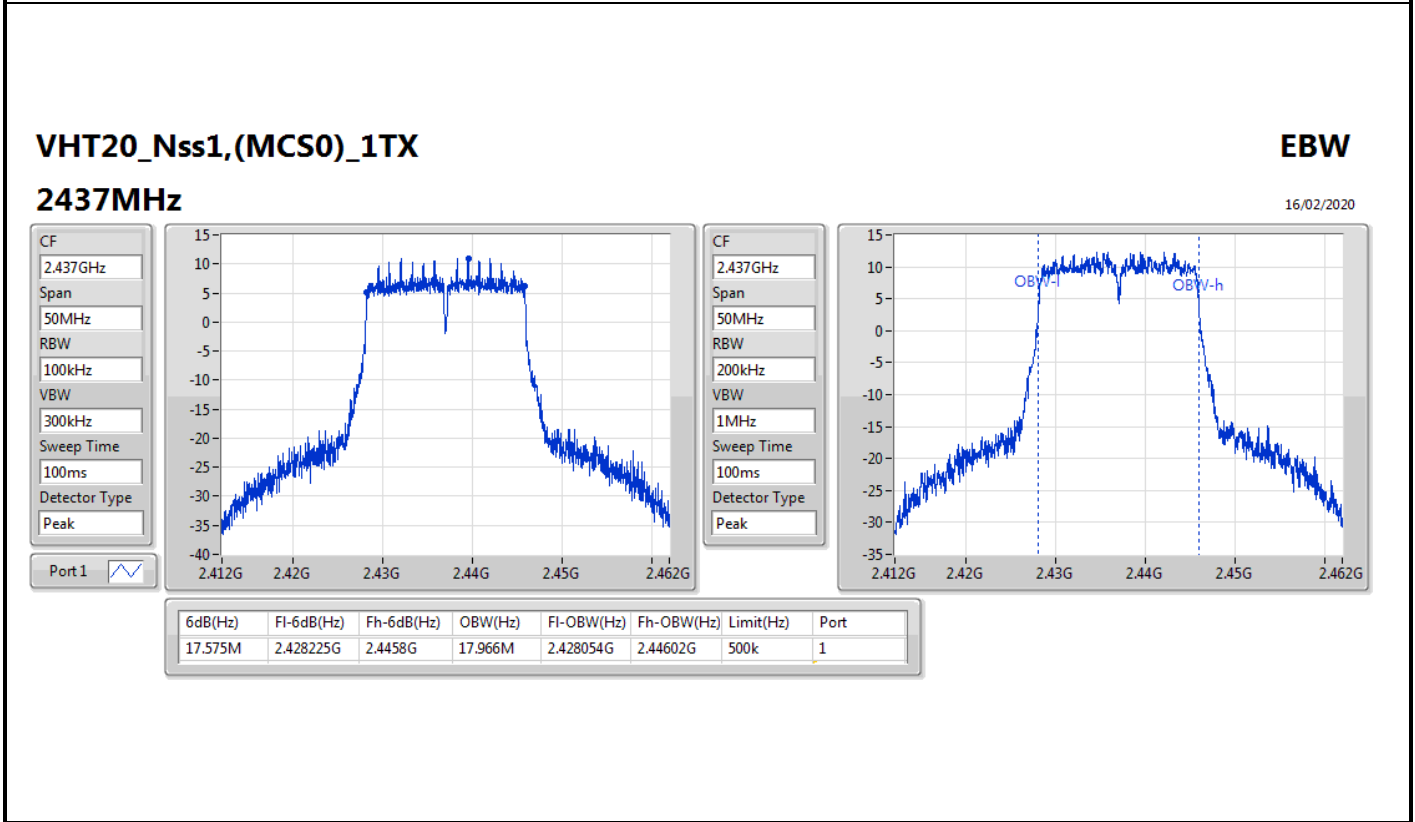
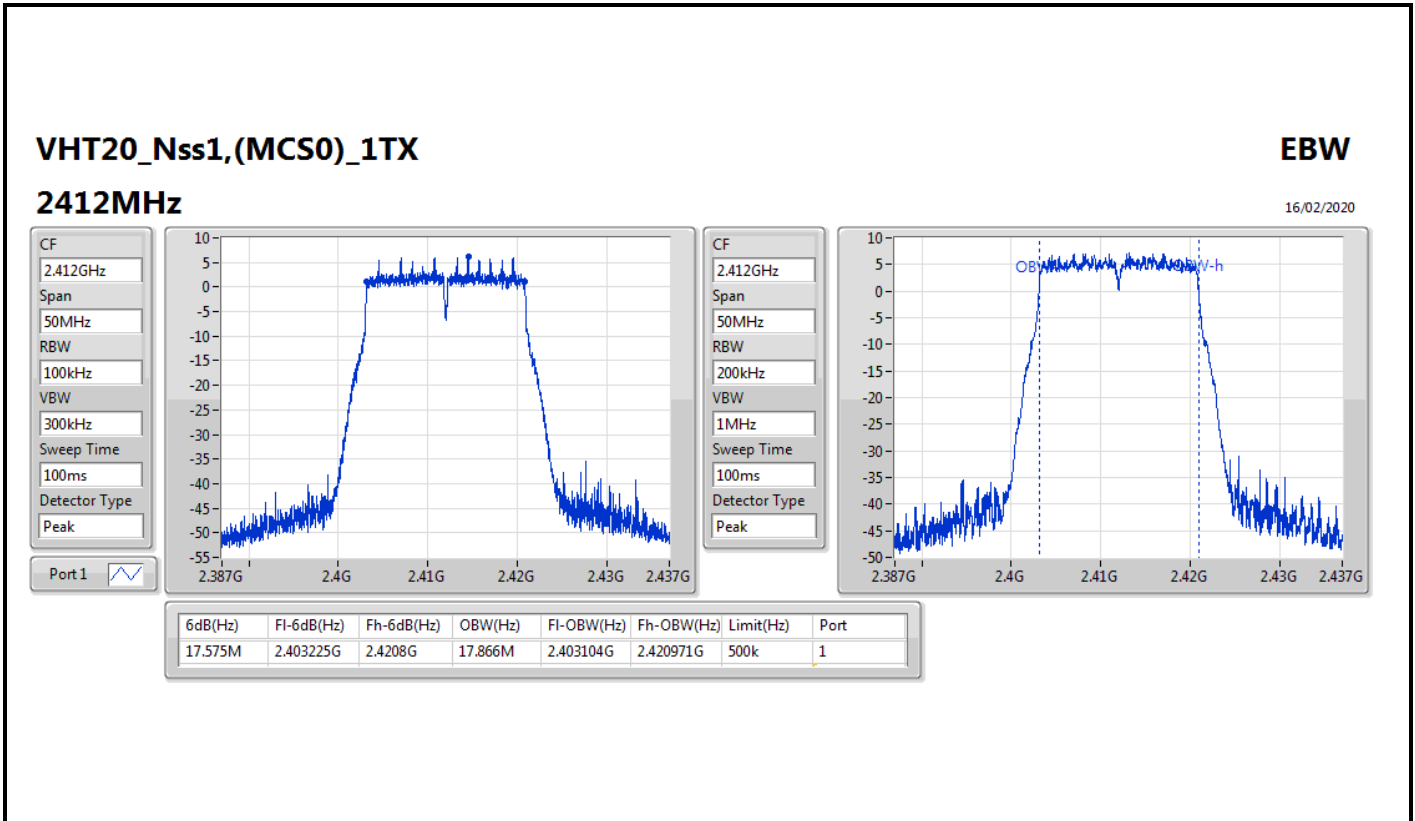
CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.45385G	2.470175G	16.767M	2.453679G	2.470446G	500k	1

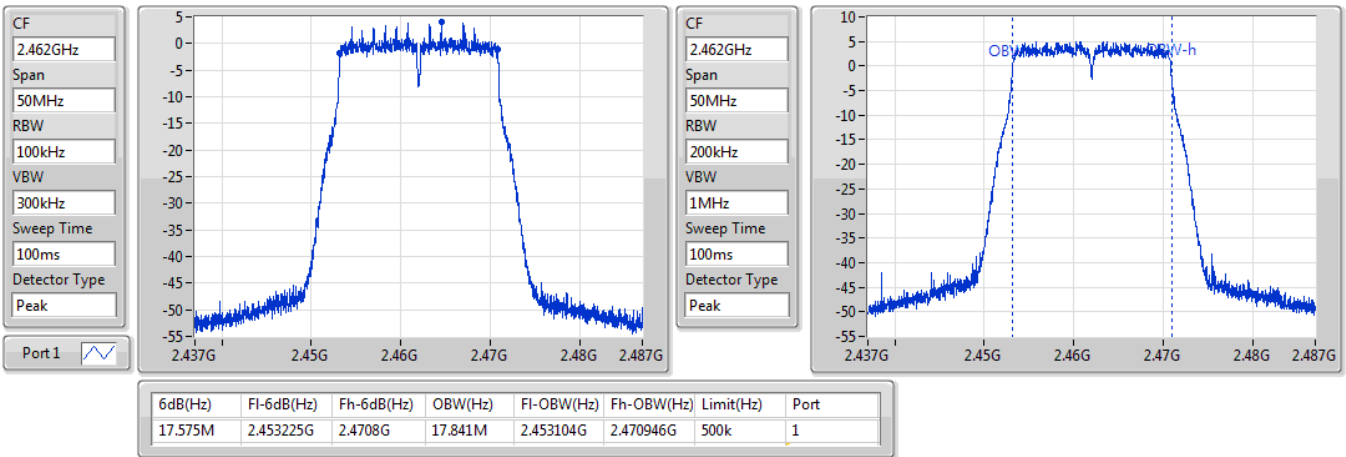


VHT20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

16/02/2020

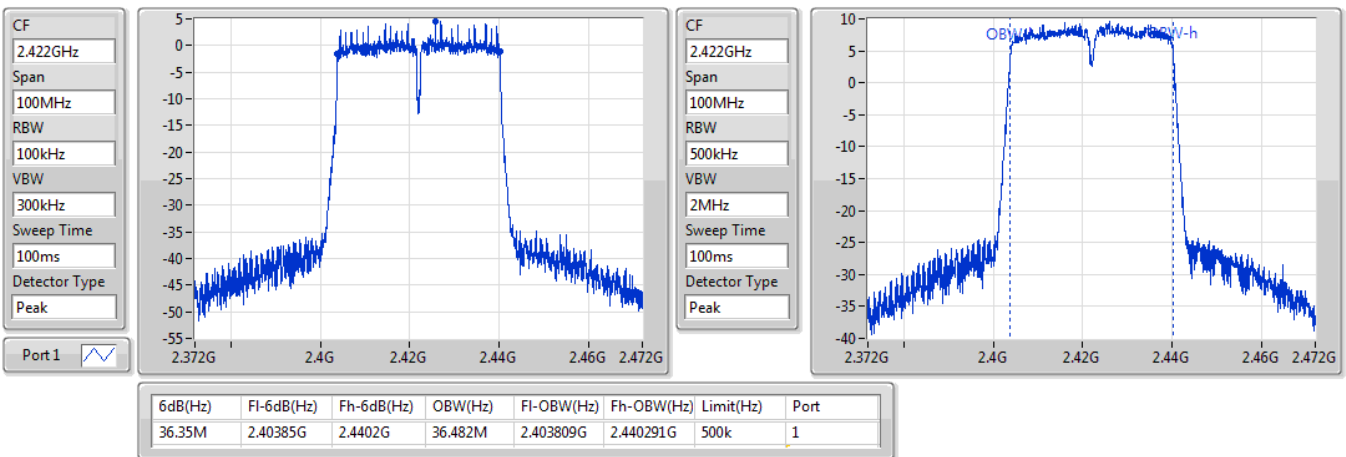


VHT40\_Nss1,(MCS0)\_1TX

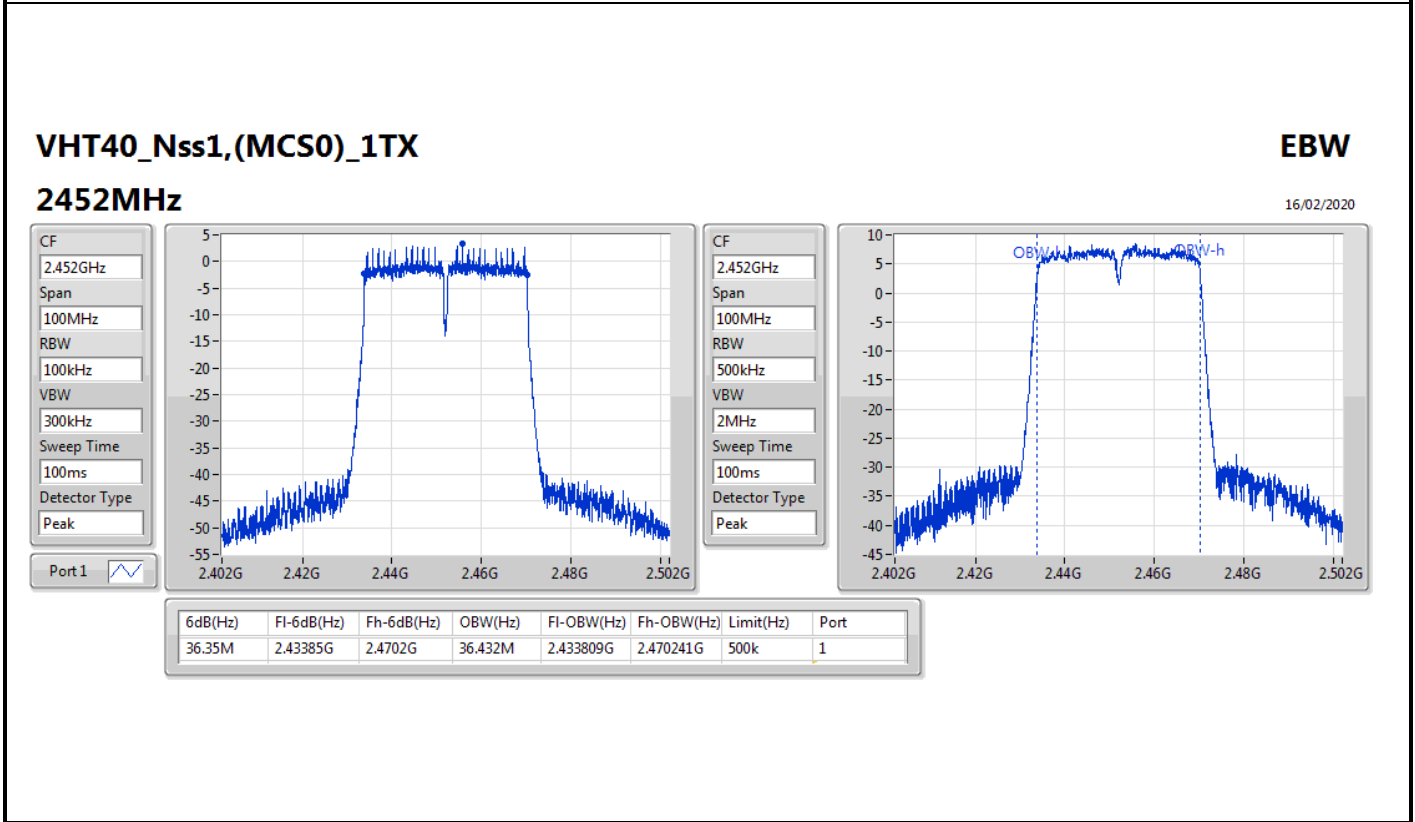
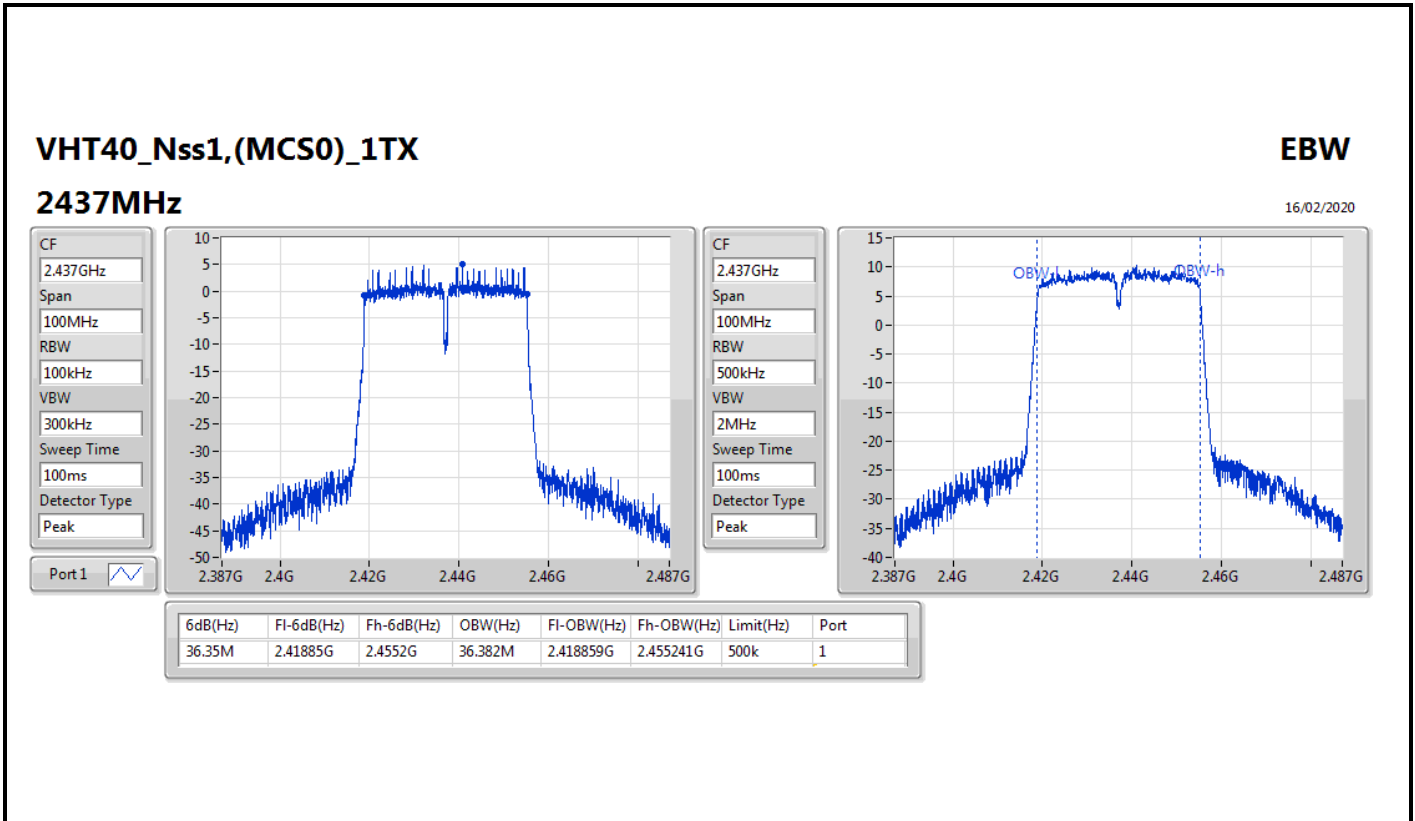
EBW

2422MHz

16/02/2020





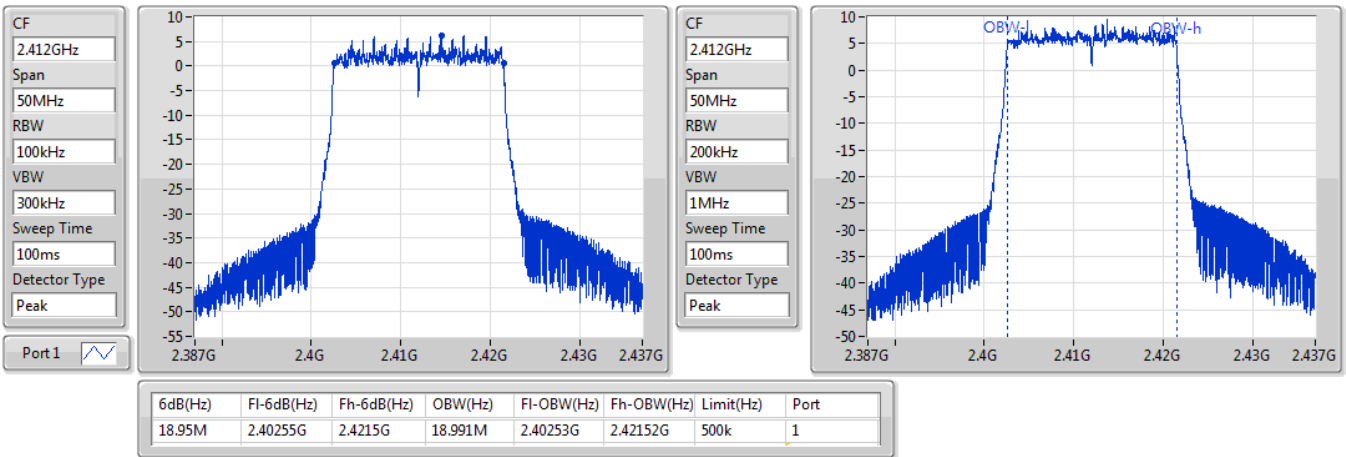


802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2412MHz

16/02/2020

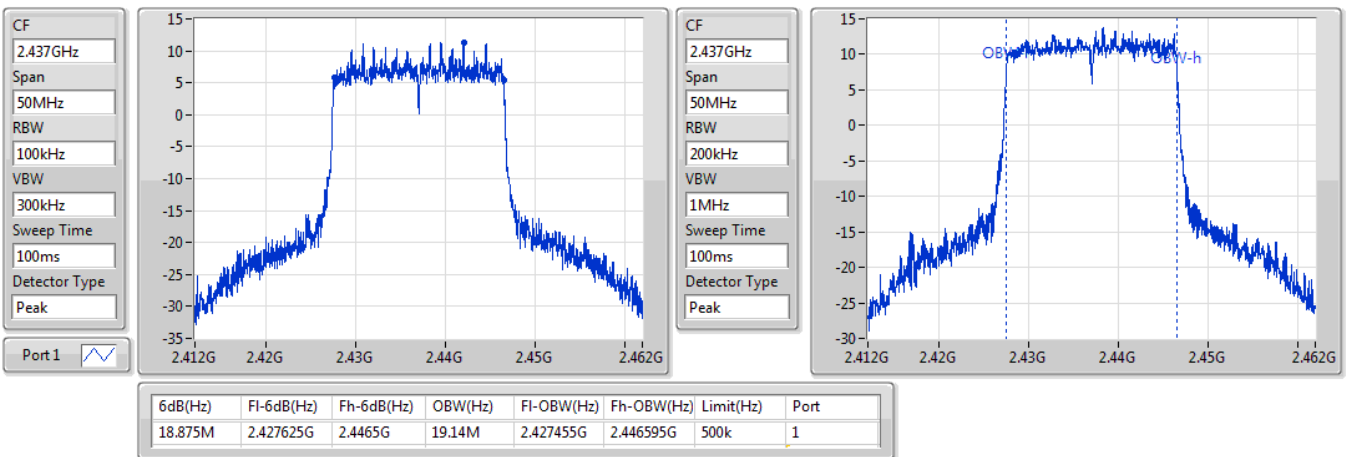


802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2437MHz

16/02/2020

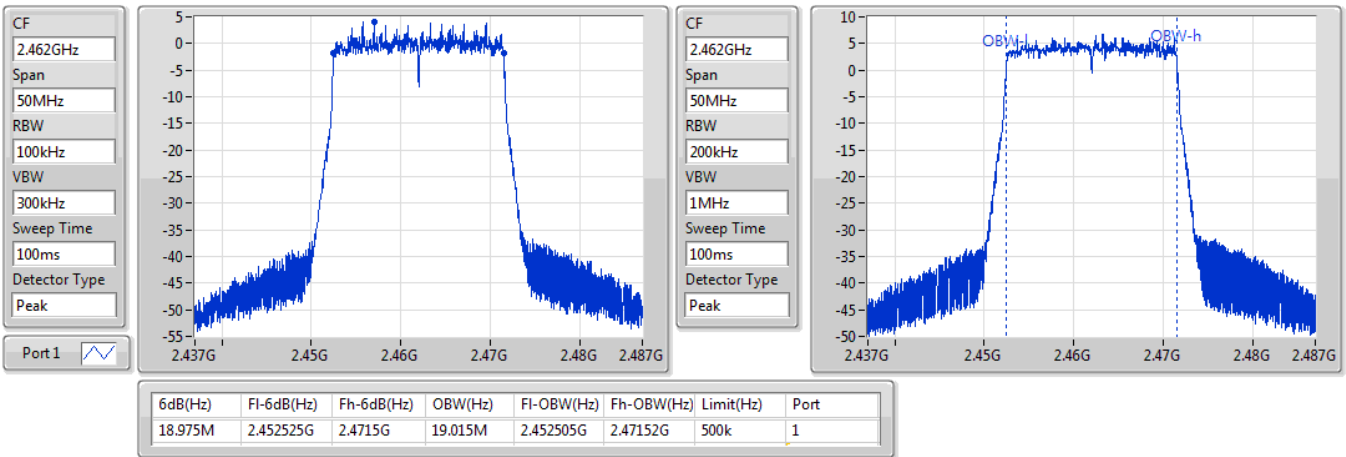


802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

16/02/2020

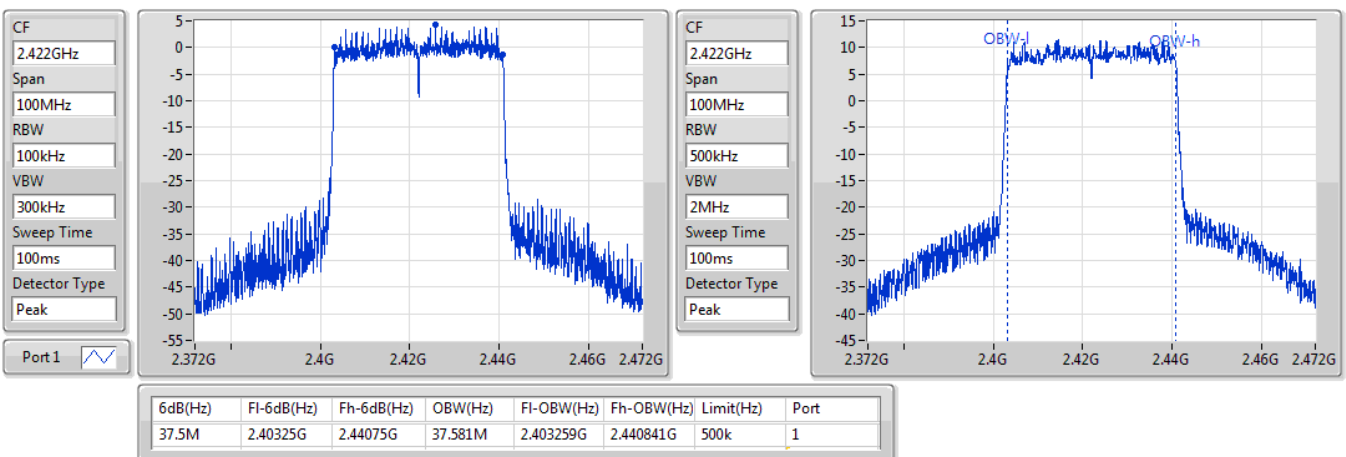


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2422MHz

16/02/2020

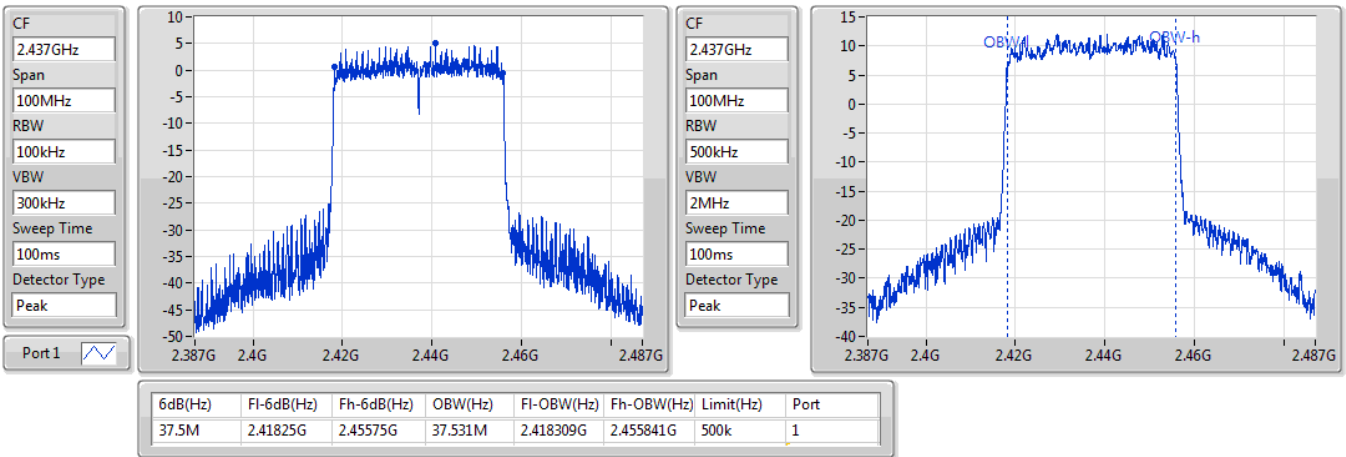


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2437MHz

16/02/2020

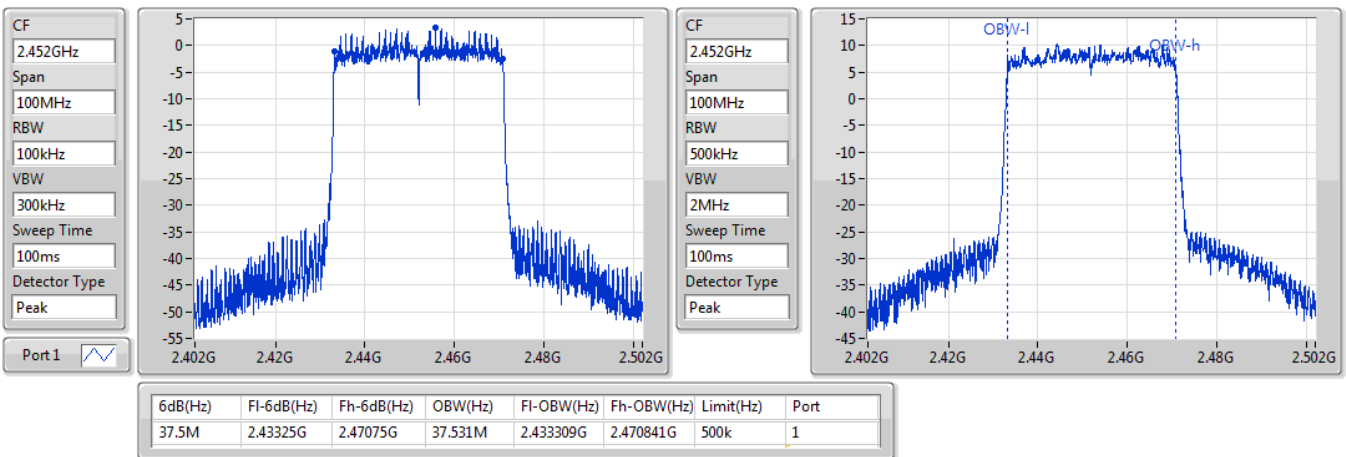


802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

2452MHz

16/02/2020





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	7.05M	10.32M	10M3G1D	6.075M	10.27M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.817M	16M8D1D	16.325M	16.642M
VHT20_Nss2,(MCS0)_2TX	17.6M	17.916M	17M9D1D	17.55M	17.791M
VHT40_Nss2,(MCS0)_2TX	36.35M	36.332M	36M3D1D	36.3M	36.232M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.975M	19.065M	19M1D1D	18.75M	18.991M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.55M	37.581M	37M6D1D	36.9M	37.481M

**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	6.55M	10.27M	7.05M	10.27M
2437MHz	Pass	500k	7.05M	10.295M	7M	10.295M
2462MHz	Pass	500k	6.075M	10.32M	7M	10.32M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.742M	16.325M	16.642M
2437MHz	Pass	500k	16.35M	16.817M	16.35M	16.742M
2462MHz	Pass	500k	16.325M	16.742M	16.35M	16.667M
VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.866M	17.6M	17.816M
2437MHz	Pass	500k	17.575M	17.916M	17.575M	17.816M
2462MHz	Pass	500k	17.55M	17.866M	17.575M	17.791M
VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.3M	36.332M	36.3M	36.282M
2437MHz	Pass	500k	36.35M	36.332M	36.35M	36.282M
2452MHz	Pass	500k	36.35M	36.332M	36.3M	36.232M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	19.015M	18.75M	19.04M
2437MHz	Pass	500k	18.9M	19.04M	18.875M	19.065M
2462MHz	Pass	500k	18.975M	19.015M	18.925M	18.991M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.45M	37.581M	37.55M	37.531M
2437MHz	Pass	500k	36.9M	37.581M	37.05M	37.531M
2452MHz	Pass	500k	37.45M	37.581M	37.05M	37.481M

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

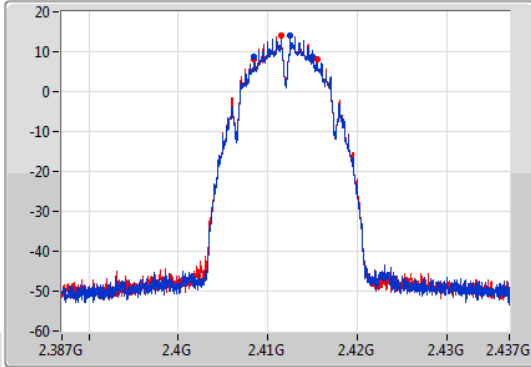
802.11b\_Nss1,(1Mbps)\_2TX

EBW

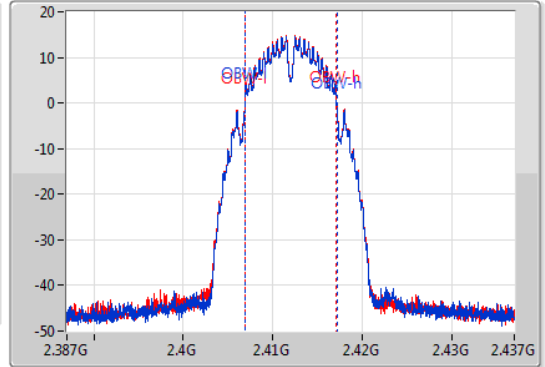
2412MHz

16/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.55M	2.4085G	2.41505G	10.27M	2.406903G	2.417172G	500k	1
7.05M	2.408475G	2.415525G	10.27M	2.406878G	2.417147G	500k	2

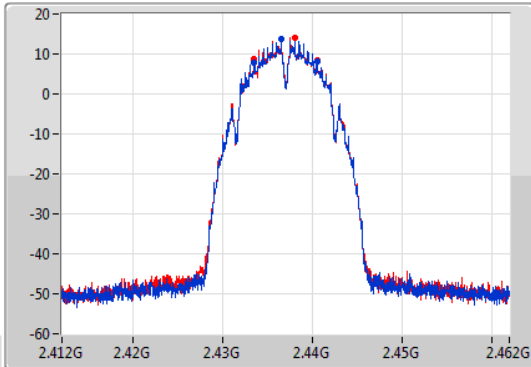
802.11b\_Nss1,(1Mbps)\_2TX

EBW

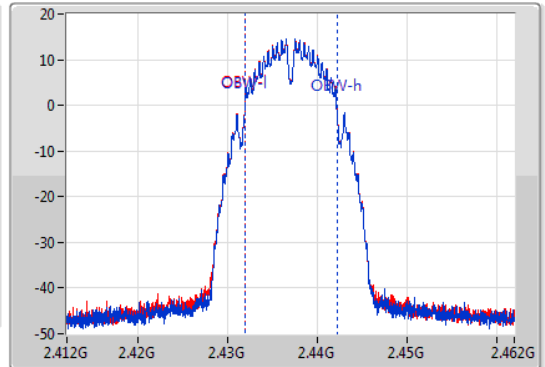
2437MHz

16/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.4335G	2.44055G	10.295M	2.431878G	2.442172G	500k	1
7M	2.4335G	2.4405G	10.295M	2.431878G	2.442172G	500k	2

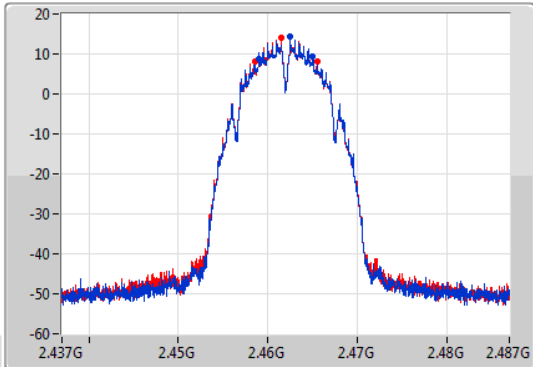
### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

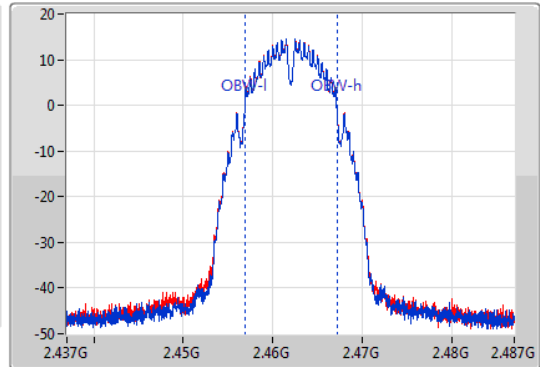
2462MHz

16/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.075M	2.458975G	2.46505G	10.32M	2.456853G	2.467172G	500k	1
7M	2.458525G	2.465525G	10.32M	2.456853G	2.467172G	500k	2

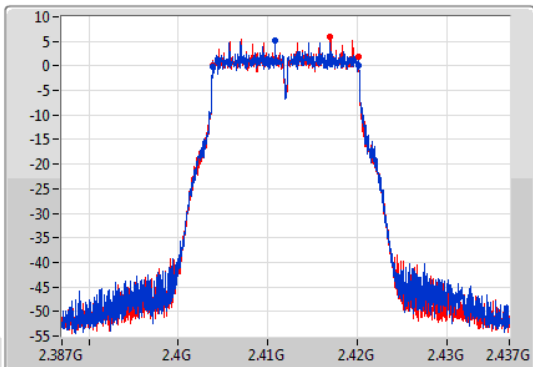
### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

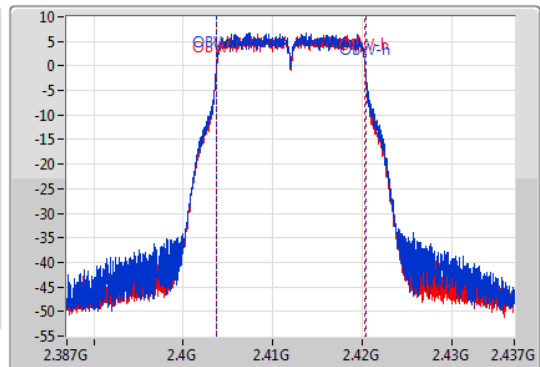
2412MHz

16/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.40385G	2.4202G	16.742M	2.403679G	2.420421G	500k	1
16.325M	2.40385G	2.420175G	16.642M	2.403704G	2.420346G	500k	2



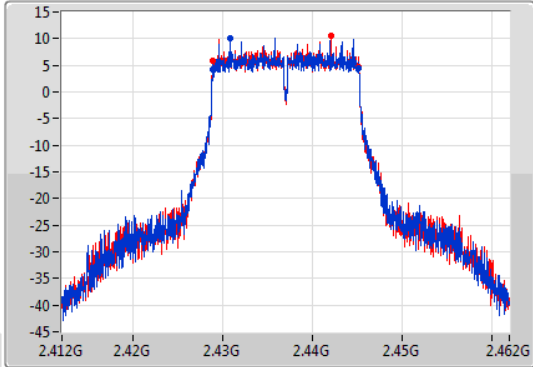
802.11g\_Nss1,(6Mbps)\_2TX

EBW

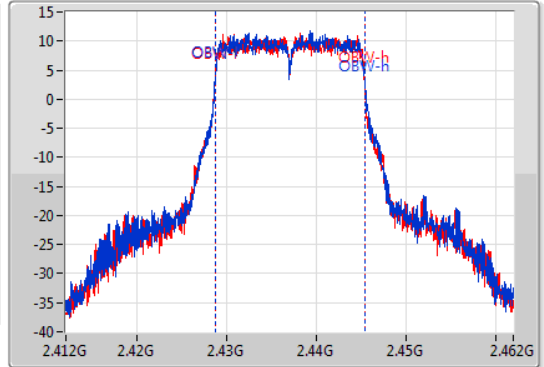
2437MHz

16/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.42885G	2.4452G	16.817M	2.428654G	2.445471G	500k	1
16.35M	2.42885G	2.4452G	16.742M	2.428654G	2.445396G	500k	2

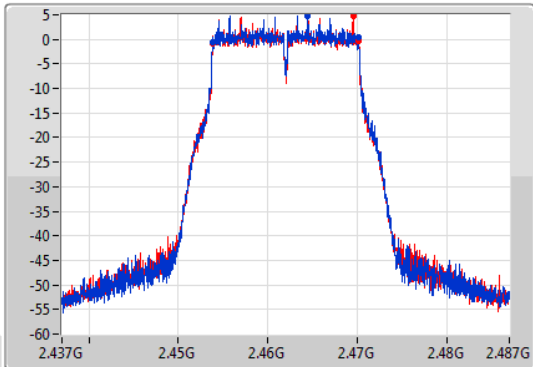
802.11g\_Nss1,(6Mbps)\_2TX

EBW

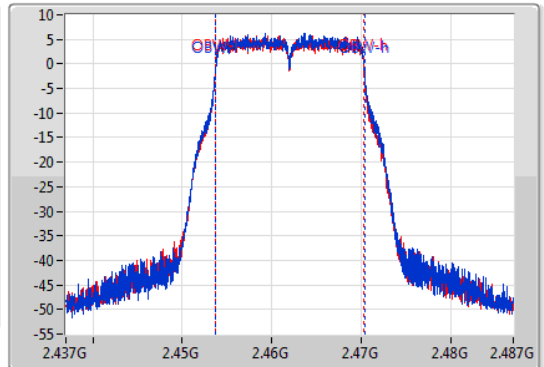
2462MHz

16/02/2020

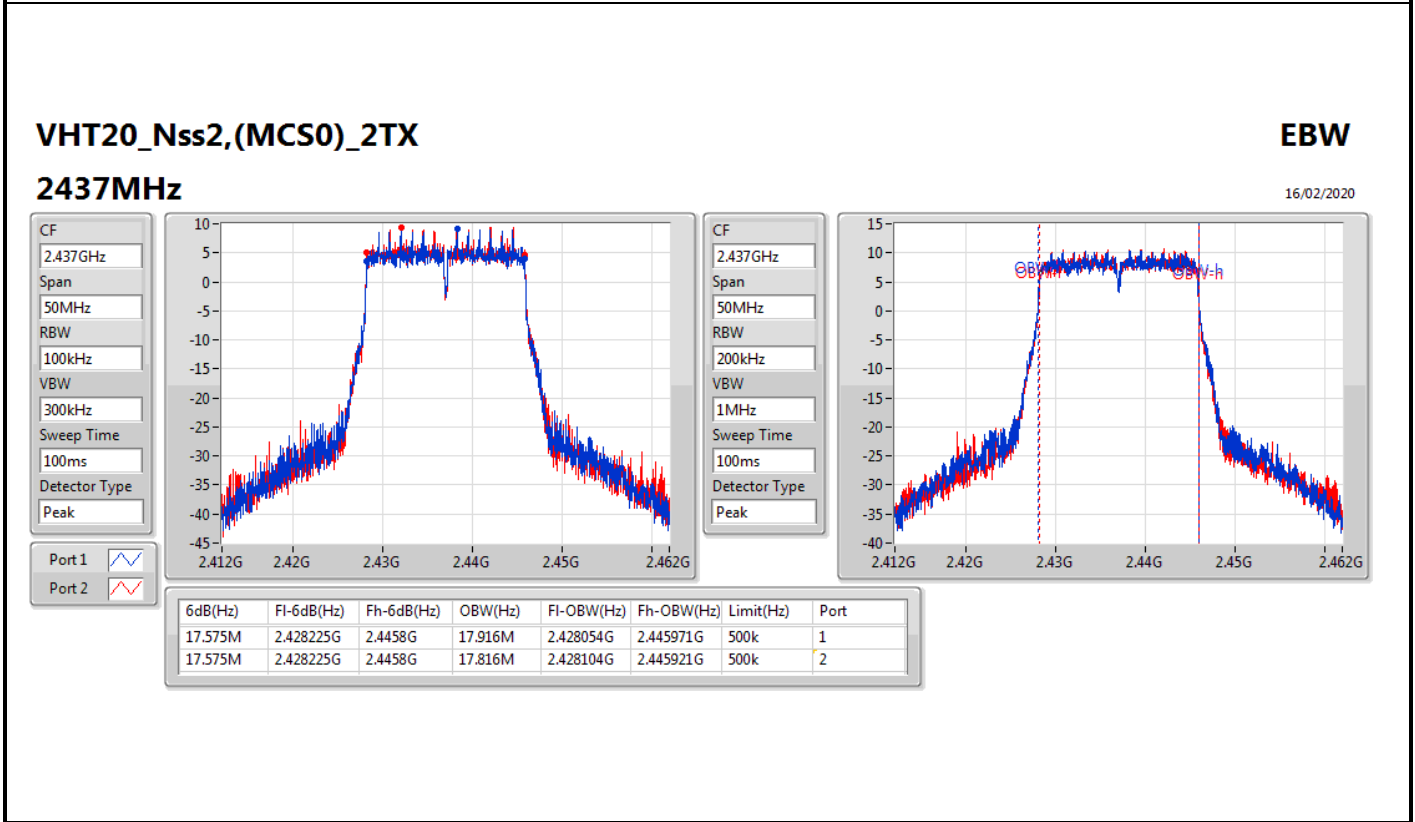
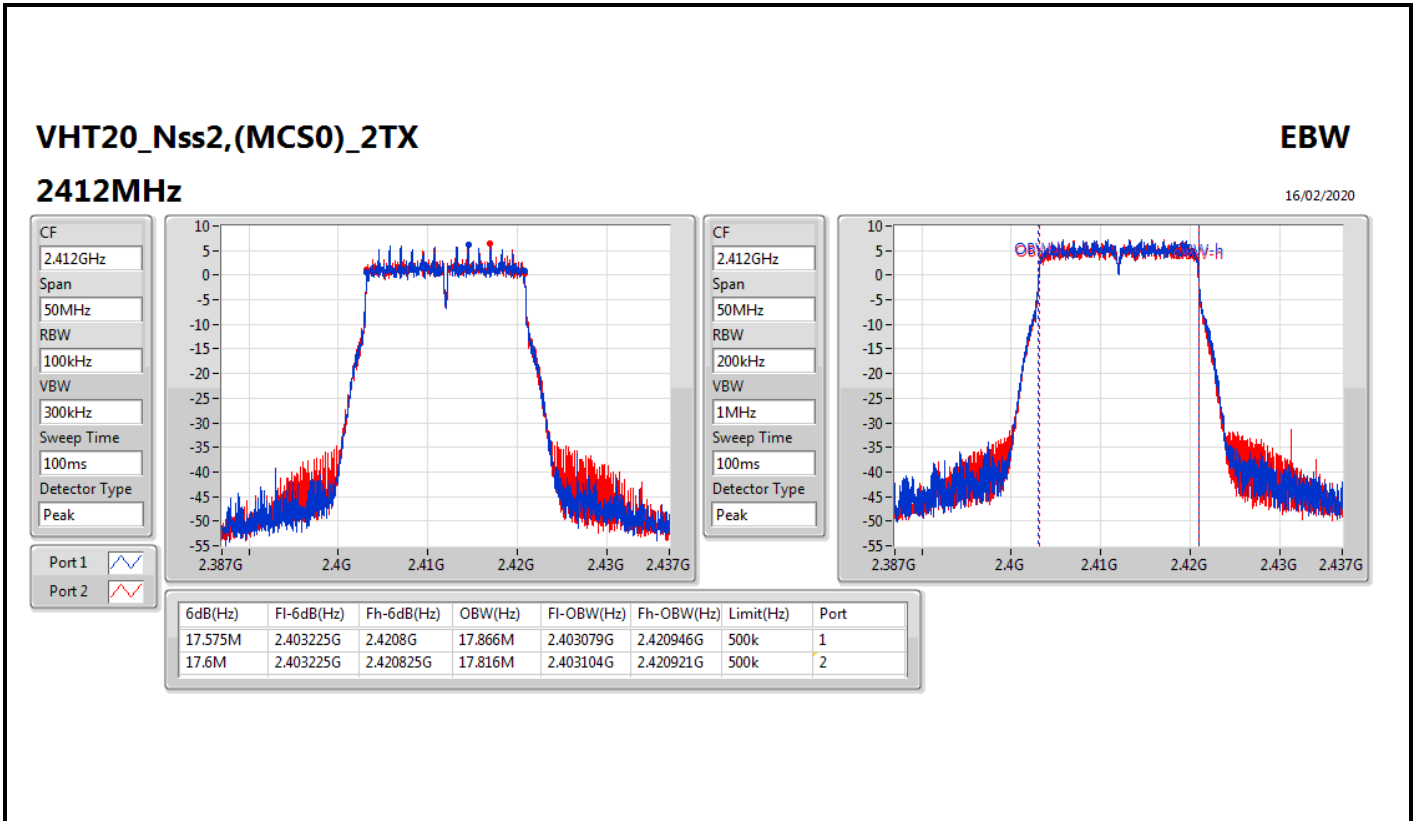
CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.45385G	2.470175G	16.742M	2.453679G	2.470421G	500k	1
16.35M	2.45385G	2.4702G	16.667M	2.453679G	2.470346G	500k	2



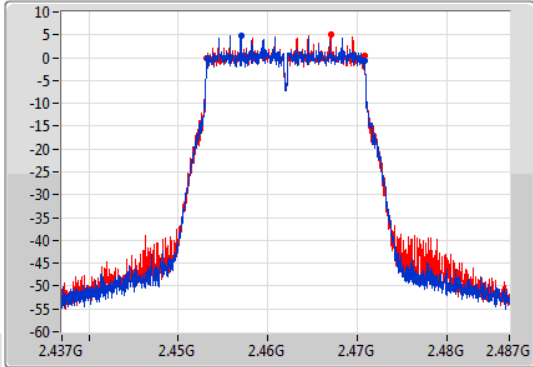
VHT20\_Nss2,(MCS0)\_2TX

EBW

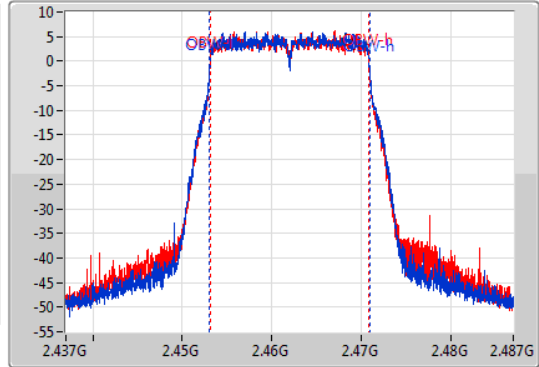
2462MHz

16/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	2.45325G	2.4708G	17.866M	2.453079G	2.470946G	500k	1
17.575M	2.453225G	2.4708G	17.791M	2.453104G	2.470896G	500k	2

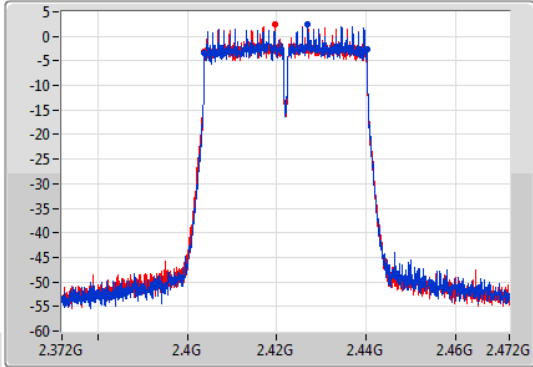
VHT40\_Nss2,(MCS0)\_2TX

EBW

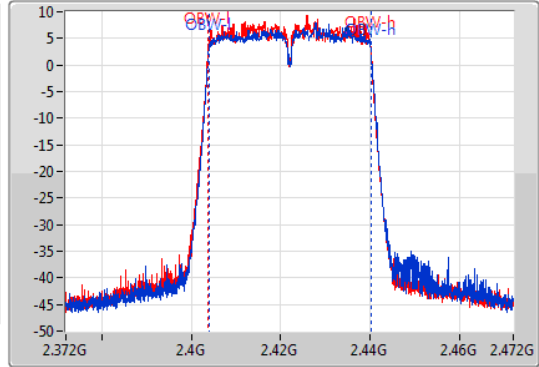
2422MHz

16/02/2020

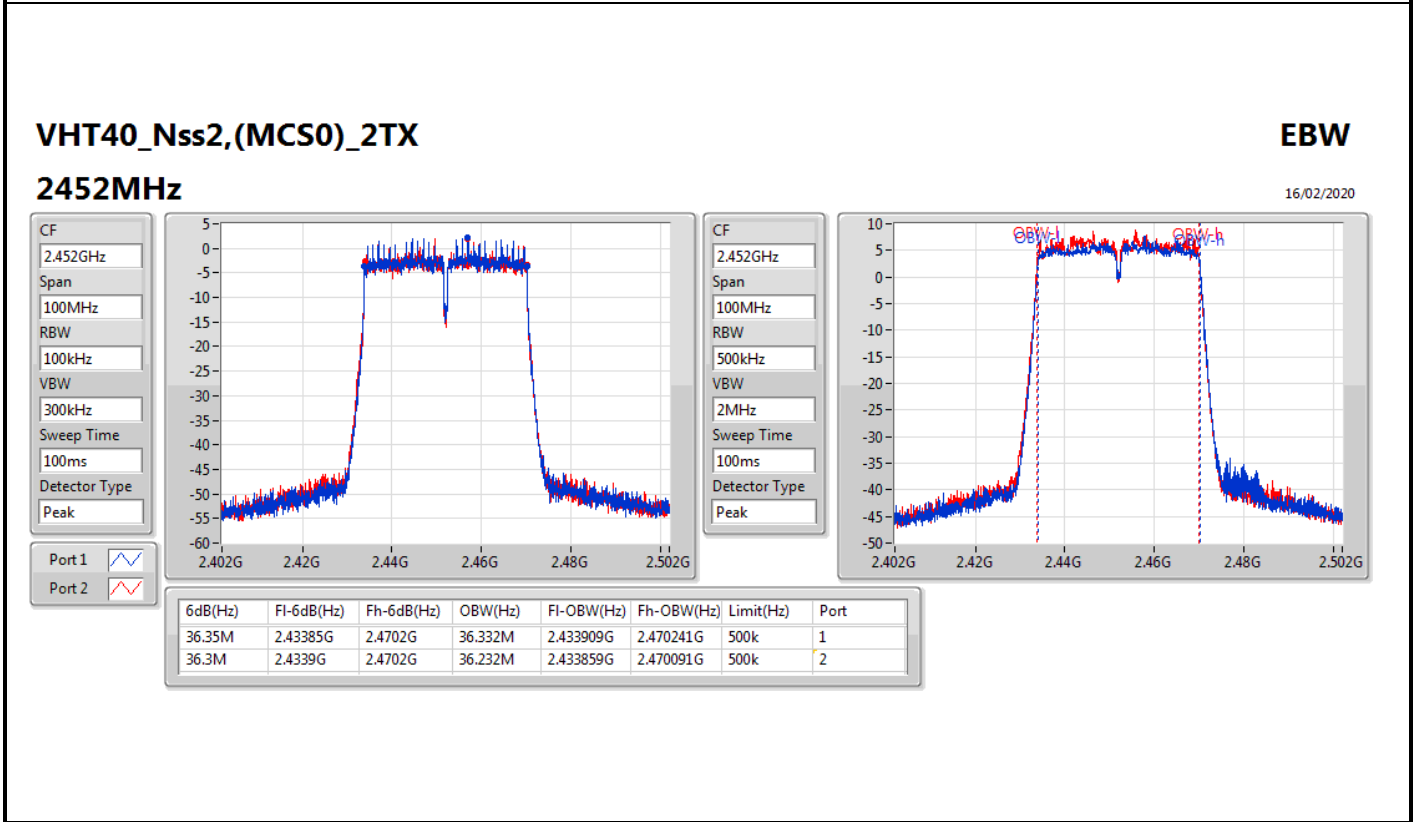
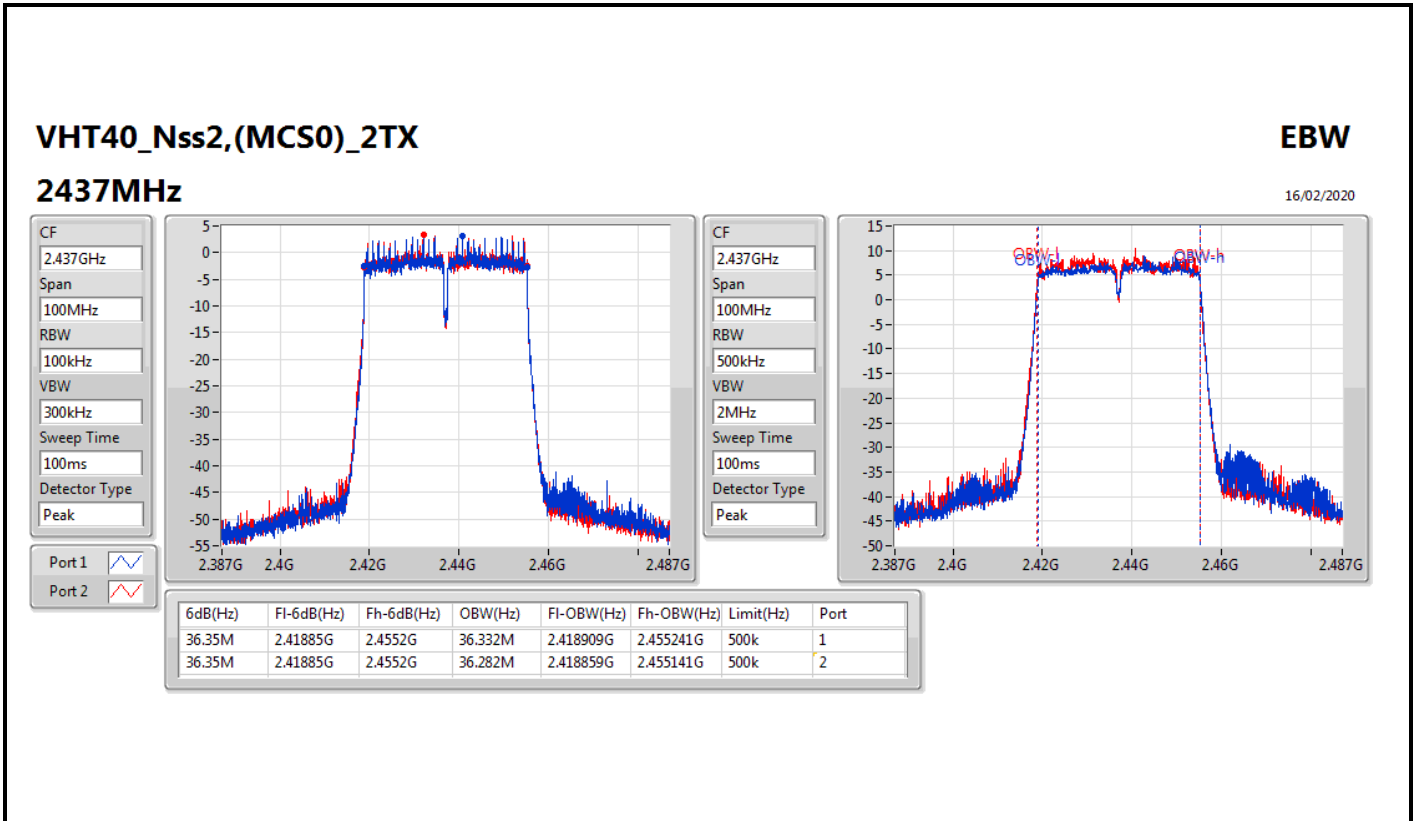
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	2.40385G	2.44015G	36.332M	2.403909G	2.440241G	500k	1
36.3M	2.40385G	2.44015G	36.282M	2.403859G	2.440141G	500k	2



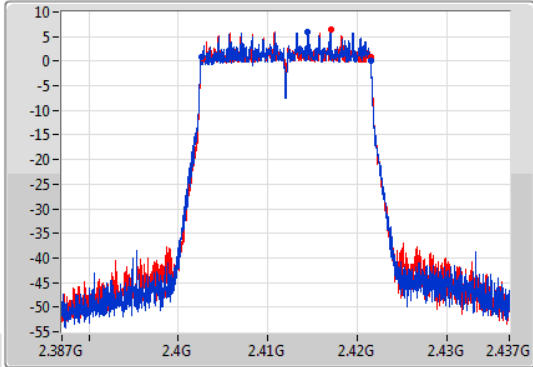
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

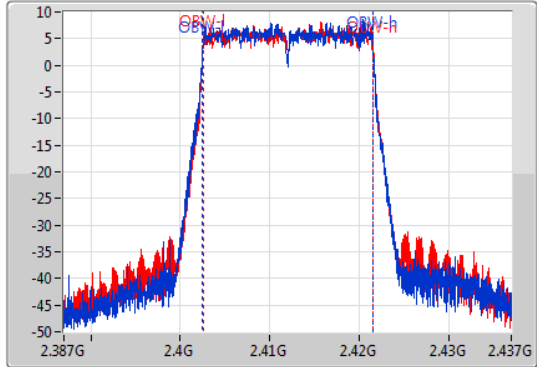
2412MHz

16/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.40255G	2.4215G	19.015M	2.402505G	2.42152G	500k	1
18.75M	2.402725G	2.421475G	19.04M	2.40253G	2.42157G	500k	2

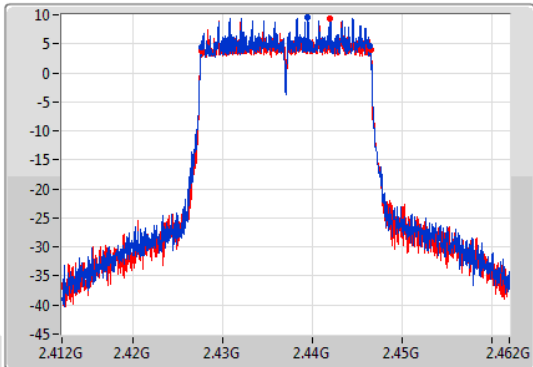
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

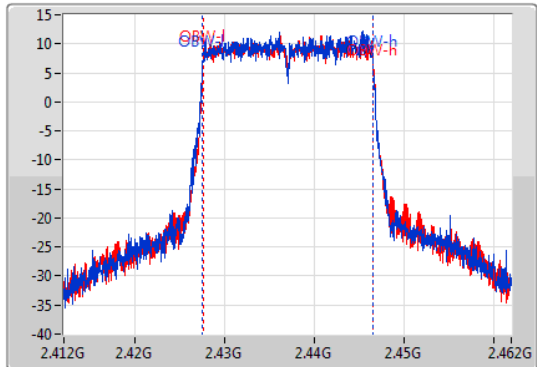
2437MHz

16/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	2.42755G	2.44645G	19.04M	2.427505G	2.446545G	500k	1
18.875M	2.427625G	2.4465G	19.065M	2.42753G	2.446595G	500k	2

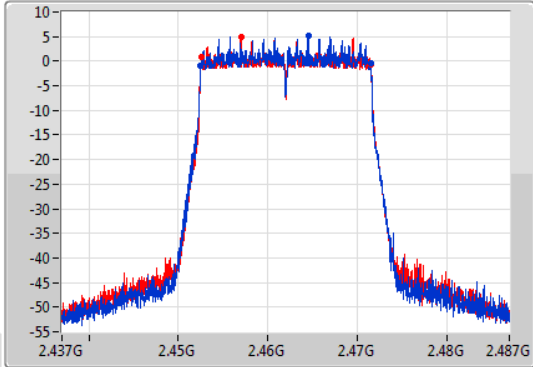
802.11ax HEW20\_Nss2,(MCS0)\_2TX

EBW

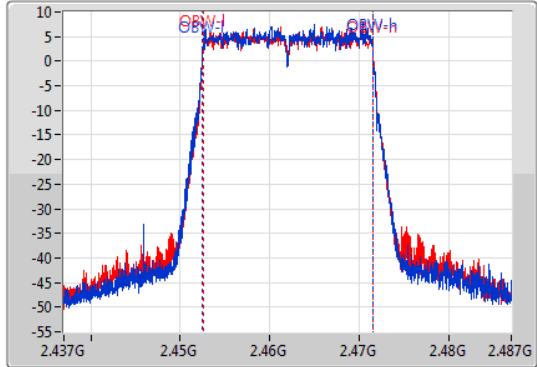
2462MHz

16/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452525G	2.47115G	19.015M	2.452505G	2.47152G	500k	1
18.925M	2.452575G	2.47115G	18.991M	2.452555G	2.471545G	500k	2

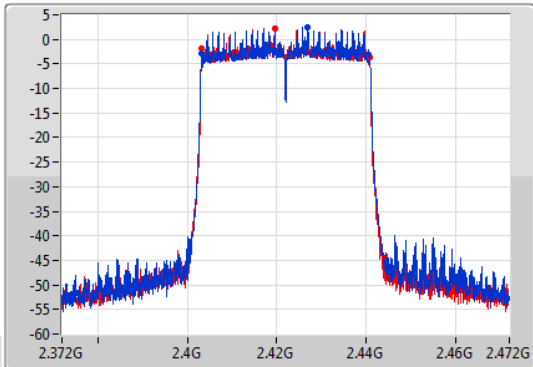
802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

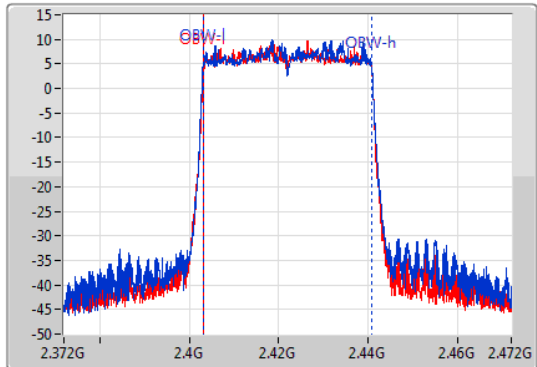
2422MHz

16/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.45M	2.4032G	2.44065G	37.581M	2.403159G	2.440741G	500k	1
37.55M	2.40325G	2.4408G	37.531M	2.403259G	2.440791G	500k	2

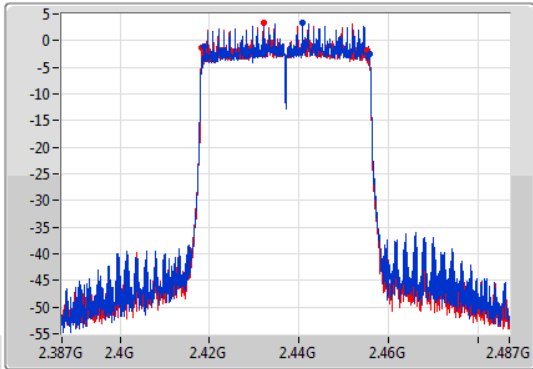
802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

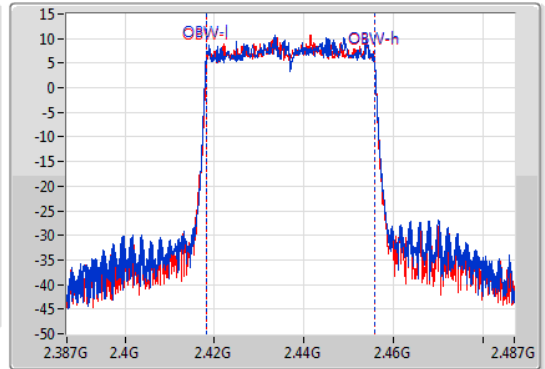
2437MHz

16/02/2020

CF  
2.437GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.9M	2.4188G	2.4557G	37.581M	2.418159G	2.455741G	500k	1
37.05M	2.4182G	2.45525G	37.531M	2.418259G	2.455791G	500k	2

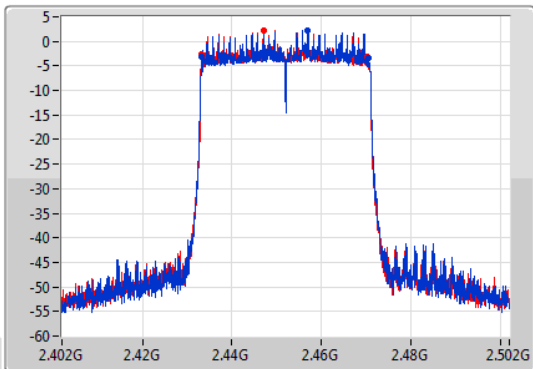
802.11ax HEW40\_Nss2,(MCS0)\_2TX

EBW

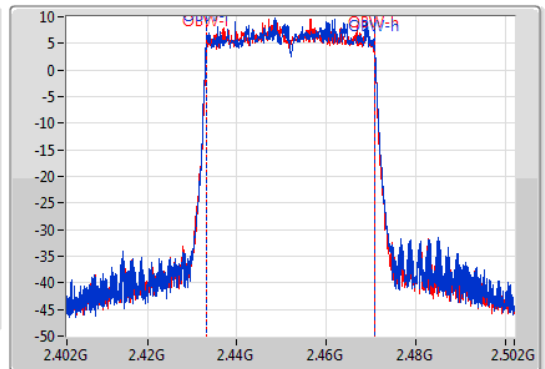
2452MHz

16/02/2020

CF  
2.452GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.452GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.45M	2.4332G	2.47065G	37.581M	2.433159G	2.470741G	500k	1
37.05M	2.4332G	2.47025G	37.481M	2.433259G	2.470741G	500k	2



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
VHT20-BF_Nss1,(MCS0)_2TX	17.55M	18.041M	18M0D1D	15M	17.766M
VHT40-BF_Nss1,(MCS0)_2TX	36.3M	36.432M	36M4D1D	5.4M	36.332M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.975M	19.165M	19M2D1D	18.85M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.65M	37.581M	37M6D1D	37.25M	37.481M

**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;

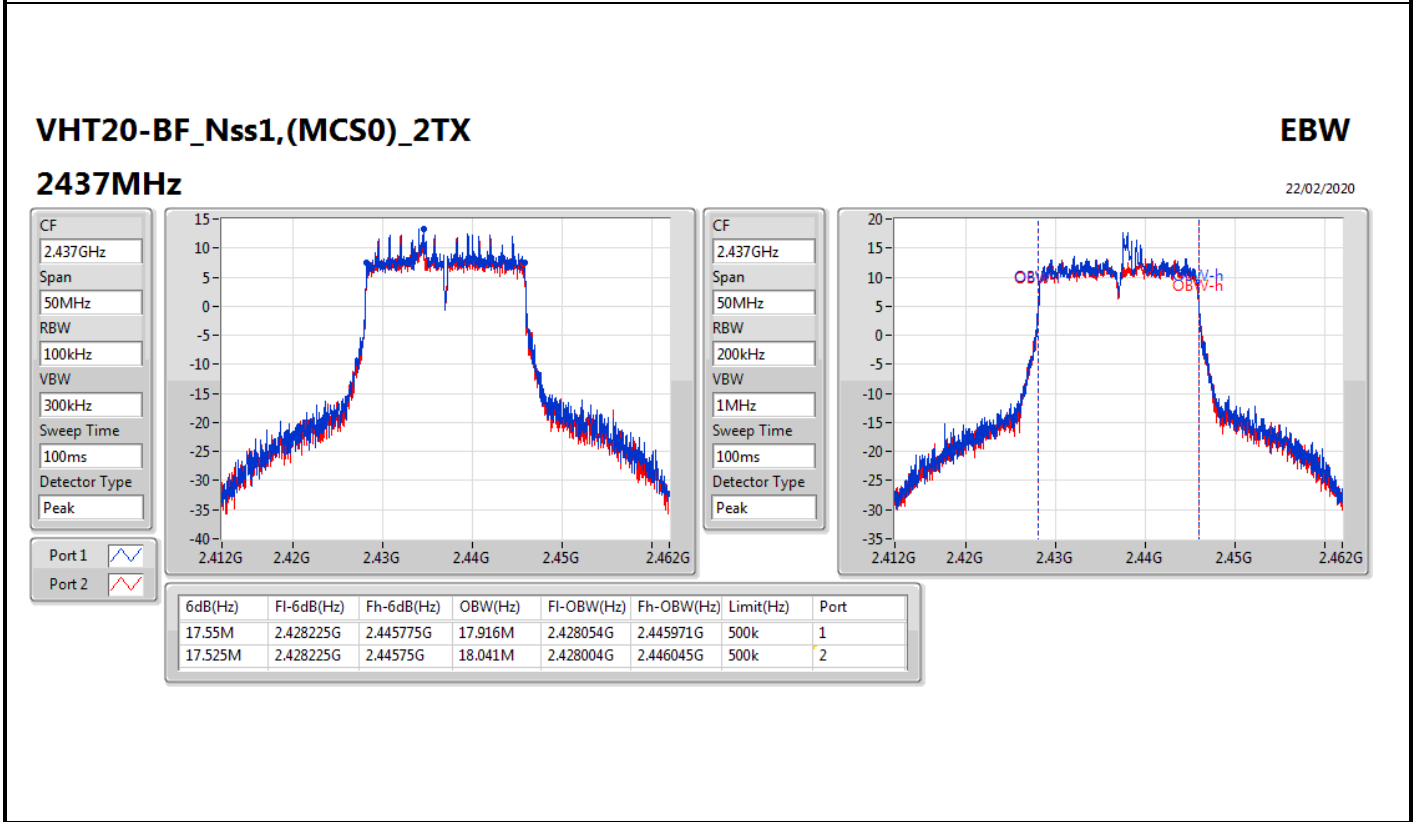
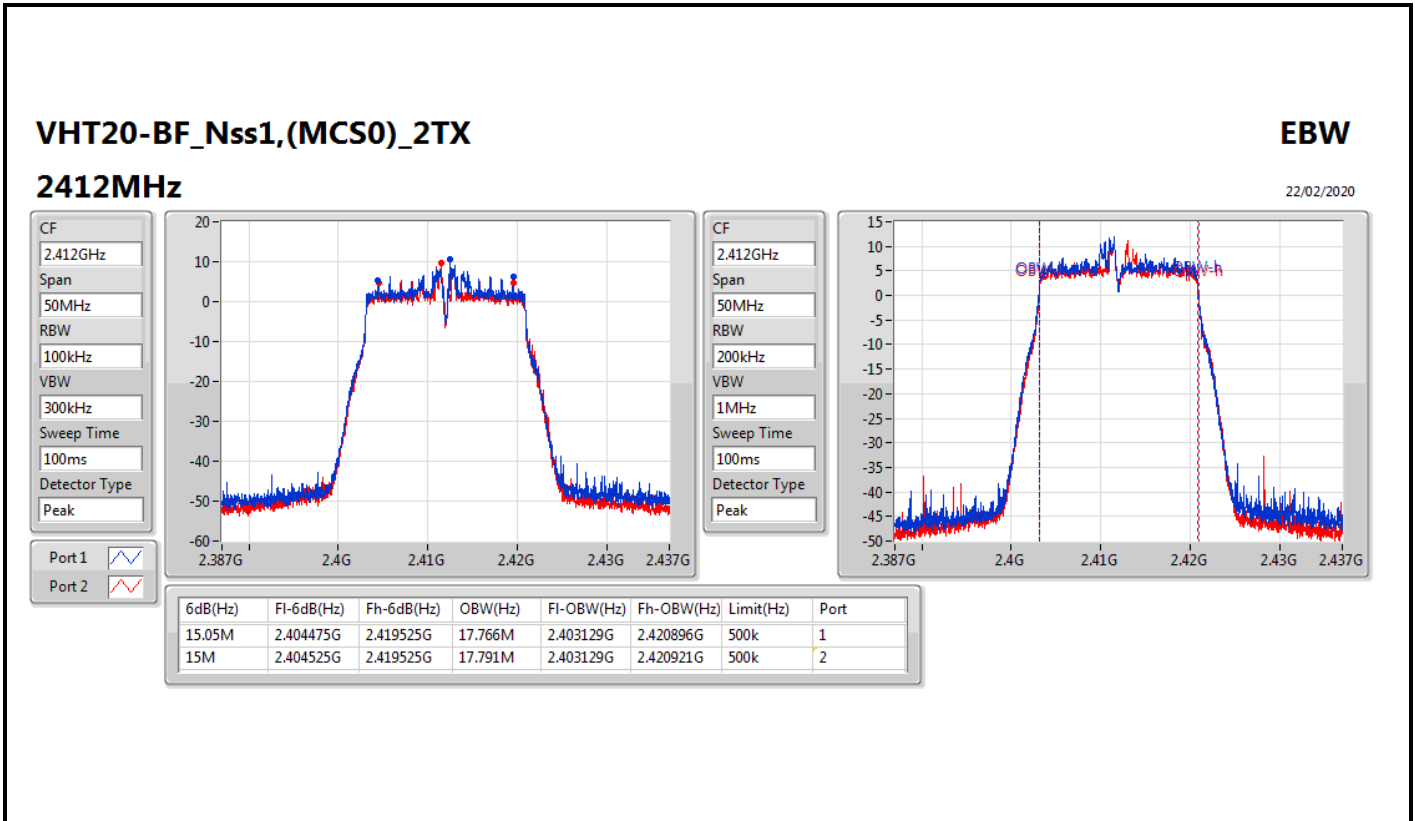




Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.05M	17.766M	15M	17.791M
2437MHz	Pass	500k	17.55M	17.916M	17.525M	18.041M
2462MHz	Pass	500k	15.1M	17.791M	15.1M	17.766M
VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	33.8M	36.382M	5.4M	36.432M
2437MHz	Pass	500k	7.55M	36.432M	30M	36.382M
2452MHz	Pass	500k	35M	36.382M	36.3M	36.332M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.925M	19.015M	18.975M	19.04M
2437MHz	Pass	500k	18.85M	19.14M	18.95M	19.165M
2462MHz	Pass	500k	18.95M	19.015M	18.975M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.65M	37.531M	37.6M	37.581M
2437MHz	Pass	500k	37.6M	37.531M	37.25M	37.531M
2452MHz	Pass	500k	37.25M	37.581M	37.35M	37.481M

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



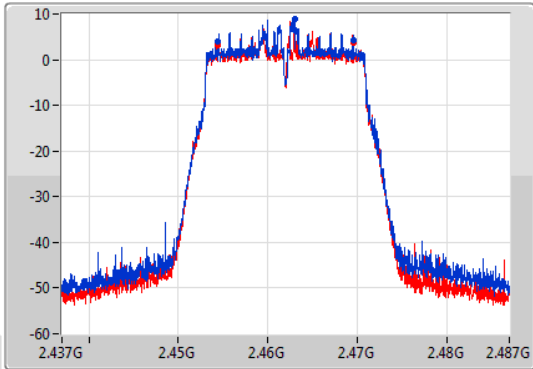
VHT20-BF\_Nss1,(MCS0)\_2TX

EBW

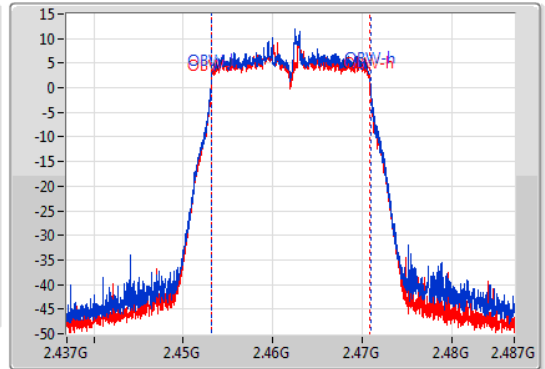
2462MHz

22/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.1M	2.45445G	2.46955G	17.791M	2.453129G	2.470921G	500k	1
15.1M	2.45445G	2.46955G	17.766M	2.453129G	2.470896G	500k	2

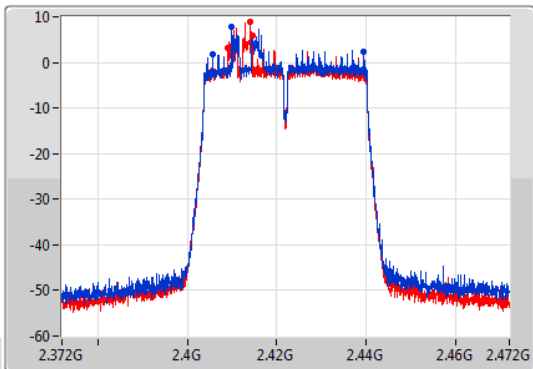
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

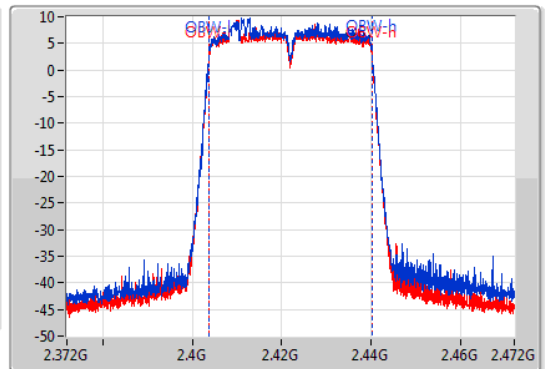
2422MHz

22/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.8M	2.4057G	2.4395G	36.382M	2.403809G	2.440191G	500k	1
5.4M	2.4091G	2.4145G	36.432M	2.403759G	2.440191G	500k	2

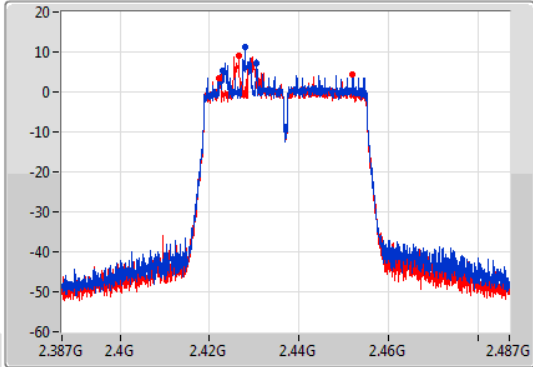
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

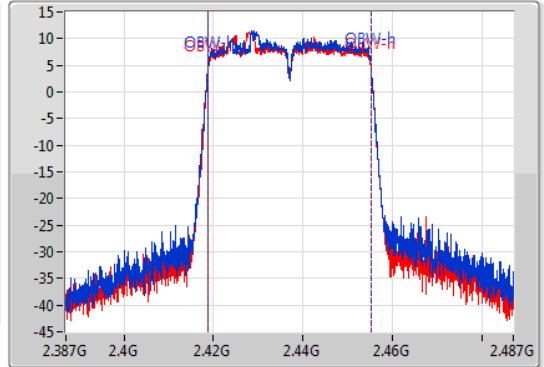
2437MHz

22/02/2020

CF  
2.437GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.55M	2.423G	2.43055G	36.432M	2.418759G	2.455191G	500k	1
30M	2.422G	2.452G	36.382M	2.418809G	2.455191G	500k	2

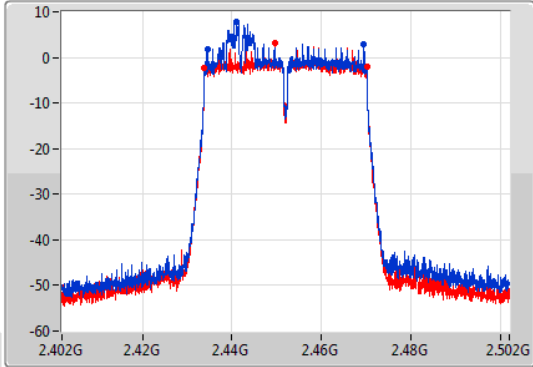
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

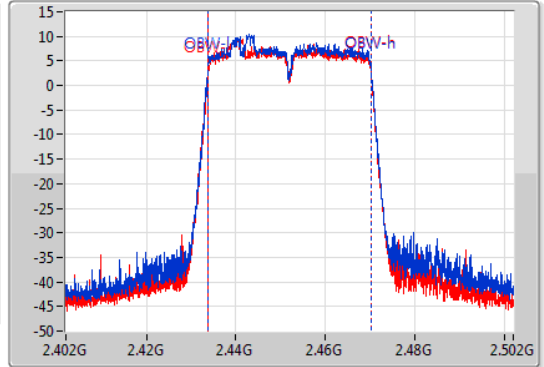
2452MHz

22/02/2020

CF  
2.452GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.452GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



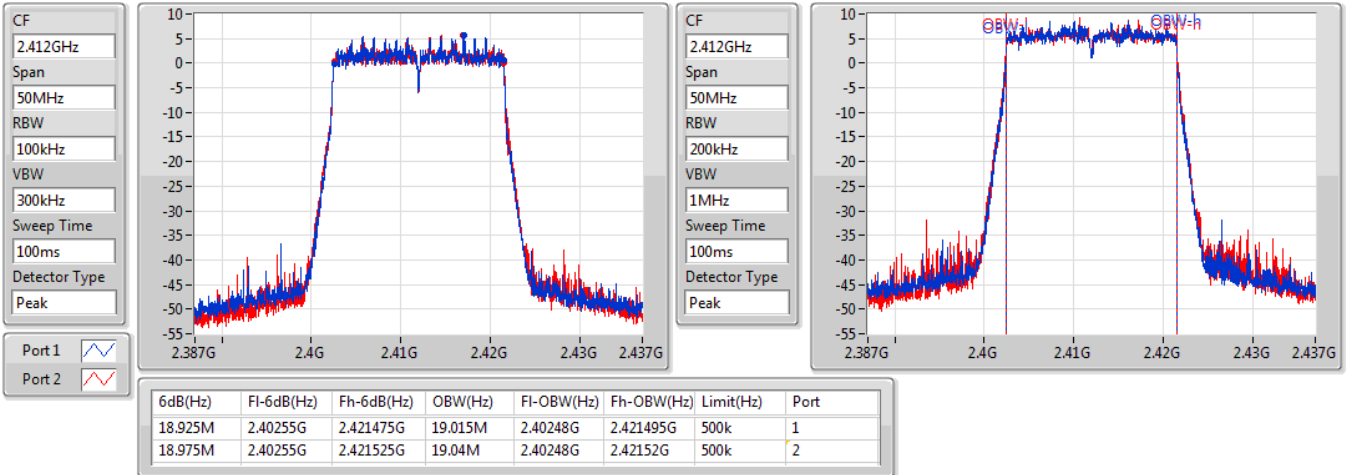
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.4345G	2.4695G	36.382M	2.433809G	2.470191G	500k	1
36.3M	2.43385G	2.47015G	36.332M	2.433809G	2.470141G	500k	2

802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

2412MHz

22/02/2020

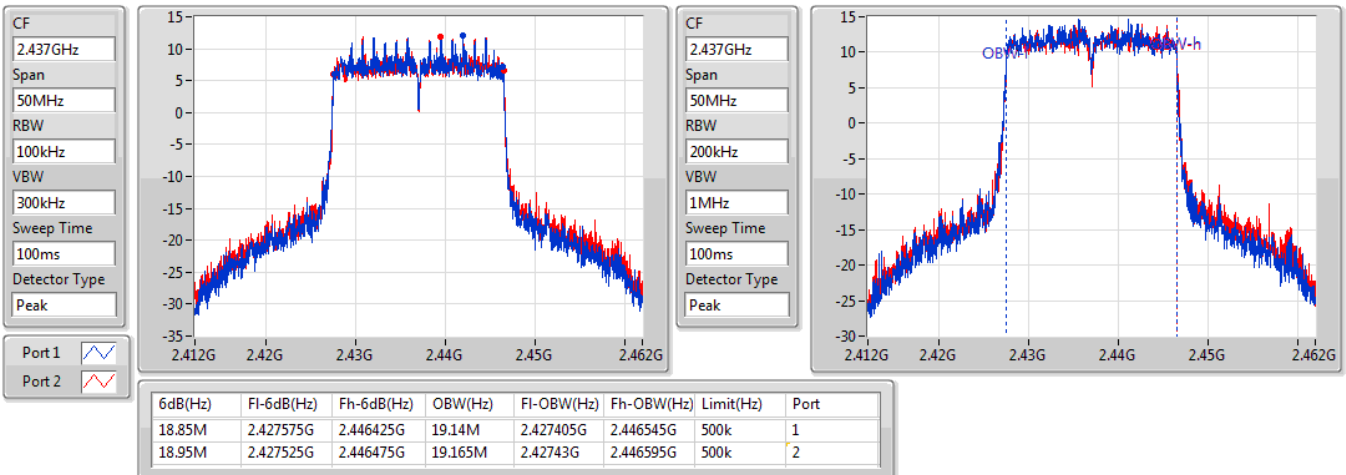


802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

2437MHz

22/02/2020



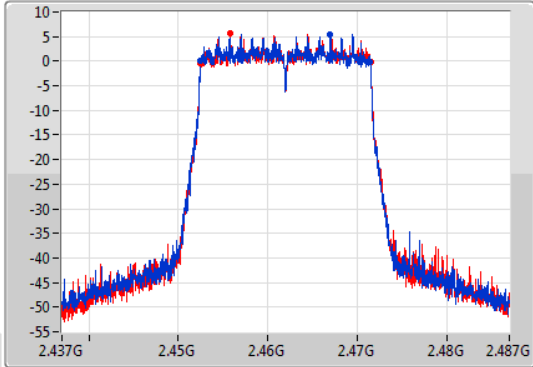
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

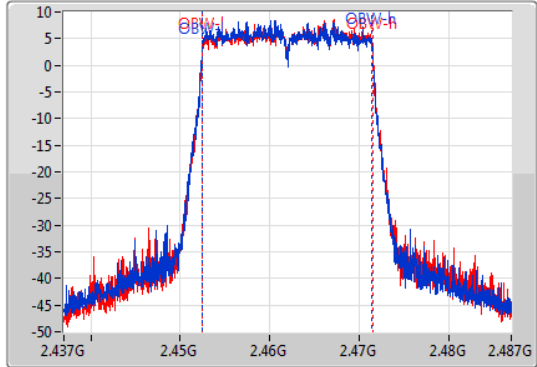
2462MHz

22/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.4525G	2.47145G	19.015M	2.452455G	2.47147G	500k	1
18.975M	2.452525G	2.4715G	18.991M	2.452505G	2.471495G	500k	2

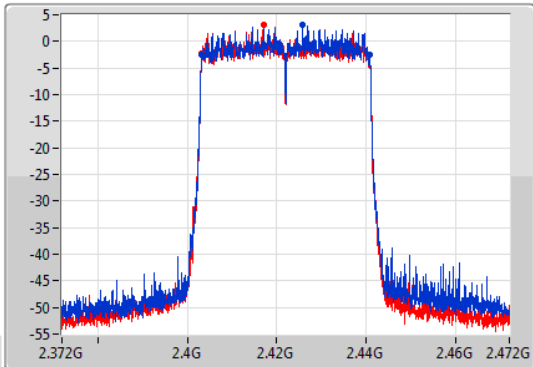
802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

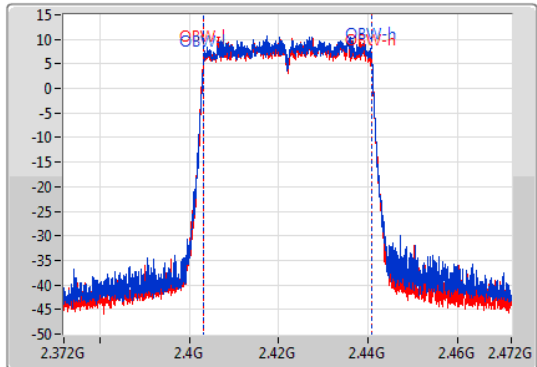
2422MHz

22/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.65M	2.4032G	2.44085G	37.531M	2.403259G	2.440791G	500k	1
37.6M	2.40325G	2.44085G	37.581M	2.403209G	2.440791G	500k	2

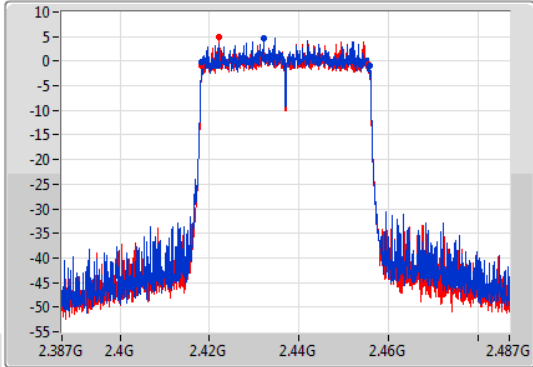
802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

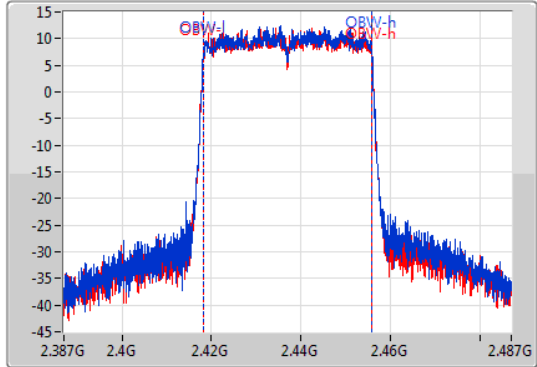
2437MHz

22/02/2020

CF  
2.437GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.6M	2.4182G	2.4558G	37.531M	2.418259G	2.455791G	500k	1
37.25M	2.4183G	2.45555G	37.531M	2.418209G	2.455741G	500k	2

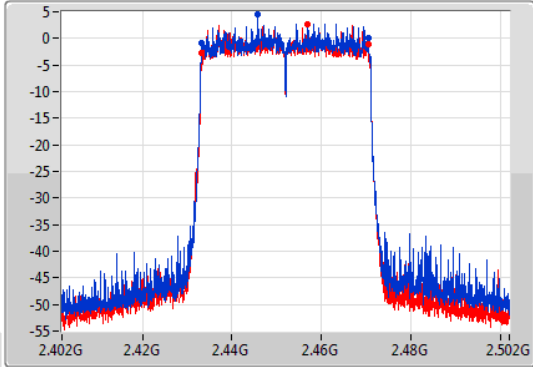
802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

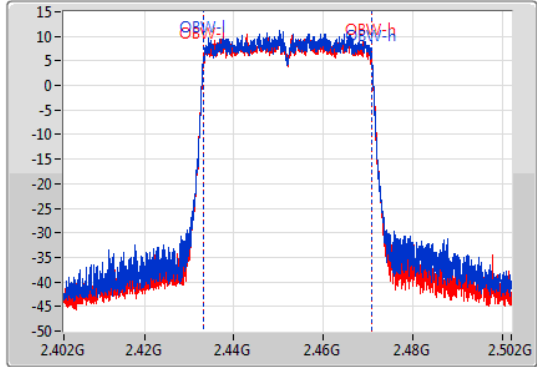
2452MHz

22/02/2020

CF  
2.452GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.452GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.25M	2.43325G	2.4705G	37.581M	2.433209G	2.470791G	500k	1
37.35M	2.4332G	2.47055G	37.481M	2.433259G	2.470741G	500k	2



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
VHT20-BF_Nss1,(MCS0)_2TX	17.6M	17.891M	17M9D1D	13.775M	17.766M
VHT40-BF_Nss1,(MCS0)_2TX	36.3M	36.382M	36M4D1D	30.35M	36.332M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	19M	19.09M	19M1D1D	18.925M	19.015M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.7M	37.581M	37M6D1D	36.9M	37.531M

**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)
VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	13.775M	17.766M	15.025M	17.841M
2437MHz	Pass	500k	16M	17.866M	17.6M	17.891M
2462MHz	Pass	500k	15.675M	17.816M	15.05M	17.791M
VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	33.8M	36.382M	33.75M	36.382M
2437MHz	Pass	500k	32.55M	36.382M	30.35M	36.382M
2452MHz	Pass	500k	35M	36.382M	36.3M	36.332M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	19.015M	18.925M	19.04M
2437MHz	Pass	500k	19M	19.09M	18.95M	19.04M
2462MHz	Pass	500k	18.975M	19.065M	18.975M	19.04M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.7M	37.581M	37.05M	37.581M
2437MHz	Pass	500k	37.45M	37.531M	36.9M	37.531M
2452MHz	Pass	500k	37.55M	37.531M	37.65M	37.581M

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

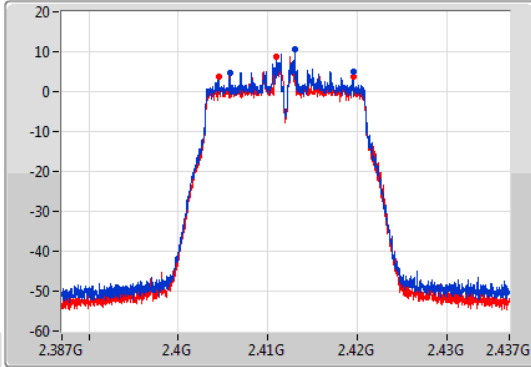
VHT20-BF\_Nss1,(MCS0)\_2TX

EBW

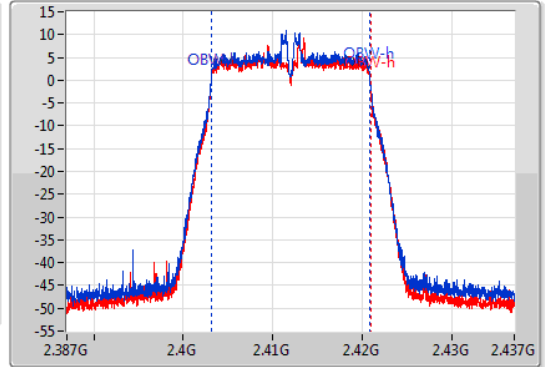
2412MHz

23/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.775M	2.40575G	2.419525G	17.766M	2.403129G	2.420896G	500k	1
15.025M	2.4045G	2.419525G	17.841M	2.403104G	2.420946G	500k	2

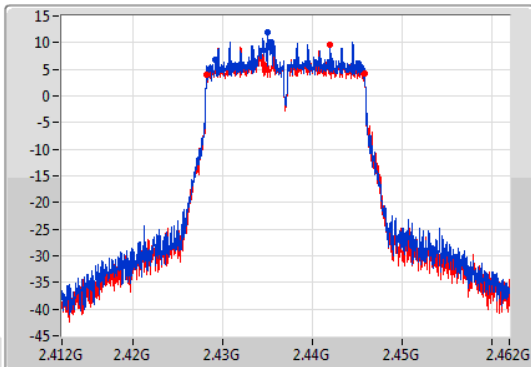
VHT20-BF\_Nss1,(MCS0)\_2TX

EBW

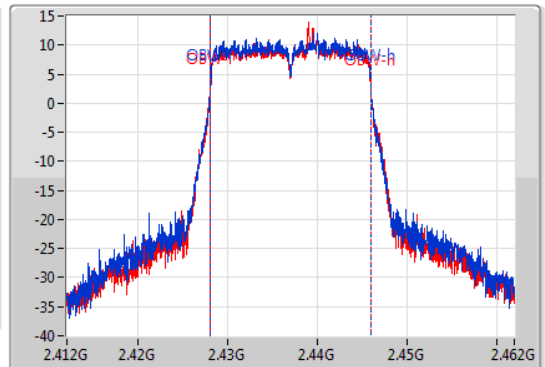
2437MHz

23/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16M	2.429125G	2.445125G	17.866M	2.428079G	2.445946G	500k	1
17.6M	2.4282G	2.4458G	17.891M	2.428079G	2.445971G	500k	2

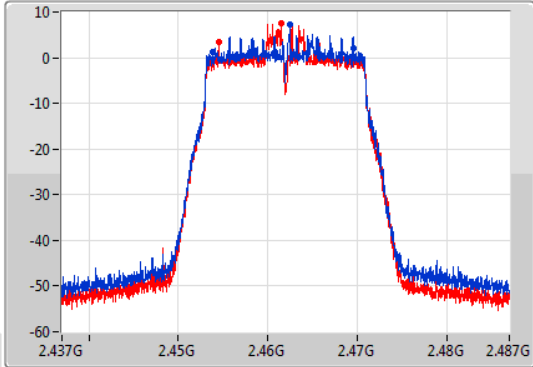
VHT20-BF\_Nss1,(MCS0)\_2TX

EBW

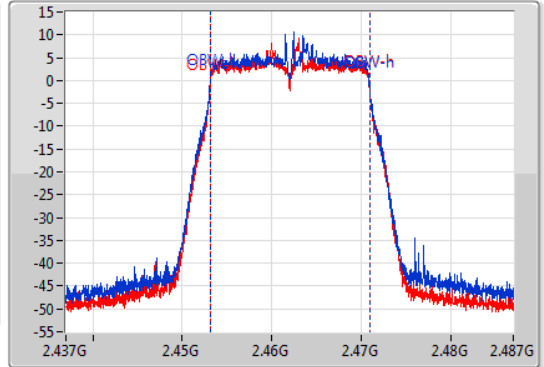
2462MHz

23/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.675M	2.453875G	2.46955G	17.816M	2.453104G	2.470921G	500k	1
15.05M	2.4545G	2.46955G	17.791M	2.453129G	2.470921G	500k	2

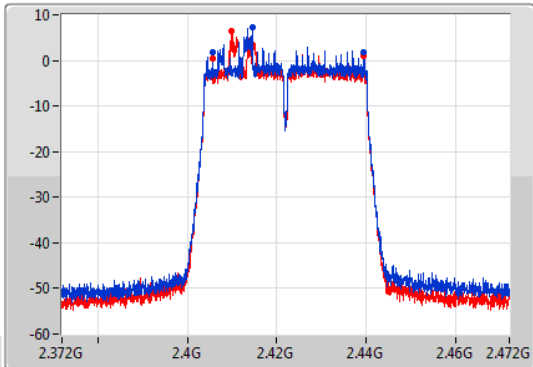
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

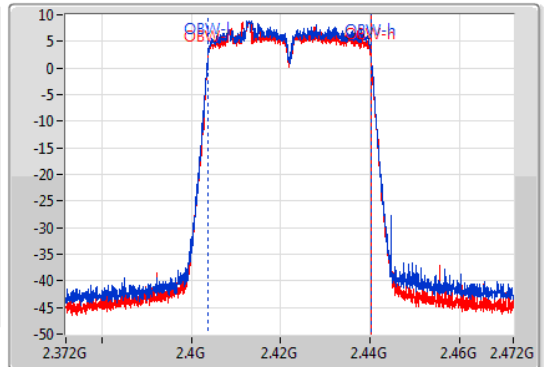
2422MHz

23/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.8M	2.4057G	2.4395G	36.382M	2.403809G	2.440191G	500k	1
33.75M	2.40575G	2.4395G	36.382M	2.403809G	2.440191G	500k	2

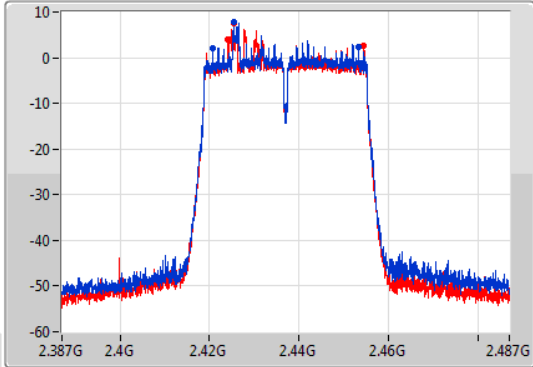
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

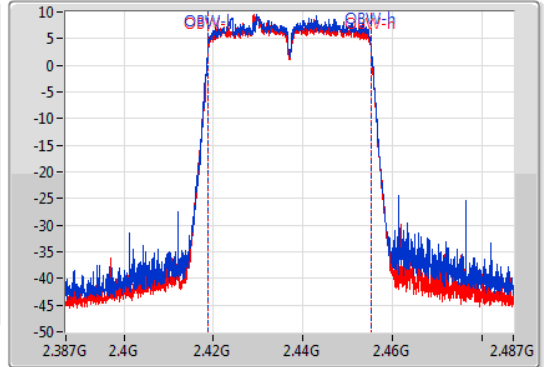
2437MHz

23/02/2020

CF  
2.437GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.55M	2.4207G	2.45325G	36.382M	2.418809G	2.455191G	500k	1
30.35M	2.42415G	2.4545G	36.382M	2.418809G	2.455191G	500k	2

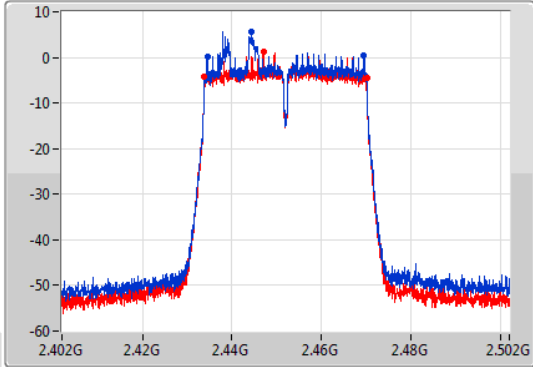
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

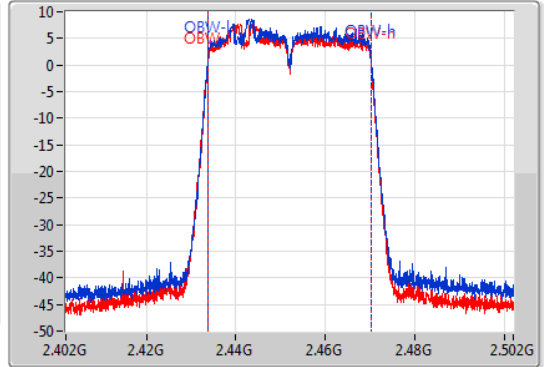
2452MHz

23/02/2020

CF  
2.452GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.452GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.4345G	2.4695G	36.382M	2.433809G	2.470191G	500k	1
36.3M	2.43385G	2.47015G	36.332M	2.433809G	2.470141G	500k	2

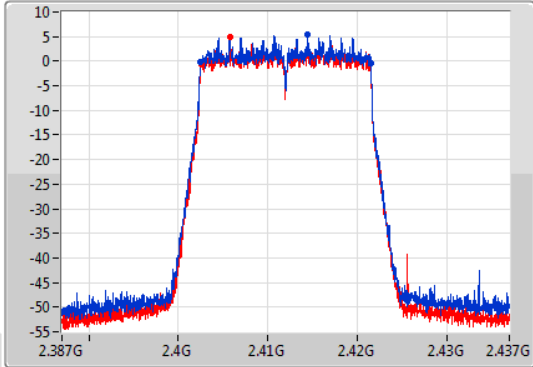
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

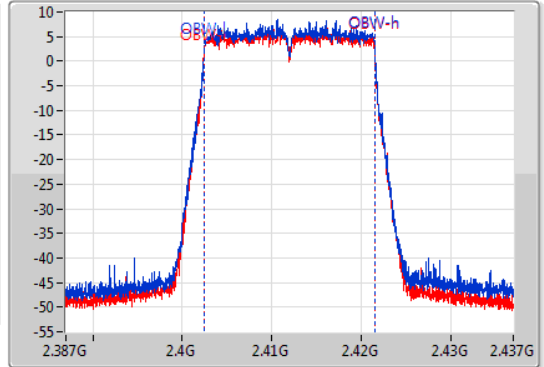
2412MHz

23/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.402525G	2.4215G	19.015M	2.40248G	2.421495G	500k	1
18.925M	2.40255G	2.421475G	19.04M	2.402455G	2.421495G	500k	2

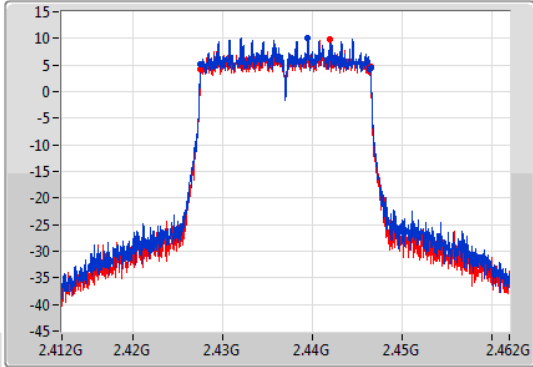
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

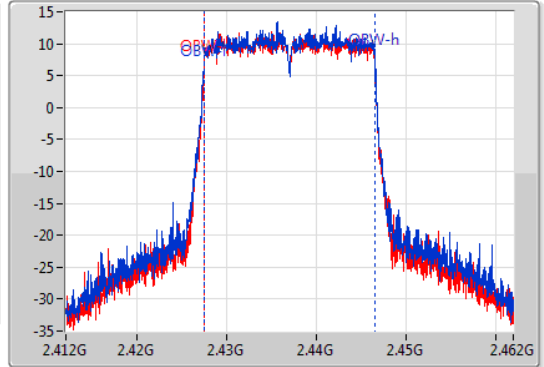
2437MHz

23/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4275G	2.4465G	19.09M	2.42743G	2.44652G	500k	1
18.95M	2.427525G	2.446475G	19.04M	2.427455G	2.446495G	500k	2

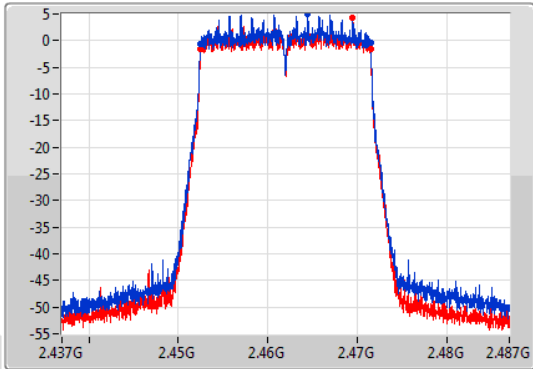
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

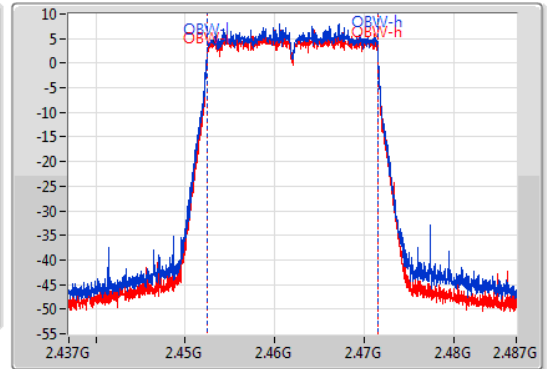
2462MHz

23/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452525G	2.47115G	19.065M	2.45243G	2.471495G	500k	1
18.975M	2.452525G	2.47115G	19.04M	2.452455G	2.471495G	500k	2

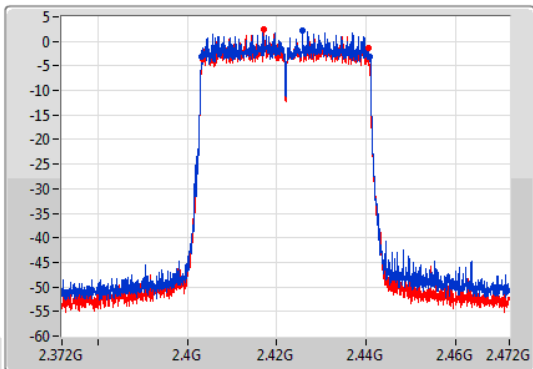
802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

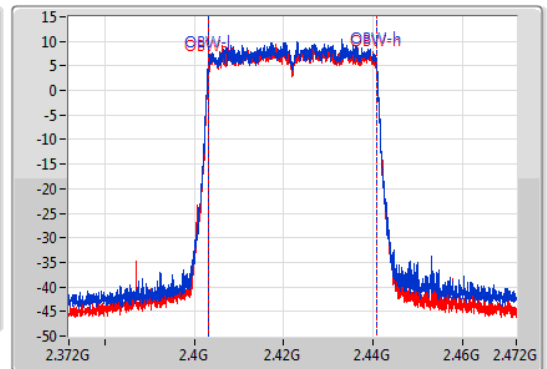
2422MHz

23/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



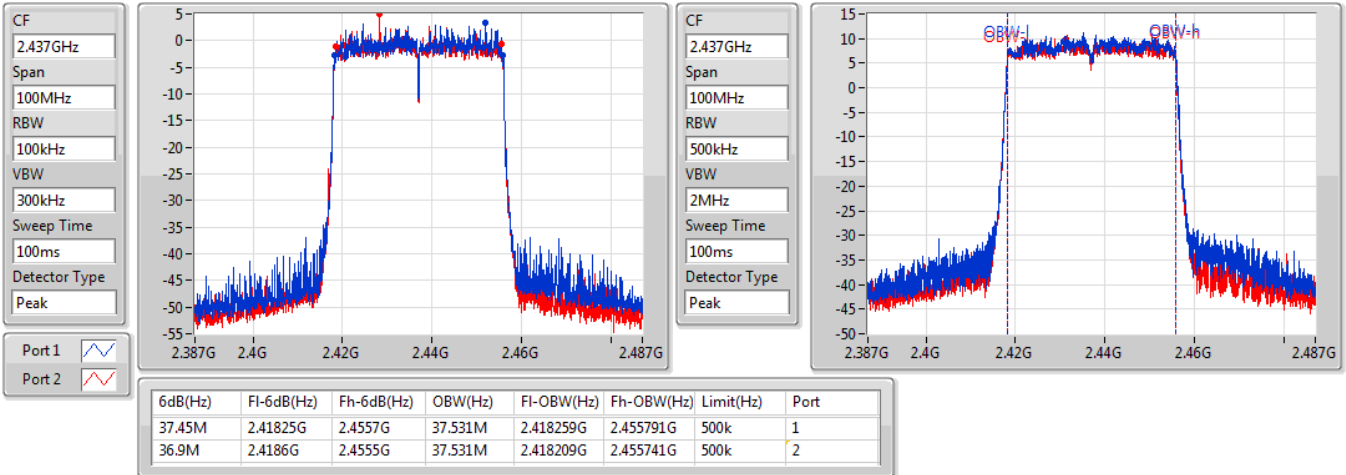
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.7M	2.4032G	2.4409G	37.581M	2.403209G	2.440791G	500k	1
37.05M	2.40345G	2.4405G	37.581M	2.403209G	2.440791G	500k	2

802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

2437MHz

23/02/2020

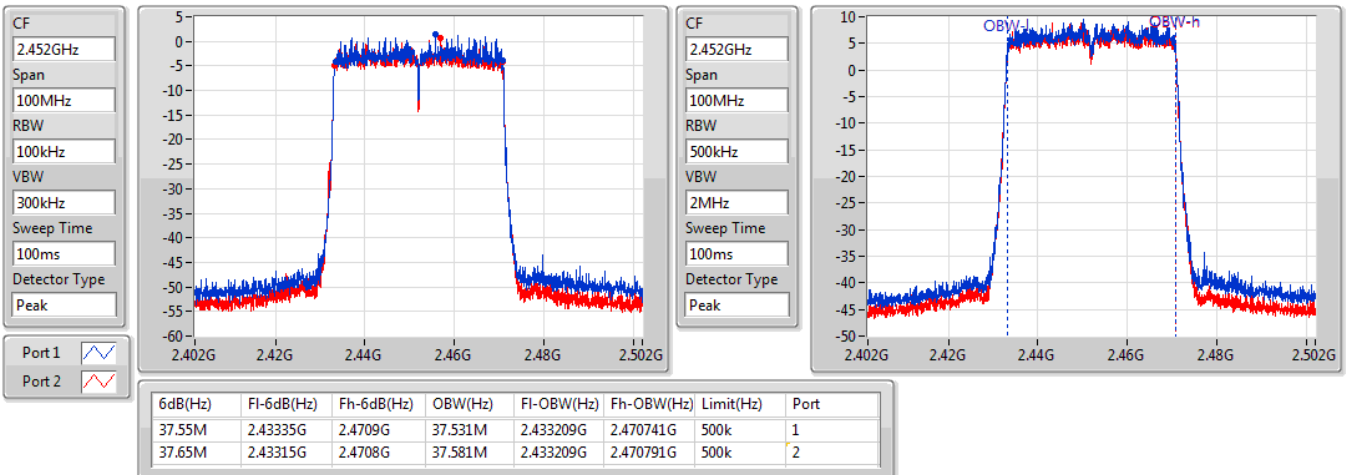


802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

2452MHz

23/02/2020





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
VHT20-BF_Nss1,(MCS0)_2TX	17.575M	17.841M	17M8D1D	15.05M	17.716M
VHT40-BF_Nss1,(MCS0)_2TX	36.3M	36.432M	36M4D1D	21.9M	36.382M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.975M	19.04M	19M0D1D	18.925M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.75M	37.581M	37M6D1D	36.2M	37.481M

**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;

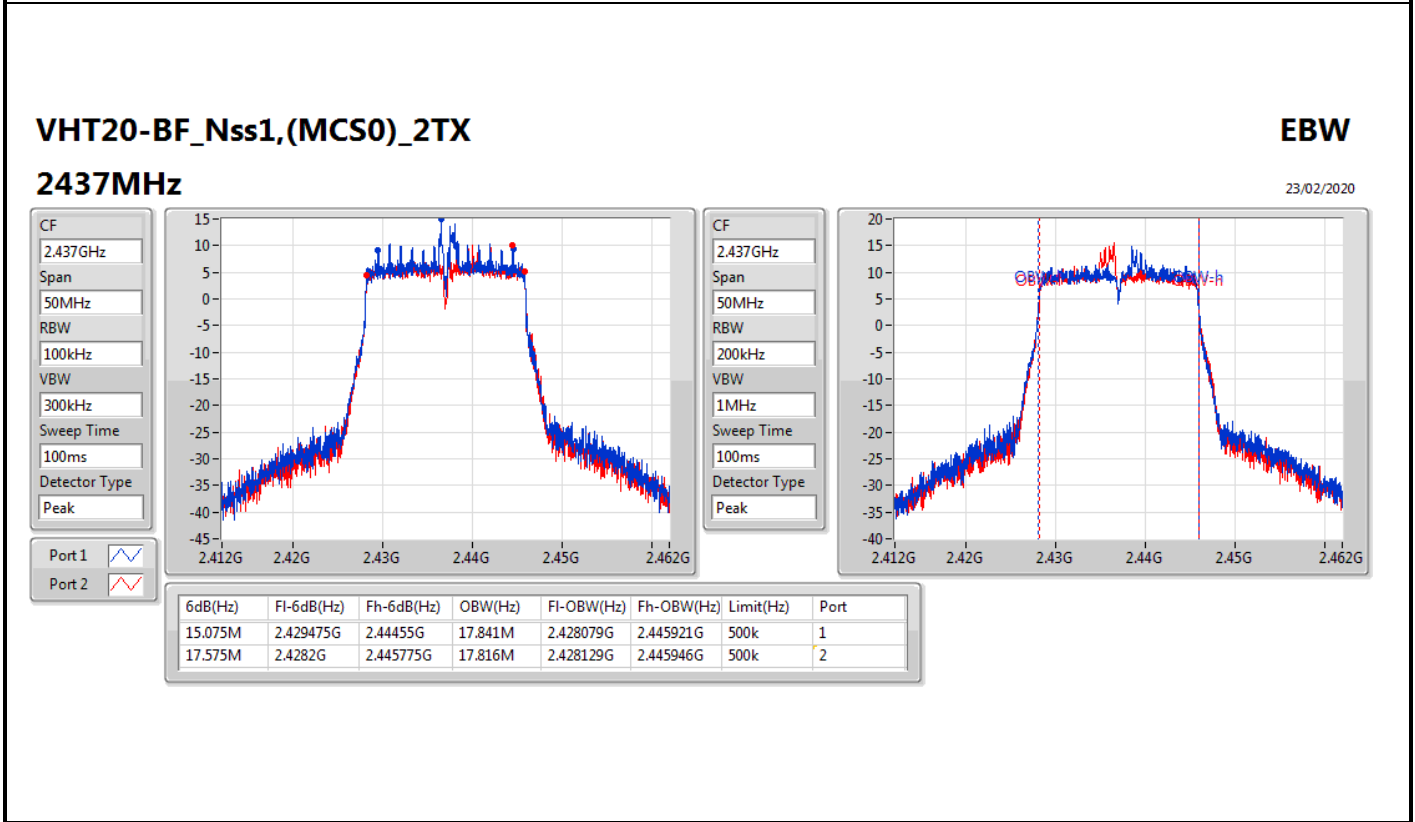
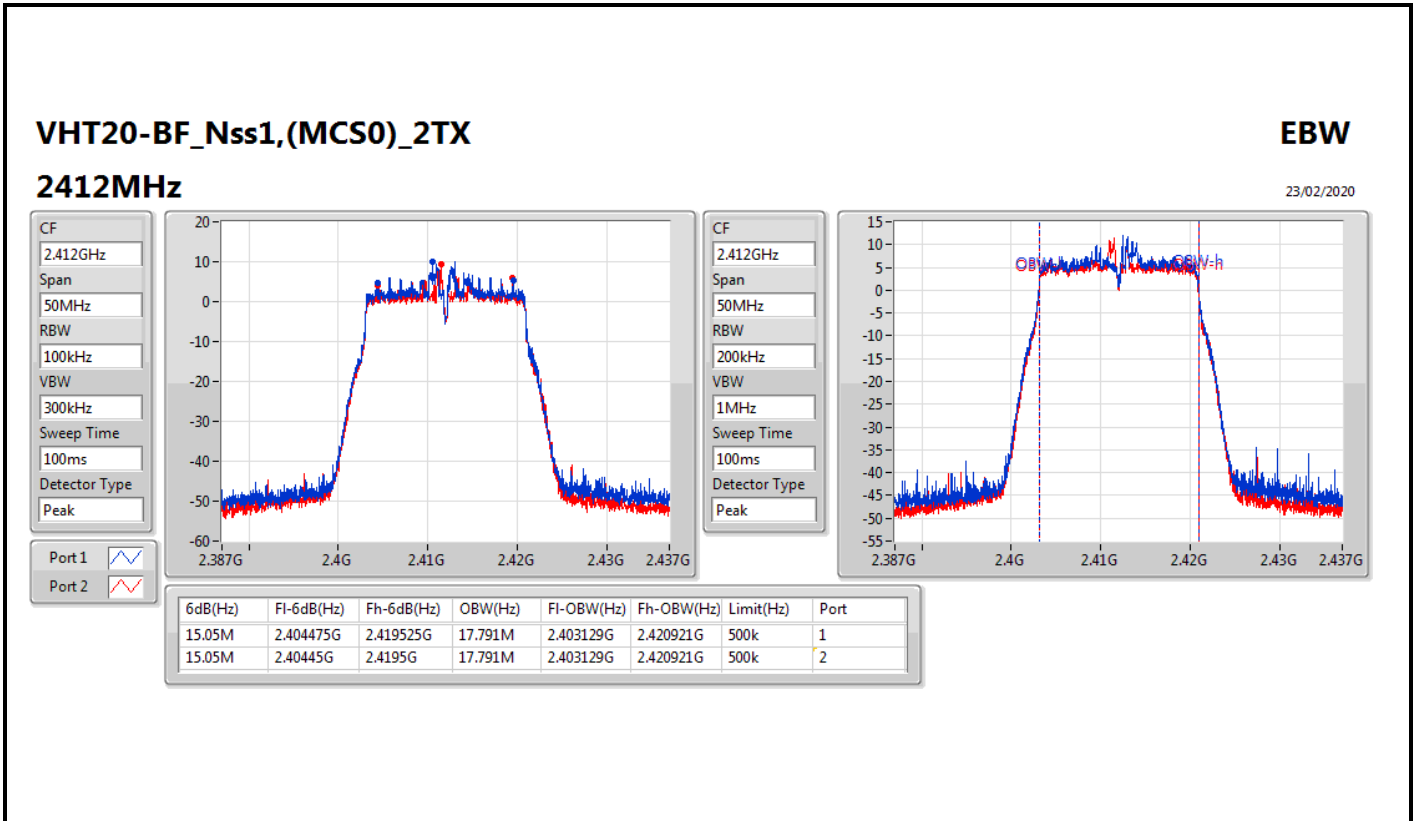




**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.05M	17.791M	15.05M	17.791M
2437MHz	Pass	500k	15.075M	17.841M	17.575M	17.816M
2462MHz	Pass	500k	15.075M	17.716M	15.05M	17.841M
VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.05M	36.382M	33.75M	36.382M
2437MHz	Pass	500k	21.9M	36.382M	35M	36.382M
2452MHz	Pass	500k	36.3M	36.432M	31.25M	36.432M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	19.04M	18.975M	19.04M
2437MHz	Pass	500k	18.975M	19.04M	18.925M	18.991M
2462MHz	Pass	500k	18.95M	19.015M	18.975M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.45M	37.531M	37.5M	37.531M
2437MHz	Pass	500k	37.75M	37.481M	37.65M	37.581M
2452MHz	Pass	500k	37.55M	37.481M	36.2M	37.531M

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



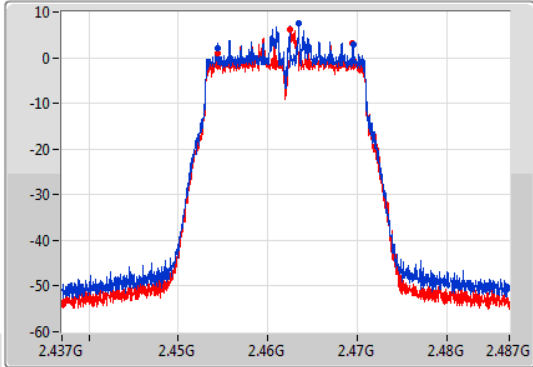
VHT20-BF\_Nss1,(MCS0)\_2TX

EBW

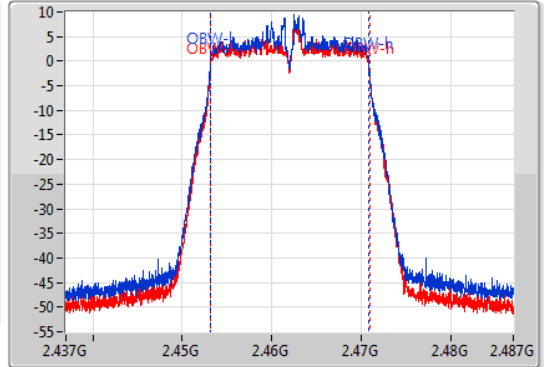
2462MHz

23/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.075M	2.45445G	2.469525G	17.716M	2.453154G	2.470871G	500k	1
15.05M	2.45445G	2.4695G	17.841M	2.453104G	2.470946G	500k	2

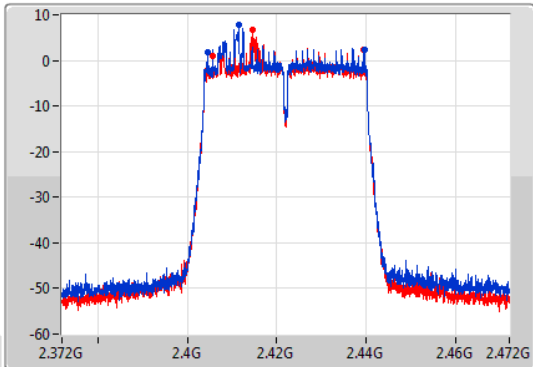
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

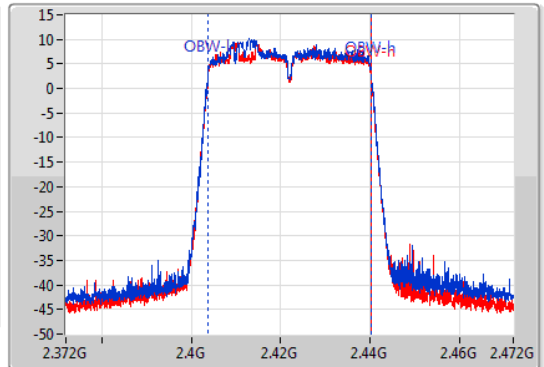
2422MHz

23/02/2020

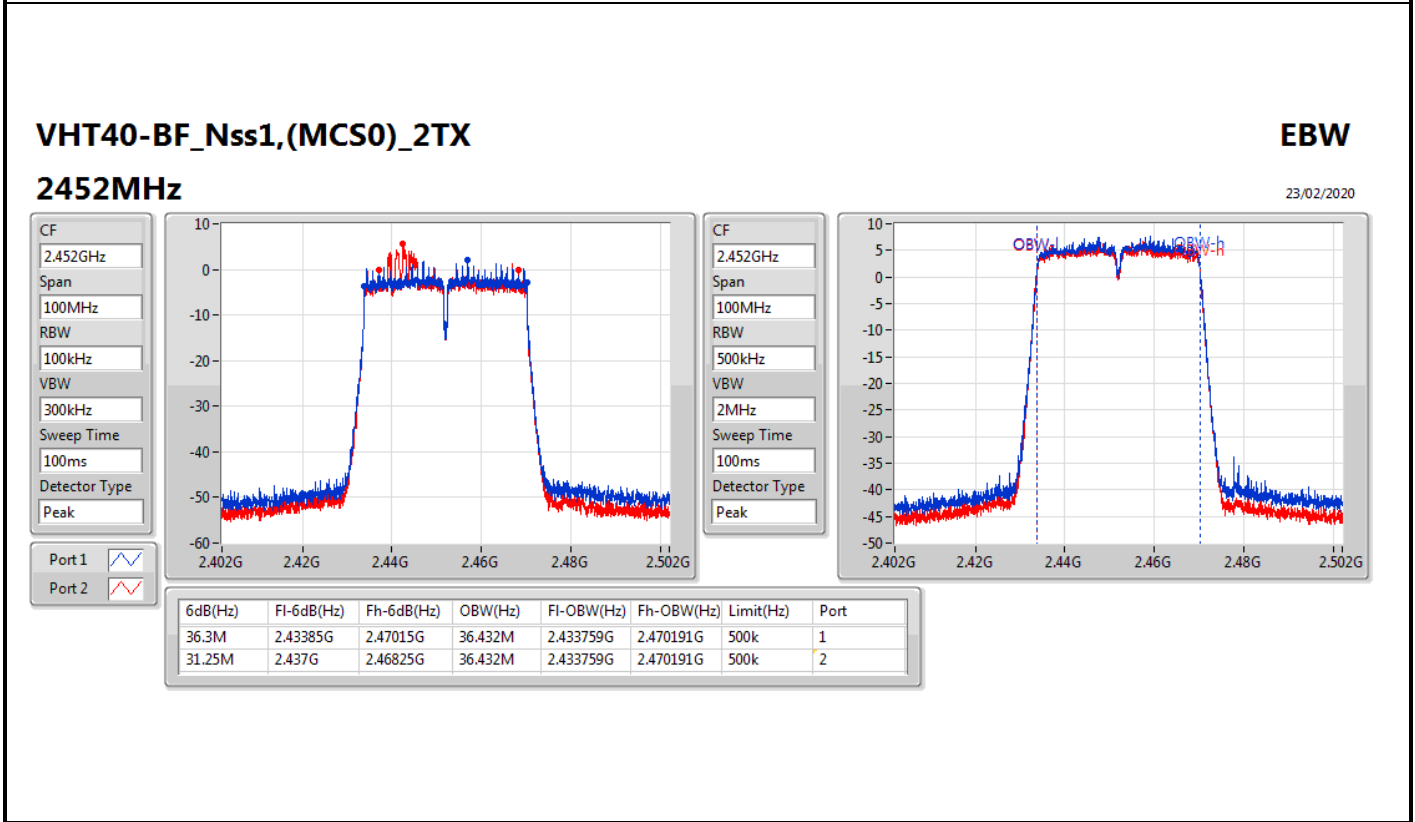
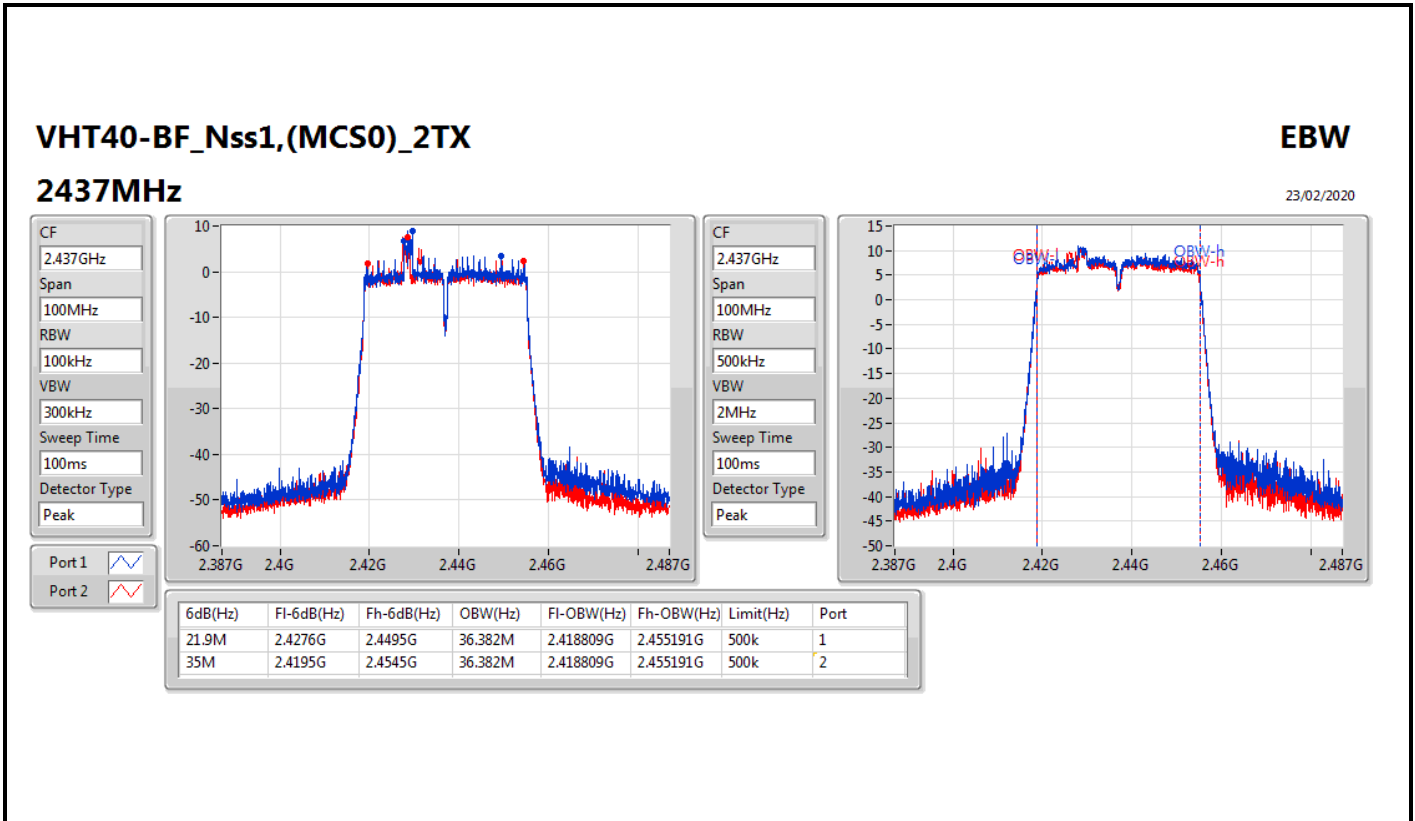
CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	2.4045G	2.43955G	36.382M	2.403809G	2.440191G	500k	1
33.75M	2.40575G	2.4395G	36.382M	2.403809G	2.440191G	500k	2



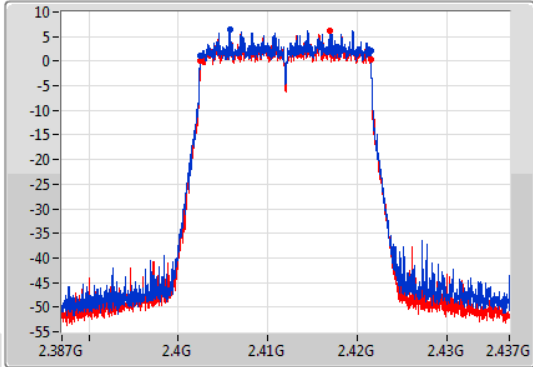
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

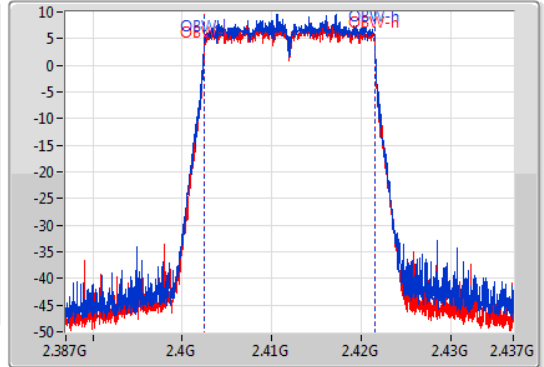
2412MHz

23/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1  
Port 2



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.402525G	2.421475G	19.04M	2.402455G	2.421495G	500k	1
18.975M	2.4025G	2.421475G	19.04M	2.402455G	2.421495G	500k	2

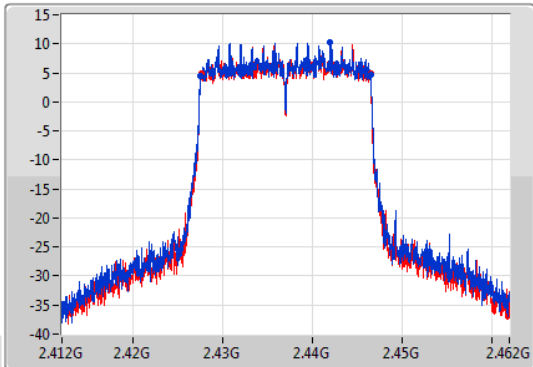
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

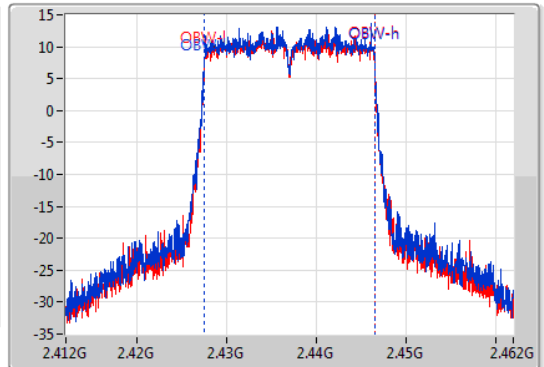
2437MHz

23/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1  
Port 2



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



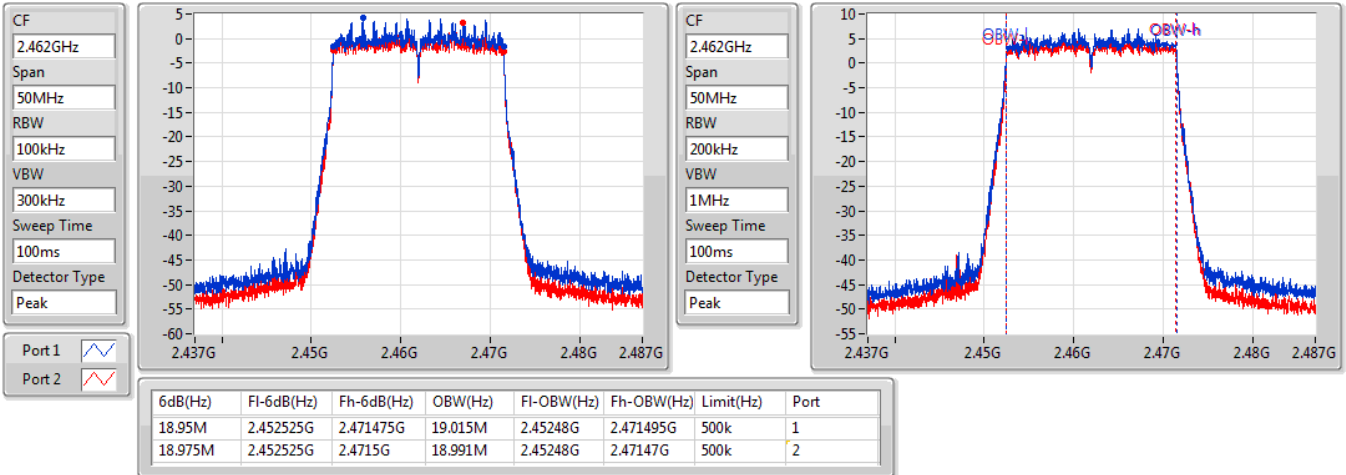
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.427525G	2.4465G	19.04M	2.427455G	2.446495G	500k	1
18.925M	2.42755G	2.446475G	18.991M	2.427505G	2.446495G	500k	2

802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

2462MHz

23/02/2020

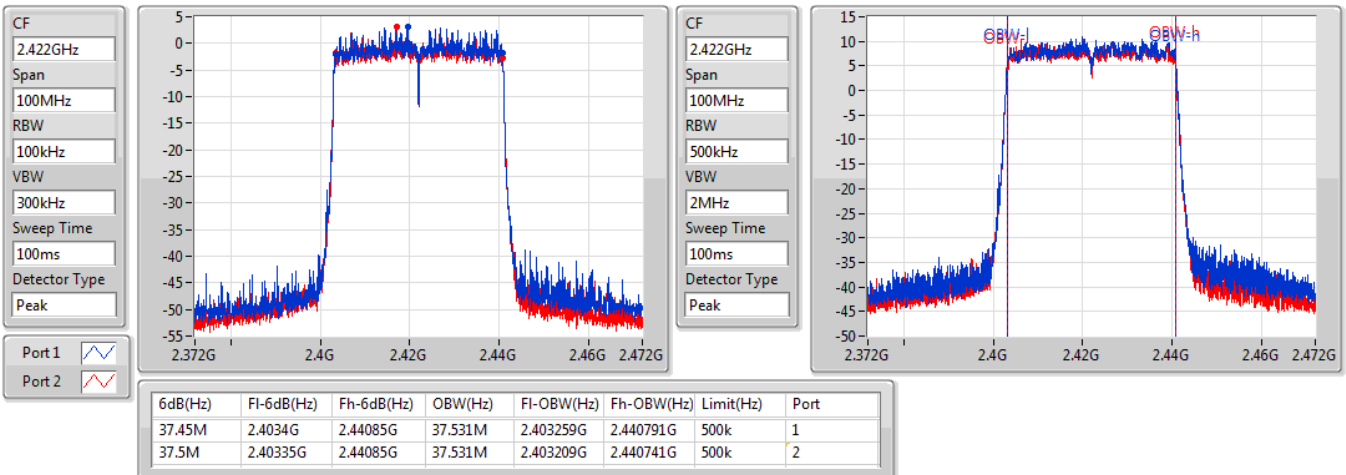


802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

2422MHz

23/02/2020

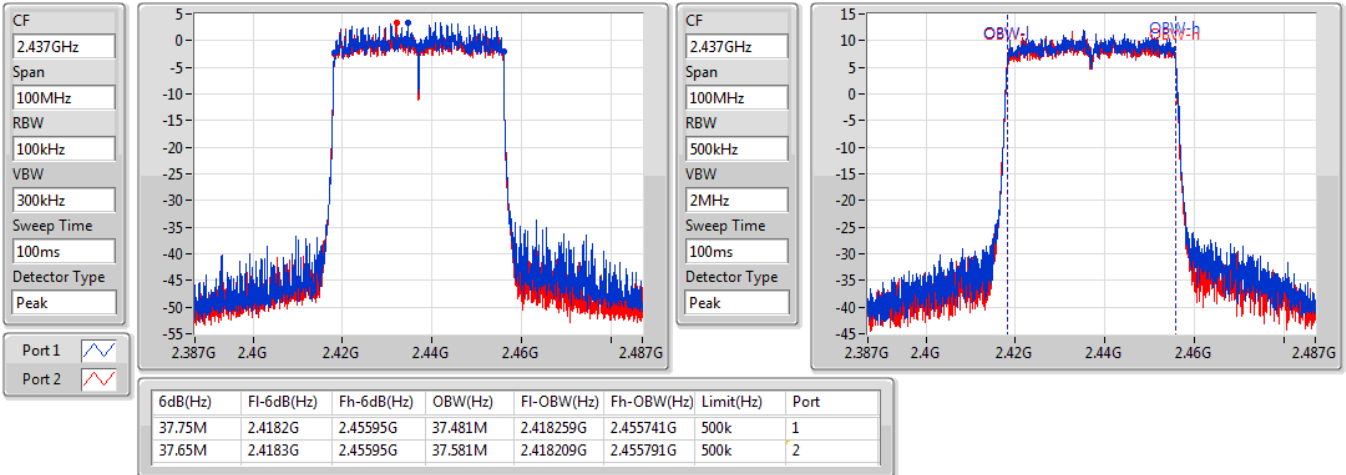


802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

2437MHz

23/02/2020

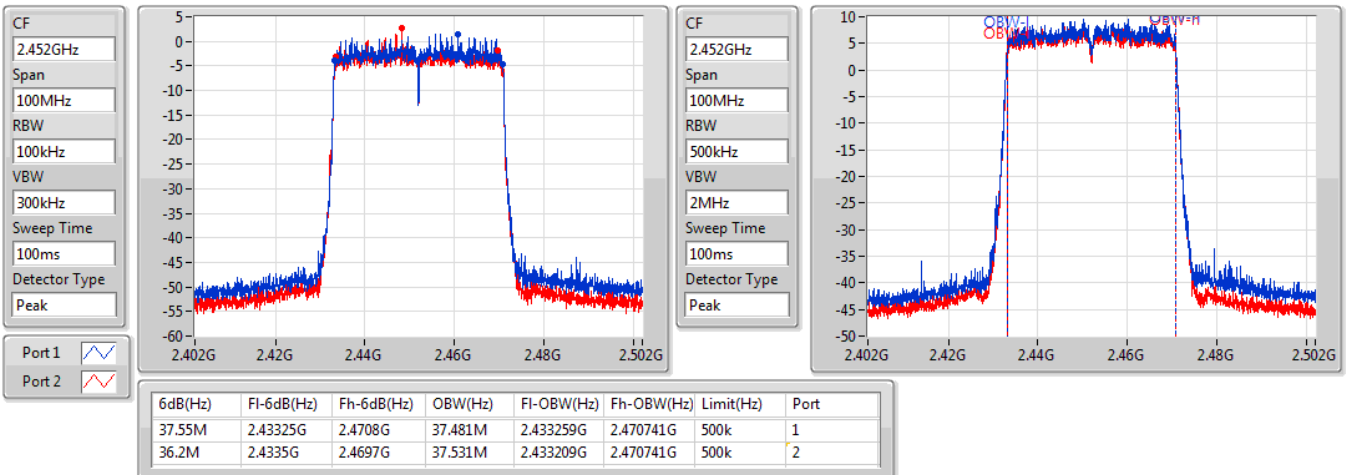


802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

2452MHz

23/02/2020





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
VHT20-BF_Nss1,(MCS0)_2TX	17.55M	17.891M	17M9D1D	15.05M	17.716M
VHT40-BF_Nss1,(MCS0)_2TX	36.3M	36.432M	36M4D1D	30.05M	36.332M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	19.025M	19.04M	19M0D1D	18.95M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.55M	37.631M	37M6D1D	36.15M	37.531M

**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;

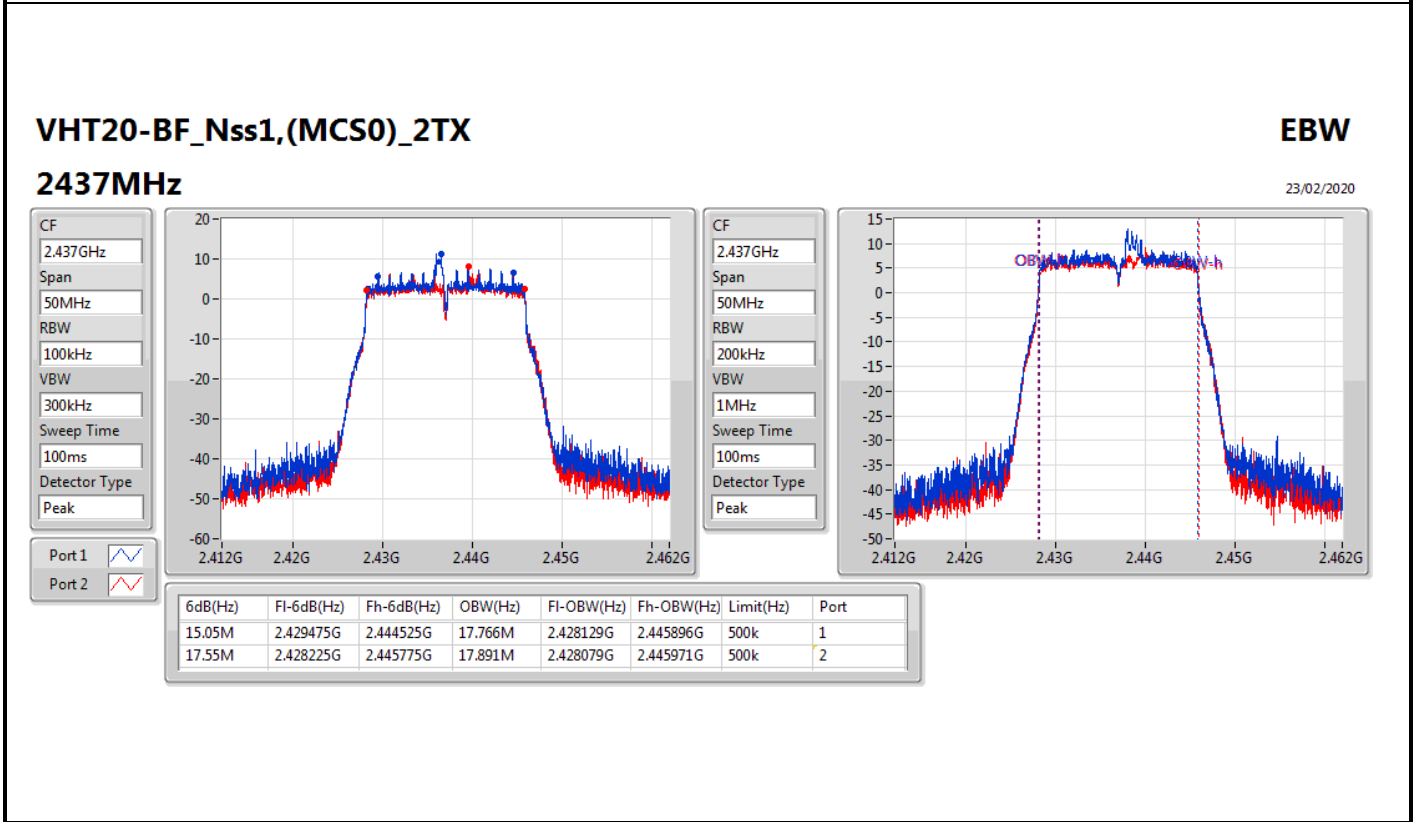
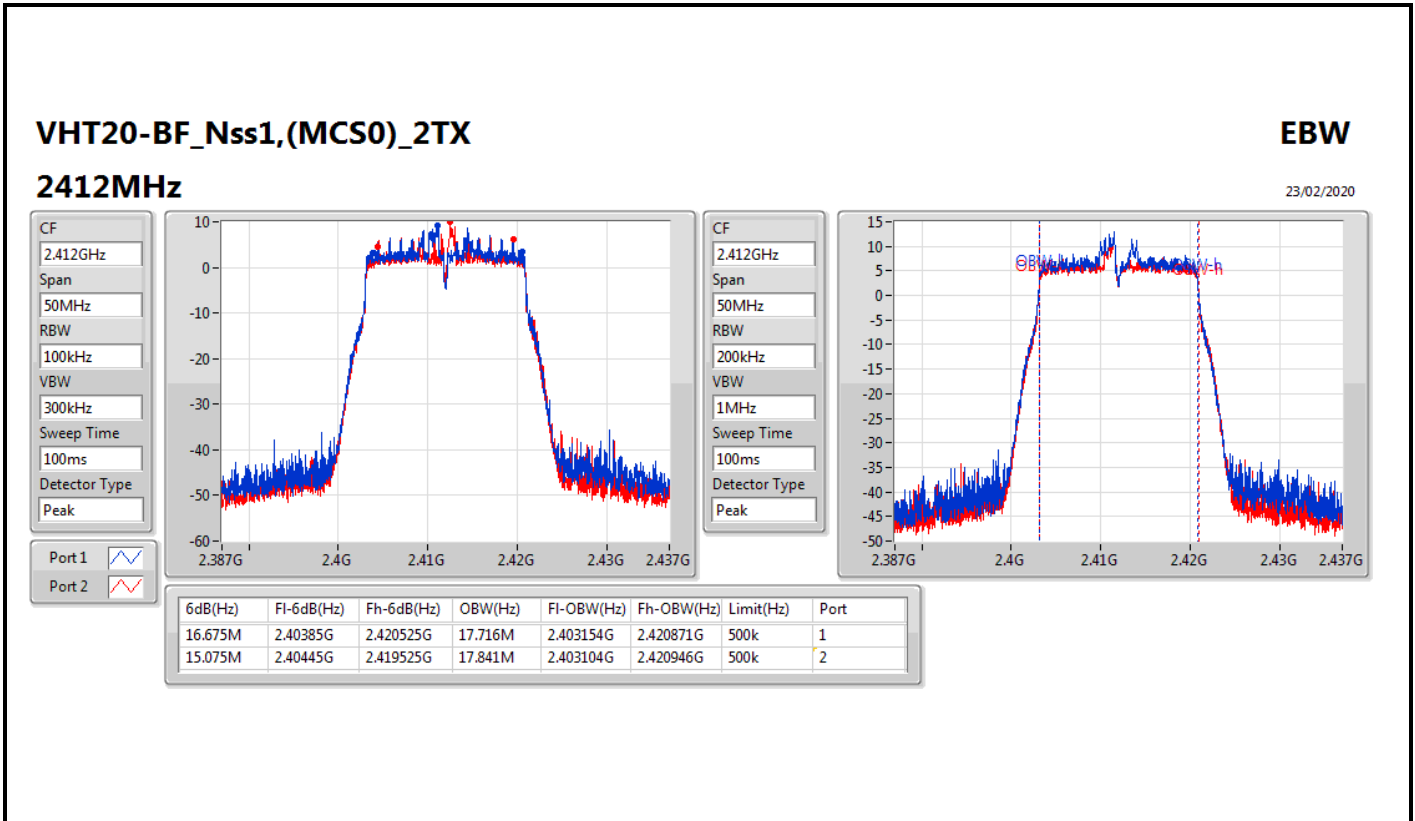




Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.675M	17.716M	15.075M	17.841M
2437MHz	Pass	500k	15.05M	17.766M	17.55M	17.891M
2462MHz	Pass	500k	15.1M	17.766M	15.075M	17.791M
VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35M	36.382M	32.5M	36.432M
2437MHz	Pass	500k	33.85M	36.332M	30.05M	36.432M
2452MHz	Pass	500k	36.3M	36.382M	36.3M	36.332M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	19.04M	18.95M	18.991M
2437MHz	Pass	500k	19M	19.04M	19.025M	18.991M
2462MHz	Pass	500k	18.975M	19.04M	18.95M	19.015M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.5M	37.631M	37.5M	37.581M
2437MHz	Pass	500k	37.55M	37.581M	36.15M	37.581M
2452MHz	Pass	500k	37.35M	37.531M	36.75M	37.581M

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



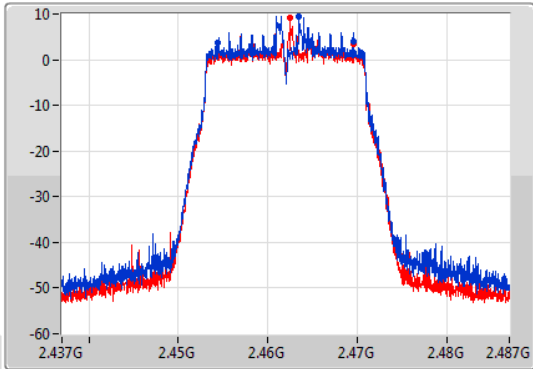
VHT20-BF\_Nss1,(MCS0)\_2TX

EBW

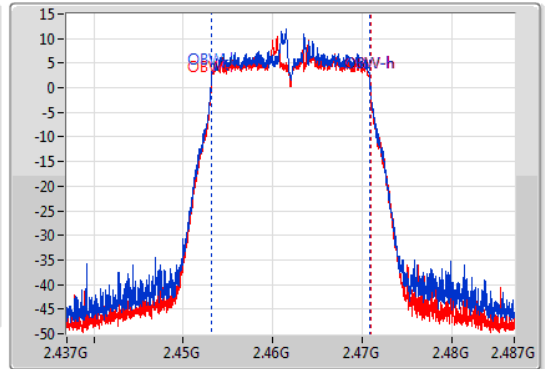
2462MHz

23/02/2020

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.1M	2.45445G	2.46955G	17.766M	2.453129G	2.470896G	500k	1
15.075M	2.454475G	2.46955G	17.791M	2.453129G	2.470921G	500k	2

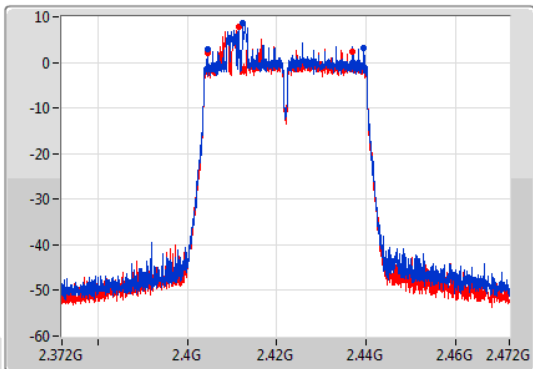
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

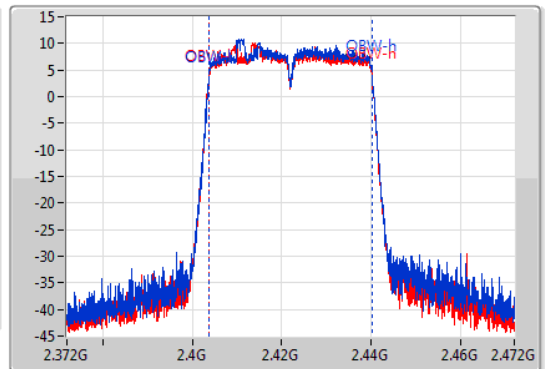
2422MHz

23/02/2020

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.4045G	2.4395G	36.382M	2.403809G	2.440191G	500k	1
32.5M	2.4045G	2.437G	36.432M	2.403759G	2.440191G	500k	2

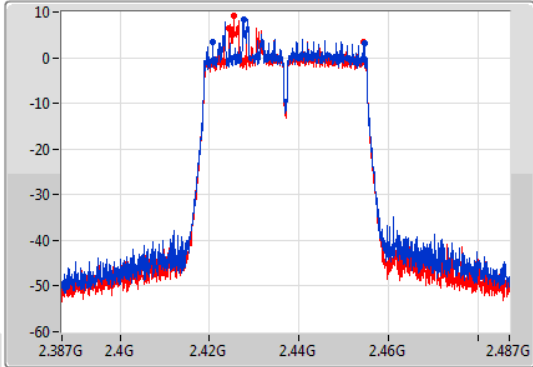
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

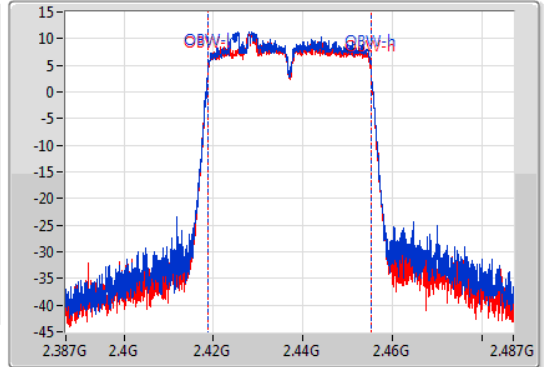
2437MHz

23/02/2020

CF  
2.437GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.85M	2.4207G	2.45455G	36.332M	2.418859G	2.455191G	500k	1
30.05M	2.42445G	2.4545G	36.432M	2.418759G	2.455191G	500k	2

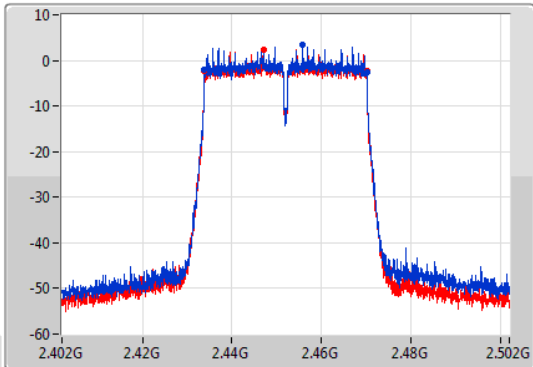
VHT40-BF\_Nss1,(MCS0)\_2TX

EBW

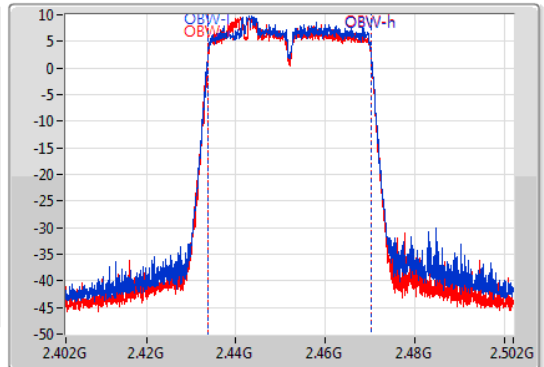
2452MHz

23/02/2020

CF  
2.452GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.452GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	2.43385G	2.47015G	36.382M	2.433809G	2.470191G	500k	1
36.3M	2.43385G	2.47015G	36.332M	2.433809G	2.470141G	500k	2

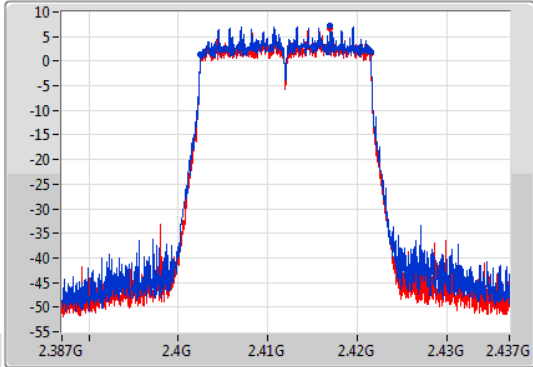
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

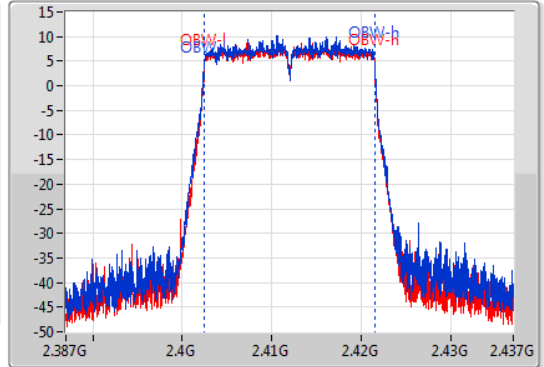
2412MHz

22/02/2020

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.402525G	2.4215G	19.04M	2.402455G	2.421495G	500k	1
18.95M	2.402525G	2.421475G	18.991M	2.402505G	2.421495G	500k	2

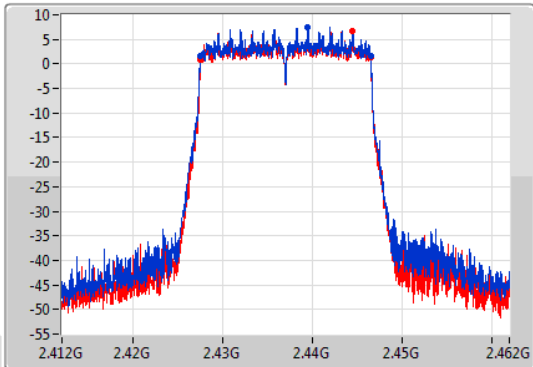
802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

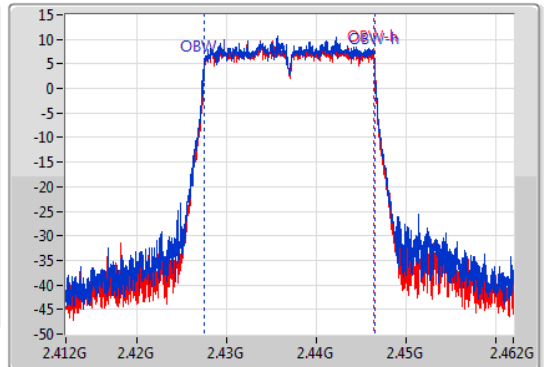
2437MHz

22/02/2020

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
50MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



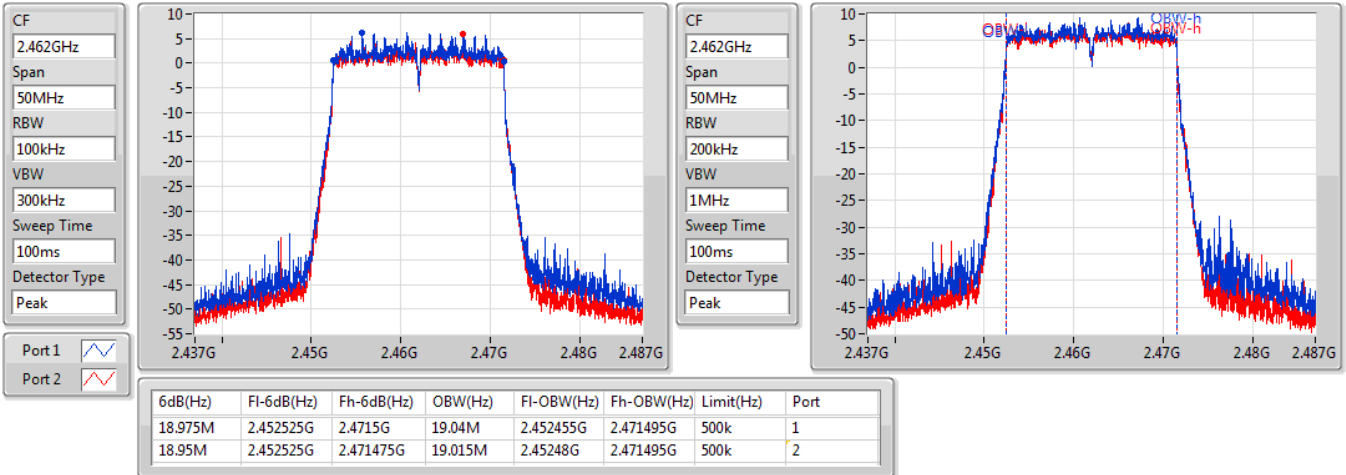
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4275G	2.4465G	19.04M	2.427455G	2.446495G	500k	1
19.025M	2.427475G	2.4465G	18.991M	2.42748G	2.44647G	500k	2

802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

2462MHz

22/02/2020

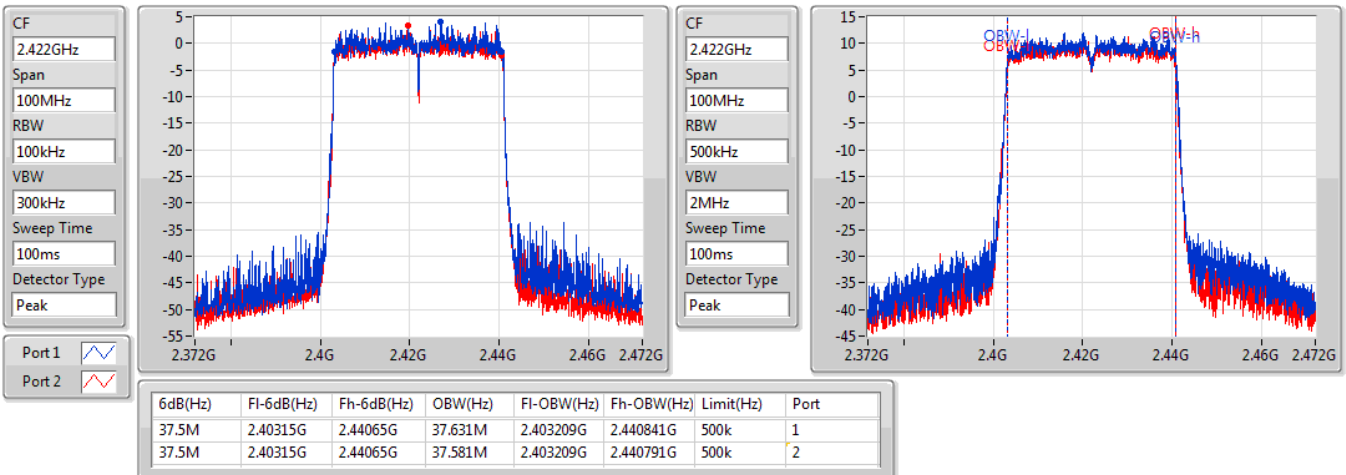


802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

2422MHz

22/02/2020



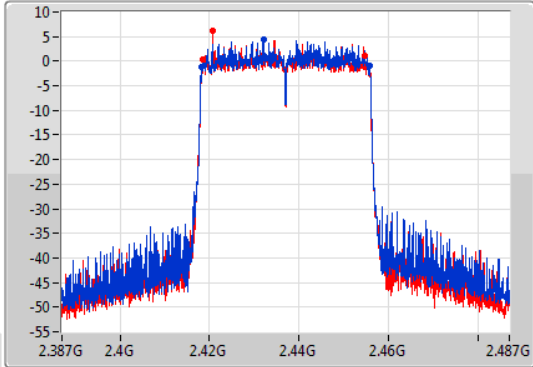
802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

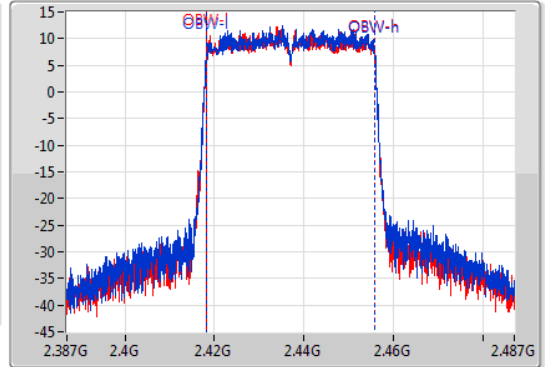
2437MHz

22/02/2020

CF  
2.437GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.41825G	2.4558G	37.581M	2.418209G	2.455791G	500k	1
36.15M	2.41855G	2.4547G	37.581M	2.418209G	2.455791G	500k	2

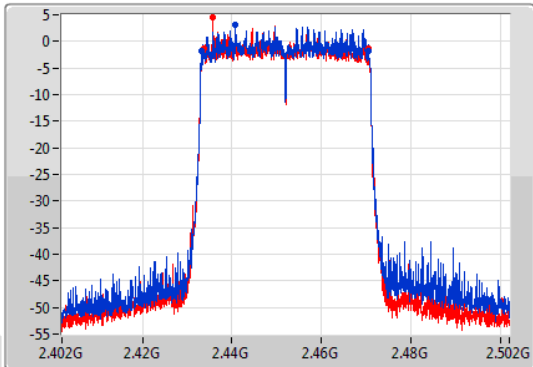
802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

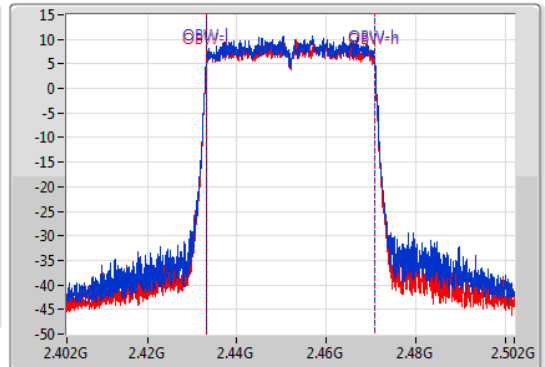
2452MHz

22/02/2020

CF  
2.452GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
100ms  
Detector Type  
Peak



CF  
2.452GHz  
Span  
100MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.35M	2.4332G	2.47055G	37.531M	2.433209G	2.470741G	500k	1
36.75M	2.4338G	2.47055G	37.581M	2.433209G	2.470791G	500k	2



**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	24.45	0.27861
802.11g_Nss1,(6Mbps)_1TX	24.35	0.27227
VHT20_Nss1,(MCS0)_1TX	23.87	0.24378
VHT40_Nss1,(MCS0)_1TX	19.90	0.09772
802.11ax HEW20_Nss1,(MCS0)_1TX	24.05	0.25410
802.11ax HEW40_Nss1,(MCS0)_1TX	20.15	0.10351