



FCC RADIO TEST REPORT

FCC ID : MSQ-RTAXI600
Equipment : Wireless-AX5700 Dual-band Gigabit Router
Brand Name : ASUS
Model Name : RT-AX86U/RT-AX5700
Applicant : ASUSTeK COMPUTER INC.
4F, No. 150, Li-Te Rd., Peitou, Taipei 112, Taiwan
Manufacturer (1) : Compal Networking(KunShan) CO., LTD.
No.520,Nan Bang RD., Economic & Technical
Development Zone, KunShan,JiangSu,China
Manufacturer (2) : ARCADYAN TECHNOLOGY (VIETNAM) CO., LTD.
Ba Thien Industrial Park, Ba Hien commune, Binh
Xuyen district, Vinh Phuc Province
Standard : 47 CFR FCC Part 15.407

The product was received on Dec. 05, 2019, and testing was started from Dec. 05, 2019 and completed on Jan. 31, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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


Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.0



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:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. 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: Cindy Peng



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]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-132 [6]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4TX
5.15-5.25GHz	802.11n HT20	20	4TX
5.15-5.25GHz	802.11n HT20-BF	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11ac VHT20-BF	20	4TX
5.15-5.25GHz	802.11ax HEW20	20	4TX
5.15-5.25GHz	802.11ax HEW20-BF	20	4TX
5.15-5.25GHz	802.11n HT40	40	4TX
5.15-5.25GHz	802.11n HT40-BF	40	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	4TX
5.15-5.25GHz	802.11ax HEW40	40	4TX
5.15-5.25GHz	802.11ax HEW40-BF	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	4TX
5.15-5.25GHz	802.11ax HEW80	80	4TX
5.15-5.25GHz	802.11ax HEW80-BF	80	4TX
5.15-5.25GHz	802.11ac VHT160	160	4TX
5.15-5.25GHz	802.11ac VHT160-BF	160	4TX
5.15-5.25GHz	802.11ax HEW160	160	4TX
5.15-5.25GHz	802.11ax HEW160-BF	160	4TX
5.25-5.35GHz	802.11a	20	4TX
5.25-5.35GHz	802.11n HT20	20	4TX
5.25-5.35GHz	802.11n HT20-BF	20	4TX
5.25-5.35GHz	802.11ac VHT20	20	4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	4TX
5.25-5.35GHz	802.11ax HEW20	20	4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	4TX
5.25-5.35GHz	802.11n HT40	40	4TX
5.25-5.35GHz	802.11n HT40-BF	40	4TX
5.25-5.35GHz	802.11ac VHT40	40	4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	4TX
5.25-5.35GHz	802.11ax HEW40	40	4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	4TX
5.25-5.35GHz	802.11ac VHT80	80	4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	4TX
5.25-5.35GHz	802.11ax HEW80	80	4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	4TX



Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ac VHT160	160	4TX
5.25-5.35GHz	802.11ac VHT160-BF	160	4TX
5.25-5.35GHz	802.11ax HEW160	160	4TX
5.25-5.35GHz	802.11ax HEW160-BF	160	4TX
5.47-5.725GHz	802.11a	20	4TX
5.47-5.725GHz	802.11n HT20	20	4TX
5.47-5.725GHz	802.11n HT20-BF	20	4TX
5.47-5.725GHz	802.11ac VHT20	20	4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	4TX
5.47-5.725GHz	802.11ax HEW20	20	4TX
5.47-5.725GHz	802.11ax HEW20-BF	20	4TX
5.47-5.725GHz	802.11n HT40	40	4TX
5.47-5.725GHz	802.11n HT40-BF	40	4TX
5.47-5.725GHz	802.11ac VHT40	40	4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	4TX
5.47-5.725GHz	802.11ax HEW40	40	4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	4TX
5.47-5.725GHz	802.11ac VHT80	80	4TX
5.47-5.725GHz	802.11ac VHT80-BF	80	4TX
5.47-5.725GHz	802.11ax HEW80	80	4TX
5.47-5.725GHz	802.11ax HEW80-BF	80	4TX
5.47-5.725GHz	802.11ac VHT160	160	4TX
5.47-5.725GHz	802.11ac VHT160-BF	160	4TX
5.47-5.725GHz	802.11ax HEW160	160	4TX
5.47-5.725GHz	802.11ax HEW160-BF	160	4TX
5.725-5.85GHz	802.11a	20	4TX
5.725-5.85GHz	802.11n HT20	20	4TX
5.725-5.85GHz	802.11n HT20-BF	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	4TX
5.725-5.85GHz	802.11ax HEW20	20	4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	4TX
5.725-5.85GHz	802.11n HT40	40	4TX
5.725-5.85GHz	802.11n HT40-BF	40	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	4TX
5.725-5.85GHz	802.11ax HEW40	40	4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	4TX



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ac VHT80	80	4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	4TX
5.725-5.85GHz	802.11ax HEW80	80	4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	4TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ HEW20, HEW40, HEW80 and HEW160 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

Set	Ant.	Port		Brand	P/N	Type	Connector	Antenna Gain (dBi)				
		2.4 GHz	5 GHz					2.4GHz	5GHz Band 1	5GHz Band 2	5GHz Band 3	5GHz Band 4
1	1	1	1	WHA YU	C660-510490-A	Dipole	Reversed-SMA	1.66	1.86	1.86	1.90	1.84
	2	2	3									
	3	3	4									
	4	-	2	WHA YU	C660-510390-A	PCB	I-PEX	-	2.90	2.90	3.00	2.52
2	1	-	-	WHA YU	C660-510492-A	Dipole	Reversed-SMA	1.52	1.41	1.45	1.72	1.74
	2	-	-									
	3	-	-									
	4	-	-	WHA YU	C660-510390-A	PCB	I-PEX	-	2.90	2.90	3.00	2.52
3	1	-	-	WHLSIN	RFDPA141500 SBLB802	Dipole	Reversed-SMA	1.52	1.66	1.76	1.82	1.65
	2	-	-									
	3	-	-									
	4	-	-	WHLSIN	RFPCA302603I M5B301	PCB	I-PEX	-	2.17	2.30	2.20	2.49

Set	Directional Gain (dBi)					
	2.4GHz	5GHz Band 1	5GHz Band 2	5GHz Band 3	5GHz Band 4	
	Nss1	Nss1	Nss1	Nss1	Nss1	Nss2
1	6.43	6.63	6.63	6.67	6.61	4.85

Note1: The above information was declared by manufacturer.

Note2: The EUT has three sets of antenna, and each set contains four antennas.

For 2.4GHz function (3TX/3RX):

Only the higher gain antenna "Set 1" was tested.

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

For 5GHz function (4TX/4RX):

Only the higher gain antenna "Set 1" was tested.

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

Note3: 5GHz Band with four antennas and device designed the three dipole antennas are used in the vertical position, the other one PCB antenna is used in the horizontal position.

So array gain only calculation $10\log(3)$.

**1.1.3 Mode Test Duty Cycle**

For Nss1:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.892	0.5	2.928m	1k
802.11ax HEW20-BF	0.915	0.39	2.928m	1k
802.11ax HEW40-BF	0.941	0.26	2.927m	1k
802.11ax HEW80-BF	0.952	0.21	4.17m	300
802.11ax HEW160-BF	0.961	0.17	4.823m	300

For Nss2 (Only 5775MHz):

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW80-BF	0.929	0.32	413.125u	3k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
TPC Function	☒	With TPC	☐	Without TPC
Test Software Version	Mtool V3.2.0.0			

Note: The above information was declared by manufacturer.

**1.1.5 Table for EUT Supports Functions**

Function	Support Type
AP Router	Master
Bridge	Client without radar detection
Repeater	Master
Mesh	Master

After evaluating, the most complex modes for “AP Router” and “Mesh” were performed for AC power-line conducted emissions test and recorded in this report.

1.1.6 Table for Multiple Listing

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

Model Name	Description
RT-AX86U	There is nothing different of two model names, just for different marketing use.
RT-AX5700	

From the above models, model: RT-AX86U was selected as representative model for the test and its data was recorded in this report.



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
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location		
☐	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
☒	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	20.9~22°C / 64~68%	Dec. 23, 2019~Jan. 20, 2020
Radiated	03CH01-CB	Eason Chen	23~24.5°C / 53~59%	Dec. 05, 2019~Jan. 31, 2020
AC Conduction	CO01-CB	Rick Yeh	21~22°C / 50~51%	Jan. 02, 2020~Jan. 03, 2020

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086D 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

For Nss1:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	88
5200MHz	94
5240MHz	94
5260MHz	69
5300MHz	69
5320MHz	69
5500MHz	69
5580MHz	70
5700MHz	69
5720MHz Straddle 5.47-5.725GHz	69
5720MHz Straddle 5.725-5.85GHz	69
5745MHz	97
5785MHz	97
5825MHz	97
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	88
5200MHz	93
5240MHz	93
5260MHz	69
5300MHz	69
5320MHz	69
5500MHz	69
5580MHz	69
5700MHz	69
5720MHz Straddle 5.47-5.725GHz	68
5720MHz Straddle 5.725-5.85GHz	68
5745MHz	93
5785MHz	93
5825MHz	93
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	81



Mode	Power Setting
5230MHz	92
5270MHz	68
5310MHz	68
5510MHz	69
5550MHz	69
5670MHz	69
5710MHz Straddle 5.47-5.725GHz	69
5710MHz Straddle 5.725-5.85GHz	69
5755MHz	92
5795MHz	92
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	80
5290MHz	69
5530MHz	69
5610MHz	69
5690MHz Straddle 5.47-5.725GHz	70
5690MHz Straddle 5.725-5.85GHz	70
5775MHz	86
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	78
5250MHz Straddle 5.25-5.35GHz	78
5570MHz	70

For Nss2 (Only 5775MHz):

Mode	Power Setting
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5775MHz	94

Note:

- ♦ 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. Only beamforming mode has been tested and recorded 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	Normal Link
1	AP Router - EUT + Adapter 1
2	AP Router - EUT + Adapter 2
3	AP Router - EUT + Adapter 3
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4~5 will follow this same test mode.	
4	Mesh + WLAN 2.4GHz - EUT + Adapter 1
5	Mesh + WLAN 5GHz - EUT + Adapter 1
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
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	WLAN 2.4GHz - EUT + Adapter 1
2	WLAN 2.4GHz - EUT + Adapter 2
3	WLAN 2.4GHz - EUT + Adapter 3
Mode 3 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	WLAN 5GHz - EUT + Adapter 3
For operating mode 3 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX



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 + WLAN 5GHz
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 + WLAN 5GHz
Refer to Sporton Test Report No.: FA9D0510 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:

For non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated 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 RX Device 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	Remark
1	Adapter 1	DELTA	APD-45ZE B	INPUT: 100-240V ~ 50-60Hz, 1.2A OUTPUT: 19V, 2.37A	With the DC cable: Non-shielded, 1.8m
2	Adapter 2	DELTA	APD-45FE F	INPUT: 100-240V ~1.2A, 50-60Hz OUTPUT: 19V, 2.37A	With the DC cable: Non-shielded, 1.5m
3	Adapter 3	AcBel	ADH011	INPUT: 100-240V ~1.4A, 50-60Hz OUTPUT: 19.5V, 2.31A, 45W MAX	With the DC cable: Non-shielded, 1.5m
No.	Others				
4	Power cable*1: Non-shielded, 0.9m				
5	RJ-45 cable*1: Non-shielded, 1.5m				



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN1 NB	DELL	E6430	N/A
B	2.4G NB	DELL	E6430	N/A
C	5G NB	DELL	E6430	N/A
D	LAN4 NB	DELL	E6430	N/A
E	HDD3.0	Transcend	TS1TSJ25A3K	N/A
F	HDD3.0	Transcend	TS1TSJ25A3K	N/A
G	WAN NB	DELL	E6430	N/A
H	2.5G LAN PC	DELL	T3400	N/A

For RF Conducted and Radiated (below 1GHz):

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

For Radiated (above 1GHz):

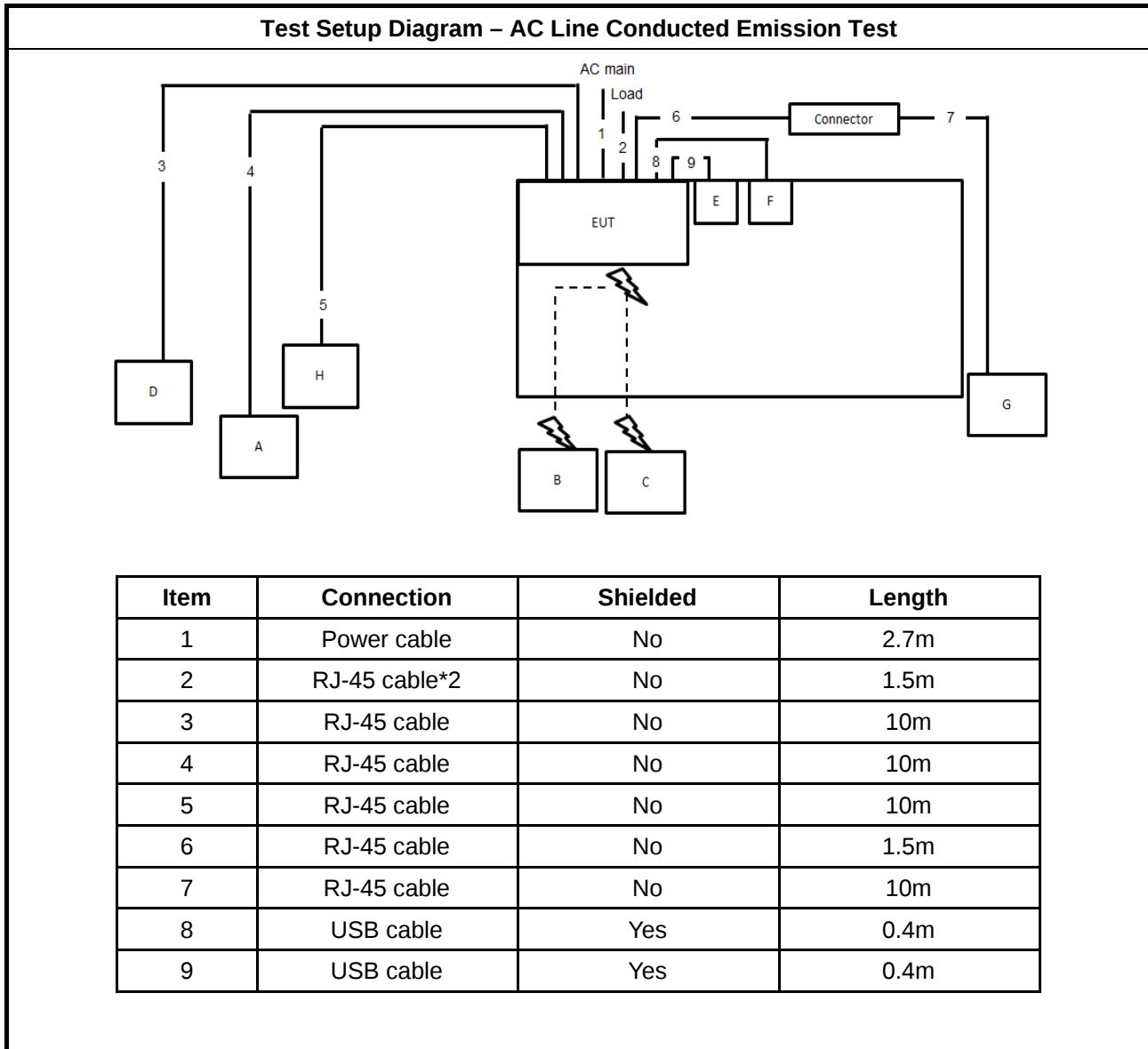
For non-beamforming mode:

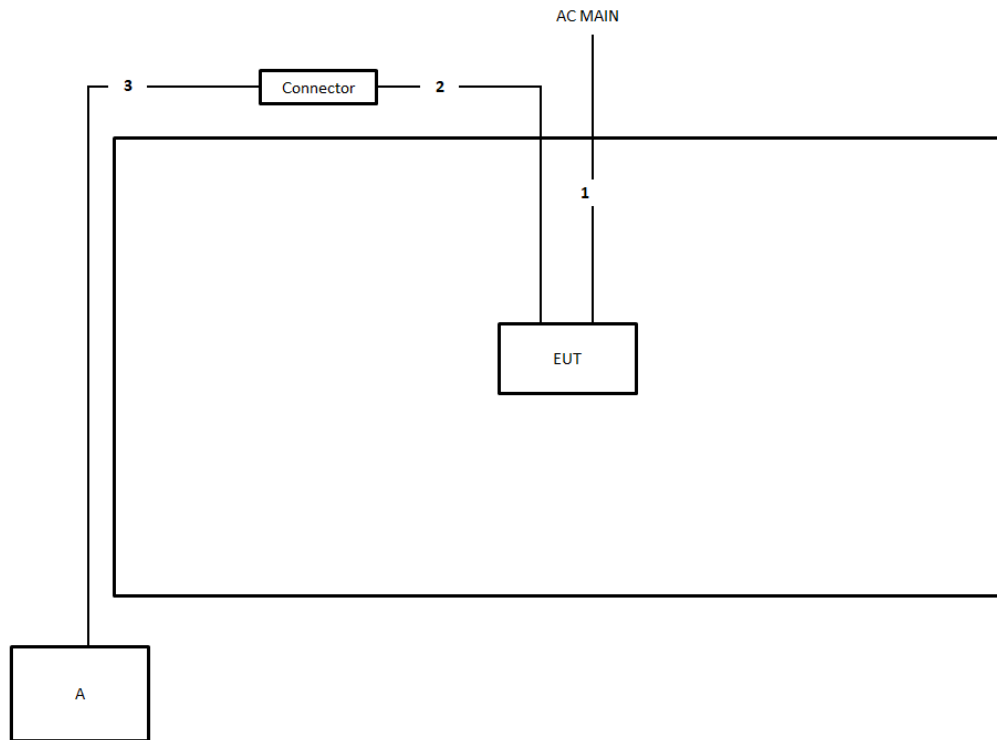
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

For beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	RX Device	ASUS	RT-AX86U	MSQ-RTAXI600

2.6 Test Setup Diagram

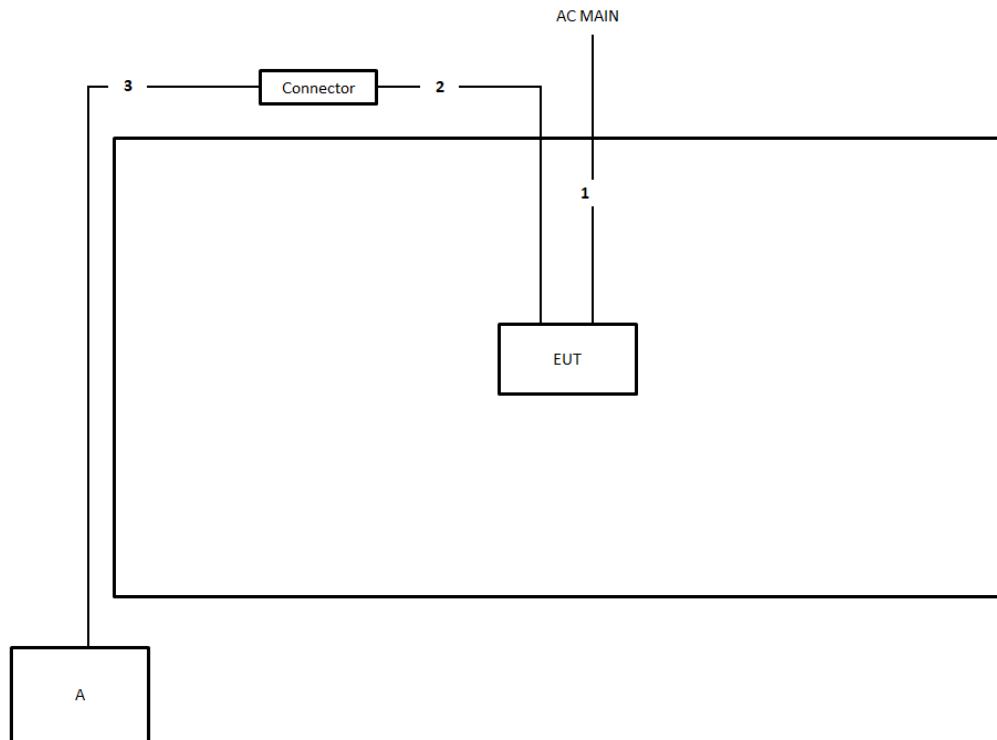


Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz

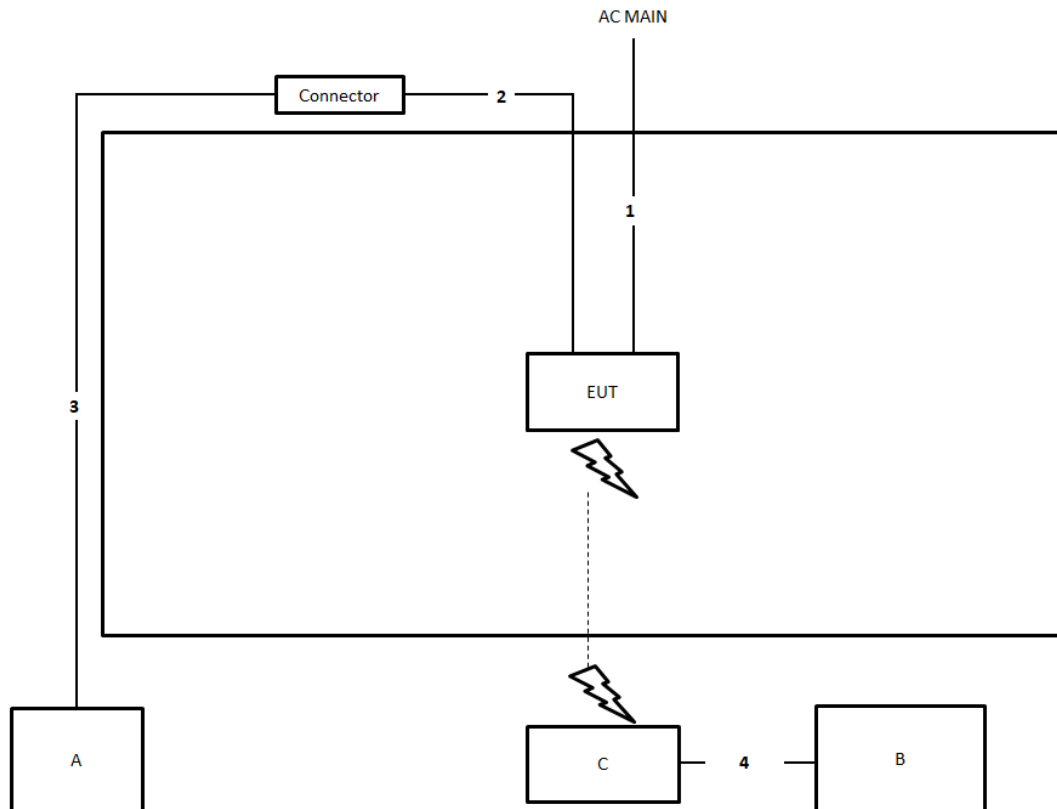
For non-beamforming mode:



Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz

For beamforming mode:



Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	10m



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.

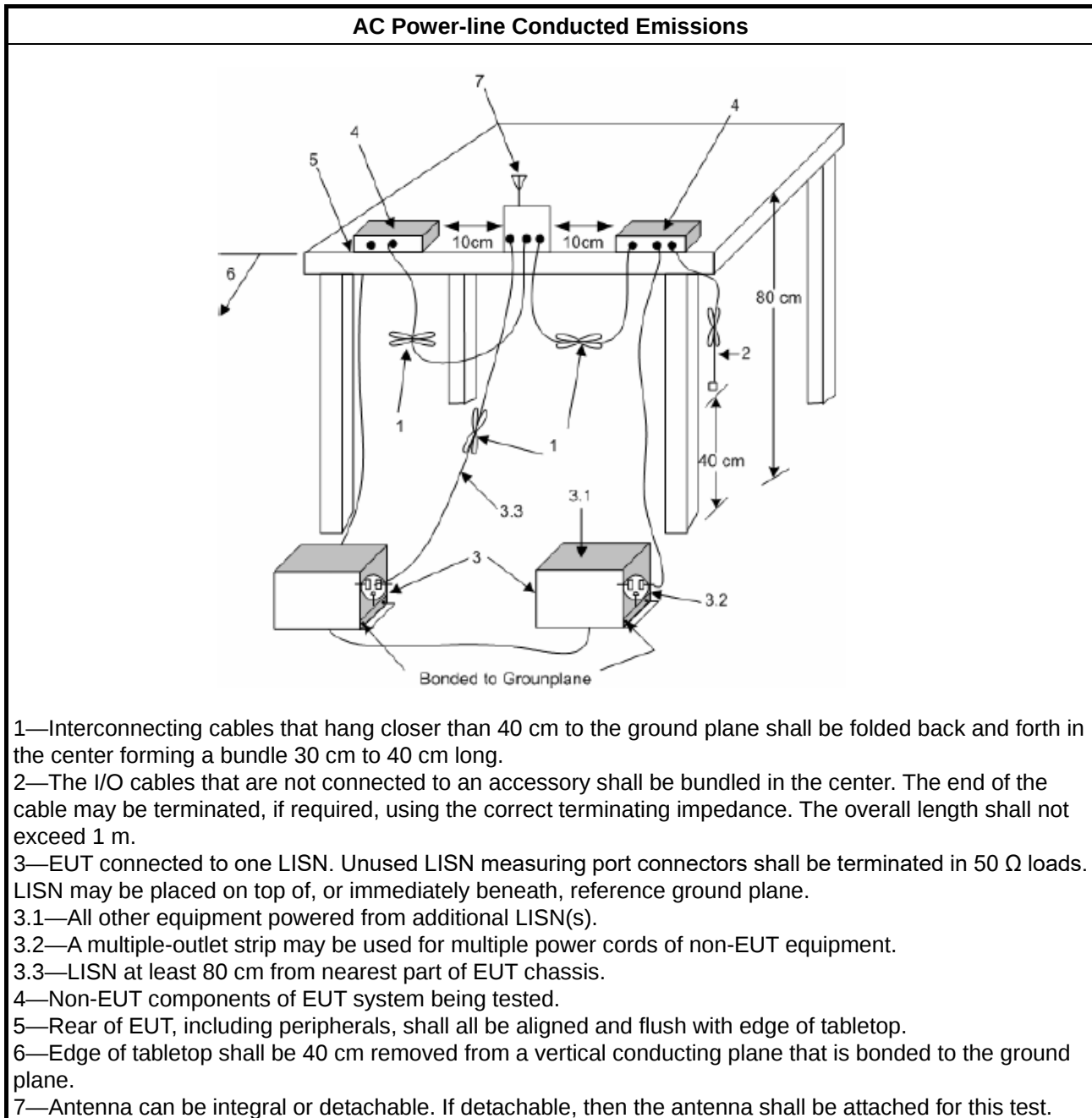
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☒	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.
LE-LAN Devices	
☐	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.
☐	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
☐	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
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

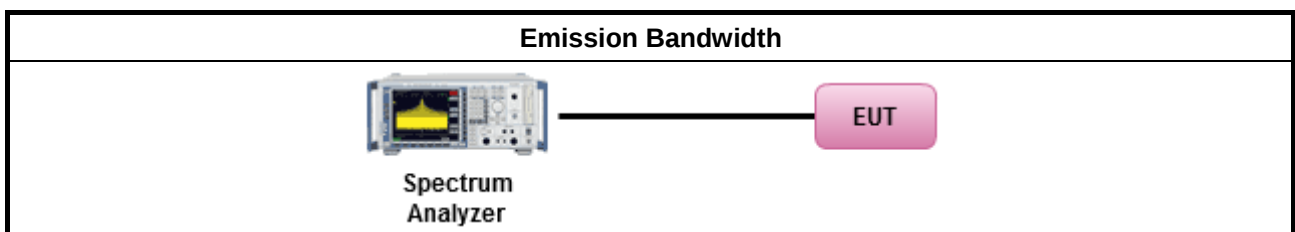
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	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	
☒ For the 5.15-5.25 GHz band:	
	- Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] - Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ 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 $G_{TX} > 23$ 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 $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒ 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ 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	
☐ 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.	
☐ 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	
☐ 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	
☐ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ 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

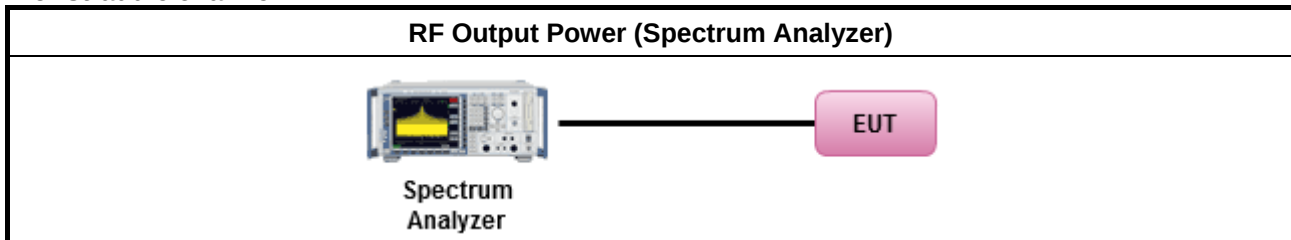
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

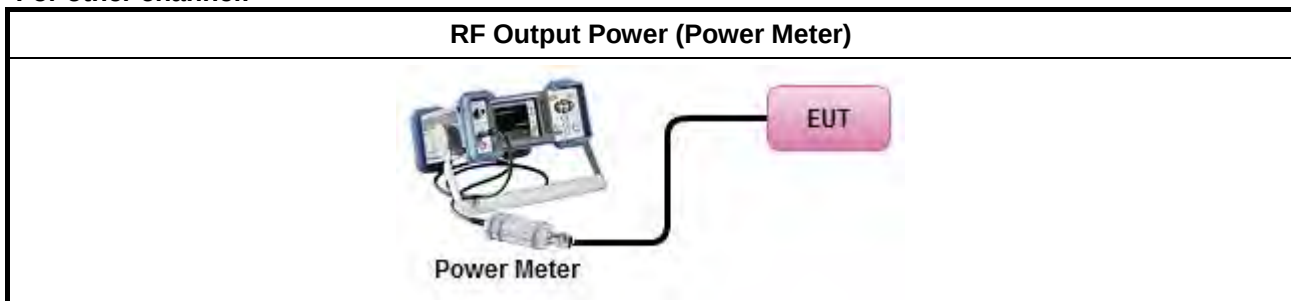
Test Method	
Maximum Conducted Output Power	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
For conducted measurement.	
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

For straddle channel:



For other channel:



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	
☒ For the 5.15-5.25 GHz band:	
	- 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 $PPSD = 11 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	- 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	
☐ For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	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 $\theta > 45^\circ$
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
☐ For the 5.725-5.85 GHz band:	
	- 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

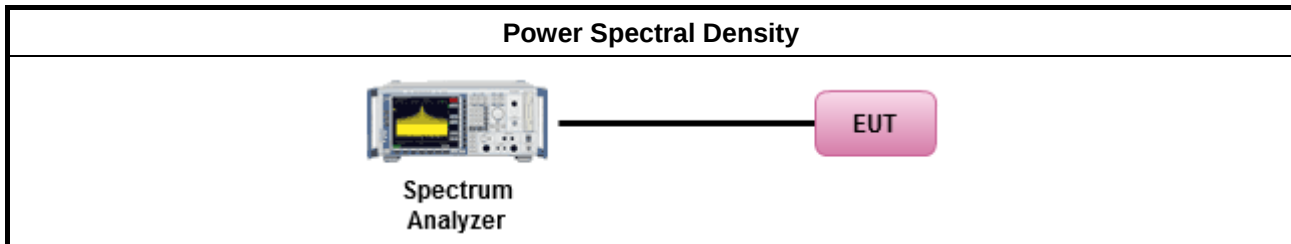
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method	
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:	
☐	Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
☒	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
☐	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	
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☒	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.
☐	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,
☐	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.
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	

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
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	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).

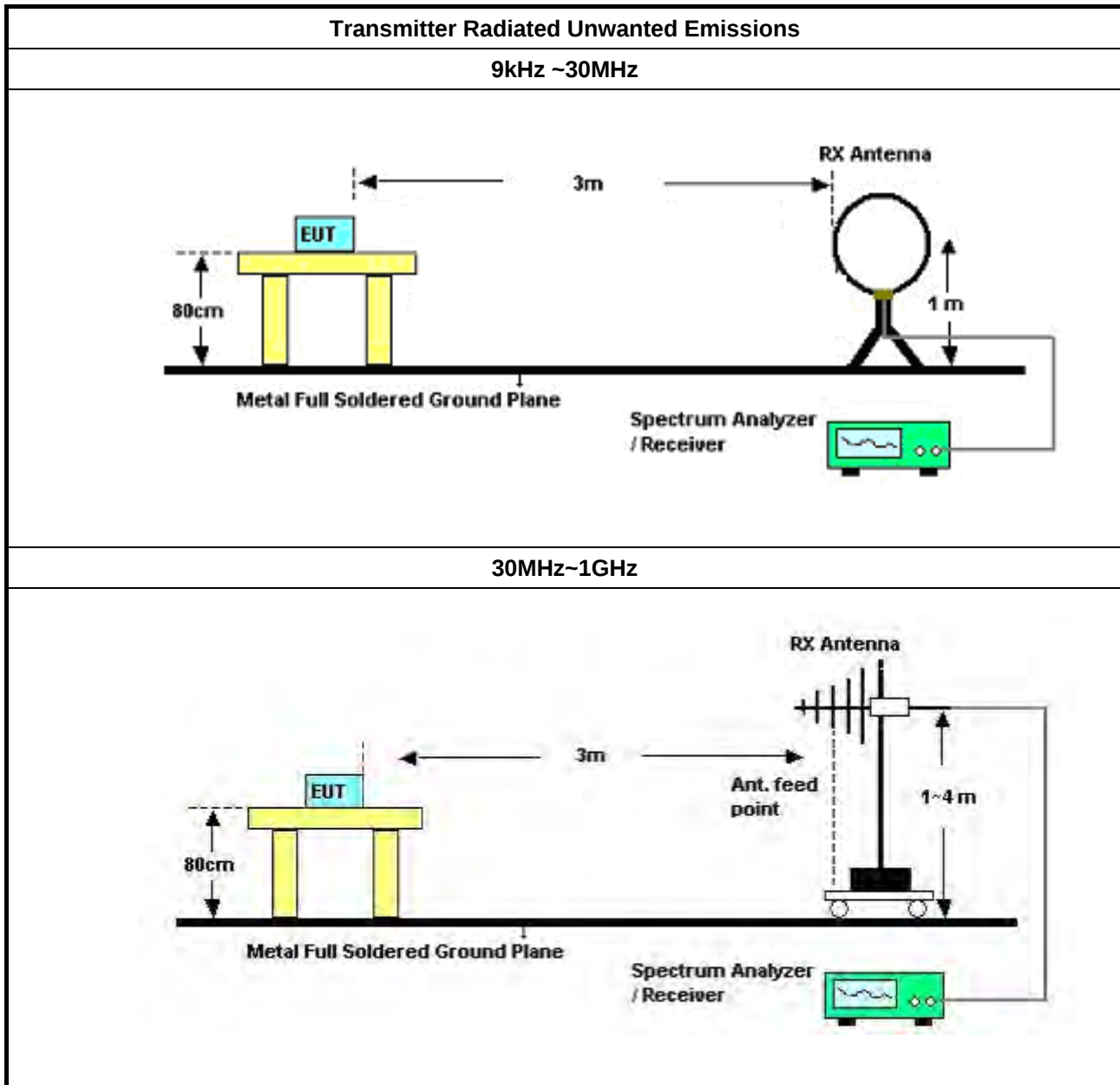
3.5.2 Measuring Instruments

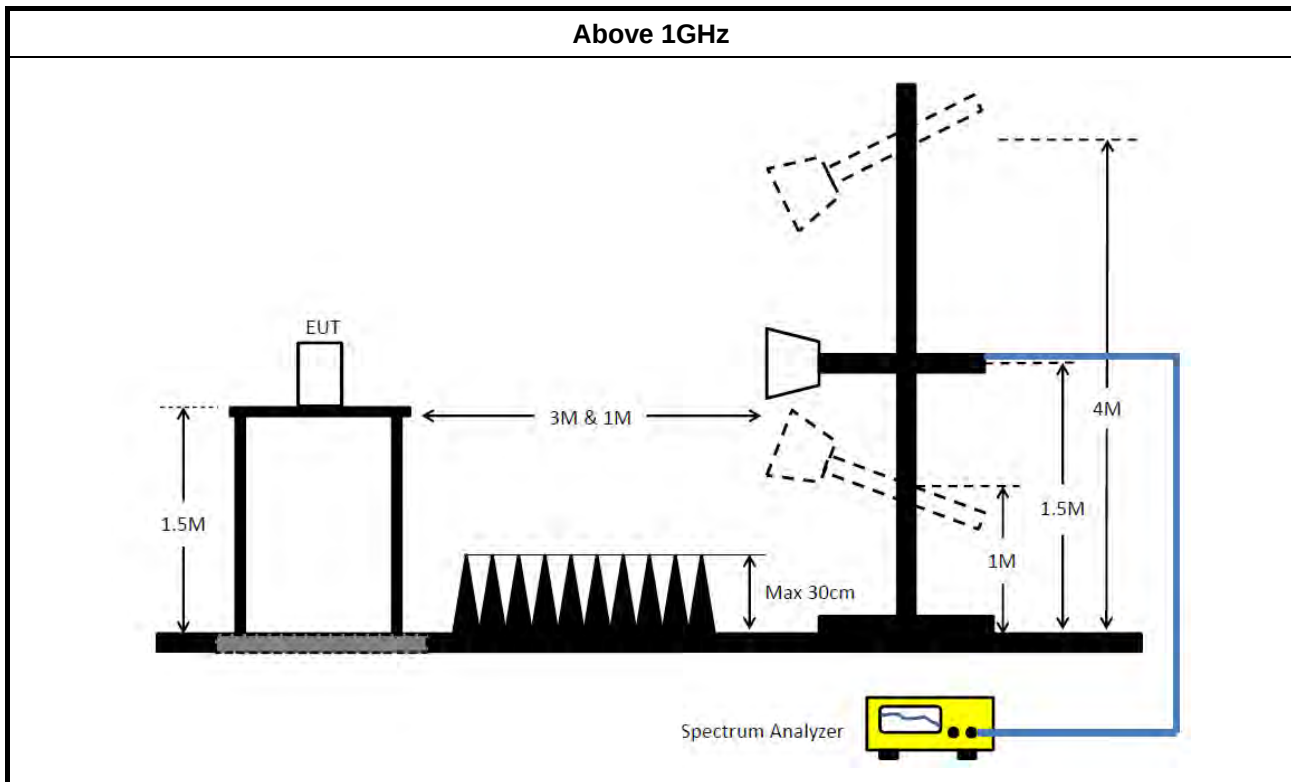
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
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).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	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.
	☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.	
For radiated measurement.	
	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.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.5.6 Transmitter Unwanted Emissions (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 Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

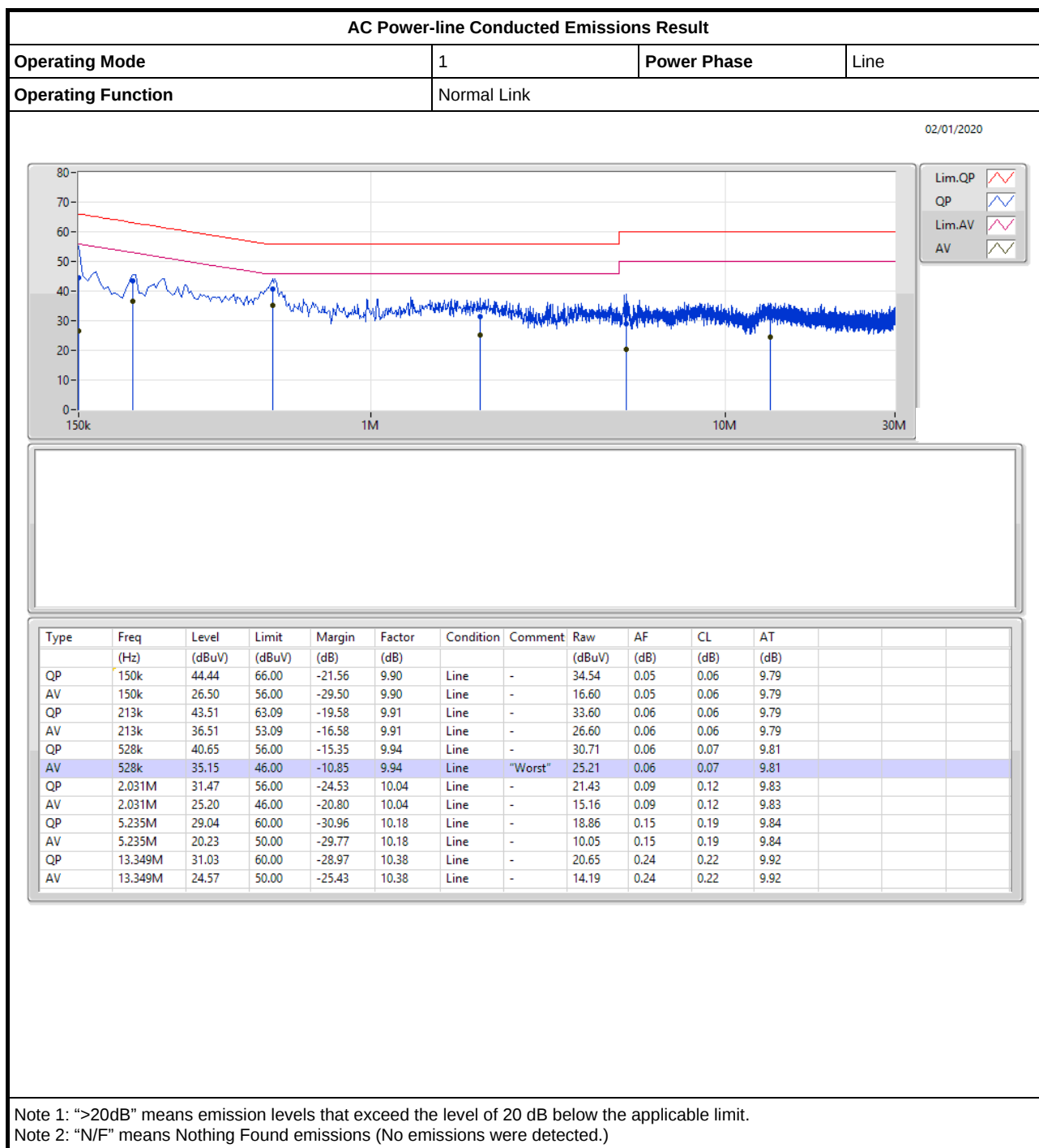
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 28, 2019	Jan. 29, 2020	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Jan. 11, 2019	Jan. 10, 2020	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH01-CB)
Bilog Antenna with 6dB Attenuator	Schaffner & EMCI	CBL6112 & N-6-06	2888 & AT-N0611	30MHz ~ 1GHz	Oct. 12, 2019	Oct. 11, 2020	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 04, 2019	Nov. 03, 2020	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Aug. 21, 2019	Jan. 07, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Apr. 23, 2019	Apr. 22, 2020	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-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. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~ 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)

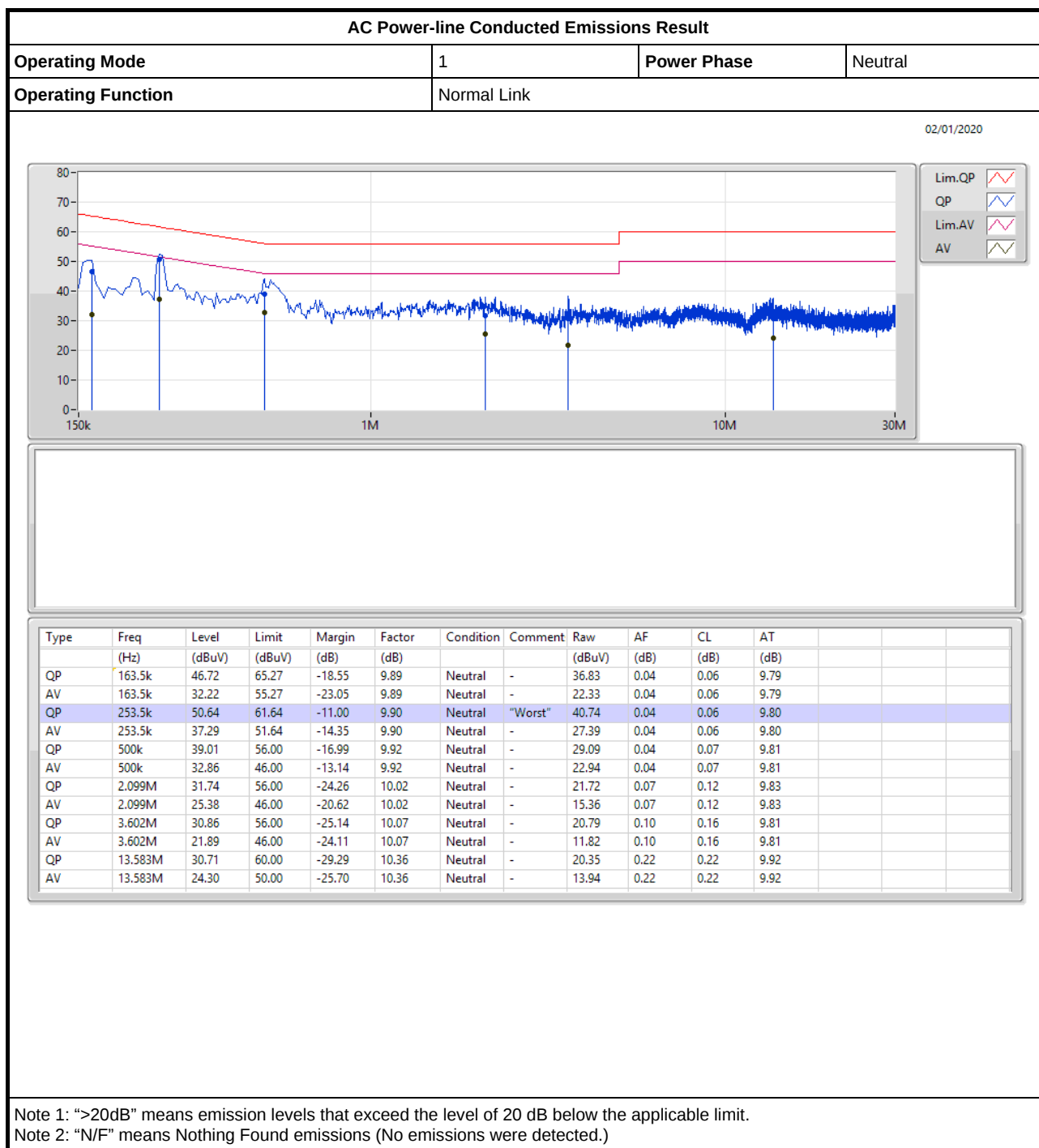


Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 18, 2019	Nov. 17, 2020	Conducted (TH01-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH01-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH01-CB)

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

N.C.R. means Non-Calibration required.





**For Nss1:
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	21.78M	16.802M	16M8D1D	20.97M	16.673M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.68M	19.118M	19M1D1D	21.27M	19.014M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	48.78M	37.653M	37M7D1D	39.78M	37.504M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.6M	76.799M	76M8D1D	81M	76.617M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	82.08M	77.626M	77M6D1D	81.24M	77.348M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	21.45M	16.77M	16M8D1D	20.88M	16.629M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.54M	19.104M	19M1D1D	21.24M	18.986M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.14M	37.602M	37M6D1D	39.66M	37.506M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.72M	76.813M	76M8D1D	81M	76.723M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	82.92M	77.575M	77M6D1D	81.96M	77.364M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	21.45M	16.753M	16M8D1D	15.505M	13.374M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.54M	19.057M	19M1D1D	15.593M	14.523M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.2M	37.56M	37M6D1D	34.95M	33.696M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.84M	76.842M	76M8D1D	75.563M	72.827M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	164.88M	155.07M	155MD1D	162.48M	154.939M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.32M	16.865M	16M9D1D	3.12M	4.107M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	18.93M	19.152M	19M2D1D	4.41M	4.629M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.5M	37.713M	37M7D1D	3.69M	4.042M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	76.32M	76.854M	76M9D1D	3.54M	4.087M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.06M	16.73M	21.39M	16.76M	21.18M	16.742M	21.12M	16.673M
5200MHz	Pass	Inf	20.97M	16.729M	21.45M	16.786M	21.78M	16.802M	21.18M	16.722M
5240MHz	Pass	Inf	20.97M	16.726M	21.39M	16.769M	21.75M	16.77M	21.15M	16.713M
5260MHz	Pass	Inf	21.15M	16.707M	21.24M	16.737M	21.21M	16.708M	20.88M	16.646M
5300MHz	Pass	Inf	21.09M	16.721M	21.33M	16.77M	21.12M	16.707M	21.06M	16.629M
5320MHz	Pass	Inf	21.09M	16.693M	21.45M	16.749M	21.27M	16.727M	21.15M	16.647M
5500MHz	Pass	Inf	21.12M	16.691M	21.21M	16.746M	21.15M	16.72M	21.21M	16.624M
5580MHz	Pass	Inf	21.12M	16.705M	21.45M	16.744M	21.06M	16.699M	21M	16.63M
5700MHz	Pass	Inf	21.18M	16.719M	21.39M	16.753M	21.27M	16.717M	21.12M	16.641M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.505M	13.381M	15.575M	13.39M	15.715M	13.411M	15.523M	13.374M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.135M	4.113M	3.12M	4.228M	3.12M	4.159M	3.12M	4.107M
5745MHz	Pass	500k	16.32M	16.829M	16.29M	16.825M	16.32M	16.824M	16.29M	16.831M
5785MHz	Pass	500k	16.32M	16.776M	16.32M	16.811M	16.32M	16.865M	16.29M	16.855M
5825MHz	Pass	500k	16.29M	16.773M	16.32M	16.808M	16.32M	16.838M	16.32M	16.756M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.48M	19.014M	21.27M	19.046M	21.42M	19.064M	21.48M	19.108M
5200MHz	Pass	Inf	21.54M	19.041M	21.36M	19.061M	22.68M	19.103M	21.57M	19.118M
5240MHz	Pass	Inf	22.14M	19.025M	21.39M	19.039M	21.54M	19.085M	22.2M	19.102M
5260MHz	Pass	Inf	21.48M	19.01M	21.24M	19.034M	21.45M	19.041M	21.36M	19.077M
5300MHz	Pass	Inf	21.48M	19.009M	21.39M	19.037M	21.42M	19.036M	21.54M	19.104M
5320MHz	Pass	Inf	21.48M	18.986M	21.39M	19.036M	21.54M	19.046M	21.36M	19.069M
5500MHz	Pass	Inf	21.51M	18.989M	21.33M	19.013M	21.51M	19.026M	21.36M	19.044M
5580MHz	Pass	Inf	21.51M	19.004M	21.45M	19.012M	21.54M	19.034M	21.51M	19.057M
5700MHz	Pass	Inf	21.51M	19.02M	21.33M	19.036M	21.48M	19.052M	21.36M	19.047M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.768M	14.523M	15.593M	14.524M	15.768M	14.543M	15.733M	14.545M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	4.629M	4.455M	4.672M	4.41M	4.654M	4.455M	4.709M
5745MHz	Pass	500k	18.93M	19.048M	18.84M	19.051M	18.87M	19.09M	18.84M	19.106M
5785MHz	Pass	500k	18.9M	19.036M	18.93M	19.039M	18.78M	19.098M	18.87M	19.13M
5825MHz	Pass	500k	18.78M	19.039M	18.87M	19.048M	18.84M	19.114M	18.84M	19.152M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.02M	37.572M	39.78M	37.51M	39.84M	37.504M	39.9M	37.512M
5230MHz	Pass	Inf	40.2M	37.575M	39.84M	37.575M	39.78M	37.592M	48.78M	37.653M
5270MHz	Pass	Inf	39.96M	37.507M	39.66M	37.506M	39.78M	37.519M	40.02M	37.516M
5310MHz	Pass	Inf	40.14M	37.509M	39.78M	37.513M	39.78M	37.548M	40.08M	37.602M
5510MHz	Pass	Inf	40.14M	37.514M	39.66M	37.497M	39.78M	37.52M	40.02M	37.56M
5550MHz	Pass	Inf	40.08M	37.528M	39.84M	37.504M	39.84M	37.521M	39.96M	37.512M
5670MHz	Pass	Inf	40.2M	37.535M	39.78M	37.541M	39.9M	37.552M	40.08M	37.557M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.1M	33.696M	34.95M	33.729M	36.075M	33.731M	35.175M	33.771M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.795M	4.07M	3.72M	4.042M	3.78M	4.072M	3.69M	4.072M
5755MHz	Pass	500k	37.02M	37.649M	36.96M	37.568M	36.96M	37.653M	37.5M	37.713M
5795MHz	Pass	500k	36.66M	37.606M	35.88M	37.54M	36.72M	37.632M	36.24M	37.654M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.12M	76.791M	81M	76.799M	81M	76.707M	81.6M	76.617M

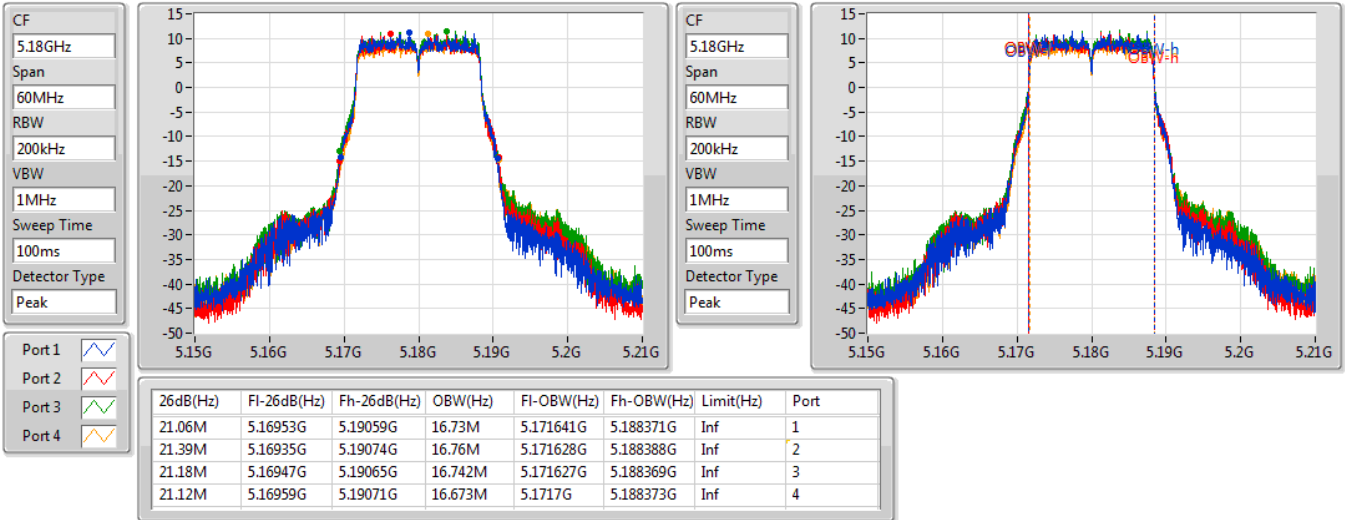
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5290MHz	Pass	Inf	81.24M	76.813M	81M	76.757M	81.48M	76.723M	81.72M	76.753M
5530MHz	Pass	Inf	81M	76.837M	81.12M	76.753M	81.72M	76.82M	81.84M	76.831M
5610MHz	Pass	Inf	81.12M	76.67M	81M	76.769M	81.48M	76.842M	81.72M	76.773M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.563M	72.891M	75.718M	72.953M	75.795M	72.827M	75.95M	72.975M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.81M	4.096M	3.54M	4.087M	3.78M	4.11M	3.54M	4.121M
5775MHz	Pass	500k	75.96M	76.854M	75.84M	76.779M	75.12M	76.762M	76.32M	76.843M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.08M	77.626M	82.08M	77.532M	81.48M	77.469M	81.24M	77.348M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.56M	77.364M	82.92M	77.466M	81.96M	77.473M	82.2M	77.575M
5570MHz	Pass	Inf	164.16M	154.939M	164.88M	154.965M	163.68M	154.969M	162.48M	155.07M

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

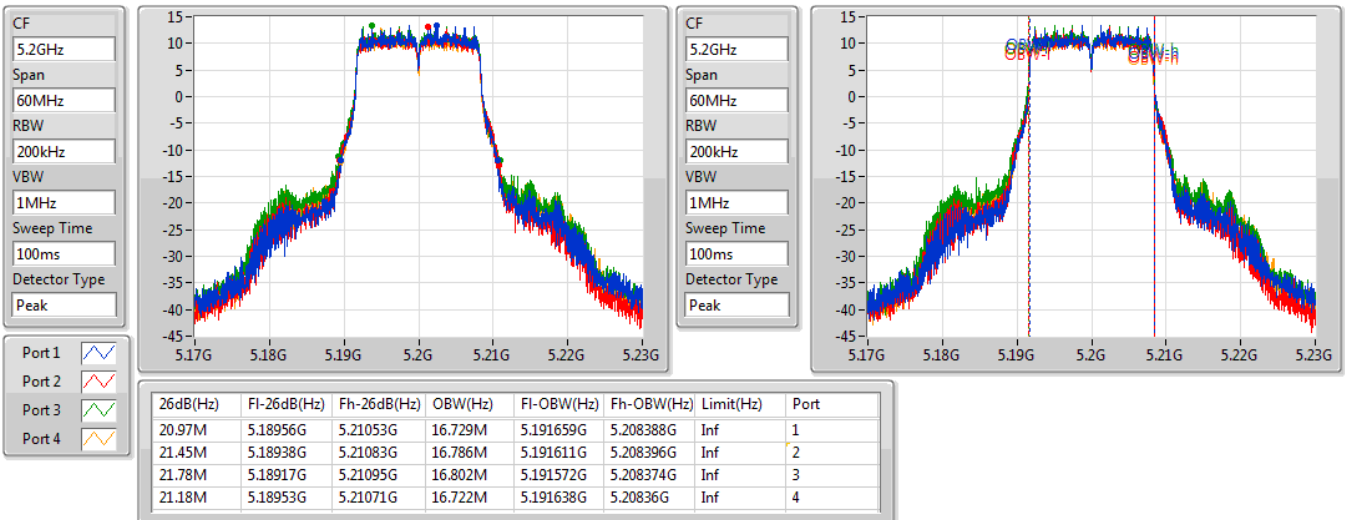
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX
EBW
5180MHz

09/01/2020

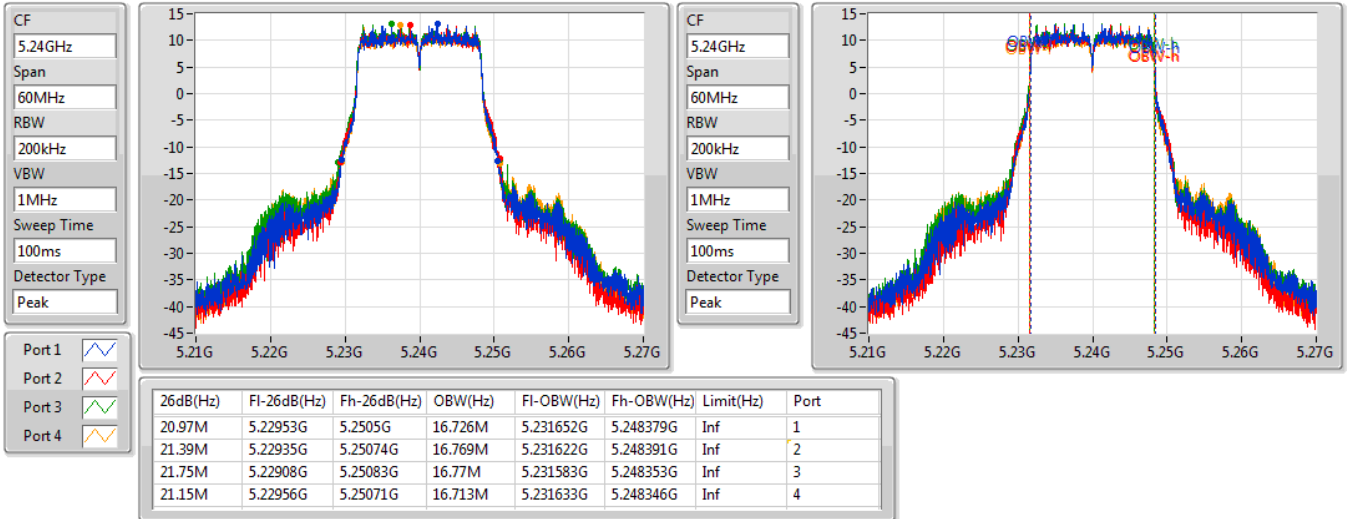

802.11a_Nss1,(6Mbps)_4TX
EBW
5200MHz

09/01/2020

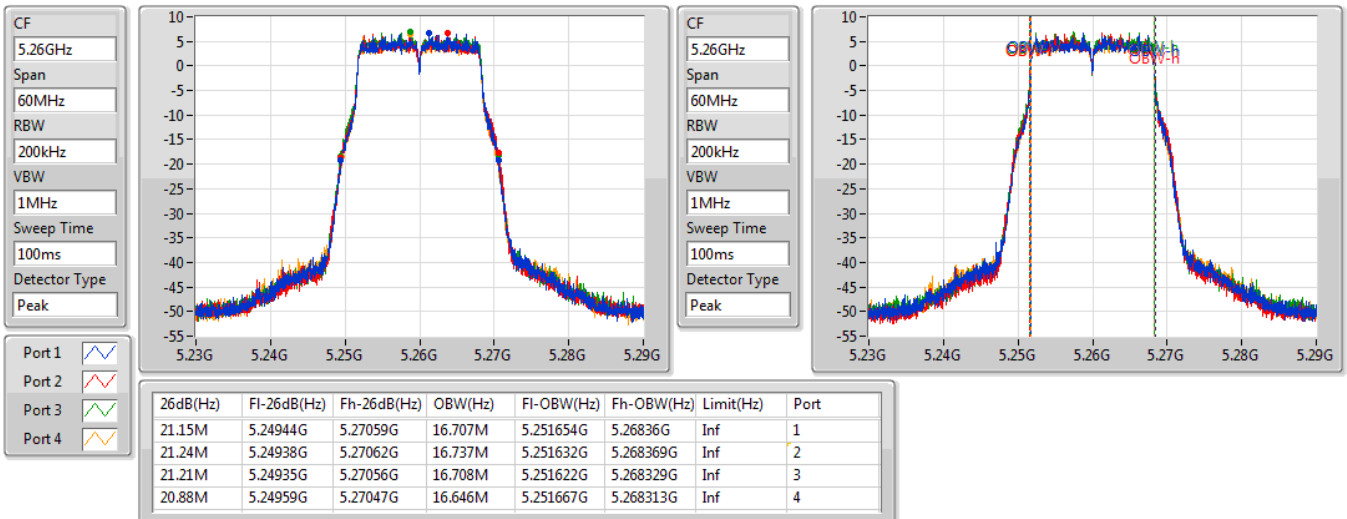


802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

09/01/2020

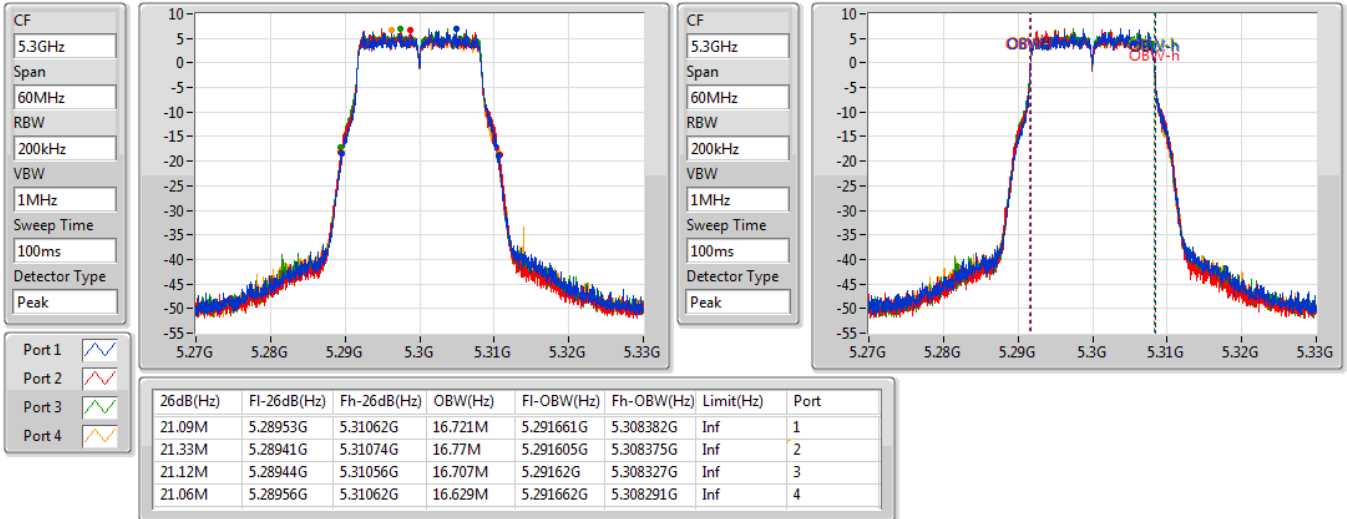

802.11a_Nss1,(6Mbps)_4TX
EBW
5260MHz

09/01/2020

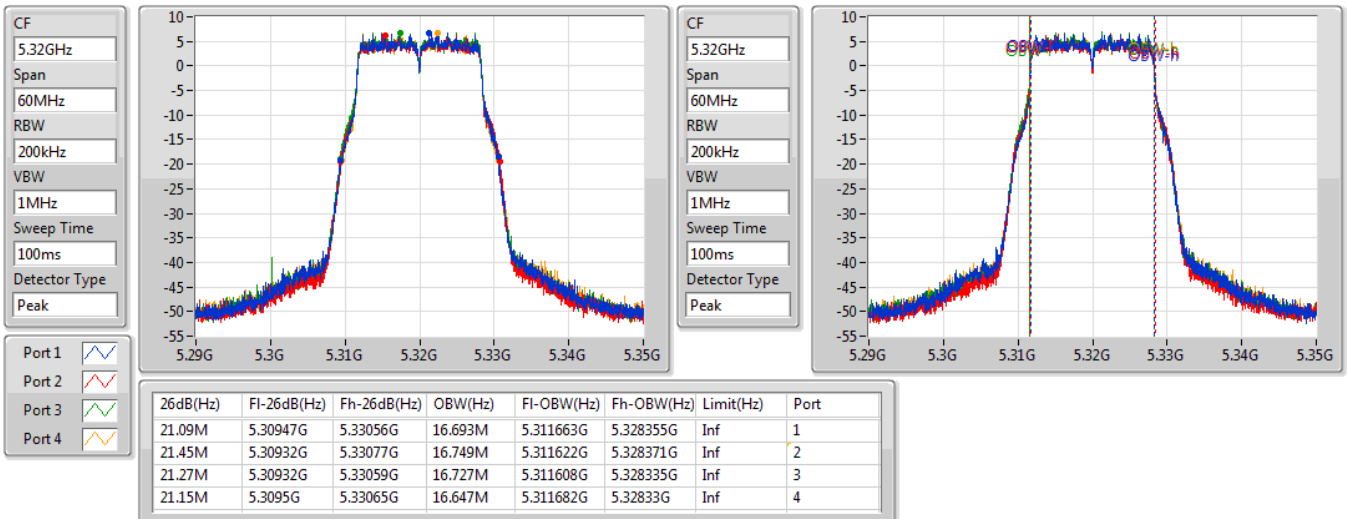


802.11a_Nss1,(6Mbps)_4TX
EBW
5300MHz

09/01/2020

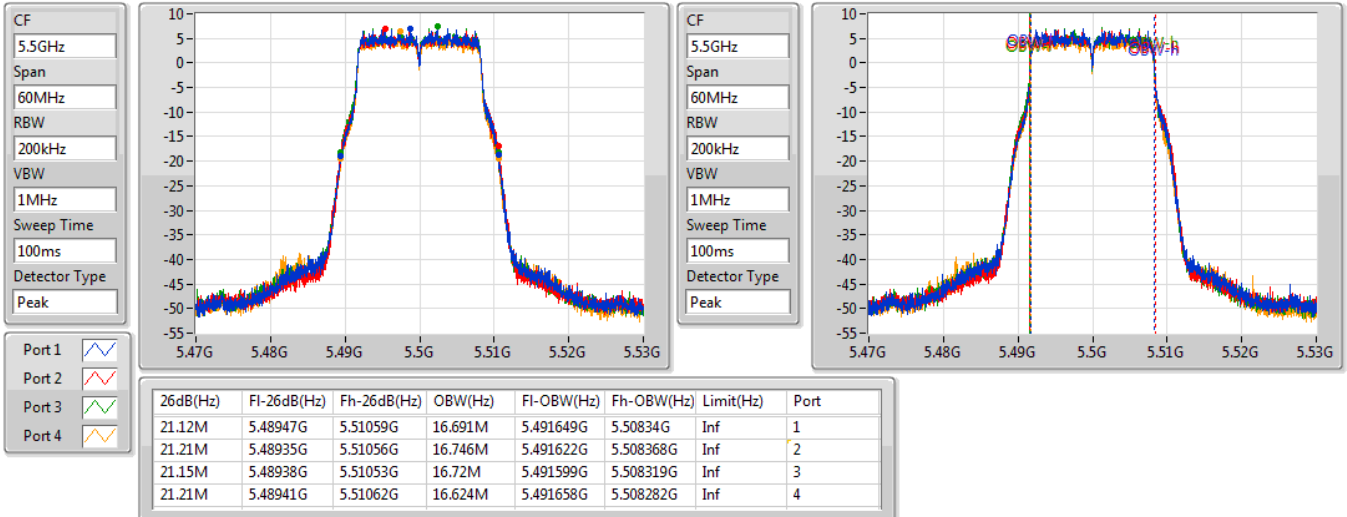

802.11a_Nss1,(6Mbps)_4TX
EBW
5320MHz

09/01/2020

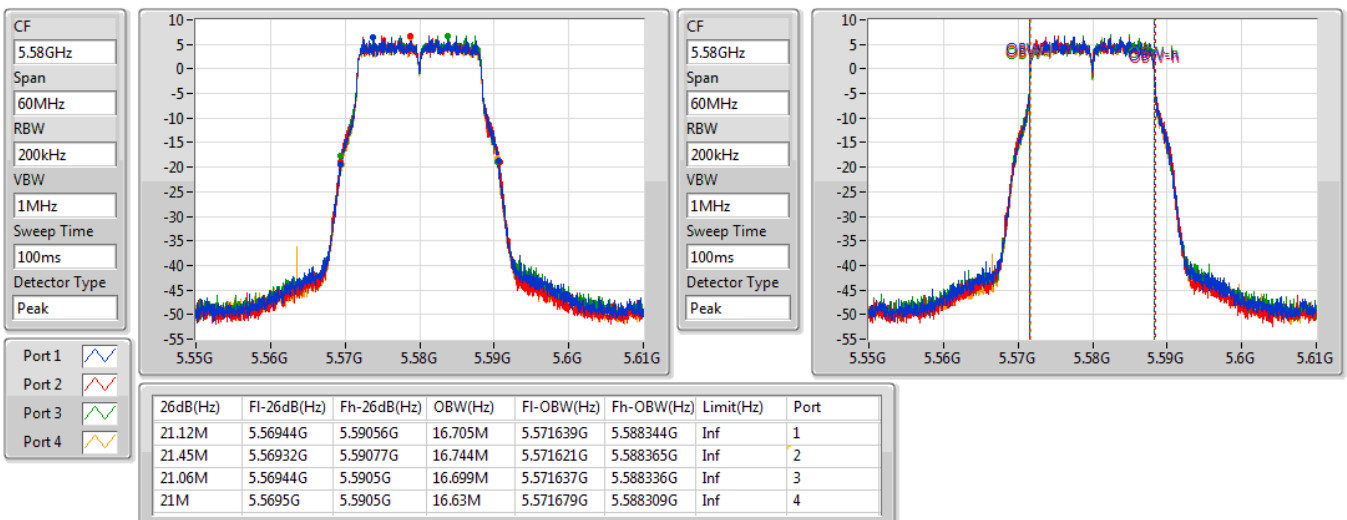


802.11a_Nss1,(6Mbps)_4TX
EBW
5500MHz

09/01/2020

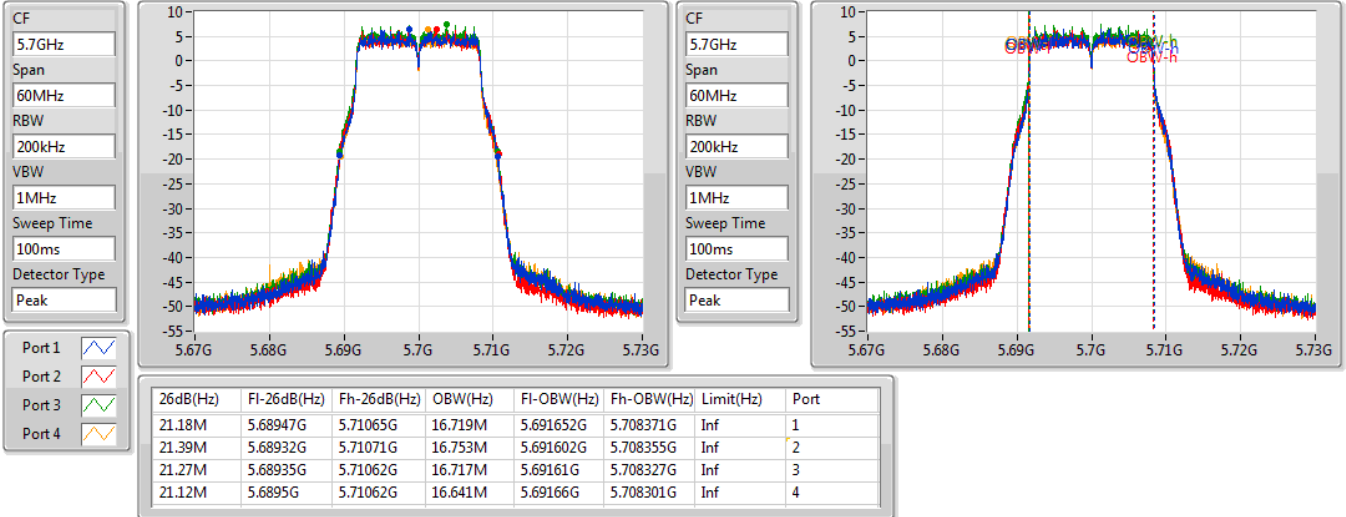

802.11a_Nss1,(6Mbps)_4TX
EBW
5580MHz

09/01/2020

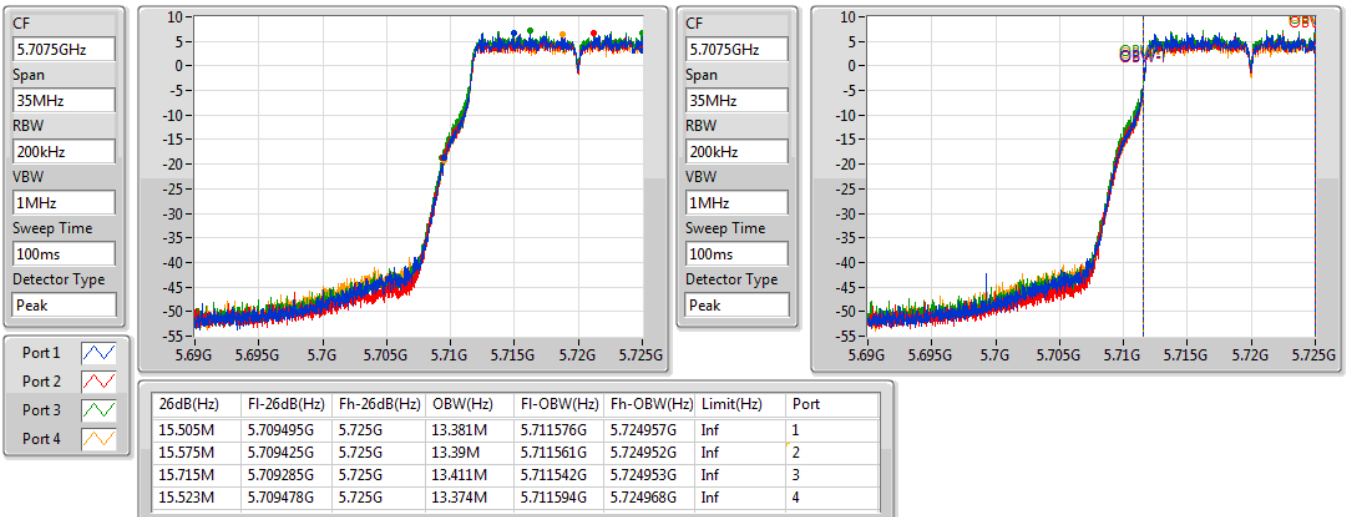


802.11a_Nss1,(6Mbps)_4TX
EBW
5700MHz

09/01/2020

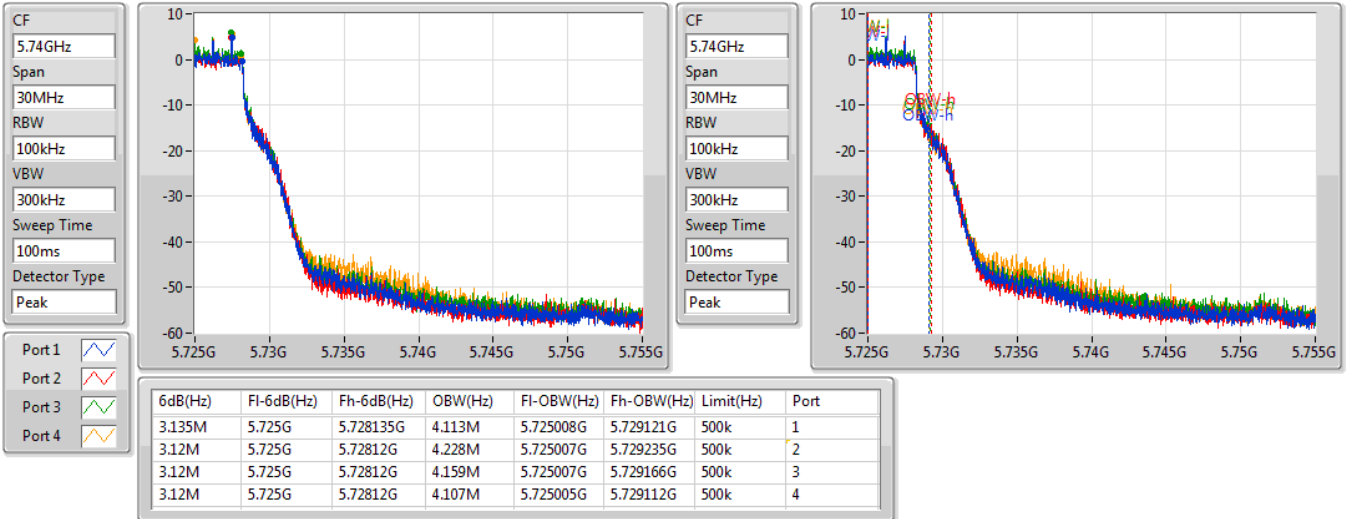

802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

09/01/2020

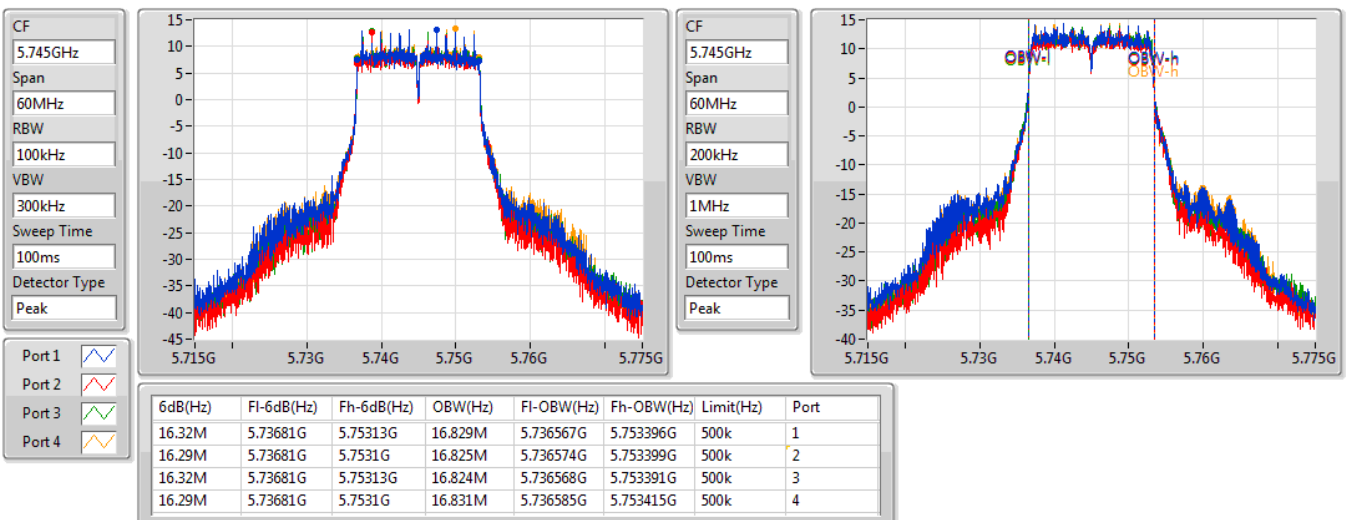


802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

09/01/2020

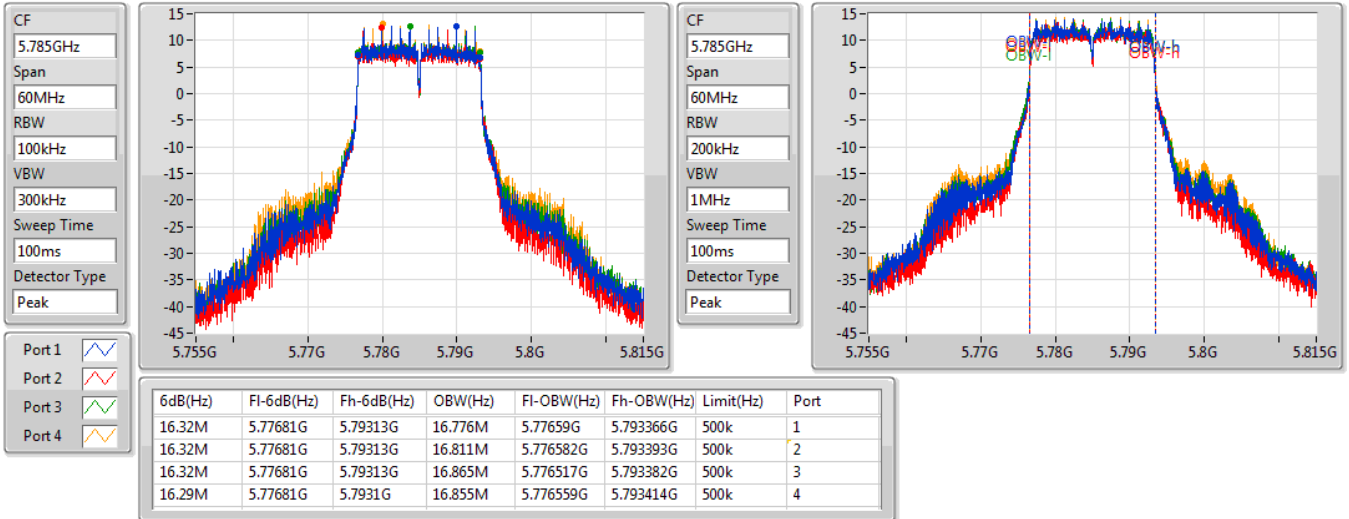

802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

09/01/2020

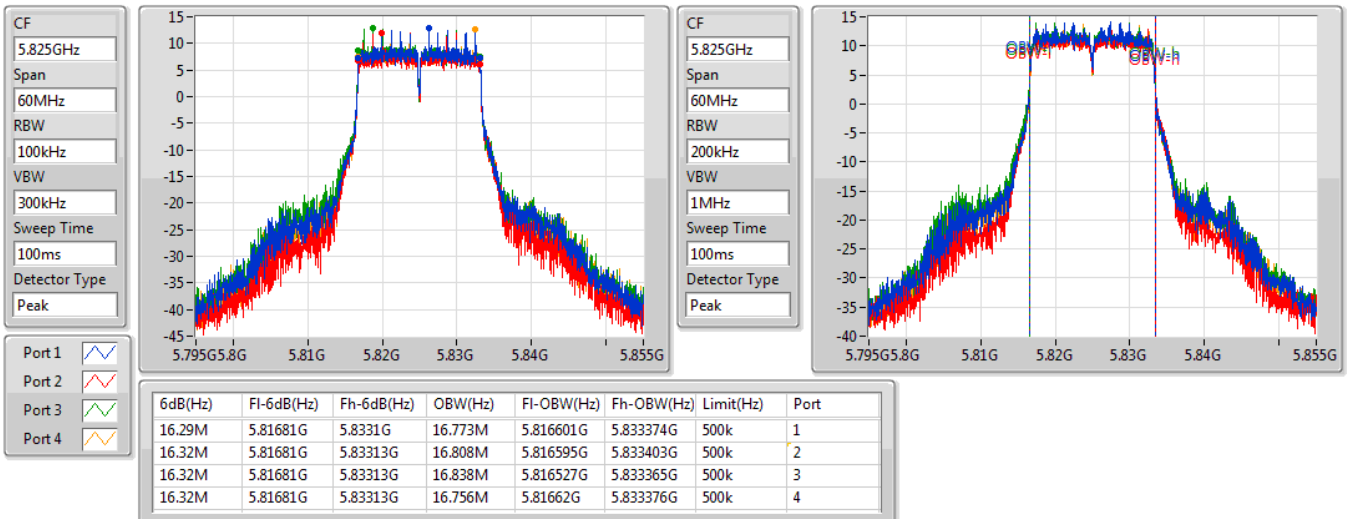


802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

09/01/2020

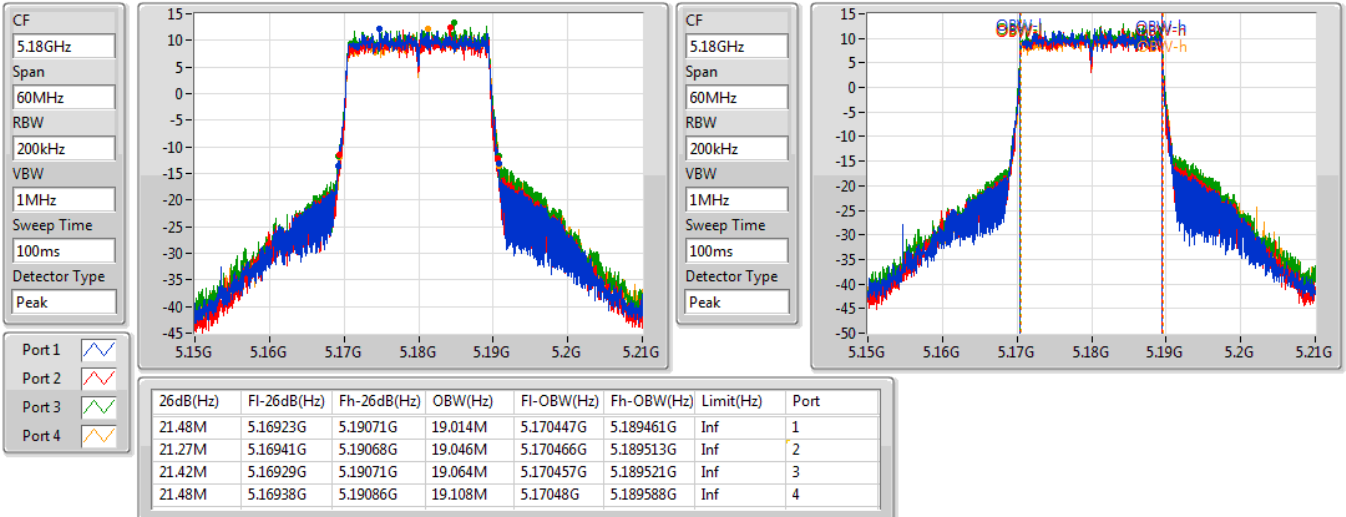

802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

09/01/2020

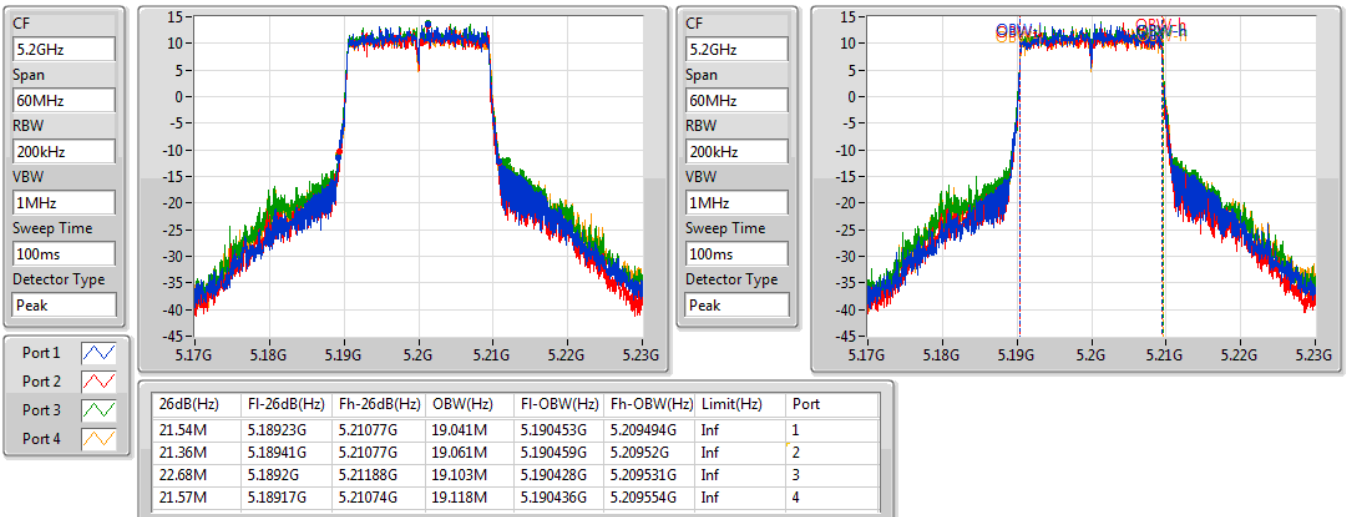


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5180MHz

09/01/2020

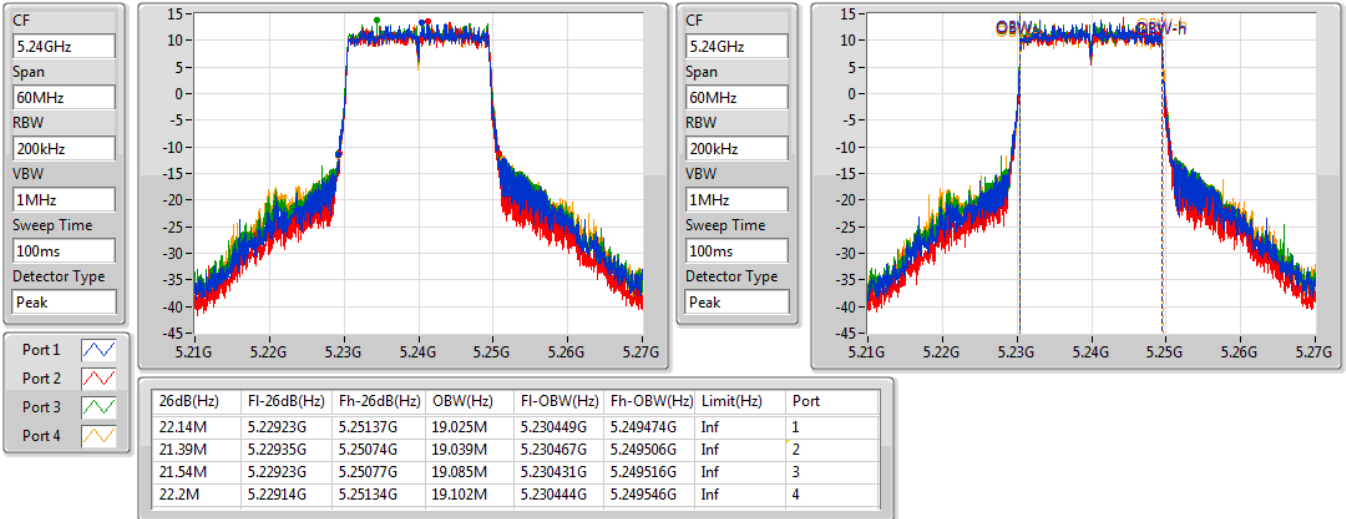

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5200MHz

09/01/2020

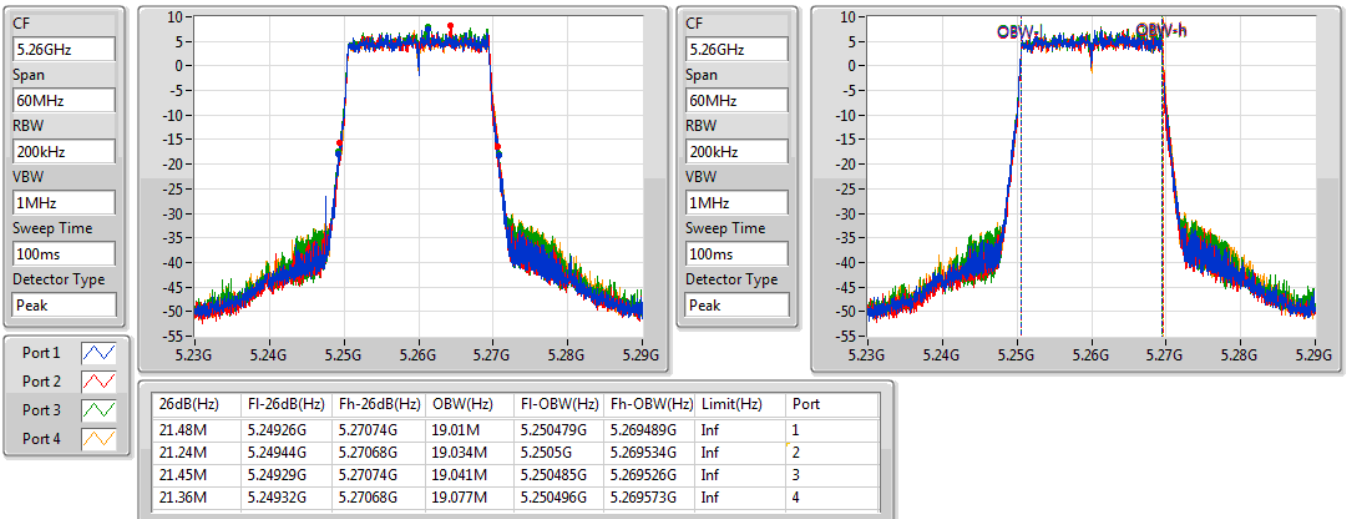


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5240MHz

09/01/2020

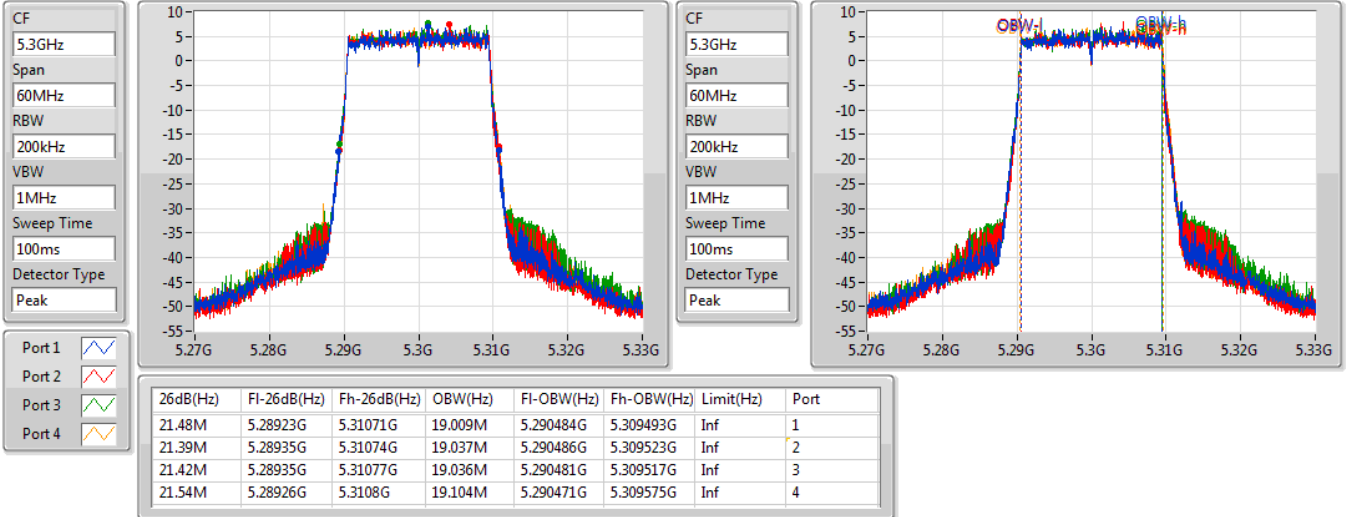

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5260MHz

09/01/2020

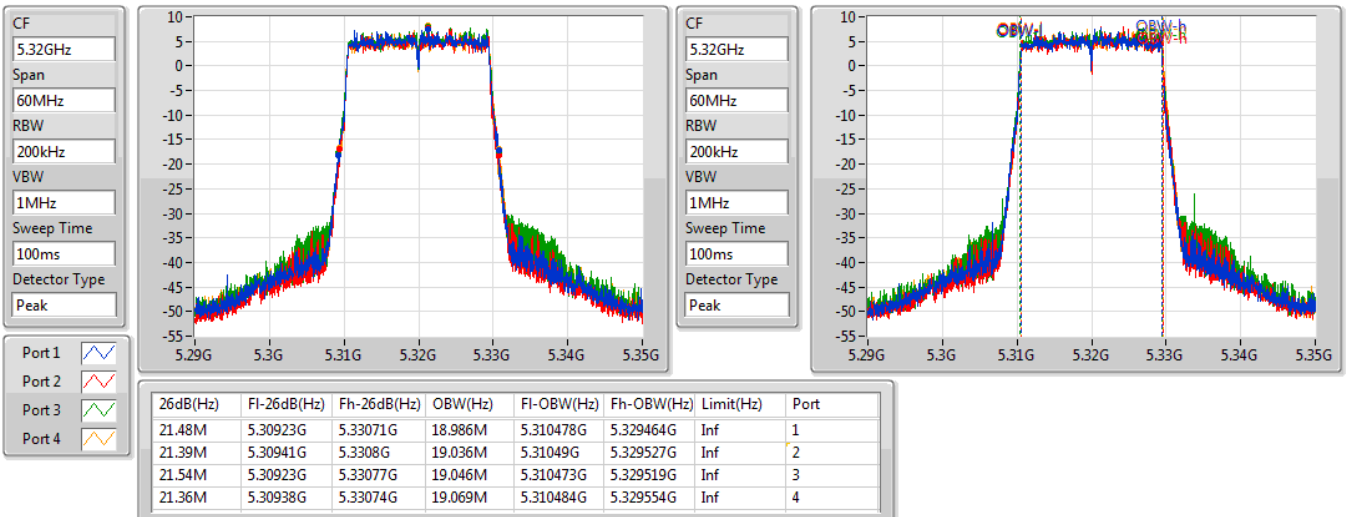


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5300MHz

09/01/2020

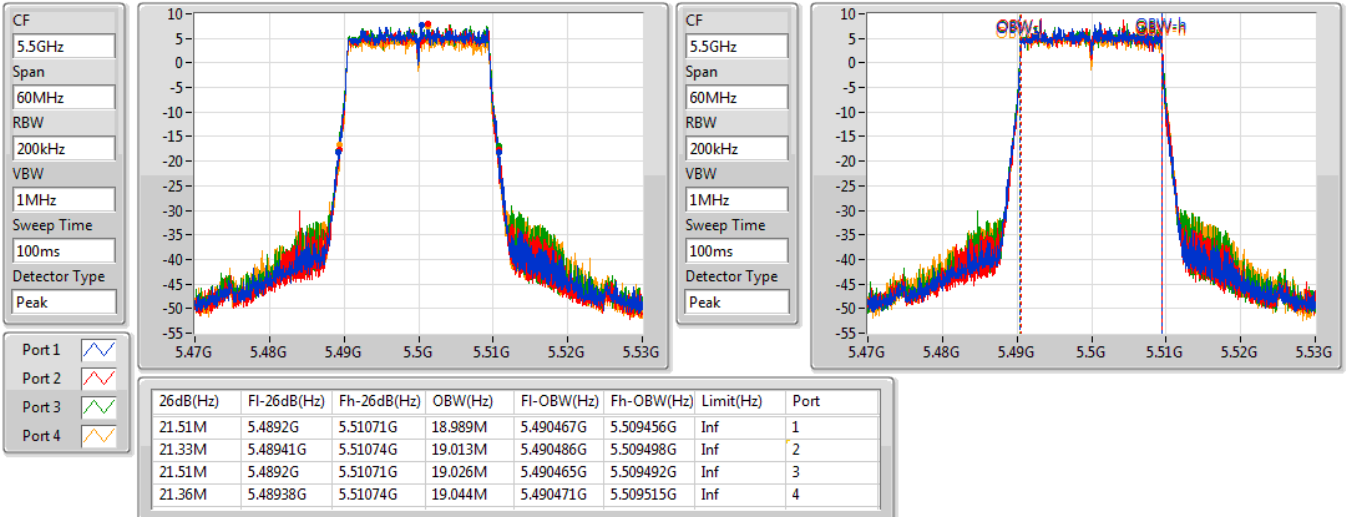

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5320MHz

09/01/2020

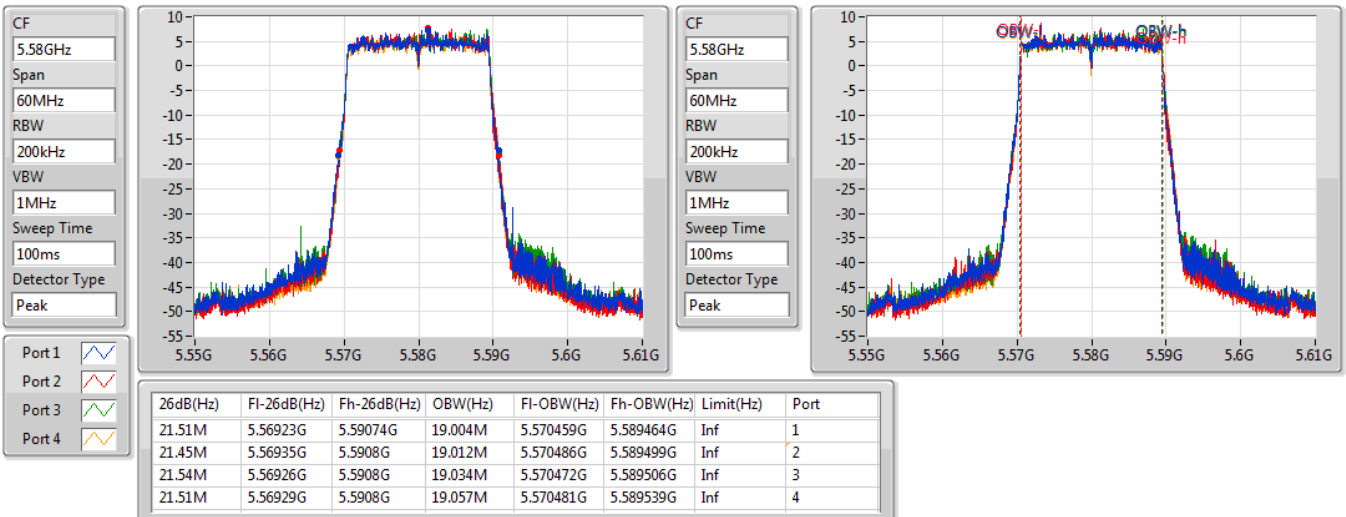


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5500MHz

09/01/2020

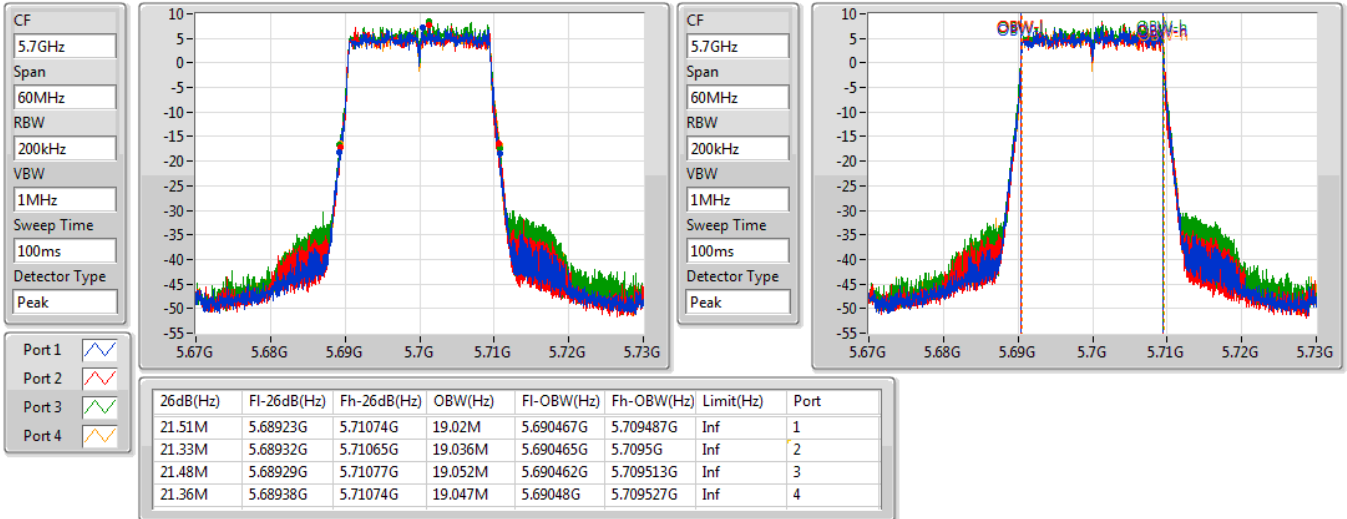

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5580MHz

09/01/2020

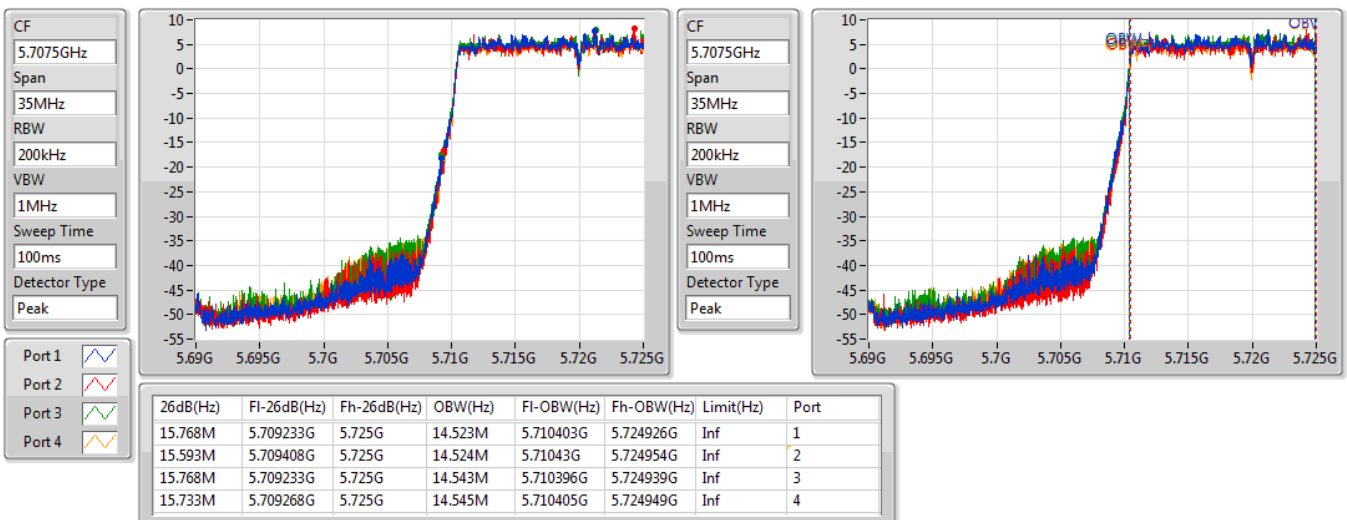


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5700MHz

09/01/2020

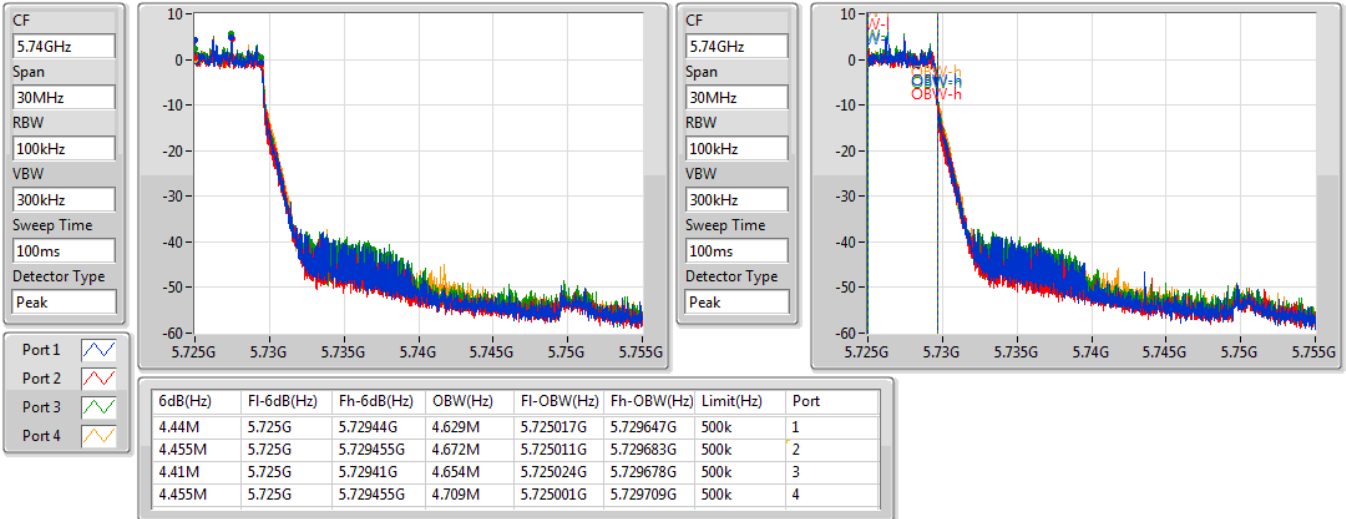

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

09/01/2020

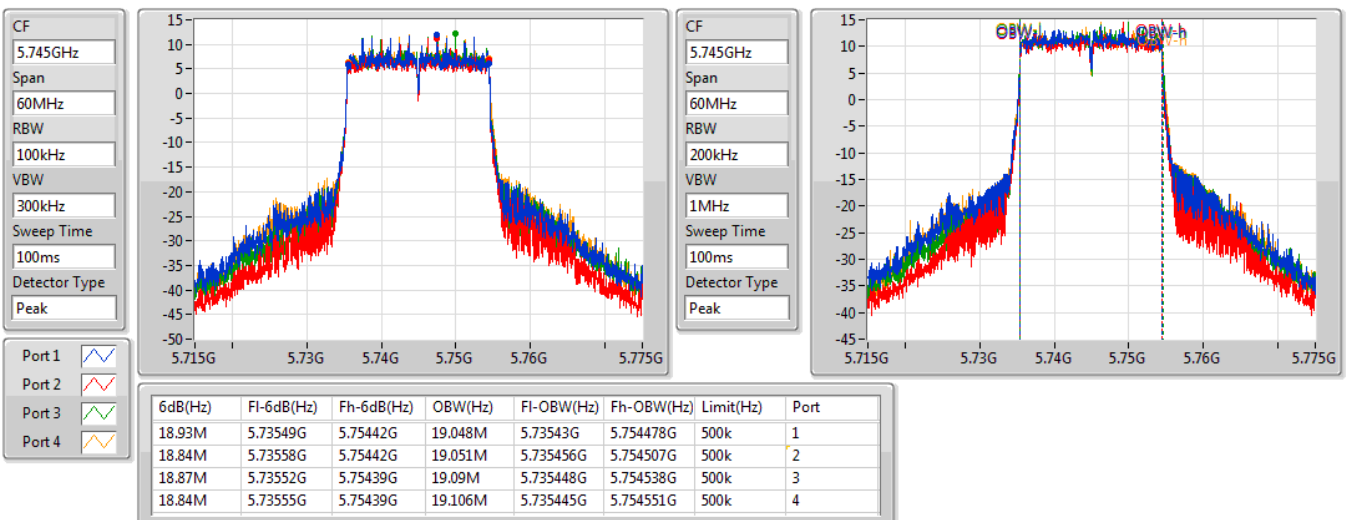


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

09/01/2020

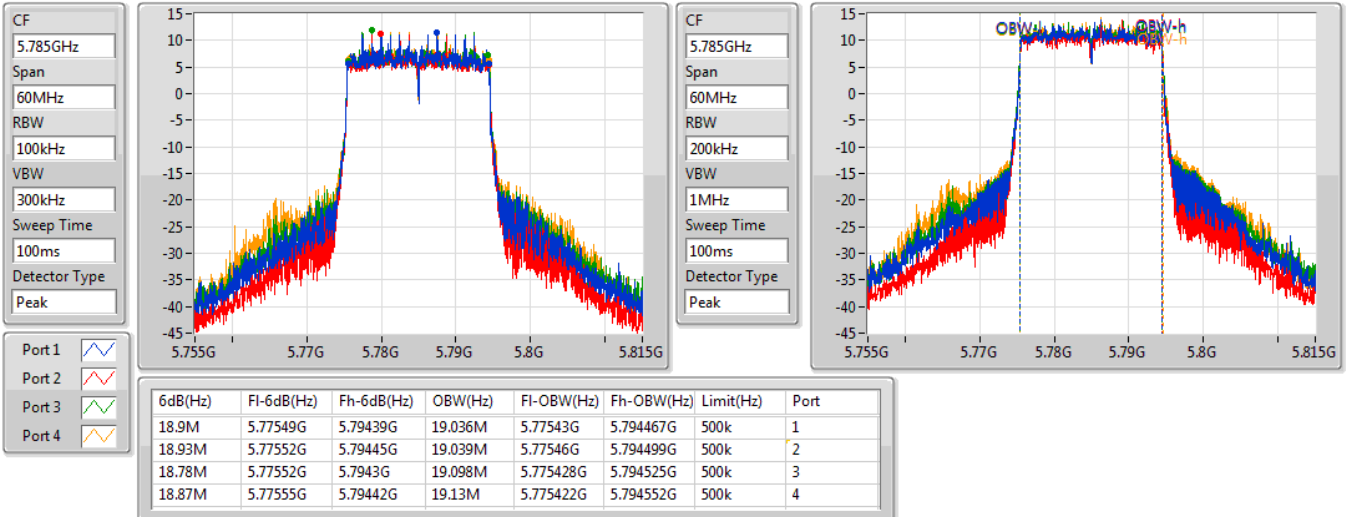

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5745MHz

09/01/2020

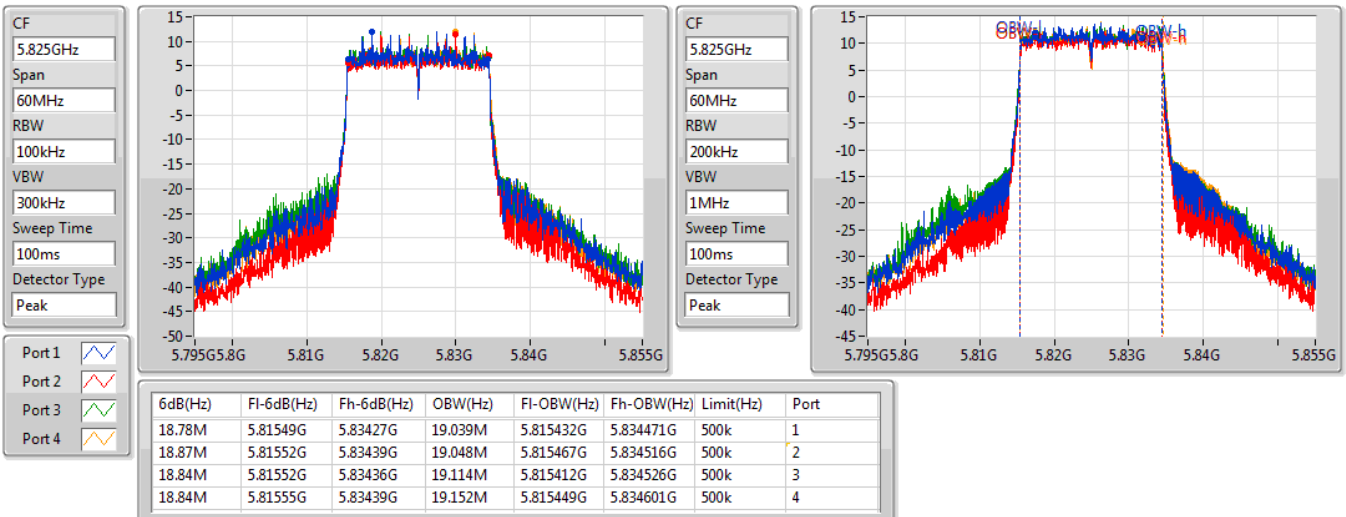


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5785MHz

09/01/2020

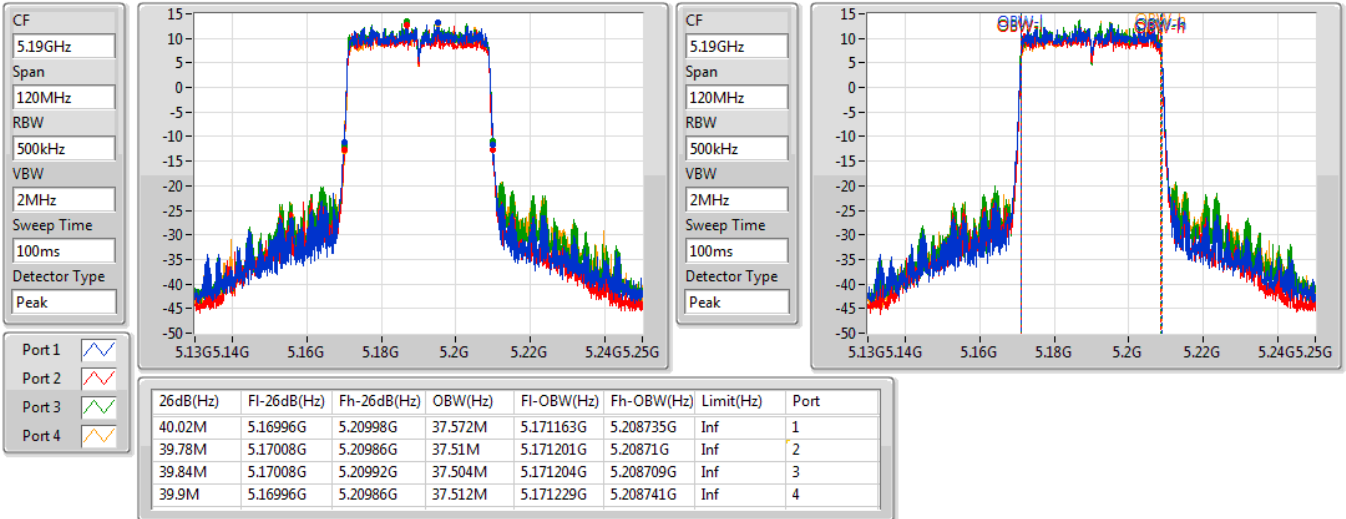

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5825MHz

09/01/2020

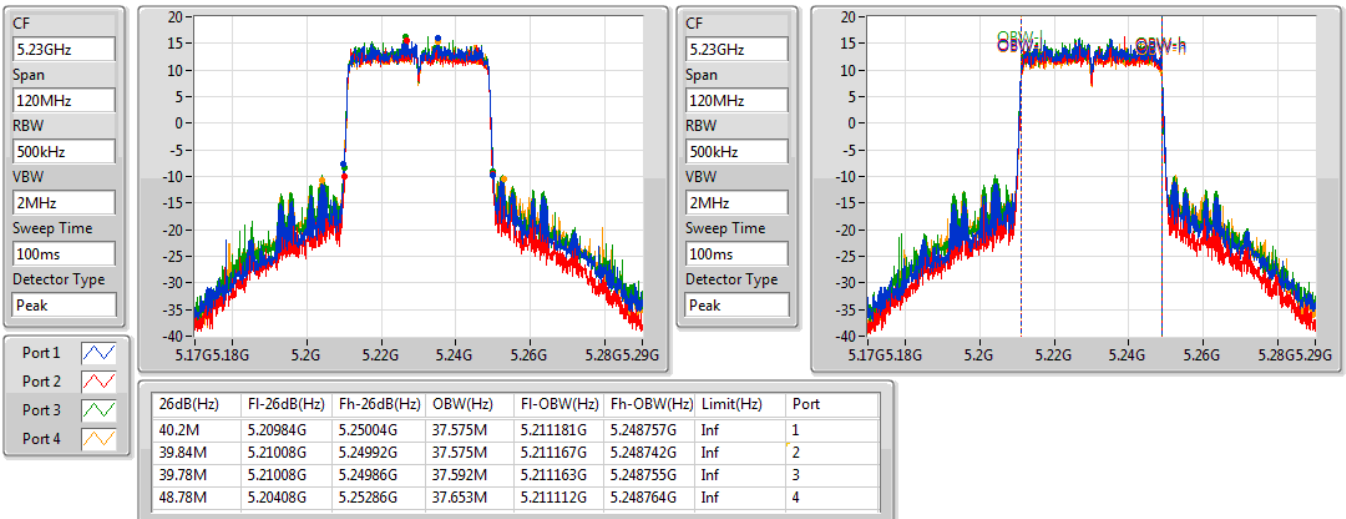


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5190MHz

09/01/2020

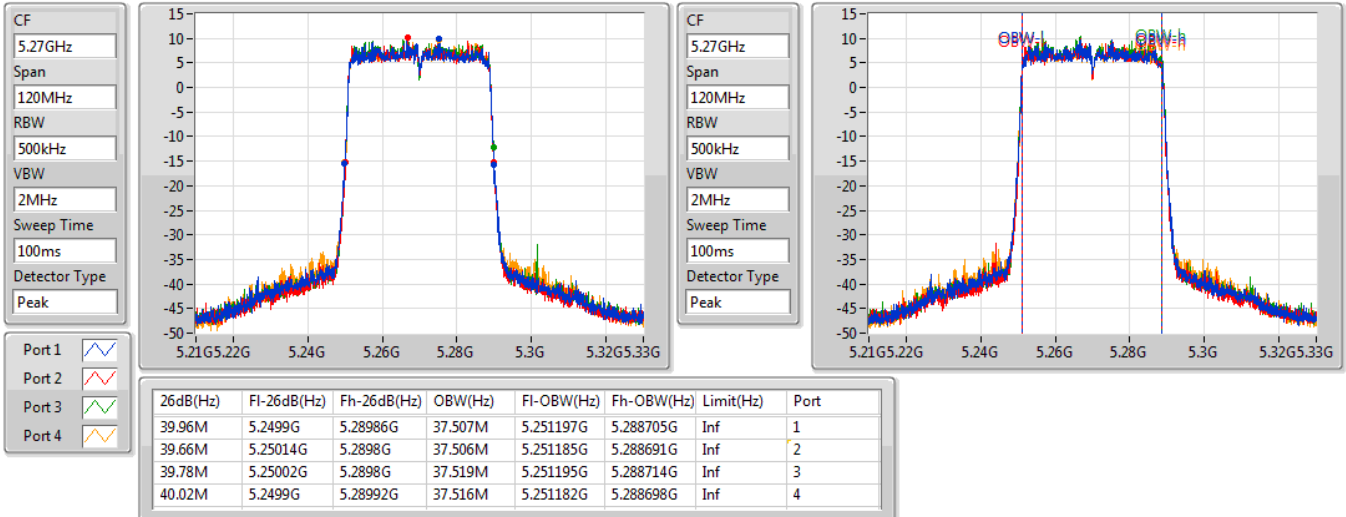

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5230MHz

09/01/2020

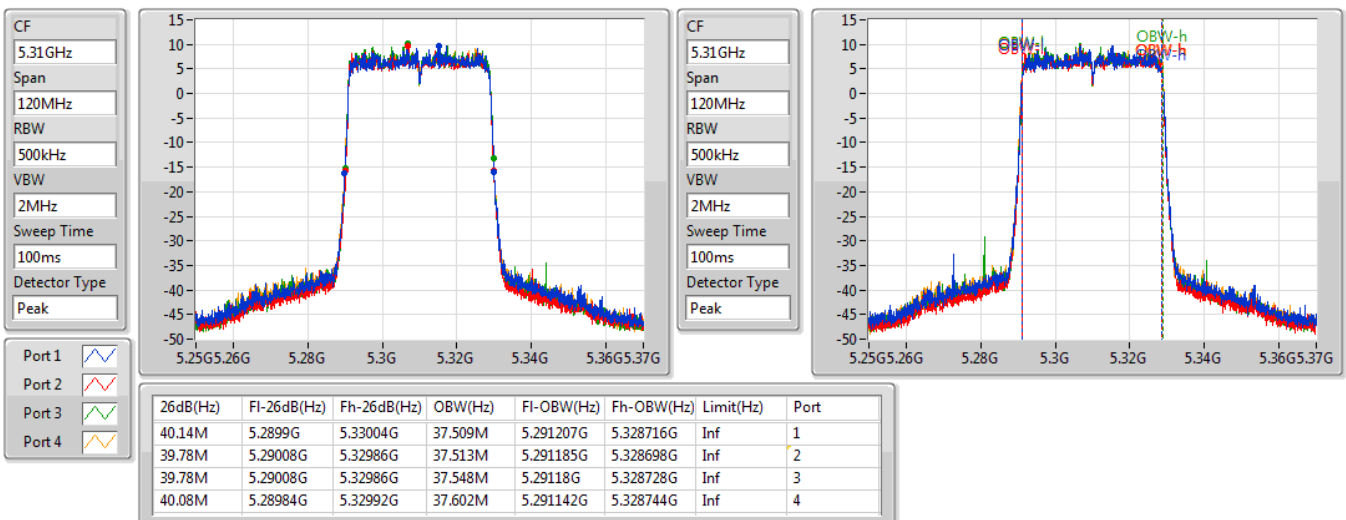


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5270MHz

09/01/2020

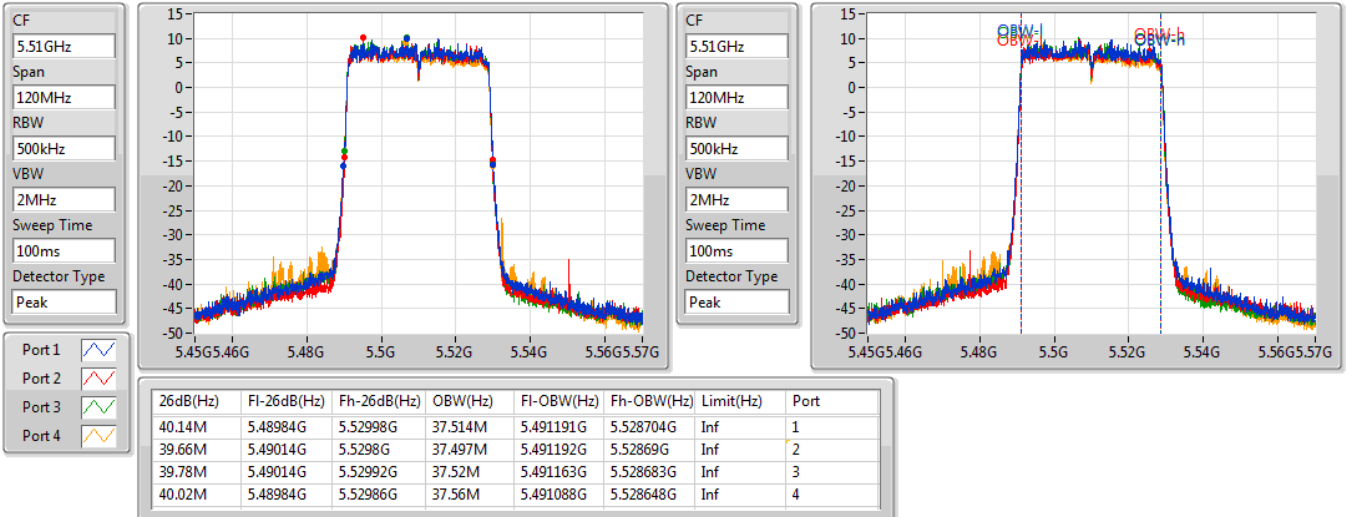

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5310MHz

09/01/2020

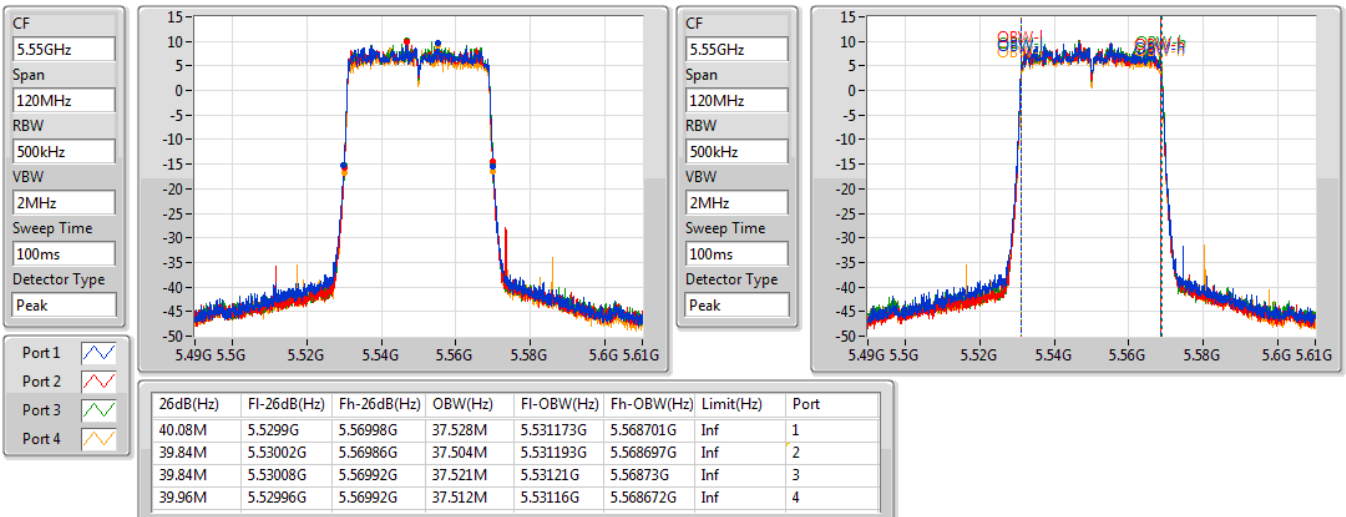


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5510MHz

09/01/2020

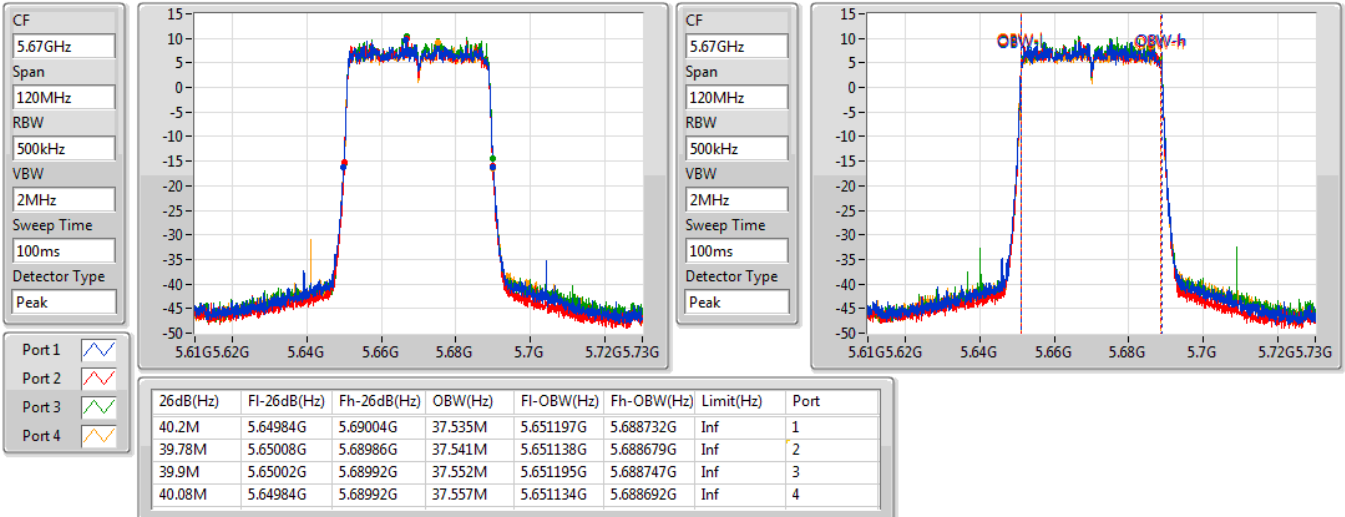

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5550MHz

09/01/2020

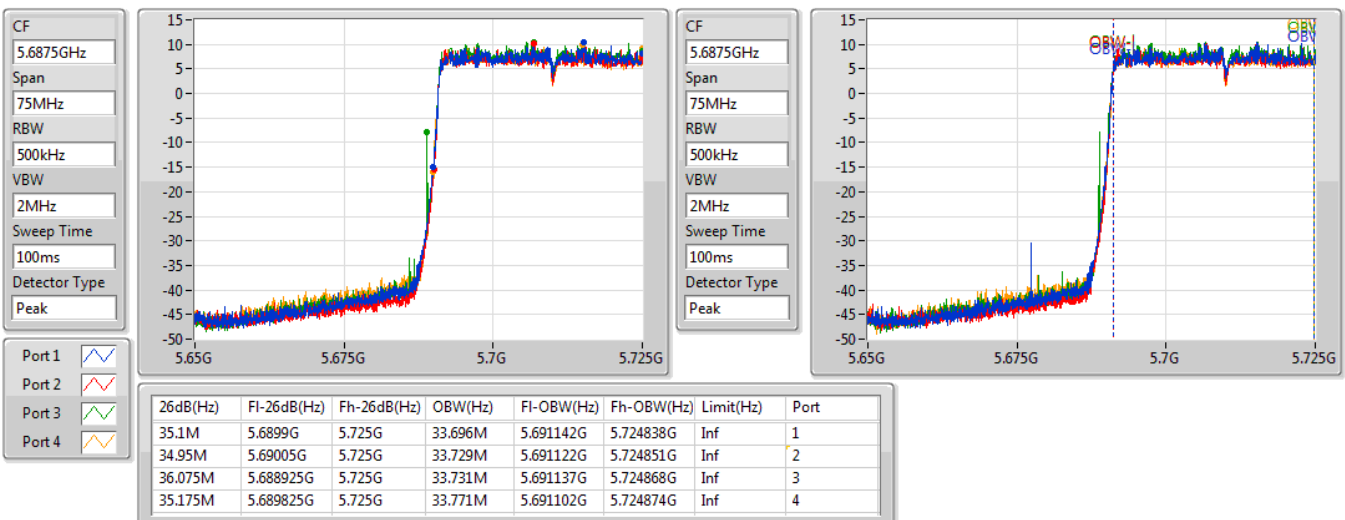


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5670MHz

09/01/2020

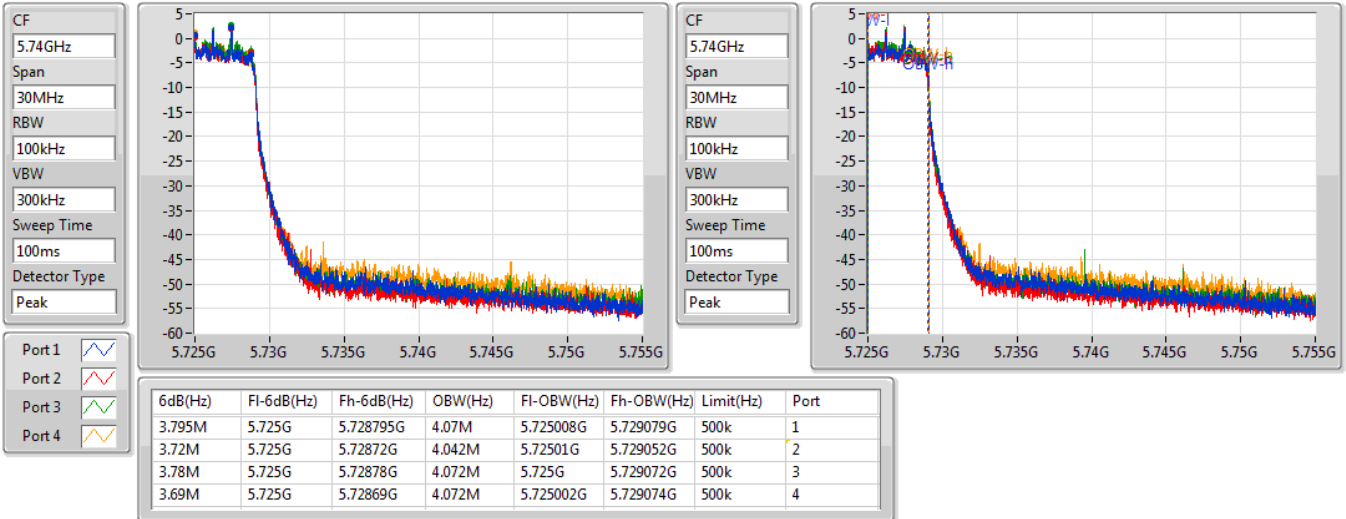

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

09/01/2020

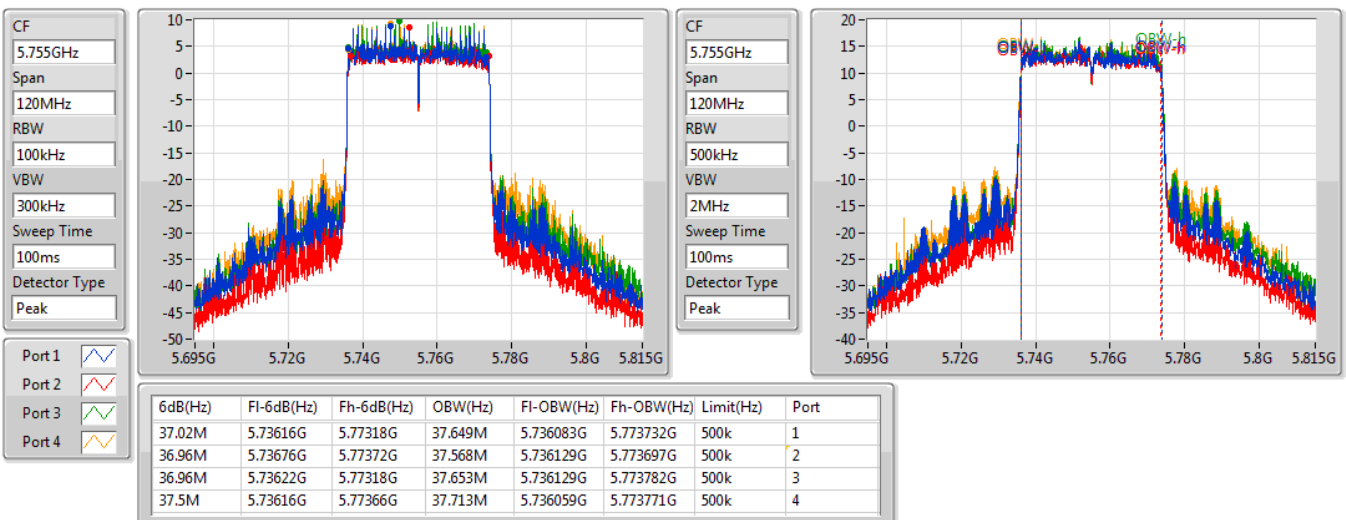


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

09/01/2020

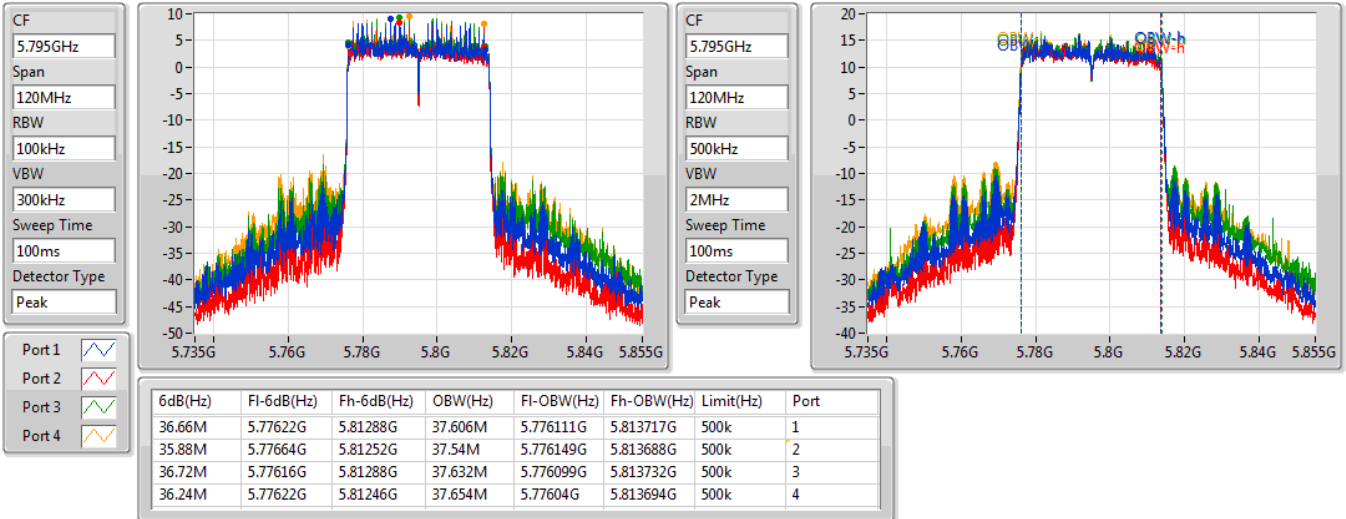

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5755MHz

09/01/2020

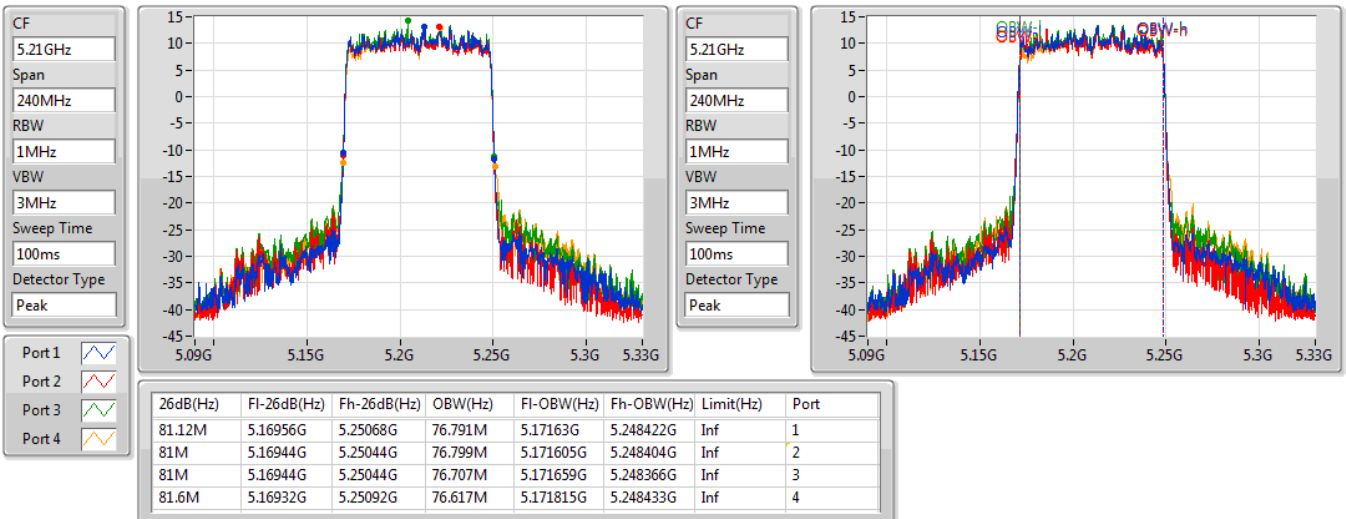


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5795MHz

09/01/2020

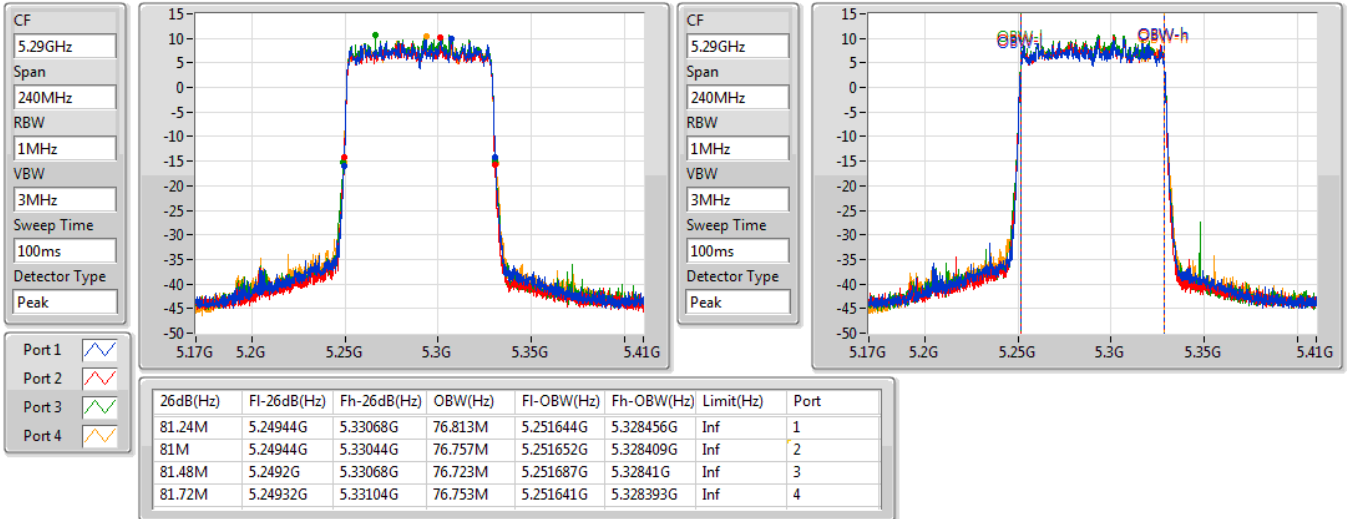

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5210MHz

09/01/2020

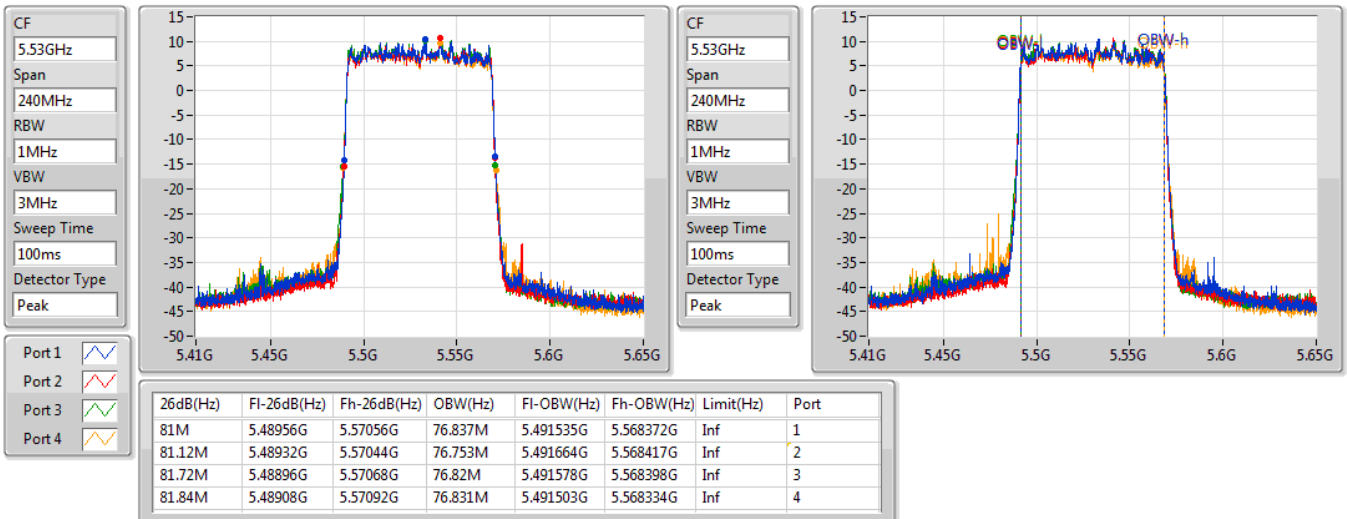


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5290MHz

09/01/2020

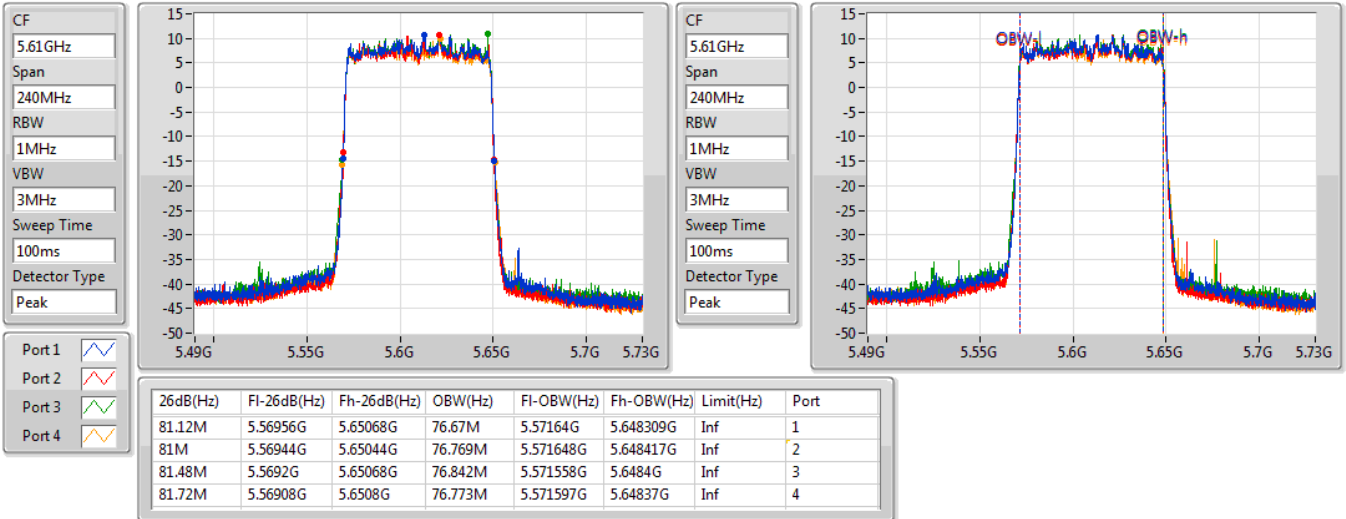

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5530MHz

09/01/2020

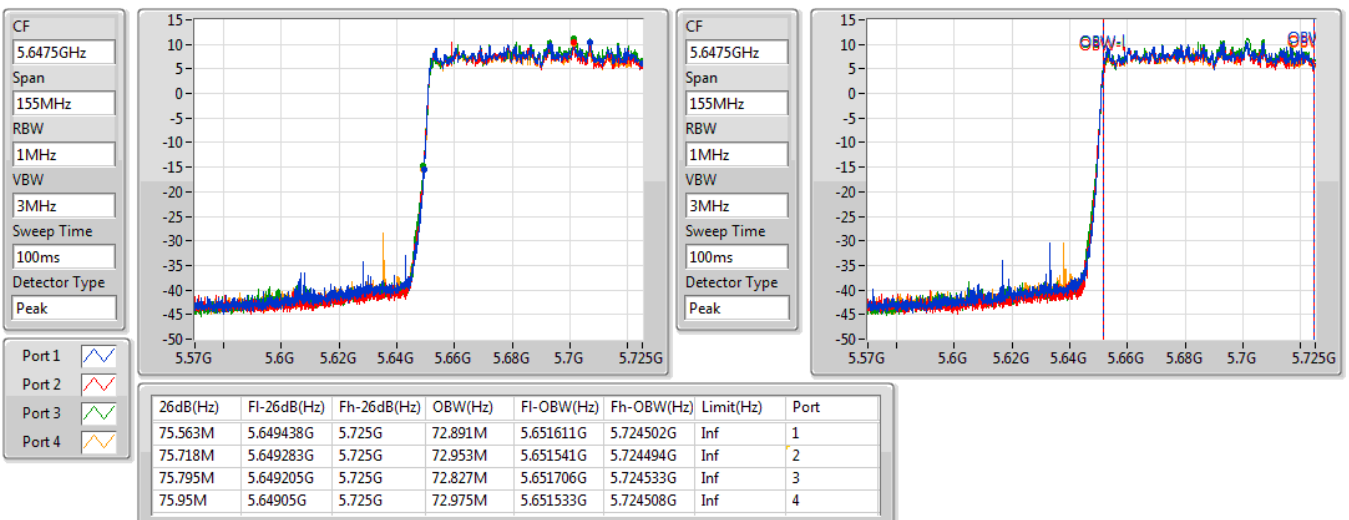


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5610MHz

09/01/2020

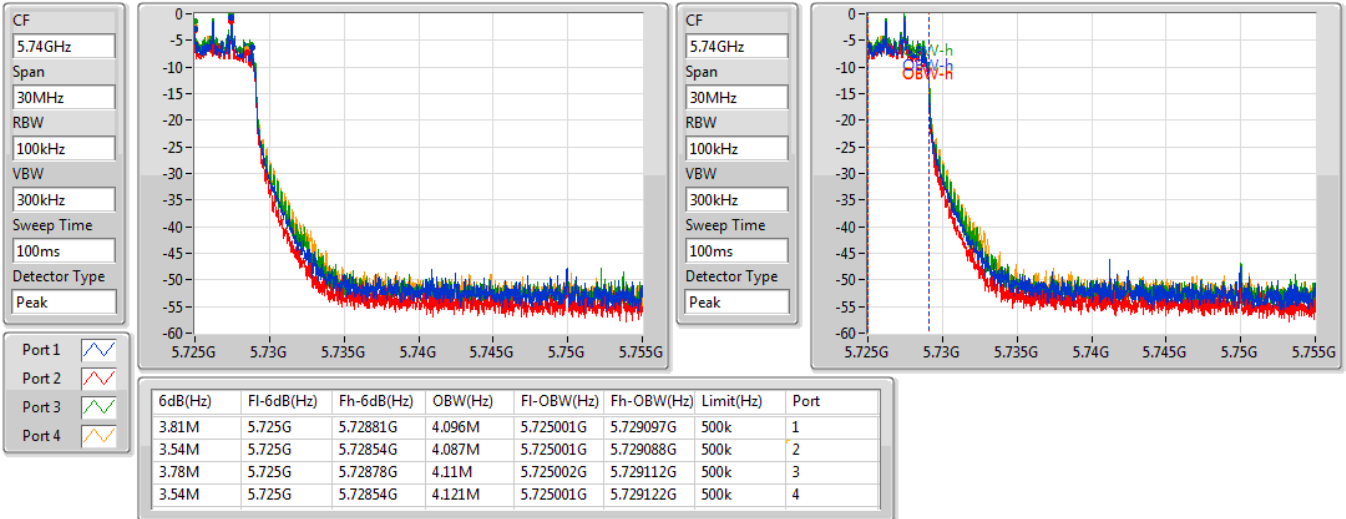

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

09/01/2020

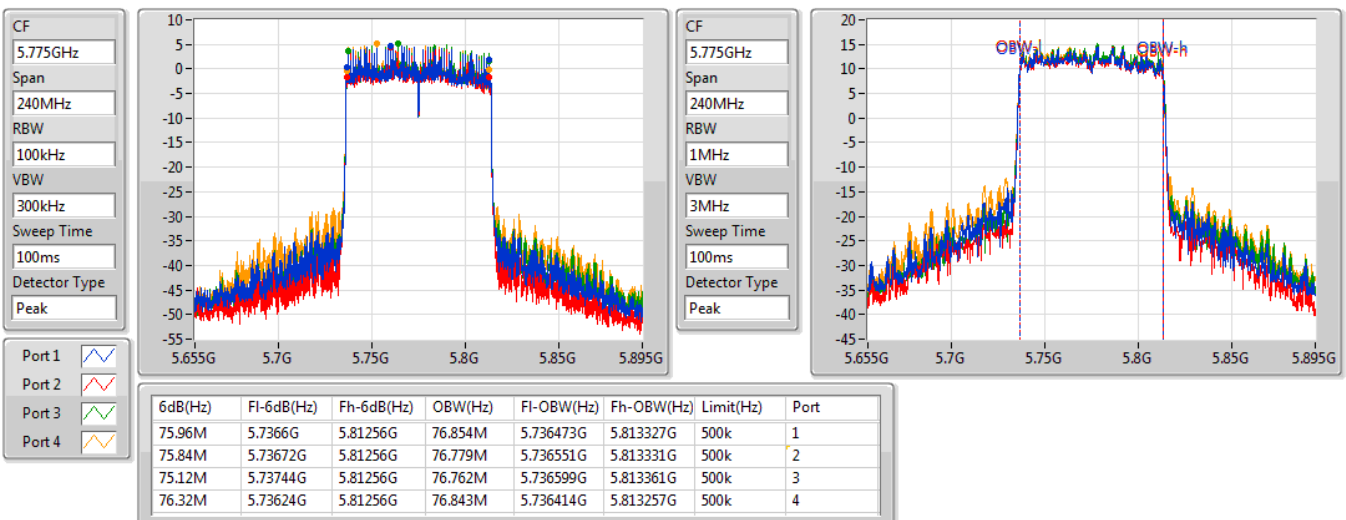


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

09/01/2020

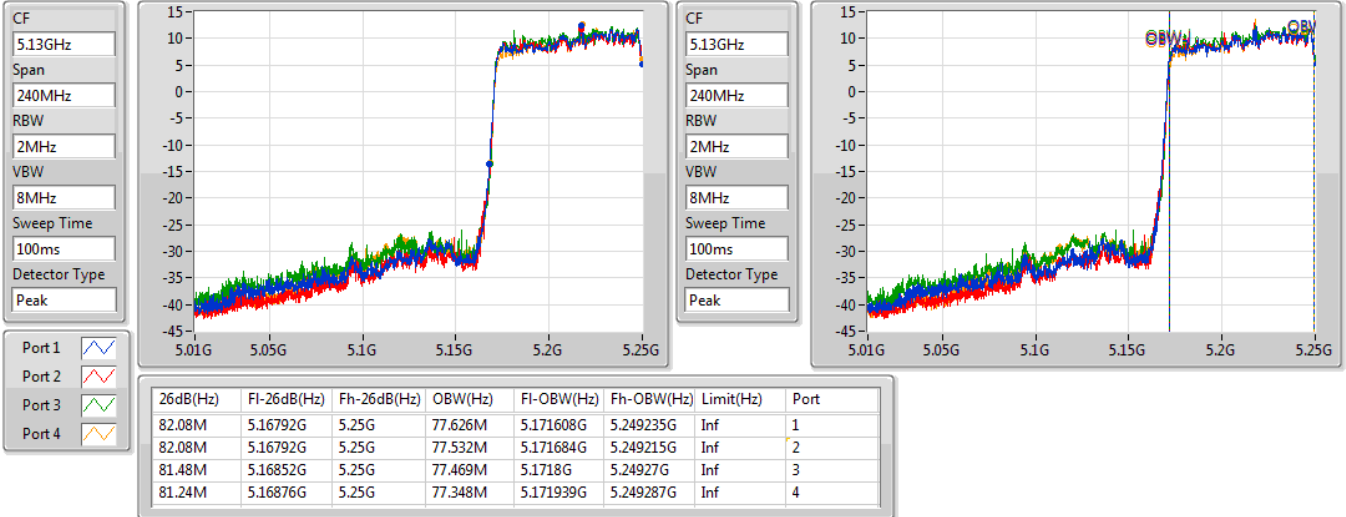

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5775MHz

09/01/2020

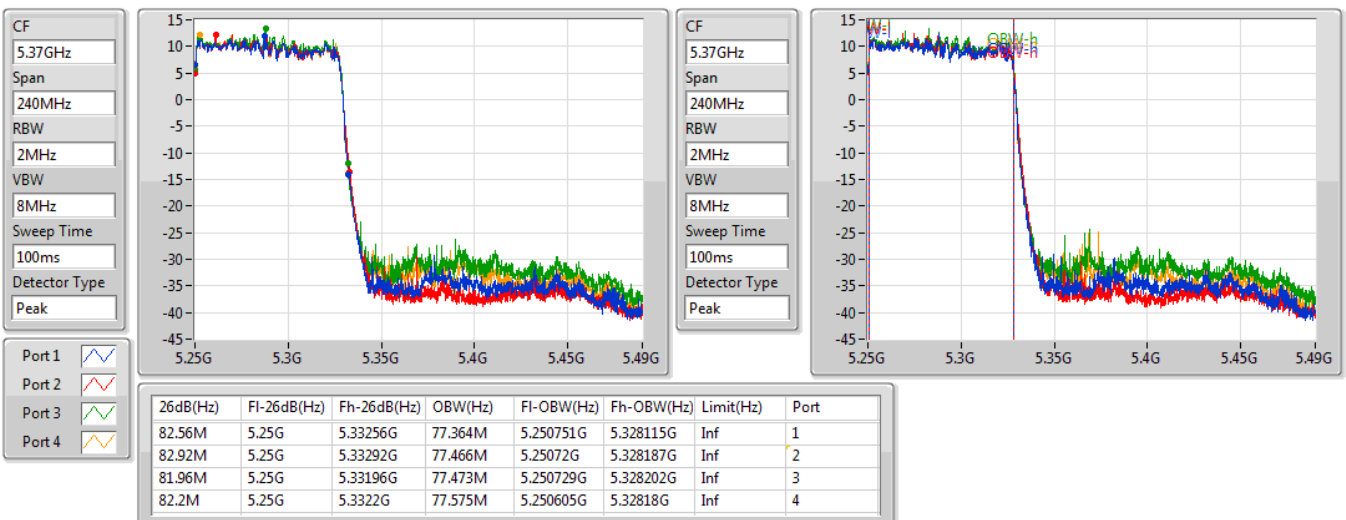


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

09/01/2020


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

09/01/2020

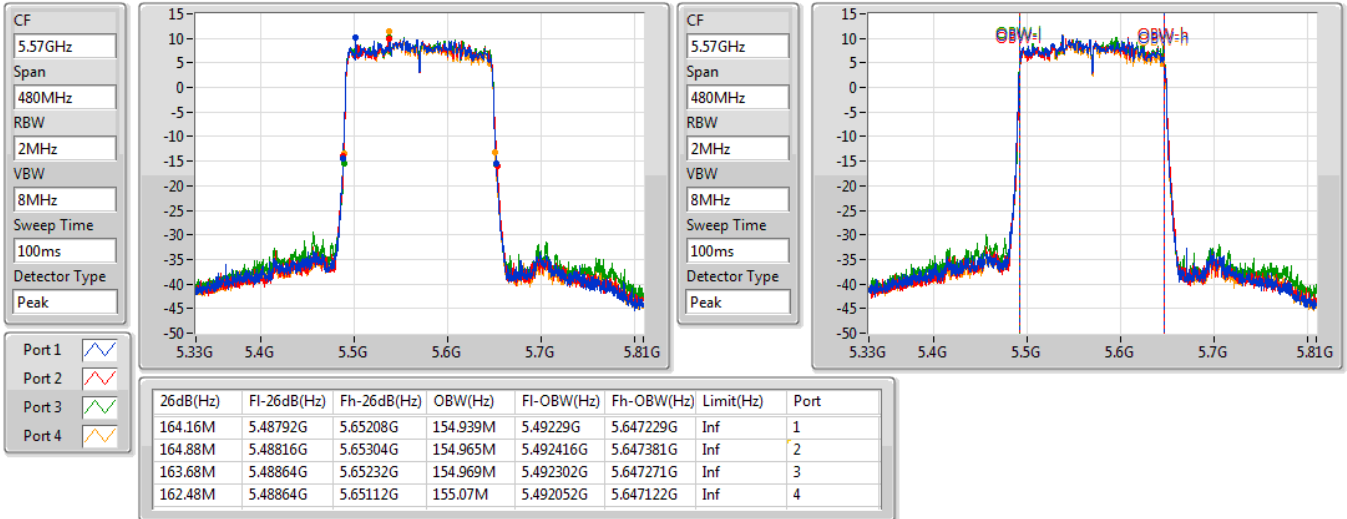


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

5570MHz

09/01/2020



For Nss2 (Only 5775MHz):**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	76.32M	77.001M	77M0D1D	74.04M	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)
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	76.08M	76.882M	76.32M	77.001M	76.32M	77.001M	74.04M	76.882M

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

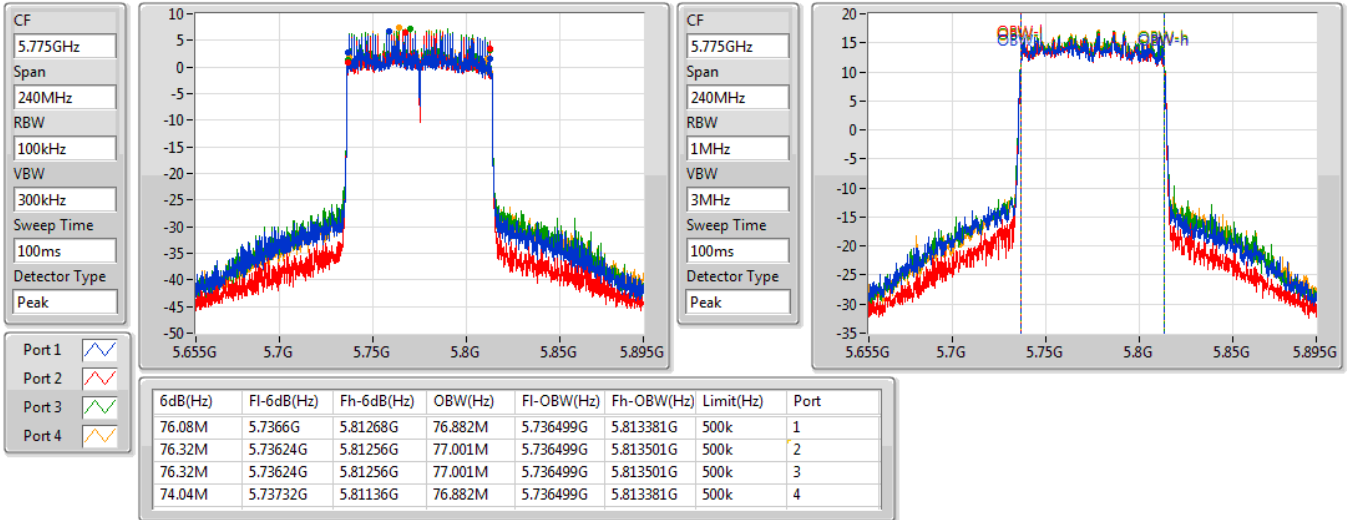
Port X-OBW = Port X 99% occupied bandwidth;

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

EBW

5775MHz

20/01/2020





Average Power Result

Appendix C

For Nss1: Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.09	0.81096
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.35	0.86099
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	29.10	0.81283
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	25.87	0.38637
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	21.92	0.15560
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	22.99	0.19907
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.32	0.21478
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.30	0.21380
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.31	0.21429
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	22.30	0.16982
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.07	0.20277
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.28	0.21281
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.28	0.21281
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.29	0.21330
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	23.27	0.21232
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.99	0.99770
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.33	0.85704
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	29.20	0.83176
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	27.50	0.56234

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.90	21.32	20.96	22.01	21.23	27.42	30.00
5200MHz	Pass	2.90	22.83	22.80	23.42	22.71	28.97	30.00
5240MHz	Pass	2.90	23.01	22.95	23.55	22.74	29.09	30.00
5260MHz	Pass	2.90	16.73	16.76	17.44	16.91	22.99	23.98
5300MHz	Pass	2.90	16.80	16.65	17.37	16.90	22.96	23.98
5320MHz	Pass	2.90	16.64	16.59	17.39	16.84	22.90	23.98
5500MHz	Pass	3.00	17.12	16.91	17.42	16.49	23.02	23.98
5580MHz	Pass	3.00	17.09	16.95	17.27	16.88	23.07	23.98
5700MHz	Pass	3.00	16.68	16.58	17.52	16.61	22.89	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	3.00	16.14	16.01	16.73	15.81	22.21	22.90
5720MHz Straddle 5.725-5.85GHz	Pass	2.52	9.72	9.38	10.48	9.91	15.91	30.00
5745MHz	Pass	2.52	24.04	23.64	24.16	24.03	29.99	30.00
5785MHz	Pass	2.52	24.06	23.43	24.08	23.85	29.88	30.00
5825MHz	Pass	2.52	24.04	23.57	24.03	23.77	29.88	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.63	22.03	21.39	22.53	21.56	27.92	29.37
5200MHz	Pass	6.63	23.39	23.00	23.75	23.14	29.35	29.37
5240MHz	Pass	6.63	22.98	23.25	23.80	23.08	29.31	29.37
5260MHz	Pass	6.63	17.09	17.18	17.76	17.09	23.31	23.35
5300MHz	Pass	6.63	17.15	16.99	17.60	17.01	23.22	23.35
5320MHz	Pass	6.63	17.24	17.01	17.73	17.18	23.32	23.35
5500MHz	Pass	6.67	17.36	17.38	17.49	16.57	23.24	23.31
5580MHz	Pass	6.67	17.26	17.21	17.53	16.85	23.24	23.31
5700MHz	Pass	6.67	17.26	17.26	17.57	16.93	23.28	23.31
5720MHz Straddle 5.47-5.725GHz	Pass	6.67	16.22	15.94	16.69	15.77	22.19	22.26
5720MHz Straddle 5.725-5.85GHz	Pass	6.61	10.78	10.47	11.37	10.90	16.91	29.39
5745MHz	Pass	6.61	23.45	22.79	23.47	23.47	29.33	29.39
5785MHz	Pass	6.61	23.24	22.65	23.42	23.51	29.24	29.39
5825MHz	Pass	6.61	23.35	22.78	23.50	23.17	29.23	29.39
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.63	20.08	19.72	20.80	20.16	26.23	29.37
5230MHz	Pass	6.63	23.22	22.73	23.62	22.70	29.10	29.37
5270MHz	Pass	6.63	17.08	17.00	17.80	17.19	23.30	23.35
5310MHz	Pass	6.63	17.06	16.87	17.44	17.13	23.15	23.35
5510MHz	Pass	6.67	17.31	17.27	17.65	16.78	23.28	23.31
5550MHz	Pass	6.67	17.32	17.18	17.48	16.88	23.24	23.31
5670MHz	Pass	6.67	17.20	17.08	17.63	16.98	23.25	23.31
5710MHz Straddle 5.47-5.725GHz	Pass	6.67	17.18	16.93	17.71	16.96	23.23	23.31
5710MHz Straddle 5.725-5.85GHz	Pass	6.61	7.05	6.85	7.80	7.31	13.29	29.39
5755MHz	Pass	6.61	22.93	22.61	23.64	23.45	29.20	29.39
5795MHz	Pass	6.61	22.80	22.48	23.58	23.61	29.17	29.39
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.63	19.89	19.46	20.21	19.82	25.87	29.37



Average Power Result

Appendix C

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
5290MHz	Pass	6.63	17.19	17.02	17.62	17.30	23.31	23.35
5530MHz	Pass	6.67	17.38	17.33	17.55	16.60	23.25	23.31
5610MHz	Pass	6.67	17.42	17.00	17.60	17.02	23.29	23.31
5690MHz Straddle 5.47-5.725GHz	Pass	6.67	17.41	16.95	17.71	16.93	23.28	23.31
5690MHz Straddle 5.725-5.85GHz	Pass	6.61	3.57	2.89	4.48	3.48	9.66	29.39
5775MHz	Pass	6.61	21.26	21.08	21.93	21.59	27.50	29.39
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.63	15.84	15.72	16.38	15.60	21.92	29.37
5250MHz Straddle 5.25-5.35GHz	Pass	6.63	16.16	16.08	16.78	16.06	22.30	23.35
5570MHz	Pass	6.67	17.33	17.30	17.50	16.83	23.27	23.31

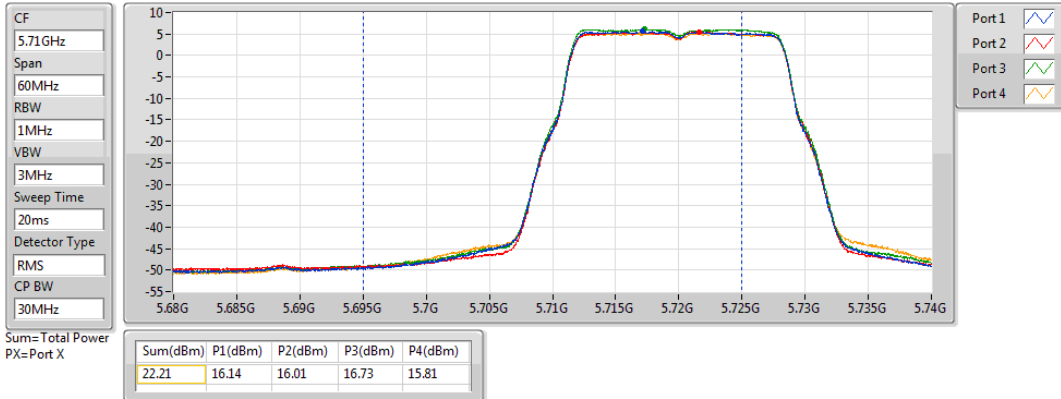
DG = Directional Gain; **Port X** = Port X output power

802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

09/01/2020

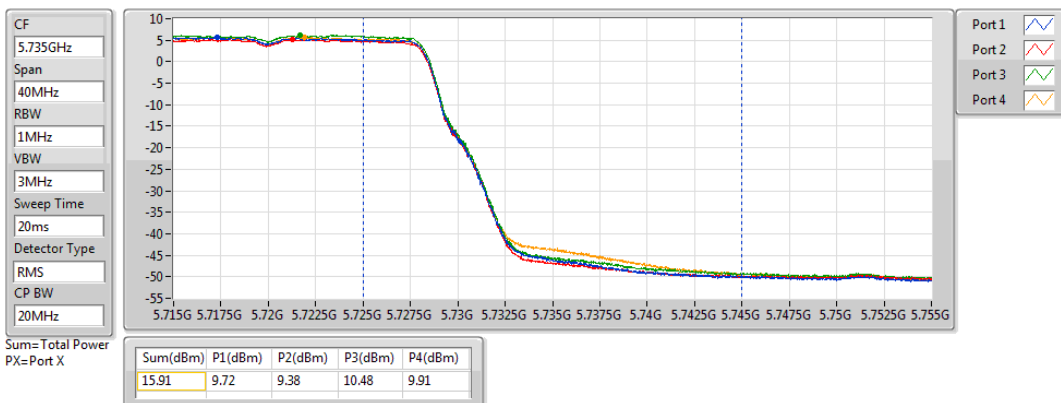


802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

09/01/2020

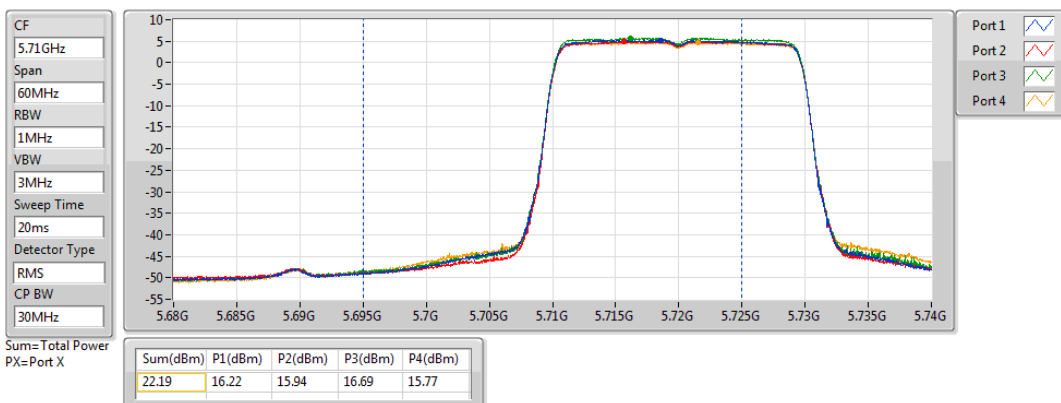


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

09/01/2020

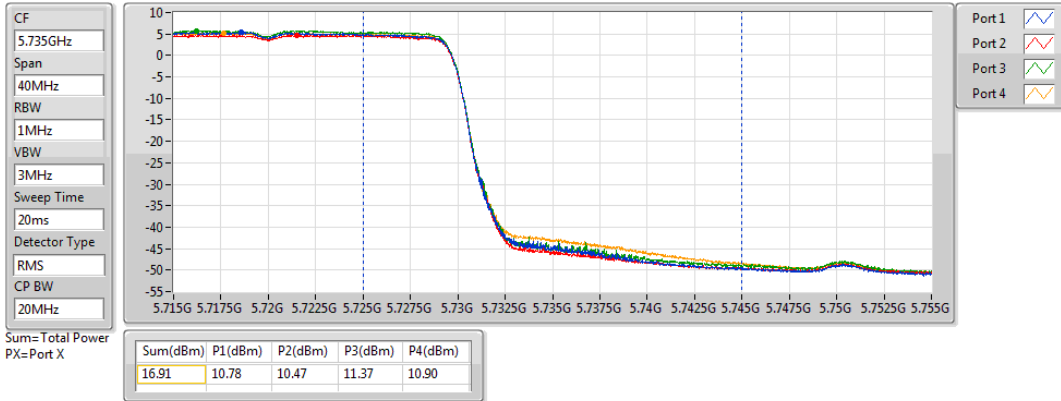


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

09/01/2020

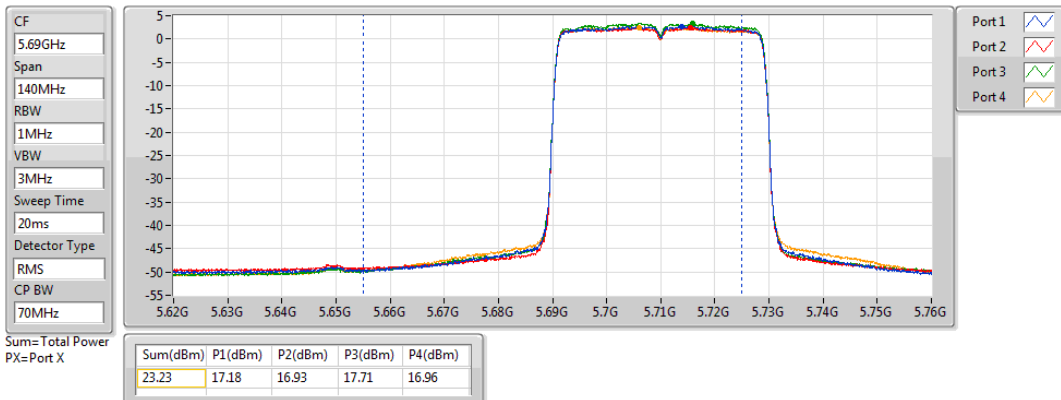


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz

09/01/2020

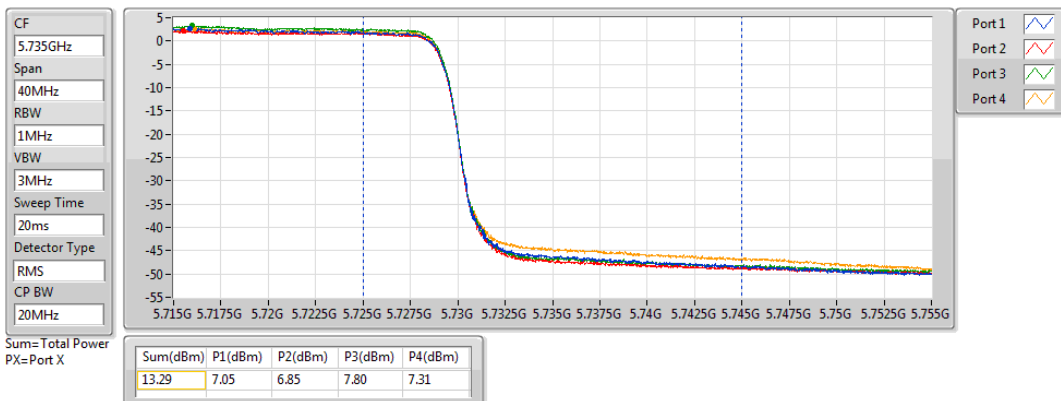


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz

09/01/2020

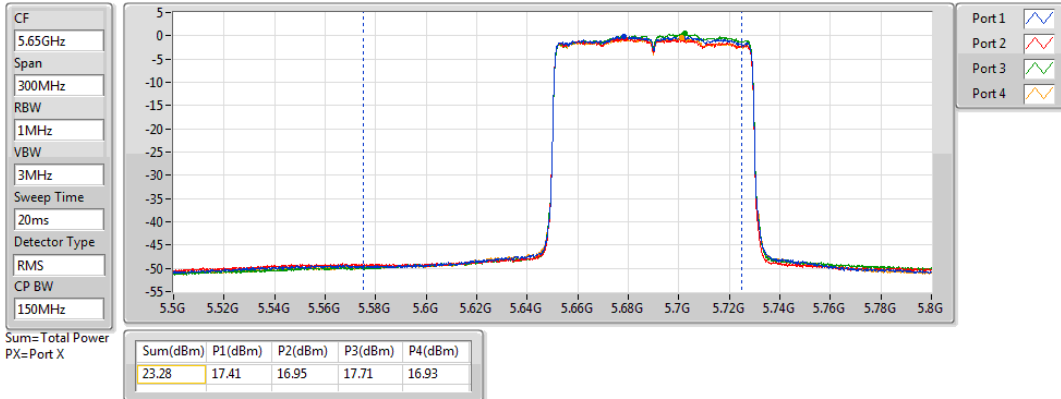


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz

09/01/2020

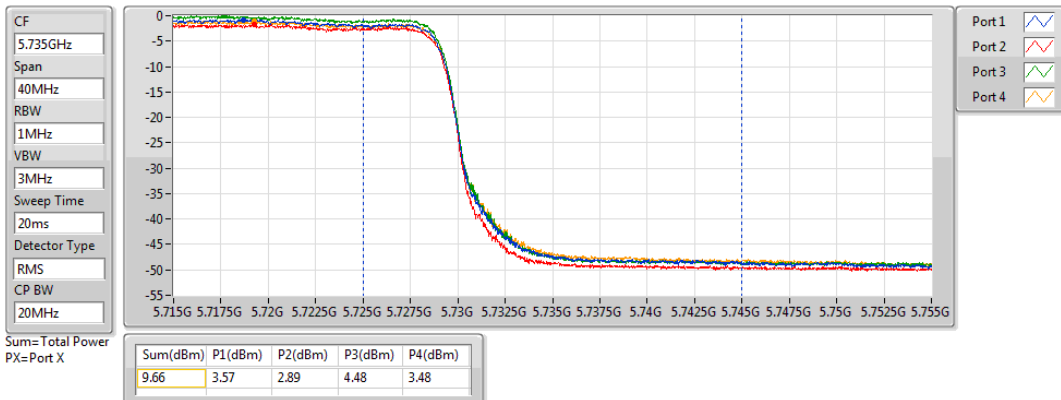


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz

09/01/2020

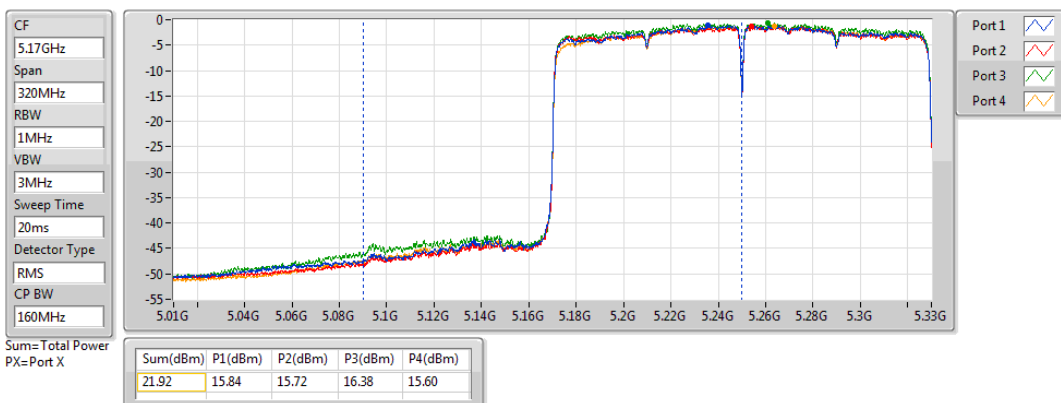


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

AV Power

5250MHz Straddle 5.15-5.25GHz

09/01/2020

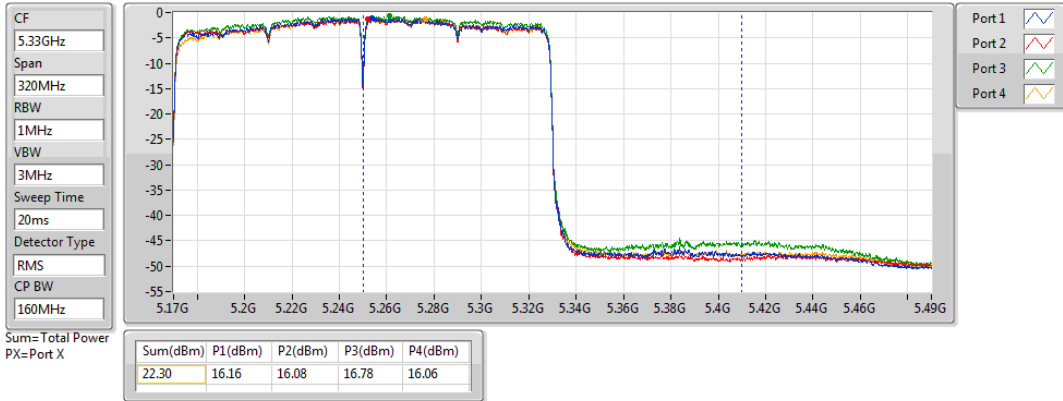


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

AV Power

5250MHz Straddle 5.25-5.35GHz

09/01/2020





Average Power Result

Appendix C

For Nss2 (Only 5775MHz):
Summary

Mode	Total Power (dBm)	Total Power (W)
5.725-5.85GHz	-	-
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	29.37	0.86497



Average Power Result

Appendix C

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5775MHz	Pass	4.85	23.07	23.12	23.53	23.65	29.37	30.00

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

**For Nss1:
Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_4TX	16.29
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	16.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	12.80
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	7.03
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	3.46
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_4TX	10.36
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	10.14
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	6.98
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	4.20
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	3.61
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_4TX	10.32
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	10.28
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	7.56
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	4.58
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	1.34
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	15.80
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	14.56
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	11.59
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	7.28

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	6.63	8.69	8.46	9.26	8.26	14.66	16.37
5200MHz	Pass	6.63	10.50	10.17	10.74	10.02	16.21	16.37
5240MHz	Pass	6.63	10.39	10.17	10.86	10.24	16.29	16.37
5260MHz	Pass	6.63	4.14	4.21	4.68	4.23	10.20	10.37
5300MHz	Pass	6.63	4.36	4.20	4.84	4.39	10.32	10.37
5320MHz	Pass	6.63	4.31	4.15	4.92	4.52	10.36	10.37
5500MHz	Pass	6.67	4.36	4.33	4.65	3.72	10.17	10.33
5580MHz	Pass	6.67	4.37	4.17	4.62	4.25	10.24	10.33
5700MHz	Pass	6.67	4.19	4.13	5.14	4.16	10.30	10.33
5720MHz Straddle 5.47-5.725GHz	Pass	6.67	4.33	4.26	4.93	3.98	10.32	10.33
5720MHz Straddle 5.725-5.85GHz	Pass	6.61	2.26	1.94	3.02	2.44	8.33	29.39
5745MHz	Pass	6.61	10.13	9.68	10.20	10.03	15.80	29.39
5785MHz	Pass	6.61	9.91	9.27	10.00	9.97	15.67	29.39
5825MHz	Pass	6.61	9.89	9.10	9.85	9.52	15.40	29.39
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.63	8.69	8.25	9.38	8.46	14.57	16.37
5200MHz	Pass	6.63	10.10	9.71	10.39	9.72	15.89	16.37
5240MHz	Pass	6.63	10.11	9.90	10.52	9.77	16.00	16.37
5260MHz	Pass	6.63	3.82	3.93	4.46	3.87	9.95	10.37
5300MHz	Pass	6.63	3.88	3.79	4.45	3.89	9.88	10.37
5320MHz	Pass	6.63	4.05	4.06	4.57	4.17	10.14	10.37
5500MHz	Pass	6.67	4.26	4.33	4.57	3.78	10.13	10.33
5580MHz	Pass	6.67	3.67	3.93	4.08	3.58	9.69	10.33
5700MHz	Pass	6.67	4.12	4.11	5.04	3.99	10.28	10.33
5720MHz Straddle 5.47-5.725GHz	Pass	6.67	4.04	3.73	4.50	3.55	9.91	10.33
5720MHz Straddle 5.725-5.85GHz	Pass	6.61	1.97	1.64	2.62	2.02	7.99	29.39
5745MHz	Pass	6.61	8.68	8.08	8.82	8.89	14.56	29.39
5785MHz	Pass	6.61	8.45	7.99	8.84	8.66	14.40	29.39
5825MHz	Pass	6.61	8.37	7.63	8.52	8.04	14.04	29.39
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.63	4.16	3.70	4.92	4.16	10.10	16.37
5230MHz	Pass	6.63	7.09	6.57	7.37	6.50	12.80	16.37
5270MHz	Pass	6.63	0.90	0.94	1.46	1.01	6.97	10.37
5310MHz	Pass	6.63	1.01	0.90	1.30	0.89	6.98	10.37
5510MHz	Pass	6.67	1.28	1.24	1.73	0.75	7.17	10.33
5550MHz	Pass	6.67	0.78	0.91	1.37	0.59	6.79	10.33
5670MHz	Pass	6.67	0.97	0.79	1.76	0.61	6.93	10.33
5710MHz Straddle 5.47-5.725GHz	Pass	6.67	1.73	1.29	2.34	1.51	7.56	10.33
5710MHz Straddle 5.725-5.85GHz	Pass	6.61	-1.12	-1.17	-0.36	-0.87	5.08	29.39
5755MHz	Pass	6.61	5.46	5.32	6.13	6.11	11.59	29.39
5795MHz	Pass	6.61	5.19	5.01	5.86	5.84	11.47	29.39
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.63	1.19	0.79	1.60	0.91	7.03	16.37

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)
5290MHz	Pass	6.63	-1.81	-1.94	-1.19	-1.69	4.20	10.37
5530MHz	Pass	6.67	-1.64	-1.66	-1.41	-2.19	4.02	10.33
5610MHz	Pass	6.67	-1.42	-1.75	-1.22	-1.95	4.31	10.33
5690MHz Straddle 5.47-5.725GHz	Pass	6.67	-1.37	-1.75	-0.47	-1.63	4.58	10.33
5690MHz Straddle 5.725-5.85GHz	Pass	6.61	-4.41	-5.09	-3.36	-4.52	1.56	29.39
5775MHz	Pass	6.61	1.07	1.05	1.59	1.78	7.28	29.39
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.63	-2.31	-2.76	-2.03	-2.60	3.46	16.37
5250MHz Straddle 5.25-5.35GHz	Pass	6.63	-2.36	-2.41	-2.05	-2.29	3.61	10.37
5570MHz	Pass	6.67	-4.32	-4.37	-4.06	-4.81	1.34	10.33

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

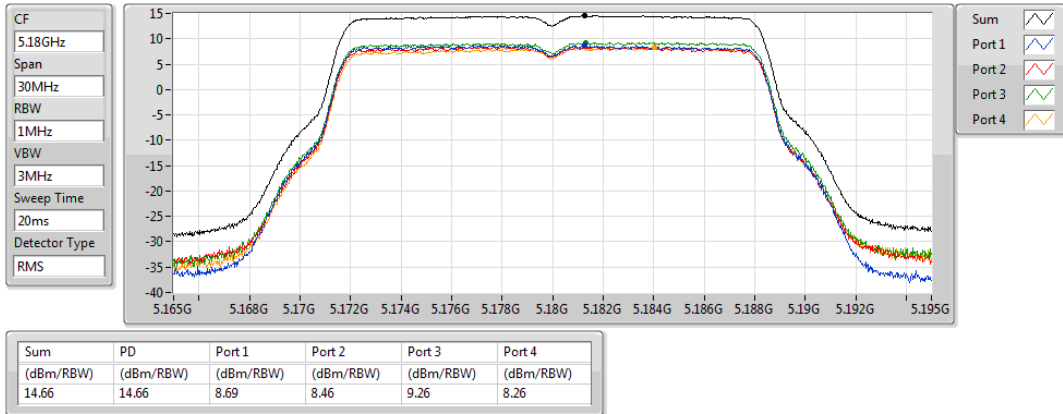
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_4TX

5180MHz

PSD

09/01/2020

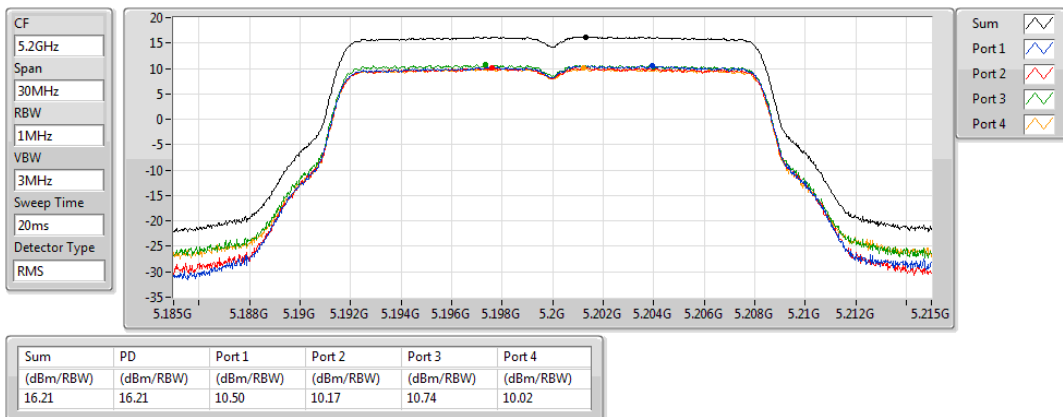


802.11a_Nss1,(6Mbps)_4TX

5200MHz

PSD

09/01/2020

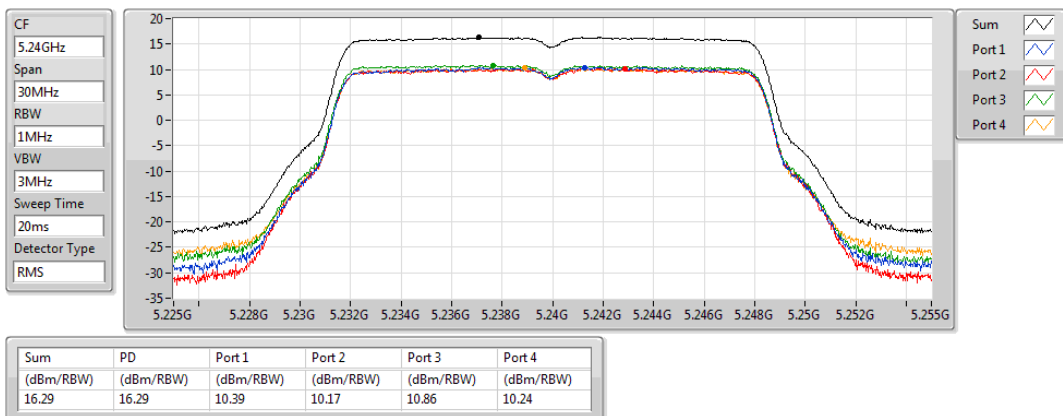


802.11a_Nss1,(6Mbps)_4TX

5240MHz

PSD

09/01/2020

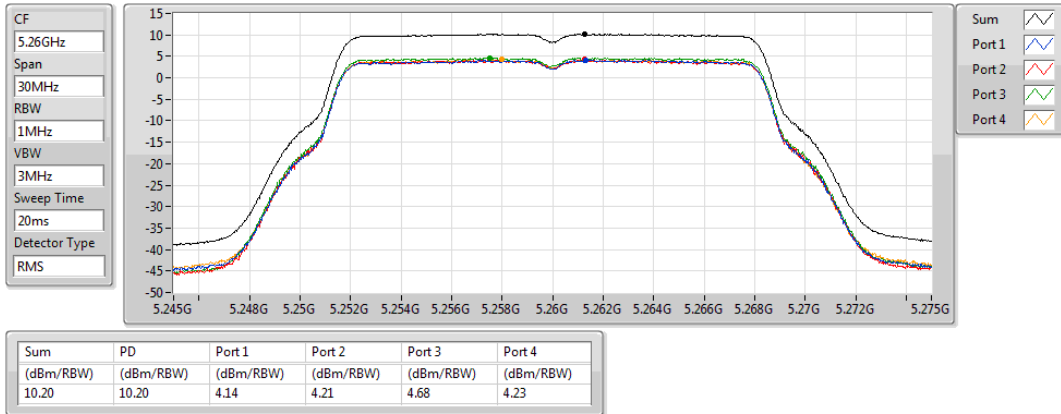


802.11a_Nss1,(6Mbps)_4TX

PSD

5260MHz

09/01/2020

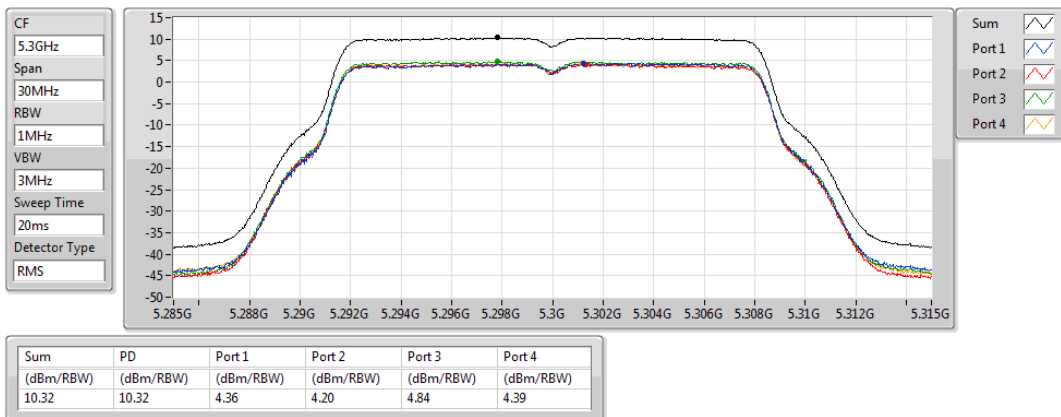


802.11a_Nss1,(6Mbps)_4TX

PSD

5300MHz

09/01/2020

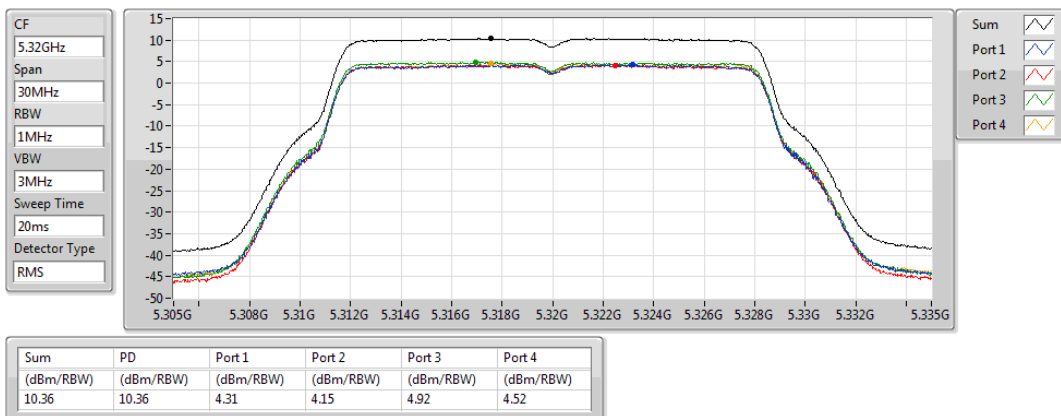


802.11a_Nss1,(6Mbps)_4TX

PSD

5320MHz

09/01/2020

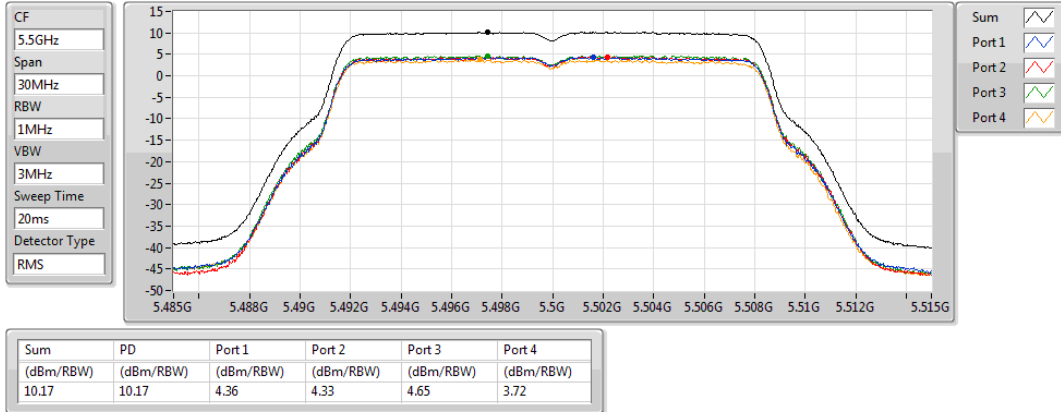


802.11a_Nss1,(6Mbps)_4TX

PSD

5500MHz

09/01/2020

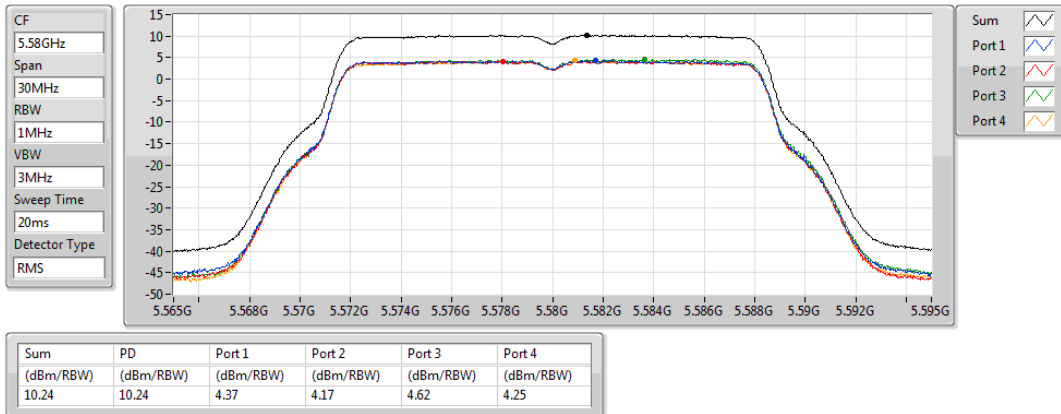


802.11a_Nss1,(6Mbps)_4TX

PSD

5580MHz

09/01/2020

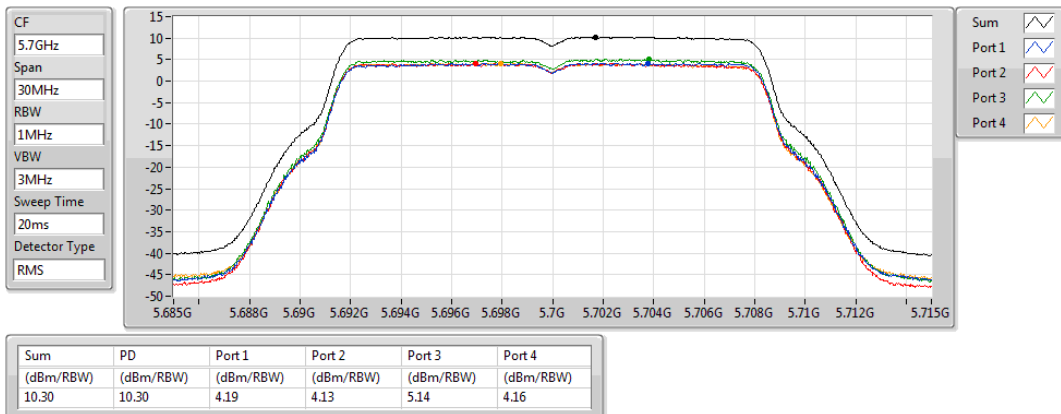


802.11a_Nss1,(6Mbps)_4TX

PSD

5700MHz

09/01/2020

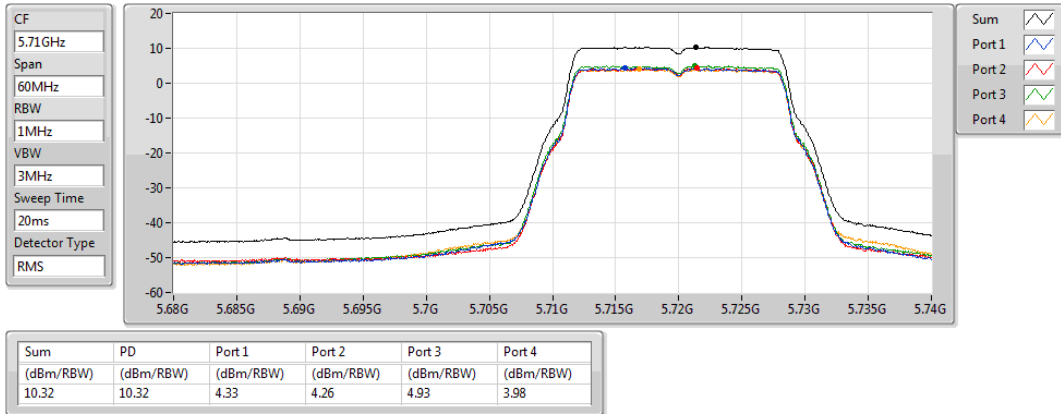


802.11a_Nss1,(6Mbps)_4TX

5720MHz Straddle 5.47-5.725GHz

PSD

09/01/2020

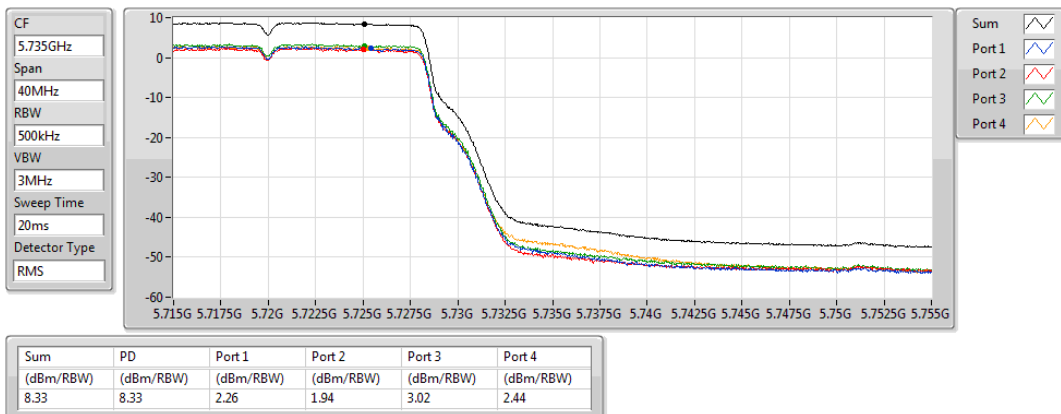


802.11a_Nss1,(6Mbps)_4TX

5720MHz Straddle 5.725-5.85GHz

PSD

09/01/2020

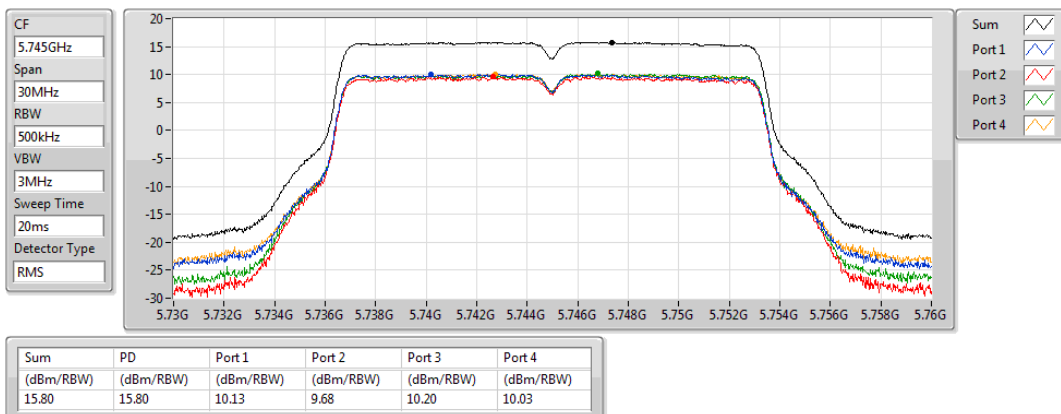


802.11a_Nss1,(6Mbps)_4TX

5745MHz

PSD

09/01/2020



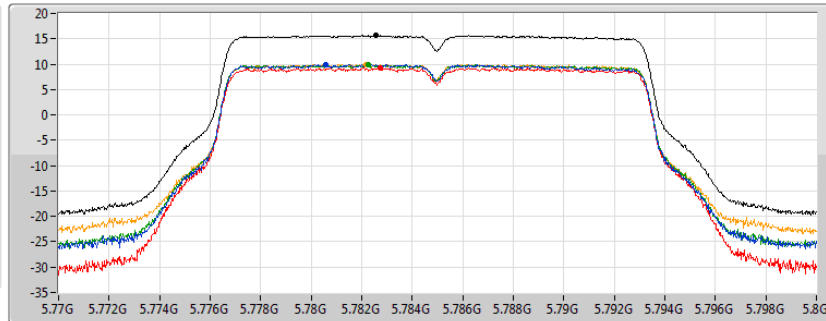
802.11a_Nss1,(6Mbps)_4TX

5785MHz

PSD

09/01/2020

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



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.67	15.67	9.91	9.27	10.00	9.97

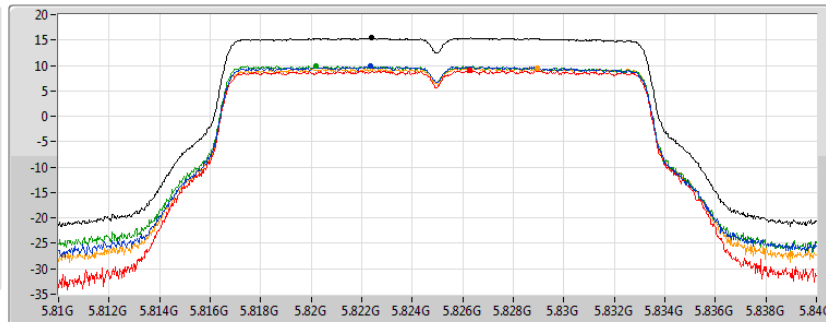
802.11a_Nss1,(6Mbps)_4TX

5825MHz

PSD

09/01/2020

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



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.40	15.40	9.89	9.10	9.85	9.52

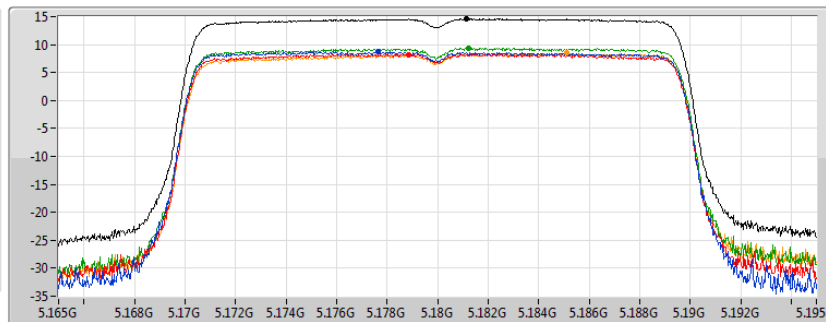
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5180MHz

PSD

09/01/2020

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



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.57	14.57	8.69	8.25	9.38	8.46

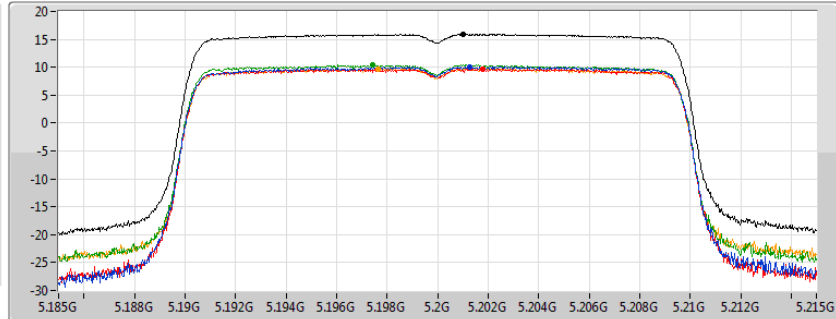
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5200MHz

09/01/2020

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



Sum
Port 1
Port 2
Port 3
Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
15.89	15.89	10.10	9.71	10.39	9.72

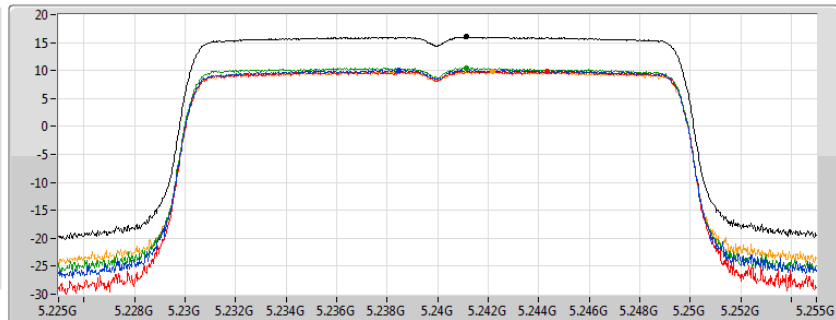
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5240MHz

09/01/2020

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



Sum
Port 1
Port 2
Port 3
Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
16.00	16.00	10.11	9.90	10.52	9.77

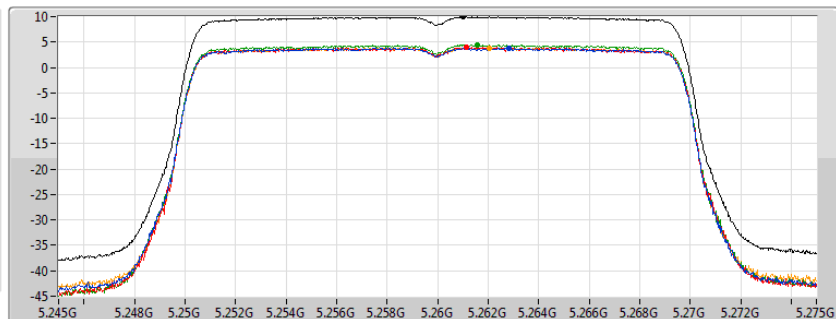
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5260MHz

09/01/2020

CF
5.26GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2
Port 3
Port 4

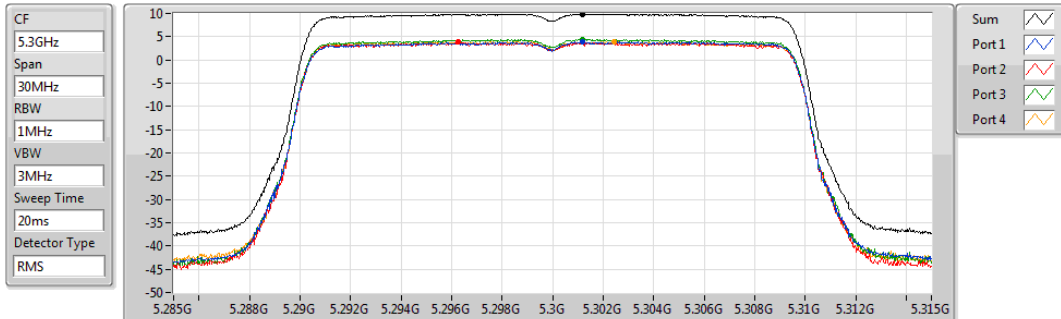
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.95	9.95	3.82	3.93	4.46	3.87

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5300MHz

09/01/2020



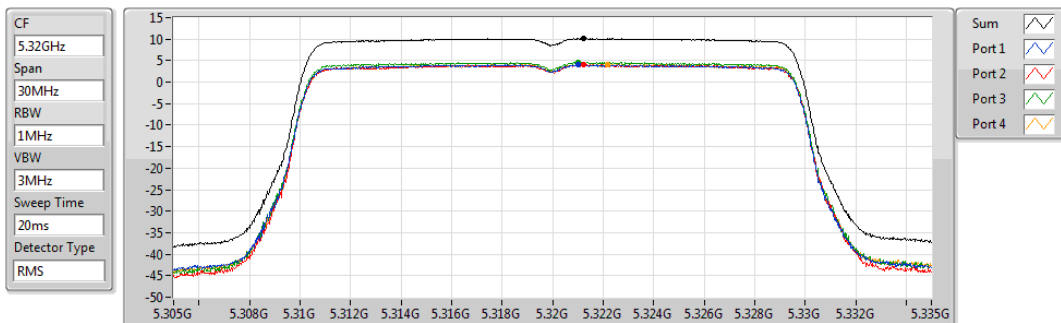
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.88	9.88	3.88	3.79	4.45	3.89

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5320MHz

09/01/2020



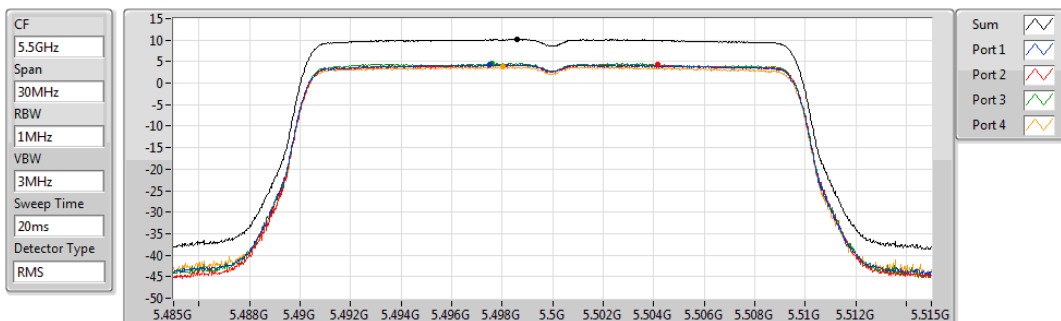
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.14	10.14	4.05	4.06	4.57	4.17

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5500MHz

09/01/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.13	10.13	4.26	4.33	4.57	3.78

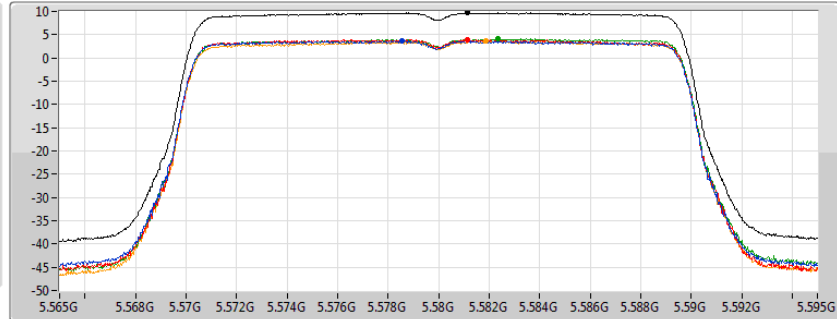
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5580MHz

09/01/2020

CF
5.58GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2
Port 3
Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.69	9.69	3.67	3.93	4.08	3.58

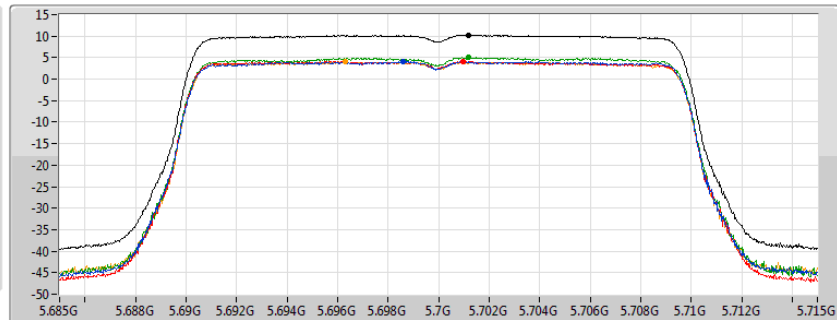
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5700MHz

09/01/2020

CF
5.7GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2
Port 3
Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.28	10.28	4.12	4.11	5.04	3.99

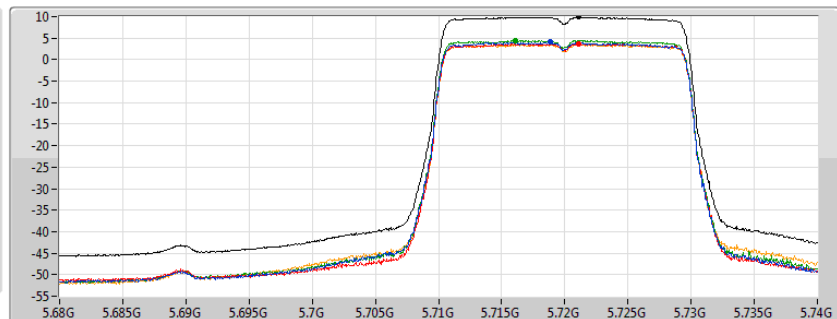
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

09/01/2020

CF
5.71GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2
Port 3
Port 4

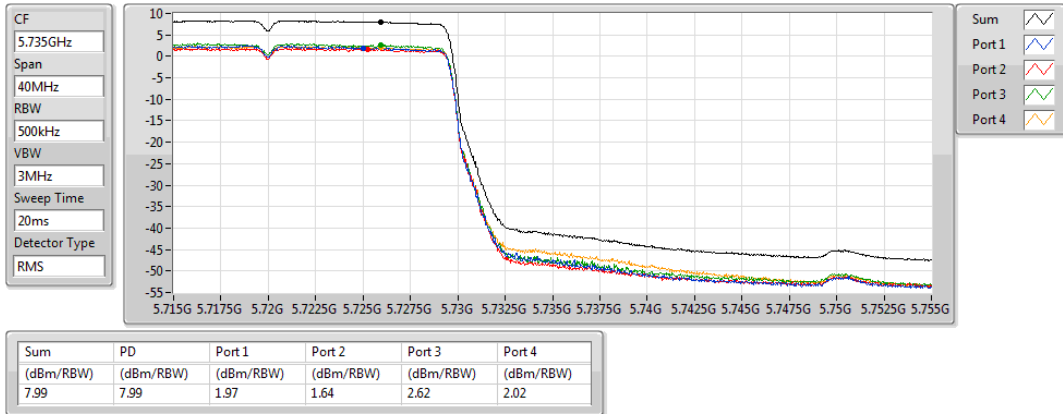
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.91	9.91	4.04	3.73	4.50	3.55

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5720MHz Straddle 5.725-5.85GHz

PSD

09/01/2020

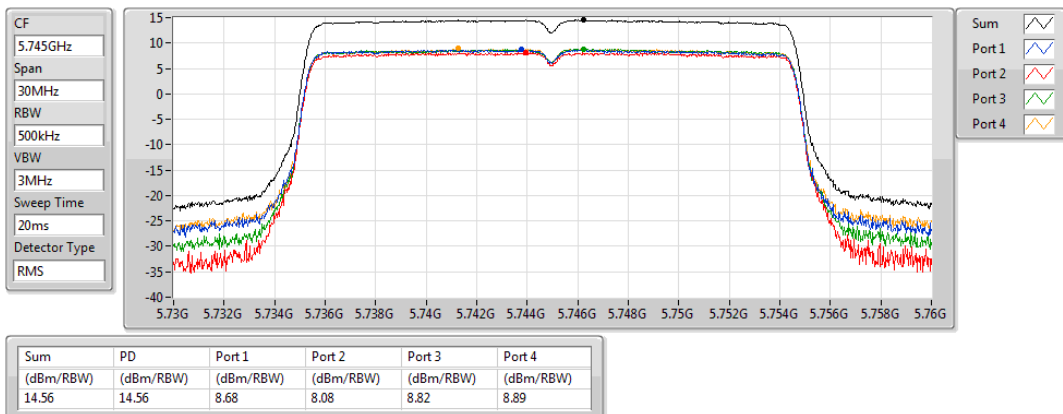


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz

PSD

09/01/2020

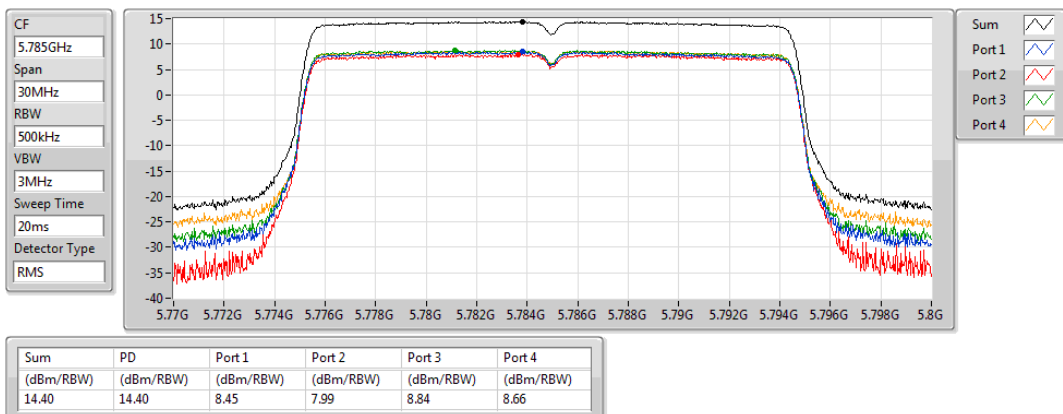


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz

PSD

09/01/2020

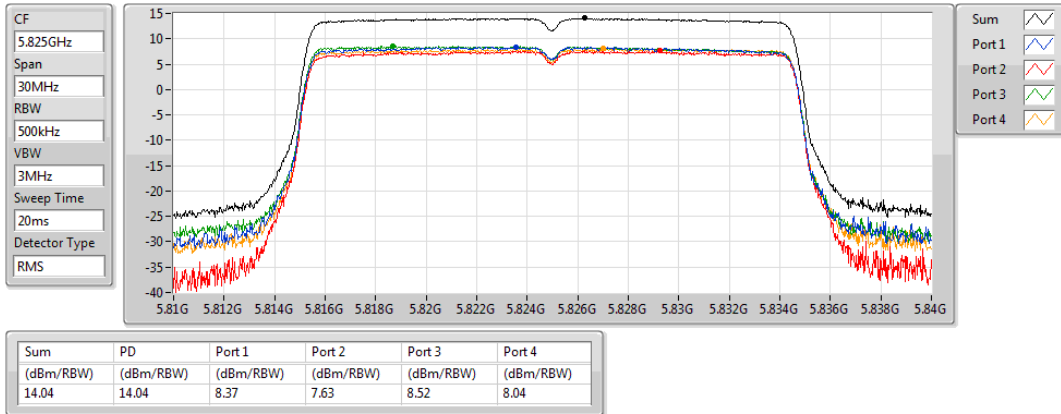


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5825MHz

09/01/2020

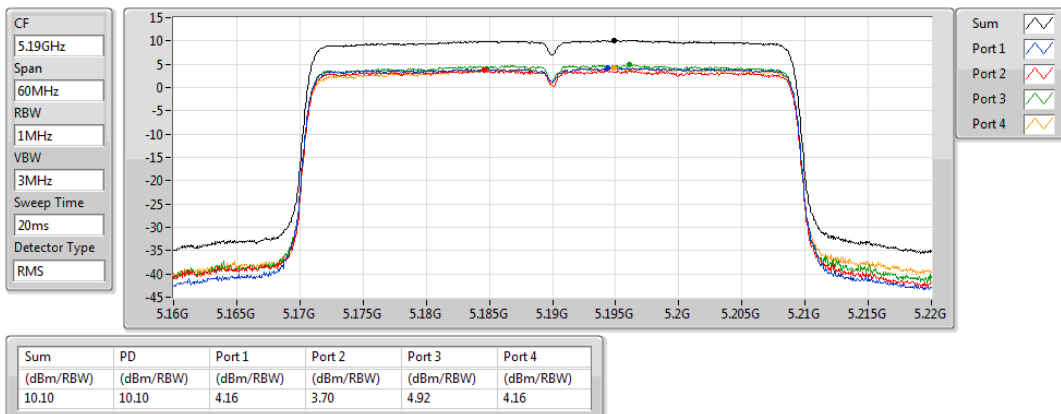


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5190MHz

09/01/2020

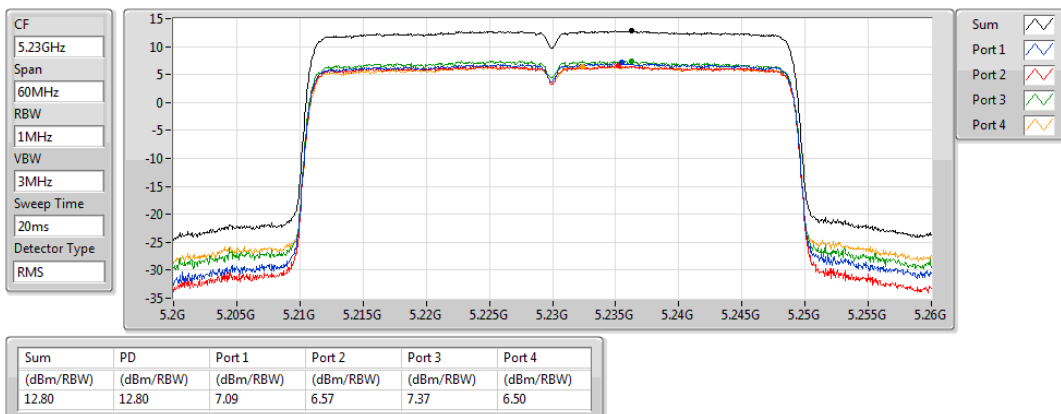


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5230MHz

09/01/2020

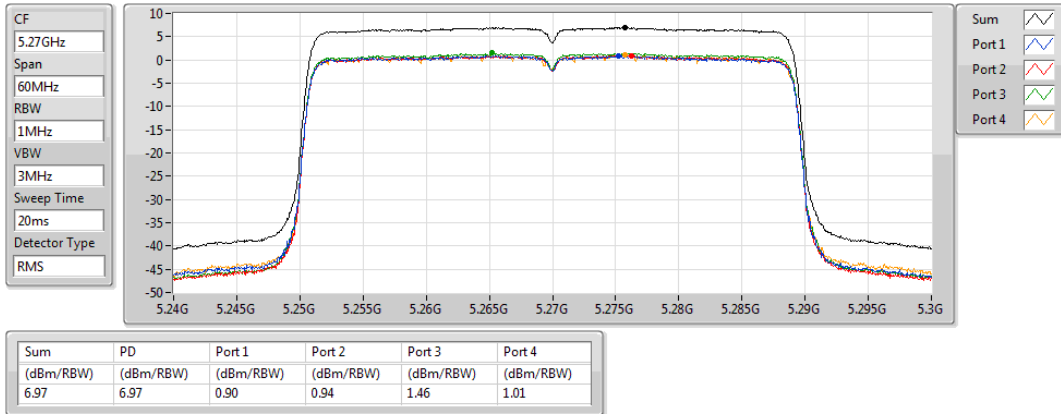


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5270MHz

09/01/2020

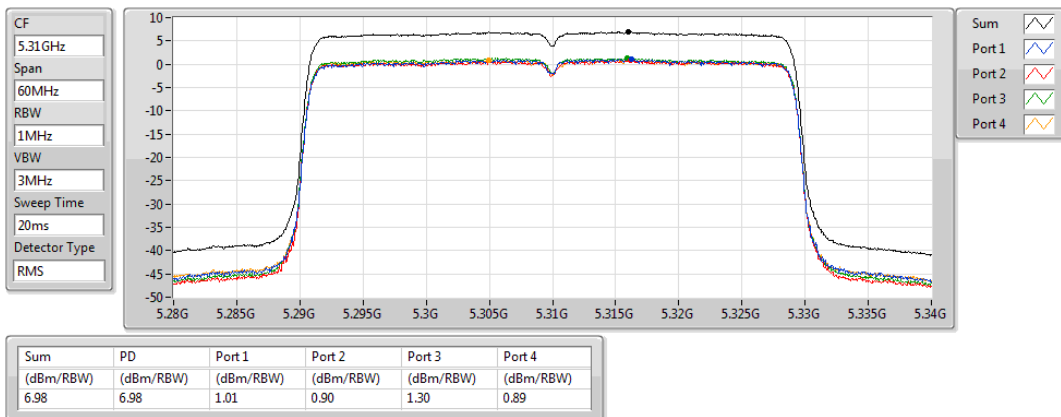


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5310MHz

09/01/2020

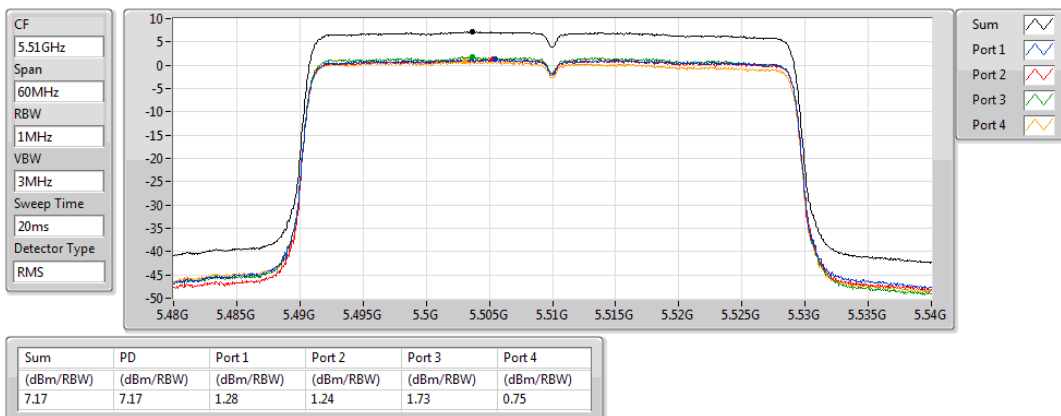


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5510MHz

09/01/2020

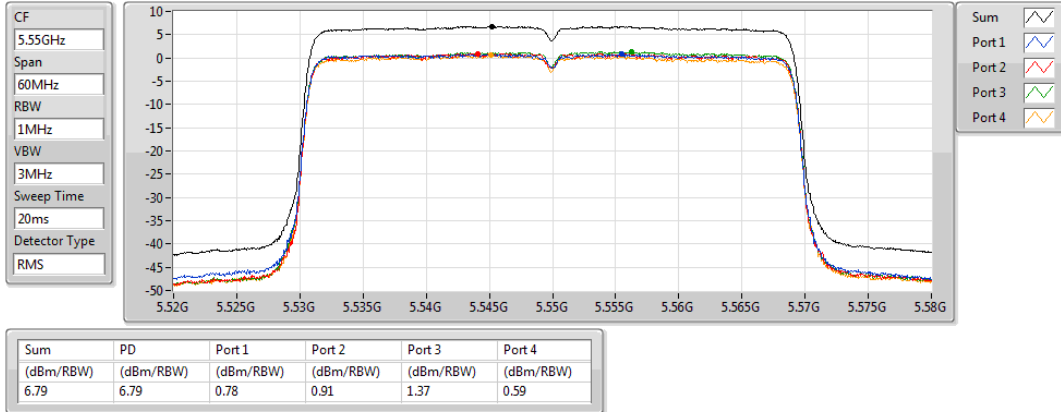


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5550MHz

09/01/2020

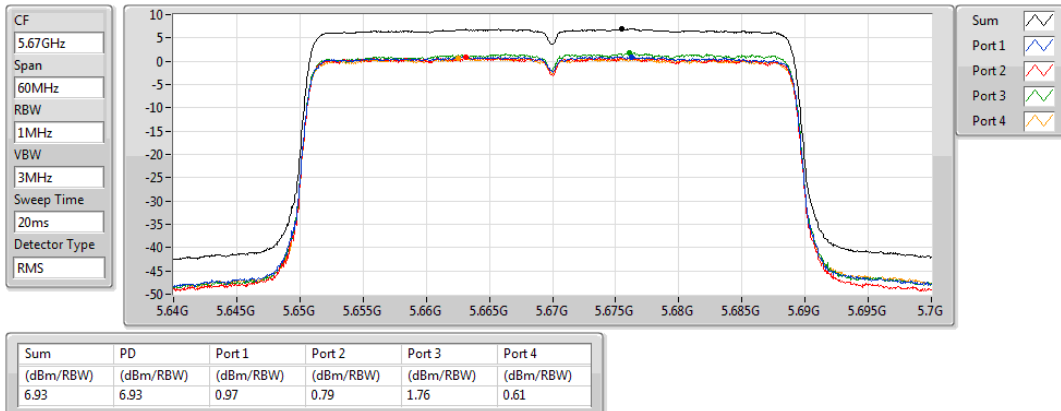


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5670MHz

09/01/2020

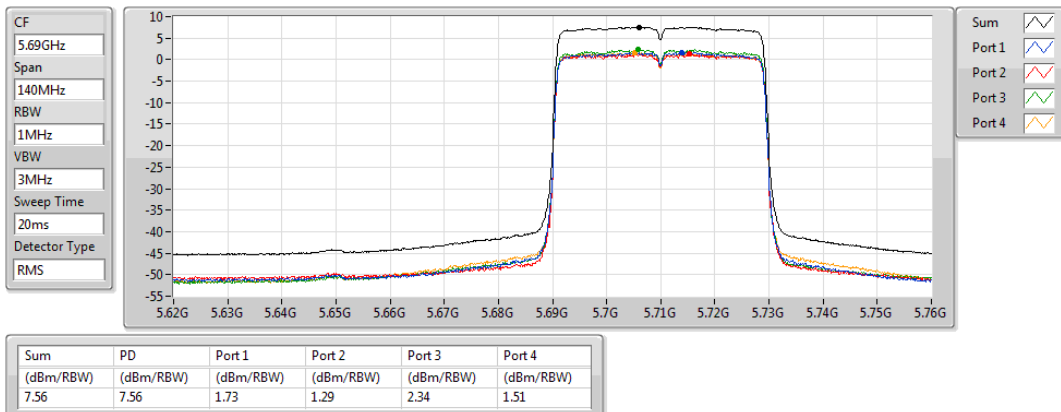


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5710MHz Straddle 5.47-5.725GHz

09/01/2020

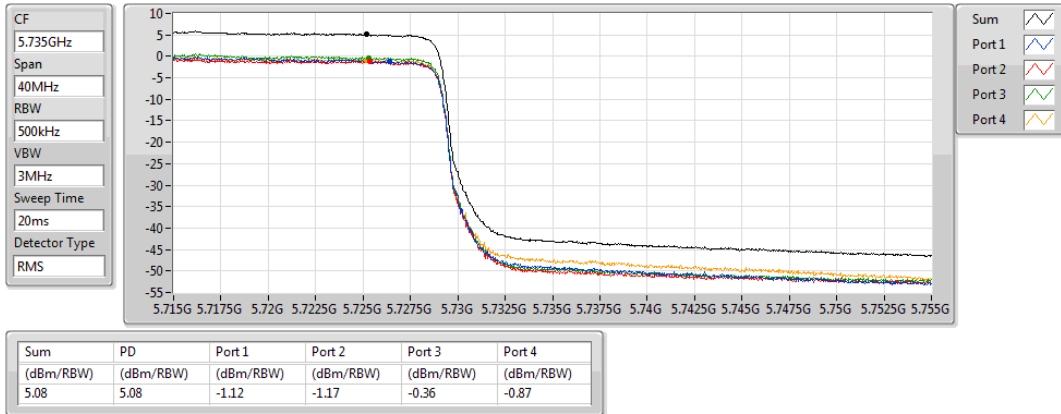


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5710MHz Straddle 5.725-5.85GHz

PSD

09/01/2020

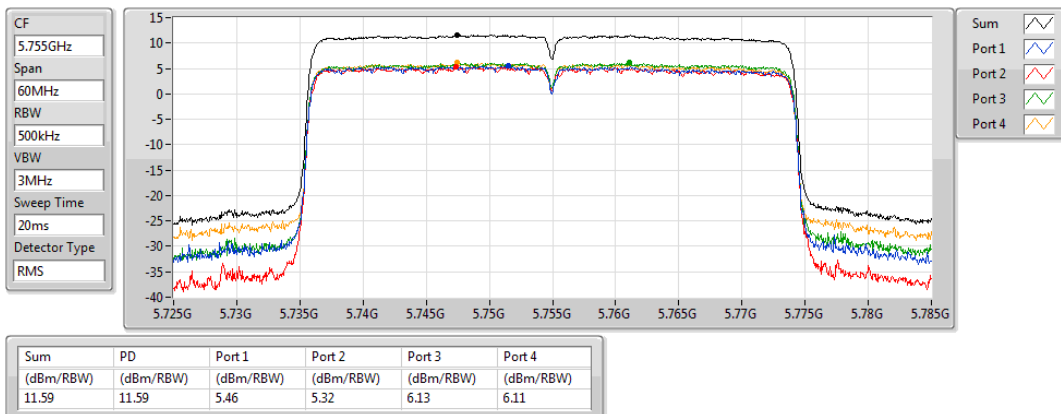


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5755MHz

PSD

09/01/2020

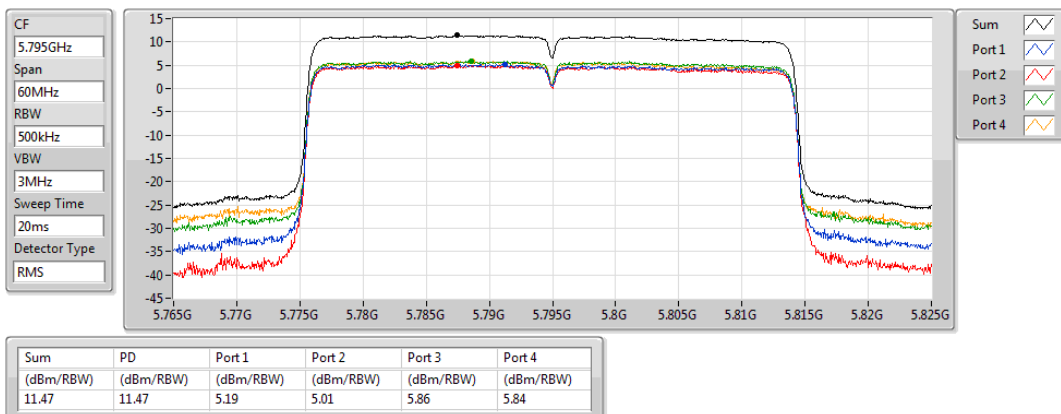


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5795MHz

PSD

09/01/2020

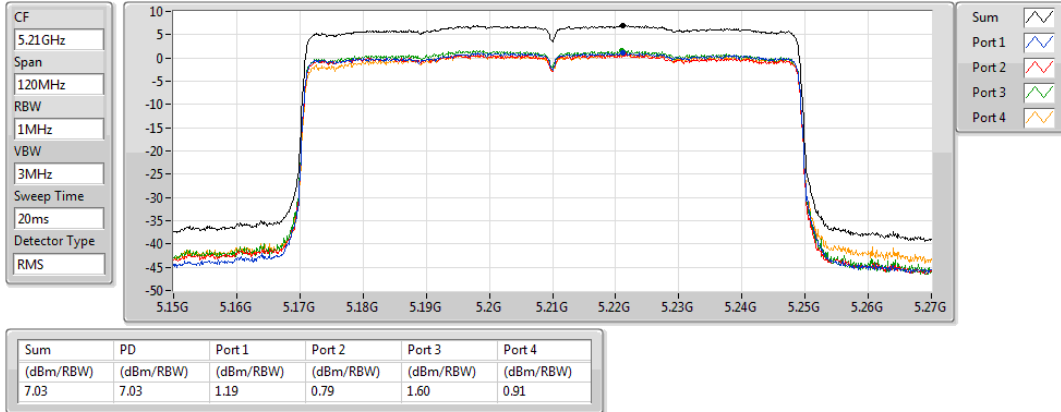


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5210MHz

09/01/2020

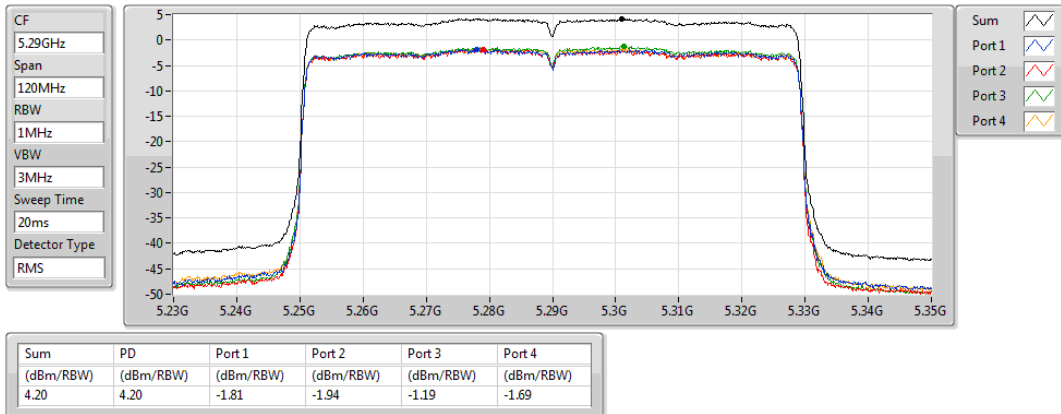


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5290MHz

09/01/2020

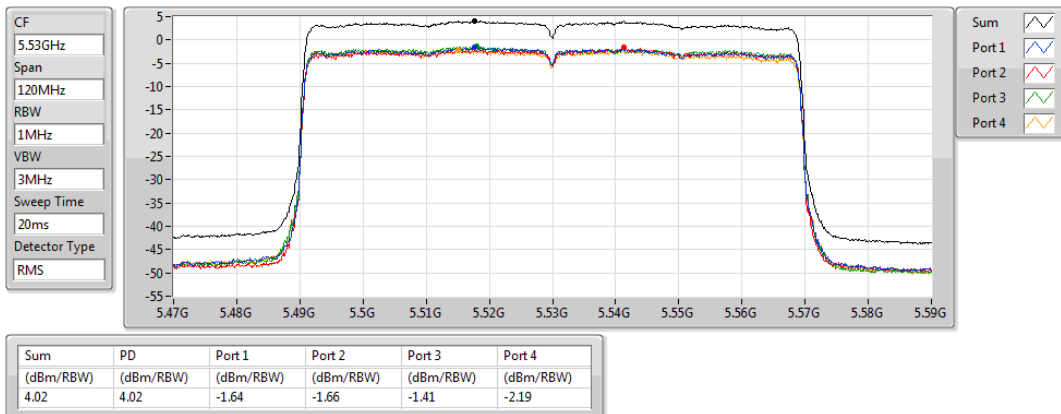


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5530MHz

09/01/2020

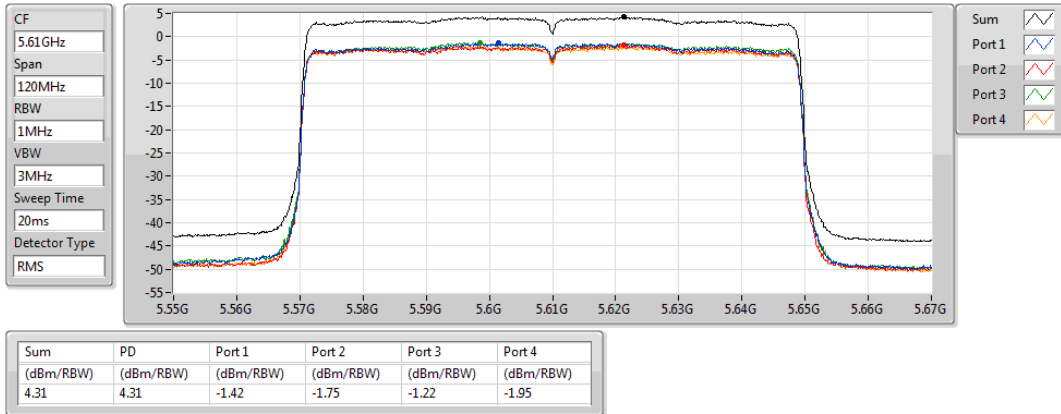


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5610MHz

09/01/2020

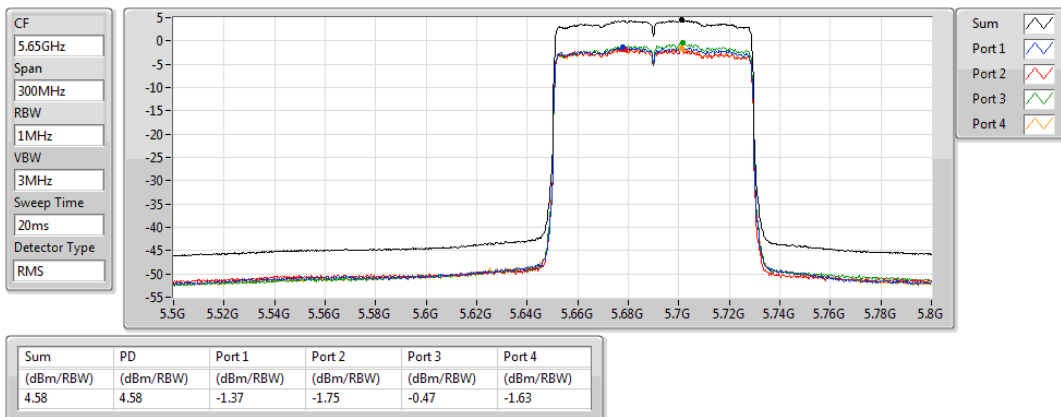


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

09/01/2020

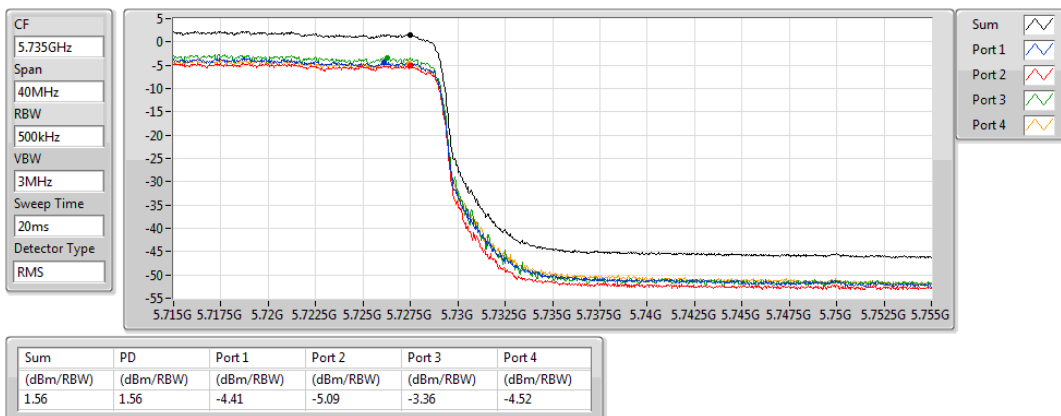


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz

09/01/2020

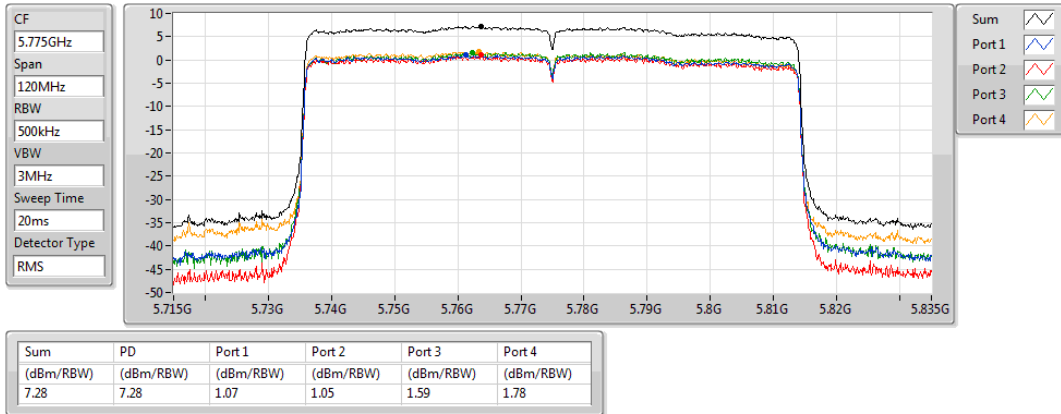


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5775MHz

09/01/2020

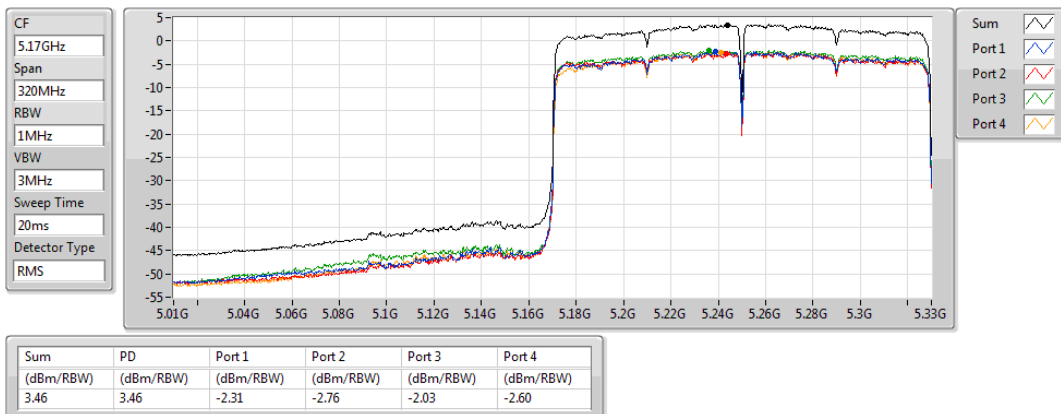


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

PSD

5250MHz Straddle 5.15-5.25GHz

09/01/2020

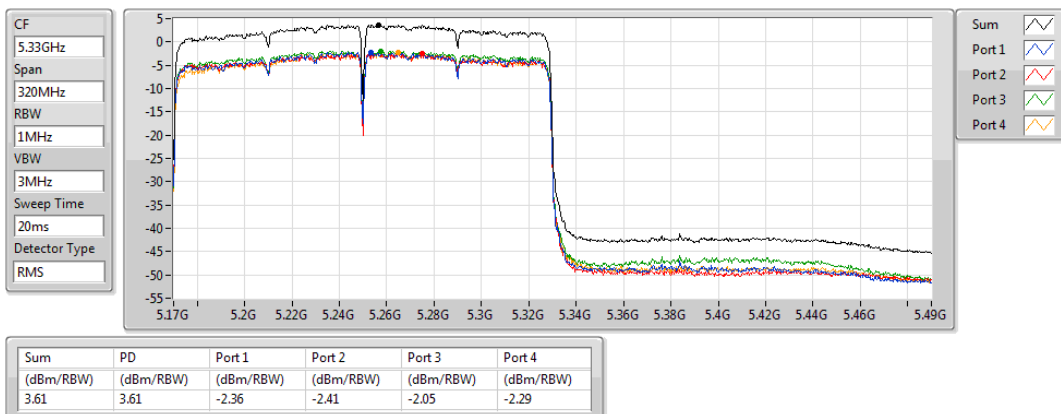


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

PSD

5250MHz Straddle 5.25-5.35GHz

09/01/2020

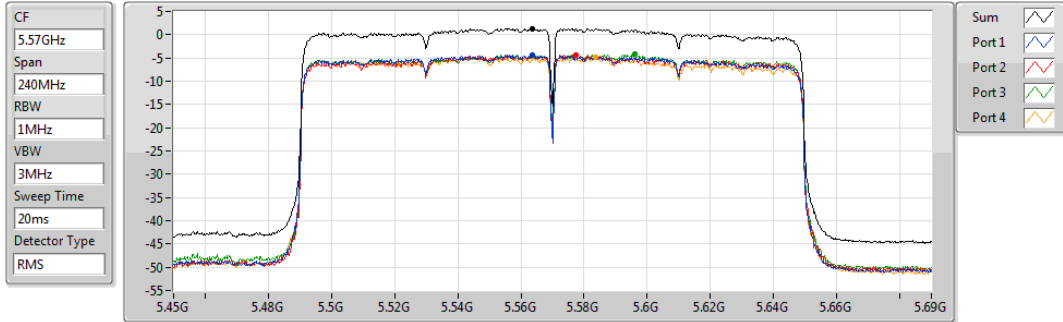


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

PSD

5570MHz

09/01/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.34	1.34	-4.32	-4.37	-4.06	-4.81



**For Nss2 (Only 5775MHz):
Summary**

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	9.31

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)
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5775MHz	Pass	4.85	2.87	3.21	3.49	3.85	9.31	30.00

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

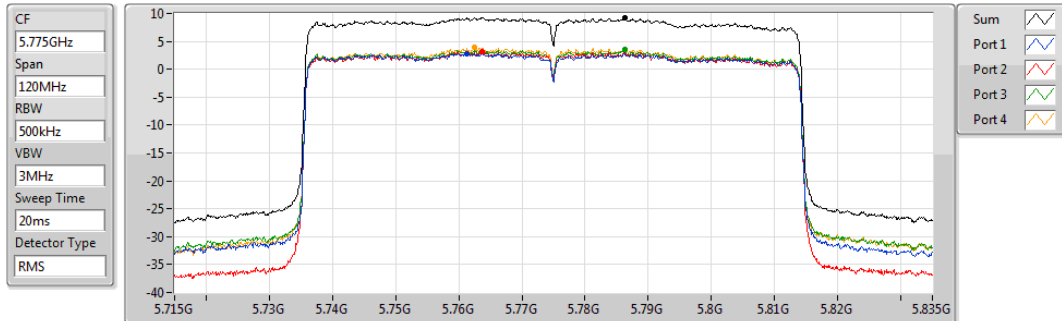
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

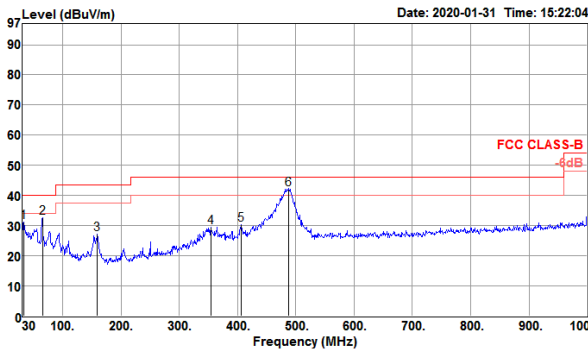
PSD

5775MHz

20/01/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.31	9.31	2.87	3.21	3.49	3.85

RSE below 1GHz Result																																																																																																																	
Operating Mode			3			Polarization			Vertical																																																																																																								
Operating Function			CTX																																																																																																														
Level (dBuV/m) Date: 2020-01-31 Time: 15:22:04  <table><tr><th></th><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>CableAntenna</th><th>Preamp</th><th>A/Pos</th><th>T/Pos</th><th>Remark</th><th>Pol/Phase</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th>dB/m</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1</td><td>32.91</td><td>31.13</td><td>40.00</td><td>-8.87</td><td>38.91</td><td>0.76</td><td>22.89</td><td>31.43</td><td>300</td><td>360</td><td>Peak</td><td>VERTICAL</td></tr><tr><td>2</td><td>64.92</td><td>32.57</td><td>40.00</td><td>-7.43</td><td>51.00</td><td>1.00</td><td>12.35</td><td>31.78</td><td>300</td><td>360</td><td>Peak</td><td>VERTICAL</td></tr><tr><td>3</td><td>159.01</td><td>27.30</td><td>43.50</td><td>-16.20</td><td>41.22</td><td>1.50</td><td>16.30</td><td>31.72</td><td>300</td><td>360</td><td>Peak</td><td>VERTICAL</td></tr><tr><td>4</td><td>353.98</td><td>29.58</td><td>46.00</td><td>-16.42</td><td>39.04</td><td>2.11</td><td>20.42</td><td>31.99</td><td>300</td><td>360</td><td>Peak</td><td>VERTICAL</td></tr><tr><td>5</td><td>405.39</td><td>30.45</td><td>46.00</td><td>-15.55</td><td>38.20</td><td>2.22</td><td>22.11</td><td>32.08</td><td>300</td><td>360</td><td>Peak</td><td>VERTICAL</td></tr><tr><td>6</td><td>487.84</td><td>41.96</td><td>46.00</td><td>-4.04</td><td>48.39</td><td>2.48</td><td>23.38</td><td>32.29</td><td>300</td><td>360</td><td>QP</td><td>VERTICAL</td></tr></table>													Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		1	32.91	31.13	40.00	-8.87	38.91	0.76	22.89	31.43	300	360	Peak	VERTICAL	2	64.92	32.57	40.00	-7.43	51.00	1.00	12.35	31.78	300	360	Peak	VERTICAL	3	159.01	27.30	43.50	-16.20	41.22	1.50	16.30	31.72	300	360	Peak	VERTICAL	4	353.98	29.58	46.00	-16.42	39.04	2.11	20.42	31.99	300	360	Peak	VERTICAL	5	405.39	30.45	46.00	-15.55	38.20	2.22	22.11	32.08	300	360	Peak	VERTICAL	6	487.84	41.96	46.00	-4.04	48.39	2.48	23.38	32.29	300	360	QP	VERTICAL
	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase																																																																																																						
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg																																																																																																							
1	32.91	31.13	40.00	-8.87	38.91	0.76	22.89	31.43	300	360	Peak	VERTICAL																																																																																																					
2	64.92	32.57	40.00	-7.43	51.00	1.00	12.35	31.78	300	360	Peak	VERTICAL																																																																																																					
3	159.01	27.30	43.50	-16.20	41.22	1.50	16.30	31.72	300	360	Peak	VERTICAL																																																																																																					
4	353.98	29.58	46.00	-16.42	39.04	2.11	20.42	31.99	300	360	Peak	VERTICAL																																																																																																					
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Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)																																																																																																																	



RSE below 1GHz Result

Appendix E.1

RSE below 1GHz Result																																																																																																											
Operating Mode		3			Polarization			Horizontal																																																																																																			
Operating Function		CTX																																																																																																									
Level (dBuV/m) Date: 2020-01-31 Time: 15:27:49 FCC CLASS-B 46dB Frequency (MHz) <table><thead><tr><th></th><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>CableAntenna</th><th>Preamp</th><th>A/Pos</th><th>T/Pos</th><th>Remark</th><th>Pol/Phase</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th>dB/m</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr></thead><tbody><tr><td>1</td><td>30.00</td><td>28.41</td><td>40.00</td><td>-11.59</td><td>34.86</td><td>0.70</td><td>24.35</td><td>31.50</td><td>100</td><td>0 Peak</td><td>HORIZONTAL</td></tr><tr><td>2</td><td>63.95</td><td>29.95</td><td>40.00</td><td>-10.05</td><td>48.38</td><td>1.00</td><td>12.34</td><td>31.77</td><td>100</td><td>0 Peak</td><td>HORIZONTAL</td></tr><tr><td>3</td><td>88.20</td><td>27.82</td><td>43.50</td><td>-15.68</td><td>43.73</td><td>1.20</td><td>14.68</td><td>31.79</td><td>100</td><td>0 Peak</td><td>HORIZONTAL</td></tr><tr><td>4</td><td>159.98</td><td>31.92</td><td>43.50</td><td>-11.58</td><td>45.82</td><td>1.50</td><td>16.31</td><td>31.71</td><td>100</td><td>0 Peak</td><td>HORIZONTAL</td></tr><tr><td>5</td><td>349.13</td><td>32.00</td><td>46.00</td><td>-14.00</td><td>41.64</td><td>2.10</td><td>20.24</td><td>31.98</td><td>100</td><td>0 Peak</td><td>HORIZONTAL</td></tr><tr><td>6</td><td>489.78</td><td>37.85</td><td>46.00</td><td>-8.15</td><td>44.28</td><td>2.48</td><td>23.38</td><td>32.29</td><td>100</td><td>0 Peak</td><td>HORIZONTAL</td></tr></tbody></table> Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)													Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		1	30.00	28.41	40.00	-11.59	34.86	0.70	24.35	31.50	100	0 Peak	HORIZONTAL	2	63.95	29.95	40.00	-10.05	48.38	1.00	12.34	31.77	100	0 Peak	HORIZONTAL	3	88.20	27.82	43.50	-15.68	43.73	1.20	14.68	31.79	100	0 Peak	HORIZONTAL	4	159.98	31.92	43.50	-11.58	45.82	1.50	16.31	31.71	100	0 Peak	HORIZONTAL	5	349.13	32.00	46.00	-14.00	41.64	2.10	20.24	31.98	100	0 Peak	HORIZONTAL	6	489.78	37.85	46.00	-8.15	44.28	2.48	23.38	32.29	100	0 Peak	HORIZONTAL
	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase																																																																																																
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg																																																																																																	
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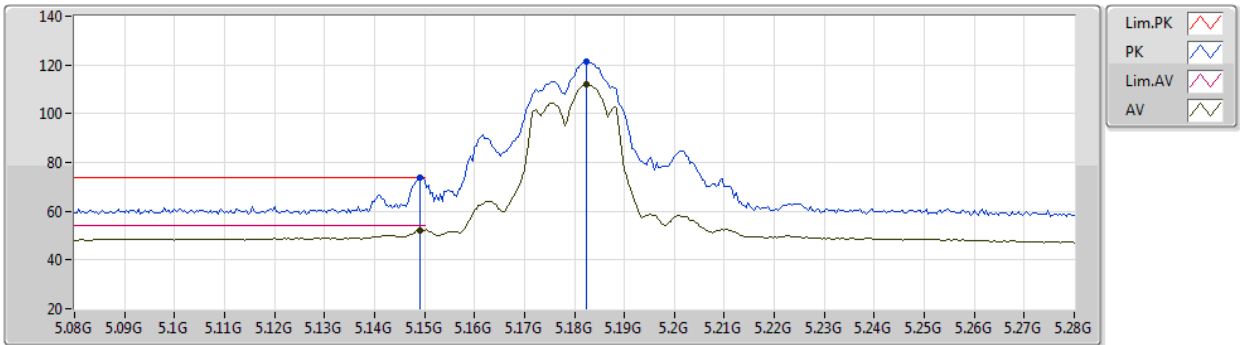
**For Nss1:
Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	Pass	AV	5.15G	53.97	54.00	-0.03	3	Vertical	0	2.17	-

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5180MHz_TX



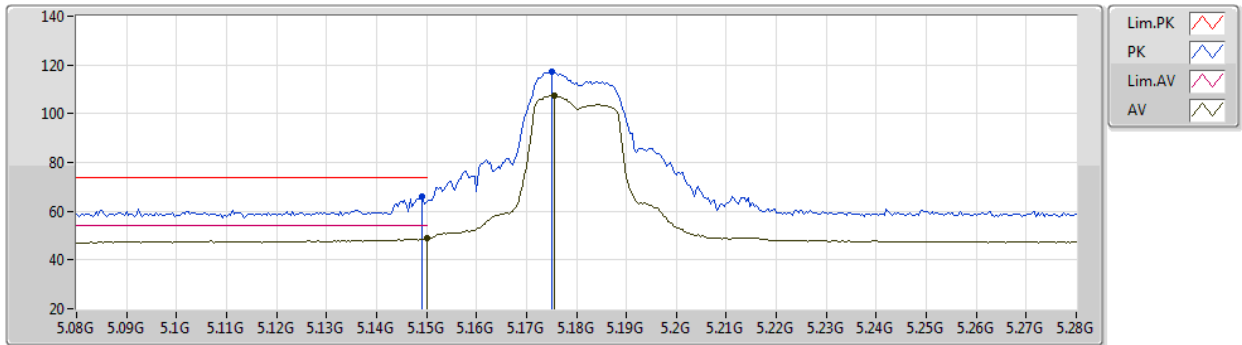
EUT Y_4TX
Setting 88
06-D-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1492G	73.58	74.00	-0.42	67.86	3	Vertical	355	1.87	-	31.75	5.60	31.63
AV	5.1492G	52.26	54.00	-1.74	46.54	3	Vertical	355	1.87	-	31.75	5.60	31.63
PK	5.1824G	121.37	Inf	-Inf	115.83	3	Vertical	355	1.87	-	31.59	5.60	31.65
AV	5.1824G	111.89	Inf	-Inf	106.35	3	Vertical	355	1.87	-	31.59	5.60	31.65

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5180MHz_TX



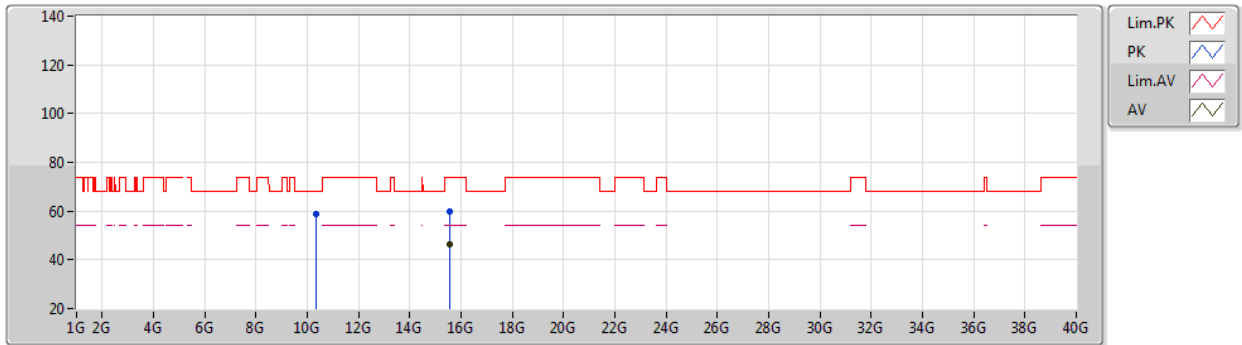
EUT Y_4TX
Setting 88
06-D-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1492G	65.99	74.00	-8.01	60.27	3	Horizontal	360	1.78	-	31.75	5.60	31.63
AV	5.15G	48.74	54.00	-5.26	43.02	3	Horizontal	360	1.78	-	31.75	5.60	31.63
PK	5.1752G	117.15	Inf	-Inf	111.58	3	Horizontal	360	1.78	-	31.62	5.60	31.65
AV	5.1756G	107.49	Inf	-Inf	101.92	3	Horizontal	360	1.78	-	31.62	5.60	31.65

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5180MHz_TX



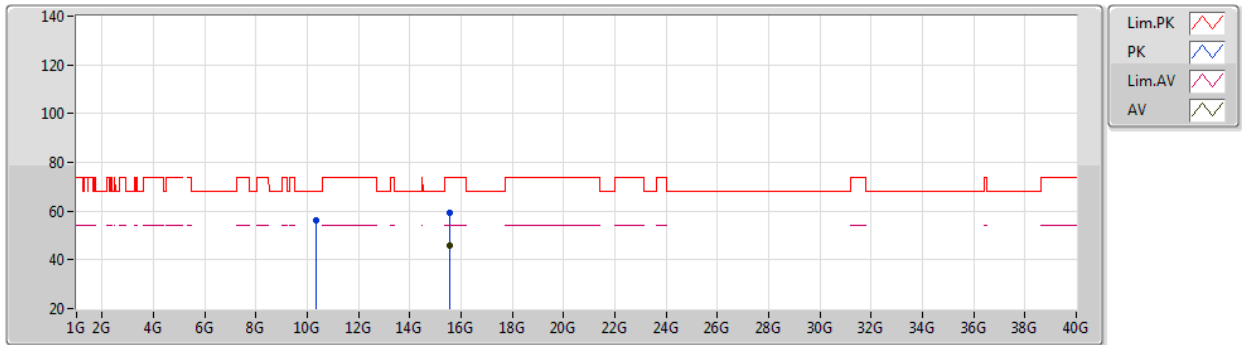
EUT Y_4TX
Setting 88
06-D-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.35364G	58.94	68.20	-9.26	45.24	3	Vertical	11	1.53	-	39.56	7.72	33.58
PK	15.53874G	59.96	74.00	-14.04	45.82	3	Vertical	185	1.80	-	39.11	8.75	33.72
AV	15.53958G	46.15	54.00	-7.85	32.01	3	Vertical	185	1.80	-	39.11	8.75	33.72

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5180MHz_TX



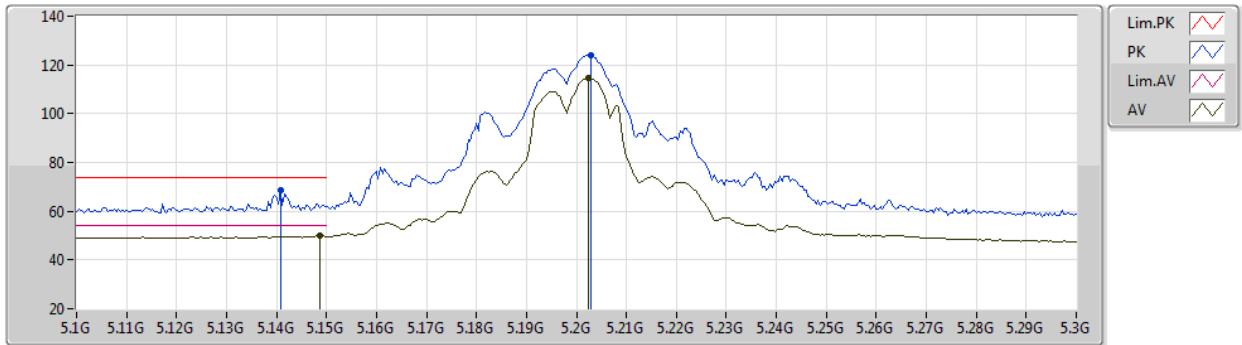
EUT Y_4TX
Setting 88
06-D-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.35958G	56.18	68.20	-12.02	42.47	3	Horizontal	191	1.81	-	39.57	7.73	33.59
PK	15.54366G	59.32	74.00	-14.68	45.19	3	Horizontal	136	1.80	-	39.10	8.75	33.72
AV	15.54306G	46.02	54.00	-7.98	31.89	3	Horizontal	136	1.80	-	39.10	8.75	33.72

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5200MHz_TX



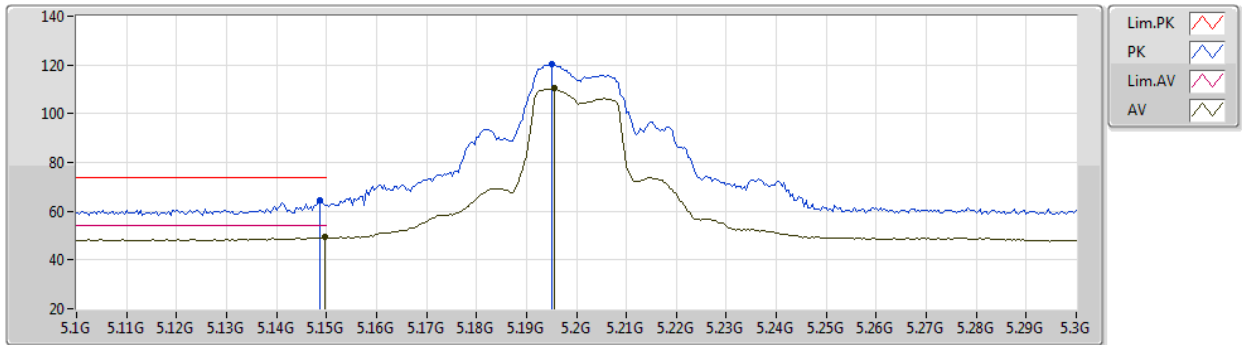
EUT Y_4TX
Setting 100
06-D-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1408G	68.39	74.00	-5.61	62.62	3	Vertical	357	1.97	-	31.80	5.60	31.63
AV	5.1488G	49.84	54.00	-4.16	44.11	3	Vertical	357	1.97	-	31.76	5.60	31.63
PK	5.2028G	124.15	Inf	-Inf	118.72	3	Vertical	357	1.97	-	31.49	5.60	31.66
AV	5.2024G	114.65	Inf	-Inf	109.22	3	Vertical	357	1.97	-	31.49	5.60	31.66

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5200MHz_TX



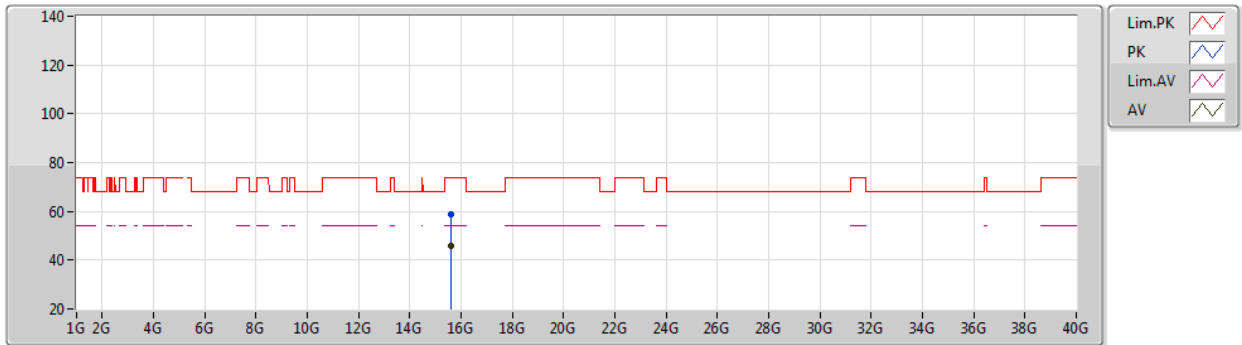
EUT Y_4TX
Setting 100
06-D-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1488G	64.33	74.00	-9.67	58.60	3	Horizontal	360	1.80	-	31.76	5.60	31.63
AV	5.1496G	49.40	54.00	-4.60	43.68	3	Horizontal	360	1.80	-	31.75	5.60	31.63
PK	5.1952G	120.27	Inf	-Inf	114.81	3	Horizontal	360	1.80	-	31.52	5.60	31.66
AV	5.1956G	110.34	Inf	-Inf	104.88	3	Horizontal	360	1.80	-	31.52	5.60	31.66

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5200MHz_TX



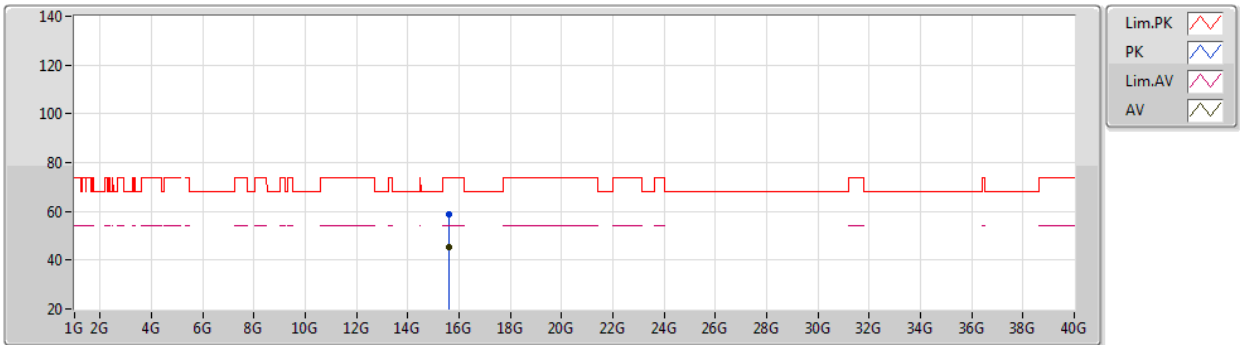
EUT Y_4TX
Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.60108G	58.74	74.00	-15.26	44.83	3	Vertical	116	2.44	-	38.90	8.74	33.73
AV	15.60108G	45.67	54.00	-8.33	31.76	3	Vertical	116	2.44	-	38.90	8.74	33.73

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5200MHz_TX



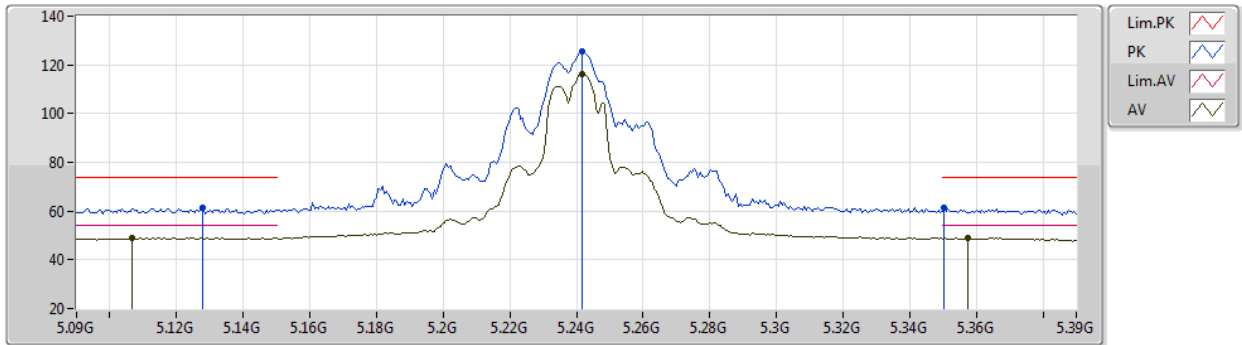
EUT Y_4TX
Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.60026G	58.73	74.00	-15.27	44.82	3	Horizontal	168	1.74	-	38.90	8.74	33.73
AV	15.60072G	45.59	54.00	-8.41	31.68	3	Horizontal	168	1.74	-	38.90	8.74	33.73

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5240MHz_TX



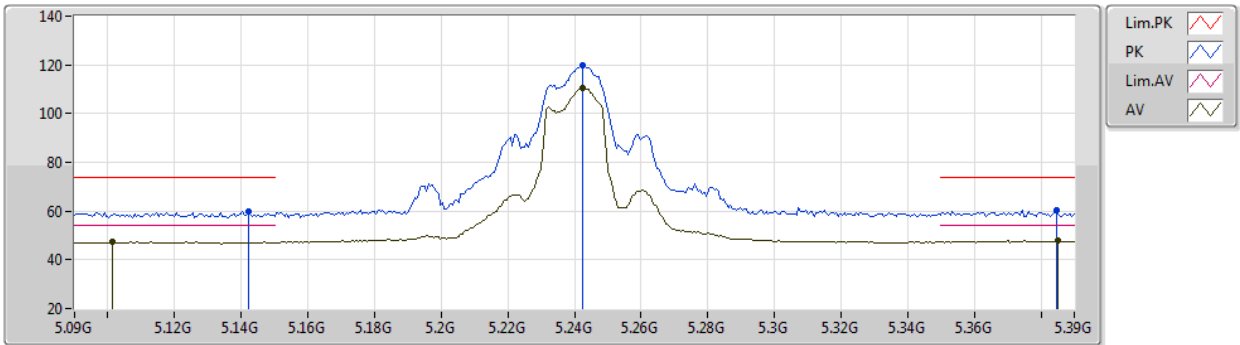
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Setting 100
06-D-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1278G	61.37	74.00	-12.63	55.53	3	Vertical	134	3.00	-	31.86	5.60	31.62
AV	5.1068G	49.07	54.00	-4.93	43.11	3	Vertical	134	3.00	-	31.97	5.60	31.61
PK	5.2418G	125.57	Inf	-Inf	120.28	3	Vertical	134	3.00	-	31.33	5.64	31.68
AV	5.2418G	116.25	Inf	-Inf	110.96	3	Vertical	134	3.00	-	31.33	5.64	31.68
PK	5.3504G	61.17	74.00	-12.83	55.81	3	Vertical	134	3.00	-	31.35	5.75	31.74
AV	5.3576G	48.83	54.00	-5.17	43.42	3	Vertical	134	3.00	-	31.39	5.76	31.74

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5240MHz_TX



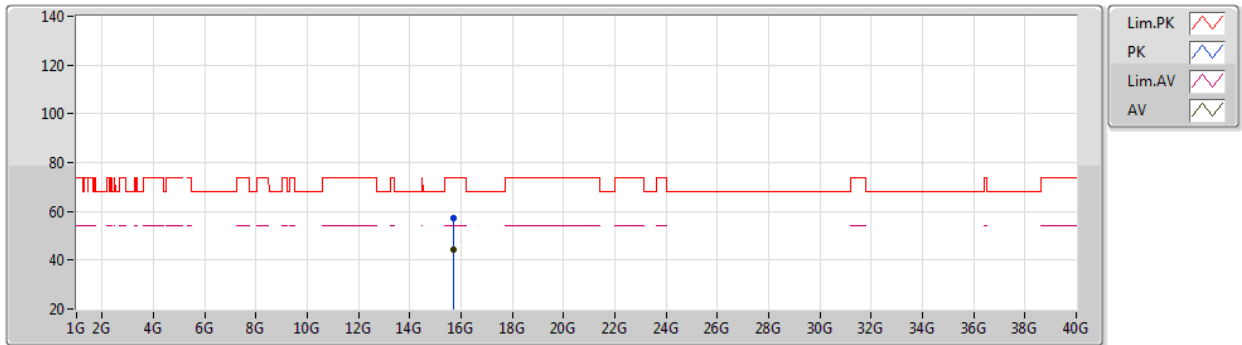
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Setting 100
06-D-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1422G	59.84	74.00	-14.16	54.08	3	Horizontal	143	1.76	-	31.79	5.60	31.63
AV	5.1014G	47.31	54.00	-6.69	41.33	3	Horizontal	143	1.76	-	31.99	5.60	31.61
PK	5.2424G	119.57	Inf	-Inf	114.28	3	Horizontal	143	1.76	-	31.33	5.64	31.68
AV	5.2424G	110.53	Inf	-Inf	105.24	3	Horizontal	143	1.76	-	31.33	5.64	31.68
PK	5.3846G	60.48	74.00	-13.52	54.93	3	Horizontal	143	1.76	-	31.52	5.78	31.75
AV	5.3852G	47.78	54.00	-6.22	42.21	3	Horizontal	143	1.76	-	31.53	5.79	31.75

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5240MHz_TX



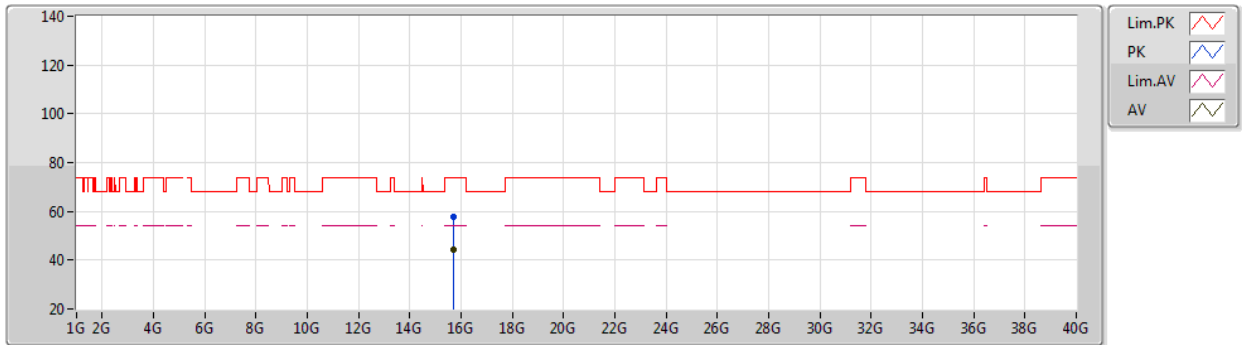
EUT Y_4TX
Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.72186G	57.42	74.00	-16.58	43.97	3	Vertical	335	2.37	-	38.47	8.73	33.75
AV	15.72156G	44.40	54.00	-9.60	30.95	3	Vertical	335	2.37	-	38.47	8.73	33.75

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5240MHz_TX



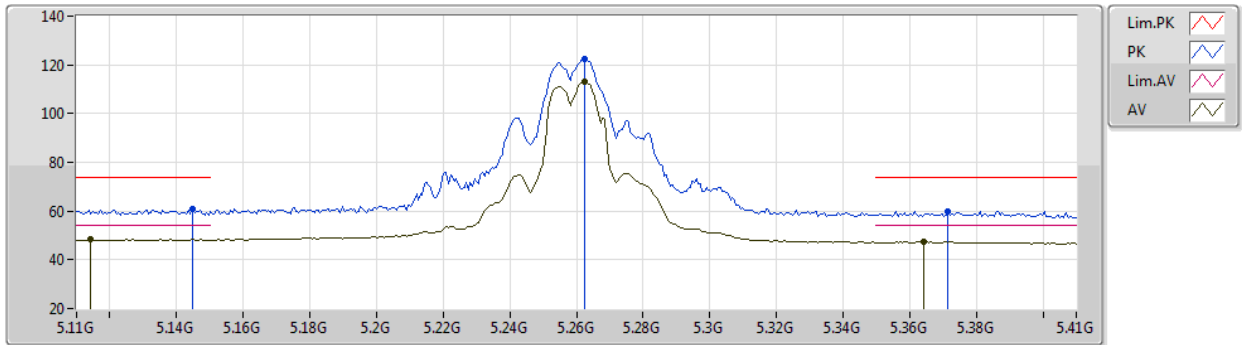
EUT Y_4TX
Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.71718G	57.78	74.00	-16.22	44.31	3	Horizontal	247	1.92	-	38.49	8.73	33.75
AV	15.72246G	44.36	54.00	-9.64	30.91	3	Horizontal	247	1.92	-	38.47	8.73	33.75

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5260MHz_TX



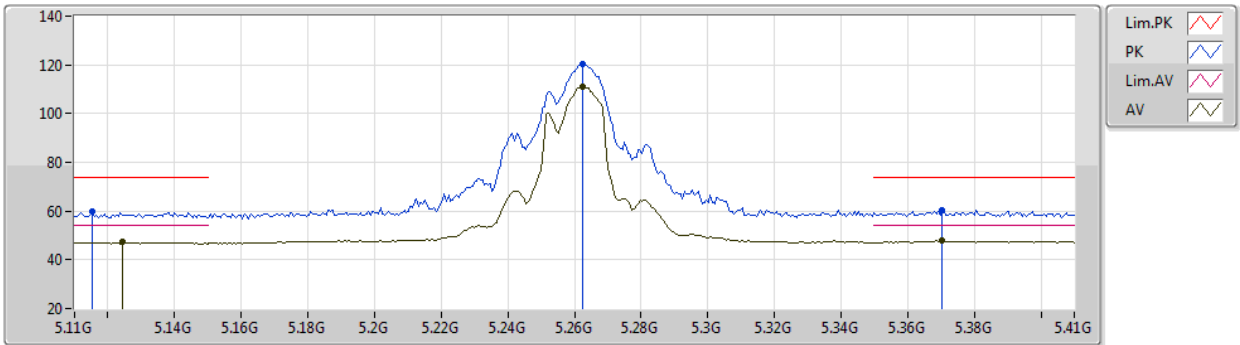
EUT Y_4TX
Setting 100
06-D-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1448G	60.95	74.00	-13.05	55.20	3	Vertical	360	1.91	-	31.78	5.60	31.63
AV	5.1442G	48.40	54.00	-5.60	42.49	3	Vertical	360	1.91	-	31.93	5.60	31.62
PK	5.2624G	122.62	Inf	-Inf	117.40	3	Vertical	360	1.91	-	31.25	5.66	31.69
AV	5.2624G	113.04	Inf	-Inf	107.82	3	Vertical	360	1.91	-	31.25	5.66	31.69
PK	5.3716G	59.97	74.00	-14.03	54.49	3	Vertical	360	1.91	-	31.46	5.77	31.75
AV	5.3644G	47.41	54.00	-6.59	41.97	3	Vertical	360	1.91	-	31.42	5.76	31.74

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5260MHz_TX



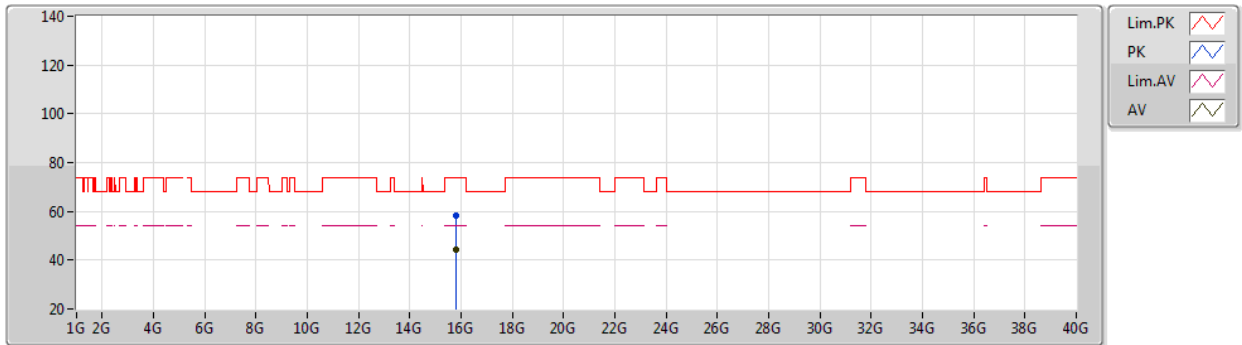
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Setting 100
06-E-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1154G	59.70	74.00	-14.30	53.80	3	Horizontal	144	1.88	-	31.92	5.60	31.62
AV	5.1244G	47.17	54.00	-6.83	41.31	3	Horizontal	144	1.88	-	31.88	5.60	31.62
PK	5.2624G	120.55	Inf	-Inf	115.33	3	Horizontal	144	1.88	-	31.25	5.66	31.69
AV	5.2624G	111.07	Inf	-Inf	105.85	3	Horizontal	144	1.88	-	31.25	5.66	31.69
PK	5.3704G	60.34	74.00	-13.66	54.87	3	Horizontal	144	1.88	-	31.45	5.77	31.75
AV	5.3704G	47.82	54.00	-6.18	42.35	3	Horizontal	144	1.88	-	31.45	5.77	31.75

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5260MHz_TX



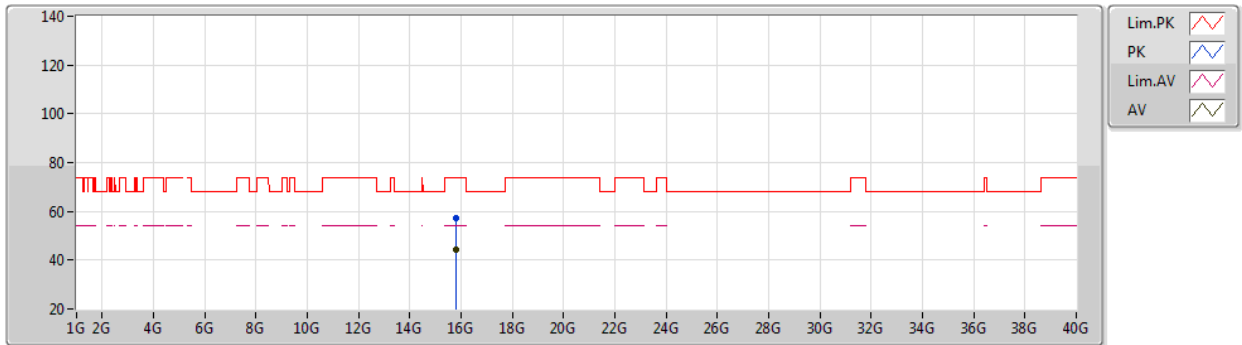
EUT Y_4TX
Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.78168G	58.37	74.00	-15.63	45.15	3	Vertical	163	1.85	-	38.26	8.72	33.76
AV	15.786G	44.41	54.00	-9.59	31.20	3	Vertical	163	1.85	-	38.25	8.72	33.76

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5260MHz_TX



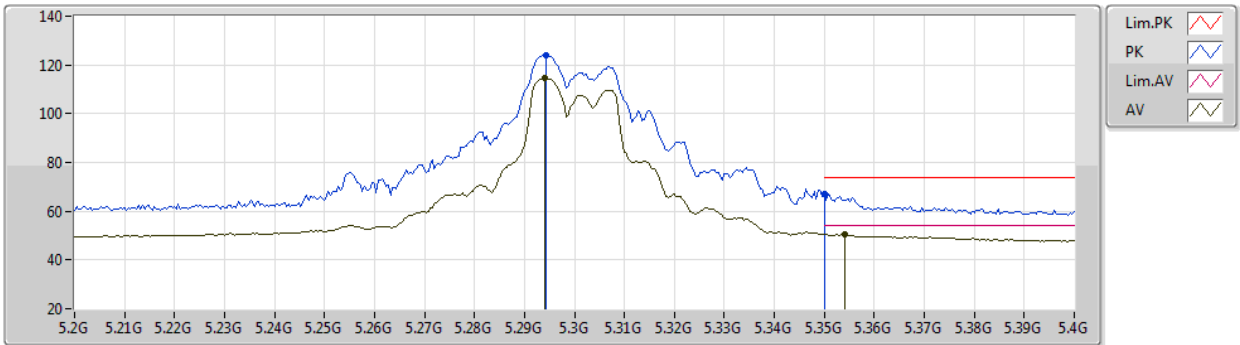
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Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	15.7863G	57.33	74.00	-16.67	44.12	3	Horizontal	180	2.19	-	38.25	8.72	33.76	
AV	15.78498G	44.32	54.00	-9.68	31.11	3	Horizontal	180	2.19	-	38.25	8.72	33.76	

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5300MHz_TX



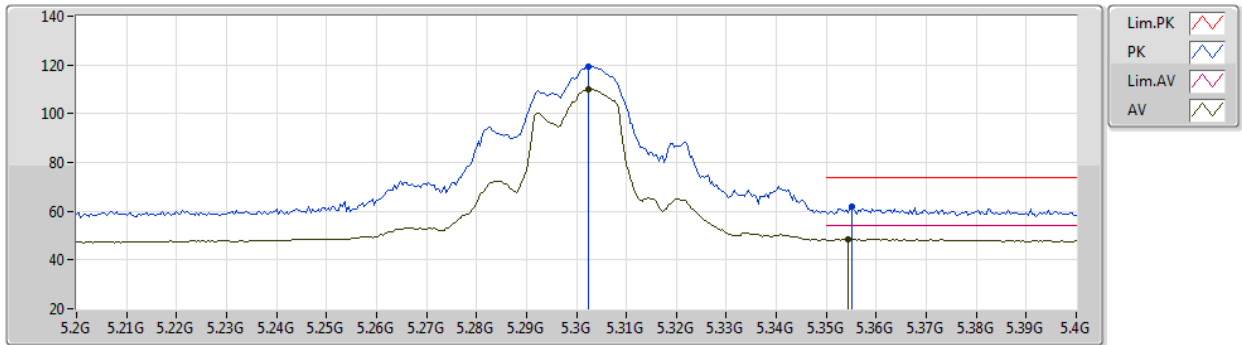
EUT Y_4TX
Setting 100
06-D-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.2944G	124.02	Inf	-Inf	118.92	3	Vertical	124	3.00	-	31.12	5.69	31.71
AV	5.294G	114.61	Inf	-Inf	109.51	3	Vertical	124	3.00	-	31.12	5.69	31.71
PK	5.35G	67.25	74.00	-6.75	61.88	3	Vertical	124	3.00	-	31.35	5.75	31.73
AV	5.354G	50.46	54.00	-3.54	45.08	3	Vertical	124	3.00	-	31.37	5.75	31.74

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5300MHz_TX



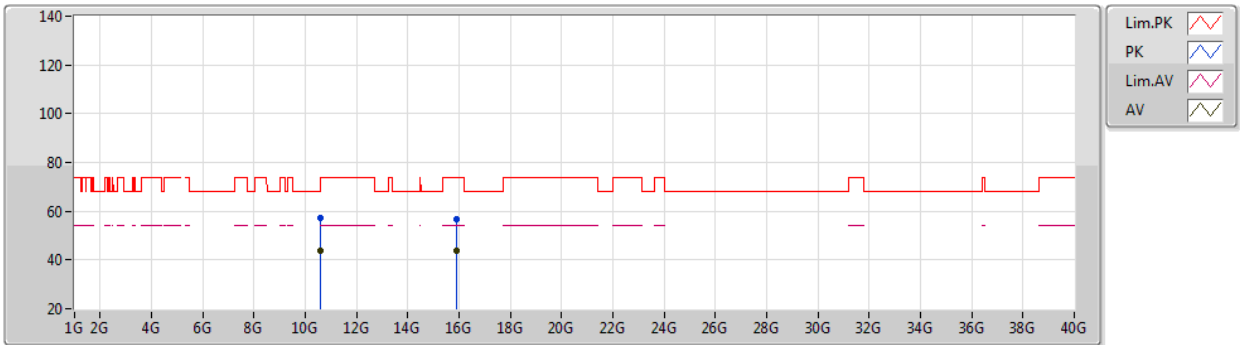
EUT Y_4TX
Setting 100
06-E-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.3024G	119.46	Inf	-Inf	114.36	3	Horizontal	143	1.80	-	31.11	5.70	31.71
AV	5.3024G	110.15	Inf	-Inf	105.05	3	Horizontal	143	1.80	-	31.11	5.70	31.71
PK	5.3552G	61.86	74.00	-12.14	56.46	3	Horizontal	143	1.80	-	31.38	5.76	31.74
AV	5.3544G	48.58	54.00	-5.42	43.20	3	Horizontal	143	1.80	-	31.37	5.75	31.74

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5300MHz_TX



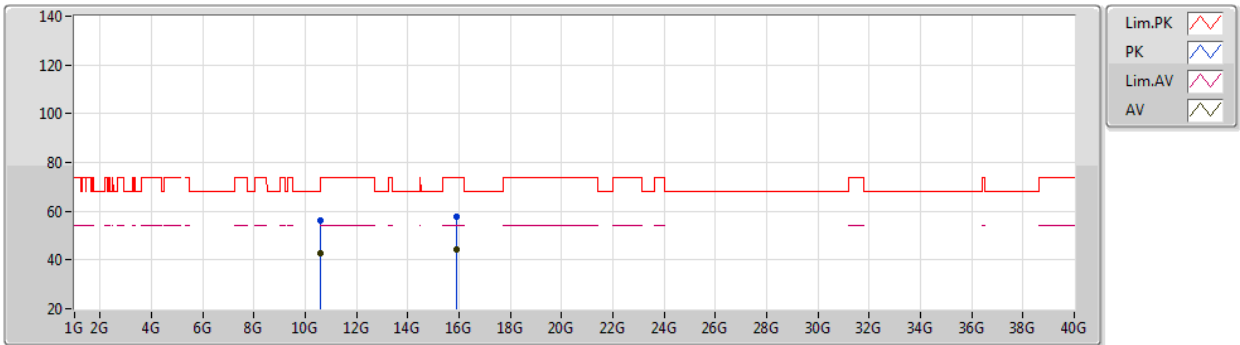
EUT Y_4TX
Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.60076G	56.99	74.00	-17.01	42.90	3	Vertical	348	1.78	-	39.88	7.81	33.60
AV	10.60006G	43.84	54.00	-10.16	29.75	3	Vertical	348	1.78	-	39.88	7.81	33.60
PK	15.89412G	56.92	74.00	-17.08	44.12	3	Vertical	332	1.67	-	37.87	8.71	33.78
AV	15.89856G	43.87	54.00	-10.13	31.08	3	Vertical	332	1.67	-	37.86	8.71	33.78

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5300MHz_TX



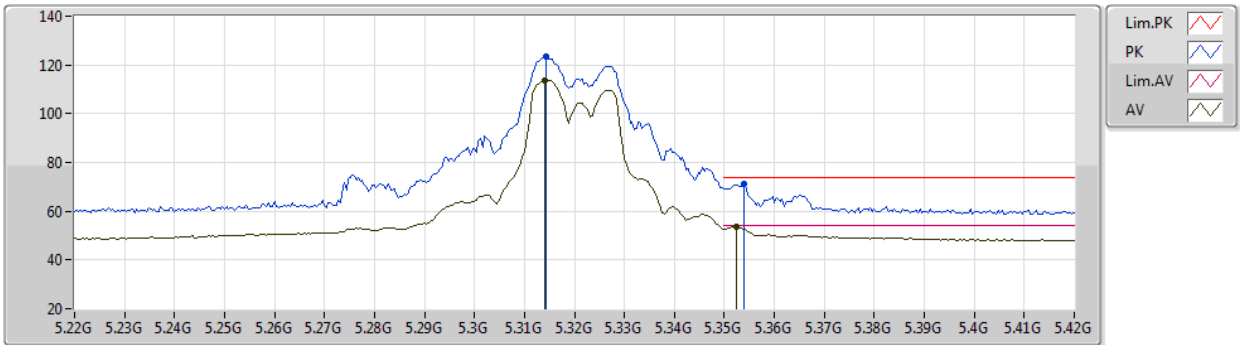
EUT Y_4TX
Setting 100
06-D-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.60424G	56.41	74.00	-17.59	42.31	3	Horizontal	31	1.88	-	39.89	7.81	33.60
AV	10.60456G	42.95	54.00	-11.05	28.85	3	Horizontal	31	1.88	-	39.89	7.81	33.60
PK	15.8901G	57.64	74.00	-16.36	44.83	3	Horizontal	215	2.39	-	37.88	8.71	33.78
AV	15.89088G	44.30	54.00	-9.70	31.49	3	Horizontal	215	2.39	-	37.88	8.71	33.78

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5320MHz_TX



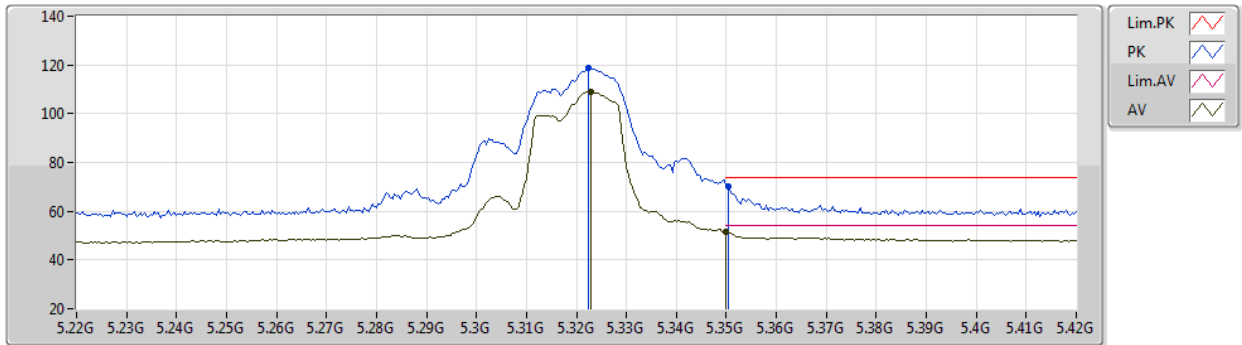
EUT Y_4TX
Setting 94
06-D-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.3144G	123.28	Inf	-Inf	118.12	3	Vertical	125	2.92	-	31.17	5.71	31.72
AV	5.314G	113.70	Inf	-Inf	108.54	3	Vertical	125	2.92	-	31.17	5.71	31.72
PK	5.354G	71.09	74.00	-2.91	65.71	3	Vertical	125	2.92	-	31.37	5.75	31.74
AV	5.3524G	53.78	54.00	-0.22	48.41	3	Vertical	125	2.92	-	31.36	5.75	31.74

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5320MHz_TX



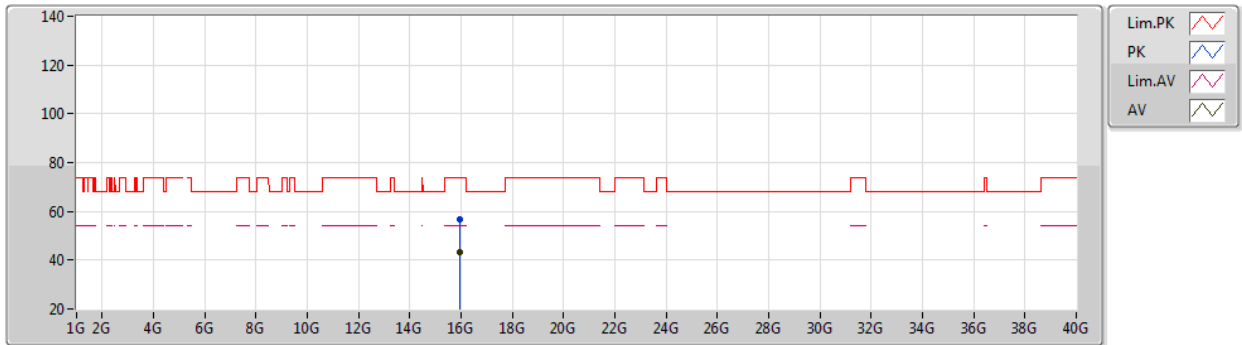
EUT Y_4TX
Setting 94
06-E-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.3224G	118.67	Inf	-Inf	113.46	3	Horizontal	144	1.79	-	31.21	5.72	31.72
AV	5.3228G	109.09	Inf	-Inf	103.88	3	Horizontal	144	1.79	-	31.21	5.72	31.72
PK	5.3504G	70.26	74.00	-3.74	64.90	3	Horizontal	144	1.79	-	31.35	5.75	31.74
AV	5.35G	51.61	54.00	-2.39	46.24	3	Horizontal	144	1.79	-	31.35	5.75	31.73

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5320MHz_TX



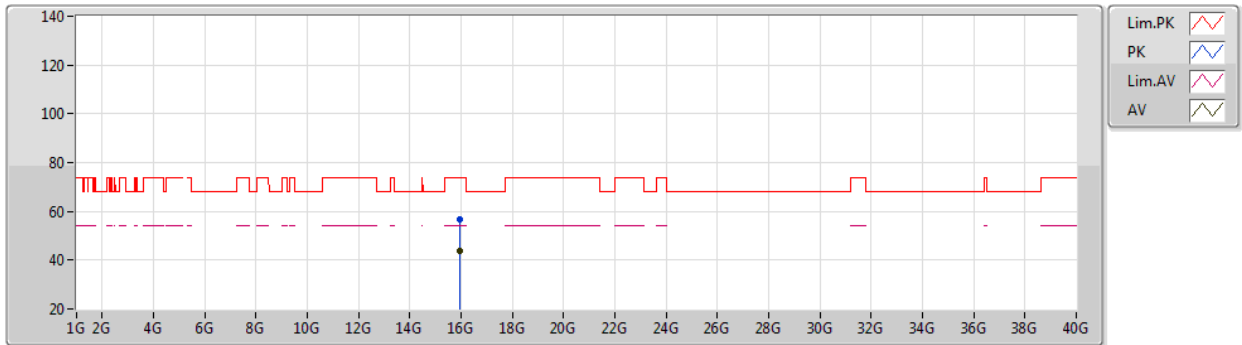
EUT Y_4TX
Setting 94
06-D-B-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.96088G	56.65	74.00	-17.35	44.10	3	Vertical	80	2.33	-	37.64	8.70	33.79
AV	15.96022G	43.49	54.00	-10.51	30.94	3	Vertical	80	2.33	-	37.64	8.70	33.79

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5320MHz_TX



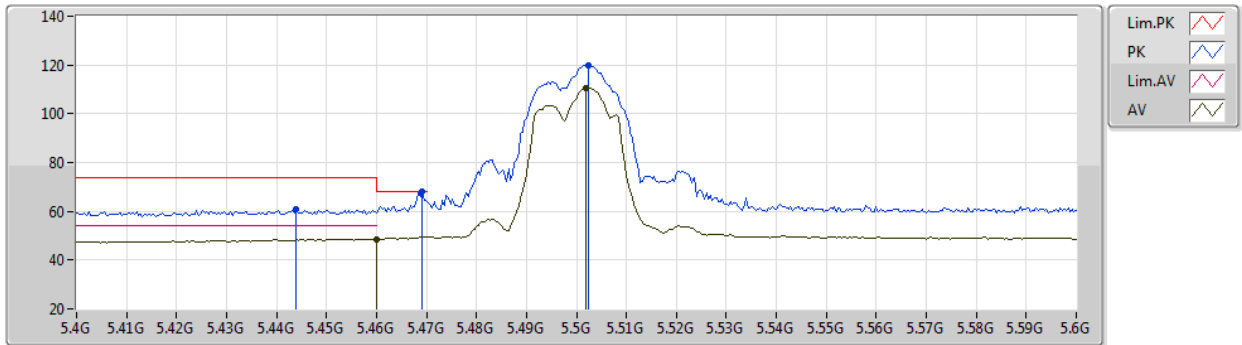
EUT Y_4TX
Setting 94
06-D-B-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	15.96276G	56.65	74.00	-17.35	44.11	3	Horizontal	305	1.61	-	37.63	8.70	33.79	
AV	15.95022G	43.72	54.00	-10.28	31.14	3	Horizontal	305	1.61	-	37.67	8.70	33.79	

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5500MHz_TX



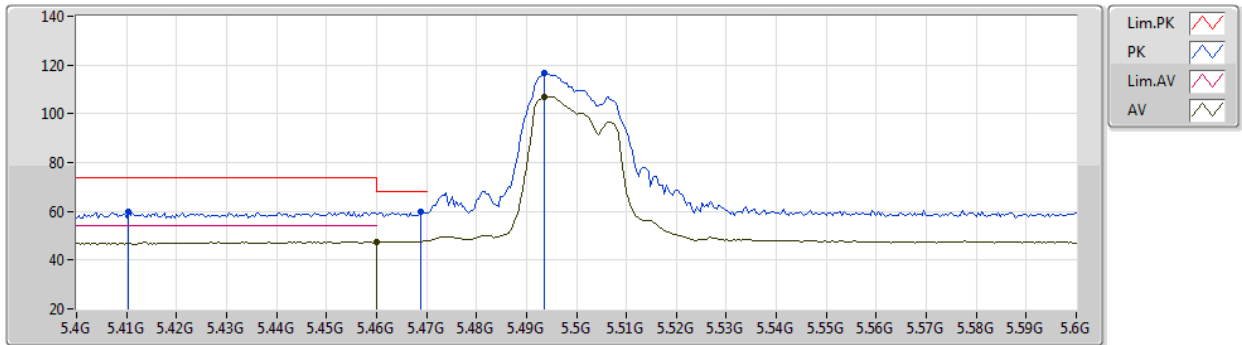
EUT Y_4TX
Setting 80
06-D-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.444G	60.66	74.00	-13.34	54.95	3	Vertical	222	2.04	-	31.69	5.80	31.78
PK	5.4692G	67.96	68.20	-0.24	62.21	3	Vertical	222	2.04	-	31.74	5.80	31.79
AV	5.46G	48.62	54.00	-5.38	42.89	3	Vertical	222	2.04	-	31.72	5.80	31.79
PK	5.5024G	120.04	Inf	-Inf	114.25	3	Vertical	222	2.04	-	31.80	5.80	31.81
AV	5.502G	110.58	Inf	-Inf	104.79	3	Vertical	222	2.04	-	31.80	5.80	31.81

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5500MHz_TX



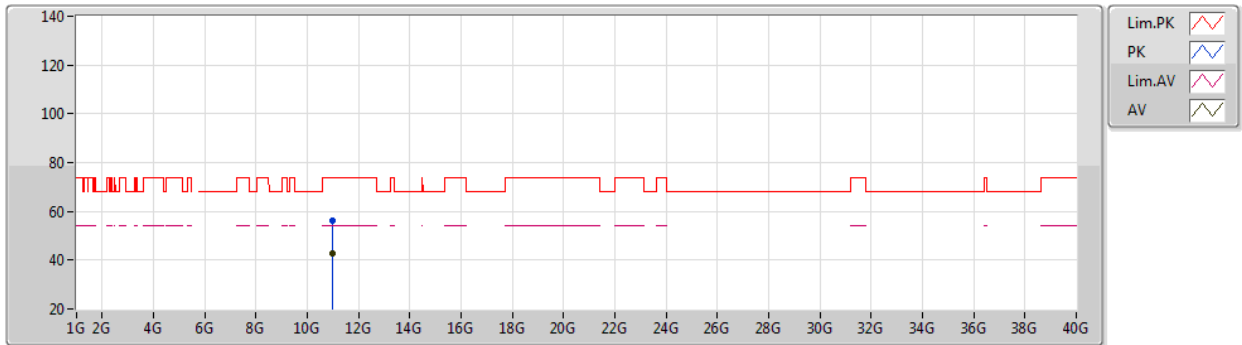
EUT Y_4TX
Setting 80
06-E-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.4104G	59.81	74.00	-14.19	54.16	3	Horizontal	135	1.80	-	31.62	5.80	31.77
PK	5.4688G	59.68	68.20	-8.52	53.93	3	Horizontal	135	1.80	-	31.74	5.80	31.79
AV	5.46G	47.56	54.00	-6.44	41.83	3	Horizontal	135	1.80	-	31.72	5.80	31.79
PK	5.4936G	116.62	Inf	-Inf	110.84	3	Horizontal	135	1.80	-	31.79	5.80	31.81
AV	5.4936G	106.97	Inf	-Inf	101.19	3	Horizontal	135	1.80	-	31.79	5.80	31.81

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5500MHz_TX



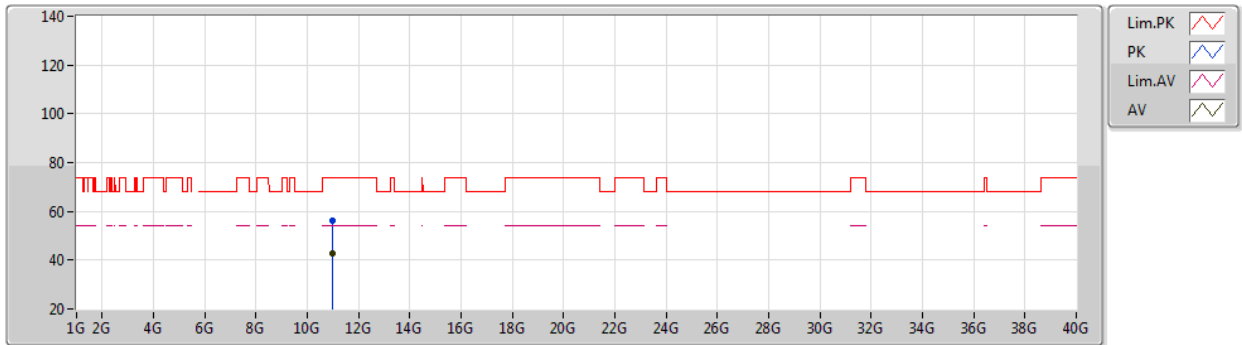
EUT Y_4TX
Setting 80
06-D-B-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.0078G	56.26	74.00	-17.74	41.55	3	Vertical	109	2.36	-	40.39	7.95	33.63
AV	11.00126G	42.90	54.00	-11.10	28.18	3	Vertical	109	2.36	-	40.40	7.95	33.63

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5500MHz_TX



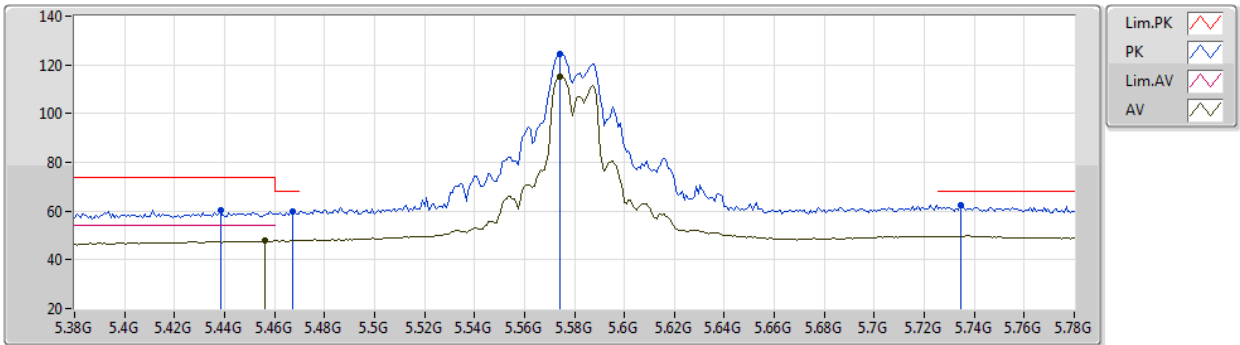
EUT Y_4TX
Setting 80
06-D-B-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.00206G	56.14	74.00	-17.86	41.42	3	Horizontal	232	1.84	-	40.40	7.95	33.63
AV	11.00204G	42.96	54.00	-11.04	28.24	3	Horizontal	232	1.84	-	40.40	7.95	33.63

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5580MHz_TX



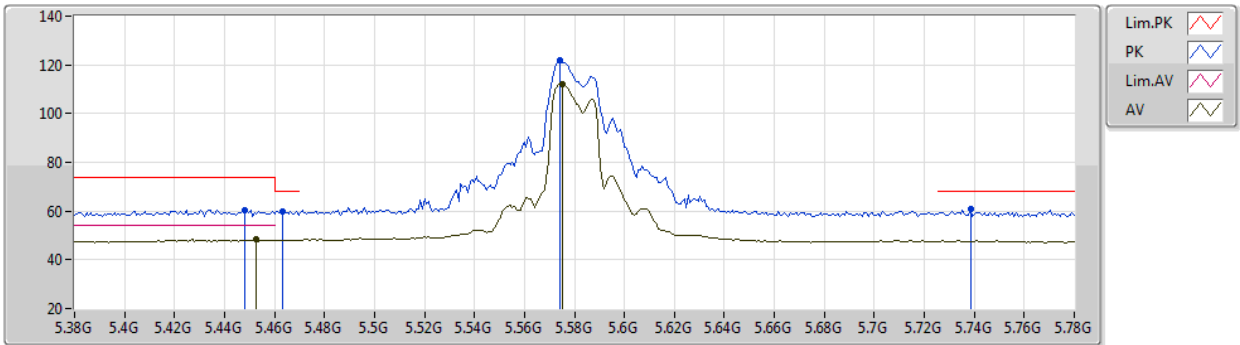
EUT Y_4TX
Setting 100
06-D-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.4384G	60.55	74.00	-13.45	54.85	3	Vertical	211	1.80	-	31.68	5.80	31.78
PK	5.4672G	59.92	68.20	-8.28	54.18	3	Vertical	211	1.80	-	31.73	5.80	31.79
AV	5.456G	47.76	54.00	-6.24	42.04	3	Vertical	211	1.80	-	31.71	5.80	31.79
PK	5.5744G	124.54	Inf	-Inf	118.93	3	Vertical	211	1.80	-	31.65	5.80	31.84
AV	5.5744G	114.92	Inf	-Inf	109.31	3	Vertical	211	1.80	-	31.65	5.80	31.84
PK	5.7344G	62.52	68.20	-5.68	56.66	3	Vertical	211	1.80	-	31.84	5.93	31.91

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5580MHz_TX



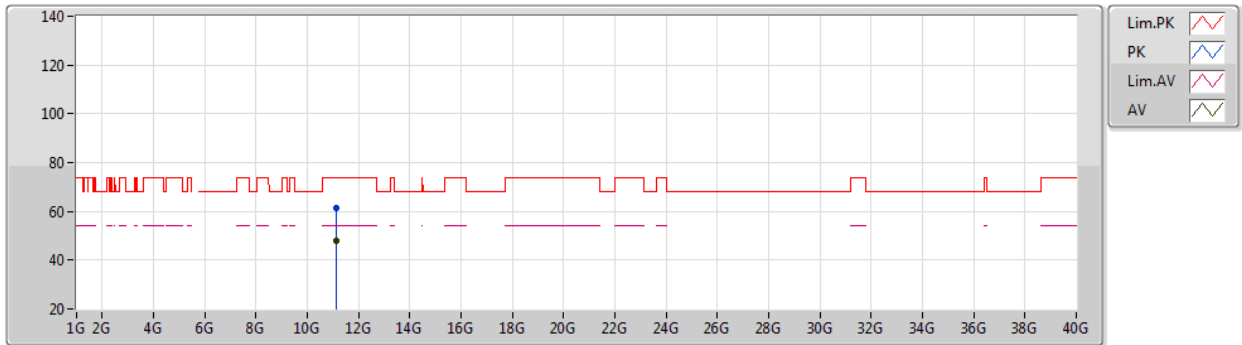
EUT Y_4TX
Setting 100
06-E-A-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.448G	60.46	74.00	-13.54	54.74	3	Horizontal	139	1.80	-	31.70	5.80	31.78
AV	5.4528G	48.29	54.00	-5.71	42.57	3	Horizontal	139	1.80	-	31.71	5.80	31.79
PK	5.4632G	59.96	68.20	-8.24	54.22	3	Horizontal	139	1.80	-	31.73	5.80	31.79
PK	5.5744G	121.79	Inf	-Inf	116.18	3	Horizontal	139	1.80	-	31.65	5.80	31.84
AV	5.5752G	112.28	Inf	-Inf	106.67	3	Horizontal	139	1.80	-	31.65	5.80	31.84
PK	5.7384G	60.90	68.20	-7.30	55.03	3	Horizontal	139	1.80	-	31.85	5.93	31.91

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5580MHz_TX



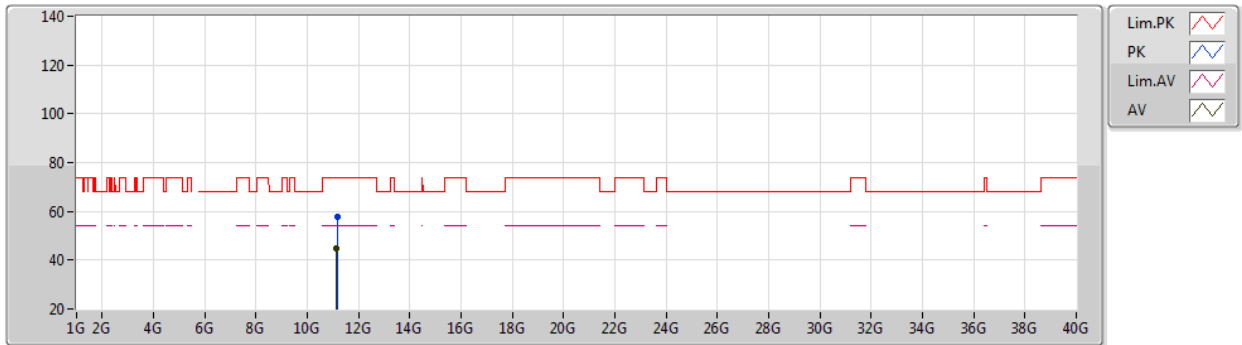
EUT Y_4TX
Setting 100
06-D-B-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.15268G	61.48	74.00	-12.52	46.98	3	Vertical	201	2.46	-	40.17	8.00	33.67
AV	11.15382G	47.86	54.00	-6.14	33.36	3	Vertical	201	2.46	-	40.17	8.00	33.67

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5580MHz_TX



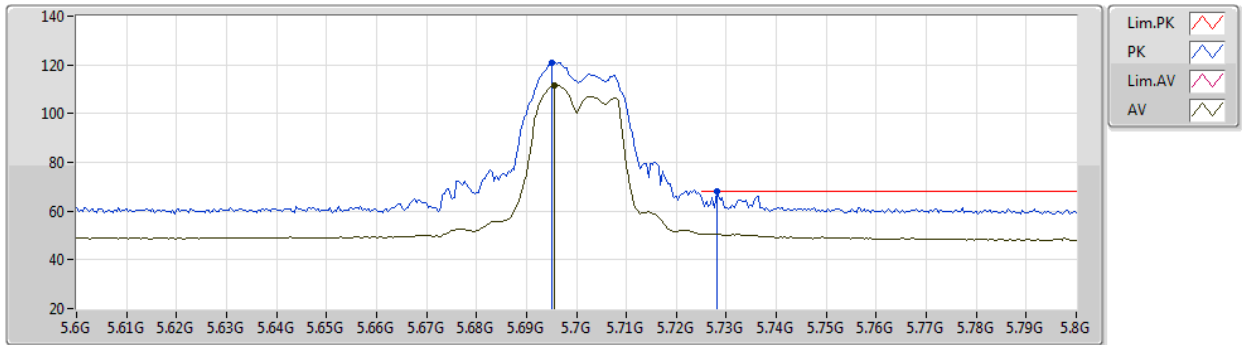
EUT Y_4TX
Setting 100
06-D-B-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.1561G	57.87	74.00	-16.13	43.38	3	Horizontal	117	2.03	-	40.17	8.00	33.68
AV	11.1543G	45.02	54.00	-8.98	30.52	3	Horizontal	117	2.03	-	40.17	8.00	33.67

802.11a_Nss1,(6Mbps)_4TX

05/12/2019

5700MHz_TX



EUT Y_4TX
Setting 78
06-D-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.6952G	120.94	Inf	-Inf	115.24	3	Vertical	179	1.97	-	31.70	5.89	31.89
AV	5.6956G	111.58	Inf	-Inf	105.88	3	Vertical	179	1.97	-	31.70	5.89	31.89
PK	5.728G	67.97	68.20	-0.23	62.14	3	Vertical	179	1.97	-	31.81	5.92	31.90