



FCC Test Report

FCC ID : TVE-3111BB056
Equipment : Secured Wireless Access Point
Brand Name : FORTINET
Model Name : FortiAP U431Fxxxxxx, FAP-U431Fxxxxxx,
FORTIAP-U431Fxxxxxx
FortiAP U433Fxxxxxx, FAP-U433Fxxxxxx,
FORTIAP-U433Fxxxxxx
(where "x" can be used as "A-Z", or "0-9", or
"-", or blank for software changes or marketing
purposes only)
Applicant : Fortinet, Inc.
899 Kifer Road, Sunnyvale, CA 94086, USA
Manufacturer : Universal Global Scientific Industrial Co., Ltd
141, Lane 351, Sec. 1, Taiping Road, TsaoTuen,
Nantou 54261, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Mar. 11, 2019, and testing was started from Apr. 20, 2019 and completed on May 17, 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.)



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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**



History of this test report



Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	FCC 15.203
3.1	15.207	AC Power-line Conducted Emissions	PASS	FCC 15.207
3.2	15.247(a)	DTS Bandwidth	PASS	$\geq 500\text{kHz}$
3.3	15.247(b)	Maximum Conducted Output Power	PASS	Power [dBm]: 30
3.4	15.247(e)	Power Spectral Density	PASS	PSD [dBm/3kHz]: 8
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	Non-Restricted Bands: > 30 dBc
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: FCC 15.209

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: Jackson Tsai

Report Producer: Debby Hung



1 General Description

1.1 Information

The EUT has three radio chip.

Function	Radio 1	Radio 2	Radio 3
WiFi 2.4G	X	V	V
WiFi 5G	V	V	V (Only RX)
Bluetooth	X	X	V

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]

<Non-Beamforming>

Band	Mode	BWch (MHz)	Nant	
			Radio 2	Radio 3
2.4-2.4835GHz	802.11b	20	4TX	2TX
2.4-2.4835GHz	802.11g	20	4TX	2TX
2.4-2.4835GHz	VHT20	20	4TX	2TX
2.4-2.4835GHz	VHT40	40	4TX	2TX
2.4-2.4835GHz	802.11ax HEW20	20	4TX	-
2.4-2.4835GHz	802.11ax HEW40	40	4TX	-

<Beamforming>

Band	Mode	BWch (MHz)	Nant	
			Radio 2	Radio 3
2.4-2.4835GHz	VHT20-BF	20	4TX	
2.4-2.4835GHz	VHT40-BF	40	4TX	
2.4-2.4835GHz	802.11ax HEW20-BF	20	4TX	
2.4-2.4835GHz	802.11ax HEW40-BF	40	4TX	

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



1.1.2 Antenna Information

Model: FAP-U433F

Ant.	Radio	Brand	Model Name	Antenna Type	Connector
1-4	1	ARISTOTLE	RFA-05-C53-U-B32C255	Dipole Antenna	Reversed-SMA
5-8	2	ARISTOTLE	RFA-25-C53-U-B32C255	Dipole Antenna	Reversed-SMA
9-10	3	ARISTOTLE	RFA-25-C53-U-B32C255	Dipole Antenna	Reversed-SMA
11	3	ARISTOTLE	RFA-BT-G402-79-200	PIFA Antenna	IPEX

Ant.	Gain (dBi)			
	Radio 1		Radio 2 & Radio 3	
	5G	2.4G	5G	BT
1-4	4.3	-	-	-
5-8	-	3.5	5.0	-
9-10	-	3.5	5.0	-
11	-	-	-	3.0

Model: FAP-U431F

Ant.	Radio	Brand	Model Name	Antenna Type	Connector
1-4	1	ARISTOTLE	RFA-9953	PIFA Antenna	IPEX
5-8	2	ARISTOTLE	RFA-9953	PIFA Antenna	IPEX
9-10	3	ARISTOTLE	RFA-9953	PIFA Antenna	IPEX
11	3	ARISTOTLE	RFA-BT-G402-79-200	PIFA Antenna	IPEX

Ant.	Gain (dBi)			
	Radio 1		Radio 2 & Radio 3	
	5G	2.4G	5G	BT
1-4	6.0	-	-	-
5-8	-	4.0	6.0	-
9-10	-	4.0	6.0	-
11	-	-	-	3.0



Ant.	BF Gain (dBi)
	Radio 1 & 2
-	6.02

Directional gain = $G_{ANT\ MAX} + 10 \log(N_{ANT}/N_{SS})$ dBi, where N_{SS} = the number of independent spatial streams of data and $G_{ANT\ MAX}$ is the gain of the antenna having the highest gain (in dBi).

For 2.4GHz function:

For IEEE 802.11 b/g/n/ac/ax mode

Radio 2 : Ant. 5 to Ant. 8 could transmit/receive simultaneously. (4TX/4RX)

Radio 3 : Ant. 9 and Ant. 10 could transmit/receive simultaneously.(2TX/2RX)

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode

Radio 1 : Ant. 1 to Ant. 4 could transmit/receive simultaneously. (4TX/4RX)

Radio 2 : Ant. 5 to Ant. 8 could transmit/receive simultaneously. (4TX/4RX)

Radio 3 : Ant. 9 and Ant. 10 could transmit/receive simultaneously. (2RX)

For Bluetooth function:

For IEEE 802.15.1 Bluetooth mode

Radio 3 : Ant. 11 could transmit/receive simultaneously. (1TX/1RX)

1.1.3 EUT Information

Operational Condition					
EUT Power Type	From AC Adapter				
EUT Function	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point	
Beamforming Function	<input checked="" type="checkbox"/>	Radio 1	<input checked="" type="checkbox"/>	Radio 2	<input type="checkbox"/> Radio 3
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

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.957	0.19	12.42m	100
802.11g	0.953	0.21	2.066m	1k
VHT20	0.981	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)
VHT40	0.95	0.22	774.375u	3k
802.11ax HEW20	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.959	0.18	956.25u	3k

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



1.1.5 Table for Multiple Listing

Brand Name	Model Name	Description
FORTINET	FortiAP U431Fxxxxxx	Internal Antenna
	FAP-U431Fxxxxxx	
	FORTIAP-U431Fxxxxxx	
	FortiAP U433Fxxxxxx	External Antenna
	FAP-U433Fxxxxxx	
	FORTIAP-U433Fxxxxxx	

Notes: All the models are electrically identical, difference model names for marketing purpose.



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

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
RF Conducted	TH06-HY	Gary	23.1~26.6°C / 61~69%	07/May/2019~10/May/2019
Radiated	03CH02-HY	Daniel	21.6~23.5°C / 51.7~55.3%	20/Apr/2019~11/May/2019
AC Conduction	CO01-HY	Jeff	23.5~24.1°C / 53.6~57.5%	11/May/2019~17/May/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

Radio 2

<Non-Beamforming>

Test Software Version	MTool 3.1.0.1

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	86
2417MHz	87
2437MHz	93
2457MHz	84
2462MHz	82
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	58
2417MHz	65
2437MHz	80
2457MHz	61
2462MHz	58
VHT20_Nss1,(MCS0)_4TX	-
2412MHz	51
2417MHz	59
2437MHz	73
2457MHz	57
2462MHz	48
VHT40_Nss1,(MCS0)_4TX	-
2422MHz	42
2427MHz	44
2437MHz	55
2447MHz	53
2452MHz	50
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	51



Mode	PowerSetting
2417MHz	59
2437MHz	73
2457MHz	57
2462MHz	48
802.11ax HEW40_Nss1,(MCS0)_4TX	-
2422MHz	42
2427MHz	44
2437MHz	55
2447MHz	53
2452MHz	50

<Beamforming>

Test Software Version	Dos

Mode	PowerSetting
VHT20-BF_Nss1,(MCS0)_4TX	-
2412MHz	52
2417MHz	64
2437MHz	76
2457MHz	61
2462MHz	54
VHT40-BF_Nss1,(MCS0)_4TX	-
2422MHz	54
2437MHz	54
2447MHz	54
2452MHz	52
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
2412MHz	52
2417MHz	64
2437MHz	76
2457MHz	61
2462MHz	54
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
2422MHz	54
2437MHz	54
2447MHz	54
2452MHz	52



Radio 3

<Non-Beamforming>

Test Software Version	MTool 3.1.0.1
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Mode	PowerSetting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	78
2417MHz	83
2437MHz	86
2457MHz	85
2462MHz	82
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	59
2417MHz	65
2437MHz	81
2457MHz	66
2462MHz	62
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	60
2417MHz	66
2437MHz	79
2457MHz	66
2462MHz	53
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	50
2427MHz	51
2437MHz	61
2447MHz	55
2452MHz	54



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
Internal / External	1. Adapter mode ; Radio 2 ; 2.4G TX
	2. Adapter mode ; Radio 3 ; 2.4G TX
	3. Adapter mode ; Radio2 ; 2.4G BF

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
Internal / External	1. Adapter mode ; Radio 2 ; 2.4G TX
	2. Adapter mode ; Radio 3 ; 2.4G TX
	3. Adapter mode ; Radio2 ; 2.4G BF
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Y Plane
Worst Planes of EUT	Z Plane



2.4 Accessories and Support Equipment

Accessories				
AC Adapter	Brand Name	APD	Model Name	WA-30J12R
	Power Rating	I/P: <u>100 - 240</u> Vac, <u>0.9</u> A, O/P: <u>12</u> Vdc, <u>2.5</u> A		
	Power Cord	1.50 meter, non-shielded cable, w/o ferrite core		

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

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	R33002 / DOC
2	Adapter for NB	DELL	HA65NM130	R35737 / DOC

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5530	DOC
2	Client AP	FORTINET	FAP-U433F	DOC
3	Client AP	FORTINET	FAP-U431F	DOC

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

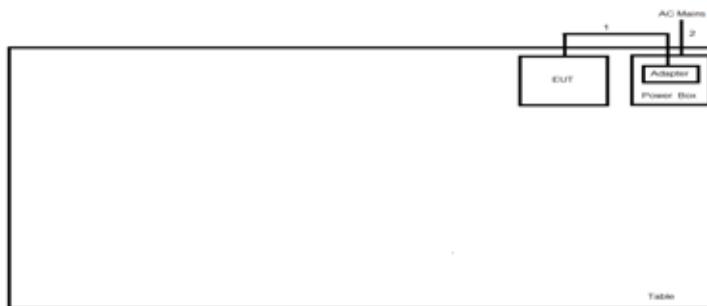
Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5530	DOC
2	Client AP	FORTINET	FAP-U433F	DOC
3	Client AP	FORTINET	FAP-U431F	DOC

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



2.5 Test Setup Diagram

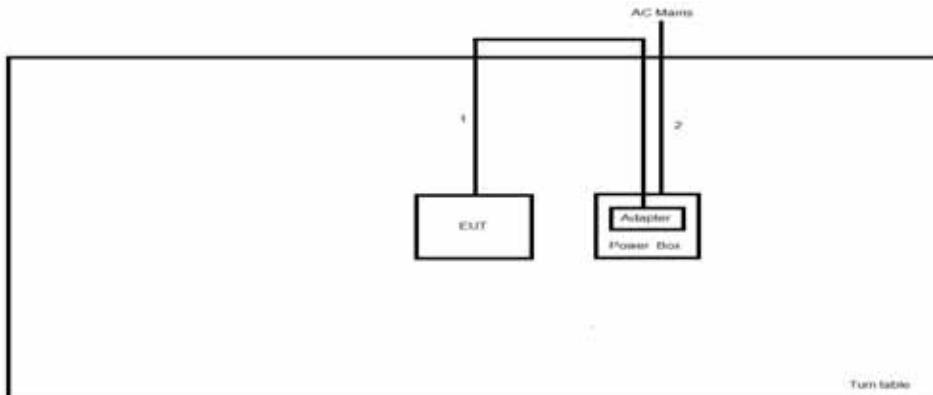
Test Setup Diagram – AC Line Conducted Emission Test



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



Test Setup Diagram - Radiated Test



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

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

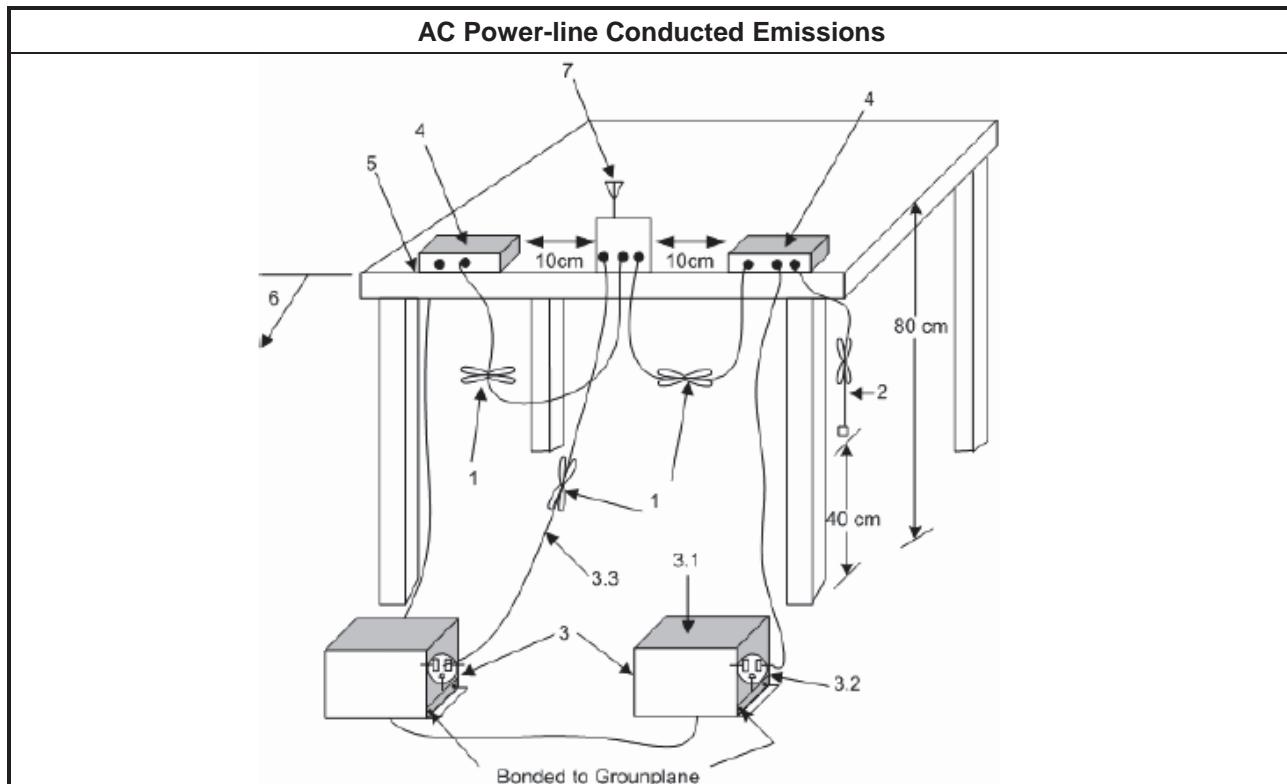
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<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:
▪ 6 dB bandwidth \geq 500 kHz.

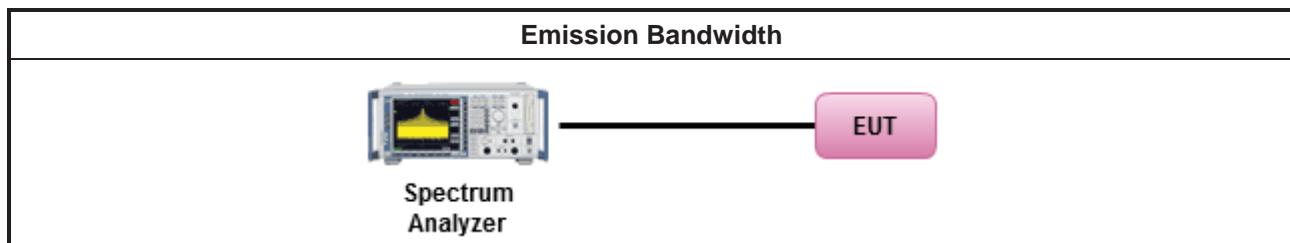
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
▪ For the emission bandwidth shall be measured using one of the options below:
<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 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 $G_{TX} \leq 6 \text{ dBi}$, then $P_{Out} \leq 30 \text{ dBm}$ (1 W)
	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6) \text{ dBm}$
	<ul style="list-style-type: none">▪ Point-to-point systems (P2P): If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)/3 \text{ dBm}$
	<ul style="list-style-type: none">▪ Smart antenna system (SAS):<ul style="list-style-type: none">- Single beam: If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)/3 \text{ dBm}$- Overlap beam: If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)/3 \text{ dBm}$- Aggregate power on all beams: If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8 \text{ dBm}$
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): $P_{eirp} \leq 36 \text{ dBm}$ (4 W)
	<ul style="list-style-type: none">▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}]) \text{ dBm}$
	<ul style="list-style-type: none">▪ Smart antenna system (SAS)<ul style="list-style-type: none">- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX}) \text{ dBm}$- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX}) \text{ dBm}$- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8]) \text{ dBm}$

P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm,
 G_{TX} = the maximum transmitting antenna directional gain in dBi.

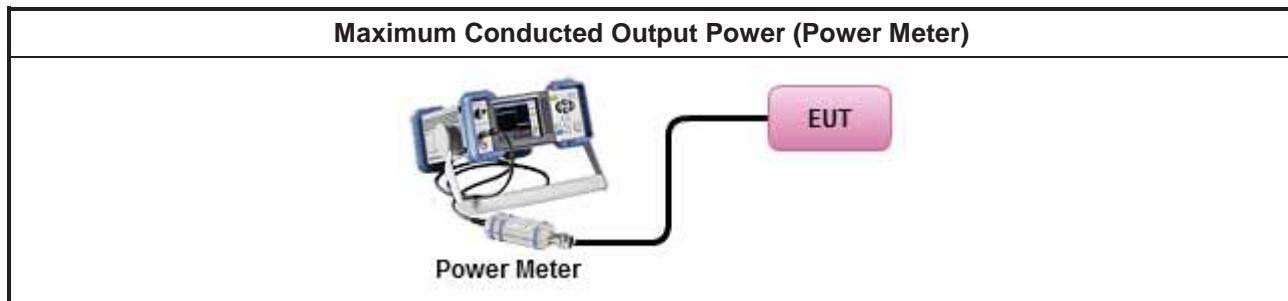
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method
▪ Maximum Peak Conducted Output Power
<input type="checkbox"/> Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW \geq 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.
▪ 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.
▪ 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.▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

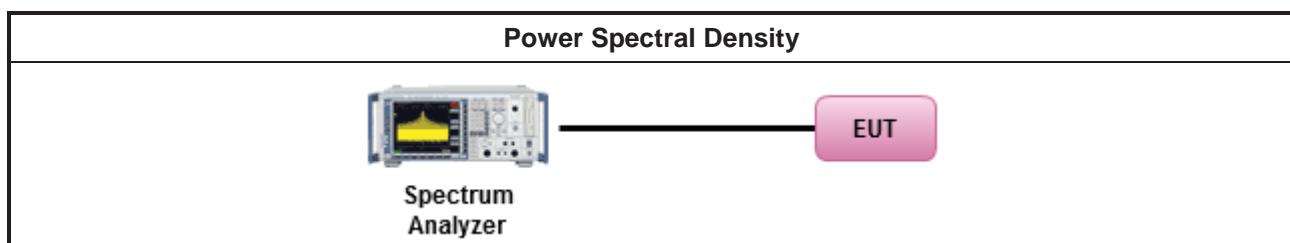
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
▪ 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.
▪ For conducted measurement.
▪ If The EUT supports multiple transmit chains using options given below:
▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

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

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

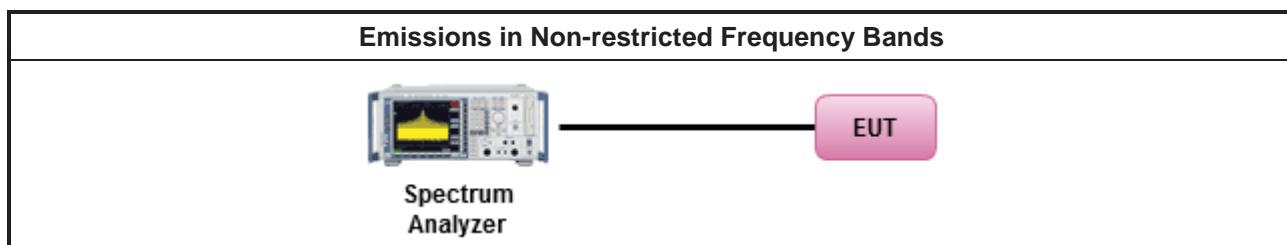
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
▪ Refer as 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

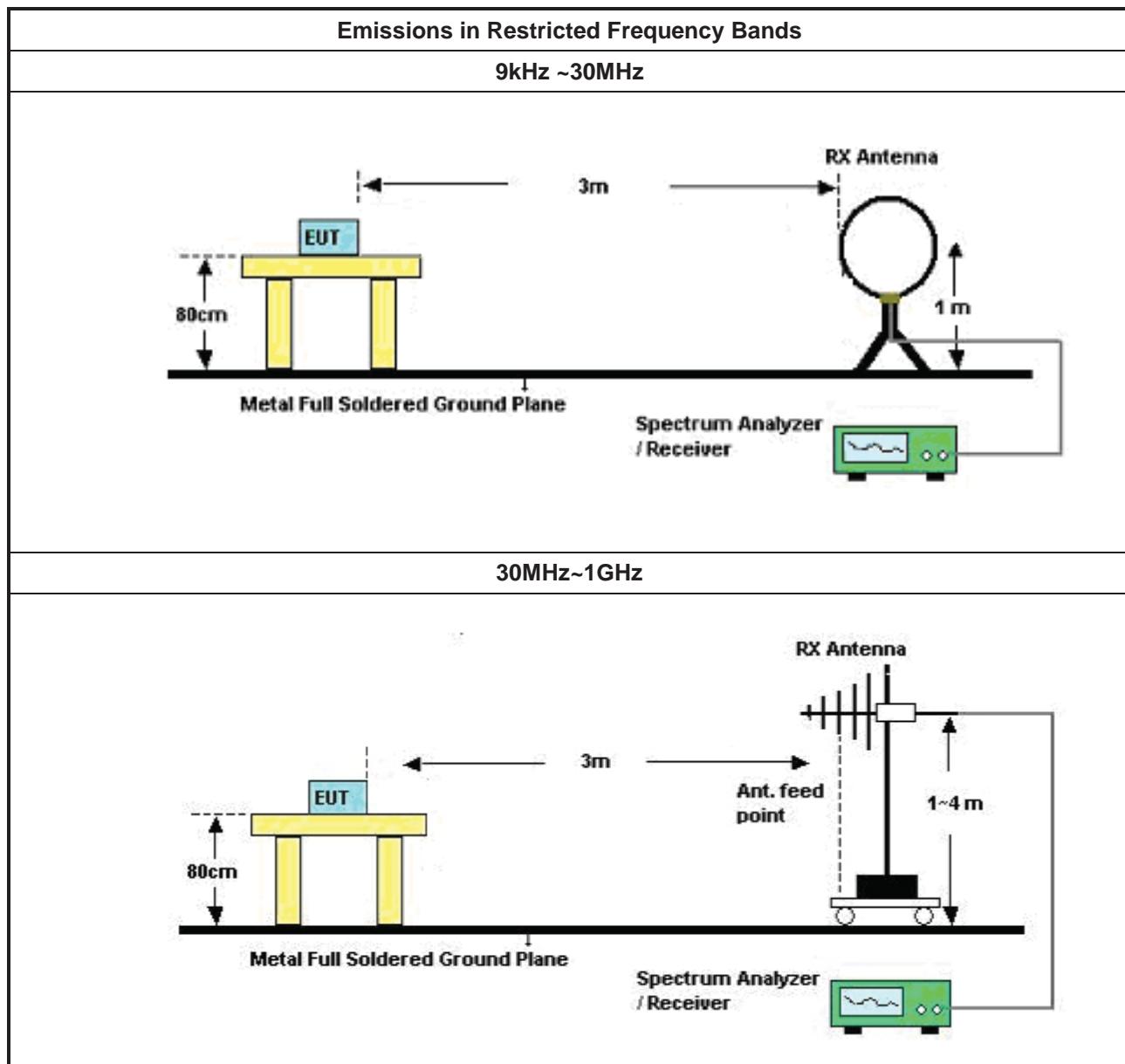
Refer a test equipment and calibration data table in this test report.

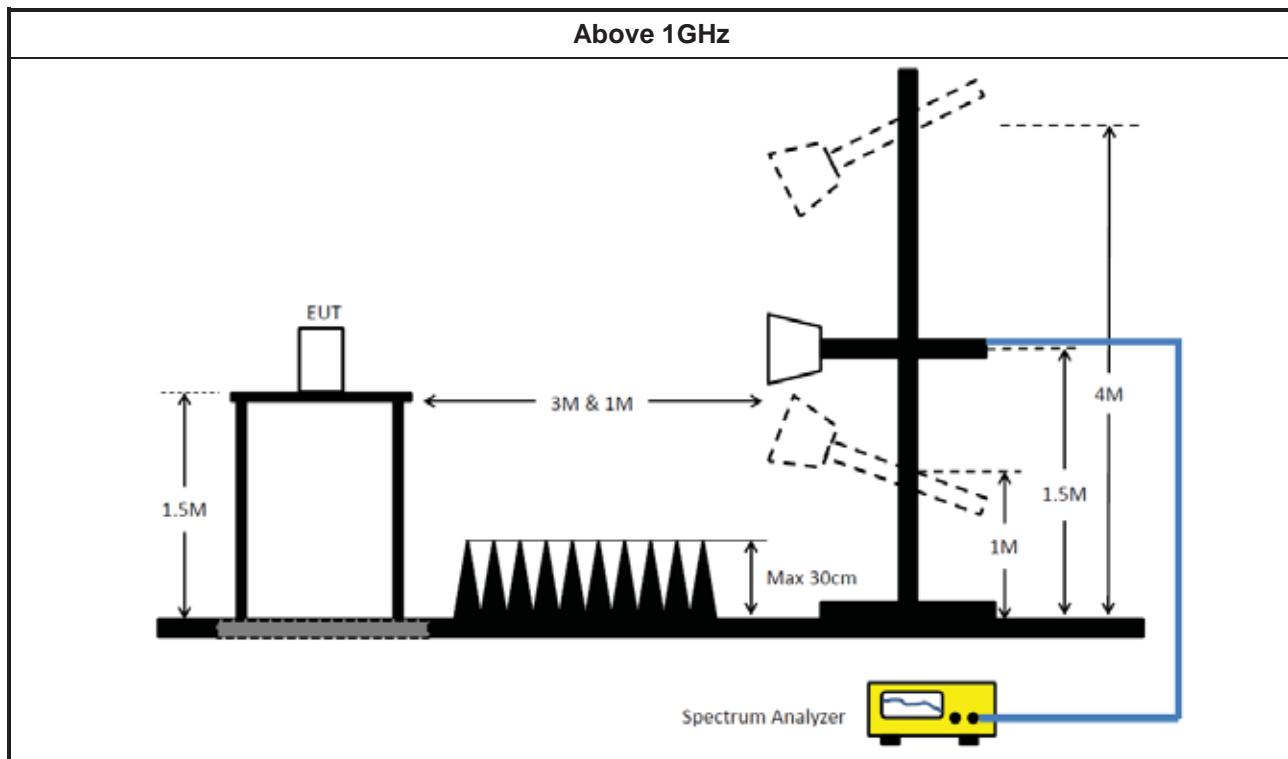


3.6.3 Test Procedures

Test Method
<ul style="list-style-type: none">▪ The average emission levels shall be measured in [duty cycle \geq 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">▪ 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">▪ Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
<ul style="list-style-type: none">▪ Use the following spectrum analyzer settings:<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.▪ Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.

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	ENV 216	101274	9kHz ~ 30MHz	12/Jun/2018	11/Jun/2019
RF Cable-CON	MTJ	RG142	CB001-CO	9kHz ~ 30MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11003G	F308010045	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Puls e Limiter	SCHWARZBEC K	VTSD 9561F	9495	9kHz ~ 30MHz	11/Oct/2018	10/Oct/2019

NCR : Non-Calibration Require

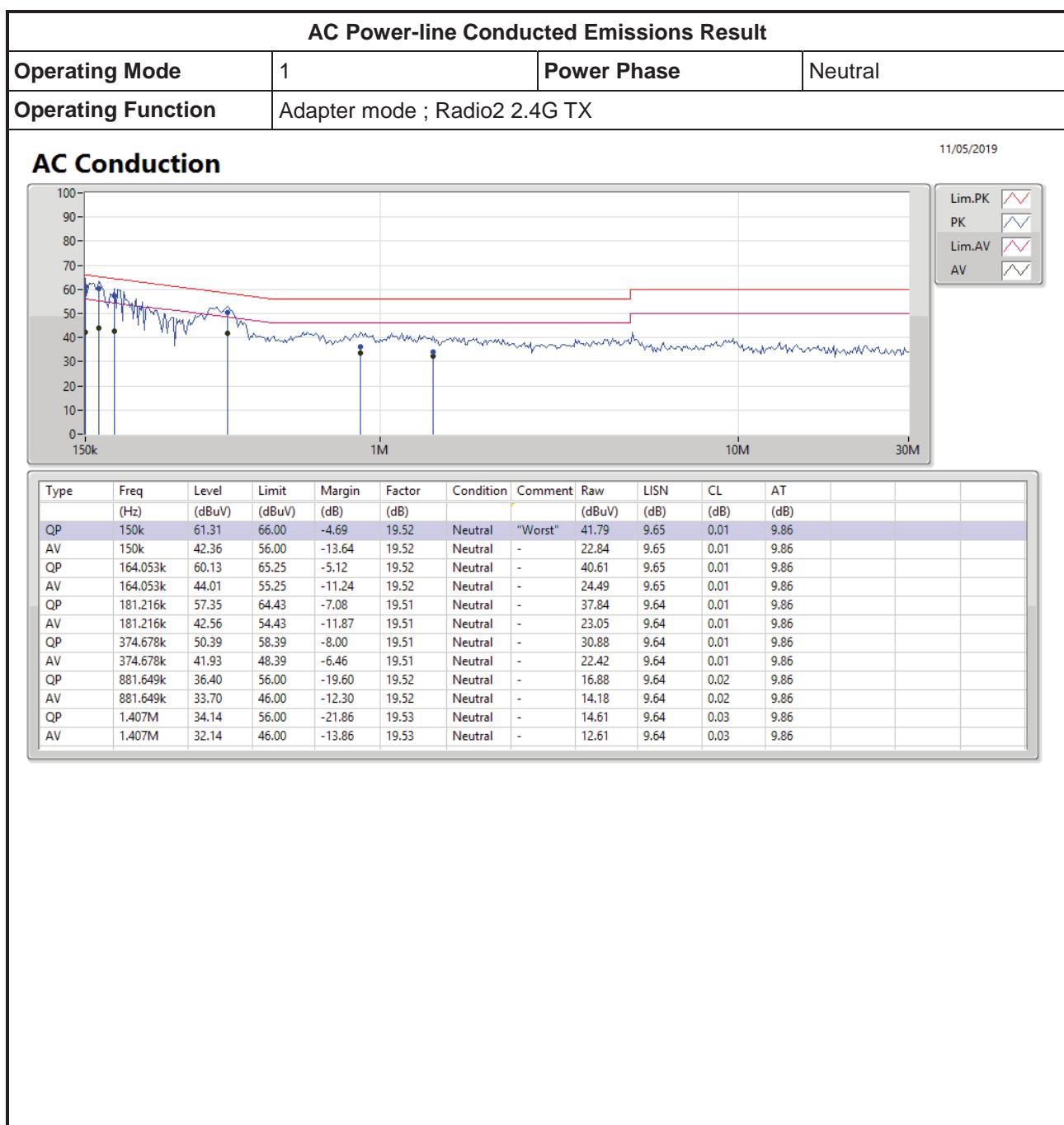
Instrument for Radiated Test

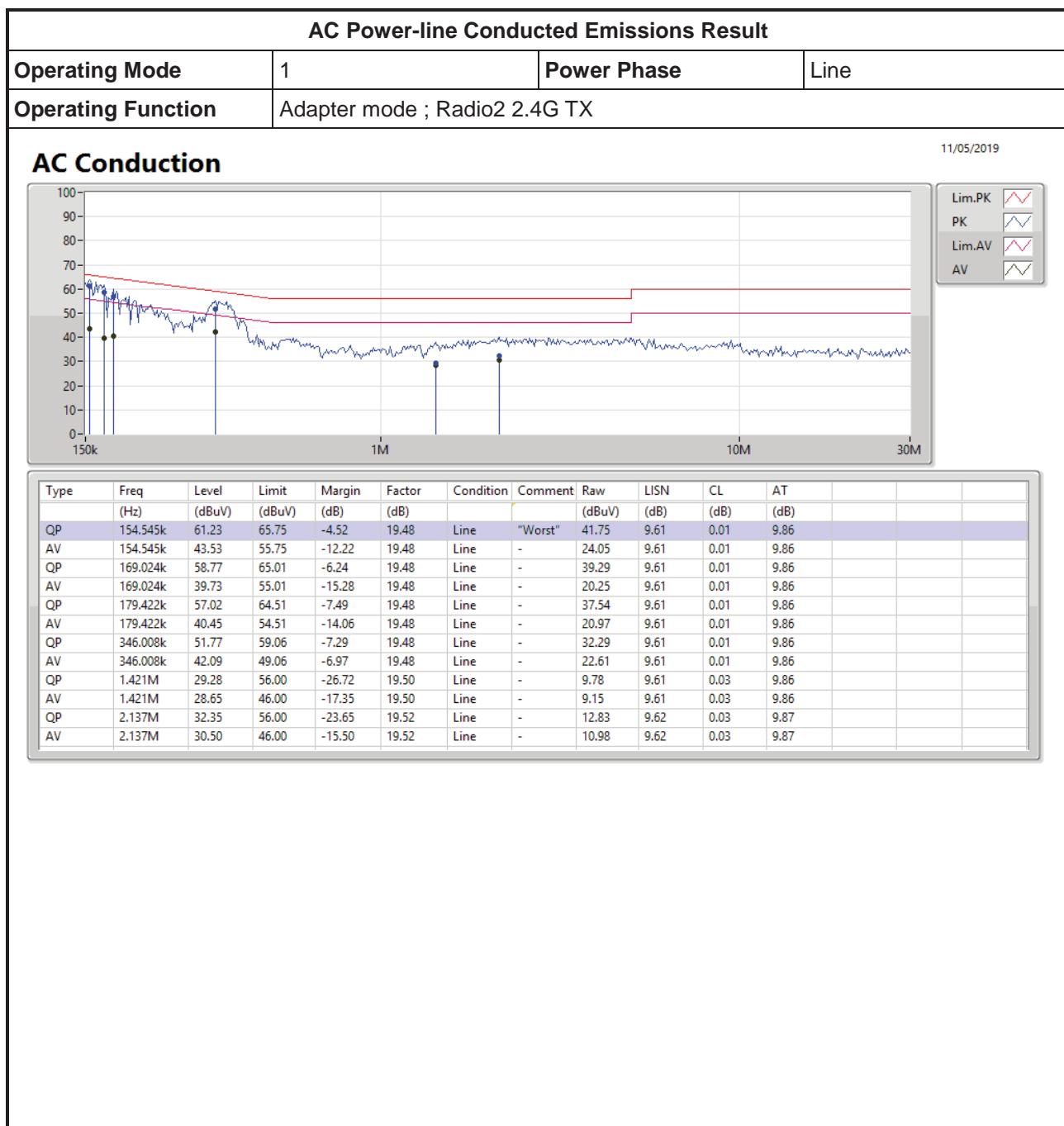
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	19/Oct/2018	18/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	17/Oct/2018	16/Oct/2019
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	27Jul/2018	02/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	23/Oct/2018	22/Oct/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Mar/2019	25/Mar/2020
RF Cable-high 6m	SUHNER	SUCOFLEX104	10567868 / SN805193/4	1GHz~40GHz	09/Apr/2019	08/Apr/2020
RF Cable-high 7m	SUHNER	SUCOFLEX104	10567868 / SN805192/4	1GHz~40GHz	09/Apr/2019	08/Apr/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	08/Sep/2018	07/Sep/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
Broadband Horn Antenna	SCHWARZBEC K	BBHA 9170	BBHA 9170221	15GHz ~ 40GHz	22/Mar/2019	21/Mar/2020
Double Ridged Guide Horn Antenna	SCHWARZBEC K	BBH 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	09/Mar/2019	08/Mar/2020



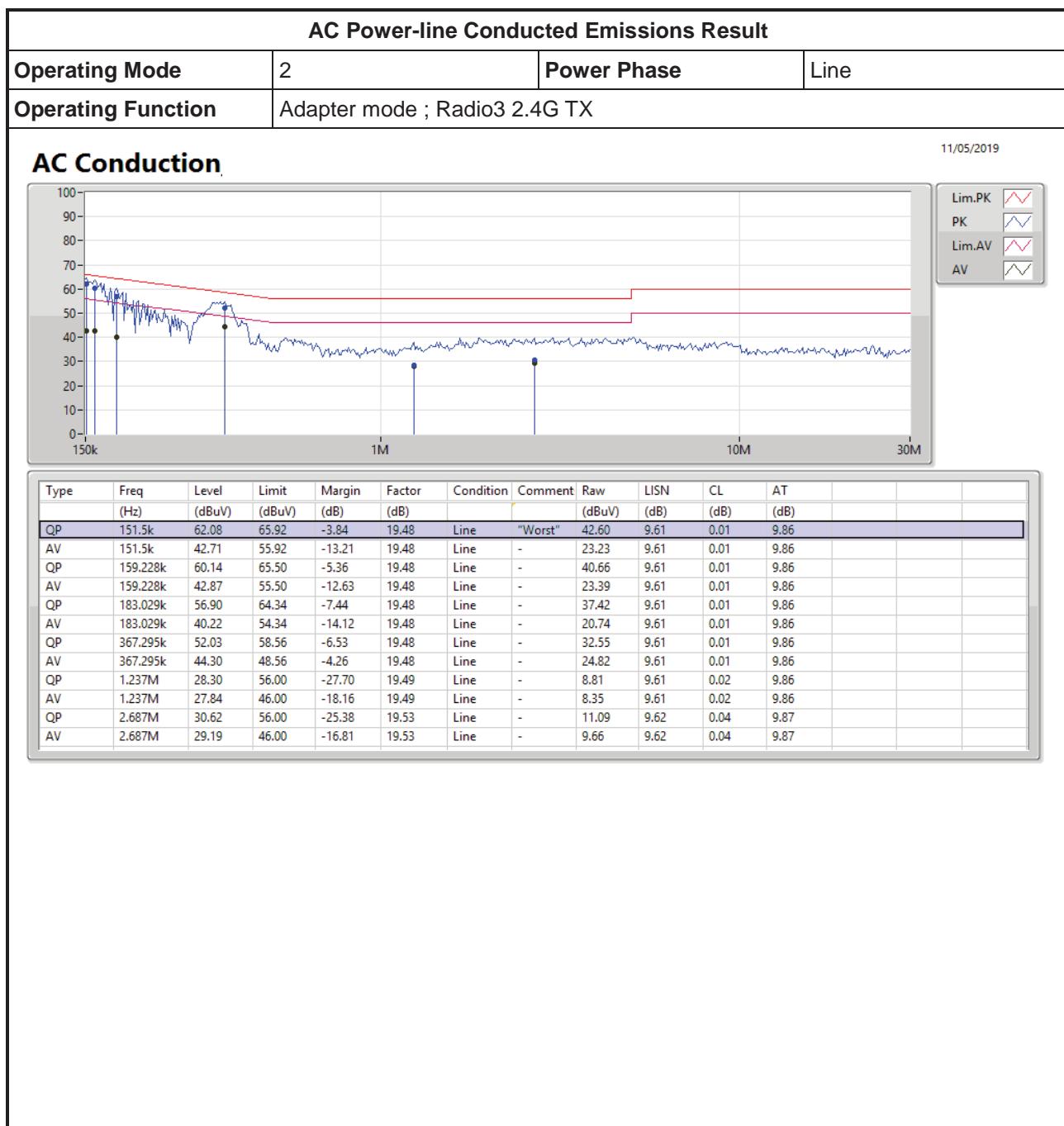
Instrument for Conducted Test

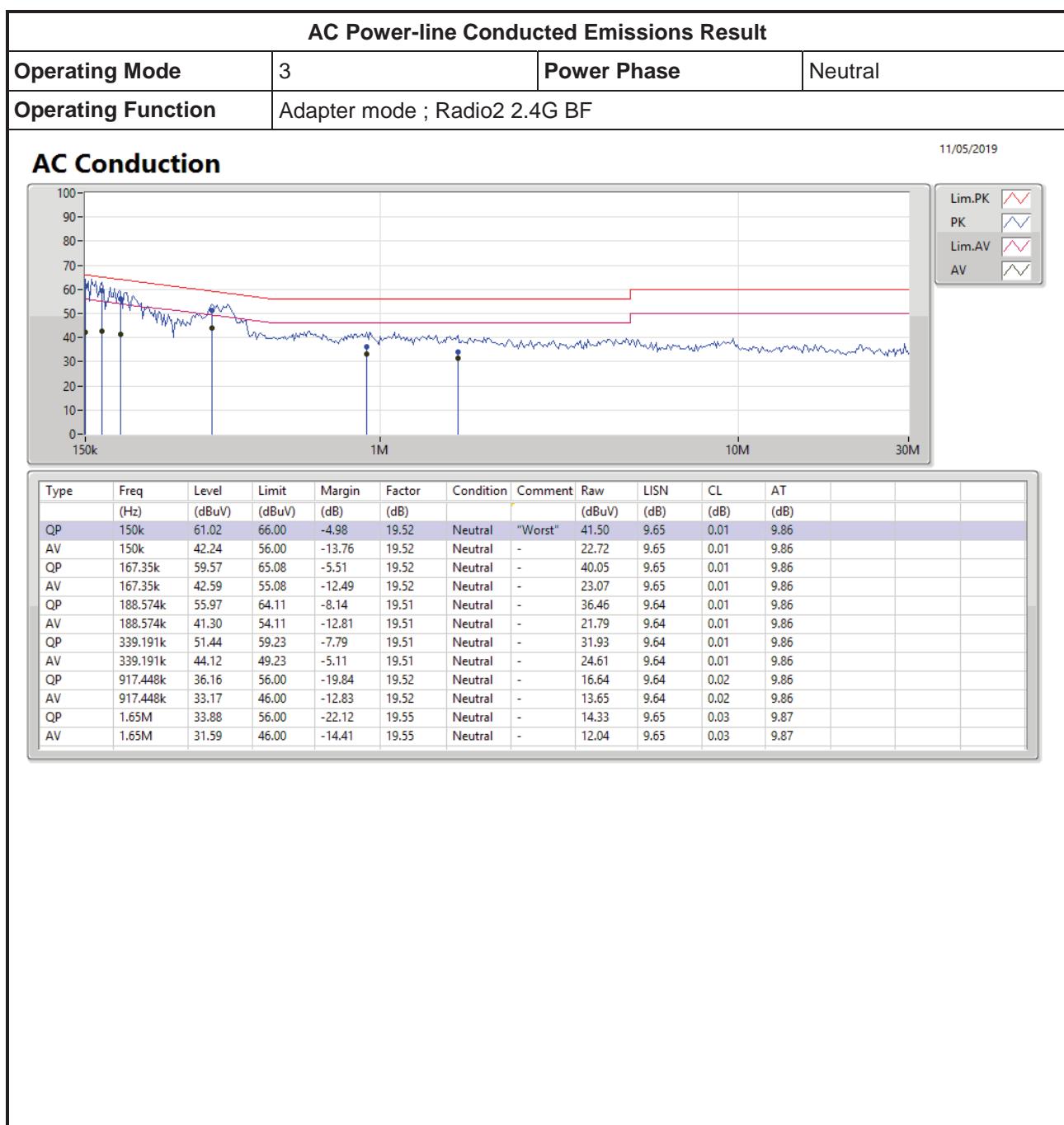
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	10Hz~40GHz	18/Jul/2018	17/Jul/2019
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
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

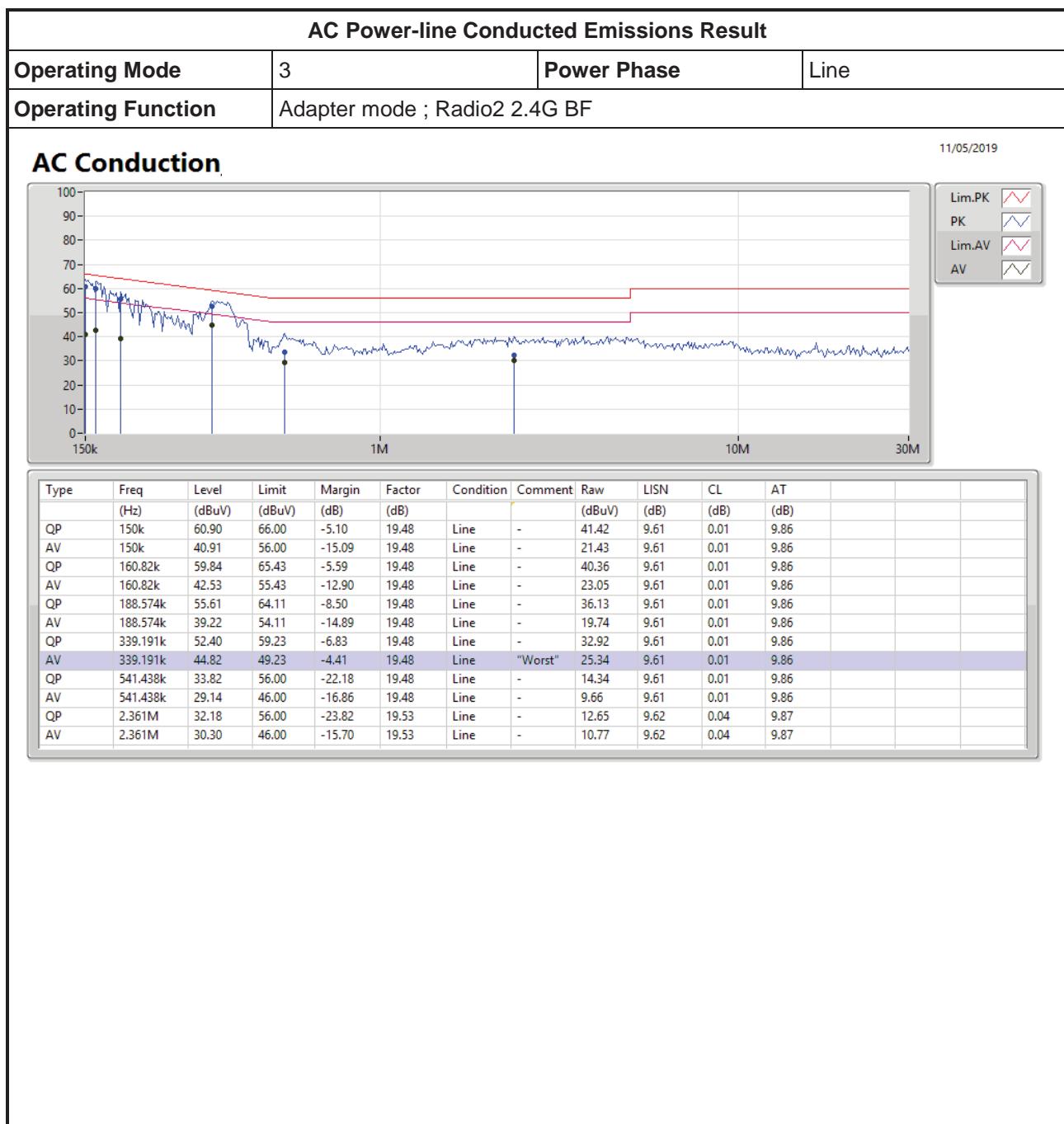


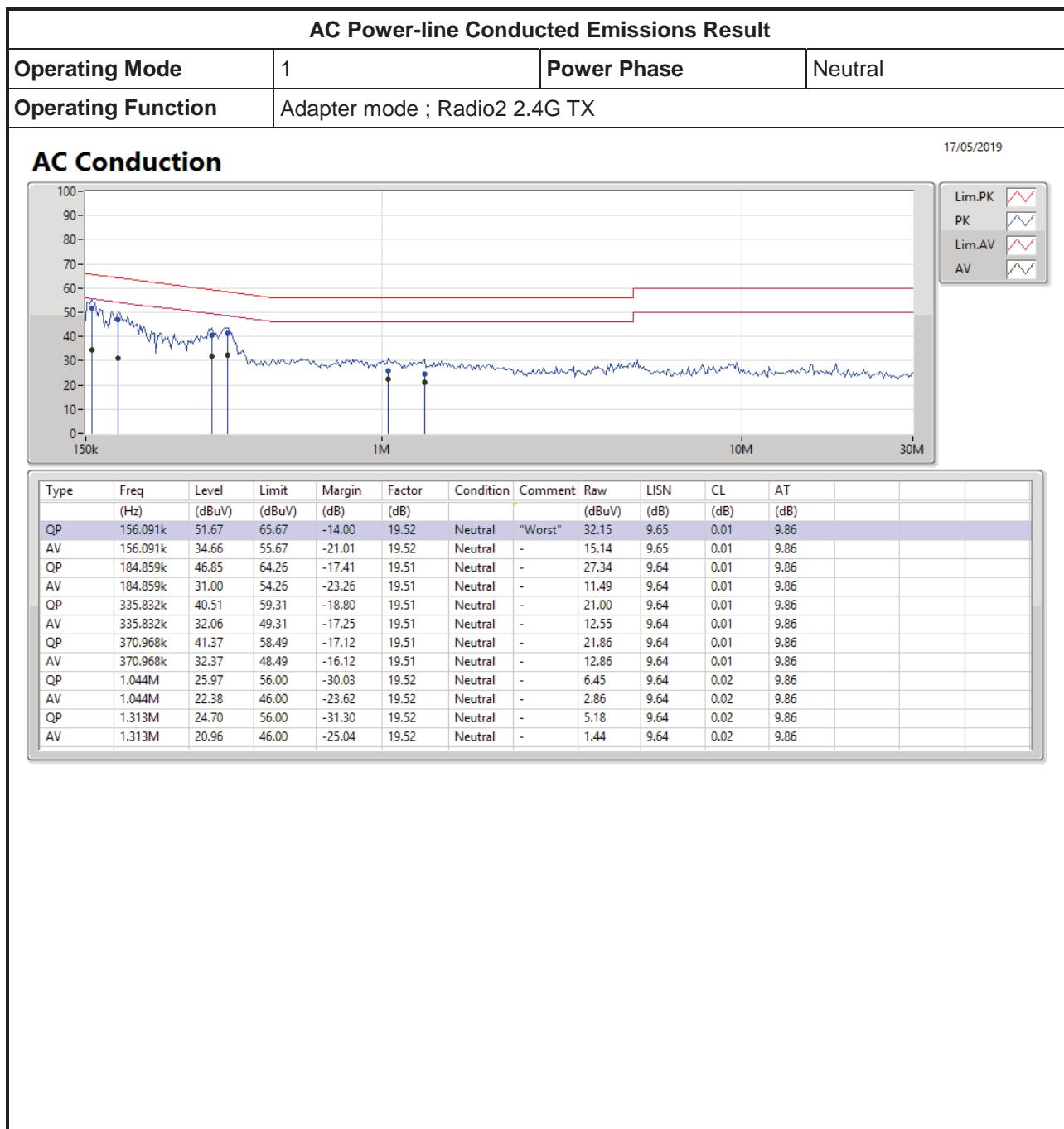


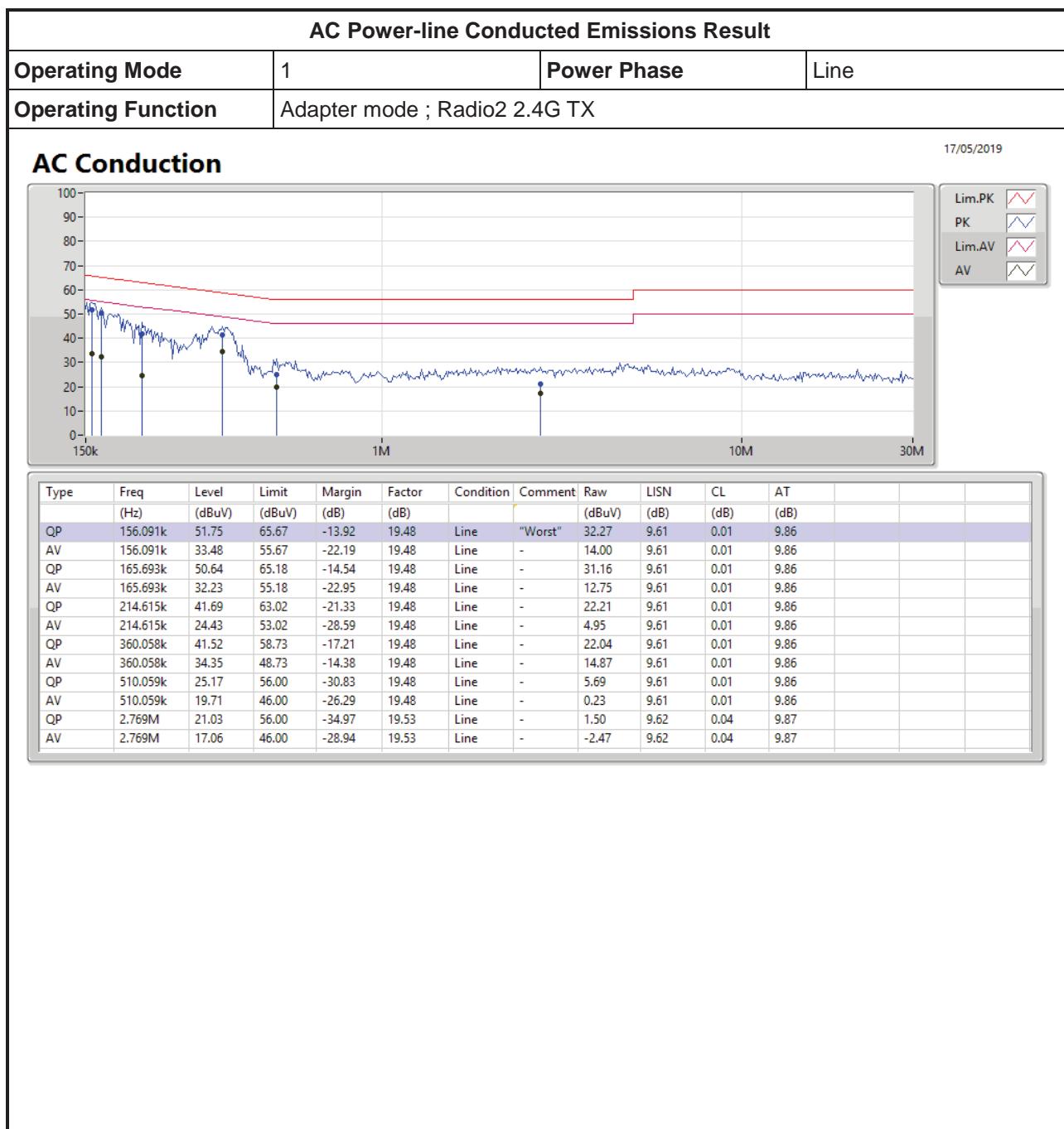


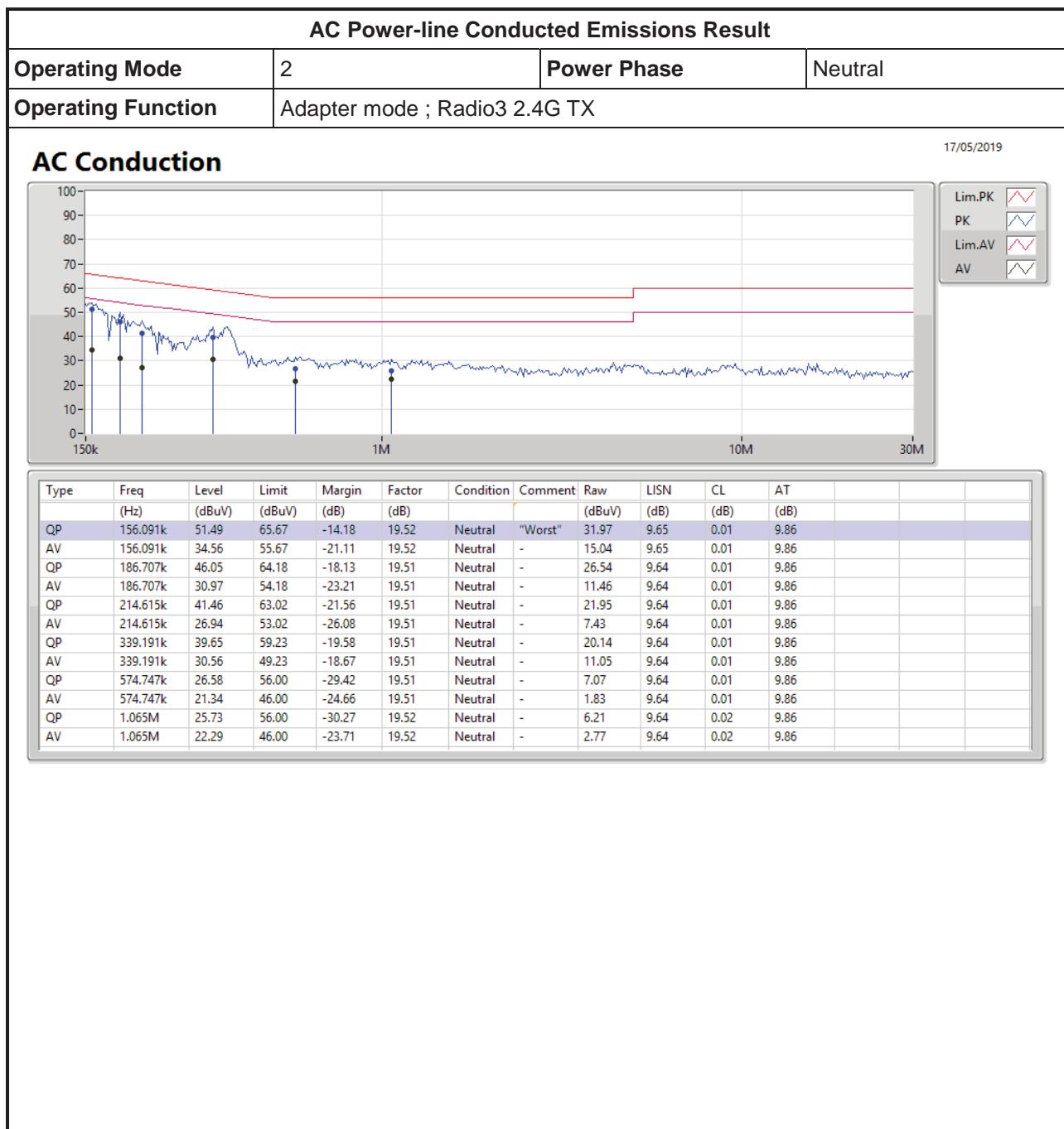


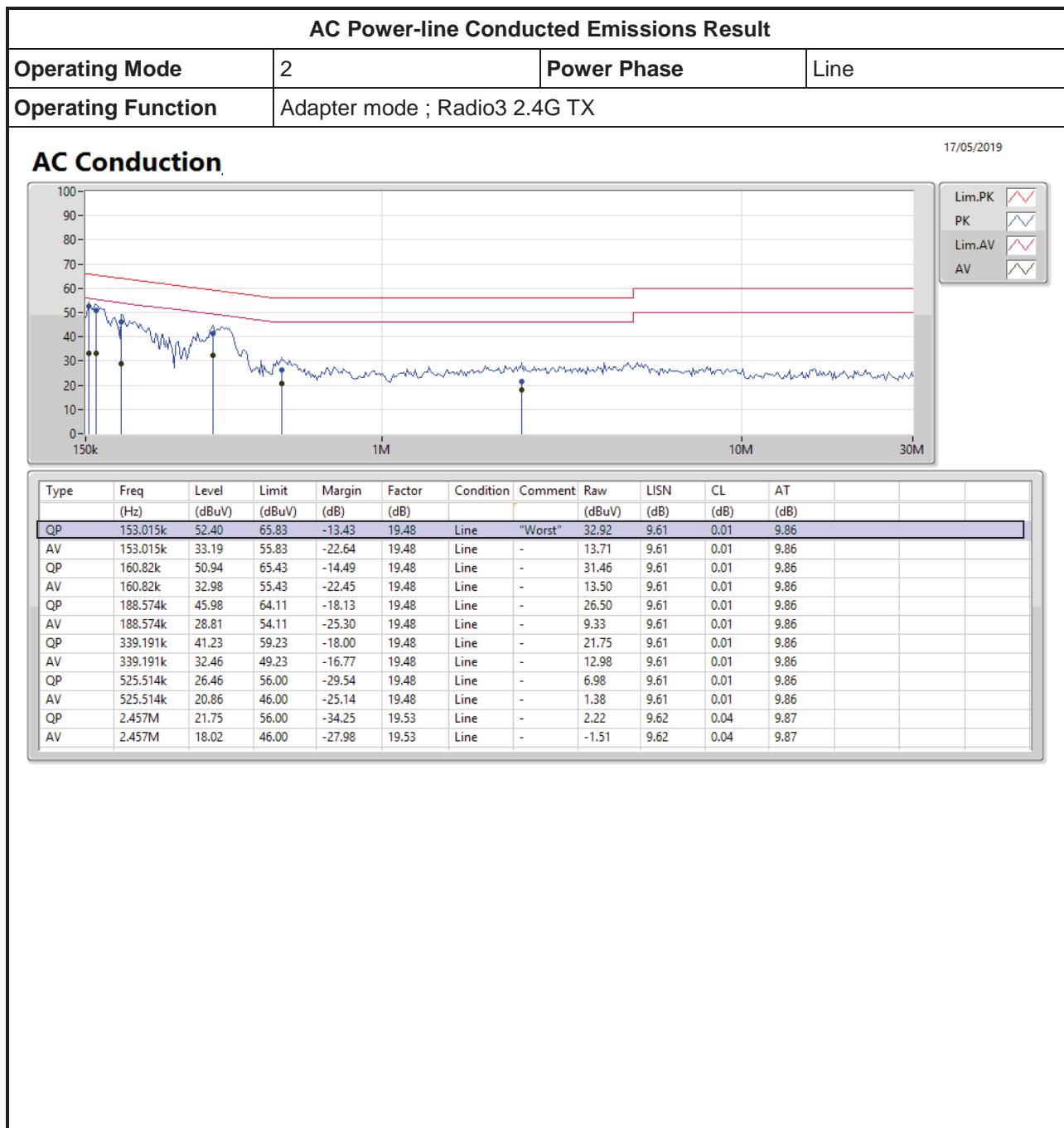


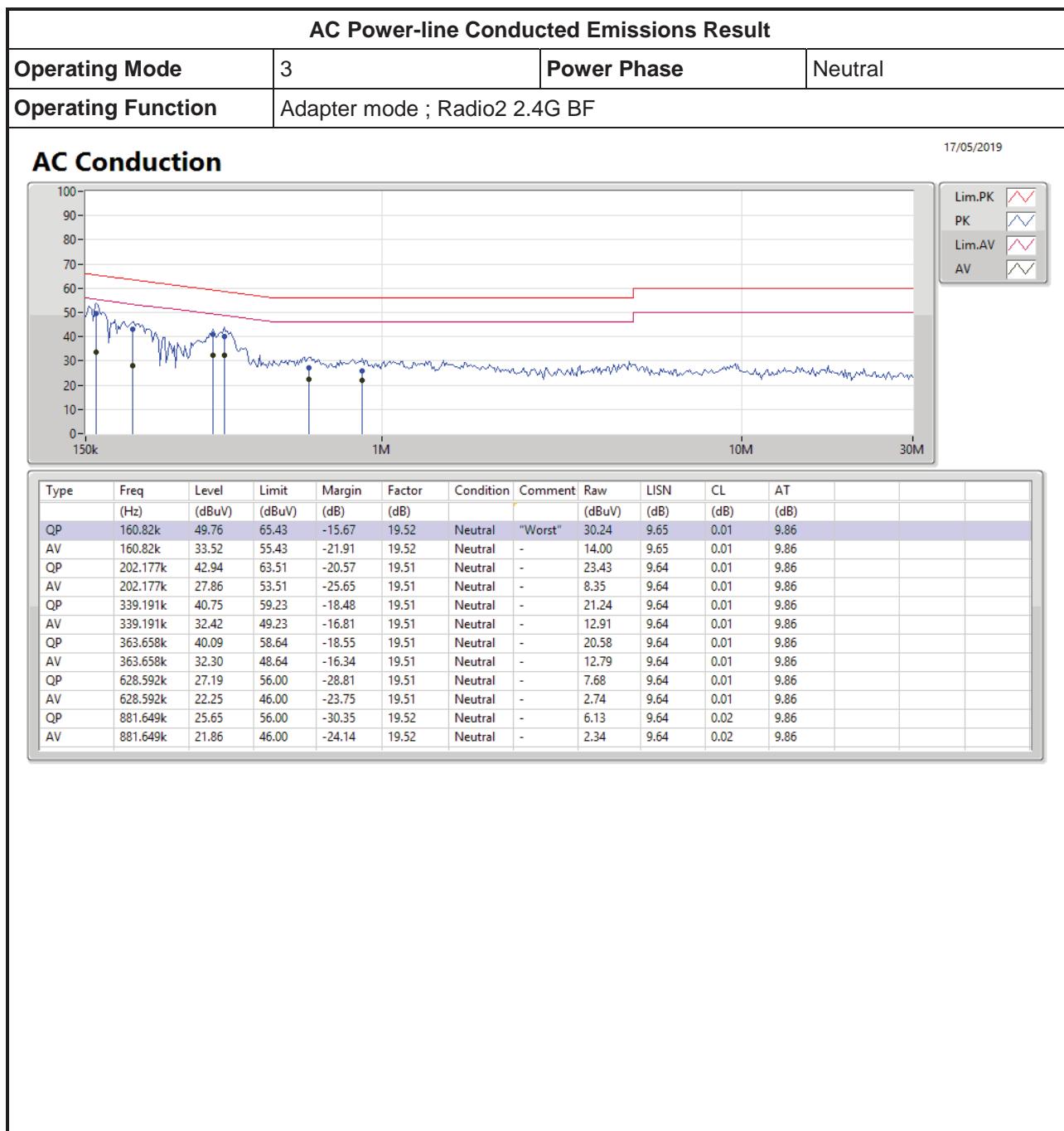


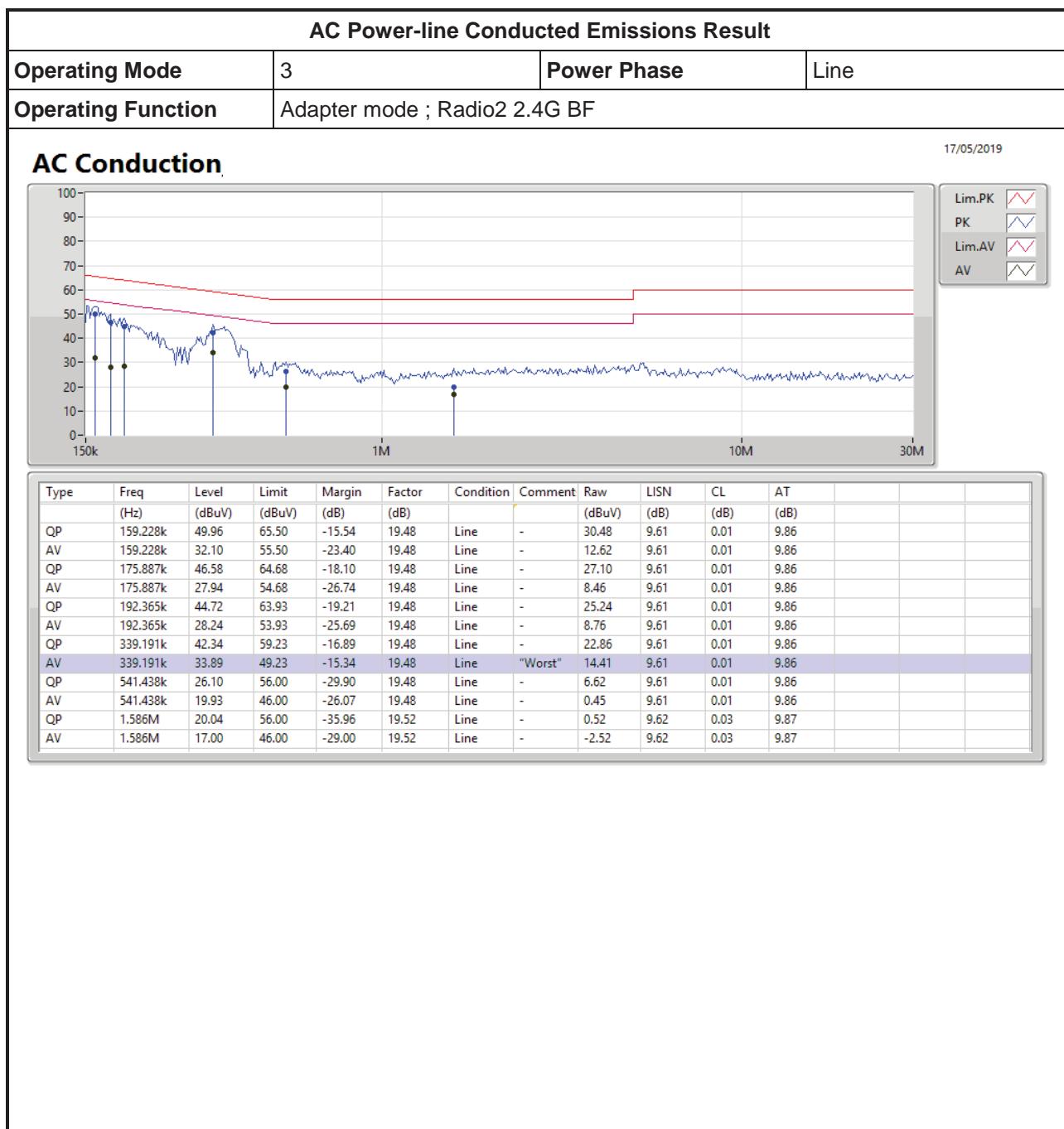












**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	9.025M	14.768M	14M8G1D	7.025M	10.62M
802.11g_Nss1,(6Mbps)_4TX	16.35M	17.616M	17M6D1D	16.3M	16.517M
VHT20_Nss1,(MCS0)_4TX	17.6M	17.841M	17M8D1D	16.95M	17.716M
VHT40_Nss1,(MCS0)_4TX	36.35M	36.332M	36M3D1D	35.65M	36.082M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.975M	19.065M	19M1D1D	18.725M	18.941M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.55M	37.681M	37M7D1D	36.05M	37.331M

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

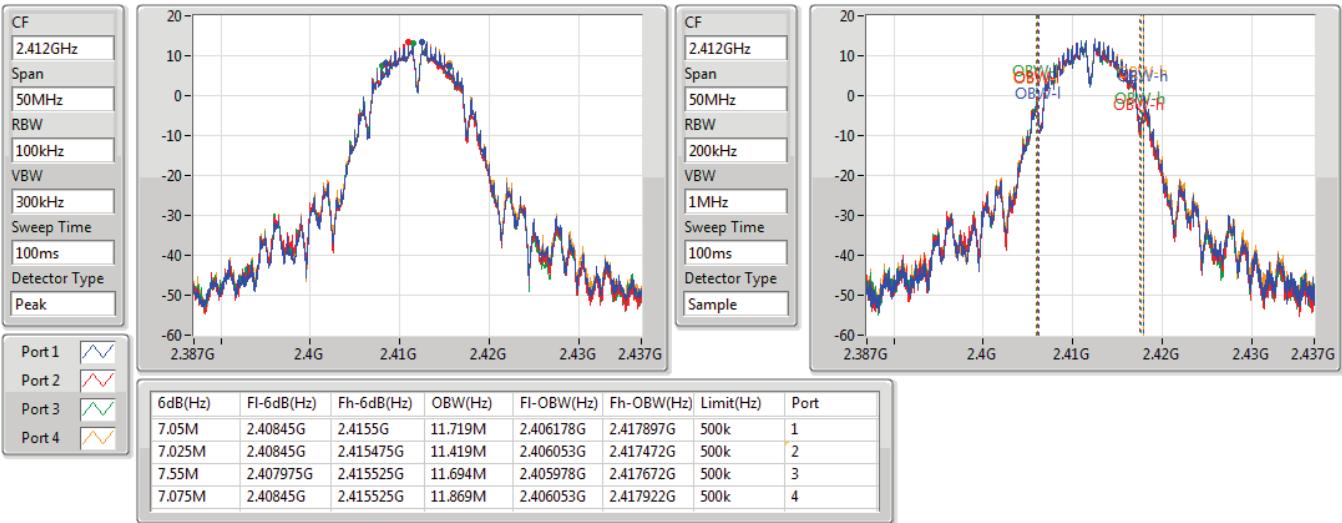
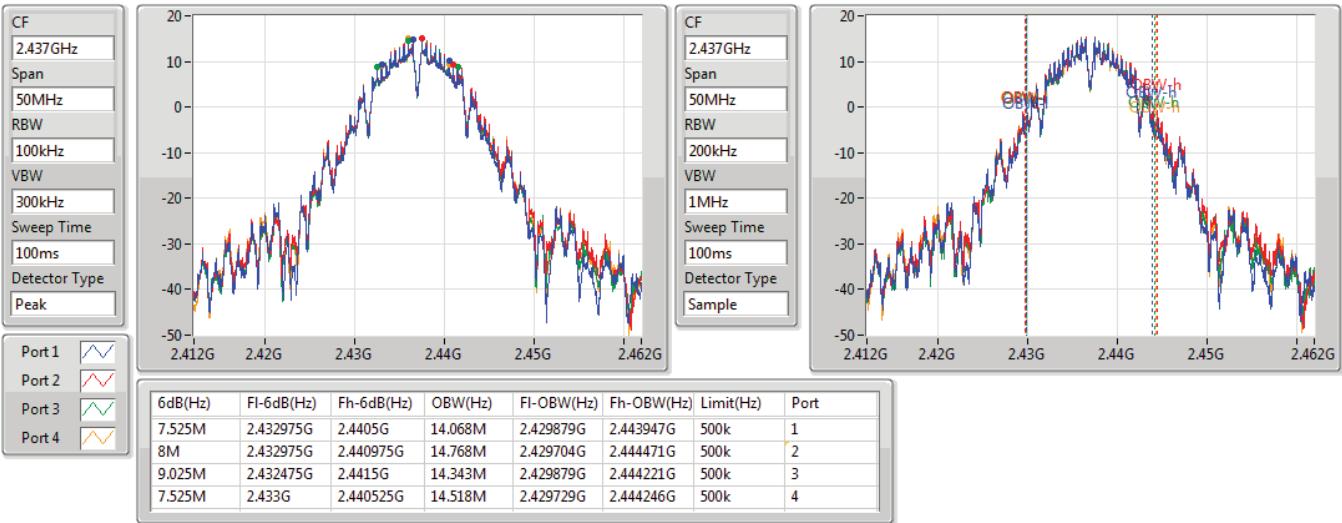
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;



Result

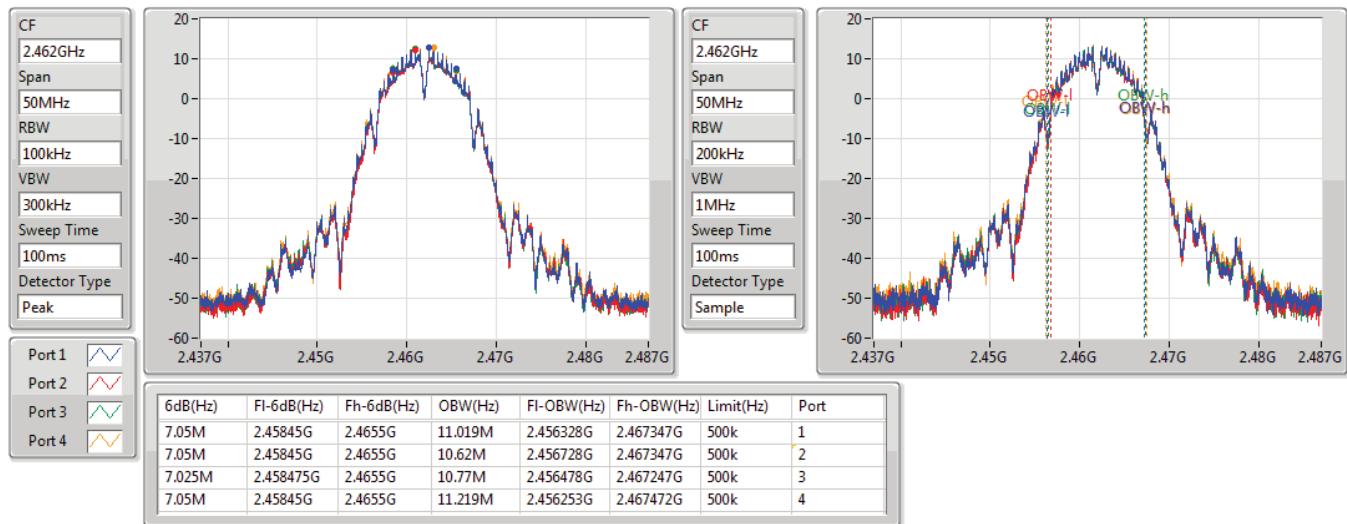
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.05M	11.719M	7.025M	11.419M	7.55M	11.694M	7.075M	11.869M
2437MHz	Pass	500k	7.525M	14.068M	8M	14.768M	9.025M	14.343M	7.525M	14.518M
2462MHz	Pass	500k	7.05M	11.019M	7.05M	10.62M	7.025M	10.77M	7.05M	11.219M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.617M	16.325M	16.592M	16.35M	16.592M	16.35M	16.592M
2437MHz	Pass	500k	16.3M	17.191M	16.325M	17.291M	16.325M	17.441M	16.325M	17.616M
2462MHz	Pass	500k	16.35M	16.617M	16.325M	16.542M	16.325M	16.517M	16.35M	16.542M
VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.791M	17.575M	17.741M	17.525M	17.741M	17.6M	17.791M
2437MHz	Pass	500k	17.55M	17.816M	17.575M	17.841M	16.95M	17.816M	17.575M	17.791M
2462MHz	Pass	500k	17.575M	17.841M	17.575M	17.741M	17.55M	17.716M	17.575M	17.791M
VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.05M	36.232M	35.7M	36.332M	36.35M	36.332M	36.3M	36.232M
2437MHz	Pass	500k	35.75M	36.132M	36.3M	36.282M	36.35M	36.332M	35.75M	36.232M
2452MHz	Pass	500k	36.1M	36.282M	35.75M	36.082M	35.65M	36.182M	36.3M	36.282M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.875M	18.991M	18.875M	18.966M	18.875M	18.966M	18.925M	18.966M
2437MHz	Pass	500k	18.825M	19.015M	18.925M	19.04M	18.725M	19.065M	18.925M	19.015M
2462MHz	Pass	500k	18.975M	19.015M	18.875M	18.966M	18.875M	18.941M	18.95M	18.966M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.25M	37.431M	37.15M	37.631M	37.55M	37.581M	36.65M	37.481M
2437MHz	Pass	500k	37.2M	37.381M	37.05M	37.681M	37.5M	37.681M	36.05M	37.431M
2452MHz	Pass	500k	37.35M	37.581M	36.05M	37.431M	36.35M	37.331M	37.3M	37.531M

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

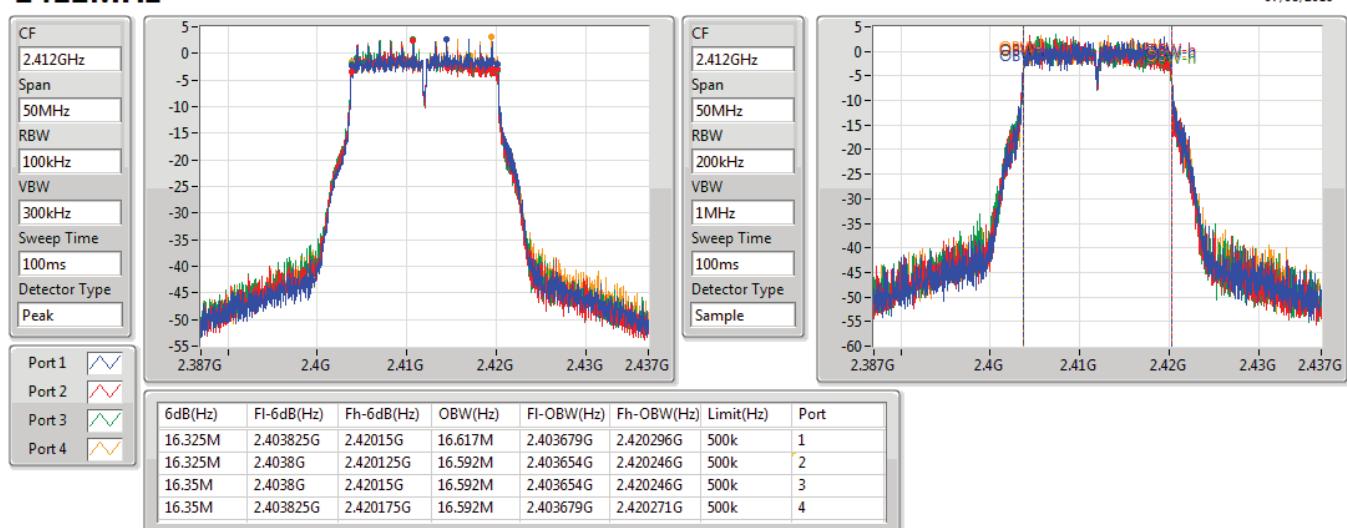
802.11b_Nss1,(1Mbps)_4TX
EBW
2412MHz

802.11b_Nss1,(1Mbps)_4TX
EBW
2437MHz


802.11b_Nss1,(1Mbps)_4TX
EBW
2462MHz

07/05/2019

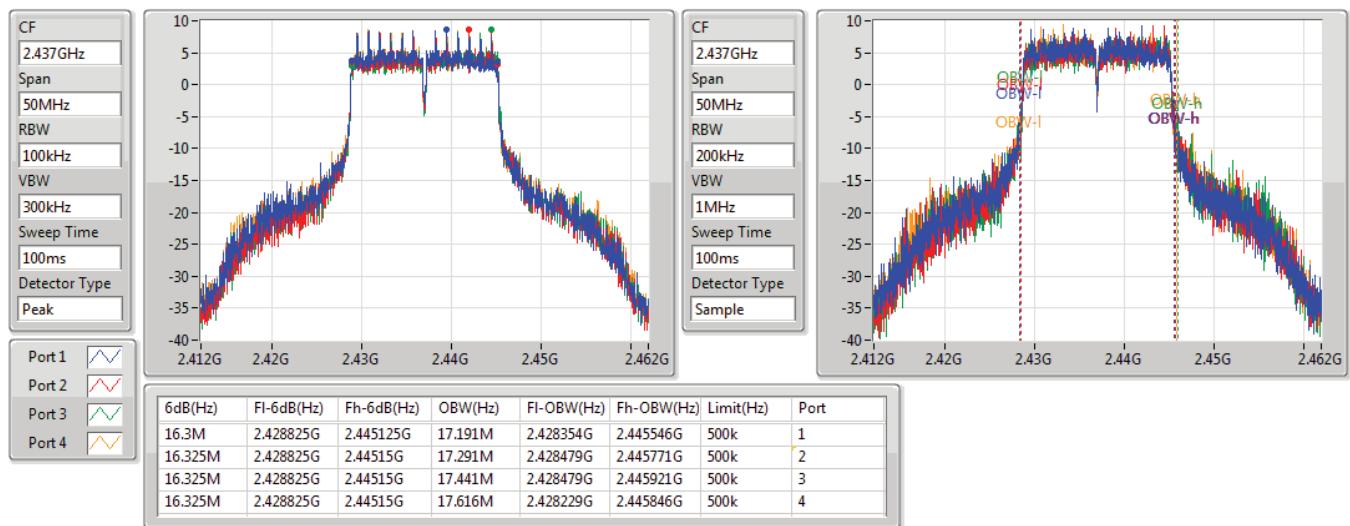

802.11g_Nss1,(6Mbps)_4TX
EBW
2412MHz

07/05/2019

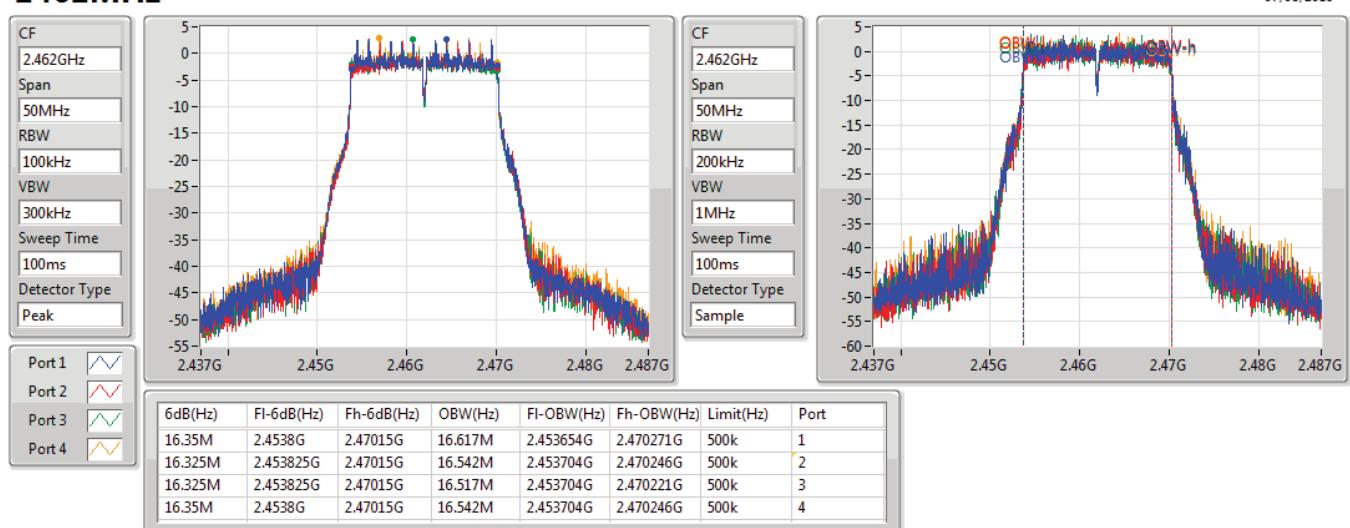


802.11g_Nss1,(6Mbps)_4TX
EBW
2437MHz

07/05/2019

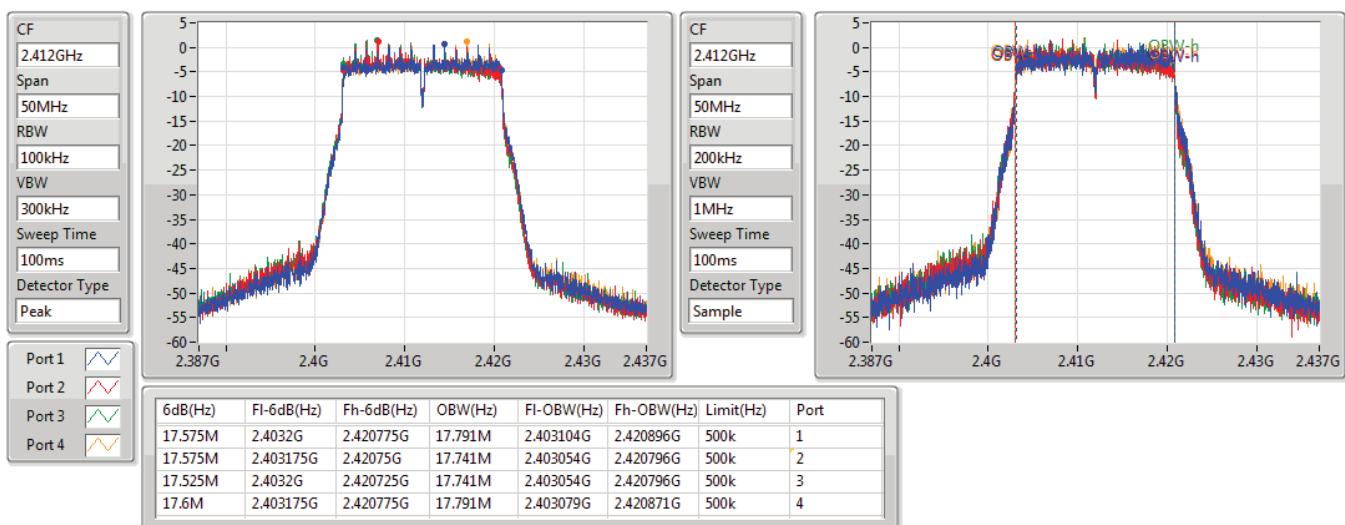

802.11g_Nss1,(6Mbps)_4TX
EBW
2462MHz

07/05/2019

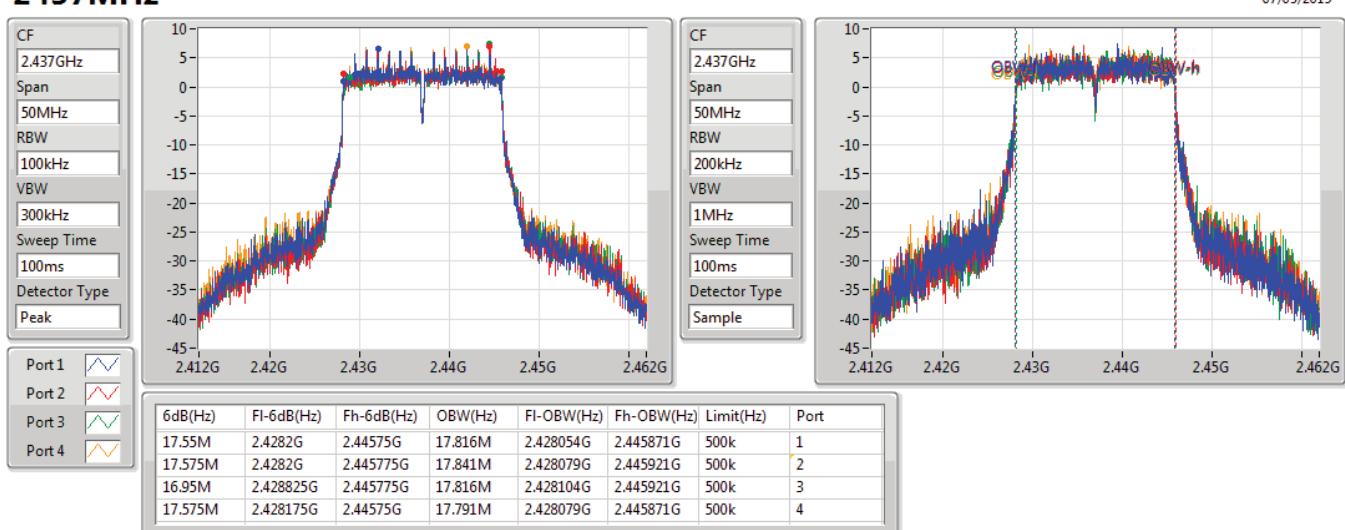


VHT20_Nss1,(MCS0)_4TX
2412MHz
EBW

07/05/2019

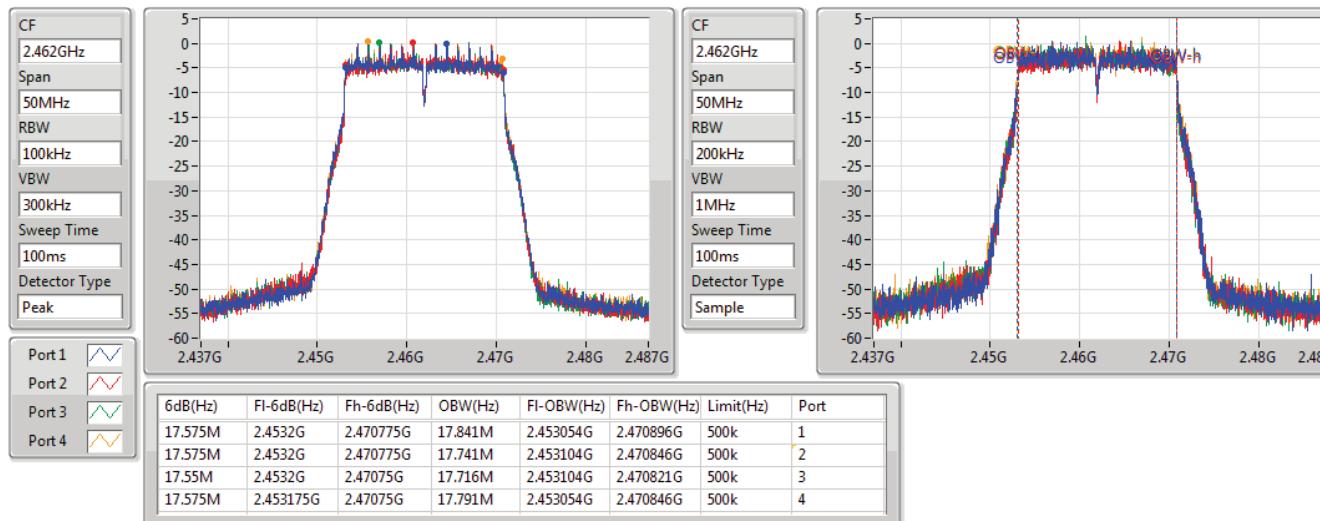

VHT20_Nss1,(MCS0)_4TX
2437MHz
EBW

07/05/2019

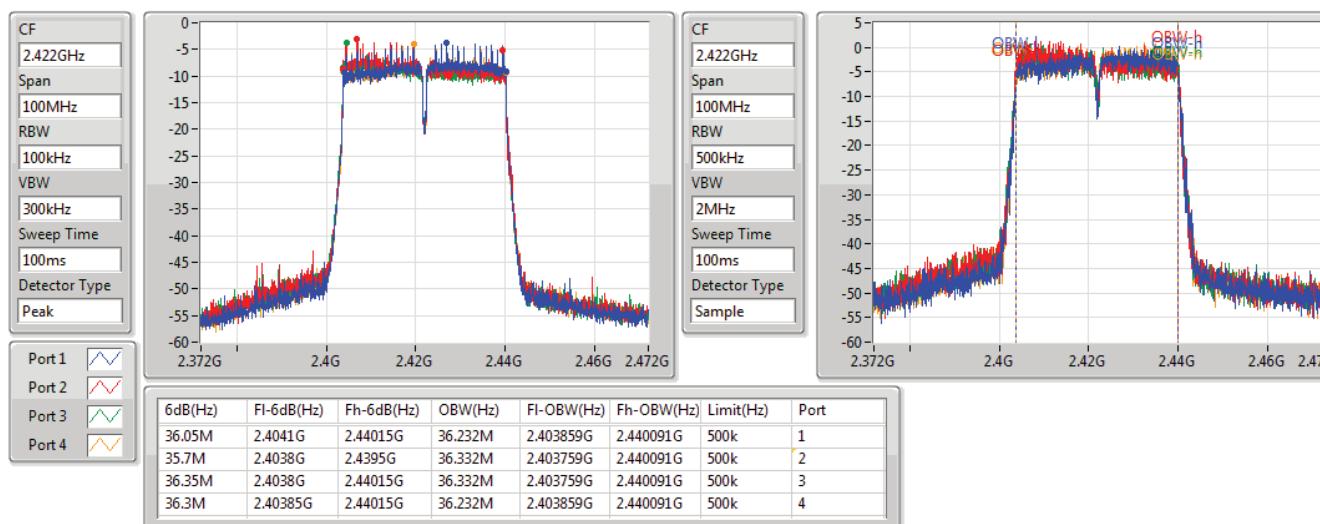


VHT20_Nss1,(MCS0)_4TX
EBW
2462MHz

07/05/2019

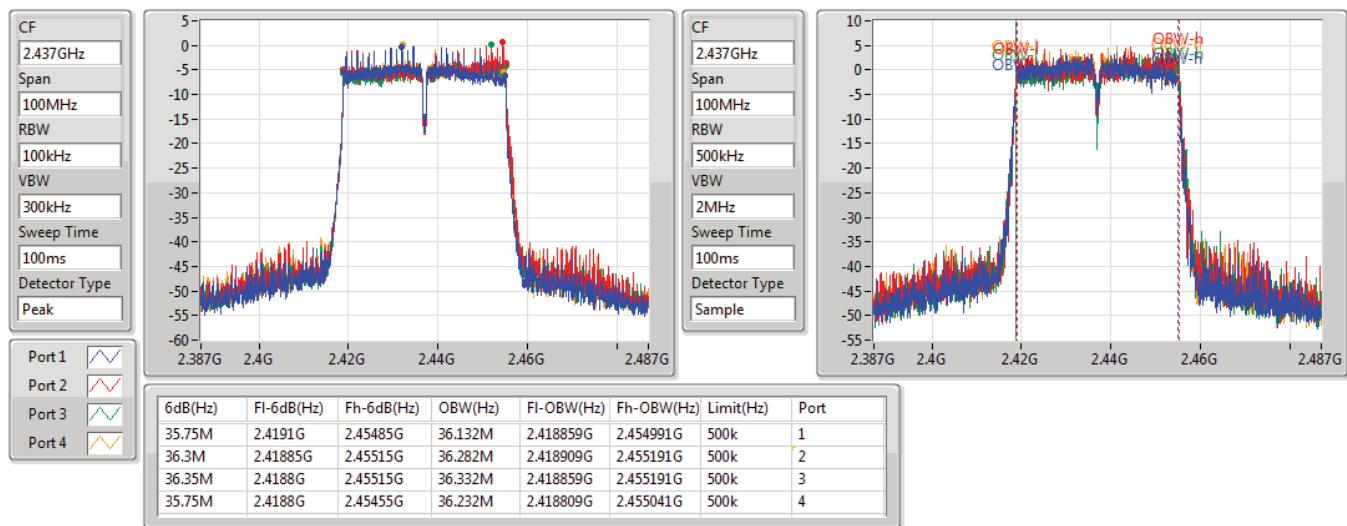

VHT40_Nss1,(MCS0)_4TX
EBW
2422MHz

07/05/2019

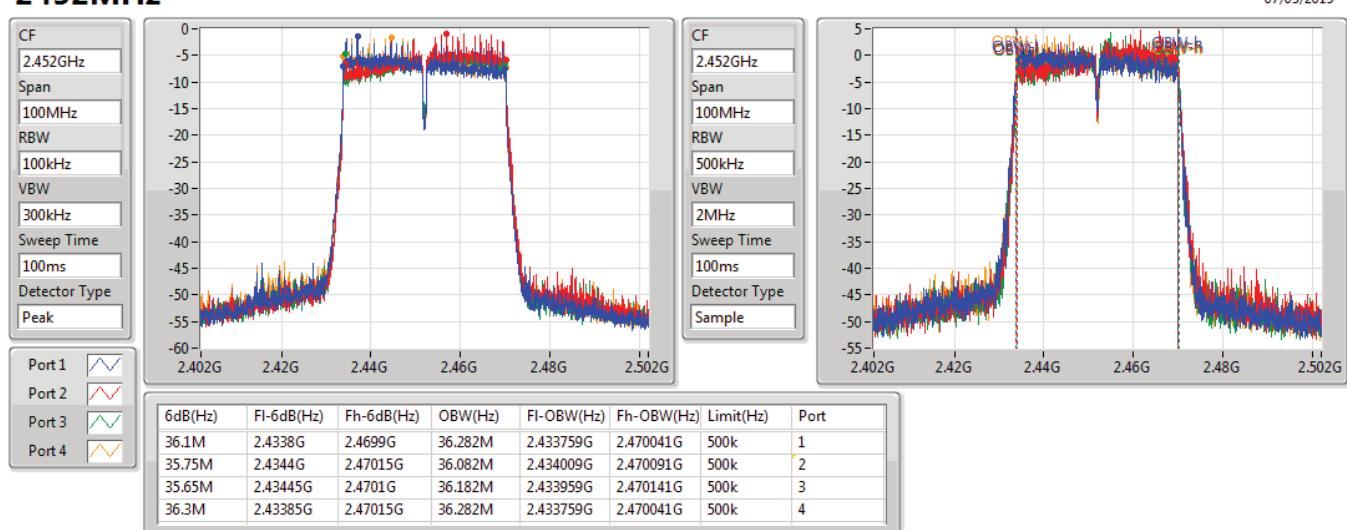


VHT40_Nss1,(MCS0)_4TX
2437MHz
EBW

07/05/2019

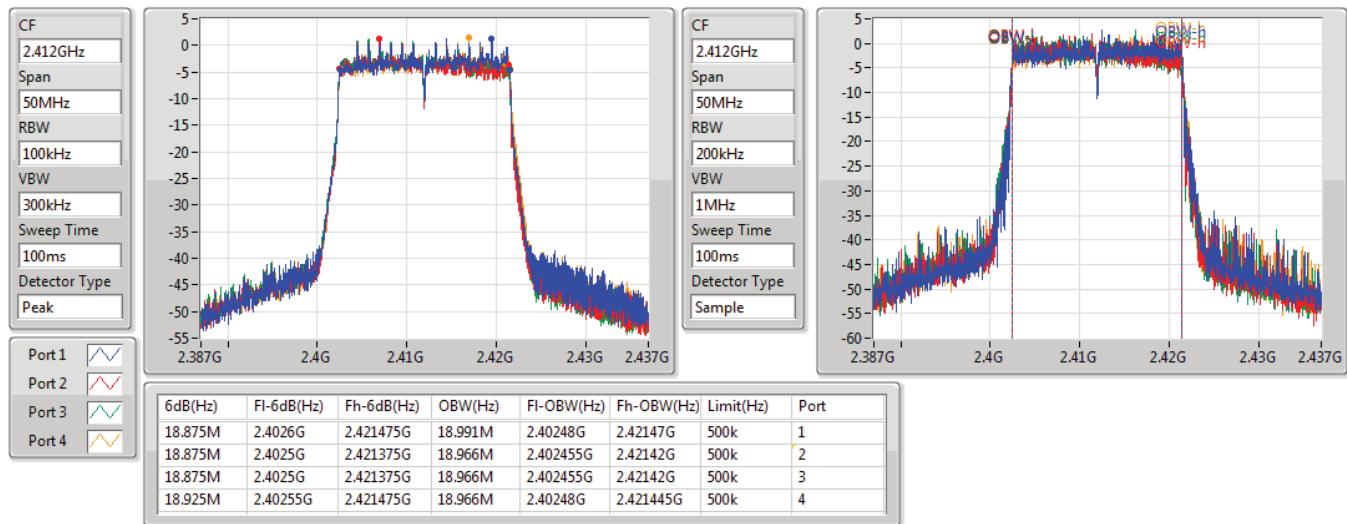

VHT40_Nss1,(MCS0)_4TX
2452MHz
EBW

07/05/2019

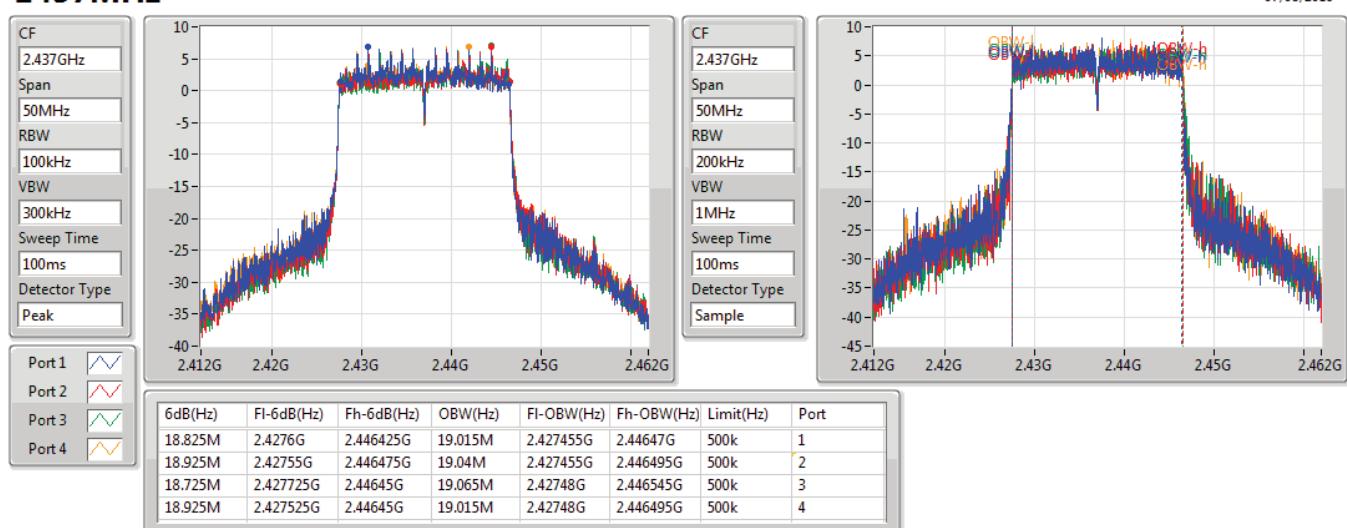


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
2412MHz

07/05/2019

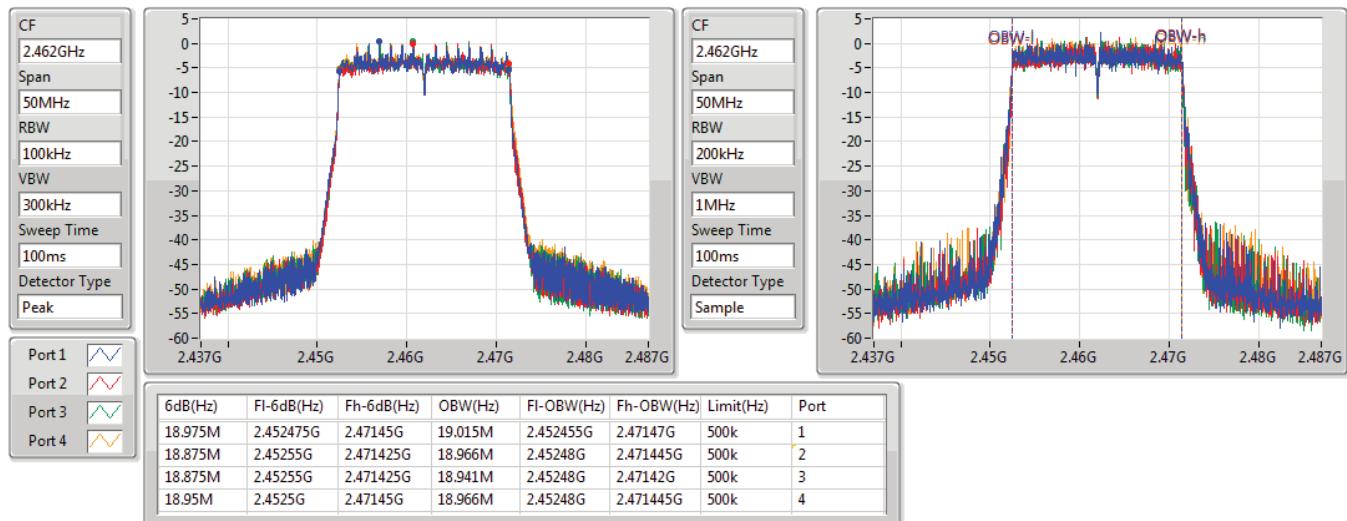

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
2437MHz

07/05/2019

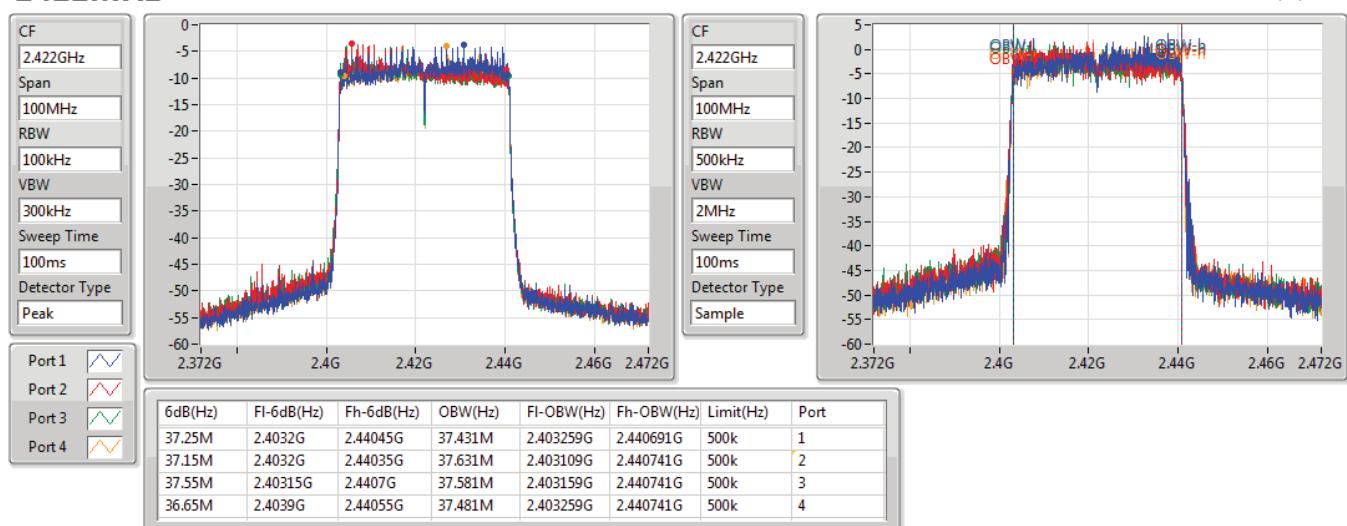


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
2462MHz

07/05/2019

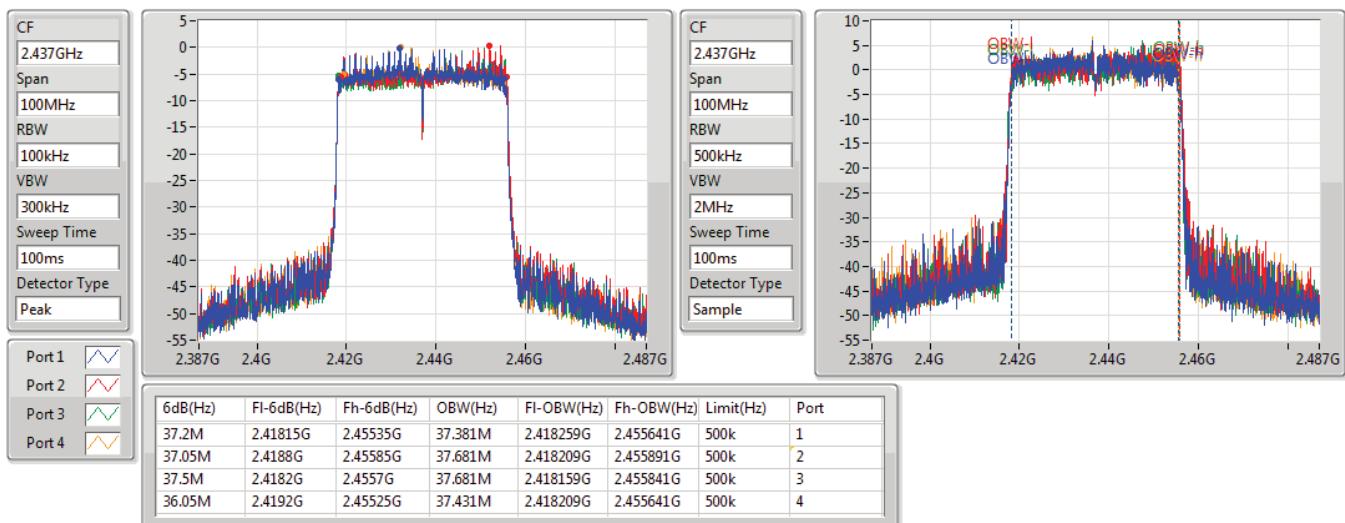

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
2422MHz

07/05/2019

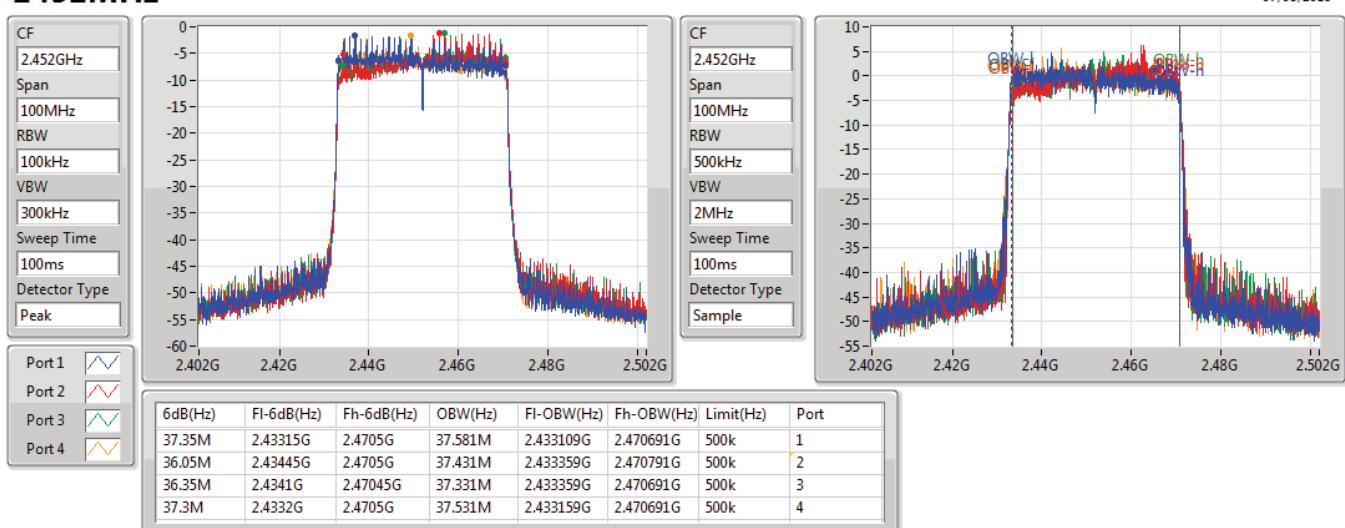


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
2437MHz

07/05/2019


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
2452MHz

07/05/2019



**Summary**

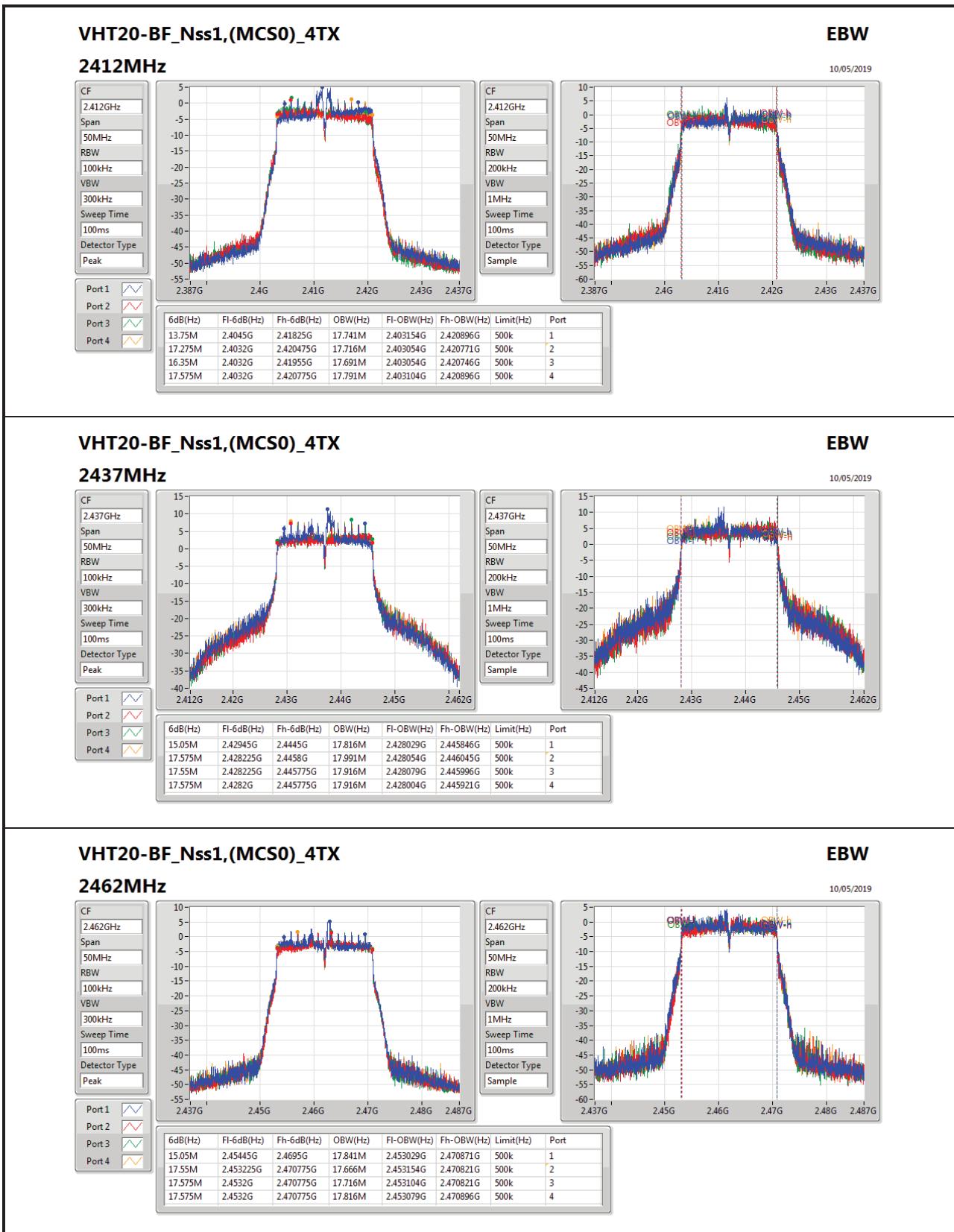
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
VHT20-BF_Nss1,(MCS0)_4TX	17.575M	17.991M	18M0D1D	13.75M	17.666M
VHT40-BF_Nss1,(MCS0)_4TX	36.4M	36.382M	36M4D1D	3.7M	35.832M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.025M	19.09M	19M1D1D	16.175M	18.841M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.8M	37.781M	37M8D1D	18.65M	37.181M

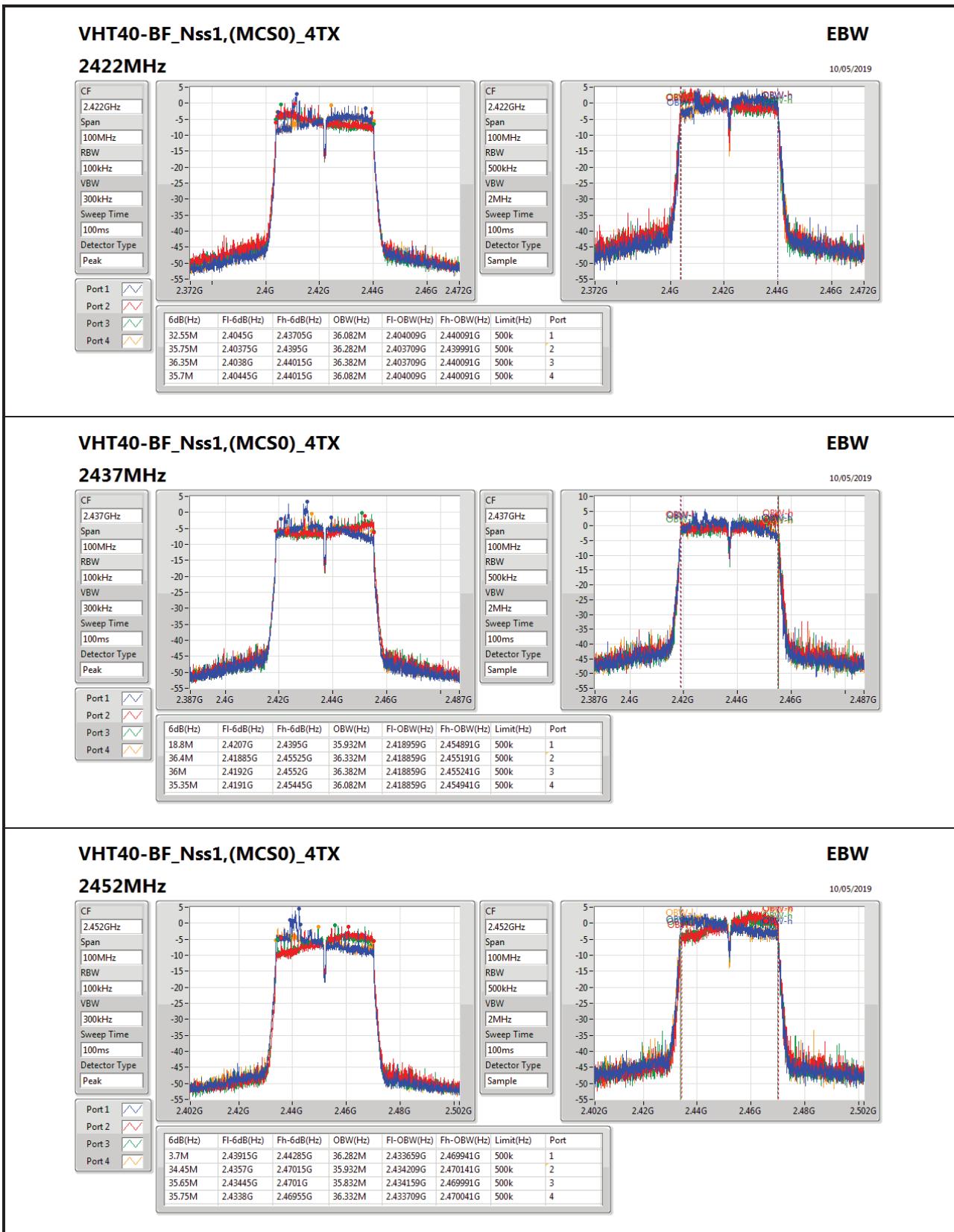
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

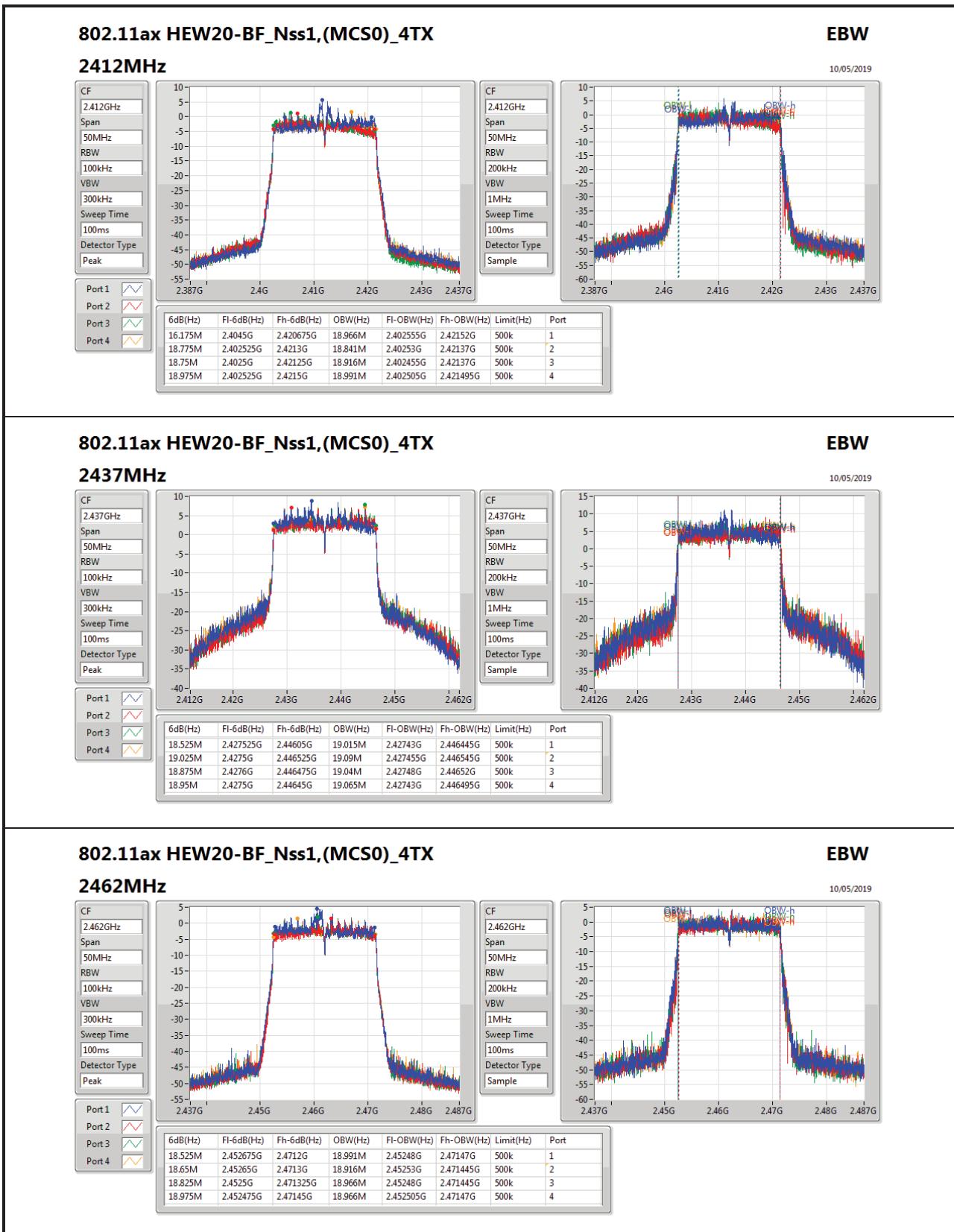
Result

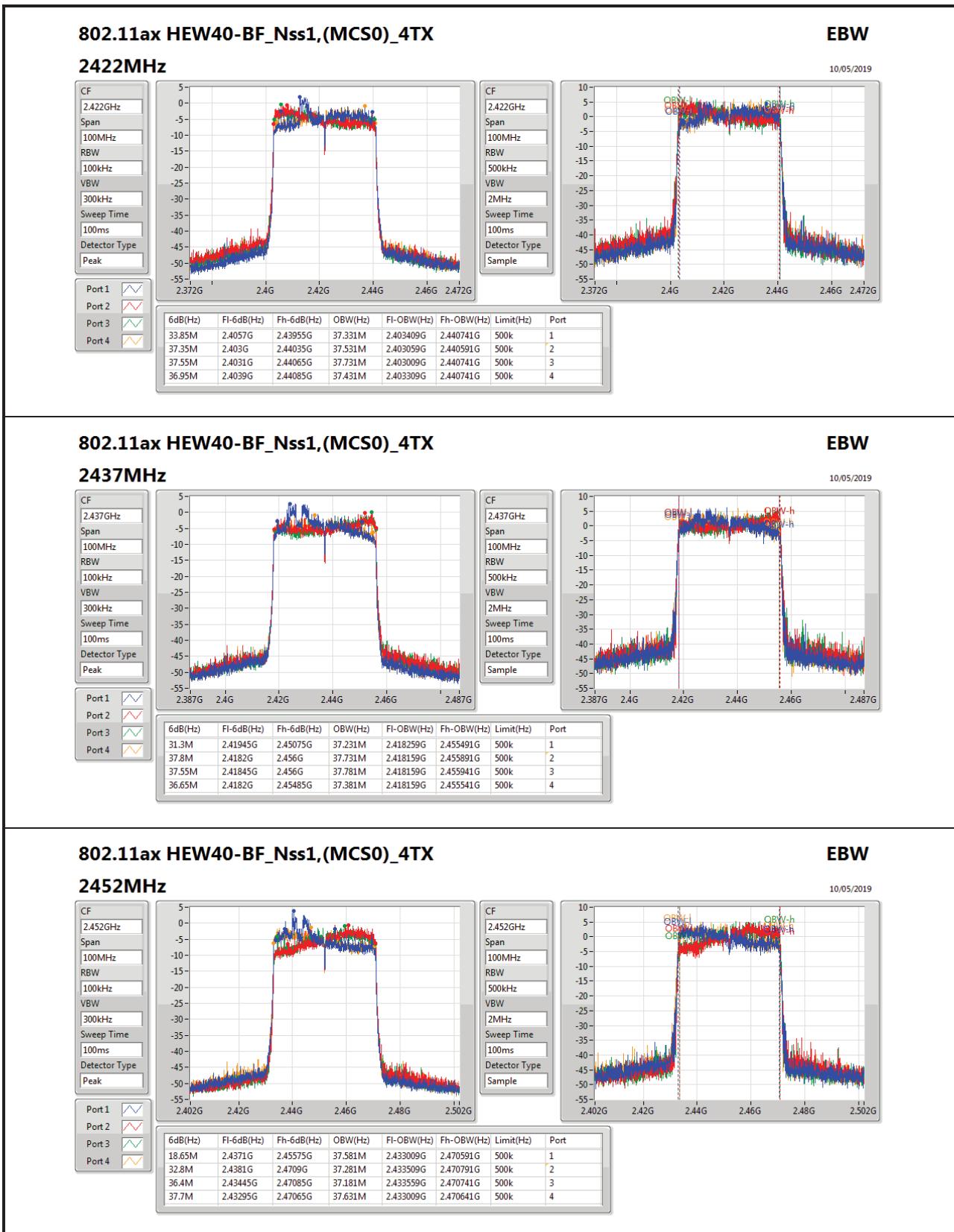
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	13.75M	17.741M	17.275M	17.716M	16.35M	17.691M	17.575M	17.791M
2437MHz_TnomVnom	Pass	500k	15.05M	17.816M	17.575M	17.991M	17.55M	17.916M	17.575M	17.916M
2462MHz_TnomVnom	Pass	500k	15.05M	17.841M	17.55M	17.666M	17.575M	17.716M	17.575M	17.816M
VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	32.55M	36.082M	35.75M	36.282M	36.35M	36.382M	35.7M	36.082M
2437MHz_TnomVnom	Pass	500k	18.8M	35.932M	36.4M	36.332M	36M	36.382M	35.35M	36.082M
2452MHz_TnomVnom	Pass	500k	3.7M	36.282M	34.45M	35.932M	35.65M	35.832M	35.75M	36.332M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	16.175M	18.966M	18.775M	18.841M	18.75M	18.916M	18.975M	18.991M
2437MHz_TnomVnom	Pass	500k	18.525M	19.015M	19.025M	19.09M	18.875M	19.04M	18.95M	19.065M
2462MHz_TnomVnom	Pass	500k	18.525M	18.991M	18.65M	18.916M	18.825M	18.966M	18.975M	18.966M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	33.85M	37.331M	37.35M	37.531M	37.55M	37.731M	36.95M	37.431M
2437MHz_TnomVnom	Pass	500k	31.3M	37.231M	37.8M	37.731M	37.55M	37.781M	36.65M	37.381M
2452MHz_TnomVnom	Pass	500k	18.65M	37.581M	32.8M	37.281M	36.4M	37.181M	37.7M	37.631M

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









**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	9.975M	13.943M	13M9G1D	9.05M	12.144M
802.11g_Nss1,(6Mbps)_2TX	16.375M	23.038M	23M0D1D	16.325M	16.617M
VHT20_Nss1,(MCS0)_2TX	17.6M	20.94M	20M9D1D	17.575M	17.791M
VHT40_Nss1,(MCS0)_2TX	36.35M	36.332M	36M3D1D	36.3M	36.232M

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

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



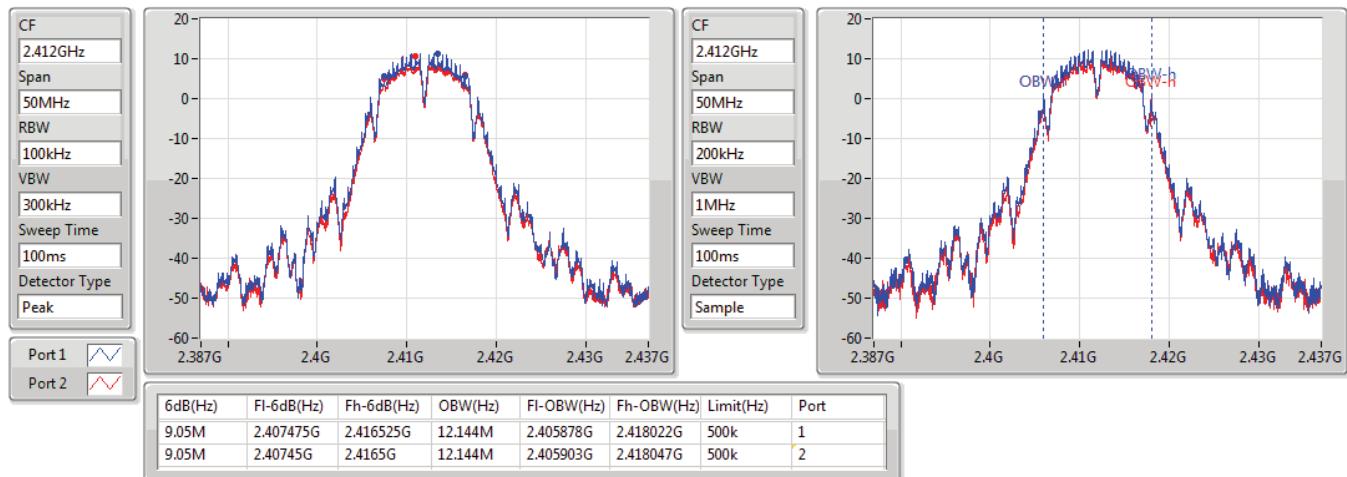
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	9.05M	12.144M	9.05M	12.144M
2437MHz	Pass	500k	9.975M	13.943M	9.525M	12.744M
2462MHz	Pass	500k	9.05M	12.544M	9.05M	12.169M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.617M	16.35M	16.617M
2437MHz	Pass	500k	16.325M	23.038M	16.375M	18.941M
2462MHz	Pass	500k	16.35M	16.667M	16.35M	16.642M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.841M	17.575M	17.791M
2437MHz	Pass	500k	17.575M	20.94M	17.575M	18.591M
2462MHz	Pass	500k	17.575M	17.816M	17.6M	17.816M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.3M	36.232M	36.35M	36.232M
2437MHz	Pass	500k	36.3M	36.232M	36.35M	36.332M
2452MHz	Pass	500k	36.3M	36.232M	36.35M	36.232M

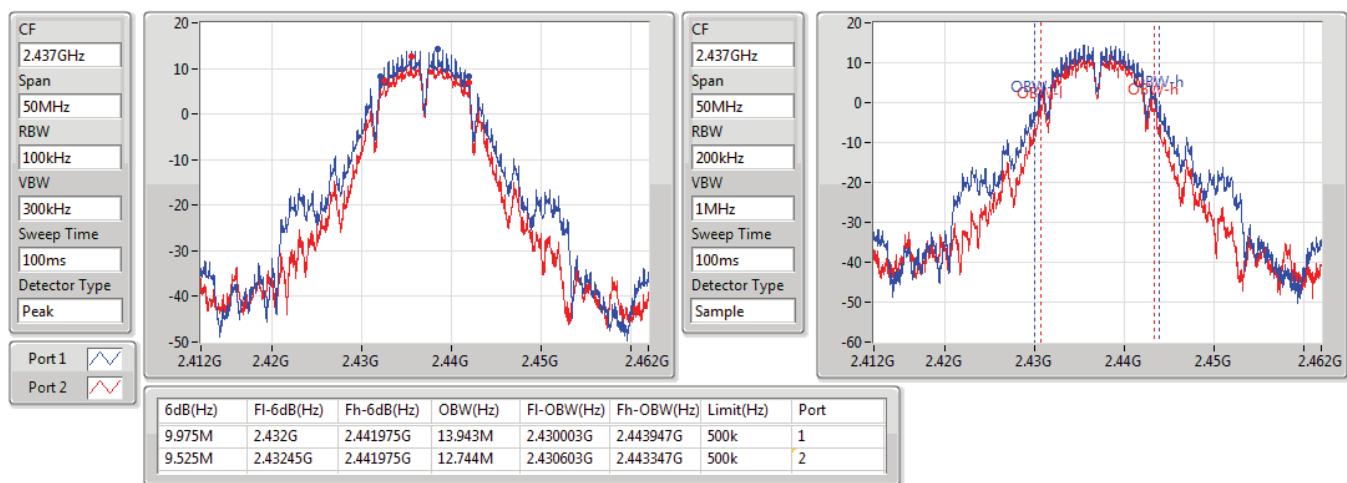
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

07/05/2019

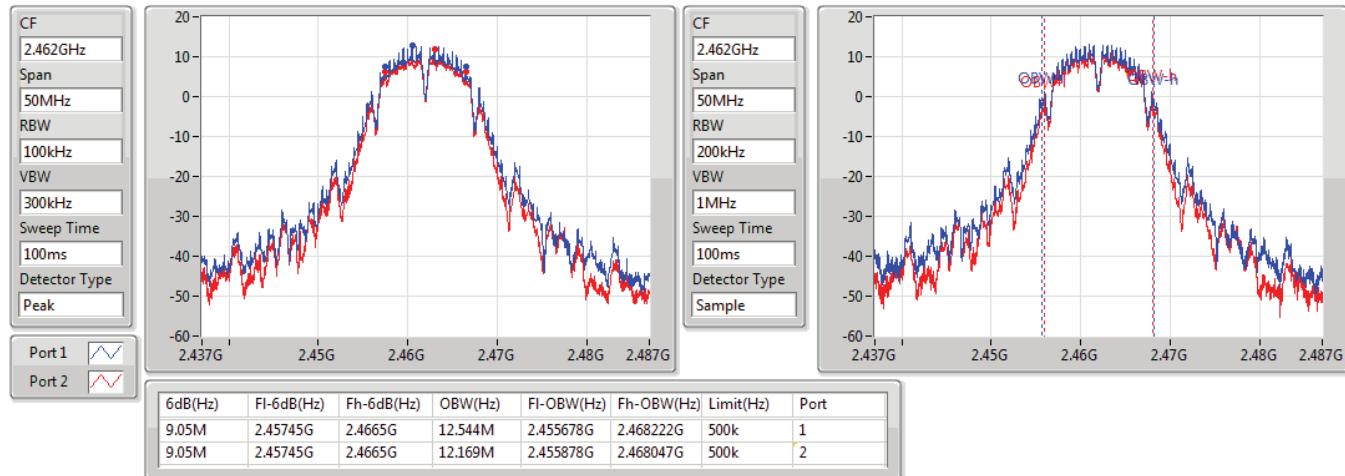

802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

07/05/2019

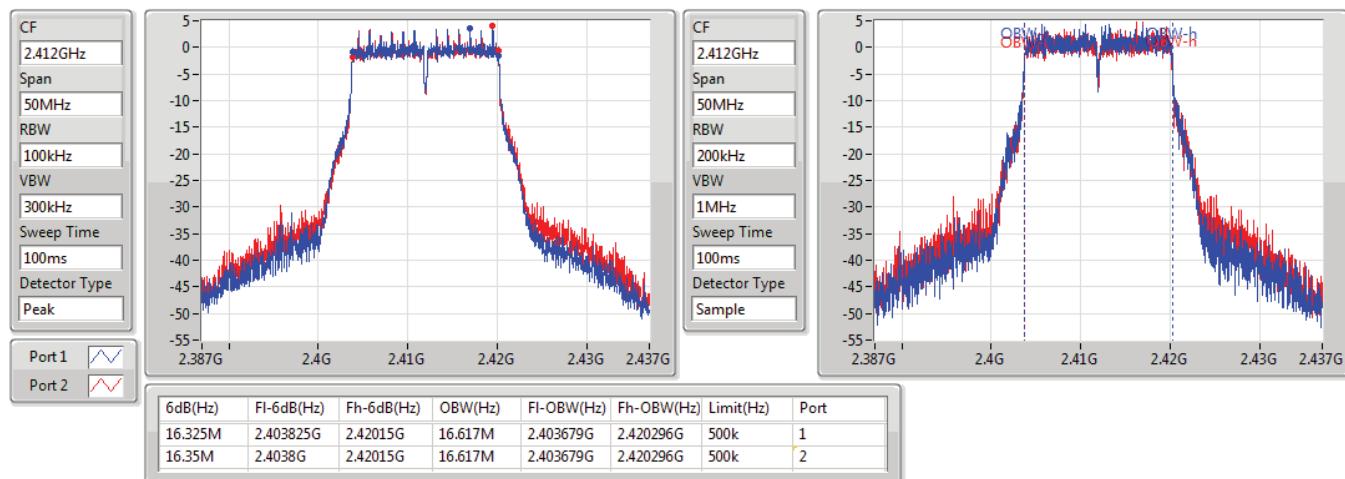


802.11b_Nss1,(1Mbps)_2TX
EBW
2462MHz

07/05/2019

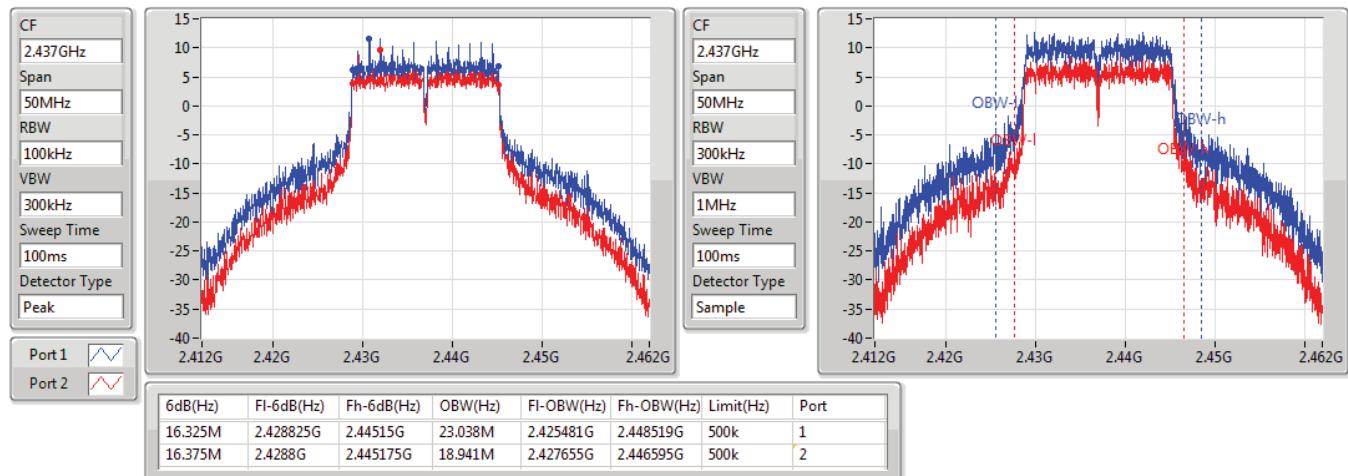

802.11g_Nss1,(6Mbps)_2TX
EBW
2412MHz

07/05/2019

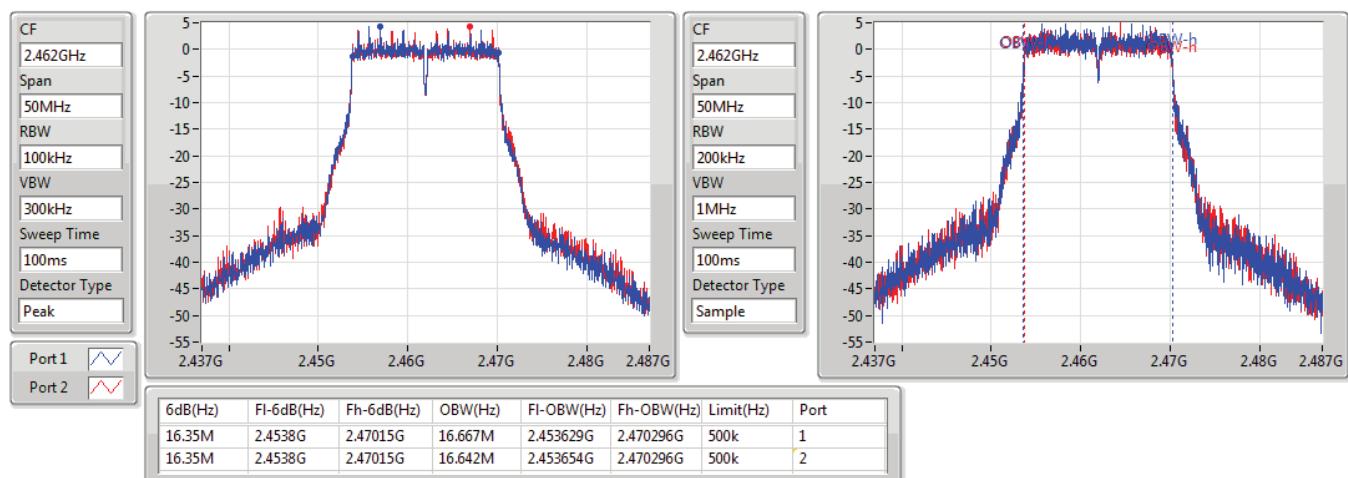


802.11g_Nss1,(6Mbps)_2TX
EBW
2437MHz

07/05/2019

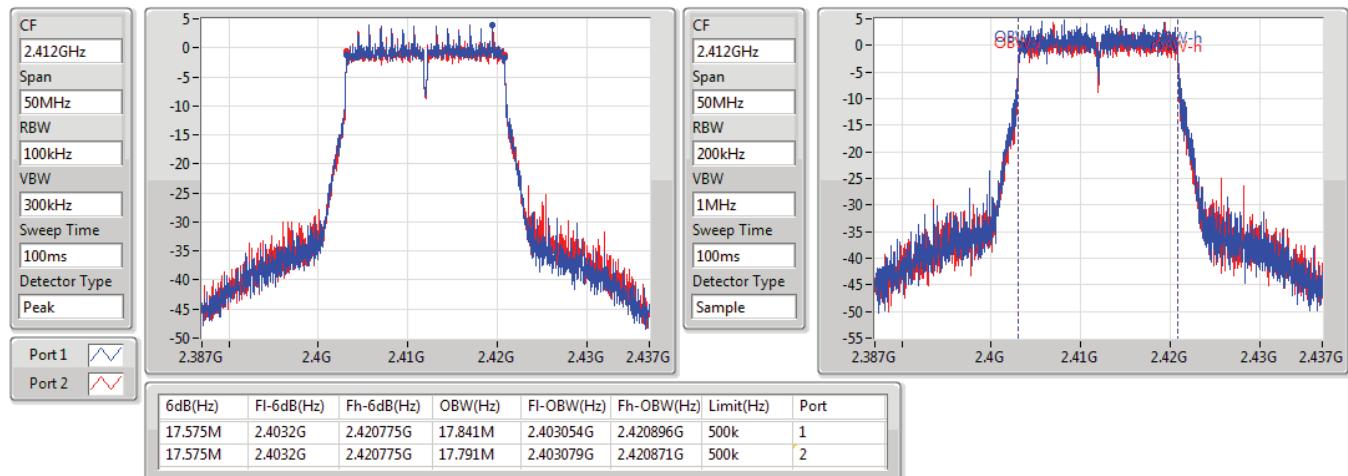

802.11g_Nss1,(6Mbps)_2TX
EBW
2462MHz

07/05/2019

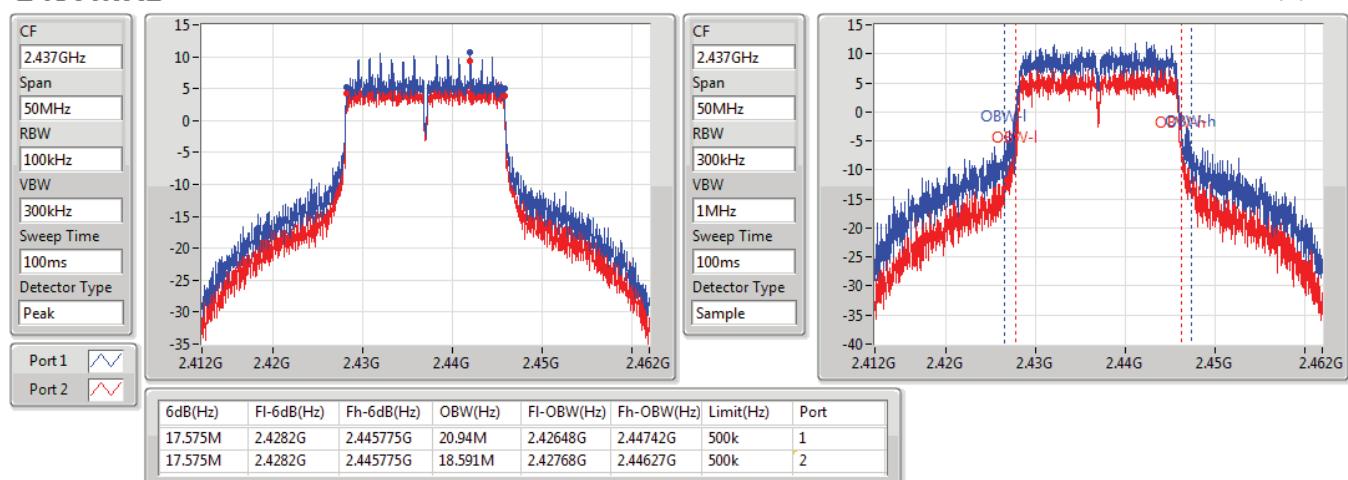


VHT20_Nss1,(MCS0)_2TX
EBW
2412MHz

07/05/2019

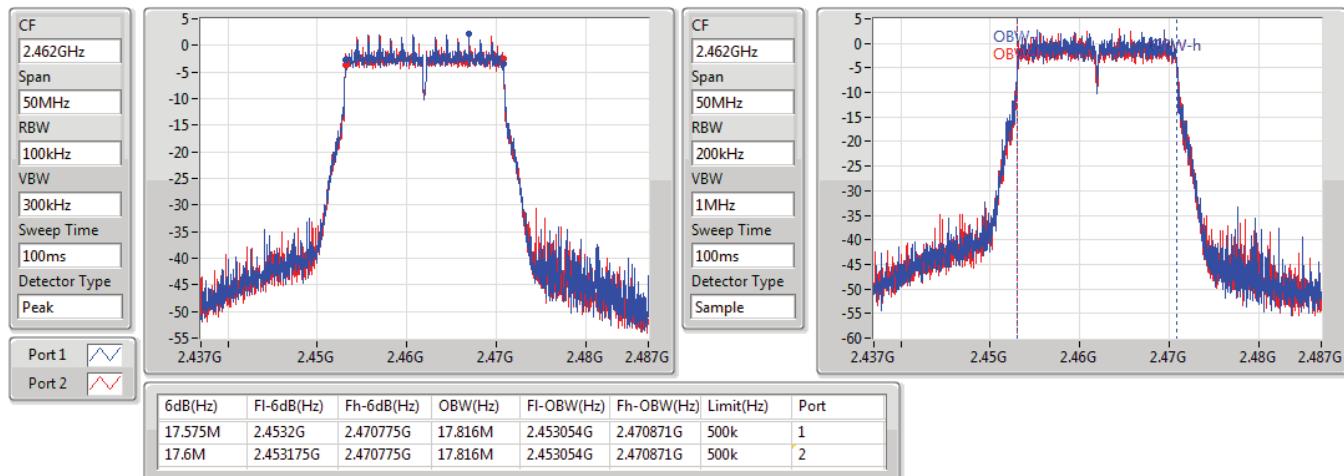

VHT20_Nss1,(MCS0)_2TX
EBW
2437MHz

07/05/2019

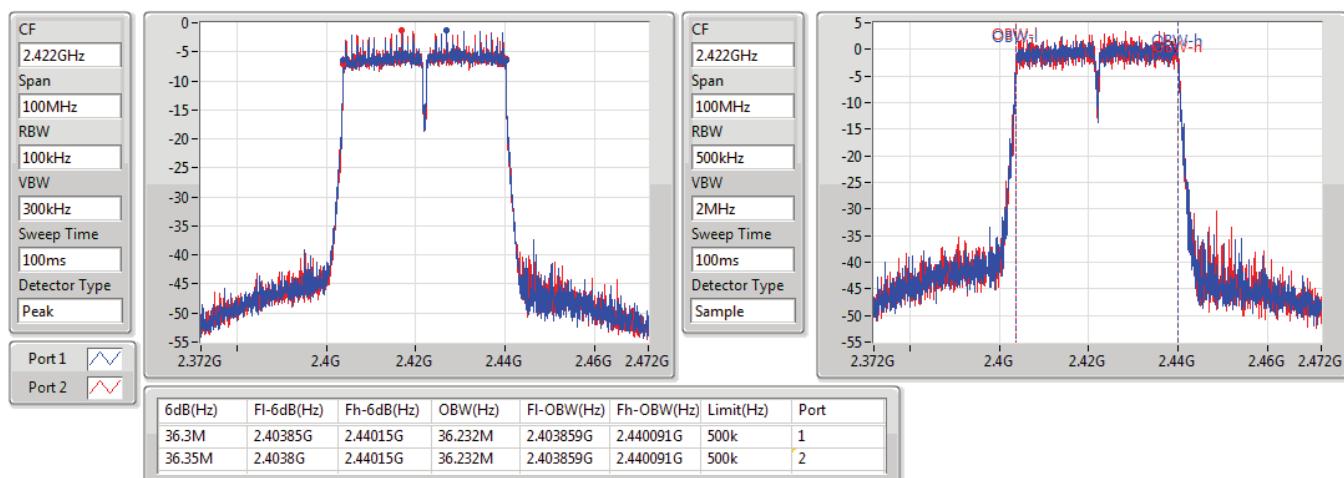


VHT20_Nss1,(MCS0)_2TX
EBW
2462MHz

07/05/2019

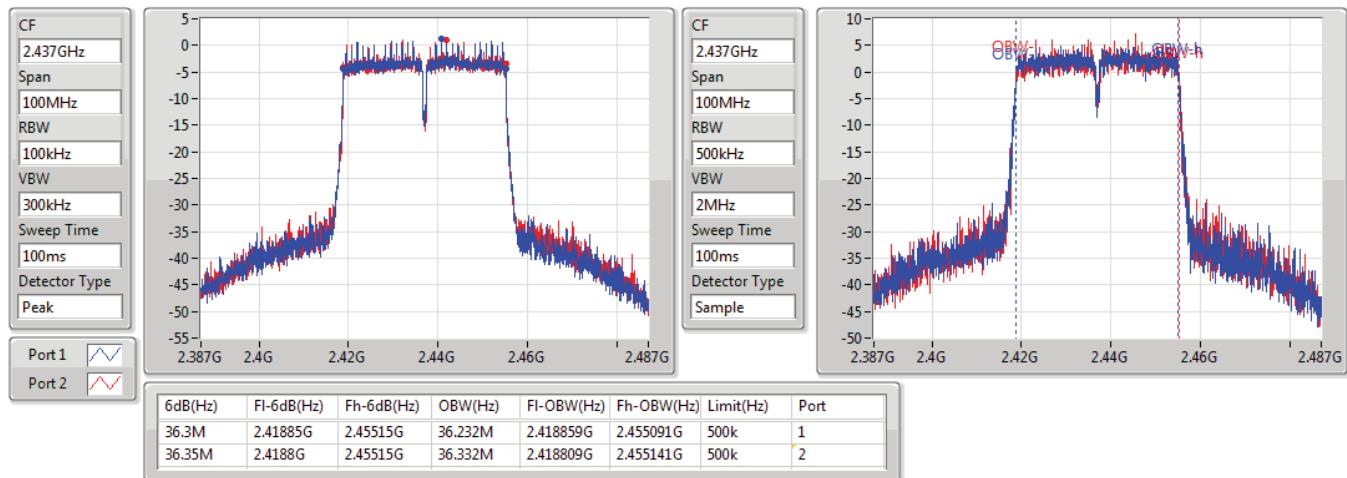

VHT40_Nss1,(MCS0)_2TX
EBW
2422MHz

07/05/2019

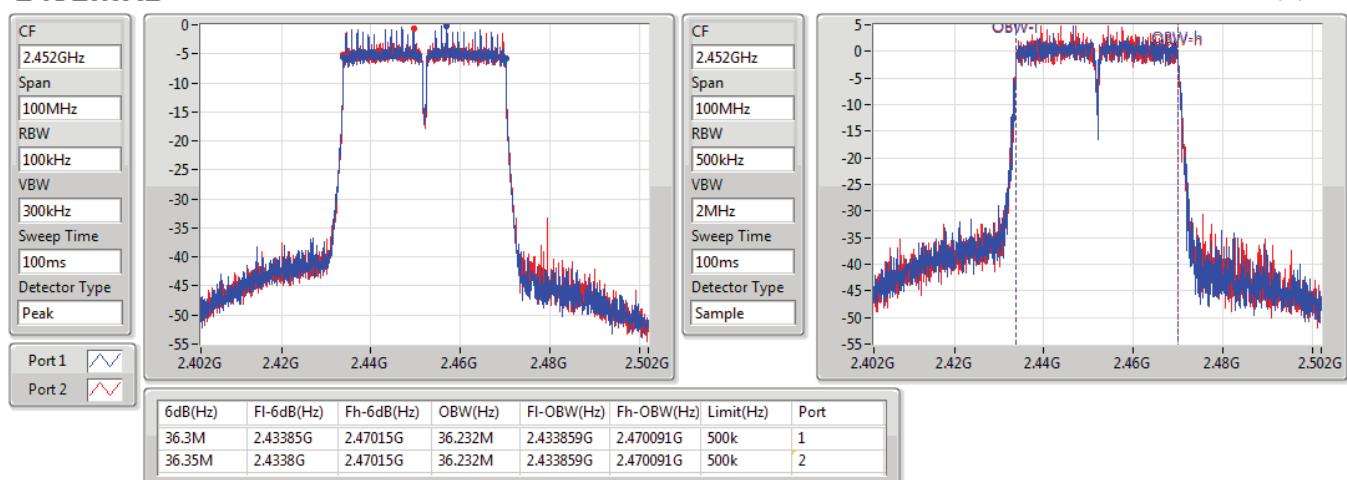


VHT40_Nss1,(MCS0)_2TX
EBW
2437MHz

07/05/2019


VHT40_Nss1,(MCS0)_2TX
EBW
2452MHz

07/05/2019



**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	28.99	0.79250
802.11g_Nss1,(6Mbps)_4TX	25.81	0.38107
VHT20_Nss1,(MCS0)_4TX	24.13	0.25882
VHT40_Nss1,(MCS0)_4TX	19.67	0.09268
802.11ax HEW20_Nss1,(MCS0)_4TX	24.38	0.27416
802.11ax HEW40_Nss1,(MCS0)_4TX	19.92	0.09817



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	21.36	21.40	21.29	21.57	27.43	30.00
2417MHz	Pass	4.00	21.69	21.64	21.54	21.72	27.67	30.00
2437MHz	Pass	4.00	22.91	23.03	22.84	23.09	28.99	30.00
2457MHz	Pass	4.00	20.82	20.85	20.84	21.13	26.93	30.00
2462MHz	Pass	4.00	20.38	20.25	20.25	20.61	26.40	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	14.11	14.02	14.25	14.50	20.24	30.00
2417MHz	Pass	4.00	15.96	15.90	15.94	16.30	22.05	30.00
2437MHz	Pass	4.00	19.78	19.60	19.74	20.04	25.81	30.00
2457MHz	Pass	4.00	15.08	15.11	15.13	15.38	21.20	30.00
2462MHz	Pass	4.00	14.34	14.18	14.35	14.65	20.40	30.00
VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	12.55	12.30	12.54	12.62	18.52	30.00
2417MHz	Pass	4.00	14.36	14.38	14.42	14.55	20.45	30.00
2437MHz	Pass	4.00	18.15	18.01	17.95	18.33	24.13	30.00
2457MHz	Pass	4.00	13.99	13.74	14.01	14.28	20.03	30.00
2462MHz	Pass	4.00	11.78	11.65	11.91	12.06	17.87	30.00
VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	4.00	10.36	10.59	10.25	10.38	16.42	30.00
2427MHz	Pass	4.00	10.92	10.89	10.70	11.07	16.92	30.00
2437MHz	Pass	4.00	13.58	13.77	13.54	13.71	19.67	30.00
2447MHz	Pass	4.00	13.03	13.24	13.32	13.43	19.28	30.00
2452MHz	Pass	4.00	12.30	12.72	12.55	12.57	18.56	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	12.90	12.66	12.73	12.81	18.80	30.00
2417MHz	Pass	4.00	14.69	14.73	14.85	15.11	20.87	30.00
2437MHz	Pass	4.00	18.33	18.22	18.35	18.53	24.38	30.00
2457MHz	Pass	4.00	14.33	14.10	14.26	14.57	20.34	30.00
2462MHz	Pass	4.00	12.03	11.79	12.10	12.35	18.09	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	4.00	10.68	10.65	10.52	10.49	16.61	30.00
2427MHz	Pass	4.00	11.03	11.09	11.13	11.20	17.13	30.00
2437MHz	Pass	4.00	13.77	13.97	13.84	14.00	19.92	30.00
2447MHz	Pass	4.00	13.18	13.50	13.50	13.46	19.43	30.00
2452MHz	Pass	4.00	12.65	12.73	12.84	13.00	18.83	30.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
VHT20-BF_Nss1,(MCS0)_4TX	24.45	0.27861
VHT40-BF_Nss1,(MCS0)_4TX	19.59	0.09099
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	24.56	0.28576
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	19.93	0.09840

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	10.02	12.14	12.11	12.65	12.13	18.28	25.98
2417MHz_TnomVnom	Pass	10.02	15.35	15.42	15.00	15.02	21.22	25.98
2437MHz_TnomVnom	Pass	10.02	18.60	18.39	18.44	18.29	24.45	25.98
2457MHz_TnomVnom	Pass	10.02	14.06	14.65	14.68	14.29	20.45	25.98
2462MHz_TnomVnom	Pass	10.02	13.45	12.84	12.71	12.58	18.93	25.98
VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	10.02	13.24	13.20	13.77	13.16	19.37	25.98
2437MHz_TnomVnom	Pass	10.02	13.21	12.81	13.08	13.55	19.19	25.98
2447MHz_TnomVnom	Pass	10.02	13.78	13.34	13.90	13.24	19.59	25.98
2452MHz_TnomVnom	Pass	10.02	12.62	12.91	13.54	12.62	18.96	25.98
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	10.02	12.55	12.14	12.64	12.44	18.47	25.98
2417MHz_TnomVnom	Pass	10.02	15.03	15.32	15.48	15.54	21.37	25.98
2437MHz_TnomVnom	Pass	10.02	18.60	18.38	18.27	18.88	24.56	25.98
2457MHz_TnomVnom	Pass	10.02	14.90	14.20	15.02	15.03	20.82	25.98
2462MHz_TnomVnom	Pass	10.02	13.06	12.50	12.94	13.22	18.96	25.98
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	10.02	13.64	13.47	13.93	14.09	19.81	25.98
2437MHz_TnomVnom	Pass	10.02	13.17	13.16	13.38	13.32	19.28	25.98
2447MHz_TnomVnom	Pass	10.02	13.37	13.93	14.00	14.27	19.93	25.98
2452MHz_TnomVnom	Pass	10.02	12.72	13.05	12.92	13.09	18.97	25.98

DG = Directional Gain; **Port X** = Port X output power**Note : Conducted average output power is for reference only**

**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	25.39	0.34594
802.11g_Nss1,(6Mbps)_2TX	24.56	0.28576
VHT20_Nss1,(MCS0)_2TX	23.92	0.24660
VHT40_Nss1,(MCS0)_2TX	18.59	0.07228



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	20.70	19.67	23.23	30.00
2417MHz	Pass	4.00	22.22	20.72	24.54	30.00
2437MHz	Pass	4.00	23.20	21.37	25.39	30.00
2457MHz	Pass	4.00	18.18	21.30	23.02	30.00
2462MHz	Pass	4.00	21.76	20.67	24.26	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	15.40	15.42	18.42	30.00
2417MHz	Pass	4.00	17.41	16.64	20.05	30.00
2437MHz	Pass	4.00	22.32	20.61	24.56	30.00
2457MHz	Pass	4.00	17.46	17.09	20.29	30.00
2462MHz	Pass	4.00	16.06	15.60	18.85	30.00
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	15.77	15.21	18.51	30.00
2417MHz	Pass	4.00	17.28	16.88	20.09	30.00
2437MHz	Pass	4.00	21.62	20.05	23.92	30.00
2457MHz	Pass	4.00	17.43	16.89	20.18	30.00
2462MHz	Pass	4.00	13.91	13.55	16.74	30.00
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.00	13.21	12.92	16.08	30.00
2427MHz	Pass	4.00	13.35	13.06	16.22	30.00
2437MHz	Pass	4.00	15.74	15.42	18.59	30.00
2447MHz	Pass	4.00	14.29	14.16	17.24	30.00
2452MHz	Pass	4.00	13.97	13.89	16.94	30.00

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

**Summary**

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	3.87
802.11g_Nss1,(6Mbps)_4TX	-1.88
VHT20_Nss1,(MCS0)_4TX	-3.94
VHT40_Nss1,(MCS0)_4TX	-10.65
802.11ax HEW20_Nss1,(MCS0)_4TX	-3.54
802.11ax HEW40_Nss1,(MCS0)_4TX	-10.97

RBW=3 kHz.

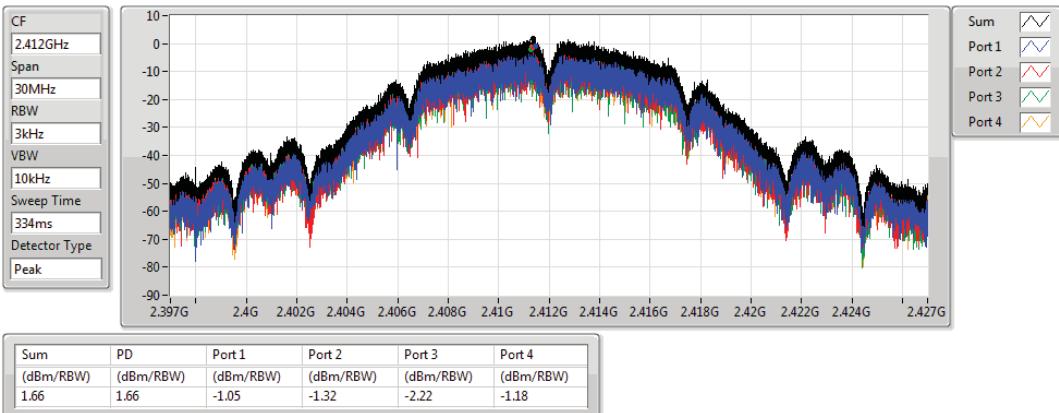
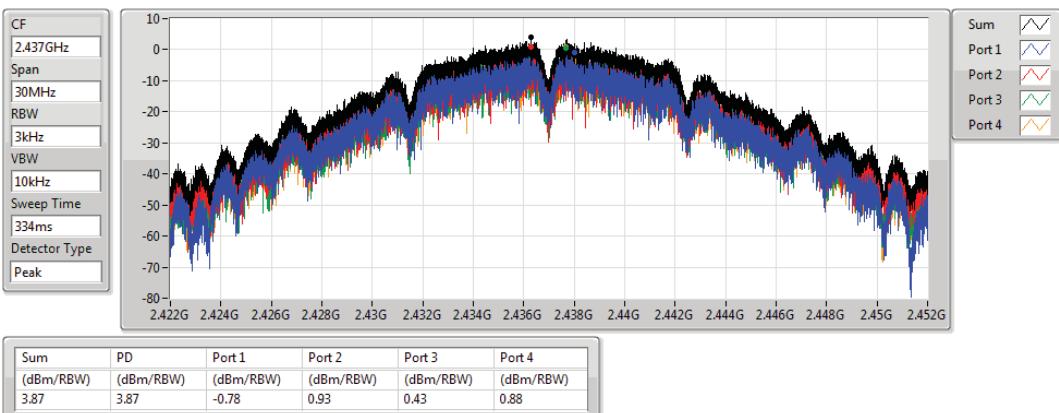
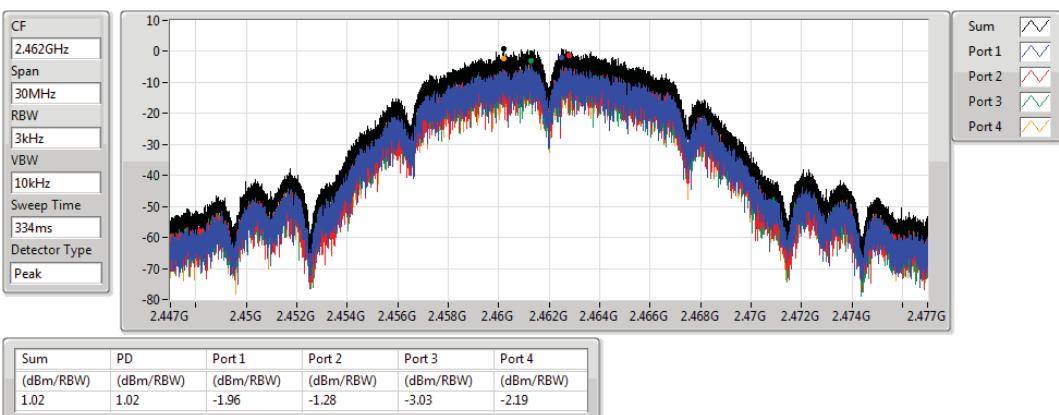


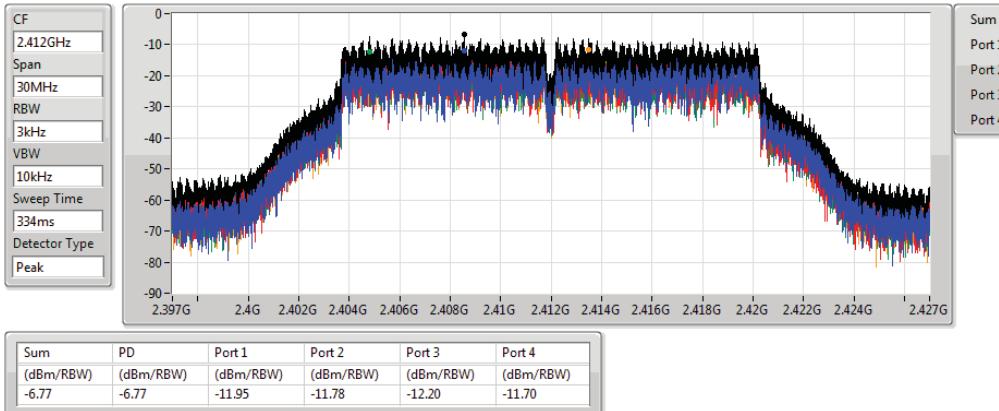
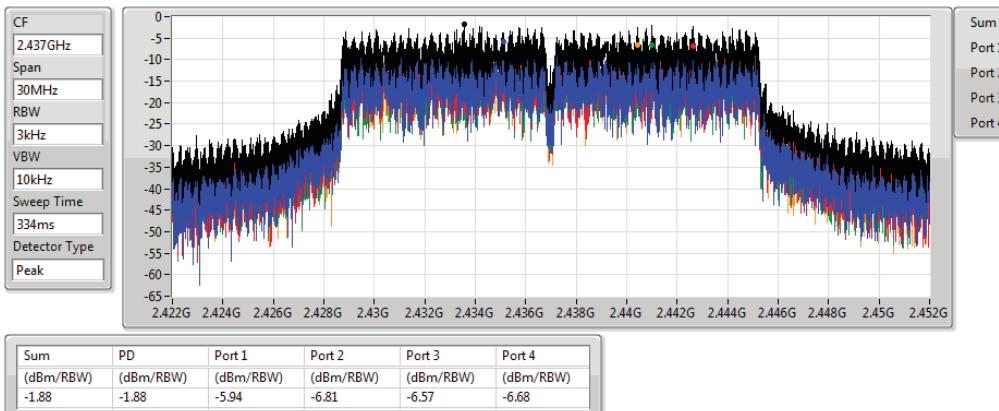
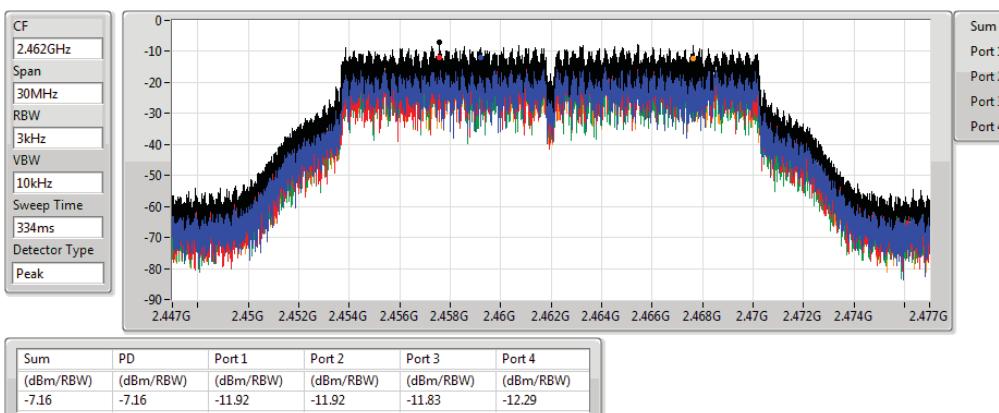
Result

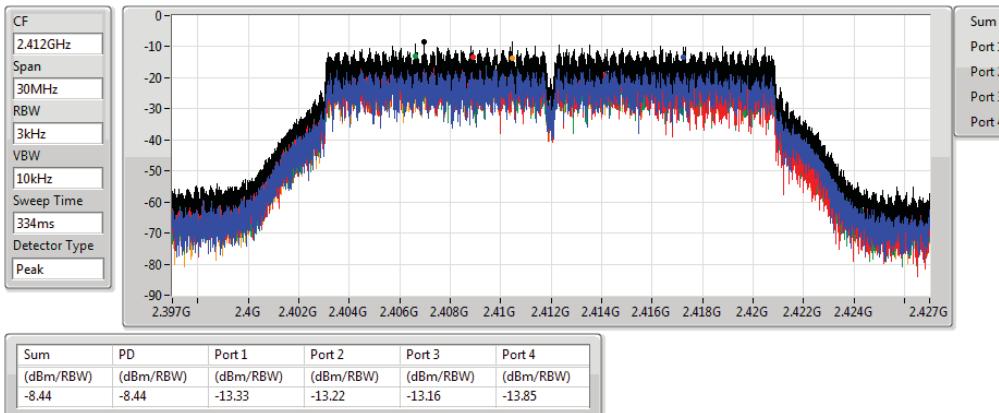
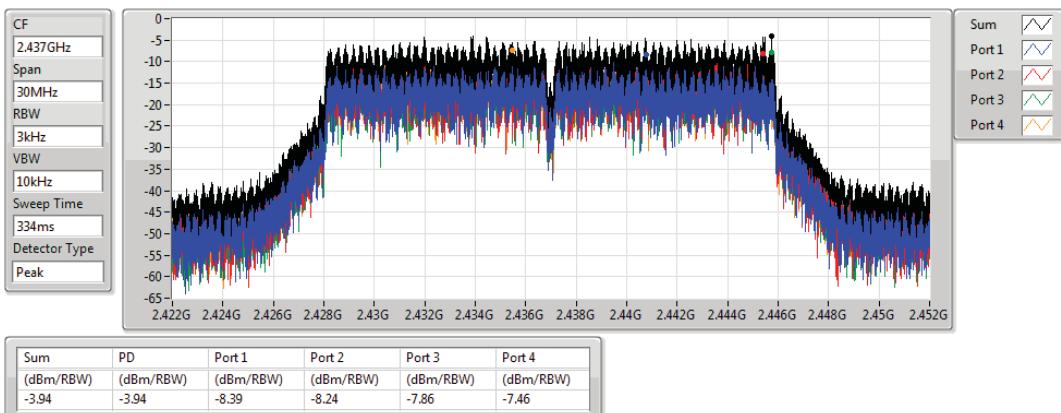
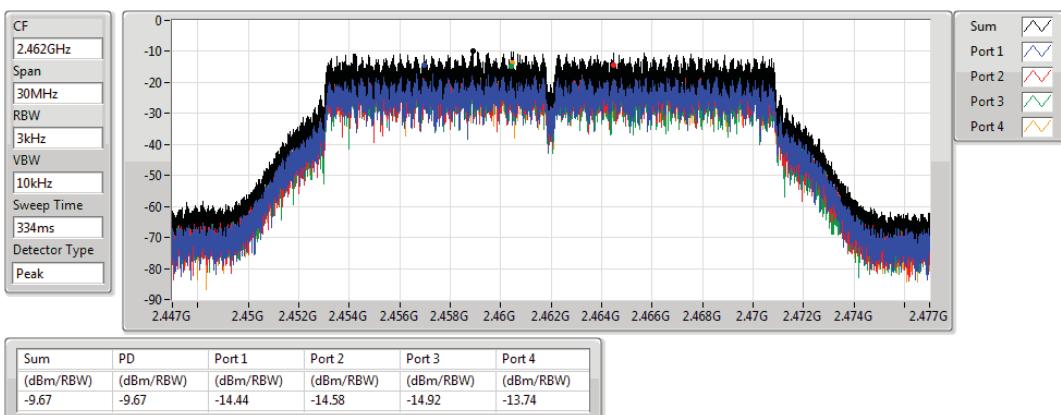
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.02	-1.05	-1.32	-2.22	-1.18	1.66	3.98
2437MHz	Pass	10.02	-0.78	0.93	0.43	0.88	3.87	3.98
2462MHz	Pass	10.02	-1.96	-1.28	-3.03	-2.19	1.02	3.98
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.02	-11.95	-11.78	-12.20	-11.70	-6.77	3.98
2437MHz	Pass	10.02	-5.94	-6.81	-6.57	-6.68	-1.88	3.98
2462MHz	Pass	10.02	-11.92	-11.92	-11.83	-12.29	-7.16	3.98
VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.02	-13.33	-13.22	-13.16	-13.85	-8.44	3.98
2437MHz	Pass	10.02	-8.39	-8.24	-7.86	-7.46	-3.94	3.98
2462MHz	Pass	10.02	-14.44	-14.58	-14.92	-13.74	-9.67	3.98
VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	10.02	-18.56	-17.70	-18.50	-18.43	-14.32	3.98
2437MHz	Pass	10.02	-14.58	-15.25	-15.42	-15.05	-10.65	3.98
2452MHz	Pass	10.02	-16.47	-15.34	-16.70	-15.82	-11.30	3.98
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.02	-12.35	-14.84	-13.94	-13.91	-9.09	3.98
2437MHz	Pass	10.02	-8.11	-8.67	-8.67	-5.95	-3.54	3.98
2462MHz	Pass	10.02	-12.95	-15.88	-14.59	-14.74	-9.47	3.98
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	10.02	-18.18	-17.94	-19.03	-19.22	-13.17	3.98
2437MHz	Pass	10.02	-15.76	-15.78	-15.66	-14.46	-10.97	3.98
2452MHz	Pass	10.02	-17.05	-16.29	-16.50	-15.97	-11.51	3.98

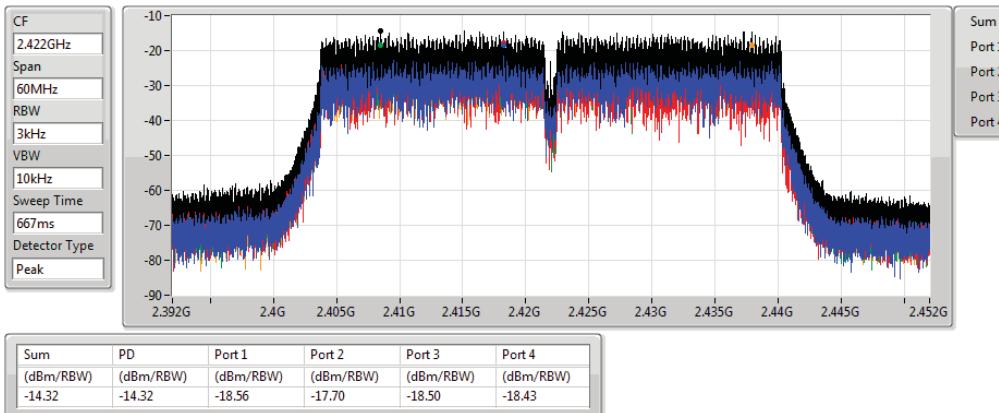
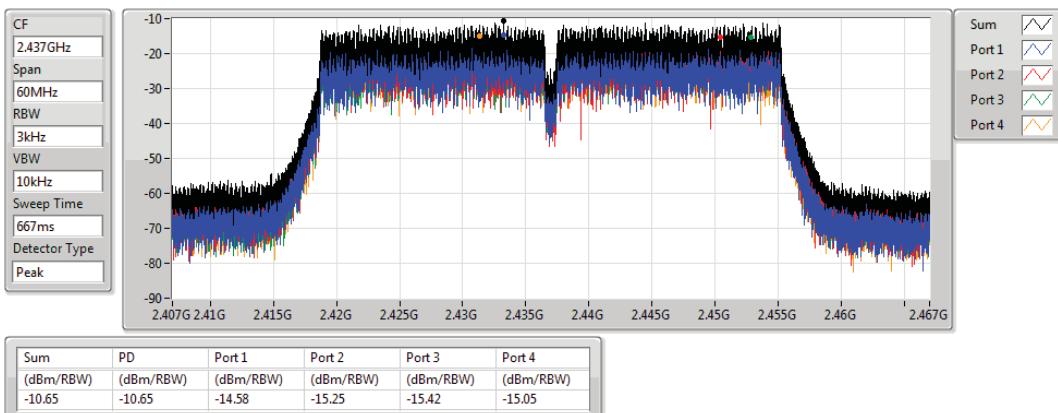
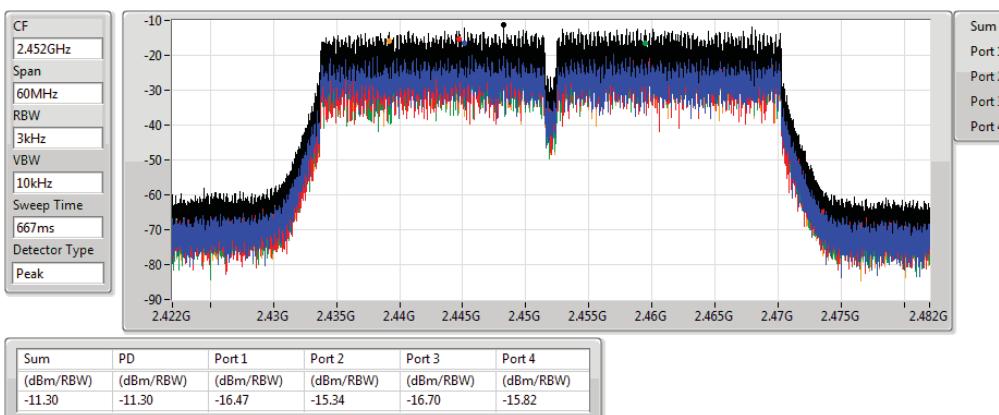
DG = Directional Gain; RBW=3 kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_4TX
2412MHz

802.11b_Nss1,(1Mbps)_4TX
2437MHz

802.11b_Nss1,(1Mbps)_4TX
2462MHz


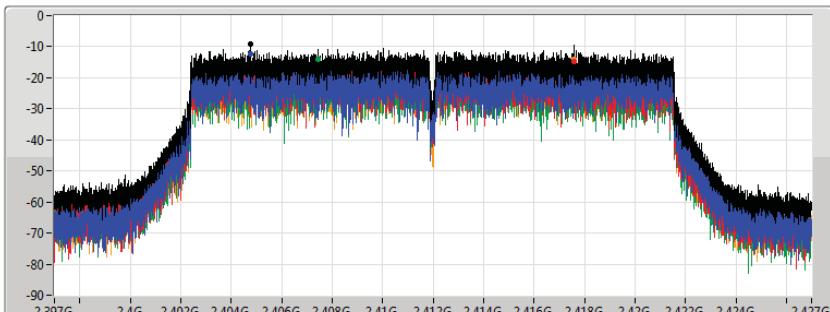
802.11g_Nss1,(6Mbps)_4TX
2412MHz

802.11g_Nss1,(6Mbps)_4TX
2437MHz

802.11g_Nss1,(6Mbps)_4TX
2462MHz


VHT20_Nss1,(MCS0)_4TX
2412MHz

VHT20_Nss1,(MCS0)_4TX
2437MHz

VHT20_Nss1,(MCS0)_4TX
2462MHz


VHT40_Nss1,(MCS0)_4TX
2422MHz

VHT40_Nss1,(MCS0)_4TX
2437MHz

VHT40_Nss1,(MCS0)_4TX
2452MHz


802.11ax HEW20_Nss1,(MCS0)_4TX
2412MHz

CF	2.412GHz
Span	30MHz
RBW	3kHz
VBW	10kHz
Sweep Time	334ms
Detector Type	Peak

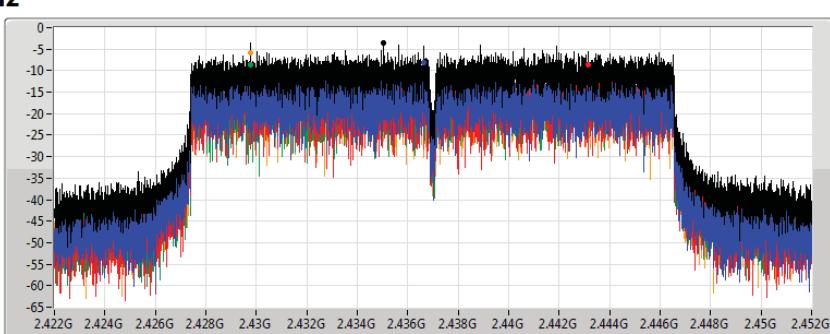

PSD

07/05/2019

Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input checked="" type="checkbox"/>
Port 3	<input checked="" type="checkbox"/>
Port 4	<input checked="" type="checkbox"/>

802.11ax HEW20_Nss1,(MCS0)_4TX
2437MHz

CF	2.437GHz
Span	30MHz
RBW	3kHz
VBW	10kHz
Sweep Time	334ms
Detector Type	Peak

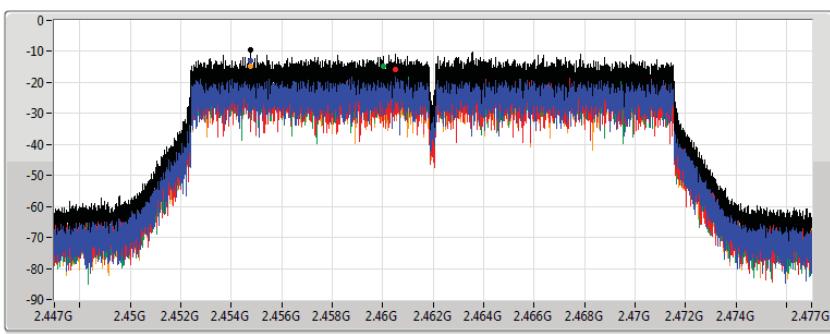

PSD

07/05/2019

Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input checked="" type="checkbox"/>
Port 3	<input checked="" type="checkbox"/>
Port 4	<input checked="" type="checkbox"/>

802.11ax HEW20_Nss1,(MCS0)_4TX
2462MHz

CF	2.462GHz
Span	30MHz
RBW	3kHz
VBW	10kHz
Sweep Time	334ms
Detector Type	Peak

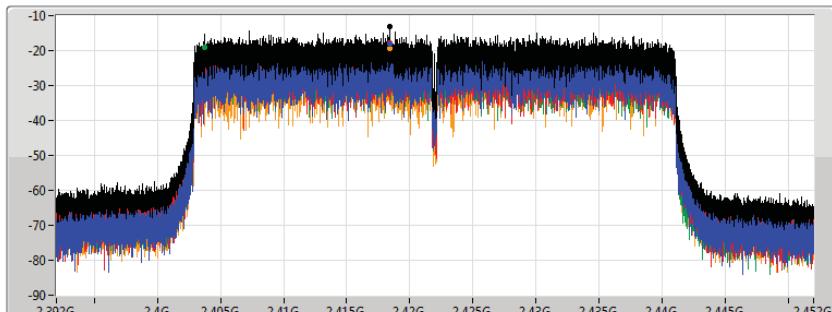

PSD

07/05/2019

Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input checked="" type="checkbox"/>
Port 3	<input checked="" type="checkbox"/>
Port 4	<input checked="" type="checkbox"/>

802.11ax HEW40_Nss1,(MCS0)_4TX
2422MHz

CF
2.422GHz
Span
60MHz
RBW
3kHz
VBW
10kHz
Sweep Time
667ms
Detector Type
Peak

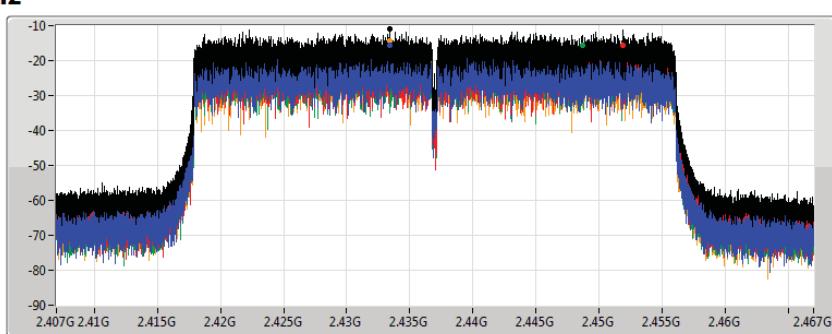

PSD

07/05/2019

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Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>
Port 3	<input type="checkbox"/>
Port 4	<input type="checkbox"/>

802.11ax HEW40_Nss1,(MCS0)_4TX
2437MHz

CF
2.437GHz
Span
60MHz
RBW
3kHz
VBW
10kHz
Sweep Time
667ms
Detector Type
Peak

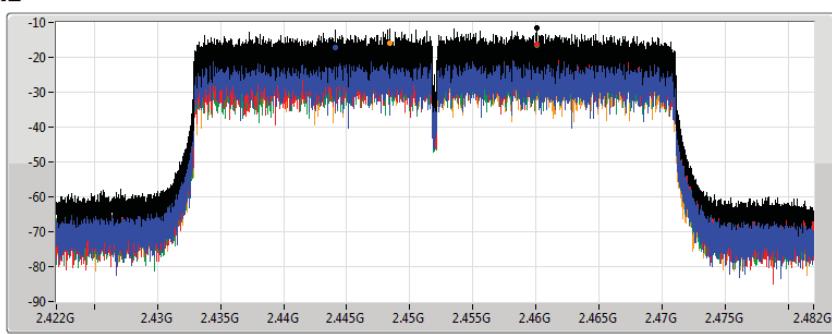

PSD

07/05/2019

Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>
Port 3	<input type="checkbox"/>
Port 4	<input type="checkbox"/>

802.11ax HEW40_Nss1,(MCS0)_4TX
2452MHz

CF
2.452GHz
Span
60MHz
RBW
3kHz
VBW
10kHz
Sweep Time
667ms
Detector Type
Peak


PSD

07/05/2019

Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>
Port 3	<input type="checkbox"/>
Port 4	<input type="checkbox"/>

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.51	-11.51	-17.05	-16.29	-16.50	-15.97

**Summary**

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
VHT20-BF_Nss1,(MCS0)_4TX	-2.33
VHT40-BF_Nss1,(MCS0)_4TX	-8.26
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-3.14
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-8.00

RBW=3kHz.

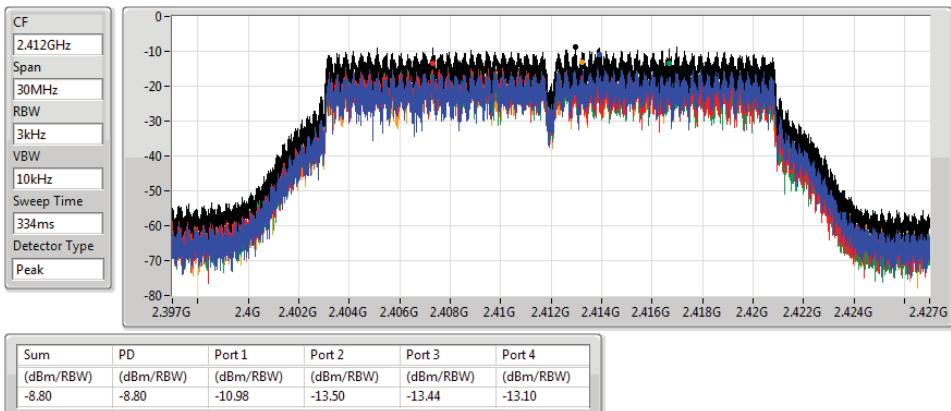
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	10.02	-10.98	-13.50	-13.44	-13.10	-8.80	3.98
2437MHz_TnomVnom	Pass	10.02	-4.77	-6.47	-6.88	-7.75	-2.33	3.98
2462MHz_TnomVnom	Pass	10.02	-12.16	-12.54	-12.76	-13.04	-8.14	3.98
VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	10.02	-11.46	-11.08	-14.12	-14.14	-8.26	3.98
2437MHz_TnomVnom	Pass	10.02	-12.29	-13.23	-11.35	-14.21	-9.55	3.98
2452MHz_TnomVnom	Pass	10.02	-12.81	-13.34	-14.60	-13.18	-10.37	3.98
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	10.02	-11.41	-13.81	-13.37	-12.87	-9.66	3.98
2437MHz_TnomVnom	Pass	10.02	-6.34	-8.38	-8.06	-7.49	-3.14	3.98
2462MHz_TnomVnom	Pass	10.02	-12.74	-13.05	-13.53	-12.87	-8.46	3.98
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	10.02	-12.79	-14.58	-14.34	-15.10	-11.36	3.98
2437MHz_TnomVnom	Pass	10.02	-8.33	-14.11	-14.30	-13.71	-8.00	3.98
2452MHz_TnomVnom	Pass	10.02	-12.04	-13.66	-14.22	-15.79	-10.95	3.98

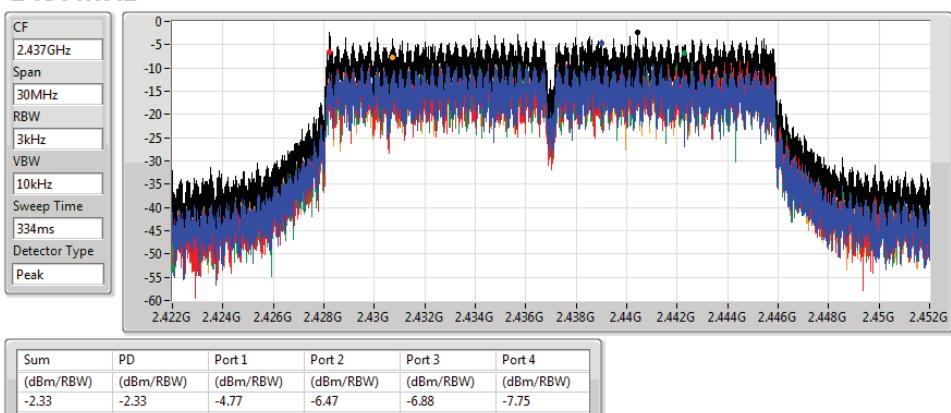
DG = Directional Gain; RBW=3kHz;**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

VHT20-BF_Nss1,(MCS0)_4TX
2412MHz
PSD

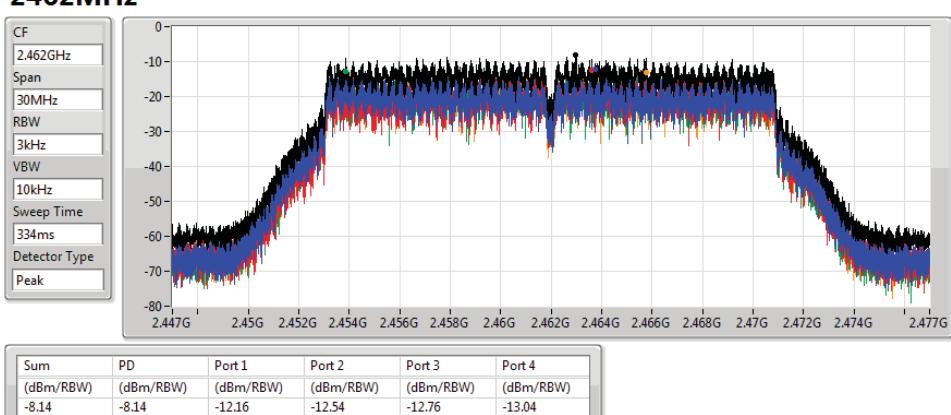
10/05/2019

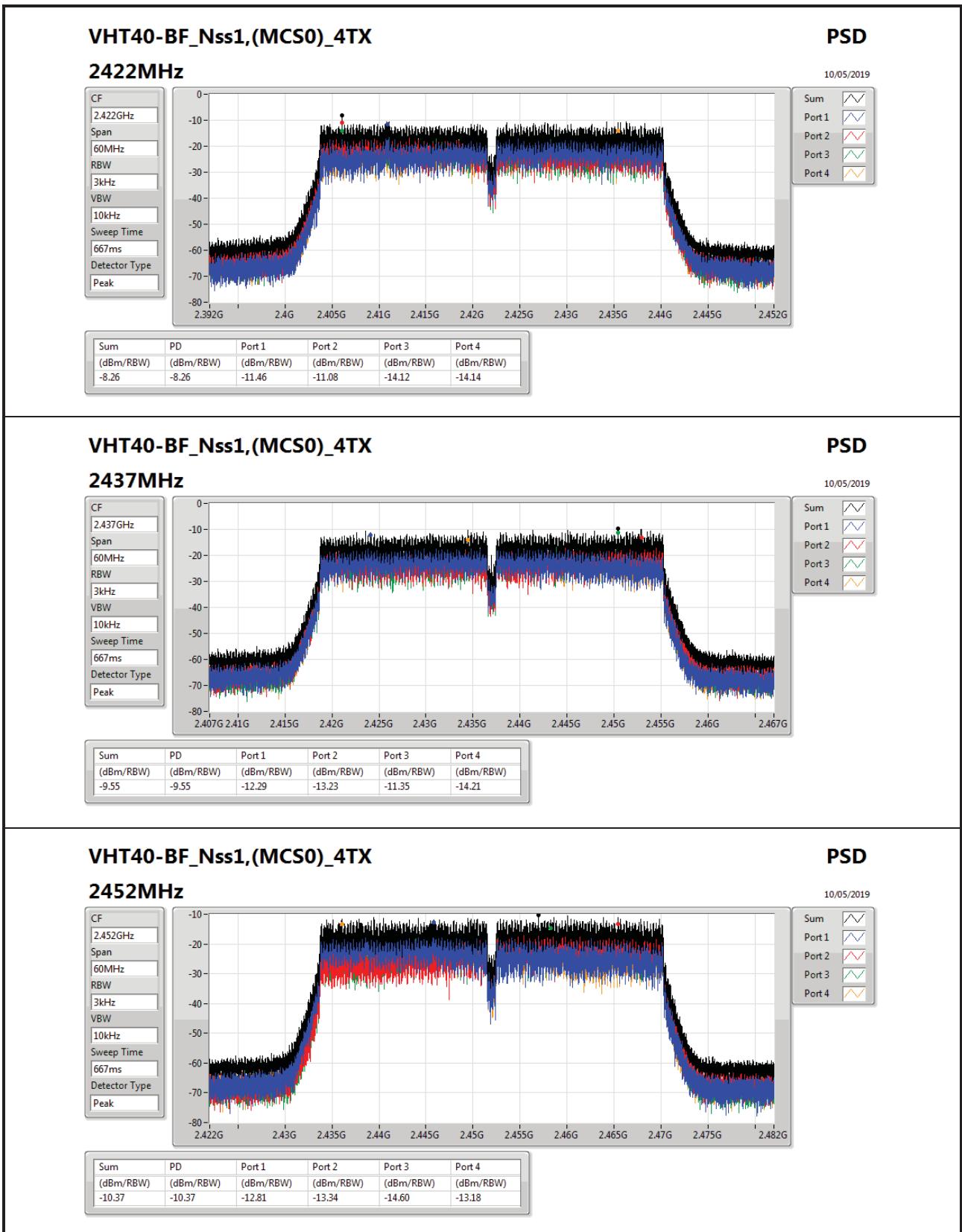

VHT20-BF_Nss1,(MCS0)_4TX
2437MHz
PSD

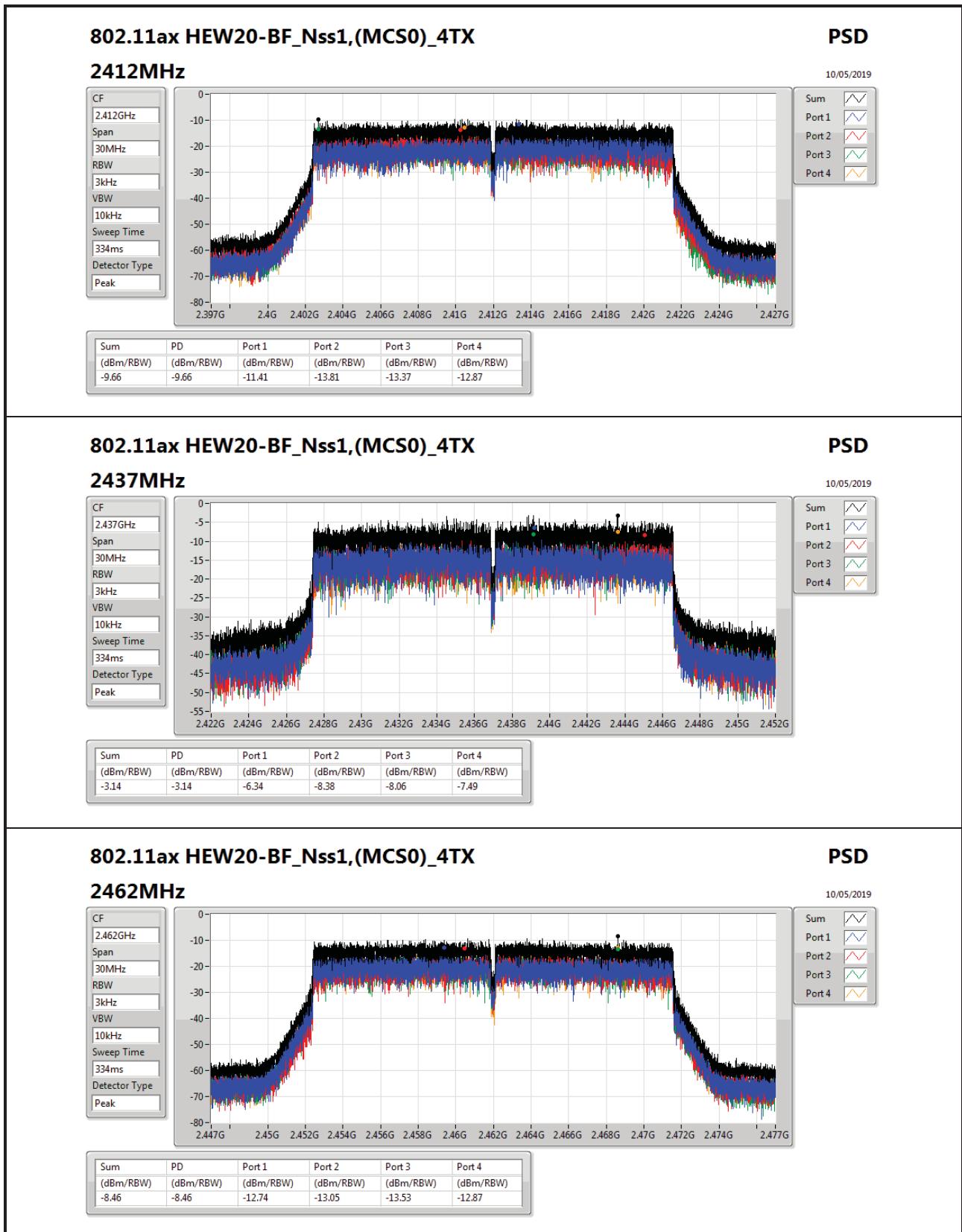
10/05/2019


VHT20-BF_Nss1,(MCS0)_4TX
2462MHz
PSD

10/05/2019

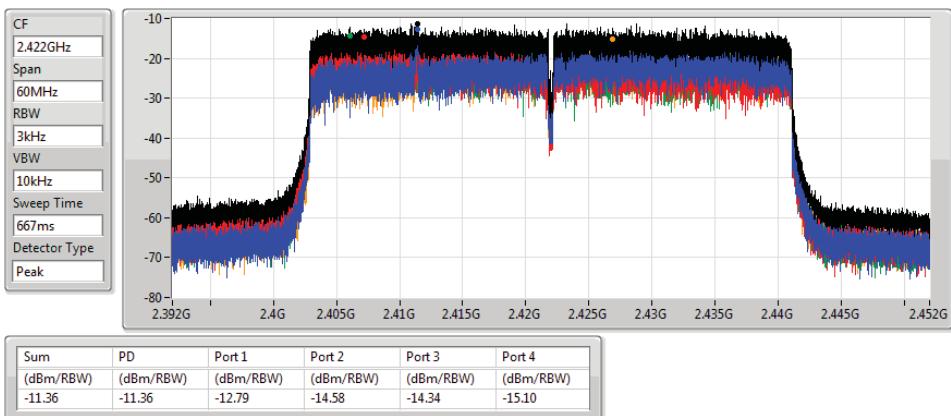




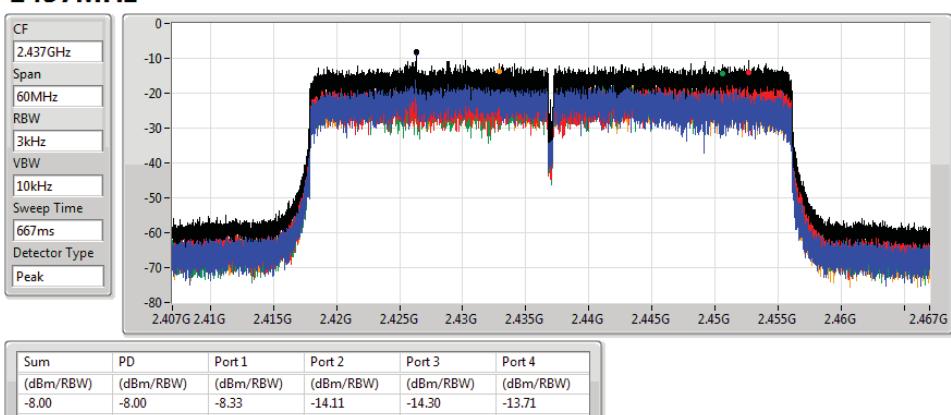


**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****2422MHz****PSD**

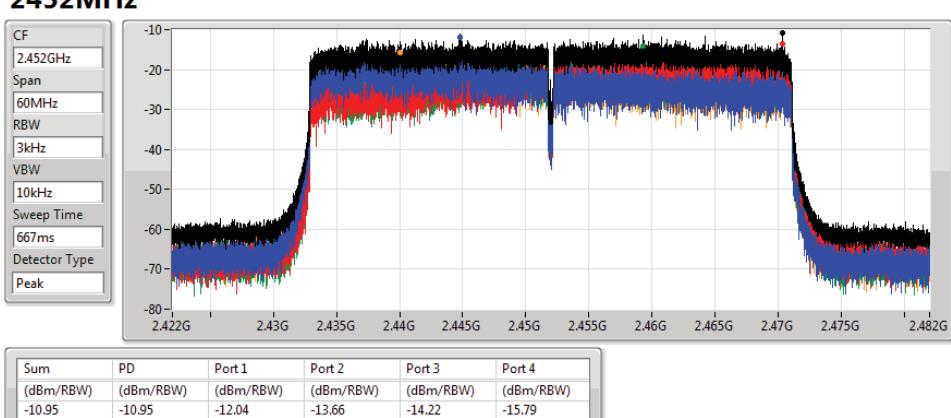
10/05/2019

**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****2437MHz****PSD**

10/05/2019

**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****2452MHz****PSD**

10/05/2019



**Summary**

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	0.42
802.11g_Nss1,(6Mbps)_2TX	-3.15
VHT20_Nss1,(MCS0)_2TX	-3.29
VHT40_Nss1,(MCS0)_2TX	-11.80

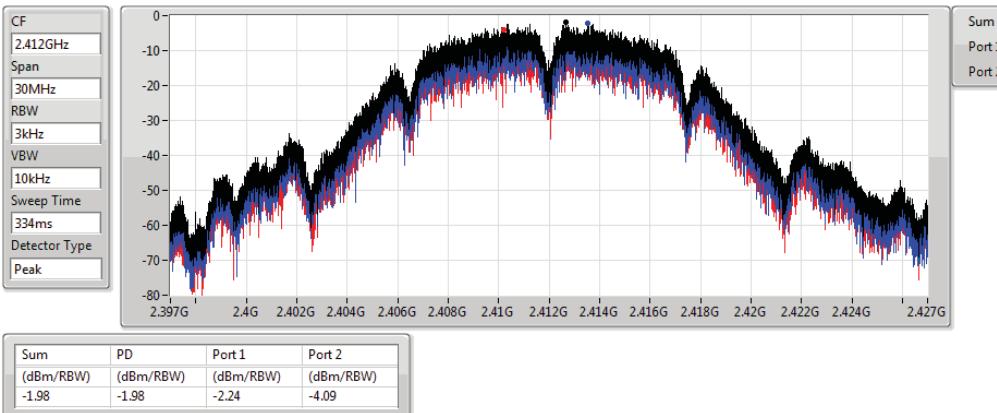
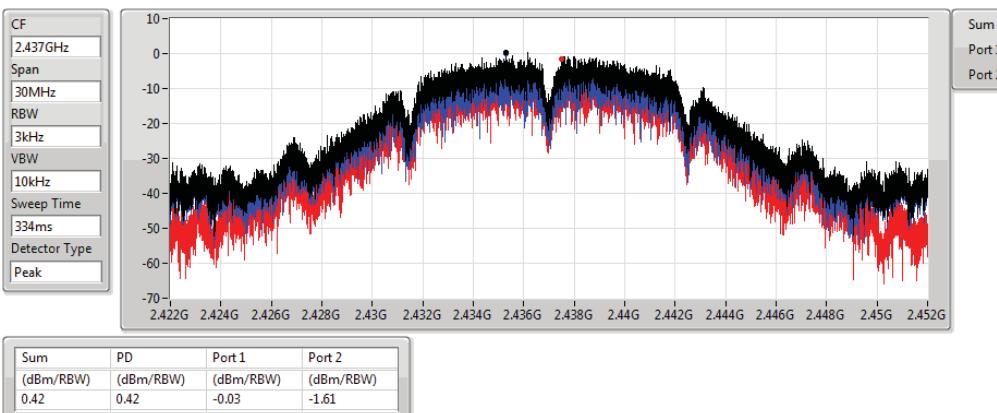
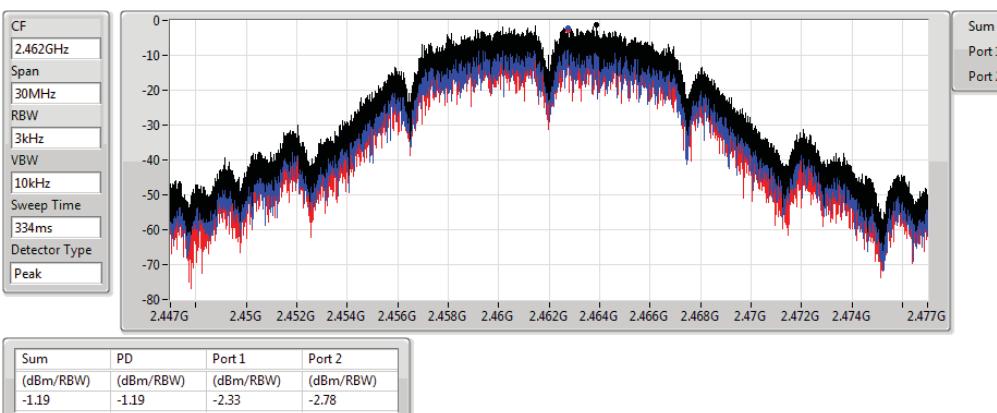
RBW=3 kHz.

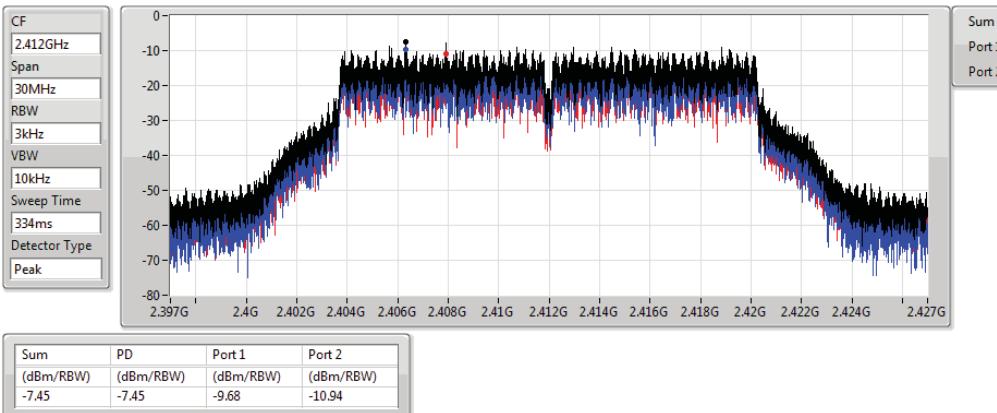
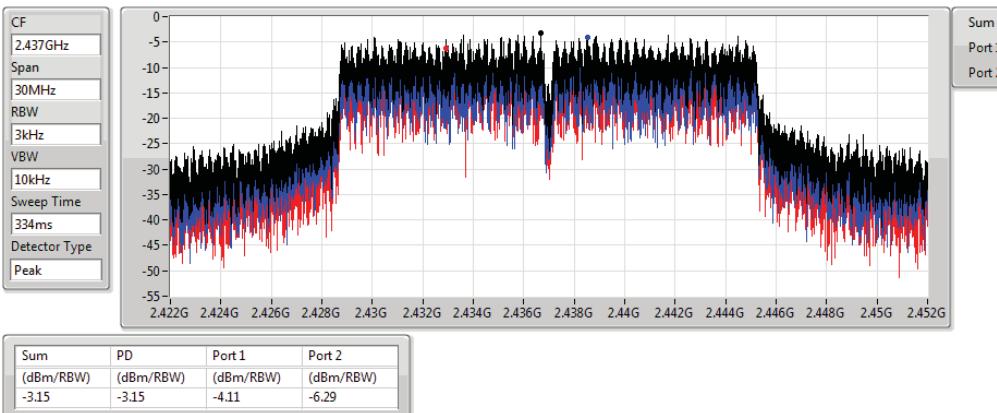
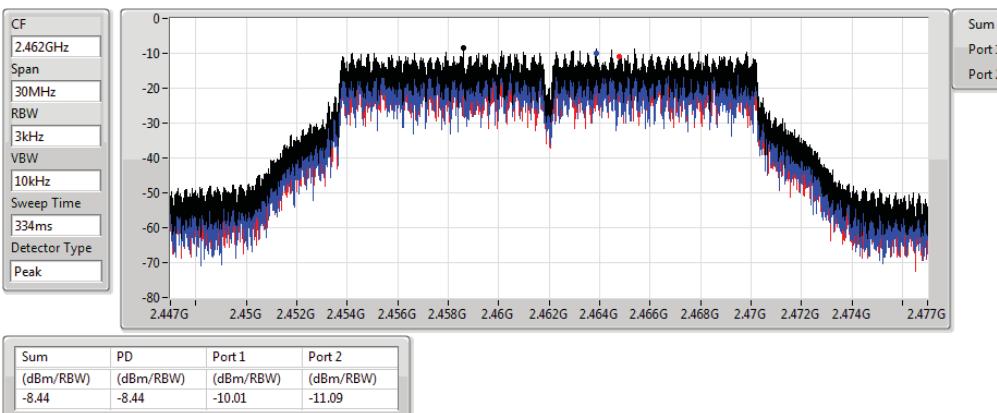
**Result**

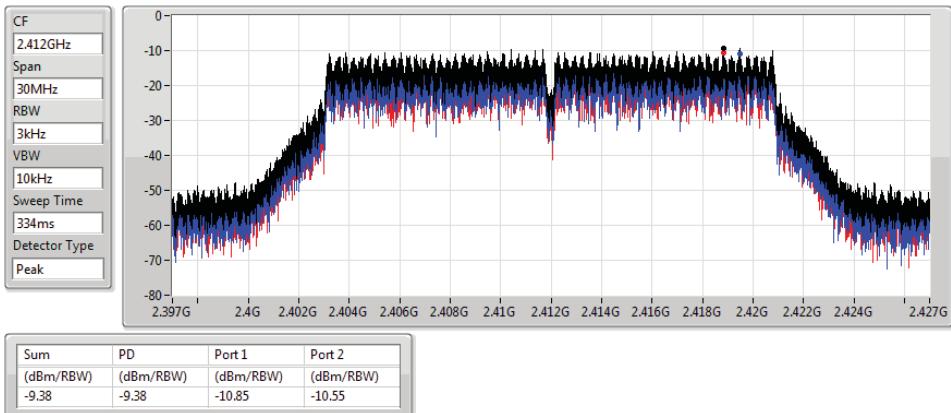
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-2.24	-4.09	-1.98	6.99
2437MHz	Pass	7.01	-0.03	-1.61	0.42	6.99
2462MHz	Pass	7.01	-2.33	-2.78	-1.19	6.99
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-9.68	-10.94	-7.45	6.99
2437MHz	Pass	7.01	-4.11	-6.29	-3.15	6.99
2462MHz	Pass	7.01	-10.01	-11.09	-8.44	6.99
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-10.85	-10.55	-9.38	6.99
2437MHz	Pass	7.01	-4.12	-5.90	-3.29	6.99
2462MHz	Pass	7.01	-12.61	-12.85	-10.46	6.99
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.01	-15.99	-15.85	-14.73	6.99
2437MHz	Pass	7.01	-13.38	-13.80	-11.80	6.99
2452MHz	Pass	7.01	-15.25	-13.29	-12.55	6.99

DG = Directional Gain; RBW=3 kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

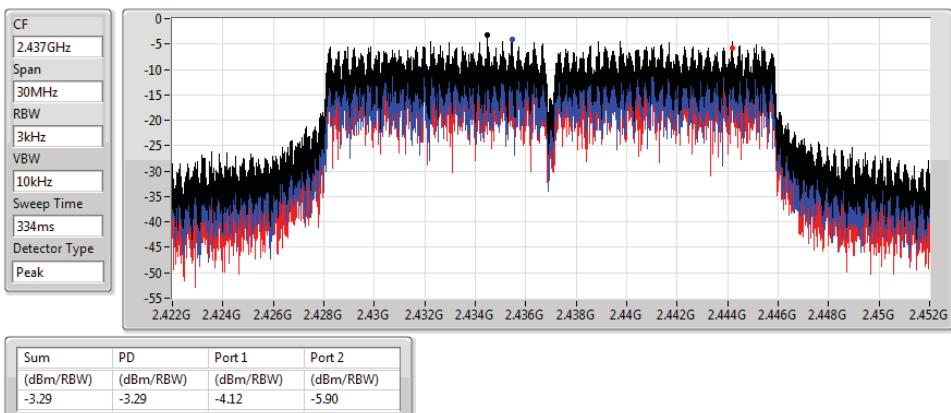
802.11b_Nss1,(1Mbps)_2TX
2412MHz

802.11b_Nss1,(1Mbps)_2TX
2437MHz

802.11b_Nss1,(1Mbps)_2TX
2462MHz


802.11g_Nss1,(6Mbps)_2TX
2412MHz

802.11g_Nss1,(6Mbps)_2TX
2437MHz

802.11g_Nss1,(6Mbps)_2TX
2462MHz


VHT20_Nss1,(MCS0)_2TX
2412MHz

PSD

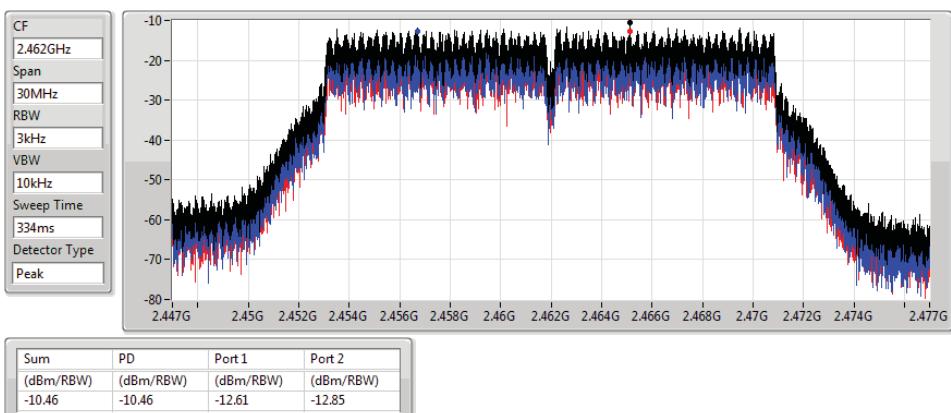
07/05/2019

 Sum
 Port 1
 Port 2

VHT20_Nss1,(MCS0)_2TX
2437MHz

PSD

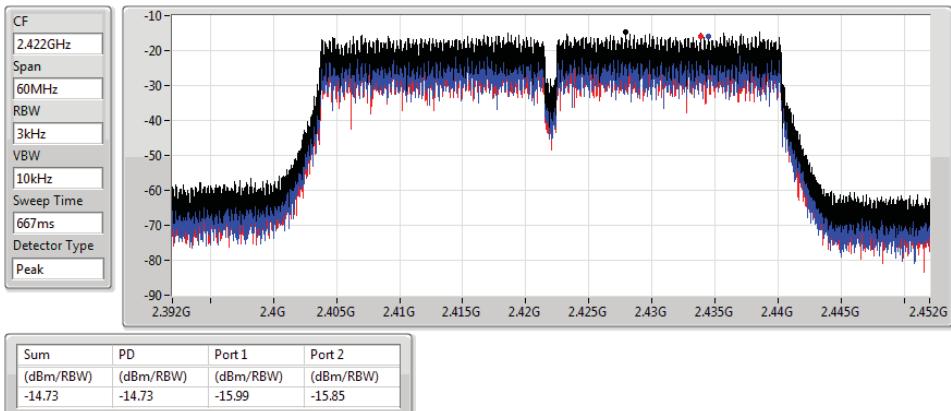
07/05/2019

 Sum
 Port 1
 Port 2

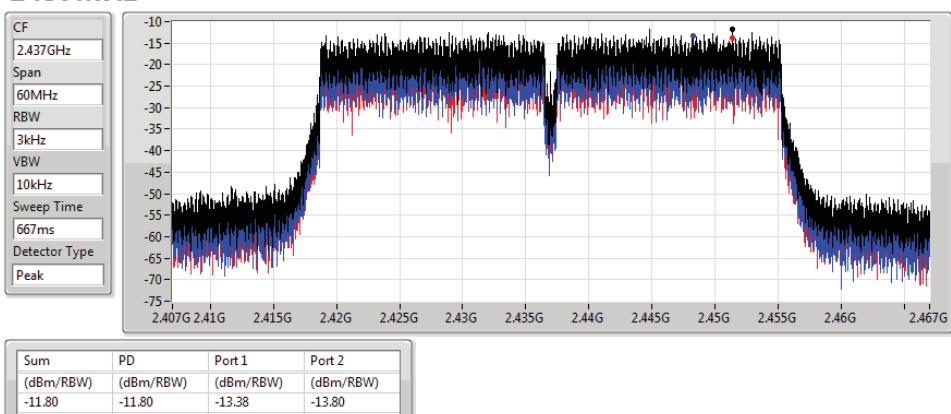
VHT20_Nss1,(MCS0)_2TX
2462MHz

PSD

07/05/2019

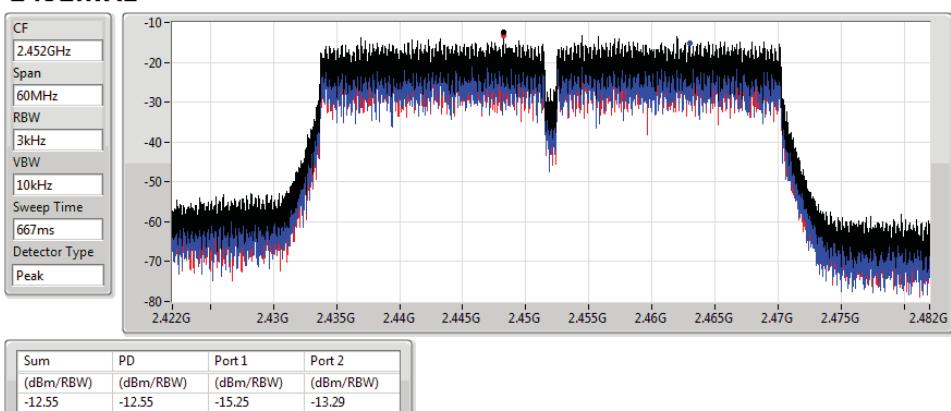
 Sum
 Port 1
 Port 2

VHT40_Nss1,(MCS0)_2TX
2422MHz

PSD

07/05/2019

 Sum
 Port 1
 Port 2
VHT40_Nss1,(MCS0)_2TX
2437MHz

PSD

07/05/2019

 Sum
 Port 1
 Port 2
VHT40_Nss1,(MCS0)_2TX
2452MHz

PSD

07/05/2019

 Sum
 Port 1
 Port 2

**Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	Pass	2.43749G	15.24	-14.76	1.80808G	-64.18	2.39996G	-27.83	2.48752G	-52.07	7.23514G	-41.16	4
802.11g_Nss1,(6Mbps)_4TX	Pass	2.44196G	9.23	-20.77	2.12438G	-64.79	2.39762G	-36.54	2.48604G	-42.76	23.4126G	-50.07	4
VHT20_Nss1,(MCS0)_4TX	Pass	2.442G	6.84	-23.16	1.73061G	-64.99	2.39952G	-39.89	2.49678G	-59.26	15.34072G	-50.36	3
VHT40_Nss1,(MCS0)_4TX	Pass	2.45198G	0.55	-29.45	2.08384G	-64.69	2.397G	-43.07	2.5007G	-58.65	15.28219G	-51.67	2
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	2.44196G	7.18	-22.82	2.15875G	-63.50	2.39988G	-38.70	2.48874G	-58.30	16.81574G	-51.06	1
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	2.45198G	0.49	-29.51	2.14167G	-64.34	2.39948G	-41.26	2.48542G	-45.89	16.31427G	-51.13	4

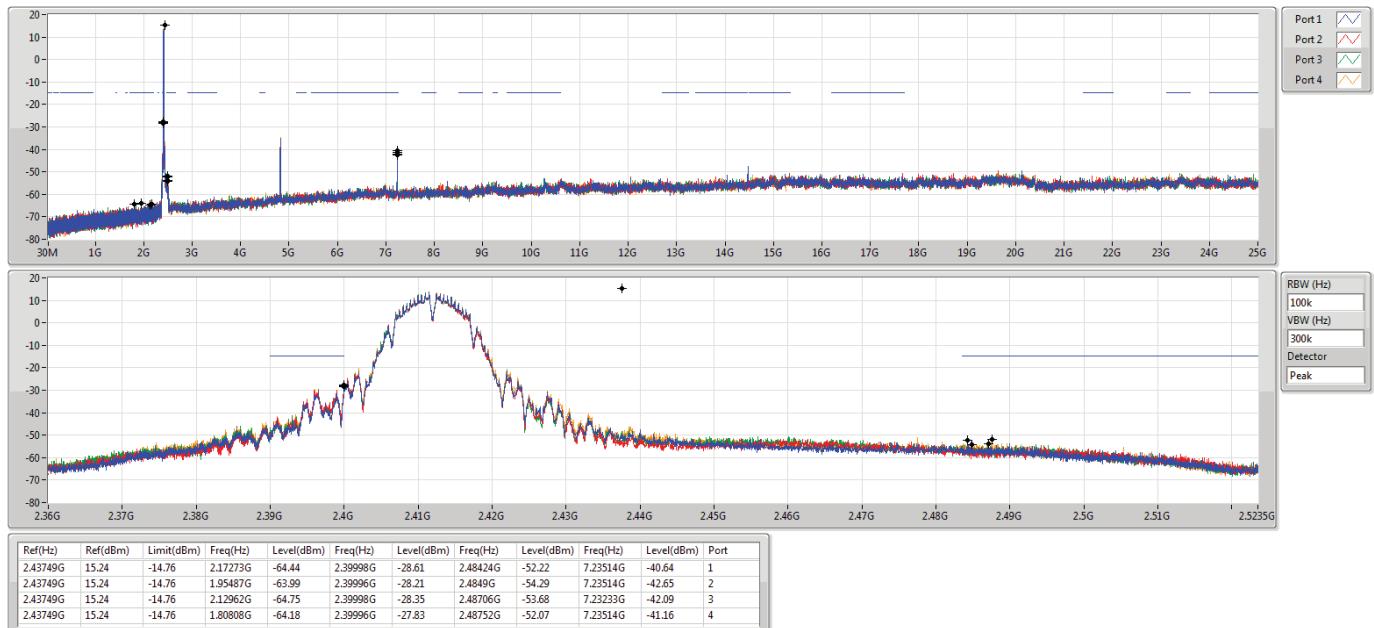
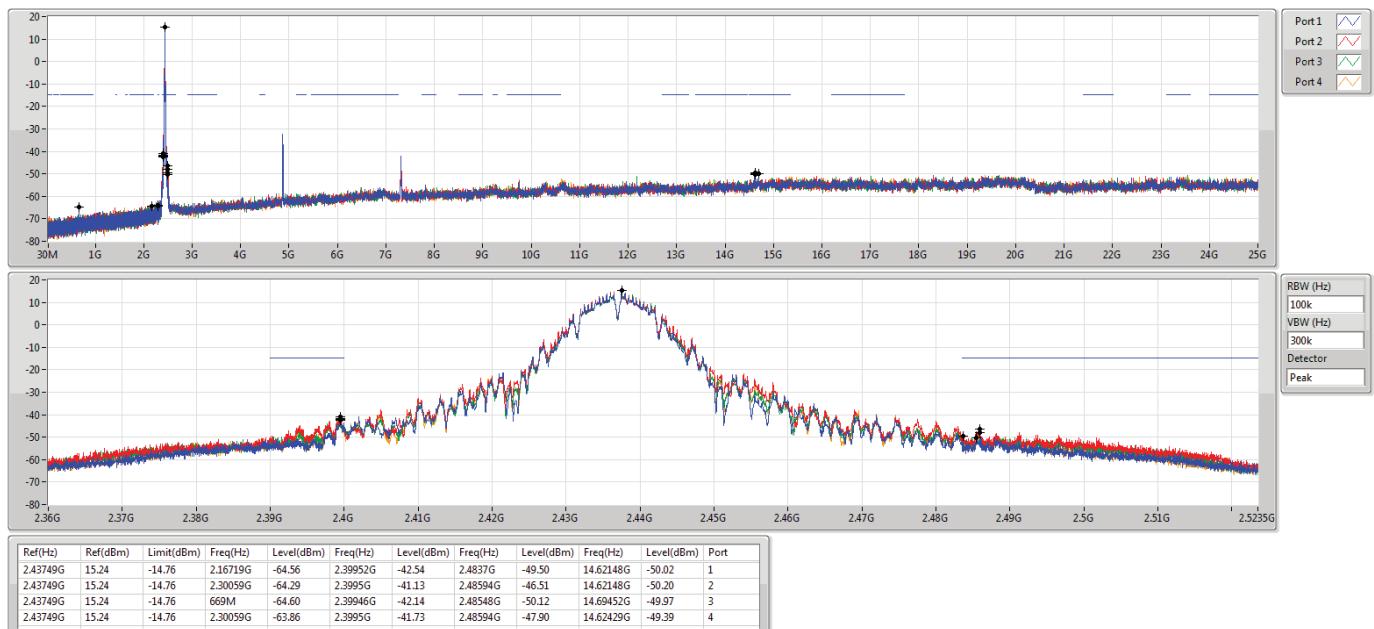


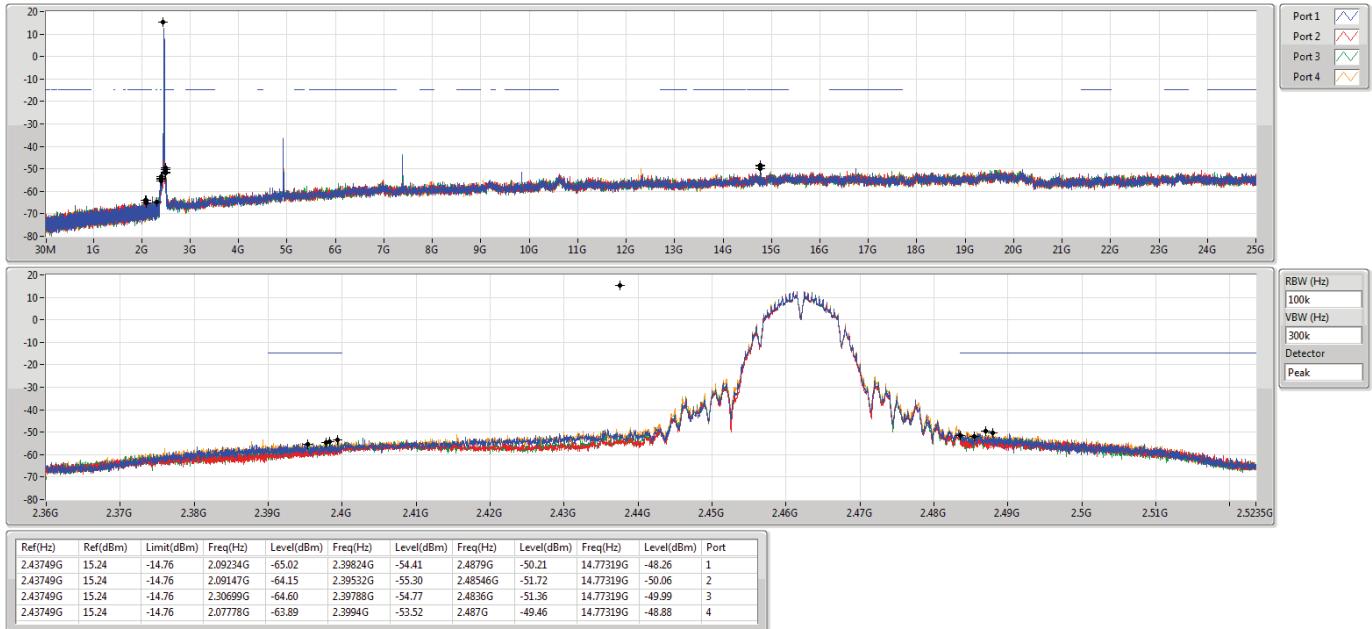
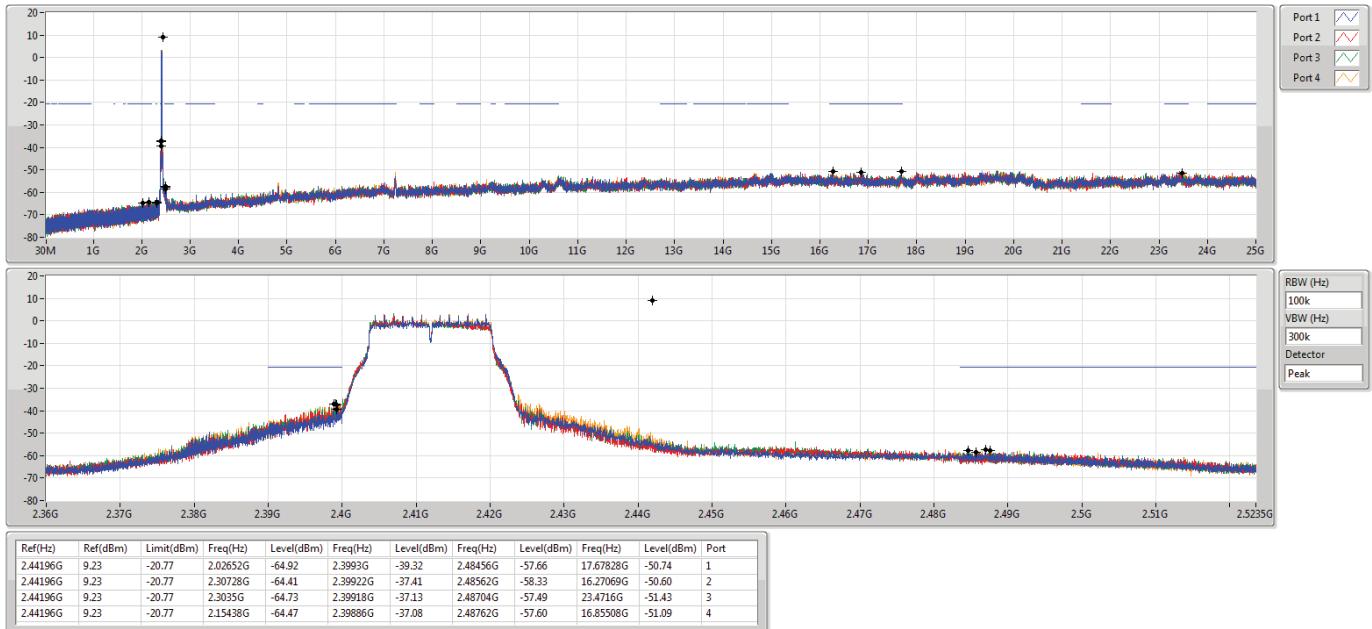
Result

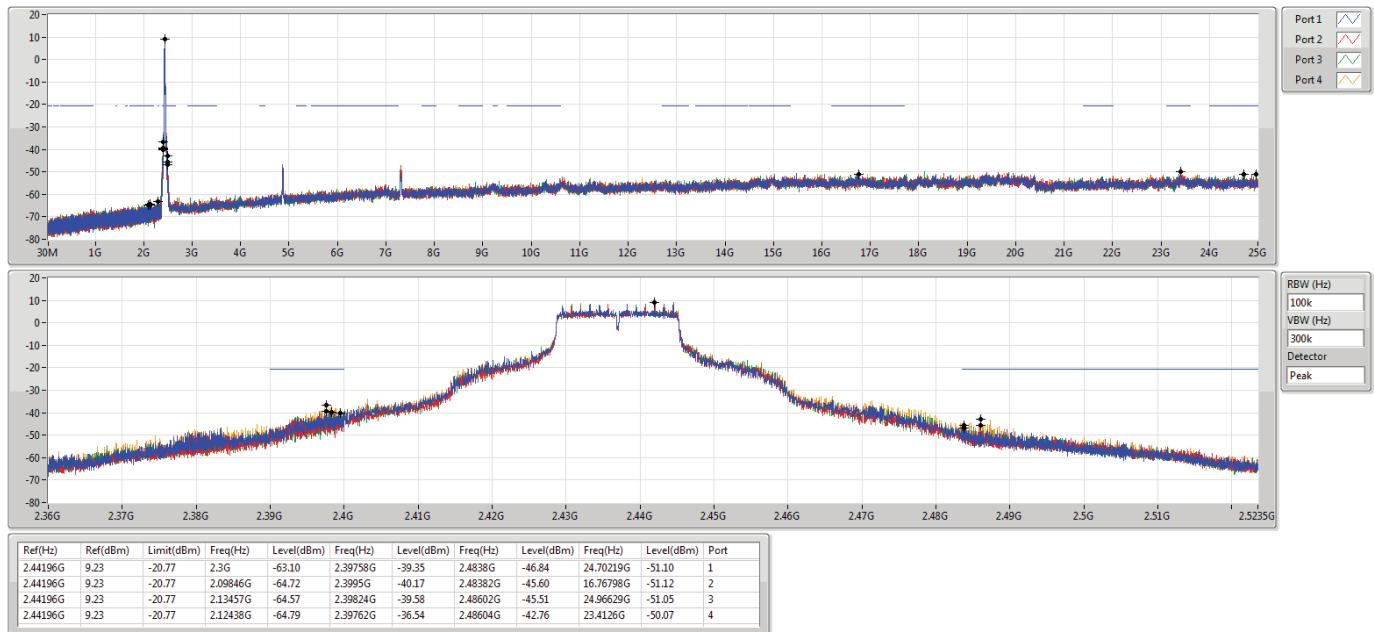
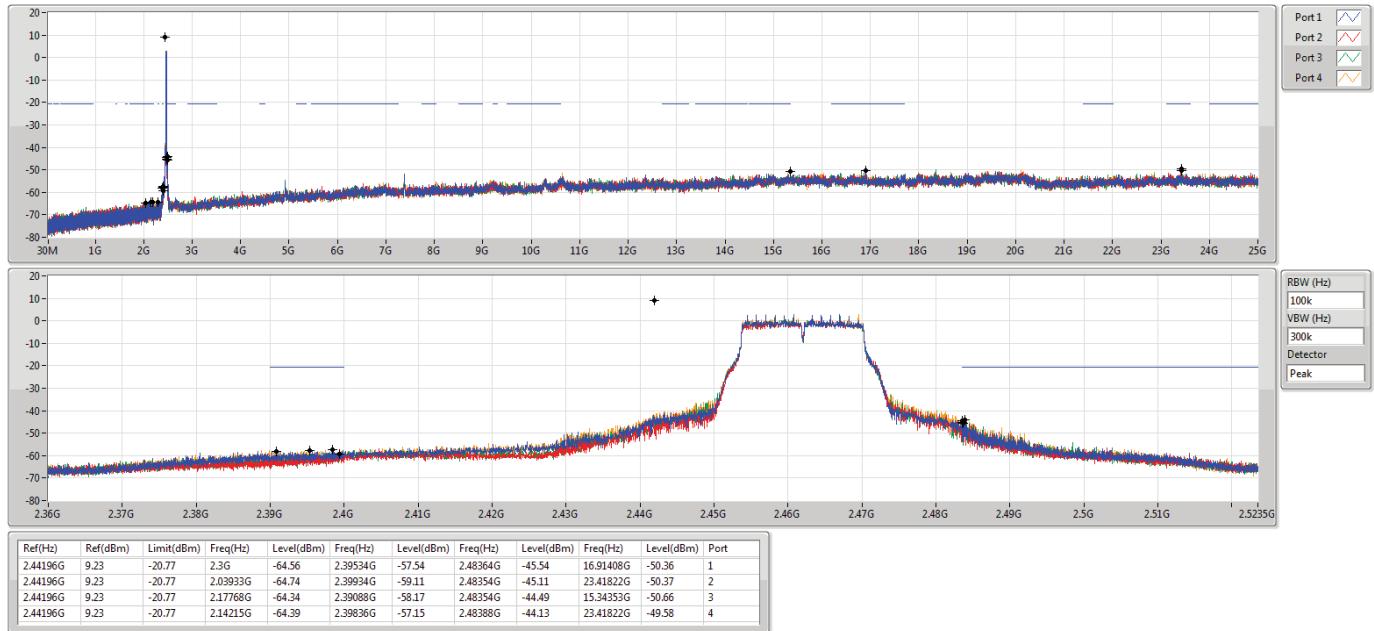
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port						
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43749G	15.24	-14.76	2.17273G	-64.44	2.39998G	-28.61	2.48424G	-52.22	7.23514G	-40.64	1
2412MHz	Pass	2.43749G	15.24	-14.76	1.95487G	-63.99	2.39996G	-28.21	2.4849G	-54.29	7.23514G	-42.65	2
2412MHz	Pass	2.43749G	15.24	-14.76	2.12962G	-64.75	2.39998G	-28.35	2.48706G	-53.68	7.23233G	-42.09	3
2412MHz	Pass	2.43749G	15.24	-14.76	1.80808G	-64.18	2.39996G	-27.83	2.48752G	-52.07	7.23514G	-41.16	4
2437MHz	Pass	2.43749G	15.24	-14.76	2.16719G	-64.56	2.39952G	-42.54	2.4837G	-49.50	14.62148G	-50.02	1
2437MHz	Pass	2.43749G	15.24	-14.76	2.30059G	-64.29	2.3995G	-41.13	2.48594G	-46.51	14.62148G	-50.20	2
2437MHz	Pass	2.43749G	15.24	-14.76	669M	-64.60	2.39946G	-42.14	2.48548G	-50.12	14.69452G	-49.97	3
2437MHz	Pass	2.43749G	15.24	-14.76	2.30059G	-63.86	2.3995G	-41.73	2.48594G	-47.90	14.62429G	-49.39	4
2462MHz	Pass	2.43749G	15.24	-14.76	2.09234G	-65.02	2.39824G	-54.41	2.4879G	-50.21	14.77319G	-48.26	1
2462MHz	Pass	2.43749G	15.24	-14.76	2.09147G	-64.15	2.39532G	-55.30	2.48546G	-51.72	14.77319G	-50.06	2
2462MHz	Pass	2.43749G	15.24	-14.76	2.30699G	-64.60	2.39788G	-54.77	2.4836G	-51.36	14.77319G	-49.99	3
2462MHz	Pass	2.43749G	15.24	-14.76	2.07778G	-63.89	2.3994G	-53.52	2.487G	-49.46	14.77319G	-48.88	4
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	9.23	-20.77	2.02652G	-64.92	2.3993G	-39.32	2.48456G	-57.66	17.67828G	-50.74	1
2412MHz	Pass	2.44196G	9.23	-20.77	2.30728G	-64.41	2.39922G	-37.41	2.48562G	-58.33	16.27069G	-50.60	2
2412MHz	Pass	2.44196G	9.23	-20.77	2.3035G	-64.73	2.39918G	-37.13	2.48704G	-57.49	23.4716G	-51.43	3
2412MHz	Pass	2.44196G	9.23	-20.77	2.15438G	-64.47	2.39886G	-37.08	2.48762G	-57.60	16.85508G	-51.09	4
2437MHz	Pass	2.44196G	9.23	-20.77	2.3G	-63.10	2.39758G	-39.35	2.4838G	-46.84	24.70219G	-51.10	1
2437MHz	Pass	2.44196G	9.23	-20.77	2.09846G	-64.72	2.3995G	-40.17	2.48382G	-45.60	16.76798G	-51.12	2
2437MHz	Pass	2.44196G	9.23	-20.77	2.13457G	-64.57	2.39824G	-39.58	2.48602G	-45.51	24.96629G	-51.05	3
2437MHz	Pass	2.44196G	9.23	-20.77	2.12438G	-64.79	2.39762G	-36.54	2.48604G	-42.76	23.4126G	-50.07	4
2462MHz	Pass	2.44196G	9.23	-20.77	2.3G	-64.56	2.39534G	-57.54	2.48364G	-45.54	16.91408G	-50.36	1
2462MHz	Pass	2.44196G	9.23	-20.77	2.03933G	-64.74	2.39934G	-59.11	2.48354G	-45.11	23.41822G	-50.37	2
2462MHz	Pass	2.44196G	9.23	-20.77	2.17768G	-64.34	2.39088G	-58.17	2.48354G	-44.49	15.34353G	-50.66	3
2462MHz	Pass	2.44196G	9.23	-20.77	2.14215G	-64.39	2.39836G	-57.15	2.48388G	-44.13	23.41822G	-49.58	4
VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.442G	6.84	-23.16	2.14972G	-64.94	2.39824G	-41.39	2.48876G	-57.43	14.99234G	-51.10	1
2412MHz	Pass	2.442G	6.84	-23.16	2.14069G	-63.20	2.3995G	-40.07	2.50446G	-59.36	16.43083G	-50.77	2
2412MHz	Pass	2.442G	6.84	-23.16	1.73061G	-64.99	2.39952G	-39.89	2.49678G	-59.26	15.34072G	-50.36	3
2412MHz	Pass	2.442G	6.84	-23.16	2.18059G	-63.61	2.39988G	-40.09	2.48394G	-58.57	23.37888G	-51.46	4
2437MHz	Pass	2.442G	6.84	-23.16	2.14185G	-65.04	2.3976G	-48.21	2.4853G	-53.48	23.42665G	-51.50	1
2437MHz	Pass	2.442G	6.84	-23.16	2.19078G	-64.40	2.39794G	-47.52	2.48586G	-52.22	15.04291G	-50.72	2
2437MHz	Pass	2.442G	6.84	-23.16	2.12642G	-64.92	2.39978G	-48.04	2.48396G	-52.25	17.69514G	-51.45	3
2437MHz	Pass	2.442G	6.84	-23.16	2.18816G	-64.72	2.39726G	-47.47	2.48446G	-52.51	17.49004G	-51.54	4
2462MHz	Pass	2.442G	6.84	-23.16	2.0105G	-63.87	2.39832G	-59.24	2.48674G	-55.48	14.95862G	-50.46	1
2462MHz	Pass	2.442G	6.84	-23.16	2.30408G	-64.90	2.39968G	-60.34	2.48574G	-55.40	16.55165G	-50.34	2
2462MHz	Pass	2.442G	6.84	-23.16	2.16748G	-63.98	2.3996G	-59.94	2.48578G	-55.68	23.36764G	-51.45	3
2462MHz	Pass	2.442G	6.84	-23.16	2.02448G	-64.89	2.3965G	-59.27	2.48638G	-53.67	24.39032G	-51.55	4
VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.45198G	0.55	-29.45	2.17917G	-64.86	2.39948G	-47.33	2.4871G	-58.95	15.2261G	-51.05	1
2422MHz	Pass	2.45198G	0.55	-29.45	2.08384G	-64.69	2.397G	-43.07	2.5007G	-58.65	15.28219G	-51.67	2
2422MHz	Pass	2.45198G	0.55	-29.45	2.30512G	-64.43	2.39072G	-46.05	2.4839G	-57.89	14.9821G	-50.86	3
2422MHz	Pass	2.45198G	0.55	-29.45	2.11619G	-65.11	2.39696G	-46.80	2.49062G	-59.17	16.60314G	-50.59	4
2437MHz	Pass	2.45198G	0.55	-29.45	2.11963G	-64.27	2.39952G	-44.64	2.48362G	-49.95	15.34109G	-51.15	1
2437MHz	Pass	2.45198G	0.55	-29.45	2.18146G	-64.59	2.39952G	-43.58	2.4875G	-48.38	16.61997G	-51.20	2
2437MHz	Pass	2.45198G	0.55	-29.45	2.19749G	-64.32	2.39952G	-44.24	2.48366G	-48.27	23.38738G	-50.43	3
2437MHz	Pass	2.45198G	0.55	-29.45	2.17859G	-64.83	2.3994G	-43.84	2.48366G	-46.99	15.23451G	-50.73	4

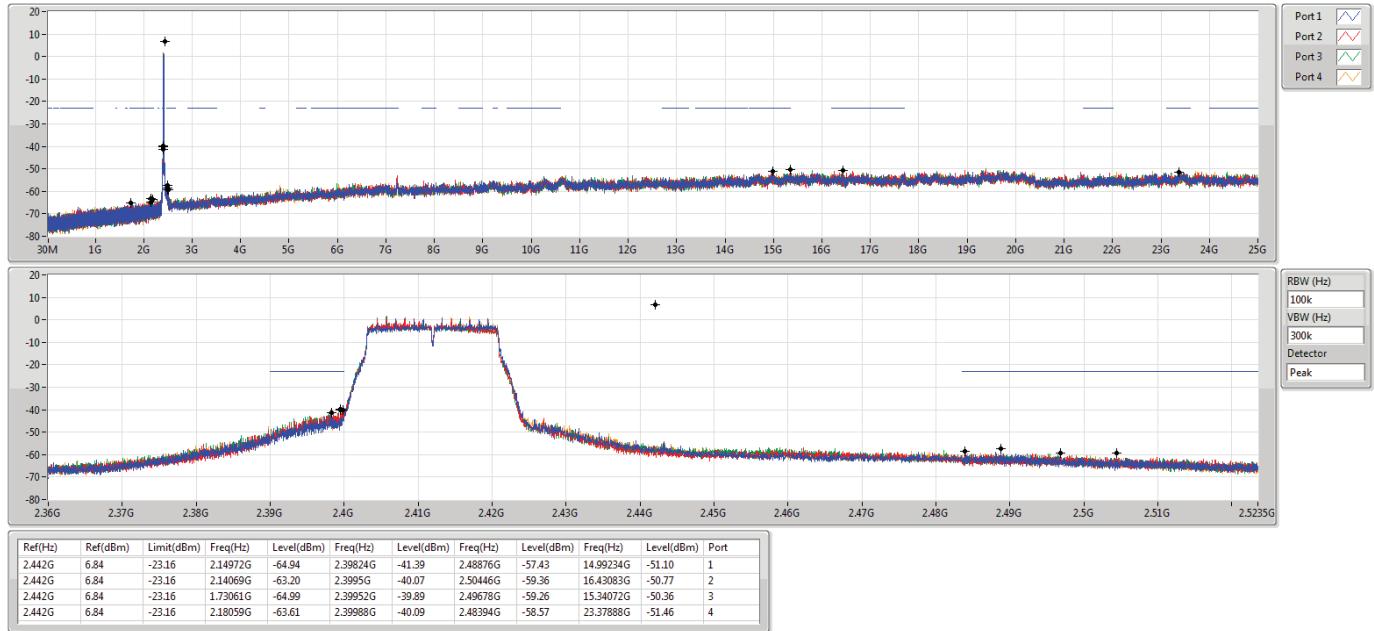
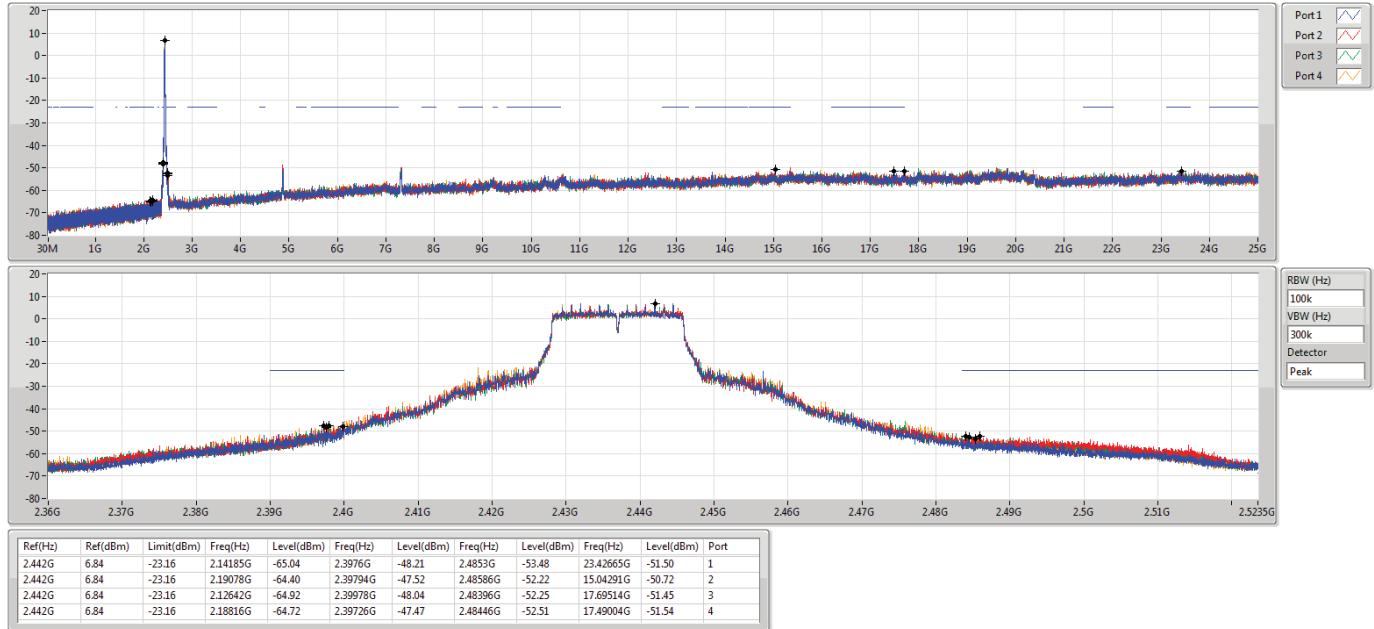


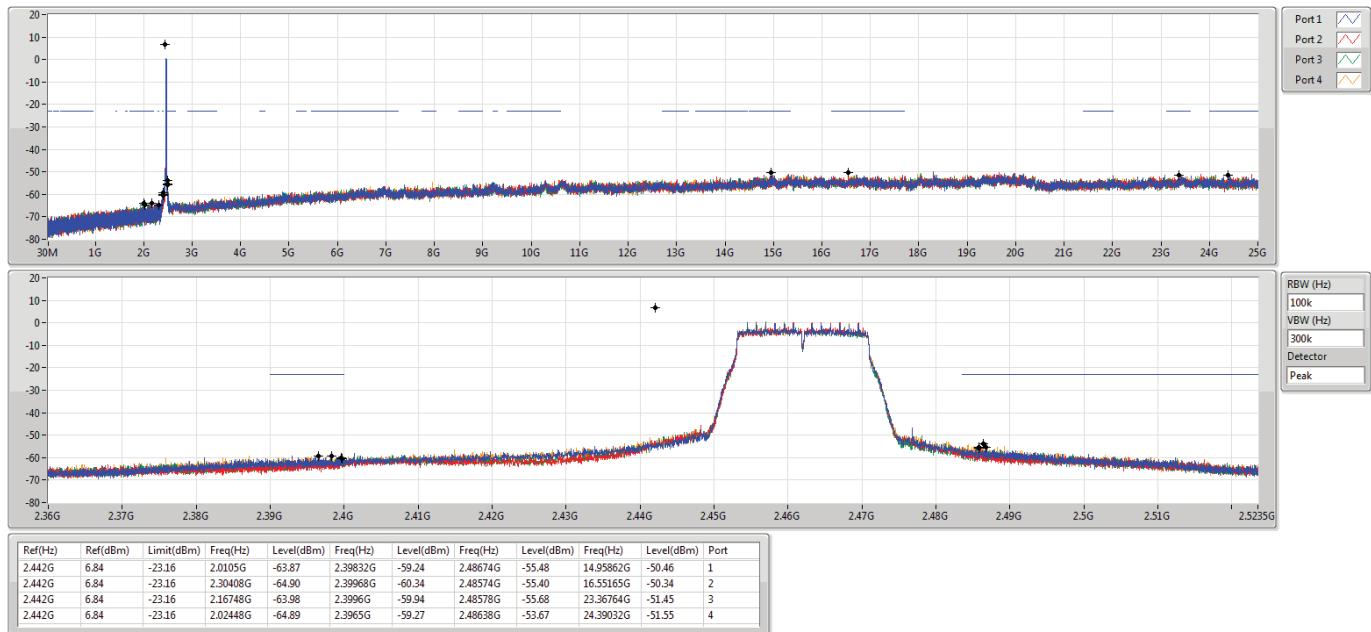
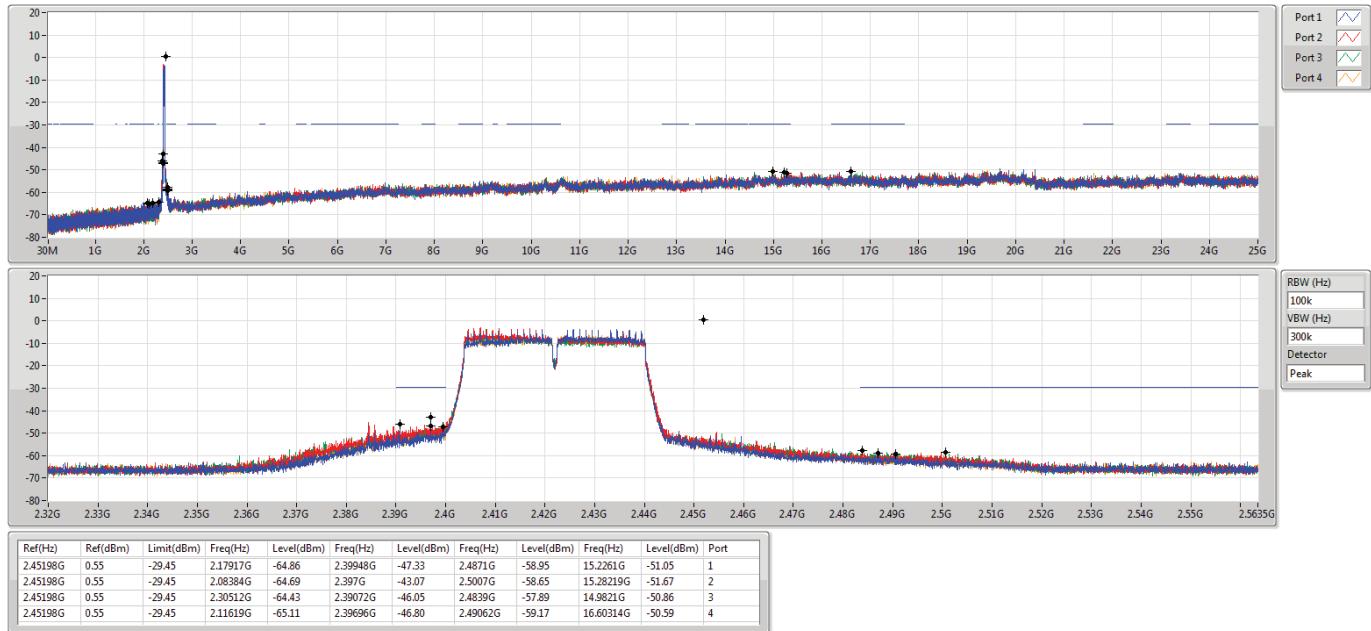
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port						
2452MHz	Pass	2.45198G	0.55	-29.45	2.07526G	-64.78	2.3986G	-54.07	2.48482G	-49.93	15.31585G	-51.29	1
2452MHz	Pass	2.45198G	0.55	-29.45	2.13508G	-64.38	2.39668G	-55.34	2.48486G	-46.85	16.35634G	-50.42	2
2452MHz	Pass	2.45198G	0.55	-29.45	2.00341G	-65.24	2.39992G	-53.02	2.4857G	-46.62	24.84575G	-51.22	3
2452MHz	Pass	2.45198G	0.55	-29.45	2.09902G	-64.06	2.39856G	-53.92	2.48482G	-47.41	16.84994G	-51.33	4
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	7.18	-22.82	2.15875G	-63.50	2.39988G	-38.70	2.48874G	-58.30	16.81574G	-51.06	1
2412MHz	Pass	2.44196G	7.18	-22.82	2.12147G	-63.36	2.39996G	-39.78	2.48542G	-59.16	23.12883G	-51.68	2
2412MHz	Pass	2.44196G	7.18	-22.82	2.11681G	-65.31	2.39892G	-39.32	2.48604G	-59.30	17.66704G	-51.28	3
2412MHz	Pass	2.44196G	7.18	-22.82	2.3035G	-64.09	2.39888G	-38.94	2.48596G	-58.53	15.20306G	-51.46	4
2437MHz	Pass	2.44196G	7.18	-22.82	2.09817G	-63.81	2.39746G	-45.93	2.48412G	-47.63	23.40136G	-51.17	1
2437MHz	Pass	2.44196G	7.18	-22.82	2.01662G	-65.06	2.39978G	-46.69	2.48372G	-49.06	15.29577G	-50.66	2
2437MHz	Pass	2.44196G	7.18	-22.82	2.12671G	-64.99	2.3996G	-45.88	2.48674G	-49.53	24.45494G	-50.79	3
2437MHz	Pass	2.44196G	7.18	-22.82	2.18845G	-64.34	2.39954G	-43.84	2.48442G	-45.50	24.15432G	-50.66	4
2462MHz	Pass	2.44196G	7.18	-22.82	2.01574G	-64.01	2.39106G	-59.37	2.48354G	-47.32	15.3323G	-50.25	1
2462MHz	Pass	2.44196G	7.18	-22.82	2.17127G	-65.12	2.398G	-61.28	2.48414G	-48.81	16.8607G	-51.02	2
2462MHz	Pass	2.44196G	7.18	-22.82	2.30758G	-63.87	2.39624G	-59.30	2.48414G	-48.45	16.87194G	-51.25	3
2462MHz	Pass	2.44196G	7.18	-22.82	2.12118G	-63.55	2.39796G	-58.44	2.48412G	-47.21	23.36203G	-51.18	4
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.45198G	0.49	-29.51	2.1285G	-64.49	2.39076G	-47.29	2.4945G	-58.12	15.33267G	-50.51	1
2422MHz	Pass	2.45198G	0.49	-29.51	2.12421G	-63.78	2.397G	-44.90	2.48698G	-58.72	16.54424G	-50.42	2
2422MHz	Pass	2.45198G	0.49	-29.51	1.98881G	-65.42	2.39696G	-44.21	2.48766G	-57.68	16.69008G	-51.23	3
2422MHz	Pass	2.45198G	0.49	-29.51	2.09787G	-65.23	2.39948G	-46.53	2.4839G	-58.77	16.83872G	-51.30	4
2437MHz	Pass	2.45198G	0.49	-29.51	2.08842G	-64.70	2.39948G	-42.83	2.48546G	-48.41	15.31585G	-50.97	1
2437MHz	Pass	2.45198G	0.49	-29.51	2.14567G	-64.02	2.39948G	-41.95	2.48542G	-45.88	24.36056G	-51.13	2
2437MHz	Pass	2.45198G	0.49	-29.51	1.98108G	-63.86	2.39952G	-42.54	2.48542G	-46.67	24.54286G	-51.37	3
2437MHz	Pass	2.45198G	0.49	-29.51	2.14167G	-64.34	2.39948G	-41.26	2.48542G	-45.89	16.31427G	-51.13	4
2452MHz	Pass	2.45198G	0.49	-29.51	1.89521G	-65.21	2.39972G	-52.36	2.48506G	-46.83	17.6829G	-51.10	1
2452MHz	Pass	2.45198G	0.49	-29.51	2.15569G	-64.78	2.39972G	-53.09	2.48642G	-45.76	14.68762G	-50.50	2
2452MHz	Pass	2.45198G	0.49	-29.51	2.14825G	-64.93	2.39972G	-53.04	2.48566G	-46.48	24.17546G	-51.45	3
2452MHz	Pass	2.45198G	0.49	-29.51	2.06037G	-64.30	2.39976G	-49.75	2.48506G	-46.14	15.31304G	-51.36	4

802.11b_Nss1,(1Mbps)_4TX
CSE NdB
2412MHz

802.11b_Nss1,(1Mbps)_4TX
CSE NdB
2437MHz


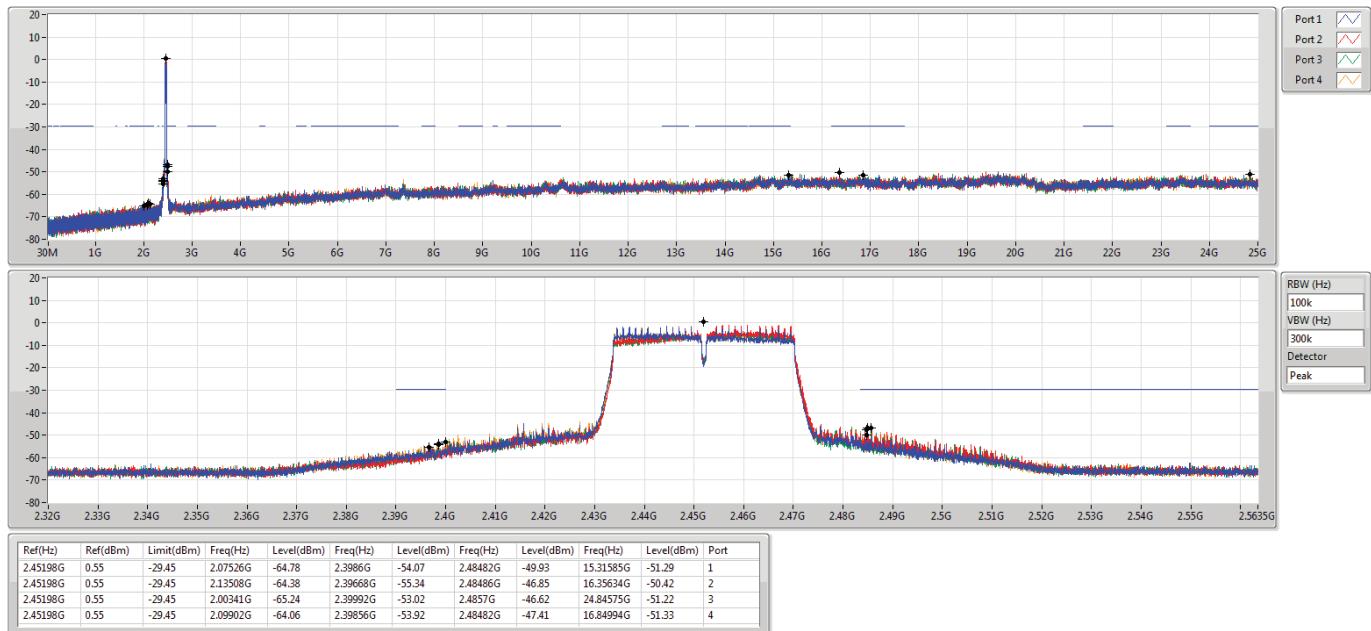
802.11b_Nss1,(1Mbps)_4TX
2462MHz

802.11g_Nss1,(6Mbps)_4TX
2412MHz


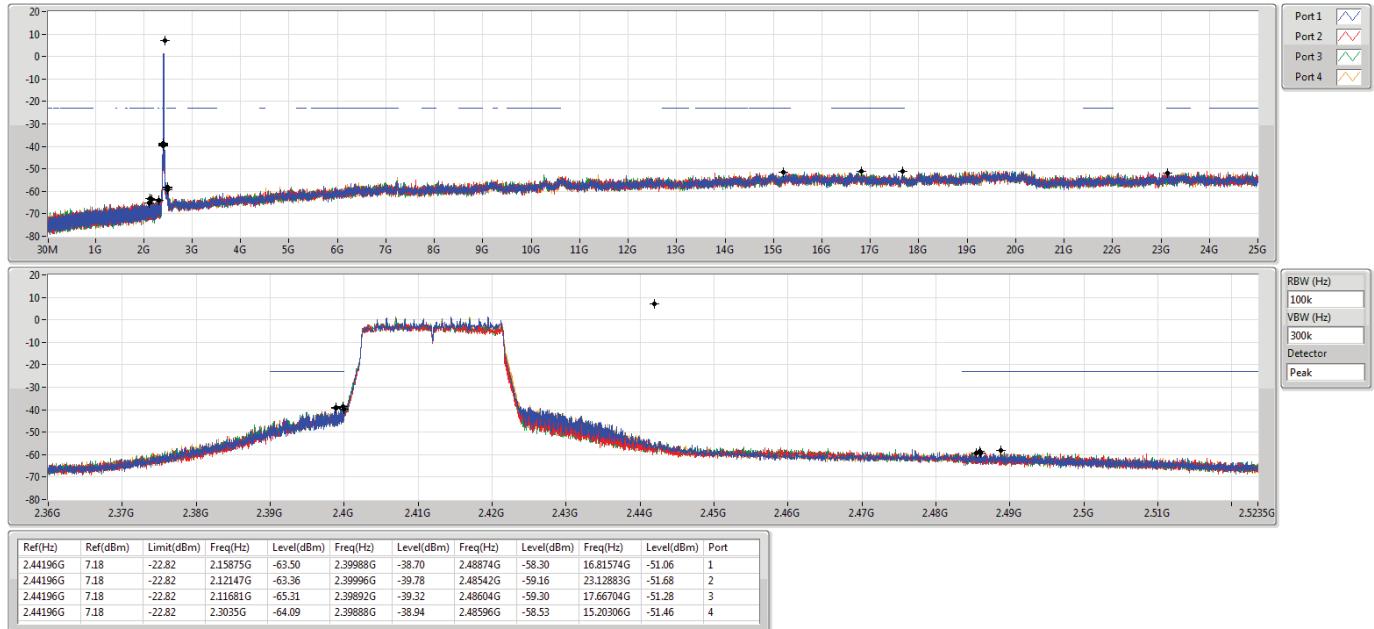
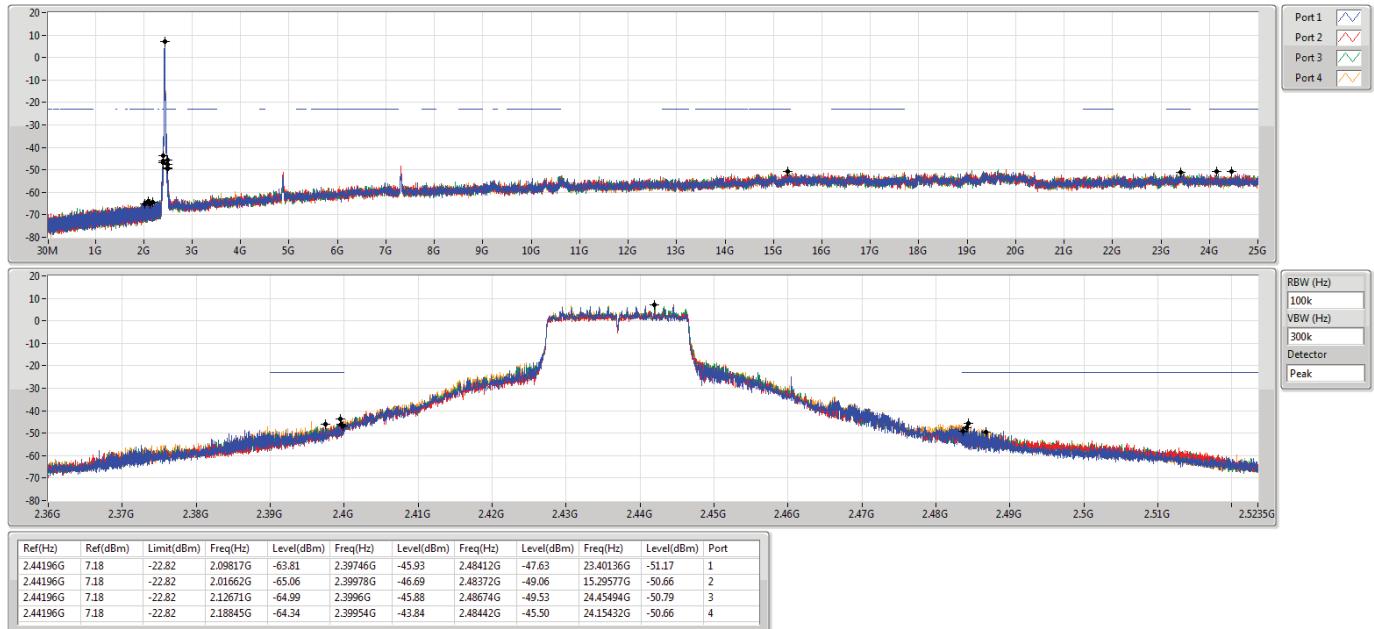
802.11g_Nss1,(6Mbps)_4TX
2437MHz

802.11g_Nss1,(6Mbps)_4TX
2462MHz


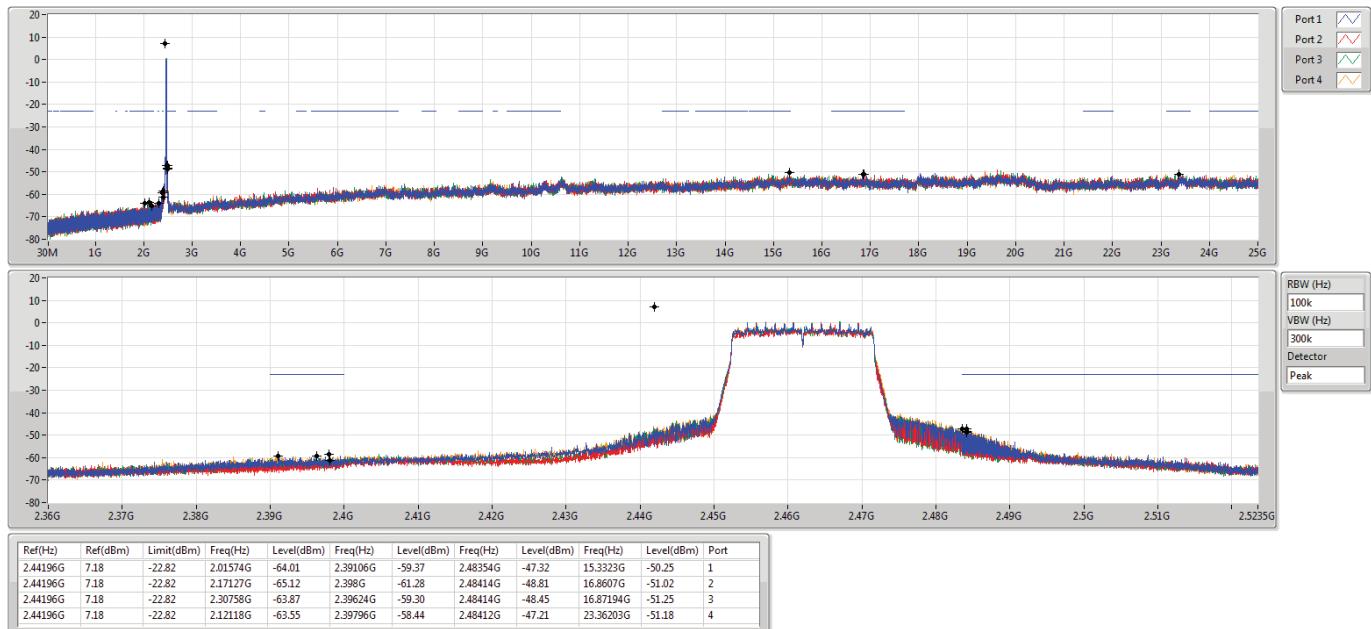
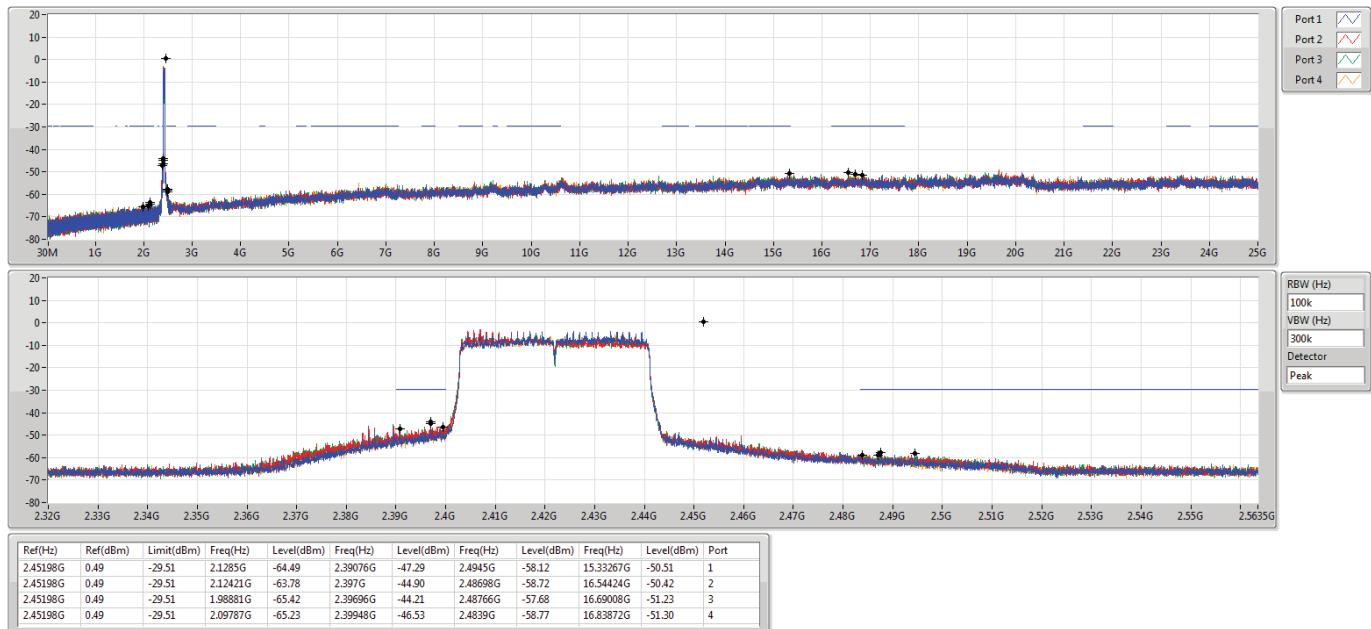
VHT20_Nss1,(MCS0)_4TX
2412MHz

VHT20_Nss1,(MCS0)_4TX
2437MHz


VHT20_Nss1,(MCS0)_4TX
2462MHz

VHT40_Nss1,(MCS0)_4TX
2422MHz


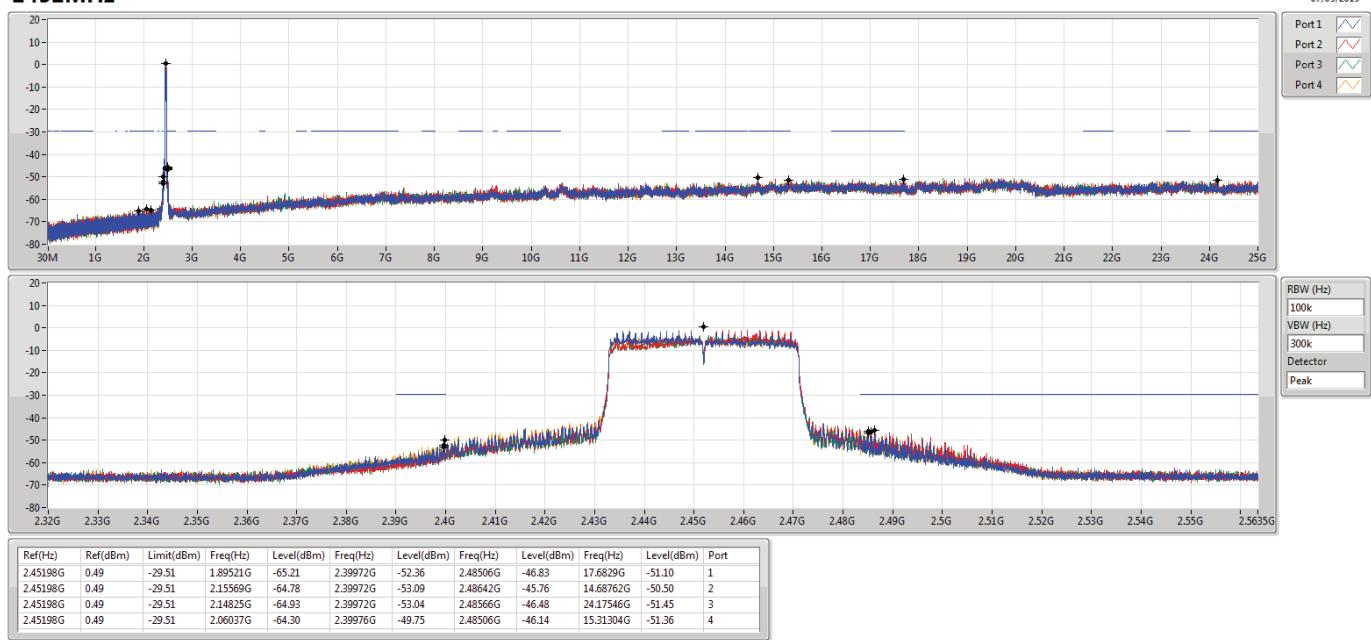
VHT40_Nss1,(MCS0)_4TX
2437MHz

VHT40_Nss1,(MCS0)_4TX
2452MHz


802.11ax HEW20_Nss1,(MCS0)_4TX
2412MHz

802.11ax HEW20_Nss1,(MCS0)_4TX
2437MHz


802.11ax HEW20_Nss1,(MCS0)_4TX
2462MHz

802.11ax HEW40_Nss1,(MCS0)_4TX
2422MHz


802.11ax HEW40_Nss1,(MCS0)_4TX
2437MHz

802.11ax HEW40_Nss1,(MCS0)_4TX
2452MHz




Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port						
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
VHT20-BF_Nss1,(MCS0)_4TX	Pass	2.43603G	10.22	-19.78	2.18962G	-51.44	2.39986G	-42.29	2.48888G	-47.91	24.16275G	-33.27	1
VHT40-BF_Nss1,(MCS0)_4TX	Pass	2.41048G	2.87	-27.13	2.30769G	-51.50	2.39672G	-49.19	2.4843G	-47.15	23.47151G	-33.73	4
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	Pass	2.43645G	10.84	-19.16	2.19574G	-51.67	2.39798G	-49.97	2.48548G	-46.88	24.09251G	-33.79	2
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	Pass	2.41349G	2.82	-27.18	1.79731G	-51.27	2.39208G	-49.29	2.48498G	-44.54	24.55968G	-33.69	2

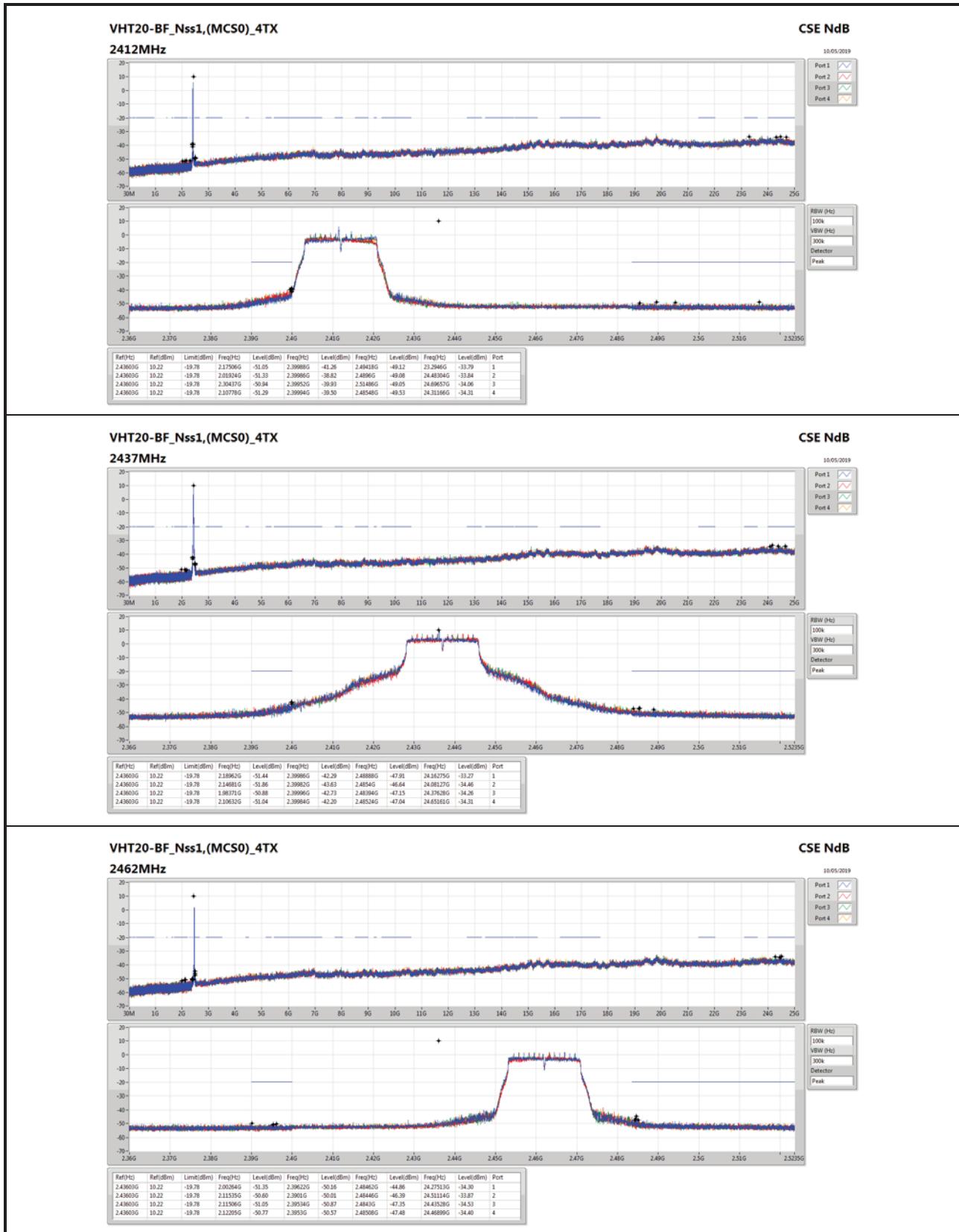
Result

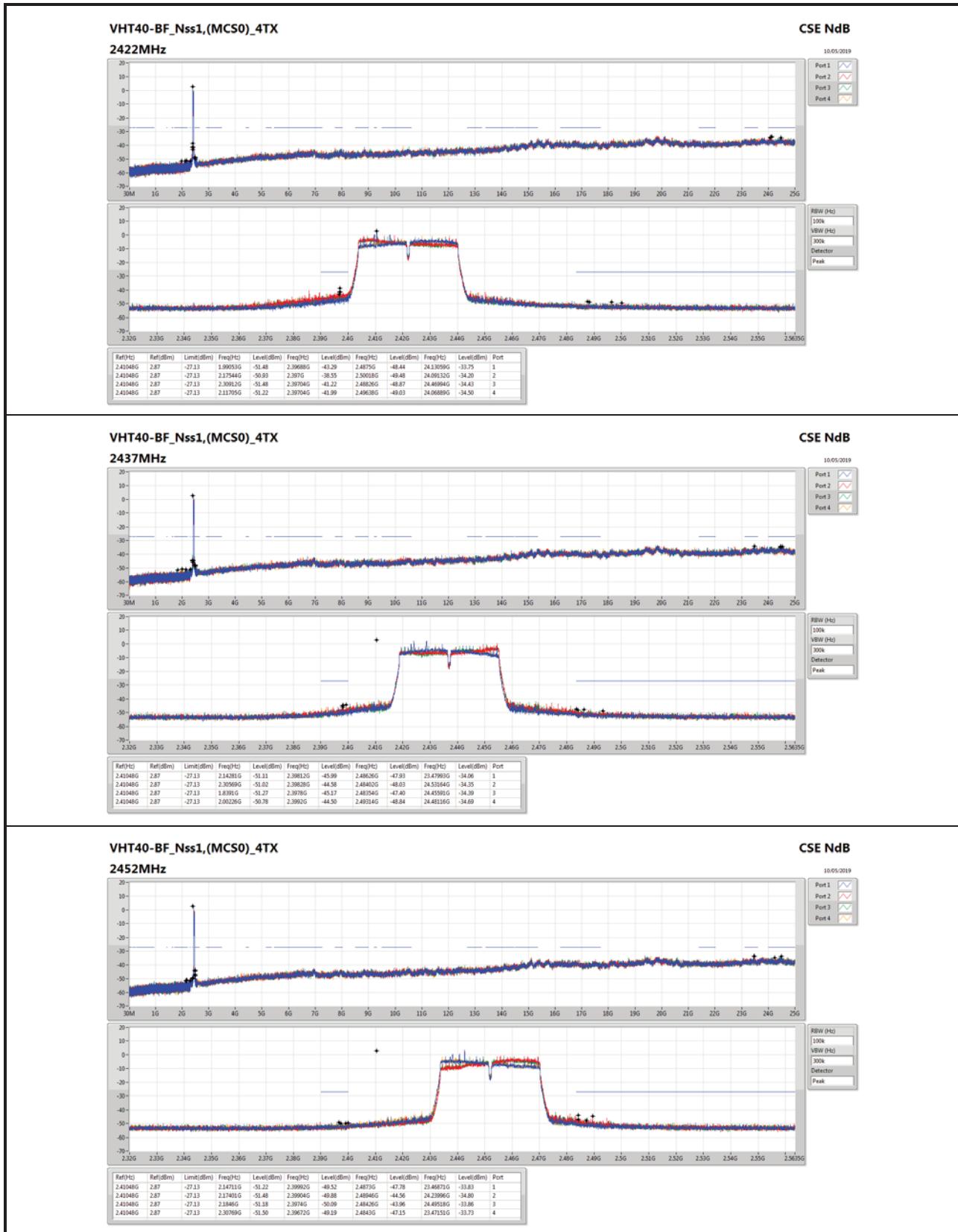
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port						
VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.17506G	-51.05	2.39988G	-41.26	2.49418G	-49.12	23.2946G	-33.79	1
2412MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.01924G	-51.33	2.39986G	-38.82	2.4896G	-49.08	24.48304G	-33.84	2
2412MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.30437G	-50.94	2.39952G	-39.93	2.51486G	-49.05	24.69657G	-34.06	3
2412MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.10778G	-51.29	2.39994G	-39.50	2.48548G	-49.53	24.31166G	-34.31	4
2437MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.18962G	-51.44	2.39986G	-42.29	2.48888G	-47.91	24.16275G	-33.27	1
2437MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.14681G	-51.86	2.39982G	-43.63	2.4854G	-46.64	24.08127G	-34.46	2
2437MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	1.98371G	-50.88	2.39996G	-42.73	2.48394G	-47.15	24.37628G	-34.26	3
2437MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.10632G	-51.04	2.39984G	-42.20	2.48524G	-47.04	24.65161G	-34.31	4
2462MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.00264G	-51.35	2.39622G	-50.16	2.48462G	-44.86	24.27513G	-34.30	1
2462MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.11535G	-50.60	2.3901G	-50.01	2.48446G	-46.39	24.51114G	-33.87	2
2462MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.11506G	-51.05	2.39534G	-50.87	2.4843G	-47.35	24.43528G	-34.53	3
2462MHz_TnomVnom	Pass	2.43603G	10.22	-19.78	2.12205G	-50.77	2.3953G	-50.57	2.48508G	-47.48	24.46899G	-34.40	4
VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	1.99053G	-51.48	2.39688G	-43.29	2.4875G	-48.44	24.13059G	-33.75	1
2422MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.17544G	-50.93	2.397G	-38.55	2.50018G	-49.48	24.09132G	-34.20	2
2422MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.30912G	-51.48	2.39704G	-41.22	2.48826G	-48.87	24.46994G	-34.43	3
2422MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.11705G	-51.22	2.39704G	-41.99	2.49638G	-49.03	24.06889G	-34.50	4
2437MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.14281G	-51.11	2.39812G	-45.99	2.48626G	-47.93	23.47993G	-34.06	1
2437MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.30569G	-51.02	2.39828G	-44.58	2.48402G	-48.03	24.53164G	-34.35	2
2437MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	1.8391G	-51.27	2.3978G	-45.17	2.48354G	-47.40	24.45591G	-34.39	3
2437MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.00226G	-50.78	2.3992G	-44.50	2.49314G	-48.84	24.48116G	-34.69	4
2452MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.14711G	-51.22	2.39992G	-49.52	2.4873G	-47.78	23.46871G	-33.83	1
2452MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.17401G	-51.48	2.39904G	-49.88	2.48946G	-44.56	24.23996G	-34.80	2
2452MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.1846G	-51.18	2.3974G	-50.09	2.48426G	-43.96	24.49518G	-33.86	3
2452MHz_TnomVnom	Pass	2.41048G	2.87	-27.13	2.30769G	-51.50	2.39672G	-49.19	2.4843G	-47.15	23.47151G	-33.73	4
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.14855G	-51.13	2.39702G	-41.14	2.49936G	-48.83	24.08127G	-34.49	1
2412MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	1.91847G	-51.01	2.39992G	-39.61	2.48912G	-49.09	24.43528G	-34.16	2
2412MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	1.9706G	-51.35	2.39984G	-41.09	2.51214G	-48.99	24.51676G	-33.98	3
2412MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.01458G	-51.82	2.39998G	-41.19	2.51222G	-49.58	24.38752G	-34.37	4
2437MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.16049G	-50.02	2.39858G	-39.66	2.49112G	-46.58	24.25266G	-34.51	1
2437MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.1072G	-50.81	2.3963G	-39.81	2.48526G	-45.12	24.46618G	-33.80	2
2437MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.18962G	-51.02	2.39956G	-41.49	2.48624G	-46.11	24.3819G	-34.29	3
2437MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.11885G	-51.37	2.39634G	-40.75	2.48406G	-46.20	24.40999G	-34.01	4
2462MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.1471G	-50.65	2.3974G	-49.25	2.4874G	-46.61	23.13726G	-34.14	1
2462MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.19574G	-51.67	2.39798G	-49.97	2.48548G	-46.88	24.09251G	-33.79	2
2462MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	2.09904G	-51.73	2.39344G	-49.70	2.48354G	-47.27	24.39875G	-34.09	3
2462MHz_TnomVnom	Pass	2.43645G	10.84	-19.16	1.82031G	-51.28	2.39588G	-50.47	2.48502G	-46.53	24.47742G	-34.17	4

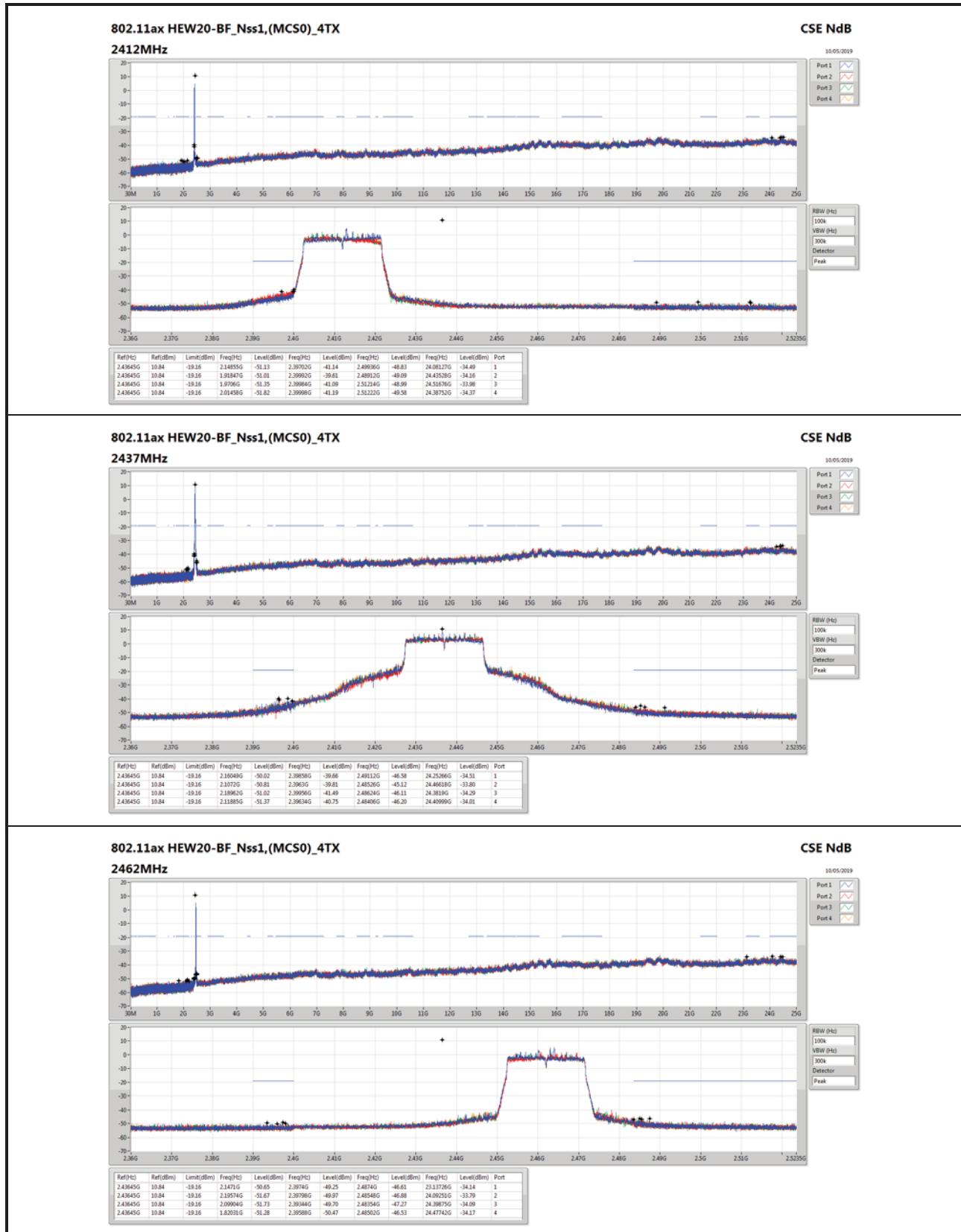


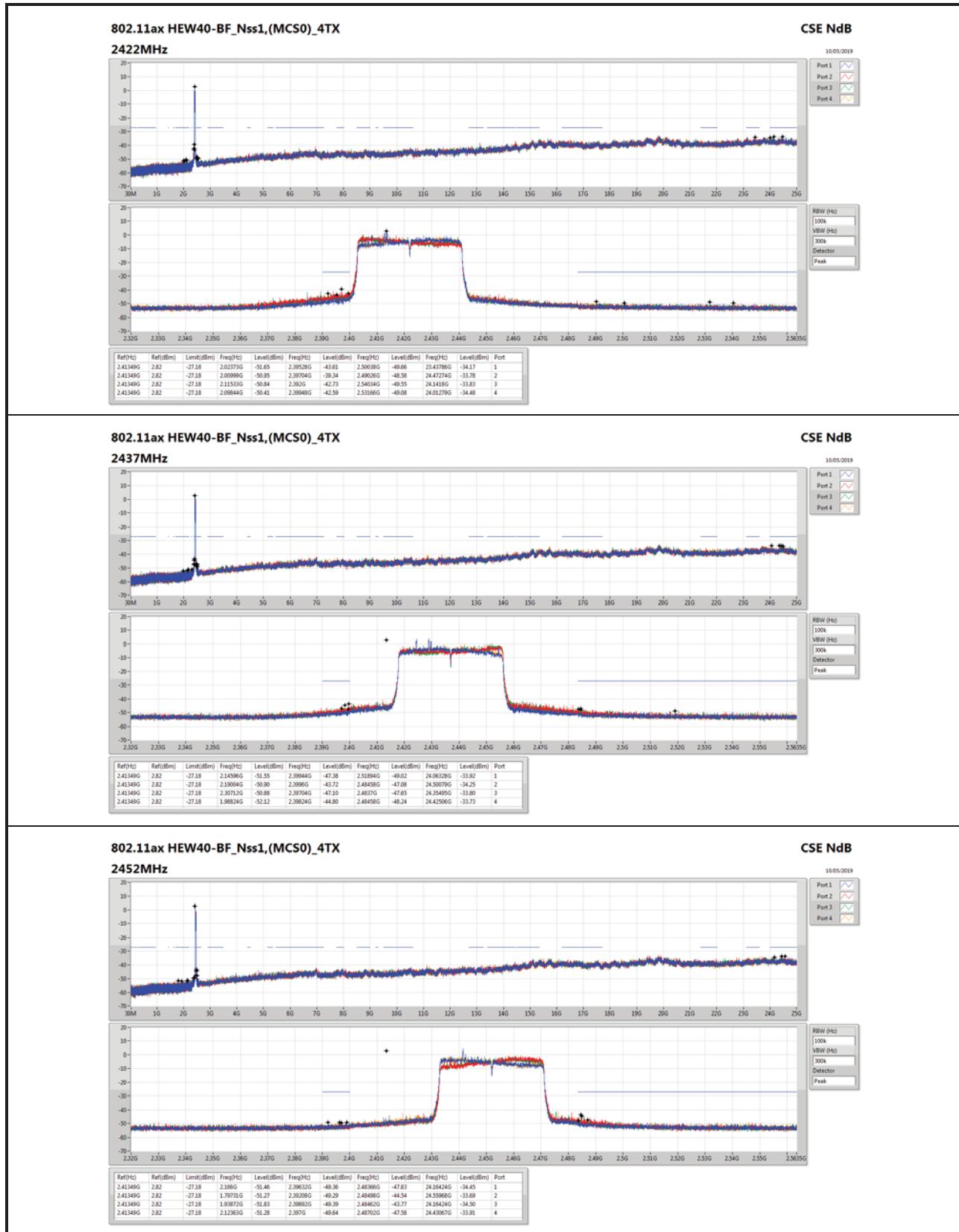
CSE Non-restricted Band Result - Beamforming <Radio 2> Appendix E.2

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port						
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.02373G	-51.65	2.39528G	-43.61	2.50038G	-49.66	23.43786G	-34.17	1
2422MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.00999G	-50.95	2.39704G	-39.34	2.49026G	-48.58	24.47274G	-33.78	2
2422MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.11533G	-50.84	2.392G	-42.73	2.54034G	-49.55	24.1418G	-33.83	3
2422MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.09844G	-50.41	2.39948G	-42.59	2.53166G	-49.08	24.01279G	-34.48	4
2437MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.14596G	-51.55	2.39944G	-47.38	2.51894G	-49.02	24.06328G	-33.92	1
2437MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.19004G	-50.90	2.3996G	-43.72	2.48458G	-47.08	24.50079G	-34.25	2
2437MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.30712G	-50.88	2.39704G	-47.10	2.4837G	-47.65	24.35495G	-33.80	3
2437MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	1.98824G	-52.12	2.39824G	-44.80	2.48458G	-48.24	24.42506G	-33.73	4
2452MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.166G	-51.46	2.39632G	-49.36	2.48366G	-47.83	24.16424G	-34.45	1
2452MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	1.79731G	-51.27	2.39208G	-49.29	2.48498G	-44.54	24.55968G	-33.69	2
2452MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	1.93872G	-51.83	2.39892G	-49.39	2.48462G	-43.77	24.16424G	-34.50	3
2452MHz_TnomVnom	Pass	2.41349G	2.82	-27.18	2.12363G	-51.28	2.397G	-49.64	2.48702G	-47.58	24.43067G	-33.91	4









**Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43645G	13.76	-16.24	2.3035G	-57.31	2.399G	-29.86	2.49046G	-48.46	7.23795G	-44.73	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.44196G	11.90	-18.10	2.30408G	-59.78	2.39824G	-29.23	2.48822G	-50.88	14.98953G	-51.52	2
VHT20_Nss1,(MCS0)_2TX	Pass	2.43073G	10.60	-19.40	2.30262G	-59.13	2.3973G	-29.02	2.48478G	-51.81	14.98391G	-50.99	2
VHT40_Nss1,(MCS0)_2TX	Pass	2.442G	1.34	-28.66	2.30941G	-61.81	2.39952G	-35.79	2.48454G	-44.48	23.4042G	-51.20	1

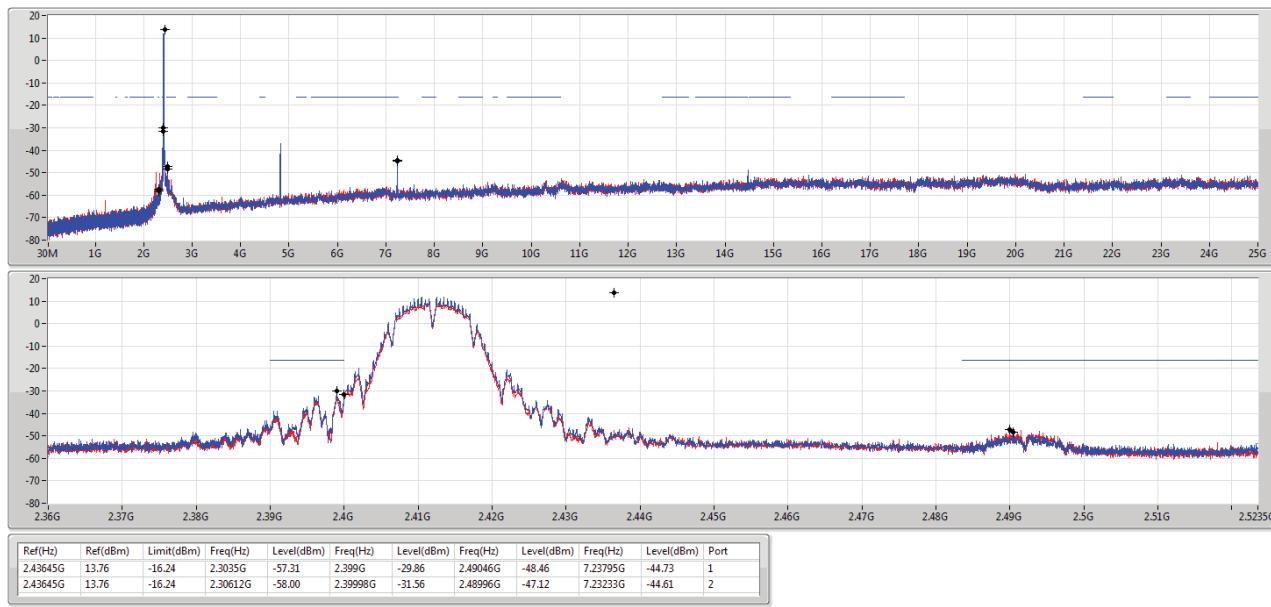


Result

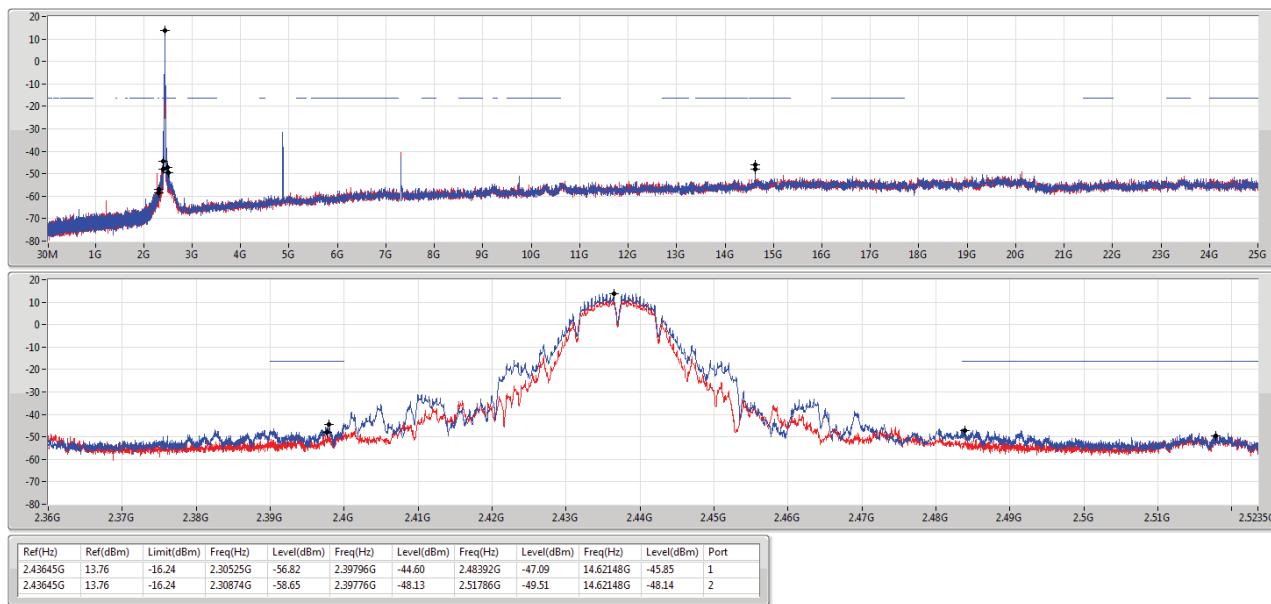
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port						
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43645G	13.76	-16.24	2.3035G	-57.31	2.399G	-29.86	2.49046G	-48.46	7.23795G	-44.73	1
2412MHz	Pass	2.43645G	13.76	-16.24	2.30612G	-58.00	2.39998G	-31.56	2.48996G	-47.12	7.23233G	-44.61	2
2437MHz	Pass	2.43645G	13.76	-16.24	2.30525G	-56.82	2.39796G	-44.60	2.48392G	-47.09	14.62148G	-45.85	1
2437MHz	Pass	2.43645G	13.76	-16.24	2.30874G	-58.65	2.39776G	-48.13	2.51786G	-49.51	14.62148G	-48.14	2
2462MHz	Pass	2.43645G	13.76	-16.24	2.30466G	-58.94	2.3907G	-52.36	2.48352G	-38.62	14.77319G	-46.94	1
2462MHz	Pass	2.43645G	13.76	-16.24	2.30059G	-47.22	2.39996G	-50.59	2.48352G	-43.28	14.77319G	-48.66	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	11.90	-18.10	2.30525G	-60.76	2.3998G	-33.70	2.49036G	-52.90	16.72022G	-51.29	1
2412MHz	Pass	2.44196G	11.90	-18.10	2.30408G	-59.78	2.39824G	-29.23	2.48822G	-50.88	14.98953G	-51.52	2
2437MHz	Pass	2.44196G	11.90	-18.10	2.30641G	-58.00	2.39948G	-37.32	2.48536G	-42.31	2.5235G	-51.12	1
2437MHz	Pass	2.44196G	11.90	-18.10	2.30758G	-57.56	2.3995G	-38.68	2.48444G	-45.67	23.4126G	-51.42	2
2462MHz	Pass	2.44196G	11.90	-18.10	2.30408G	-59.62	2.39768G	-54.88	2.48386G	-40.34	15.31263G	-51.18	1
2462MHz	Pass	2.44196G	11.90	-18.10	2.30146G	-52.86	2.39012G	-52.60	2.48388G	-39.77	23.40698G	-51.41	2
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	10.60	-19.40	2.30495G	-60.66	2.39882G	-29.73	2.48454G	-53.46	15.34072G	-50.94	1
2412MHz	Pass	2.43073G	10.60	-19.40	2.30262G	-59.13	2.3973G	-29.02	2.48478G	-51.81	14.98391G	-50.99	2
2437MHz	Pass	2.43073G	10.60	-19.40	2.30845G	-59.45	2.39758G	-37.77	2.4839G	-44.15	16.85227G	-50.42	1
2437MHz	Pass	2.43073G	10.60	-19.40	2.30961G	-57.75	2.39948G	-38.78	2.48384G	-46.21	24.89324G	-51.00	2
2462MHz	Pass	2.43073G	10.60	-19.40	2.30583G	-62.15	2.39624G	-56.32	2.4845G	-44.82	15.30982G	-50.39	1
2462MHz	Pass	2.43073G	10.60	-19.40	2.30379G	-56.01	2.39008G	-54.17	2.48568G	-41.40	14.69172G	-50.68	2
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.442G	1.34	-28.66	2.30426G	-61.33	2.397G	-41.02	2.48446G	-54.42	24.46994G	-51.12	1
2422MHz	Pass	2.442G	1.34	-28.66	2.30168G	-61.75	2.39792G	-40.06	2.4907G	-54.36	16.90884G	-50.63	2
2437MHz	Pass	2.442G	1.34	-28.66	2.30941G	-61.81	2.39952G	-35.79	2.48454G	-44.48	23.4042G	-51.20	1
2437MHz	Pass	2.442G	1.34	-28.66	2.30998G	-61.50	2.39952G	-36.12	2.48354G	-40.66	14.9821G	-51.19	2
2452MHz	Pass	2.442G	1.34	-28.66	2.30283G	-61.02	2.39724G	-48.99	2.4889G	-43.85	23.42384G	-51.35	1
2452MHz	Pass	2.442G	1.34	-28.66	2.30712G	-57.26	2.39764G	-48.34	2.48818G	-39.17	16.90323G	-51.27	2

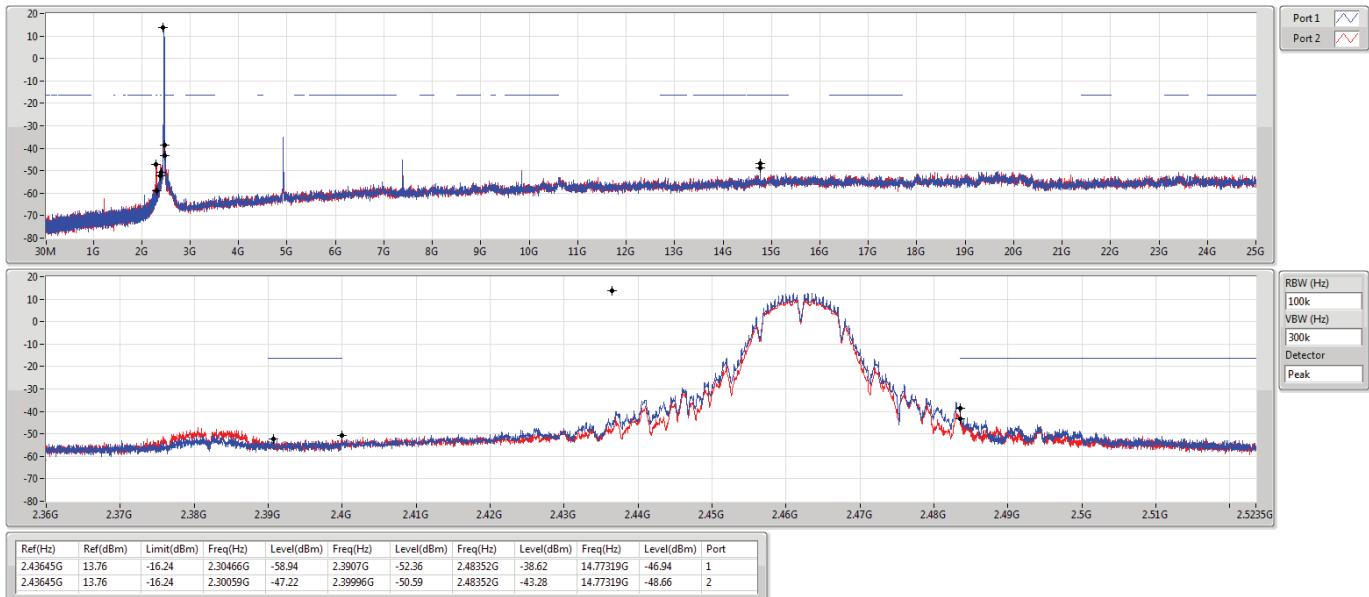
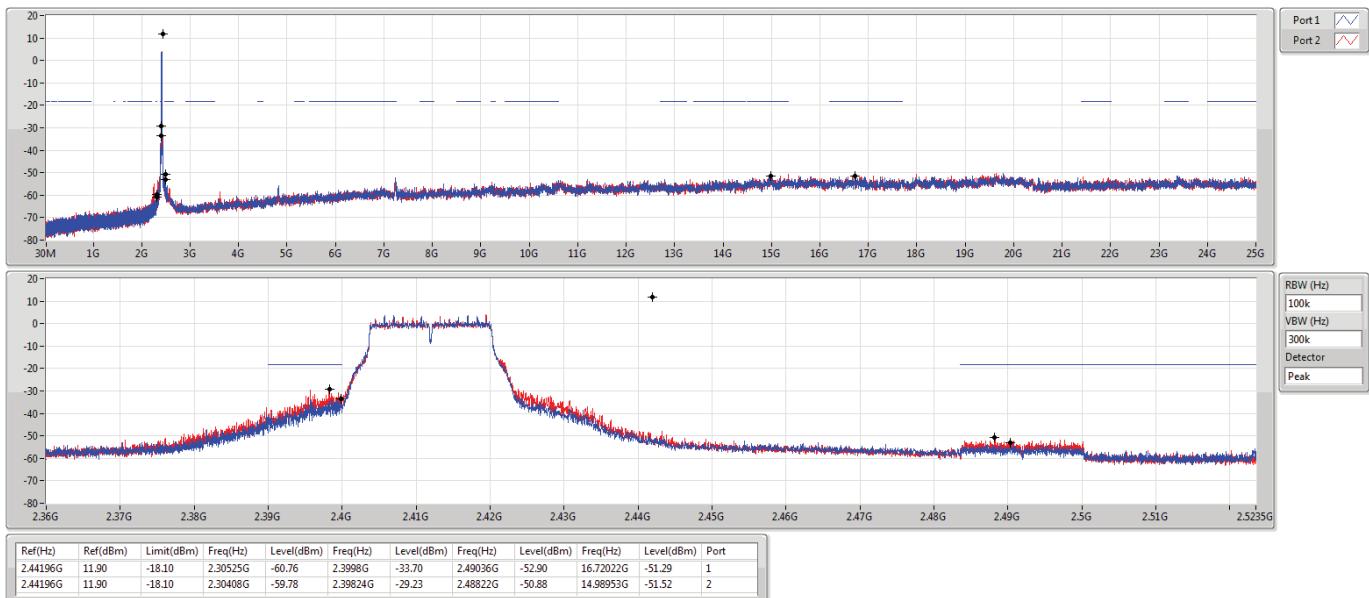
802.11b_Nss1,(1Mbps)_2TX
CSE NdB
2412MHz

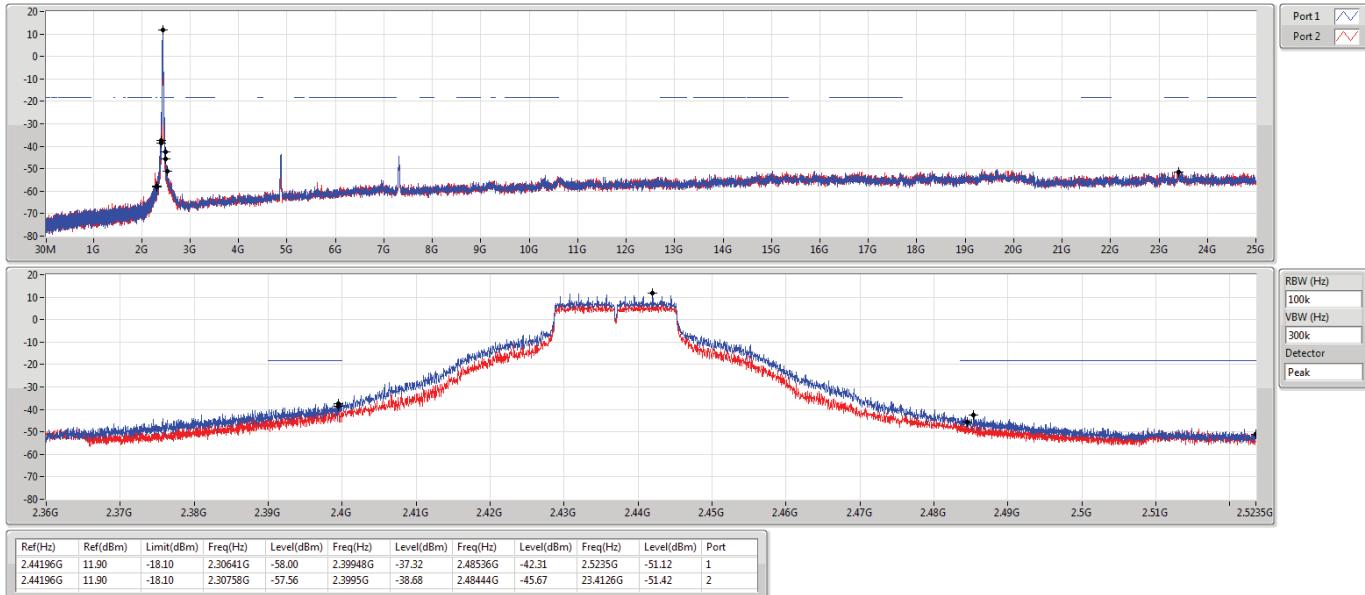
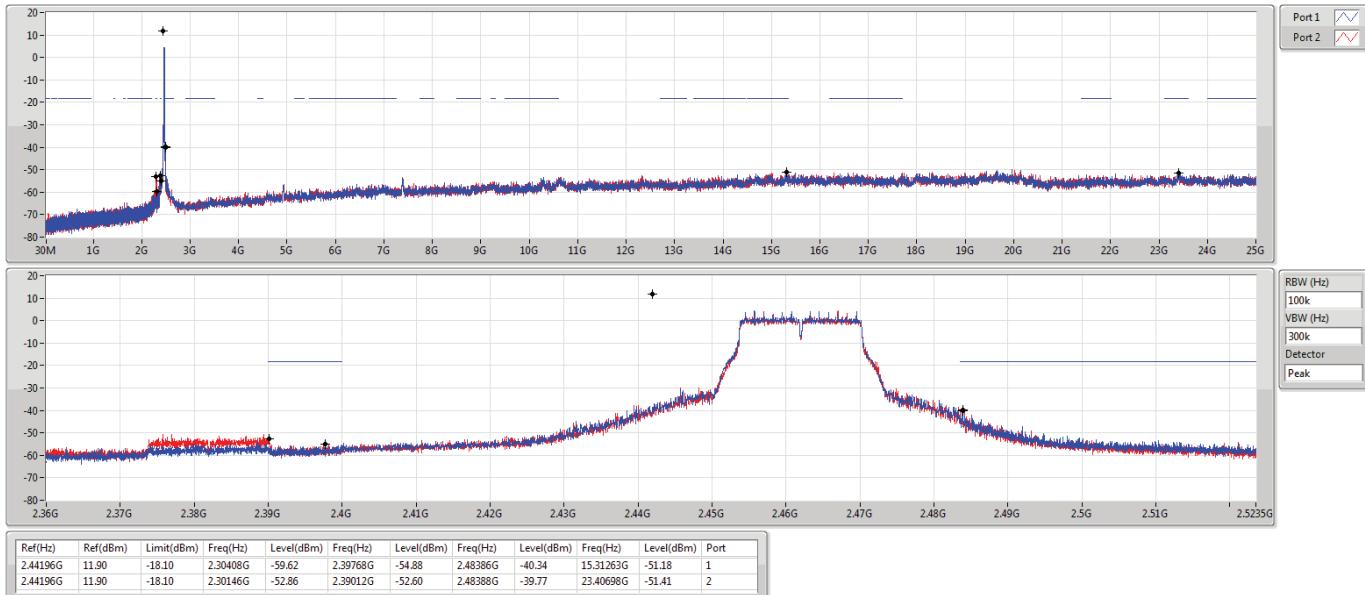
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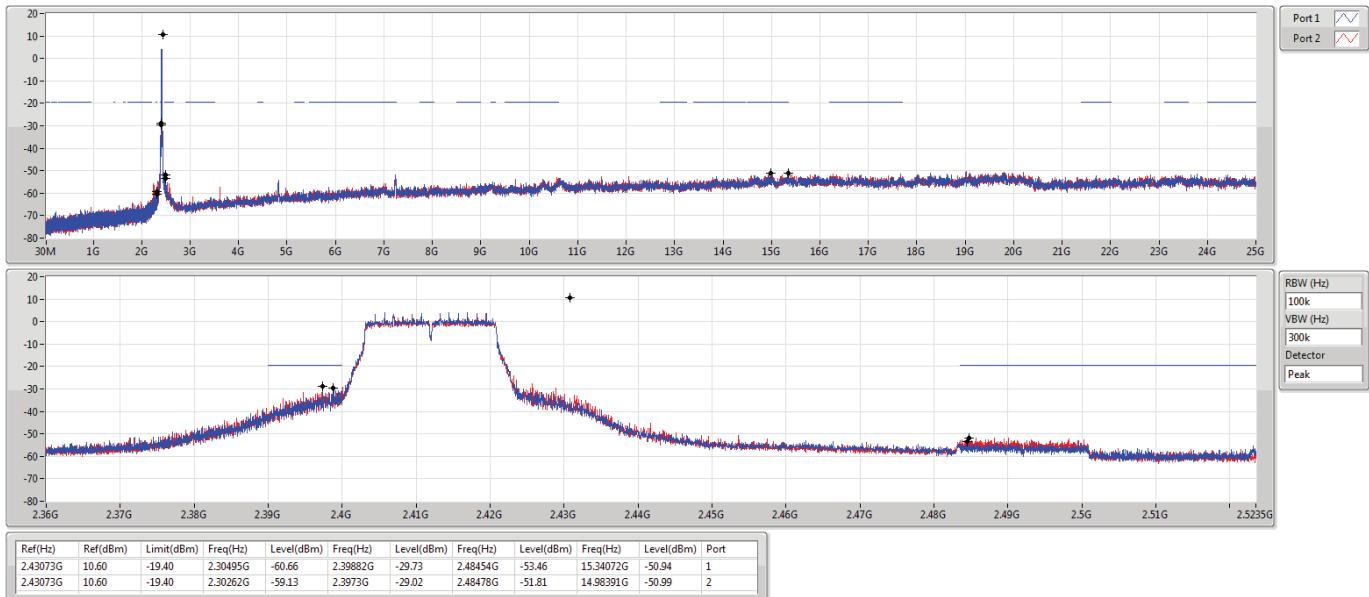
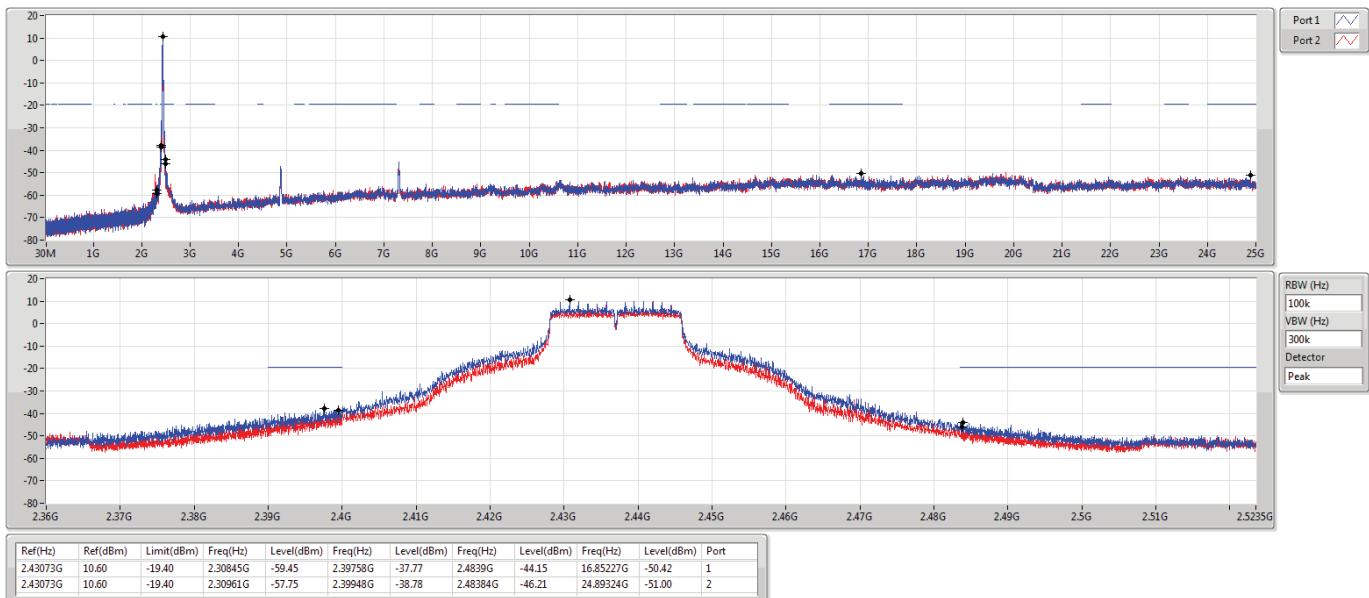
 Port 1
 Port 2

802.11b_Nss1,(1Mbps)_2TX
CSE NdB
2437MHz

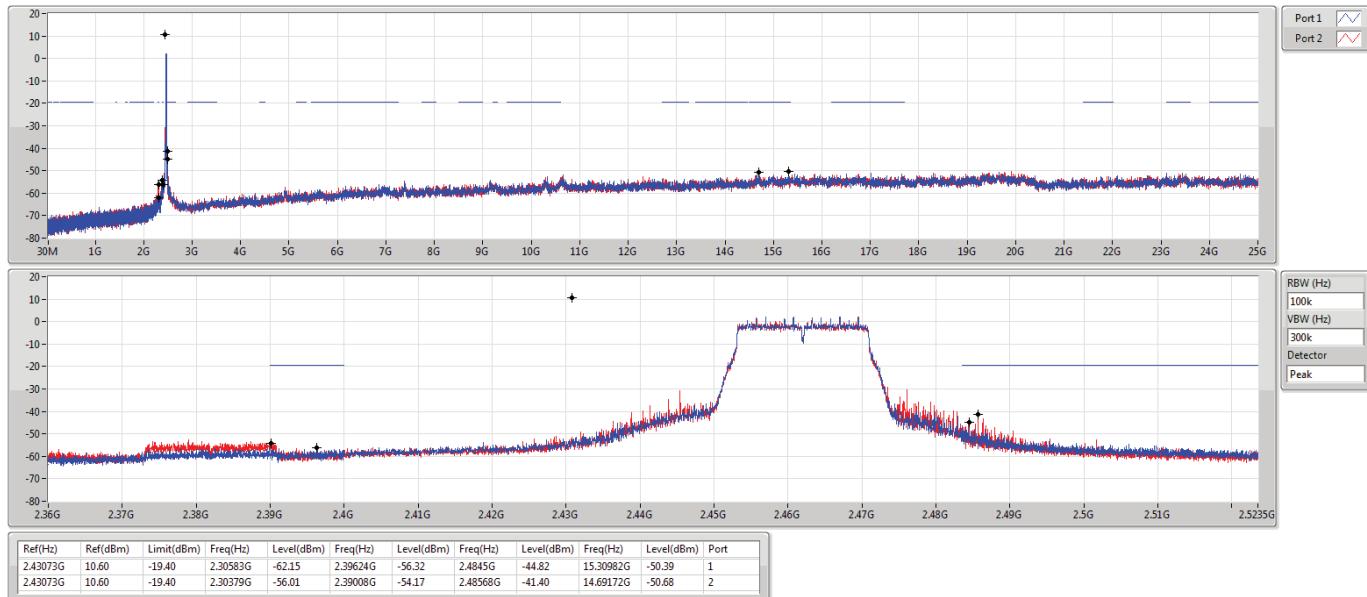
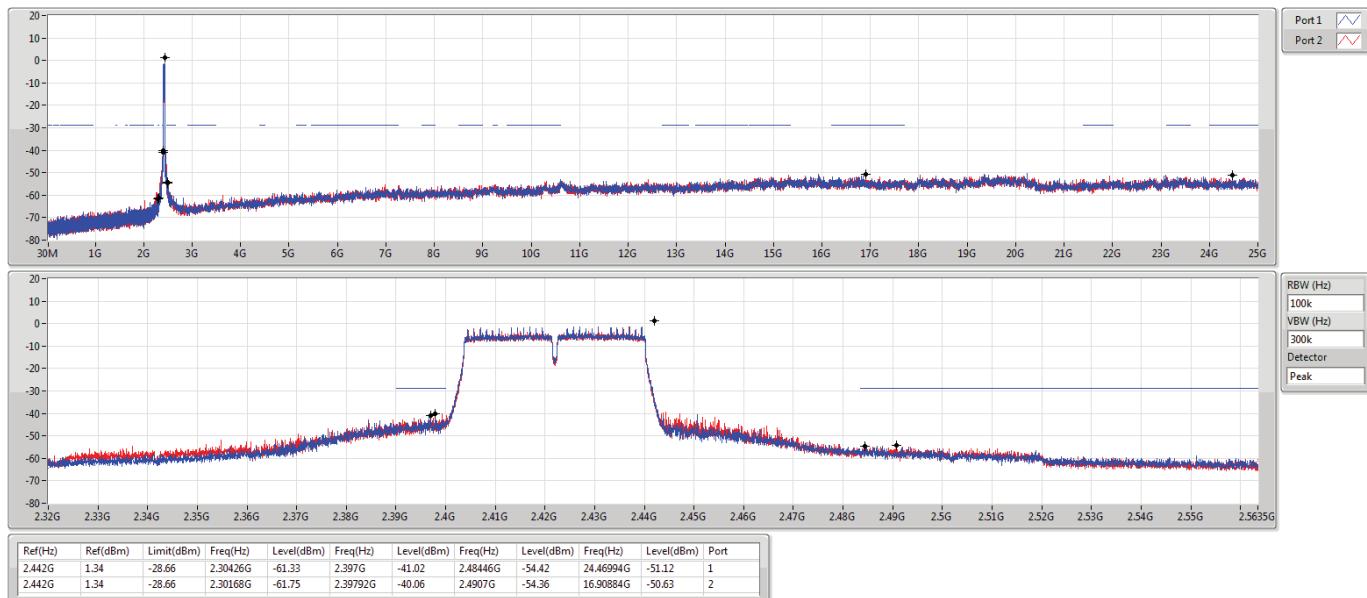
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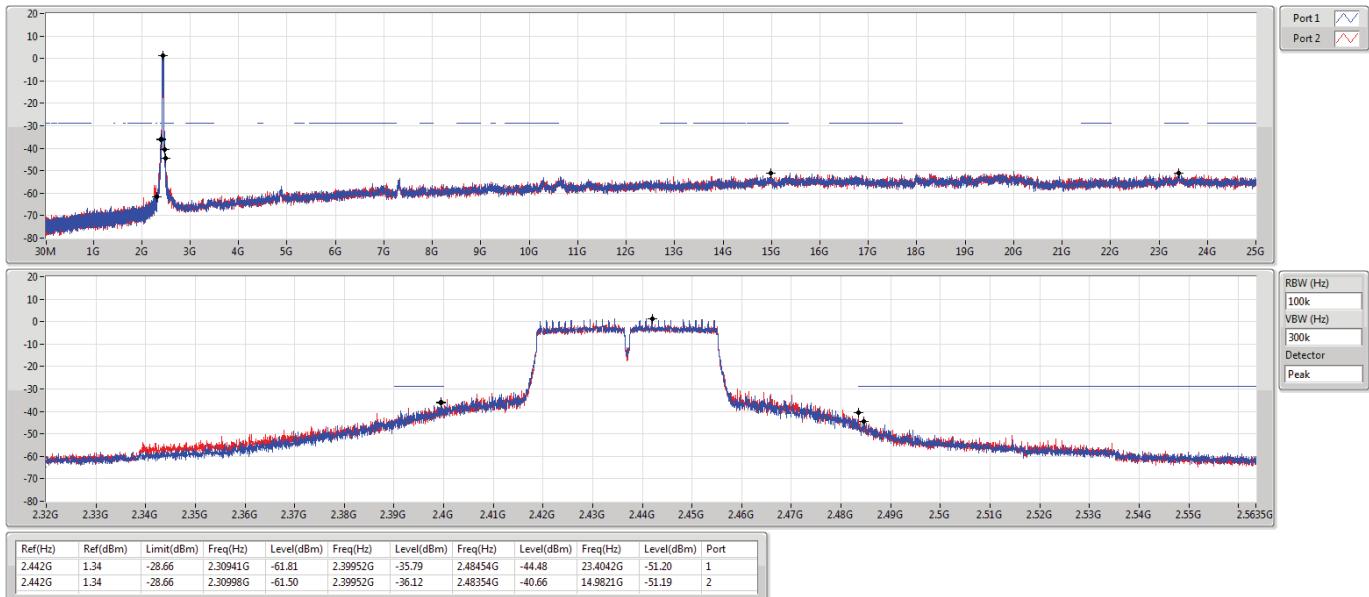
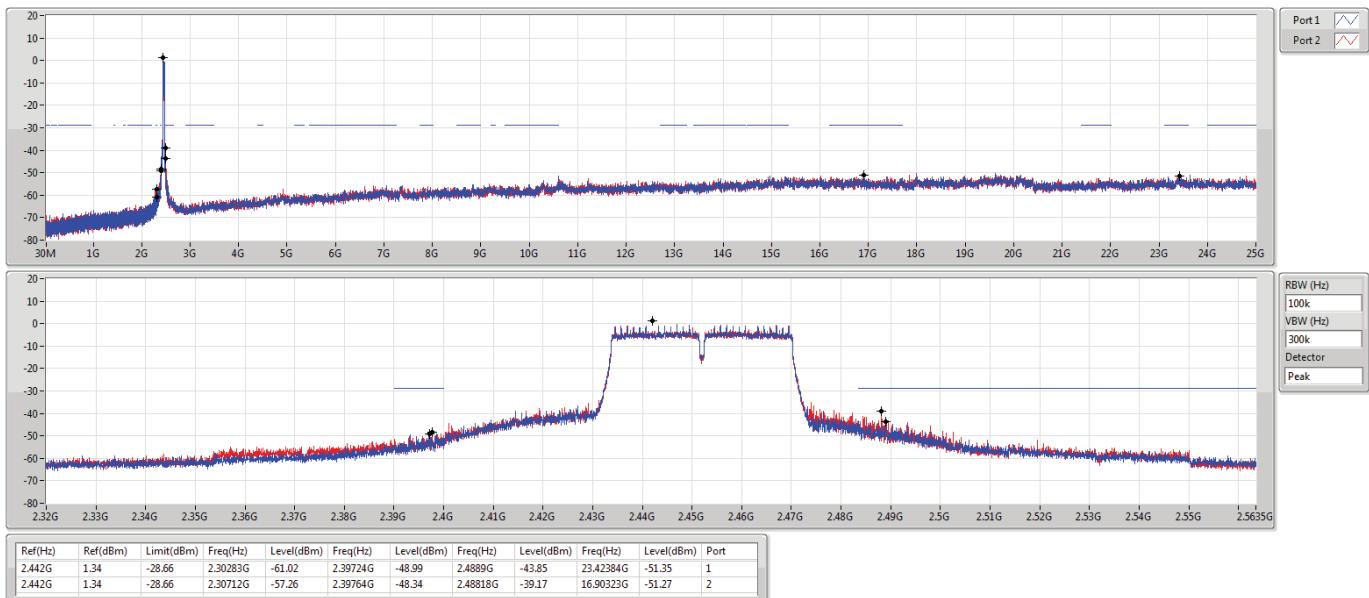
 Port 1
 Port 2


802.11b_Nss1,(1Mbps)_2TX
CSE NdB
2462MHz

802.11g_Nss1,(6Mbps)_2TX
CSE NdB
2412MHz


802.11g_Nss1,(6Mbps)_2TX
2437MHz

802.11g_Nss1,(6Mbps)_2TX
2462MHz


VHT20_Nss1,(MCS0)_2TX
2412MHz

VHT20_Nss1,(MCS0)_2TX
2437MHz


VHT20_Nss1,(MCS0)_2TX
2462MHz

VHT40_Nss1,(MCS0)_2TX
2422MHz


VHT40_Nss1,(MCS0)_2TX
2437MHz

VHT40_Nss1,(MCS0)_2TX
2452MHz




Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	PK	43.58M	34.17	40.00	-5.83	-20.09	3	Vertical	0	1.00	-



Result

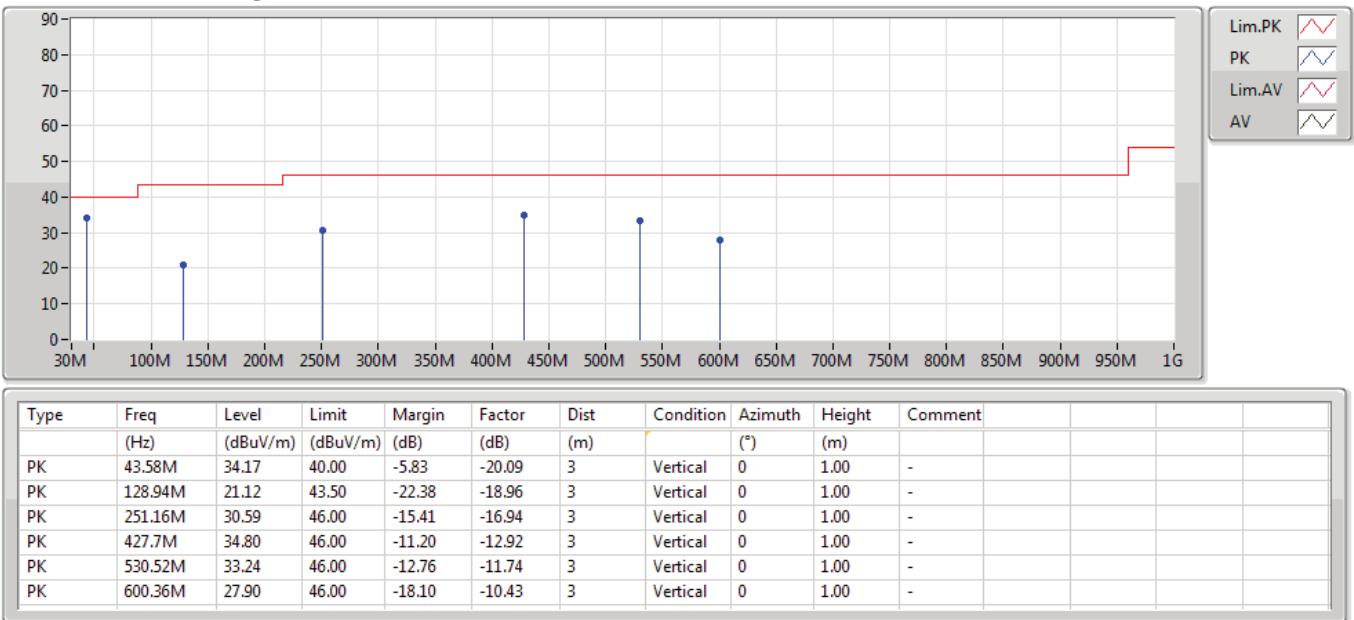
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	43.58M	34.17	40.00	-5.83	-20.09	3	Vertical	0	1.00	-
2437MHz	Pass	PK	128.94M	21.12	43.50	-22.38	-18.96	3	Vertical	0	1.00	-
2437MHz	Pass	PK	251.16M	30.59	46.00	-15.41	-16.94	3	Vertical	0	1.00	-
2437MHz	Pass	PK	427.7M	34.80	46.00	-11.20	-12.92	3	Vertical	0	1.00	-
2437MHz	Pass	PK	530.52M	33.24	46.00	-12.76	-11.74	3	Vertical	0	1.00	-
2437MHz	Pass	PK	600.36M	27.90	46.00	-18.10	-10.43	3	Vertical	0	1.00	-
2437MHz	Pass	PK	41.64M	21.70	40.00	-18.30	-19.06	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	92.08M	26.60	43.50	-16.90	-21.91	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	255.04M	28.18	46.00	-17.82	-16.35	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	423.82M	33.57	46.00	-12.43	-12.96	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	526.64M	34.34	46.00	-11.66	-11.76	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	596.48M	25.71	46.00	-20.29	-10.46	3	Horizontal	360	1.00	-



802.11ax HEW40_Nss1,(MCS0)_4TX

10/05/2019

2437MHz_Adapter

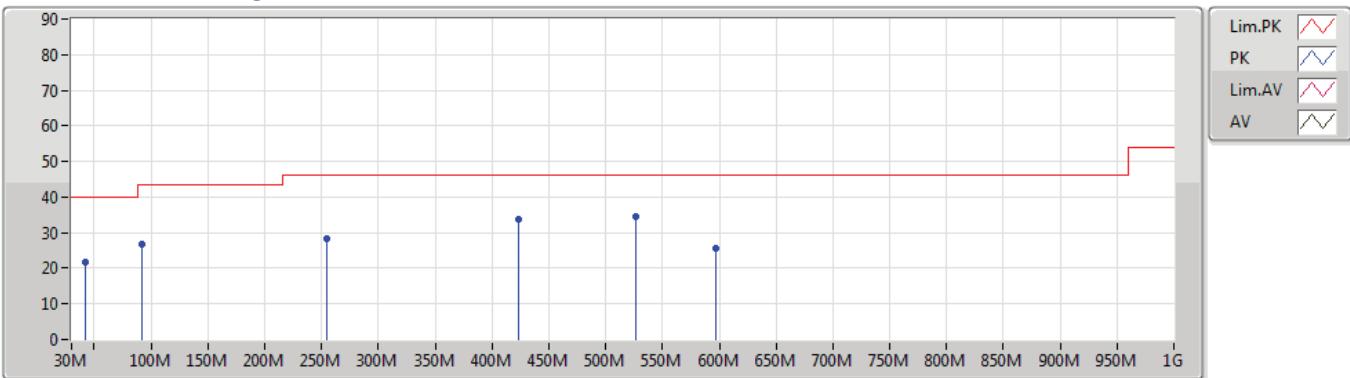




802.11ax HEW40_Nss1,(MCS0)_4TX

10/05/2019

2437MHz_Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment			
PK	41.64M	21.70	40.00	-18.30	-19.06	3	Horizontal	360	1.00	-			
PK	92.08M	26.60	43.50	-16.90	-21.91	3	Horizontal	360	1.00	-			
PK	255.04M	28.18	46.00	-17.82	-16.35	3	Horizontal	360	1.00	-			
PK	423.82M	33.57	46.00	-12.43	-12.96	3	Horizontal	360	1.00	-			
PK	526.64M	34.34	46.00	-11.66	-11.76	3	Horizontal	360	1.00	-			
PK	596.48M	25.71	46.00	-20.29	-10.46	3	Horizontal	360	1.00	-			



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	Pass	AV	2.39G	52.88	54.00	-1.12	32.23	3	Horizontal	4	2.94	-
802.11g_Nss1,(6Mbps)_4TX	Pass	AV	2.4862G	52.89	54.00	-1.11	32.10	3	Vertical	310	2.99	-
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	AV	2.389G	52.76	54.00	-1.24	32.22	3	Vertical	314	2.75	-
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	AV	2.3898G	52.94	54.00	-1.06	32.23	3	Vertical	315	2.68	-



RSE TX above 1GHz- Non-Beamforming <Radio 2> - Internal Antenna

Appendix F.2

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.387G	52.35	54.00	-1.65	32.23	3	Vertical	158	2.41	-
2412MHz	Pass	AV	2.4112G	111.56	Inf	-Inf	32.19	3	Vertical	158	2.41	-
2412MHz	Pass	PK	2.3884G	61.48	74.00	-12.52	32.23	3	Vertical	158	2.41	-
2412MHz	Pass	PK	2.4128G	113.56	Inf	-Inf	32.18	3	Vertical	158	2.41	-
2412MHz	Pass	AV	2.39G	52.54	54.00	-1.46	32.23	3	Horizontal	289	2.67	-
2412MHz	Pass	AV	2.4112G	110.83	Inf	-Inf	32.19	3	Horizontal	289	2.67	-
2412MHz	Pass	PK	2.3898G	61.81	74.00	-12.19	32.23	3	Horizontal	289	2.67	-
2412MHz	Pass	PK	2.4112G	112.81	Inf	-Inf	32.19	3	Horizontal	289	2.67	-
2412MHz	Pass	AV	4.82394G	46.23	54.00	-7.77	8.16	3	Vertical	173	2.73	-
2412MHz	Pass	PK	4.824G	51.30	74.00	-22.70	8.16	3	Vertical	173	2.73	-
2412MHz	Pass	AV	4.82394G	47.31	54.00	-6.69	8.16	3	Horizontal	261	2.61	-
2412MHz	Pass	PK	4.82388G	51.68	74.00	-22.32	8.16	3	Horizontal	261	2.61	-
2417MHz	Pass	AV	2.3874G	52.10	54.00	-1.90	32.23	3	Vertical	309	2.75	-
2417MHz	Pass	AV	2.4162G	114.84	Inf	-Inf	32.18	3	Vertical	309	2.75	-
2417MHz	Pass	PK	2.388G	62.12	74.00	-11.88	32.23	3	Vertical	309	2.75	-
2417MHz	Pass	PK	2.4162G	116.75	Inf	-Inf	32.18	3	Vertical	309	2.75	-
2417MHz	Pass	AV	2.39G	52.88	54.00	-1.12	32.23	3	Horizontal	4	2.94	-
2417MHz	Pass	AV	2.4162G	117.02	Inf	-Inf	32.18	3	Horizontal	4	2.94	-
2417MHz	Pass	PK	2.3888G	62.02	74.00	-11.98	32.22	3	Horizontal	4	2.94	-
2417MHz	Pass	PK	2.416G	118.97	Inf	-Inf	32.18	3	Horizontal	4	2.94	-
2437MHz	Pass	AV	2.3898G	49.57	54.00	-4.43	32.23	3	Vertical	309	2.68	-
2437MHz	Pass	AV	2.4362G	117.51	Inf	-Inf	32.16	3	Vertical	309	2.68	-
2437MHz	Pass	AV	2.4858G	52.24	54.00	-1.76	32.10	3	Vertical	309	2.68	-
2437MHz	Pass	PK	2.3898G	60.06	74.00	-13.94	32.23	3	Vertical	309	2.68	-
2437MHz	Pass	PK	2.4362G	119.43	Inf	-Inf	32.16	3	Vertical	309	2.68	-
2437MHz	Pass	PK	2.4835G	62.30	74.00	-11.70	32.10	3	Vertical	309	2.68	-
2437MHz	Pass	AV	2.3898G	48.91	54.00	-5.09	32.23	3	Horizontal	123	2.41	-
2437MHz	Pass	AV	2.4362G	110.37	Inf	-Inf	32.16	3	Horizontal	123	2.41	-
2437MHz	Pass	AV	2.4835G	52.24	54.00	-1.76	32.10	3	Horizontal	123	2.41	-
2437MHz	Pass	PK	2.3798G	59.20	74.00	-14.80	32.25	3	Horizontal	123	2.41	-
2437MHz	Pass	PK	2.4362G	112.38	Inf	-Inf	32.16	3	Horizontal	123	2.41	-
2437MHz	Pass	PK	2.4838G	60.90	74.00	-13.10	32.10	3	Horizontal	123	2.41	-
2437MHz	Pass	AV	4.87394G	38.54	54.00	-15.46	8.25	3	Vertical	314	1.90	-
2437MHz	Pass	AV	7.30974G	51.16	54.00	-2.84	14.47	3	Vertical	288	2.53	-
2437MHz	Pass	PK	4.87376G	47.00	74.00	-27.00	8.25	3	Vertical	314	1.90	-
2437MHz	Pass	PK	7.31136G	57.59	74.00	-16.41	14.47	3	Vertical	288	2.53	-
2437MHz	Pass	AV	4.87394G	40.73	54.00	-13.27	8.25	3	Horizontal	284	2.99	-
2437MHz	Pass	AV	7.3098G	44.50	54.00	-9.50	14.47	3	Horizontal	200	2.42	-
2437MHz	Pass	PK	4.874G	47.60	74.00	-26.40	8.25	3	Horizontal	284	2.99	-
2437MHz	Pass	PK	7.3107G	53.62	74.00	-20.38	14.47	3	Horizontal	200	2.42	-
2457MHz	Pass	AV	2.4562G	115.90	Inf	-Inf	32.13	3	Vertical	0	2.79	-
2457MHz	Pass	AV	2.4836G	52.57	54.00	-1.43	32.10	3	Vertical	0	2.79	-
2457MHz	Pass	PK	2.4578G	117.90	Inf	-Inf	32.13	3	Vertical	0	2.79	-
2457MHz	Pass	PK	2.484G	62.10	74.00	-11.90	32.10	3	Vertical	0	2.79	-
2457MHz	Pass	AV	2.4562G	107.80	Inf	-Inf	32.13	3	Horizontal	288	2.55	-
2457MHz	Pass	AV	2.4842G	48.03	54.00	-5.97	32.10	3	Horizontal	288	2.55	-
2457MHz	Pass	PK	2.456G	109.80	Inf	-Inf	32.13	3	Horizontal	288	2.55	-



**RSE TX above 1GHz- Non-Beamforming <Radio 2> - Internal
Antenna**

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2457MHz	Pass	PK	2.4835G	59.22	74.00	-14.78	32.10	3	Horizontal	288	2.55	-
2462MHz	Pass	AV	2.4612G	112.31	Inf	-Inf	32.13	3	Vertical	304	2.90	-
2462MHz	Pass	AV	2.4835G	52.88	54.00	-1.12	32.10	3	Vertical	304	2.90	-
2462MHz	Pass	PK	2.461G	114.38	Inf	-Inf	32.13	3	Vertical	304	2.90	-
2462MHz	Pass	PK	2.4838G	61.74	74.00	-12.26	32.10	3	Vertical	304	2.90	-
2462MHz	Pass	AV	2.4612G	103.90	Inf	-Inf	32.13	3	Horizontal	133	2.61	-
2462MHz	Pass	AV	2.4864G	48.03	54.00	-5.97	32.10	3	Horizontal	133	2.61	-
2462MHz	Pass	PK	2.461G	103.92	Inf	-Inf	32.13	3	Horizontal	133	2.61	-
2462MHz	Pass	PK	2.4836G	59.97	74.00	-14.03	32.10	3	Horizontal	133	2.61	-
2462MHz	Pass	AV	4.924G	42.71	54.00	-11.29	8.39	3	Vertical	129	2.87	-
2462MHz	Pass	AV	7.38588G	43.14	54.00	-10.86	14.20	3	Vertical	202	2.06	-
2462MHz	Pass	PK	4.92388G	48.79	74.00	-25.21	8.39	3	Vertical	129	2.87	-
2462MHz	Pass	PK	7.38558G	52.66	74.00	-21.34	14.20	3	Vertical	202	2.06	-
2462MHz	Pass	AV	4.92392G	42.75	54.00	-11.25	8.39	3	Horizontal	260	2.81	-
2462MHz	Pass	AV	7.3859G	41.17	54.00	-12.83	14.20	3	Horizontal	136	2.51	-
2462MHz	Pass	PK	4.92394G	48.62	74.00	-25.38	8.39	3	Horizontal	260	2.81	-
2462MHz	Pass	PK	7.38619G	51.96	74.00	-22.04	14.20	3	Horizontal	136	2.51	-
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3882G	52.86	54.00	-1.14	32.23	3	Vertical	312	2.83	-
2412MHz	Pass	AV	2.4078G	104.89	Inf	-Inf	32.19	3	Vertical	312	2.83	-
2412MHz	Pass	PK	2.3882G	71.73	74.00	-2.27	32.23	3	Vertical	312	2.83	-
2412MHz	Pass	PK	2.4074G	112.90	Inf	-Inf	32.20	3	Vertical	312	2.83	-
2412MHz	Pass	AV	2.3896G	47.68	54.00	-6.32	32.23	3	Horizontal	355	2.48	-
2412MHz	Pass	AV	2.4042G	89.51	Inf	-Inf	32.19	3	Horizontal	355	2.48	-
2412MHz	Pass	PK	2.3898G	60.58	74.00	-13.42	32.23	3	Horizontal	355	2.48	-
2412MHz	Pass	PK	2.4112G	97.31	Inf	-Inf	32.19	3	Horizontal	355	2.48	-
2412MHz	Pass	AV	4.82988G	33.80	54.00	-20.20	8.17	3	Vertical	229	1.50	-
2412MHz	Pass	PK	4.81134G	45.20	74.00	-28.80	8.14	3	Vertical	229	1.50	-
2412MHz	Pass	AV	4.82754G	33.96	54.00	-20.04	8.17	3	Horizontal	278	2.76	-
2412MHz	Pass	PK	4.80918G	44.93	74.00	-29.07	8.14	3	Horizontal	278	2.76	-
2417MHz	Pass	AV	2.39G	52.78	54.00	-1.22	32.23	3	Vertical	311	2.74	-
2417MHz	Pass	AV	2.413G	107.51	Inf	-Inf	32.18	3	Vertical	311	2.74	-
2417MHz	Pass	PK	2.3866G	70.70	74.00	-3.30	32.23	3	Vertical	311	2.74	-
2417MHz	Pass	PK	2.413G	115.81	Inf	-Inf	32.18	3	Vertical	311	2.74	-
2417MHz	Pass	AV	2.39G	48.51	54.00	-5.49	32.23	3	Horizontal	227	2.38	-
2417MHz	Pass	AV	2.419G	98.47	Inf	-Inf	32.18	3	Horizontal	227	2.38	-
2417MHz	Pass	PK	2.3894G	61.23	74.00	-12.77	32.23	3	Horizontal	227	2.38	-
2417MHz	Pass	PK	2.4186G	105.98	Inf	-Inf	32.17	3	Horizontal	227	2.38	-
2437MHz	Pass	AV	2.3898G	52.28	54.00	-1.72	32.23	3	Vertical	302	2.79	-
2437MHz	Pass	AV	2.4322G	109.18	Inf	-Inf	32.17	3	Vertical	302	2.79	-
2437MHz	Pass	AV	2.4838G	52.72	54.00	-1.28	32.10	3	Vertical	302	2.79	-
2437MHz	Pass	PK	2.3898G	69.27	74.00	-4.73	32.23	3	Vertical	302	2.79	-
2437MHz	Pass	PK	2.4326G	117.46	Inf	-Inf	32.16	3	Vertical	302	2.79	-
2437MHz	Pass	PK	2.4838G	71.71	74.00	-2.29	32.10	3	Vertical	302	2.79	-
2437MHz	Pass	AV	2.3898G	48.20	54.00	-5.80	32.23	3	Horizontal	164	2.77	-
2437MHz	Pass	AV	2.4426G	104.12	Inf	-Inf	32.14	3	Horizontal	164	2.77	-
2437MHz	Pass	AV	2.4838G	50.38	54.00	-3.62	32.10	3	Horizontal	164	2.77	-
2437MHz	Pass	PK	2.3822G	64.31	74.00	-9.69	32.25	3	Horizontal	302	2.77	-
2437MHz	Pass	PK	2.4422G	112.35	Inf	-Inf	32.15	3	Horizontal	164	2.77	-



**RSE TX above 1GHz- Non-Beamforming <Radio 2> - Internal
Antenna**

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	PK	2.4835G	68.52	74.00	-5.48	32.10	3	Horizontal	164	2.77	-
2437MHz	Pass	AV	4.8803G	35.33	54.00	-18.67	8.27	3	Vertical	228	2.12	-
2437MHz	Pass	AV	7.3109G	46.86	54.00	-7.14	14.47	3	Vertical	203	2.59	-
2437MHz	Pass	PK	4.8810G	46.51	74.00	-27.49	8.27	3	Vertical	228	2.12	-
2437MHz	Pass	PK	7.3111G	54.25	74.00	-19.75	14.47	3	Vertical	203	2.59	-
2437MHz	Pass	AV	4.8806G	35.02	54.00	-18.98	8.27	3	Horizontal	191	2.99	-
2437MHz	Pass	AV	7.3109G	45.11	54.00	-8.89	14.47	3	Horizontal	134	2.45	-
2437MHz	Pass	PK	4.8812G	46.16	74.00	-27.84	8.27	3	Horizontal	191	2.99	-
2437MHz	Pass	PK	7.3111G	52.99	74.00	-21.01	14.47	3	Horizontal	134	2.45	-
2457MHz	Pass	AV	2.4522G	107.45	Inf	-Inf	32.14	3	Vertical	310	2.99	-
2457MHz	Pass	AV	2.4862G	52.89	54.00	-1.11	32.10	3	Vertical	310	2.99	-
2457MHz	Pass	PK	2.4526G	115.57	Inf	-Inf	32.13	3	Vertical	310	2.99	-
2457MHz	Pass	PK	2.4854G	72.19	74.00	-1.81	32.10	3	Vertical	310	2.99	-
2457MHz	Pass	AV	2.454G	99.93	Inf	-Inf	32.13	3	Horizontal	335	2.82	-
2457MHz	Pass	AV	2.4835G	49.86	54.00	-4.14	32.10	3	Horizontal	335	2.82	-
2457MHz	Pass	PK	2.4528G	108.41	Inf	-Inf	32.13	3	Horizontal	335	2.82	-
2457MHz	Pass	PK	2.4836G	67.20	74.00	-6.80	32.10	3	Horizontal	335	2.82	-
2462MHz	Pass	AV	2.4578G	104.86	Inf	-Inf	32.13	3	Vertical	313	2.72	-
2462MHz	Pass	AV	2.484G	52.73	54.00	-1.27	32.10	3	Vertical	313	2.72	-
2462MHz	Pass	PK	2.4592G	113.24	Inf	-Inf	32.13	3	Vertical	313	2.72	-
2462MHz	Pass	PK	2.4835G	71.68	74.00	-2.32	32.10	3	Vertical	313	2.72	-
2462MHz	Pass	AV	2.4642G	96.30	Inf	-Inf	32.12	3	Horizontal	190	2.50	-
2462MHz	Pass	AV	2.4836G	49.04	54.00	-4.96	32.10	3	Horizontal	190	2.50	-
2462MHz	Pass	PK	2.4644G	103.85	Inf	-Inf	32.12	3	Horizontal	190	2.50	-
2462MHz	Pass	PK	2.4842G	67.46	74.00	-6.54	32.10	3	Horizontal	190	2.50	-
2462MHz	Pass	AV	4.9285G	33.91	54.00	-20.09	8.41	3	Vertical	278	2.45	-
2462MHz	Pass	AV	7.3858G	42.72	54.00	-11.28	14.20	3	Vertical	130	2.75	-
2462MHz	Pass	PK	4.9313G	45.79	74.00	-28.21	8.41	3	Vertical	278	2.45	-
2462MHz	Pass	PK	7.3861G	52.26	74.00	-21.74	14.20	3	Vertical	130	2.75	-
2462MHz	Pass	AV	4.9241G	33.83	54.00	-20.17	8.39	3	Horizontal	294	2.83	-
2462MHz	Pass	AV	7.3858G	40.46	54.00	-13.54	14.20	3	Horizontal	308	1.77	-
2462MHz	Pass	PK	4.9315G	45.28	74.00	-28.72	8.41	3	Horizontal	294	2.83	-
2462MHz	Pass	PK	7.3871G	51.11	74.00	-22.89	14.20	3	Horizontal	308	1.77	-
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	52.73	54.00	-1.27	32.23	3	Vertical	0	2.99	-
2412MHz	Pass	AV	2.4096G	102.84	Inf	-Inf	32.19	3	Vertical	0	2.99	-
2412MHz	Pass	PK	2.3896G	71.90	74.00	-2.10	32.23	3	Vertical	0	2.99	-
2412MHz	Pass	PK	2.4098G	113.04	Inf	-Inf	32.19	3	Vertical	0	2.99	-
2412MHz	Pass	AV	2.39G	49.36	54.00	-4.64	32.23	3	Horizontal	320	2.97	-
2412MHz	Pass	AV	2.408G	96.08	Inf	-Inf	32.19	3	Horizontal	320	2.97	-
2412MHz	Pass	PK	2.39G	65.77	74.00	-8.23	32.23	3	Horizontal	320	2.97	-
2412MHz	Pass	PK	2.418G	105.70	Inf	-Inf	32.17	3	Horizontal	320	2.97	-
2412MHz	Pass	AV	4.8108G	33.56	54.00	-20.44	8.14	3	Vertical	360	1.06	-
2412MHz	Pass	PK	4.8304G	45.56	74.00	-28.44	8.17	3	Vertical	360	1.06	-
2412MHz	Pass	AV	4.8274G	33.84	54.00	-20.16	8.17	3	Horizontal	299	2.77	-
2412MHz	Pass	PK	4.8287G	45.56	74.00	-28.44	8.17	3	Horizontal	299	2.77	-
2417MHz	Pass	AV	2.389G	52.76	54.00	-1.24	32.22	3	Vertical	314	2.75	-
2417MHz	Pass	AV	2.416G	104.92	Inf	-Inf	32.18	3	Vertical	314	2.75	-
2417MHz	Pass	PK	2.3892G	69.84	74.00	-4.16	32.22	3	Vertical	314	2.75	-



**RSE TX above 1GHz- Non-Beamforming <Radio 2> - Internal
Antenna**

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2417MHz	Pass	PK	2.421G	114.49	Inf	-Inf	32.18	3	Vertical	314	2.75	-
2417MHz	Pass	AV	2.388G	49.48	54.00	-4.52	32.23	3	Horizontal	217	2.39	-
2417MHz	Pass	AV	2.418G	97.32	Inf	-Inf	32.17	3	Horizontal	217	2.39	-
2417MHz	Pass	PK	2.3892G	62.75	74.00	-11.25	32.22	3	Horizontal	217	2.39	-
2417MHz	Pass	PK	2.418G	107.72	Inf	-Inf	32.17	3	Horizontal	217	2.39	-
2437MHz	Pass	AV	2.3894G	51.63	54.00	-2.37	32.23	3	Vertical	1	2.87	-
2437MHz	Pass	AV	2.4422G	108.31	Inf	-Inf	32.15	3	Vertical	1	2.87	-
2437MHz	Pass	AV	2.487G	52.24	54.00	-1.76	32.10	3	Vertical	1	2.87	-
2437MHz	Pass	PK	2.3874G	69.51	74.00	-4.49	32.23	3	Vertical	1	2.87	-
2437MHz	Pass	PK	2.4422G	118.06	Inf	-Inf	32.15	3	Vertical	1	2.87	-
2437MHz	Pass	PK	2.4922G	70.06	74.00	-3.94	32.09	3	Vertical	1	2.87	-
2437MHz	Pass	AV	2.3898G	48.68	54.00	-5.32	32.23	3	Horizontal	188	2.55	-
2437MHz	Pass	AV	2.4402G	102.05	Inf	-Inf	32.15	3	Horizontal	188	2.55	-
2437MHz	Pass	AV	2.4854G	49.74	54.00	-4.26	32.10	3	Horizontal	188	2.55	-
2437MHz	Pass	PK	2.3898G	63.17	74.00	-10.83	32.23	3	Horizontal	188	2.55	-
2437MHz	Pass	PK	2.4302G	111.50	Inf	-Inf	32.16	3	Horizontal	188	2.55	-
2437MHz	Pass	PK	2.4858G	64.42	74.00	-9.58	32.10	3	Horizontal	188	2.55	-
2437MHz	Pass	AV	4.8779G	34.24	54.00	-19.76	8.26	3	Vertical	9	1.50	-
2437MHz	Pass	AV	7.31088G	45.17	54.00	-8.83	14.47	3	Vertical	127	2.84	-
2437MHz	Pass	PK	4.87154G	45.26	74.00	-28.74	8.25	3	Vertical	9	1.50	-
2437MHz	Pass	PK	7.31118G	53.85	74.00	-20.15	14.47	3	Vertical	127	2.84	-
2437MHz	Pass	AV	4.87286G	35.28	54.00	-18.72	8.25	3	Horizontal	193	2.99	-
2437MHz	Pass	AV	7.31106G	43.43	54.00	-10.57	14.47	3	Horizontal	242	2.38	-
2437MHz	Pass	PK	4.87286G	46.35	74.00	-27.65	8.25	3	Horizontal	193	2.99	-
2437MHz	Pass	PK	7.31112G	52.09	74.00	-21.91	14.47	3	Horizontal	242	2.38	-
2457MHz	Pass	AV	2.4596G	104.91	Inf	-Inf	32.13	3	Vertical	358	2.81	-
2457MHz	Pass	AV	2.4846G	52.36	54.00	-1.64	32.10	3	Vertical	358	2.81	-
2457MHz	Pass	PK	2.4648G	114.29	Inf	-Inf	32.12	3	Vertical	358	2.81	-
2457MHz	Pass	PK	2.4844G	69.75	74.00	-4.25	32.10	3	Vertical	358	2.81	-
2457MHz	Pass	AV	2.458G	95.98	Inf	-Inf	32.13	3	Horizontal	222	2.60	-
2457MHz	Pass	AV	2.4835G	49.11	54.00	-4.89	32.10	3	Horizontal	222	2.60	-
2457MHz	Pass	PK	2.458G	106.37	Inf	-Inf	32.13	3	Horizontal	222	2.60	-
2457MHz	Pass	PK	2.4838G	63.61	74.00	-10.39	32.10	3	Horizontal	222	2.60	-
2462MHz	Pass	AV	2.4596G	101.73	Inf	-Inf	32.13	3	Vertical	0	2.81	-
2462MHz	Pass	AV	2.4846G	50.59	54.00	-3.41	32.10	3	Vertical	0	2.81	-
2462MHz	Pass	PK	2.4596G	112.02	Inf	-Inf	32.13	3	Vertical	0	2.81	-
2462MHz	Pass	PK	2.4846G	72.54	74.00	-1.46	32.10	3	Vertical	0	2.81	-
2462MHz	Pass	AV	2.4668G	96.89	Inf	-Inf	32.12	3	Horizontal	110	2.99	-
2462MHz	Pass	AV	2.4872G	49.05	54.00	-4.95	32.10	3	Horizontal	110	2.99	-
2462MHz	Pass	PK	2.467G	106.83	Inf	-Inf	32.12	3	Horizontal	110	2.99	-
2462MHz	Pass	PK	2.4868G	68.62	74.00	-5.38	32.10	3	Horizontal	110	2.99	-
2462MHz	Pass	AV	4.92346G	33.69	54.00	-20.31	8.39	3	Vertical	0	2.38	-
2462MHz	Pass	AV	7.38594G	44.10	54.00	-9.90	14.20	3	Vertical	202	1.99	-
2462MHz	Pass	PK	4.92598G	45.92	74.00	-28.08	8.40	3	Vertical	0	2.38	-
2462MHz	Pass	PK	7.38582G	52.42	74.00	-21.58	14.20	3	Vertical	202	1.99	-
2462MHz	Pass	AV	4.92388G	33.95	54.00	-20.05	8.39	3	Horizontal	262	2.96	-
2462MHz	Pass	AV	7.38588G	40.18	54.00	-13.82	14.20	3	Horizontal	121	2.48	-
2462MHz	Pass	PK	4.9099G	45.35	74.00	-28.65	8.34	3	Horizontal	262	2.96	-
2462MHz	Pass	PK	7.38606G	51.02	74.00	-22.98	14.20	3	Horizontal	121	2.48	-



RSE TX above 1GHz- Non-Beamforming <Radio 2> - Internal Antenna

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.39G	52.62	54.00	-1.38	32.23	3	Vertical	311	2.93	-
2422MHz	Pass	AV	2.4152G	97.41	Inf	-Inf	32.18	3	Vertical	311	2.93	-
2422MHz	Pass	AV	2.49G	49.61	54.00	-4.39	32.09	3	Vertical	311	2.93	-
2422MHz	Pass	PK	2.3896G	61.57	74.00	-12.43	32.23	3	Vertical	311	2.93	-
2422MHz	Pass	PK	2.43G	107.23	Inf	-Inf	32.16	3	Vertical	311	2.93	-
2422MHz	Pass	PK	2.5G	60.24	74.00	-13.76	32.08	3	Vertical	311	2.93	-
2422MHz	Pass	AV	2.3876G	49.70	54.00	-4.30	32.23	3	Horizontal	265	2.91	-
2422MHz	Pass	AV	2.4168G	92.04	Inf	-Inf	32.18	3	Horizontal	265	2.91	-
2422MHz	Pass	AV	2.4944G	49.36	54.00	-4.64	32.09	3	Horizontal	265	2.91	-
2422MHz	Pass	PK	2.3808G	60.53	74.00	-13.47	32.25	3	Horizontal	265	2.91	-
2422MHz	Pass	PK	2.4068G	102.73	Inf	-Inf	32.20	3	Horizontal	265	2.91	-
2422MHz	Pass	PK	2.4868G	59.83	74.00	-14.17	32.10	3	Horizontal	265	2.91	-
2422MHz	Pass	AV	4.84718G	34.40	54.00	-19.60	8.20	3	Vertical	82	1.50	-
2422MHz	Pass	AV	7.26594G	43.90	54.00	-10.10	14.56	3	Vertical	328	2.12	-
2422MHz	Pass	PK	4.85024G	45.06	74.00	-28.94	8.22	3	Vertical	82	1.50	-
2422MHz	Pass	PK	7.26594G	52.06	74.00	-21.94	14.56	3	Vertical	328	2.12	-
2422MHz	Pass	AV	4.84316G	33.95	54.00	-20.05	8.19	3	Horizontal	236	1.50	-
2422MHz	Pass	AV	7.26594G	44.95	54.00	-9.05	14.56	3	Horizontal	244	2.35	-
2422MHz	Pass	PK	4.83206G	44.73	74.00	-29.27	8.17	3	Horizontal	236	1.50	-
2422MHz	Pass	PK	7.26586G	53.63	74.00	-20.37	14.56	3	Horizontal	244	2.35	-
2427MHz	Pass	AV	2.3898G	52.94	54.00	-1.06	32.23	3	Vertical	315	2.68	-
2427MHz	Pass	AV	2.4326G	98.37	Inf	-Inf	32.16	3	Vertical	315	2.68	-
2427MHz	Pass	AV	2.4986G	49.85	54.00	-4.15	32.08	3	Vertical	315	2.68	-
2427MHz	Pass	PK	2.3894G	63.10	74.00	-10.90	32.23	3	Vertical	315	2.68	-
2427MHz	Pass	PK	2.4379G	108.13	Inf	-Inf	32.15	3	Vertical	315	2.68	-
2427MHz	Pass	PK	2.4898G	60.11	74.00	-13.89	32.09	3	Vertical	315	2.68	-
2427MHz	Pass	AV	2.3894G	50.17	54.00	-3.83	32.23	3	Horizontal	264	2.99	-
2427MHz	Pass	AV	2.4246G	92.89	Inf	-Inf	32.17	3	Horizontal	264	2.99	-
2427MHz	Pass	AV	2.4842G	49.61	54.00	-4.39	32.10	3	Horizontal	264	2.99	-
2427MHz	Pass	PK	2.3898G	59.99	74.00	-14.01	32.23	3	Horizontal	264	2.99	-
2427MHz	Pass	PK	2.419G	103.69	Inf	-Inf	32.18	3	Horizontal	264	2.99	-
2427MHz	Pass	PK	2.4966G	59.75	74.00	-14.25	32.09	3	Horizontal	264	2.99	-
2437MHz	Pass	AV	2.3866G	52.69	54.00	-1.31	32.23	3	Vertical	3	2.79	-
2437MHz	Pass	AV	2.4522G	101.42	Inf	-Inf	32.14	3	Vertical	3	2.79	-
2437MHz	Pass	AV	2.4858G	52.07	54.00	-1.93	32.10	3	Vertical	3	2.79	-
2437MHz	Pass	PK	2.3866G	66.31	74.00	-7.69	32.23	3	Vertical	3	2.79	-
2437MHz	Pass	PK	2.447G	110.91	Inf	-Inf	32.15	3	Vertical	3	2.79	-
2437MHz	Pass	PK	2.4854G	67.01	74.00	-6.99	32.10	3	Vertical	3	2.79	-
2437MHz	Pass	AV	2.385G	49.94	54.00	-4.06	32.24	3	Horizontal	136	2.59	-
2437MHz	Pass	AV	2.4406G	95.24	Inf	-Inf	32.15	3	Horizontal	136	2.59	-
2437MHz	Pass	AV	2.4838G	49.95	54.00	-4.05	32.10	3	Horizontal	136	2.59	-
2437MHz	Pass	PK	2.3838G	64.56	74.00	-9.44	32.24	3	Horizontal	136	2.59	-
2437MHz	Pass	PK	2.4406G	104.94	Inf	-Inf	32.15	3	Horizontal	136	2.59	-
2437MHz	Pass	PK	2.4866G	62.79	74.00	-11.21	32.10	3	Horizontal	136	2.59	-
2437MHz	Pass	AV	4.8617G	34.25	54.00	-19.75	8.23	3	Vertical	197	1.50	-
2437MHz	Pass	AV	7.31088G	46.46	54.00	-7.54	14.47	3	Vertical	204	2.41	-
2437MHz	Pass	PK	4.8821G	45.07	74.00	-28.93	8.27	3	Vertical	197	1.50	-
2437MHz	Pass	PK	7.31088G	53.83	74.00	-20.17	14.47	3	Vertical	204	2.41	-



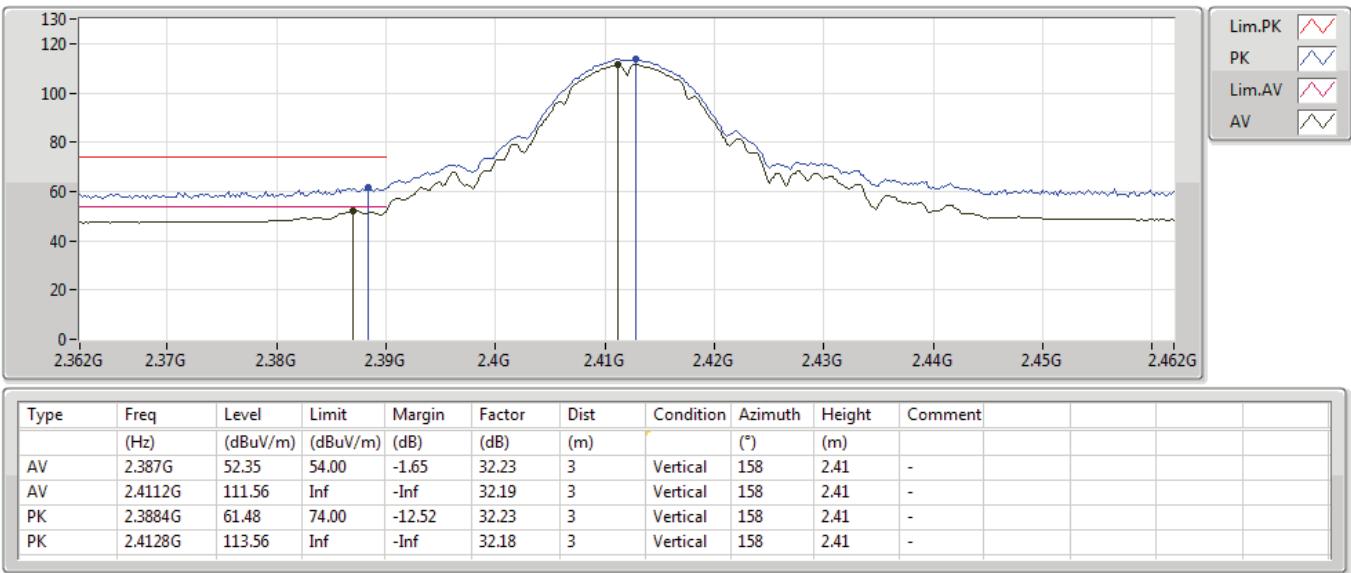
**RSE TX above 1GHz- Non-Beamforming <Radio 2> - Internal
Antenna**

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	4.8776G	34.00	54.00	-20.00	8.26	3	Horizontal	165	2.07	-
2437MHz	Pass	AV	7.311G	45.83	54.00	-8.17	14.47	3	Horizontal	133	2.41	-
2437MHz	Pass	PK	4.88078G	44.78	74.00	-29.22	8.27	3	Horizontal	165	2.07	-
2437MHz	Pass	PK	7.31094G	53.66	74.00	-20.34	14.47	3	Horizontal	133	2.41	-
2447MHz	Pass	AV	2.3894G	49.25	54.00	-4.75	32.23	3	Vertical	357	2.81	-
2447MHz	Pass	AV	2.457G	100.82	Inf	-Inf	32.14	3	Vertical	357	2.81	-
2447MHz	Pass	AV	2.4858G	52.89	54.00	-1.11	32.10	3	Vertical	357	2.81	-
2447MHz	Pass	PK	2.377G	60.29	74.00	-13.71	32.26	3	Vertical	357	2.81	-
2447MHz	Pass	PK	2.457G	111.08	Inf	-Inf	32.14	3	Vertical	357	2.81	-
2447MHz	Pass	PK	2.4854G	70.05	74.00	-3.95	32.10	3	Vertical	357	2.81	-
2447MHz	Pass	AV	2.3746G	48.98	54.00	-5.02	32.26	3	Horizontal	234	2.60	-
2447MHz	Pass	AV	2.455G	92.73	Inf	-Inf	32.13	3	Horizontal	234	2.60	-
2447MHz	Pass	AV	2.4858G	50.10	54.00	-3.90	32.10	3	Horizontal	234	2.60	-
2447MHz	Pass	PK	2.3554G	59.14	74.00	-14.86	32.32	3	Horizontal	234	2.60	-
2447MHz	Pass	PK	2.455G	102.41	Inf	-Inf	32.13	3	Horizontal	234	2.60	-
2447MHz	Pass	PK	2.4842G	62.98	74.00	-11.02	32.10	3	Horizontal	234	2.60	-
2452MHz	Pass	AV	2.3884G	49.24	54.00	-4.76	32.23	3	Vertical	3	2.81	-
2452MHz	Pass	AV	2.4572G	100.65	Inf	-Inf	32.14	3	Vertical	3	2.81	-
2452MHz	Pass	AV	2.4852G	52.89	54.00	-1.11	32.10	3	Vertical	3	2.81	-
2452MHz	Pass	PK	2.358G	60.09	74.00	-13.91	32.31	3	Vertical	3	2.81	-
2452MHz	Pass	PK	2.462G	110.39	Inf	-Inf	32.13	3	Vertical	3	2.81	-
2452MHz	Pass	PK	2.4904G	68.89	74.00	-5.11	32.09	3	Vertical	3	2.81	-
2452MHz	Pass	AV	2.352G	48.85	54.00	-5.15	32.32	3	Horizontal	137	2.70	-
2452MHz	Pass	AV	2.4556G	93.90	Inf	-Inf	32.13	3	Horizontal	137	2.70	-
2452MHz	Pass	AV	2.4835G	50.99	54.00	-3.01	32.10	3	Horizontal	137	2.70	-
2452MHz	Pass	PK	2.358G	59.75	74.00	-14.25	32.31	3	Horizontal	137	2.70	-
2452MHz	Pass	PK	2.466G	103.72	Inf	-Inf	32.12	3	Horizontal	137	2.70	-
2452MHz	Pass	PK	2.4856G	64.25	74.00	-9.75	32.10	3	Horizontal	137	2.70	-
2452MHz	Pass	AV	4.89494G	34.24	54.00	-19.76	8.29	3	Vertical	39	1.50	-
2452MHz	Pass	AV	7.35588G	44.03	54.00	-9.97	14.32	3	Vertical	130	2.79	-
2452MHz	Pass	PK	4.8923G	45.39	74.00	-28.61	8.28	3	Vertical	39	1.50	-
2452MHz	Pass	PK	7.3632G	53.01	74.00	-20.99	14.29	3	Vertical	130	2.79	-
2452MHz	Pass	AV	4.9139G	34.13	54.00	-19.87	8.35	3	Horizontal	228	1.50	-
2452MHz	Pass	AV	7.35588G	43.70	54.00	-10.30	14.32	3	Horizontal	243	2.54	-
2452MHz	Pass	PK	4.9157G	45.17	74.00	-28.83	8.36	3	Horizontal	228	1.50	-
2452MHz	Pass	PK	7.356G	51.45	74.00	-22.55	14.31	3	Horizontal	243	2.54	-

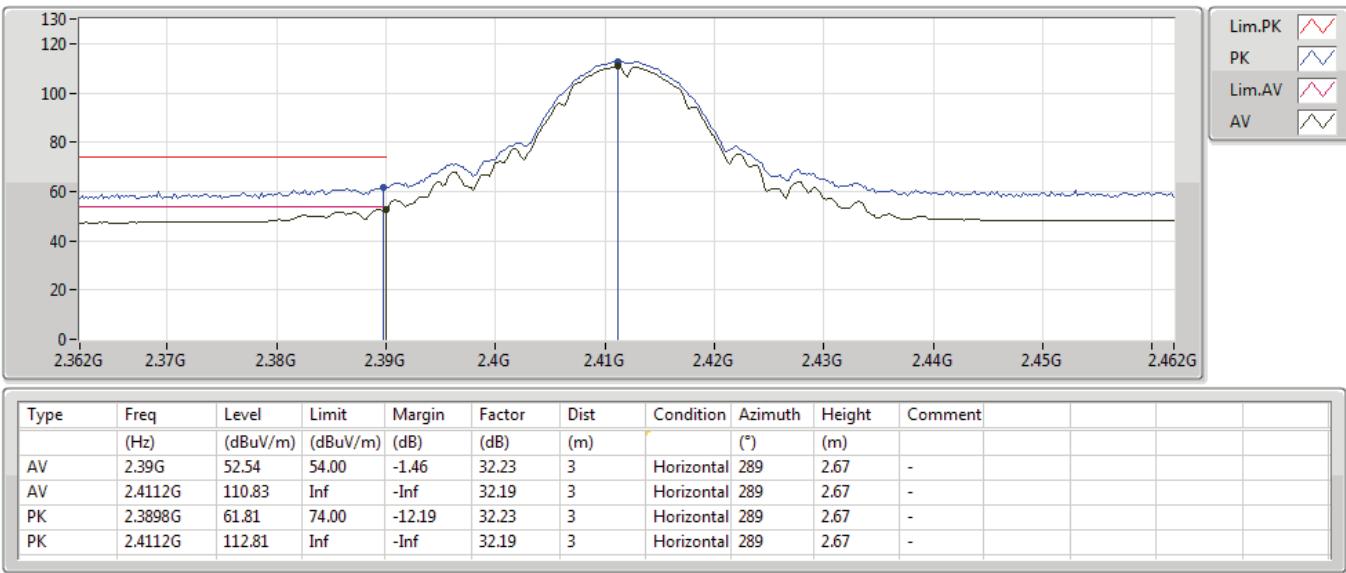
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04/05/2019

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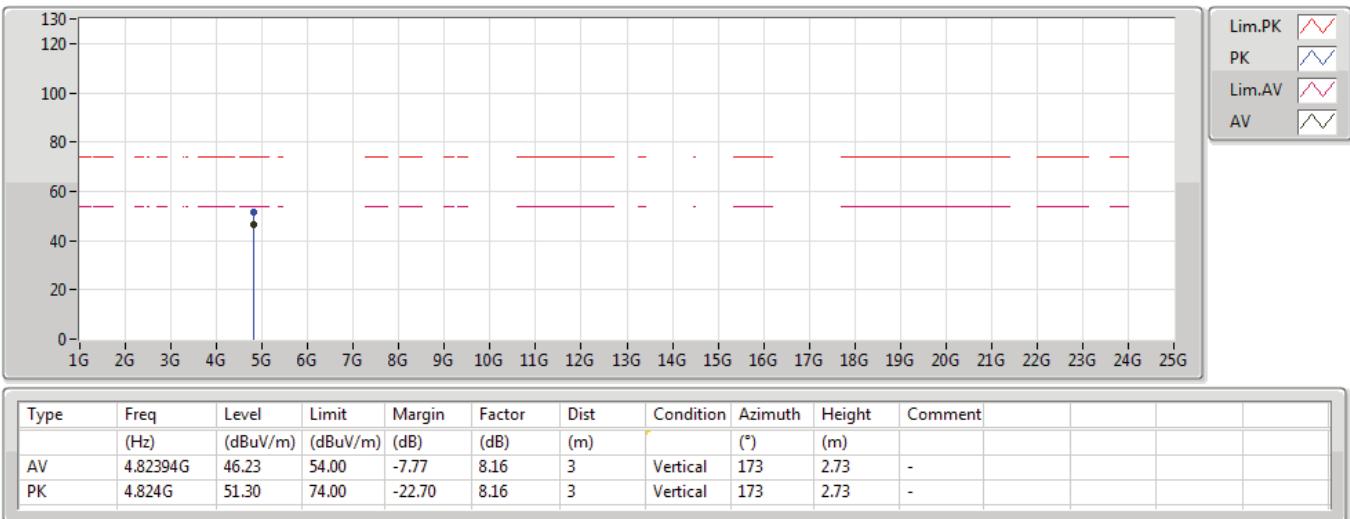
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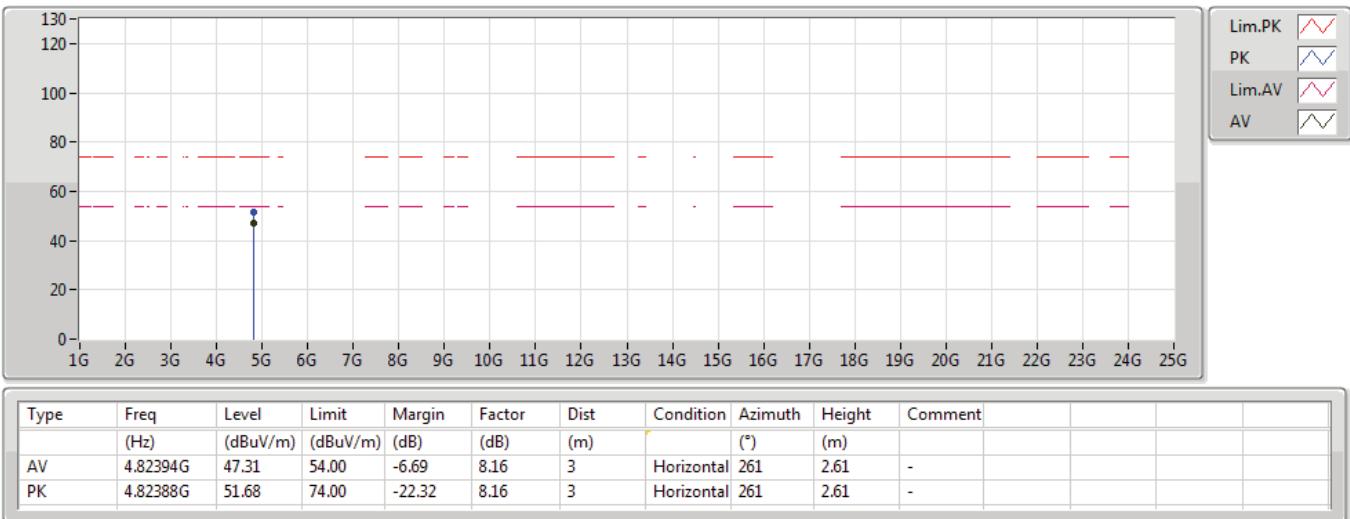
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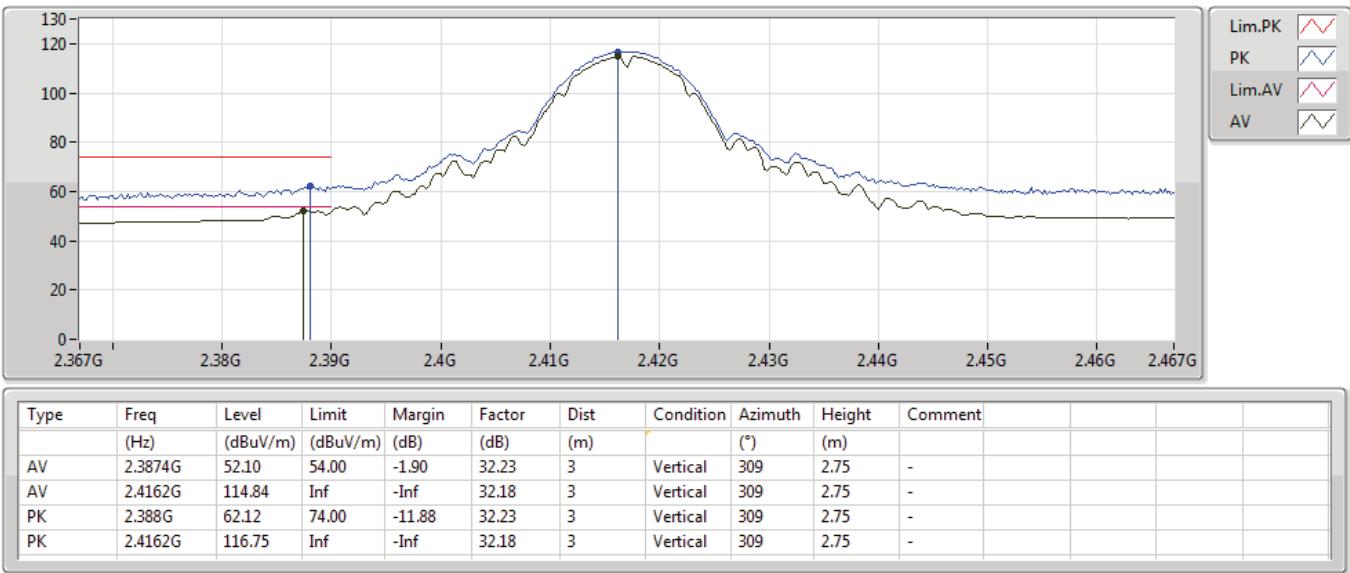
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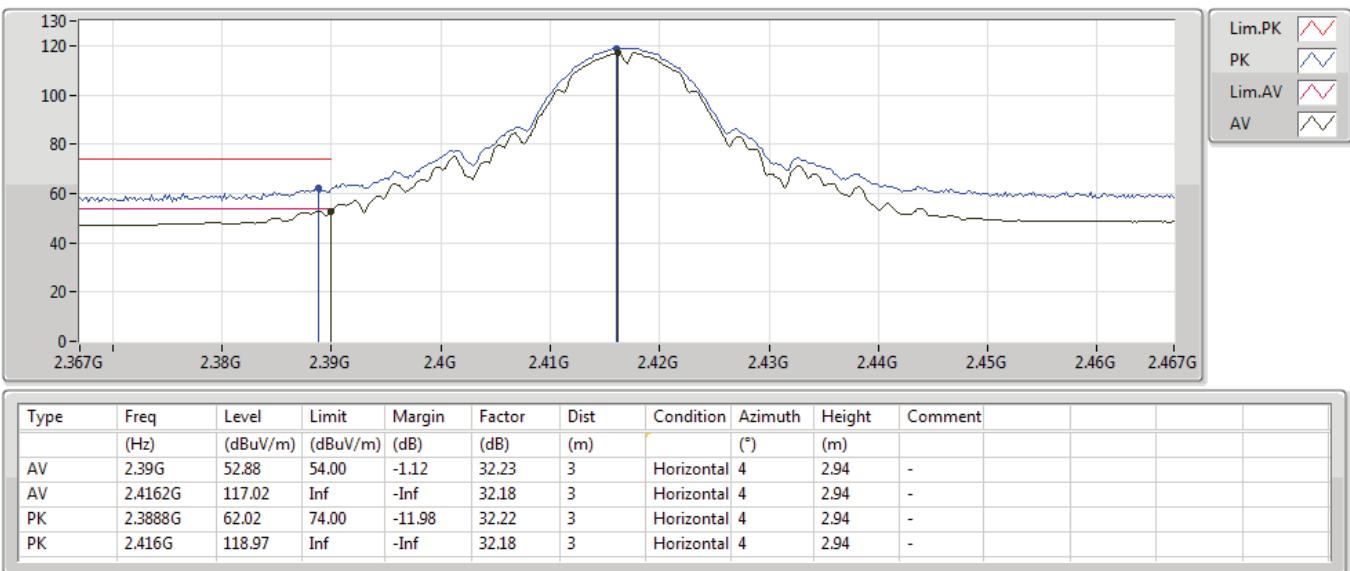
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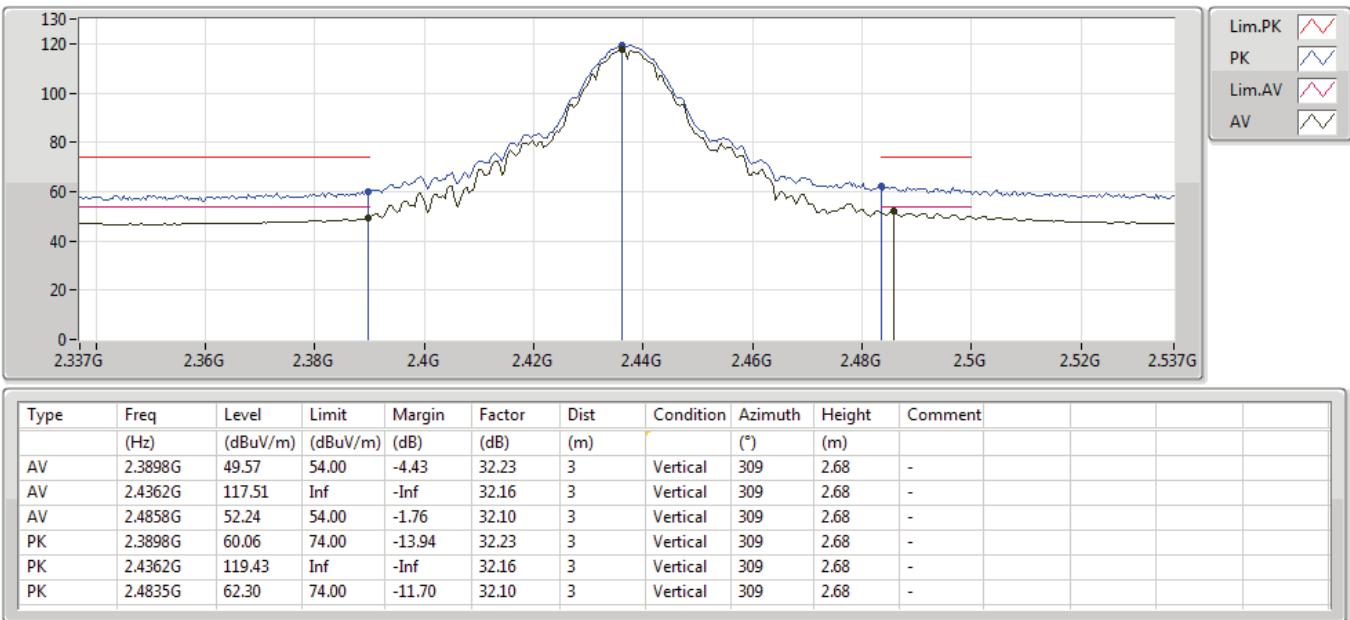
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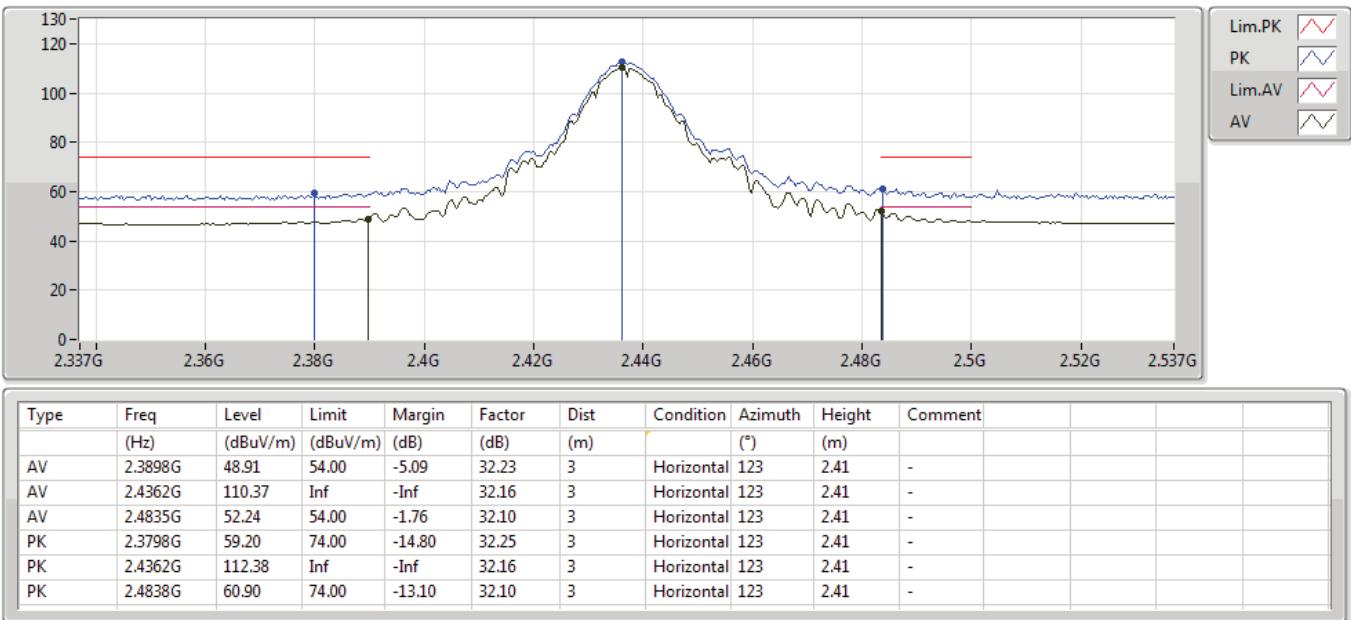
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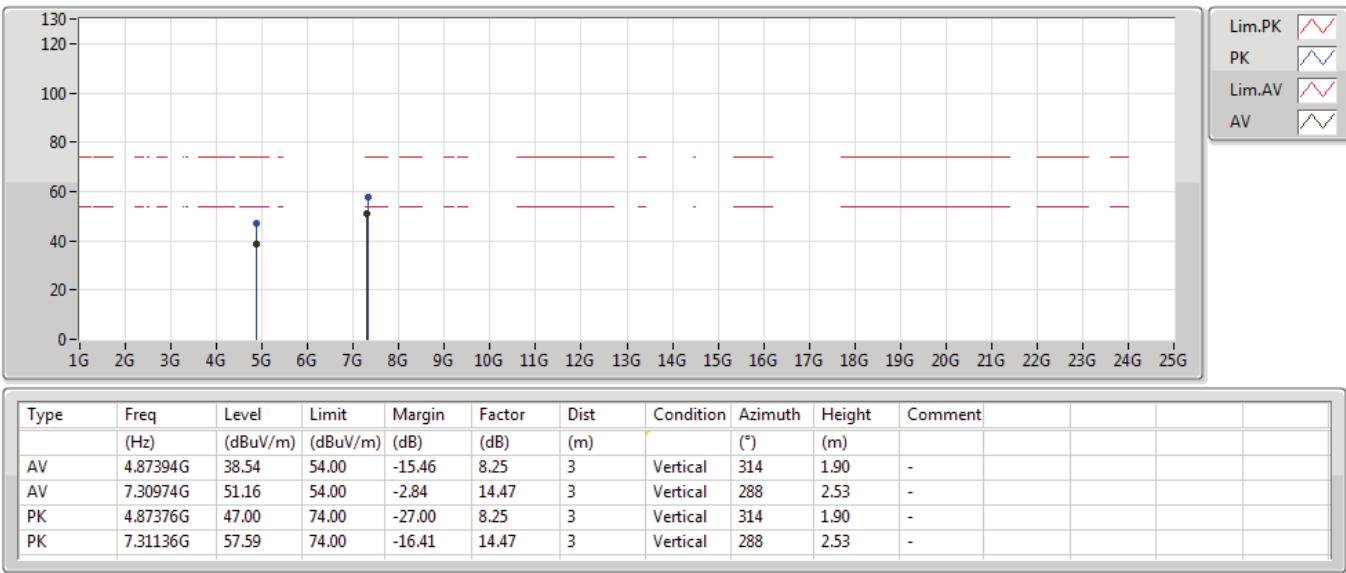
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2437MHz_TX


802.11b_Nss1,(1Mbps)_4TX

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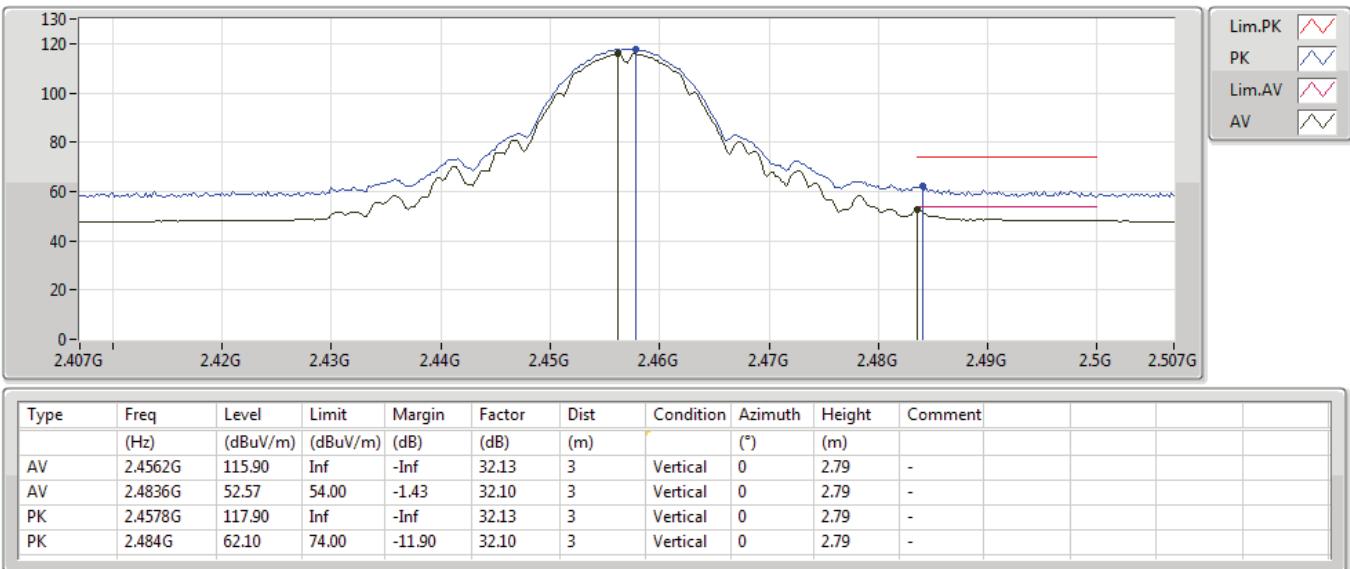
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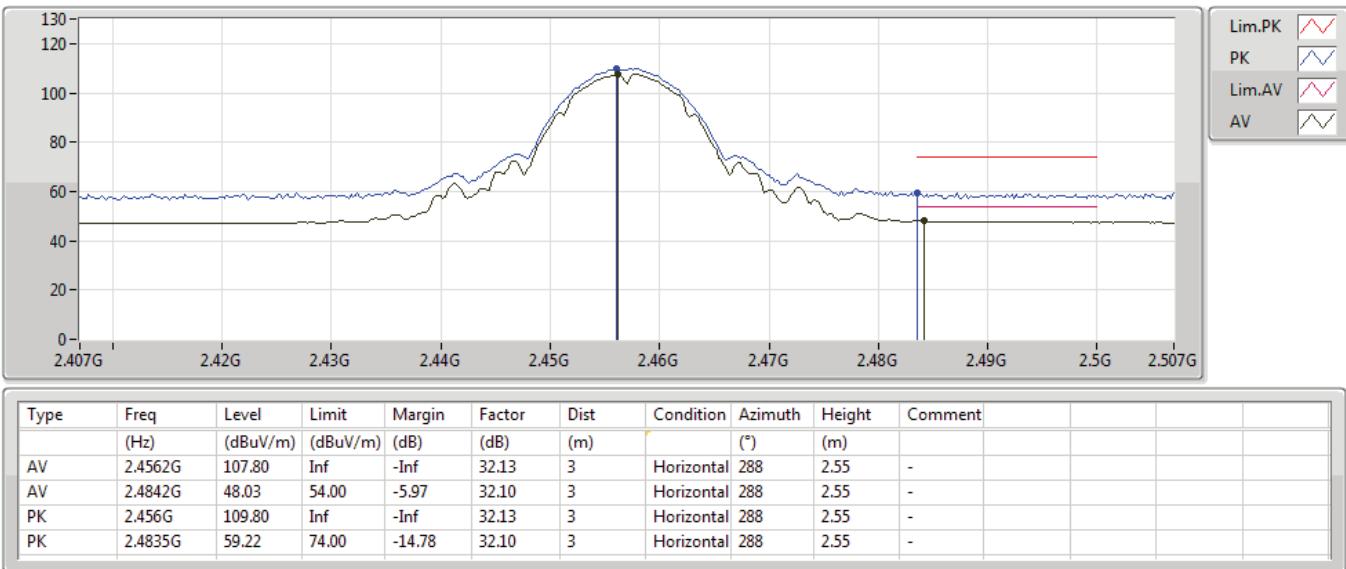

802.11b_Nss1,(1Mbps)_4TX

05/05/2019

2457MHz_TX


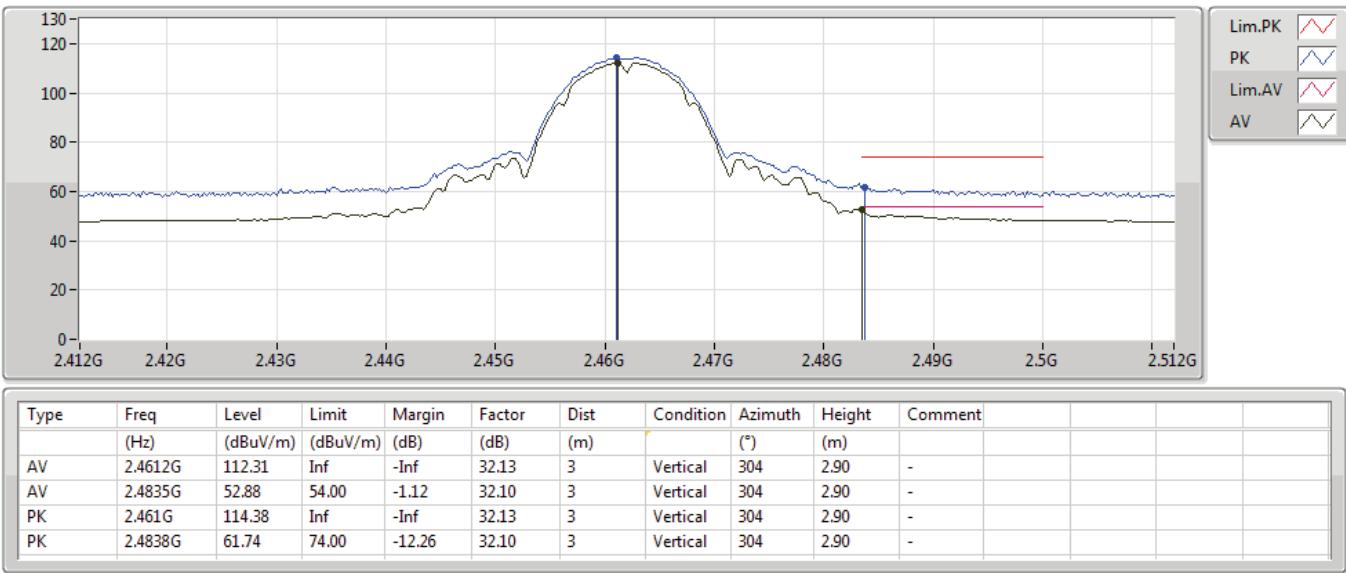
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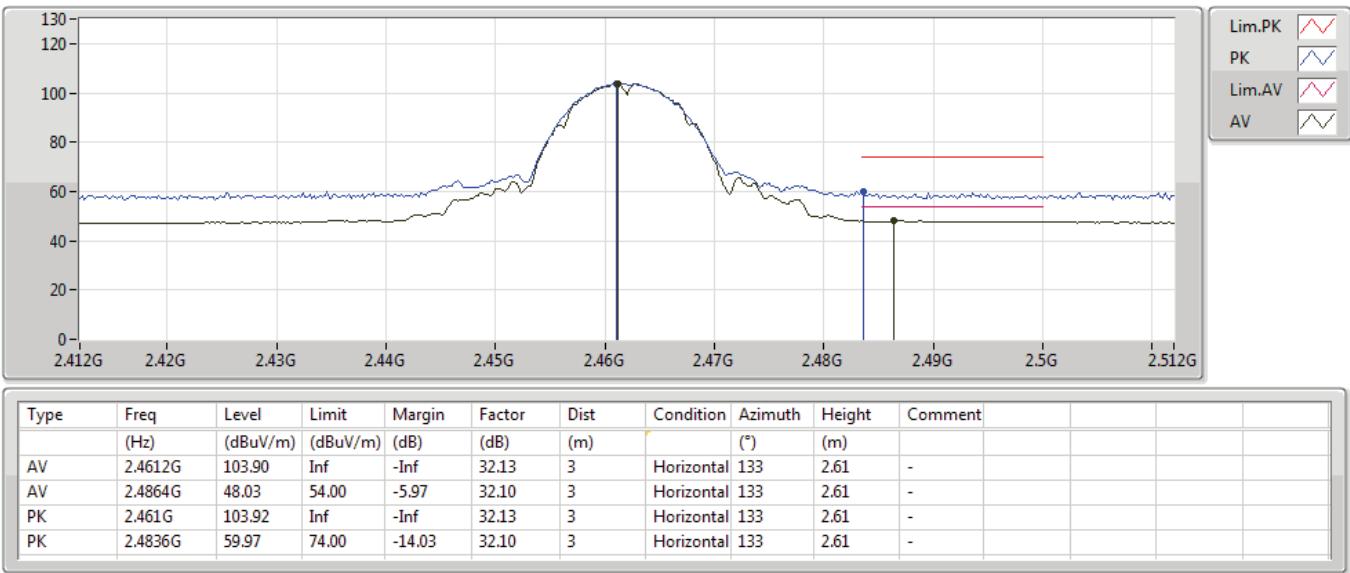
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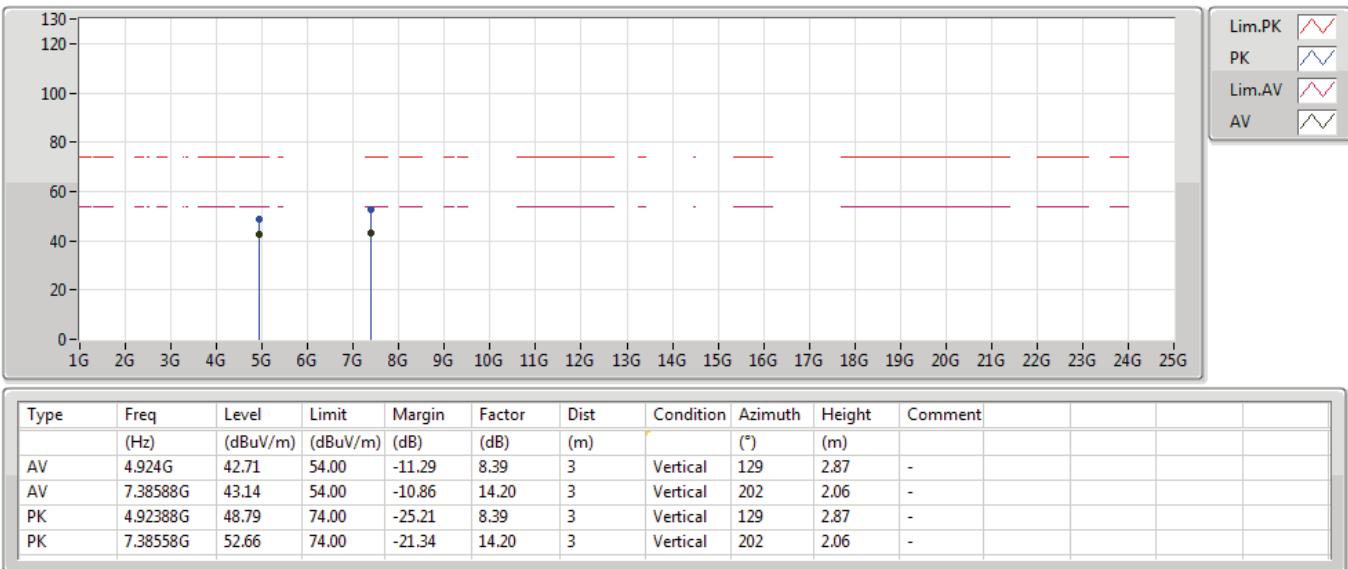
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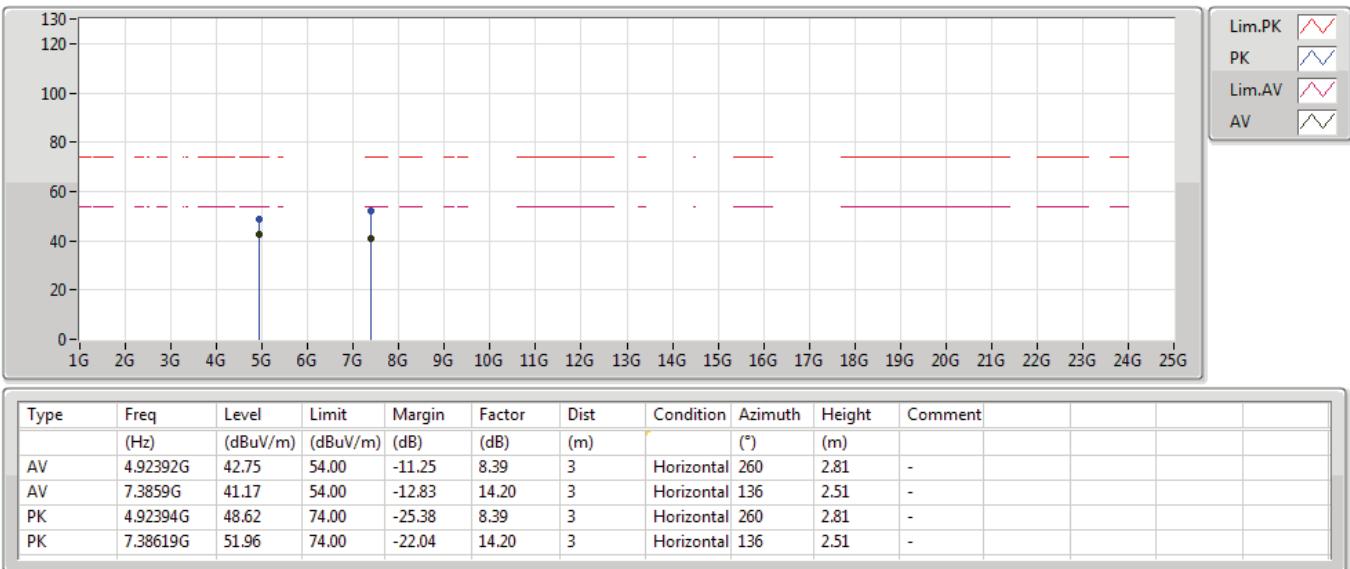




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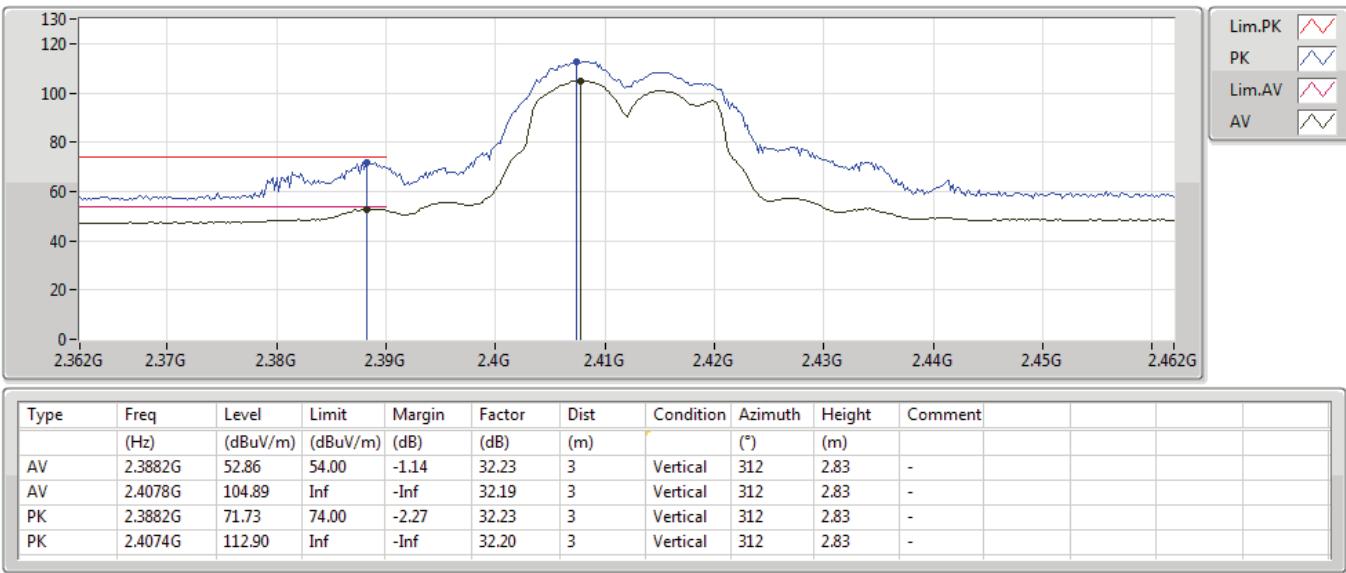
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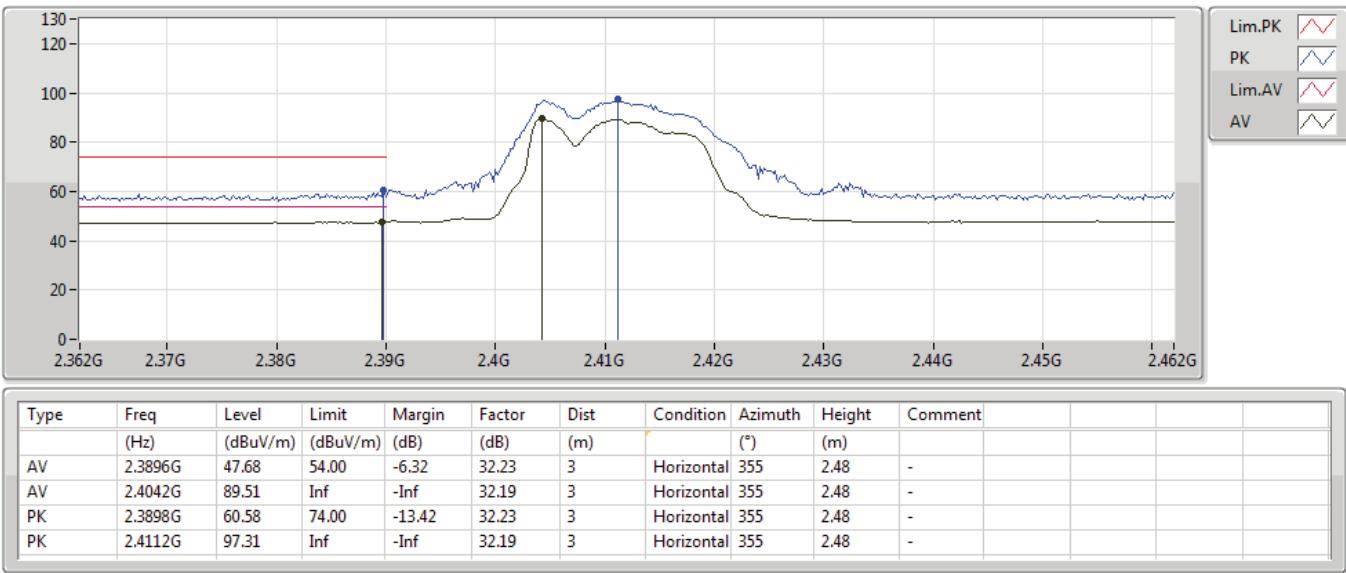
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04/05/2019

2412MHz_TX


802.11g_Nss1,(6Mbps)_4TX

04/05/2019

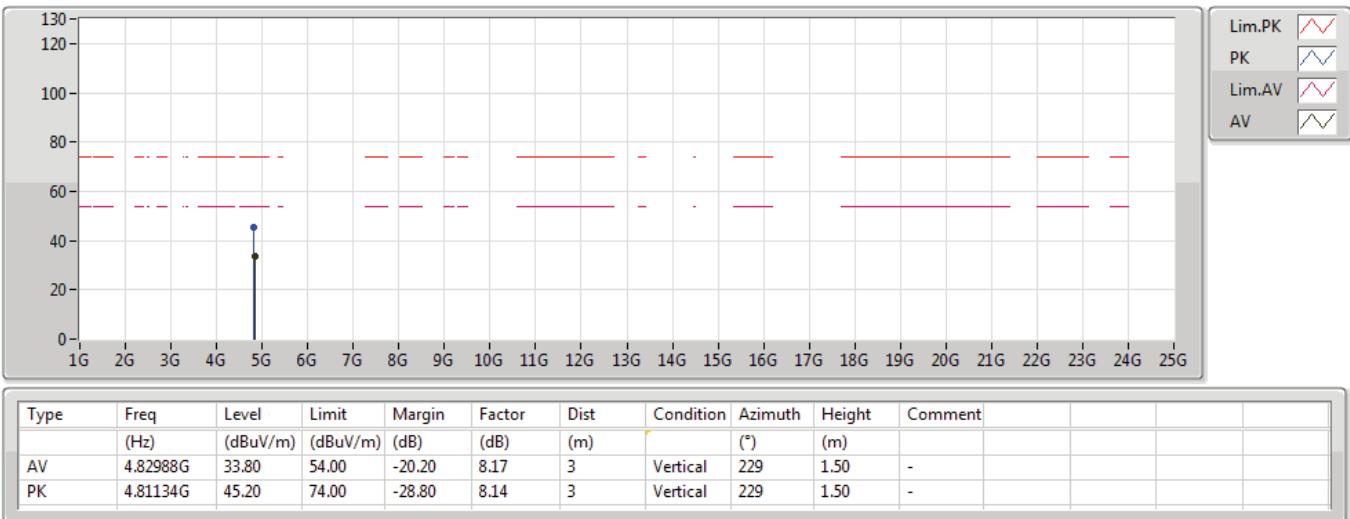
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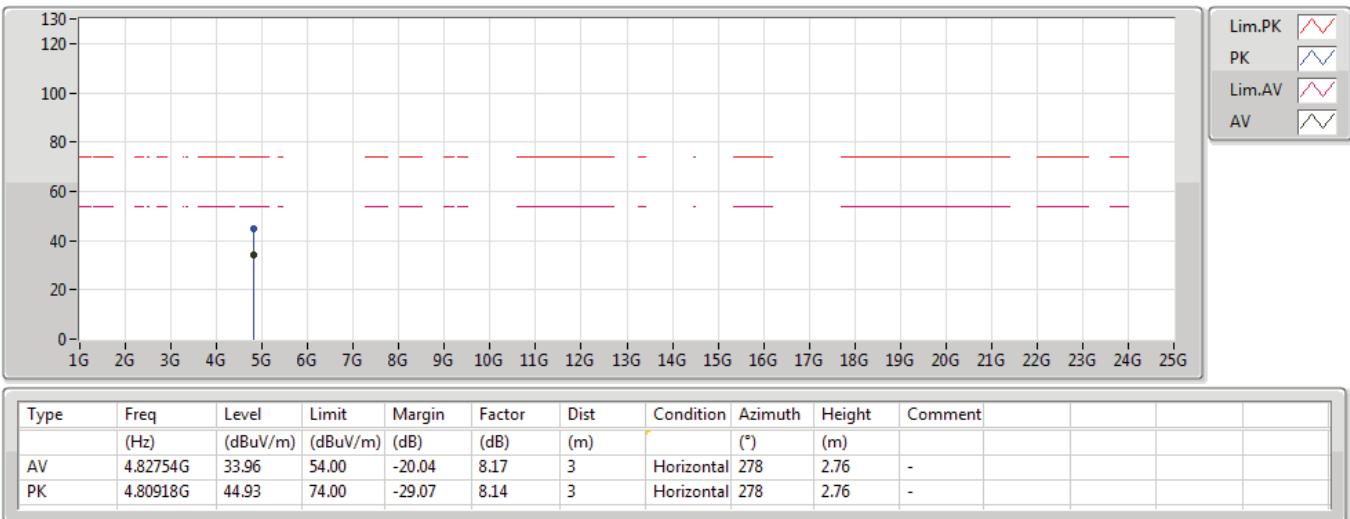
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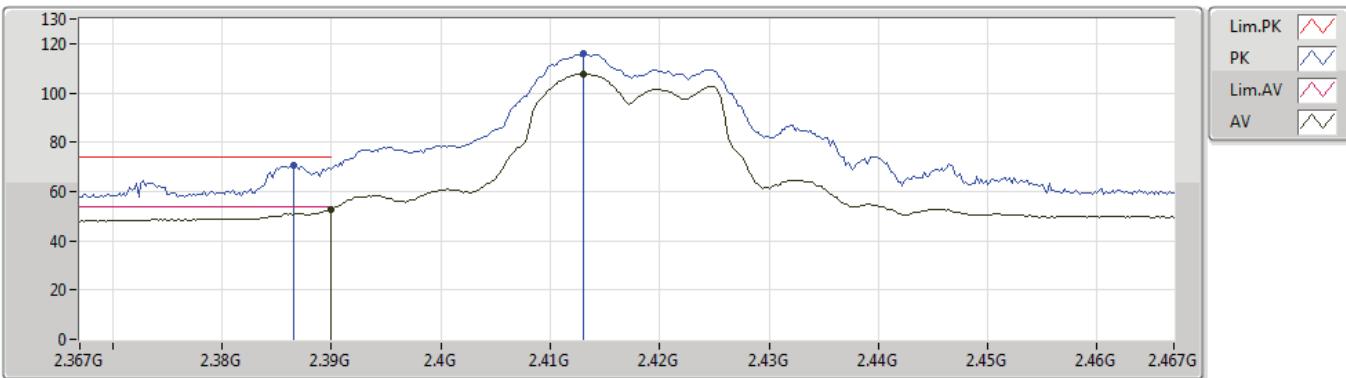
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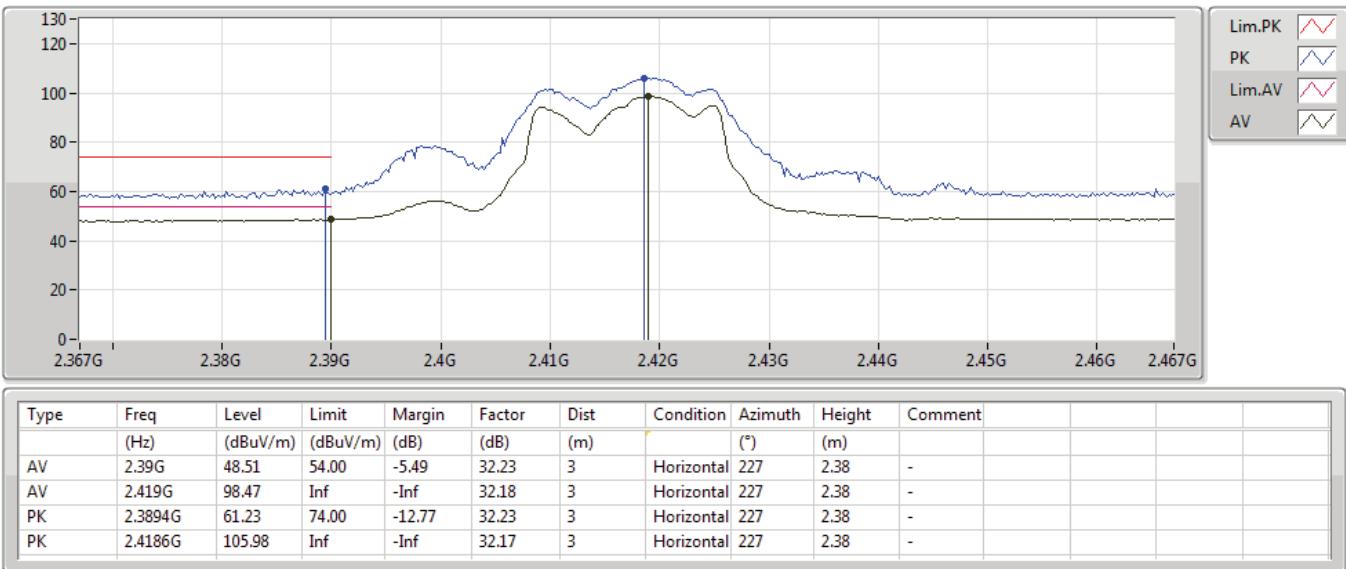
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2417MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	2.39G	52.78	54.00	-1.22	32.23	3	Vertical	311	2.74	-		
AV	2.413G	107.51	Inf	-Inf	32.18	3	Vertical	311	2.74	-		
PK	2.3866G	70.70	74.00	-3.30	32.23	3	Vertical	311	2.74	-		
PK	2.413G	115.81	Inf	-Inf	32.18	3	Vertical	311	2.74	-		

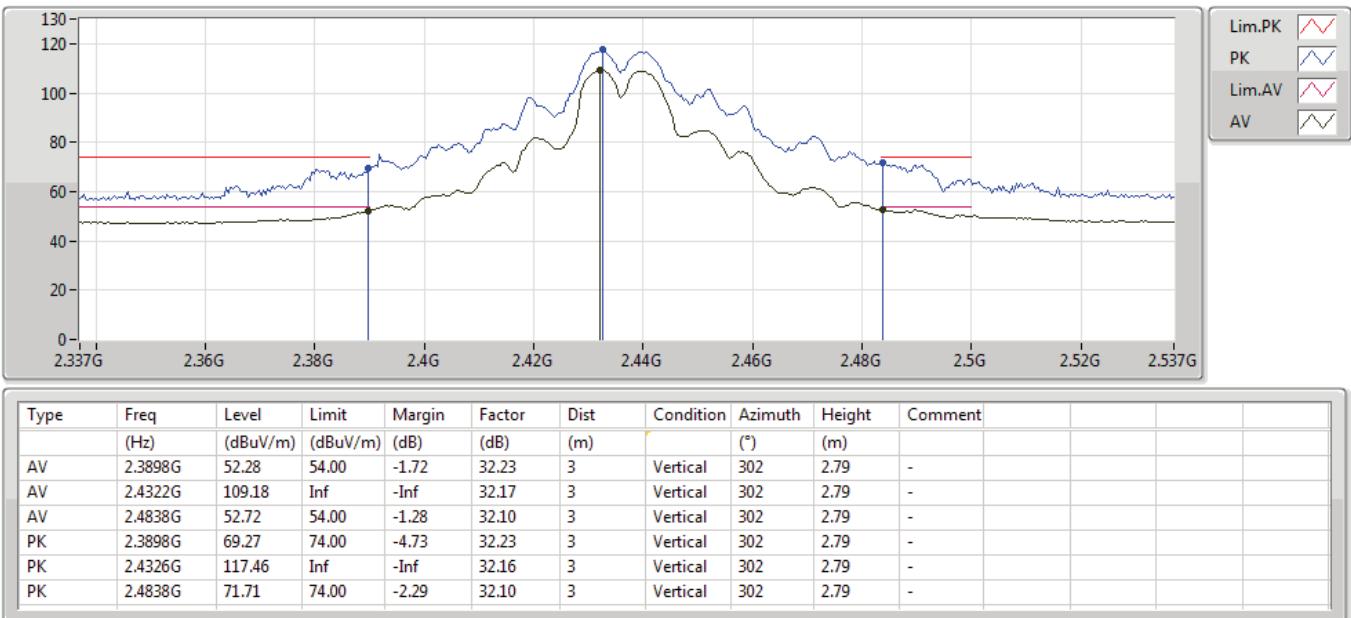
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2417MHz_TX


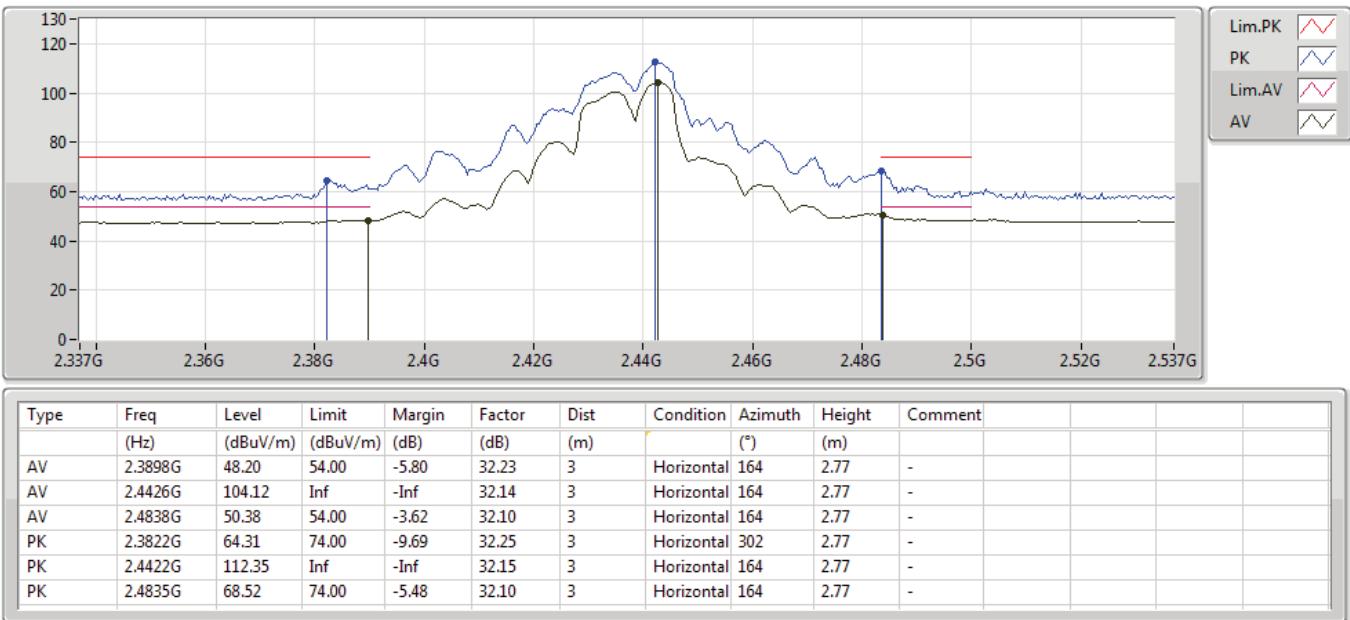
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2437MHz_TX


802.11g_Nss1,(6Mbps)_4TX

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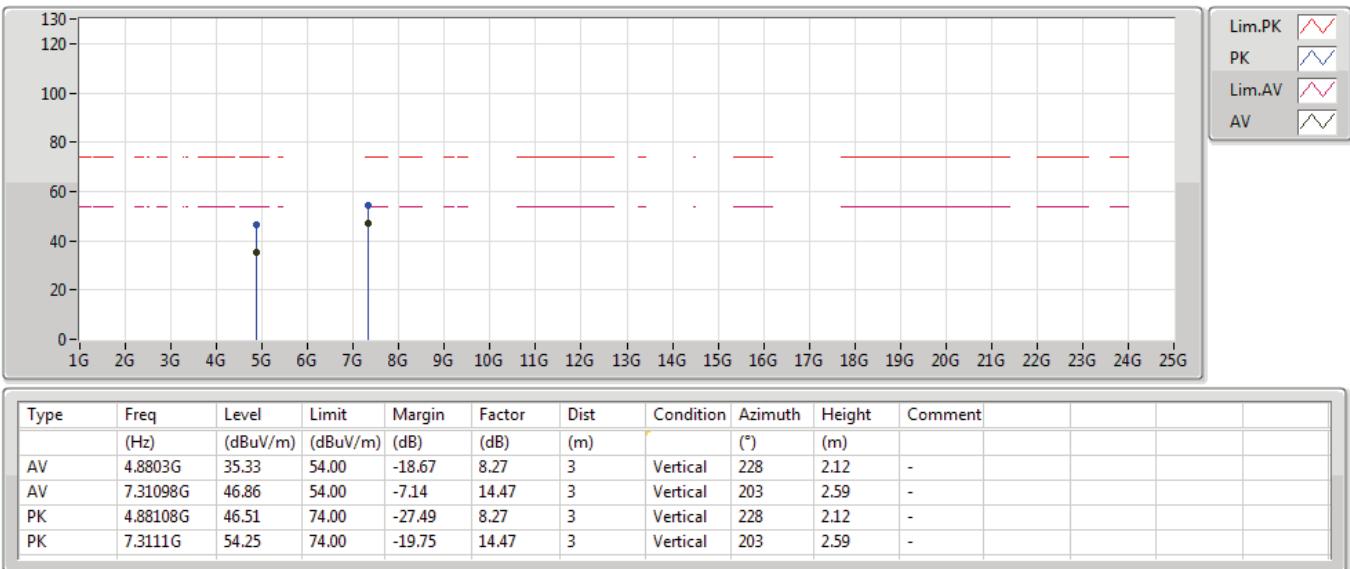
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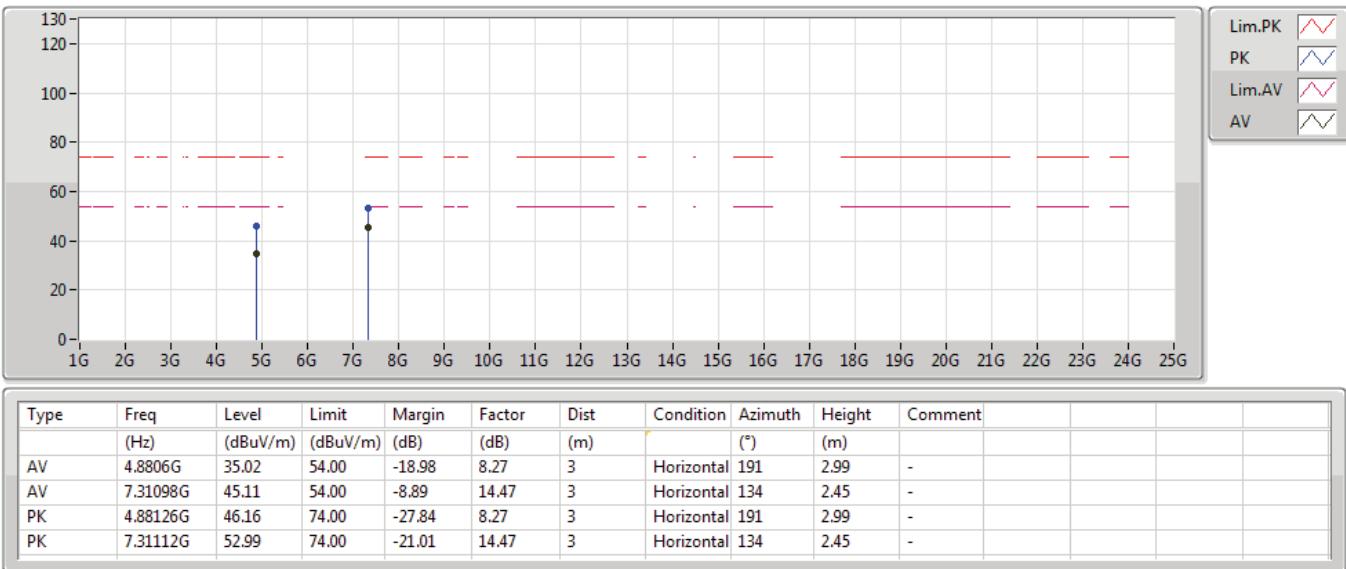
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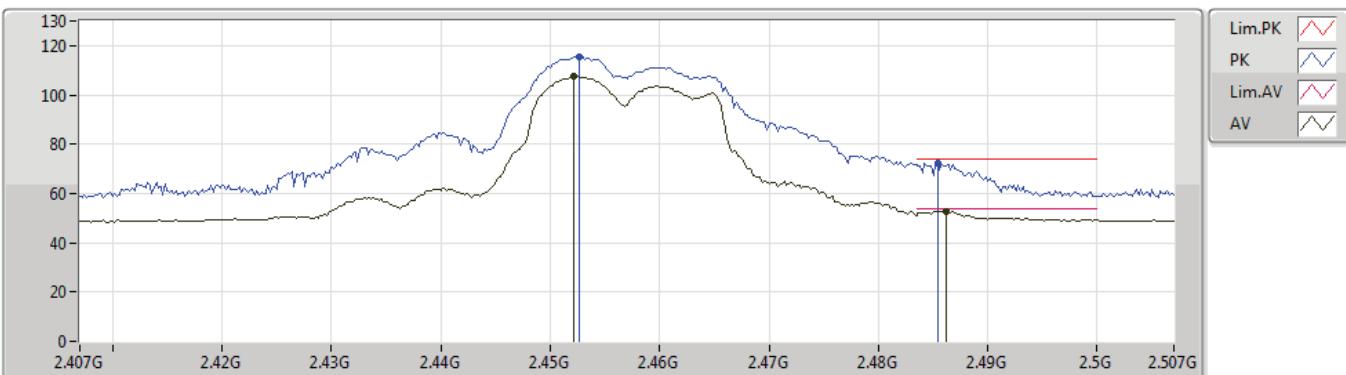
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802.11g_Nss1,(6Mbps)_4TX

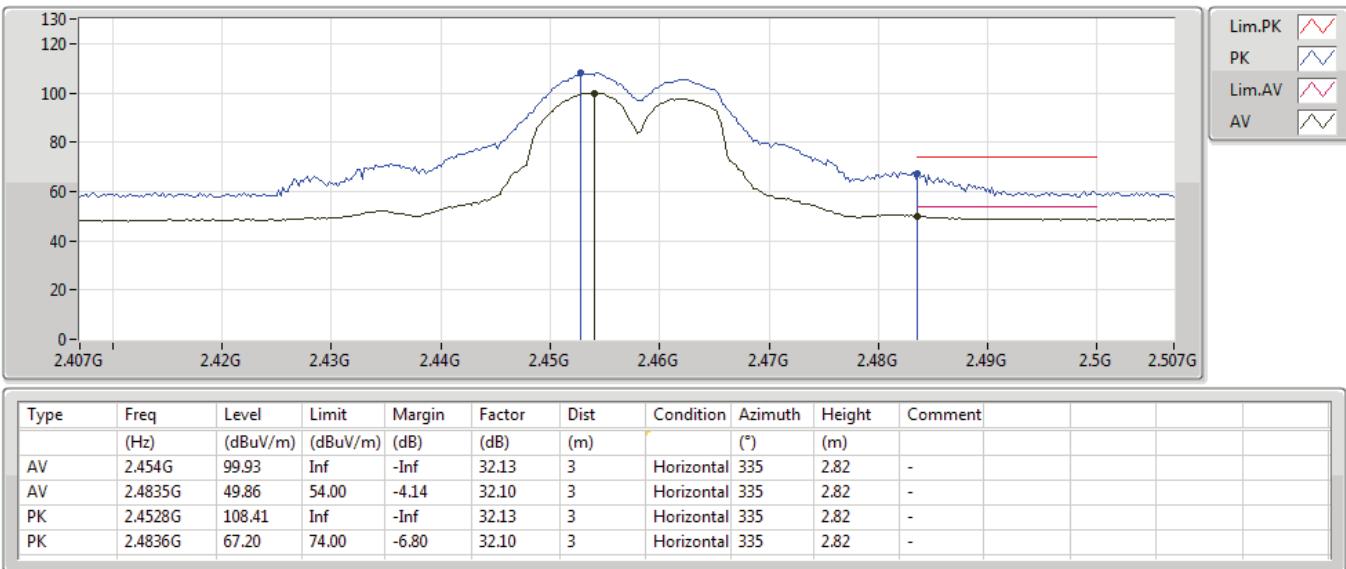
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2457MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment			
AV	2.4522G	107.45	Inf	-Inf	32.14	3	Vertical	310	2.99	-			
AV	2.4862G	52.89	54.00	-1.11	32.10	3	Vertical	310	2.99	-			
PK	2.4526G	115.57	Inf	-Inf	32.13	3	Vertical	310	2.99	-			
PK	2.4854G	72.19	74.00	-1.81	32.10	3	Vertical	310	2.99	-			

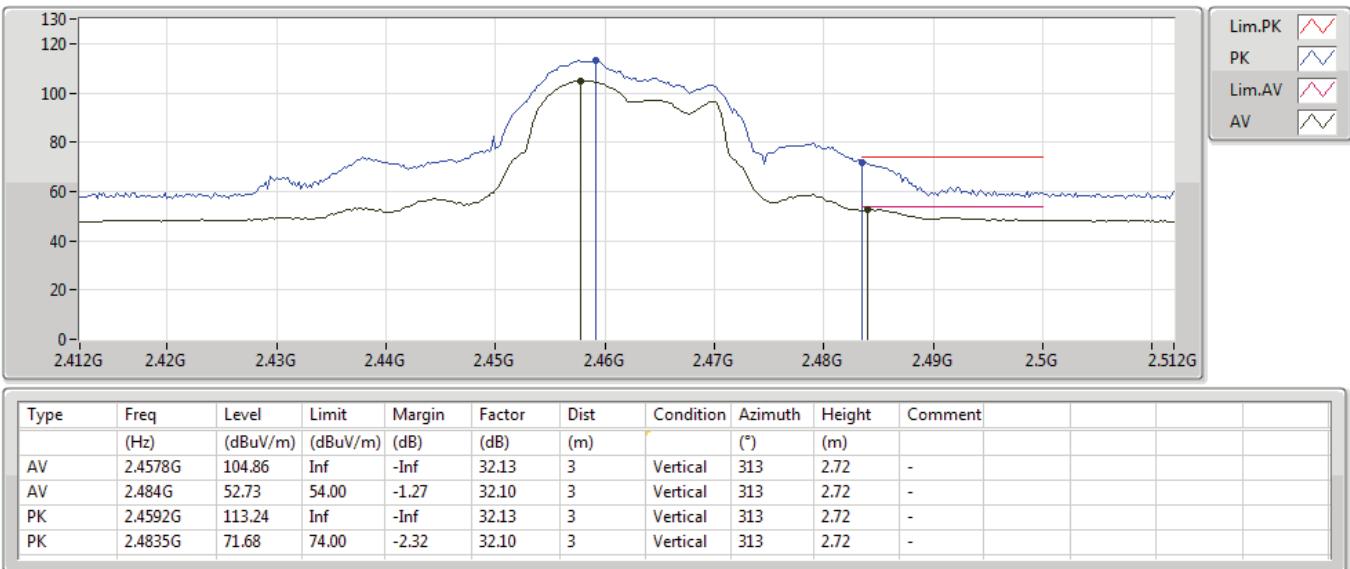
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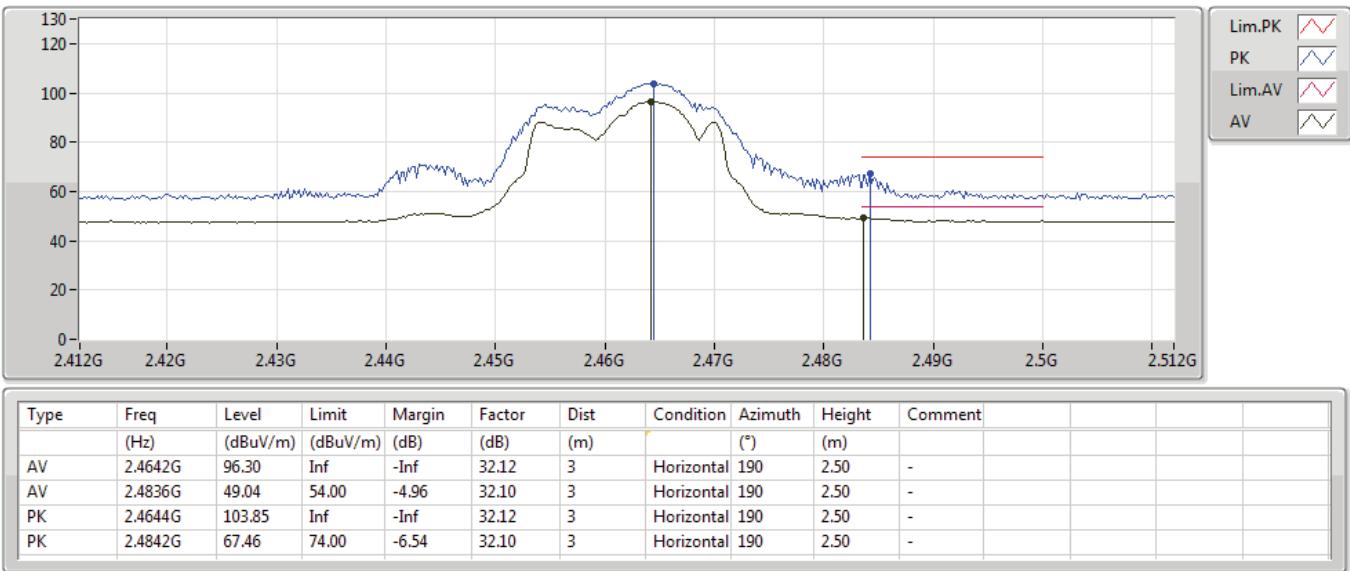
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2462MHz_TX


802.11g_Nss1,(6Mbps)_4TX

04/05/2019

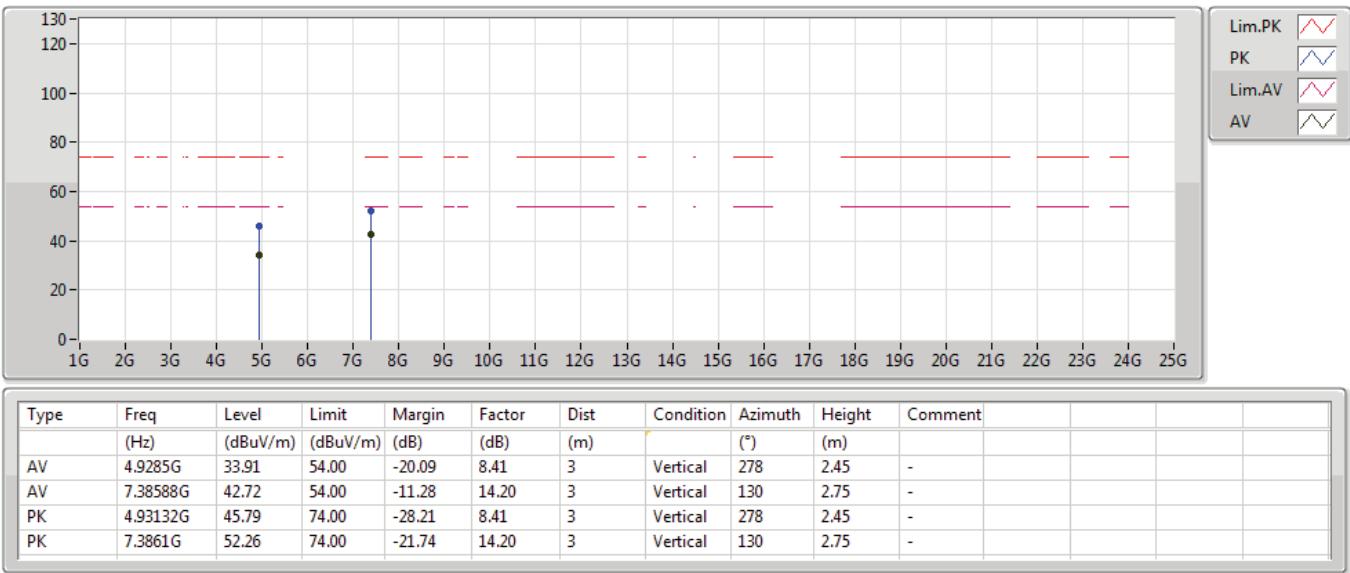
2462MHz_TX




802.11g_Nss1,(6Mbps)_4TX

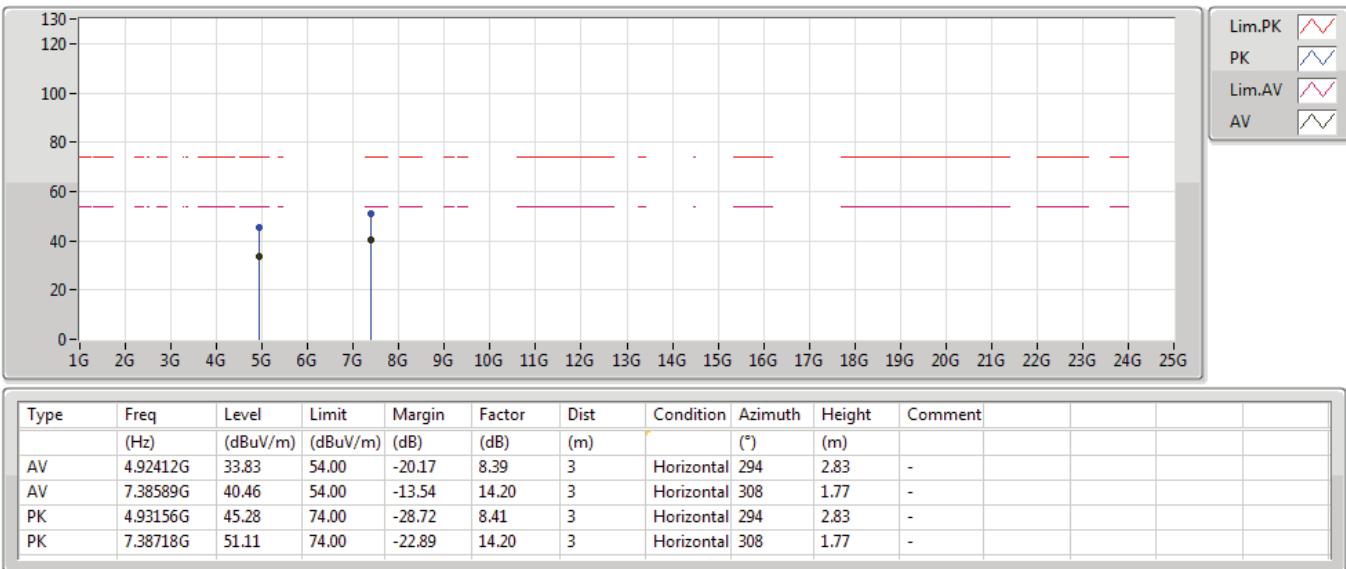
04/05/2019

2462MHz_TX



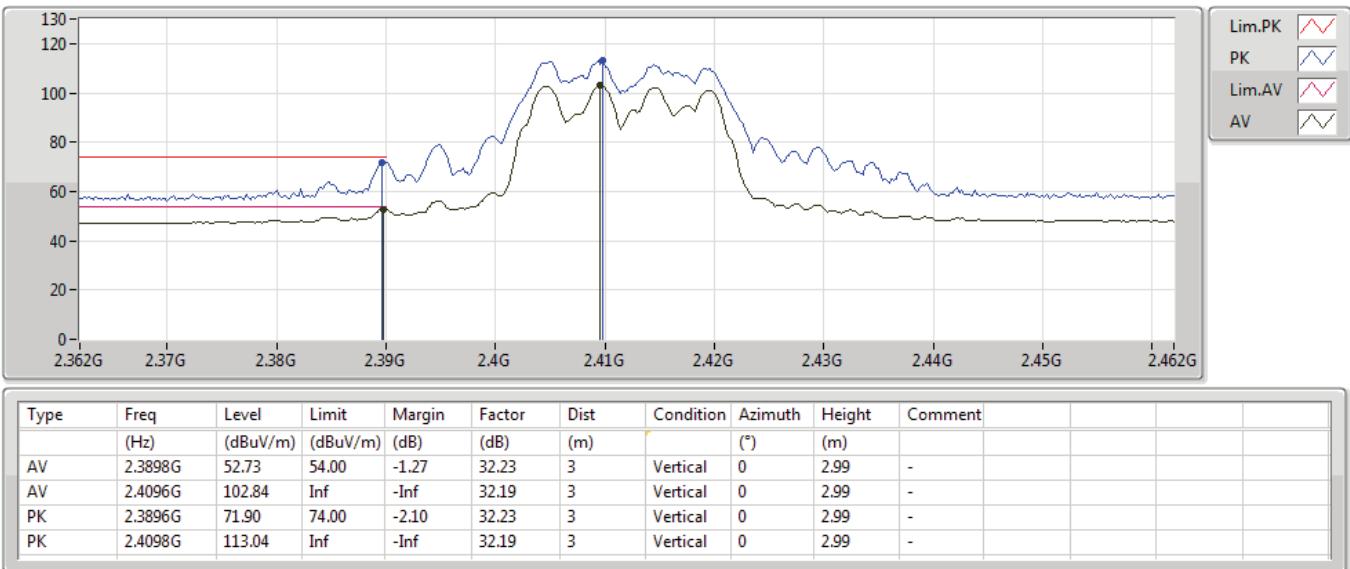
802.11g_Nss1,(6Mbps)_4TX

04/05/2019

2462MHz_TX


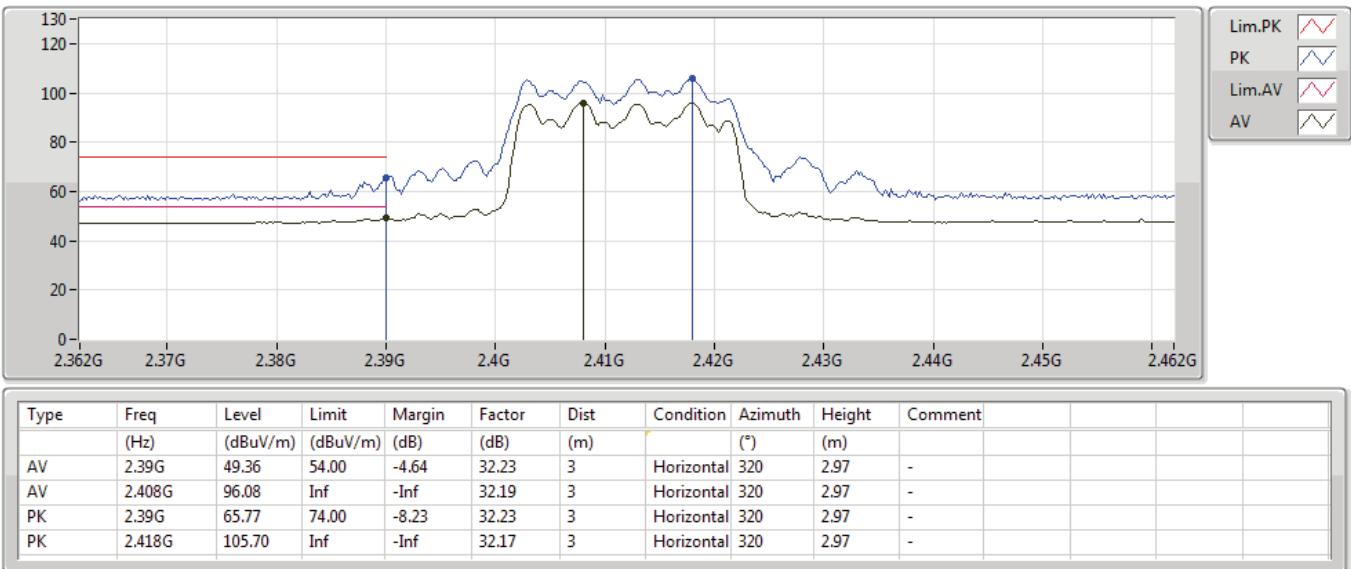
802.11ax HEW20_Nss1,(MCS0)_4TX

04/05/2019

2412MHz_TX


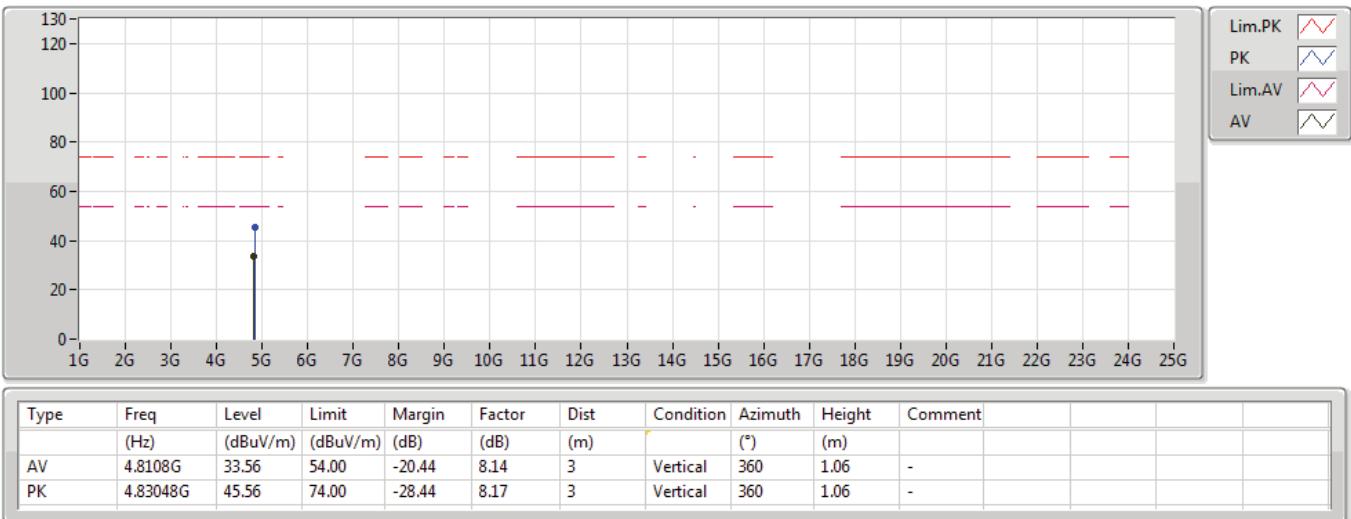
802.11ax HEW20_Nss1,(MCS0)_4TX

04/05/2019

2412MHz_TX


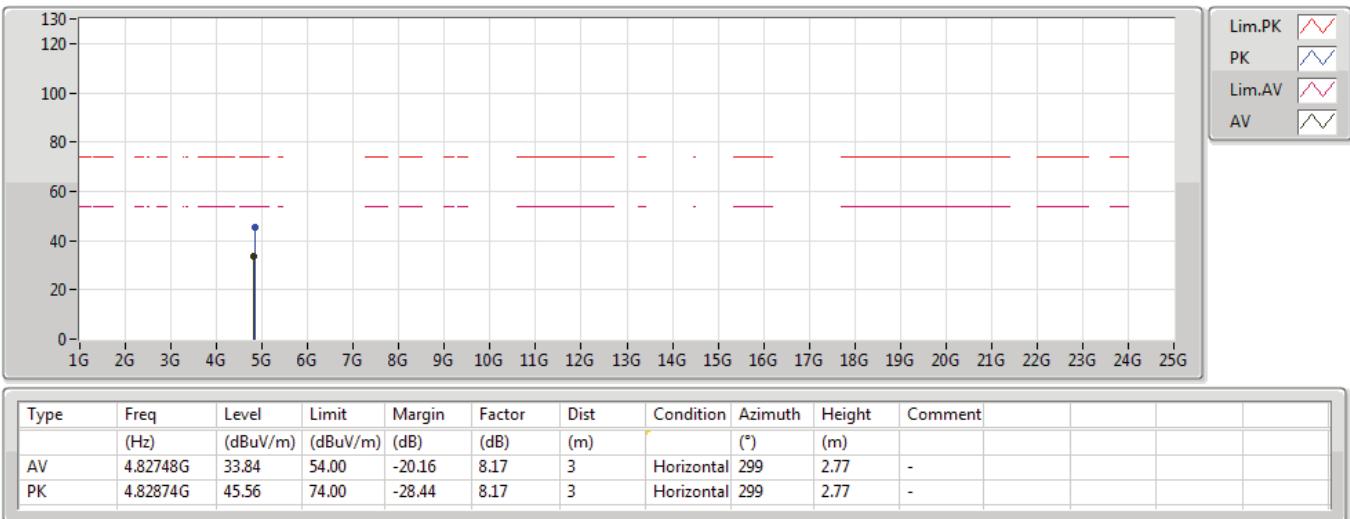
802.11ax HEW20_Nss1,(MCS0)_4TX

04/05/2019

2412MHz_TX


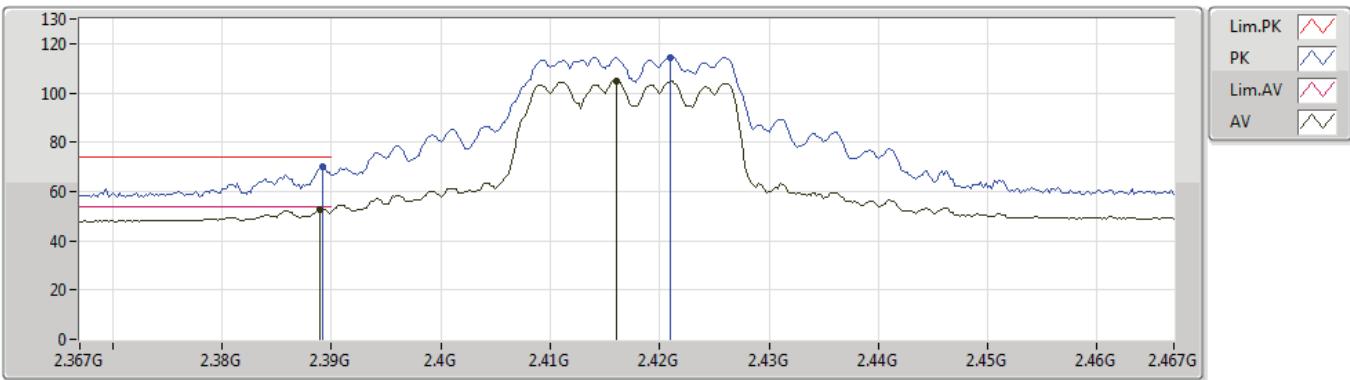
802.11ax HEW20_Nss1,(MCS0)_4TX

04/05/2019

2412MHz_TX


802.11ax HEW20_Nss1,(MCS0)_4TX

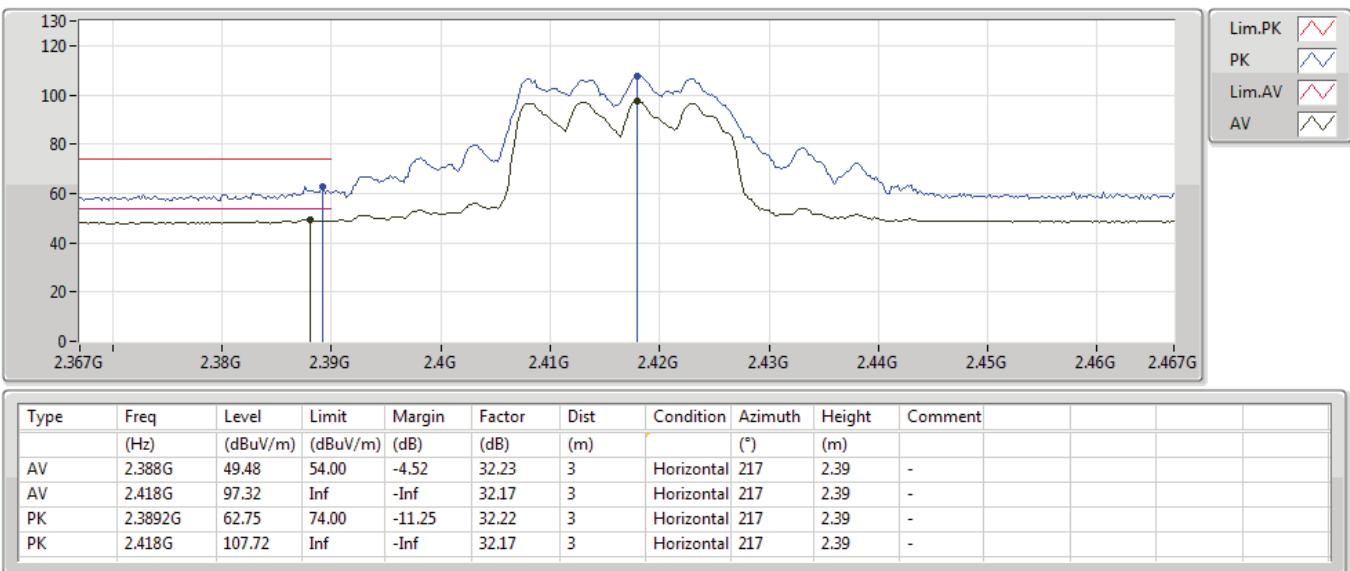
05/05/2019

2417MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	2.389G	52.76	54.00	-1.24	32.22	3	Vertical	314	2.75	-		
AV	2.416G	104.92	Inf	-Inf	32.18	3	Vertical	314	2.75	-		
PK	2.3892G	69.84	74.00	-4.16	32.22	3	Vertical	314	2.75	-		
PK	2.421G	114.49	Inf	-Inf	32.18	3	Vertical	314	2.75	-		

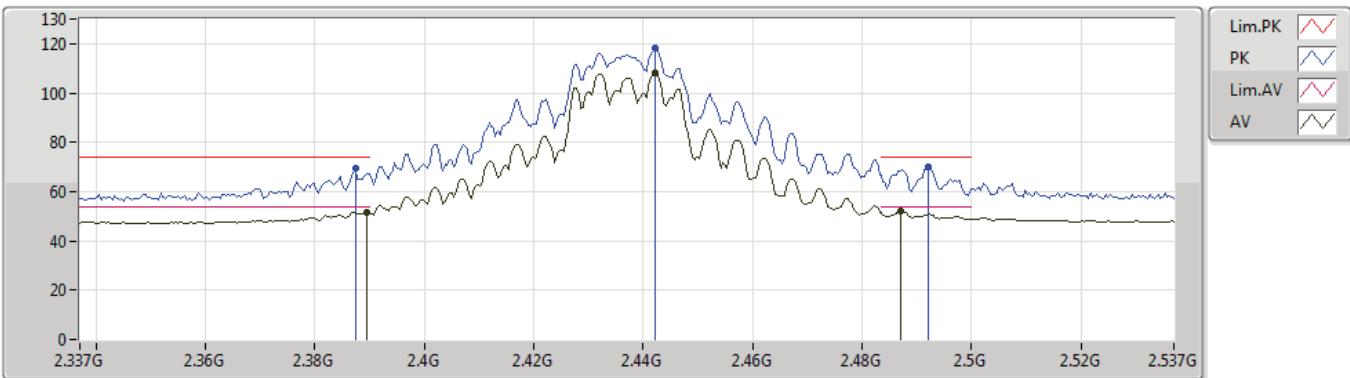
802.11ax HEW20_Nss1,(MCS0)_4TX

05/05/2019

2417MHz_TX


802.11ax HEW20_Nss1,(MCS0)_4TX

05/05/2019

2437MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3894G	51.63	54.00	-2.37	32.23	3	Vertical	1	2.87	-
AV	2.4422G	108.31	Inf	-Inf	32.15	3	Vertical	1	2.87	-
AV	2.487G	52.24	54.00	-1.76	32.10	3	Vertical	1	2.87	-
PK	2.3874G	69.51	74.00	-4.49	32.23	3	Vertical	1	2.87	-
PK	2.4422G	118.06	Inf	-Inf	32.15	3	Vertical	1	2.87	-
PK	2.4922G	70.06	74.00	-3.94	32.09	3	Vertical	1	2.87	-