

FCC Test Report

FCC ID : UDX-600100010
Equipment : Wi-Fi 6 Outdoor Access Point
Brand Name : CISCO
Model Name : MR76-HW
Applicant : Cisco Systems, Inc.
170 West Tasman Drive San Jose, CA
95134 USA
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive San Jose, CA
95134 USA
Standard : 47 CFR FCC Part 15.247

The product was received on Jul. 25, 2019, and testing was started from Aug. 05, 2019 and completed on Oct. 08, 2019. 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

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



Table of Contents

HISTORY OF THIS TEST REPORT3

SUMMARY OF TEST RESULT4

1 GENERAL DESCRIPTION5

1.1 Information.....5

1.2 Testing Applied Standards9

1.3 Testing Location Information9

1.4 Measurement Uncertainty9

2 TEST CONFIGURATION OF EUT.....10

2.1 Test Condition10

2.2 Test Channel Mode10

2.3 The Worst Case Measurement Configuration.....23

2.4 Accessories and Support Equipment24

2.5 Test Setup Diagram25

3 TRANSMITTER TEST RESULT27

3.1 AC Power-line Conducted Emissions27

3.2 DTS Bandwidth.....29

3.3 Maximum Conducted Output Power30

3.4 Power Spectral Density32

3.5 Emissions in Non-restricted Frequency Bands33

3.6 Emissions in Restricted Frequency Bands.....34

4 TEST EQUIPMENT AND CALIBRATION DATA38

APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

APPENDIX B. TEST RESULTS OF DTS BANDWIDTH

APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY

APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS

APPENDIX G. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



Summary of Test Result

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

Declaration of Conformity:

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

Comments and explanations:

None

Reviewed by: Ben Tseng

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), ac (VHT20), ax (HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), ac (VHT40), ax (HEW40)	2422-2452	3-9 [7]

Group 1/2/3/4

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

Scanning Radio

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

Group 1/2/3/4(BF)

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, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.
- ◆ The resource unit of HEW 20, HEW 40 only support full loading.

1.1.2 Antenna Information

Group	Ant. No.	Brand	Model Name	Antenna Type	Connector	
1	20	1	Meraki	MA-ANT-20	Omni	N-Type
		2	Meraki	MA-ANT-20	Omni	N-Type
		3	Meraki	MA-ANT-20	Omni	N-Type
		4	Meraki	MA-ANT-20	Omni	N-Type
2	21+23	1	Meraki	MA-ANT-23	Sector	N-Type
		2	Meraki	MA-ANT-23	Sector	N-Type
		3	Meraki	MA-ANT-21	Sector	N-Type
		4	Meraki	MA-ANT-21	Sector	N-Type
3	25	1	Meraki	MA-ANT-25	Sector	N-Type
		2	Meraki	MA-ANT-25	Sector	N-Type
		3	Meraki	MA-ANT-25	Sector	N-Type
		4	Meraki	MA-ANT-25	Sector	N-Type
4	27	1	Meraki	MA-ANT-27	Sector	N-Type
		2	Meraki	MA-ANT-27	Sector	N-Type
		3	Meraki	MA-ANT-27	Sector	N-Type
		4	Meraki	MA-ANT-27	Sector	N-Type
-	-	5	Meraki	MR76	PIFA	I-PEX
-	-	6	Meraki	MR76	PIFA	I-PEX

Group	Ant. No.	Gain (dBi)			Elevation angle above 30 degrees Gain (dBi)	Remark	
		2.4G	5G	BT			
1	20	1	4	-	-	Radio 1	
		2	4	-	-	Radio 1	
		3	-	7	-	-1	Radio 2
		4	-	7	-	-1	Radio 2
2	21+23	1	11	-	-	Radio 1	
		2	11	-	-	Radio 1	
		3	-	13	-	11.2	Radio 2
		4	-	13	-	11.2	Radio 2
3	25	1	8.1	-	-	Radio 1	
		2	8.1	-	-	Radio 1	
		3	-	7.1	-	1.8	Radio 2
		4	-	7.1	-	1.8	Radio 2
4	27	1	9.8	-	-	Radio 1	
		2	9.8	-	-	Radio 1	
		3	-	11.3	-	9.7	Radio 2
		4	-	11.3	-	9.7	Radio 2
-	-	5	4.6	5.9	-	5.20	Radio 3 (Scanning Radio)
-	-	6	-	-	4.7	-	Radio 4 (BT LE)



Note 1: The EUT has six antennas.

For 2.4GHz function:

<Radio 1>

For IEEE 802.11 b/g/n/ac/ax mode (1TX/1RX)

Support diversity function and pre-tested on each single chain, the worst case was record in this test report.

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

Ant. 1 and Ant. 2 could transmit/receive simultaneously.

<Radio 3>

For IEEE 802.11 b/g/n/ac mode (1TX/1RX)

Ant. 5 could transmit/receive simultaneously.

For 5GHz function:

<Radio 2>

For IEEE 802.11 a/an/ac/ax mode (1TX/1RX)

Support diversity function and pre-tested on each single chain, the worst case was record in this test report.

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

Ant. 3 and Ant. 4 could transmit/receive simultaneously.

<Radio 3>

For IEEE 802.11 a/an/ac mode (1TX/1RX)

Ant. 5 could transmit/receive simultaneously.

For BT function:

<Radio 4>

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

Ant. 6 could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From PoE			
EUT Function	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
Beamforming Function	<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 Mode Test Duty Cycle

Group 1/2/3/4

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.567	2.46	693.75u	3k
802.11g	0.941	0.26	1.978m	1k
VHT20	0.956	0.2	5.431m	300
VHT40	0.955	0.2	5.431m	300
802.11ax HEW20	0.959	0.18	5.45m	300
802.11ax HEW40	0.956	0.2	5.45m	300

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

Scanning Radio

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.994	0.03	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.965	0.15	2.069m	1k
VHT20	0.962	0.17	1.937m	1k
VHT40	0.921	0.36	952.5u	3k

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

Group 1/2/3/4(BF)

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF	0.911	0.4	1.76m	1k
802.11ax HEW40-BF	0.86	0.66	1.759m	1k
VHT20-BF	0.923	0.35	1.759m	1k
VHT40-BF	0.904	0.44	1.759m	1k

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

1.1.5 Table for Multiple Listing

The brand/model names in the following table are all refer to the identical product.

Sample	Description
SKU1: Screened C-temp	All the Samples are identical, the difference samples for difference NAND, DDR, Security chip.
SKU2: unscreened C-temp	

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.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward	25.2~26.9°C / 60.1~63.3%	15/Aug/2019
AC Conduction (BF)	CO04-HY	Edward	25.5~26.2°C / 60.3~62.2%	08/Oct/2019
RF Conducted	TH01-HY	Andy	22.5~25.9°C / 59.5~66.8%	10/Aug/2019~ 14/Sep/2019
Radiated	03CH02-HY	Edward	23.5~24.3°C / 51.7~62.6%	05/Aug/2019~ 08/Oct/2019

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	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	QRCT V4.0 00123 and QRCT V3.0 0297
-----------------------	------------------------------------

Group 1

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	21.5
2417MHz	22
2437MHz	23.5
2457MHz	22
2462MHz	21
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	21
2417MHz	22
2437MHz	23.5
2457MHz	22
2462MHz	21
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	17.5
2417MHz	18.5
2437MHz	22
2457MHz	18
2462MHz	17.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	15.5
2417MHz	16
2437MHz	20.5
2457MHz	16.5
2462MHz	15.5
VHT20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	17
2417MHz	18
2437MHz	21
2457MHz	17.5
2462MHz	17



Mode	Power Setting
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	15.5
2417MHz	16
2437MHz	20.5
2457MHz	16.5
2462MHz	15.5
VHT40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	16.5
2427MHz	17
2437MHz	17
2447MHz	17
2452MHz	16
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	15.5
2427MHz	16
2437MHz	16.5
2447MHz	16
2452MHz	15.5
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	17
2417MHz	18
2437MHz	21
2457MHz	17.5
2462MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	15.5
2417MHz	16
2437MHz	20.5
2457MHz	16.5
2462MHz	15.5
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	16.5
2427MHz	17
2437MHz	17
2447MHz	17
2452MHz	16
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	15.5
2427MHz	16
2437MHz	16.5
2447MHz	16
2452MHz	15.5



Group 2

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	20.5
2417MHz	20.5
2437MHz	22
2457MHz	21
2462MHz	20.5
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	21
2417MHz	21.5
2437MHz	21
2457MHz	20.5
2462MHz	20.5
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	15
2417MHz	16
2437MHz	19
2457MHz	16
2462MHz	15
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	15
2417MHz	16
2437MHz	18
2457MHz	15.5
2462MHz	15
VHT20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	15.5
2417MHz	16
2437MHz	18
2457MHz	16
2462MHz	15
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	14
2417MHz	15.5
2437MHz	18
2457MHz	15
2462MHz	14.5



Mode	Power Setting
VHT40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	15
2427MHz	15.5
2437MHz	16
2447MHz	15
2452MHz	14.5
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	15
2427MHz	15
2437MHz	15.5
2447MHz	14.5
2452MHz	14
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	15.5
2417MHz	16
2437MHz	18
2457MHz	16
2462MHz	15
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	14
2417MHz	15.5
2437MHz	18
2457MHz	15
2462MHz	14.5
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	15
2427MHz	15.5
2437MHz	16
2447MHz	15
2452MHz	16
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	15
2427MHz	15
2437MHz	15.5
2447MHz	14.5
2452MHz	14



Group 3

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	21.5
2417MHz	22.5
2437MHz	23
2457MHz	20.5
2462MHz	19.5
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	21
2417MHz	21.5
2437MHz	23
2457MHz	20
2462MHz	19.5
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	15.5
2417MHz	16.5
2437MHz	20
2457MHz	16
2462MHz	15.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	15.5
2417MHz	16
2437MHz	20.5
2457MHz	15.5
2462MHz	15
VHT20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	16.5
2417MHz	17.5
2437MHz	20
2457MHz	16
2462MHz	14.5
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	16
2417MHz	16.5
2437MHz	18.5
2457MHz	15.5
2462MHz	14



Mode	Power Setting
VHT40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	16.5
2427MHz	16.5
2437MHz	17
2447MHz	15
2452MHz	14
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	15
2427MHz	16
2437MHz	16.5
2447MHz	14.5
2452MHz	13.5
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	16.5
2417MHz	17.5
2437MHz	20
2457MHz	16
2462MHz	14.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	16
2417MHz	16.5
2437MHz	18.5
2457MHz	15.5
2462MHz	14
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	16.5
2427MHz	16.5
2437MHz	17
2447MHz	15
2452MHz	14
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	15
2427MHz	16
2437MHz	16.5
2447MHz	14.5
2452MHz	13.5



Group 4

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	21.5
2417MHz	22.5
2437MHz	23
2457MHz	20.5
2462MHz	19.5
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	21
2417MHz	21.5
2437MHz	23
2457MHz	20
2462MHz	19.5
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	15.5
2417MHz	16.5
2437MHz	20
2457MHz	16
2462MHz	15.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	15.5
2417MHz	16
2437MHz	20.5
2457MHz	15.5
2462MHz	15
VHT20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	16.5
2417MHz	17.5
2437MHz	20
2457MHz	16
2462MHz	14.5
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	16
2417MHz	16.5
2437MHz	18.5
2457MHz	15.5
2462MHz	14



Mode	Power Setting
VHT40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	16.5
2427MHz	16.5
2437MHz	17
2447MHz	15
2452MHz	14
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	15
2427MHz	16
2437MHz	16.5
2447MHz	14.5
2452MHz	13.5
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	16.5
2417MHz	17.5
2437MHz	20
2457MHz	16
2462MHz	14.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	16
2417MHz	16.5
2437MHz	18.5
2457MHz	15.5
2462MHz	14
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	16.5
2427MHz	16.5
2437MHz	17
2447MHz	15
2452MHz	14
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	15
2427MHz	16
2437MHz	16.5
2447MHz	14.5
2452MHz	13.5



Scanning Radio

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	10
2417MHz	11
2437MHz	11
2457MHz	11
2462MHz	10.5
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	14
2417MHz	17.5
2437MHz	19.5
2457MHz	18
2462MHz	14.5
VHT20_Nss1,(MCS0)_1TX	-
2412MHz	13
2417MHz	17.5
2437MHz	20
2457MHz	18
2462MHz	14
VHT40_Nss1,(MCS0)_1TX	-
2422MHz	11.5
2427MHz	13.5
2437MHz	15.5
2447MHz	13
2452MHz	10



Group 1(BF)

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	19
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	19
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	19
2427MHz	19
2437MHz	20
2447MHz	17
2452MHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	19
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	19
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	19
2427MHz	19
2437MHz	20
2447MHz	17
2452MHz	17



Group 2(BF)

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	19
2437MHz	20
2457MHz	20
2462MHz	19
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17
2437MHz	18
2447MHz	17
2452MHz	15
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	19
2437MHz	20
2457MHz	20
2462MHz	19
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17
2437MHz	18
2447MHz	17
2452MHz	15



Group 3(BF)

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	19
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17
2437MHz	19
2447MHz	17
2452MHz	16
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	19
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17
2437MHz	19
2447MHz	17
2452MHz	16






Group 4(BF)

Mode	Power Setting
VHT20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	19
VHT40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17
2437MHz	19
2447MHz	17
2452MHz	16
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	19
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17
2437MHz	19
2447MHz	17
2452MHz	16

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	PoE mode

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4GHz+ WLAN 5GHz+ Scanning Radio WLAN 2.4GHz+Bluetooth
2	WLAN 2.4GHz+ WLAN 5GHz+ Scanning Radio WLAN 5GHz+Bluetooth
Refer to Sporton Test Report No.: FA972312 for Co-location RF Exposure Evaluation.	



2.4 Accessories and Support Equipment

Accessories				
Mounting bracket	Brand Name	CISCO	Model Name	MR76-HW

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

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	PHIHONG	POEA30U-1ATE	N/A
2	Power Cable	CHING CHANG	N/A	N/A
3	LAN Cable	Power sync	CAT-6E-01	N/A

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

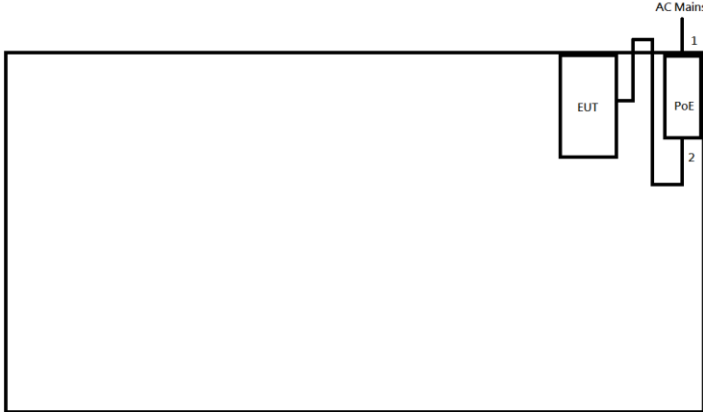
Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Power Source	G.W	APS-9102	N/A

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	LAN Cable	Power sync	CAT-6E-10	N/A
2	PoE(Remote)	PHIHONG	POEA30U-1ATE	N/A
3	Power Cable(Remote)	CHING CHANG	N/A	N/A
4	LAN Cable(Remote)	Power sync	N/A	N/A

Note: Support equipment No.3 was provided by customer.

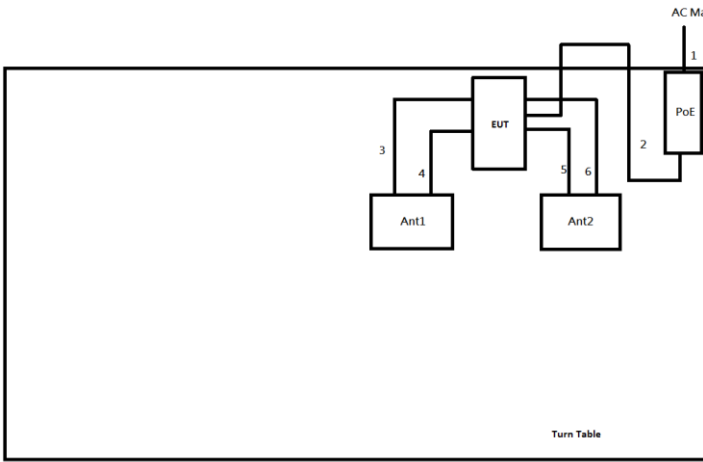
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (Group 1/Scanning Radio)



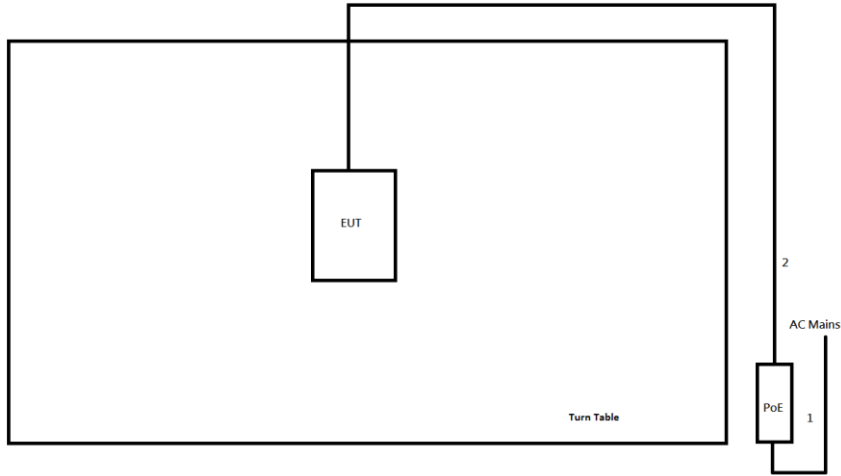
Item	Connection	Shielded	Length
1	Power Cable	No	1.8m
2	LAN Cable	No	1.0m

Test Setup Diagram – AC Line Conducted Emission Test (Group 2/3/4)



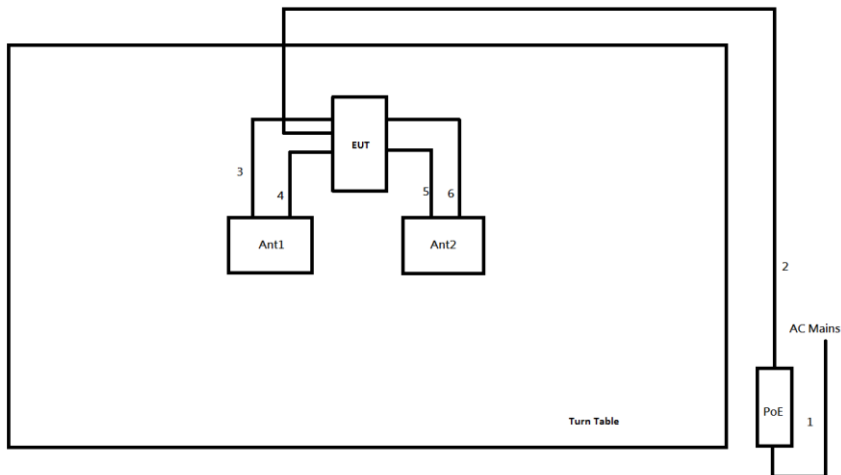
Item	Connection	Shielded	Length
1	Power Cable	No	1.8m
2	LAN Cable	No	1.0m
3	Antenna Cable	No	0.35 m
4	Antenna Cable	No	0.35 m
5	Antenna Cable	No	0.35 m
6	Antenna Cable	No	0.35 m

Test Setup Diagram - Radiated Test (Group 1/ Scanning Radio)



Item	Connection	Shielded	Length
1	Power Cable	No	1.8m
2	LAN Cable	No	10m

Test Setup Diagram - Radiated Test (Group 2/3/4)



Item	Connection	Shielded	Length
1	Power Cable	No	1.8m
2	LAN Cable	No	10m
3	Antenna Cable	No	0.35 m
4	Antenna Cable	No	0.35 m
5	Antenna Cable	No	0.35 m
6	Antenna Cable	No	0.35 m



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.

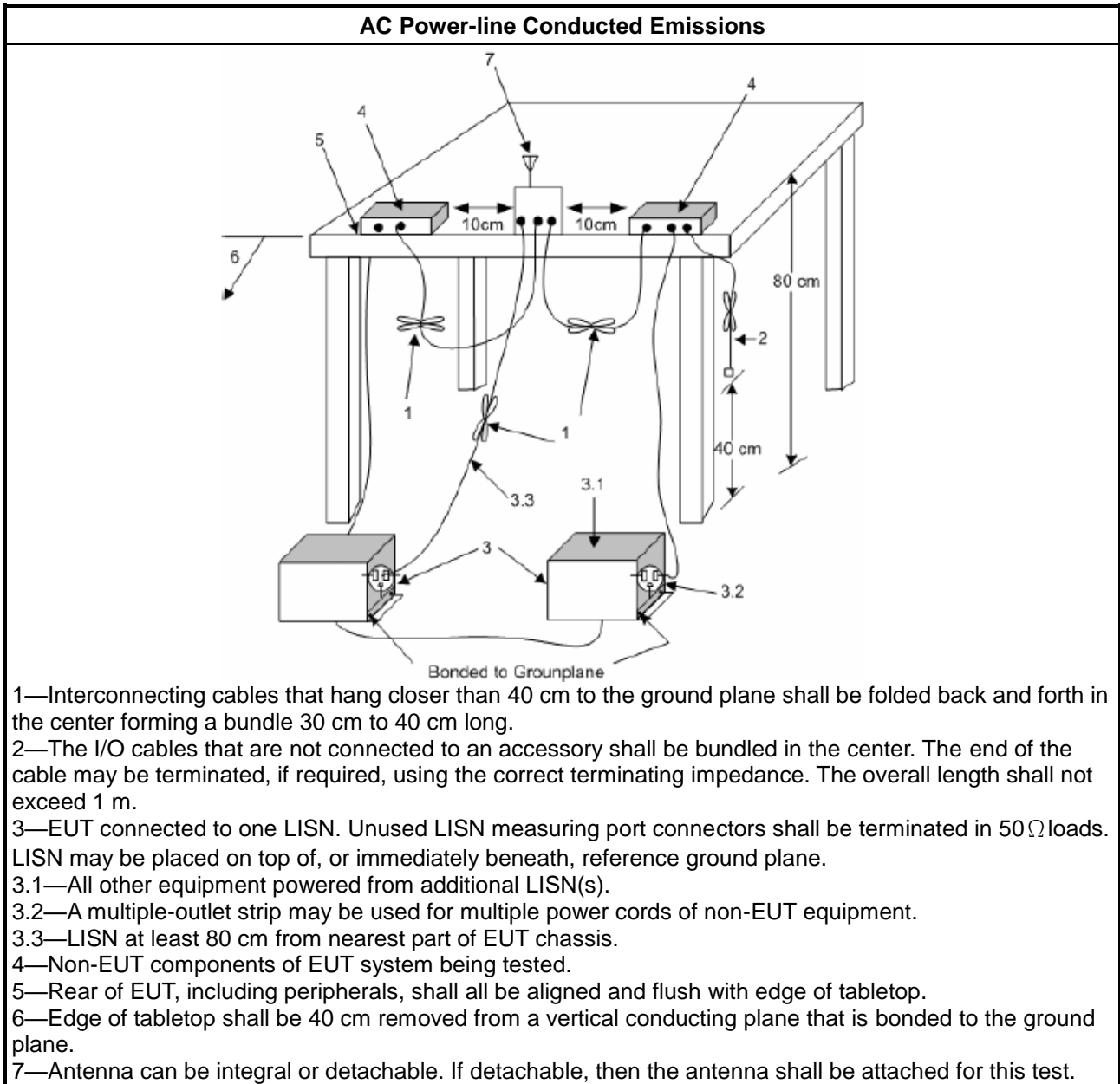
3.1.2 Measuring Instruments

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"> ▪ 6 dB bandwidth \geq 500 kHz. 	

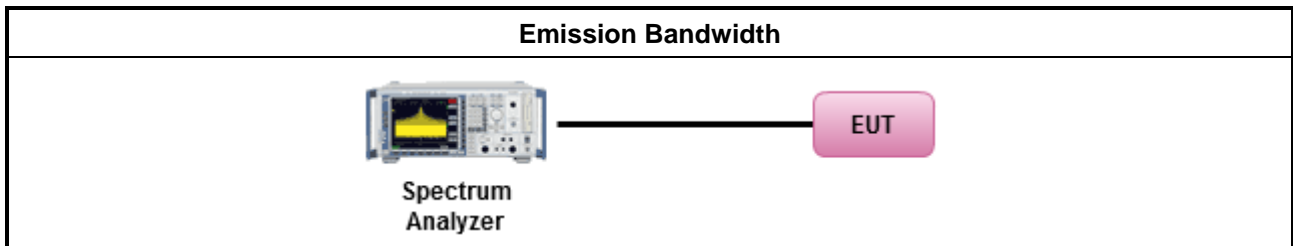
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<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"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS):
	<ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS)
	<ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
<p>P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

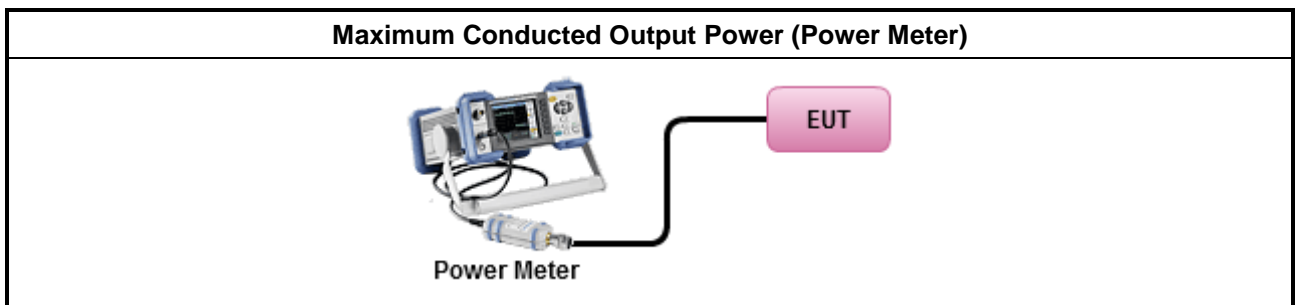
3.3.2 Measuring Instruments

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"> ▪ Maximum Peak Conducted Output Power 	
<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"> ▪ Maximum Average Conducted Output Power 	
<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"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ 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. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

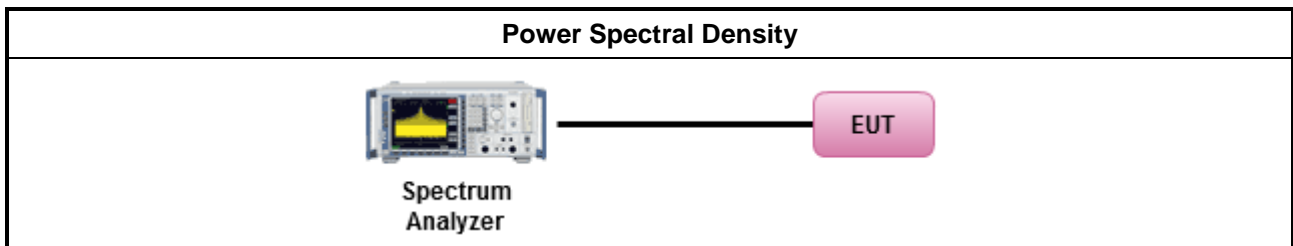
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> 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).
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Method PKPSD.
<ul style="list-style-type: none"> For conducted measurement.
<ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.

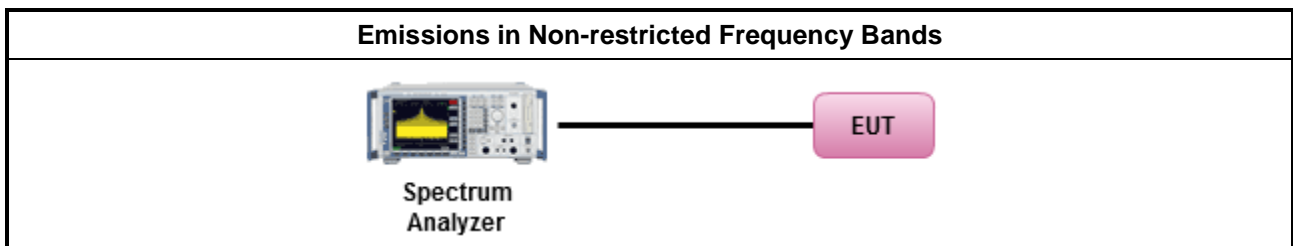
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

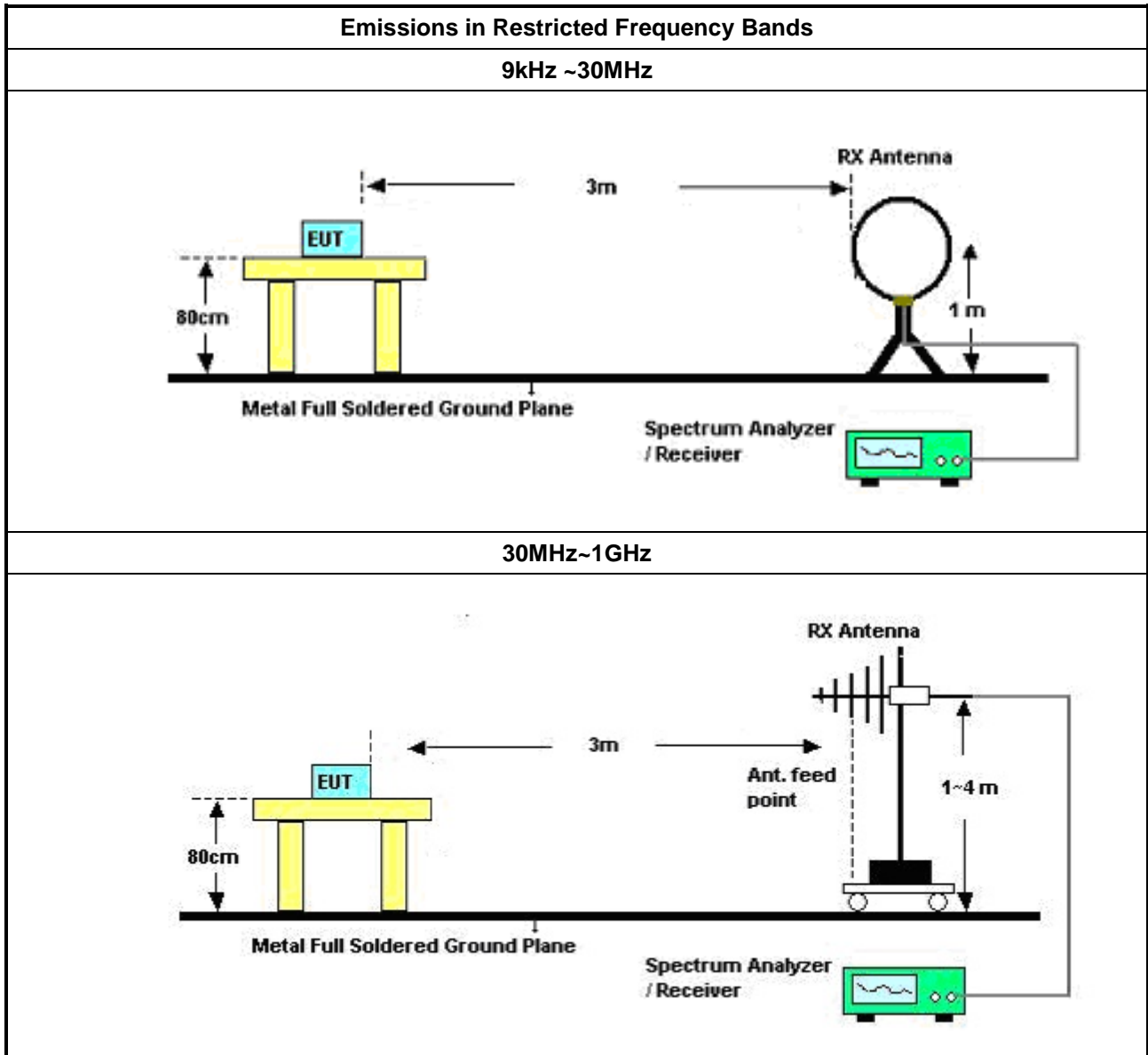
Refer a test equipment and calibration data table in this test report.

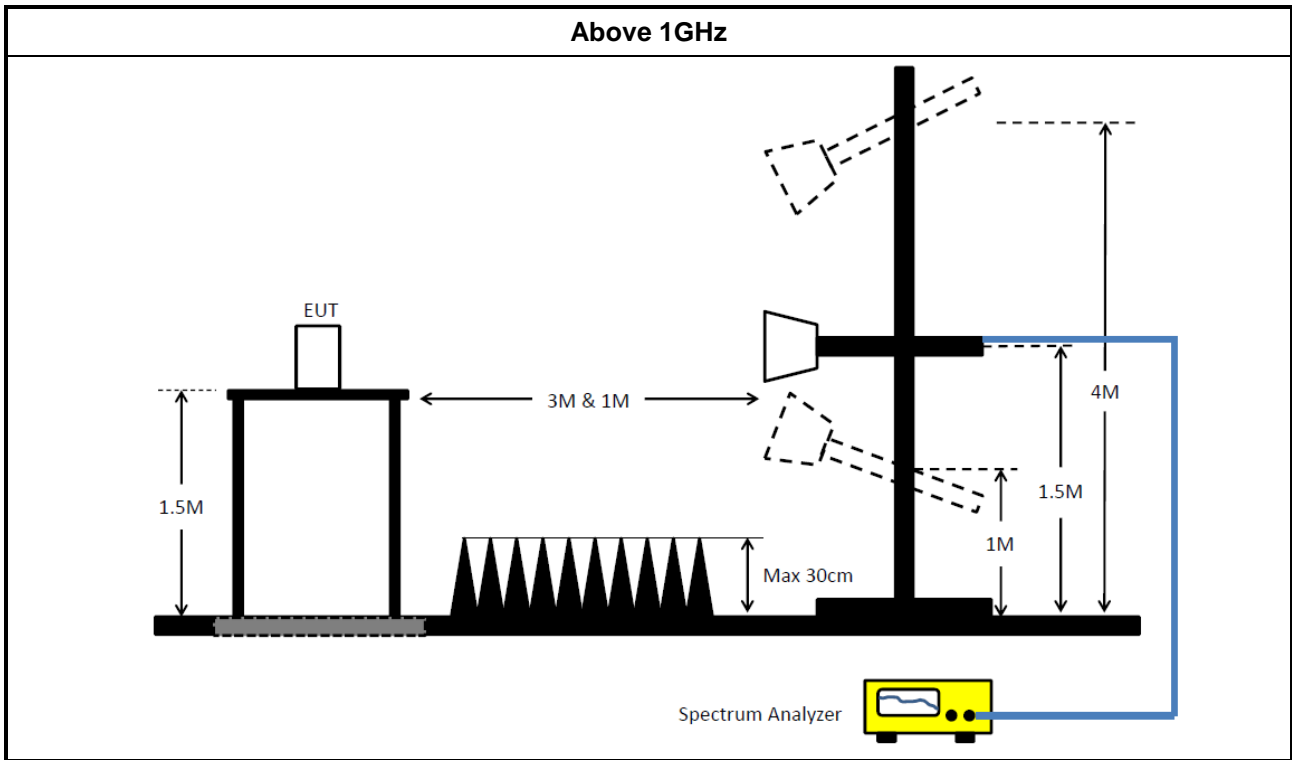


3.6.3 Test Procedures

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

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	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
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	12/Oct/2018	11/Oct/2019

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
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020



Instrument for Radiated Test

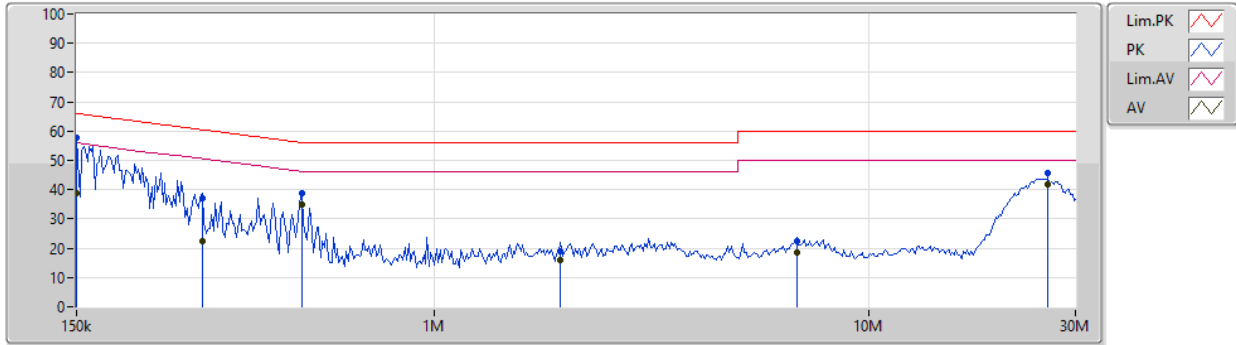
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	19/Oct/2018	18/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	17/Oct/2018	16/Oct/2019
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	02/Jul/2019	01/Jul/2020
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	02/Jun/2019	01/Jun/2020
Spectrum Analyzer	Rohde & Schwarz	FSP40	100593	9KHz - 40GHz	27/Dec/2018	26/Dec/2019
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	CBL6112B / MTJ6102-0	2722 / MTJ61202-06	30MHz ~ 1GHz	06/Jul/2019	05/Jul/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz ~ 40GHz	05/Feb/2019	04/Feb/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	05/Aug/2019	04/Aug/2020
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/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 Result

Operating Mode	1	Power Phase	Neutral
Operating Function	PoE mode_Group 1		

15/08/2019



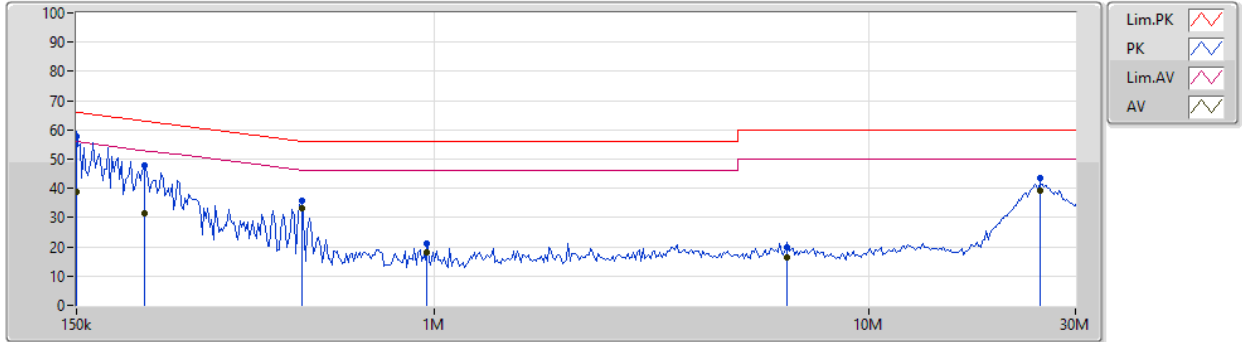
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	57.72	66.00	-8.28	19.48	Neutral	"Worst"	38.24	9.60	0.01	9.87
AV	150k	38.68	56.00	-17.32	19.48	Neutral	-	19.20	9.60	0.01	9.87
QP	292.162k	37.22	60.46	-23.24	19.48	Neutral	-	17.74	9.59	0.01	9.88
AV	292.162k	22.53	50.46	-27.93	19.48	Neutral	-	3.05	9.59	0.01	9.88
QP	495.058k	38.87	56.08	-17.21	19.48	Neutral	-	19.39	9.59	0.01	9.88
AV	495.058k	34.76	46.08	-11.32	19.48	Neutral	-	15.28	9.59	0.01	9.88
QP	1.954M	19.04	56.00	-36.96	19.53	Neutral	-	-0.49	9.61	0.03	9.89
AV	1.954M	15.97	46.00	-30.03	19.53	Neutral	-	-3.56	9.61	0.03	9.89
QP	6.847M	22.51	60.00	-37.49	19.60	Neutral	-	2.91	9.65	0.06	9.89
AV	6.847M	18.51	50.00	-31.49	19.60	Neutral	-	-1.09	9.65	0.06	9.89
QP	25.975M	45.84	60.00	-14.16	19.69	Neutral	-	26.15	9.67	0.12	9.90
AV	25.975M	41.62	50.00	-8.38	19.69	Neutral	-	21.93	9.67	0.12	9.90



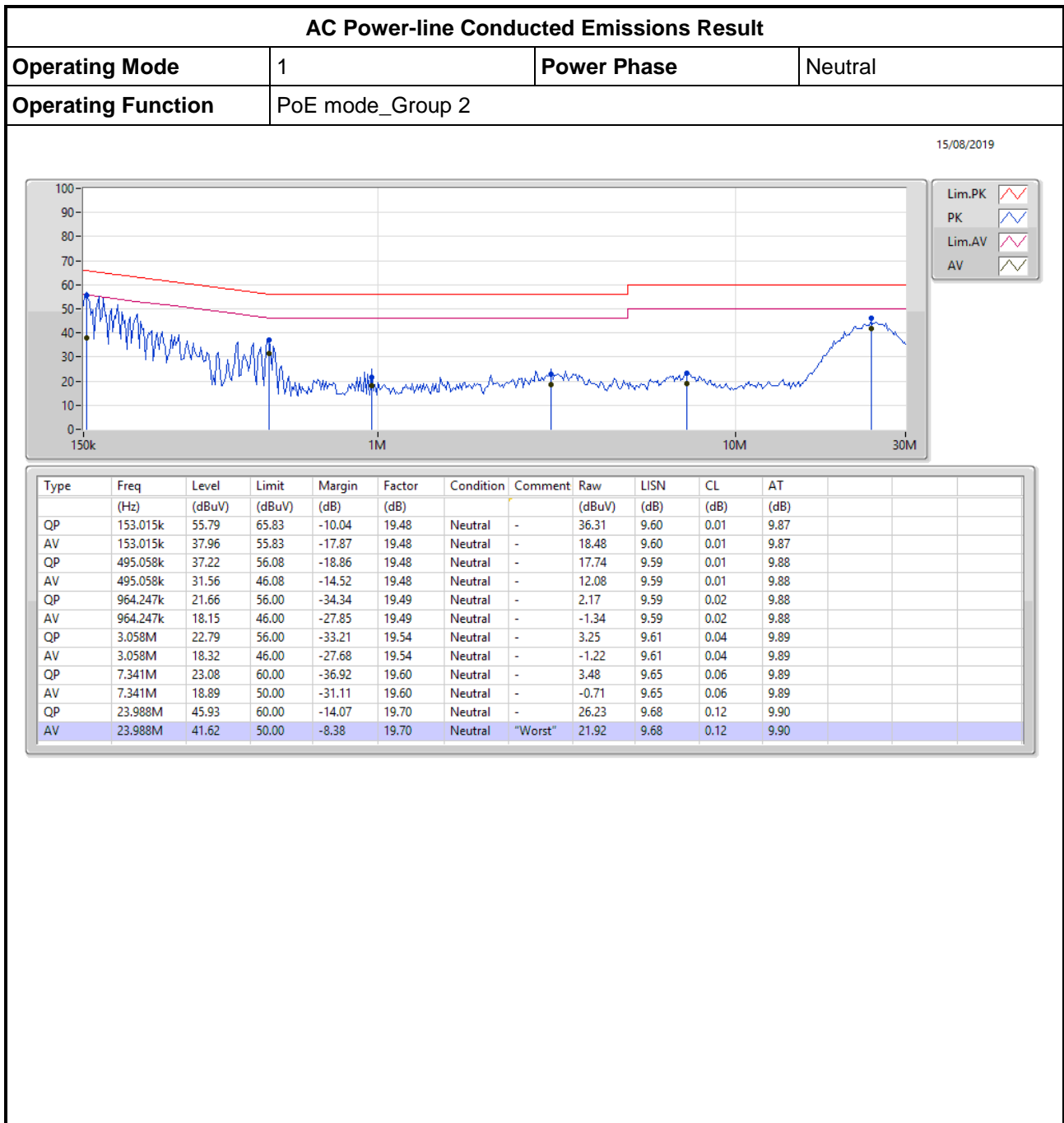
AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 1		

15/08/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	57.70	66.00	-8.30	19.48	Line	"Worst"	38.22	9.60	0.01	9.87
AV	150k	38.72	56.00	-17.28	19.48	Line	-	19.24	9.60	0.01	9.87
QP	214.615k	47.82	63.02	-15.20	19.48	Line	-	28.34	9.60	0.01	9.87
AV	214.615k	31.59	53.02	-21.43	19.48	Line	-	12.11	9.60	0.01	9.87
QP	495.058k	35.92	56.08	-20.16	19.48	Line	-	16.44	9.59	0.01	9.88
AV	495.058k	33.02	46.08	-13.06	19.48	Line	-	13.54	9.59	0.01	9.88
QP	964.247k	21.23	56.00	-34.77	19.50	Line	-	1.73	9.60	0.02	9.88
AV	964.247k	18.03	46.00	-27.97	19.50	Line	-	-1.47	9.60	0.02	9.88
QP	6.515M	19.67	60.00	-40.33	19.60	Line	-	0.07	9.65	0.06	9.89
AV	6.515M	16.52	50.00	-33.48	19.60	Line	-	-3.08	9.65	0.06	9.89
QP	24.962M	43.52	60.00	-16.48	19.59	Line	-	23.93	9.57	0.12	9.90
AV	24.962M	39.17	50.00	-10.83	19.59	Line	-	19.58	9.57	0.12	9.90

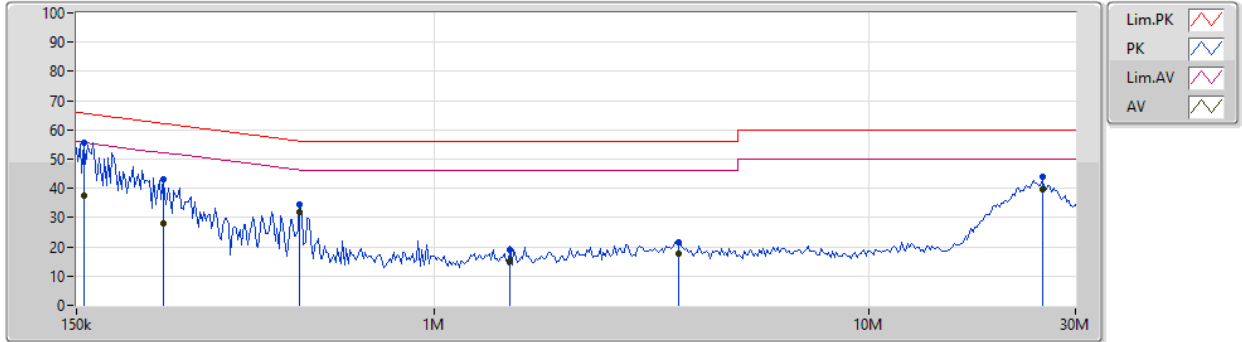




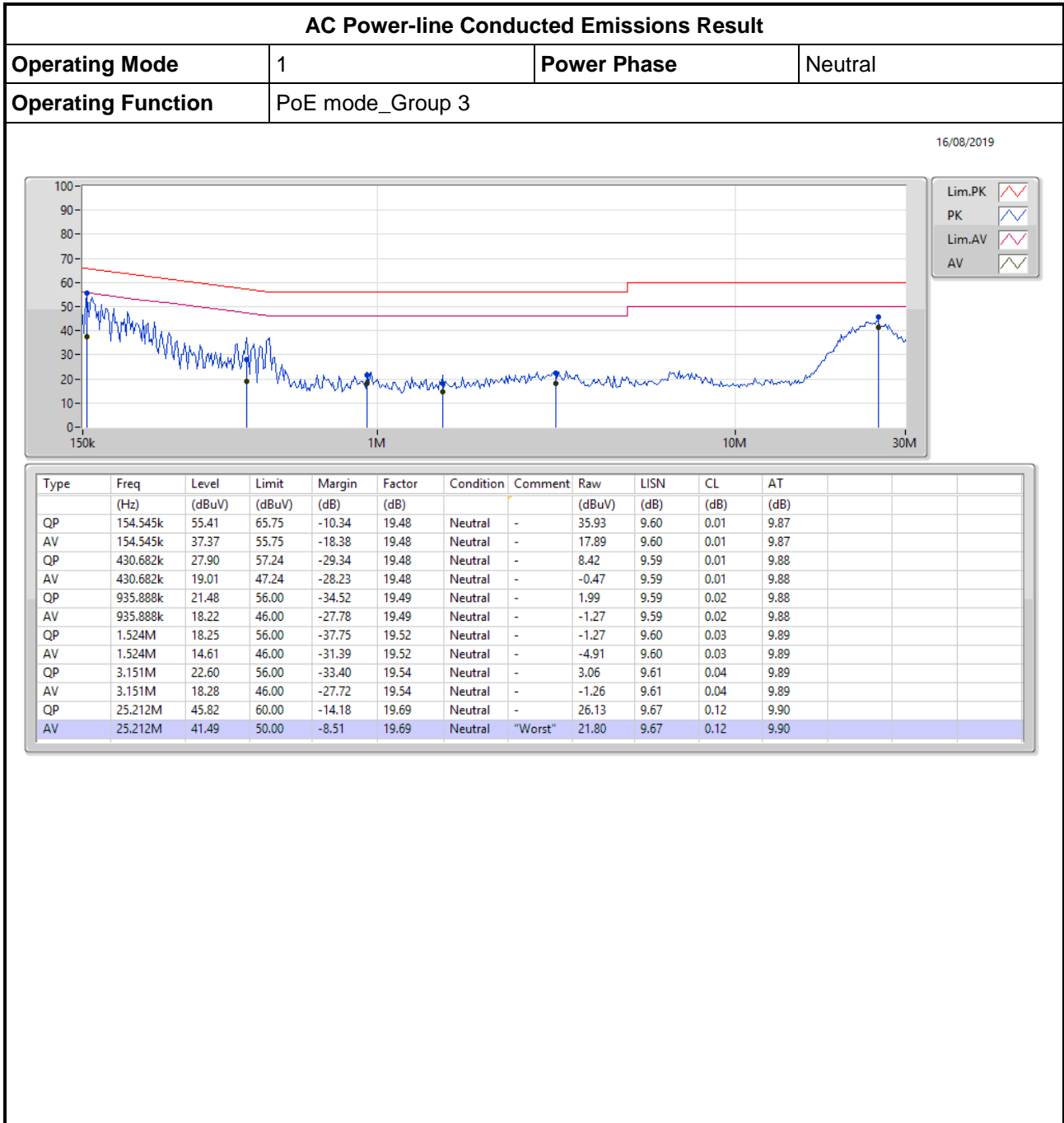
AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 2		

15/08/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	156.091k	55.70	65.67	-9.97	19.48	Line	"Worst"	36.22	9.60	0.01	9.87
AV	156.091k	37.47	55.67	-18.20	19.48	Line	-	17.99	9.60	0.01	9.87
QP	237.069k	42.91	62.20	-19.29	19.48	Line	-	23.43	9.60	0.01	9.87
AV	237.069k	28.14	52.20	-24.06	19.48	Line	-	8.66	9.60	0.01	9.87
QP	490.156k	34.53	56.17	-21.64	19.48	Line	-	15.05	9.59	0.01	9.88
AV	490.156k	31.94	46.17	-14.23	19.48	Line	-	12.46	9.59	0.01	9.88
QP	1.494M	19.08	56.00	-36.92	19.53	Line	-	-0.45	9.61	0.03	9.89
AV	1.494M	15.25	46.00	-30.75	19.53	Line	-	-4.28	9.61	0.03	9.89
QP	3.658M	21.76	56.00	-34.24	19.56	Line	-	2.20	9.63	0.04	9.89
AV	3.658M	17.76	46.00	-28.24	19.56	Line	-	-1.80	9.63	0.04	9.89
QP	25.212M	43.78	60.00	-16.22	19.59	Line	-	24.19	9.57	0.12	9.90
AV	25.212M	39.53	50.00	-10.47	19.59	Line	-	19.94	9.57	0.12	9.90

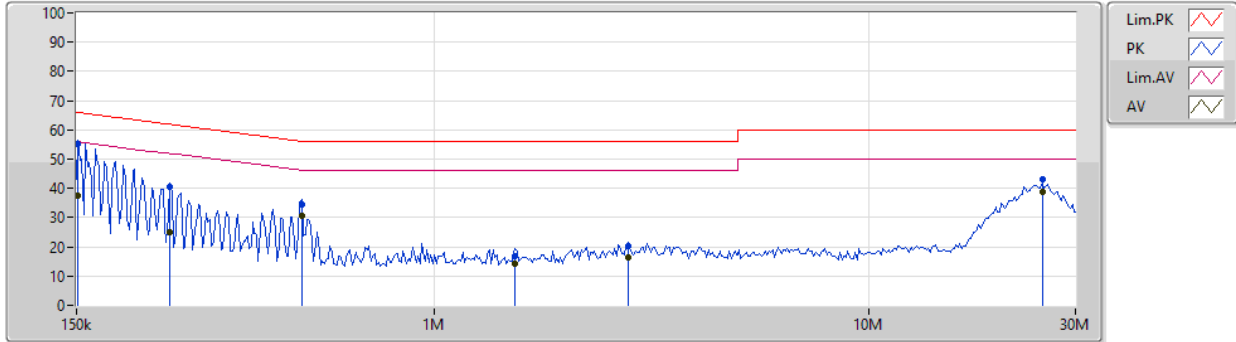




AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 3		

16/08/2019



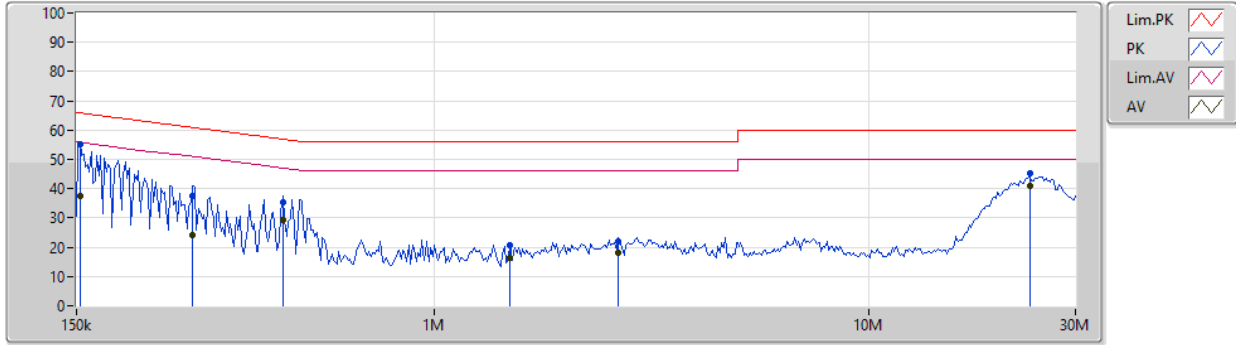
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	151.5k	55.07	65.92	-10.85	19.48	Line	"Worst"	35.59	9.60	0.01	9.87
AV	151.5k	37.34	55.92	-18.58	19.48	Line	-	17.86	9.60	0.01	9.87
QP	246.695k	40.39	61.87	-21.48	19.48	Line	-	20.91	9.60	0.01	9.87
AV	246.695k	24.98	51.87	-26.89	19.48	Line	-	5.50	9.60	0.01	9.87
QP	495.058k	34.35	56.08	-21.73	19.48	Line	-	14.87	9.59	0.01	9.88
AV	495.058k	30.39	46.08	-15.69	19.48	Line	-	10.91	9.59	0.01	9.88
QP	1.539M	17.01	56.00	-38.99	19.53	Line	-	-2.52	9.61	0.03	9.89
AV	1.539M	14.07	46.00	-31.93	19.53	Line	-	-5.46	9.61	0.03	9.89
QP	2.796M	20.11	56.00	-35.89	19.55	Line	-	0.56	9.62	0.04	9.89
AV	2.796M	16.49	46.00	-29.51	19.55	Line	-	-3.06	9.62	0.04	9.89
QP	25.212M	43.17	60.00	-16.83	19.59	Line	-	23.58	9.57	0.12	9.90
AV	25.212M	38.89	50.00	-11.11	19.59	Line	-	19.30	9.57	0.12	9.90



AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	PoE mode_Group 4		

16/08/2019



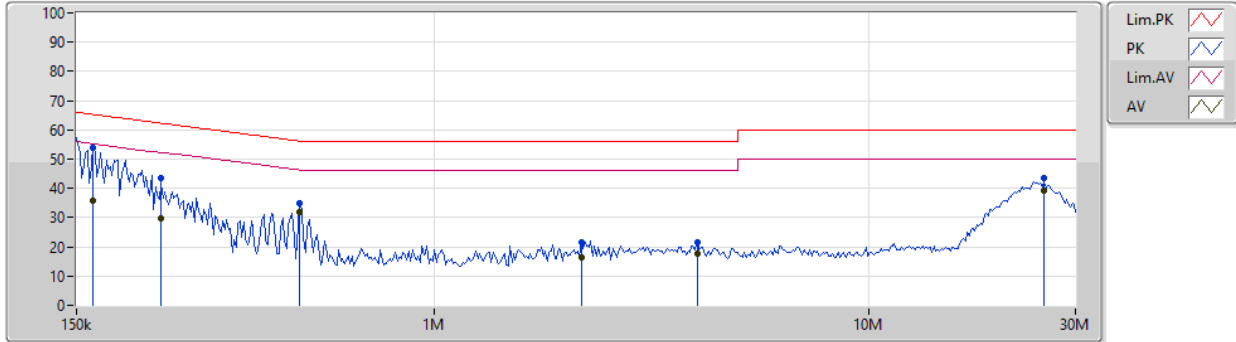
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	153.015k	55.29	65.83	-10.54	19.48	Neutral	-	35.81	9.60	0.01	9.87
AV	153.015k	37.69	55.83	-18.14	19.48	Neutral	-	18.21	9.60	0.01	9.87
QP	277.982k	37.49	60.88	-23.39	19.47	Neutral	-	18.02	9.59	0.01	9.87
AV	277.982k	24.20	50.88	-26.68	19.47	Neutral	-	4.73	9.59	0.01	9.87
QP	448.17k	35.32	56.92	-21.60	19.48	Neutral	-	15.84	9.59	0.01	9.88
AV	448.17k	29.13	46.92	-17.79	19.48	Neutral	-	9.65	9.59	0.01	9.88
QP	1.494M	20.78	56.00	-35.22	19.52	Neutral	-	1.26	9.60	0.03	9.89
AV	1.494M	16.41	46.00	-29.59	19.52	Neutral	-	-3.11	9.60	0.03	9.89
QP	2.661M	21.80	56.00	-34.20	19.54	Neutral	-	2.26	9.61	0.04	9.89
AV	2.661M	17.95	46.00	-28.05	19.54	Neutral	-	-1.59	9.61	0.04	9.89
QP	23.515M	45.45	60.00	-14.55	19.70	Neutral	-	25.75	9.68	0.12	9.90
AV	23.515M	41.14	50.00	-8.86	19.70	Neutral	"Worst"	21.44	9.68	0.12	9.90



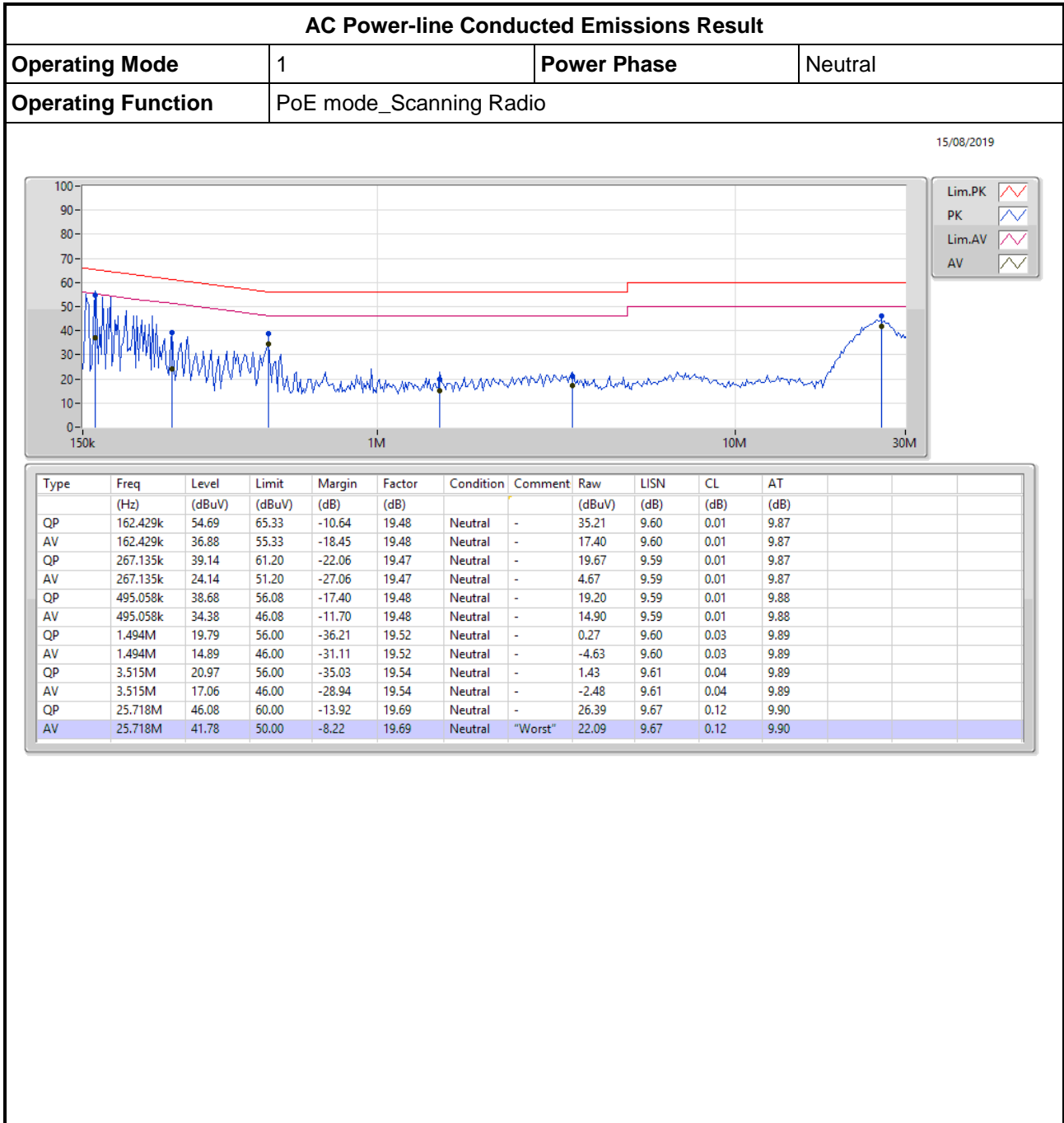
AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 4		

16/08/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	164.053k	53.88	65.25	-11.37	19.48	Line	-	34.40	9.60	0.01	9.87
AV	164.053k	35.82	55.25	-19.43	19.48	Line	-	16.34	9.60	0.01	9.87
QP	234.722k	43.68	62.27	-18.59	19.48	Line	-	24.20	9.60	0.01	9.87
AV	234.722k	29.63	52.27	-22.64	19.48	Line	-	10.15	9.60	0.01	9.87
QP	490.156k	34.73	56.17	-21.44	19.48	Line	-	15.25	9.59	0.01	9.88
AV	490.156k	32.03	46.17	-14.14	19.48	Line	-	12.55	9.59	0.01	9.88
QP	2.18M	21.46	56.00	-34.54	19.54	Line	-	1.92	9.62	0.03	9.89
AV	2.18M	16.30	46.00	-29.70	19.54	Line	-	-3.24	9.62	0.03	9.89
QP	4.041M	21.40	56.00	-34.60	19.57	Line	-	1.83	9.63	0.05	9.89
AV	4.041M	17.68	46.00	-28.32	19.57	Line	-	-1.89	9.63	0.05	9.89
QP	25.464M	43.48	60.00	-16.52	19.59	Line	-	23.89	9.57	0.12	9.90
AV	25.464M	39.20	50.00	-10.80	19.59	Line	"Worst"	19.61	9.57	0.12	9.90

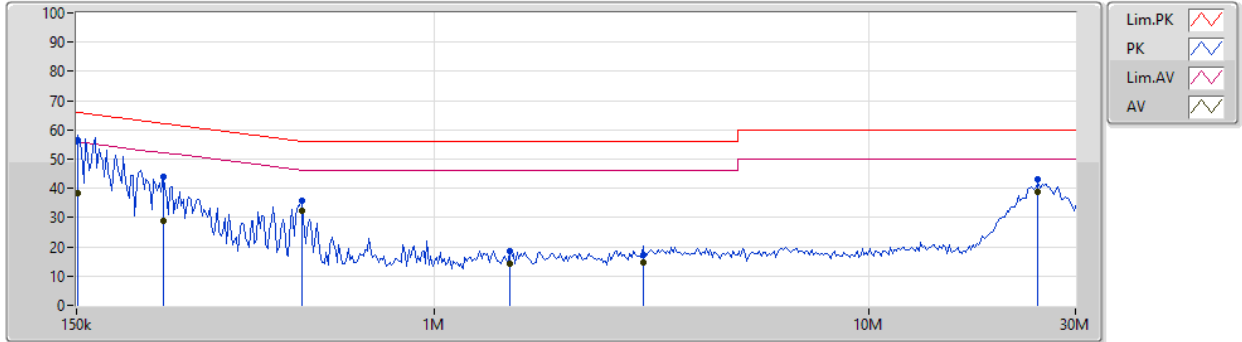




AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Scanning Radio		

15/08/2019



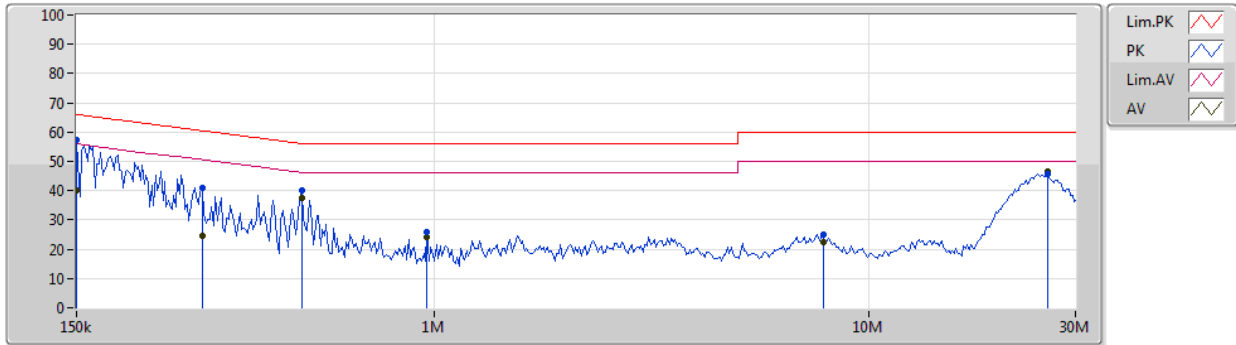
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	151.5k	56.48	65.92	-9.44	19.48	Line	"Worst"	37.00	9.60	0.01	9.87
AV	151.5k	38.35	55.92	-17.57	19.48	Line	-	18.87	9.60	0.01	9.87
QP	237.069k	43.91	62.20	-18.29	19.48	Line	-	24.43	9.60	0.01	9.87
AV	237.069k	28.91	52.20	-23.29	19.48	Line	-	9.43	9.60	0.01	9.87
QP	495.058k	35.59	56.08	-20.49	19.48	Line	-	16.11	9.59	0.01	9.88
AV	495.058k	32.36	46.08	-13.72	19.48	Line	-	12.88	9.59	0.01	9.88
QP	1.494M	18.57	56.00	-37.43	19.53	Line	-	-0.96	9.61	0.03	9.89
AV	1.494M	14.10	46.00	-31.90	19.53	Line	-	-5.43	9.61	0.03	9.89
QP	3.028M	17.34	56.00	-38.66	19.56	Line	-	-2.22	9.63	0.04	9.89
AV	3.028M	14.60	46.00	-31.40	19.56	Line	-	-4.96	9.63	0.04	9.89
QP	24.47M	43.08	60.00	-16.92	19.60	Line	-	23.48	9.58	0.12	9.90
AV	24.47M	38.85	50.00	-11.15	19.60	Line	-	19.25	9.58	0.12	9.90



AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	PoE mode_Group 1 (BF)		

08/10/2019



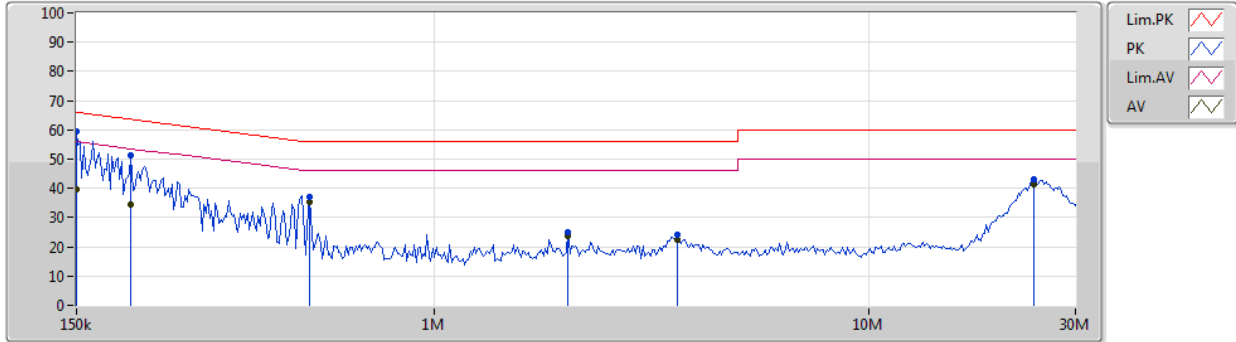
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	57.40	66.00	-8.60	19.48	Neutral	-	37.92	9.60	0.01	9.87
AV	150k	40.17	56.00	-15.83	19.48	Neutral	-	20.69	9.60	0.01	9.87
QP	292.162k	41.08	60.46	-19.38	19.48	Neutral	-	21.60	9.59	0.01	9.88
AV	292.162k	24.73	50.46	-25.73	19.48	Neutral	-	5.25	9.59	0.01	9.88
QP	495.058k	39.98	56.08	-16.10	19.48	Neutral	-	20.50	9.59	0.01	9.88
AV	495.058k	37.38	46.08	-8.70	19.48	Neutral	-	17.90	9.59	0.01	9.88
QP	964.247k	25.67	56.00	-30.33	19.49	Neutral	-	6.18	9.59	0.02	9.88
AV	964.247k	24.30	46.00	-21.70	19.49	Neutral	-	4.81	9.59	0.02	9.88
QP	7.87M	25.05	60.00	-34.95	19.60	Neutral	-	5.45	9.65	0.06	9.89
AV	7.87M	22.54	50.00	-27.46	19.60	Neutral	-	2.94	9.65	0.06	9.89
QP	25.975M	45.59	60.00	-14.41	19.69	Neutral	-	25.90	9.67	0.12	9.90
AV	25.975M	46.56	50.00	-3.44	19.69	Neutral	"Worst"	26.87	9.67	0.12	9.90



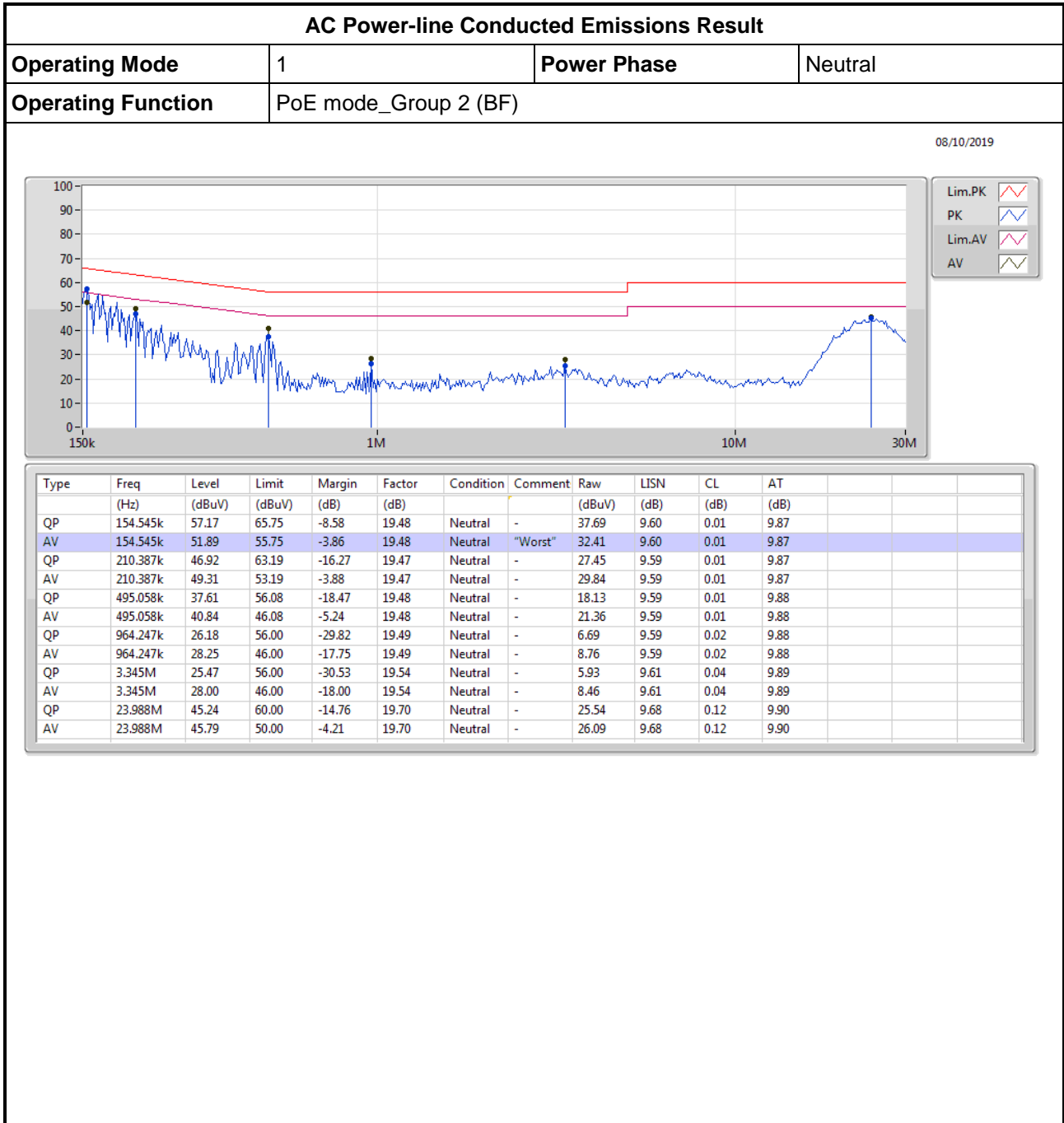
AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 1 (BF)		

08/10/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	59.66	66.00	-6.34	19.48	Line	"Worst"	40.18	9.60	0.01	9.87
AV	150k	39.65	56.00	-16.35	19.48	Line	-	20.17	9.60	0.01	9.87
QP	200.176k	51.21	63.61	-12.40	19.48	Line	-	31.73	9.60	0.01	9.87
AV	200.176k	34.59	53.61	-19.02	19.48	Line	-	15.11	9.60	0.01	9.87
QP	515.159k	36.90	56.00	-19.10	19.48	Line	-	17.42	9.59	0.01	9.88
AV	515.159k	35.19	46.00	-10.81	19.48	Line	-	15.71	9.59	0.01	9.88
QP	2.034M	25.18	56.00	-30.82	19.54	Line	-	5.64	9.62	0.03	9.89
AV	2.034M	23.71	46.00	-22.29	19.54	Line	-	4.17	9.62	0.03	9.89
QP	3.622M	24.20	56.00	-31.80	19.56	Line	-	4.64	9.63	0.04	9.89
AV	3.622M	22.32	46.00	-23.68	19.56	Line	-	2.76	9.63	0.04	9.89
QP	23.988M	43.09	60.00	-16.91	19.61	Line	-	23.48	9.59	0.12	9.90
AV	23.988M	41.18	50.00	-8.82	19.61	Line	-	21.57	9.59	0.12	9.90

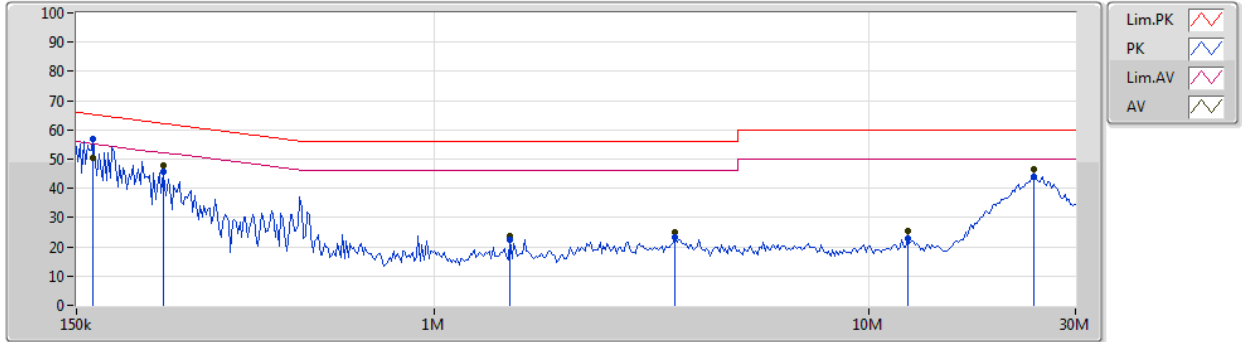




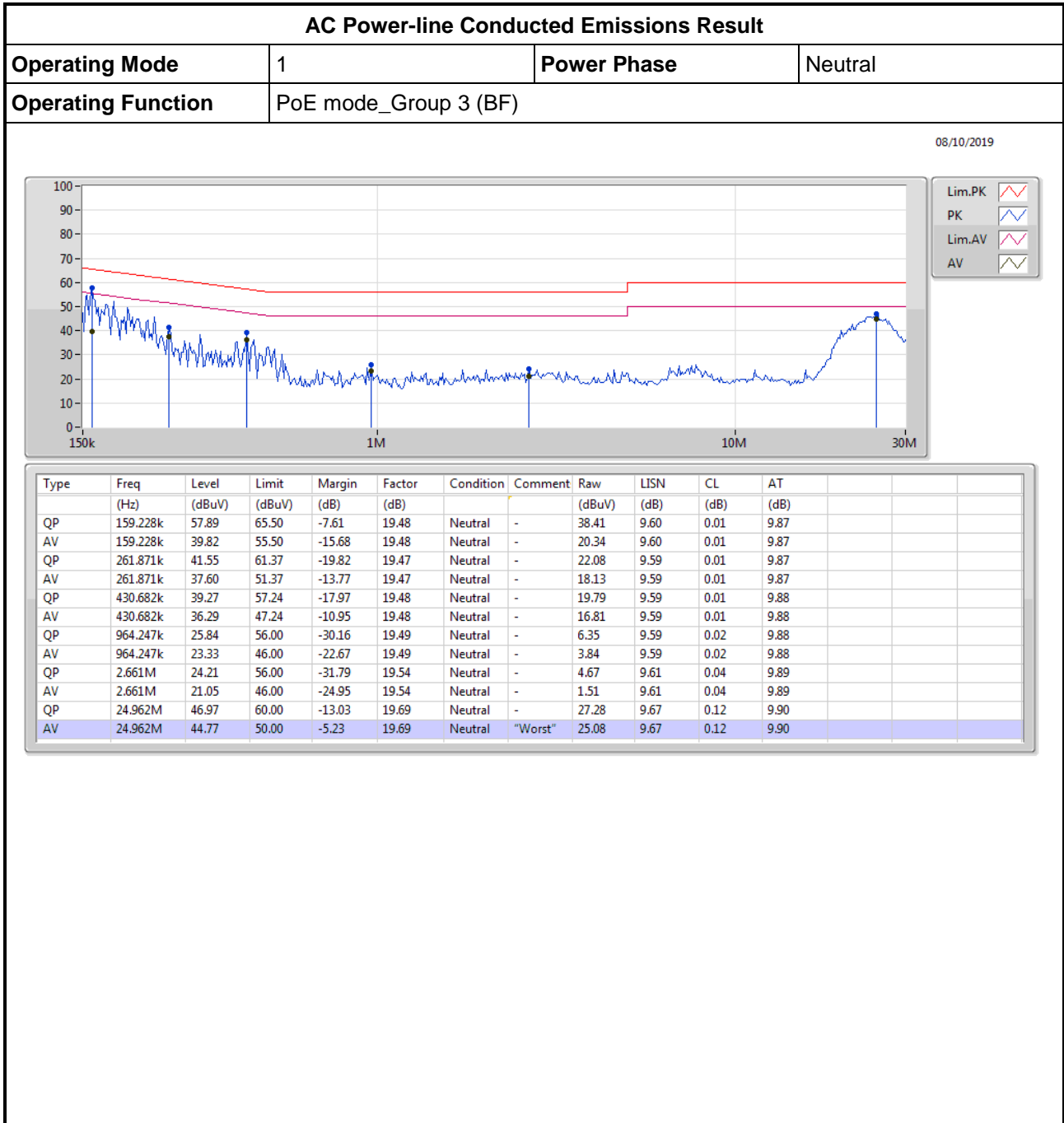
AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 2 (BF)		

08/10/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	164.053k	56.88	65.25	-8.37	19.48	Line	-	37.40	9.60	0.01	9.87
AV	164.053k	50.43	55.25	-4.82	19.48	Line	-	30.95	9.60	0.01	9.87
QP	237.069k	45.62	62.20	-16.58	19.48	Line	-	26.14	9.60	0.01	9.87
AV	237.069k	47.82	52.20	-4.38	19.48	Line	-	28.34	9.60	0.01	9.87
QP	1.494M	22.57	56.00	-33.43	19.53	Line	-	3.04	9.61	0.03	9.89
AV	1.494M	23.68	46.00	-22.32	19.53	Line	-	4.15	9.61	0.03	9.89
QP	3.586M	23.28	56.00	-32.72	19.56	Line	-	3.72	9.63	0.04	9.89
AV	3.586M	25.14	46.00	-20.86	19.56	Line	-	5.58	9.63	0.04	9.89
QP	12.316M	22.97	60.00	-37.03	19.64	Line	-	3.33	9.66	0.08	9.90
AV	12.316M	25.55	50.00	-24.45	19.64	Line	-	5.91	9.66	0.08	9.90
QP	23.988M	44.07	60.00	-15.93	19.61	Line	-	24.46	9.59	0.12	9.90
AV	23.988M	46.43	50.00	-3.57	19.61	Line	"Worst"	26.82	9.59	0.12	9.90

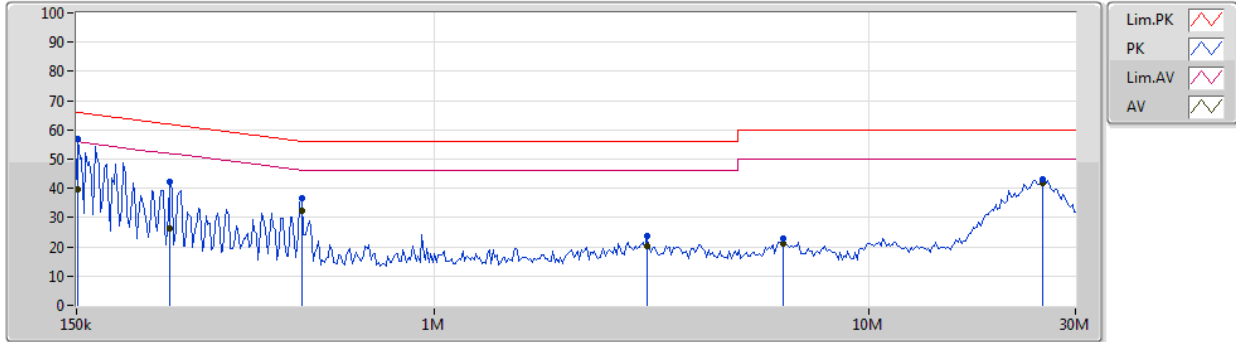




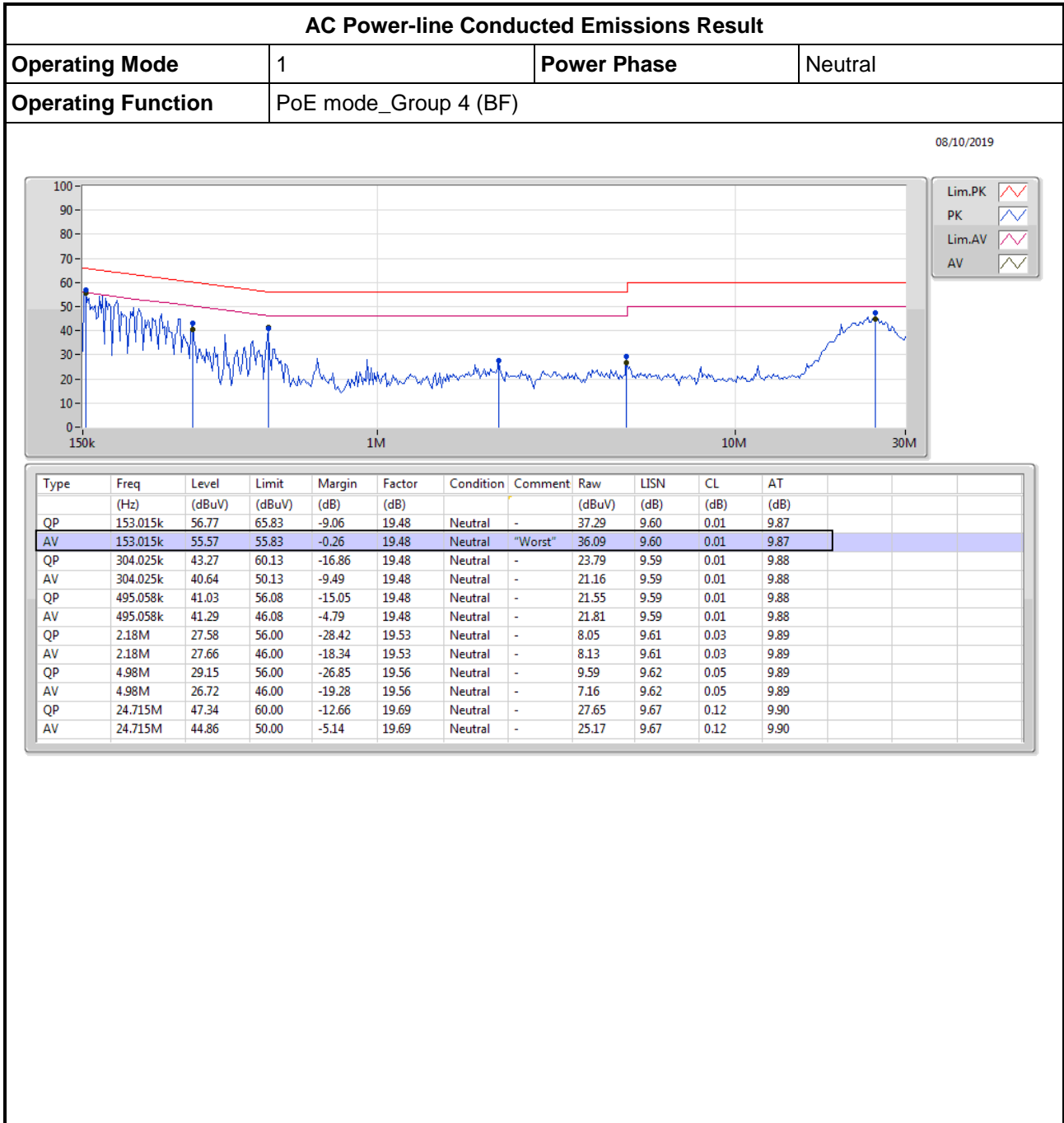
AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 3 (BF)		

08/10/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	151.5k	56.87	65.92	-9.05	19.48	Line	-	37.39	9.60	0.01	9.87
AV	151.5k	39.74	55.92	-16.18	19.48	Line	-	20.26	9.60	0.01	9.87
QP	246.695k	42.45	61.87	-19.42	19.48	Line	-	22.97	9.60	0.01	9.87
AV	246.695k	26.42	51.87	-25.45	19.48	Line	-	6.94	9.60	0.01	9.87
QP	495.058k	36.46	56.08	-19.62	19.48	Line	-	16.98	9.59	0.01	9.88
AV	495.058k	32.37	46.08	-13.71	19.48	Line	-	12.89	9.59	0.01	9.88
QP	3.089M	23.50	56.00	-32.50	19.56	Line	-	3.94	9.63	0.04	9.89
AV	3.089M	20.41	46.00	-25.59	19.56	Line	-	0.85	9.63	0.04	9.89
QP	6.386M	22.82	60.00	-37.18	19.60	Line	-	3.22	9.65	0.06	9.89
AV	6.386M	21.27	50.00	-28.73	19.60	Line	-	1.67	9.65	0.06	9.89
QP	25.212M	42.96	60.00	-17.04	19.59	Line	-	23.37	9.57	0.12	9.90
AV	25.212M	41.70	50.00	-8.30	19.59	Line	"Worst"	22.11	9.57	0.12	9.90

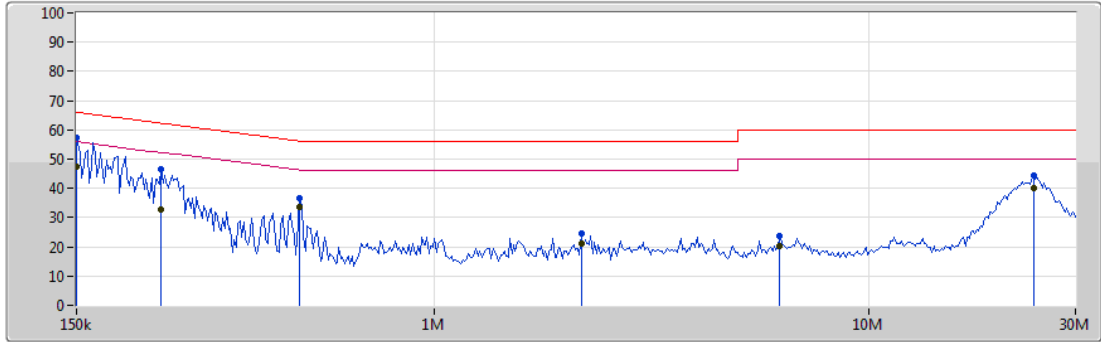




AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode_Group 4 (BF)		

08/10/2019



Legend for the graph:

- Lim.PK: Red line with a peak symbol
- PK: Blue line with a peak symbol
- Lim.AV: Pink line with a peak symbol
- AV: Yellow line with a peak symbol

Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	57.46	66.00	-8.54	19.48	Line	-	37.98	9.60	0.01	9.87
AV	150k	47.58	56.00	-8.42	19.48	Line	"Worst"	28.10	9.60	0.01	9.87
QP	234.722k	46.72	62.27	-15.55	19.48	Line	-	27.24	9.60	0.01	9.87
AV	234.722k	32.95	52.27	-19.32	19.48	Line	-	13.47	9.60	0.01	9.87
QP	490.156k	36.56	56.17	-19.61	19.48	Line	-	17.08	9.59	0.01	9.88
AV	490.156k	33.77	46.17	-12.40	19.48	Line	-	14.29	9.59	0.01	9.88
QP	2.18M	24.53	56.00	-31.47	19.54	Line	-	4.99	9.62	0.03	9.89
AV	2.18M	20.98	46.00	-25.02	19.54	Line	-	1.44	9.62	0.03	9.89
QP	6.26M	23.56	60.00	-36.44	19.60	Line	-	3.96	9.65	0.06	9.89
AV	6.26M	20.39	50.00	-29.61	19.60	Line	-	0.79	9.65	0.06	9.89
QP	23.988M	44.55	60.00	-15.45	19.61	Line	-	24.94	9.59	0.12	9.90
AV	23.988M	40.29	50.00	-9.71	19.61	Line	-	20.68	9.59	0.12	9.90



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	9.025M	15.467M	15M5G1D	7.55M	13.043M
802.11b_Nss1,(1Mbps)_2TX	9.575M	15.117M	15M1G1D	7.05M	12.869M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.3M	19.89M	19M9D1D	16.275M	16.417M
802.11g_Nss1,(6Mbps)_2TX	16.325M	17.016M	17M0D1D	15.575M	16.367M
VHT20_Nss1,(MCS0)_1TX(Port2)	17.55M	18.941M	18M9D1D	17.275M	17.591M
VHT20_Nss1,(MCS0)_2TX	17.575M	18.091M	18M1D1D	16.15M	17.566M
VHT40_Nss1,(MCS0)_1TX(Port2)	36.05M	36.132M	36M1D1D	36.05M	36.082M
VHT40_Nss1,(MCS0)_2TX	36.3M	36.182M	36M2D1D	35.7M	36.032M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.925M	19.415M	19M4D1D	18.675M	18.941M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.975M	19.14M	19M1D1D	18.325M	18.841M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.65M	37.831M	37M8D1D	37.05M	37.681M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.9M	37.781M	37M8D1D	37.5M	37.631M

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;

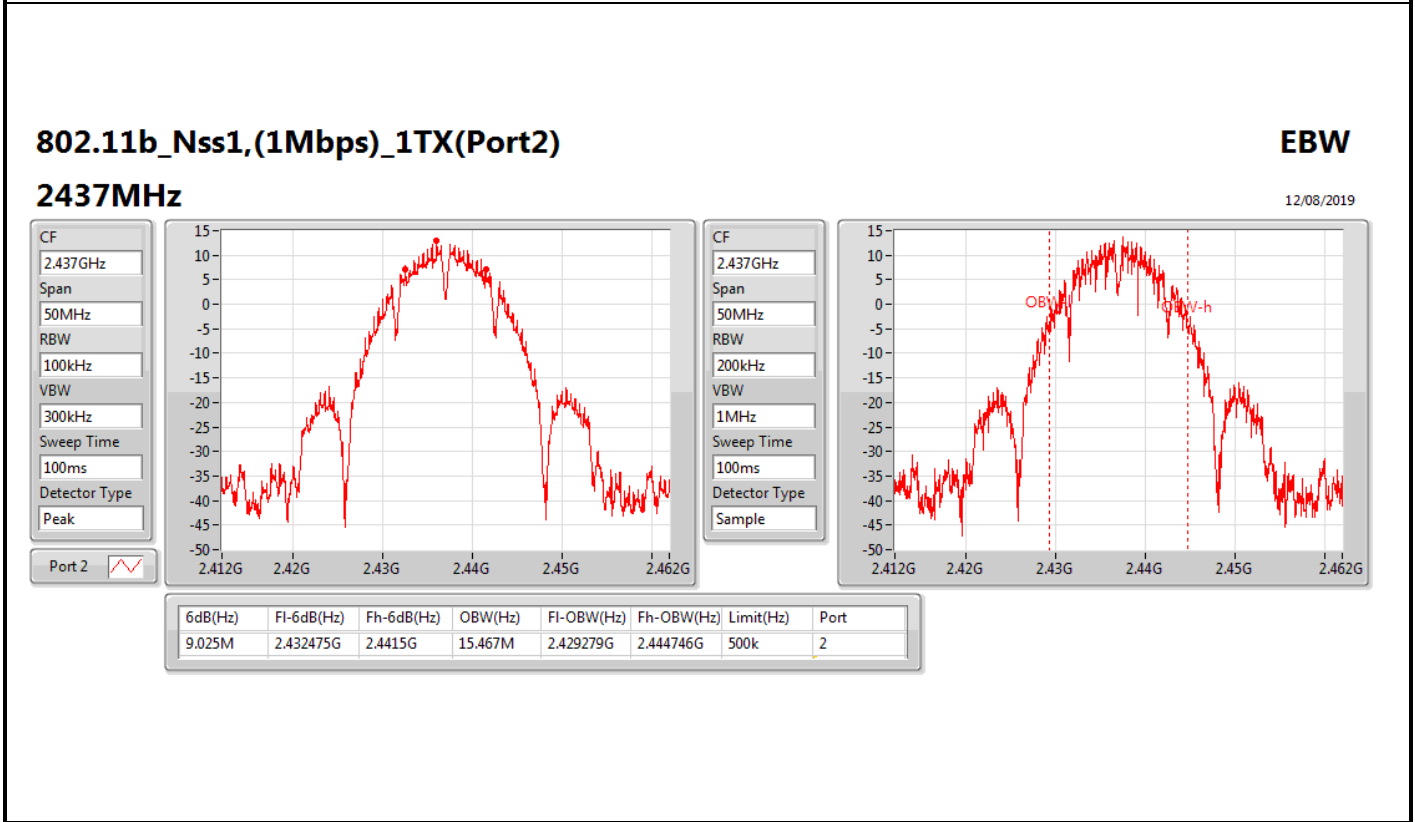
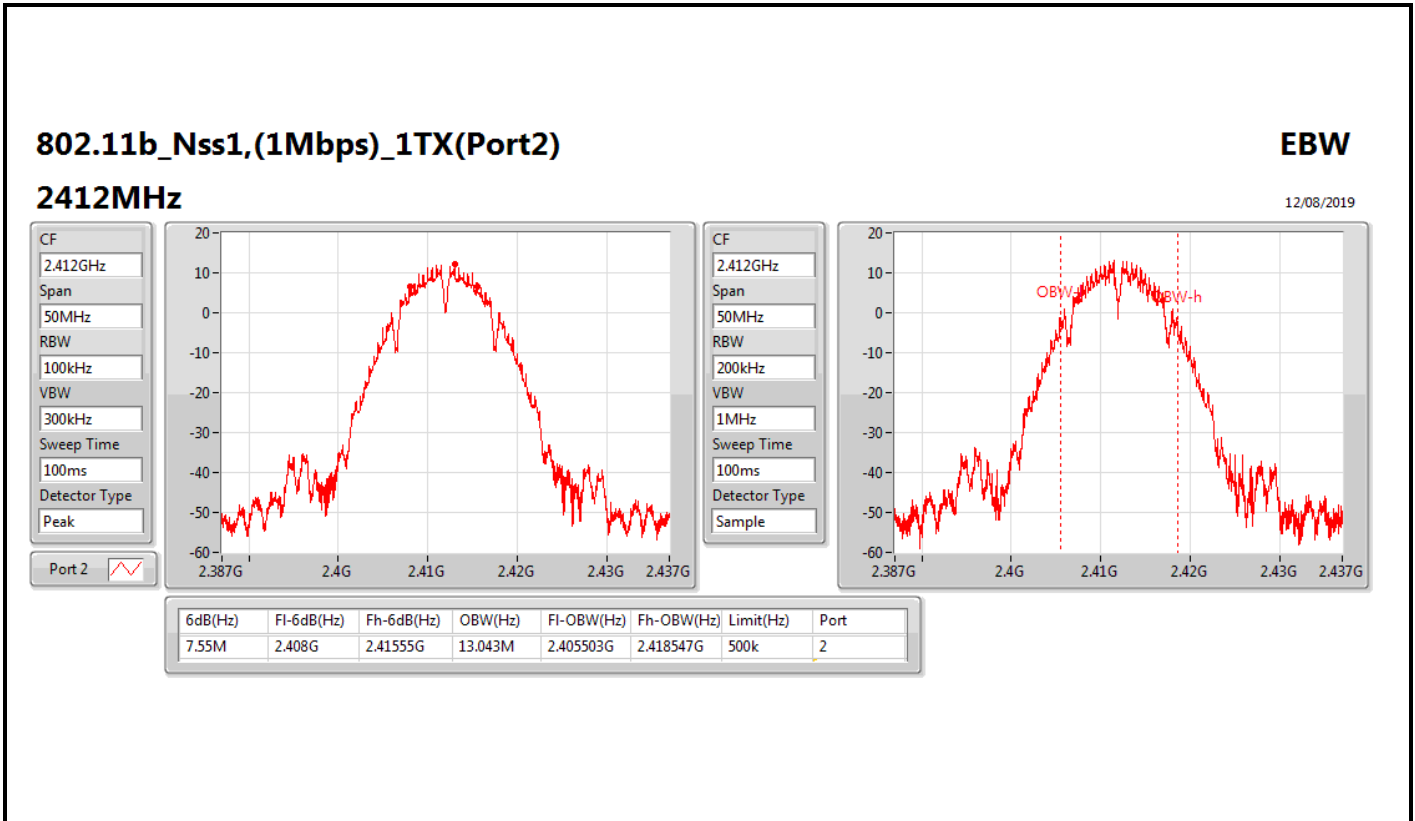
Result

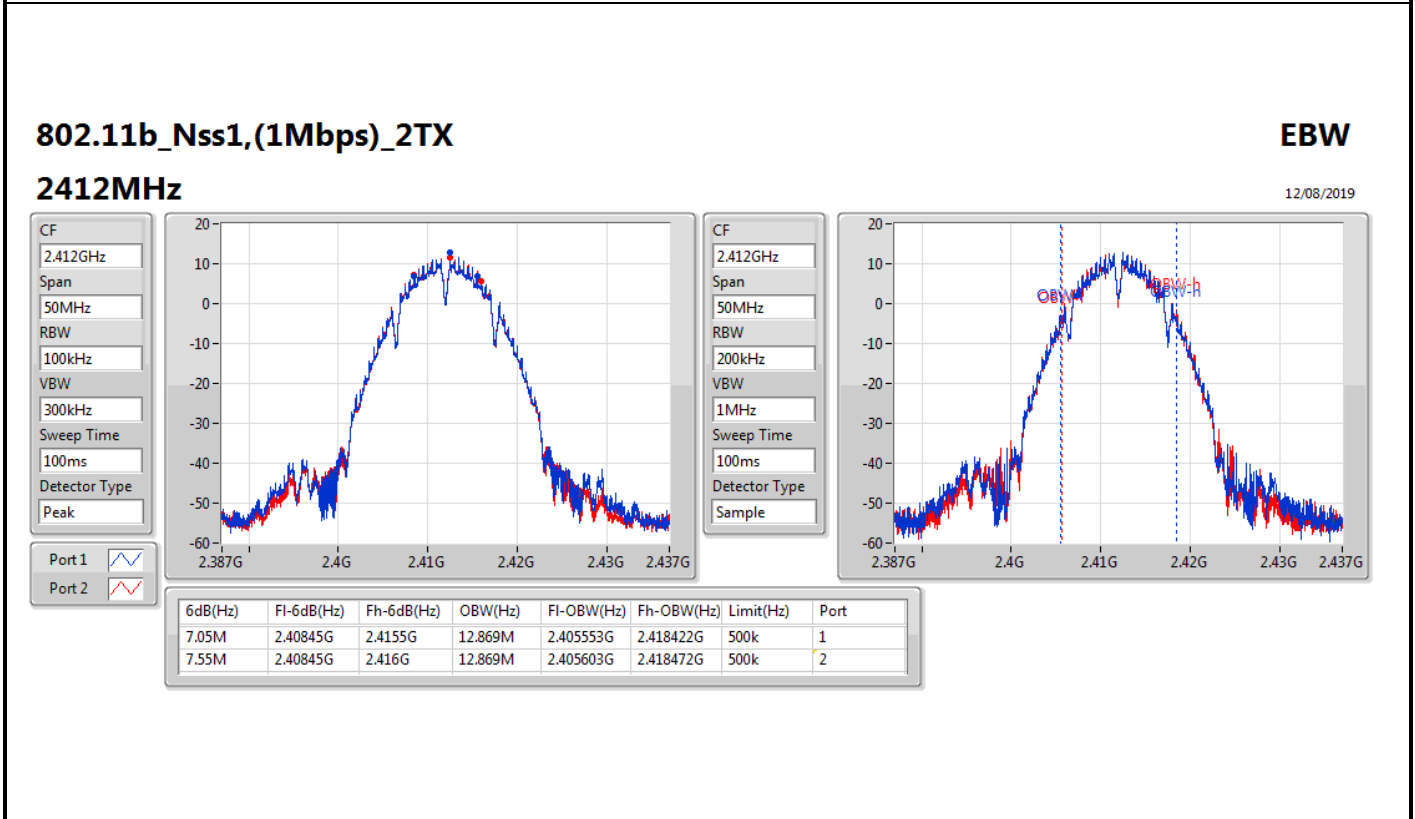
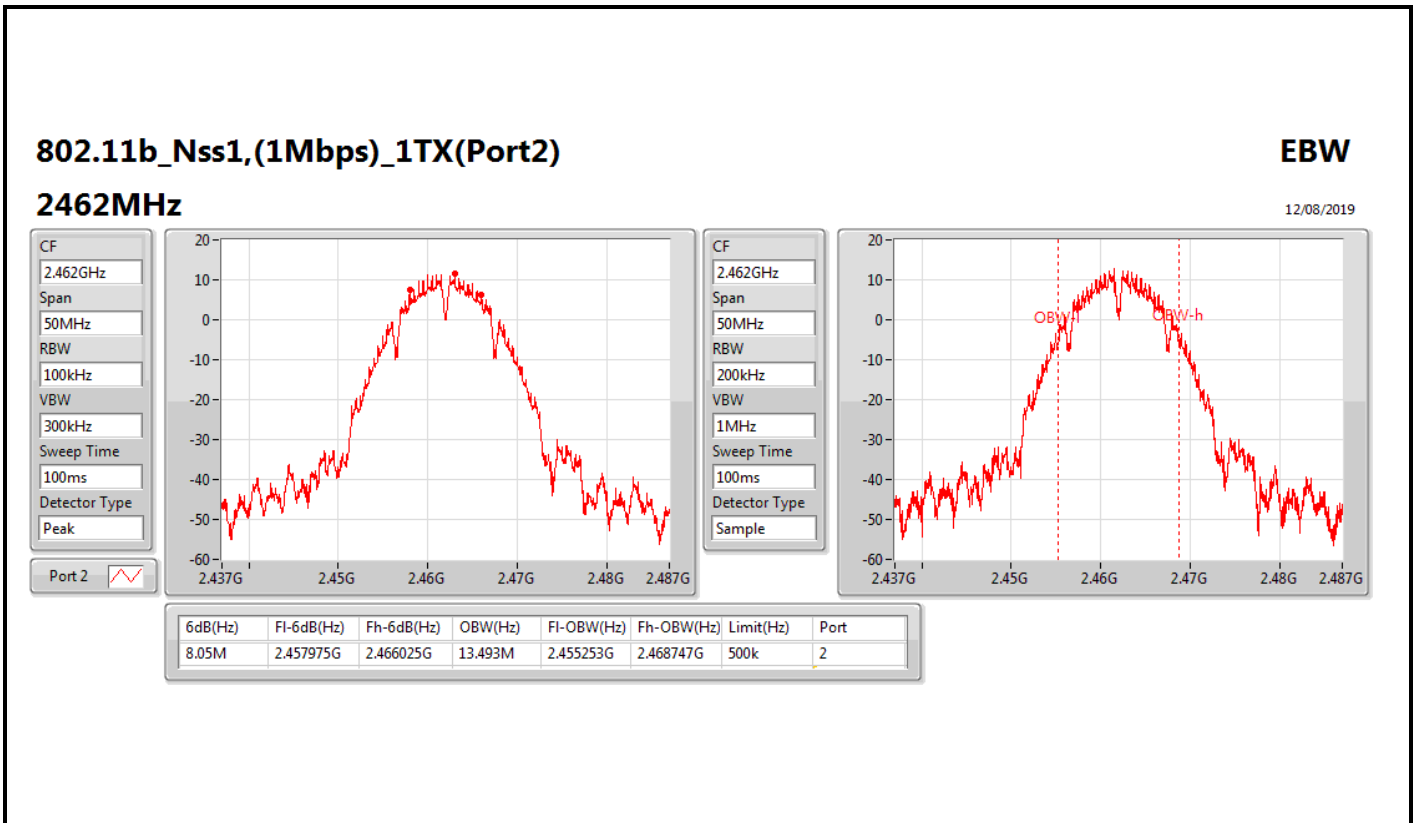
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			7.55M	13.043M
2437MHz_TnomVnom	Pass	500k			9.025M	15.467M
2462MHz_TnomVnom	Pass	500k			8.05M	13.493M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	7.05M	12.869M	7.55M	12.869M
2437MHz_TnomVnom	Pass	500k	7.05M	14.493M	9.575M	15.117M
2462MHz_TnomVnom	Pass	500k	7.075M	12.894M	7.075M	13.468M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			16.3M	16.417M
2437MHz_TnomVnom	Pass	500k			16.275M	19.89M
2462MHz_TnomVnom	Pass	500k			16.3M	16.417M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	16.325M	16.367M	16.325M	16.392M
2437MHz_TnomVnom	Pass	500k	16.275M	16.642M	15.575M	17.016M
2462MHz_TnomVnom	Pass	500k	16.3M	16.392M	16.3M	16.392M
VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			17.55M	17.591M
2437MHz_TnomVnom	Pass	500k			17.525M	18.941M
2462MHz_TnomVnom	Pass	500k			17.275M	17.616M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	17.525M	17.566M	17.575M	17.591M
2437MHz_TnomVnom	Pass	500k	16.15M	17.741M	17.5M	18.091M
2462MHz_TnomVnom	Pass	500k	17.55M	17.566M	17.55M	17.591M
VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k			36.05M	36.082M
2437MHz_TnomVnom	Pass	500k			36.05M	36.132M
2452MHz_TnomVnom	Pass	500k			36.05M	36.132M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	36.3M	36.032M	36.3M	36.082M
2437MHz_TnomVnom	Pass	500k	35.95M	36.032M	36.3M	36.182M
2452MHz_TnomVnom	Pass	500k	35.7M	36.082M	36.3M	36.032M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			18.925M	18.966M
2437MHz_TnomVnom	Pass	500k			18.675M	19.415M
2462MHz_TnomVnom	Pass	500k			18.75M	18.941M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	18.65M	18.891M	18.825M	18.941M
2437MHz_TnomVnom	Pass	500k	18.325M	18.991M	18.7M	19.14M
2462MHz_TnomVnom	Pass	500k	18.725M	18.841M	18.975M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k			37.05M	37.731M
2437MHz_TnomVnom	Pass	500k			37.55M	37.831M
2452MHz_TnomVnom	Pass	500k			37.65M	37.681M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	37.9M	37.681M	37.6M	37.681M
2437MHz_TnomVnom	Pass	500k	37.85M	37.631M	37.5M	37.781M
2452MHz_TnomVnom	Pass	500k	37.65M	37.681M	37.85M	37.681M

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



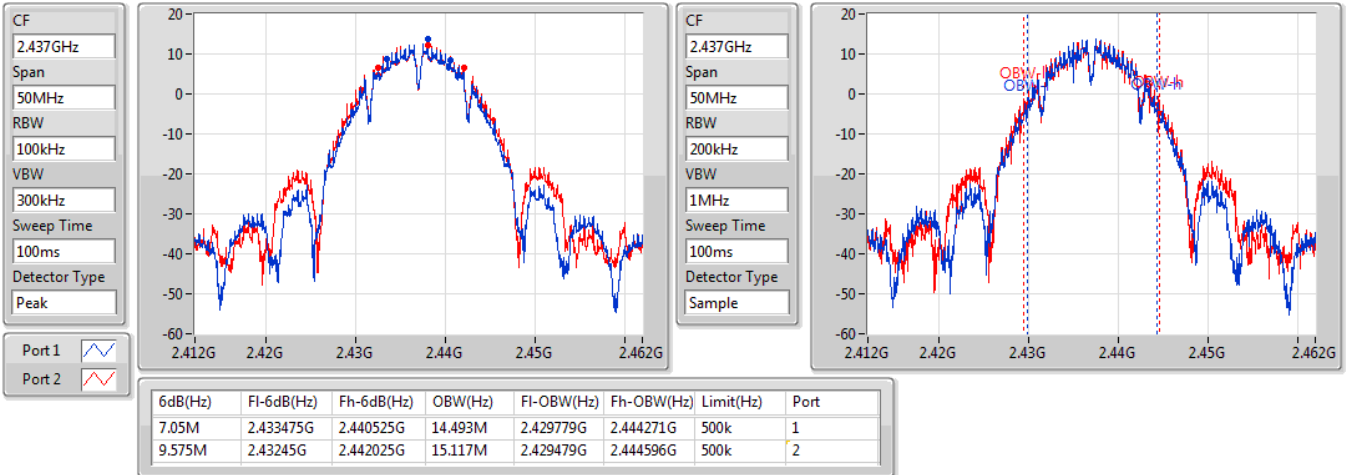


802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

12/08/2019

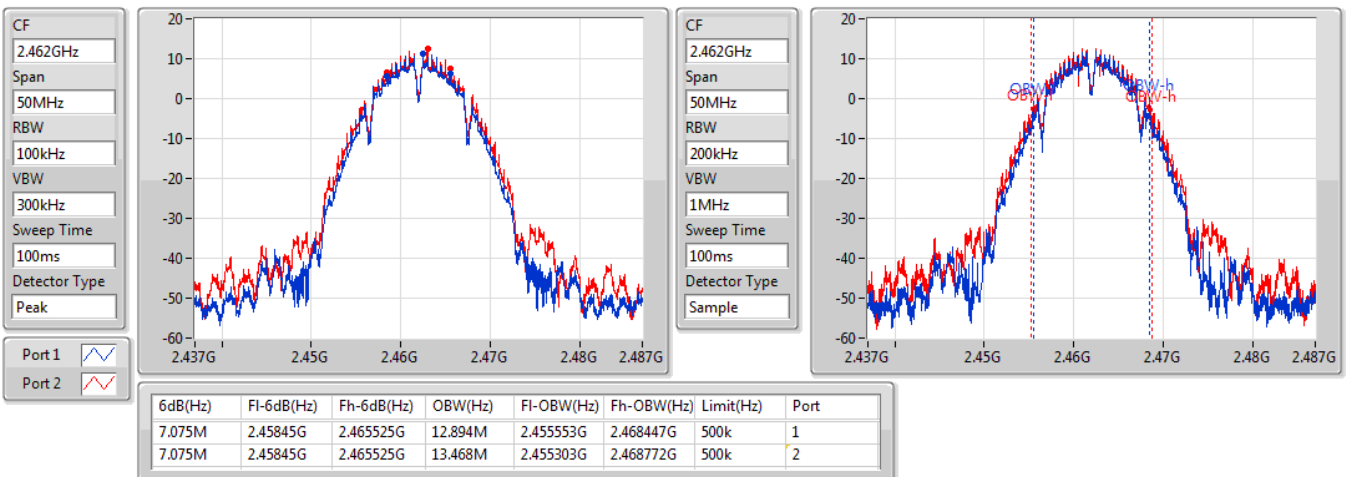


802.11b_Nss1,(1Mbps)_2TX

EBW

2462MHz

12/08/2019



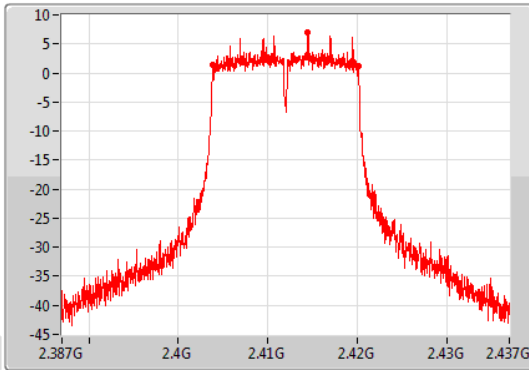
802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

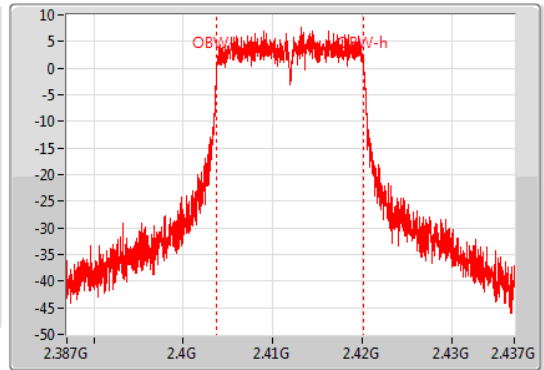
2412MHz

12/08/2019

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.40385G	2.42015G	16.417M	2.403779G	2.420196G	500k	2

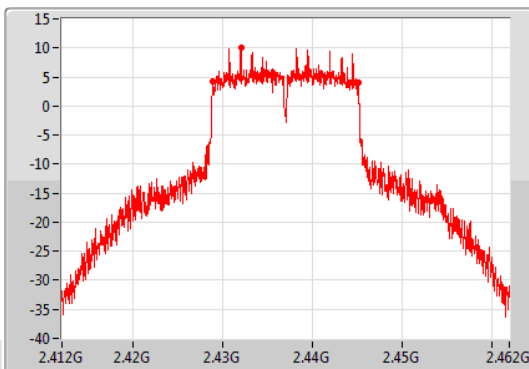
802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

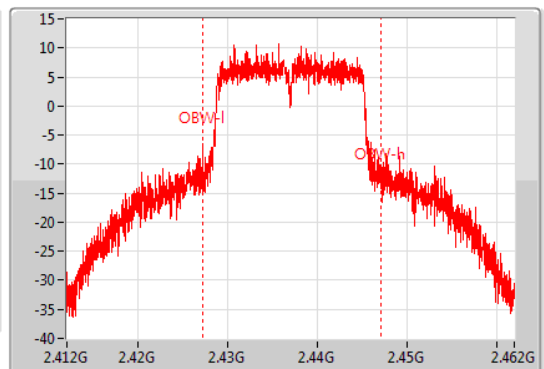
2437MHz

12/08/2019

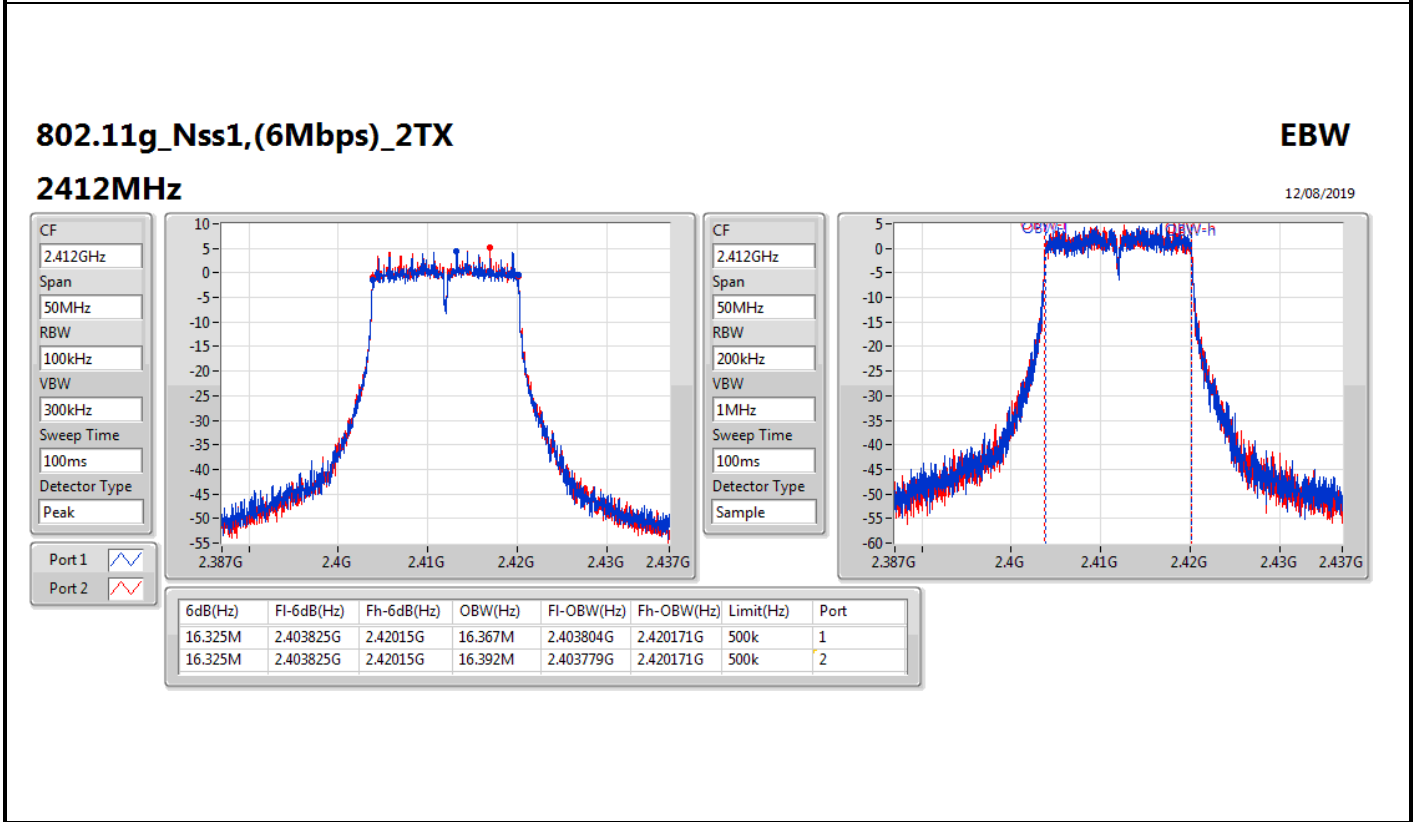
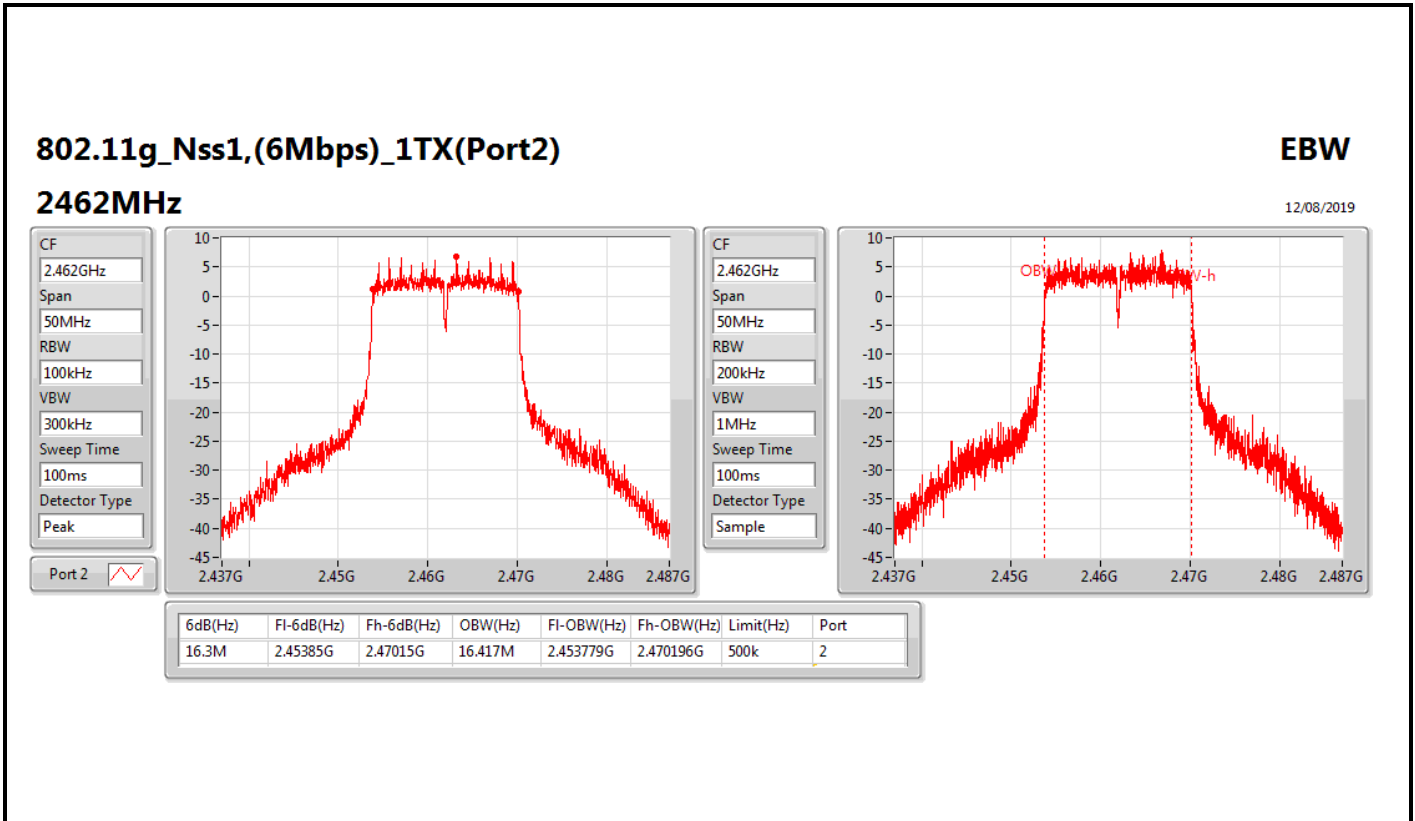
CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak
Port 2



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.42885G	2.445125G	19.89M	2.427205G	2.447095G	500k	2

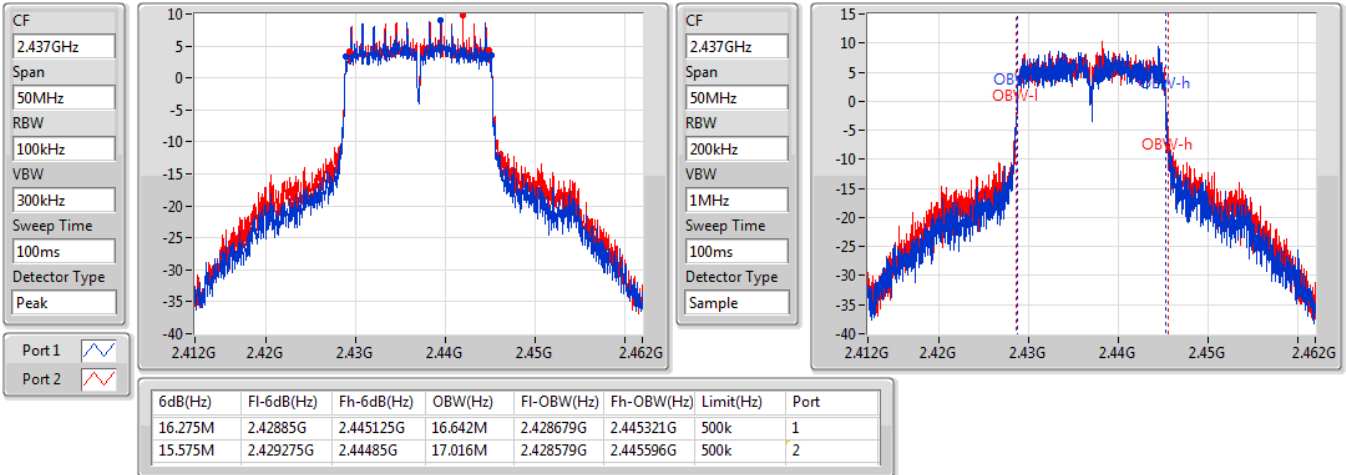


802.11g_Nss1,(6Mbps)_2TX

EBW

2437MHz

12/08/2019

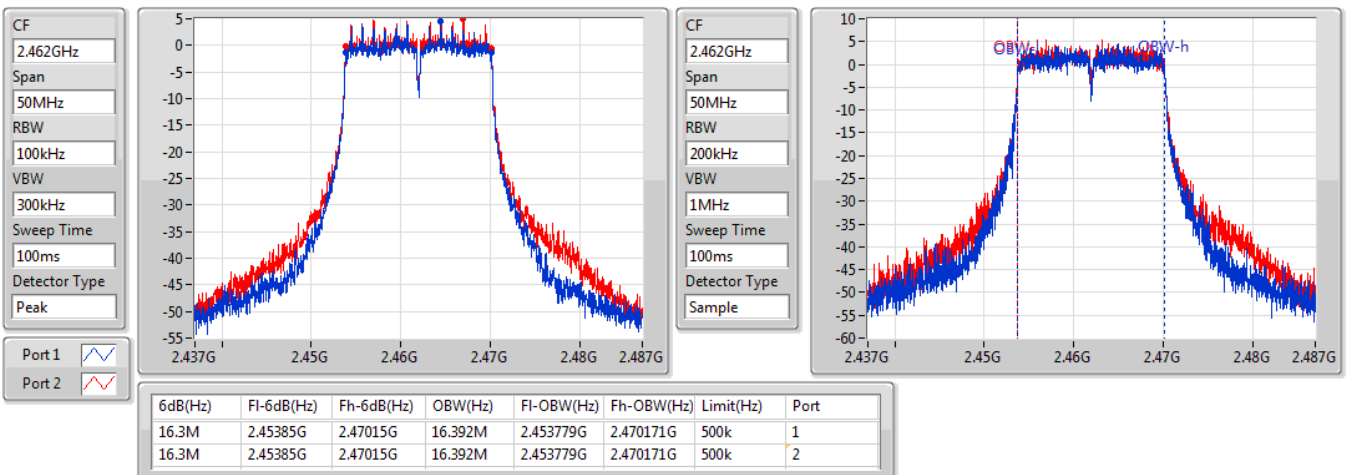


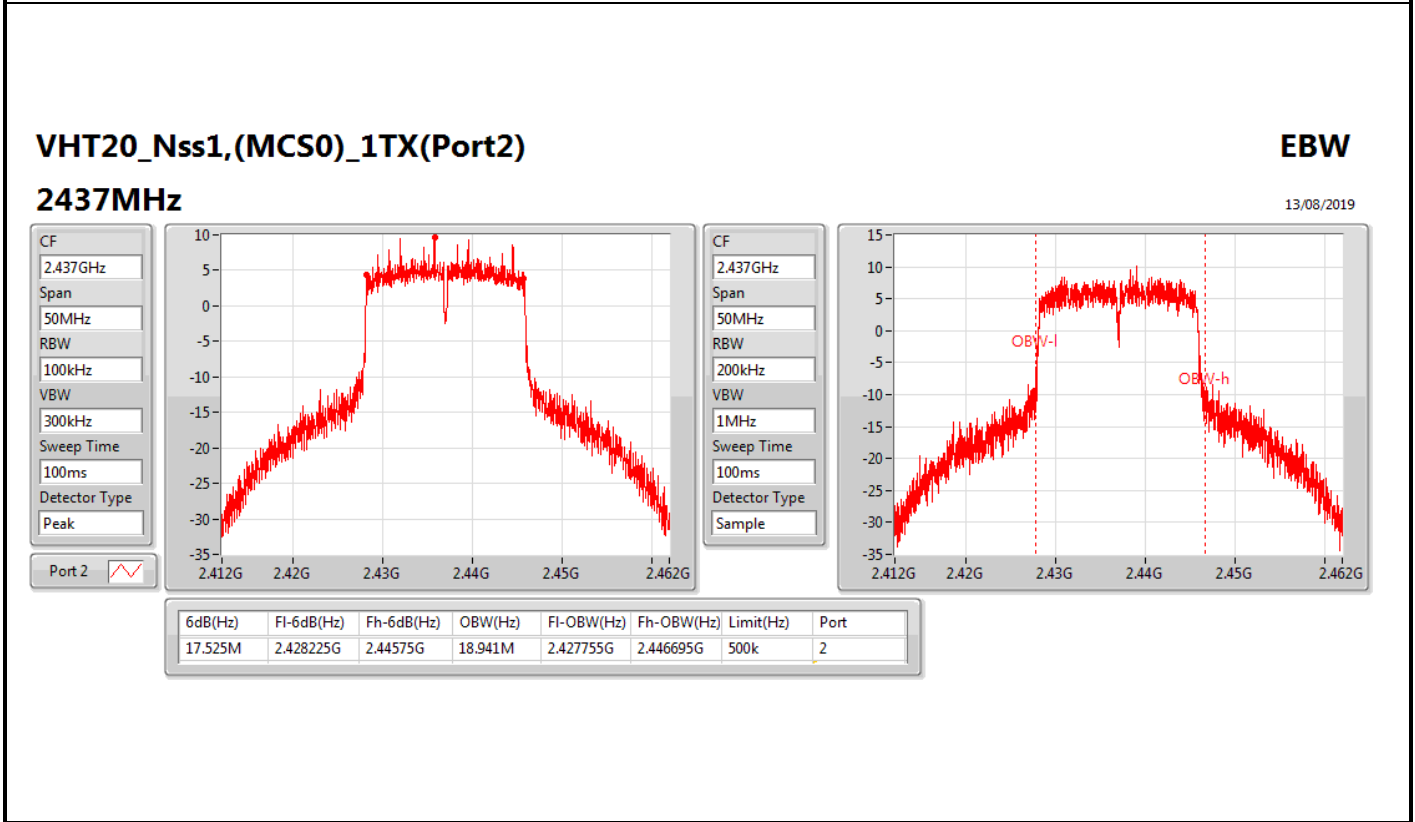
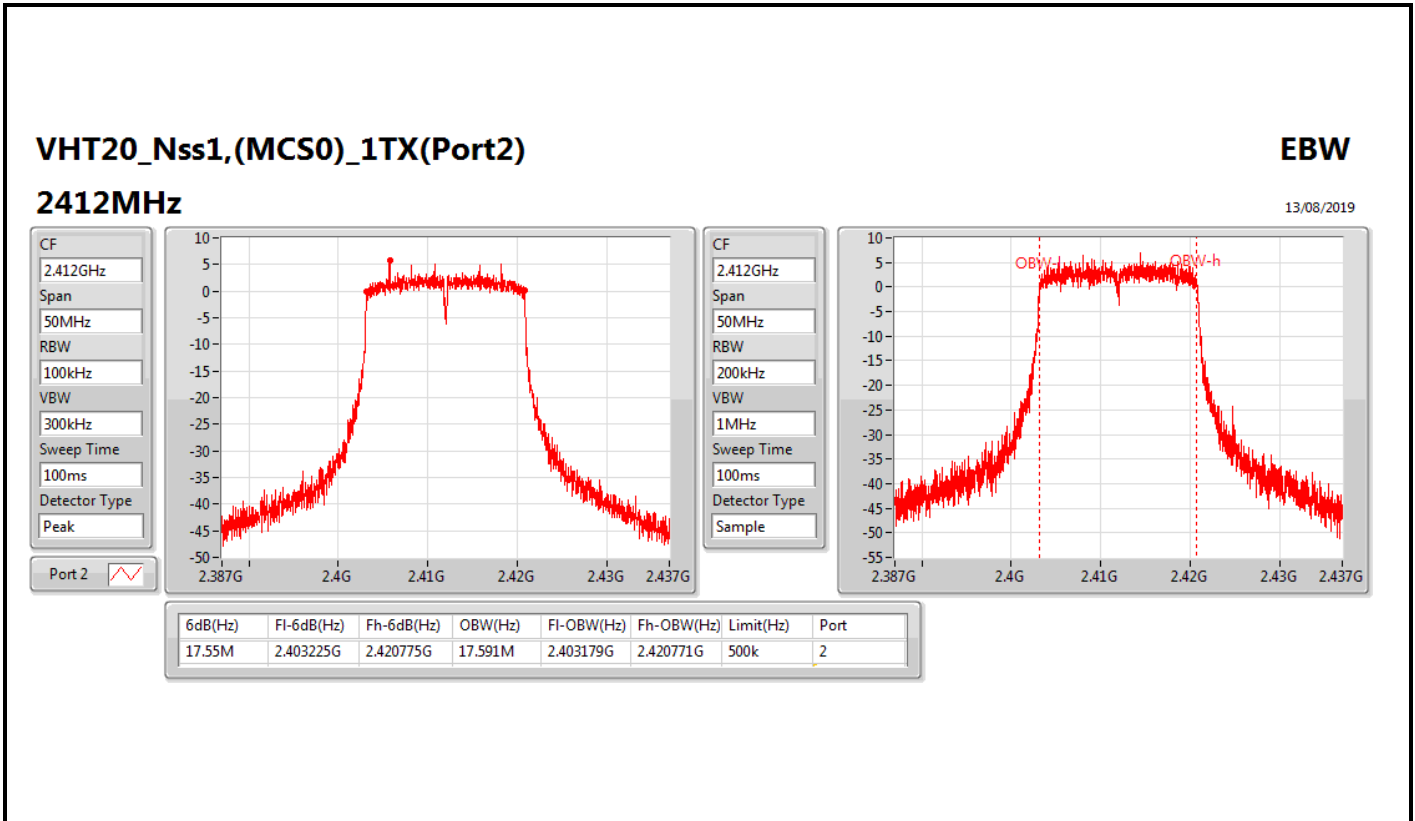
802.11g_Nss1,(6Mbps)_2TX

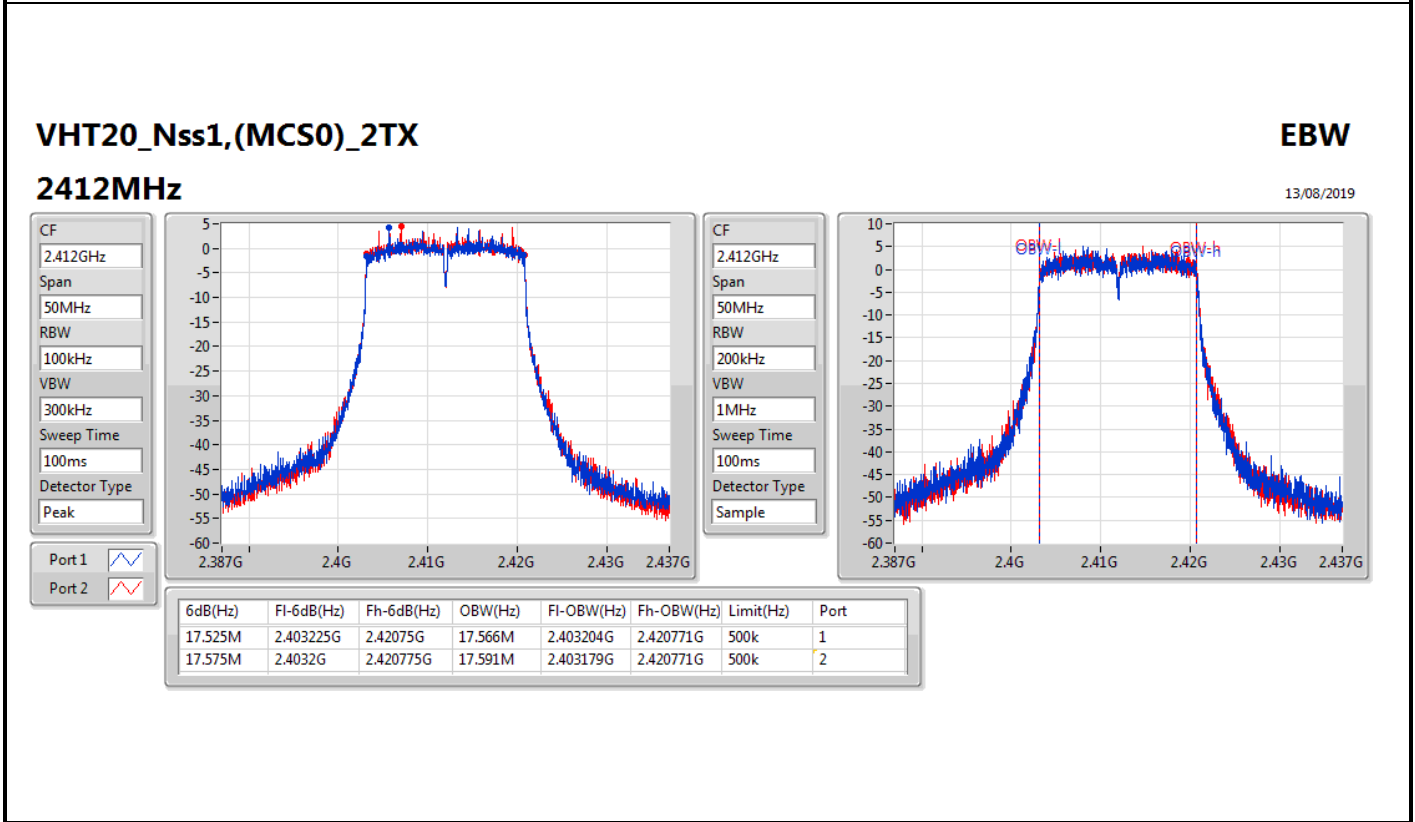
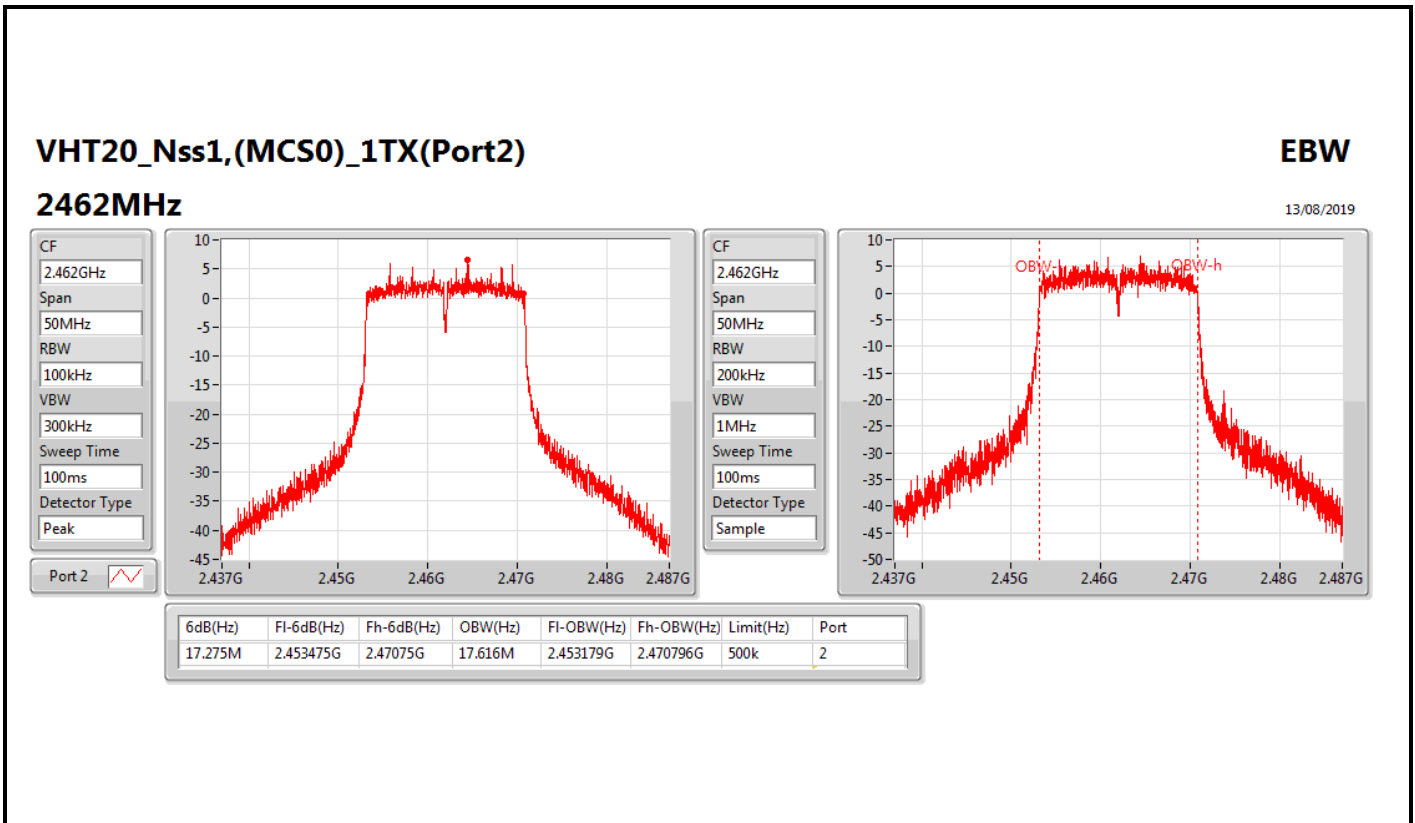
EBW

2462MHz

12/08/2019







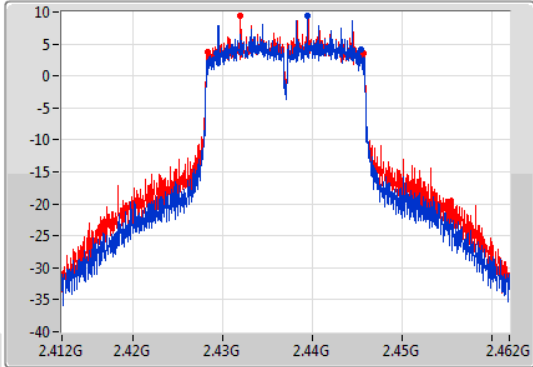
VHT20_Nss1,(MCS0)_2TX

EBW

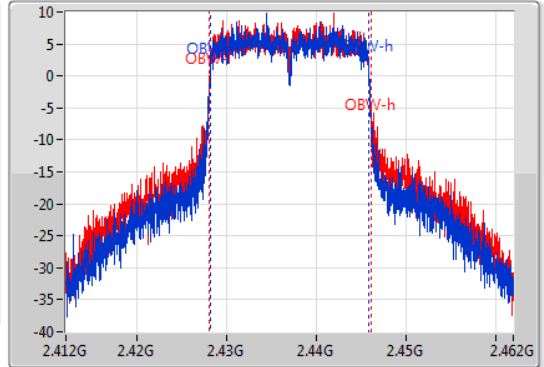
2437MHz

13/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.15M	2.429225G	2.445375G	17.741M	2.428129G	2.445871G	500k	1
17.5M	2.42825G	2.44575G	18.091M	2.42798G	2.44607G	500k	2

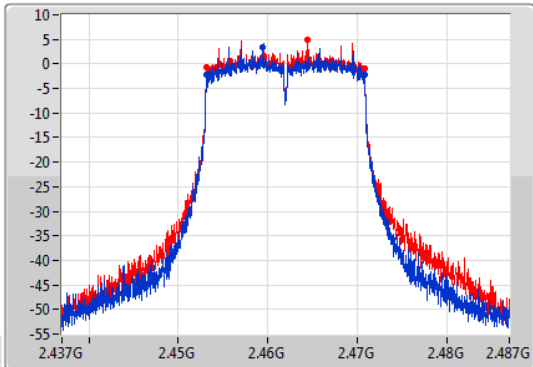
VHT20_Nss1,(MCS0)_2TX

EBW

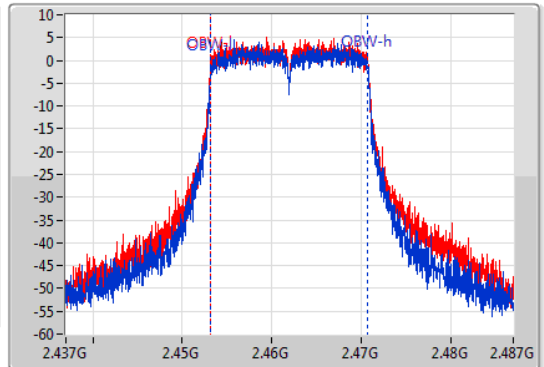
2462MHz

13/08/2019

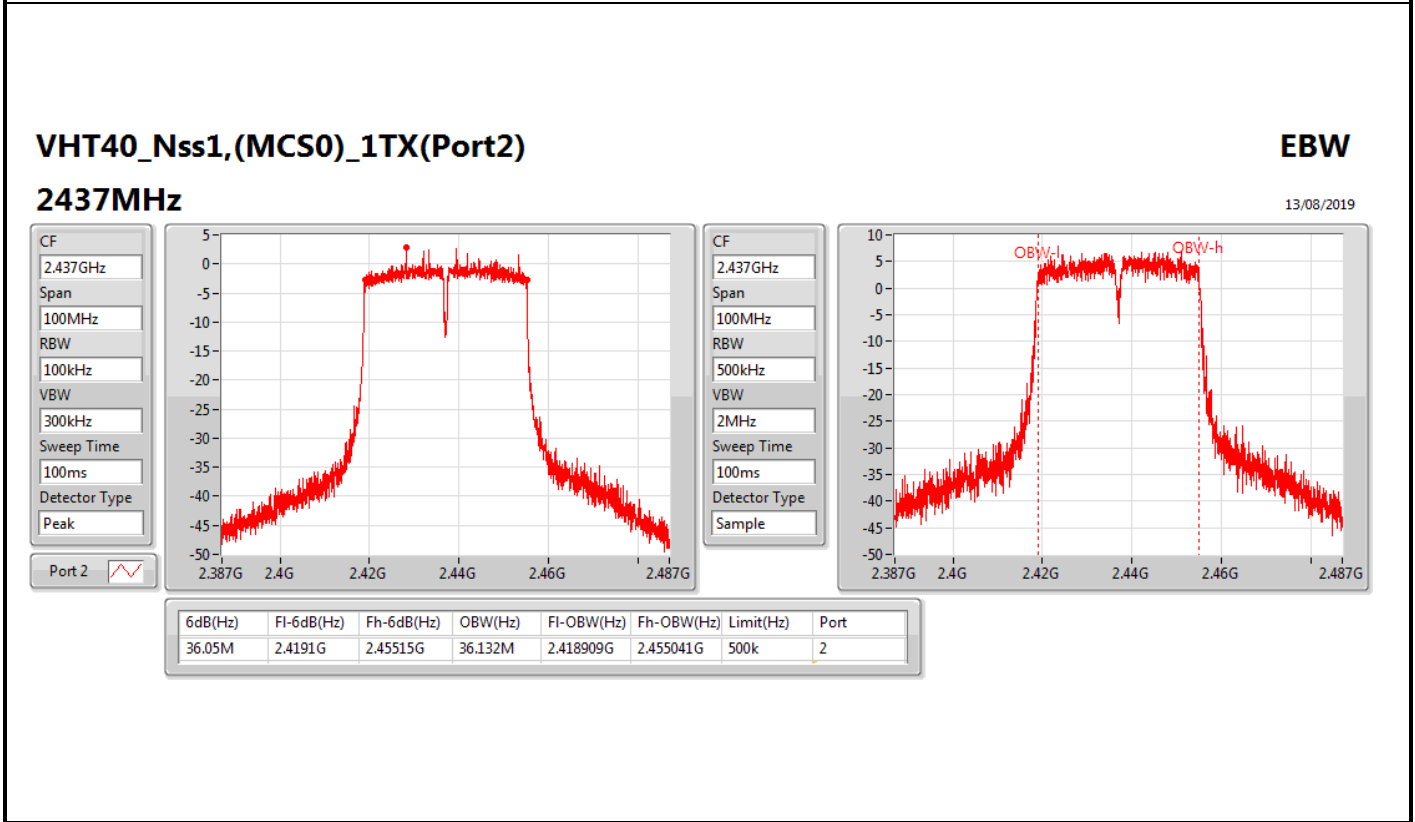
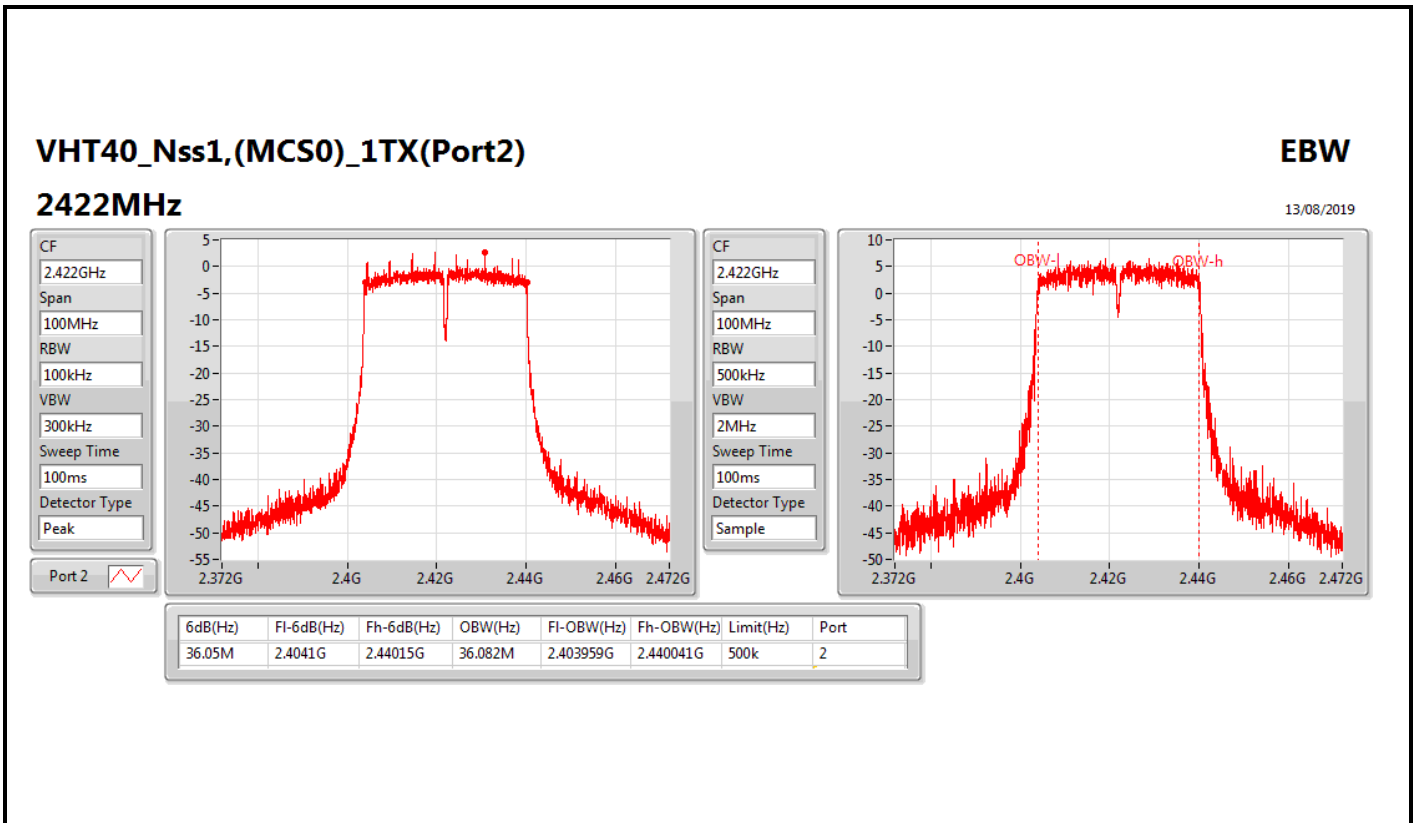
CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak

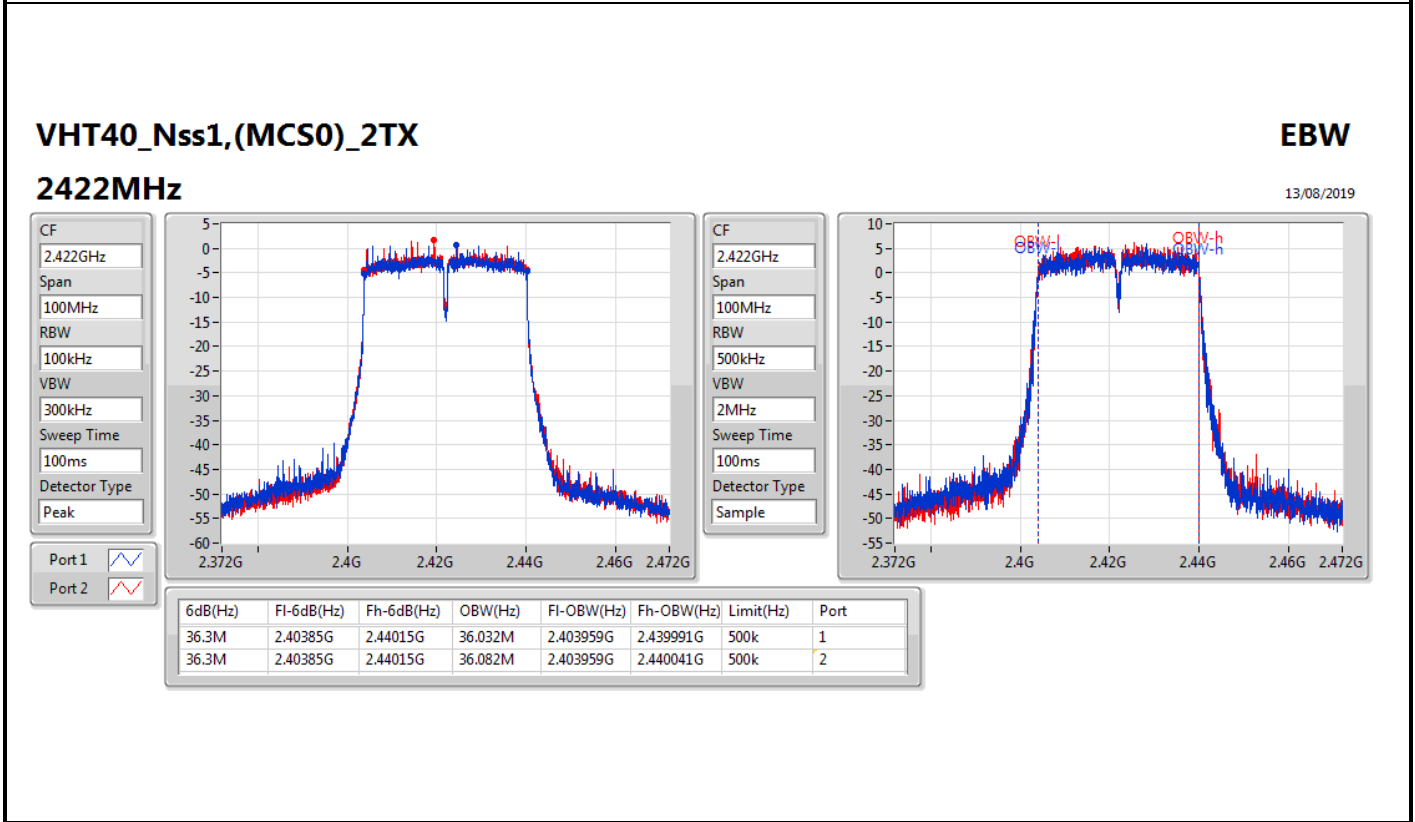
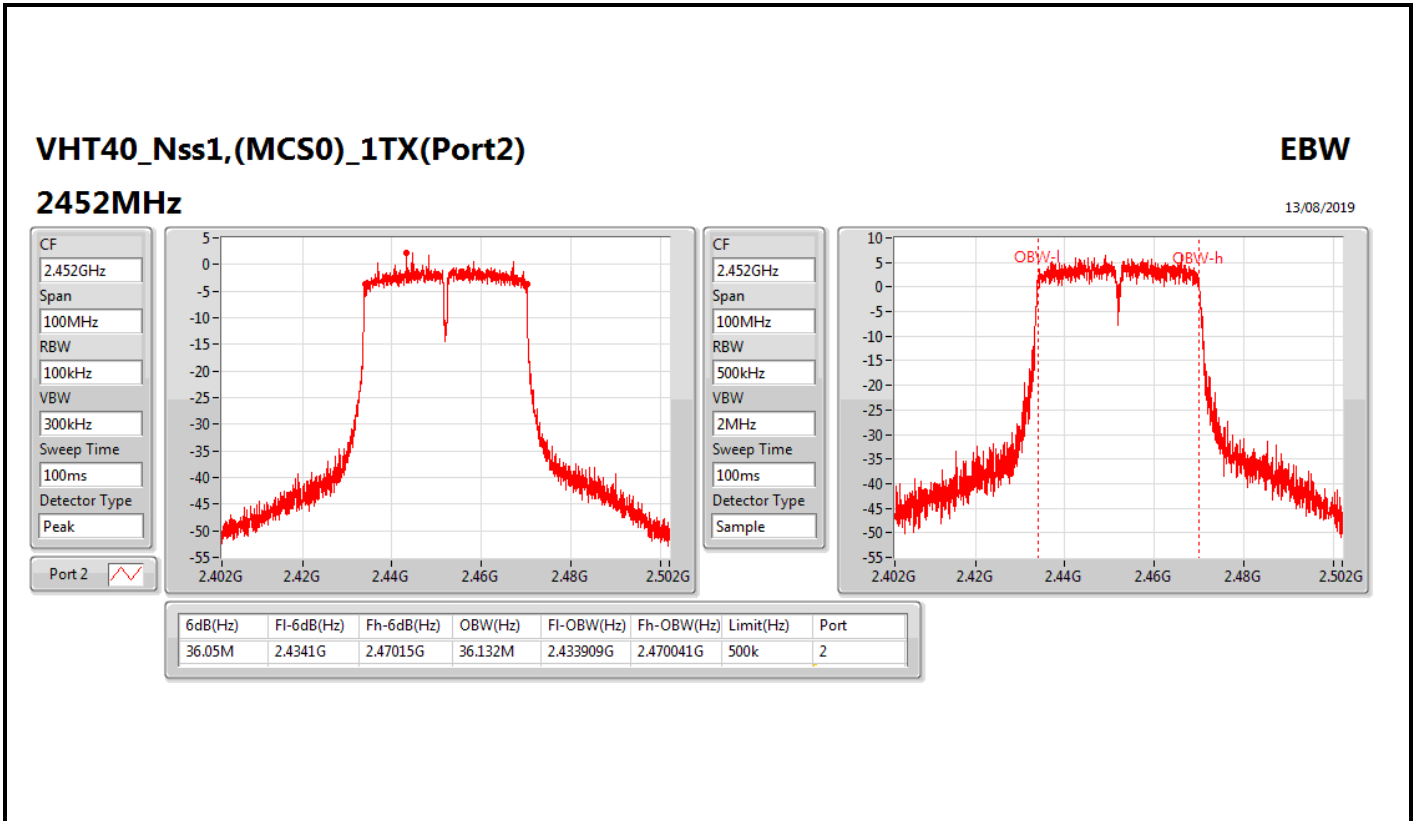


CF
2.462GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



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	17.566M	2.453204G	2.470771G	500k	1
17.55M	2.453225G	2.470775G	17.591M	2.453179G	2.470771G	500k	2





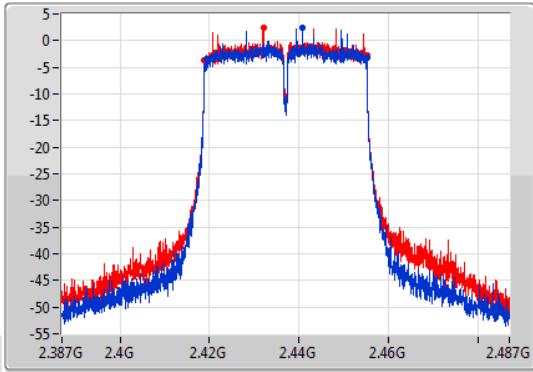
VHT40_Nss1,(MCS0)_2TX

EBW

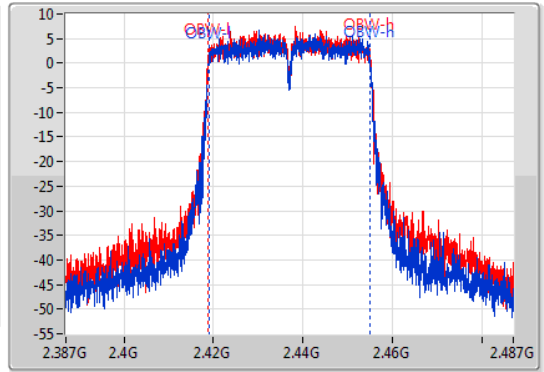
2437MHz

13/08/2019

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.95M	2.4192G	2.45515G	36.032M	2.418959G	2.454991G	500k	1
36.3M	2.41885G	2.45515G	36.182M	2.418859G	2.455041G	500k	2

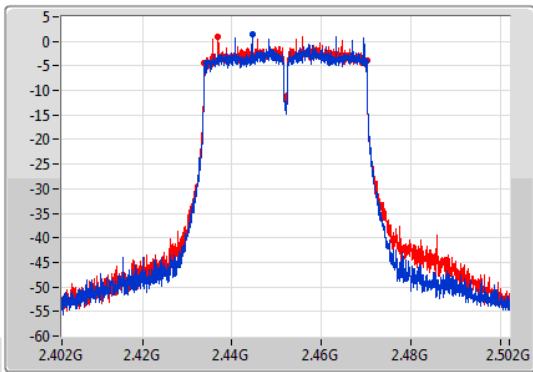
VHT40_Nss1,(MCS0)_2TX

EBW

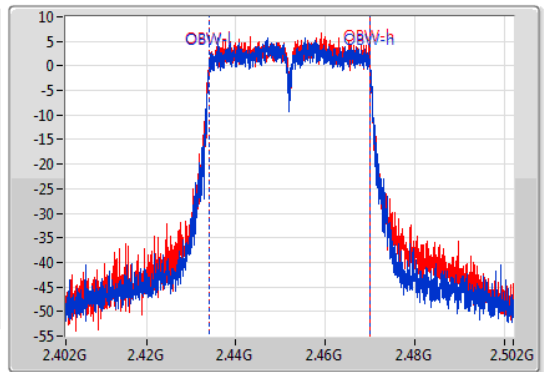
2452MHz

13/08/2019

CF
2.452GHz
Span
100MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak
Port 1
Port 2



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



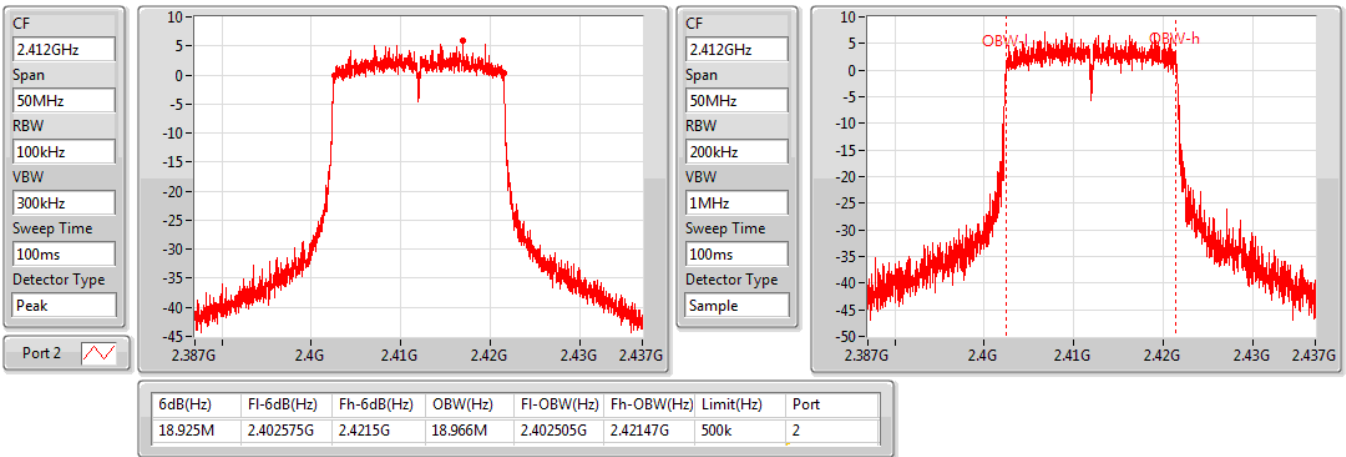
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.7M	2.4344G	2.4701G	36.082M	2.433959G	2.470041G	500k	1
36.3M	2.43385G	2.47015G	36.032M	2.433959G	2.469991G	500k	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2412MHz

12/08/2019

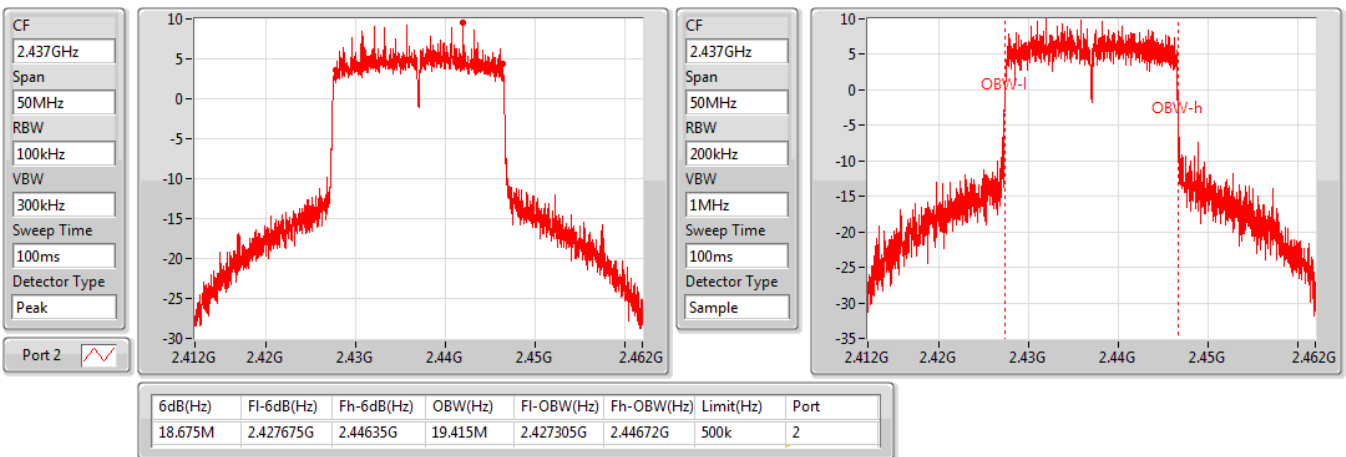


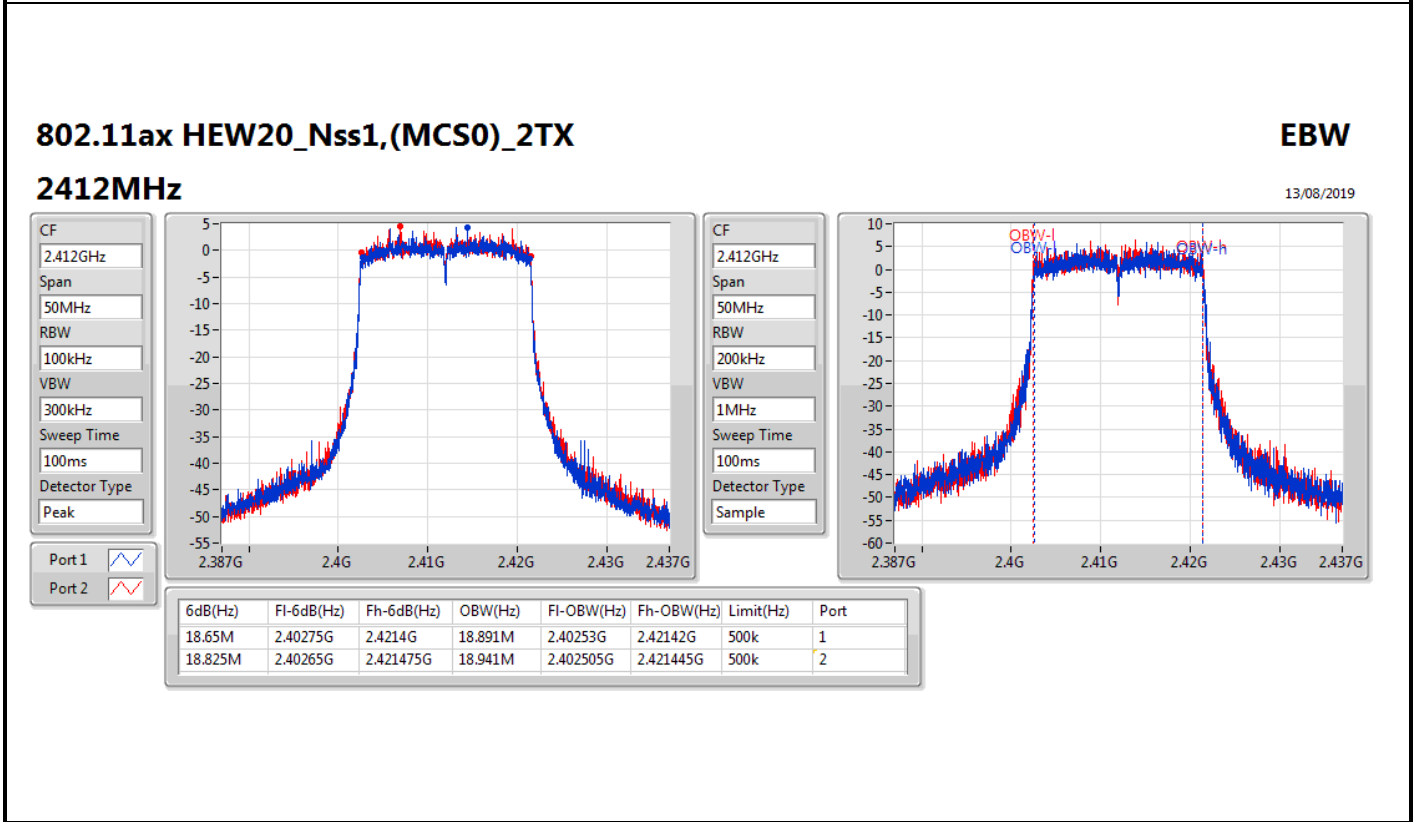
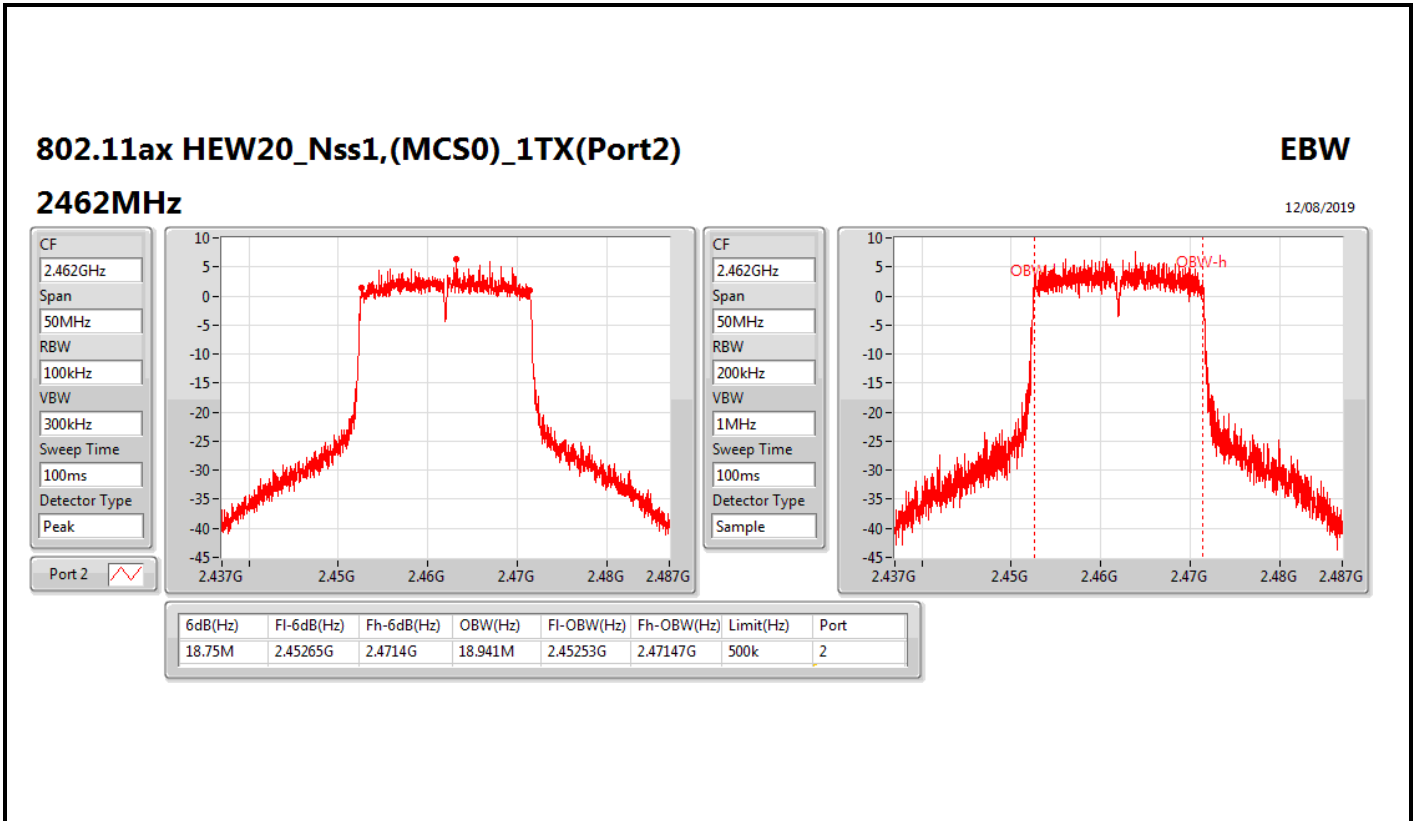
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

12/08/2019



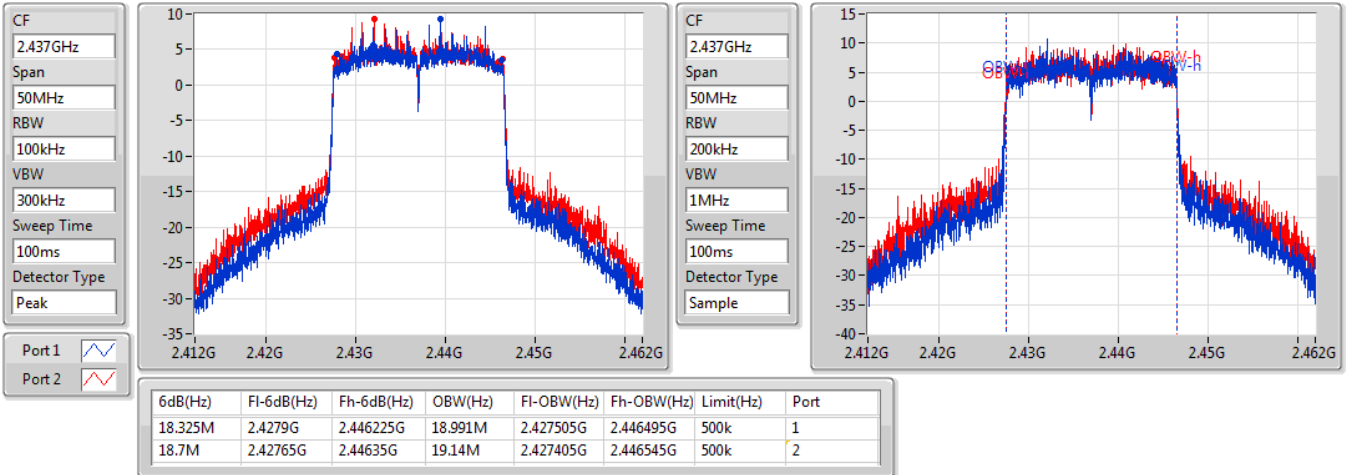


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

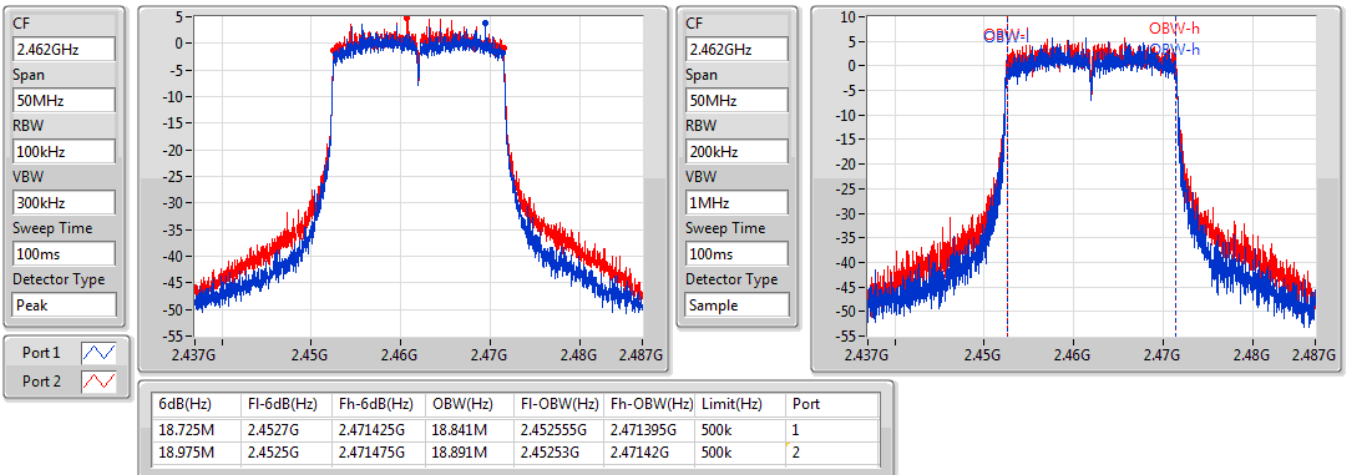


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2462MHz

13/08/2019

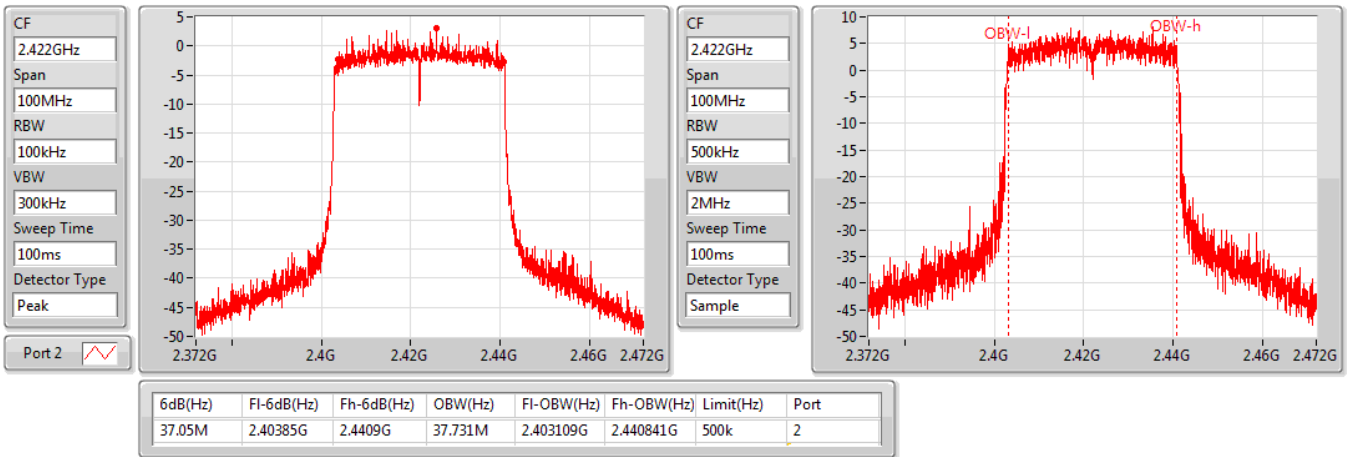


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2422MHz

13/08/2019

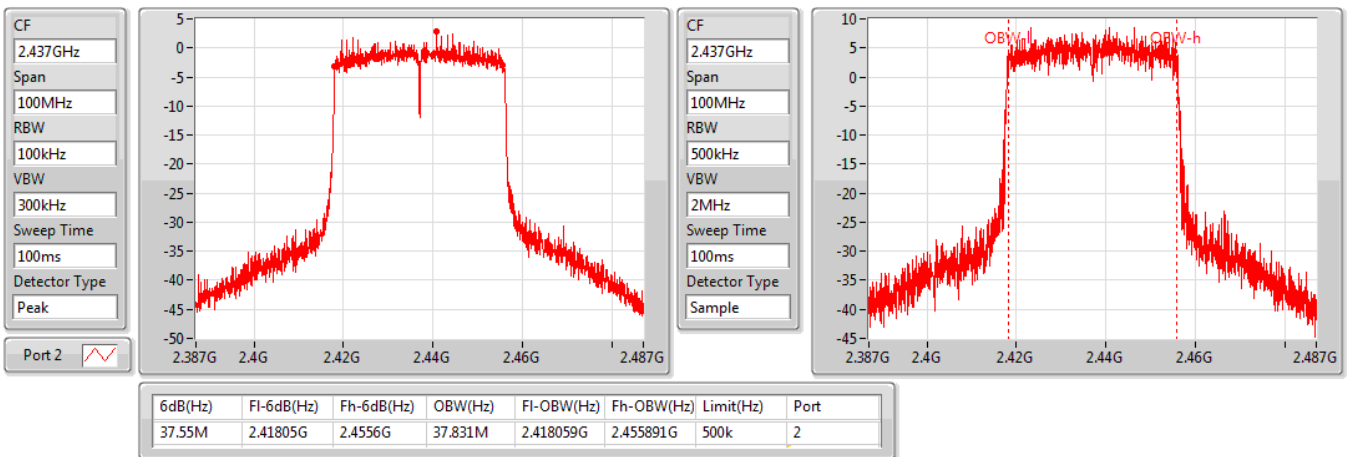


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

13/08/2019

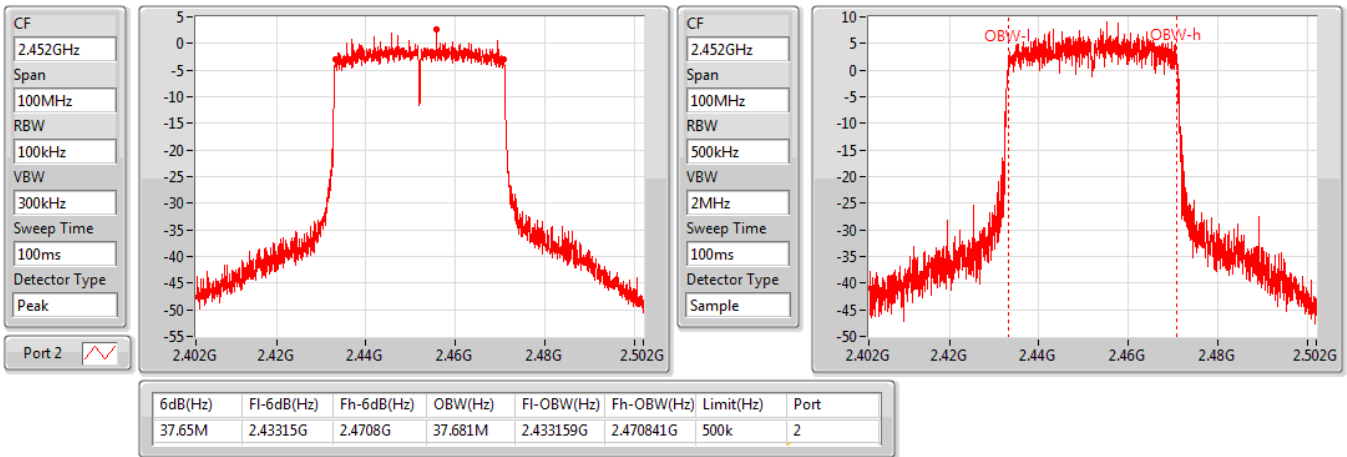


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2452MHz

13/08/2019

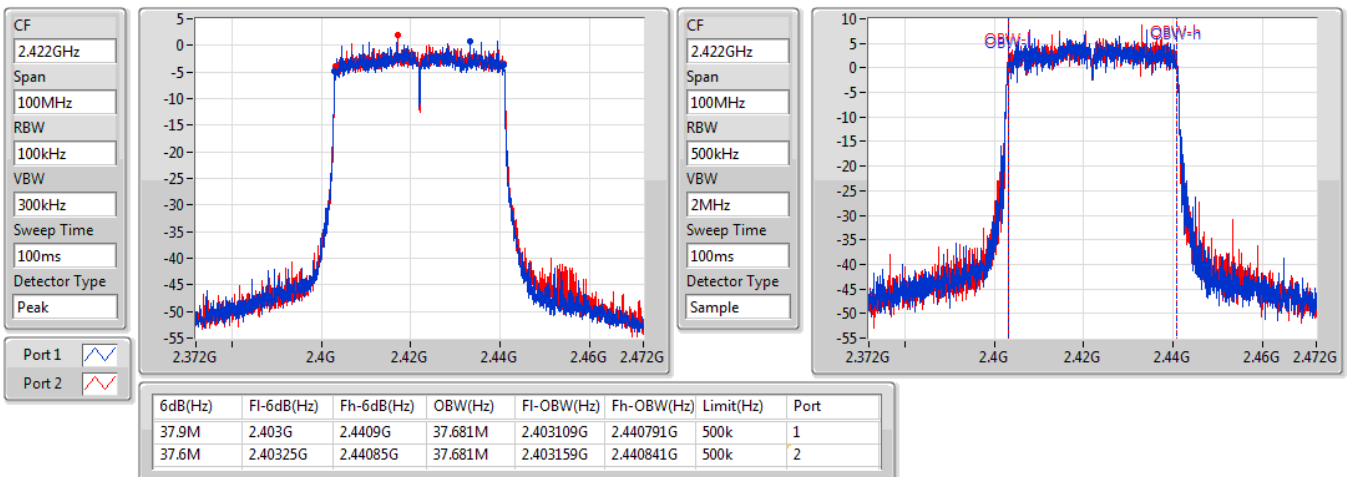


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2422MHz

13/08/2019

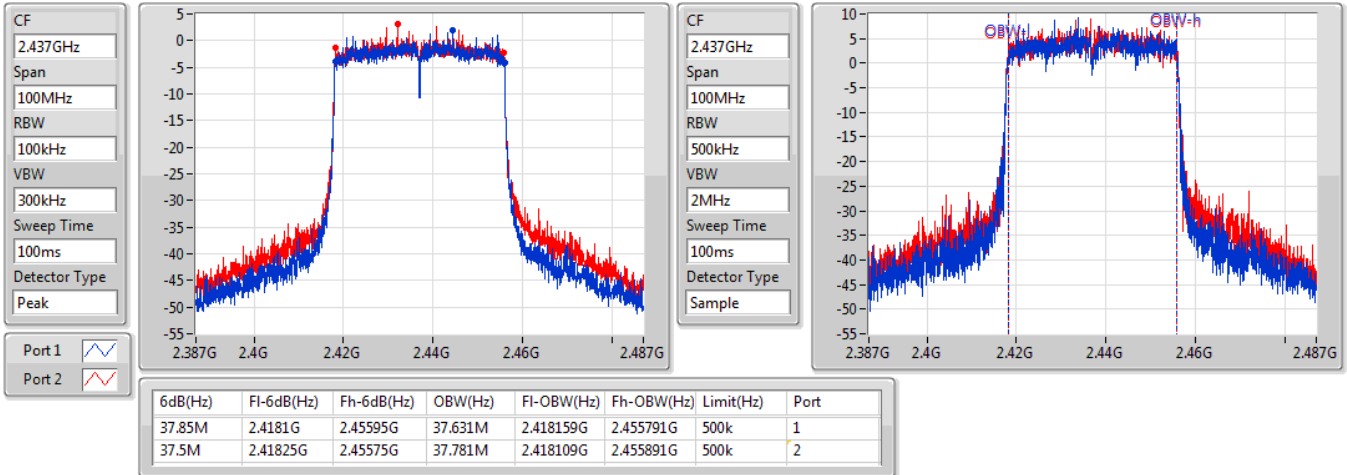


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

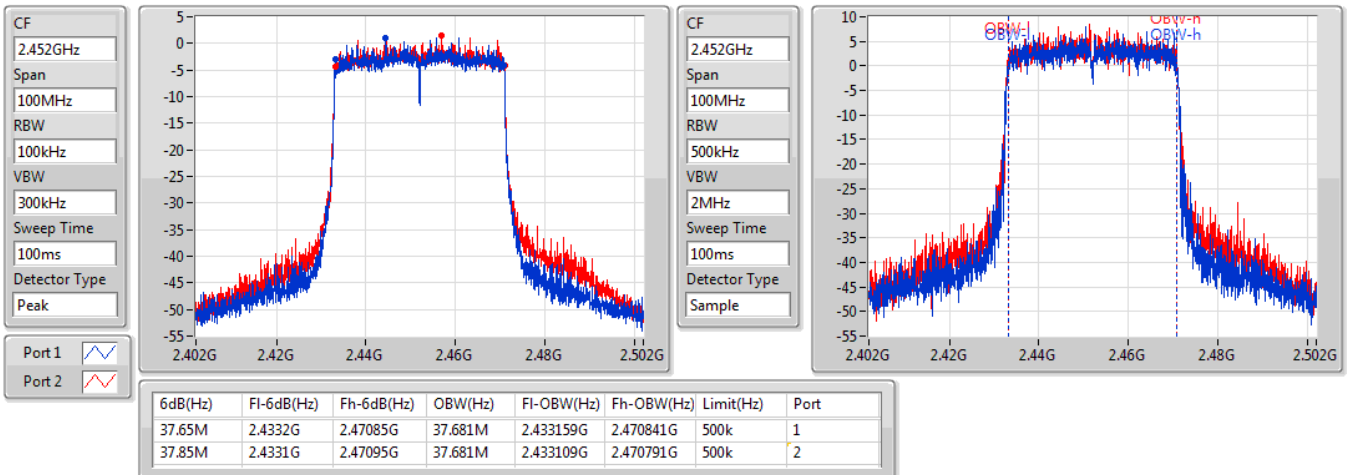


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2452MHz

13/08/2019





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(Port2)	8.525M	13.743M	13M7G1D	7.975M	12.894M
802.11b_Nss1,(1Mbps)_2TX	8.025M	13.068M	13M1G1D	7.55M	12.794M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.325M	16.517M	16M5D1D	16.3M	16.367M
802.11g_Nss1,(6Mbps)_2TX	16.325M	16.442M	16M4D1D	16.275M	16.392M
VHT20_Nss1,(MCS0)_1TX(Port2)	17.55M	17.616M	17M6D1D	17.5M	17.591M
VHT20_Nss1,(MCS0)_2TX	17.575M	17.616M	17M6D1D	16.775M	17.566M
VHT40_Nss1,(MCS0)_1TX(Port2)	36.3M	36.082M	36M1D1D	36.05M	36.082M
VHT40_Nss1,(MCS0)_2TX	36.3M	36.132M	36M1D1D	35.35M	36.032M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.925M	18.916M	18M9D1D	18.775M	18.891M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.925M	18.941M	18M9D1D	18.7M	18.866M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.95M	37.781M	37M8D1D	37.9M	37.681M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.8M	37.781M	37M8D1D	37.4M	37.631M

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)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			7.975M	12.894M
2417MHz						
2437MHz	Pass	500k			8.525M	13.743M
2457MHz						
2462MHz	Pass	500k			8.525M	13.143M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.575M	12.919M	7.55M	12.794M
2417MHz						
2437MHz	Pass	500k	7.975M	13.043M	8.025M	12.844M
2457MHz						
2462MHz	Pass	500k	8.025M	13.068M	7.55M	12.894M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			16.3M	16.367M
2417MHz						
2437MHz	Pass	500k			16.325M	16.517M
2457MHz						
2462MHz	Pass	500k			16.325M	16.367M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.392M	16.3M	16.392M
2417MHz						
2437MHz	Pass	500k	16.325M	16.417M	16.275M	16.442M
2457MHz						
2462MHz	Pass	500k	16.3M	16.417M	16.325M	16.392M
VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			17.55M	17.616M
2417MHz						
2437MHz	Pass	500k			17.5M	17.591M
2457MHz						
2462MHz	Pass	500k			17.525M	17.591M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.55M	17.566M	17.275M	17.591M
2417MHz						
2437MHz	Pass	500k	16.775M	17.616M	16.9M	17.591M
2457MHz						
2462MHz	Pass	500k	17.25M	17.566M	17.575M	17.566M
VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			36.05M	36.082M
2427MHz						
2437MHz	Pass	500k			36.05M	36.082M
2447MHz						
2452MHz	Pass	500k			36.3M	36.082M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.45M	36.032M	35.75M	36.132M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
2427MHz						
2437MHz	Pass	500k	36.3M	36.082M	35.9M	36.082M
2447MHz						
2452MHz	Pass	500k	35.35M	36.132M	36.05M	36.082M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			18.925M	18.916M
2417MHz						
2437MHz	Pass	500k			18.8M	18.916M
2457MHz						
2462MHz	Pass	500k			18.775M	18.891M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.725M	18.941M	18.775M	18.916M
2417MHz						
2437MHz	Pass	500k	18.7M	18.866M	18.925M	18.941M
2457MHz						
2462MHz	Pass	500k	18.825M	18.891M	18.925M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			37.9M	37.731M
2427MHz						
2437MHz	Pass	500k			37.9M	37.781M
2447MHz						
2452MHz	Pass	500k			37.95M	37.681M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.4M	37.681M	37.6M	37.631M
2427MHz						
2437MHz	Pass	500k	37.8M	37.681M	37.6M	37.681M
2447MHz						
2452MHz	Pass	500k	37.75M	37.681M	37.8M	37.781M

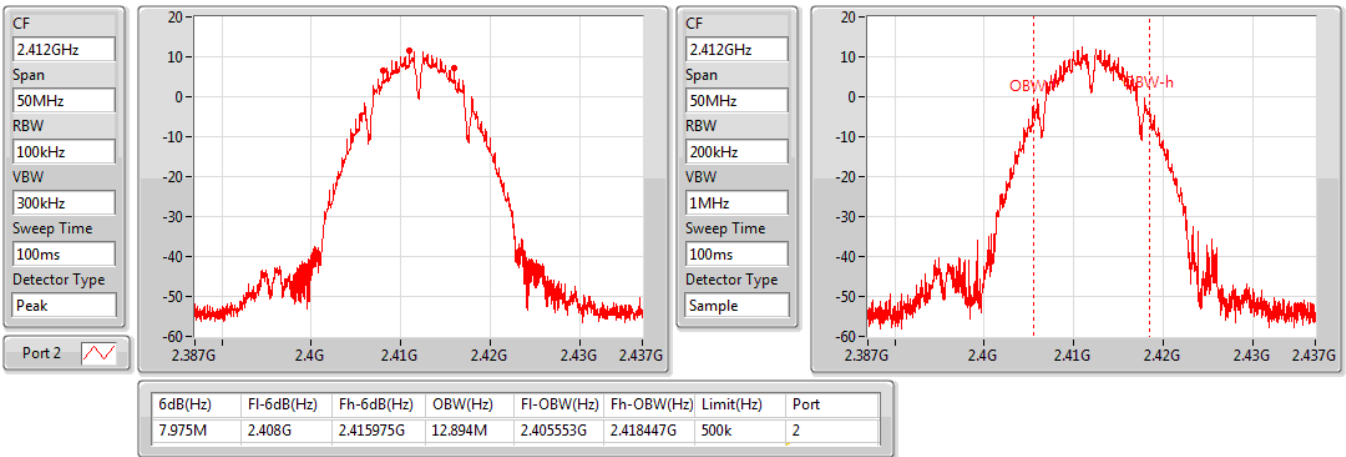
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2412MHz

13/08/2019

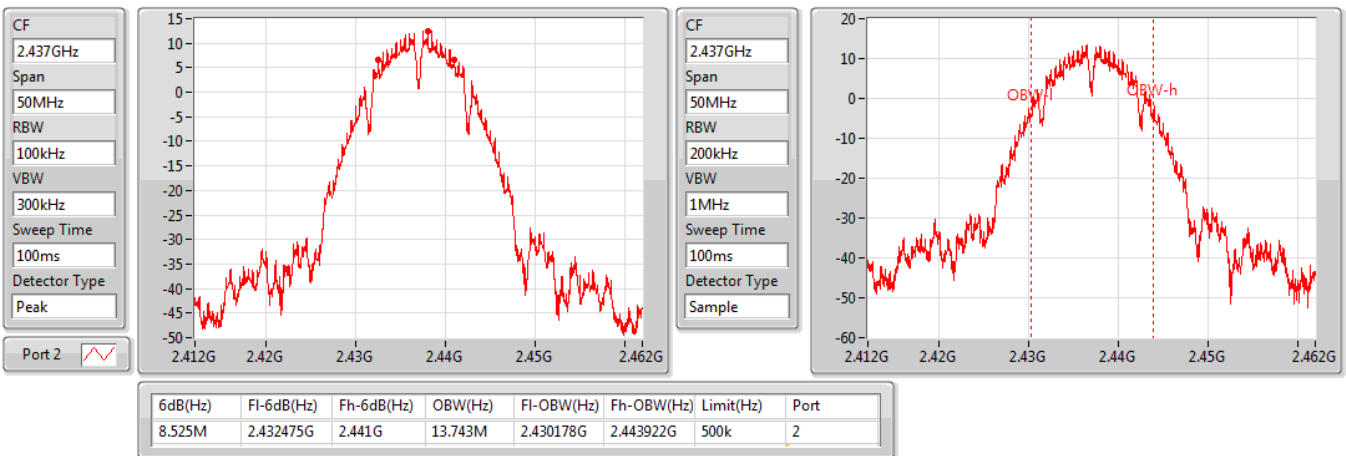


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2437MHz

13/08/2019

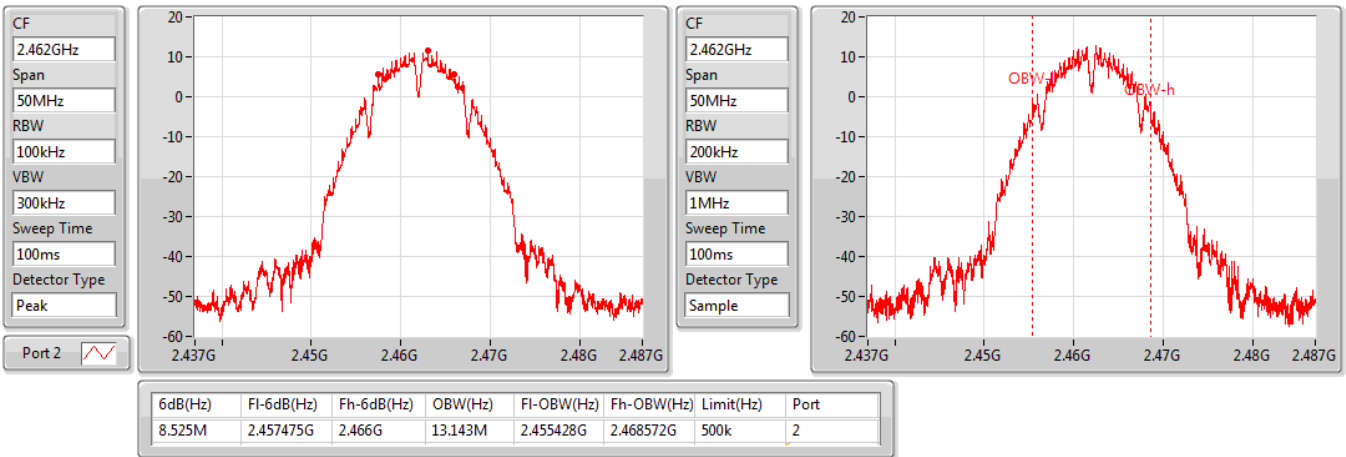


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2462MHz

13/08/2019

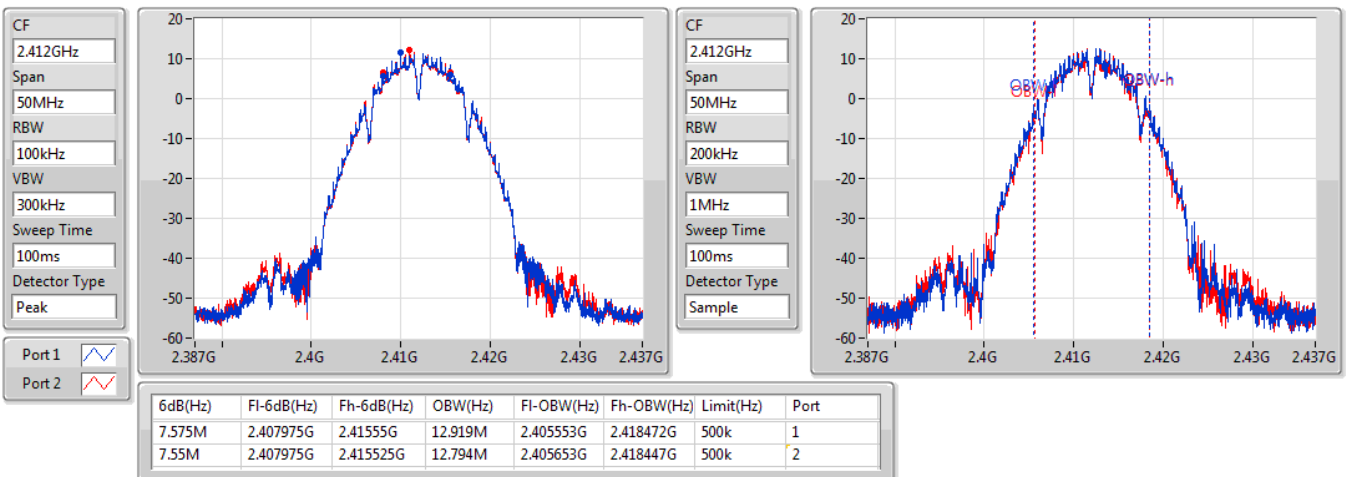


802.11b_Nss1,(1Mbps)_2TX

EBW

2412MHz

13/08/2019

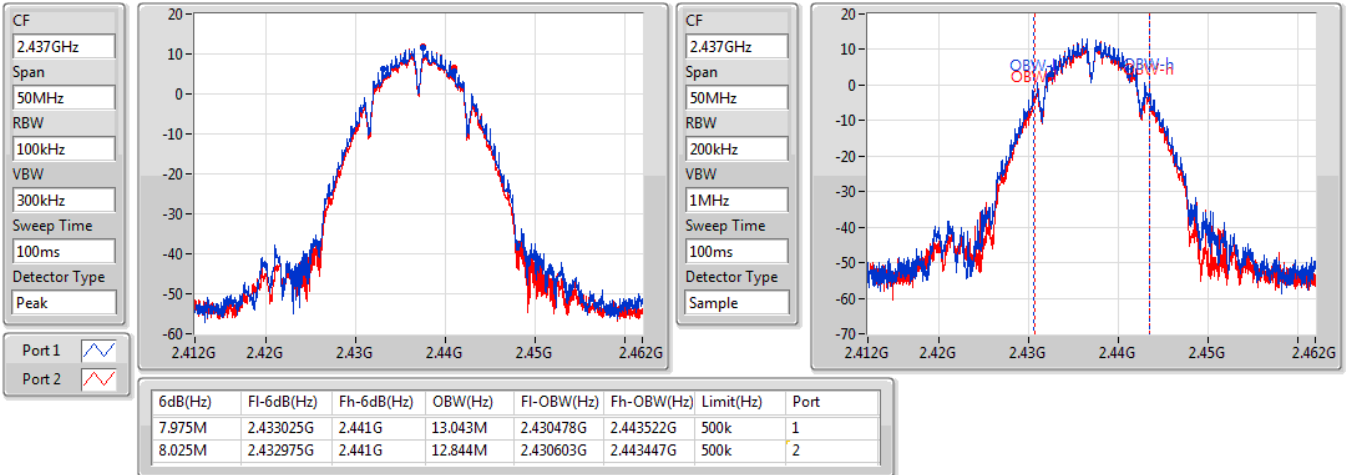


802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

13/08/2019

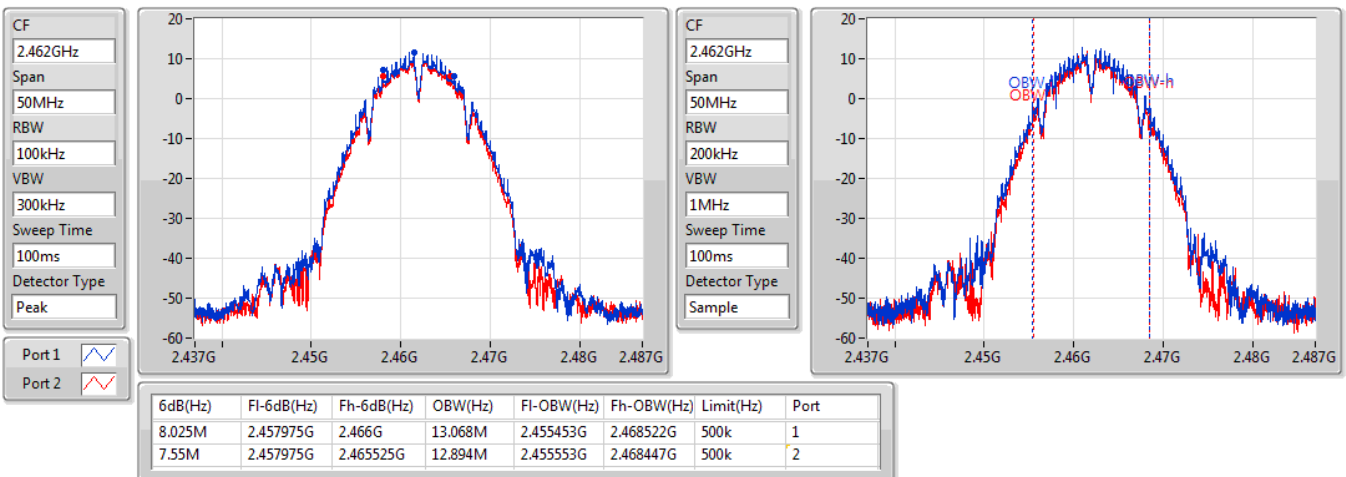


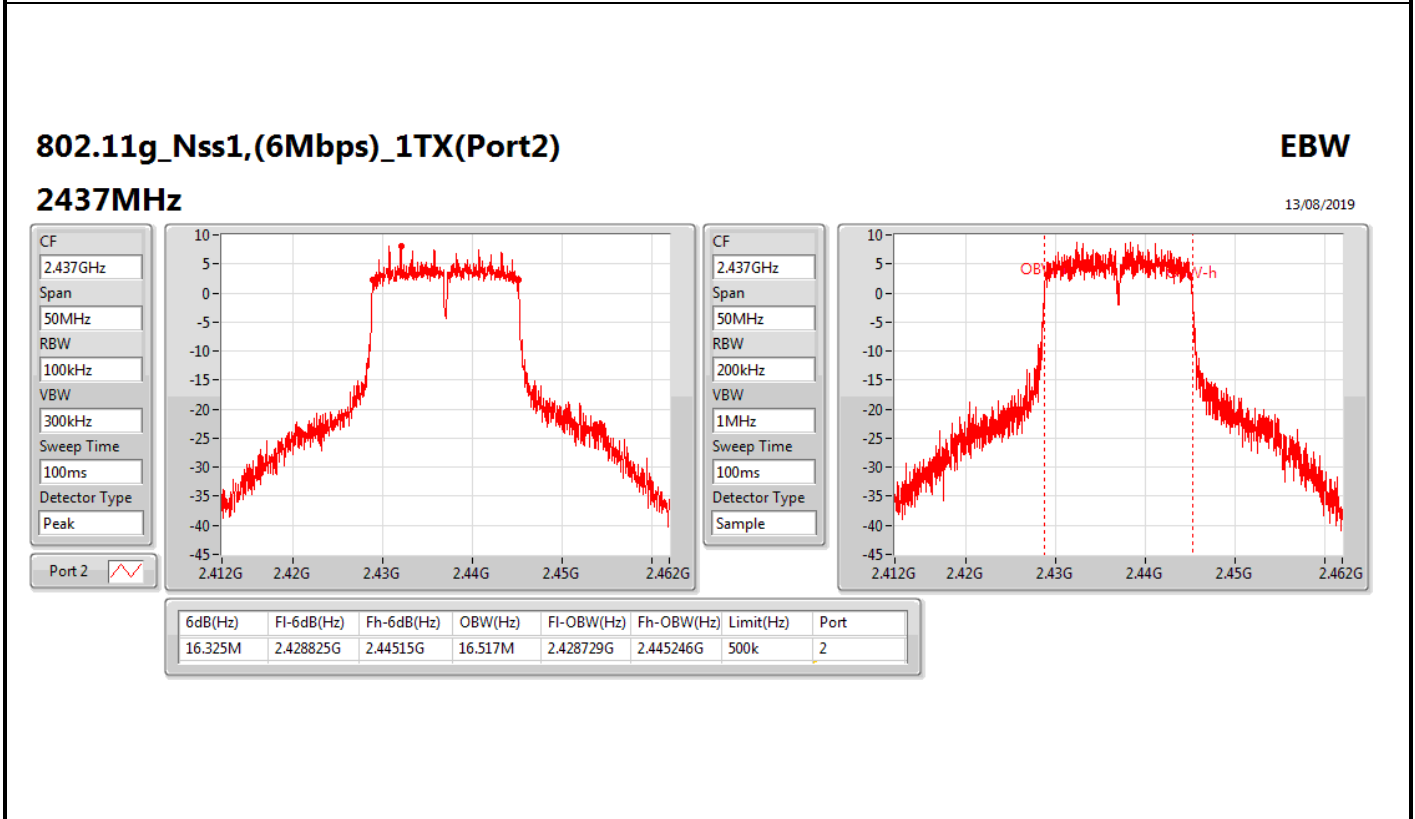
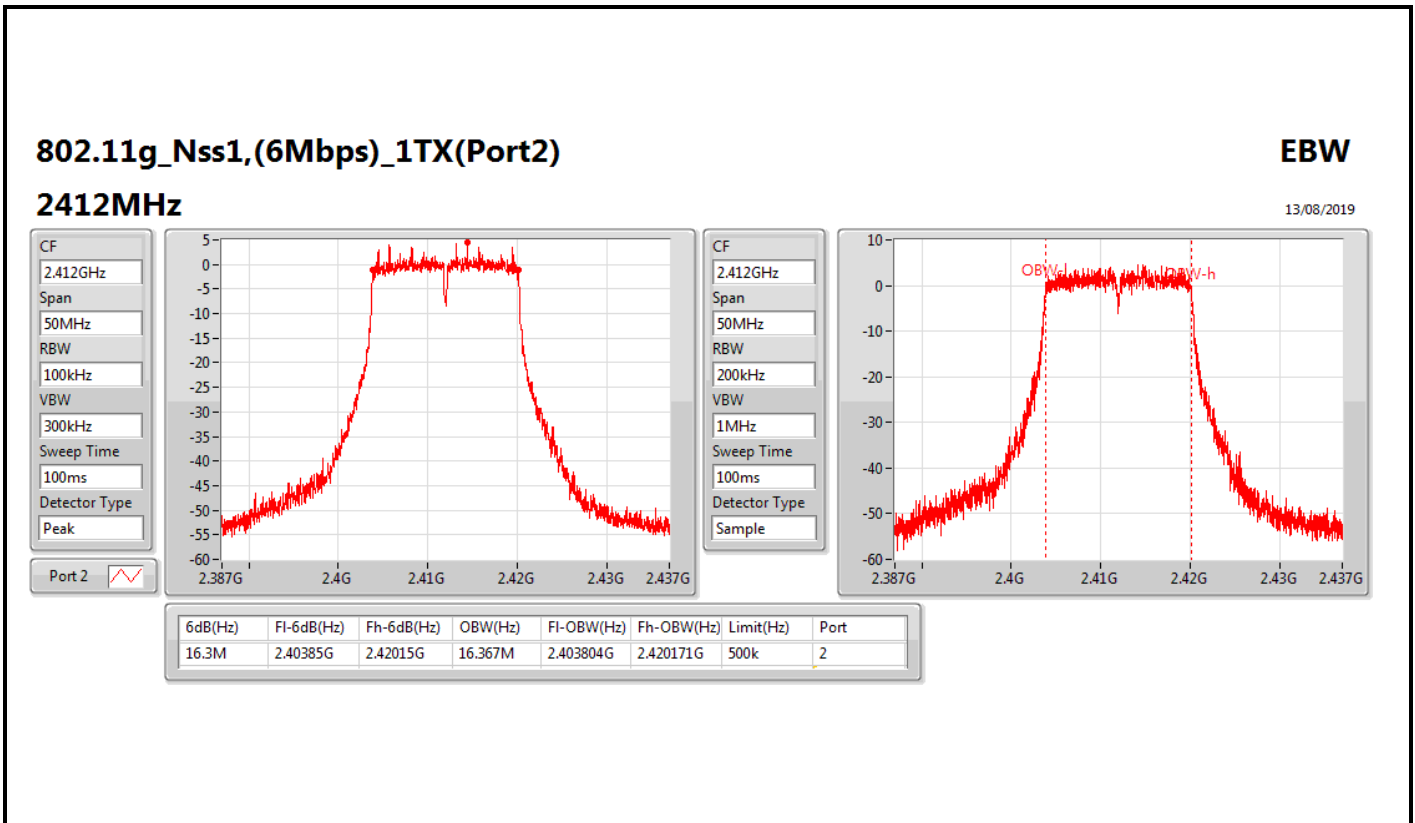
802.11b_Nss1,(1Mbps)_2TX

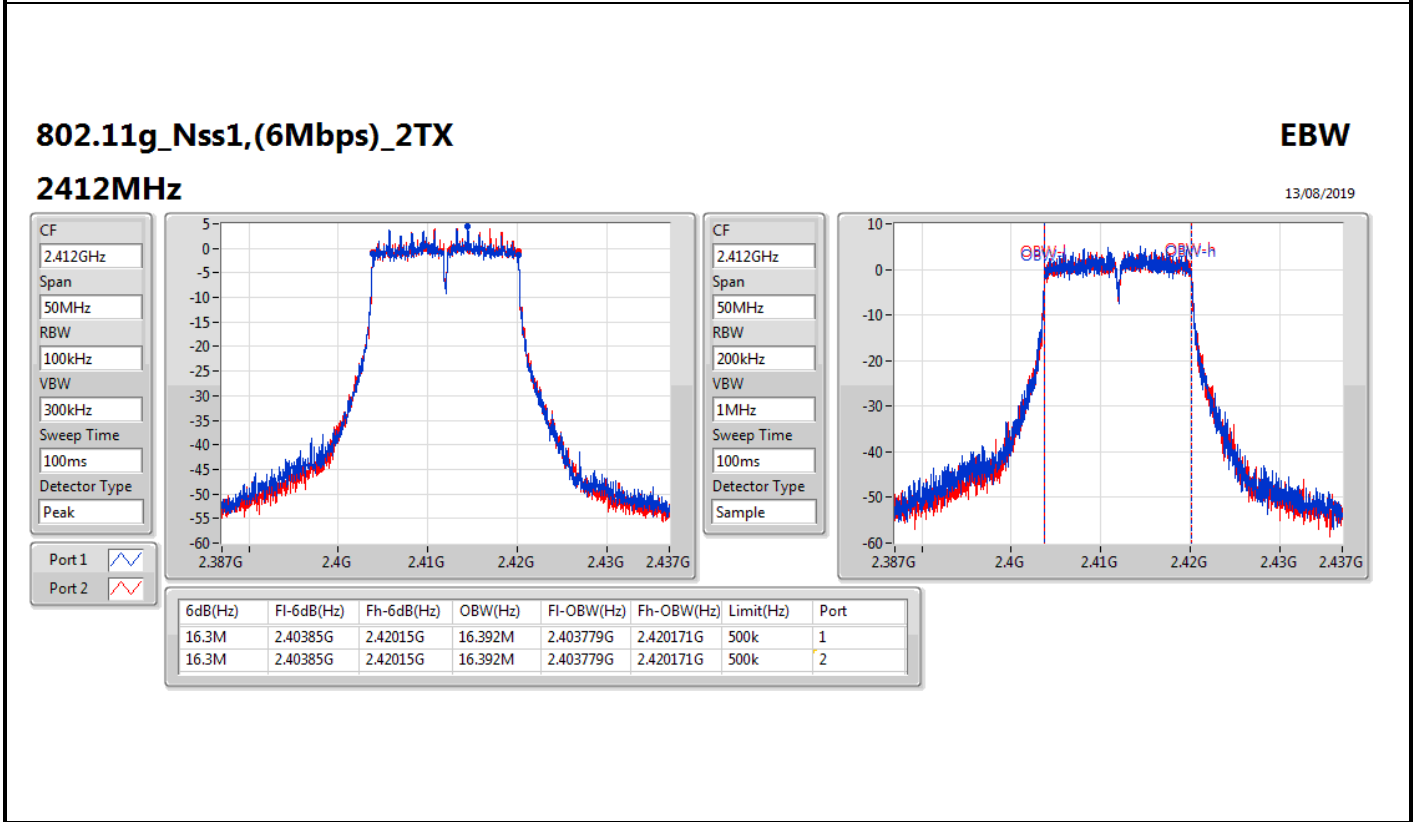
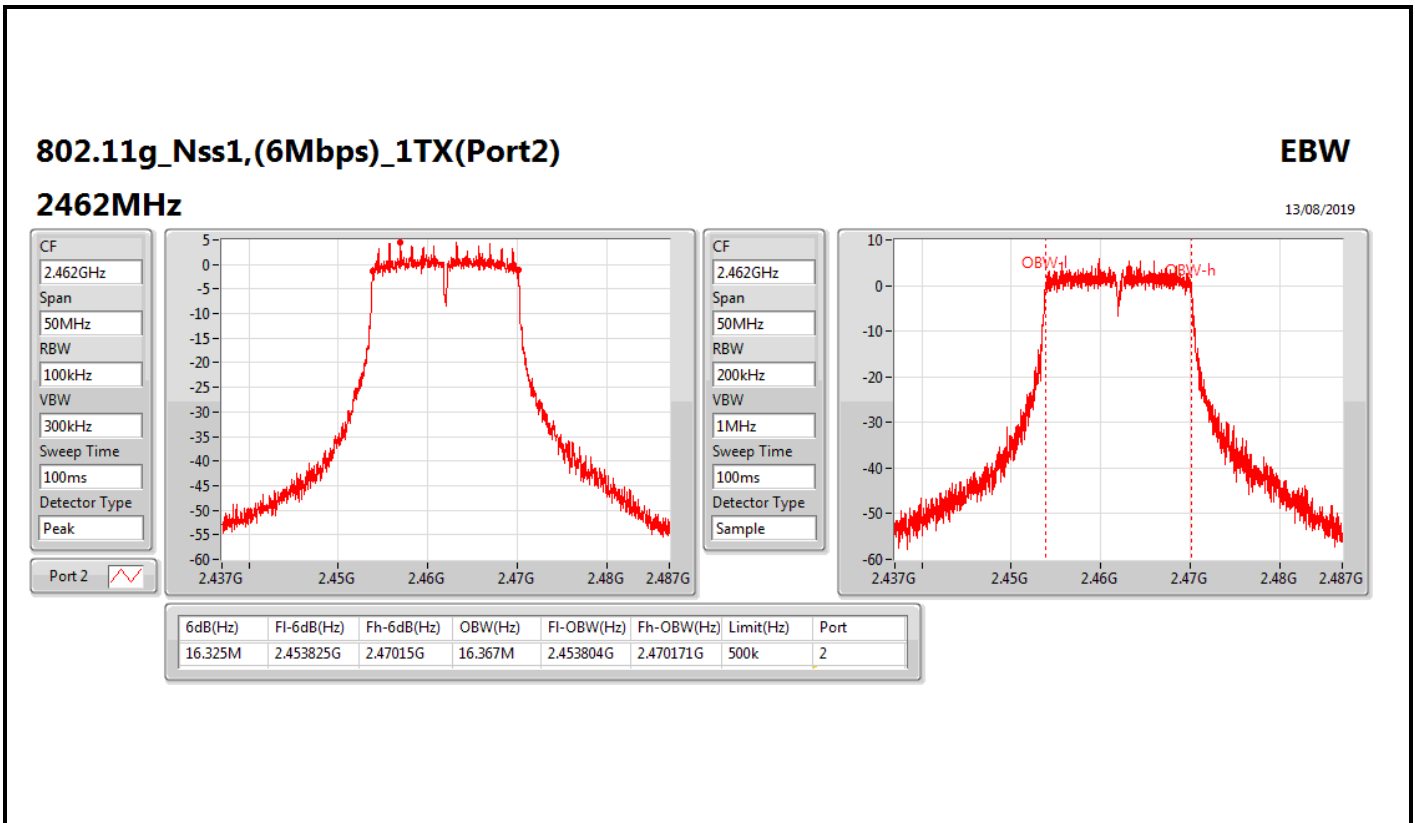
EBW

2462MHz

13/08/2019







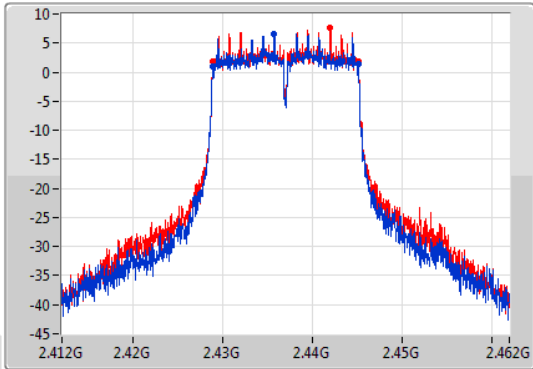
802.11g_Nss1,(6Mbps)_2TX

EBW

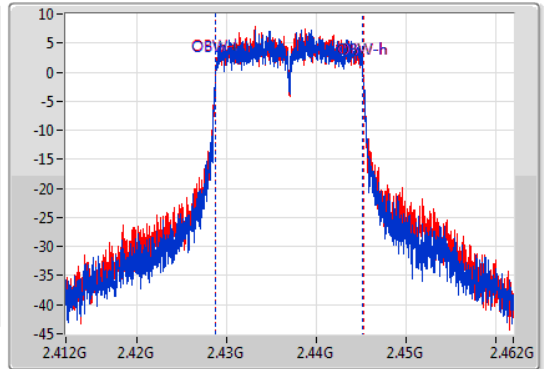
2437MHz

13/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.428825G	2.44515G	16.417M	2.428779G	2.445196G	500k	1
16.275M	2.42885G	2.445125G	16.442M	2.428779G	2.445221G	500k	2

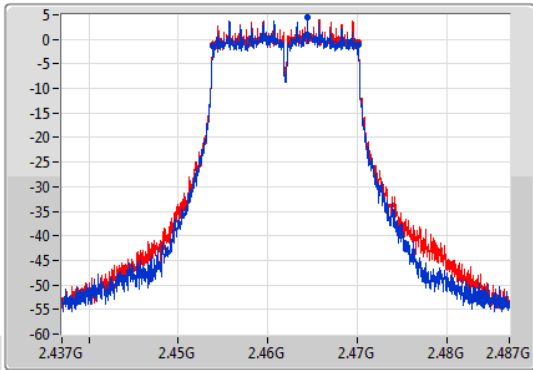
802.11g_Nss1,(6Mbps)_2TX

EBW

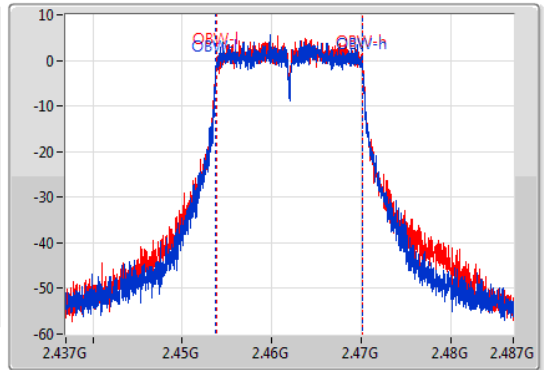
2462MHz

13/08/2019

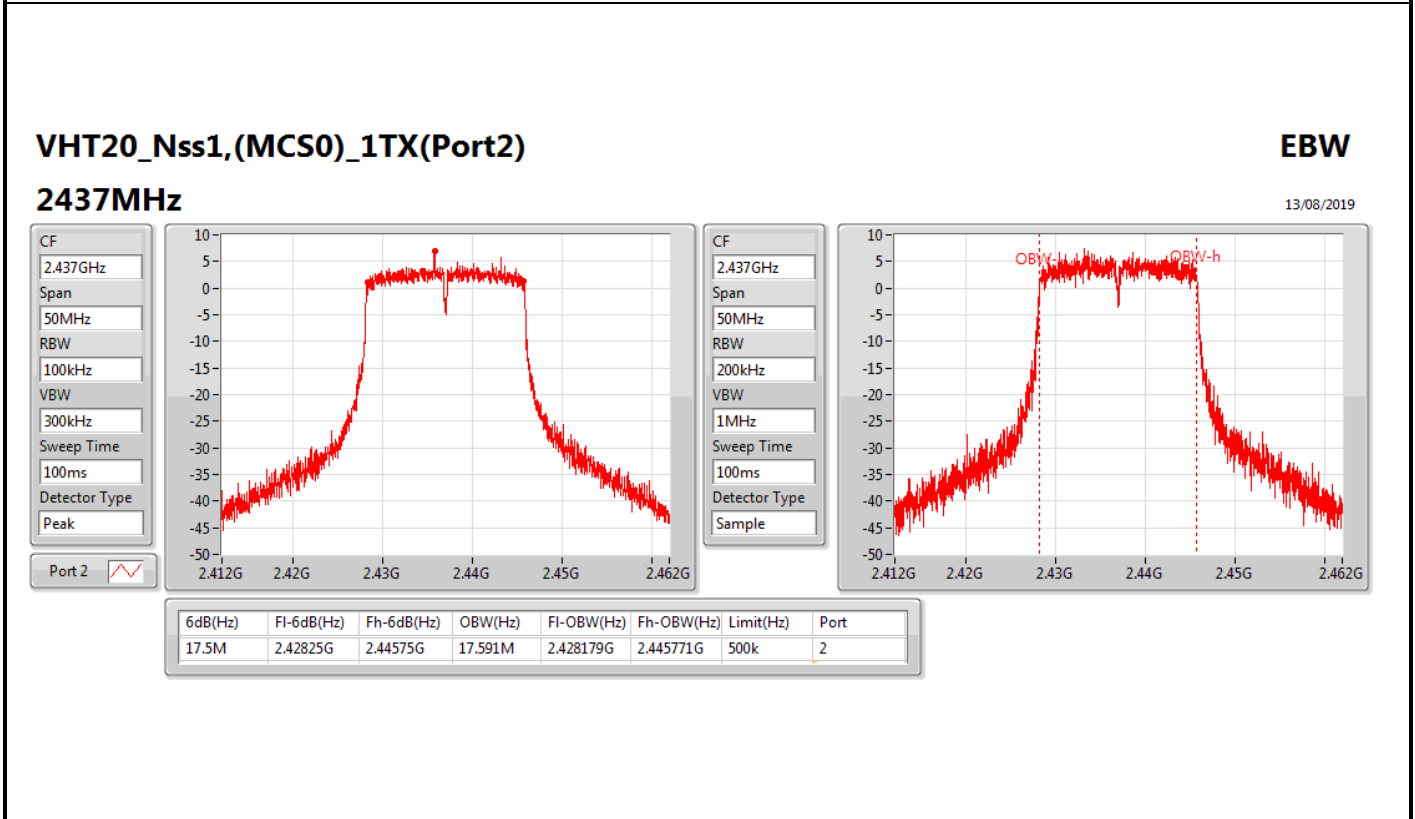
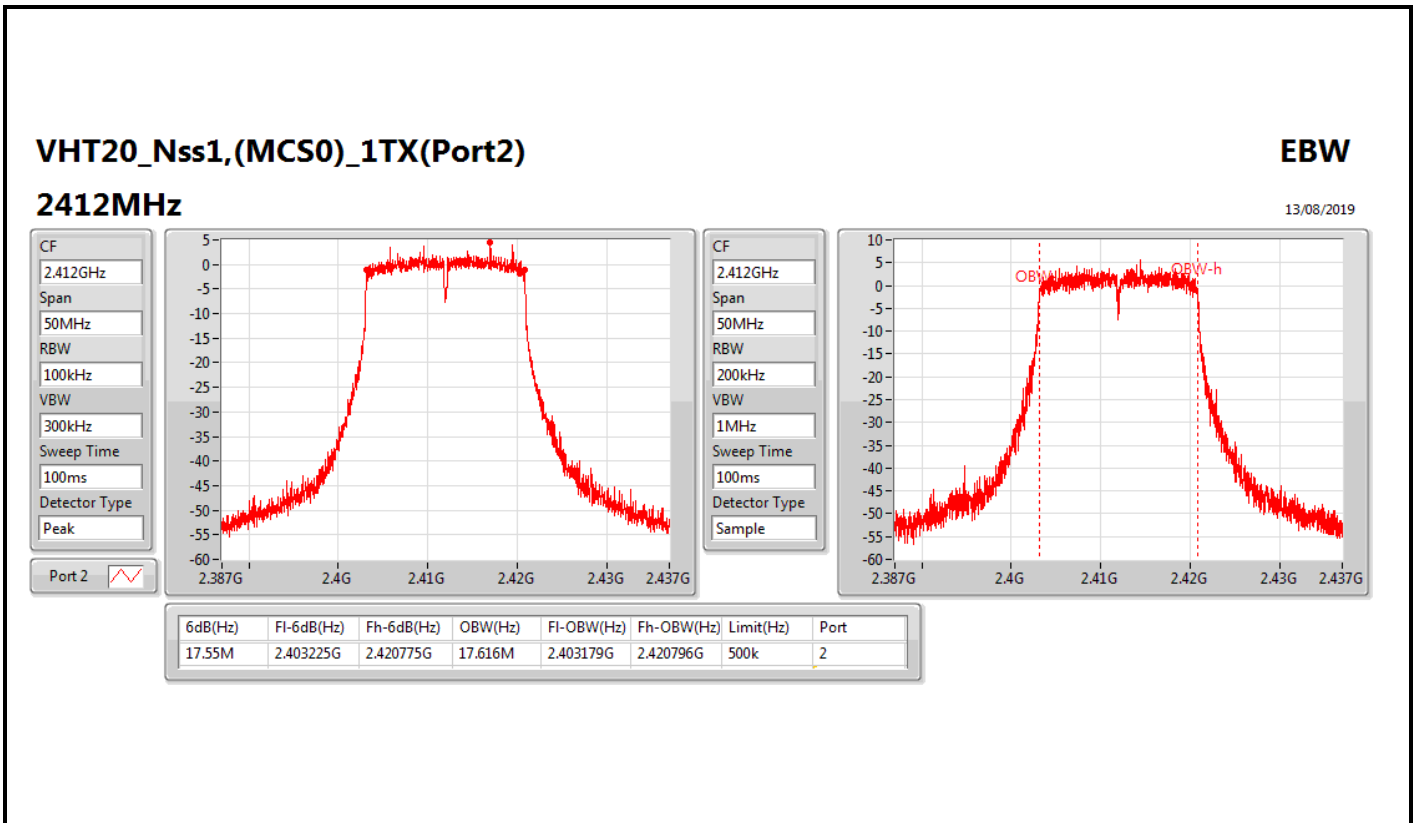
CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak

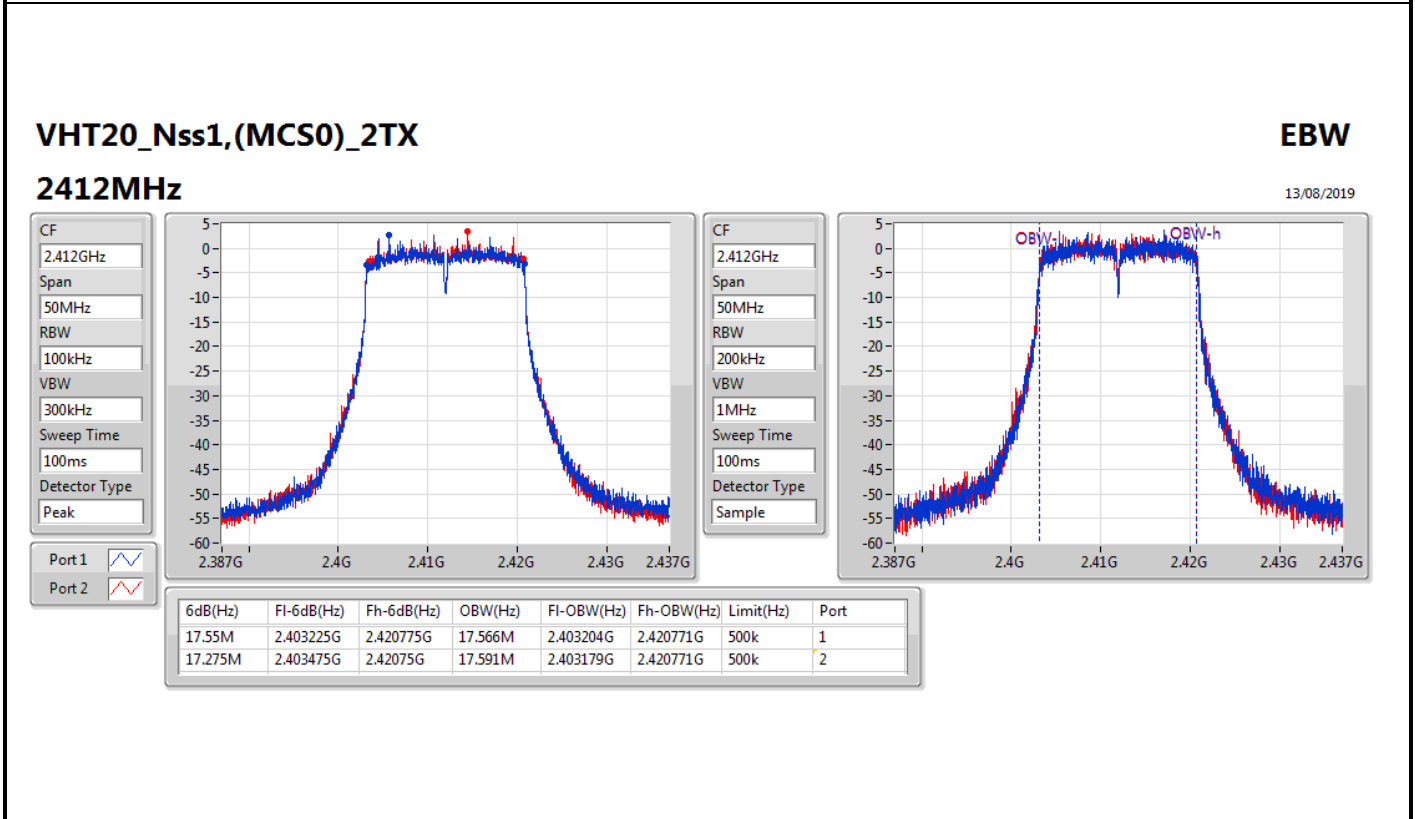
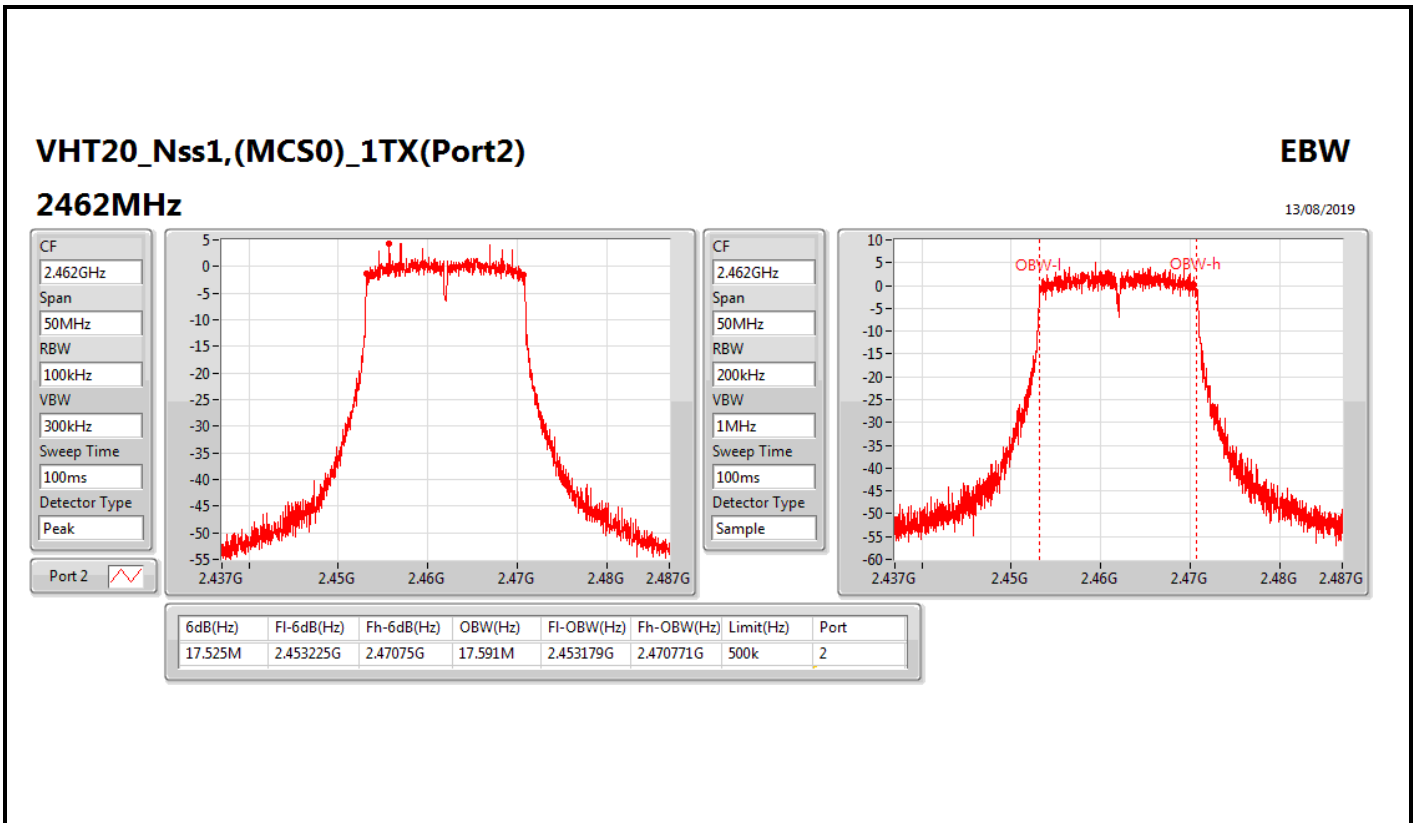


CF
2.462GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.417M	2.453779G	2.470196G	500k	1
16.325M	2.453825G	2.47015G	16.392M	2.453804G	2.470196G	500k	2



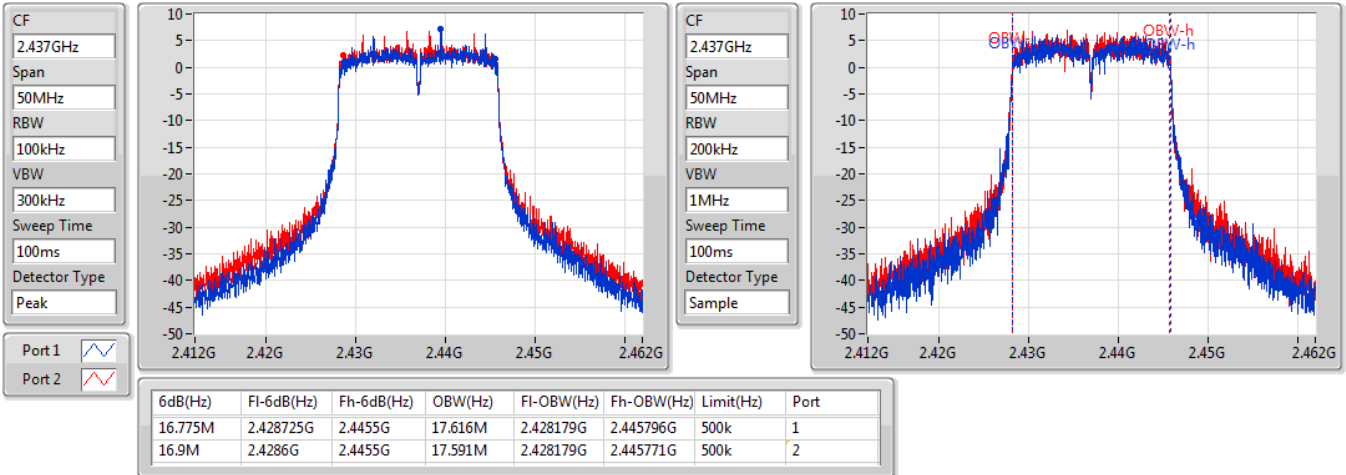


VHT20_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

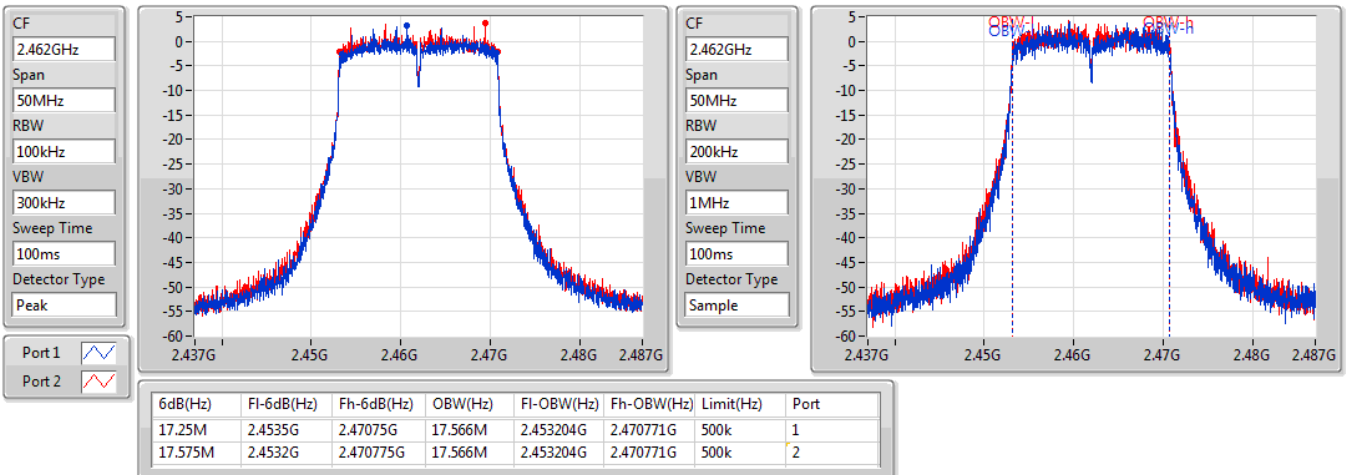


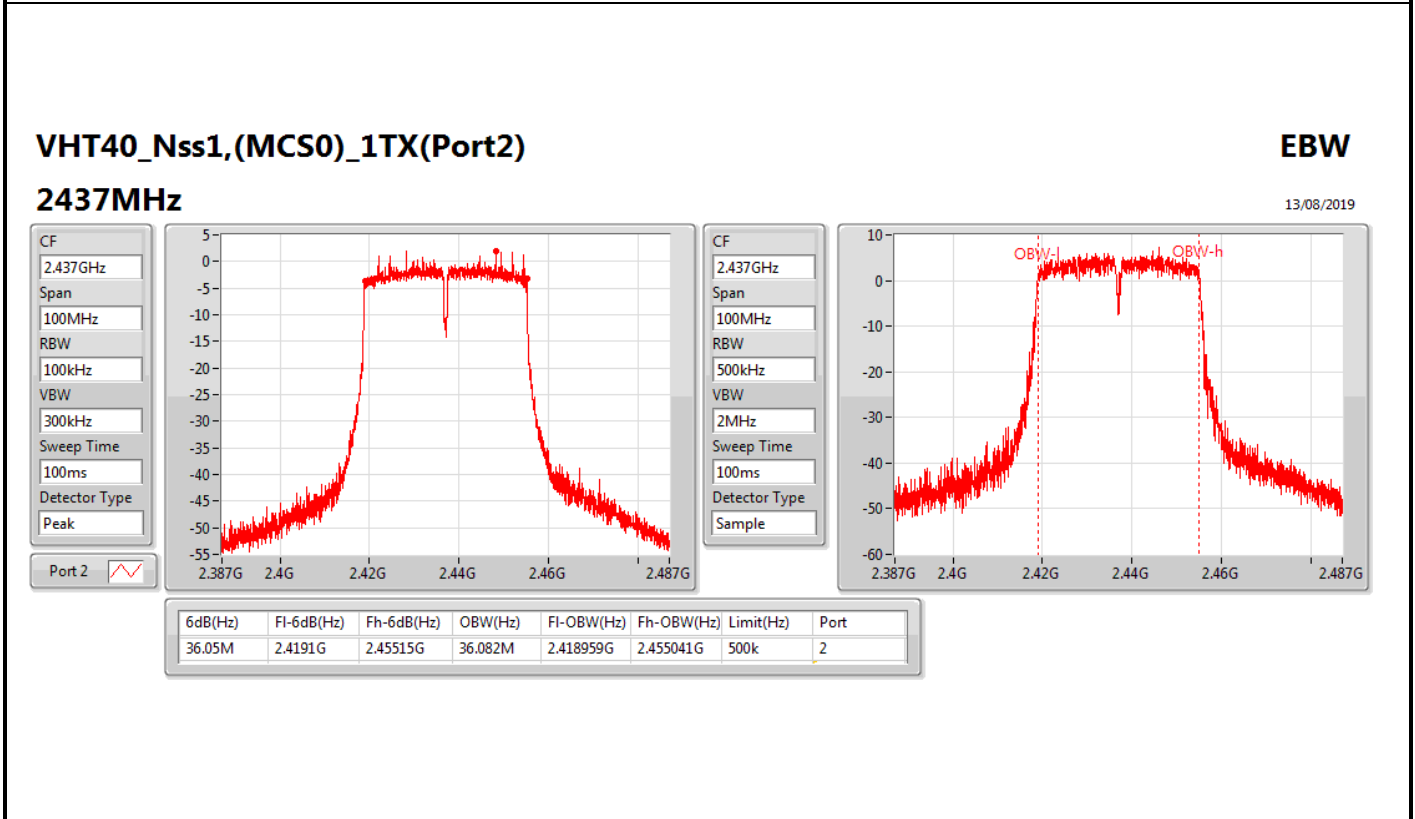
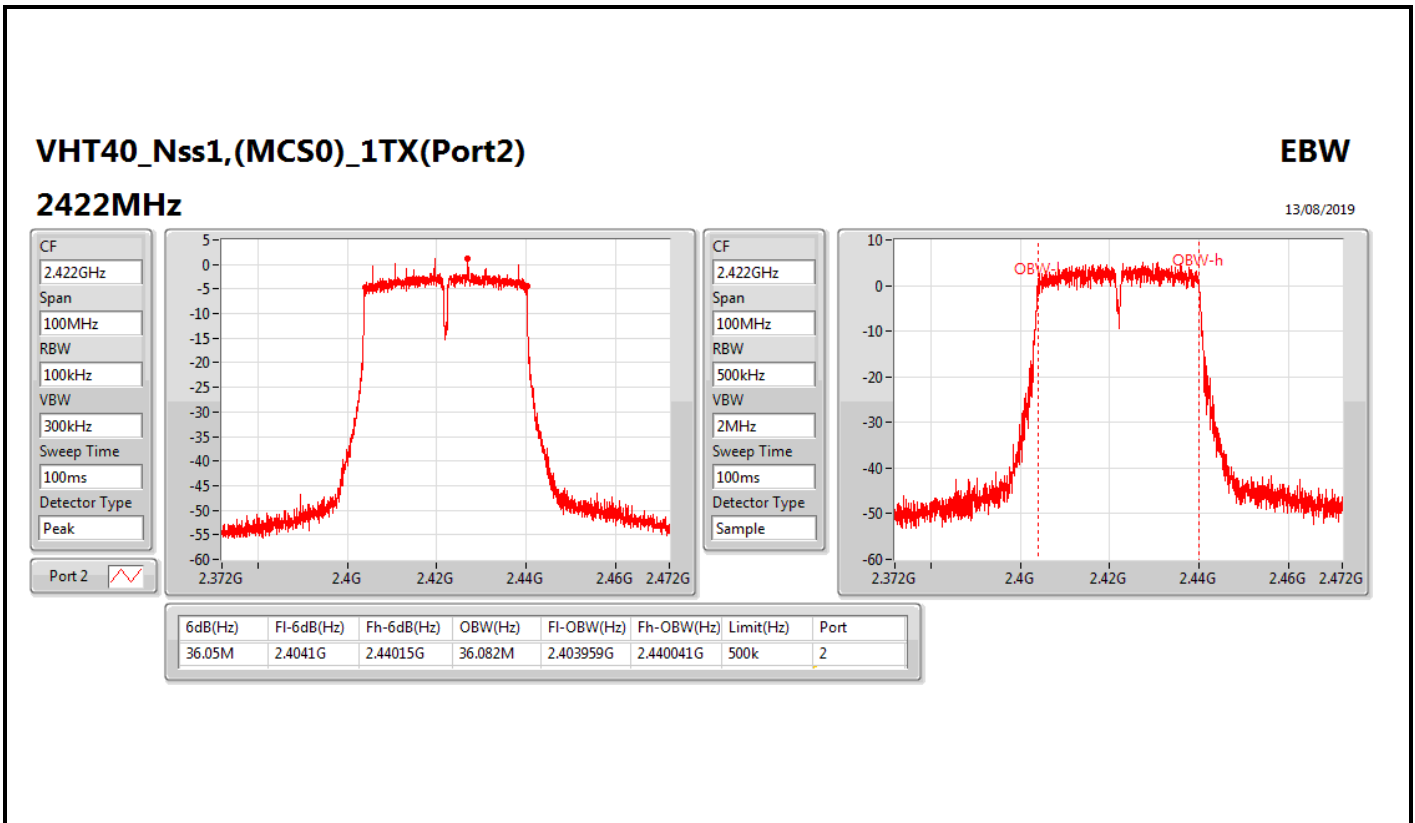
VHT20_Nss1,(MCS0)_2TX

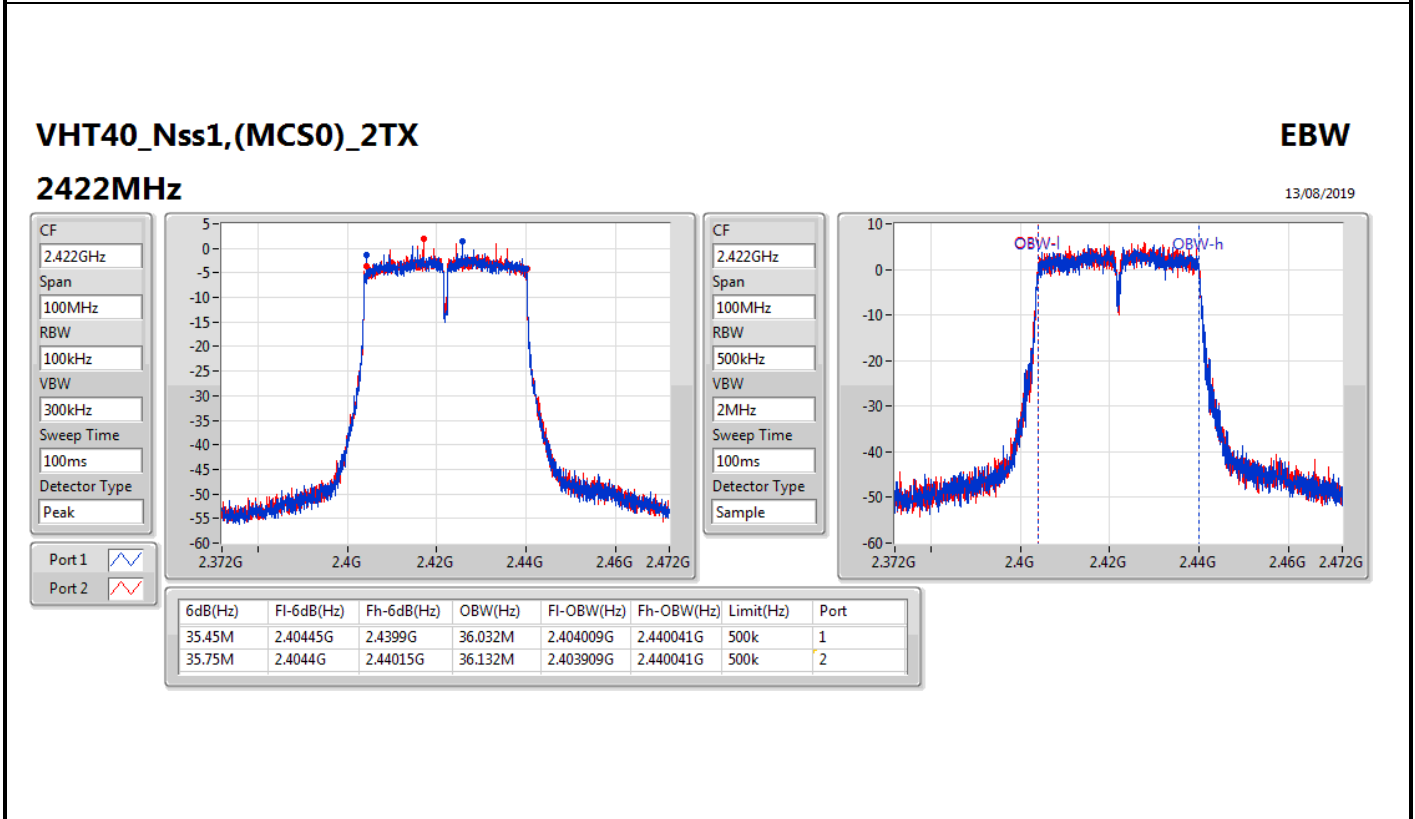
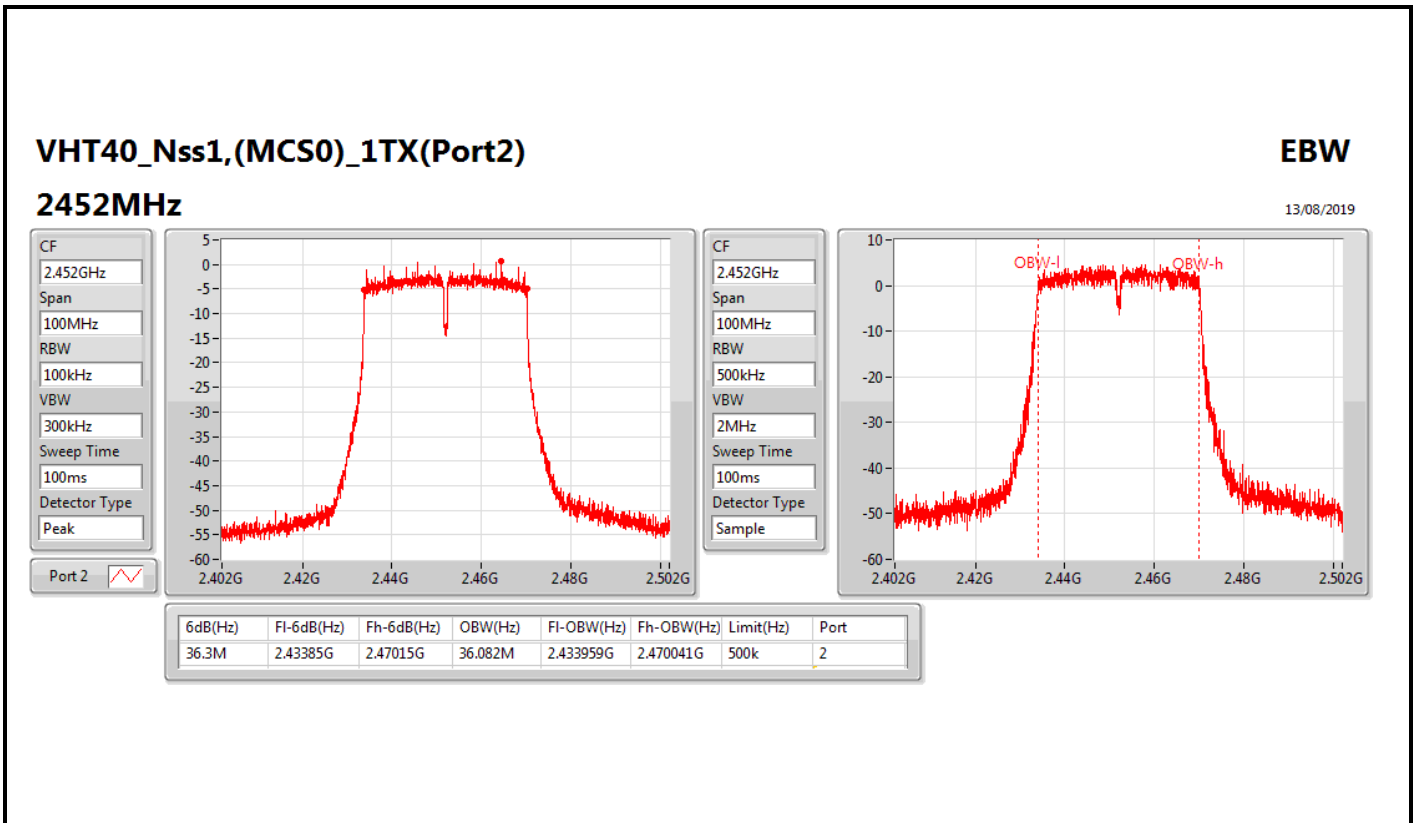
EBW

2462MHz

13/08/2019





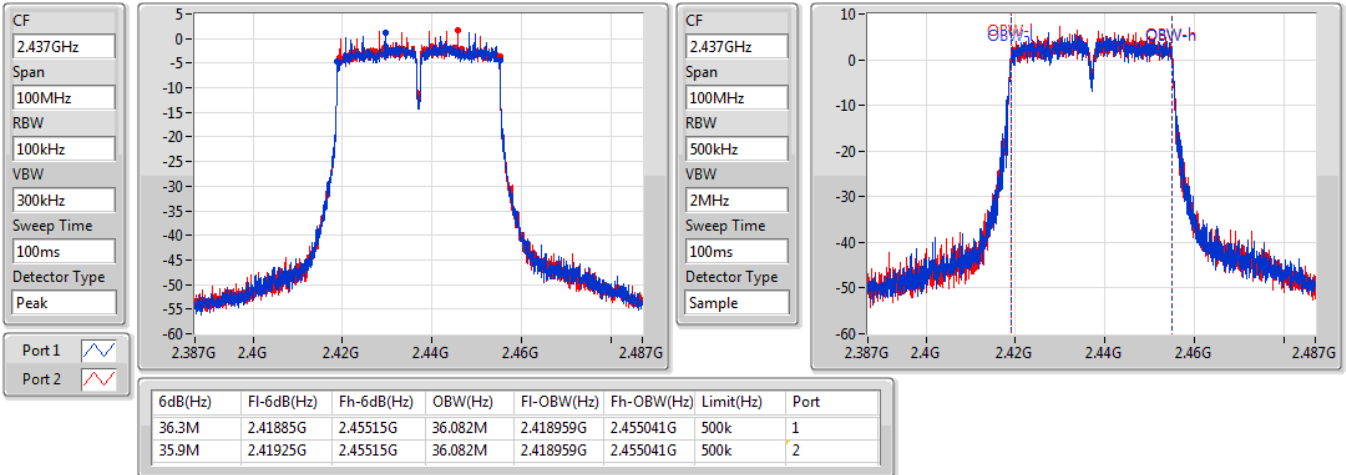


VHT40_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

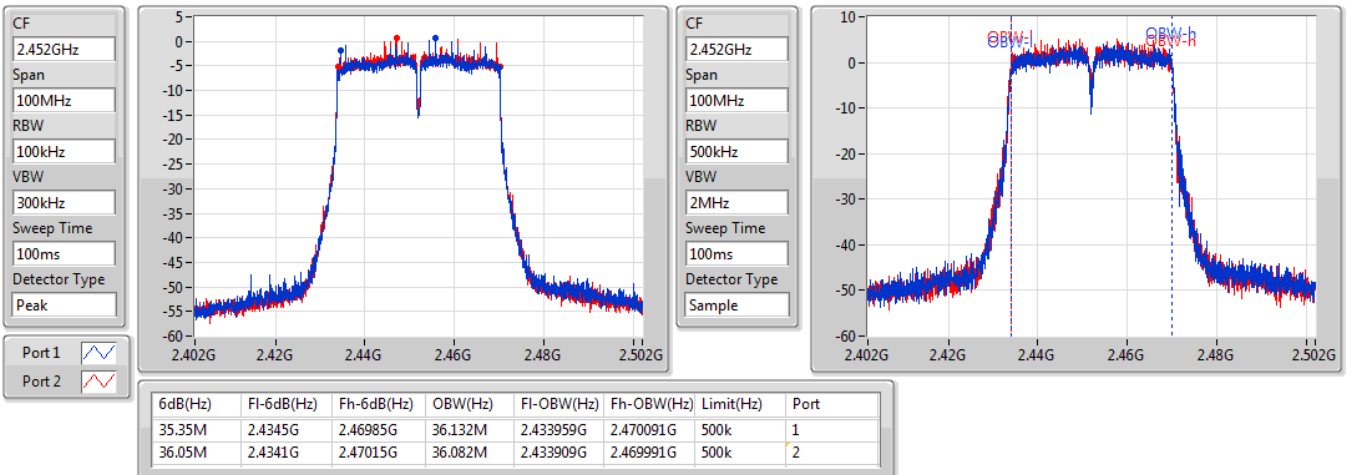


VHT40_Nss1,(MCS0)_2TX

EBW

2452MHz

13/08/2019

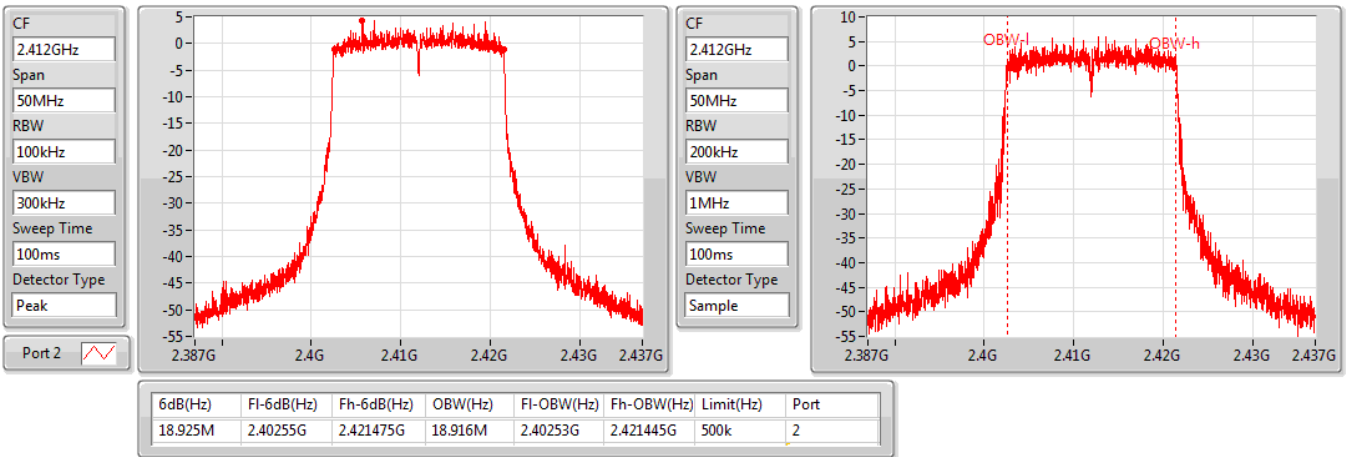


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2412MHz

13/08/2019

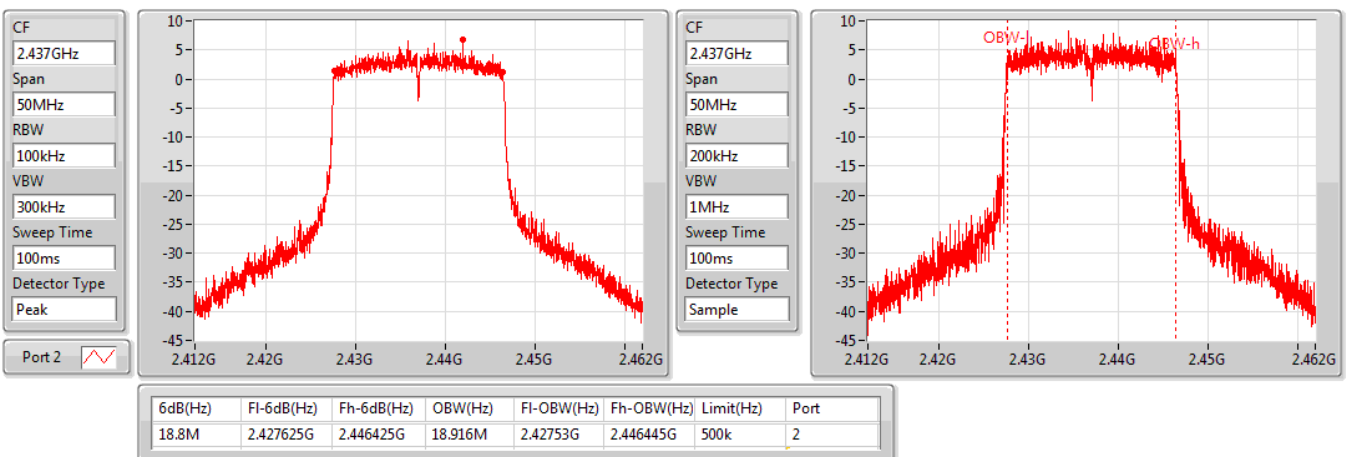


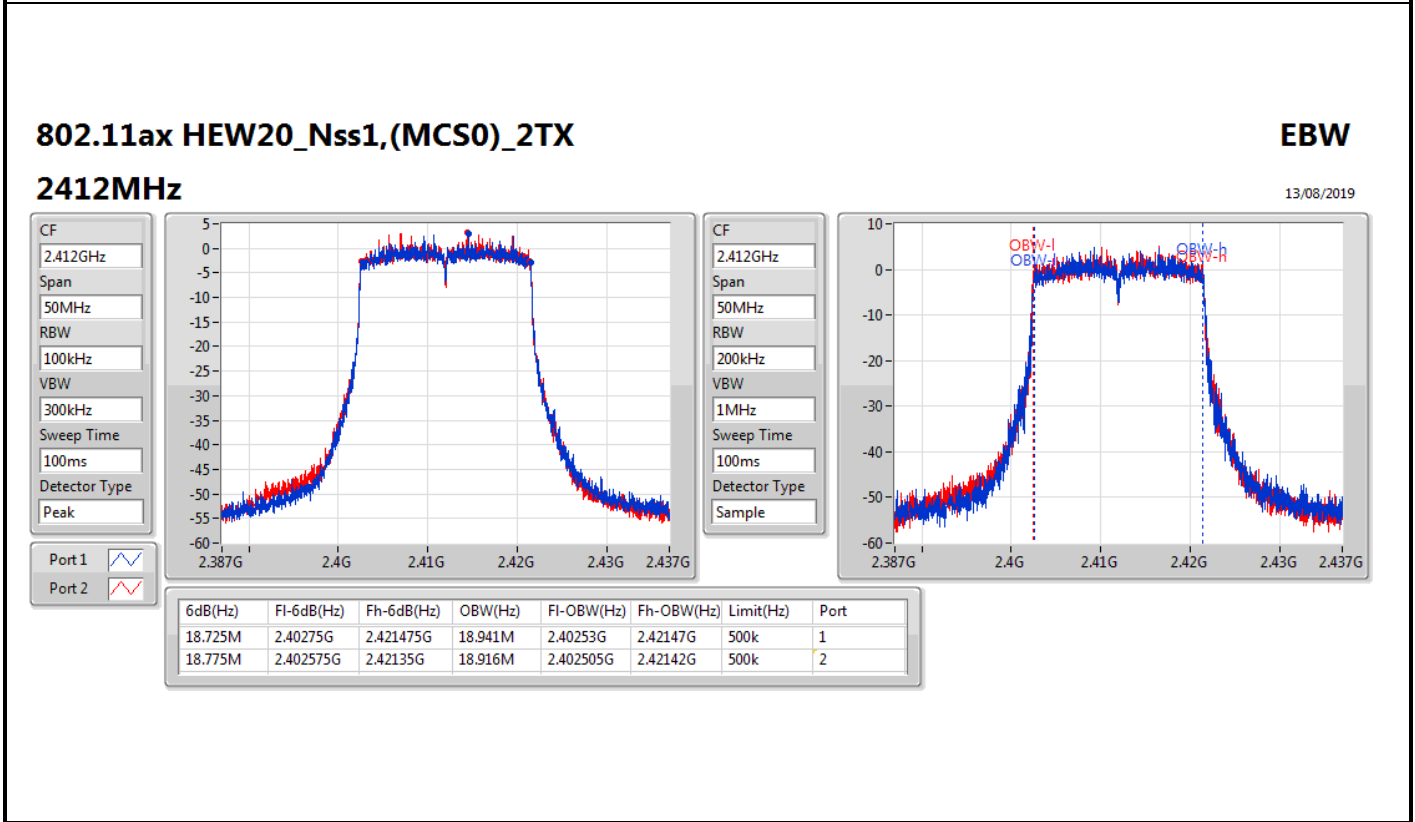
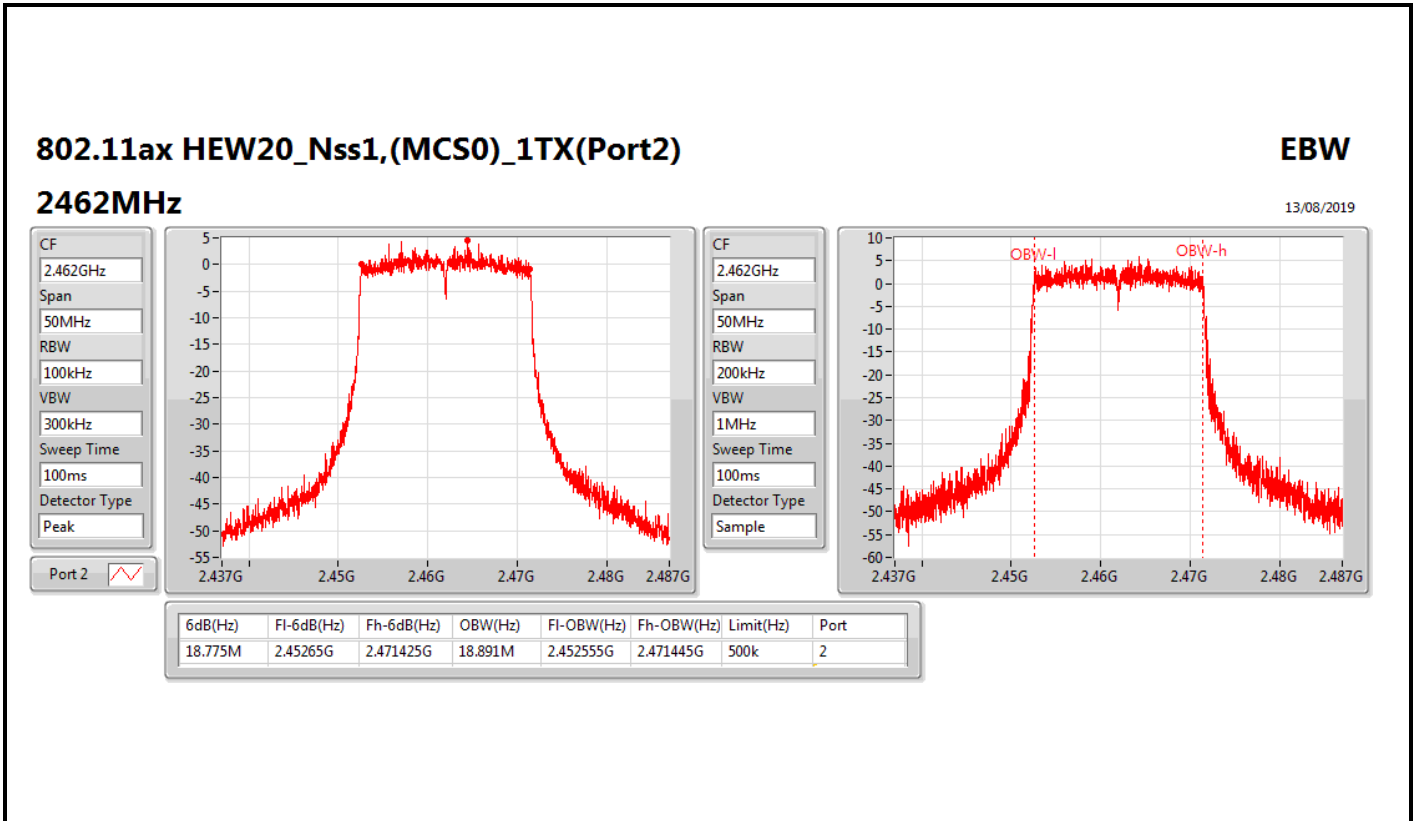
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

13/08/2019



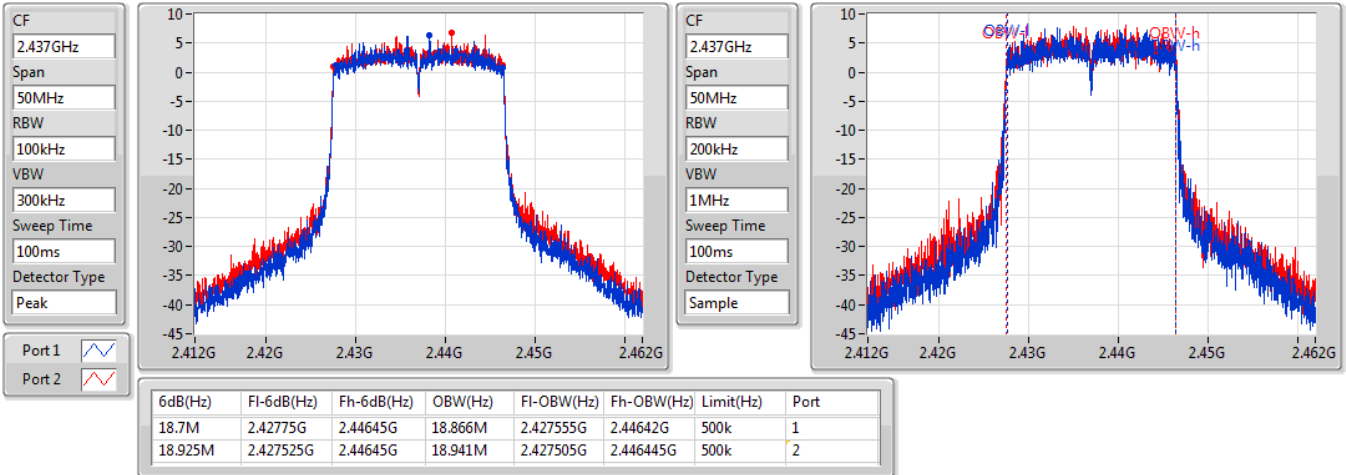


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

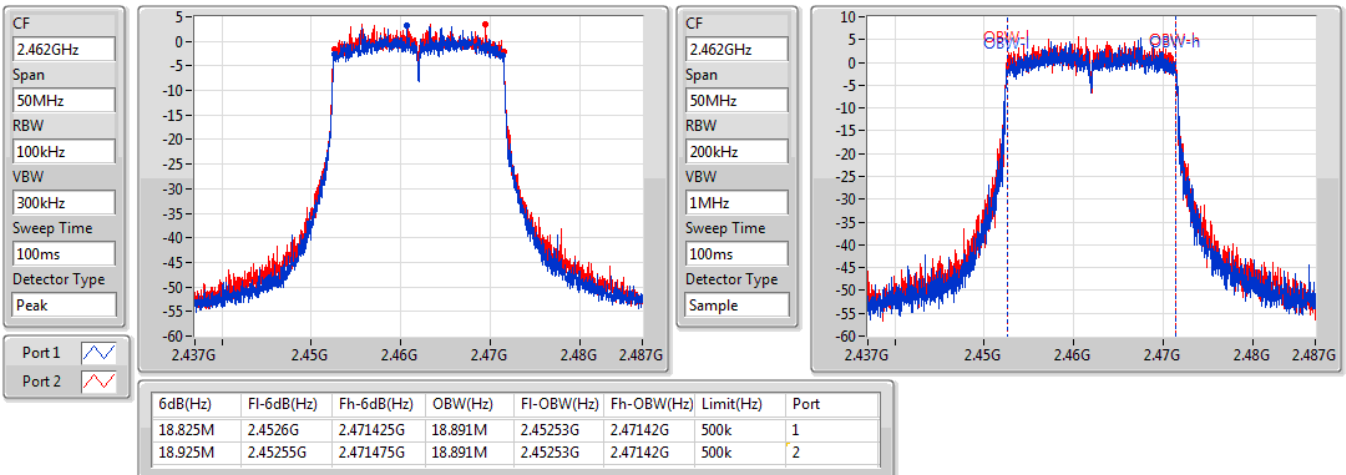


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2462MHz

13/08/2019

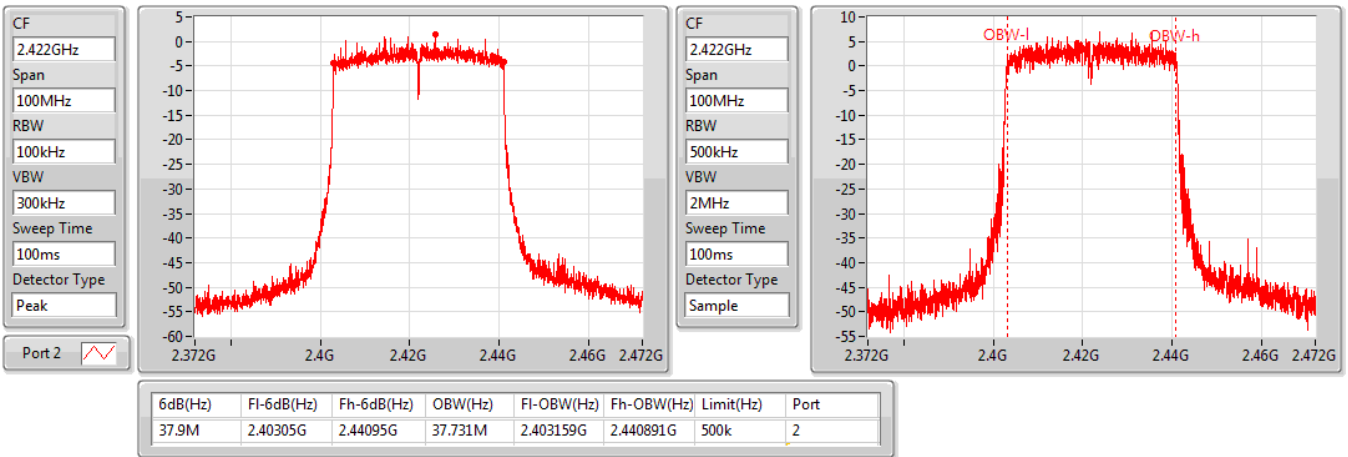


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2422MHz

13/08/2019

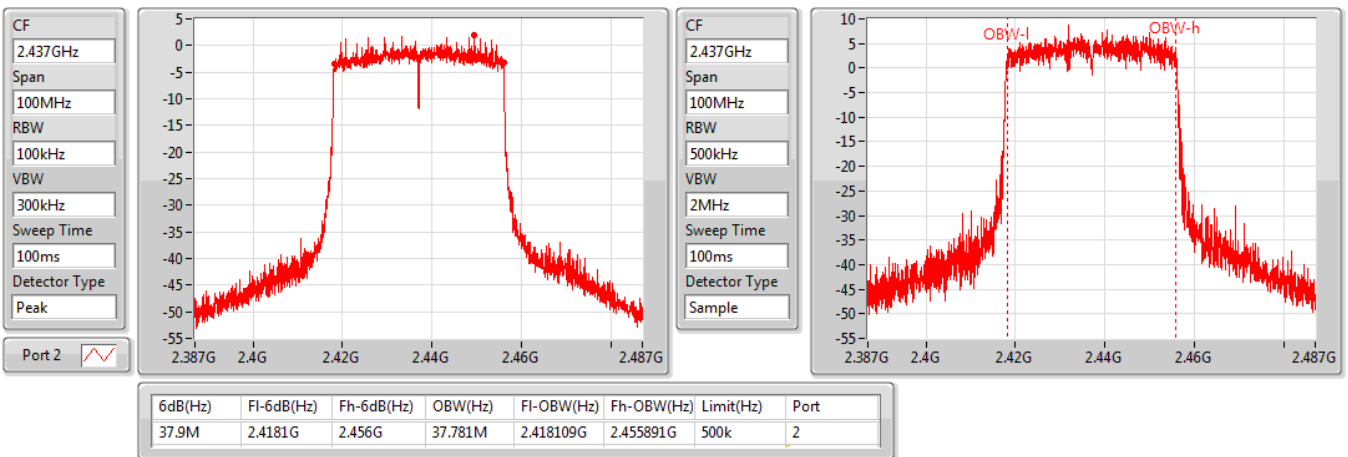


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

13/08/2019

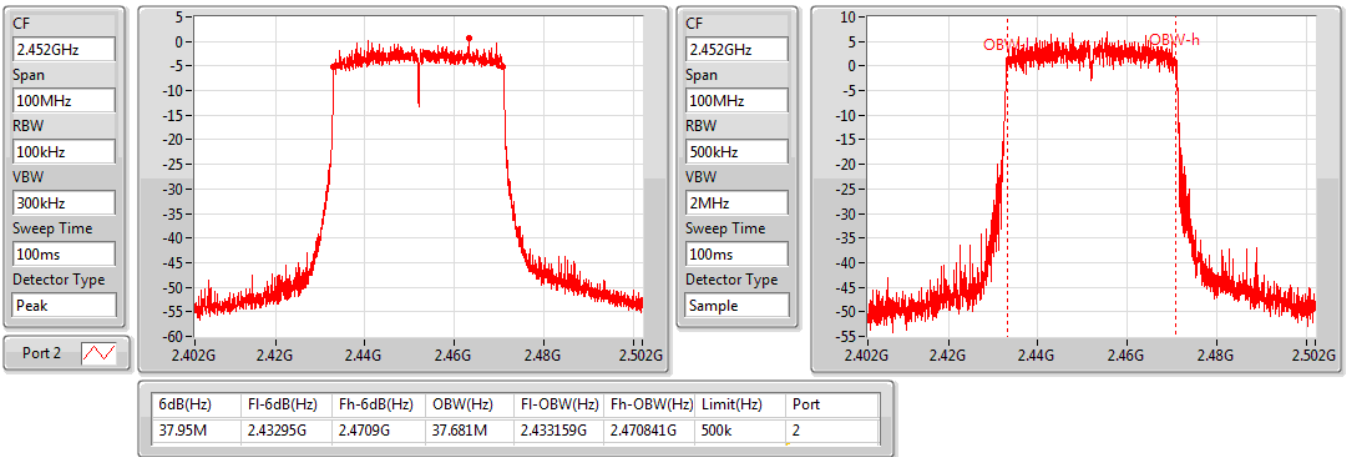


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2452MHz

13/08/2019

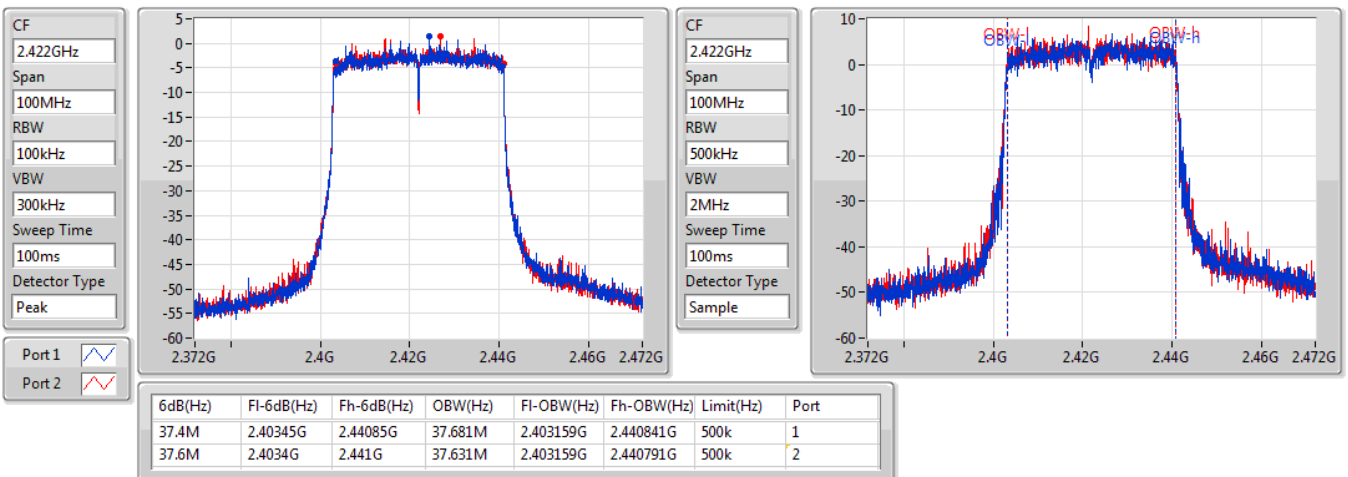


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2422MHz

13/08/2019

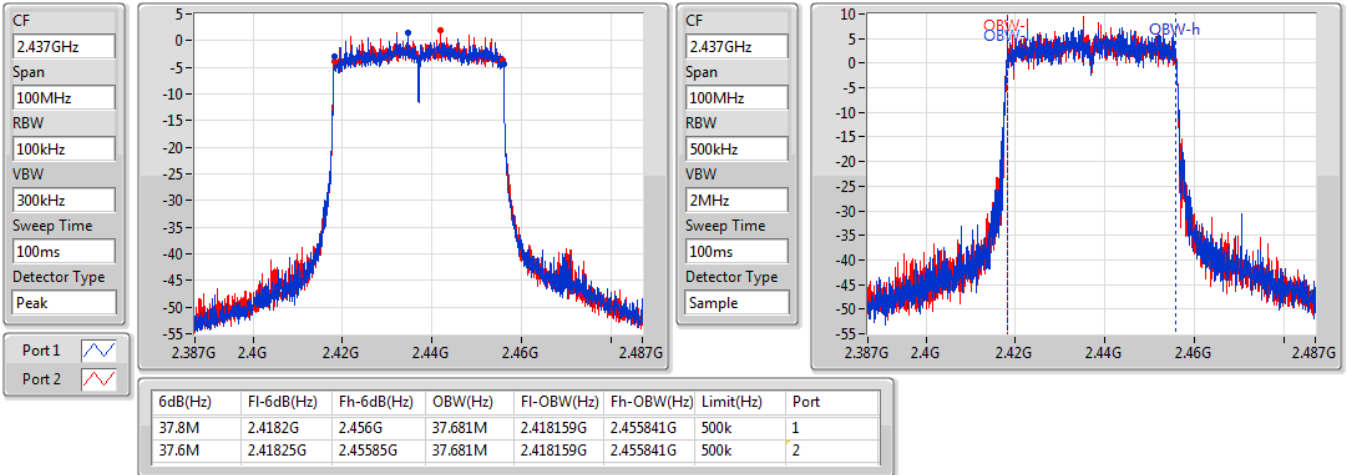


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

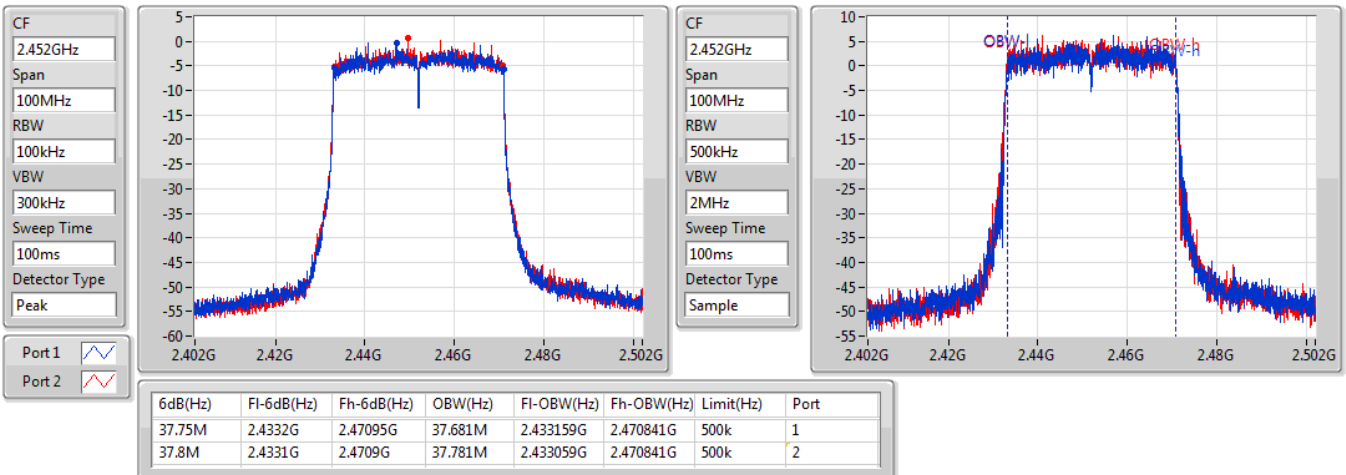


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2452MHz

13/08/2019





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(Port2)	8.05M	14.868M	14M9G1D	8M	12.969M
802.11b_Nss1,(1Mbps)_2TX	8.075M	14.793M	14M8G1D	7.05M	12.719M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.3M	16.717M	16M7D1D	16.275M	16.367M
802.11g_Nss1,(6Mbps)_2TX	16.3M	17.091M	17M1D1D	15.65M	16.367M
VHT20_Nss1,(MCS0)_1TX(Port2)	17.525M	17.841M	17M8D1D	17.525M	17.591M
VHT20_Nss1,(MCS0)_2TX	17.55M	17.666M	17M7D1D	17.15M	17.541M
VHT40_Nss1,(MCS0)_1TX(Port2)	36.3M	36.082M	36M1D1D	36.05M	36.082M
VHT40_Nss1,(MCS0)_2TX	36.3M	36.082M	36M1D1D	35.45M	35.982M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.95M	19.115M	19M1D1D	18.75M	18.916M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.9M	18.941M	18M9D1D	18.225M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	38.1M	37.731M	37M7D1D	37.8M	37.731M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.8M	37.781M	37M8D1D	37.45M	37.631M

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)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			8.05M	13.068M
2437MHz_TnomVnom	Pass	500k			8.025M	14.868M
2462MHz_TnomVnom	Pass	500k			8M	12.969M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	7.05M	12.919M	7.55M	12.894M
2437MHz_TnomVnom	Pass	500k	8.075M	13.918M	7.55M	14.793M
2462MHz_TnomVnom	Pass	500k	7.525M	12.719M	7.55M	12.944M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			16.3M	16.367M
2437MHz_TnomVnom	Pass	500k			16.275M	16.717M
2462MHz_TnomVnom	Pass	500k			16.3M	16.392M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	16.3M	16.392M	16.3M	16.367M
2437MHz_TnomVnom	Pass	500k	16.3M	16.642M	15.65M	17.091M
2462MHz_TnomVnom	Pass	500k	16.3M	16.367M	16.3M	16.392M
VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			17.525M	17.616M
2437MHz_TnomVnom	Pass	500k			17.525M	17.841M
2462MHz_TnomVnom	Pass	500k			17.525M	17.591M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	17.3M	17.541M	17.55M	17.566M
2437MHz_TnomVnom	Pass	500k	17.275M	17.616M	17.525M	17.666M
2462MHz_TnomVnom	Pass	500k	17.15M	17.566M	17.525M	17.591M
VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k			36.05M	36.082M
2437MHz_TnomVnom	Pass	500k			36.3M	36.082M
2452MHz_TnomVnom	Pass	500k			36.3M	36.082M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	35.95M	36.082M	36.3M	36.082M
2437MHz_TnomVnom	Pass	500k	35.45M	36.032M	36.3M	36.082M
2452MHz_TnomVnom	Pass	500k	35.95M	35.982M	36.3M	36.082M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k			18.925M	18.916M
2437MHz_TnomVnom	Pass	500k			18.75M	19.115M
2462MHz_TnomVnom	Pass	500k			18.95M	18.916M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	18.225M	18.891M	18.9M	18.891M
2437MHz_TnomVnom	Pass	500k	18.725M	18.941M	18.725M	18.941M
2462MHz_TnomVnom	Pass	500k	18.825M	18.891M	18.8M	18.916M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k			37.8M	37.731M
2437MHz_TnomVnom	Pass	500k			38.1M	37.731M
2452MHz_TnomVnom	Pass	500k			37.85M	37.731M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	37.6M	37.631M	37.45M	37.781M
2437MHz_TnomVnom	Pass	500k	37.55M	37.631M	37.8M	37.731M
2452MHz_TnomVnom	Pass	500k	37.65M	37.631M	37.75M	37.731M

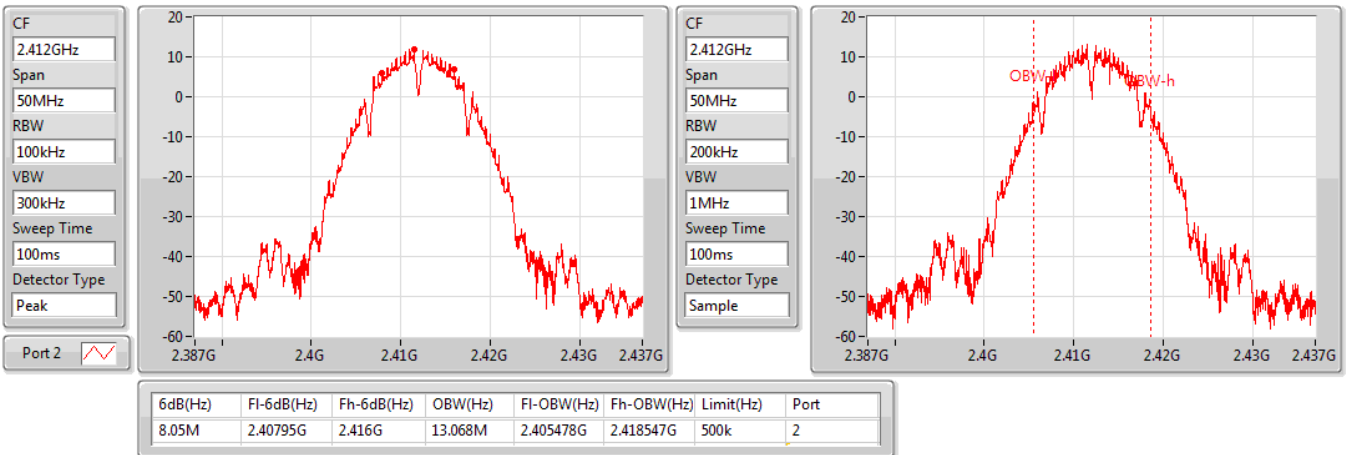
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2412MHz

12/08/2019

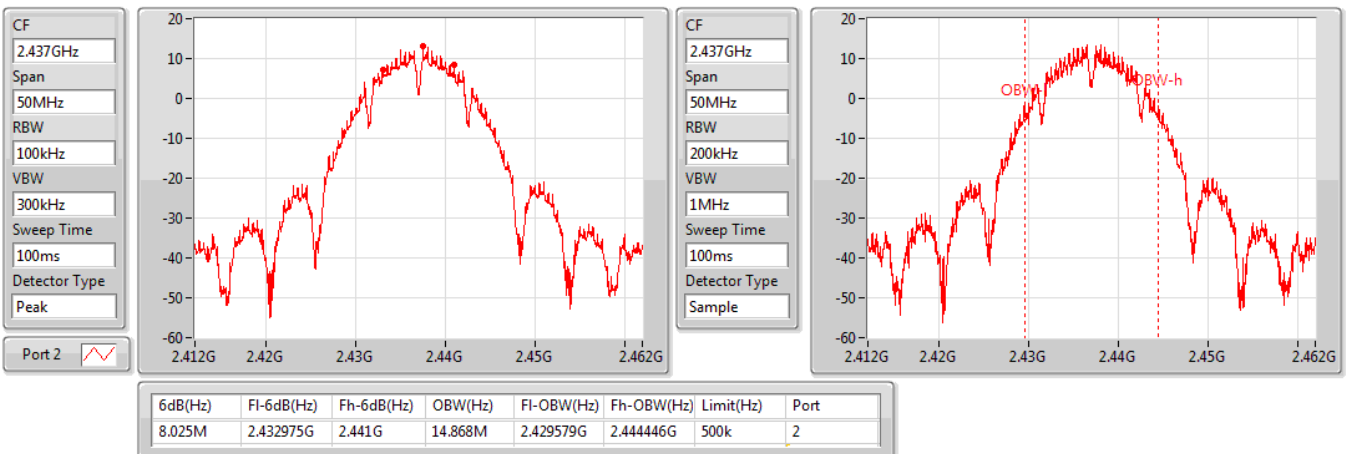


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2437MHz

12/08/2019

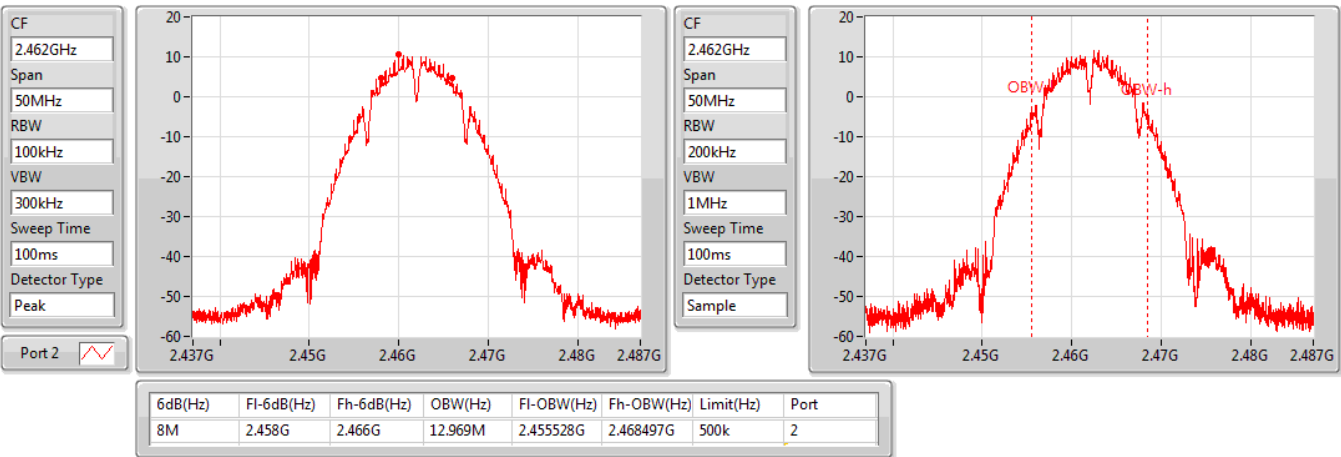


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2462MHz

12/08/2019

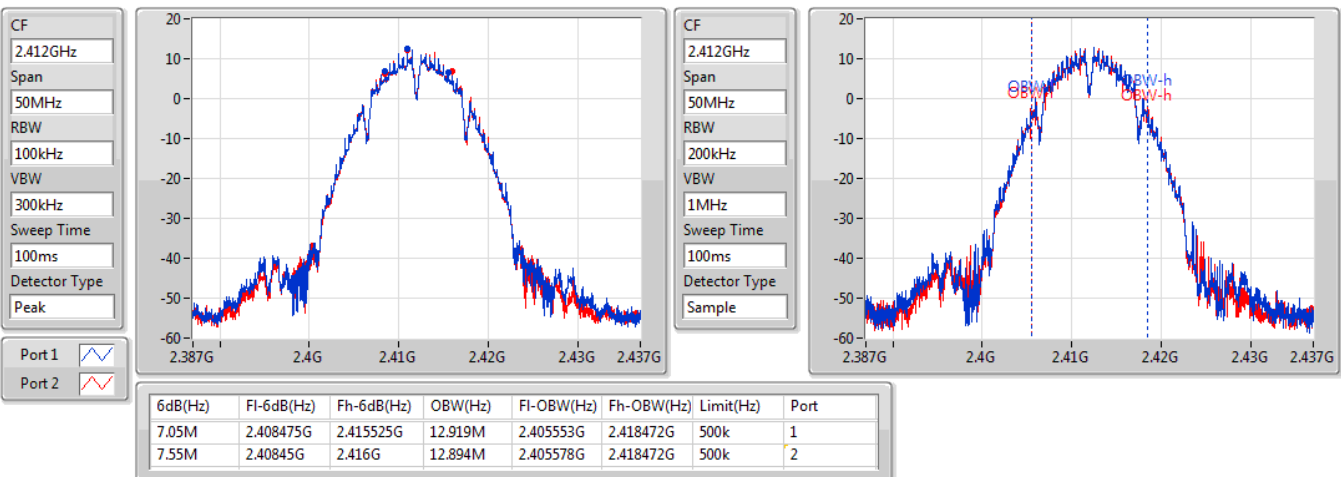


802.11b_Nss1,(1Mbps)_2TX

EBW

2412MHz

12/08/2019

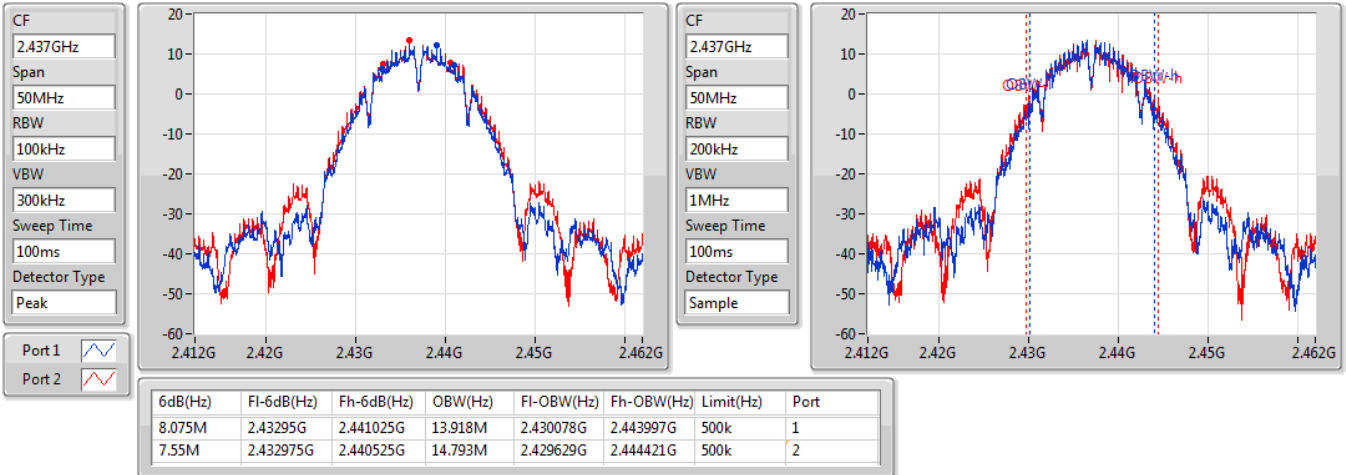


802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

12/08/2019

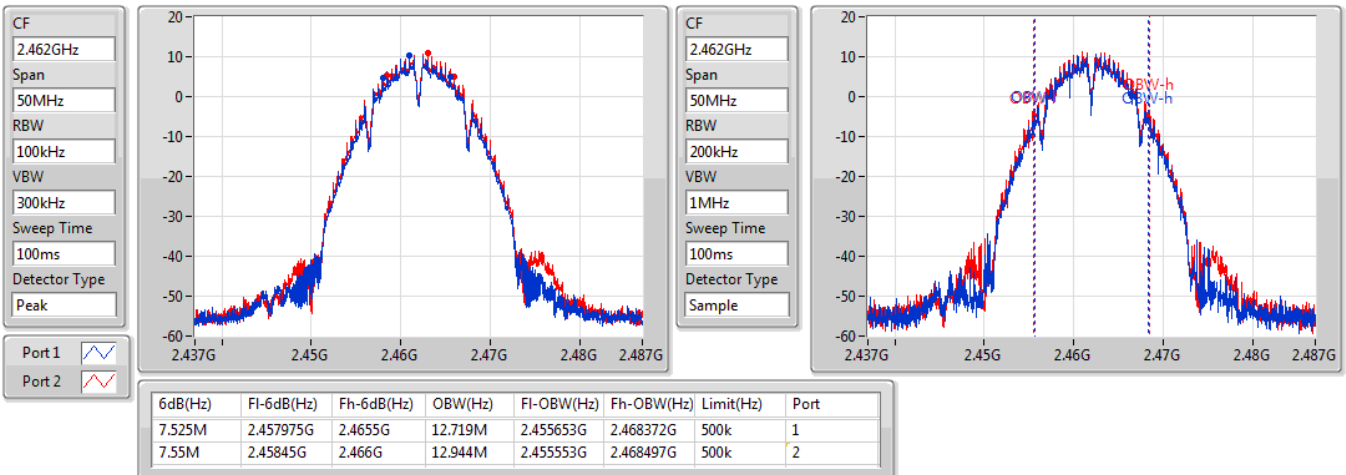


802.11b_Nss1,(1Mbps)_2TX

EBW

2462MHz

12/08/2019

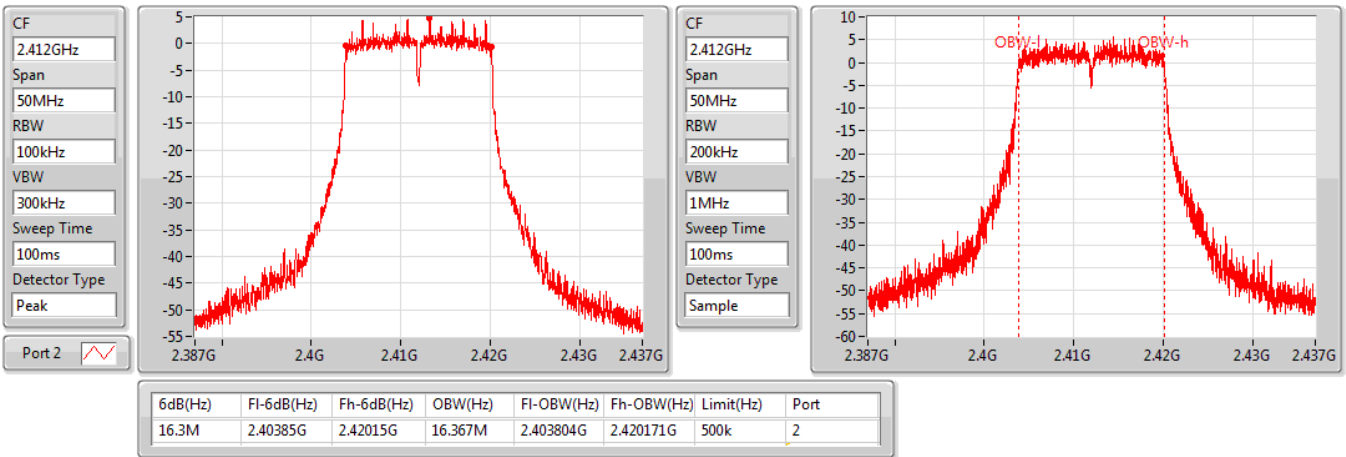


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2412MHz

12/08/2019

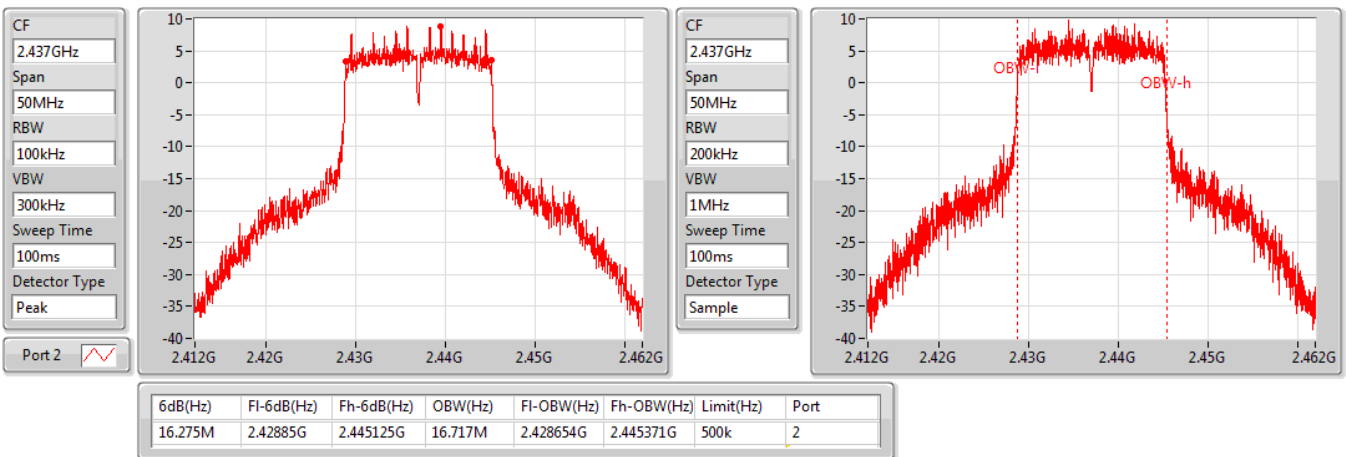


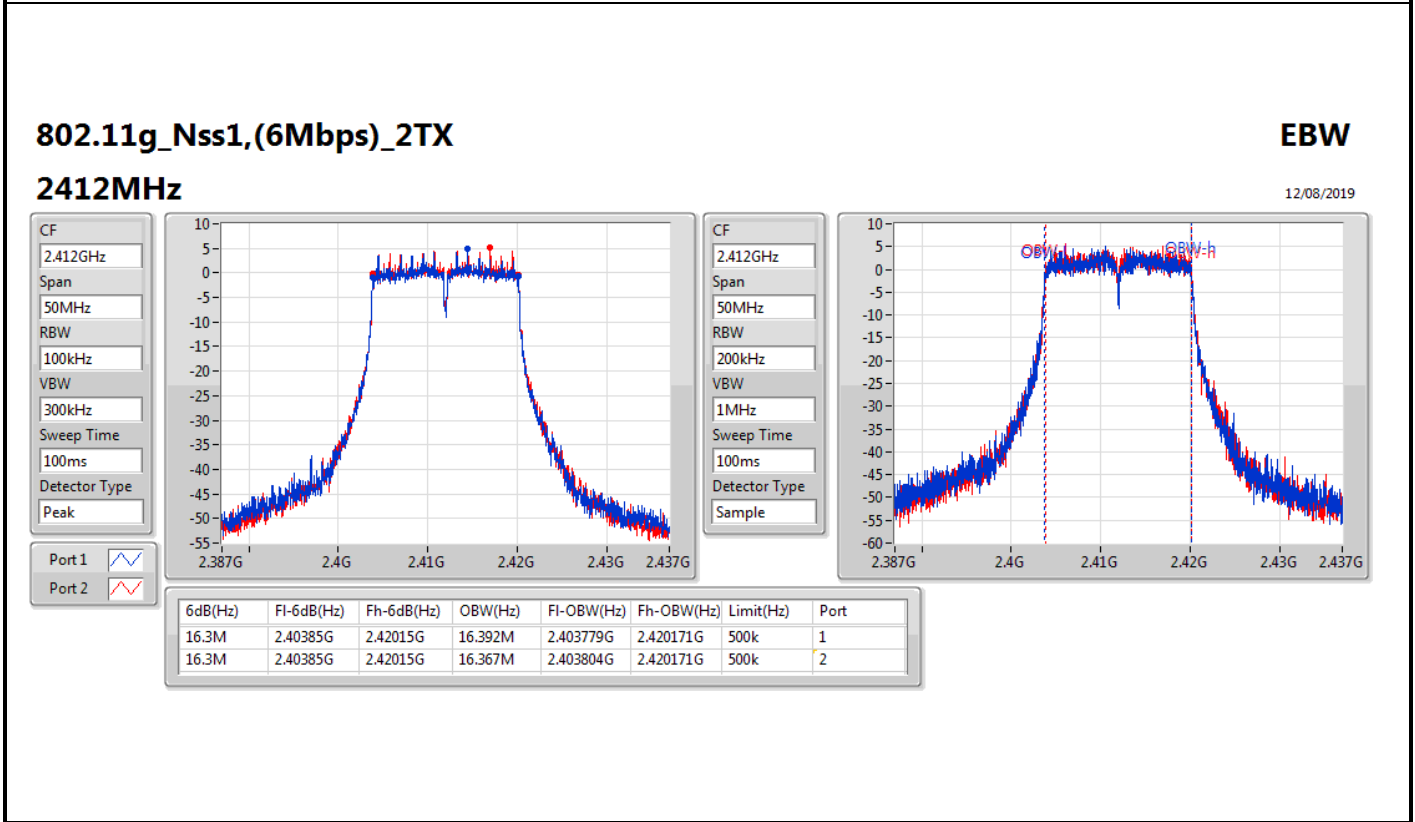
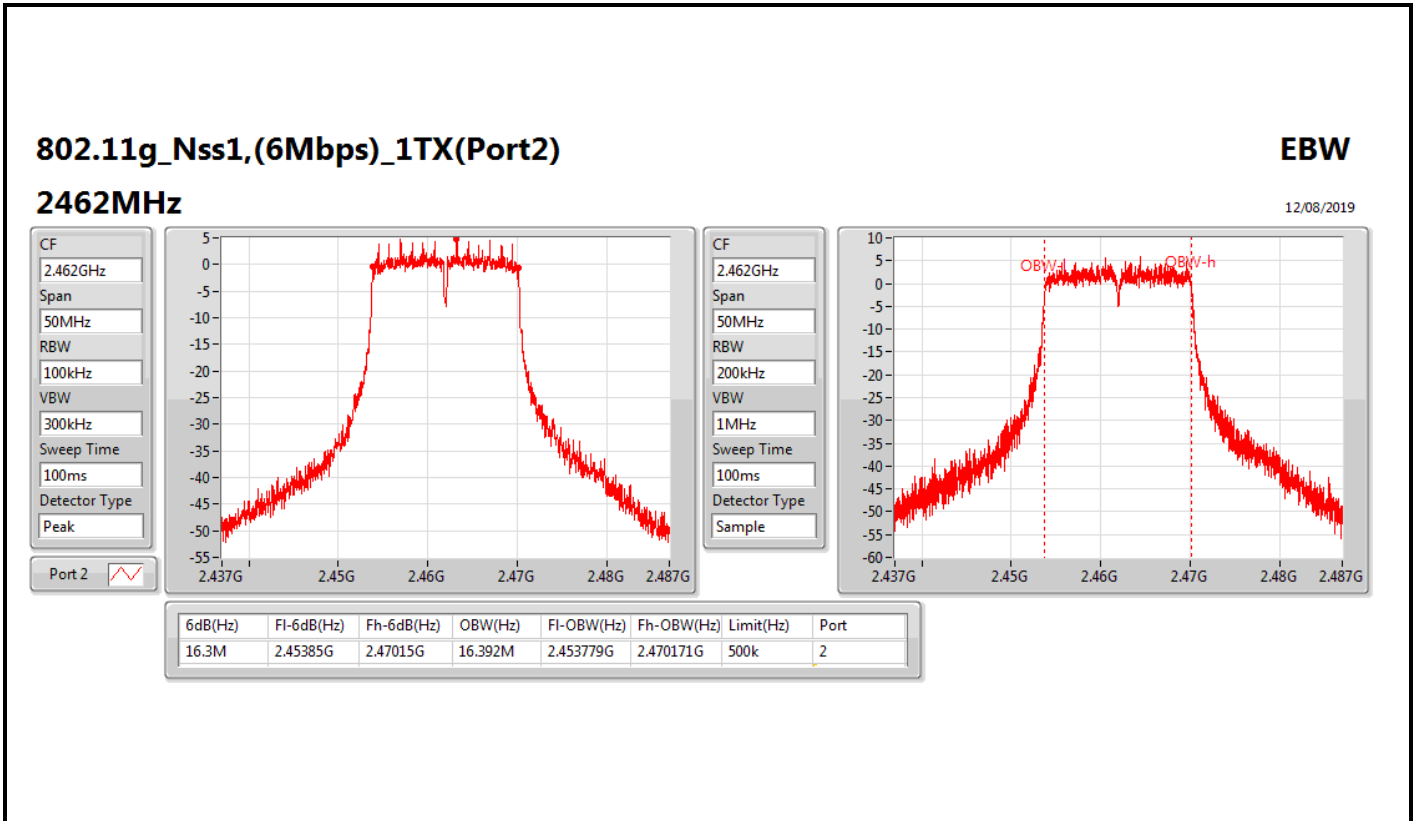
802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2437MHz

12/08/2019



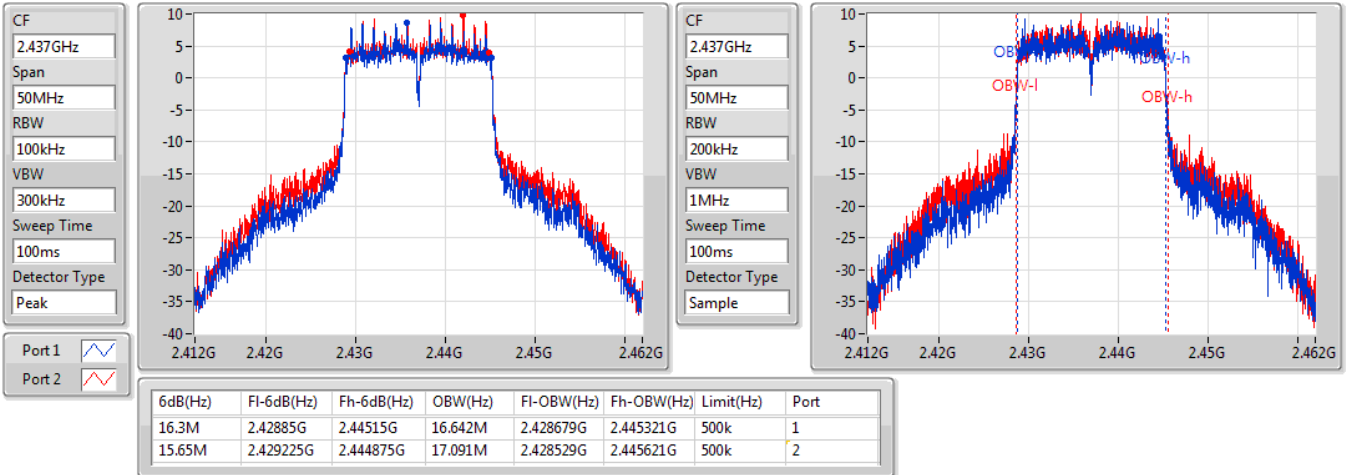


802.11g_Nss1,(6Mbps)_2TX

EBW

2437MHz

12/08/2019

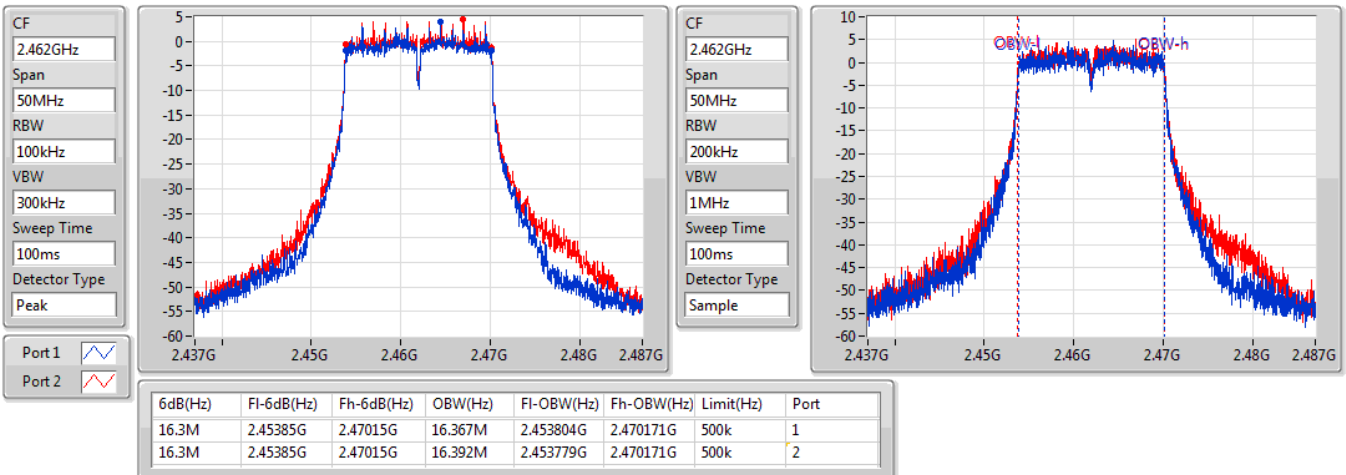


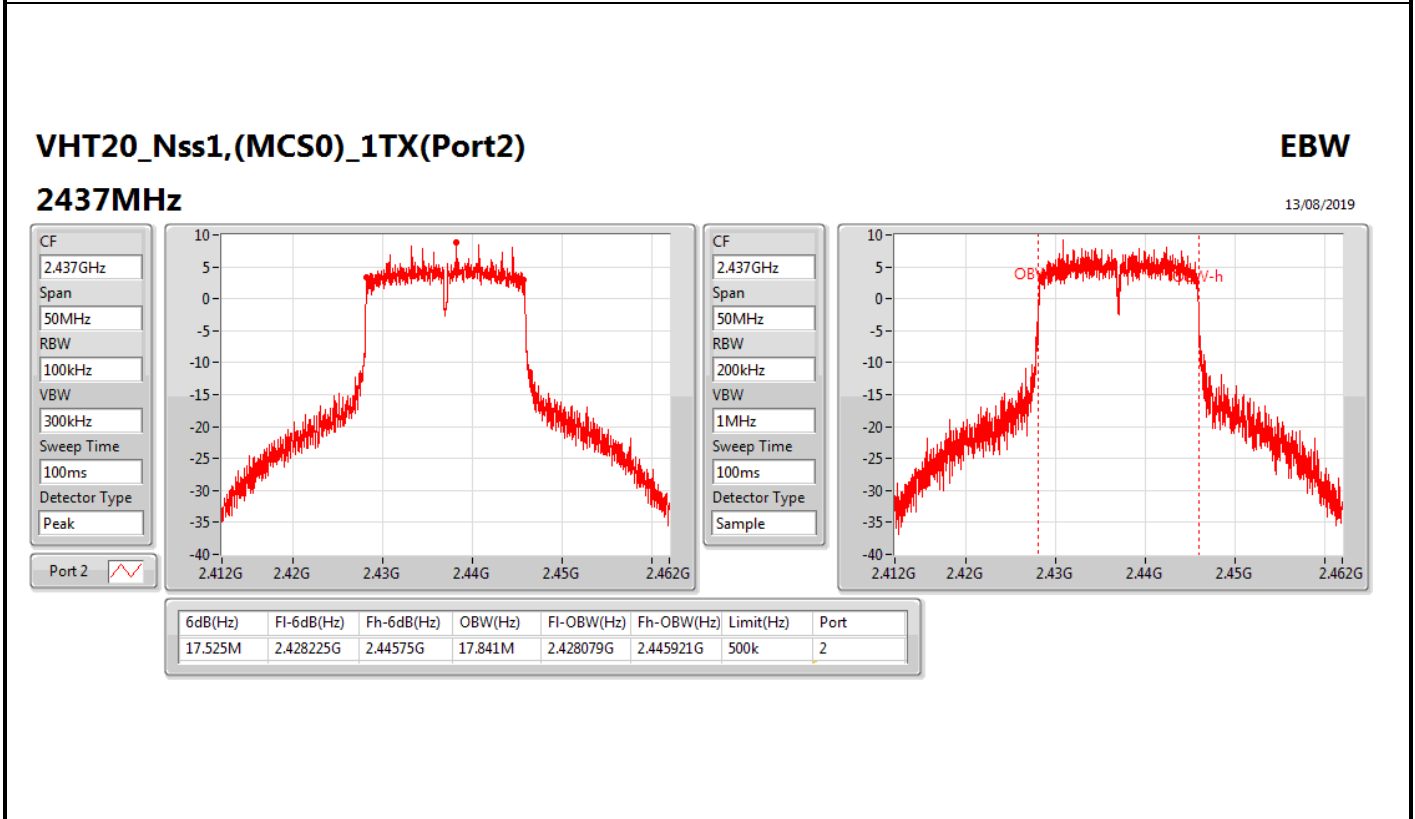
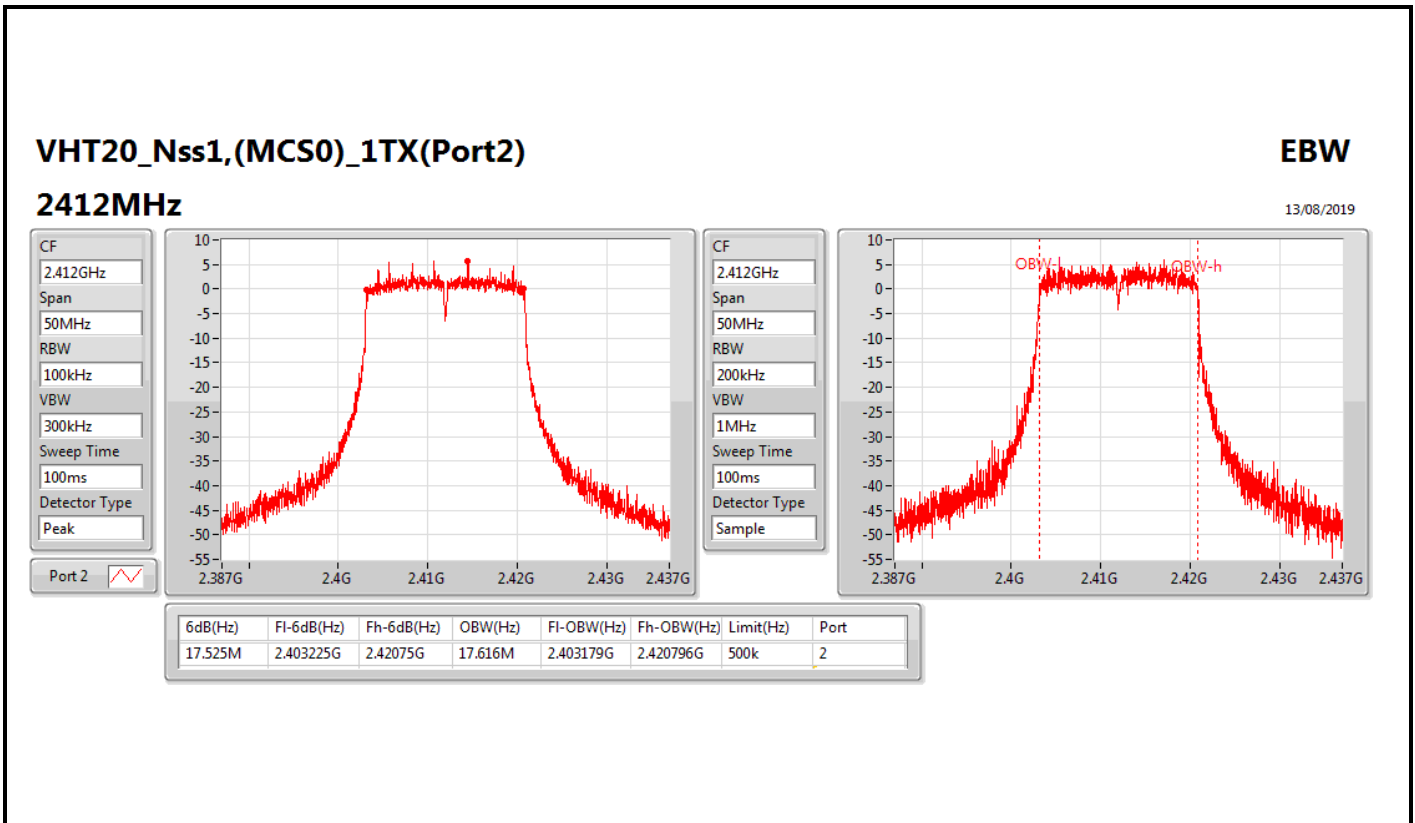
802.11g_Nss1,(6Mbps)_2TX

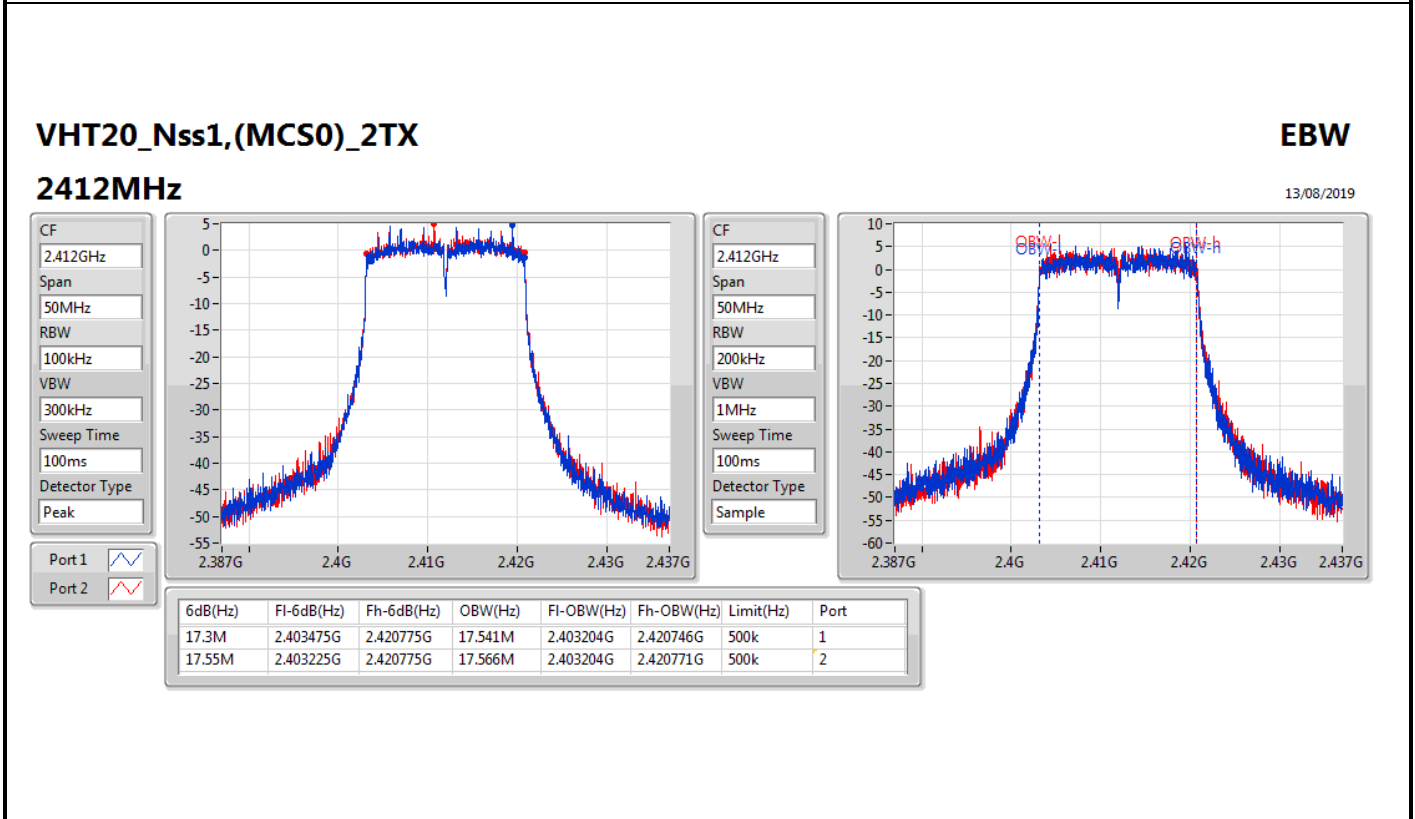
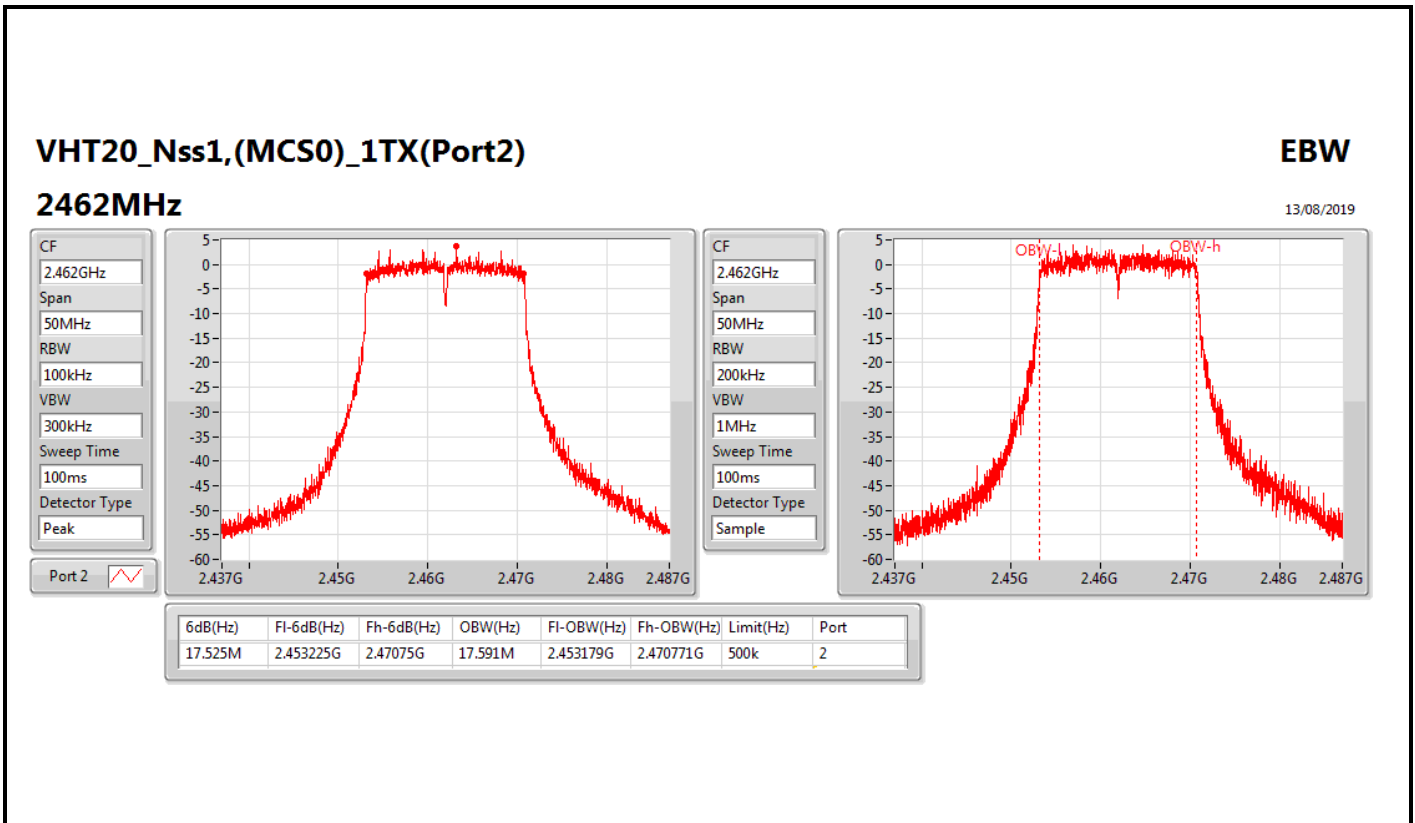
EBW

2462MHz

12/08/2019







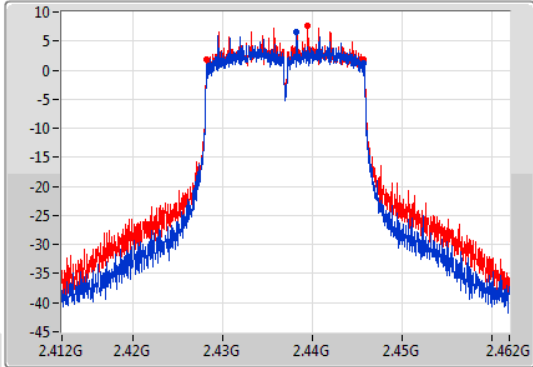
VHT20_Nss1,(MCS0)_2TX

EBW

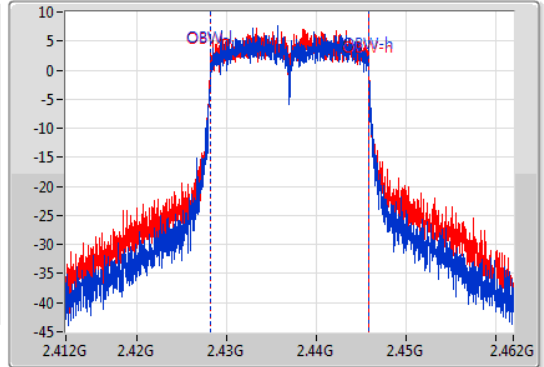
2437MHz

13/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.275M	2.428475G	2.44575G	17.616M	2.428179G	2.445796G	500k	1
17.525M	2.428225G	2.44575G	17.666M	2.428154G	2.445821G	500k	2

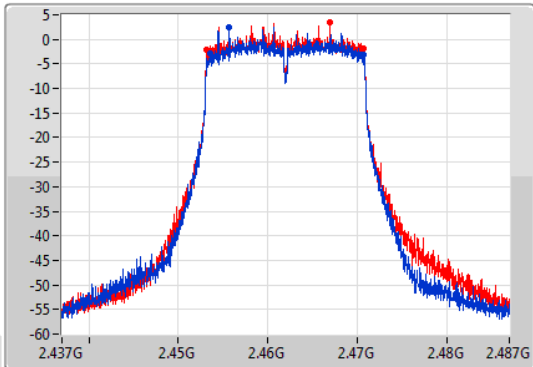
VHT20_Nss1,(MCS0)_2TX

EBW

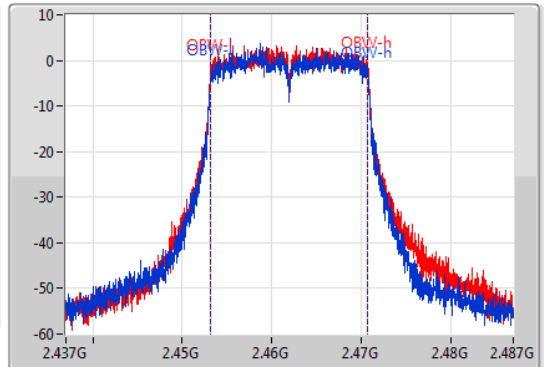
2462MHz

13/08/2019

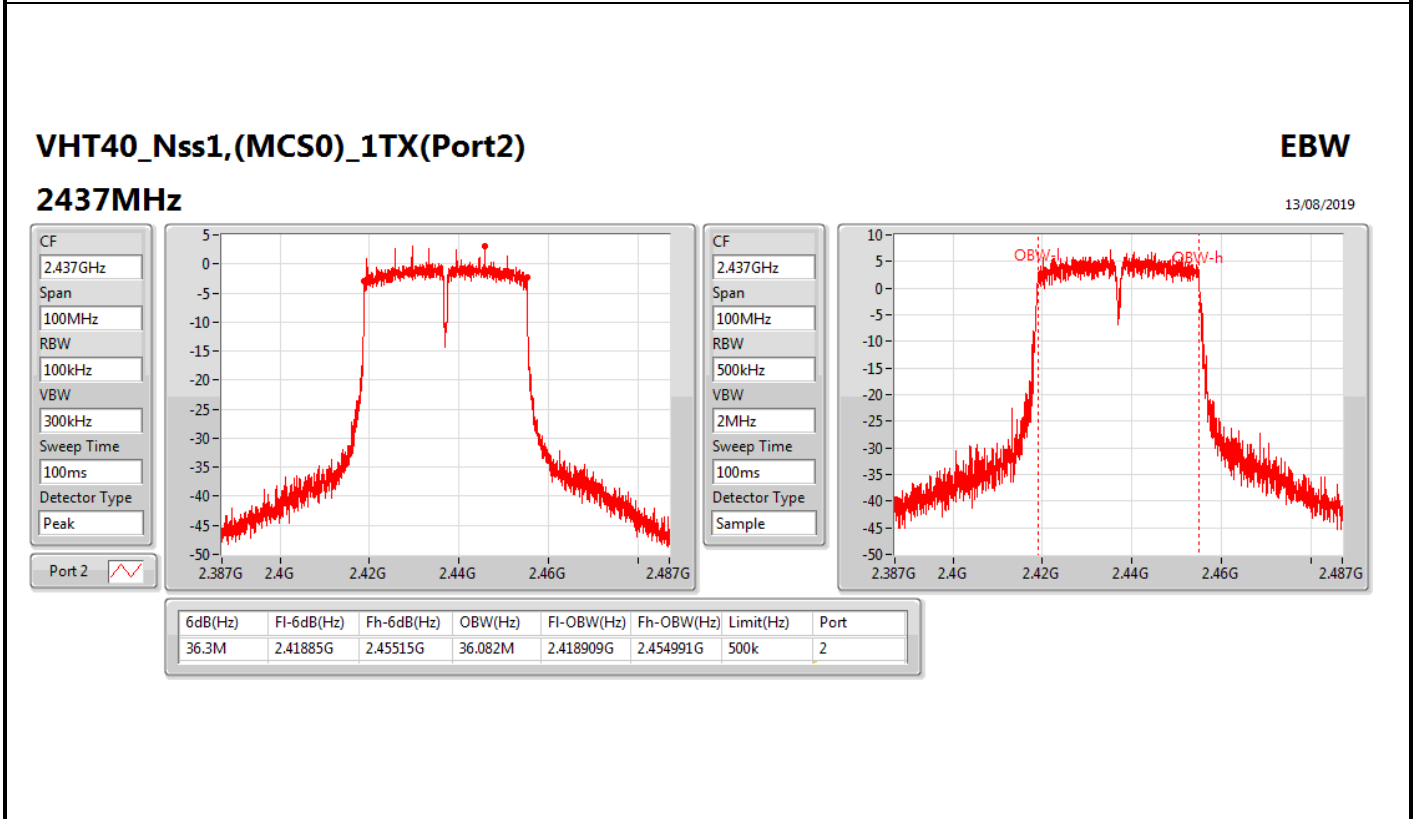
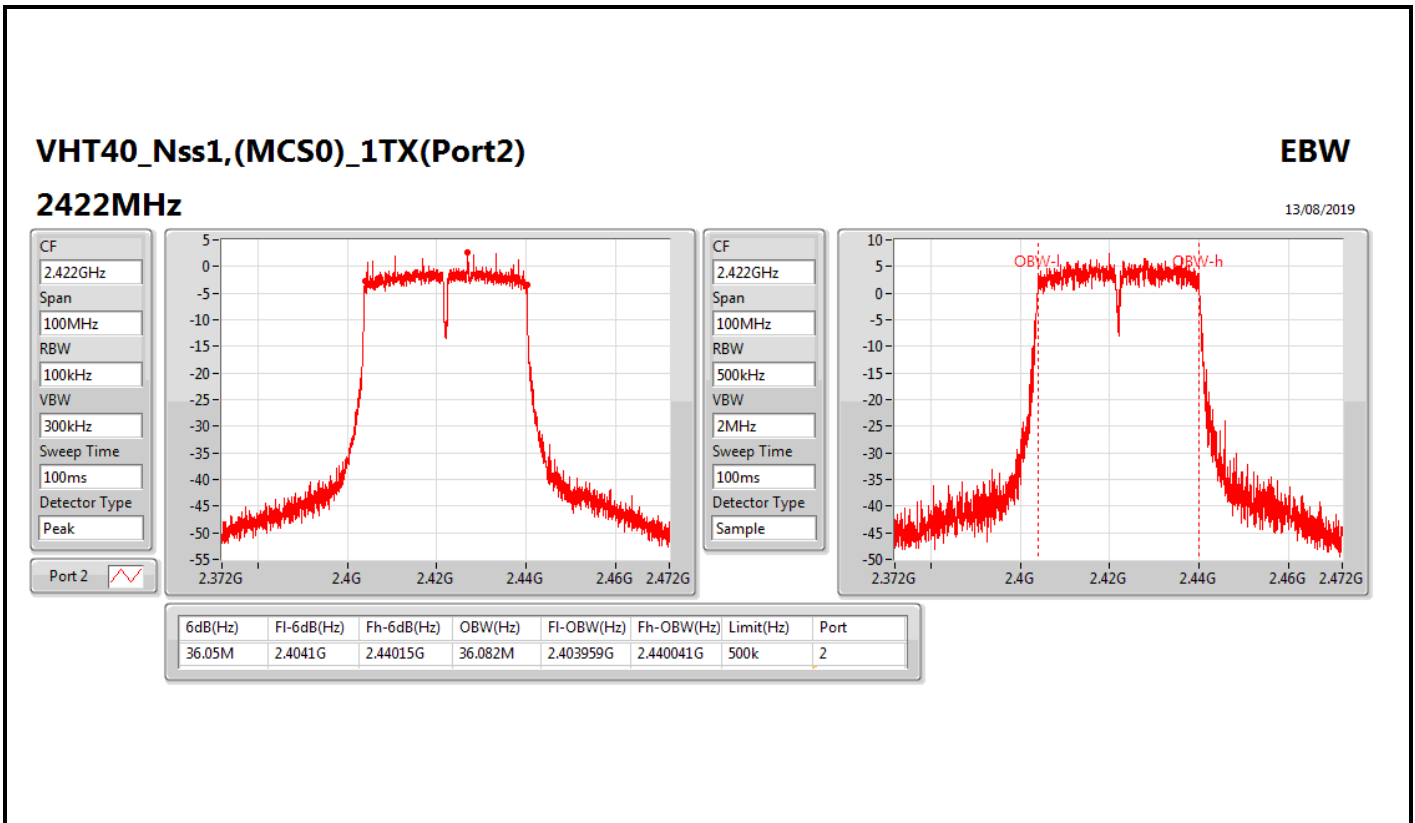
CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak

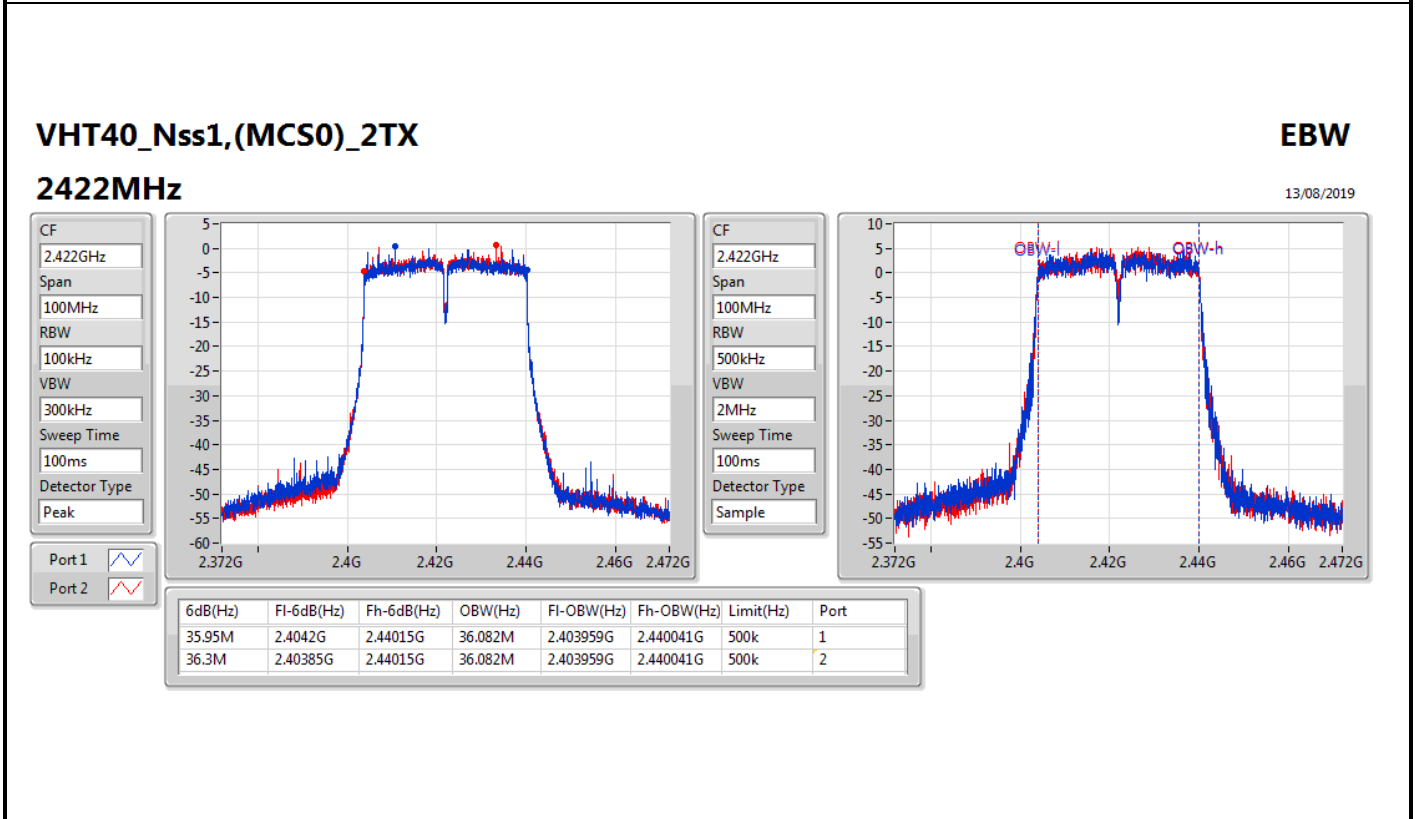
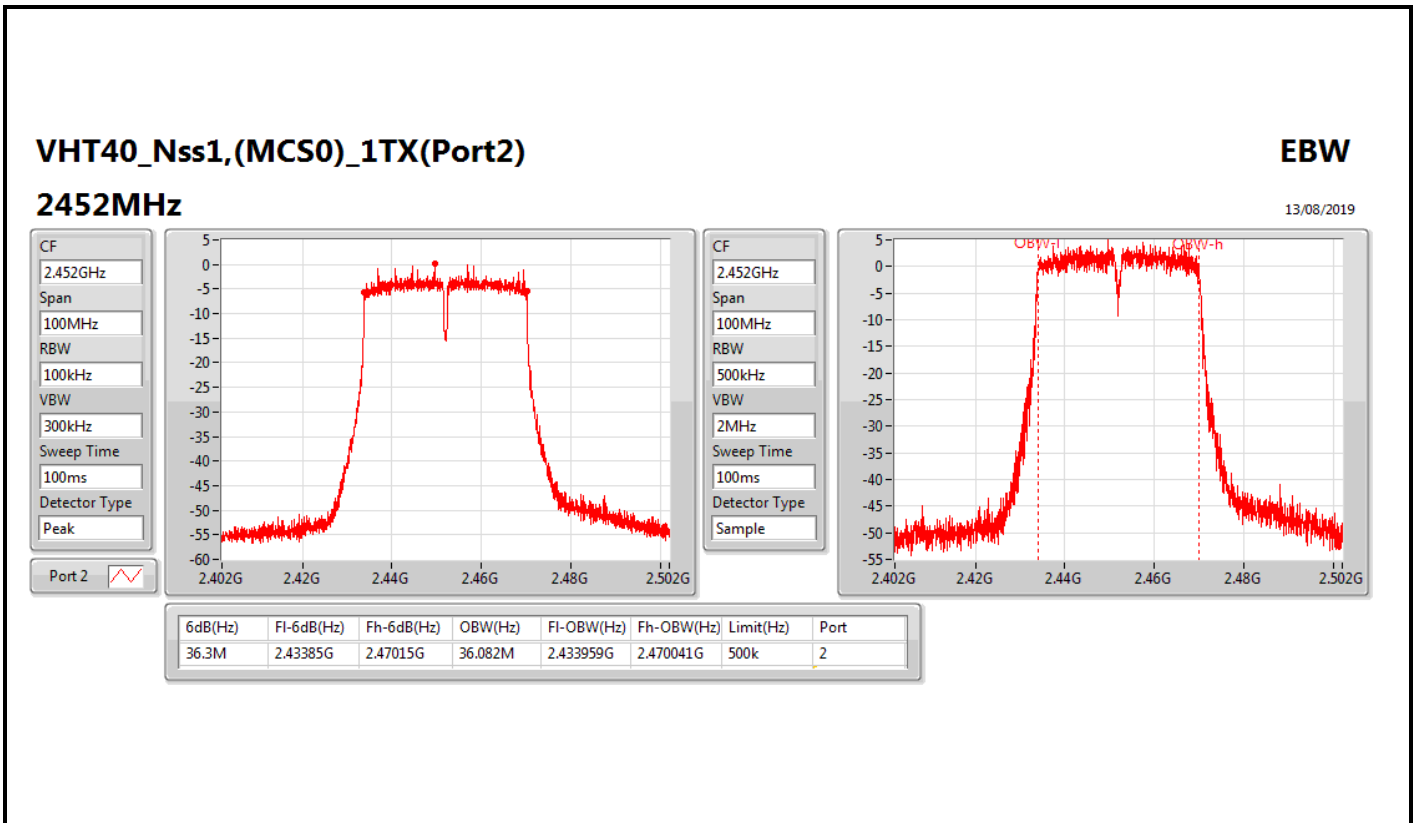


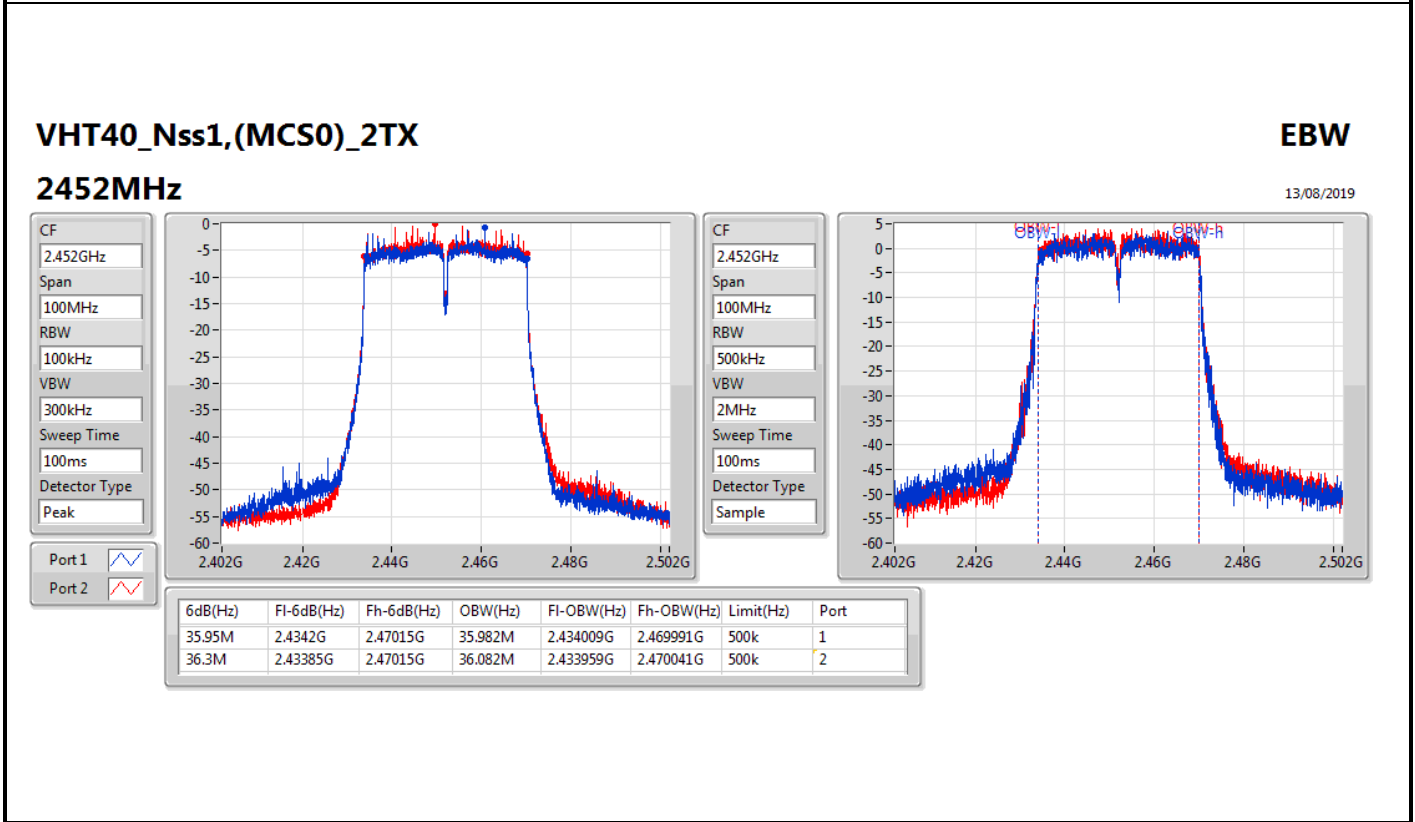
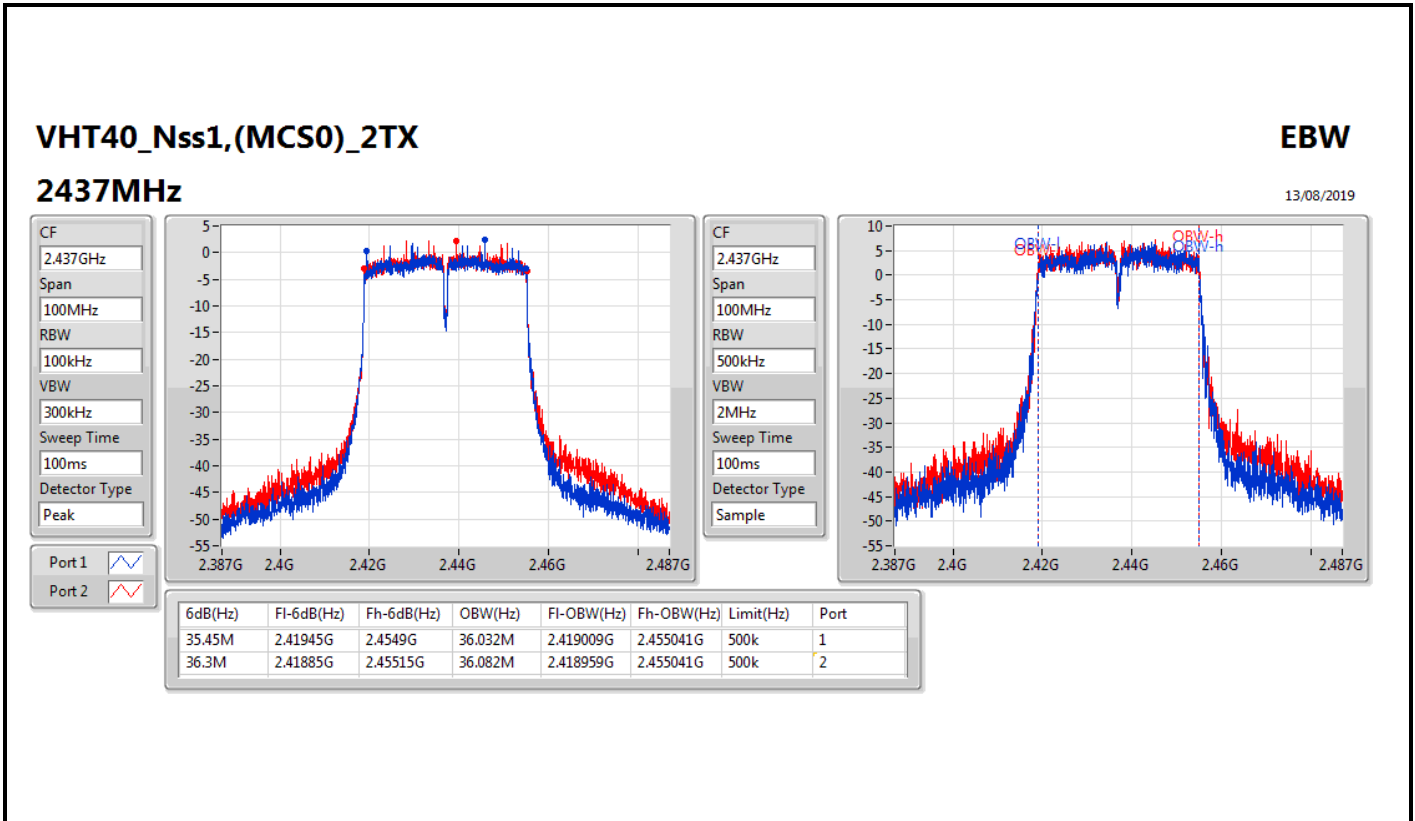
CF
2.462GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.15M	2.4536G	2.47075G	17.566M	2.453204G	2.470771G	500k	1
17.525M	2.453225G	2.47075G	17.591M	2.453179G	2.470771G	500k	2





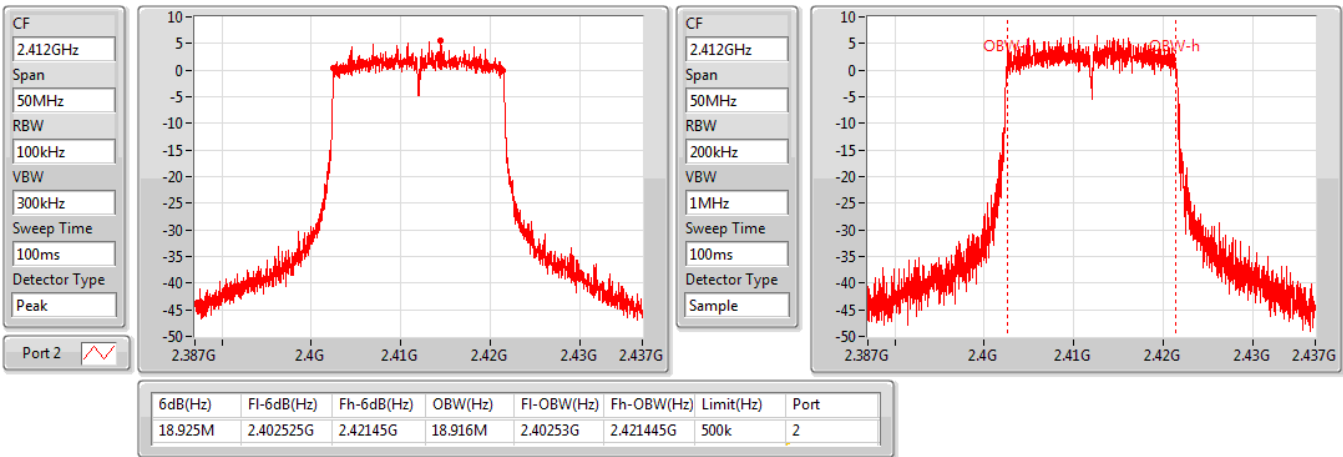


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2412MHz

12/08/2019

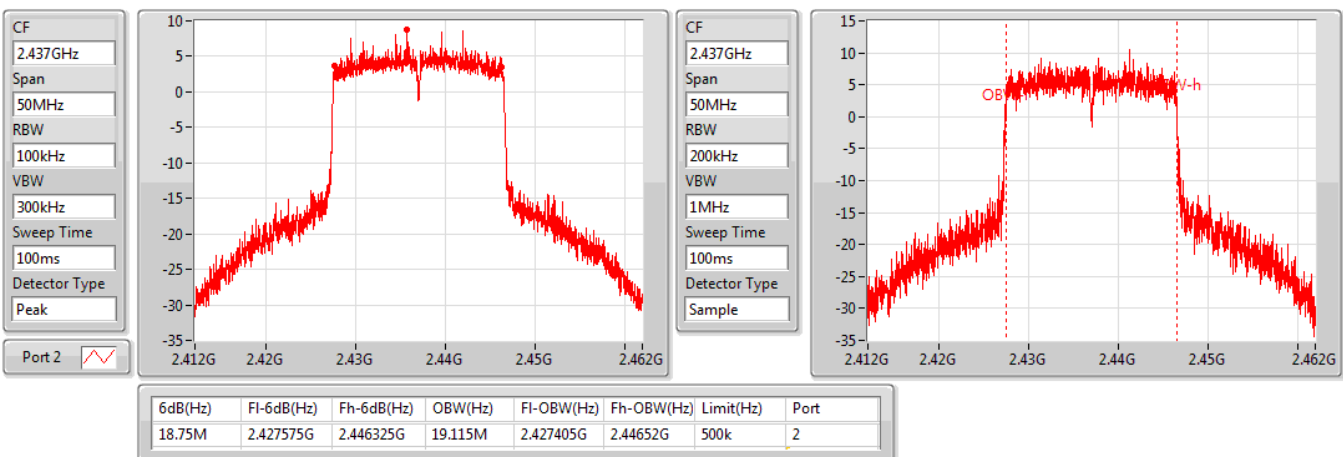


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

12/08/2019

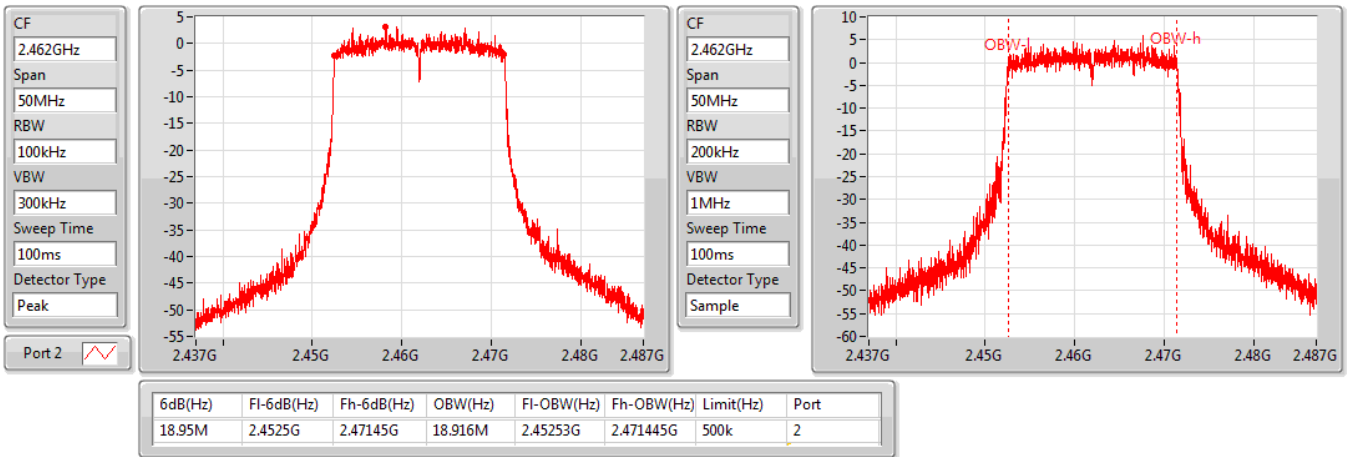


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2462MHz

13/08/2019

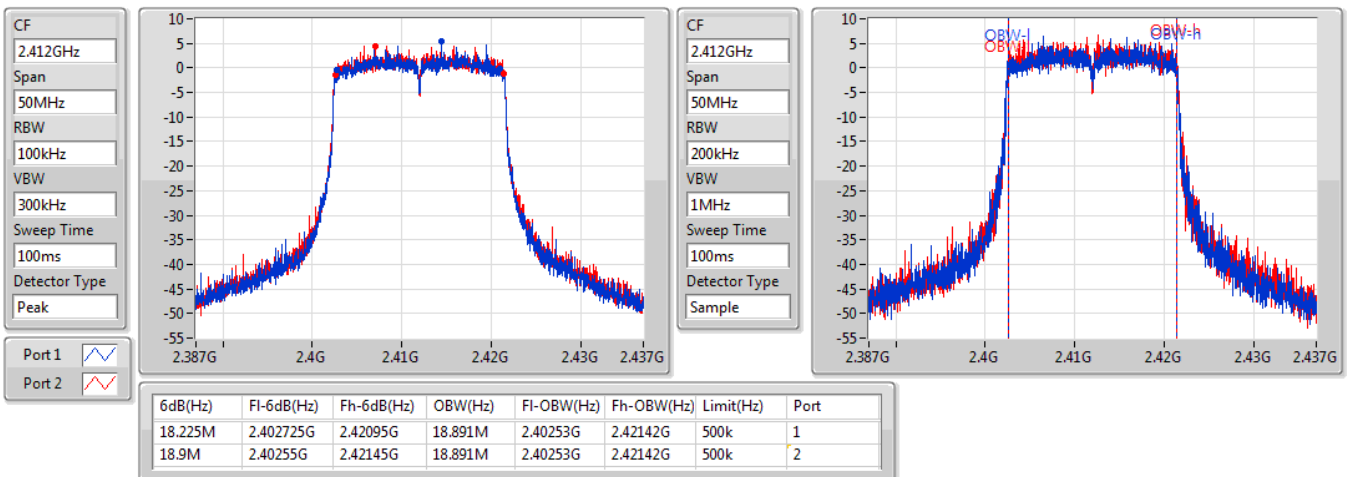


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2412MHz

13/08/2019

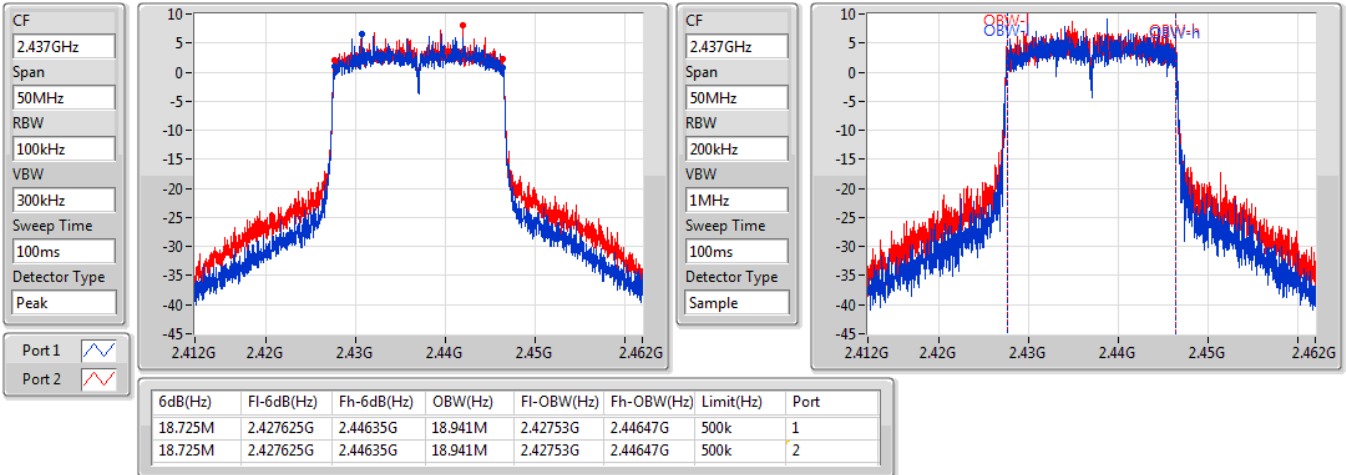


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

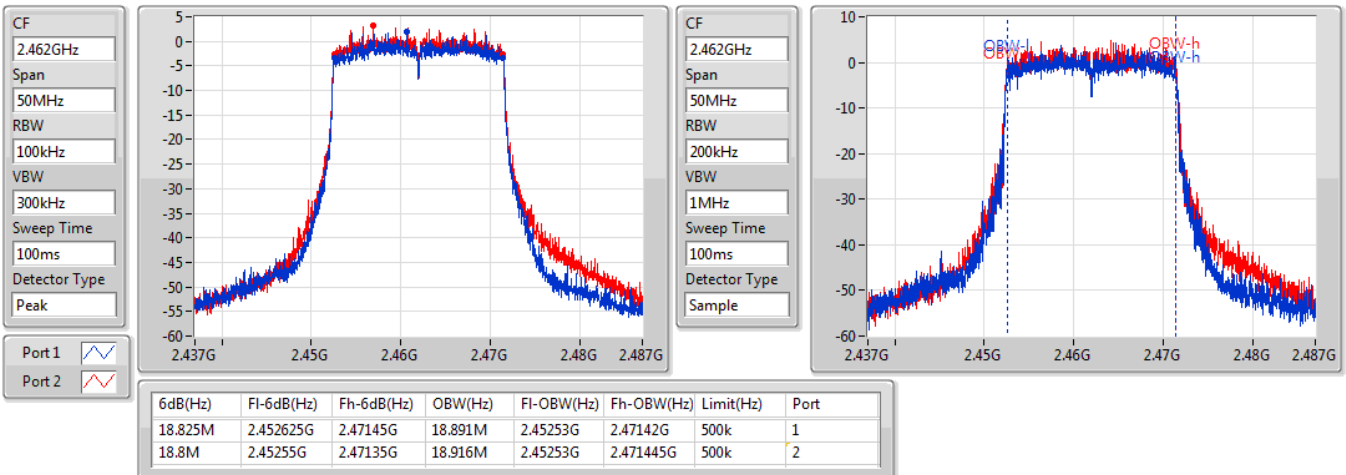


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2462MHz

13/08/2019

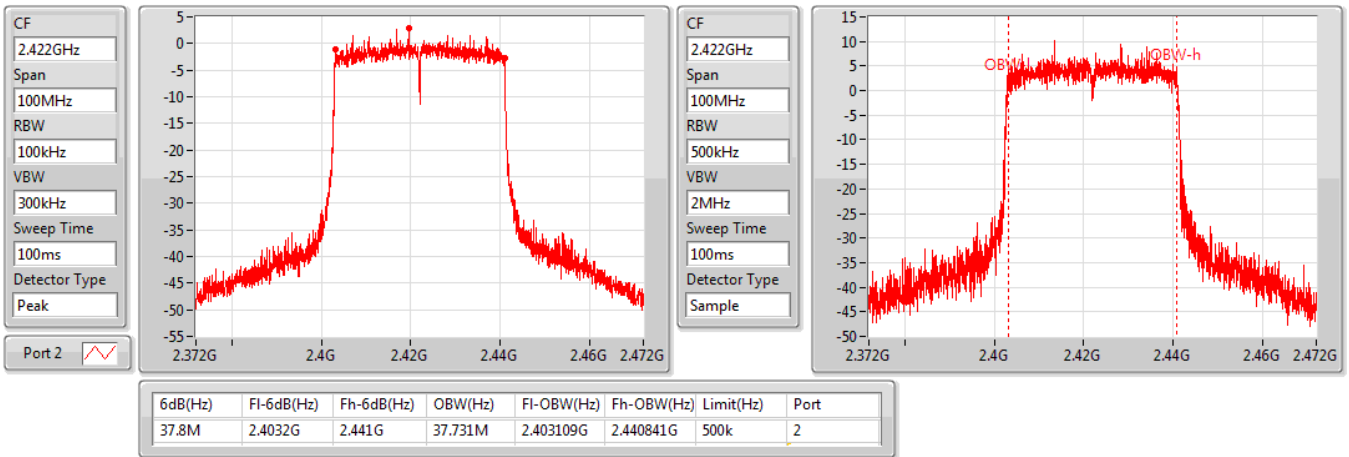


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2422MHz

13/08/2019

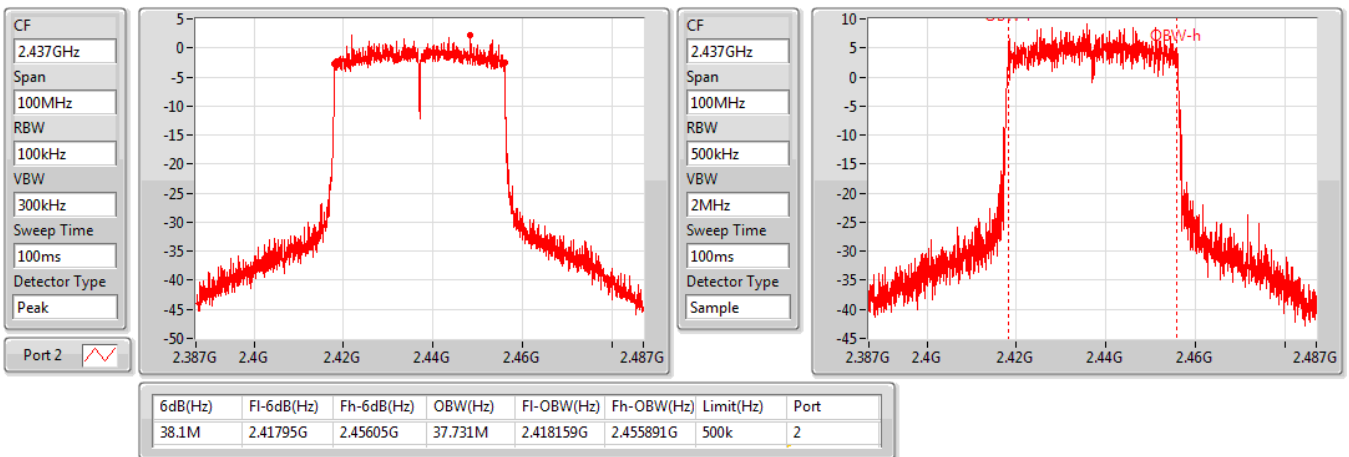


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

13/08/2019

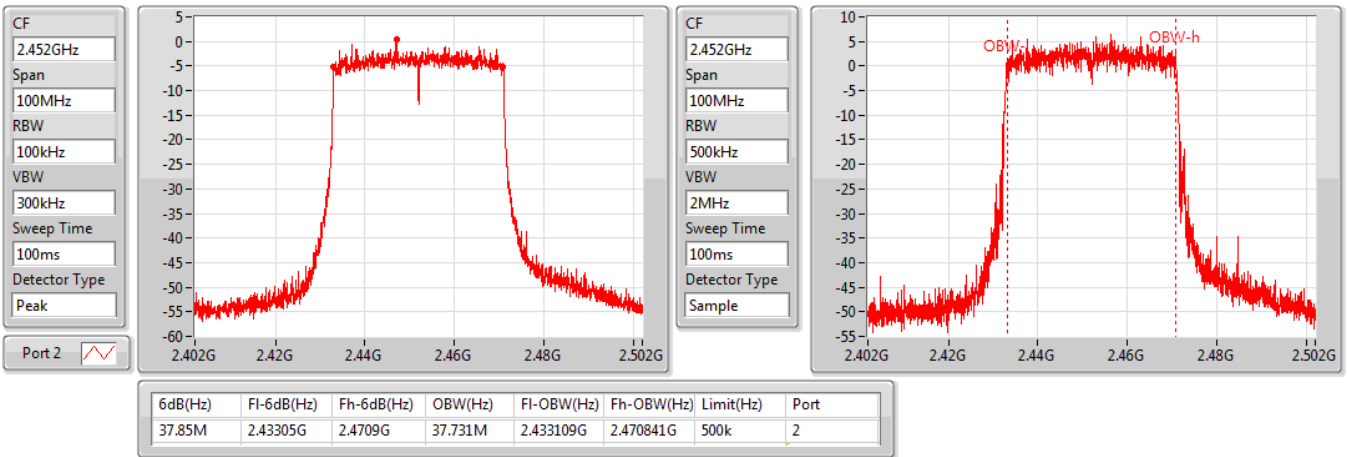


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2452MHz

13/08/2019

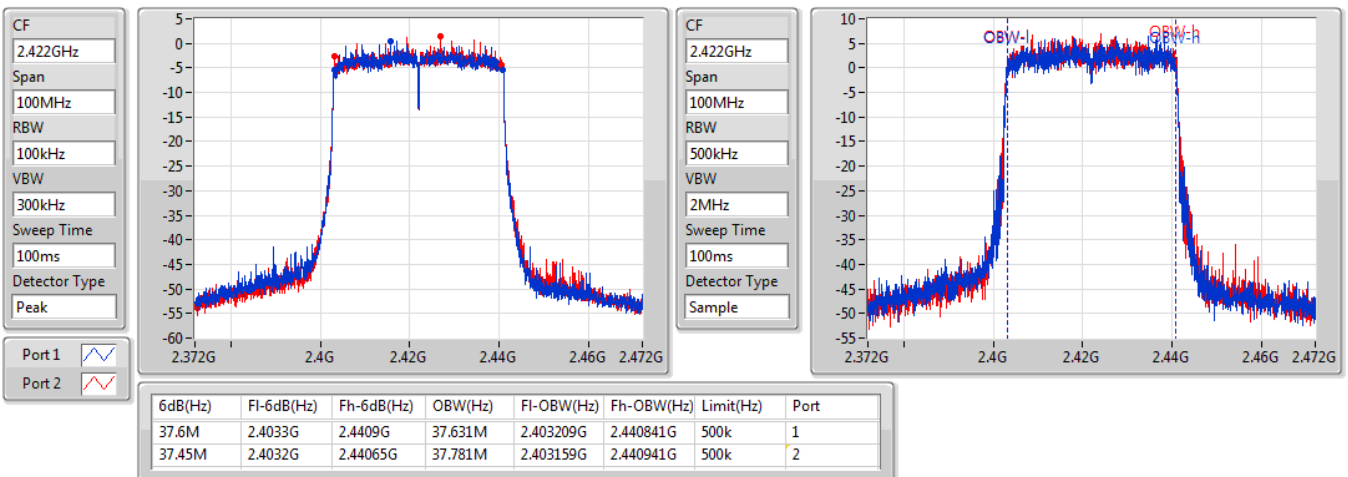


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2422MHz

13/08/2019

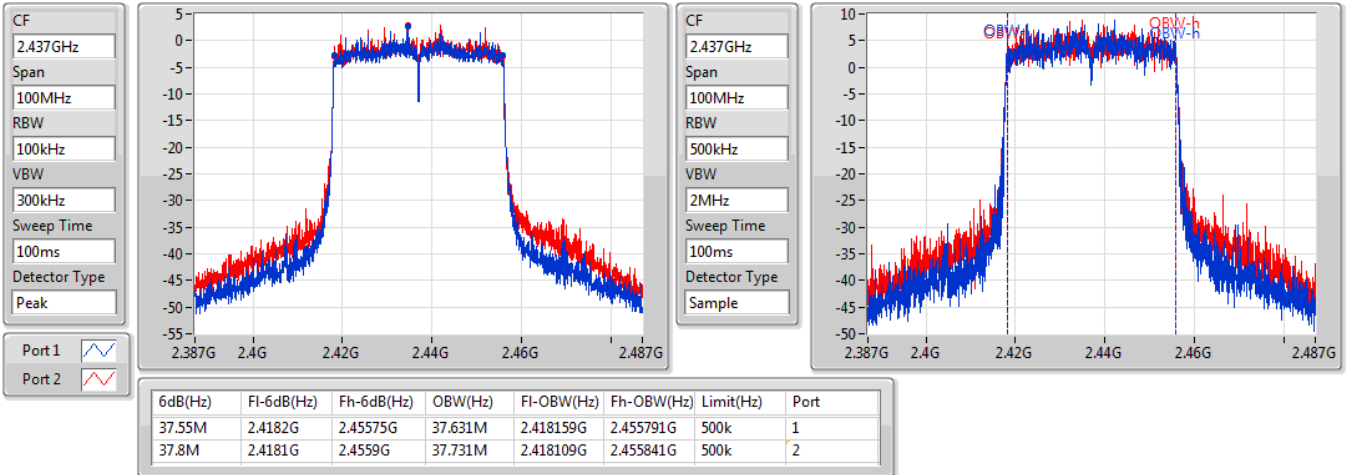


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

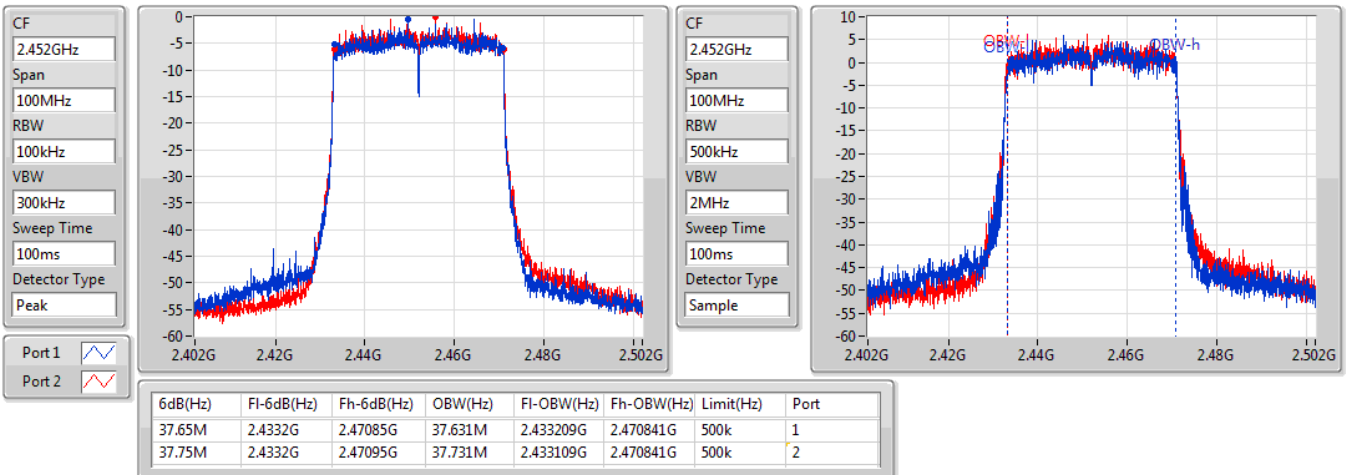


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2452MHz

13/08/2019





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(Port2)	8.05M	13.643M	13M6G1D	7.05M	12.944M
802.11b_Nss1,(1Mbps)_2TX	8.05M	13.593M	13M6G1D	7.05M	12.844M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.325M	16.467M	16M5D1D	16.3M	16.392M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.467M	16M5D1D	16.3M	16.367M
VHT20_Nss1,(MCS0)_1TX(Port2)	17.575M	17.616M	17M6D1D	17.525M	17.591M
VHT20_Nss1,(MCS0)_2TX	17.55M	17.666M	17M7D1D	16.65M	17.566M
VHT40_Nss1,(MCS0)_1TX(Port2)	36.3M	36.132M	36M1D1D	35.9M	36.082M
VHT40_Nss1,(MCS0)_2TX	36.3M	36.132M	36M1D1D	35.65M	36.032M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.95M	18.916M	18M9D1D	18.8M	18.891M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.875M	18.916M	18M9D1D	18.375M	18.866M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	38M	37.731M	37M7D1D	37.55M	37.681M
802.11ax HEW40_Nss1,(MCS0)_2TX	38.1M	37.781M	37M8D1D	37.7M	37.631M

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;

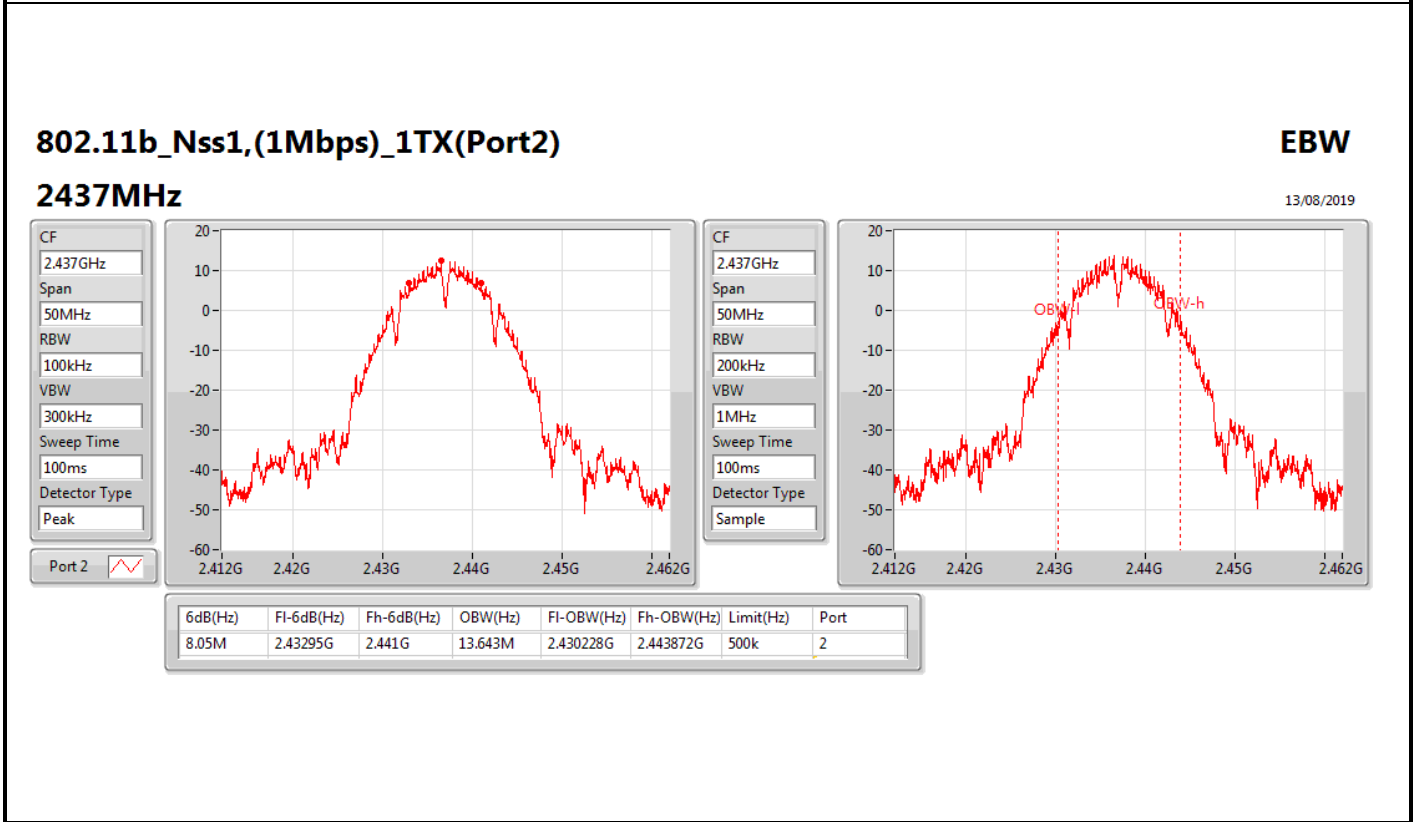
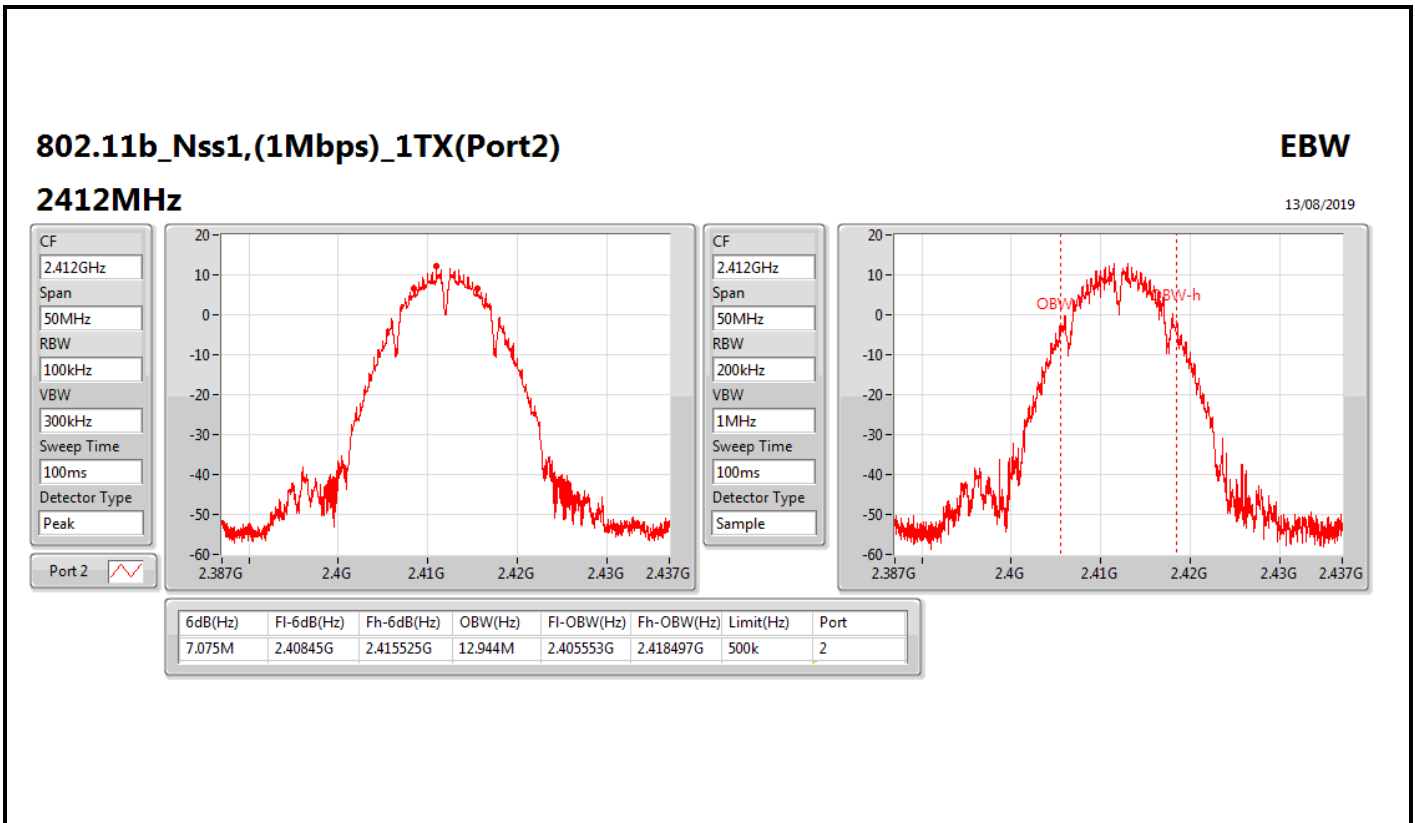
Result

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)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			7.075M	12.944M
2417MHz						
2437MHz	Pass	500k			8.05M	13.643M
2457MHz						
2462MHz	Pass	500k			7.05M	12.969M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.05M	12.919M	7.55M	12.969M
2417MHz						
2437MHz	Pass	500k	7.55M	13.118M	7.075M	13.593M
2457MHz						
2462MHz	Pass	500k	7.075M	12.844M	8.05M	12.969M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			16.3M	16.417M
2417MHz						
2437MHz	Pass	500k			16.325M	16.467M
2457MHz						
2462MHz	Pass	500k			16.3M	16.392M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.417M	16.3M	16.367M
2417MHz						
2437MHz	Pass	500k	16.3M	16.417M	16.325M	16.467M
2457MHz						
2462MHz	Pass	500k	16.3M	16.392M	16.325M	16.392M
VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			17.55M	17.591M
2417MHz						
2437MHz	Pass	500k			17.575M	17.616M
2457MHz						
2462MHz	Pass	500k			17.525M	17.591M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.525M	17.566M	17.55M	17.591M
2417MHz						
2437MHz	Pass	500k	17.175M	17.616M	16.65M	17.666M
2457MHz						
2462MHz	Pass	500k	16.9M	17.566M	17.55M	17.591M
VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			35.9M	36.082M
2427MHz						
2437MHz	Pass	500k			36.3M	36.082M
2447MHz						
2452MHz	Pass	500k			36.05M	36.132M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.7M	36.032M	35.9M	36.082M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
2427MHz						
2437MHz	Pass	500k	35.9M	36.082M	35.65M	36.032M
2447MHz						
2452MHz	Pass	500k	35.95M	36.082M	36.3M	36.132M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			18.8M	18.891M
2417MHz						
2437MHz	Pass	500k			18.95M	18.916M
2457MHz						
2462MHz	Pass	500k			18.9M	18.916M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.875M	18.866M	18.625M	18.916M
2417MHz						
2437MHz	Pass	500k	18.375M	18.891M	18.675M	18.916M
2457MHz						
2462MHz	Pass	500k	18.725M	18.866M	18.825M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			38M	37.731M
2427MHz						
2437MHz	Pass	500k			37.95M	37.681M
2447MHz						
2452MHz	Pass	500k			37.55M	37.681M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.7M	37.631M	37.85M	37.781M
2427MHz						
2437MHz	Pass	500k	37.8M	37.681M	38M	37.731M
2447MHz						
2452MHz	Pass	500k	37.85M	37.731M	38.1M	37.781M

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

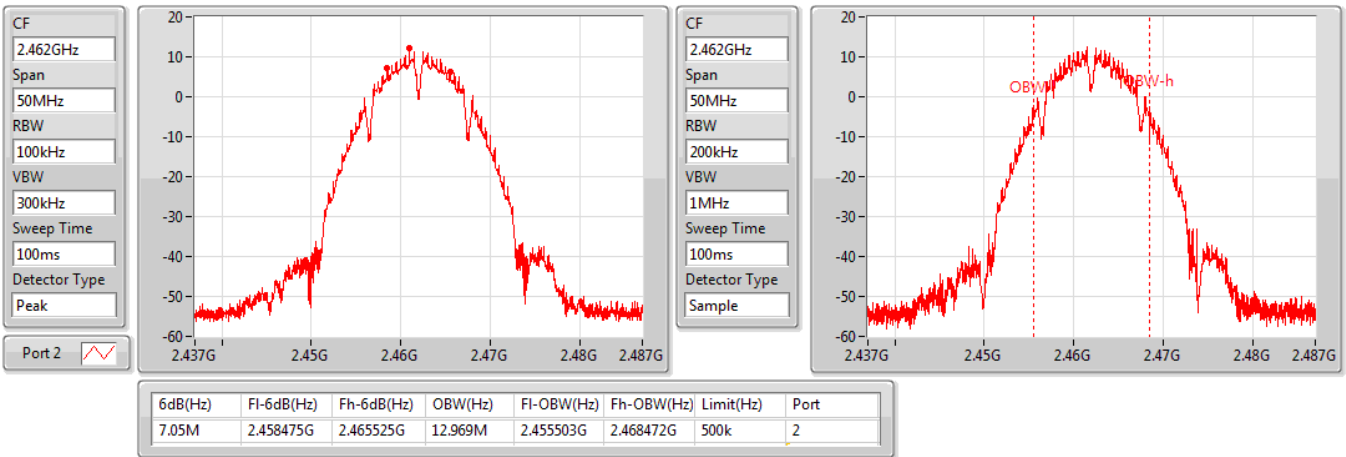


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2462MHz

13/08/2019

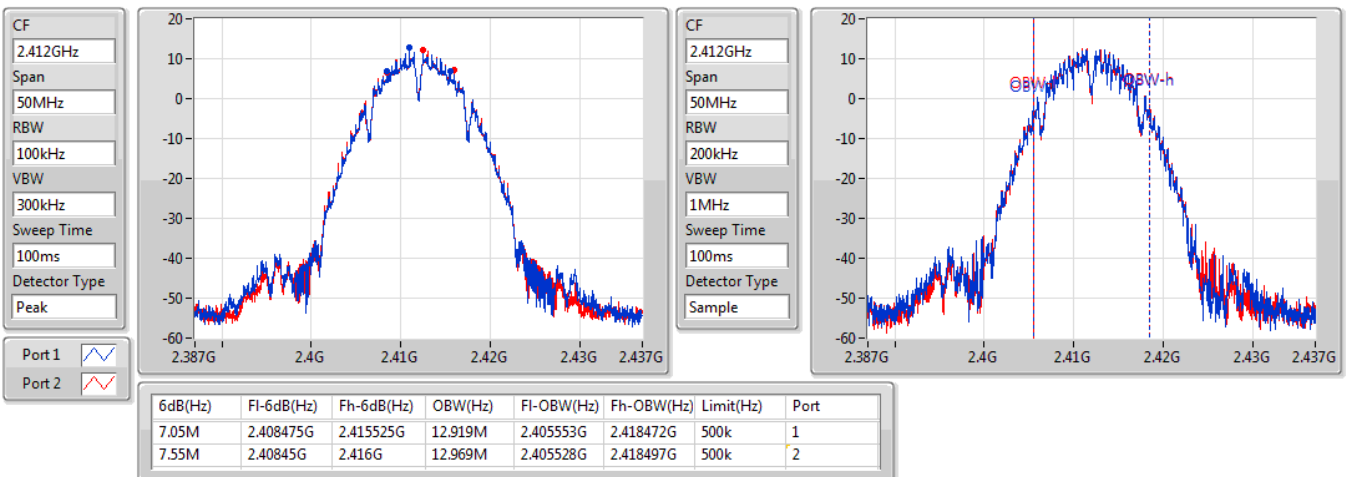


802.11b_Nss1,(1Mbps)_2TX

EBW

2412MHz

13/08/2019



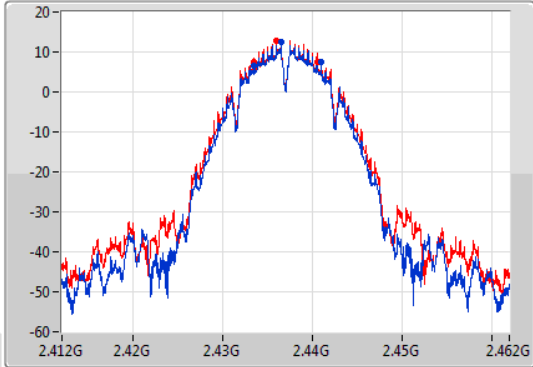
802.11b_Nss1,(1Mbps)_2TX

EBW

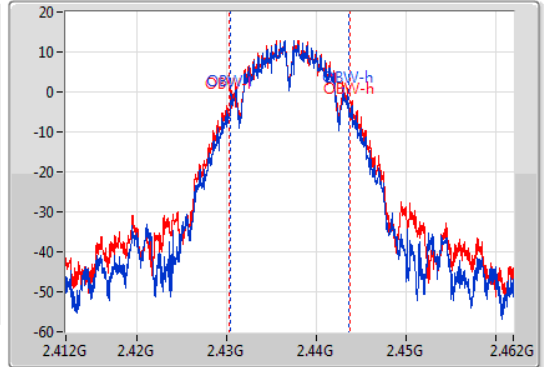
2437MHz

13/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.55M	2.43345G	2.441G	13.118M	2.430453G	2.443572G	500k	1
7.075M	2.43345G	2.440525G	13.593M	2.430228G	2.443822G	500k	2

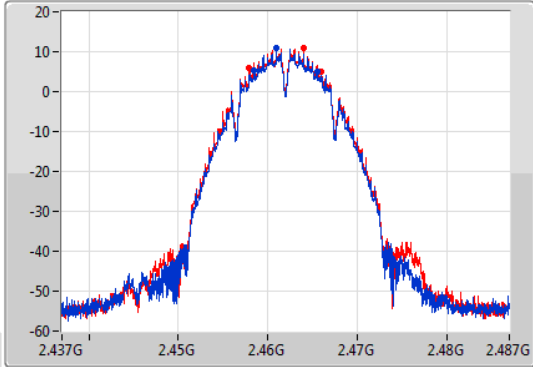
802.11b_Nss1,(1Mbps)_2TX

EBW

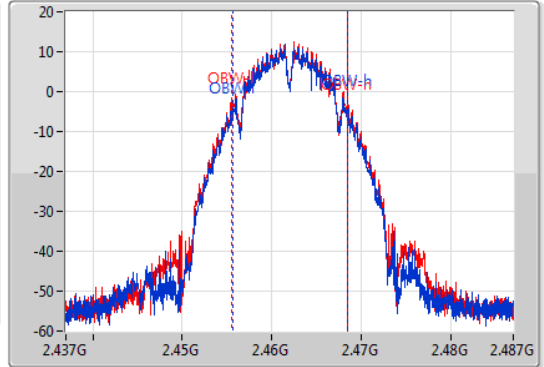
2462MHz

13/08/2019

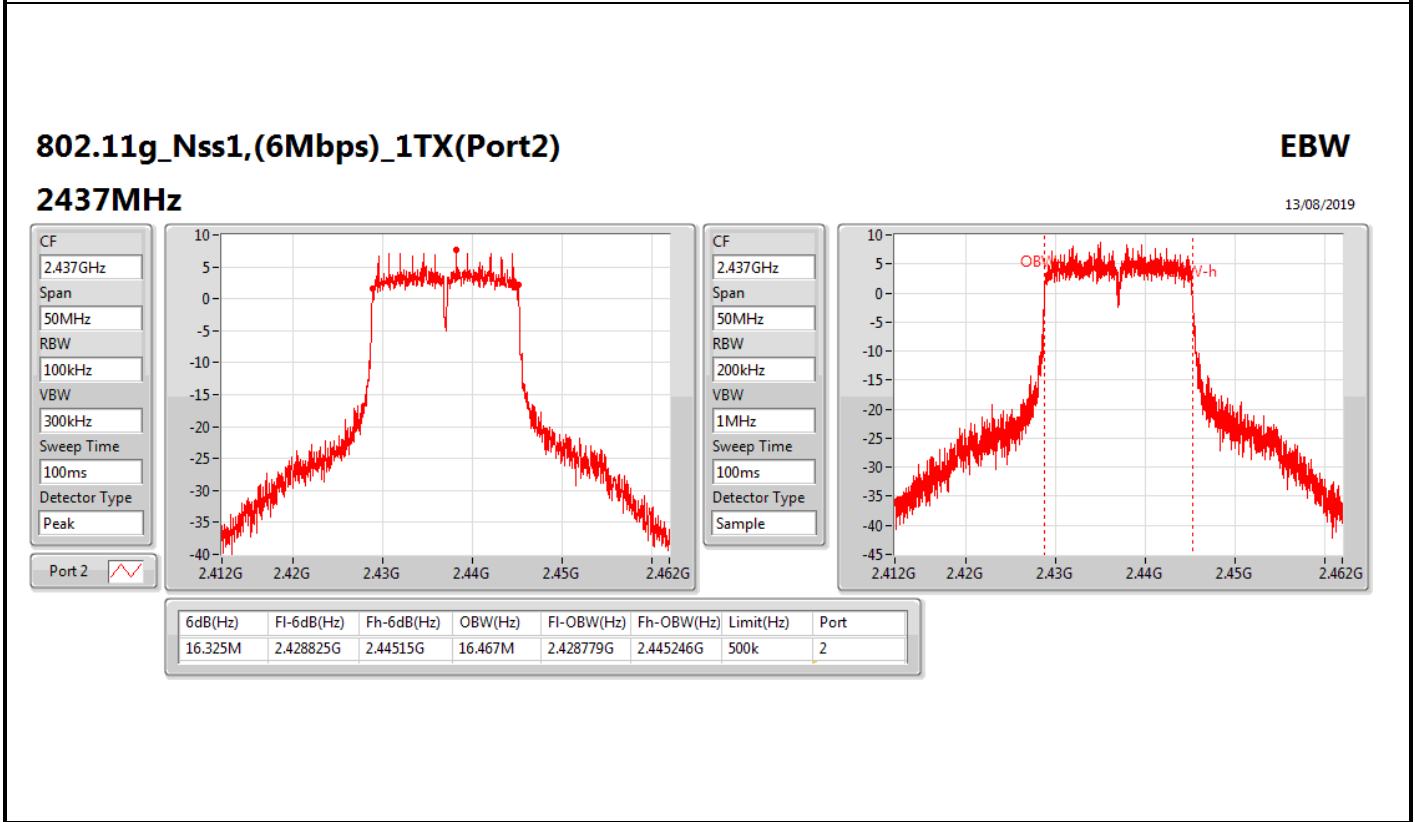
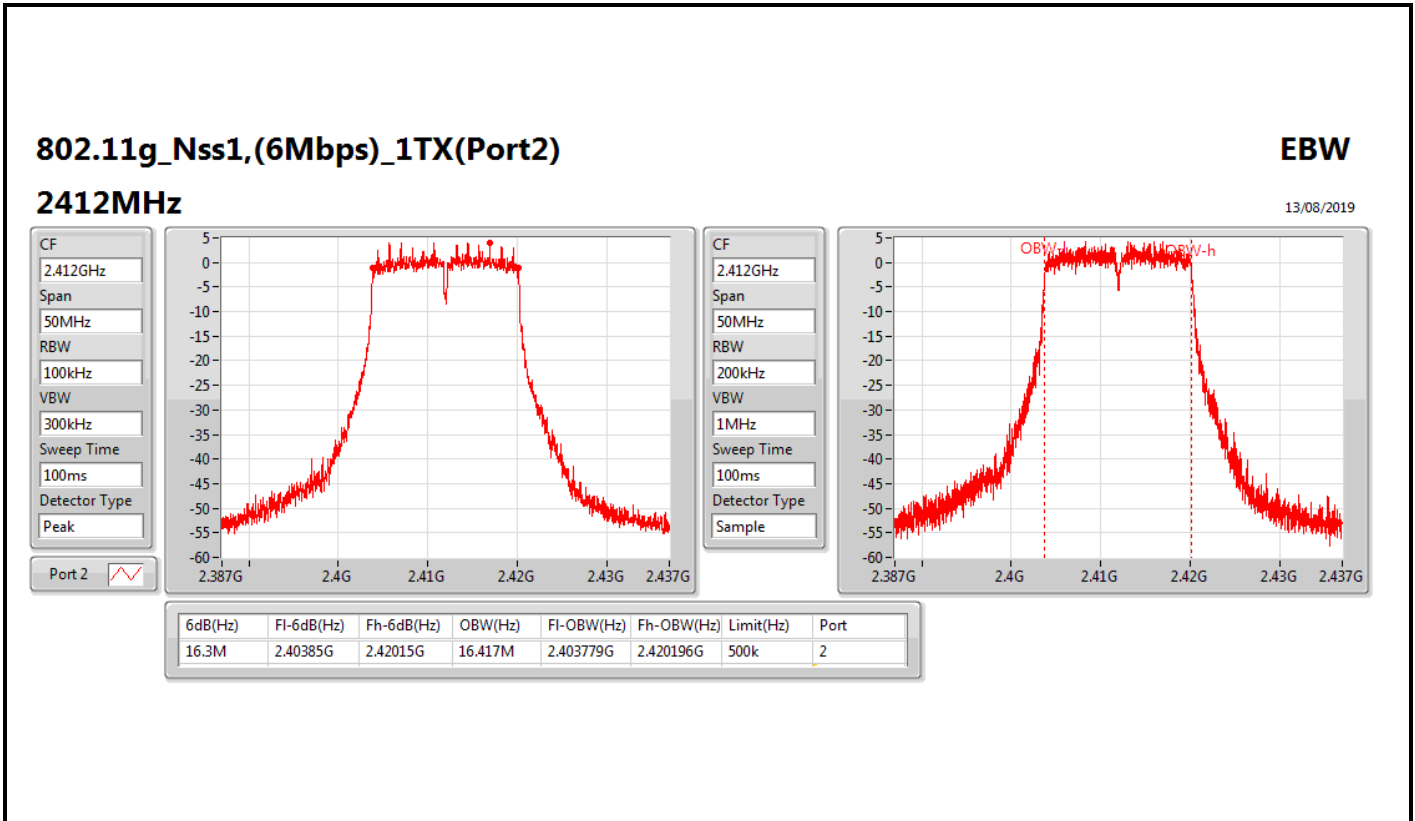
CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.075M	2.45845G	2.465525G	12.844M	2.455603G	2.468447G	500k	1
8.05M	2.45795G	2.466G	12.969M	2.455528G	2.468497G	500k	2



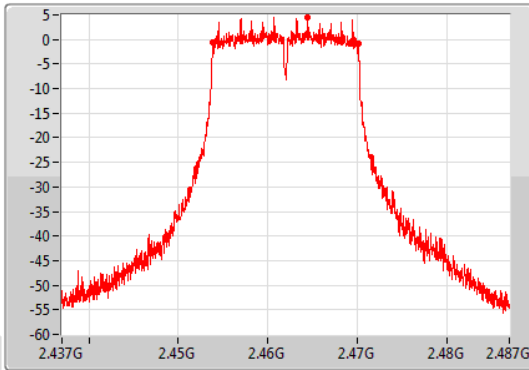
802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

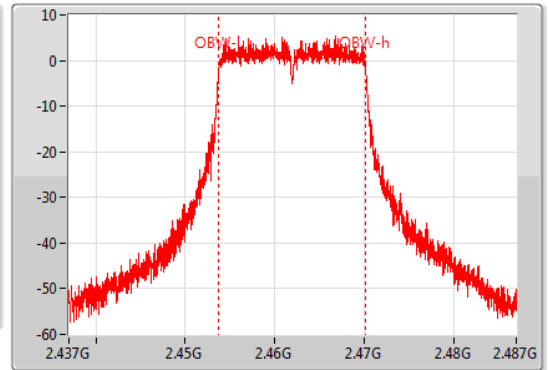
2462MHz

13/08/2019

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.392M	2.453779G	2.470171G	500k	2

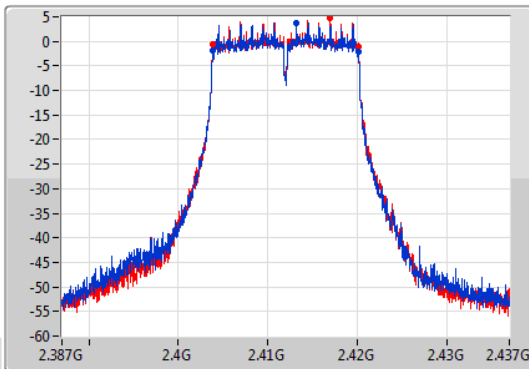
802.11g_Nss1,(6Mbps)_2TX

EBW

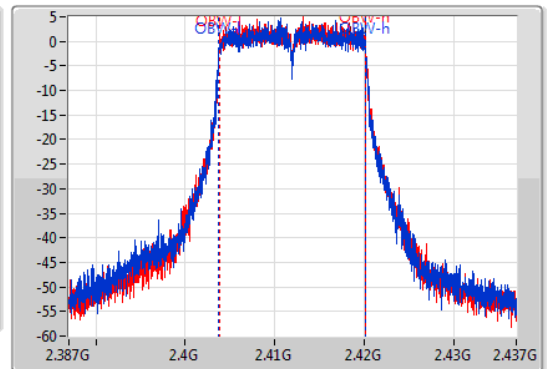
2412MHz

13/08/2019

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
Sample



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	16.417M	2.403779G	2.420196G	500k	1
16.3M	2.40385G	2.42015G	16.367M	2.403804G	2.420171G	500k	2

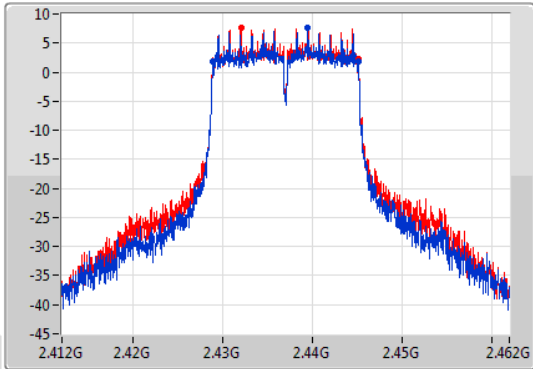
802.11g_Nss1,(6Mbps)_2TX

EBW

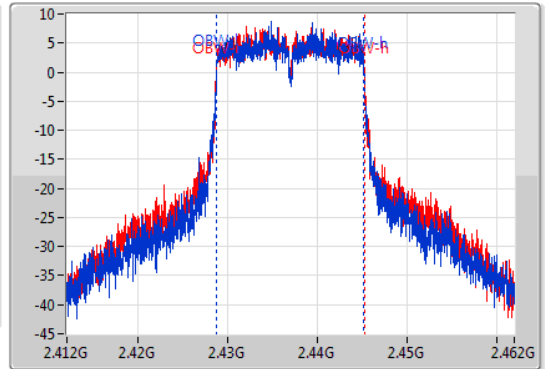
2437MHz

13/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.42885G	2.44515G	16.417M	2.428779G	2.445196G	500k	1
16.325M	2.428825G	2.44515G	16.467M	2.428754G	2.445221G	500k	2

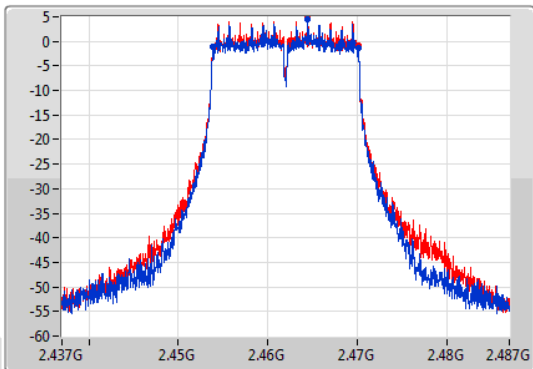
802.11g_Nss1,(6Mbps)_2TX

EBW

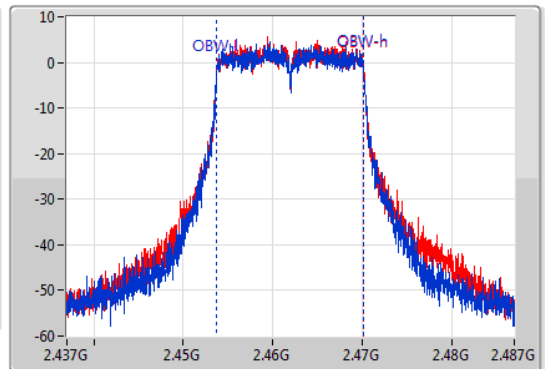
2462MHz

13/08/2019

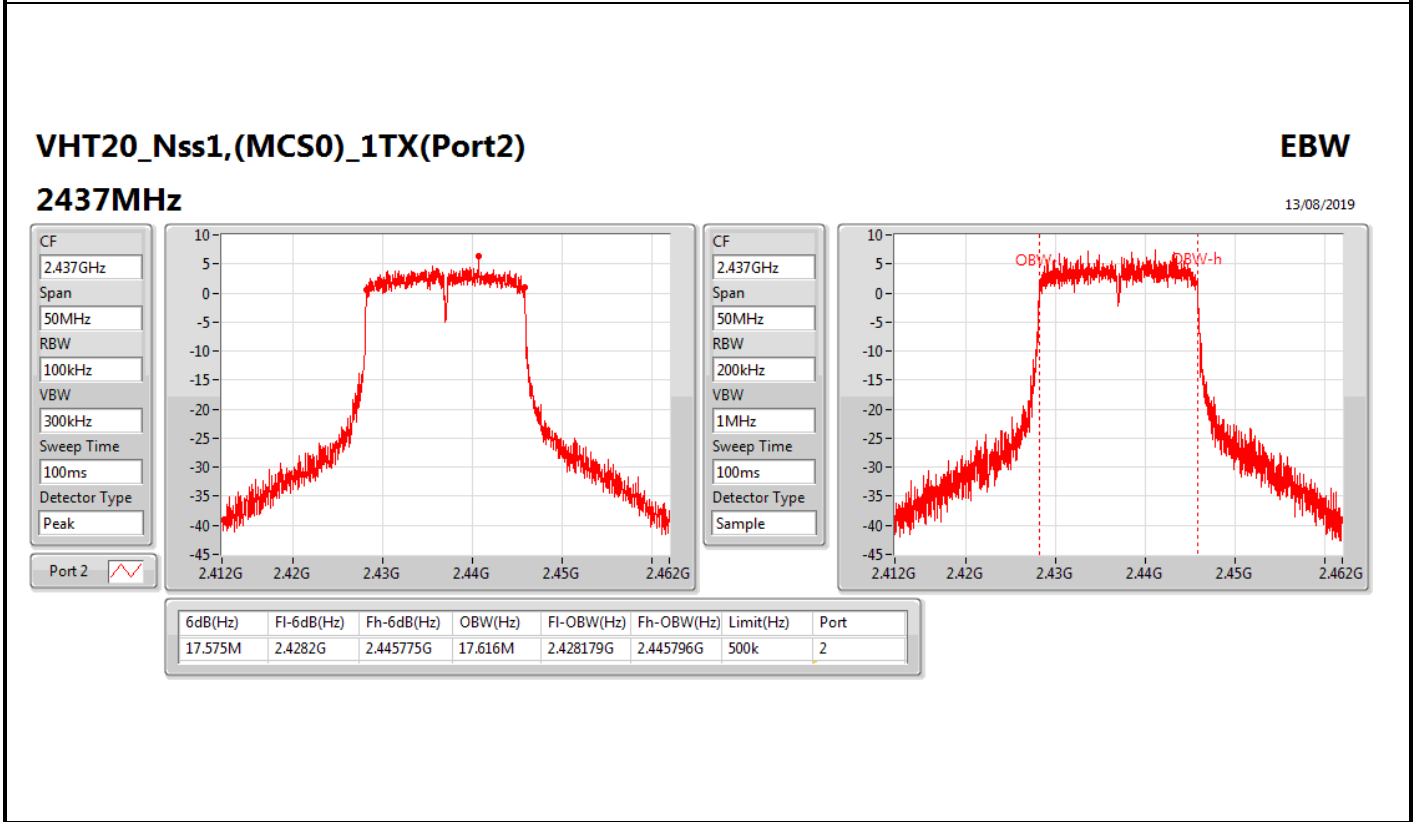
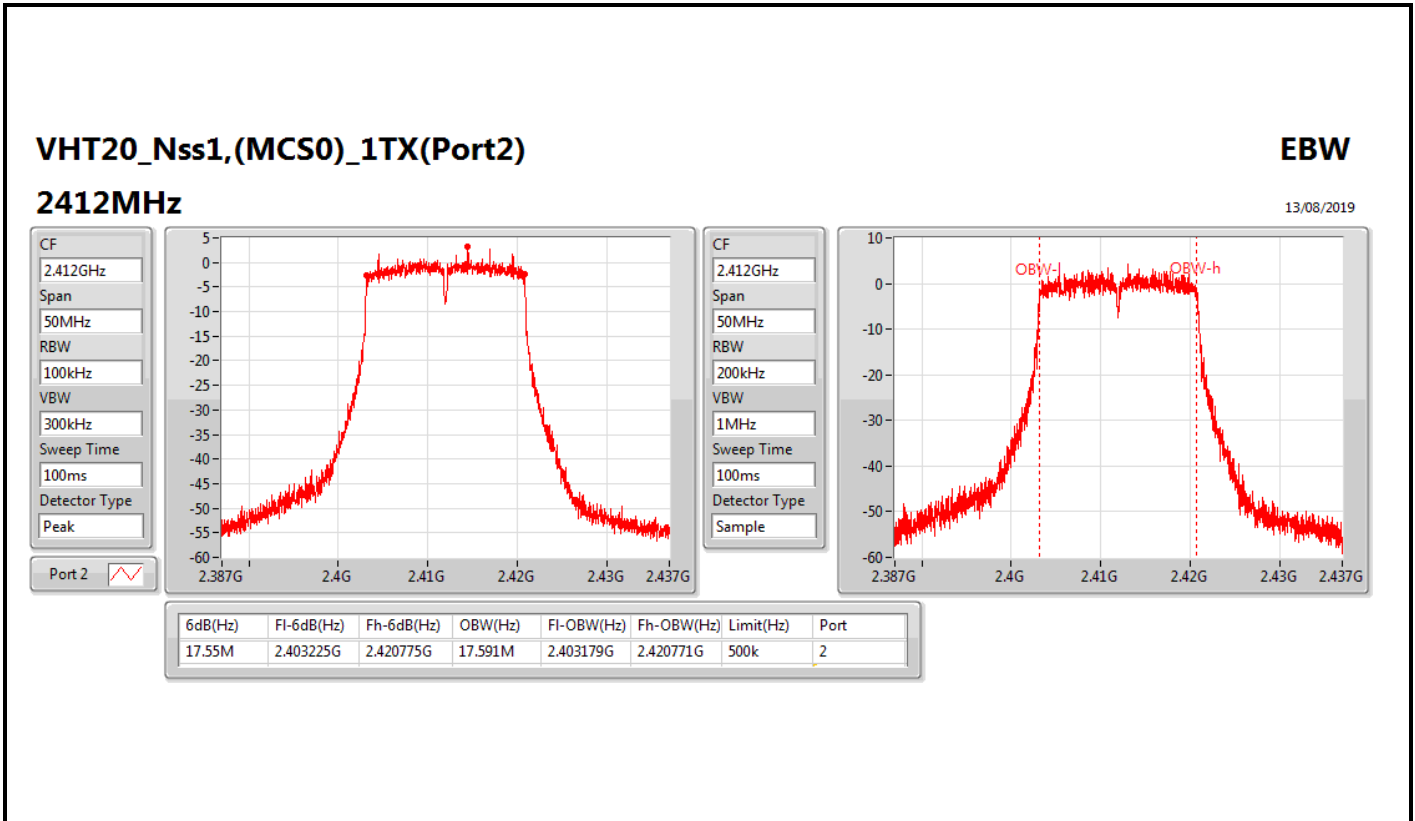
CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak

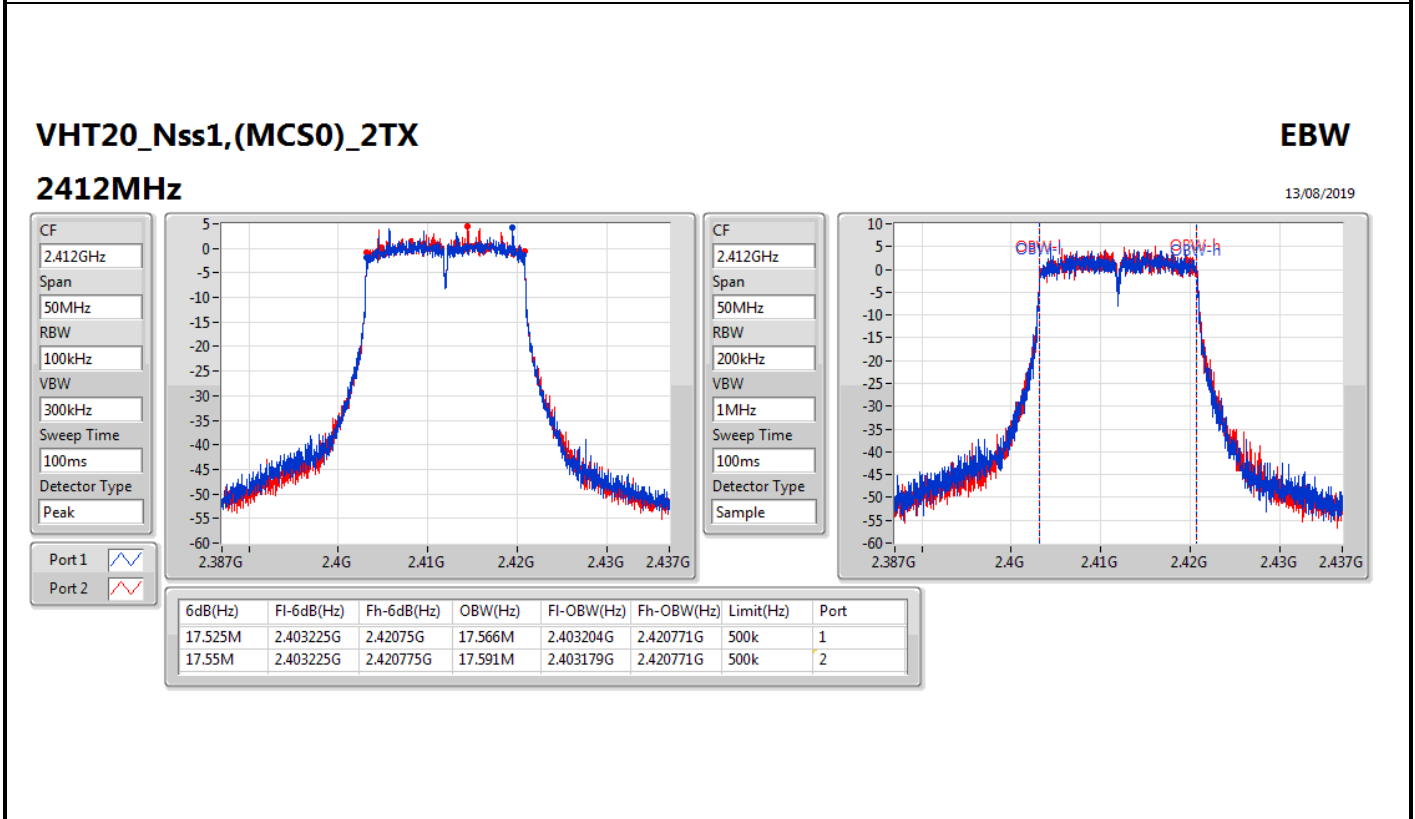
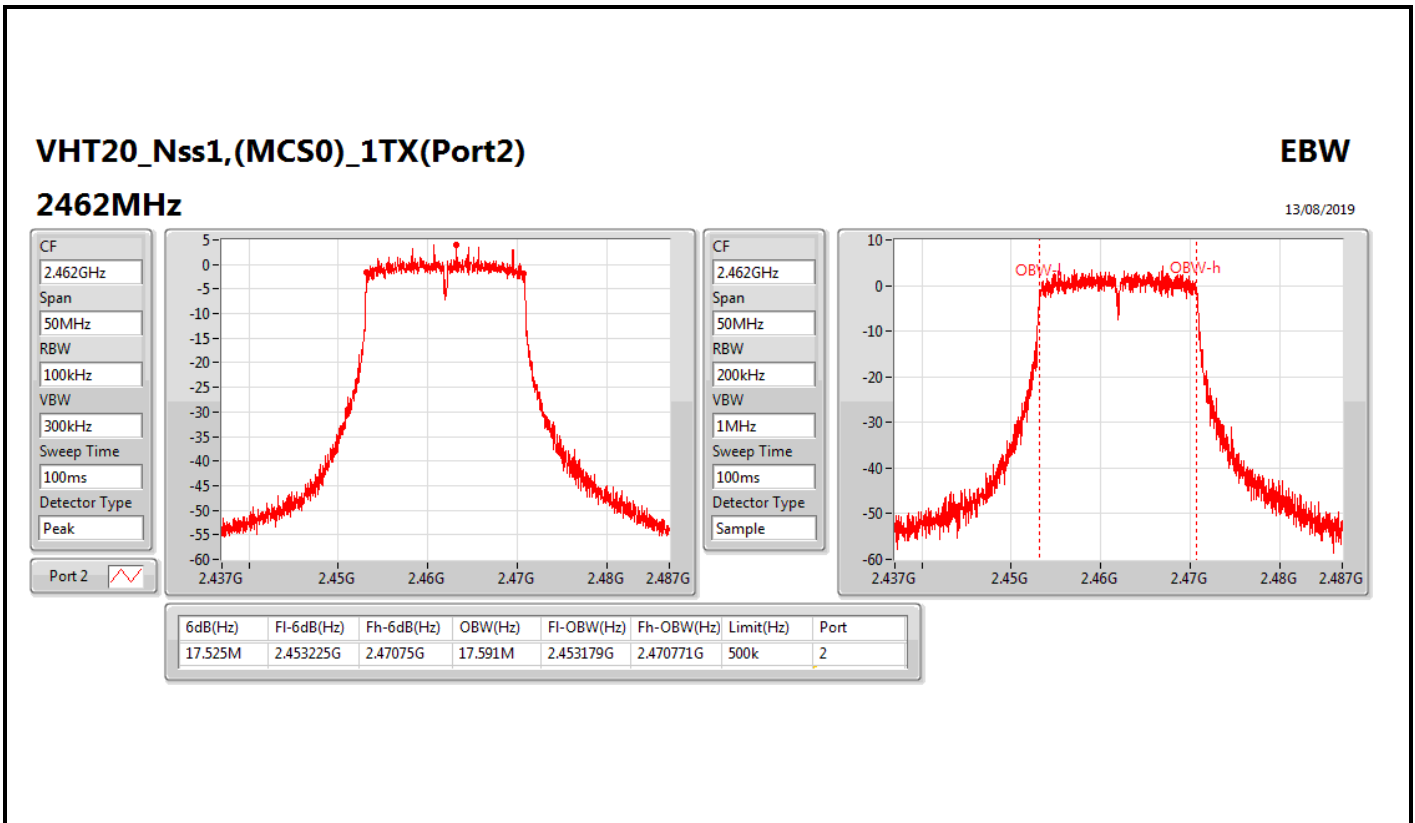


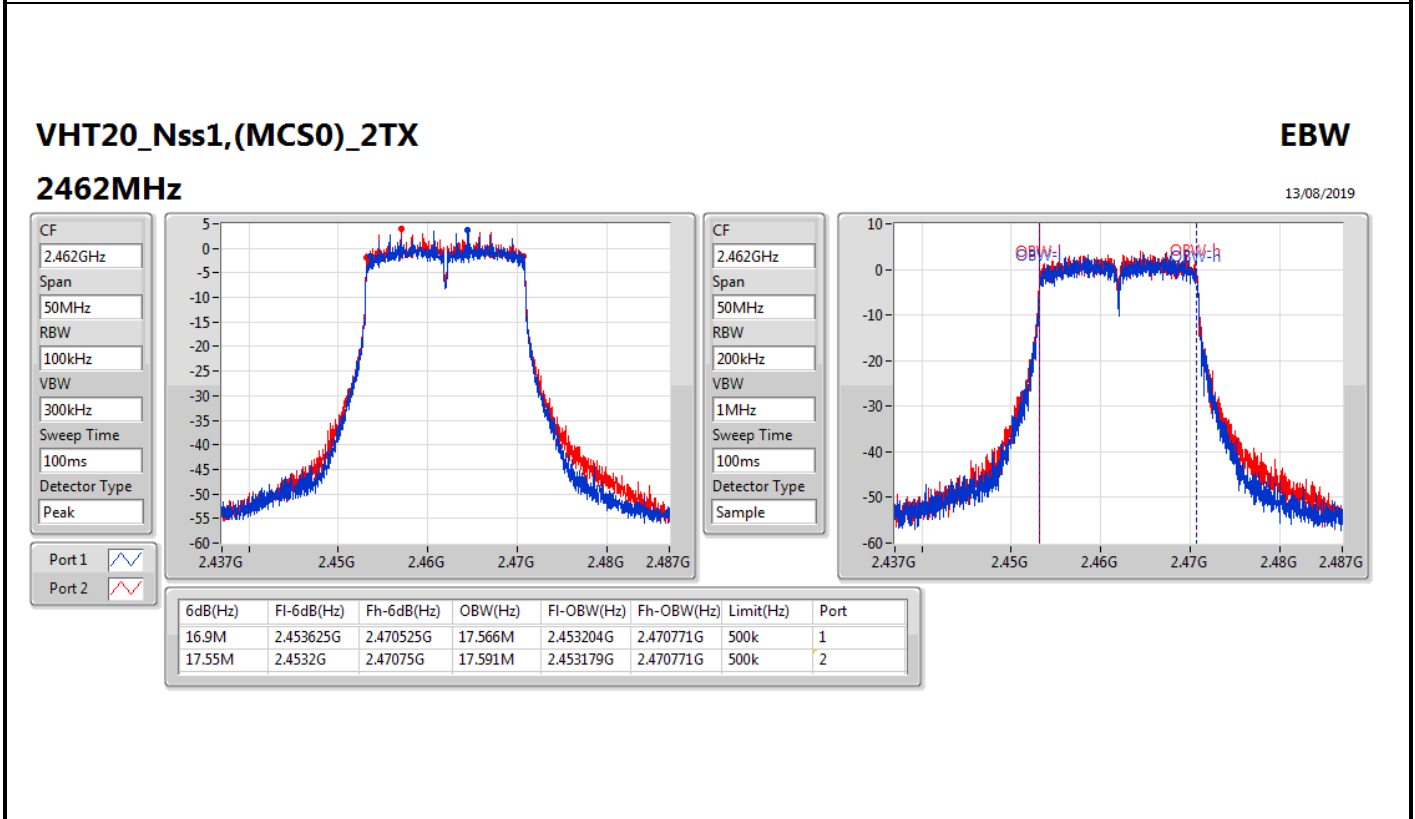
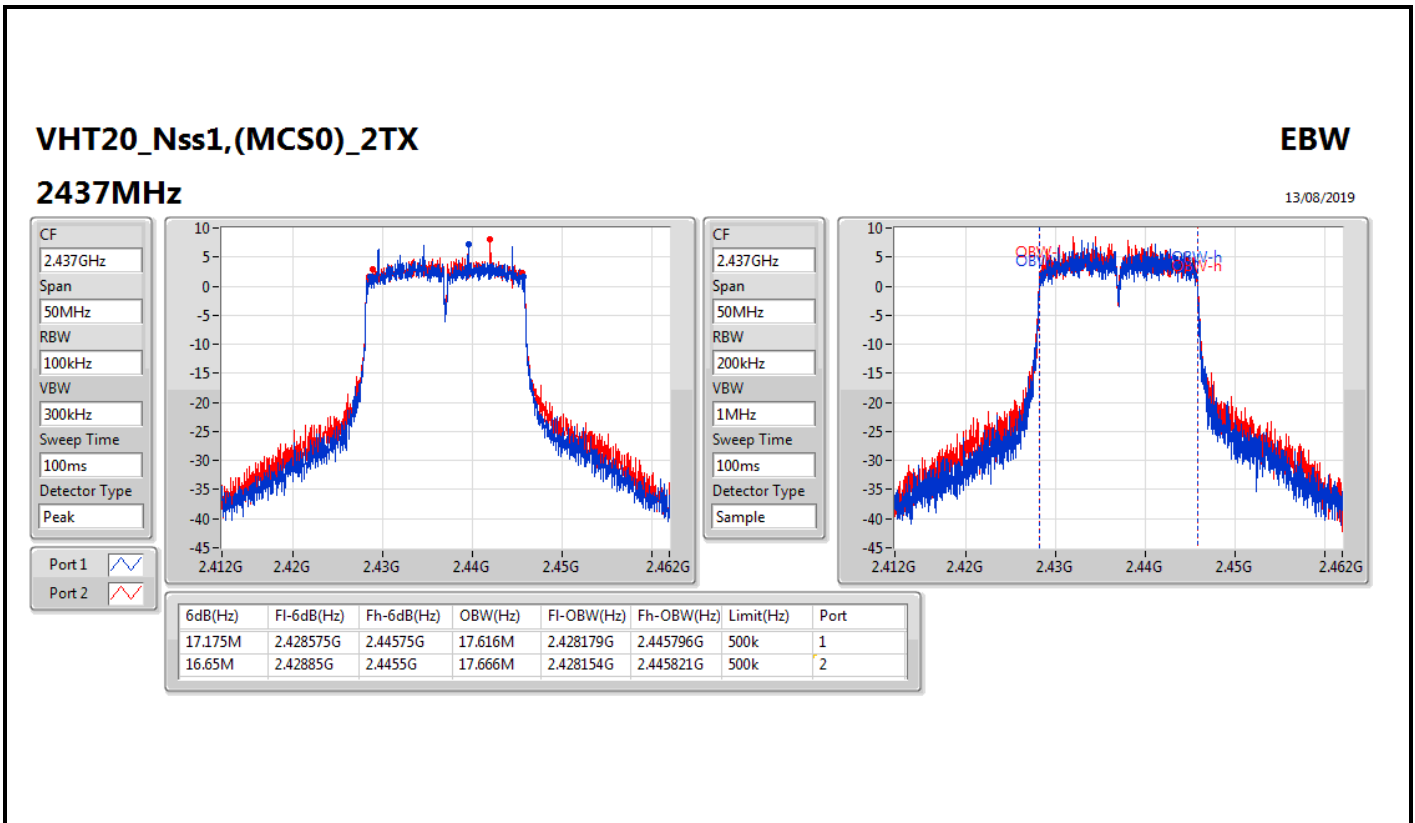
CF
2.462GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample

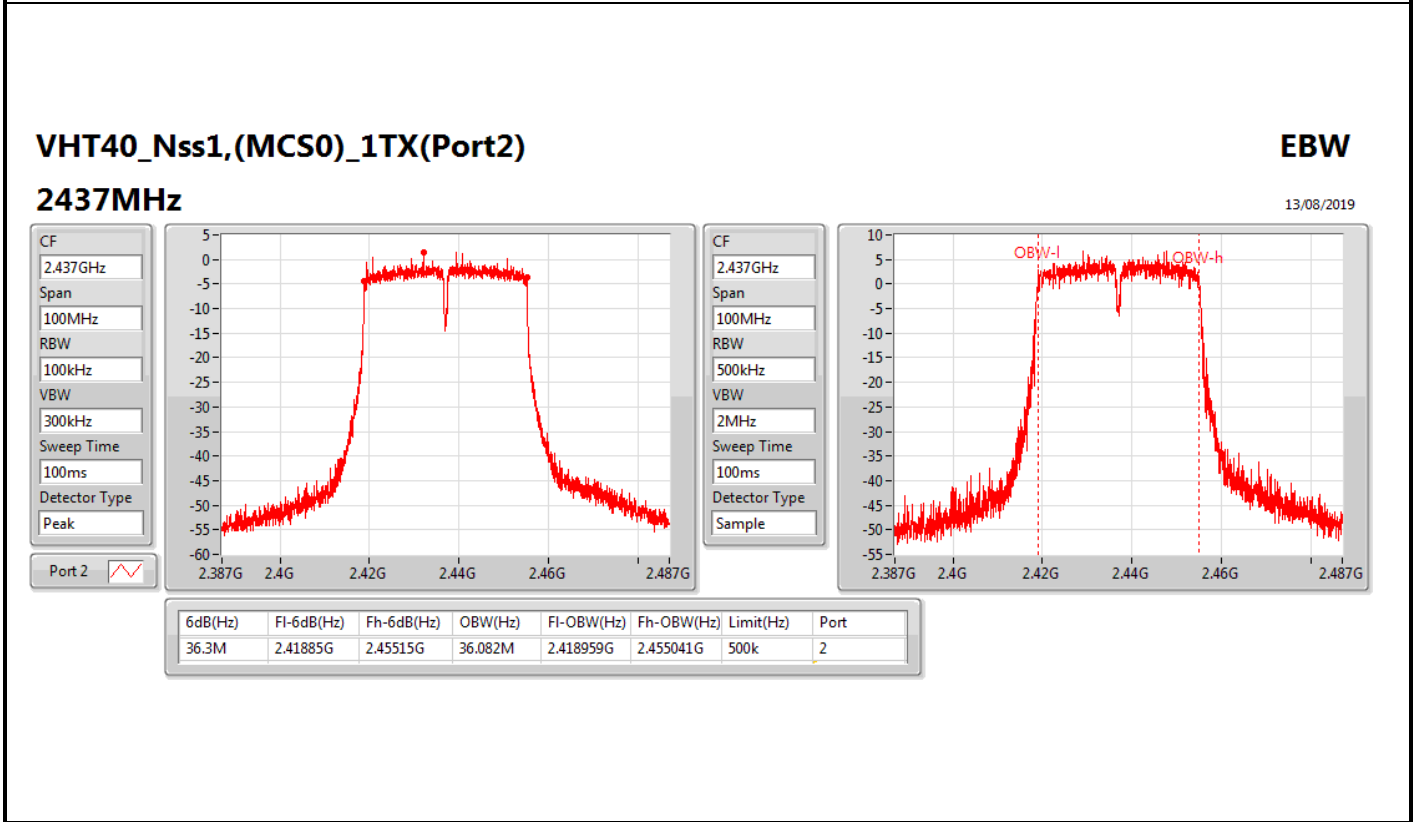
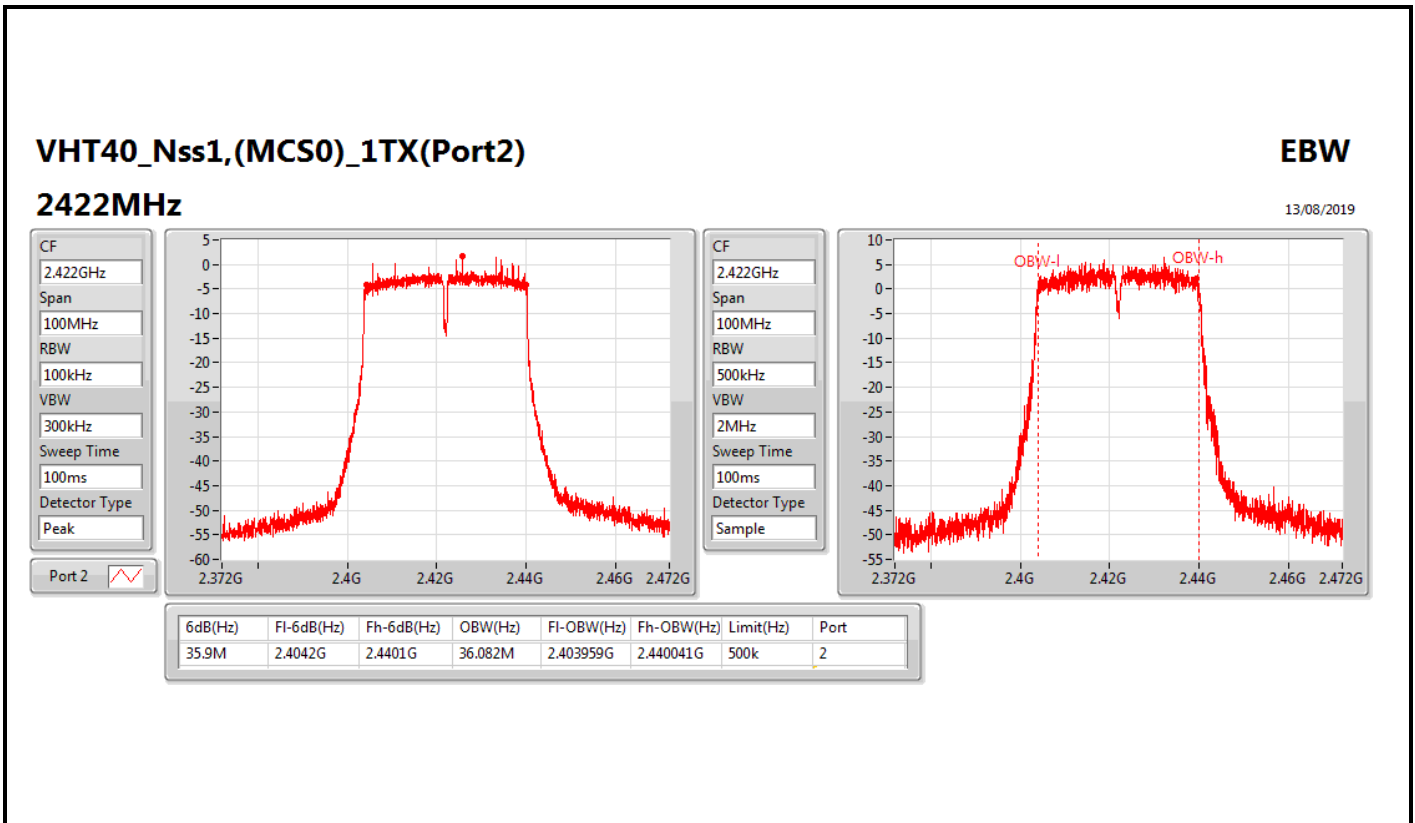


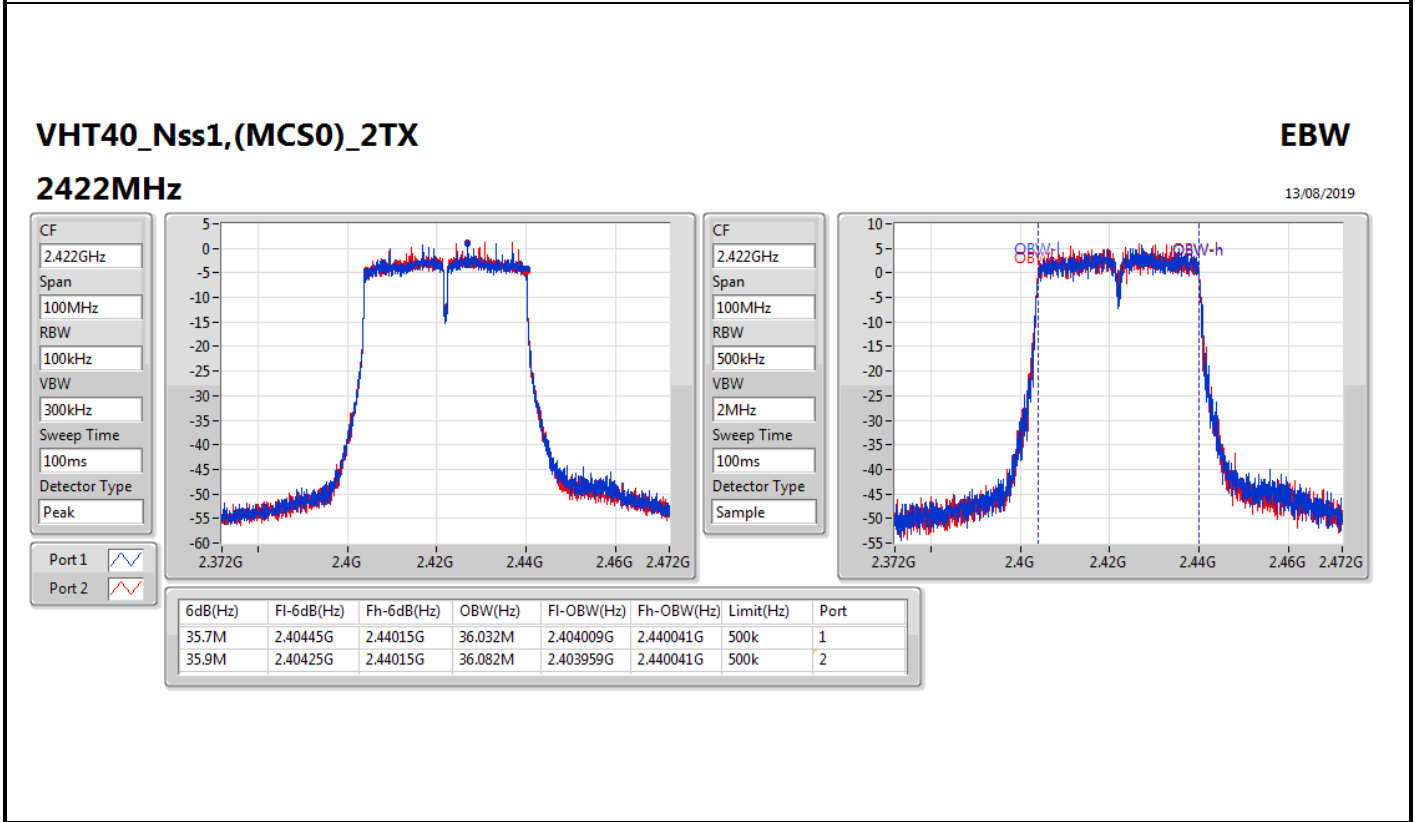
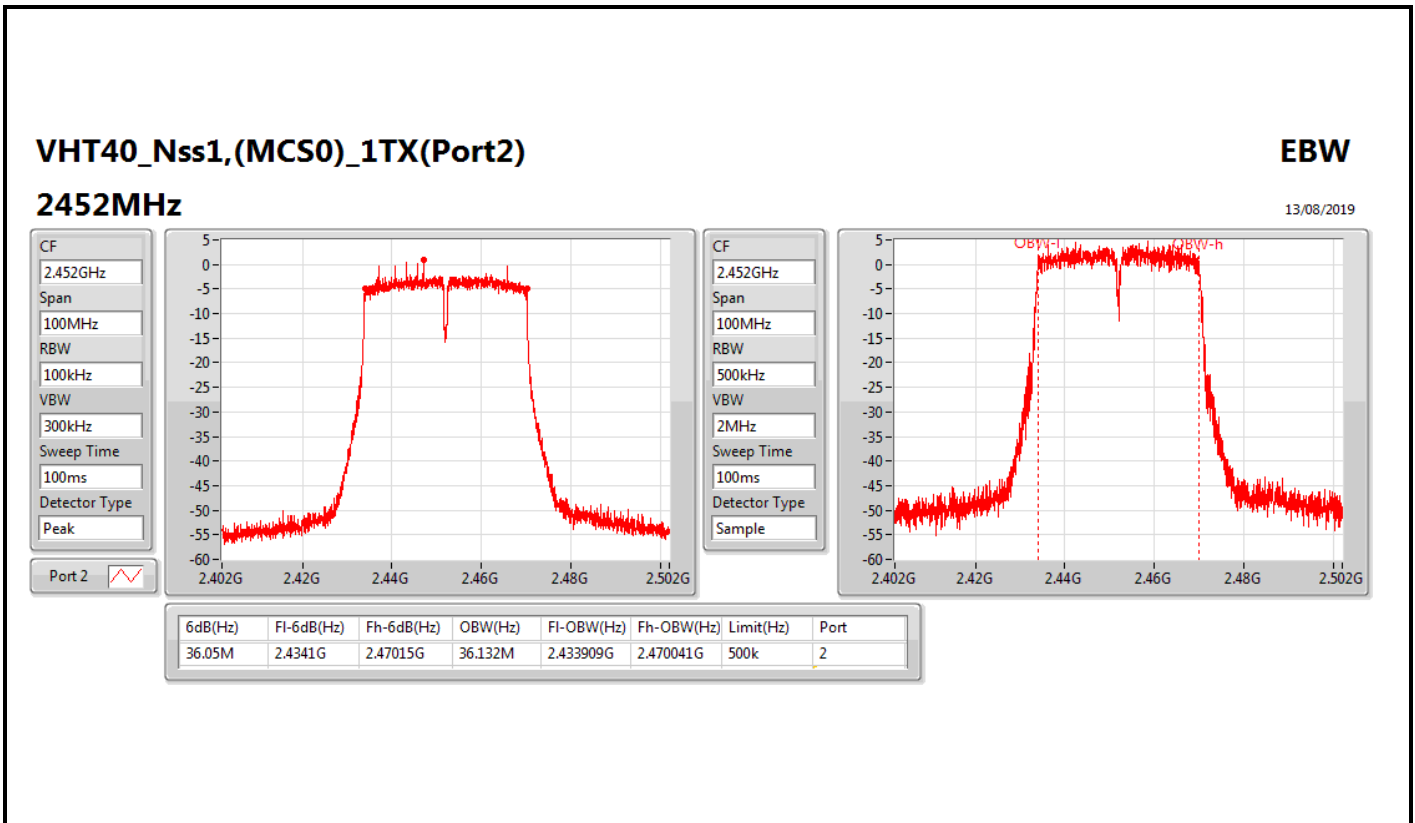
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.392M	2.453779G	2.470171G	500k	1
16.325M	2.453825G	2.47015G	16.392M	2.453779G	2.470171G	500k	2











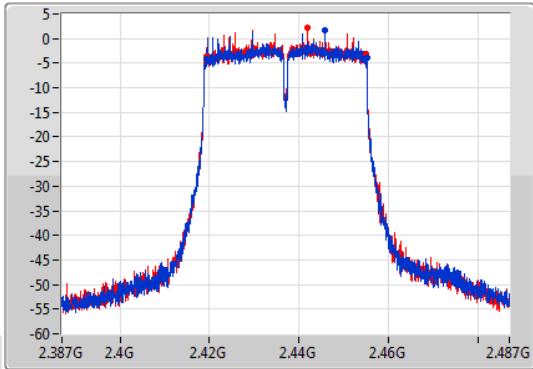
VHT40_Nss1,(MCS0)_2TX

EBW

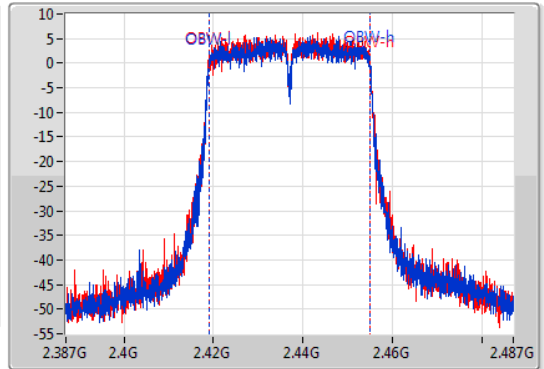
2437MHz

13/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.9M	2.41925G	2.45515G	36.082M	2.418959G	2.455041G	500k	1
35.65M	2.41925G	2.4549G	36.032M	2.418959G	2.454991G	500k	2

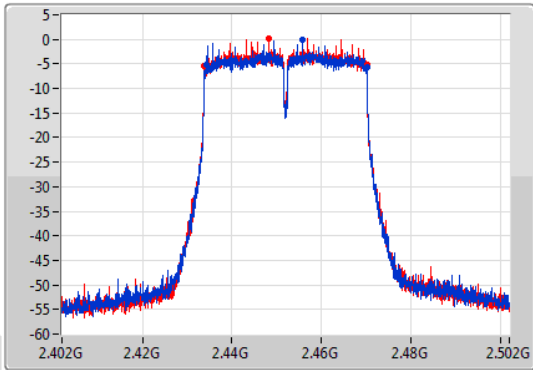
VHT40_Nss1,(MCS0)_2TX

EBW

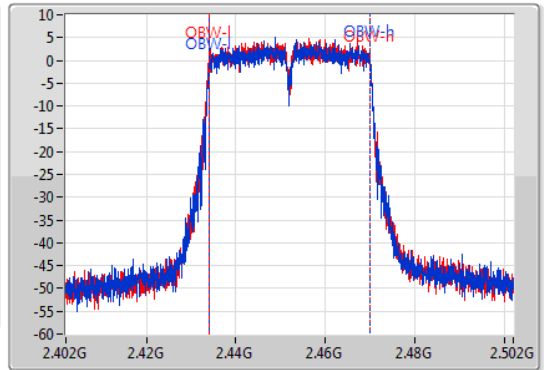
2452MHz

13/08/2019

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
Sample



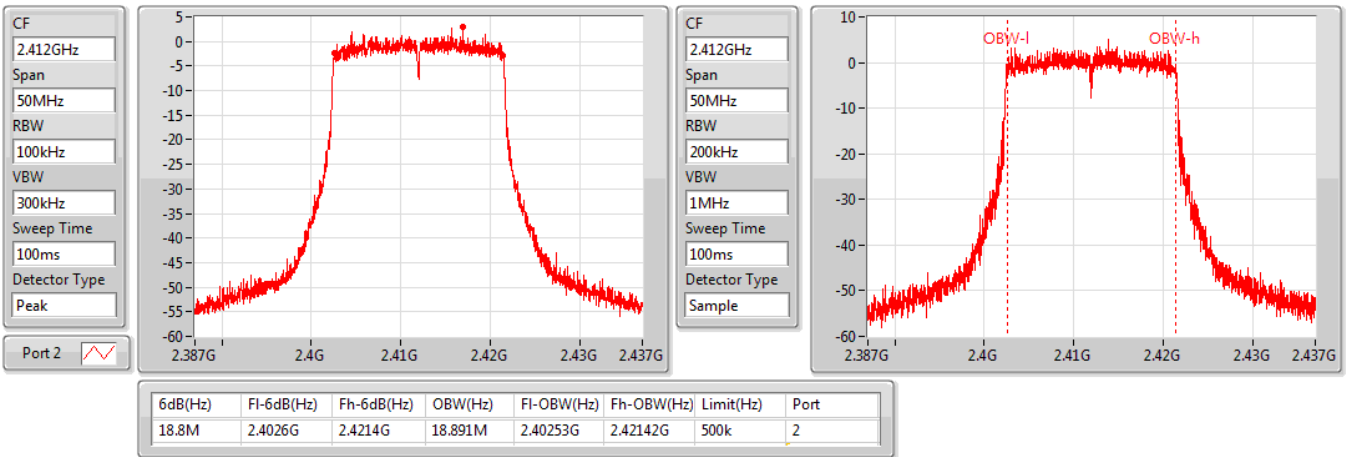
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.95M	2.4342G	2.47015G	36.082M	2.434009G	2.470091G	500k	1
36.3M	2.43385G	2.47015G	36.132M	2.433909G	2.470041G	500k	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2412MHz

13/08/2019

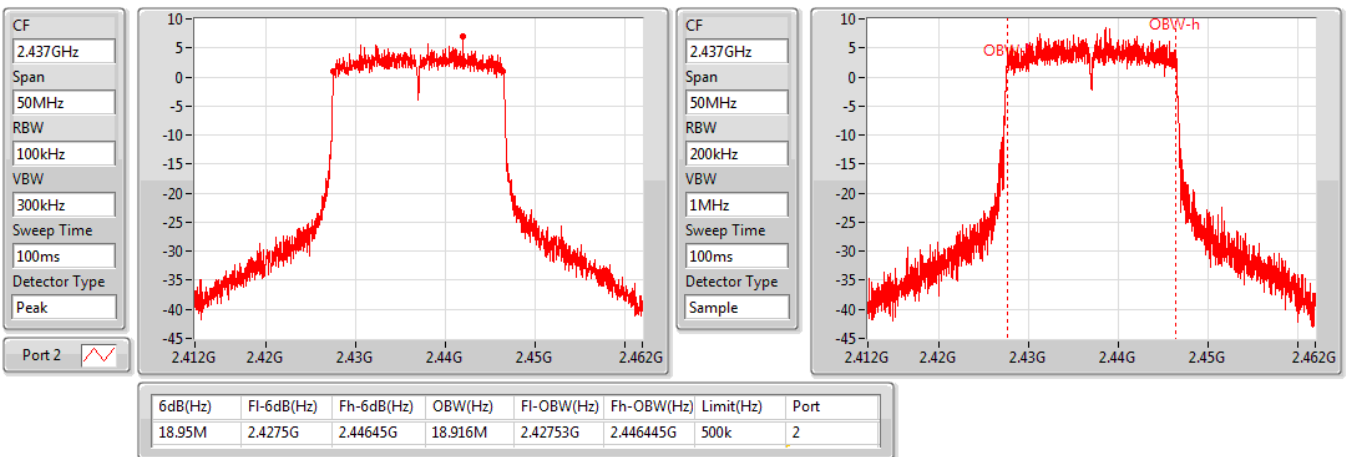


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

13/08/2019

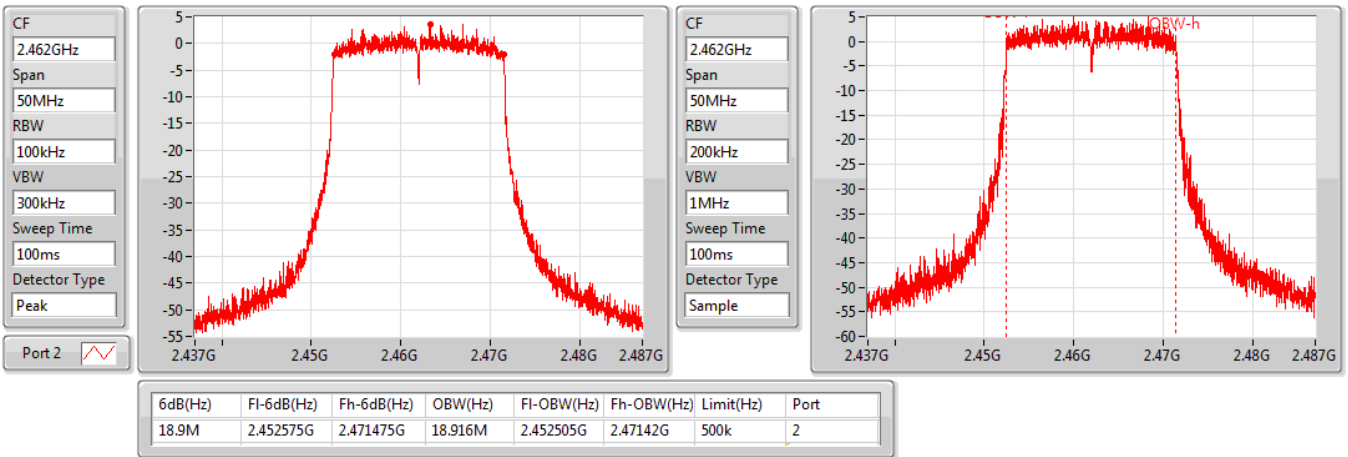


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2462MHz

13/08/2019

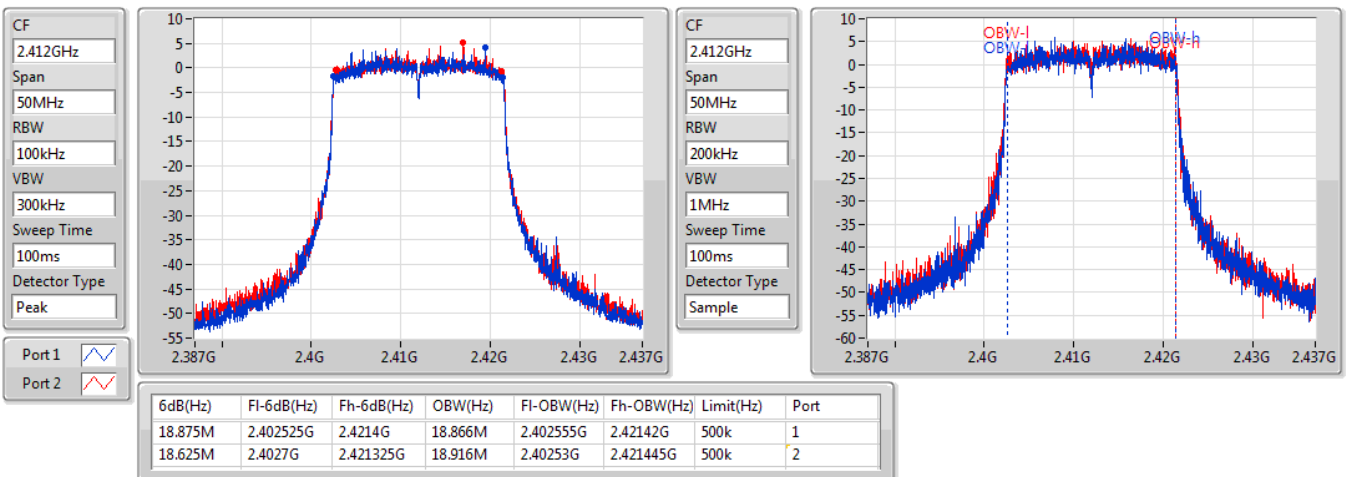


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2412MHz

13/08/2019



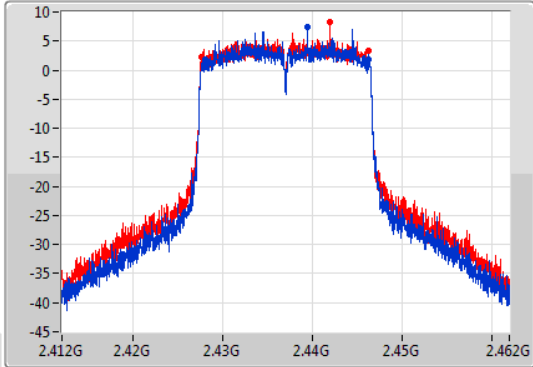
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

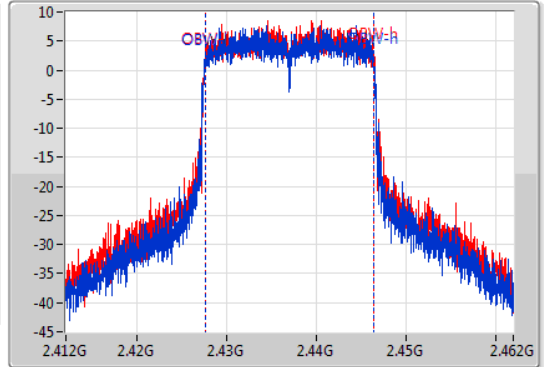
2437MHz

13/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.375M	2.42795G	2.446325G	18.891M	2.42753G	2.44642G	500k	1
18.675M	2.427625G	2.4463G	18.916M	2.42753G	2.446445G	500k	2

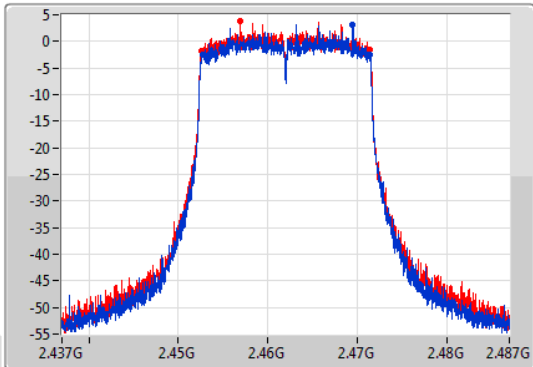
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

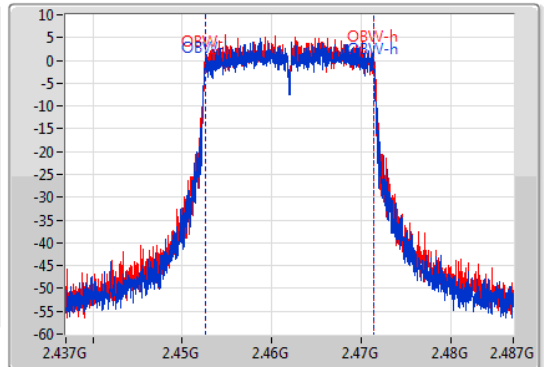
2462MHz

13/08/2019

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
Sample



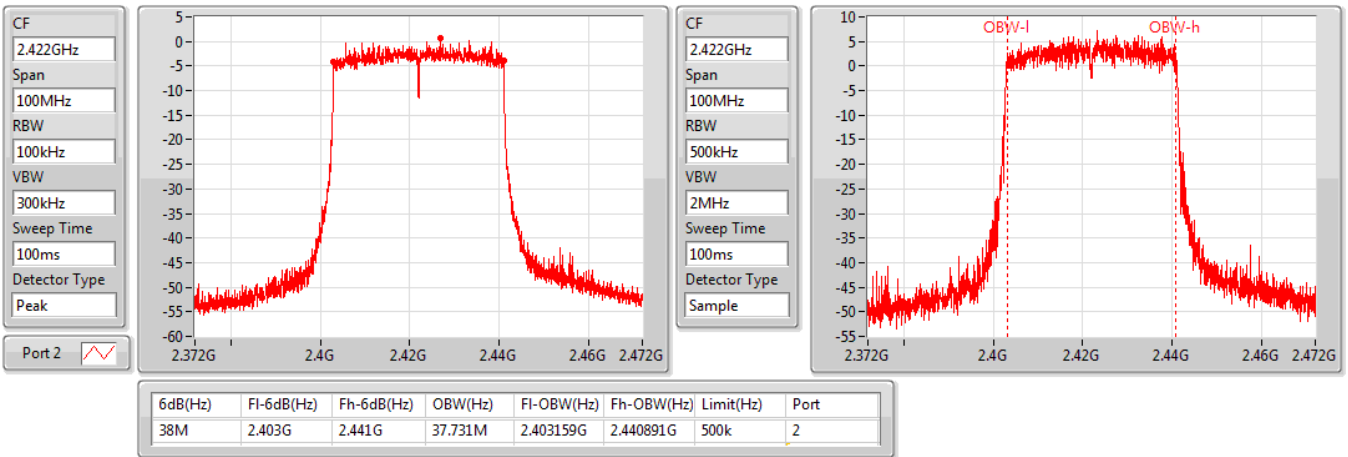
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.725M	2.4527G	2.471425G	18.866M	2.452555G	2.47142G	500k	1
18.825M	2.4526G	2.471425G	18.891M	2.452555G	2.471445G	500k	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2422MHz

13/08/2019

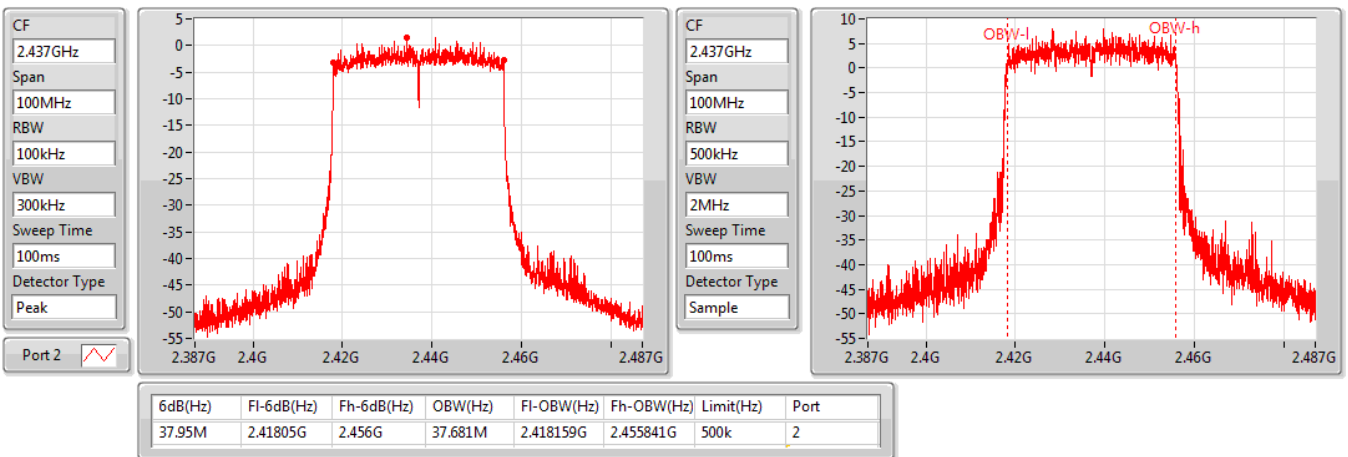


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

13/08/2019

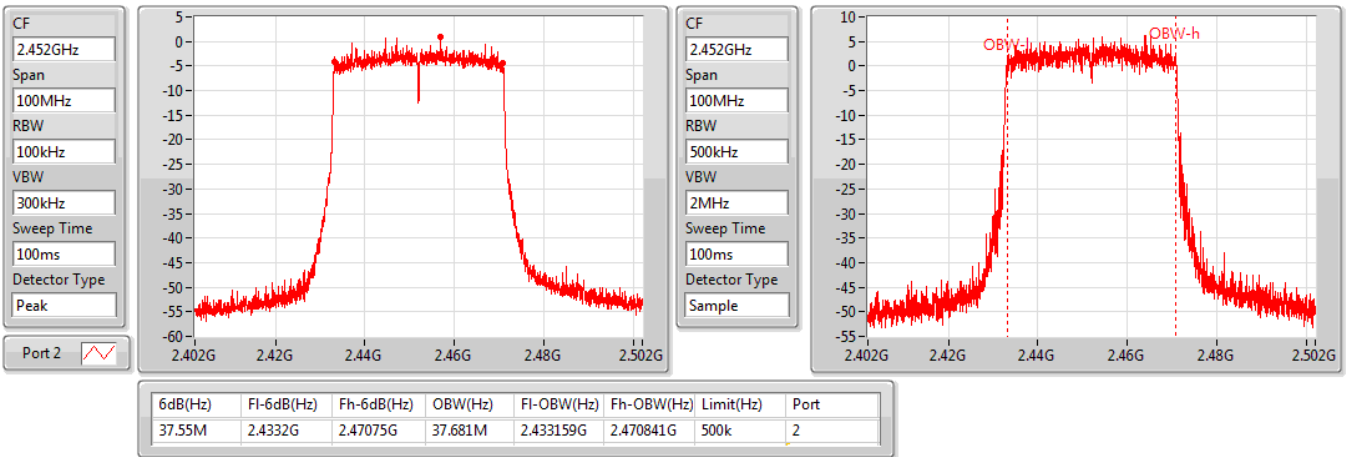


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2452MHz

13/08/2019

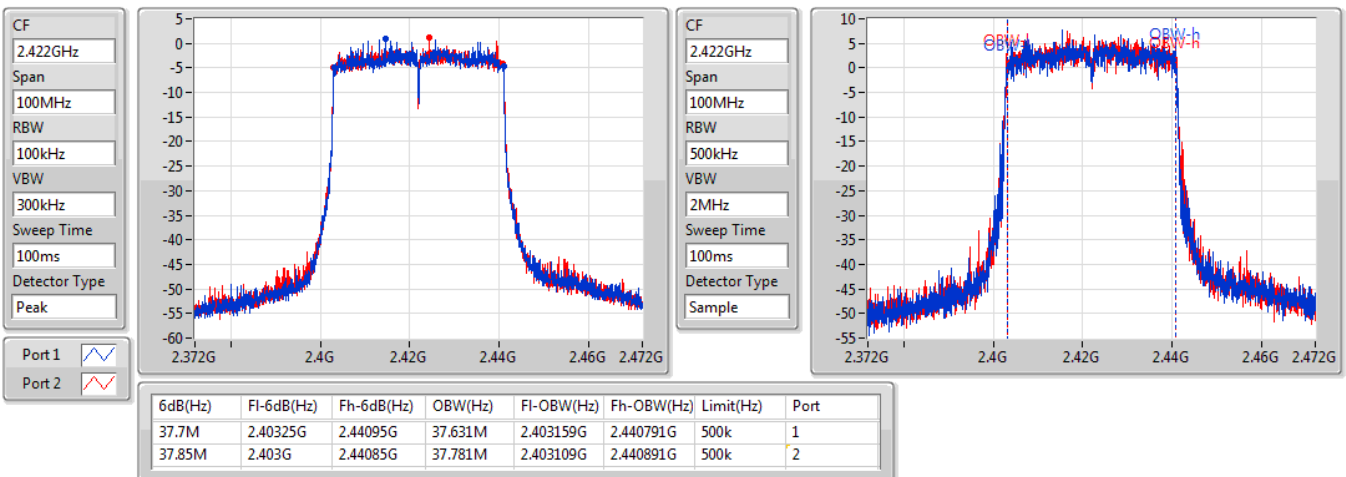


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2422MHz

13/08/2019

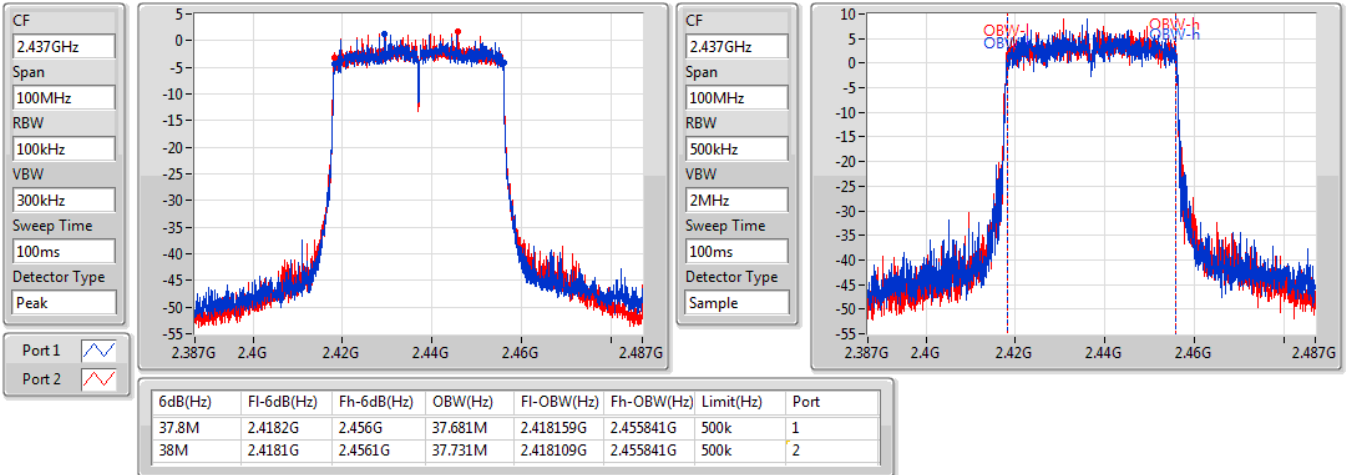


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2437MHz

13/08/2019

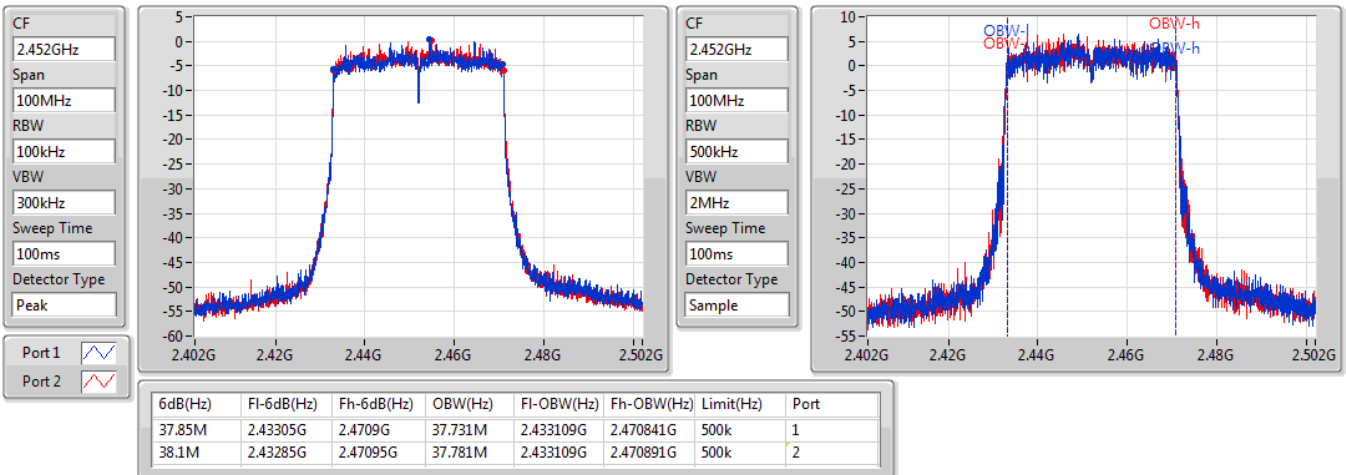


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

2452MHz

13/08/2019





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	7.575M	11.769M	11M8G1D	5.625M	11.494M
802.11g_Nss1,(6Mbps)_1TX	15.775M	20.265M	20M3D1D	15.3M	16.517M
VHT20_Nss1,(MCS0)_1TX	16.8M	21.014M	21M0D1D	16.525M	17.741M
VHT40_Nss1,(MCS0)_1TX	35.7M	36.382M	36M4D1D	35.3M	36.282M

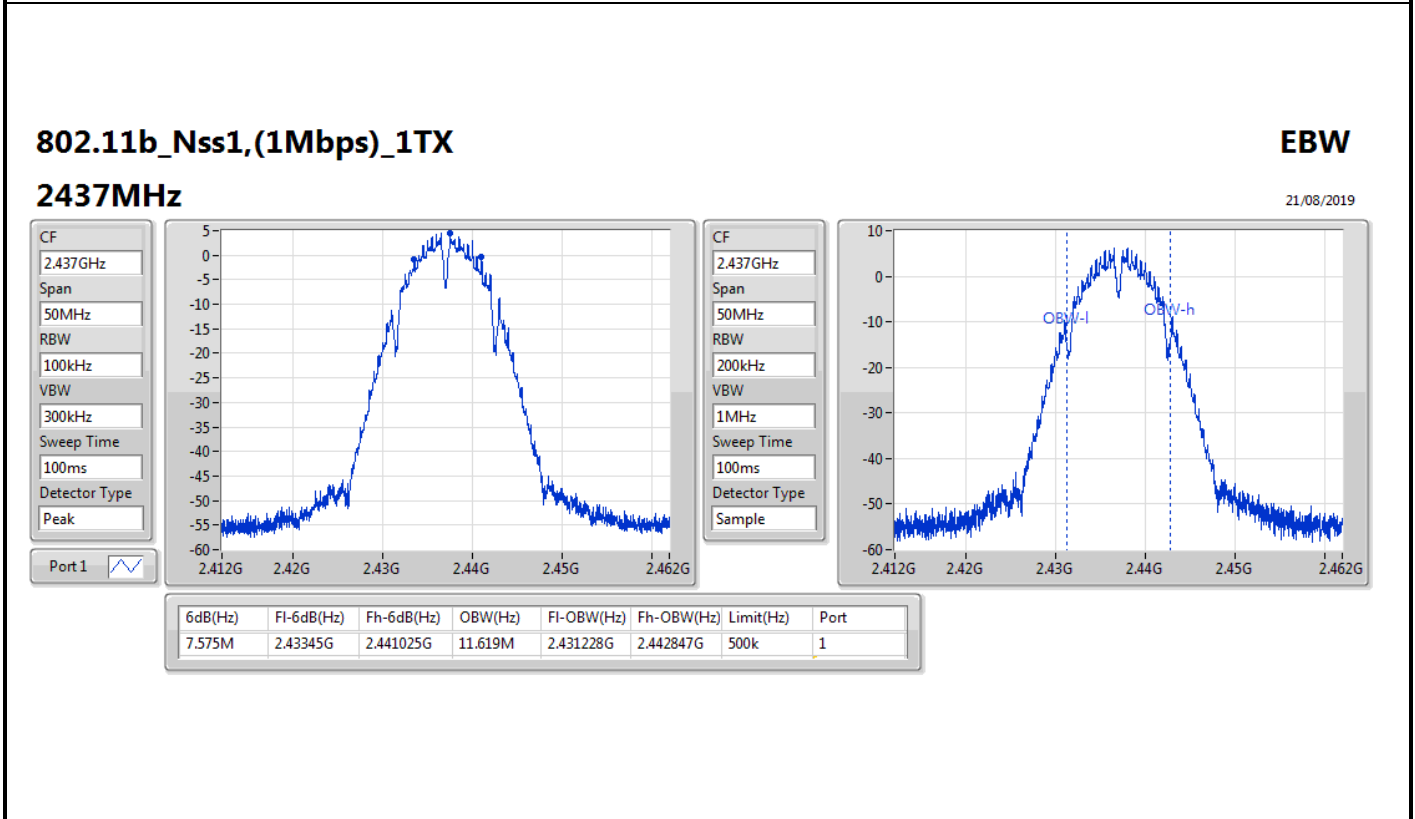
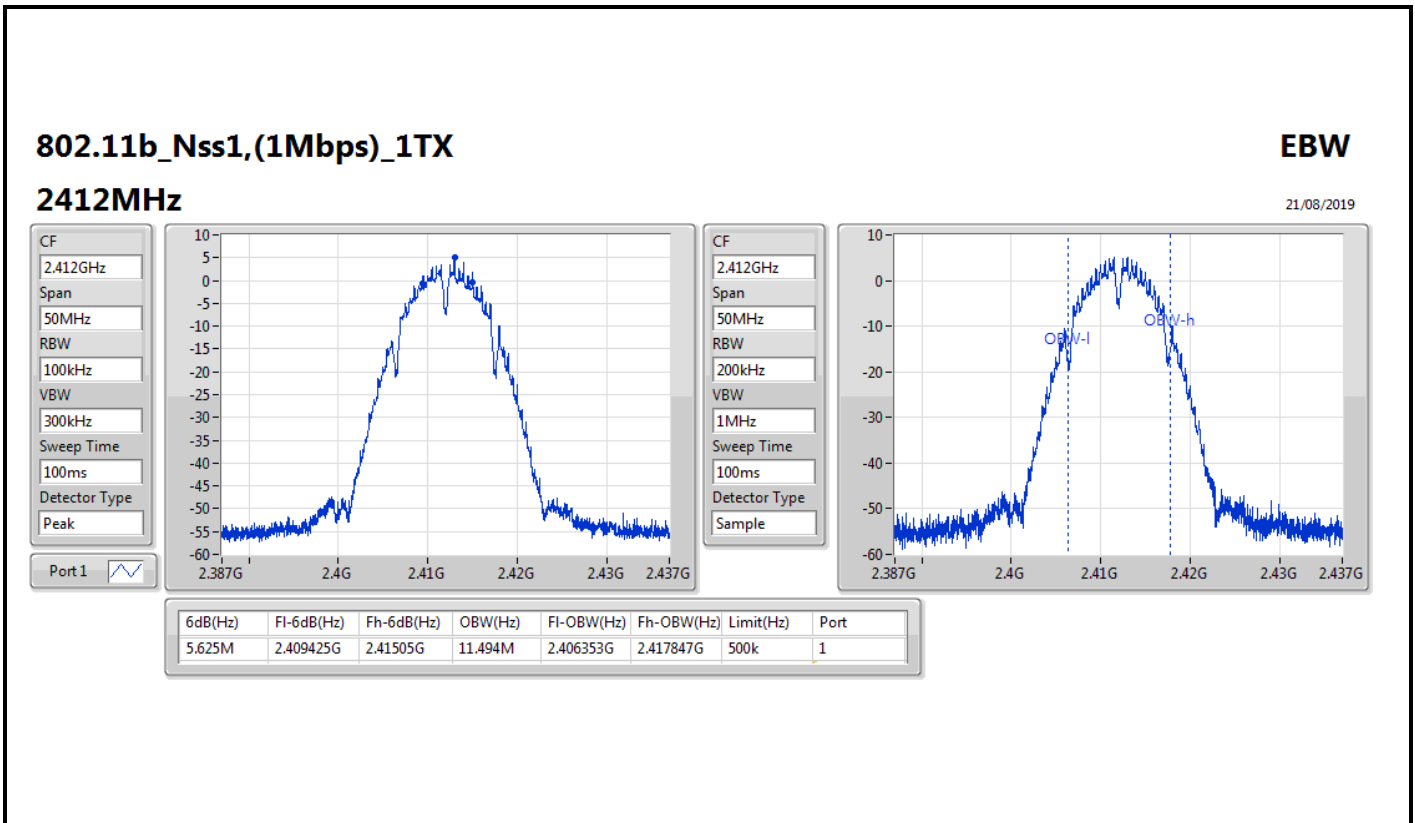
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	5.625M	11.494M
2437MHz	Pass	500k	7.575M	11.619M
2462MHz	Pass	500k	7.1M	11.769M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	15.775M	16.517M
2437MHz	Pass	500k	15.3M	20.265M
2462MHz	Pass	500k	15.75M	16.567M
VHT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	16.8M	17.766M
2437MHz	Pass	500k	16.525M	21.014M
2462MHz	Pass	500k	16.75M	17.741M
VHT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	35.4M	36.282M
2437MHz	Pass	500k	35.7M	36.382M
2452MHz	Pass	500k	35.3M	36.282M

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



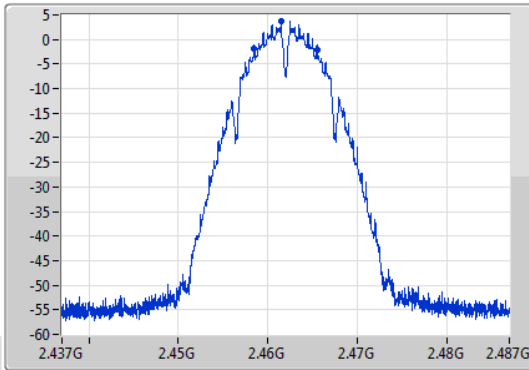
802.11b_Nss1,(1Mbps)_1TX

EBW

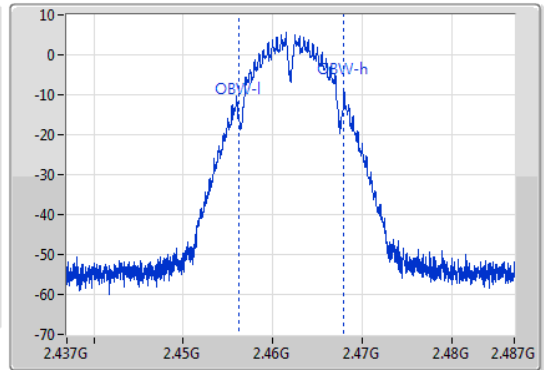
2462MHz

21/08/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.1M	2.45845G	2.46555G	11.769M	2.456178G	2.467947G	500k	1

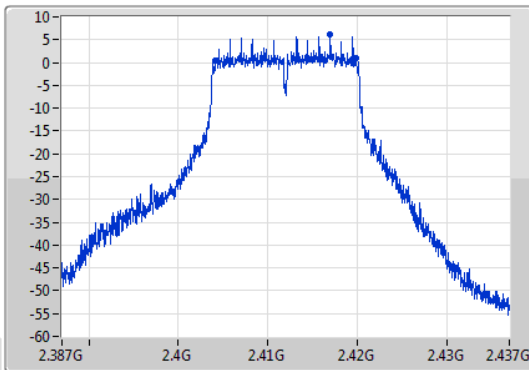
802.11g_Nss1,(6Mbps)_1TX

EBW

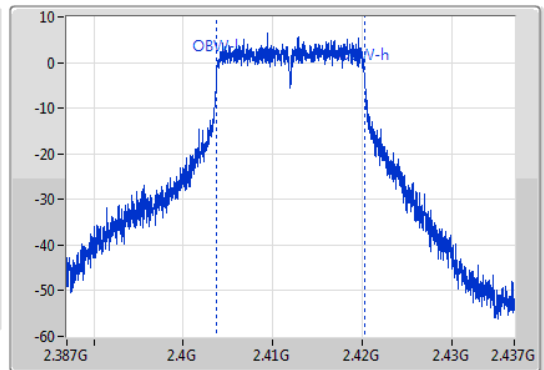
2412MHz

21/08/2019

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
Sample



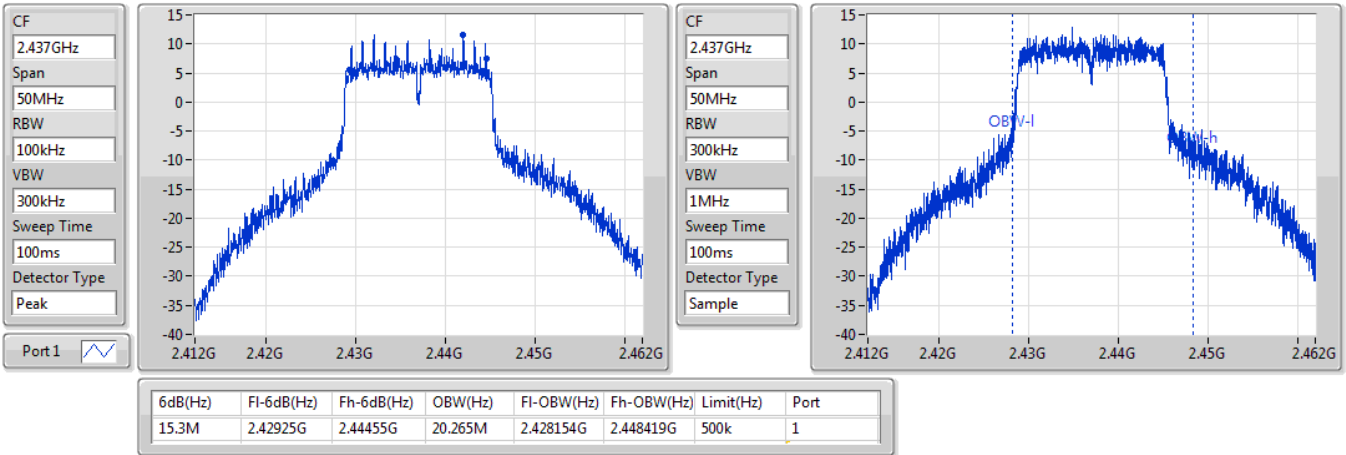
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.775M	2.4041G	2.419875G	16.517M	2.403754G	2.420271G	500k	1

802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

21/08/2019

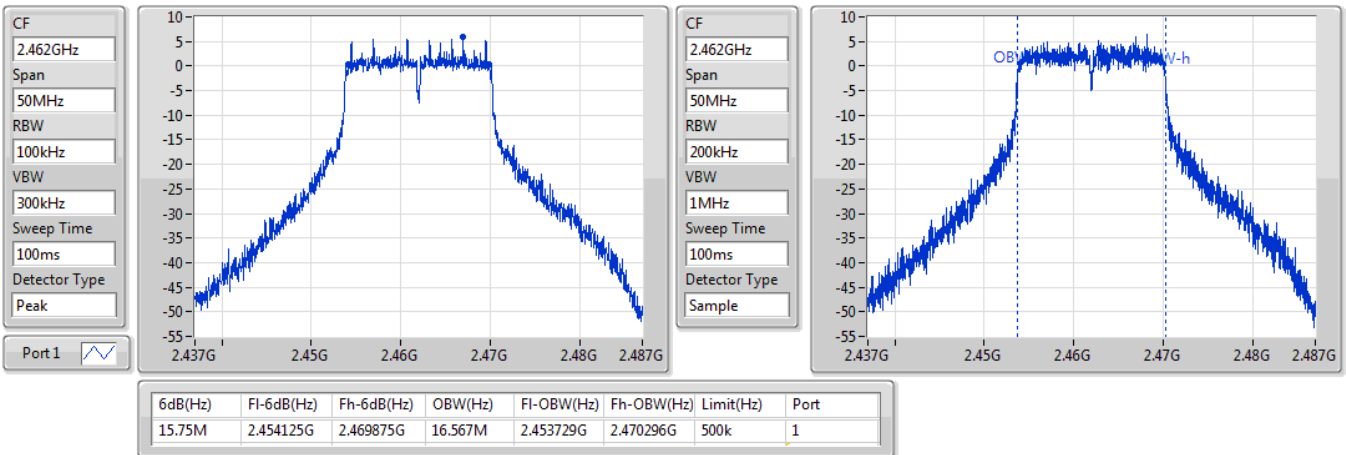


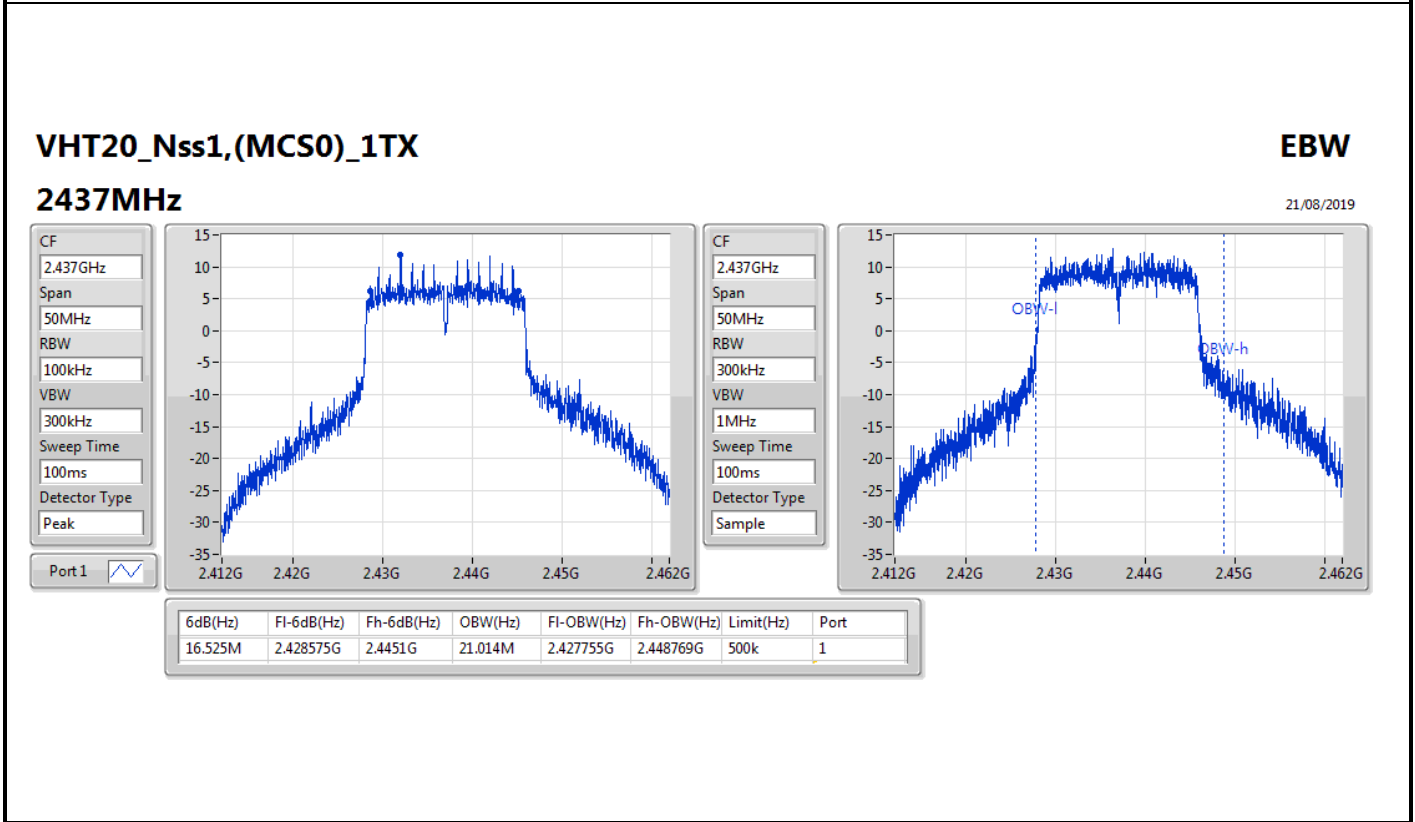
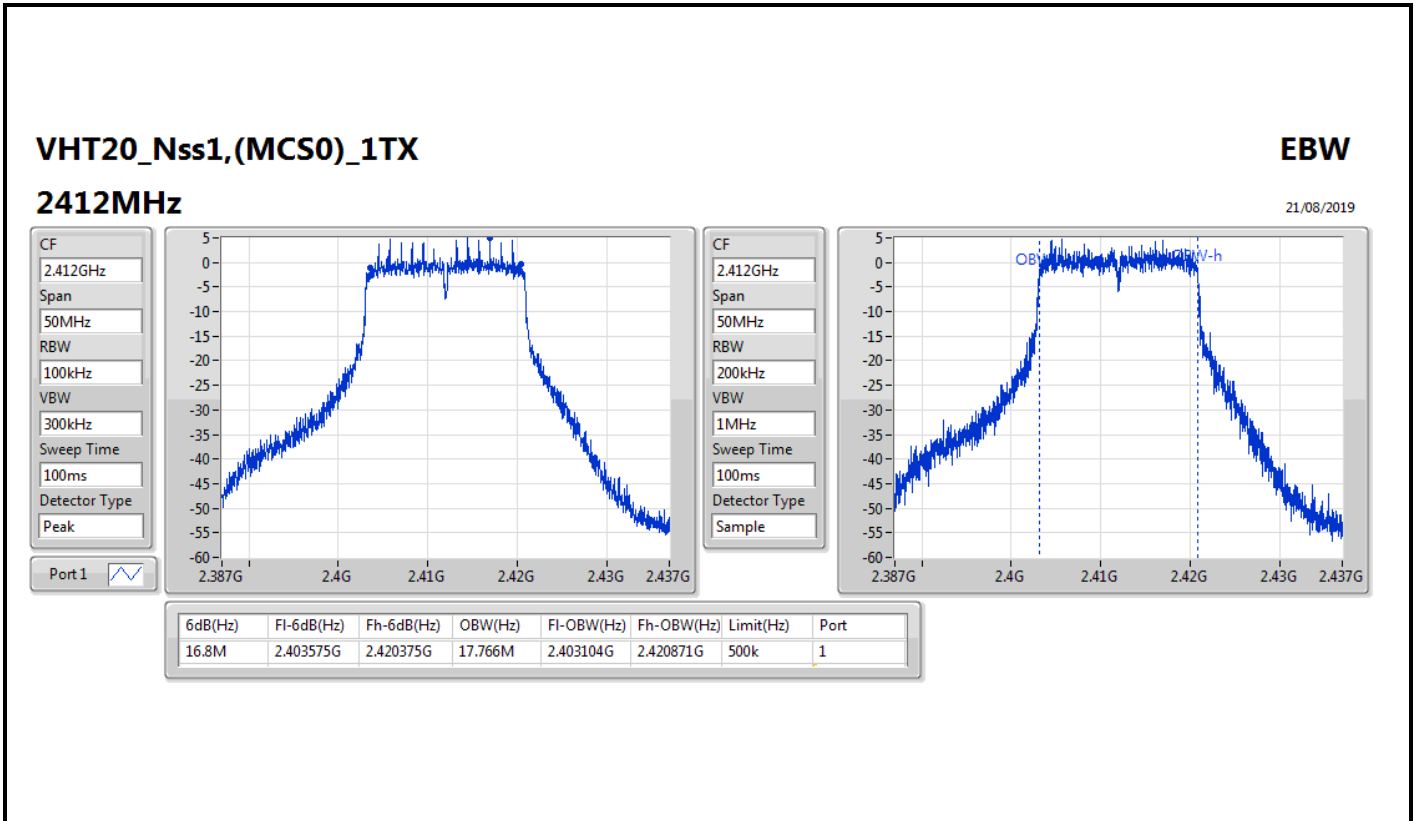
802.11g_Nss1,(6Mbps)_1TX

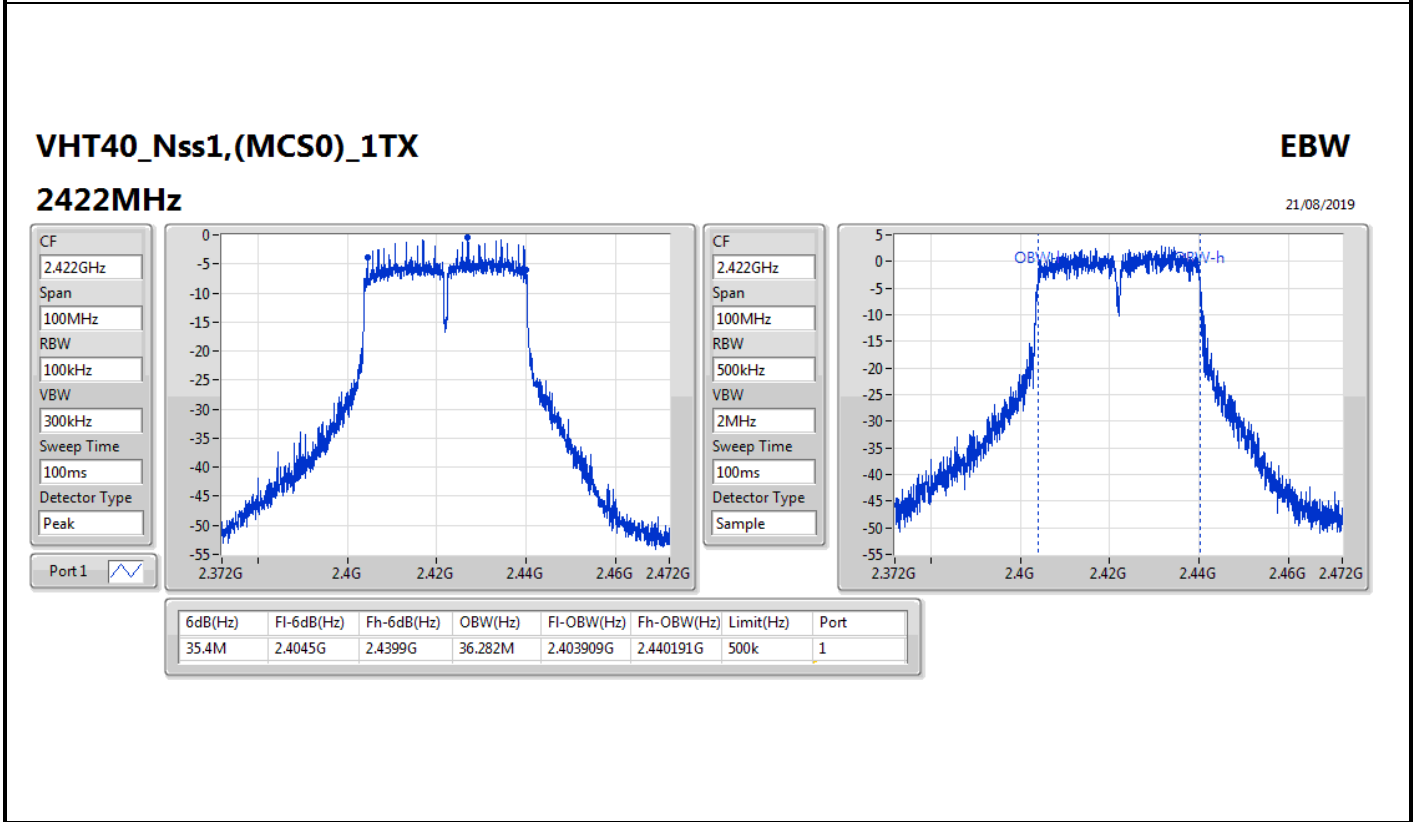
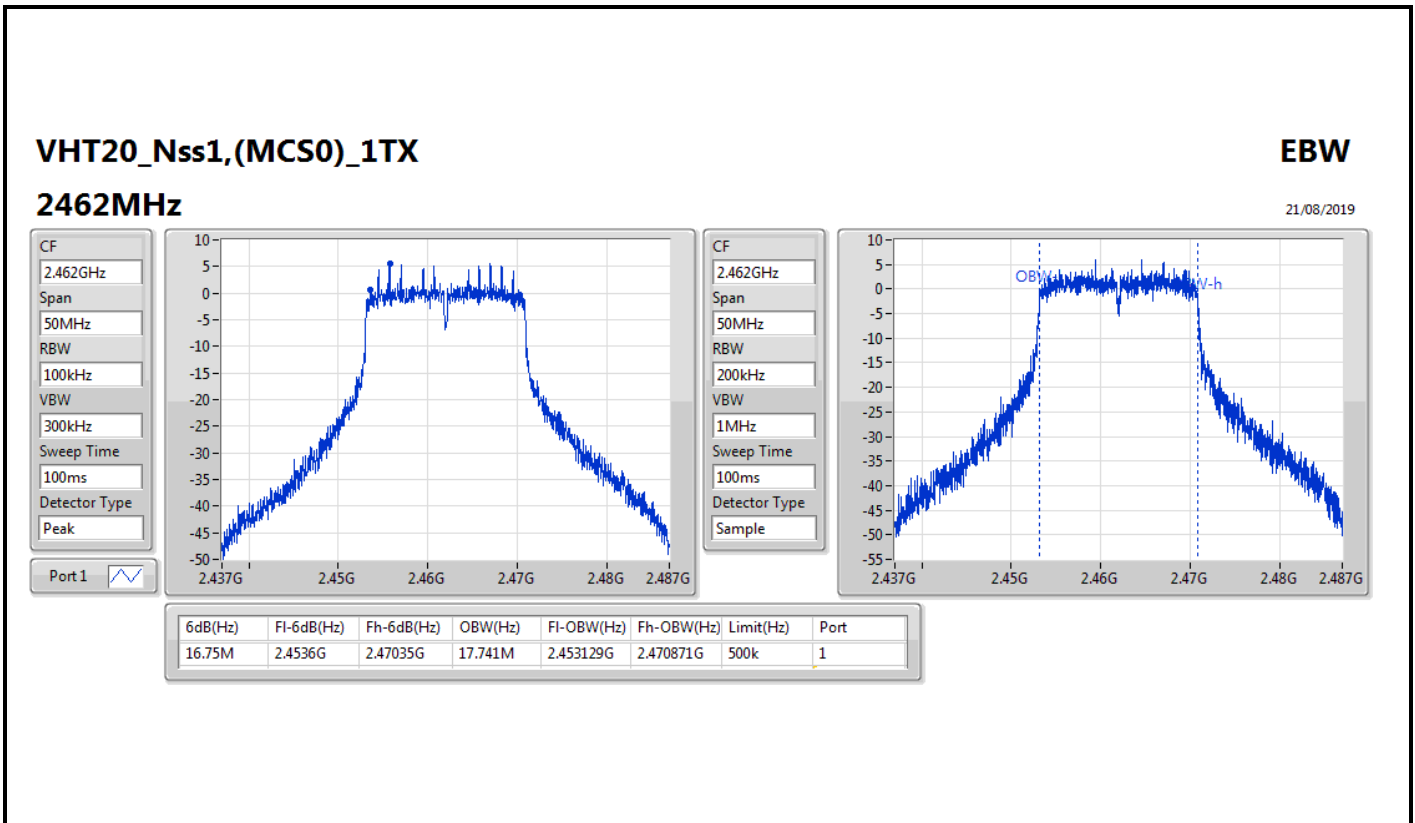
EBW

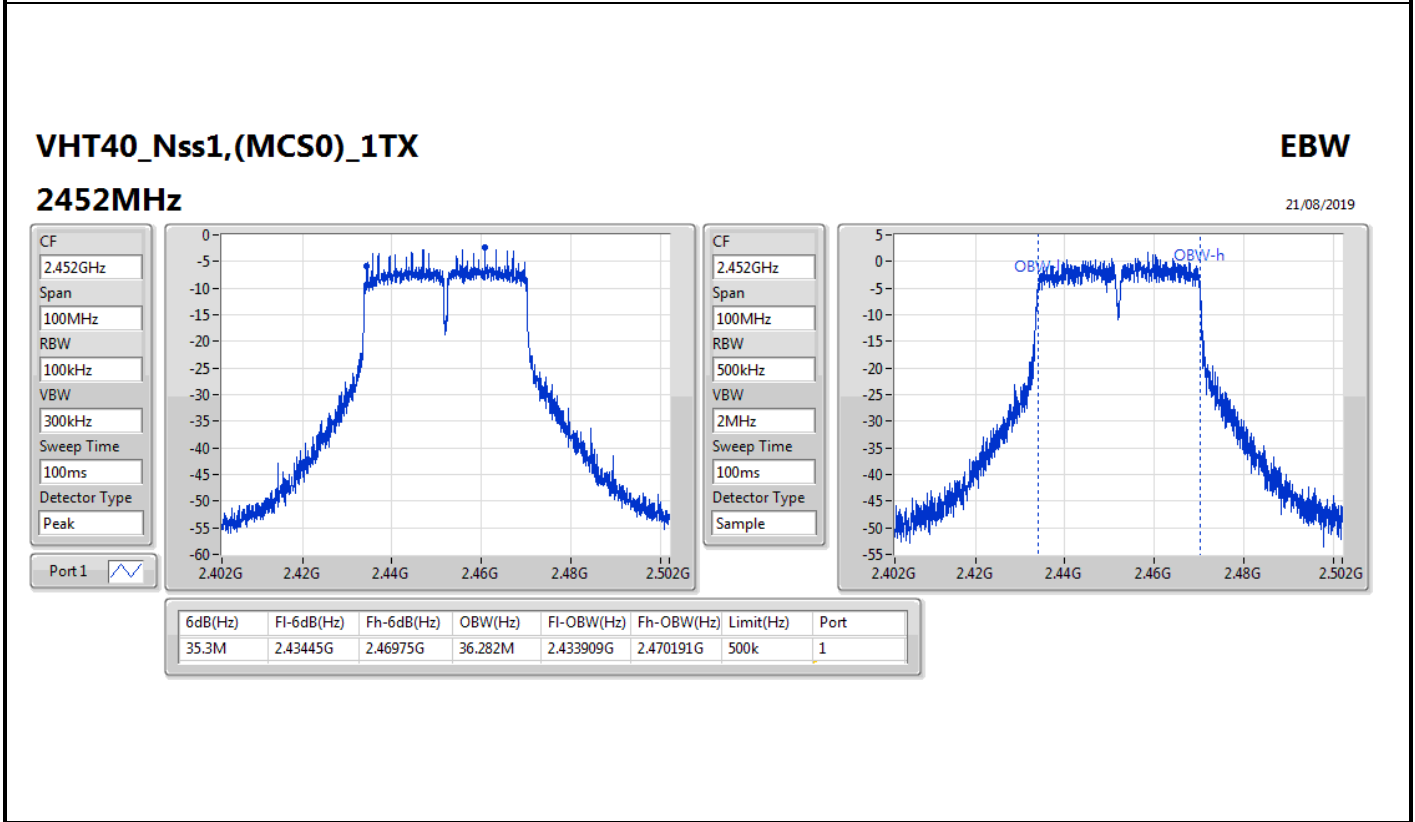
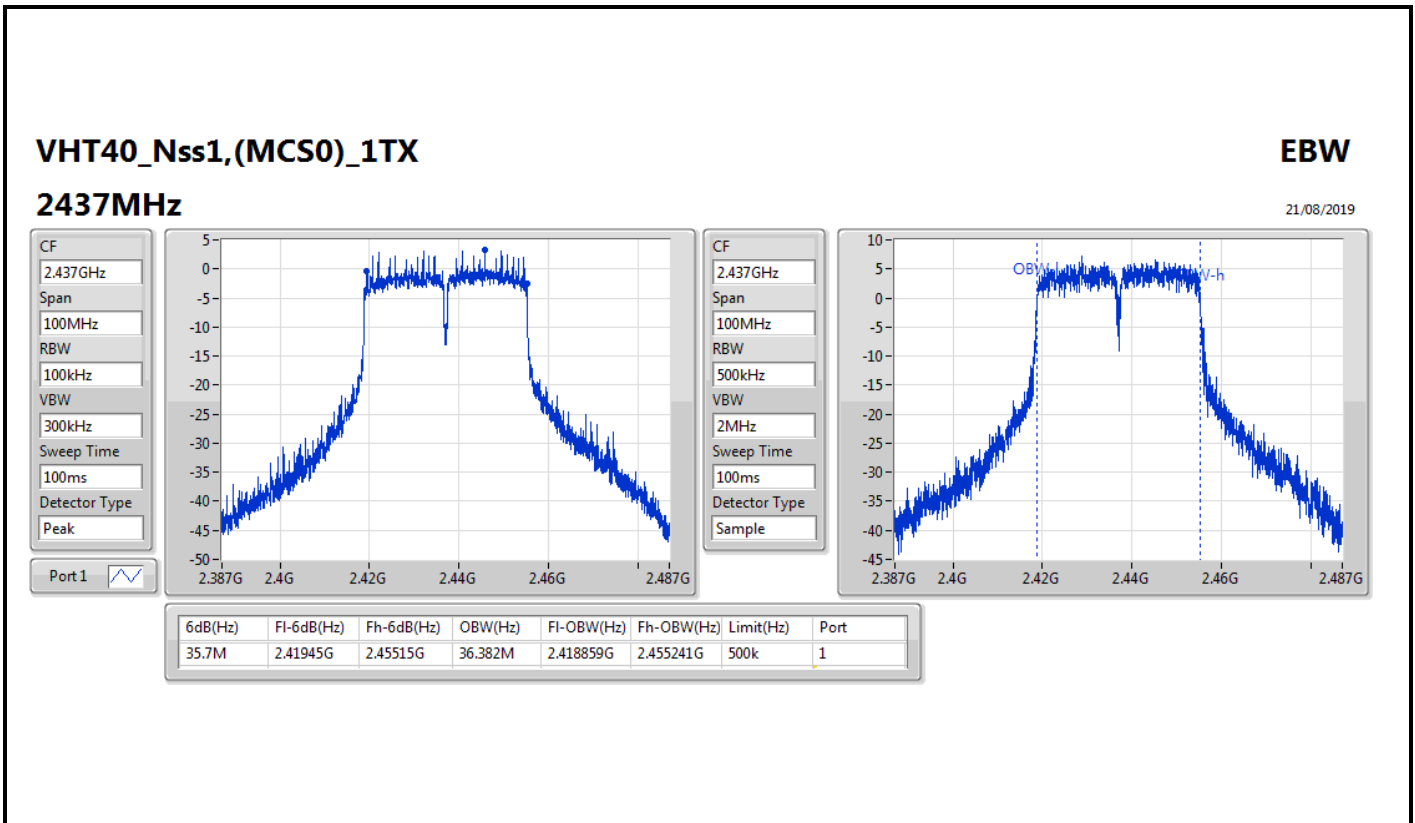
2462MHz

21/08/2019











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	17.525M	17.616M	17M6D1D	15.1M	17.566M
VHT40-BF_Nss1,(MCS0)_2TX	33.95M	36.682M	36M7D1D	25.55M	35.982M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.5M	17.591M	17M6D1D	15.025M	17.566M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	35.9M	36.682M	36M7D1D	28.05M	36.082M

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	15.1M	17.591M	16.425M	17.591M
2437MHz	Pass	500k	15.9M	17.566M	17.1M	17.591M
2462MHz	Pass	500k	17.375M	17.616M	17.525M	17.591M
VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	33.85M	36.432M	33.95M	36.532M
2437MHz	Pass	500k	30M	36.682M	30.05M	36.682M
2452MHz	Pass	500k	25.55M	36.132M	33.75M	35.982M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.15M	17.591M	15.05M	17.566M
2437MHz	Pass	500k	15.025M	17.591M	16.925M	17.591M
2462MHz	Pass	500k	15.1M	17.591M	17.5M	17.591M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35M	36.682M	35.9M	36.382M
2437MHz	Pass	500k	28.05M	36.532M	30.05M	36.082M
2452MHz	Pass	500k	35M	36.082M	35.05M	36.132M

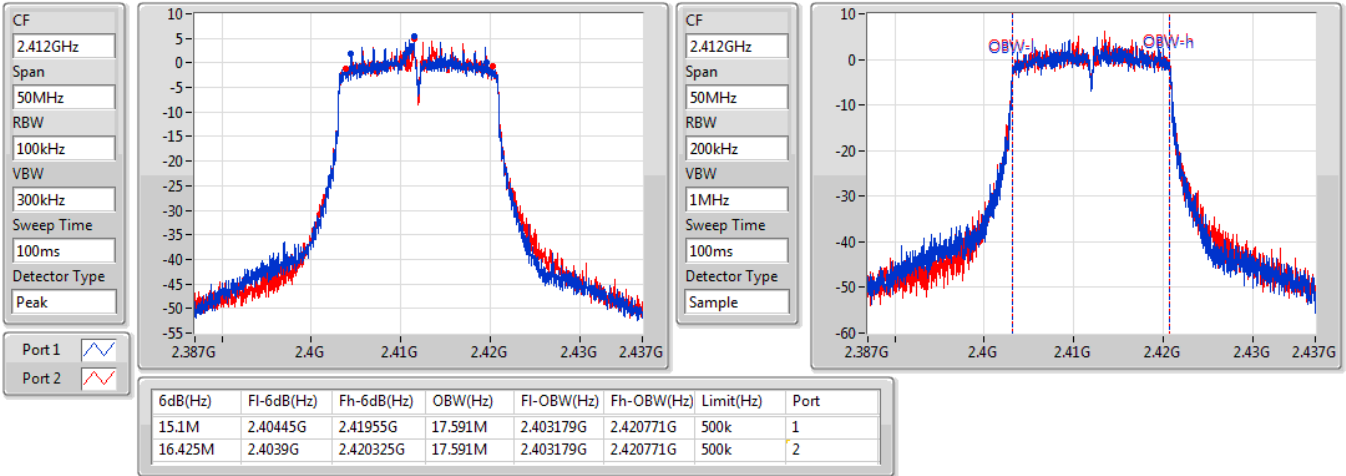
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

VHT20-BF_Nss1,(MCS0)_2TX

EBW

2412MHz

13/09/2019

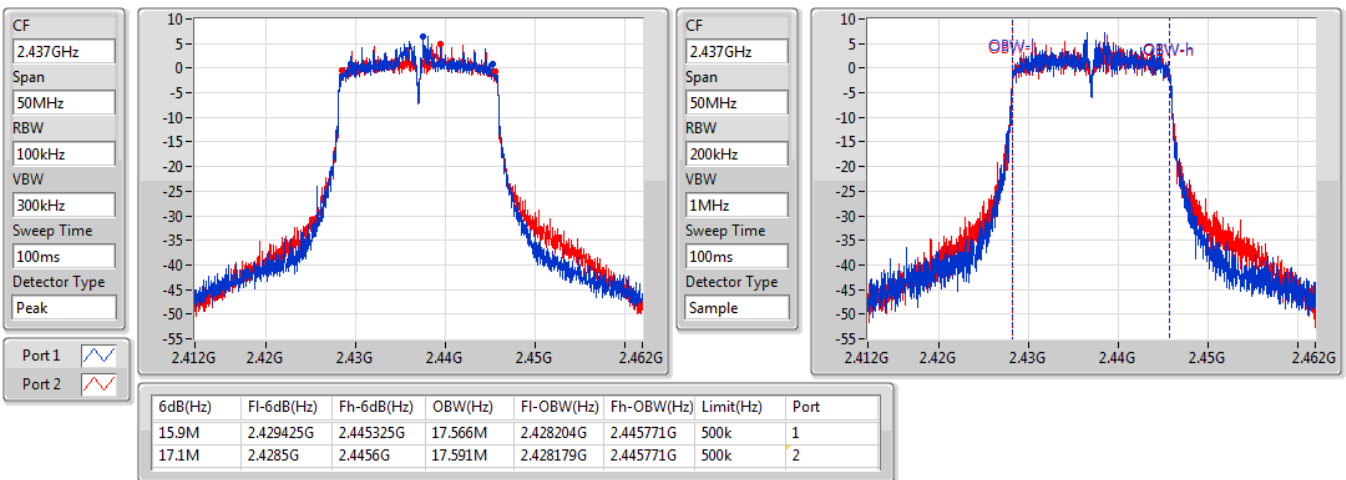


VHT20-BF_Nss1,(MCS0)_2TX

EBW

2437MHz

13/09/2019



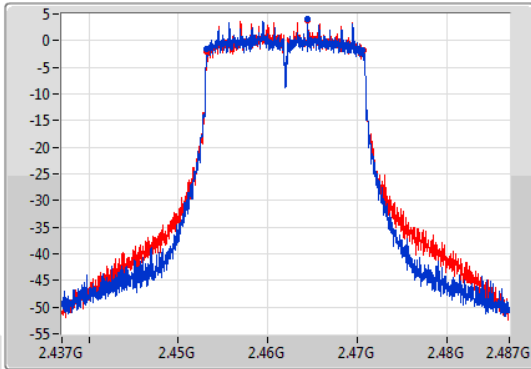
VHT20-BF_Nss1,(MCS0)_2TX

EBW

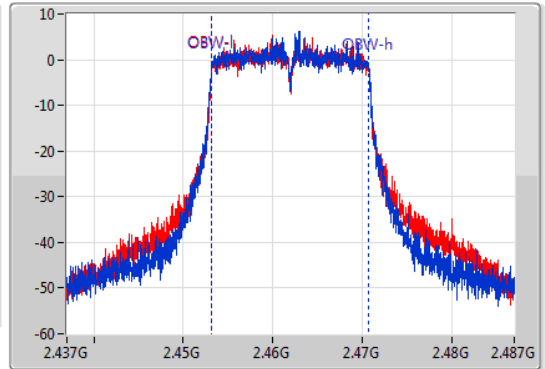
2462MHz

13/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.375M	2.453225G	2.4706G	17.616M	2.453154G	2.470771G	500k	1
17.525M	2.453225G	2.47075G	17.591M	2.453179G	2.470771G	500k	2

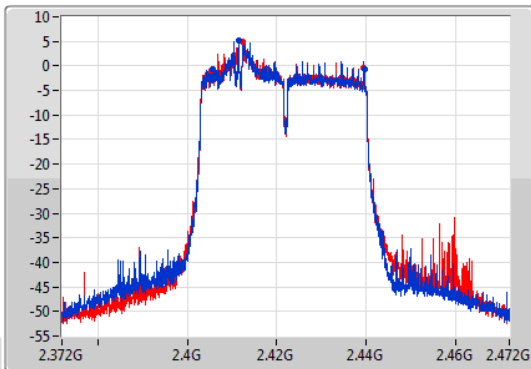
VHT40-BF_Nss1,(MCS0)_2TX

EBW

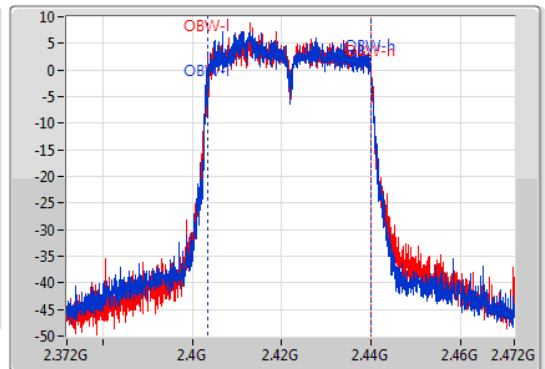
2422MHz

13/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.85M	2.4057G	2.43955G	36.432M	2.403509G	2.439941G	500k	1
33.95M	2.4055G	2.43945G	36.532M	2.403459G	2.439991G	500k	2

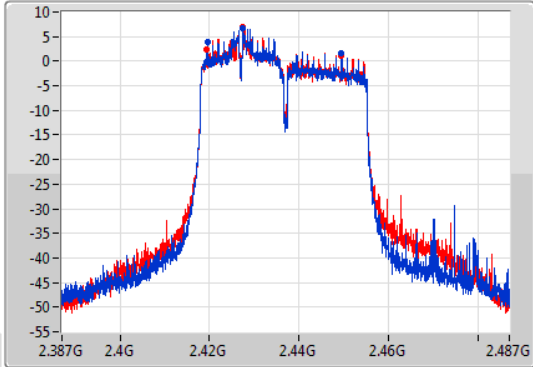
VHT40-BF_Nss1,(MCS0)_2TX

EBW

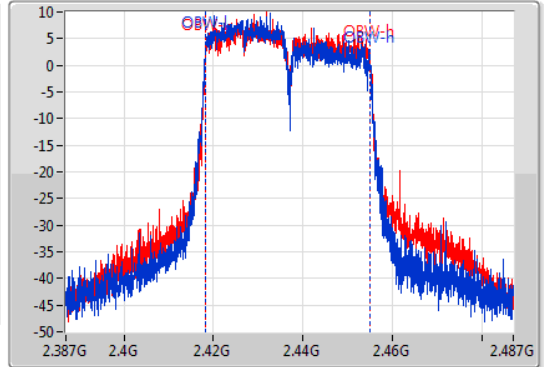
2437MHz

13/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30M	2.4195G	2.4495G	36.682M	2.418209G	2.454891G	500k	1
30.05M	2.41945G	2.4495G	36.682M	2.418259G	2.454941G	500k	2

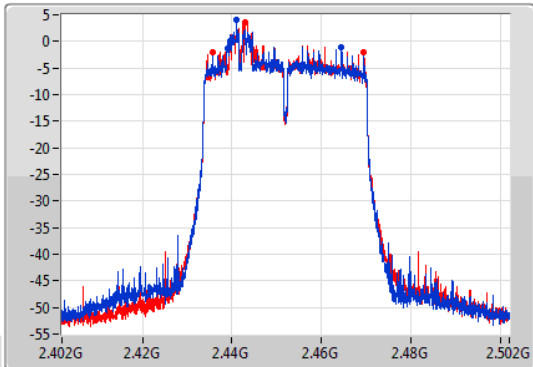
VHT40-BF_Nss1,(MCS0)_2TX

EBW

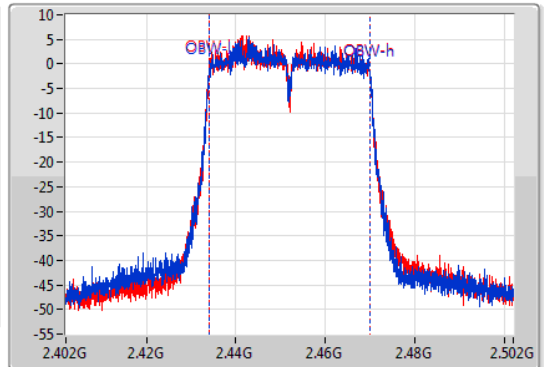
2452MHz

13/09/2019

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
Sample



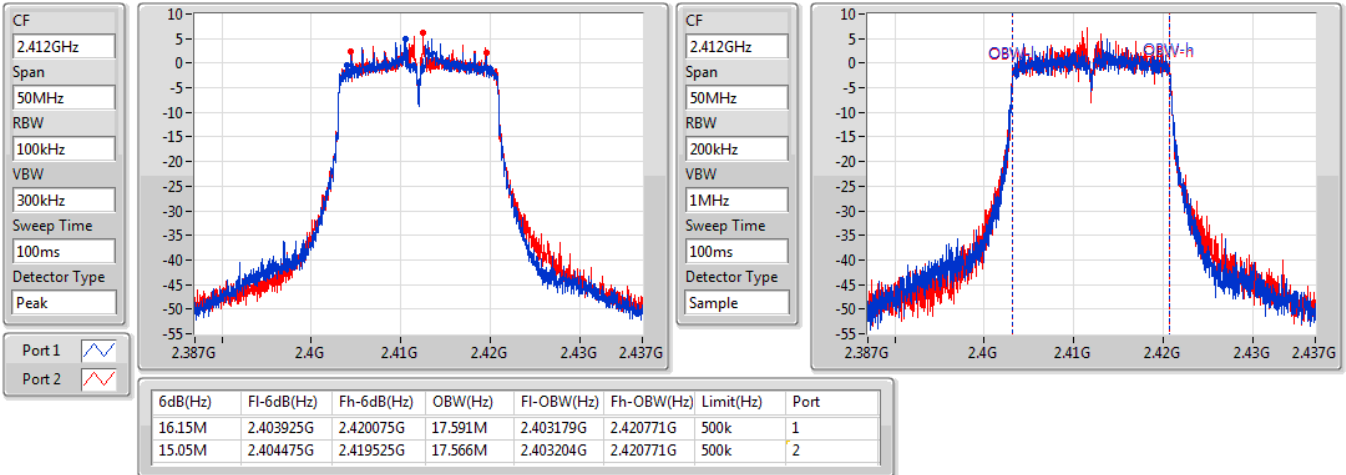
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.55M	2.43895G	2.4645G	36.132M	2.433909G	2.470041G	500k	1
33.75M	2.43575G	2.4695G	35.982M	2.434009G	2.469991G	500k	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2412MHz

13/09/2019

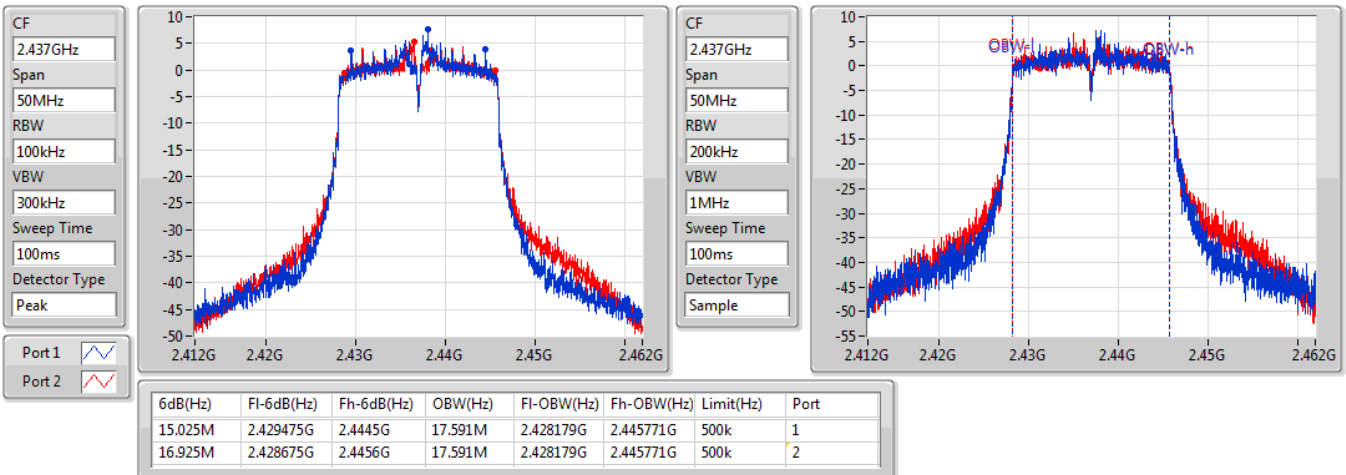


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2437MHz

13/09/2019



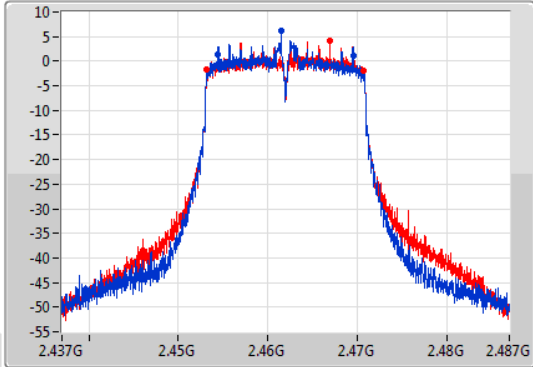
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

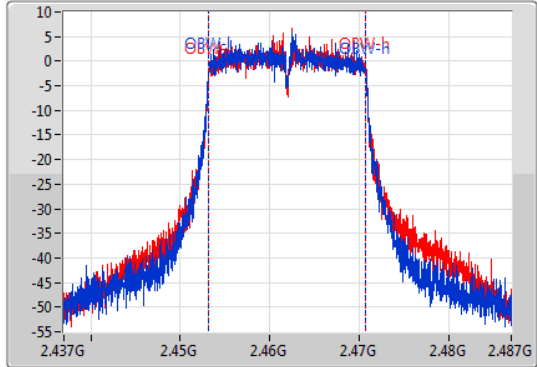
2462MHz

13/09/2019

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
Sample



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	17.591M	2.453154G	2.470746G	500k	1
17.5M	2.453225G	2.470725G	17.591M	2.453179G	2.470771G	500k	2

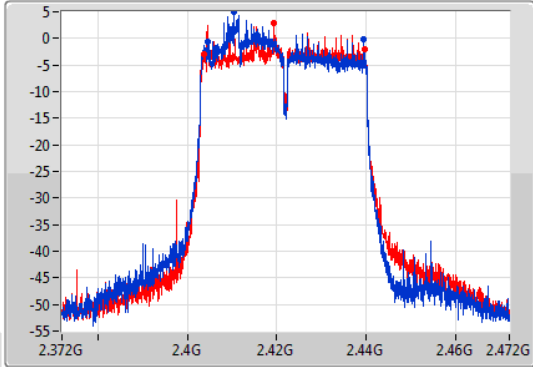
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

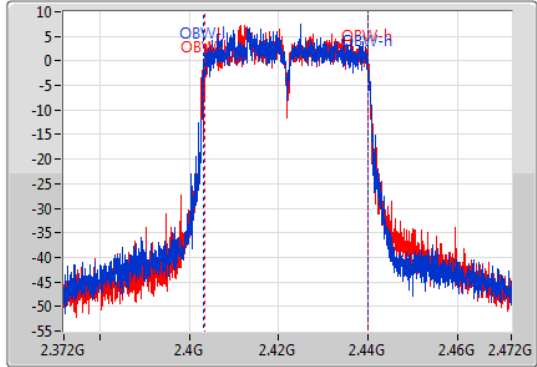
2422MHz

13/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.4045G	2.4395G	36.682M	2.403309G	2.439991G	500k	1
35.9M	2.40365G	2.43955G	36.382M	2.403609G	2.439991G	500k	2

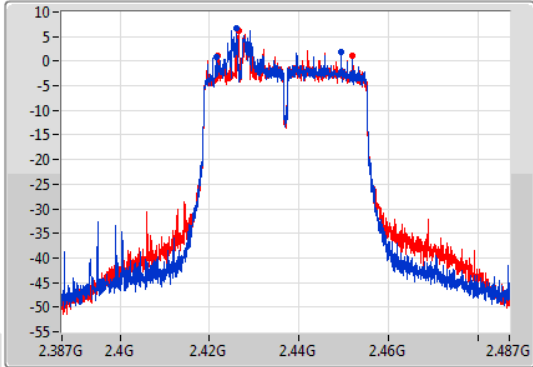
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

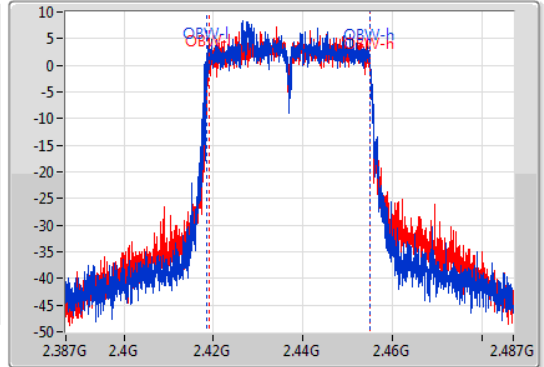
2437MHz

13/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
28.05M	2.42145G	2.4495G	36.532M	2.418459G	2.454991G	500k	1
30.05M	2.42195G	2.452G	36.082M	2.418959G	2.455041G	500k	2

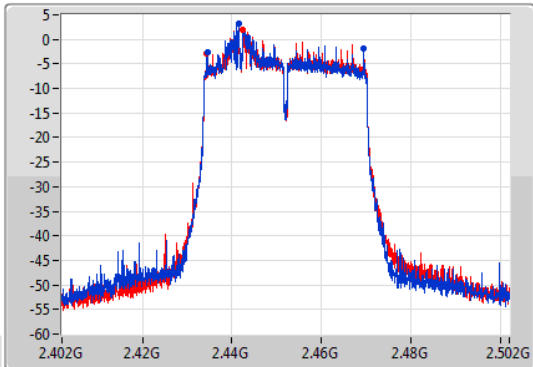
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

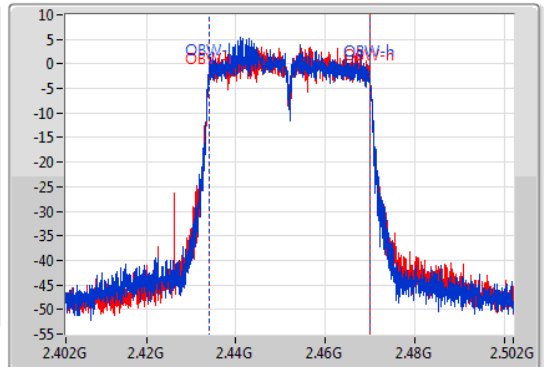
2452MHz

13/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.4345G	2.4695G	36.082M	2.433909G	2.469991G	500k	1
35.05M	2.43445G	2.4695G	36.132M	2.433909G	2.470041G	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	17.525M	17.616M	17M6D1D	15.9M	17.566M
VHT40-BF_Nss1,(MCS0)_2TX	35.25M	36.082M	36M1D1D	31.05M	35.982M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.5M	17.616M	17M6D1D	15.025M	17.591M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	35.1M	36.032M	36M0D1D	32.55M	35.982M

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	17.375M	17.591M	17.25M	17.566M
2437MHz	Pass	500k	15.9M	17.566M	17.1M	17.591M
2462MHz	Pass	500k	17.375M	17.616M	17.525M	17.591M
VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	31.05M	35.982M	32.5M	36.032M
2437MHz	Pass	500k	35.25M	36.082M	35M	35.982M
2452MHz	Pass	500k	33.8M	36.032M	35.1M	36.032M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.825M	17.616M	17.25M	17.591M
2437MHz	Pass	500k	15.025M	17.591M	16.925M	17.591M
2462MHz	Pass	500k	15.1M	17.591M	17.5M	17.591M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.1M	36.032M	32.55M	36.032M
2437MHz	Pass	500k	33.8M	35.982M	33.75M	36.032M
2452MHz	Pass	500k	33.8M	36.032M	33.7M	36.032M

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

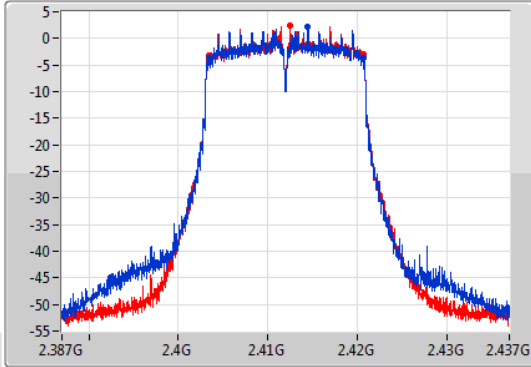
VHT20-BF_Nss1,(MCS0)_2TX

EBW

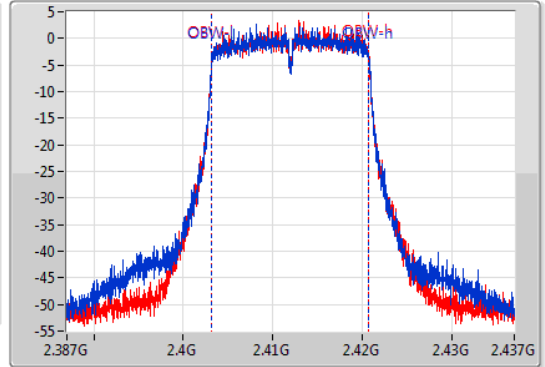
2412MHz

14/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.375M	2.403375G	2.42075G	17.591M	2.403179G	2.420771G	500k	1
17.25M	2.4035G	2.42075G	17.566M	2.403204G	2.420771G	500k	2

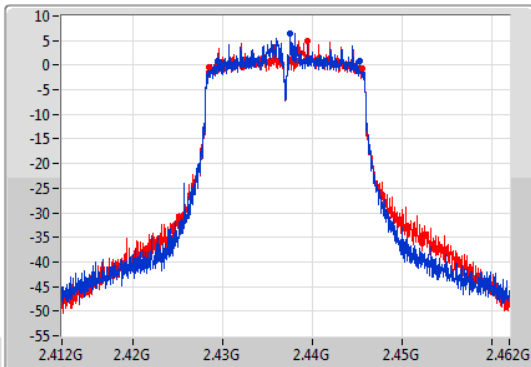
VHT20-BF_Nss1,(MCS0)_2TX

EBW

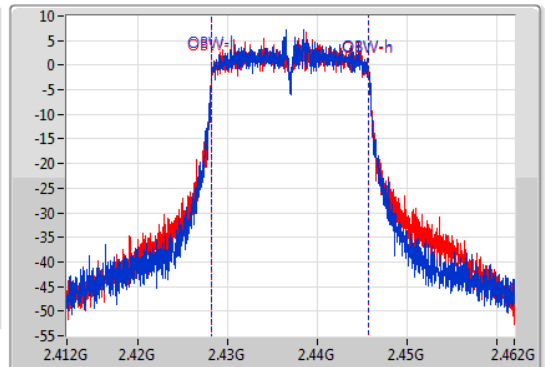
2437MHz

13/09/2019

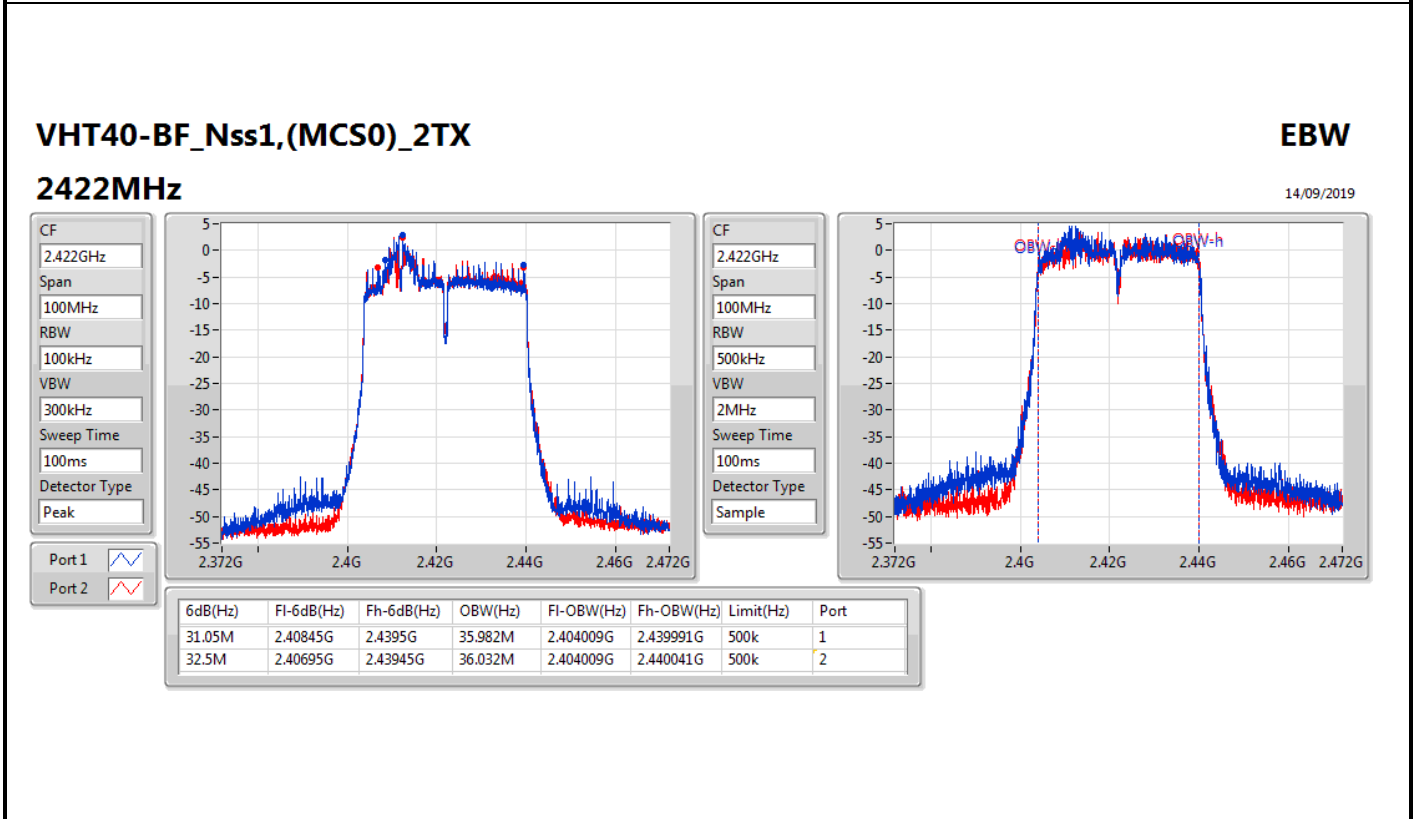
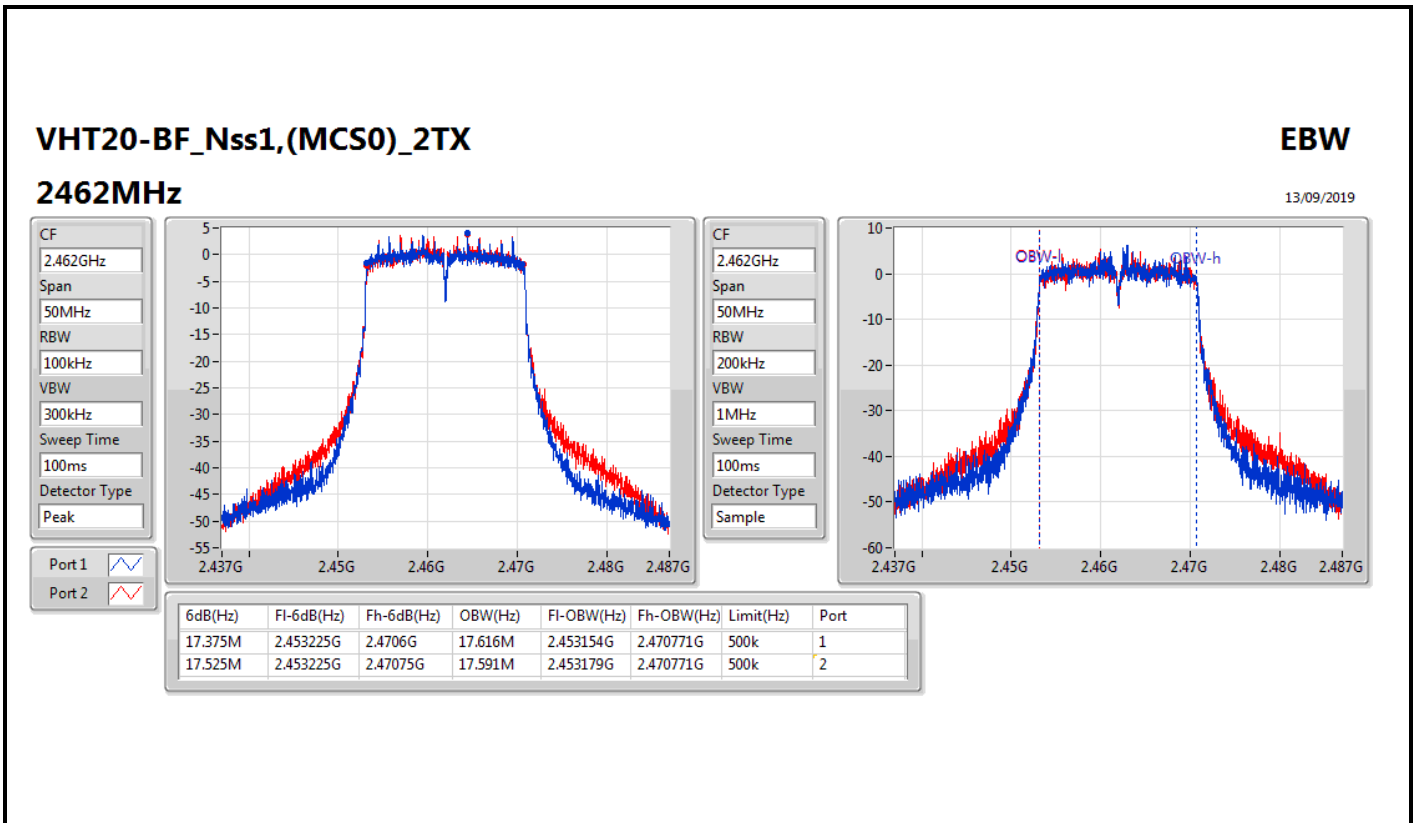
CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.9M	2.429425G	2.445325G	17.566M	2.428204G	2.445771G	500k	1
17.1M	2.4285G	2.4456G	17.591M	2.428179G	2.445771G	500k	2



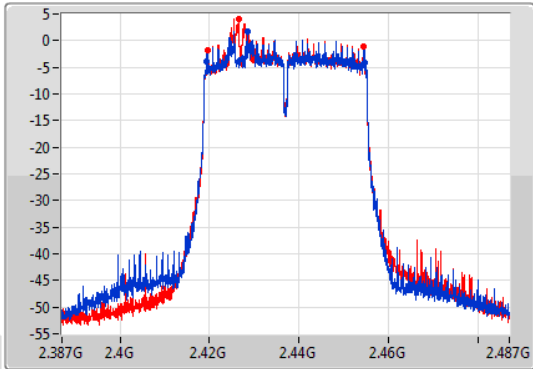
VHT40-BF_Nss1,(MCS0)_2TX

EBW

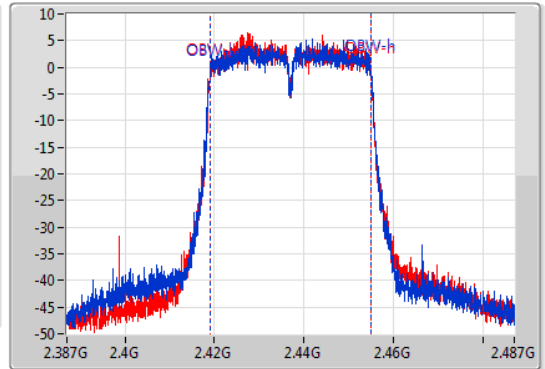
2437MHz

14/09/2019

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
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.25M	2.4194G	2.45465G	36.082M	2.418959G	2.455041G	500k	1
35M	2.4195G	2.4545G	35.982M	2.419009G	2.454991G	500k	2

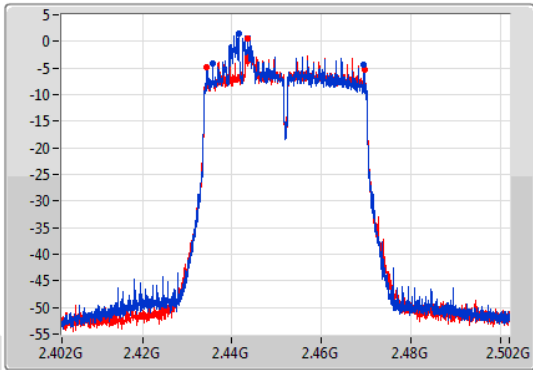
VHT40-BF_Nss1,(MCS0)_2TX

EBW

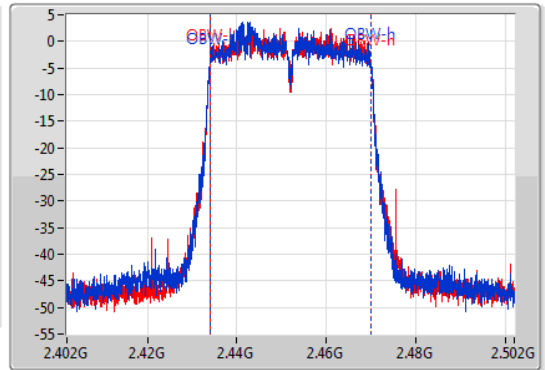
2452MHz

14/09/2019

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
Sample



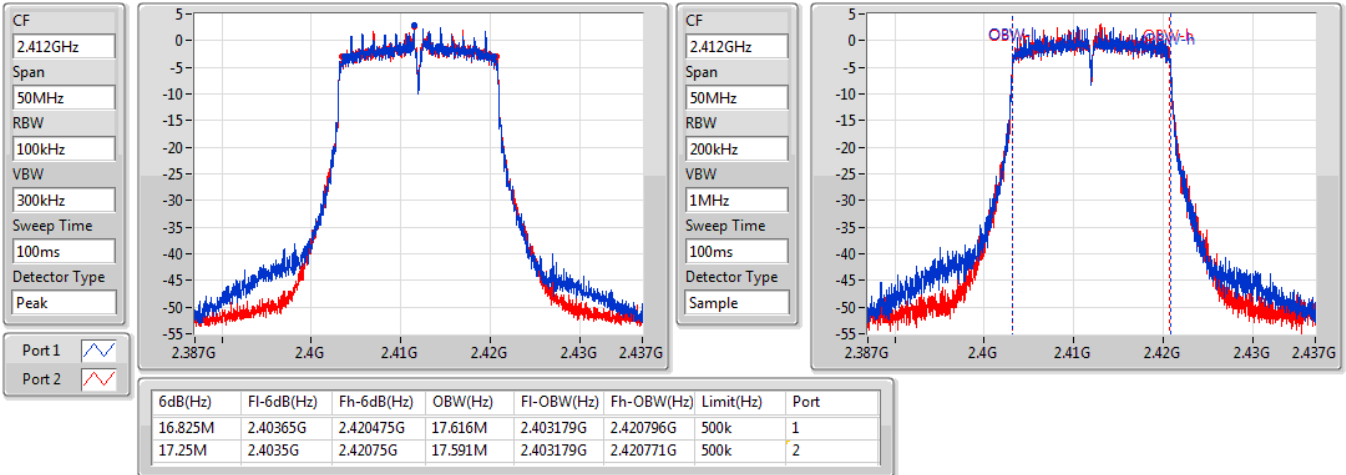
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.8M	2.4357G	2.4695G	36.032M	2.433959G	2.469991G	500k	1
35.1M	2.43445G	2.46955G	36.032M	2.433959G	2.469991G	500k	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2412MHz

14/09/2019

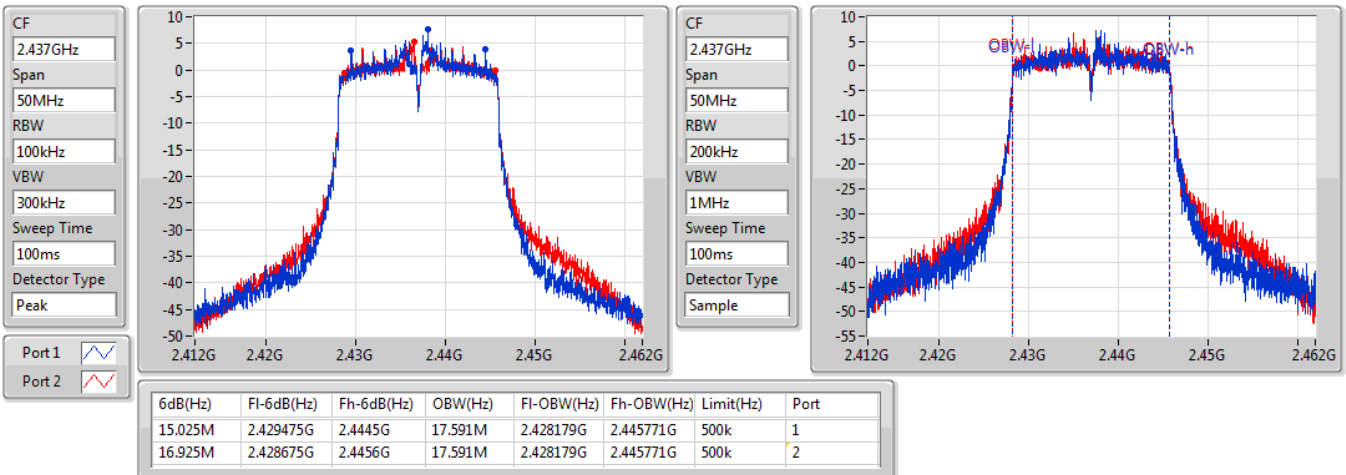


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2437MHz

13/09/2019



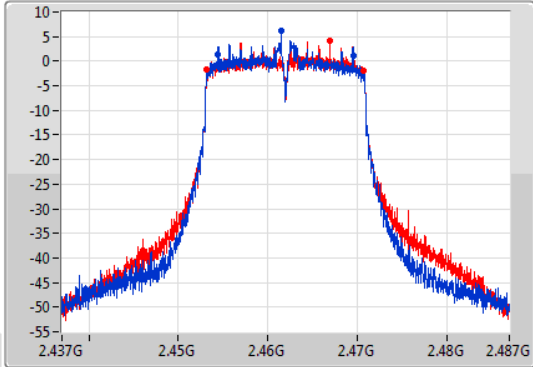
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

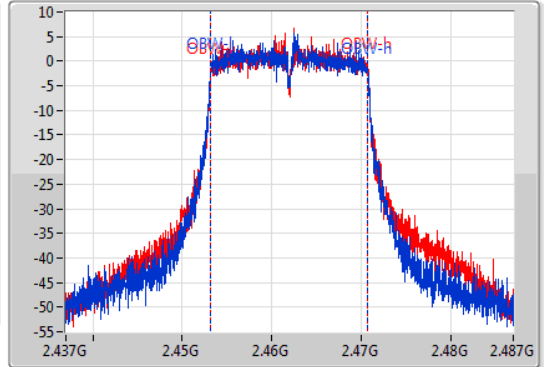
2462MHz

13/09/2019

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



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



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	17.591M	2.453154G	2.470746G	500k	1
17.5M	2.453225G	2.470725G	17.591M	2.453179G	2.470771G	500k	2

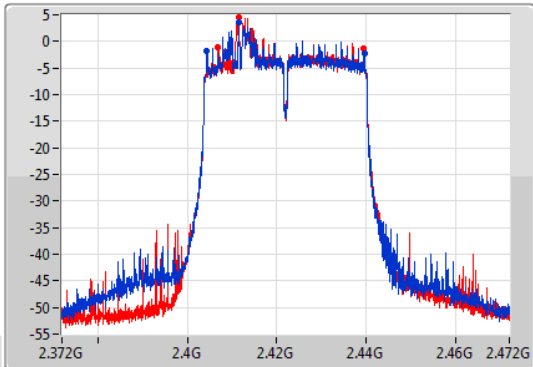
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

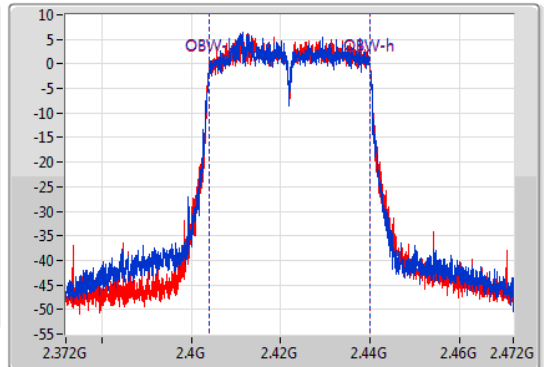
2422MHz

14/09/2019

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.1M	2.40445G	2.43955G	36.032M	2.404009G	2.440041G	500k	1
32.55M	2.40695G	2.4395G	36.032M	2.404009G	2.440041G	500k	2