



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, Tsao-tien, Nantou
54261, Taiwan
Standard : 47 CFR FCC Part 15.407

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 EMISSION BANDWIDTH****APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER****APPENDIX D. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY****APPENDIX E. TEST RESULTS OF UNWANTED EMISSIONS****APPENDIX F. 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	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

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

Comments and explanations:

None

Reviewed by: 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
5150-5250	a, n (HT20), ac (VHT20) , ax (HEW20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40) , ax (HEW40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80) , ax (HEW80)	5210	42 [1]
5725-5850		5775	155 [1]

Radio 1

<Non-Beamforming>

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4TX
5.725-5.85GHz	802.11a	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	4TX
5.725-5.85GHz	802.11ac VHT80	80	4TX
5.15-5.25GHz	802.11ax HEW20	20	4TX
5.725-5.85GHz	802.11ax HEW20	20	4TX
5.15-5.25GHz	802.11ax HEW40	40	4TX
5.725-5.85GHz	802.11ax HEW40	40	4TX
5.15-5.25GHz	802.11ax HEW80	80	4TX
5.725-5.85GHz	802.11ax HEW80	80	4TX



<Beamforming>

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ac VHT20-BF	20	4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	4TX
5.15-5.25GHz	802.11ax HEW20-BF	20	4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	4TX
5.15-5.25GHz	802.11ax HEW40-BF	40	4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	4TX
5.15-5.25GHz	802.11ax HEW80-BF	80	4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	4TX

Radio 2

<Non-Beamforming>

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11a	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT80	80	4TX
5.725-5.85GHz	802.11ax HEW20	20	4TX
5.725-5.85GHz	802.11ax HEW40	40	4TX
5.725-5.85GHz	802.11ax HEW80	80	4TX

<Beamforming>

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ac VHT20-BF	20	4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	4TX



Note:

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- The resource unit of HEW 20, HEW 40, HEW 80 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"/>	Outdoor	<input type="checkbox"/>	Indoor
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
Beamforming Function	<input checked="" type="checkbox"/>	Radio 1	<input checked="" type="checkbox"/>	Radio 2
TPC Function	<input checked="" type="checkbox"/>	With TPC Function	<input type="checkbox"/>	Without TPC Function
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

Radio 1

<Non-Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.947	0.24	2.066m	1k
802.11ac VHT20	0.986	0.06	n/a (DC≥=0.98)	n/a (DC≥=0.98)
802.11ac VHT40	0.956	0.2	956.25u	3k
802.11ac VHT80	0.932	0.31	465u	3k
802.11ax HEW20	0.98	0.09	n/a (DC≥=0.98)	n/a (DC≥=0.98)
802.11ax HEW40	0.95	0.22	774.375u	3k
802.11ax HEW80	0.904	0.44	403.125u	3k

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

<Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.957	0.19	4.034m	300
802.11ac VHT40-BF	0.959	0.18	3.697m	300
802.11ac VHT80-BF	0.949	0.23	3.697m	300
802.11ax HEW20-BF	0.757	1.21	2.931m	1k
802.11ax HEW40-BF	0.927	0.33	4.616m	300
802.11ax HEW80-BF	0.95	0.22	4.853m	300

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

Radio 2

<Non-Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.951	0.22	2.067m	1k
802.11ac VHT20	0.986	0.06	n/a (DC≥=0.98)	n/a (DC≥=0.98)
802.11ac VHT40	0.958	0.19	955.938u	3k
802.11ac VHT80	0.923	0.35	463.75u	3k
802.11ax HEW20	0.981	0.08	n/a (DC≥=0.98)	n/a (DC≥=0.98)
802.11ax HEW40	0.951	0.22	776.563u	3k
802.11ax HEW80	0.903	0.44	404.688u	3k

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



< Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.931	0.31	3.841m	300
802.11ac VHT40-BF	0.959	0.18	3.697m	300
802.11ac VHT80-BF	0.949	0.23	3.697m	300
802.11ax HEW20-BF	0.907	0.42	2.928m	1k
802.11ax HEW40-BF	0.942	0.26	4.616m	300
802.11ax HEW80-BF	0.81	0.92	4.853m	300

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 789033 D02 v02r01
- ◆ 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

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

2.2 Test Channel Mode

Radio1

<Non-Beamforming>

Test Software Version	MTool 3.1.0.1
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Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	60
5200MHz	72
5240MHz	72
5745MHz	76
5785MHz	76
5825MHz	66
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5180MHz	65
5200MHz	73
5240MHz	74
5745MHz	72
5785MHz	72
5825MHz	76
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5190MHz	53
5230MHz	76
5755MHz	74
5795MHz	91
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5210MHz	52
5775MHz	70



802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	65
5200MHz	73
5240MHz	74
5745MHz	72
5785MHz	72
5825MHz	76
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	53
5230MHz	76
5755MHz	74
5795MHz	91
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	52
5775MHz	70



<Beamforming>

Test Software Version	Dos
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Mode	PowerSetting
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5180MHz	67
5200MHz	70
5240MHz	69
5745MHz	73
5785MHz	74
5825MHz	70
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5190MHz	55
5230MHz	71
5755MHz	74
5795MHz	72
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5210MHz	58
5775MHz	72
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	67
5200MHz	70
5240MHz	69
5745MHz	73
5785MHz	74
5825MHz	70
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	55
5230MHz	71
5755MHz	74
5795MHz	72
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	58
5775MHz	72



Radio 2

<Non-Beamforming>

Test Software Version	MTool 3.1.0.1
-----------------------	---------------

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5745MHz	65
5785MHz	65
5825MHz	70
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5745MHz	69
5785MHz	68
5825MHz	66
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5755MHz	74
5795MHz	74
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5775MHz	78
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5745MHz	69
5785MHz	68
5825MHz	66
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5755MHz	74
5795MHz	74
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5775MHz	78



<Beamforming>

Mode	PowerSetting
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5745MHz	70
5785MHz	70
5825MHz	70
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5755MHz	70
5795MHz	75
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5775MHz	75
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5745MHz	70
5785MHz	70
5825MHz	70
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5755MHz	70
5795MHz	75
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5775MHz	75



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 1; 5G TX
	2. Adapter mode ; Radio 2 ; 5G TX
	3. Adapter mode ; Radio1 ; 5G BF
	4. Adapter mode ; Radio 2 ; 5G BF

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
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 1 ; 5G TX
	2. Adapter mode ; Radio 2 ; 5G TX
	3. Adapter mode ; Radio1 ; 5G BF
	4. Adapter mode ; Radio2 ; 5G BF
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Y Plane
Worst Planes of EUT	V



2.4 Accessories and Support Equipment

Accessories				
AC Adapter	Brand Name	APD	Model Name	WA-30J12R
	Power Rating	I/P: 100 - 240Vac, 0.9 A, O/P: 12 Vdc, 2.5 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.

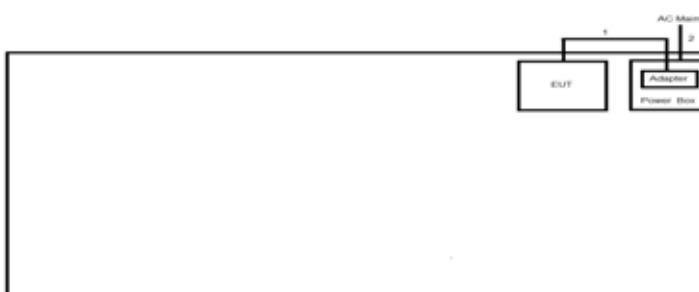
Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5530	DOC
2	Client AP	FORTINET	FAP-U433F	DOC
3	Client AP	FORTINET	FAP-U431F	DOC

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



2.5 Test Setup Diagram

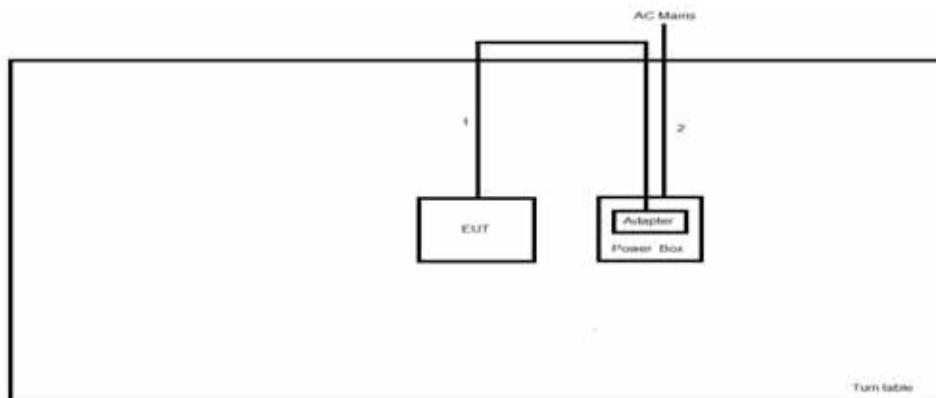
Test Setup Diagram – AC Line Conducted Emission Test				
Item	Connection	Shielded	Length(m)	Remark
1	DC Power line	No	1.5	-
2	AC Power line	No	1.8	-



Test Fixture



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.

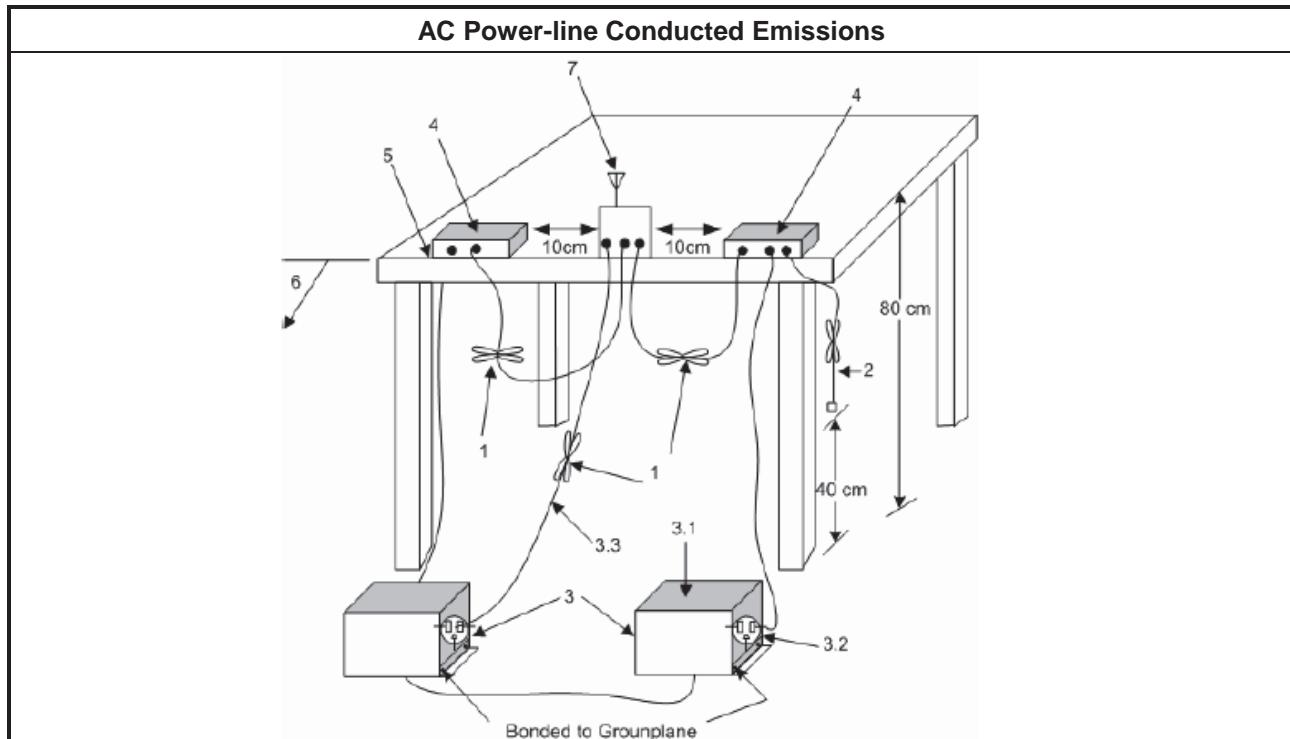
3.1.2 Measuring Instruments

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 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input type="checkbox"/>	For the 5.25-5.35 GHz band, N/A
<input type="checkbox"/>	For the 5.47-5.725 GHz band, N/A
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.

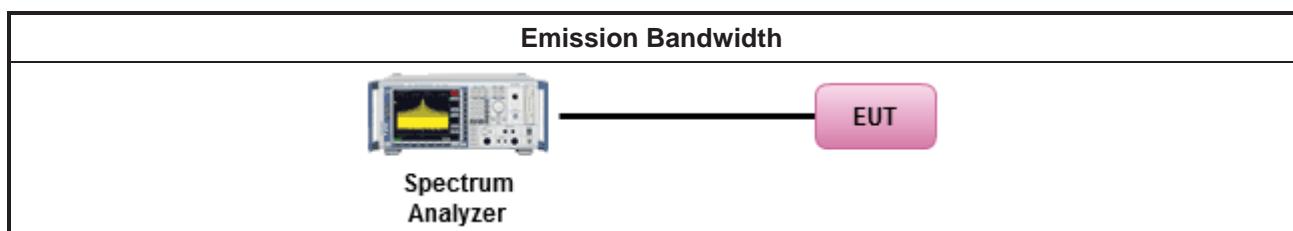
3.2.2 Measuring Instruments

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 789033, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 6.7 for 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	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	<ul style="list-style-type: none">▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125\text{mW}$ [21dBm]▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)$▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 23)$.▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 24 - (G_{TX} - 6)$.
<input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)$.▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
<p>P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

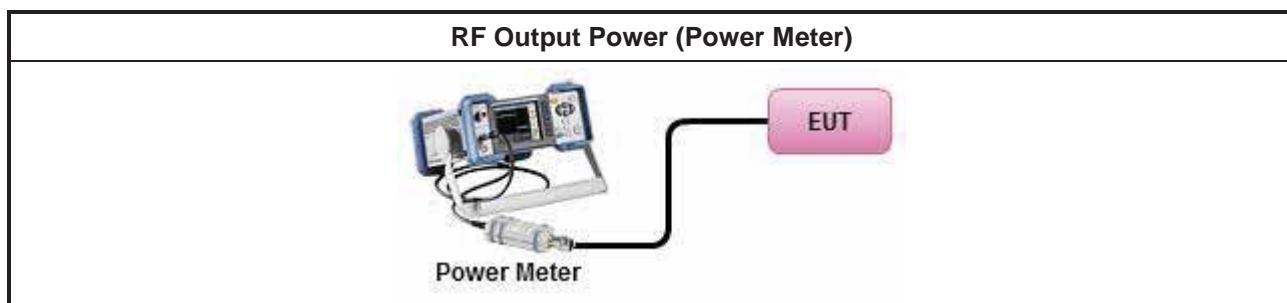
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
Duty cycle ≥ 98%	<input type="checkbox"/> Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
Duty cycle < 98%	<input type="checkbox"/> Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
Wideband RF power meter and average over on/off periods with duty factor	<input checked="" type="checkbox"/> Refer as KDB 789033, clause E Method PM (using an RF average 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 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	<ul style="list-style-type: none">▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.4.2 Measuring Instruments

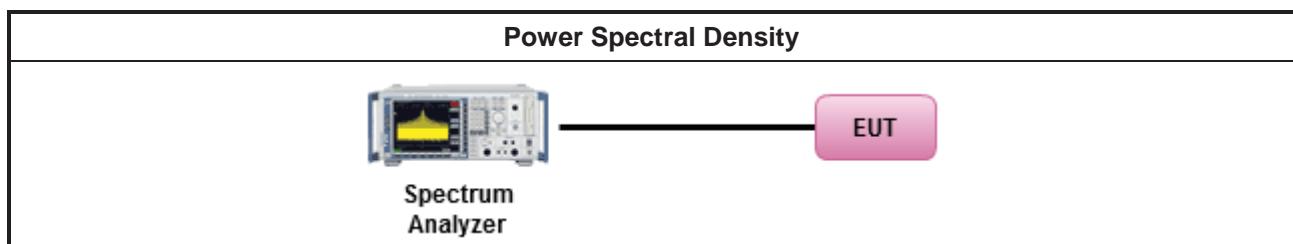
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none">▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
	<input type="checkbox"/> Refer as KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
Duty cycle \geq 98%	<input checked="" type="checkbox"/> Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
Duty cycle < 98%	<input checked="" type="checkbox"/> Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none">▪ For conducted measurement.	
	<ul style="list-style-type: none">▪ If the EUT supports multiple transmit chains using options given below:
	<ul style="list-style-type: none">▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PPSD). 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.
	<ul style="list-style-type: none">▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $\text{PPSD}_{\text{total}} = \text{PPSD}_1 + \text{PPSD}_2 + \dots + \text{PPSD}_n$(calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = \text{PPSD}_{\text{total}} + \text{DG}$

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz 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.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2 dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: 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).



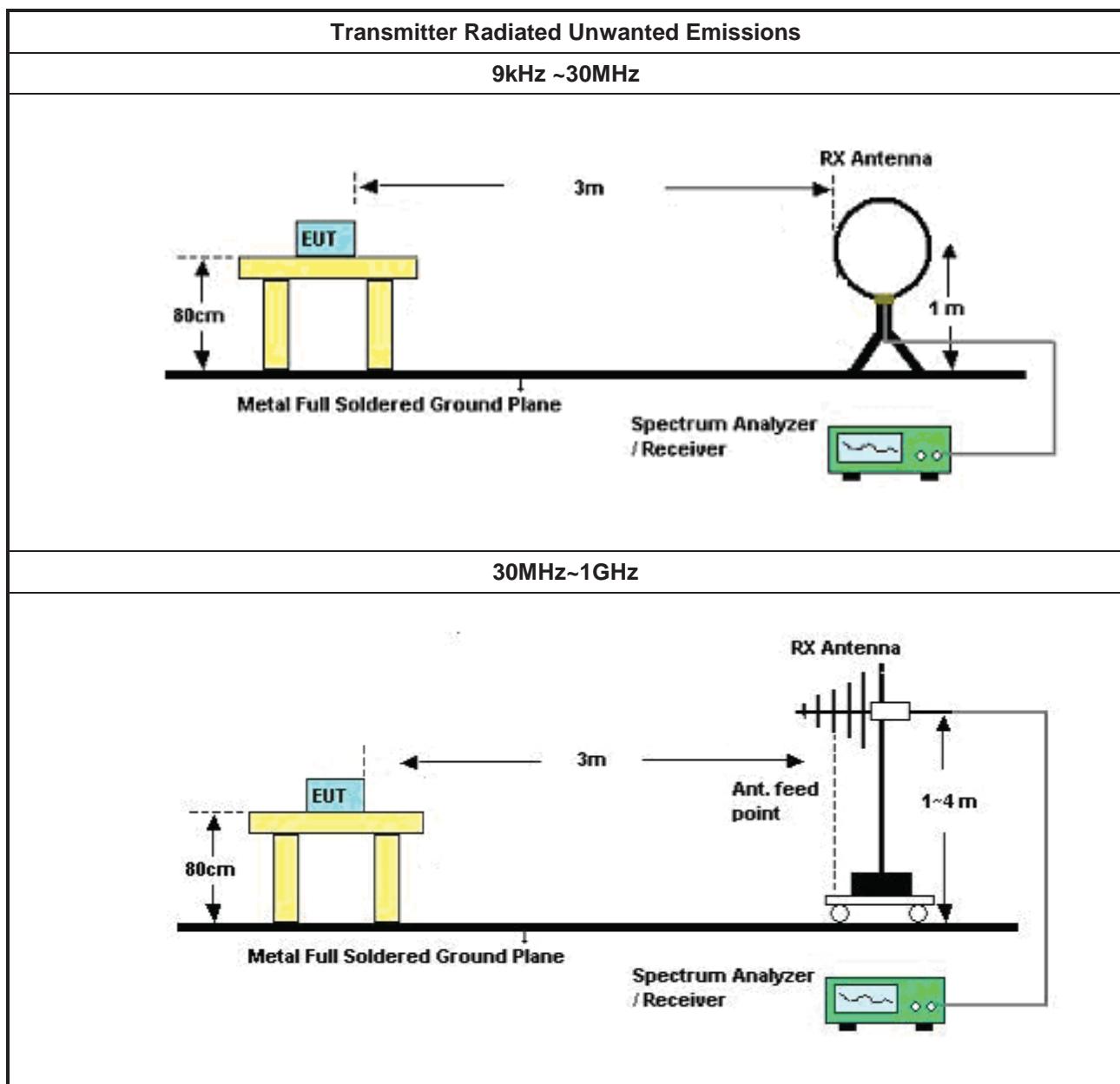
3.5.2 Measuring Instruments

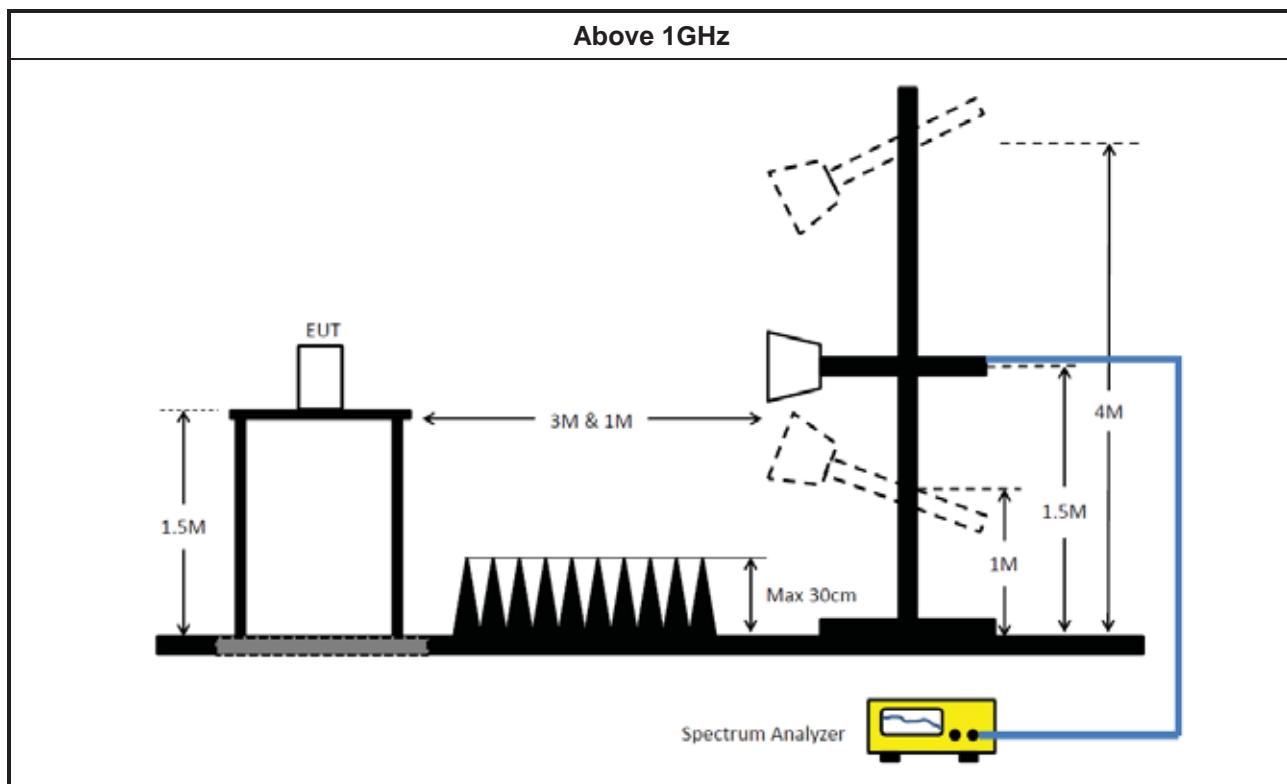
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
<ul style="list-style-type: none">▪ 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. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. 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).	
<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">▪ For the transmitter unwanted emissions shall be measured using following options below:	
<ul style="list-style-type: none">▪ Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.	
<ul style="list-style-type: none">▪ Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.	
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.	
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.	
<ul style="list-style-type: none">▪ For radiated measurement.	
<ul style="list-style-type: none">▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.	
<ul style="list-style-type: none">▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.	
<ul style="list-style-type: none">▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
<ul style="list-style-type: none">▪ The any unwanted emissions level shall not exceed the fundamental emission level.	
<ul style="list-style-type: none">▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



3.6 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

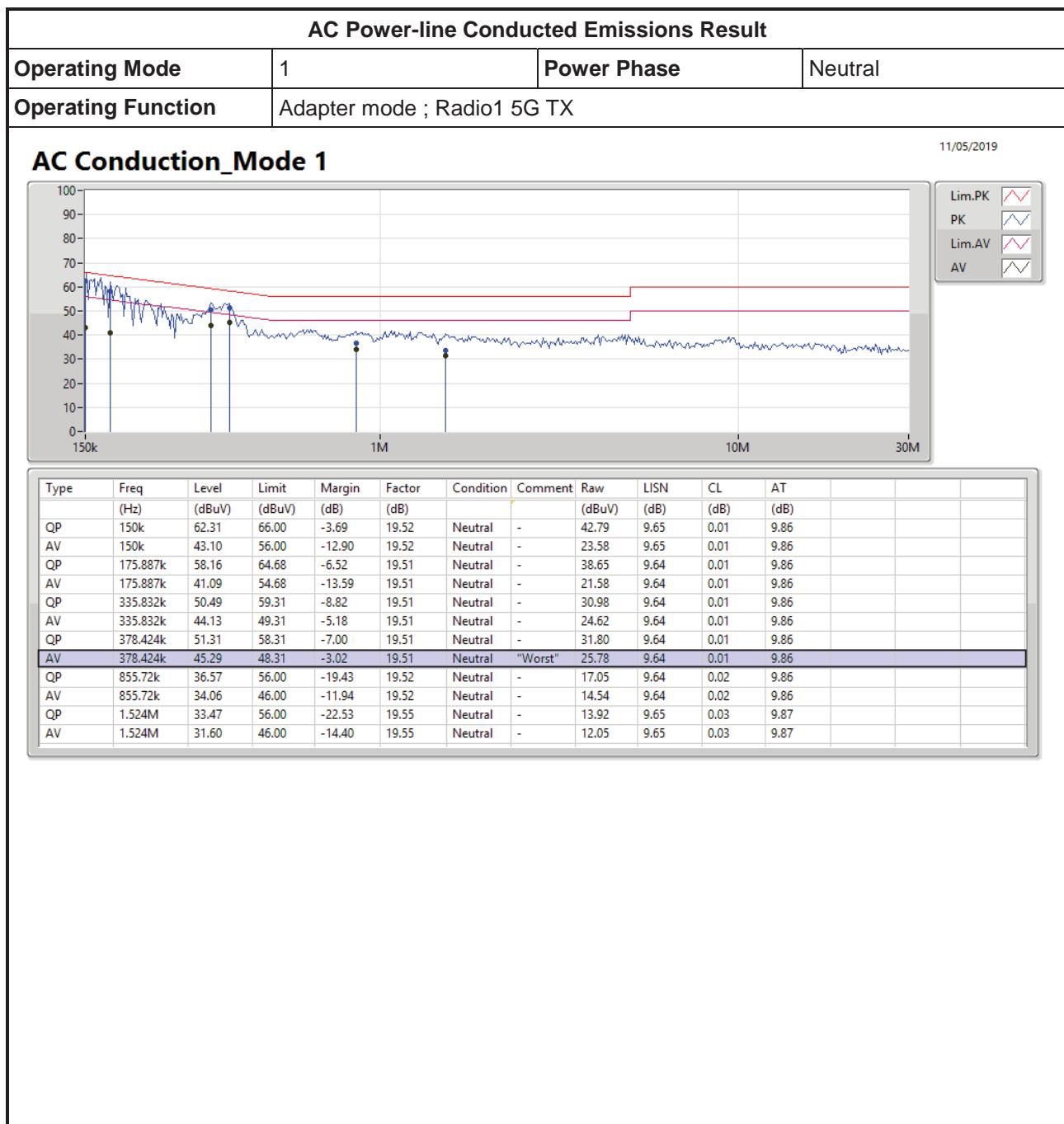
Instrument for Radiated Test

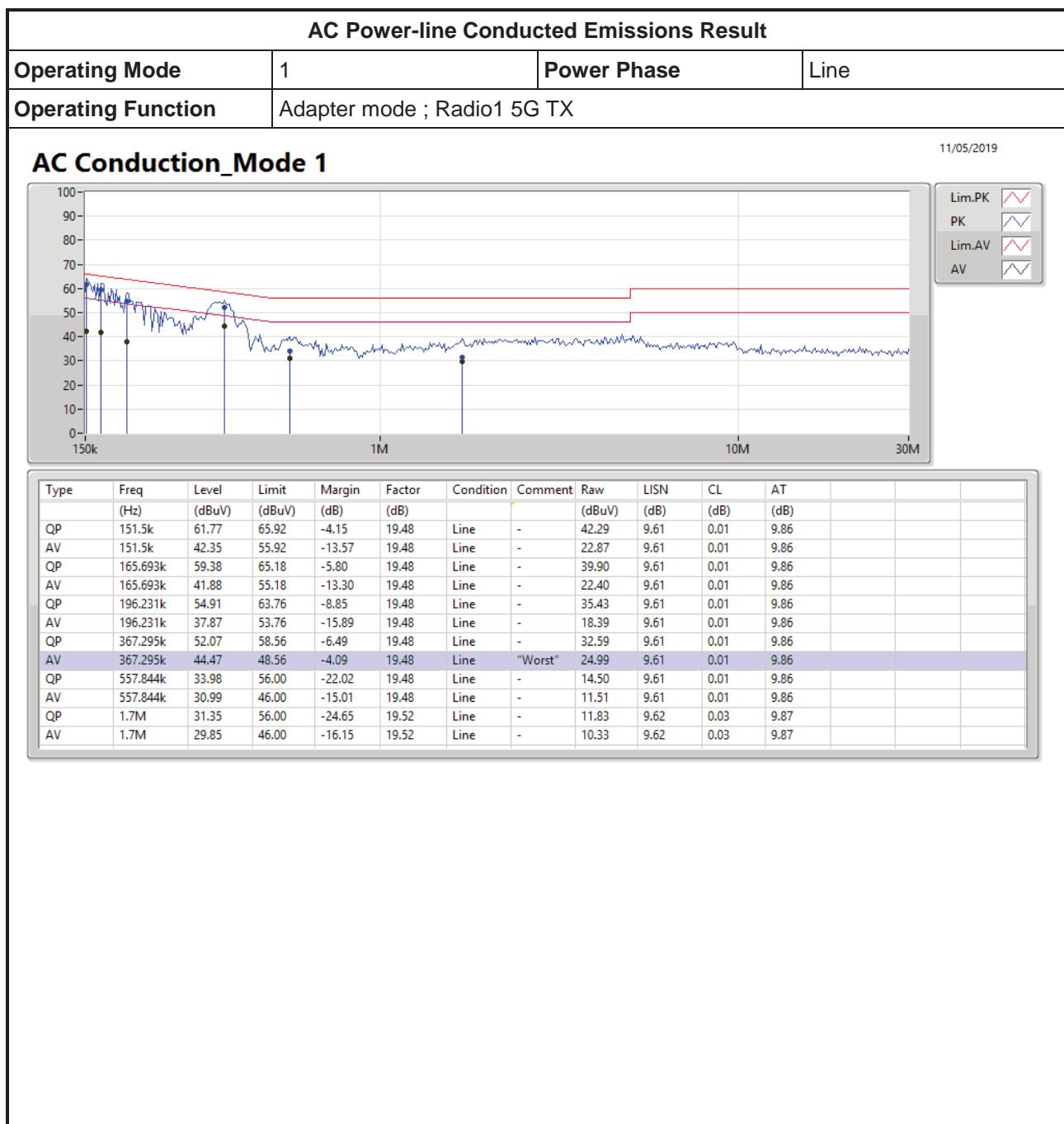
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	19/Oct/2018	18/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	17/Oct/2018	16/Oct/2019
Amplifier	Agilent	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

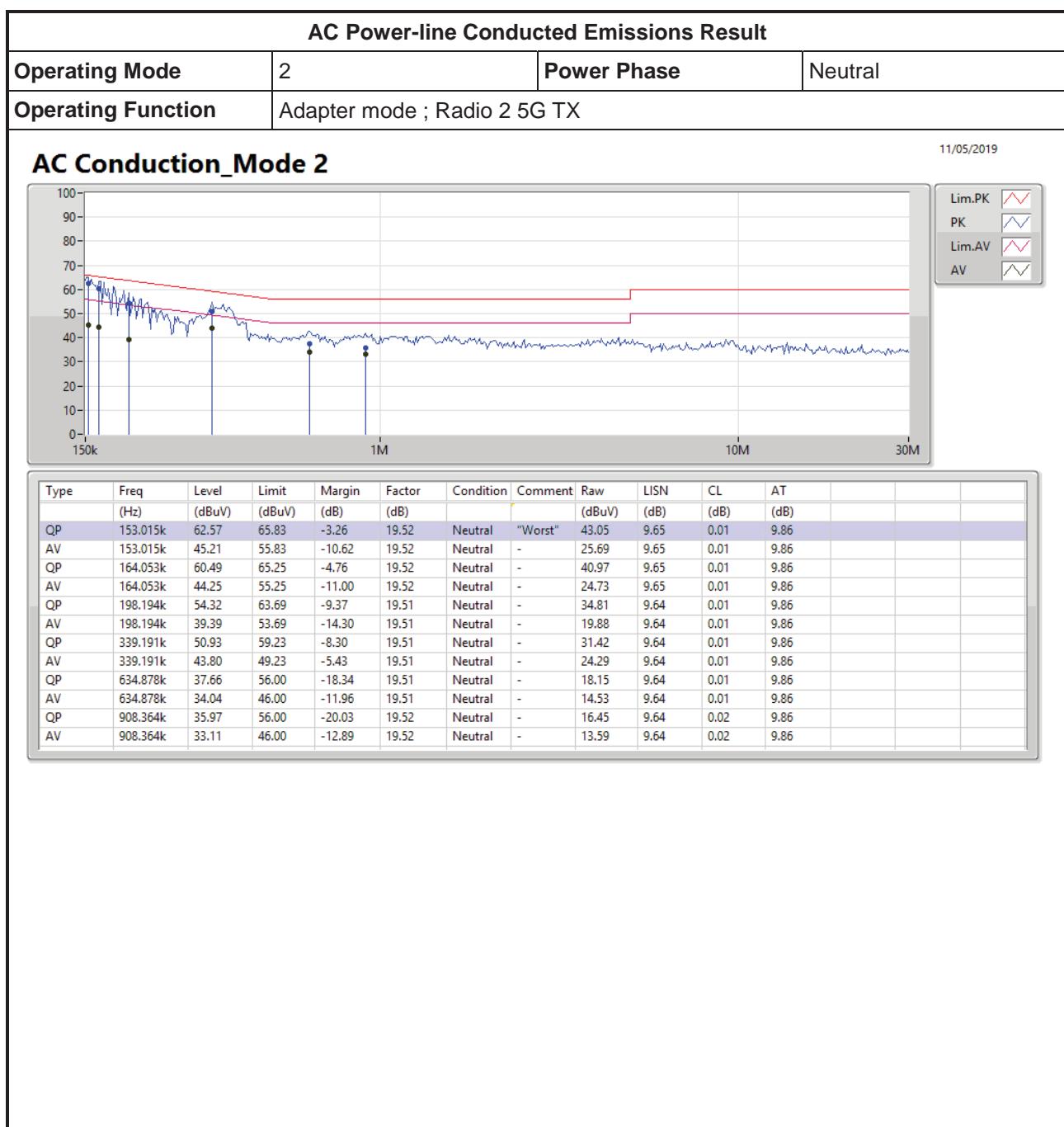


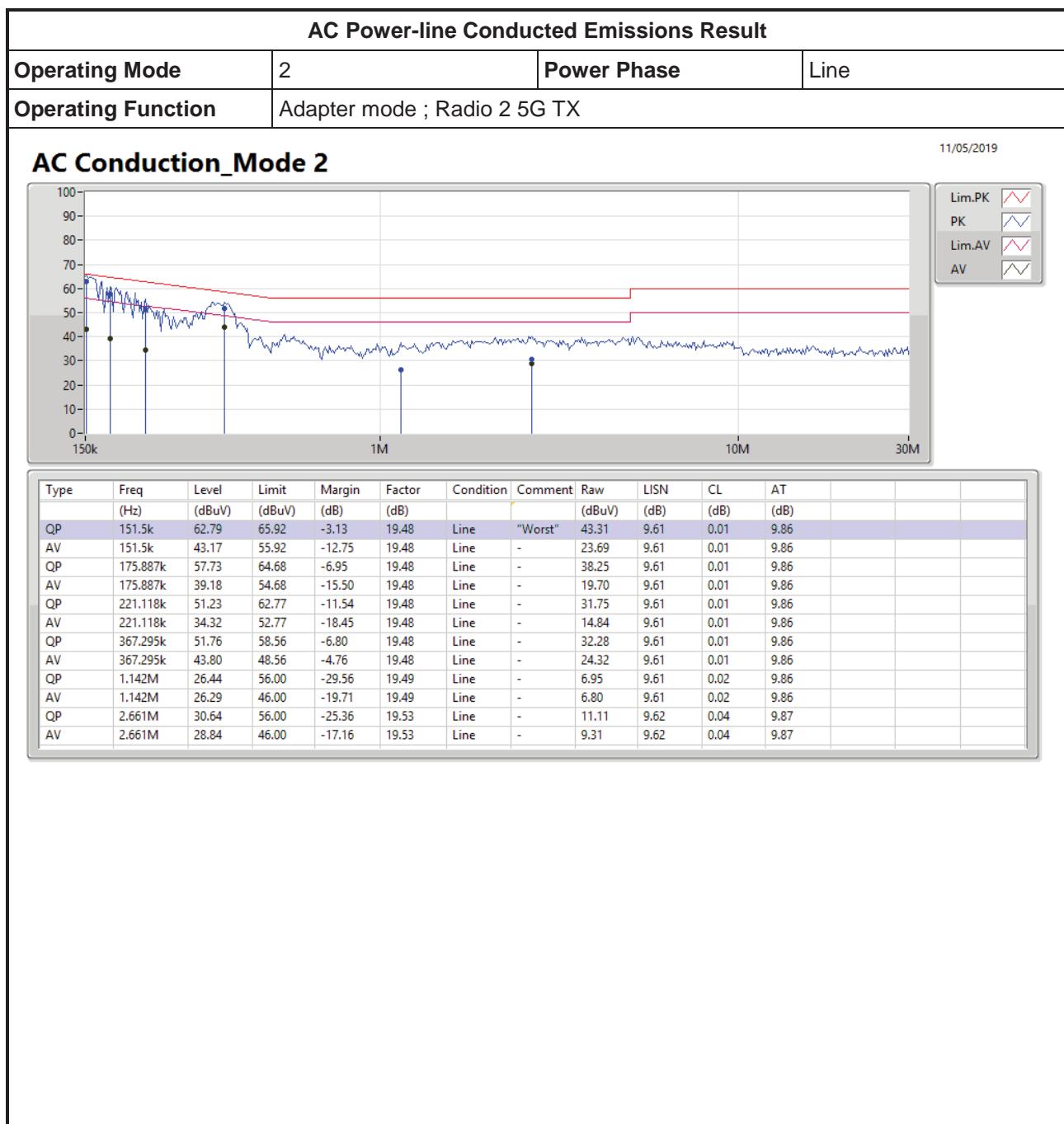
Instrument for Conducted Test

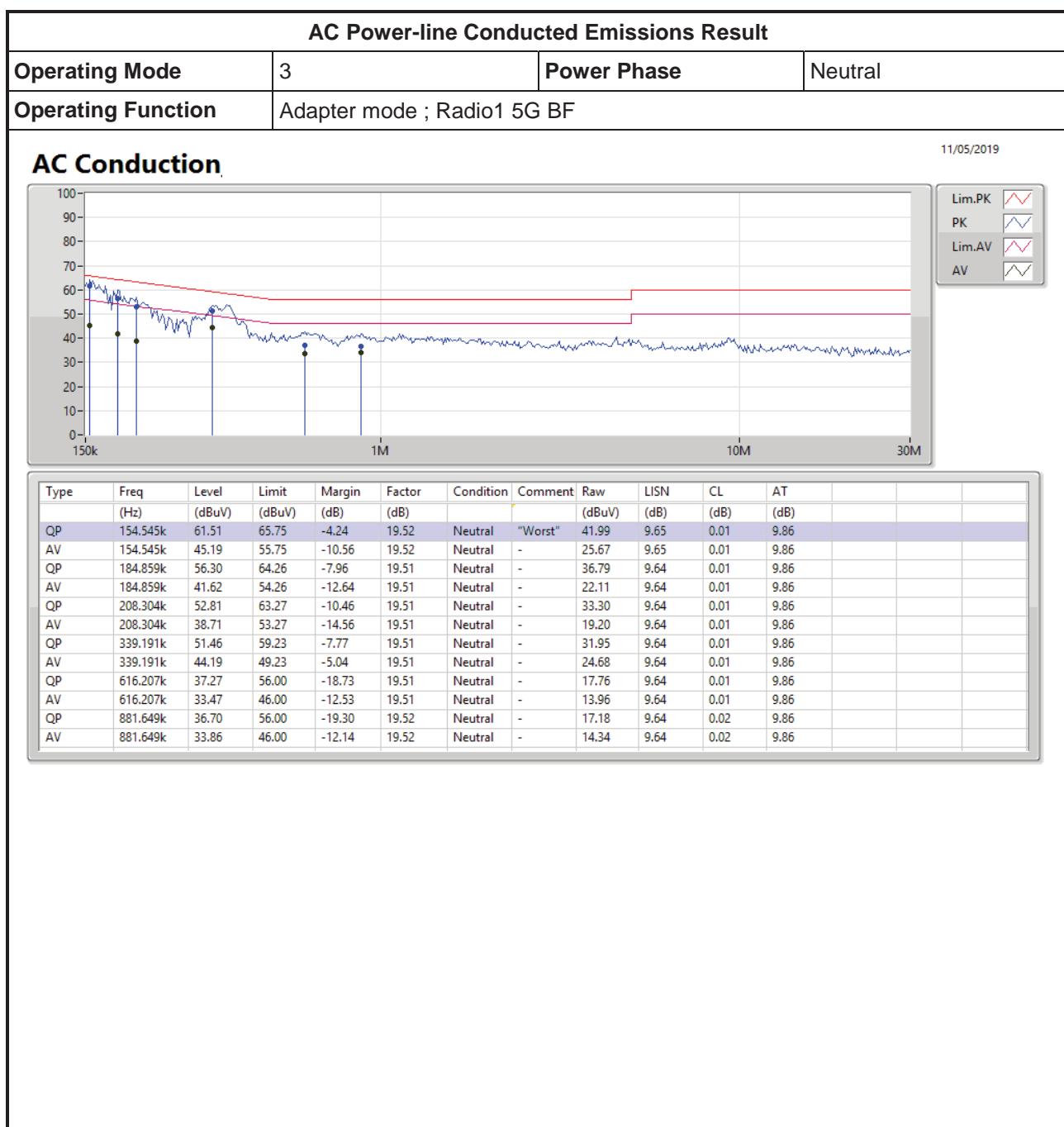
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	10Hz~40GHz	18/Jul/2018	17/Jul/2019
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019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

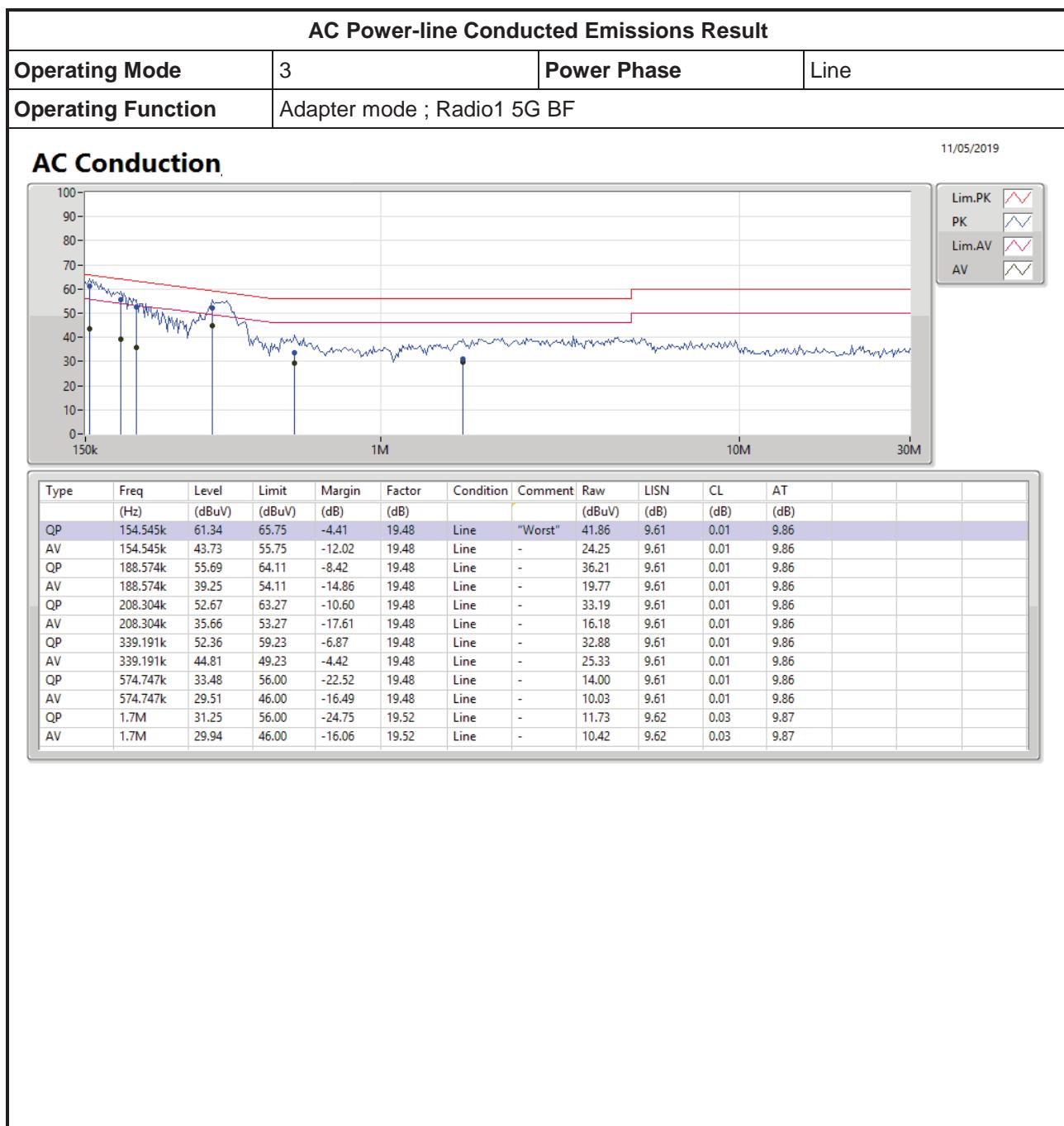


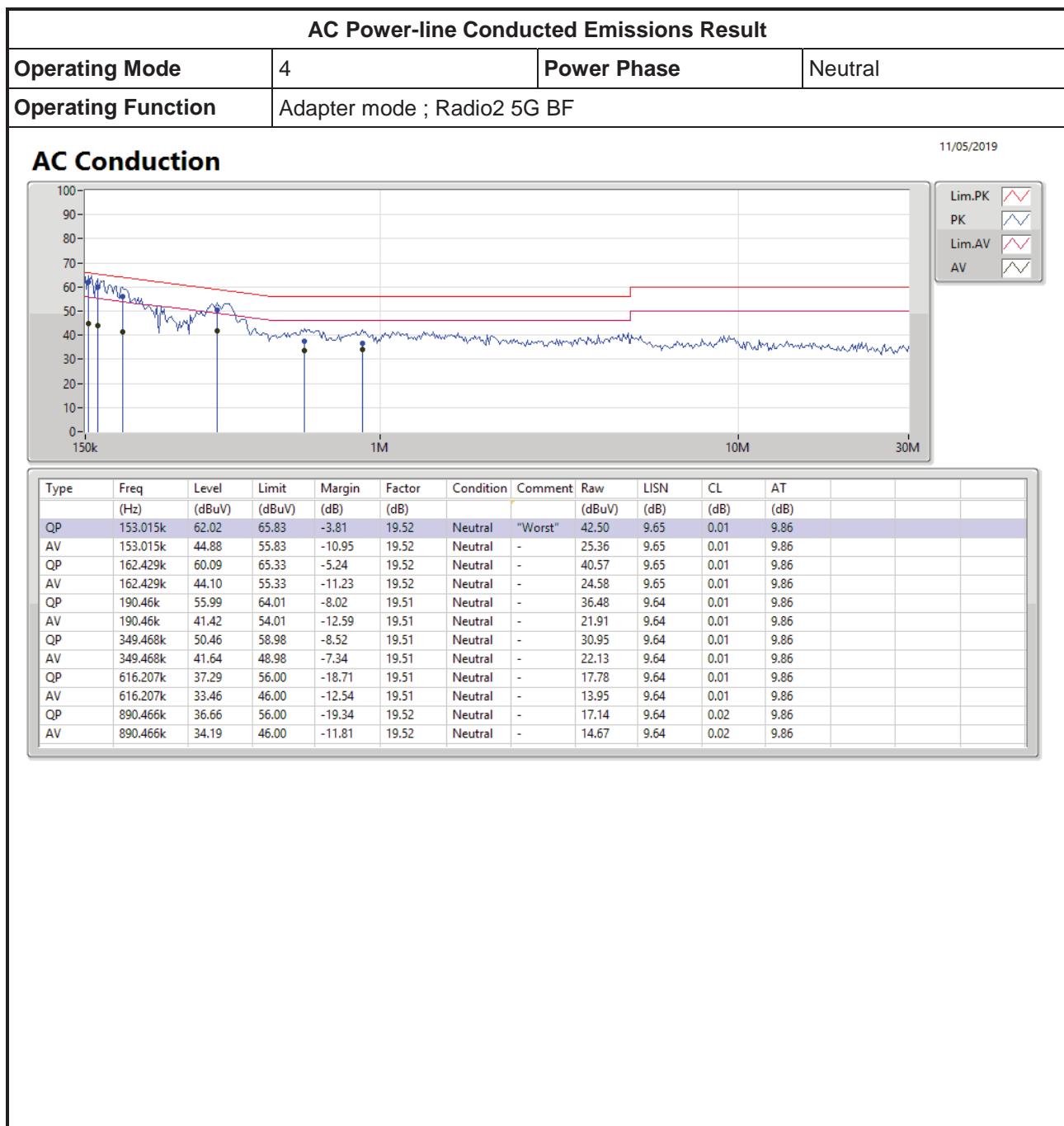


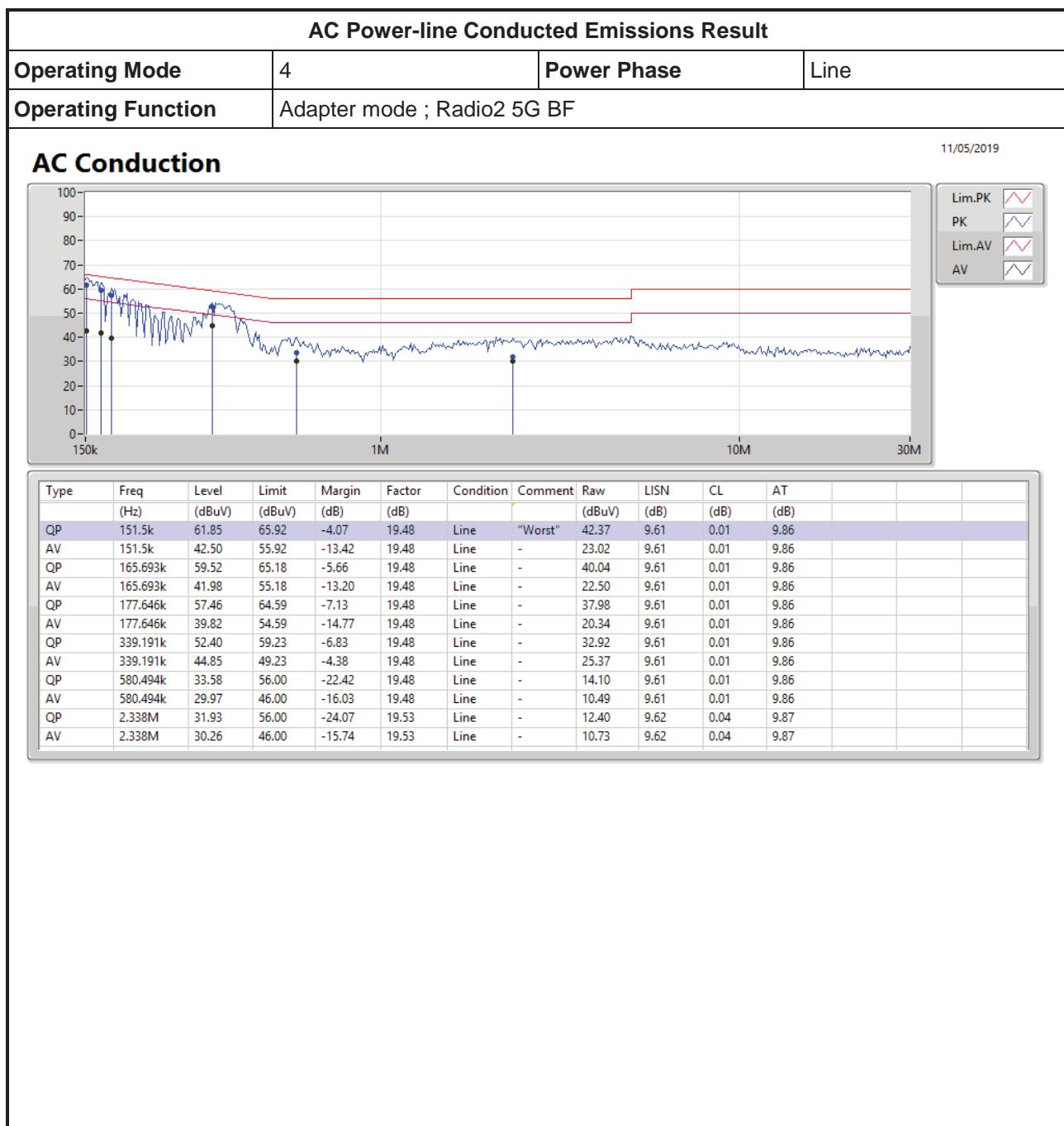


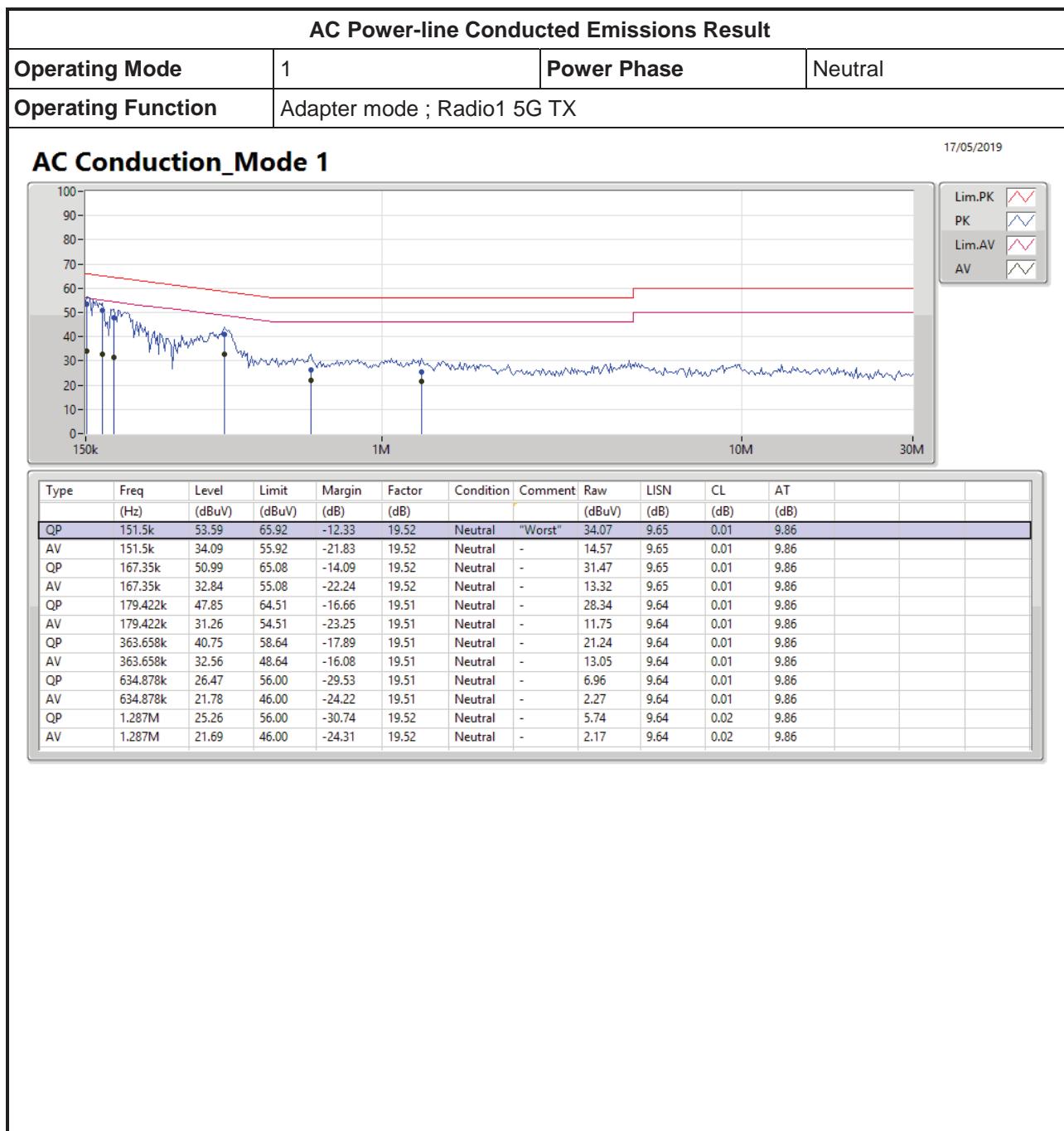


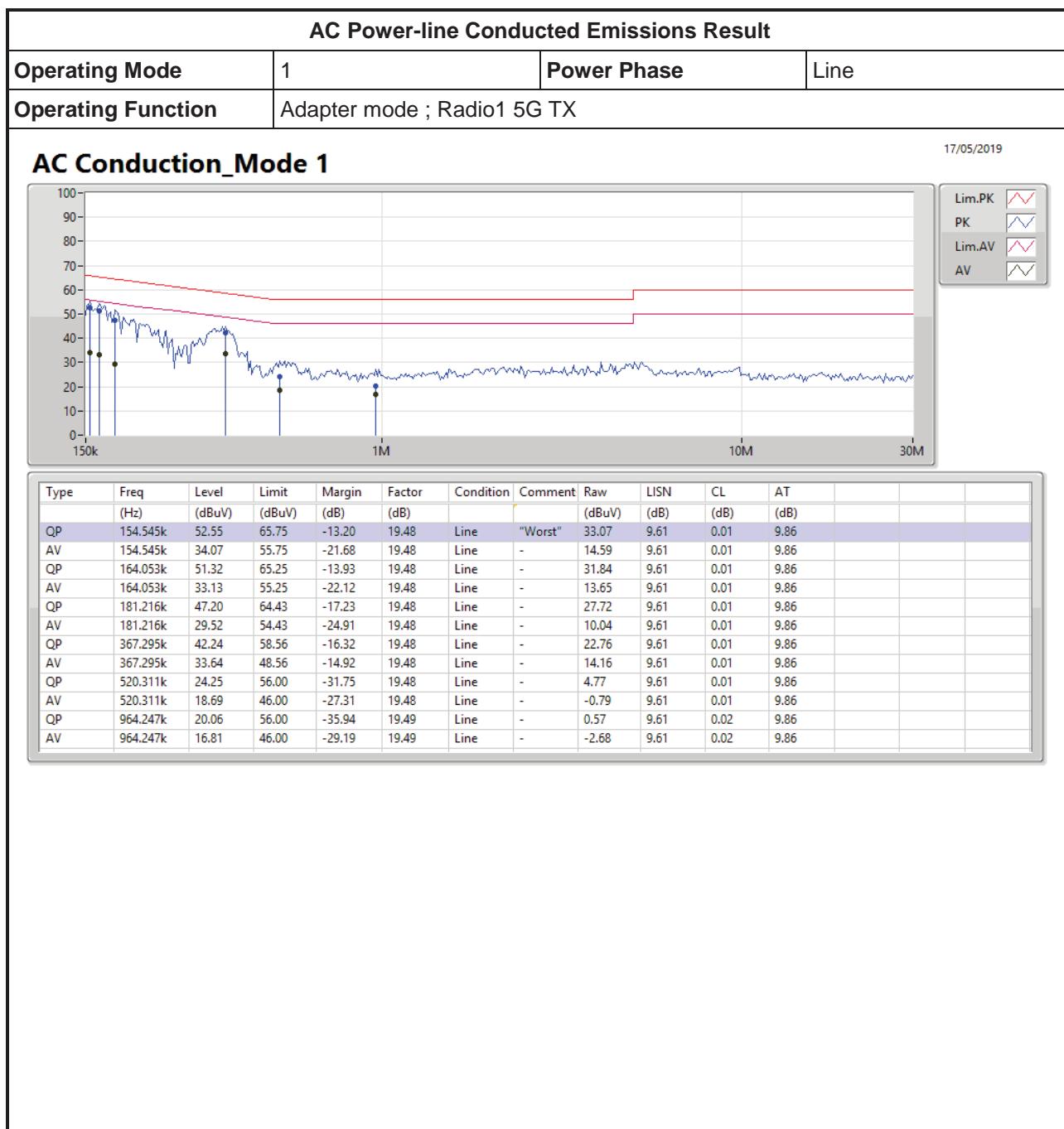


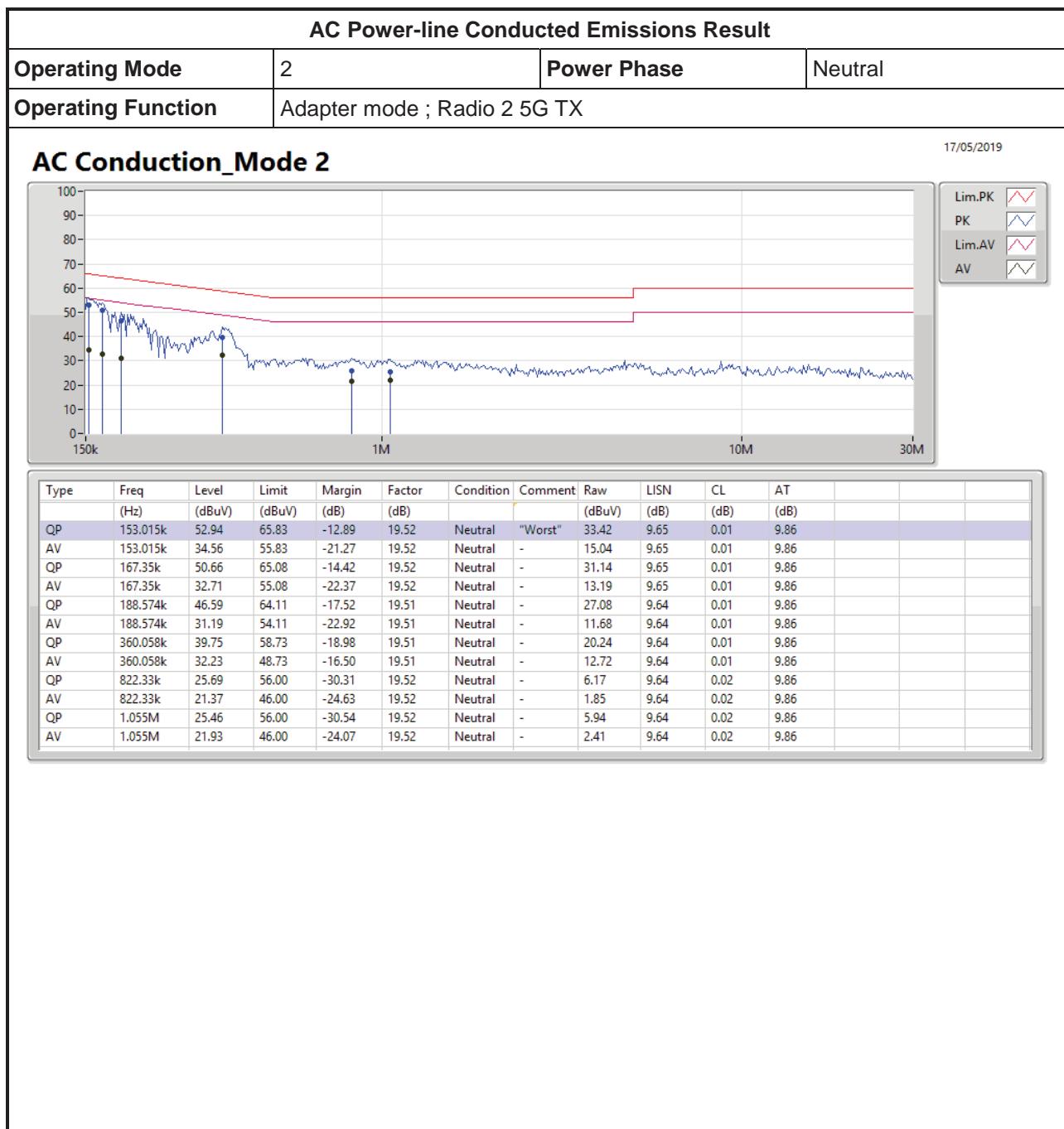


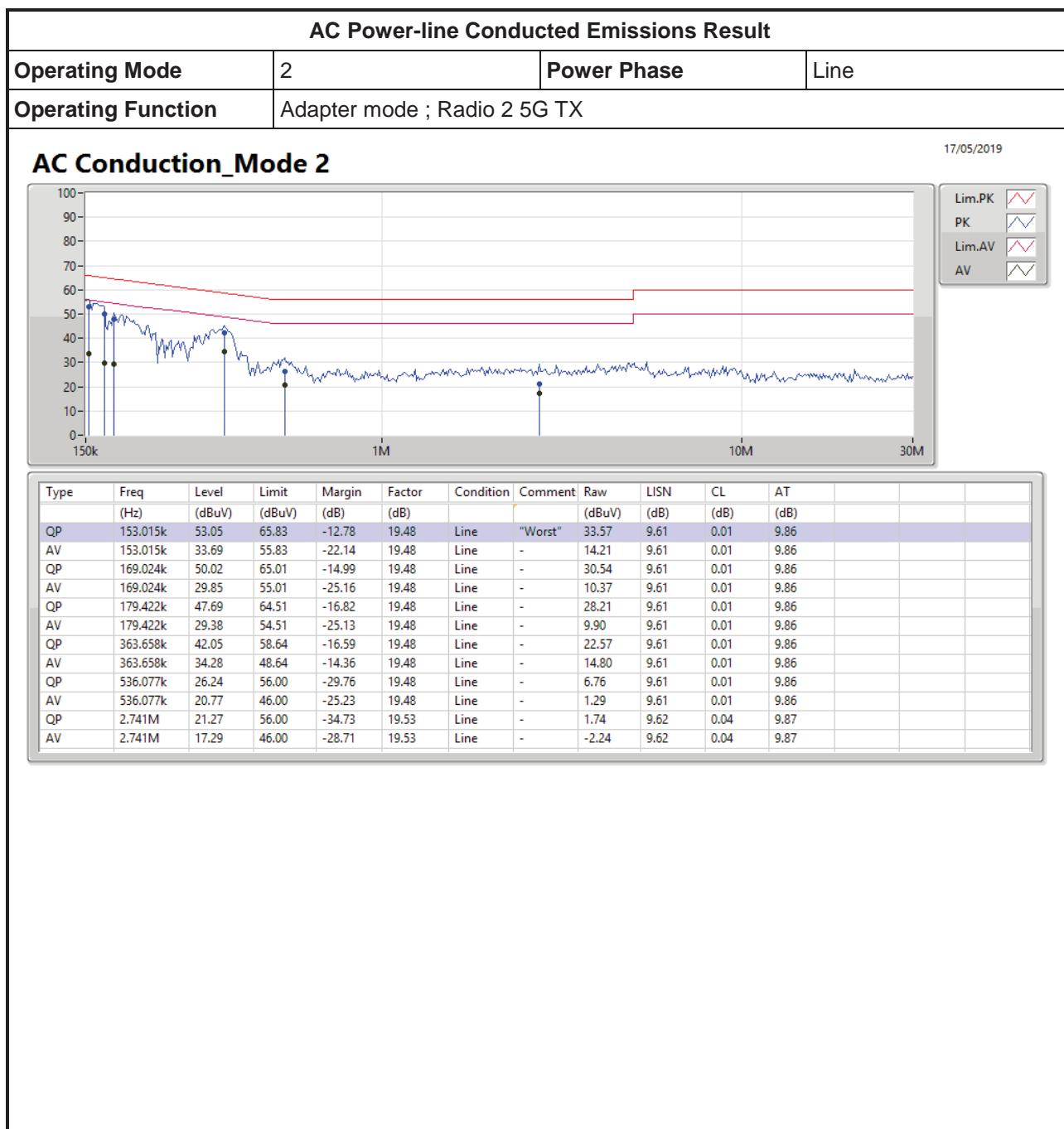


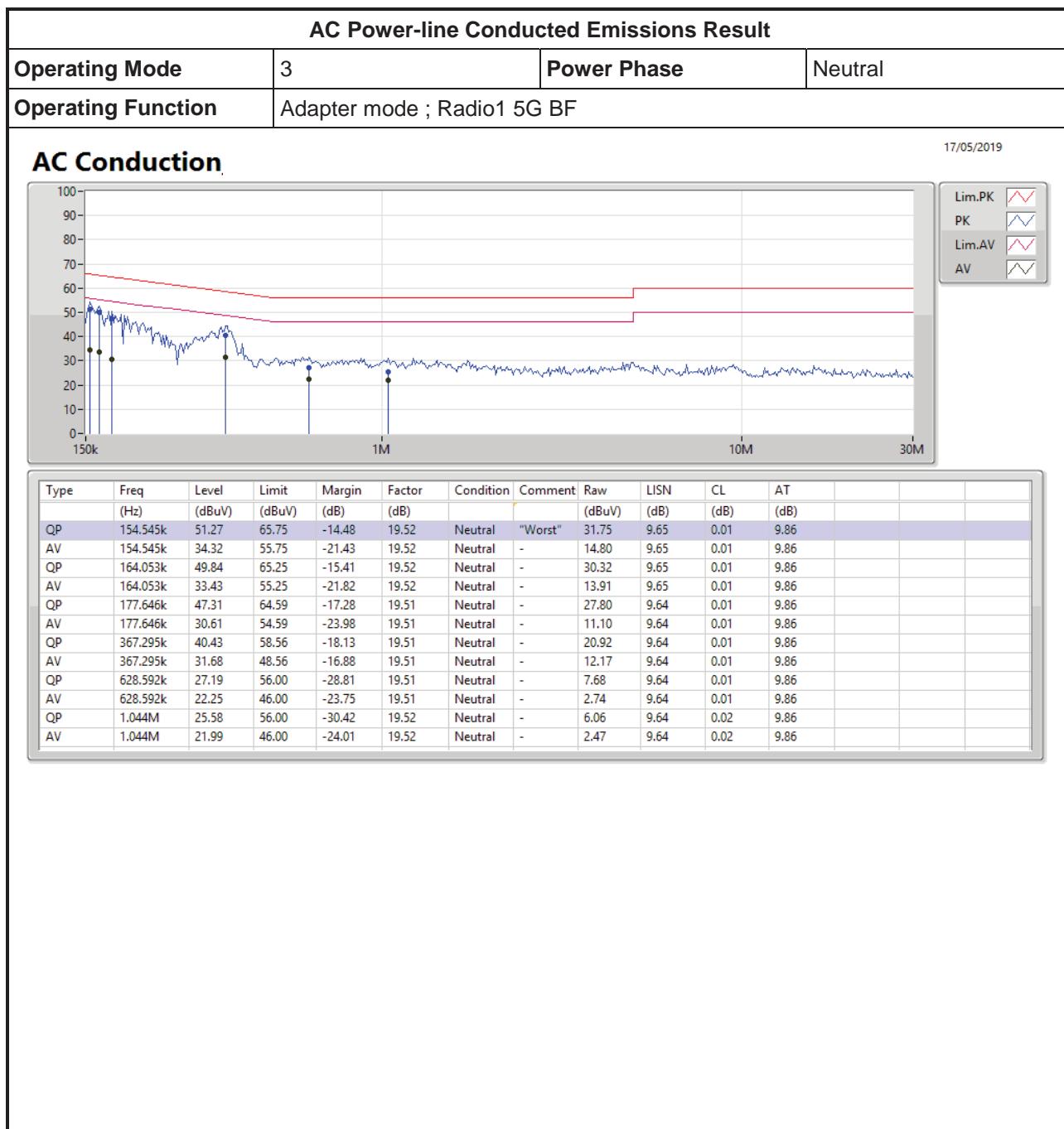


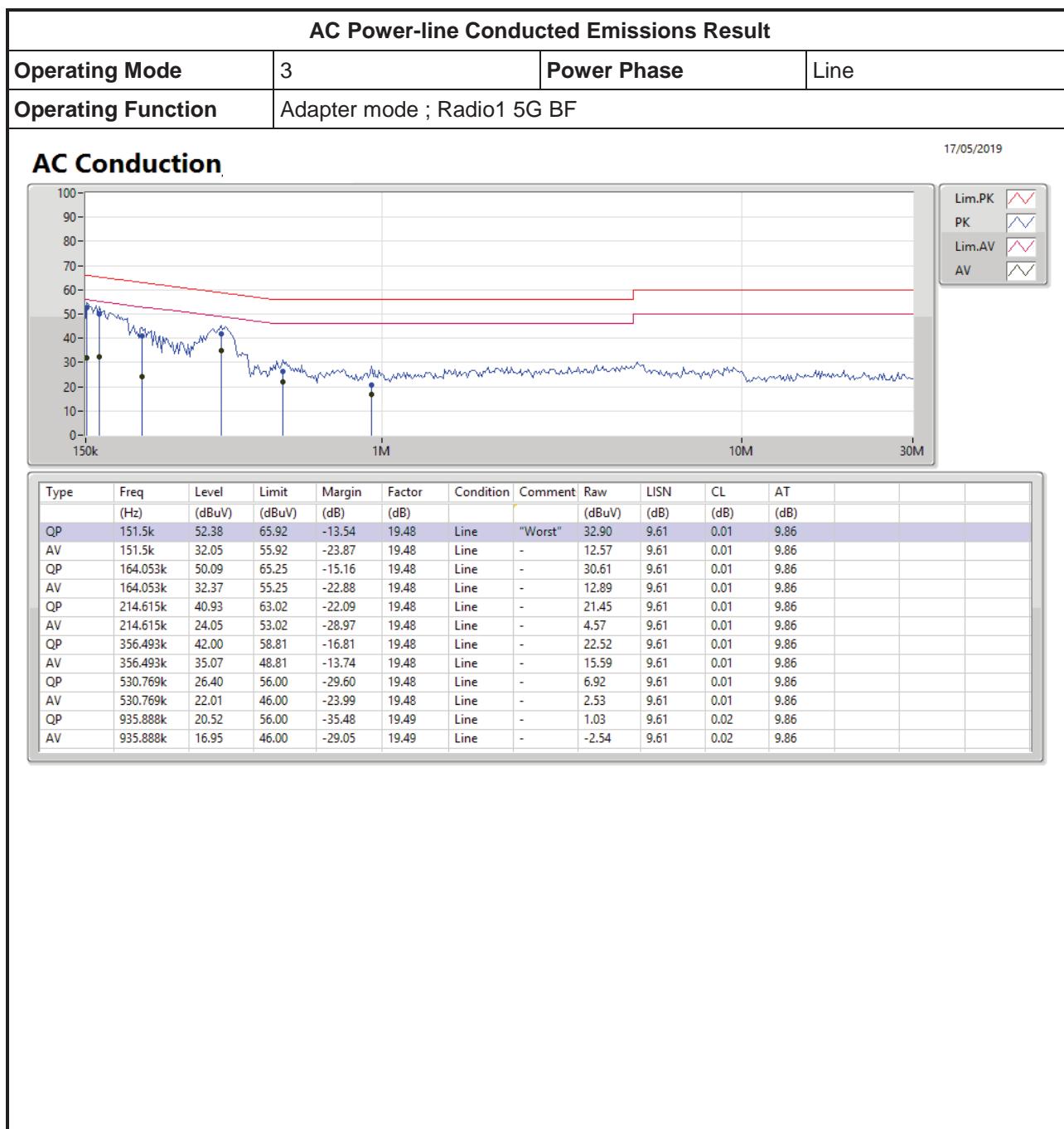


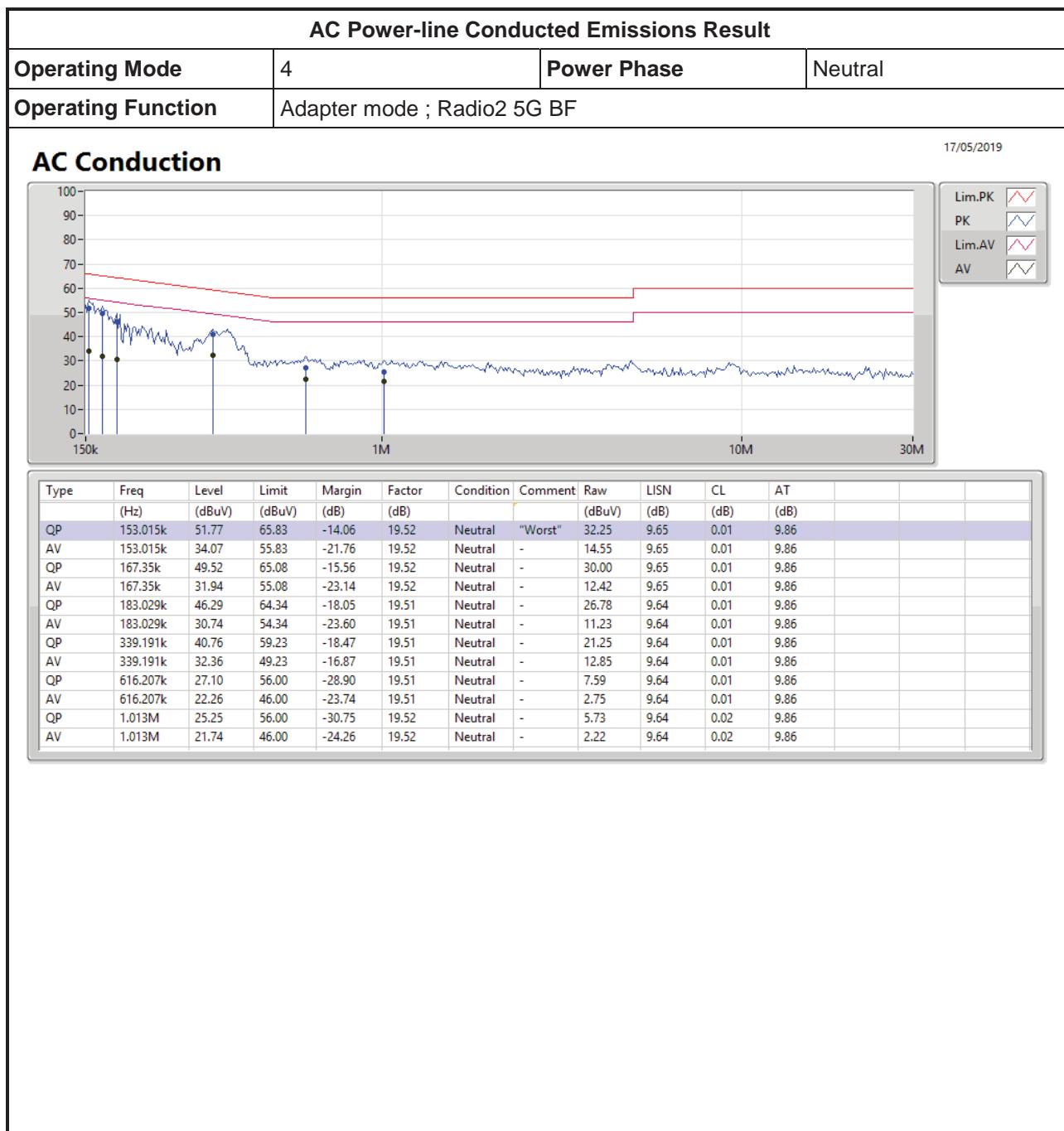


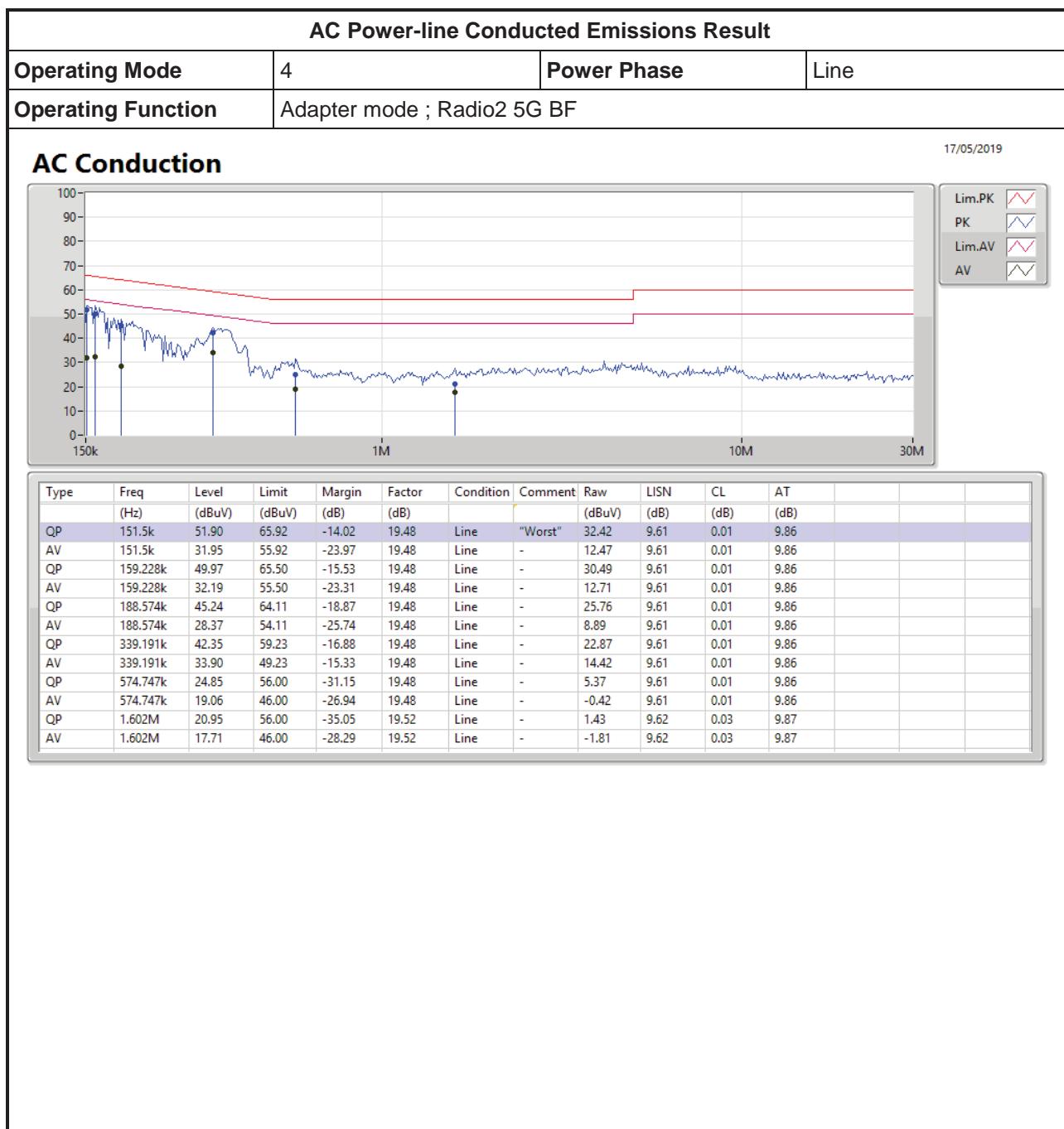












**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	22.26M	16.642M	16M6D1D	21.51M	16.552M
802.11ac VHT20_Nss1,(MCS0)_4TX	23.01M	17.811M	17M8D1D	21.48M	17.751M
802.11ac VHT40_Nss1,(MCS0)_4TX	45.9M	36.342M	36M3D1D	39.78M	36.162M
802.11ac VHT80_Nss1,(MCS0)_4TX	82.32M	75.802M	75M8D1D	81.48M	75.682M
802.11ax HEW20_Nss1,(MCS0)_4TX	23.52M	19.04M	19M0D1D	21.45M	18.951M
802.11ax HEW40_Nss1,(MCS0)_4TX	44.22M	37.661M	37M7D1D	39.96M	37.481M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.2M	77.121M	77M1D1D	81.6M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.38M	16.762M	16M8D1D	16.32M	16.552M
802.11ac VHT20_Nss1,(MCS0)_4TX	17.61M	17.841M	17M8D1D	17.55M	17.781M
802.11ac VHT40_Nss1,(MCS0)_4TX	36.36M	48.456M	48M5D1D	36.24M	36.282M
802.11ac VHT80_Nss1,(MCS0)_4TX	75.96M	76.042M	76M0D1D	75.12M	75.682M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.02M	19.07M	19M1D1D	18.72M	18.951M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.56M	46.057M	46M1D1D	36.54M	37.601M
802.11ax HEW80_Nss1,(MCS0)_4TX	76.56M	77.241M	77M2D1D	76.08M	77.001M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;



Result

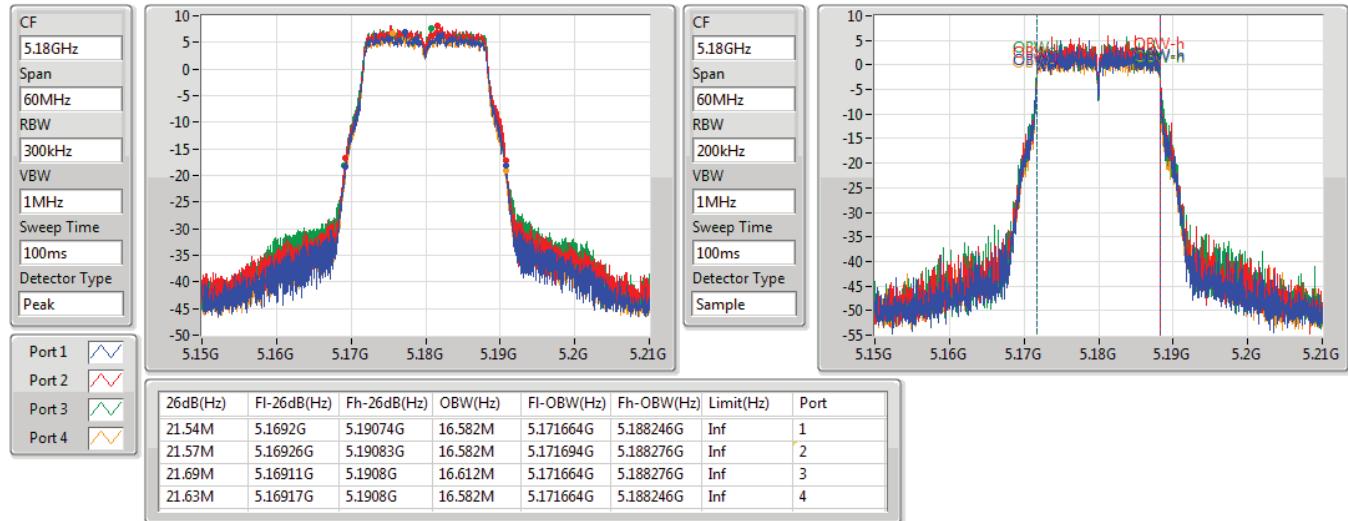
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.54M	16.582M	21.57M	16.582M	21.69M	16.612M	21.63M	16.582M
5200MHz	Pass	Inf	21.51M	16.552M	21.66M	16.582M	21.99M	16.612M	21.54M	16.552M
5240MHz	Pass	Inf	21.54M	16.642M	21.72M	16.612M	22.26M	16.642M	21.57M	16.552M
5745MHz	Pass	500k	16.32M	16.612M	16.35M	16.762M	16.32M	16.672M	16.32M	16.612M
5785MHz	Pass	500k	16.32M	16.642M	16.32M	16.732M	16.38M	16.672M	16.32M	16.612M
5825MHz	Pass	500k	16.35M	16.582M	16.35M	16.642M	16.32M	16.612M	16.32M	16.552M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.9M	17.781M	21.66M	17.751M	21.51M	17.781M	21.75M	17.781M
5200MHz	Pass	Inf	21.87M	17.811M	22.08M	17.781M	23.01M	17.811M	21.72M	17.751M
5240MHz	Pass	Inf	21.72M	17.781M	22.02M	17.781M	21.48M	17.751M	22.32M	17.751M
5745MHz	Pass	500k	17.55M	17.841M	17.58M	17.841M	17.58M	17.781M	17.58M	17.781M
5785MHz	Pass	500k	17.55M	17.811M	17.61M	17.781M	17.58M	17.781M	17.55M	17.781M
5825MHz	Pass	500k	17.55M	17.811M	17.55M	17.841M	17.58M	17.841M	17.58M	17.781M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.32M	36.222M	39.9M	36.162M	40.02M	36.342M	39.9M	36.282M
5230MHz	Pass	Inf	45.84M	36.282M	40.02M	36.282M	45.9M	36.282M	39.78M	36.222M
5755MHz	Pass	500k	36.36M	36.282M	36.3M	36.342M	36.36M	36.402M	36.3M	36.402M
5795MHz	Pass	500k	36.36M	38.021M	36.3M	48.456M	36.24M	39.94M	36.3M	37.241M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.32M	75.802M	81.48M	75.682M	81.48M	75.802M	81.72M	75.682M
5775MHz	Pass	500k	75.12M	75.682M	75.96M	76.042M	75.24M	75.682M	75.6M	75.682M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.66M	18.951M	21.6M	18.981M	21.72M	18.951M	21.72M	19.01M
5200MHz	Pass	Inf	23.28M	19.04M	21.45M	18.981M	23.37M	18.951M	21.72M	18.981M
5240MHz	Pass	Inf	23.19M	18.951M	22.83M	18.981M	23.52M	19.01M	22.17M	19.01M
5745MHz	Pass	500k	18.81M	19.01M	18.87M	19.01M	18.9M	19.01M	18.9M	19.04M
5785MHz	Pass	500k	18.96M	18.981M	18.84M	18.981M	18.72M	18.951M	19.02M	18.981M
5825MHz	Pass	500k	18.96M	18.981M	18.75M	19.07M	18.93M	19.01M	18.96M	19.04M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	37.601M	39.96M	37.601M	40.02M	37.481M	39.96M	37.601M
5230MHz	Pass	Inf	40.02M	37.601M	40.02M	37.541M	44.22M	37.661M	40.32M	37.601M
5755MHz	Pass	500k	36.54M	37.601M	36.72M	37.601M	37.26M	37.601M	37.56M	37.601M
5795MHz	Pass	500k	37.56M	38.441M	37.26M	46.057M	37.5M	39.16M	37.32M	38.201M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.96M	77.001M	82.2M	77.121M	82.08M	77.121M	81.6M	76.882M
5775MHz	Pass	500k	76.56M	77.241M	76.08M	77.121M	76.32M	77.001M	76.2M	77.121M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

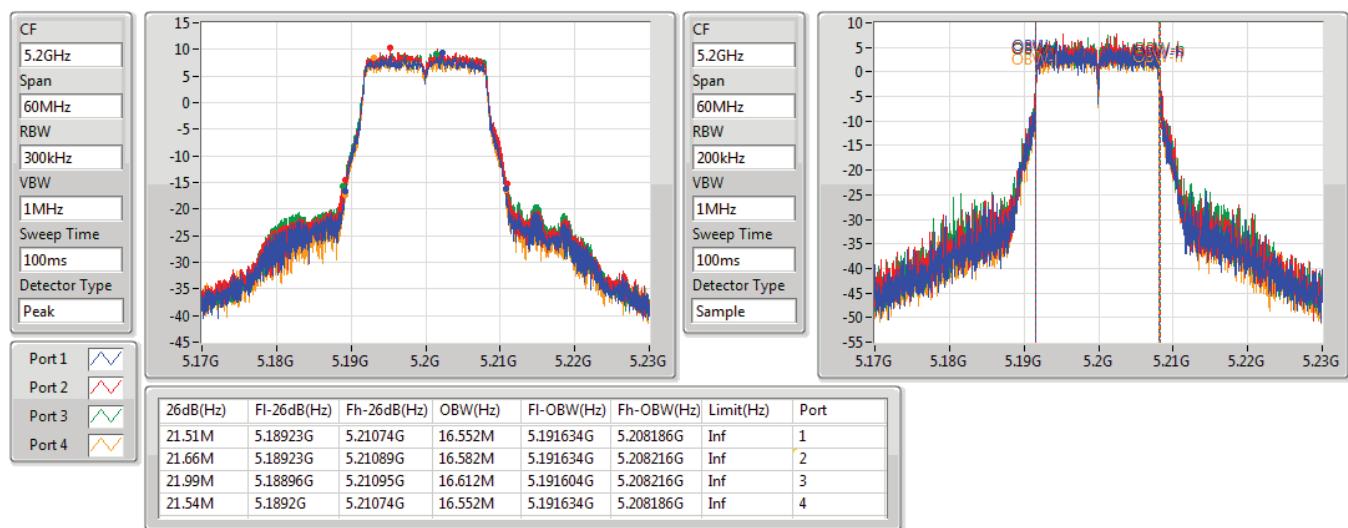
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX
EBW
5180MHz

07/05/2019

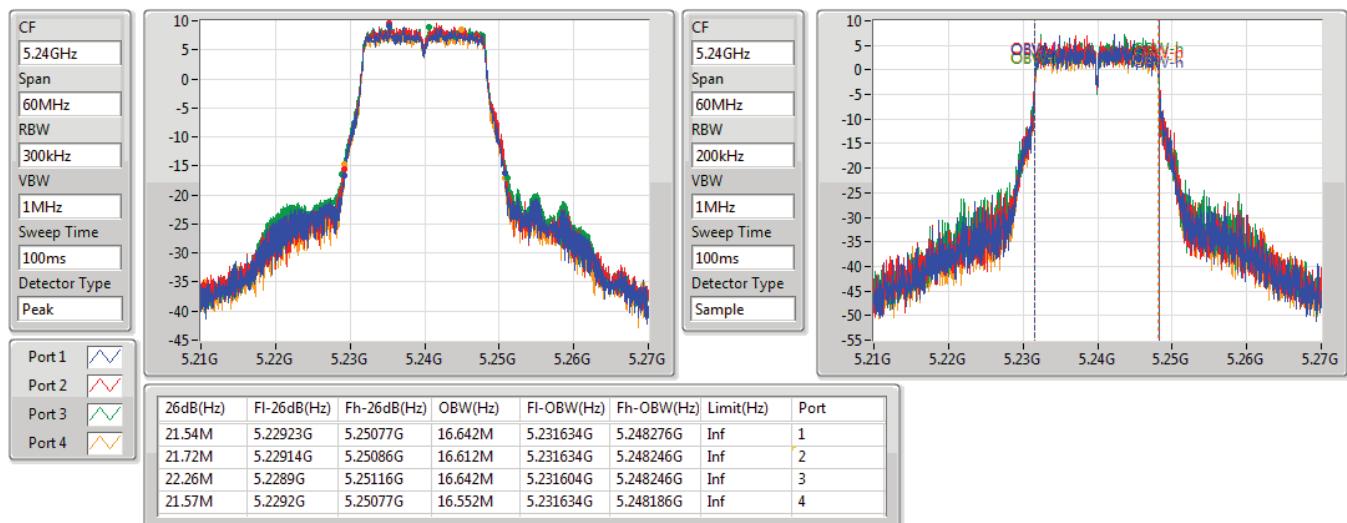

802.11a_Nss1,(6Mbps)_4TX
EBW
5200MHz

07/05/2019

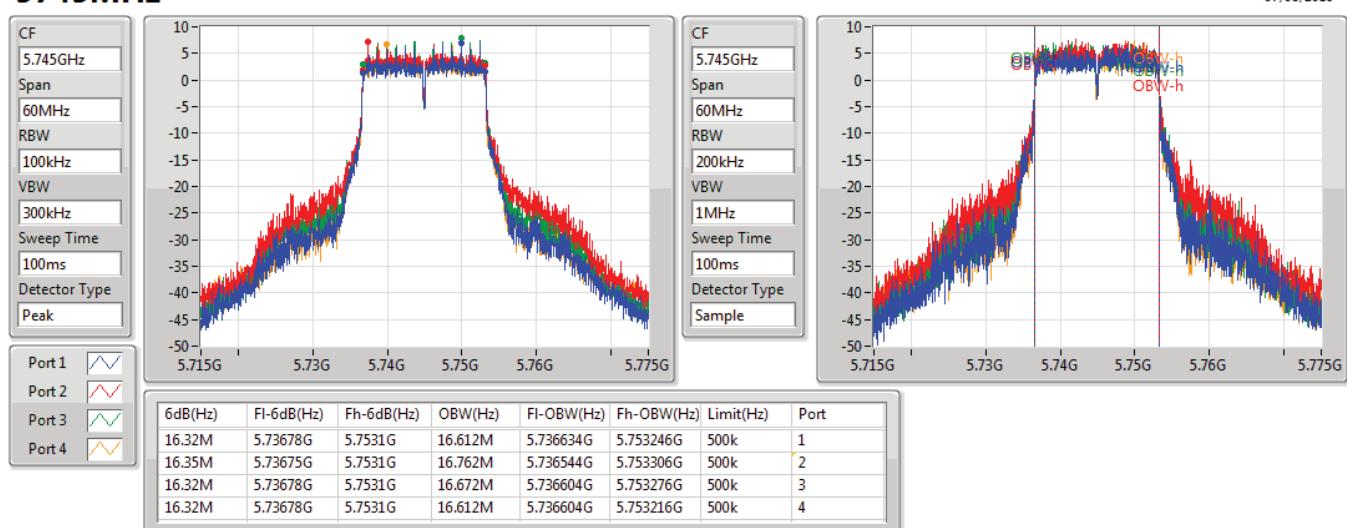


802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

07/05/2019

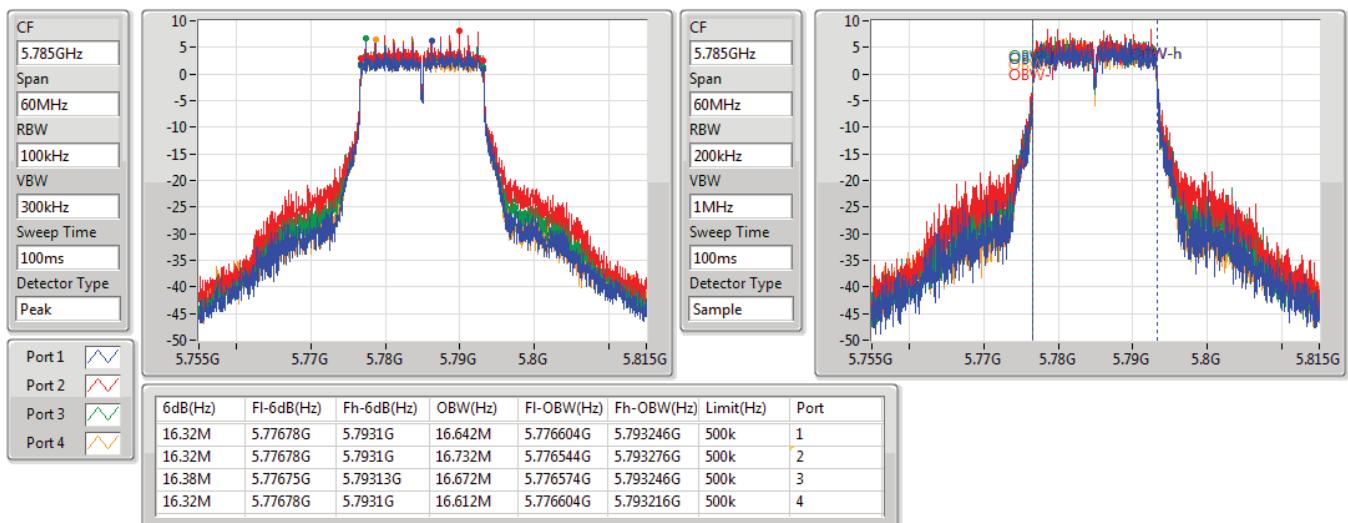

802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

07/05/2019

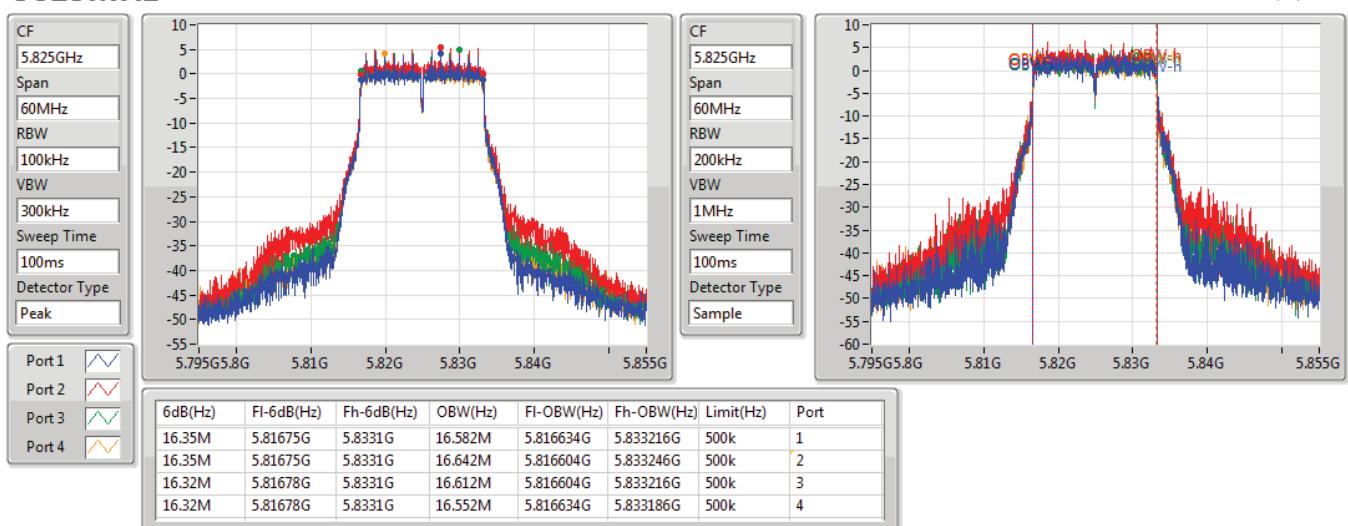


802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

07/05/2019

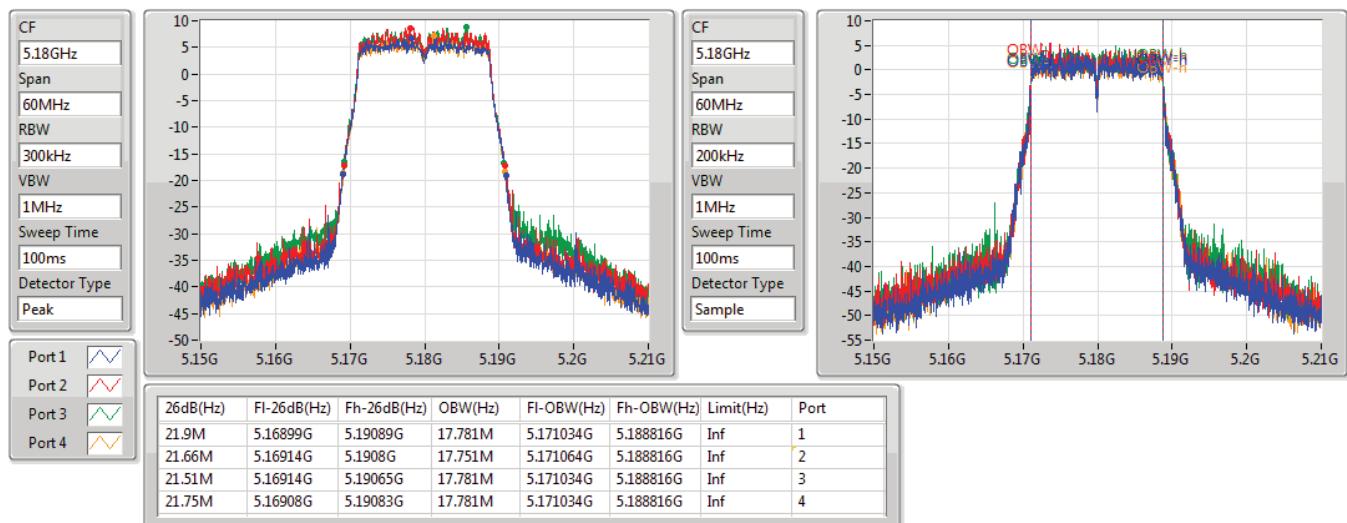

802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

07/05/2019

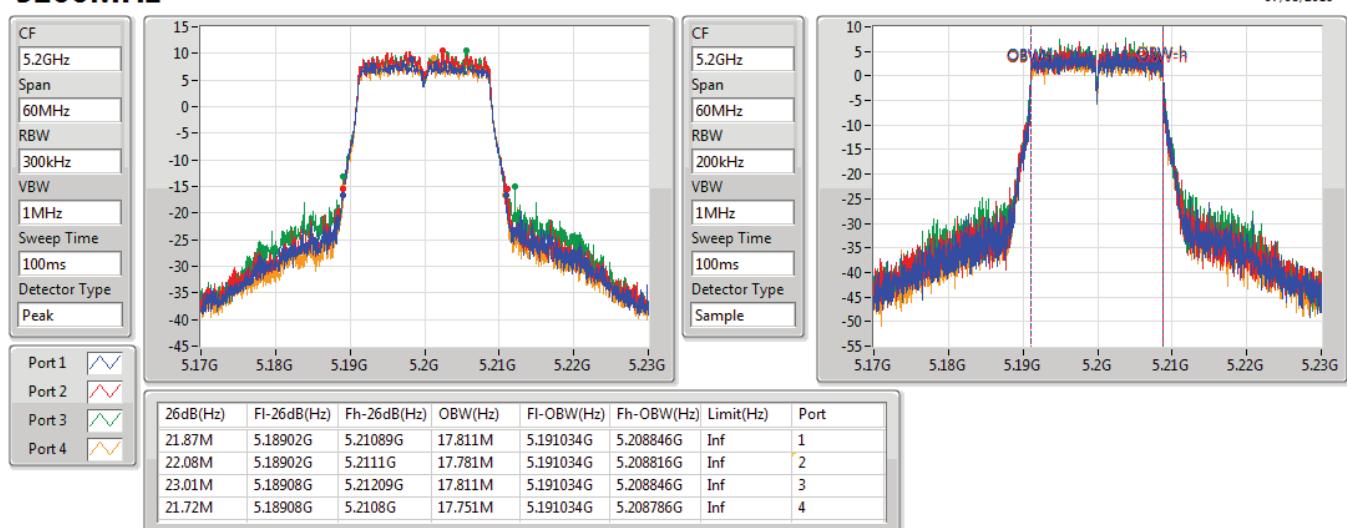


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5180MHz

07/05/2019

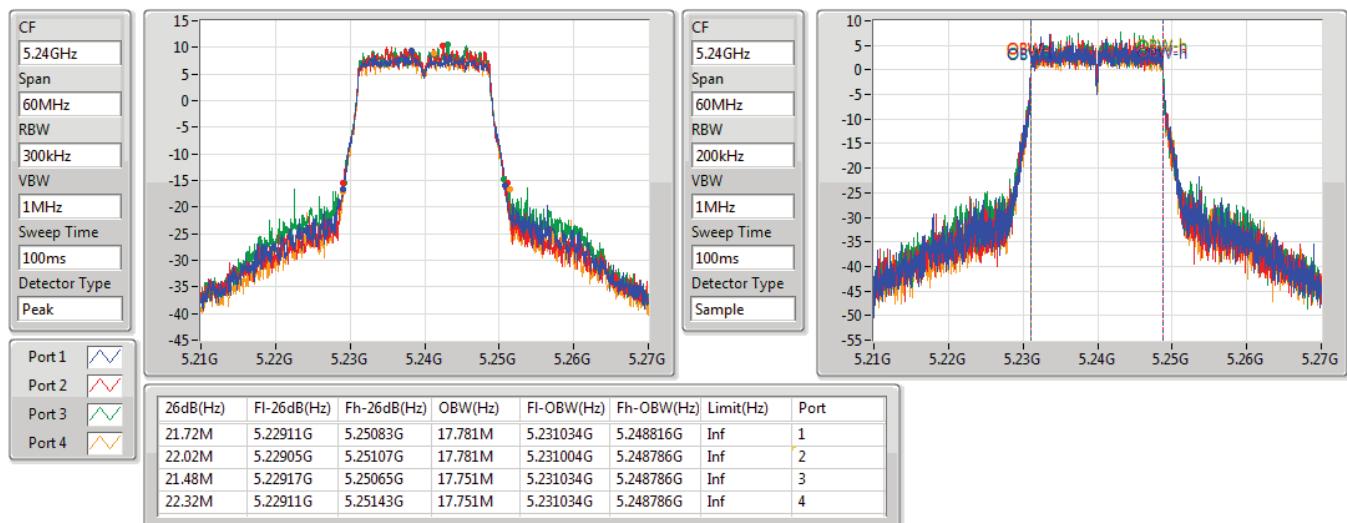

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5200MHz

07/05/2019

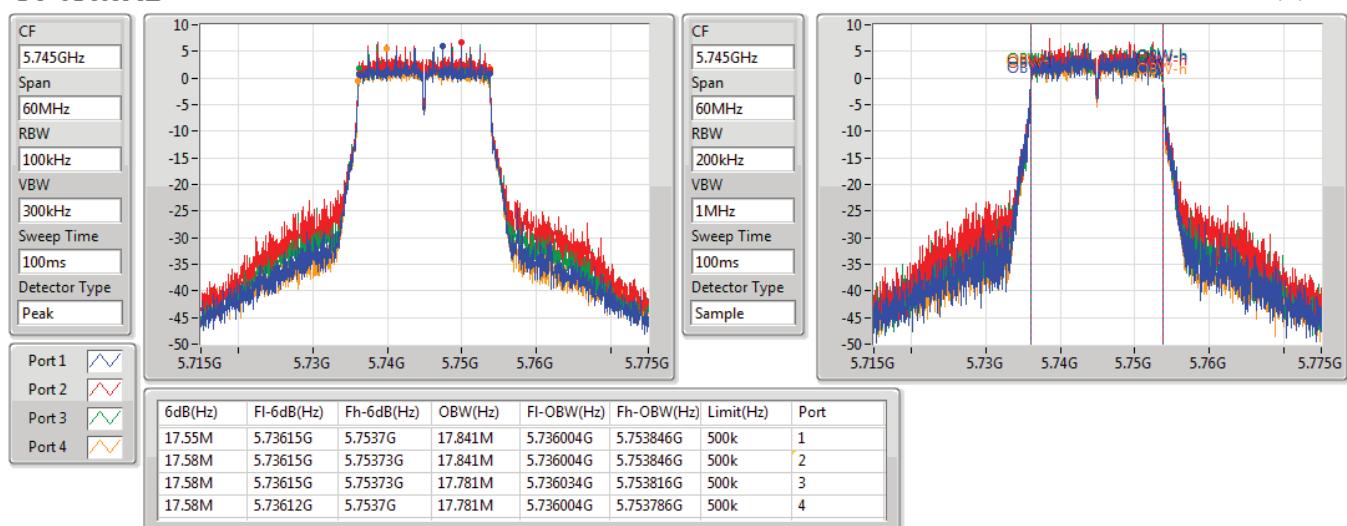


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5240MHz

07/05/2019

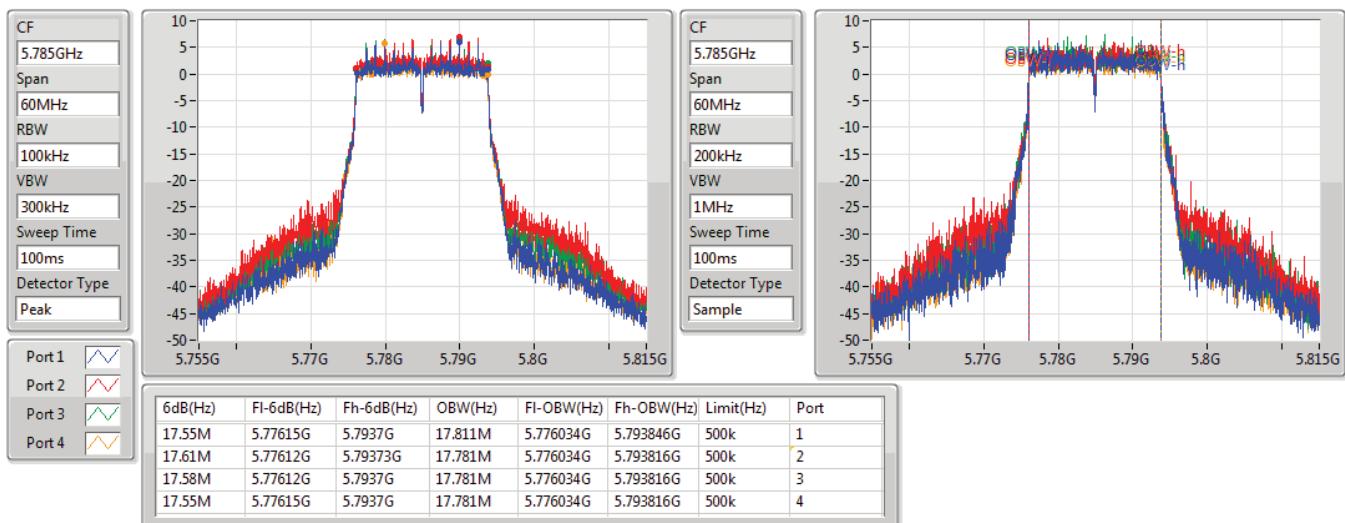

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5745MHz

07/05/2019

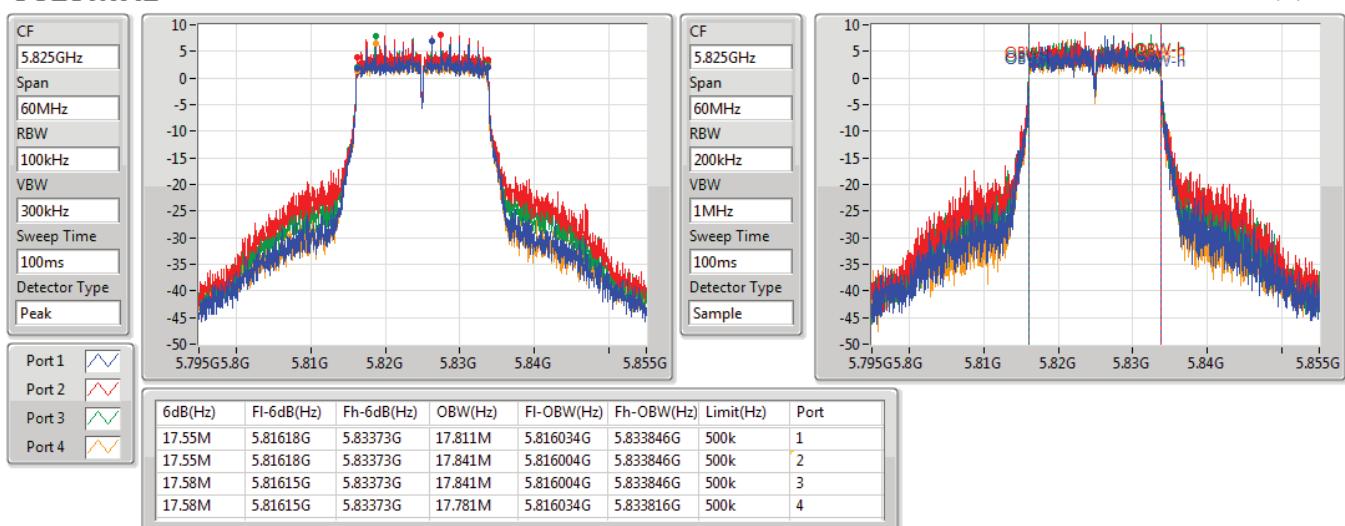


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5785MHz

07/05/2019

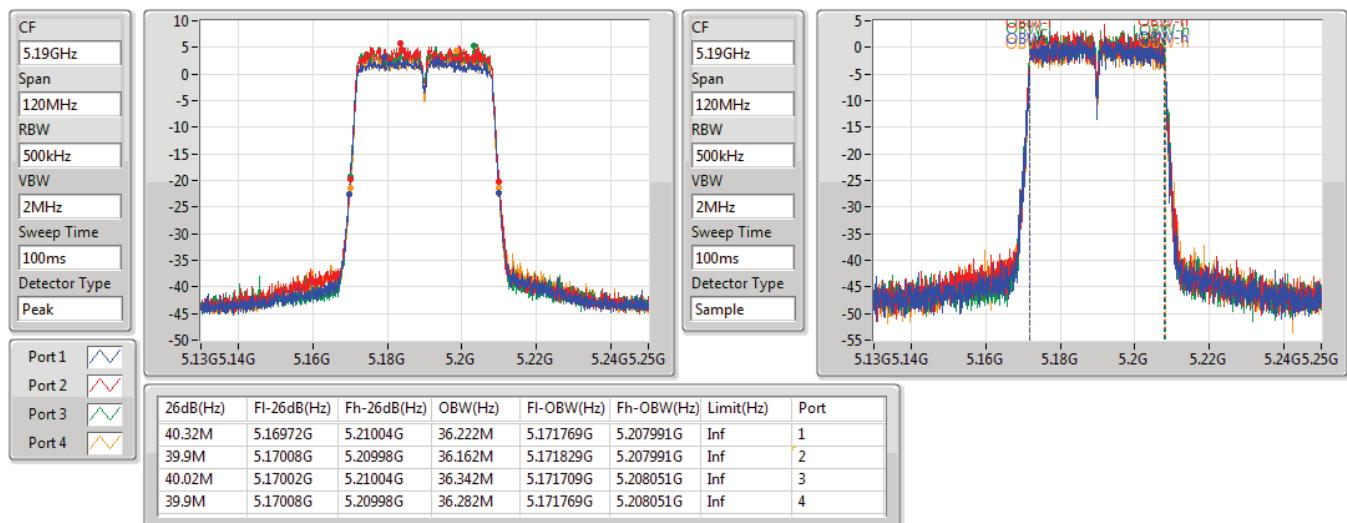

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5825MHz

07/05/2019

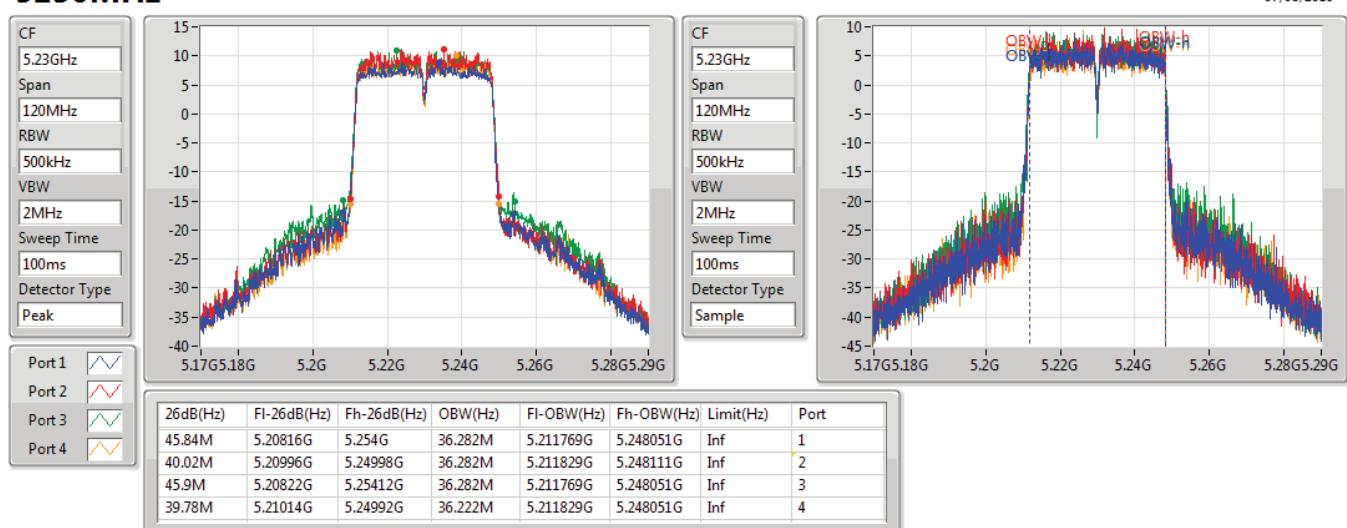


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5190MHz

07/05/2019

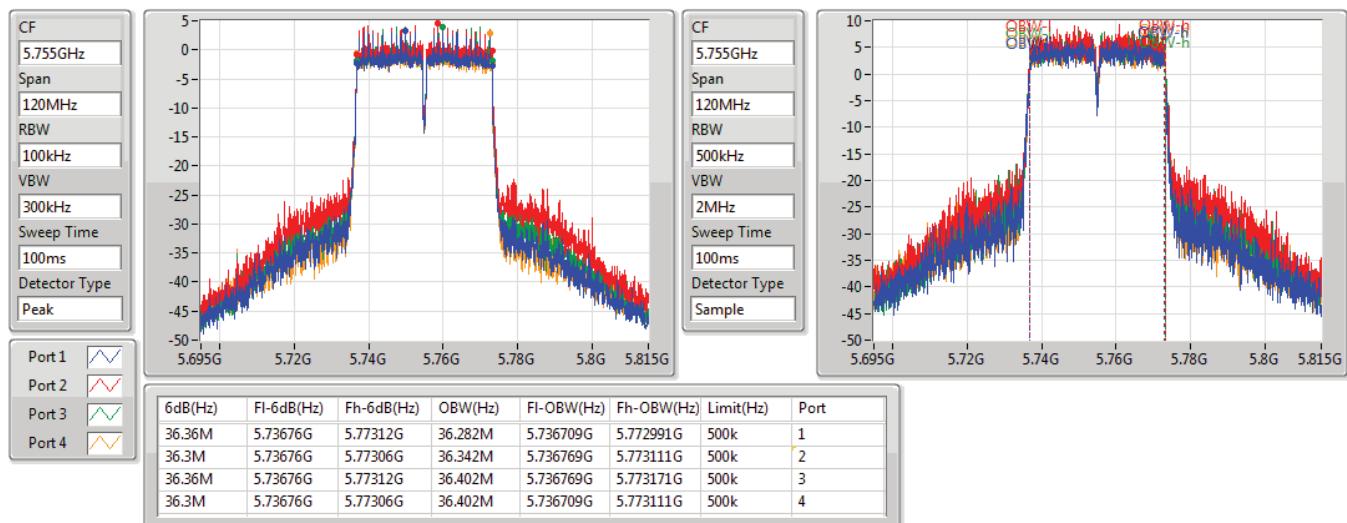

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5230MHz

07/05/2019

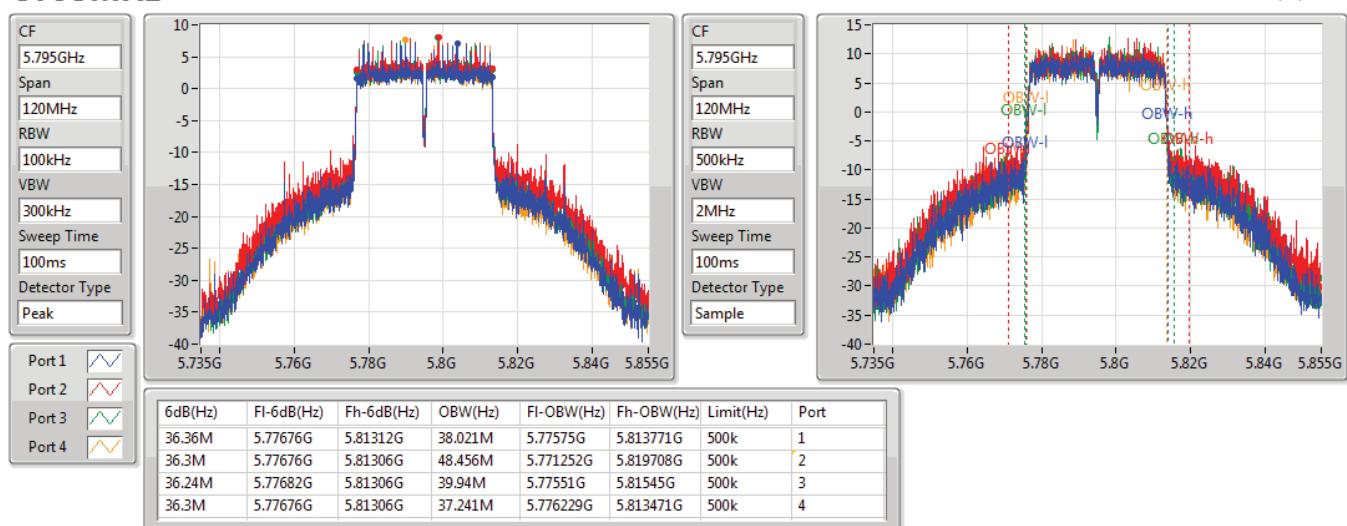


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5755MHz

07/05/2019

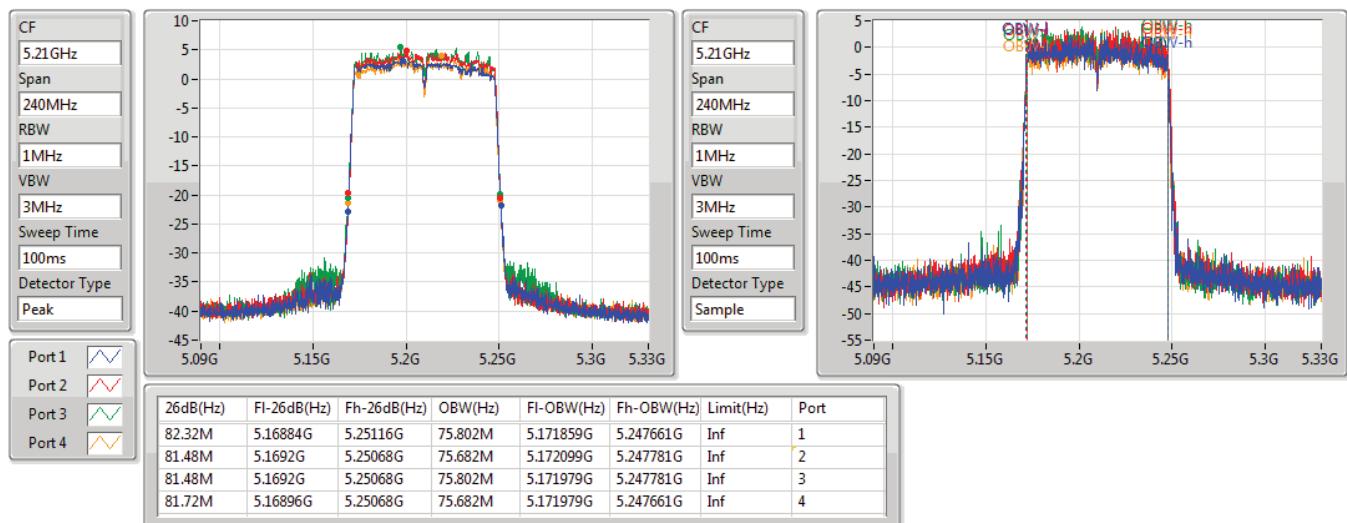

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5795MHz

07/05/2019

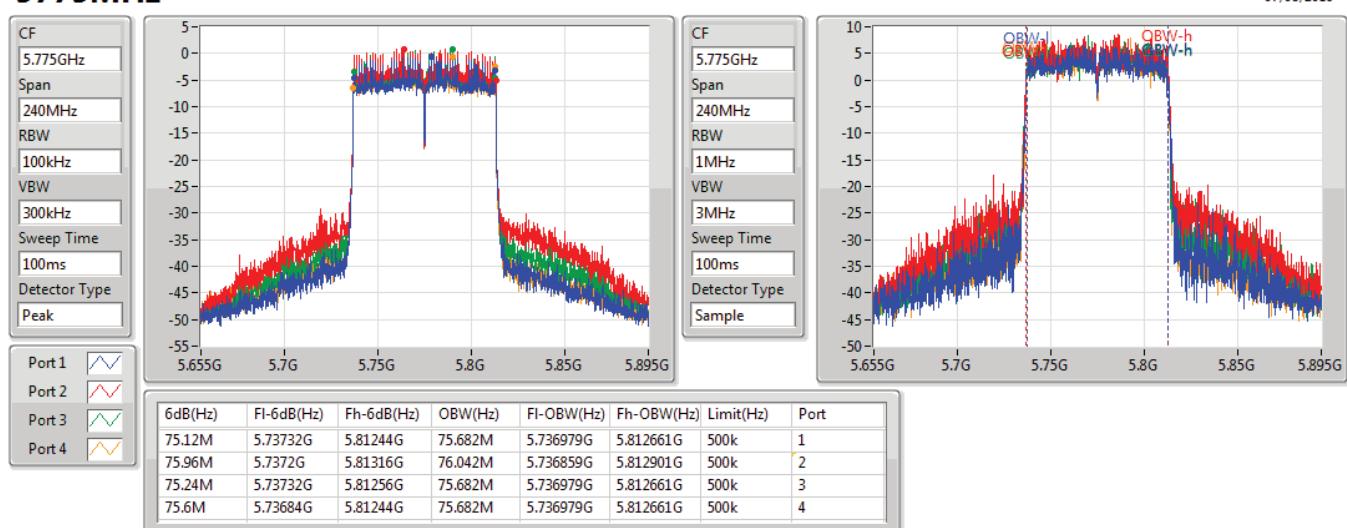


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5210MHz

07/05/2019

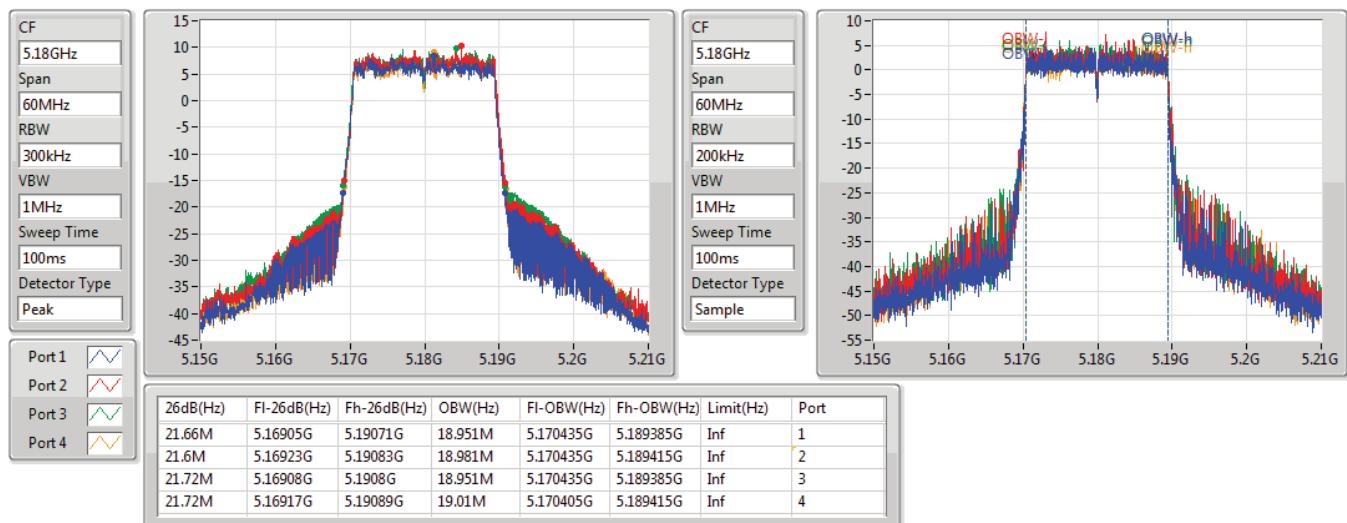

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5775MHz

07/05/2019

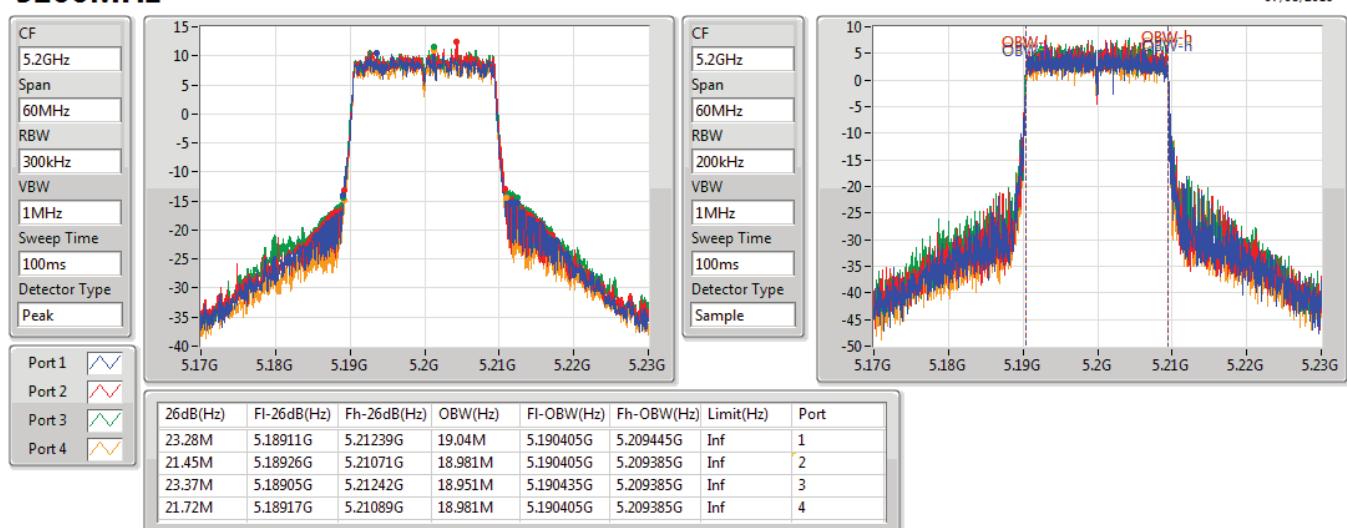


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5180MHz

07/05/2019

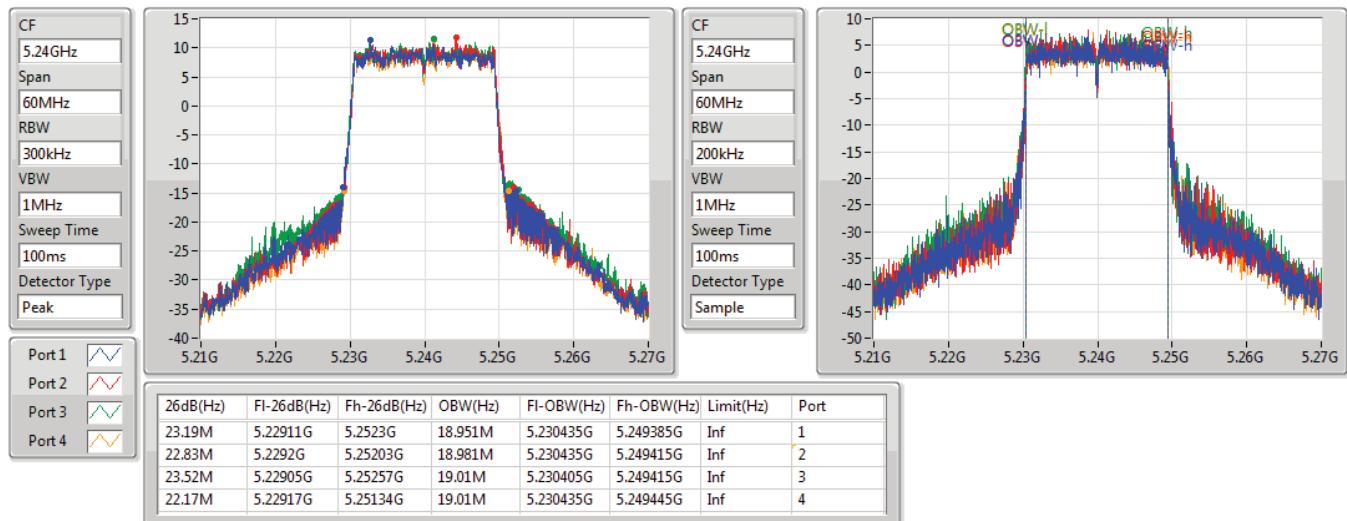

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5200MHz

07/05/2019

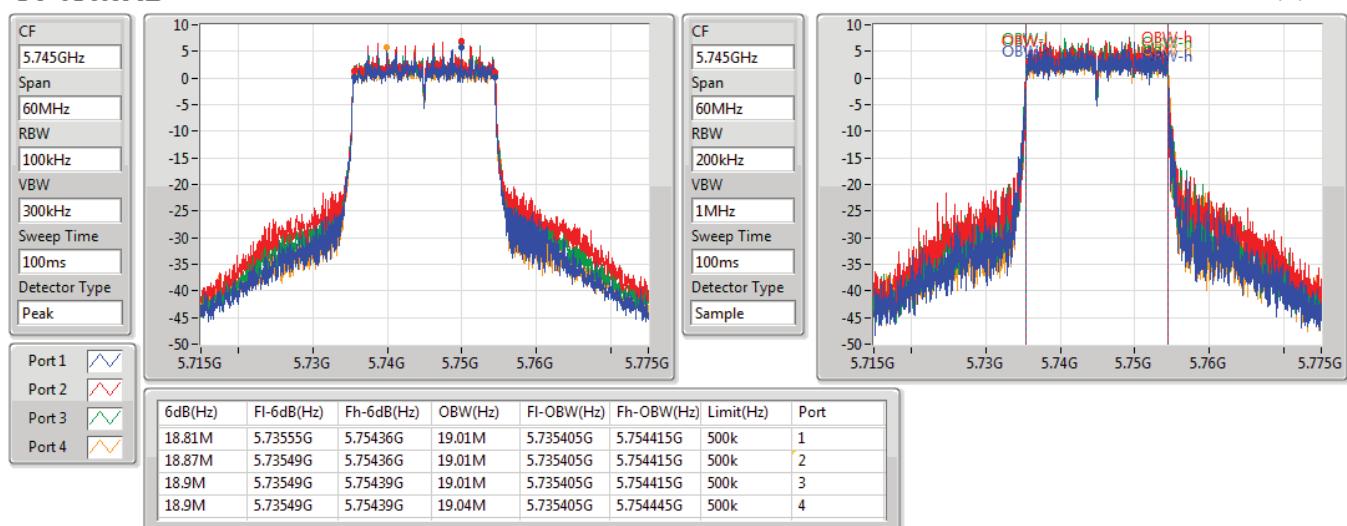


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5240MHz

07/05/2019

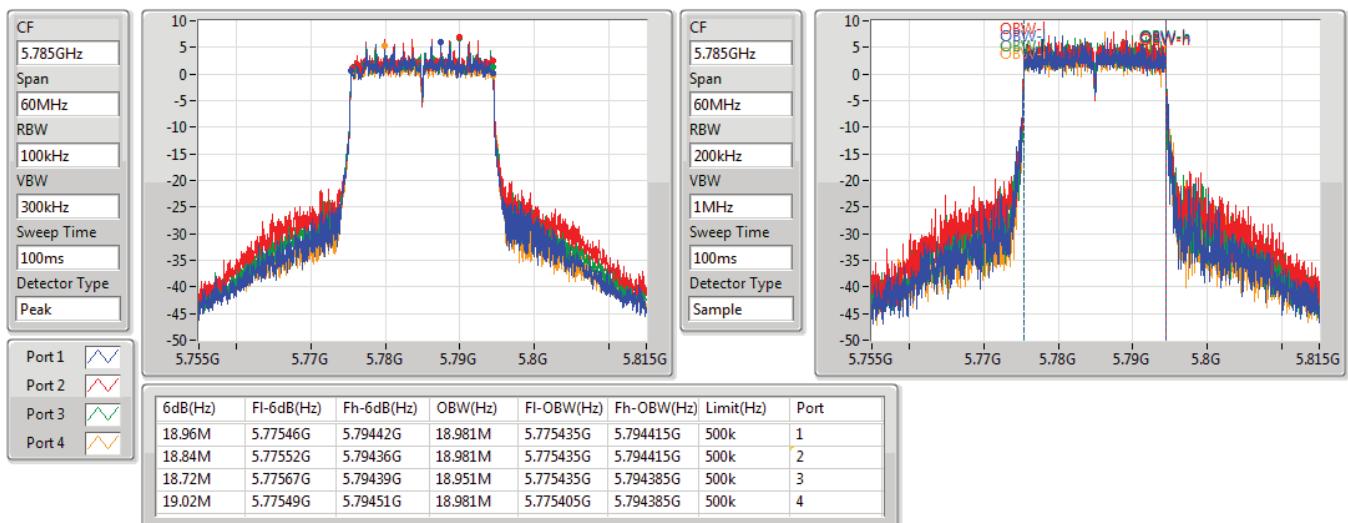

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5745MHz

07/05/2019

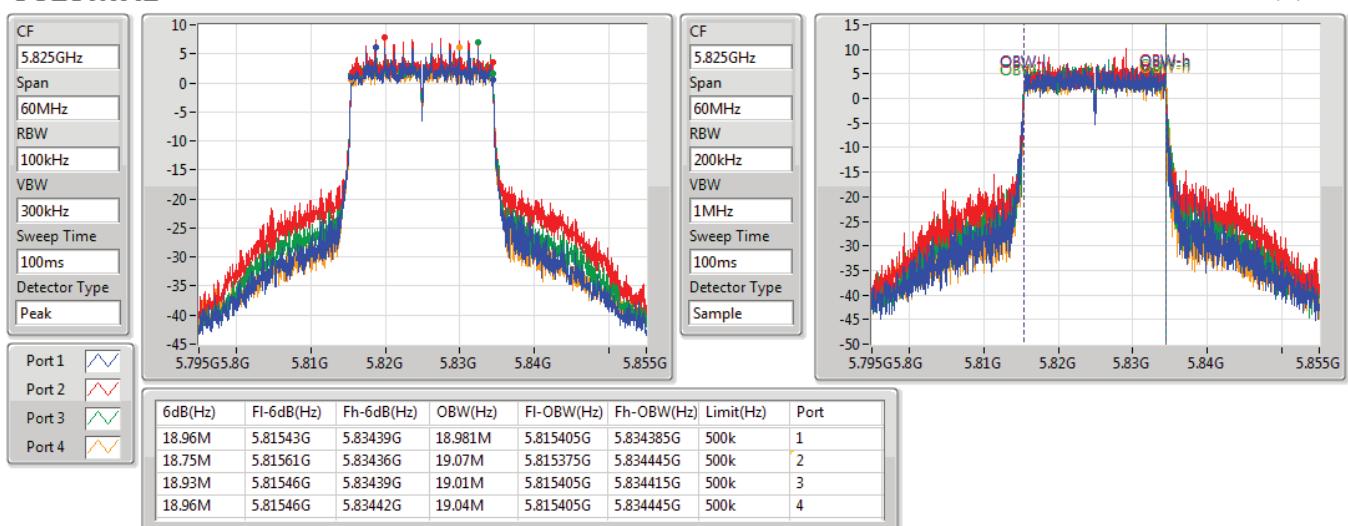


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5785MHz

07/05/2019

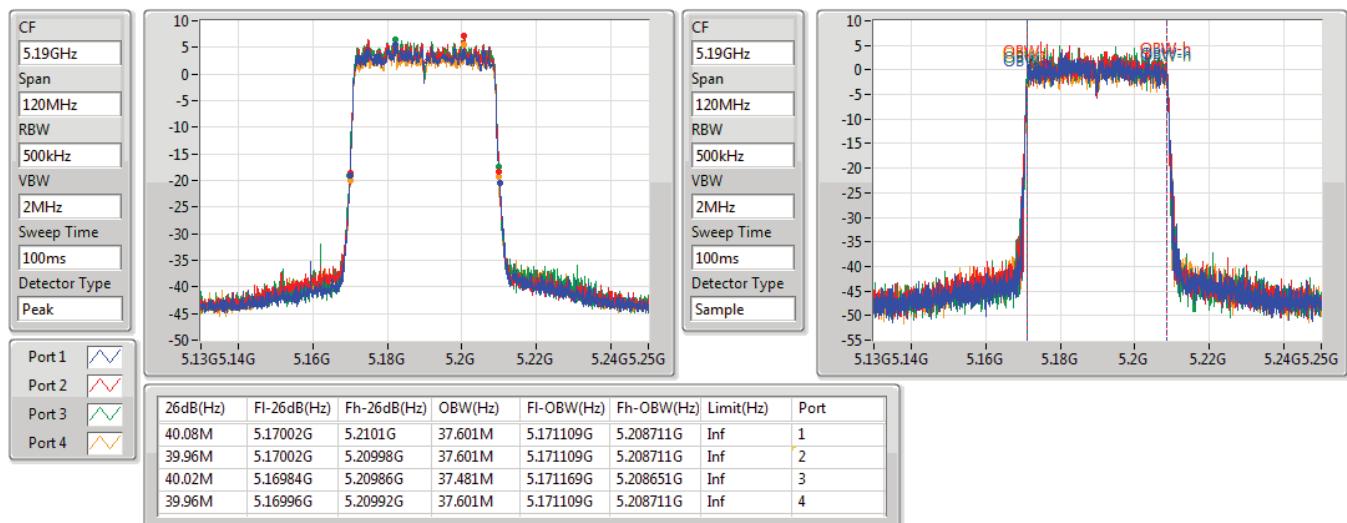

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5825MHz

07/05/2019

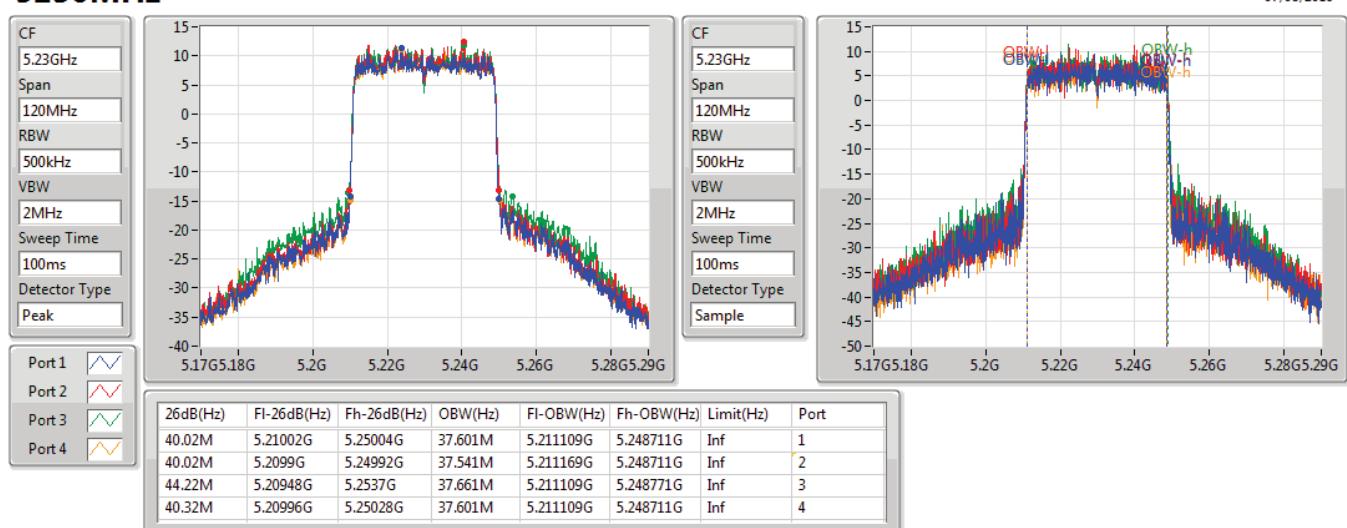


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5190MHz

07/05/2019

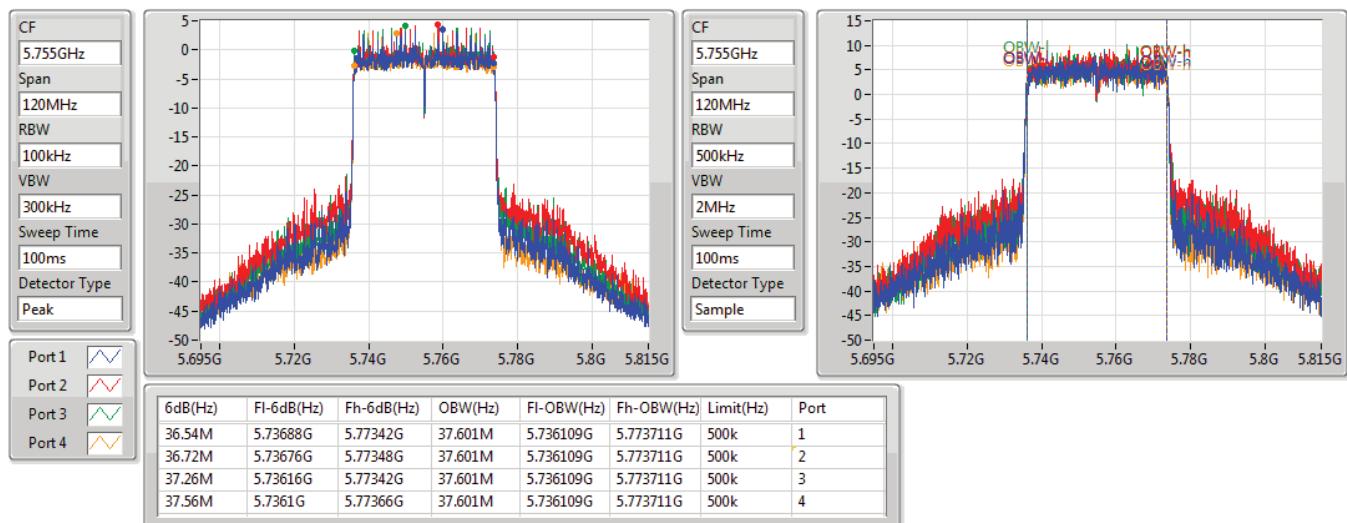

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5230MHz

07/05/2019

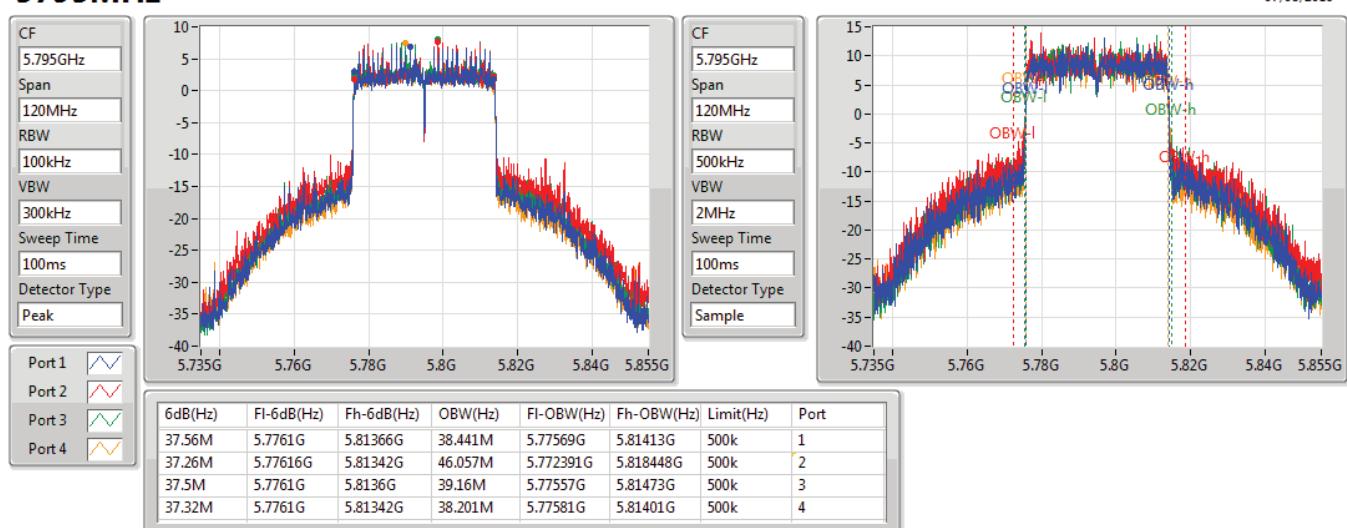


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5755MHz

07/05/2019

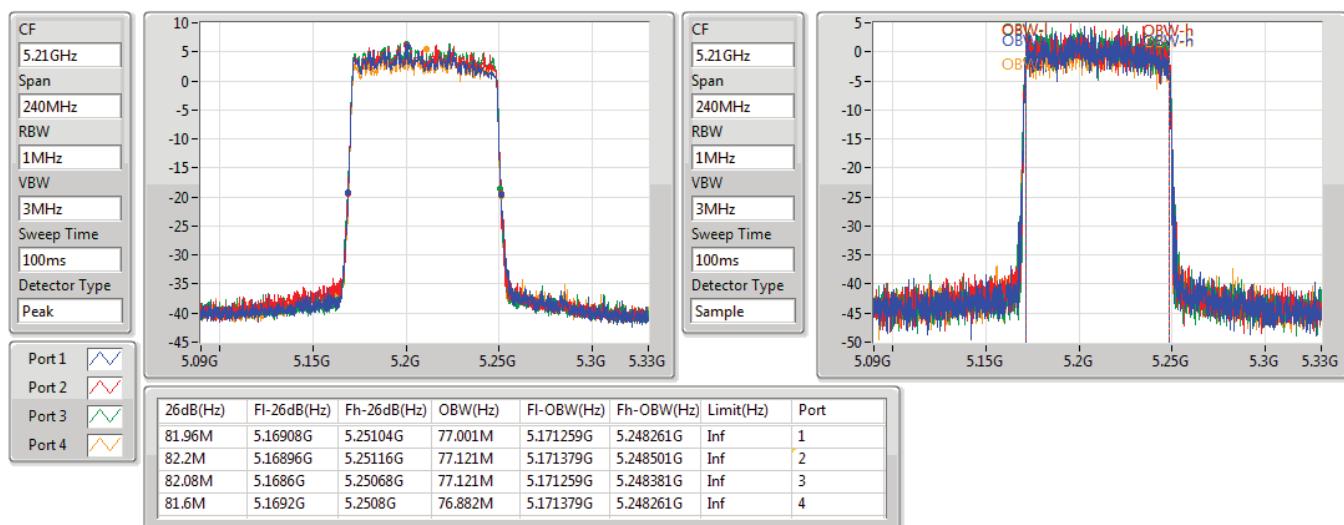

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5795MHz

07/05/2019

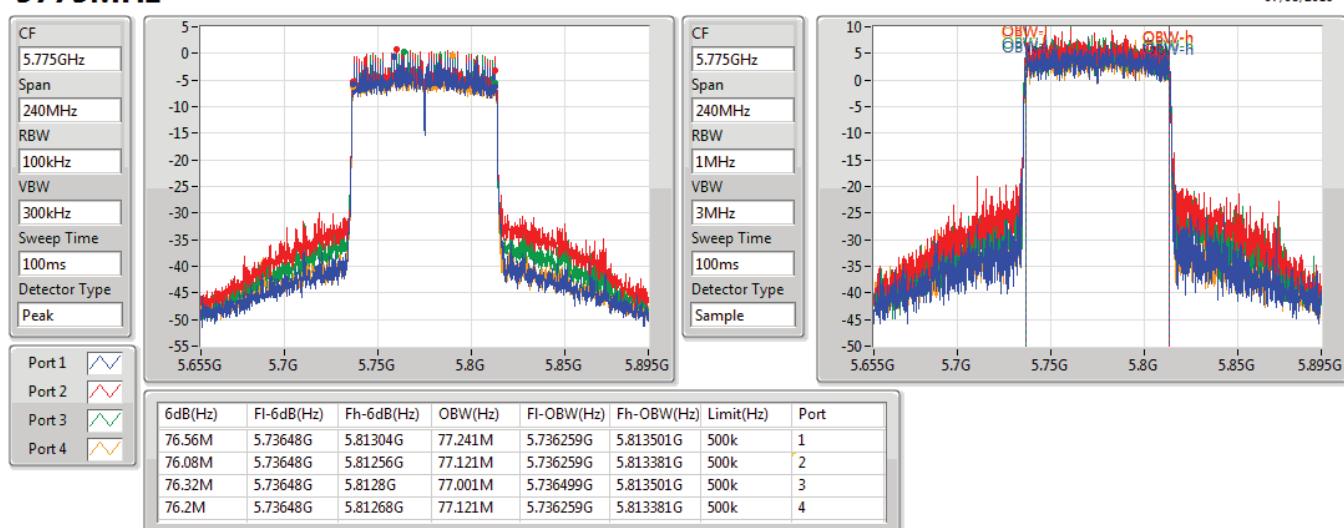


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5210MHz

07/05/2019


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5775MHz

07/05/2019



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	22.02M	17.811M	17M8D1D	21.48M	17.751M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	41.82M	36.342M	36M3D1D	39.6M	36.222M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	81.48M	76.042M	76M0D1D	80.28M	75.562M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.17M	19.01M	19M0D1D	21.54M	18.951M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	41.46M	37.661M	37M7D1D	39.84M	37.481M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.24M	77.241M	77M2D1D	80.76M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	17.61M	17.871M	17M9D1D	17.58M	17.781M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	36.36M	36.402M	36M4D1D	35.1M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	76.2M	75.922M	75M9D1D	75.12M	75.802M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.02M	19.04M	19M0D1D	18.72M	18.951M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.8M	37.721M	37M7D1D	36.54M	37.541M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	77.4M	77.121M	77M1D1D	75M	77.001M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

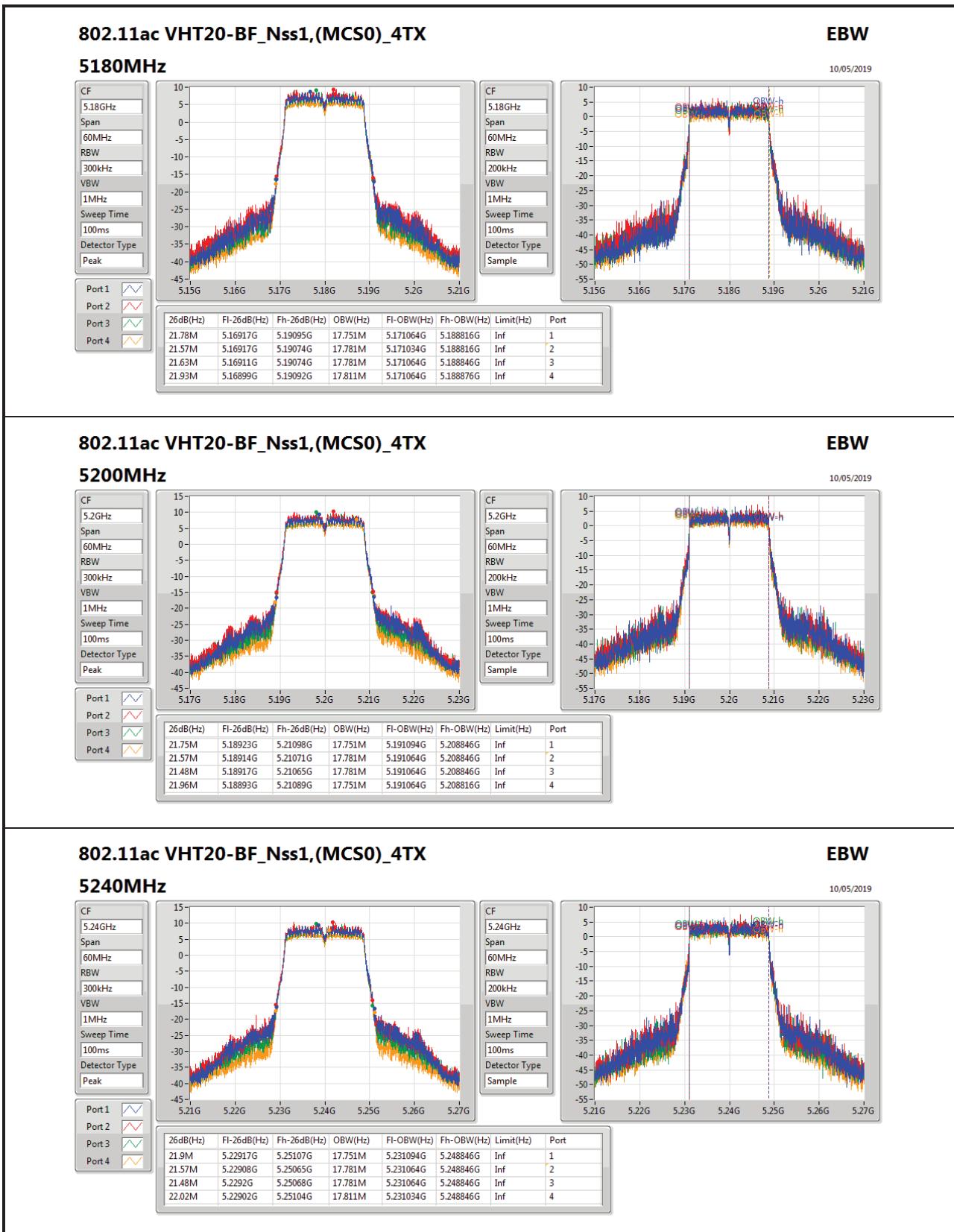


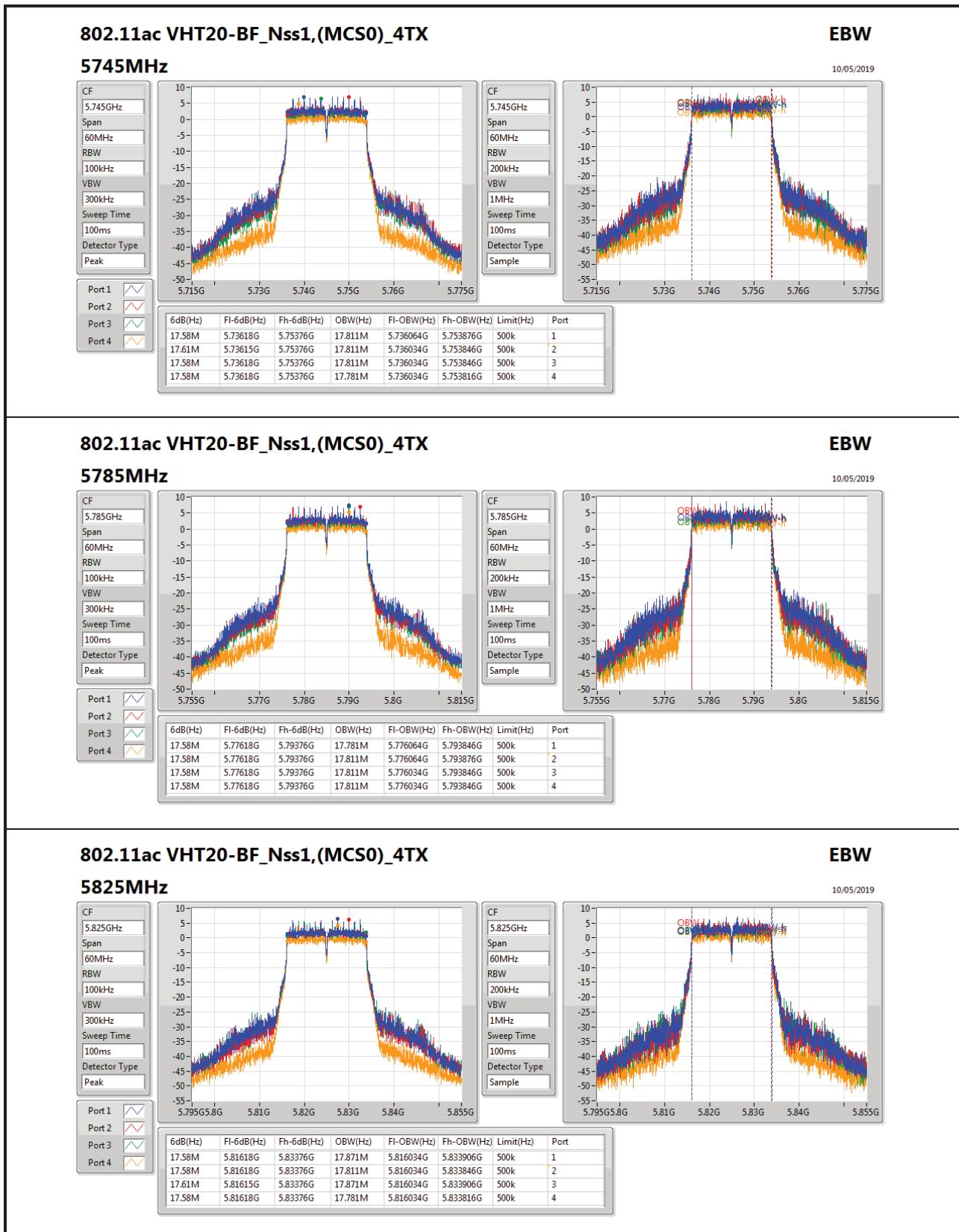
Result

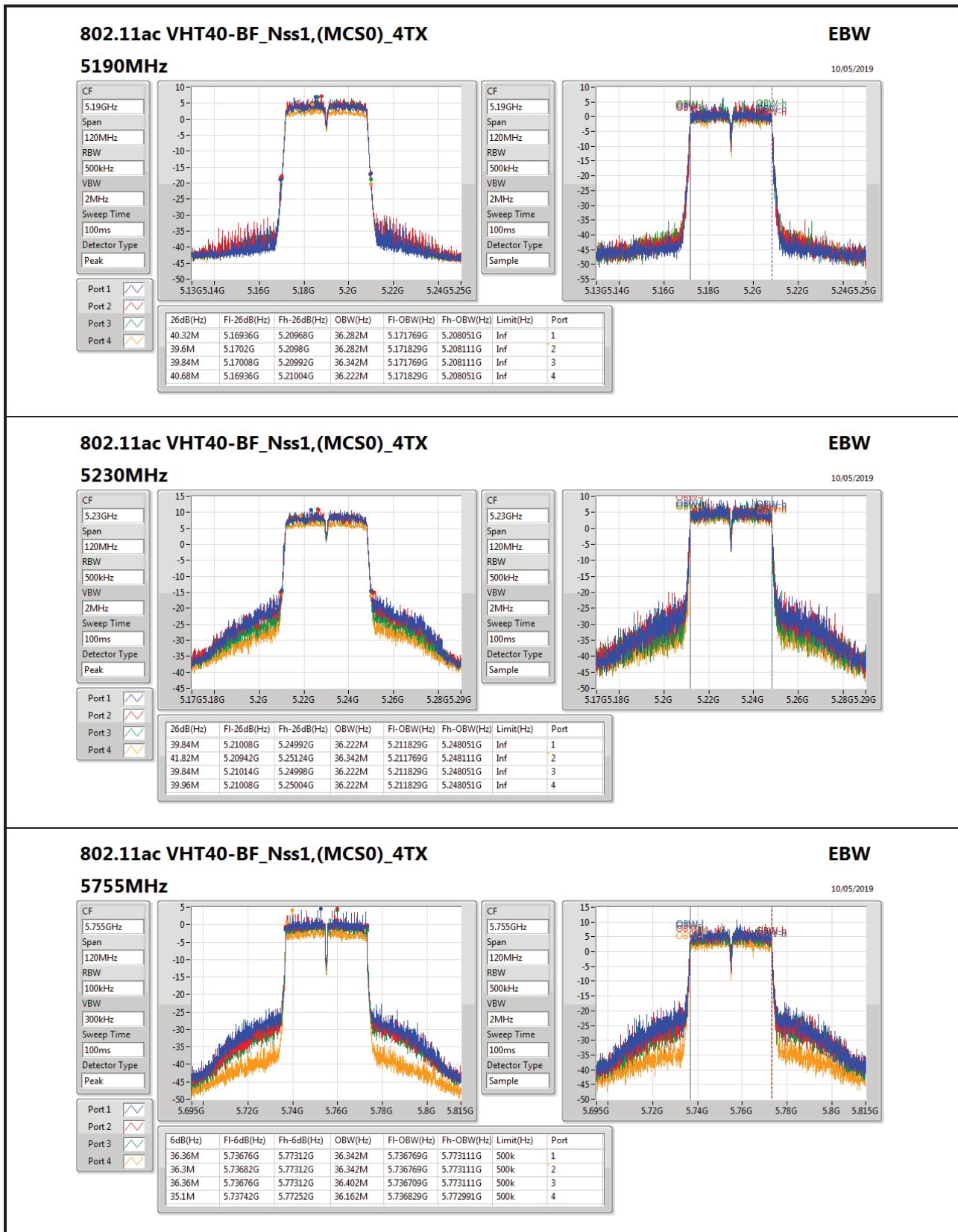
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	21.78M	17.751M	21.57M	17.781M	21.63M	17.781M	21.93M	17.811M
5200MHz_TnomVnom	Pass	Inf	21.75M	17.751M	21.57M	17.781M	21.48M	17.781M	21.96M	17.751M
5240MHz_TnomVnom	Pass	Inf	21.9M	17.751M	21.57M	17.781M	21.48M	17.781M	22.02M	17.811M
5745MHz_TnomVnom	Pass	500k	17.58M	17.811M	17.61M	17.811M	17.58M	17.811M	17.58M	17.781M
5785MHz_TnomVnom	Pass	500k	17.58M	17.781M	17.58M	17.811M	17.58M	17.811M	17.58M	17.811M
5825MHz_TnomVnom	Pass	500k	17.58M	17.871M	17.58M	17.811M	17.61M	17.871M	17.58M	17.781M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	40.32M	36.282M	39.6M	36.282M	39.84M	36.342M	40.68M	36.222M
5230MHz_TnomVnom	Pass	Inf	39.84M	36.222M	41.82M	36.342M	39.84M	36.222M	39.96M	36.222M
5755MHz_TnomVnom	Pass	500k	36.36M	36.342M	36.3M	36.342M	36.36M	36.402M	35.1M	36.162M
5795MHz_TnomVnom	Pass	500k	36.36M	36.282M	35.1M	36.282M	35.76M	36.282M	35.34M	36.222M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	80.64M	75.562M	80.28M	76.042M	81.48M	75.922M	80.52M	75.682M
5775MHz_TnomVnom	Pass	500k	75.6M	75.802M	75.12M	75.802M	75.12M	75.922M	76.2M	75.922M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	21.69M	18.981M	22.17M	18.981M	21.63M	18.981M	21.72M	18.981M
5200MHz_TnomVnom	Pass	Inf	21.69M	18.981M	21.84M	18.981M	21.63M	18.981M	21.6M	18.981M
5240MHz_TnomVnom	Pass	Inf	21.63M	18.951M	21.54M	19.01M	21.66M	18.951M	21.75M	19.01M
5745MHz_TnomVnom	Pass	500k	18.72M	19.01M	18.93M	19.01M	18.96M	19.01M	18.96M	19.01M
5785MHz_TnomVnom	Pass	500k	18.9M	19.01M	18.93M	18.981M	18.75M	19.04M	18.84M	18.951M
5825MHz_TnomVnom	Pass	500k	18.93M	19.01M	19.02M	19.01M	19.02M	19.01M	18.87M	19.01M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	39.9M	37.541M	40.14M	37.481M	39.96M	37.661M	40.02M	37.481M
5230MHz_TnomVnom	Pass	Inf	41.46M	37.601M	39.84M	37.601M	40.5M	37.601M	40.08M	37.541M
5755MHz_TnomVnom	Pass	500k	37.38M	37.721M	37.8M	37.601M	37.68M	37.541M	37.5M	37.541M
5795MHz_TnomVnom	Pass	500k	36.54M	37.601M	37.38M	37.661M	36.54M	37.661M	37.56M	37.661M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	81.12M	77.001M	80.88M	77.241M	80.76M	76.882M	81.24M	77.121M
5775MHz_TnomVnom	Pass	500k	75.24M	77.121M	75M	77.001M	76.2M	77.121M	77.4M	77.001M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

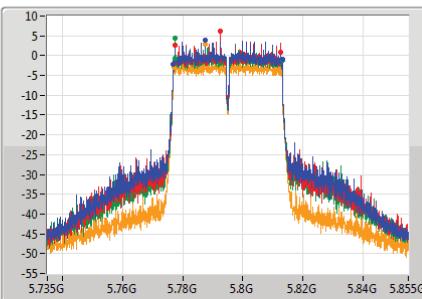




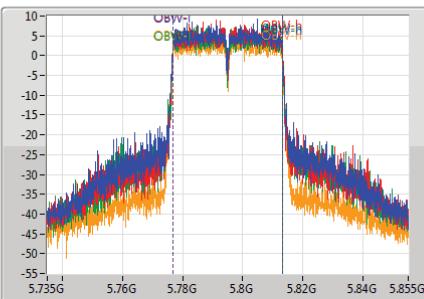


**802.11ac VHT40-BF_Nss1,(MCS0)_4TX****EBW****5795MHz**

CF	5.795GHz
Span	120MHz
RBW	100kHz
VBW	300kHz
Sweep Time	100ms
Detector Type	Peak
Port 1	
Port 2	
Port 3	
Port 4	



CF	5.795GHz
Span	120MHz
RBW	500kHz
VBW	2MHz
Sweep Time	100ms
Detector Type	Sample

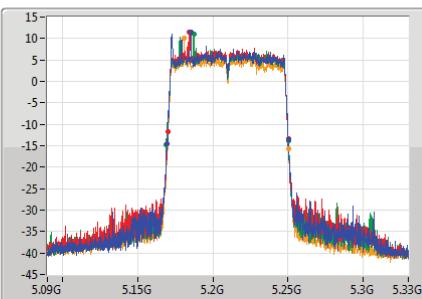


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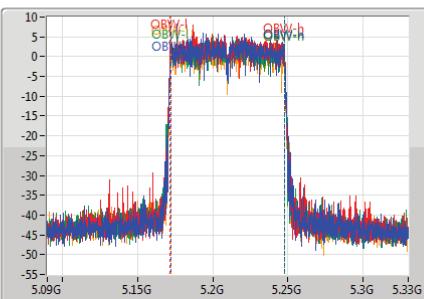
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.36M	5.77676G	5.81312G	36.282M	5.776769G	5.813051G	500k	1
35.1M	5.77742G	5.81252G	36.282M	5.776769G	5.813051G	500k	2
35.76M	5.77736G	5.81312G	36.282M	5.776769G	5.813051G	500k	3
35.34M	5.77718G	5.81252G	36.222M	5.776829G	5.813051G	500k	4

802.11ac VHT80-BF_Nss1,(MCS0)_4TX**EBW****5210MHz**

CF	5.21GHz
Span	240MHz
RBW	1MHz
VBW	3MHz
Sweep Time	100ms
Detector Type	Peak
Port 1	
Port 2	
Port 3	
Port 4	



CF	5.21GHz
Span	240MHz
RBW	1MHz
VBW	3MHz
Sweep Time	100ms
Detector Type	Sample



10/05/2019

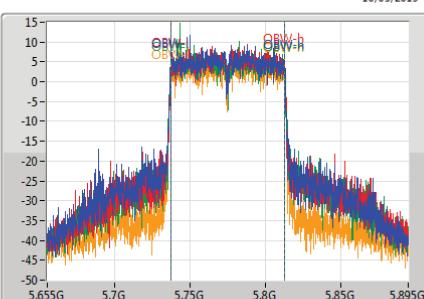
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.64M	5.16956G	5.2502G	75.562M	5.172219G	5.247781G	Inf	1
80.28M	5.16992G	5.2502G	76.042M	5.171739G	5.247781G	Inf	2
81.48M	5.16884G	5.25032G	75.922M	5.171979G	5.247901G	Inf	3
80.52M	5.1698G	5.25032G	75.682M	5.171979G	5.247661G	Inf	4

802.11ac VHT80-BF_Nss1,(MCS0)_4TX**EBW****5775MHz**

CF	5.775GHz
Span	240MHz
RBW	100kHz
VBW	300kHz
Sweep Time	100ms
Detector Type	Peak
Port 1	
Port 2	
Port 3	
Port 4	

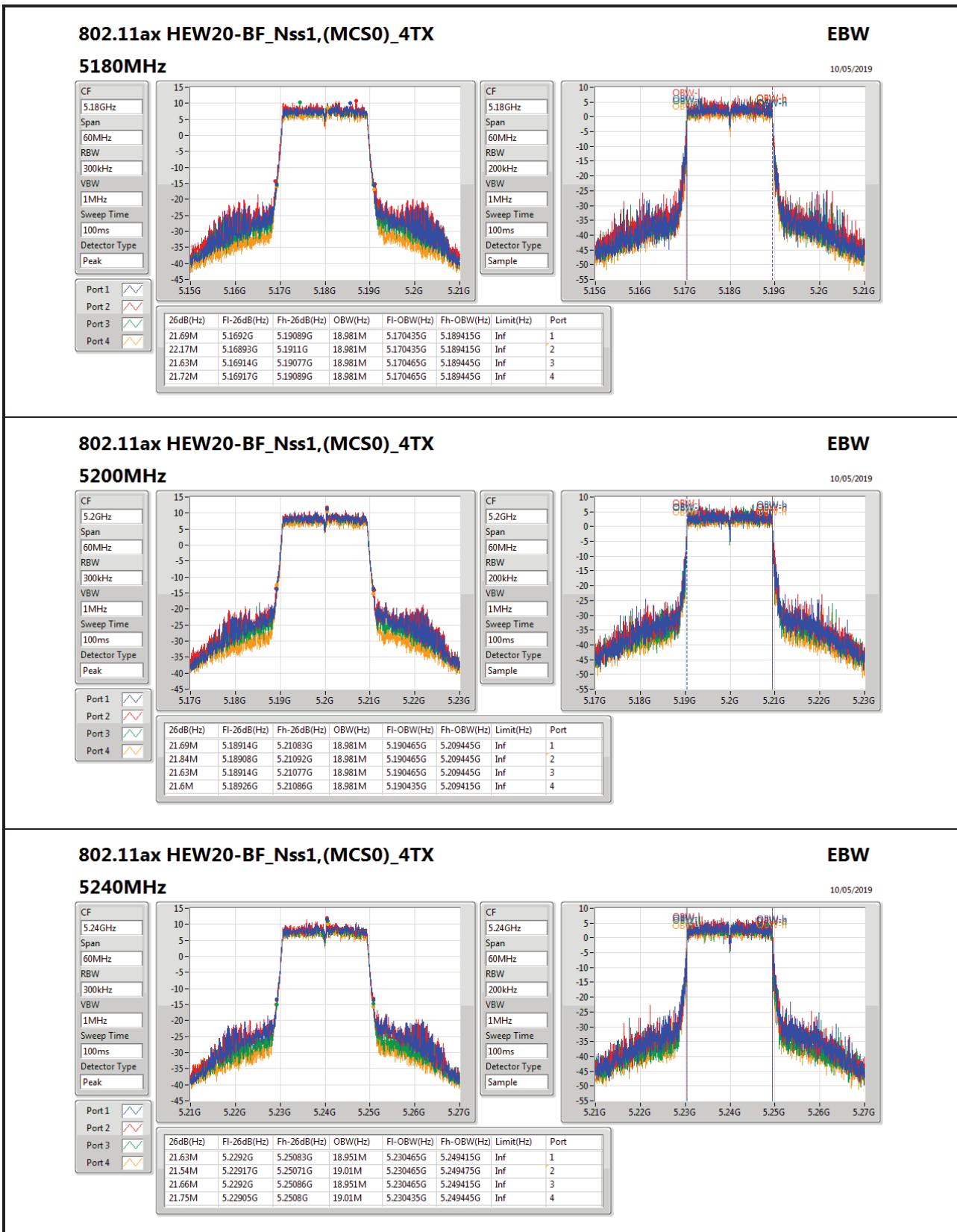


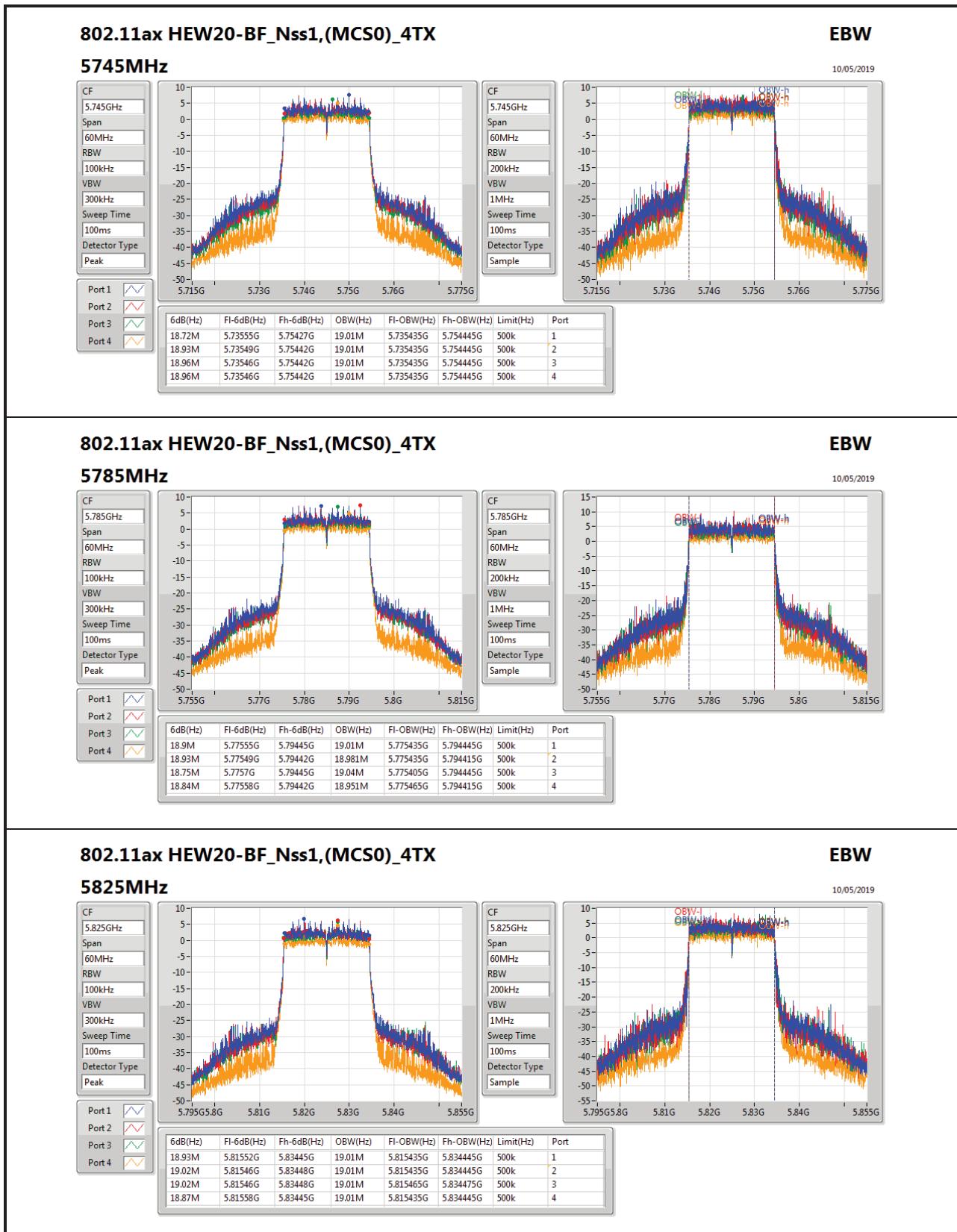
CF	5.775GHz
Span	240MHz
RBW	1MHz
VBW	3MHz
Sweep Time	100ms
Detector Type	Sample



10/05/2019

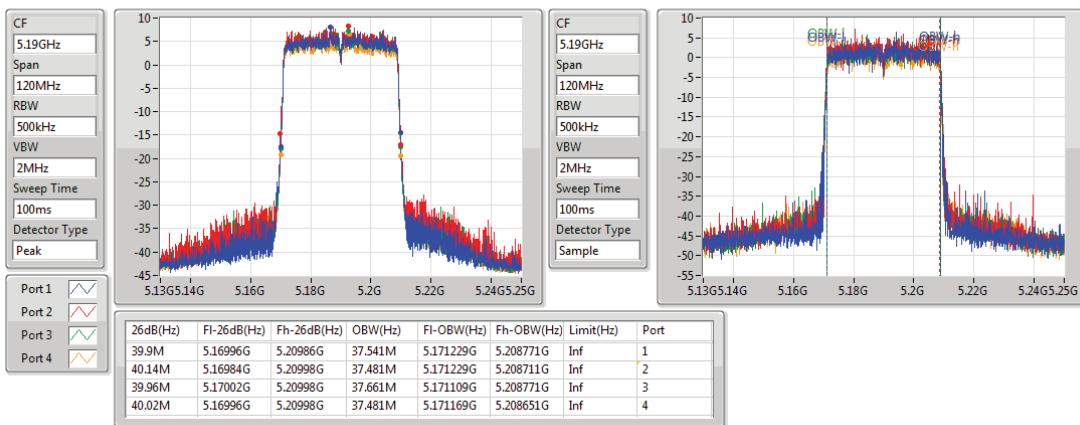
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.6M	5.73708G	5.81268G	75.802M	5.736979G	5.812781G	500k	1
75.12M	5.73744G	5.81256G	75.802M	5.737099G	5.812901G	500k	2
75.12M	5.73744G	5.81256G	75.922M	5.736979G	5.812901G	500k	3
76.2M	5.73684G	5.81304G	75.922M	5.736979G	5.812901G	500k	4



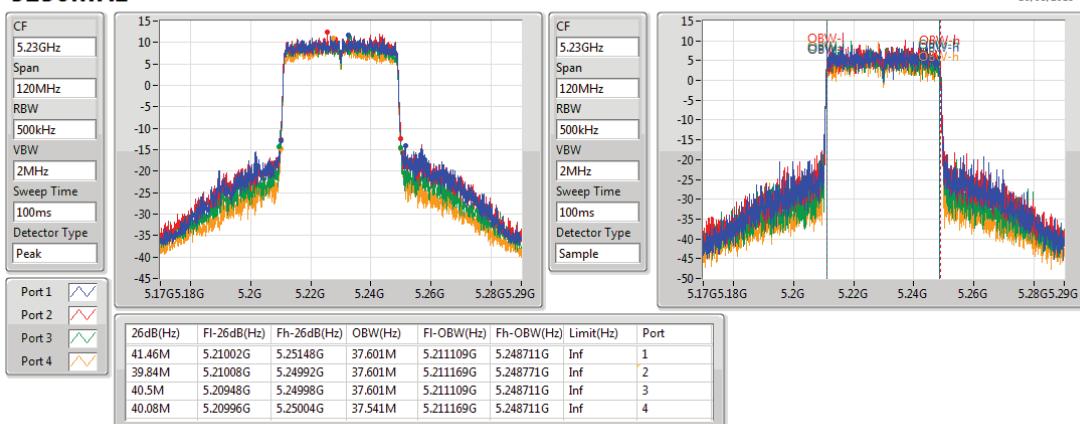


**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****EBW****5190MHz**

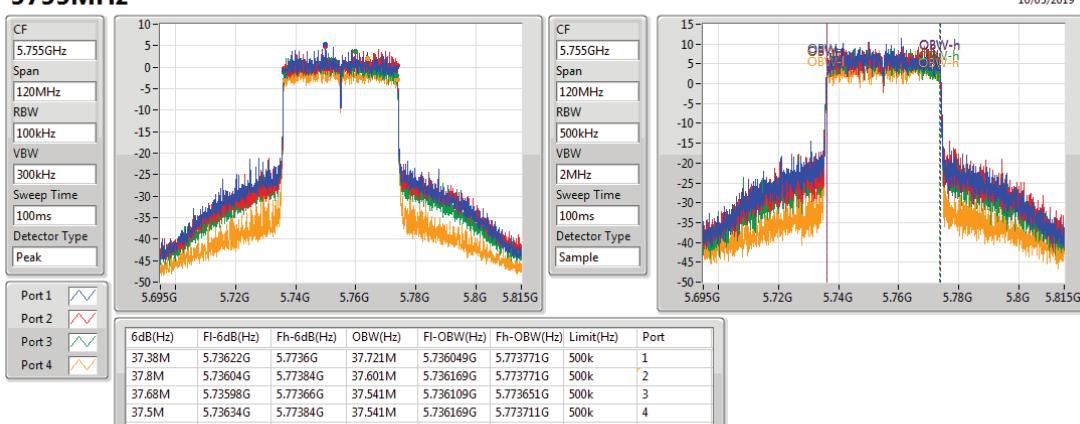
10/05/2019

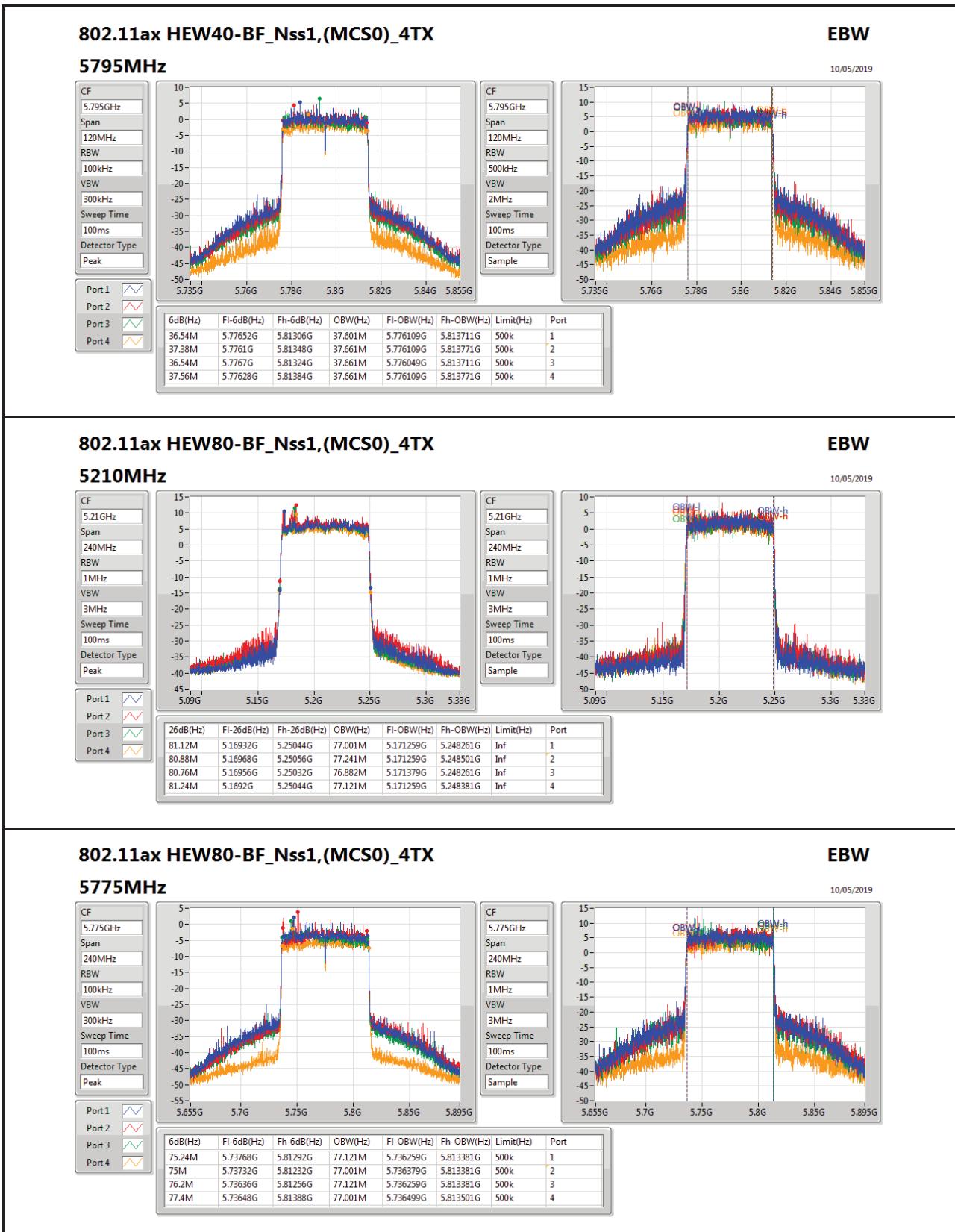
**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****EBW****5230MHz**

10/05/2019

**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****EBW****5755MHz**

10/05/2019





**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.38M	16.642M	16M6D1D	16.32M	16.552M
802.11ac VHT20_Nss1,(MCS0)_4TX	17.61M	17.841M	17M8D1D	17.55M	17.751M
802.11ac VHT40_Nss1,(MCS0)_4TX	36.3M	36.342M	36M3D1D	36.3M	36.162M
802.11ac VHT80_Nss1,(MCS0)_4TX	75.84M	75.922M	75M9D1D	75.12M	75.802M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.05M	19.04M	19M0D1D	18.84M	18.981M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.56M	37.661M	37M7D1D	36.72M	37.541M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.52M	77.241M	77M2D1D	75.72M	77.121M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;



Result

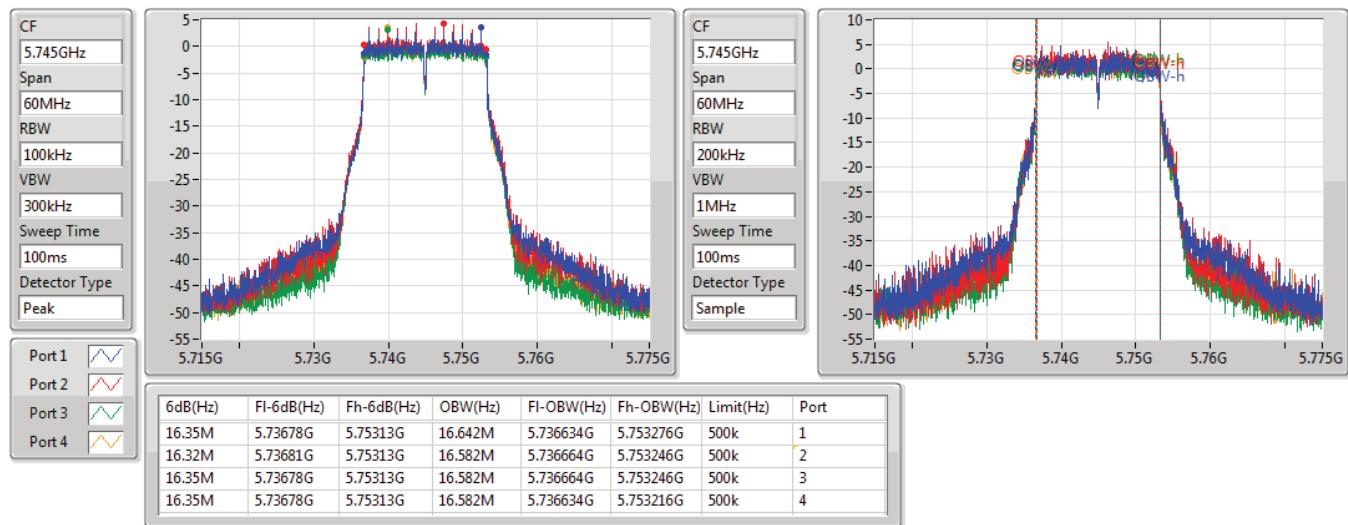
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	16.35M	16.642M	16.32M	16.582M	16.35M	16.582M	16.35M	16.582M
5785MHz	Pass	500k	16.32M	16.612M	16.32M	16.642M	16.35M	16.612M	16.38M	16.582M
5825MHz	Pass	500k	16.35M	16.552M	16.35M	16.612M	16.35M	16.582M	16.35M	16.642M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	17.55M	17.841M	17.58M	17.811M	17.61M	17.751M	17.58M	17.751M
5785MHz	Pass	500k	17.55M	17.781M	17.58M	17.811M	17.58M	17.781M	17.58M	17.781M
5825MHz	Pass	500k	17.58M	17.811M	17.58M	17.751M	17.58M	17.781M	17.55M	17.781M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	500k	36.3M	36.282M	36.3M	36.222M	36.3M	36.342M	36.3M	36.162M
5795MHz	Pass	500k	36.3M	36.342M	36.3M	36.342M	36.3M	36.342M	36.3M	36.222M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.12M	75.802M	75.84M	75.922M	75.84M	75.802M	75.72M	75.922M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	18.99M	18.981M	18.87M	19.01M	18.9M	19.01M	19.05M	19.04M
5785MHz	Pass	500k	18.96M	19.04M	18.9M	19.01M	18.84M	18.981M	19.02M	18.981M
5825MHz	Pass	500k	18.96M	18.981M	18.96M	18.981M	18.93M	18.981M	18.9M	19.01M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	500k	36.9M	37.661M	36.72M	37.661M	37.56M	37.541M	37.5M	37.541M
5795MHz	Pass	500k	37.56M	37.661M	36.72M	37.541M	37.56M	37.541M	37.2M	37.661M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.84M	77.241M	76.32M	77.121M	75.72M	77.241M	77.52M	77.121M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

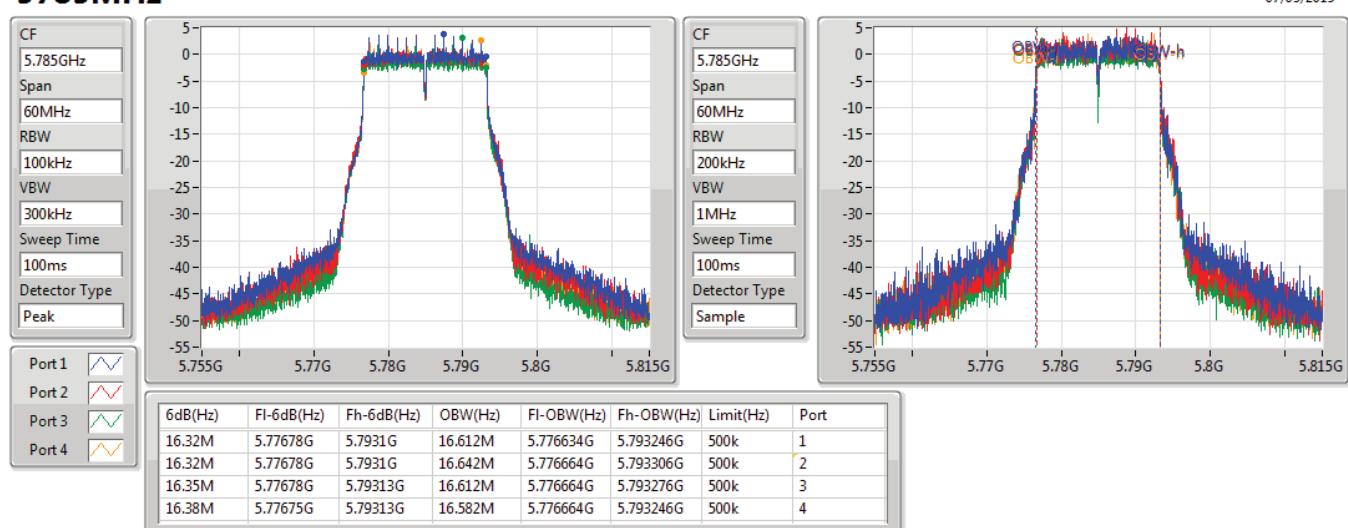
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

07/05/2019

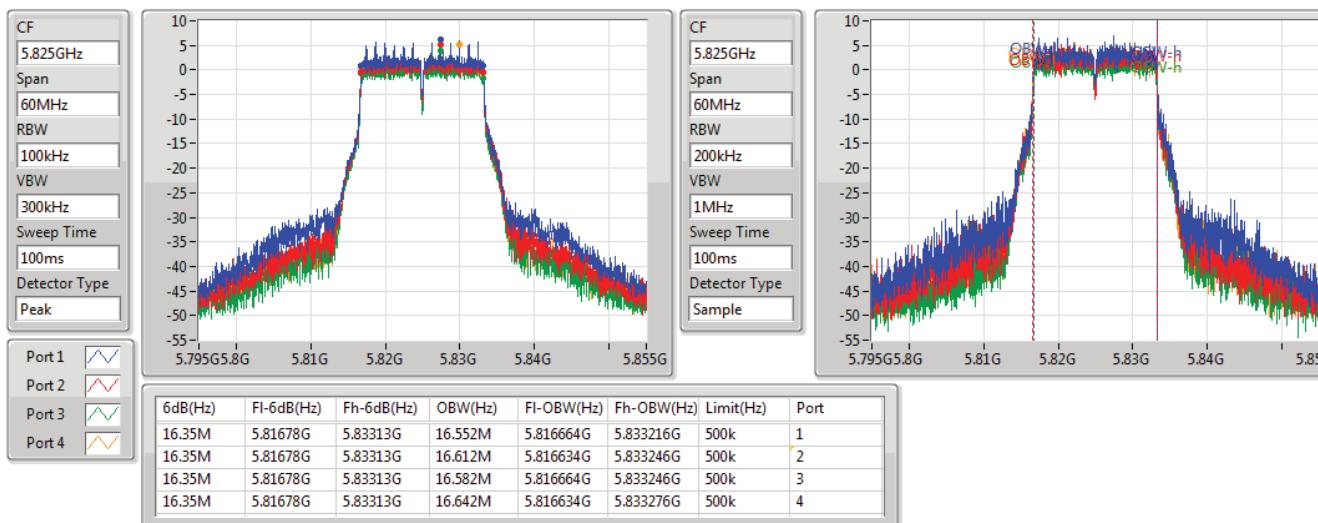

802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

07/05/2019

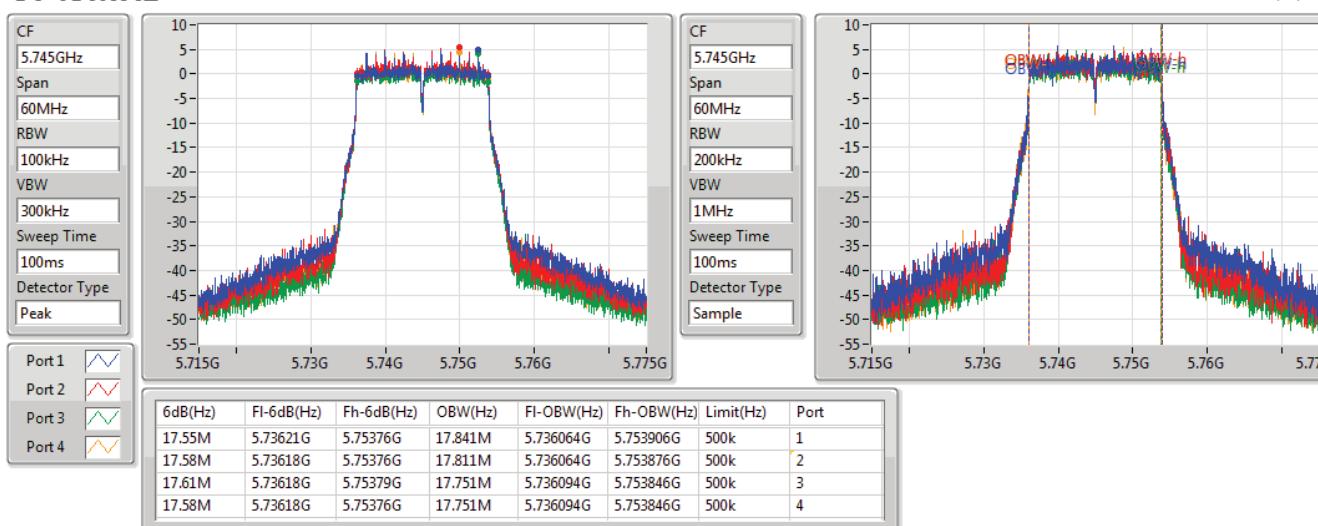


802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

07/05/2019

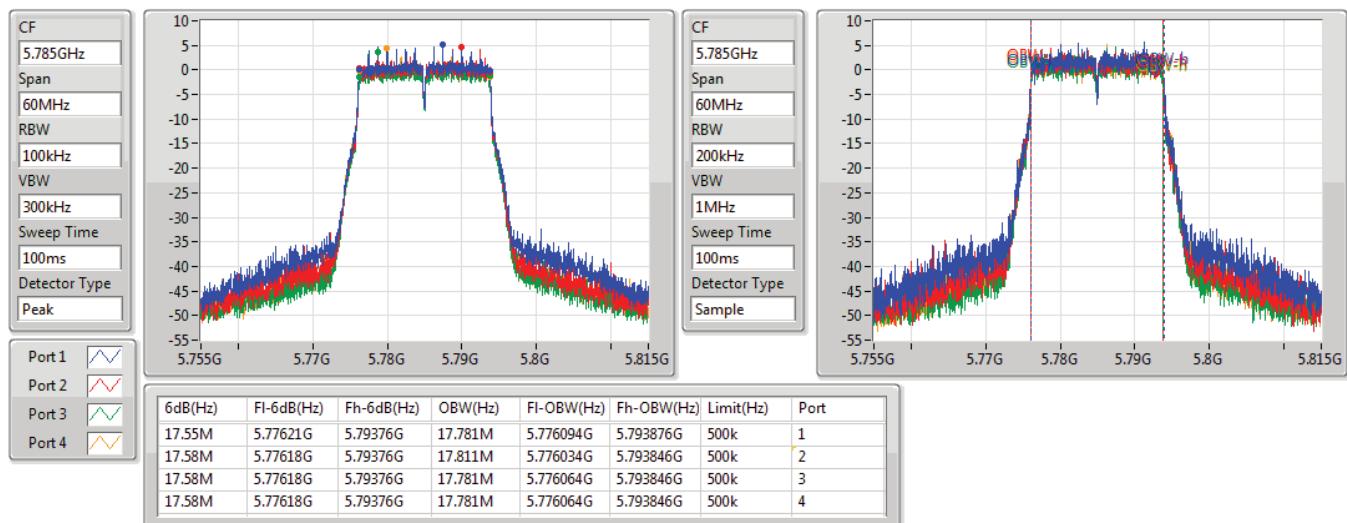

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5745MHz

09/05/2019

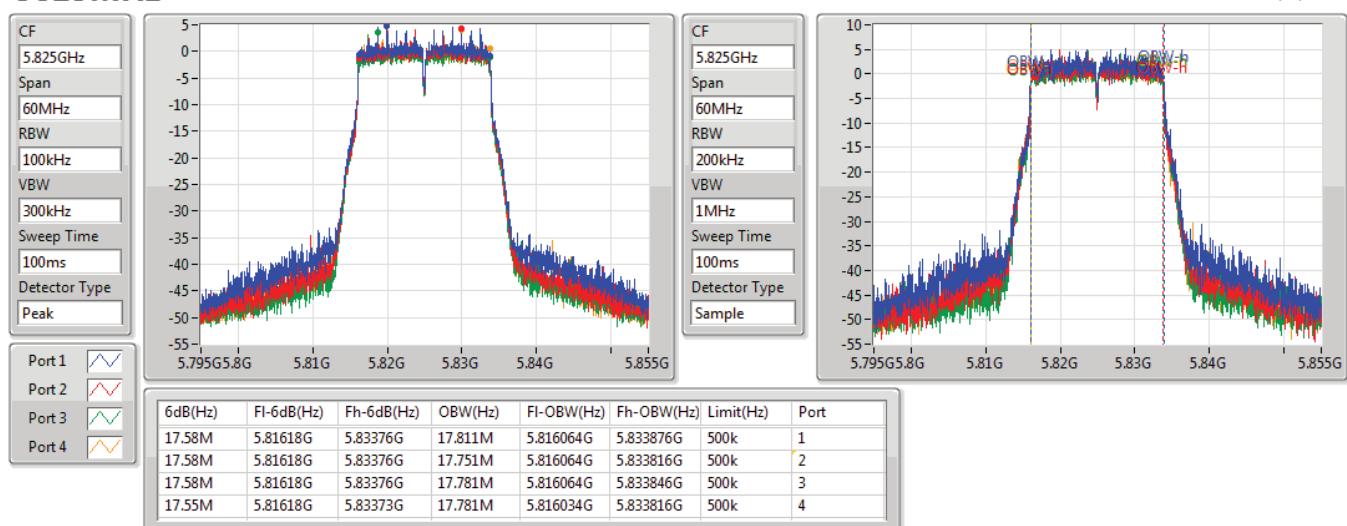


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5785MHz

09/05/2019

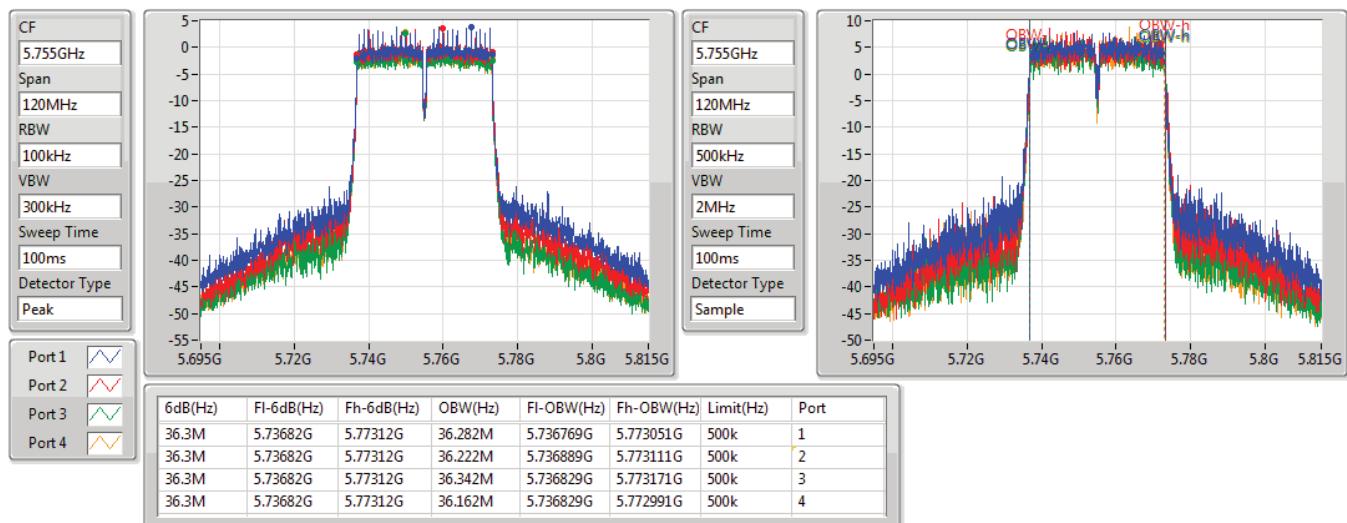

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5825MHz

09/05/2019

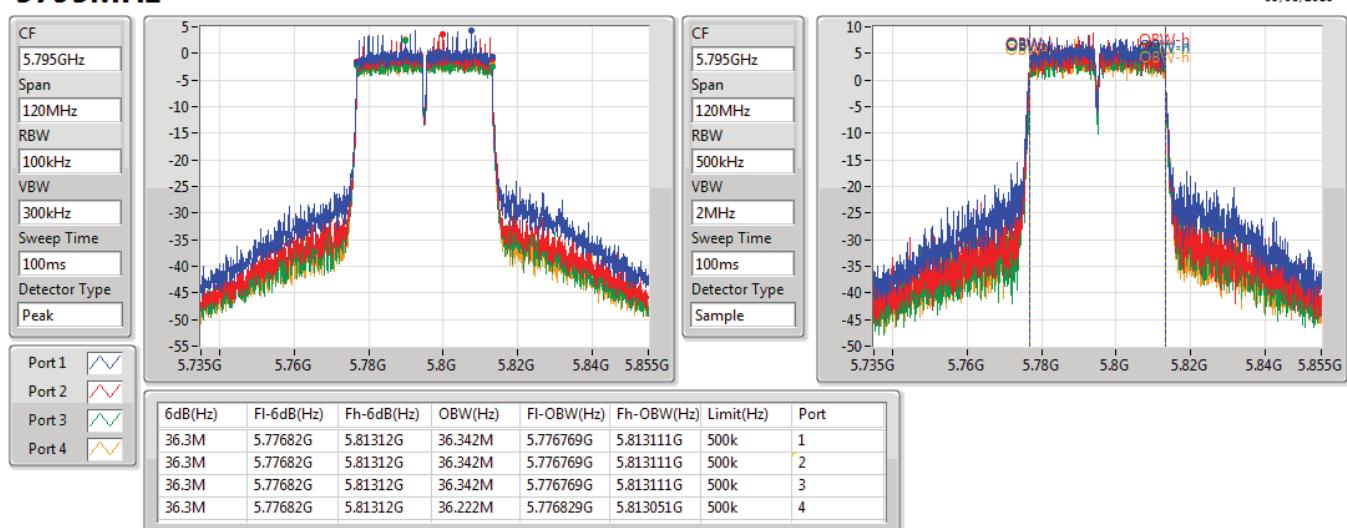


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5755MHz

09/05/2019

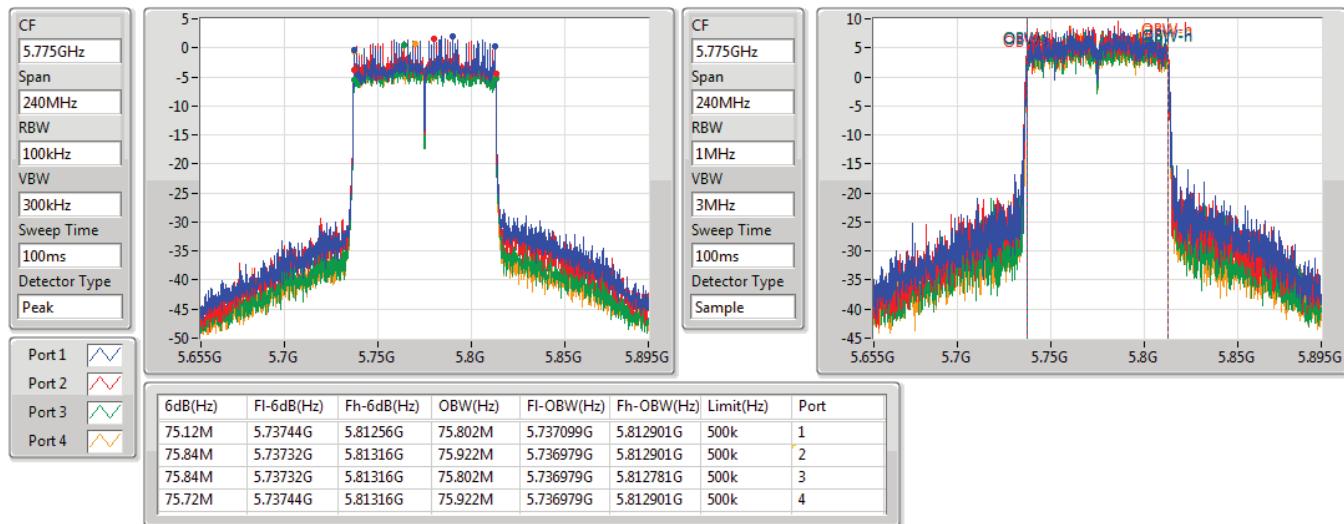

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5795MHz

09/05/2019

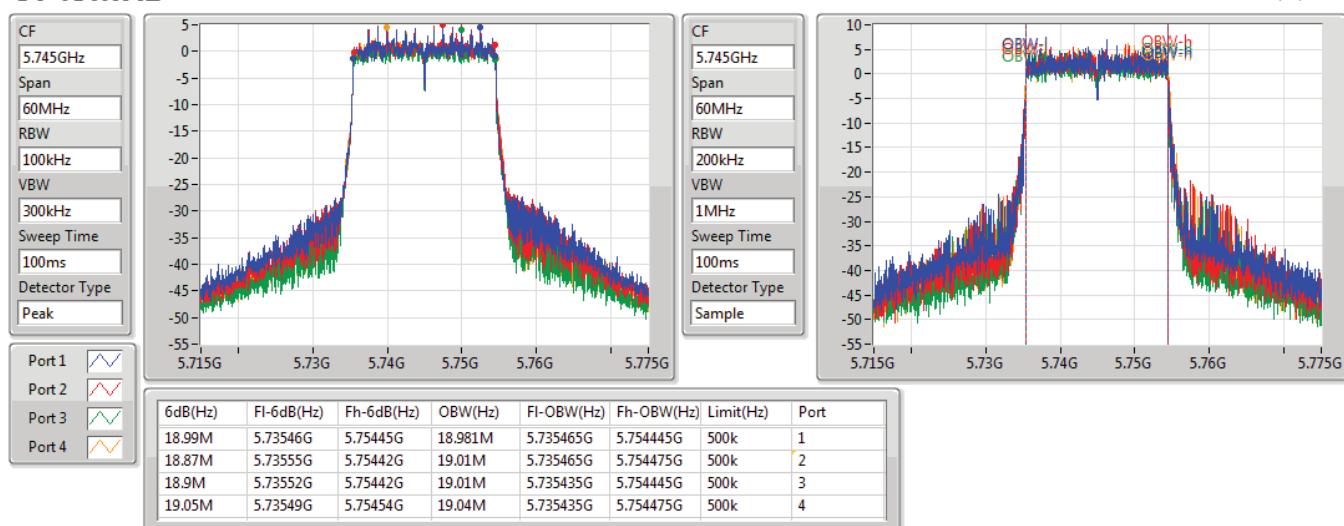


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5775MHz

09/05/2019

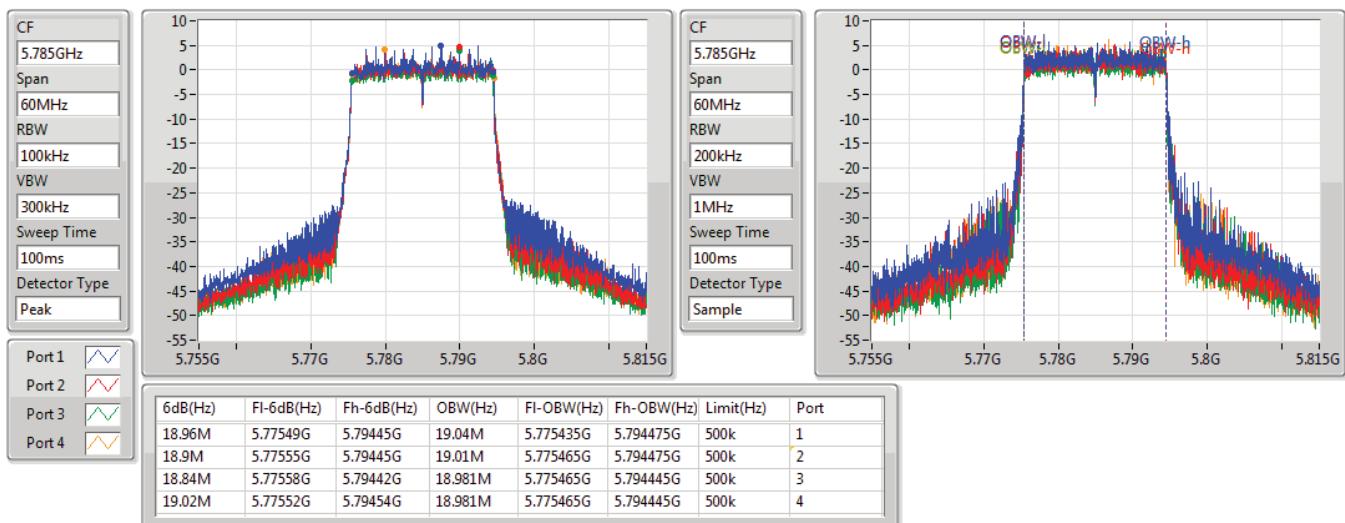

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5745MHz

09/05/2019

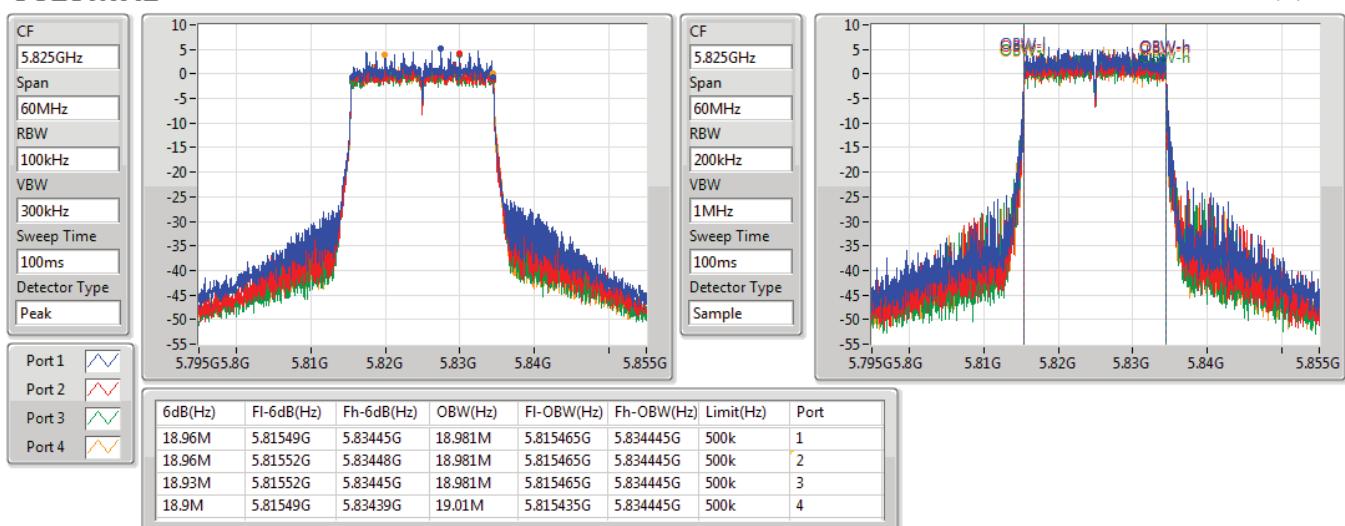


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5785MHz

09/05/2019

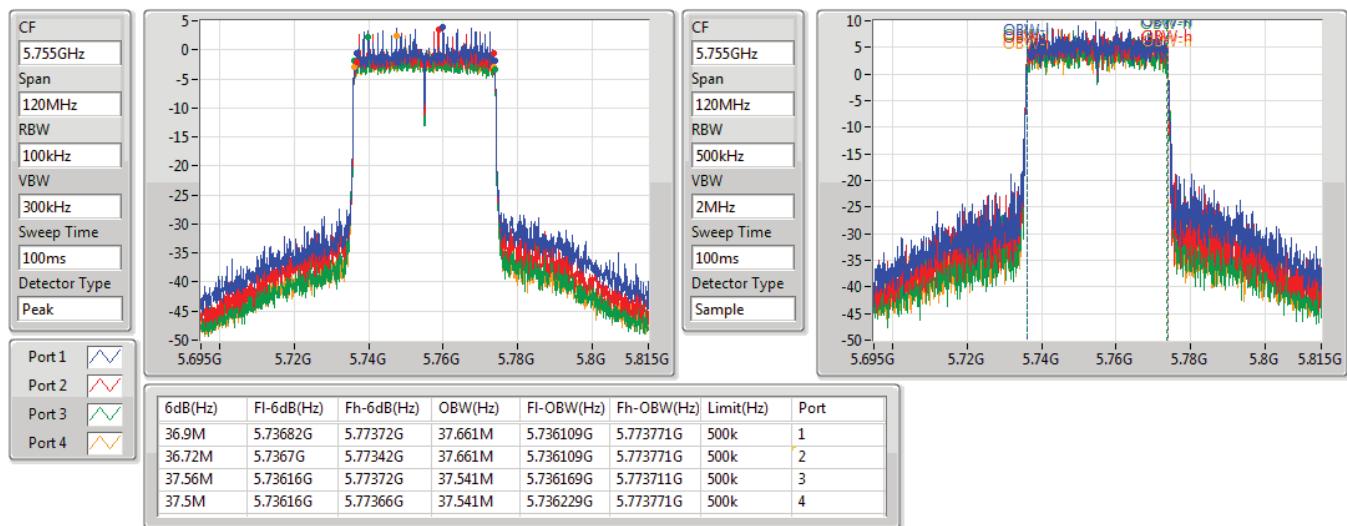

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5825MHz

09/05/2019

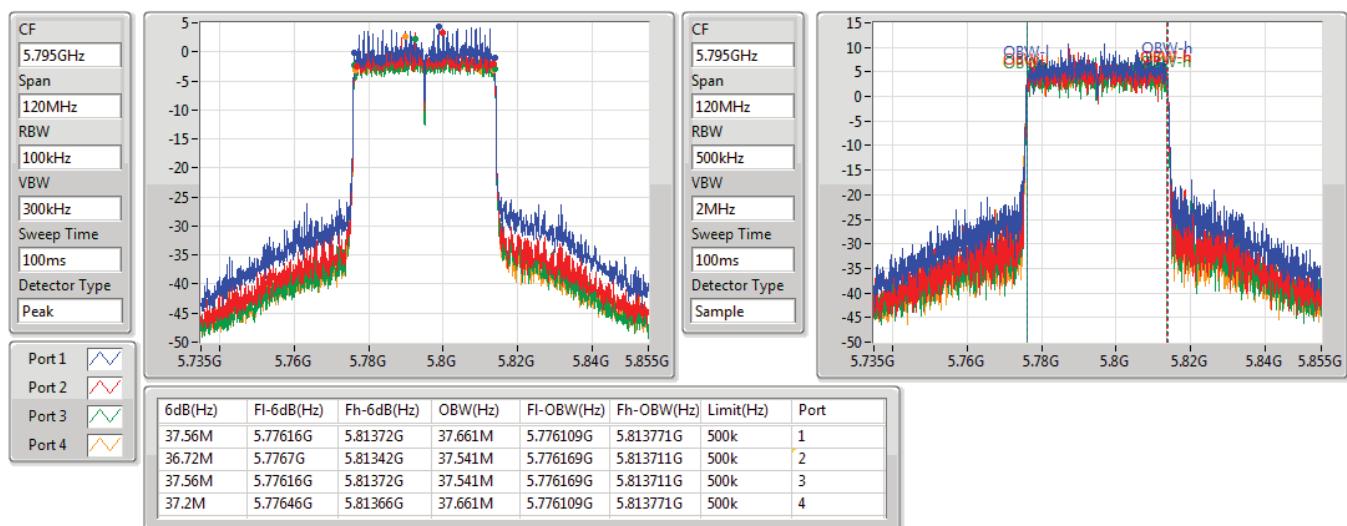


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5755MHz

09/05/2019

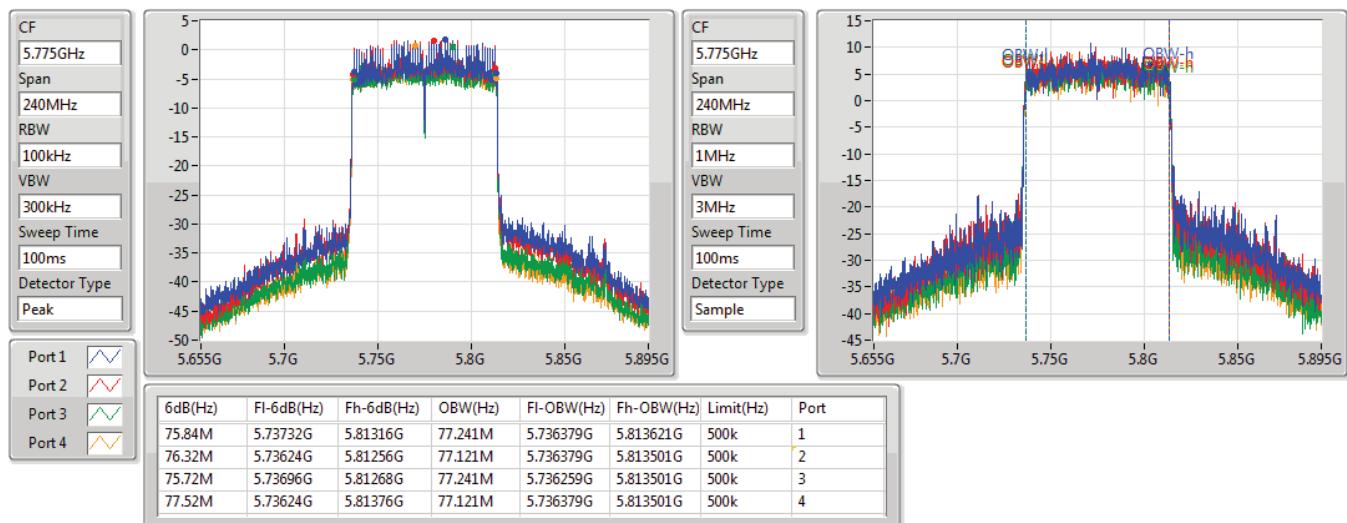

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5795MHz

09/05/2019



802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5775MHz

09/05/2019



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	17.61M	17.811M	17M8D1D	17.55M	17.751M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	36.42M	36.342M	36M3D1D	35.1M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	75M	75.802M	75M8D1D	66.36M	75.682M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.02M	19.04M	19M0D1D	18.78M	18.951M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.74M	37.721M	37M7D1D	37.14M	37.481M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	77.4M	77.361M	77M4D1D	75.96M	76.762M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

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)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz_TnomVnom	Pass	500k	17.55M	17.781M	17.61M	17.811M	17.61M	17.781M	17.61M	17.811M
5785MHz_TnomVnom	Pass	500k	17.58M	17.781M	17.58M	17.781M	17.61M	17.811M	17.58M	17.781M
5825MHz_TnomVnom	Pass	500k	17.58M	17.751M	17.55M	17.781M	17.58M	17.811M	17.55M	17.781M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz_TnomVnom	Pass	500k	36.36M	36.342M	35.1M	36.282M	36.3M	36.162M	36.42M	36.282M
5795MHz_TnomVnom	Pass	500k	36.42M	36.342M	36.3M	36.222M	36.3M	36.222M	36.06M	36.282M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz_TnomVnom	Pass	500k	75M	75.802M	66.36M	75.682M	73.56M	75.802M	73.92M	75.802M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz_TnomVnom	Pass	500k	18.81M	18.981M	18.99M	18.981M	18.96M	19.01M	18.96M	19.01M
5785MHz_TnomVnom	Pass	500k	19.02M	19.01M	18.78M	19.04M	18.9M	18.981M	18.96M	18.981M
5825MHz_TnomVnom	Pass	500k	18.87M	18.981M	18.96M	18.951M	19.02M	18.981M	18.99M	18.981M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz_TnomVnom	Pass	500k	37.68M	37.541M	37.44M	37.481M	37.14M	37.601M	37.56M	37.661M
5795MHz_TnomVnom	Pass	500k	37.44M	37.601M	37.38M	37.541M	37.74M	37.721M	37.5M	37.541M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz_TnomVnom	Pass	500k	75.96M	77.121M	76.2M	76.762M	77.4M	77.361M	76.56M	76.882M

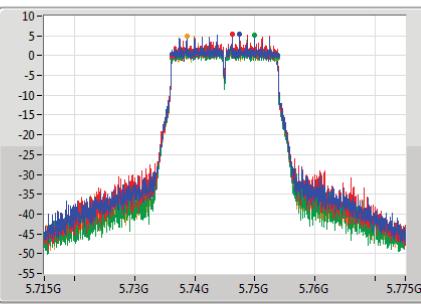
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

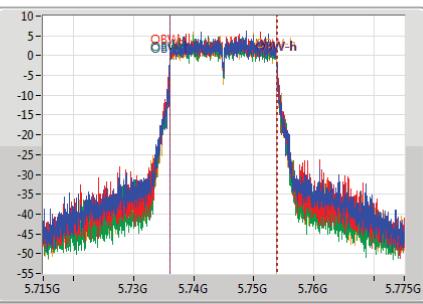
**802.11ac VHT20-BF_Nss1,(MCS0)_4TX****EBW****5745MHz**

CF
5.745GHz
Span
60MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak

Port 1
Port 2
Port 3
Port 4



CF
5.745GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample

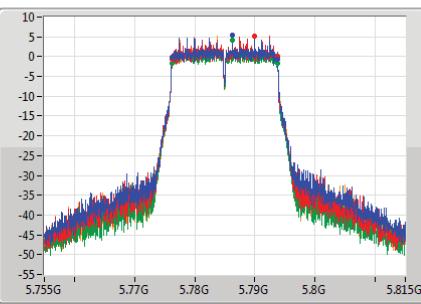


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.73618G	5.75373G	17.781M	5.736034G	5.753816G	500k	1
17.61M	5.73615G	5.75376G	17.811M	5.736064G	5.753876G	500k	2
17.61M	5.73615G	5.75376G	17.781M	5.736034G	5.753816G	500k	3
17.61M	5.73615G	5.75376G	17.811M	5.736034G	5.753846G	500k	4

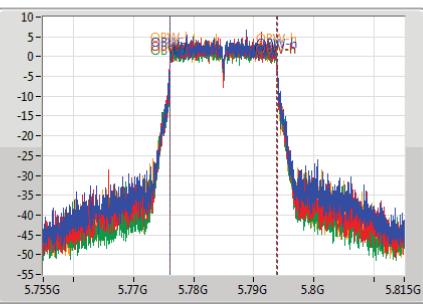
802.11ac VHT20-BF_Nss1,(MCS0)_4TX**EBW****5785MHz**

CF
5.785GHz
Span
60MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak

Port 1
Port 2
Port 3
Port 4



CF
5.785GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample

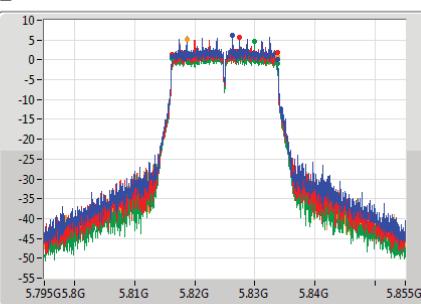


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.58M	5.77618G	5.79376G	17.781M	5.776094G	5.793876G	500k	1
17.58M	5.77615G	5.79373G	17.781M	5.776064G	5.793846G	500k	2
17.61M	5.77615G	5.79376G	17.811M	5.776034G	5.793846G	500k	3
17.58M	5.77618G	5.79376G	17.781M	5.776094G	5.793876G	500k	4

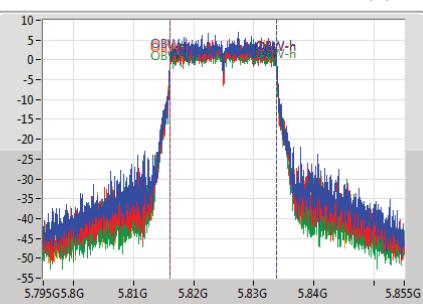
802.11ac VHT20-BF_Nss1,(MCS0)_4TX**EBW****5825MHz**

CF
5.825GHz
Span
60MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak

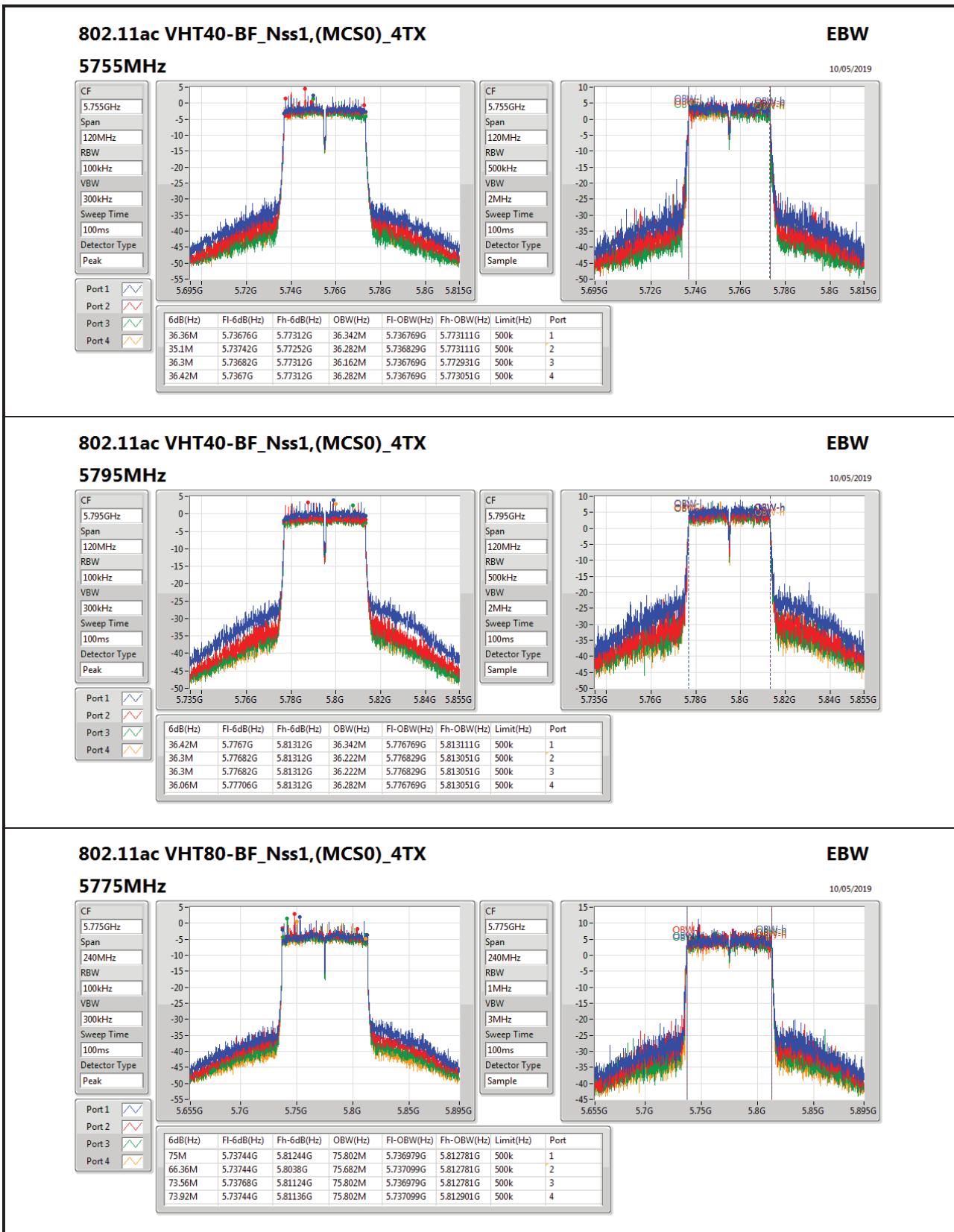
Port 1
Port 2
Port 3
Port 4

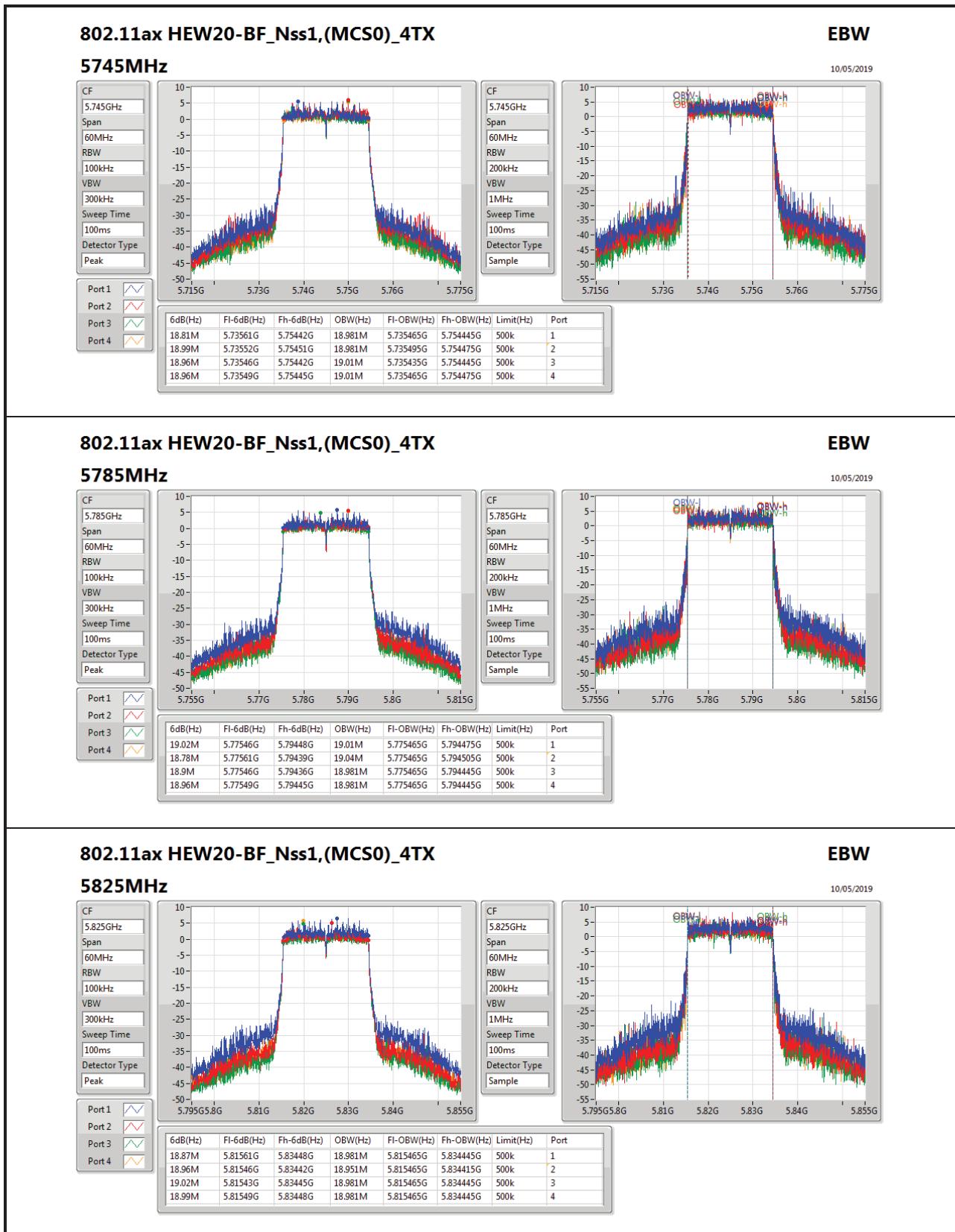


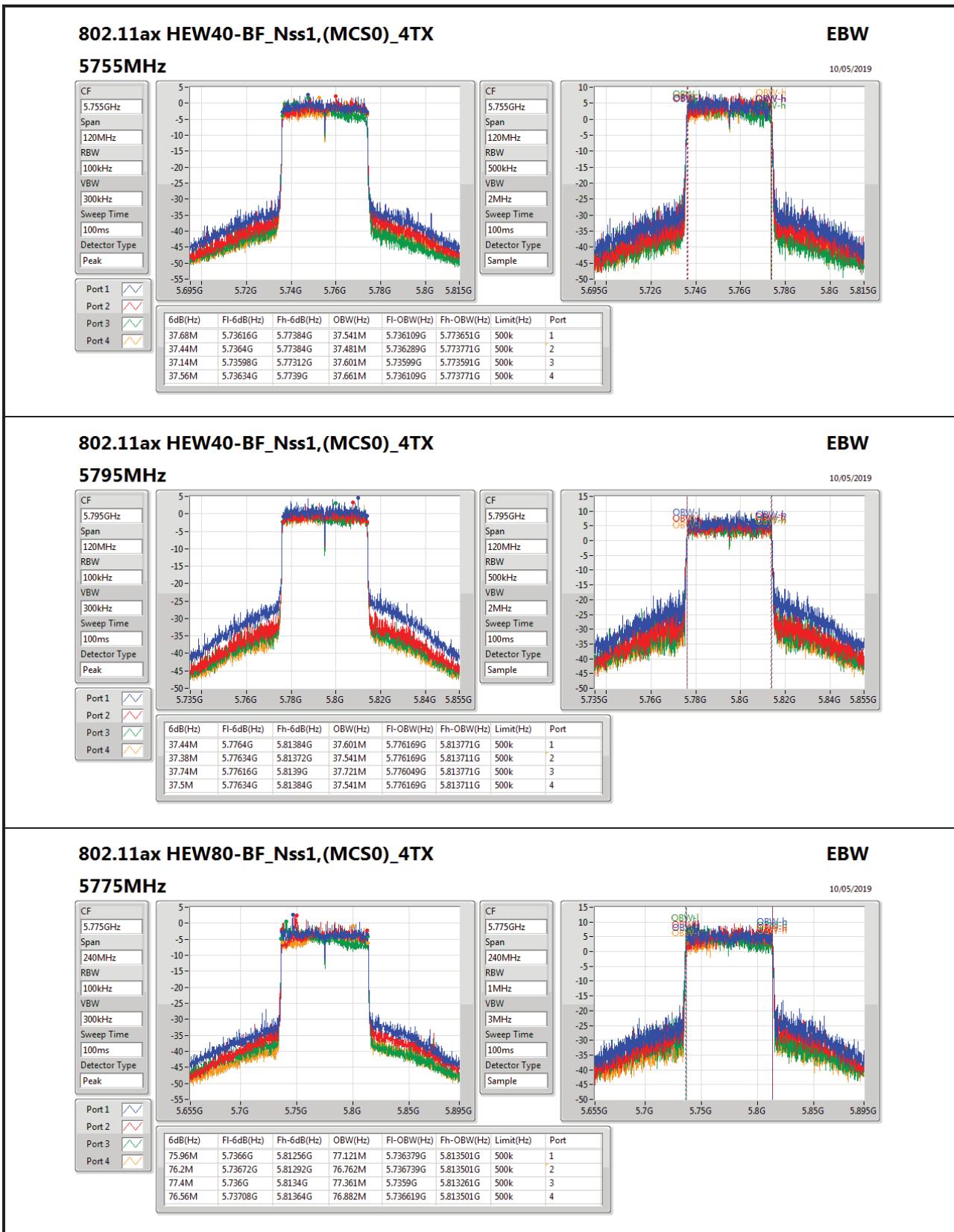
CF
5.825GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.58M	5.81618G	5.83376G	17.751M	5.816064G	5.833816G	500k	1
17.55M	5.81618G	5.83373G	17.781M	5.816064G	5.833846G	500k	2
17.58M	5.81618G	5.83376G	17.811M	5.816034G	5.833846G	500k	3
17.55M	5.81618G	5.83373G	17.781M	5.816034G	5.833816G	500k	4







**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	23.72	0.23550	29.72	0.93756
802.11ac VHT20_Nss1,(MCS0)_4TX	23.99	0.25061	29.99	0.99770
802.11ac VHT40_Nss1,(MCS0)_4TX	24.69	0.29444	30.69	1.17220
802.11ac VHT80_Nss1,(MCS0)_4TX	18.72	0.07447	24.72	0.29648
802.11ax HEW20_Nss1,(MCS0)_4TX	24.27	0.26730	30.27	1.06414
802.11ax HEW40_Nss1,(MCS0)_4TX	24.83	0.30409	30.83	1.21060
802.11ax HEW80_Nss1,(MCS0)_4TX	19.09	0.08110	25.09	0.32285
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	24.78	0.30061	30.78	1.19674
802.11ac VHT20_Nss1,(MCS0)_4TX	24.39	0.27479	30.39	1.09396
802.11ac VHT40_Nss1,(MCS0)_4TX	27.66	0.58345	33.66	2.32274
802.11ac VHT80_Nss1,(MCS0)_4TX	23.09	0.20370	29.09	0.81096
802.11ax HEW20_Nss1,(MCS0)_4TX	24.64	0.29107	30.64	1.15878
802.11ax HEW40_Nss1,(MCS0)_4TX	27.73	0.59293	33.73	2.36048
802.11ax HEW80_Nss1,(MCS0)_4TX	23.29	0.21330	29.29	0.84918



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	6.00	14.85	15.79	15.76	14.81	21.35	30.00	27.35	36.00
5200MHz	Pass	6.00	17.39	18.16	18.15	17.00	23.72	30.00	29.72	36.00
5240MHz	Pass	6.00	17.29	17.77	17.85	17.13	23.54	30.00	29.54	36.00
5745MHz	Pass	6.00	18.26	19.32	19.09	18.24	24.78	30.00	30.78	36.00
5785MHz	Pass	6.00	17.95	19.06	18.76	18.15	24.52	30.00	30.52	36.00
5825MHz	Pass	6.00	15.55	16.90	16.25	15.54	22.12	30.00	28.12	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	6.00	15.63	16.34	16.67	15.40	22.06	30.00	28.06	36.00
5200MHz	Pass	6.00	17.81	18.25	18.45	17.28	23.99	30.00	29.99	36.00
5240MHz	Pass	6.00	17.84	18.12	18.38	17.45	23.98	30.00	29.98	36.00
5745MHz	Pass	6.00	17.14	18.21	18.04	17.09	23.67	30.00	29.67	36.00
5785MHz	Pass	6.00	17.17	18.23	17.88	16.87	23.59	30.00	29.59	36.00
5825MHz	Pass	6.00	17.81	19.00	18.67	17.89	24.39	30.00	30.39	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	6.00	12.79	13.36	13.70	12.52	19.14	30.00	25.14	36.00
5230MHz	Pass	6.00	18.21	18.99	19.30	18.06	24.69	30.00	30.69	36.00
5755MHz	Pass	6.00	17.41	18.49	18.19	17.56	23.96	30.00	29.96	36.00
5795MHz	Pass	6.00	21.40	21.80	21.86	21.46	27.66	30.00	33.66	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	6.00	12.37	13.04	13.30	11.96	18.72	30.00	24.72	36.00
5775MHz	Pass	6.00	16.48	17.64	17.62	16.36	23.09	30.00	29.09	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	6.00	15.86	16.71	17.03	15.77	22.40	30.00	28.40	36.00
5200MHz	Pass	6.00	17.89	18.42	18.63	17.43	24.14	30.00	30.14	36.00
5240MHz	Pass	6.00	18.12	18.44	18.65	17.75	24.27	30.00	30.27	36.00
5745MHz	Pass	6.00	17.46	18.37	18.25	17.49	23.93	30.00	29.93	36.00
5785MHz	Pass	6.00	17.43	18.42	18.13	17.20	23.84	30.00	29.84	36.00
5825MHz	Pass	6.00	18.12	19.26	18.97	17.99	24.64	30.00	30.64	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	6.00	13.06	13.69	14.04	12.59	19.40	30.00	25.40	36.00
5230MHz	Pass	6.00	18.51	19.05	19.36	18.21	24.83	30.00	30.83	36.00
5755MHz	Pass	6.00	17.77	18.71	18.49	17.69	24.21	30.00	30.21	36.00
5795MHz	Pass	6.00	21.44	21.87	21.96	21.54	27.73	30.00	33.73	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	6.00	12.76	13.34	13.77	12.26	19.09	30.00	25.09	36.00
5775MHz	Pass	6.00	16.70	17.84	17.77	16.62	23.29	30.00	29.29	36.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	22.84	0.19231	34.86	3.06196
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	23.15	0.20654	35.17	3.28852
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	20.45	0.11092	32.47	1.76604
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.89	0.19454	34.91	3.09742
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.20	0.20893	35.22	3.32660
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	20.68	0.11695	32.70	1.86209
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	23.37	0.21727	35.39	3.45939
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	23.37	0.21727	35.39	3.45939
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	23.33	0.21528	35.35	3.42768
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.44	0.22080	35.46	3.51560
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.43	0.22029	35.45	3.50752
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.47	0.22233	35.49	3.53997

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	12.02	16.71	16.82	16.10	14.77	22.19	23.98	34.21	36.00
5200MHz_TnomVnom	Pass	12.02	16.84	17.47	16.84	15.99	22.84	23.98	34.86	36.00
5240MHz_TnomVnom	Pass	12.02	16.68	17.07	16.29	15.63	22.47	23.98	34.49	36.00
5745MHz_TnomVnom	Pass	12.02	17.87	17.82	17.62	15.75	23.37	23.98	35.39	36.00
5785MHz_TnomVnom	Pass	12.02	17.82	17.72	17.12	16.02	23.25	23.98	35.27	36.00
5825MHz_TnomVnom	Pass	12.02	17.32	17.24	16.76	15.05	22.70	23.98	34.72	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	12.02	13.20	14.09	13.12	12.91	19.37	23.98	31.39	36.00
5230MHz_TnomVnom	Pass	12.02	17.28	17.69	16.82	16.66	23.15	23.98	35.17	36.00
5755MHz_TnomVnom	Pass	12.02	17.85	17.85	17.33	15.88	23.32	23.98	35.34	36.00
5795MHz_TnomVnom	Pass	12.02	17.80	17.98	17.45	15.86	23.37	23.98	35.39	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	12.02	14.43	14.97	14.65	13.56	20.45	23.98	32.47	36.00
5775MHz_TnomVnom	Pass	12.02	17.83	18.01	17.40	15.64	23.33	23.98	35.35	36.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	12.02	16.26	16.90	16.30	15.28	22.24	23.98	34.26	36.00
5200MHz_TnomVnom	Pass	12.02	16.91	17.28	17.20	15.97	22.89	23.98	34.91	36.00
5240MHz_TnomVnom	Pass	12.02	16.77	17.09	16.57	15.51	22.54	23.98	34.56	36.00
5745MHz_TnomVnom	Pass	12.02	18.13	17.84	17.45	15.93	23.44	23.98	35.46	36.00
5785MHz_TnomVnom	Pass	12.02	17.92	17.89	17.09	15.87	23.29	23.98	35.31	36.00
5825MHz_TnomVnom	Pass	12.02	17.39	17.25	16.98	14.93	22.76	23.98	34.78	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	12.02	13.48	14.03	13.39	12.48	19.40	23.98	31.42	36.00
5230MHz_TnomVnom	Pass	12.02	17.59	17.70	16.74	16.58	23.20	23.98	35.22	36.00
5755MHz_TnomVnom	Pass	12.02	18.08	17.92	17.43	15.90	23.43	23.98	35.45	36.00
5795MHz_TnomVnom	Pass	12.02	18.27	17.91	17.46	15.41	23.41	23.98	35.43	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	12.02	14.64	14.94	14.65	14.41	20.68	23.98	32.70	36.00
5775MHz_TnomVnom	Pass	12.02	17.32	17.96	18.07	16.22	23.47	23.98	35.49	36.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	22.44	0.17539	28.44	0.69823
802.11ac VHT20_Nss1,(MCS0)_4TX	22.40	0.17378	28.40	0.69183
802.11ac VHT40_Nss1,(MCS0)_4TX	23.60	0.22909	29.60	0.91201
802.11ac VHT80_Nss1,(MCS0)_4TX	24.06	0.25468	30.06	1.01391
802.11ax HEW20_Nss1,(MCS0)_4TX	22.68	0.18535	28.68	0.73790
802.11ax HEW40_Nss1,(MCS0)_4TX	23.80	0.23988	29.80	0.95499
802.11ax HEW80_Nss1,(MCS0)_4TX	24.31	0.26977	30.31	1.07399

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	6.00	15.35	16.12	15.28	15.51	21.60	30.00	27.60	36.00
5785MHz	Pass	6.00	15.06	15.13	14.18	14.75	20.82	30.00	26.82	36.00
5825MHz	Pass	6.00	17.16	16.45	15.64	16.29	22.44	30.00	28.44	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	6.00	16.49	16.81	15.95	16.22	22.40	30.00	28.40	36.00
5785MHz	Pass	6.00	16.49	16.21	15.44	15.91	22.05	30.00	28.05	36.00
5825MHz	Pass	6.00	16.51	15.84	15.36	15.63	21.88	30.00	27.88	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	6.00	18.19	17.81	16.79	17.05	23.52	30.00	29.52	36.00
5795MHz	Pass	6.00	18.62	17.61	16.80	17.06	23.60	30.00	29.60	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	6.00	18.51	18.49	17.43	17.62	24.06	30.00	30.06	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	6.00	16.81	17.07	16.14	16.57	22.68	30.00	28.68	36.00
5785MHz	Pass	6.00	16.75	16.45	15.81	16.32	22.37	30.00	28.37	36.00
5825MHz	Pass	6.00	16.82	16.12	15.69	15.92	22.18	30.00	28.18	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	6.00	18.50	17.97	17.08	17.14	23.73	30.00	29.73	36.00
5795MHz	Pass	6.00	18.75	17.72	17.13	17.34	23.80	30.00	29.80	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	6.00	18.67	18.79	17.72	17.86	24.31	30.00	30.31	36.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	22.17	0.16482	34.19	2.62422
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	22.81	0.19099	34.83	3.04089
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	23.04	0.20137	35.06	3.20627
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.42	0.17458	34.44	2.77971
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.15	0.20654	35.17	3.28852
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.47	0.22233	35.49	3.53997



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz_TnomVnom	Pass	12.02	16.39	16.31	15.50	16.13	22.12	23.98	34.14	36.00
5785MHz_TnomVnom	Pass	12.02	16.61	16.25	15.30	16.01	22.09	23.98	34.11	36.00
5825MHz_TnomVnom	Pass	12.02	16.94	16.31	15.47	15.72	22.17	23.98	34.19	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz_TnomVnom	Pass	12.02	16.48	16.48	16.24	16.16	22.36	23.98	34.38	36.00
5795MHz_TnomVnom	Pass	12.02	17.97	16.74	16.26	15.90	22.81	23.98	34.83	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz_TnomVnom	Pass	12.02	17.38	17.25	16.54	16.84	23.04	23.98	35.06	36.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz_TnomVnom	Pass	12.02	16.43	16.39	16.35	16.43	22.42	23.98	34.44	36.00
5785MHz_TnomVnom	Pass	12.02	16.56	16.00	15.72	16.14	22.14	23.98	34.16	36.00
5825MHz_TnomVnom	Pass	12.02	17.11	16.09	15.68	15.74	22.21	23.98	34.23	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz_TnomVnom	Pass	12.02	16.65	17.24	15.77	15.56	22.38	23.98	34.40	36.00
5795MHz_TnomVnom	Pass	12.02	17.06	17.47	17.40	16.51	23.15	23.98	35.17	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz_TnomVnom	Pass	12.02	17.38	18.03	17.50	16.81	23.47	23.98	35.49	36.00

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

**Summary**

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	10.88	22.90
802.11ac VHT20_Nss1,(MCS0)_4TX	10.82	22.84
802.11ac VHT40_Nss1,(MCS0)_4TX	8.54	20.56
802.11ac VHT80_Nss1,(MCS0)_4TX	-0.12	11.90
802.11ax HEW20_Nss1,(MCS0)_4TX	10.73	22.75
802.11ax HEW40_Nss1,(MCS0)_4TX	8.49	20.51
802.11ax HEW80_Nss1,(MCS0)_4TX	0.14	12.16
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	10.17	22.19
802.11ac VHT20_Nss1,(MCS0)_4TX	9.97	21.99
802.11ac VHT40_Nss1,(MCS0)_4TX	9.96	21.98
802.11ac VHT80_Nss1,(MCS0)_4TX	2.81	14.83
802.11ax HEW20_Nss1,(MCS0)_4TX	9.54	21.56
802.11ax HEW40_Nss1,(MCS0)_4TX	9.87	21.89
802.11ax HEW80_Nss1,(MCS0)_4TX	2.93	14.95

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

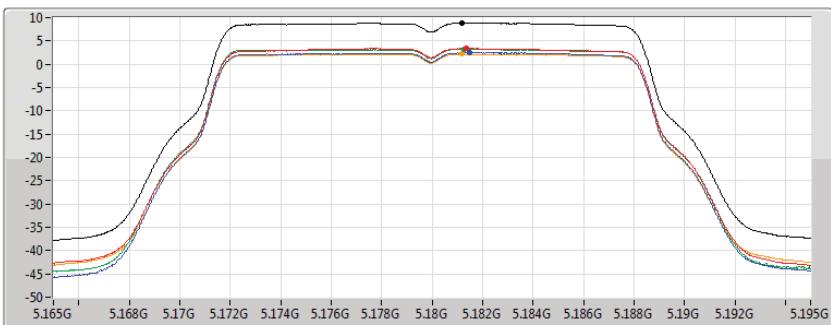
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	12.02	2.46	3.37	3.23	2.15	8.84	10.98	20.86	23.00
5200MHz	Pass	12.02	4.50	5.41	5.33	4.13	10.88	10.98	22.90	23.00
5240MHz	Pass	12.02	4.33	5.18	4.99	4.19	10.68	10.98	22.70	23.00
5745MHz	Pass	12.02	3.72	4.78	4.34	3.93	10.17	23.98	22.19	36.00
5785MHz	Pass	12.02	3.63	4.59	4.08	3.59	9.95	23.98	21.97	36.00
5825MHz	Pass	12.02	1.01	2.32	1.58	1.02	7.47	23.98	19.49	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	12.02	2.39	3.27	3.51	2.24	8.83	10.98	20.85	23.00
5200MHz	Pass	12.02	4.63	5.34	5.48	4.04	10.82	10.98	22.84	23.00
5240MHz	Pass	12.02	4.64	5.02	5.37	4.24	10.80	10.98	22.82	23.00
5745MHz	Pass	12.02	2.51	3.49	3.40	2.33	8.83	23.98	20.85	36.00
5785MHz	Pass	12.02	2.52	3.54	3.15	2.27	8.77	23.98	20.79	36.00
5825MHz	Pass	12.02	3.70	4.68	4.21	3.57	9.97	23.98	21.99	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	12.02	-3.26	-2.64	-2.31	-3.63	3.07	10.98	15.09	23.00
5230MHz	Pass	12.02	2.15	2.84	3.10	2.05	8.54	10.98	20.56	23.00
5755MHz	Pass	12.02	-0.07	0.97	0.87	-0.05	6.40	23.98	18.42	36.00
5795MHz	Pass	12.02	3.79	4.17	4.30	3.84	9.96	23.98	21.98	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	12.02	-6.39	-5.83	-5.43	-6.89	-0.12	10.98	11.90	23.00
5775MHz	Pass	12.02	-3.78	-2.44	-2.60	-3.91	2.81	23.98	14.83	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	12.02	2.33	3.20	3.51	2.25	8.77	10.98	20.79	23.00
5200MHz	Pass	12.02	4.46	4.99	5.23	4.02	10.64	10.98	22.66	23.00
5240MHz	Pass	12.02	4.80	4.83	5.23	4.34	10.73	10.98	22.75	23.00
5745MHz	Pass	12.02	2.59	3.32	3.31	2.43	8.82	23.98	20.84	36.00
5785MHz	Pass	12.02	2.44	3.41	3.18	2.26	8.72	23.98	20.74	36.00
5825MHz	Pass	12.02	3.22	4.24	3.98	2.98	9.54	23.98	21.56	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	12.02	-3.25	-2.61	-2.25	-3.60	3.05	10.98	15.07	23.00
5230MHz	Pass	12.02	2.21	2.82	3.13	1.93	8.49	10.98	20.51	23.00
5755MHz	Pass	12.02	-0.10	0.86	0.82	-0.14	6.33	23.98	18.35	36.00
5795MHz	Pass	12.02	3.58	4.05	4.22	3.77	9.87	23.98	21.89	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	12.02	-6.05	-5.51	-5.20	-6.71	0.14	10.98	12.16	23.00
5775MHz	Pass	12.02	-3.59	-2.42	-2.52	-3.73	2.93	23.98	14.95	36.00

DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

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

802.11a_Nss1,(6Mbps)_4TX
5180MHz

CF
5.18GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS

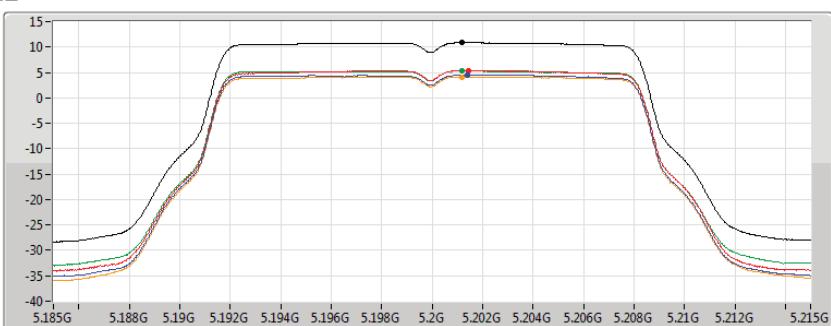

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11a_Nss1,(6Mbps)_4TX
5200MHz

CF
5.2GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS

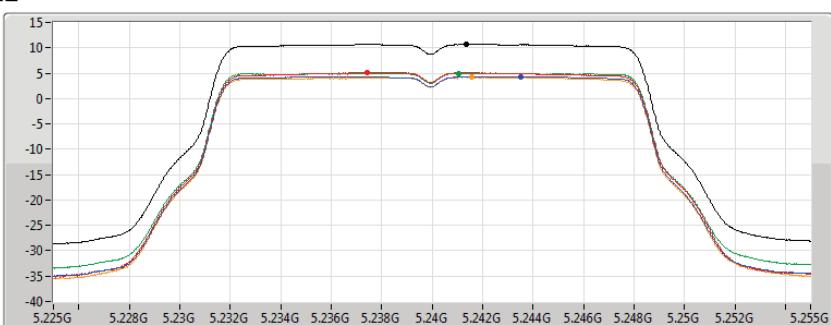

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11a_Nss1,(6Mbps)_4TX
5240MHz

CF
5.24GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS


PSD

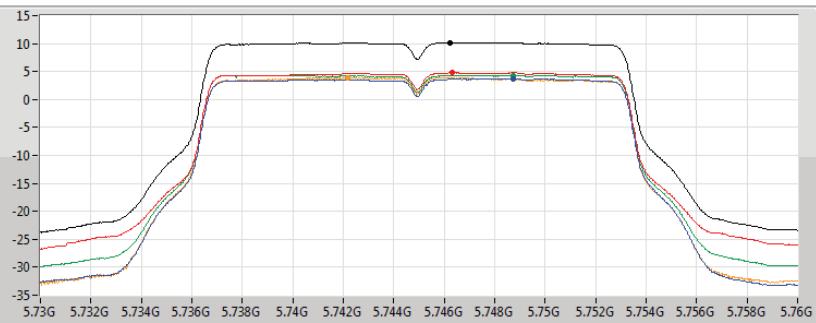
07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)

802.11a_Nss1,(6Mbps)_4TX
5745MHz

CF
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS

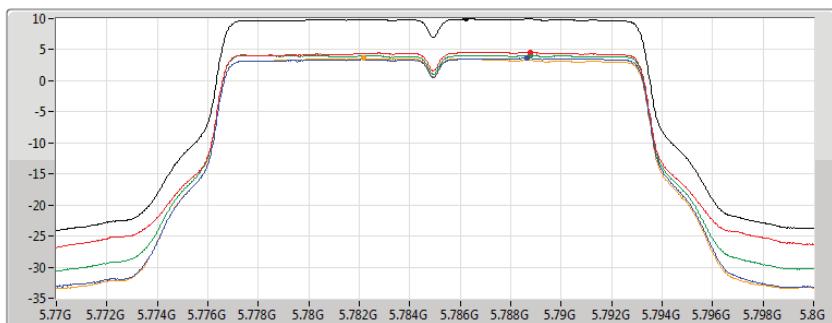

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11a_Nss1,(6Mbps)_4TX
5785MHz

CF
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS

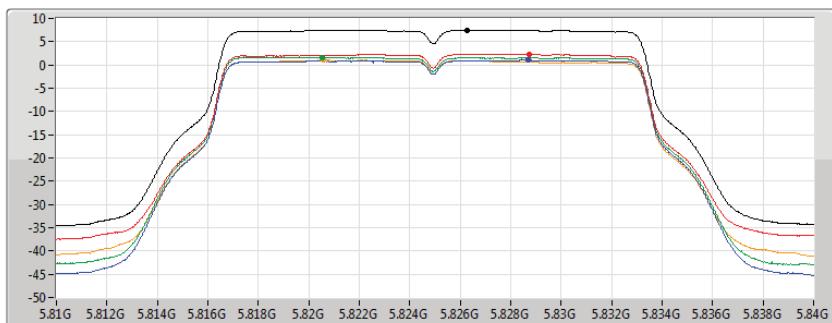

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11a_Nss1,(6Mbps)_4TX
5825MHz

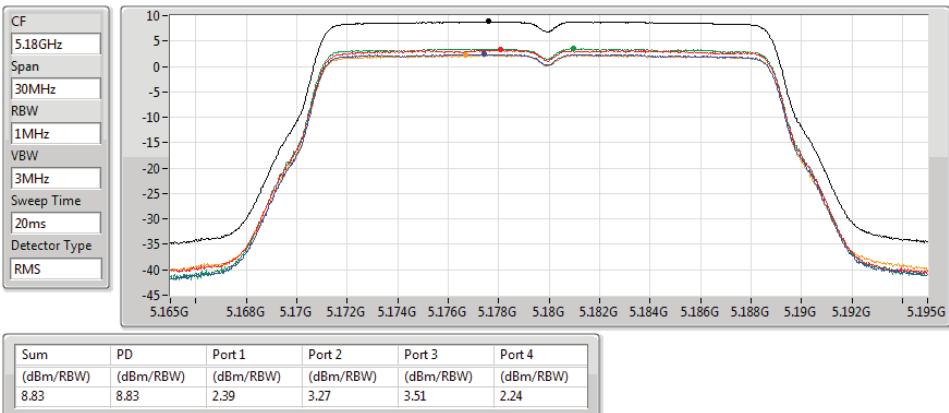
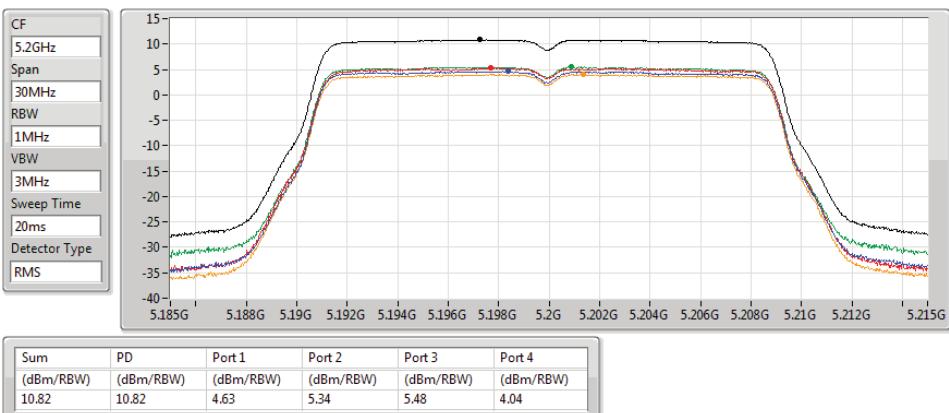
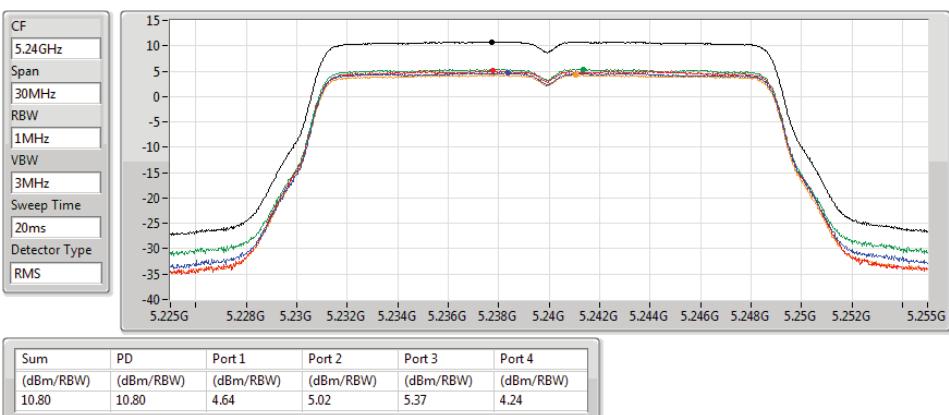
CF
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS

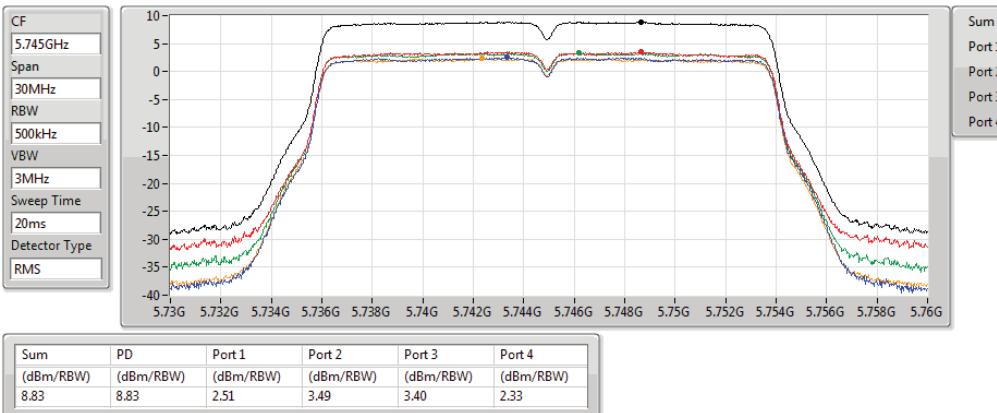
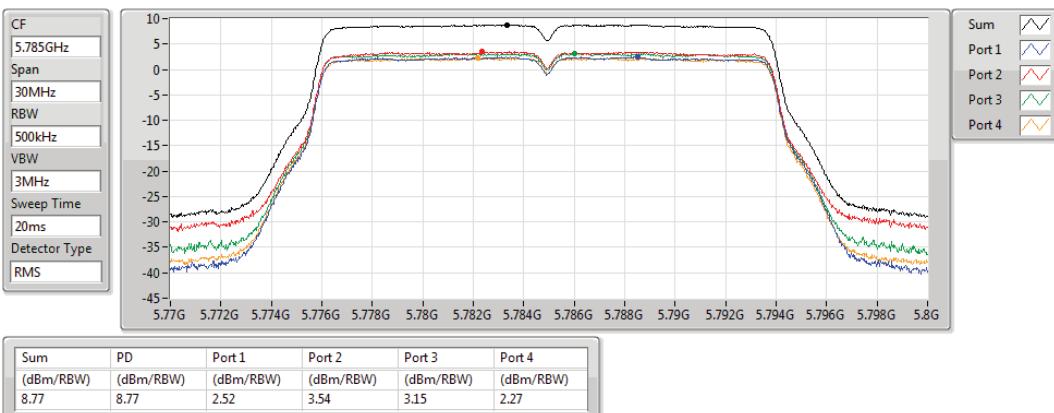
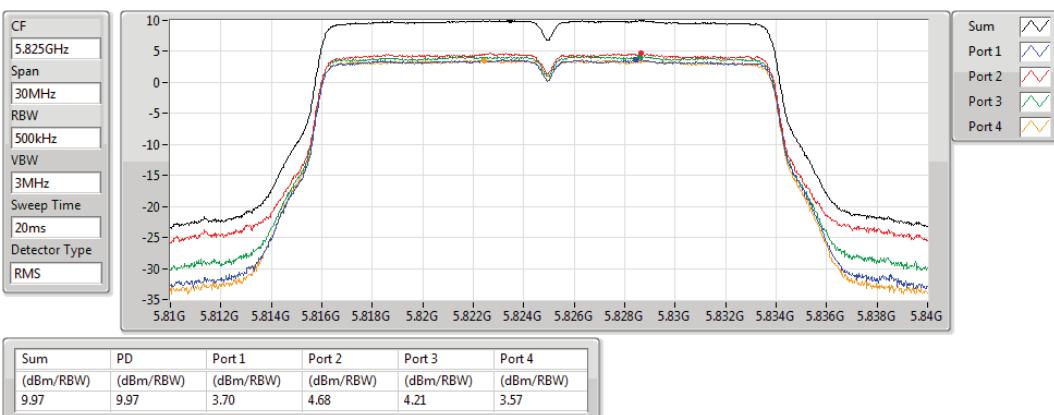

PSD

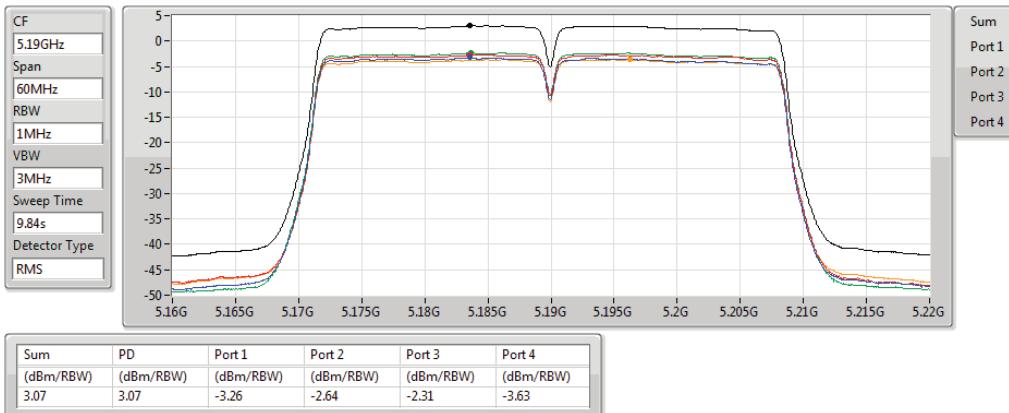
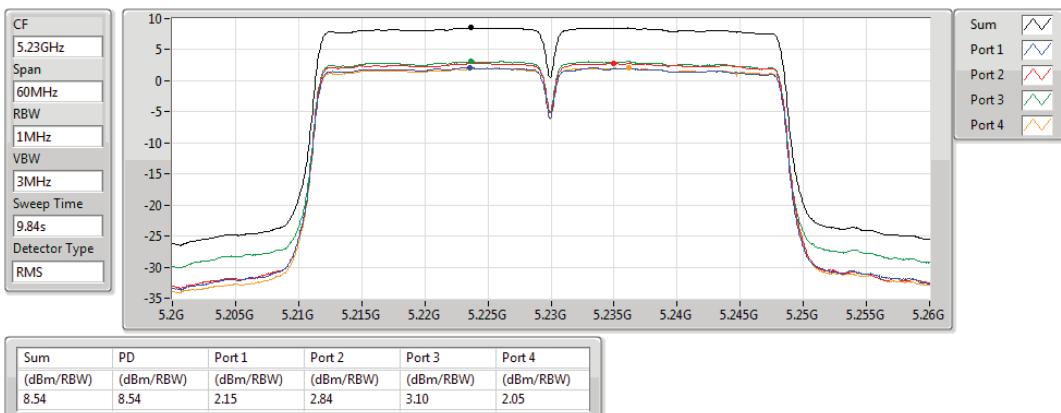
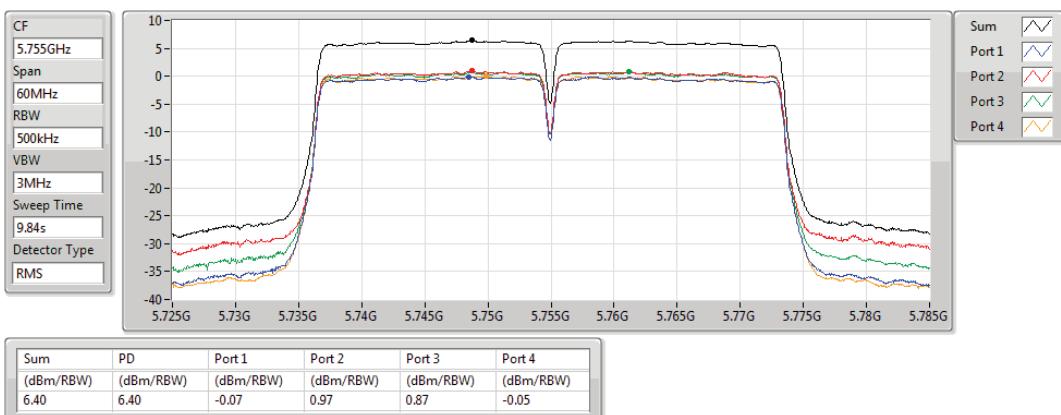
07/05/2019

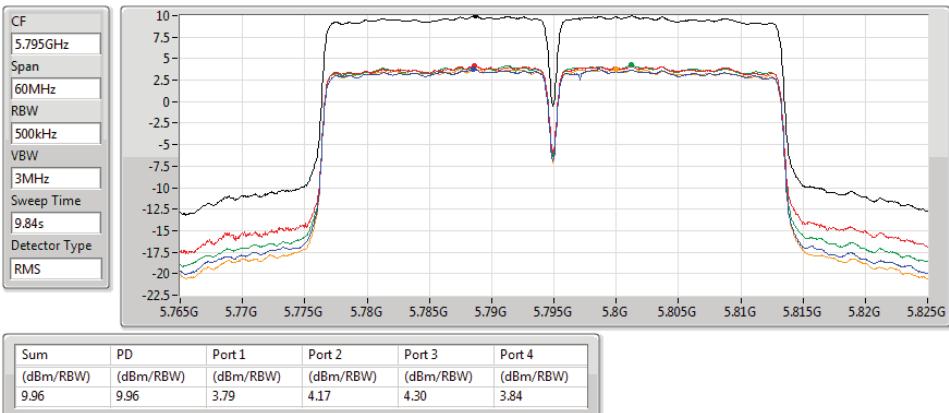
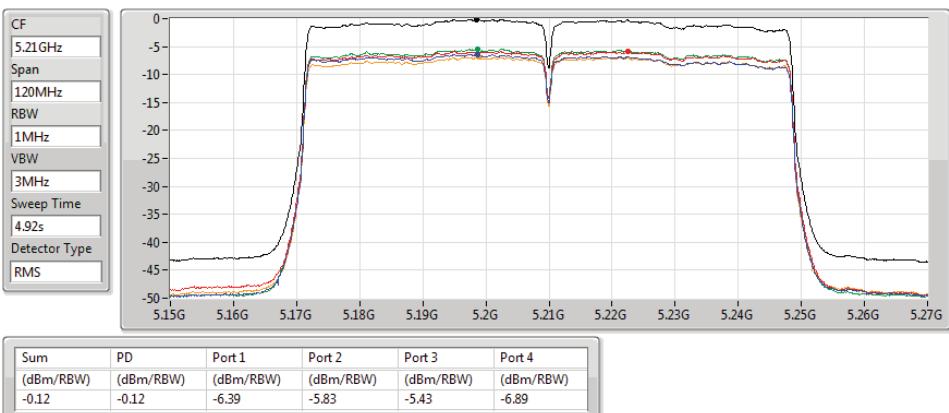
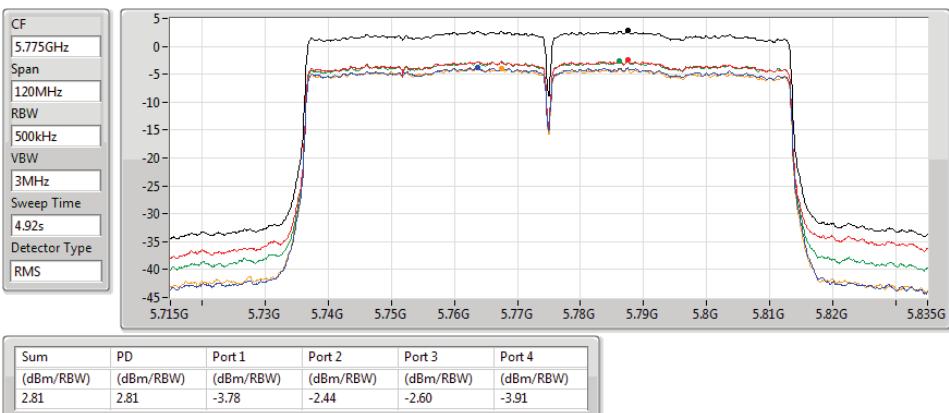
Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.47	7.47	1.01	2.32	1.58	1.02

802.11ac VHT20_Nss1,(MCS0)_4TX**5180MHz****PSD****802.11ac VHT20_Nss1,(MCS0)_4TX****5200MHz****PSD****802.11ac VHT20_Nss1,(MCS0)_4TX****5240MHz****PSD**

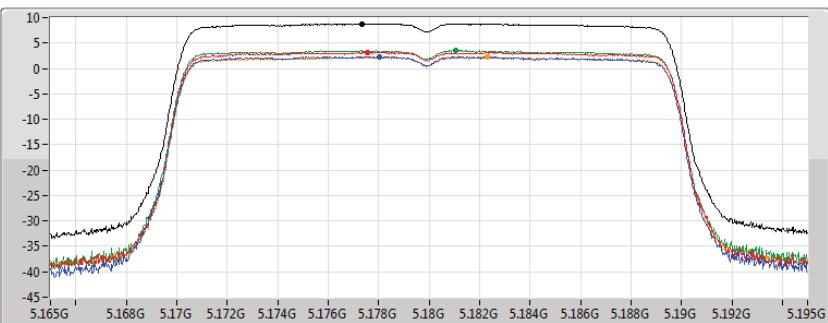
802.11ac VHT20_Nss1,(MCS0)_4TX
5745MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
5785MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
5825MHz


802.11ac VHT40_Nss1,(MCS0)_4TX
5190MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
5230MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
5755MHz


802.11ac VHT40_Nss1,(MCS0)_4TX
5795MHz

PSD
802.11ac VHT80_Nss1,(MCS0)_4TX
5210MHz

PSD
802.11ac VHT80_Nss1,(MCS0)_4TX
5775MHz

PSD

802.11ax HEW20_Nss1,(MCS0)_4TX
5180MHz

CF
5.18GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

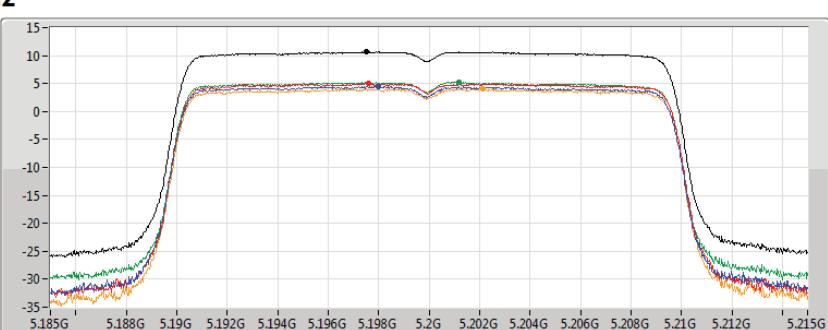

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11ax HEW20_Nss1,(MCS0)_4TX
5200MHz

CF
5.2GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

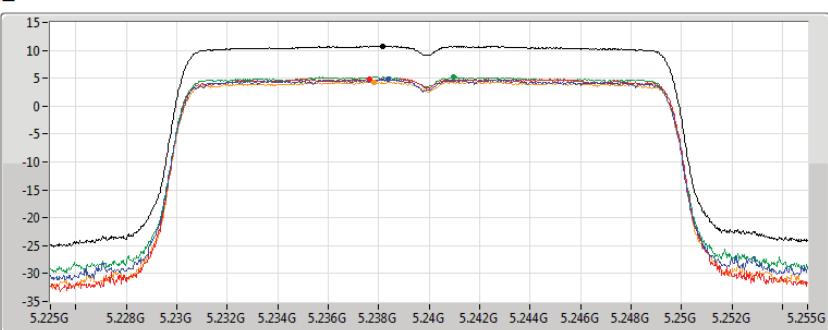

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11ax HEW20_Nss1,(MCS0)_4TX
5240MHz

CF
5.24GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS


PSD

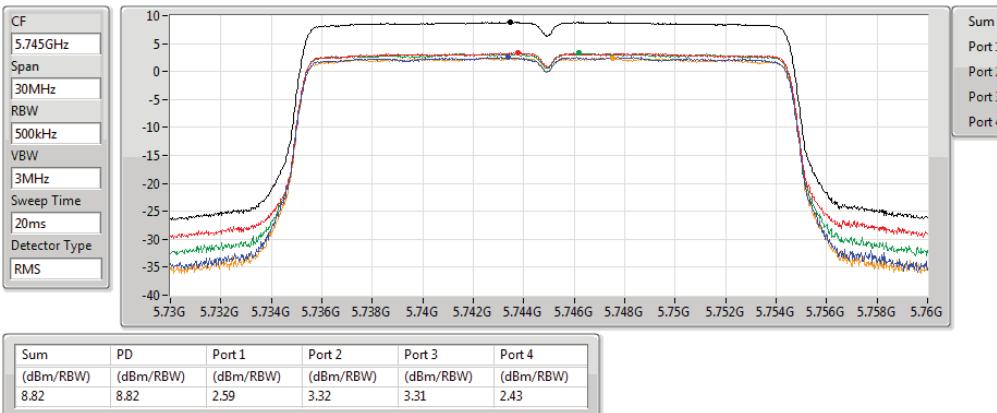
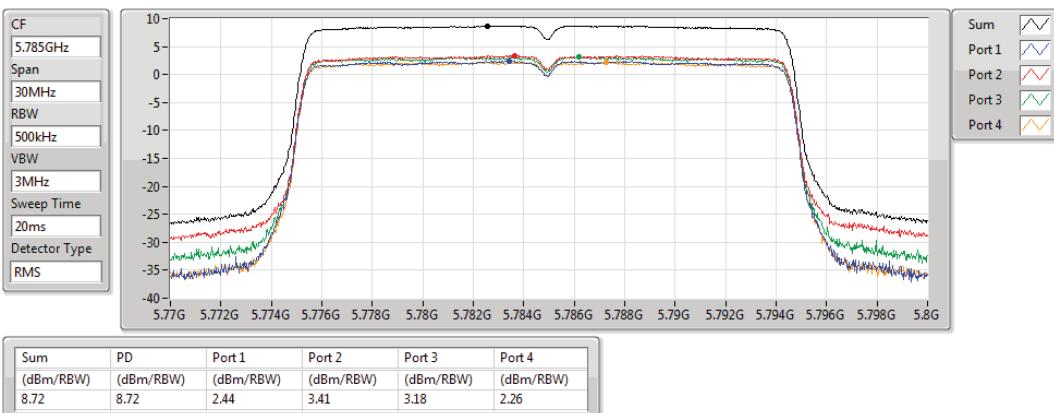
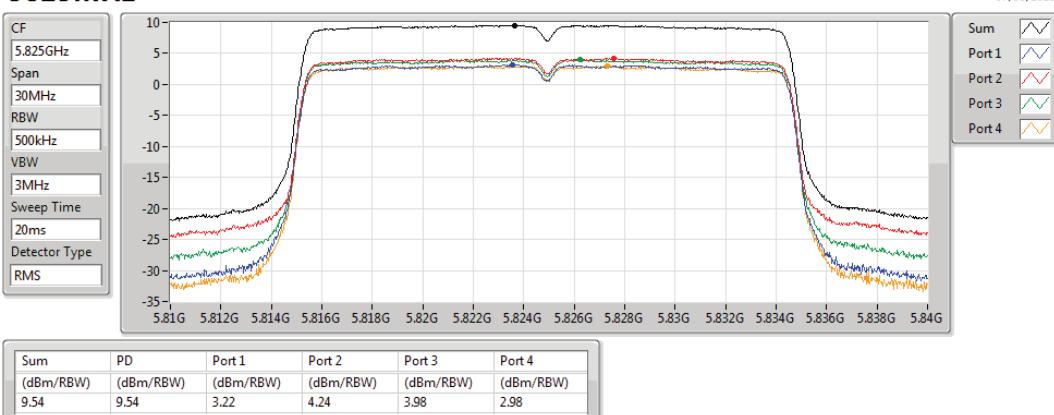
07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.77	8.77	2.33	3.20	3.51	2.25

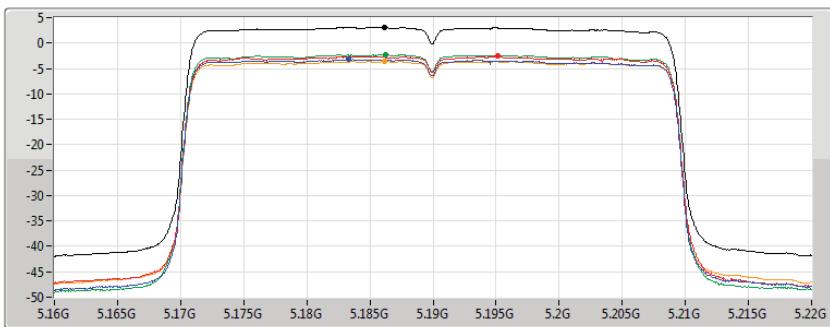
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.64	10.64	4.46	4.99	5.23	4.02

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.73	10.73	4.80	4.83	5.23	4.34

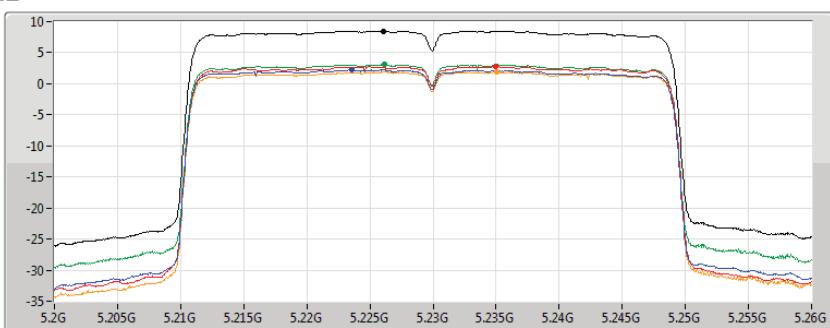
802.11ax HEW20_Nss1,(MCS0)_4TX
5745MHz

802.11ax HEW20_Nss1,(MCS0)_4TX
5785MHz

802.11ax HEW20_Nss1,(MCS0)_4TX
5825MHz


802.11ax HEW40_Nss1,(MCS0)_4TX
5190MHz

CF
5.19GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
8.04s
Detector Type
RMS


PSD
802.11ax HEW40_Nss1,(MCS0)_4TX
5230MHz

CF
5.23GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
8.04s
Detector Type
RMS

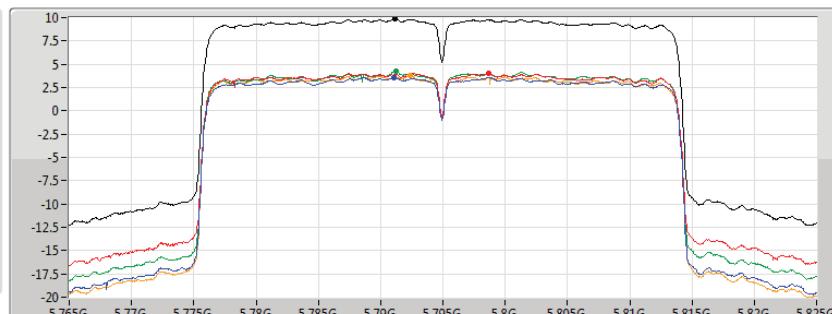

PSD
802.11ax HEW40_Nss1,(MCS0)_4TX
5755MHz

CF
5.755GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
8.04s
Detector Type
RMS


PSD

802.11ax HEW40_Nss1,(MCS0)_4TX
PSD
5795MHz

CF
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
8.04s
Detector Type
RMS

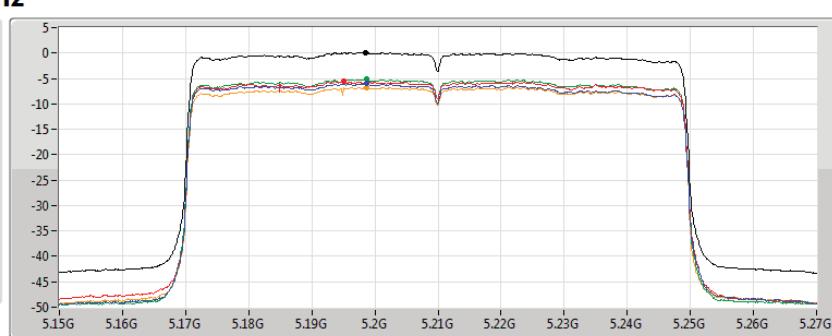


07/05/2019

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 HEW80_Nss1,(MCS0)_4TX
PSD
5210MHz

CF
5.21GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
4.32s
Detector Type
RMS

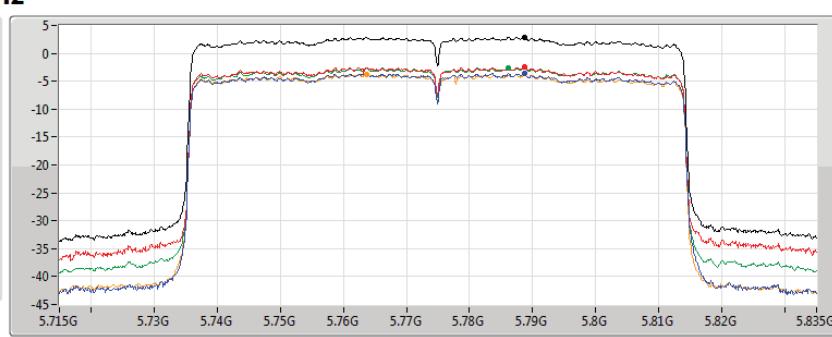


07/05/2019

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 HEW80_Nss1,(MCS0)_4TX
PSD
5775MHz

CF
5.775GHz
Span
120MHz
RBW
500kHz
VBW
3MHz
Sweep Time
4.32s
Detector Type
RMS



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)

**Summary**

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	10.02	22.04
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	7.70	19.72
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	0.12	12.14
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	10.97	22.99
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	7.97	19.99
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	1.74	13.76
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	9.26	21.28
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	6.36	18.38
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	2.16	14.18
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	10.06	22.08
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	6.41	18.43
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.32	15.34

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

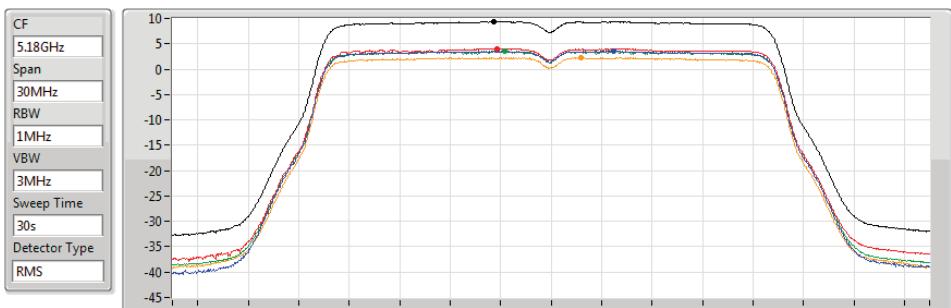
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	12.02	3.52	4.02	3.52	2.29	9.34	10.98	21.36	23.00
5200MHz_TnomVnom	Pass	12.02	4.36	4.49	4.04	3.17	10.01	10.98	22.03	23.00
5240MHz_TnomVnom	Pass	12.02	4.39	4.62	4.08	3.08	10.02	10.98	22.04	23.00
5745MHz_TnomVnom	Pass	12.02	3.80	3.78	3.22	1.62	9.12	23.98	21.14	36.00
5785MHz_TnomVnom	Pass	12.02	3.96	3.88	3.43	1.88	9.26	23.98	21.28	36.00
5825MHz_TnomVnom	Pass	12.02	3.12	3.04	2.72	1.03	8.46	23.98	20.48	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	12.02	-2.25	-1.66	-2.14	-3.30	3.63	10.98	15.65	23.00
5230MHz_TnomVnom	Pass	12.02	2.12	2.18	1.74	0.91	7.70	10.98	19.72	23.00
5755MHz_TnomVnom	Pass	12.02	1.02	1.17	0.44	-1.27	6.36	23.98	18.38	36.00
5795MHz_TnomVnom	Pass	12.02	0.61	0.46	-0.09	-1.65	5.82	23.98	17.84	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	12.02	4.37	4.78	-5.13	-5.85	0.12	10.98	12.14	23.00
5775MHz_TnomVnom	Pass	12.02	-3.19	-2.96	-3.84	-5.49	2.16	23.98	14.18	36.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	12.02	4.44	4.85	4.41	3.83	10.25	10.98	22.27	23.00
5200MHz_TnomVnom	Pass	12.02	5.54	5.54	5.19	4.07	10.97	10.98	22.99	23.00
5240MHz_TnomVnom	Pass	12.02	4.99	5.70	4.66	4.05	10.73	10.98	22.75	23.00
5745MHz_TnomVnom	Pass	12.02	5.26	4.87	3.93	2.59	10.06	23.98	22.08	36.00
5785MHz_TnomVnom	Pass	12.02	4.77	4.67	3.88	2.56	9.82	23.98	21.84	36.00
5825MHz_TnomVnom	Pass	12.02	4.70	4.23	3.78	1.75	9.47	23.98	21.49	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	12.02	-1.98	-1.05	-1.86	-2.62	4.01	10.98	16.03	23.00
5230MHz_TnomVnom	Pass	12.02	2.33	2.60	1.87	1.63	7.97	10.98	19.99	23.00
5755MHz_TnomVnom	Pass	12.02	1.57	1.58	0.84	-0.59	6.41	23.98	18.43	36.00
5795MHz_TnomVnom	Pass	12.02	1.05	0.65	0.10	-1.25	5.99	23.98	18.01	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	12.02	-4.09	-3.64	-4.21	-4.84	1.74	10.98	13.76	23.00
5775MHz_TnomVnom	Pass	12.02	-1.36	-1.81	-2.10	-3.90	3.32	23.98	15.34	36.00

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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

**802.11ac VHT20-BF_Nss1,(MCS0)_4TX****PSD****5180MHz**

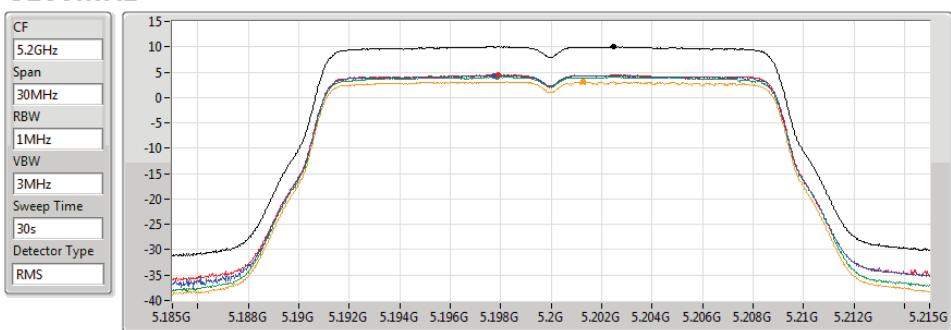
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.34	9.34	3.52	4.02	3.52	2.29

802.11ac VHT20-BF_Nss1,(MCS0)_4TX**PSD****5200MHz**

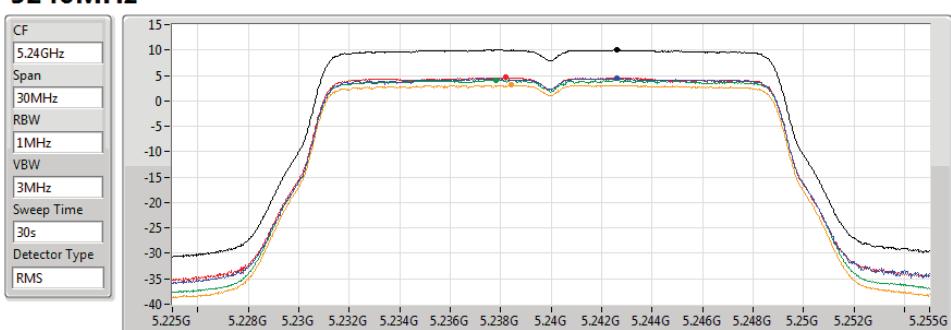
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.01	10.01	4.36	4.49	4.04	3.17

802.11ac VHT20-BF_Nss1,(MCS0)_4TX**PSD****5240MHz**

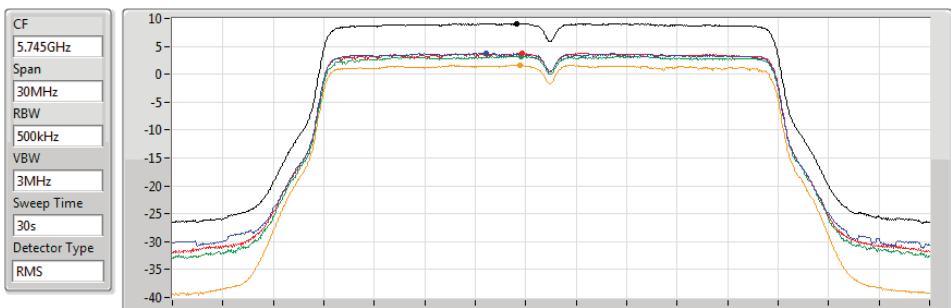
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.02	10.02	4.39	4.62	4.08	3.08

**802.11ac VHT20-BF_Nss1,(MCS0)_4TX****PSD****5745MHz**

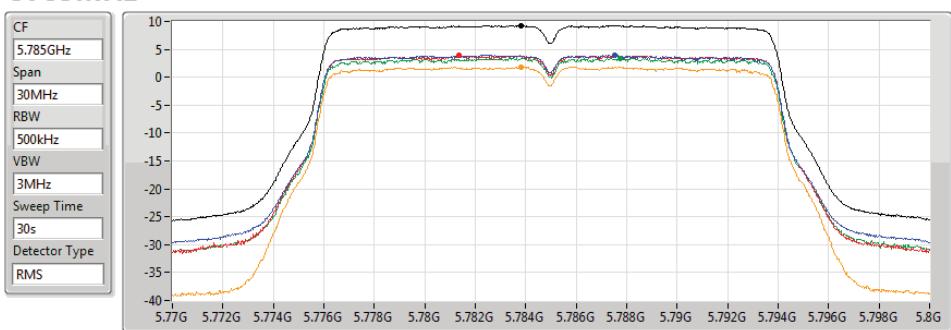
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.12	9.12	3.80	3.78	3.22	1.62

802.11ac VHT20-BF_Nss1,(MCS0)_4TX**PSD****5785MHz**

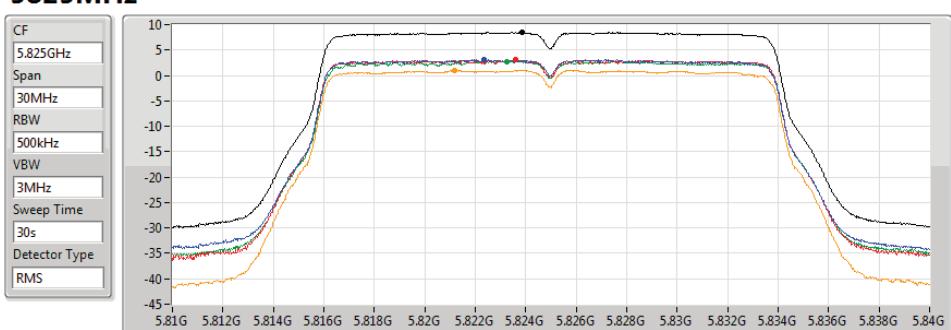
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.26	9.26	3.96	3.88	3.43	1.88

802.11ac VHT20-BF_Nss1,(MCS0)_4TX**PSD****5825MHz**

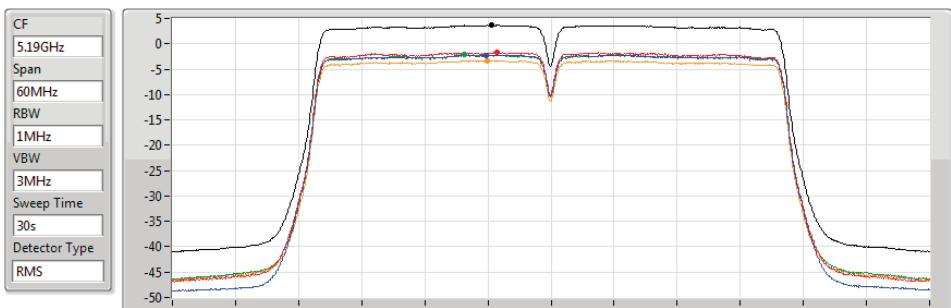
10/05/2019



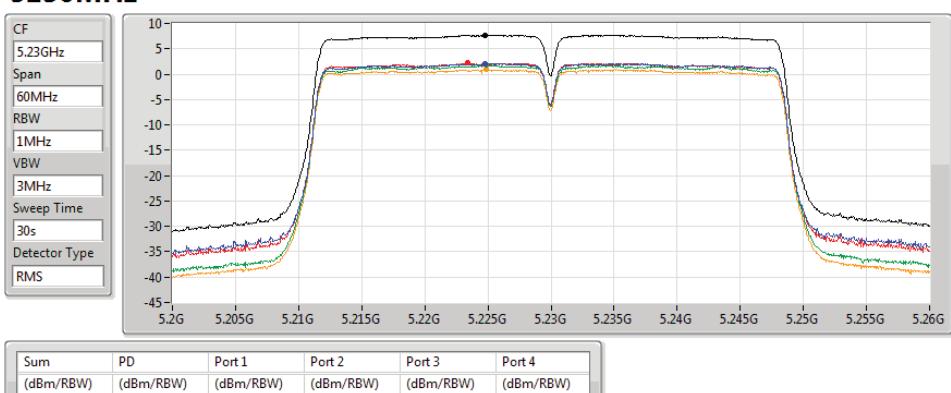
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.46	8.46	3.12	3.04	2.72	1.03

**802.11ac VHT40-BF_Nss1,(MCS0)_4TX****PSD****5190MHz**

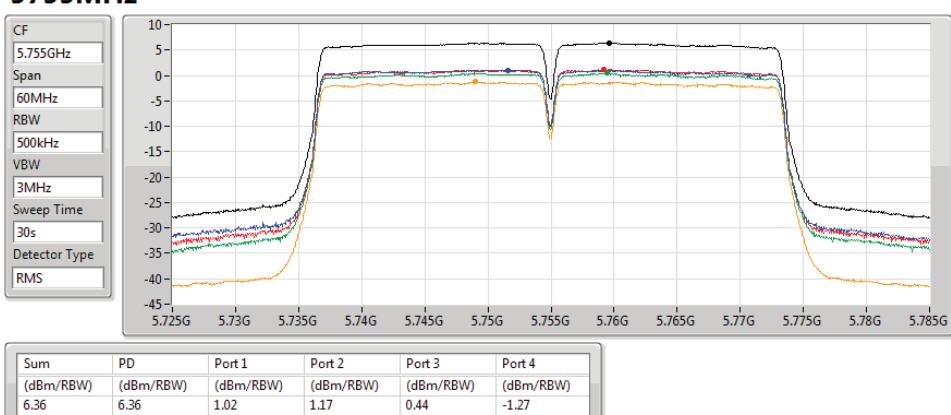
10/05/2019

**802.11ac VHT40-BF_Nss1,(MCS0)_4TX****PSD****5230MHz**

10/05/2019

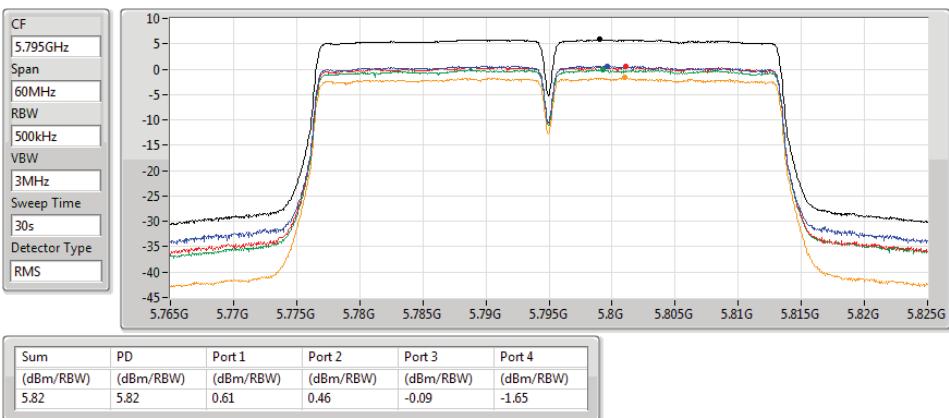
**802.11ac VHT40-BF_Nss1,(MCS0)_4TX****PSD****5755MHz**

10/05/2019

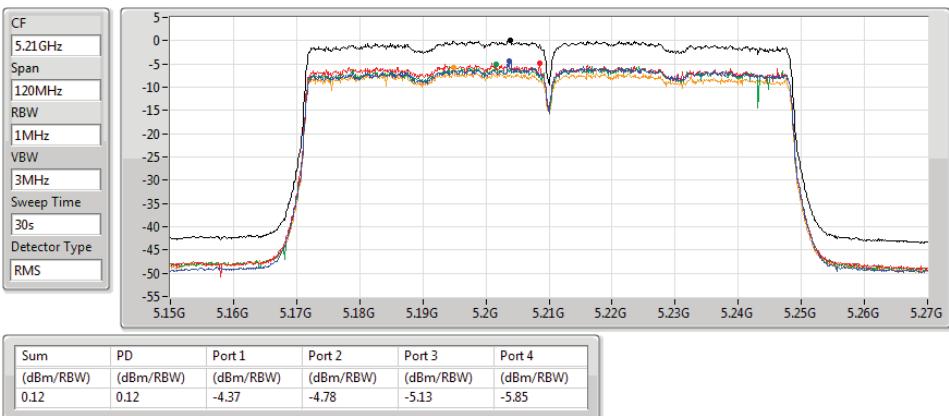


**802.11ac VHT40-BF_Nss1,(MCS0)_4TX****5795MHz****PSD**

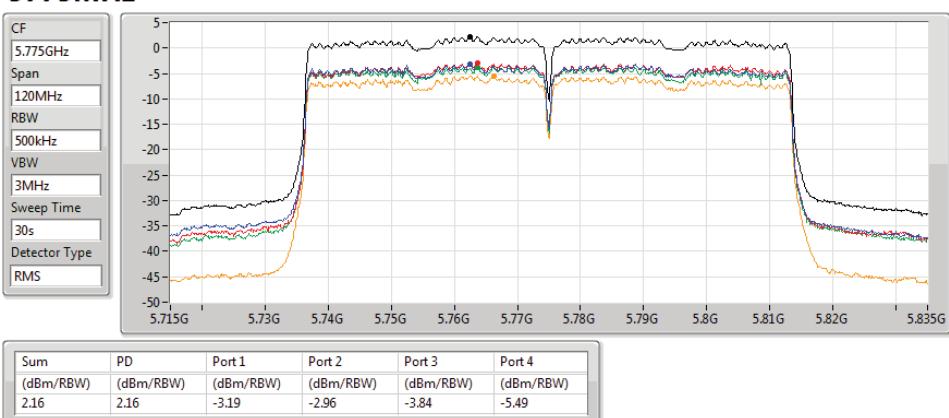
10/05/2019

**802.11ac VHT80-BF_Nss1,(MCS0)_4TX****5210MHz****PSD**

10/05/2019

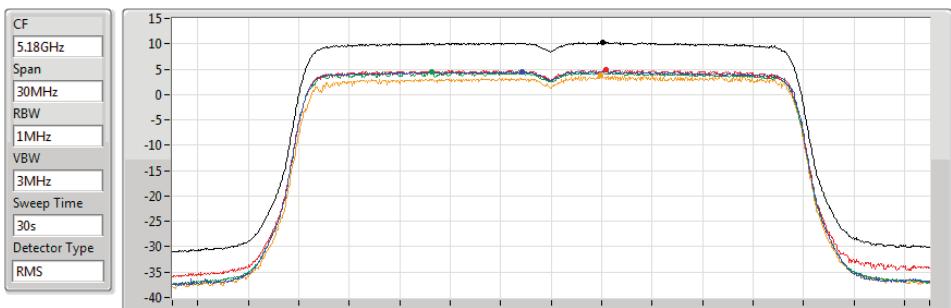
**802.11ac VHT80-BF_Nss1,(MCS0)_4TX****5775MHz****PSD**

10/05/2019



**802.11ax HEW20-BF_Nss1,(MCS0)_4TX****PSD****5180MHz**

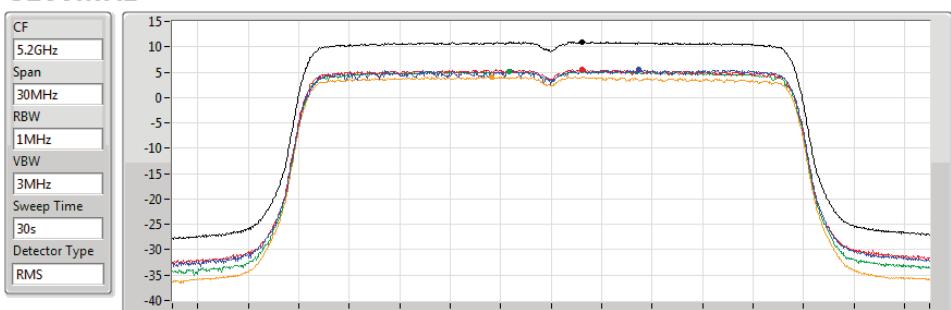
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.25	10.25	4.44	4.85	4.41	3.83

802.11ax HEW20-BF_Nss1,(MCS0)_4TX**PSD****5200MHz**

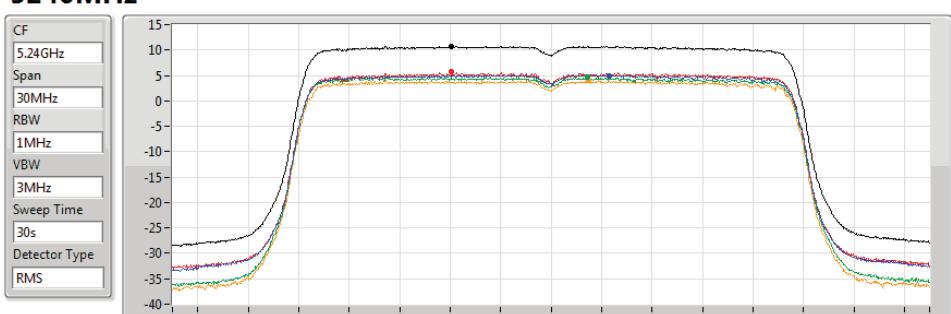
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.97	10.97	5.54	5.54	5.19	4.07

802.11ax HEW20-BF_Nss1,(MCS0)_4TX**PSD****5240MHz**

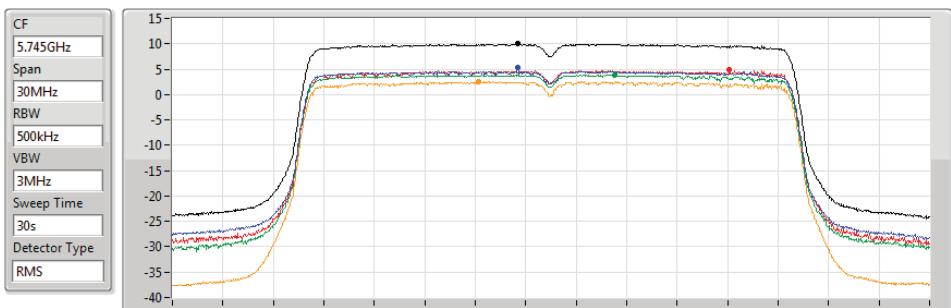
10/05/2019



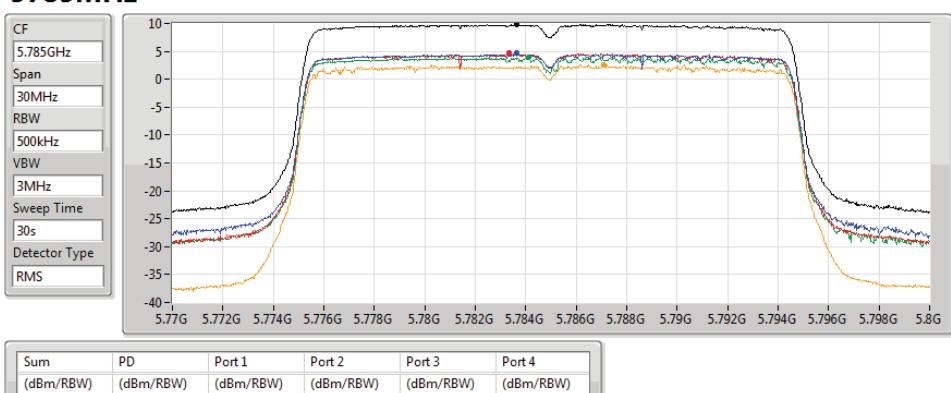
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.73	10.73	4.99	5.70	4.66	4.05

**802.11ax HEW20-BF_Nss1,(MCS0)_4TX****PSD****5745MHz**

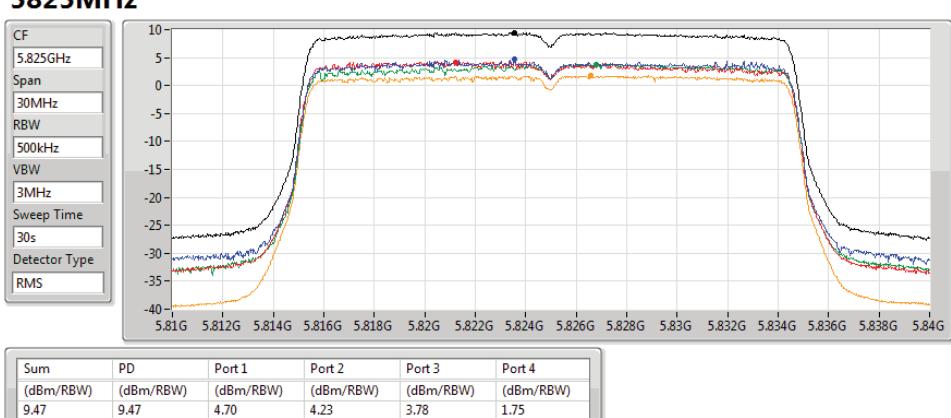
10/05/2019

**802.11ax HEW20-BF_Nss1,(MCS0)_4TX****PSD****5785MHz**

10/05/2019

**802.11ax HEW20-BF_Nss1,(MCS0)_4TX****PSD****5825MHz**

10/05/2019

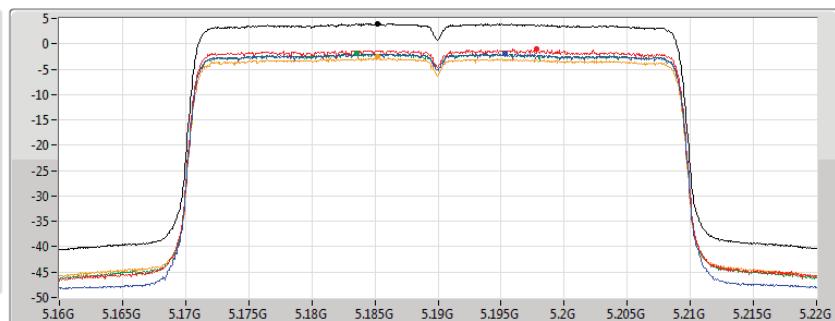


**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****PSD**

10/05/2019

5190MHz

CF
5.19GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum

Port 1

Port 2

Port 3

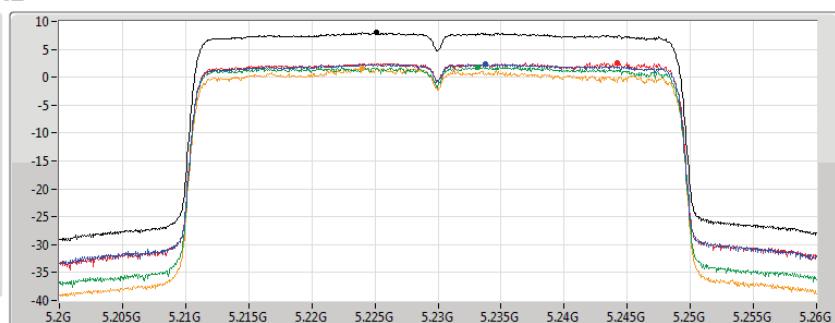
Port 4

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

10/05/2019

5230MHz

CF
5.23GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum

Port 1

Port 2

Port 3

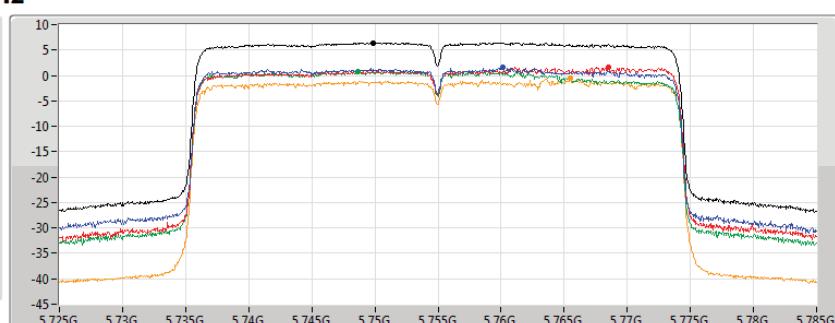
Port 4

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

10/05/2019

5755MHz

CF
5.755GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum

Port 1

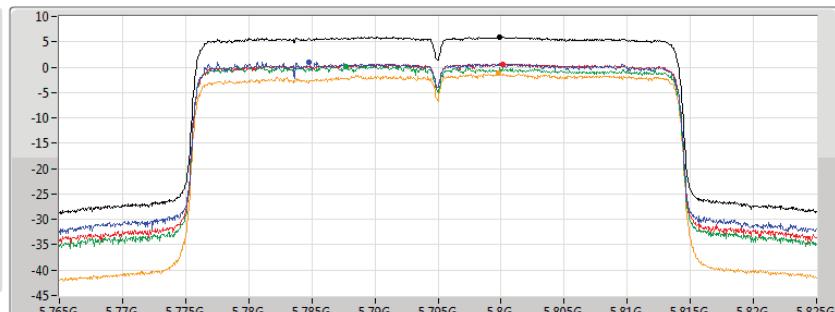
Port 2

Port 3

Port 4

**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****5795MHz**

CF
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS

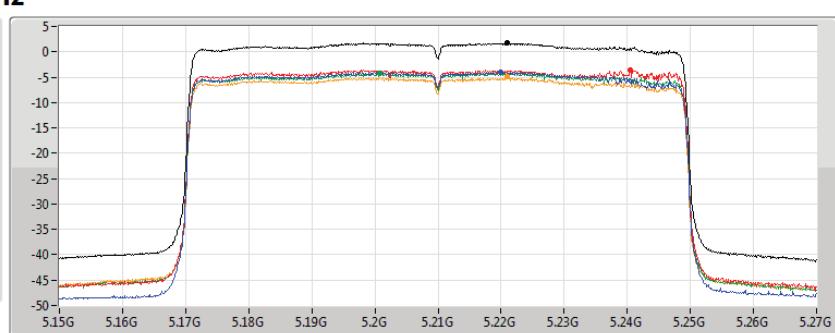
**PSD**

10/05/2019

Sum
Port 1
Port 2
Port 3
Port 4

802.11ax HEW80-BF_Nss1,(MCS0)_4TX**5210MHz**

CF
5.21GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS

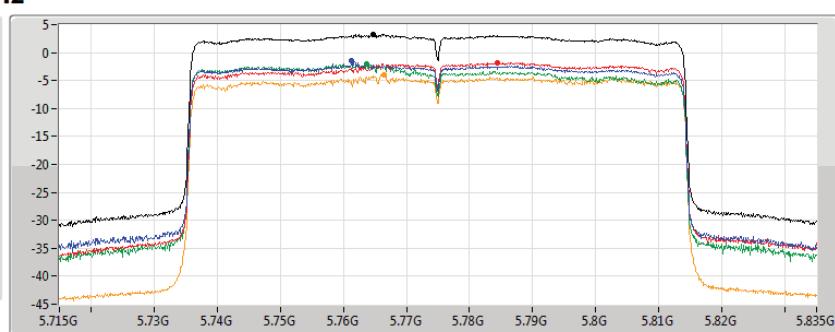
**PSD**

10/05/2019

Sum
Port 1
Port 2
Port 3
Port 4

802.11ax HEW80-BF_Nss1,(MCS0)_4TX**5775MHz**

CF
5.775GHz
Span
120MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS

**PSD**

10/05/2019

Sum
Port 1
Port 2
Port 3
Port 4

**Summary**

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	8.02	20.04
802.11ac VHT20_Nss1,(MCS0)_4TX	7.53	19.55
802.11ac VHT40_Nss1,(MCS0)_4TX	5.98	18.00
802.11ac VHT80_Nss1,(MCS0)_4TX	3.73	15.75
802.11ax HEW20_Nss1,(MCS0)_4TX	7.45	19.47
802.11ax HEW40_Nss1,(MCS0)_4TX	5.92	17.94
802.11ax HEW80_Nss1,(MCS0)_4TX	3.88	15.90

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

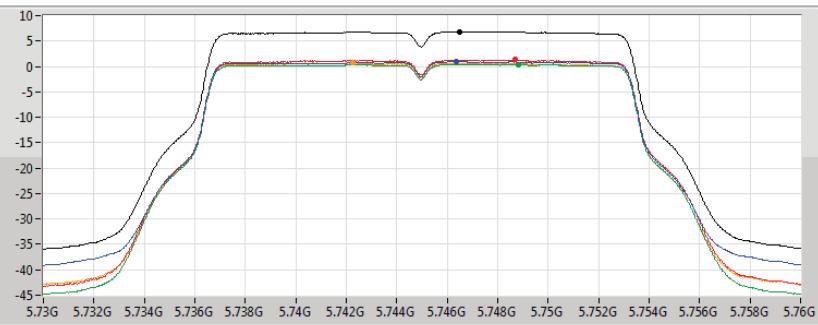
Mode	Result	DG (dB _i)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	12.02	0.95	1.30	0.38	0.74	6.81	23.98	18.83	36.00
5785MHz	Pass	12.02	0.79	0.82	-0.27	0.29	6.42	23.98	18.44	36.00
5825MHz	Pass	12.02	2.78	2.20	1.04	1.91	8.02	23.98	20.04	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	12.02	1.68	2.08	1.12	1.54	7.53	23.98	19.55	36.00
5785MHz	Pass	12.02	1.67	1.46	0.71	1.10	7.24	23.98	19.26	36.00
5825MHz	Pass	12.02	1.80	1.03	0.55	0.83	6.94	23.98	18.96	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	12.02	0.48	0.30	-0.62	-0.61	5.91	23.98	17.93	36.00
5795MHz	Pass	12.02	1.06	-0.05	-0.79	-0.43	5.98	23.98	18.00	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	12.02	-1.73	-1.60	-2.93	-2.73	3.73	23.98	15.75	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	12.02	1.74	1.85	1.06	1.36	7.45	23.98	19.47	36.00
5785MHz	Pass	12.02	1.63	1.47	0.68	1.18	7.19	23.98	19.21	36.00
5825MHz	Pass	12.02	1.71	0.94	0.53	0.76	6.95	23.98	18.97	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	12.02	0.57	0.03	-0.83	-0.63	5.81	23.98	17.83	36.00
5795MHz	Pass	12.02	0.96	-0.04	-0.72	-0.53	5.92	23.98	17.94	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	12.02	-1.62	-1.64	-2.78	-2.50	3.88	23.98	15.90	36.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

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

802.11a_Nss1,(6Mbps)_4TX
5745MHz

CF
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS

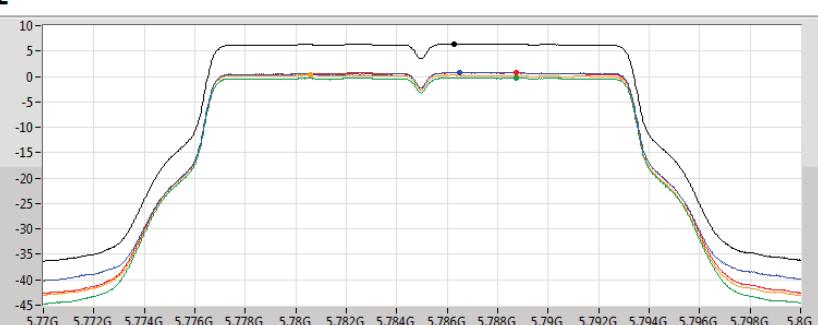

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11a_Nss1,(6Mbps)_4TX
5785MHz

CF
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS

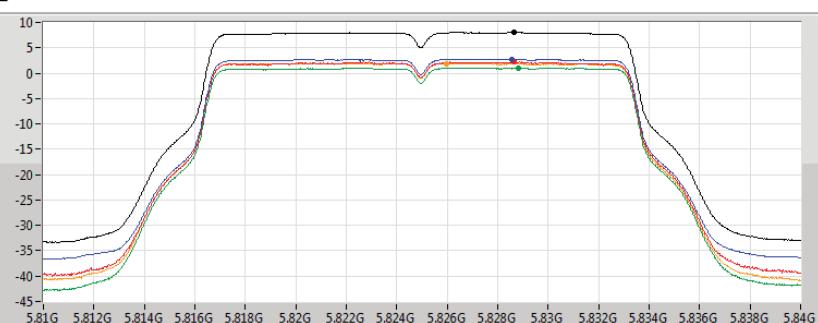

PSD

07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11a_Nss1,(6Mbps)_4TX
5825MHz

CF
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.8s
Detector Type
RMS


PSD

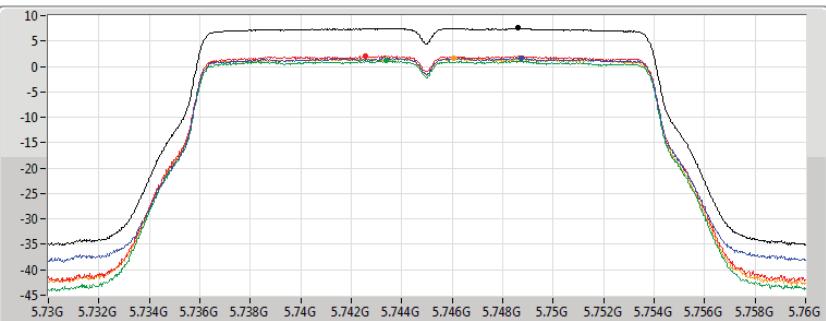
07/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.81	6.81	0.95	1.30	0.38	0.74

802.11ac VHT20_Nss1,(MCS0)_4TX
5745MHz

CF
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

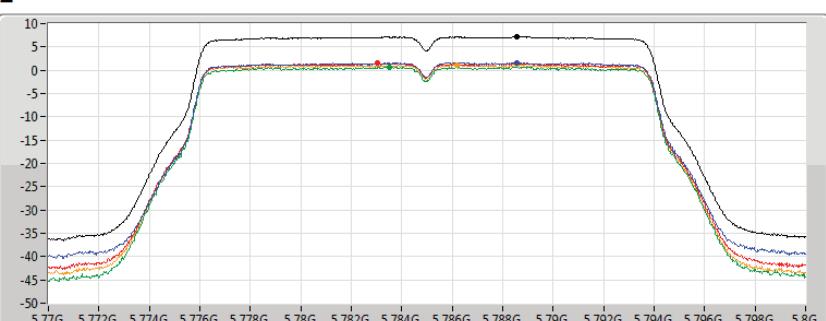

PSD

09/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11ac VHT20_Nss1,(MCS0)_4TX
5785MHz

CF
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

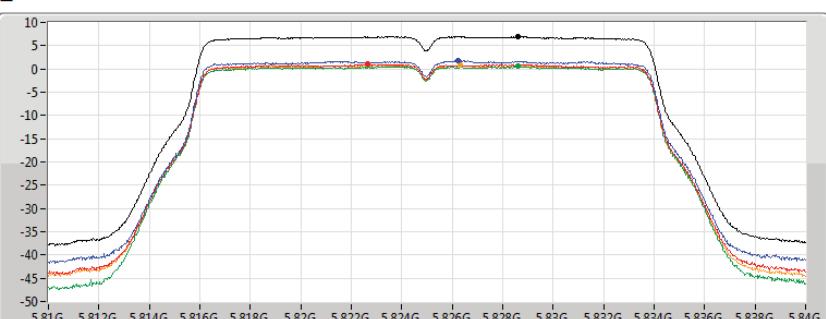

PSD

09/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

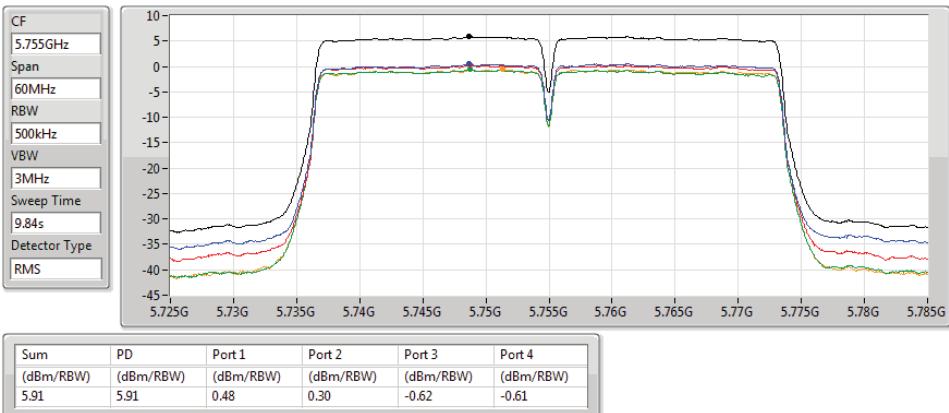
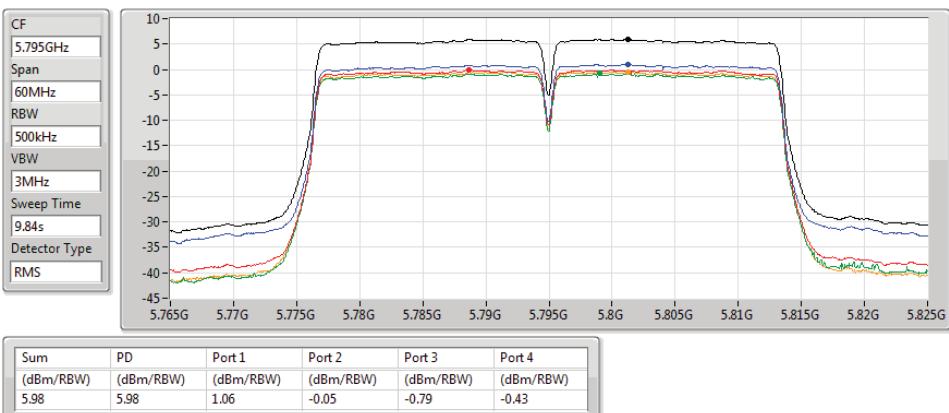
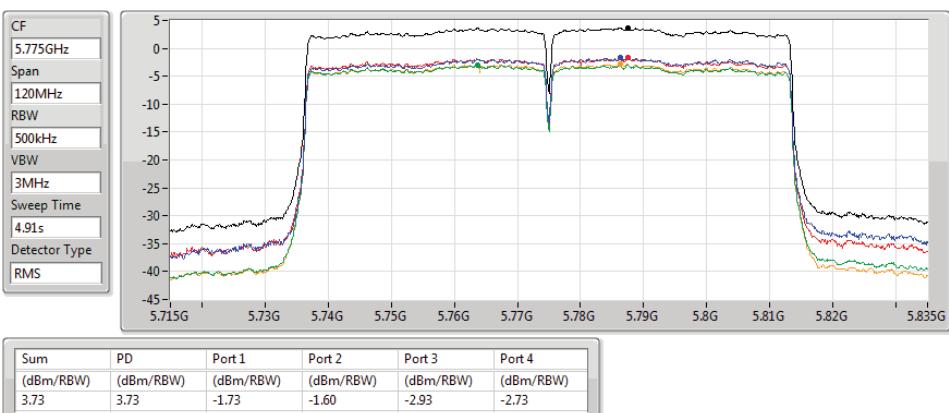
802.11ac VHT20_Nss1,(MCS0)_4TX
5825MHz

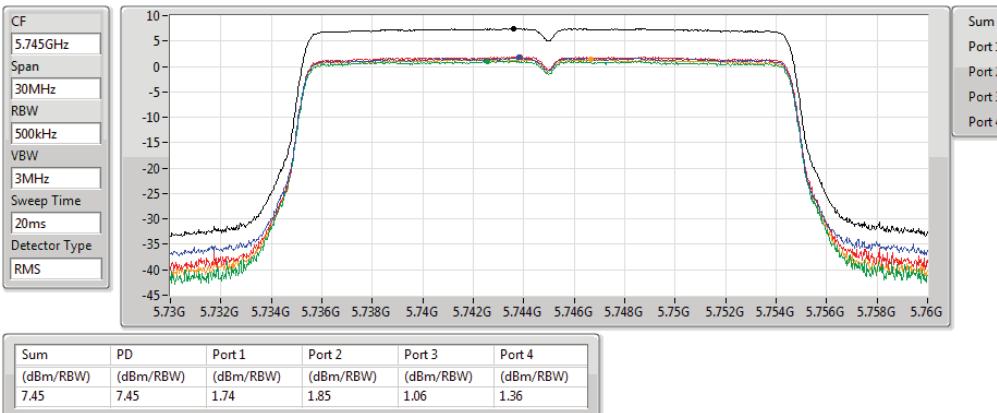
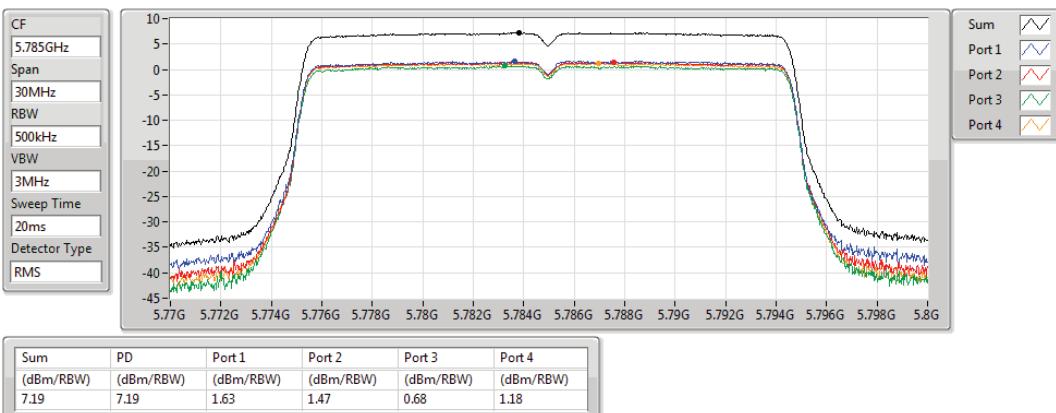
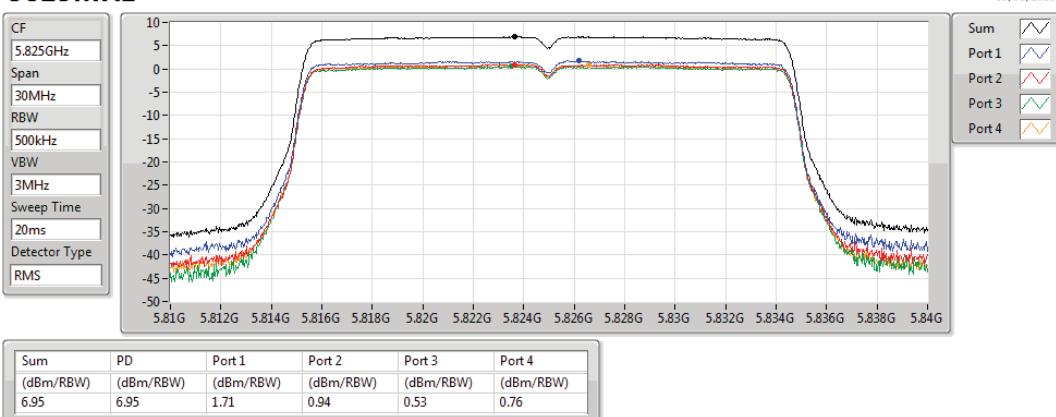
CF
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

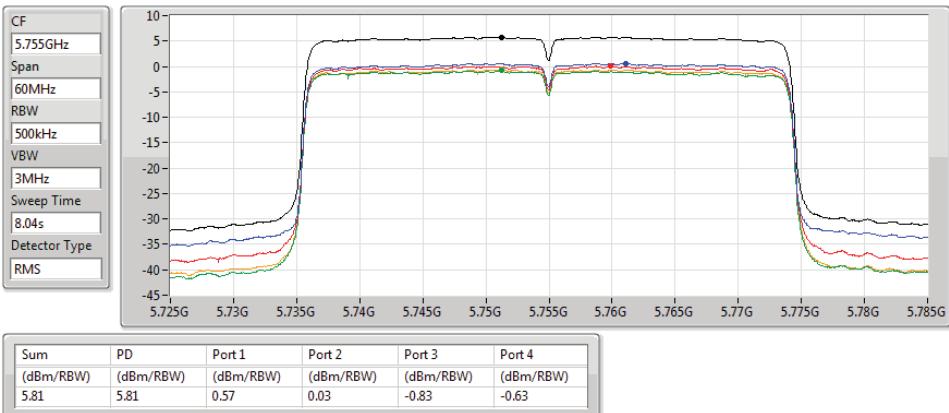
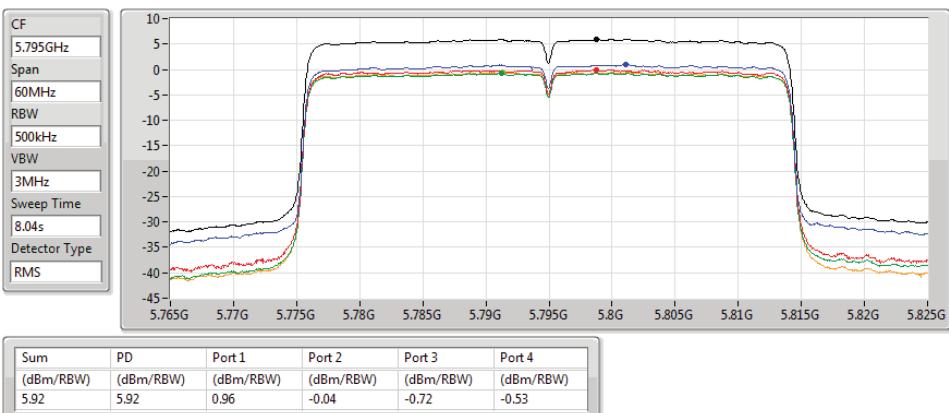
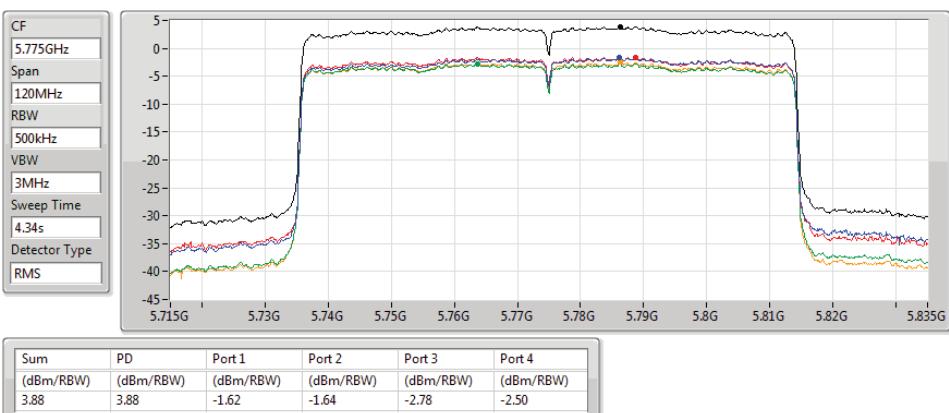

PSD

09/05/2019

Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11ac VHT40_Nss1,(MCS0)_4TX
5755MHz

PSD
802.11ac VHT40_Nss1,(MCS0)_4TX
5795MHz

PSD
802.11ac VHT80_Nss1,(MCS0)_4TX
5775MHz

PSD

802.11ax HEW20_Nss1,(MCS0)_4TX
5745MHz

802.11ax HEW20_Nss1,(MCS0)_4TX
5785MHz

802.11ax HEW20_Nss1,(MCS0)_4TX
5825MHz


802.11ax HEW40_Nss1,(MCS0)_4TX
5755MHz

PSD
802.11ax HEW40_Nss1,(MCS0)_4TX
5795MHz

PSD
802.11ax HEW80_Nss1,(MCS0)_4TX
5775MHz

PSD

**Summary**

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	8.12	20.14
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	6.07	18.09
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	2.90	14.92
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	8.25	20.27
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	6.18	18.20
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.20	15.22

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

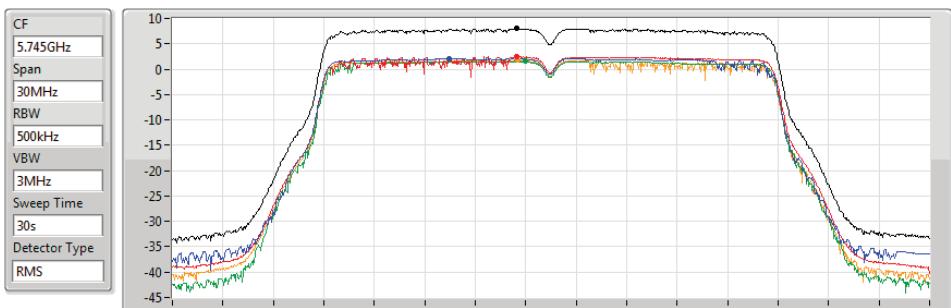
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz_TnomVnom	Pass	12.02	2.15	2.44	1.52	1.78	7.96	23.98	19.98	36.00
5785MHz_TnomVnom	Pass	12.02	2.22	1.89	1.35	1.69	7.69	23.98	19.71	36.00
5825MHz_TnomVnom	Pass	12.02	3.30	2.58	2.00	1.95	8.12	23.98	20.14	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz_TnomVnom	Pass	12.02	-0.11	-0.82	-0.96	-1.29	4.80	23.98	16.82	36.00
5795MHz_TnomVnom	Pass	12.02	1.38	-0.09	-0.54	-0.56	6.07	23.98	18.09	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz_TnomVnom	Pass	12.02	-2.51	-2.76	-3.37	-3.38	2.90	23.98	14.92	36.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz_TnomVnom	Pass	12.02	2.90	3.01	2.35	1.81	8.25	23.98	20.27	36.00
5785MHz_TnomVnom	Pass	12.02	2.63	2.31	1.76	2.00	7.84	23.98	19.86	36.00
5825MHz_TnomVnom	Pass	12.02	3.39	2.30	2.28	2.15	8.16	23.98	20.18	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz_TnomVnom	Pass	12.02	0.03	-0.18	-0.10	-1.00	5.03	23.98	17.05	36.00
5795MHz_TnomVnom	Pass	12.02	1.84	0.38	0.26	-0.43	6.18	23.98	18.20	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz_TnomVnom	Pass	12.02	-1.85	-2.25	-1.36	-3.21	3.20	23.98	15.22	36.00

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
PSD
5745MHz

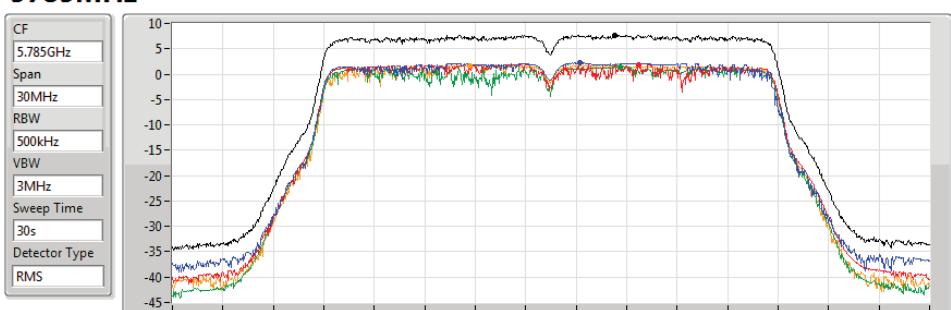
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.96	7.96	2.15	2.44	1.52	1.78

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
PSD
5785MHz

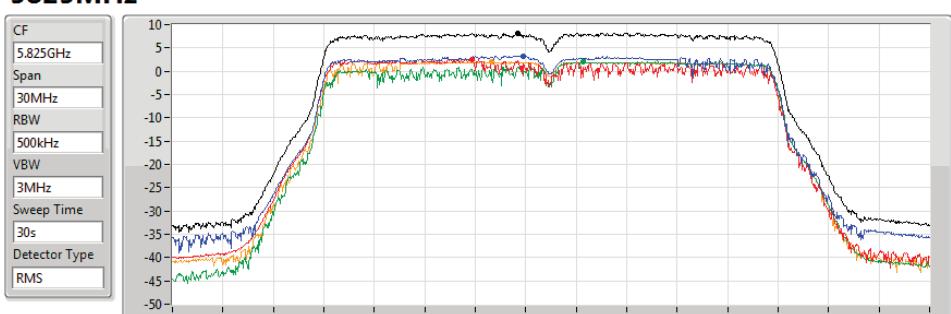
10/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.69	7.69	2.22	1.89	1.35	1.69

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
PSD
5825MHz

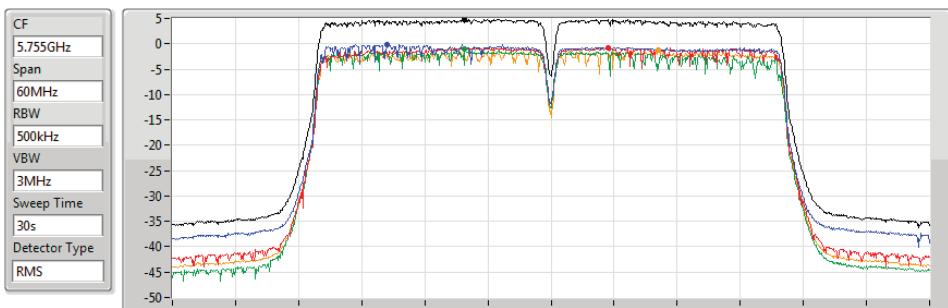
10/05/2019



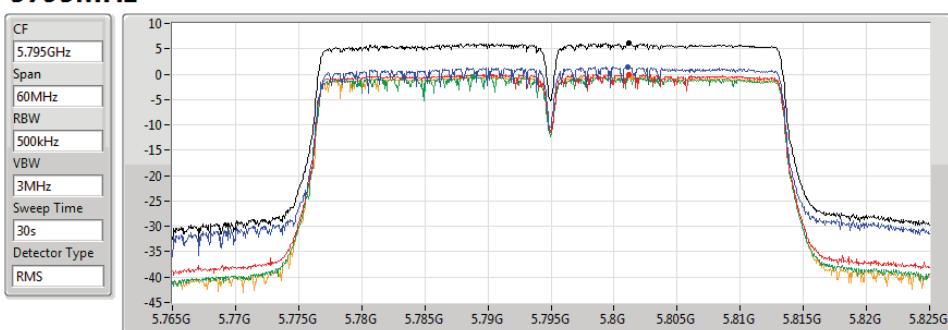
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.12	8.12	3.30	2.58	2.00	1.95

**802.11ac VHT40-BF_Nss1,(MCS0)_4TX****PSD****5755MHz**

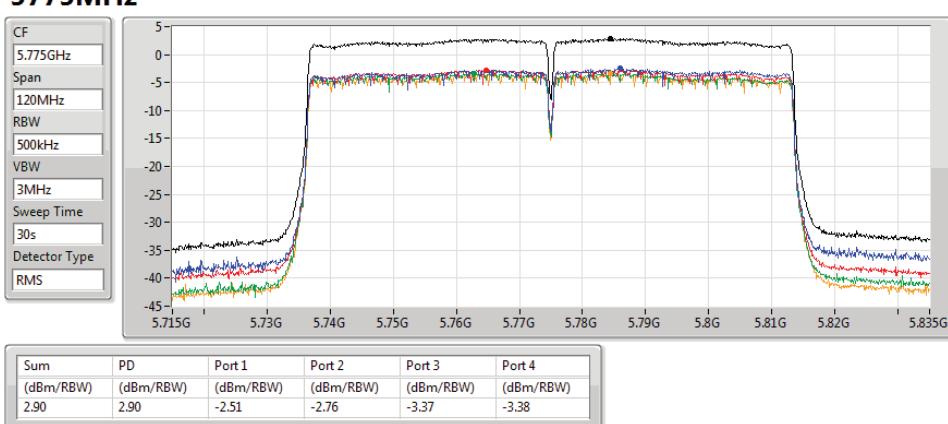
10/05/2019

**802.11ac VHT40-BF_Nss1,(MCS0)_4TX****PSD****5795MHz**

10/05/2019

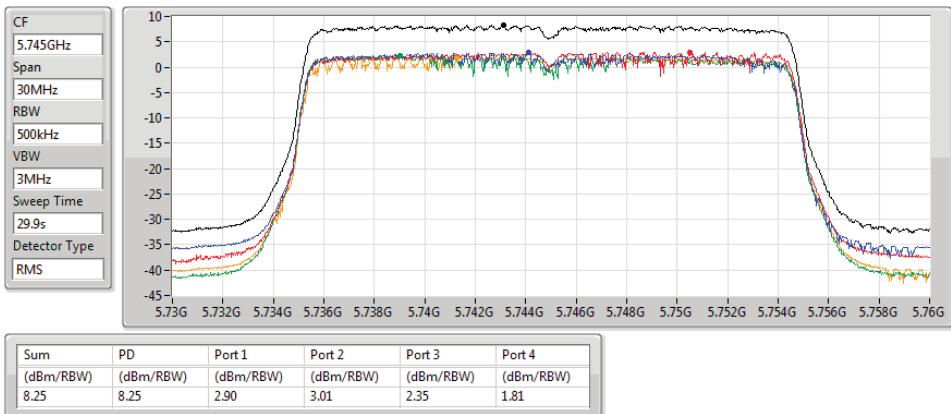
**802.11ac VHT80-BF_Nss1,(MCS0)_4TX****PSD****5775MHz**

10/05/2019

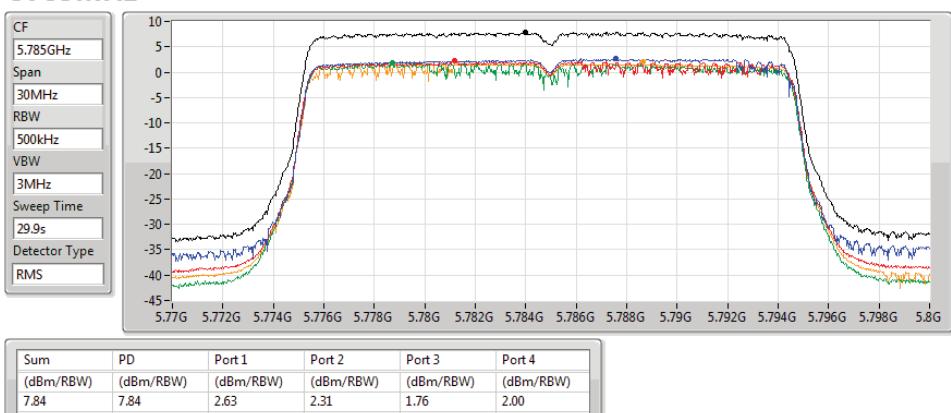


**802.11ax HEW20-BF_Nss1,(MCS0)_4TX****5745MHz****PSD**

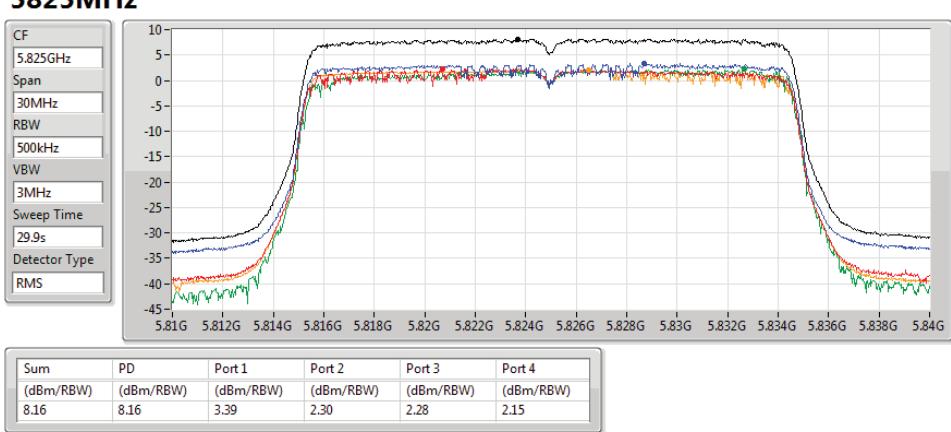
10/05/2019

**802.11ax HEW20-BF_Nss1,(MCS0)_4TX****5785MHz****PSD**

10/05/2019

**802.11ax HEW20-BF_Nss1,(MCS0)_4TX****5825MHz****PSD**

10/05/2019

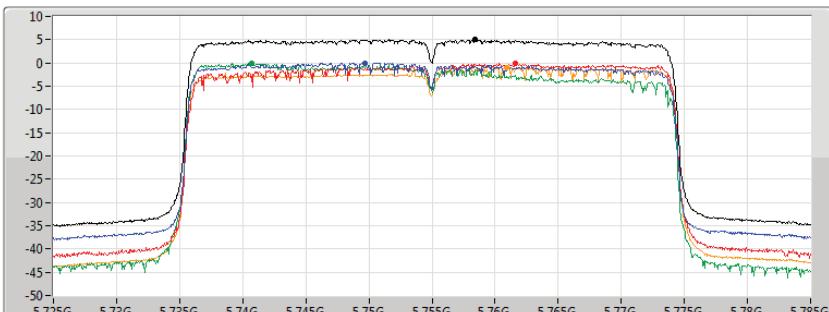


**802.11ax HEW40-BF_Nss1,(MCS0)_4TX****PSD**

10/05/2019

5755MHz

CF
5.755GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum
Port 1
Port 2
Port 3
Port 4

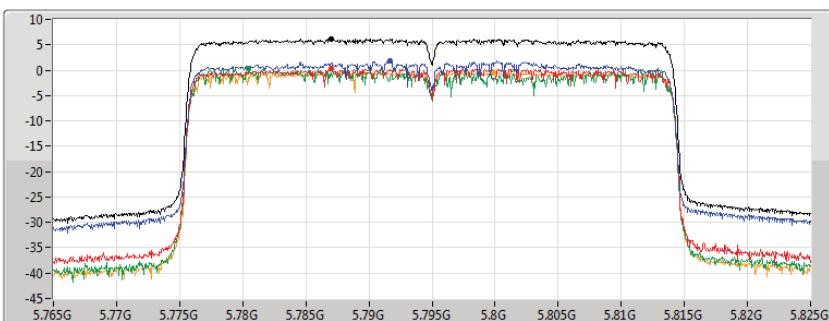
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.03	5.03	0.03	-0.18	0.10	-1.00

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

10/05/2019

5795MHz

CF
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum
Port 1
Port 2
Port 3
Port 4

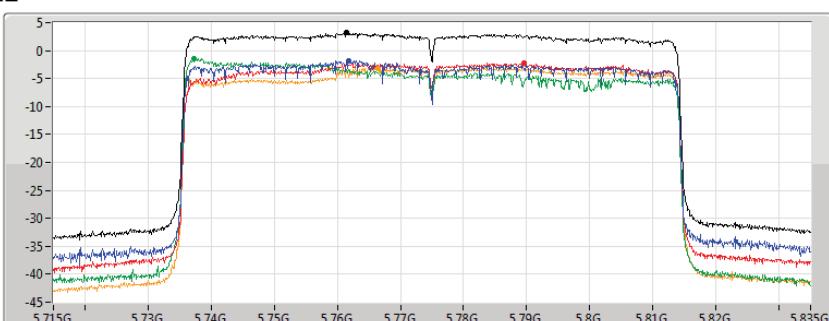
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.18	6.18	1.84	0.38	0.26	-0.43

802.11ax HEW80-BF_Nss1,(MCS0)_4TX**PSD**

10/05/2019

5775MHz

CF
5.775GHz
Span
120MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum
Port 1
Port 2
Port 3
Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.20	3.20	-1.85	-2.25	-1.36	-3.21



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	PK	43.58M	34.70	40.00	-5.30	-20.09	3	Vertical	0	1.00	-

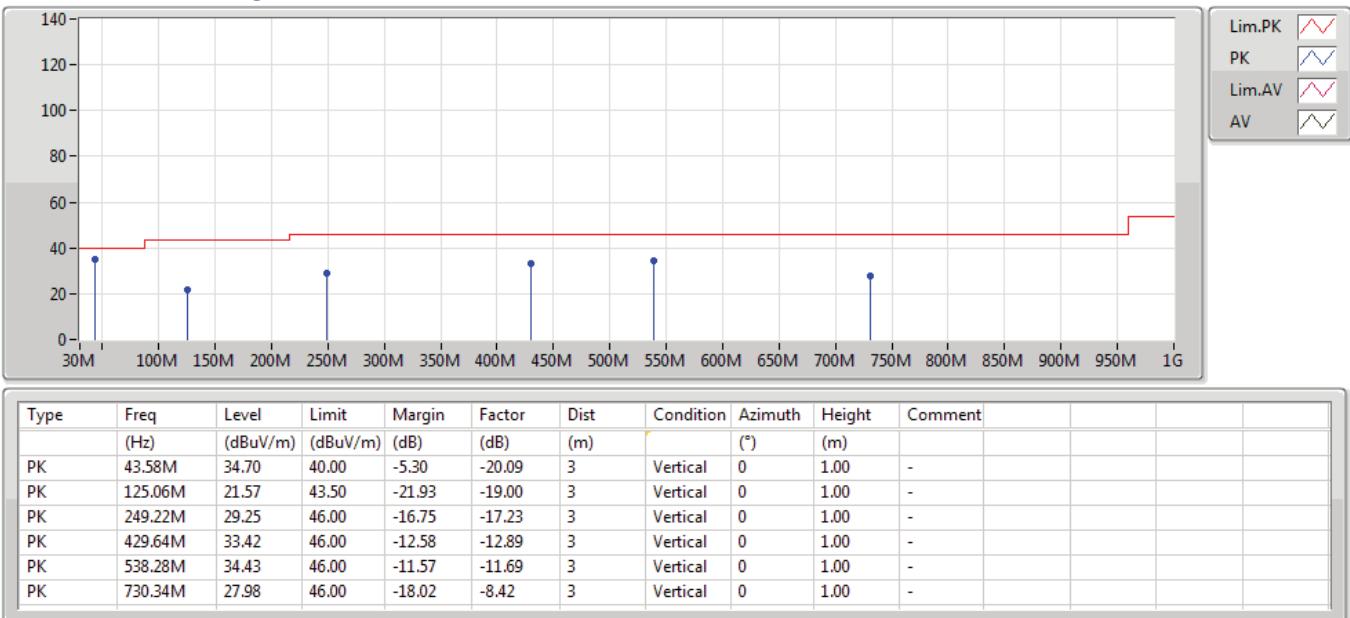


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	PK	43.58M	34.70	40.00	-5.30	-20.09	3	Vertical	0	1.00	-
5775MHz	Pass	PK	125.06M	21.57	43.50	-21.93	-19.00	3	Vertical	0	1.00	-
5775MHz	Pass	PK	249.22M	29.25	46.00	-16.75	-17.23	3	Vertical	0	1.00	-
5775MHz	Pass	PK	429.64M	33.42	46.00	-12.58	-12.89	3	Vertical	0	1.00	-
5775MHz	Pass	PK	538.28M	34.43	46.00	-11.57	-11.69	3	Vertical	0	1.00	-
5775MHz	Pass	PK	730.34M	27.98	46.00	-18.02	-8.42	3	Vertical	0	1.00	-
5775MHz	Pass	PK	35.82M	21.27	40.00	-18.73	-16.12	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	146.4M	17.34	43.50	-26.16	-19.19	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	249.22M	28.43	46.00	-17.57	-17.23	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	357.86M	30.63	46.00	-15.37	-15.18	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	431.58M	31.94	46.00	-14.06	-12.87	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	530.52M	37.91	46.00	-8.09	-11.74	3	Horizontal	360	1.00	-

802.11ax HEW80_Nss1,(MCS0)_4TX

10/05/2019

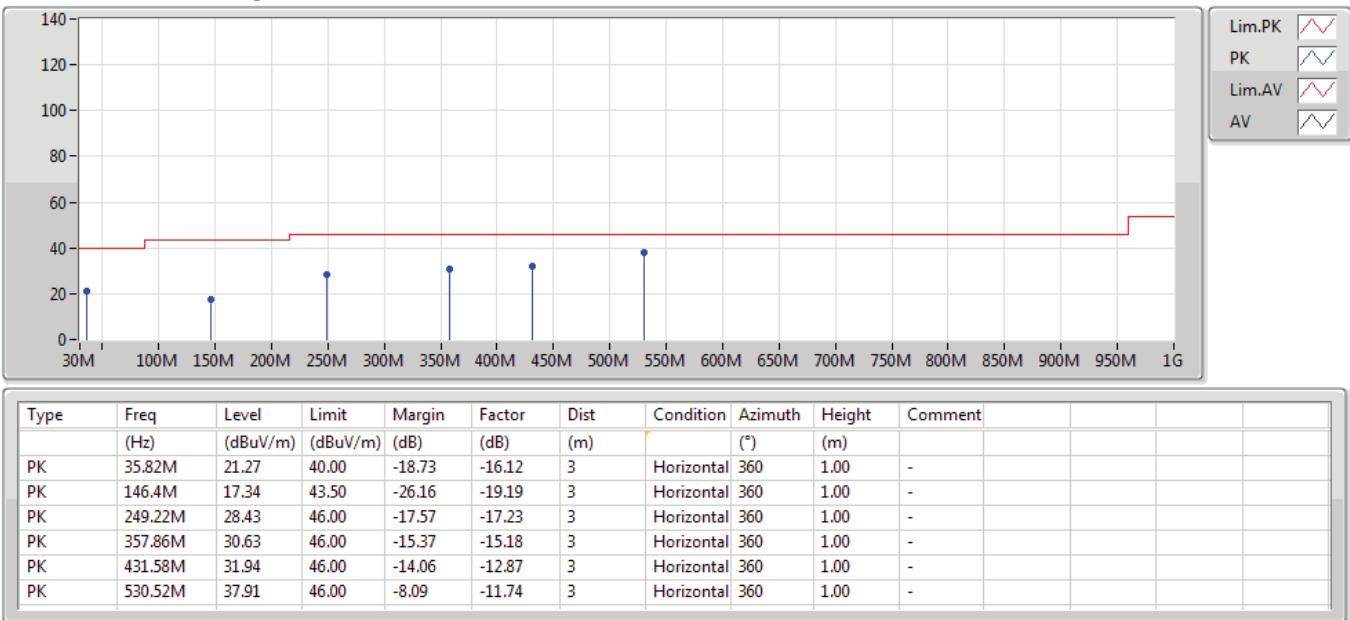
5775MHz_Adapter




802.11ax HEW80_Nss1,(MCS0)_4TX

10/05/2019

5775MHz_Adapter





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	AV	5.1468G	52.96	54.00	-1.04	4.19	3	Vertical	194	2.93	-
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	AV	5.15G	52.89	54.00	-1.11	4.20	3	Vertical	190	2.91	-
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	AV	5.1468G	52.58	54.00	-1.42	4.19	3	Vertical	360	2.65	-
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	AV	5.147G	52.74	54.00	-1.26	9.02	3	Vertical	182	2.62	-
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	AV	11.65186G	52.90	54.00	-1.10	15.43	3	Vertical	57	2.77	-
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	PK	17.3592G	67.10	68.20	-1.10	22.34	3	Vertical	207	2.65	-
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	AV	11.5909G	52.93	54.00	-1.07	15.49	3	Vertical	176	2.96	-
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	PK	5.649G	66.93	68.20	-1.27	9.37	3	Vertical	227	2.73	-



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

Appendix E.2

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz_TX	Pass	AV	5.1496G	49.25	54.00	-4.75	4.20	3	Vertical	193	2.97	-
5180MHz_TX	Pass	AV	5.1876G	105.68	Inf	-Inf	4.27	3	Vertical	193	2.97	-
5180MHz_TX	Pass	PK	5.1494G	72.60	74.00	-1.40	4.20	3	Vertical	193	2.97	-
5180MHz_TX	Pass	PK	5.1876G	115.03	Inf	-Inf	4.27	3	Vertical	193	2.97	-
5180MHz_TX	Pass	AV	5.1492G	44.96	54.00	-9.04	4.20	3	Horizontal	249	2.61	-
5180MHz_TX	Pass	AV	5.1784G	101.27	Inf	-Inf	4.26	3	Horizontal	249	2.61	-
5180MHz_TX	Pass	PK	5.1496G	61.78	74.00	-12.22	4.20	3	Horizontal	249	2.61	-
5180MHz_TX	Pass	PK	5.178G	110.95	Inf	-Inf	4.26	3	Horizontal	249	2.61	-
5180MHz_TX	Pass	AV	15.5313G	47.41	54.00	-6.59	16.77	3	Vertical	0	1.71	-
5180MHz_TX	Pass	PK	10.35946G	56.72	68.20	-11.48	14.66	3	Vertical	46	2.99	-
5180MHz_TX	Pass	PK	15.54234G	60.25	74.00	-13.75	16.73	3	Vertical	0	1.71	-
5180MHz_TX	Pass	AV	15.54366G	47.16	54.00	-6.84	16.73	3	Horizontal	139	2.72	-
5180MHz_TX	Pass	PK	10.3717G	54.51	68.20	-13.69	14.69	3	Horizontal	1	1.50	-
5180MHz_TX	Pass	PK	15.55188G	60.29	74.00	-13.71	16.69	3	Horizontal	139	2.72	-
5200MHz_TX	Pass	AV	5.1468G	52.96	54.00	-1.04	4.19	3	Vertical	194	2.93	-
5200MHz_TX	Pass	AV	5.2076G	111.69	Inf	-Inf	4.31	3	Vertical	194	2.93	-
5200MHz_TX	Pass	PK	5.1456G	72.79	74.00	-1.21	4.19	3	Vertical	194	2.93	-
5200MHz_TX	Pass	PK	5.2076G	121.35	Inf	-Inf	4.31	3	Vertical	194	2.93	-
5200MHz_TX	Pass	AV	5.15G	47.15	54.00	-6.85	4.20	3	Horizontal	250	2.73	-
5200MHz_TX	Pass	AV	5.198G	108.71	Inf	-Inf	4.30	3	Horizontal	250	2.73	-
5200MHz_TX	Pass	PK	5.1484G	63.06	74.00	-10.94	4.19	3	Horizontal	250	2.73	-
5200MHz_TX	Pass	PK	5.1984G	117.92	Inf	-Inf	4.30	3	Horizontal	250	2.73	-
5200MHz_TX	Pass	AV	15.59874G	51.29	54.00	-2.71	16.52	3	Vertical	35	2.99	-
5200MHz_TX	Pass	PK	10.39754G	64.21	68.20	-3.99	14.74	3	Vertical	0	2.99	-
5200MHz_TX	Pass	PK	15.59436G	64.17	74.00	-9.83	16.53	3	Vertical	35	2.99	-
5200MHz_TX	Pass	AV	15.58578G	47.07	54.00	-6.93	16.57	3	Horizontal	339	1.50	-
5200MHz_TX	Pass	PK	10.39682G	54.71	68.20	-13.49	14.74	3	Horizontal	212	1.75	-
5200MHz_TX	Pass	PK	15.59304G	60.86	74.00	-13.14	16.54	3	Horizontal	339	1.50	-
5240MHz_TX	Pass	AV	5.15G	46.49	54.00	-7.51	4.20	3	Vertical	135	2.92	-
5240MHz_TX	Pass	AV	5.2418G	113.86	Inf	-Inf	4.38	3	Vertical	135	2.92	-
5240MHz_TX	Pass	AV	5.3504G	47.17	54.00	-6.83	4.59	3	Vertical	135	2.92	-
5240MHz_TX	Pass	PK	5.147G	58.78	74.00	-15.22	4.19	3	Vertical	135	2.92	-
5240MHz_TX	Pass	PK	5.2412G	123.45	Inf	-Inf	4.37	3	Vertical	135	2.92	-
5240MHz_TX	Pass	PK	5.3504G	59.46	74.00	-14.54	4.59	3	Vertical	135	2.92	-
5240MHz_TX	Pass	AV	5.1494G	45.20	54.00	-8.80	4.20	3	Horizontal	249	2.72	-
5240MHz_TX	Pass	AV	5.2388G	109.81	Inf	-Inf	4.37	3	Horizontal	249	2.72	-
5240MHz_TX	Pass	AV	5.3522G	44.91	54.00	-9.09	4.59	3	Horizontal	249	2.72	-
5240MHz_TX	Pass	PK	5.132G	57.52	74.00	-16.48	4.16	3	Horizontal	249	2.72	-
5240MHz_TX	Pass	PK	5.2388G	119.76	Inf	-Inf	4.37	3	Horizontal	249	2.72	-
5240MHz_TX	Pass	PK	5.3726G	57.34	74.00	-16.66	4.63	3	Horizontal	249	2.72	-
5240MHz_TX	Pass	AV	15.72012G	52.83	54.00	-1.17	16.06	3	Vertical	35	2.99	-
5240MHz_TX	Pass	PK	10.47754G	66.82	68.20	-1.38	14.92	3	Vertical	0	2.98	-
5240MHz_TX	Pass	PK	15.7185G	66.42	74.00	-7.58	16.05	3	Vertical	35	2.99	-
5240MHz_TX	Pass	AV	15.71916G	46.96	54.00	-7.04	16.06	3	Horizontal	164	2.97	-
5240MHz_TX	Pass	PK	10.47988G	56.10	68.20	-12.10	14.93	3	Horizontal	46	2.02	-
5240MHz_TX	Pass	PK	15.71976G	59.65	74.00	-14.35	16.06	3	Horizontal	164	2.97	-
5745MHz_TX	Pass	AV	5.7462G	111.85	Inf	-Inf	5.31	3	Vertical	144	2.83	-



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

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5745MHz_TX	Pass	PK	5.6082G	59.87	68.20	-8.33	5.07	3	Vertical	144	2.83	-
5745MHz_TX	Pass	PK	5.7462G	120.89	Inf	-Inf	5.31	3	Vertical	144	2.83	-
5745MHz_TX	Pass	PK	5.9646G	58.68	68.20	-9.52	5.72	3	Vertical	144	2.83	-
5745MHz_TX	Pass	AV	5.7522G	104.17	Inf	-Inf	5.32	3	Horizontal	19	2.98	-
5745MHz_TX	Pass	PK	5.5986G	57.77	68.20	-10.43	5.05	3	Horizontal	19	2.98	-
5745MHz_TX	Pass	PK	5.7522G	113.80	Inf	-Inf	5.32	3	Horizontal	19	2.98	-
5745MHz_TX	Pass	PK	5.9286G	57.96	68.20	-10.24	5.64	3	Horizontal	19	2.98	-
5745MHz_TX	Pass	AV	11.48586G	50.09	54.00	-3.91	15.60	3	Vertical	161	2.43	-
5745MHz_TX	Pass	PK	11.48544G	63.38	74.00	-10.62	15.60	3	Vertical	161	2.43	-
5745MHz_TX	Pass	PK	17.23914G	67.09	68.20	-1.11	21.56	3	Vertical	249	2.99	-
5745MHz_TX	Pass	AV	11.48778G	44.34	54.00	-9.66	15.59	3	Horizontal	199	2.92	-
5745MHz_TX	Pass	PK	11.48736G	57.94	74.00	-16.06	15.60	3	Horizontal	199	2.92	-
5745MHz_TX	Pass	PK	17.23458G	66.22	68.20	-1.98	21.54	3	Horizontal	298	2.99	-
5785MHz_TX	Pass	AV	5.7814G	110.50	Inf	-Inf	5.38	3	Vertical	268	2.88	-
5785MHz_TX	Pass	PK	5.6458G	58.72	68.20	-9.48	5.13	3	Vertical	268	2.88	-
5785MHz_TX	Pass	PK	5.7814G	119.93	Inf	-Inf	5.38	3	Vertical	268	2.88	-
5785MHz_TX	Pass	PK	5.9722G	58.69	68.20	-9.51	5.73	3	Vertical	268	2.88	-
5785MHz_TX	Pass	AV	5.7922G	103.72	Inf	-Inf	5.39	3	Horizontal	17	2.99	-
5785MHz_TX	Pass	PK	5.6374G	57.45	68.20	-10.75	5.11	3	Horizontal	17	2.99	-
5785MHz_TX	Pass	PK	5.7922G	113.08	Inf	-Inf	5.39	3	Horizontal	17	2.99	-
5785MHz_TX	Pass	PK	5.9314G	58.37	68.20	-9.83	5.64	3	Horizontal	17	2.99	-
5785MHz_TX	Pass	AV	11.57126G	52.89	54.00	-1.11	15.51	3	Vertical	58	2.82	-
5785MHz_TX	Pass	PK	11.57102G	66.38	74.00	-7.62	15.51	3	Vertical	58	2.82	-
5785MHz_TX	Pass	PK	17.35374G	66.57	68.20	-1.63	22.31	3	Vertical	252	2.99	-
5785MHz_TX	Pass	AV	11.57174G	42.89	54.00	-11.11	15.51	3	Horizontal	48	1.50	-
5785MHz_TX	Pass	PK	11.56988G	55.73	74.00	-18.27	15.52	3	Horizontal	48	1.50	-
5785MHz_TX	Pass	PK	17.36592G	65.88	68.20	-2.32	22.39	3	Horizontal	284	2.99	-
5825MHz_TX	Pass	AV	5.8226G	108.42	Inf	-Inf	5.45	3	Vertical	266	2.83	-
5825MHz_TX	Pass	PK	5.6162G	58.33	68.20	-9.87	5.08	3	Vertical	266	2.83	-
5825MHz_TX	Pass	PK	5.8226G	118.20	Inf	-Inf	5.45	3	Vertical	266	2.83	-
5825MHz_TX	Pass	PK	5.9366G	58.47	68.20	-9.73	5.66	3	Vertical	266	2.83	-
5825MHz_TX	Pass	AV	5.831G	100.18	Inf	-Inf	5.46	3	Horizontal	163	2.55	-
5825MHz_TX	Pass	PK	5.615G	57.21	68.20	-10.99	5.08	3	Horizontal	163	2.55	-
5825MHz_TX	Pass	PK	5.8298G	110.10	Inf	-Inf	5.46	3	Horizontal	163	2.55	-
5825MHz_TX	Pass	PK	5.9546G	58.00	68.20	-10.20	5.70	3	Horizontal	163	2.55	-
5825MHz_TX	Pass	AV	11.65186G	52.90	54.00	-1.10	15.43	3	Vertical	57	2.77	-
5825MHz_TX	Pass	PK	11.6509G	65.41	74.00	-8.59	15.43	3	Vertical	57	2.77	-
5825MHz_TX	Pass	PK	17.47116G	65.18	68.20	-3.02	23.07	3	Vertical	252	2.20	-
5825MHz_TX	Pass	AV	11.6512G	43.99	54.00	-10.01	15.43	3	Horizontal	186	2.80	-
5825MHz_TX	Pass	PK	11.65G	57.06	74.00	-16.94	15.43	3	Horizontal	186	2.80	-
5825MHz_TX	Pass	PK	17.47668G	64.98	68.20	-3.22	23.11	3	Horizontal	112	1.50	-
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz_TX	Pass	AV	5.1478G	52.32	54.00	-1.68	4.19	3	Vertical	187	2.83	-
5180MHz_TX	Pass	AV	5.1808G	105.26	Inf	-Inf	4.27	3	Vertical	187	2.83	-
5180MHz_TX	Pass	PK	5.1478G	71.99	74.00	-2.01	4.19	3	Vertical	187	2.83	-
5180MHz_TX	Pass	PK	5.1854G	118.07	Inf	-Inf	4.27	3	Vertical	187	2.83	-
5180MHz_TX	Pass	AV	5.1496G	48.01	54.00	-5.99	4.20	3	Horizontal	248	2.95	-
5180MHz_TX	Pass	AV	5.1846G	101.28	Inf	-Inf	4.27	3	Horizontal	248	2.95	-
5180MHz_TX	Pass	PK	5.15G	65.04	74.00	-8.96	4.20	3	Horizontal	248	2.95	-



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

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5180MHz_TX	Pass	PK	5.1844G	114.60	Inf	-Inf	4.27	3	Horizontal	248	2.95	-
5180MHz_TX	Pass	AV	15.5475G	46.71	54.00	-7.29	16.71	3	Vertical	10	1.50	-
5180MHz_TX	Pass	PK	10.35934G	56.71	68.20	-11.49	14.66	3	Vertical	158	2.41	-
5180MHz_TX	Pass	PK	15.53622G	60.27	74.00	-13.73	16.76	3	Vertical	10	1.50	-
5180MHz_TX	Pass	AV	15.54576G	46.67	54.00	-7.33	16.72	3	Horizontal	44	1.70	-
5180MHz_TX	Pass	PK	10.36342G	54.40	68.20	-13.80	14.67	3	Horizontal	7	1.79	-
5180MHz_TX	Pass	PK	15.53592G	60.71	74.00	-13.29	16.76	3	Horizontal	44	1.70	-
5200MHz_TX	Pass	AV	5.148G	52.11	54.00	-1.89	4.19	3	Vertical	184	2.94	-
5200MHz_TX	Pass	AV	5.2056G	109.61	Inf	-Inf	4.31	3	Vertical	184	2.94	-
5200MHz_TX	Pass	PK	5.1432G	70.32	74.00	-3.68	4.19	3	Vertical	184	2.94	-
5200MHz_TX	Pass	PK	5.2056G	122.06	Inf	-Inf	4.31	3	Vertical	184	2.94	-
5200MHz_TX	Pass	AV	5.1492G	47.83	54.00	-6.17	4.20	3	Horizontal	247	2.73	-
5200MHz_TX	Pass	AV	5.2048G	105.91	Inf	-Inf	4.31	3	Horizontal	247	2.73	-
5200MHz_TX	Pass	PK	5.1492G	65.16	74.00	-8.84	4.20	3	Horizontal	247	2.73	-
5200MHz_TX	Pass	PK	5.2044G	118.12	Inf	-Inf	4.30	3	Horizontal	247	2.73	-
5200MHz_TX	Pass	AV	15.5997G	47.38	54.00	-6.62	16.51	3	Vertical	133	2.47	-
5200MHz_TX	Pass	PK	10.39958G	61.27	68.20	-6.93	14.74	3	Vertical	0	2.99	-
5200MHz_TX	Pass	PK	15.60534G	61.01	74.00	-12.99	16.50	3	Vertical	133	2.47	-
5200MHz_TX	Pass	AV	15.59094G	46.40	54.00	-7.60	16.54	3	Horizontal	204	2.26	-
5200MHz_TX	Pass	PK	10.40366G	54.91	68.20	-13.29	14.76	3	Horizontal	9	2.03	-
5200MHz_TX	Pass	PK	15.60582G	60.34	74.00	-13.66	16.50	3	Horizontal	204	2.26	-
5240MHz_TX	Pass	AV	5.15G	52.89	54.00	-1.11	4.20	3	Vertical	190	2.91	-
5240MHz_TX	Pass	AV	5.2358G	112.19	Inf	-Inf	4.36	3	Vertical	190	2.91	-
5240MHz_TX	Pass	AV	5.35G	49.08	54.00	-4.92	4.59	3	Vertical	190	2.91	-
5240MHz_TX	Pass	PK	5.15G	69.98	74.00	-4.02	4.20	3	Vertical	190	2.91	-
5240MHz_TX	Pass	PK	5.2406G	124.37	Inf	-Inf	4.37	3	Vertical	190	2.91	-
5240MHz_TX	Pass	PK	5.35G	65.80	74.00	-8.20	4.59	3	Vertical	190	2.91	-
5240MHz_TX	Pass	AV	5.1488G	46.74	54.00	-7.26	4.19	3	Horizontal	247	2.70	-
5240MHz_TX	Pass	AV	5.2346G	108.61	Inf	-Inf	4.36	3	Horizontal	247	2.70	-
5240MHz_TX	Pass	AV	5.3534G	44.72	54.00	-9.28	4.59	3	Horizontal	247	2.70	-
5240MHz_TX	Pass	PK	5.1476G	61.47	74.00	-12.53	4.19	3	Horizontal	247	2.70	-
5240MHz_TX	Pass	PK	5.2442G	121.23	Inf	-Inf	4.38	3	Horizontal	247	2.70	-
5240MHz_TX	Pass	PK	5.3678G	57.34	74.00	-16.66	4.62	3	Horizontal	247	2.70	-
5240MHz_TX	Pass	AV	15.71988G	52.29	54.00	-1.71	16.06	3	Vertical	35	2.96	-
5240MHz_TX	Pass	PK	10.48156G	55.95	68.20	-12.25	14.93	3	Vertical	10	1.49	-
5240MHz_TX	Pass	PK	15.71988G	65.64	74.00	-8.36	16.06	3	Vertical	35	2.96	-
5240MHz_TX	Pass	AV	15.70548G	45.25	54.00	-8.75	16.11	3	Horizontal	277	1.14	-
5240MHz_TX	Pass	PK	10.4836G	55.94	68.20	-12.26	14.93	3	Horizontal	11	1.50	-
5240MHz_TX	Pass	PK	15.72792G	58.92	74.00	-15.08	16.02	3	Horizontal	277	1.14	-
5745MHz_TX	Pass	AV	5.7462G	108.11	Inf	-Inf	5.31	3	Vertical	170	2.99	-
5745MHz_TX	Pass	PK	5.6466G	59.12	68.20	-9.08	5.14	3	Vertical	170	2.99	-
5745MHz_TX	Pass	PK	5.7462G	120.38	Inf	-Inf	5.31	3	Vertical	170	2.99	-
5745MHz_TX	Pass	PK	5.937G	60.08	68.20	-8.12	5.66	3	Vertical	170	2.99	-
5745MHz_TX	Pass	AV	5.7486G	100.91	Inf	-Inf	5.33	3	Horizontal	19	2.75	-
5745MHz_TX	Pass	PK	5.6478G	57.06	68.20	-11.14	5.14	3	Horizontal	19	2.75	-
5745MHz_TX	Pass	PK	5.7534G	113.71	Inf	-Inf	5.32	3	Horizontal	19	2.75	-
5745MHz_TX	Pass	PK	5.9598G	58.95	68.20	-9.25	5.70	3	Horizontal	19	2.75	-
5745MHz_TX	Pass	AV	11.48976G	48.93	54.00	-5.07	15.59	3	Vertical	189	2.89	-
5745MHz_TX	Pass	PK	11.49078G	61.99	74.00	-12.01	15.59	3	Vertical	189	2.89	-



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

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5745MHz_TX	Pass	PK	17.23422G	67.03	68.20	-1.17	21.53	3	Vertical	208	2.73	-
5745MHz_TX	Pass	AV	11.48772G	41.81	54.00	-12.19	15.59	3	Horizontal	207	1.50	-
5745MHz_TX	Pass	PK	11.49306G	54.80	74.00	-19.20	15.59	3	Horizontal	207	1.50	-
5745MHz_TX	Pass	PK	17.24766G	64.84	68.20	-3.36	21.61	3	Horizontal	224	1.25	-
5785MHz_TX	Pass	AV	5.7862G	108.04	Inf	-Inf	5.38	3	Vertical	173	2.90	-
5785MHz_TX	Pass	PK	5.5234G	58.92	68.20	-9.28	4.91	3	Vertical	173	2.90	-
5785MHz_TX	Pass	PK	5.791G	120.22	Inf	-Inf	5.39	3	Vertical	173	2.90	-
5785MHz_TX	Pass	PK	5.9386G	59.35	68.20	-8.85	5.66	3	Vertical	173	2.90	-
5785MHz_TX	Pass	AV	5.7826G	100.90	Inf	-Inf	5.39	3	Horizontal	17	2.71	-
5785MHz_TX	Pass	PK	5.6362G	57.46	68.20	-10.74	5.11	3	Horizontal	17	2.71	-
5785MHz_TX	Pass	PK	5.7778G	113.13	Inf	-Inf	5.37	3	Horizontal	17	2.71	-
5785MHz_TX	Pass	PK	5.9386G	58.87	68.20	-9.33	5.66	3	Horizontal	17	2.71	-
5785MHz_TX	Pass	AV	11.56952G	47.62	54.00	-6.38	15.52	3	Vertical	160	1.72	-
5785MHz_TX	Pass	PK	11.57444G	60.64	74.00	-13.36	15.50	3	Vertical	160	1.72	-
5785MHz_TX	Pass	PK	17.3592G	67.10	68.20	-1.10	22.34	3	Vertical	207	2.65	-
5785MHz_TX	Pass	AV	11.57546G	41.54	54.00	-12.46	15.50	3	Horizontal	171	1.04	-
5785MHz_TX	Pass	PK	11.5658G	55.06	74.00	-18.94	15.52	3	Horizontal	171	1.04	-
5785MHz_TX	Pass	PK	17.36088G	65.01	68.20	-3.19	22.35	3	Horizontal	216	1.01	-
5825MHz_TX	Pass	AV	5.8262G	107.56	Inf	-Inf	5.46	3	Vertical	179	2.66	-
5825MHz_TX	Pass	PK	5.639G	58.99	68.20	-9.21	5.12	3	Vertical	179	2.66	-
5825MHz_TX	Pass	PK	5.831G	119.26	Inf	-Inf	5.46	3	Vertical	179	2.66	-
5825MHz_TX	Pass	PK	5.9342G	58.87	68.20	-9.33	5.66	3	Vertical	179	2.66	-
5825MHz_TX	Pass	AV	5.8238G	101.12	Inf	-Inf	5.45	3	Horizontal	17	2.51	-
5825MHz_TX	Pass	PK	5.5718G	57.66	68.20	-10.54	5.00	3	Horizontal	17	2.51	-
5825MHz_TX	Pass	PK	5.8178G	113.24	Inf	-Inf	5.44	3	Horizontal	17	2.51	-
5825MHz_TX	Pass	PK	5.951G	58.34	68.20	-9.86	5.69	3	Horizontal	17	2.51	-
5825MHz_TX	Pass	AV	11.6485G	49.88	54.00	-4.12	15.43	3	Vertical	319	2.93	-
5825MHz_TX	Pass	PK	11.6563G	62.78	74.00	-11.22	15.42	3	Vertical	319	2.93	-
5825MHz_TX	Pass	PK	17.4843G	66.30	68.20	-1.90	23.15	3	Vertical	250	2.99	-
5825MHz_TX	Pass	AV	11.64964G	44.48	54.00	-9.52	15.43	3	Horizontal	174	2.39	-
5825MHz_TX	Pass	PK	11.64952G	57.45	74.00	-16.55	15.43	3	Horizontal	174	2.39	-
5825MHz_TX	Pass	PK	17.46156G	65.42	68.20	-2.78	23.02	3	Horizontal	200	2.41	-
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz_TX	Pass	AV	5.1476G	52.32	54.00	-1.68	4.19	3	Vertical	360	2.97	-
5190MHz_TX	Pass	AV	5.1724G	99.77	Inf	-Inf	4.24	3	Vertical	360	2.97	-
5190MHz_TX	Pass	PK	5.1468G	67.69	74.00	-6.31	4.19	3	Vertical	360	2.97	-
5190MHz_TX	Pass	PK	5.1824G	111.77	Inf	-Inf	4.27	3	Vertical	360	2.97	-
5190MHz_TX	Pass	AV	5.15G	51.71	54.00	-2.29	4.20	3	Horizontal	248	2.97	-
5190MHz_TX	Pass	AV	5.1948G	98.15	Inf	-Inf	4.29	3	Horizontal	248	2.97	-
5190MHz_TX	Pass	PK	5.1496G	65.16	74.00	-8.84	4.20	3	Horizontal	248	2.97	-
5190MHz_TX	Pass	PK	5.1892G	109.73	Inf	-Inf	4.28	3	Horizontal	248	2.97	-
5190MHz_TX	Pass	AV	15.57954G	47.82	54.00	-6.18	16.60	3	Vertical	319	1.50	-
5190MHz_TX	Pass	PK	10.38354G	55.27	68.20	-12.93	14.71	3	Vertical	165	2.99	-
5190MHz_TX	Pass	PK	15.56754G	60.57	74.00	-13.43	16.64	3	Vertical	319	1.50	-
5190MHz_TX	Pass	AV	15.57966G	47.81	54.00	-6.19	16.60	3	Horizontal	165	2.99	-
5190MHz_TX	Pass	PK	10.39062G	54.14	68.20	-14.06	14.72	3	Horizontal	224	2.16	-
5190MHz_TX	Pass	PK	15.57456G	60.59	74.00	-13.41	16.61	3	Horizontal	165	2.99	-
5230MHz_TX	Pass	AV	5.1468G	52.58	54.00	-1.42	4.19	3	Vertical	360	2.65	-
5230MHz_TX	Pass	AV	5.2372G	104.50	Inf	-Inf	4.37	3	Vertical	360	2.65	-



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

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5230MHz_TX	Pass	PK	5.1472G	66.45	74.00	-7.55	4.19	3	Vertical	360	2.65	-
5230MHz_TX	Pass	PK	5.2224G	116.60	Inf	-Inf	4.34	3	Vertical	360	2.65	-
5230MHz_TX	Pass	AV	5.1488G	51.02	54.00	-2.98	4.19	3	Horizontal	246	2.84	-
5230MHz_TX	Pass	AV	5.2348G	103.79	Inf	-Inf	4.36	3	Horizontal	246	2.84	-
5230MHz_TX	Pass	PK	5.1428G	63.46	74.00	-10.54	4.19	3	Horizontal	246	2.84	-
5230MHz_TX	Pass	PK	5.2148G	114.54	Inf	-Inf	4.33	3	Horizontal	246	2.84	-
5230MHz_TX	Pass	AV	15.67626G	47.33	54.00	-6.67	16.22	3	Vertical	102	2.64	-
5230MHz_TX	Pass	PK	10.4588G	59.51	68.20	-8.69	14.88	3	Vertical	0	2.99	-
5230MHz_TX	Pass	PK	15.69276G	60.63	74.00	-13.37	16.15	3	Vertical	102	2.64	-
5230MHz_TX	Pass	AV	15.68424G	46.81	54.00	-7.19	16.19	3	Horizontal	129	2.94	-
5230MHz_TX	Pass	PK	10.46282G	54.46	68.20	-13.74	14.89	3	Horizontal	10	1.36	-
5230MHz_TX	Pass	PK	15.68328G	59.04	74.00	-14.96	16.19	3	Horizontal	129	2.94	-
5755MHz_TX	Pass	AV	5.761G	106.94	Inf	-Inf	5.34	3	Vertical	172	2.97	-
5755MHz_TX	Pass	PK	5.6146G	61.00	68.20	-7.20	5.08	3	Vertical	172	2.97	-
5755MHz_TX	Pass	PK	5.7658G	117.67	Inf	-Inf	5.35	3	Vertical	172	2.97	-
5755MHz_TX	Pass	PK	5.9278G	59.36	68.20	-8.84	5.64	3	Vertical	172	2.97	-
5755MHz_TX	Pass	AV	5.7622G	99.24	Inf	-Inf	5.34	3	Horizontal	31	2.54	-
5755MHz_TX	Pass	PK	5.647G	57.79	68.20	-10.41	5.14	3	Horizontal	31	2.54	-
5755MHz_TX	Pass	PK	5.7478G	110.59	Inf	-Inf	5.33	3	Horizontal	31	2.54	-
5755MHz_TX	Pass	PK	5.929G	57.99	68.20	-10.21	5.64	3	Horizontal	31	2.54	-
5755MHz_TX	Pass	AV	11.50784G	49.29	54.00	-4.71	15.57	3	Vertical	132	2.97	-
5755MHz_TX	Pass	PK	11.51378G	61.48	74.00	-12.52	15.56	3	Vertical	132	2.97	-
5755MHz_TX	Pass	PK	17.26932G	66.94	68.20	-1.26	21.76	3	Vertical	209	2.90	-
5755MHz_TX	Pass	AV	11.50796G	43.21	54.00	-10.79	15.57	3	Horizontal	200	2.90	-
5755MHz_TX	Pass	PK	11.5085G	55.70	74.00	-18.30	15.57	3	Horizontal	200	2.90	-
5755MHz_TX	Pass	PK	17.26776G	64.98	68.20	-3.22	21.75	3	Horizontal	0	1.17	-
5795MHz_TX	Pass	AV	5.7914G	109.93	Inf	-Inf	5.39	3	Vertical	171	2.93	-
5795MHz_TX	Pass	PK	5.6462G	64.48	68.20	-3.72	5.13	3	Vertical	171	2.93	-
5795MHz_TX	Pass	PK	5.8106G	121.72	Inf	-Inf	5.43	3	Vertical	171	2.93	-
5795MHz_TX	Pass	PK	5.939G	66.40	68.20	-1.80	5.66	3	Vertical	171	2.93	-
5795MHz_TX	Pass	AV	5.7974G	102.92	Inf	-Inf	5.41	3	Horizontal	32	2.73	-
5795MHz_TX	Pass	PK	5.6486G	58.24	68.20	-9.96	5.14	3	Horizontal	32	2.73	-
5795MHz_TX	Pass	PK	5.7866G	114.25	Inf	-Inf	5.38	3	Horizontal	32	2.73	-
5795MHz_TX	Pass	PK	5.9306G	59.61	68.20	-8.59	5.64	3	Horizontal	32	2.73	-
5795MHz_TX	Pass	AV	11.5909G	52.93	54.00	-1.07	15.49	3	Vertical	176	2.96	-
5795MHz_TX	Pass	PK	11.59588G	65.20	74.00	-8.80	15.48	3	Vertical	176	2.96	-
5795MHz_TX	Pass	PK	17.39022G	66.17	68.20	-2.03	22.54	3	Vertical	360	1.11	-
5795MHz_TX	Pass	AV	11.60362G	43.45	54.00	-10.55	15.49	3	Horizontal	0	2.95	-
5795MHz_TX	Pass	PK	11.584G	56.21	74.00	-17.79	15.50	3	Horizontal	0	2.95	-
5795MHz_TX	Pass	PK	17.37354G	65.31	68.20	-2.89	22.43	3	Horizontal	226	2.47	-
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_TX	Pass	AV	5.147G	52.74	54.00	-1.26	9.02	3	Vertical	182	2.62	-
5210MHz_TX	Pass	AV	5.221G	98.66	Inf	-Inf	8.92	3	Vertical	182	2.62	-
5210MHz_TX	Pass	AV	5.351G	46.86	54.00	-7.14	8.88	3	Vertical	182	2.62	-
5210MHz_TX	Pass	PK	5.145G	63.06	74.00	-10.94	9.01	3	Vertical	182	2.62	-
5210MHz_TX	Pass	PK	5.2G	107.90	Inf	-Inf	8.97	3	Vertical	182	2.62	-
5210MHz_TX	Pass	PK	5.354G	57.00	74.00	-17.00	8.89	3	Vertical	182	2.62	-
5210MHz_TX	Pass	AV	5.148G	48.03	54.00	-5.97	9.01	3	Horizontal	249	2.70	-
5210MHz_TX	Pass	AV	5.22G	94.09	Inf	-Inf	8.92	3	Horizontal	249	2.70	-



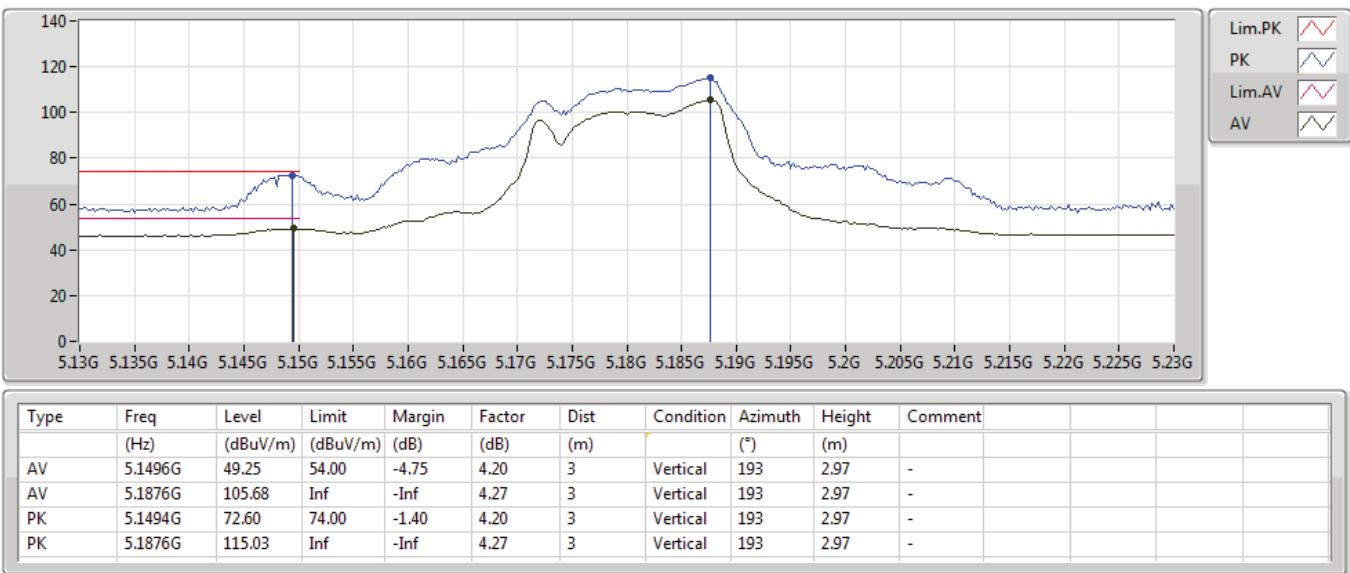
**RSE TX above 1GHz- Non-Beamforming <Radio 1> -Internal
Antenna**

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5210MHz_TX	Pass	AV	5.435G	45.56	54.00	-8.44	9.17	3	Horizontal	249	2.70	-
5210MHz_TX	Pass	PK	5.128G	58.03	74.00	-15.97	9.03	3	Horizontal	249	2.70	-
5210MHz_TX	Pass	PK	5.2G	103.02	Inf	-Inf	8.97	3	Horizontal	249	2.70	-
5210MHz_TX	Pass	PK	5.459G	56.95	74.00	-17.05	9.29	3	Horizontal	249	2.70	-
5210MHz_TX	Pass	AV	15.63702G	47.89	54.00	-6.11	20.24	3	Vertical	50	1.52	-
5210MHz_TX	Pass	PK	10.42186G	56.81	68.20	-11.39	19.23	3	Vertical	182	1.50	-
5210MHz_TX	Pass	PK	15.6327G	58.49	74.00	-15.51	20.25	3	Vertical	50	1.52	-
5210MHz_TX	Pass	AV	15.62256G	47.90	54.00	-6.10	20.30	3	Horizontal	89	2.48	-
5210MHz_TX	Pass	PK	10.42216G	56.84	68.20	-11.36	19.23	3	Horizontal	322	1.56	-
5210MHz_TX	Pass	PK	15.63072G	58.69	74.00	-15.31	20.26	3	Horizontal	89	2.48	-
5775MHz_TX	Pass	AV	5.7882G	103.95	Inf	-Inf	9.61	3	Vertical	227	2.73	-
5775MHz_TX	Pass	PK	5.649G	66.93	68.20	-1.27	9.37	3	Vertical	227	2.73	-
5775MHz_TX	Pass	PK	5.7738G	114.62	Inf	-Inf	9.58	3	Vertical	227	2.73	-
5775MHz_TX	Pass	PK	5.931G	62.68	68.20	-5.52	10.00	3	Vertical	227	2.73	-
5775MHz_TX	Pass	AV	5.7678G	97.57	Inf	-Inf	9.57	3	Horizontal	13	2.97	-
5775MHz_TX	Pass	PK	5.6478G	61.16	68.20	-7.04	9.37	3	Horizontal	13	2.97	-
5775MHz_TX	Pass	PK	5.7738G	107.21	Inf	-Inf	9.58	3	Horizontal	13	2.97	-
5775MHz_TX	Pass	PK	5.925G	59.07	68.20	-9.13	10.00	3	Horizontal	13	2.97	-
5775MHz_TX	Pass	AV	11.54526G	50.37	54.00	-3.63	19.77	3	Vertical	30	2.99	-
5775MHz_TX	Pass	PK	11.56026G	60.06	74.00	-13.94	19.76	3	Vertical	30	2.99	-
5775MHz_TX	Pass	PK	17.33232G	63.84	68.20	-4.36	25.46	3	Vertical	182	1.12	-
5775MHz_TX	Pass	AV	11.5476G	46.11	54.00	-7.89	19.77	3	Horizontal	155	1.61	-
5775MHz_TX	Pass	PK	11.54568G	57.09	74.00	-16.91	19.77	3	Horizontal	155	1.61	-
5775MHz_TX	Pass	PK	17.32188G	63.90	68.20	-4.30	25.39	3	Horizontal	283	2.37	-

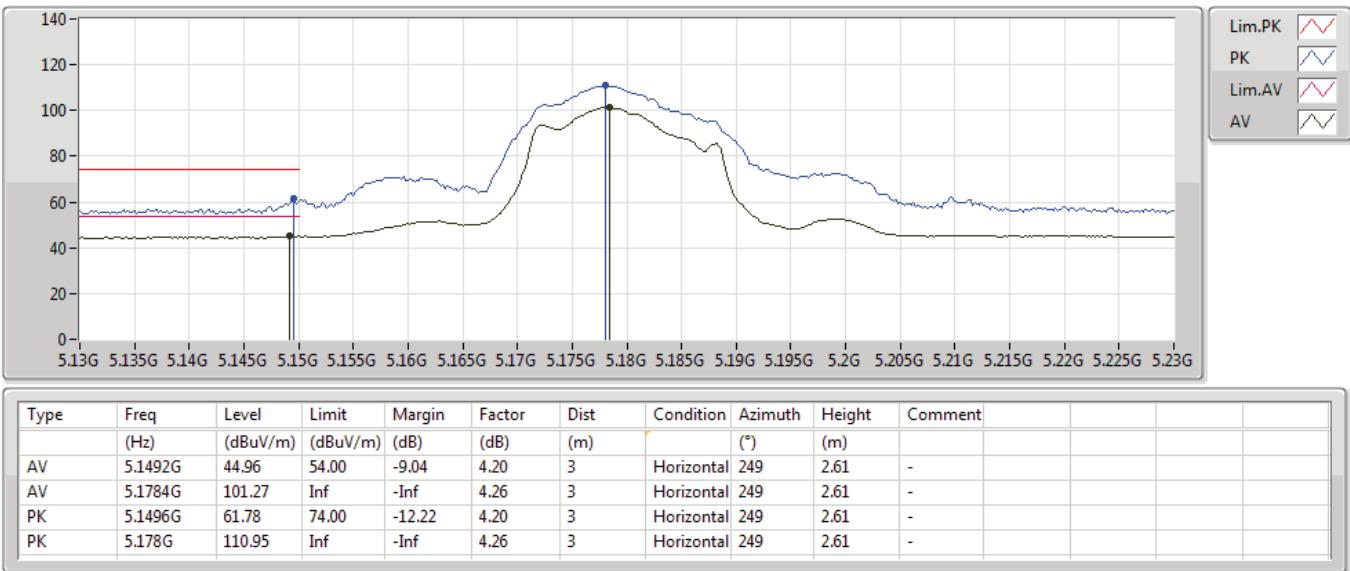
802.11a_Nss1,(6Mbps)_4TX

01/05/2019

5180MHz_TX


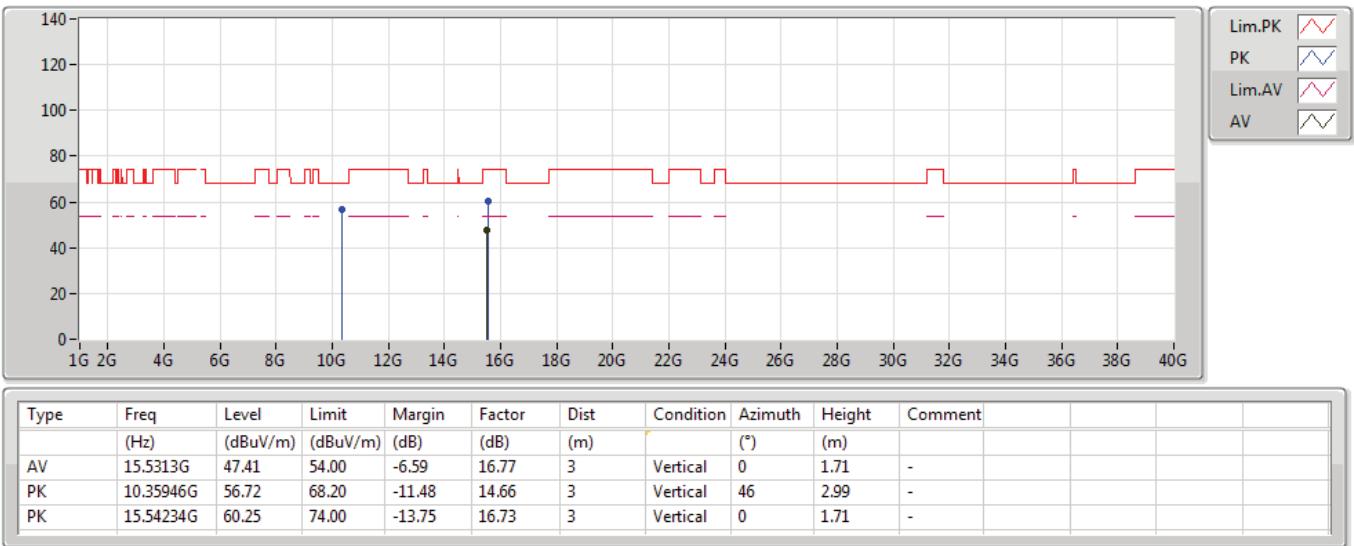
802.11a_Nss1,(6Mbps)_4TX

01/05/2019

5180MHz_TX


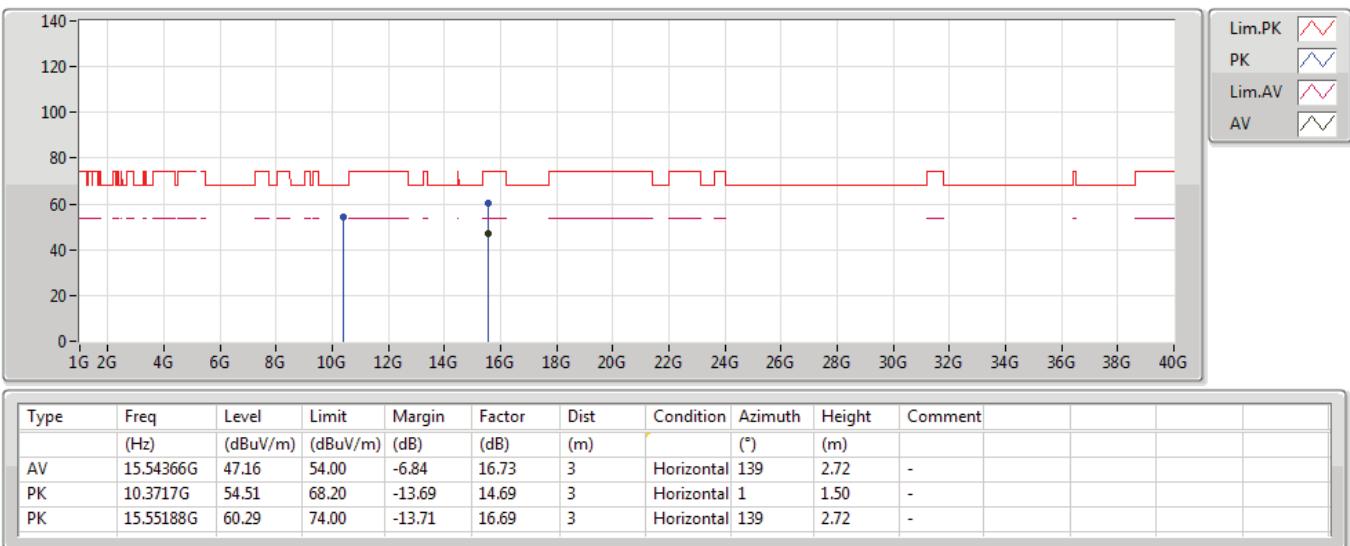
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01/05/2019

5180MHz_TX


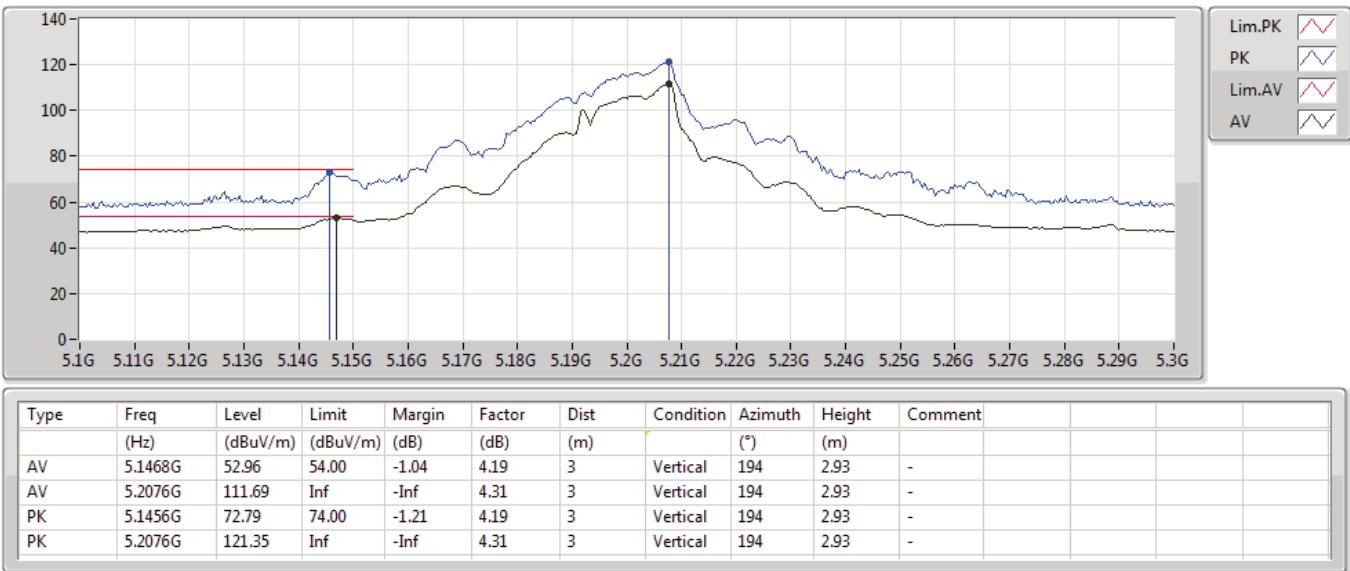
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01/05/2019

5180MHz_TX


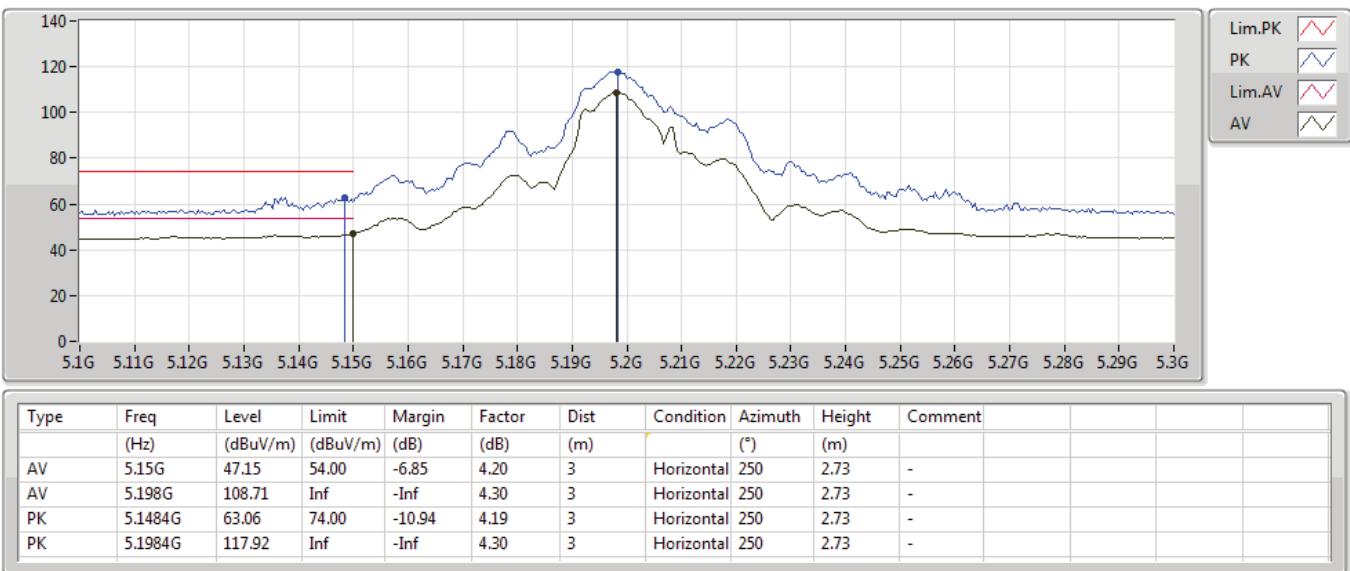
802.11a_Nss1,(6Mbps)_4TX

01/05/2019

5200MHz_TX


802.11a_Nss1,(6Mbps)_4TX

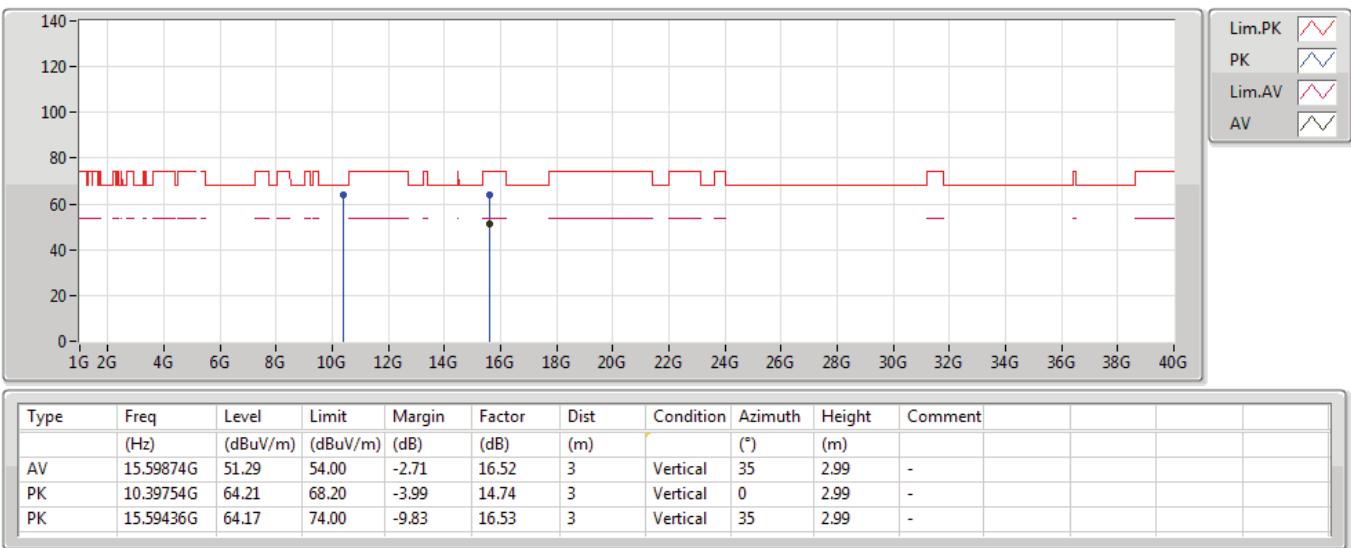
01/05/2019

5200MHz_TX


802.11a_Nss1,(6Mbps)_4TX

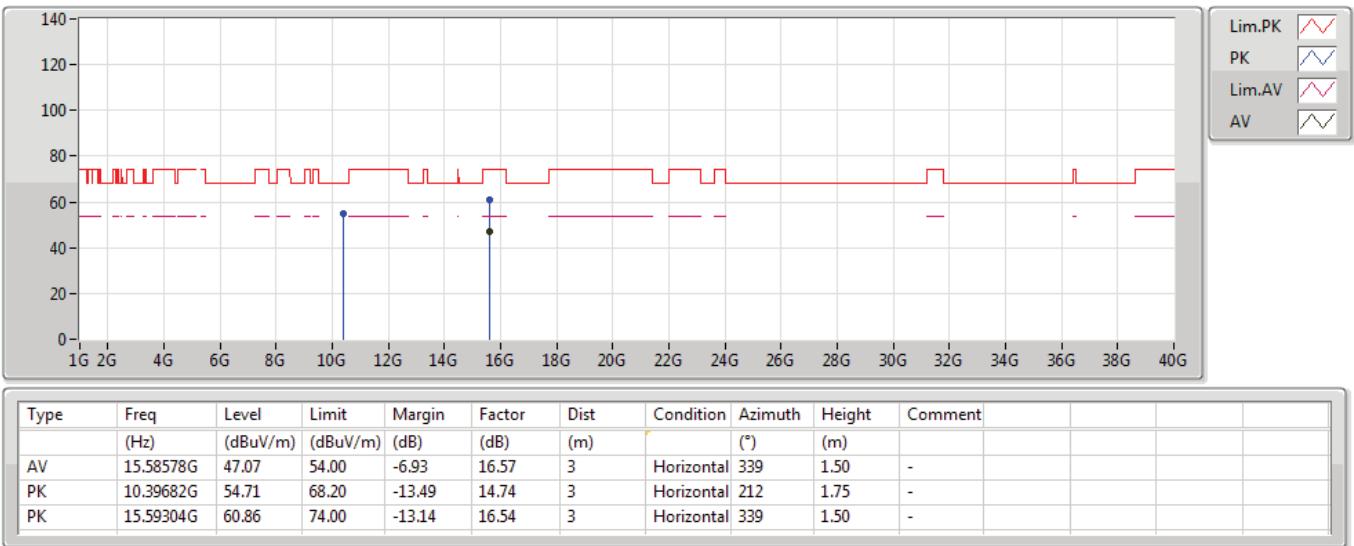
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5200MHz_TX



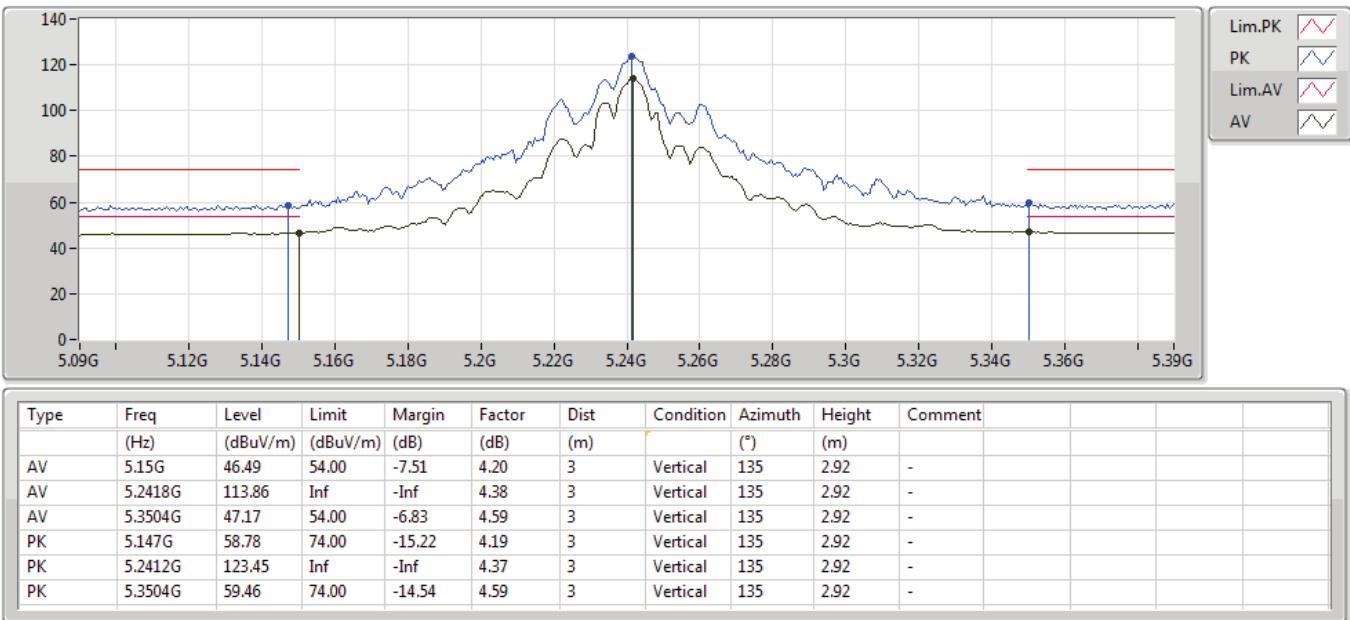
802.11a_Nss1,(6Mbps)_4TX

01/05/2019

5200MHz_TX


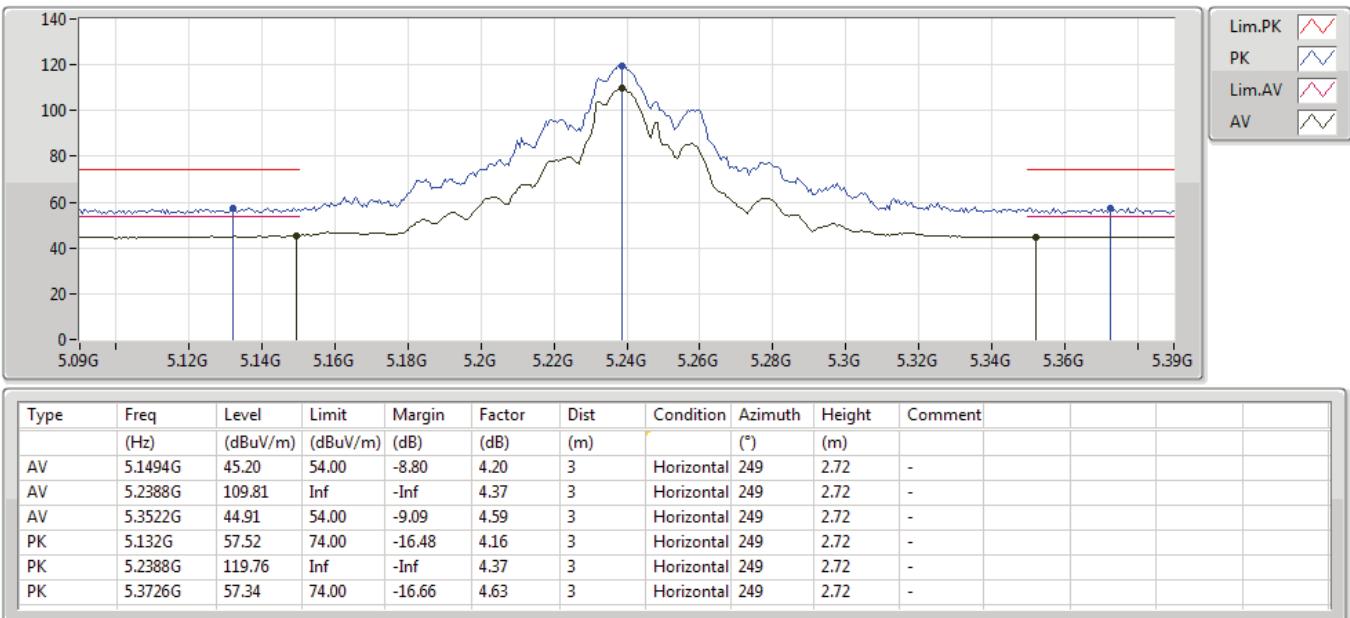
802.11a_Nss1,(6Mbps)_4TX

01/05/2019

5240MHz_TX


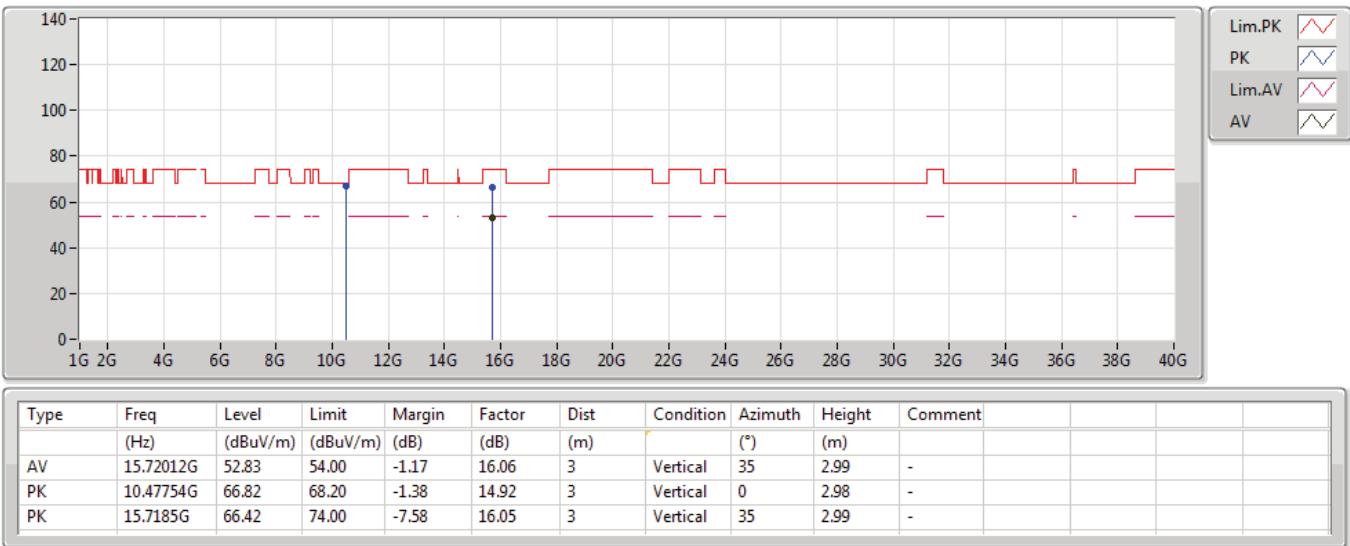
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5240MHz_TX


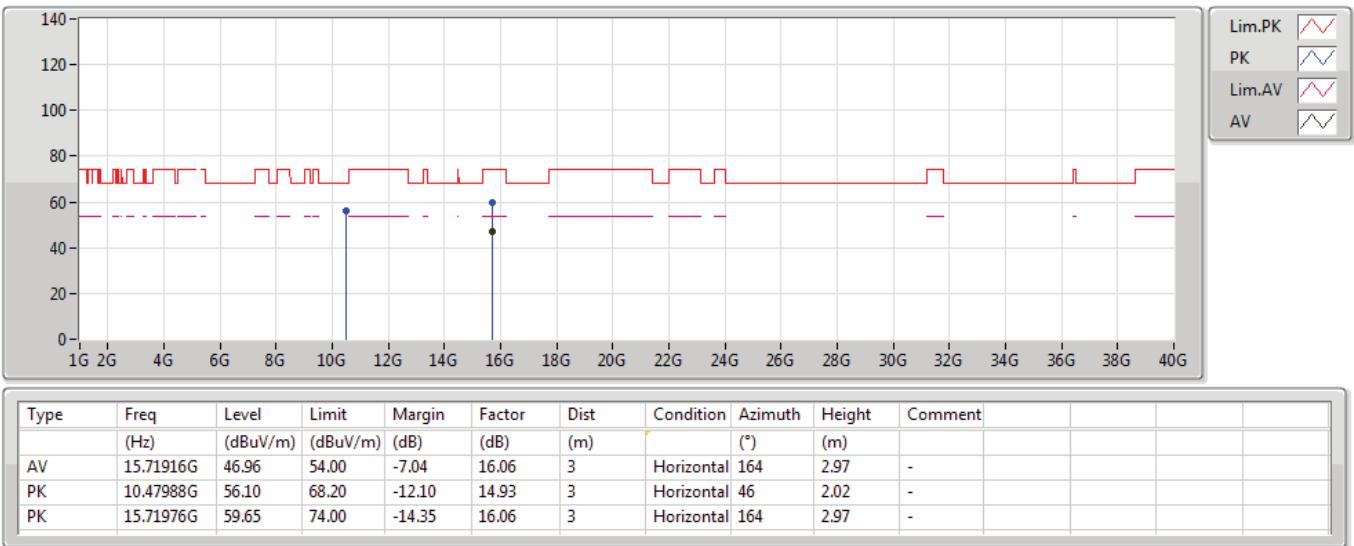
802.11a_Nss1,(6Mbps)_4TX

01/05/2019

5240MHz_TX


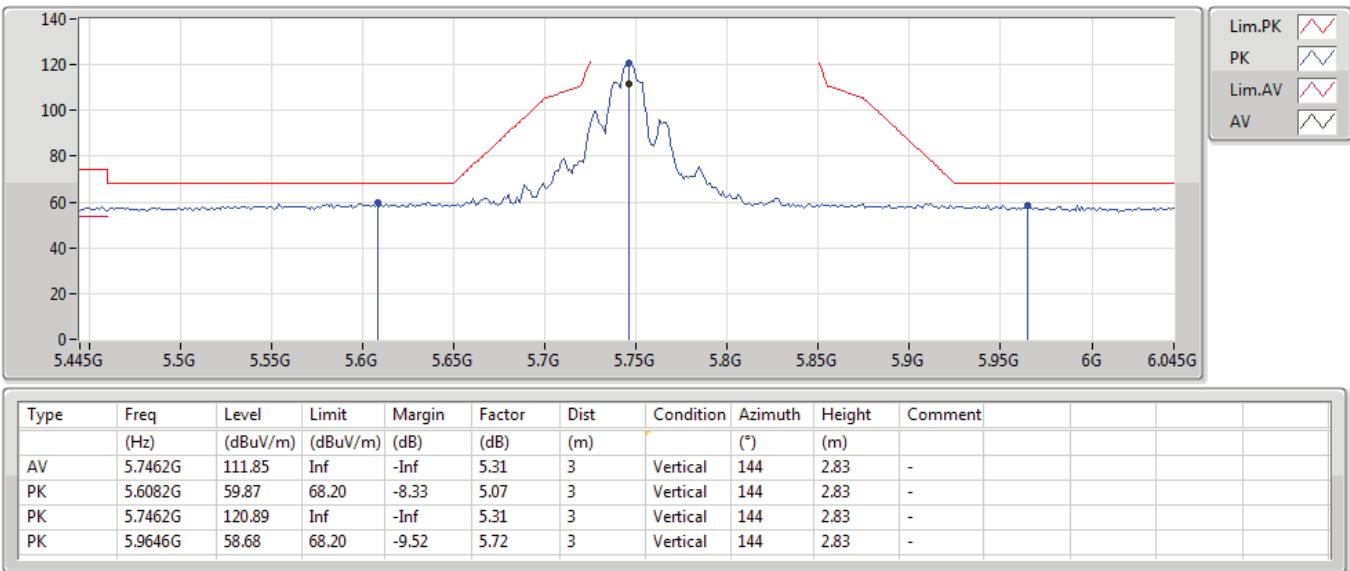
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5240MHz_TX


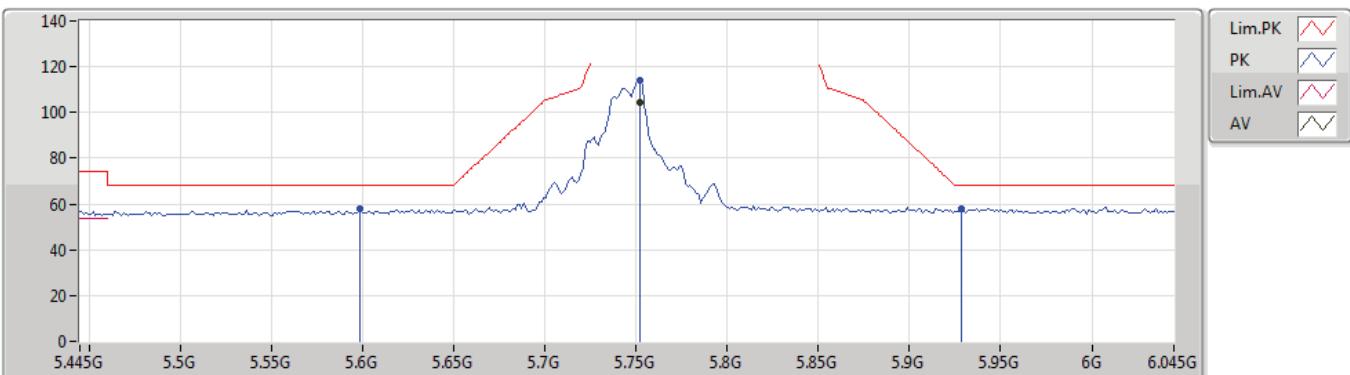
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5745MHz_TX


802.11a_Nss1,(6Mbps)_4TX

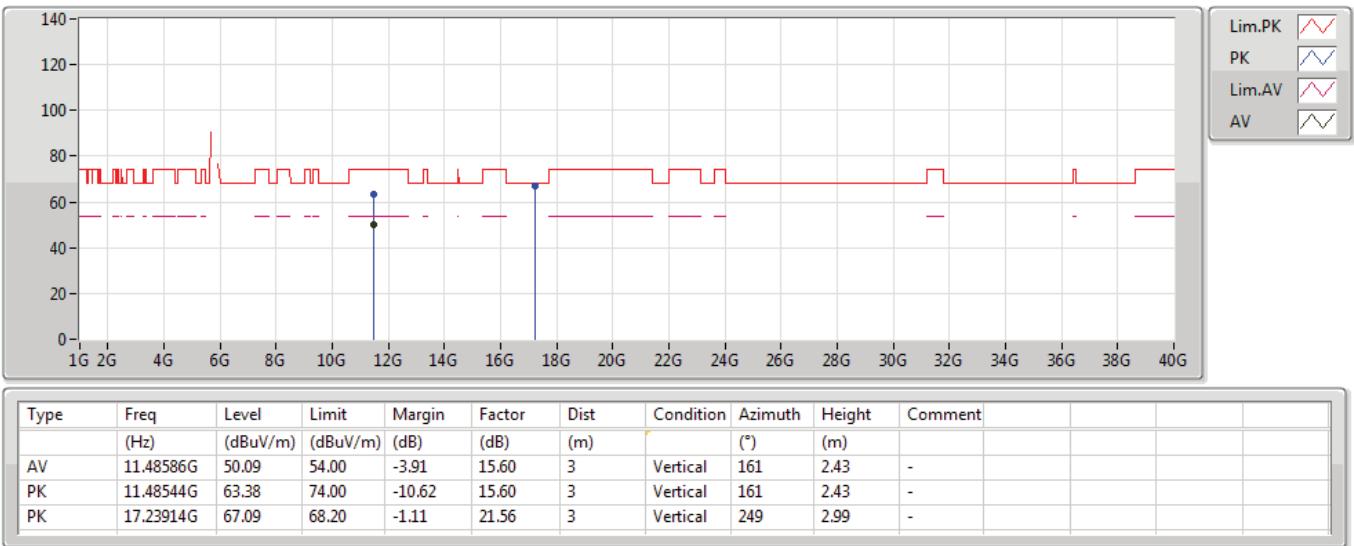
02/05/2019

5745MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.7522G	104.17	Inf	-Inf	5.32	3	Horizontal	19	2.98	-		
PK	5.5986G	57.77	68.20	-10.43	5.05	3	Horizontal	19	2.98	-		
PK	5.7522G	113.80	Inf	-Inf	5.32	3	Horizontal	19	2.98	-		
PK	5.9286G	57.96	68.20	-10.24	5.64	3	Horizontal	19	2.98	-		

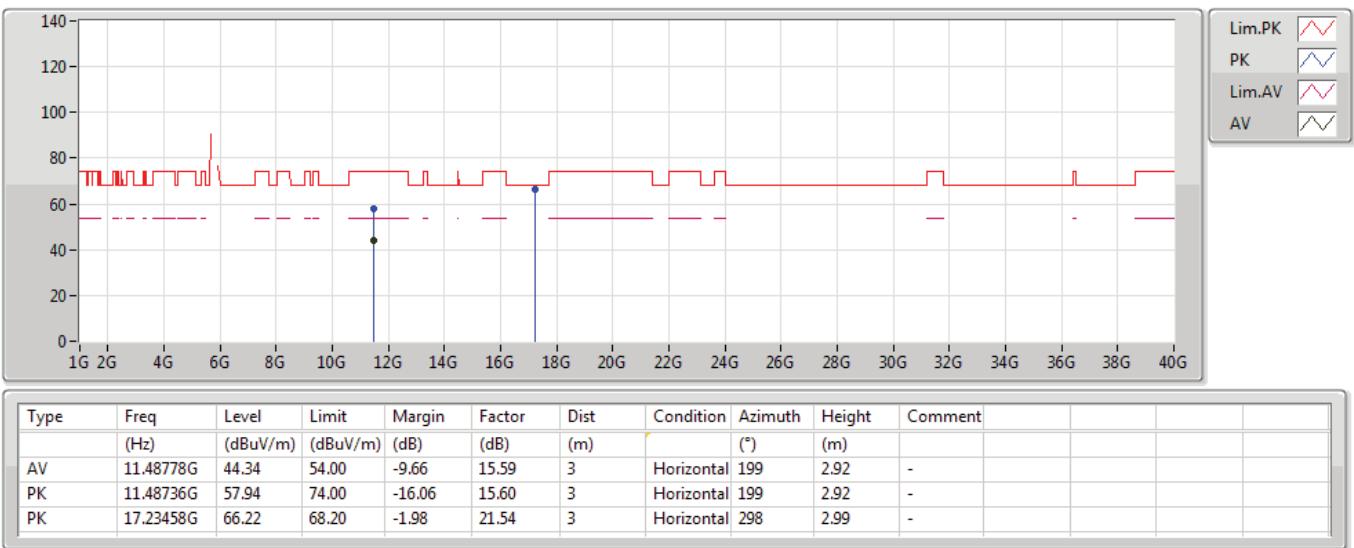
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5745MHz_TX


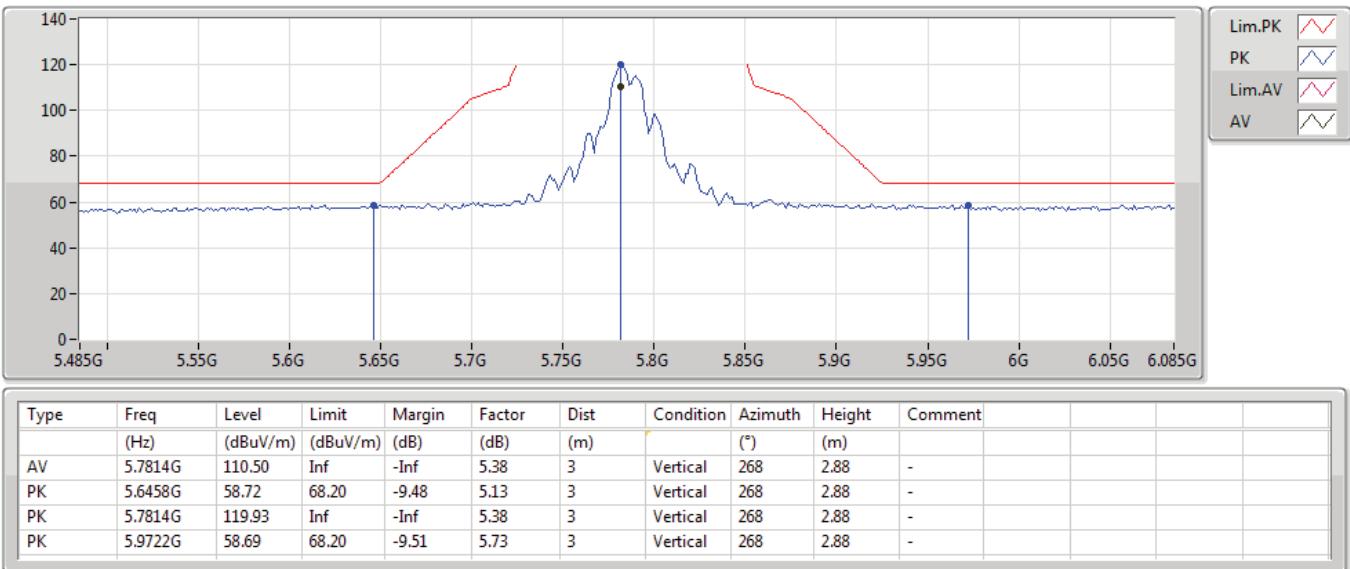
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5745MHz_TX


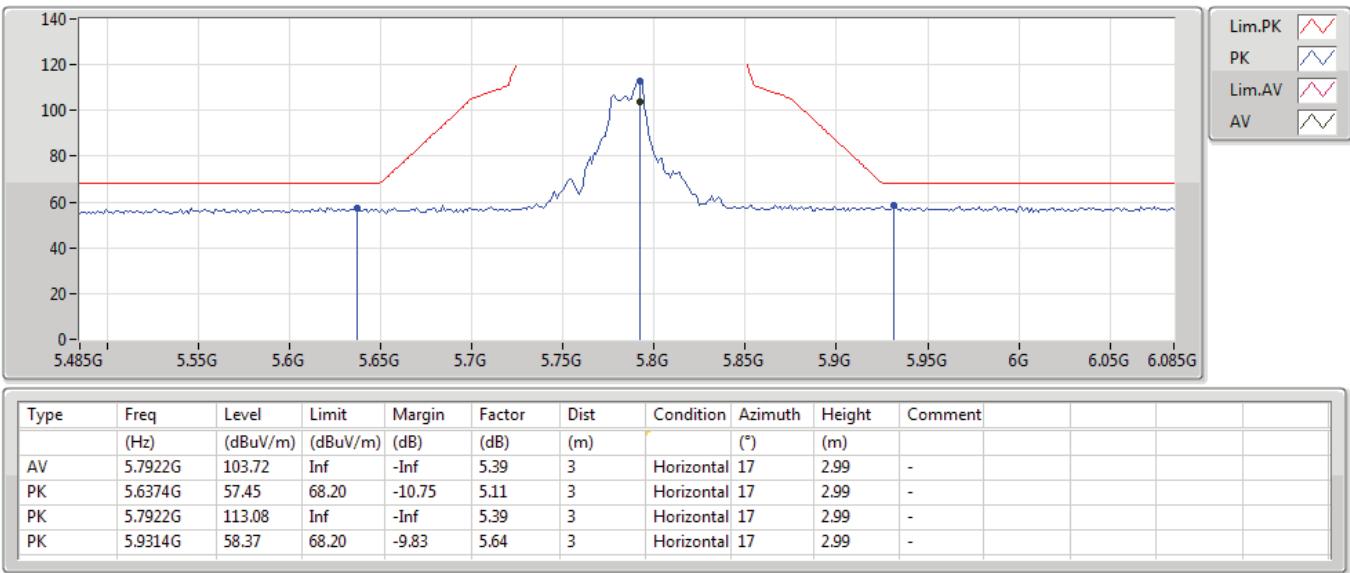
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5785MHz_TX


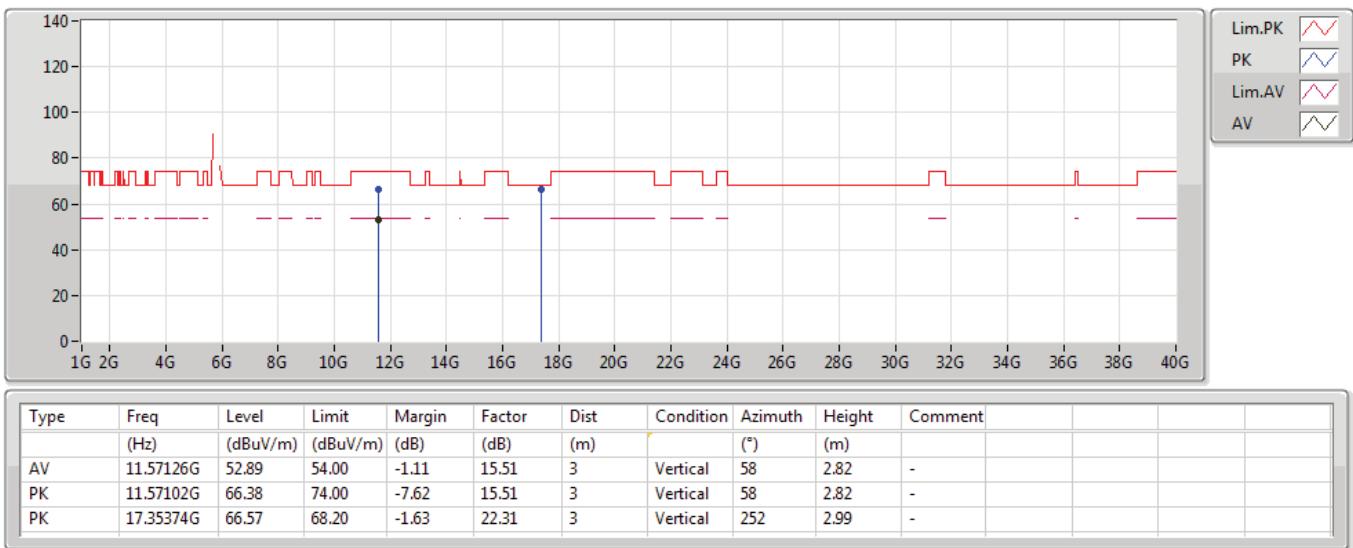
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5785MHz_TX


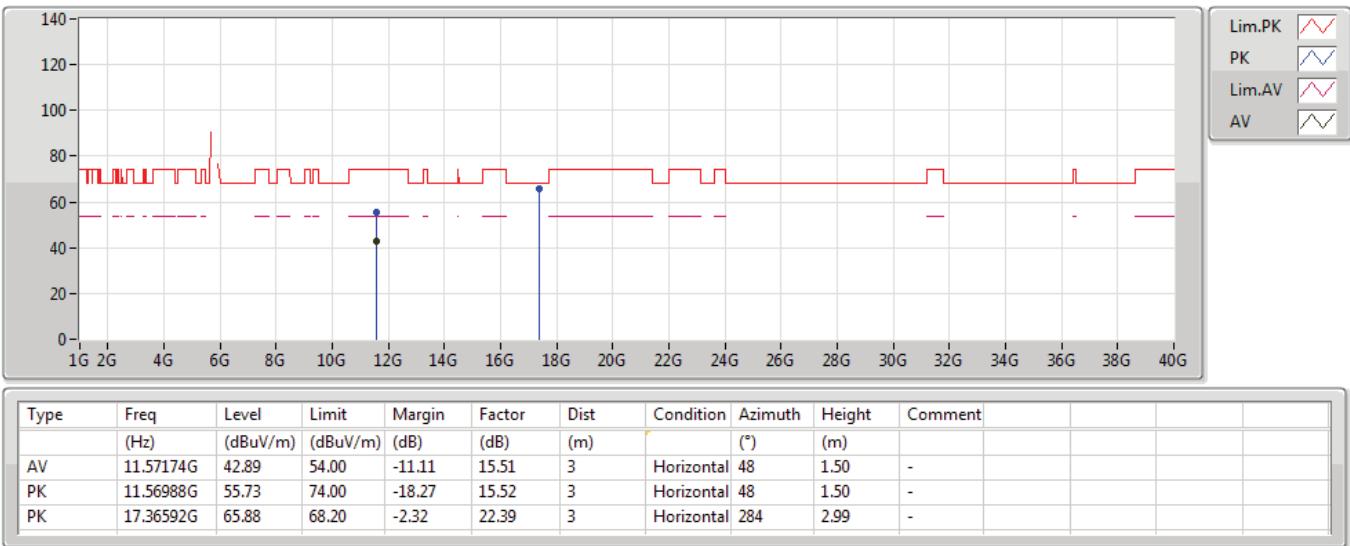
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5785MHz_TX


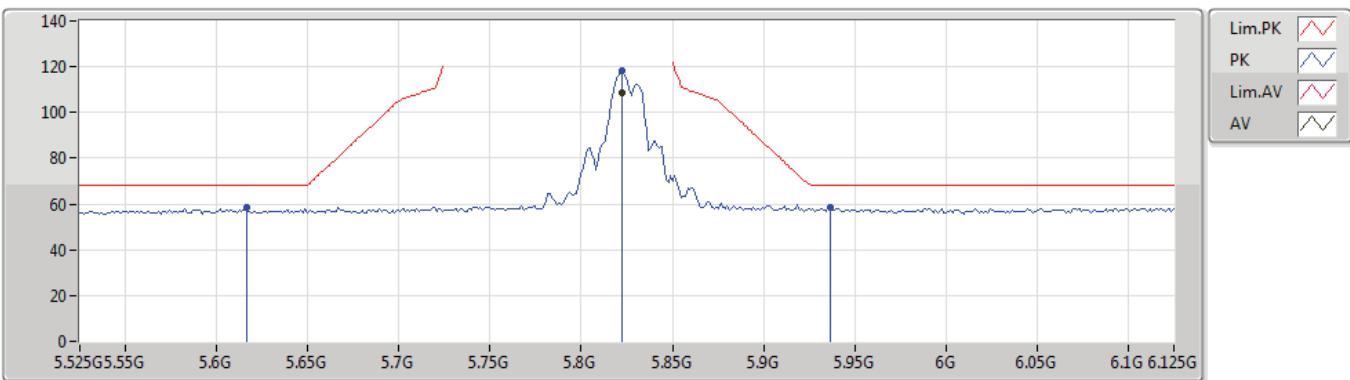
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5785MHz_TX


802.11a_Nss1,(6Mbps)_4TX

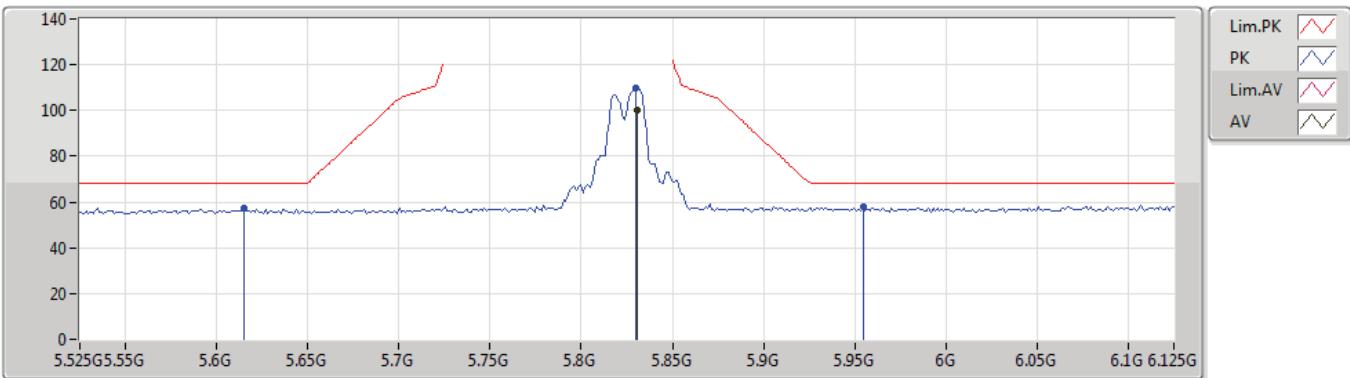
02/05/2019

5825MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.8226G	108.42	Inf	-Inf	5.45	3	Vertical	266	2.83	-		
PK	5.6162G	58.33	68.20	-9.87	5.08	3	Vertical	266	2.83	-		
PK	5.8226G	118.20	Inf	-Inf	5.45	3	Vertical	266	2.83	-		
PK	5.9366G	58.47	68.20	-9.73	5.66	3	Vertical	266	2.83	-		

802.11a_Nss1,(6Mbps)_4TX

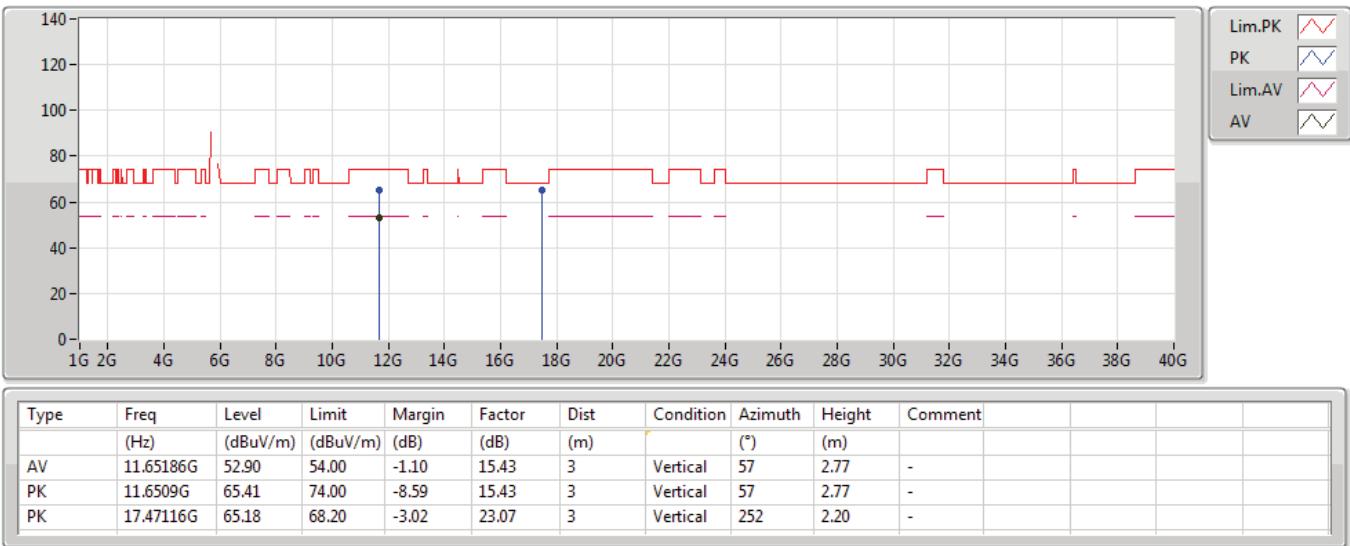
02/05/2019

5825MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.831G	100.18	Inf	-Inf	5.46	3	Horizontal	163	2.55	-		
PK	5.615G	57.21	68.20	-10.99	5.08	3	Horizontal	163	2.55	-		
PK	5.8298G	110.10	Inf	-Inf	5.46	3	Horizontal	163	2.55	-		
PK	5.9546G	58.00	68.20	-10.20	5.70	3	Horizontal	163	2.55	-		

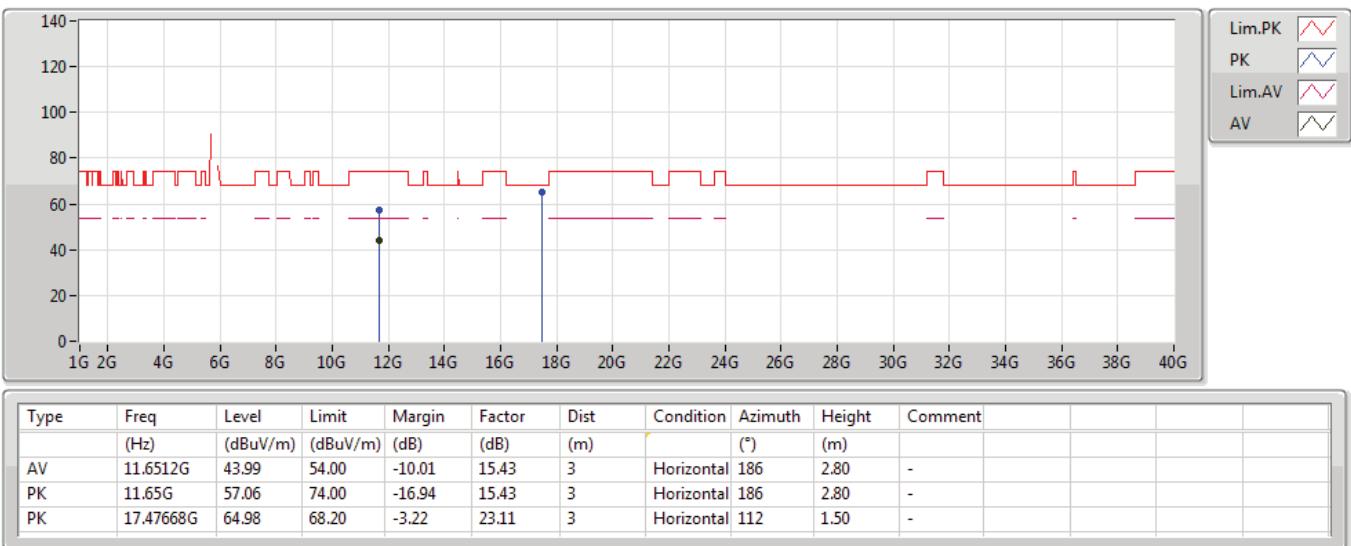
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5825MHz_TX


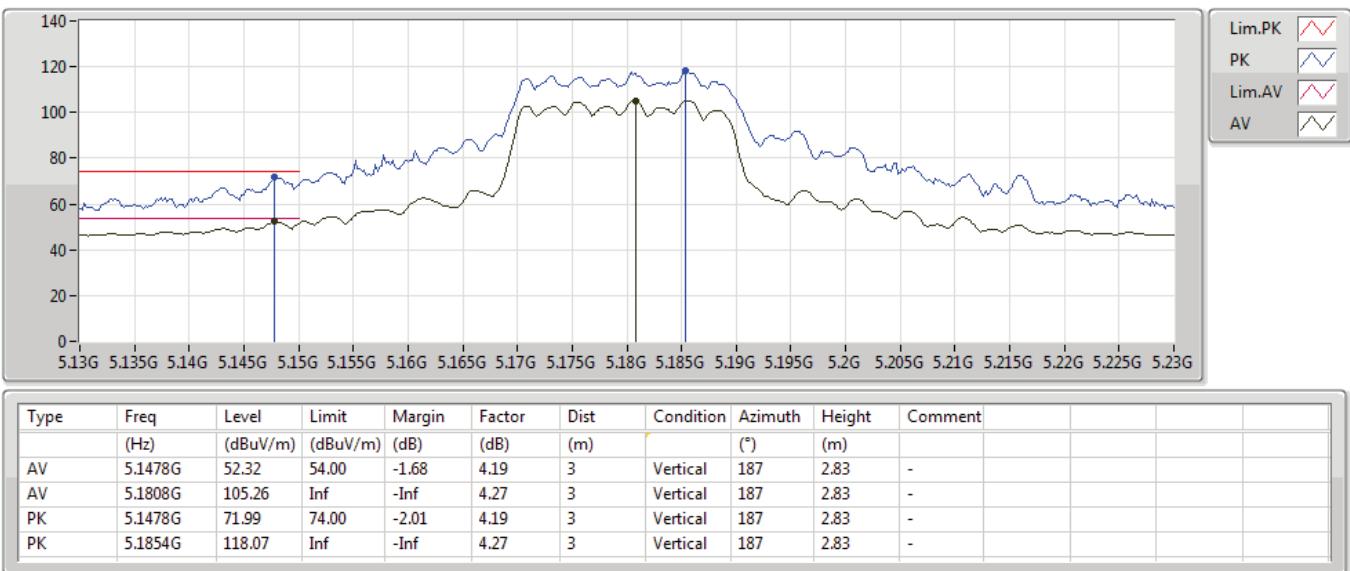
802.11a_Nss1,(6Mbps)_4TX

02/05/2019

5825MHz_TX


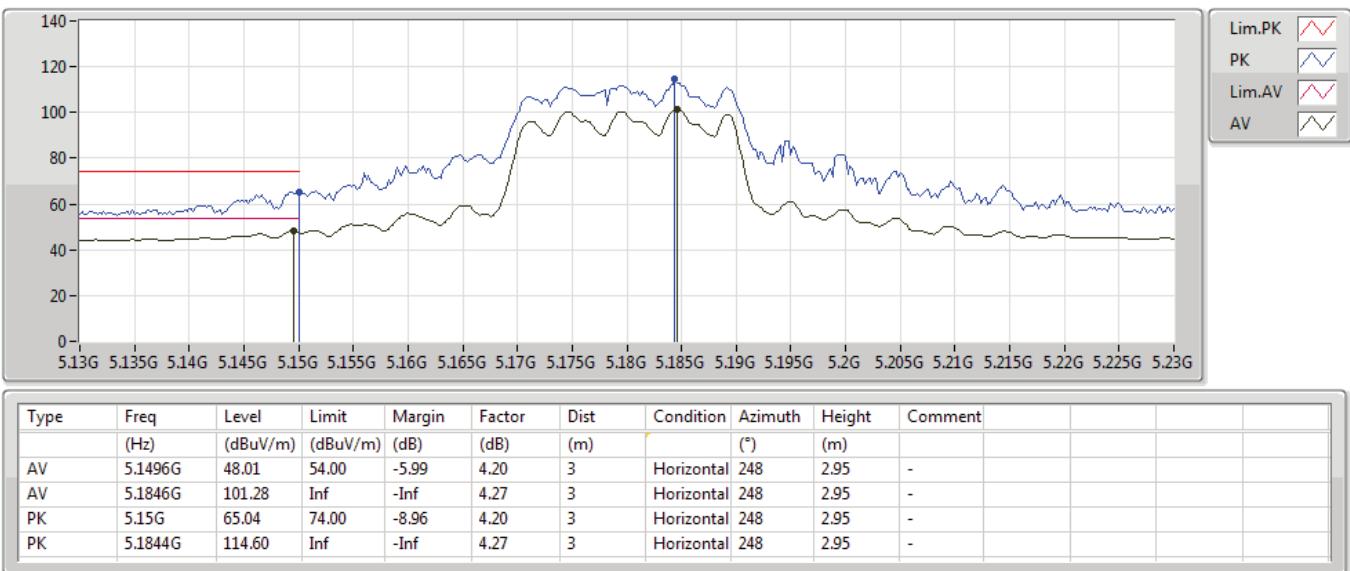
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5180MHz_TX


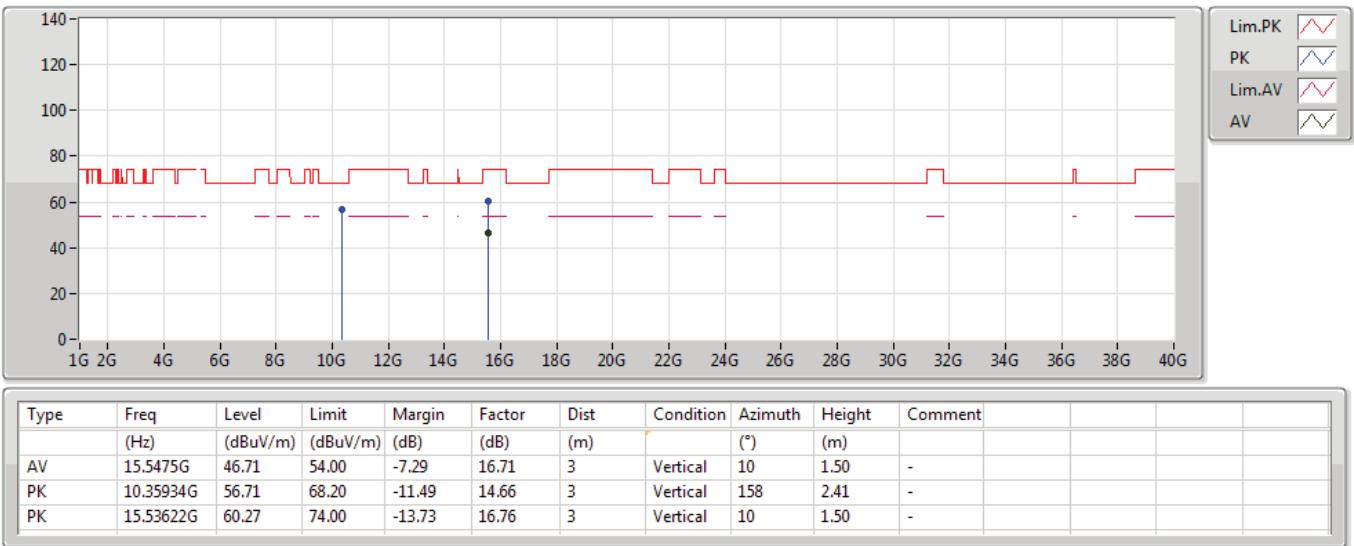
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5180MHz_TX


802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

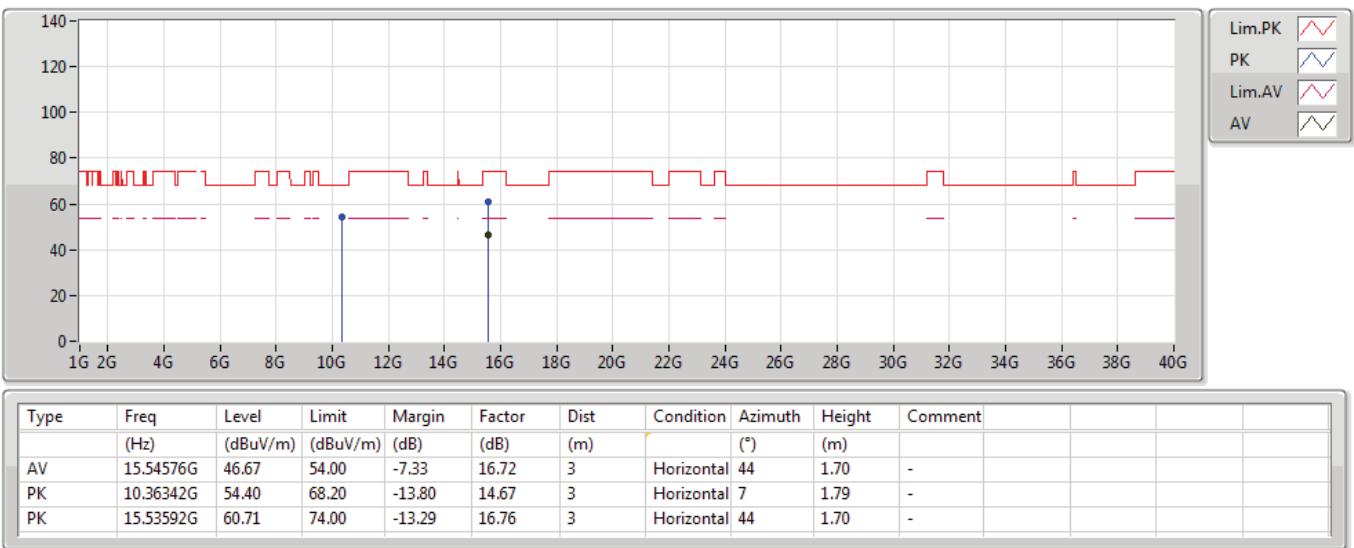
5180MHz_TX




802.11ax HEW20_Nss1,(MCS0)_4TX

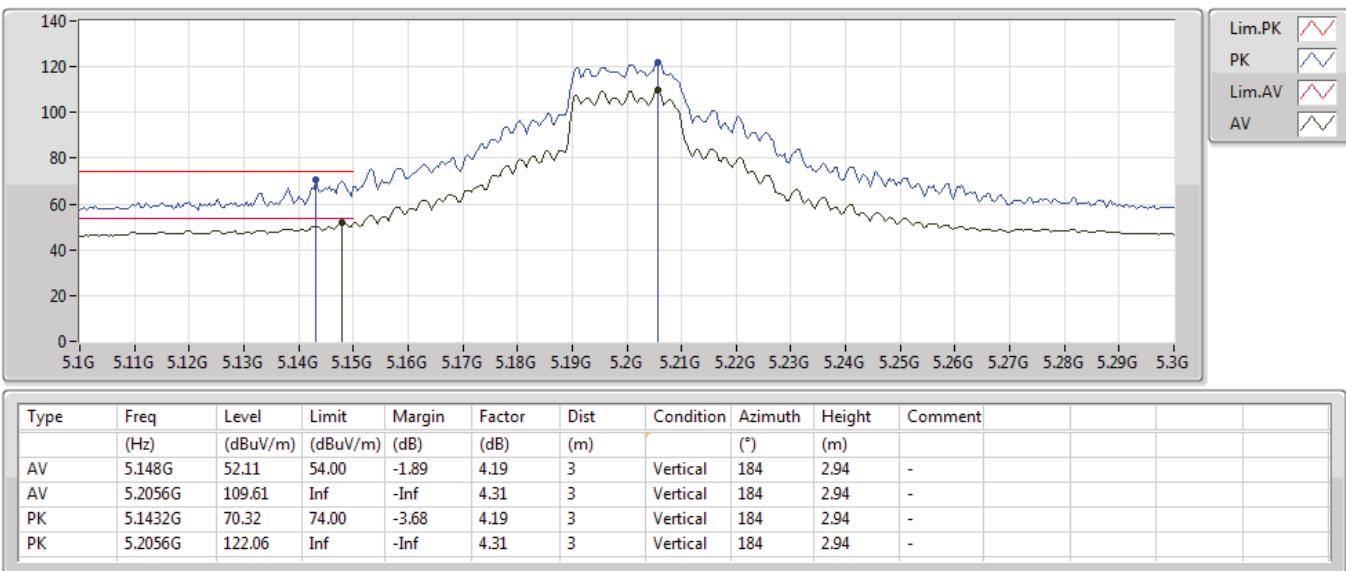
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5180MHz_TX



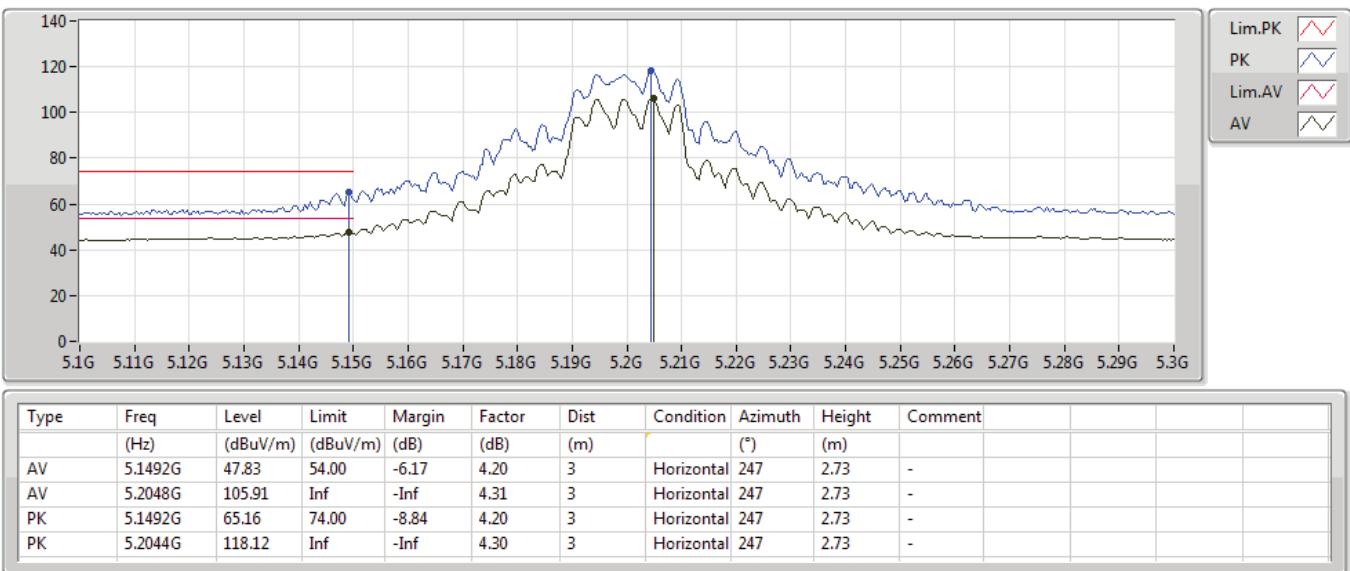
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5200MHz_TX


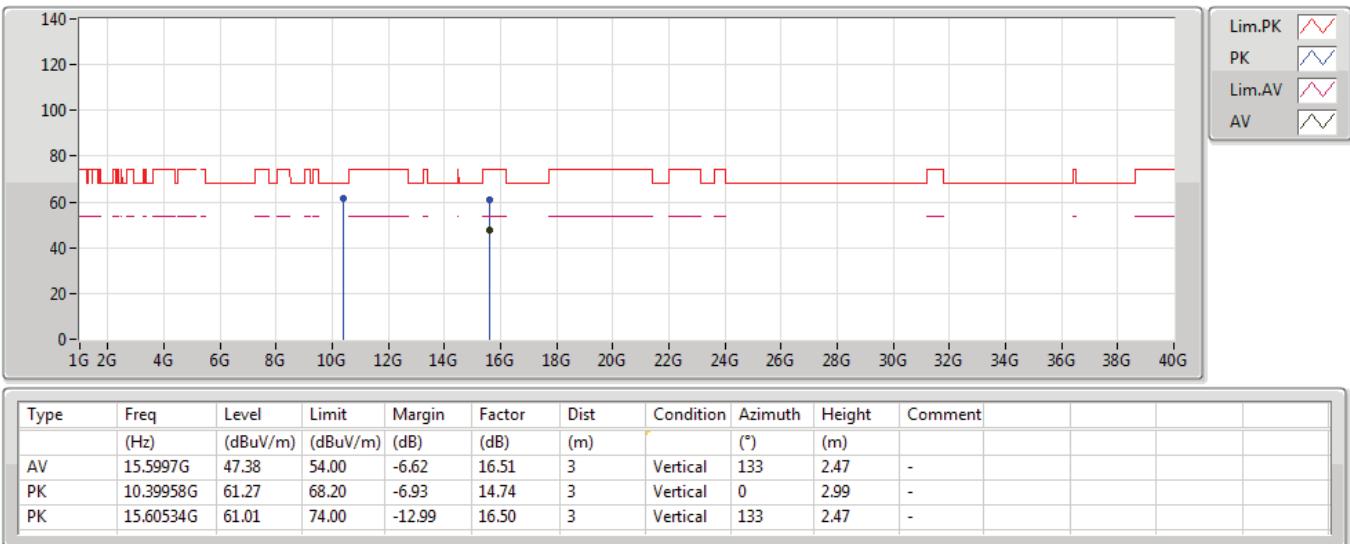
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02/05/2019

5200MHz_TX


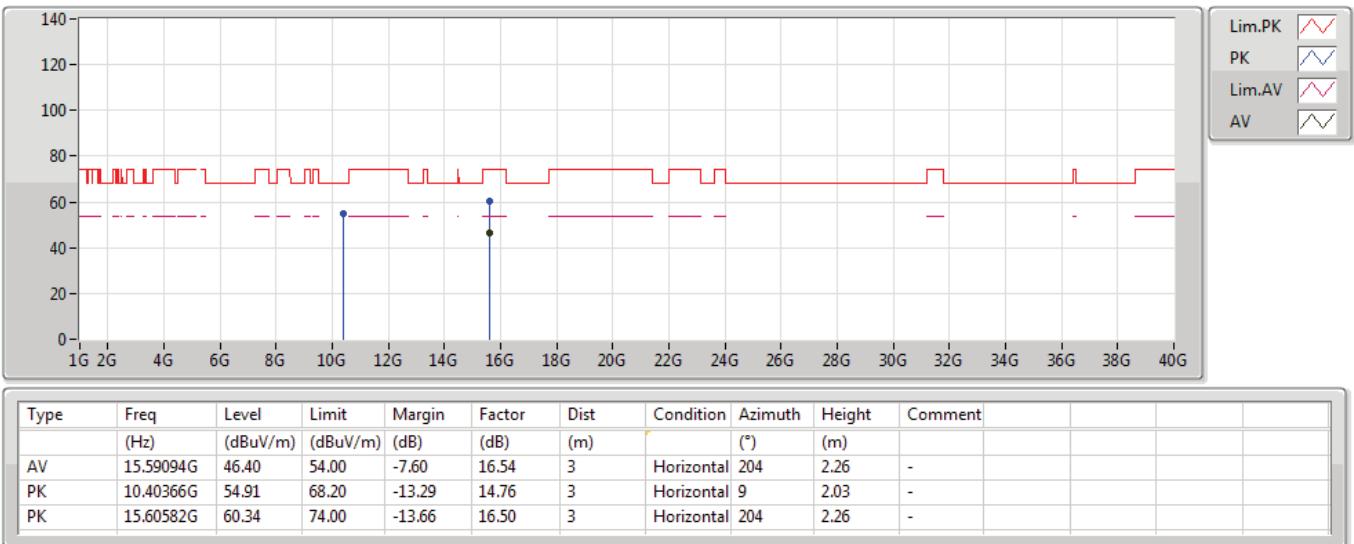
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5200MHz_TX


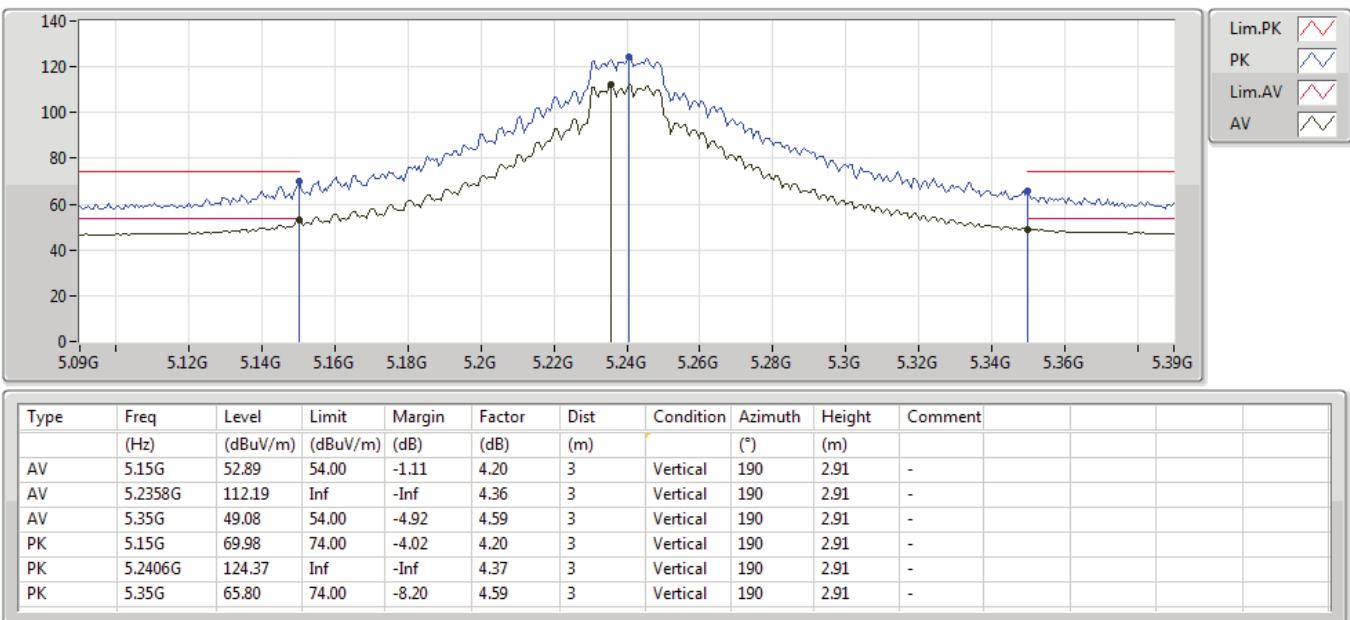
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5200MHz_TX


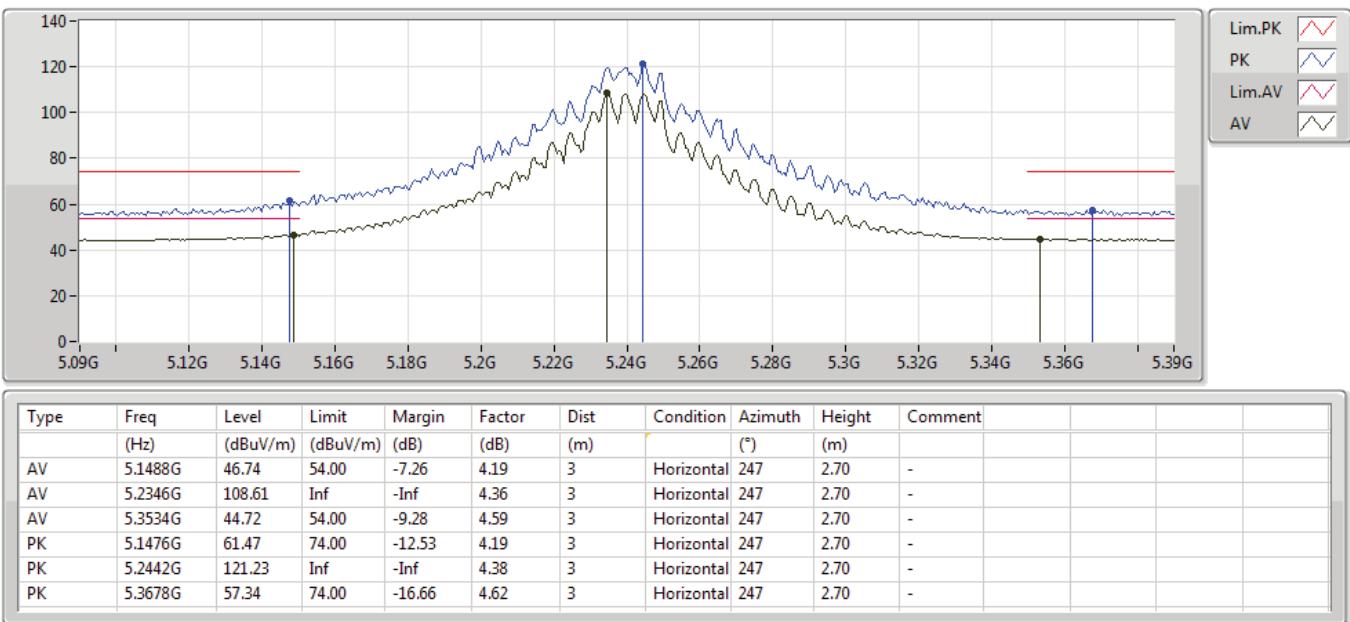
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5240MHz_TX


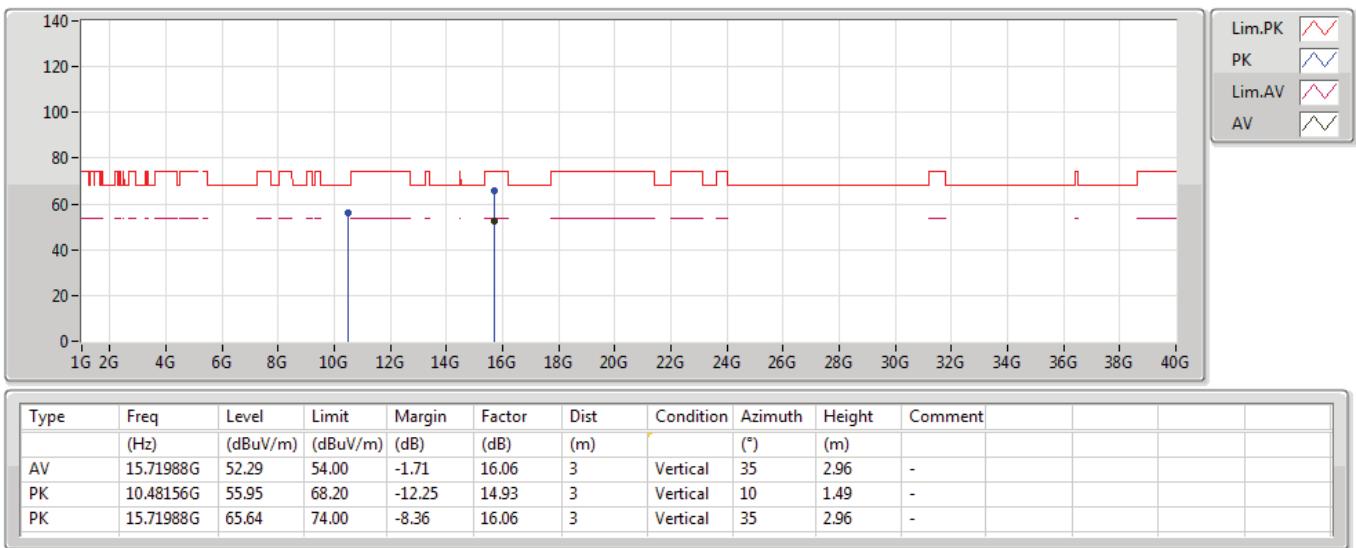
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5240MHz_TX


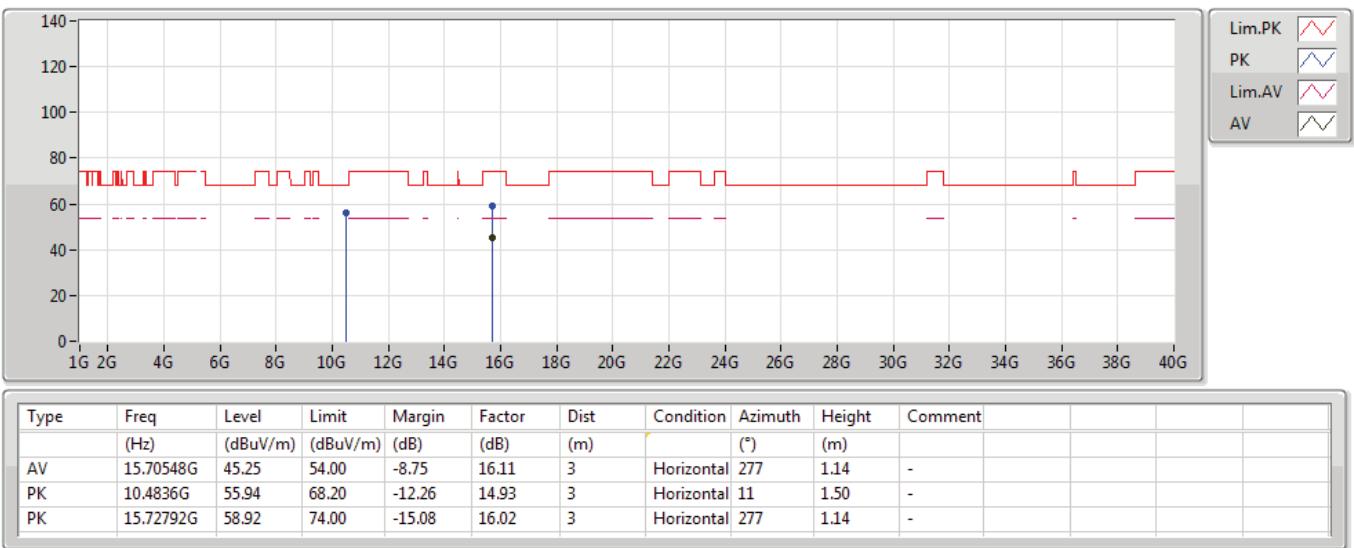
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5240MHz_TX


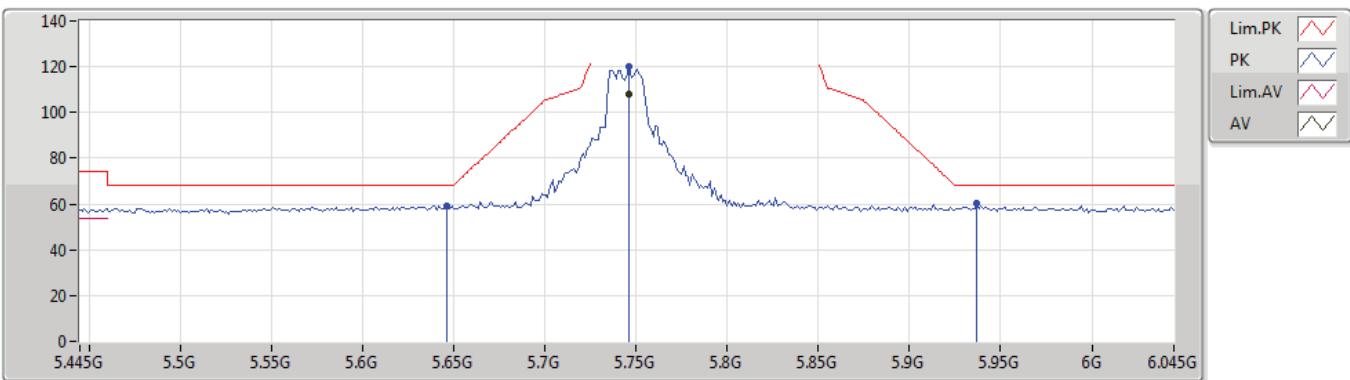
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5240MHz_TX


802.11ax HEW20_Nss1,(MCS0)_4TX

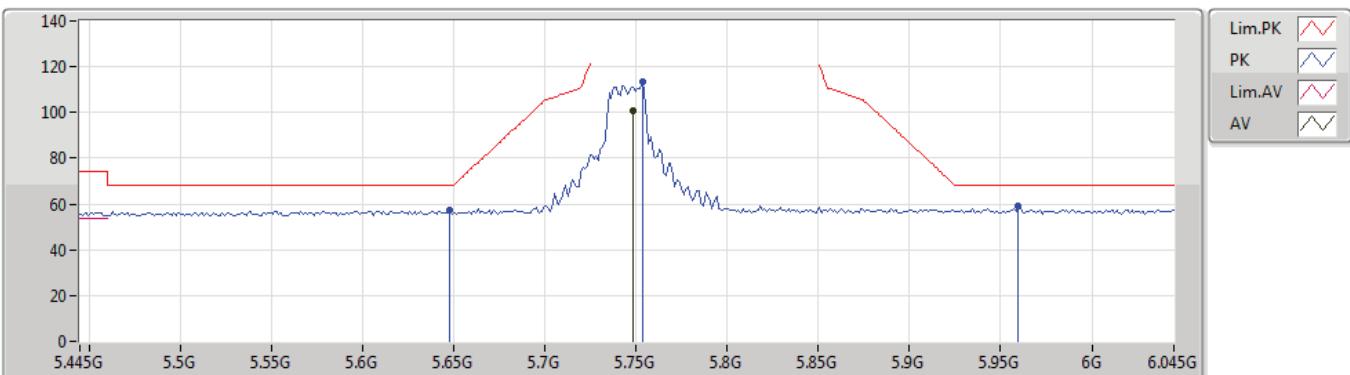
02/05/2019

5745MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.7462G	108.11	Inf	-Inf	5.31	3	Vertical	170	2.99	-		
PK	5.6466G	59.12	68.20	-9.08	5.14	3	Vertical	170	2.99	-		
PK	5.7462G	120.38	Inf	-Inf	5.31	3	Vertical	170	2.99	-		
PK	5.937G	60.08	68.20	-8.12	5.66	3	Vertical	170	2.99	-		

802.11ax HEW20_Nss1,(MCS0)_4TX

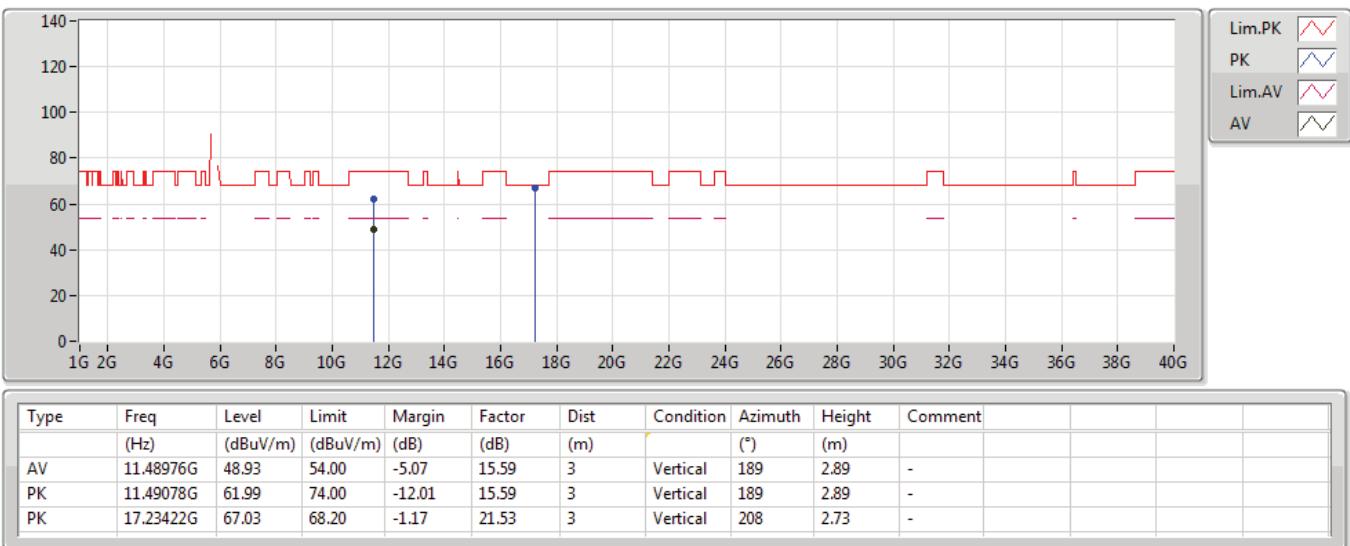
02/05/2019

5745MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.7486G	100.91	Inf	-Inf	5.33	3	Horizontal	19	2.75	-		
PK	5.6478G	57.06	68.20	-11.14	5.14	3	Horizontal	19	2.75	-		
PK	5.7534G	113.71	Inf	-Inf	5.32	3	Horizontal	19	2.75	-		
PK	5.9598G	58.95	68.20	-9.25	5.70	3	Horizontal	19	2.75	-		

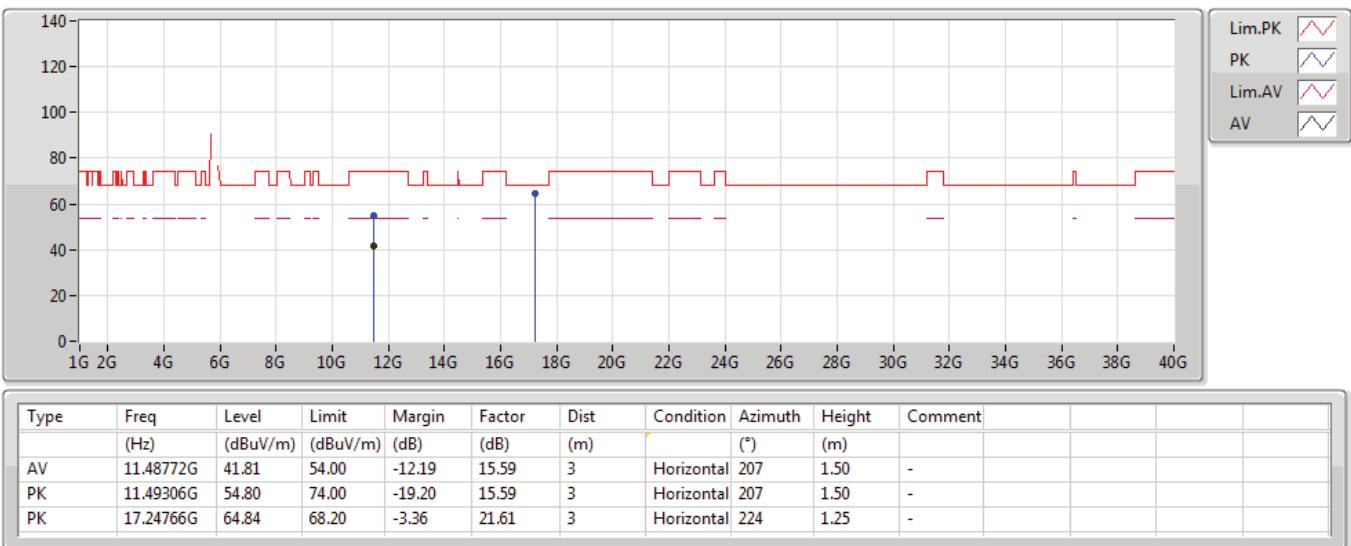
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5745MHz_TX


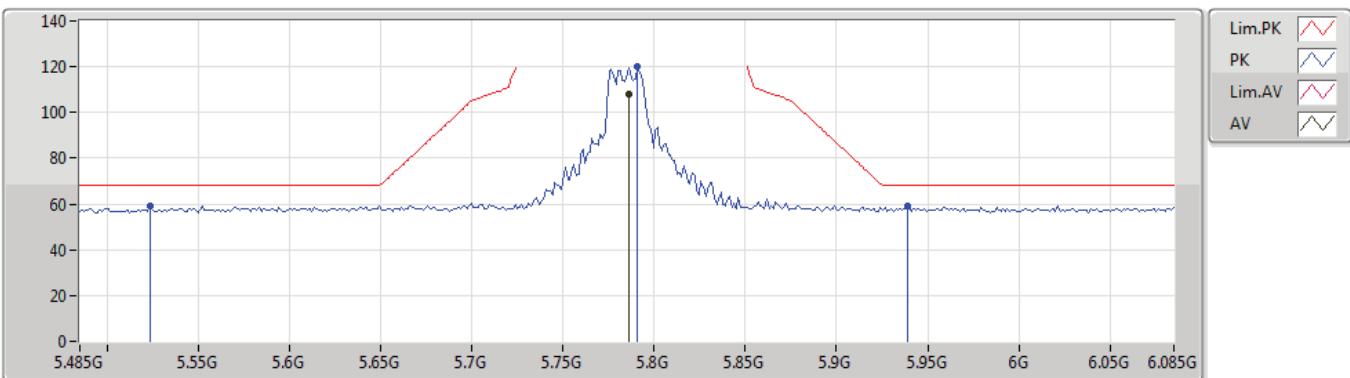
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5745MHz_TX


802.11ax HEW20_Nss1,(MCS0)_4TX

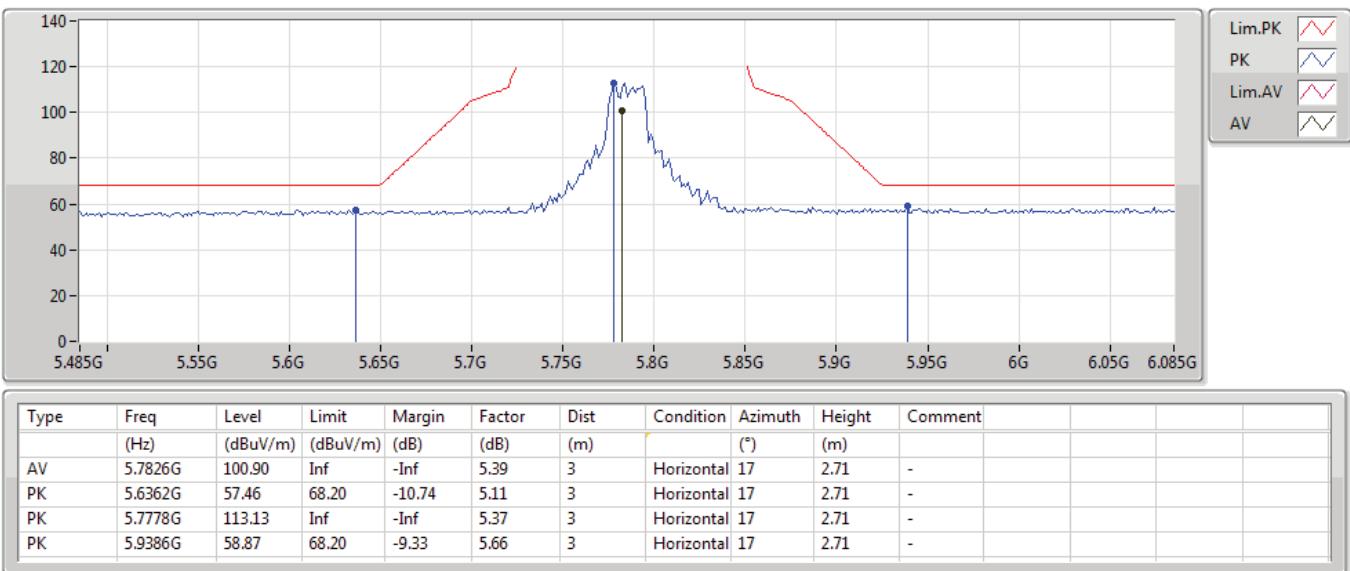
02/05/2019

5785MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.7862G	108.04	Inf	-Inf	5.38	3	Vertical	173	2.90	-		
PK	5.5234G	58.92	68.20	-9.28	4.91	3	Vertical	173	2.90	-		
PK	5.791G	120.22	Inf	-Inf	5.39	3	Vertical	173	2.90	-		
PK	5.9386G	59.35	68.20	-8.85	5.66	3	Vertical	173	2.90	-		

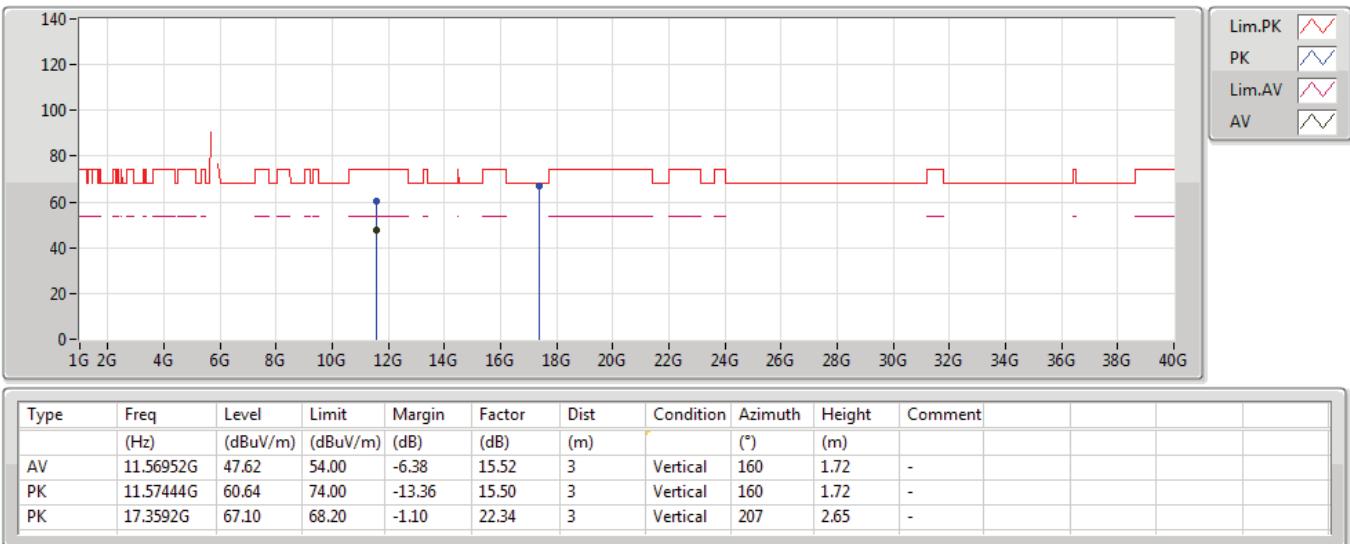
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5785MHz_TX


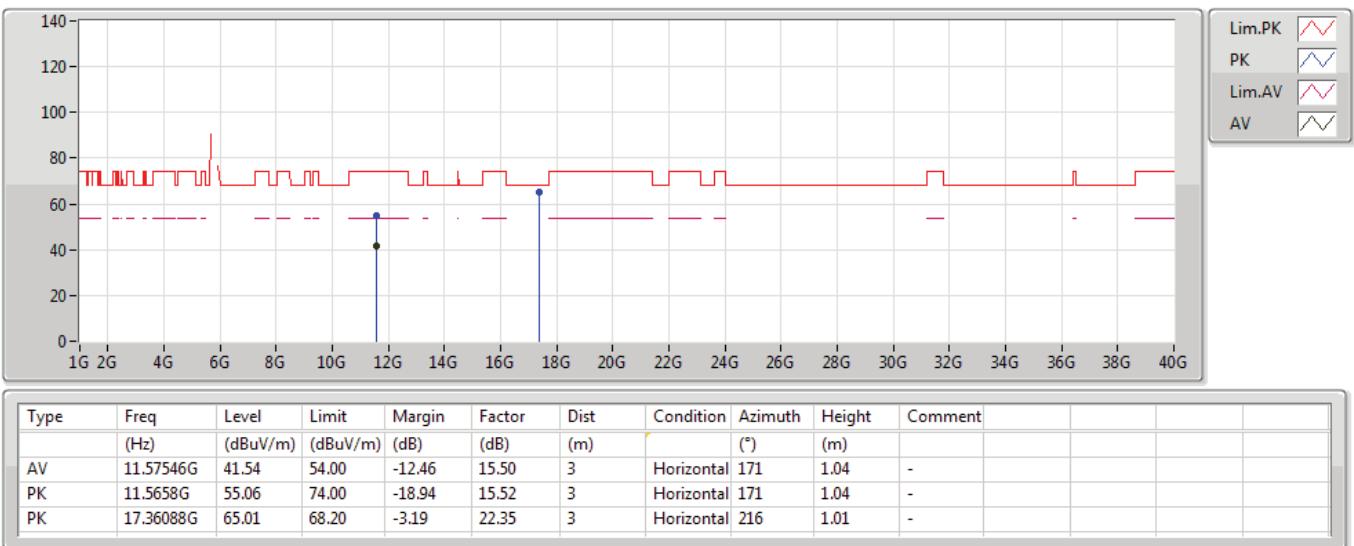
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5785MHz_TX


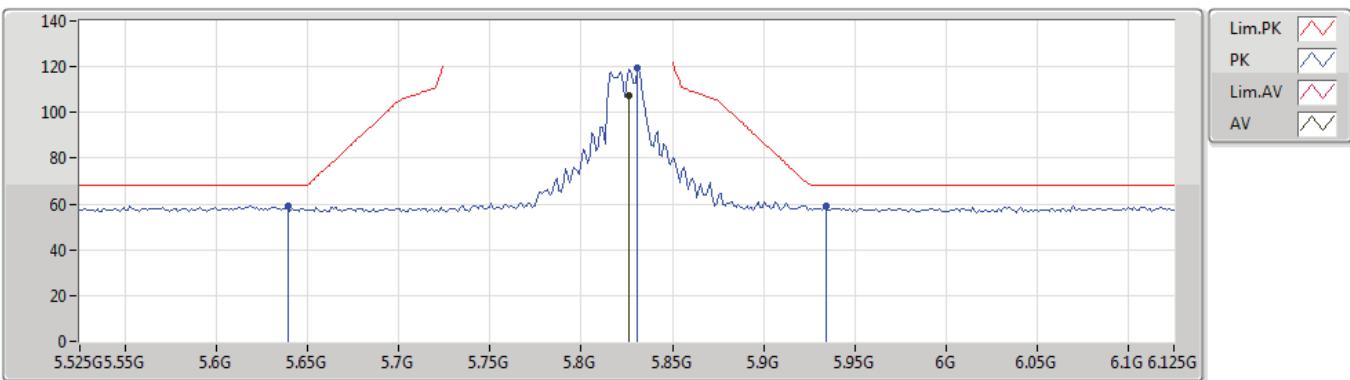
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5785MHz_TX


802.11ax HEW20_Nss1,(MCS0)_4TX

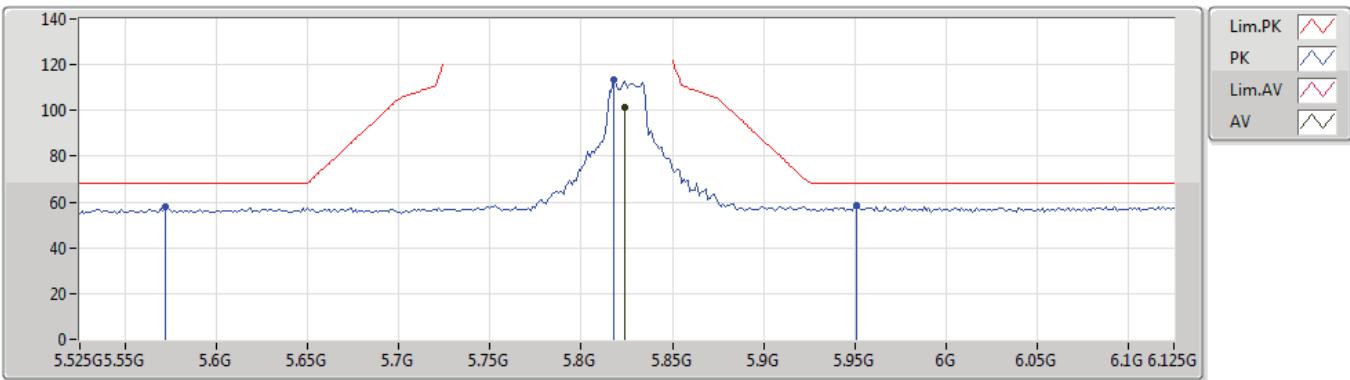
02/05/2019

5825MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.8262G	107.56	Inf	-Inf	5.46	3	Vertical	179	2.66	-		
PK	5.639G	58.99	68.20	-9.21	5.12	3	Vertical	179	2.66	-		
PK	5.831G	119.26	Inf	-Inf	5.46	3	Vertical	179	2.66	-		
PK	5.9342G	58.87	68.20	-9.33	5.66	3	Vertical	179	2.66	-		

802.11ax HEW20_Nss1,(MCS0)_4TX

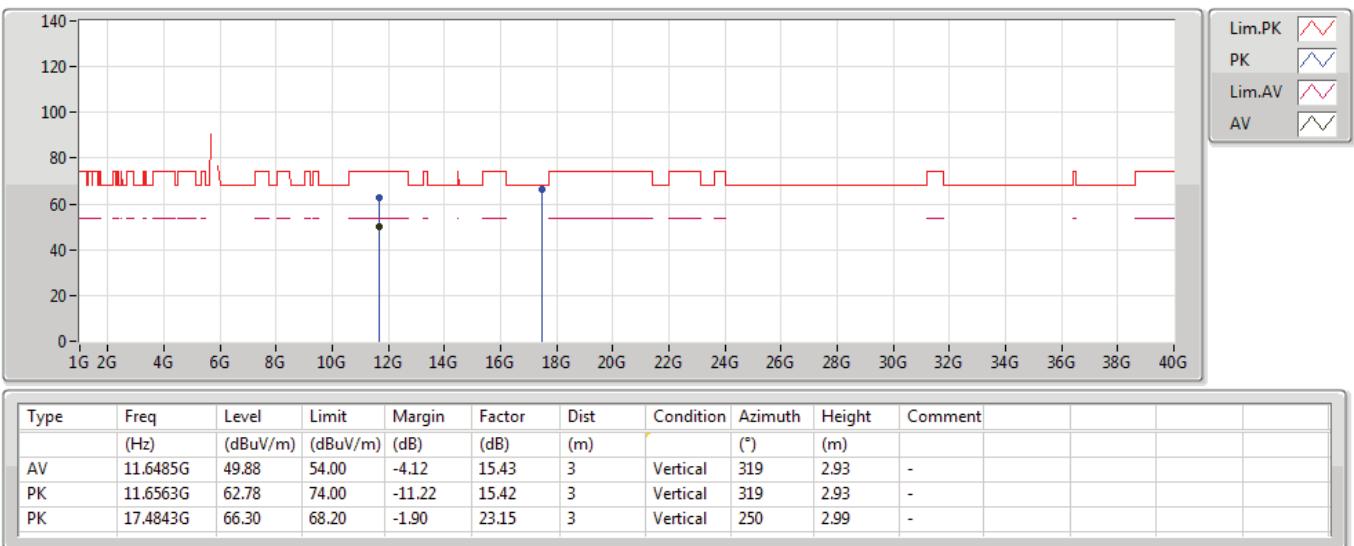
02/05/2019

5825MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.8238G	101.12	Inf	-Inf	5.45	3	Horizontal	17	2.51	-		
PK	5.8178G	57.66	68.20	-10.54	5.00	3	Horizontal	17	2.51	-		
PK	5.8178G	113.24	Inf	-Inf	5.44	3	Horizontal	17	2.51	-		
PK	5.951G	58.34	68.20	-9.86	5.69	3	Horizontal	17	2.51	-		

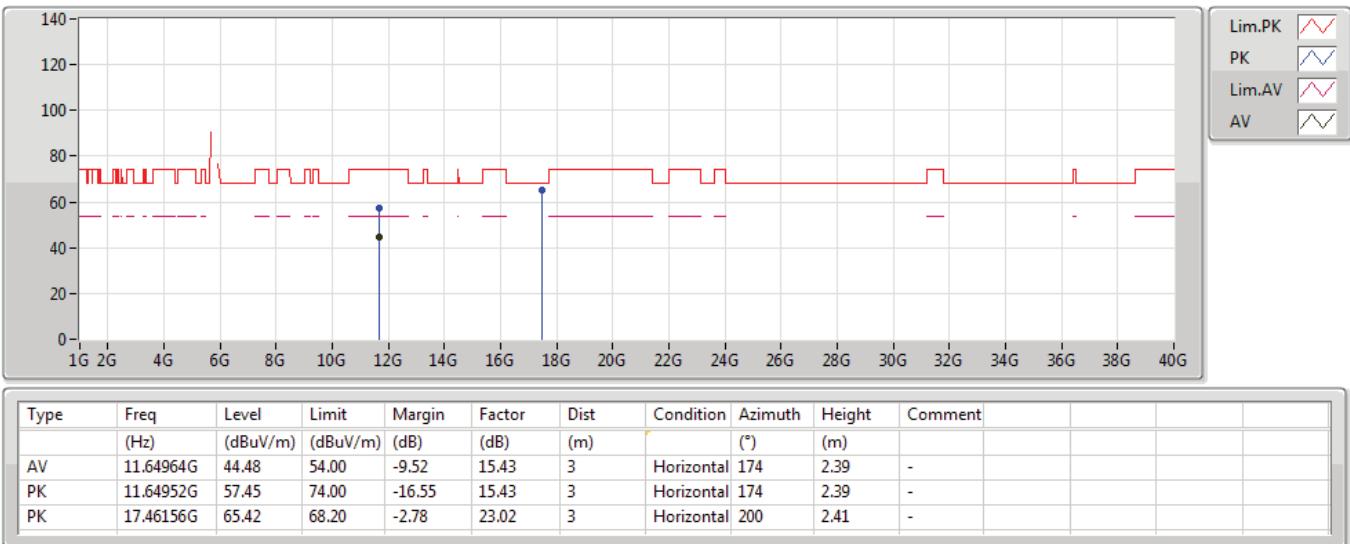
802.11ax HEW20_Nss1,(MCS0)_4TX

02/05/2019

5825MHz_TX


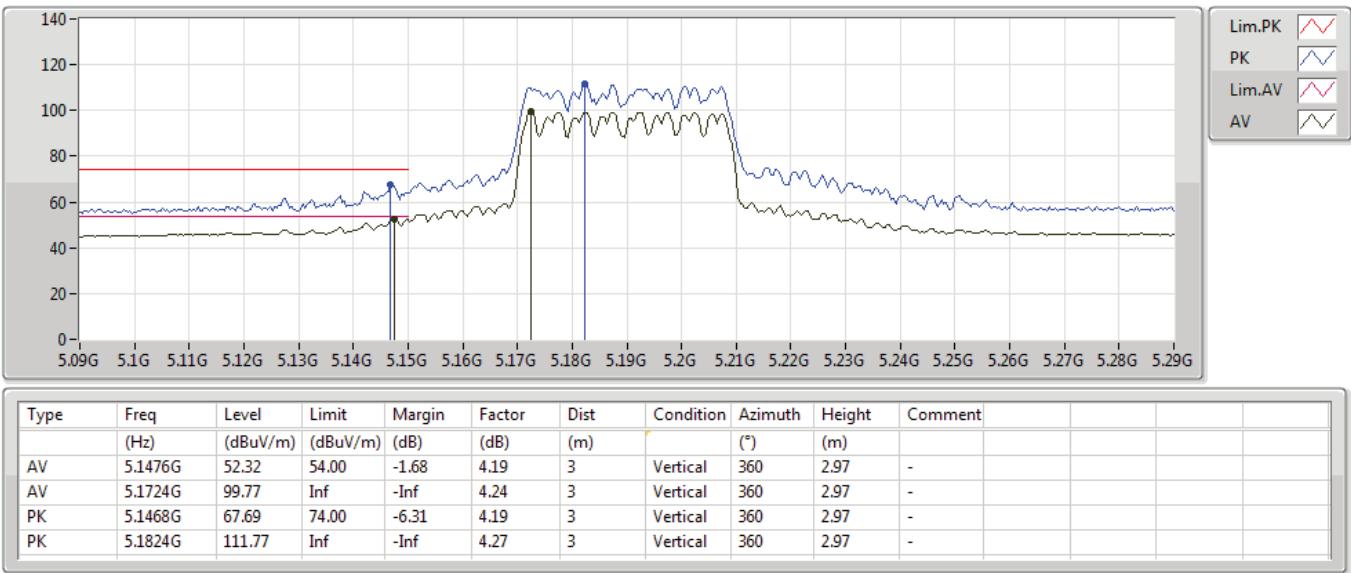
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02/05/2019

5825MHz_TX


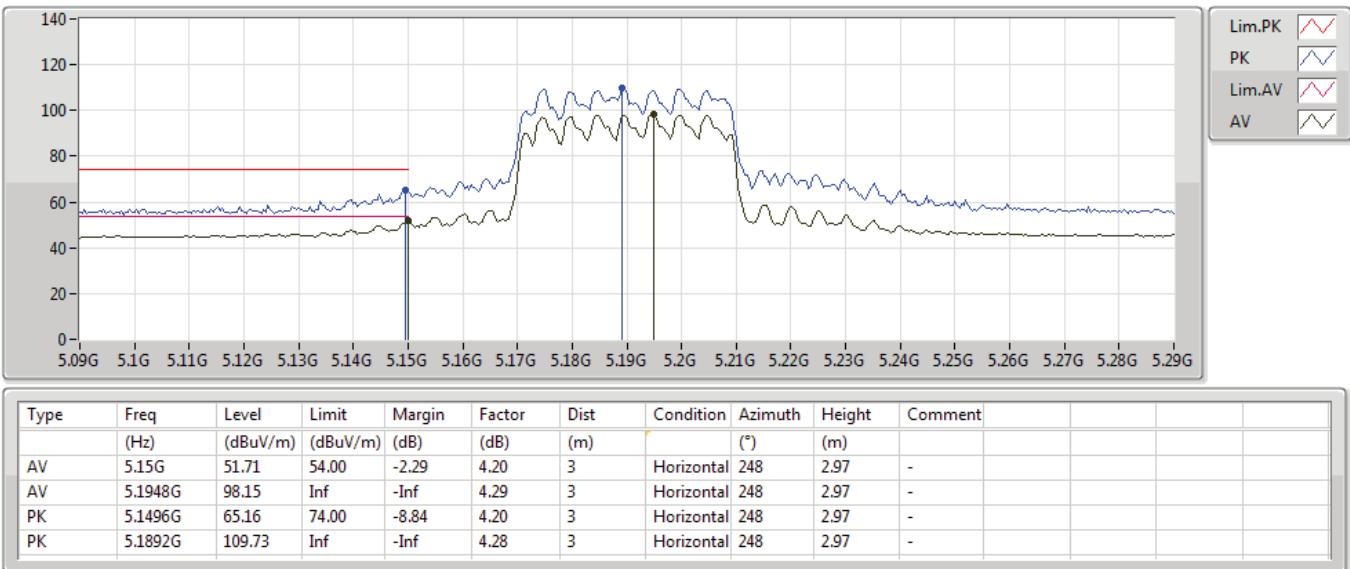
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5190MHz_TX


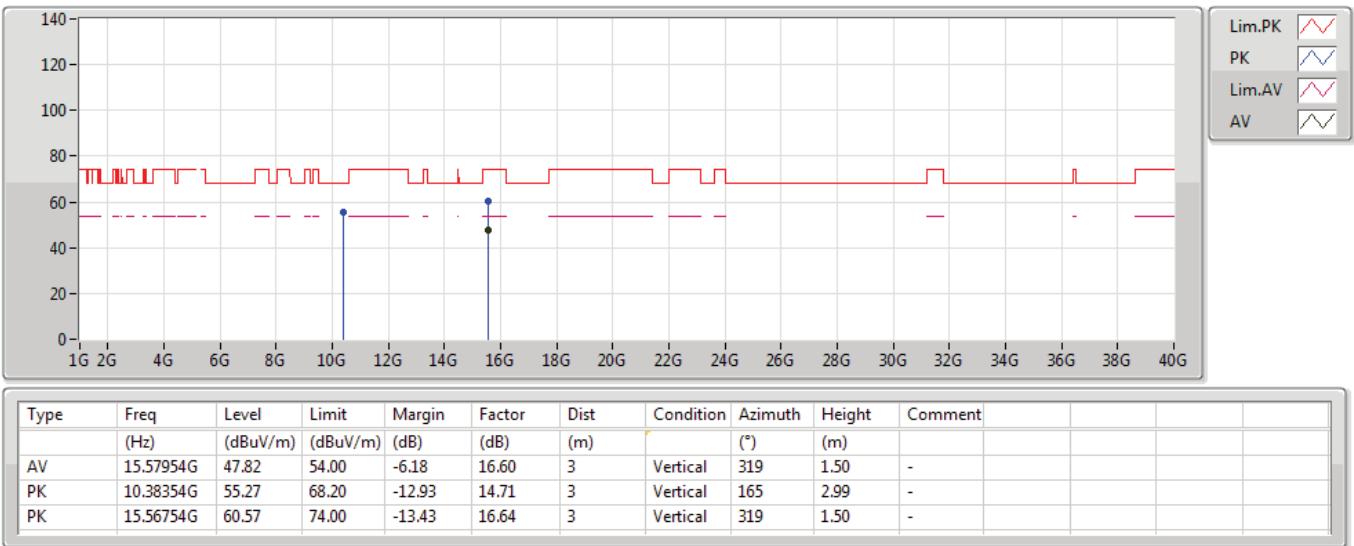
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5190MHz_TX


802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

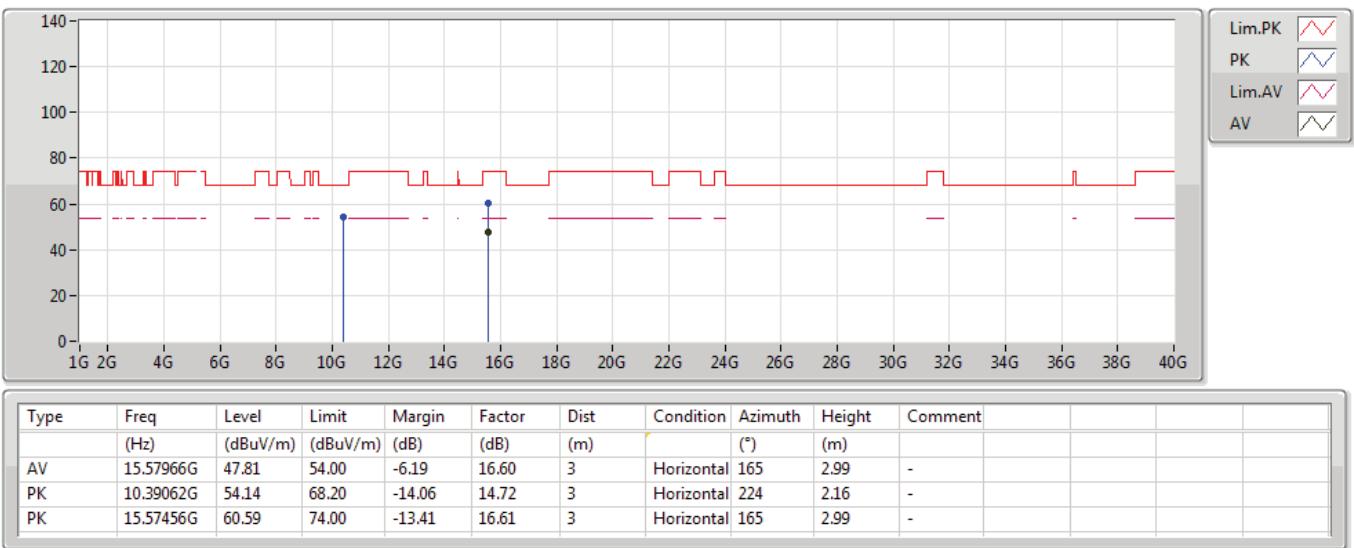
5190MHz_TX




802.11ax HEW40_Nss1,(MCS0)_4TX

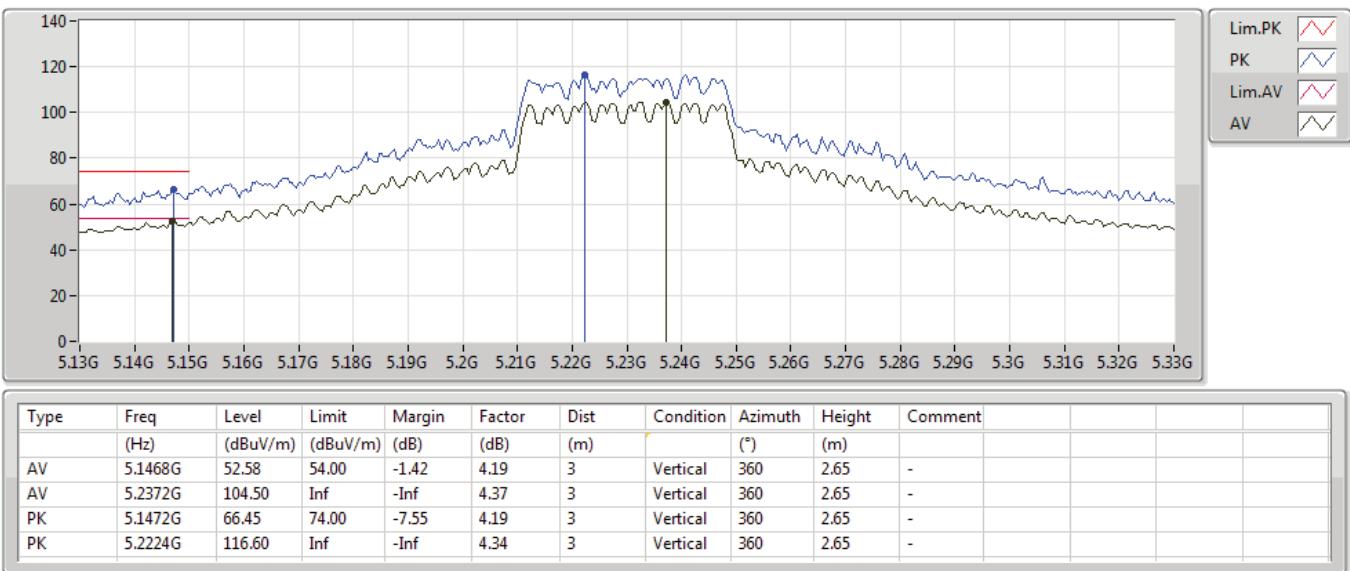
02/05/2019

5190MHz_TX



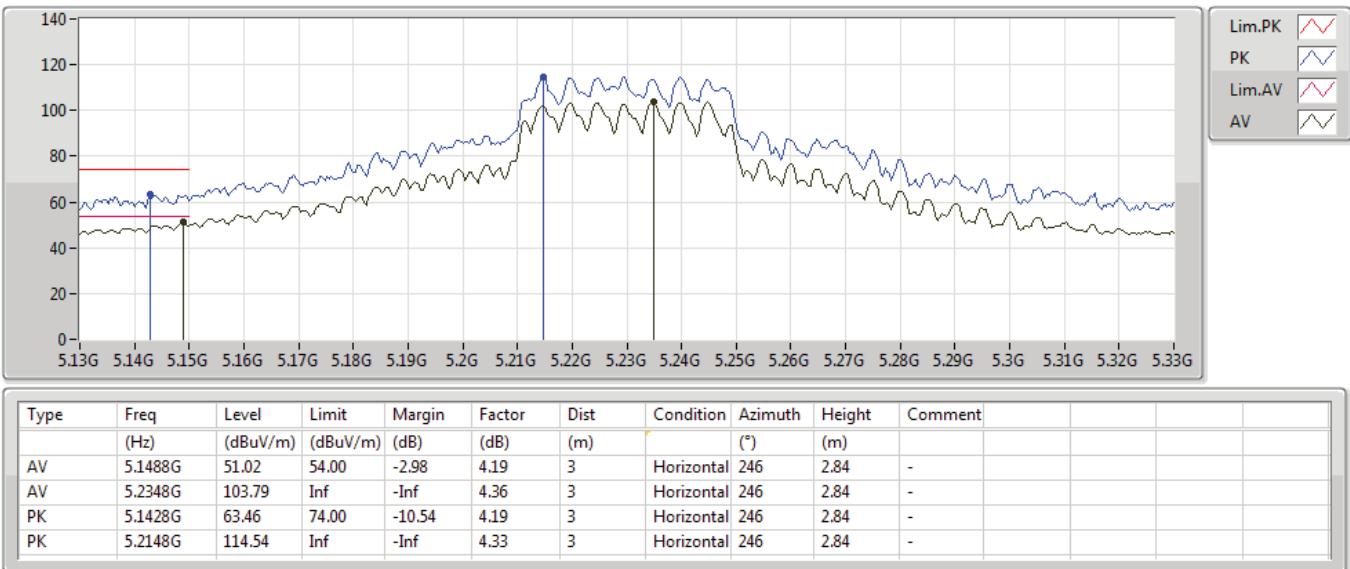
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5230MHz_TX


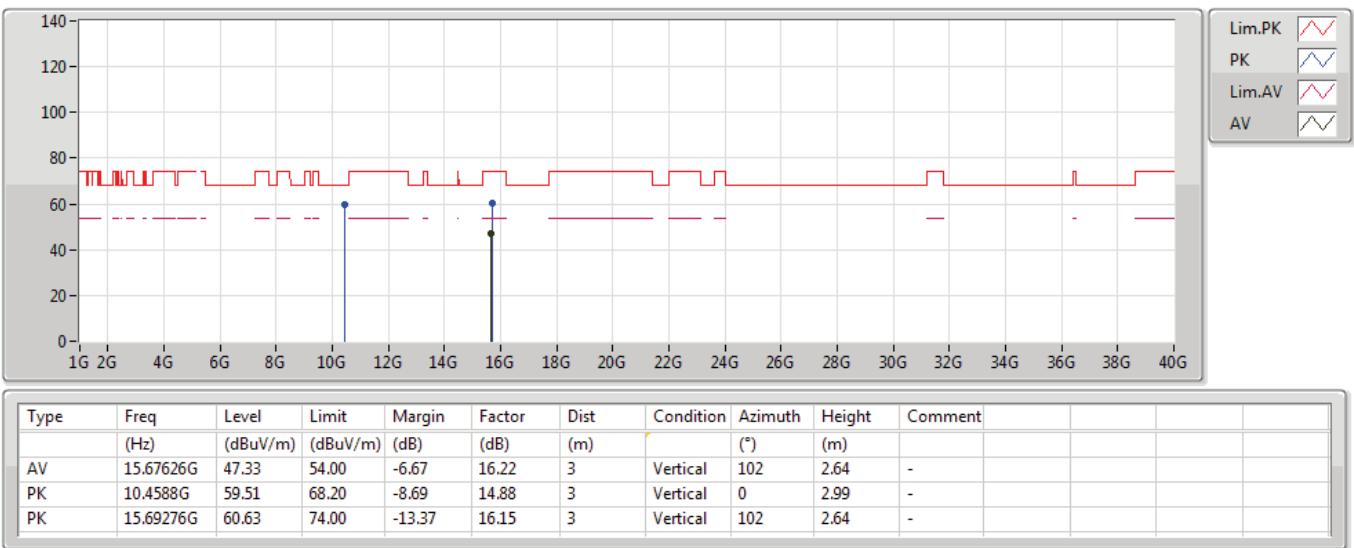
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5230MHz_TX


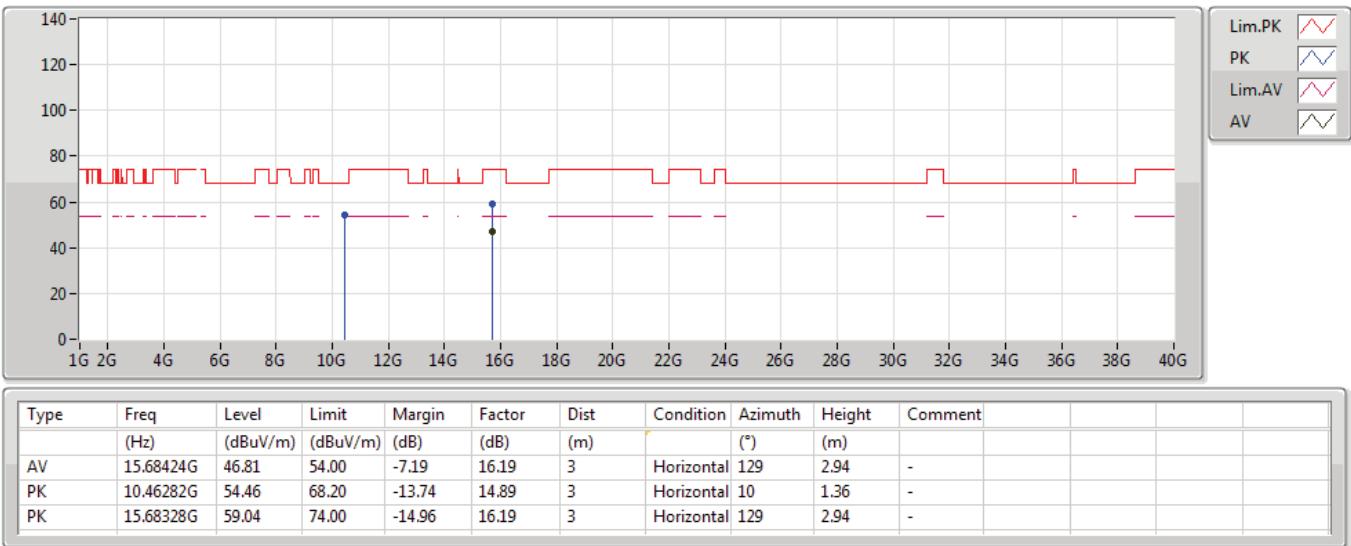
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5230MHz_TX


802.11ax HEW40_Nss1,(MCS0)_4TX

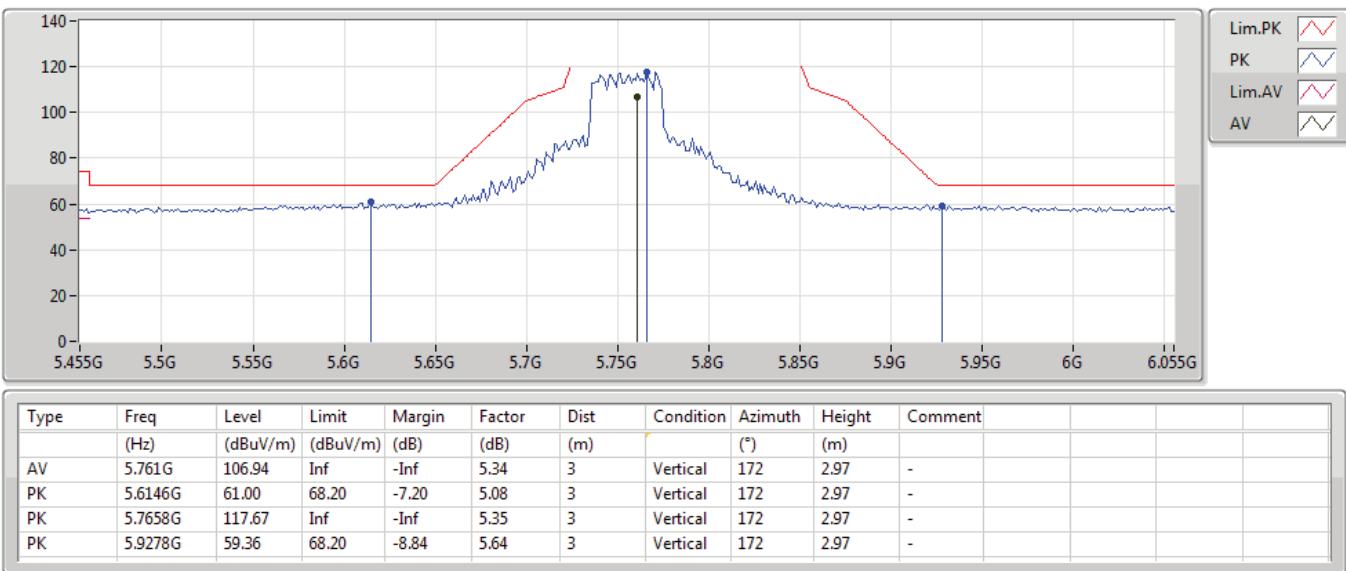
02/05/2019

5230MHz_TX


802.11ax HEW40_Nss1,(MCS0)_4TX

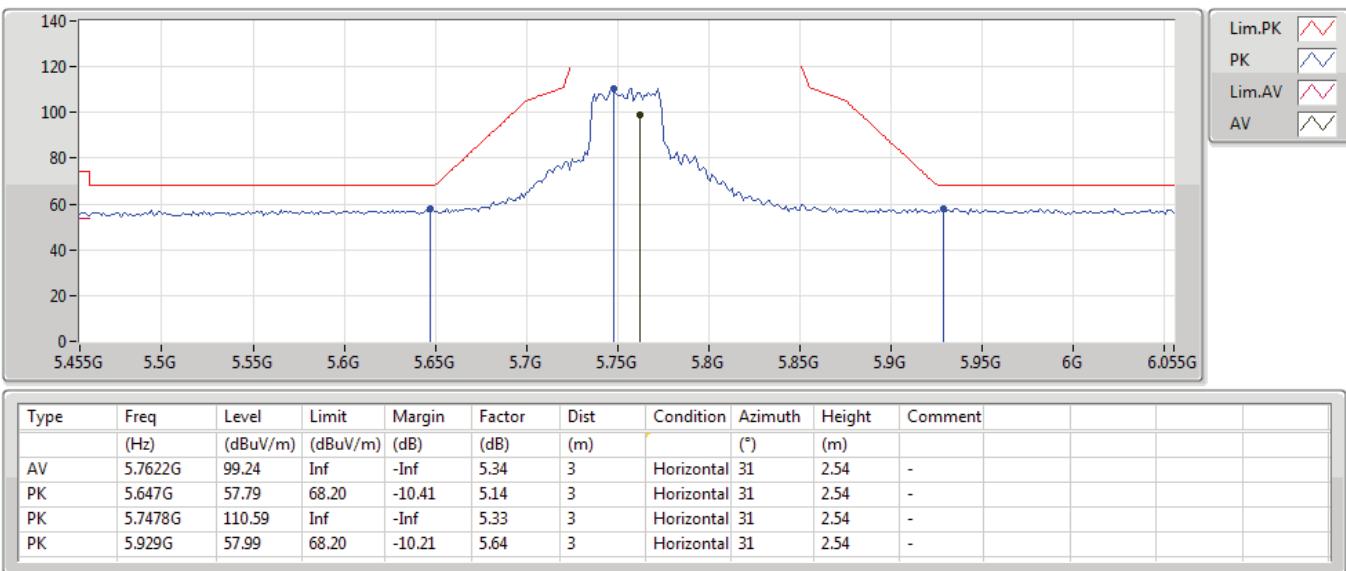
02/05/2019

5755MHz_TX



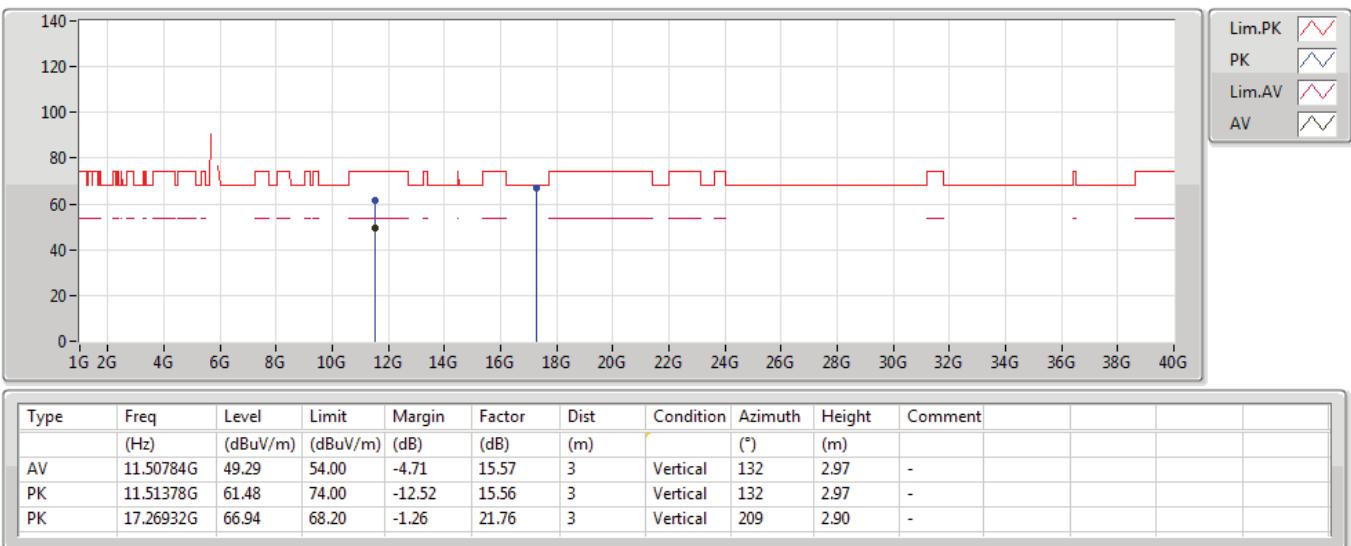
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5755MHz_TX


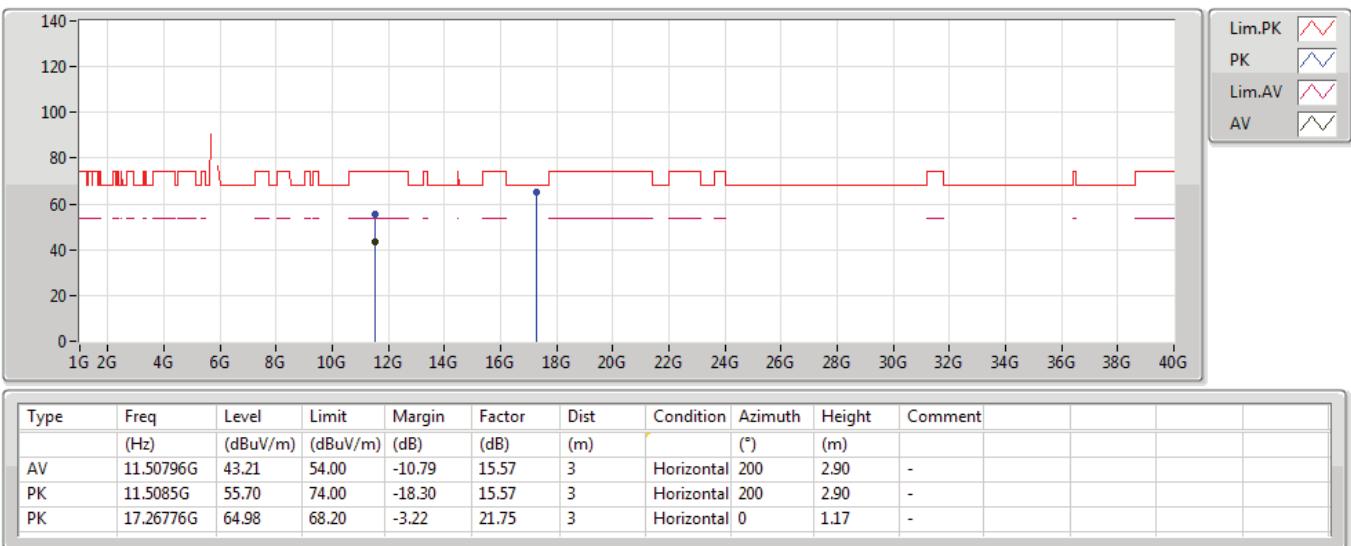
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5755MHz_TX


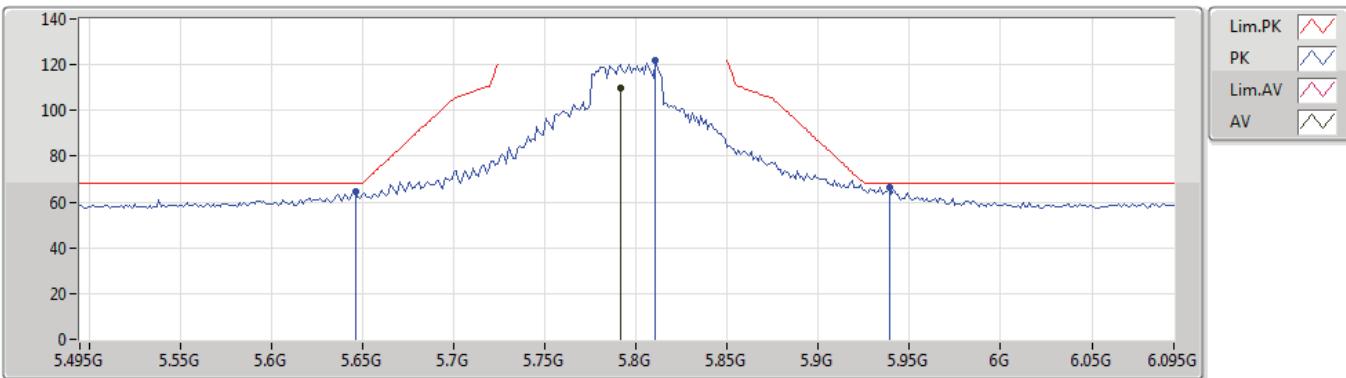
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5755MHz_TX


802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

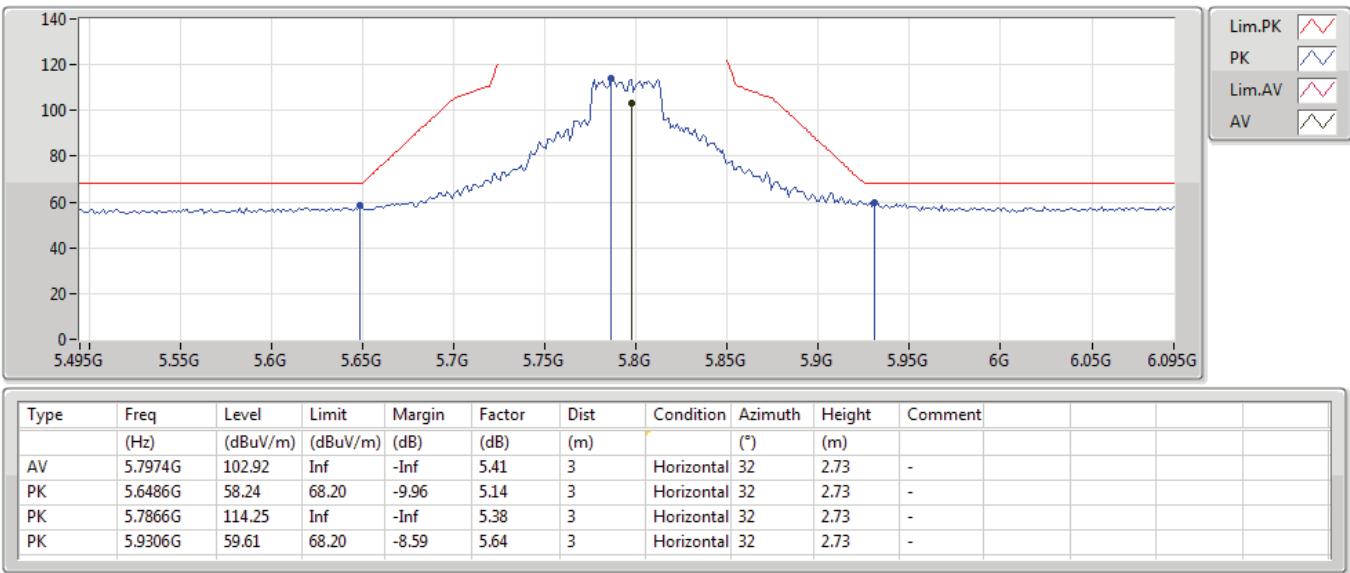
5795MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.7914G	109.93	Inf	-Inf	5.39	3	Vertical	171	2.93	-		
PK	5.6462G	64.48	68.20	-3.72	5.13	3	Vertical	171	2.93	-		
PK	5.8106G	121.72	Inf	-Inf	5.43	3	Vertical	171	2.93	-		
PK	5.939G	66.40	68.20	-1.80	5.66	3	Vertical	171	2.93	-		

802.11ax HEW40_Nss1,(MCS0)_4TX

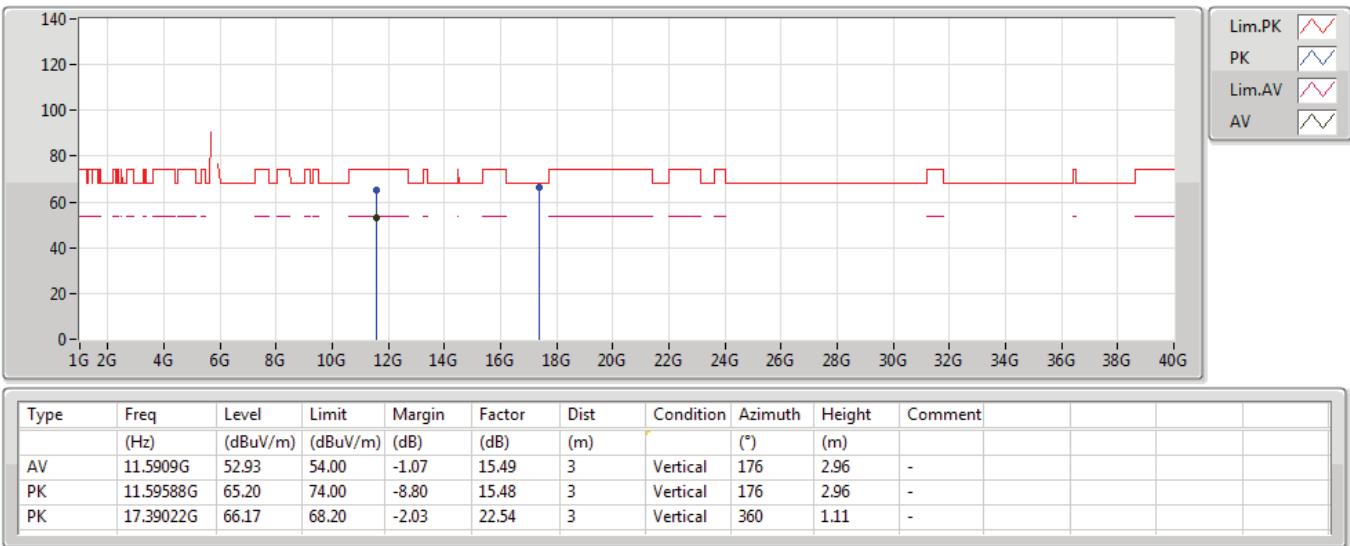
02/05/2019

5795MHz_TX



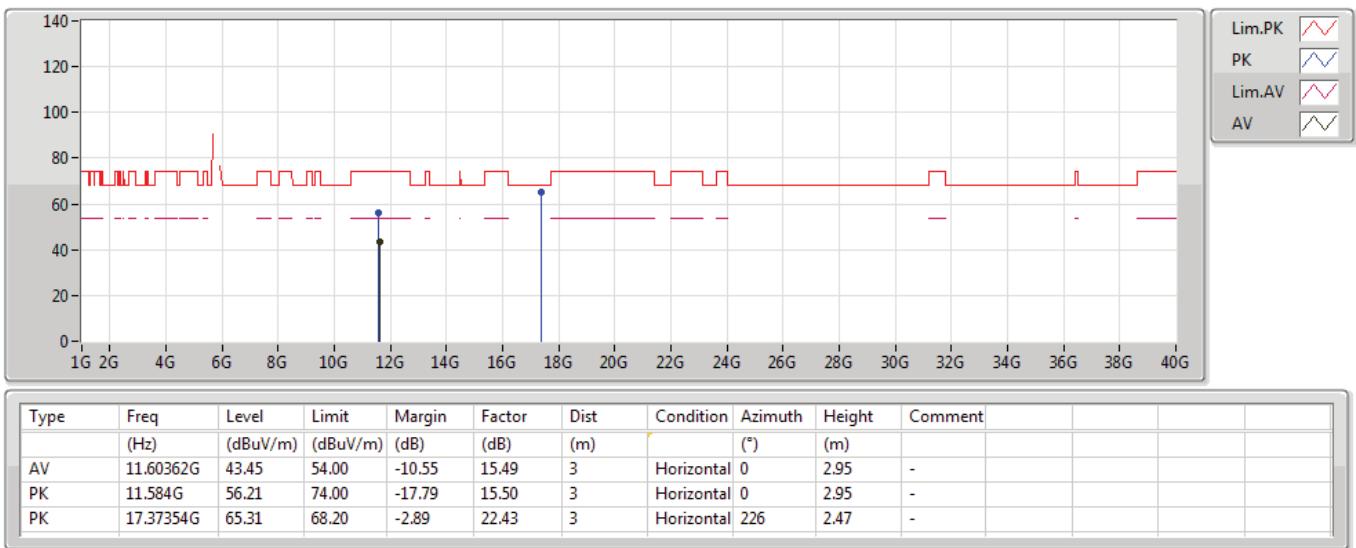
802.11ax HEW40_Nss1,(MCS0)_4TX

02/05/2019

5795MHz_TX


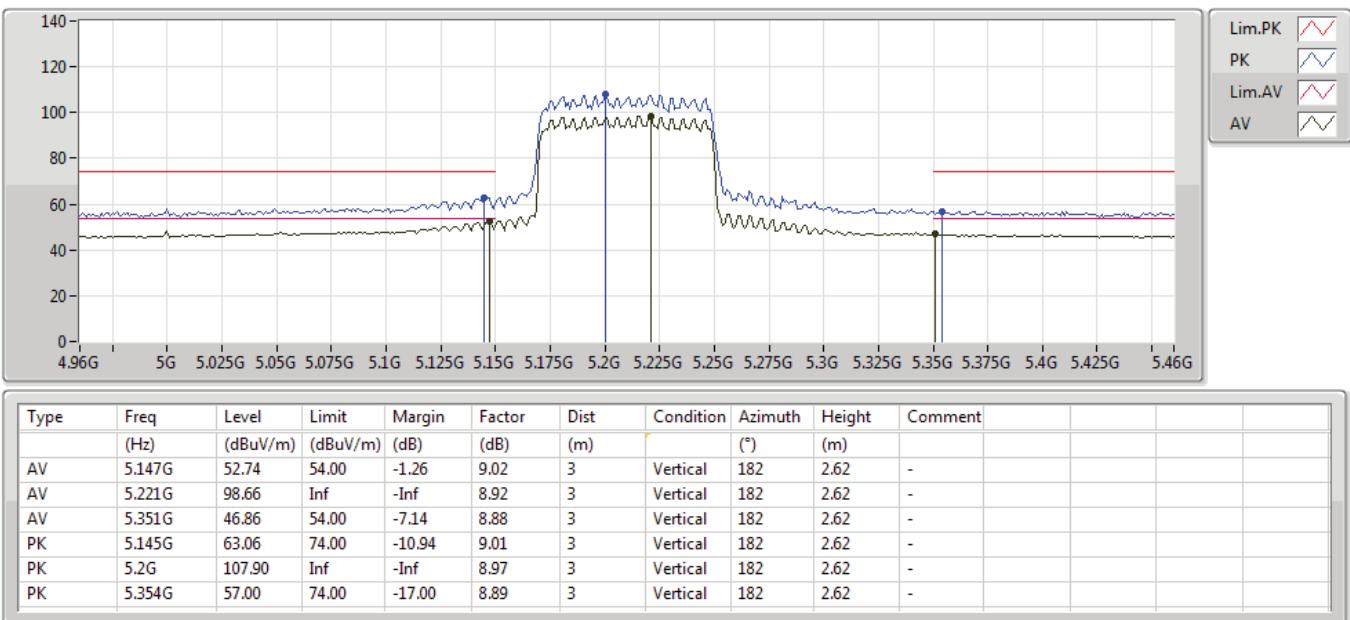
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02/05/2019

5795MHz_TX


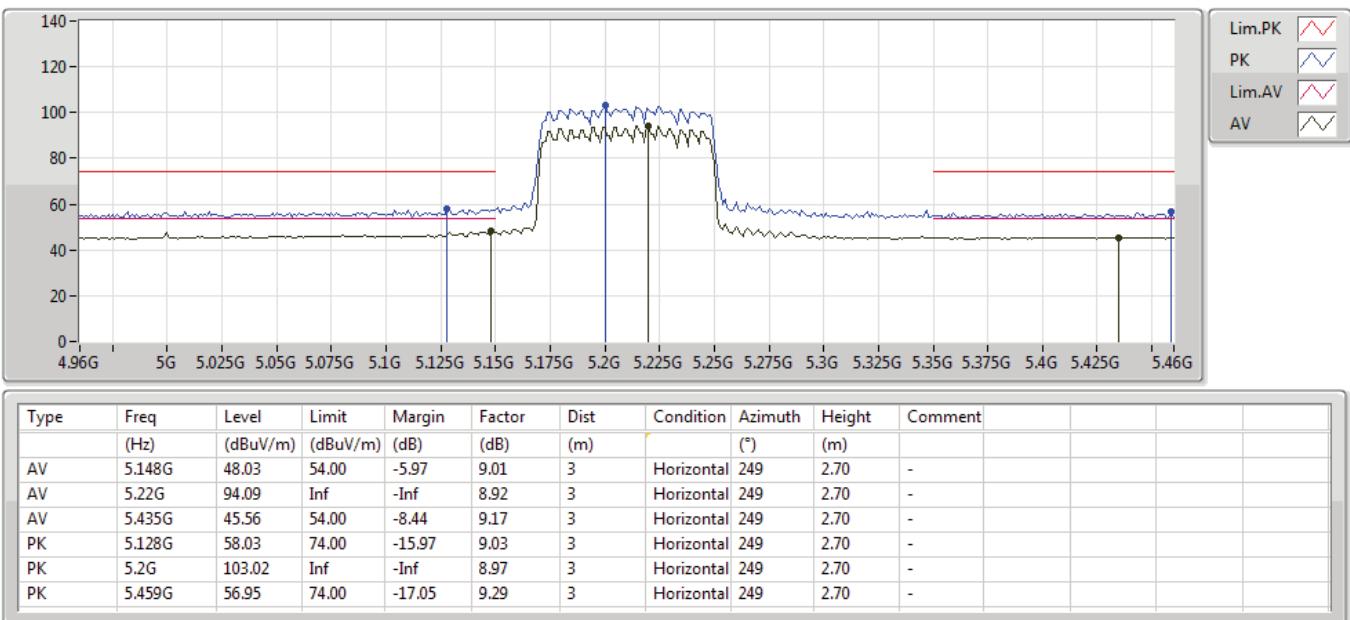
802.11ax HEW80_Nss1,(MCS0)_4TX

04/05/2019

5210MHz_TX


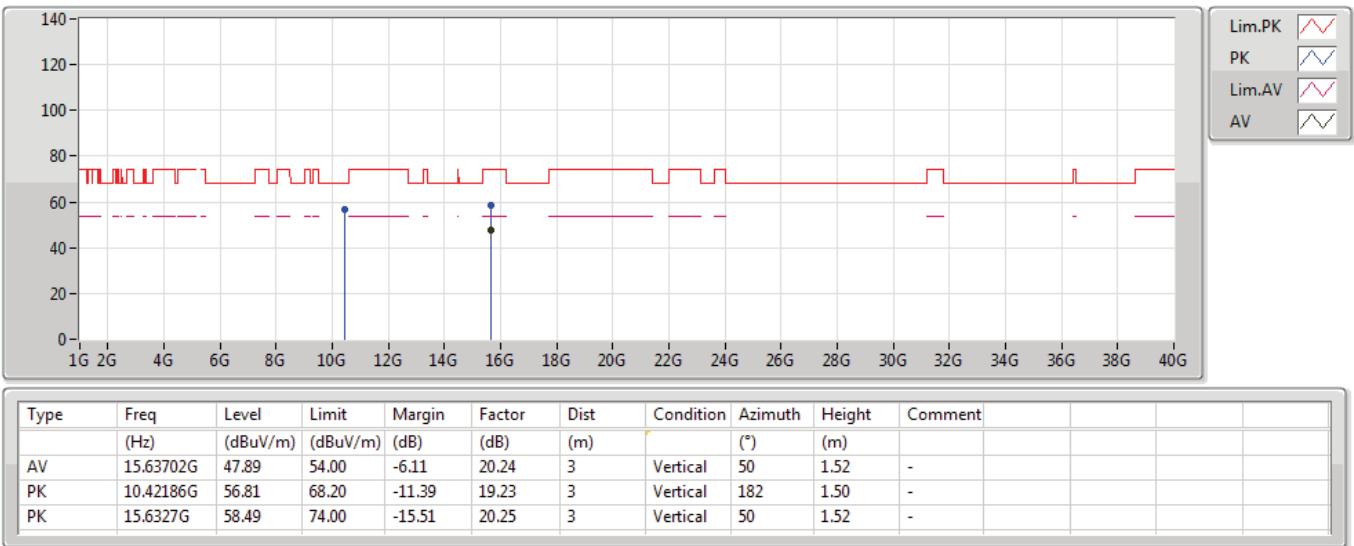
802.11ax HEW80_Nss1,(MCS0)_4TX

04/05/2019

5210MHz_TX


802.11ax HEW80_Nss1,(MCS0)_4TX

04/05/2019

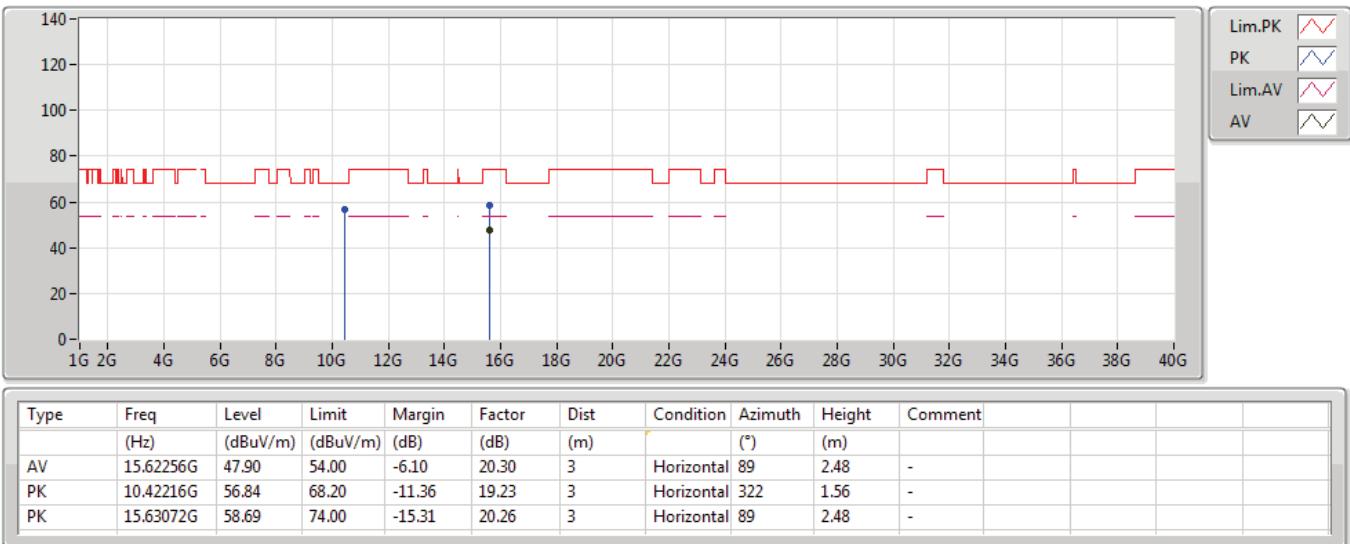
5210MHz_TX




802.11ax HEW80_Nss1,(MCS0)_4TX

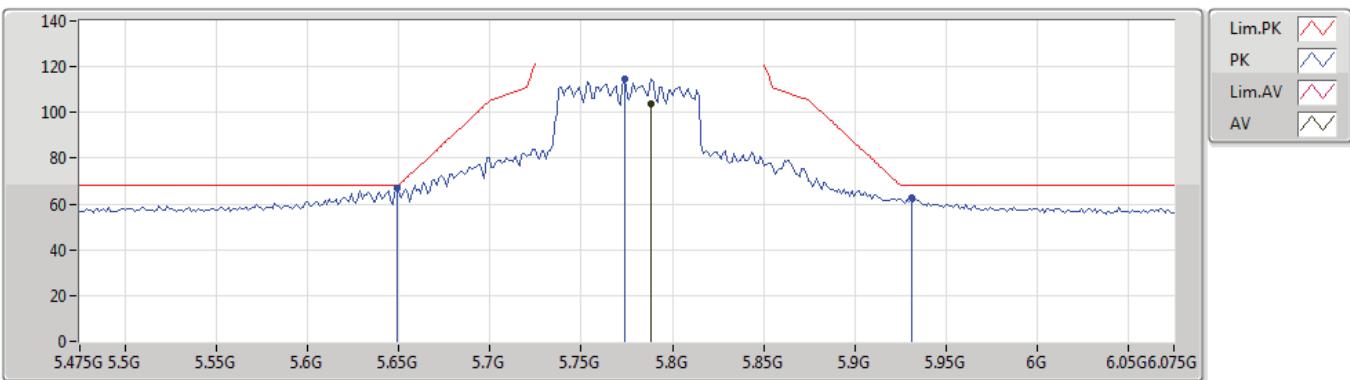
04/05/2019

5210MHz_TX



802.11ax HEW80_Nss1,(MCS0)_4TX

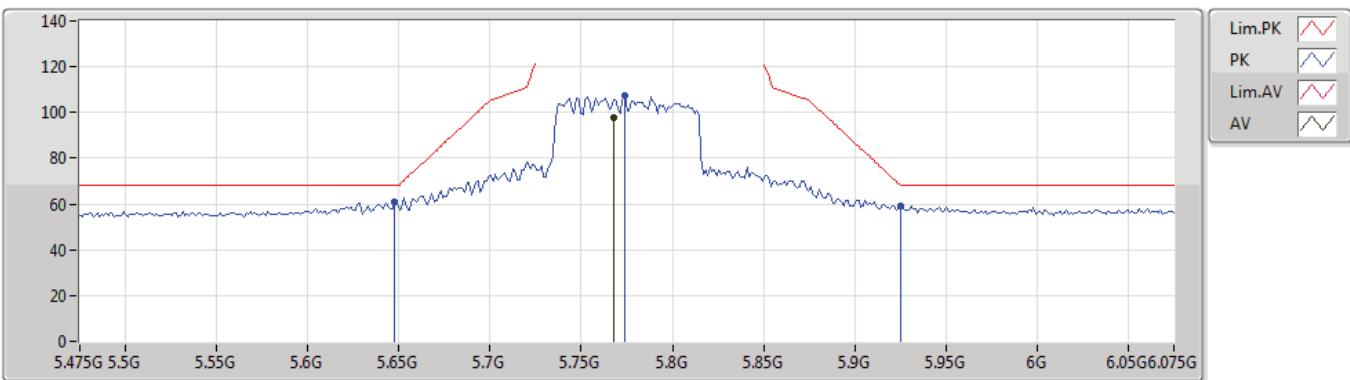
04/05/2019

5775MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment			
AV	5.7882G	103.95	Inf	-Inf	9.61	3	Vertical	227	2.73	-			
PK	5.649G	66.93	68.20	-1.27	9.37	3	Vertical	227	2.73	-			
PK	5.7738G	114.62	Inf	-Inf	9.58	3	Vertical	227	2.73	-			
PK	5.931G	62.68	68.20	-5.52	10.00	3	Vertical	227	2.73	-			

802.11ax HEW80_Nss1,(MCS0)_4TX

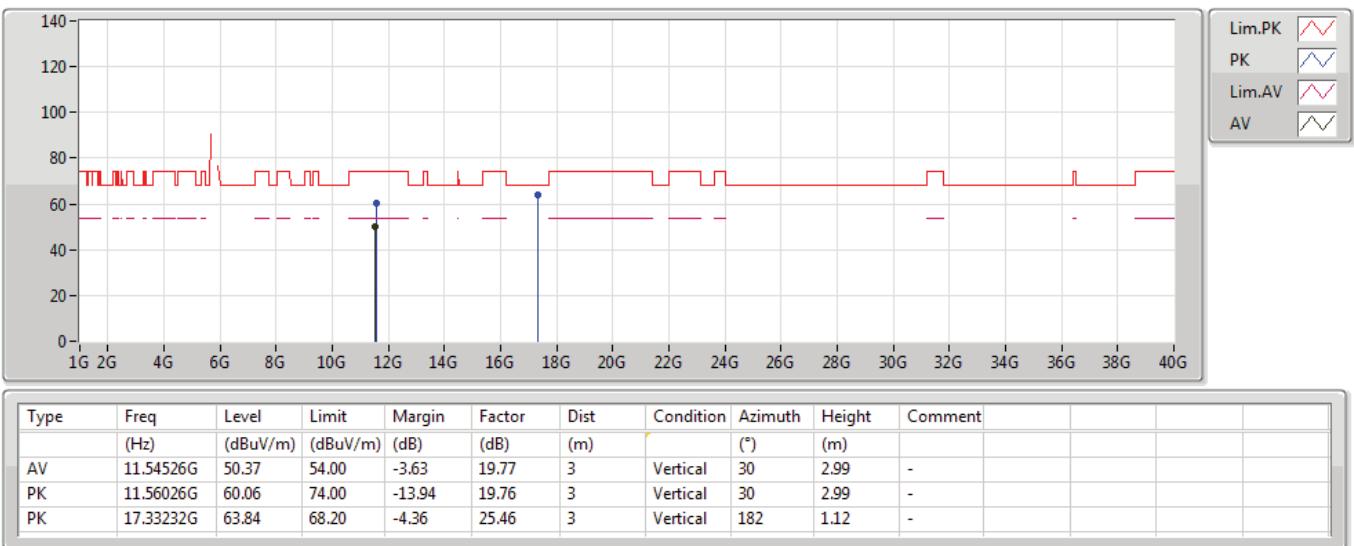
04/05/2019

5775MHz_TX


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment		
AV	5.7678G	97.57	Inf	-Inf	9.57	3	Horizontal	13	2.97	-		
PK	5.6478G	61.16	68.20	-7.04	9.37	3	Horizontal	13	2.97	-		
PK	5.7738G	107.21	Inf	-Inf	9.58	3	Horizontal	13	2.97	-		
PK	5.925G	59.07	68.20	-9.13	10.00	3	Horizontal	13	2.97	-		

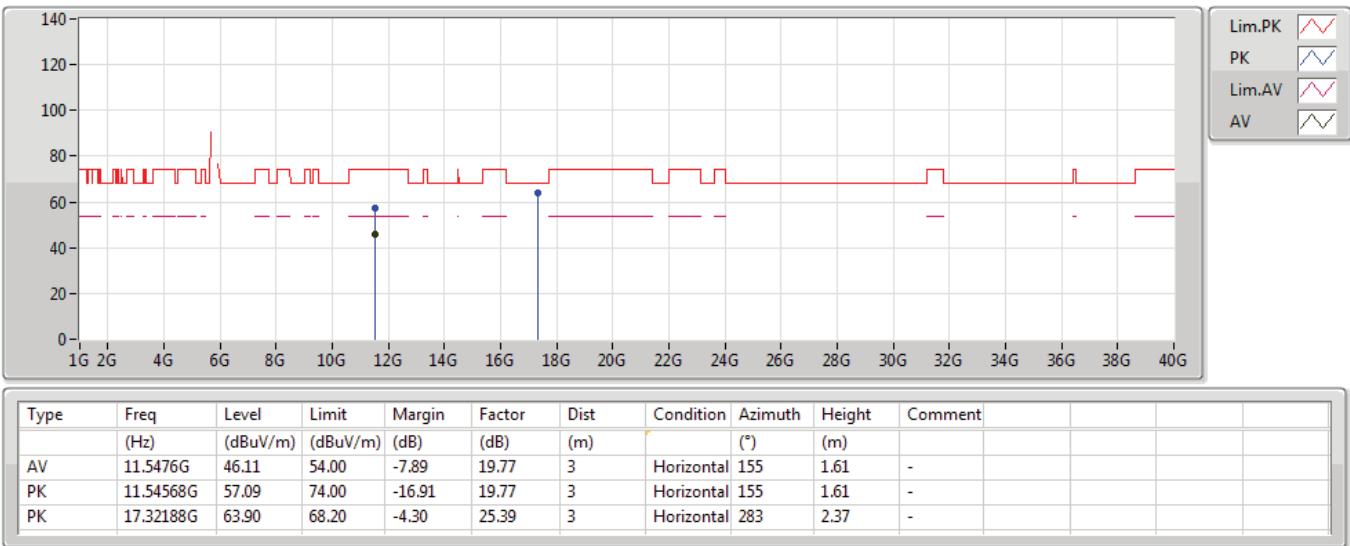
802.11ax HEW80_Nss1,(MCS0)_4TX

04/05/2019

5775MHz_TX


802.11ax HEW80_Nss1,(MCS0)_4TX

04/05/2019

5775MHz_TX




Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	PK	57.16M	33.26	40.00	-6.74	-25.20	3	Vertical	0	1.00	-

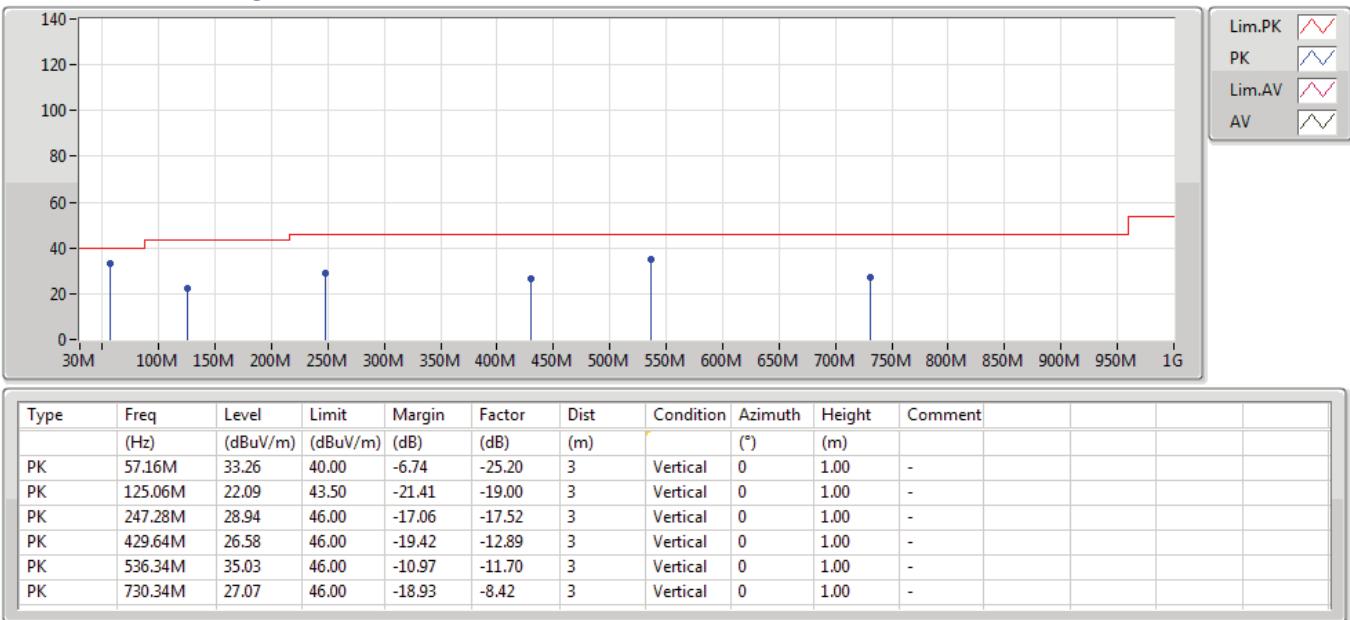


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	PK	57.16M	33.26	40.00	-6.74	-25.20	3	Vertical	0	1.00	-
5775MHz	Pass	PK	125.06M	22.09	43.50	-21.41	-19.00	3	Vertical	0	1.00	-
5775MHz	Pass	PK	247.28M	28.94	46.00	-17.06	-17.52	3	Vertical	0	1.00	-
5775MHz	Pass	PK	429.64M	26.58	46.00	-19.42	-12.89	3	Vertical	0	1.00	-
5775MHz	Pass	PK	536.34M	35.03	46.00	-10.97	-11.70	3	Vertical	0	1.00	-
5775MHz	Pass	PK	730.34M	27.07	46.00	-18.93	-8.42	3	Vertical	0	1.00	-
5775MHz	Pass	PK	35.82M	20.45	40.00	-19.55	-16.12	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	140.59M	16.20	43.50	-27.30	-19.08	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	251.16M	28.25	46.00	-17.75	-16.94	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	423.82M	27.56	46.00	-18.44	-12.96	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	532.46M	37.00	46.00	-9.00	-11.73	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	753.62M	27.56	46.00	-18.44	-7.88	3	Horizontal	360	1.00	-

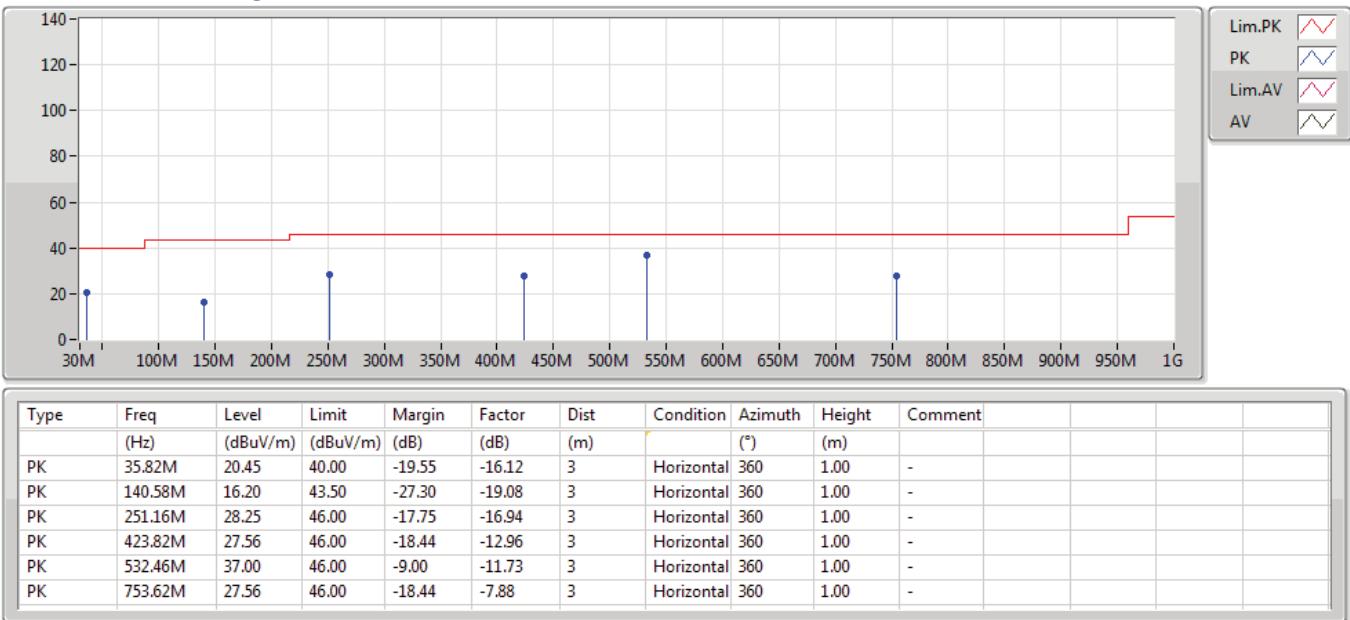
802.11ax HEW80_Nss1,(MCS0)_4TX

10/05/2019

5775MHz_Adapter


802.11ax HEW80_Nss1,(MCS0)_4TX

10/05/2019

5775MHz_Adapter




Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	PK	17.47476G	67.09	68.20	-1.11	26.53	3	Vertical	32	1.78	-
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	PK	17.48008G	67.16	68.20	-1.04	26.58	3	Vertical	91	2.12	-
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	PK	17.27024G	67.07	68.20	-1.13	25.00	3	Vertical	91	1.87	-
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	PK	5.6466G	67.18	68.20	-1.02	5.14	3	Vertical	137	2.78	-



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

Appendix E.4

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	AV	5.751G	105.67	Inf	-Inf	9.53	3	Vertical	160	2.27	-
5745MHz	Pass	PK	5.5338G	56.89	68.20	-11.31	9.41	3	Vertical	160	2.27	-
5745MHz	Pass	PK	5.7522G	113.03	Inf	-Inf	9.53	3	Vertical	160	2.27	-
5745MHz	Pass	PK	5.943G	57.85	68.20	-10.35	10.02	3	Vertical	160	2.27	-
5745MHz	Pass	AV	5.7438G	104.10	Inf	-Inf	9.52	3	Horizontal	184	2.69	-
5745MHz	Pass	PK	5.5638G	57.33	68.20	-10.87	9.36	3	Horizontal	184	2.69	-
5745MHz	Pass	PK	5.7438G	111.47	Inf	-Inf	9.52	3	Horizontal	184	2.69	-
5745MHz	Pass	PK	5.9562G	57.35	68.20	-10.85	10.05	3	Horizontal	184	2.69	-
5745MHz	Pass	AV	11.48964G	45.61	54.00	-8.39	19.81	3	Vertical	79	2.92	-
5745MHz	Pass	PK	11.49858G	57.72	74.00	-16.28	19.80	3	Vertical	79	2.92	-
5745MHz	Pass	PK	17.23592G	66.93	68.20	-1.27	24.75	3	Vertical	91	1.89	-
5745MHz	Pass	AV	11.4933G	45.49	54.00	-8.51	19.81	3	Horizontal	85	1.57	-
5745MHz	Pass	PK	11.48004G	56.87	74.00	-17.13	19.82	3	Horizontal	85	1.57	-
5745MHz	Pass	PK	17.23452G	63.74	68.20	-4.46	24.73	3	Horizontal	8	1.50	-
5785MHz	Pass	AV	5.7922G	106.92	Inf	-Inf	9.61	3	Vertical	169	2.99	-
5785MHz	Pass	PK	5.5258G	57.10	68.20	-11.10	9.43	3	Vertical	169	2.99	-
5785MHz	Pass	PK	5.7922G	114.40	Inf	-Inf	9.61	3	Vertical	169	2.99	-
5785MHz	Pass	PK	5.935G	57.75	68.20	-10.45	10.01	3	Vertical	169	2.99	-
5785MHz	Pass	AV	5.7838G	103.77	Inf	-Inf	9.60	3	Horizontal	183	2.65	-
5785MHz	Pass	PK	5.5546G	57.29	68.20	-10.91	9.38	3	Horizontal	183	2.65	-
5785MHz	Pass	PK	5.7838G	111.08	Inf	-Inf	9.60	3	Horizontal	183	2.65	-
5785MHz	Pass	PK	5.959G	56.98	68.20	-11.22	10.05	3	Horizontal	183	2.65	-
5785MHz	Pass	AV	11.57564G	44.92	54.00	-9.08	19.75	3	Vertical	91	1.79	-
5785MHz	Pass	PK	11.56088G	56.88	74.00	-17.12	19.76	3	Vertical	91	1.79	-
5785MHz	Pass	PK	17.35518G	66.55	68.20	-1.65	25.63	3	Vertical	95	1.85	-
5785MHz	Pass	AV	11.576G	45.18	54.00	-8.82	19.75	3	Horizontal	357	1.82	-
5785MHz	Pass	PK	11.5583G	57.40	74.00	-16.60	19.75	3	Horizontal	357	1.82	-
5785MHz	Pass	PK	17.35208G	64.71	68.20	-3.49	25.61	3	Horizontal	221	2.97	-
5825MHz	Pass	AV	5.8262G	106.01	Inf	-Inf	9.71	3	Vertical	176	2.54	-
5825MHz	Pass	PK	5.6126G	56.74	68.20	-11.46	9.33	3	Vertical	176	2.54	-
5825MHz	Pass	PK	5.8262G	113.72	Inf	-Inf	9.71	3	Vertical	176	2.54	-
5825MHz	Pass	PK	5.939G	56.99	68.20	-11.21	10.02	3	Vertical	176	2.54	-
5825MHz	Pass	AV	5.8226G	104.71	Inf	-Inf	9.70	3	Horizontal	0	2.59	-
5825MHz	Pass	PK	5.6342G	56.98	68.20	-11.22	9.35	3	Horizontal	0	2.59	-
5825MHz	Pass	PK	5.8226G	112.48	Inf	-Inf	9.70	3	Horizontal	0	2.59	-
5825MHz	Pass	PK	5.9702G	57.70	68.20	-10.50	10.07	3	Horizontal	0	2.59	-
5825MHz	Pass	AV	11.64648G	45.11	54.00	-8.89	19.69	3	Vertical	303	1.02	-
5825MHz	Pass	PK	11.6414G	57.03	74.00	-16.97	19.69	3	Vertical	303	1.02	-
5825MHz	Pass	PK	17.47476G	67.09	68.20	-1.11	26.53	3	Vertical	32	1.78	-
5825MHz	Pass	AV	11.65456G	45.10	54.00	-8.90	19.68	3	Horizontal	195	2.44	-
5825MHz	Pass	PK	11.6466G	56.54	74.00	-17.46	19.69	3	Horizontal	195	2.44	-
5825MHz	Pass	PK	17.47224G	64.59	68.20	-3.61	26.51	3	Horizontal	238	2.38	-
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	AV	5.7426G	104.72	Inf	-Inf	9.52	3	Vertical	161	2.11	-
5745MHz	Pass	PK	5.5326G	55.99	68.20	-12.21	9.41	3	Vertical	161	2.11	-
5745MHz	Pass	PK	5.7378G	115.83	Inf	-Inf	9.51	3	Vertical	161	2.11	-
5745MHz	Pass	PK	5.943G	56.51	68.20	-11.69	10.02	3	Vertical	161	2.11	-



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

Appendix E.4

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5745MHz	Pass	AV	5.7438G	102.23	Inf	-Inf	9.52	3	Horizontal	325	2.53	-
5745MHz	Pass	PK	5.5518G	56.41	68.20	-11.79	9.39	3	Horizontal	325	2.53	-
5745MHz	Pass	PK	5.7378G	112.73	Inf	-Inf	9.51	3	Horizontal	325	2.53	-
5745MHz	Pass	PK	5.9466G	56.32	68.20	-11.88	10.04	3	Horizontal	325	2.53	-
5745MHz	Pass	AV	11.4783G	45.48	54.00	-8.52	19.82	3	Vertical	84	2.49	-
5745MHz	Pass	PK	11.4912G	56.80	74.00	-17.20	19.80	3	Vertical	84	2.49	-
5745MHz	Pass	PK	17.23824G	67.05	68.20	-1.15	24.76	3	Vertical	91	1.89	-
5745MHz	Pass	AV	11.47872G	45.35	54.00	-8.65	19.82	3	Horizontal	113	2.31	-
5745MHz	Pass	PK	11.47956G	56.80	74.00	-17.20	19.82	3	Horizontal	113	2.31	-
5745MHz	Pass	PK	17.2227G	63.24	68.20	-4.96	24.65	3	Horizontal	143	1.77	-
5785MHz	Pass	AV	5.7898G	103.38	Inf	-Inf	9.61	3	Vertical	176	2.06	-
5785MHz	Pass	PK	5.4994G	56.22	68.20	-11.98	9.47	3	Vertical	176	2.06	-
5785MHz	Pass	PK	5.7898G	112.33	Inf	-Inf	9.61	3	Vertical	176	2.06	-
5785MHz	Pass	PK	5.9458G	56.21	68.20	-11.99	10.04	3	Vertical	176	2.06	-
5785MHz	Pass	AV	5.7886G	101.08	Inf	-Inf	9.61	3	Horizontal	0	2.67	-
5785MHz	Pass	PK	5.5726G	56.52	68.20	-11.68	9.35	3	Horizontal	0	2.67	-
5785MHz	Pass	PK	5.7886G	111.01	Inf	-Inf	9.61	3	Horizontal	0	2.67	-
5785MHz	Pass	PK	5.9782G	56.21	68.20	-11.99	10.09	3	Horizontal	0	2.67	-
5785MHz	Pass	AV	11.57378G	44.92	54.00	-9.08	19.74	3	Vertical	28	1.20	-
5785MHz	Pass	PK	11.56862G	57.04	74.00	-16.96	19.75	3	Vertical	28	1.20	-
5785MHz	Pass	PK	17.358G	66.89	68.20	-1.31	25.66	3	Vertical	92	2.25	-
5785MHz	Pass	AV	11.57378G	44.92	54.00	-9.08	19.74	3	Horizontal	133	1.51	-
5785MHz	Pass	PK	11.56436G	56.74	74.00	-17.26	19.75	3	Horizontal	133	1.51	-
5785MHz	Pass	PK	17.36082G	64.03	68.20	-4.17	25.68	3	Horizontal	216	1.54	-
5825MHz	Pass	AV	5.8238G	104.64	Inf	-Inf	9.71	3	Vertical	166	2.99	-
5825MHz	Pass	PK	5.5466G	56.34	68.20	-11.86	9.40	3	Vertical	166	2.99	-
5825MHz	Pass	PK	5.8334G	114.32	Inf	-Inf	9.74	3	Vertical	166	2.99	-
5825MHz	Pass	PK	5.9282G	56.74	68.20	-11.46	10.00	3	Vertical	166	2.99	-
5825MHz	Pass	AV	5.8238G	102.69	Inf	-Inf	9.71	3	Horizontal	5	2.63	-
5825MHz	Pass	PK	5.6318G	55.92	68.20	-12.28	9.35	3	Horizontal	5	2.63	-
5825MHz	Pass	PK	5.8298G	112.14	Inf	-Inf	9.72	3	Horizontal	5	2.63	-
5825MHz	Pass	PK	5.927G	56.83	68.20	-11.37	10.00	3	Horizontal	5	2.63	-
5825MHz	Pass	AV	11.6359G	45.05	54.00	-8.95	19.70	3	Vertical	286	1.33	-
5825MHz	Pass	PK	11.64868G	56.56	74.00	-17.44	19.69	3	Vertical	286	1.33	-
5825MHz	Pass	PK	17.48008G	67.16	68.20	-1.04	26.58	3	Vertical	91	2.12	-
5825MHz	Pass	AV	11.64898G	45.47	54.00	-8.53	19.69	3	Horizontal	231	1.74	-
5825MHz	Pass	PK	11.6563G	56.62	74.00	-17.38	19.68	3	Horizontal	231	1.74	-
5825MHz	Pass	PK	17.4837G	64.80	68.20	-3.40	26.60	3	Horizontal	24	1.78	-
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	AV	5.7586G	103.64	Inf	-Inf	9.55	3	Vertical	161	2.47	-
5755MHz	Pass	PK	5.6506G	56.81	68.64	-11.83	9.37	3	Vertical	161	2.47	-
5755MHz	Pass	PK	5.7634G	112.68	Inf	-Inf	9.56	3	Vertical	161	2.47	-
5755MHz	Pass	PK	5.9266G	57.15	68.20	-11.05	10.00	3	Vertical	161	2.47	-
5755MHz	Pass	AV	5.7598G	100.50	Inf	-Inf	9.55	3	Horizontal	180	2.23	-
5755MHz	Pass	PK	5.5894G	57.93	68.20	-10.27	9.32	3	Horizontal	180	2.23	-
5755MHz	Pass	PK	5.7394G	110.68	Inf	-Inf	9.51	3	Horizontal	180	2.23	-
5755MHz	Pass	PK	5.9278G	56.00	68.20	-12.20	10.00	3	Horizontal	180	2.23	-
5755MHz	Pass	AV	11.51288G	45.89	54.00	-8.11	19.79	3	Vertical	323	2.20	-
5755MHz	Pass	PK	11.49704G	56.68	74.00	-17.32	19.80	3	Vertical	323	2.20	-