FCC RADIO TEST REPORT

FCC ID	:	MSQ-RTAXJ300
Equipment	:	AX3000 Dual Band Wi-Fi Router, AX5400 Dual Band Wi-Fi Router, Dual Band Wi-Fi Router
Brand Name	:	ASUS
Model Name	:	RT-AX58U, RT-AX82U, RT-AX3000, RT-AX5400, TUF-AX3000
Applicant	:	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Manufacturer (1)	:	Datamax Electronics (DongGuan) Co., Ltd. Niu Shan Foreign Economic Industrial Park, Dong Cheng District, Dong Guan City, Guang Dong, China
Manufacturer (2)	:	Compal Networking (KunShan) Co., LTD. No. 520, Nabbang Rd., Economic & Technical Development Zone Kunshan, Jiangsu Province China
Manufacturer (3)	:	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 Jul. 12, 2019, and testing was started from Jul. 12, 2019 and completed on May 30, 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 variant 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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Appendix F. Test Photos

Photographs of EUT v01

History of this test report

Report No.	Version	Description	Issued Date
FR952922-06AB	01	Initial issue of report	Jun. 10, 2020

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	-
Reference to Sporton Project No.: 952922-05				

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: 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	102-142 [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	2TX / 4TX
5.15-5.25GHz	802.11n HT20	20	2TX / 4TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX / 4TX
5.15-5.25GHz	802.11ac VHT20	20	2TX / 4TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX / 4TX
5.15-5.25GHz	802.11ax HEW20	20	2TX / 4TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX / 4TX
5.15-5.25GHz	802.11n HT40	40	2TX / 4TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX / 4TX
5.15-5.25GHz	802.11ac VHT40	40	2TX / 4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX / 4TX
5.15-5.25GHz	802.11ax HEW40	40	2TX / 4TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX / 4TX
5.15-5.25GHz	802.11ac VHT80	80	2TX / 4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX / 4TX
5.15-5.25GHz	802.11ax HEW80	80	2TX / 4TX

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX / 4TX
5.25-5.35GHz	802.11a	20	2TX / 4TX
5.25-5.35GHz	802.11n HT20	20	2TX / 4TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX / 4TX
5.25-5.35GHz	802.11ac VHT20	20	2TX / 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX / 4TX
5.25-5.35GHz	802.11ax HEW20	20	2TX / 4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX / 4TX
5.25-5.35GHz	802.11n HT40	40	2TX / 4TX
5.25-5.35GHz	802.11n HT40-BF	40	2TX / 4TX
5.25-5.35GHz	802.11ac VHT40	40	2TX / 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX / 4TX
5.25-5.35GHz	802.11ax HEW40	40	2TX / 4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX / 4TX
5.25-5.35GHz	802.11ac VHT80	80	2TX / 4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX / 4TX
5.25-5.35GHz	802.11ax HEW80	80	2TX / 4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX / 4TX
5.15-5.35GHz	802.11ac VHT160	160	2TX / 4TX
5.15-5.35GHz	802.11ac VHT160-BF	160	2TX / 4TX
5.15-5.35GHz	802.11ax HEW160	160	2TX / 4TX
5.15-5.35GHz	802.11ax HEW160-BF	160	2TX / 4TX
5.47-5.725GHz	802.11a	20	2TX / 4TX
5.47-5.725GHz	802.11n HT20	20	2TX / 4TX
5.47-5.725GHz	802.11n HT20-BF	20	2TX / 4TX
5.47-5.725GHz	802.11ac VHT20	20	2TX / 4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX / 4TX
5.725-5.85GHz	802.11ax HEW20	20	2TX / 4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX / 4TX
5.725-5.85GHz	802.11n HT40	40	2TX / 4TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX / 4TX
5.47-5.725GHz	802.11ac VHT40	40	2TX / 4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX / 4TX
5.47-5.725GHz	802.11ax HEW40	40	2TX / 4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX / 4TX
5.47-5.725GHz	802.11ac VHT80	80	2TX / 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX / 4TX
5.725-5.85GHz	802.11ax HEW80	80	2TX / 4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX / 4TX
5.47-5.725GHz	802.11ac VHT160	160	2TX / 4TX

Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11ac VHT160-BF	160	2TX / 4TX
5.47-5.725GHz	802.11ax HEW160	160	2TX / 4TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX / 4TX
5.725-5.85GHz	802.11a	20	2TX / 4TX
5.725-5.85GHz	802.11n HT20	20	2TX / 4TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX / 4TX
5.725-5.85GHz	802.11ac VHT20	20	2TX / 4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX / 4TX
5.725-5.85GHz	802.11ax HEW20	20	2TX / 4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX / 4TX
5.725-5.85GHz	802.11n HT40	40	2TX / 4TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX / 4TX
5.725-5.85GHz	802.11ac VHT40	40	2TX / 4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX / 4TX
5.725-5.85GHz	802.11ax HEW40	40	2TX / 4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX / 4TX
5.725-5.85GHz	802.11ac VHT80	80	2TX / 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX / 4TX
5.725-5.85GHz	802.11ax HEW80	80	2TX / 4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX / 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.

1.1.2 Antenna Information

Set	Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	1	PSA	RFDPA161314IMLB701	Dipole Antenna	I-PEX	Note 1
	2	PSA	RFDPA161311IM5B702	Dipole Antenna	I-PEX	
	3	PSA	RFDPA161310IM5B701	Dipole Antenna	I-PEX	
	4	PSA	RFDPA161316IMLB701	Dipole Antenna	I-PEX	
2	1	M.gear	C660-510468-A	Dipole Antenna	I-PEX	
	2	M.gear	C660-510469-A	Dipole Antenna	I-PEX	
	3	M.gear	C660-510470-A	Dipole Antenna	I-PEX	
	4	M.gear	C660-510471-A	Dipole Antenna	I-PEX	
3	1	M.gear	C660-510472-A	Dipole Antenna	I-PEX	
	2	M.gear	C660-510473-A	Dipole Antenna	I-PEX	
	3	M.gear	C660-510474-A	Dipole Antenna	I-PEX	
	4	M.gear	C660-510475-A	Dipole Antenna	I-PEX	
4	1	PSA	RFDPA171314IMLB701	Dipole Antenna	I-PEX	
	2	PSA	RFDPA171311IM5B702	Dipole Antenna	I-PEX	
	3	PSA	RFDPA171310IM5B702	Dipole Antenna	I-PEX	
	4	PSA	RFDPA171316IMLB701	Dipole Antenna	I-PEX	

Note 1:

Set	Ant.	Port			2.4GHz	5GHz Band 1	5GHz Band 2	5GHz Band 3	5GHz Band 4
		2.4G 2TX	5G 2TX	5G 4TX					
1	1	2	-	2	1.71	1.75	1.89	1.88	1.70
	2	-	1	1	-	1.93	1.93	1.92	1.95
	3	-	2	4	-	1.75	1.85	1.83	1.89
	4	1	-	3	1.63	1.92	1.88	1.90	1.87
2	1	2	-	2	1.61	1.74	1.84	1.86	1.67
	2	-	1	1	-	1.76	1.80	1.87	1.87
	3	-	2	4	-	1.66	1.72	1.69	1.84
	4	1	-	3	1.60	1.88	1.82	1.85	1.86
3	1	2	-	2	1.70	1.71	1.85	1.85	1.68
	2	-	1	1	-	1.68	1.73	1.80	1.85
	3	-	2	4	-	1.63	1.74	1.76	1.77
	4	1	-	3	1.62	1.67	1.74	1.79	1.85
4	1	2	-	2	1.7	1.74	1.74	1.82	1.68
	2	-	1	1	-	1.86	1.90	1.64	1.90
	3	-	2	4	-	1.48	1.60	1.46	1.88
	4	1	-	3	1.61	1.63	1.71	1.81	1.86

Note 2: The above information was declared by manufacturer.

Note 3: The EUT has four sets of antennas and there are four antennas for each set.

Set 1~4 are the same type antenna. Only the highest gain Set 1 antenna was selected to test and record in this report.

For 2.4GHz WLAN function

IEEE 802.11b/g/n/VHT/ax mode (2TX/2RX):

Port 1 and port 2 can be used as transmitting/receiving antenna.

Port 1 and port 2 could transmit/receive simultaneously.

For 5GHz WLAN function

IEEE 802.11a/n/ac/ax mode (2TX, 4TX/4RX):

For 2TX

Port 1 and port 2 can be used as transmitting antenna.

Port 1 and port 2 could transmit simultaneously.

For 4TX, 4RX

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

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

1.1.3 Mode Test Duty Cycle

<SKU 1: 5GHz Band 3>

For 2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.98	0.09	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20-BF	0.949	0.23	2.935m	1k
802.11ax HEW40-BF	0.938	0.28	2.933m	1k
802.11ax HEW80-BF	0.946	0.24	4.15m	300
802.11ax HEW160-BF	0.957	0.19	4.832m	300

For 2T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.954	0.2	2.923m	1k
802.11ax HEW40	0.94	0.27	4.365m	300
802.11ax HEW80	0.967	0.15	5.348m	300
802.11ax HEW160	0.816	0.88	4.832m	300

For 4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.98	0.09	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20-BF	0.948	0.23	2.933m	1k
802.11ax HEW40-BF	0.942	0.26	2.935m	1k
802.11ax HEW80-BF	0.963	0.16	4.152m	300
802.11ax HEW160-BF	0.947	0.24	4.832m	300

For 4T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF	0.934	0.3	2.944m	1k
802.11ax HEW40-BF	0.954	0.2	4.38m	300
802.11ax HEW80-BF	0.955	0.2	4.84m	300
802.11ax HEW160-BF	0.949	0.23	5.178m	300

<SKU 5>

For 2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.946	0.24	2.064m	1k
802.11ax HEW20-BF	0.979	0.09	9.225m	300
802.11ax HEW40-BF	0.909	0.41	2.933m	1k
802.11ax HEW80-BF	0.95	0.22	4.152m	300
802.11ax HEW160-BF	0.925	0.34	4.152m	300

For 2T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.982	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)

For 4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.946	0.24	2.064m	1k
802.11ax HEW20-BF	0.957	0.19	2.933m	1k
802.11ax HEW40-BF	0.932	0.31	2.933m	1k
802.11ax HEW80-BF	0.938	0.28	4.15m	300
802.11ax HEW160-BF	0.943	0.25	3.468m	300

For 4T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF	0.968	0.14	9.42m	300

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
	For IEEE 802.11n/ax/VHT in 2.4GHz and IEEE 802.11n/ac/ax in 5GHz.			
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	Mtool V3.1.0.3			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

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

Equipment	Model Name	Description
AX3000 Dual Band Wi-Fi Router, AX5400 Dual Band Wi-Fi Router, Dual Band Wi-Fi Router	RT-AX58U, RT-AX82U, RT-AX3000, RT-AX5400, TUF-AX3000	All the equipment and model names are identical, the different equipment and model names served as marketing strategy.

From the above table, equipment: AX3000 Dual Band Wi-Fi Router and model: RT-AX82U was selected as representative model for the test and its data was recorded in this report.

1.1.6 Table for SKU information

SKU	Material	5G PA	Housing Size	Brand	P/N
SKU 1	RJ-45 port was covered by plastic.	SKY85743	223.62mm x 129.48mm x 32.9mm	LAN port : NETSWAP / Mingtek WAN port : NETSWAP / Mingtek	LAN port : NS773602 / HN36201CG WAN port: NS771802 / HN18101CG
SKU 2	RJ-45 port was covered by metal.	SKY85743	264.82mm x 156.11mm x 54.97mm		
SKU 3	RJ-45 port was covered by metal.	SKY85743	265.00mm x 158.39mm x 54.99mm		
SKU 4	RJ-45 port was covered by metal.	SKY85743	275.50mm x 170.40mm x 65.00mm		
SKU 5	RJ-45 port was covered by plastic.	QPF4516B	223.62mm x 129.48mm x 32.9mm		

Note1: The SKU 3 is same as SKU 2 except for the logo of housing size and antenna appearance.

Note2: The SKU 4 is same as SKU 2 except for the logo of housing size, antenna appearance and design of light board.

Note3: The EUT 5 is same as SKU 1 except for 5G PA.

1.1.7 Table for EUT supports functions

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

1.1.8 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR952922AB and FR952922-01AB

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding three adapters (adapter 3~adapter 5).	1. AC Power-line Conducted Emissions. 2. Unwanted Emissions below 1GHz.
2. Adding the SKU 4 (Refer to section 1.1.6 for detail information).	Unwanted Emissions below 1GHz.
3. Adding the SKU 5 (Refer to section 1.1.6 for detail information).	Retest 5GHz band 1-4: 1. Emission Bandwidth. 2. Maximum Conducted Output Power. 3. Peak Power Spectral Density. 4. Unwanted Emissions.
4. Adding 5GHz band 3 (5470~5725 MHz) for this device.	Retest 5GHz band 3 for SKU 1/ SKU 5: 1. Emission Bandwidth. 2. Maximum Conducted Output Power. 3. Peak Power Spectral Density. 4. Unwanted Emissions above 1GHz.
5. Adding Mesh function. 6. Adding model name: RT-AX3000, RT-AX5400, TUF-AX3000 (Refer to section 1.1.5 for detail information) 7. Adding equipment name: Dual Band Wi-Fi Router (Refer to section 1.1.5 for detail information) 8. Adding the SKU 3 (Refer to section 1.1.6 for detail information). 10. Changing the applicant address to “1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan” from “4F, No. 150, Li-Te Rd., Peitou, Taipei 112, Taiwan”.	It is not necessary to re-test.

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

The following reference test guidance is not within the scope of accreditation of TAF.

- 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 (For SKU 1, Non-beamforming function: 5GHz Band 3)	TH02-CB	Owen Hsu	26.4~27.3°C / 61~63%	Jul. 18, 2019~Aug. 01, 2019
RF Conducted (For SKU 1, Beamforming function: 5GHz Band 3 and SKU 5)	TH01-CB	Paul Chen	21.1~23.2°C / 56~60%	May 06, 2020~May 30, 2020
Radiated below 1GHz (For Mode 1~Mode 2)	03CH05-CB	Eason Chen	21.1~22.4°C / 52~55%	Dec. 26, 2019
Radiated below 1GHz (For Mode 3~Mode 5)	03CH05-CB	KJ Chang	21.9~22.6°C / 54~57%	Apr. 23, 2020~May 06, 2020
Radiated above 1GHz (For SKU 1: 5GHz Band 3 and SKU 5)	03CH06-CB	KJ Chang	25.8~28.2°C / 63~67%	Jul. 12, 2019~May 29, 2020
AC Conduction (For Mode 1~Mode 2)	CO02-CB	Rick Yeh	23~24.8°C / 56~59%	Dec. 25, 2019

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

<SKU 1: 5GHz Band 3>
For 2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5500MHz	82
5580MHz	83
5700MHz	80
5720MHz Straddle 5.47-5.725GHz	82
5720MHz Straddle 5.725-5.85GHz	82
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5500MHz	75
5580MHz	84
5700MHz	69
5720MHz Straddle 5.47-5.725GHz	81
5720MHz Straddle 5.725-5.85GHz	81
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5510MHz	74
5550MHz	84
5670MHz	82
5710MHz Straddle 5.47-5.725GHz	81
5710MHz Straddle 5.725-5.85GHz	81
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5530MHz	76
5610MHz	82
5690MHz Straddle 5.47-5.725GHz	81
5690MHz Straddle 5.725-5.85GHz	81
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5570MHz	70

For 2T2S

Mode	PowerSetting
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5500MHz	81
5580MHz	81
5700MHz	76
5720MHz Straddle 5.47-5.725GHz	81
5720MHz Straddle 5.725-5.85GHz	81
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5510MHz	78
5550MHz	82
5670MHz	82
5710MHz Straddle 5.47-5.725GHz	82
5710MHz Straddle 5.725-5.85GHz	82
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5530MHz	82
5610MHz	81
5690MHz Straddle 5.47-5.725GHz	81
5690MHz Straddle 5.725-5.85GHz	81
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5570MHz	77

For 4T1S

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5500MHz	62
5580MHz	62
5700MHz	63
5720MHz Straddle 5.47-5.725GHz	63
5720MHz Straddle 5.725-5.85GHz	63
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5500MHz	65
5580MHz	64
5700MHz	64
5720MHz Straddle 5.47-5.725GHz	63
5720MHz Straddle 5.725-5.85GHz	63
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5510MHz	65
5550MHz	65
5670MHz	64
5710MHz Straddle 5.47-5.725GHz	64
5710MHz Straddle 5.725-5.85GHz	64
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5530MHz	64
5610MHz	64
5690MHz Straddle 5.47-5.725GHz	64
5690MHz Straddle 5.725-5.85GHz	64
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5570MHz	64

For 4T2S

Mode	PowerSetting
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5500MHz	72
5580MHz	72
5700MHz	72
5720MHz Straddle 5.47-5.725GHz	71
5720MHz Straddle 5.725-5.85GHz	71
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5510MHz	67
5550MHz	72
5670MHz	72
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5530MHz	71
5610MHz	72
5690MHz Straddle 5.47-5.725GHz	72
5690MHz Straddle 5.725-5.85GHz	72
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-
5570MHz	70

<SKU 5>
For 2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	80
5200MHz	101
5240MHz	108
5260MHz	79
5300MHz	79
5320MHz	79
5500MHz	70
5580MHz	79
5700MHz	72
5720MHz Straddle 5.47-5.725GHz	79
5720MHz Straddle 5.725-5.85GHz	79
5745MHz	106
5785MHz	100
5825MHz	97
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	89
5200MHz	97
5240MHz	103
5260MHz	80
5300MHz	80
5320MHz	80
5500MHz	77
5580MHz	79
5700MHz	71
5720MHz Straddle 5.47-5.725GHz	78
5720MHz Straddle 5.725-5.85GHz	78
5745MHz	106
5785MHz	106
5825MHz	107
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	76
5230MHz	96
5270MHz	81
5310MHz	78
5510MHz	70
5550MHz	79
5670MHz	77

Mode	Power Setting
5710MHz Straddle 5.47-5.725GHz	79
5710MHz Straddle 5.725-5.85GHz	79
5755MHz	99
5795MHz	102
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	77
5290MHz	76
5530MHz	74
5610MHz	79
5690MHz Straddle 5.47-5.725GHz	78
5690MHz Straddle 5.725-5.85GHz	78
5775MHz	85
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	70
5250MHz Straddle 5.25-5.35GHz	70
5570MHz	65

For 4T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	83
5200MHz	86
5240MHz	86
5260MHz	62
5300MHz	62
5320MHz	62
5500MHz	62
5580MHz	62
5700MHz	62
5720MHz Straddle 5.47-5.725GHz	63
5720MHz Straddle 5.725-5.85GHz	63
5745MHz	92
5785MHz	92
5825MHz	92
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	82
5200MHz	83
5240MHz	84
5260MHz	61
5300MHz	61
5320MHz	61
5500MHz	61
5580MHz	61
5700MHz	61
5720MHz Straddle 5.47-5.725GHz	61
5720MHz Straddle 5.725-5.85GHz	61
5745MHz	84
5785MHz	84
5825MHz	84
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	74
5230MHz	84
5270MHz	61
5310MHz	61
5510MHz	61
5550MHz	61
5670MHz	61
5710MHz Straddle 5.47-5.725GHz	62

Mode	Power Setting
5710MHz Straddle 5.725-5.85GHz	62
5755MHz	84
5795MHz	84
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	71
5290MHz	61
5530MHz	61
5610MHz	61
5690MHz Straddle 5.47-5.725GHz	61
5690MHz Straddle 5.725-5.85GHz	61
5775MHz	81
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	66
5250MHz Straddle 5.25-5.35GHz	66
5570MHz	58

Note:
- After evaluating, 802.11ax mode has been evaluated to be the worst case, so it was selected to test and record in this test report.
- There are two modes of EUT for 802.11n/ax/VHT in 2.4GHz and 802.11n/ac/ax in 5GHz. One is beamforming mode, and the other is non-beamforming mode, after evaluating, beamforming mode has been evaluated to be the worst case, so it was selected to test and record in this test report.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
The EUT supports 2.4GHz and 5GHz, the 2.4GHz has been evaluated to be the worst case. So the measurement will follow this same test configuration.	
1	SKU 1 (2.4GHz) + adapter 3
2	SKU 1 (2.4GHz) + adapter 5
For operating mode 2 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
Operating Mode	CTX
1	SKU 1 (5GHz) - 5GHz Band 3
2	SKU 5 (5GHz) - 5GHz Band 1~4

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	SKU 2 (2.4GHz) + adapter 3
2	SKU 2 (2.4GHz) + adapter 5
For adapter 1, adapter 3 and adapter 5, after evaluating, adapter 1 has been evaluated to be the worst case. So the measurement will follow this same test configuration.	
3	SKU 4 (2.4GHz) + adapter 1
4	SKU 4 (5GHz) + adapter 1
Mode 3 has been evaluated to be the worst case among Mode 3~4, thus measurement for Mode 5 will follow this same test mode.	
5	SKU 5 (2.4GHz) + adapter 1
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	SKU 1 (5GHz) + adapter 1 - 5GHz Band 3
2	SKU 5 (5GHz) + adapter 1 - 5GHz Band 1~4

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.: FA952922-06 for Co-location RF Exposure Evaluation.	

Note: The EUT only use in Z axis.

2.3 EUT Operation during Test

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 were executed.
The program was executed as follows:
1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under telnet.
3. Executed "Lantest20" to link with the remote workstation to transmit and receive packet by Device and transmit duty cycle no less than 98%.

2.4 Accessories

Accessories					
Equipment Name	**Brand Name**	**Model Name**	**Type**	**Country Code**	**Rating**
Adapter 1	PI	AD2088320	010LF	-	INPUT: 100-240V ~ 50/60Hz, 0.8A OUTPUT: 19V, 1.75A
Adapter 2	PI	AD2088320	010-5LF	-	INPUT: 100-240V ~ 50/60Hz, 0.8A OUTPUT: 19V, 1.75A
Adapter 3	Delta	ADP-33AW B	-	G	INPUT: 100-240V ~ 1A, 50-60Hz OUTPUT: 19V, 1.75A
Adapter 4	Delta	ADP-33AW B	-	L	INPUT: 100-240V ~ 1A, 50-60Hz OUTPUT: 19V, 1.75A
Adapter 5	Delta	ADP-33AW Y	-	-	INPUT: 100-240V ~ 1A, 50-60Hz OUTPUT: 19V, 1.75A
Other					
RJ-45 cable*1, Non-shielded, 1.5m					

Note:

1. The power adapter 1~ adapter 2 do not affect the test result of RF tests, so only adapter 1 was tested and recorded in this report.
2. The difference between adapter 3 ~ adapter 4 are only different country code, there are only adapter 3 tested and recorded in this report.

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E6430	N/A
B	HDD3.0	WD	WDBACY5000AWT	N/A

For 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	Device	ASUS	RT-AX88U	MSQ-RTAXHP00
C	NB	DELL	E4300	N/A

For RF Conducted:
(For non beamforming mode)

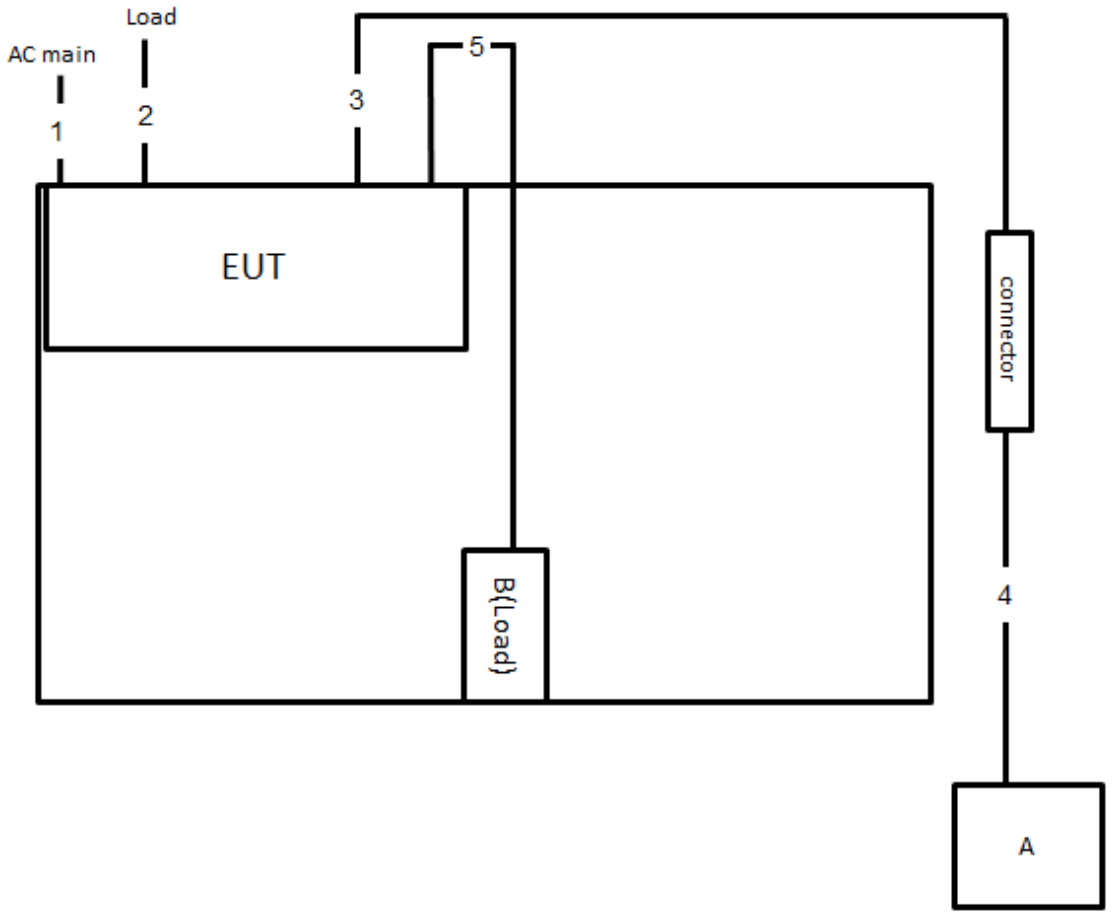
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A

(For beamforming mode)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	Device	ASUS	RT-AX82U	MSQ-RTAXJ300
C	NB	DELL	E4300	N/A

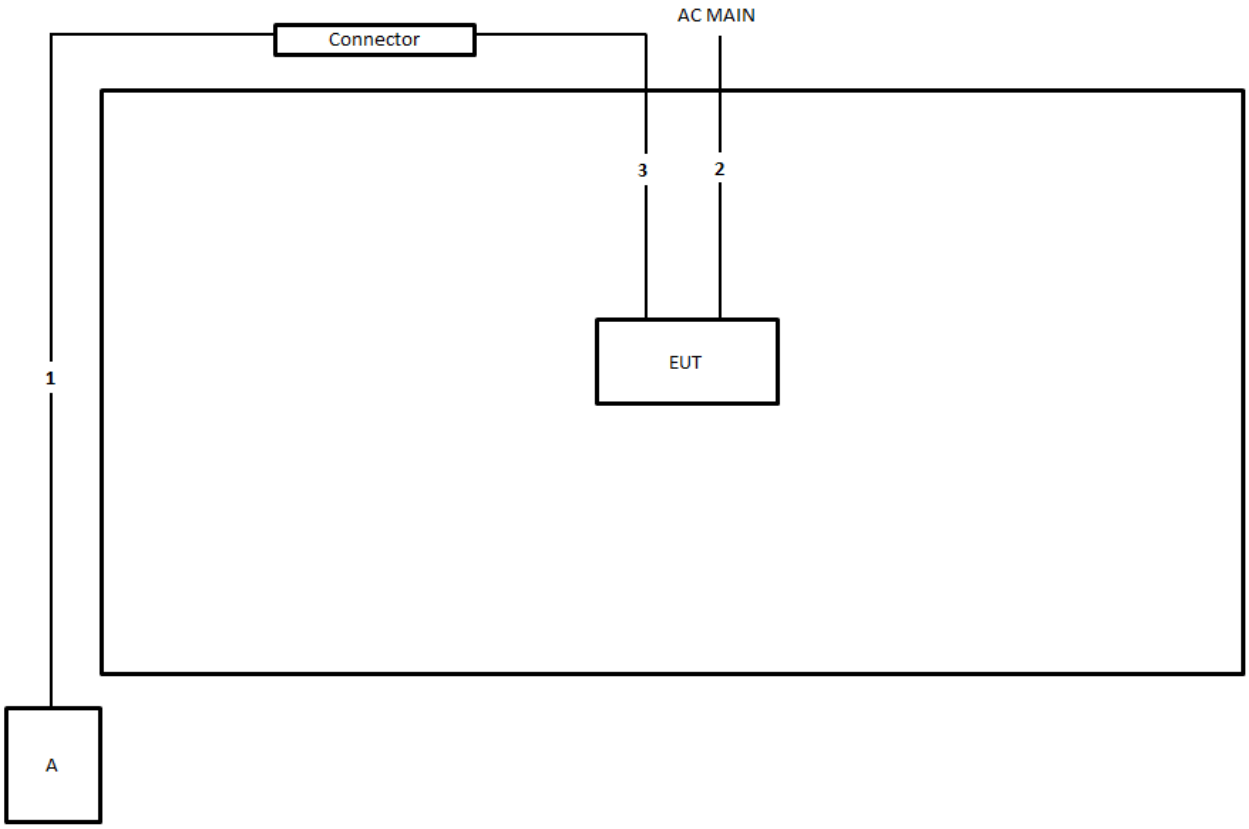
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



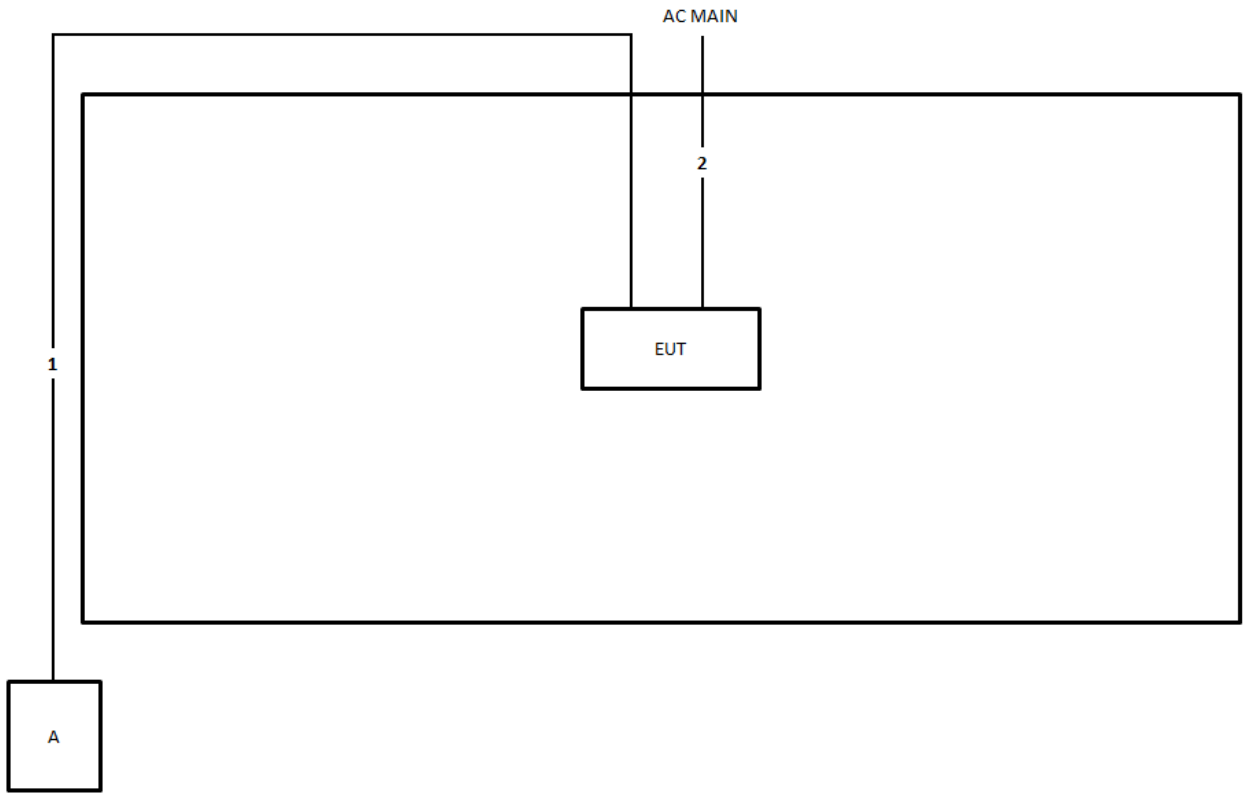
Item	Connection	Shielded	Length
1	Power cable	No	2.2m
2	RJ-45 cable*4	No	1.5m
3	RJ-45 cable	No	1.5m
4	RJ-45 cable	No	10m
5	USB cable	Yes	1.8m

Test Setup Diagram - Radiated Test < 1GHz



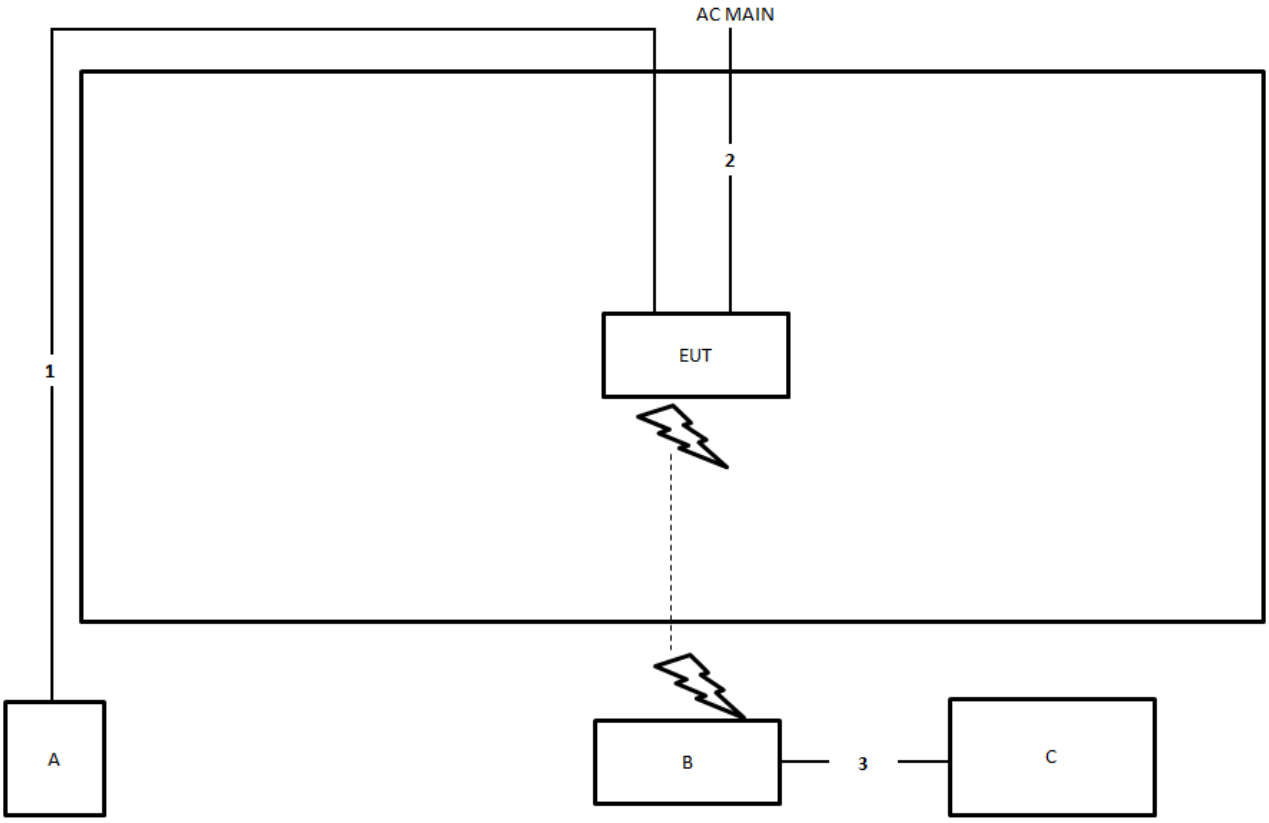
Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.2m
3	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz / For non-beamforming mode



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.2m

Test Setup Diagram - Radiated Test > 1GHz / For beamforming mode



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.2m
3	RJ-45 cable	No	1.5m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

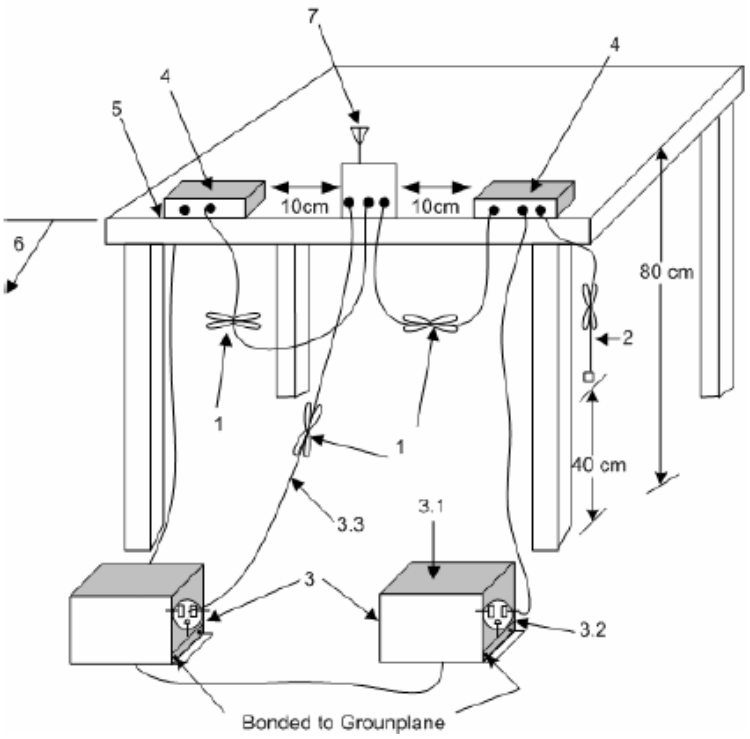
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level

b. Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

3.1.6 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 ≥ 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 ≥ 500kHz.

3.2.2 Measuring Instruments

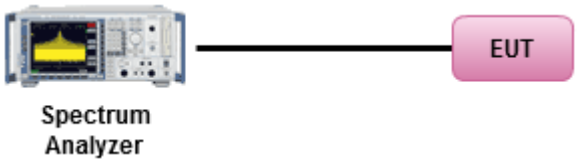
Refer a test equipment and calibration data table in this test report.

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

Emission Bandwidth



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.

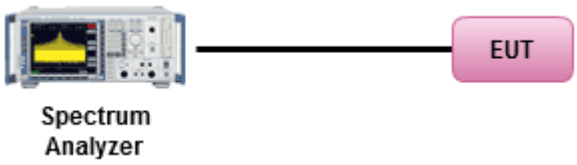
3.3.3 Test Procedures

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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

For straddle channel:

RF Output Power (Spectrum Analyzer)



For other channel:

RF Output Power (Power Meter)

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° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	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

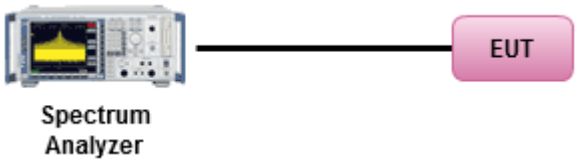
Refer a test equipment and calibration data table in this test report.

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: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup

Power Spectral Density



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.

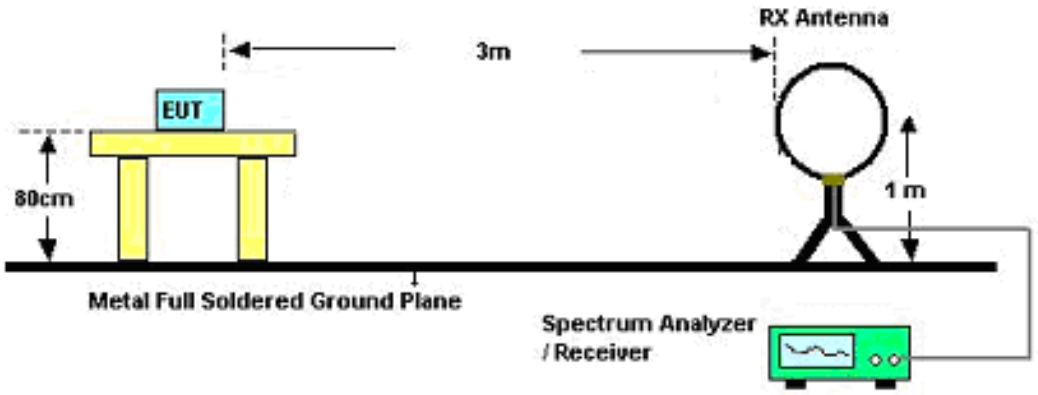
3.5.3 Test Procedures

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 ≥ 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 ≥ 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.		

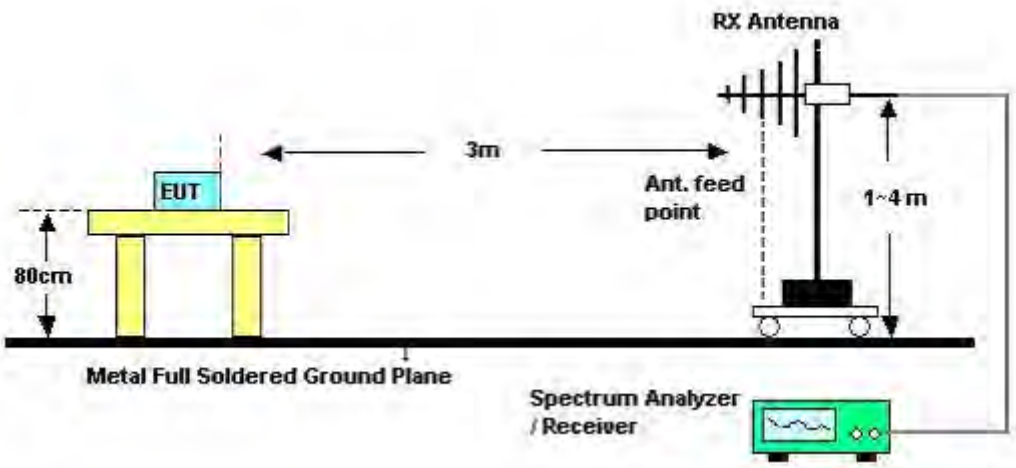
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

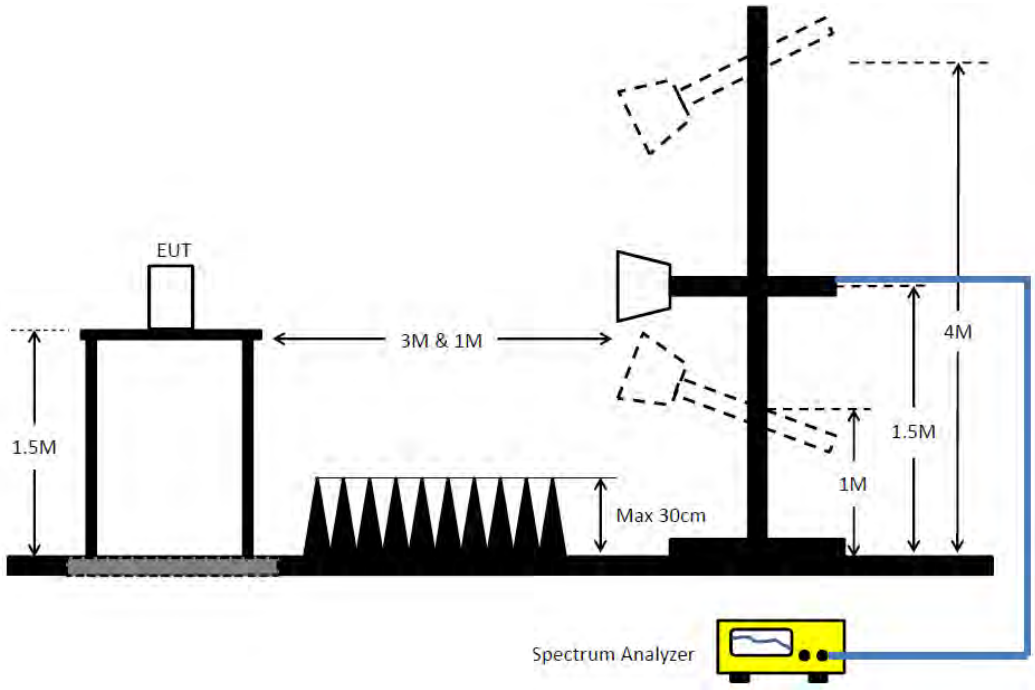
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.5 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor (if applicable) = Level.

3.5.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.5.7 Test Result of 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
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2019	Nov. 20, 2020	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Oct. 30, 2019	Oct. 29, 2020	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 16, 2019	Jan. 15, 2020	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 21, 2019	Oct. 20, 2020	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 20, 2018	Jul. 19, 2019	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 08, 2019	May 07, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2020	Jan. 07, 2021	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Bilog Antenna with 6dB Attenuator	TESE & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 28, 2019	Mar. 27, 2020	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 27, 2020	Mar. 26, 2021	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH05-CB)
.Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 28, 2020	Apr. 27, 2021	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 02, 2019	Jul. 01, 2020	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 24, 2018	Oct. 23, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 05, 2020	May 04, 2021	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)
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)

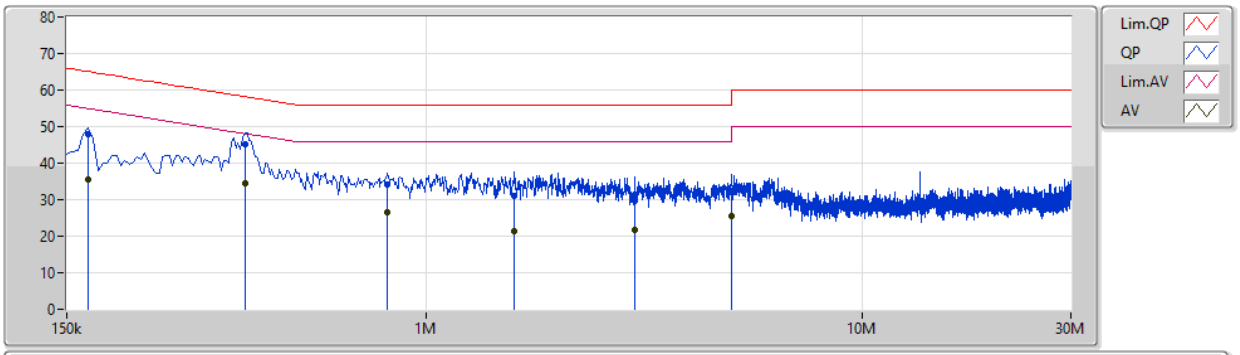
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 18, 2019	Nov. 17, 2020	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.
N.C.R. means Non-Calibration required.

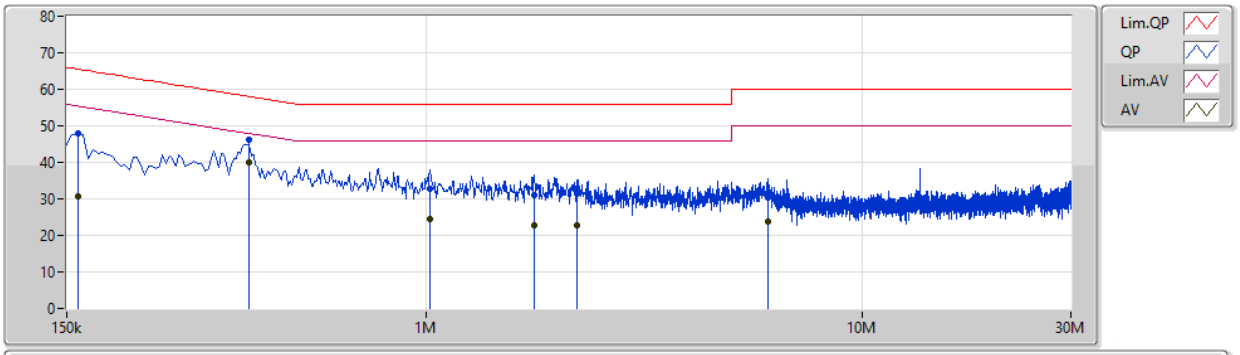
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 2	Pass	AV	393k	39.85	48.01	-8.16	9.91	Neutral

Test Mode: Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	168k	47.93	65.06	-17.13	9.90	Line	-	38.03	0.05	0.06	9.79
AV	168k	35.60	55.06	-19.46	9.90	Line	-	25.70	0.05	0.06	9.79
QP	384k	45.32	58.20	-12.88	9.93	Line	"Worst"	35.39	0.06	0.06	9.81
AV	384k	34.34	48.20	-13.86	9.93	Line	-	24.41	0.06	0.06	9.81
QP	816k	34.21	56.00	-21.79	9.97	Line	-	24.24	0.07	0.08	9.82
AV	816k	26.46	46.00	-19.54	9.97	Line	-	16.49	0.07	0.08	9.82
QP	1.595M	30.89	56.00	-25.11	10.02	Line	-	20.87	0.08	0.11	9.83
AV	1.595M	21.25	46.00	-24.75	10.02	Line	-	11.23	0.08	0.11	9.83
QP	3.008M	29.80	56.00	-26.20	10.08	Line	-	19.72	0.11	0.15	9.82
AV	3.008M	21.63	46.00	-24.37	10.08	Line	-	11.55	0.11	0.15	9.82
QP	5M	32.38	60.00	-27.62	10.16	Line	-	22.22	0.14	0.18	9.84
AV	5M	25.63	50.00	-24.37	10.16	Line	-	15.47	0.14	0.18	9.84



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	159k	47.94	65.52	-17.58	9.89	Neutral	-	38.05	0.04	0.06	9.79
AV	159k	30.58	55.52	-24.94	9.89	Neutral	-	20.69	0.04	0.06	9.79
QP	393k	46.24	58.01	-11.77	9.91	Neutral	-	36.33	0.04	0.06	9.81
AV	393k	39.85	48.01	-8.16	9.91	Neutral	"Worst"	29.94	0.04	0.06	9.81
QP	1.019M	32.82	56.00	-23.18	9.97	Neutral	-	22.85	0.06	0.09	9.82
AV	1.019M	24.60	46.00	-21.40	9.97	Neutral	-	14.63	0.06	0.09	9.82
QP	1.766M	31.14	56.00	-24.86	10.01	Neutral	-	21.13	0.07	0.11	9.83
AV	1.766M	22.88	46.00	-23.12	10.01	Neutral	-	12.87	0.07	0.11	9.83
QP	2.22M	31.28	56.00	-24.72	10.03	Neutral	-	21.25	0.07	0.13	9.83
AV	2.22M	22.70	46.00	-23.30	10.03	Neutral	-	12.67	0.07	0.13	9.83
QP	6.081M	30.38	60.00	-29.62	10.20	Neutral	-	20.18	0.14	0.20	9.86
AV	6.081M	23.92	50.00	-26.08	10.20	Neutral	-	13.72	0.14	0.20	9.86

<SKU 1, Non-beamforming function: 5GHz Band 3>
For 2T1S
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	21.45M	16.592M	16M6D1D	15.495M	13.298M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.12M	3.798M	3M80D1D	3.12M	3.778M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5500MHz	Pass	Inf	21.35M	16.542M	21.425M	16.567M
5580MHz	Pass	Inf	21.35M	16.517M	21.35M	16.592M
5700MHz	Pass	Inf	21.45M	16.567M	21.425M	16.592M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.555M	13.358M	15.495M	13.298M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.778M	3.12M	3.798M

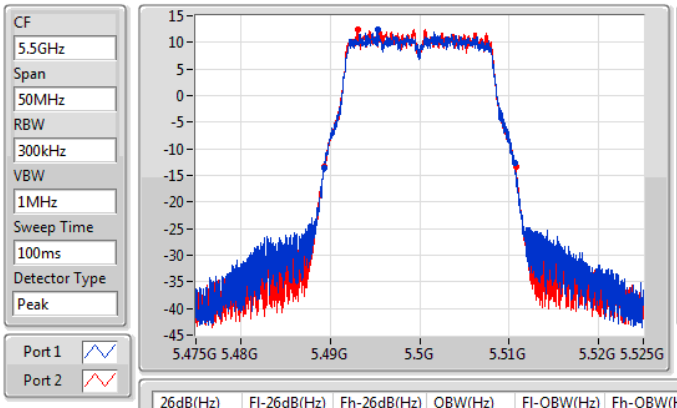
Port X-N dB = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port **X** 99% occupied bandwidth;

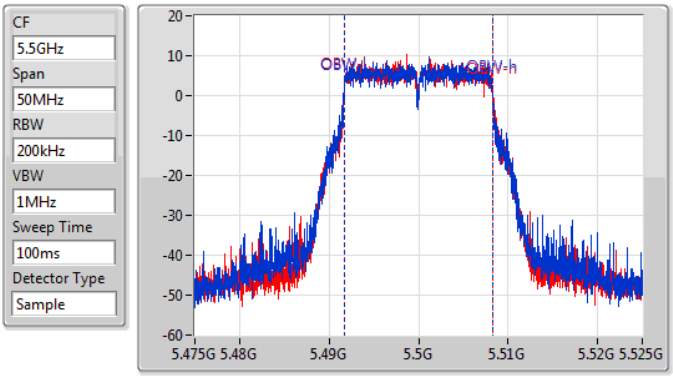
802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

19/07/2019





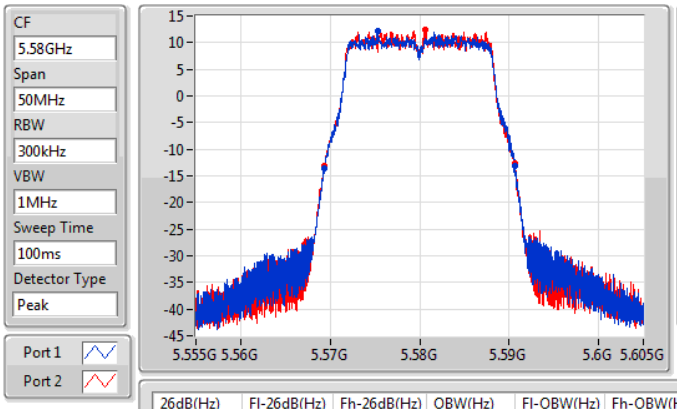
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.35M	5.4893G	5.51065G	16.542M	5.491679G	5.508221G	Inf	1
21.425M	5.4893G	5.510725G	16.567M	5.491679G	5.508246G	Inf	2

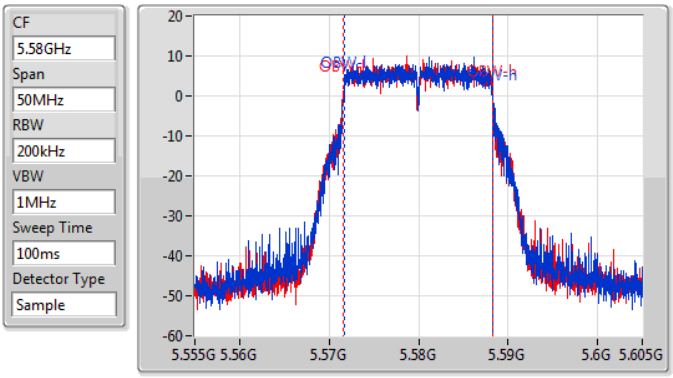
802.11a_Nss1,(6Mbps)_2TX

EBW

5580MHz

19/07/2019





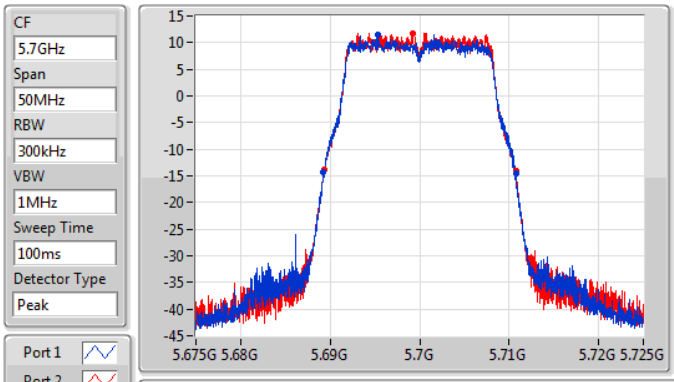
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.35M	5.569325G	5.590675G	16.517M	5.571704G	5.588221G	Inf	1
21.35M	5.569325G	5.590675G	16.592M	5.571629G	5.588221G	Inf	2

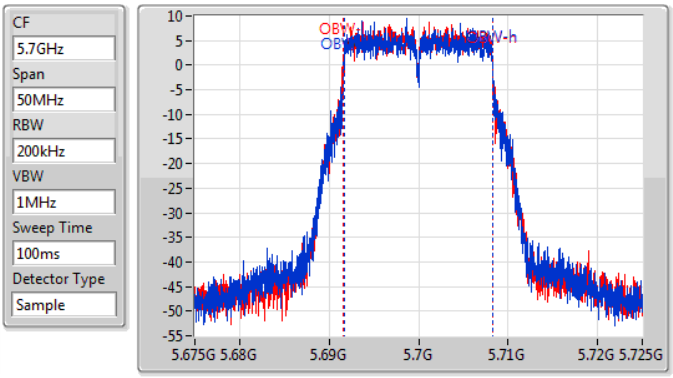
802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

19/07/2019





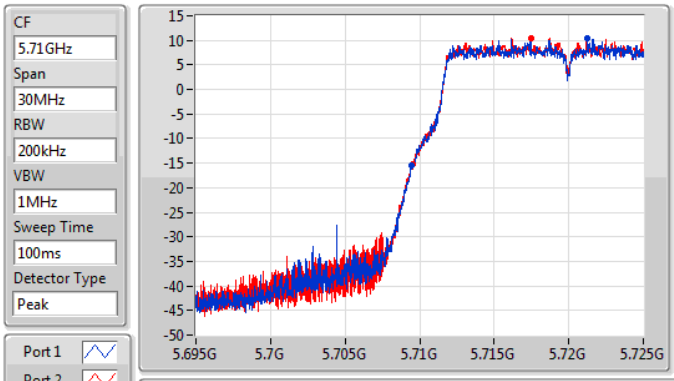
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.45M	5.689275G	5.710725G	16.567M	5.691654G	5.708221G	Inf	1
21.425M	5.6893G	5.710725G	16.592M	5.691629G	5.708221G	Inf	2

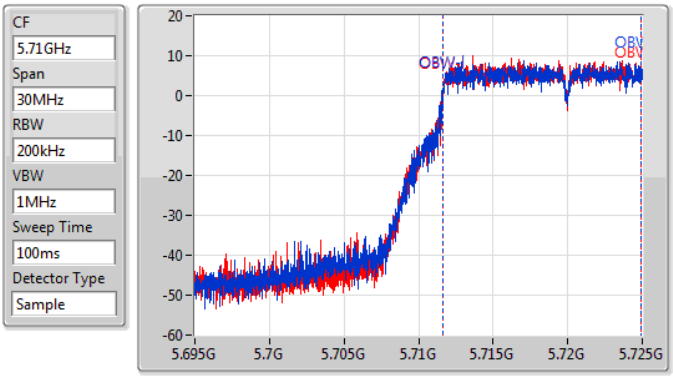
802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

19/07/2019





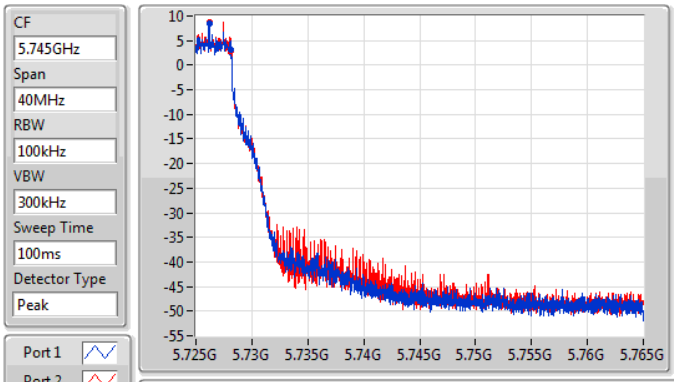
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.555M	5.709445G	5.725G	13.358M	5.711589G	5.724948G	Inf	1
15.495M	5.709505G	5.725G	13.298M	5.711619G	5.724918G	Inf	2

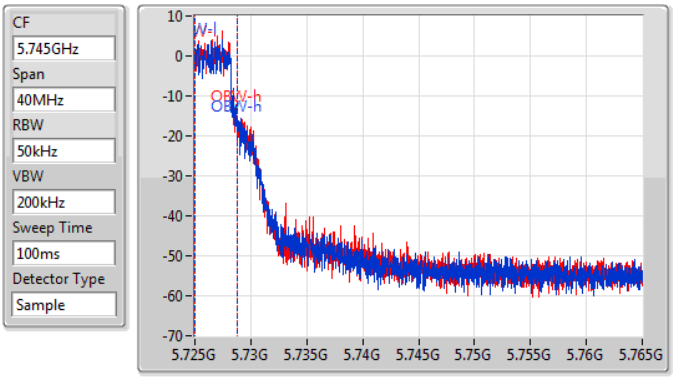
802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

19/07/2019





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.12M	5.725G	5.72812G	3.778M	5.72503G	5.728808G	500k	1
3.12M	5.725G	5.72812G	3.798M	5.72501G	5.728808G	500k	2

For 2T2S
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	21.65M	19.015M	19M0D1D	15.615M	14.483M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.05M	37.631M	37M6D1D	35.035M	33.688M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.5M	77.161M	77M2D1D	75.75M	73.163M
802.11ax HEW160_Nss2,(MCS0)_2TX	165.4M	155.322M	155MD1D	164M	154.923M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	4.42M	4.518M	4M52D1D	4.42M	4.518M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.68M	4.018M	4M02D1D	3.68M	3.978M
802.11ax HEW80_Nss2,(MCS0)_2TX	3.92M	4.018M	4M02D1D	3.88M	3.998M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

Result

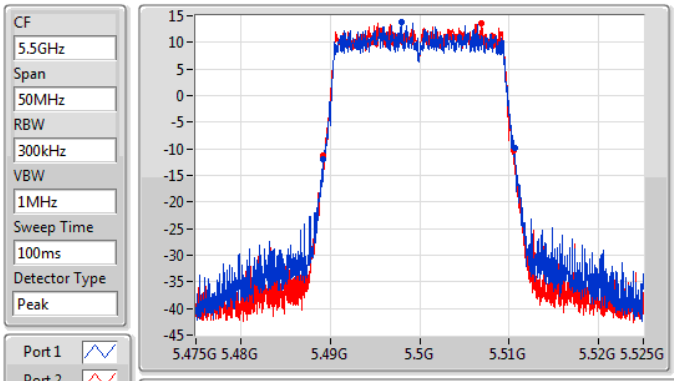
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5500MHz	Pass	Inf	21.425M	18.966M	21.275M	18.991M
5580MHz	Pass	Inf	21.575M	19.015M	21.625M	18.966M
5700MHz	Pass	Inf	21.575M	18.941M	21.65M	18.991M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.615M	14.483M	15.75M	14.513M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	4.518M	4.42M	4.518M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5510MHz	Pass	Inf	40.05M	37.531M	39.9M	37.581M
5550MHz	Pass	Inf	39.95M	37.531M	39.9M	37.581M
5670MHz	Pass	Inf	40.05M	37.631M	39.8M	37.581M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.07M	33.688M	35.035M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.68M	3.978M	3.68M	4.018M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5530MHz	Pass	Inf	81.4M	77.061M	81.1M	77.161M
5610MHz	Pass	Inf	81.5M	77.061M	81.3M	77.161M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.825M	73.163M	75.75M	73.163M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	3.998M	3.88M	4.018M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5570MHz	Pass	Inf	165.4M	155.322M	164M	154.923M

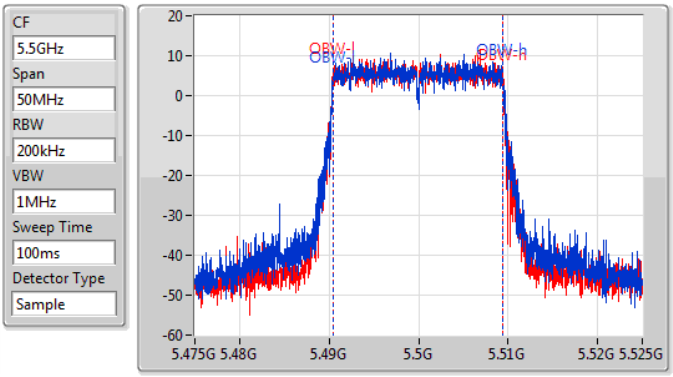
Port X-N dB = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port **X** 99% occupied bandwidth;

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

5500MHz

22/07/2019



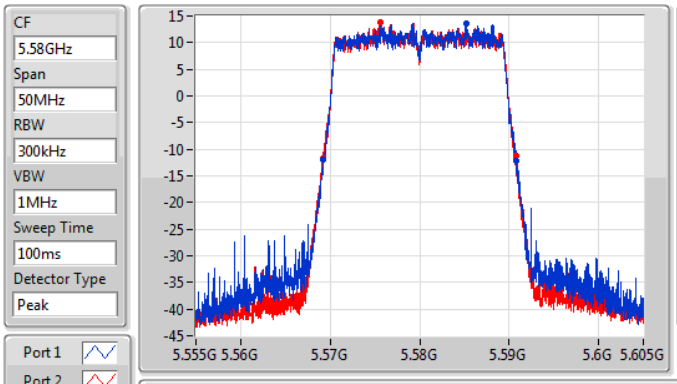


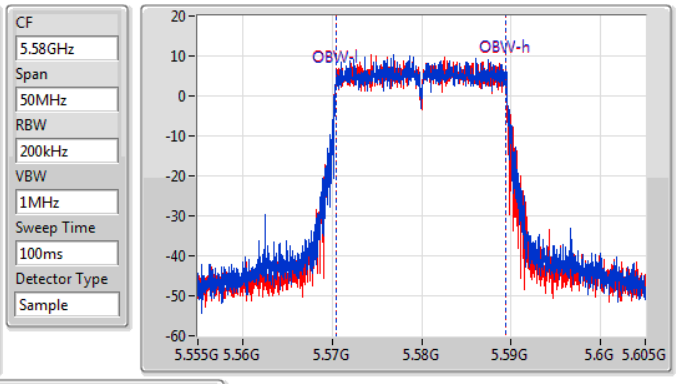
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.425M	5.489275G	5.5107G	18.966M	5.490455G	5.50942G	Inf	1
21.275M	5.489275G	5.51055G	18.991M	5.49043G	5.50942G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

5580MHz

22/07/2019





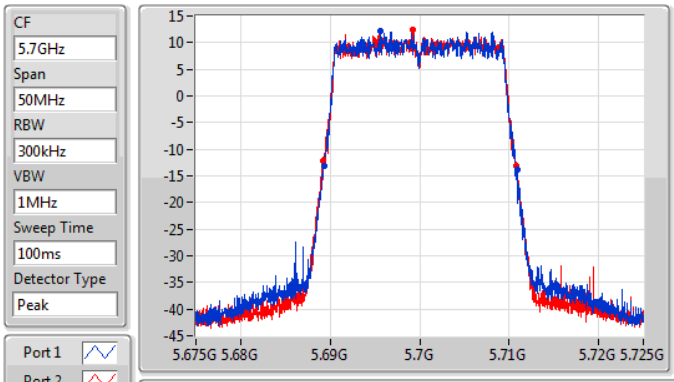
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.575M	5.569275G	5.59085G	19.015M	5.570455G	5.58947G	Inf	1
21.625M	5.56915G	5.590775G	18.966M	5.570455G	5.58942G	Inf	2

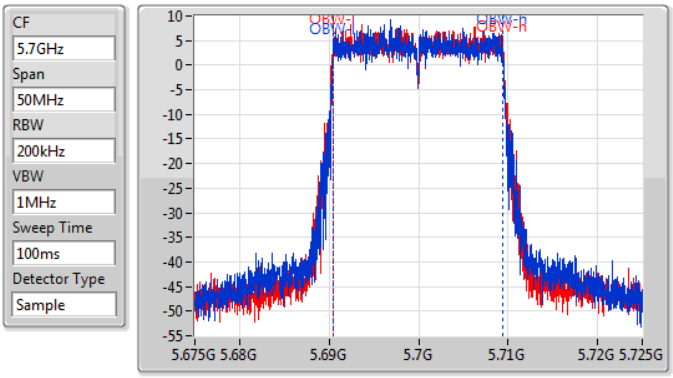
802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5700MHz

22/07/2019





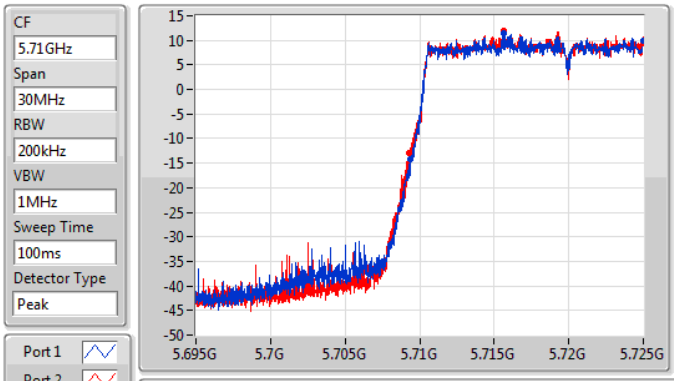
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.575M	5.6893G	5.710875G	18.941M	5.690455G	5.709395G	Inf	1
21.65M	5.6892G	5.71085G	18.991M	5.690455G	5.709445G	Inf	2

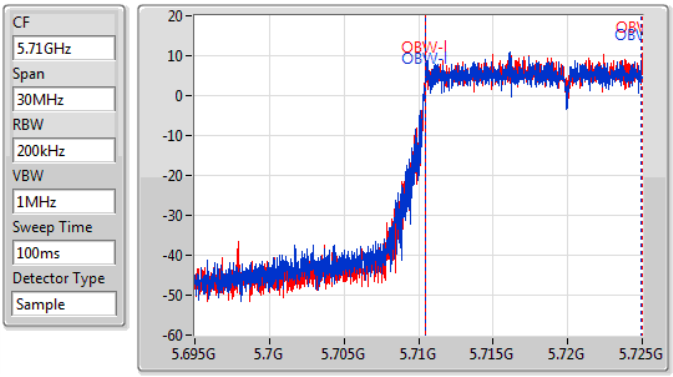
802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

22/07/2019



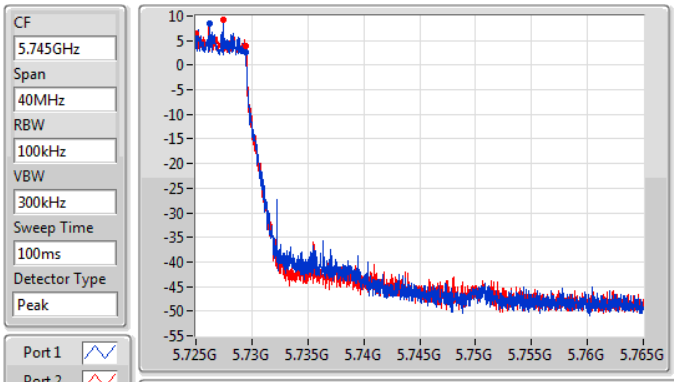


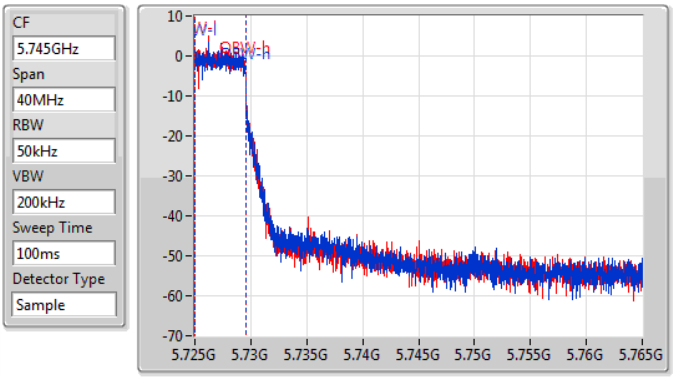
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.615M	5.709385G	5.725G	14.483M	5.710435G	5.724918G	Inf	1
15.75M	5.70925G	5.725G	14.513M	5.71045G	5.724963G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

5720MHz Straddle 5.725-5.85GHz

22/07/2019



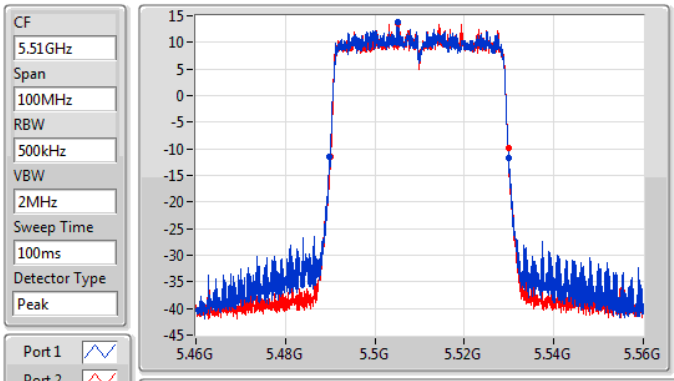


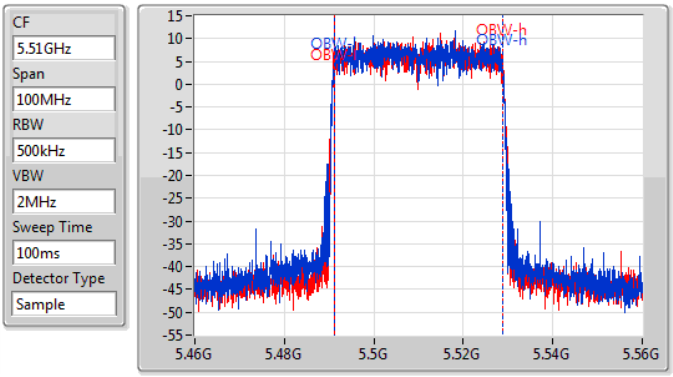
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.42M	5.725G	5.72942G	4.518M	5.72501G	5.729528G	500k	1
4.42M	5.725G	5.72942G	4.518M	5.72501G	5.729528G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

5510MHz

22/07/2019



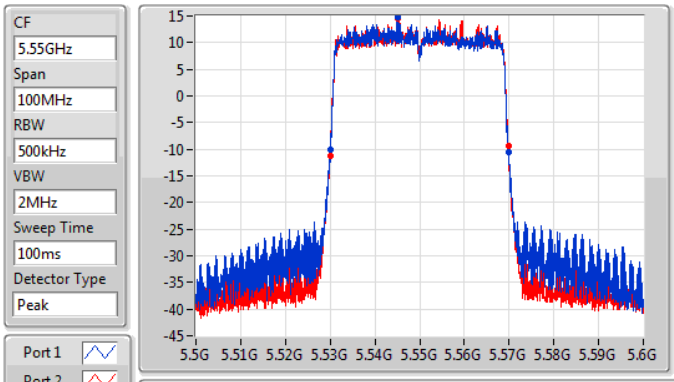


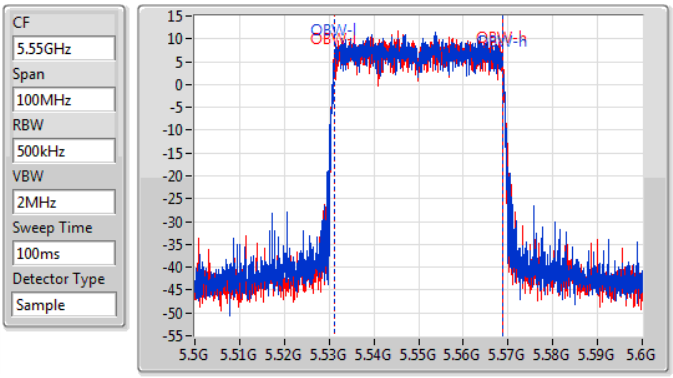
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.05M	5.4899G	5.52995G	37.531M	5.491159G	5.528691G	Inf	1
39.9M	5.48995G	5.52985G	37.581M	5.491109G	5.528691G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

5550MHz

22/07/2019



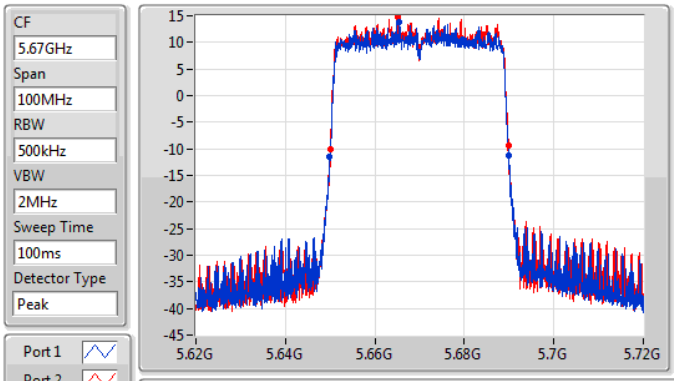


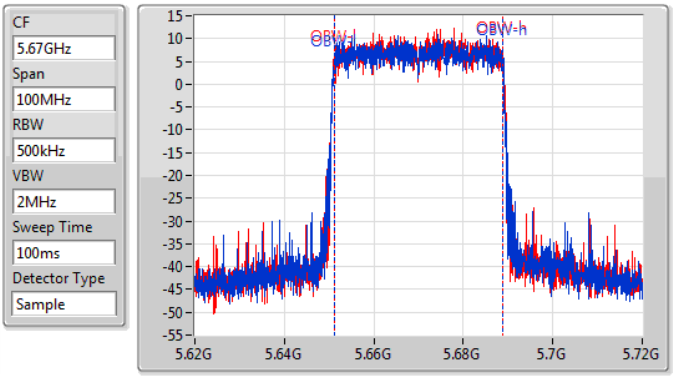
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.95M	5.52995G	5.5699G	37.531M	5.531209G	5.568741G	Inf	1
39.9M	5.52995G	5.56985G	37.581M	5.531159G	5.568741G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

5670MHz

22/07/2019



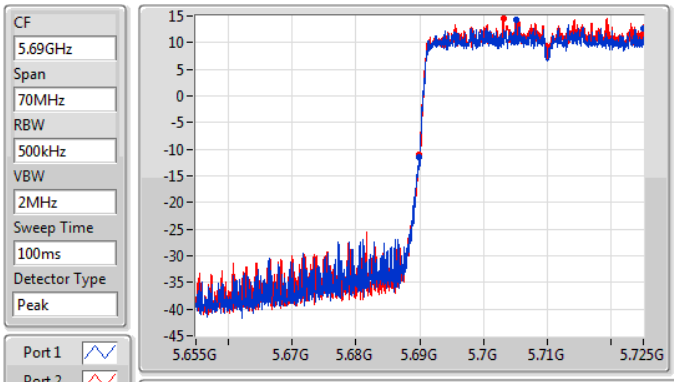


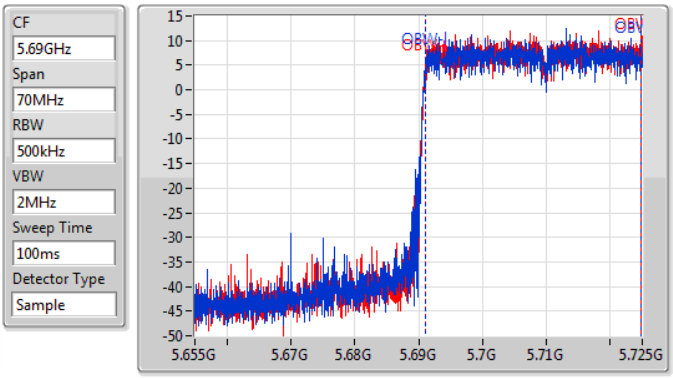
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.05M	5.6499G	5.68995G	37.631M	5.651159G	5.688791G	Inf	1
39.8M	5.65005G	5.68985G	37.581M	5.651209G	5.688791G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX — EBW

5710MHz Straddle 5.47-5.725GHz

22/07/2019



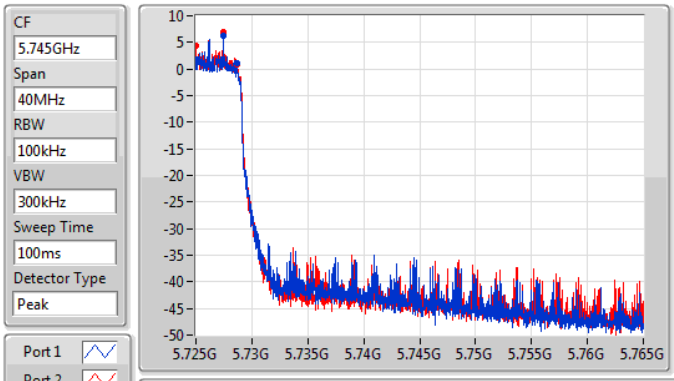


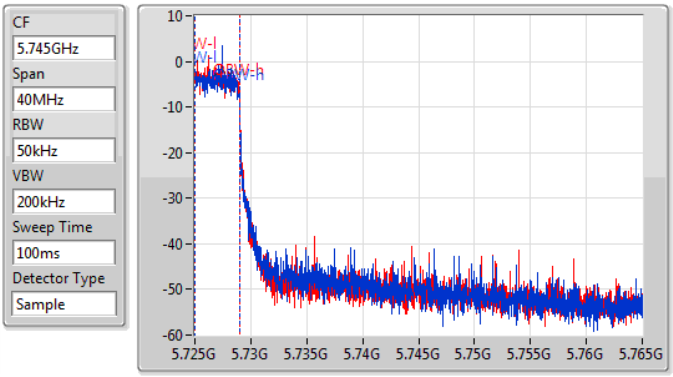
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.07M	5.68993G	5.725G	33.688M	5.691119G	5.724808G	Inf	1
35.035M	5.689965G	5.725G	33.758M	5.691119G	5.724878G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX — EBW

5710MHz Straddle 5.725-5.85GHz

22/07/2019



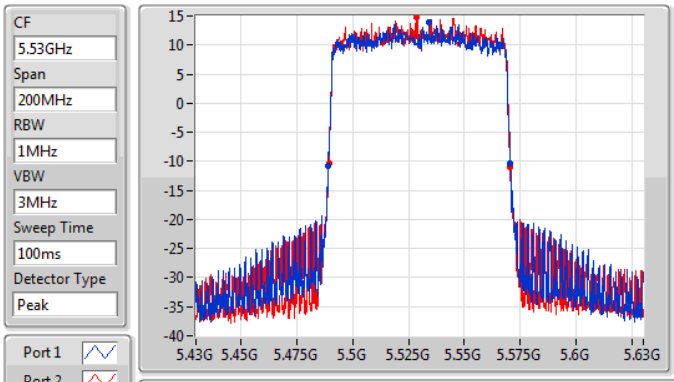


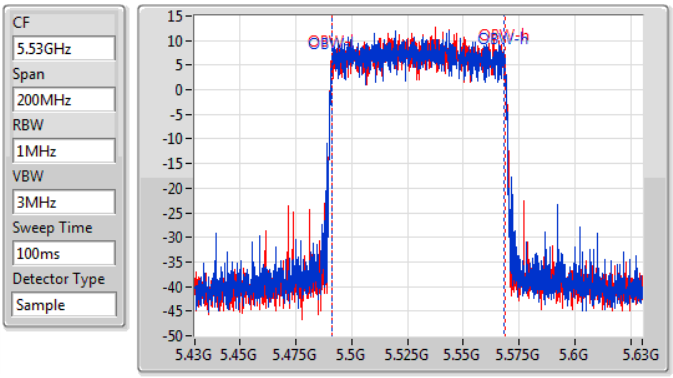
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.68M	5.725G	5.72868G	3.978M	5.72503G	5.729008G	500k	1
3.68M	5.725G	5.72868G	4.018M	5.72501G	5.729028G	500k	2

802.11ax HEW80_Nss2,(MCS0)_2TX EBW

5530MHz

22/07/2019



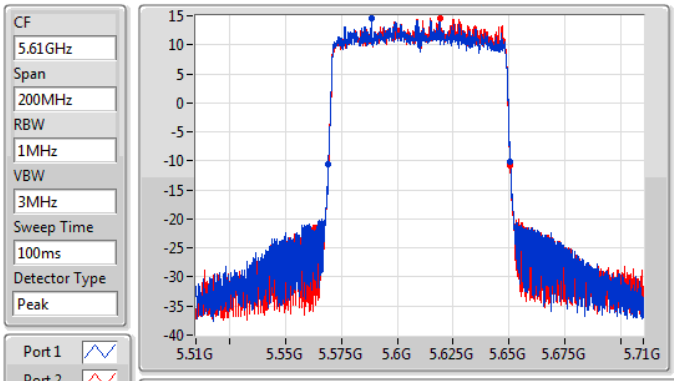


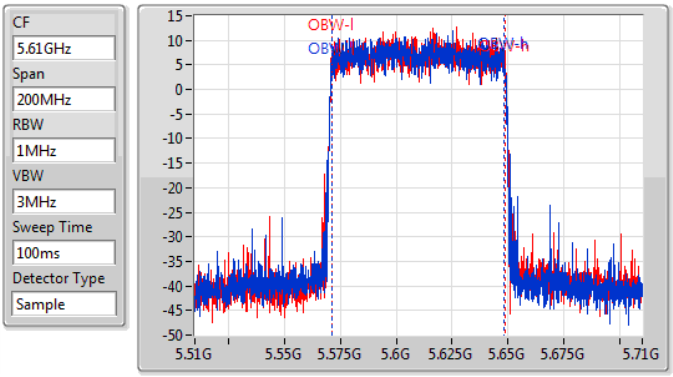
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.4M	5.4892G	5.5706G	77.061M	5.491319G	5.568381G	Inf	1
81.1M	5.4894G	5.5705G	77.161M	5.491319G	5.568481G	Inf	2

802.11ax HEW80_Nss2,(MCS0)_2TX EBW

5610MHz

22/07/2019





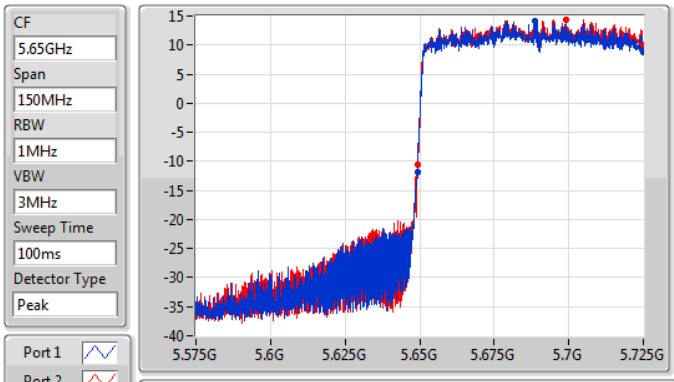
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.5M	5.5691G	5.6506G	77.061M	5.571219G	5.648281G	Inf	1
81.3M	5.5692G	5.6505G	77.161M	5.571319G	5.648481G	Inf	2

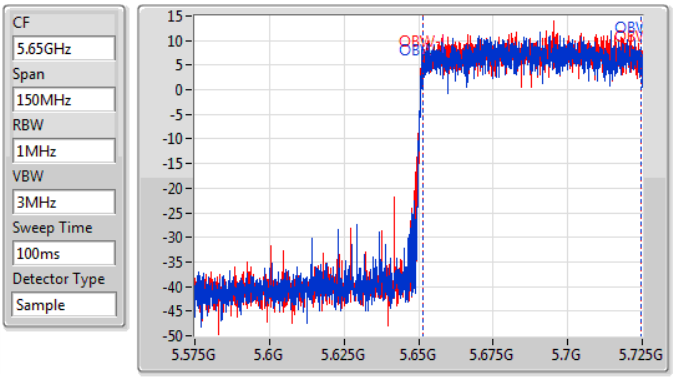
802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

22/07/2019





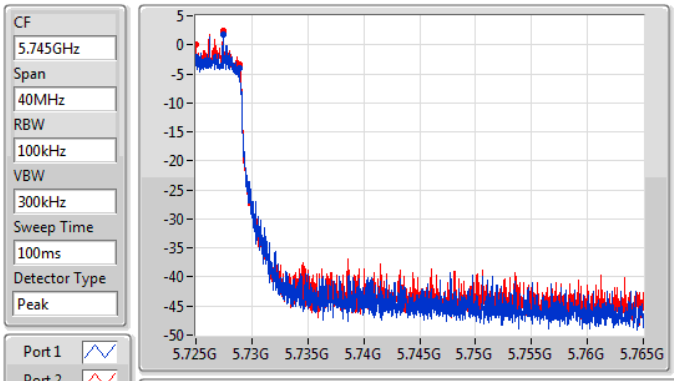
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.825M	5.649175G	5.725G	73.163M	5.651424G	5.724588G	Inf	1
75.75M	5.64925G	5.725G	73.163M	5.651424G	5.724588G	Inf	2

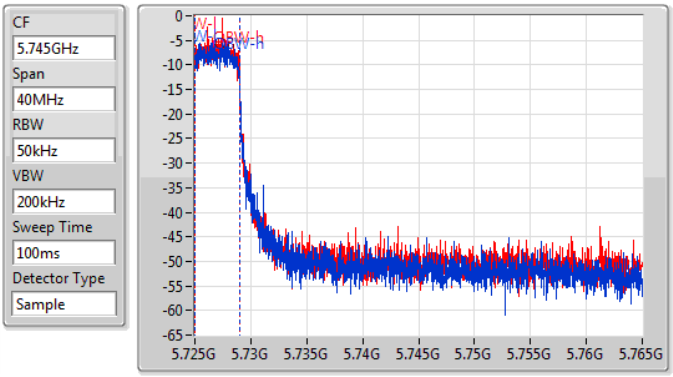
802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

22/07/2019





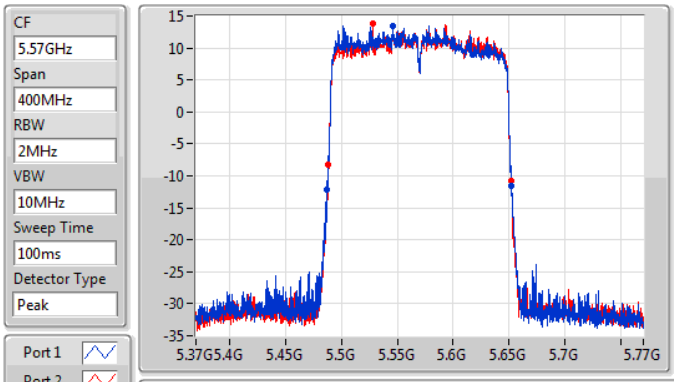
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.92M	5.725G	5.72892G	3.998M	5.72503G	5.729028G	500k	1
3.88M	5.725G	5.72888G	4.018M	5.72501G	5.729028G	500k	2

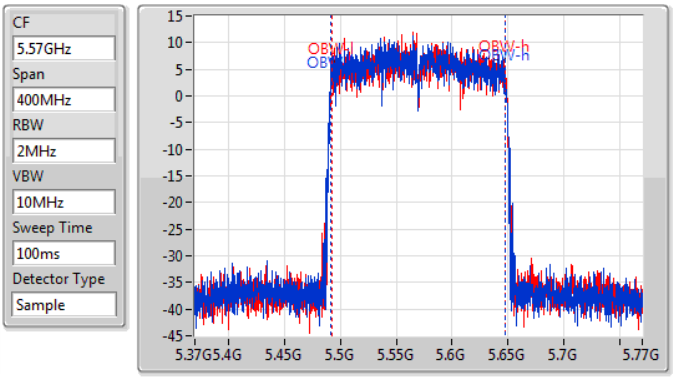
802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz

22/07/2019





26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
165.4M	5.487G	5.6524G	155.322M	5.491839G	5.647161G	Inf	1
164M	5.4882G	5.6522G	154.923M	5.492439G	5.647361G	Inf	2

For 4T1S
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	21.675M	16.592M	16M6D1D	15.48M	13.313M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	3.1M	3.858M	3M86D1D	3.1M	3.778M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	21.35M	16.542M	21.55M	16.567M	21.575M	16.592M	21.525M	16.567M
5580MHz	Pass	Inf	21.475M	16.567M	21.575M	16.517M	21.65M	16.592M	21.35M	16.542M
5700MHz	Pass	Inf	21.525M	16.592M	21.625M	16.592M	21.675M	16.592M	21.525M	16.592M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.48M	13.313M	15.675M	13.328M	15.735M	13.343M	15.69M	13.358M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.858M	3.1M	3.858M	3.1M	3.798M	3.1M	3.778M

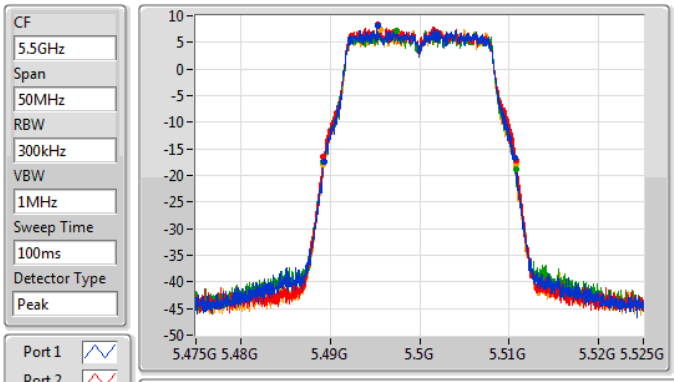
Port X-N dB = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port **X** 99% occupied bandwidth;

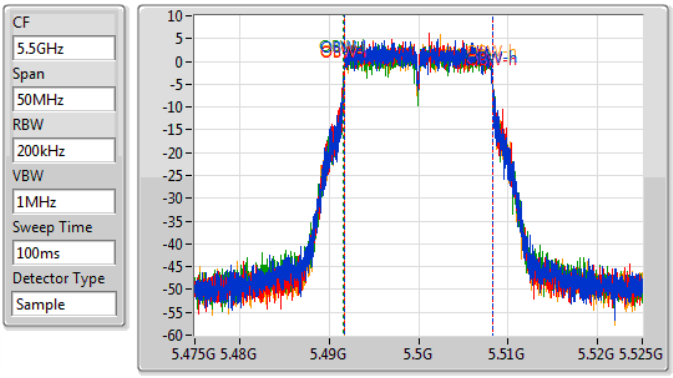
802.11a_Nss1,(6Mbps)_4TX

EBW

5500MHz

18/07/2019





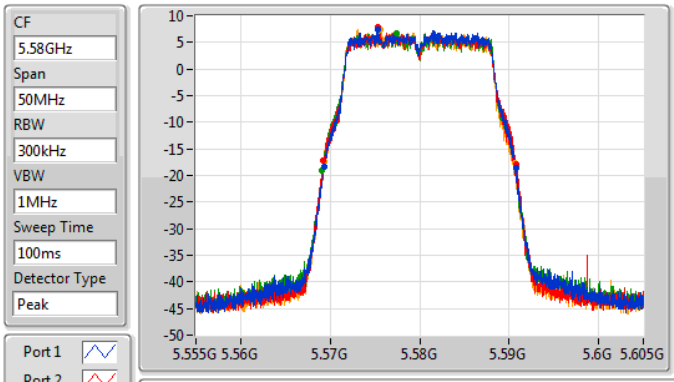
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.35M	5.4893G	5.51065G	16.542M	5.491679G	5.508221G	Inf	1
21.55M	5.48925G	5.5108G	16.567M	5.491654G	5.508221G	Inf	2
21.575M	5.489175G	5.51075G	16.592M	5.491629G	5.508221G	Inf	3
21.525M	5.489275G	5.5108G	16.567M	5.491654G	5.508221G	Inf	4

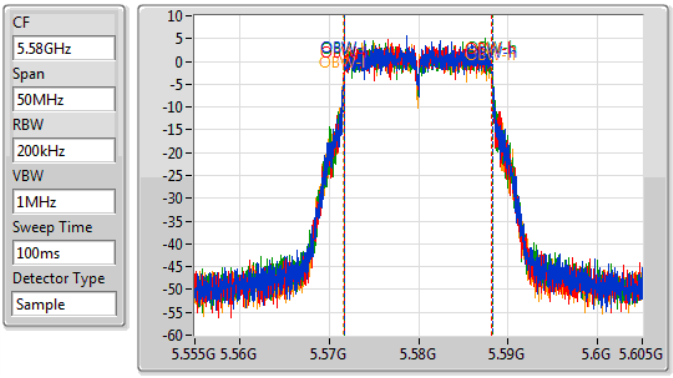
802.11a_Nss1,(6Mbps)_4TX

EBW

5580MHz

18/07/2019





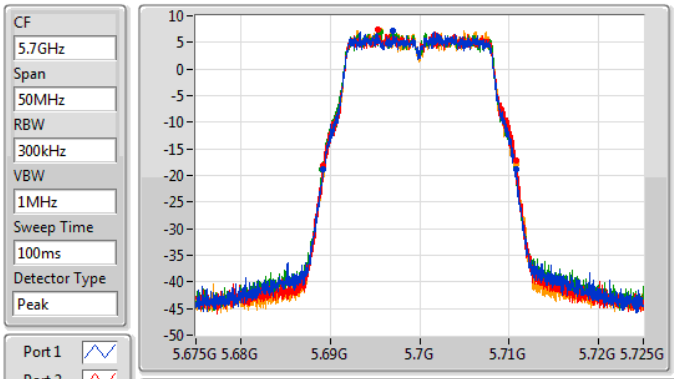
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.475M	5.5693G	5.590775G	16.567M	5.571679G	5.588246G	Inf	1
21.575M	5.56925G	5.590825G	16.517M	5.571654G	5.588171G	Inf	2
21.65M	5.569075G	5.590725G	16.592M	5.571654G	5.588246G	Inf	3
21.35M	5.569325G	5.590675G	16.542M	5.571629G	5.588171G	Inf	4

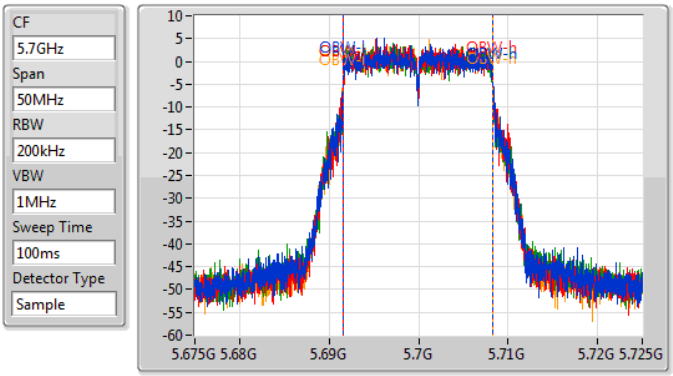
802.11a_Nss1,(6Mbps)_4TX

EBW

5700MHz

18/07/2019





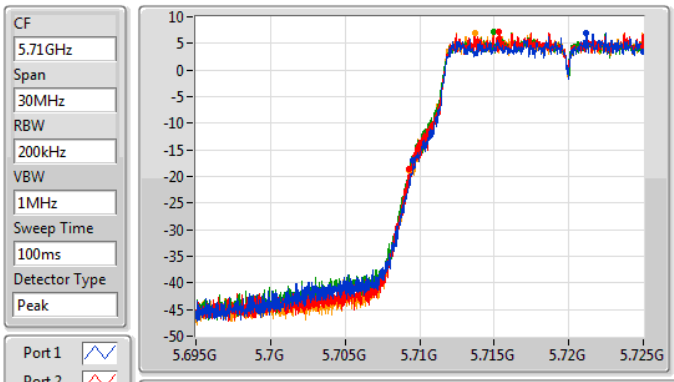
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.525M	5.689225G	5.71075G	16.592M	5.691629G	5.708221G	Inf	1
21.625M	5.689175G	5.7108G	16.592M	5.691629G	5.708221G	Inf	2
21.675M	5.6891G	5.710775G	16.592M	5.691629G	5.708221G	Inf	3
21.525M	5.689225G	5.71075G	16.592M	5.691629G	5.708221G	Inf	4

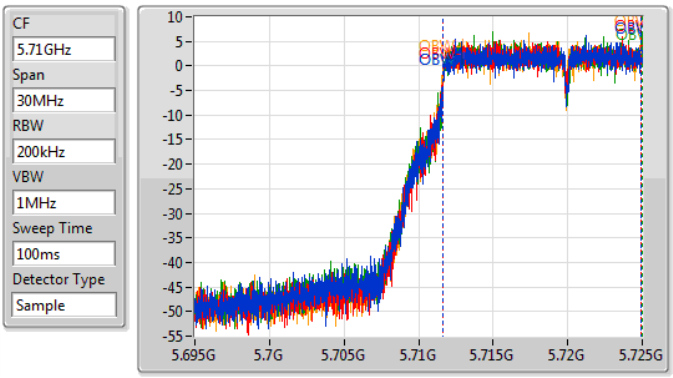
802.11a_Nss1,(6Mbps)_4TX

EBW

5720MHz Straddle 5.47-5.725GHz

18/07/2019





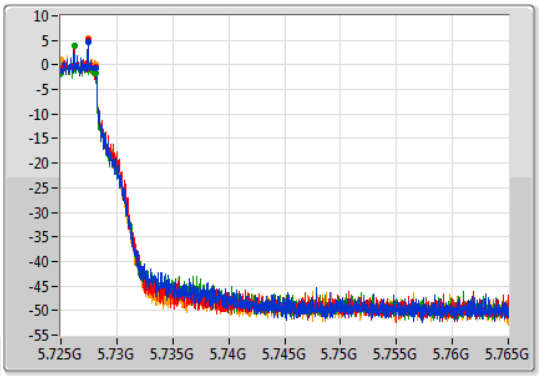
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.48M	5.70952G	5.725G	13.313M	5.711634G	5.724948G	Inf	1
15.675M	5.709325G	5.725G	13.328M	5.711604G	5.724933G	Inf	2
15.735M	5.709265G	5.725G	13.343M	5.711619G	5.724963G	Inf	3
15.69M	5.70931G	5.725G	13.358M	5.711589G	5.724948G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

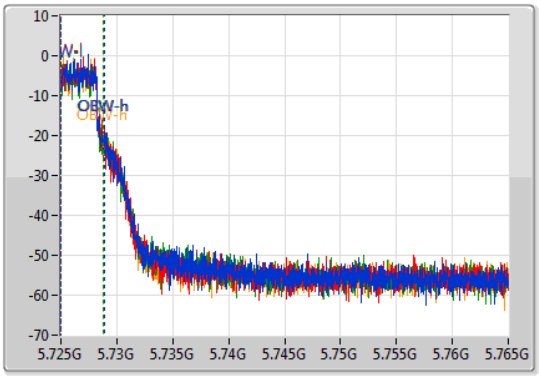
5720MHz Straddle 5.725-5.85GHz

18/07/2019

CF 5.745GHz
Span 40MHz
RBW 100kHz
VBW 300kHz
Sweep Time 100ms
Detector Type Peak



CF 5.745GHz
Span 40MHz
RBW 50kHz
VBW 200kHz
Sweep Time 100ms
Detector Type Sample



Port 1
Port 2
Port 3
Port 4

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	3.858M	5.72503G	5.728888G	500k	1
3.1M	5.725G	5.7281G	3.858M	5.72501G	5.728868G	500k	2
3.1M	5.72502G	5.72812G	3.798M	5.72503G	5.728828G	500k	3
3.1M	5.725G	5.7281G	3.778M	5.72501G	5.728788G	500k	4

<SKU 1, Non-beamforming function: 5GHz Band 3>
For 2T1S
Summary

Mode	Total Power (dBm)	Total Power (W)
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.93	0.24717
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	16.84	0.04831

Result

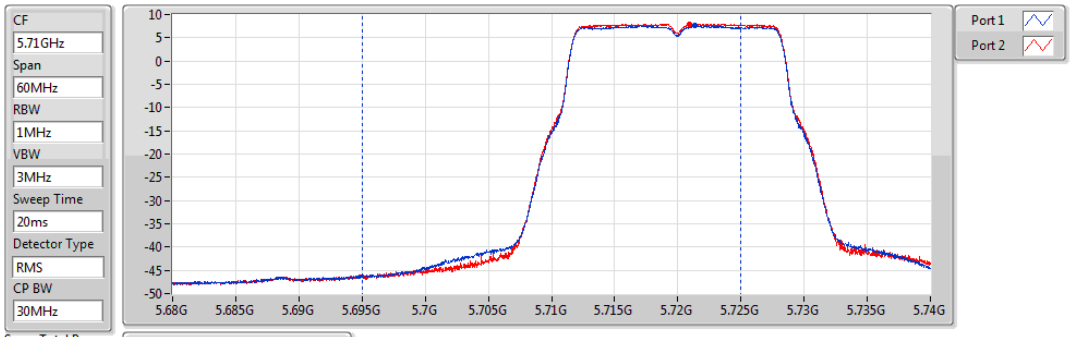
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5500MHz	Pass	1.92	20.84	20.79	23.83	23.98
5580MHz	Pass	1.92	20.93	20.90	23.93	23.98
5700MHz	Pass	1.92	19.83	20.33	23.10	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.92	19.60	20.06	22.85	22.90
5720MHz Straddle 5.725-5.85GHz	Pass	1.95	13.61	14.03	16.84	30.00

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

802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

19/07/2019



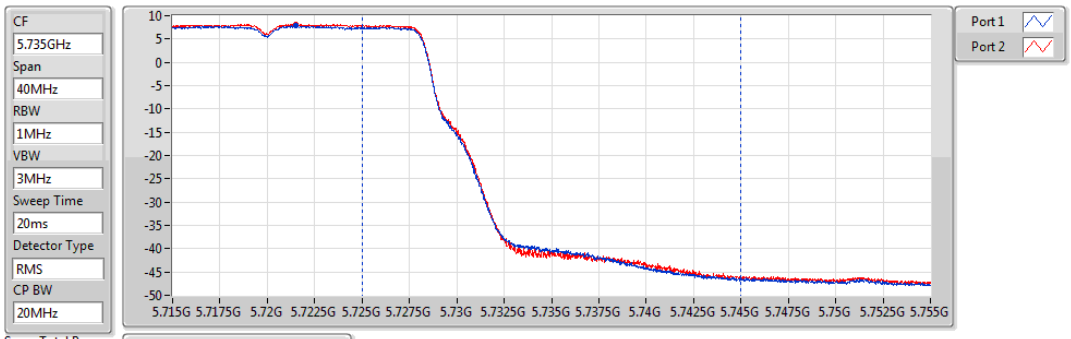
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
22.85	19.60	20.06

802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

19/07/2019



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
16.84	13.61	14.03

For 2T2S
Summary

Mode	Total Power (dBm)	Total Power (W)
5.47-5.725GHz	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	23.91	0.24604
802.11ax HEW40_Nss2,(MCS0)_2TX	23.95	0.24831
802.11ax HEW80_Nss2,(MCS0)_2TX	23.94	0.24774
802.11ax HEW160_Nss2,(MCS0)_2TX	22.52	0.17865
5.725-5.85GHz	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	17.86	0.06109
802.11ax HEW40_Nss2,(MCS0)_2TX	14.38	0.02742
802.11ax HEW80_Nss2,(MCS0)_2TX	10.65	0.01161

Result

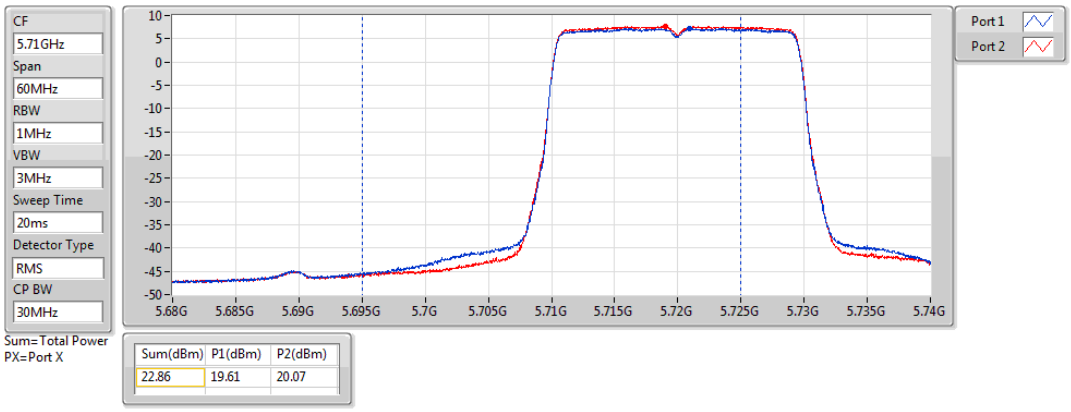
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5500MHz	Pass	1.88	20.76	21.04	23.91	23.98
5580MHz	Pass	1.88	20.82	20.97	23.91	23.98
5700MHz	Pass	1.88	19.32	19.72	22.53	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.88	19.61	20.07	22.86	22.94
5720MHz Straddle 5.725-5.85GHz	Pass	1.92	14.52	15.15	17.86	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5510MHz	Pass	1.88	20.19	20.06	23.14	23.98
5550MHz	Pass	1.88	20.88	20.89	23.90	23.98
5670MHz	Pass	1.88	20.86	21.01	23.95	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	1.88	20.74	21.04	23.90	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	1.92	11.16	11.57	14.38	30.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5530MHz	Pass	1.88	20.86	21	23.94	23.98
5610MHz	Pass	1.88	20.69	21.08	23.90	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	1.88	20.71	21.14	23.94	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	1.92	7.19	8.05	10.65	30.00
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5570MHz	Pass	1.88	19.47	19.54	22.52	23.98

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

802.11ax HEW20_Nss2,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

22/07/2019

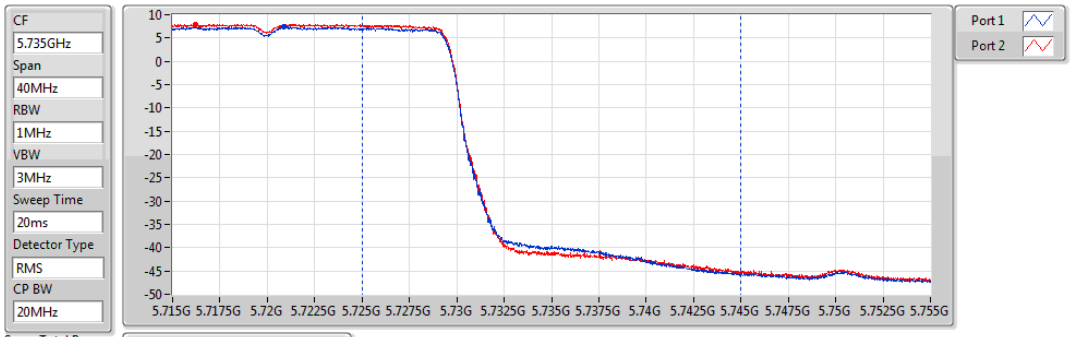


Sum(dBm)	P1(dBm)	P2(dBm)
22.86	19.61	20.07

802.11ax HEW20_Nss2,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

22/07/2019

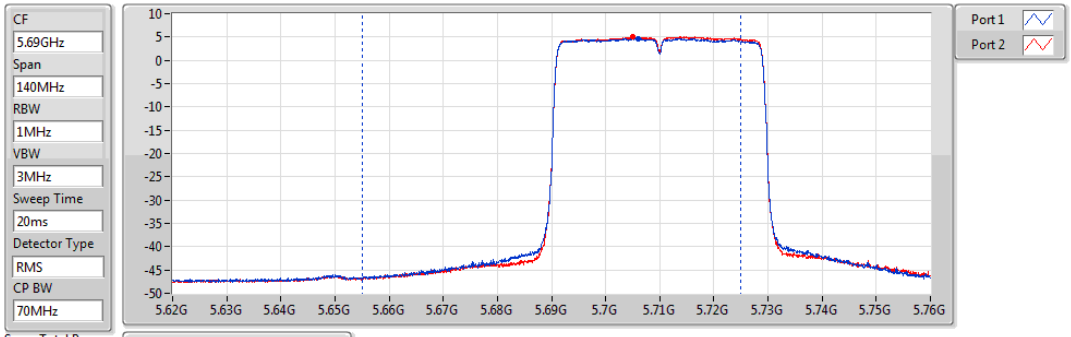


Sum(dBm)	P1(dBm)	P2(dBm)
17.86	14.52	15.15

802.11ax HEW40_Nss2,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

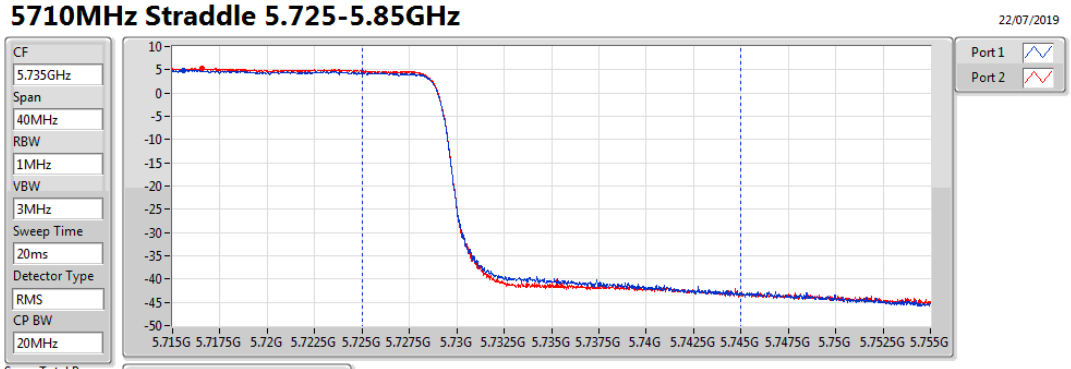
22/07/2019



Sum(dBm)	P1(dBm)	P2(dBm)
23.90	20.74	21.04

802.11ax HEW40_Nss2,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

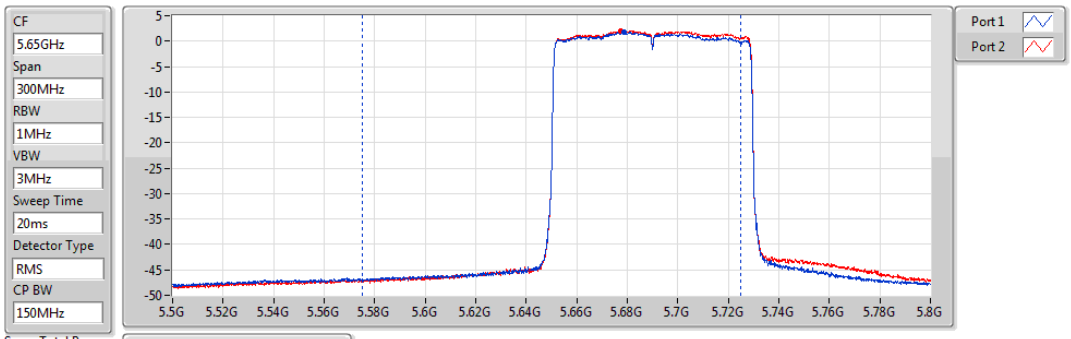


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
14.38	11.16	11.57

802.11ax HEW80_Nss2,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

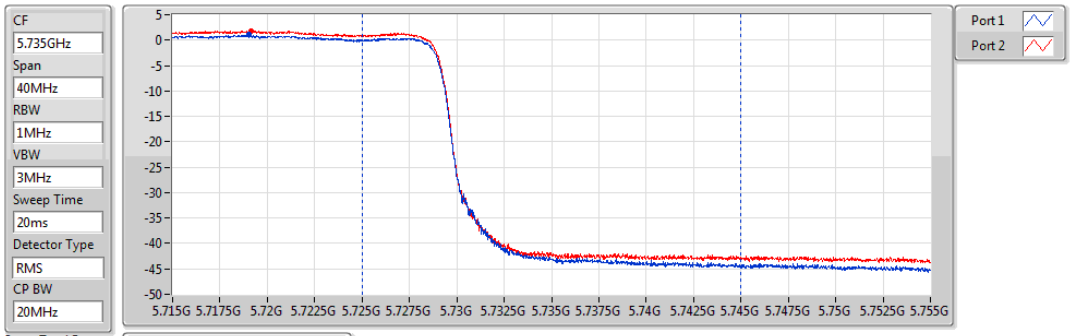


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
23.94	20.71	21.14

802.11ax HEW80_Nss2,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
10.65	7.19	8.05

For 4T1S
Summary

Mode	Total Power (dBm)	Total Power (W)
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	22.12	0.16293
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	15.23	0.03334

Result

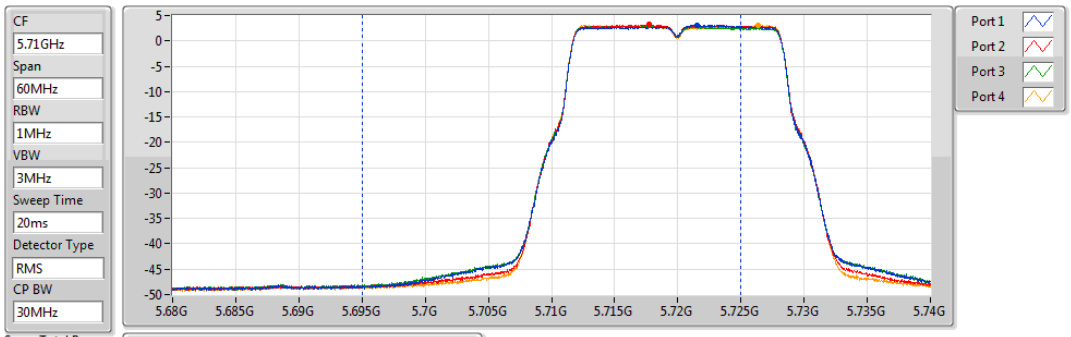
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5500MHz	Pass	1.92	16.27	16.29	15.91	15.87	22.11	23.98
5580MHz	Pass	1.92	16.28	15.94	15.76	15.95	22.01	23.98
5700MHz	Pass	1.92	16.13	16.06	15.93	16.26	22.12	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.92	15.06	15.23	15.06	15.07	21.13	22.90
5720MHz Straddle 5.725-5.85GHz	Pass	1.95	9.08	9.30	8.93	9.50	15.23	30.00

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

802.11a_Nss1,(6Mbps)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

18/07/2019

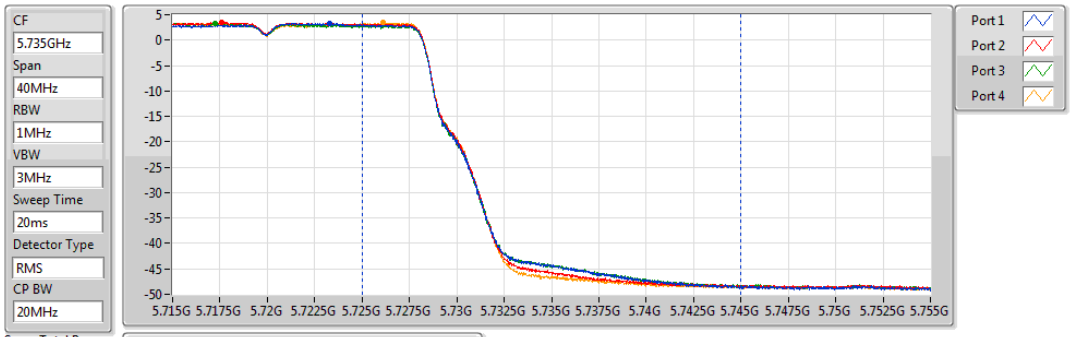


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.13	15.06	15.23	15.06	15.07

802.11a_Nss1,(6Mbps)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

18/07/2019



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.23	9.08	9.30	8.93	9.50

<SKU 1, Beamforming function: 5GHz Band 3>
For 2T1S
Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.88	0.24434	28.77	0.75336
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	23.95	0.24831	28.84	0.76560
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.90	0.24547	28.79	0.75683
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	20.41	0.10990	25.30	0.33884
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.63	0.05794	22.56	0.18030
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	13.79	0.02393	18.72	0.07447
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	10.23	0.01054	15.16	0.03281

Result

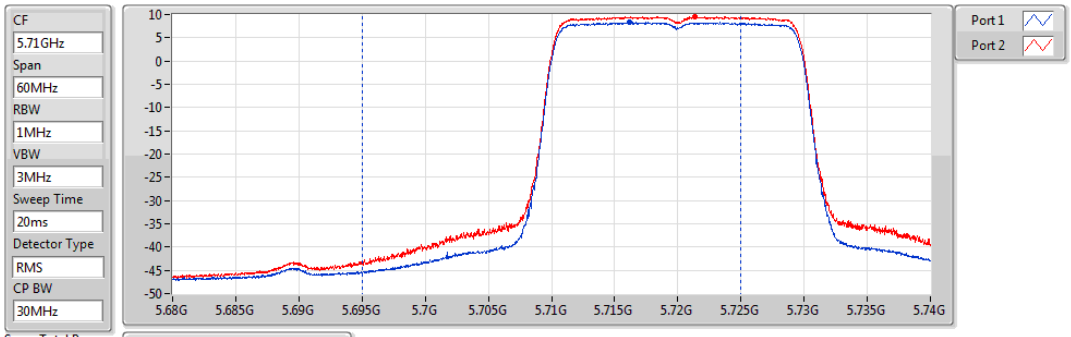
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5500MHz	Pass	4.89	18.77	18.48	21.64	23.98	26.53	30.00
5580MHz	Pass	4.89	20.76	20.98	23.88	23.98	28.77	30.00
5700MHz	Pass	4.89	17.10	18.07	20.62	23.98	25.51	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	19.29	20.47	22.93	22.94	27.82	28.94
5720MHz Straddle 5.725-5.85GHz	Pass	4.93	14.00	15.16	17.63	30.00	22.56	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5510MHz	Pass	4.89	18.31	18.33	21.33	23.98	26.22	30.00
5550MHz	Pass	4.89	20.77	21.08	23.94	23.98	28.83	30.00
5670MHz	Pass	4.89	20.53	21.32	23.95	23.98	28.84	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.89	20.45	21.05	23.77	23.98	28.66	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.93	10.37	11.15	13.79	30.00	18.72	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5530MHz	Pass	4.89	18.91	19.23	22.08	23.98	26.97	30.00
5610MHz	Pass	4.89	20.39	21.27	23.86	23.98	28.75	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.89	20.37	21.35	23.90	23.98	28.79	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.93	6.62	7.75	10.23	30.00	15.16	36.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5570MHz	Pass	4.89	17.32	17.48	20.41	23.98	25.30	30.00

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

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

22/05/2020



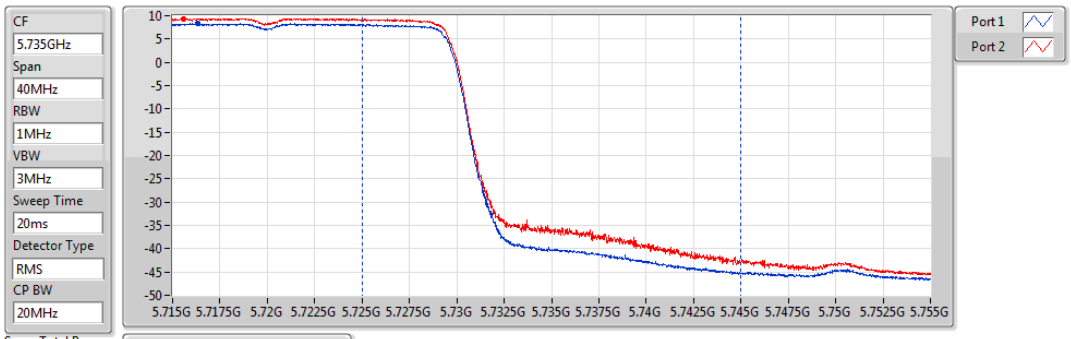
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
22.93	19.29	20.47

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

22/05/2020



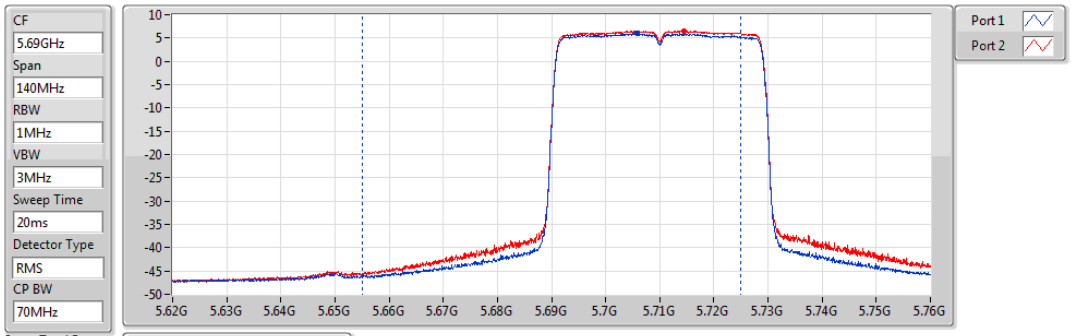
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
17.63	14.00	15.16

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

22/05/2020

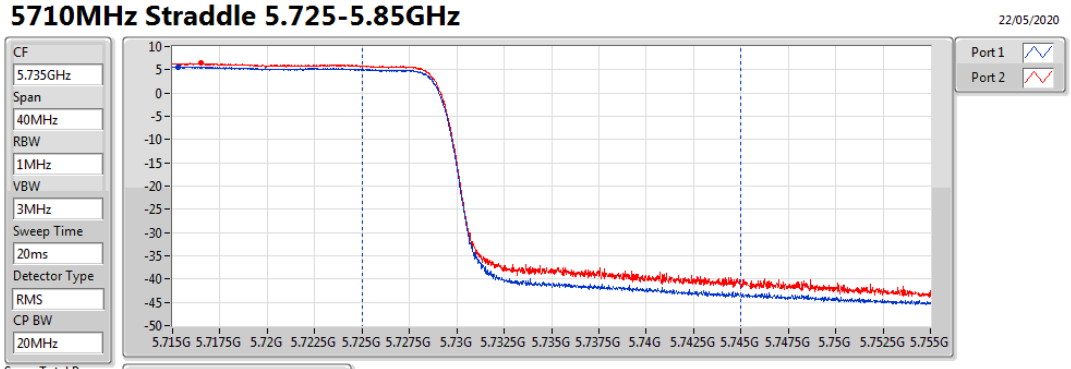


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
23.77	20.45	21.05

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

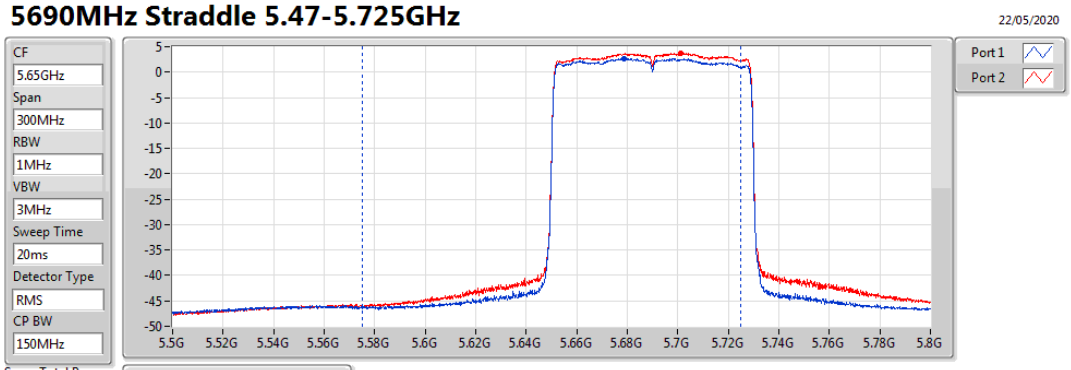


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
13.79	10.37	11.15

802.11ax HEW80-BF_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

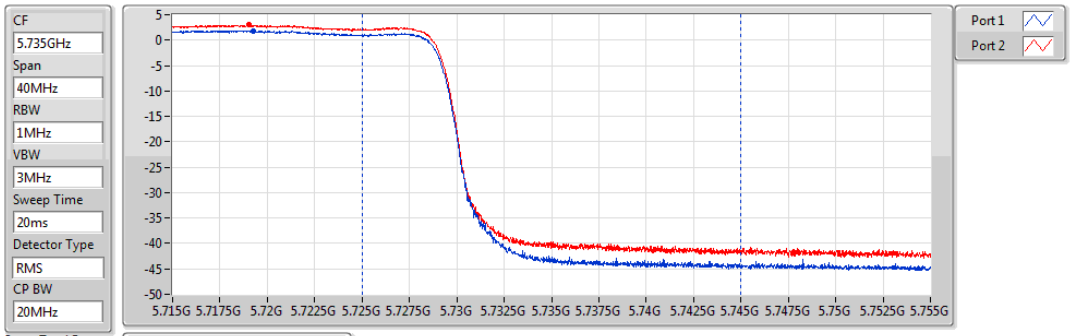


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
23.90	20.37	21.35

802.11ax HEW80-BF_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
10.23	6.62	7.75

For 4T1S
Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.00	0.15849	29.90	0.97724
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	22.06	0.16069	29.96	0.99083
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.07	0.16106	29.97	0.99312
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	21.82	0.15205	29.72	0.93756
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	15.58	0.03614	23.45	0.22131
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	12.04	0.01600	19.91	0.09795
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	8.38	0.00689	16.25	0.04217

Result

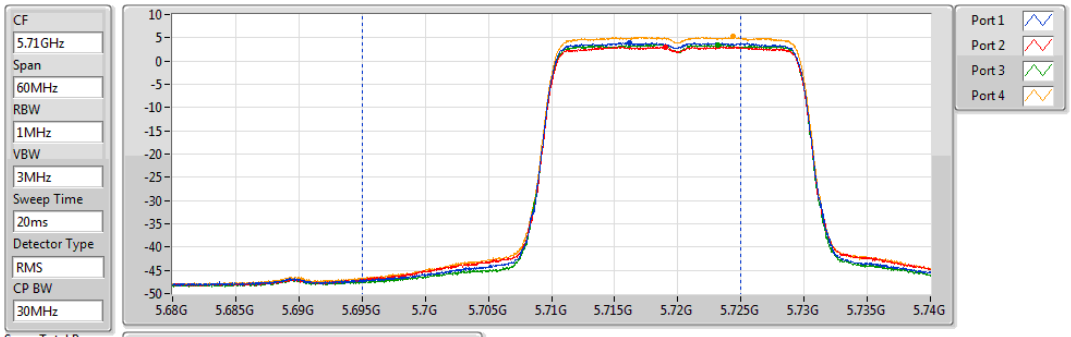
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	7.90	15.97	15.27	15.86	16.70	22.00	22.08	29.90	30.00
5580MHz	Pass	7.90	16.09	14.94	15.75	16.50	21.88	22.08	29.78	30.00
5700MHz	Pass	7.90	15.89	15.12	15.36	16.87	21.88	22.08	29.78	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.90	14.86	14.00	14.41	16.09	20.93	21.02	28.83	28.92
5720MHz Straddle 5.725-5.85GHz	Pass	7.87	9.47	8.71	9.03	10.74	15.58	28.13	23.45	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	7.90	16.23	15.23	15.56	16.94	22.06	22.08	29.96	30.00
5550MHz	Pass	7.90	16.10	15.14	15.65	16.89	22.01	22.08	29.91	30.00
5670MHz	Pass	7.90	16.13	15.17	15.61	16.86	22.01	22.08	29.91	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.90	16.24	15.14	15.46	16.91	22.01	22.08	29.91	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.87	6.14	5.24	5.44	7.03	12.04	28.13	19.91	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	7.90	15.92	15.18	15.50	16.78	21.91	22.08	29.81	30.00
5610MHz	Pass	7.90	16.01	15.24	15.66	16.82	21.99	22.08	29.89	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	7.90	16.12	15.34	15.63	16.95	22.07	22.08	29.97	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.87	2.30	1.79	1.80	3.36	8.38	28.13	16.25	36.00
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	7.90	15.85	15.21	15.44	16.57	21.82	22.08	29.72	30.00

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

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

22/05/2020



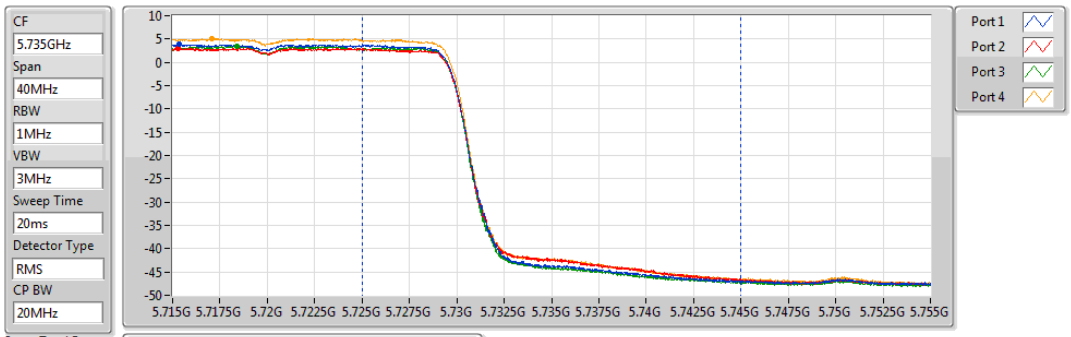
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.93	14.86	14.00	14.41	16.09

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

22/05/2020



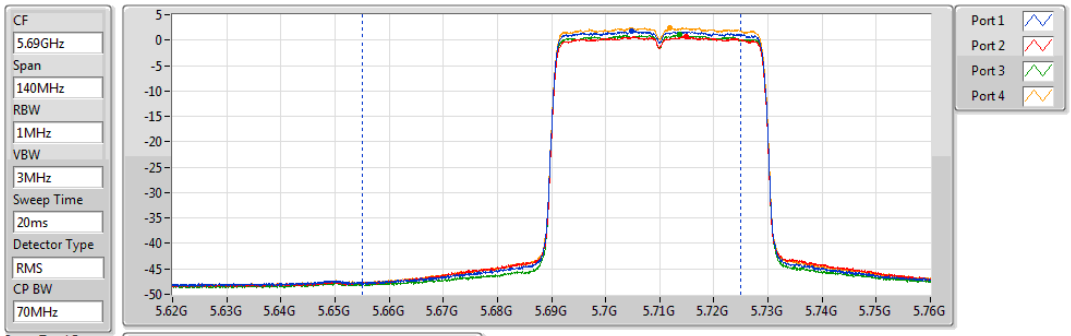
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.58	9.47	8.71	9.03	10.74

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

22/05/2020



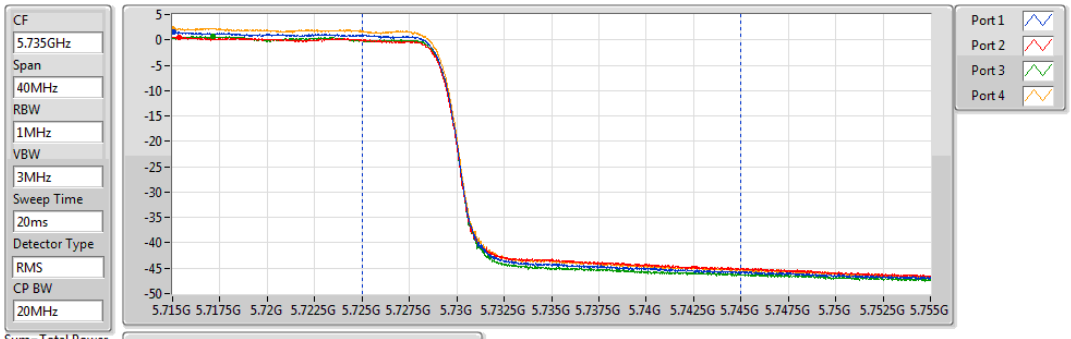
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.01	16.24	15.14	15.46	16.91

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

22/05/2020



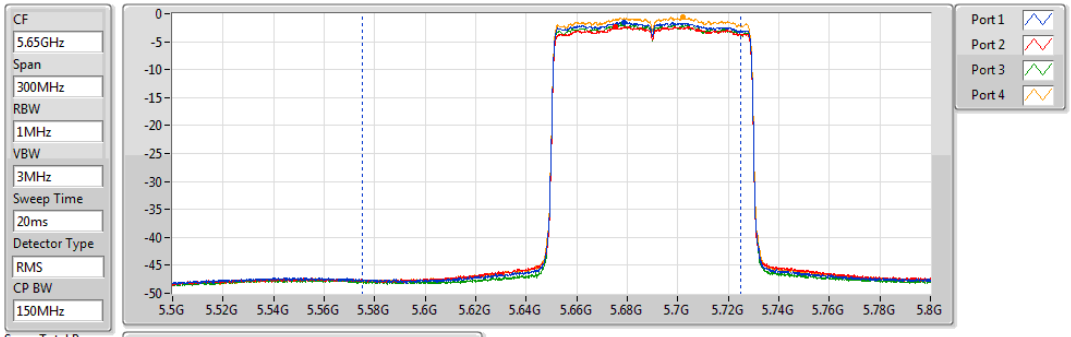
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
12.04	6.14	5.24	5.44	7.03

802.11ax HEW80-BF_Nss1,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

22/05/2020



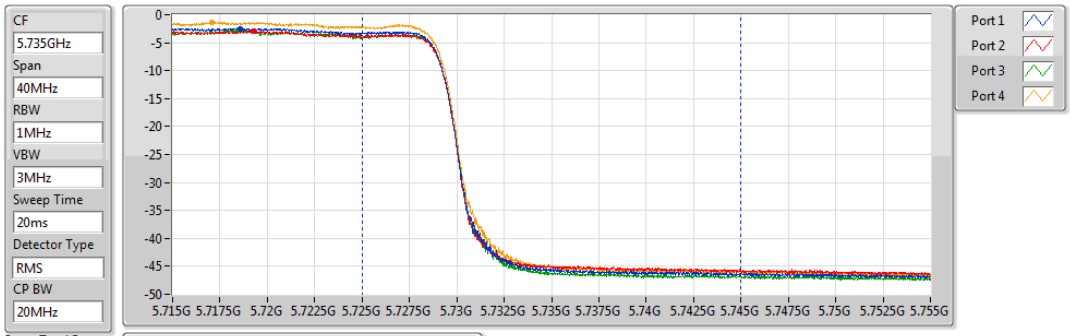
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.07	16.12	15.34	15.63	16.95

802.11ax HEW80-BF_Nss1,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz

22/05/2020



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
8.38	2.30	1.79	1.80	3.36

For 4T2S
Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	23.89	0.24491	28.78	0.75509
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	23.94	0.24774	28.83	0.76384
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	23.97	0.24946	28.86	0.76913
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	23.31	0.21429	28.20	0.66069
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	17.56	0.05702	22.42	0.17458
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	13.87	0.02438	18.73	0.07464
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	10.29	0.01069	15.15	0.03273

Result

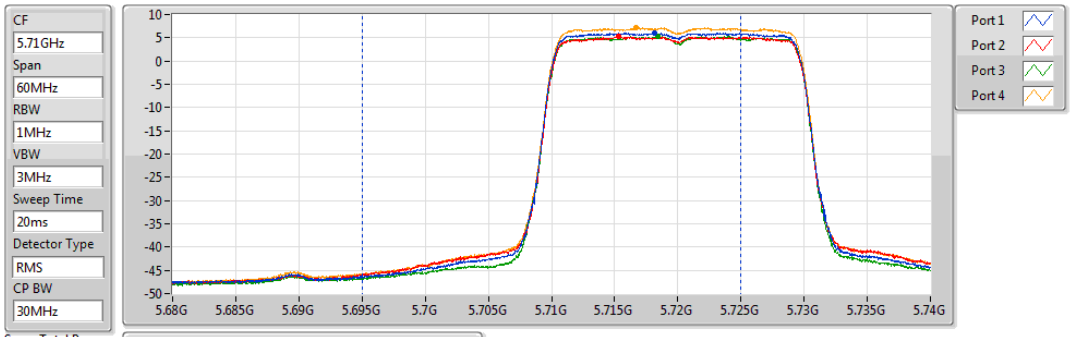
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	4.89	17.95	16.89	17.51	18.53	23.78	23.98	28.67	30.00
5580MHz	Pass	4.89	18.04	16.98	17.49	18.58	23.83	23.98	28.72	30.00
5700MHz	Pass	4.89	17.92	17.15	17.10	19.03	23.89	23.98	28.78	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	16.98	16.12	16.13	18.04	22.91	22.92	27.80	28.92
5720MHz Straddle 5.725-5.85GHz	Pass	4.86	11.60	10.83	10.79	12.66	17.56	30.00	22.42	36.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	4.89	16.92	15.89	16.12	17.41	22.65	23.98	27.54	30.00
5550MHz	Pass	4.89	18.06	17.01	17.23	18.81	23.86	23.98	28.75	30.00
5670MHz	Pass	4.89	18.24	17.10	17.32	18.80	23.94	23.98	28.83	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.89	18.01	16.97	17.01	18.76	23.77	23.98	28.66	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.86	8.19	7.18	7.08	8.74	13.87	30.00	18.73	36.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	4.89	17.79	16.94	16.97	18.68	23.68	23.98	28.57	30.00
5610MHz	Pass	4.89	18.13	17.14	17.28	18.91	23.95	23.98	28.84	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.89	18.16	17.39	17.26	18.82	23.97	23.98	28.86	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.86	4.34	3.82	3.44	5.27	10.29	30.00	15.15	36.00
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	4.89	17.71	16.65	16.68	17.96	23.31	23.98	28.20	30.00

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

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

22/05/2020



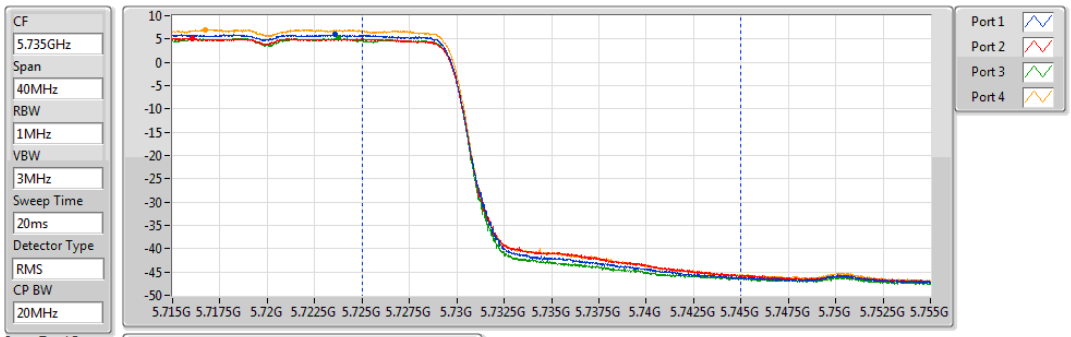
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.91	16.98	16.12	16.13	18.04

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

22/05/2020



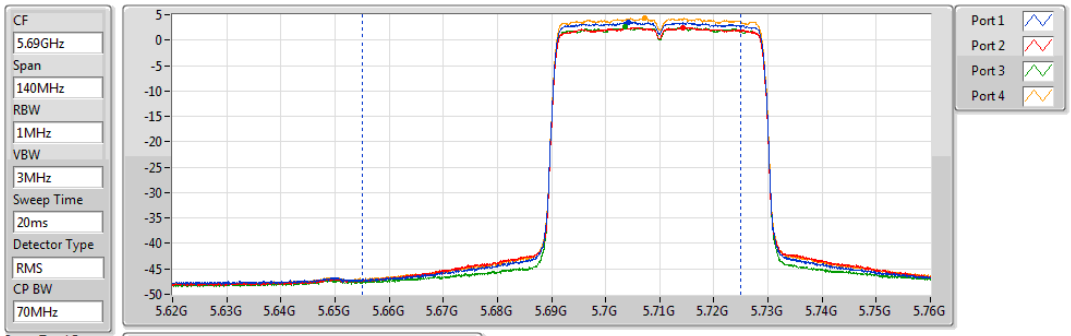
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.56	11.60	10.83	10.79	12.66

802.11ax HEW40-BF_Nss2,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

22/05/2020



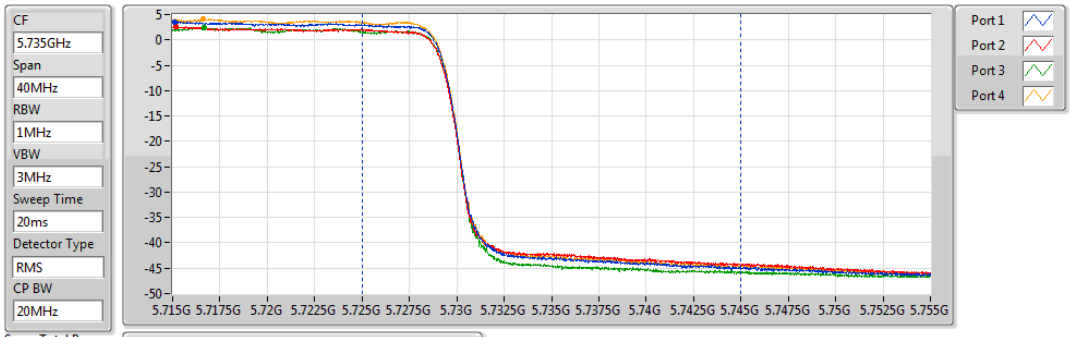
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.77	18.01	16.97	17.01	18.76

802.11ax HEW40-BF_Nss2,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

22/05/2020



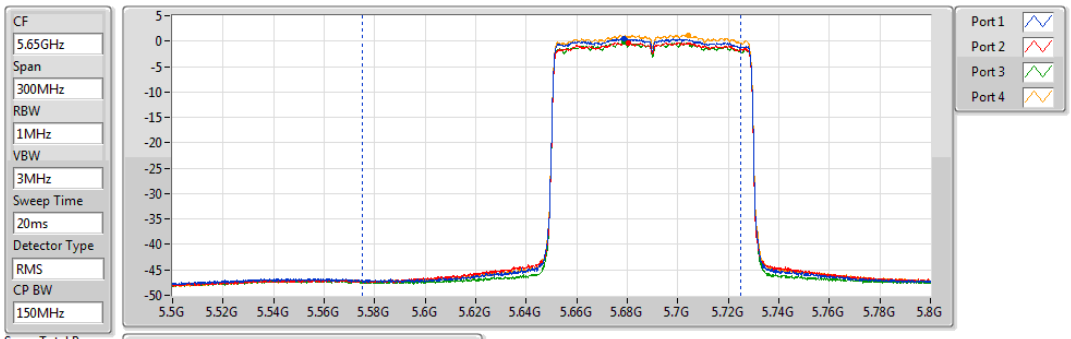
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
13.87	8.19	7.18	7.08	8.74

802.11ax HEW80-BF_Nss2,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

22/05/2020



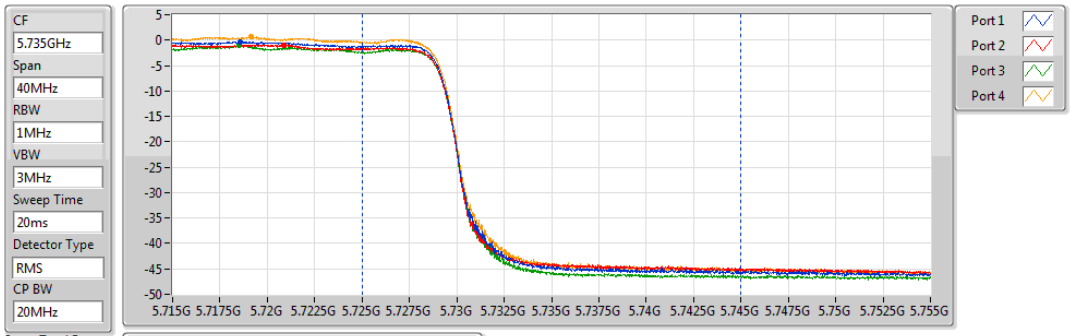
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.97	18.16	17.39	17.26	18.82

802.11ax HEW80-BF_Nss2,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz

22/05/2020



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
10.29	4.34	3.82	3.44	5.27

<SKU 5>
For 2T1S
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	29.84	0.96383
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	29.53	0.89743
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	27.74	0.59429
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.34	0.21577
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	18.87	0.07709
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.96	0.24889
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.90	0.24547
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	23.95	0.24831
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	22.72	0.18707
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	19.01	0.07962
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.87	0.24378
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.85	0.24266
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	23.90	0.24547
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.84	0.24210
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	20.13	0.10304
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	29.96	0.99083
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	29.86	0.96828
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	29.19	0.82985
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	25.31	0.33963

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	1.93	20.21	20.39	23.31	30.00
5200MHz	Pass	1.93	25.26	25.29	28.29	30.00
5240MHz	Pass	1.93	27.2	26.43	29.84	30.00
5260MHz	Pass	1.93	20.86	21.03	23.96	23.98
5300MHz	Pass	1.93	20.66	20.85	23.77	23.98
5320MHz	Pass	1.93	20.67	20.88	23.79	23.98
5500MHz	Pass	1.92	18.44	18.56	21.51	23.98
5580MHz	Pass	1.92	20.71	21.01	23.87	23.98
5700MHz	Pass	1.92	18.84	19.1	21.98	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.92	19.84	19.72	22.79	22.91
5720MHz Straddle 5.725-5.85GHz	Pass	1.95	13.9	13.48	16.71	30.00
5745MHz	Pass	1.95	27.26	26.61	29.96	30.00
5785MHz	Pass	1.95	25.65	25.21	28.45	30.00
5825MHz	Pass	1.95	25.06	24.51	27.80	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.85	23.38	23.4	26.40	30.00
5200MHz	Pass	4.85	25.17	25.08	28.14	30.00
5240MHz	Pass	4.85	26.53	26.5	29.53	30.00
5260MHz	Pass	4.90	20.94	20.76	23.86	23.98
5300MHz	Pass	4.90	20.83	20.94	23.90	23.98
5320MHz	Pass	4.90	20.76	21.02	23.90	23.98
5500MHz	Pass	4.89	20.77	20.9	23.85	23.98
5580MHz	Pass	4.89	20.77	20.75	23.77	23.98
5700MHz	Pass	4.89	18.72	19.01	21.88	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	19.61	19.8	22.72	22.94
5720MHz Straddle 5.725-5.85GHz	Pass	4.93	14.45	14.42	17.45	30.00
5745MHz	Pass	4.93	26.97	26.72	29.86	30.00
5785MHz	Pass	4.93	26.99	26.69	29.85	30.00
5825MHz	Pass	4.93	26.96	26.71	29.85	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	4.85	19.83	19.98	22.92	30.00
5230MHz	Pass	4.85	24.66	24.8	27.74	30.00
5270MHz	Pass	4.90	20.97	20.91	23.95	23.98
5310MHz	Pass	4.90	20.37	20.16	23.28	23.98
5510MHz	Pass	4.89	18.23	18.26	21.26	23.98
5550MHz	Pass	4.89	20.69	20.78	23.75	23.98
5670MHz	Pass	4.89	20.2	20.5	23.36	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	4.89	20.94	20.83	23.90	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	4.93	11.16	10.66	13.93	30.00
5755MHz	Pass	4.93	25.78	25.34	28.58	30.00
5795MHz	Pass	4.93	26.3	26.05	29.19	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	4.85	20.24	20.41	23.34	30.00

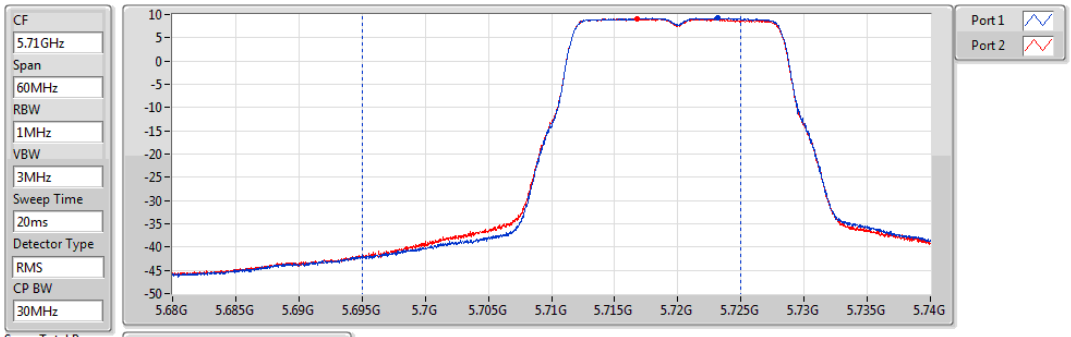
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
5290MHz	Pass	4.90	19.8	19.61	22.72	23.98
5530MHz	Pass	4.89	19.46	19.61	22.55	23.98
5610MHz	Pass	4.89	20.72	20.94	23.84	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	4.89	20.67	20.89	23.79	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	4.93	7.45	6.65	10.08	30.00
5775MHz	Pass	4.93	22.34	22.25	25.31	30.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.85	15.84	15.88	18.87	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.90	15.65	16.33	19.01	23.98
5570MHz	Pass	4.89	17.06	17.17	20.13	23.98

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

802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

29/05/2020



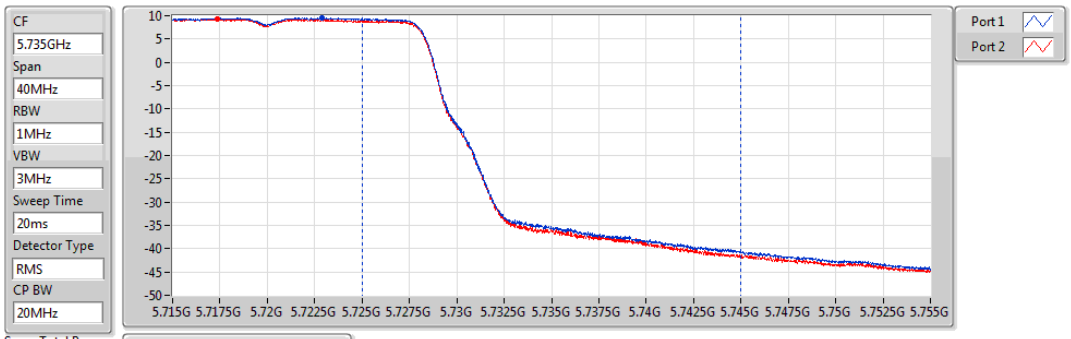
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
22.79	19.84	19.72

802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

29/05/2020



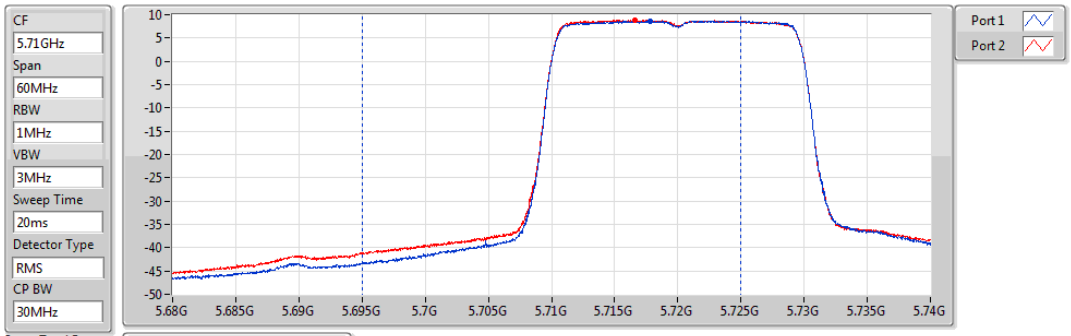
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
16.71	13.90	13.48

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

22/05/2020



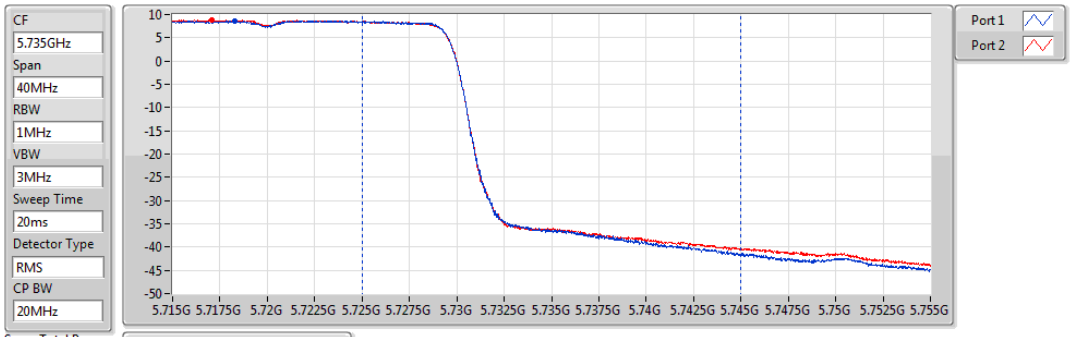
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
22.72	19.61	19.80

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

22/05/2020



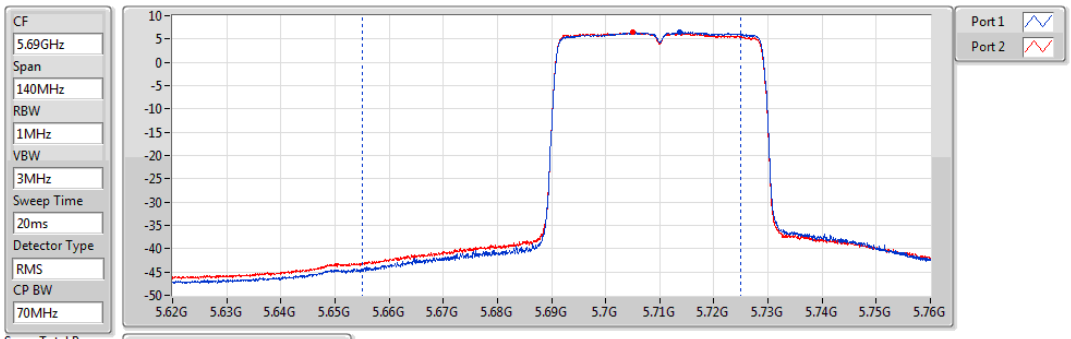
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
17.45	14.45	14.42

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

22/05/2020



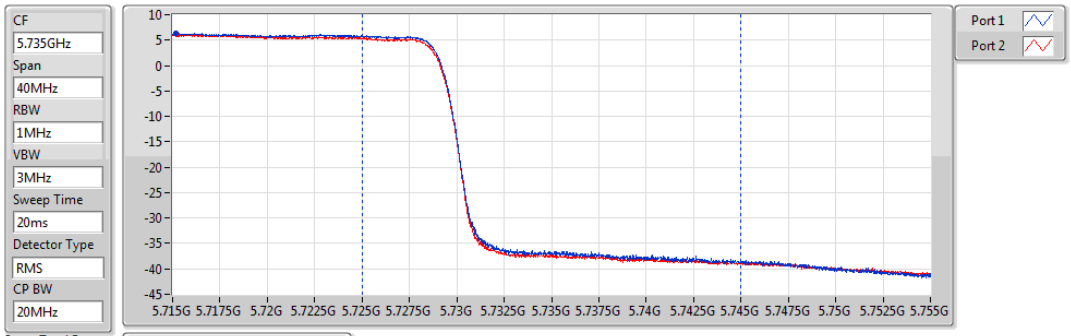
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
23.90	20.94	20.83

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

22/05/2020

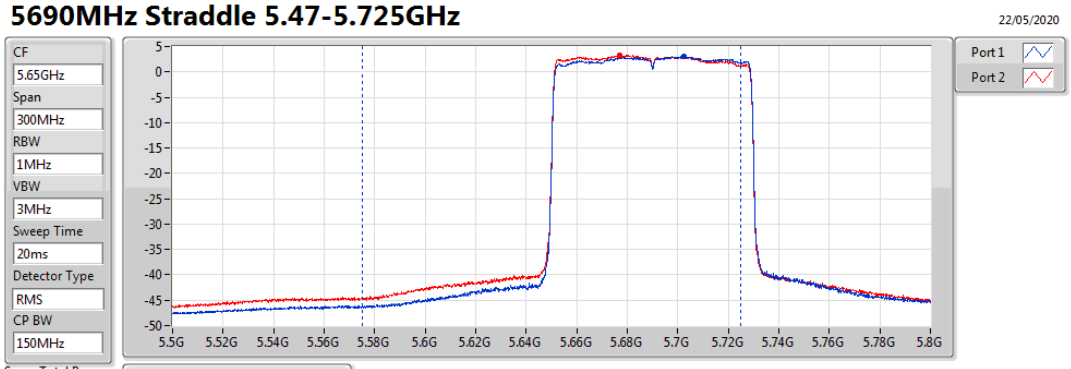


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
13.93	11.16	10.66

802.11ax HEW80-BF_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

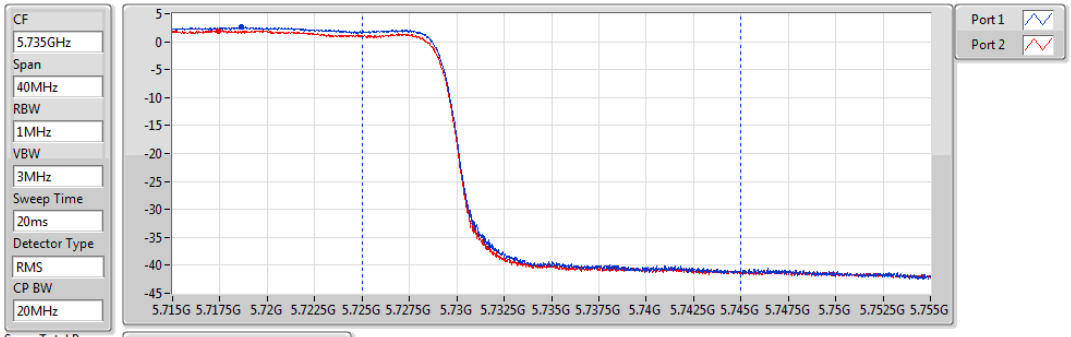


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
23.79	20.67	20.89

802.11ax HEW80-BF_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz

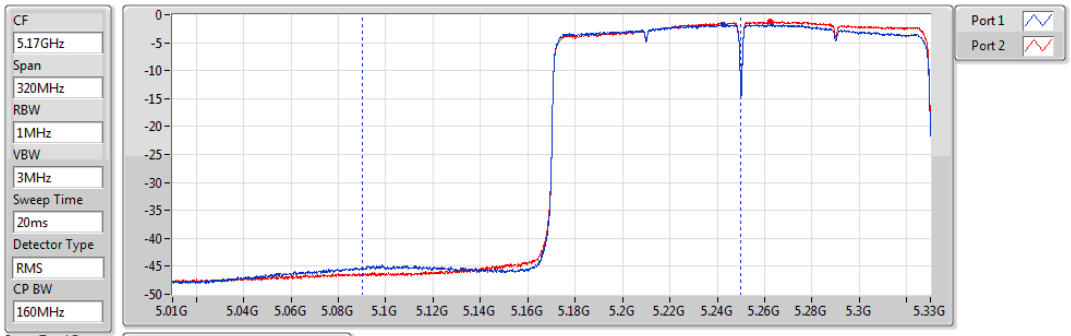


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
10.08	7.45	6.65

802.11ax HEW160-BF_Nss1,(MCS0)_2TX **AV Power**

5250MHz Straddle 5.15-5.25GHz



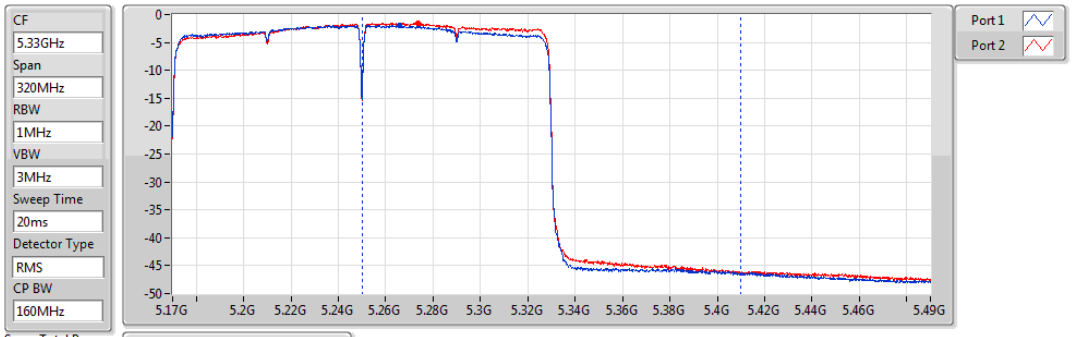
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
18.87	15.84	15.88

802.11ax HEW160-BF_Nss1,(MCS0)_2TX **AV Power**

5250MHz Straddle 5.25-5.35GHz

22/05/2020



Sum(dBm)	P1(dBm)	P2(dBm)
19.01	15.65	16.33

For 4T1S
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	28.40	0.69183
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	28.01	0.63241
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	28.06	0.63973
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	25.00	0.31623
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	20.39	0.10940
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	22.48	0.17701
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.96	0.15704
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	21.93	0.15596
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	21.90	0.15488
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	20.82	0.12078
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	22.48	0.17701
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.99	0.15812
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	22.05	0.16032
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.00	0.15849
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	21.10	0.12882
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.93	0.98401
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	28.12	0.64863
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	28.01	0.63241
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	27.25	0.53088

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	1.93	21.52	21.79	22.14	21.41	27.74	30.00
5200MHz	Pass	1.93	22.46	22.41	22.68	21.93	28.40	30.00
5240MHz	Pass	1.93	22.59	22.24	22.63	21.99	28.39	30.00
5260MHz	Pass	1.93	16.34	16.55	16.61	16.18	22.44	23.98
5300MHz	Pass	1.93	16.27	16.53	16.42	16.06	22.34	23.98
5320MHz	Pass	1.93	16.43	16.65	16.60	16.12	22.48	23.98
5500MHz	Pass	1.92	16.22	16.33	16.65	16.50	22.45	23.98
5580MHz	Pass	1.92	16.08	16.53	16.63	16.39	22.43	23.98
5700MHz	Pass	1.92	16.24	16.83	16.76	15.96	22.48	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.92	15.08	15.40	15.16	14.34	21.03	22.91
5720MHz Straddle 5.725-5.85GHz	Pass	1.95	9.13	9.38	9.12	8.35	15.03	30.00
5745MHz	Pass	1.95	24.11	24.17	23.94	23.13	29.88	30.00
5785MHz	Pass	1.95	24.22	24.01	23.97	23.39	29.93	30.00
5825MHz	Pass	1.95	24.03	24.23	23.98	23.08	29.87	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.86	21.51	21.87	21.77	21.5	27.69	28.14
5200MHz	Pass	7.86	21.81	22.12	22.03	21.7	27.94	28.14
5240MHz	Pass	7.86	21.99	22.2	21.76	21.99	28.01	28.14
5260MHz	Pass	7.91	16.01	15.76	16.01	15.97	21.96	22.07
5300MHz	Pass	7.91	15.81	15.68	15.92	16.04	21.89	22.07
5320MHz	Pass	7.91	15.83	15.75	15.97	15.91	21.89	22.07
5500MHz	Pass	7.90	16.09	15.94	15.99	15.84	21.99	22.08
5580MHz	Pass	7.90	15.86	15.79	16.06	15.85	21.91	22.08
5700MHz	Pass	7.90	15.75	15.85	16	16	21.92	22.08
5720MHz Straddle 5.47-5.725GHz	Pass	7.90	14.78	15.01	15.03	15.06	20.99	21.03
5720MHz Straddle 5.725-5.85GHz	Pass	7.87	9.9	9.66	9.9	9.95	15.87	28.13
5745MHz	Pass	7.87	21.98	21.88	22.08	21.92	27.99	28.13
5785MHz	Pass	7.87	22.02	21.95	22.18	22.24	28.12	28.13
5825MHz	Pass	7.87	21.92	21.83	21.91	21.88	27.91	28.13
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.86	19.64	19.5	19.76	19.45	25.61	28.14
5230MHz	Pass	7.86	21.92	22.04	22.18	22.01	28.06	28.14
5270MHz	Pass	7.91	15.86	15.76	15.91	16.09	21.93	22.07
5310MHz	Pass	7.91	15.89	15.82	15.62	15.97	21.85	22.07
5510MHz	Pass	7.90	15.71	15.74	15.91	15.98	21.86	22.08
5550MHz	Pass	7.90	15.72	15.8	15.94	16.16	21.93	22.08
5670MHz	Pass	7.90	15.91	15.73	15.77	15.85	21.84	22.08
5710MHz Straddle 5.47-5.725GHz	Pass	7.90	15.92	15.98	16.04	16.19	22.05	22.08
5710MHz Straddle 5.725-5.85GHz	Pass	7.87	6.41	6.06	6.25	6.29	12.27	28.13
5755MHz	Pass	7.87	22.01	21.92	21.98	22.06	28.01	28.13
5795MHz	Pass	7.87	21.98	21.74	21.95	21.89	27.91	28.13
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.86	18.83	19.03	19.03	19.02	25.00	28.14

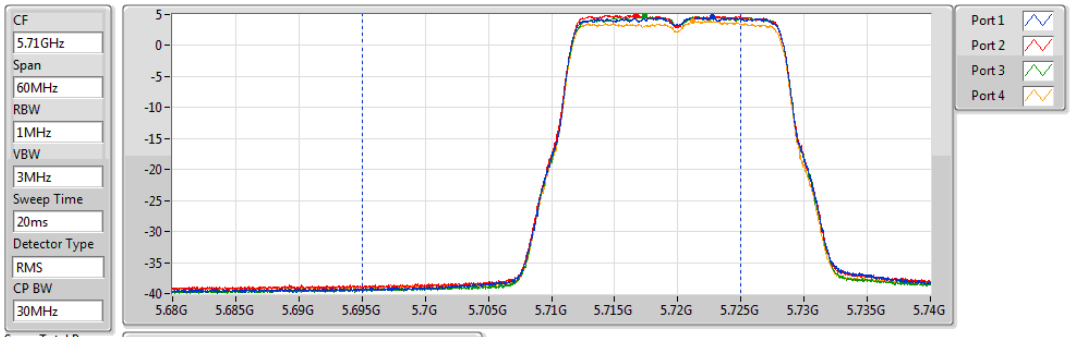
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
5290MHz	Pass	7.91	15.77	15.9	15.95	15.89	21.90	22.07
5530MHz	Pass	7.90	15.75	15.8	16	15.97	21.90	22.08
5610MHz	Pass	7.90	15.7	15.85	16.09	15.87	21.90	22.08
5690MHz Straddle 5.47-5.725GHz	Pass	7.90	15.91	15.87	16.07	16.05	22.00	22.08
5690MHz Straddle 5.725-5.85GHz	Pass	7.87	2.86	1.88	2.19	2.13	8.30	28.13
5775MHz	Pass	7.87	21.26	21.23	21.3	21.14	27.25	28.13
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	7.86	14.42	14.1	14.55	14.39	20.39	28.14
5250MHz Straddle 5.25-5.35GHz	Pass	7.91	14.64	14.93	14.65	14.98	20.82	22.07
5570MHz	Pass	7.90	15.05	14.95	15.18	15.14	21.10	22.08

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

802.11a_Nss1,(6Mbps)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

29/05/2020



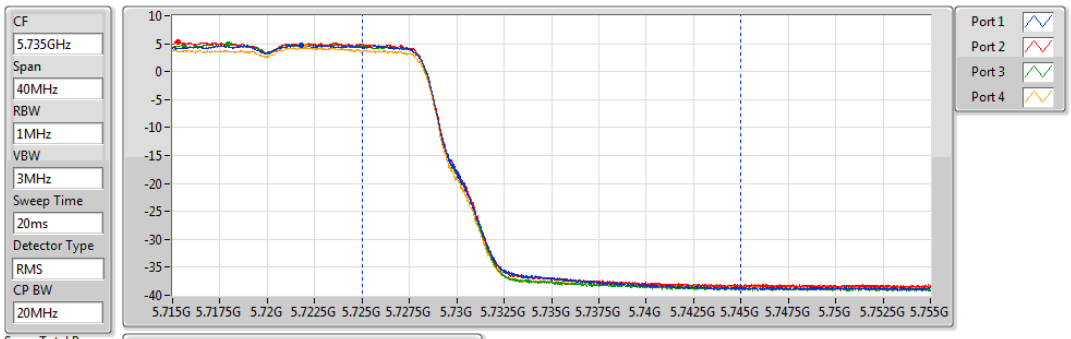
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.03	15.08	15.40	15.16	14.34

802.11a_Nss1,(6Mbps)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

29/05/2020



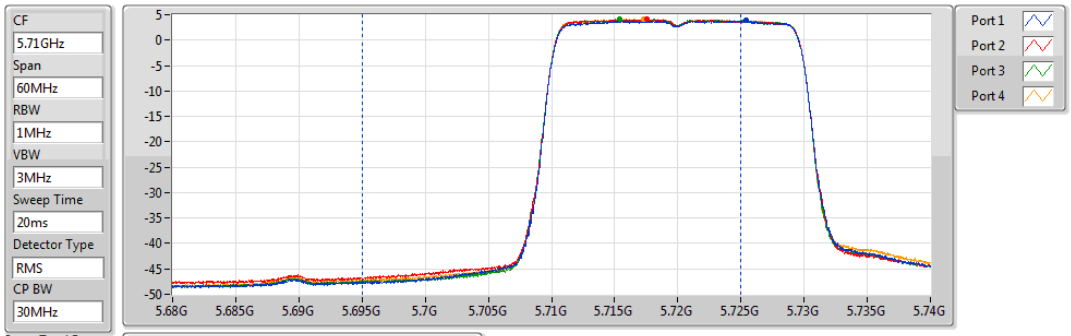
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.03	9.13	9.38	9.12	8.35

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

21/05/2020



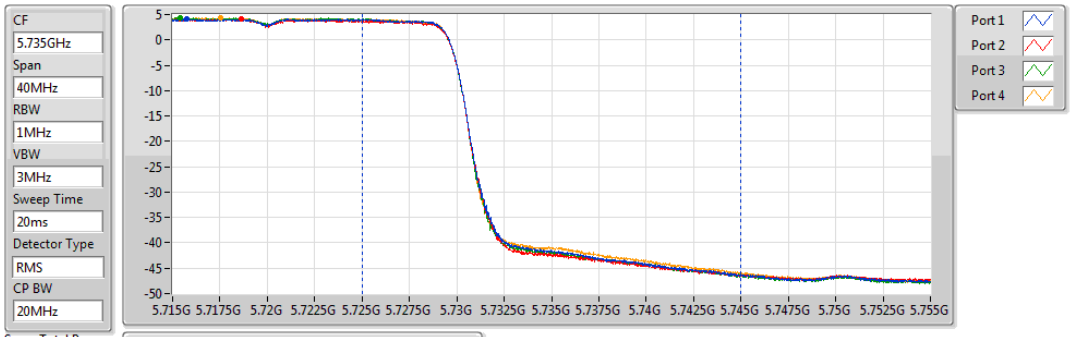
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.99	14.78	15.01	15.03	15.06

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

21/05/2020



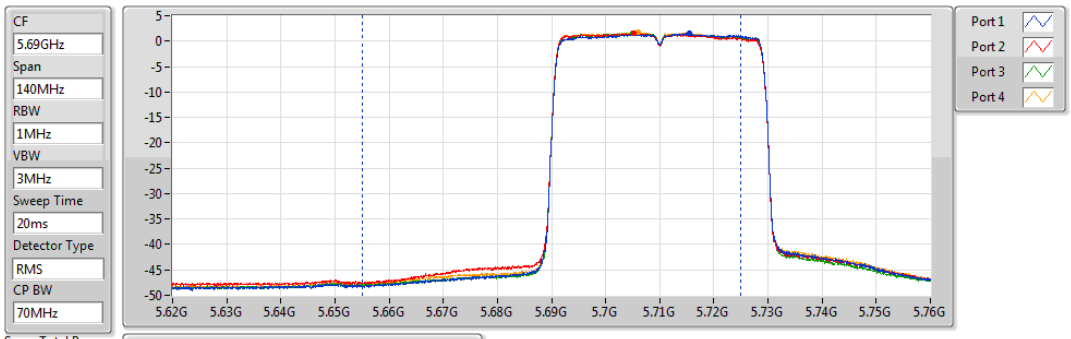
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.87	9.90	9.66	9.90	9.95

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

21/05/2020



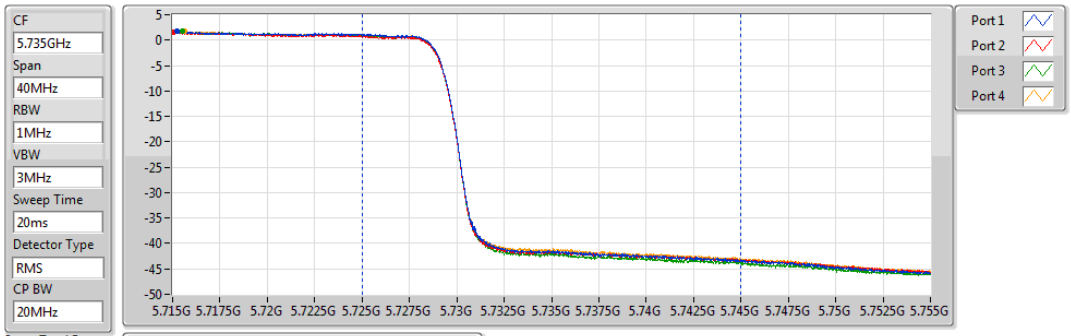
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.05	15.92	15.98	16.04	16.19

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

21/05/2020



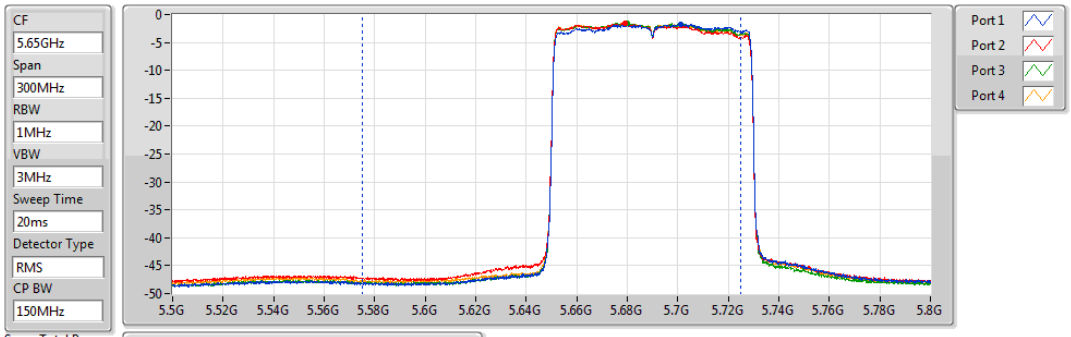
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
12.27	6.41	6.06	6.25	6.29

802.11ax HEW80-BF_Nss1,(MCS0)_4TX — AV Power

5690MHz Straddle 5.47-5.725GHz

21/05/2020



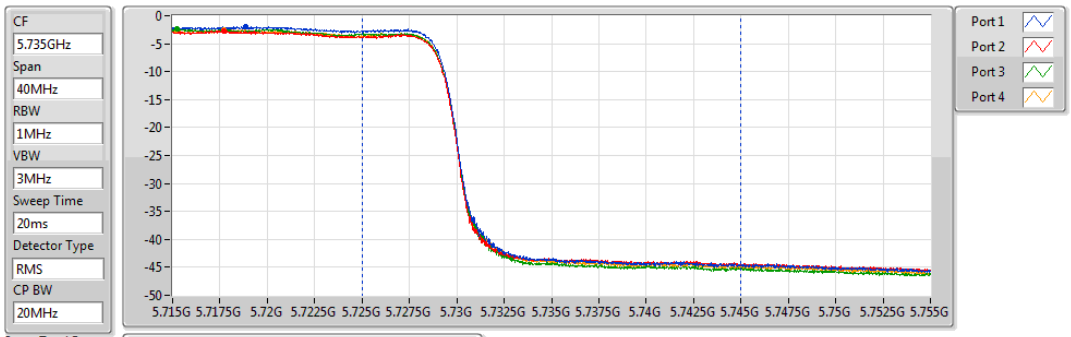
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.00	15.91	15.87	16.07	16.05

802.11ax HEW80-BF_Nss1,(MCS0)_4TX — AV Power

5690MHz Straddle 5.725-5.85GHz

21/05/2020



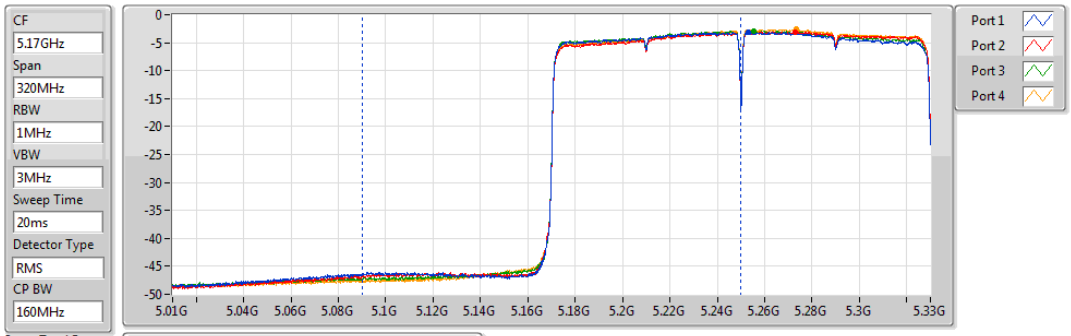
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
8.30	2.86	1.88	2.19	2.13

802.11ax HEW160-BF_Nss1,(MCS0)_4TX — AV Power

5250MHz Straddle 5.15-5.25GHz

21/05/2020



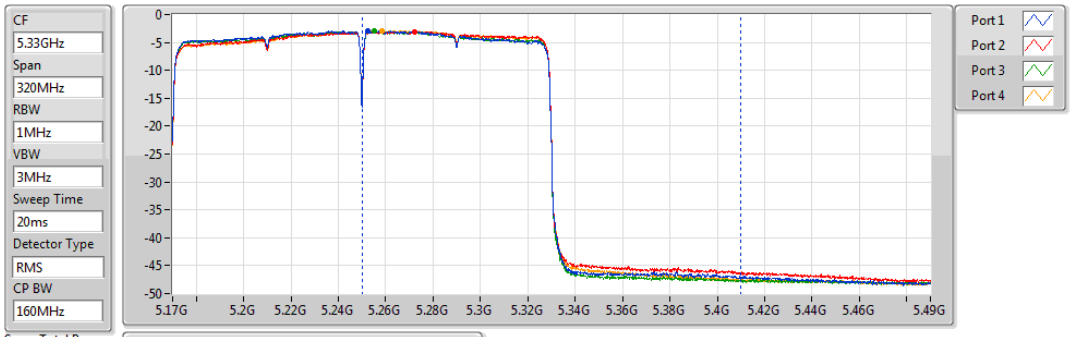
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.39	14.42	14.10	14.55	14.39

802.11ax HEW160-BF_Nss1,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.25-5.35GHz

21/05/2020



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.82	14.64	14.93	14.65	14.98

<SKU 1, Non-beamforming function: 5GHz Band 3>
For 2T1S
Summary

Mode	PD (dBm/RBW)
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_2TX	10.89
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	9.20

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

Result

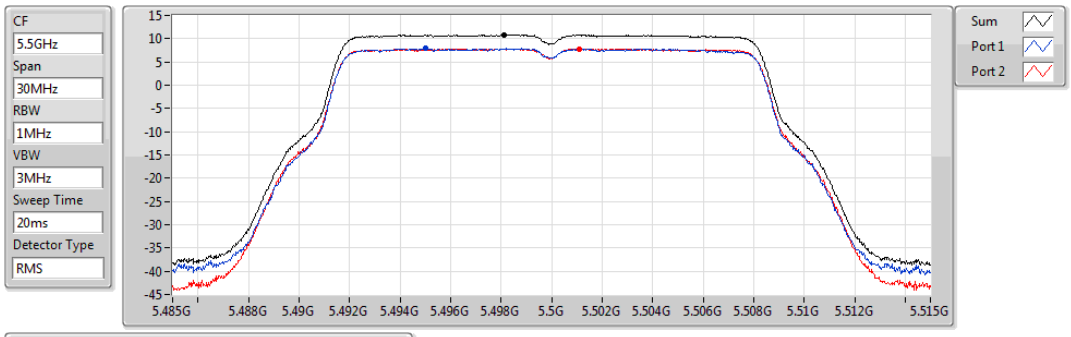
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5500MHz	Pass	4.89	7.90	7.78	10.79	11.00
5580MHz	Pass	4.89	7.91	7.88	10.89	11.00
5700MHz	Pass	4.89	6.99	7.34	10.12	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	7.56	7.95	10.76	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.93	6.03	6.43	9.20	30.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_2TX PSD

5500MHz

19/07/2019

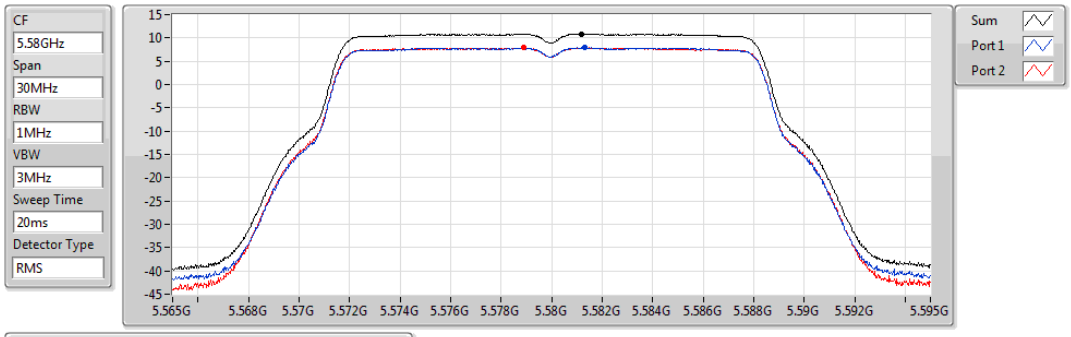


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.79	10.79	7.90	7.78

802.11a_Nss1,(6Mbps)_2TX PSD

5580MHz

19/07/2019

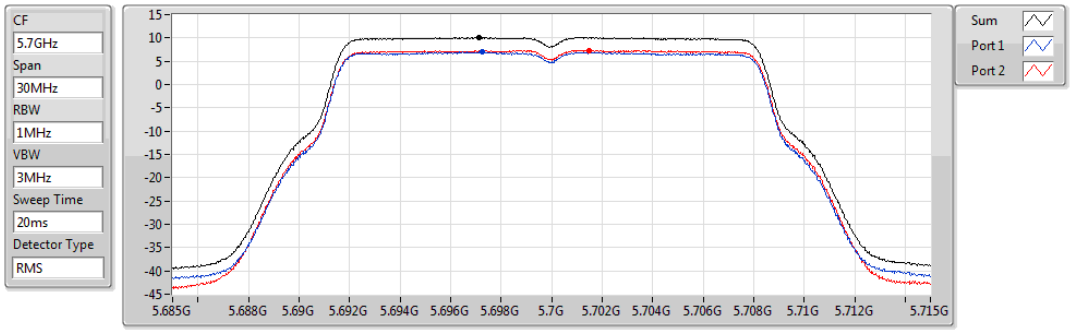


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.89	10.89	7.91	7.88

802.11a_Nss1,(6Mbps)_2TX PSD

5700MHz

19/07/2019

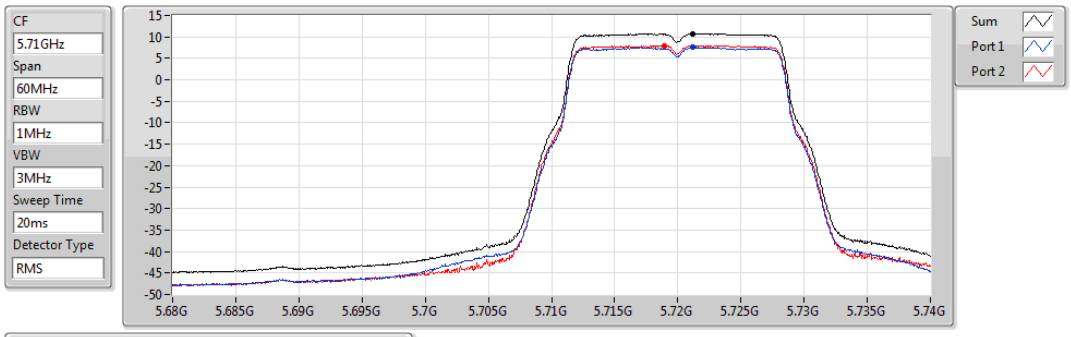


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.12	10.12	6.99	7.34

802.11a_Nss1,(6Mbps)_2TX **PSD**

5720MHz Straddle 5.47-5.725GHz

19/07/2019

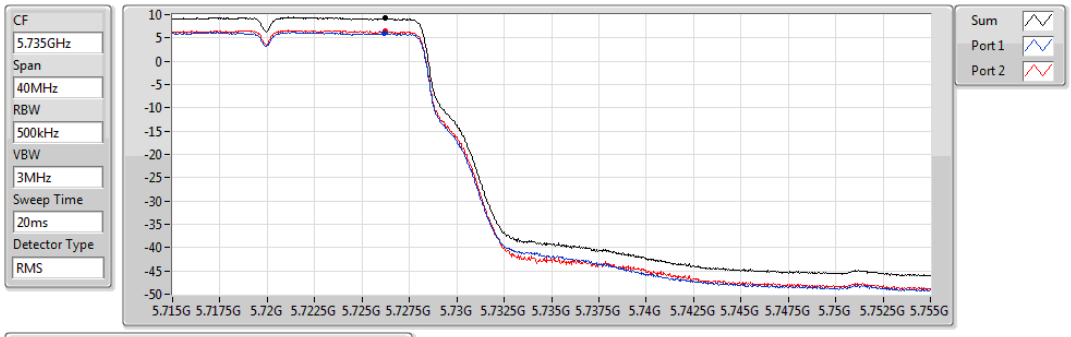


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.76	10.76	7.56	7.95

802.11a_Nss1,(6Mbps)_2TX **PSD**

5720MHz Straddle 5.725-5.85GHz

19/07/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.20	9.20	6.03	6.43

For 2T2S
Summary

Mode	PD (dBm/RBW)
5.47-5.725GHz	-
802.11ax HEW20_Nss2,(MCS0)_2TX	10.3
802.11ax HEW40_Nss2,(MCS0)_2TX	8.01
802.11ax HEW80_Nss2,(MCS0)_2TX	5.1
802.11ax HEW160_Nss2,(MCS0)_2TX	1.7
5.725-5.85GHz	-
802.11ax HEW20_Nss2,(MCS0)_2TX	9
802.11ax HEW40_Nss2,(MCS0)_2TX	6.02
802.11ax HEW80_Nss2,(MCS0)_2TX	2.19

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

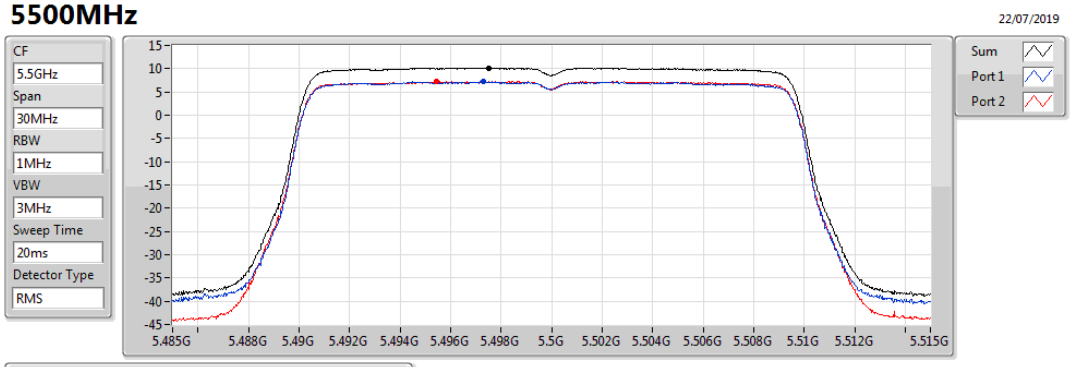
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5500MHz	Pass	1.88	7.18	7.23	10.18	11.00
5580MHz	Pass	1.88	7.26	7.25	10.22	11.00
5700MHz	Pass	1.88	5.91	6.28	9.03	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	1.88	7.21	7.45	10.30	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	1.92	5.76	6.25	9.00	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5510MHz	Pass	1.88	4.23	4.06	7.10	11.00
5550MHz	Pass	1.88	5.12	4.86	7.92	11.00
5670MHz	Pass	1.88	4.93	5.15	8.01	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	1.88	4.62	5.12	7.88	11.00
5710MHz Straddle 5.725-5.85GHz	Pass	1.92	2.78	3.37	6.02	30.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5530MHz	Pass	1.88	2.1	2.18	5.10	11.00
5610MHz	Pass	1.88	1.74	1.97	4.75	11.00
5690MHz Straddle 5.47-5.725GHz	Pass	1.88	1.82	1.86	4.81	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	1.92	-1.25	-0.37	2.19	30.00
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5570MHz	Pass	1.88	-1.27	-1.31	1.70	11.00

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 HEW20_Nss2,(MCS0)_2TX PSD

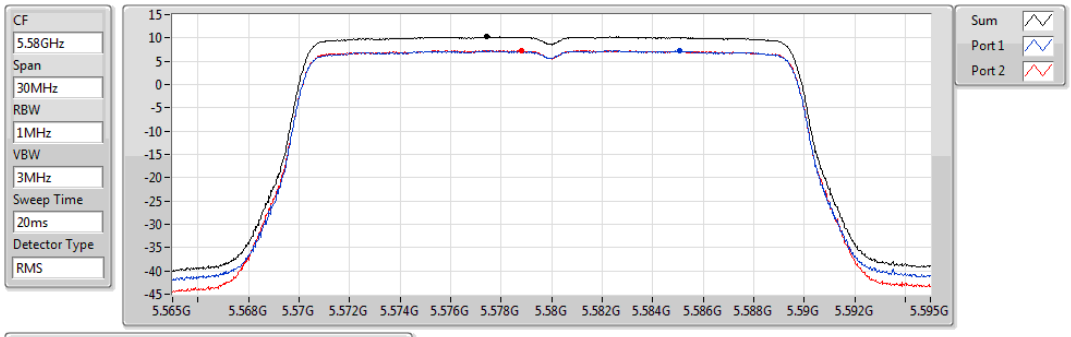
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.18	10.18	7.18	7.23

802.11ax HEW20_Nss2,(MCS0)_2TX PSD

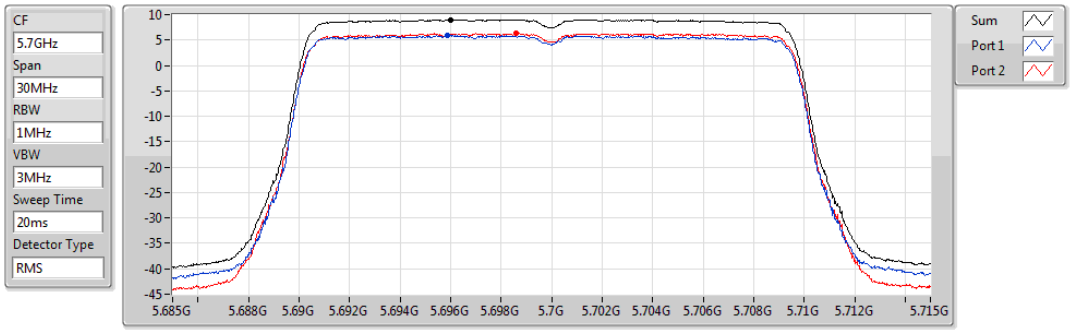
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.22	10.22	7.26	7.25

802.11ax HEW20_Nss2,(MCS0)_2TX PSD

5700MHz

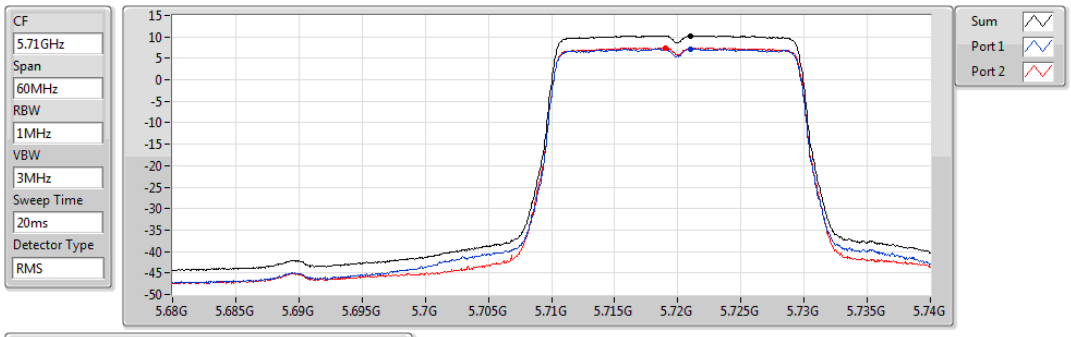


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.03	9.03	5.91	6.28

802.11ax HEW20_Nss2,(MCS0)_2TX PSD

5720MHz Straddle 5.47-5.725GHz

22/07/2019

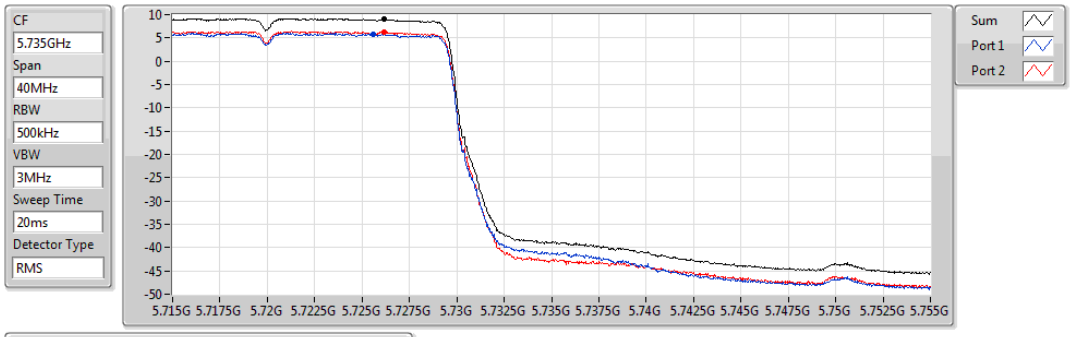


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.30	10.30	7.21	7.45

802.11ax HEW20_Nss2,(MCS0)_2TX PSD

5720MHz Straddle 5.725-5.85GHz

22/07/2019

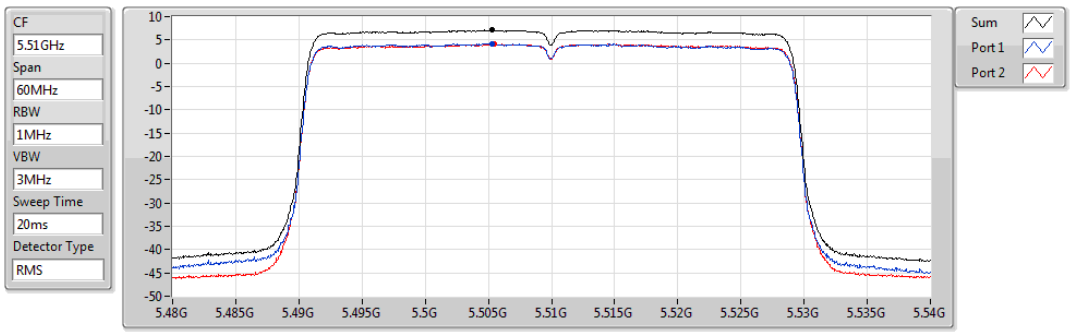


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.00	9.00	5.76	6.25

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

5510MHz

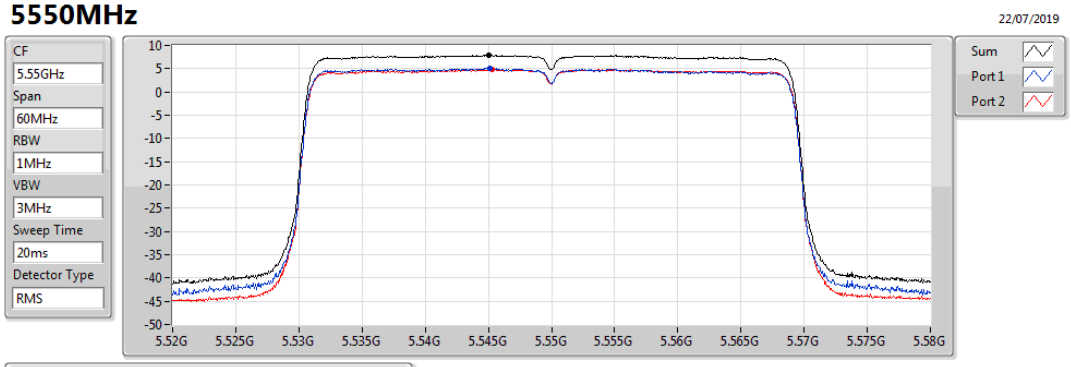
22/07/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.10	7.10	4.23	4.06

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

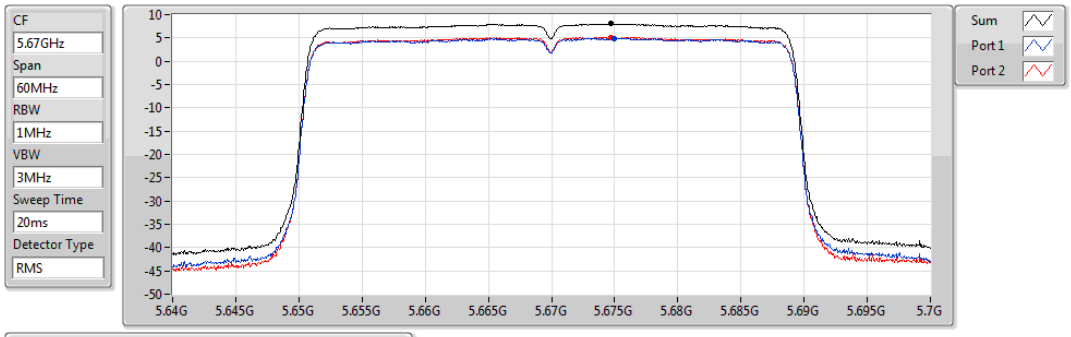
5550MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.92	7.92	5.12	4.86

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

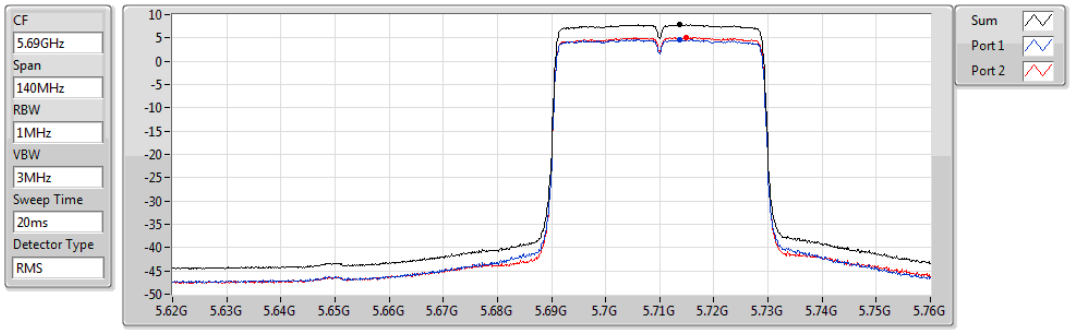
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.01	8.01	4.93	5.15

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

5710MHz Straddle 5.47-5.725GHz

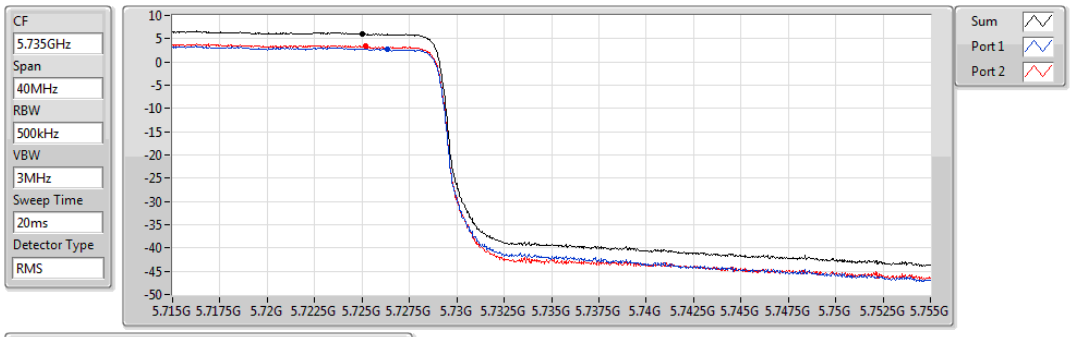


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.88	7.88	4.62	5.12

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

5710MHz Straddle 5.725-5.85GHz

22/07/2019

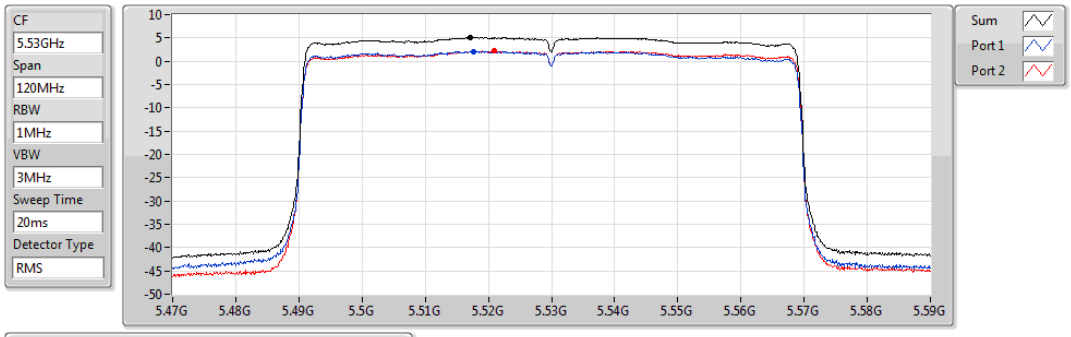


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.02	6.02	2.78	3.37

802.11ax HEW80_Nss2,(MCS0)_2TX PSD

5530MHz

22/07/2019

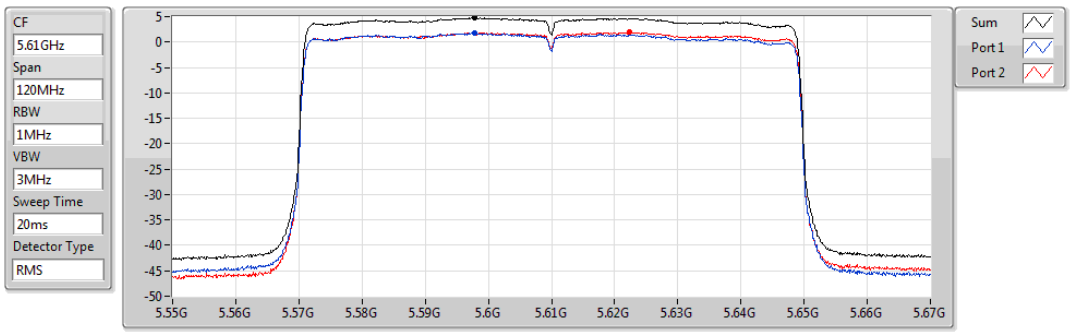


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.10	5.10	2.10	2.18

802.11ax HEW80_Nss2,(MCS0)_2TX PSD

5610MHz

22/07/2019

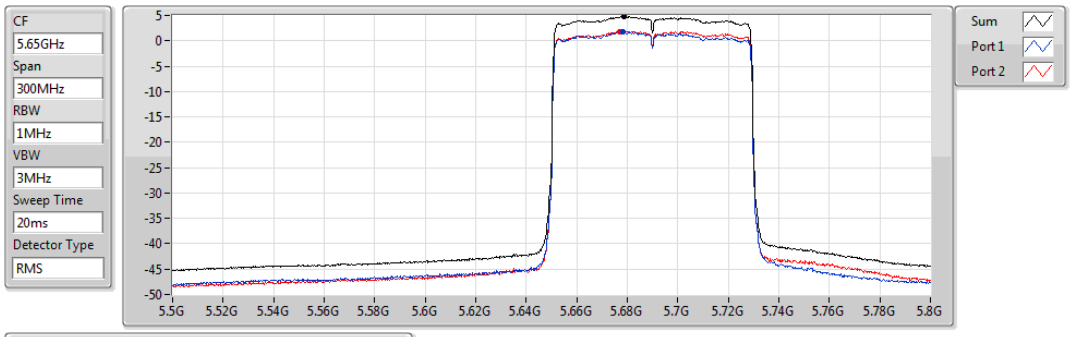


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.75	4.75	1.74	1.97

802.11ax HEW80_Nss2,(MCS0)_2TX PSD

5690MHz Straddle 5.47-5.725GHz

22/07/2019

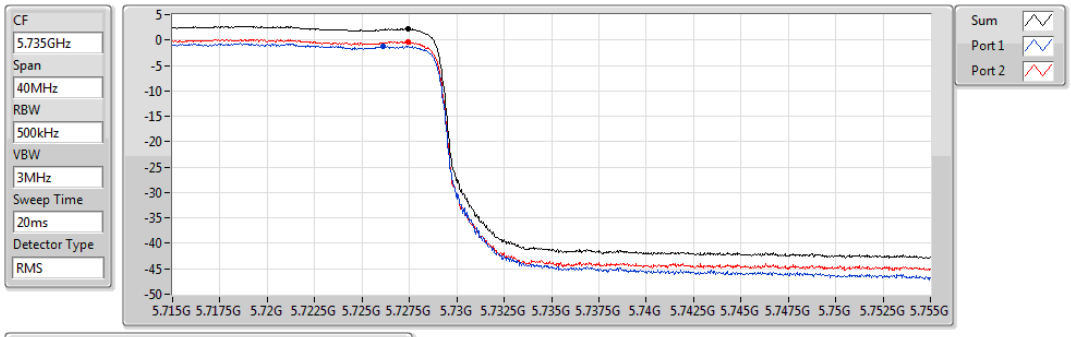


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.81	4.81	1.82	1.86

802.11ax HEW80_Nss2,(MCS0)_2TX PSD

5690MHz Straddle 5.725-5.85GHz

22/07/2019

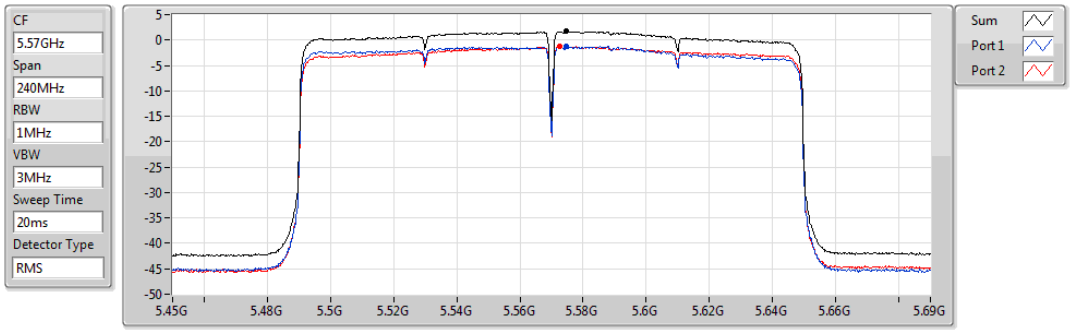


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.19	2.19	-1.25	-0.37

802.11ax HEW160_Nss2,(MCS0)_2TX PSD

5570MHz

22/07/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.70	1.70	-1.27	-1.31

For 4T1S
Summary

Mode	PD (dBm/RBW)
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_4TX	9.07
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	7.53

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

Result

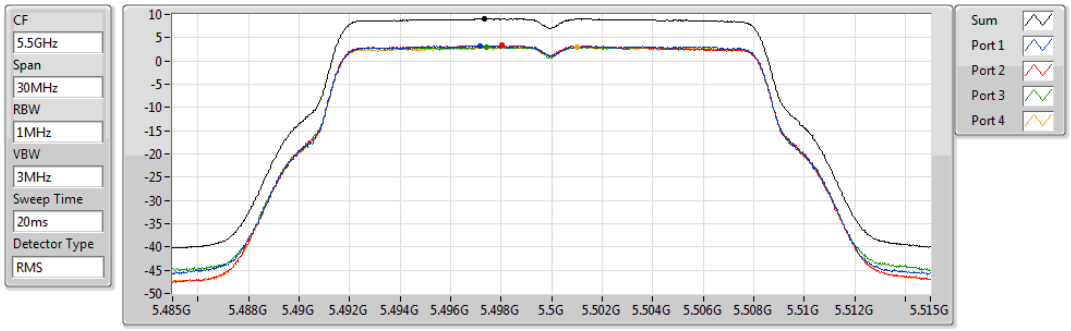
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5500MHz	Pass	7.90	3.25	3.34	3.02	3.01	9.07	9.10
5580MHz	Pass	7.90	3.16	3.00	2.76	2.97	8.91	9.10
5700MHz	Pass	7.90	3.16	3.06	3.00	3.11	8.90	9.10
5720MHz Straddle 5.47-5.725GHz	Pass	7.90	3.08	3.16	3.13	3.07	8.92	9.10
5720MHz Straddle 5.725-5.85GHz	Pass	7.87	1.55	1.64	1.26	1.85	7.53	28.13

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_4TX PSD

5500MHz

18/07/2019

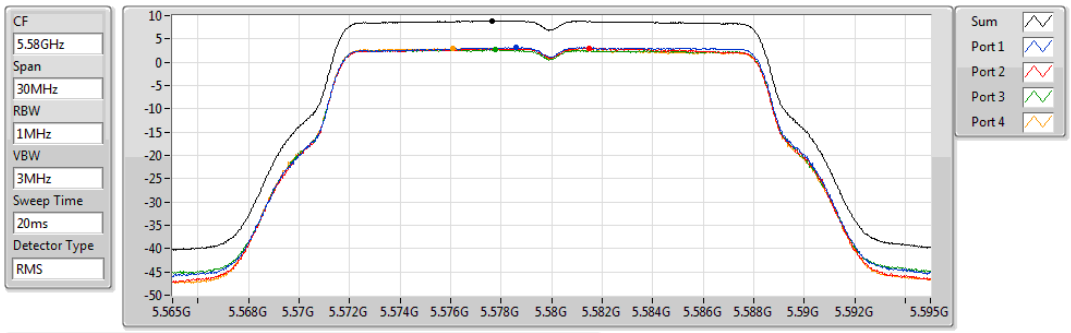


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.07	9.07	3.25	3.34	3.02	3.01

802.11a_Nss1,(6Mbps)_4TX PSD

5580MHz

18/07/2019

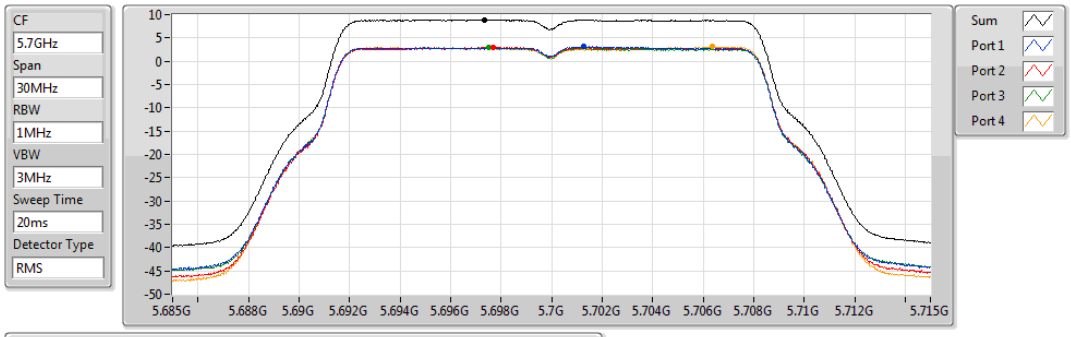


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.91	8.91	3.16	3.00	2.76	2.97

802.11a_Nss1,(6Mbps)_4TX PSD

5700MHz

18/07/2019

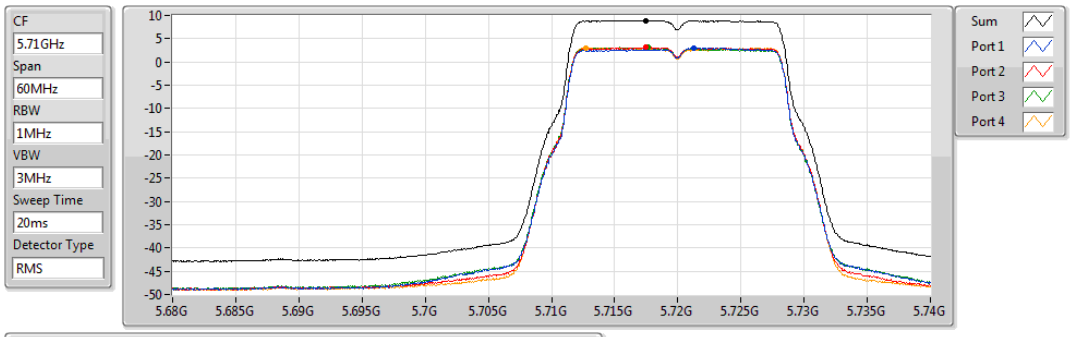


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.90	8.90	3.16	3.06	3.00	3.11

802.11a_Nss1,(6Mbps)_4TX PSD

5720MHz Straddle 5.47-5.725GHz

18/07/2019

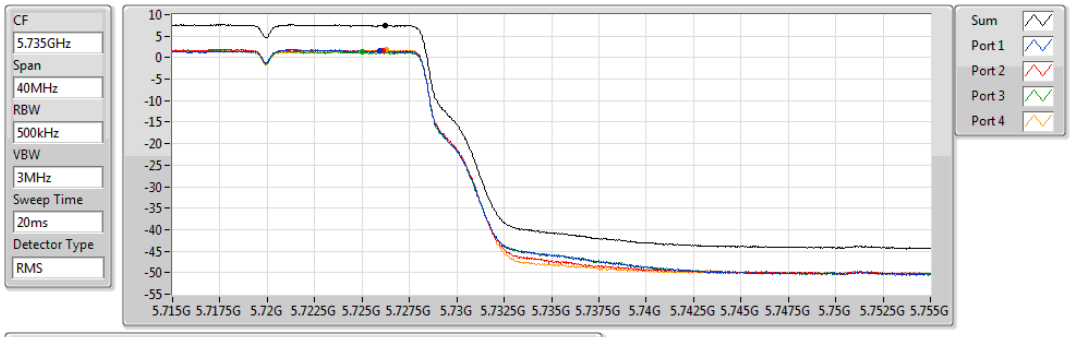


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.92	8.92	3.08	3.16	3.13	3.07

802.11a_Nss1,(6Mbps)_4TX PSD

5720MHz Straddle 5.725-5.85GHz

18/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.53	7.53	1.55	1.64	1.26	1.85

<SKU 1, Beamforming function: 5GHz Band 3>
For 2T1S
Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	10.79	15.68
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	8.17	13.06
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	5.12	10.01
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-1.20	3.69
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	8.74	13.67
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	5.45	10.38
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	1.92	6.85

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

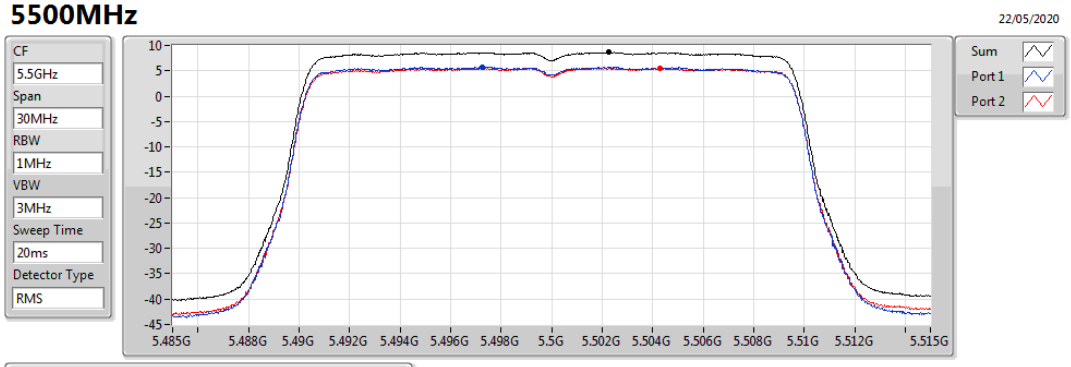
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5500MHz	Pass	4.89	5.76	5.51	8.62	11.00	13.51	17.00
5580MHz	Pass	4.89	7.87	7.84	10.79	11.00	15.68	17.00
5700MHz	Pass	4.89	3.90	4.80	7.32	11.00	12.21	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	6.81	7.93	10.40	11.00	15.29	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.93	5.25	6.20	8.74	30.00	13.67	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5510MHz	Pass	4.89	2.56	2.52	5.55	11.00	10.44	17.00
5550MHz	Pass	4.89	5.09	5.36	8.17	11.00	13.06	17.00
5670MHz	Pass	4.89	4.61	5.41	7.96	11.00	12.85	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.89	4.38	5.01	7.67	11.00	12.56	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.93	2.02	2.83	5.45	30.00	10.38	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5530MHz	Pass	4.89	0.15	0.50	3.30	11.00	8.19	17.00
5610MHz	Pass	4.89	1.83	2.62	5.12	11.00	10.01	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.89	1.19	2.17	4.67	11.00	9.56	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.93	-1.68	-0.55	1.92	30.00	6.85	36.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5570MHz	Pass	4.89	-4.15	-4.09	-1.20	11.00	3.69	17.00

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 HEW20-BF_Nss1,(MCS0)_2TX PSD

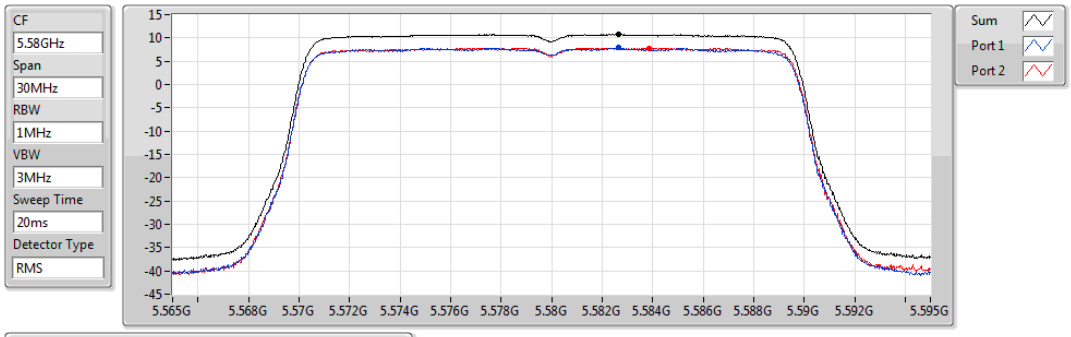
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.62	8.62	5.76	5.51

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

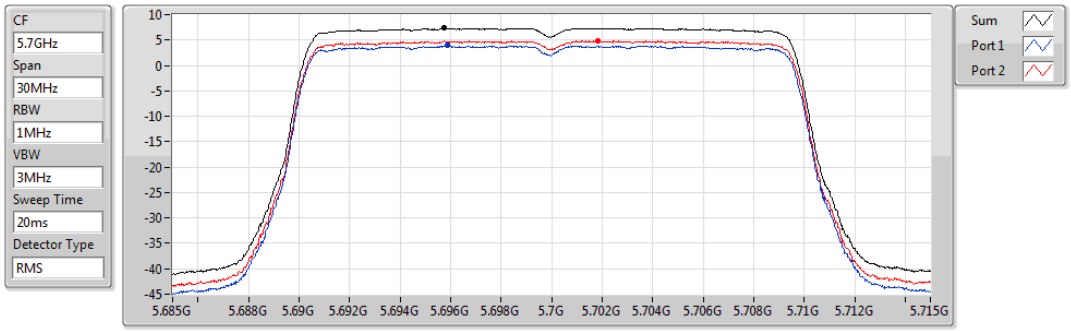
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.79	10.79	7.87	7.84

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5700MHz

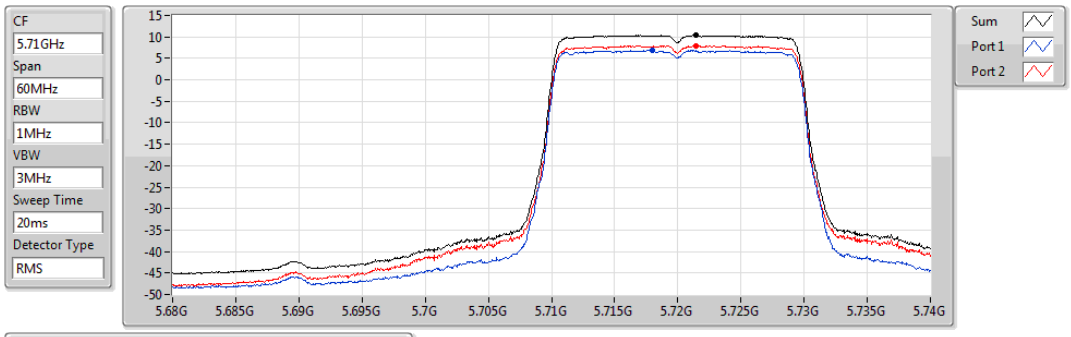


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.32	7.32	3.90	4.80

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5720MHz Straddle 5.47-5.725GHz

22/05/2020

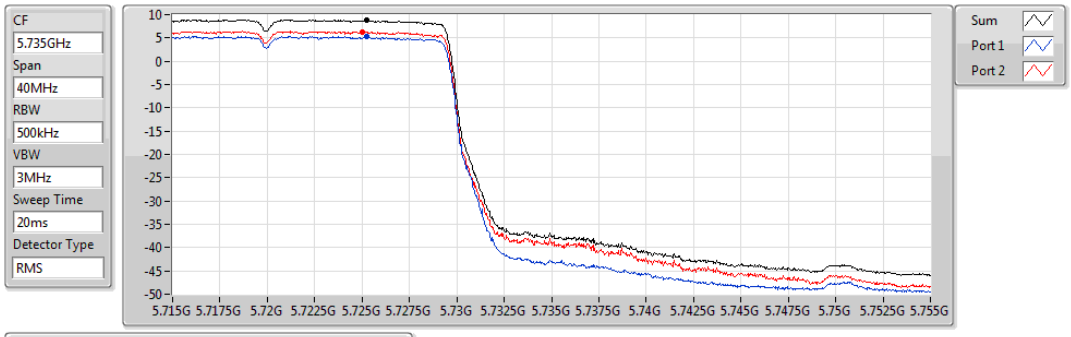


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.40	10.40	6.81	7.93

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5720MHz Straddle 5.725-5.85GHz

22/05/2020

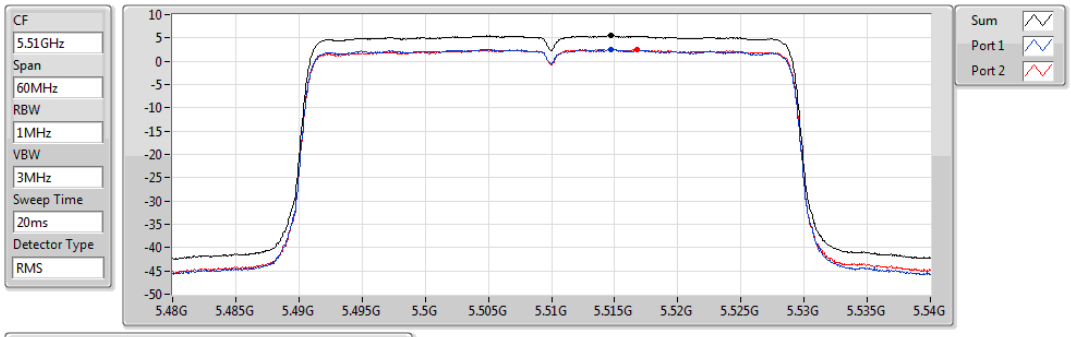


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.74	8.74	5.25	6.20

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

5510MHz

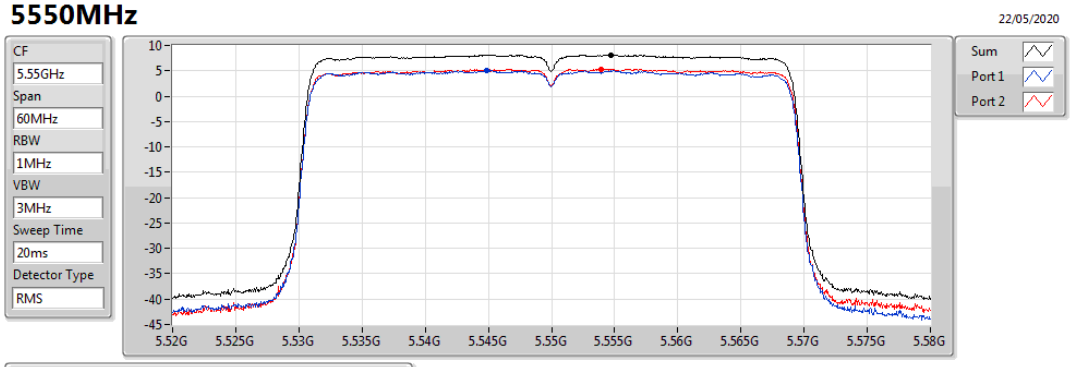
22/05/2020



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.55	5.55	2.56	2.52

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

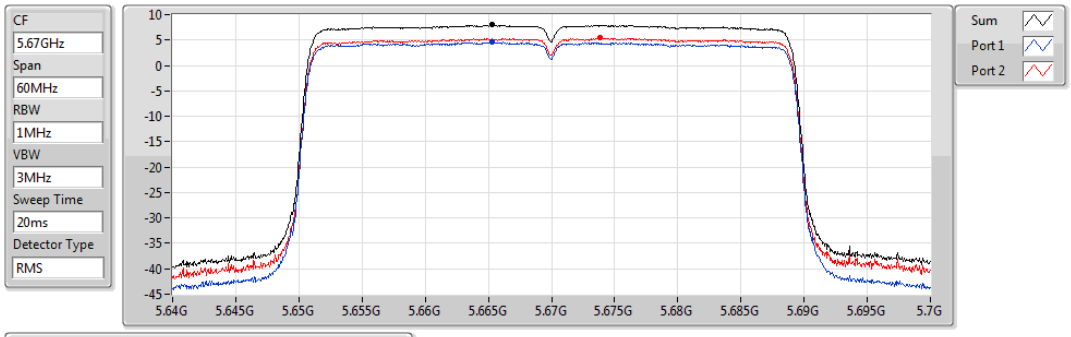
5550MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.17	8.17	5.09	5.36

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

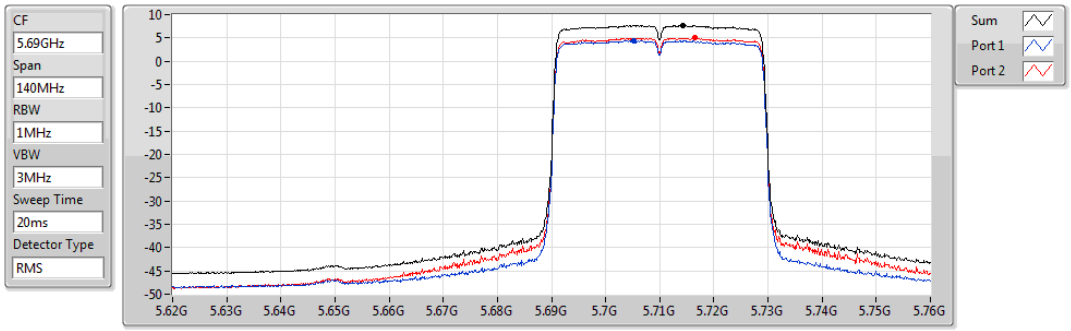
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.96	7.96	4.61	5.41

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

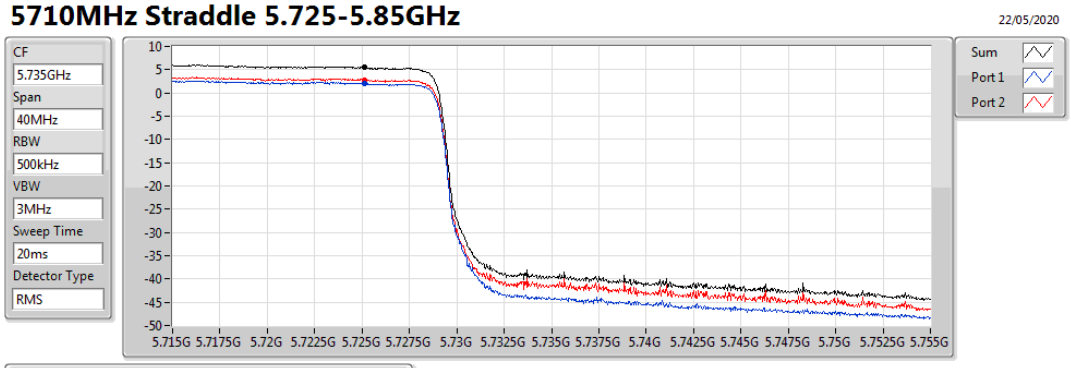
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.67	7.67	4.38	5.01

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

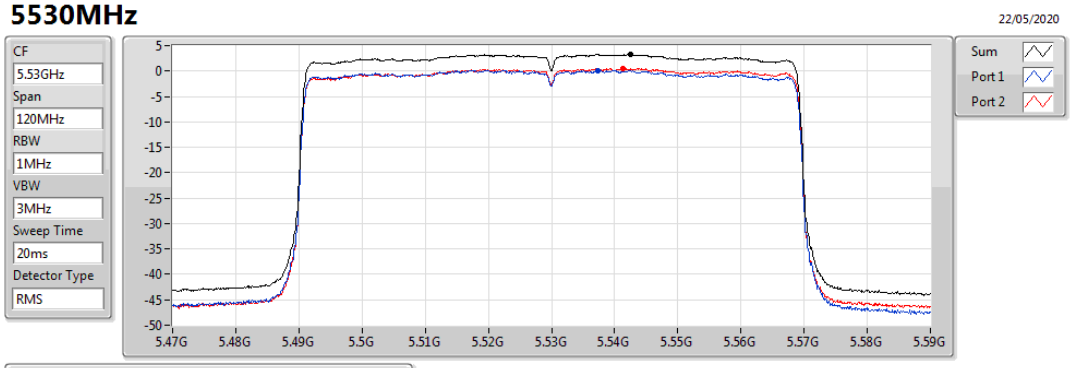
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.45	5.45	2.02	2.83

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

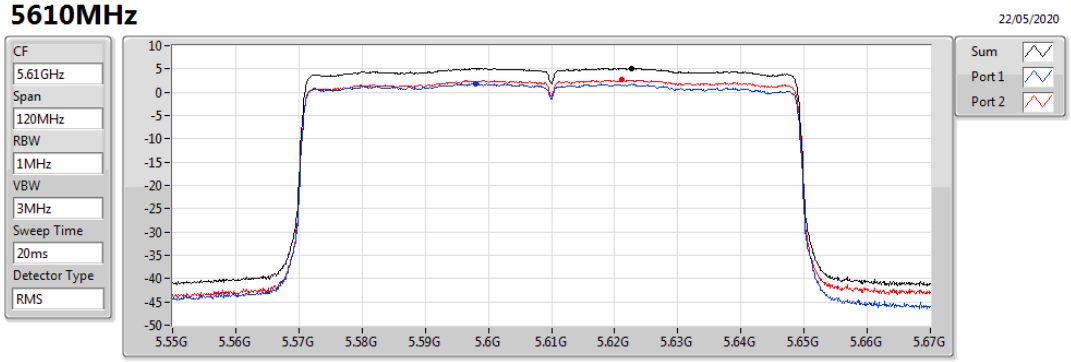
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.30	3.30	0.15	0.50

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

5610MHz

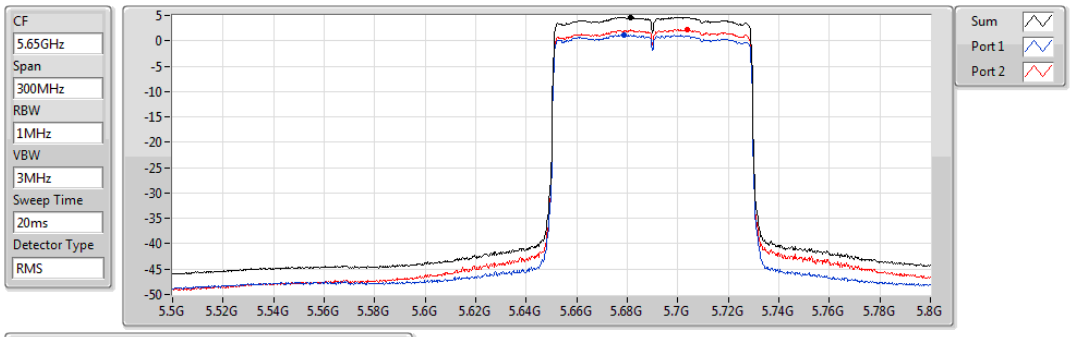


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.12	5.12	1.83	2.62

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

5690MHz Straddle 5.47-5.725GHz

22/05/2020

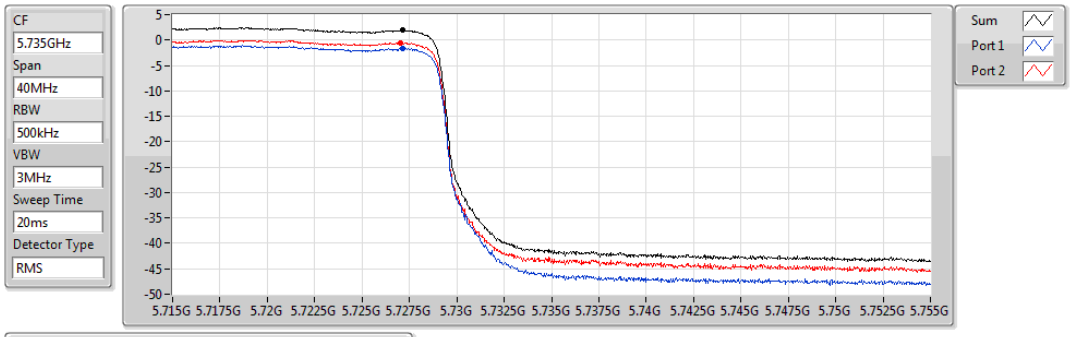


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.67	4.67	1.19	2.17

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

5690MHz Straddle 5.725-5.85GHz

22/05/2020

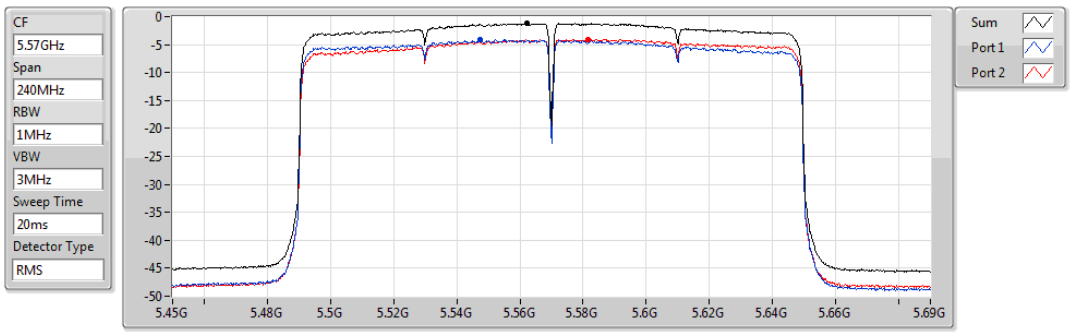


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.92	1.92	-1.68	-0.55

802.11ax HEW160-BF_Nss1,(MCS0)_2TX PSD

5570MHz

22/05/2020



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.20	-1.20	-4.15	-4.09

For 4T1S
Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	8.83	16.73
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	6.16	14.06
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.01	10.91
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	0.13	8.03
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	6.60	14.47
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	3.69	11.56
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	0.02	7.89

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

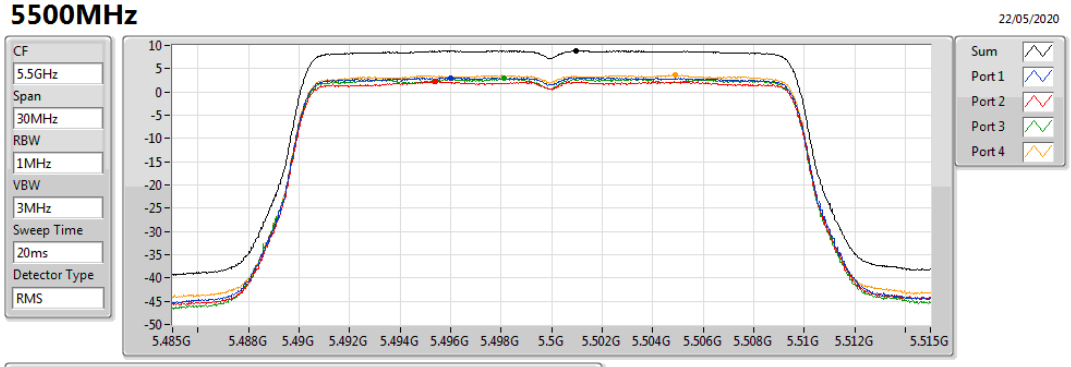
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	7.90	3.07	2.21	2.86	3.60	8.83	9.10	16.73	17.00
5580MHz	Pass	7.90	2.77	1.88	2.51	3.35	8.51	9.10	16.41	17.00
5700MHz	Pass	7.90	2.57	1.75	2.38	3.83	8.57	9.10	16.47	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.90	2.47	1.48	2.07	3.65	8.40	9.10	16.30	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.87	0.79	-0.13	0.15	1.92	6.60	28.13	14.47	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	7.90	0.41	-0.46	-0.08	1.11	6.16	9.10	14.06	17.00
5550MHz	Pass	7.90	0.28	-0.61	-0.34	1.05	5.98	9.10	13.88	17.00
5670MHz	Pass	7.90	0.21	-0.79	-0.39	0.82	5.87	9.10	13.77	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.90	0.11	-0.93	-0.58	0.85	5.81	9.10	13.71	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.87	-2.07	-2.96	-3.00	-1.13	3.69	28.13	11.56	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	7.90	-2.88	-3.67	-3.29	-2.06	2.95	9.10	10.85	17.00
5610MHz	Pass	7.90	-2.81	-3.71	-3.17	-1.87	3.01	9.10	10.91	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	7.90	-3.03	-3.79	-3.48	-2.25	2.81	9.10	10.71	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.87	-6.00	-6.51	-6.52	-4.74	0.02	28.13	7.89	36.00
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	7.90	-5.70	-6.41	-6.08	-4.91	0.13	9.10	8.03	17.00

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 HEW20-BF_Nss1,(MCS0)_4TX PSD

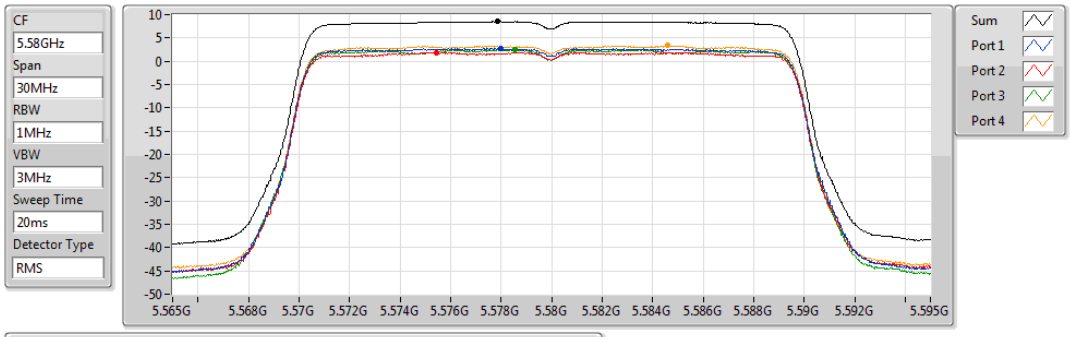
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.83	8.83	3.07	2.21	2.86	3.60

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

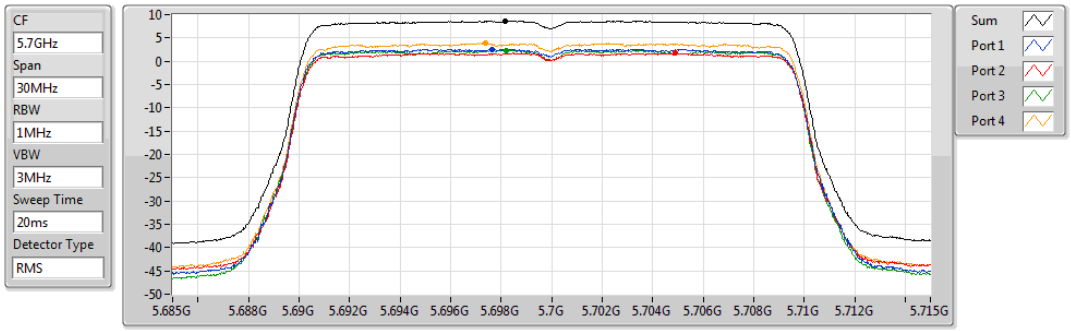
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.51	8.51	2.77	1.88	2.51	3.35

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5700MHz

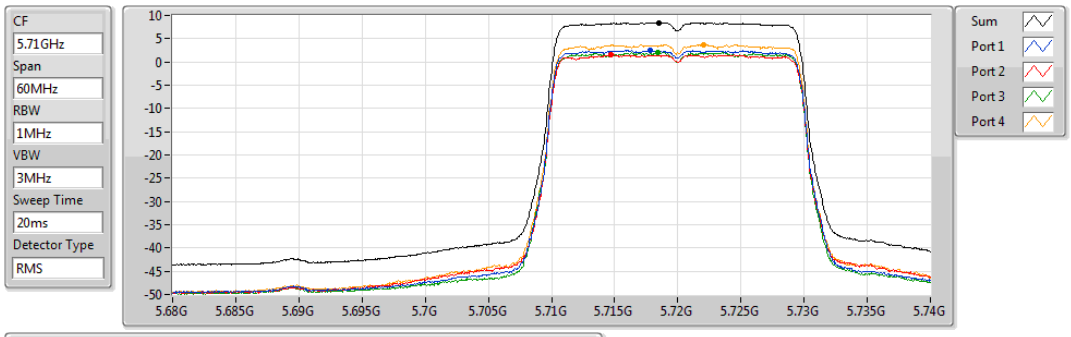


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.57	8.57	2.57	1.75	2.38	3.83

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5720MHz Straddle 5.47-5.725GHz

22/05/2020

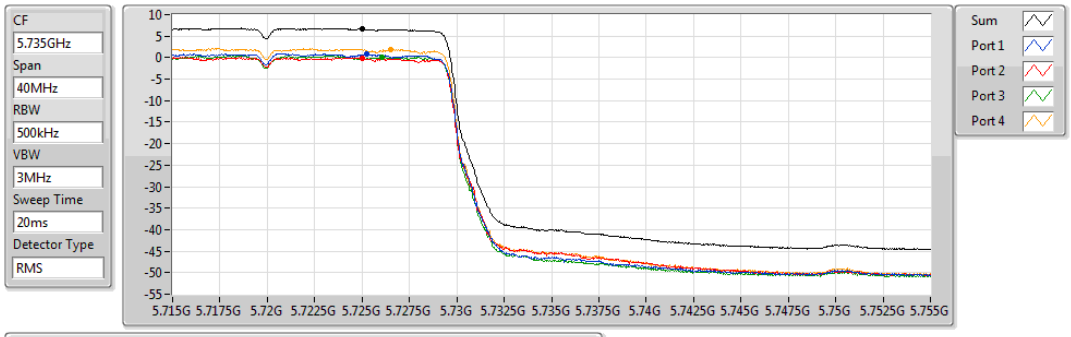


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.40	8.40	2.47	1.48	2.07	3.65

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5720MHz Straddle 5.725-5.85GHz

22/05/2020

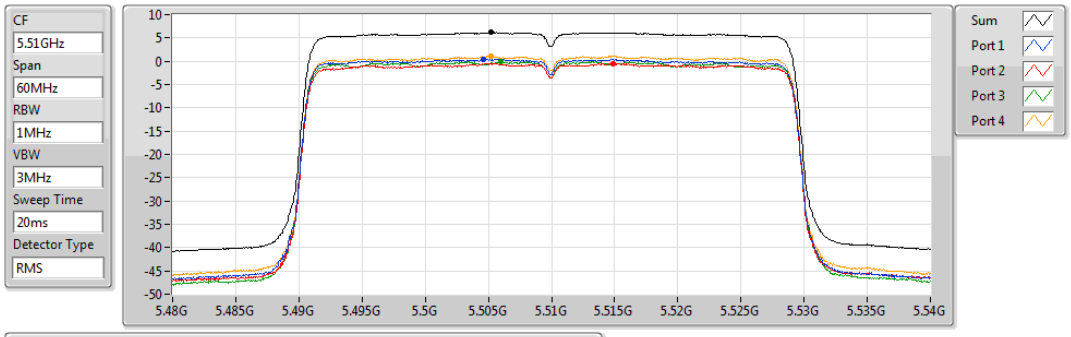


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.60	6.60	0.79	-0.13	0.15	1.92

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5510MHz

22/05/2020

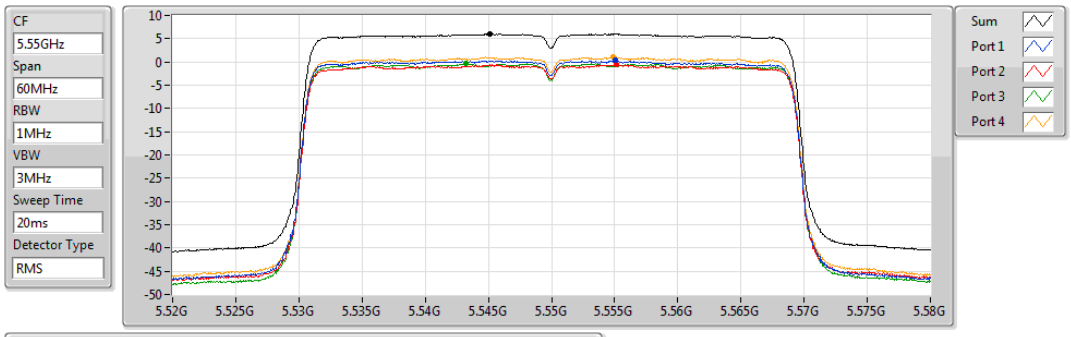


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.16	6.16	0.41	-0.46	-0.08	1.11

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5550MHz

22/05/2020

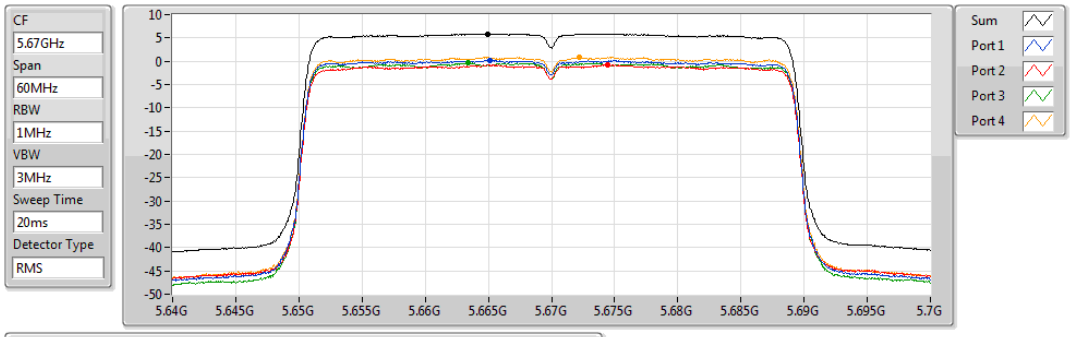


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.98	5.98	0.28	-0.61	-0.34	1.05

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5670MHz

22/05/2020

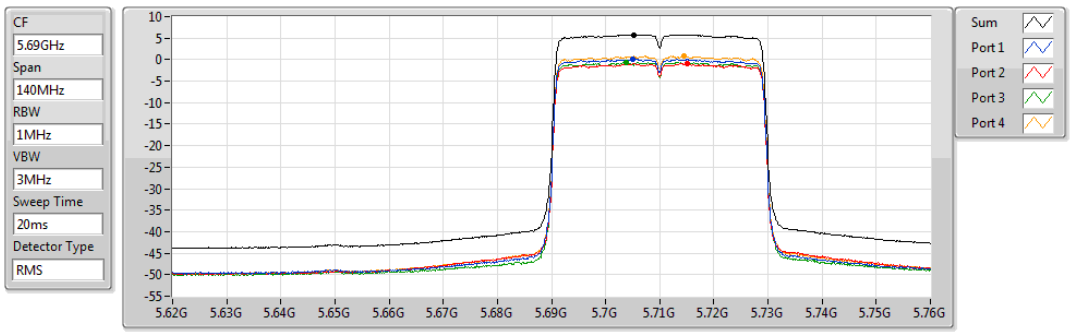


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.87	5.87	0.21	-0.79	-0.39	0.82

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5710MHz Straddle 5.47-5.725GHz

22/05/2020

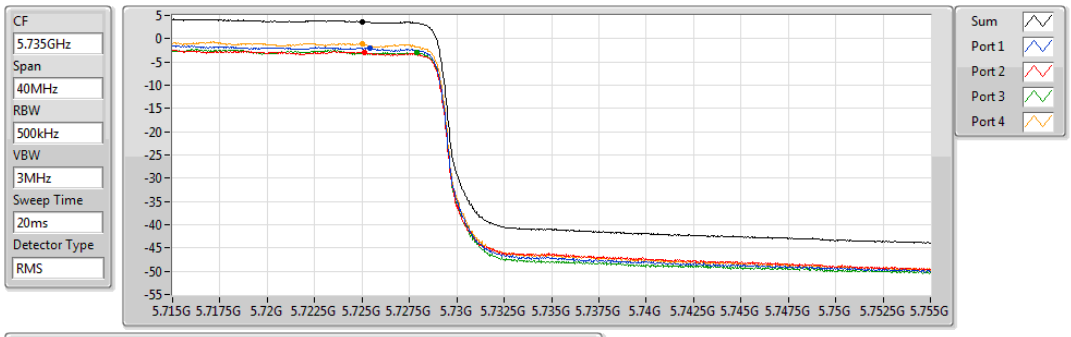


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.81	5.81	0.11	-0.93	-0.58	0.85

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5710MHz Straddle 5.725-5.85GHz

22/05/2020

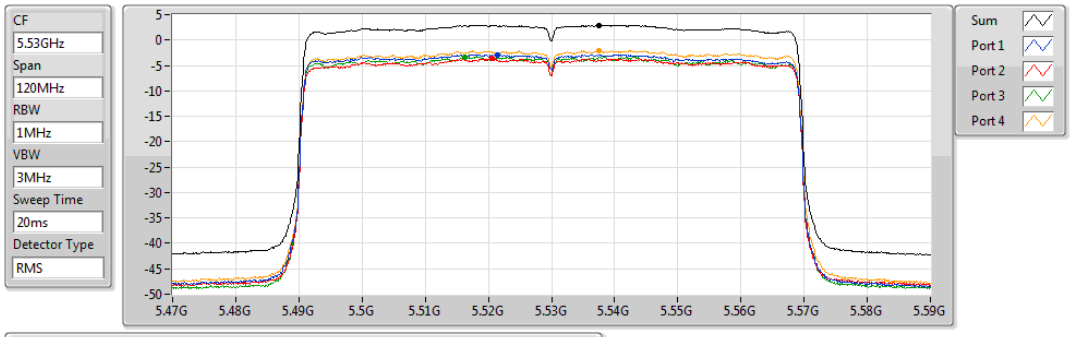


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.69	3.69	-2.07	-2.96	-3.00	-1.13

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5530MHz

22/05/2020

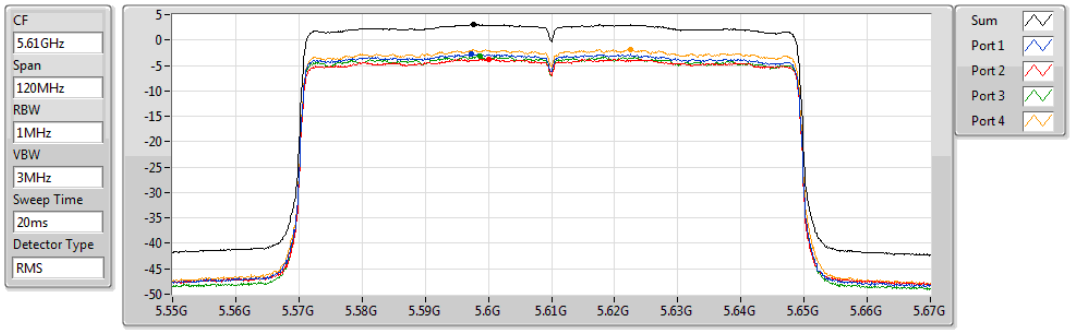


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.95	2.95	-2.88	-3.67	-3.29	-2.06

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5610MHz

22/05/2020

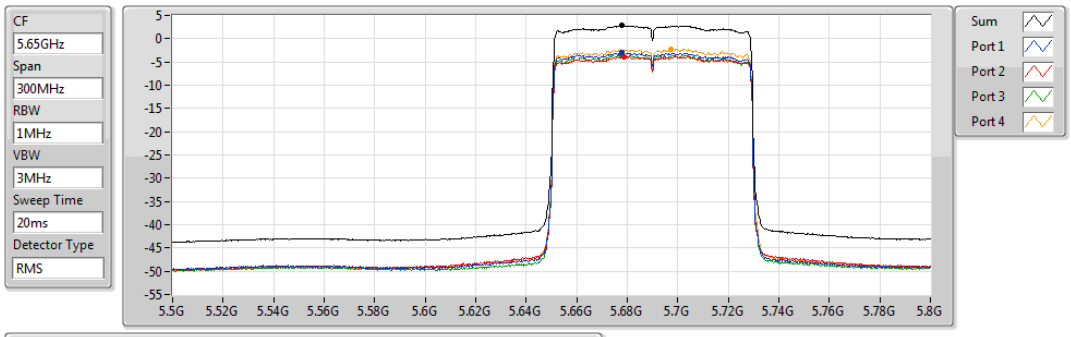


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.01	3.01	-2.81	-3.71	-3.17	-1.87

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5690MHz Straddle 5.47-5.725GHz

22/05/2020

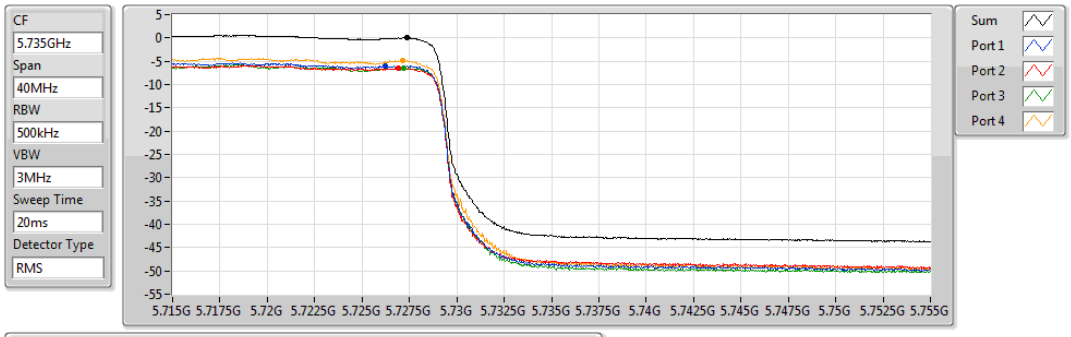


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.81	2.81	-3.03	-3.79	-3.48	-2.25

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5690MHz Straddle 5.725-5.85GHz

22/05/2020

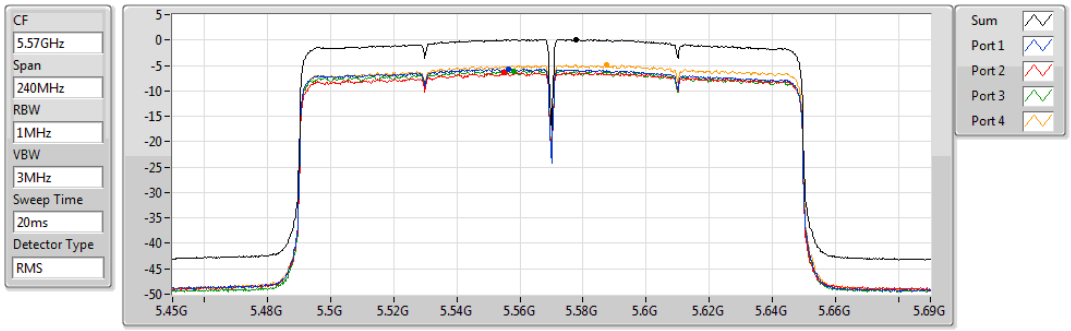


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.02	0.02	-6.00	-6.51	-6.52	-4.74

802.11ax HEW160-BF_Nss1,(MCS0)_4TX PSD

5570MHz

22/05/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.13	0.13	-5.70	-6.41	-6.08	-4.91

For 4T2S
Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	10.62	15.51
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	7.73	12.62
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	4.97	9.86
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	1.67	6.56
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	8.55	13.41
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	5.54	10.40
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	1.93	6.79

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

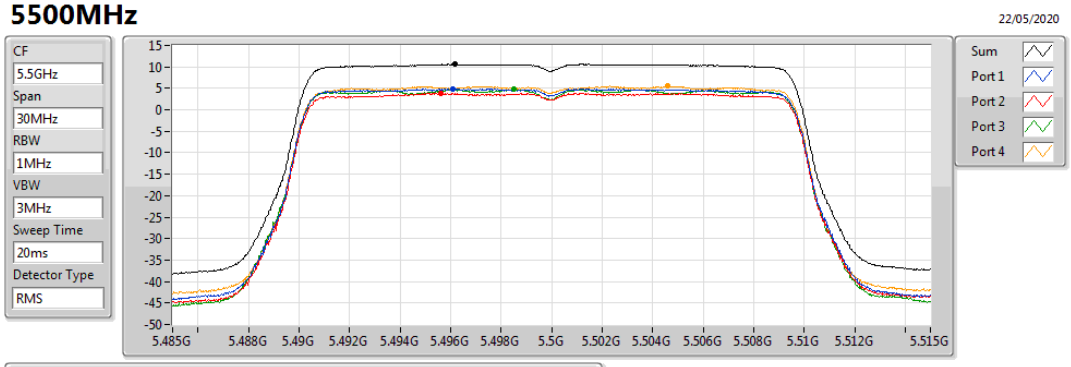
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	4.89	4.89	3.84	4.72	5.55	10.62	11.00	15.51	17.00
5580MHz	Pass	4.89	4.85	3.90	4.50	5.39	10.53	11.00	15.42	17.00
5700MHz	Pass	4.89	4.66	3.91	3.97	5.92	10.59	11.00	15.48	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	4.59	3.88	3.86	5.70	10.42	11.00	15.31	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.86	2.87	2.02	1.93	3.88	8.55	30.00	13.41	36.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	4.89	0.89	-0.12	0.56	1.55	6.58	11.00	11.47	17.00
5550MHz	Pass	4.89	2.06	0.99	1.37	2.84	7.71	11.00	12.60	17.00
5670MHz	Pass	4.89	2.15	1.18	1.25	2.84	7.73	11.00	12.62	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.89	2.24	1.05	1.25	2.77	7.73	11.00	12.62	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.86	-0.05	-0.98	-1.31	0.55	5.54	30.00	10.40	36.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	4.89	-1.09	-2.01	-1.56	-0.05	4.70	11.00	9.59	17.00
5610MHz	Pass	4.89	-0.68	-1.70	-1.43	0.09	4.97	11.00	9.86	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.89	-0.88	-1.76	-1.69	-0.18	4.82	11.00	9.71	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.86	-3.99	-4.52	-4.83	-2.88	1.93	30.00	6.79	36.00
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	4.89	-3.98	-4.83	-4.51	-3.46	1.67	11.00	6.56	17.00

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 HEW20-BF_Nss2,(MCS0)_4TX PSD

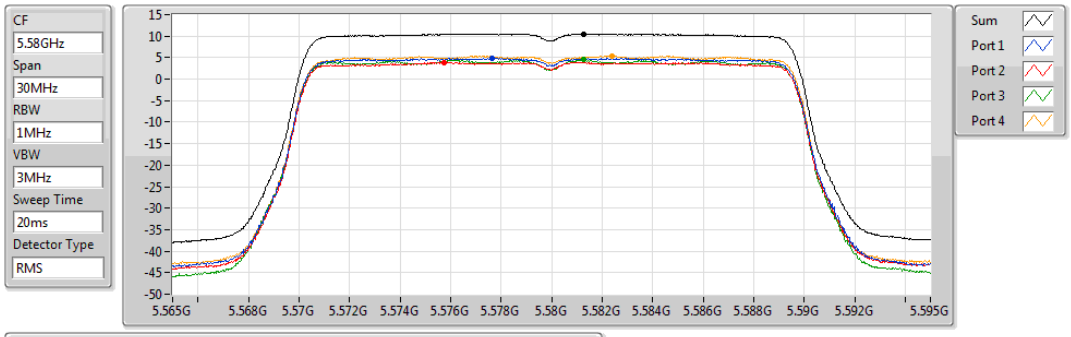
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.62	10.62	4.89	3.84	4.72	5.55

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

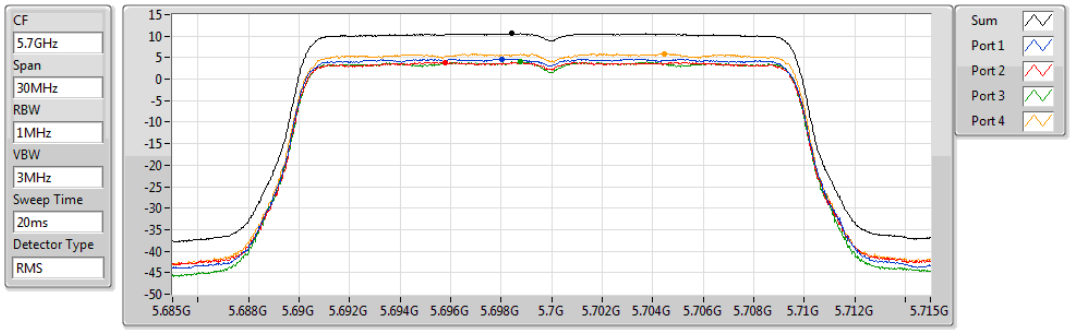
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.53	10.53	4.85	3.90	4.50	5.39

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5700MHz

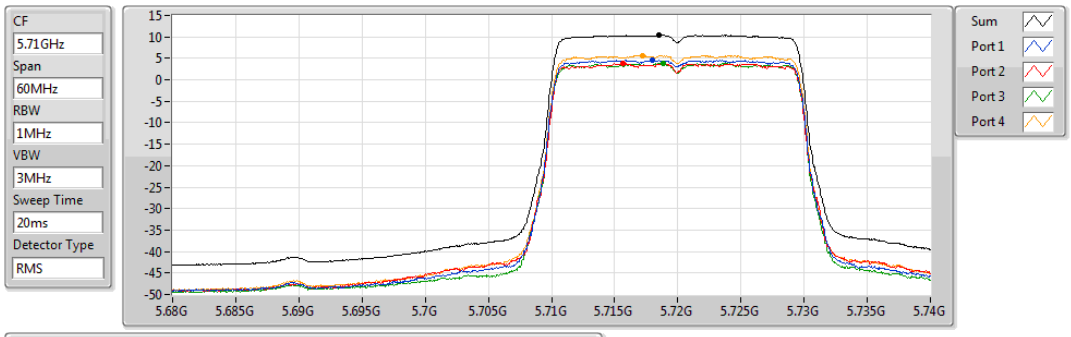


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.59	10.59	4.66	3.91	3.97	5.92

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5720MHz Straddle 5.47-5.725GHz

22/05/2020

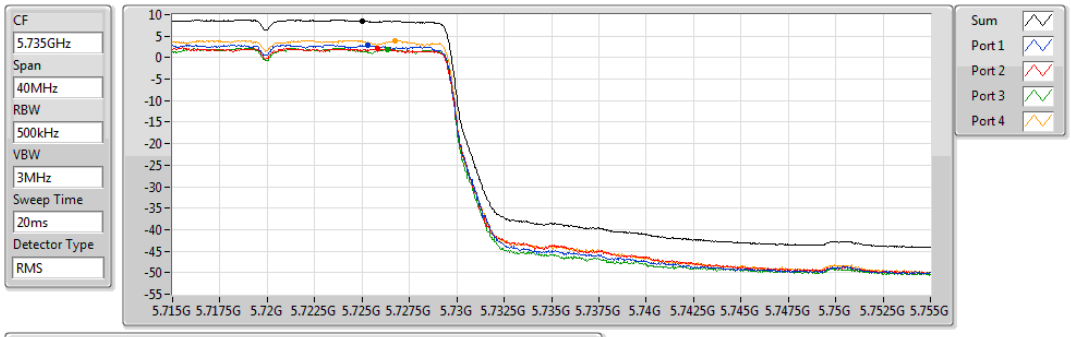


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.42	10.42	4.59	3.88	3.86	5.70

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5720MHz Straddle 5.725-5.85GHz

22/05/2020

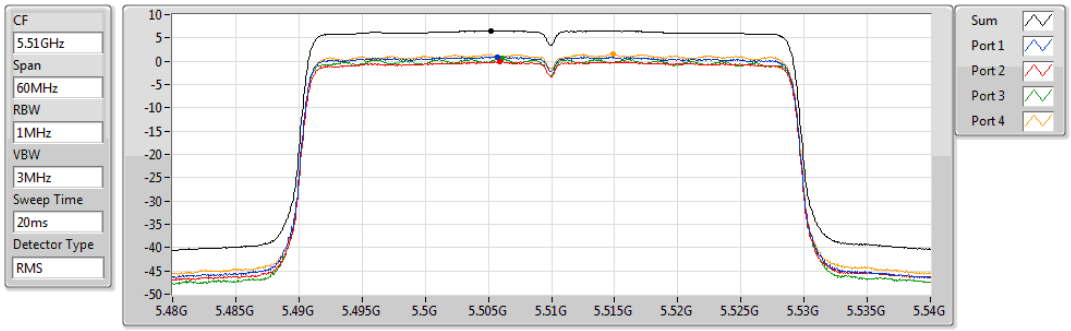


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.55	8.55	2.87	2.02	1.93	3.88

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

5510MHz

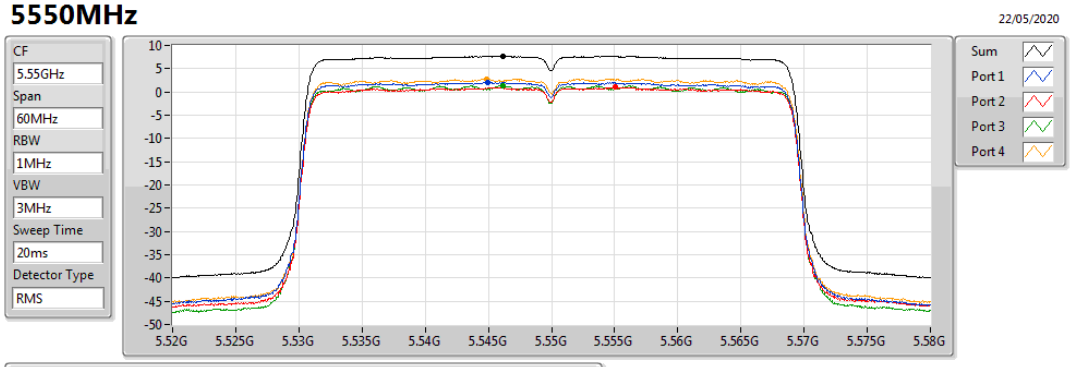
22/05/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.58	6.58	0.89	-0.12	0.56	1.55

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

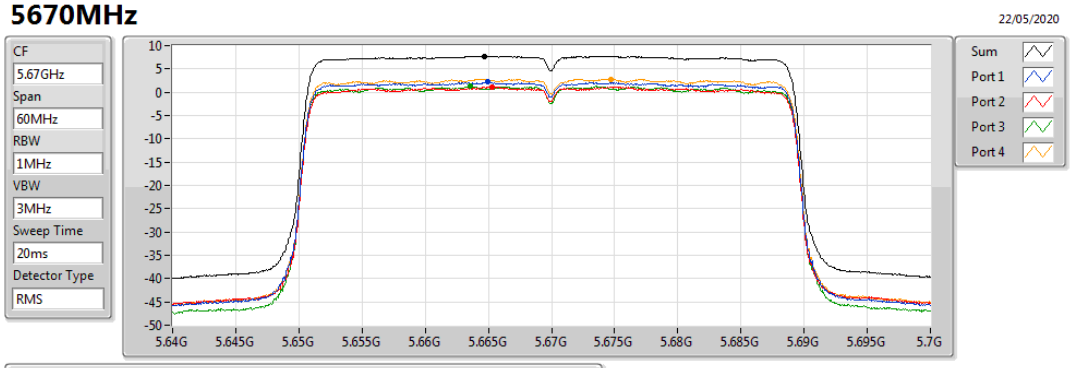
5550MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.71	7.71	2.06	0.99	1.37	2.84

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

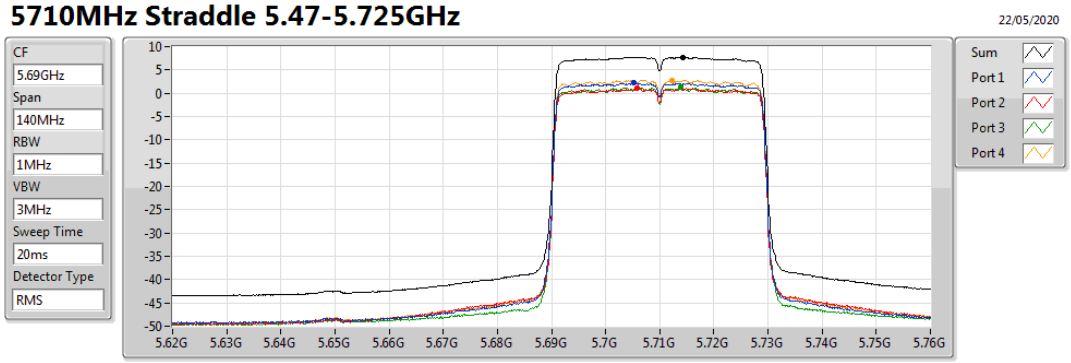
5670MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.73	7.73	2.15	1.18	1.25	2.84

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

5710MHz Straddle 5.47-5.725GHz

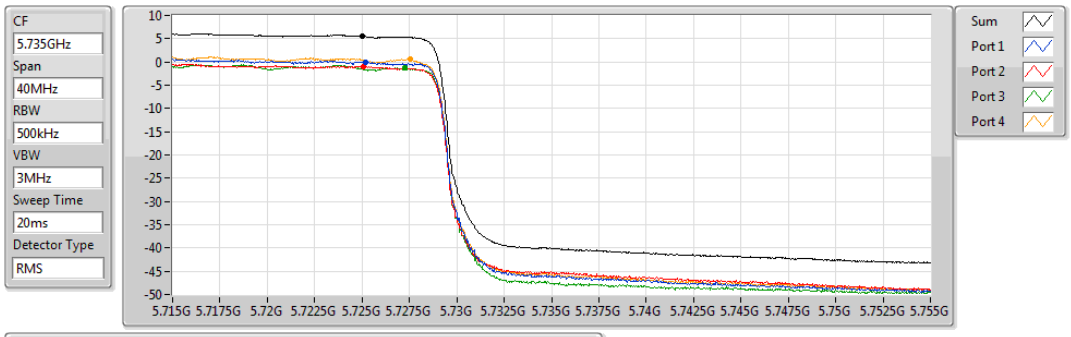


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.73	7.73	2.24	1.05	1.25	2.77

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

5710MHz Straddle 5.725-5.85GHz

22/05/2020

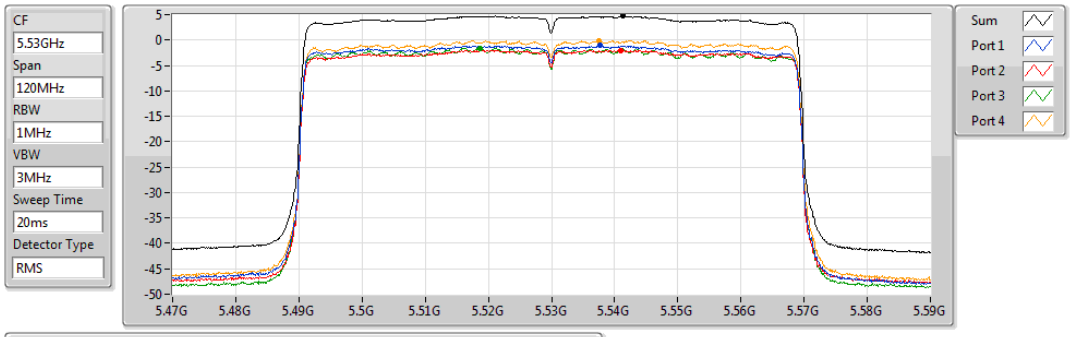


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.54	5.54	-0.05	-0.98	-1.31	0.55

802.11ax HEW80-BF_Nss2,(MCS0)_4TX PSD

5530MHz

22/05/2020

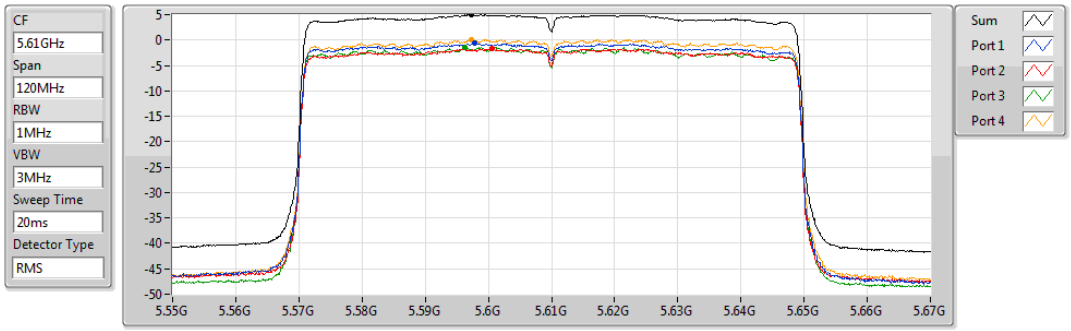


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.70	4.70	-1.09	-2.01	-1.56	-0.05

802.11ax HEW80-BF_Nss2,(MCS0)_4TX PSD

5610MHz

22/05/2020

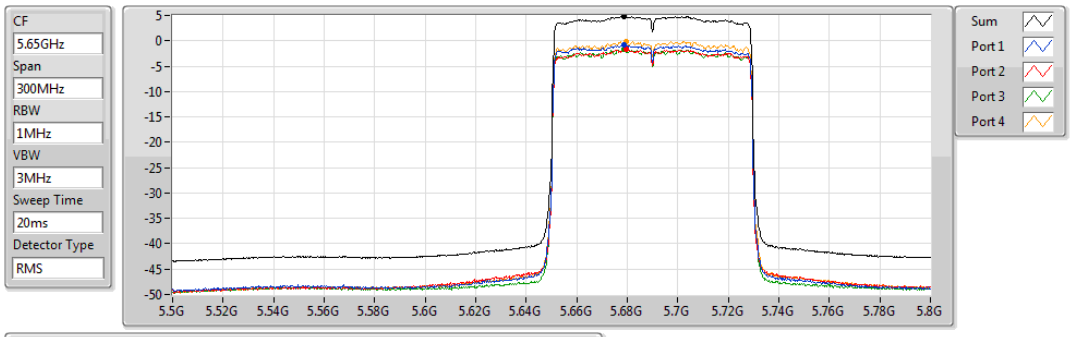


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.97	4.97	-0.68	-1.70	-1.43	0.09

802.11ax HEW80-BF_Nss2,(MCS0)_4TX PSD

5690MHz Straddle 5.47-5.725GHz

22/05/2020

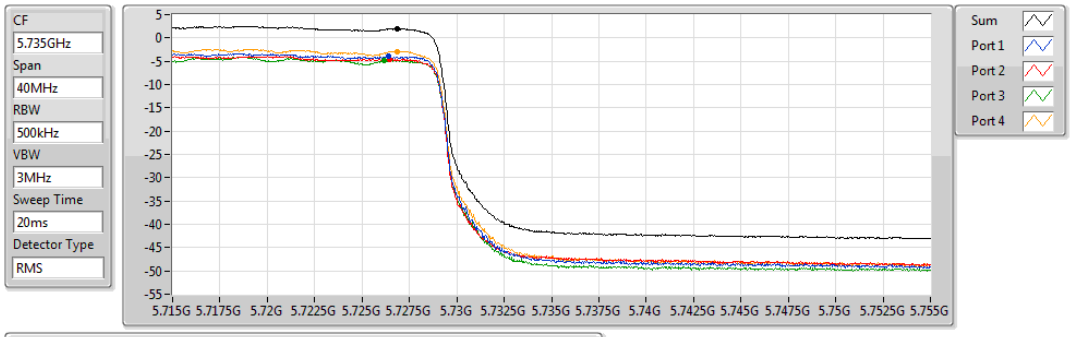


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.82	4.82	-0.88	-1.76	-1.69	-0.18

802.11ax HEW80-BF_Nss2,(MCS0)_4TX PSD

5690MHz Straddle 5.725-5.85GHz

22/05/2020

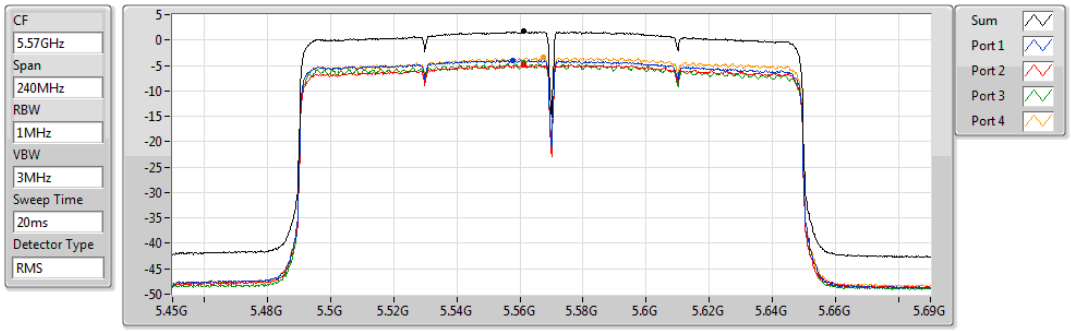


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.93	1.93	-3.99	-4.52	-4.83	-2.88

802.11ax HEW160-BF_Nss2,(MCS0)_4TX PSD

5570MHz

22/05/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.67	1.67	-3.98	-4.83	-4.51	-3.46

<SKU 5>
For 2T1S
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	16.66
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	15.93
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	11.87
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.38
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-0.13
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	10.79
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	10.71
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	8.25
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	3.9
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-0.29
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_2TX	10.87
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	10.35
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	7.95
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	5.03
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-1.34
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	15.17
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	15.15
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	11.84
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.75

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)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.85	7.58	7.28	10.38	17.00
5200MHz	Pass	4.85	12.21	12.25	15.22	17.00
5240MHz	Pass	4.85	14.15	13.26	16.66	17.00
5260MHz	Pass	4.90	7.62	7.79	10.68	11.00
5300MHz	Pass	4.90	7.74	7.85	10.79	11.00
5320MHz	Pass	4.90	7.73	7.84	10.75	11.00
5500MHz	Pass	4.89	5.3	6	8.65	11.00
5580MHz	Pass	4.89	7.83	7.95	10.87	11.00
5700MHz	Pass	4.89	5.88	6.1	8.97	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	7.9	7.83	10.83	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.93	6.21	5.84	9.03	30.00
5745MHz	Pass	4.93	12.59	11.88	15.17	30.00
5785MHz	Pass	4.93	11.33	10.88	14.06	30.00
5825MHz	Pass	4.93	10.59	10.24	13.34	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.85	10.05	10.03	13.01	17.00
5200MHz	Pass	4.85	11.8	11.73	14.75	17.00
5240MHz	Pass	4.85	12.93	12.93	15.93	17.00
5260MHz	Pass	4.90	7.65	7.8	10.71	11.00
5300MHz	Pass	4.90	7.6	7.72	10.56	11.00
5320MHz	Pass	4.90	7.4	7.77	10.57	11.00
5500MHz	Pass	4.89	7.12	7.08	10.01	11.00
5580MHz	Pass	4.89	7.44	7.41	10.35	11.00
5700MHz	Pass	4.89	5.33	5.64	8.41	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.89	7.15	7.34	10.20	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.93	5.51	5.55	8.50	30.00
5745MHz	Pass	4.93	12.25	12.05	15.10	30.00
5785MHz	Pass	4.93	11.99	11.83	14.85	30.00
5825MHz	Pass	4.93	12.35	12.07	15.15	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	4.85	3.96	4.33	7.15	17.00
5230MHz	Pass	4.85	8.85	8.91	11.87	17.00
5270MHz	Pass	4.90	5.26	5.21	8.25	11.00
5310MHz	Pass	4.90	4.48	4.35	7.32	11.00
5510MHz	Pass	4.89	2.53	2.54	5.51	11.00
5550MHz	Pass	4.89	5.09	4.98	7.95	11.00
5670MHz	Pass	4.89	4.31	4.48	7.39	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.89	4.86	4.86	7.82	11.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.93	2.8	2.43	5.58	30.00
5755MHz	Pass	4.93	8.5	8.17	11.25	30.00
5795MHz	Pass	4.93	9.02	8.84	11.84	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	4.85	1.36	1.58	4.38	17.00

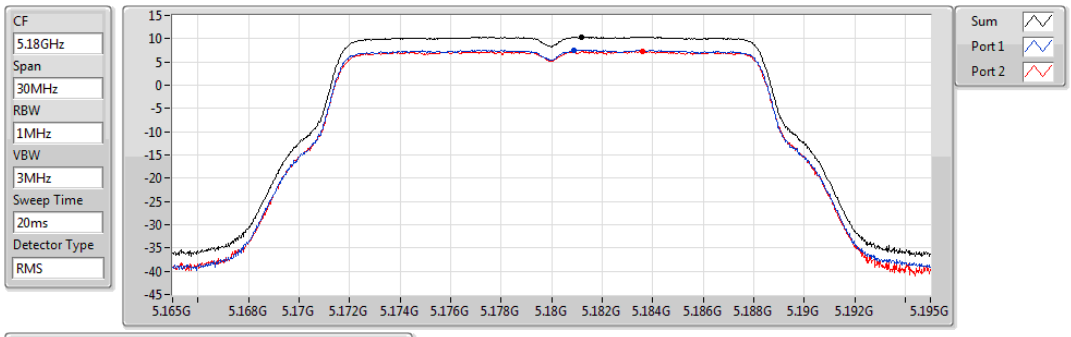
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5290MHz	Pass	4.90	1.03	0.89	3.90	11.00
5530MHz	Pass	4.89	0.74	0.72	3.60	11.00
5610MHz	Pass	4.89	2.01	2.11	5.03	11.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.89	1.42	1.69	4.46	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.93	-0.86	-1.63	1.73	30.00
5775MHz	Pass	4.93	2.03	1.79	4.75	30.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.85	-3.34	-2.91	-0.13	17.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.90	-3.49	-3.1	-0.29	11.00
5570MHz	Pass	4.89	-4.41	-4.16	-1.34	11.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_2TX PSD

5180MHz

29/05/2020

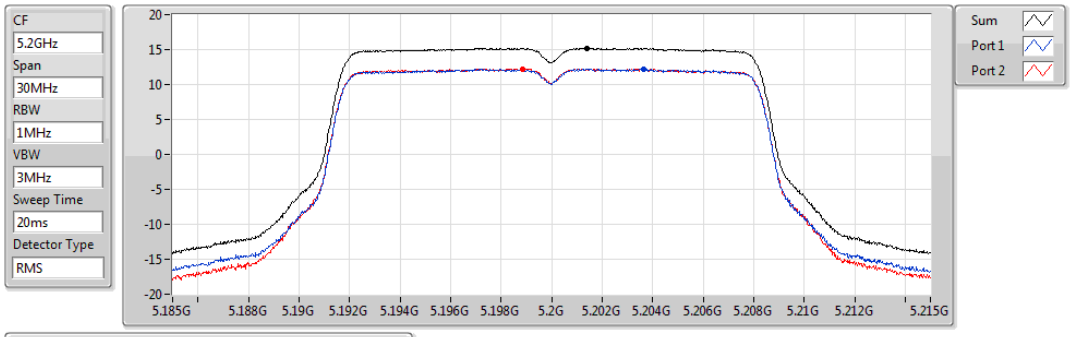


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.38	10.38	7.58	7.28

802.11a_Nss1,(6Mbps)_2TX PSD

5200MHz

29/05/2020

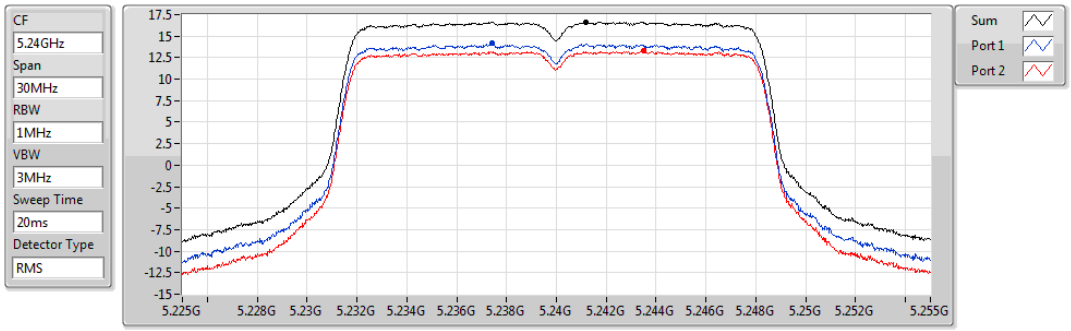


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.22	15.22	12.21	12.25

802.11a_Nss1,(6Mbps)_2TX PSD

5240MHz

29/05/2020

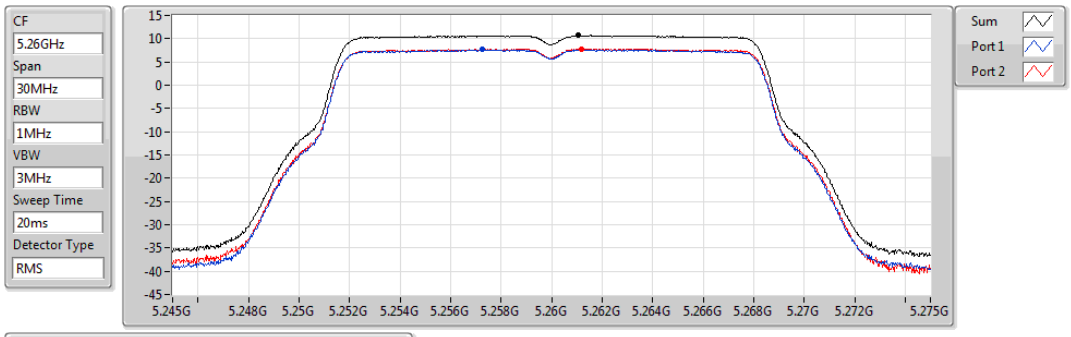


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.66	16.66	14.15	13.26

802.11a_Nss1,(6Mbps)_2TX PSD

5260MHz

29/05/2020

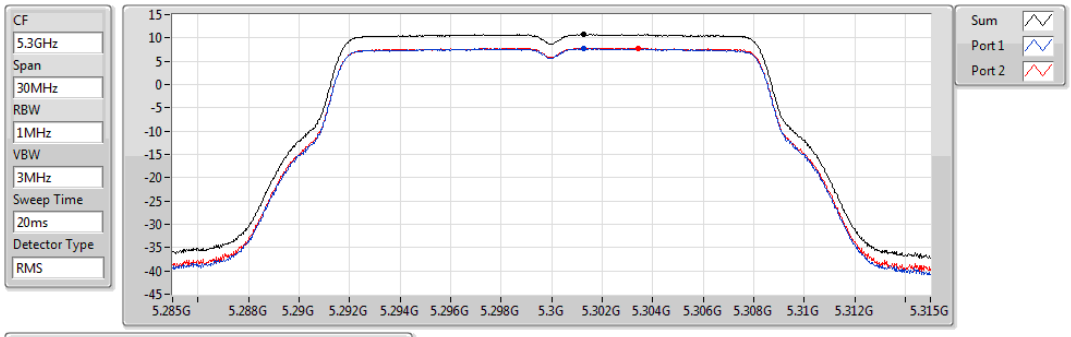


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.68	10.68	7.62	7.79

802.11a_Nss1,(6Mbps)_2TX PSD

5300MHz

29/05/2020

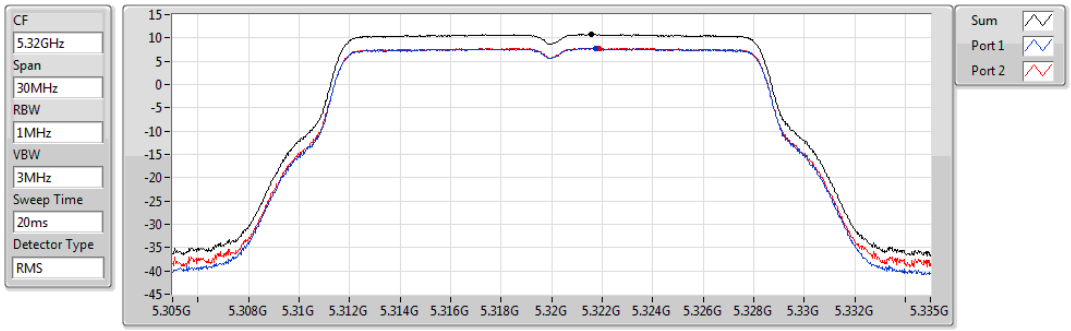


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.79	10.79	7.74	7.85

802.11a_Nss1,(6Mbps)_2TX PSD

5320MHz

29/05/2020

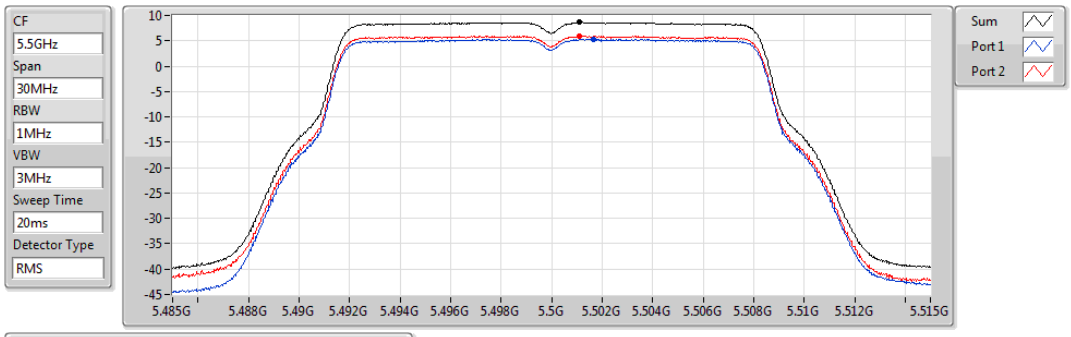


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.75	10.75	7.73	7.84

802.11a_Nss1,(6Mbps)_2TX PSD

5500MHz

29/05/2020

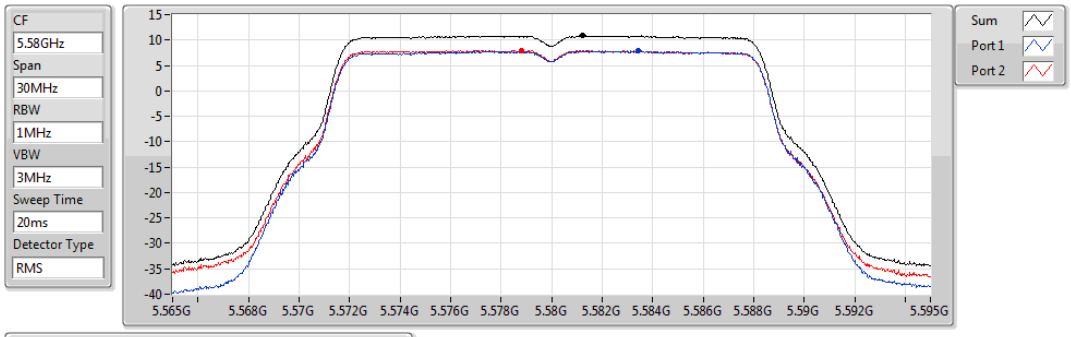


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.65	8.65	5.30	6.00

802.11a_Nss1,(6Mbps)_2TX PSD

5580MHz

29/05/2020

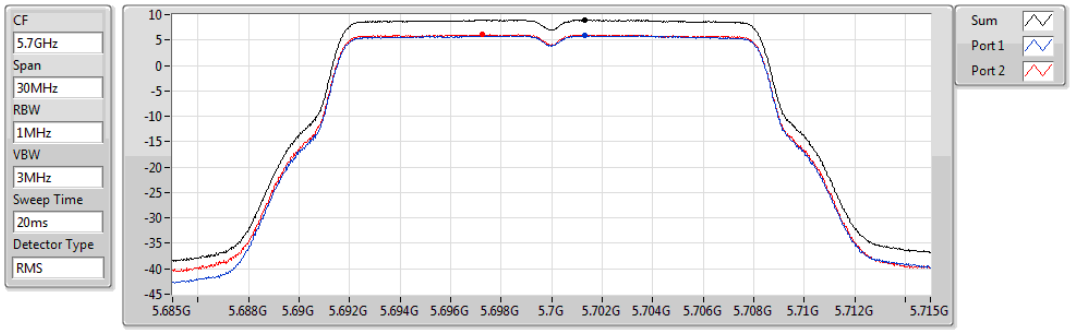


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.87	10.87	7.83	7.95

802.11a_Nss1,(6Mbps)_2TX PSD

5700MHz

29/05/2020

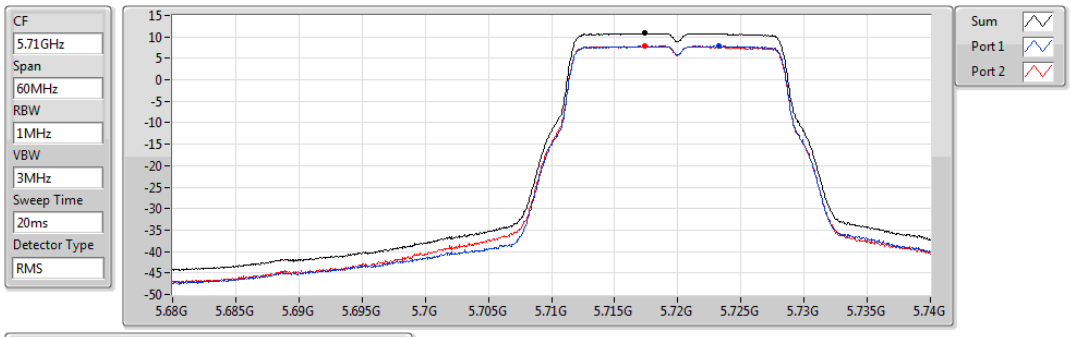


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.97	8.97	5.88	6.10

802.11a_Nss1,(6Mbps)_2TX PSD

5720MHz Straddle 5.47-5.725GHz

29/05/2020

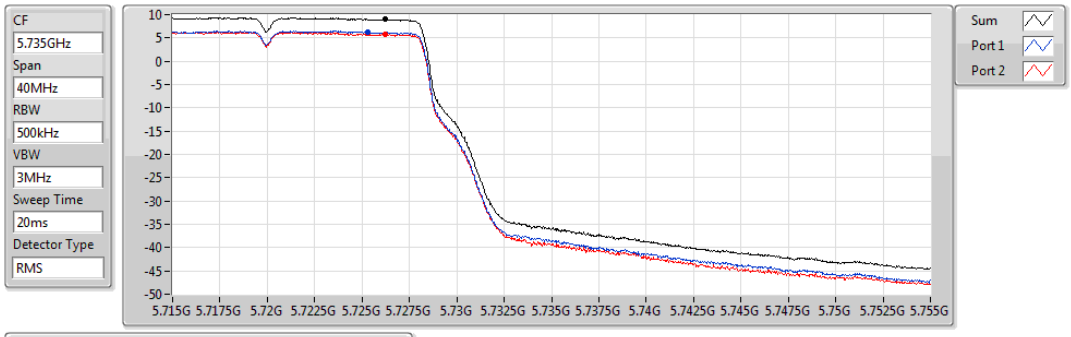


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.83	10.83	7.90	7.83

802.11a_Nss1,(6Mbps)_2TX PSD

5720MHz Straddle 5.725-5.85GHz

29/05/2020

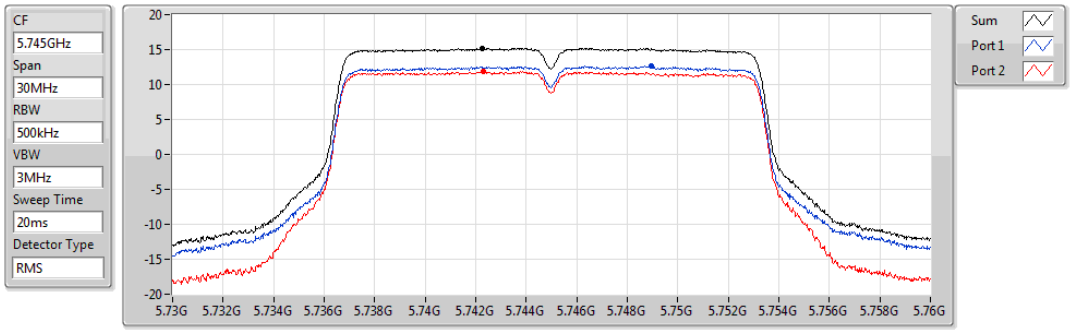


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.03	9.03	6.21	5.84

802.11a_Nss1,(6Mbps)_2TX PSD

5745MHz

29/05/2020

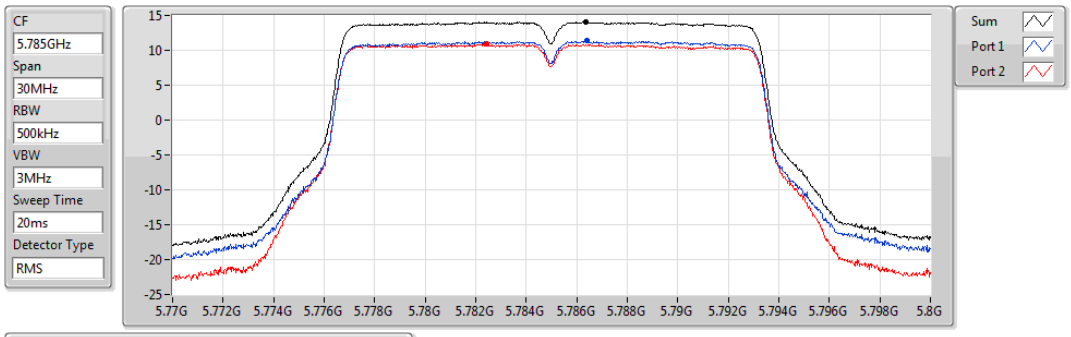


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.17	15.17	12.59	11.88

802.11a_Nss1,(6Mbps)_2TX PSD

5785MHz

29/05/2020

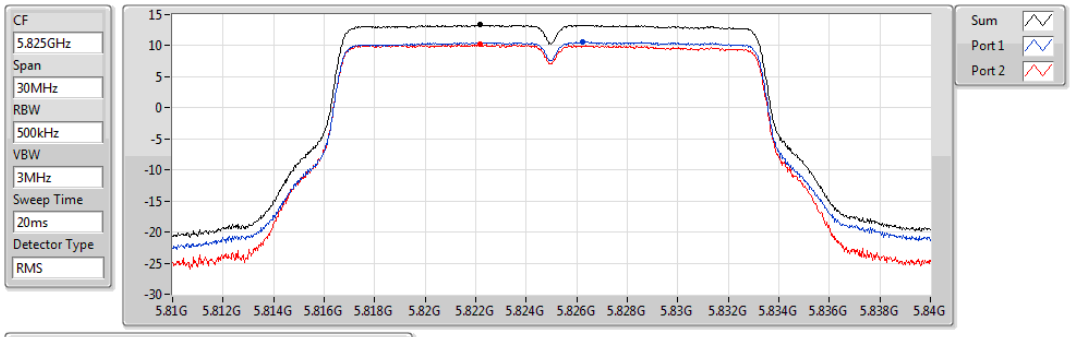


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.06	14.06	11.33	10.88

802.11a_Nss1,(6Mbps)_2TX PSD

5825MHz

29/05/2020

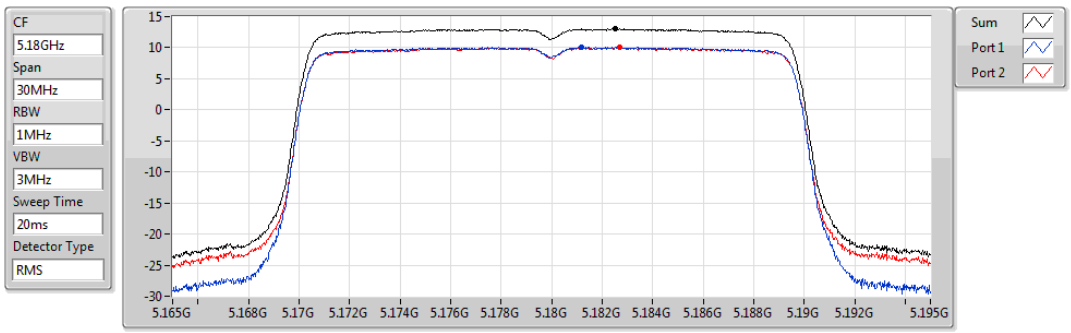


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.34	13.34	10.59	10.24

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5180MHz

21/05/2020

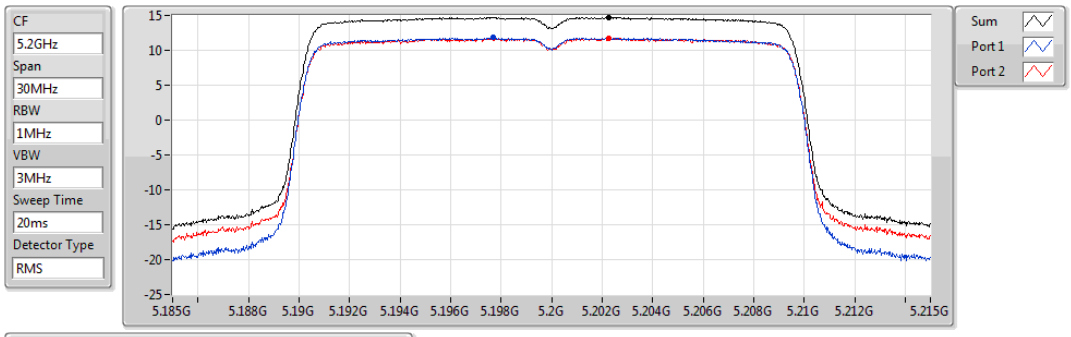


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.01	13.01	10.05	10.03

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5200MHz

21/05/2020

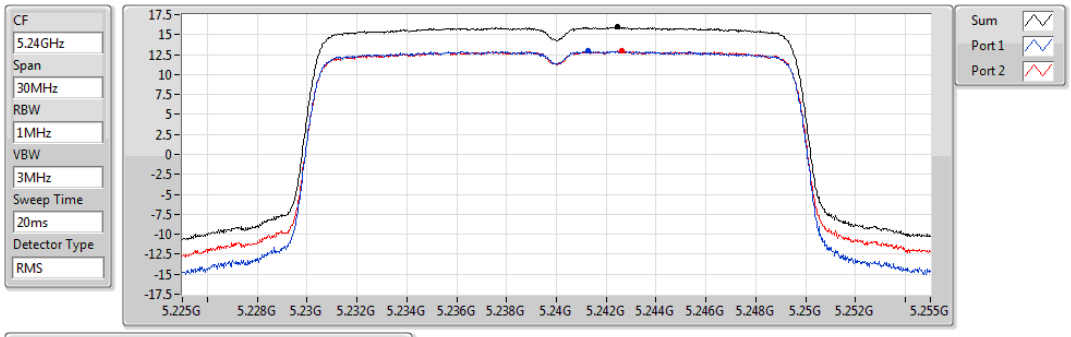


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.75	14.75	11.80	11.73

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5240MHz

22/05/2020

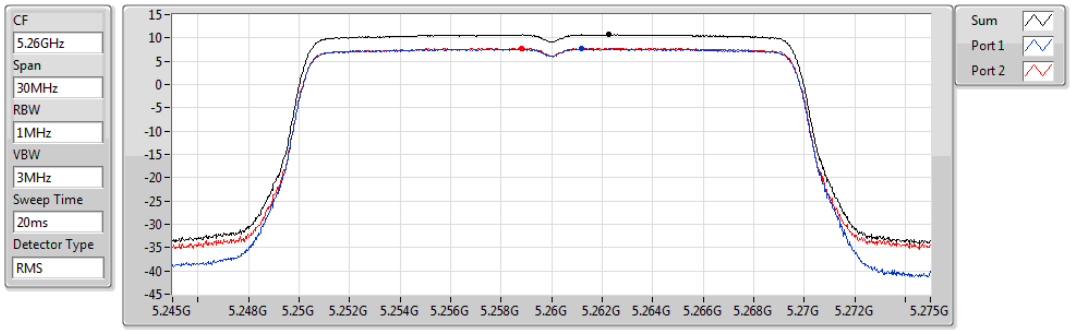


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.93	15.93	12.93	12.93

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5260MHz

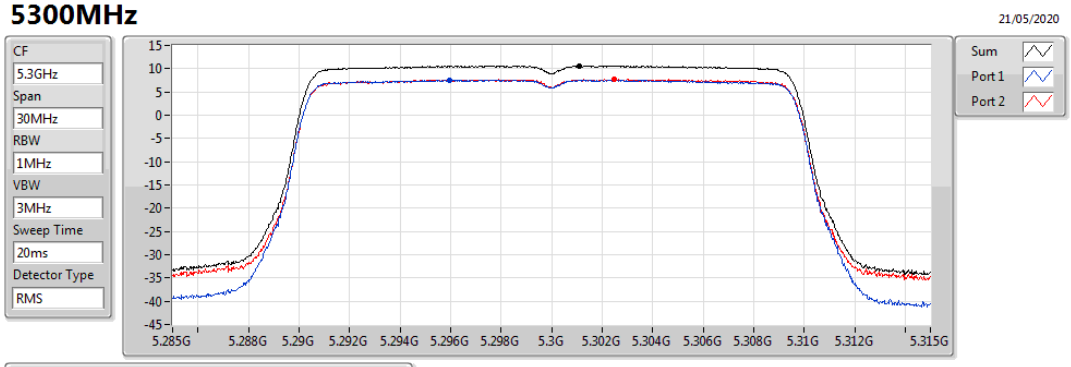
21/05/2020



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.71	10.71	7.65	7.80

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

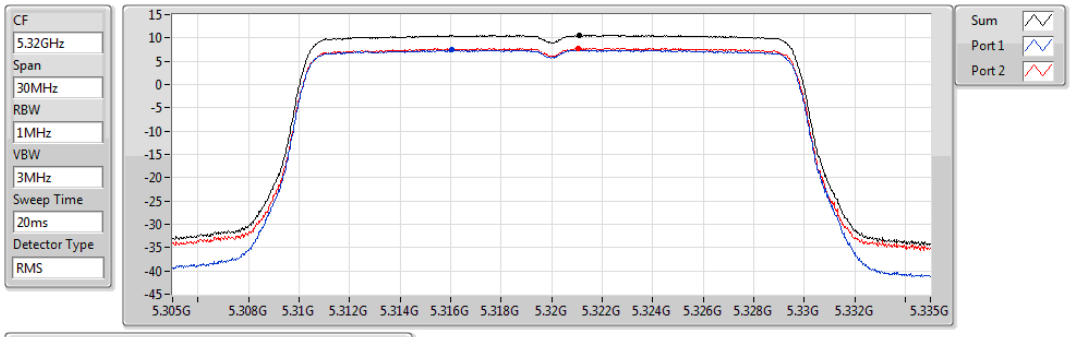
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.56	10.56	7.60	7.72

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

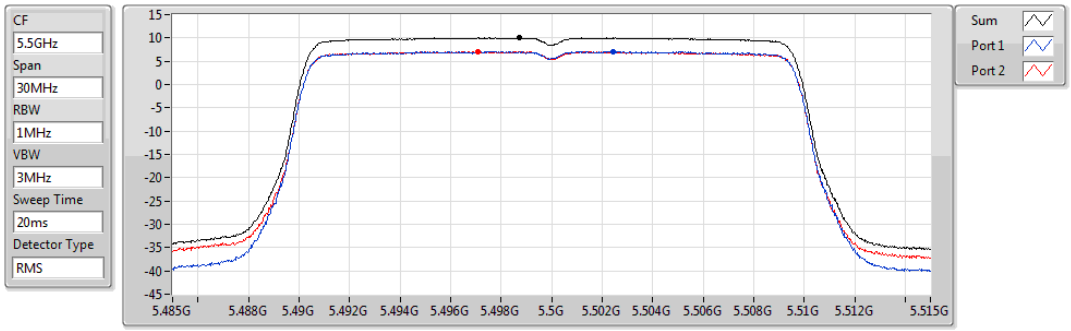
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.57	10.57	7.40	7.77

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

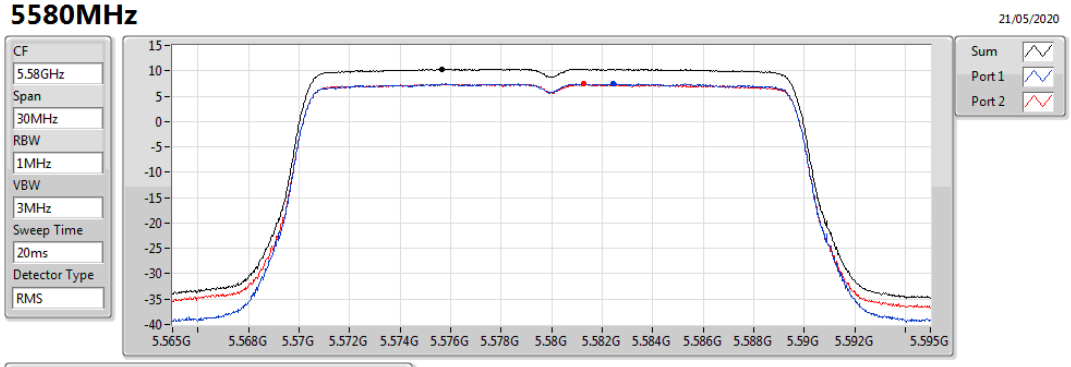
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.01	10.01	7.12	7.08

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

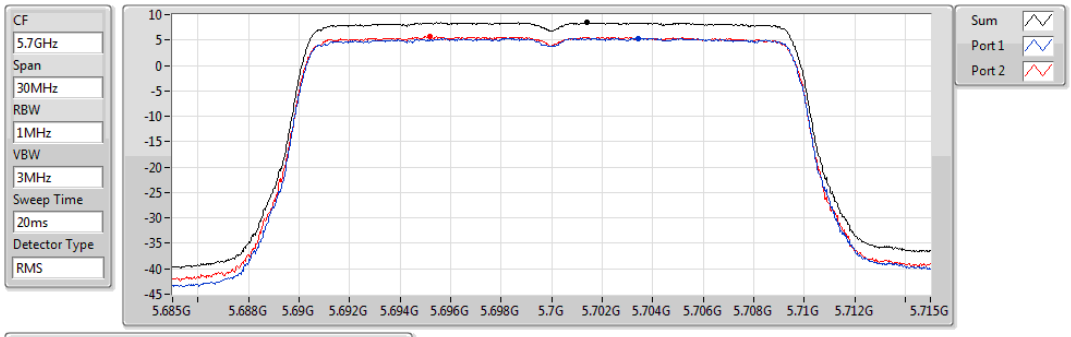
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.35	10.35	7.44	7.41

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

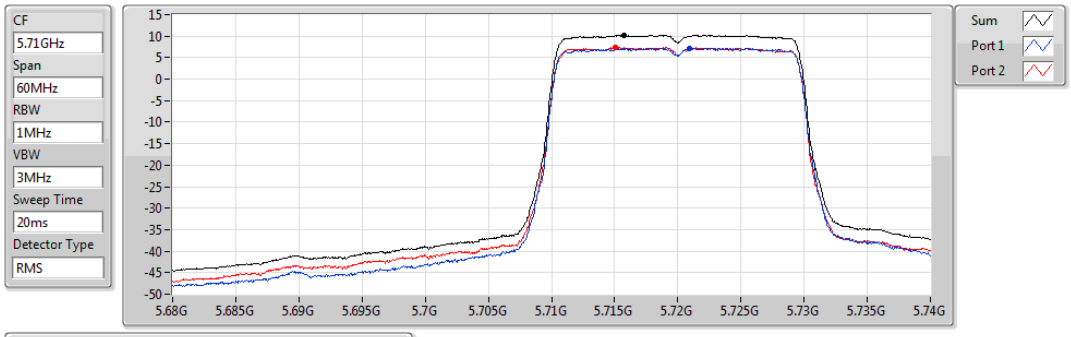
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.41	8.41	5.33	5.64

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5720MHz Straddle 5.47-5.725GHz

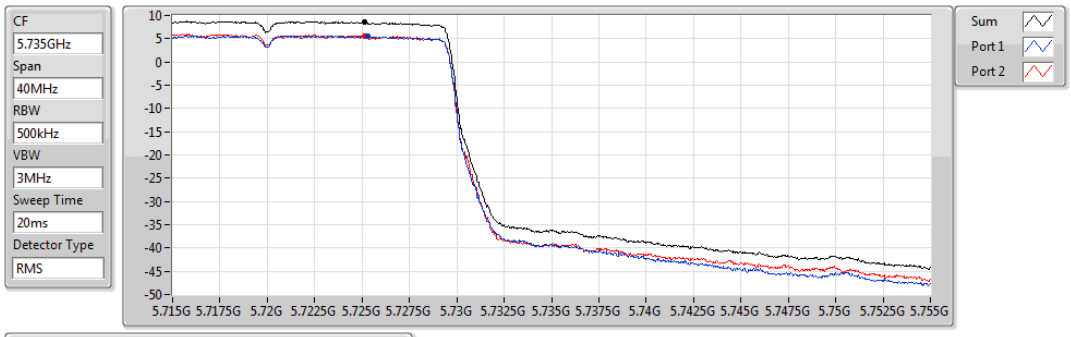


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.20	10.20	7.15	7.34

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5720MHz Straddle 5.725-5.85GHz

22/05/2020

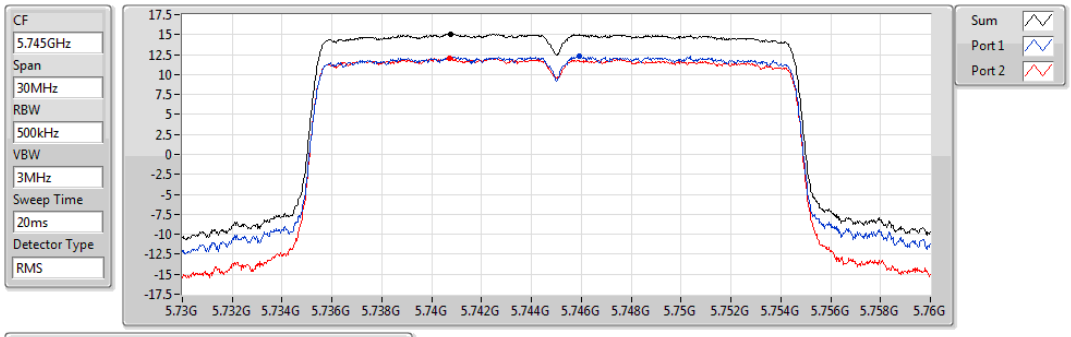


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.50	8.50	5.51	5.55

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5745MHz

21/05/2020

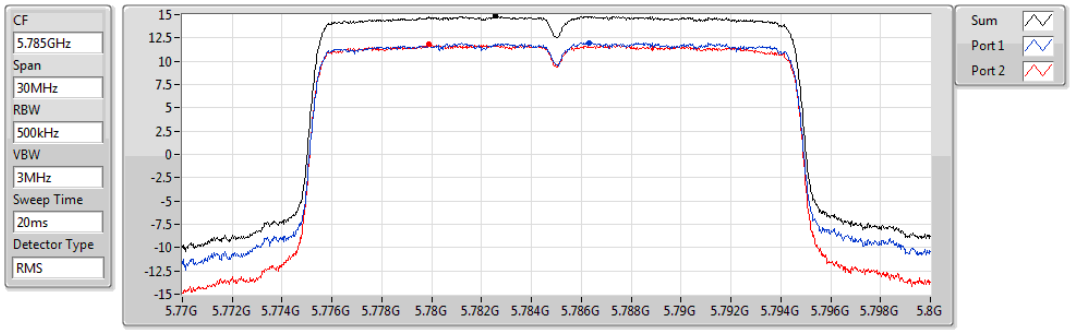


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.10	15.10	12.25	12.05

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

5785MHz

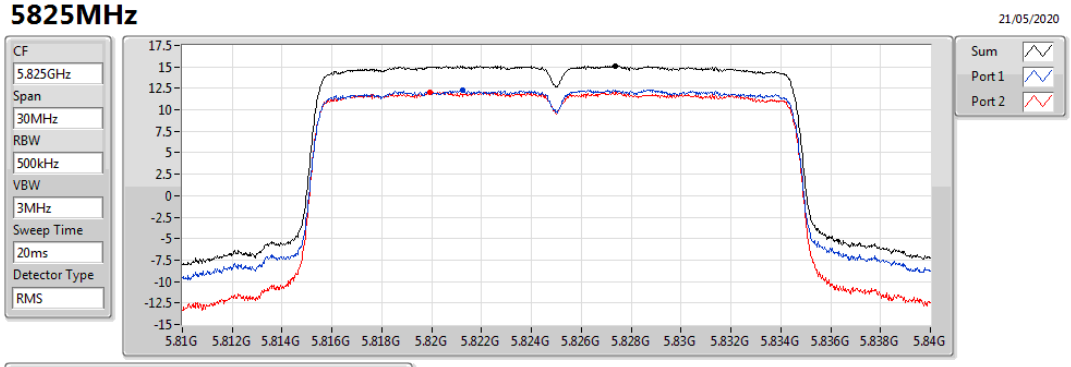
21/05/2020



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.85	14.85	11.99	11.83

802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

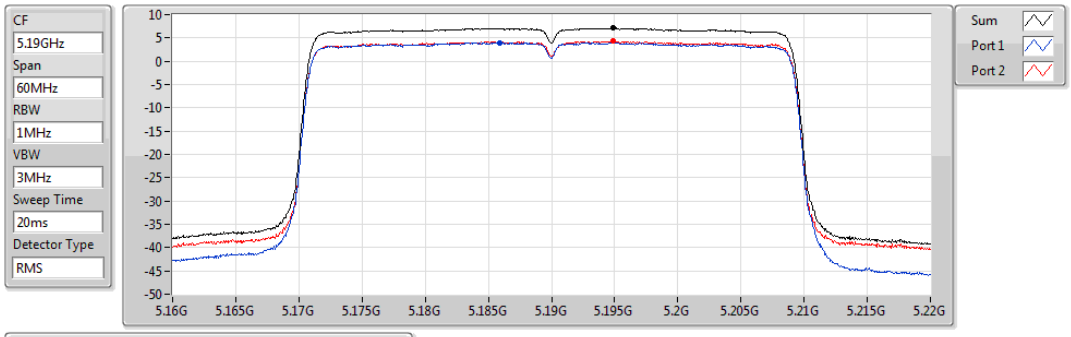
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.15	15.15	12.35	12.07

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

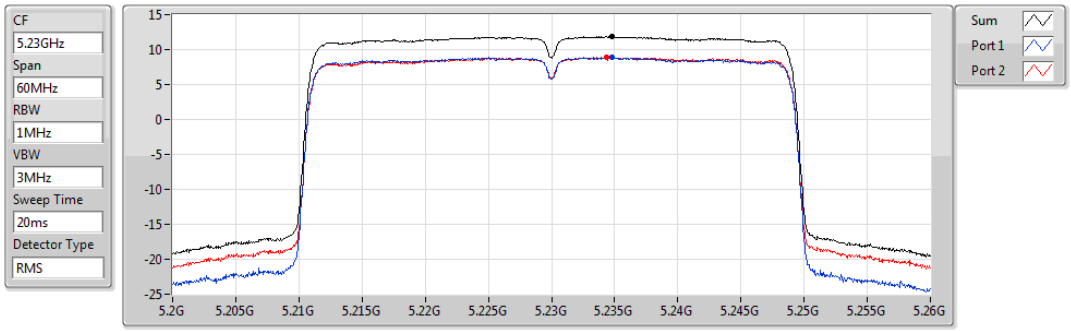
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.15	7.15	3.96	4.33

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

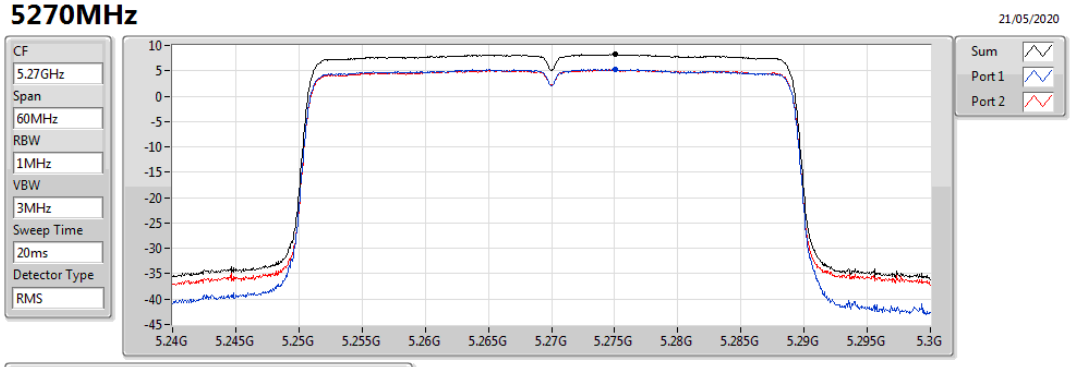
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.87	11.87	8.85	8.91

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

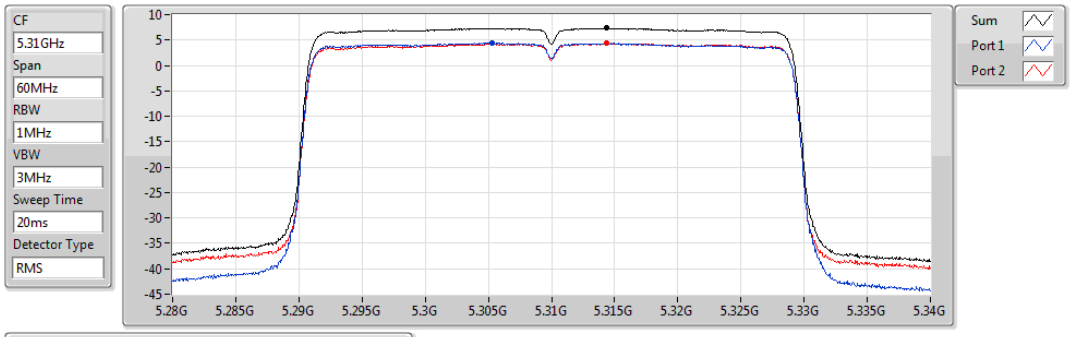
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.25	8.25	5.26	5.21

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

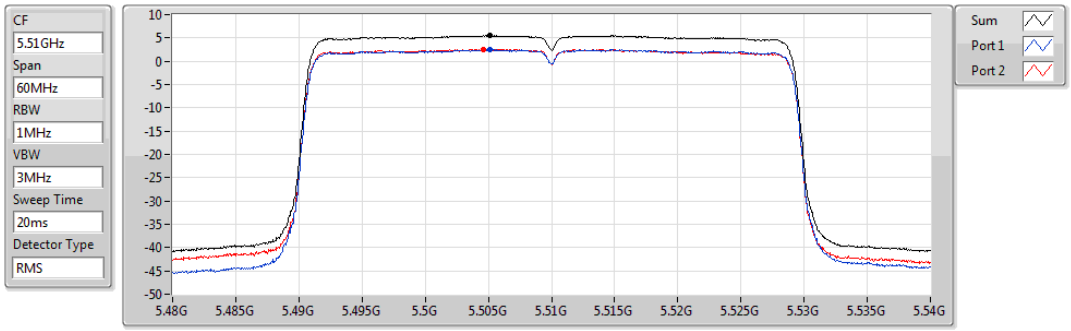
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.32	7.32	4.48	4.35

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

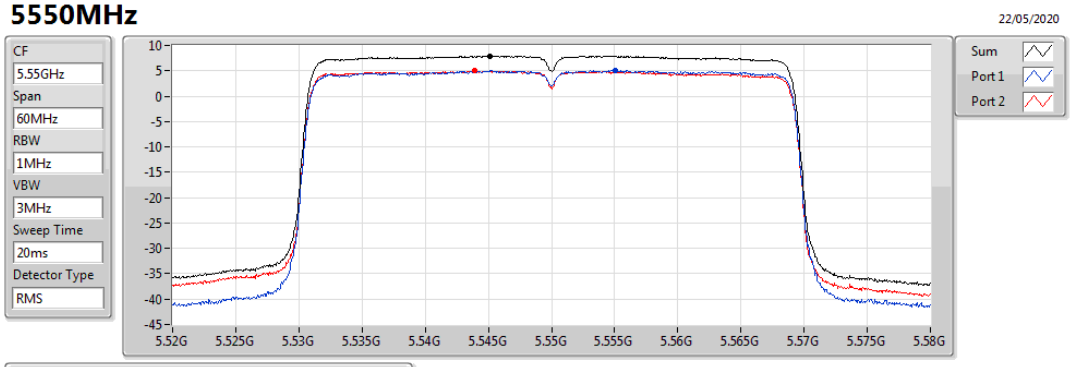
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.51	5.51	2.53	2.54

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

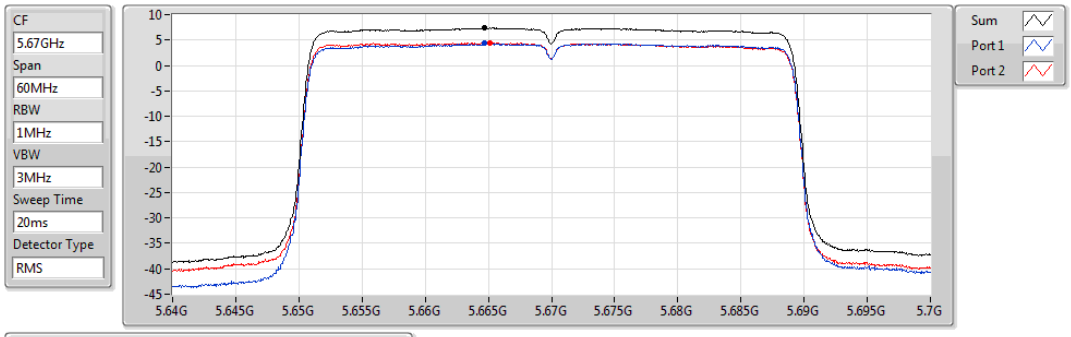
5550MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.95	7.95	5.09	4.98

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

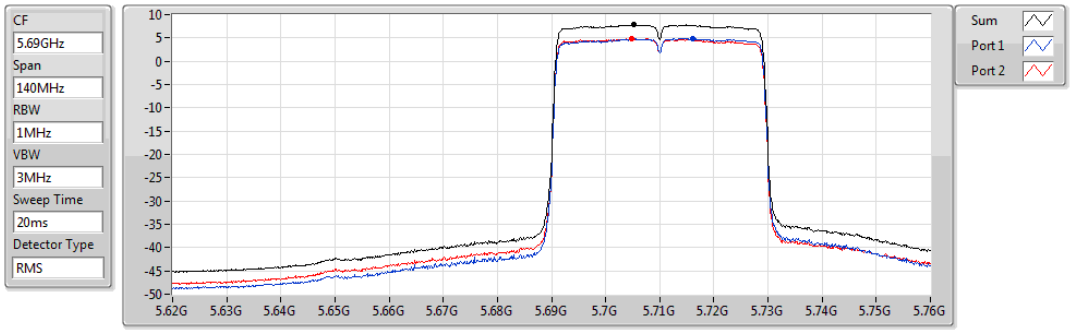
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.39	7.39	4.31	4.48

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

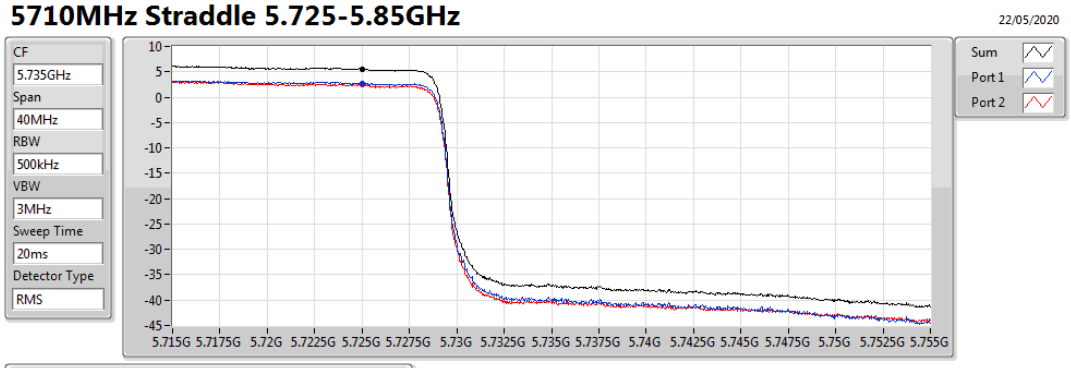
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.82	7.82	4.86	4.86

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

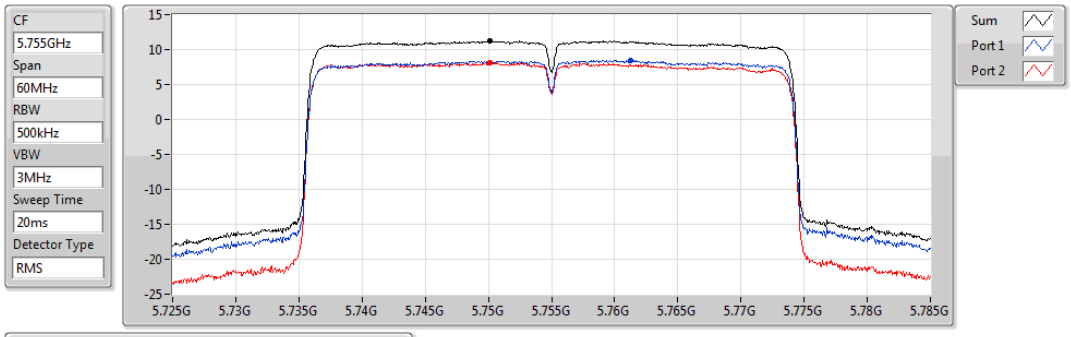
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.58	5.58	2.80	2.43

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

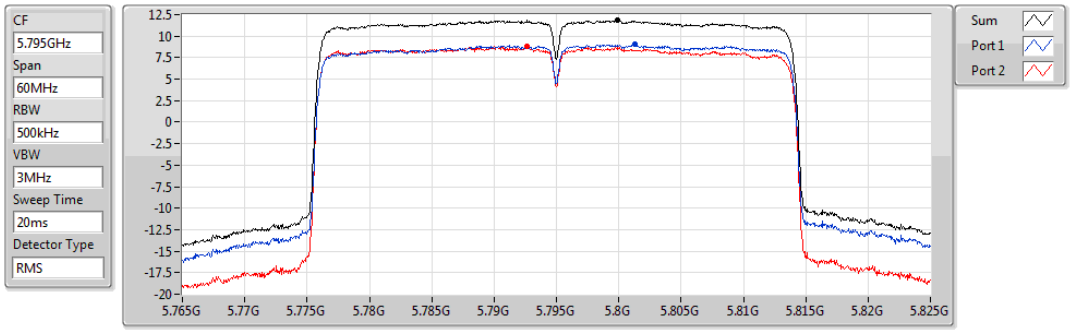
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.25	11.25	8.50	8.17

802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

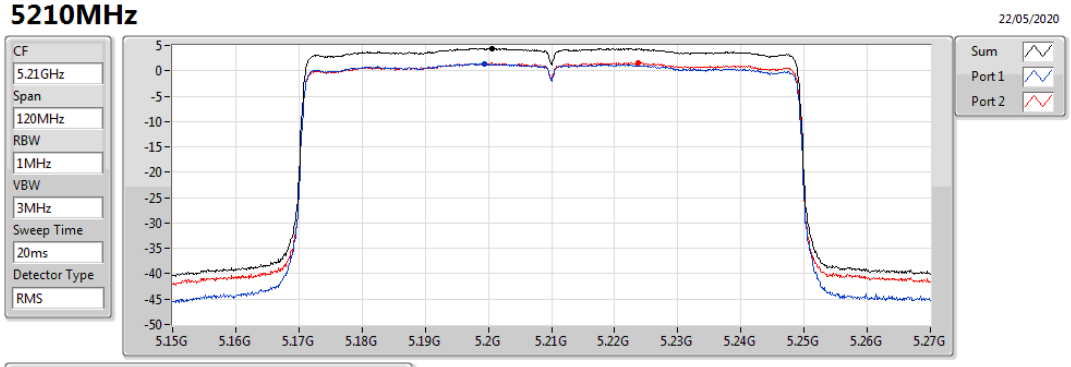
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.84	11.84	9.02	8.84

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

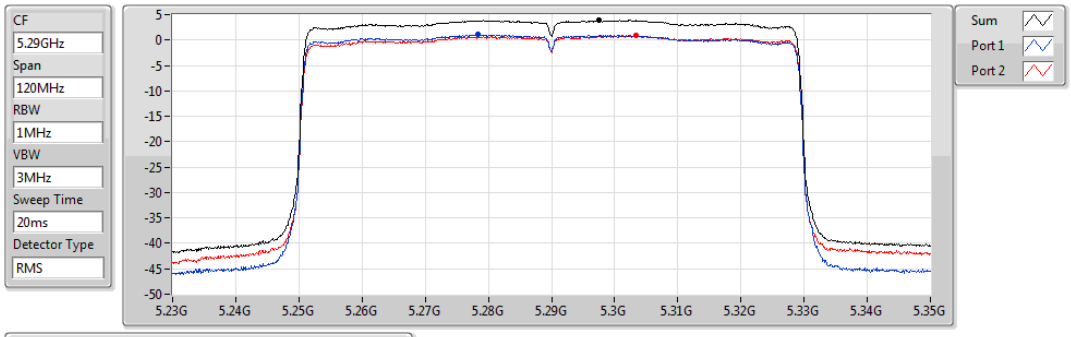
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.38	4.38	1.36	1.58

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

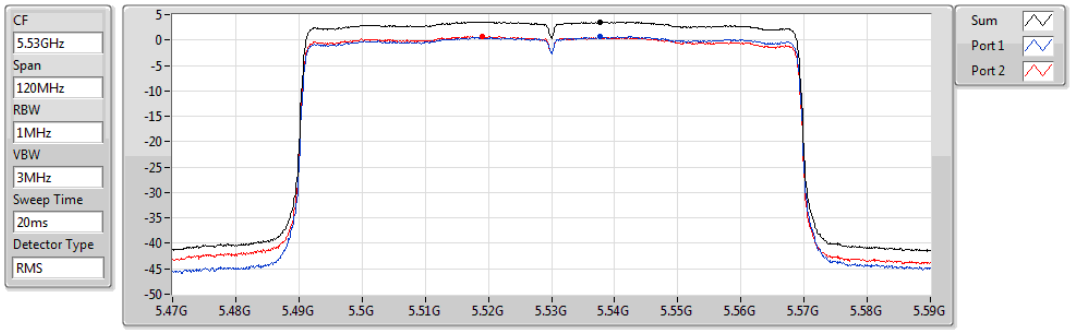
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.90	3.90	1.03	0.89

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

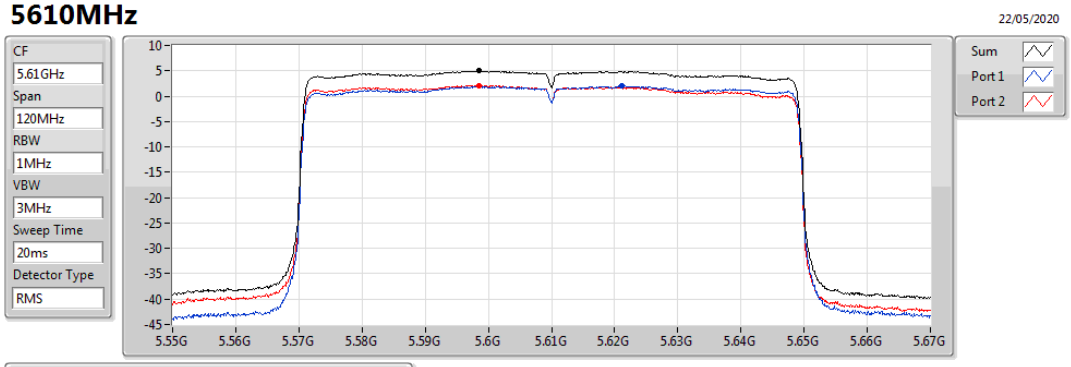
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.60	3.60	0.74	0.72

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

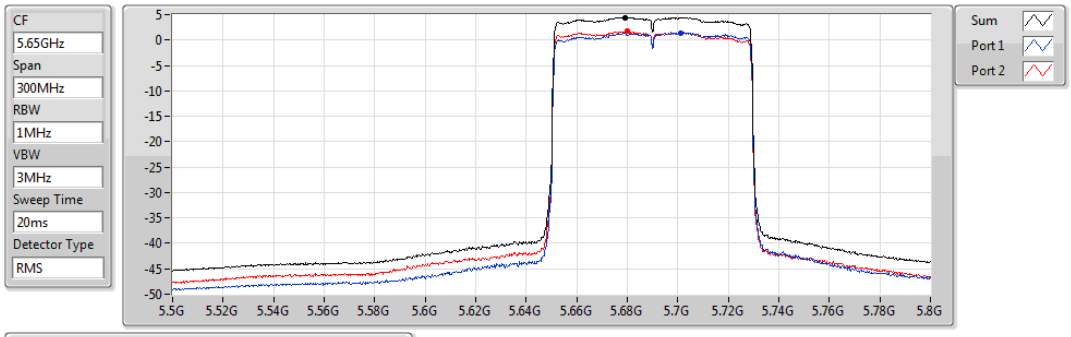
5610MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.03	5.03	2.01	2.11

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

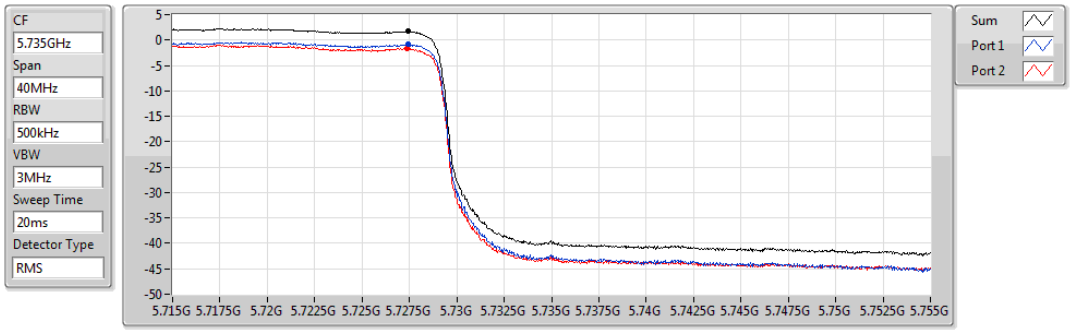
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.46	4.46	1.42	1.69

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

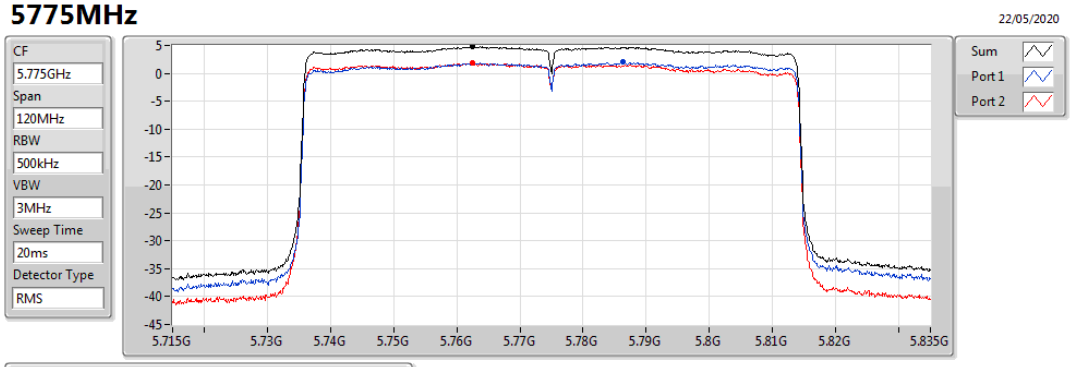
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.73	1.73	-0.86	-1.63

802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

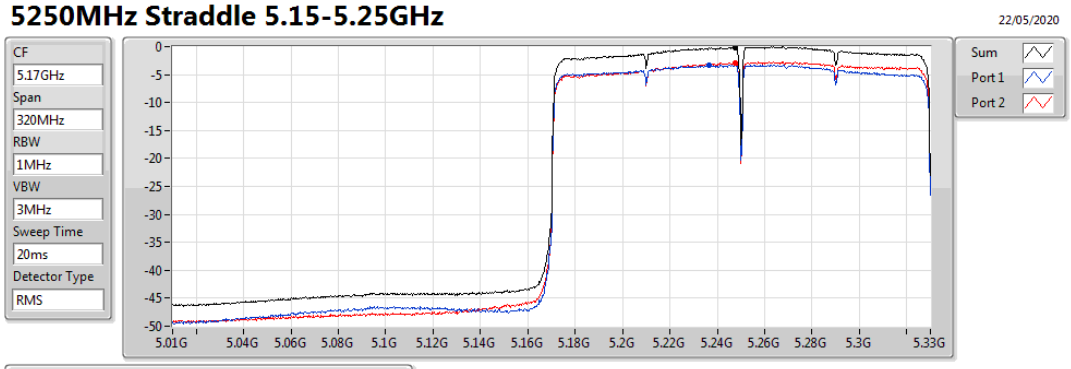
5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.75	4.75	2.03	1.79

802.11ax HEW160-BF_Nss1,(MCS0)_2TX PSD

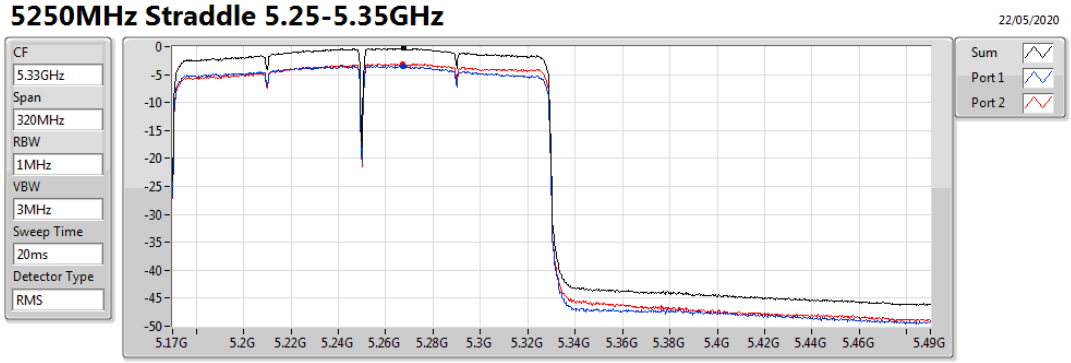
5250MHz Straddle 5.15-5.25GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.13	-0.13	-3.34	-2.91

802.11ax HEW160-BF_Nss1,(MCS0)_2TX PSD

5250MHz Straddle 5.25-5.35GHz

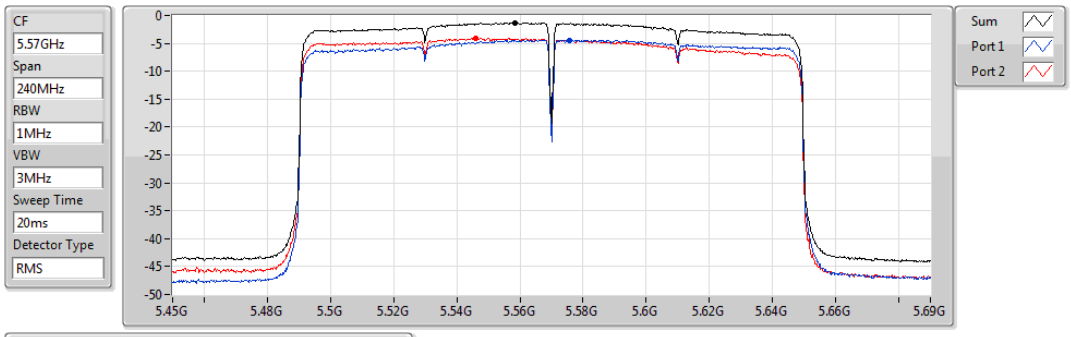


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.29	-0.29	-3.49	-3.10

802.11ax HEW160-BF_Nss1,(MCS0)_2TX **PSD**

5570MHz

22/05/2020



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.34	-1.34	-4.41	-4.16

For 4T1S
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_4TX	15.00
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	14.68
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	12.03
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	5.99
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	1.35
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_4TX	9.06
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	8.57
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	5.9
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.06
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	1.56
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_4TX	9.05
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	8.55
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	6.05
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.08
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-0.55
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	14.57
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	13.36
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	10.47
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	6.8

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	7.86	8.39	8.51	9.07	8.32	14.51	15.14
5200MHz	Pass	7.86	9.48	8.98	9.52	8.44	15.00	15.14
5240MHz	Pass	7.86	9.12	9.03	9.43	8.55	14.96	15.14
5260MHz	Pass	7.91	3.11	3.18	3.25	2.94	9.03	9.09
5300MHz	Pass	7.91	2.94	3.11	3.38	2.62	8.95	9.09
5320MHz	Pass	7.91	3.20	3.18	3.44	2.82	9.06	9.09
5500MHz	Pass	7.90	2.75	3.18	3.08	3.21	8.99	9.10
5580MHz	Pass	7.90	2.81	3.01	3.05	3.17	8.90	9.10
5700MHz	Pass	7.90	3.19	3.41	3.36	2.63	9.05	9.10
5720MHz Straddle 5.47-5.725GHz	Pass	7.90	3.01	3.47	3.12	2.63	8.94	9.10
5720MHz Straddle 5.725-5.85GHz	Pass	7.87	1.67	1.73	1.77	1.05	7.47	28.13
5745MHz	Pass	7.87	8.96	8.86	8.84	7.96	14.56	28.13
5785MHz	Pass	7.87	8.92	8.98	8.80	8.10	14.57	28.13
5825MHz	Pass	7.87	8.92	9.04	8.85	7.84	14.53	28.13
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.86	8.27	8.51	8.4	8.17	14.27	15.14
5200MHz	Pass	7.86	8.39	8.88	8.68	8.6	14.57	15.14
5240MHz	Pass	7.86	8.48	8.86	8.88	8.73	14.68	15.14
5260MHz	Pass	7.91	2.59	2.43	2.65	2.82	8.53	9.09
5300MHz	Pass	7.91	2.63	2.6	2.73	2.57	8.57	9.09
5320MHz	Pass	7.91	2.4	2.37	2.4	2.49	8.33	9.09
5500MHz	Pass	7.90	2.48	2.85	2.64	2.47	8.55	9.10
5580MHz	Pass	7.90	2.48	2.43	2.65	2.64	8.49	9.10
5700MHz	Pass	7.90	2.35	2.56	2.71	2.82	8.53	9.10
5720MHz Straddle 5.47-5.725GHz	Pass	7.90	2.47	2.5	2.66	2.52	8.45	9.10
5720MHz Straddle 5.725-5.85GHz	Pass	7.87	1.13	0.58	1.13	1.33	6.94	28.13
5745MHz	Pass	7.87	7.36	7.21	7.7	7.5	13.36	28.13
5785MHz	Pass	7.87	7.22	7	7.33	7.29	13.07	28.13
5825MHz	Pass	7.87	7.5	7.06	7.46	7.28	13.20	28.13
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.86	3.51	3.66	3.68	3.57	9.53	15.14
5230MHz	Pass	7.86	5.85	6.25	6.29	6.06	12.03	15.14
5270MHz	Pass	7.91	-0.09	-0.11	0	0.1	5.90	9.09
5310MHz	Pass	7.91	-0.1	-0.04	-0.19	-0.06	5.78	9.09
5510MHz	Pass	7.90	-0.24	-0.02	0.1	0.17	5.92	9.10
5550MHz	Pass	7.90	-0.13	-0.29	0.14	0.07	5.84	9.10
5670MHz	Pass	7.90	-0.26	-0.2	-0.35	-0.39	5.66	9.10
5710MHz Straddle 5.47-5.725GHz	Pass	7.90	0.04	-0.01	0.18	0.14	6.05	9.10
5710MHz Straddle 5.725-5.85GHz	Pass	7.87	-1.85	-2.17	-1.89	-2.11	3.98	28.13
5755MHz	Pass	7.87	4.52	4.43	4.61	4.69	10.47	28.13
5795MHz	Pass	7.87	4.41	4.29	4.57	4.47	10.33	28.13
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.86	-0.04	0.14	0.06	0.07	5.99	15.14

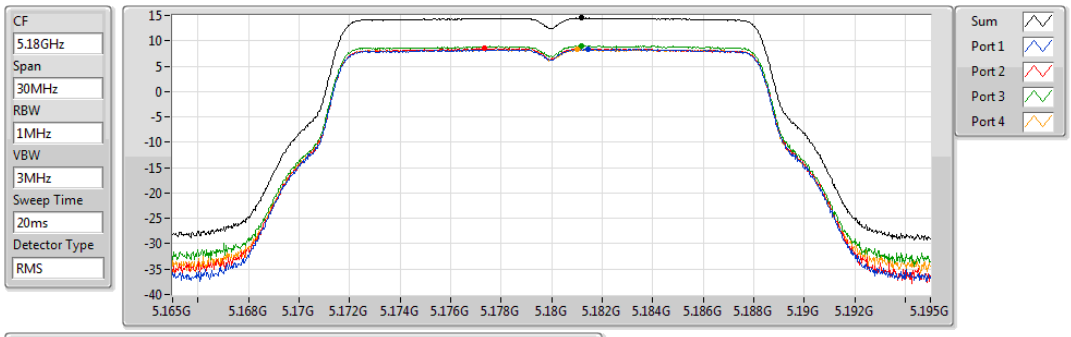
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5290MHz	Pass	7.91	-2.78	-2.98	-2.86	-2.69	3.06	9.09
5530MHz	Pass	7.90	-3.08	-2.98	-2.61	-2.59	3.08	9.10
5610MHz	Pass	7.90	-3.16	-2.8	-2.74	-2.84	3.04	9.10
5690MHz Straddle 5.47-5.725GHz	Pass	7.90	-3.28	-3.18	-2.91	-2.99	2.78	9.10
5690MHz Straddle 5.725-5.85GHz	Pass	7.87	-5.54	-6.45	-6.13	-6.22	-0.10	28.13
5775MHz	Pass	7.87	0.89	0.91	1.05	0.73	6.80	28.13
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	7.86	-4.77	-4.75	-4.36	-4.42	1.35	15.14
5250MHz Straddle 5.25-5.35GHz	Pass	7.91	-4.52	-4.42	-4.34	-4.23	1.56	9.09
5570MHz	Pass	7.90	-6.61	-6.57	-6.46	-6.18	-0.55	9.10

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_4TX PSD

5180MHz

29/05/2020

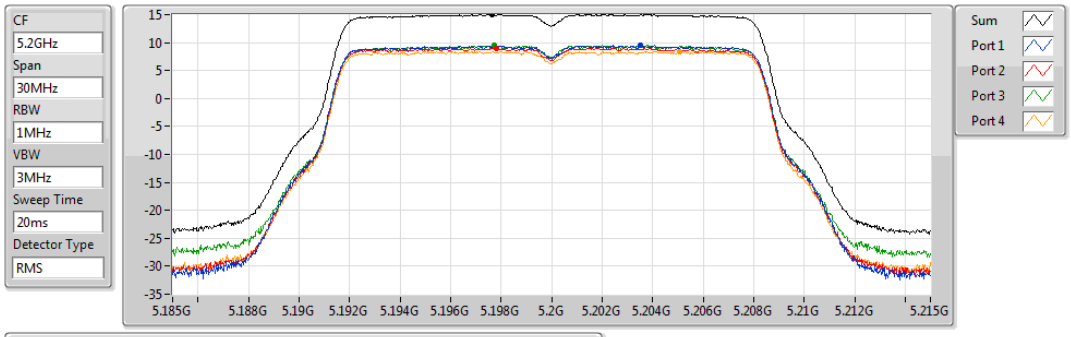


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.51	14.51	8.39	8.51	9.07	8.32

802.11a_Nss1,(6Mbps)_4TX PSD

5200MHz

29/05/2020

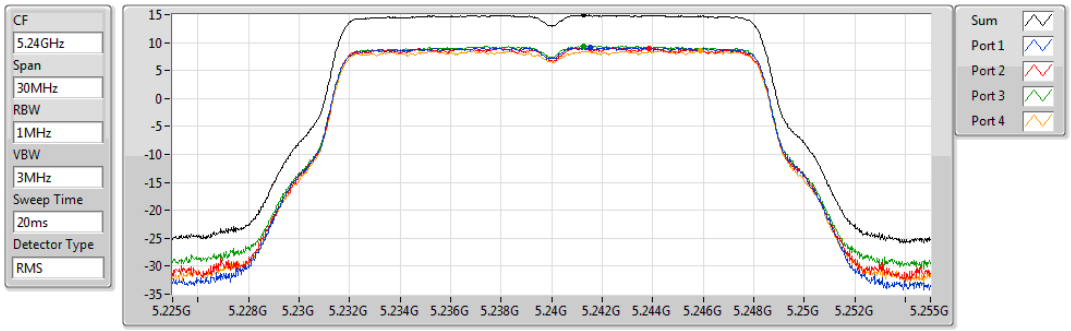


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.00	15.00	9.48	8.98	9.52	8.44

802.11a_Nss1,(6Mbps)_4TX PSD

5240MHz

29/05/2020

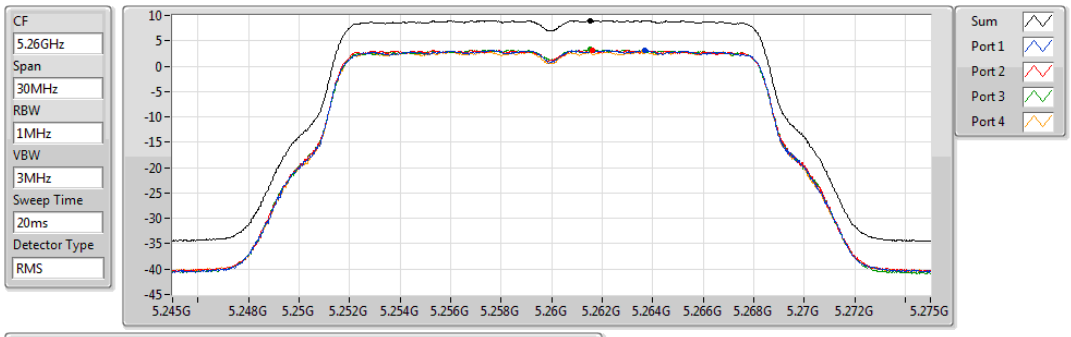


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.96	14.96	9.12	9.03	9.43	8.55

802.11a_Nss1,(6Mbps)_4TX PSD

5260MHz

29/05/2020

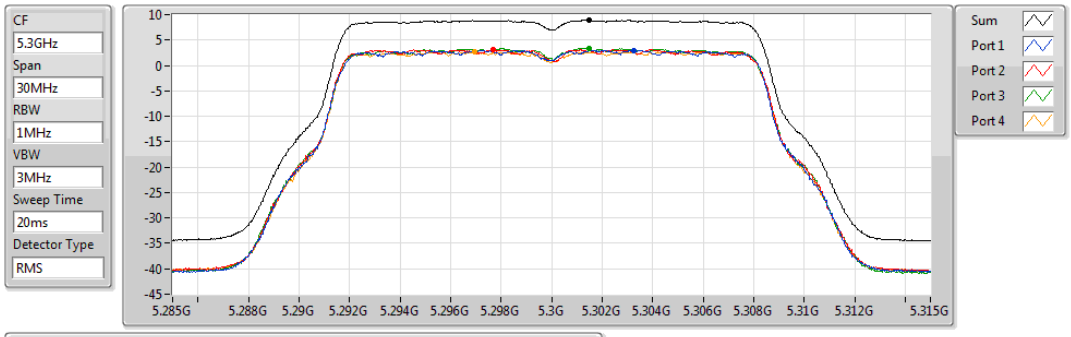


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.03	9.03	3.11	3.18	3.25	2.94

802.11a_Nss1,(6Mbps)_4TX PSD

5300MHz

29/05/2020

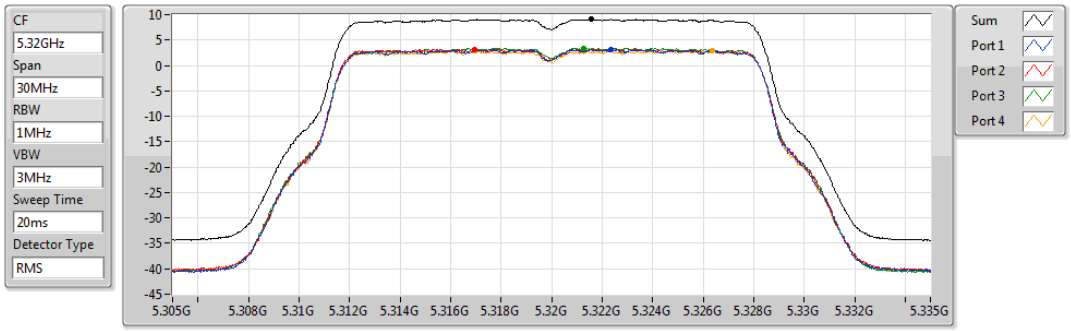


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.95	8.95	2.94	3.11	3.38	2.62

802.11a_Nss1,(6Mbps)_4TX PSD

5320MHz

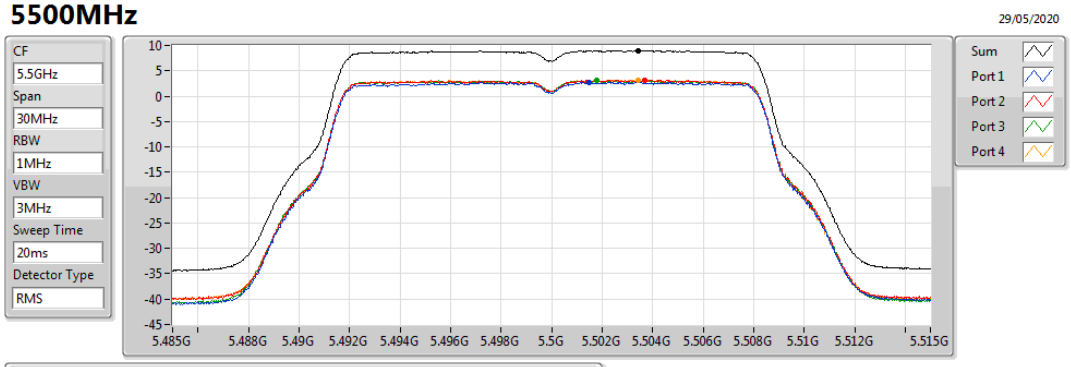
29/05/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.06	9.06	3.20	3.18	3.44	2.82

802.11a_Nss1,(6Mbps)_4TX PSD

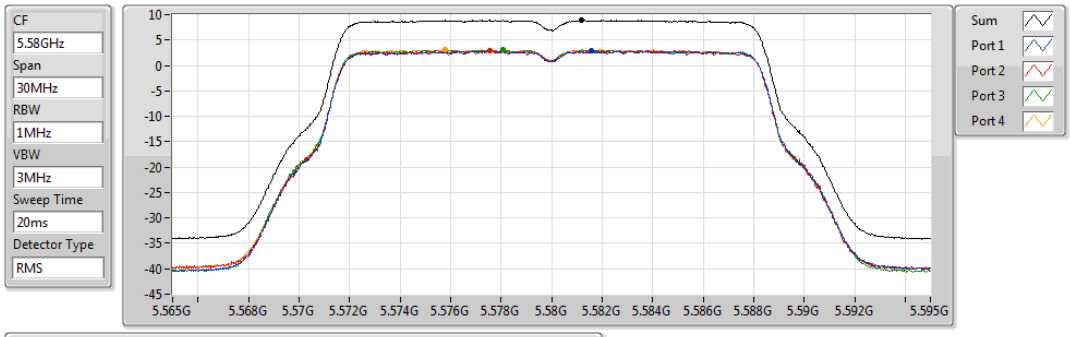
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.99	8.99	2.75	3.18	3.08	3.21

802.11a_Nss1,(6Mbps)_4TX PSD

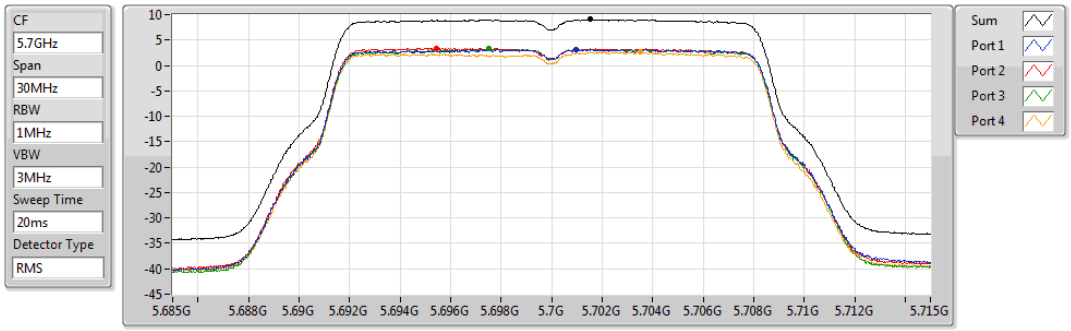
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.90	8.90	2.81	3.01	3.05	3.17

802.11a_Nss1,(6Mbps)_4TX PSD

5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.05	9.05	3.19	3.41	3.36	2.63