FCC RADIO TEST REPORT

FCC ID	:	G954331X
Equipment Name	:	DOCSIS Cable Gateway
Trade Name	:	Technicolor
Model Number	:	CGM4331COM
Applicant / Manufacturer	:	Technicolor Connected Home USA LLC 5030 Sugarloaf Parkway,Building 6, Lawrenceville Georgia,United States,30044
Standard	:	47 CFR FCC Part 15.407

The product was received on Jul. 19, 2019, and testing was started from Jul. 19, 2019 and completed on Nov. 11, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

The test results in this 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
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History of this test report

Report No.	Version	Description	Issued Date
FR971031-02AB	01	Initial issue of report	Nov. 15, 2019

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	15.407(a)	Maximum Conducted Output Power	PASS	-
3.2	15.407(a)	Peak Power Spectral Density	PASS	-
3.3	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

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

Comments and Explanations:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Cindy Peng

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [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	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT20-BF	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW20	20	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW20-BF	20	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT40	40	2TX, 3TX, 4TX
5.15-5.25GHz	802.11n HT40-BF	40	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT40	40	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW40	40	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW40-BF	40	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT80	80	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW80	80	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW80-BF	80	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT160	160	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT160-BF	160	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW160	160	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW160-BF	160	2TX, 3TX, 4TX
5.25-5.35GHz	802.11a	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW20	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT40	40	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT40-BF	40	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT40	40	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW40	40	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX, 3TX, 4TX

5.25-5.35GHz	802.11ac VHT80	80	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW80	80	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT160	160	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT160-BF	160	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW160	160	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW160-BF	160	2TX, 3TX, 4TX
5.47-5.725GHz	802.11a	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW20	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT40	40	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT40-BF	40	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT40	40	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW40	40	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT80	80	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW80	80	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT160	160	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT160-BF	160	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW160	160	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX, 3TX, 4TX
5.725-5.85GHz	802.11a	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW20	20	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	1TX, 2TX, 3TX, 4TX

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11n HT40	40	2TX, 3TX, 4TX
5.725-5.85GHz	802.11n HT40-BF	40	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT40	40	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW40	40	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT80	80	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	1TX, 2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW80	80	2TX, 3TX, 4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	1TX, 2TX, 3TX, 4TX

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 and VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- HEW20, HEW40 and HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector
1	1	-	-	-	-
2	2	-	-	-	-
3	3	-	-	-	-
4	4	-	-	-	-

Number of Transmit Antennas & Bandwidth

Number of Transmit Antennas	1TX				2TX				3TX				4TX			
Bandwidth Mode	20 MHz	40 MHz	80 MHz	160 MHz	20 MHz	40 MHz	80 MHz	160 MHz	20 MHz	40 MHz	80 MHz	160 MHz	20 MHz	40 MHz	80 MHz	160 MHz
802.11a	V	X	X	X	V	X	X	X	V	X	X	X	V	X	X	X
802.11n	V	V	X	X	V	V	X	X	V	V	X	X	V	V	X	X
802.11ac	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
802.11ax	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V

Directional Gain (dBi) for TxBF & SDM mode					
Bandwidth Mode	Frequency	1 Stream 4 TX for TxBF mode	2 Stream 4 TX for TxBF mode	3 Stream 4 TX for TxBF mode	4 Stream 4 TX for SDM mode
20MHz	5180MHz	8.0	5.0	4.6	2.2
	5200MHz	8.0	5.0	4.6	2.2
	5240MHz	8.0	5.0	4.6	2.2
	5260MHz	8.8	5.8	4.9	2.8
	5300MHz	8.8	5.8	4.9	2.8
	5320MHz	8.8	5.8	4.9	2.8
	5500MHz	9.1	6.1	5.2	3.1
	5580MHz	9.1	6.3	5.5	3.3
	5700MHz	9.1	6.3	5.5	3.3
	5720MHz	9.1	6.3	5.5	3.3
	5745MHz	9.1	6.2	5.6	3.2
	5785MHz	9.1	6.2	5.6	3.2
	5825MHz	9.1	6.2	5.6	3.2
40MHz	5190MHz	8.0	5.0	4.6	2.2
	5230MHz	8.0	5.0	4.6	2.2
	5270MHz	8.8	5.8	4.9	2.8
	5310MHz	8.8	5.8	4.9	2.8
	5510MHz	9.1	6.1	5.2	3.1
	5550MHz	9.1	6.1	5.2	3.1
	5670MHz	9.1	6.3	5.5	3.3
	5710MHz	9.1	6.3	5.5	3.3
	5755MHz	9.1	6.2	5.6	3.2
	5795MHz	9.1	6.2	5.6	3.2
80MHz	5210MHz	8.0	5.0	4.6	2.0
	5290MHz	8.8	5.8	4.9	2.8
	5530MHz	9.1	6.1	5.2	3.1
	5610MHz	9.1	6.3	5.5	3.3
	5690MHz	9.1	6.3	5.5	3.3
	5775MHz	9.1	6.2	5.6	3.2
160MHz	5250MHz	8.0	5.0	4.6	2.2
	5570MHz	9.1	6.3	5.5	3.3

Note: The above information was declared by manufacturer.

1.1.3 Mode Test Duty Cycle

For non-beamforming mode:
4 Stream 4 TX for SDM mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20	0.989	0.05	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.971	0.13	952.5u	3k
802.11ac VHT80	0.852	0.7	161.25u	10k
802.11ax HEW20	0.931	0.31	437.5u	3k
802.11ax HEW40	0.898	0.47	261.25u	10k
802.11ax HEW80	0.844	0.74	170u	10k

For beamforming mode:
1 Stream 4 TX for TxBF mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.954	0.2	3.84m	300
802.11ac VHT40-BF	0.959	0.18	3.695m	300
802.11ac VHT80-BF	0.943	0.25	5.105m	300
802.11ax HEW20-BF	0.928	0.32	2.928m	1k
802.11ax HEW40-BF	0.968	0.14	4.36m	300
802.11ax HEW80-BF	0.962	0.17	4.85m	300

2 Stream 4 TX for TxBF mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.956	0.2	3.84m	300
802.11ac VHT40-BF	0.943	0.25	4.61m	300
802.11ac VHT80-BF	0.955	0.2	5.103m	300
802.11ax HEW20-BF	0.953	0.21	4.368m	300
802.11ax HEW40-BF	0.945	0.25	5.085m	300
802.11ax HEW80-BF	0.912	0.4	5.198m	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
	The product has beamforming function for 11n, VHT, 11ax in 2.4GHz and 11n, 11ac, 11ax in 5GHz.			
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
TPC Function	☒	With TPC	☐	Without TPC
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	For non-beamforming mode: accessMTool_3.1.0.1			
	For beamforming mode: Telnet			

Note: The above information was declared by manufacturer.

1.1.5 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR971031AD, FR971031-01

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

Modifications	Performance Checking
Changing the same type antenna with different directional gain (Only for WLAN function).	1. Maximum Conducted Output Power. 2. Power Spectral Density.
	3. Unwanted Emissions below 1GHz. (It was performed according the worst case of original test)
	4. Unwanted Emissions above 1GHz - Band Edge. (After evaluating, 4 Stream 4 TX for SDM mode: 802.11ax HEW20 5180 MHz/5200 MHz/5825 MHz, 802.11ax HEW40 5190 MHz/5230 MHz/5310 MHz/5510 MHz, 802.11ax HEW80 5290 MHz/5530 MHz/5775 MHz, 802.11ax HEW160 5250 MHz/5570 MHz; 1 Stream 4 TX for TxBF mode: 802.11ax HEW20 5180 MHz/5825 MHz, 802.11ax HEW40 5190 MHz/5230 MHz/5310 MHz/5510 MHz/5795 MHz, 802.11ax HEW80 5210 MHz/5530 MHz/5775 MHz, 802.11ax HEW160 5250 MHz/5570 MHz; 2 Stream 4 TX for TxBF mode: 802.11ax HEW20 5180 MHz/5200 MHz/5240 MHz/5700 MHz/5825 MHz, 802.11ax HEW40 5190 MHz/5230 MHz /5510 MHz, 802.11ax HEW80 5210 MHz/5290 MHz/5530 MHz/5775 MHz, 802.11ax HEW160 5250 MHz/5570 MHz were tested.)
	5. Unwanted Emissions above 1GHz - Harmonic. (After evaluating, 1 Stream 4 TX for TxBF mode: 802.11ax HEW20 5580 MHz; 2 Stream 4 TX for TxBF mode: 802.11ax HEW20 5825 MHz were tested)
	6. Radiated Emission Co-location.

1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location							
☐	HWA YA	ADD	:	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)			
		TEL	:	886-3-327-3456	FAX	:	886-3-327-0973
☒	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.			
		TEL	:	886-3-656-9065	FAX	:	886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Eddie Weng	26~27.7°C / 62~64%	Jul. 19, 2019~Nov. 11, 2019
Radiated	03CH05-CB	Cola Fan	23.8~25.8°C / 58~61%	Oct. 30, 2019~Nov. 04, 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
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

For non-beamforming mode:
4 Stream 4 TX for SDM mode for band 1, 4:

Mode	Power Setting
802.11ac VHT20_Nss4,(MCS0)_4TX	-
5180MHz	77
5200MHz	91
5240MHz	94
5745MHz	93
5785MHz	94
5825MHz	93
802.11ax HEW20_Nss4,(MCS0)_4TX	-
5180MHz	77
5200MHz	91
5240MHz	94
5745MHz	93
5785MHz	94
5825MHz	93
802.11ac VHT40_Nss4,(MCS0)_4TX	-
5190MHz	64
5230MHz	86
5755MHz	92
5795MHz	92
802.11ax HEW40_Nss4,(MCS0)_4TX	-
5190MHz	64
5230MHz	86
5755MHz	92
5795MHz	92
802.11ac VHT80_Nss4,(MCS0)_4TX	-
5210MHz	68
5775MHz	81
802.11ax HEW80_Nss4,(MCS0)_4TX	-
5210MHz	68
5775MHz	81

4 Stream 4 TX for SDM mode for 160MHz and band 2, 3:

Mode	Power Setting
802.11ac VHT20_Nss4,(MCS0)_4TX	-
5260MHz	72
5300MHz	71
5320MHz	70
5500MHz	68
5580MHz	69
5700MHz	70
5720MHz Straddle 5.47-5.725GHz	71
5720MHz Straddle 5.725-5.85GHz	71
802.11ax HEW20_Nss4,(MCS0)_4TX	-
5260MHz	72
5300MHz	71
5320MHz	70
5500MHz	68
5580MHz	69
5700MHz	70
5720MHz Straddle 5.47-5.725GHz	71
5720MHz Straddle 5.725-5.85GHz	71
802.11ac VHT40_Nss4,(MCS0)_4TX	-
5270MHz	71
5310MHz	70
5510MHz	68
5550MHz	69
5670MHz	70
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
802.11ax HEW40_Nss4,(MCS0)_4TX	-
5270MHz	71
5310MHz	70
5510MHz	68
5550MHz	69
5670MHz	70
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
802.11ac VHT80_Nss4,(MCS0)_4TX	-
5290MHz	68

Mode	Power Setting
5530MHz	70
5610MHz	70
5690MHz Straddle 5.47-5.725GHz	71
5690MHz Straddle 5.725-5.85GHz	71
802.11ax HEW80_Nss4,(MCS0)_4TX	-
5290MHz	68
5530MHz	70
5610MHz	70
5690MHz Straddle 5.47-5.725GHz	71
5690MHz Straddle 5.725-5.85GHz	71
802.11ac VHT160_Nss4,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	54
5250MHz Straddle 5.25-5.35GHz	54
5570MHz	56
802.11ax HEW160_Nss4,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	54
5250MHz Straddle 5.25-5.35GHz	54
5570MHz	58

For beamforming mode:
1 Stream 4 TX for TxBF mode for band 1, 4:

Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5180MHz	69
5200MHz	87
5240MHz	86
5745MHz	82
5785MHz	83
5825MHz	83
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	69
5200MHz	87
5240MHz	86
5745MHz	82
5785MHz	83
5825MHz	83
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5190MHz	59
5230MHz	85
5755MHz	82
5795MHz	83
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	59
5230MHz	85
5755MHz	82
5795MHz	83
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5210MHz	67
5775MHz	78
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	69
5775MHz	78

1 Stream 4 TX for TxBF mode for 160MHz and band 2, 3:

Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5260MHz	57
5300MHz	57
5320MHz	62
5500MHz	56
5580MHz	55
5700MHz	58
5720MHz Straddle 5.47-5.725GHz	66
5720MHz Straddle 5.725-5.85GHz	66
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	57
5300MHz	57
5320MHz	62
5500MHz	56
5580MHz	55
5700MHz	58
5720MHz Straddle 5.47-5.725GHz	66
5720MHz Straddle 5.725-5.85GHz	66
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5270MHz	60
5310MHz	57
5510MHz	56
5550MHz	56
5670MHz	58
5710MHz Straddle 5.47-5.725GHz	60
5710MHz Straddle 5.725-5.85GHz	60
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	60
5310MHz	57
5510MHz	56
5550MHz	56
5670MHz	58
5710MHz Straddle 5.47-5.725GHz	60
5710MHz Straddle 5.725-5.85GHz	60
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5290MHz	56

Mode	Power Setting
5530MHz	56
5610MHz	58
5690MHz Straddle 5.47-5.725GHz	60
5690MHz Straddle 5.725-5.85GHz	60
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	56
5530MHz	56
5610MHz	58
5690MHz Straddle 5.47-5.725GHz	60
5690MHz Straddle 5.725-5.85GHz	60
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	56
5250MHz Straddle 5.25-5.35GHz	56
5570MHz	50
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	56
5250MHz Straddle 5.25-5.35GHz	56
5570MHz	50

2 Stream 4 TX for TxBF mode for band 1, 4:

Mode	Power Setting
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-
5180MHz	75
5200MHz	90
5240MHz	90
5745MHz	94
5785MHz	94
5825MHz	94
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-
5190MHz	62
5230MHz	86
5755MHz	92
5795MHz	92
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-
5210MHz	64
5775MHz	78
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5180MHz	75
5200MHz	90
5240MHz	90
5745MHz	94
5785MHz	94
5825MHz	94
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5190MHz	62
5230MHz	86
5755MHz	92
5795MHz	92
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5210MHz	64
5775MHz	78

2 Stream 4 TX for TxBF mode for 160MHz and band 2, 3:

Mode	Power Setting
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-
5260MHz	72
5300MHz	72
5320MHz	70
5500MHz	69
5580MHz	67
5700MHz	62
5720MHz Straddle 5.47-5.725GHz	70
5720MHz Straddle 5.725-5.85GHz	70
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-
5270MHz	71
5310MHz	71
5510MHz	56
5550MHz	68
5670MHz	68
5710MHz Straddle 5.47-5.725GHz	70
5710MHz Straddle 5.725-5.85GHz	70
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-
5290MHz	63
5530MHz	58
5610MHz	66
5690MHz Straddle 5.47-5.725GHz	70
5690MHz Straddle 5.725-5.85GHz	70
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	59
5250MHz Straddle 5.25-5.35GHz	59
5570MHz	52
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5260MHz	72
5300MHz	72
5320MHz	72
5500MHz	69
5580MHz	67
5700MHz	62
5720MHz Straddle 5.47-5.725GHz	70
5720MHz Straddle 5.725-5.85GHz	70

Mode	Power Setting
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5270MHz	71
5310MHz	71
5510MHz	56
5550MHz	68
5670MHz	68
5710MHz Straddle 5.47-5.725GHz	70
5710MHz Straddle 5.725-5.85GHz	70
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5290MHz	63
5530MHz	58
5610MHz	66
5690MHz Straddle 5.47-5.725GHz	70
5690MHz Straddle 5.725-5.85GHz	70
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	59
5250MHz Straddle 5.25-5.35GHz	59
5570MHz	52

Note:
- 11a CDD、SDM modes can be covered by 11ac 20M SDM 4T/4S mode.
- 4T3S TxBF modes can be covered by 4T/2S TxBF mode.
- VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
- There are two functions of EUT, one is beamforming function, and the other is non-beamforming function for for 11n, VHT, 11ax in 2.4GHz and 11n, 11ac, 11ax in 5GHz. All test results were recorded in the report.

2.2 The Worst Case Measurement Configuration

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
There are two adapters, one is adapter 1 and the other is adapter 2 Adapter 2 generated the worst test result for original test. Unwanted Emissions below 1GHz was performed according the worst case of original test.	
1	EUT + Adapter 2: WLAN 2.4GHz on only
2	EUT + Adapter 2: WLAN 5Hz on only
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix D for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
2	WLAN 5GHz + Zigbee + Bluetooth
Refer to Sporton Test Report No.: FA971031-02 for Co-location RF Exposure Evaluation.	

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

2.3 EUT Operation during Test

For CTX Mode:

For non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

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

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
No.	**Equipment Name**	**Brand Name**	**Model Name**	**Rating**
1	Adapter 1	AcBel	ADK002	INPUT: 100-120V ~50/60Hz, 1.5A, OUTPUT: 12V, 4.6A
2	Adapter 2	Netbit	NBC56A120460VU	INPUT: 100-120V ~50/60Hz, 1.5A, OUTPUT: 12V, 4.6A

2.5 Support Equipment

For Radiated (below 1GHz):

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

For Radiated (above 1GHz) and RF Conducted:

For non-beamforming mode:

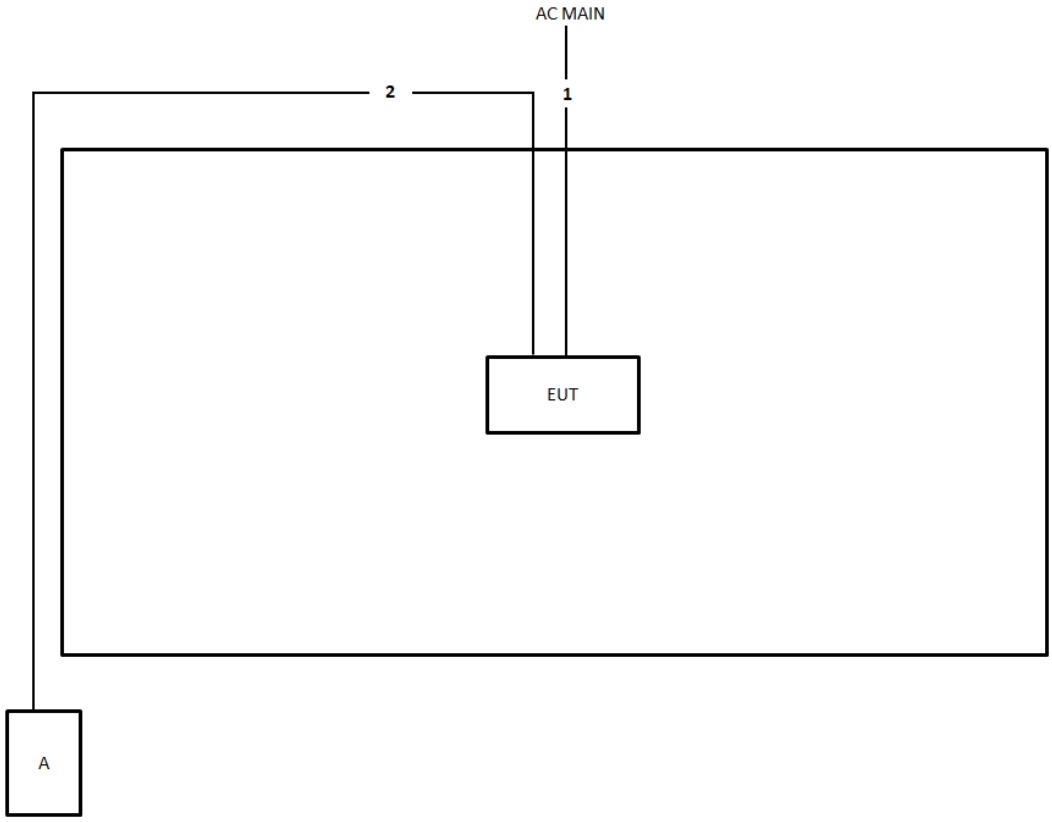
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A

For beamforming mode:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	NA
B	NB	DELL	E4300	NA
C	AP (RX Device)	ASUS	RT-AX88U	N/A

2.6 Test Setup Diagram

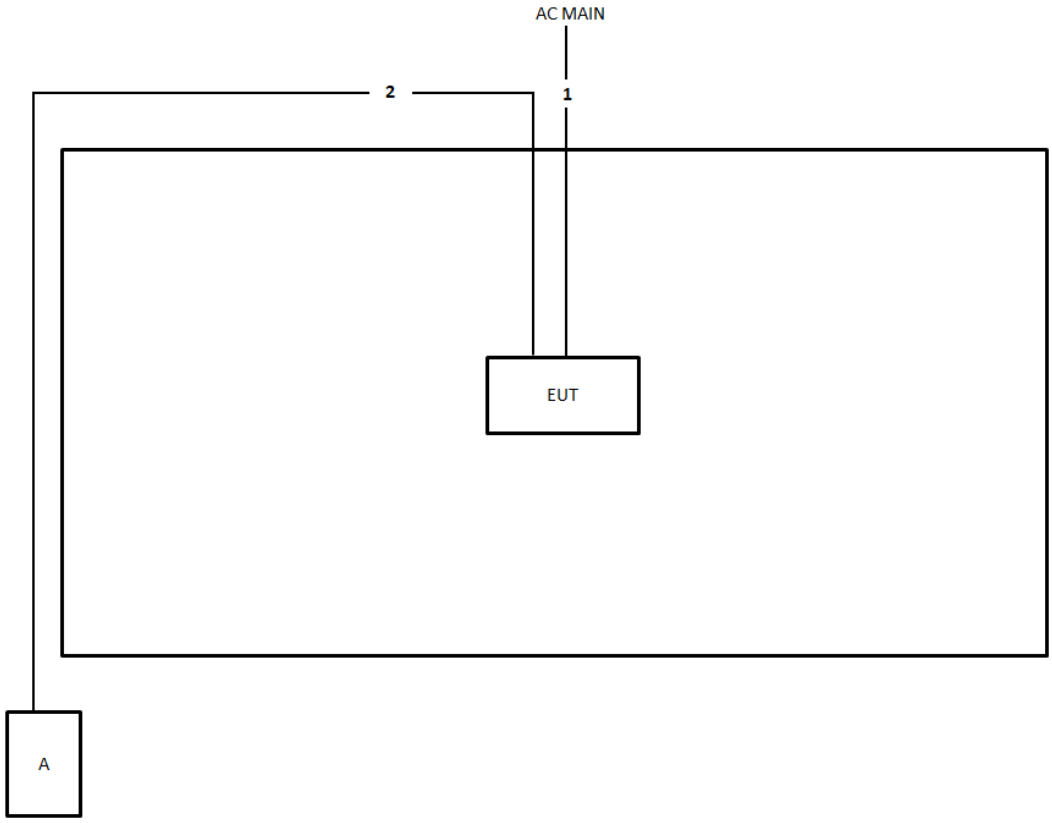
Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz

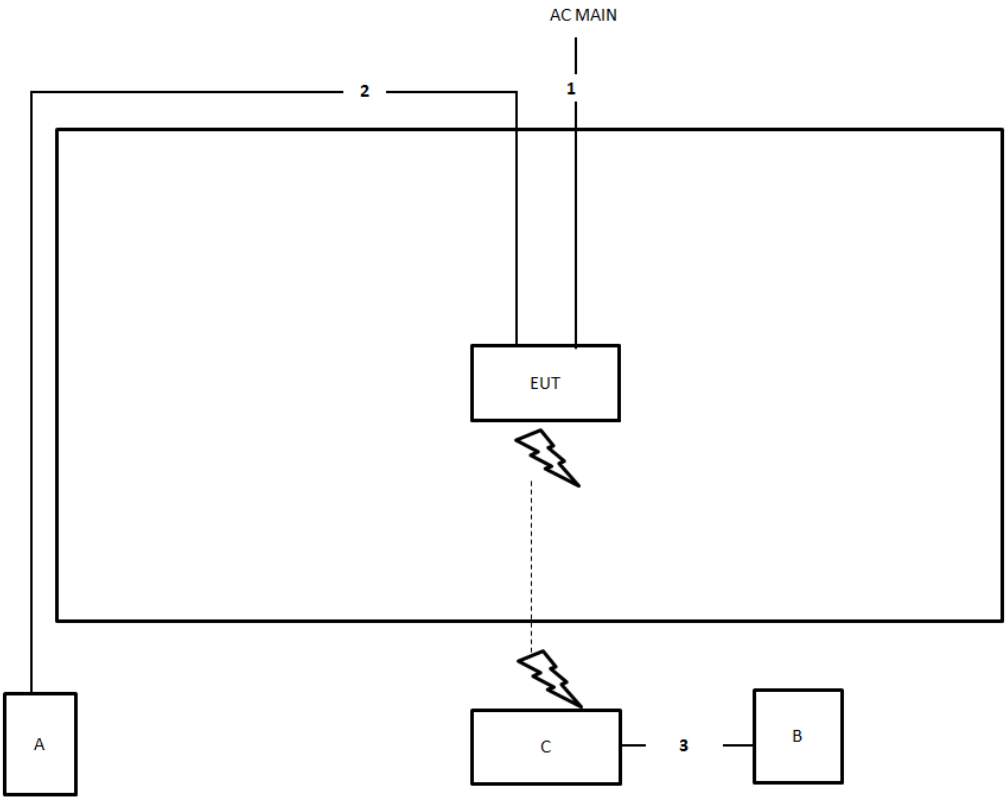
For non-beamforming mode:



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz

For beamforming mode:



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

3 Transmitter Test Result

3.1 Maximum Conducted Output Power

3.1.1 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.	

3.1.2 Measuring Instruments

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

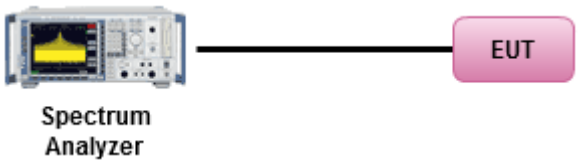
3.1.3 Test Procedures

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]) $EIRP_{total} = P_{total} + DG$

3.1.4 Test Setup

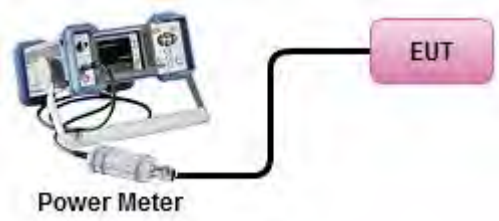
For Straddle channel test:

RF Output Power (Spectrum Analyzer)



For other test:

RF Output Power (Power Meter)



3.1.5 Test Result of Maximum Conducted Output Power

Refer as Appendix A

3.2 Peak Power Spectral Density

3.2.1 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.	

3.2.2 Measuring Instruments

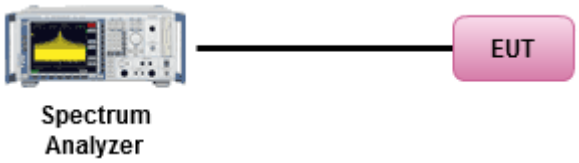
Refer a test equipment and calibration data table in this test report.

3.2.3 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]) $EIRP_{total} = PPSD_{total} + DG$	

3.2.4 Test Setup

Power Spectral Density



3.2.5 Test Result of Peak Power Spectral Density

Refer as Appendix B

3.3 Unwanted Emissions

3.3.1 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).

3.3.2 Measuring Instruments

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

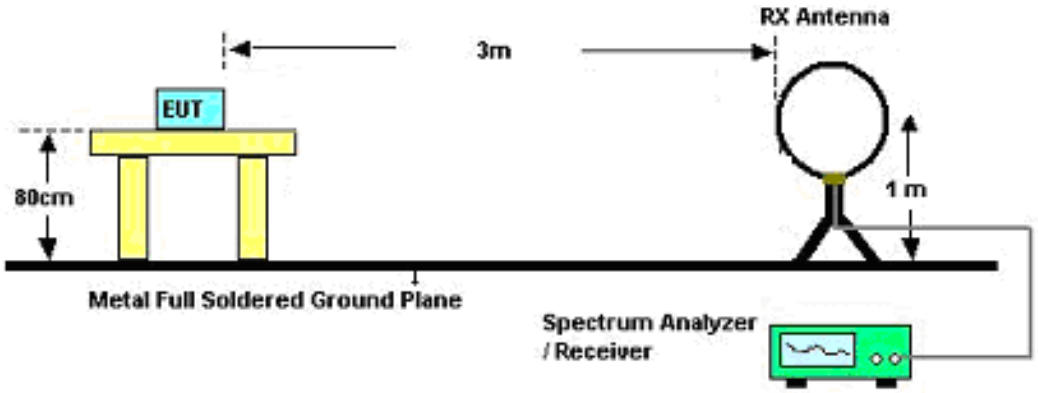
3.3.3 Test Procedures

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.		

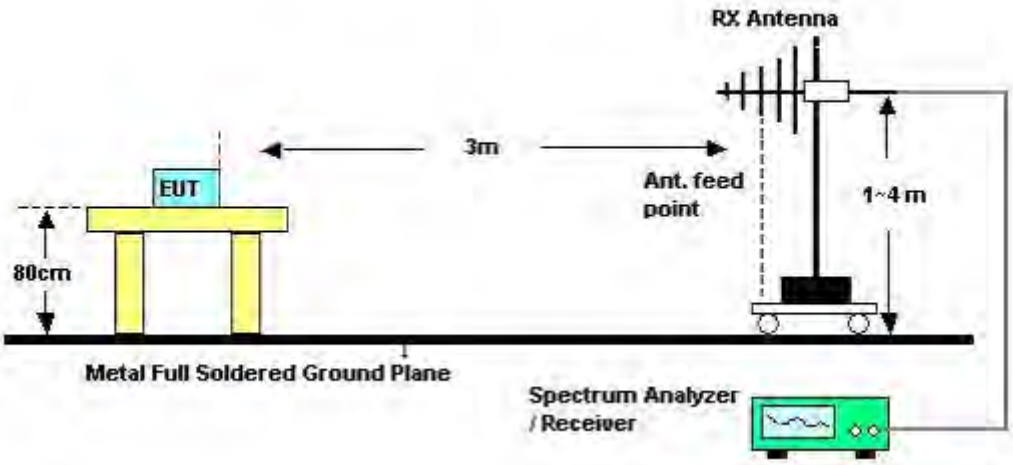
3.3.4 Test Setup

Transmitter Radiated Unwanted Emissions

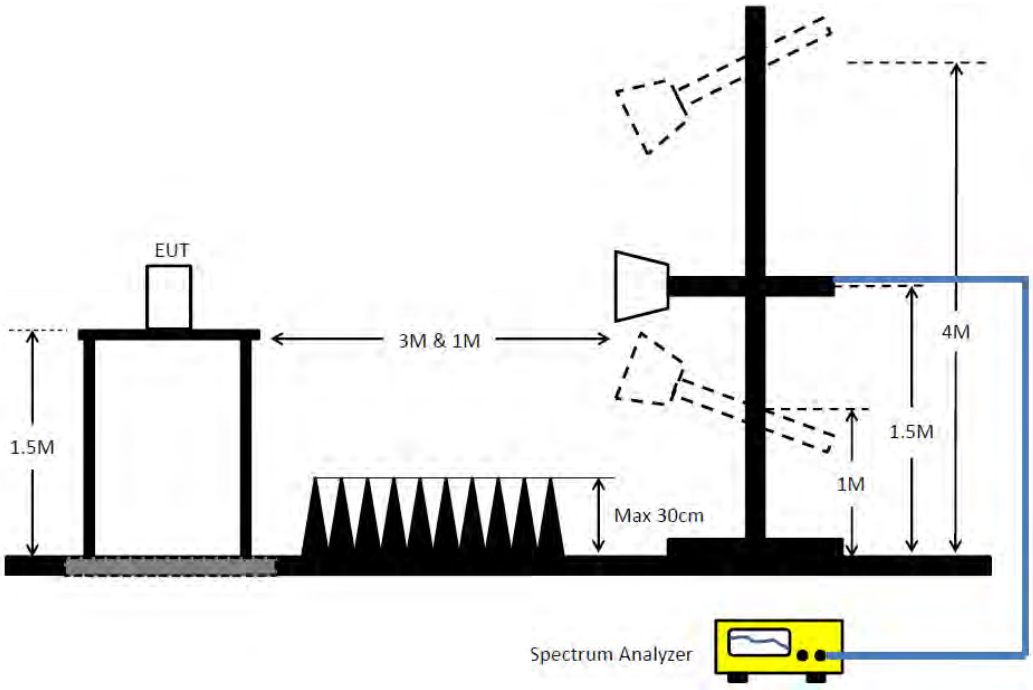
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.3.5 Measurement Results Calculation

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

3.3.6 Transmitter Unwanted Emissions (Below 30MHz)

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

3.3.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix C

4 Test Equipment and Calibration Data

For Radiated:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH05-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)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1291	1GHz~18GHz	Oct. 05, 2019	Oct. 04, 2020	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Apr. 16, 2019	Apr. 15, 2020	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	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-high	Woken	RG402	High Cable-04	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+23	30MHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH05-CB)

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

For RF Conducted:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-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. 08, 2018	Oct. 07, 2019	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. 08, 2018	Oct. 07, 2019	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. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)

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

For non-beamforming mode:
4 Stream 4 TX for SDM mode for band 1, 4:
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	29.76	0.94624
802.11ax HEW20_Nss4,(MCS0)_4TX	29.95	0.98855
802.11ac VHT40_Nss4,(MCS0)_4TX	27.55	0.56885
802.11ax HEW40_Nss4,(MCS0)_4TX	27.74	0.59429
802.11ac VHT80_Nss4,(MCS0)_4TX	23.03	0.20091
802.11ax HEW80_Nss4,(MCS0)_4TX	22.97	0.19815
5.725-5.85GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	29.76	0.94624
802.11ax HEW20_Nss4,(MCS0)_4TX	29.90	0.97724
802.11ac VHT40_Nss4,(MCS0)_4TX	29.21	0.83368
802.11ax HEW40_Nss4,(MCS0)_4TX	29.40	0.87096
802.11ac VHT80_Nss4,(MCS0)_4TX	26.36	0.43251
802.11ax HEW80_Nss4,(MCS0)_4TX	26.36	0.43251

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.20	18.90	19.24	19.60	18.91	25.19	30.00
5200MHz	Pass	2.20	22.66	23.04	23.25	22.71	28.94	30.00
5240MHz	Pass	2.20	23.17	23.93	24.07	23.74	29.76	30.00
5745MHz	Pass	3.20	23.86	23.67	23.88	23.50	29.75	30.00
5785MHz	Pass	3.20	24.16	23.43	23.63	23.70	29.76	30.00
5825MHz	Pass	3.20	23.64	23.63	23.89	23.78	29.76	30.00
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.20	19.14	19.36	19.88	19.19	25.42	30.00
5200MHz	Pass	2.20	22.74	22.87	23.19	23.01	28.98	30.00
5240MHz	Pass	2.20	23.53	24.21	24.16	23.77	29.95	30.00
5745MHz	Pass	3.20	23.85	23.70	23.87	23.75	29.81	30.00
5785MHz	Pass	3.20	23.69	23.70	23.85	23.84	29.79	30.00
5825MHz	Pass	3.20	23.84	23.78	24.04	23.85	29.90	30.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	2.20	16.70	17.18	17.23	16.40	22.91	30.00
5230MHz	Pass	2.20	21.21	21.94	21.72	21.21	27.55	30.00
5755MHz	Pass	3.20	23.04	23.29	23.49	22.92	29.21	30.00
5795MHz	Pass	3.20	22.87	23.07	22.98	22.77	28.94	30.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	2.20	16.96	17.24	17.22	16.75	23.07	30.00
5230MHz	Pass	2.20	21.52	22.24	21.81	21.25	27.74	30.00
5755MHz	Pass	3.20	23.16	23.41	23.68	23.24	29.40	30.00
5795MHz	Pass	3.20	23.03	23.15	23.14	22.89	29.07	30.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	2.00	16.84	17.35	17.11	16.73	23.03	30.00
5775MHz	Pass	3.20	20.37	20.44	20.37	20.18	26.36	30.00
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	2.00	16.68	17.21	17.08	16.79	22.97	30.00
5775MHz	Pass	3.20	20.48	20.36	20.44	20.08	26.36	30.00

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

4 Stream 4 TX for SDM mode for 160MHz and band 2, 3:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT160_Nss4,(MCS0)_4TX	15.62	0.03648
802.11ax HEW160_Nss4,(MCS0)_4TX	16.03	0.04009
5.25-5.35GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	23.76	0.23768
802.11ax HEW20_Nss4,(MCS0)_4TX	23.93	0.24717
802.11ac VHT40_Nss4,(MCS0)_4TX	23.66	0.23227
802.11ax HEW40_Nss4,(MCS0)_4TX	23.87	0.24378
802.11ac VHT80_Nss4,(MCS0)_4TX	22.96	0.19770
802.11ax HEW80_Nss4,(MCS0)_4TX	22.96	0.19770
802.11ac VHT160_Nss4,(MCS0)_4TX	16.09	0.04064
802.11ax HEW160_Nss4,(MCS0)_4TX	16.51	0.04477
5.47-5.725GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	23.55	0.22646
802.11ax HEW20_Nss4,(MCS0)_4TX	23.83	0.24155
802.11ac VHT40_Nss4,(MCS0)_4TX	23.79	0.23933
802.11ax HEW40_Nss4,(MCS0)_4TX	23.91	0.24604
802.11ac VHT80_Nss4,(MCS0)_4TX	23.86	0.24322
802.11ax HEW80_Nss4,(MCS0)_4TX	23.92	0.24660
802.11ac VHT160_Nss4,(MCS0)_4TX	21.80	0.15136
802.11ax HEW160_Nss4,(MCS0)_4TX	20.64	0.11588
5.725-5.85GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	16.82	0.04808
802.11ax HEW20_Nss4,(MCS0)_4TX	17.52	0.05649
802.11ac VHT40_Nss4,(MCS0)_4TX	13.17	0.02075
802.11ax HEW40_Nss4,(MCS0)_4TX	14.17	0.02612
802.11ac VHT80_Nss4,(MCS0)_4TX	10.50	0.01122
802.11ax HEW80_Nss4,(MCS0)_4TX	10.52	0.01127

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.8	17.85	18.04	17.67	17.39	23.76	23.98
5300MHz	Pass	2.8	17.53	17.75	17.83	17.27	23.62	23.98
5320MHz	Pass	2.8	17.85	17.53	17.54	16.82	23.47	23.98
5500MHz	Pass	3.1	17.28	17.48	17.30	17.37	23.38	23.98
5580MHz	Pass	3.3	17.63	17.84	17.28	17.35	23.55	23.98
5700MHz	Pass	3.3	17.64	17.53	17.78	17.07	23.53	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	3.3	16.27	16.56	16.86	15.86	22.42	22.95
5720MHz Straddle 5.725-5.85GHz	Pass	3.3	10.78	10.99	11.12	10.28	16.82	30.00
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.8	17.89	18.25	17.96	17.52	23.93	23.98
5300MHz	Pass	2.8	17.88	17.81	17.94	17.21	23.74	23.98
5320MHz	Pass	2.8	18.09	17.66	17.79	17.29	23.74	23.98
5500MHz	Pass	3.1	18.02	17.98	17.41	17.79	23.83	23.98
5580MHz	Pass	3.3	17.78	17.84	17.52	17.91	23.79	23.98
5700MHz	Pass	3.3	17.80	17.64	18.11	17.32	23.75	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	3.3	16.68	16.97	16.73	16.93	22.85	22.94
5720MHz Straddle 5.725-5.85GHz	Pass	3.3	11.52	11.50	11.81	11.13	17.52	30.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.8	17.87	17.86	17.60	17.19	23.66	23.98
5310MHz	Pass	2.8	17.80	17.67	17.64	17.14	23.59	23.98
5510MHz	Pass	3.1	17.44	16.47	16.41	17.62	23.04	23.98
5550MHz	Pass	3.1	17.77	17.87	17.72	17.26	23.68	23.98
5670MHz	Pass	3.3	17.62	17.77	17.92	17.75	23.79	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	3.3	17.32	17.41	17.73	16.95	23.38	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.3	7.13	7.05	7.44	6.98	13.17	30.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.8	18.04	18.08	17.72	17.38	23.83	23.98
5310MHz	Pass	2.8	18.07	17.98	17.88	17.44	23.87	23.98
5510MHz	Pass	3.1	17.95	16.87	16.64	17.62	23.32	23.98
5550MHz	Pass	3.1	18.00	18.00	17.83	17.52	23.86	23.98
5670MHz	Pass	3.3	17.97	17.83	17.96	17.80	23.91	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	3.3	17.94	17.80	18.26	17.50	23.90	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.3	8.18	8.19	8.36	7.84	14.17	30.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.8	16.68	16.38	16.21	17.54	22.75	23.98
5530MHz	Pass	3.1	17.91	17.63	17.74	17.14	23.63	23.98
5610MHz	Pass	3.3	17.90	17.74	18.01	17.71	23.86	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	3.3	17.90	17.89	18.06	17.45	23.85	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.3	4.42	4.51	4.64	4.33	10.50	30.00
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.8	16.68	16.38	16.21	17.54	22.75	23.98
5530MHz	Pass	3.1	17.90	17.71	17.79	17.33	23.71	23.98
5610MHz	Pass	3.3	17.85	17.76	18.06	17.77	23.88	23.98

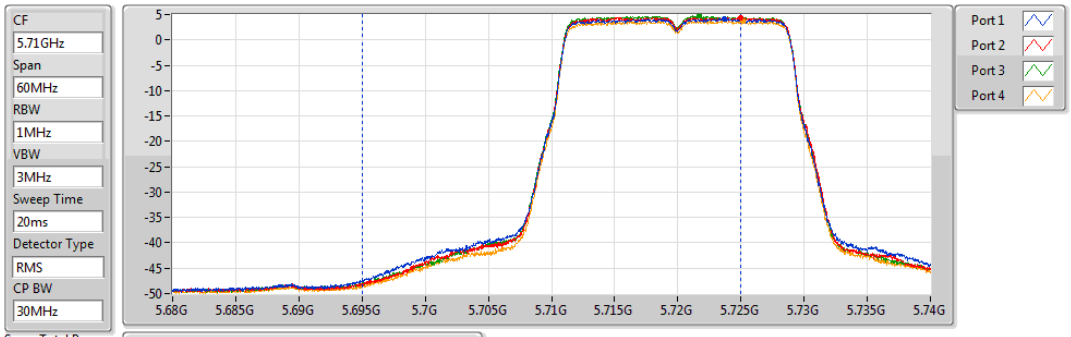
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
5690MHz Straddle 5.47-5.725GHz	Pass	3.3	17.98	17.98	18.13	17.50	23.92	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.3	4.49	4.57	4.69	4.23	10.52	30.00
802.11ac VHT160_Nss4,(MCS0)_4TX	-		-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.2	10.27	9.22	8.86	9.90	15.62	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.2	10.88	9.36	9.48	10.36	16.09	23.98
5570MHz	Pass	3.3	16.37	15.50	14.54	16.44	21.80	23.98
802.11ax HEW160_Nss4,(MCS0)_4TX	-		-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.2	10.77	9.55	9.50	10.10	16.03	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.2	11.31	9.93	10.08	10.52	16.51	23.98
5570MHz	Pass	3.3	15.40	14.34	13.51	14.98	20.64	23.98

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

802.11ac VHT20_Nss4,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

19/07/2019

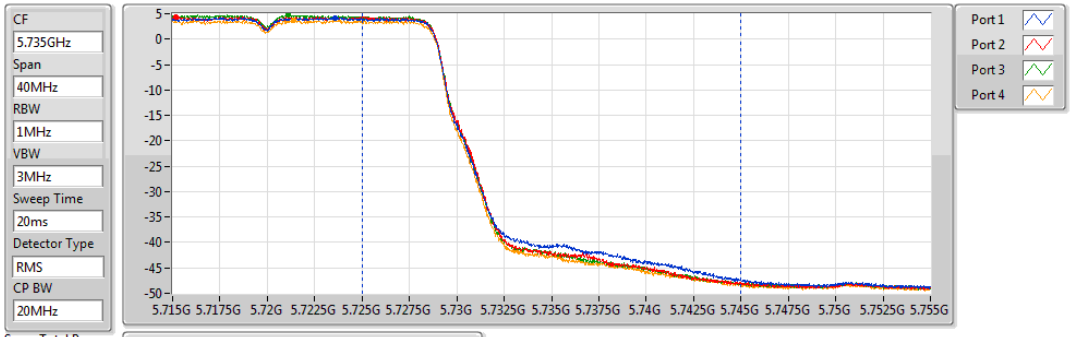


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.42	16.27	16.56	16.86	15.86

802.11ac VHT20_Nss4,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

19/07/2019

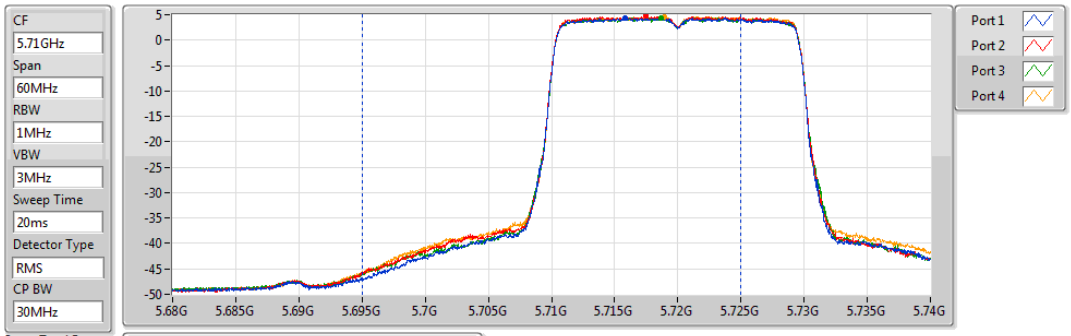


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.82	10.78	10.99	11.12	10.28

802.11ax HEW20_Nss4,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

25/07/2019

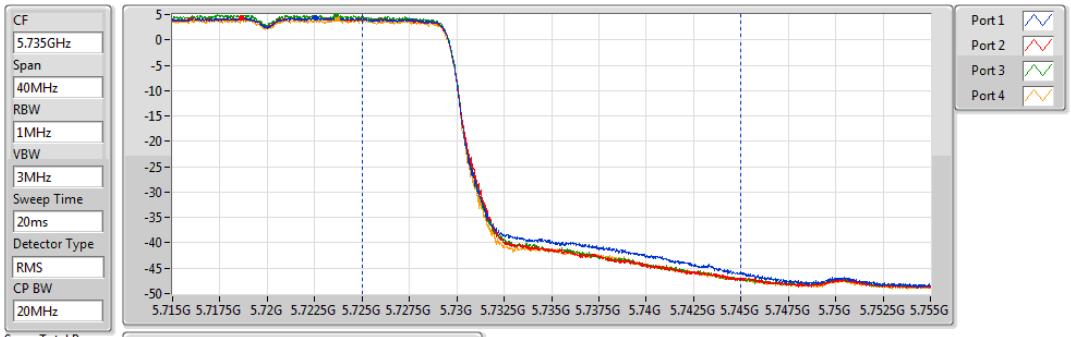


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.85	16.68	16.97	16.73	16.93

802.11ax HEW20_Nss4,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

19/07/2019



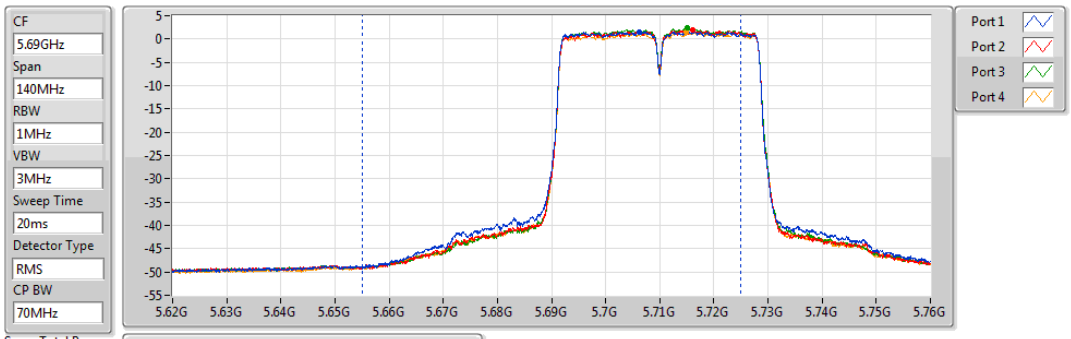
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.52	11.52	11.50	11.81	11.13

802.11ac VHT40_Nss4,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

19/07/2019



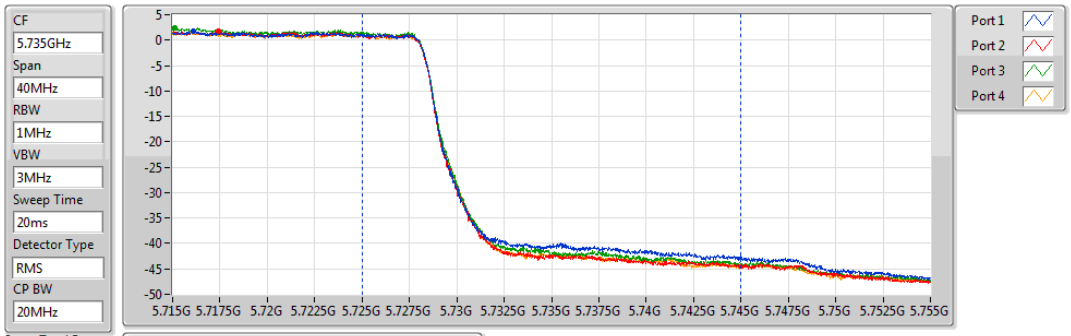
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.38	17.32	17.41	17.73	16.95

802.11ac VHT40_Nss4,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

19/07/2019



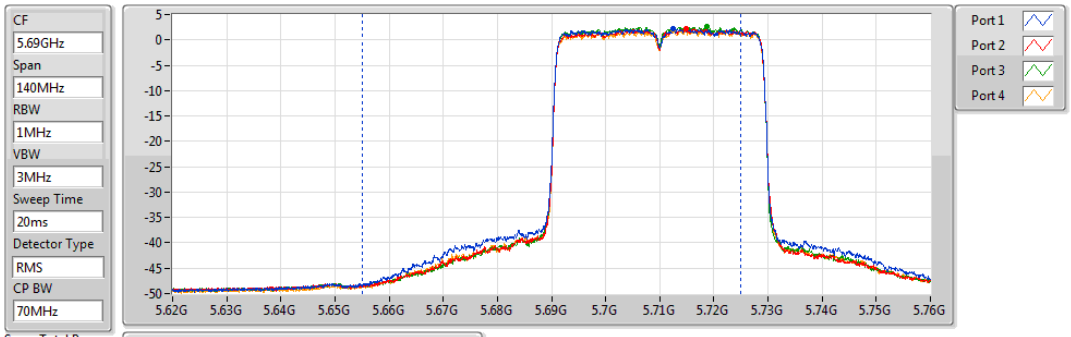
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
13.17	7.13	7.05	7.44	6.98

802.11ax HEW40_Nss4,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

19/07/2019

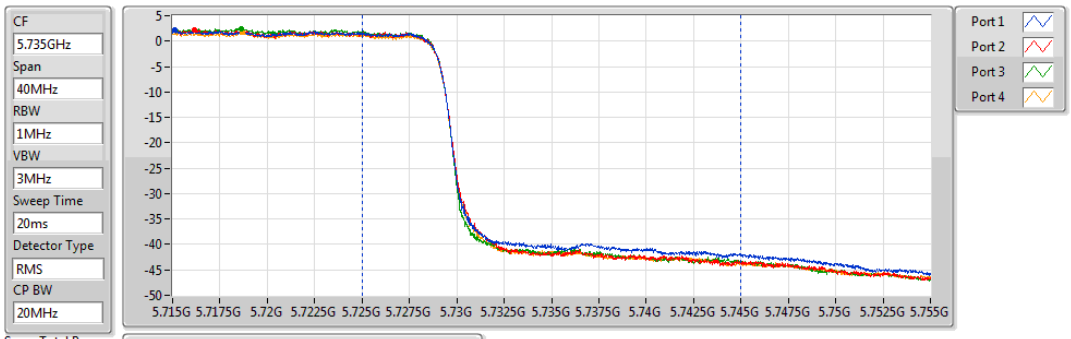


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.90	17.94	17.80	18.26	17.50

802.11ax HEW40_Nss4,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

19/07/2019

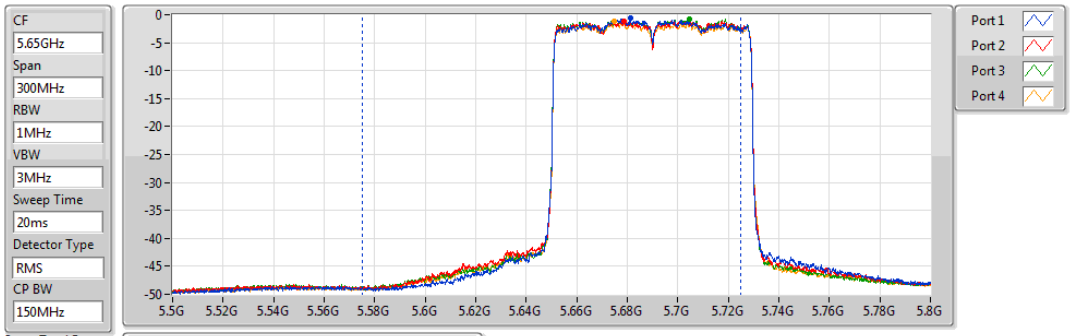


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
14.17	8.18	8.19	8.36	7.84

802.11ac VHT80_Nss4,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

19/07/2019

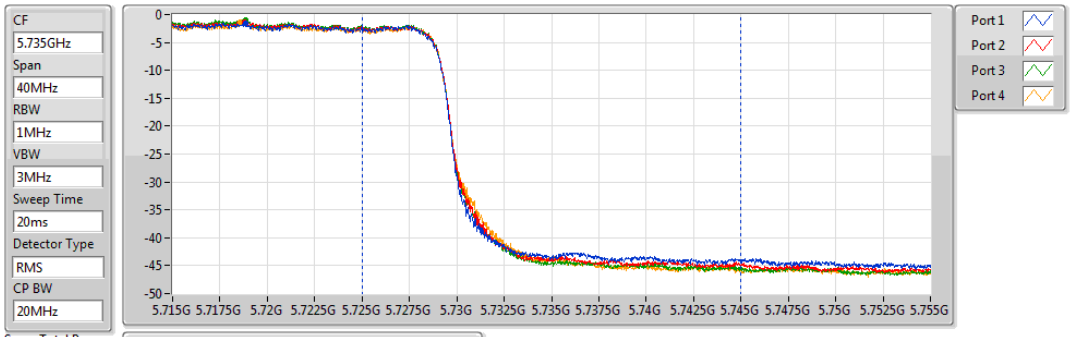


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.85	17.90	17.89	18.06	17.45

802.11ac VHT80_Nss4,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz

19/07/2019



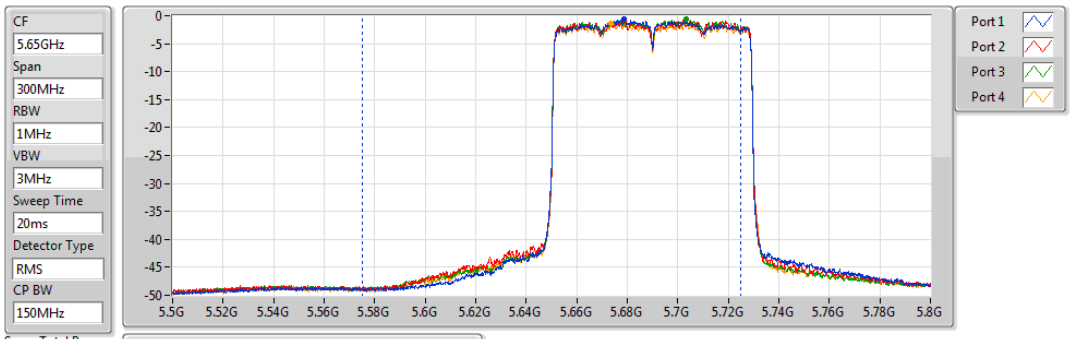
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
10.50	4.42	4.51	4.64	4.33

802.11ax HEW80_Nss4,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

19/07/2019



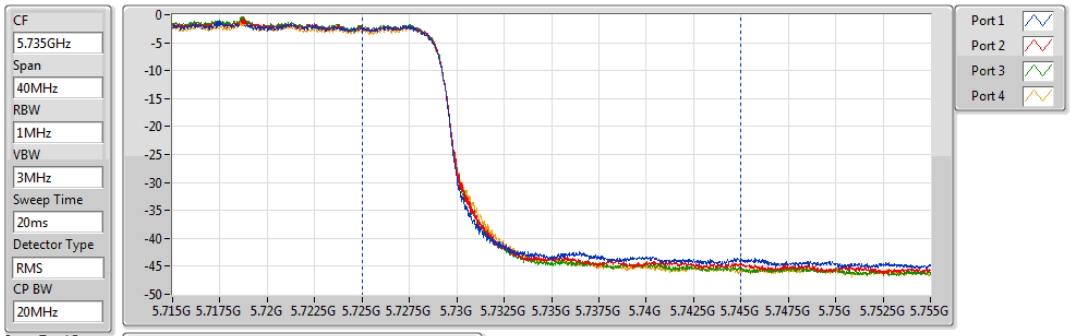
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.92	17.98	17.98	18.13	17.50

802.11ax HEW80_Nss4,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz

19/07/2019



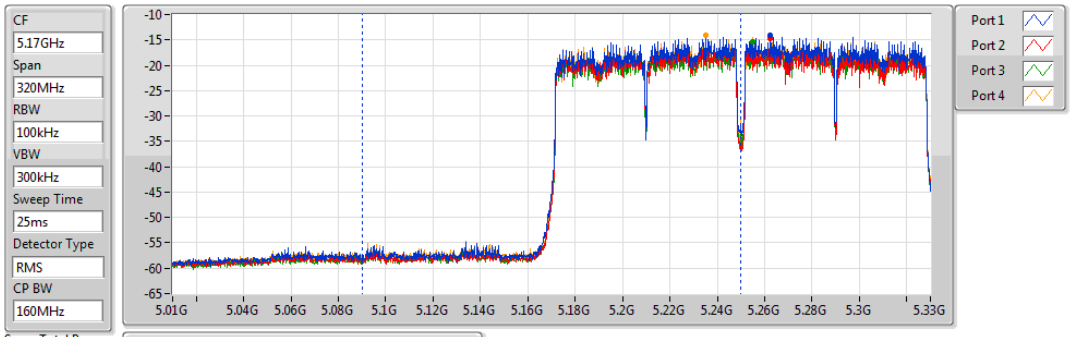
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
10.52	4.49	4.57	4.69	4.23

802.11ac VHT160_Nss4,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.15-5.25GHz

07/11/2019



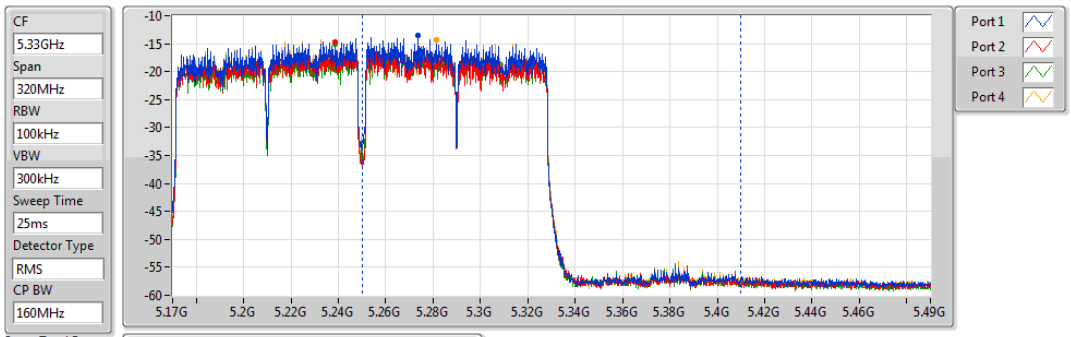
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.62	10.27	9.22	8.86	9.90

802.11ac VHT160_Nss4,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.25-5.35GHz

07/11/2019



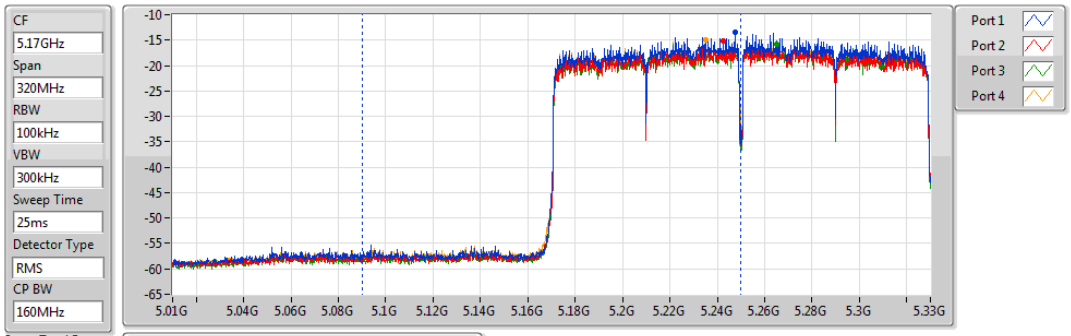
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.09	10.88	9.36	9.48	10.36

802.11ax HEW160_Nss4,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.15-5.25GHz

06/11/2019



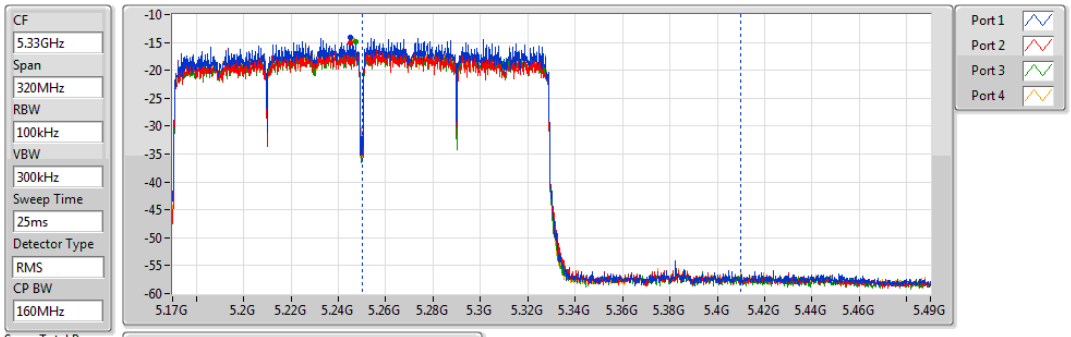
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.03	10.77	9.55	9.50	10.10

802.11ax HEW160_Nss4,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.25-5.35GHz

06/11/2019



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.51	11.31	9.93	10.08	10.52

For beamforming mode:
1 Stream 4 TX for TxBF mode for band 1, 4:
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	27.43	0.55335
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	27.78	0.59979
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	27.04	0.50582
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	27.53	0.56624
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	22.31	0.17022
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.70	0.18621
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	26.51	0.44771
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	26.82	0.48084
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	26.44	0.44055
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	26.76	0.47424
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	25.21	0.33189
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	25.40	0.34674

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	8.00	17.43	16.8	16.6	17.69	23.17	28.00
5200MHz	Pass	8.00	20.25	21.28	21.93	20.35	27.03	28.00
5240MHz	Pass	8.00	21.59	21.38	21.38	21.30	27.43	28.00
5745MHz	Pass	9.10	20.79	20.26	19.91	20.77	26.47	26.90
5785MHz	Pass	9.10	20.76	20.09	20	20.92	26.48	26.90
5825MHz	Pass	9.10	20.84	20.35	19.83	20.87	26.51	26.90
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	8.00	17.88	17.29	17.01	18.17	23.63	28.00
5200MHz	Pass	8.00	21.12	21.65	22.56	21.58	27.78	28.00
5240MHz	Pass	8.00	22.14	21.96	21.11	21.61	27.74	28.00
5745MHz	Pass	9.10	21.28	20.47	20.06	20.97	26.74	26.90
5785MHz	Pass	9.10	21.16	20.48	20.19	21.11	26.78	26.90
5825MHz	Pass	9.10	21.41	20.53	20.15	20.99	26.82	26.90
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	8.00	14.78	14.44	14.14	15.04	20.63	28.00
5230MHz	Pass	8.00	21.13	20.72	20.56	21.6	27.04	28.00
5755MHz	Pass	9.10	21.02	19.88	19.44	20.70	26.33	26.90
5795MHz	Pass	9.10	21.26	19.98	19.55	20.68	26.44	26.90
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	8.00	15.18	14.58	14.66	15.43	21.00	28.00
5230MHz	Pass	8.00	21.71	21.21	21.26	21.83	27.53	28.00
5755MHz	Pass	9.10	21.54	20.36	19.68	20.94	26.70	26.90
5795MHz	Pass	9.10	21.61	20.36	19.84	20.96	26.76	26.90
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	8.00	16.91	16.11	15.63	16.4	22.31	28.00
5775MHz	Pass	9.10	19.39	18.99	18.69	19.64	25.21	26.90
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	8.00	17.25	16.5	16.05	16.84	22.70	28.00
5775MHz	Pass	9.10	19.72	19.41	18.51	19.75	25.40	26.90

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

1 Stream 4 TX for TxBF mode for 160MHz and band 2, 3:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	15.79	0.03793
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	15.95	0.03936
5.25-5.35GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	21.18	0.13122
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	20.87	0.12218
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	20.90	0.12303
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	20.91	0.12331
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	19.53	0.08974
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	19.95	0.09886
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	16.46	0.04426
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	16.93	0.04932
5.47-5.725GHz	-	-!
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	20.40	0.10965
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	20.78	0.11967
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	20.46	0.11117
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	20.77	0.11940
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	20.34	0.10814
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	20.59	0.11455
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	18.63	0.07295
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	18.84	0.07656
5.725-5.85GHz		-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	12.81	0.01910
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	13.36	0.02168
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	9.75	0.00944
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	10.63	0.01156
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	5.84	0.00384
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	6.91	0.00491

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.80	14.13	13.41	13.17	14.18	19.77	21.18
5300MHz	Pass	8.80	13.96	13.46	13.32	14.38	19.82	21.18
5320MHz	Pass	8.80	15.37	14.89	14.46	15.81	21.18	21.18
5500MHz	Pass	9.10	15.07	14.03	13.49	14.74	20.40	20.88
5580MHz	Pass	9.10	14.73	14	13.22	14.7	20.23	20.88
5700MHz	Pass	9.10	14.72	13.96	13.78	14.33	20.23	20.88
5720MHz Straddle 5.47-5.725GHz	Pass	9.10	14.08	13.58	14.19	13.40	19.85	21.18
5720MHz Straddle 5.725-5.85GHz	Pass	9.10	6.97	7.06	6.96	6.11	12.81	26.90
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.80	14.61	14.03	13.78	14.29	20.21	21.18
5300MHz	Pass	8.80	14.46	14.18	13.68	14.58	20.26	21.18
5320MHz	Pass	8.80	15.04	14.87	14.31	15.14	20.87	21.18
5500MHz	Pass	9.10	15.28	14.37	13.95	15.28	20.78	20.88
5580MHz	Pass	9.10	15.12	14.44	13.67	14.82	20.57	20.88
5700MHz	Pass	9.10	15.27	14.42	14.16	14.65	20.67	20.88
5720MHz Straddle 5.47-5.725GHz	Pass	9.10	14.48	13.70	14.36	13.49	20.05	21.18
5720MHz Straddle 5.725-5.85GHz	Pass	9.10	7.38	7.65	7.61	6.64	13.36	26.90
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.80	15.37	14.35	13.95	15.62	20.90	21.18
5310MHz	Pass	8.80	15.01	13.69	13.22	14.87	20.28	21.18
5510MHz	Pass	9.10	14.89	14	13.5	14.62	20.31	20.88
5550MHz	Pass	9.10	14.96	14.23	13.66	14.79	20.46	20.88
5670MHz	Pass	9.10	14.63	14.21	13.84	14.79	20.40	20.88
5710MHz Straddle 5.47-5.725GHz	Pass	9.10	14.68	14.08	13.76	14.77	20.36	20.88
5710MHz Straddle 5.725-5.85GHz	Pass	9.10	4.07	3.49	3.17	4.12	9.75	26.90
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.80	15.55	14.37	13.99	15.43	20.91	21.18
5310MHz	Pass	8.80	15.43	14.16	13.69	15.27	20.72	21.18
5510MHz	Pass	9.10	15.42	14.39	13.76	15.09	20.73	20.88
5550MHz	Pass	9.10	15.47	14.6	13.73	14.96	20.76	20.88
5670MHz	Pass	9.10	15.25	14.62	13.94	15.06	20.77	20.88
5710MHz Straddle 5.47-5.725GHz	Pass	9.10	15.2	14.37	13.87	14.81	20.61	20.88
5710MHz Straddle 5.725-5.85GHz	Pass	9.10	5.08	4.43	3.76	5.04	10.63	26.90
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.80	13.65	13.15	13.05	14.11	19.53	21.18
5530MHz	Pass	9.10	14.62	13.84	13.62	14.77	20.26	20.88
5610MHz	Pass	9.10	14.66	13.97	13.73	14.4	20.23	20.88
5690MHz Straddle 5.47-5.725GHz	Pass	9.10	14.56	14.2	13.98	14.51	20.34	20.88
5690MHz Straddle 5.725-5.85GHz	Pass	9.10	0.27	-0.4	-0.6	-0.05	5.84	26.90
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.80	13.96	13.74	13.55	14.42	19.95	21.18
5530MHz	Pass	9.10	15.2	14.18	13.87	14.9	20.59	20.88
5610MHz	Pass	9.10	15.04	14.15	14.08	14.62	20.51	20.88

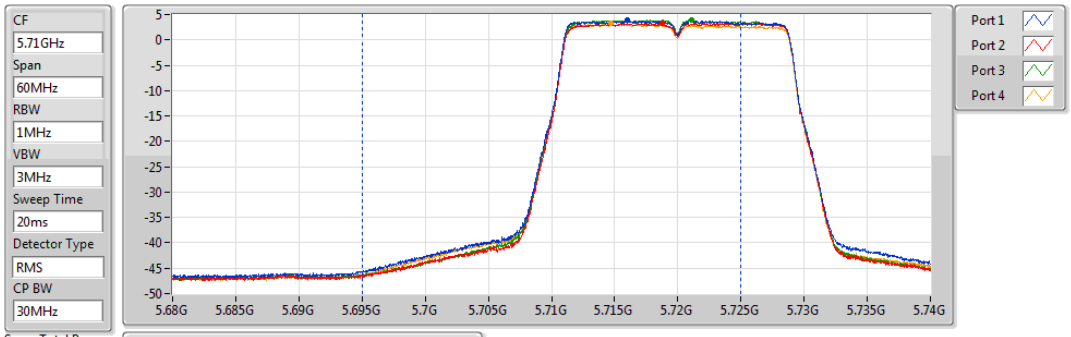
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
5690MHz Straddle 5.47-5.725GHz	Pass	9.10	15.04	14.36	14.21	14.6	20.58	20.88
5690MHz Straddle 5.725-5.85GHz	Pass	9.10	1.45	0.69	0.32	1.02	6.91	26.90
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.00	9.78	9.29	9.30	10.58	15.79	27.20
5250MHz	Pass	8.00	10.15	9.77	9.65	11.13	16.24	21.18
5570MHz	Pass	9.10	13.21	12.55	11.3	13.14	18.63	20.88
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.00	9.94	9.47	9.45	10.72	15.95	27.20
5250MHz	Pass	8.00	10.33	9.86	9.76	11.79	16.34	21.18
5570MHz	Pass	9.10	13.51	12.68	11.61	13.26	18.84	20.88

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

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

5720MHz Straddle 5.47-5.725GHz

24/07/2019



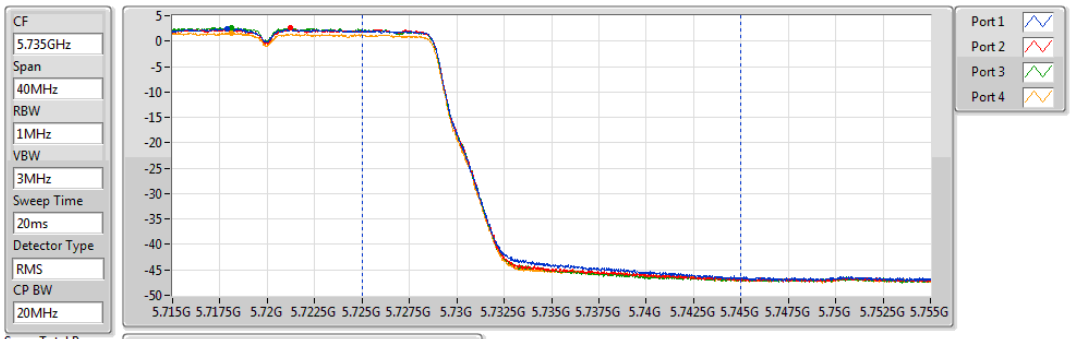
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
19.85	14.08	13.58	14.19	13.40

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

5720MHz Straddle 5.725-5.85GHz

24/07/2019



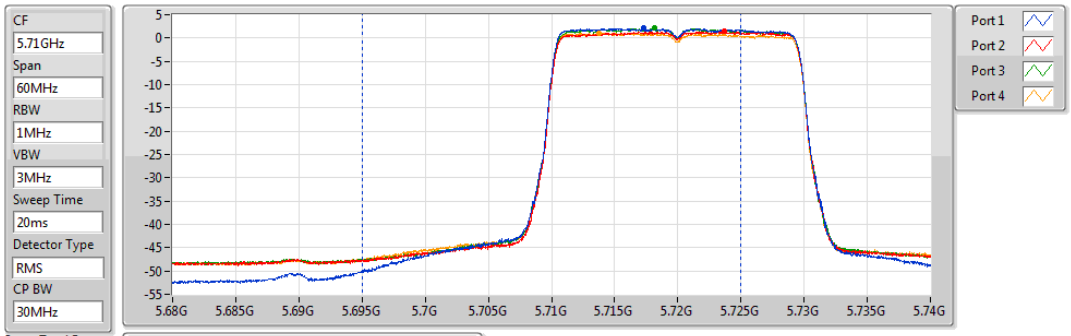
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
12.81	6.97	7.06	6.96	6.11

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

5720MHz Straddle 5.47-5.725GHz

23/07/2019



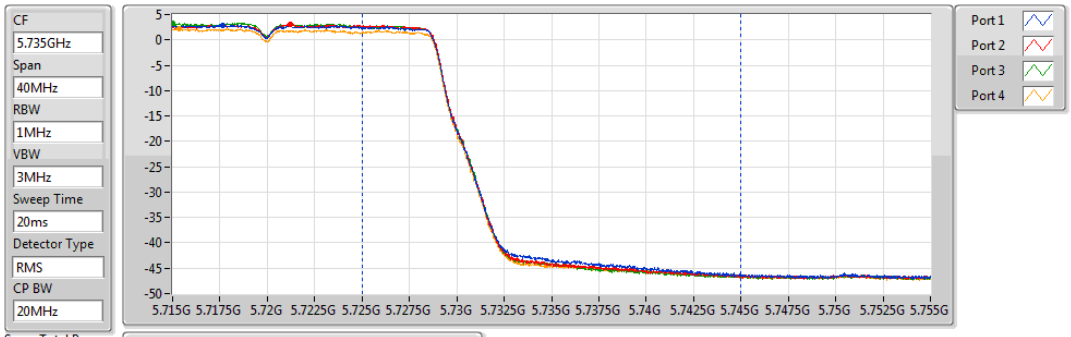
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.05	14.48	13.70	14.36	13.49

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

5720MHz Straddle 5.725-5.85GHz

24/07/2019



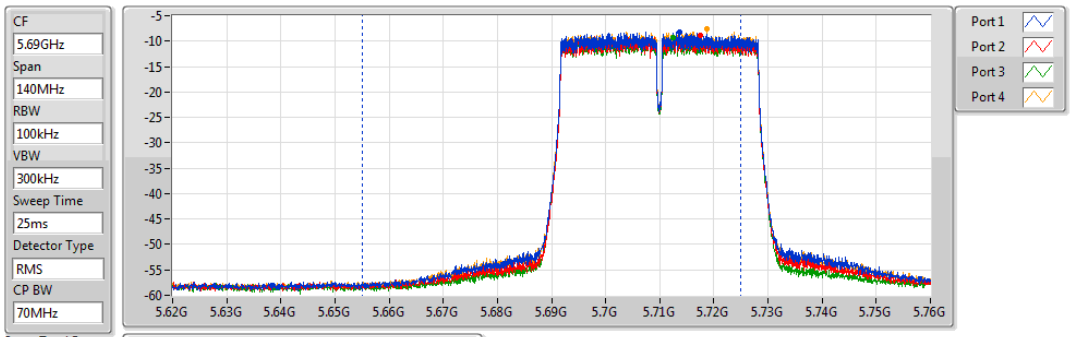
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
13.36	7.38	7.65	7.61	6.64

802.11ac VHT40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

07/11/2019



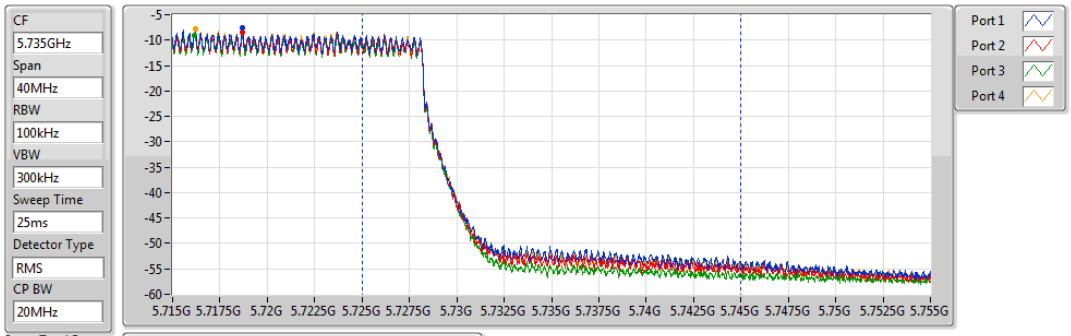
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.36	14.68	14.08	13.76	14.77

802.11ac VHT40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

07/11/2019



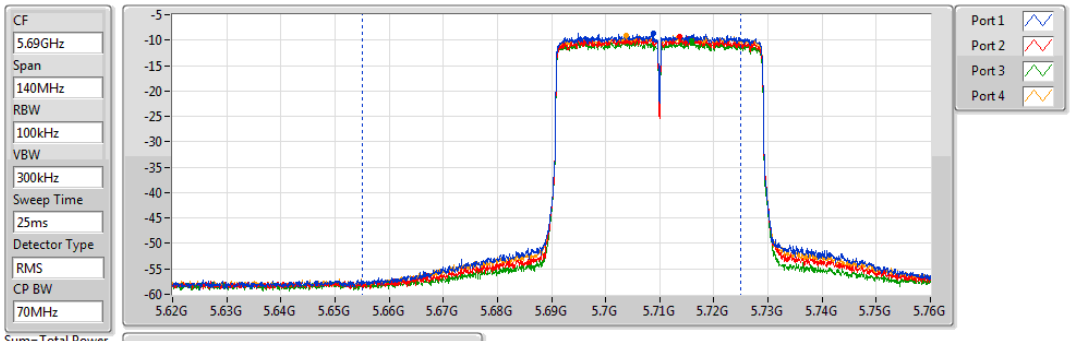
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
9.75	4.07	3.49	3.17	4.12

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

5710MHz Straddle 5.47-5.725GHz

06/11/2019

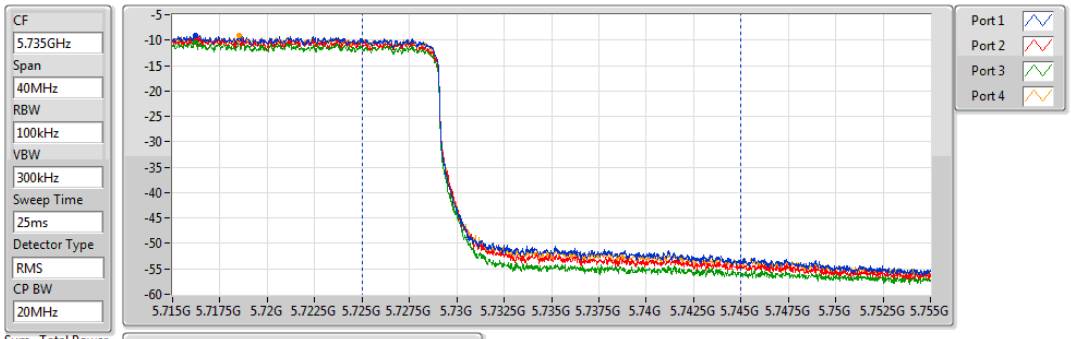


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.61	15.20	14.37	13.87	14.81

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

5710MHz Straddle 5.725-5.85GHz

06/11/2019

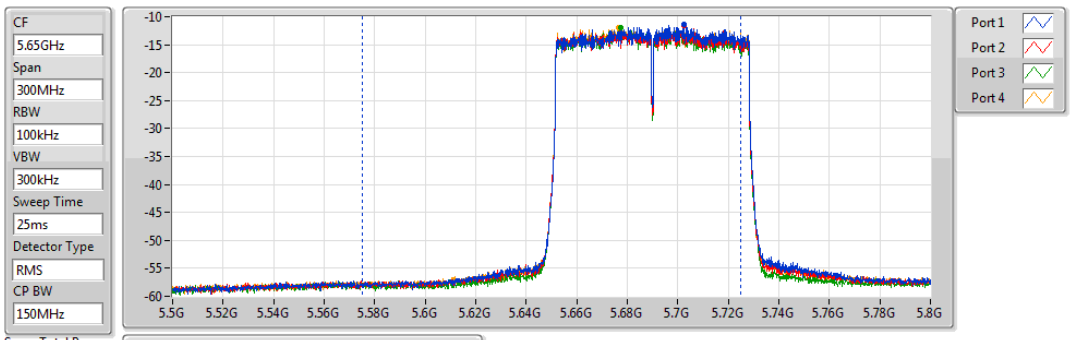


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
10.63	5.08	4.43	3.76	5.04

802.11ac VHT80-BF_Nss1,(MCS0)_4TX — AV Power

5690MHz Straddle 5.47-5.725GHz

07/11/2019

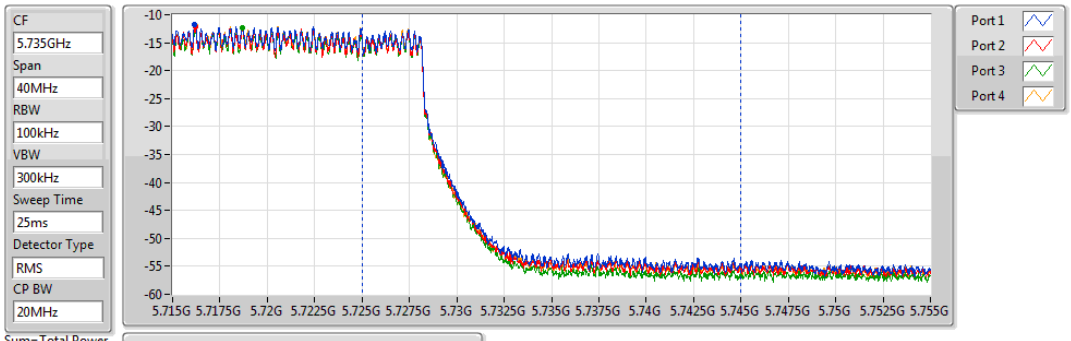


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.34	14.56	14.20	13.98	14.51

802.11ac VHT80-BF_Nss1,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz

07/11/2019



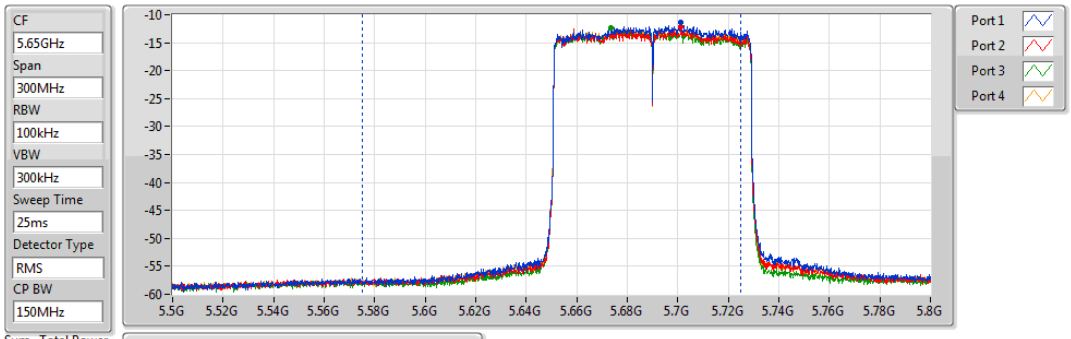
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
5.81	0.16	-0.40	-0.60	-0.05

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

5690MHz Straddle 5.47-5.725GHz

06/11/2019



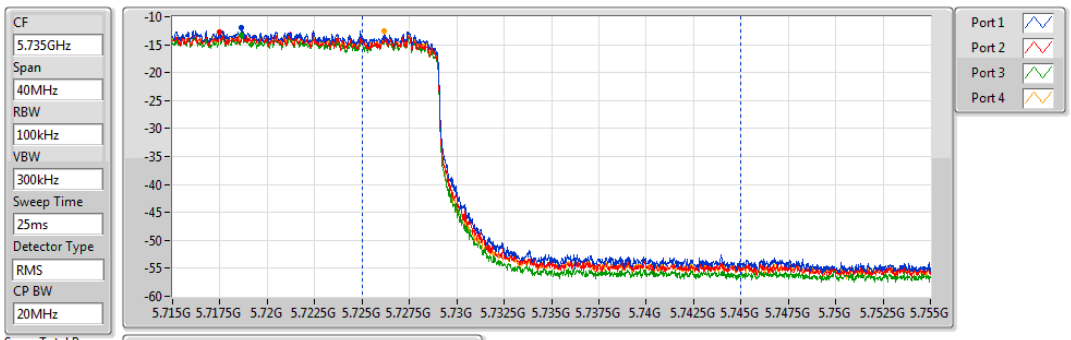
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.58	15.04	14.36	14.21	14.60

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

5690MHz Straddle 5.725-5.85GHz

06/11/2019

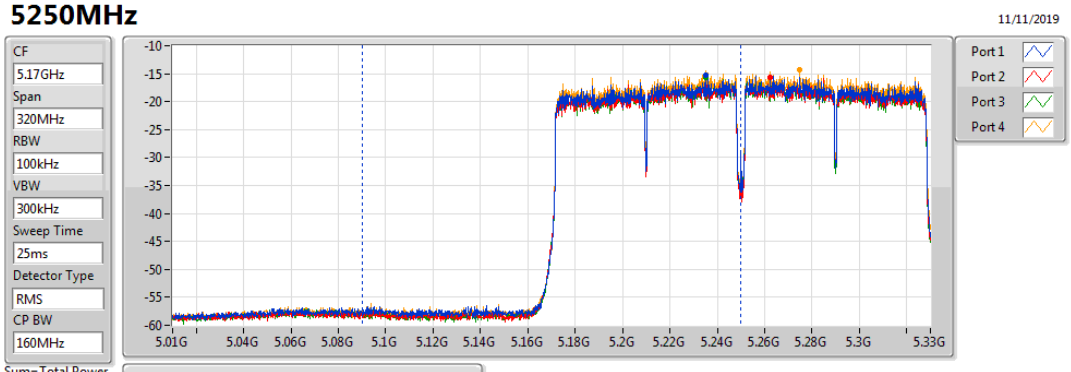


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
6.91	1.45	0.69	0.32	1.02

802.11ac VHT160-BF_Nss1,(MCS0)_4TX AV Power

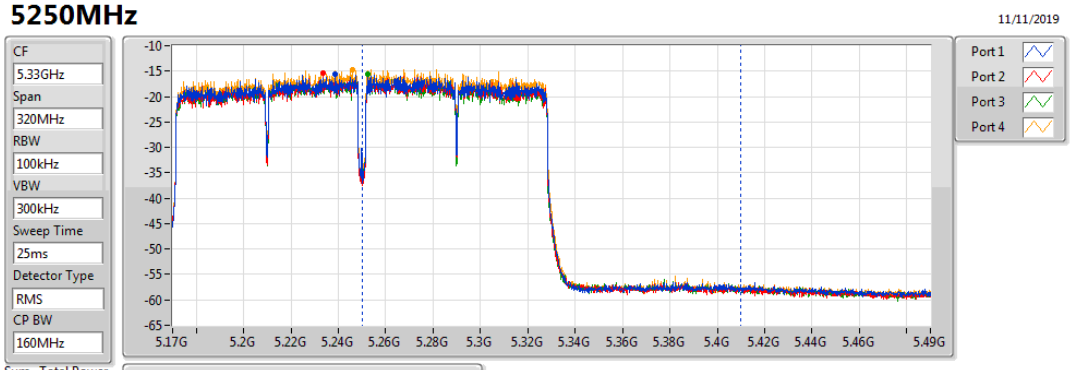
5250MHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.79	9.78	9.29	9.30	10.58

802.11ac VHT160-BF_Nss1,(MCS0)_4TX AV Power

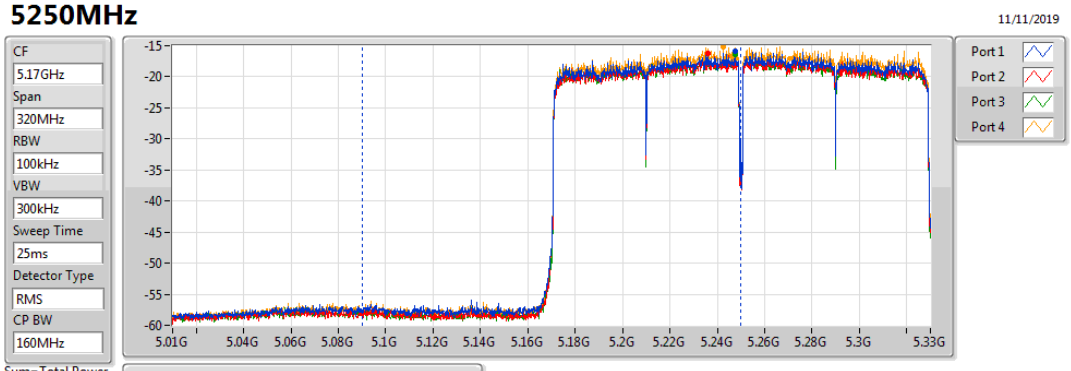
5250MHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.24	10.15	9.77	9.65	11.13

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

5250MHz

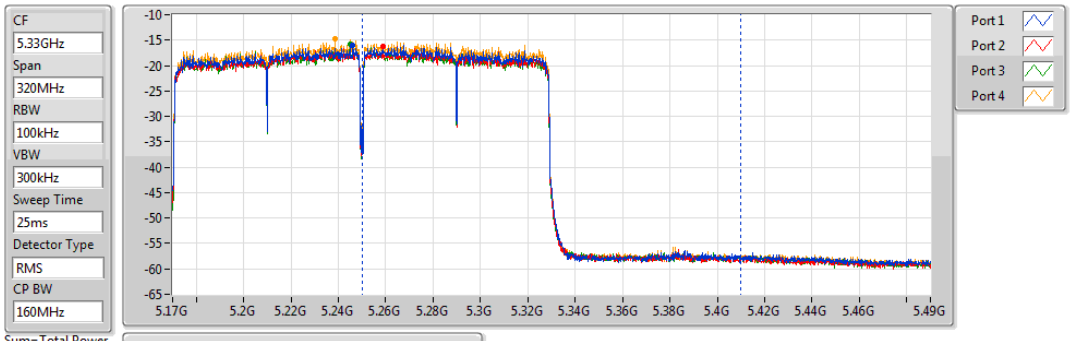


Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.95	9.94	9.47	9.45	10.72

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

5250MHz

11/11/2019



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.34	10.33	9.86	9.76	11.19

2 Stream 4 TX for TxBF mode for band 1, 4:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	28.40	0.69183
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	27.29	0.53580
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	21.51	0.14158
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	28.66	0.73451
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	27.56	0.57016
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	21.65	0.14622
5.725-5.85GHz	-	
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	29.54	0.89950
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	29.22	0.83560
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	25.17	0.32885
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	29.65	0.92257
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	29.52	0.89536
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	25.40	0.34674

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.00	18.76	18.39	18.08	19.24	24.66	30.00
5200MHz	Pass	5.00	22.21	22.12	22.04	22.93	28.36	30.00
5240MHz	Pass	5.00	22.32	22.11	21.84	23.13	28.40	30.00
5745MHz	Pass	6.20	23.80	23.40	22.92	23.90	29.54	29.80
5785MHz	Pass	6.20	23.57	23.04	22.86	23.88	29.38	29.80
5825MHz	Pass	6.20	23.70	23.13	22.71	23.86	29.39	29.80
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.00	15.50	15.07	14.88	15.96	21.39	30.00
5230MHz	Pass	5.00	21.44	20.90	20.87	21.78	27.29	30.00
5755MHz	Pass	6.20	22.46	23.53	22.84	23.47	29.12	29.80
5795MHz	Pass	6.20	23.36	23.24	23.33	22.83	29.22	29.80
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.00	16.00	15.21	14.88	15.79	21.51	30.00
5775MHz	Pass	6.20	19.28	19.06	18.62	19.59	25.17	29.80
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.00	19.15	18.59	18.43	19.39	24.93	30.00
5200MHz	Pass	5.00	22.22	22.17	22.03	22.71	28.31	30.00
5240MHz	Pass	5.00	22.53	22.54	22.29	23.14	28.66	30.00
5745MHz	Pass	6.20	24.04	23.44	22.94	23.99	29.65	29.80
5785MHz	Pass	6.20	23.80	23.18	23.01	23.99	29.53	29.80
5825MHz	Pass	6.20	24.02	23.31	22.83	23.87	29.55	29.80
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.00	15.72	15.41	15.22	15.95	21.60	30.00
5230MHz	Pass	5.00	21.70	21.21	21.14	22.06	27.56	30.00
5755MHz	Pass	6.20	23.22	23.09	23.93	23.51	29.47	29.80
5795MHz	Pass	6.20	23.37	23.93	23.69	22.94	29.52	29.80
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.00	16.10	15.50	14.96	15.89	21.65	30.00
5775MHz	Pass	6.20	19.71	19.19	18.79	19.77	25.40	29.80

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

2 Stream 4 TX for TxBF mode for 160MHz and band 2, 3:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	16.70	0.04677
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	17.01	0.05023
5.25-5.35GHz		
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	23.90	0.24547
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	23.57	0.22751
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	21.29	0.13459
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	17.34	0.05420
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	23.88	0.24434
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	23.75	0.23714
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	21.46	0.13996
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	17.51	0.05636
5.47-5.725GHz		
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	23.57	0.22751
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	23.21	0.20941
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	23.20	0.20893
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	19.12	0.08166
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	23.81	0.24044
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	23.40	0.21878
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	23.43	0.22029
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	19.32	0.08551
5.725-5.85GHz		
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	16.51	0.04477
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	12.64	0.01837
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	9.51	0.00893
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	17.09	0.05117
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	13.39	0.02183
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	9.75	0.00944

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	5.8	17.56	17.94	17.41	17.93	23.74	23.98
5300MHz	Pass	5.8	17.16	18.04	17.80	18.41	23.90	23.98
5320MHz	Pass	5.8	18.02	17.50	17.32	18.41	23.85	23.98
5500MHz	Pass	6.1	17.60	17.40	17.38	17.81	23.57	23.88
5580MHz	Pass	6.3	17.65	16.99	16.16	17.62	23.17	23.68
5700MHz	Pass	6.3	15.93	15.28	15.03	15.33	21.43	23.68
5720MHz Straddle 5.47-5.725GHz	Pass	6.3	16.71	16.11	15.97	16.50	22.35	22.71
5720MHz Straddle 5.725-5.85GHz	Pass	6.3	10.88	10.25	10.13	10.67	16.51	29.70
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-		-	-	-	-	-	
5270MHz	Pass	5.8	17.57	17.12	16.98	17.67	23.37	23.98
5310MHz	Pass	5.8	17.56	17.91	17.42	17.27	23.57	23.98
5510MHz	Pass	6.1	14.86	14.02	13.42	14.74	20.32	23.89
5550MHz	Pass	6.1	17.77	16.95	16.85	17.11	23.21	23.97
5670MHz	Pass	6.3	17.11	16.64	16.41	17.51	22.96	23.68
5710MHz Straddle 5.47-5.725GHz	Pass	6.3	17.44	17.03	16.59	17.63	23.21	23.68
5710MHz Straddle 5.725-5.85GHz	Pass	6.3	6.93	6.37	5.90	7.15	12.64	29.70
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-		-	-	-	-	-	
5290MHz	Pass	5.8	15.34	14.87	14.91	15.88	21.29	23.98
5530MHz	Pass	6.1	15.17	14.35	14.17	15.16	20.76	23.89
5610MHz	Pass	6.3	16.47	15.77	15.94	16.25	22.14	23.68
5690MHz Straddle 5.47-5.725GHz	Pass	6.3	17.35	16.83	17.12	17.40	23.20	23.68
5690MHz Straddle 5.725-5.85GHz	Pass	6.3	3.91	3.19	3.11	3.68	9.51	29.70
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-		-	-	-	-	-	
5250MHz	Pass	5	11.23	10.13	10.15	11.10	16.70	30.00
5250MHz	Pass	5	11.91	10.57	10.96	11.69	17.34	23.98
5570MHz	Pass	6.3	13.75	12.86	11.82	13.68	19.12	23.68
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-		-	-	-	-	-	
5260MHz	Pass	5.8	17.69	17.86	17.93	17.67	23.81	23.98
5300MHz	Pass	5.8	17.76	18.15	17.68	17.83	23.88	23.98
5320MHz	Pass	5.8	17.20	18.32	17.66	18.06	23.85	23.98
5500MHz	Pass	6.1	17.99	17.55	17.86	17.74	23.81	23.88
5580MHz	Pass	6.3	18.07	17.26	16.35	17.70	23.41	23.68
5700MHz	Pass	6.3	16.21	15.39	15.31	15.66	21.68	23.68
5720MHz Straddle 5.47-5.725GHz	Pass	6.3	16.94	16.50	16.17	16.80	22.63	23.68
5720MHz Straddle 5.725-5.85GHz	Pass	6.3	11.48	10.76	10.70	11.27	17.09	29.70
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-		-	-	-	-	-	
5270MHz	Pass	5.8	17.79	17.89	17.74	17.48	23.75	23.98
5310MHz	Pass	5.8	17.74	17.76	17.73	17.70	23.75	23.98
5510MHz	Pass	6.1	15.13	14.41	13.65	14.82	20.56	23.89
5550MHz	Pass	6.1	17.78	17.84	17.75	17.66	23.78	23.97
5670MHz	Pass	6.3	17.41	16.71	16.66	17.62	23.14	23.68
5710MHz Straddle 5.47-5.725GHz	Pass	6.3	17.78	17.16	16.71	17.79	23.40	23.68
5710MHz Straddle 5.725-5.85GHz	Pass	6.3	7.75	7.13	6.63	7.85	13.39	29.70

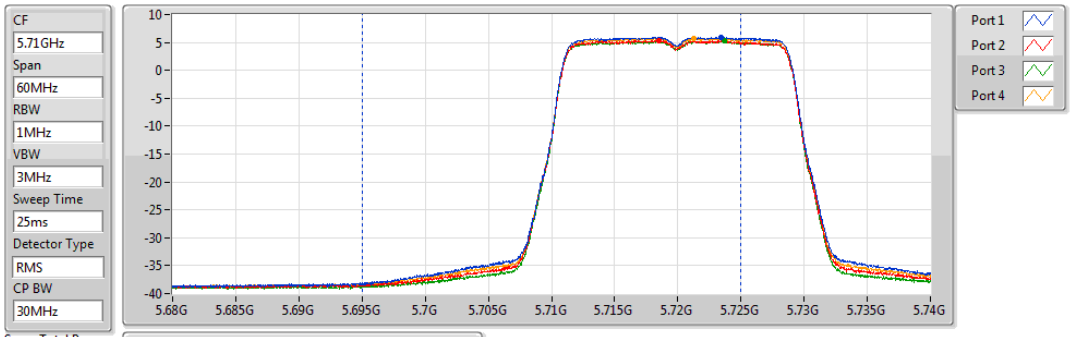
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-		-	-	-	-	-	
5290MHz	Pass	5.8	15.34	15.23	15.23	15.91	21.46	23.98
5530MHz	Pass	6.1	15.23	14.65	14.17	15.46	20.93	23.89
5610MHz	Pass	6.3	16.62	16.13	16.26	16.59	22.43	23.68
5690MHz Straddle 5.47-5.725GHz	Pass	6.3	17.63	17.21	17.27	17.52	23.43	23.68
5690MHz Straddle 5.725-5.85GHz	Pass	6.3	4.05	3.47	3.39	3.98	9.75	29.70
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-		-	-	-	-	-	
5250MHz	Pass	5	11.47	10.51	10.64	11.25	17.01	30.00
5250MHz	Pass	5	12.08	11.03	11.14	11.62	17.51	23.98
5570MHz	Pass	6.3	13.75	13.06	12.16	13.99	19.32	23.68

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

802.11ac VHT20-BF_Nss2,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

07/11/2019



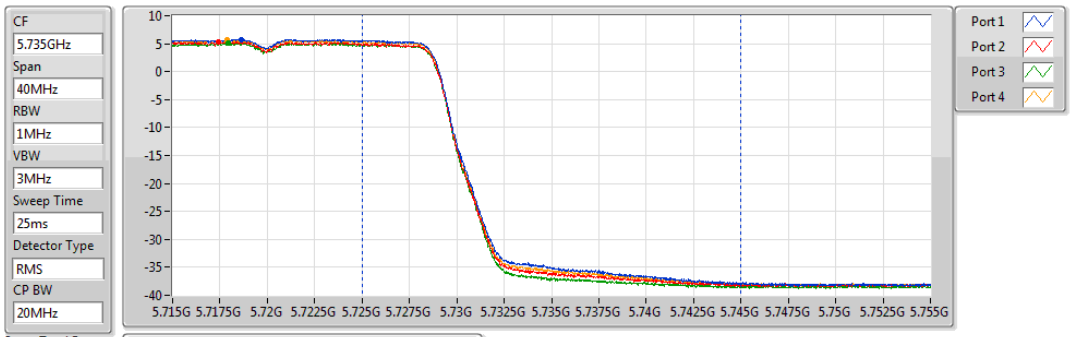
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.35	16.71	16.11	15.97	16.50

802.11ac VHT20-BF_Nss2,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

07/11/2019



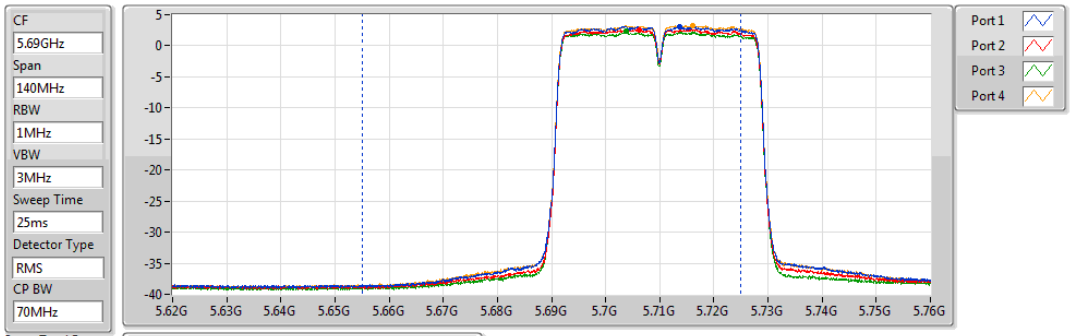
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.51	10.88	10.25	10.13	10.67

802.11ac VHT40-BF_Nss2,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

07/11/2019



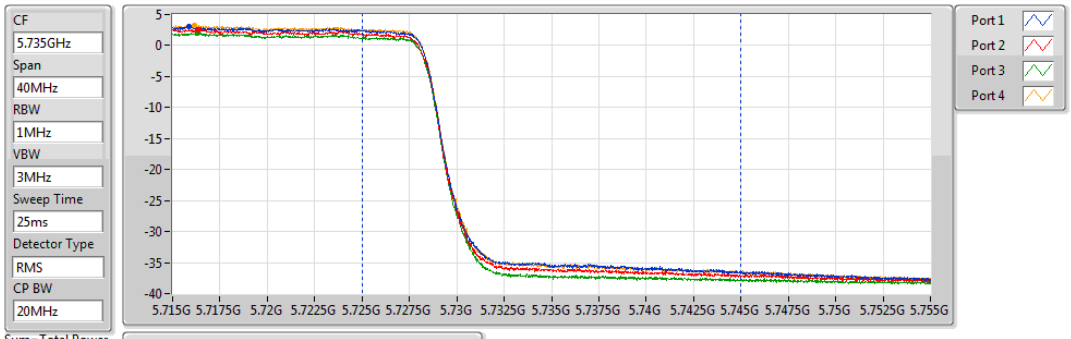
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.21	17.44	17.03	16.59	17.63

802.11ac VHT40-BF_Nss2,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

07/11/2019



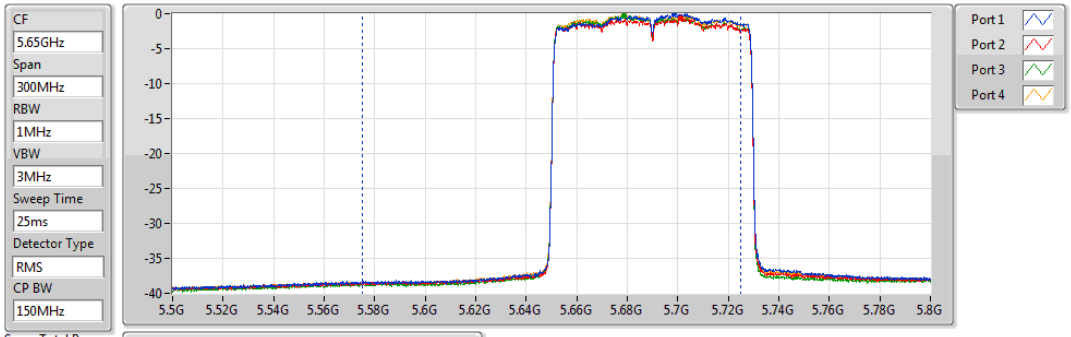
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
12.64	6.93	6.37	5.90	7.15

802.11ac VHT80-BF_Nss2,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

07/11/2019



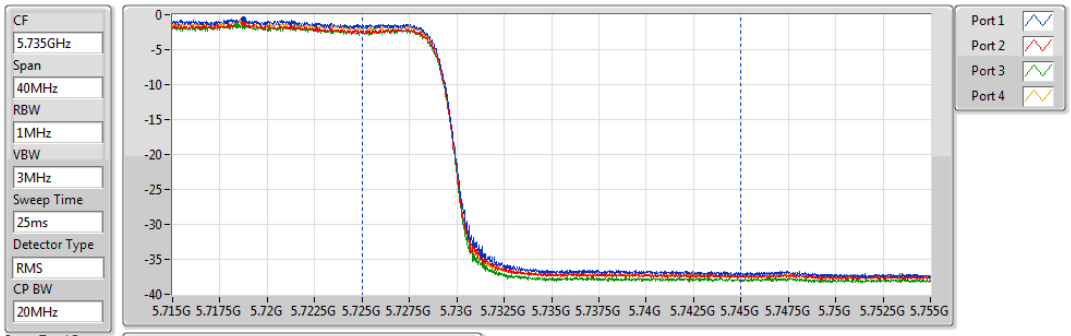
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.20	17.35	16.83	17.12	17.40

802.11ac VHT80-BF_Nss2,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz

07/11/2019



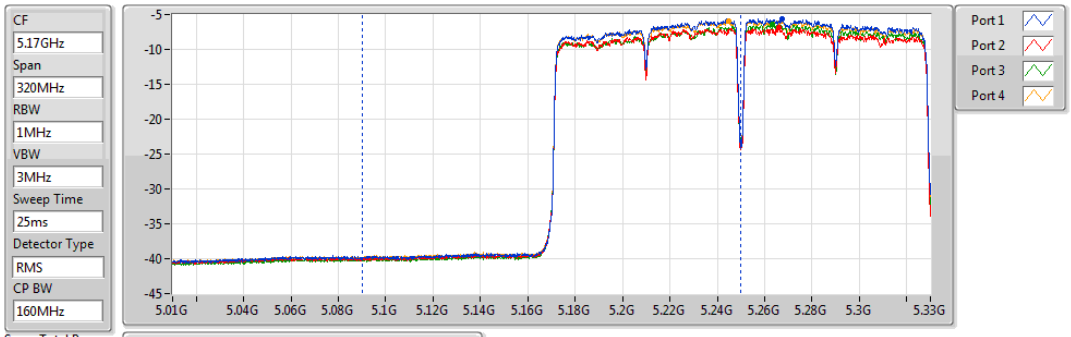
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
9.51	3.91	3.19	3.11	3.68

802.11ac VHT160-BF_Nss2,(MCS0)_4TX **AV Power**

5250MHz

07/11/2019



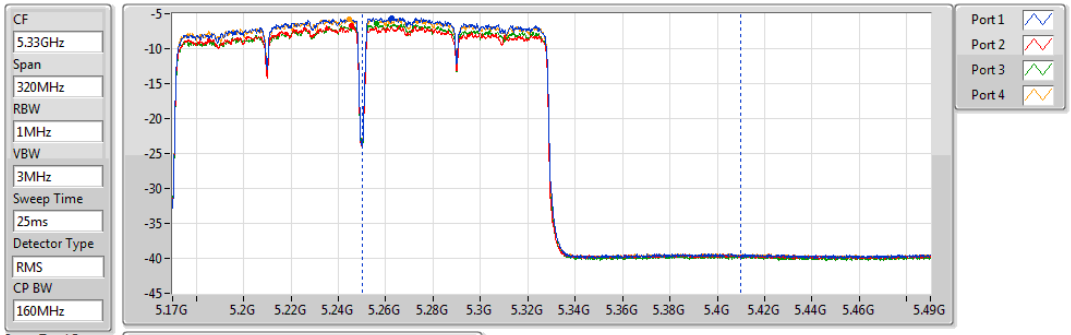
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
16.70	11.23	10.13	10.15	11.10

802.11ac VHT160-BF_Nss2,(MCS0)_4TX **AV Power**

5250MHz

07/11/2019



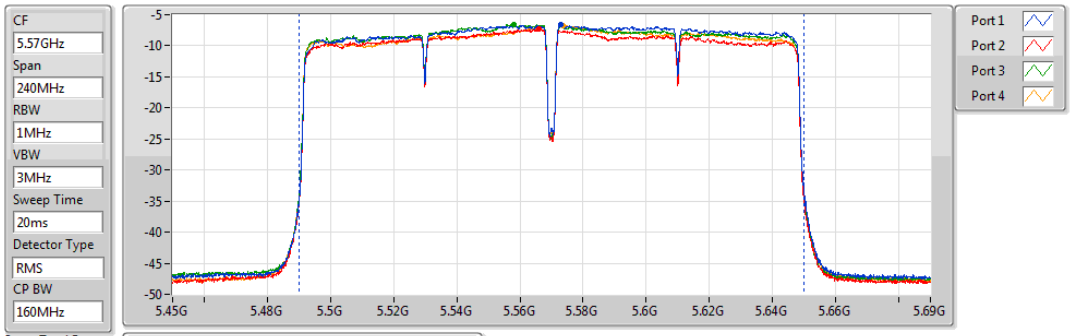
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.34	11.91	10.57	10.96	11.69

802.11ac VHT160-BF_Nss2,(MCS0)_4TX **AV Power**

5570MHz

24/07/2019



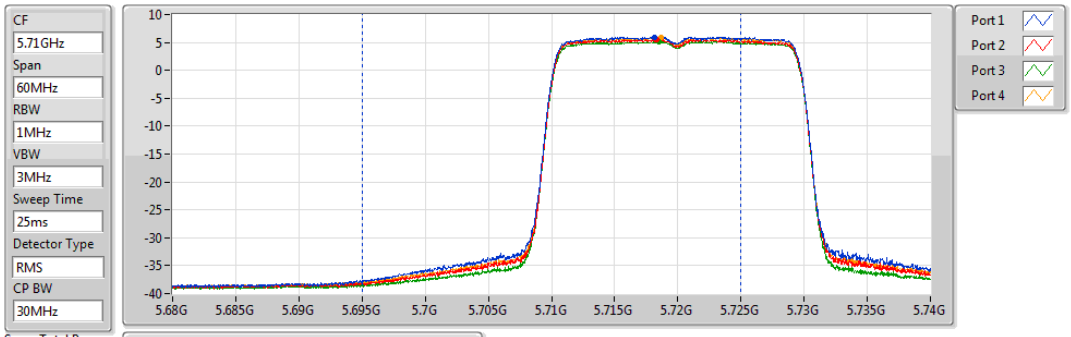
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
20.75	15.18	14.12	15.01	14.53

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

5720MHz Straddle 5.47-5.725GHz

07/11/2019



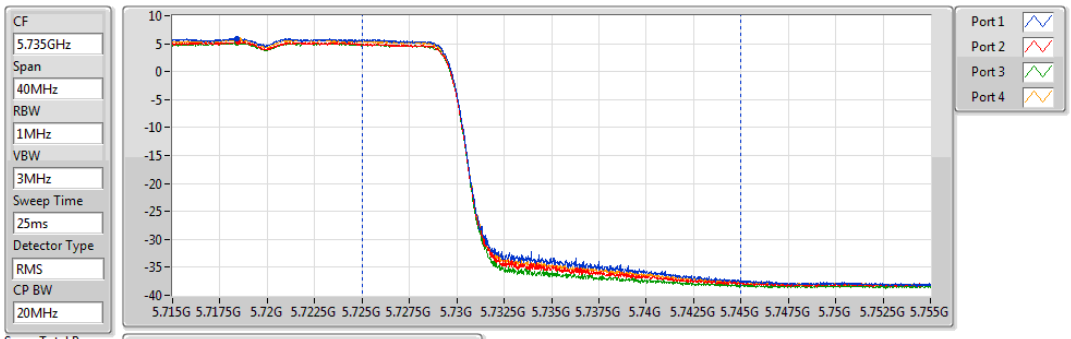
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.63	16.94	16.50	16.17	16.80

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

5720MHz Straddle 5.725-5.85GHz

07/11/2019



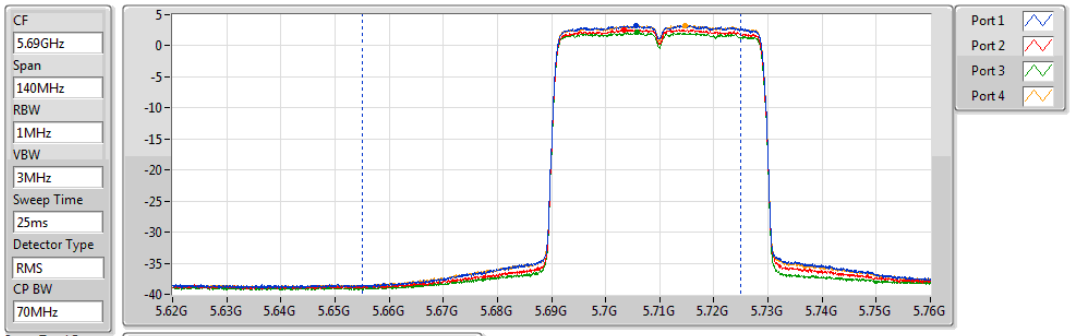
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.23	11.64	10.90	10.84	11.41

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

5710MHz Straddle 5.47-5.725GHz

06/11/2019



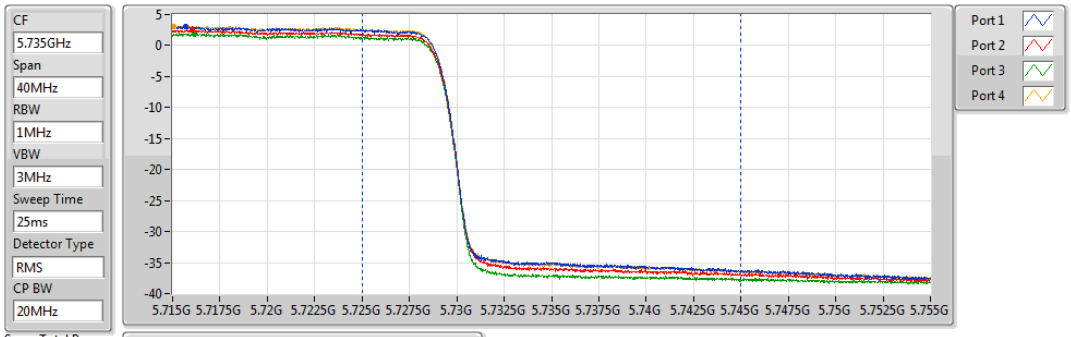
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.40	17.78	17.16	16.71	17.79

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

5710MHz Straddle 5.725-5.85GHz

06/11/2019



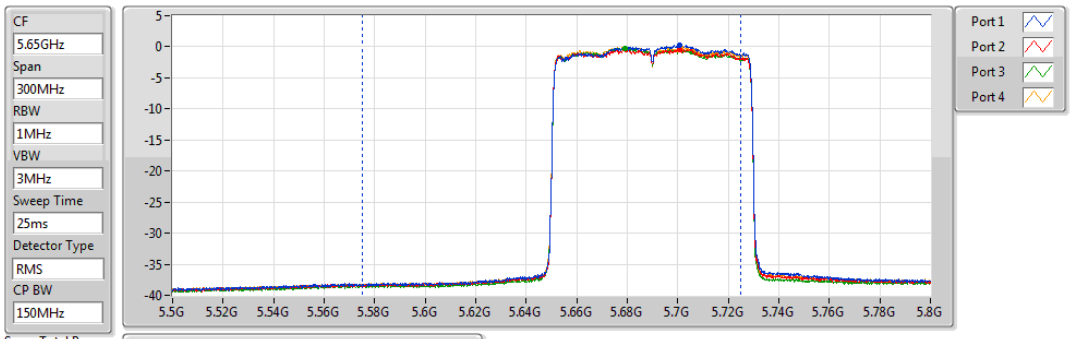
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
13.39	7.75	7.13	6.63	7.85

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

5690MHz Straddle 5.47-5.725GHz

06/11/2019



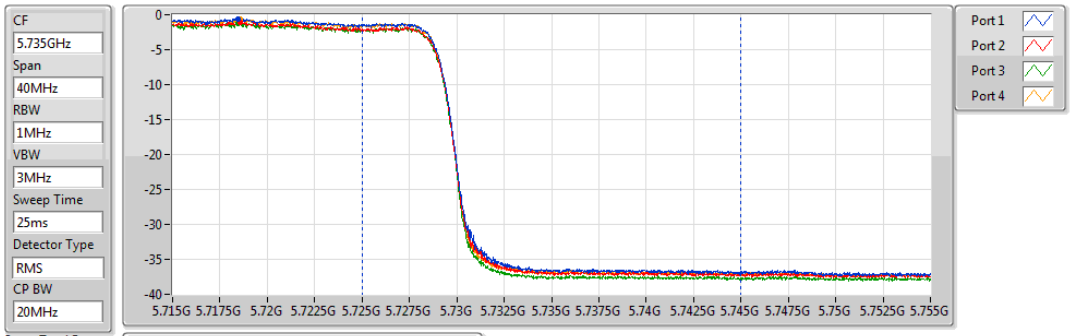
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.43	17.63	17.21	17.27	17.52

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

5690MHz Straddle 5.725-5.85GHz

06/11/2019



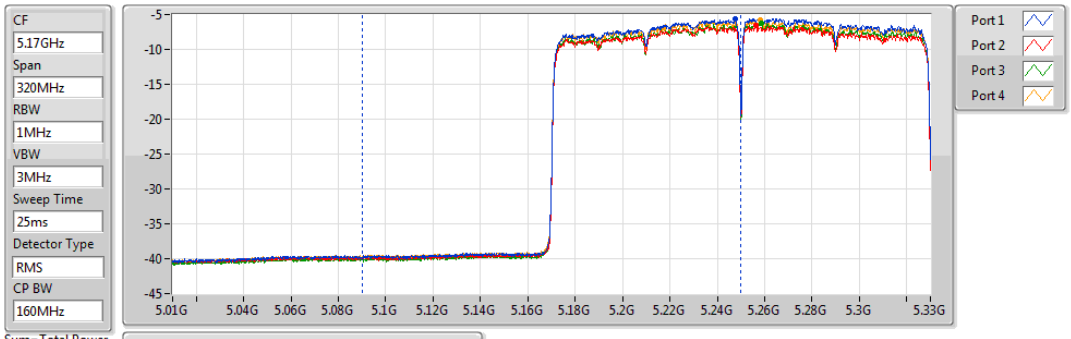
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
9.75	4.05	3.47	3.39	3.98

802.11ax HEW160-BF_Nss2,(MCS0)_4TX **AV Power**

5250MHz

06/11/2019



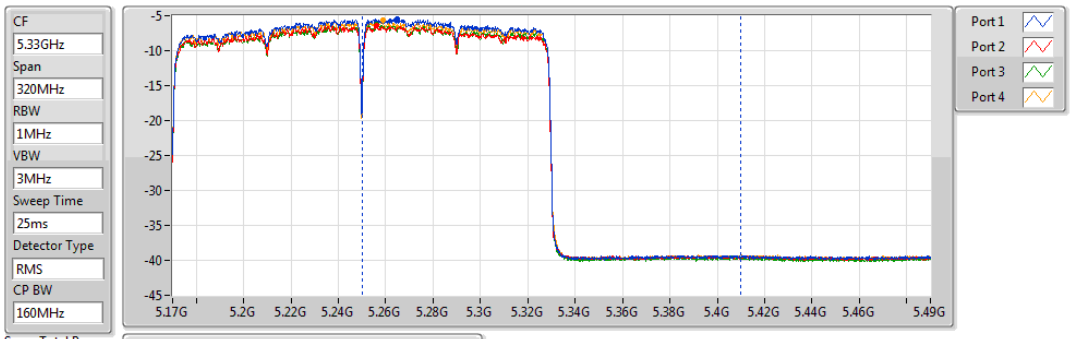
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.01	11.47	10.51	10.64	11.25

802.11ax HEW160-BF_Nss2,(MCS0)_4TX **AV Power**

5250MHz

06/11/2019



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.51	12.08	11.03	11.14	11.62

For non-beamforming mode:
4 Stream 4 TX for SDM mode for band 1, 4:
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	15.81
802.11ax HEW20_Nss4,(MCS0)_4TX	15.94
802.11ac VHT40_Nss4,(MCS0)_4TX	11.06
802.11ax HEW40_Nss4,(MCS0)_4TX	11.31
802.11ac VHT80_Nss4,(MCS0)_4TX	4.26
802.11ax HEW80_Nss4,(MCS0)_4TX	4.26
5.725-5.85GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	14.50
802.11ax HEW20_Nss4,(MCS0)_4TX	14.71
802.11ac VHT40_Nss4,(MCS0)_4TX	11.15
802.11ax HEW40_Nss4,(MCS0)_4TX	11.48
802.11ac VHT80_Nss4,(MCS0)_4TX	6.25
802.11ax HEW80_Nss4,(MCS0)_4TX	6.22

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

Result

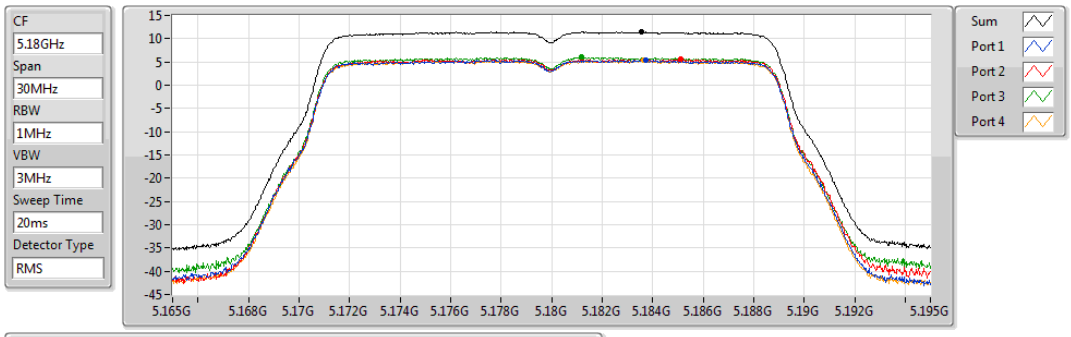
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.20	5.38	5.53	6.01	5.33	11.42	17.00
5200MHz	Pass	2.20	9.15	9.55	9.63	9.33	15.30	17.00
5240MHz	Pass	2.20	9.57	10.16	10.28	9.73	15.81	17.00
5745MHz	Pass	3.20	8.65	8.61	8.69	8.51	14.49	30.00
5785MHz	Pass	3.20	9.01	8.45	8.41	8.55	14.50	30.00
5825MHz	Pass	3.20	8.39	8.29	8.65	8.58	14.32	30.00
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.20	5.67	5.83	6.35	5.68	11.75	17.00
5200MHz	Pass	2.20	9.26	9.73	9.93	9.61	15.53	17.00
5240MHz	Pass	2.20	9.66	10.16	10.23	10.02	15.94	17.00
5745MHz	Pass	3.20	8.67	8.71	8.95	8.80	14.69	30.00
5785MHz	Pass	3.20	8.91	8.64	8.72	8.95	14.71	30.00
5825MHz	Pass	3.20	8.50	8.69	8.79	8.89	14.59	30.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	2.20	0.52	0.87	1.29	0.27	6.67	17.00
5230MHz	Pass	2.20	4.92	5.54	5.62	4.89	11.06	17.00
5755MHz	Pass	3.20	5.19	5.32	5.63	5.12	11.15	30.00
5795MHz	Pass	3.20	5.02	5.19	5.27	4.95	10.94	30.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	2.20	0.96	1.49	1.46	0.65	6.91	17.00
5230MHz	Pass	2.20	5.24	5.96	5.49	4.97	11.31	17.00
5755MHz	Pass	3.20	5.43	5.55	5.91	5.44	11.48	30.00
5795MHz	Pass	3.20	5.28	5.44	5.50	5.44	11.22	30.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	2.00	-1.97	-1.15	-1.62	-2.09	4.26	17.00
5775MHz	Pass	3.20	0.39	0.74	0.20	0.32	6.25	30.00
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	2.00	-1.85	-1.10	-1.53	-2.04	4.26	17.00
5775MHz	Pass	3.20	0.39	0.47	0.17	0.25	6.22	30.00

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

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5180MHz

19/07/2019

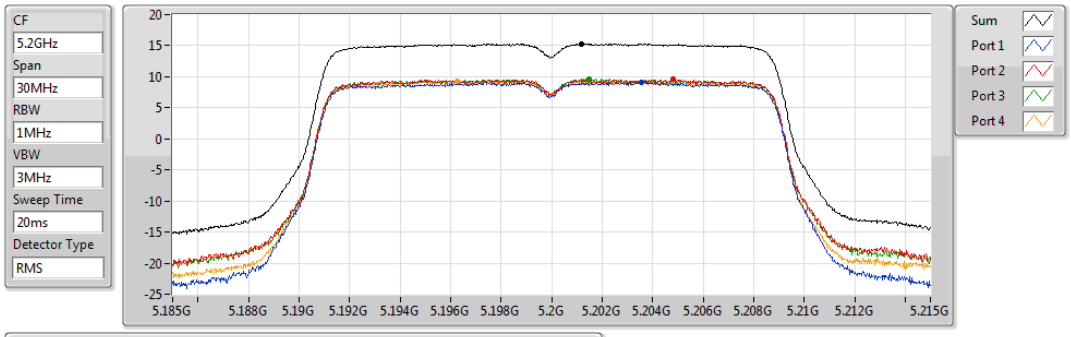


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.42	11.42	5.38	5.53	6.01	5.33

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5200MHz

19/07/2019

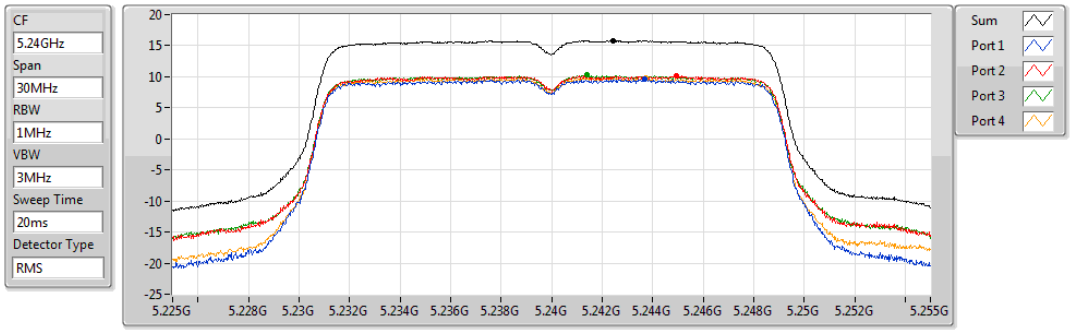


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.30	15.30	9.15	9.55	9.63	9.33

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5240MHz

19/07/2019

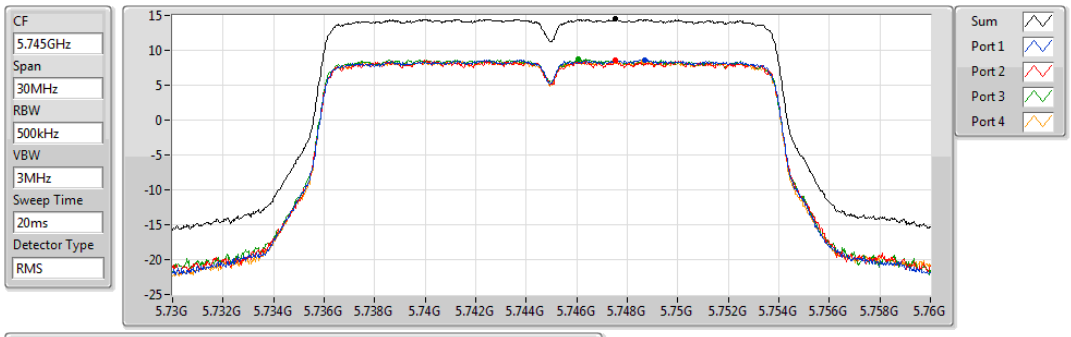


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.81	15.81	9.57	10.16	10.28	9.73

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5745MHz

19/07/2019

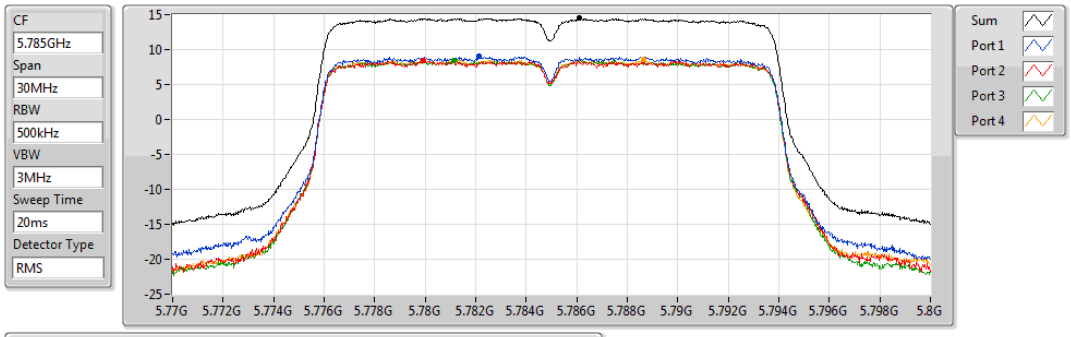


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.49	14.49	8.65	8.61	8.69	8.51

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5785MHz

19/07/2019

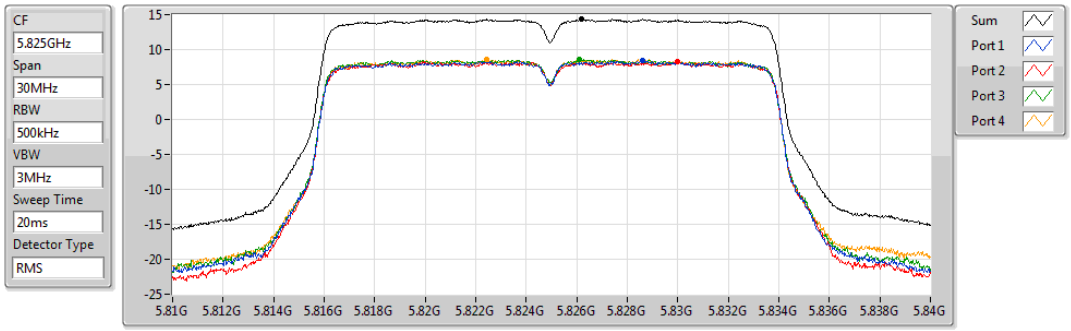


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.50	14.50	9.01	8.45	8.41	8.55

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5825MHz

19/07/2019

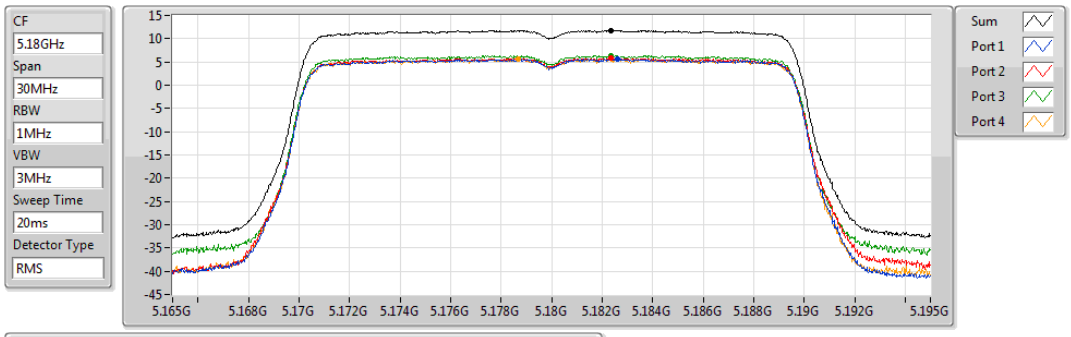


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.32	14.32	8.39	8.29	8.65	8.58

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5180MHz

19/07/2019

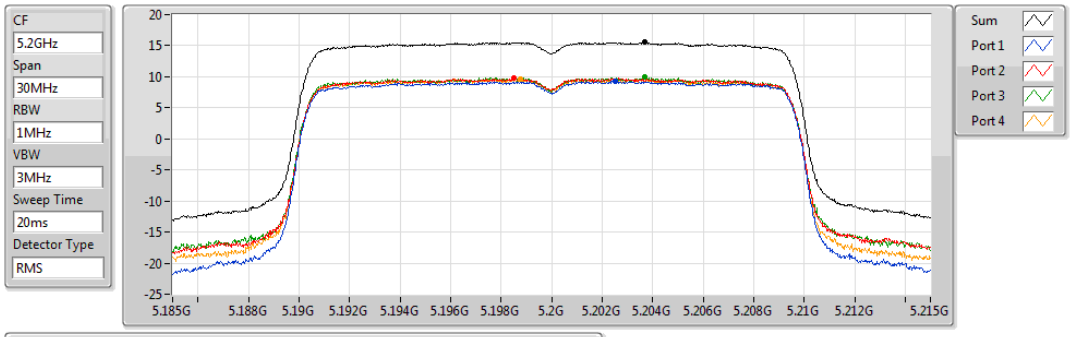


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.75	11.75	5.67	5.83	6.35	5.68

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5200MHz

19/07/2019

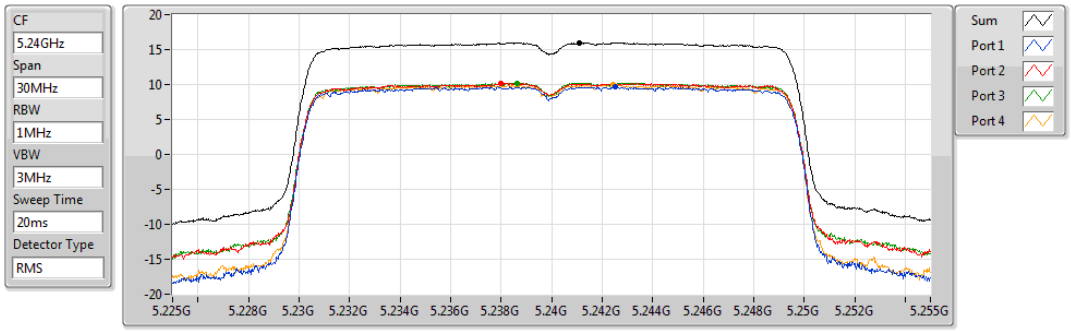


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.53	15.53	9.26	9.73	9.93	9.61

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5240MHz

19/07/2019

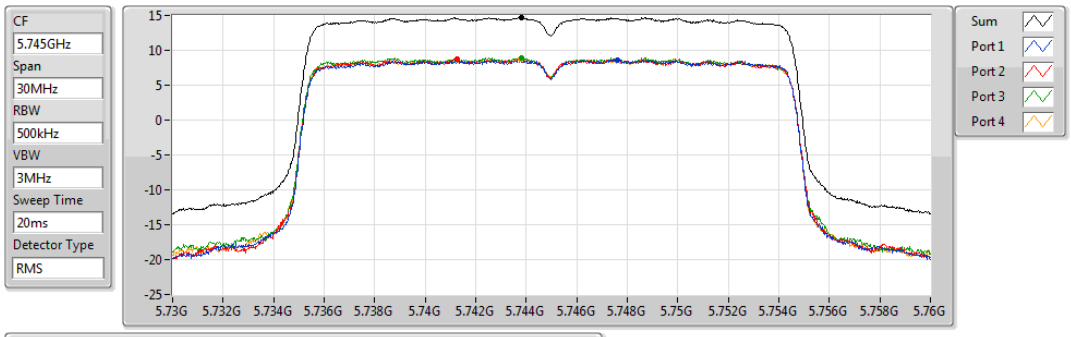


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.94	15.94	9.66	10.16	10.23	10.02

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5745MHz

19/07/2019

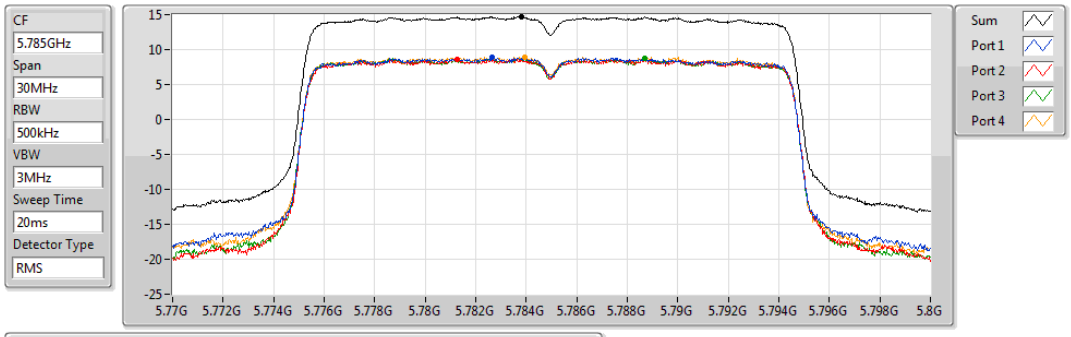


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.69	14.69	8.67	8.71	8.95	8.80

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5785MHz

19/07/2019

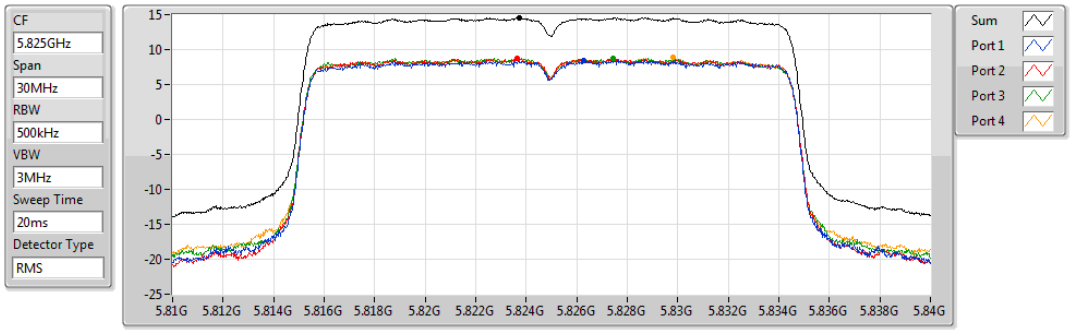


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.71	14.71	8.91	8.64	8.72	8.95

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5825MHz

19/07/2019

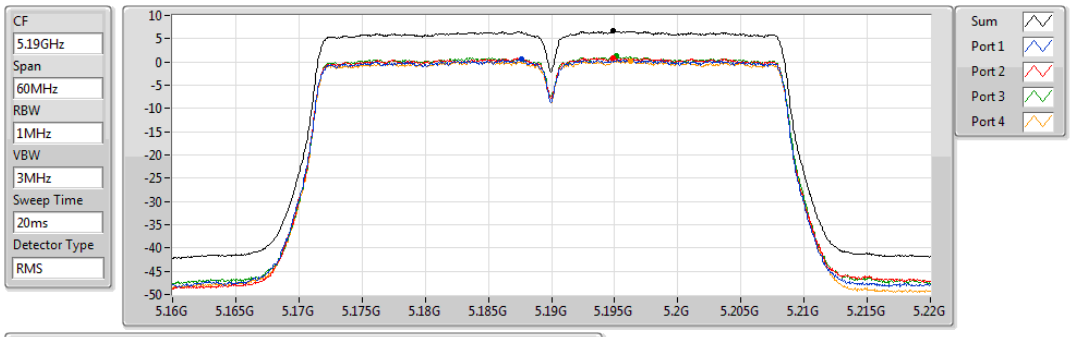


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.59	14.59	8.50	8.69	8.79	8.89

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5190MHz

19/07/2019

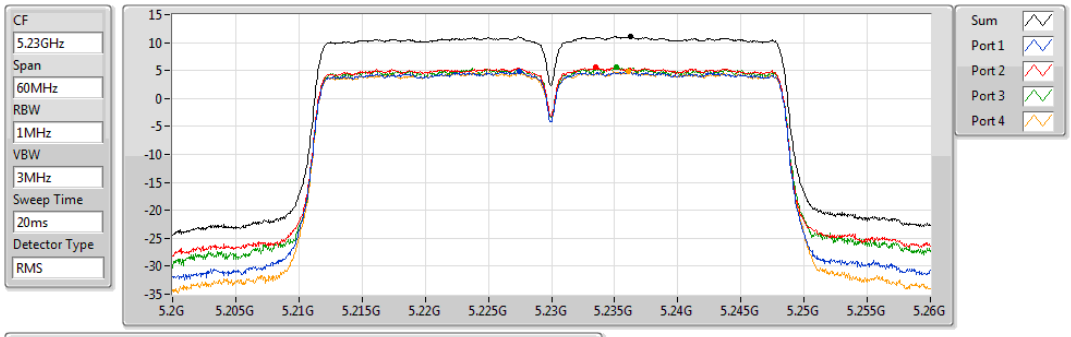


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.67	6.67	0.52	0.87	1.29	0.27

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5230MHz

19/07/2019

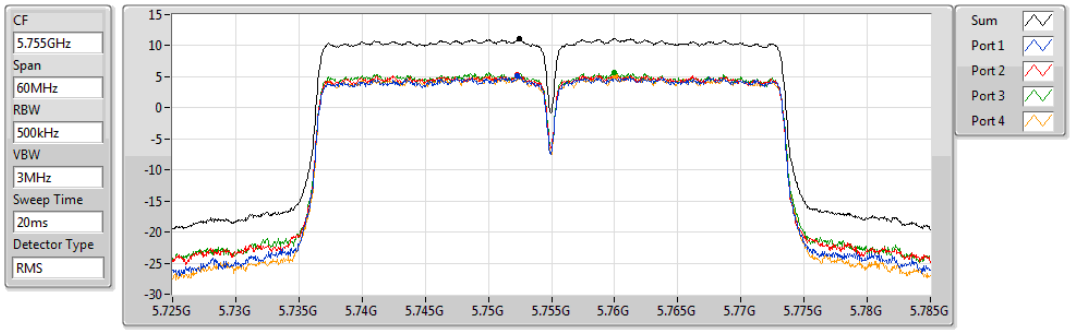


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.06	11.06	4.92	5.54	5.62	4.89

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5755MHz

19/07/2019

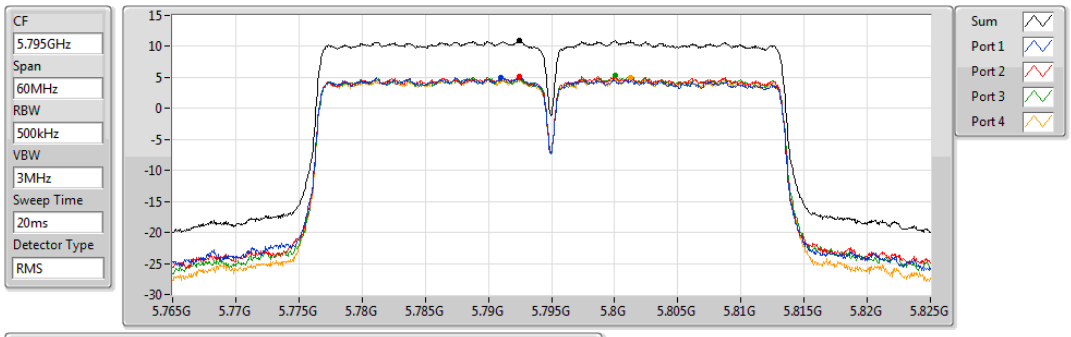


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.15	11.15	5.19	5.32	5.63	5.12

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5795MHz

19/07/2019

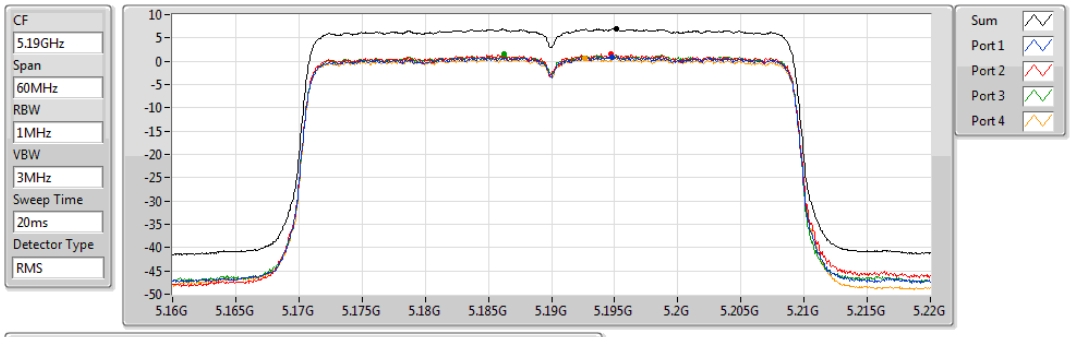


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.94	10.94	5.02	5.19	5.27	4.95

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5190MHz

19/07/2019

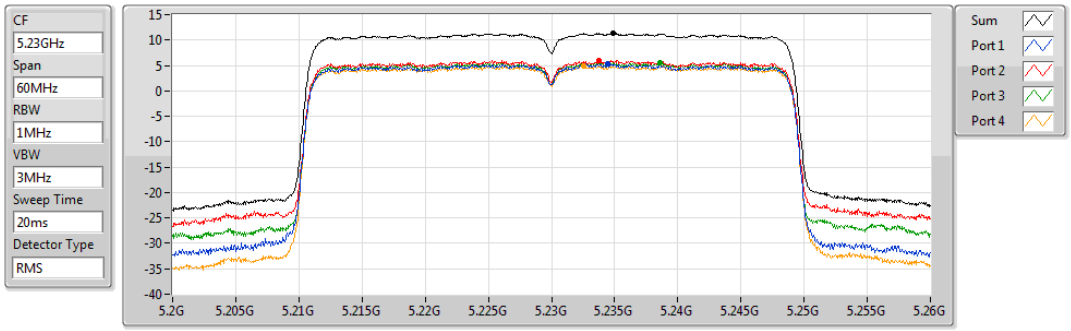


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.91	6.91	0.96	1.49	1.46	0.65

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5230MHz

19/07/2019

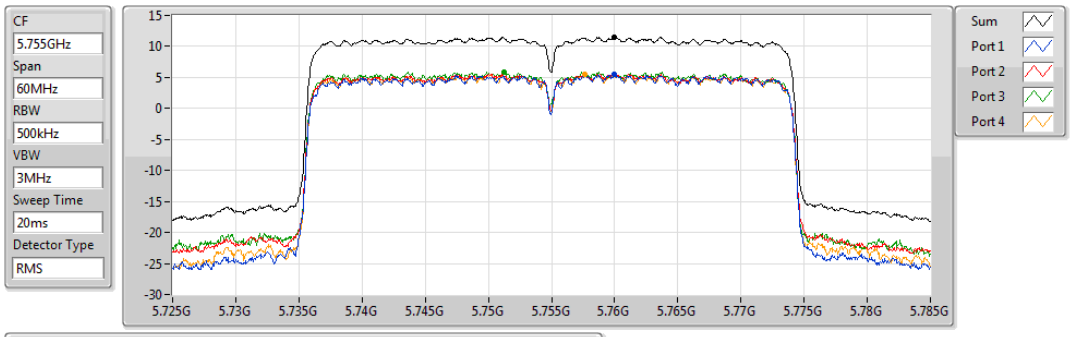


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.31	11.31	5.24	5.96	5.49	4.97

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5755MHz

19/07/2019

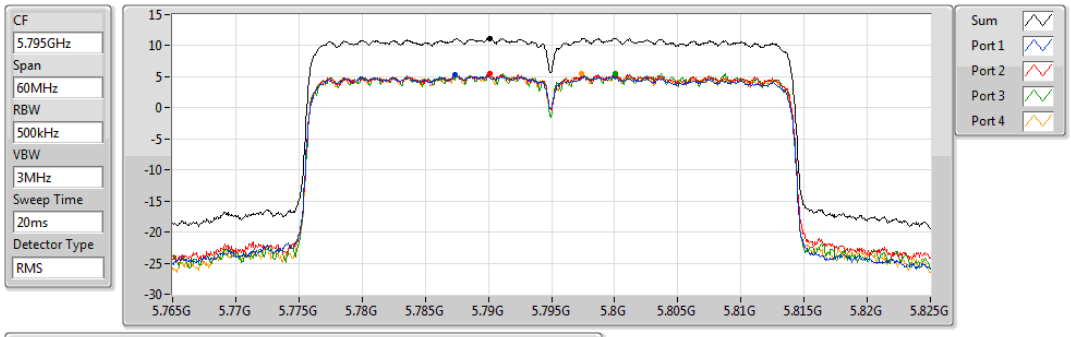


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.48	11.48	5.43	5.55	5.91	5.44

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5795MHz

19/07/2019

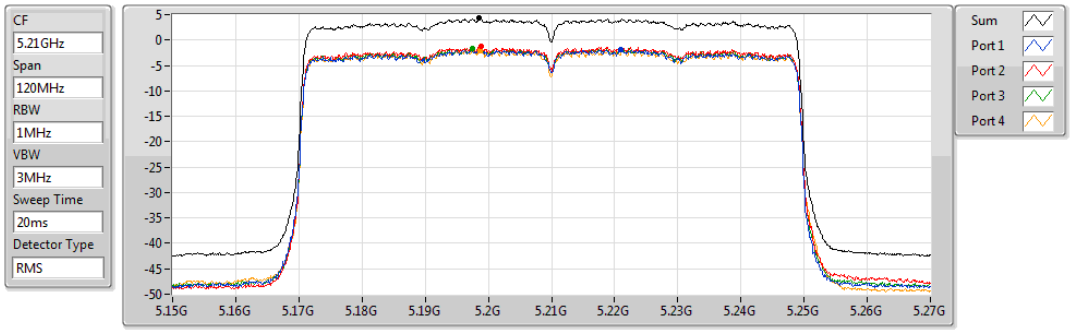


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.22	11.22	5.28	5.44	5.50	5.44

802.11ac VHT80_Nss4,(MCS0)_4TX PSD

5210MHz

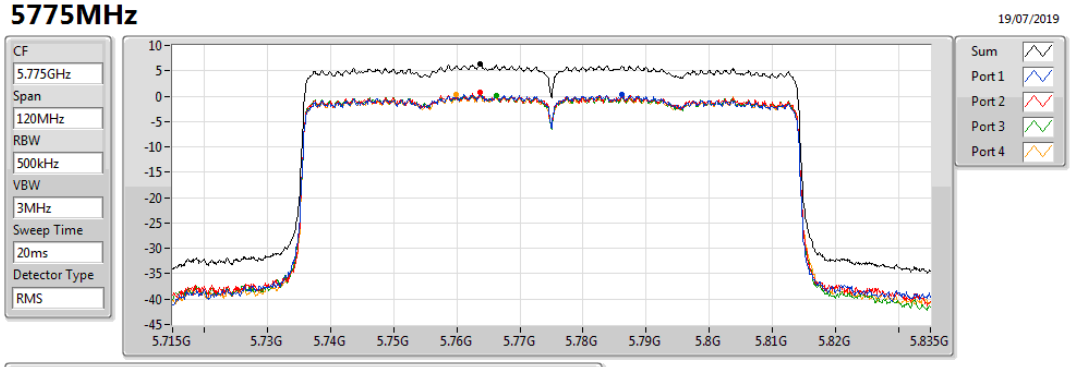
19/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.26	4.26	-1.97	-1.15	-1.62	-2.09

802.11ac VHT80_Nss4,(MCS0)_4TX PSD

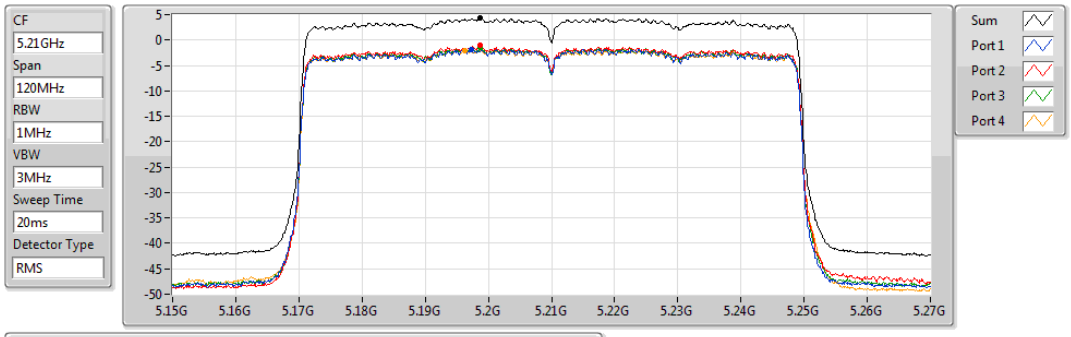
5775MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.25	6.25	0.39	0.74	0.20	0.32

802.11ax HEW80_Nss4,(MCS0)_4TX PSD

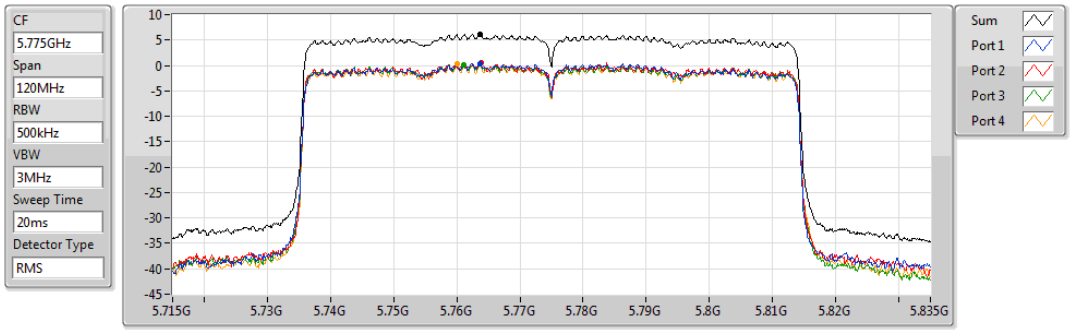
5210MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.26	4.26	-1.85	-1.10	-1.53	-2.04

802.11ax HEW80_Nss4,(MCS0)_4TX PSD

5775MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.22	6.22	0.39	0.47	0.17	0.25

4 Stream 4 TX for SDM mode for 160MHz and band 2, 3:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT160_Nss4,(MCS0)_4TX	-2.33
802.11ax HEW160_Nss4,(MCS0)_4TX	-2.14
5.25-5.35GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	9.95
802.11ax HEW20_Nss4,(MCS0)_4TX	10.19
802.11ac VHT40_Nss4,(MCS0)_4TX	7.26
802.11ax HEW40_Nss4,(MCS0)_4TX	7.44
802.11ac VHT80_Nss4,(MCS0)_4TX	4.20
802.11ax HEW80_Nss4,(MCS0)_4TX	4.15
802.11ac VHT160_Nss4,(MCS0)_4TX	-1.94
802.11ax HEW160_Nss4,(MCS0)_4TX	-1.97
5.47-5.725GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	10.12
802.11ax HEW20_Nss4,(MCS0)_4TX	10.42
802.11ac VHT40_Nss4,(MCS0)_4TX	7.65
802.11ax HEW40_Nss4,(MCS0)_4TX	8.07
802.11ac VHT80_Nss4,(MCS0)_4TX	5.02
802.11ax HEW80_Nss4,(MCS0)_4TX	5.10
802.11ac VHT160_Nss4,(MCS0)_4TX	0.64
802.11ax HEW160_Nss4,(MCS0)_4TX	0.64
5.725-5.85GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	8.55
802.11ax HEW20_Nss4,(MCS0)_4TX	8.69
802.11ac VHT40_Nss4,(MCS0)_4TX	5.69
802.11ax HEW40_Nss4,(MCS0)_4TX	6.04
802.11ac VHT80_Nss4,(MCS0)_4TX	2.61
802.11ax HEW80_Nss4,(MCS0)_4TX	2.56

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.8	4.13	4.30	4.10	3.84	9.95	11.00
5300MHz	Pass	2.8	3.92	4.08	4.10	3.27	9.75	11.00
5320MHz	Pass	2.8	3.80	3.79	4.04	3.09	9.57	11.00
5500MHz	Pass	3.1	3.41	3.98	3.65	3.70	9.58	11.00
5580MHz	Pass	3.3	3.79	3.98	3.63	3.81	9.70	11.00
5700MHz	Pass	3.3	3.70	3.54	3.92	3.05	9.39	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.3	4.23	4.33	4.73	3.74	10.12	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	3.3	2.50	2.93	2.86	2.06	8.55	30.00
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.8	4.50	4.60	4.37	3.95	10.19	11.00
5300MHz	Pass	2.8	4.25	4.29	4.37	3.67	10.02	11.00
5320MHz	Pass	2.8	4.30	3.85	4.20	3.30	9.87	11.00
5500MHz	Pass	3.1	4.07	4.21	3.82	4.02	9.91	11.00
5580MHz	Pass	3.3	4.15	4.40	3.72	4.07	9.96	11.00
5700MHz	Pass	3.3	4.17	4.14	4.29	3.49	9.93	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.3	4.46	4.61	4.47	4.71	10.42	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	3.3	2.56	2.68	3.14	2.32	8.69	30.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.8	1.50	1.45	1.48	0.98	7.26	11.00
5310MHz	Pass	2.8	1.55	1.45	1.55	0.96	7.23	11.00
5510MHz	Pass	3.1	1.12	1.29	1.33	0.82	7.06	11.00
5550MHz	Pass	3.1	1.38	1.51	1.44	1.11	7.18	11.00
5670MHz	Pass	3.3	1.24	1.08	1.25	1.15	6.93	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.3	1.52	1.79	2.18	1.50	7.65	11.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.3	-0.37	-0.36	0.17	-0.32	5.69	30.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.8	1.79	1.75	1.43	1.06	7.44	11.00
5310MHz	Pass	2.8	1.86	1.61	1.56	1.30	7.44	11.00
5510MHz	Pass	3.1	1.67	1.58	1.35	1.21	7.29	11.00
5550MHz	Pass	3.1	1.81	1.99	1.86	1.27	7.55	11.00
5670MHz	Pass	3.3	1.97	1.56	1.95	1.56	7.61	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.3	2.06	2.17	2.52	1.75	8.07	11.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.3	0.13	0.16	0.29	-0.14	6.04	30.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.8	-1.51	-1.64	-1.64	-2.19	4.20	11.00
5530MHz	Pass	3.1	-0.78	-0.95	-0.87	-1.58	4.86	11.00
5610MHz	Pass	3.3	-0.85	-0.91	-0.66	-0.92	5.02	11.00
5690MHz Straddle 5.47-5.725GHz	Pass	3.3	-0.86	-1.20	-0.84	-1.41	4.79	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.3	-3.41	-3.43	-3.06	-3.36	2.61	30.00
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.8	-1.64	-1.53	-1.89	-2.17	4.15	11.00
5530MHz	Pass	3.1	-0.66	-0.81	-0.70	-1.51	4.96	11.00
5610MHz	Pass	3.3	-0.64	-0.79	-0.48	-0.95	5.10	11.00

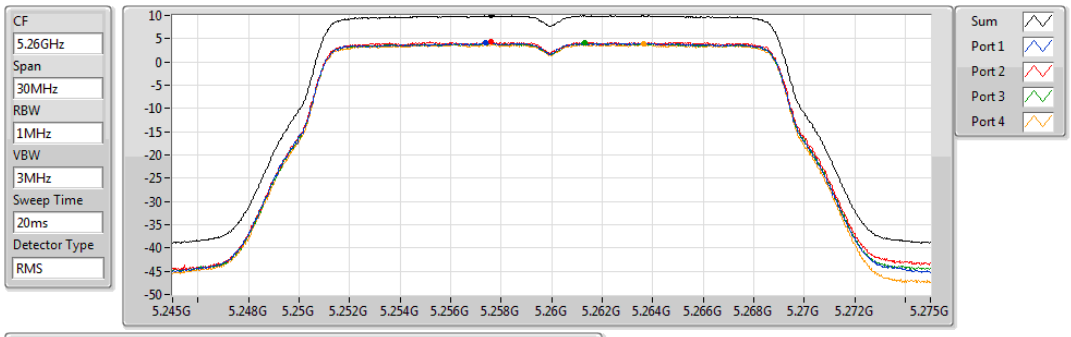
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5690MHz Straddle 5.47-5.725GHz	Pass	3.3	-0.78	-1.12	-0.91	-1.37	4.84	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.3	-3.50	-3.30	-3.24	-3.45	2.56	30.00
802.11ac VHT160_Nss4,(MCS0)_4TX	-		-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.2	-8.09	-8.10	-7.96	-8.23	-2.33	17.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.2	-7.70	-8.02	-7.57	-8.23	-1.94	11.00
5570MHz	Pass	3.3	-5.02	-5.56	-4.98	-5.17	0.64	11.00
802.11ax HEW160_Nss4,(MCS0)_4TX	-		-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.2	-7.90	-7.98	-7.84	-8.28	-2.14	17.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.2	-7.49	-7.83	-7.59	-8.35	-1.97	11.00
5570MHz	Pass	3.3	-5.00	-5.35	-5.05	-5.25	0.64	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;

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5260MHz

19/07/2019

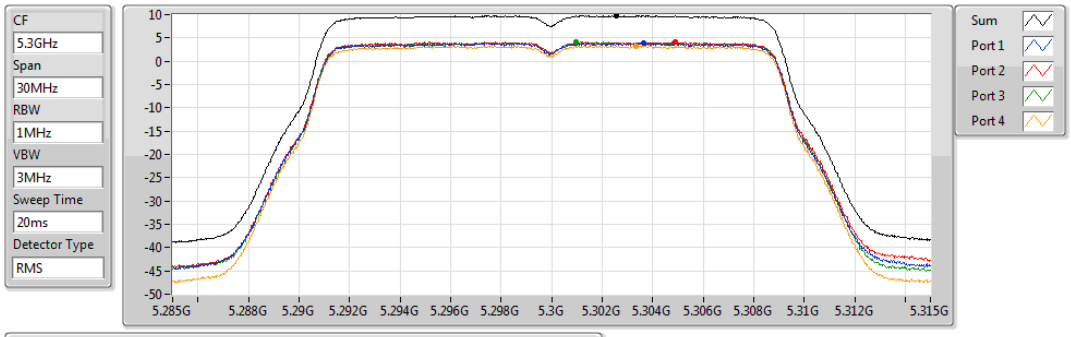


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.95	9.95	4.13	4.30	4.10	3.84

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5300MHz

19/07/2019

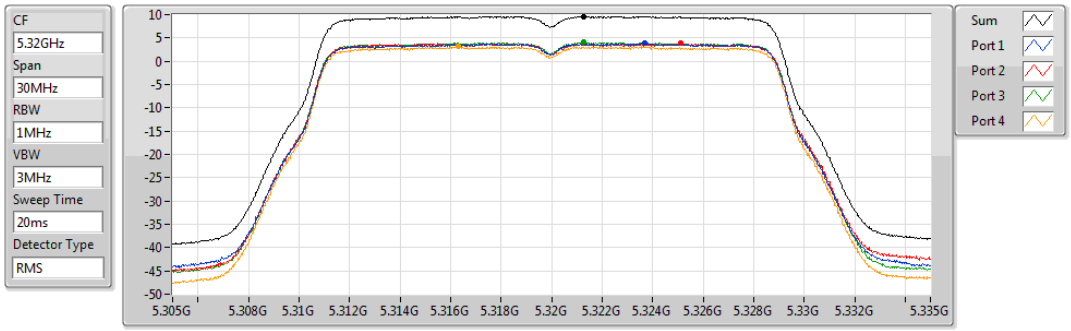


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.75	9.75	3.92	4.08	4.10	3.27

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5320MHz

19/07/2019

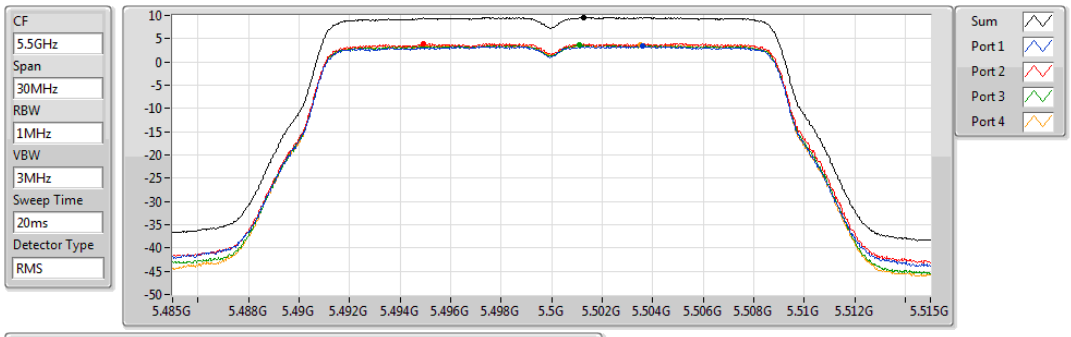


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.57	9.57	3.80	3.79	4.04	3.09

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5500MHz

19/07/2019

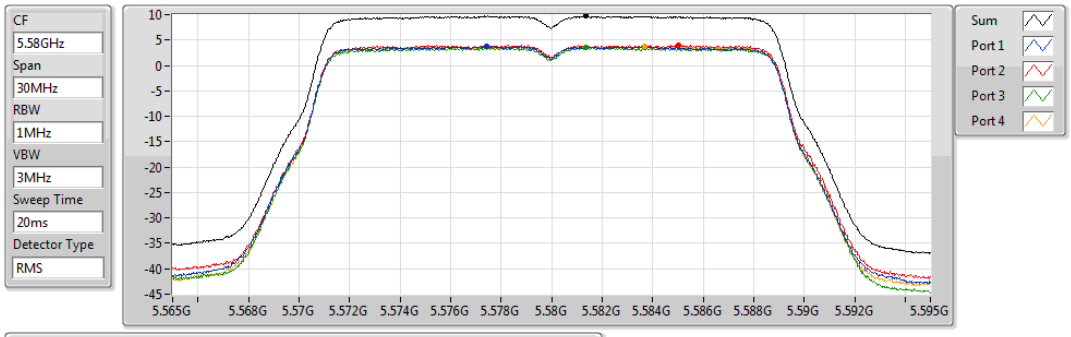


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.58	9.58	3.41	3.98	3.65	3.70

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5580MHz

19/07/2019

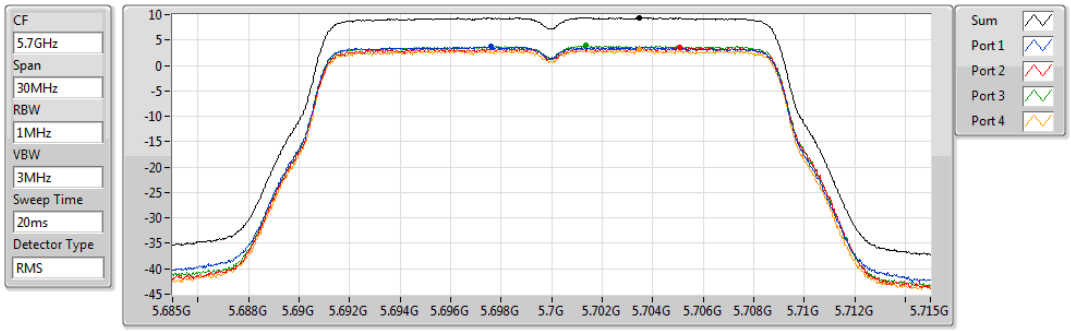


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.70	9.70	3.79	3.98	3.63	3.81

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5700MHz

19/07/2019

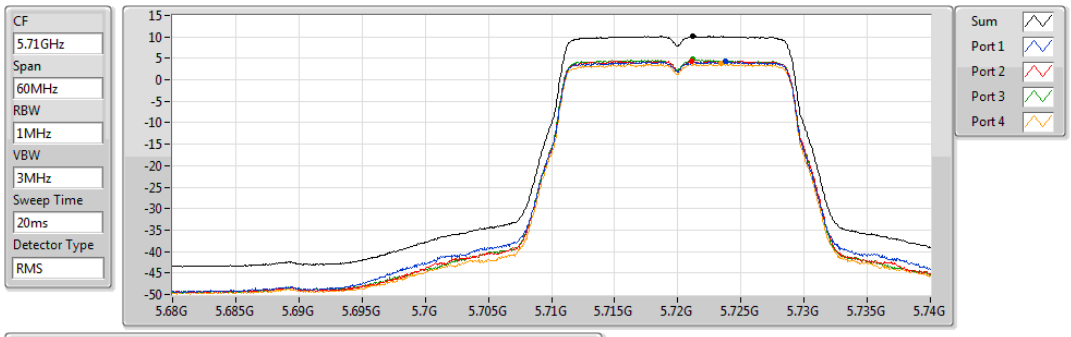


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.39	9.39	3.70	3.54	3.92	3.05

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5720MHz Straddle 5.47-5.725GHz

19/07/2019

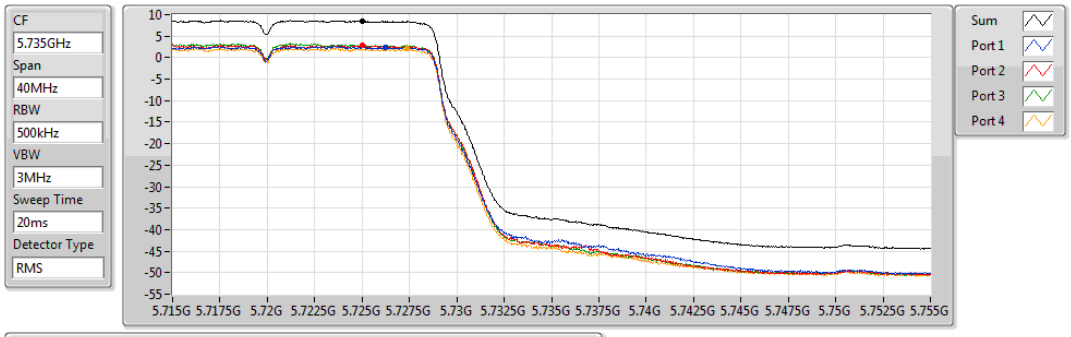


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.12	10.12	4.23	4.33	4.73	3.74

802.11ac VHT20_Nss4,(MCS0)_4TX PSD

5720MHz Straddle 5.725-5.85GHz

19/07/2019

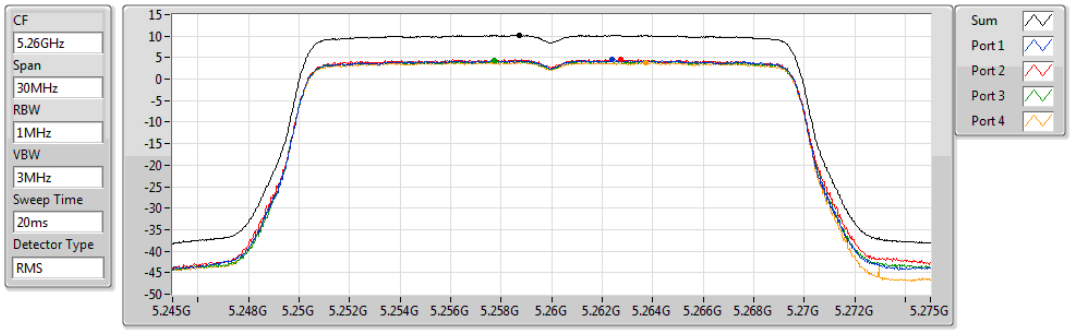


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.55	8.55	2.50	2.93	2.86	2.06

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5260MHz

19/07/2019

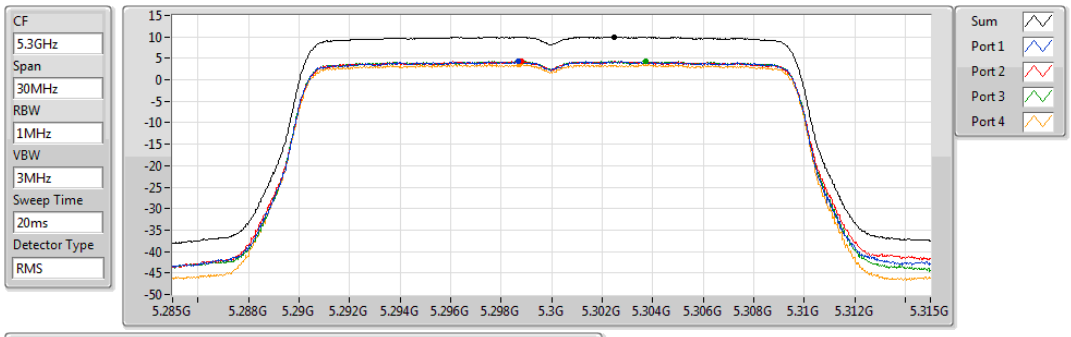


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.19	10.19	4.50	4.60	4.37	3.95

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5300MHz

19/07/2019

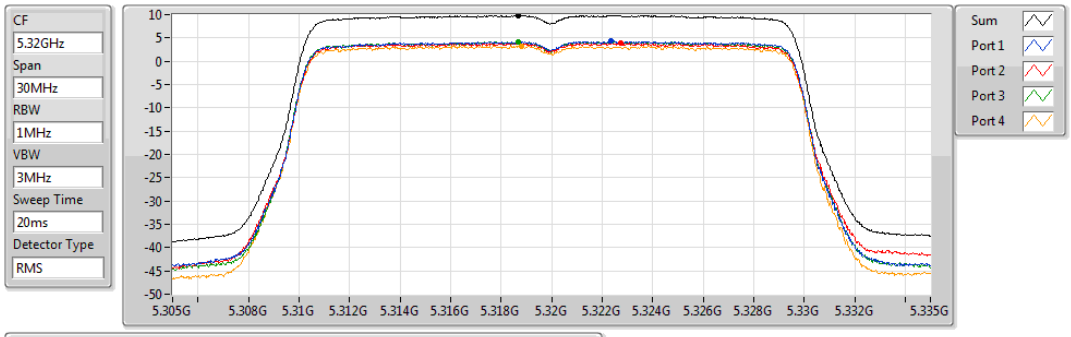


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.02	10.02	4.25	4.29	4.37	3.67

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5320MHz

19/07/2019

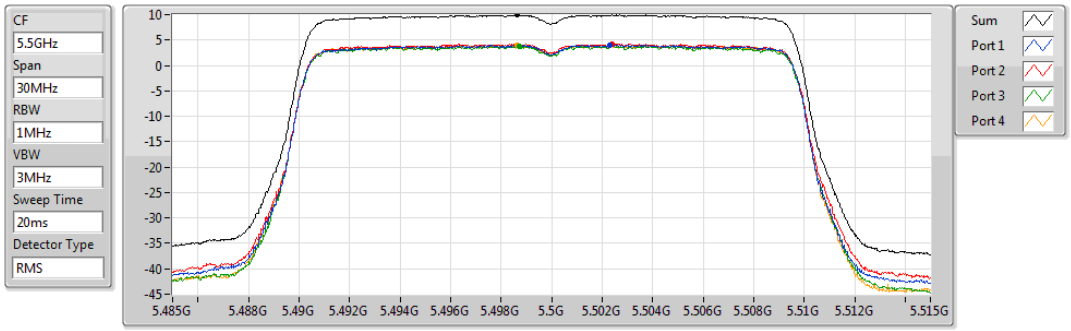


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.87	9.87	4.30	3.85	4.20	3.30

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5500MHz

19/07/2019

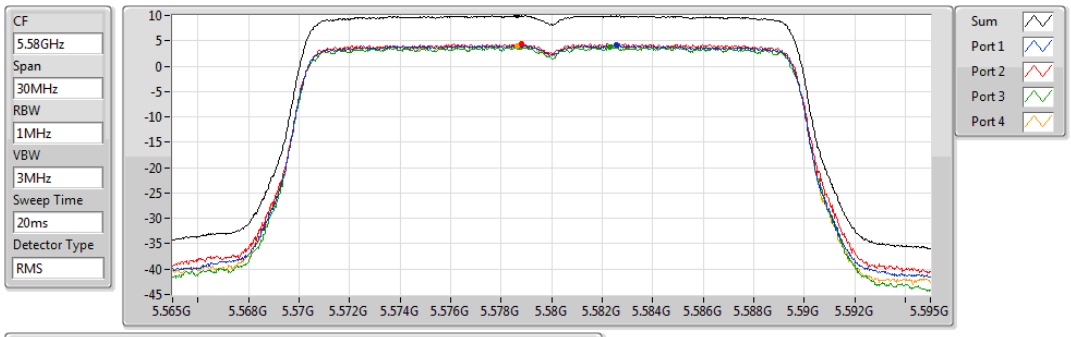


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.91	9.91	4.07	4.21	3.82	4.02

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5580MHz

19/07/2019

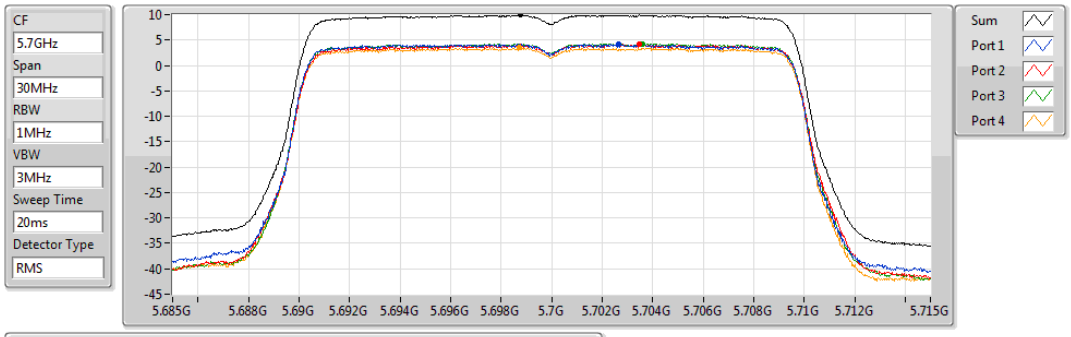


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.96	9.96	4.15	4.40	3.72	4.07

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5700MHz

19/07/2019

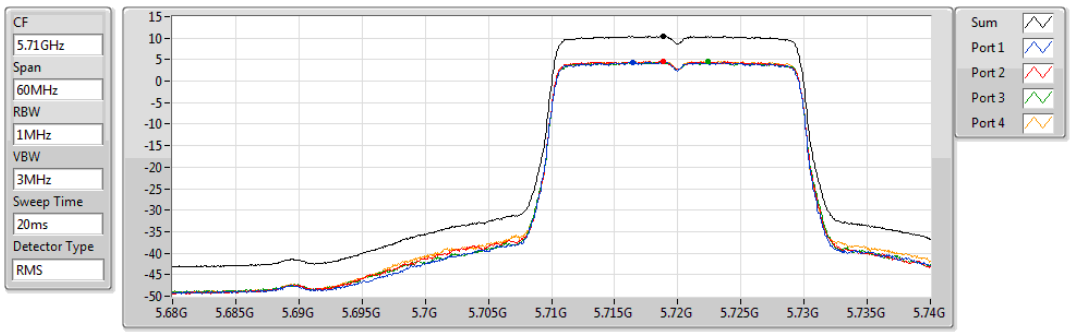


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.93	9.93	4.17	4.14	4.29	3.49

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5720MHz Straddle 5.47-5.725GHz

25/07/2019

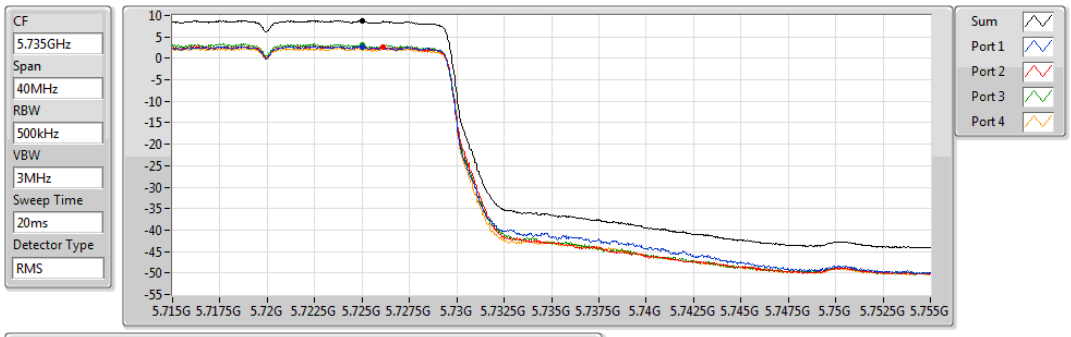


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.42	10.42	4.46	4.61	4.47	4.71

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

5720MHz Straddle 5.725-5.85GHz

19/07/2019

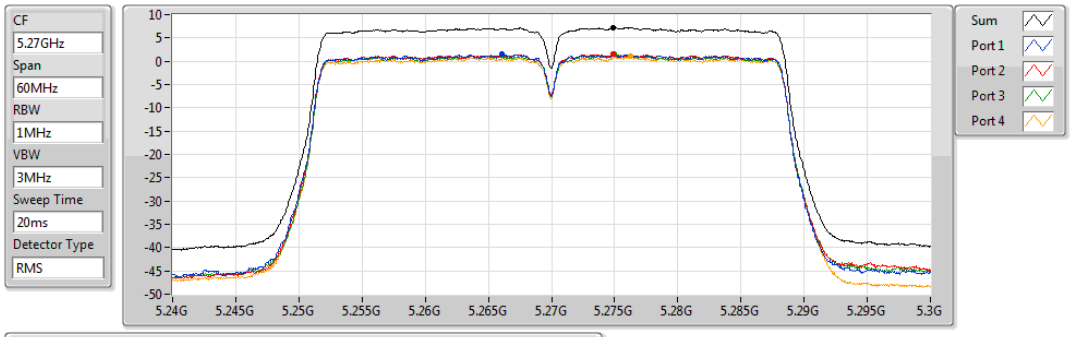


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.69	8.69	2.56	2.68	3.14	2.32

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5270MHz

19/07/2019

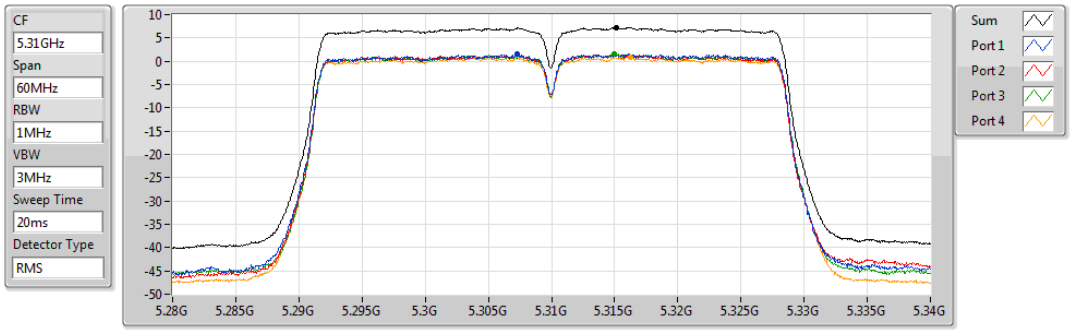


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.26	7.26	1.50	1.45	1.48	0.98

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5310MHz

19/07/2019

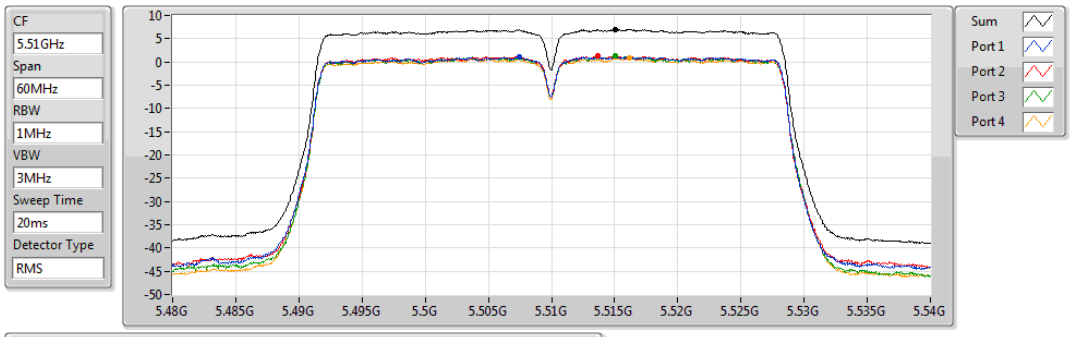


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.23	7.23	1.55	1.45	1.55	0.96

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5510MHz

19/07/2019

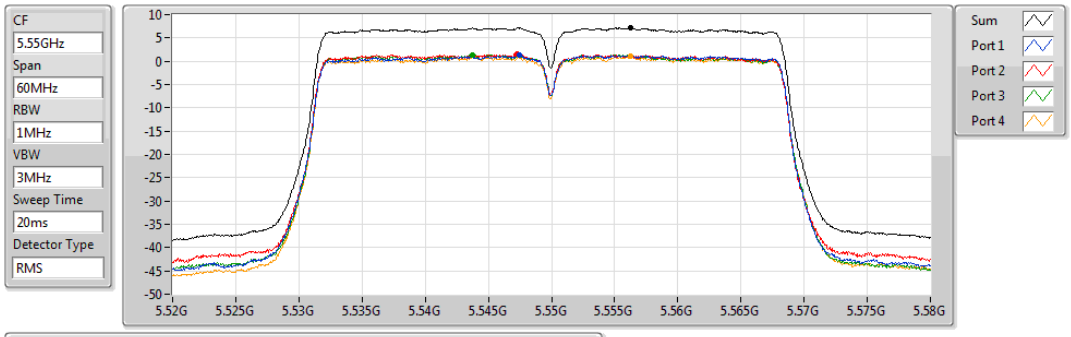


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.06	7.06	1.12	1.29	1.33	0.82

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5550MHz

19/07/2019

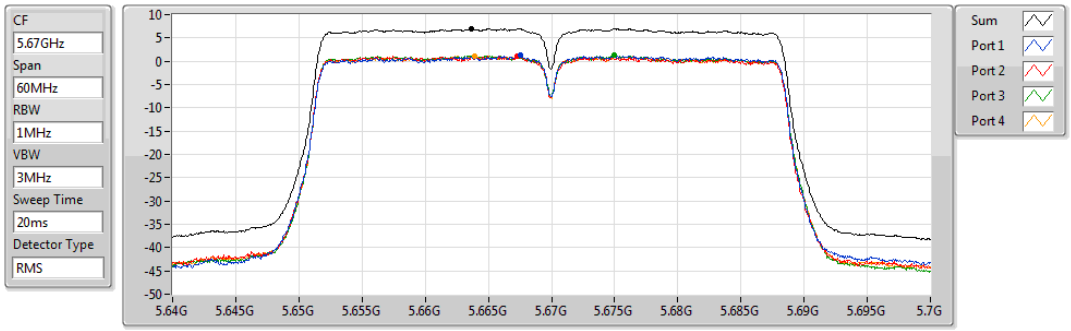


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.18	7.18	1.38	1.51	1.44	1.11

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5670MHz

19/07/2019

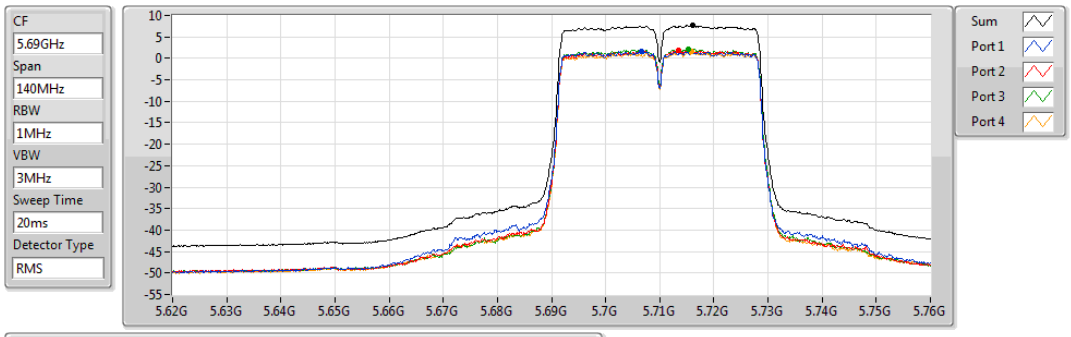


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.93	6.93	1.24	1.08	1.25	1.15

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5710MHz Straddle 5.47-5.725GHz

19/07/2019

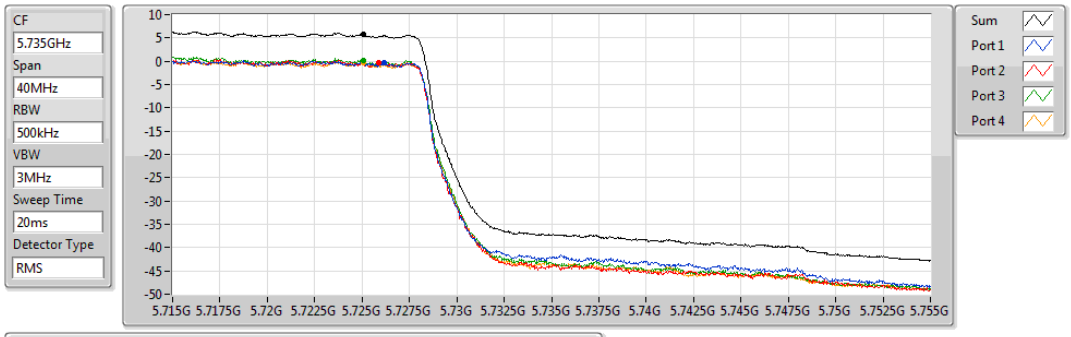


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.65	7.65	1.52	1.79	2.18	1.50

802.11ac VHT40_Nss4,(MCS0)_4TX PSD

5710MHz Straddle 5.725-5.85GHz

19/07/2019

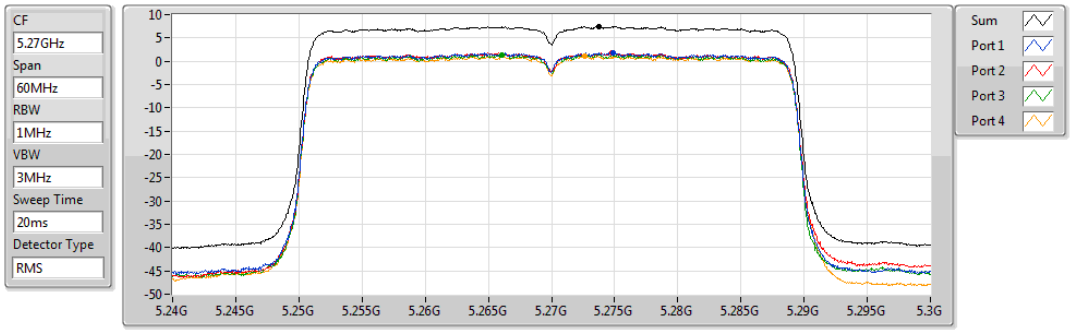


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.69	5.69	-0.37	-0.36	0.17	-0.32

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5270MHz

19/07/2019

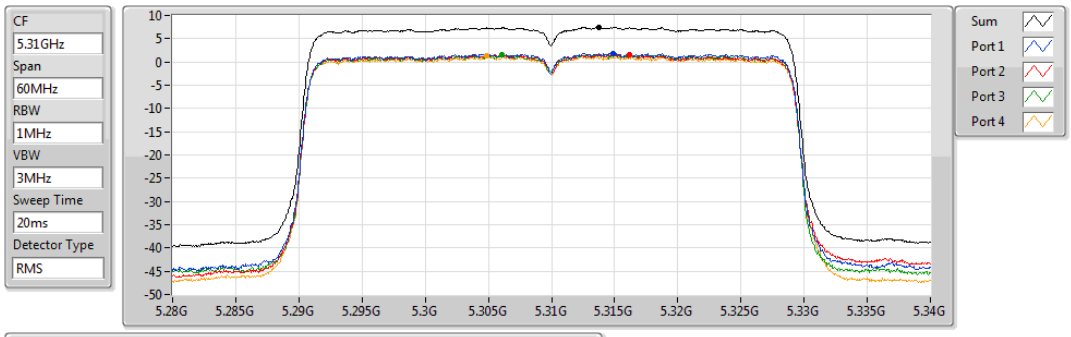


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.44	7.44	1.79	1.75	1.43	1.06

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5310MHz

19/07/2019

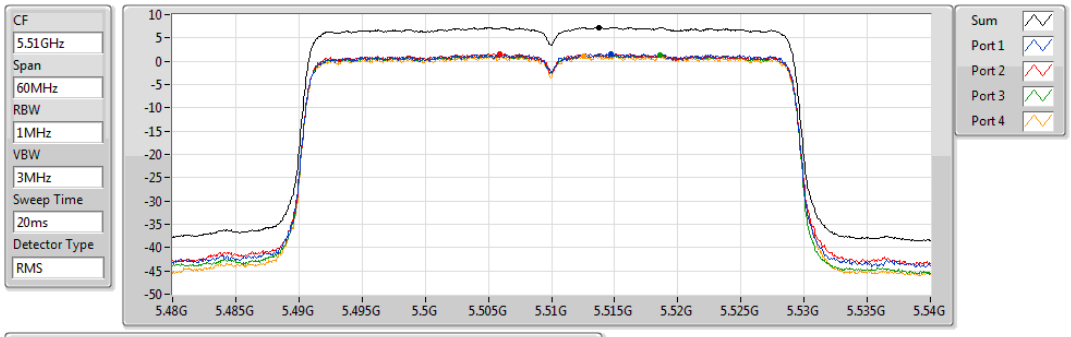


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.44	7.44	1.86	1.61	1.56	1.30

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5510MHz

19/07/2019

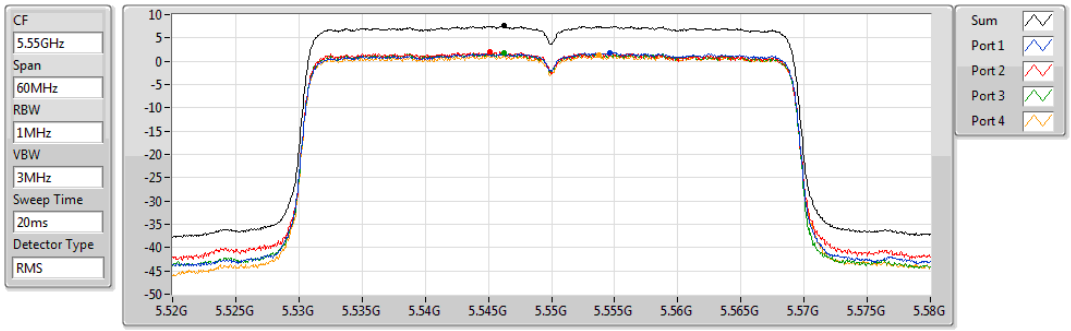


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.29	7.29	1.67	1.58	1.35	1.21

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5550MHz

19/07/2019

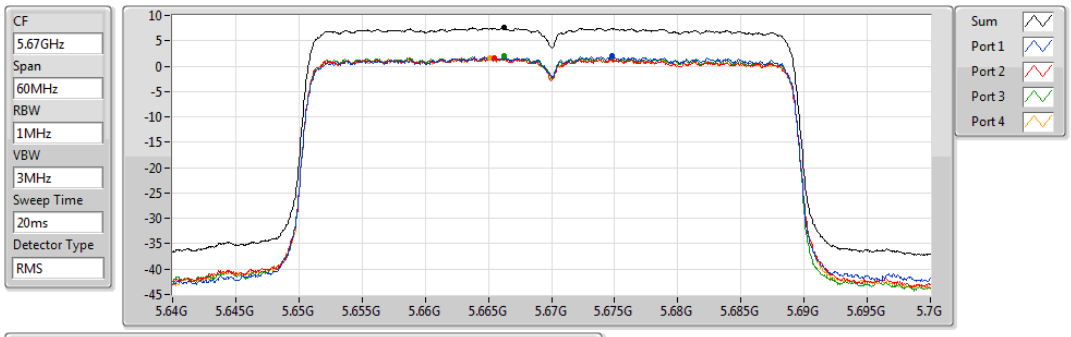


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.55	7.55	1.81	1.99	1.86	1.27

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5670MHz

19/07/2019

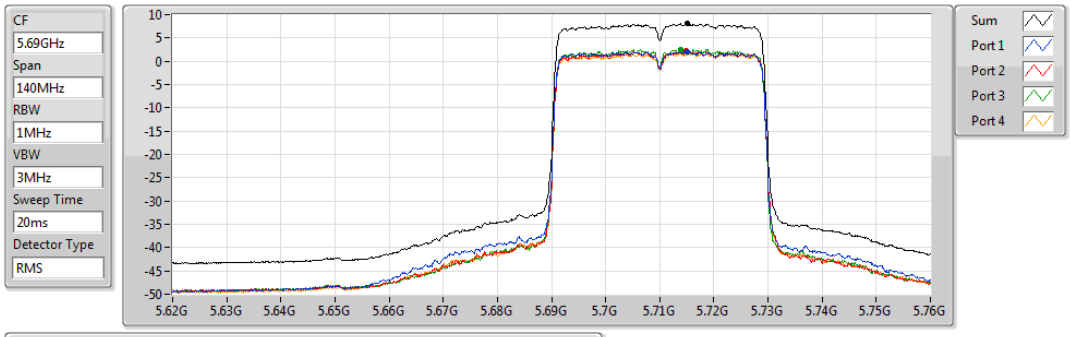


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.61	7.61	1.97	1.56	1.95	1.56

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5710MHz Straddle 5.47-5.725GHz

19/07/2019

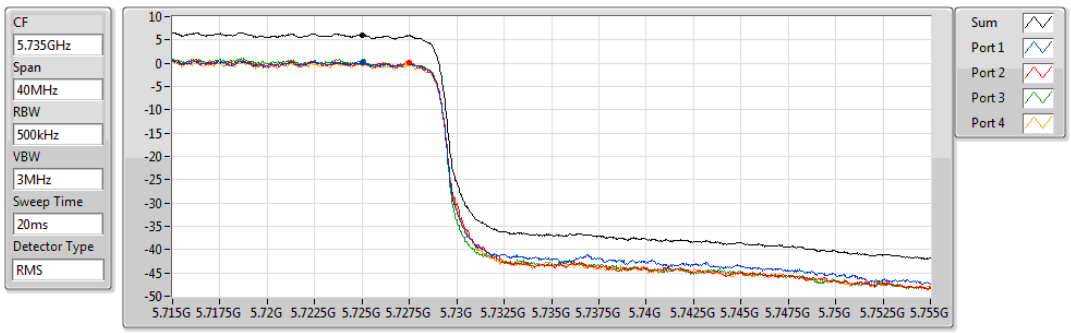


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.07	8.07	2.06	2.17	2.52	1.75

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

5710MHz Straddle 5.725-5.85GHz

19/07/2019

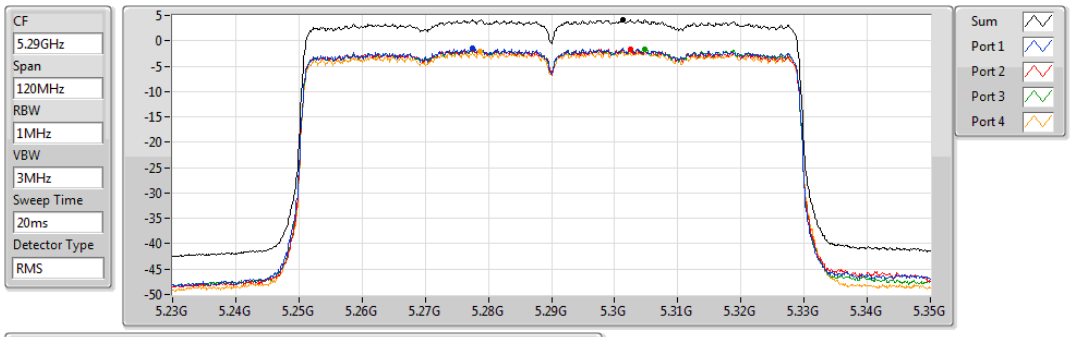


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.04	6.04	0.13	0.16	0.29	-0.14

802.11ac VHT80_Nss4,(MCS0)_4TX PSD

5290MHz

19/07/2019

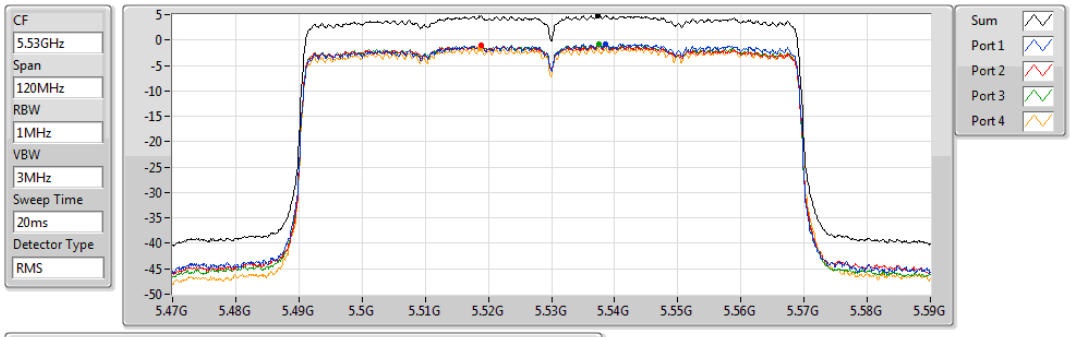


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.20	4.20	-1.51	-1.64	-1.64	-2.19

802.11ac VHT80_Nss4,(MCS0)_4TX PSD

5530MHz

19/07/2019

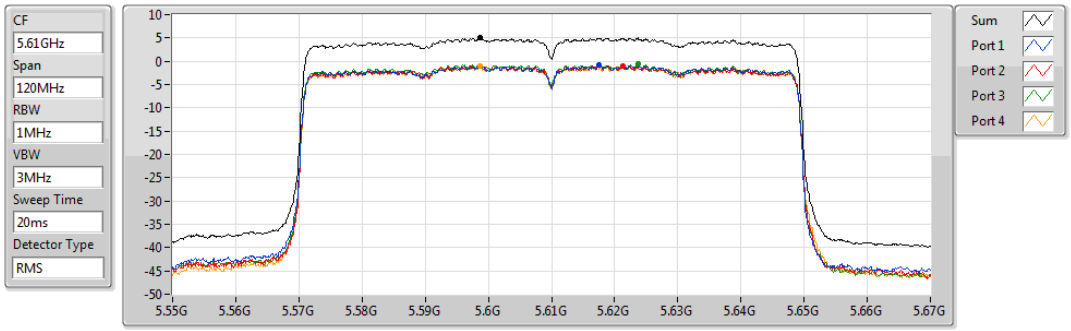


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.86	4.86	-0.78	-0.95	-0.87	-1.58

802.11ac VHT80_Nss4,(MCS0)_4TX PSD

5610MHz

19/07/2019

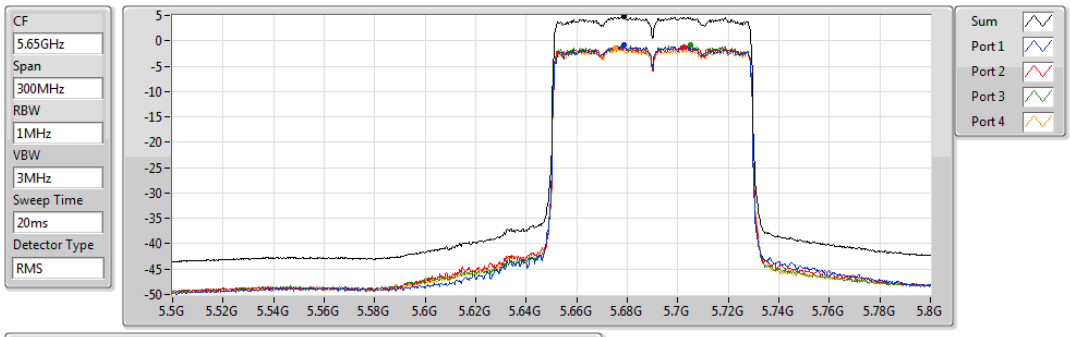


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.02	5.02	-0.85	-0.91	-0.66	-0.92

802.11ac VHT80_Nss4,(MCS0)_4TX PSD

5690MHz Straddle 5.47-5.725GHz

19/07/2019

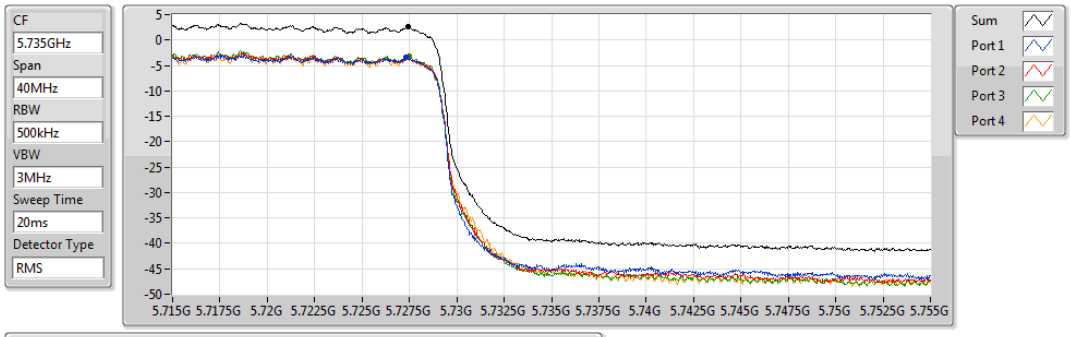


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.79	4.79	-0.86	-1.20	-0.84	-1.41

802.11ac VHT80_Nss4,(MCS0)_4TX PSD

5690MHz Straddle 5.725-5.85GHz

19/07/2019

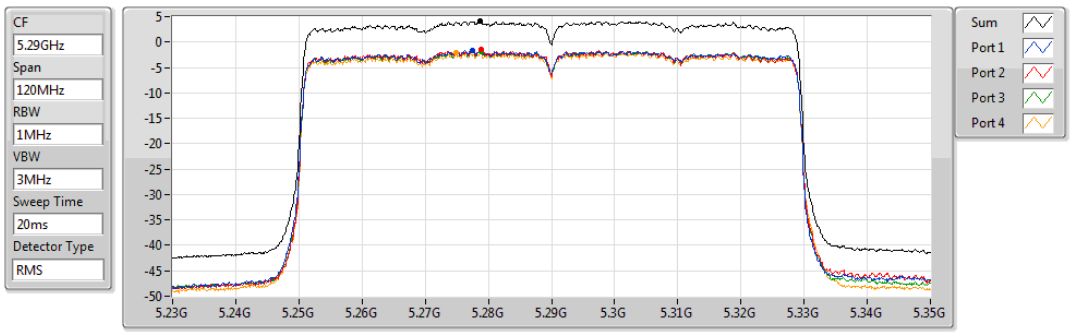


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.61	2.61	-3.41	-3.43	-3.06	-3.36

802.11ax HEW80_Nss4,(MCS0)_4TX PSD

5290MHz

19/07/2019

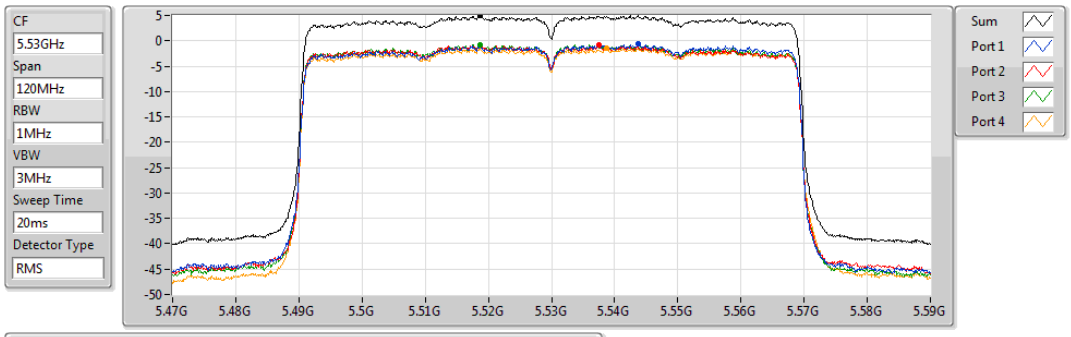


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.15	4.15	-1.64	-1.53	-1.89	-2.17

802.11ax HEW80_Nss4,(MCS0)_4TX PSD

5530MHz

19/07/2019

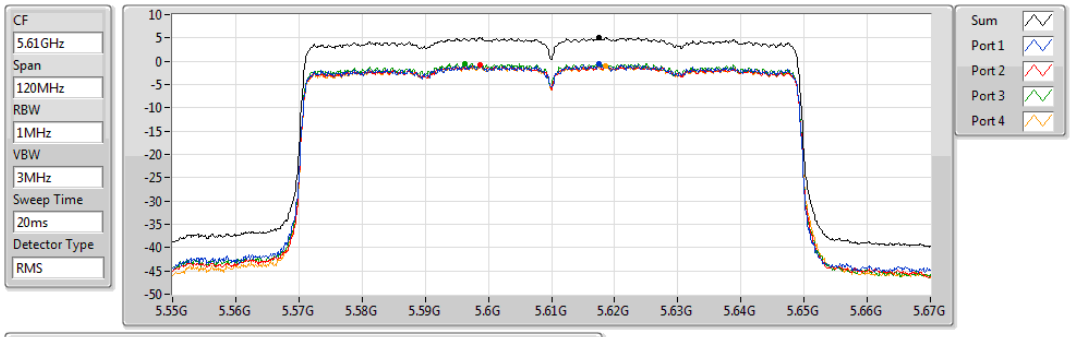


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.96	4.96	-0.66	-0.81	-0.70	-1.51

802.11ax HEW80_Nss4,(MCS0)_4TX PSD

5610MHz

19/07/2019

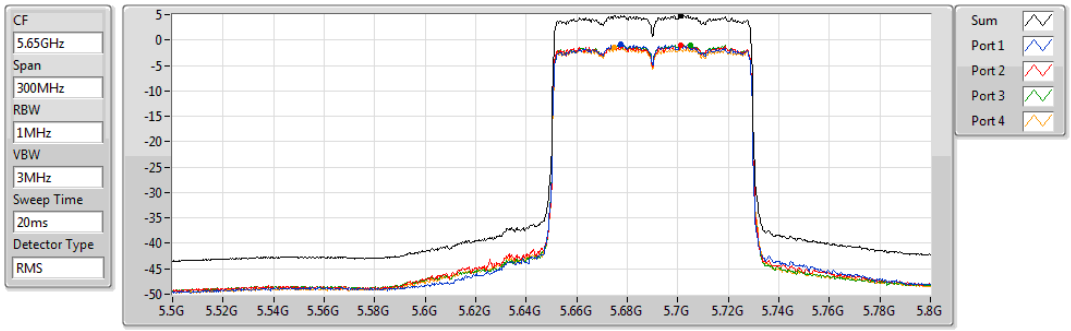


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.10	5.10	-0.64	-0.79	-0.48	-0.95

802.11ax HEW80_Nss4,(MCS0)_4TX PSD

5690MHz Straddle 5.47-5.725GHz

19/07/2019

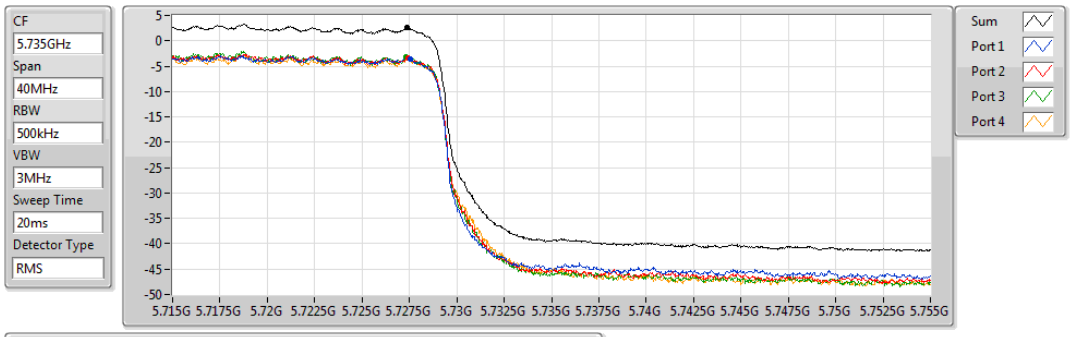


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.84	4.84	-0.78	-1.12	-0.91	-1.37

802.11ax HEW80_Nss4,(MCS0)_4TX PSD

5690MHz Straddle 5.725-5.85GHz

19/07/2019

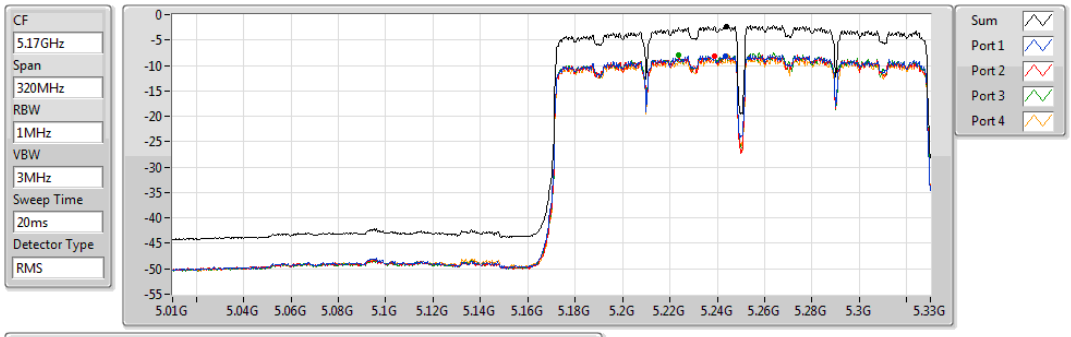


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.56	2.56	-3.50	-3.30	-3.24	-3.45

802.11ac VHT160_Nss4,(MCS0)_4TX PSD

5250MHz Straddle 5.15-5.25GHz

19/07/2019

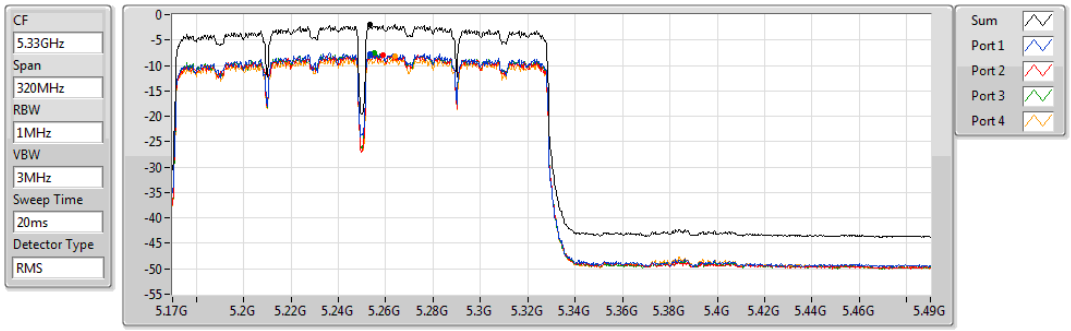


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.33	-2.33	-8.09	-8.10	-7.96	-8.23

802.11ac VHT160_Nss4,(MCS0)_4TX PSD

5250MHz Straddle 5.25-5.35GHz

19/07/2019

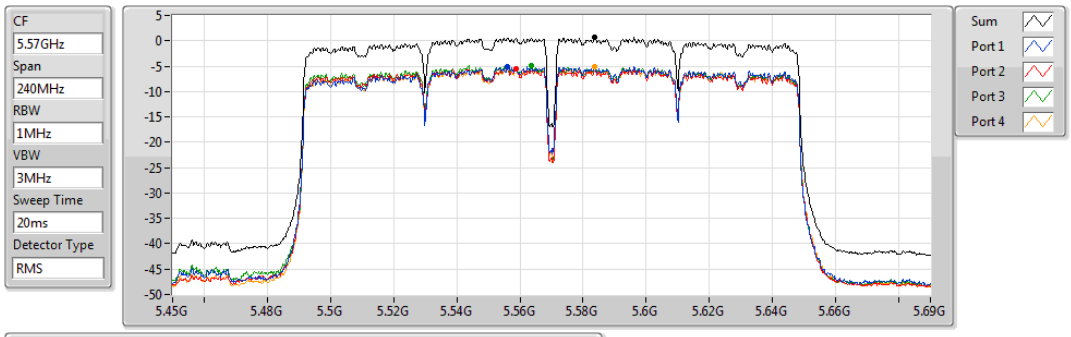


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.94	-1.94	-7.70	-8.02	-7.57	-8.23

802.11ac VHT160_Nss4,(MCS0)_4TX PSD

5570MHz

19/07/2019

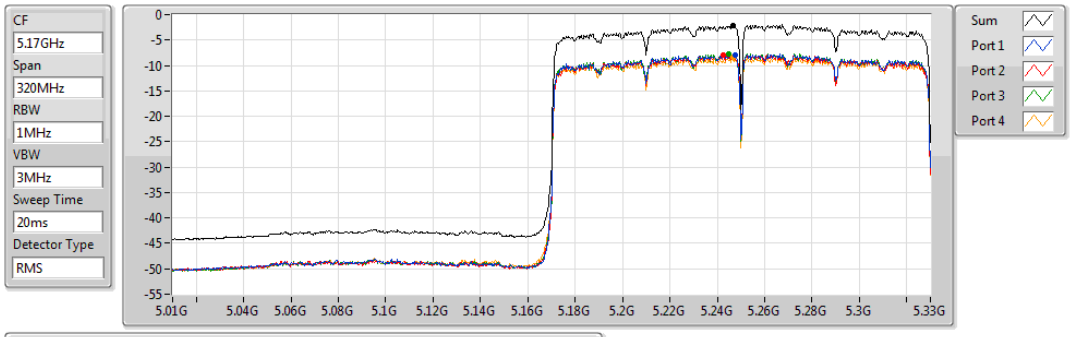


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.64	0.64	-5.02	-5.56	-4.98	-5.17

802.11ax HEW160_Nss4,(MCS0)_4TX PSD

5250MHz Straddle 5.15-5.25GHz

19/07/2019

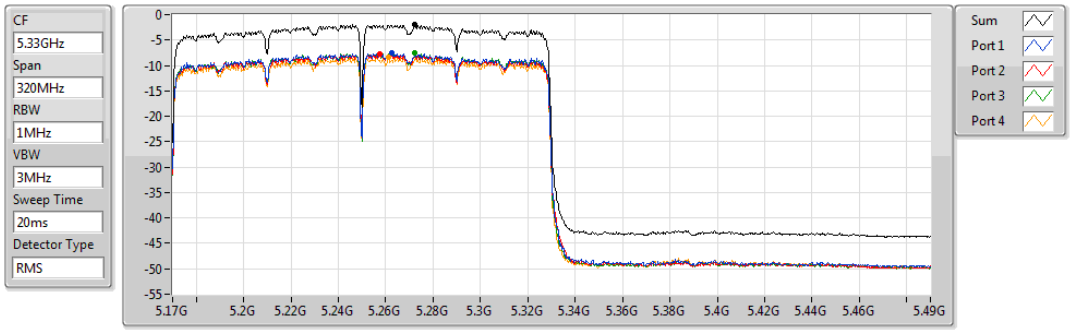


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.14	-2.14	-7.90	-7.98	-7.84	-8.28

802.11ax HEW160_Nss4,(MCS0)_4TX PSD

5250MHz Straddle 5.25-5.35GHz

19/07/2019

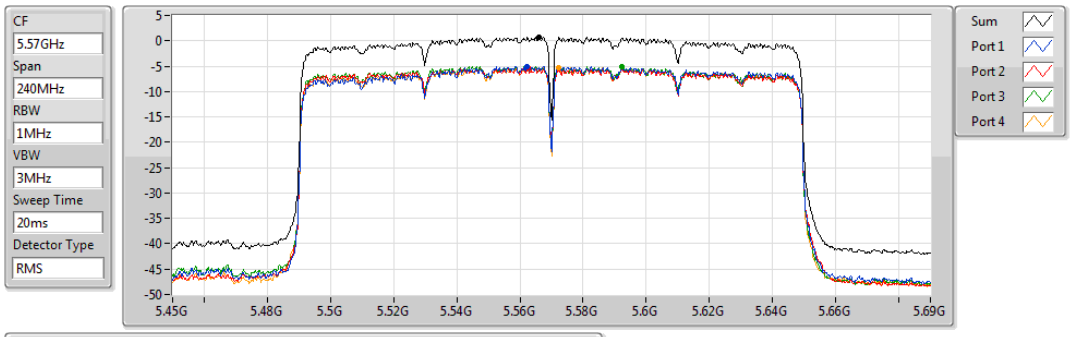


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.97	-1.97	-7.49	-7.83	-7.59	-8.35

802.11ax HEW160_Nss4,(MCS0)_4TX **PSD**

5570MHz

19/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.64	0.64	-5.00	-5.35	-5.05	-5.25

For beamforming mode:
1 Stream 4 TX for TxBF mode for band 1, 4:
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	14.40
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	14.67
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	11.21
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	11.27
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	3.63
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	4.00
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	12.38
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	12.24
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	9.26
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	9.06
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	4.48
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	4.61

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

Result

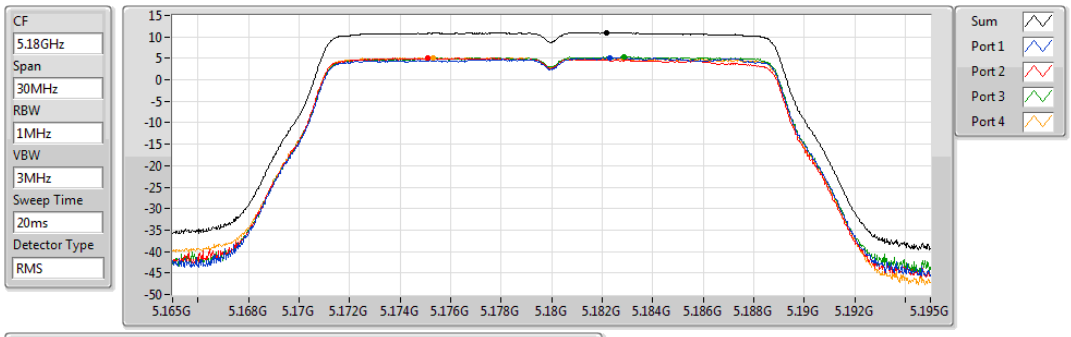
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	8.00	5.18	5.15	5.31	5.15	10.99	15.00
5200MHz	Pass	8.00	8.46	8.42	9.03	8.03	14.40	15.00
5240MHz	Pass	8.00	8.72	8.40	8.29	8.24	14.26	15.00
5745MHz	Pass	9.10	5.58	5.97	5.10	5.39	11.30	26.90
5785MHz	Pass	9.10	6.80	6.76	6.39	6.38	12.31	26.90
5825MHz	Pass	9.10	6.23	7.09	6.20	6.53	12.38	26.90
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	8.00	5.28	5.44	5.52	5.38	11.20	15.00
5200MHz	Pass	8.00	8.70	8.62	9.10	8.13	14.54	15.00
5240MHz	Pass	8.00	9.16	8.96	8.79	8.43	14.67	15.00
5745MHz	Pass	9.10	5.24	5.67	4.78	5.44	11.05	26.90
5785MHz	Pass	9.10	6.50	6.67	6.26	6.31	12.24	26.90
5825MHz	Pass	9.10	6.37	7.33	5.91	6.26	12.17	26.90
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	8.00	1.50	1.31	1.60	0.42	7.12	15.00
5230MHz	Pass	8.00	5.63	5.87	5.39	4.94	11.21	15.00
5755MHz	Pass	9.10	3.32	3.64	2.88	3.05	8.70	26.90
5795MHz	Pass	9.10	3.63	3.85	2.99	3.55	9.26	26.90
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	8.00	1.18	1.25	1.51	0.39	7.02	15.00
5230MHz	Pass	8.00	5.62	5.85	5.45	4.90	11.27	15.00
5755MHz	Pass	9.10	3.25	3.74	2.93	3.10	8.64	26.90
5795MHz	Pass	9.10	3.79	3.51	2.89	3.50	9.06	26.90
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	8.00	-2.26	-1.59	-1.95	-2.62	3.63	15.00
5775MHz	Pass	9.10	-1.61	-0.96	-1.71	-0.74	4.48	26.90
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	8.00	-1.94	-1.22	-1.78	-2.41	4.00	15.00
5775MHz	Pass	9.10	-1.63	-0.93	-1.50	-0.53	4.61	26.90

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

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5180MHz

23/07/2019

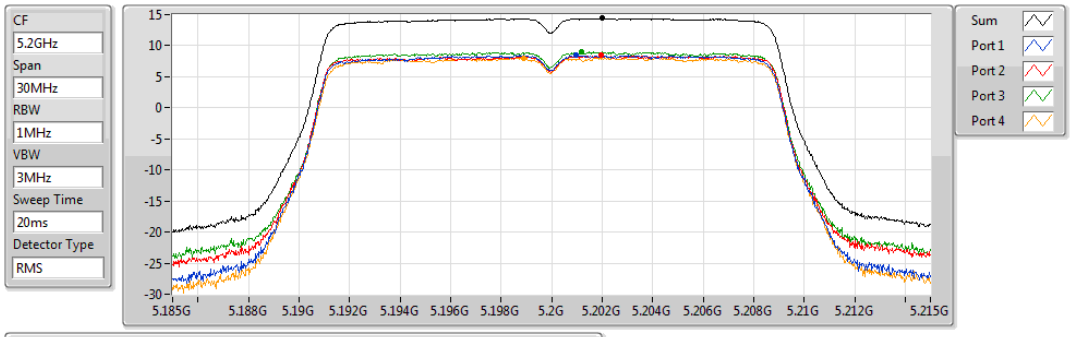


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.99	10.99	5.18	5.15	5.31	5.15

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5200MHz

23/07/2019

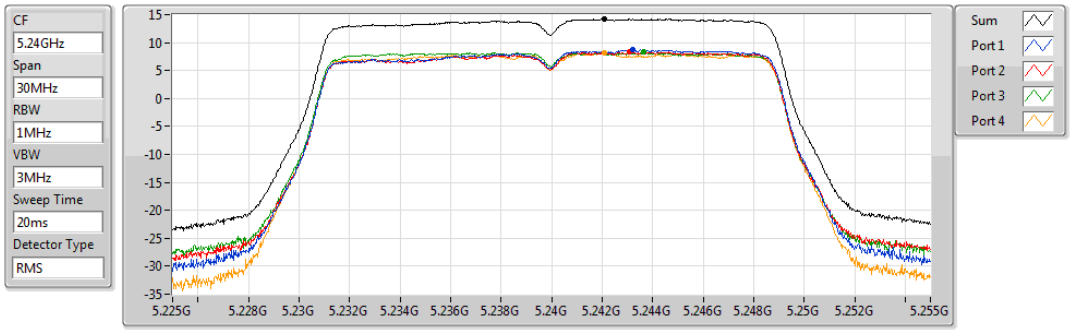


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.40	14.40	8.46	8.42	9.03	8.03

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5240MHz

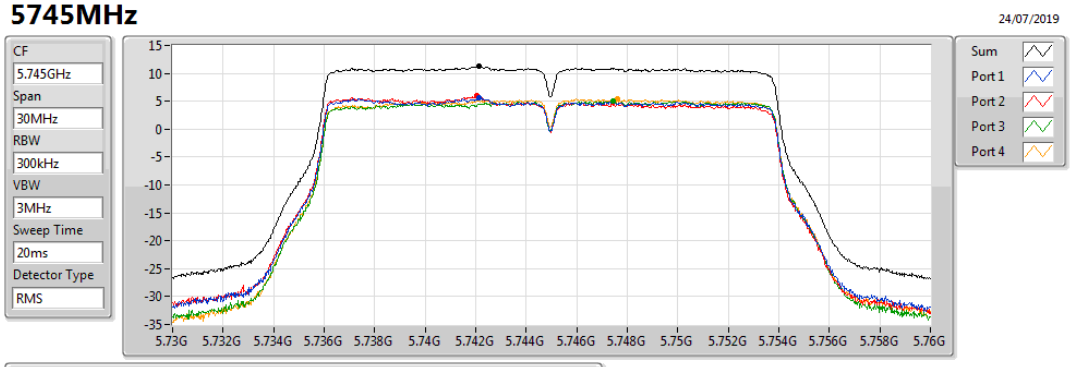
23/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.26	14.26	8.72	8.40	8.29	8.24

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

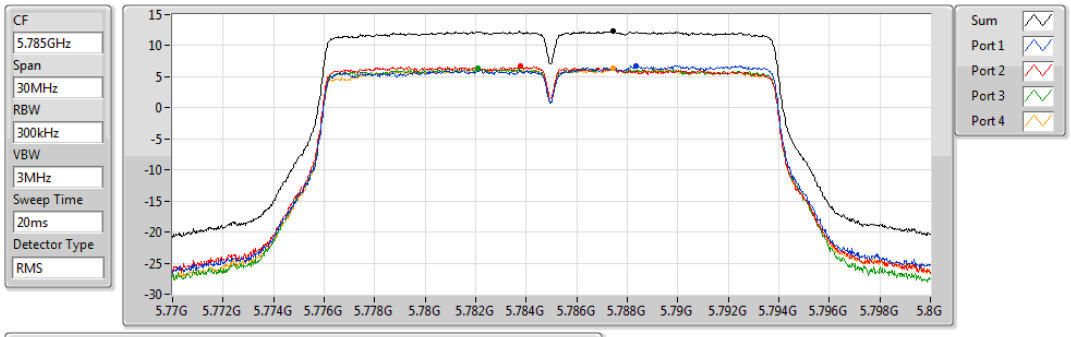
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.30	11.30	5.58	5.97	5.10	5.39

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

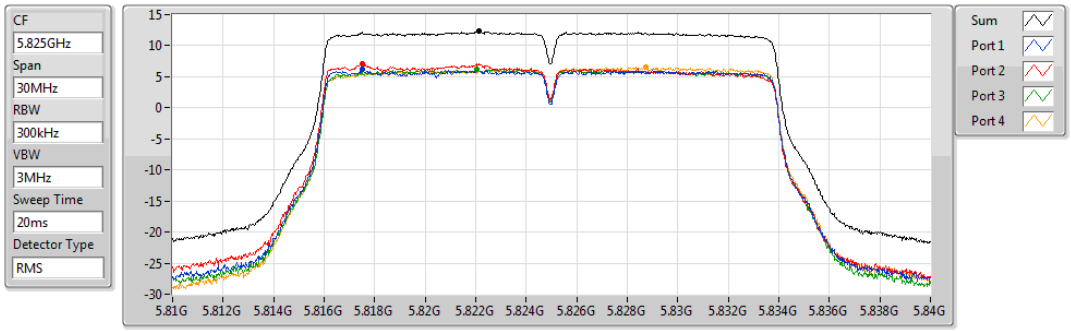
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.31	12.31	6.80	6.76	6.39	6.38

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

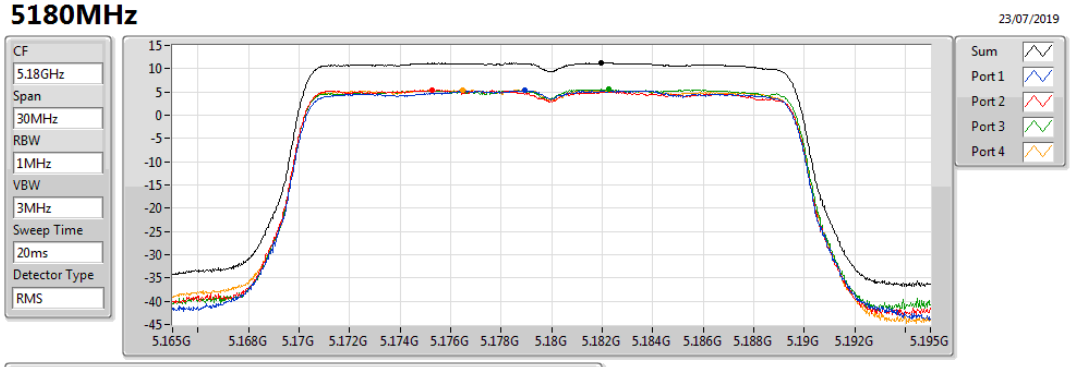
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.38	12.38	6.23	7.09	6.20	6.53

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

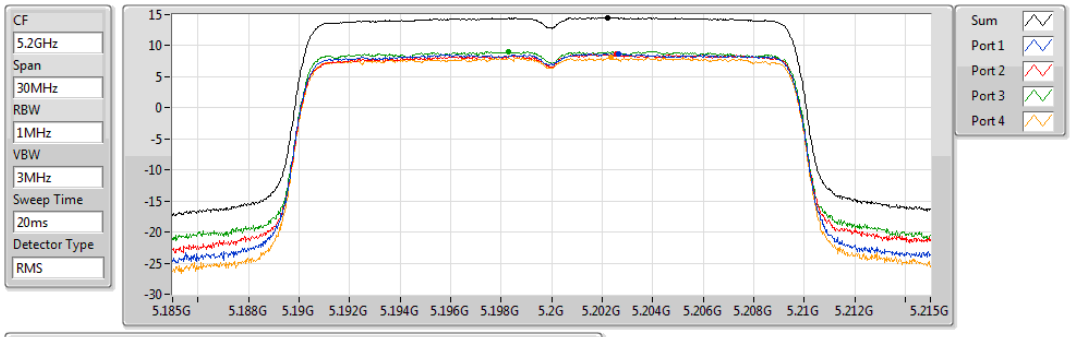
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.20	11.20	5.28	5.44	5.52	5.38

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

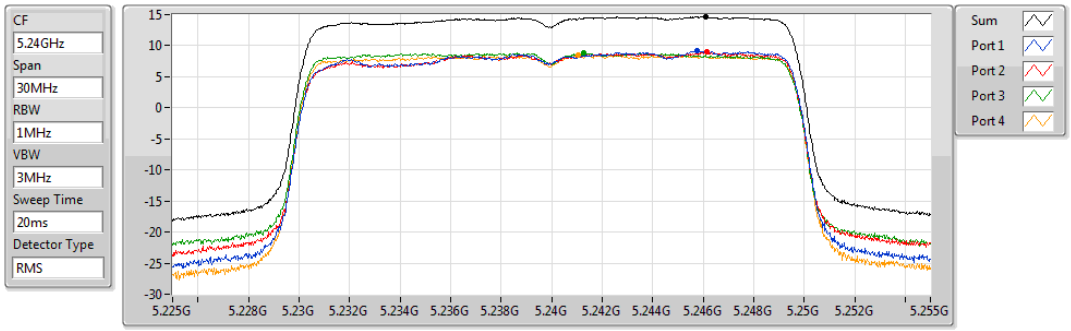
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.54	14.54	8.70	8.62	9.10	8.13

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5240MHz

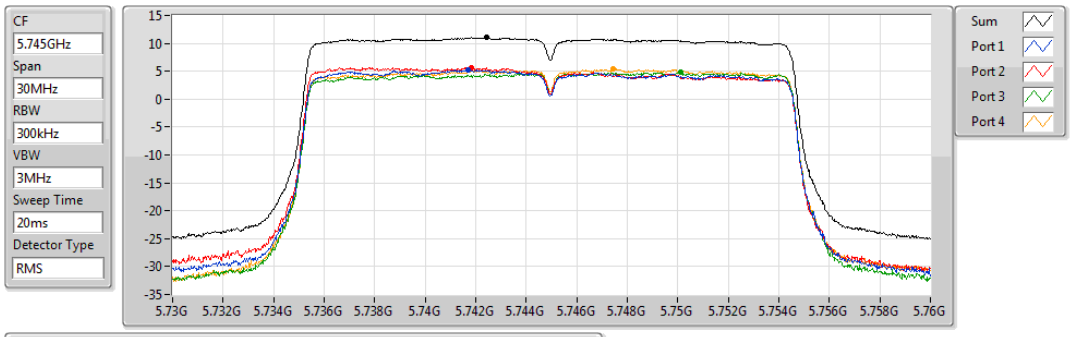


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.67	14.67	9.16	8.96	8.79	8.43

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5745MHz

23/07/2019

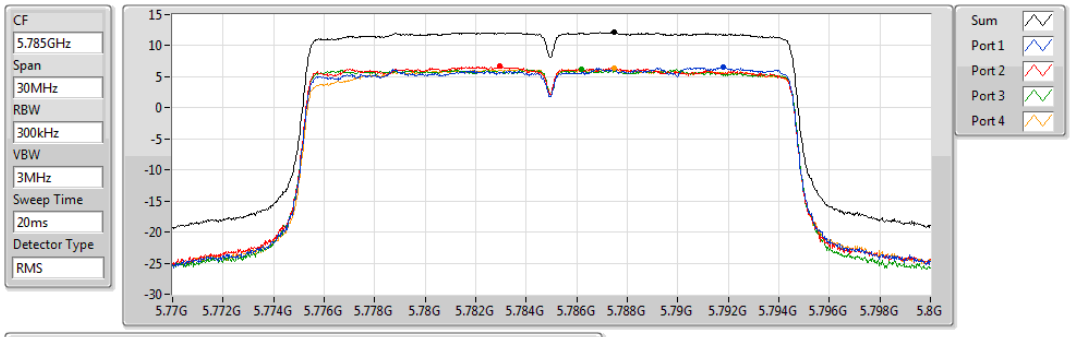


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.05	11.05	5.24	5.67	4.78	5.44

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5785MHz

23/07/2019

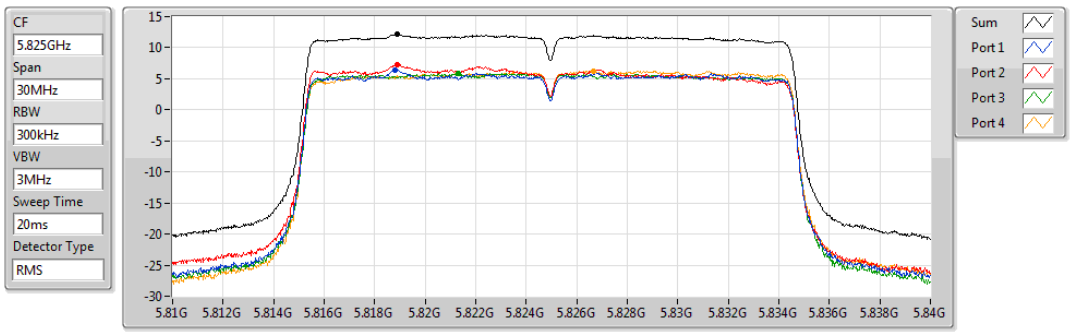


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.24	12.24	6.50	6.67	6.26	6.31

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5825MHz

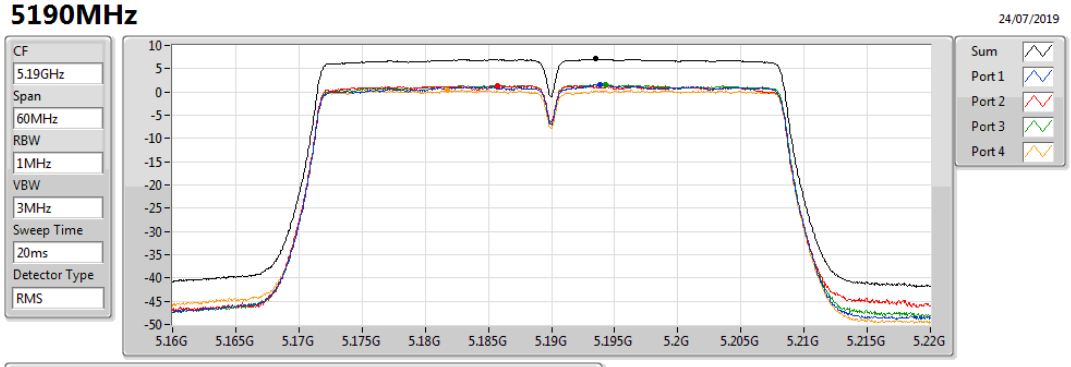
23/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.17	12.17	6.37	7.33	5.91	6.26

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

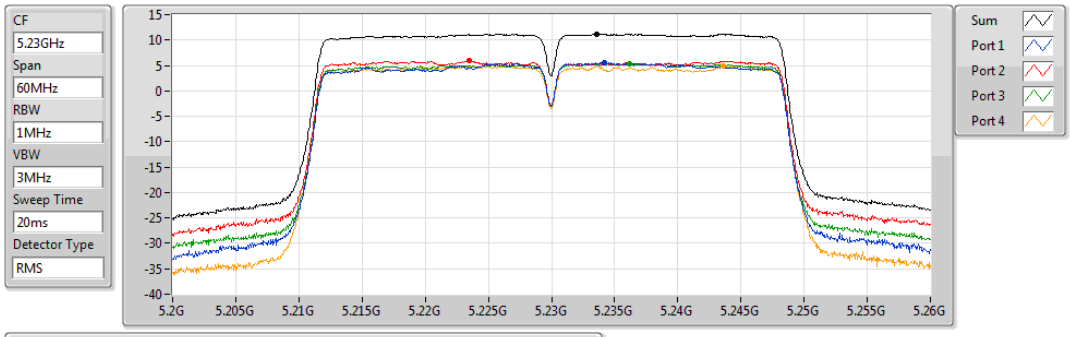
5190MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.12	7.12	1.50	1.31	1.60	0.42

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

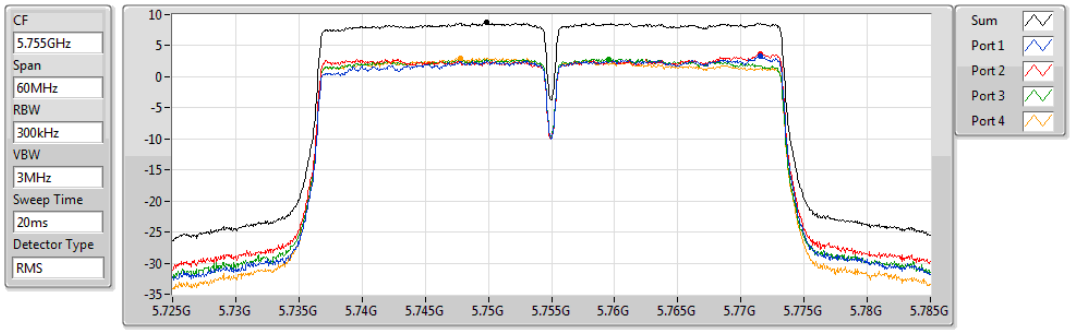
5230MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.21	11.21	5.63	5.87	5.39	4.94

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5755MHz

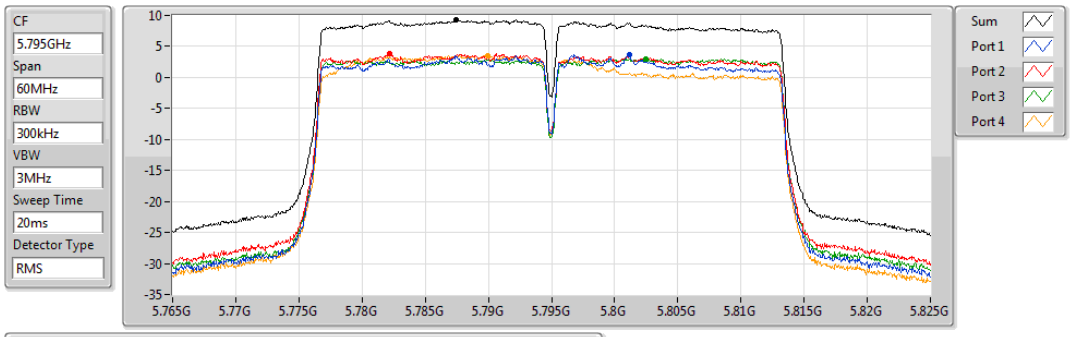


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.70	8.70	3.32	3.64	2.88	3.05

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5795MHz

24/07/2019

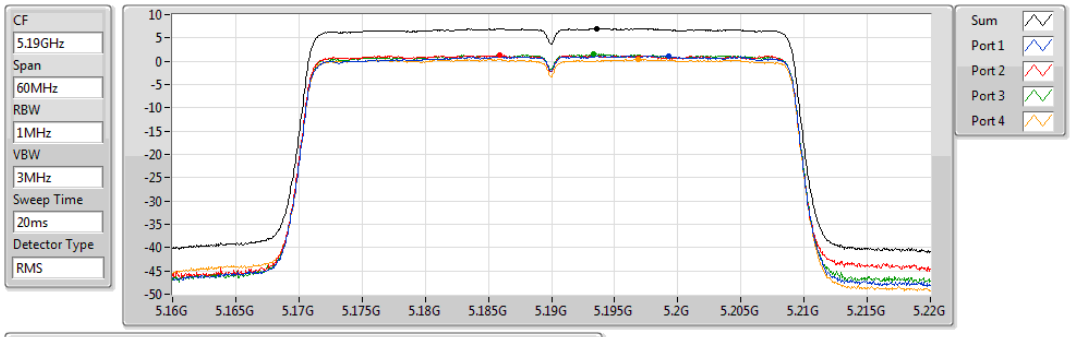


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.26	9.26	3.63	3.85	2.99	3.55

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5190MHz

23/07/2019

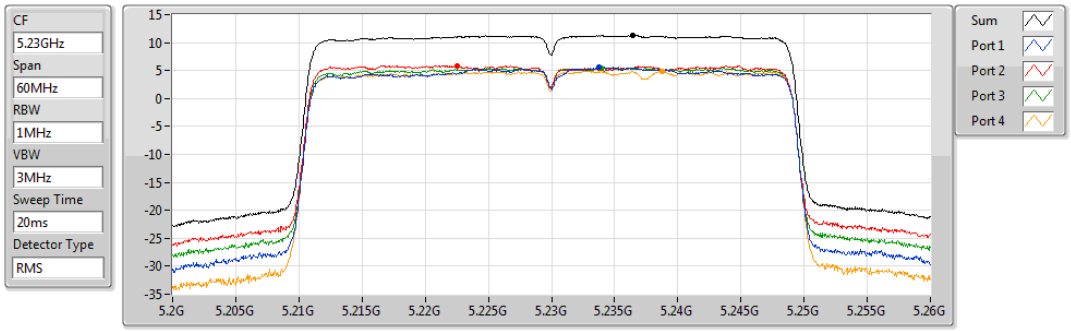


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.02	7.02	1.18	1.25	1.51	0.39

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5230MHz

23/07/2019

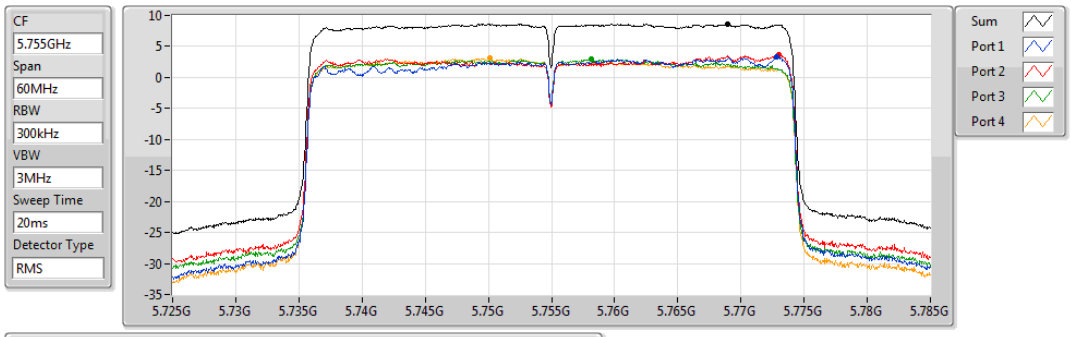


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.27	11.27	5.62	5.85	5.45	4.90

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5755MHz

23/07/2019

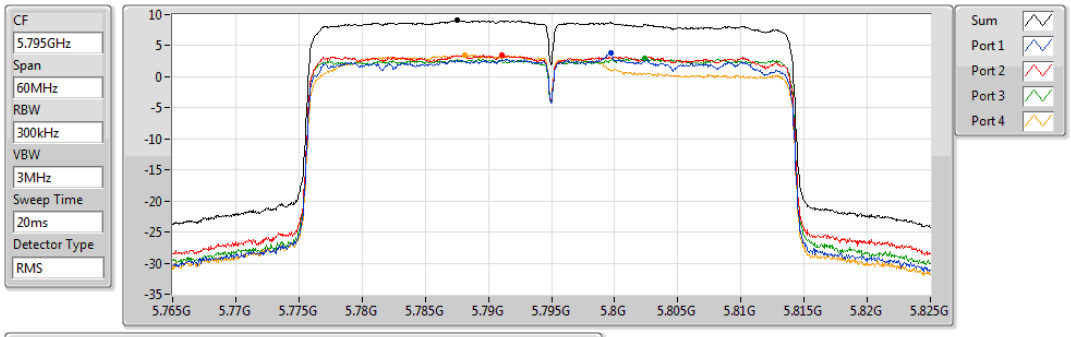


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.64	8.64	3.25	3.74	2.93	3.10

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5795MHz

23/07/2019

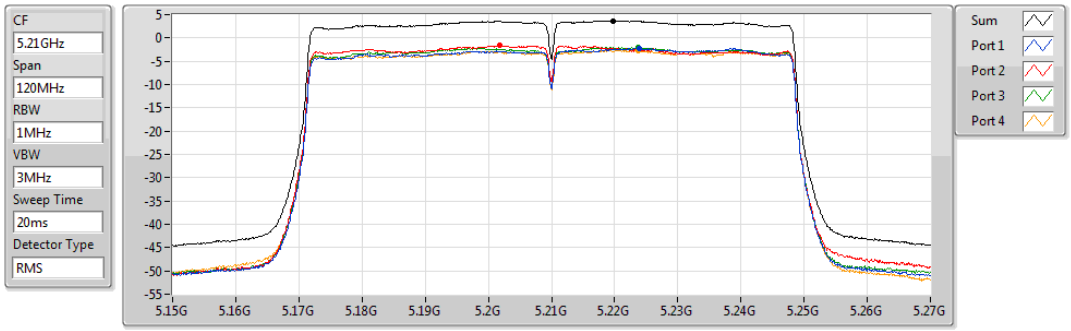


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.06	9.06	3.79	3.51	2.89	3.50

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

5210MHz

24/07/2019

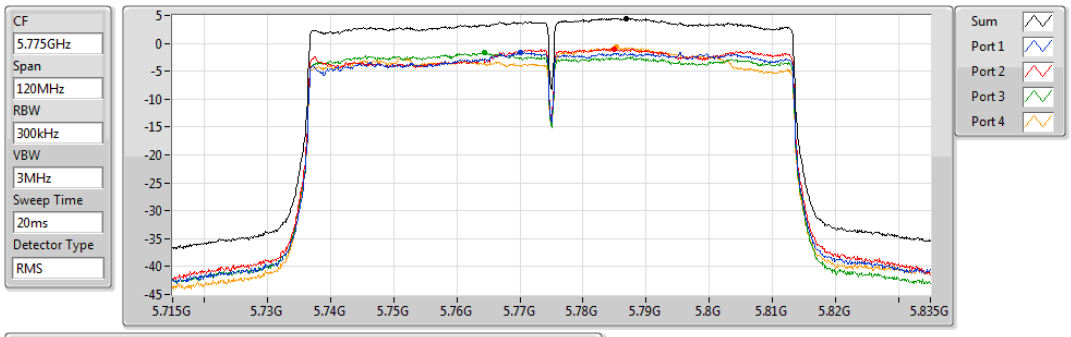


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.63	3.63	-2.26	-1.59	-1.95	-2.62

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

5775MHz

24/07/2019

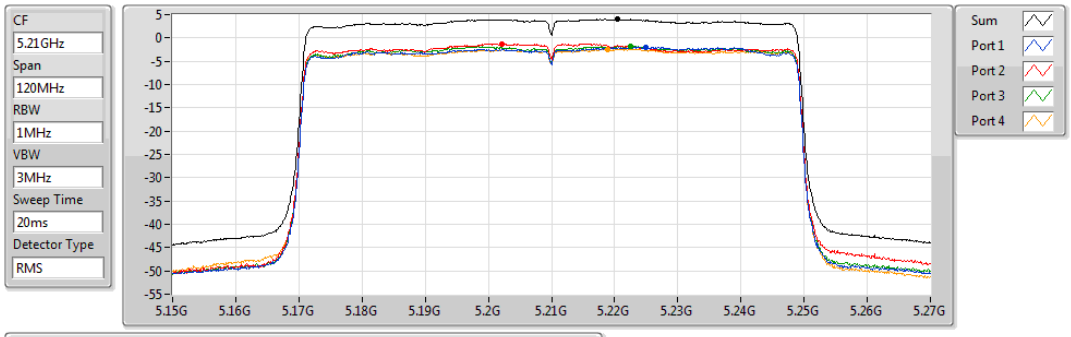


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.48	4.48	-1.61	-0.96	-1.71	-0.74

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5210MHz

23/07/2019

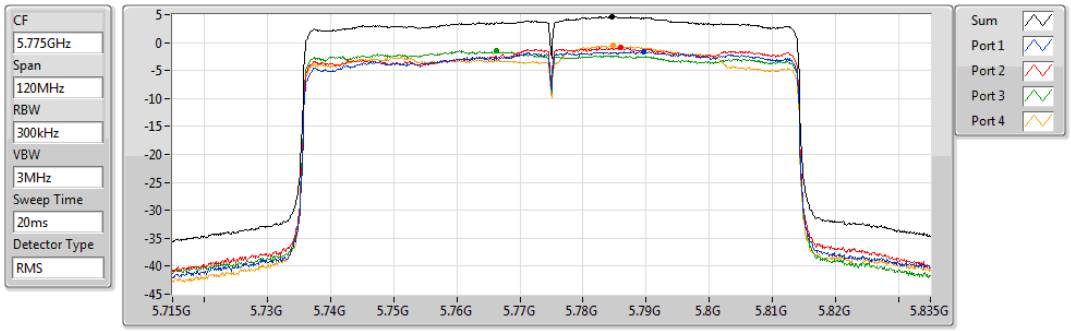


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.00	4.00	-1.94	-1.22	-1.78	-2.41

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5775MHz

23/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.61	4.61	-1.63	-0.93	-1.50	-0.53

1 Stream 4 TX for TxBF mode for 160MHz and band 2, 3:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-0.89
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-1.08
5.25-5.35GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	8.16
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	8.16
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	5.32
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	5.49
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	2.17
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.17
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-0.65
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-0.54
5.47-5.725GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	7.84
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	7.82
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	6.98
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	6.93
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	3.55
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.54
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-1.77
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-1.78
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	4.91
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	5.38
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	2.80
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	2.72
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-0.71
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-0.40

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.80	2.32	2.48	2.26	1.77	8.05	8.20
5300MHz	Pass	8.80	3.39	2.58	2.75	2.32	8.07	8.20
5320MHz	Pass	8.80	2.56	2.25	2.29	2.45	8.16	8.20
5500MHz	Pass	9.10	2.05	1.35	2.30	2.06	7.84	7.90
5580MHz	Pass	9.10	2.07	2.04	1.53	2.36	7.82	7.90
5700MHz	Pass	9.10	1.82	1.19	1.30	0.93	7.13	7.90
5720MHz Straddle 5.47-5.725GHz	Pass	9.10	1.86	1.43	1.85	2.40	7.87	7.90
5720MHz Straddle 5.725-5.85GHz	Pass	9.10	-0.87	-0.58	-0.83	-1.61	4.91	26.90
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.80	2.47	2.40	2.39	2.32	8.16	8.20
5300MHz	Pass	8.80	2.50	1.96	2.94	2.80	8.01	8.20
5320MHz	Pass	8.80	2.56	2.48	2.45	2.64	8.16	8.20
5500MHz	Pass	9.10	2.68	1.75	3.07	2.60	7.82	7.90
5580MHz	Pass	9.10	2.10	1.67	1.15	1.93	7.48	7.90
5700MHz	Pass	9.10	2.42	1.51	1.75	1.37	7.64	7.90
5720MHz Straddle 5.47-5.725GHz	Pass	9.10	2.07	1.26	1.97	1.09	7.48	7.90
5720MHz Straddle 5.725-5.85GHz	Pass	9.10	-0.48	-0.29	-0.20	-1.25	5.38	26.90
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.80	-0.73	-0.42	-0.49	-0.83	5.30	8.20
5310MHz	Pass	8.80	-0.86	-0.39	-0.61	-0.68	5.32	8.20
5510MHz	Pass	9.10	1.03	0.38	0.33	1.38	6.25	7.90
5550MHz	Pass	9.10	1.28	0.87	0.52	0.27	6.53	7.90
5670MHz	Pass	9.10	-0.53	-1.19	-1.22	-0.90	4.47	7.90
5710MHz Straddle 5.47-5.725GHz	Pass	9.10	1.29	0.53	0.80	2.30	6.98	7.90
5710MHz Straddle 5.725-5.85GHz	Pass	9.10	-2.83	-2.54	-3.06	-4.29	2.80	26.90
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.80	-0.71	-0.76	-0.37	0.09	5.40	8.20
5310MHz	Pass	8.80	-0.45	-0.09	-0.64	-0.52	5.49	8.20
5510MHz	Pass	9.10	1.04	0.30	0.31	1.42	6.22	7.90
5550MHz	Pass	9.10	1.34	1.00	0.75	0.50	6.79	7.90
5670MHz	Pass	9.10	-0.68	-1.18	-1.35	-1.00	4.41	7.90
5710MHz Straddle 5.47-5.725GHz	Pass	9.10	1.00	0.51	0.97	2.13	6.93	7.90
5710MHz Straddle 5.725-5.85GHz	Pass	9.10	-2.85	-2.50	-3.00	-4.37	2.72	26.90
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.80	-3.87	-3.76	-3.34	-3.26	2.17	8.20
5530MHz	Pass	9.10	-2.32	-3.08	-2.61	-3.56	3.02	7.90
5610MHz	Pass	9.10	-3.74	-3.54	-3.38	-4.01	2.20	7.90
5690MHz Straddle 5.47-5.725GHz	Pass	9.10	-2.04	-2.90	-1.73	-2.98	3.55	7.90
5690MHz Straddle 5.725-5.85GHz	Pass	9.10	-6.58	-6.14	-6.60	-7.44	-0.71	26.90
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.80	-2.87	-3.15	-2.36	-2.74	3.17	8.20
5530MHz	Pass	9.10	-2.07	-3.08	-2.72	-3.25	2.98	7.90
5610MHz	Pass	9.10	-3.53	-3.41	-3.68	-3.90	2.23	7.90

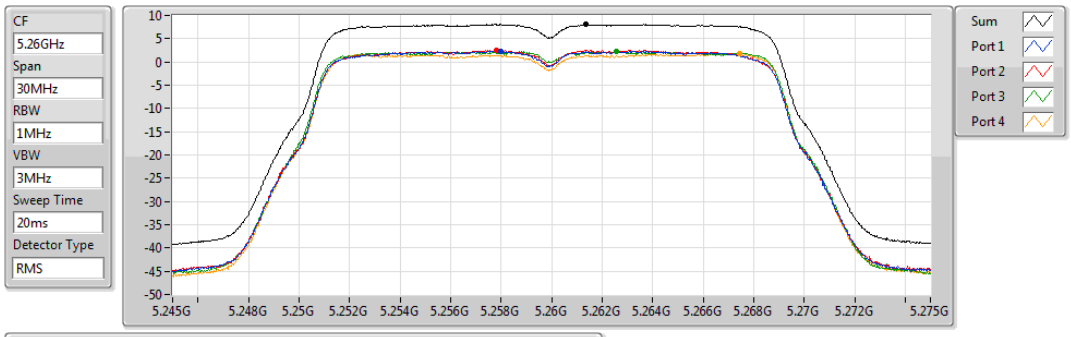
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5690MHz Straddle 5.47-5.725GHz	Pass	9.10	-1.51	-2.31	-2.67	-2.98	3.54	7.90
5690MHz Straddle 5.725-5.85GHz	Pass	9.10	-6.14	-5.78	-6.42	-7.20	-0.40	26.90
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.00	-6.46	-7.28	-6.83	-6.78	-0.89	8.20
5250MHz	Pass	8.00	-6.55	-6.25	-6.49	-6.73	-0.65	8.20
5570MHz	Pass	9.10	-7.33	-7.42	-7.52	-7.73	-1.77	7.90
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.00	-6.68	-7.53	-6.97	-7.03	-1.08	8.20
5250MHz	Pass	8.00	-6.41	-6.25	-6.32	-6.49	-0.54	8.20
5570MHz	Pass	9.10	-7.11	-7.36	-7.84	-7.80	-1.78	7.90

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

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5260MHz

29/10/2019

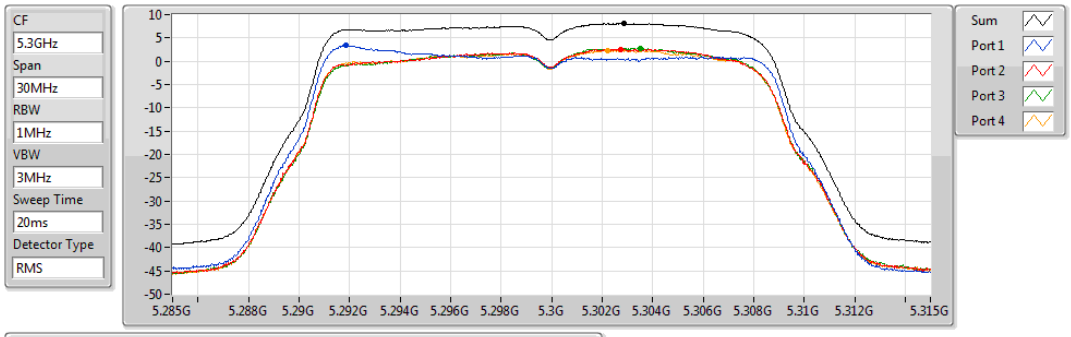


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.05	8.05	2.32	2.48	2.26	1.77

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5300MHz

29/10/2019

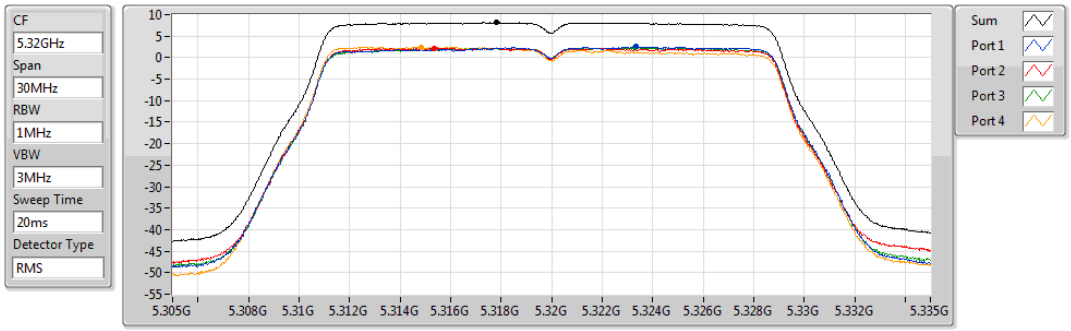


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.07	8.07	3.39	2.58	2.75	2.32

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5320MHz

23/07/2019

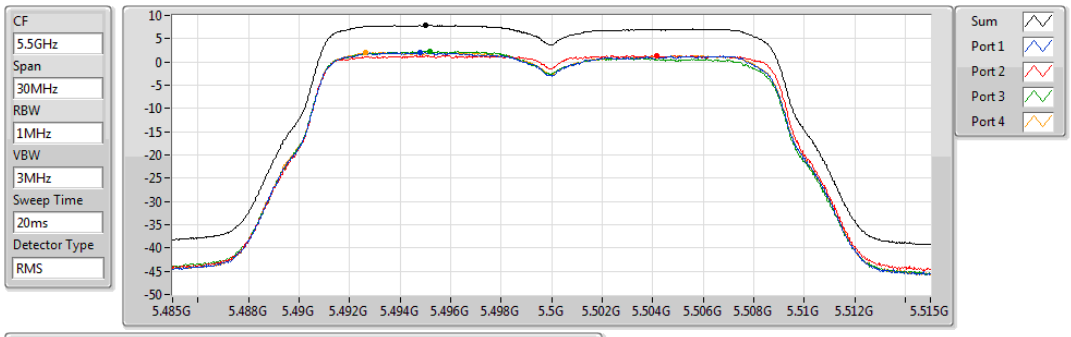


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.16	8.16	2.56	2.25	2.29	2.45

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5500MHz

29/10/2019

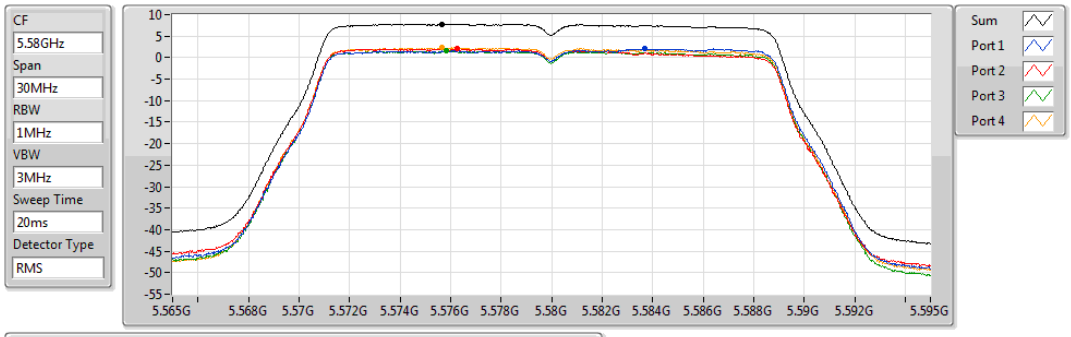


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.84	7.84	2.05	1.35	2.30	2.06

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5580MHz

23/07/2019

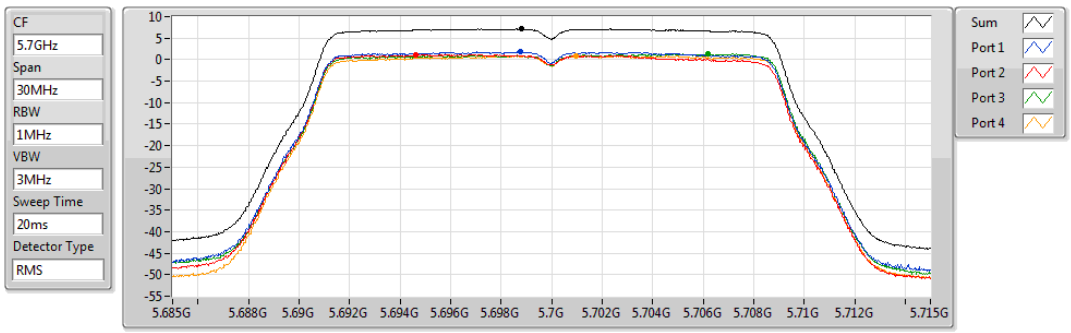


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.82	7.82	2.07	2.04	1.53	2.36

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5700MHz

23/07/2019

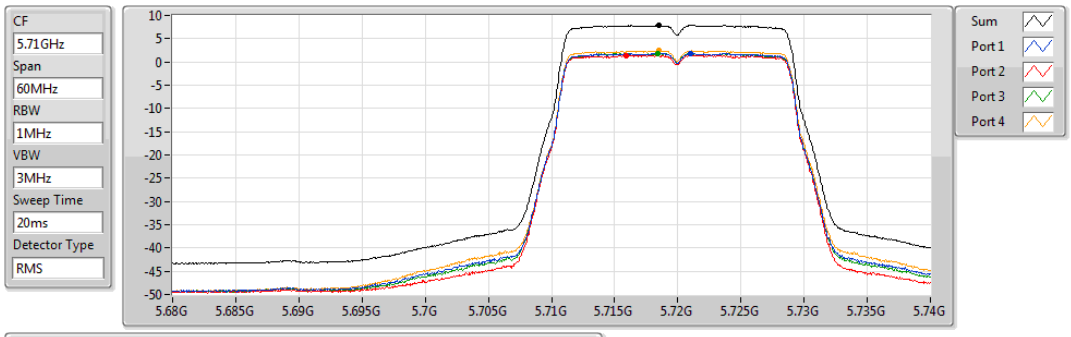


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.13	7.13	1.82	1.19	1.30	0.93

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5720MHz Straddle 5.47-5.725GHz

11/11/2019

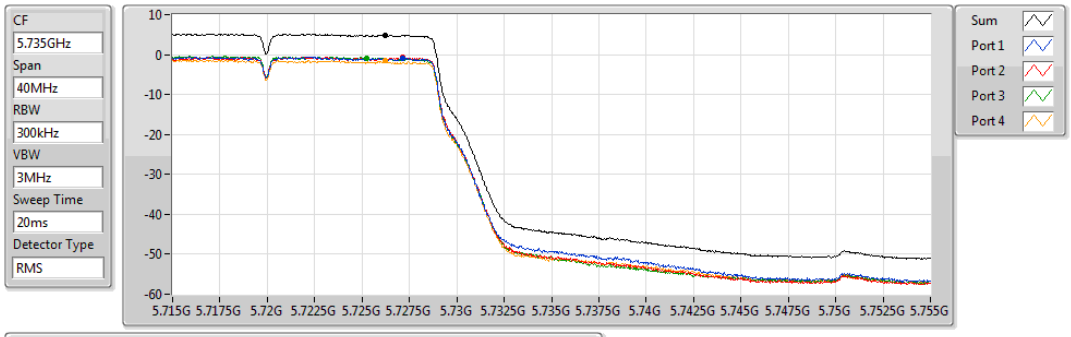


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.87	7.87	1.86	1.43	1.85	2.40

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

5720MHz Straddle 5.725-5.85GHz

24/07/2019

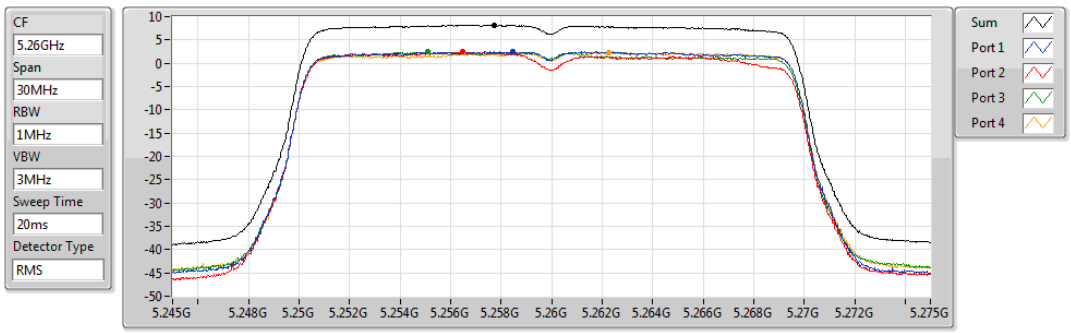


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.91	4.91	-0.87	-0.58	-0.83	-1.61

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5260MHz

29/10/2019

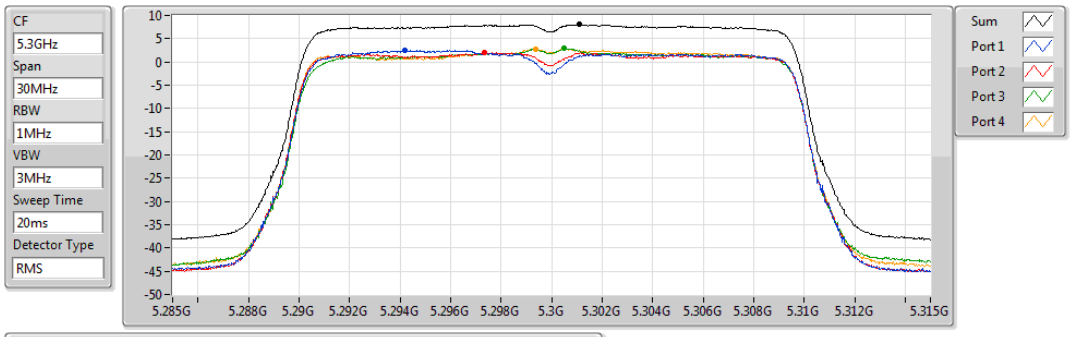


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.16	8.16	2.47	2.40	2.39	2.32

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5300MHz

29/10/2019

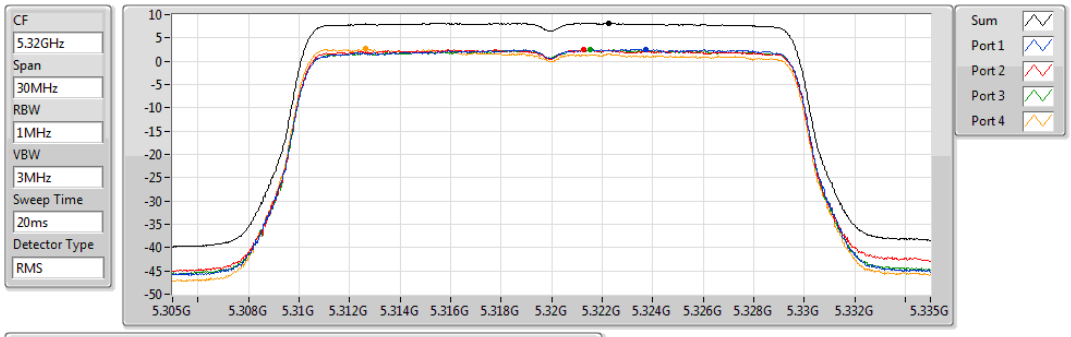


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.01	8.01	2.50	1.96	2.94	2.80

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5320MHz

23/07/2019

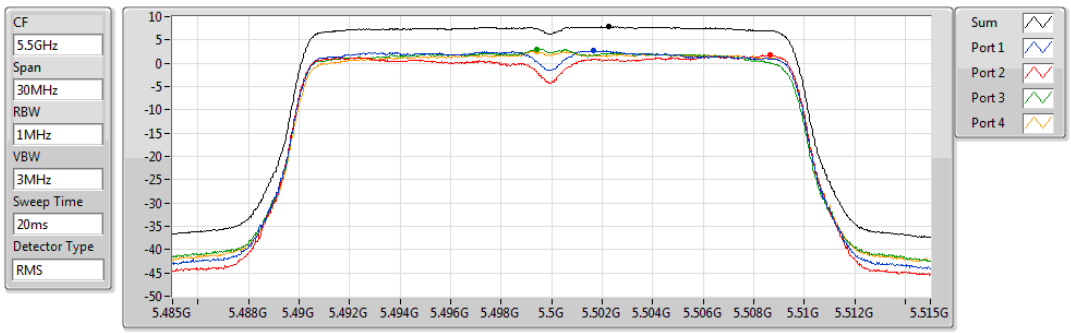


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.16	8.16	2.56	2.48	2.45	2.64

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5500MHz

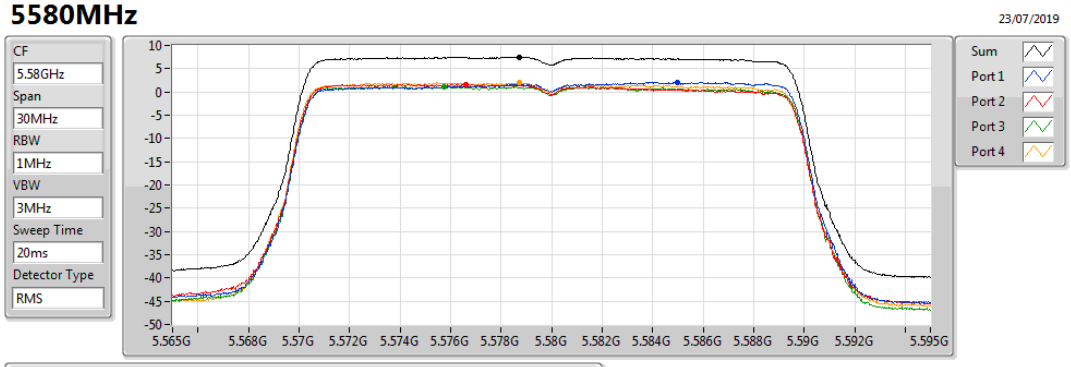
29/10/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.82	7.82	2.68	1.75	3.07	2.60

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

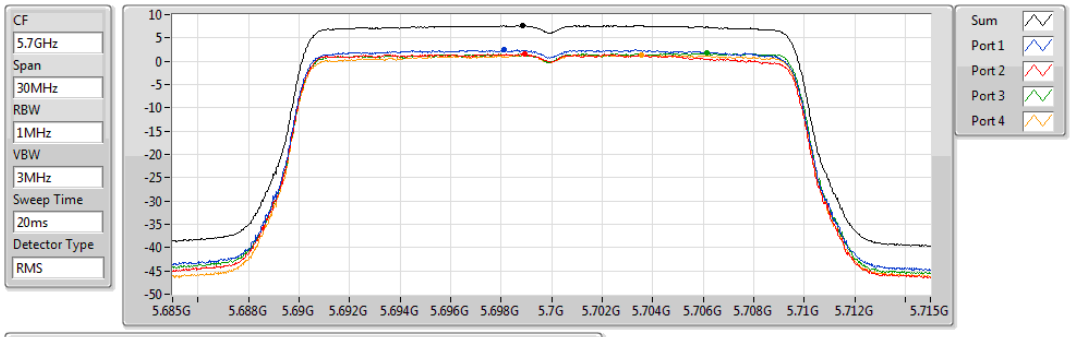
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.48	7.48	2.10	1.67	1.15	1.93

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

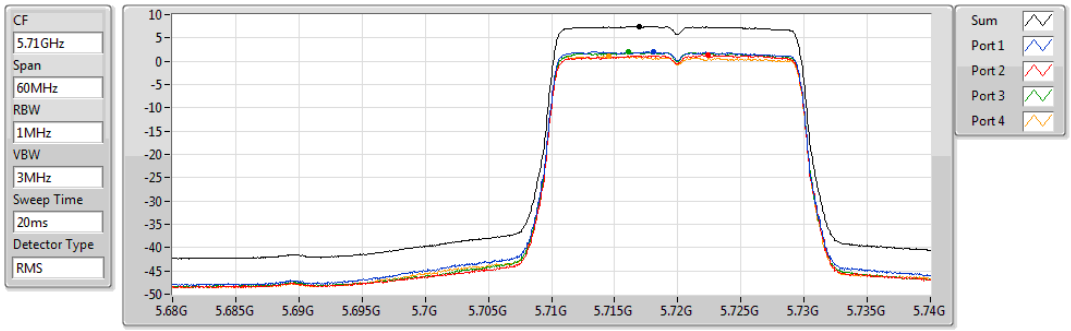
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.64	7.64	2.42	1.51	1.75	1.37

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5720MHz Straddle 5.47-5.725GHz

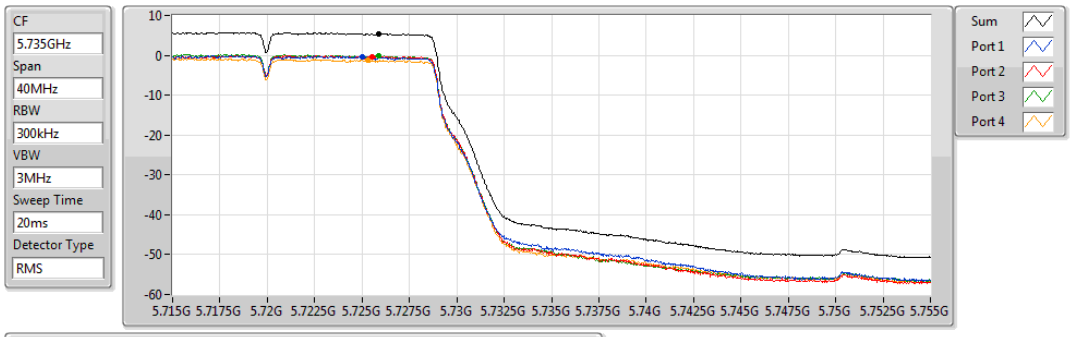


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.48	7.48	2.07	1.26	1.97	1.09

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5720MHz Straddle 5.725-5.85GHz

24/07/2019

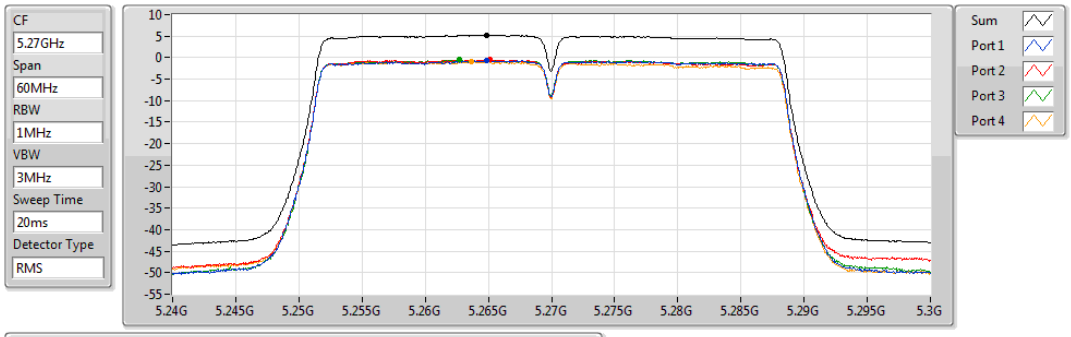


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.38	5.38	-0.48	-0.29	-0.20	-1.25

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5270MHz

24/07/2019

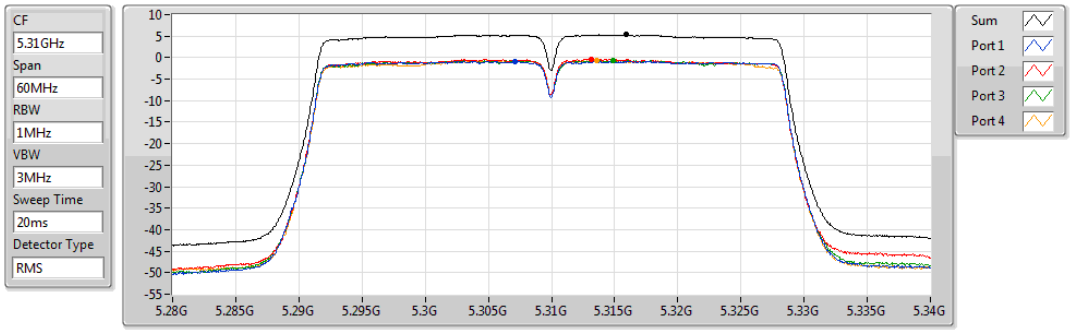


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.30	5.30	-0.73	-0.42	-0.49	-0.83

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5310MHz

24/07/2019

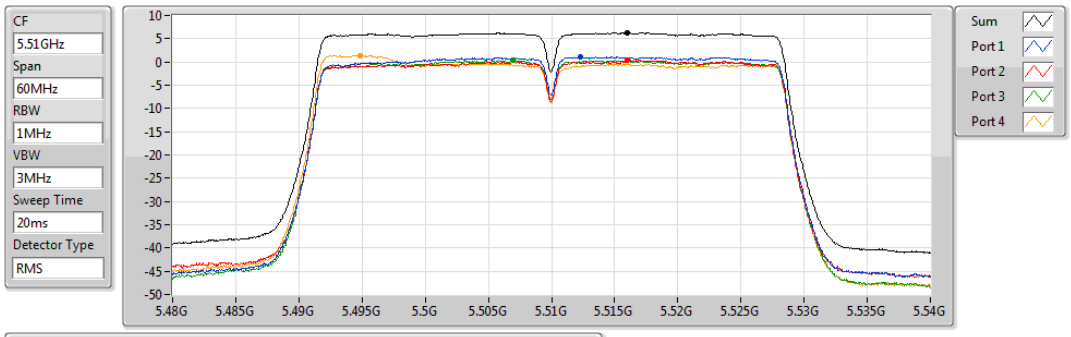


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.32	5.32	-0.86	-0.39	-0.61	-0.68

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5510MHz

24/07/2019

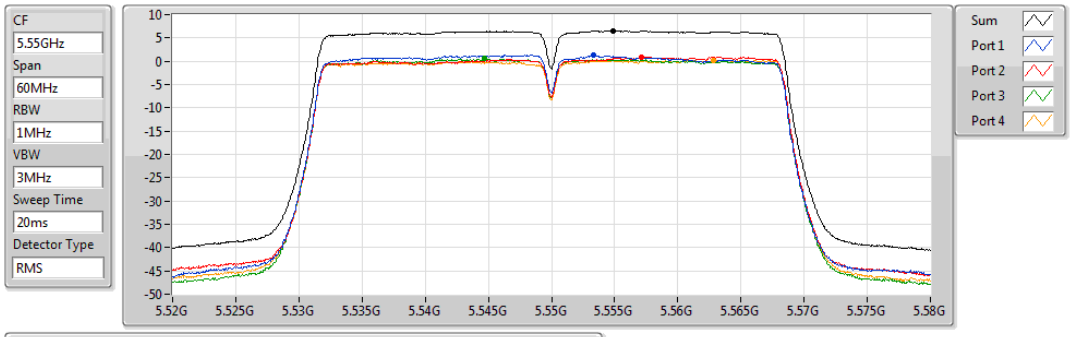


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.25	6.25	1.03	0.38	0.33	1.38

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5550MHz

24/07/2019

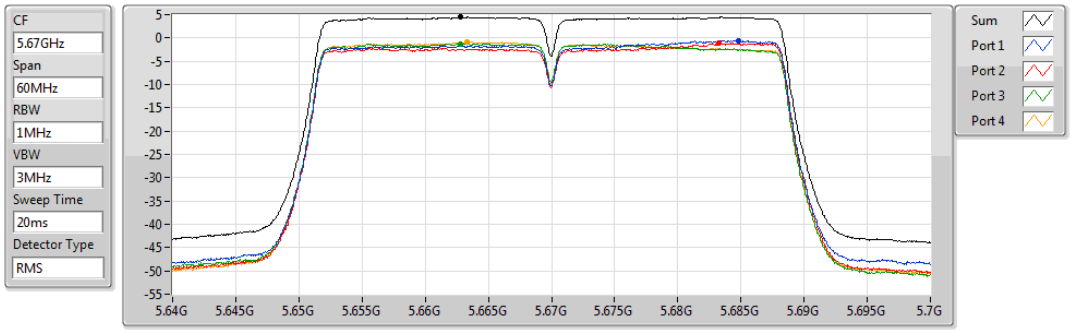


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.53	6.53	1.28	0.87	0.52	0.27

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5670MHz

24/07/2019

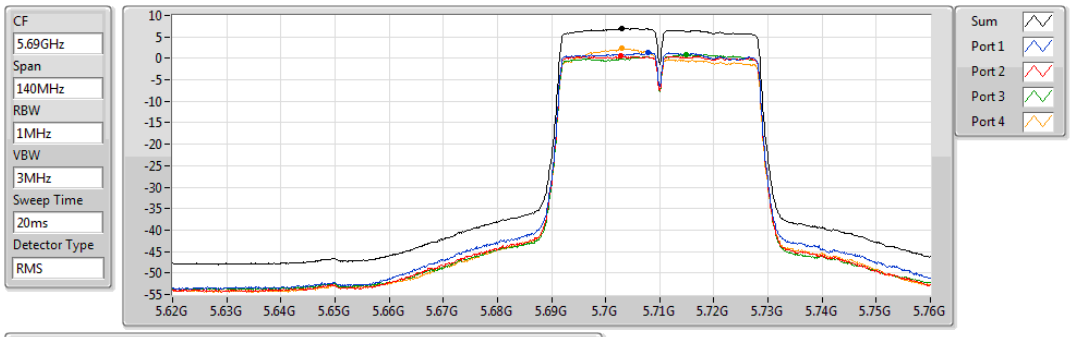


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.47	4.47	-0.53	-1.19	-1.22	-0.90

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5710MHz Straddle 5.47-5.725GHz

24/07/2019

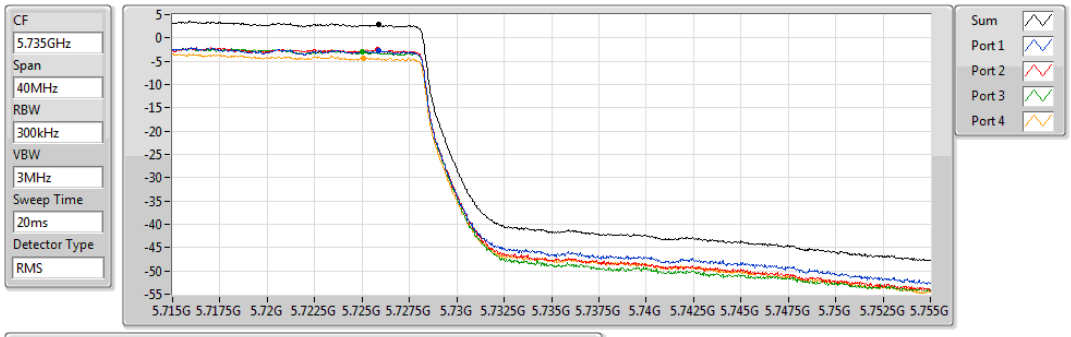


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.98	6.98	1.29	0.53	0.80	2.30

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

5710MHz Straddle 5.725-5.85GHz

24/07/2019

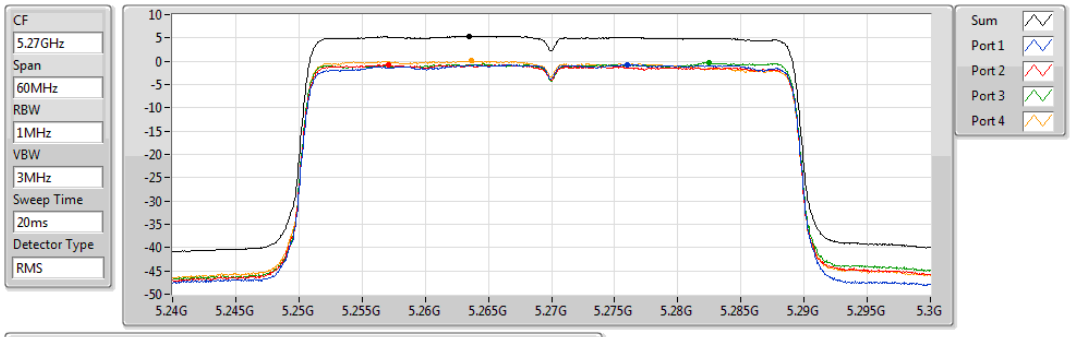


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.80	2.80	-2.83	-2.54	-3.06	-4.29

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5270MHz

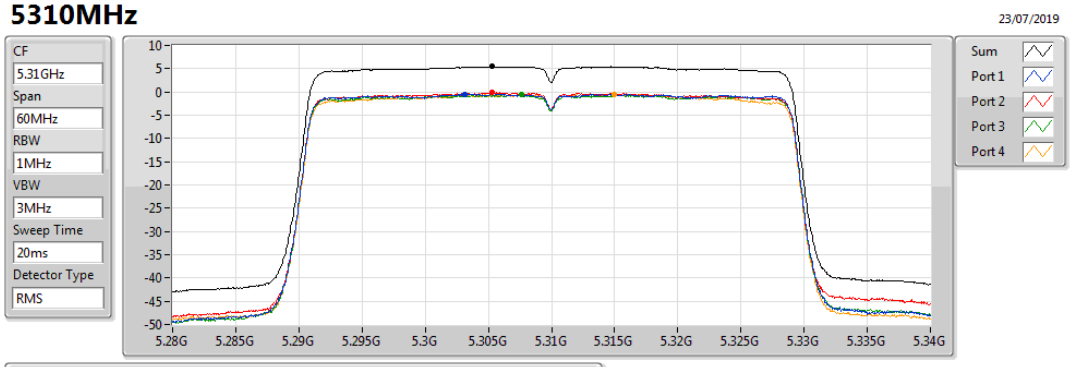
25/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.40	5.40	-0.71	-0.76	-0.37	0.09

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

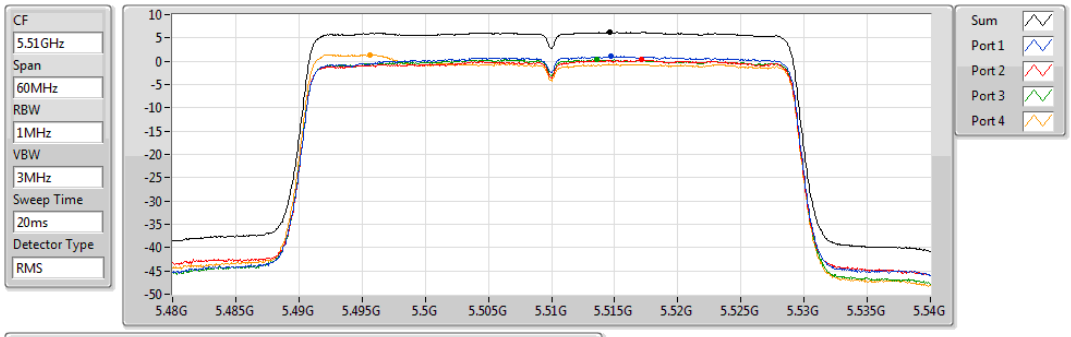
5310MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.49	5.49	-0.45	-0.09	-0.64	-0.52

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

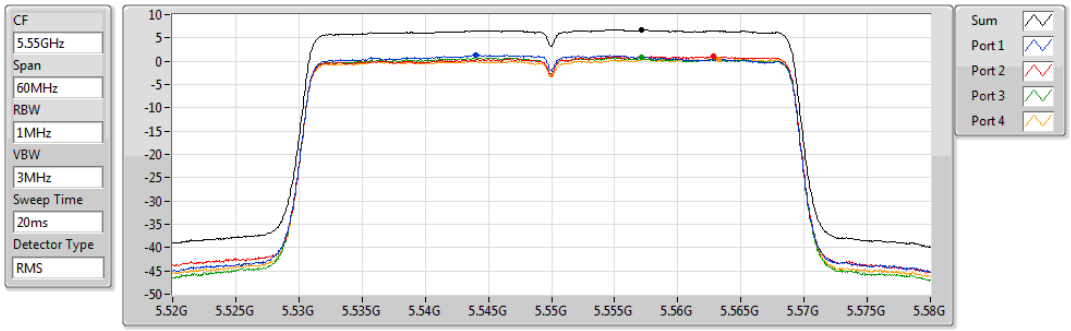
5510MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.22	6.22	1.04	0.30	0.31	1.42

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5550MHz

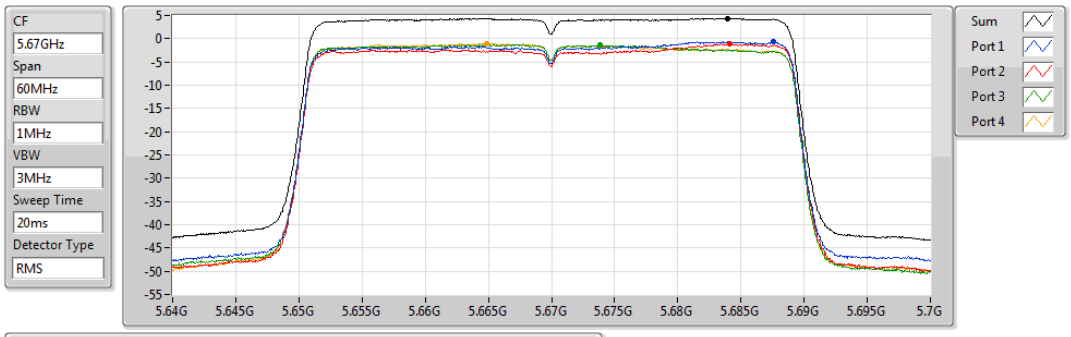


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.79	6.79	1.34	1.00	0.75	0.50

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5670MHz

23/07/2019

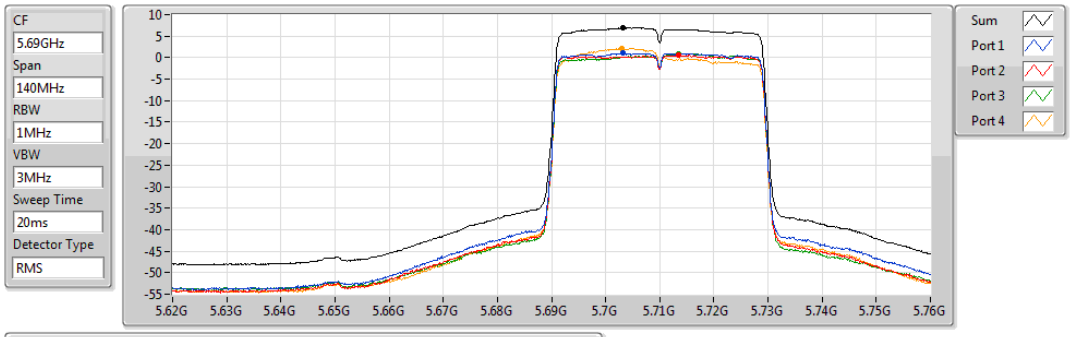


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.41	4.41	-0.68	-1.18	-1.35	-1.00

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5710MHz Straddle 5.47-5.725GHz

23/07/2019

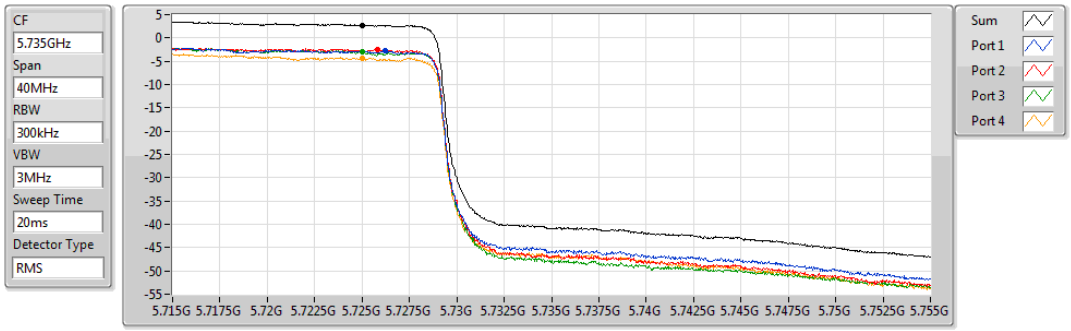


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.93	6.93	1.00	0.51	0.97	2.13

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5710MHz Straddle 5.725-5.85GHz

23/07/2019

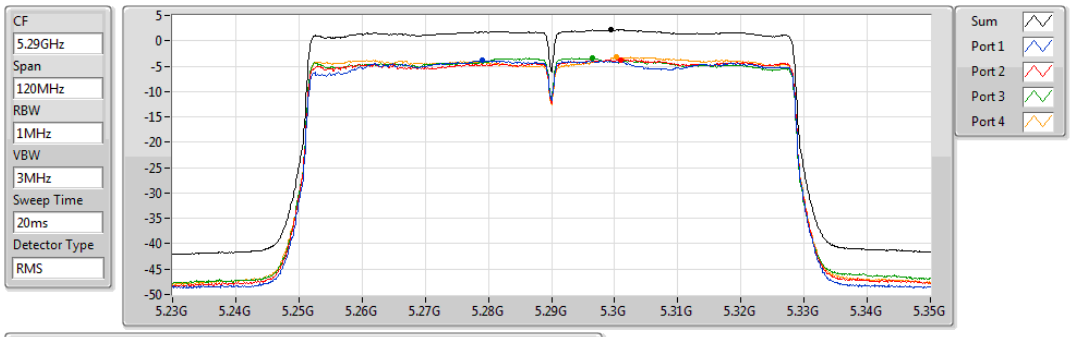


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.72	2.72	-2.85	-2.50	-3.00	-4.37

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

5290MHz

25/07/2019

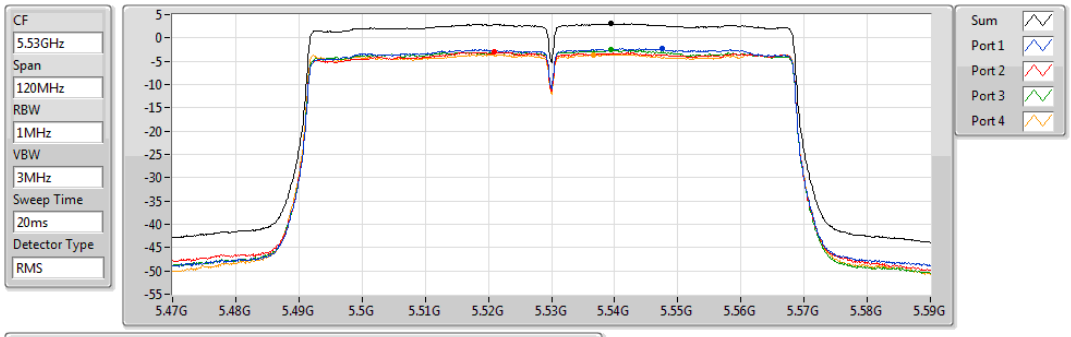


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.17	2.17	-3.87	-3.76	-3.34	-3.26

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

5530MHz

24/07/2019

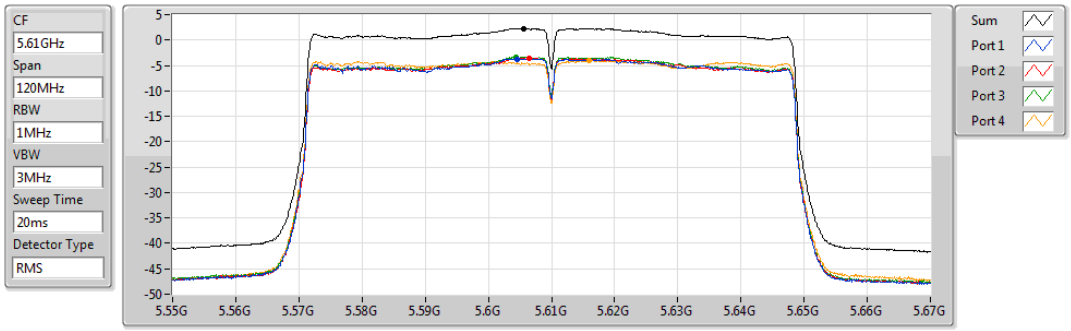


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.02	3.02	-2.32	-3.08	-2.61	-3.56

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

5610MHz

25/07/2019

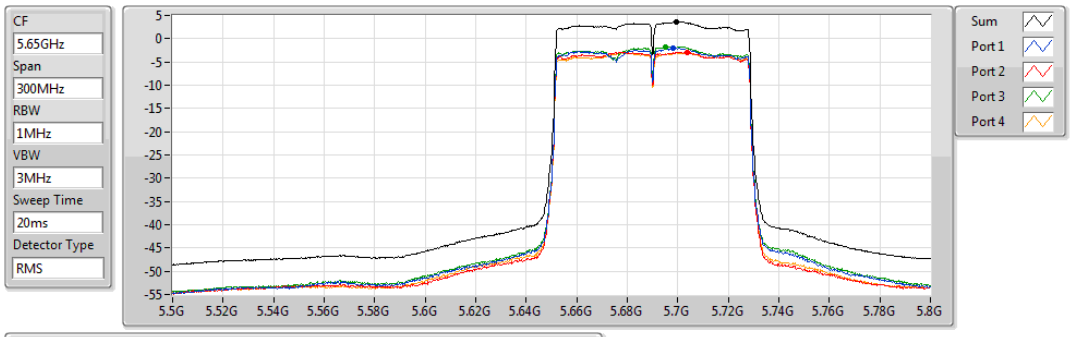


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.20	2.20	-3.74	-3.54	-3.38	-4.01

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

5690MHz Straddle 5.47-5.725GHz

29/07/2019

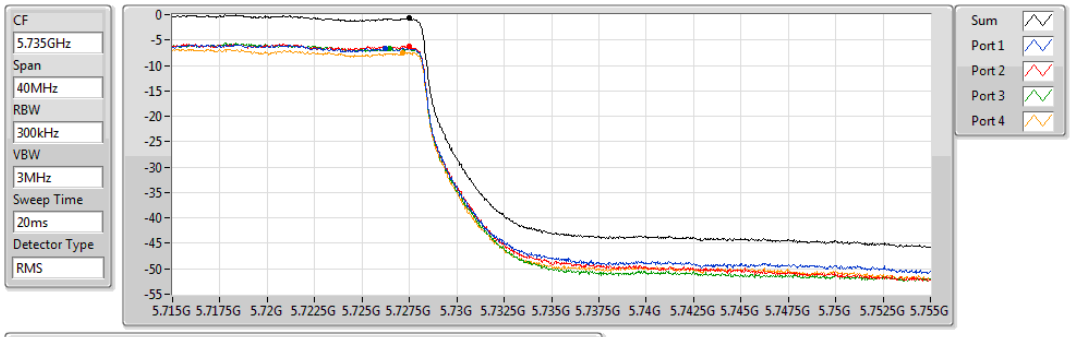


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.55	3.55	-2.04	-2.90	-1.73	-2.98

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

5690MHz Straddle 5.725-5.85GHz

24/07/2019

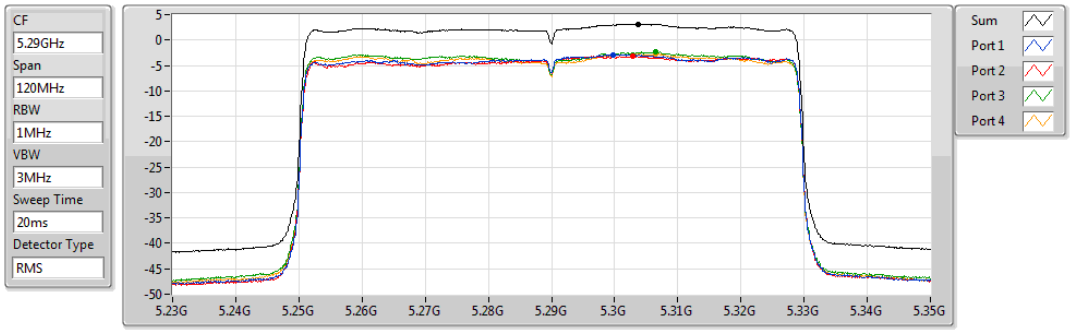


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.71	-0.71	-6.58	-6.14	-6.60	-7.44

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5290MHz

25/07/2019

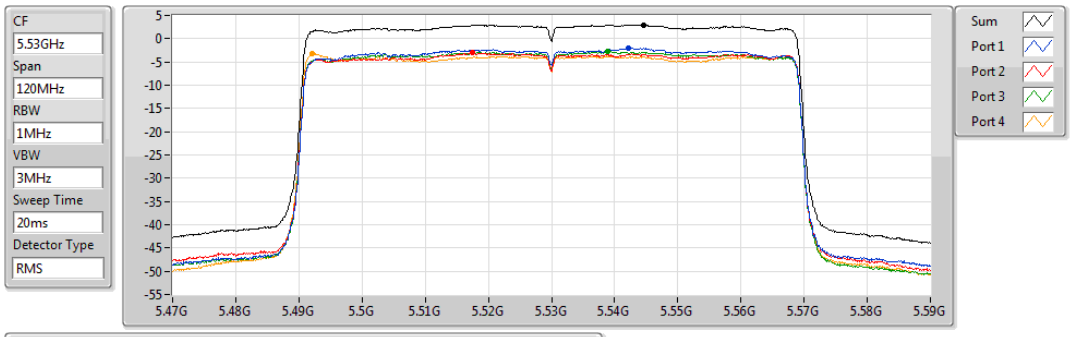


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.17	3.17	-2.87	-3.15	-2.36	-2.74

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5530MHz

23/07/2019

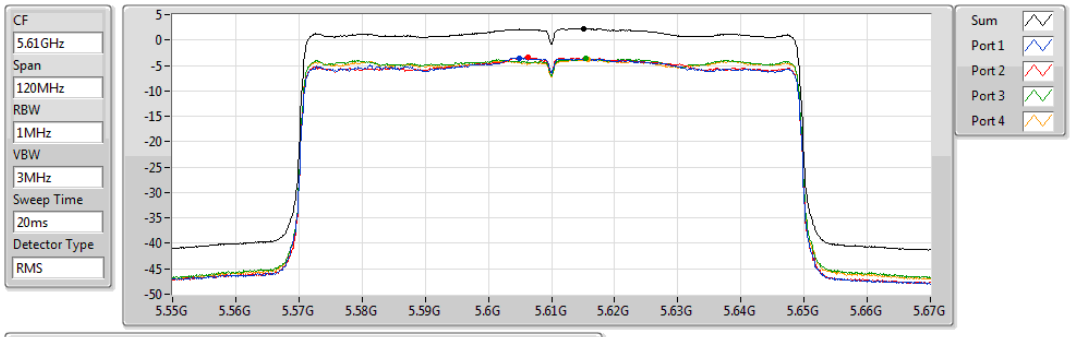


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.98	2.98	-2.07	-3.08	-2.72	-3.25

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5610MHz

25/07/2019

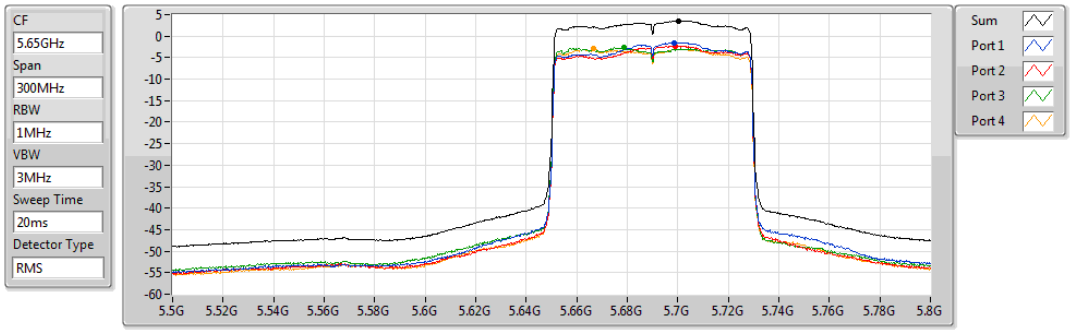


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.23	2.23	-3.53	-3.41	-3.68	-3.90

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5690MHz Straddle 5.47-5.725GHz

23/07/2019

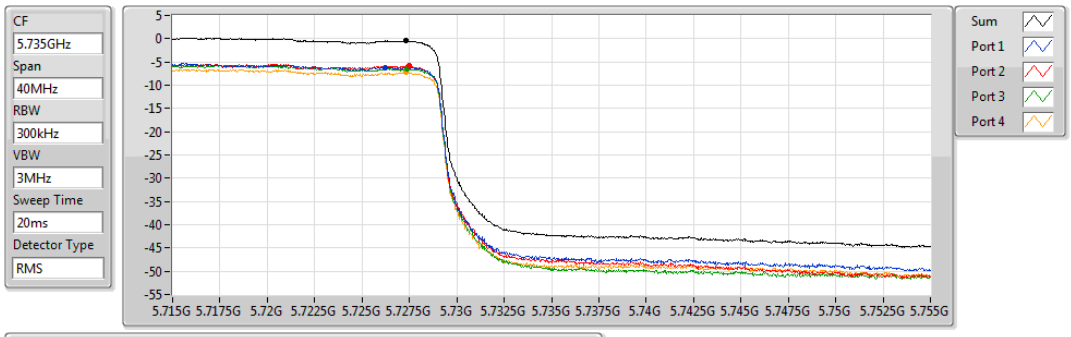


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.54	3.54	-1.51	-2.31	-2.67	-2.98

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5690MHz Straddle 5.725-5.85GHz

23/07/2019

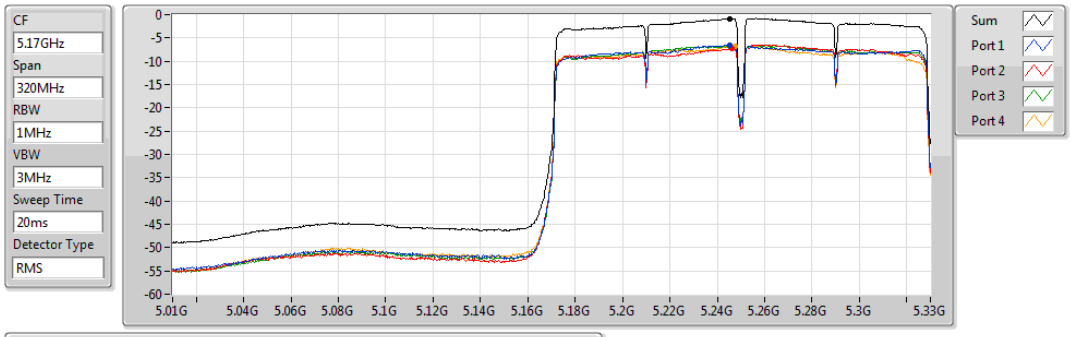


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.40	-0.40	-6.14	-5.78	-6.42	-7.20

802.11ac VHT160-BF_Nss1,(MCS0)_4TX PSD

5250MHz

24/07/2019

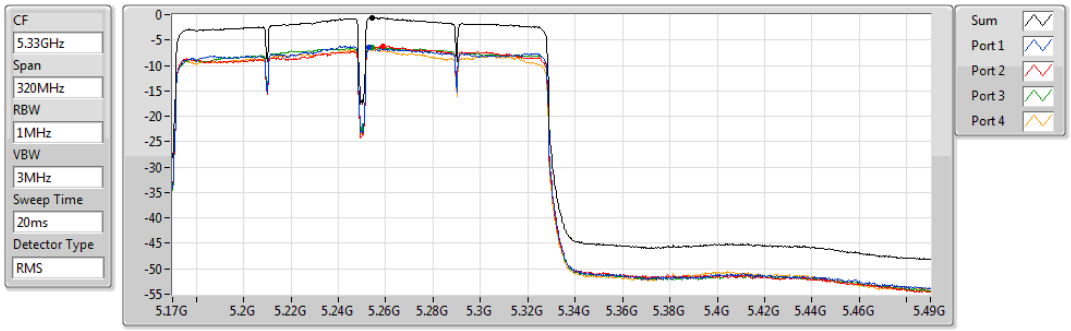


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.89	-0.89	-6.46	-7.28	-6.83	-6.78

802.11ac VHT160-BF_Nss1,(MCS0)_4TX PSD

5250MHz

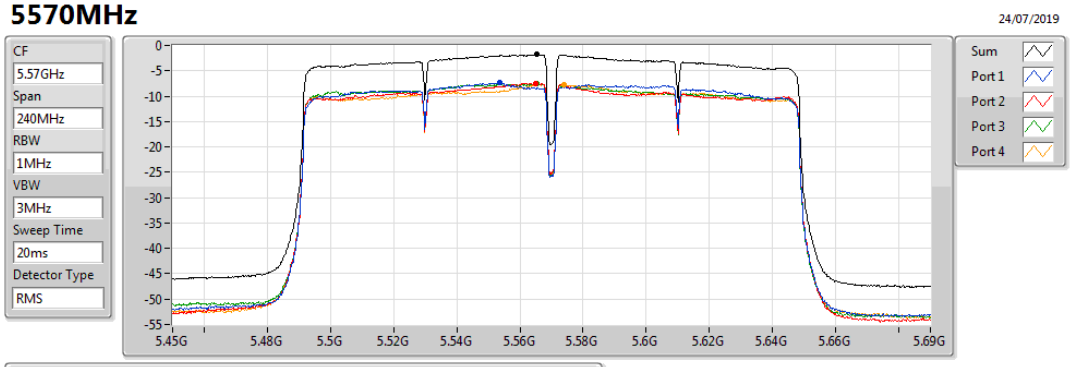
24/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.65	-0.65	-6.55	-6.25	-6.49	-6.73

802.11ac VHT160-BF_Nss1,(MCS0)_4TX PSD

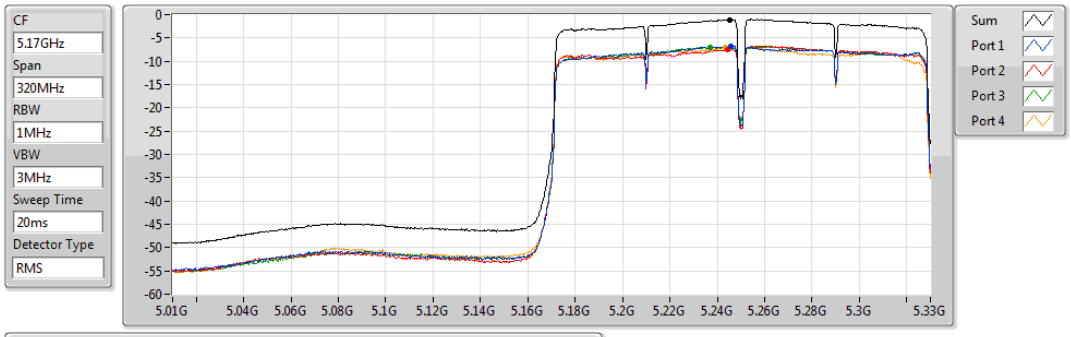
5570MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.77	-1.77	-7.33	-7.42	-7.52	-7.73

802.11ax HEW160-BF_Nss1,(MCS0)_4TX PSD

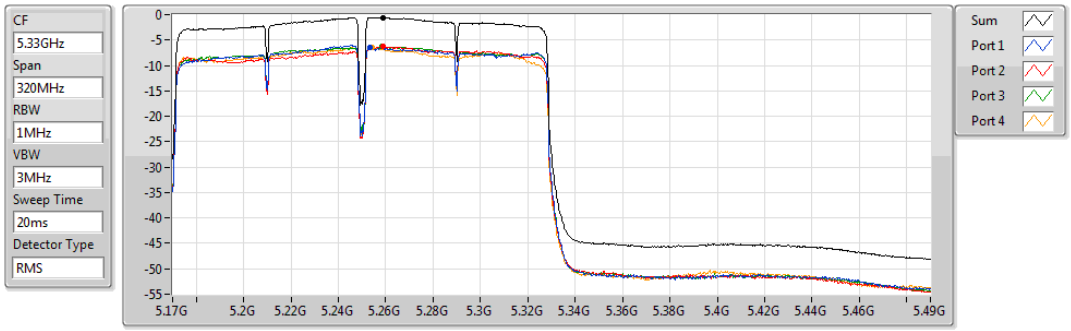
5250MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.08	-1.08	-6.68	-7.53	-6.97	-7.03

802.11ax HEW160-BF_Nss1,(MCS0)_4TX PSD

5250MHz

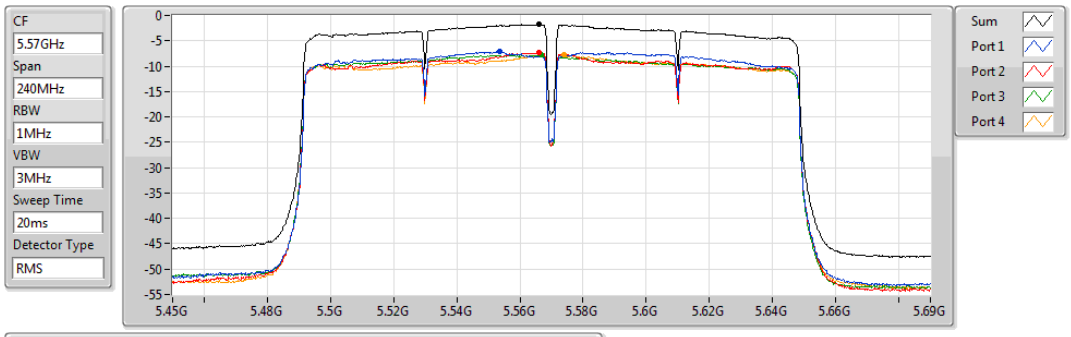


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.54	-0.54	-6.41	-6.25	-6.32	-6.49

802.11ax HEW160-BF_Nss1,(MCS0)_4TX **PSD**

5570MHz

24/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.78	-1.78	-7.11	-7.36	-7.84	-7.80

2 Stream 4 TX for TxBF mode for band 1, 4:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	15.08
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	10.98
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	3.33
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	14.52
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	10.96
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	3.13
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	14.90
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	11.69
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	6.27
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	13.85
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	11.47
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	6.50

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

Result

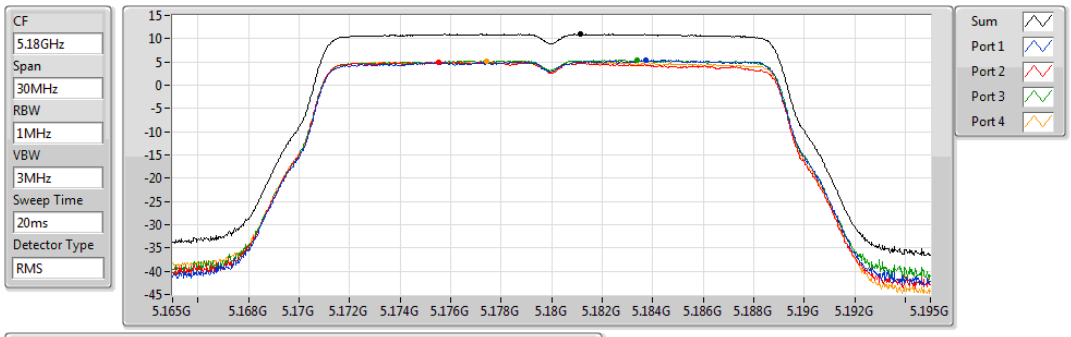
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.00	5.41	5.01	5.41	5.10	10.96	17.00
5200MHz	Pass	5.00	9.55	8.76	9.04	7.97	14.69	17.00
5240MHz	Pass	5.00	9.58	9.37	9.42	9.25	15.08	17.00
5745MHz	Pass	6.20	10.09	9.32	9.95	10.26	14.90	29.80
5785MHz	Pass	6.20	9.12	8.45	8.32	8.25	14.29	29.80
5825MHz	Pass	6.20	8.61	8.86	8.26	8.49	14.25	29.80
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.00	0.96	0.61	0.81	-0.20	6.43	17.00
5230MHz	Pass	5.00	5.31	5.39	5.38	4.65	10.98	17.00
5755MHz	Pass	6.20	6.32	6.21	6.95	6.12	11.69	29.80
5795MHz	Pass	6.20	5.90	6.46	7.45	4.70	11.23	29.80
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.00	-2.56	-1.89	-2.88	-2.91	3.33	17.00
5775MHz	Pass	6.20	0.68	0.57	0.60	1.01	6.27	29.80
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.00	4.86	4.24	5.09	4.56	10.54	17.00
5200MHz	Pass	5.00	8.49	8.21	8.60	8.39	14.24	17.00
5240MHz	Pass	5.00	8.33	8.54	9.16	8.48	14.52	17.00
5745MHz	Pass	6.20	8.18	7.92	8.04	7.93	13.85	29.80
5785MHz	Pass	6.20	6.97	7.81	7.95	7.60	13.38	29.80
5825MHz	Pass	6.20	7.21	7.40	7.26	7.17	12.94	29.80
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.00	0.68	0.47	1.01	0.21	6.51	17.00
5230MHz	Pass	5.00	4.98	5.57	4.72	4.83	10.96	17.00
5755MHz	Pass	6.20	5.73	5.75	6.19	5.39	11.47	29.80
5795MHz	Pass	6.20	5.09	6.36	6.22	5.31	11.00	29.80
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.00	-2.95	-2.55	-3.20	-2.46	3.13	17.00
5775MHz	Pass	6.20	0.43	0.44	0.90	0.88	6.50	29.80

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

802.11ac VHT20-BF_Nss2,(MCS0)_4TX PSD

5180MHz

24/07/2019

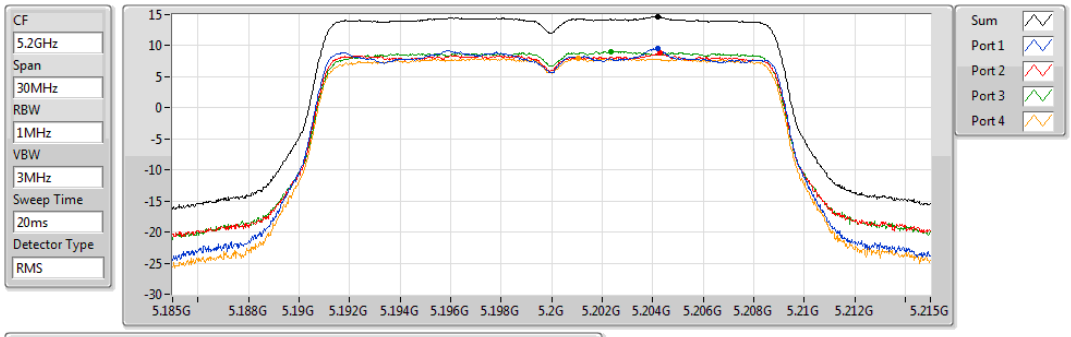


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.96	10.96	5.41	5.01	5.41	5.10

802.11ac VHT20-BF_Nss2,(MCS0)_4TX PSD

5200MHz

24/07/2019

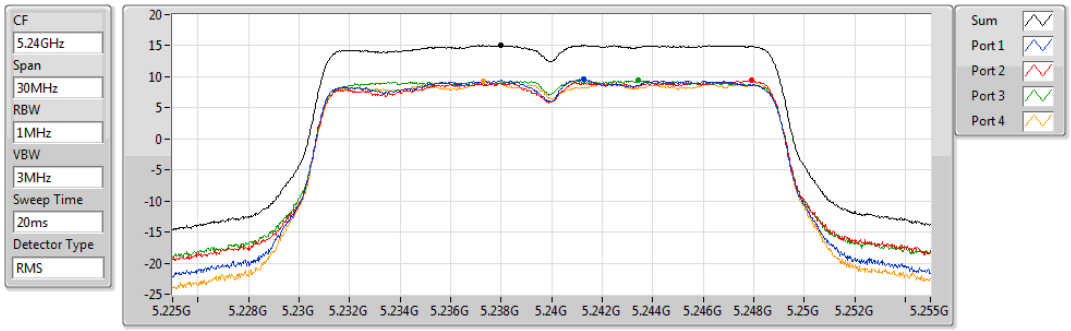


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.69	14.69	9.55	8.76	9.04	7.97

802.11ac VHT20-BF_Nss2,(MCS0)_4TX PSD

5240MHz

24/07/2019

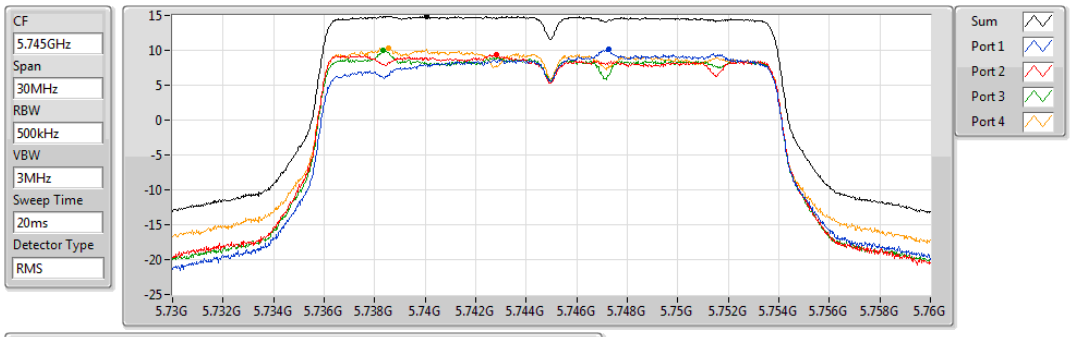


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.08	15.08	9.58	9.37	9.42	9.25

802.11ac VHT20-BF_Nss2,(MCS0)_4TX PSD

5745MHz

25/07/2019

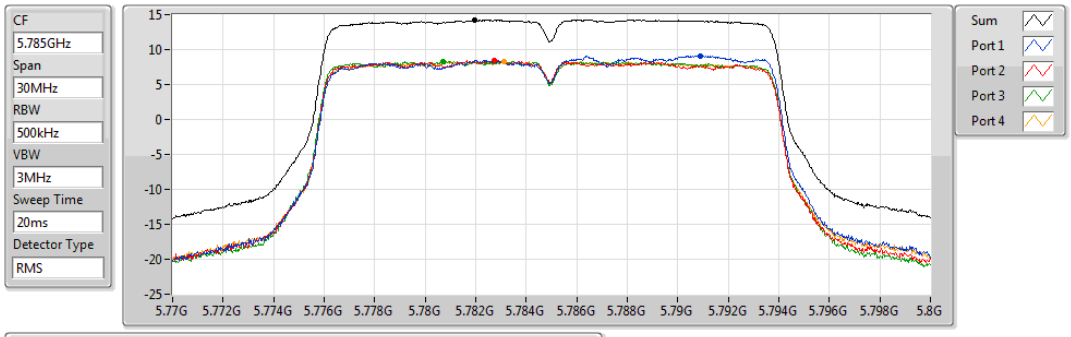


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.90	14.90	10.09	9.32	9.95	10.26

802.11ac VHT20-BF_Nss2,(MCS0)_4TX PSD

5785MHz

24/07/2019

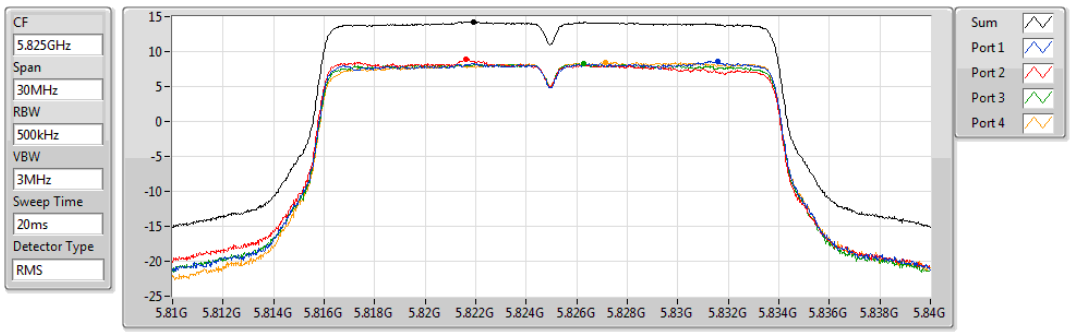


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.29	14.29	9.12	8.45	8.32	8.25

802.11ac VHT20-BF_Nss2,(MCS0)_4TX PSD

5825MHz

24/07/2019

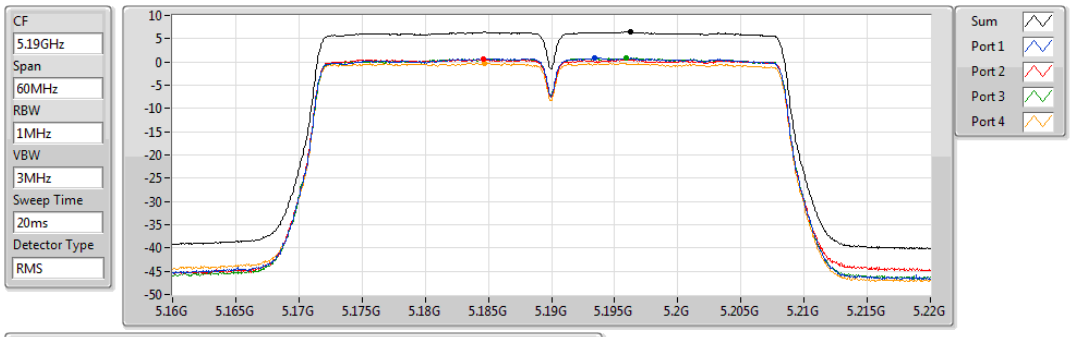


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.25	14.25	8.61	8.86	8.26	8.49

802.11ac VHT40-BF_Nss2,(MCS0)_4TX PSD

5190MHz

24/07/2019

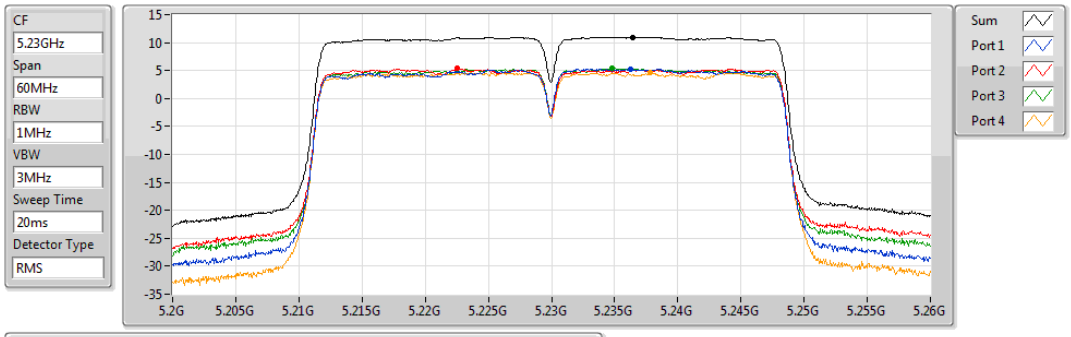


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.43	6.43	0.96	0.61	0.81	-0.20

802.11ac VHT40-BF_Nss2,(MCS0)_4TX PSD

5230MHz

24/07/2019

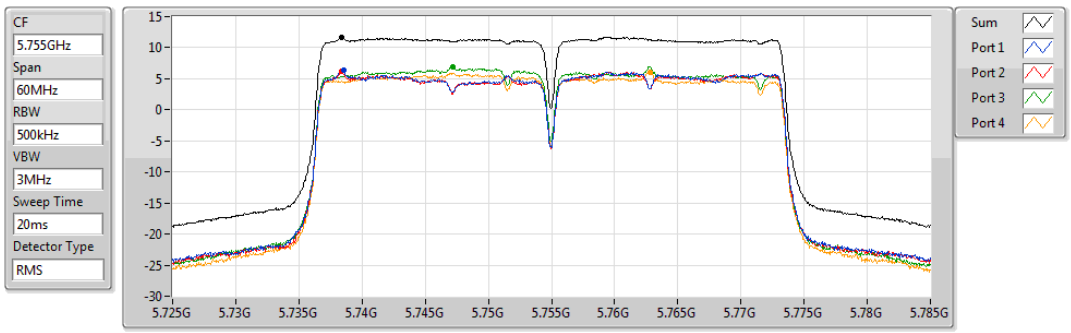


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.98	10.98	5.31	5.39	5.38	4.65

802.11ac VHT40-BF_Nss2,(MCS0)_4TX PSD

5755MHz

25/07/2019

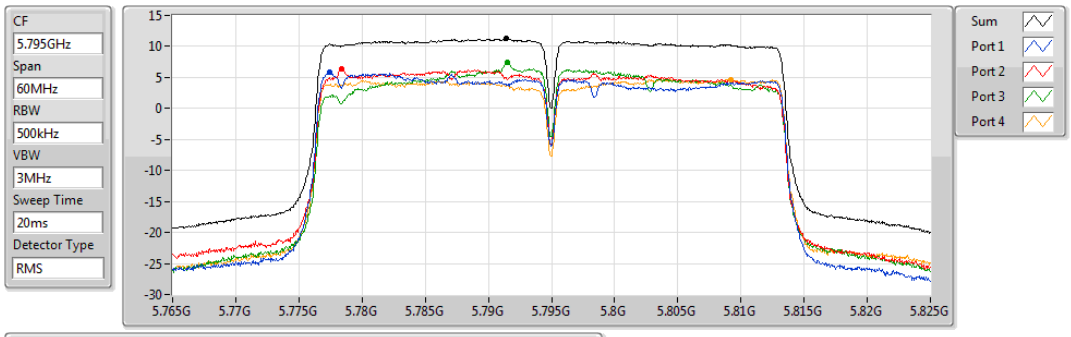


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.69	11.69	6.32	6.21	6.95	6.12

802.11ac VHT40-BF_Nss2,(MCS0)_4TX PSD

5795MHz

25/07/2019

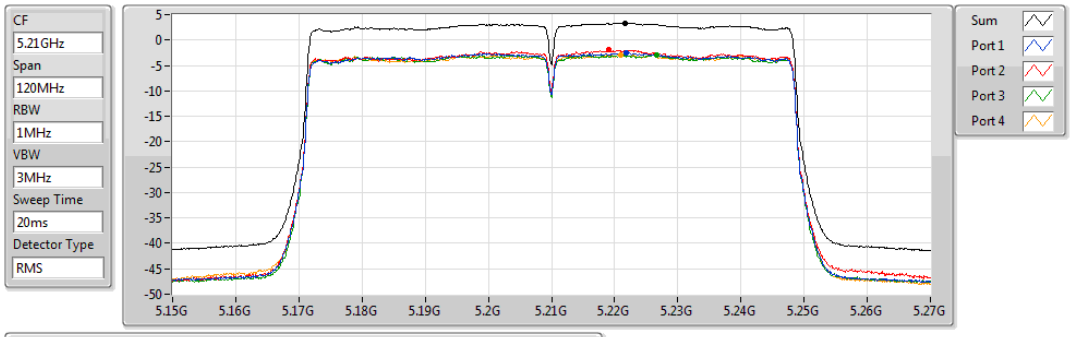


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.23	11.23	5.90	6.46	7.45	4.70

802.11ac VHT80-BF_Nss2,(MCS0)_4TX PSD

5210MHz

24/07/2019

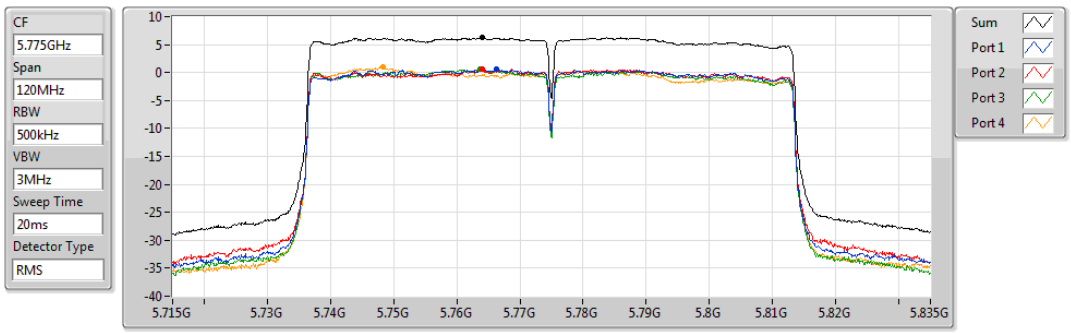


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.33	3.33	-2.56	-1.89	-2.88	-2.91

802.11ac VHT80-BF_Nss2,(MCS0)_4TX PSD

5775MHz

24/07/2019

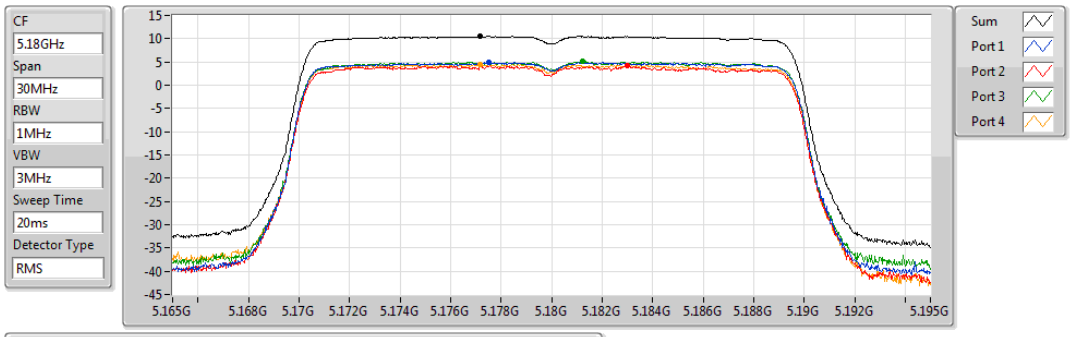


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.27	6.27	0.68	0.57	0.60	1.01

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5180MHz

24/07/2019

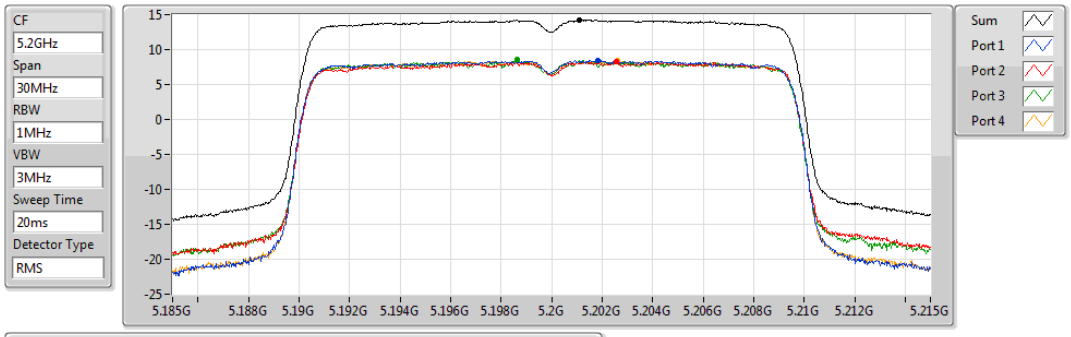


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.54	10.54	4.86	4.24	5.09	4.56

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5200MHz

24/07/2019

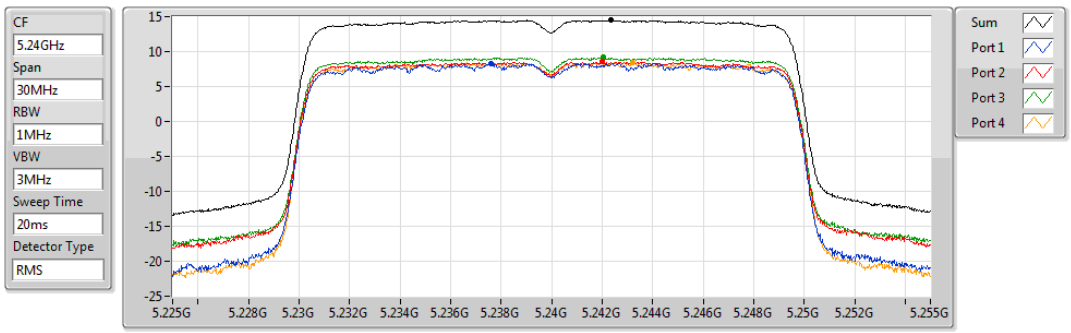


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.24	14.24	8.49	8.21	8.60	8.39

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5240MHz

24/07/2019

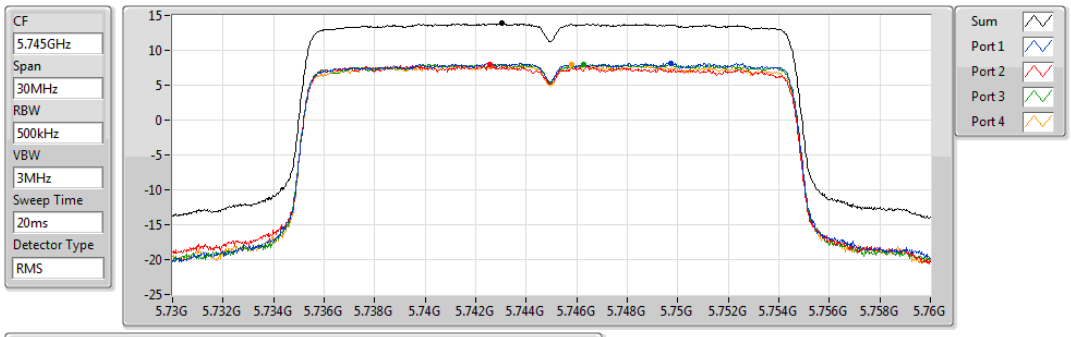


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.52	14.52	8.33	8.54	9.16	8.48

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5745MHz

24/07/2019

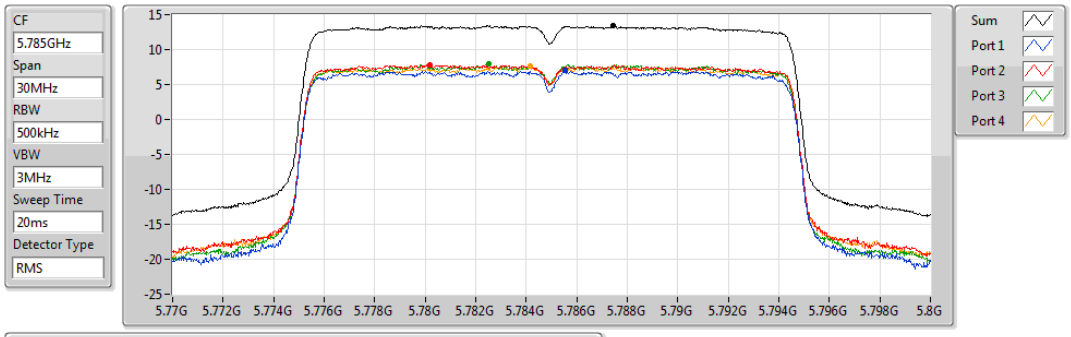


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.85	13.85	8.18	7.92	8.04	7.93

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5785MHz

24/07/2019

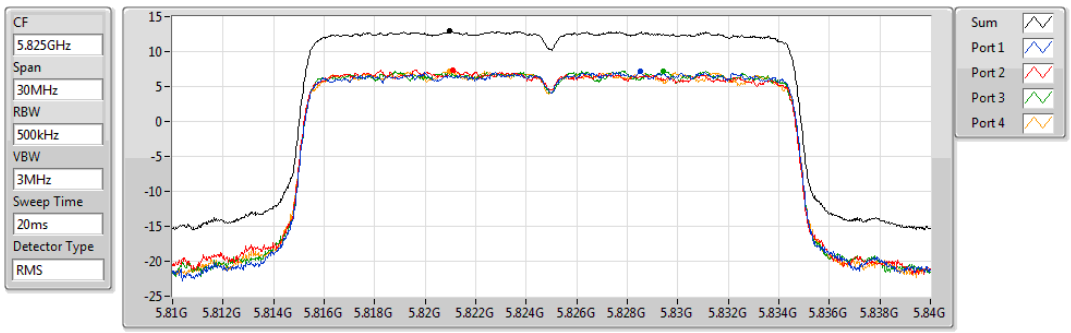


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.38	13.38	6.97	7.81	7.95	7.60

802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

5825MHz

24/07/2019

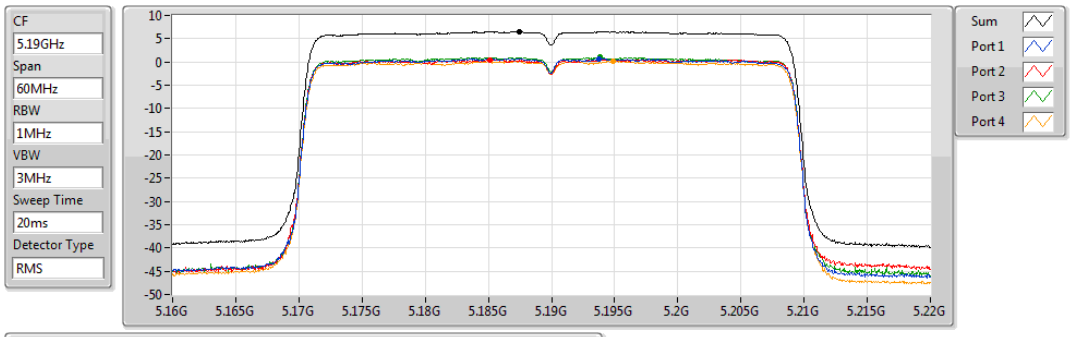


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.94	12.94	7.21	7.40	7.26	7.17

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

5190MHz

24/07/2019

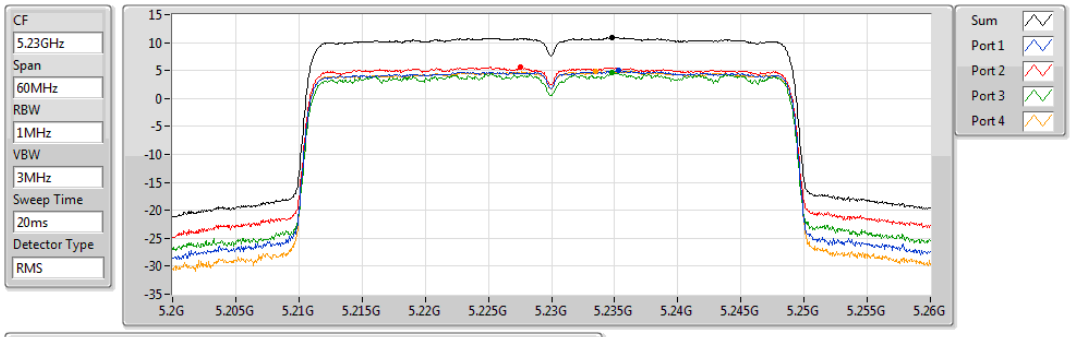


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.51	6.51	0.68	0.47	1.01	0.21

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

5230MHz

24/07/2019

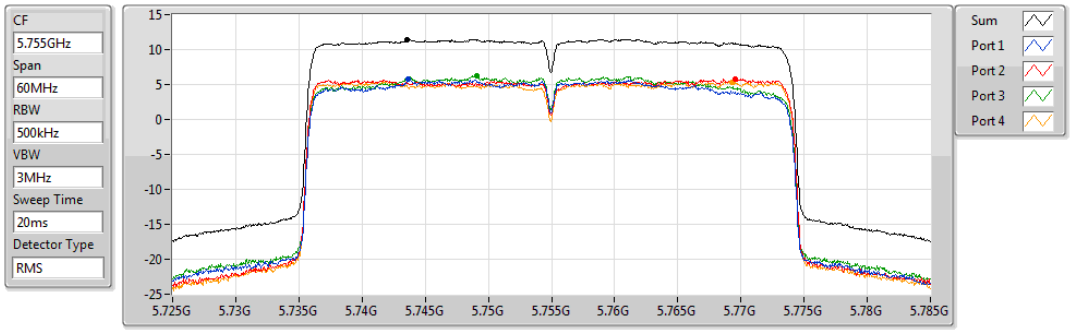


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.96	10.96	4.98	5.57	4.72	4.83

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

5755MHz

25/07/2019

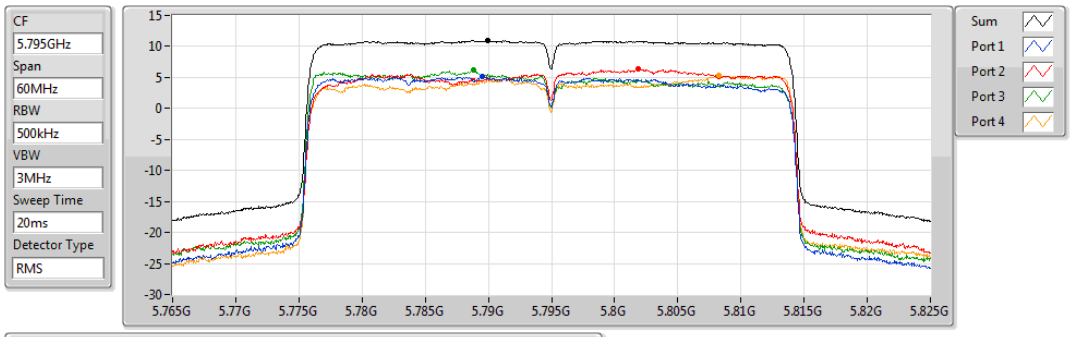


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.47	11.47	5.73	5.75	6.19	5.39

802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

5795MHz

25/07/2019

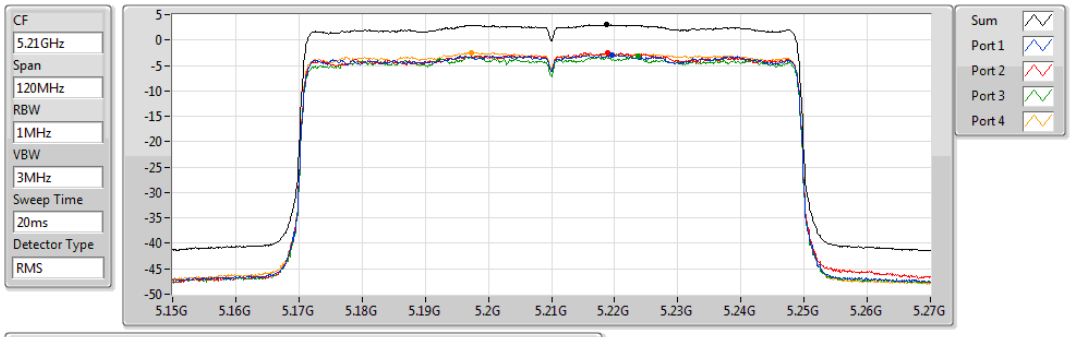


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.00	11.00	5.09	6.36	6.22	5.31

802.11ax HEW80-BF_Nss2,(MCS0)_4TX PSD

5210MHz

24/07/2019

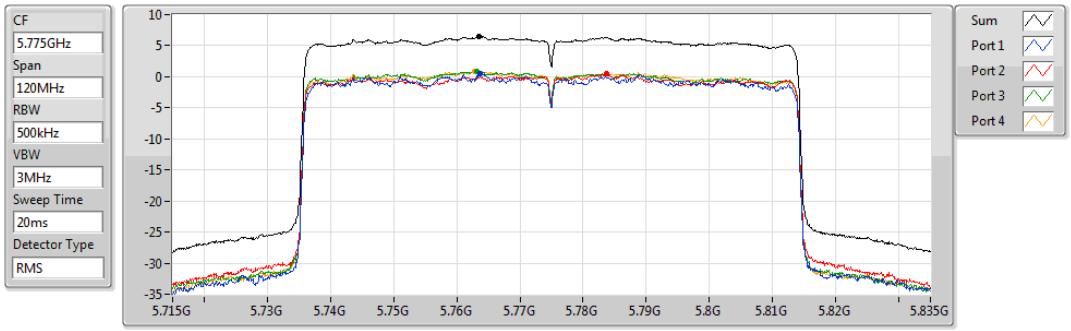


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.13	3.13	-2.95	-2.55	-3.20	-2.46

802.11ax HEW80-BF_Nss2,(MCS0)_4TX PSD

5775MHz

24/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.50	6.50	0.43	0.44	0.90	0.88