



FCC RADIO TEST REPORT

FCC ID : 2ADZRBGW320
Equipment : BGW320-505 Wireless Integrated ONT Residential Gateway
Brand Name : Nokia
Model Name : BGW320-505
Applicant : Nokia Shanghai Bell Co. Ltd.
No. 388, Ningqiao Rd. Pilot Free Trade Zone
Shanghai , China 201206
Manufacturer : Nokia Shanghai Bell Co. Ltd.
No. 388, Ningqiao Rd. Pilot Free Trade Zone
Shanghai , China 201206
Standard : 47 CFR FCC Part 15.407

The product was received on Mar. 18, 2019, and testing was started from Jul. 20, 2019 and completed on Sep. 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: Cliff Chang

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 Results of Radiated Emission Co-location****Appendix G. Test Photos****Photographs of EUT v01**



History of this test report



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
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:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Sandy Chuang



1 General Description

1.1 Information

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]



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Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW20	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT40	40	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT40	40	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW40	40	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT80	80	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW80	80	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX, 3TX, 4TX
5.725-5.85GHz	802.11a	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW20	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX, 3TX, 4TX
5.725-5.85GHz	802.11n HT40	40	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT40	40	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW40	40	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT80	80	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW80	80	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX, 3TX, 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, 1024QAM modulation.
- HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.



1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Airgain	N2430ARJYW Rev A-PK1-L-G1X165BUR2	PCB	I-PEX	Note 1
2	Airgain	N2430ARHYN Rev A-PK1-L-Y1X140BUR2		I-PEX	
3	Airgain	N2435ARHYN Rev A-PK1-L-B1X155BU		I-PEX	
4	Airgain	N2420ARHYW Rev A-PK1-L-A1X195BU		I-PEX	
5	Airgain	N5X20QSYN Rev A-PK1-L-B50UR2		I-PEX	
6	Airgain	N5X20QSYE Rev A-PK1-L-A55UR2		I-PEX	
7	Airgain	N5X20QSYN Rev A-PK1-L-Y1X190BU		I-PEX	
8	Airgain	N5X20QSYE Rev A-PK1-L-G1X160BU		I-PEX	
9	Airgain	N5X20HGHC Rev A-PK1-L-R1X1058U		I-PEX	

Note 1:

Ant.	2.4GHz Port				5GHz Port				Gain (dBi) 1TX mode for output power, PSD CDD mode for output power		
	1TX	2TX	3TX	4TX	1TX	2TX	3TX	4TX	2.4GHz	5GHz Band 1	5GHz Band 4
1	4	4	4	4	1	1	1	1	4.9	5.8	-
2	3	3	3	3	2	2	2	2			
3	2	2	2	2	3	3	3	3			
4	1	1	1	1	4	4	4	4			
5	-	-	-	-	1	1	1	1	-	-	4.7
6	-	-	-	-	2	2	2	2			
7	-	-	-	-	3	3	3	3			
8	-	-	-	-	4	4	4	4			
9	-	-	-	-	RX only	-	-	-	-	3.9	4.2

Ant.	Gain (dBi) CDD mode for PSD Beamforming mode, SDM Mode for output power & PSD							
	2.4GHz				5GHz Band 1		5GHz Band 4	
	3T1S/3T2S	3T3S	4T1S/4T2S	4T3S	4T1S/4T2S	4T3S	4T1S/4T2S	4T3S
1	4.2	2.3	4.8	3.1	4.7	3.8	-	-
2								
3								
4								
5								
6								
7								
8								
9	-	-	-	-	-	3.9	-	4.2



Note 2: The above information was declared by manufacturer.

Note 3: The EUT has nine antennas.

Note 4:

For 2.4GHz function:

For IEEE 802.11b (1TX, 4TX/4RX):

For 1TX

Only Port 1 can be used as transmitting antenna.

For 4TX, 4RX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For IEEE 802.11g (4TX/4RX):

Port 1, Port 2, Pot 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Pot 3 and Port 4 could transmit/receive simultaneously.

For IEEE 802.11n/VHT/ax (1TX, 2TX, 3TX, 4TX/4RX):

For 1TX

The EUT supports all antennas with TX diversity functions.

At once time there is only one antenna port can transmitting RF signal

For 2TX

The EUT supports all antennas with TX diversity functions.

At once time there are only two antenna port can transmitting RF signal

For 3TX

The EUT supports all antennas with TX diversity functions.

At once time there are only three antenna port can transmitting RF signal

The Port 2, Port 3 and Port 4 generated the worst case, so it was selected to test and record in the report.

For 4TX, 4RX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11a (4TX/4RX):

Port 1, Port 2, Pot 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Pot 3 and Port 4 could transmit/receive simultaneously.

For IEEE 802.11n/ac/ax (1TX, 2TX, 3TX, 4TX/4RX):

For 1TX

The EUT supports all antennas with TX diversity functions.

At once time there is only one antenna port can transmitting RF signal

For 2TX

The EUT supports all antennas with TX diversity functions.

At once time there are only two antenna port can transmitting RF signal

For 3TX

The EUT supports all antennas with TX diversity functions.

At once time there are only three antenna port can transmitting RF signal

For 4TX, 4RX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For IEEE 802.11n/ac/ax (1RX):

Ant.9 can be use as receiving antenna only.



1.1.3 Mode Test Duty Cycle

<non-beamforming mode> 4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.953	0.21	2.068m	1k
802.11ac VHT20	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.972	0.12	955u	3k
802.11ac VHT80	0.943	0.25	462.5u	3k
802.11ax HEW20	0.979	0.09	1.49m	1k
802.11ax HEW40	0.962	0.17	782.5u	3k
802.11ax HEW80	0.931	0.31	415u	3k

<beamforming mode> 4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.966	0.15	3.836m	300
802.11ac VHT40-BF	0.949	0.23	3.693m	300
802.11ac VHT80-BF	0.961	0.17	5.095m	300
802.11ax HEW20-BF	0.954	0.2	2.924m	1k
802.11ax HEW40-BF	0.926	0.33	4.335m	300
802.11ax HEW80-BF	0.92	0.36	4.85m	300

<non-beamforming mode> 4T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20	0.982	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.964	0.16	502.5u	3k
802.11ac VHT80	0.936	0.29	257.5u	10k
802.11ax HEW20	0.976	0.11	781.25u	3k
802.11ax HEW40	0.96	0.18	423.75u	3k
802.11ax HEW80	0.931	0.31	241.25u	10k



<beamforming mode> 4T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40-BF	0.973	0.12	5.007m	300
802.11ac VHT80-BF	0.929	0.32	257.971u	10k
802.11ax HEW20-BF	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40-BF	0.965	0.15	5.007m	300
802.11ax HEW80-BF	0.928	0.32	240.58u	10k

<non-beamforming mode> 4T3S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20	0.973	0.12	686.25u	3k
802.11ac VHT40	0.951	0.22	357.5u	3k
802.11ac VHT80	0.916	0.38	193.75u	10k
802.11ax HEW20	0.97	0.13	558.75u	3k
802.11ax HEW40	0.946	0.24	320u	10k
802.11ax HEW80	0.916	0.38	197.5u	10k

<beamforming mode> 4T3S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.973	0.12	684.375u	3k
802.11ac VHT40-BF	0.949	0.23	356.563u	3k
802.11ac VHT80-BF	0.912	0.4	192.5u	10k
802.11ax HEW20-BF	0.968	0.14	557.188u	3k
802.11ax HEW40-BF	0.943	0.25	318.125u	10k
802.11ax HEW80-BF	0.914	0.39	195.625u	10k

Note:

- DC is Duty Cycle.
- DCF is Duty Cycle Factor.



1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter		
Beamforming Function	<input checked="" type="checkbox"/> With beamforming	<input type="checkbox"/> Without beamforming	
The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz.			
Function	<input type="checkbox"/> Outdoor P2M	<input checked="" type="checkbox"/> Indoor P2M	
	<input type="checkbox"/> Fixed P2P	<input type="checkbox"/> Client	
Test Software Version	accessMTool v3.1.0.2、Telnet v6.1.7601		

Note: The above information was declared by manufacturer.



1.2 Applicable 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
- ◆ FCC KDB 789033 D02 v02r01
- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location				
<input 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		
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Owen Hsu	27.5-28.2°C / 62-66 %	Aug. 05, 2019~ Sep. 17, 2019
Radiated <Below 1GHz>	03CH04-CB	Welson Chen	24.4-26°C / 64-66%	Jul. 20, 2019~ Sep. 17, 2019
Radiated <Above 1GHz>	03CH04-CB	Welson Chen	26.2-27.9°C / 63-65%	Jul. 20, 2019~ Sep. 17, 2019
AC Conduction	CO02-CB	Deven Huang	24~25°C / 58~60%	Aug. 29, 2019

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086B with Industry Canada.

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)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

<non-beamforming mode> 4T1S

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	90
5200MHz	99
5240MHz	100
5745MHz	97
5785MHz	98
5825MHz	99
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5180MHz	88
5200MHz	98
5240MHz	99
5745MHz	97
5785MHz	98
5825MHz	99
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5190MHz	74
5230MHz	95
5755MHz	97
5795MHz	97
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5210MHz	66
5775MHz	92
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	84
5200MHz	97
5240MHz	98
5745MHz	95
5785MHz	96
5825MHz	97
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	71
5230MHz	93
5755MHz	96
5795MHz	96
802.11ax HEW80_Nss1,(MCS0)_4TX	-



Mode	PowerSetting
5210MHz	67
5775MHz	88

<beamforming mode> 4T1S

Mode	PowerSetting
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5180MHz	85
5200MHz	98
5240MHz	99
5745MHz	97
5785MHz	98
5825MHz	99
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5190MHz	71
5230MHz	96
5755MHz	97
5795MHz	97
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5210MHz	71
5775MHz	88
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	84
5200MHz	97
5240MHz	98
5745MHz	95
5785MHz	96
5825MHz	97
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	70
5230MHz	96
5755MHz	96
5795MHz	96
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	66
5775MHz	86



<non-beamforming mode> 4T2S

Mode	PowerSetting
802.11ac VHT20_Nss2,(MCS0)_4TX	-
5180MHz	87
802.11ac VHT40_Nss2,(MCS0)_4TX	-
5190MHz	75
802.11ac VHT80_Nss2,(MCS0)_4TX	-
5210MHz	64
5775MHz	92
802.11ax HEW20_Nss2,(MCS0)_4TX	-
5180MHz	84
802.11ax HEW40_Nss2,(MCS0)_4TX	-
5190MHz	71
802.11ax HEW80_Nss2,(MCS0)_4TX	-
5210MHz	67
5775MHz	89

<beamforming mode> 4T2S

Mode	PowerSetting
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-
5180MHz	88
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-
5190MHz	76
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-
5210MHz	75
5775MHz	90
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5180MHz	84
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5190MHz	74
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5210MHz	73
5775MHz	90



<non-beamforming mode> 4T3S

Mode	PowerSetting
802.11ac VHT20_Nss3,(MCS0)_4TX	-
5180MHz	87
802.11ac VHT40_Nss3,(MCS0)_4TX	-
5190MHz	75
802.11ac VHT80_Nss3,(MCS0)_4TX	-
5210MHz	65
5775MHz	92
802.11ax HEW20_Nss3,(MCS0)_4TX	-
5180MHz	83
802.11ax HEW40_Nss3,(MCS0)_4TX	-
5190MHz	71
802.11ax HEW80_Nss3,(MCS0)_4TX	-
5210MHz	68
5775MHz	90

<beamforming mode> 4T3S

Mode	PowerSetting
802.11ac VHT20-BF_Nss3,(MCS0)_4TX	-
5180MHz	88
802.11ac VHT40-BF_Nss3,(MCS0)_4TX	-
5190MHz	77
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	-
5210MHz	76
5775MHz	90
802.11ax HEW20-BF_Nss3,(MCS0)_4TX	-
5180MHz	85
802.11ax HEW40-BF_Nss3,(MCS0)_4TX	-
5190MHz	75
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	-
5210MHz	75
5775MHz	90

Note:

- VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
- There are two modes of EUT, one is beamforming mode, and the other is Non-beamforming mode for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz, Beamforming mode and Non-beamforming mode has been test and record in this test report.



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests

Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	EUT - 2.4GHz
2	EUT - 5GHz

For operating mode 1 is the worst case and it was record in this test report.

The Worst Case Mode for Following Conformance Tests

Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Unwanted Emissions
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
1	EUT - 2.4GHz
2	EUT - 5GHz

For operating mode 2 is the worst case and it was record in this test report.

Operating Mode > 1GHz	CTX
1	EUT + 5GHz

**The Worst Case Mode for Following Conformance Tests**

Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz + 5GHz Band 1

Refer to Appendix F for Radiated Emission Co-location.

The Worst Case Mode for Following Conformance Tests

Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + 5GHz Band 1 + 5GHz Band 4

Refer to Sporton Test Report No.: FA912114 for Co-location RF Exposure Evaluation.

Note: The EUT can only be used at Y axis position.



2.3 EUT Operation during Test

For CTX Mode:

Non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN AP and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter	DIRECTV	EPS48R0-16	Input: 120V~1.1A, 60Hz Output: 12V, 4A, 48W



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Flash disk3.0	Transcend	JetFlash-700	N/A
B	Notebook	DELL	E6430	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

For Radiated (above 1GHz):

<non-beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

<beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	WLAN AP	ASUS	RT-AX88U	MSQ-RTAXHP00
C	Notebook	DELL	E4300	N/A

For RF Conducted:

<non-beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

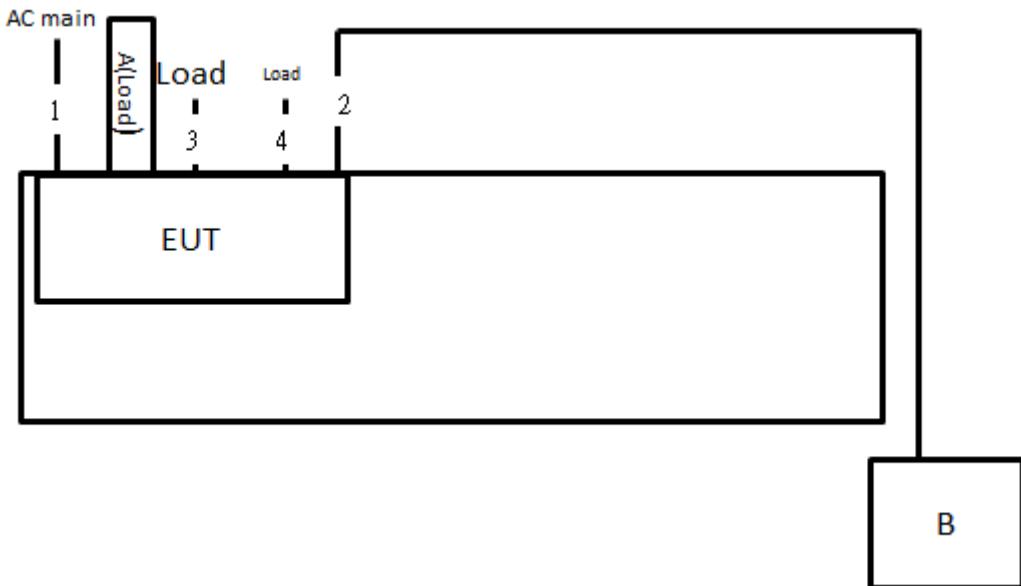
<beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	WLAN AP	ASUS	RT-AX88U	MSQ-RTAXHP00
C	Notebook	DELL	E4300	N/A

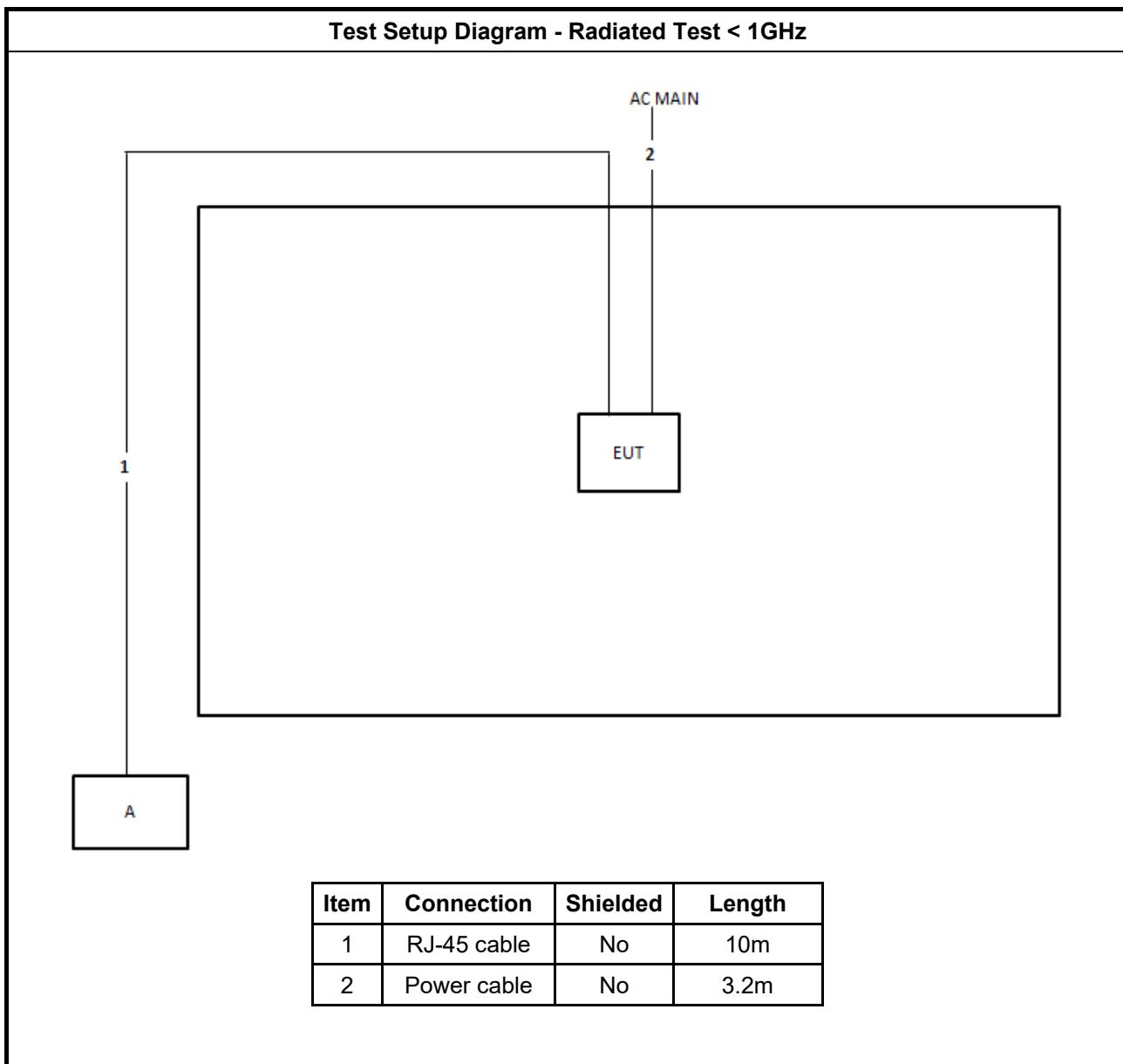


2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



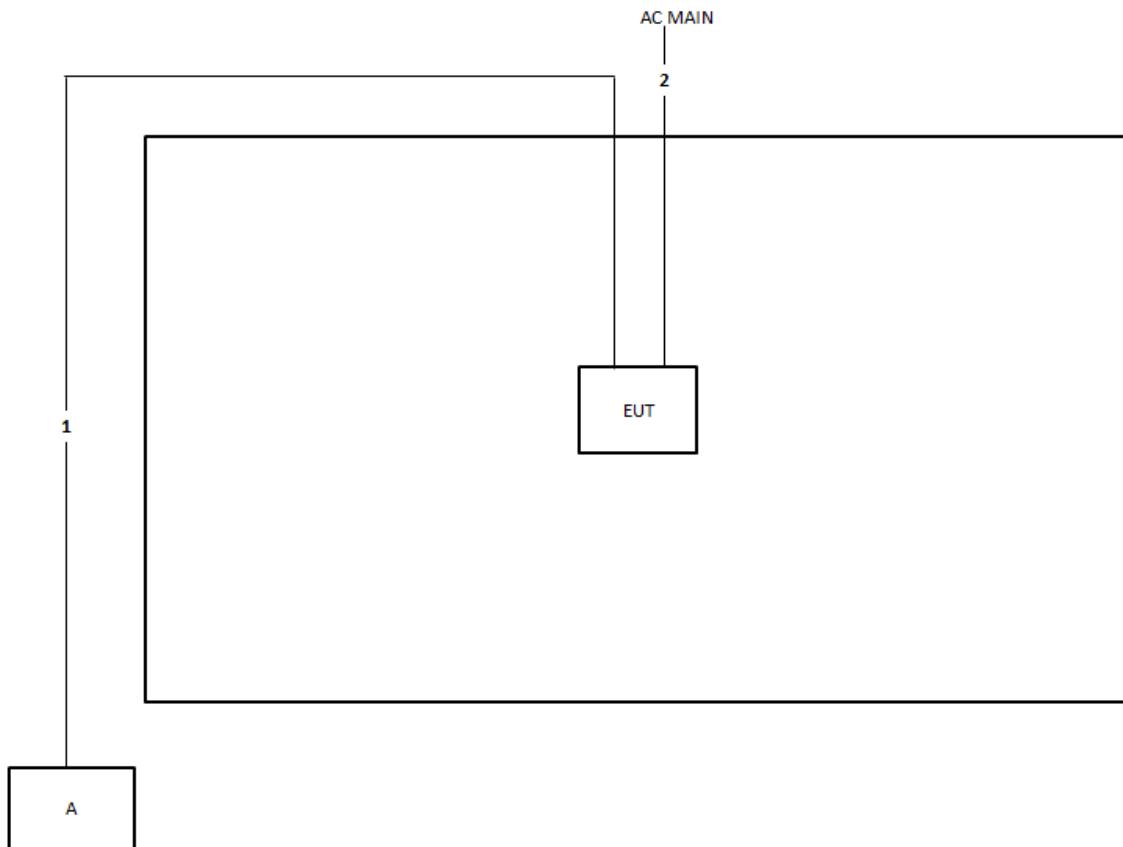
Item	Connection	Shielded	Length
1	Power cable	No	3.2m
2	RJ-45 cable	No	10m
3	RJ-45 cable*5	No	1.5m
4	RJ-11 cable	No	1.5m





Test Setup Diagram - Radiated Test > 1GHz

<For Non-Beamforming Mode>

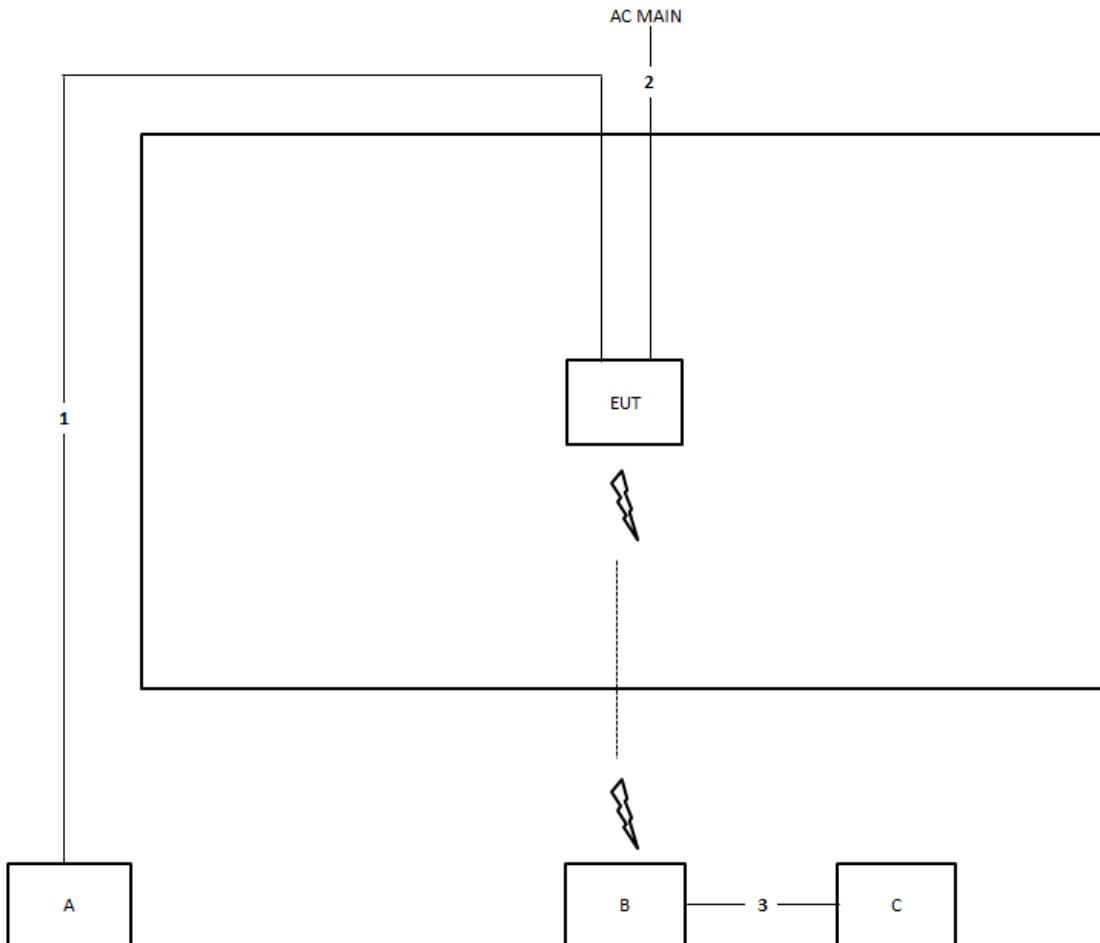


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	3.2m



Test Setup Diagram - Radiated Test > 1GHz

<For Beamforming Mode>



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	3.2m
3	RJ-45 cable	No	1.5m



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.

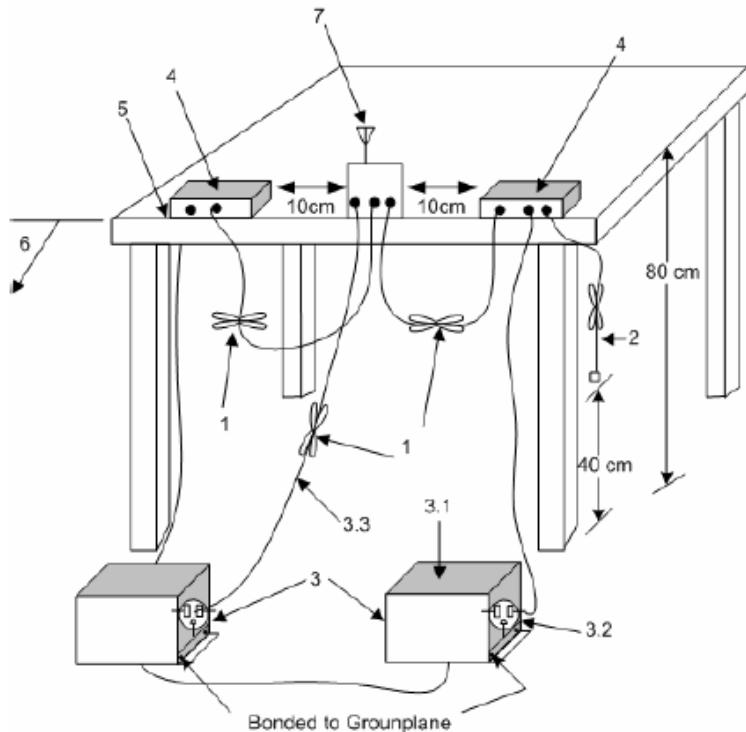
3.1.3 Test Procedures

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

AC Power-line Conducted Emissions



- 1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
- 2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- 3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
- 3.1—All other equipment powered from additional LISN(s).
- 3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
- 3.3—LISN at least 80 cm from nearest part of EUT chassis.
- 4—Non-EUT components of EUT system being tested.
- 5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
- 6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
- 7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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, the maximum conducted output power 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.
<input type="checkbox"/>	For the 5.47-5.725 GHz band, the maximum conducted output power 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.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$.
LE-LAN Devices	
<input type="checkbox"/>	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$.

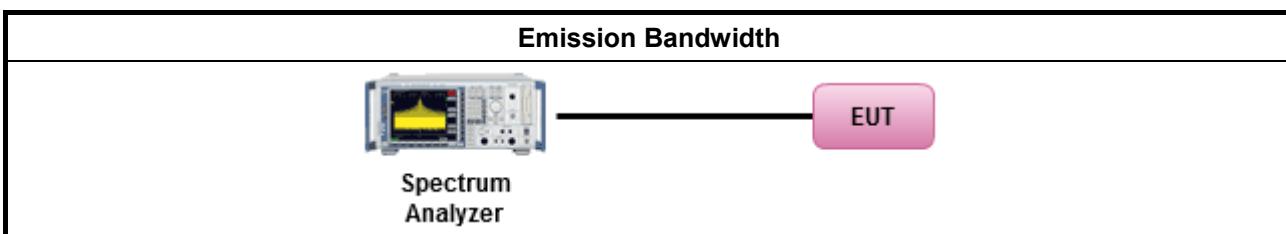
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 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.
LE-LAN Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input 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_{out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	



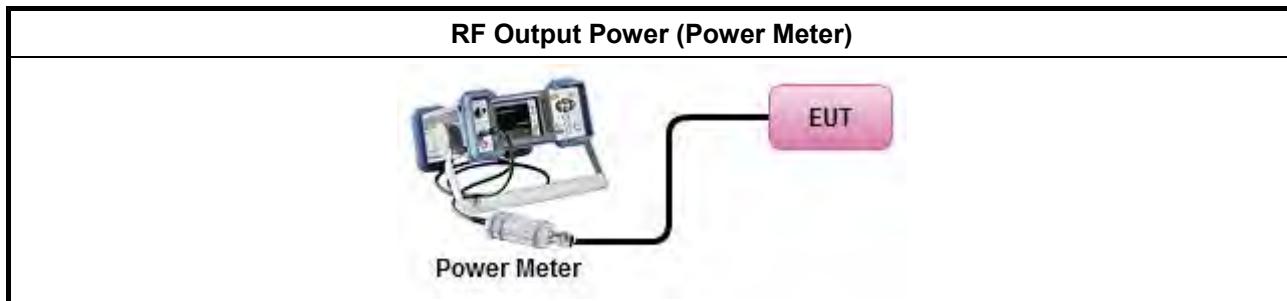
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	Average over on/off periods with duty factor <input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging). <input type="checkbox"/> Refer as FCC 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 FCC KDB 789033, clause E Method PM-G (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 FCC 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.
LE-LAN Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	<ul style="list-style-type: none">▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 – 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 – 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input 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.

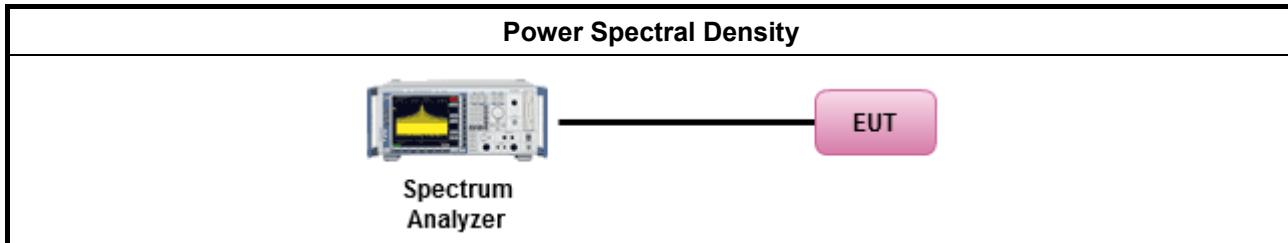


3.4.3 Test Procedures

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 FCC 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% or external video / power trigger]
<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).	
<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)	duty cycle < 98% and average over on/off periods with duty factor
<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
<input type="checkbox"/> Refer as FCC 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:	
	<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
	<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
	<input type="checkbox"/> Option 3: Measure and add $10 \log(N)$ dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with $10 \log(N)$. Or each transmit chains shall be add $10 \log(N)$ to compared with the limit.
<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 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
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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).



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

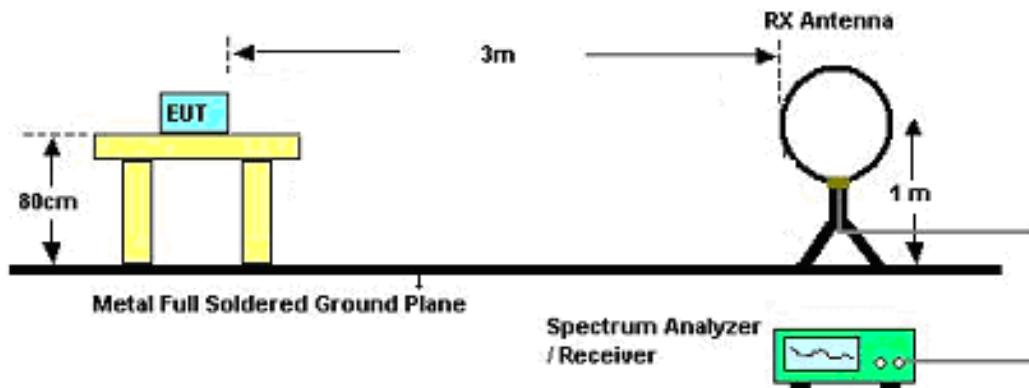
Test Method
<ul style="list-style-type: none">▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance 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 FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.<ul style="list-style-type: none"><input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).<input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time.<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.<input type="checkbox"/> Refer as 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.▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.▪ 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.



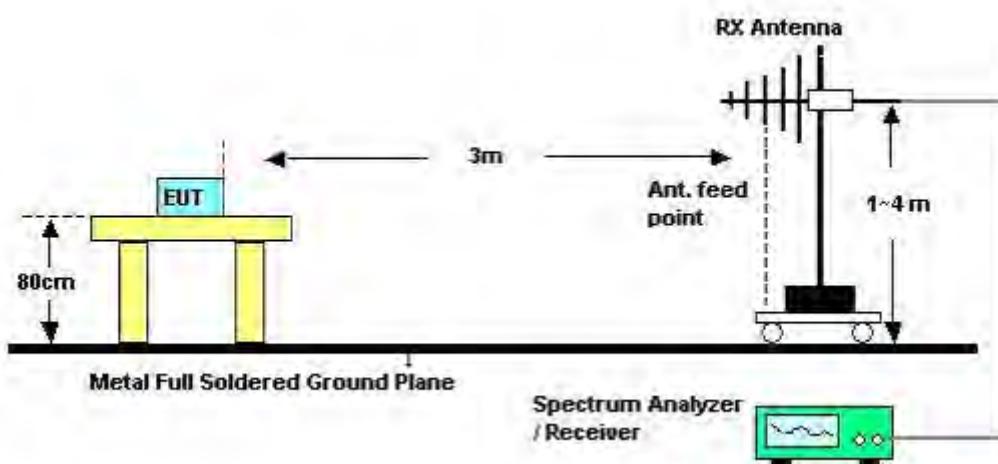
3.5.4 Test Setup

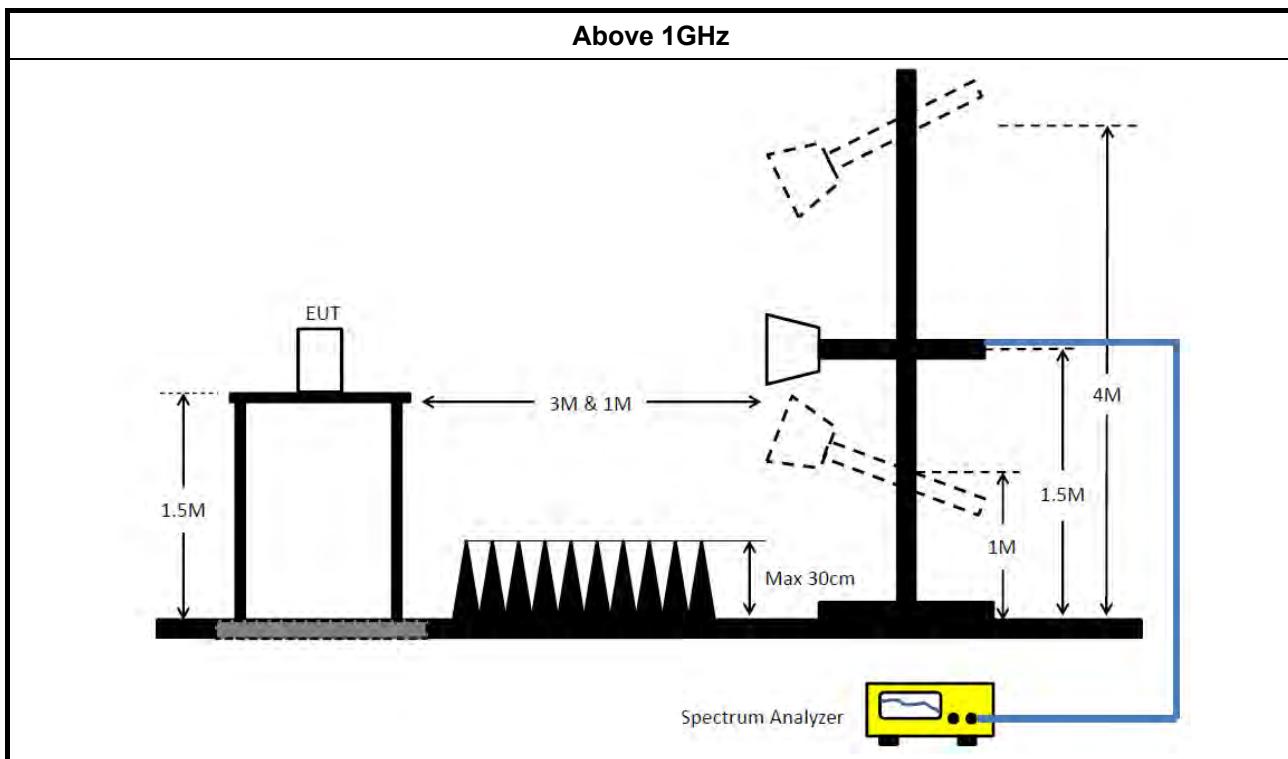
Radiated - Emissions in Restricted Frequency Bands

9kHz ~30MHz



30MHz~1GHz





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.5.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.5.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2018	Nov. 20, 2019	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 05, 2018	Nov. 04, 2019	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 16, 2019	Jan. 15, 2020	Conduction (CO02-CB)
Coupling Decoupling Network	Teseq	ISN ST08	32630	150kHz ~ 30MHz	May 29, 2019	May 28, 2020	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Nov. 06, 2018	Nov. 05, 2019	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & Woken	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 12, 2018	Oct. 11, 2019	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Mar. 19, 2019	Mar. 18, 2020	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 26, 2018	Oct. 25, 2019	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Mar. 19, 2019	Mar. 18, 2020	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Dec. 26, 2018	Dec. 25, 2019	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+22	1GHz - 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH04-CB)

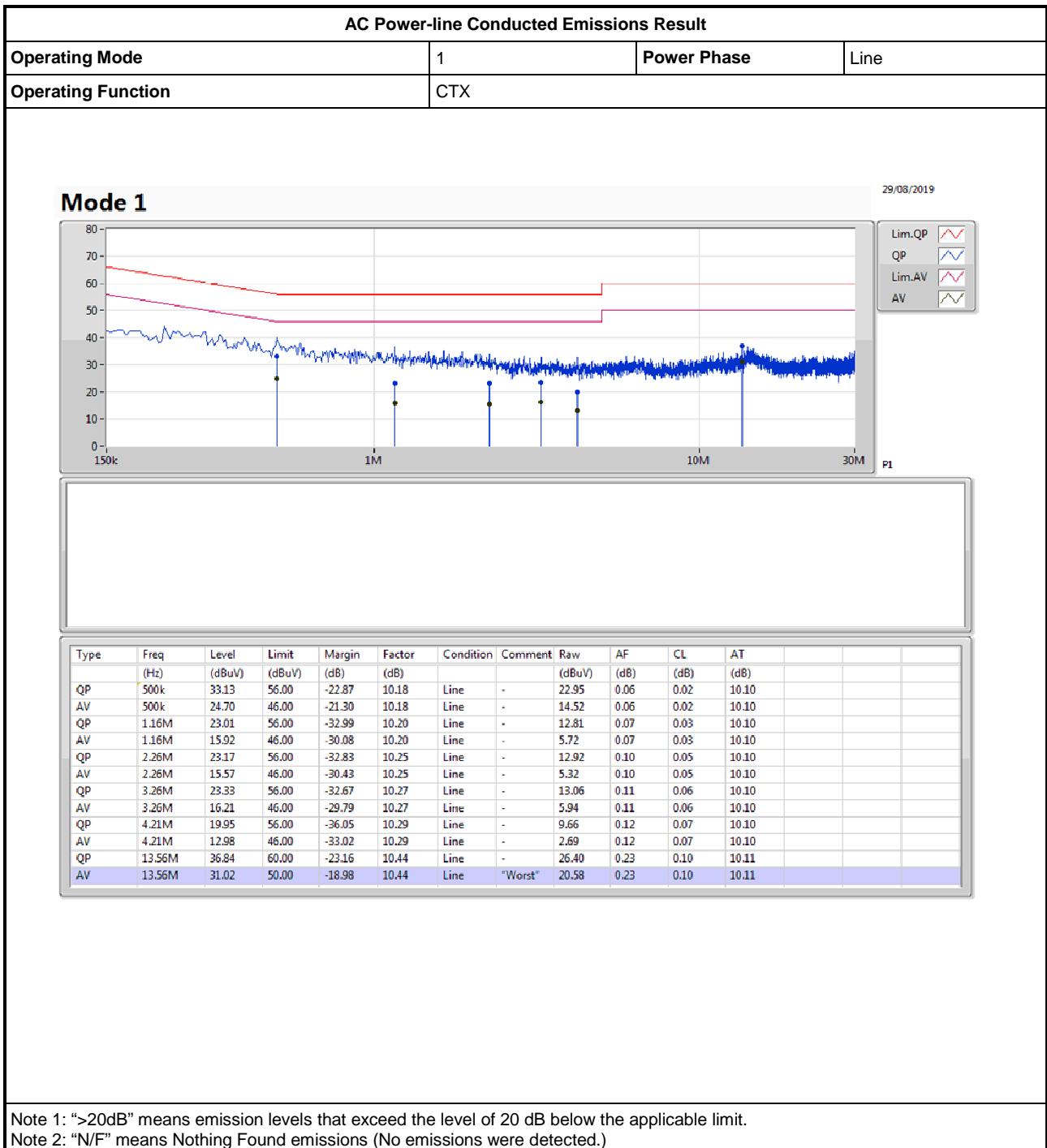
**FCC RADIO TEST REPORT**

Report No. : FR912114AB

RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz – 26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

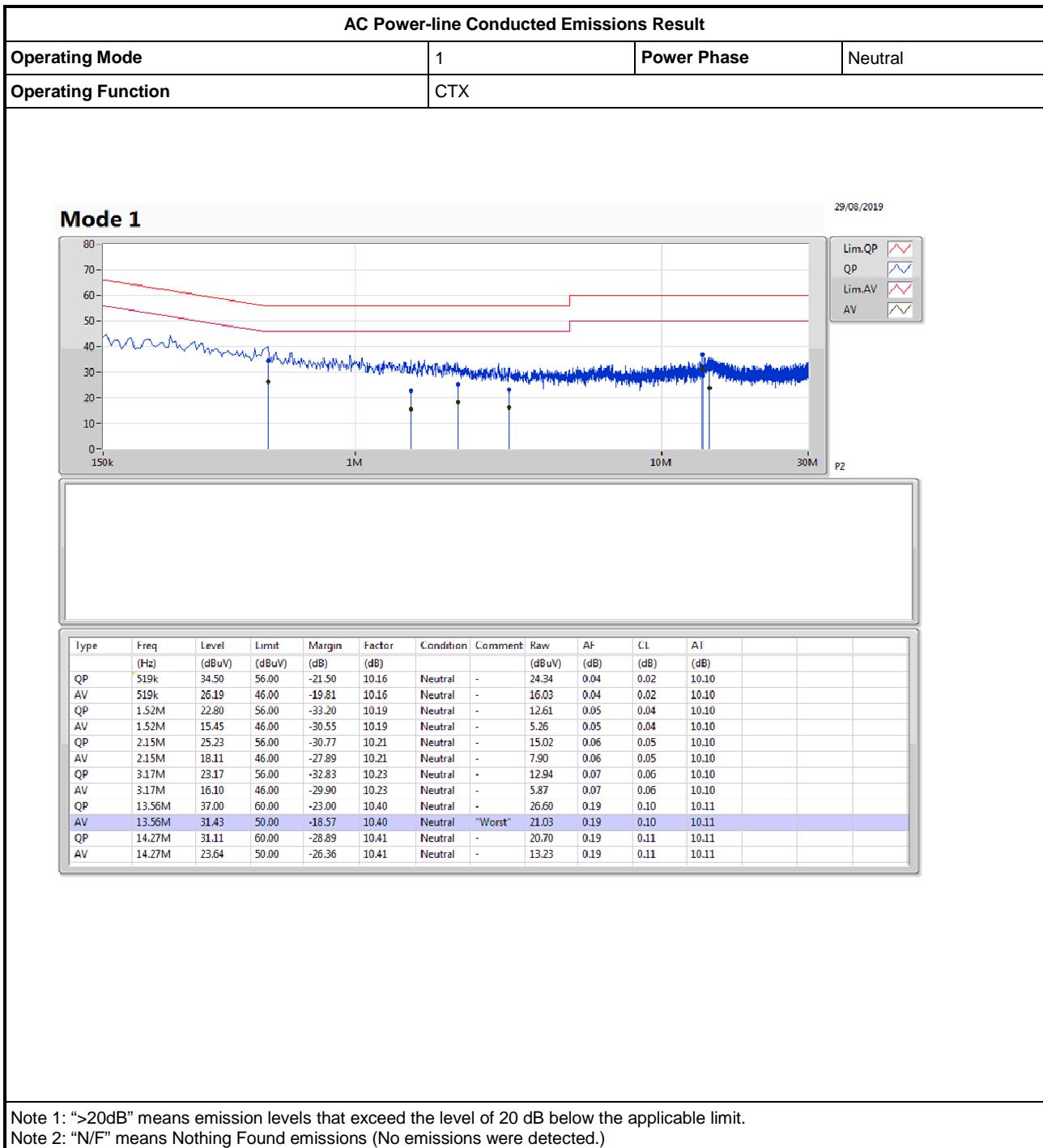
NCR means Non-Calibration required.





AC Power-line Conducted Emissions Result

Appendix A





<non-beamforming mode> 4T1S

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	37.26M	16.822M	16M8D1D	21.75M	16.582M
802.11ac VHT20_Nss1,(MCS0)_4TX	34.38M	17.931M	17M9D1D	21.75M	17.751M
802.11ac VHT40_Nss1,(MCS0)_4TX	67.92M	36.342M	36M3D1D	39.84M	36.222M
802.11ac VHT80_Nss1,(MCS0)_4TX	82.2M	75.682M	75M7D1D	81.24M	75.562M
802.11ax HEW20_Nss1,(MCS0)_4TX	36.57M	19.07M	19M1D1D	21.48M	18.981M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.32M	37.721M	37M7D1D	39.84M	37.481M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.72M	77.001M	77M0D1D	81.12M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.53M	16.732M	16M7D1D	16.29M	16.612M
802.11ac VHT20_Nss1,(MCS0)_4TX	17.58M	17.871M	17M9D1D	17.52M	17.781M
802.11ac VHT40_Nss1,(MCS0)_4TX	36.36M	36.342M	36M3D1D	35.64M	36.282M
802.11ac VHT80_Nss1,(MCS0)_4TX	75.12M	76.042M	76M0D1D	75.12M	75.802M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.99M	19.07M	19M1D1D	18.75M	18.981M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.5M	37.661M	37M7D1D	35.94M	37.481M
802.11ax HEW80_Nss1,(MCS0)_4TX	76.08M	77.241M	77M2D1D	75.24M	76.882M

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

Max-OBW = Maximum99% 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

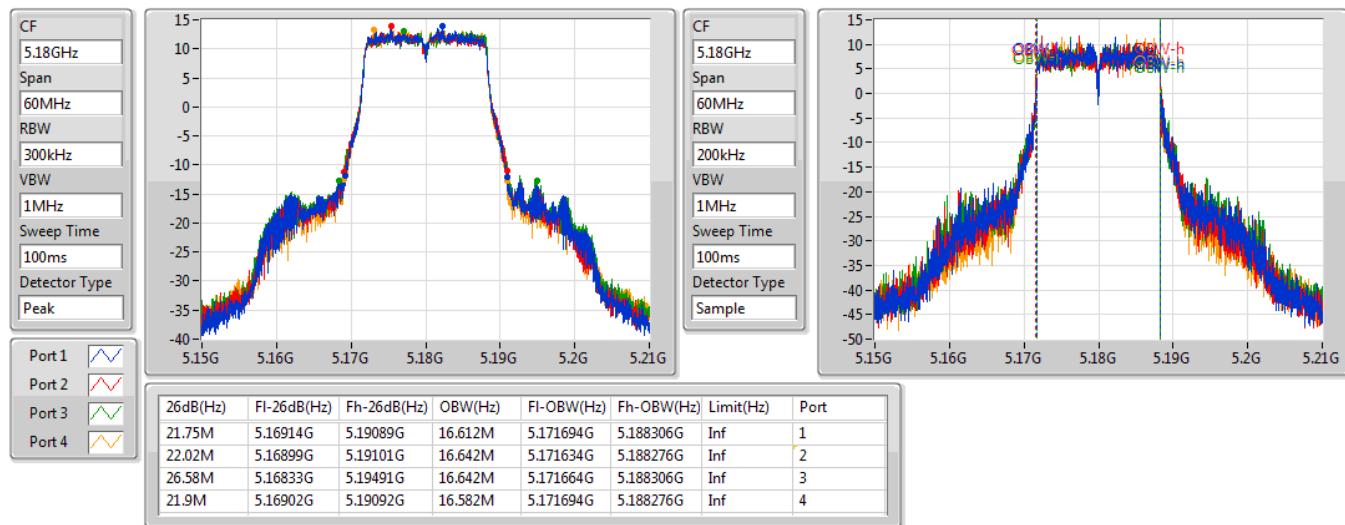
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.75M	16.612M	22.02M	16.642M	26.58M	16.642M	21.9M	16.582M
5200MHz	Pass	Inf	33.84M	16.822M	27.42M	16.672M	37.26M	16.762M	28.5M	16.642M
5240MHz	Pass	Inf	28.44M	16.702M	27.3M	16.702M	36.66M	16.762M	27.66M	16.612M
5745MHz	Pass	500k	16.35M	16.642M	16.29M	16.672M	16.53M	16.672M	16.32M	16.672M
5785MHz	Pass	500k	16.29M	16.642M	16.29M	16.732M	16.29M	16.612M	16.32M	16.642M
5825MHz	Pass	500k	16.47M	16.672M	16.29M	16.612M	16.29M	16.642M	16.32M	16.672M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.99M	17.811M	22.14M	17.811M	21.75M	17.811M	21.75M	17.751M
5200MHz	Pass	Inf	33.12M	17.901M	28.83M	17.871M	34.38M	17.931M	28.14M	17.811M
5240MHz	Pass	Inf	29.01M	17.901M	23.58M	17.841M	27.69M	17.871M	26.73M	17.781M
5745MHz	Pass	500k	17.52M	17.841M	17.55M	17.811M	17.55M	17.811M	17.55M	17.841M
5785MHz	Pass	500k	17.52M	17.841M	17.55M	17.871M	17.55M	17.781M	17.55M	17.841M
5825MHz	Pass	500k	17.55M	17.871M	17.58M	17.871M	17.55M	17.841M	17.55M	17.811M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.2M	36.282M	39.9M	36.222M	40.02M	36.282M	39.84M	36.342M
5230MHz	Pass	Inf	67.92M	36.282M	46.92M	36.282M	52.38M	36.342M	45.84M	36.342M
5755MHz	Pass	500k	36.3M	36.342M	36.36M	36.342M	36.3M	36.342M	36.06M	36.342M
5795MHz	Pass	500k	35.64M	36.282M	36.3M	36.342M	35.7M	36.282M	36.36M	36.282M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	75.682M	81.24M	75.562M	81.36M	75.562M	81.96M	75.682M
5775MHz	Pass	500k	75.12M	75.922M	75.12M	75.802M	75.12M	76.042M	75.12M	75.802M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	22.65M	18.981M	21.48M	19.01M	23.67M	19.01M	21.78M	19.01M
5200MHz	Pass	Inf	36.3M	19.01M	26.25M	19.07M	36.57M	19.07M	26.61M	19.07M
5240MHz	Pass	Inf	29.67M	19.07M	25.56M	19.07M	29.85M	19.04M	25.92M	19.01M
5745MHz	Pass	500k	18.9M	19.04M	18.81M	19.04M	18.87M	19.01M	18.99M	19.07M
5785MHz	Pass	500k	18.87M	18.981M	18.84M	19.01M	18.75M	19.04M	18.78M	18.981M
5825MHz	Pass	500k	18.84M	19.01M	18.87M	19.04M	18.99M	19.04M	18.93M	19.04M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.2M	37.481M	39.84M	37.481M	39.96M	37.601M	40.08M	37.541M
5230MHz	Pass	Inf	40.32M	37.721M	40.14M	37.601M	40.08M	37.661M	40.14M	37.601M
5755MHz	Pass	500k	37.5M	37.601M	36.42M	37.661M	37.5M	37.661M	36.96M	37.601M
5795MHz	Pass	500k	37.5M	37.661M	35.94M	37.601M	37.5M	37.481M	36.54M	37.481M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.36M	77.001M	81.12M	77.001M	81.48M	77.001M	81.72M	76.882M
5775MHz	Pass	500k	76.08M	77.241M	75.24M	76.882M	75.48M	77.121M	75.6M	77.001M

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

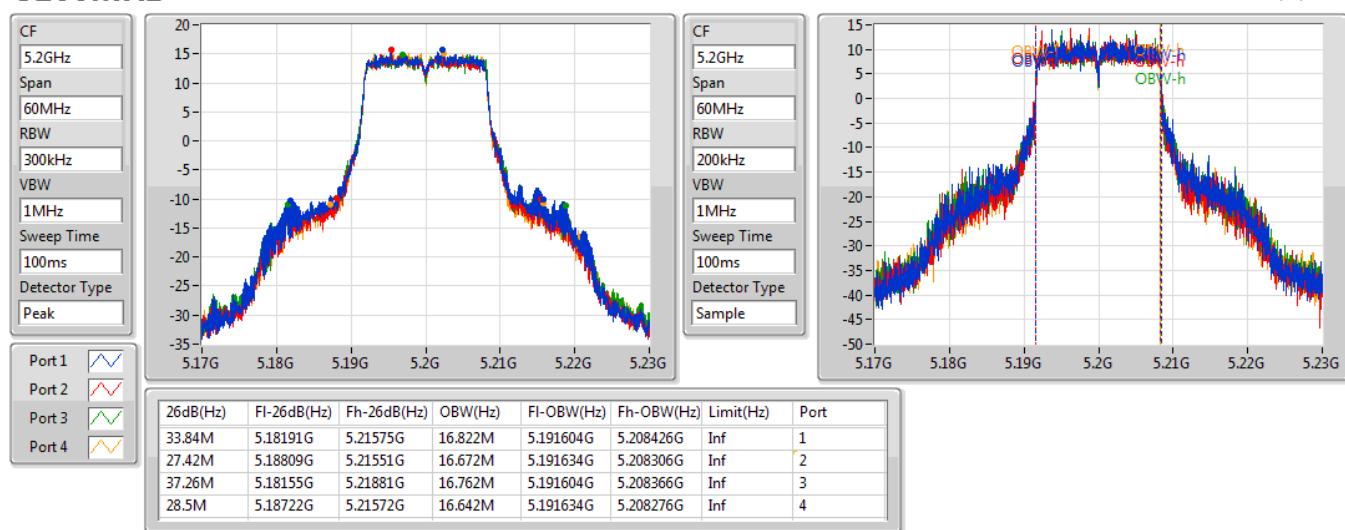
Port X-OBW = Port X 99% occupied bandwidth;

**802.11a_Nss1,(6Mbps)_4TX****EBW****5180MHz**

30/07/2019

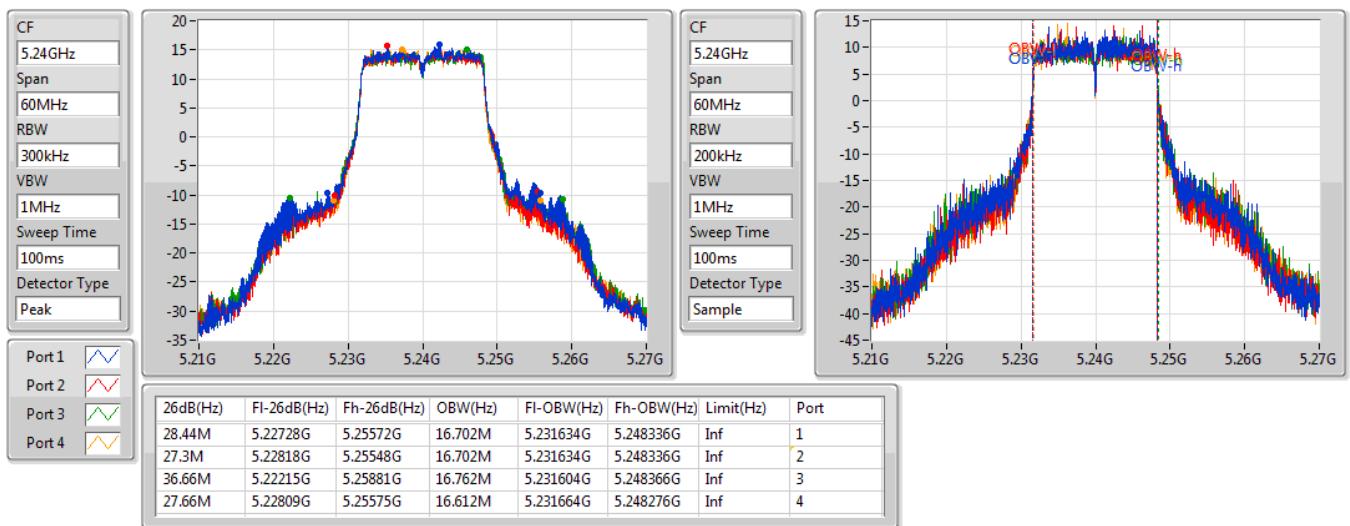
**802.11a_Nss1,(6Mbps)_4TX****EBW****5200MHz**

30/07/2019

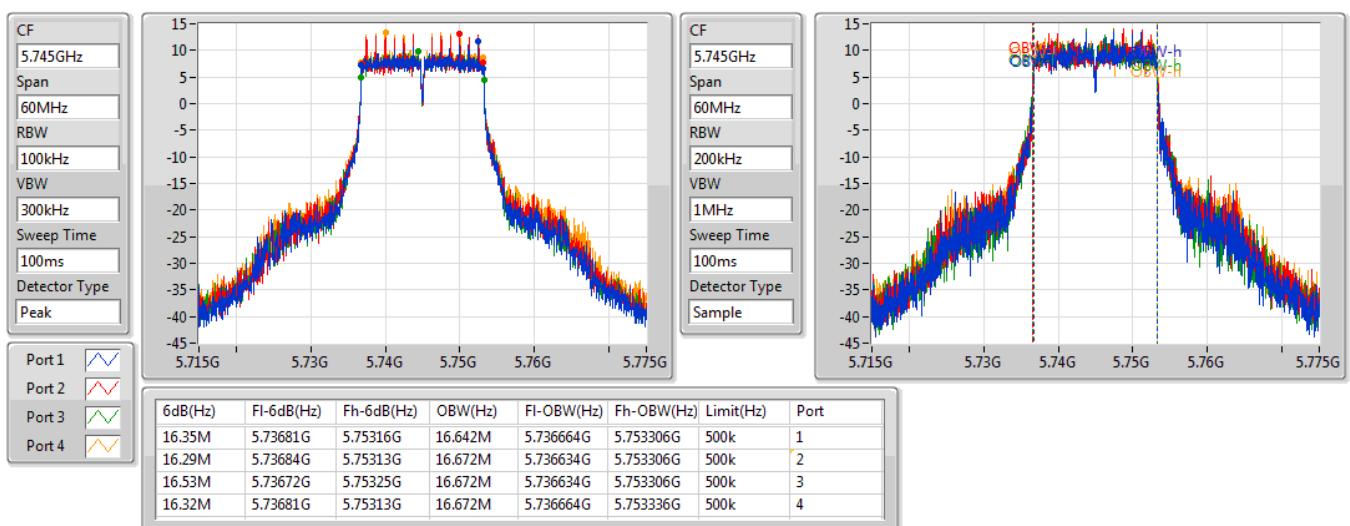


802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

30/07/2019

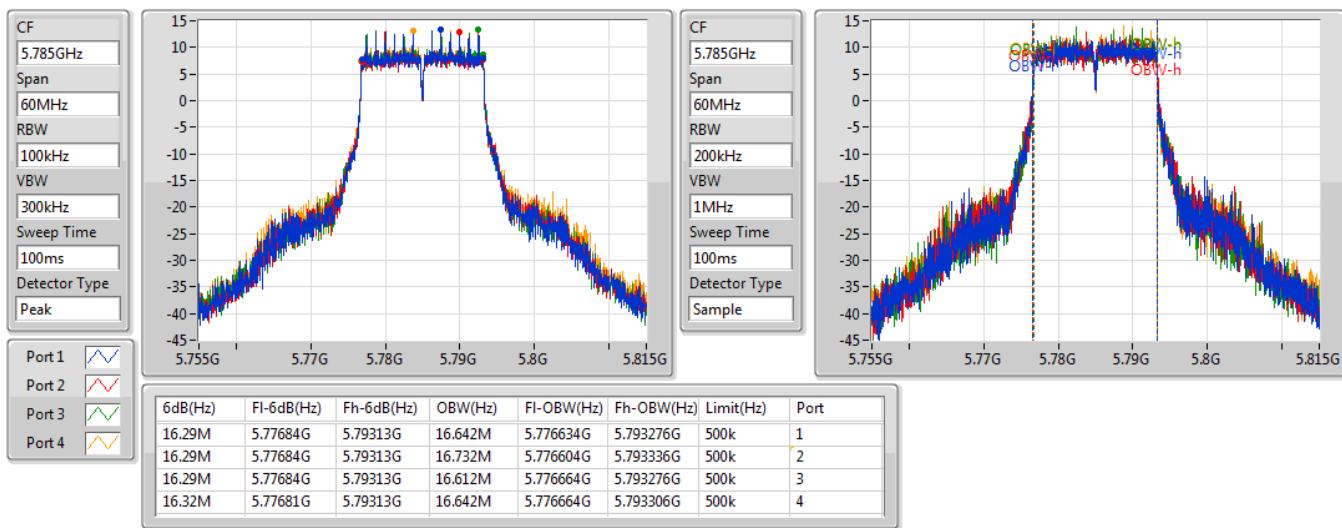

802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

30/07/2019

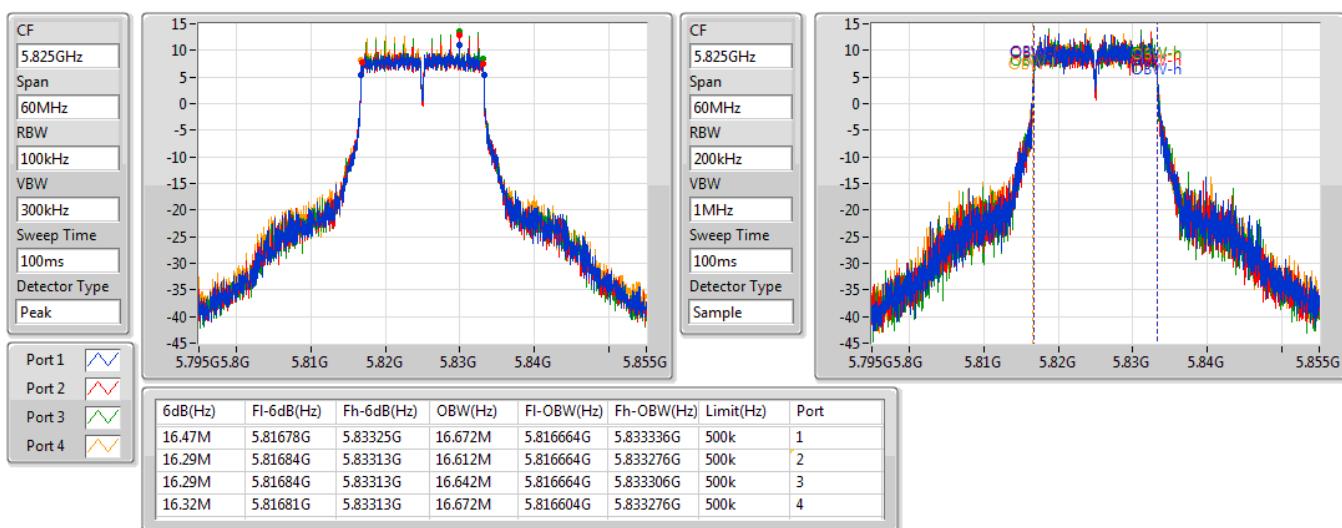


802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

30/07/2019

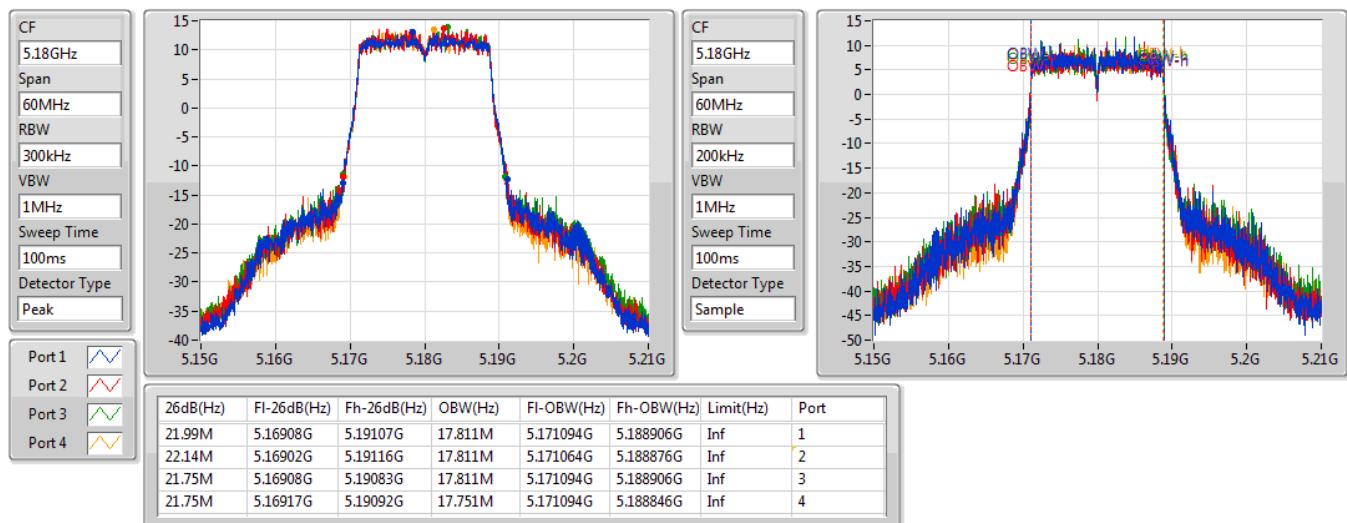

802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

30/07/2019

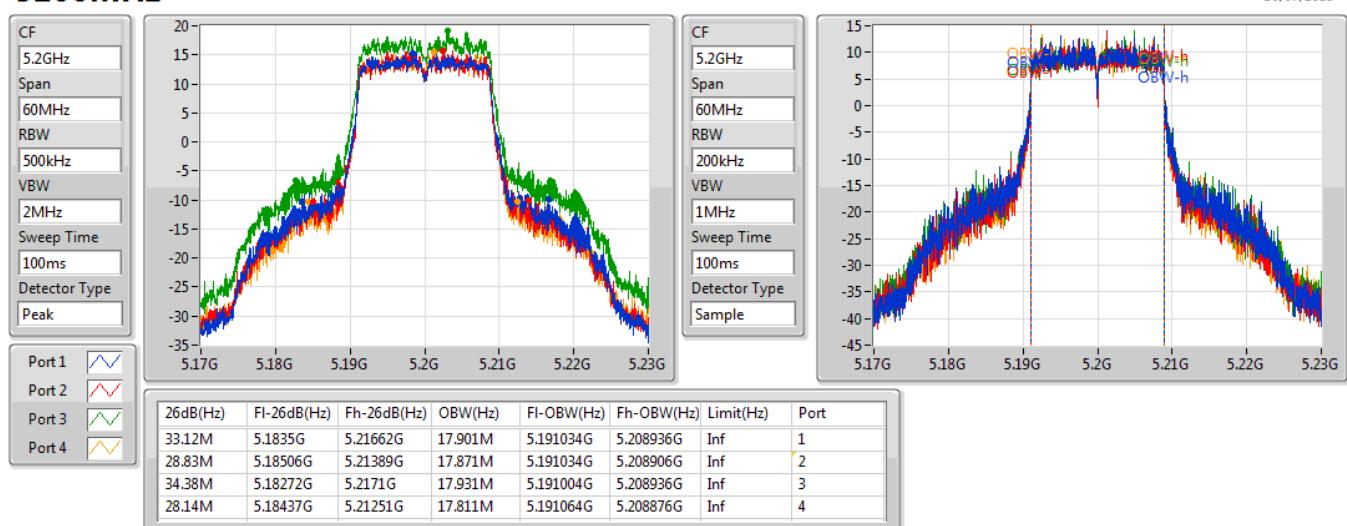


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5180MHz

30/07/2019

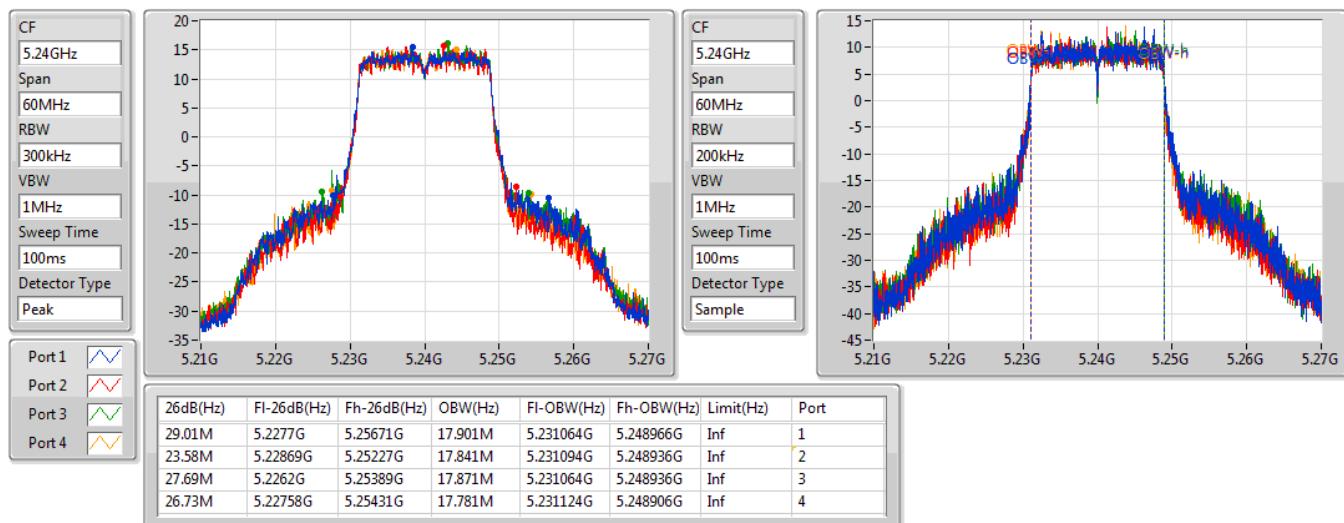

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EBW
5200MHz

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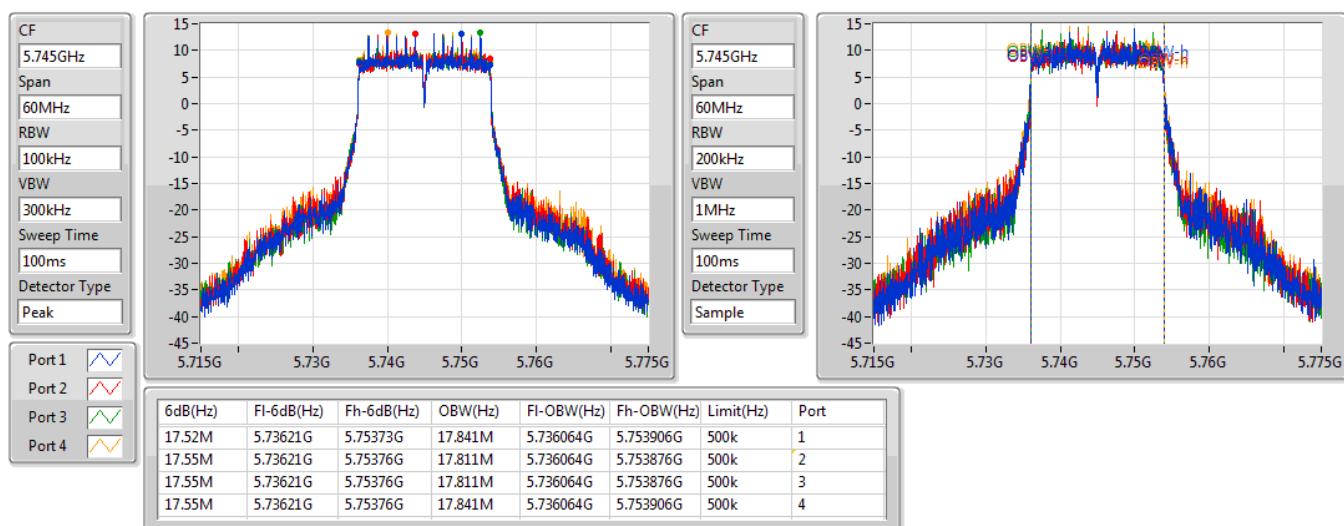


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5240MHz

30/07/2019


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5745MHz

30/07/2019

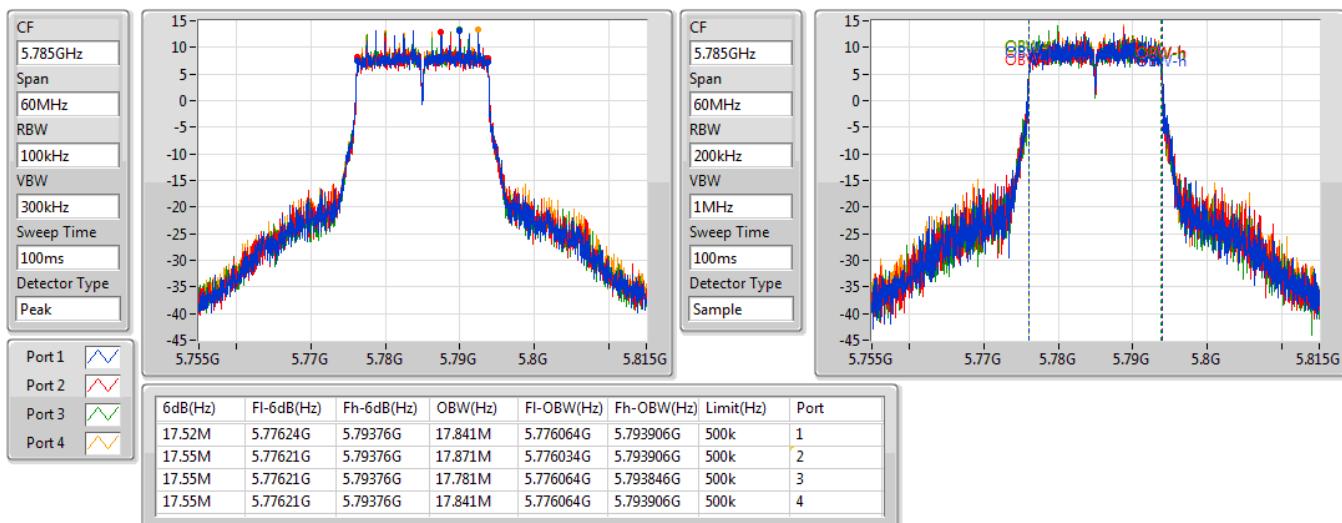


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5785MHz

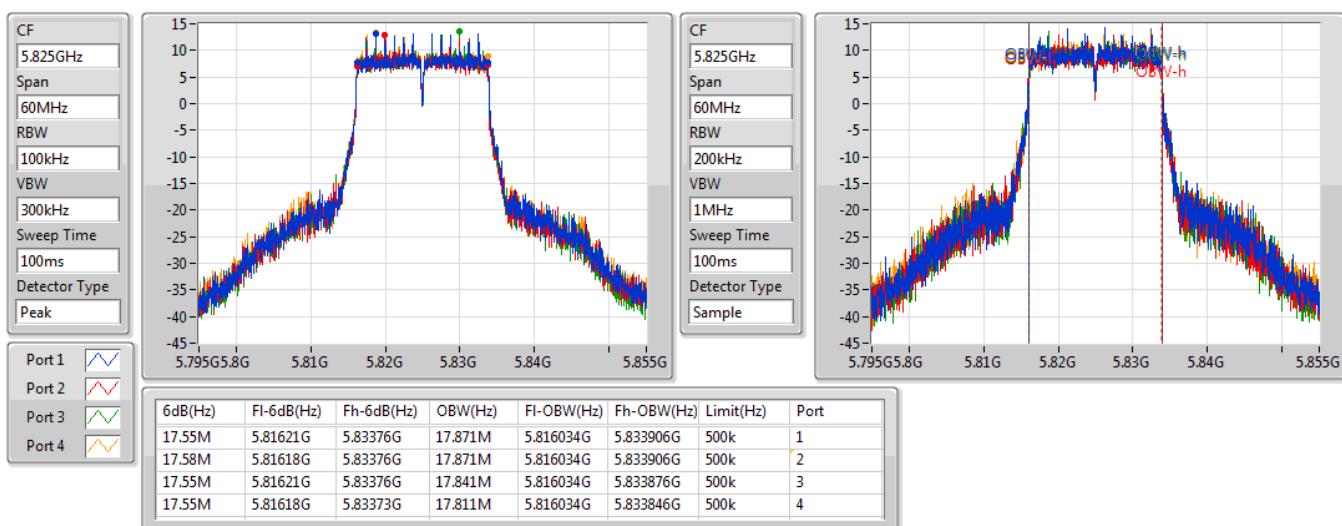
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802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

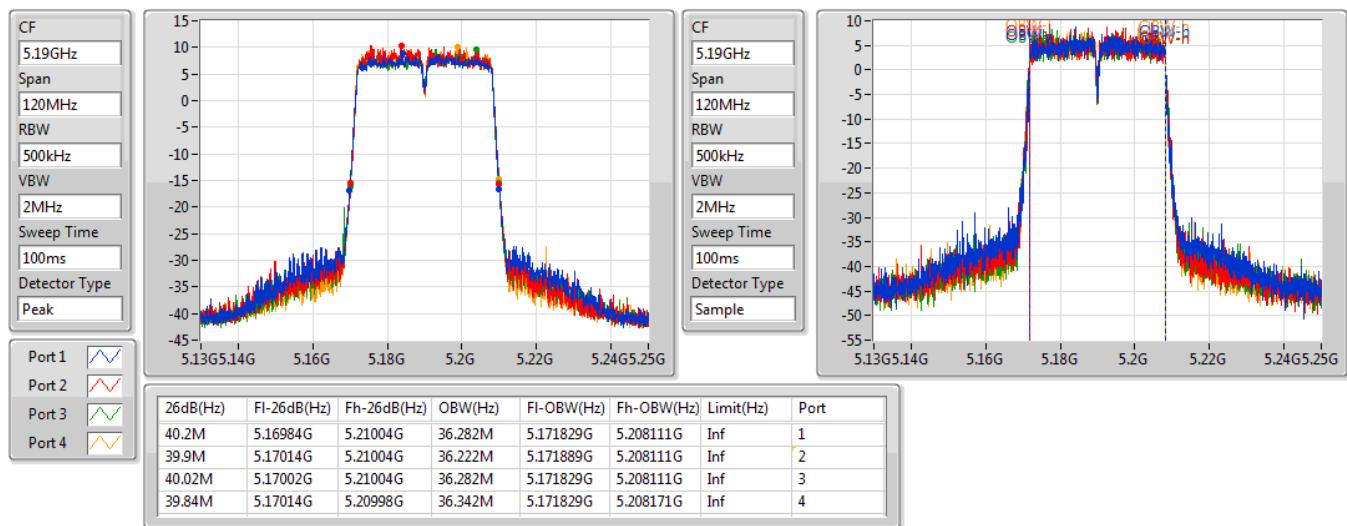
5825MHz

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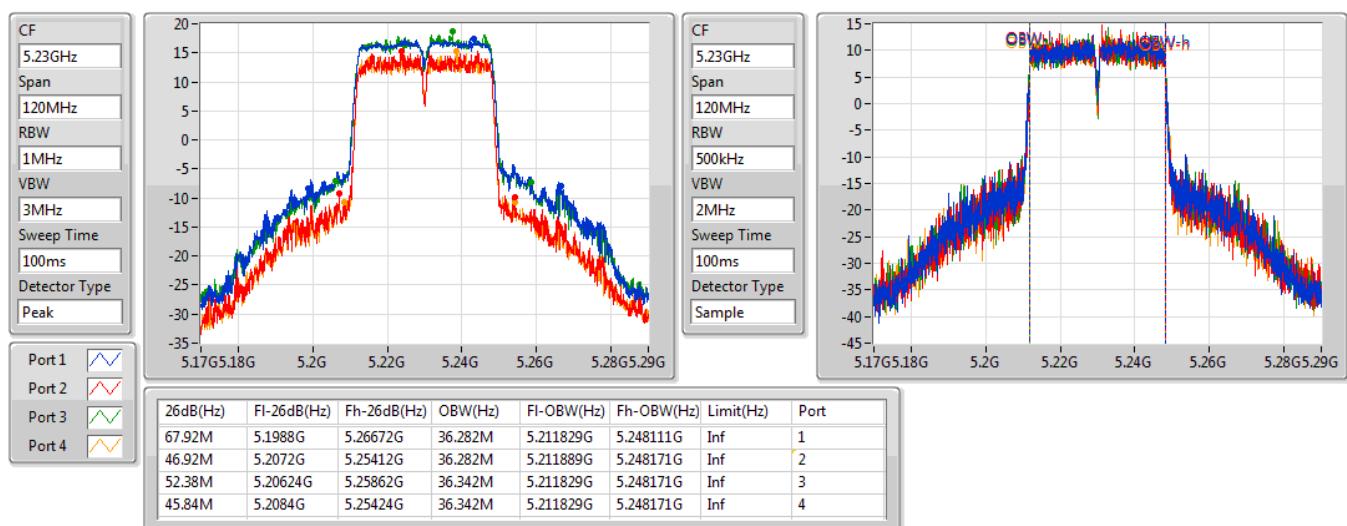


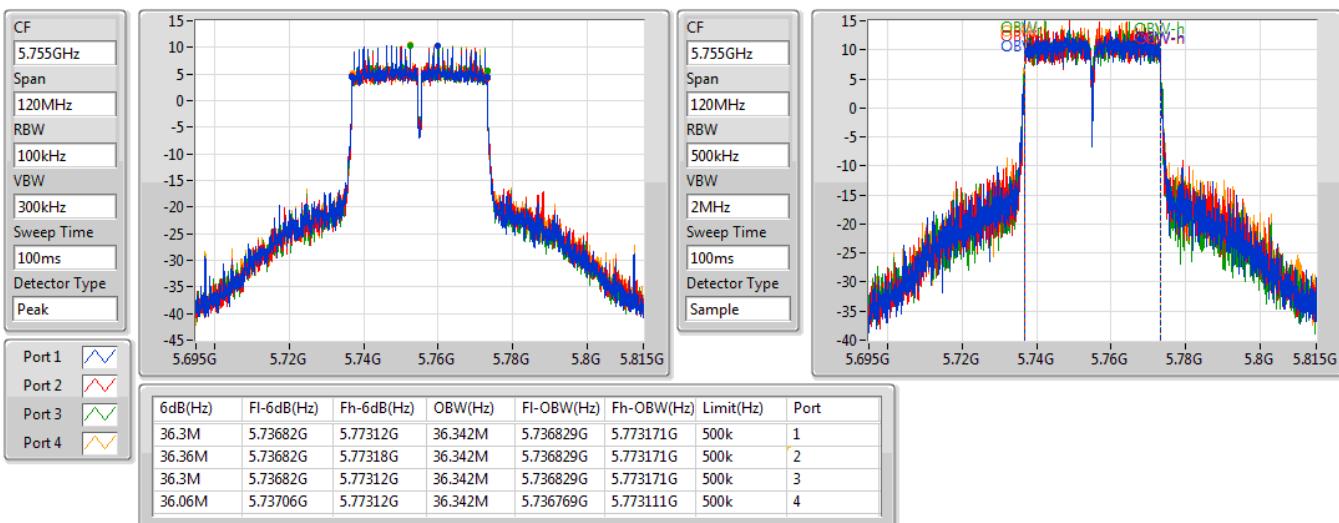
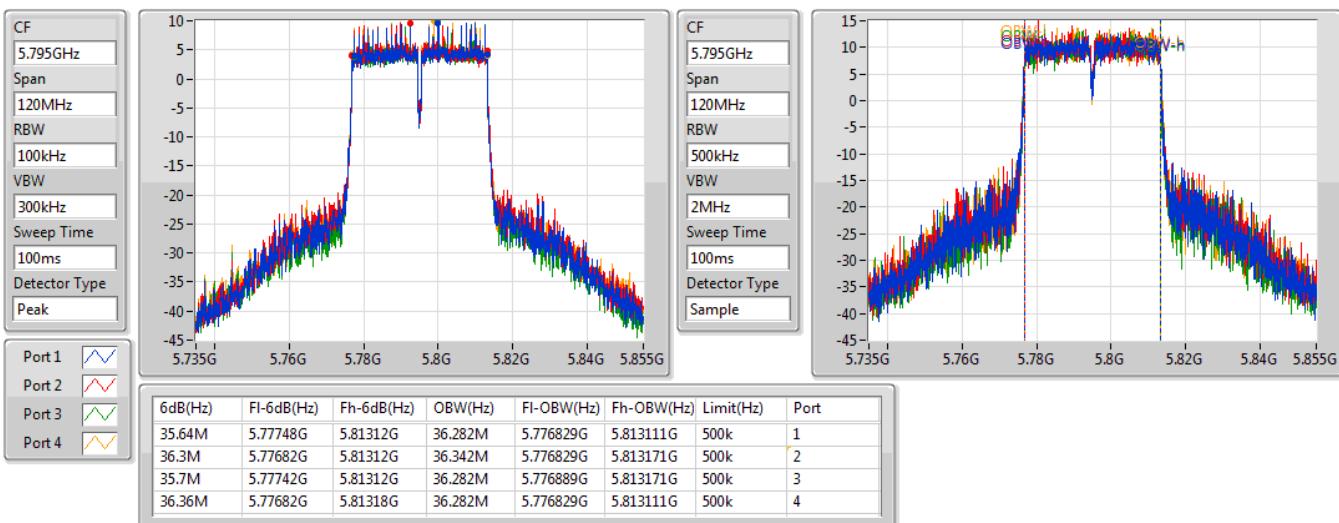
802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5190MHz

30/07/2019


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5230MHz

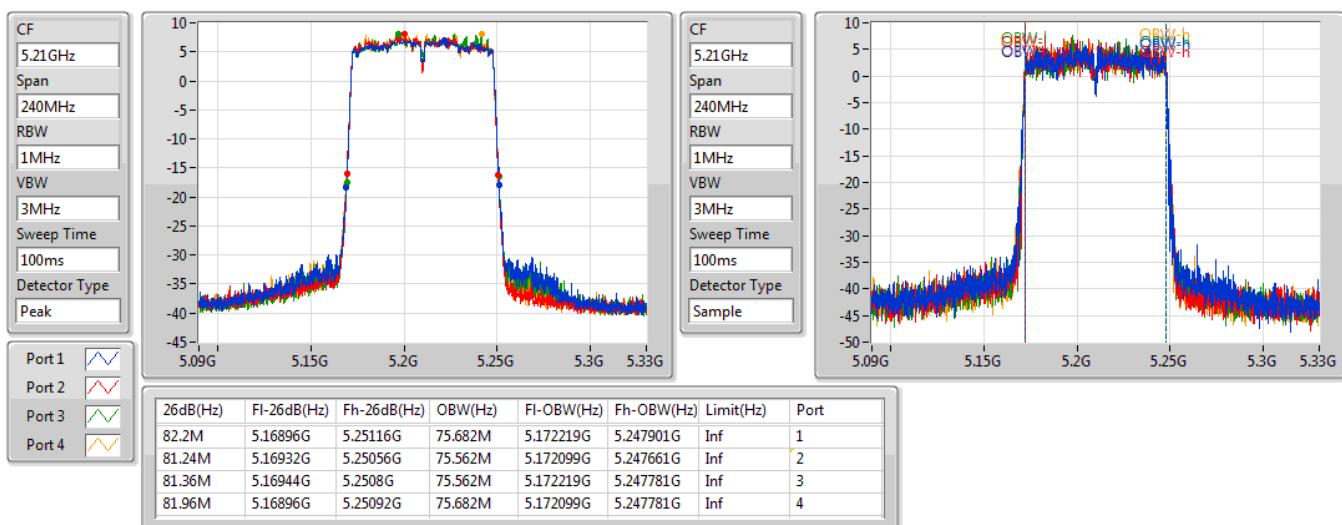
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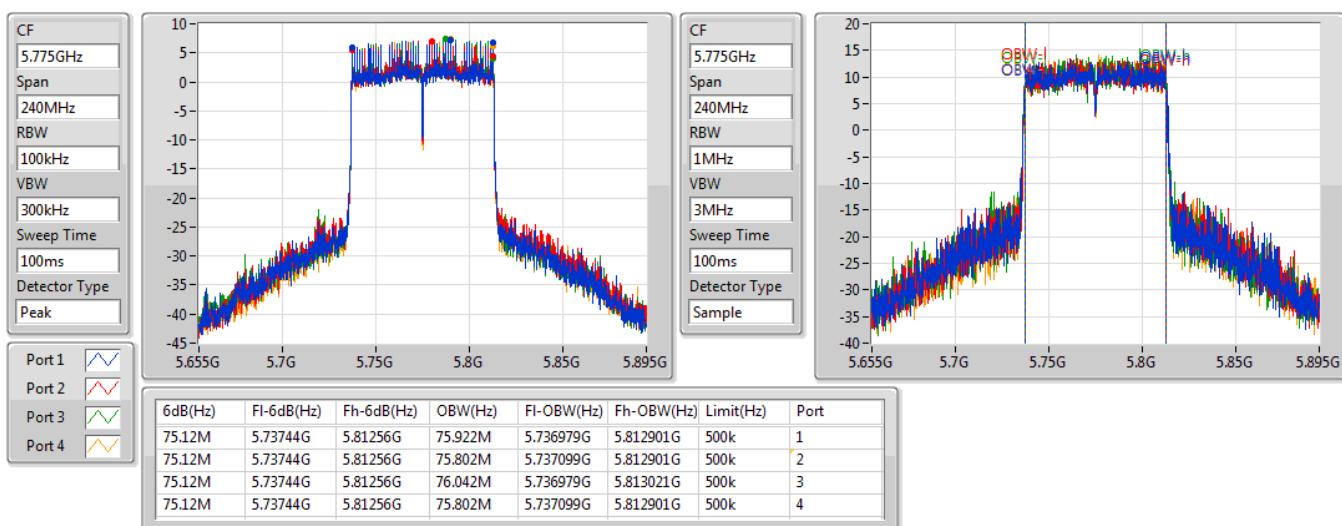
802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5755MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5795MHz


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5210MHz

30/07/2019

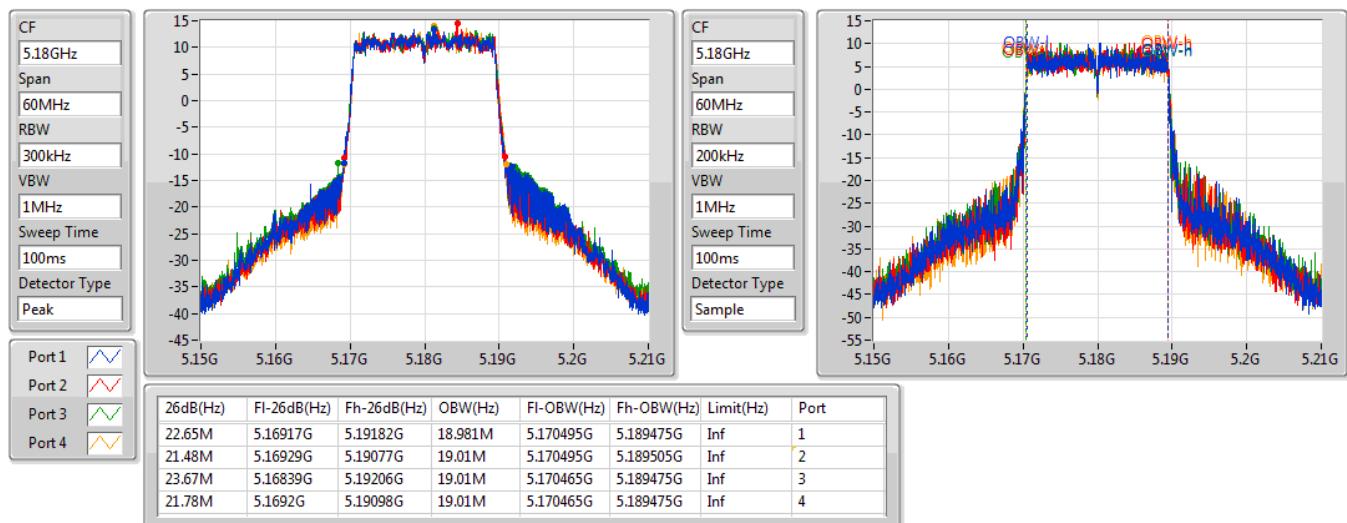

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5775MHz

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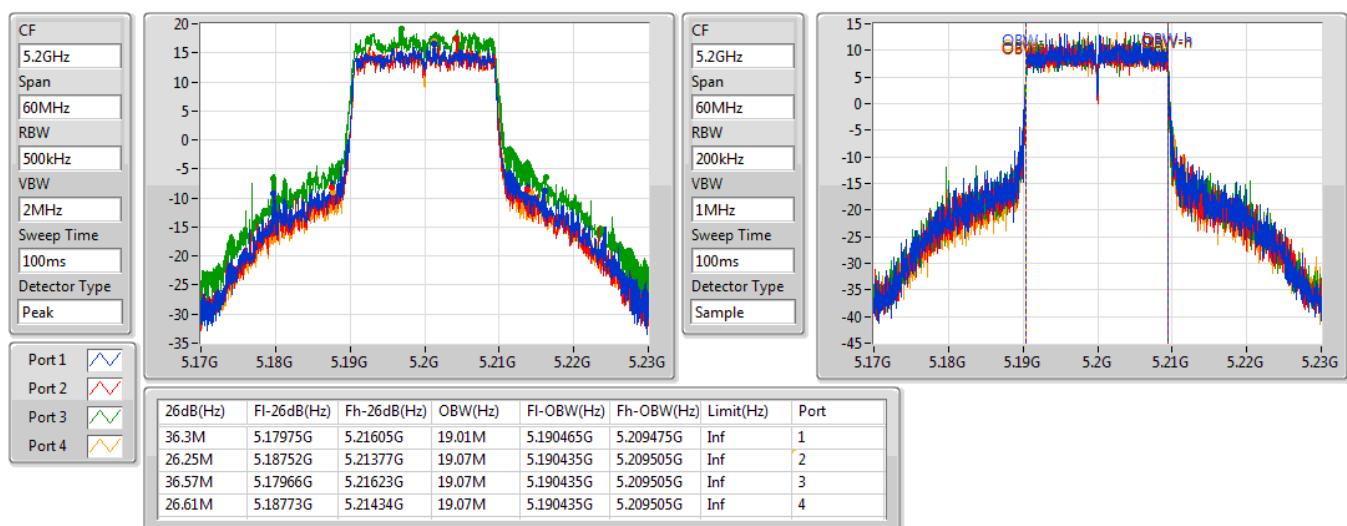


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5180MHz

30/07/2019

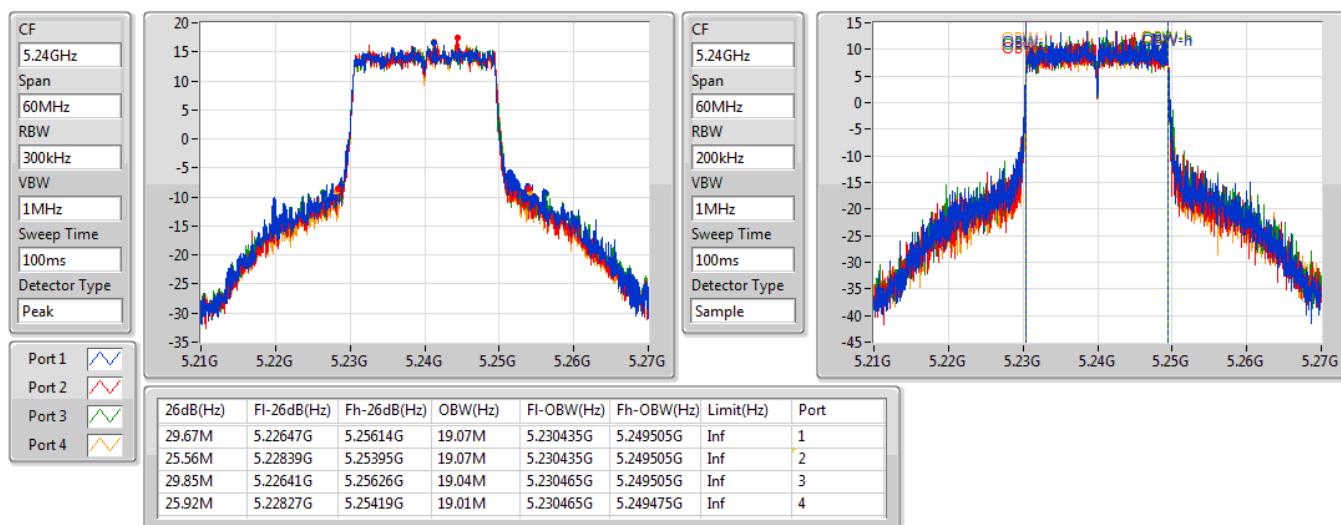

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5200MHz

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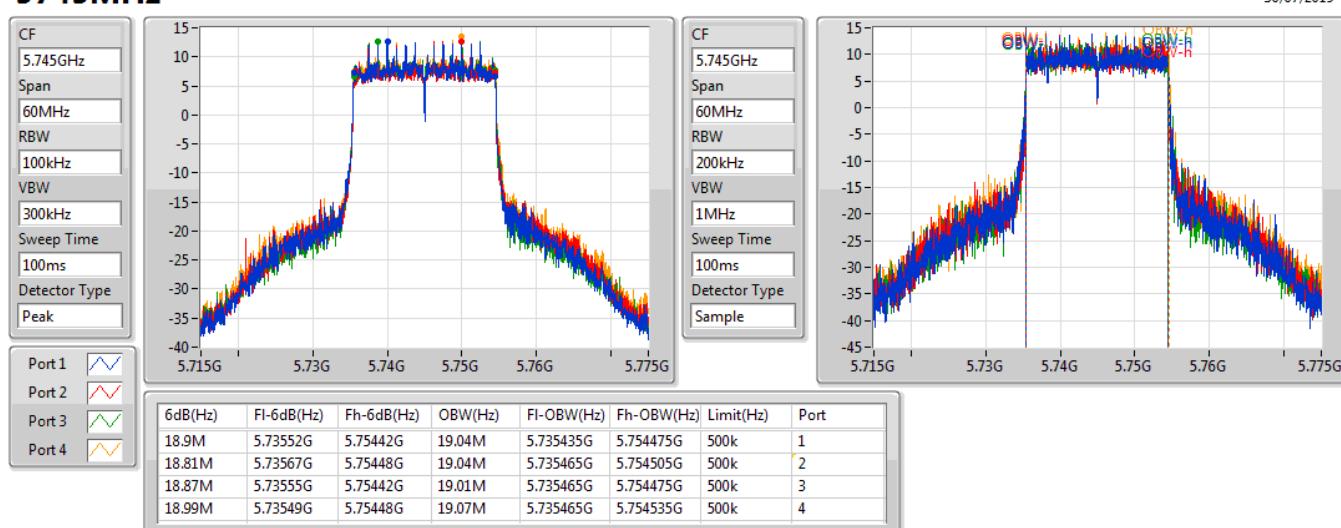


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5240MHz

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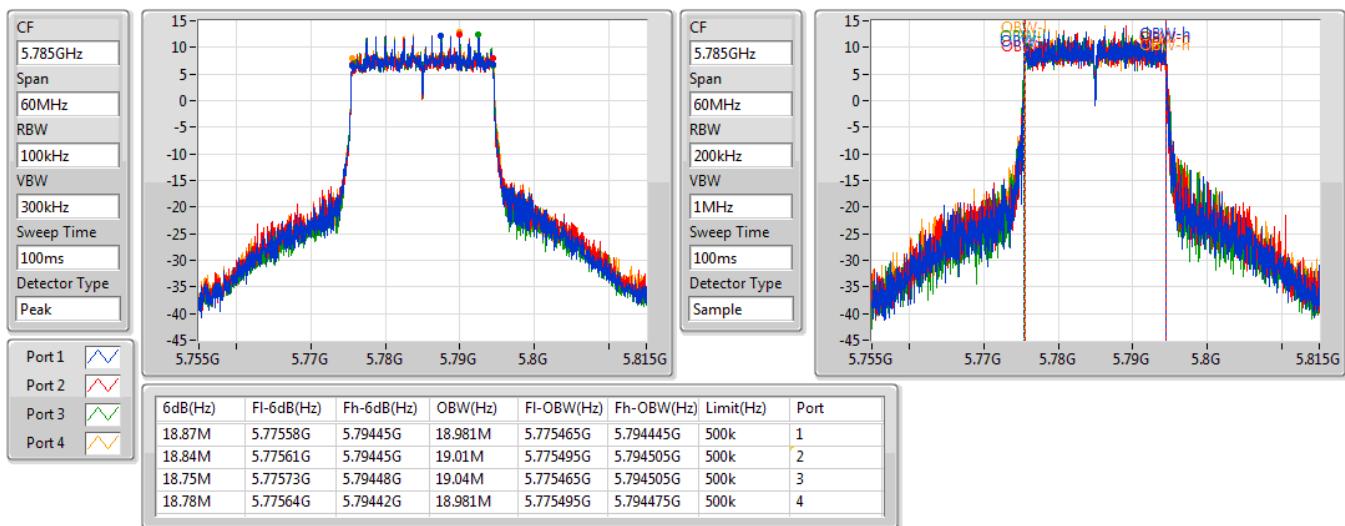

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5745MHz

30/07/2019



802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5785MHz

30/07/2019

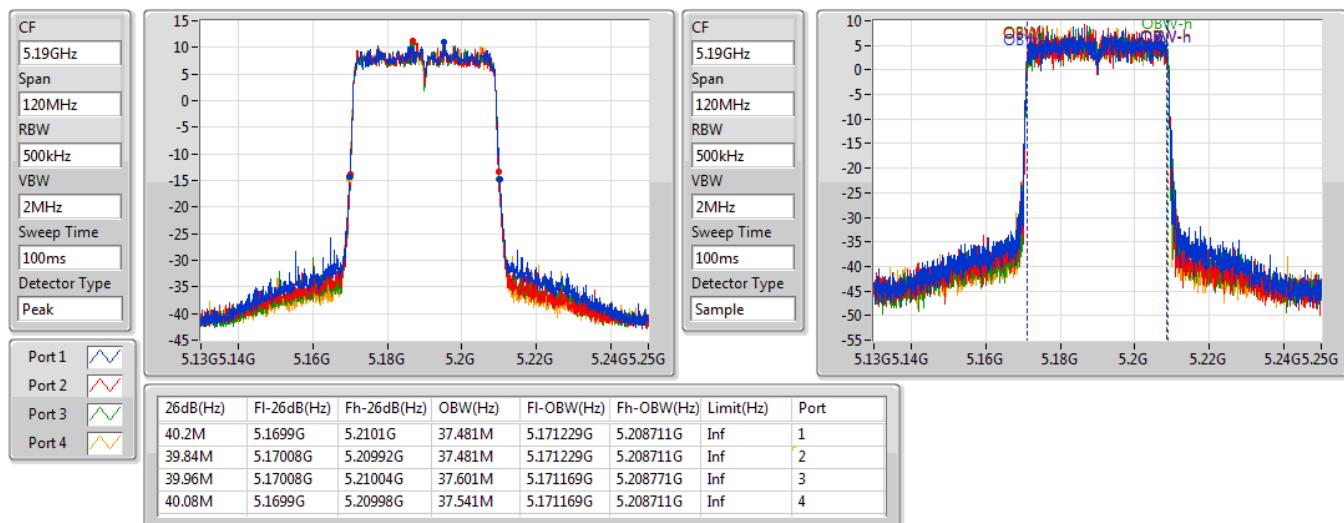

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5825MHz

30/07/2019

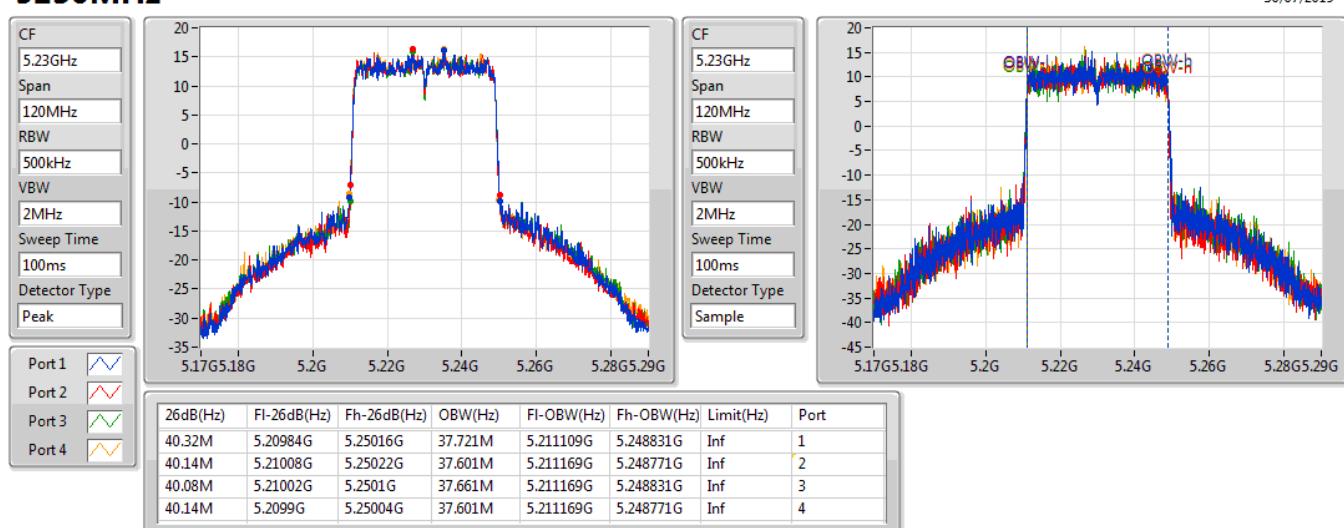


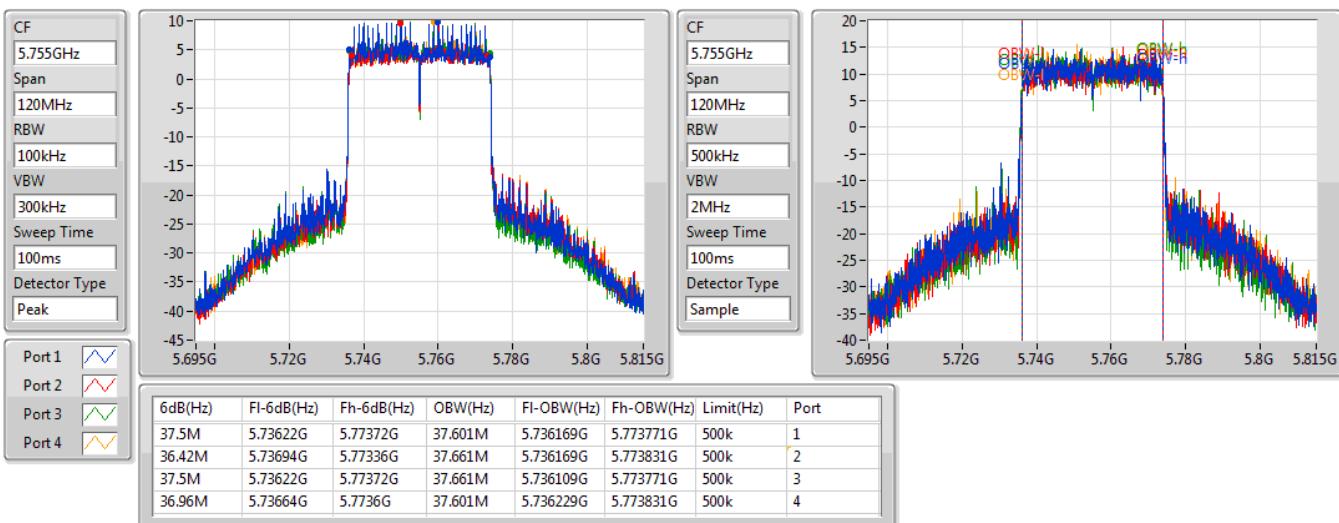
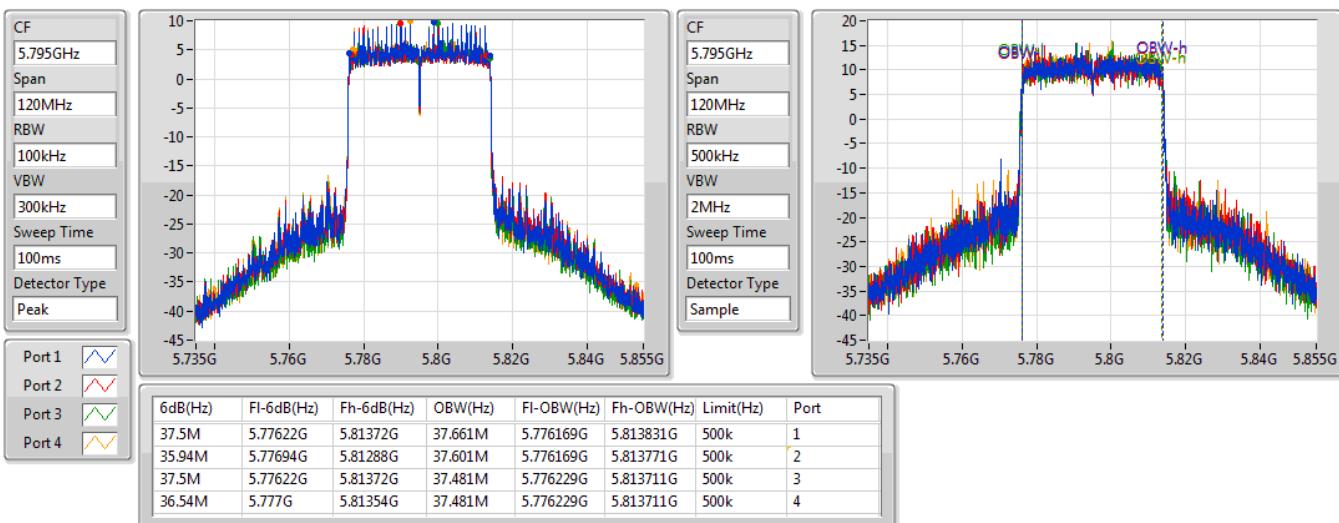
802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5190MHz

30/07/2019


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5230MHz

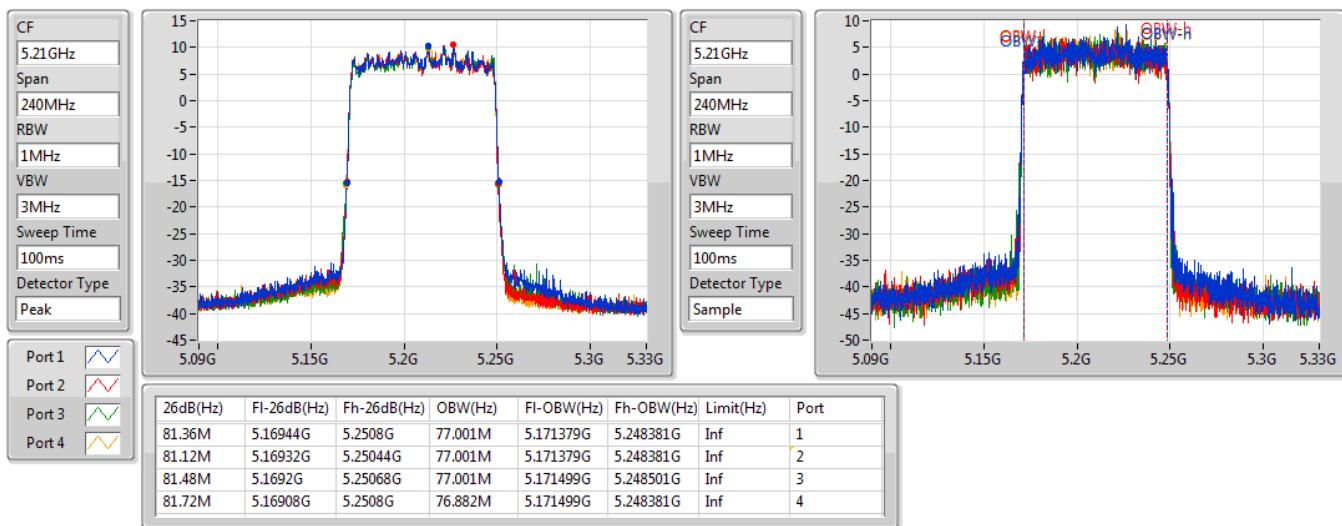
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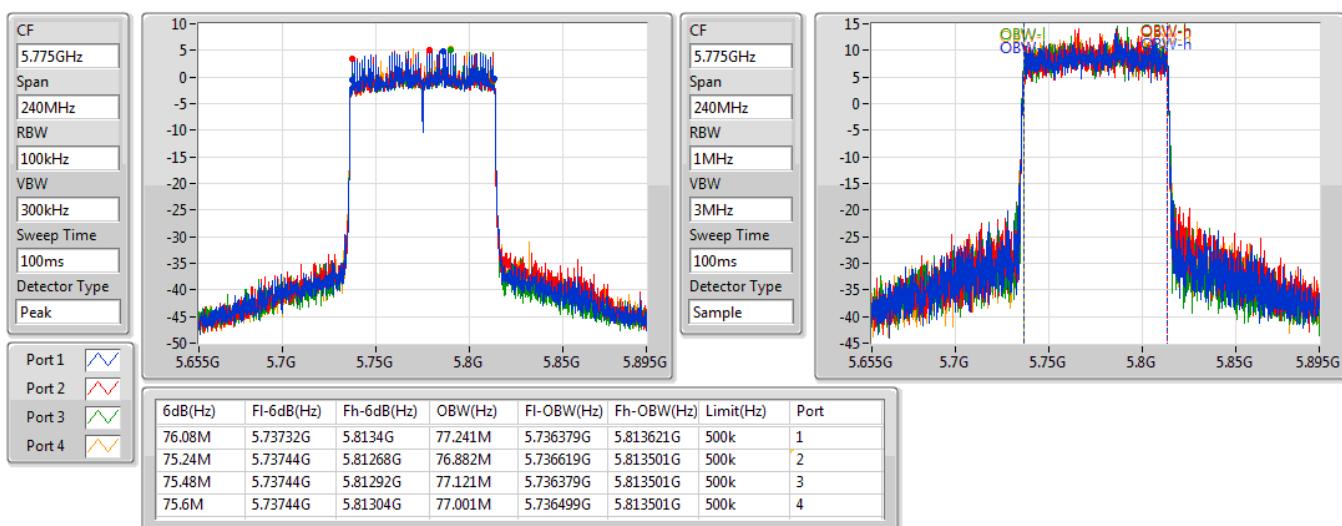
802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5755MHz

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5795MHz


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5210MHz

30/07/2019


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5775MHz

31/07/2019





<beamforming mode> 4T1S

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	38.4M	17.961M	18M0D1D	21.66M	17.751M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	64.74M	36.462M	36M5D1D	39.66M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	82.56M	75.922M	75M9D1D	81.12M	75.562M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	32.61M	19.16M	19M2D1D	21.63M	18.981M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	65.1M	37.721M	37M7D1D	39.9M	37.481M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.08M	77.001M	77M0D1D	81.84M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	17.58M	17.841M	17M8D1D	17.28M	17.781M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	36.3M	36.402M	36M4D1D	36M	36.282M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	75.72M	75.802M	75M8D1D	75.12M	75.562M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	18.99M	19.04M	19M0D1D	18.66M	18.981M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.5M	37.721M	37M7D1D	36.12M	37.541M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	75.96M	77.241M	77M2D1D	75.48M	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

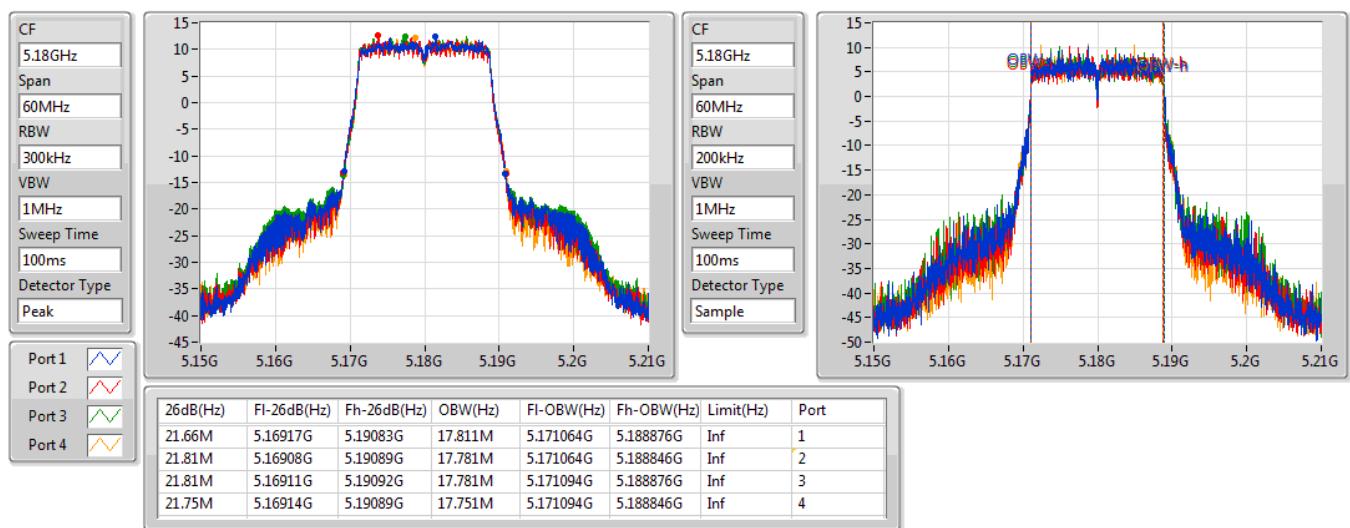
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.66M	17.811M	21.81M	17.781M	21.81M	17.781M	21.75M	17.751M
5200MHz	Pass	Inf	38.4M	17.961M	29.64M	17.871M	32.73M	17.961M	31.11M	17.901M
5240MHz	Pass	Inf	31.35M	17.931M	29.58M	17.931M	33.99M	17.931M	30.12M	17.901M
5745MHz	Pass	500k	17.52M	17.841M	17.55M	17.841M	17.55M	17.841M	17.58M	17.841M
5785MHz	Pass	500k	17.28M	17.841M	17.55M	17.841M	17.55M	17.781M	17.55M	17.841M
5825MHz	Pass	500k	17.52M	17.841M	17.55M	17.811M	17.55M	17.841M	17.55M	17.811M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.02M	36.222M	39.72M	36.162M	39.66M	36.222M	39.72M	36.162M
5230MHz	Pass	Inf	64.62M	36.402M	64.74M	36.462M	63.48M	36.342M	64.56M	36.402M
5755MHz	Pass	500k	36.06M	36.402M	36.3M	36.342M	36.3M	36.342M	36.24M	36.342M
5795MHz	Pass	500k	36M	36.402M	36.06M	36.402M	36.3M	36.342M	36.3M	36.282M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.56M	75.562M	82.2M	75.922M	81.12M	75.682M	81.48M	75.682M
5775MHz	Pass	500k	75.12M	75.802M	75.12M	75.682M	75.72M	75.802M	75.12M	75.562M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.75M	18.981M	21.63M	19.01M	21.78M	19.01M	21.84M	19.01M
5200MHz	Pass	Inf	32.61M	19.13M	29.04M	19.07M	29.52M	19.1M	25.71M	19.16M
5240MHz	Pass	Inf	32.58M	19.1M	29.01M	19.07M	25.8M	19.07M	28.86M	19.07M
5745MHz	Pass	500k	18.99M	19.04M	18.75M	18.981M	18.72M	18.981M	18.84M	19.01M
5785MHz	Pass	500k	18.93M	19.01M	18.72M	19.01M	18.69M	19.01M	18.72M	19.01M
5825MHz	Pass	500k	18.87M	18.981M	18.78M	19.01M	18.66M	19.04M	18.84M	19.04M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.02M	37.481M	39.9M	37.481M	39.9M	37.541M	40.14M	37.601M
5230MHz	Pass	Inf	60.84M	37.721M	49.98M	37.721M	65.1M	37.661M	49.74M	37.721M
5755MHz	Pass	500k	37.08M	37.721M	36.12M	37.601M	37.32M	37.661M	37.5M	37.541M
5795MHz	Pass	500k	37.38M	37.601M	36.72M	37.661M	36.24M	37.541M	37.08M	37.601M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.08M	77.001M	82.08M	77.001M	81.96M	77.001M	81.84M	76.882M
5775MHz	Pass	500k	75.96M	77.241M	75.6M	77.001M	75.48M	77.001M	75.48M	77.001M

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

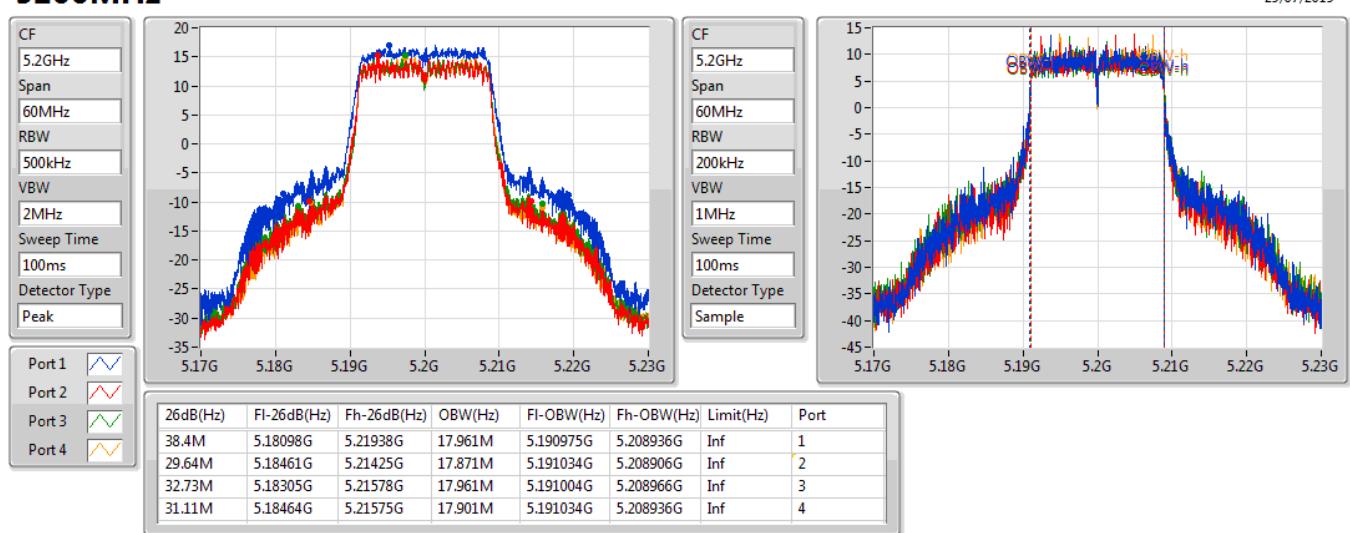
Port X-OBW = Port X 99% occupied bandwidth;

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

29/07/2019

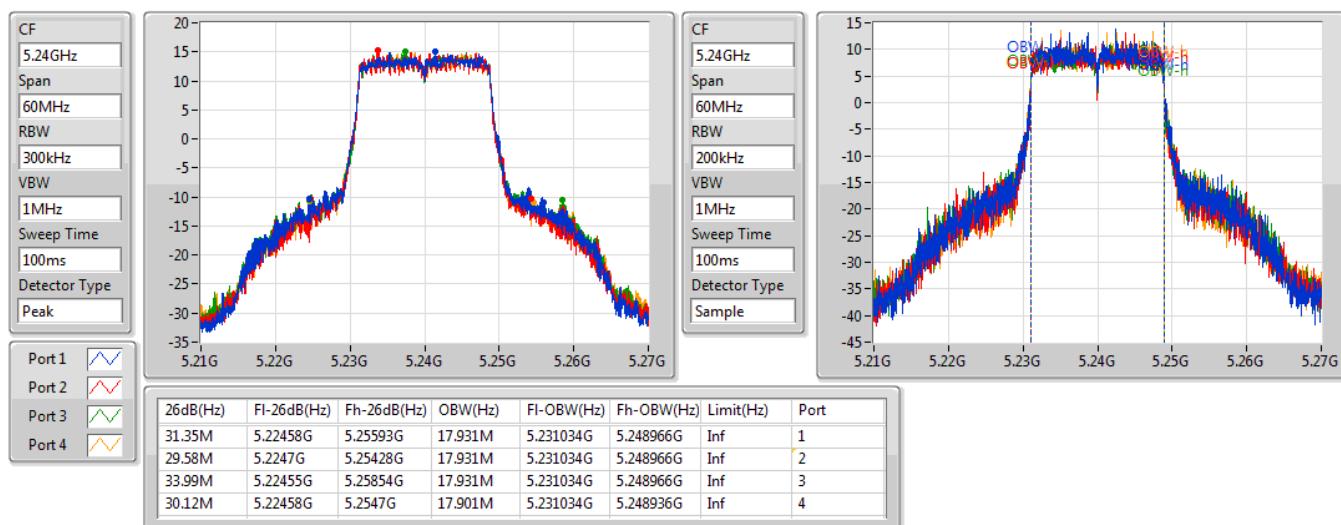

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5200MHz

29/07/2019

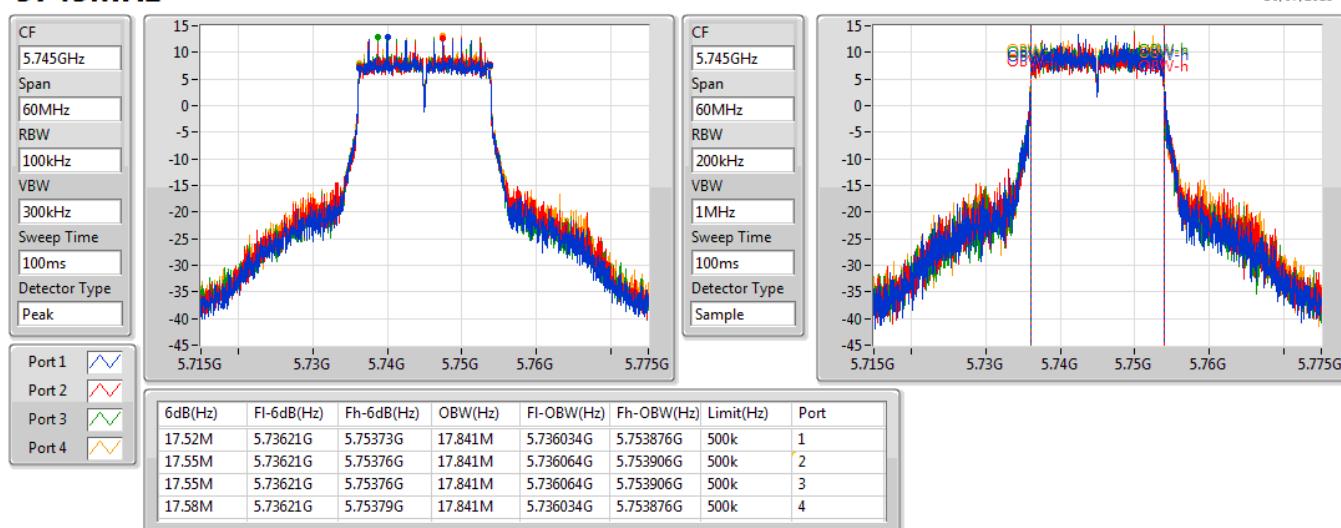


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5240MHz

29/07/2019

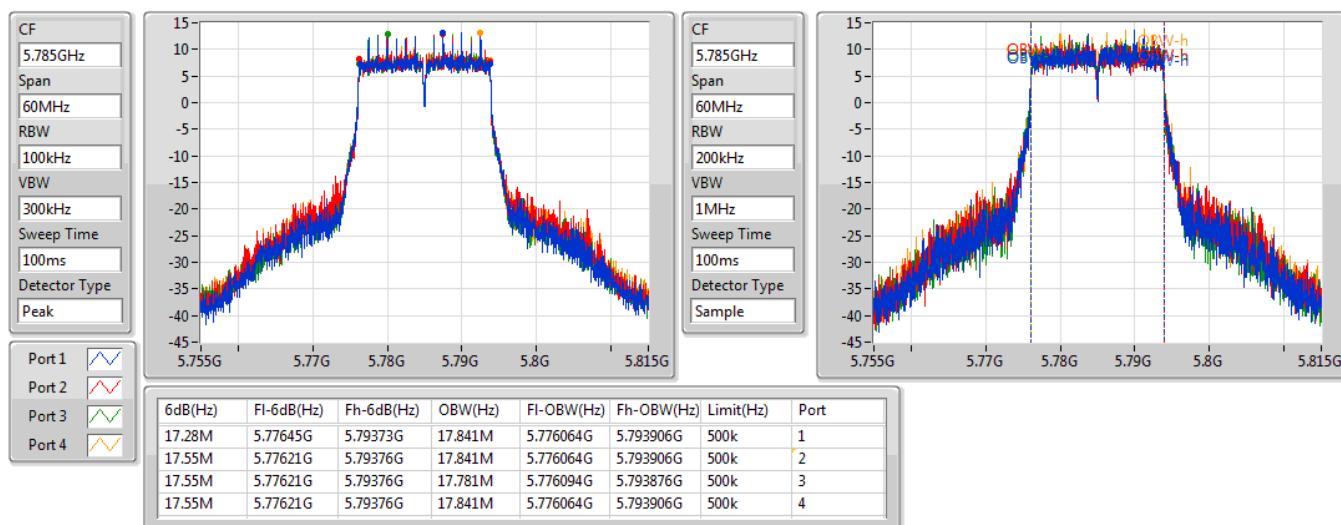

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5745MHz

30/07/2019

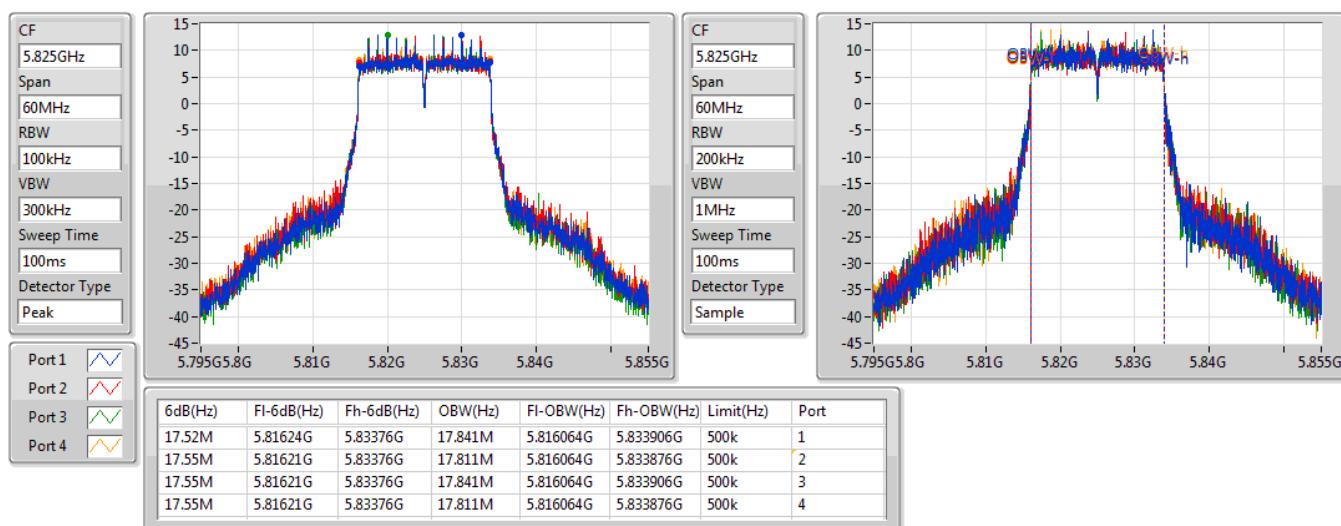


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5785MHz

30/07/2019

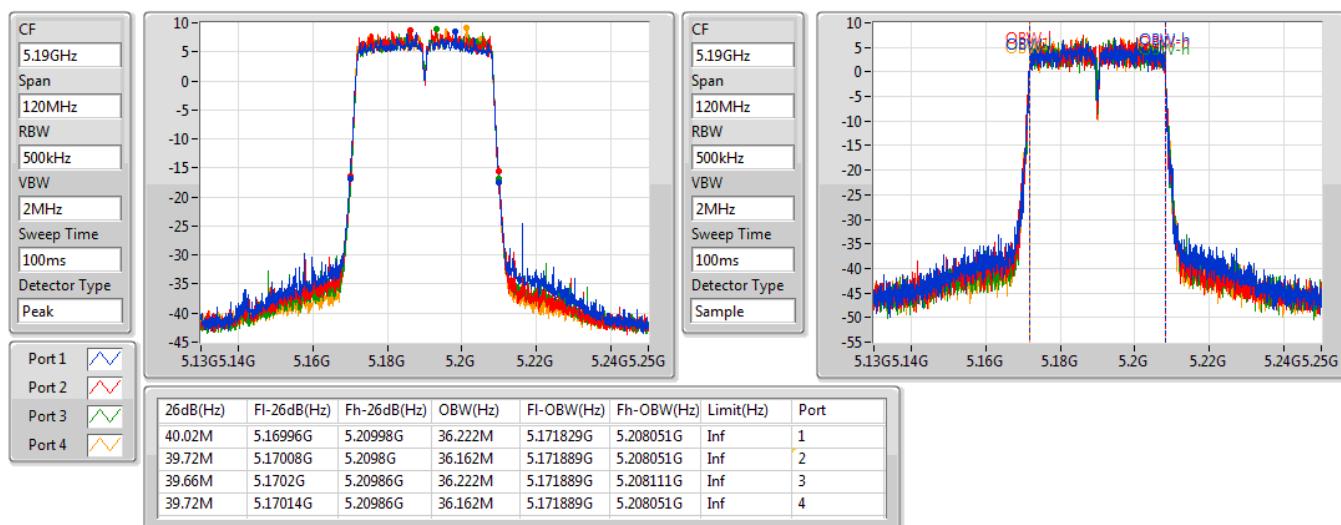

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5825MHz

30/07/2019

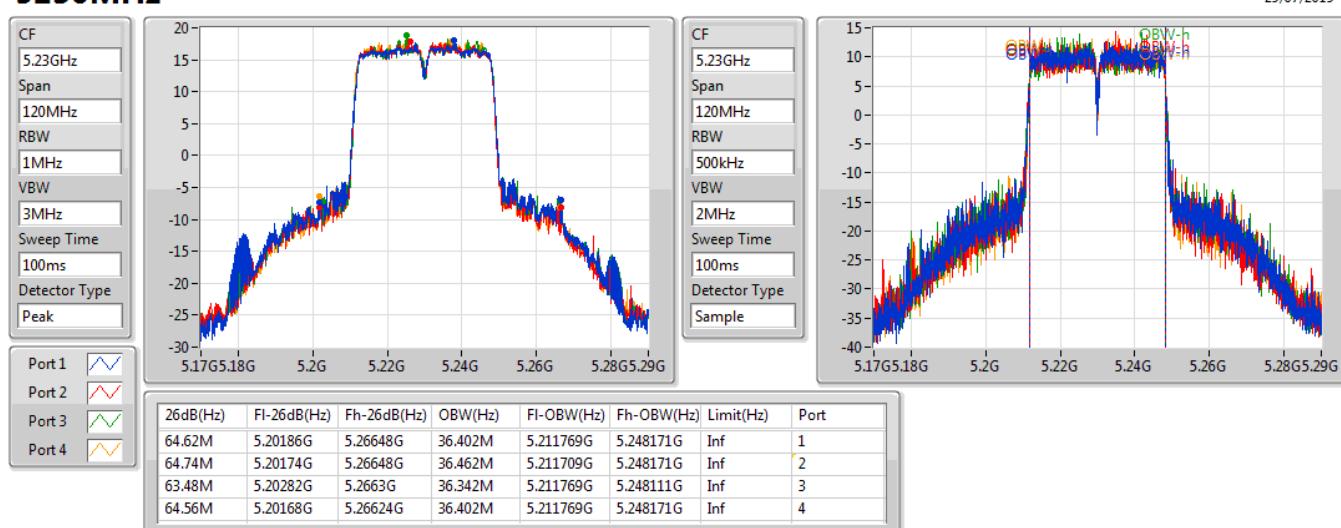


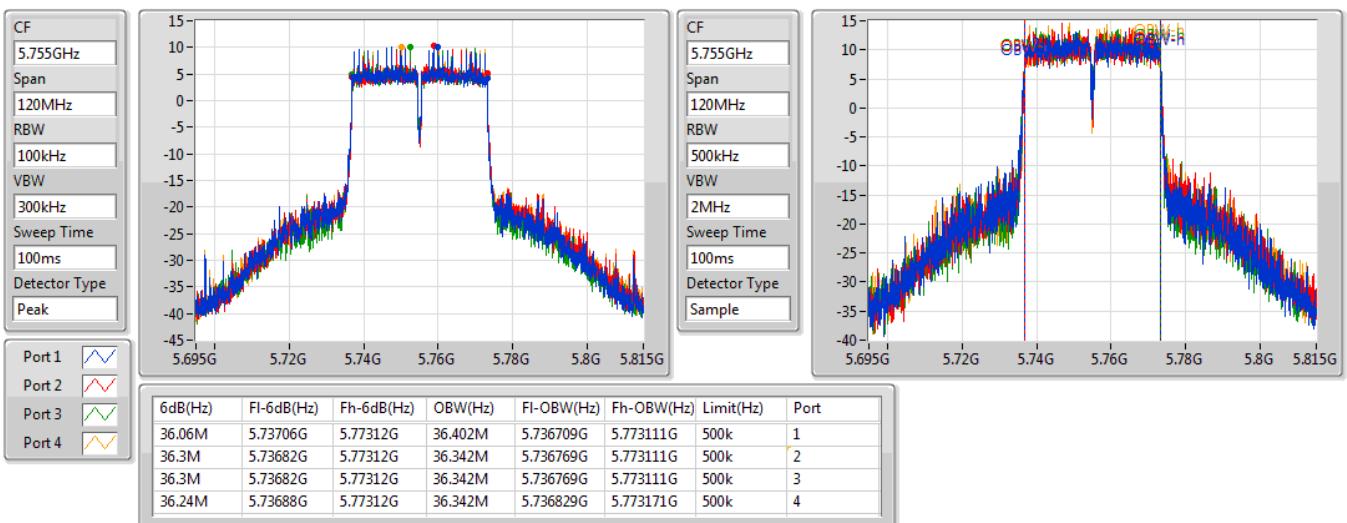
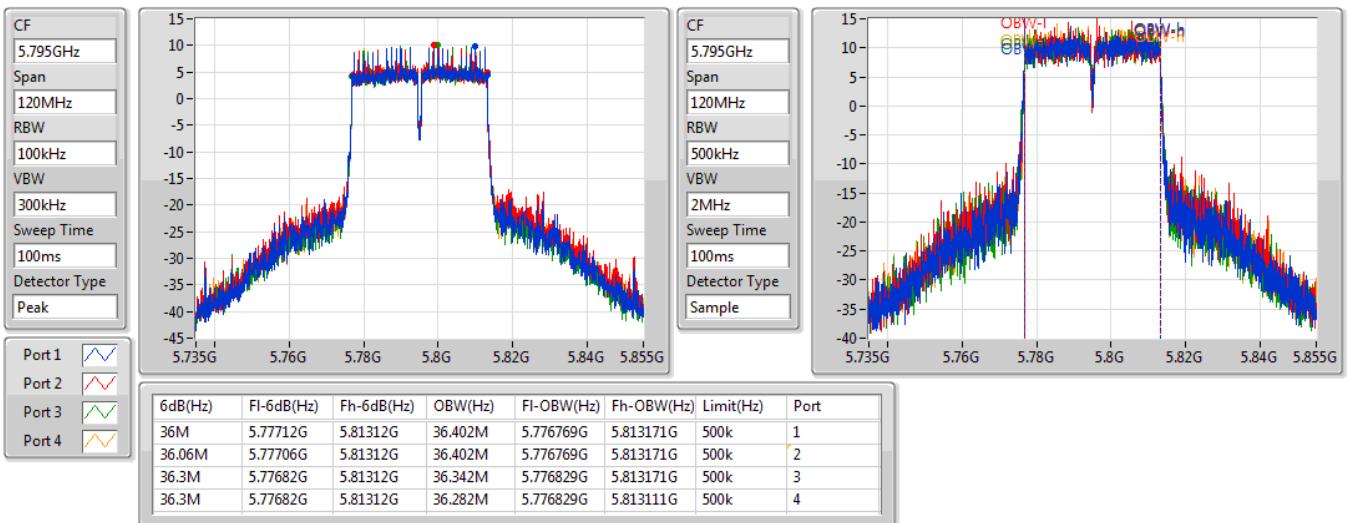
802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5190MHz

29/07/2019


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

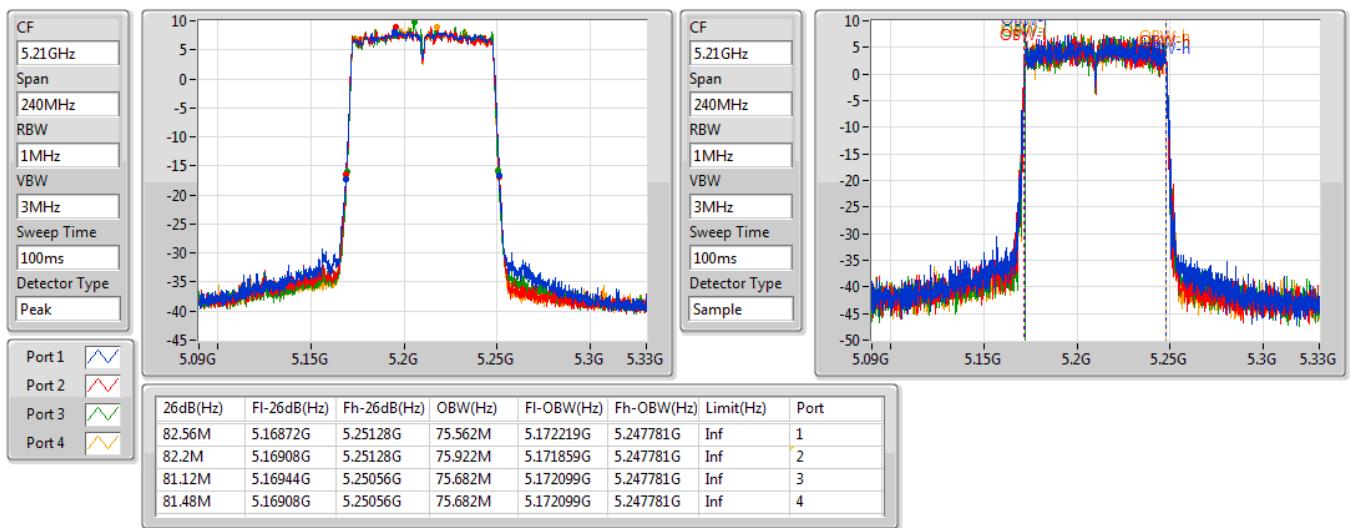
29/07/2019



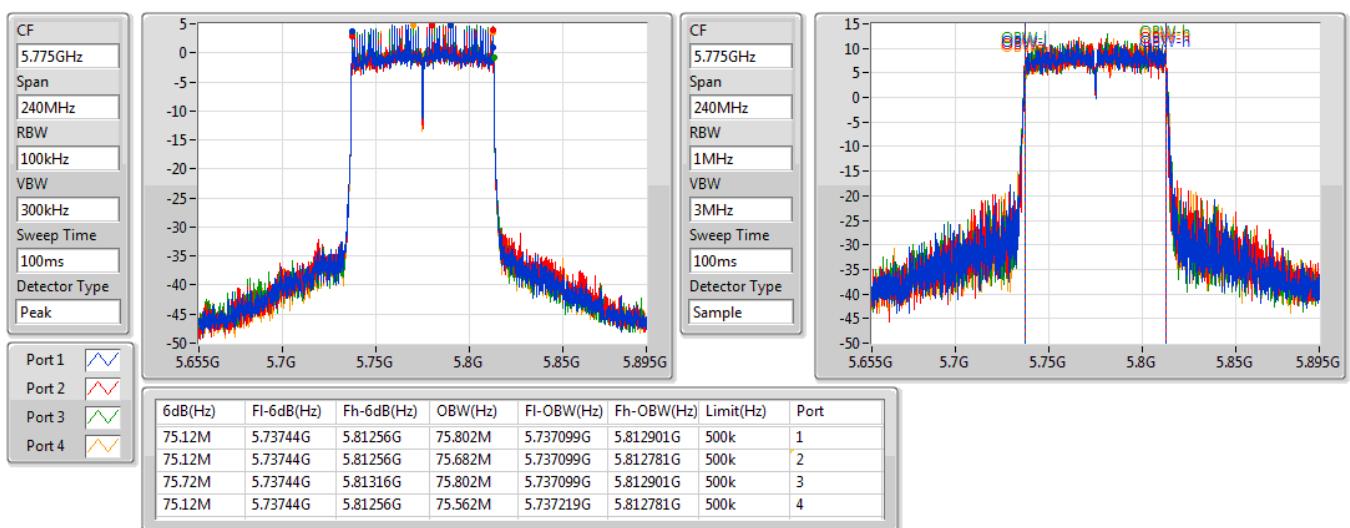
802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5755MHz

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


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

29/07/2019

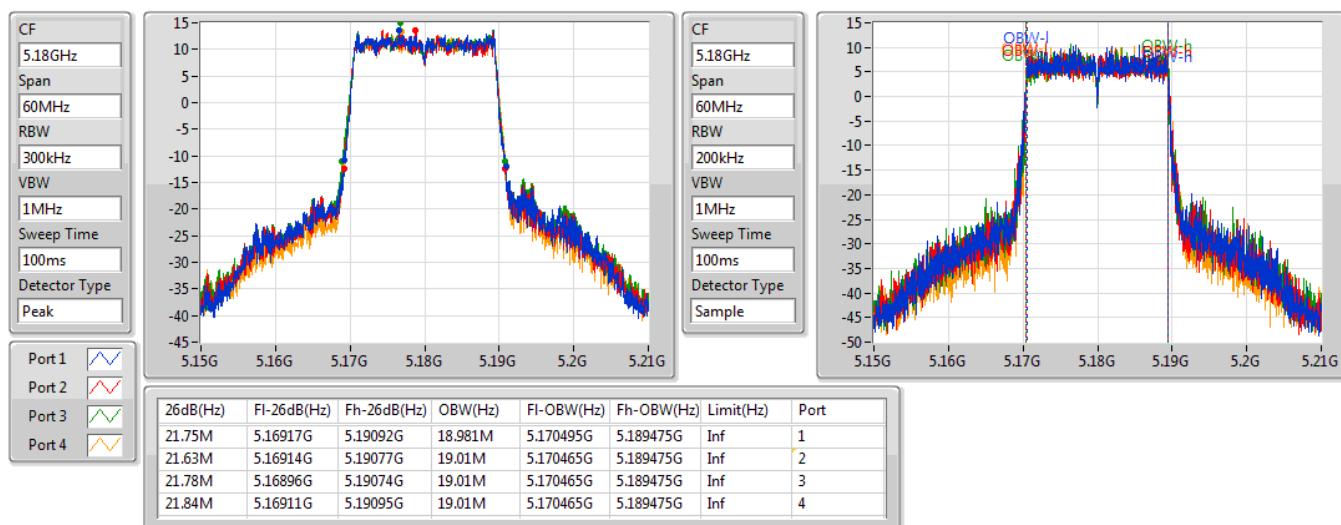

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5775MHz

30/07/2019

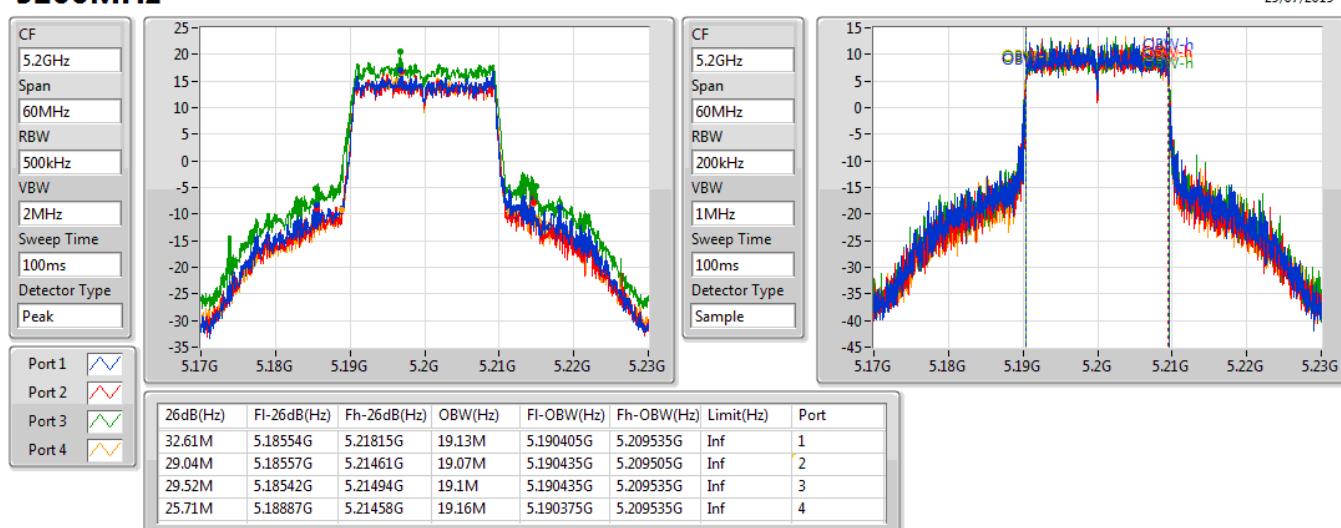


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5180MHz

29/07/2019

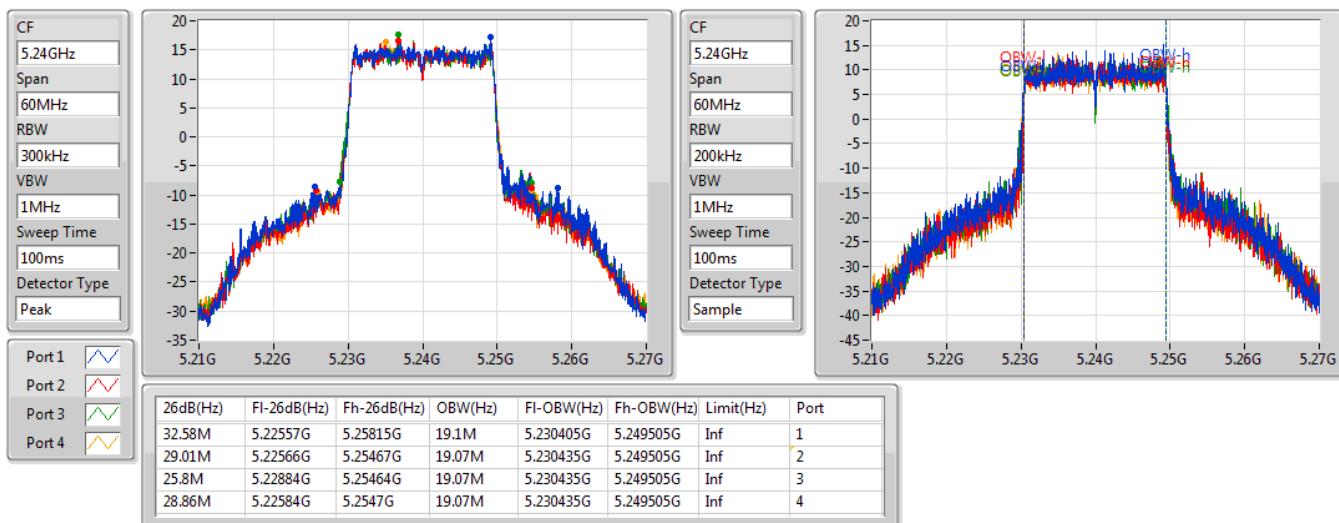

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5200MHz

29/07/2019

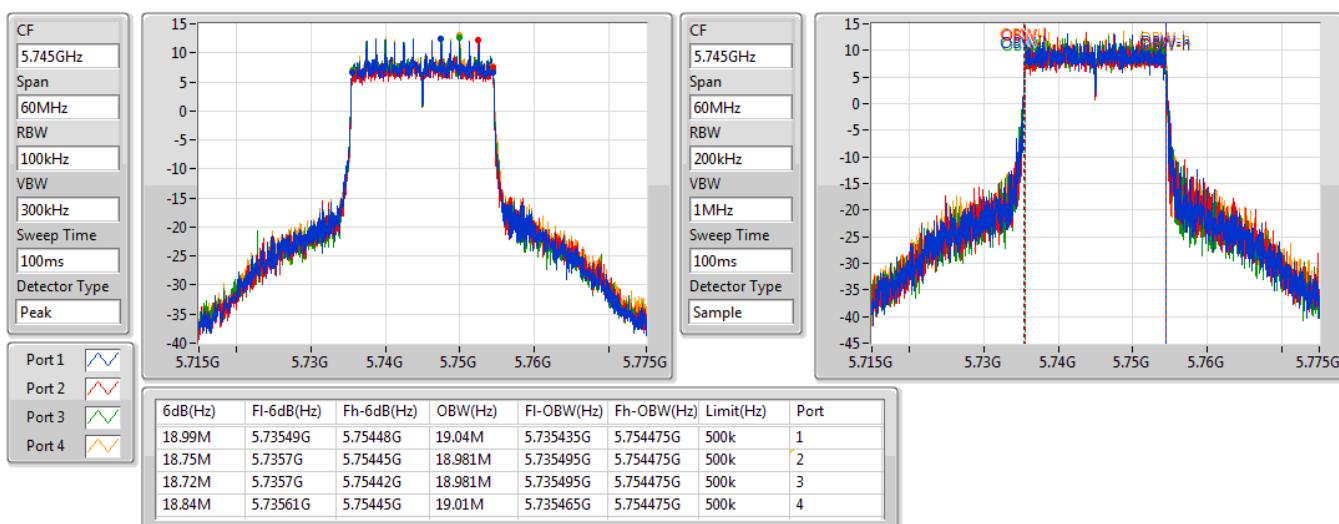


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5240MHz

29/07/2019

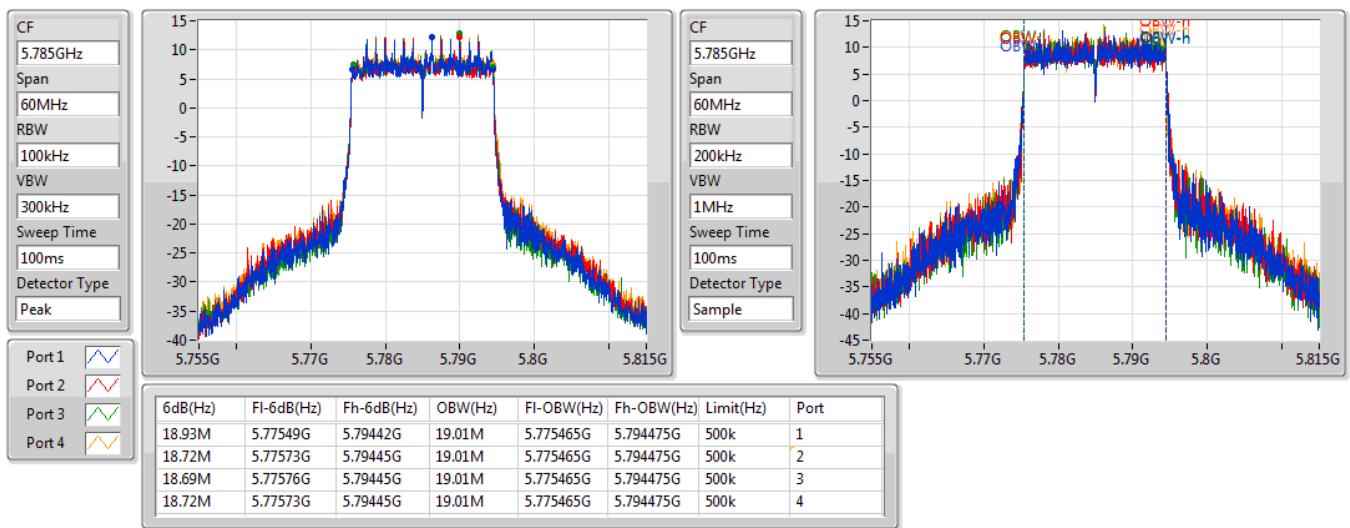

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5745MHz

30/07/2019

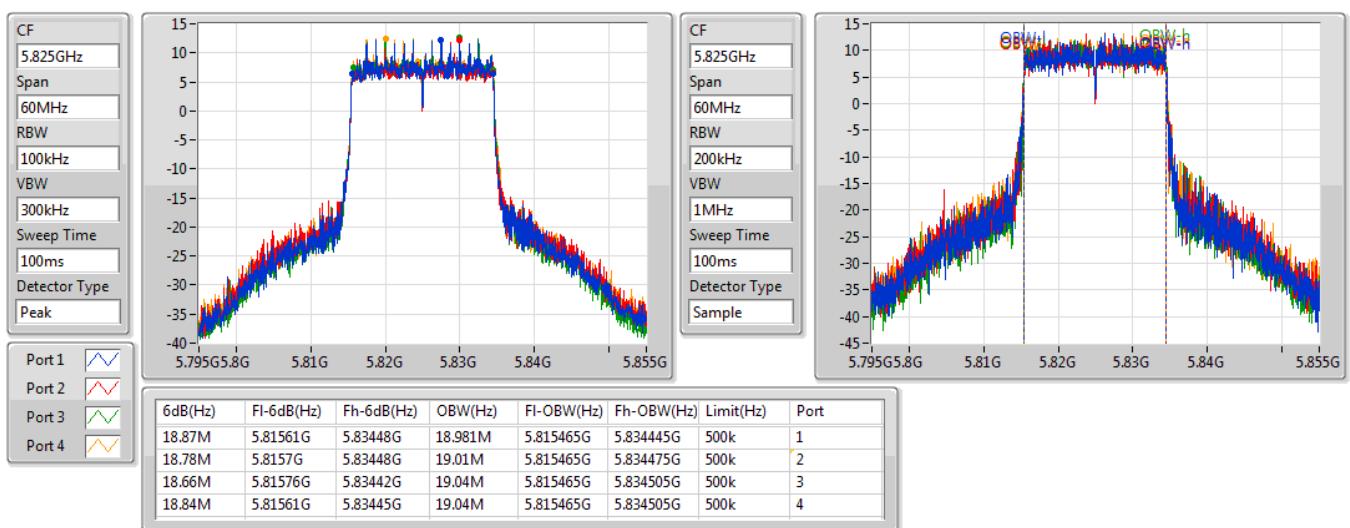


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5785MHz

30/07/2019

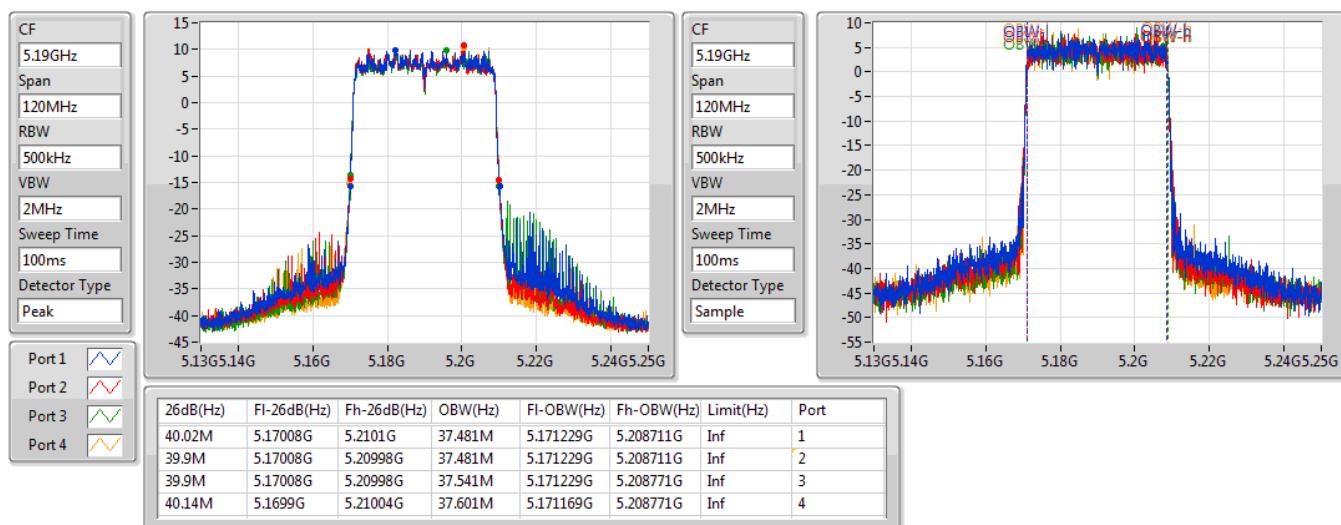

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5825MHz

30/07/2019

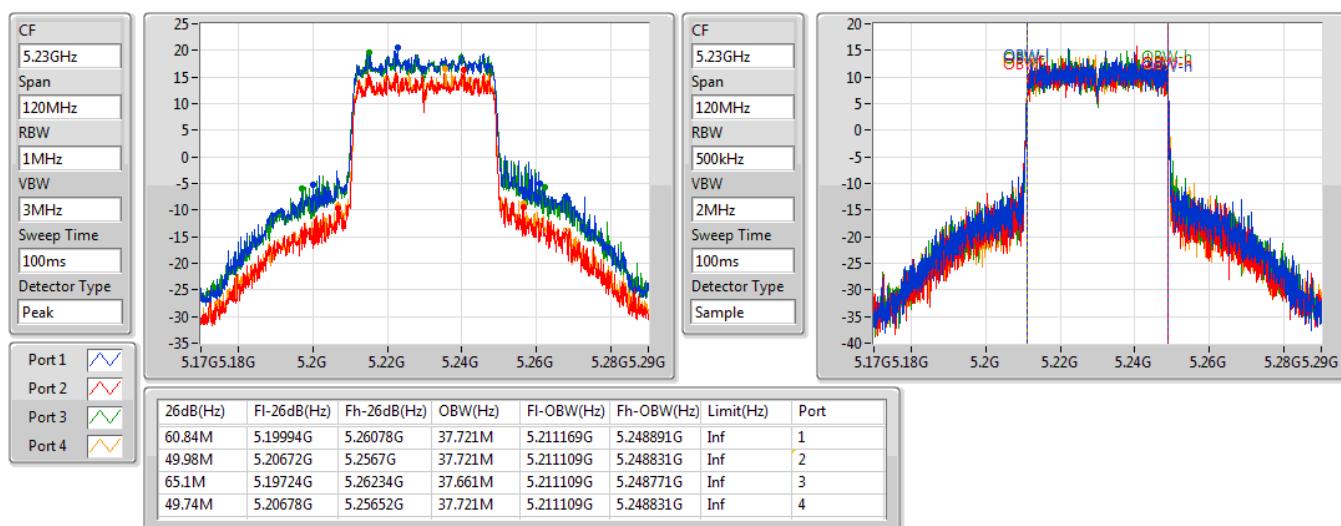


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5190MHz

29/07/2019

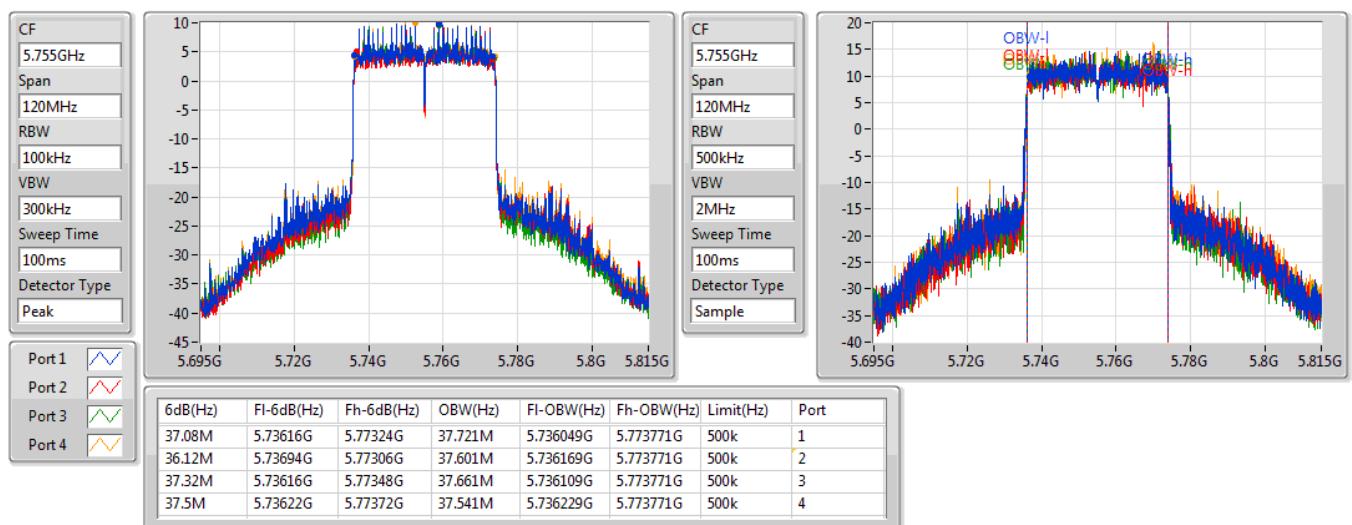

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5230MHz

29/07/2019

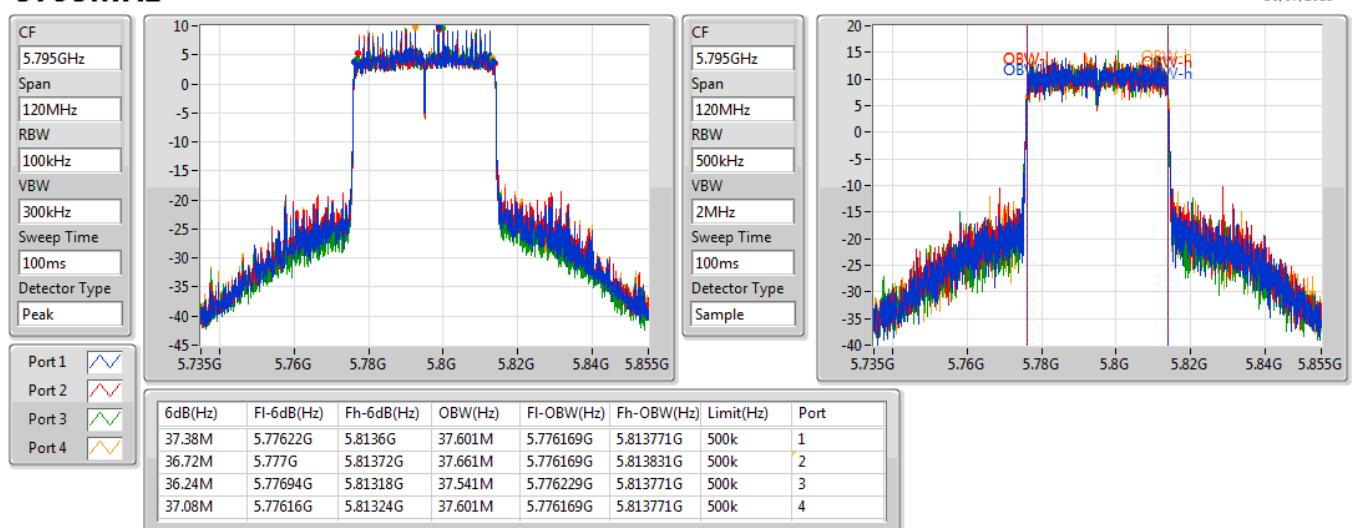


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5755MHz

30/07/2019

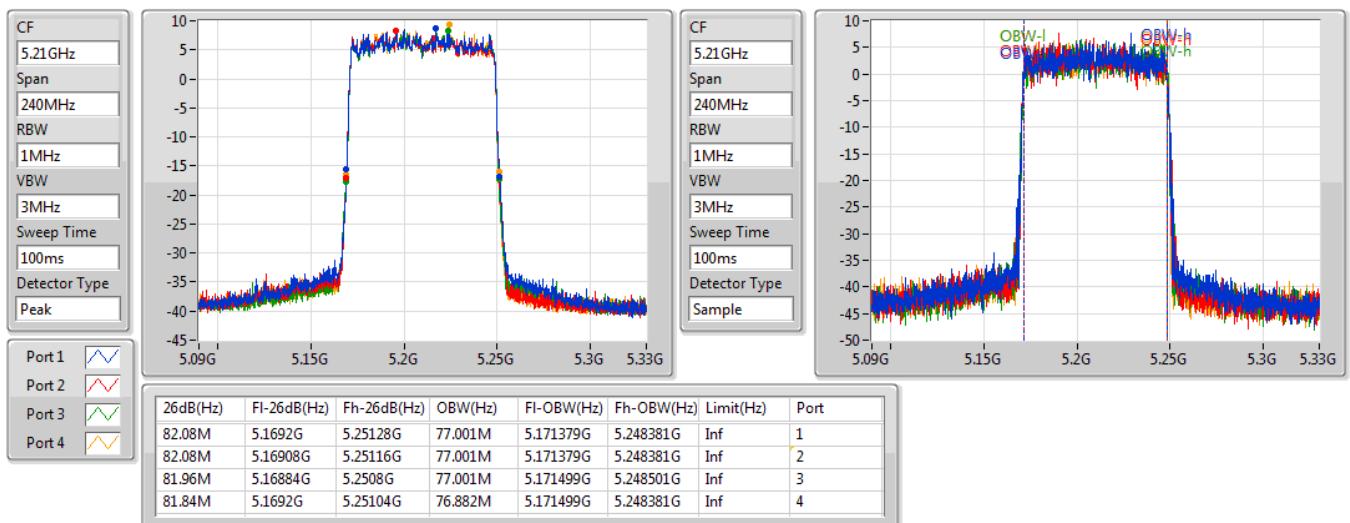

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5795MHz

30/07/2019

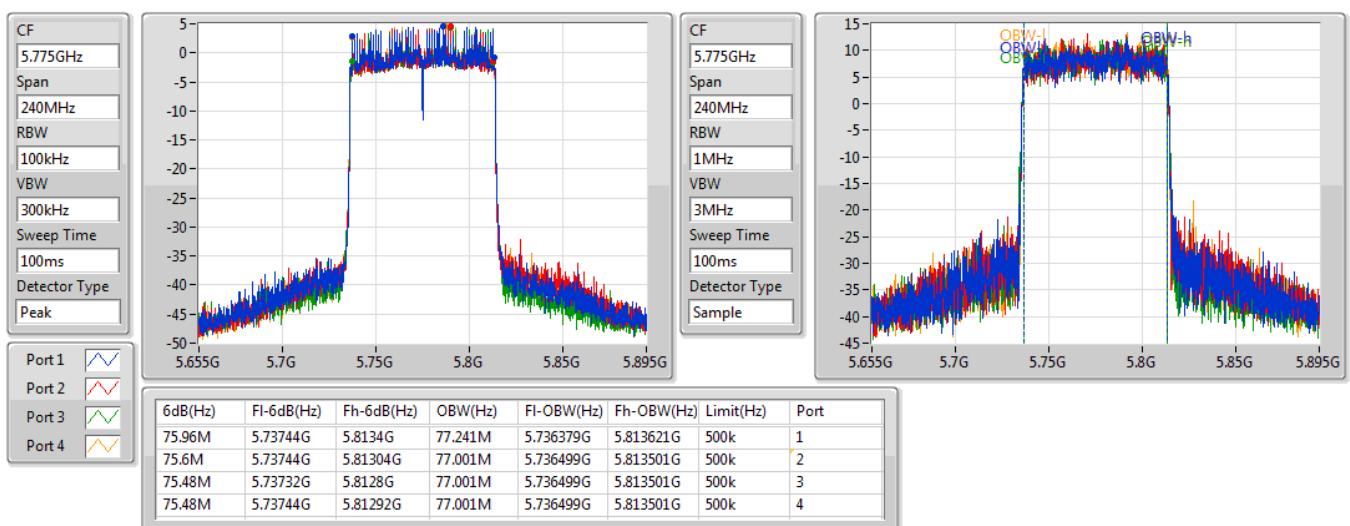


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5210MHz

29/07/2019


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

30/07/2019





<non-beamforming mode> 4T2S

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_Nss2,(MCS0)_4TX	22.23M	17.841M	17M8D1D	21.84M	17.751M
802.11ac VHT40_Nss2,(MCS0)_4TX	40.2M	36.342M	36M3D1D	39.66M	36.222M
802.11ac VHT80_Nss2,(MCS0)_4TX	81.96M	75.682M	75M7D1D	81.6M	75.682M
802.11ax HEW20_Nss2,(MCS0)_4TX	21.93M	18.981M	19M0D1D	21.48M	18.951M
802.11ax HEW40_Nss2,(MCS0)_4TX	40.26M	37.541M	37M5D1D	39.9M	37.481M
802.11ax HEW80_Nss2,(MCS0)_4TX	81.72M	77.121M	77M1D1D	81.36M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT80_Nss2,(MCS0)_4TX	75.84M	76.042M	76M0D1D	75.12M	75.802M
802.11ax HEW80_Nss2,(MCS0)_4TX	76.56M	77.121M	77M1D1D	75.36M	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**

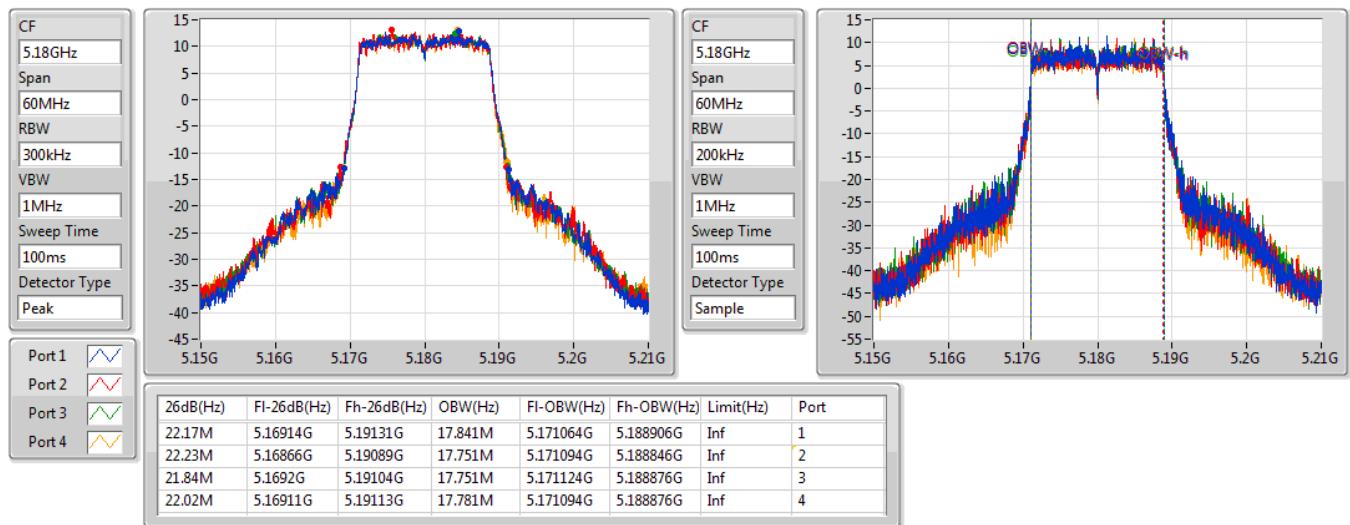
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	22.17M	17.841M	22.23M	17.751M	21.84M	17.751M	22.02M	17.781M
802.11ac VHT40_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.2M	36.342M	39.66M	36.282M	39.84M	36.222M	39.72M	36.222M
802.11ac VHT80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.96M	75.682M	81.6M	75.682M	81.84M	75.682M	81.72M	75.682M
5775MHz	Pass	500k	75.12M	75.922M	75.72M	76.042M	75.84M	75.802M	75.72M	75.922M
802.11ax HEW20_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.84M	18.981M	21.93M	18.951M	21.75M	18.981M	21.48M	18.981M
802.11ax HEW40_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.14M	37.541M	39.96M	37.541M	40.26M	37.481M	39.9M	37.541M
802.11ax HEW80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.36M	77.001M	81.48M	77.001M	81.48M	76.882M	81.72M	77.121M
5775MHz	Pass	500k	76.56M	77.001M	75.84M	77.121M	75.36M	77.001M	75.96M	77.001M

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

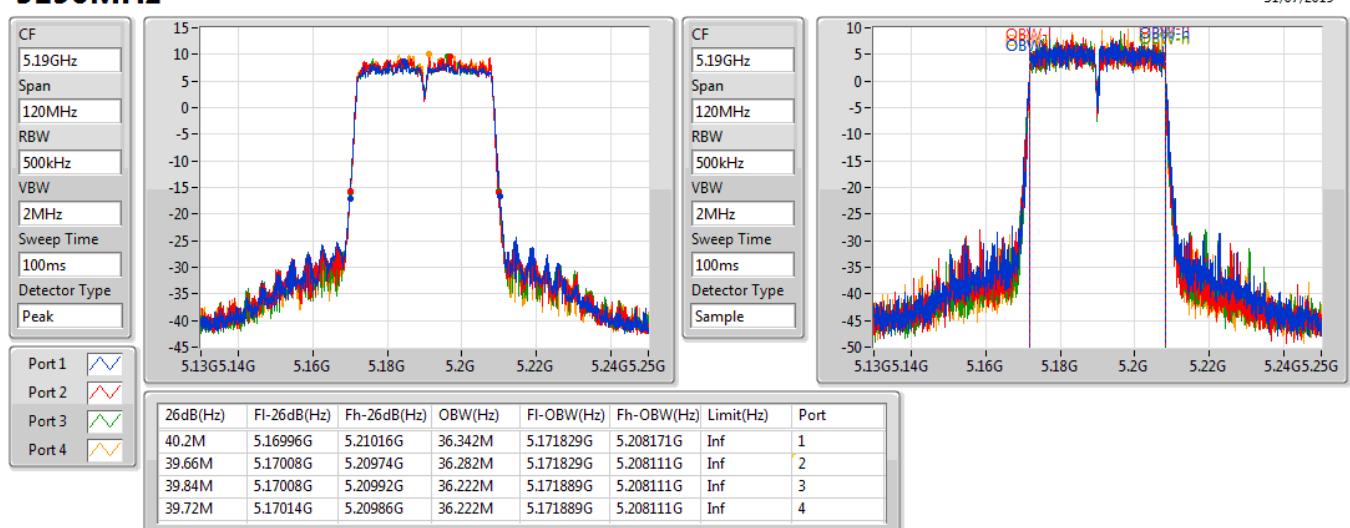
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20_Nss2,(MCS0)_4TX
EBW
5180MHz

31/07/2019

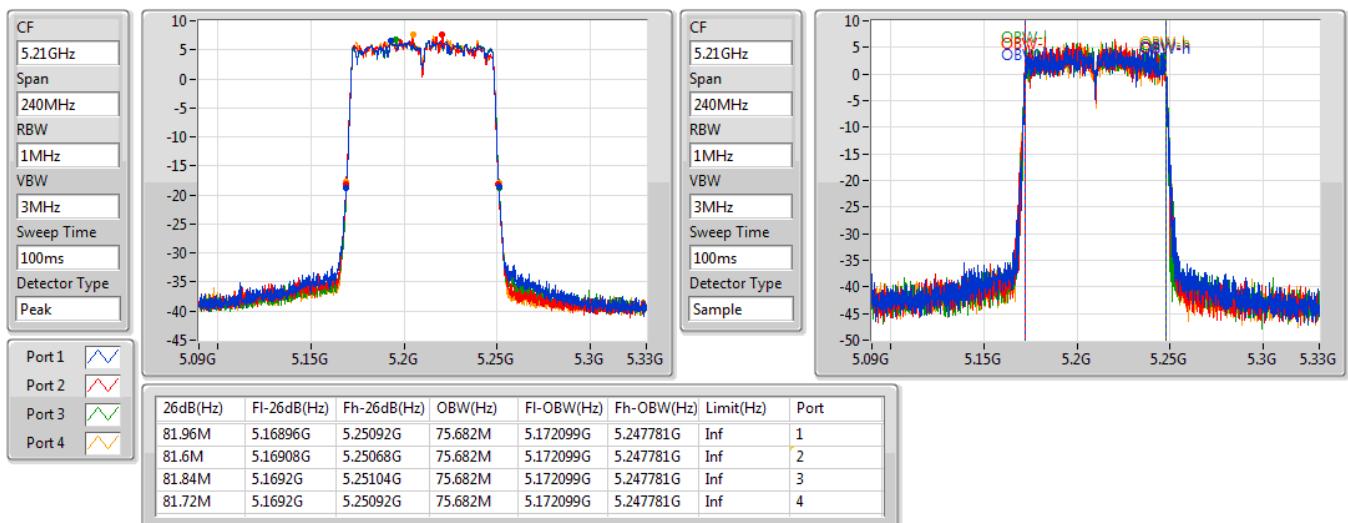

802.11ac VHT40_Nss2,(MCS0)_4TX
EBW
5190MHz

31/07/2019

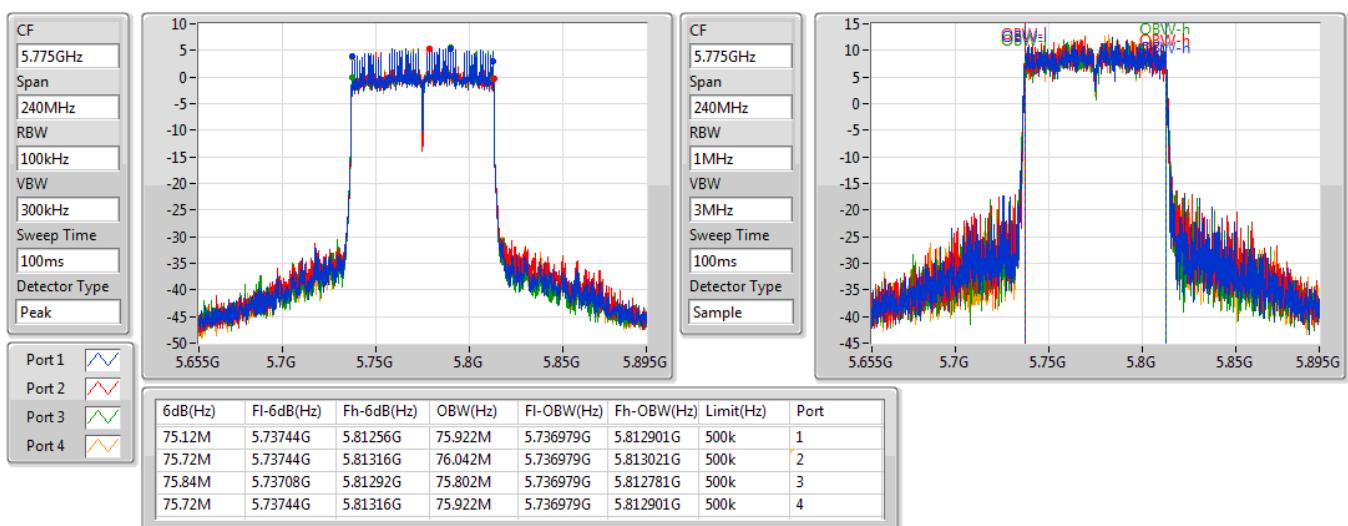


802.11ac VHT80_Nss2,(MCS0)_4TX
EBW
5210MHz

31/07/2019

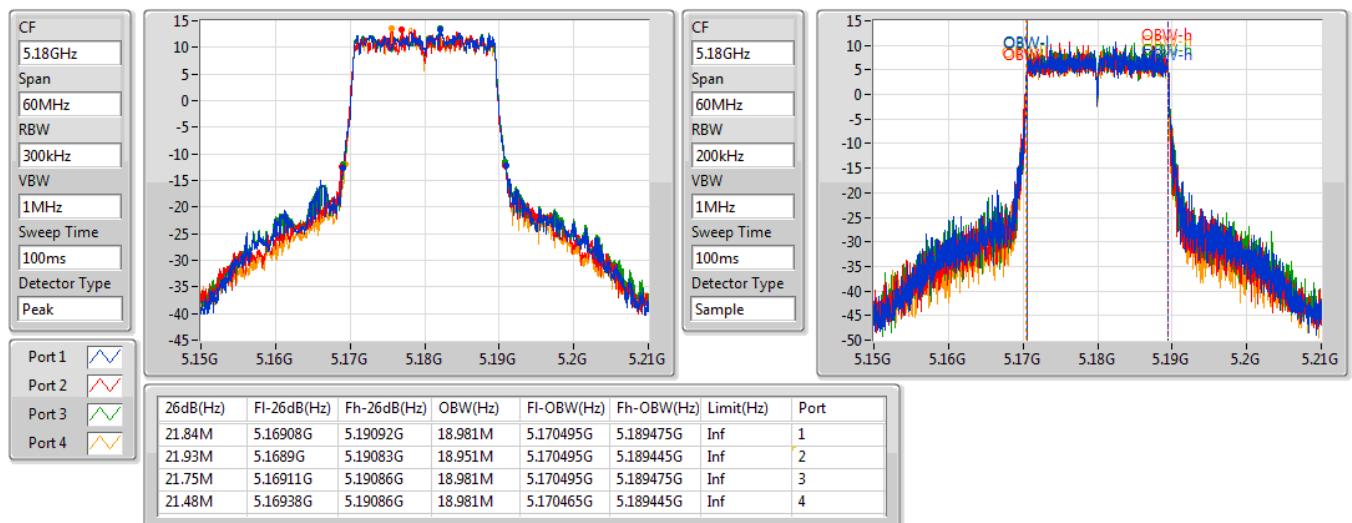

802.11ac VHT80_Nss2,(MCS0)_4TX
EBW
5775MHz

31/07/2019

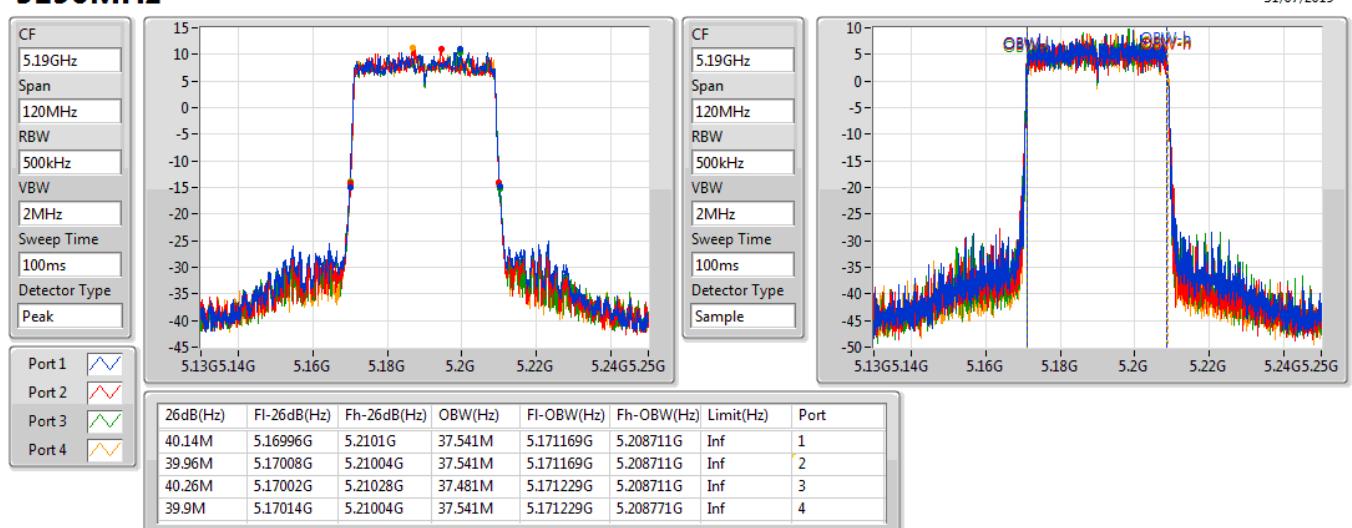


802.11ax HEW20_Nss2,(MCS0)_4TX
EBW
5180MHz

31/07/2019

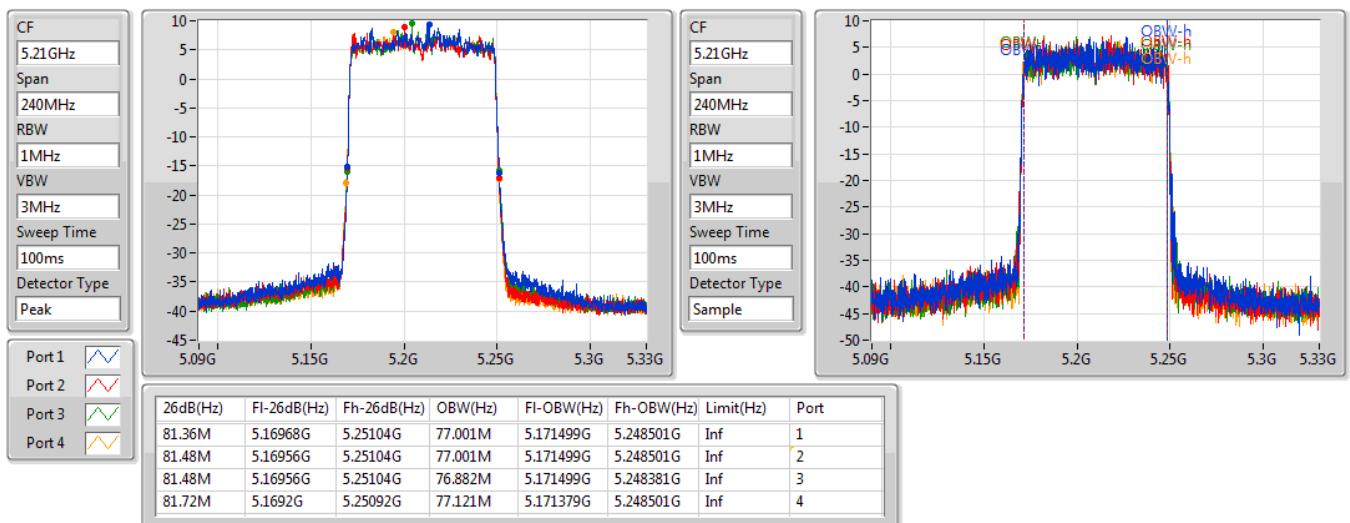

802.11ax HEW40_Nss2,(MCS0)_4TX
EBW
5190MHz

31/07/2019



802.11ax HEW80_Nss2,(MCS0)_4TX
EBW
5210MHz

31/07/2019


802.11ax HEW80_Nss2,(MCS0)_4TX
EBW
5775MHz

31/07/2019





<beamforming mode> 4T2S

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_Nss2,(MCS0)_4TX	23.37M	17.841M	17M8D1D	22.11M	17.751M
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	40.2M	36.342M	36M3D1D	39.6M	36.162M
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	82.08M	75.922M	75M9D1D	81.6M	75.682M
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	21.9M	19.04M	19M0D1D	21.48M	18.951M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	40.14M	37.541M	37M5D1D	39.84M	37.541M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	81.48M	77.121M	77M1D1D	80.88M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	75.72M	76.042M	76M0D1D	75.12M	75.562M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	75.84M	77.241M	77M2D1D	75.36M	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

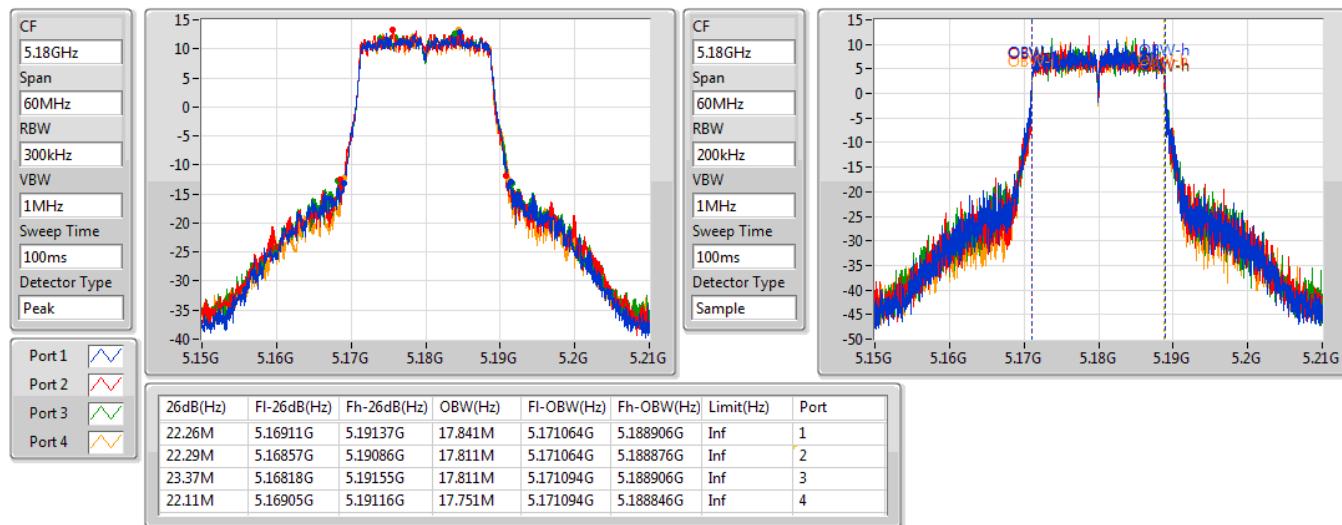
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	22.26M	17.841M	22.29M	17.811M	23.37M	17.811M	22.11M	17.751M
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.2M	36.342M	39.72M	36.282M	39.9M	36.222M	39.6M	36.162M
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.08M	75.682M	81.6M	75.922M	81.84M	75.682M	81.6M	75.922M
5775MHz	Pass	500k	75.12M	76.042M	75.72M	75.802M	75.12M	75.802M	75.72M	75.562M
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.81M	18.951M	21.9M	18.981M	21.78M	18.951M	21.48M	19.04M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.14M	37.541M	39.9M	37.541M	40.14M	37.541M	39.84M	37.541M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	80.88M	76.882M	81.36M	76.882M	81.48M	77.001M	81.48M	77.121M
5775MHz	Pass	500k	75.36M	77.121M	75.36M	77.121M	75.6M	77.001M	75.84M	77.241M

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

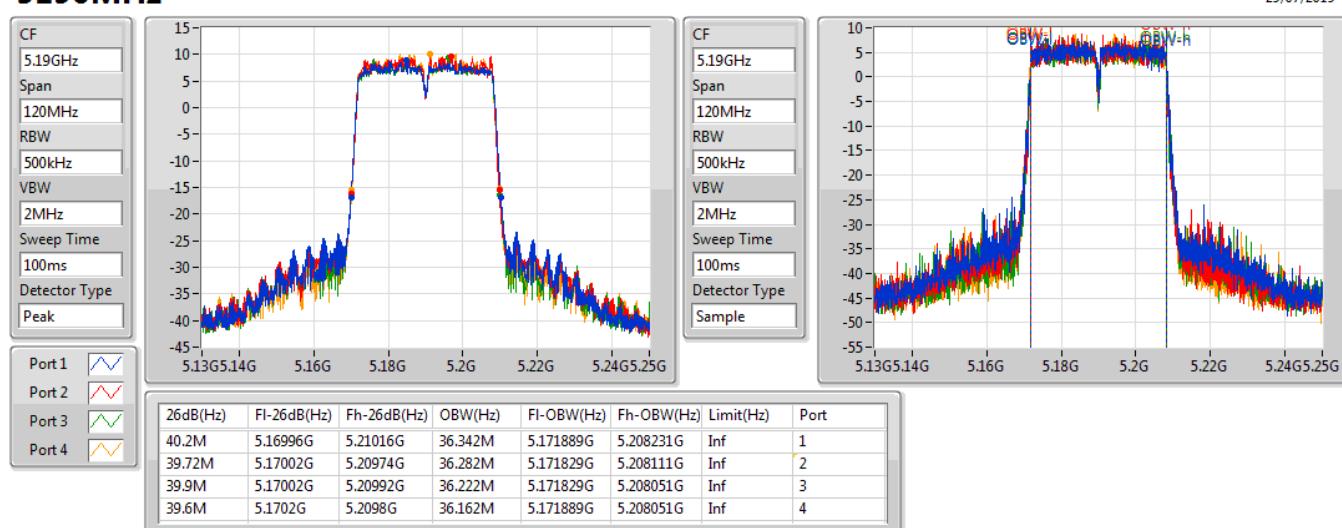
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5180MHz

29/07/2019

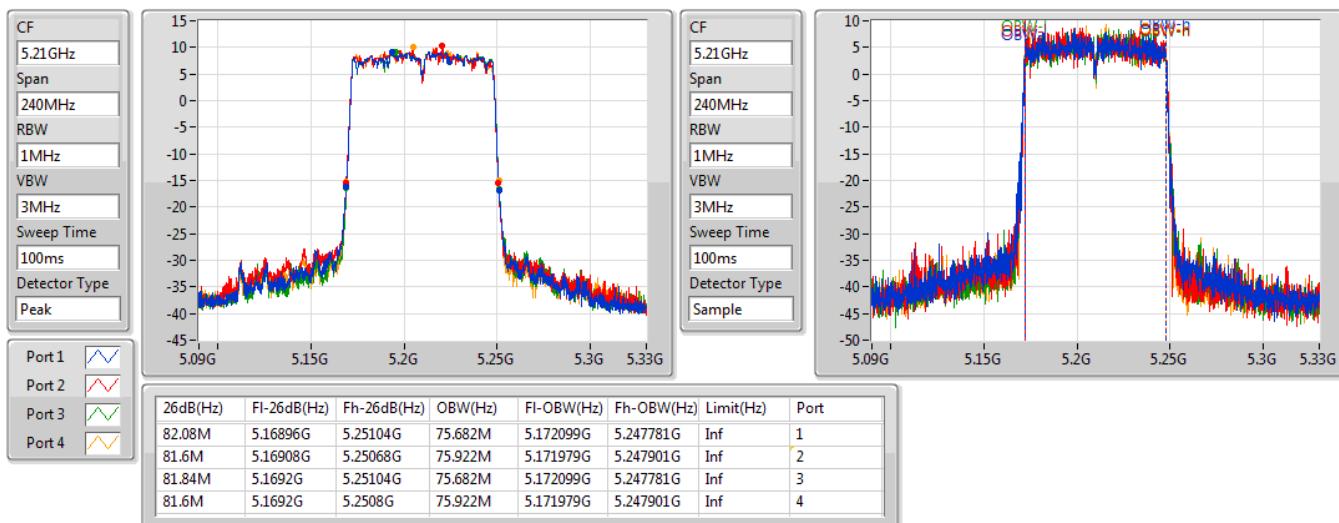

802.11ac VHT40-BF_Nss2,(MCS0)_4TX
EBW
5190MHz

29/07/2019

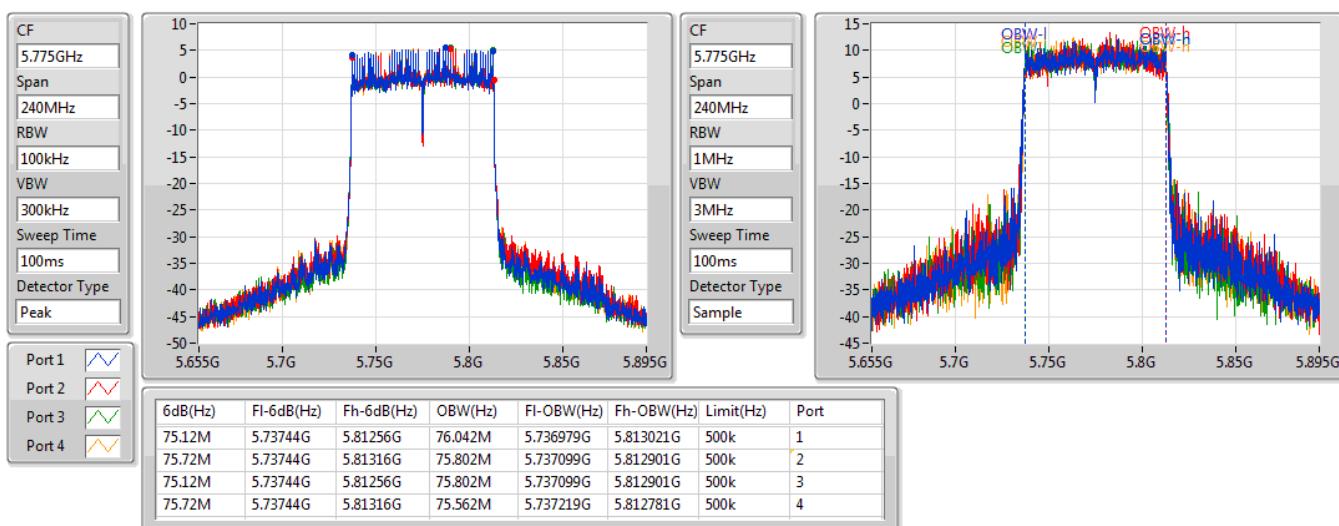


802.11ac VHT80-BF_Nss2,(MCS0)_4TX
EBW
5210MHz

29/07/2019

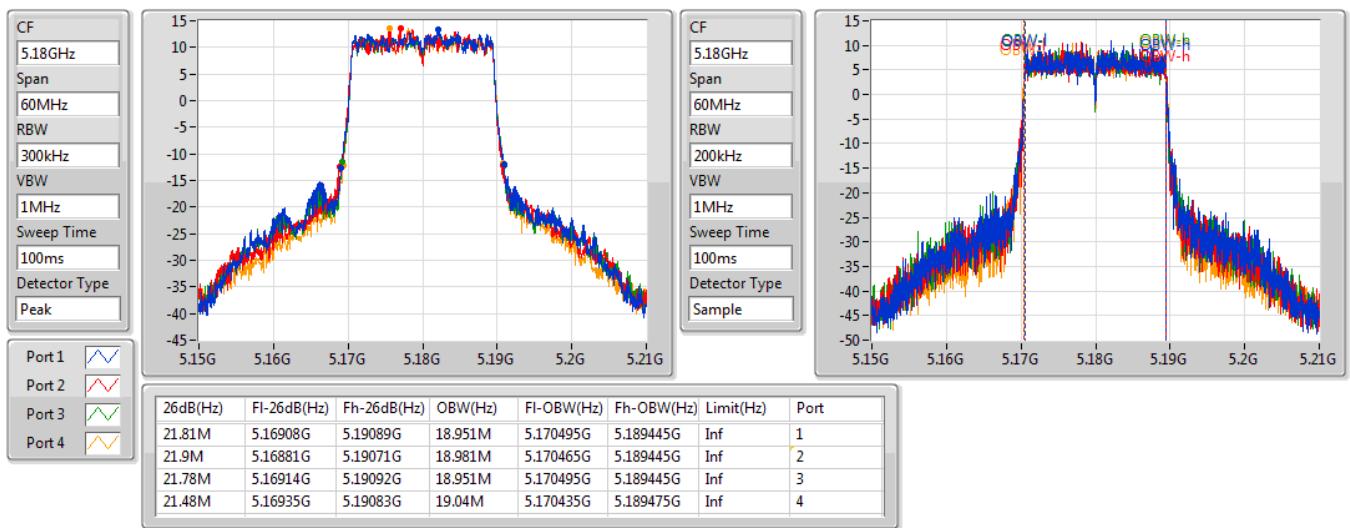

802.11ac VHT80-BF_Nss2,(MCS0)_4TX
EBW
5775MHz

29/07/2019

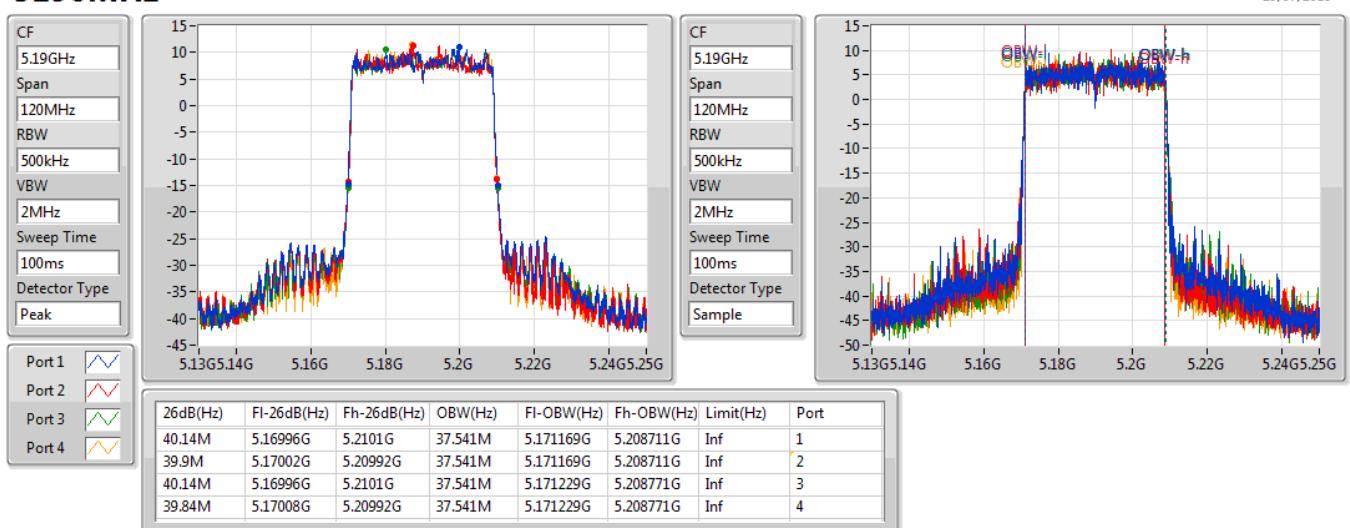


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5180MHz

29/07/2019

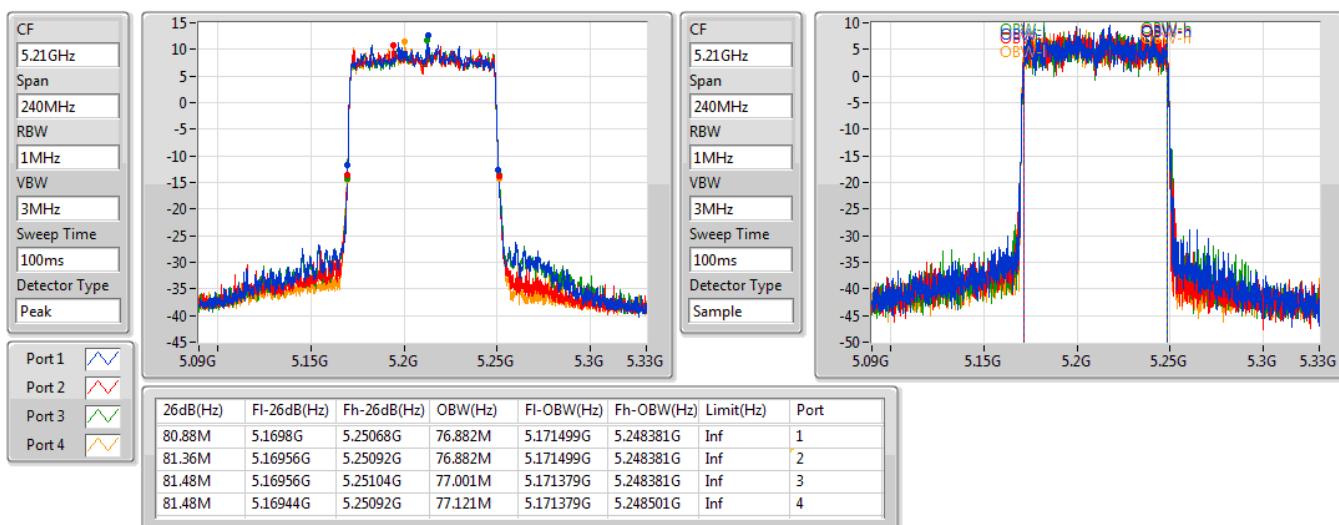

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5190MHz

29/07/2019

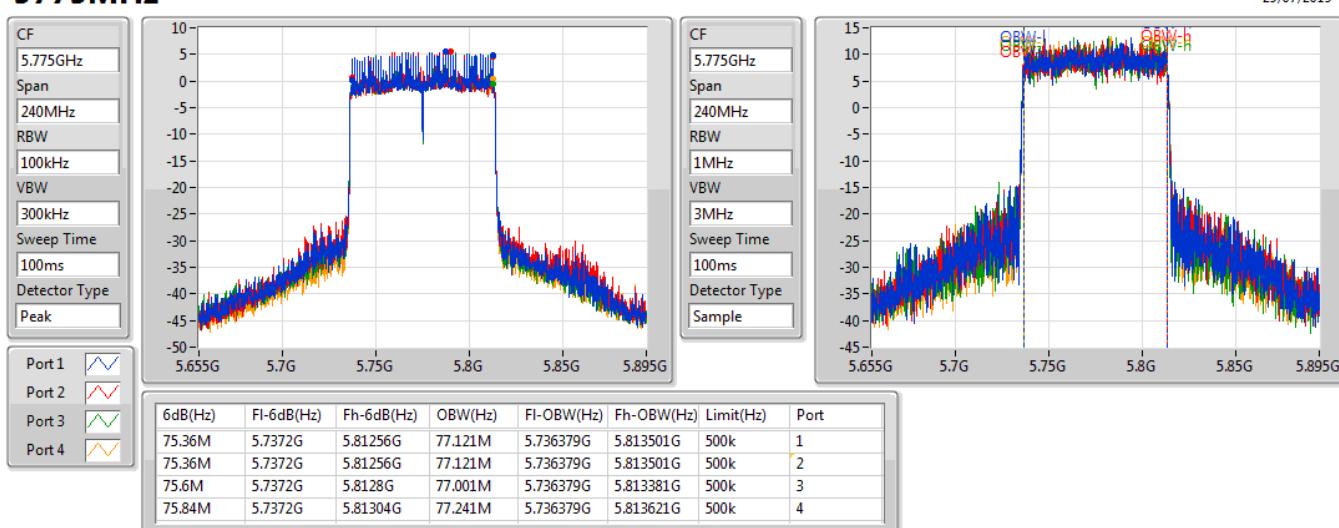


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5210MHz

29/07/2019


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5775MHz

29/07/2019





<non-beamforming mode> 4T3S

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_Nss3,(MCS0)_4TX	21.81M	17.841M	17M8D1D	21.42M	17.721M
802.11ac VHT40_Nss3,(MCS0)_4TX	40.08M	36.342M	36M3D1D	39.66M	36.222M
802.11ac VHT80_Nss3,(MCS0)_4TX	81.72M	75.802M	75M8D1D	81.12M	75.682M
802.11ax HEW20_Nss3,(MCS0)_4TX	21.66M	19.01M	19M0D1D	21.42M	18.951M
802.11ax HEW40_Nss3,(MCS0)_4TX	40.08M	37.541M	37M5D1D	39.78M	37.481M
802.11ax HEW80_Nss3,(MCS0)_4TX	82.2M	77.001M	77M0D1D	81.36M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT80_Nss3,(MCS0)_4TX	75.96M	76.042M	76M0D1D	75.72M	75.562M
802.11ax HEW80_Nss3,(MCS0)_4TX	76.8M	77.121M	77M1D1D	75.96M	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

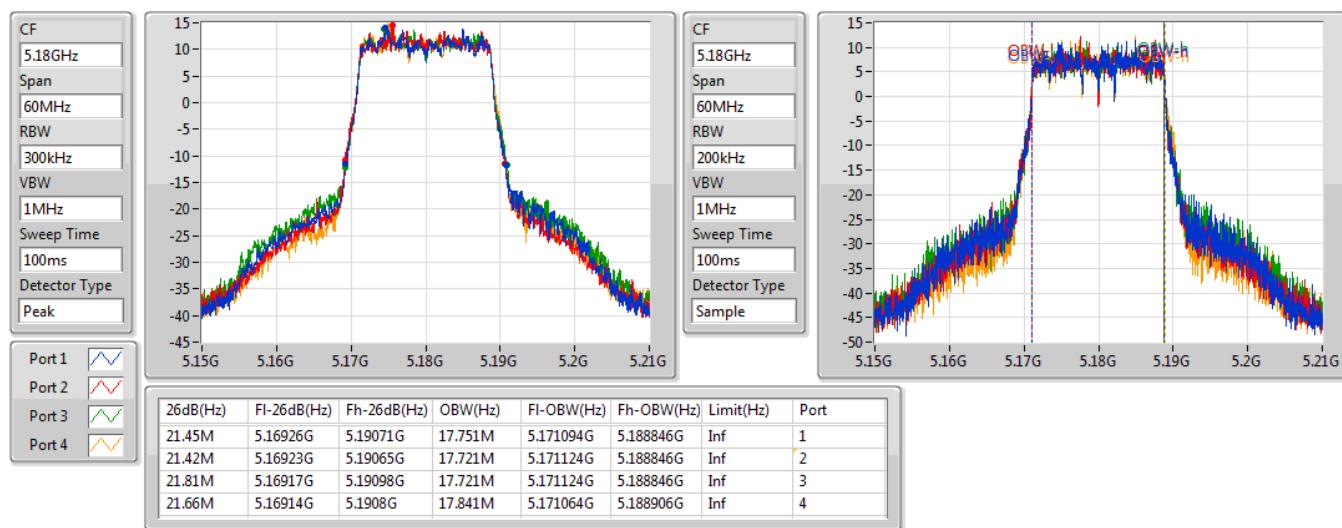
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.45M	17.751M	21.42M	17.721M	21.81M	17.721M	21.66M	17.841M
802.11ac VHT40_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	36.342M	39.66M	36.222M	39.84M	36.222M	39.84M	36.342M
802.11ac VHT80_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.6M	75.682M	81.12M	75.802M	81.12M	75.682M	81.72M	75.802M
5775MHz	Pass	500k	75.96M	76.042M	75.96M	75.922M	75.72M	75.802M	75.72M	75.562M
802.11ax HEW20_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.6M	18.981M	21.42M	18.951M	21.66M	19.01M	21.42M	19.01M
802.11ax HEW40_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	37.541M	39.78M	37.481M	40.08M	37.541M	39.84M	37.541M
802.11ax HEW80_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.84M	77.001M	82.2M	77.001M	81.72M	76.882M	81.36M	77.001M
5775MHz	Pass	500k	76.8M	77.121M	75.96M	77.121M	76.08M	77.121M	76.2M	77.001M

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

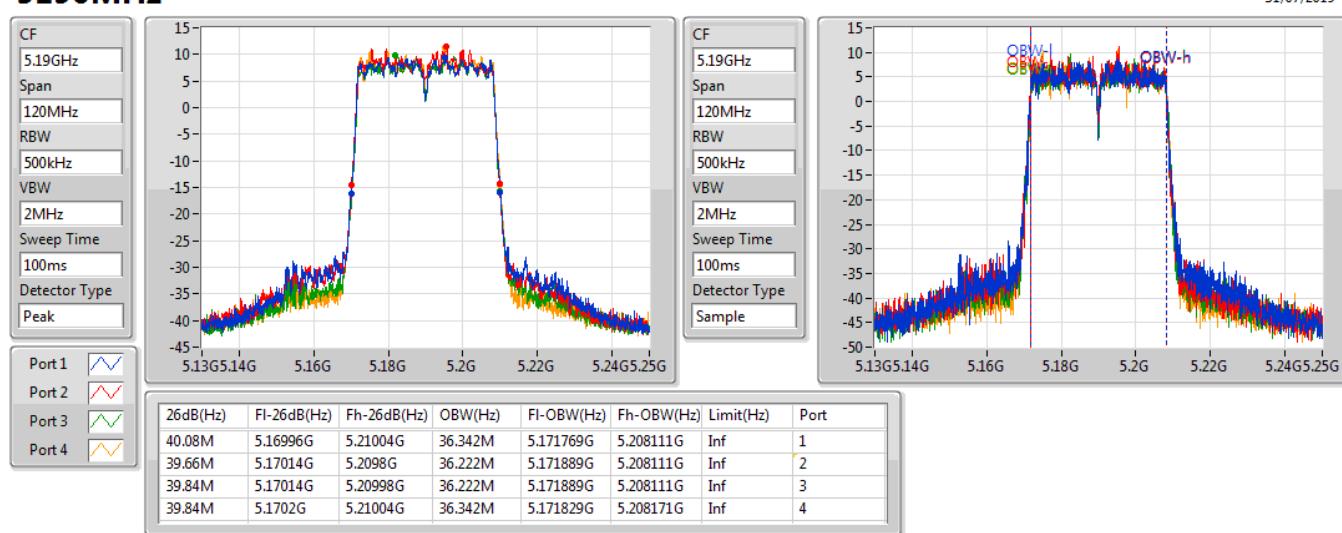
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20_Nss3,(MCS0)_4TX
EBW
5180MHz

31/07/2019

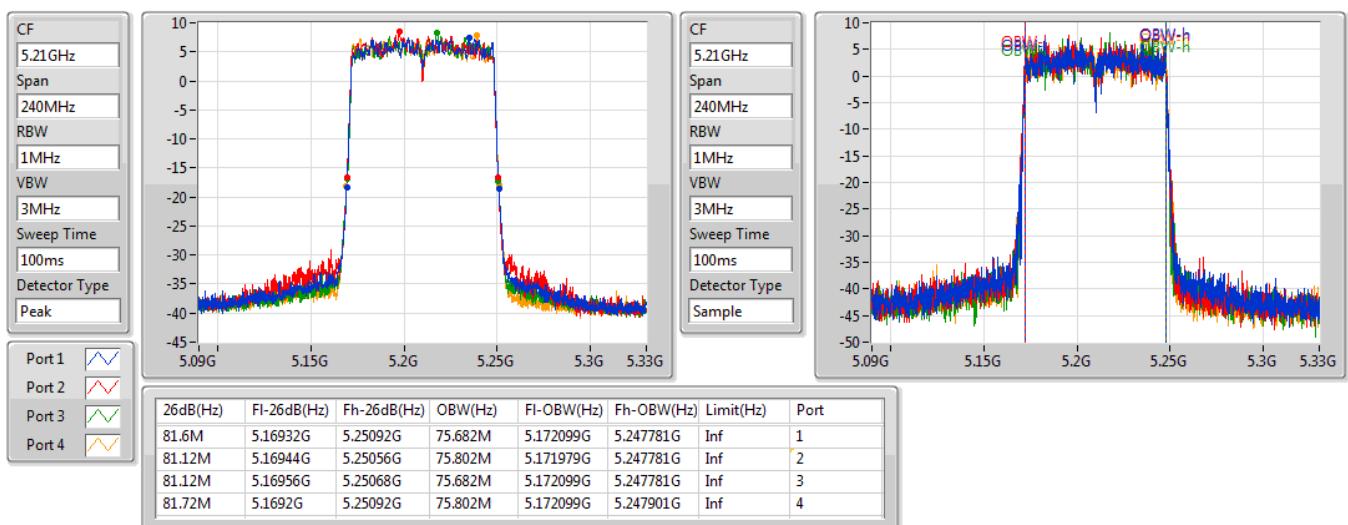

802.11ac VHT40_Nss3,(MCS0)_4TX
EBW
5190MHz

31/07/2019

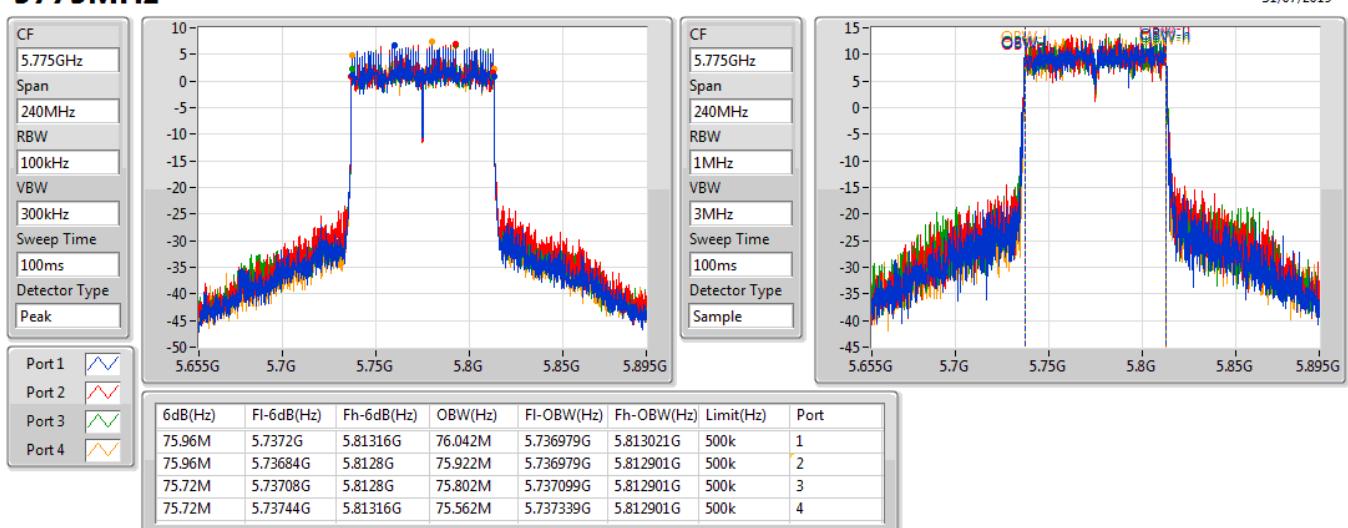


802.11ac VHT80_Nss3,(MCS0)_4TX
EBW
5210MHz

31/07/2019

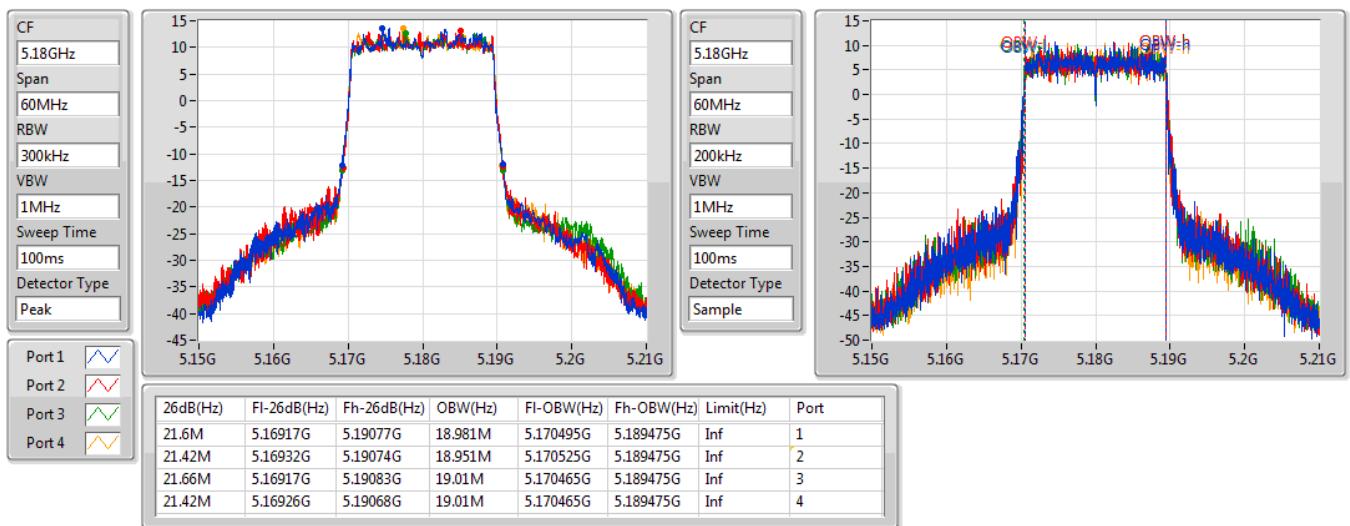

802.11ac VHT80_Nss3,(MCS0)_4TX
EBW
5775MHz

31/07/2019

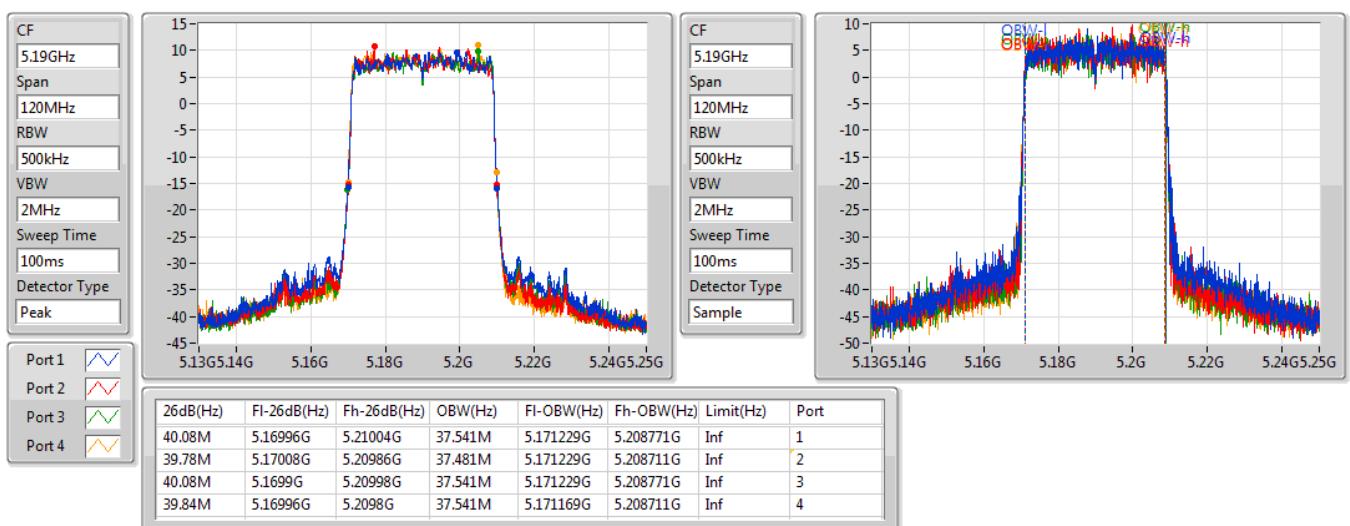


802.11ax HEW20_Nss3,(MCS0)_4TX
EBW
5180MHz

31/07/2019

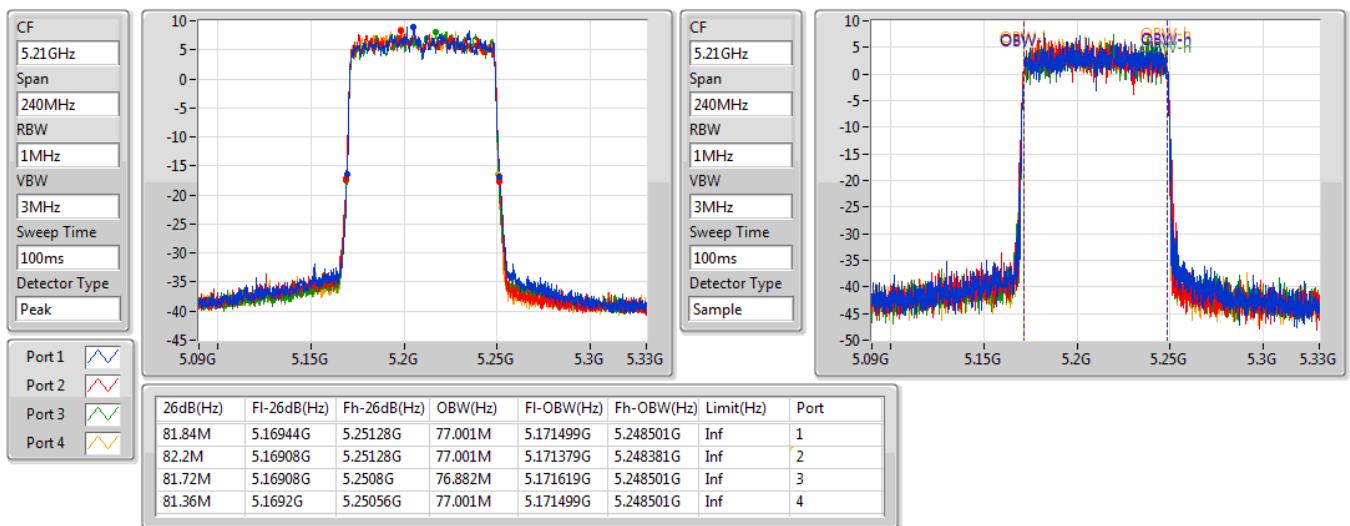

802.11ax HEW40_Nss3,(MCS0)_4TX
EBW
5190MHz

31/07/2019

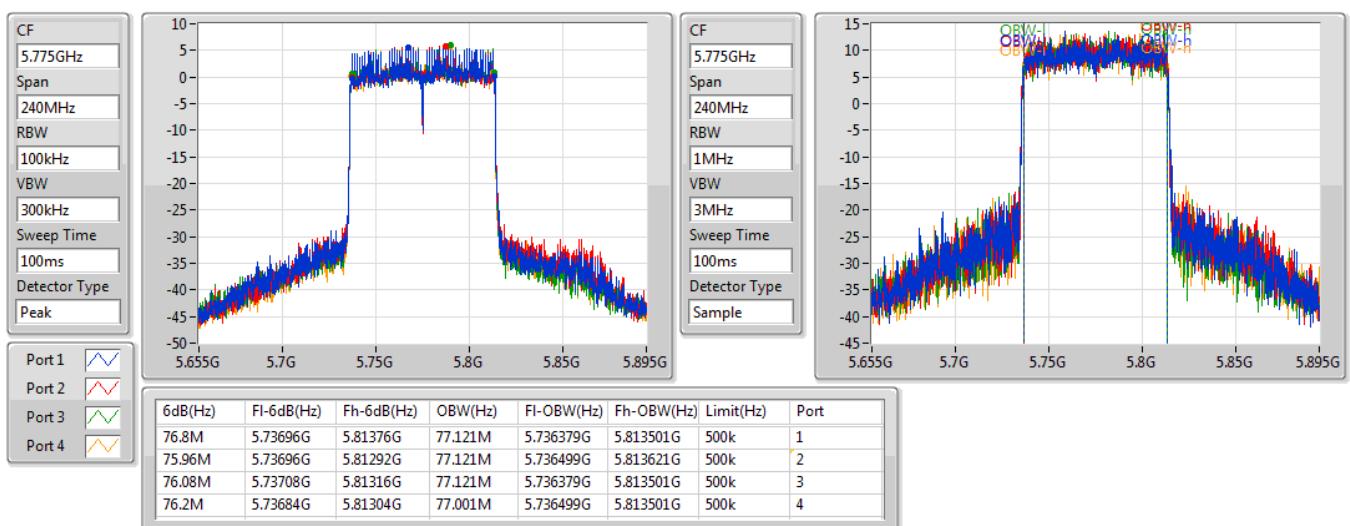


802.11ax HEW80_Nss3,(MCS0)_4TX
EBW
5210MHz

31/07/2019


802.11ax HEW80_Nss3,(MCS0)_4TX
EBW
5775MHz

31/07/2019





<beamforming mode> 4T3S

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_Nss3,(MCS0)_4TX	21.81M	17.781M	17M8D1D	21.45M	17.721M
802.11ac VHT40-BF_Nss3,(MCS0)_4TX	40.14M	36.282M	36M3D1D	39.6M	36.222M
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	81.6M	75.802M	75M8D1D	81.24M	75.802M
802.11ax HEW20-BF_Nss3,(MCS0)_4TX	21.69M	19.01M	19M0D1D	21.36M	18.951M
802.11ax HEW40-BF_Nss3,(MCS0)_4TX	40.08M	37.601M	37M6D1D	39.78M	37.481M
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	82.2M	77.121M	77M1D1D	81.36M	76.882M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	75.96M	75.922M	75M9D1D	75.72M	75.682M
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	76.92M	77.001M	77M0D1D	76.08M	76.882M

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

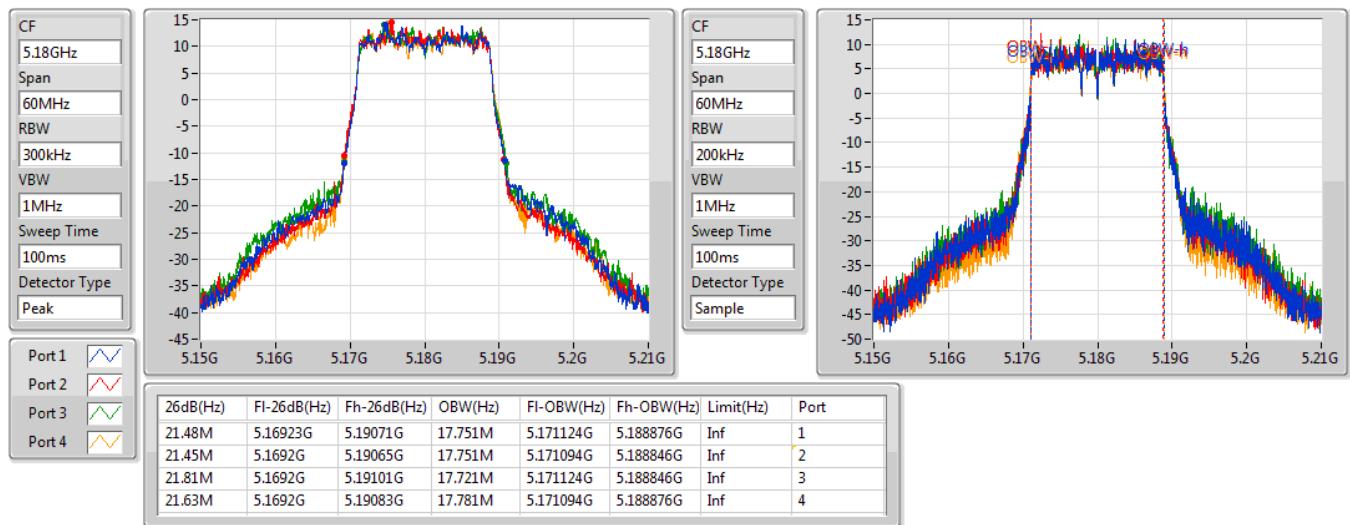
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.48M	17.751M	21.45M	17.751M	21.81M	17.721M	21.63M	17.781M
802.11ac VHT40-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.14M	36.222M	39.6M	36.222M	39.9M	36.282M	39.72M	36.282M
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.48M	75.802M	81.24M	75.802M	81.24M	75.802M	81.6M	75.802M
5775MHz	Pass	500k	75.72M	75.802M	75.96M	75.922M	75.72M	75.802M	75.72M	75.682M
802.11ax HEW20-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.63M	18.981M	21.51M	18.951M	21.69M	18.981M	21.36M	19.01M
802.11ax HEW40-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	37.541M	39.78M	37.481M	40.02M	37.601M	39.96M	37.541M
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.6M	76.882M	82.2M	77.001M	81.36M	76.882M	81.36M	77.121M
5775MHz	Pass	500k	76.92M	76.882M	76.44M	77.001M	76.08M	76.882M	76.44M	76.882M

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

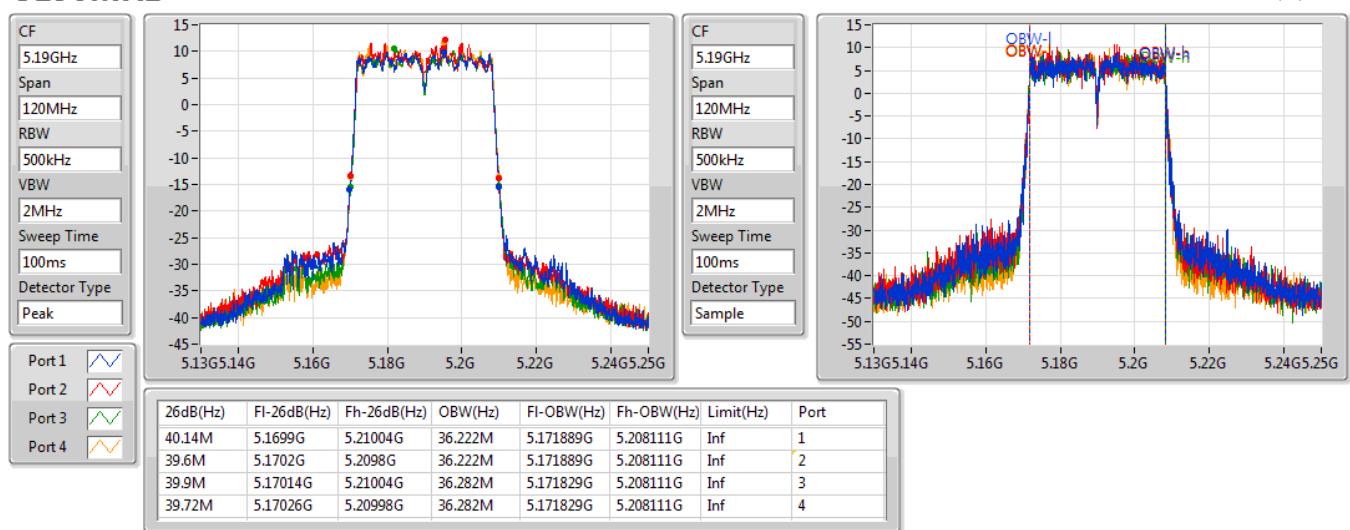
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss3,(MCS0)_4TX
EBW
5180MHz

29/07/2019

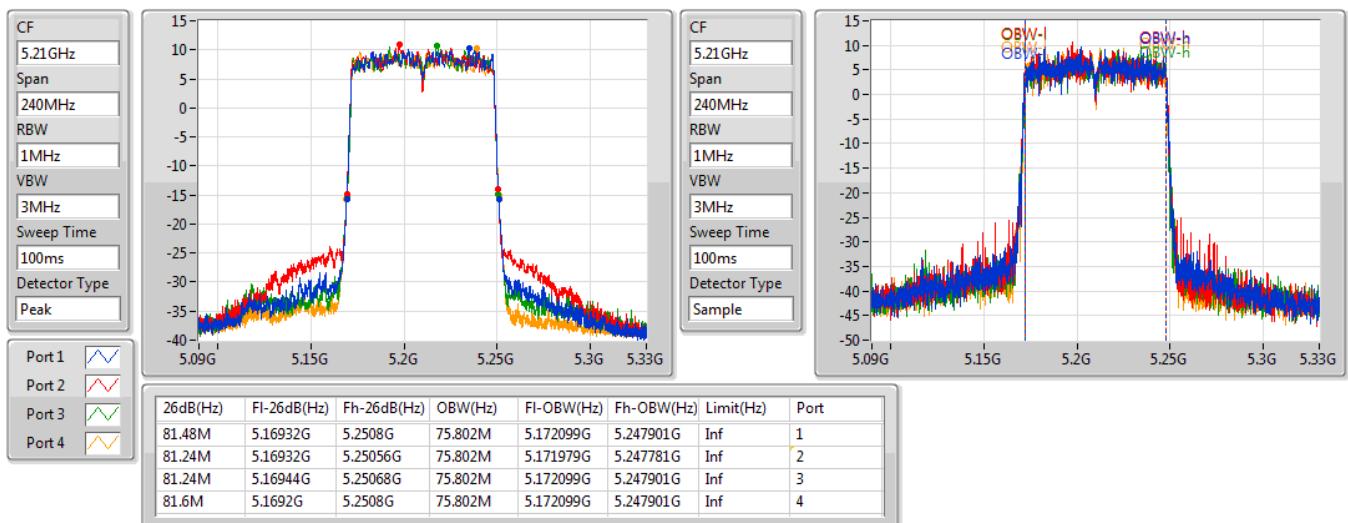

802.11ac VHT40-BF_Nss3,(MCS0)_4TX
EBW
5190MHz

29/07/2019

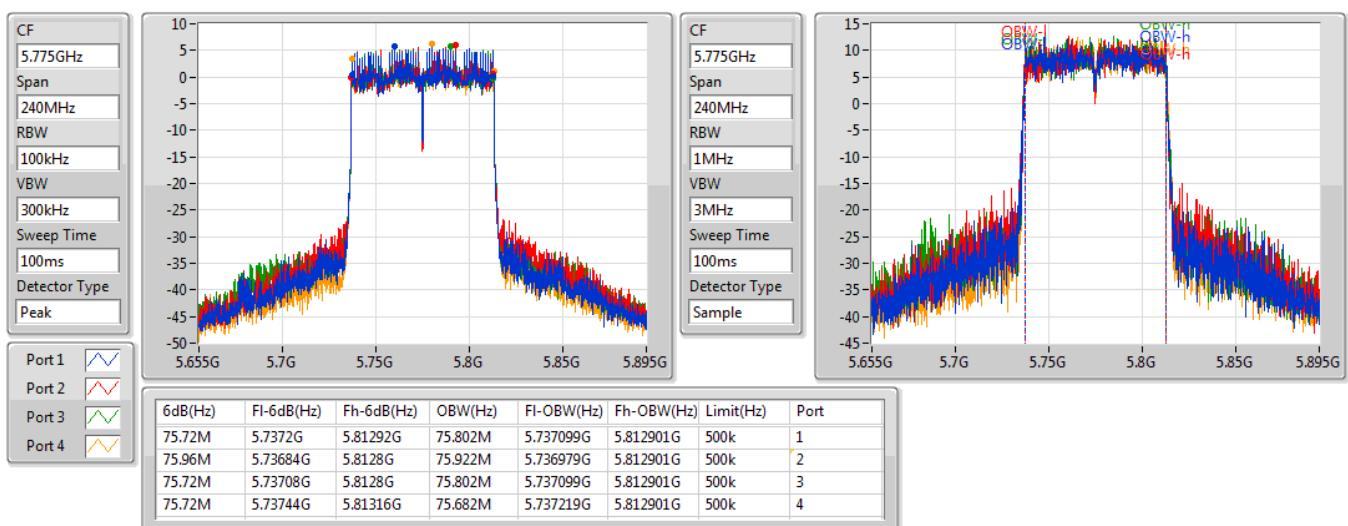


802.11ac VHT80-BF_Nss3,(MCS0)_4TX
EBW
5210MHz

29/07/2019

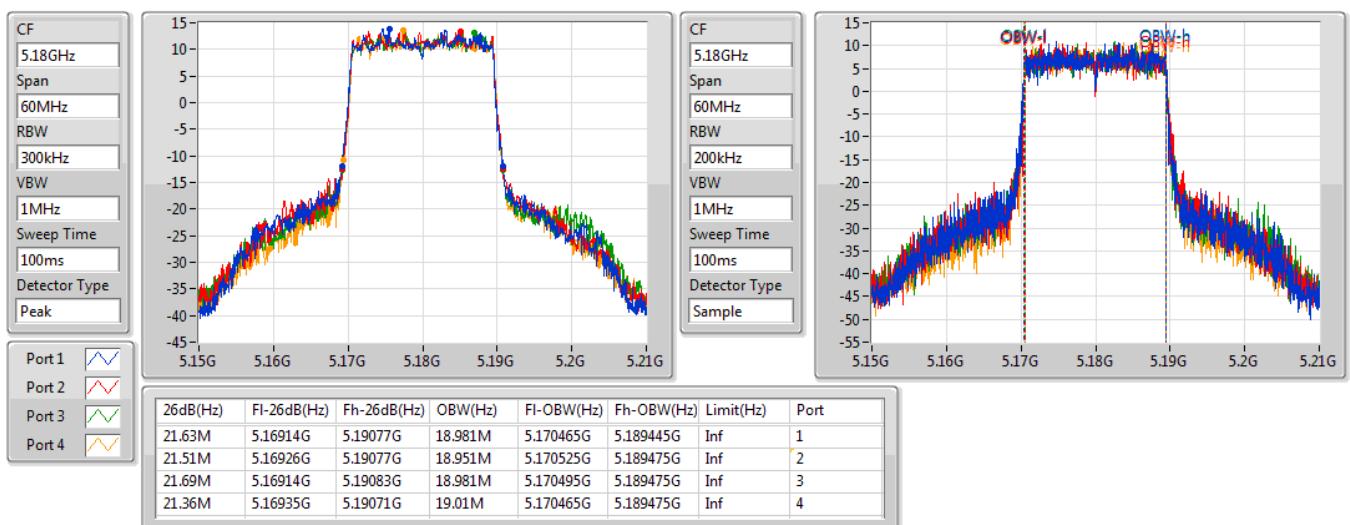

802.11ac VHT80-BF_Nss3,(MCS0)_4TX
EBW
5775MHz

29/07/2019

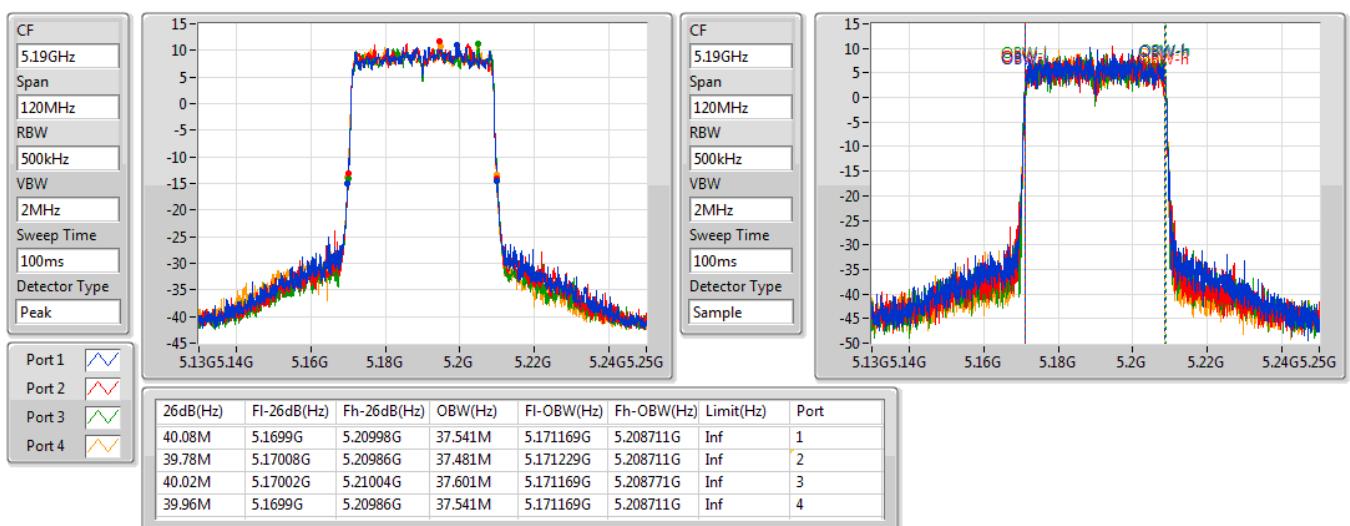


802.11ax HEW20-BF_Nss3,(MCS0)_4TX
EBW
5180MHz

29/07/2019

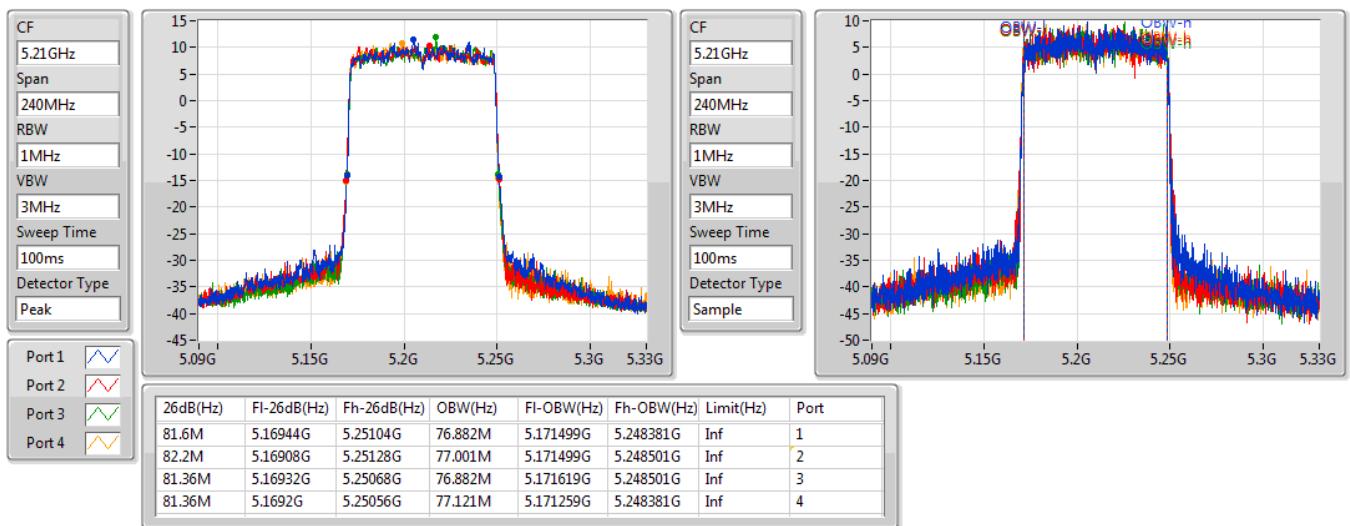

802.11ax HEW40-BF_Nss3,(MCS0)_4TX
EBW
5190MHz

29/07/2019

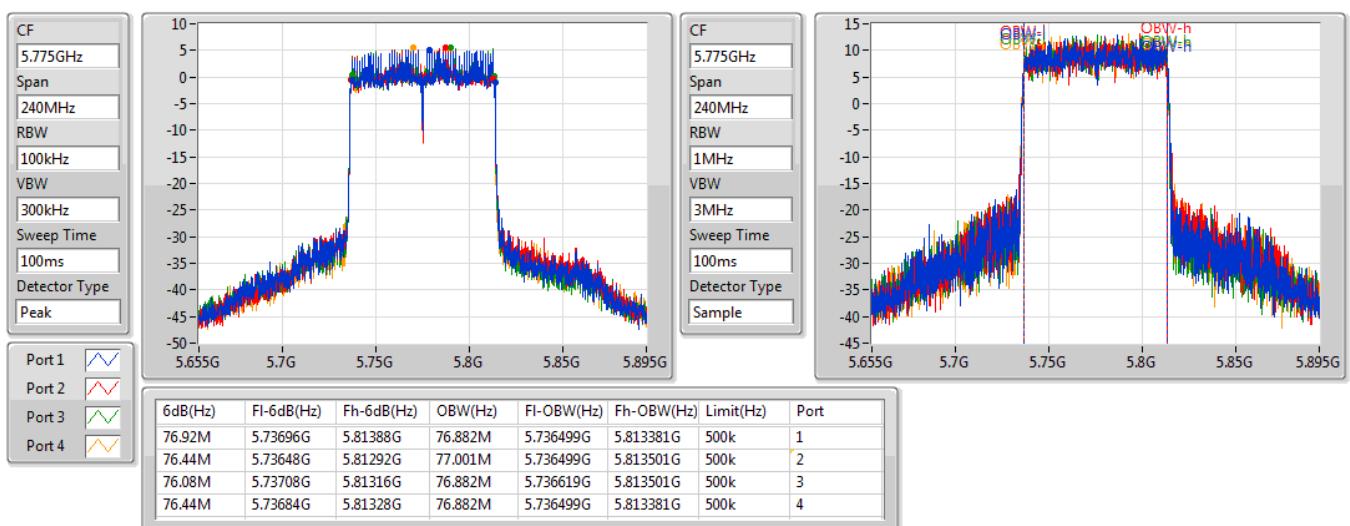


802.11ax HEW80-BF_Nss3,(MCS0)_4TX
EBW
5210MHz

29/07/2019


802.11ax HEW80-BF_Nss3,(MCS0)_4TX
EBW
5775MHz

29/07/2019



**<non-beamforming mode> 4T1S****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.88	0.97275
802.11ac VHT20_Nss1,(MCS0)_4TX	29.82	0.95940
802.11ac VHT40_Nss1,(MCS0)_4TX	29.28	0.84723
802.11ac VHT80_Nss1,(MCS0)_4TX	22.35	0.17179
802.11ax HEW20_Nss1,(MCS0)_4TX	29.98	0.99541
802.11ax HEW40_Nss1,(MCS0)_4TX	29.11	0.81470
802.11ax HEW80_Nss1,(MCS0)_4TX	22.76	0.18880
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.86	0.96828
802.11ac VHT20_Nss1,(MCS0)_4TX	29.93	0.98401
802.11ac VHT40_Nss1,(MCS0)_4TX	29.93	0.98401
802.11ac VHT80_Nss1,(MCS0)_4TX	28.45	0.69984
802.11ax HEW20_Nss1,(MCS0)_4TX	29.84	0.96383
802.11ax HEW40_Nss1,(MCS0)_4TX	29.95	0.98855
802.11ax HEW80_Nss1,(MCS0)_4TX	28.31	0.67764



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	5.80	22.09	21.81	22.03	21.98	28.00	30.00	33.80	36.00
5200MHz	Pass	5.80	24.01	23.68	23.81	23.86	29.86	30.00	35.66	36.00
5240MHz	Pass	5.80	24.02	23.86	23.79	23.75	29.88	30.00	35.68	36.00
5745MHz	Pass	4.70	23.52	23.69	23.87	24.24	29.86	30.00	34.56	36.00
5785MHz	Pass	4.70	23.64	23.56	23.82	24.22	29.84	30.00	34.54	36.00
5825MHz	Pass	4.70	23.73	23.55	23.67	24.13	29.80	30.00	34.50	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.80	21.87	21.54	21.71	21.66	27.72	30.00	33.52	36.00
5200MHz	Pass	5.80	23.98	23.58	23.82	23.71	29.80	30.00	35.60	36.00
5240MHz	Pass	5.80	23.93	23.69	23.84	23.73	29.82	30.00	35.62	36.00
5745MHz	Pass	4.70	23.63	23.59	23.96	24.12	29.85	30.00	34.55	36.00
5785MHz	Pass	4.70	23.82	23.68	23.83	24.28	29.93	30.00	34.63	36.00
5825MHz	Pass	4.70	23.92	23.64	23.99	24.06	29.93	30.00	34.63	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	5.80	18.38	18.19	18.26	18.45	24.34	30.00	30.14	36.00
5230MHz	Pass	5.80	23.36	23.23	23.09	23.35	29.28	30.00	35.08	36.00
5755MHz	Pass	4.70	23.87	23.69	23.96	24.11	29.93	30.00	34.63	36.00
5795MHz	Pass	4.70	23.84	23.59	23.78	24.04	29.84	30.00	34.54	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	5.80	16.48	16.21	16.27	16.36	22.35	30.00	28.15	36.00
5775MHz	Pass	4.70	22.30	22.38	22.53	22.50	28.45	30.00	33.15	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.80	21.06	21.01	21.13	20.99	27.07	30.00	32.87	36.00
5200MHz	Pass	5.80	24.09	23.77	23.97	23.95	29.97	30.00	35.77	36.00
5240MHz	Pass	5.80	24.15	23.89	23.97	23.82	29.98	30.00	35.78	36.00
5745MHz	Pass	4.70	23.78	23.39	23.80	24.12	29.80	30.00	34.50	36.00
5785MHz	Pass	4.70	23.63	23.58	23.92	24.11	29.84	30.00	34.54	36.00
5825MHz	Pass	4.70	23.62	23.56	23.76	24.06	29.77	30.00	34.47	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	5.80	17.94	17.65	17.69	17.89	23.81	30.00	29.61	36.00
5230MHz	Pass	5.80	23.14	22.97	23.03	23.21	29.11	30.00	34.91	36.00
5755MHz	Pass	4.70	23.84	23.85	23.85	24.15	29.95	30.00	34.65	36.00
5795MHz	Pass	4.70	23.75	23.71	23.65	24.02	29.81	30.00	34.51	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	5.80	16.86	16.74	16.63	16.74	22.76	30.00	28.56	36.00
5775MHz	Pass	4.70	22.18	22.06	22.42	22.50	28.31	30.00	33.01	36.00

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

**<beamforming mode> 4T1S****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	29.82	0.95940
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	29.53	0.89743
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	23.53	0.22542
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.98	0.99541
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	29.82	0.95940
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.63	0.18323
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	29.93	0.98401
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	29.93	0.98401
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	27.55	0.56885
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.84	0.96383
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	29.95	0.98855
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	27.71	0.59020



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	21.20	20.83	21.16	21.04	27.08	30.00
5200MHz	Pass	4.70	23.98	23.58	23.82	23.71	29.80	30.00
5240MHz	Pass	4.70	23.93	23.69	23.84	23.73	29.82	30.00
5745MHz	Pass	5.00	23.63	23.59	23.96	24.12	29.85	30.00
5785MHz	Pass	5.00	23.82	23.68	23.83	24.28	29.93	30.00
5825MHz	Pass	5.00	23.92	23.64	23.99	24.06	29.93	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	17.51	17.55	17.36	17.48	23.50	30.00
5230MHz	Pass	4.70	23.60	23.53	23.31	23.59	29.53	30.00
5755MHz	Pass	5.00	23.87	23.69	23.96	24.11	29.93	30.00
5795MHz	Pass	5.00	23.84	23.59	23.78	24.04	29.84	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	17.73	17.37	17.42	17.52	23.53	30.00
5775MHz	Pass	5.00	21.39	21.30	21.67	21.76	27.55	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	21.06	21.01	21.13	20.99	27.07	30.00
5200MHz	Pass	4.70	24.09	23.77	23.97	23.95	29.97	30.00
5240MHz	Pass	4.70	24.15	23.89	23.97	23.82	29.98	30.00
5745MHz	Pass	5.00	23.78	23.39	23.80	24.12	29.80	30.00
5785MHz	Pass	5.00	23.63	23.58	23.92	24.11	29.84	30.00
5825MHz	Pass	5.00	23.62	23.56	23.76	24.06	29.77	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	17.72	17.66	17.38	17.63	23.62	30.00
5230MHz	Pass	4.70	23.91	23.57	23.86	23.83	29.82	30.00
5755MHz	Pass	5.00	23.84	23.85	23.85	24.15	29.95	30.00
5795MHz	Pass	5.00	23.75	23.71	23.65	24.02	29.81	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	16.77	16.58	16.44	16.63	22.63	30.00
5775MHz	Pass	5.00	21.57	21.77	21.75	21.67	27.71	30.00

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

**<non-beamforming mode> 4T2S****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20_Nss2,(MCS0)_4TX	27.33	0.54075
802.11ac VHT40_Nss2,(MCS0)_4TX	24.35	0.27227
802.11ac VHT80_Nss2,(MCS0)_4TX	21.58	0.14388
802.11ax HEW20_Nss2,(MCS0)_4TX	27.13	0.51642
802.11ax HEW40_Nss2,(MCS0)_4TX	23.77	0.23823
802.11ax HEW80_Nss2,(MCS0)_4TX	22.59	0.18155
5.725-5.85GHz	-	-
802.11ac VHT80_Nss2,(MCS0)_4TX	28.64	0.73114
802.11ax HEW80_Nss2,(MCS0)_4TX	27.92	0.61944

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.80	21.42	21.13	21.47	21.19	27.33	30.00
802.11ac VHT40_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.80	18.42	18.21	18.30	18.38	24.35	30.00
802.11ac VHT80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.80	15.67	15.51	15.61	15.44	21.58	30.00
5775MHz	Pass	4.70	22.54	22.53	22.67	22.72	28.64	30.00
802.11ax HEW20_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.80	21.17	20.99	21.19	21.07	27.13	30.00
802.11ax HEW40_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.80	17.75	17.95	17.57	17.72	23.77	30.00
802.11ax HEW80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.80	16.64	16.77	16.32	16.53	22.59	30.00
5775MHz	Pass	4.70	21.92	21.89	21.88	21.90	27.92	30.00

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

**<beamforming mode> 4T2S****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	27.74	0.59429
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	24.79	0.30130
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	24.42	0.27669
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	27.13	0.51642
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	24.49	0.28119
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	24.27	0.26730
5.725-5.85GHz	-	-
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	28.05	0.63826
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	28.30	0.67608

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	21.92	21.55	21.73	21.65	27.74	30.00
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	18.92	18.73	18.63	18.79	24.79	30.00
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	18.49	18.36	18.33	18.41	24.42	30.00
5775MHz	Pass	5.00	22.00	21.92	22.06	22.12	28.05	30.00
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	21.17	20.99	21.19	21.07	27.13	30.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	18.61	18.41	18.34	18.50	24.49	30.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	18.34	18.26	18.19	18.22	24.27	30.00
5775MHz	Pass	5.00	22.23	22.23	22.35	22.29	28.30	30.00

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

**<non-beamforming mode> 4T3S****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20_Nss3,(MCS0)_4TX	27.16	0.52000
802.11ac VHT40_Nss3,(MCS0)_4TX	24.17	0.26122
802.11ac VHT80_Nss3,(MCS0)_4TX	21.68	0.14723
802.11ax HEW20_Nss3,(MCS0)_4TX	26.62	0.45920
802.11ax HEW40_Nss3,(MCS0)_4TX	23.55	0.22646
802.11ax HEW80_Nss3,(MCS0)_4TX	22.85	0.19275
5.725-5.85GHz	-	-
802.11ac VHT80_Nss3,(MCS0)_4TX	28.49	0.70632
802.11ax HEW80_Nss3,(MCS0)_4TX	28.16	0.65464

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.80	20.91	21.23	21.40	21.00	27.16	30.00
802.11ac VHT40_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.80	18.10	18.32	18.05	18.14	24.17	30.00
802.11ac VHT80_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.80	15.67	15.85	15.54	15.57	21.68	30.00
5775MHz	Pass	4.70	22.26	22.56	22.65	22.39	28.49	30.00
802.11ax HEW20_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.80	20.62	20.66	20.59	20.53	26.62	30.00
802.11ax HEW40_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.80	17.66	17.50	17.28	17.67	23.55	30.00
802.11ax HEW80_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.80	16.98	17.03	16.53	16.74	22.85	30.00
5775MHz	Pass	4.70	22.02	22.06	22.31	22.15	28.16	30.00

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

**<beamforming mode> 4T3S****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss3,(MCS0)_4TX	27.72	0.59156
802.11ac VHT40-BF_Nss3,(MCS0)_4TX	25.01	0.31696
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	24.54	0.28445
802.11ax HEW20-BF_Nss3,(MCS0)_4TX	27.31	0.53827
802.11ax HEW40-BF_Nss3,(MCS0)_4TX	24.68	0.29376
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	24.59	0.28774
5.725-5.85GHz	-	-
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	27.93	0.62087
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	28.16	0.65464

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.80	21.54	21.79	22.12	21.31	27.72	30.00
802.11ac VHT40-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.80	19.04	19.06	19.12	18.71	25.01	30.00
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.80	18.38	18.85	18.56	18.26	24.54	30.00
5775MHz	Pass	3.80	21.73	22.00	22.15	21.76	27.93	30.00
802.11ax HEW20-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.80	21.15	21.41	21.43	21.14	27.31	30.00
802.11ax HEW40-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.80	18.76	18.69	18.45	18.73	24.68	30.00
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.80	18.62	18.59	18.52	18.55	24.59	30.00
5775MHz	Pass	3.80	22.02	22.06	22.31	22.15	28.16	30.00

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



<non-beamforming mode> 4T1S

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_4TX	16.94
802.11ac VHT20_Nss1,(MCS0)_4TX	16.40
802.11ac VHT40_Nss1,(MCS0)_4TX	12.87
802.11ac VHT80_Nss1,(MCS0)_4TX	3.23
802.11ax HEW20_Nss1,(MCS0)_4TX	16.18
802.11ax HEW40_Nss1,(MCS0)_4TX	12.60
802.11ax HEW80_Nss1,(MCS0)_4TX	3.83
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	15.46
802.11ac VHT20_Nss1,(MCS0)_4TX	15.07
802.11ac VHT40_Nss1,(MCS0)_4TX	12.20
802.11ac VHT80_Nss1,(MCS0)_4TX	8.16
802.11ax HEW20_Nss1,(MCS0)_4TX	14.67
802.11ax HEW40_Nss1,(MCS0)_4TX	11.92
802.11ax HEW80_Nss1,(MCS0)_4TX	7.54

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



Result

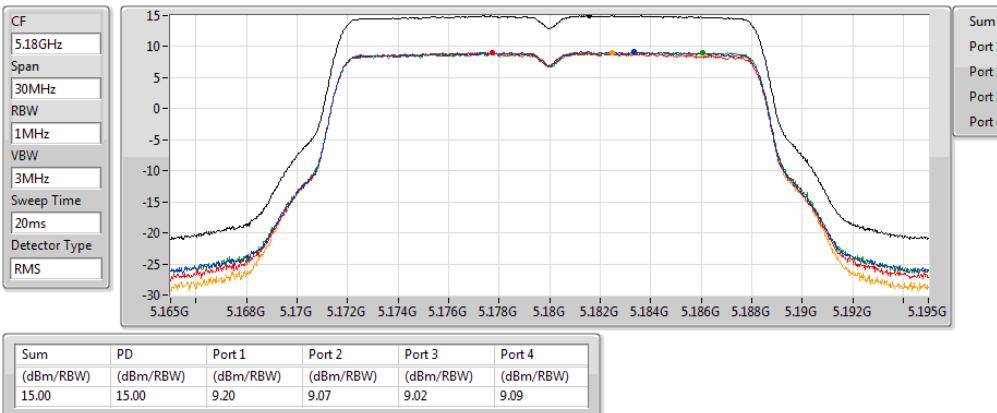
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	9.20	9.07	9.02	9.09	15.00	17.00
5200MHz	Pass	4.70	11.22	10.86	10.89	11.07	16.90	17.00
5240MHz	Pass	4.70	11.12	11.03	11.17	10.97	16.94	17.00
5745MHz	Pass	5.00	9.21	9.39	9.49	9.96	15.42	30.00
5785MHz	Pass	5.00	9.31	9.24	9.40	9.82	15.42	30.00
5825MHz	Pass	5.00	9.57	9.31	9.53	9.85	15.46	30.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	8.50	8.31	8.42	8.32	14.34	17.00
5200MHz	Pass	4.70	10.56	10.21	10.62	10.37	16.34	17.00
5240MHz	Pass	4.70	10.60	10.23	10.61	10.45	16.40	17.00
5745MHz	Pass	5.00	8.93	8.98	9.21	9.39	15.04	30.00
5785MHz	Pass	5.00	9.00	8.88	9.05	9.32	15.00	30.00
5825MHz	Pass	5.00	9.14	8.94	9.15	9.33	15.07	30.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	2.22	2.12	2.11	2.24	8.05	17.00
5230MHz	Pass	4.70	7.10	6.85	6.84	6.99	12.87	17.00
5755MHz	Pass	5.00	6.10	6.12	6.23	6.41	12.20	30.00
5795MHz	Pass	5.00	5.97	5.84	6.04	6.15	11.99	30.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-2.69	-2.65	-2.65	-2.62	3.23	17.00
5775MHz	Pass	5.00	2.07	2.25	2.41	2.19	8.16	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	7.25	7.16	7.46	7.24	13.23	17.00
5200MHz	Pass	4.70	10.14	10.07	10.37	10.17	16.07	17.00
5240MHz	Pass	4.70	10.35	10.15	10.42	10.18	16.18	17.00
5745MHz	Pass	5.00	8.64	8.38	8.84	8.99	14.67	30.00
5785MHz	Pass	5.00	8.51	8.47	8.81	8.92	14.61	30.00
5825MHz	Pass	5.00	8.48	8.37	8.64	8.84	14.52	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	1.71	1.72	1.67	1.89	7.70	17.00
5230MHz	Pass	4.70	6.69	6.67	6.64	6.77	12.60	17.00
5755MHz	Pass	5.00	5.93	5.84	6.01	6.08	11.92	30.00
5795MHz	Pass	5.00	5.87	5.86	6.05	6.07	11.89	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-2.10	-2.08	-2.26	-1.96	3.83	17.00
5775MHz	Pass	5.00	1.30	1.55	1.62	1.78	7.54	30.00

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

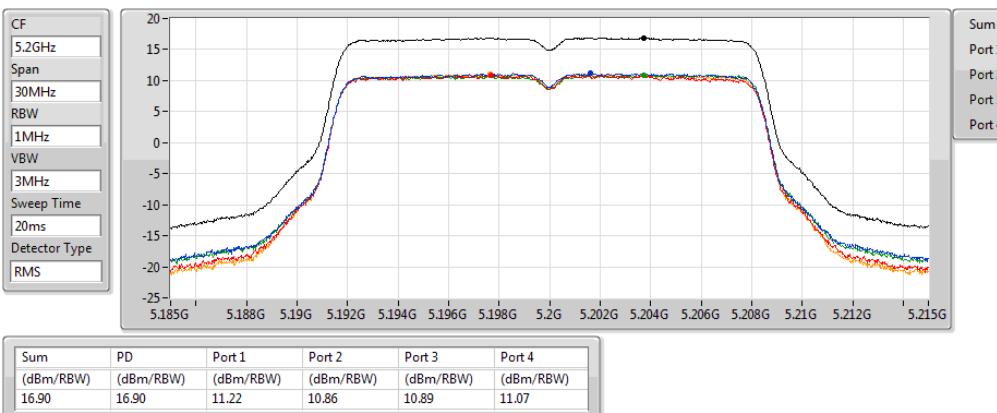
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_4TX
PSD
5180MHz

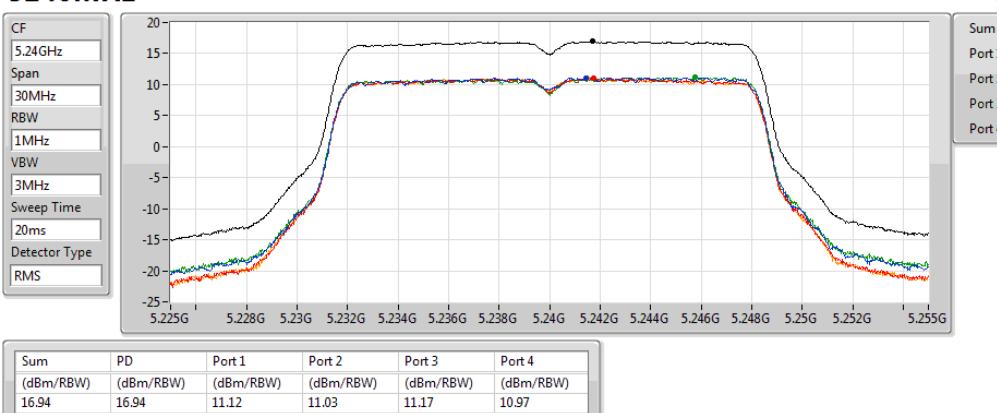
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802.11a_Nss1,(6Mbps)_4TX
PSD
5200MHz

30/07/2019

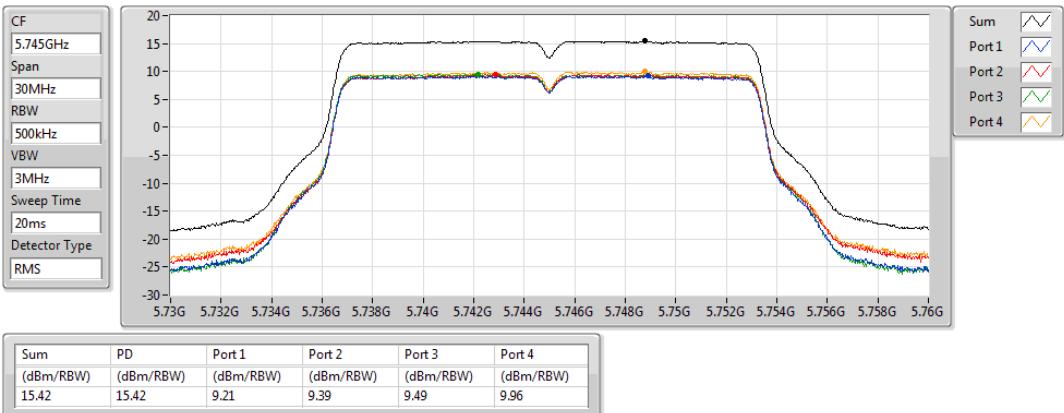

802.11a_Nss1,(6Mbps)_4TX
PSD
5240MHz

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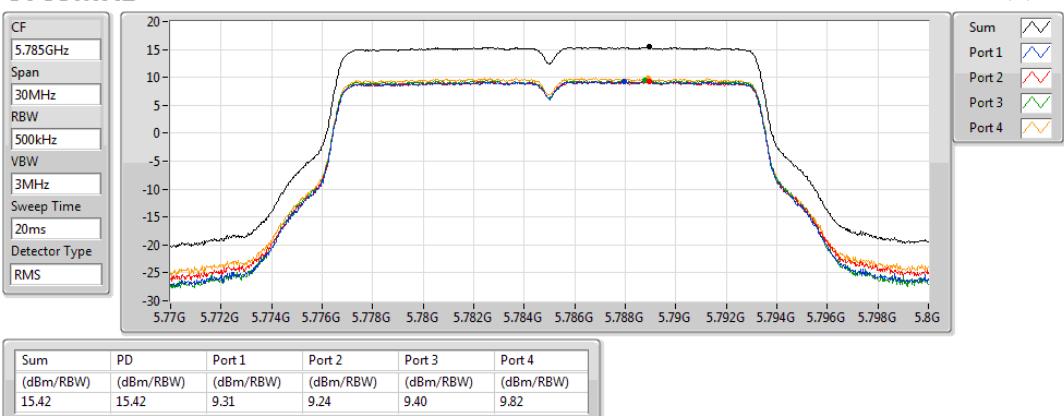


802.11a_Nss1,(6Mbps)_4TX
PSD
5745MHz

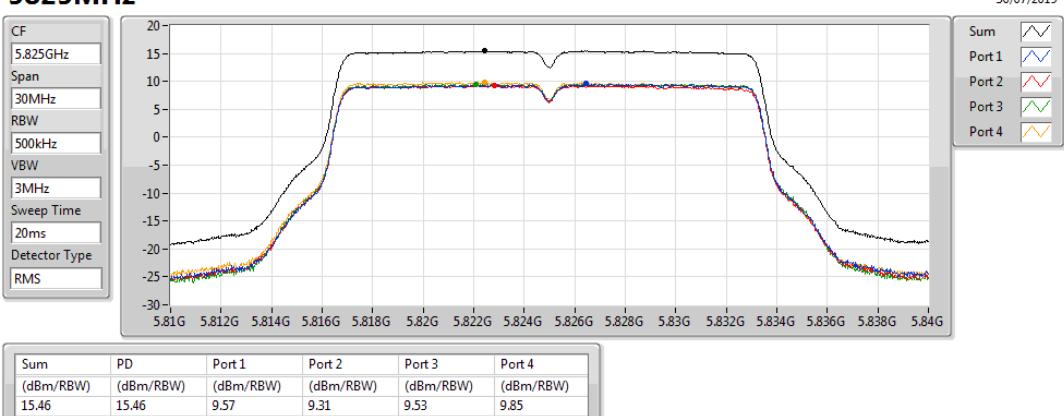
30/07/2019


802.11a_Nss1,(6Mbps)_4TX
PSD
5785MHz

30/07/2019

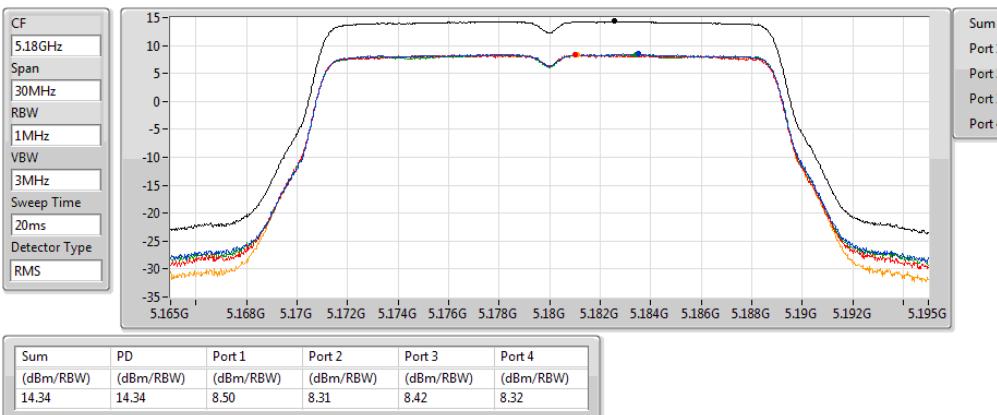

802.11a_Nss1,(6Mbps)_4TX
PSD
5825MHz

30/07/2019

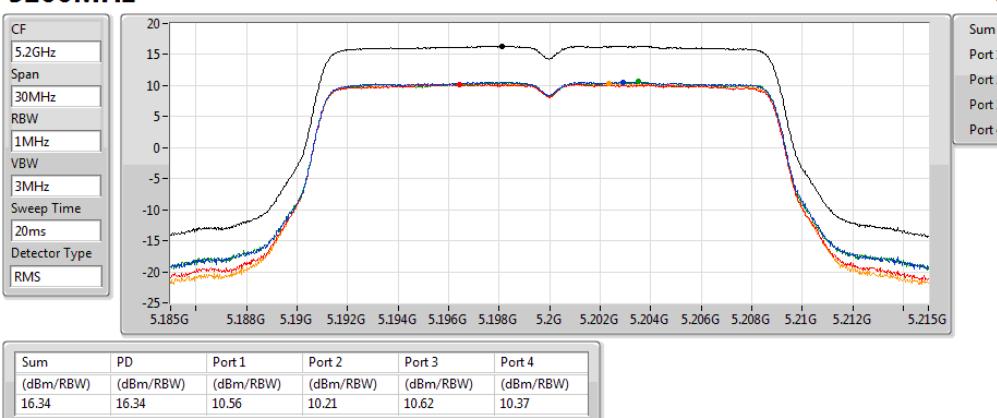


802.11ac VHT20_Nss1,(MCS0)_4TX
PSD
5180MHz

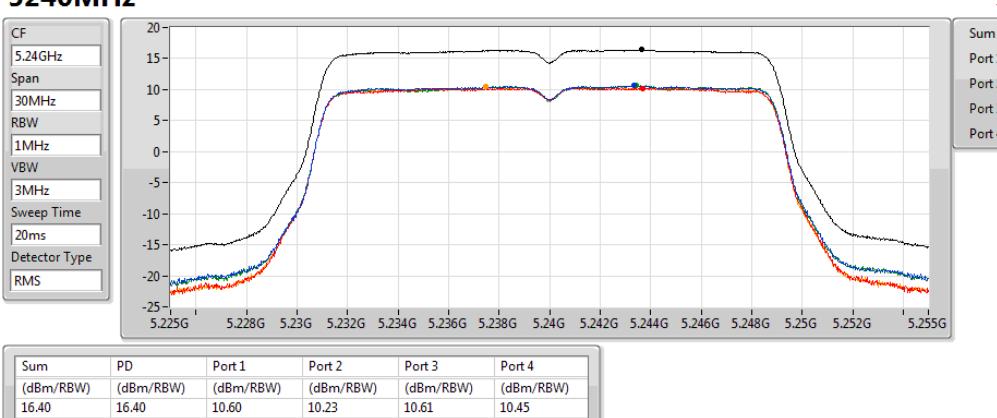
30/07/2019


802.11ac VHT20_Nss1,(MCS0)_4TX
PSD
5200MHz

30/07/2019

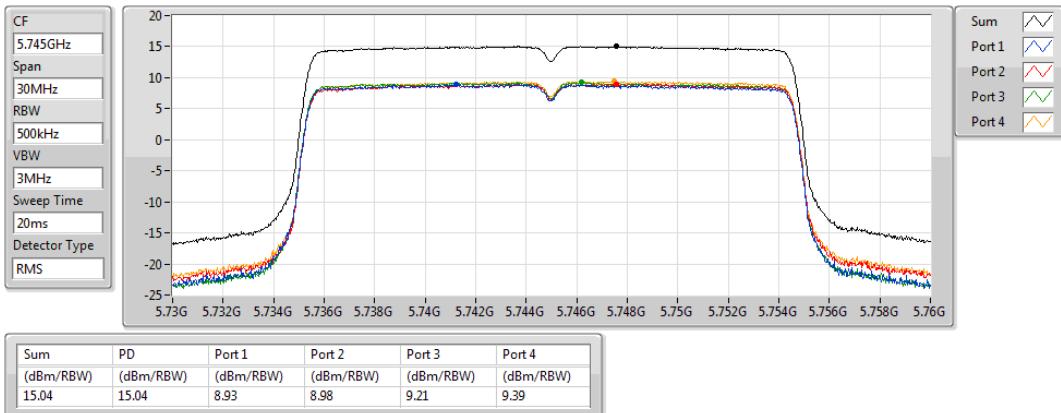

802.11ac VHT20_Nss1,(MCS0)_4TX
PSD
5240MHz

30/07/2019

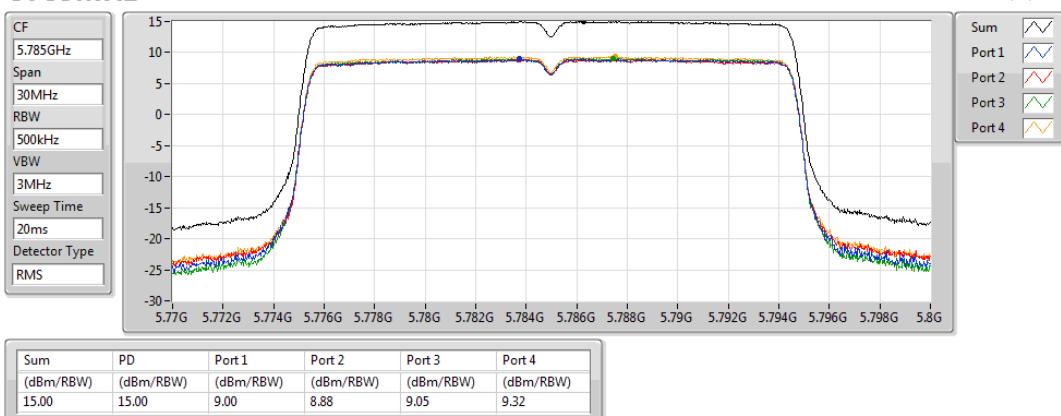


802.11ac VHT20_Nss1,(MCS0)_4TX
PSD
5745MHz

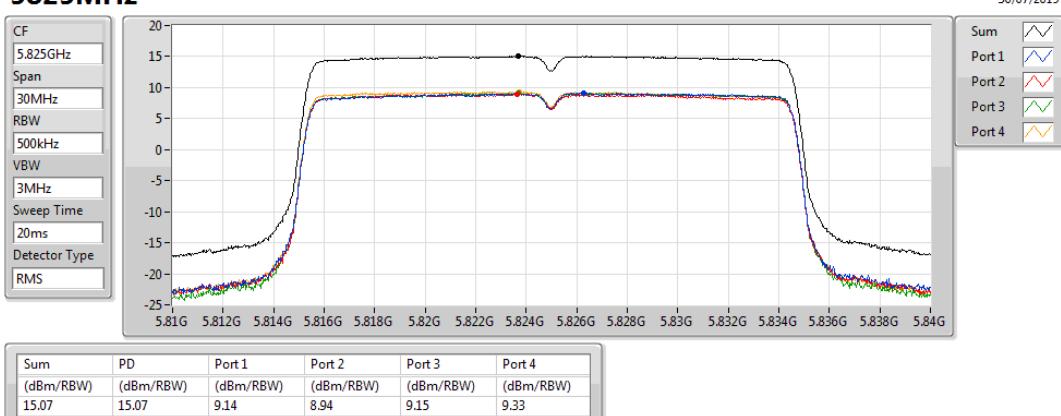
30/07/2019


802.11ac VHT20_Nss1,(MCS0)_4TX
PSD
5785MHz

30/07/2019


802.11ac VHT20_Nss1,(MCS0)_4TX
PSD
5825MHz

30/07/2019

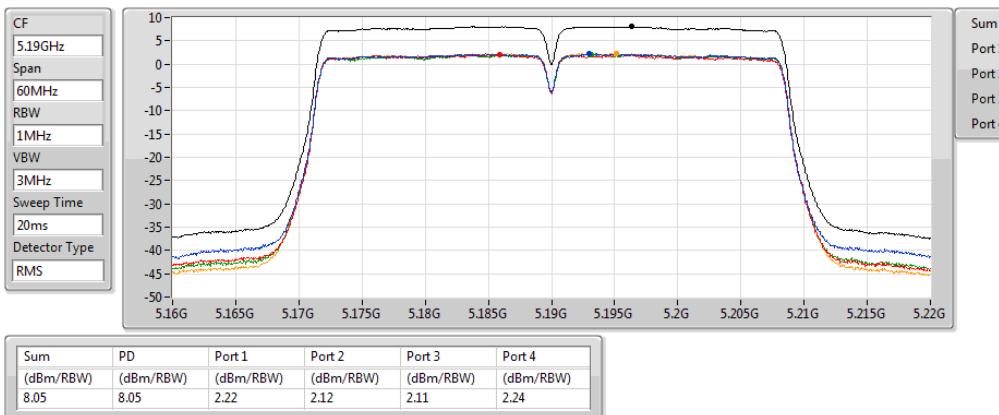


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5190MHz

30/07/2019

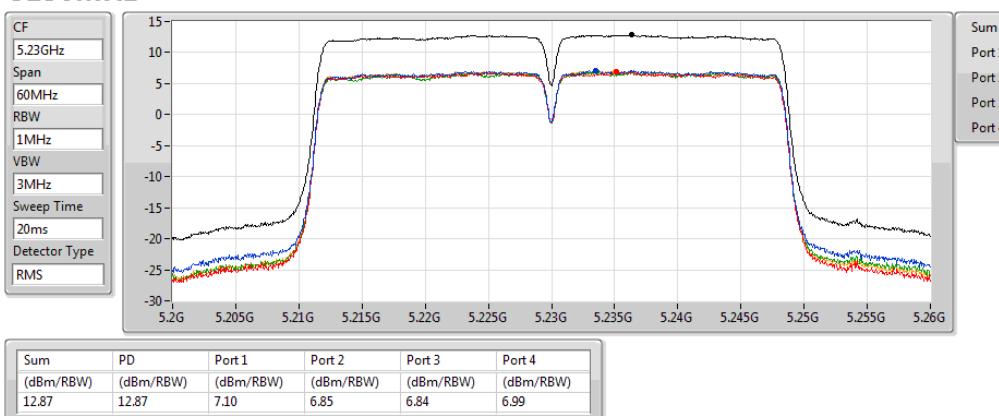


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5230MHz

30/07/2019

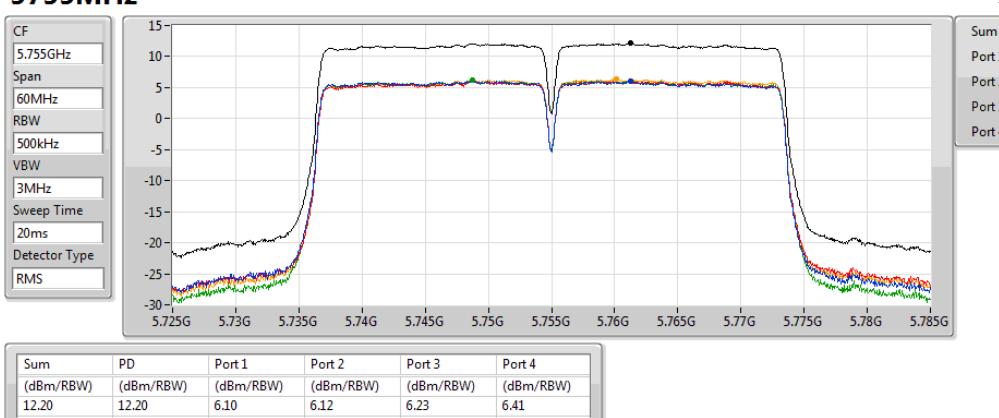


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

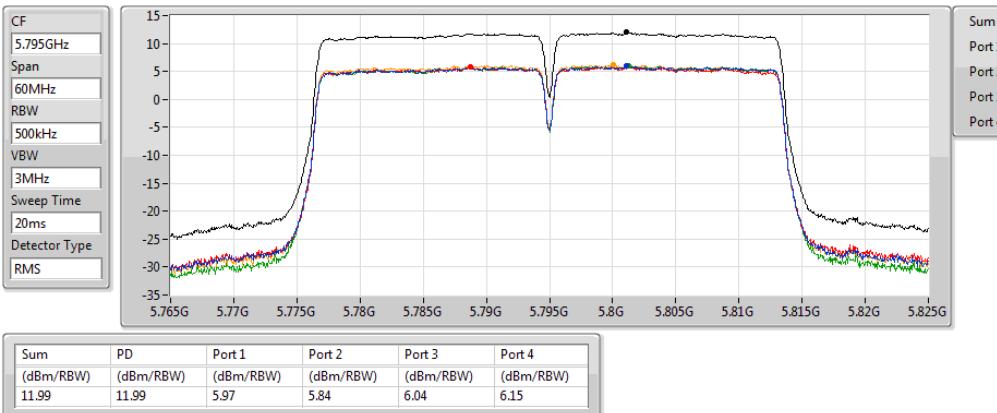
5755MHz

30/07/2019

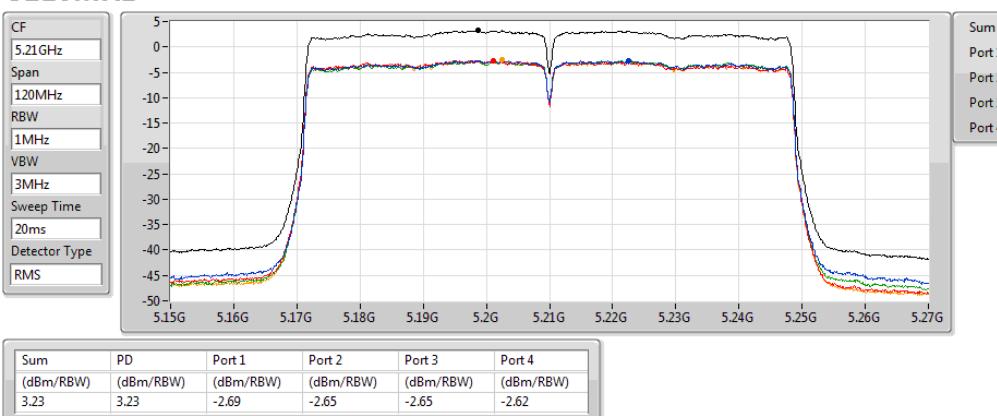


802.11ac VHT40_Nss1,(MCS0)_4TX
PSD
5795MHz

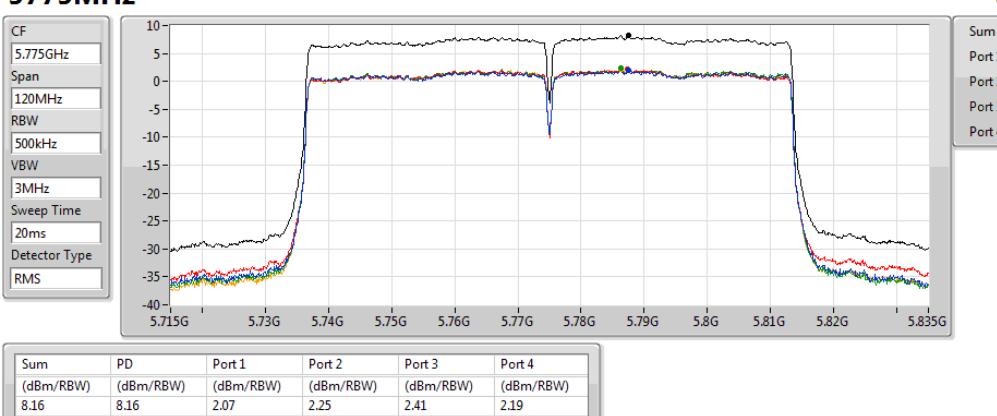
30/07/2019


802.11ac VHT80_Nss1,(MCS0)_4TX
PSD
5210MHz

30/07/2019

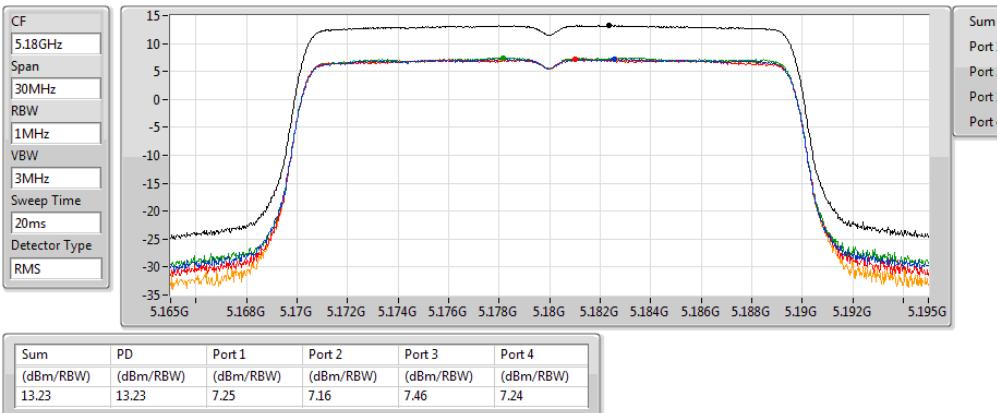

802.11ac VHT80_Nss1,(MCS0)_4TX
PSD
5775MHz

02/08/2019

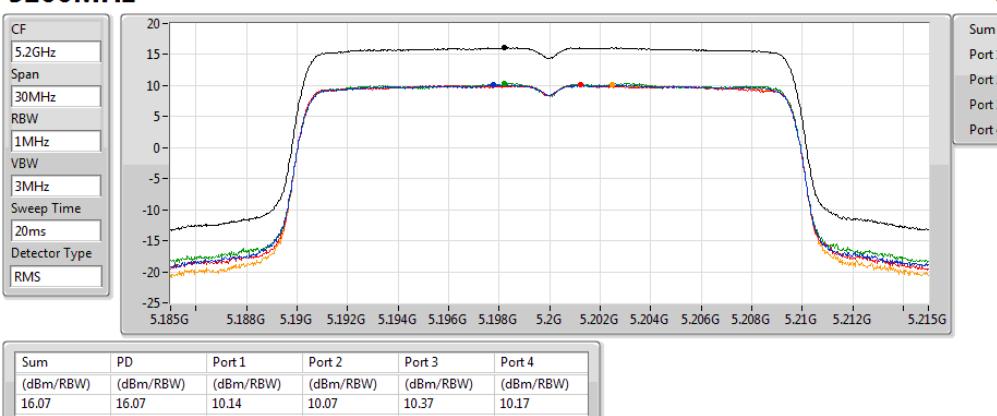


802.11ax HEW20_Nss1,(MCS0)_4TX
PSD
5180MHz

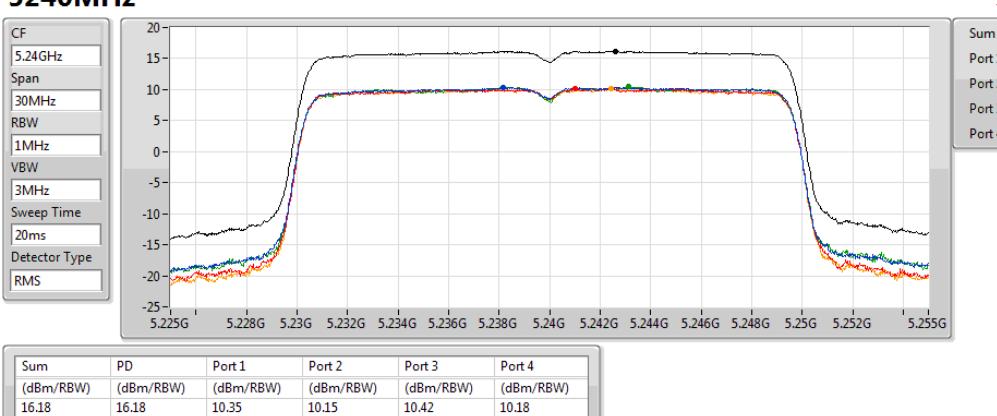
30/07/2019


802.11ax HEW20_Nss1,(MCS0)_4TX
PSD
5200MHz

30/07/2019

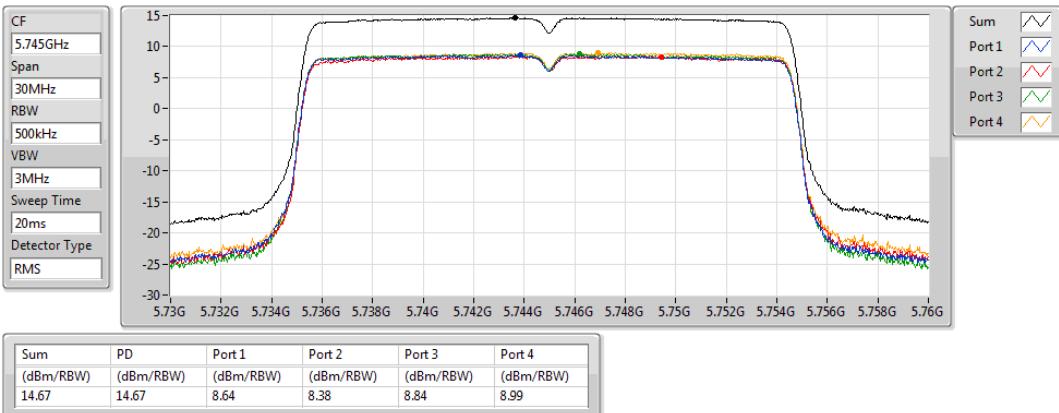

802.11ax HEW20_Nss1,(MCS0)_4TX
PSD
5240MHz

30/07/2019

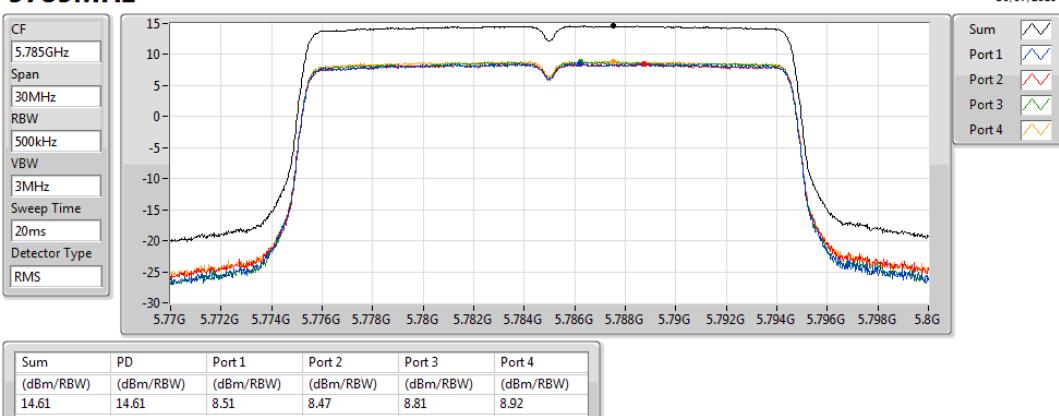


802.11ax HEW20_Nss1,(MCS0)_4TX
PSD
5745MHz

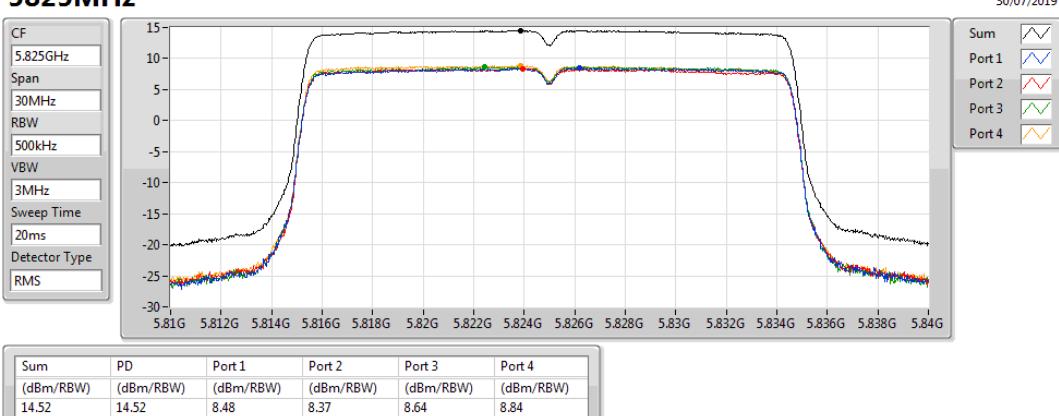
30/07/2019


802.11ax HEW20_Nss1,(MCS0)_4TX
PSD
5785MHz

30/07/2019

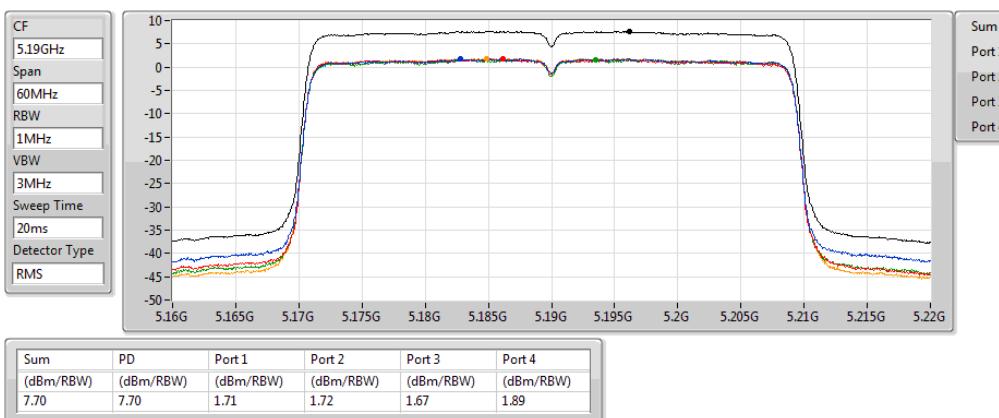

802.11ax HEW20_Nss1,(MCS0)_4TX
PSD
5825MHz

30/07/2019

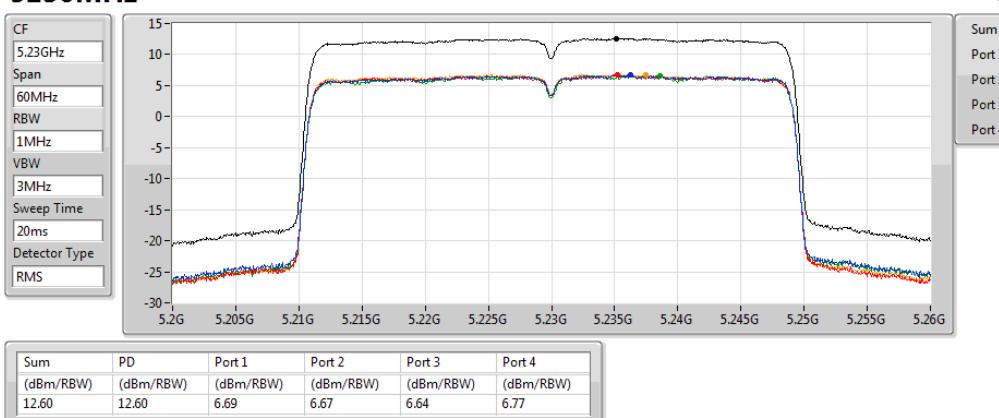


802.11ax HEW40_Nss1,(MCS0)_4TX
PSD
5190MHz

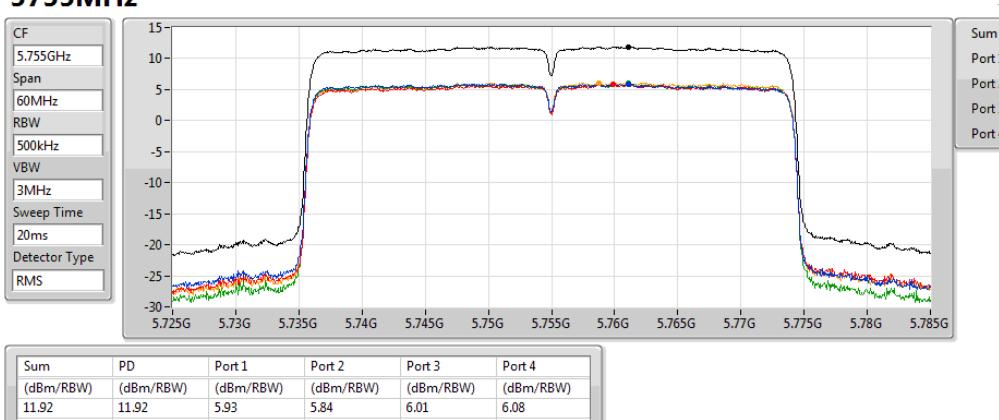
30/07/2019


802.11ax HEW40_Nss1,(MCS0)_4TX
PSD
5230MHz

30/07/2019

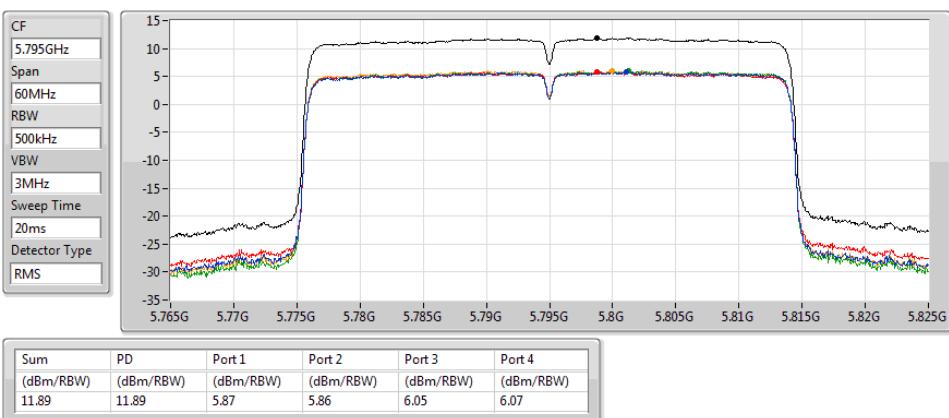

802.11ax HEW40_Nss1,(MCS0)_4TX
PSD
5755MHz

30/07/2019

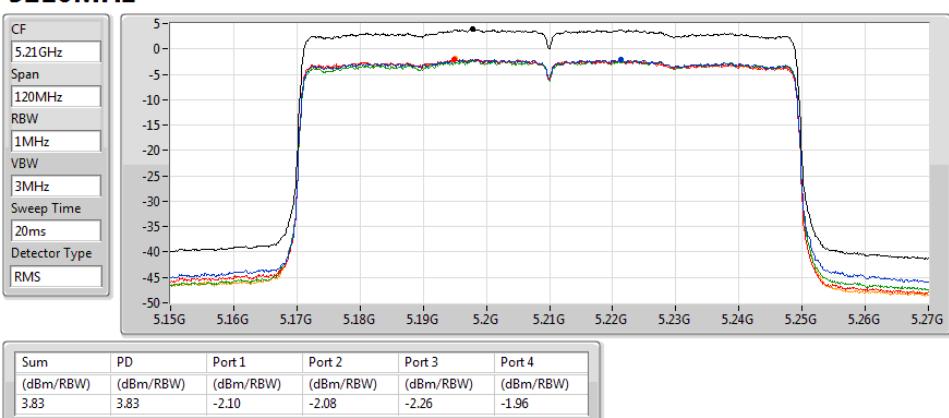


802.11ax HEW40_Nss1,(MCS0)_4TX
PSD
5795MHz

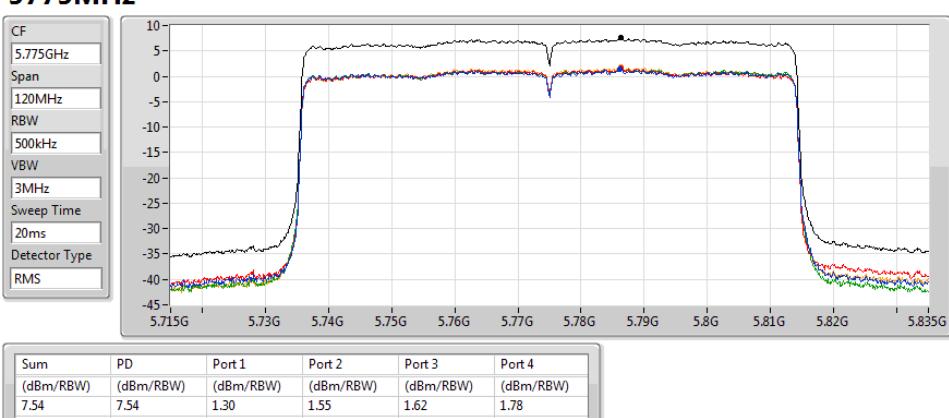
30/07/2019


802.11ax HEW80_Nss1,(MCS0)_4TX
PSD
5210MHz

30/07/2019


802.11ax HEW80_Nss1,(MCS0)_4TX
PSD
5775MHz

31/07/2019





<beamforming mode> 4T1S

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	16.30
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	13.10
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	4.35
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	16.17
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	13.22
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	2.51
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	15.02
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	12.19
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	6.96
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	14.52
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	11.84
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	6.70

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



Result

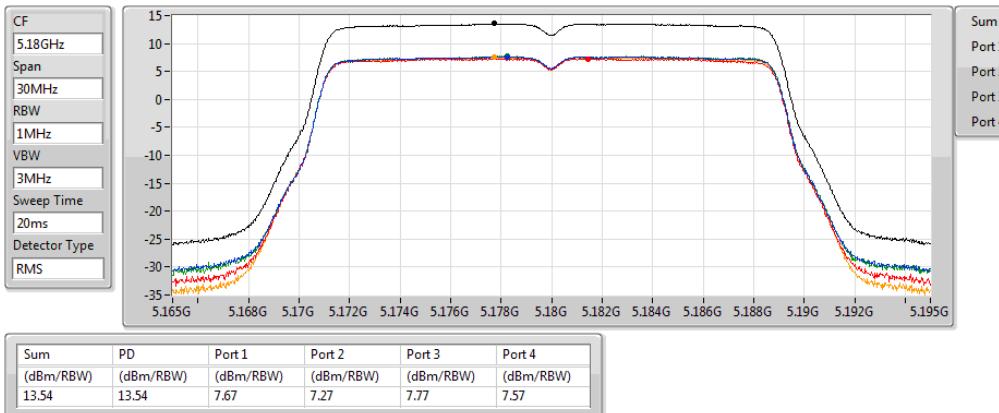
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	7.67	7.27	7.77	7.57	13.54	17.00
5200MHz	Pass	4.70	10.48	10.00	10.48	10.35	16.28	17.00
5240MHz	Pass	4.70	10.51	10.23	10.41	10.32	16.30	17.00
5745MHz	Pass	5.00	8.82	8.85	9.23	9.38	15.02	30.00
5785MHz	Pass	5.00	9.09	8.79	9.07	9.29	14.97	30.00
5825MHz	Pass	5.00	9.04	8.97	9.10	9.22	14.98	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	1.08	1.13	0.97	0.99	6.96	17.00
5230MHz	Pass	4.70	7.27	7.20	7.09	7.27	13.10	17.00
5755MHz	Pass	5.00	6.15	6.06	6.20	6.53	12.19	30.00
5795MHz	Pass	5.00	6.10	6.06	6.33	6.27	12.11	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-1.33	-1.59	-1.72	-1.58	4.35	17.00
5775MHz	Pass	5.00	0.93	0.85	1.23	1.17	6.96	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	7.24	7.20	7.32	7.16	13.15	17.00
5200MHz	Pass	4.70	10.27	9.96	10.21	10.13	16.07	17.00
5240MHz	Pass	4.70	10.32	10.18	10.20	10.11	16.17	17.00
5745MHz	Pass	5.00	8.51	8.22	8.68	8.87	14.52	30.00
5785MHz	Pass	5.00	8.43	8.38	8.58	8.84	14.46	30.00
5825MHz	Pass	5.00	8.48	8.42	8.53	8.82	14.49	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	1.08	1.00	0.85	1.12	6.93	17.00
5230MHz	Pass	4.70	7.42	7.03	7.45	7.35	13.22	17.00
5755MHz	Pass	5.00	5.79	5.83	5.88	6.23	11.84	30.00
5795MHz	Pass	5.00	5.70	5.63	5.91	5.85	11.70	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-3.23	-3.49	-3.43	-3.28	2.51	17.00
5775MHz	Pass	5.00	0.59	0.68	0.78	0.96	6.70	30.00

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

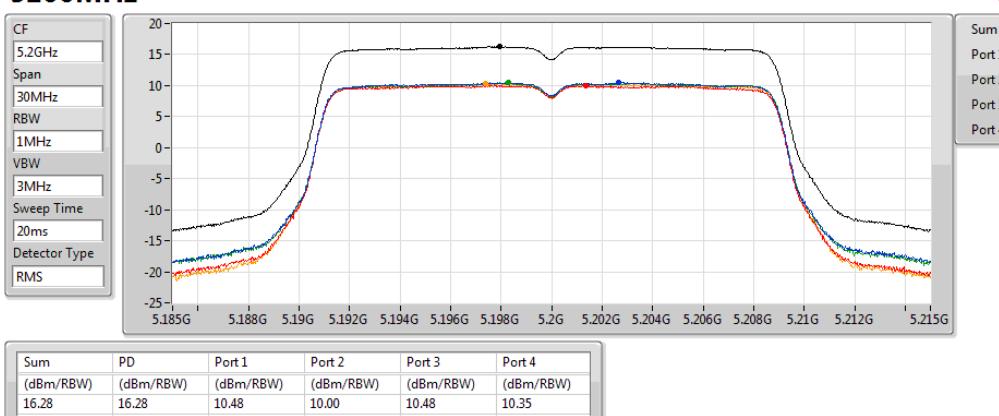
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

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

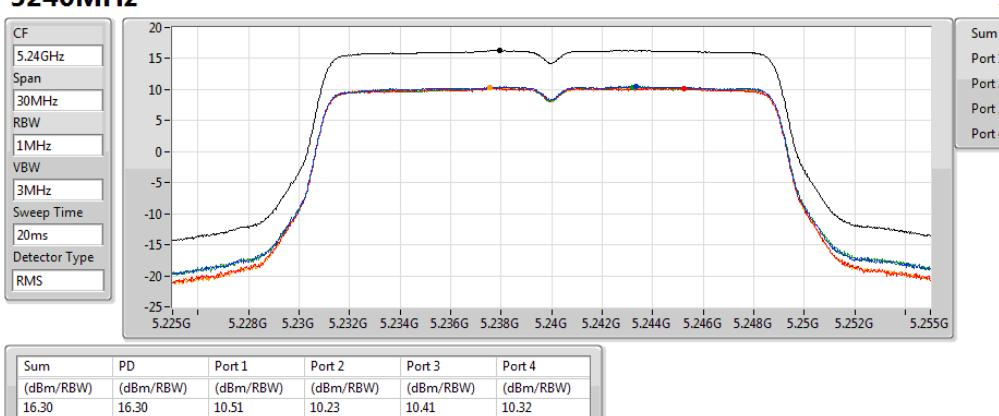
29/07/2019


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

29/07/2019


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

29/07/2019

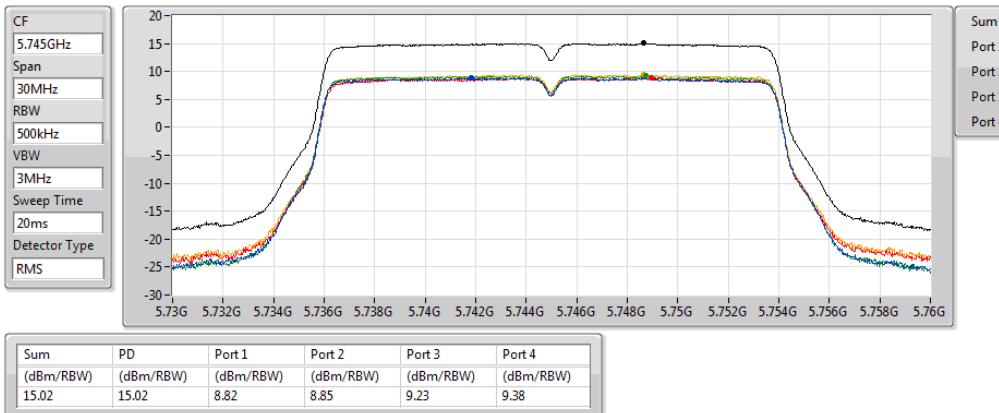


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5745MHz

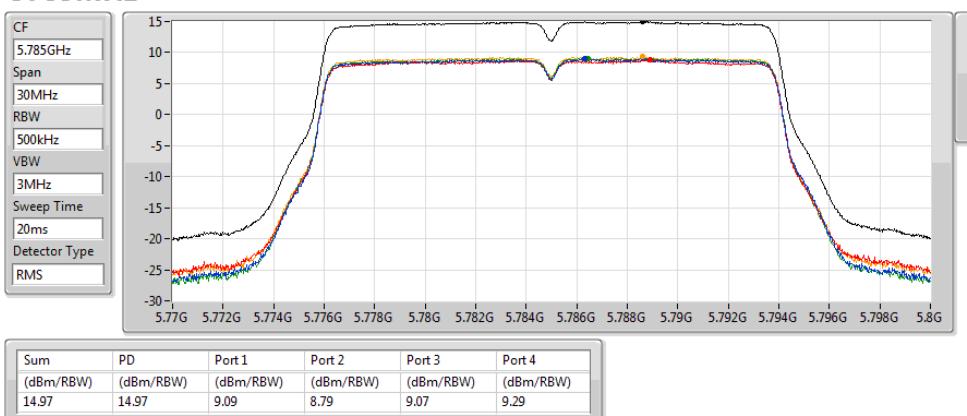
30/07/2019

**802.11ac VHT20-BF_Nss1,(MCS0)_4TX**

PSD

5785MHz

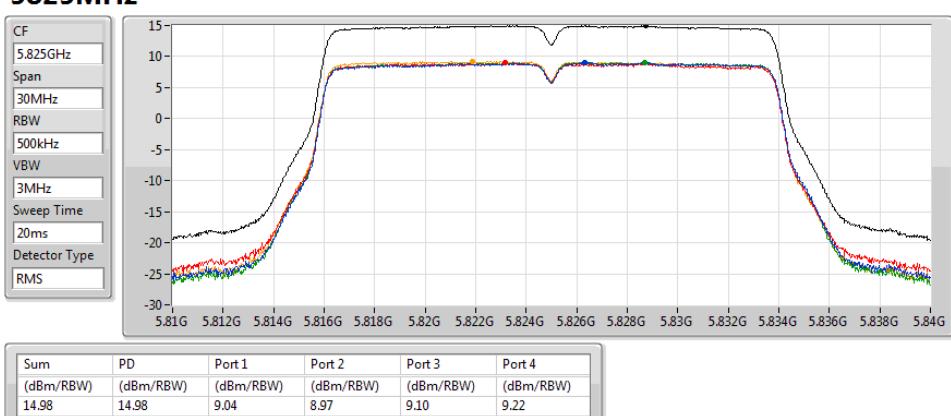
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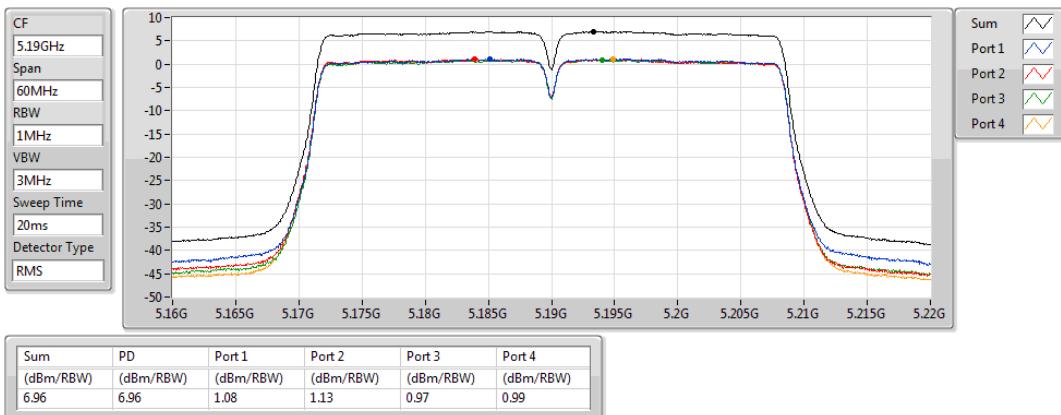
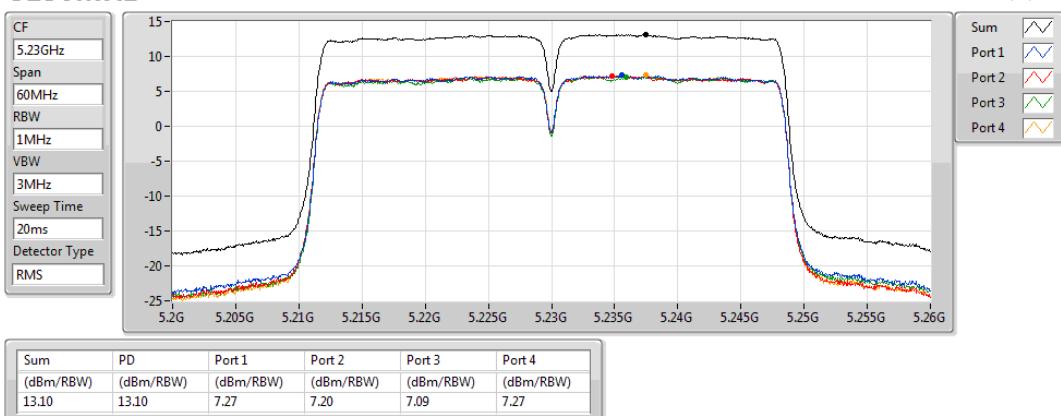
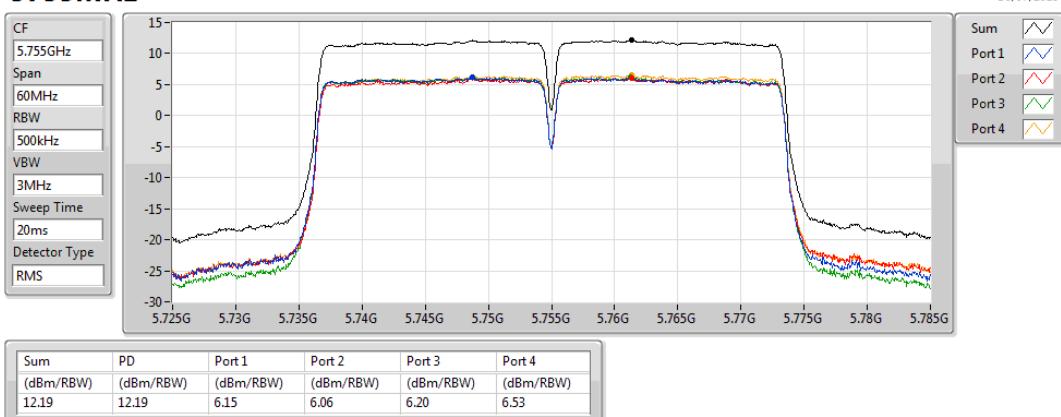
**802.11ac VHT20-BF_Nss1,(MCS0)_4TX**

PSD

5825MHz

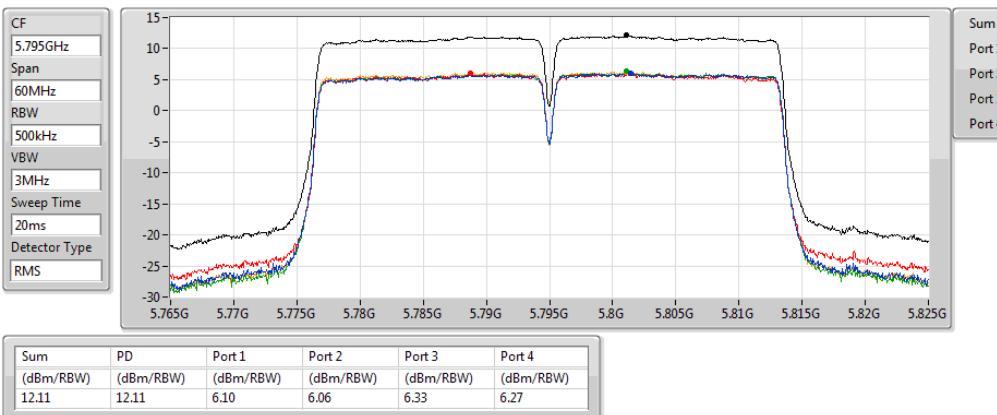
30/07/2019



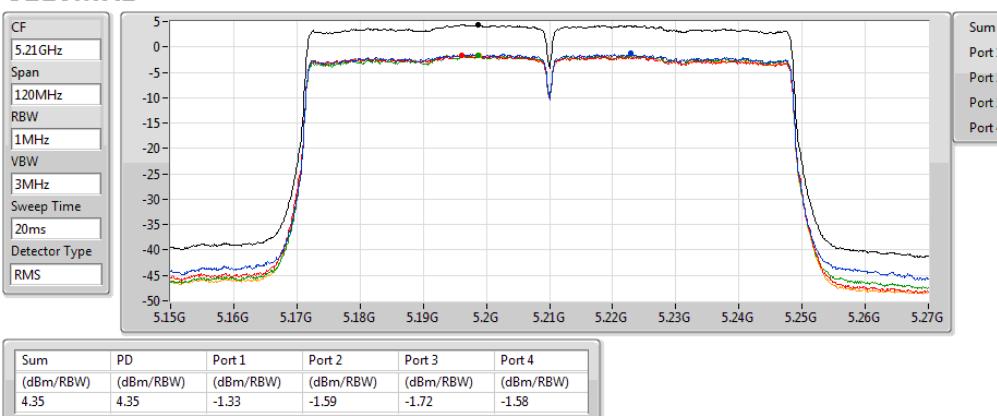
802.11ac VHT40-BF_Nss1,(MCS0)_4TX
PSD
5190MHz

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

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


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

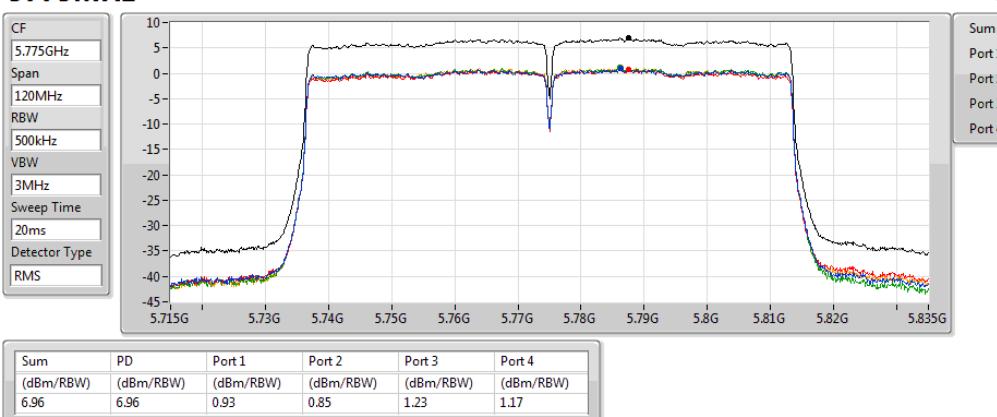
30/07/2019


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

29/07/2019

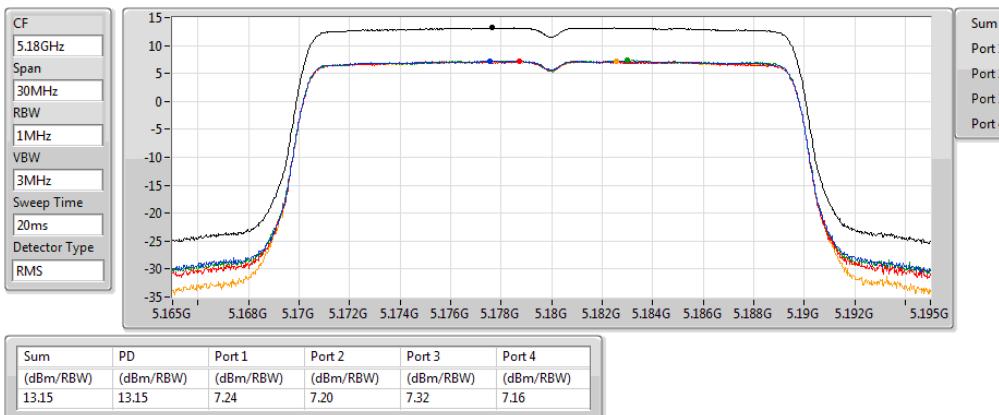

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
PSD
5775MHz

30/07/2019

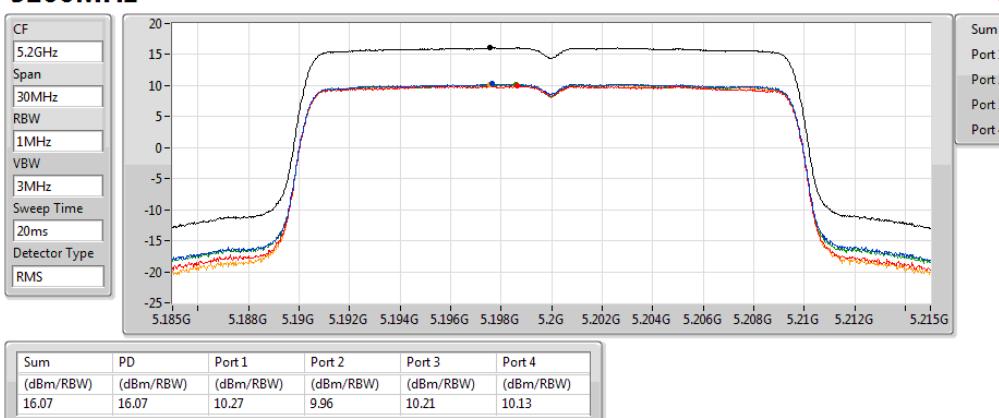


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
PSD
5180MHz

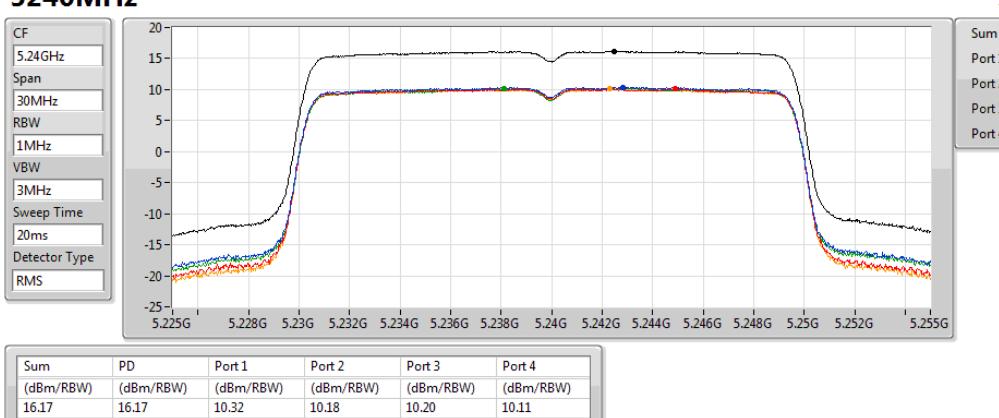
29/07/2019


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

29/07/2019

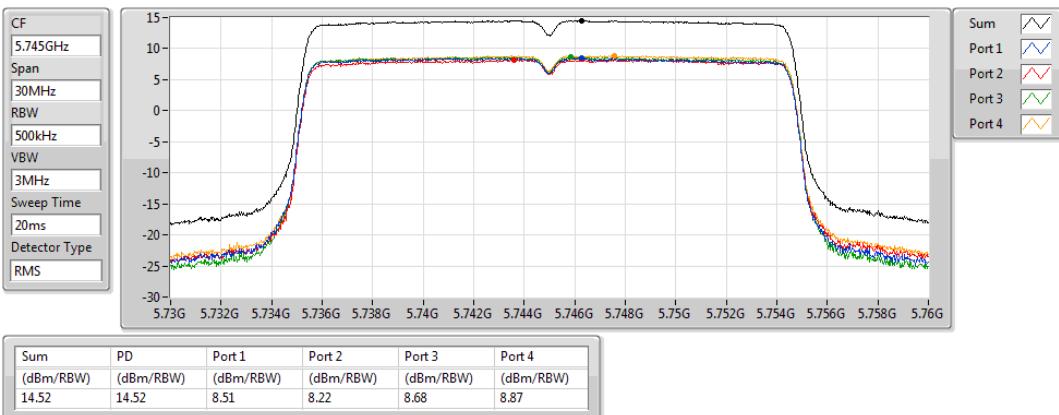

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
PSD
5240MHz

29/07/2019

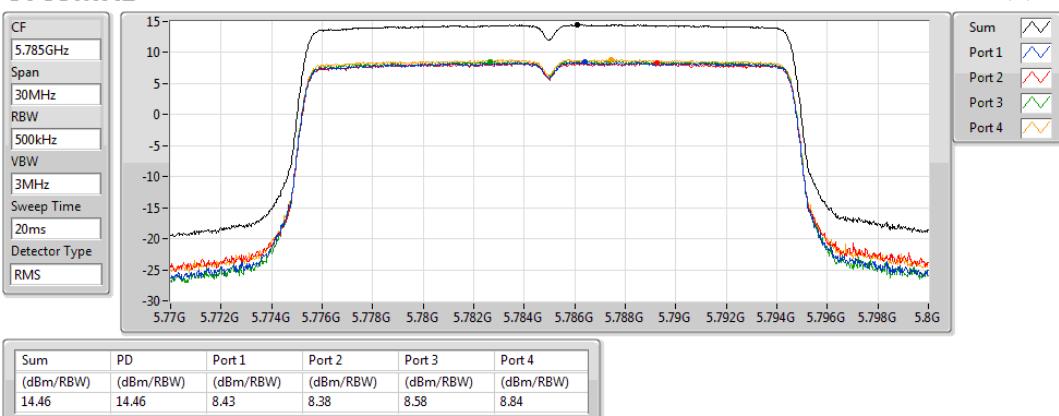


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
PSD
5745MHz

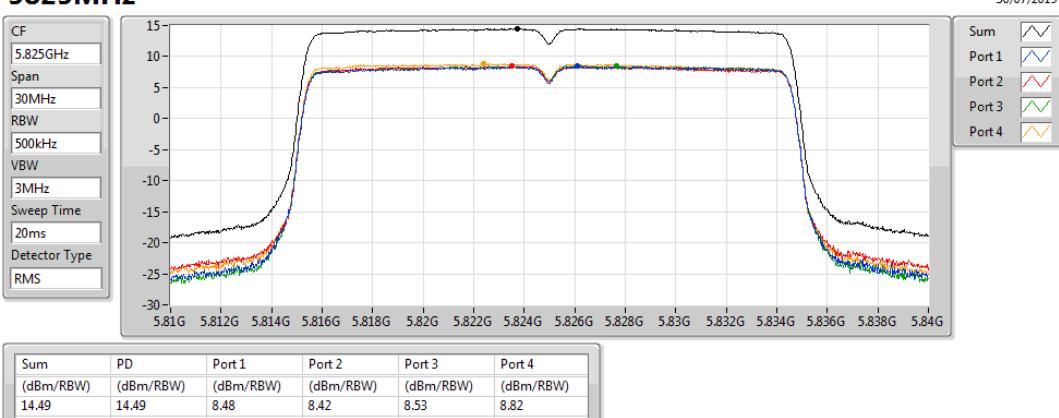
30/07/2019


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

30/07/2019

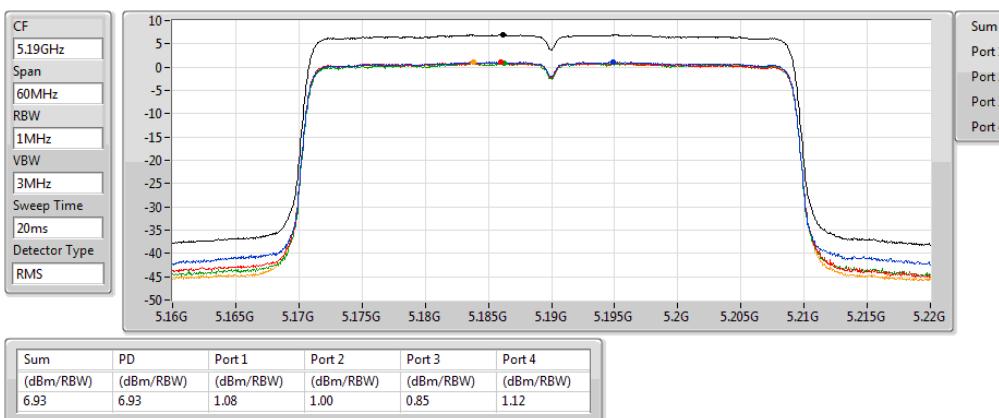

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
PSD
5825MHz

30/07/2019

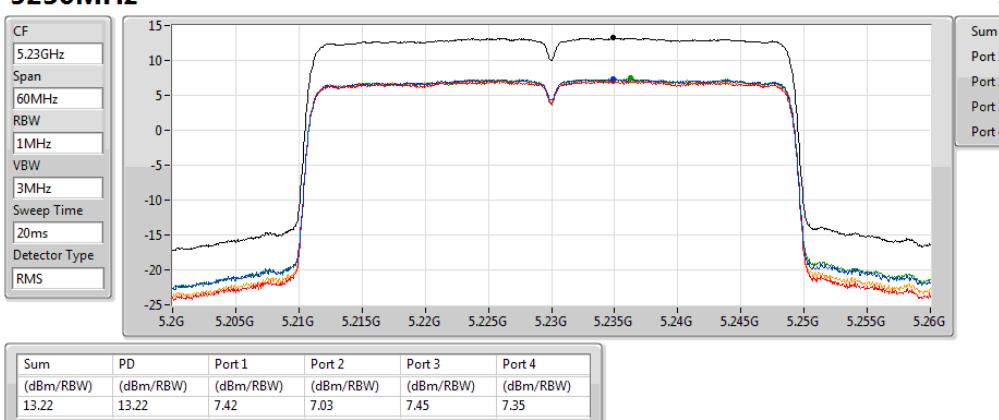


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
PSD
5190MHz

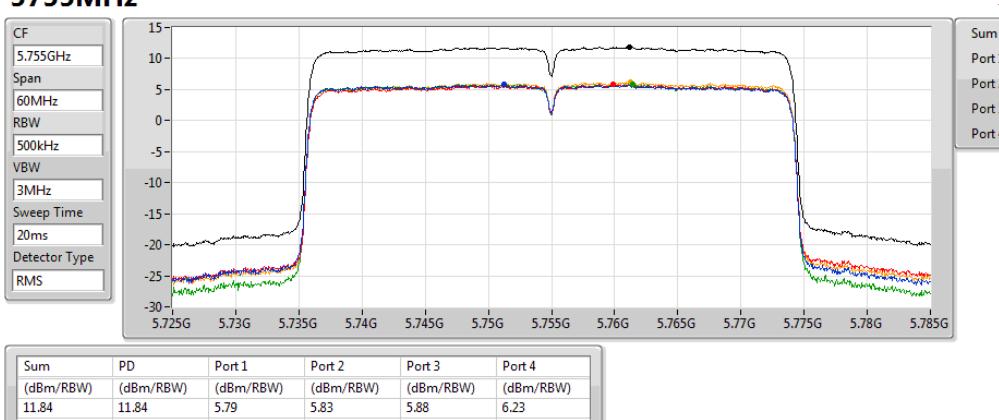
29/07/2019


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

29/07/2019

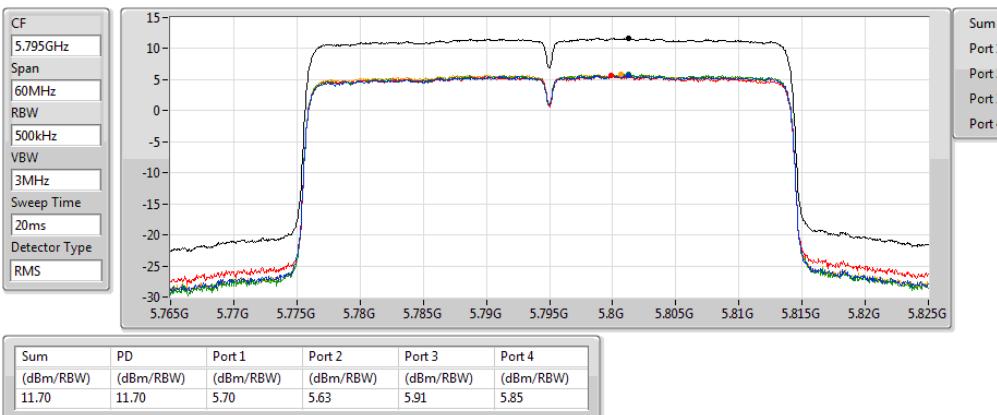

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
PSD
5755MHz

30/07/2019

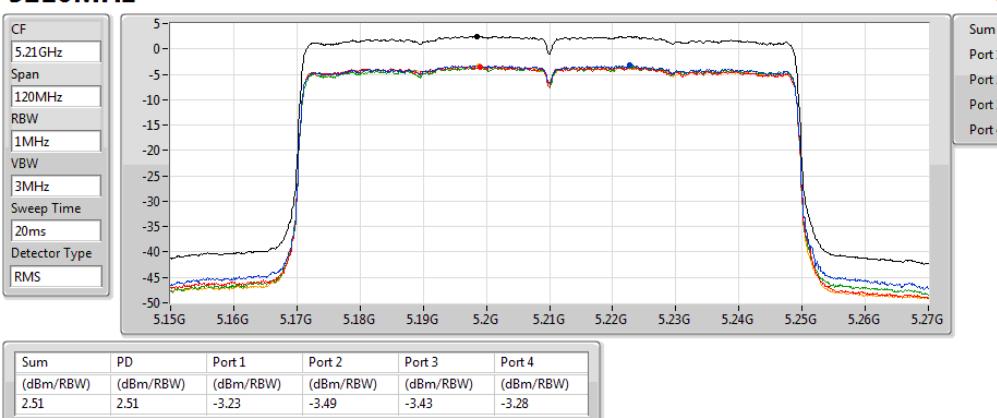


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
PSD
5795MHz

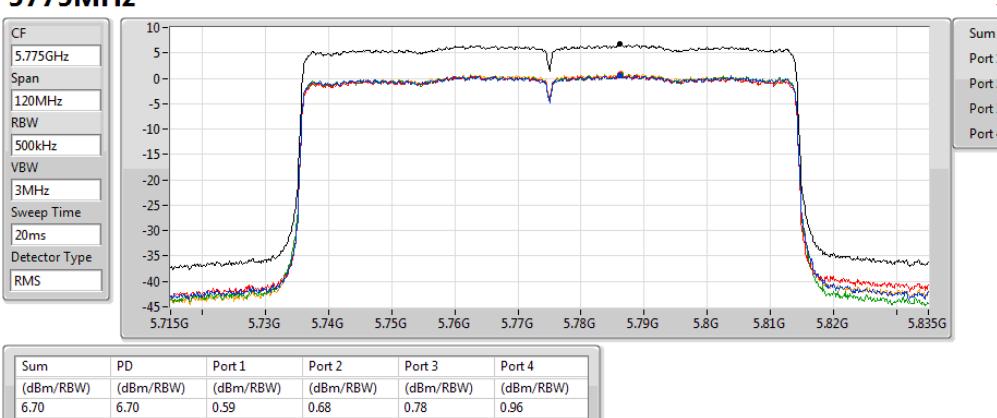
30/07/2019


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

29/07/2019


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

30/07/2019





<non-beamforming mode> 4T2S

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20_Nss2,(MCS0)_4TX	14.03
802.11ac VHT40_Nss2,(MCS0)_4TX	8.38
802.11ac VHT80_Nss2,(MCS0)_4TX	2.91
802.11ax HEW20_Nss2,(MCS0)_4TX	13.46
802.11ax HEW40_Nss2,(MCS0)_4TX	7.41
802.11ax HEW80_Nss2,(MCS0)_4TX	3.72
5.725-5.85GHz	-
802.11ac VHT80_Nss2,(MCS0)_4TX	8.69
802.11ax HEW80_Nss2,(MCS0)_4TX	7.83

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

**Result**

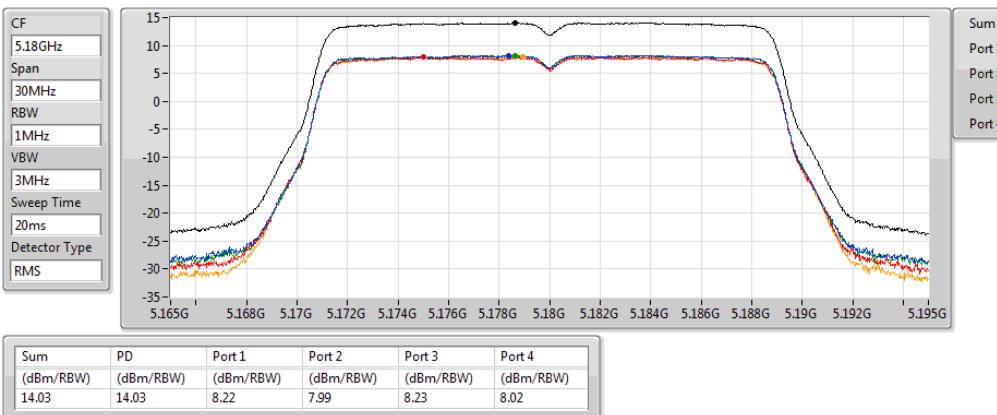
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	8.22	7.99	8.23	8.02	14.03	17.00
802.11ac VHT40_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	2.61	2.34	2.37	2.51	8.38	17.00
802.11ac VHT80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-3.03	-2.93	-3.05	-3.09	2.91	17.00
5775MHz	Pass	5.00	2.48	2.72	2.80	3.08	8.69	30.00
802.11ax HEW20_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	7.61	7.31	7.56	7.45	13.46	17.00
802.11ax HEW40_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	1.49	1.64	1.30	1.40	7.41	17.00
802.11ax HEW80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-2.09	-2.04	-2.40	-2.20	3.72	17.00
5775MHz	Pass	5.00	1.83	2.07	1.86	1.99	7.83	30.00

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

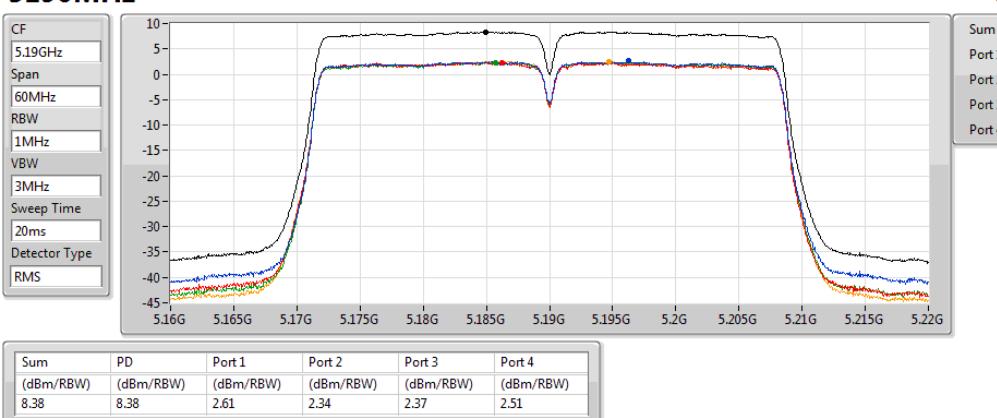
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20_Nss2,(MCS0)_4TX
PSD
5180MHz

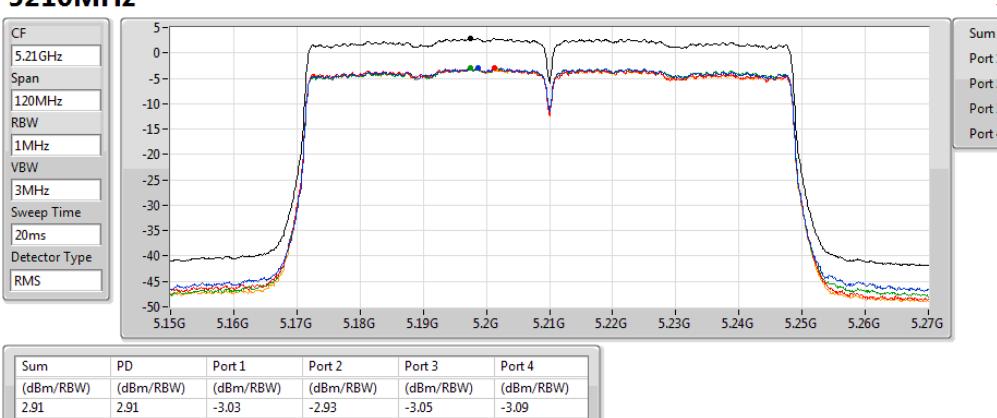
31/07/2019


802.11ac VHT40_Nss2,(MCS0)_4TX
PSD
5190MHz

31/07/2019

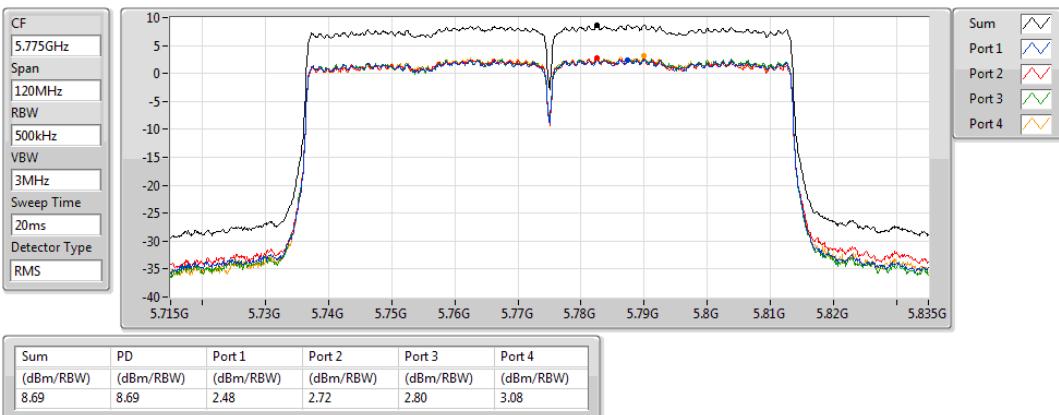

802.11ac VHT80_Nss2,(MCS0)_4TX
PSD
5210MHz

31/07/2019

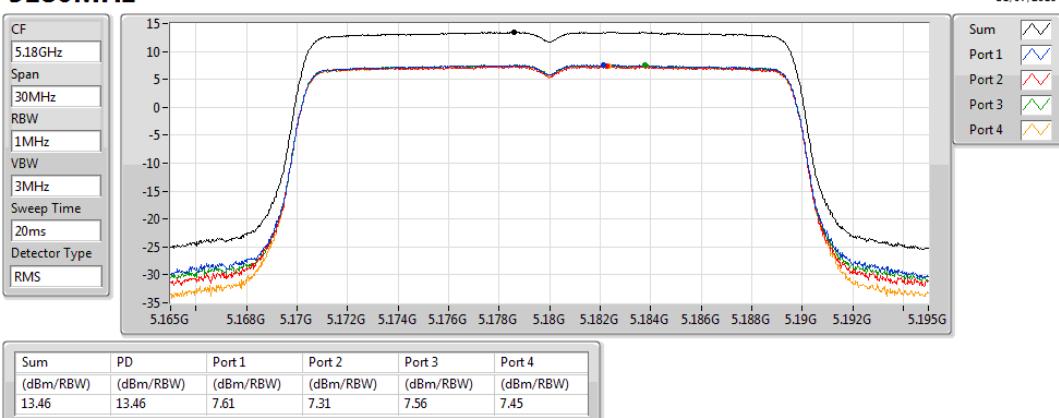


802.11ac VHT80_Nss2,(MCS0)_4TX
PSD
5775MHz

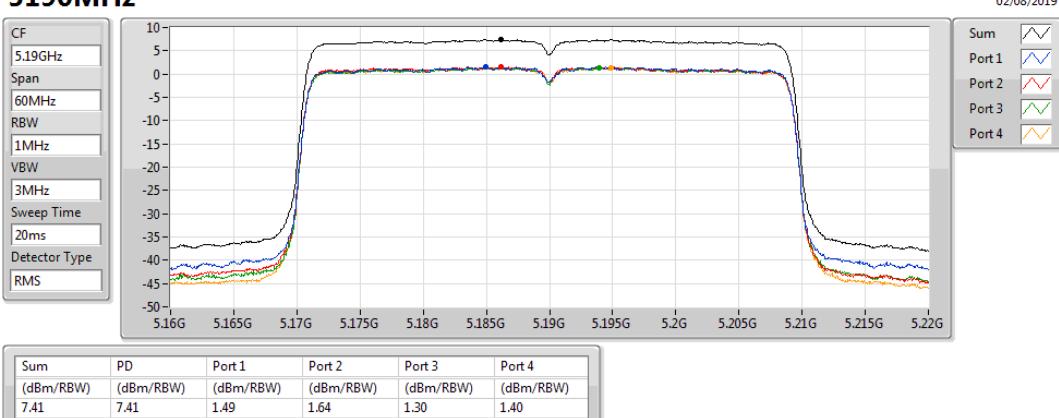
02/08/2019


802.11ax HEW20_Nss2,(MCS0)_4TX
PSD
5180MHz

31/07/2019

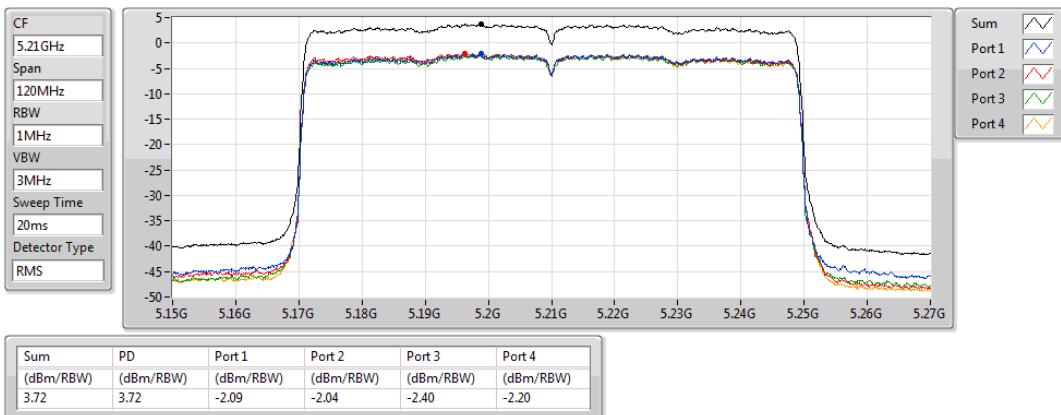

802.11ax HEW40_Nss2,(MCS0)_4TX
PSD
5190MHz

02/08/2019

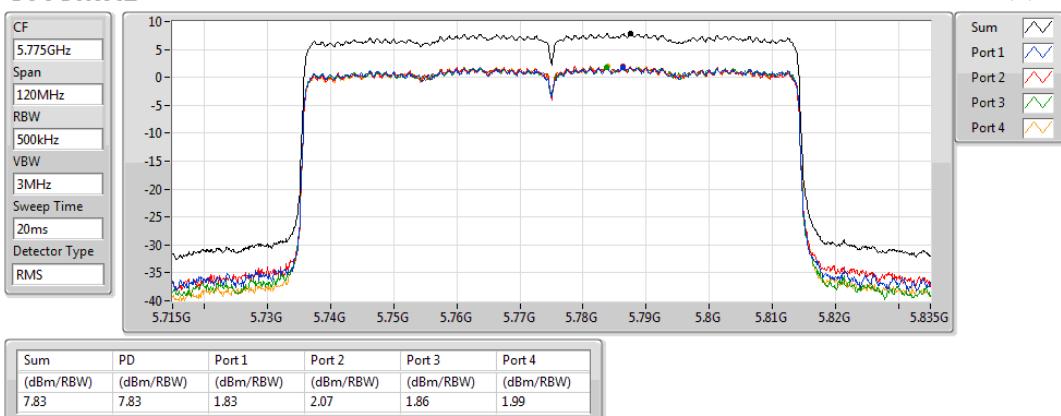


802.11ax HEW80_Nss2,(MCS0)_4TX
PSD
5210MHz

02/08/2019


802.11ax HEW80_Nss2,(MCS0)_4TX
PSD
5775MHz

31/07/2019





<beamforming mode> 4T2S

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	14.23
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	8.42
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	5.46
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	13.41
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	7.98
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	5.19
5.725-5.85GHz	-
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	7.77
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	7.92

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



Result

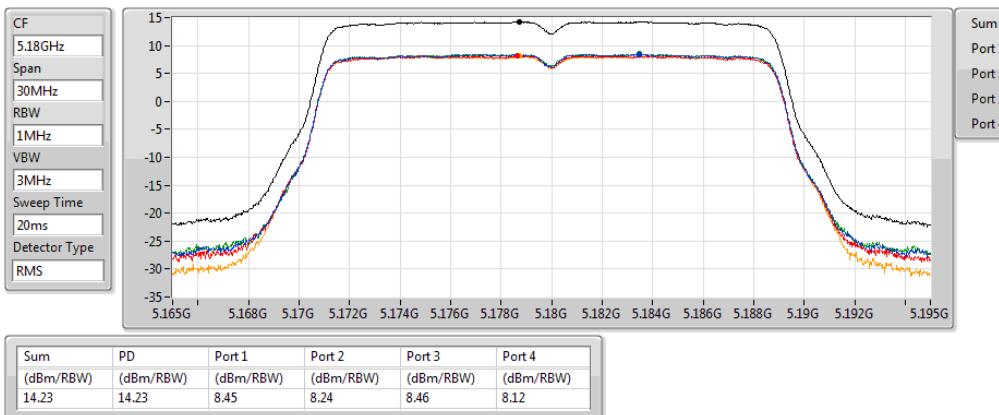
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	8.45	8.24	8.46	8.12	14.23	17.00
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	2.65	2.46	2.34	2.49	8.42	17.00
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-0.42	-0.44	-0.53	-0.42	5.46	17.00
5775MHz	Pass	5.00	1.77	1.80	1.86	2.13	7.77	30.00
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.70	7.54	7.43	7.51	7.33	13.41	17.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.70	2.17	2.03	1.94	2.12	7.98	17.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.70	-0.71	-0.80	-0.79	-0.80	5.19	17.00
5775MHz	Pass	5.00	1.87	1.93	2.10	2.05	7.92	30.00

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

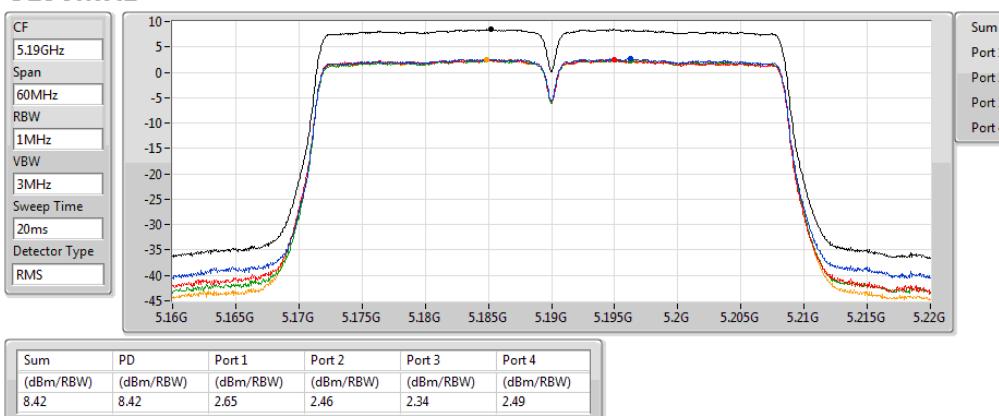
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss2,(MCS0)_4TX
PSD
5180MHz

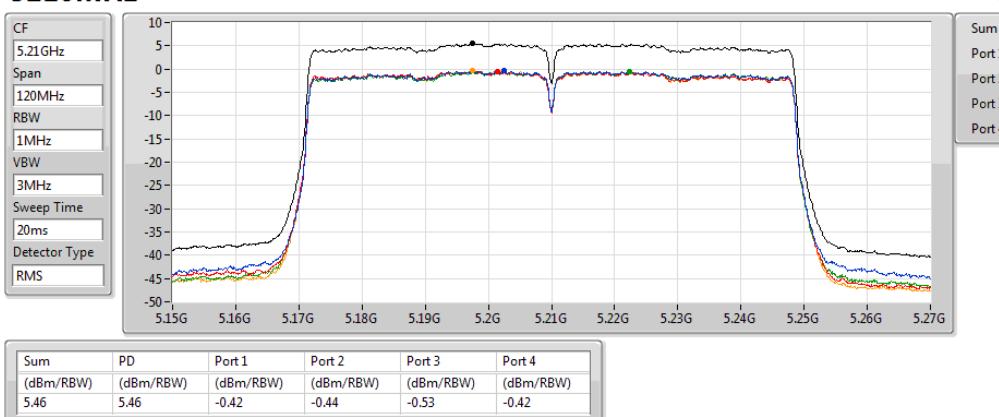
29/07/2019


802.11ac VHT40-BF_Nss2,(MCS0)_4TX
PSD
5190MHz

29/07/2019

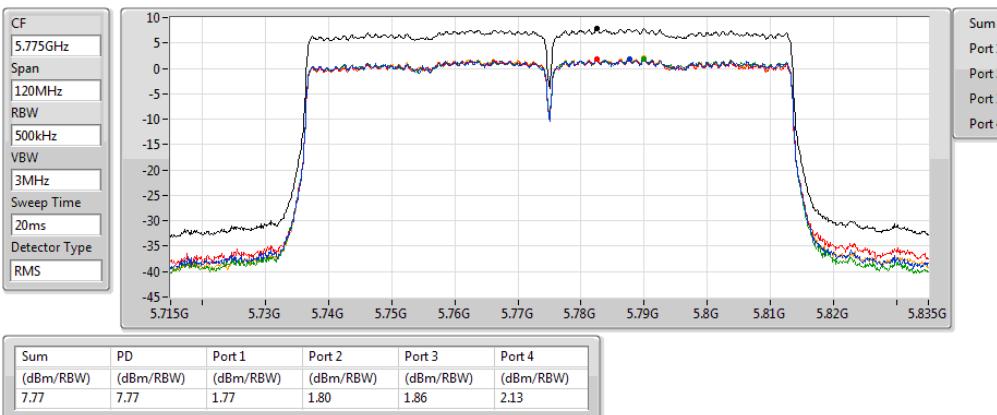

802.11ac VHT80-BF_Nss2,(MCS0)_4TX
PSD
5210MHz

29/07/2019

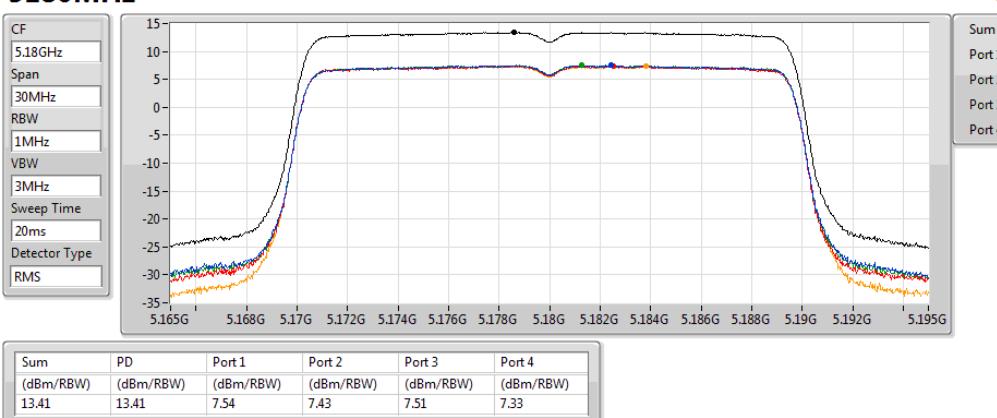


802.11ac VHT80-BF_Nss2,(MCS0)_4TX
PSD
5775MHz

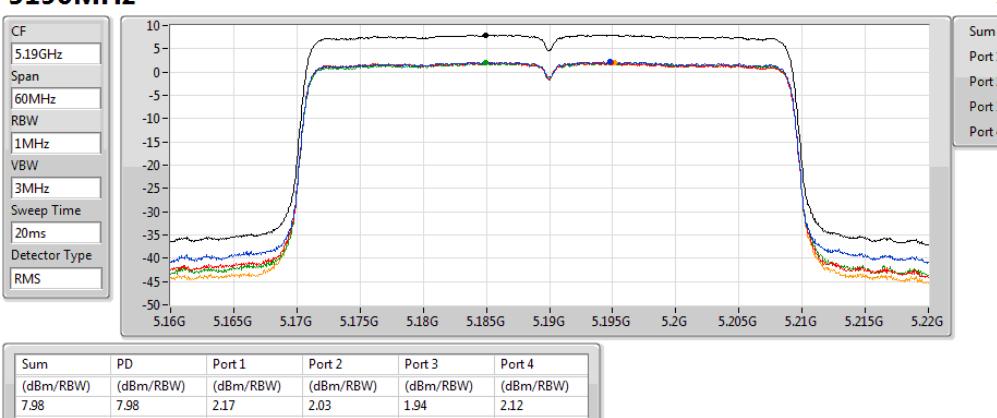
29/07/2019


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
PSD
5180MHz

29/07/2019

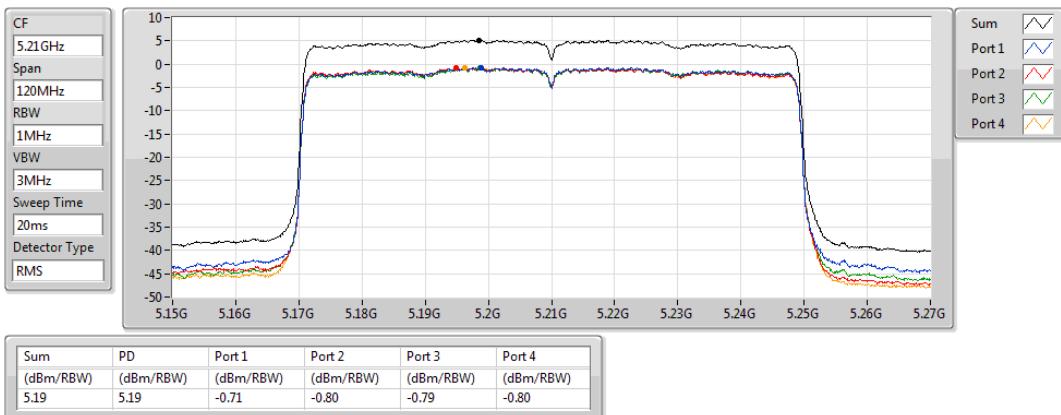

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
PSD
5190MHz

29/07/2019

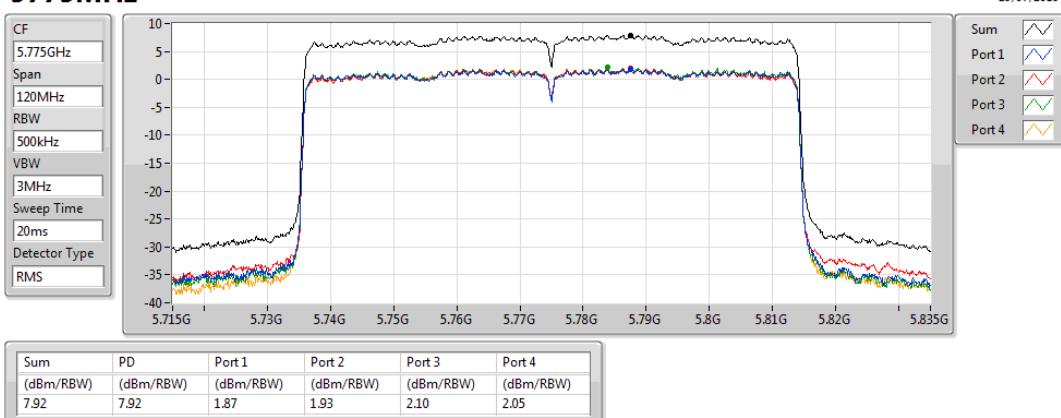


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
PSD
5210MHz

29/07/2019


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
PSD
5775MHz

29/07/2019



**Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20_Nss3,(MCS0)_4TX	14.08
802.11ac VHT40_Nss3,(MCS0)_4TX	8.42
802.11ac VHT80_Nss3,(MCS0)_4TX	3.20
802.11ax HEW20_Nss3,(MCS0)_4TX	13.25
802.11ax HEW40_Nss3,(MCS0)_4TX	7.47
802.11ax HEW80_Nss3,(MCS0)_4TX	3.97
5.725-5.85GHz	-
802.11ac VHT80_Nss3,(MCS0)_4TX	8.78
802.11ax HEW80_Nss3,(MCS0)_4TX	7.93

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

**Result**

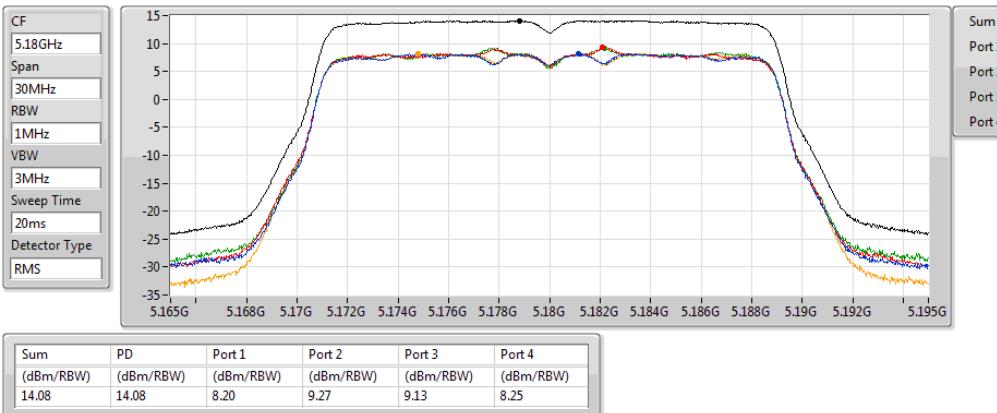
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.80	8.20	9.27	9.13	8.25	14.08	17.00
802.11ac VHT40_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.80	2.78	3.27	3.10	2.52	8.42	17.00
802.11ac VHT80_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.80	-2.65	-1.54	-1.93	-2.44	3.20	17.00
5775MHz	Pass	3.80	2.72	3.92	3.77	3.45	8.78	30.00
802.11ax HEW20_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.80	7.42	7.61	7.42	7.67	13.25	17.00
802.11ax HEW40_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.80	1.76	1.81	1.38	2.18	7.47	17.00
802.11ax HEW80_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.80	-1.74	-1.27	-1.91	-1.64	3.97	17.00
5775MHz	Pass	3.80	1.89	2.43	2.49	2.15	7.93	30.00

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

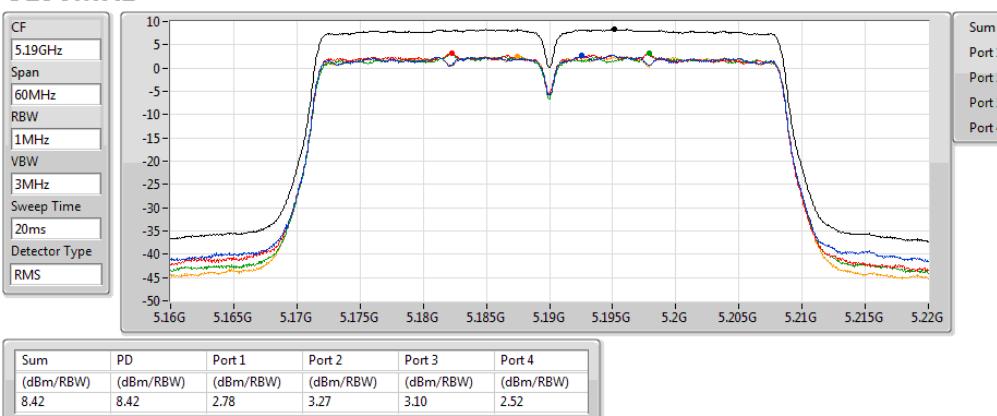
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20_Nss3,(MCS0)_4TX
PSD
5180MHz

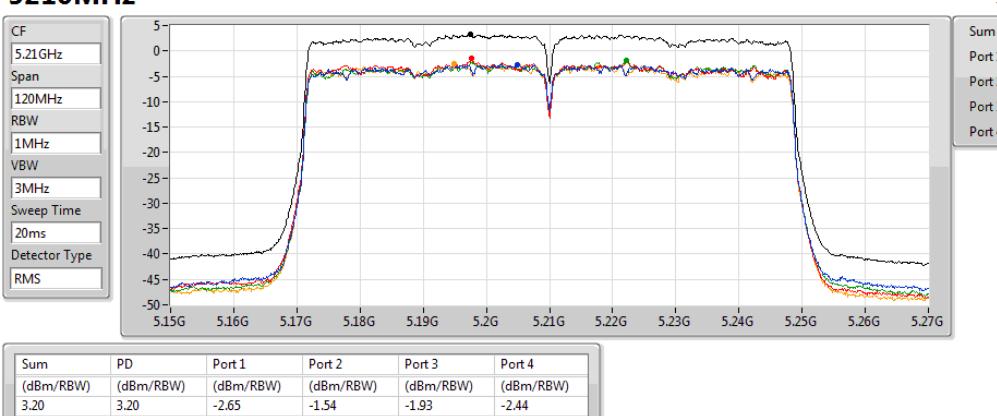
31/07/2019

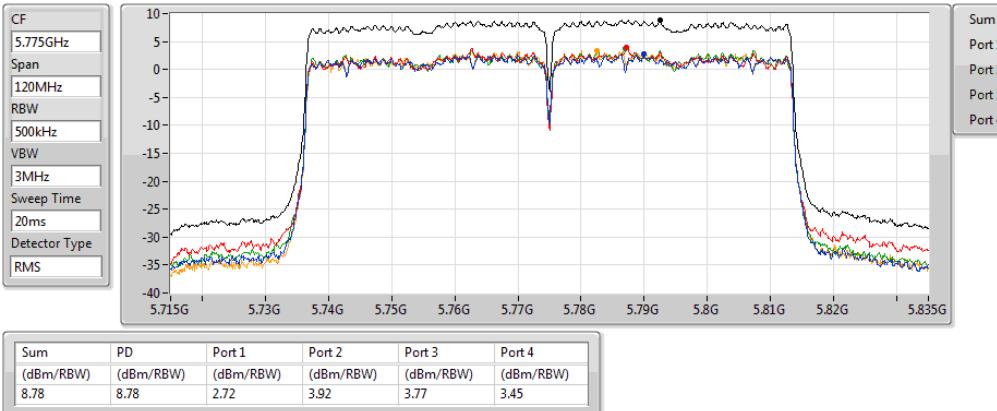

802.11ac VHT40_Nss3,(MCS0)_4TX
PSD
5190MHz

31/07/2019


802.11ac VHT80_Nss3,(MCS0)_4TX
PSD
5210MHz

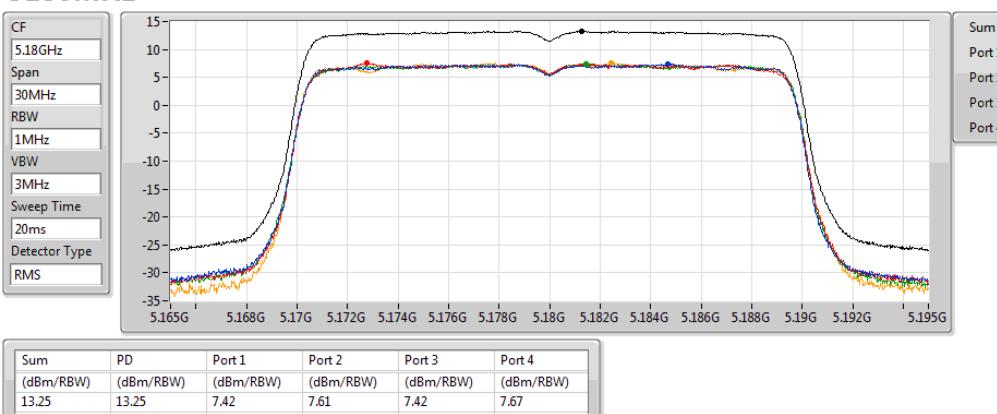
31/07/2019



802.11ac VHT80_Nss3,(MCS0)_4TX
PSD
5775MHz


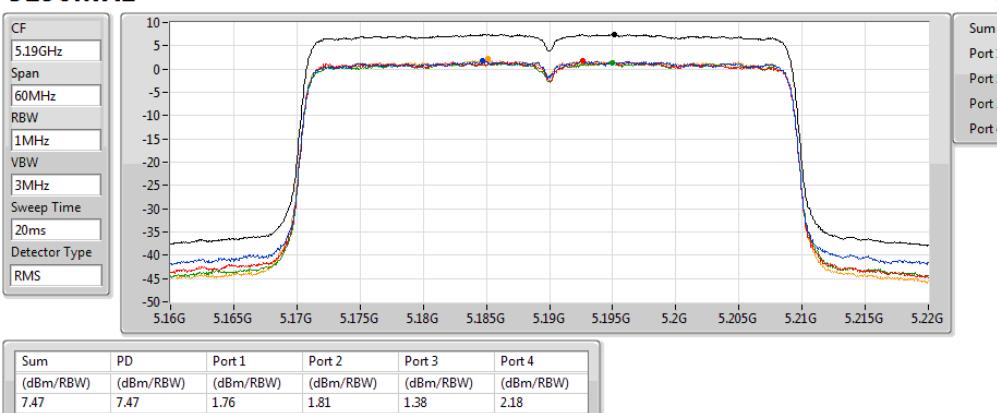
31/07/2019

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

802.11ax HEW20_Nss3,(MCS0)_4TX
PSD
5180MHz


31/07/2019

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

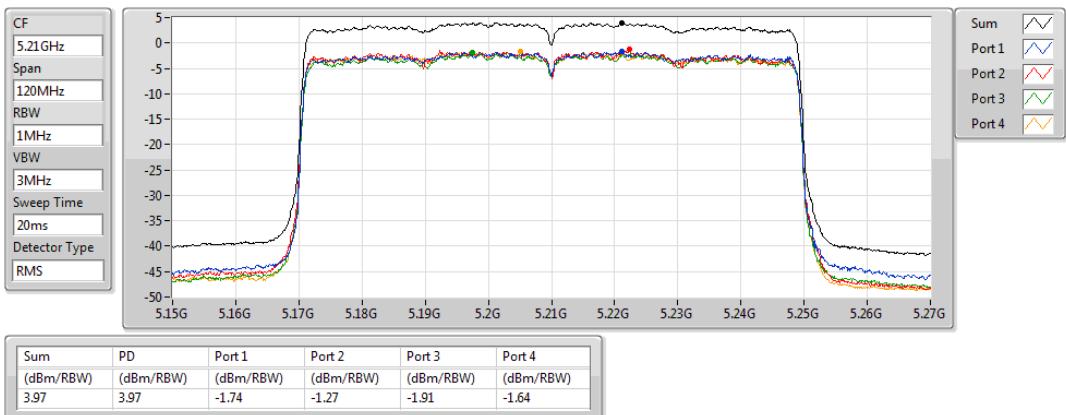
802.11ax HEW40_Nss3,(MCS0)_4TX
PSD
5190MHz


31/07/2019

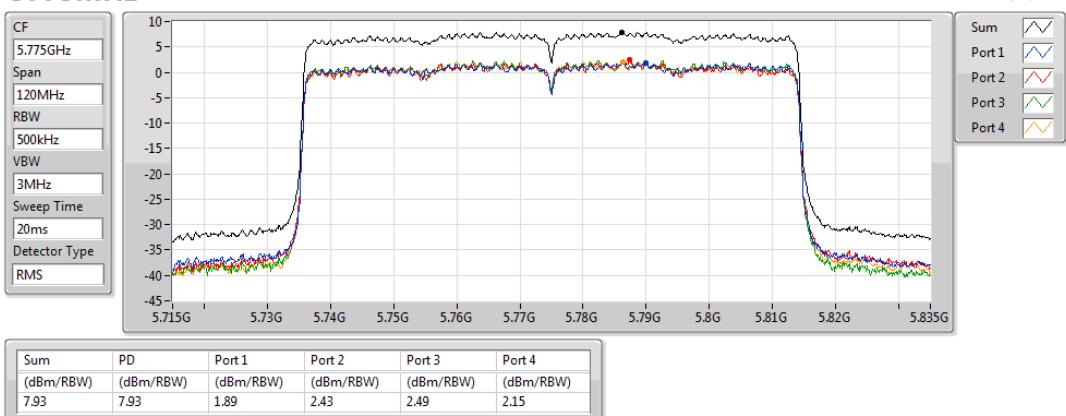
Sum	/\
Port 1	/\
Port 2	/\
Port 3	/\
Port 4	/\

802.11ax HEW80_Nss3,(MCS0)_4TX
PSD
5210MHz

02/08/2019


802.11ax HEW80_Nss3,(MCS0)_4TX
PSD
5775MHz

31/07/2019





<beamforming mode> 4T3S

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss3,(MCS0)_4TX	14.24
802.11ac VHT40-BF_Nss3,(MCS0)_4TX	8.93
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	5.76
802.11ax HEW20-BF_Nss3,(MCS0)_4TX	13.63
802.11ax HEW40-BF_Nss3,(MCS0)_4TX	8.17
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	5.68
5.725-5.85GHz	-
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	7.73
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	7.98

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



Result

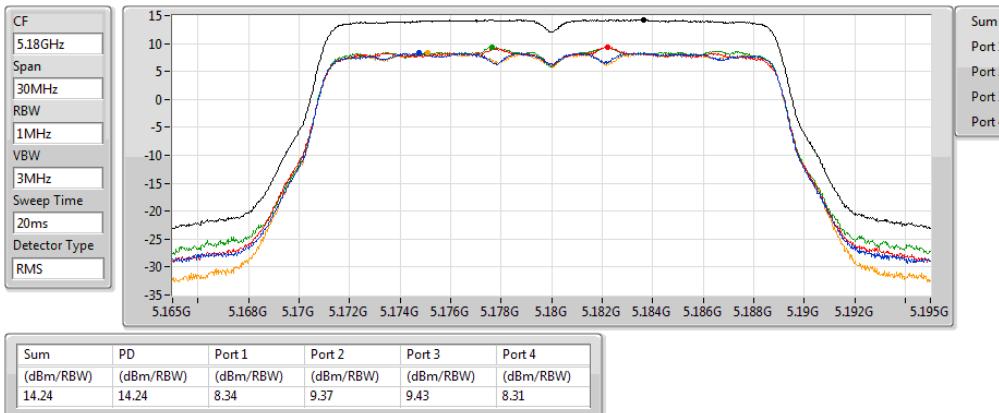
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.80	8.34	9.37	9.43	8.31	14.24	17.00
802.11ac VHT40-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.80	3.47	3.87	3.57	2.84	8.93	17.00
802.11ac VHT80-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.80	-0.20	0.95	0.54	-0.00	5.76	17.00
5775MHz	Pass	3.80	1.89	2.69	2.77	2.10	7.73	30.00
802.11ax HEW20-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.80	7.81	8.05	7.89	7.76	13.63	17.00
802.11ax HEW40-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.80	2.38	2.56	2.16	2.57	8.17	17.00
802.11ax HEW80-BF_Nss3,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.80	-0.17	0.17	0.13	-0.07	5.68	17.00
5775MHz	Pass	3.80	1.80	2.82	2.56	2.27	7.98	30.00

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

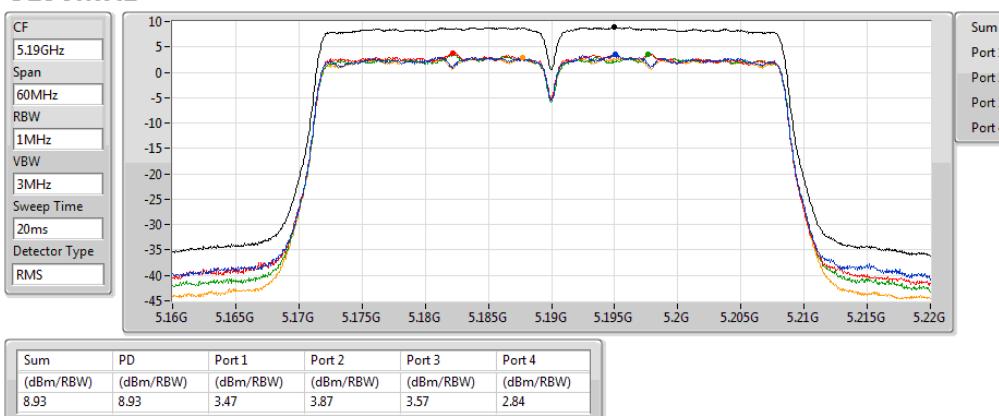
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss3,(MCS0)_4TX
PSD
5180MHz

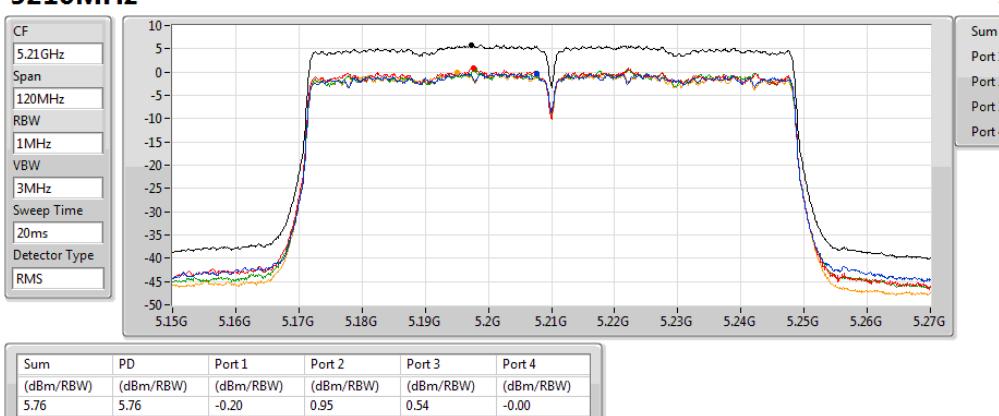
29/07/2019

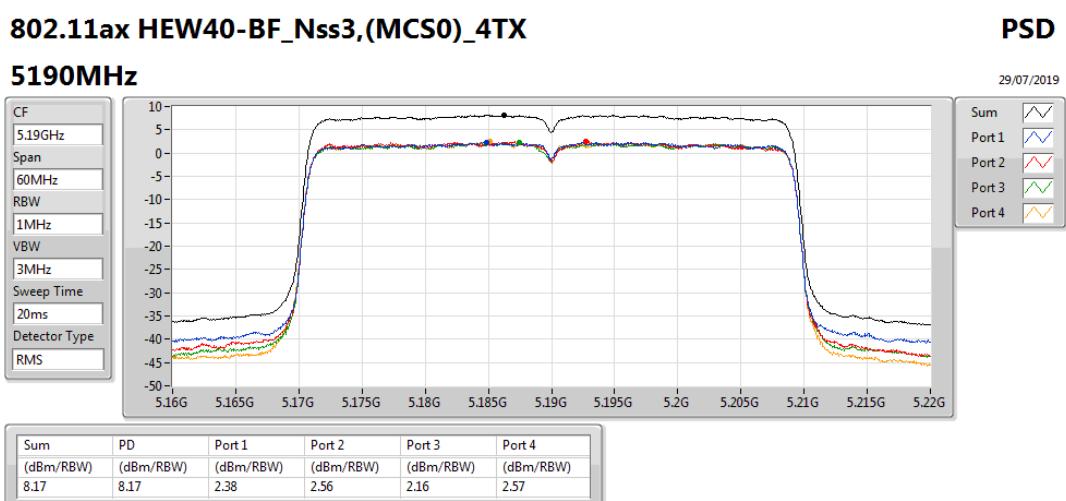
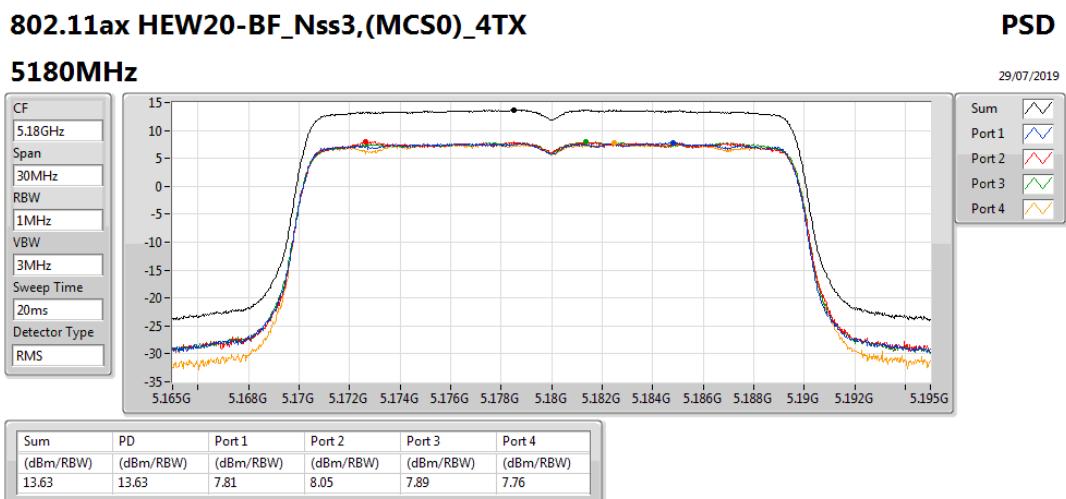
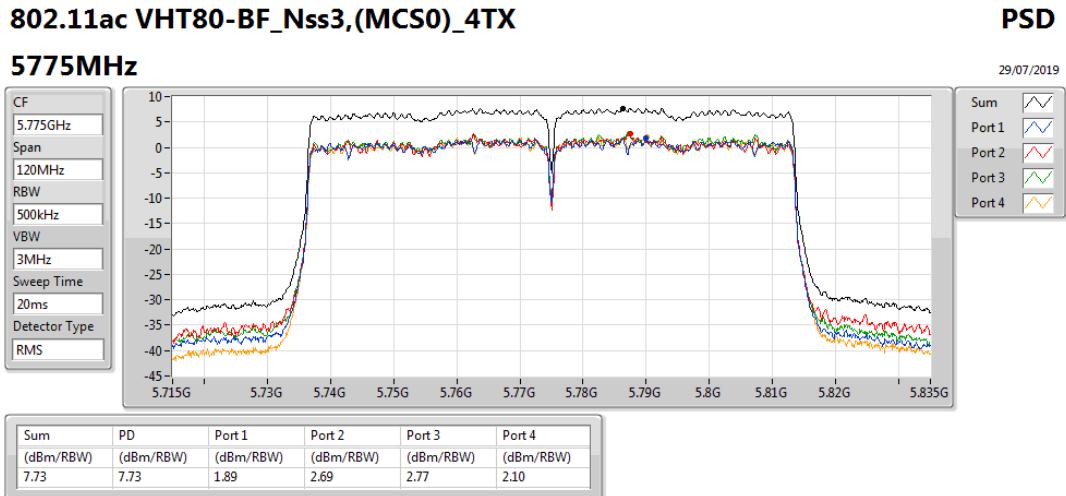

802.11ac VHT40-BF_Nss3,(MCS0)_4TX
PSD
5190MHz

29/07/2019


802.11ac VHT80-BF_Nss3,(MCS0)_4TX
PSD
5210MHz

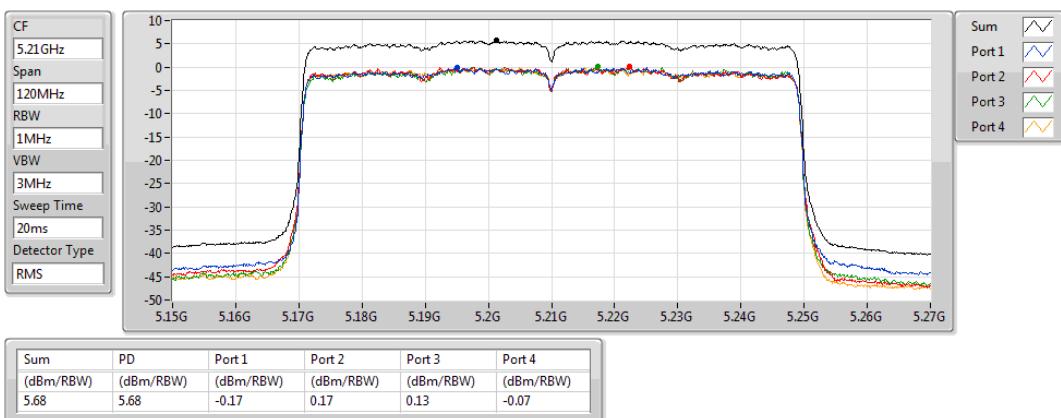
29/07/2019



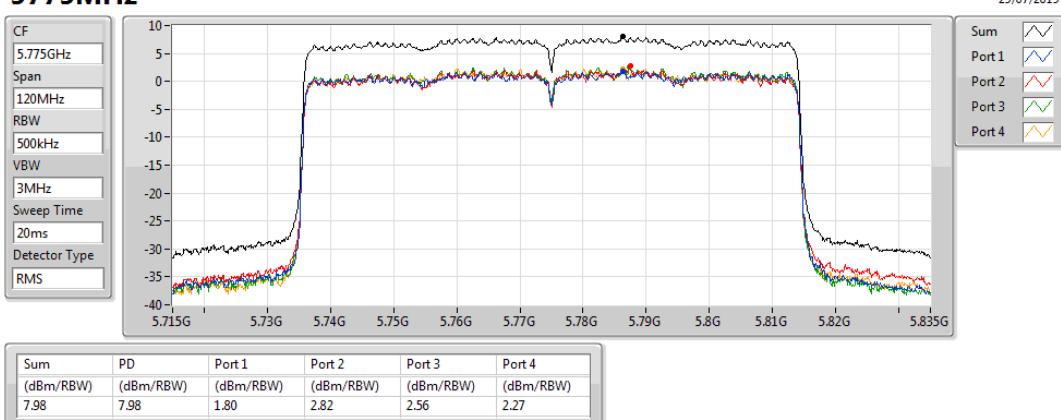


802.11ax HEW80-BF_Nss3,(MCS0)_4TX
PSD
5210MHz

29/07/2019


802.11ax HEW80-BF_Nss3,(MCS0)_4TX
PSD
5775MHz

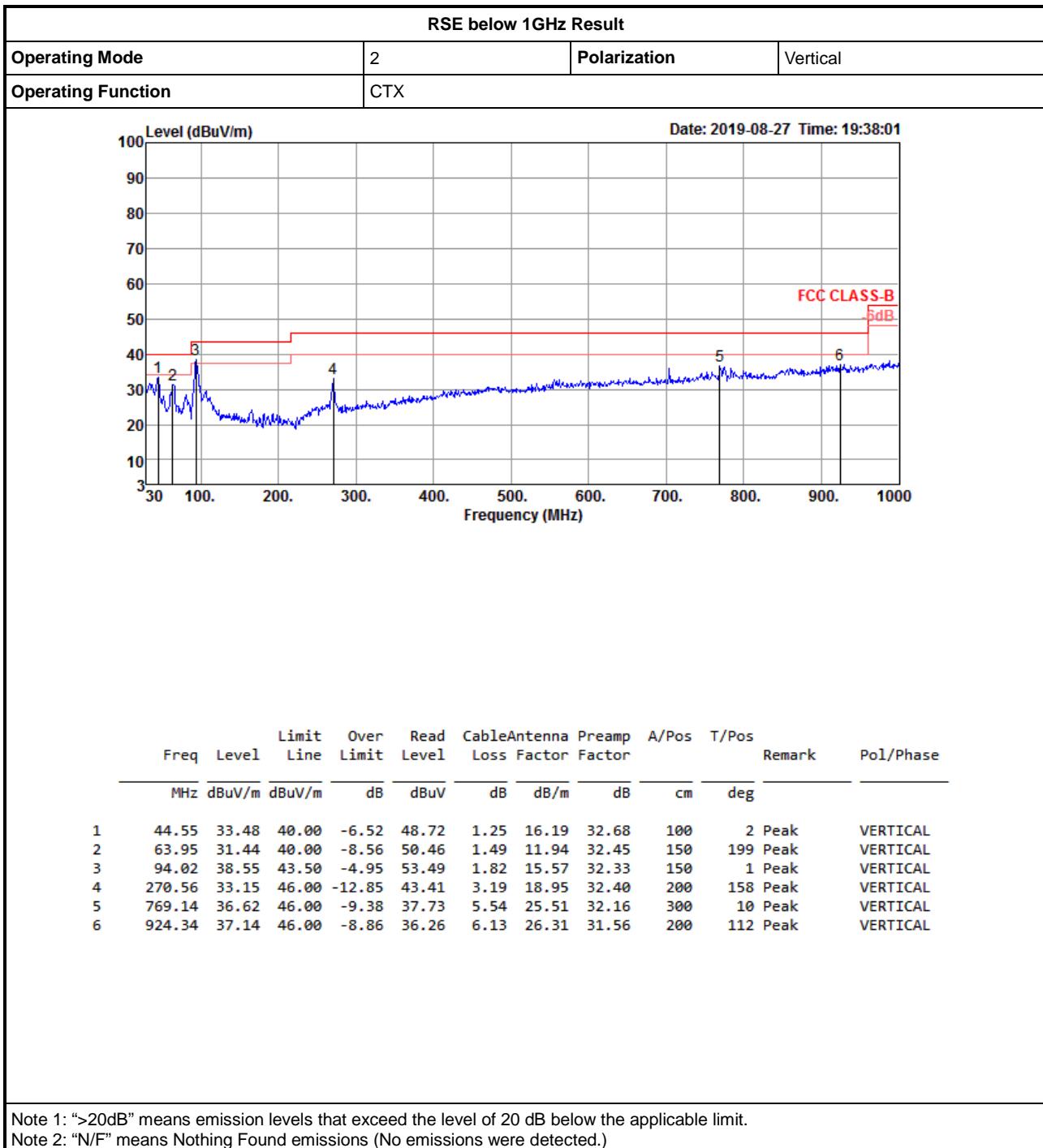
29/07/2019





RSE below 1GHz Result

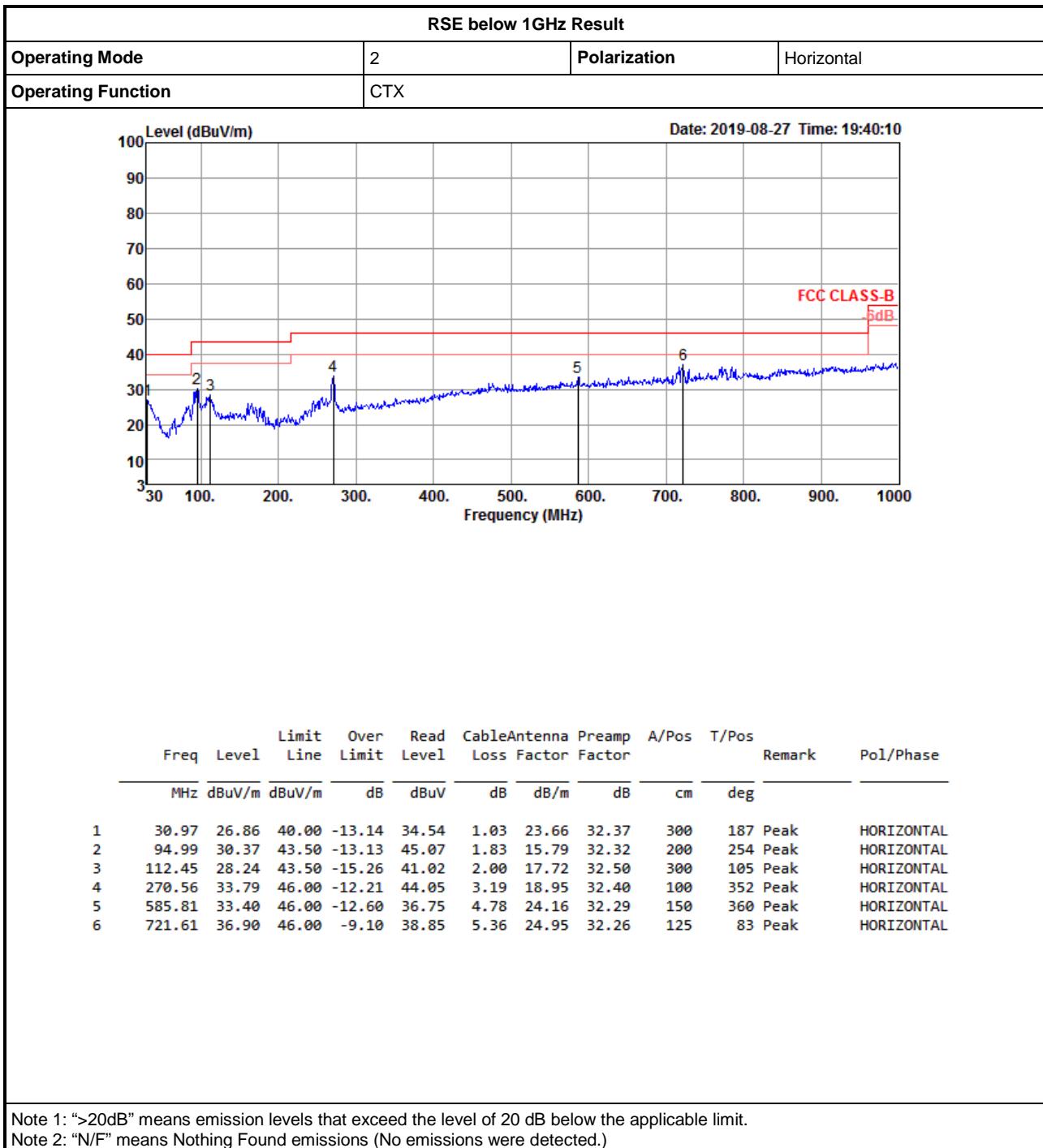
Appendix E.1





RSE below 1GHz Result

Appendix E.1





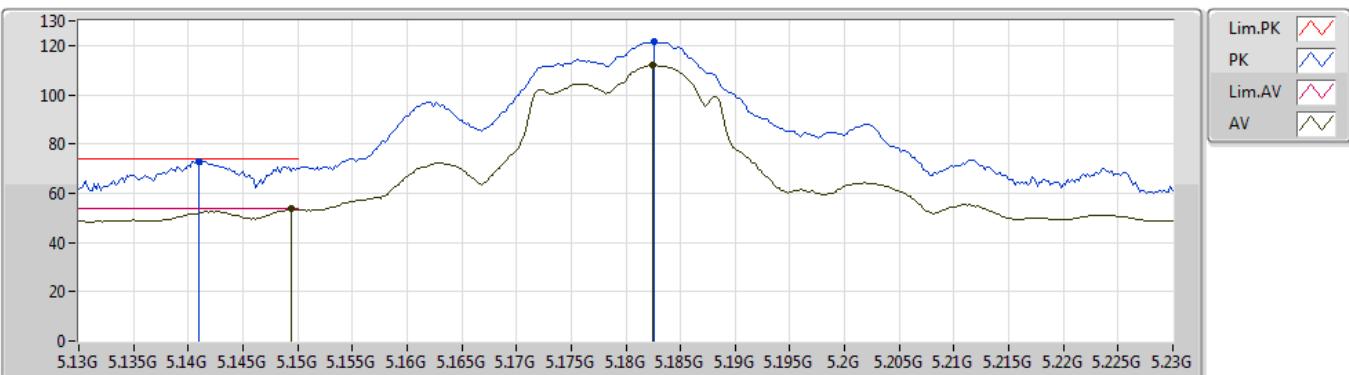
<non-beamforming mode> 4T1S

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	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_4TX	Pass	PK	5.636G	68.17	68.20	-0.03	5.68	3	Vertical	96	1.49	-

802.11a_Nss1,(6Mbps)_4TX

26/07/2019

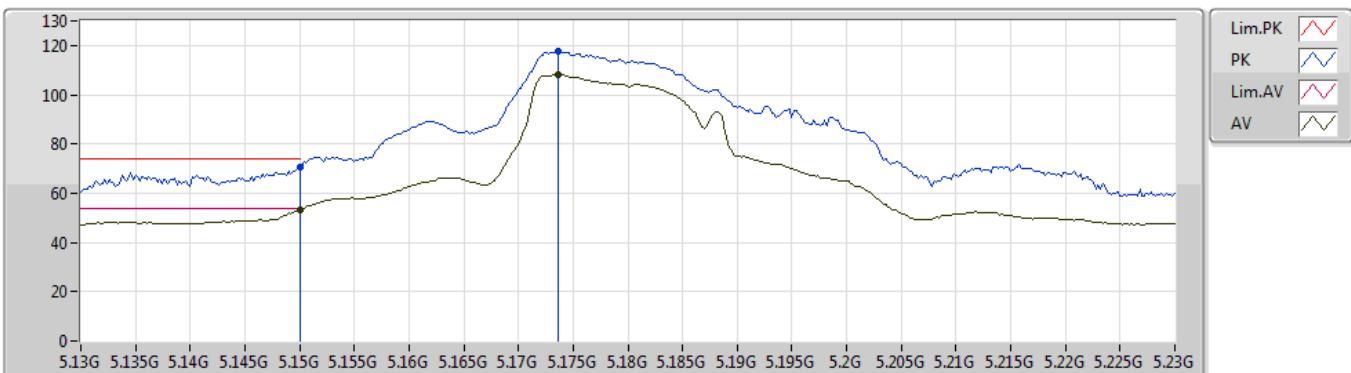
5180MHz_TX


EUT Y_4TX
Setting 90
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.141G	72.88	74.00	-1.12	4.24	3	Vertical	139	1.50	-	68.64			
AV	5.1494G	53.67	54.00	-0.33	4.25	3	Vertical	139	1.50	-	49.42			
PK	5.1826G	121.51	Inf	-Inf	4.26	3	Vertical	139	1.50	-	117.25			
AV	5.1824G	111.95	Inf	-Inf	4.26	3	Vertical	139	1.50	-	107.69			

802.11a_Nss1,(6Mbps)_4TX

26/07/2019

5180MHz_TX


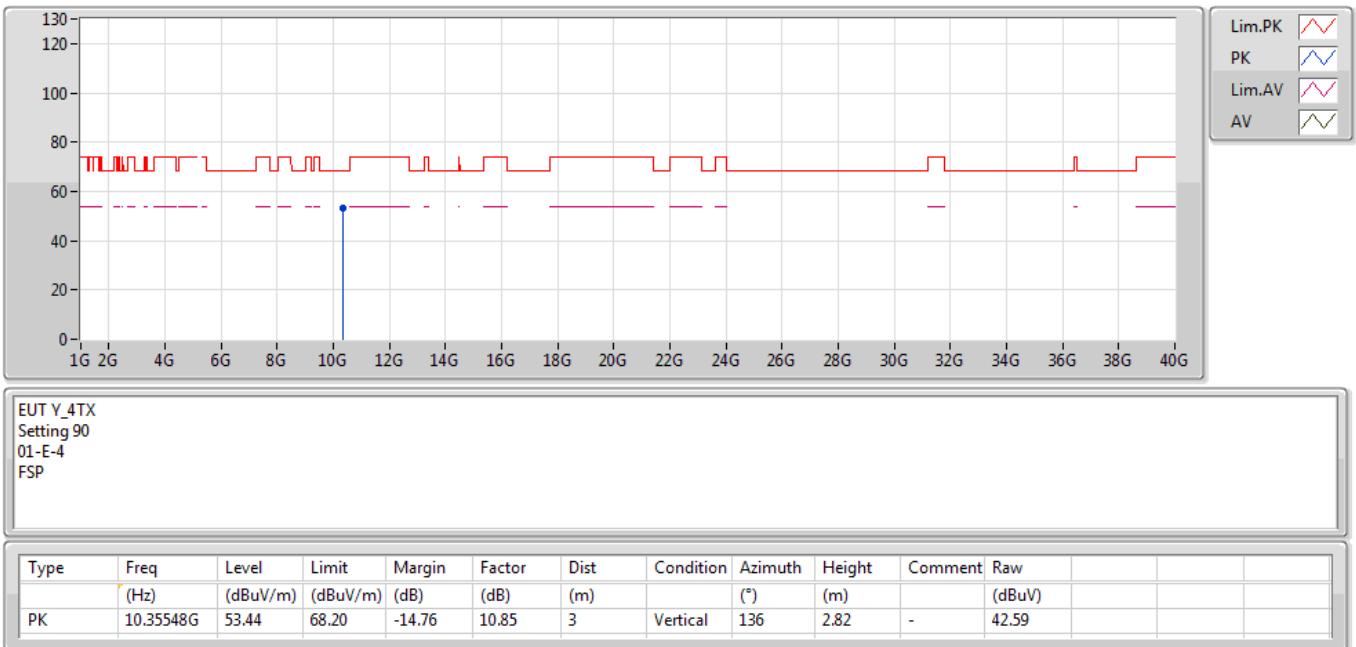
EUT Y_4TX
Setting 90
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.15G	70.62	74.00	-3.38	4.25	3	Horizontal	244	2.54	-	66.37			
AV	5.15G	53.26	54.00	-0.74	4.25	3	Horizontal	244	2.54	-	49.01			
PK	5.1736G	117.63	Inf	-Inf	4.25	3	Horizontal	244	2.54	-	113.38			
AV	5.1736G	108.07	Inf	-Inf	4.25	3	Horizontal	244	2.54	-	103.82			

802.11a_Nss1,(6Mbps)_4TX

26/07/2019

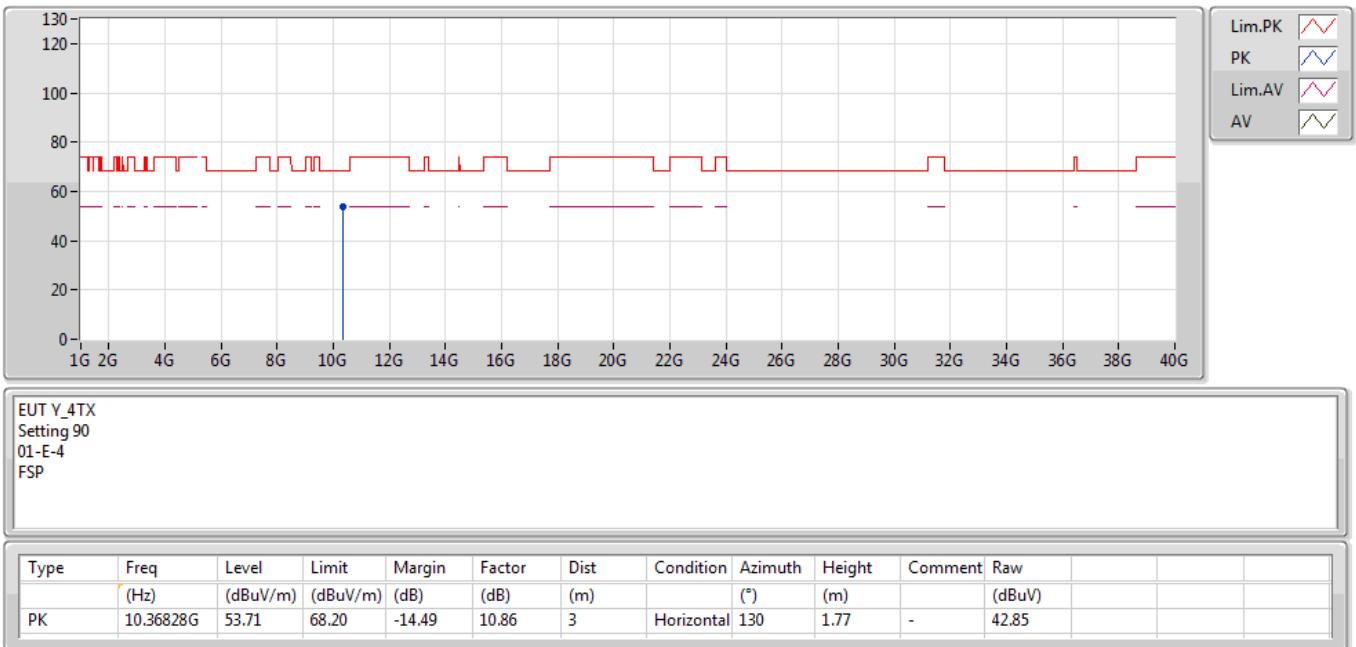
5180MHz_TX



802.11a_Nss1,(6Mbps)_4TX

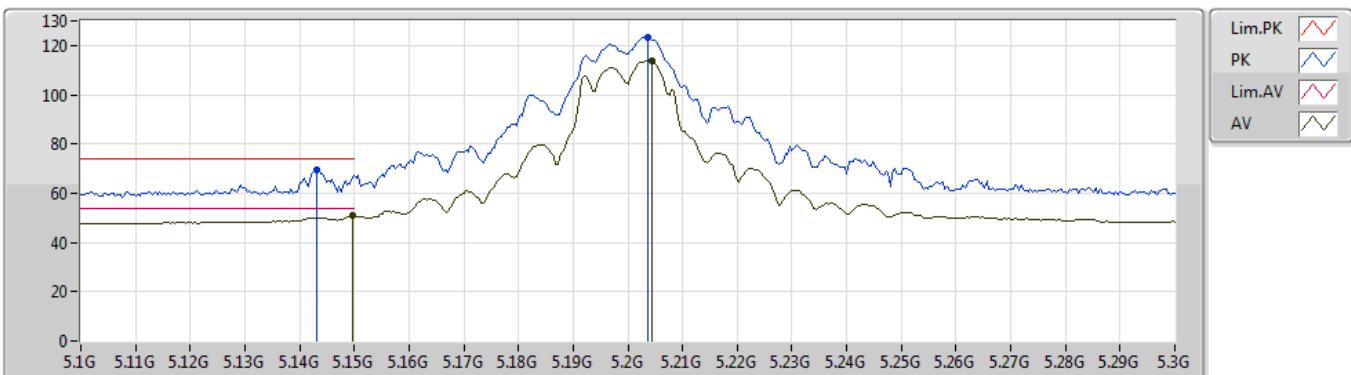
26/07/2019

5180MHz_TX



802.11a_Nss1,(6Mbps)_4TX

24/07/2019

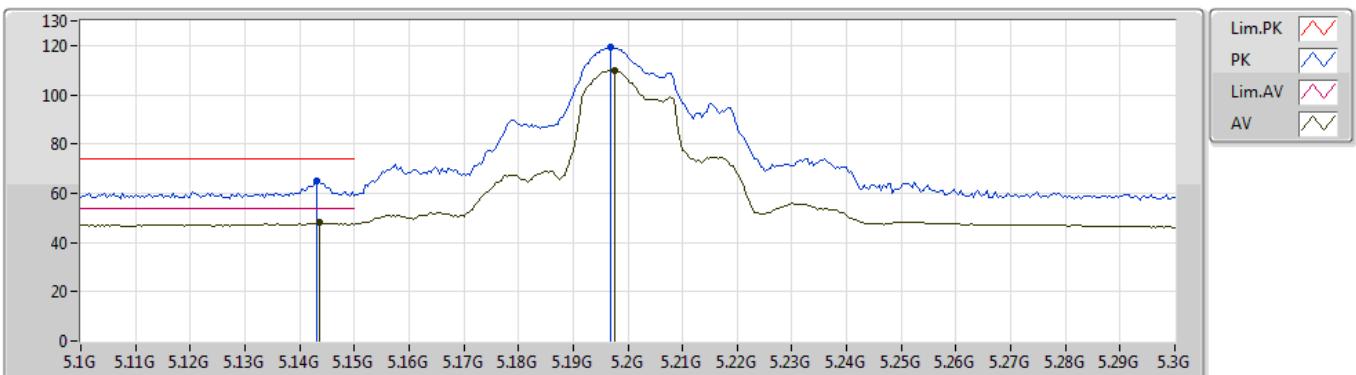
5200MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1432G	69.63	74.00	-4.37	4.24	3	Vertical	97	1.50	-	65.39			
AV	5.1496G	50.91	54.00	-3.09	4.25	3	Vertical	97	1.50	-	46.66			
PK	5.2036G	123.41	Inf	-Inf	4.28	3	Vertical	97	1.50	-	119.13			
AV	5.2044G	113.68	Inf	-Inf	4.28	3	Vertical	97	1.50	-	109.40			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5200MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1432G	64.79	74.00	-9.21	4.24	3	Horizontal	91	2.72	-	60.55			
AV	5.1436G	48.07	54.00	-5.93	4.24	3	Horizontal	91	2.72	-	43.83			
PK	5.1968G	119.53	Inf	-Inf	4.27	3	Horizontal	91	2.72	-	115.26			
AV	5.1976G	109.84	Inf	-Inf	4.27	3	Horizontal	91	2.72	-	105.57			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5200MHz_TX



802.11a_Nss1,(6Mbps)_4TX

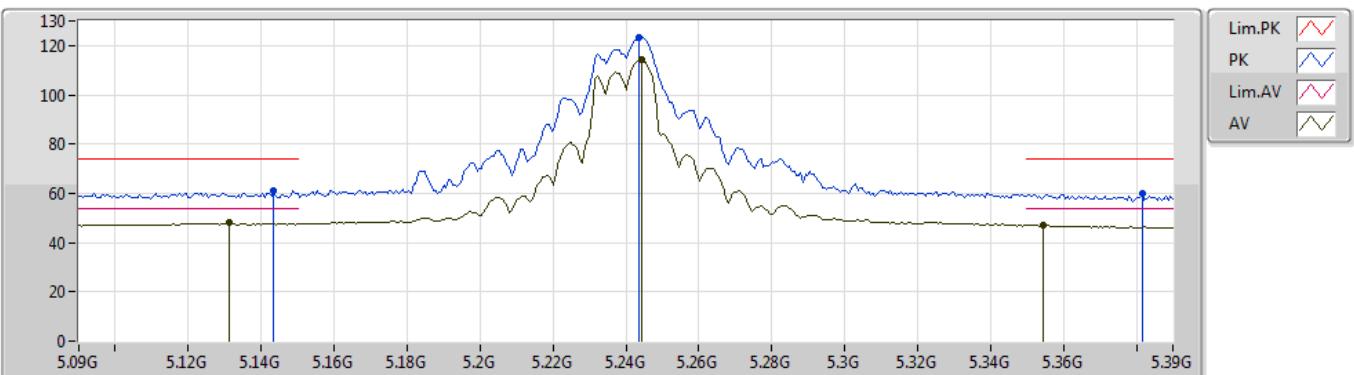
24/07/2019

5200MHz_TX



802.11a_Nss1,(6Mbps)_4TX

24/07/2019

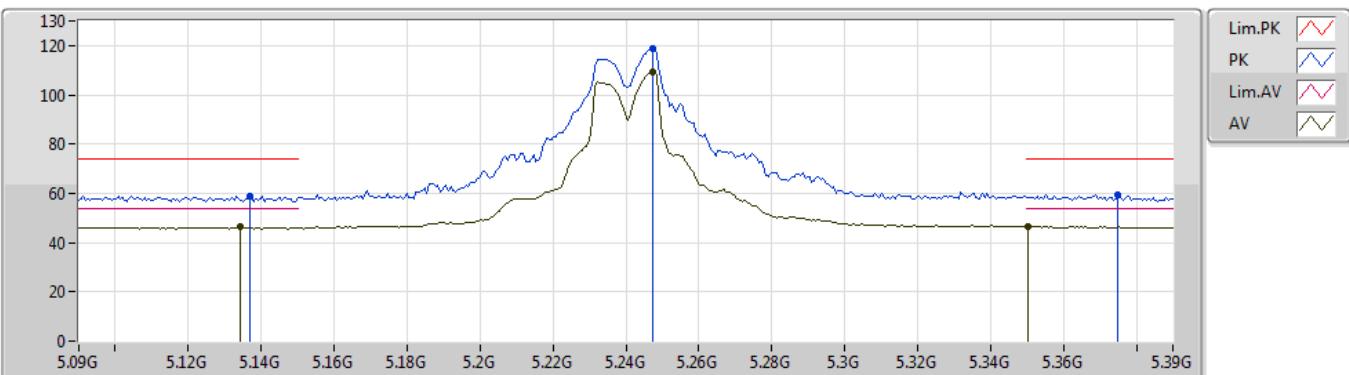
5240MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1434G	61.10	74.00	-12.90	4.24	3	Vertical	134	1.73	-	56.86			
AV	5.1314G	47.95	54.00	-6.05	4.24	3	Vertical	134	1.73	-	43.71			
PK	5.2436G	123.40	Inf	-Inf	4.43	3	Vertical	134	1.73	-	118.97			
AV	5.2442G	114.17	Inf	-Inf	4.43	3	Vertical	134	1.73	-	109.74			
PK	5.3816G	60.06	74.00	-13.94	4.92	3	Vertical	134	1.73	-	55.14			
AV	5.3546G	47.32	54.00	-6.68	4.82	3	Vertical	134	1.73	-	42.50			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5240MHz_TX


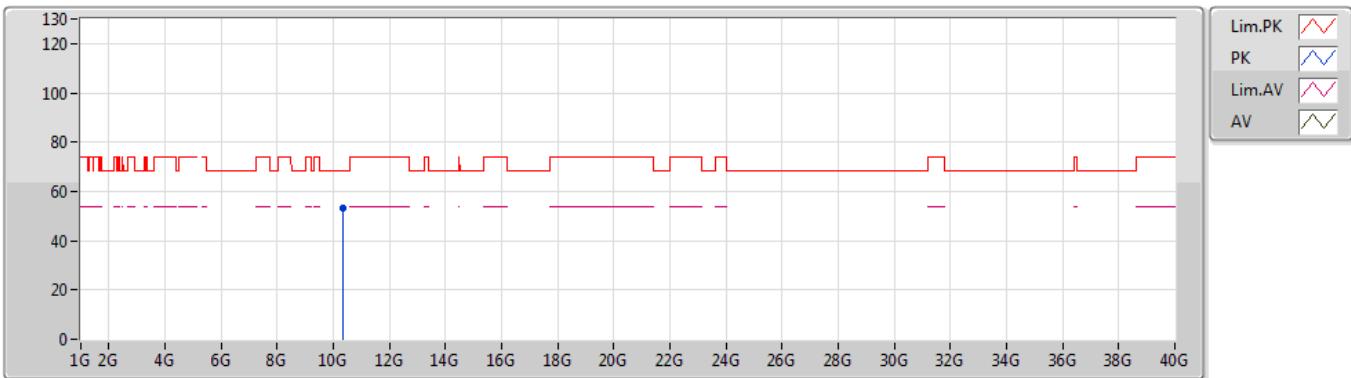
EUT Y_4TX
 Setting 100
 01-G-2-10
 FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1368G	59.02	74.00	-14.98	4.25	3	Horizontal	241	1.53	-	54.77			
AV	5.1344G	46.27	54.00	-7.73	4.24	3	Horizontal	241	1.53	-	42.03			
PK	5.2472G	118.64	Inf	4.44	3	Horizontal	241	1.53	-		114.20			
AV	5.2472G	109.01	Inf	4.44	3	Horizontal	241	1.53	-		104.57			
PK	5.375G	59.48	74.00	-14.52	4.90	3	Horizontal	241	1.53	-	54.58			
AV	5.3504G	46.61	54.00	-7.39	4.81	3	Horizontal	241	1.53	-	41.80			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5240MHz_TX



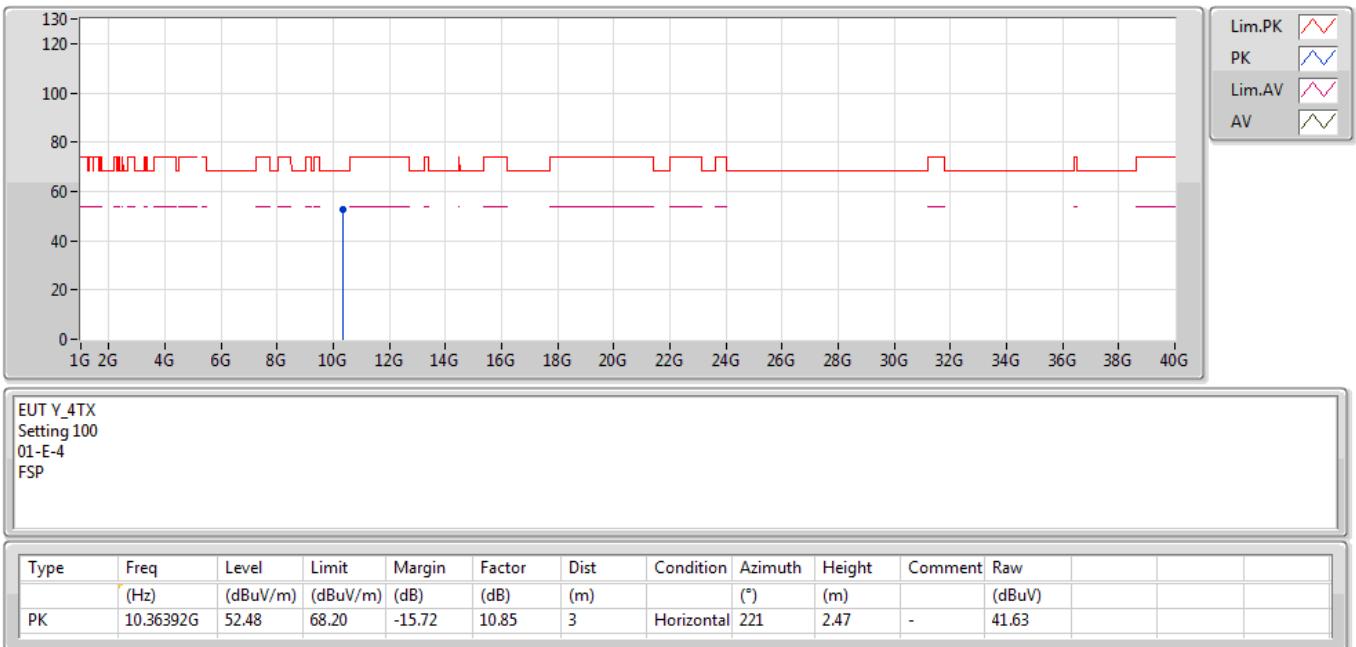
EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)			
PK	10.35792G	53.01	68.20	-15.19	10.85	3	Vertical	13	1.40	-	42.16			

802.11a_Nss1,(6Mbps)_4TX

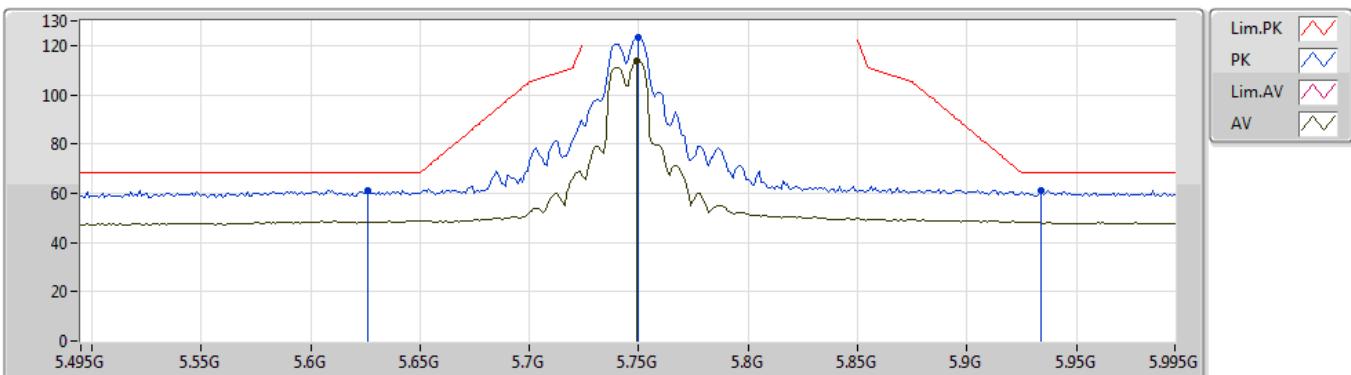
24/07/2019

5240MHz_TX



802.11a_Nss1,(6Mbps)_4TX

25/07/2019

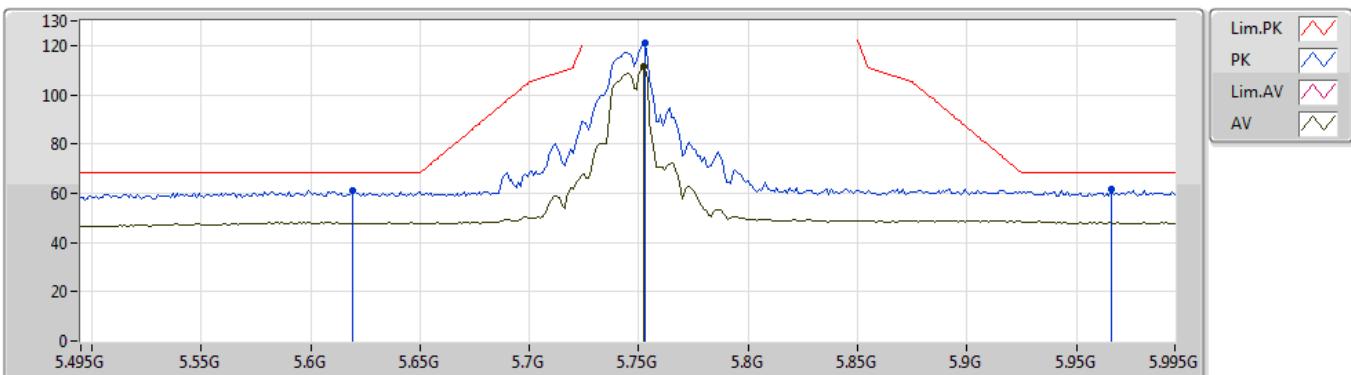
5745MHz_TX


EUT Y_4TX
 Setting 100
 01-G-2-10
 FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.626G	61.08	68.20	-7.12	5.67	3	Vertical	333	1.48	-	55.41			
PK	5.75G	123.47	Inf	-Inf	5.85	3	Vertical	333	1.48	-	117.62			
AV	5.749G	113.99	Inf	-Inf	5.85	3	Vertical	333	1.48	-	108.14			
PK	5.934G	61.23	68.20	-6.97	6.85	3	Vertical	333	1.48	-	54.38			

802.11a_Nss1,(6Mbps)_4TX

25/07/2019

5745MHz_TX


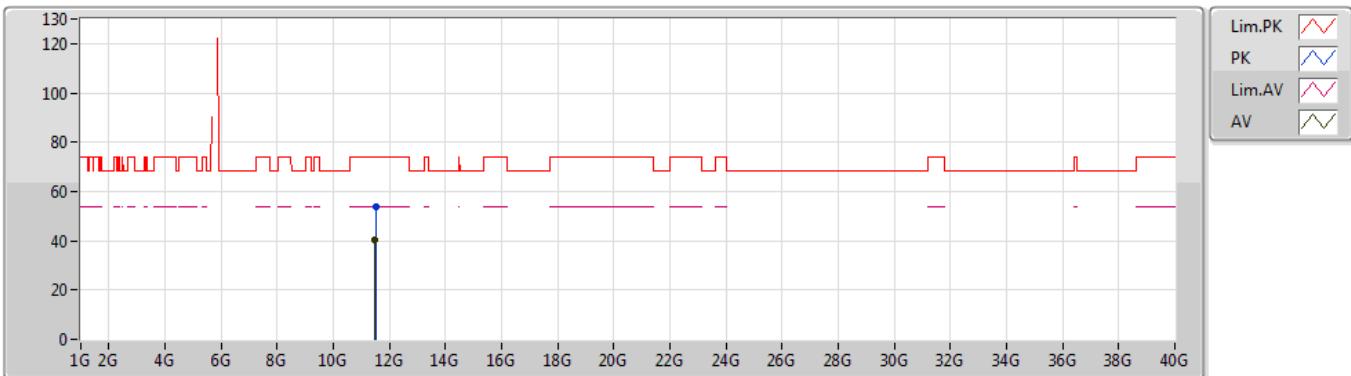
EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.619G	61.23	68.20	-6.97	5.66	3	Horizontal	352	2.97	-	55.57			
PK	5.753G	120.87	Inf	-Inf	5.86	3	Horizontal	352	2.97	-	115.01			
AV	5.752G	111.44	Inf	-Inf	5.85	3	Horizontal	352	2.97	-	105.59			
PK	5.966G	61.66	68.20	-6.54	7.00	3	Horizontal	352	2.97	-	54.66			

802.11a_Nss1,(6Mbps)_4TX

25/07/2019

5745MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

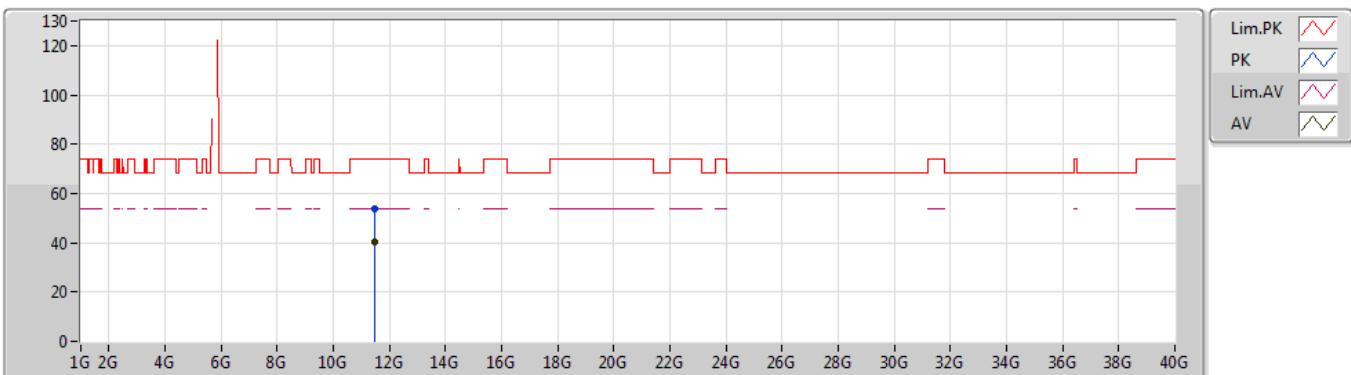
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.509G	53.63	74.00	-20.37	11.93	3	Vertical	84	1.48	-	41.70			
AV	11.4908G	40.41	54.00	-13.59	11.93	3	Vertical	84	1.48	-	28.48			



802.11a_Nss1,(6Mbps)_4TX

25/07/2019

5745MHz_TX

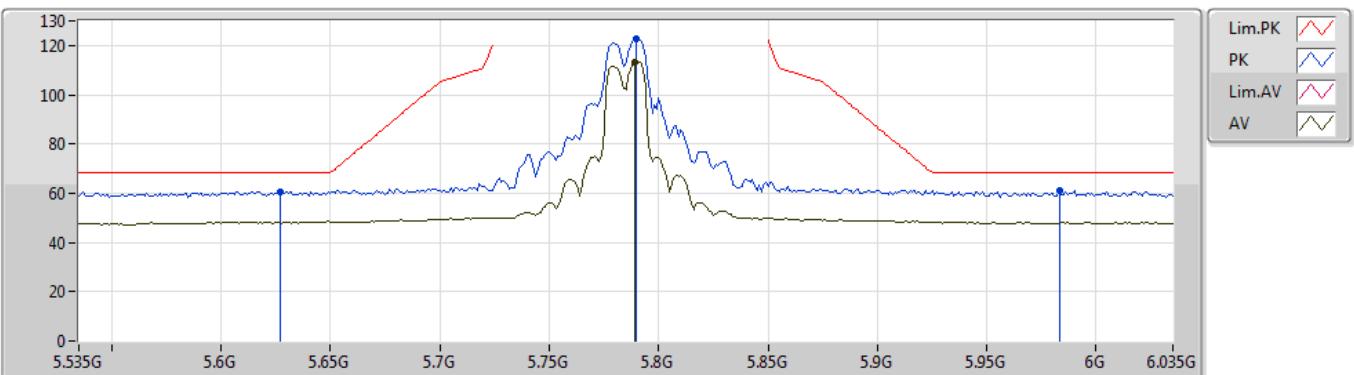


EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.4936G	53.87	74.00	-20.13	11.93	3	Horizontal	79	2.07	-	41.94			
AV	11.4994G	40.45	54.00	-13.55	11.93	3	Horizontal	79	2.07	-	28.52			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

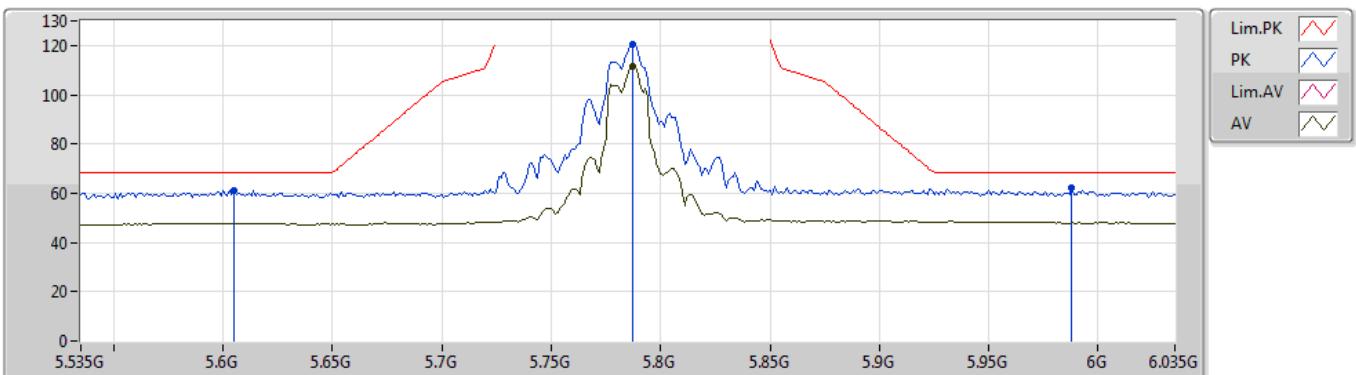
5785MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.627G	60.73	68.20	-7.47	5.67	3	Vertical	334	1.54	-	55.06			
PK	5.79G	122.83	Inf	-Inf	5.94	3	Vertical	334	1.54	-	116.89			
AV	5.789G	113.32	Inf	-Inf	5.94	3	Vertical	334	1.54	-	107.38			
PK	5.983G	61.09	68.20	-7.11	7.07	3	Vertical	334	1.54	-	54.02			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5785MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

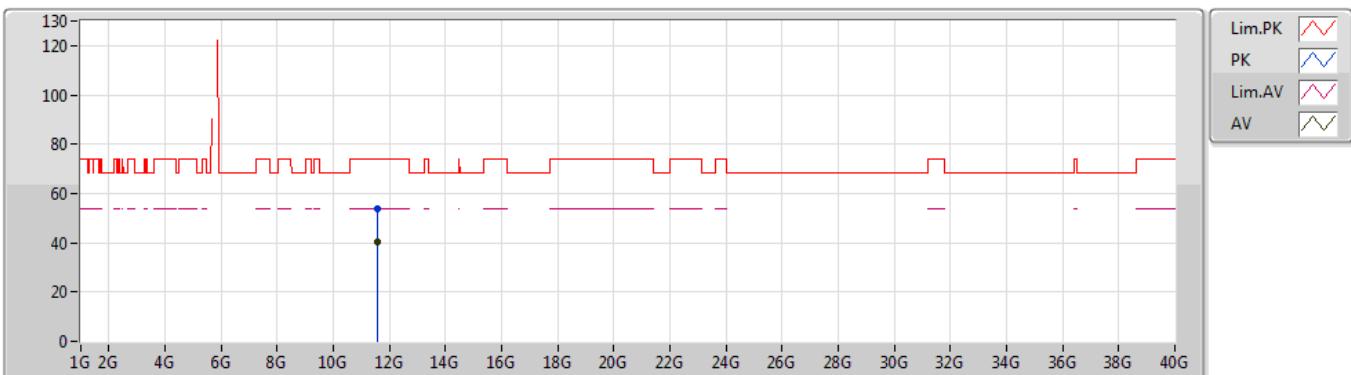
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.605G	61.23	68.20	-6.97	5.65	3	Horizontal	344	2.18	-	55.58			
PK	5.787G	120.74	Inf	-Inf	5.92	3	Horizontal	344	2.18	-	114.82			
AV	5.787G	111.56	Inf	-Inf	5.92	3	Horizontal	344	2.18	-	105.64			
PK	5.988G	62.11	68.20	-6.09	7.09	3	Horizontal	344	2.18	-	55.02			



802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5785MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

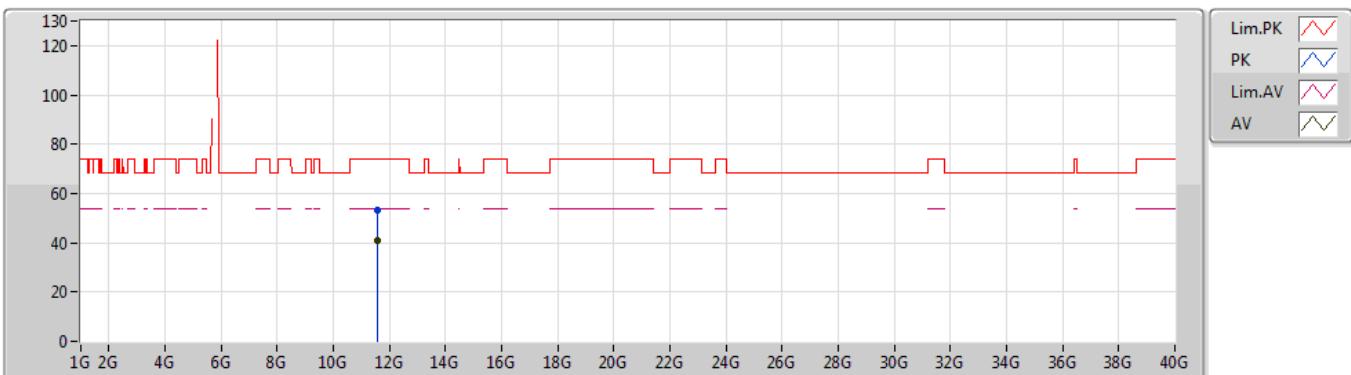
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.5886G	54.07	74.00	-19.93	11.97	3	Vertical	206	2.75	-	42.10			
AV	11.5832G	40.60	54.00	-13.40	11.97	3	Vertical	206	2.75	-	28.63			



802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5785MHz_TX

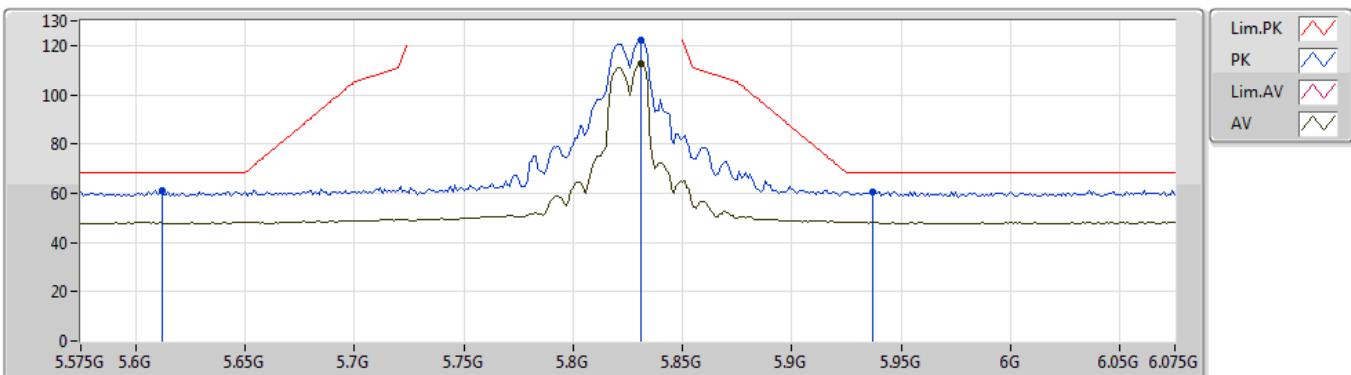


EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.5505G	53.47	74.00	-20.53	11.95	3	Horizontal	116	2.33	-	41.52			
AV	11.5803G	40.82	54.00	-13.18	11.97	3	Horizontal	116	2.33	-	28.85			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

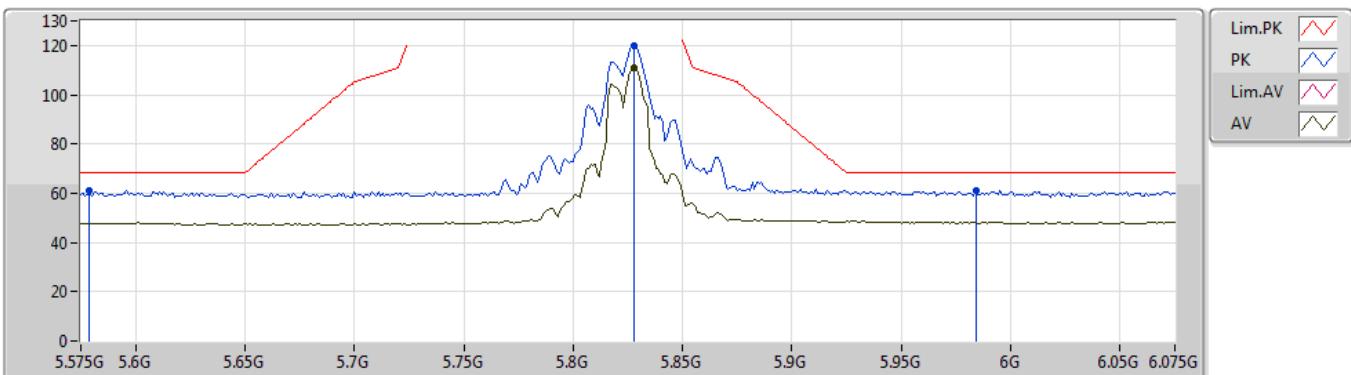
5825MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.612G	61.23	68.20	-6.97	5.65	3	Vertical	331	1.56	-	55.58			
PK	5.831G	122.23	Inf	-Inf	6.19	3	Vertical	331	1.56	-	116.04			
AV	5.831G	112.35	Inf	-Inf	6.19	3	Vertical	331	1.56	-	106.16			
PK	5.937G	60.78	68.20	-7.42	6.86	3	Vertical	331	1.56	-	53.92			

802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5825MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

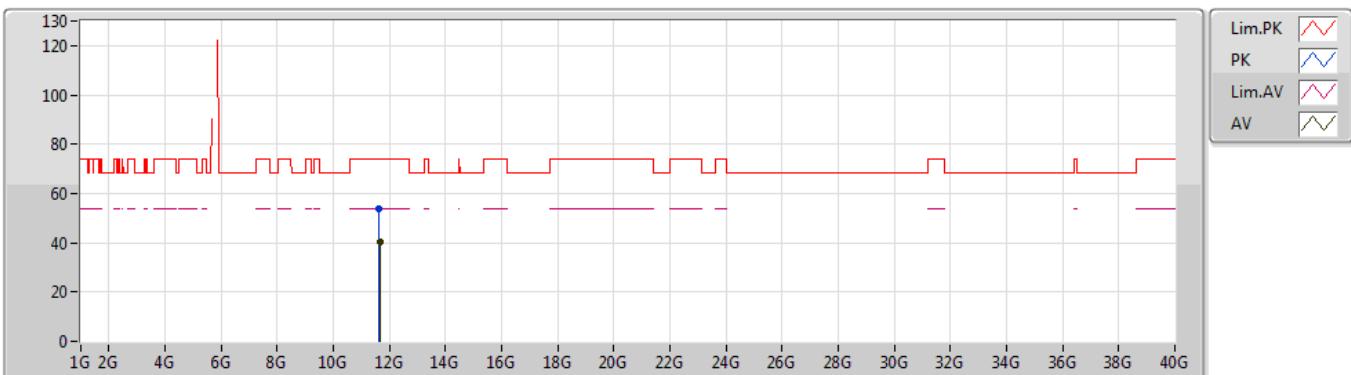
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.579G	61.30	68.20	-6.90	5.58	3	Horizontal	340	2.33	-	55.72			
PK	5.828G	119.95	Inf	-Inf	6.17	3	Horizontal	340	2.33	-	113.78			
AV	5.828G	110.81	Inf	-Inf	6.17	3	Horizontal	340	2.33	-	104.64			
PK	5.984G	61.16	68.20	-7.04	7.07	3	Horizontal	340	2.33	-	54.09			



802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5825MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

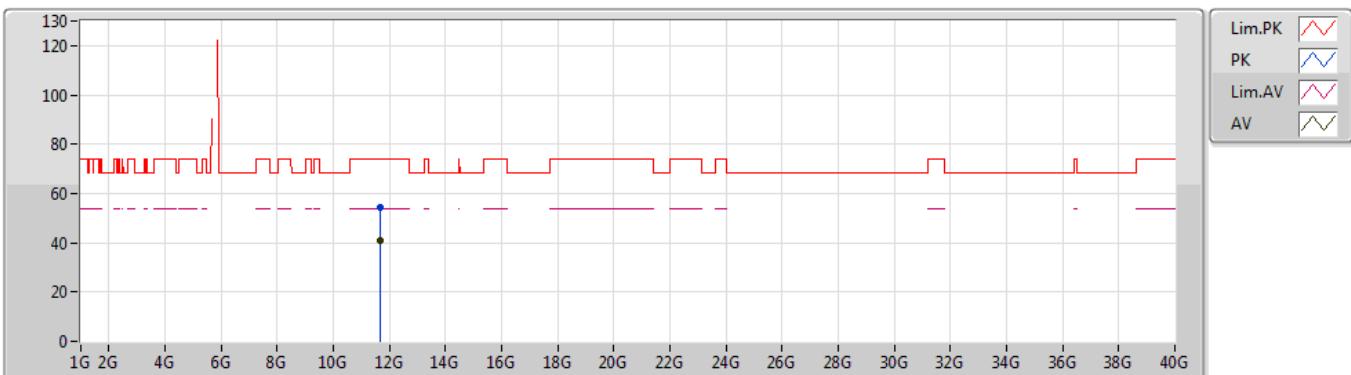
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.6372G	53.99	74.00	-20.01	11.99	3	Vertical	174	2.47	-	42.00			
AV	11.6581G	40.61	54.00	-13.39	12.00	3	Vertical	174	2.47	-	28.61			



802.11a_Nss1,(6Mbps)_4TX

24/07/2019

5825MHz_TX

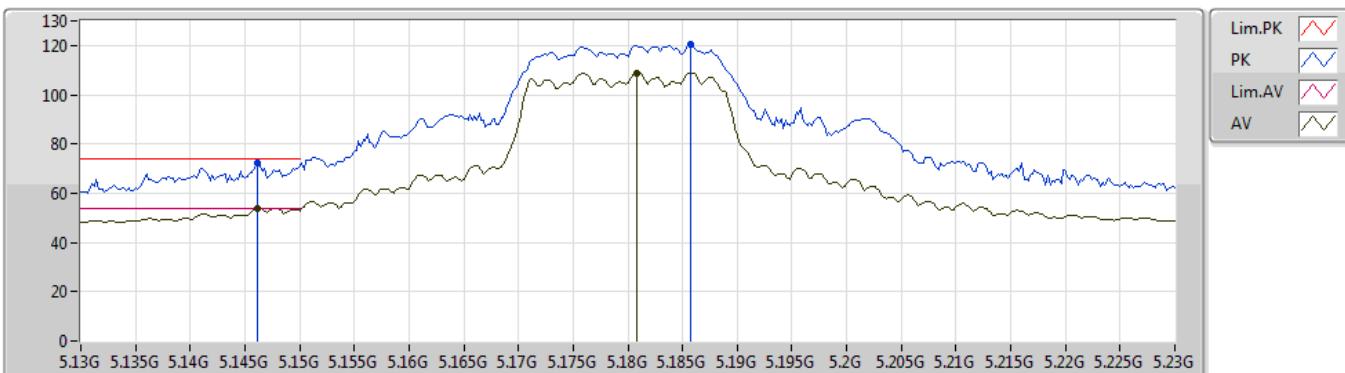


EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.6698G	54.20	74.00	-19.80	12.00	3	Horizontal	216	1.63	-	42.20			
AV	11.6512G	40.89	54.00	-13.11	11.99	3	Horizontal	216	1.63	-	28.90			

802.11ac VHT20_Nss1,(MCS0)_4TX

26/07/2019

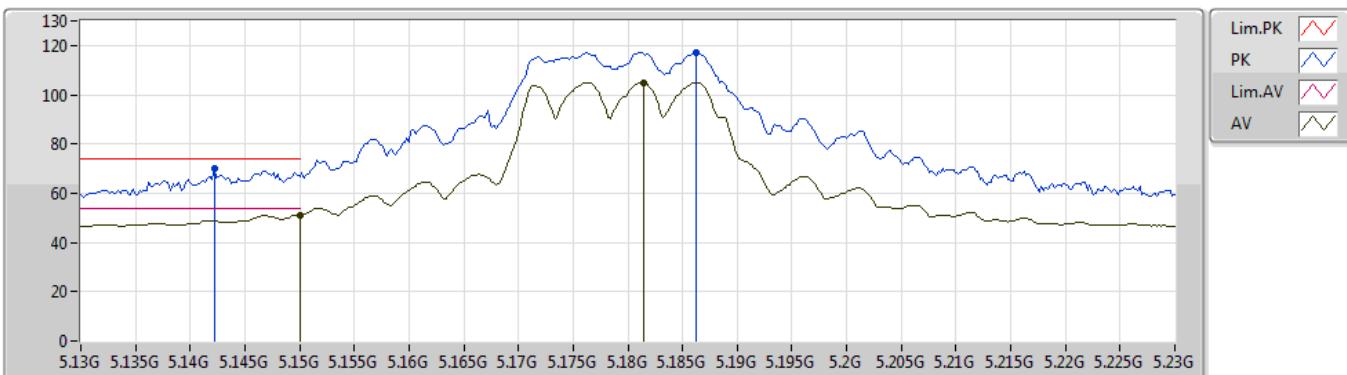
5180MHz_TX


EUT Y_4TX
Setting 88
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1462G	72.04	74.00	-1.96	4.25	3	Vertical	97	1.50	-	67.79			
AV	5.1462G	53.87	54.00	-0.13	4.25	3	Vertical	97	1.50	-	49.62			
PK	5.1858G	120.31	Inf	-Inf	4.27	3	Vertical	97	1.50	-	116.04			
AV	5.1808G	108.95	Inf	-Inf	4.26	3	Vertical	97	1.50	-	104.69			

802.11ac VHT20_Nss1,(MCS0)_4TX

26/07/2019

5180MHz_TX


EUT Y_4TX
Setting 88
01-G-2-10
FSP

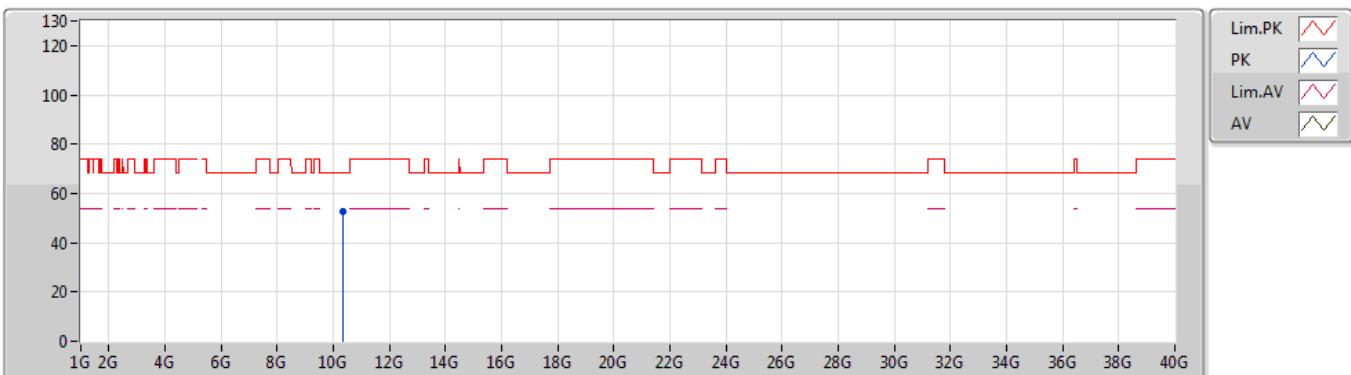
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1422G	70.01	74.00	-3.99	4.24	3	Horizontal	243	2.56	-	65.77			
AV	5.15G	51.10	54.00	-2.90	4.25	3	Horizontal	243	2.56	-	46.85			
PK	5.1862G	117.30	Inf	-Inf	4.27	3	Horizontal	243	2.56	-	113.03			
AV	5.1814G	104.92	Inf	-Inf	4.26	3	Horizontal	243	2.56	-	100.66			



802.11ac VHT20_Nss1,(MCS0)_4TX

26/07/2019

5180MHz_TX



EUT Y_4TX
Setting 88
01-E-4
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)			
PK	10.3655G	52.78	68.20	-15.42	10.85	3	Vertical	40	2.98	-	41.93			

802.11ac VHT20_Nss1,(MCS0)_4TX

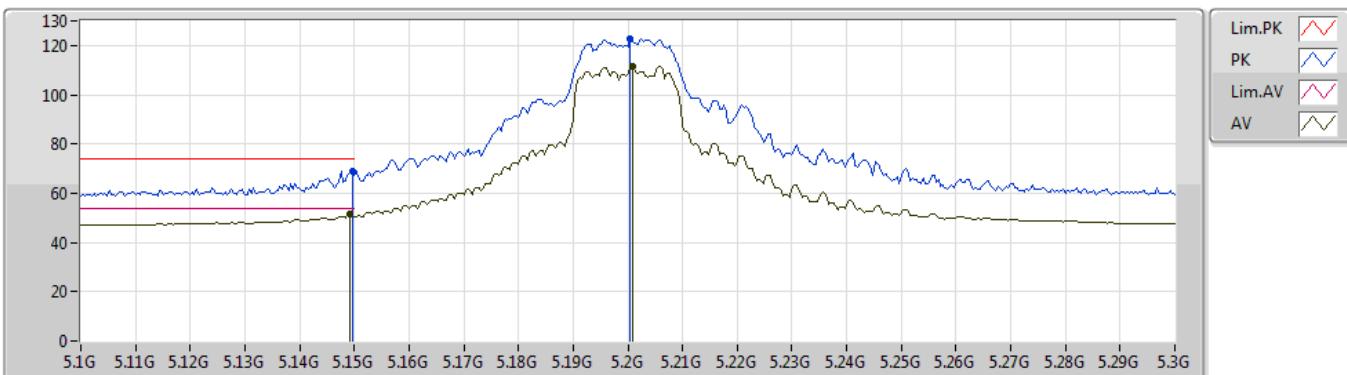
26/07/2019

5180MHz_TX



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

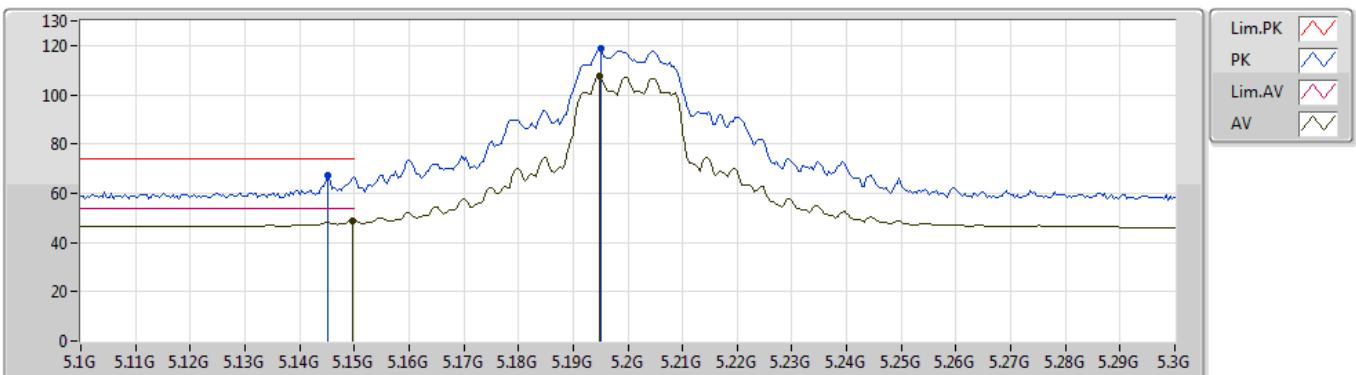
5200MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1496G	69.10	74.00	-4.90	4.25	3	Vertical	98	1.50	-	64.85			
AV	5.1492G	51.28	54.00	-2.72	4.25	3	Vertical	98	1.50	-	47.03			
PK	5.2004G	122.52	Inf	-Inf	4.27	3	Vertical	98	1.50	-	118.25			
AV	5.2008G	111.57	Inf	-Inf	4.27	3	Vertical	98	1.50	-	107.30			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5200MHz_TX


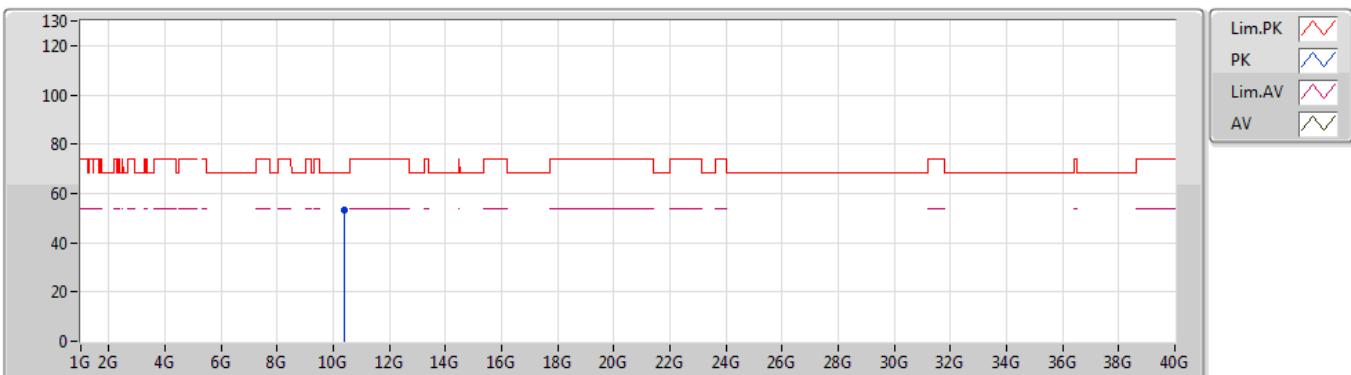
EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1452G	67.13	74.00	-6.87	4.25	3	Horizontal	85	2.73	-	62.88			
AV	5.1496G	49.01	54.00	-4.99	4.25	3	Horizontal	85	2.73	-	44.76			
PK	5.1952G	118.87	Inf	-Inf	4.27	3	Horizontal	85	2.73	-	114.60			
AV	5.1948G	107.48	Inf	-Inf	4.26	3	Horizontal	85	2.73	-	103.22			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5200MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

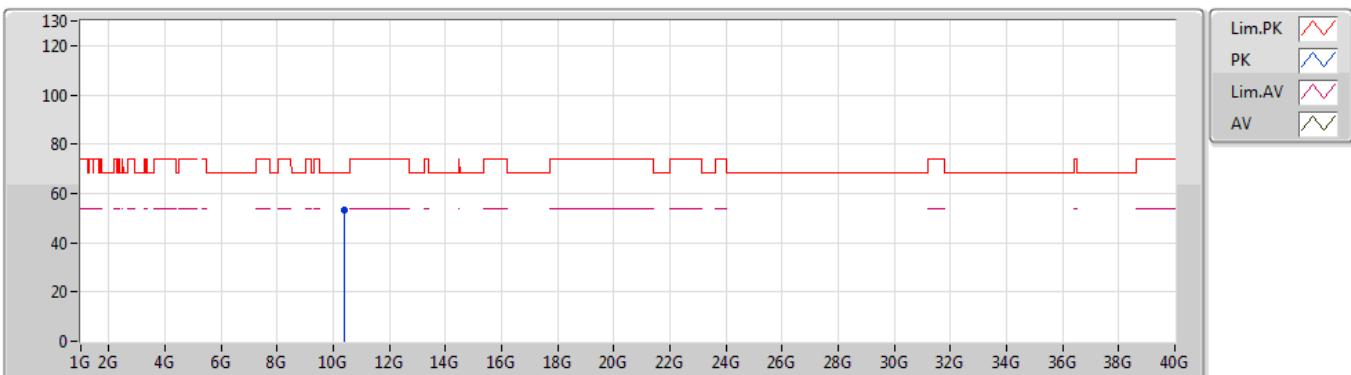
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)			
PK	10.3795G	53.36	68.20	-14.84	10.88	3	Vertical	325	1.96	-	42.48			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5200MHz_TX

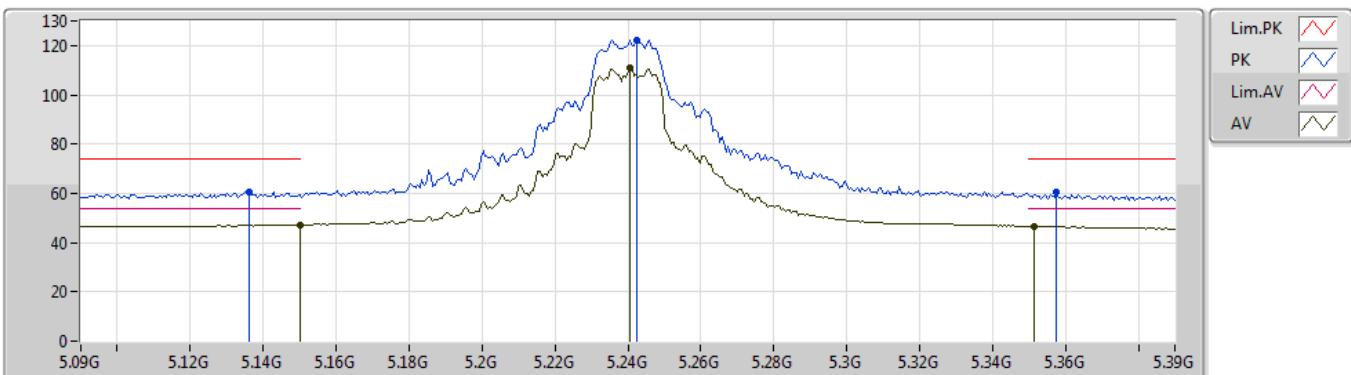


EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)			
PK	10.405G	53.11	68.20	-15.09	10.91	3	Horizontal	253	1.90	-	42.20			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

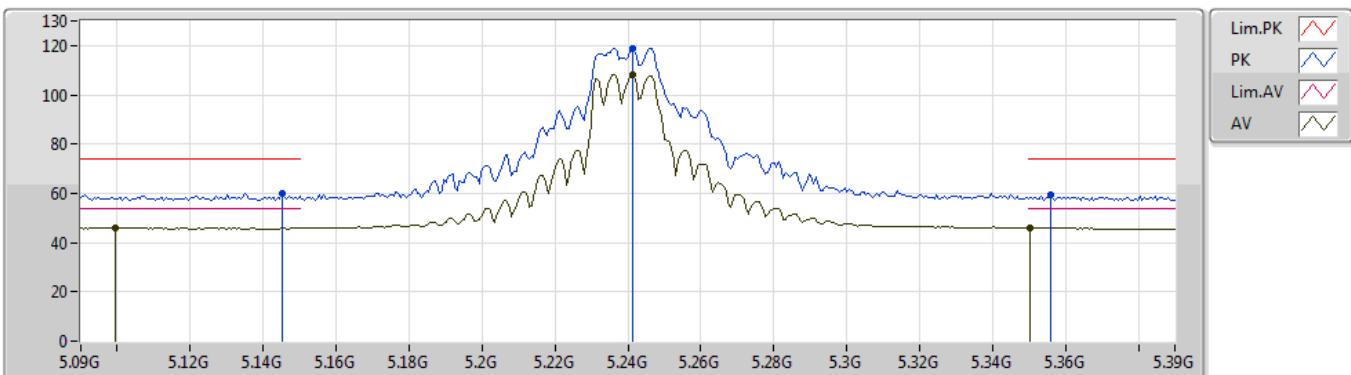
5240MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1362G	60.56	74.00	-13.44	4.25	3	Vertical	100	1.48	-	56.31			
AV	5.15G	47.17	54.00	-6.83	4.25	3	Vertical	100	1.48	-	42.92			
PK	5.2424G	122.13	Inf	-Inf	4.43	3	Vertical	100	1.48	-	117.70			
AV	5.2406G	110.89	Inf	-Inf	4.42	3	Vertical	100	1.48	-	106.47			
PK	5.3576G	60.27	74.00	-13.73	4.83	3	Vertical	100	1.48	-	55.44			
AV	5.3516G	46.56	54.00	-7.44	4.81	3	Vertical	100	1.48	-	41.75			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5240MHz_TX


EUT Y_4TX
Setting 100
01-G-2-10
FSP

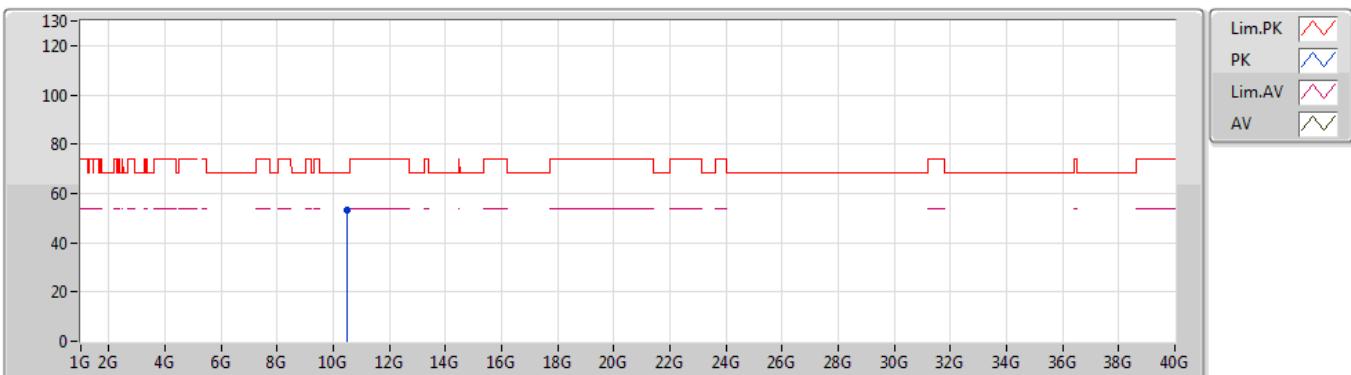
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1452G	59.71	74.00	-14.29	4.25	3	Horizontal	242	2.62	-	55.46			
AV	5.0996G	45.93	54.00	-8.07	4.22	3	Horizontal	242	2.62	-	41.71			
PK	5.2412G	119.05	Inf	-Inf	4.42	3	Horizontal	242	2.62	-	114.63			
AV	5.2412G	108.26	Inf	-Inf	4.42	3	Horizontal	242	2.62	-	103.84			
PK	5.3558G	59.17	74.00	-14.83	4.83	3	Horizontal	242	2.62	-	54.34			
AV	5.3504G	46.00	54.00	-8.00	4.81	3	Horizontal	242	2.62	-	41.19			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5240MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

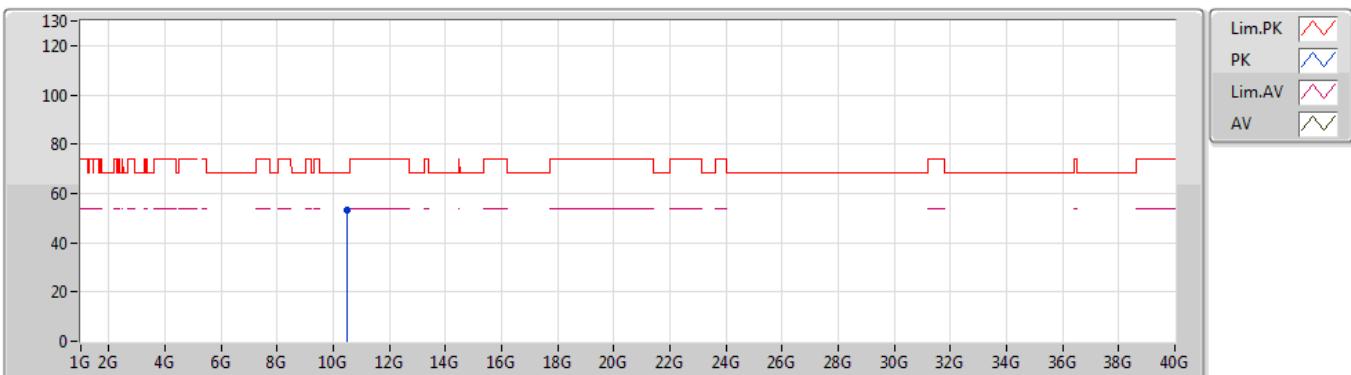
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	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)			
PK	10.5031G	53.00	68.20	-15.20	11.04	3	Vertical	175	2.80	-	41.96			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5240MHz_TX

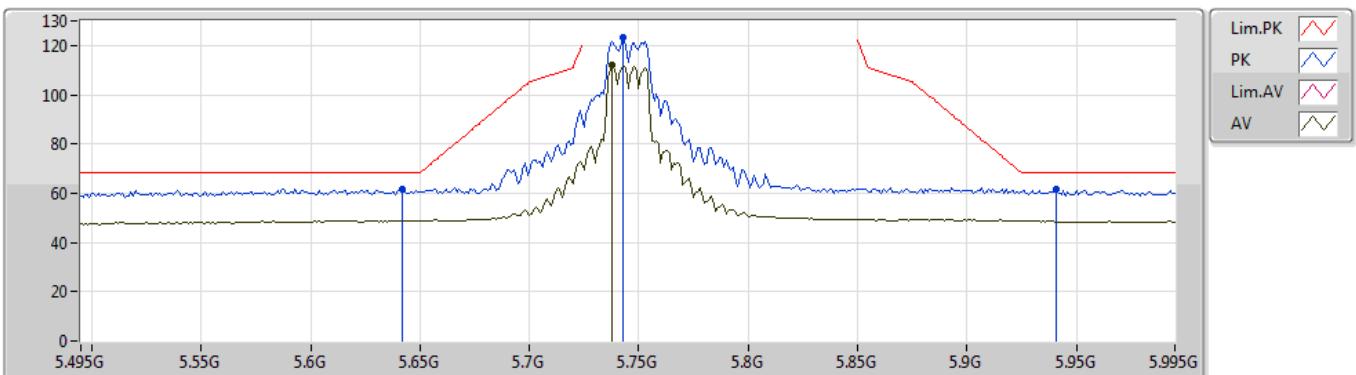


EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)			
PK	10.4787G	53.11	68.20	-15.09	11.01	3	Horizontal	340	2.22	-	42.10			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

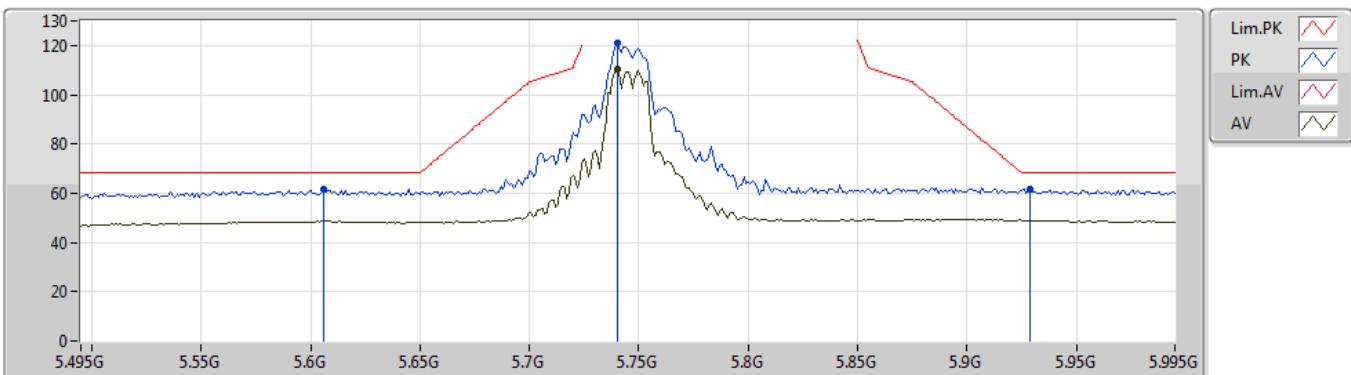
5745MHz_TX


EUT Y_4TX
Setting 100
01-E-4-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.642G	61.84	68.20	-6.36	5.68	3	Vertical	175	1.50	-	56.16			
PK	5.743G	123.14	Inf	-Inf	5.84	3	Vertical	175	1.50	-	117.30			
AV	5.738G	111.98	Inf	-Inf	5.83	3	Vertical	175	1.50	-	106.15			
PK	5.941G	61.68	68.20	-6.52	6.88	3	Vertical	175	1.50	-	54.80			

802.11ac VHT20_Nss1,(MCS0)_4TX 5745MHz_TX

24/07/2019



EUT Y_4TX
Setting 100
01-E-4-10
FSP

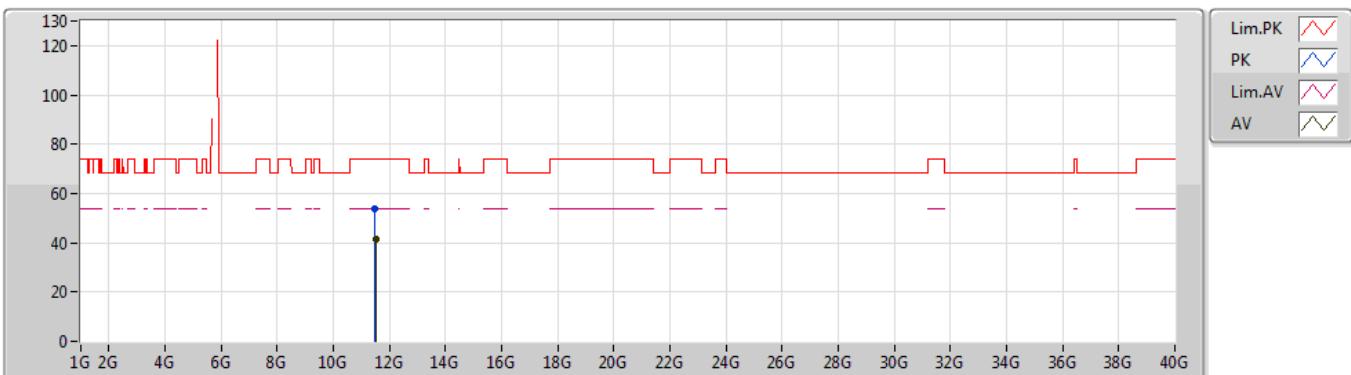
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PK	5.606G	61.64	68.20	-6.56	5.65	3	Horizontal	103	2.37	-	55.99			
PK	5.74G	120.81	Inf	-Inf	5.83	3	Horizontal	103	2.37	-	114.98			
AV	5.74G	110.18	Inf	-Inf	5.83	3	Horizontal	103	2.37	-	104.35			
PK	5.929G	61.38	68.20	-6.82	6.83	3	Horizontal	103	2.37	-	54.55			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5745MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

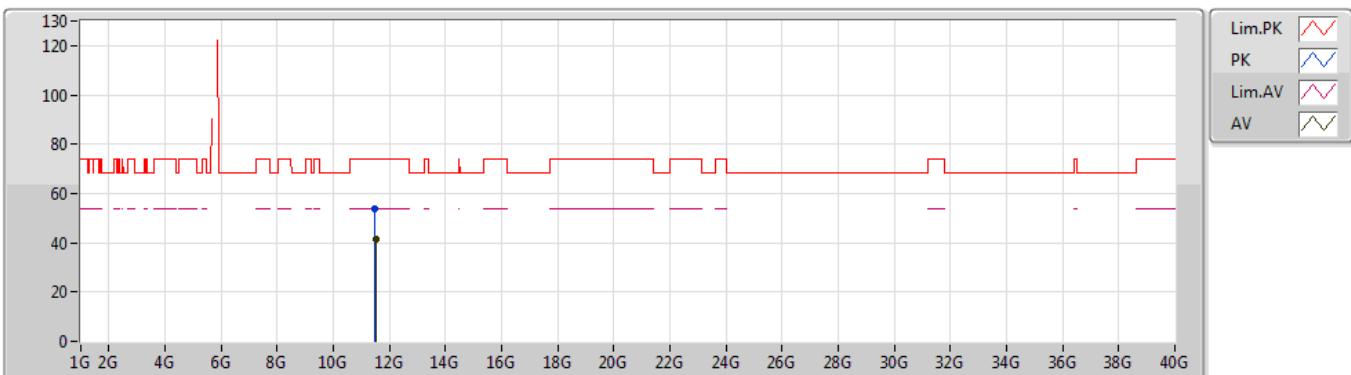
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PK	11.4788G	53.99	74.00	-20.01	11.93	3	Vertical	38	1.79	-	42.06			
AV	11.5107G	41.36	54.00	-12.64	11.93	3	Vertical	38	1.79	-	29.43			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5745MHz_TX

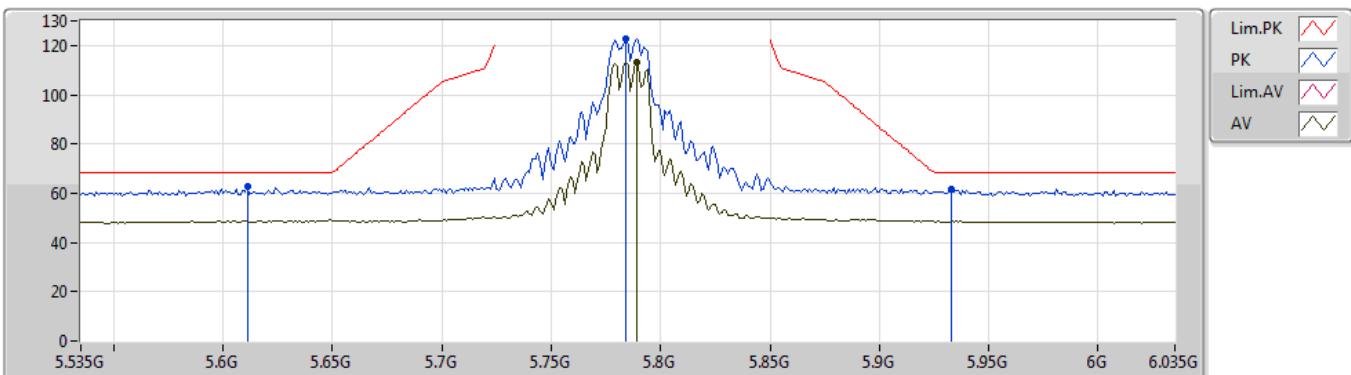


EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.4968G	53.91	74.00	-20.09	11.93	3	Horizontal	187	2.71	-	41.98			
AV	11.5102G	41.24	54.00	-12.76	11.93	3	Horizontal	187	2.71	-	29.31			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5785MHz_TX


EUT Y_4TX
Setting 100
01-E-4-10
FSP

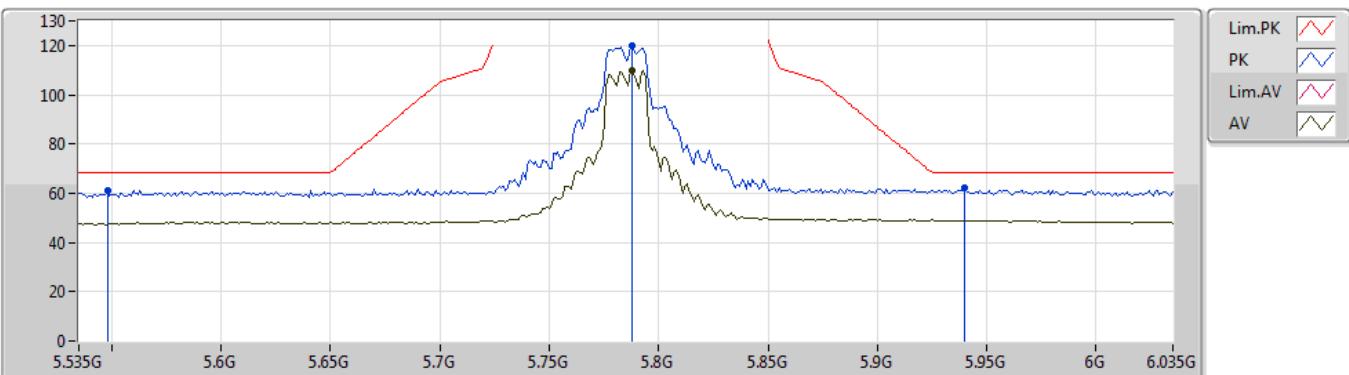
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PK	5.611G	62.62	68.20	-5.58	5.65	3	Vertical	358	2.57	-	56.97			
PK	5.784G	122.99	Inf	-Inf	5.92	3	Vertical	358	2.57	-	117.07			
AV	5.789G	113.19	Inf	-Inf	5.94	3	Vertical	358	2.57	-	107.25			
PK	5.933G	61.43	68.20	-6.77	6.85	3	Vertical	358	2.57	-	54.58			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5785MHz_TX



EUT Y_4TX
Setting 100
01-E-4-10
FSP

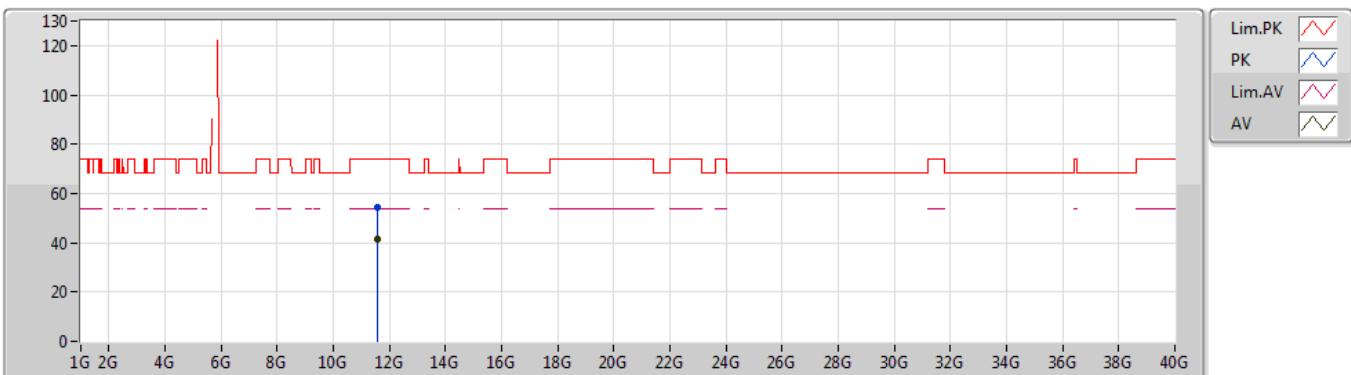
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.548G	61.26	68.20	-6.94	5.51	3	Horizontal	108	2.41	-	55.75			
PK	5.788G	120.17	Inf	-Inf	5.94	3	Horizontal	108	2.41	-	114.23			
AV	5.788G	109.77	Inf	-Inf	5.94	3	Horizontal	108	2.41	-	103.83			
PK	5.94G	61.93	68.20	-6.27	6.88	3	Horizontal	108	2.41	-	55.05			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5785MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

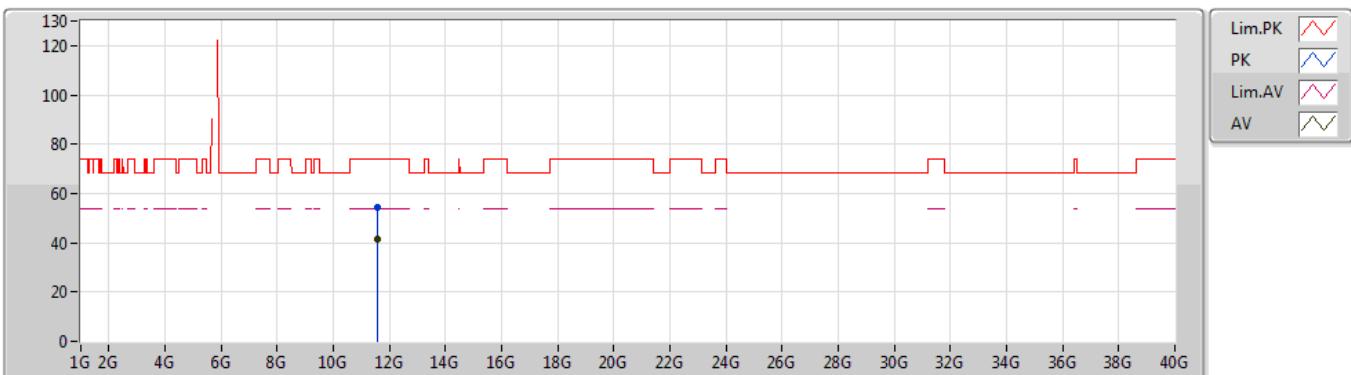
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.5881G	54.33	74.00	-19.67	11.97	3	Vertical	261	2.86	-	42.36			
AV	11.5533G	41.32	54.00	-12.68	11.96	3	Vertical	261	2.86	-	29.36			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5785MHz_TX

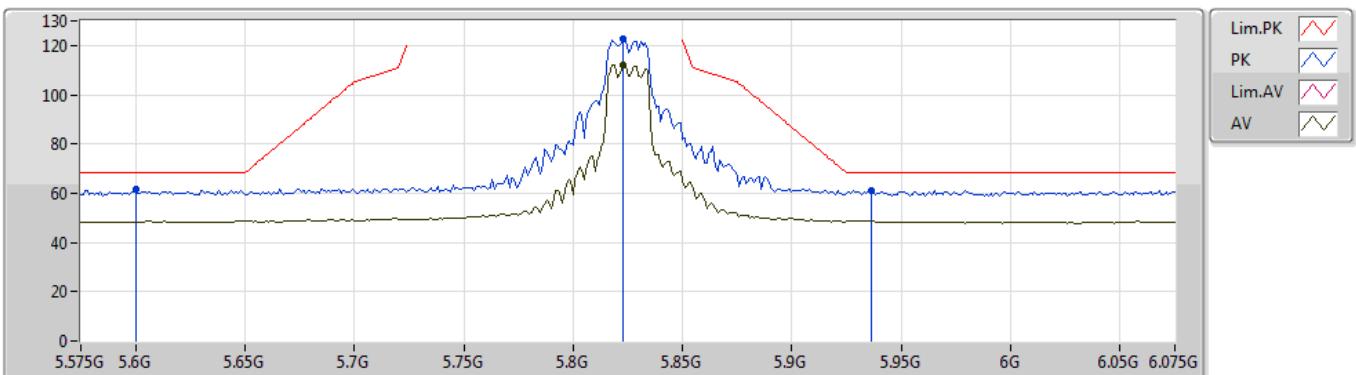


EUT Y_4TX
Setting 100
01-E-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.5748G	54.35	74.00	-19.65	11.95	3	Horizontal	234	1.69	-	42.40			
AV	11.5657G	41.39	54.00	-12.61	11.96	3	Horizontal	234	1.69	-	29.43			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

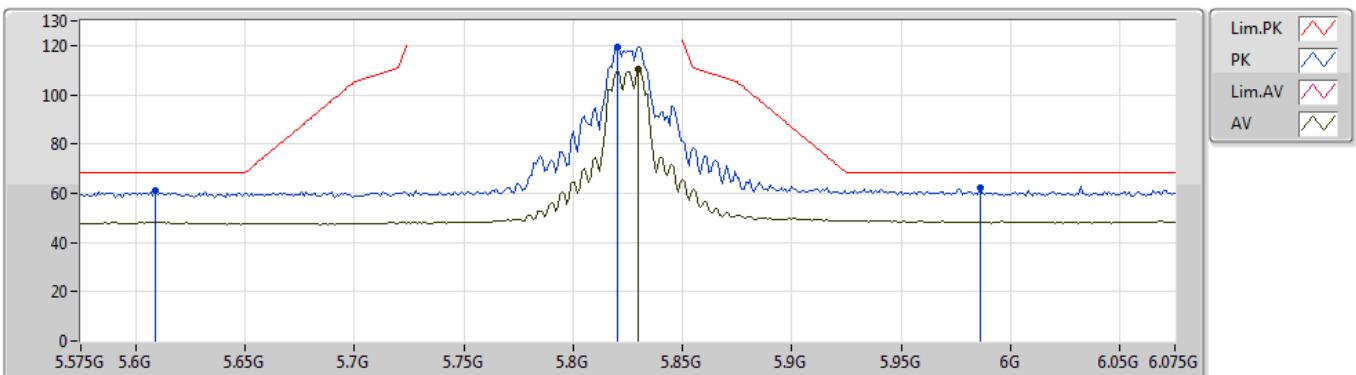
5825MHz_TX


EUT Y_4TX
 Setting 100
 01-E-4-10
 FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.6G	61.60	68.20	-6.60	5.64	3	Vertical	332	1.59	-	55.96			
PK	5.823G	122.64	Inf	-Inf	6.13	3	Vertical	332	1.59	-	116.51			
AV	5.823G	112.34	Inf	-Inf	6.13	3	Vertical	332	1.59	-	106.21			
PK	5.936G	61.31	68.20	-6.89	6.86	3	Vertical	332	1.59	-	54.45			

802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5825MHz_TX


EUT Y_4TX
Setting 100
01-E-4-10
FSP

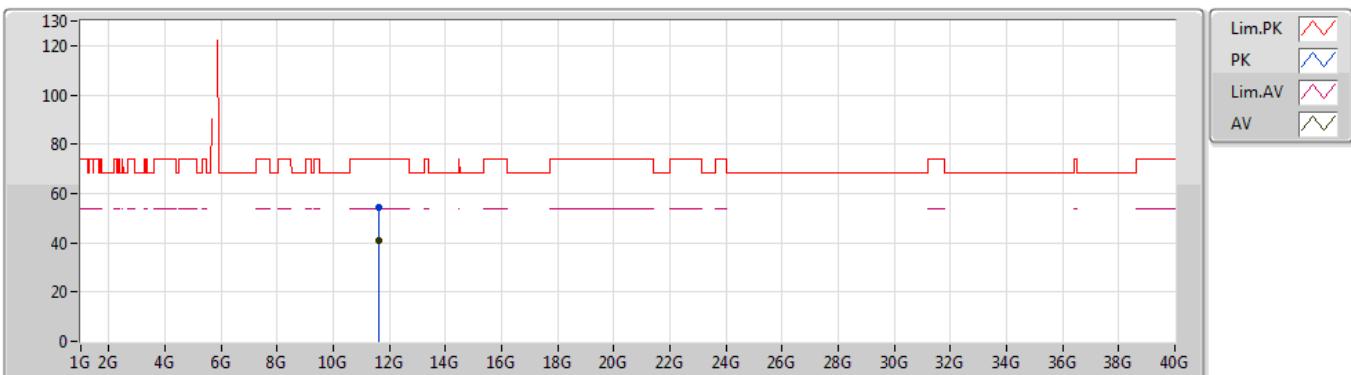
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.609G	61.01	68.20	-7.19	5.65	3	Horizontal	102	2.38	-	55.36			
PK	5.82G	119.52	Inf	-Inf	6.10	3	Horizontal	102	2.38	-	113.42			
AV	5.83G	110.63	Inf	-Inf	6.18	3	Horizontal	102	2.38	-	104.45			
PK	5.986G	62.25	68.20	-5.95	7.09	3	Horizontal	102	2.38	-	55.16			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5825MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

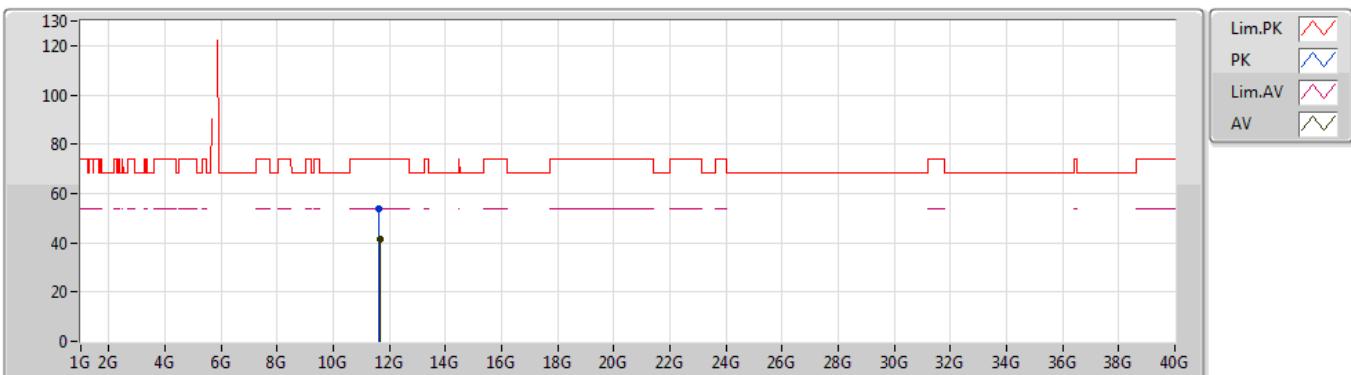
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.6371G	54.36	74.00	-19.64	11.99	3	Vertical	150	1.54	-	42.37			
AV	11.6301G	41.17	54.00	-12.83	12.00	3	Vertical	150	1.54	-	29.17			



802.11ac VHT20_Nss1,(MCS0)_4TX

24/07/2019

5825MHz_TX



EUT Y_4TX
Setting 100
01-E-4
FSP

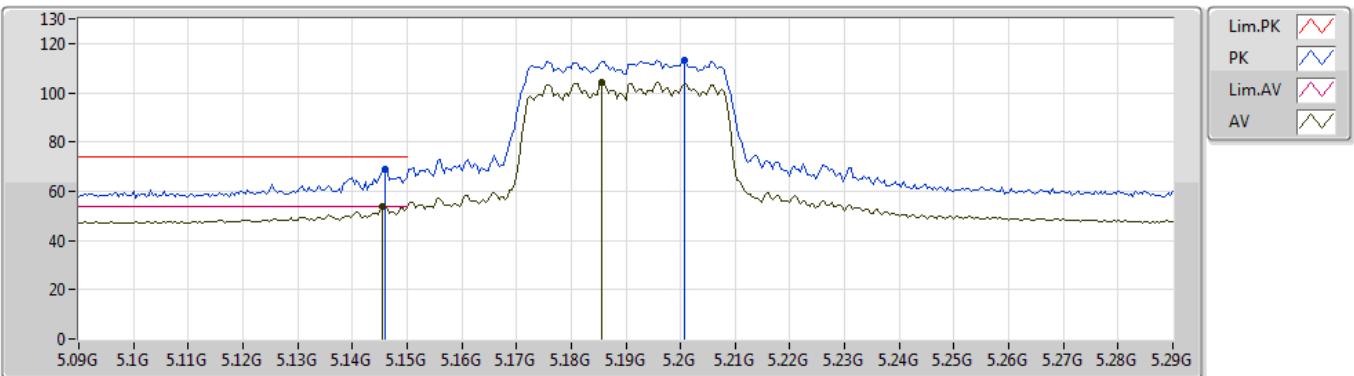
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.6443G	54.03	74.00	-19.97	11.99	3	Horizontal	220	2.35	-	42.04			
AV	11.6674G	41.26	54.00	-12.74	12.00	3	Horizontal	220	2.35	-	29.26			



802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5190MHz_TX

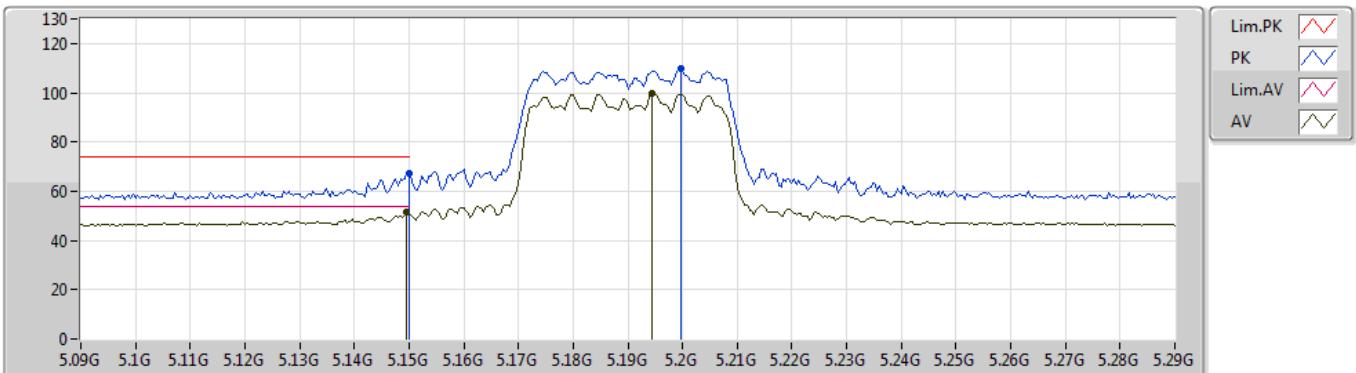


EUT Y_4TX
Setting 74
01-E-4-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.146G	68.75	74.00	-5.25	4.25	3	Vertical	99	1.50	-	64.50			
AV	5.1456G	53.78	54.00	-0.22	4.25	3	Vertical	99	1.50	-	49.53			
PK	5.2008G	113.36	Inf	-Inf	4.27	3	Vertical	99	1.50	-	109.09			
AV	5.1856G	104.21	Inf	-Inf	4.27	3	Vertical	99	1.50	-	99.94			

802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5190MHz_TX


EUT Y_4TX
 Setting 74
 01-E-4-10
 FSP

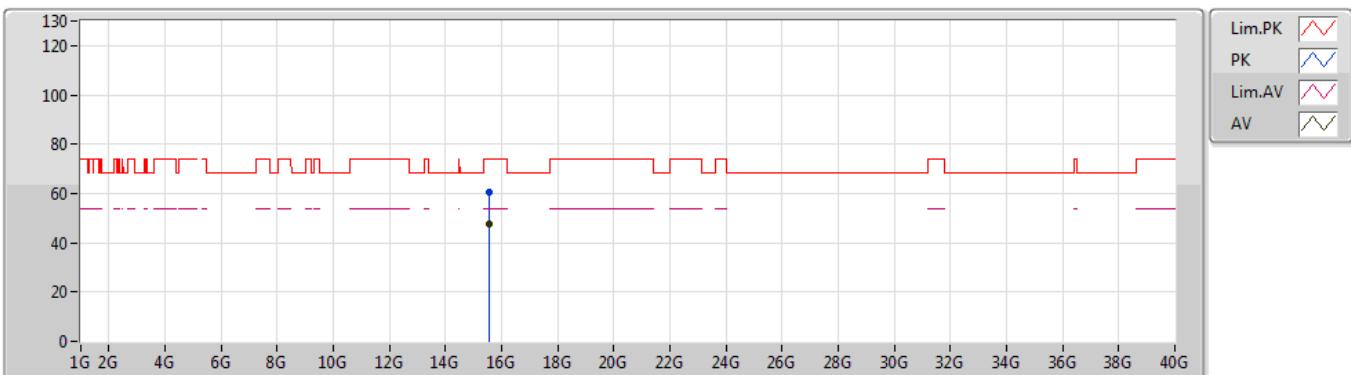
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.15G	67.11	74.00	-6.89	4.25	3	Horizontal	85	2.76	-	62.86			
AV	5.1496G	51.30	54.00	-2.70	4.25	3	Horizontal	85	2.76	-	47.05			
PK	5.1996G	109.83	Inf	-Inf	4.27	3	Horizontal	85	2.76	-	105.56			
AV	5.1944G	99.57	Inf	-Inf	4.26	3	Horizontal	85	2.76	-	95.31			



802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5190MHz_TX



EUT Y_4TX
Setting 74
01-G-2
FSP

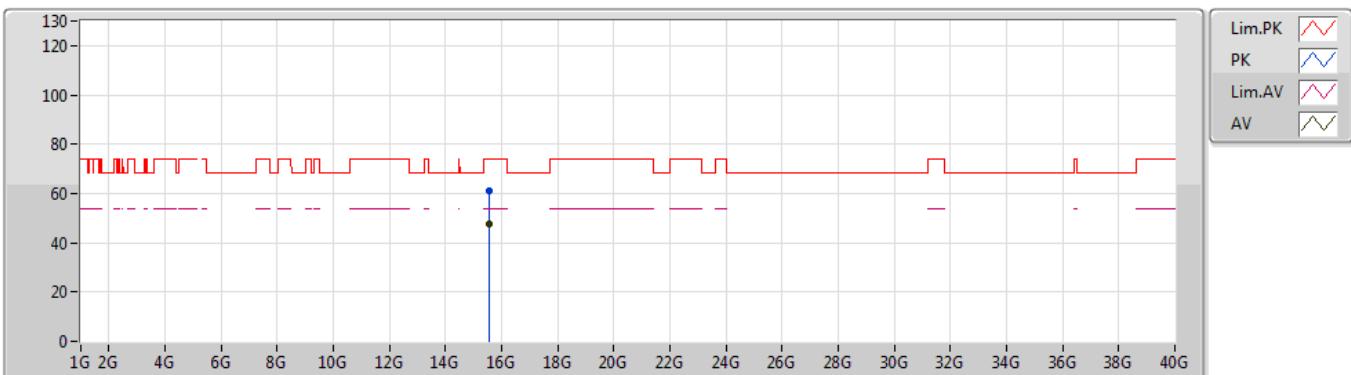
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	15.57338G	60.36	74.00	-13.64	14.42	3	Vertical	287	1.50	-	45.94			
AV	15.5663G	47.64	54.00	-6.36	14.42	3	Vertical	287	1.50	-	33.22			



802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5190MHz_TX

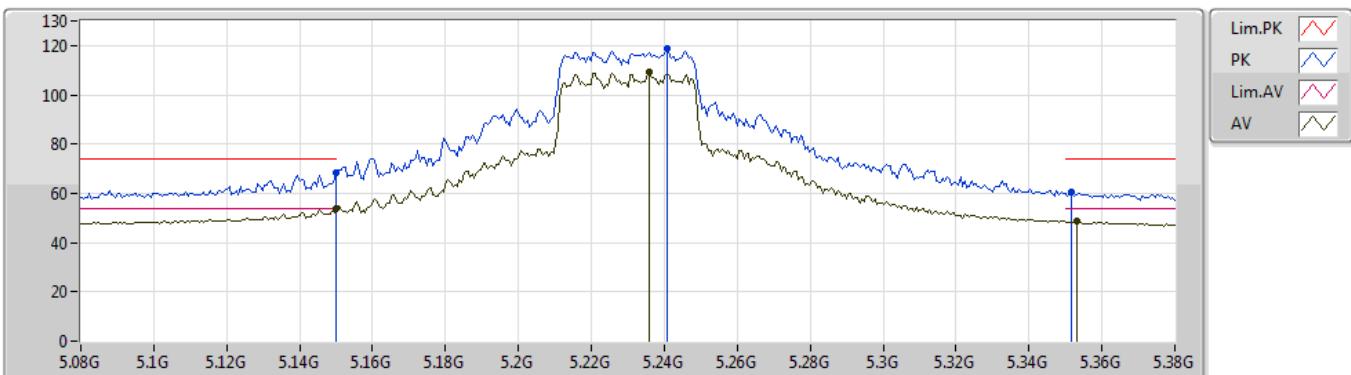


EUT Y_4TX
Setting 74
01-G-2
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	15.56722G	61.11	74.00	-12.89	14.42	3	Horizontal	190	1.42	-	46.69			
AV	15.57444G	47.58	54.00	-6.42	14.42	3	Horizontal	190	1.42	-	33.16			

802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

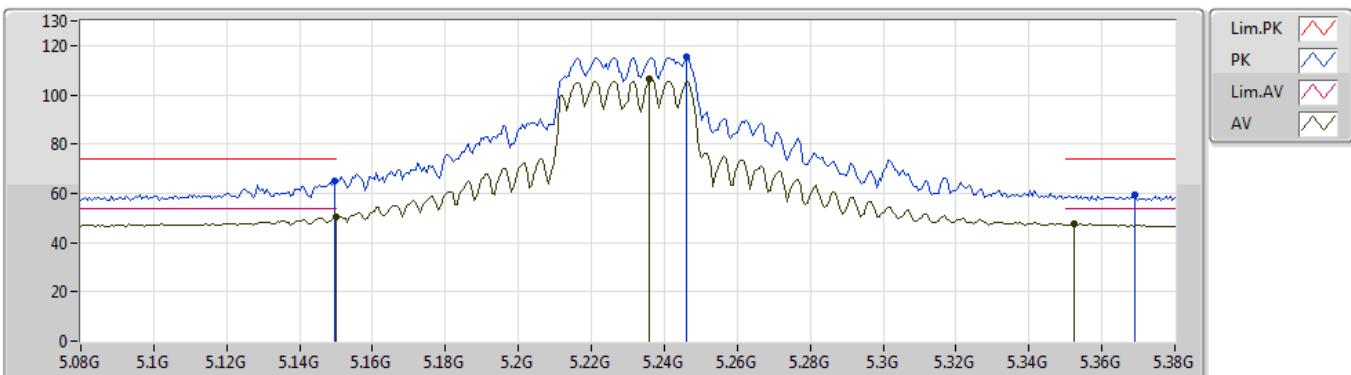
5230MHz_TX


EUT Y_4TX
Setting 95
01-E-4-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.15G	68.35	74.00	-5.65	4.25	3	Vertical	100	1.50	-	64.10			
AV	5.15G	53.82	54.00	-0.18	4.25	3	Vertical	100	1.50	-	49.57			
PK	5.2408G	118.58	Inf	-Inf	4.42	3	Vertical	100	1.50	-	114.16			
AV	5.236G	108.99	Inf	-Inf	4.41	3	Vertical	100	1.50	-	104.58			
PK	5.3518G	60.43	74.00	-13.57	4.82	3	Vertical	100	1.50	-	55.61			
AV	5.353G	48.94	54.00	-5.06	4.82	3	Vertical	100	1.50	-	44.12			

802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5230MHz_TX


EUT Y_4TX
Setting 95
01-E-4-10
FSP

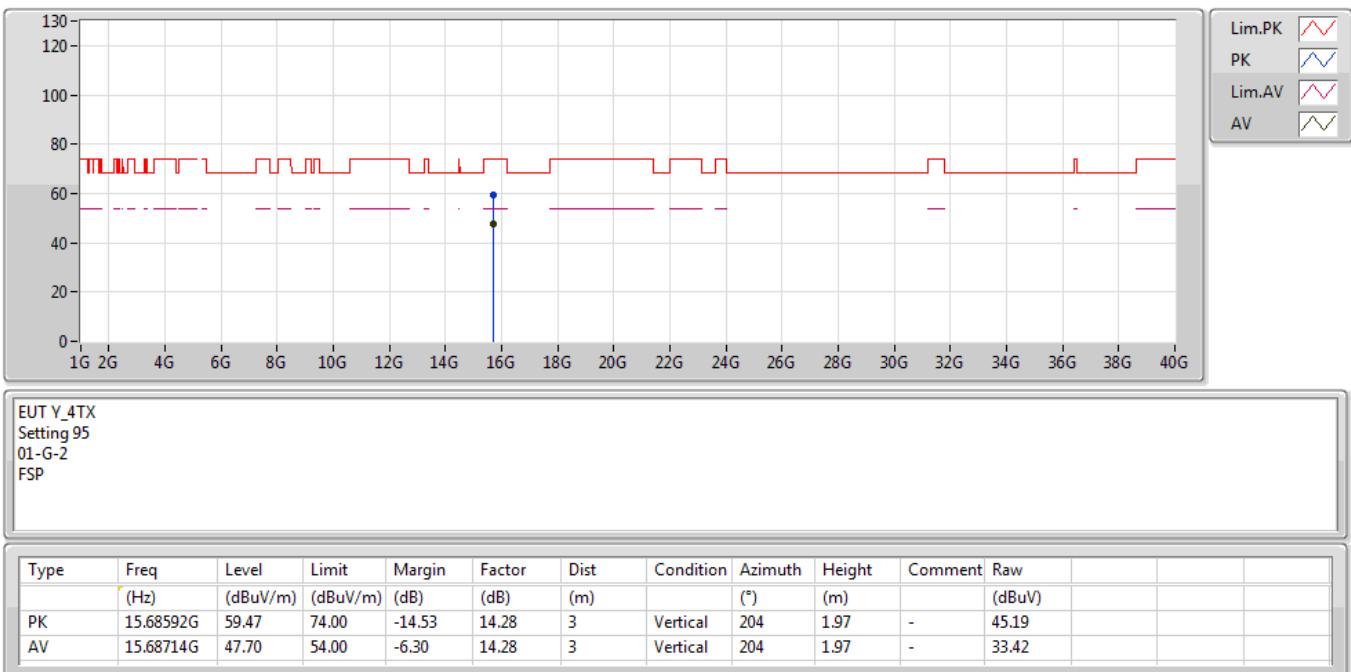
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1496G	65.10	74.00	-8.90	4.25	3	Horizontal	242	2.62	-	60.85			
AV	5.15G	50.47	54.00	-3.53	4.25	3	Horizontal	242	2.62	-	46.22			
PK	5.2462G	115.61	Inf	-Inf	4.44	3	Horizontal	242	2.62	-	111.17			
AV	5.236G	106.27	Inf	-Inf	4.41	3	Horizontal	242	2.62	-	101.86			
PK	5.3692G	59.21	74.00	-14.79	4.88	3	Horizontal	242	2.62	-	54.33			
AV	5.3524G	47.67	54.00	-6.33	4.82	3	Horizontal	242	2.62	-	42.85			



802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5230MHz_TX

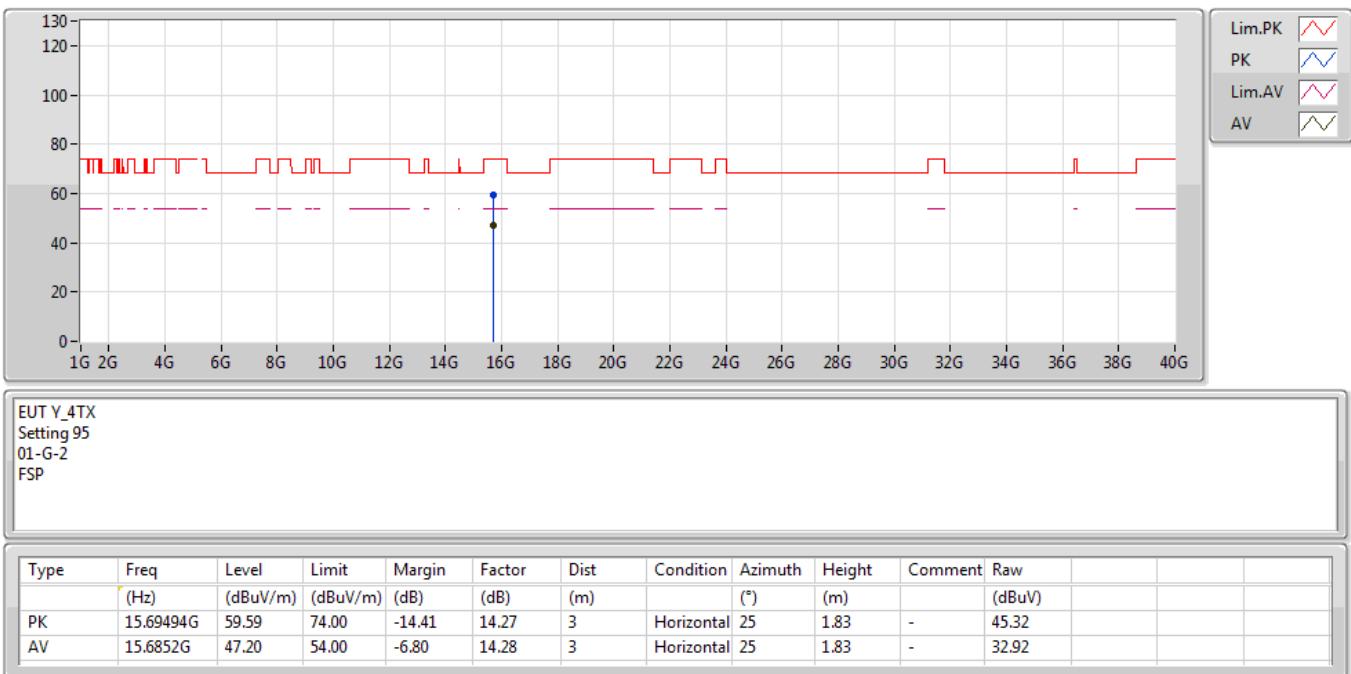




802.11ac VHT40_Nss1,(MCS0)_4TX

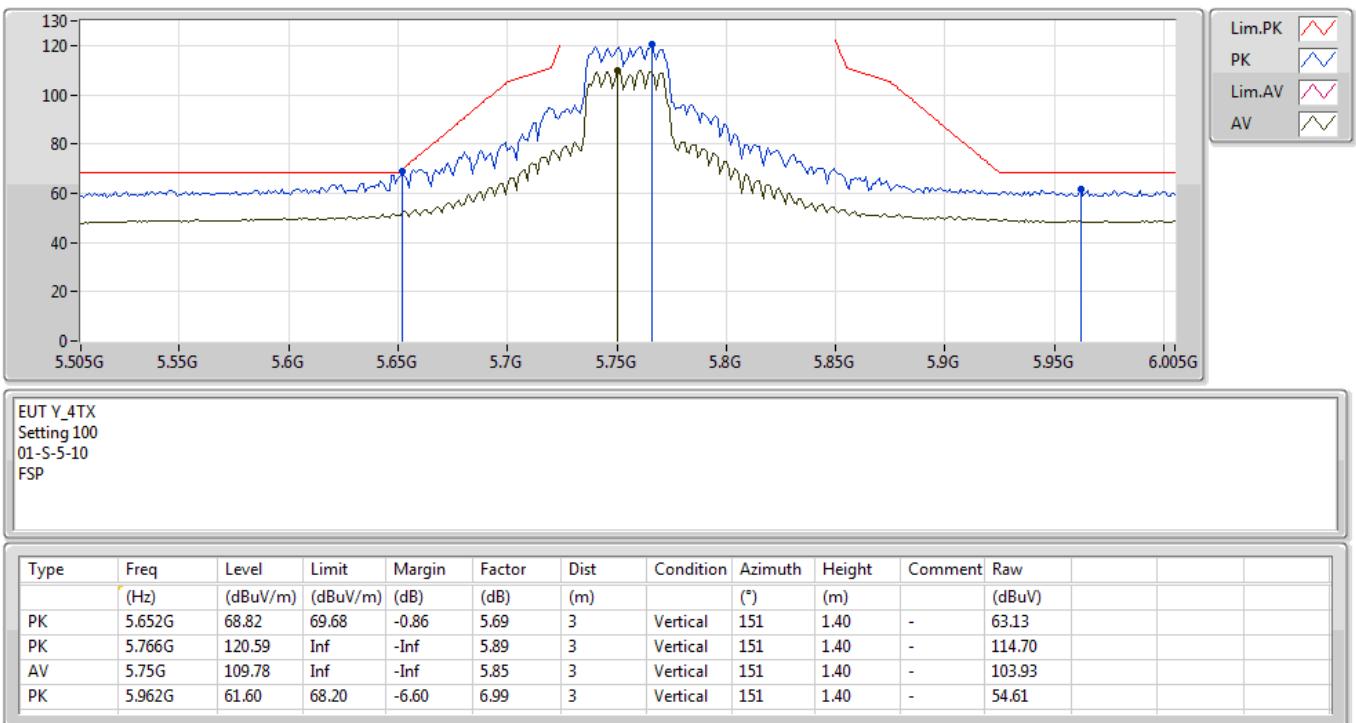
25/07/2019

5230MHz_TX



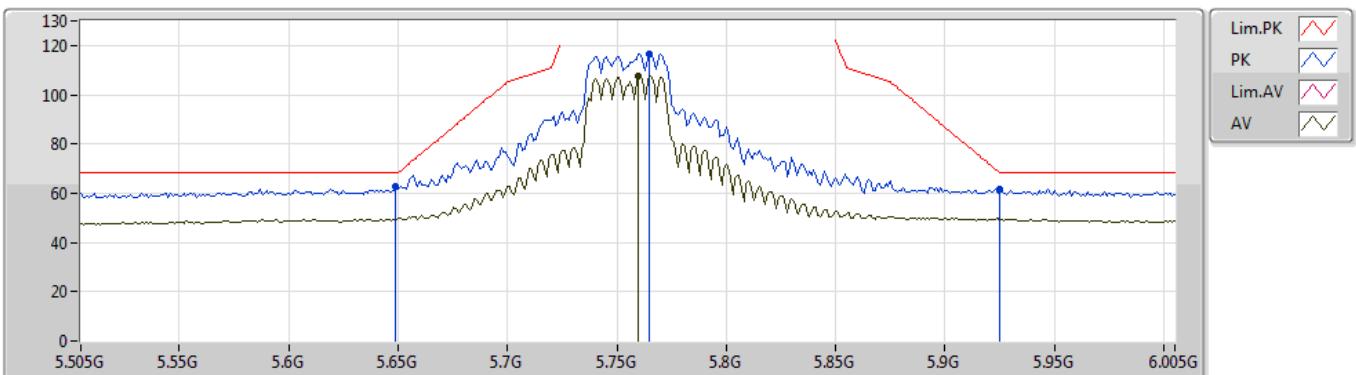
802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5755MHz_TX


802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5755MHz_TX


EUT Y_4TX
Setting 100
01-S-5-10
FSP

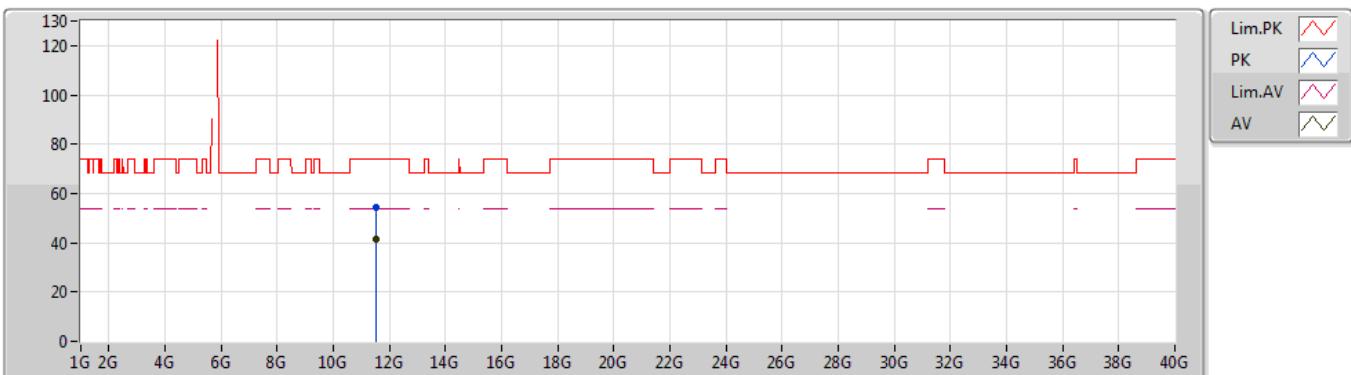
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.649G	62.76	68.20	-5.44	5.69	3	Horizontal	99	2.39	-	57.07			
PK	5.765G	116.60	Inf	-Inf	5.89	3	Horizontal	99	2.39	-	110.71			
AV	5.76G	107.62	Inf	-Inf	5.87	3	Horizontal	99	2.39	-	101.75			
PK	5.925G	61.91	68.20	-6.29	6.81	3	Horizontal	99	2.39	-	55.10			



802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5755MHz_TX



EUT Y_4TX
Setting 100
01-G-2
FSP

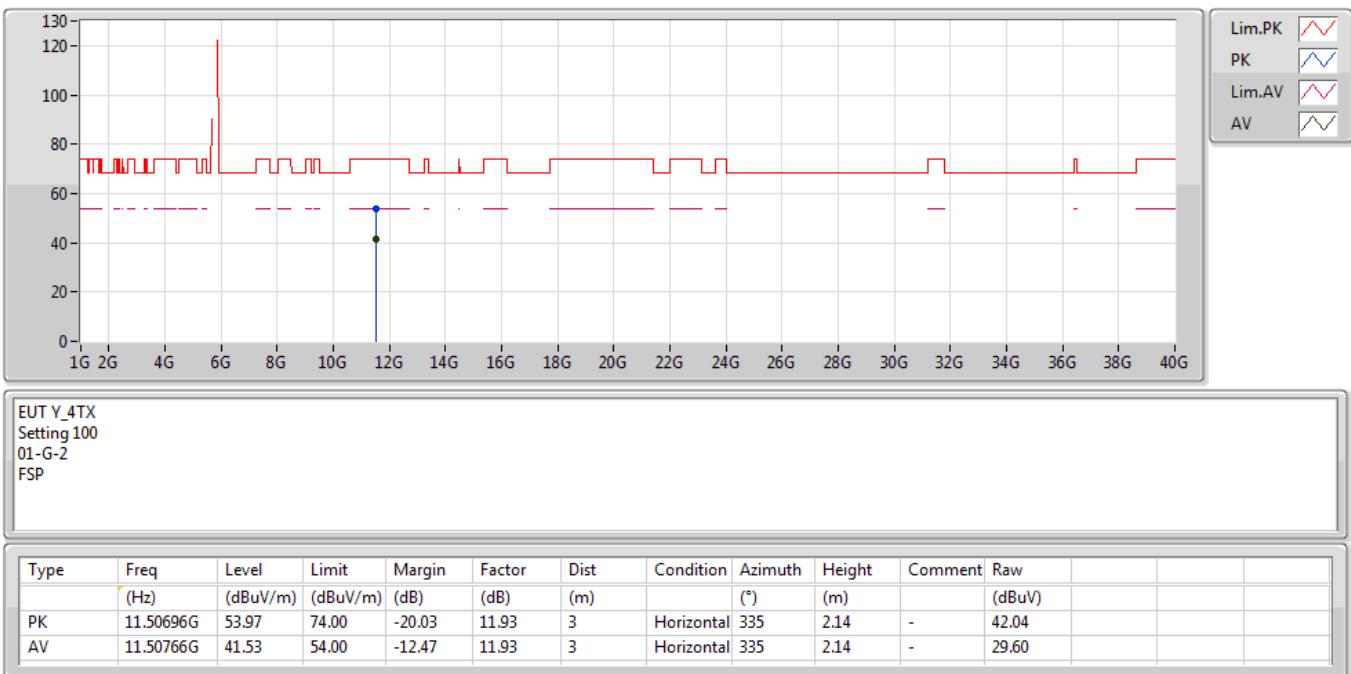
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.51166G	54.28	74.00	-19.72	11.93	3	Vertical	297	2.50	-	42.35			
AV	11.51364G	41.29	54.00	-12.71	11.93	3	Vertical	297	2.50	-	29.36			



802.11ac VHT40_Nss1,(MCS0)_4TX

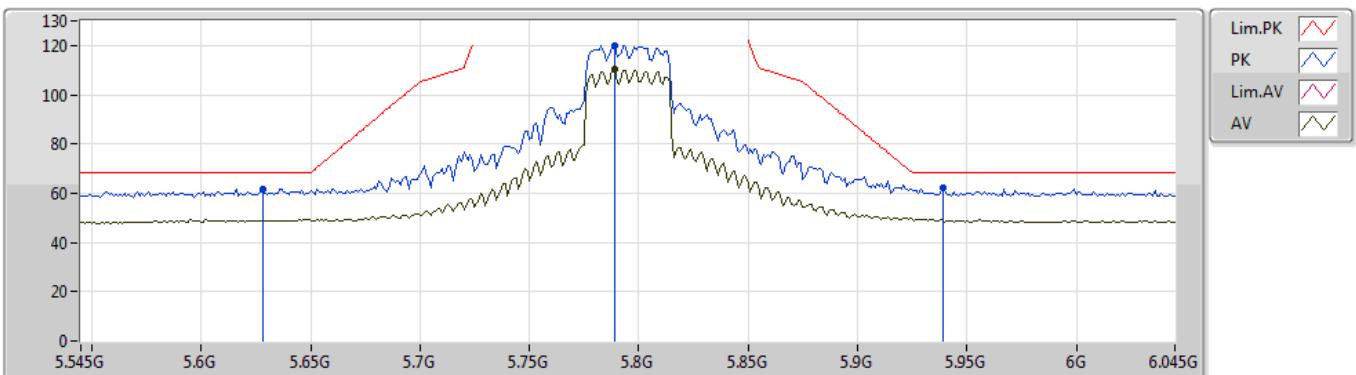
25/07/2019

5755MHz_TX



802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

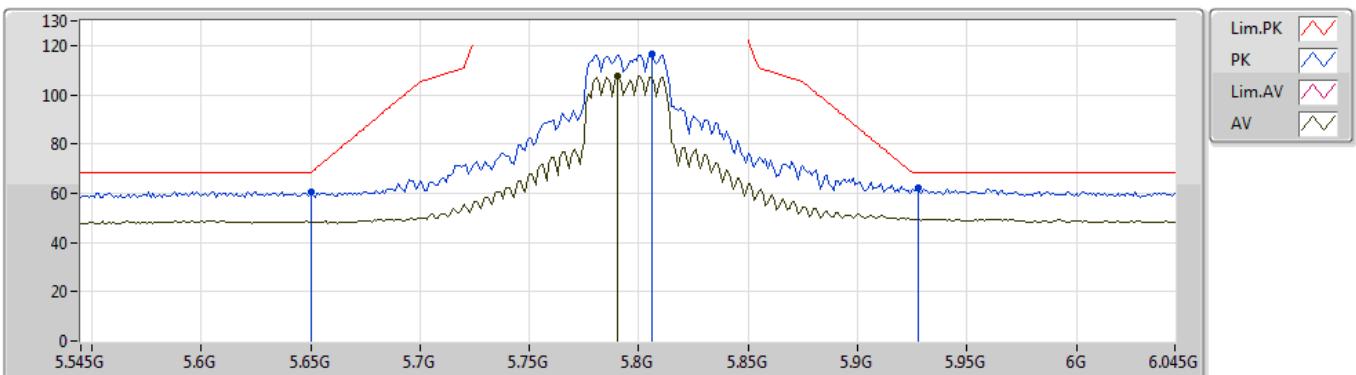
5795MHz_TX


EUT Y_4TX
 Setting 100
 01-S-5-10
 FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.628G	61.88	68.20	-6.32	5.67	3	Vertical	333	1.49	-	56.21			
PK	5.789G	120.18	Inf	-Inf	5.94	3	Vertical	333	1.49	-	114.24			
AV	5.789G	110.20	Inf	-Inf	5.94	3	Vertical	333	1.49	-	104.26			
PK	5.939G	62.11	68.20	-6.09	6.88	3	Vertical	333	1.49	-	55.23			

802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5795MHz_TX


EUT Y_4TX
Setting 100
01-S-5-10
FSP

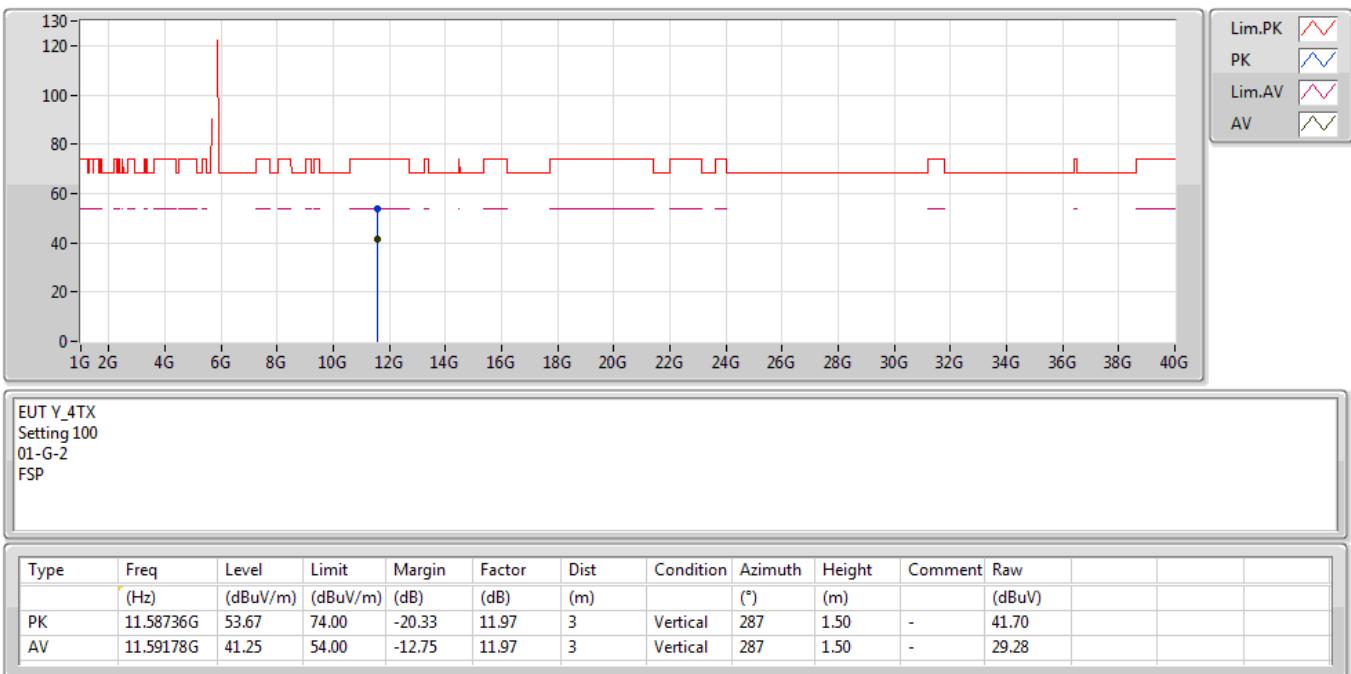
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.65G	60.69	68.20	-7.51	5.69	3	Horizontal	99	2.30	-	55.00			
PK	5.806G	116.39	Inf	-Inf	6.01	3	Horizontal	99	2.30	-	110.38			
AV	5.79G	107.57	Inf	-Inf	5.94	3	Horizontal	99	2.30	-	101.63			
PK	5.928G	61.99	68.20	-6.21	6.82	3	Horizontal	99	2.30	-	55.17			



802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5795MHz_TX

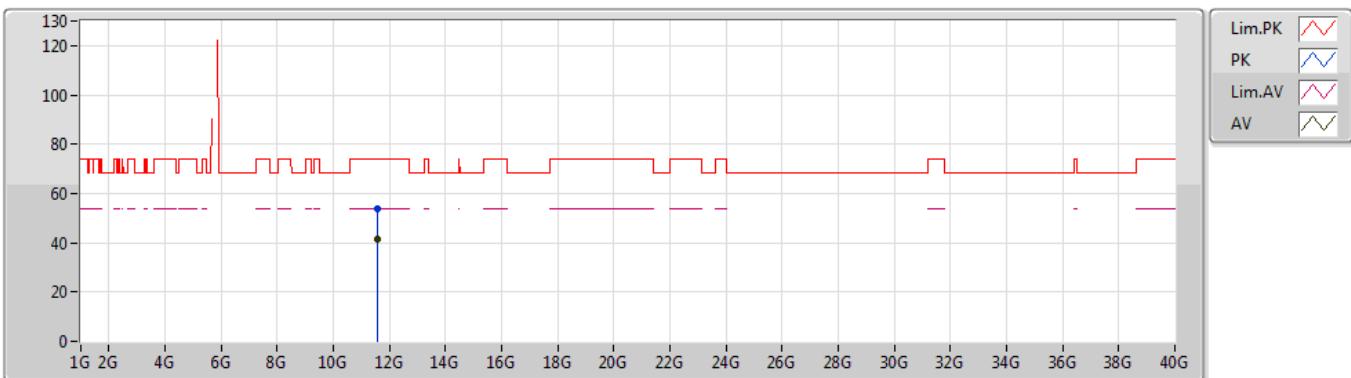




802.11ac VHT40_Nss1,(MCS0)_4TX

25/07/2019

5795MHz_TX

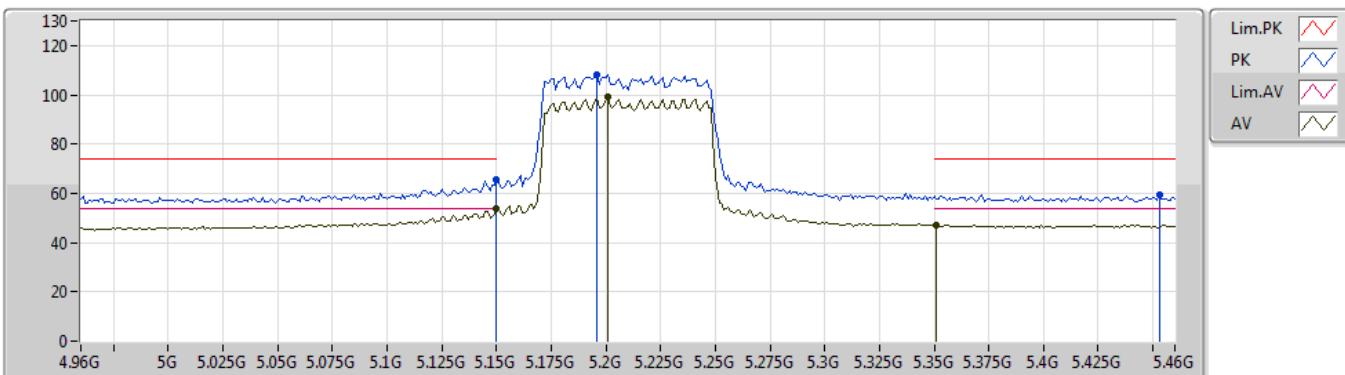


EUT Y_4TX
Setting 100
01-G-2
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.58506G	53.86	74.00	-20.14	11.97	3	Horizontal	226	2.14	-	41.89			
AV	11.58606G	41.51	54.00	-12.49	11.97	3	Horizontal	226	2.14	-	29.54			

802.11ac VHT80_Nss1,(MCS0)_4TX

25/07/2019

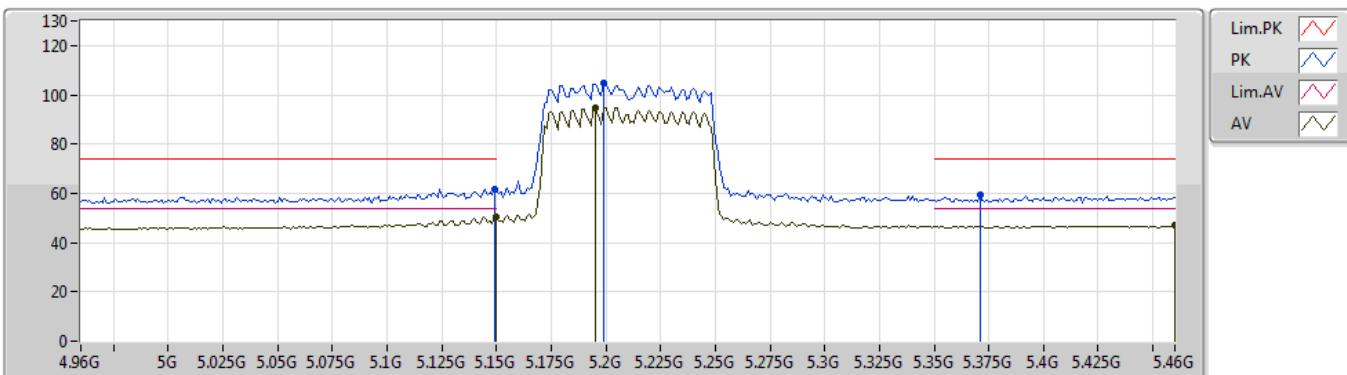
5210MHz_TX


EUT Y_4TX
Setting 66
01-S-5-10
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1499G	65.47	74.00	-8.53	4.25	3	Vertical	102	1.52	-	61.22			
AV	5.1499G	53.81	54.00	-0.19	4.25	3	Vertical	102	1.52	-	49.56			
PK	5.196G	108.16	Inf	-Inf	4.27	3	Vertical	102	1.52	-	103.89			
AV	5.201G	99.12	Inf	-Inf	4.27	3	Vertical	102	1.52	-	94.85			
PK	5.453G	59.14	74.00	-14.86	5.19	3	Vertical	102	1.52	-	53.95			
AV	5.351G	47.11	54.00	-6.89	4.81	3	Vertical	102	1.52	-	42.30			

802.11ac VHT80_Nss1,(MCS0)_4TX

25/07/2019

5210MHz_TX


EUT Y_4TX
Setting 66
01-S-5-10
FSP

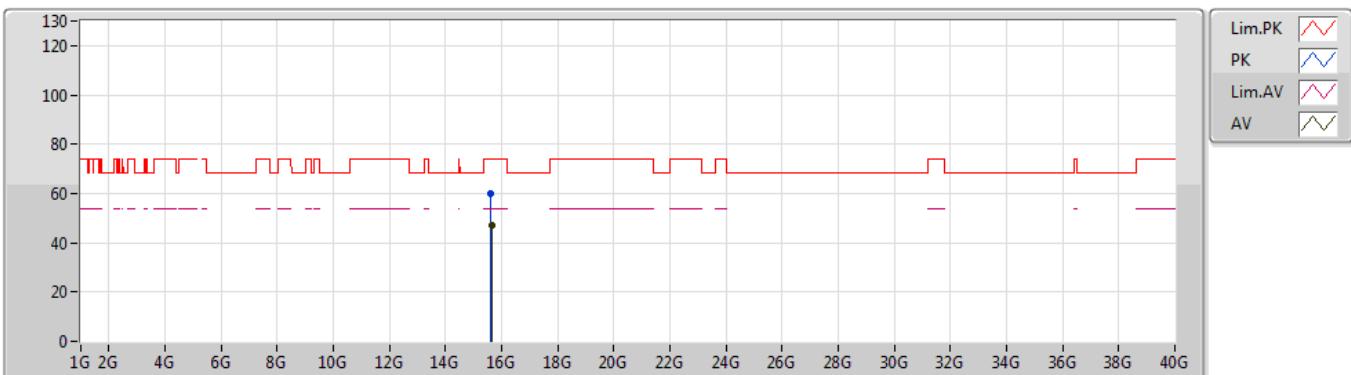
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.149G	61.68	74.00	-12.32	4.25	3	Horizontal	85	2.76	-	57.43			
AV	5.15G	50.55	54.00	-3.45	4.25	3	Horizontal	85	2.76	-	46.30			
PK	5.199G	104.63	Inf	-Inf	4.27	3	Horizontal	85	2.76	-	100.36			
AV	5.195G	94.72	Inf	-Inf	4.26	3	Horizontal	85	2.76	-	90.46			
PK	5.371G	59.25	74.00	-14.75	4.88	3	Horizontal	85	2.76	-	54.37			
AV	5.46G	46.85	54.00	-7.15	5.22	3	Horizontal	85	2.76	-	41.63			



802.11ac VHT80_Nss1,(MCS0)_4TX

25/07/2019

5210MHz_TX



EUT Y_4TX
Setting 66
01-G-2
FSP

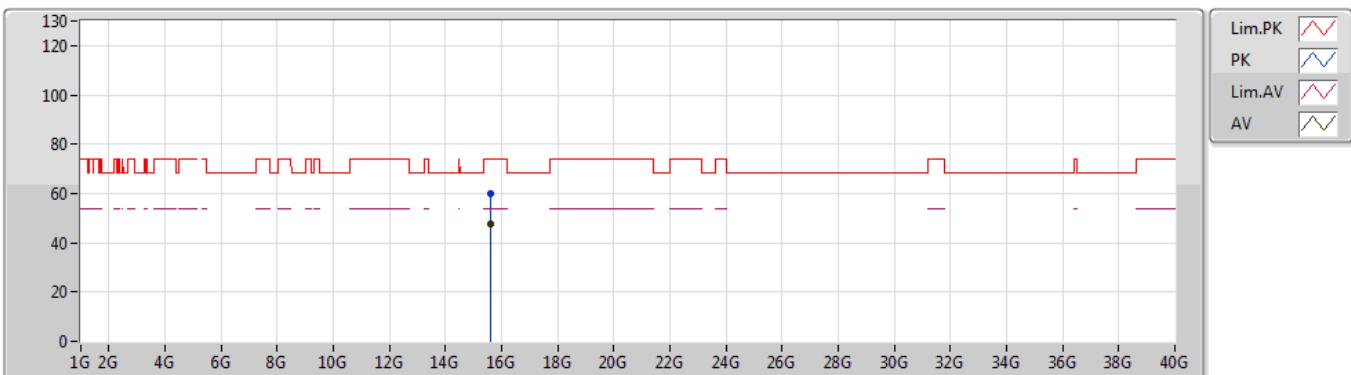
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	15.6299G	60.18	74.00	-13.82	14.34	3	Vertical	101	2.76	-	45.84			
AV	15.63284G	47.28	54.00	-6.72	14.35	3	Vertical	101	2.76	-	32.93			



802.11ac VHT80_Nss1,(MCS0)_4TX

25/07/2019

5210MHz_TX



EUT Y_4TX
Setting 66
01-G-2
FSP

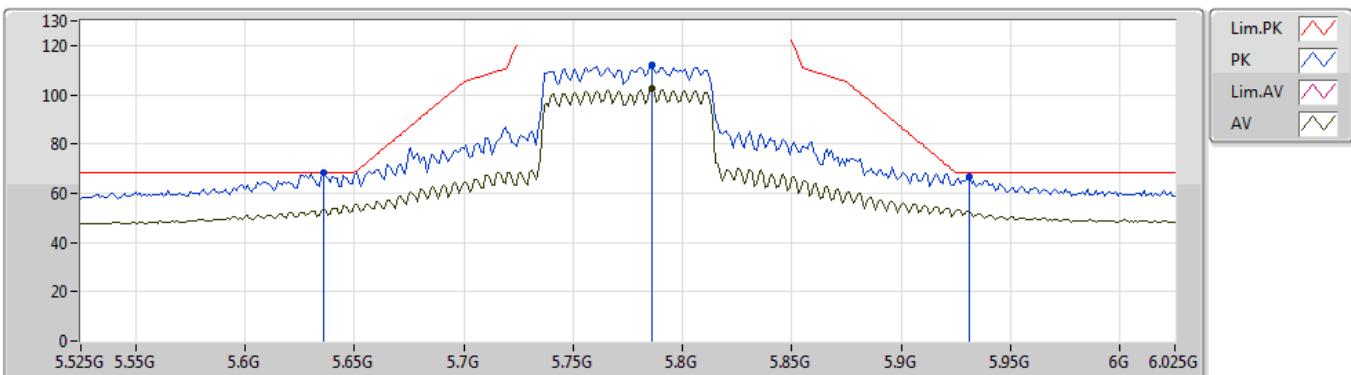
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	15.627G	59.92	74.00	-14.08	14.35	3	Horizontal	339	1.45	-	45.57			
AV	15.6269G	47.39	54.00	-6.61	14.35	3	Horizontal	339	1.45	-	33.04			



802.11ac VHT80_Nss1,(MCS0)_4TX

01/08/2019

5775MHz_TX



EUT Y_4TX
Setting 92
01-D-1-10
FSP

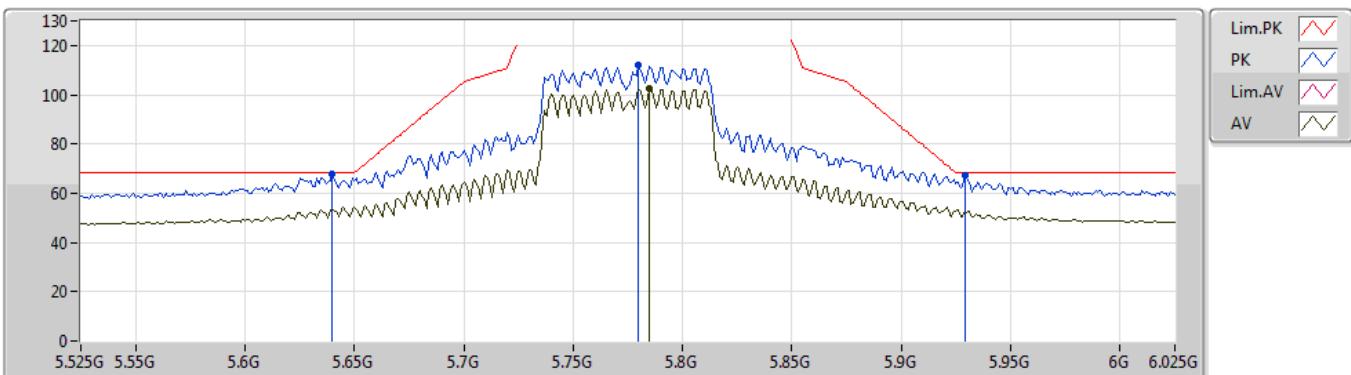
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.636G	68.17	68.20	-0.03	5.68	3	Vertical	96	1.49	-	62.49			
PK	5.786G	111.95	Inf	-Inf	5.92	3	Vertical	96	1.49	-	106.03			
AV	5.786G	102.36	Inf	-Inf	5.92	3	Vertical	96	1.49	-	96.44			
PK	5.931G	66.50	68.20	-1.70	6.83	3	Vertical	96	1.49	-	59.67			



802.11ac VHT80_Nss1,(MCS0)_4TX

01/08/2019

5775MHz_TX



EUT Y_4TX
Setting 92
01-D-1-10
FSP

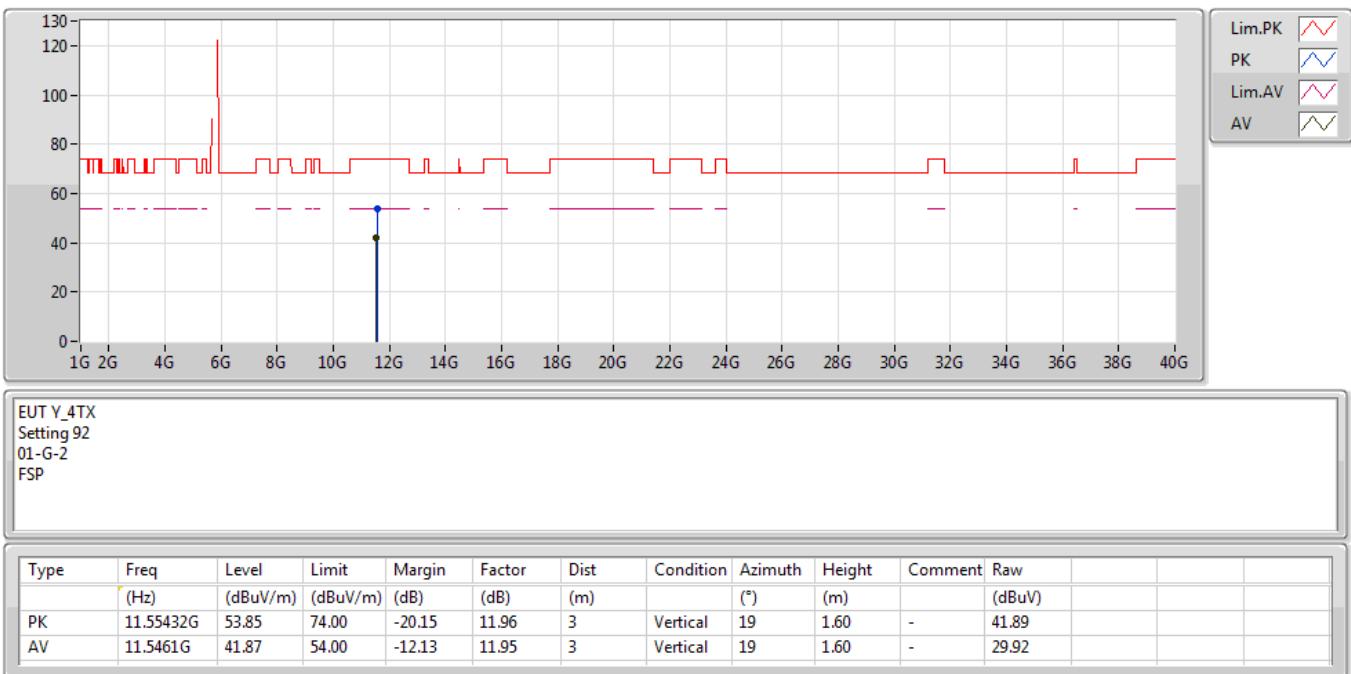
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.64G	67.57	68.20	-0.63	5.68	3	Horizontal	80	2.48	-	61.89			
PK	5.78G	111.80	Inf	-Inf	5.91	3	Horizontal	80	2.48	-	105.89			
AV	5.785G	102.44	Inf	-Inf	5.92	3	Horizontal	80	2.48	-	96.52			
PK	5.929G	67.47	68.20	-0.73	6.83	3	Horizontal	80	2.48	-	60.64			



802.11ac VHT80_Nss1,(MCS0)_4TX

01/08/2019

5775MHz_TX

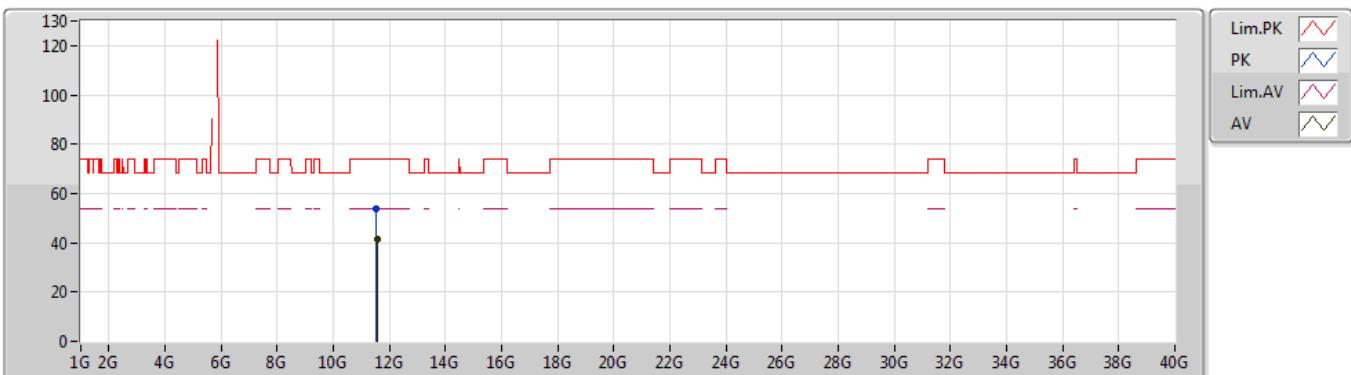




802.11ac VHT80_Nss1,(MCS0)_4TX

01/08/2019

5775MHz_TX

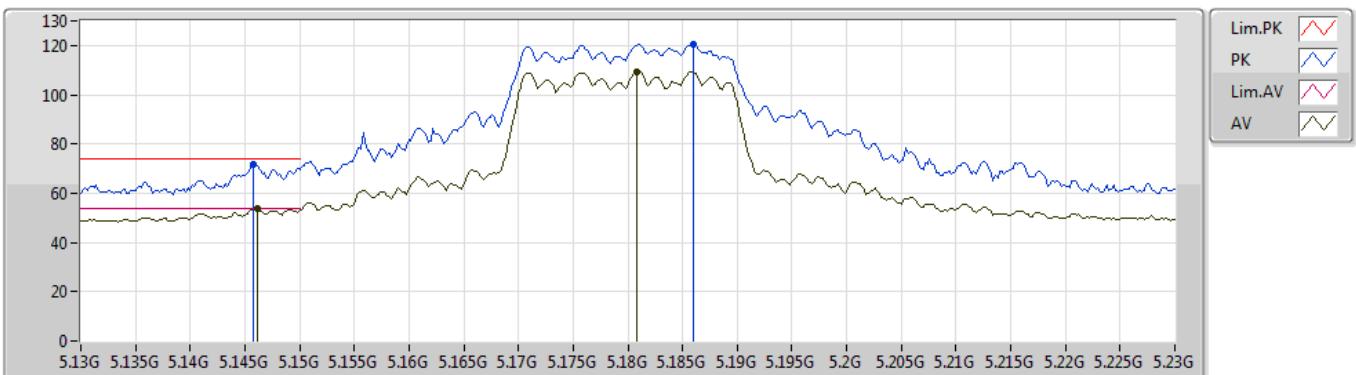


EUT Y_4TX
Setting 92
01-G-2
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	11.54908G	53.66	74.00	-20.34	11.95	3	Horizontal	112	1.18	-	41.71			
AV	11.55308G	41.44	54.00	-12.56	11.96	3	Horizontal	112	1.18	-	29.48			

802.11ax HEW20_Nss1,(MCS0)_4TX

25/07/2019

5180MHz_TX


EUT Y_4TX
 Setting 84
 01-D-1-10
 FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	5.1458G	71.95	74.00	-2.05	4.25	3	Vertical	98	1.50	-	67.70			
AV	5.1462G	53.85	54.00	-0.15	4.25	3	Vertical	98	1.50	-	49.60			
PK	5.186G	120.48	Inf	-Inf	4.27	3	Vertical	98	1.50	-	116.21			
AV	5.1808G	109.49	Inf	-Inf	4.26	3	Vertical	98	1.50	-	105.23			