

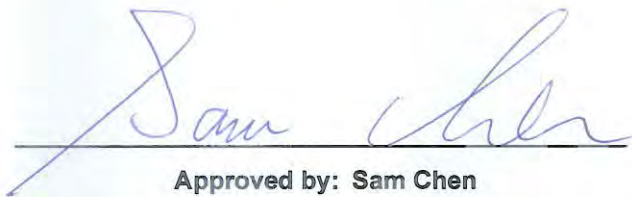


NCC RADIO TEST REPORT

Equipment : Wireless Access Point
Brand Name : Ruckus
Model Name : R850
Applicant : Ruckus Wireless Inc.
350 W. Java Dr., Sunnyvale CA 94089 USA
Manufacturer : Ruckus Wireless Inc.
350 W. Java Dr., Sunnyvale CA 94089 USA
Standard : LP0002 Section 4.7 (2018-01-10)

The product was received on May 08, 2020, and testing was started from Jun. 12, 2020 and completed on Jul. 31, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.2



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	4.7.8	Antenna Requirement	PASS	-
3.1	2.3	AC Power-line Conducted Emissions	PASS	-
3.2	4.7.3	Emission Bandwidth	PASS	-
3.3	4.7.3	Maximum Conducted Output Power	PASS	-
3.4	4.7.3	Peak Power Spectral Density	PASS	-
3.5	4.7.4	Unwanted Emissions	PASS	-

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Sam Chen

Report Producer: 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 VHT2), 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 (80+80), ax HEW160 (80+80)	5210+5290	42+58 [1]
5470-5725		5530+5610	106+122 [1]



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4TX/8TX
5.15-5.25GHz	802.11n HT20	20	4TX/8TX
5.15-5.25GHz	802.11n HT20-BF	20	4TX/8TX
5.15-5.25GHz	802.11ac VHT20	20	4TX/8TX
5.15-5.25GHz	802.11ac VHT20-BF	20	4TX/8TX
5.15-5.25GHz	802.11ax HEW20	20	4TX/8TX
5.15-5.25GHz	802.11ax HEW20-BF	20	4TX/8TX
5.15-5.25GHz	802.11n HT40	40	4TX/8TX
5.15-5.25GHz	802.11n HT40-BF	40	4TX/8TX
5.15-5.25GHz	802.11ac VHT40	40	4TX/8TX
5.15-5.25GHz	802.11ac VHT40-BF	40	4TX/8TX
5.15-5.25GHz	802.11ax HEW40	40	4TX/8TX
5.15-5.25GHz	802.11ax HEW40-BF	40	4TX/8TX
5.15-5.25GHz	802.11ac VHT80	80	4TX/8TX
5.15-5.25GHz	802.11ac VHT80-BF	80	4TX/8TX
5.15-5.25GHz	802.11ax HEW80	80	4TX/8TX
5.15-5.25GHz	802.11ax HEW80-BF	80	4TX/8TX
5.25-5.35GHz	802.11a	20	4TX/8TX
5.25-5.35GHz	802.11n HT20	20	4TX/8TX
5.25-5.35GHz	802.11n HT20-BF	20	4TX/8TX
5.25-5.35GHz	802.11ac VHT20	20	4TX/8TX
5.25-5.35GHz	802.11ac VHT20-BF	20	4TX/8TX
5.25-5.35GHz	802.11ax HEW20	20	4TX/8TX
5.25-5.35GHz	802.11ax HEW20-BF	20	4TX/8TX
5.25-5.35GHz	802.11n HT40	40	4TX/8TX
5.25-5.35GHz	802.11n HT40-BF	40	4TX/8TX
5.25-5.35GHz	802.11ac VHT40	40	4TX/8TX
5.25-5.35GHz	802.11ac VHT40-BF	40	4TX/8TX
5.25-5.35GHz	802.11ax HEW40	40	4TX/8TX
5.25-5.35GHz	802.11ax HEW40-BF	40	4TX/8TX
5.25-5.35GHz	802.11ac VHT80	80	4TX/8TX
5.25-5.35GHz	802.11ac VHT80-BF	80	4TX/8TX
5.25-5.35GHz	802.11ax HEW80	80	4TX/8TX
5.25-5.35GHz	802.11ax HEW80-BF	80	4TX/8TX



Band	Mode	BWch (MHz)	Nant
5.15-5.35GHz	802.11ac VHT160	80+80	4TX/8TX
5.15-5.35GHz	802.11ac VHT160-BF	80+80	4TX/8TX
5.15-5.35GHz	802.11ax HEW160	80+80	4TX/8TX
5.15-5.35GHz	802.11ax HEW160-BF	80+80	4TX/8TX
5.47-5.725GHz	802.11a	20	4TX/8TX
5.47-5.725GHz	802.11n HT20	20	4TX/8TX
5.47-5.725GHz	802.11n HT20-BF	20	4TX/8TX
5.47-5.725GHz	802.11ac VHT20	20	4TX/8TX
5.47-5.725GHz	802.11ac VHT20-BF	20	4TX/8TX
5.47-5.725GHz	802.11ax HEW20	20	4TX/8TX
5.47-5.725GHz	802.11ax HEW20-BF	20	4TX/8TX
5.47-5.725GHz	802.11n HT40	40	4TX/8TX
5.47-5.725GHz	802.11n HT40-BF	40	4TX/8TX
5.47-5.725GHz	802.11ac VHT40	40	4TX/8TX
5.47-5.725GHz	802.11ac VHT40-BF	40	4TX/8TX
5.47-5.725GHz	802.11ax HEW40	40	4TX/8TX
5.47-5.725GHz	802.11ax HEW40-BF	40	4TX/8TX
5.47-5.725GHz	802.11ac VHT80	80	4TX/8TX
5.47-5.725GHz	802.11ac VHT80-BF	80	4TX/8TX
5.47-5.725GHz	802.11ax HEW80	80	4TX/8TX
5.47-5.725GHz	802.11ax HEW80-BF	80	4TX/8TX
5.47-5.725GHz	802.11ac VHT160	80+80	4TX/8TX
5.47-5.725GHz	802.11ac VHT160-BF	80+80	4TX/8TX
5.47-5.725GHz	802.11ax HEW160	80+80	4TX/8TX
5.47-5.725GHz	802.11ax HEW160-BF	80+80	4TX/8TX
5.725-5.85GHz	802.11a	20	4TX/8TX
5.725-5.85GHz	802.11n HT20	20	4TX/8TX
5.725-5.85GHz	802.11n HT20-BF	20	4TX/8TX
5.725-5.85GHz	802.11ac VHT20	20	4TX/8TX
5.725-5.85GHz	802.11ac VHT20-BF	20	4TX/8TX
5.725-5.85GHz	802.11ax HEW20	20	4TX/8TX
5.725-5.85GHz	802.11ax HEW20-BF	20	4TX/8TX
5.725-5.85GHz	802.11n HT40	40	4TX/8TX
5.725-5.85GHz	802.11n HT40-BF	40	4TX/8TX
5.725-5.85GHz	802.11ac VHT40	40	4TX/8TX



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ac VHT40-BF	40	4TX/8TX
5.725-5.85GHz	802.11ax HEW40	40	4TX/8TX
5.725-5.85GHz	802.11ax HEW40-BF	40	4TX/8TX
5.725-5.85GHz	802.11ac VHT80	80	4TX/8TX
5.725-5.85GHz	802.11ac VHT80-BF	80	4TX/8TX
5.725-5.85GHz	802.11ax HEW80	80	4TX/8TX
5.725-5.85GHz	802.11ax HEW80-BF	80	4TX/8TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 and VHT160 (80+80) use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40, HEW80 and HEW160 (80+80) use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Type	Connector	Gain (dBi)		Polarization
	WLAN 2.4GHz	WLAN 5GHz						WLAN 2.4GHz	WLAN 5GHz	
		4TX/ 4RX	8TX/ 8RX							
1	1	-	1	Ruckus	Stamped Metal Antenna	Omni Integrated PCB	N/A	0	1.5	Vertical
2	2	-	2	Ruckus	Stamped Metal Antenna	Omni Integrated PCB	N/A	0	1.5	Vertical
3	-	-	3	Ruckus	Hamal	Omni Integrated PCB	N/A	-	1.5	Horizontal
4	-	-	4	Ruckus	Corzar	Omni Integrated PCB	N/A	-	1.5	Vertical
5	-	1	5	Ruckus	Corzar	Omni Integrated PCB	N/A	-	1.5	Vertical
6	-	2	6	Ruckus	Corzar	Omni Integrated PCB	N/A	-	1.5	Vertical
7	-	3	7	Ruckus	Hamal	Omni Integrated PCB	N/A	-	1.5	Horizontal
8	-	4	8	Ruckus	Corzar	Omni Integrated PCB	N/A	-	1.5	Vertical
9	3	-	-	Ruckus	Hadar	Omni Integrated PCB	N/A	0	-	Horizontal
10	4	-	-	Ruckus	Corzar	Omni Integrated PCB	N/A	0	-	Vertical
Ant.	Port			Brand	Model Name	Type	Connector	Gain (dBi)		Polarization
	Bluetooth	Zigbee						Bluetooth	Zigbee	
11	1		1	Ruckus	IOT	Omni Integrated PCB	N/A	0.55	0.55	Vertical

Note1: The above information was declared by manufacturer.

Note2:

For WLAN 2.4GHz Function:

11b/g/n/ax (4TX/4RX): Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For WLAN 5GHz Function:

11a/n/ac/ax (4TX/4RX): Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

11a/n/ac/ax (8TX/8RX): Port 1, Port 2, Port 3, Port 4, Port 5, Port 6, Port 7 and Port 8 could transmit/receive simultaneously.

For Bluetooth Function (1TX/1RX):

Only Port 1 can be used as transmitting/receiving.

For Zigbee Function (1TX/1RX):

Only Port 1 can be used as transmitting/receiving.

1.1.3 Mode Test Duty Cycle

4TX mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.943	0.25	1.984m	1k
802.11ax HEW20	0.959	0.18	5.446m	300
802.11ax HEW40	0.961	0.17	5.449m	300
802.11ax HEW80	0.955	0.2	5.449m	300
802.11ax HEW80+80	0.896	0.48	5.448m	300

8TX mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.942	0.26	1.976m	1k
802.11ax HEW20	0.964	0.16	5.445m	300
802.11ax HEW40	0.959	0.18	5.446m	300
802.11ax HEW80	0.951	0.22	5.446m	300
802.11ax HEW80+80	0.95	0.22	5.448m	300

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter or PoE			
Beamforming Function	☒	With beamforming for 2.4GHz: 802.11n/ax, 5GHz: 802.11n/ac/ax	☐	Without beamforming
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
TPC Function	☒	With TPC	☐	Without TPC
Test Software Version	ttermpro.exe			

Note: The above information was declared by manufacturer.

1.2 Applicable Standards

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

- ♦ LP0002 Section 4.7 (2018-01-10)
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 789033 D02 v02r01

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

- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Mode	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	-	TH01-CB	Serway Li	25~26.4°C / 59~64%	Jun. 22, 2020~Jul. 16, 2020
Radiated Below 1GHz (Intentional – CTX)	All mode	03CH05-CB	Eason Chen	27.7~29.6°C / 58~59%	Jul. 21, 2020~Jul. 30, 2020
		03CH06-CB	Eason Chen	26.9~28.8°C / 58~61%	Jul. 21, 2020~Jul. 30, 2020
Radiated Above 1GHz (Intentional – CTX)	4TX mode <20MHz, 40MHz, 80MHz>	03CH02-CB	Brian Sun	24.8~26.4°C / 57~59%	Jun. 23, 2020~Jul. 14, 2020
		03CH03-CB	Brian Sun	25.9~26.1°C / 57~62%	Jun. 23, 2020~Jul. 14, 2020
		03CH06-CB	Brian Sun	25.4~26.5°C / 58~60%	Jun. 23, 2020~Jul. 14, 2020
	8TX mode <20MHz, 40MHz, 80MHz>	03CH03-CB	Brian Sun	25.9~26.1°C / 57~62%	Jun. 23, 2020
		03CH06-CB	Brian Sun	25.5~26.6°C / 57~61%	Jun. 23, 2020
	4TX mode, 8TX mode <160MHz (80+80MHz)>	03CH02-CB	Brian Sun	24.8~26°C / 54~57%	Jun. 12, 2020
Radiated Below 1GHz and Above 1GHz (Unintentional – CRX)	All mode	03CH05-CB	Eason Chen	27.7~29.6°C / 58~59%	Jul. 21, 2020~Jul. 30, 2020
		03CH06-CB	Eason Chen	26.9~28.8°C / 58~61%	Jul. 21, 2020~Jul. 30, 2020
AC Conduction	All mode	CO01-CB	GN Hou	22~23°C / 59~61%	Jul. 21, 2020~Jul. 31, 2020

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.



1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 dB	Confidence levels of 95%
Conducted Emission	2.8 dB	Confidence levels of 95%
Output Power Measurement	1.4 dB	Confidence levels of 95%
Power Density Measurement	2.8 dB	Confidence levels of 95%
Bandwidth Measurement	0.39%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

For non-beamforming function:

4TX mode:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	38
5200MHz	44
5240MHz	42
5260MHz	34
5300MHz	35
5320MHz	35
5500MHz	35
5580MHz	34
5700MHz	35
5720MHz Straddle 5.47-5.725GHz	34
5720MHz Straddle 5.725-5.85GHz	34
5745MHz	46
5785MHz	46
5825MHz	46
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	35
5200MHz	44
5240MHz	42
5260MHz	35
5300MHz	35
5320MHz	35
5500MHz	35
5580MHz	35
5700MHz	35
5720MHz Straddle 5.47-5.725GHz	35
5720MHz Straddle 5.725-5.85GHz	35
5745MHz	46
5785MHz	46



Mode	Power Setting
5825MHz	46
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	33
5230MHz	39
5270MHz	35
5310MHz	35
5510MHz	33
5550MHz	35
5670MHz	35
5710MHz Straddle 5.47-5.725GHz	35
5710MHz Straddle 5.725-5.85GHz	35
5755MHz	43
5795MHz	46
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	33
5290MHz	33
5530MHz	33
5610MHz	35
5690MHz Straddle 5.47-5.725GHz	36
5690MHz Straddle 5.725-5.85GHz	36
5775MHz	40
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-
#5210MHz,5290MHz	35
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-
5210MHz,#5290MHz	35
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-
#5530MHz,#5610MHz	34



8TX mode:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_8TX	-
5180MHz	34
5200MHz	34
5240MHz	34
5260MHz	22
5300MHz	23
5320MHz	23
5500MHz	23
5580MHz	22
5700MHz	22
5720MHz Straddle 5.47-5.725GHz	21
5720MHz Straddle 5.725-5.85GHz	21
5745MHz	40
5785MHz	40
5825MHz	40
802.11ax HEW20_Nss1,(MCS0)_8TX	-
5180MHz	35
5200MHz	35
5240MHz	35
5260MHz	23
5300MHz	24
5320MHz	24
5500MHz	23
5580MHz	23
5700MHz	23
5720MHz Straddle 5.47-5.725GHz	22
5720MHz Straddle 5.725-5.85GHz	22
5745MHz	40
5785MHz	40
5825MHz	40
802.11ax HEW40_Nss1,(MCS0)_8TX	-
5190MHz	32
5230MHz	38
5270MHz	29



Mode	Power Setting
5310MHz	29
5510MHz	29
5550MHz	29
5670MHz	28
5710MHz Straddle 5.47-5.725GHz	28
5710MHz Straddle 5.725-5.85GHz	28
5755MHz	40
5795MHz	40
802.11ax HEW80_Nss1,(MCS0)_8TX	-
5210MHz	32
5290MHz	29
5530MHz	29
5610MHz	29
5690MHz Straddle 5.47-5.725GHz	28
5690MHz Straddle 5.725-5.85GHz	28
5775MHz	36
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-
#5210MHz,5290MHz	32
5210MHz,#5290MHz	32
802.11ax HEW80+80_Nss2,(MCS0)_8TX	-
#5530MHz,#5610MHz	29



For beamforming function:

4TX mode:

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	35
5200MHz	44
5240MHz	42
5260MHz	34
5300MHz	34
5320MHz	34
5500MHz	34
5580MHz	34
5700MHz	34
5720MHz Straddle 5.47-5.725GHz	35
5720MHz Straddle 5.725-5.85GHz	35
5745MHz	46
5785MHz	46
5825MHz	46
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	33
5230MHz	39
5270MHz	34
5310MHz	34
5510MHz	33
5550MHz	34
5670MHz	34
5710MHz Straddle 5.47-5.725GHz	34
5710MHz Straddle 5.725-5.85GHz	34
5755MHz	43
5795MHz	45
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	33
5290MHz	33
5530MHz	33
5610MHz	34
5690MHz Straddle 5.47-5.725GHz	35



Mode	Power Setting
5690MHz Straddle 5.725-5.85GHz	35
5775MHz	40
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	-
#5210MHz,5290MHz	35
5210MHz,#5290MHz	35
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	-
#5530MHz,#5610MHz	34



8TX mode:

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	-
5180MHz	34
5200MHz	34
5240MHz	34
5260MHz	22
5300MHz	23
5320MHz	23
5500MHz	22
5580MHz	22
5700MHz	22
5720MHz Straddle 5.47-5.725GHz	22
5720MHz Straddle 5.725-5.85GHz	22
5745MHz	33
5785MHz	33
5825MHz	33
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	-
5190MHz	32
5230MHz	33
5270MHz	22
5310MHz	22
5510MHz	22
5550MHz	22
5670MHz	22
5710MHz Straddle 5.47-5.725GHz	22
5710MHz Straddle 5.725-5.85GHz	22
5755MHz	33
5795MHz	33
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	-
5210MHz	32
5290MHz	22
5530MHz	22
5610MHz	22
5690MHz Straddle 5.47-5.725GHz	22
5690MHz Straddle 5.725-5.85GHz	22



Mode	Power Setting
5775MHz	33
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	-
#5210MHz,5290MHz	32
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	-
5210MHz,#5290MHz	32
802.11ax HEW80+80-BF_Nss2,(MCS0)_8TX	-
#5530MHz,#5610MHz	28

Note:

- ♦ The EUT supports beamforming and CDD modes for 2.4GHz: 802.11n/ax, 5GHz: 802.11n/ac/ax, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Intentional – CTX
1	EUT + Adapter (WLAN 2.4GHz)
2	EUT + Adapter (WLAN 5GHz)
3	EUT + Adapter (Bluetooth)
4	EUT + Adapter (Zigbee)
5	EUT + PoE (WLAN 2.4GHz)
6	EUT + PoE (WLAN 5GHz)
7	EUT + PoE (Bluetooth)
8	EUT + PoE (Zigbee)
For operating mode 8 is the worst case and it was record in this test report.	
Operating Mode	Unintentional – CRX
1	EUT + Adapter (WLAN 2.4GHz)
2	EUT + Adapter (WLAN 5GHz)
3	EUT + Adapter (Bluetooth)
4	EUT + Adapter (Zigbee)
5	EUT + PoE (WLAN 2.4GHz)
6	EUT + PoE (WLAN 5GHz)
7	EUT + PoE (Bluetooth)
8	EUT + PoE (Zigbee)
For operating mode 2 is the worst case and it was record in this test report.	

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



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	Intentional – CTX
The EUT was performed at Y axis and Z axis position for Unwanted Emissions test. 1. For WLAN 2.4GHz: EUT Y axis generated the worst test result for Unwanted Emissions Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Intentional – CTX test will follow this same test configuration. 2. For WLAN 5GHz: EUT Z axis generated the worst test result for Unwanted Emissions Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Intentional – CTX test will follow this same test configuration. 3. For Bluetooth: EUT Y axis generated the worst test result for Unwanted Emissions Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Intentional – CTX test will follow this same test configuration. 4. For Zigbee: EUT Y axis generated the worst test result for Unwanted Emissions Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Intentional – CTX test will follow this same test configuration.	
For WLAN 5GHz: There are two modes of EUT for WLAN 5GHz. One is 8TX mode, and the other is 4TX mode. 8TX mode is the highest power was selected to test and record in this report.	
1	EUT Y axis + Adapter (WLAN 2.4GHz)
2	EUT Z axis + Adapter (WLAN 5GHz - 8TX mode)
3	EUT Y axis + Adapter (Bluetooth)
4	EUT Y axis + Adapter (Zigbee)
5	EUT Y axis + PoE (WLAN 2.4GHz)
6	EUT Z axis + PoE (WLAN 5GHz - 8TX mode)
7	EUT Y axis + PoE (Bluetooth)
8	EUT Y axis + PoE (Zigbee)
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode < 1GHz	Unintentional – CRX
The EUT was performed at Y axis and Z axis position for Unwanted Emissions test. 1. For WLAN 2.4GHz: EUT Y axis generated the worst test result for Restricted Frequency Bands Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Unintentional – CRX test will follow this same test configuration. 2. For WLAN 5GHz: EUT Z axis generated the worst test result for Restricted Frequency Bands A Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Unintentional – CRX test will follow this same test configuration. 3. For Bluetooth: EUT Y axis generated the worst test result for Restricted Frequency Bands Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Unintentional – CRX test will follow this same test configuration. 4. For Zigbee: EUT Y axis generated the worst test result for Restricted Frequency Bands Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Intentional – CTX test will follow this same test configuration.	

For WLAN 5GHz: There are two modes of EUT for WLAN 5GHz. One is 8TX mode, and the other is 4TX mode. 8TX mode is the highest power was selected to test and record in this report.

1	EUT Y axis + Adapter (WLAN 2.4GHz)
2	EUT Z axis + Adapter (WLAN 5GHz - 8TX mode)
3	EUT Y axis + Adapter (Bluetooth)
4	EUT Y axis + Adapter (Zigbee)
5	EUT Y axis + PoE (WLAN 2.4GHz)
6	EUT Z axis + PoE (WLAN 5GHz - 8TX mode)
7	EUT Y axis + PoE (Bluetooth)
8	EUT Y axis + PoE (Zigbee)

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

Operating Mode Unintentional 1GHz~5th Harmonic	Unintentional – CRX
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The EUT was performed at Y axis and Z axis position for Unwanted Emissions test.

1. For WLAN 2.4GHz: EUT Y axis generated the worst test result for Restricted Frequency Bands Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Unintentional 1GHz~5th Harmonic test will follow this same test configuration.
2. For WLAN 5GHz: EUT Z axis generated the worst test result for Restricted Frequency Bands Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Unintentional 1GHz~5th Harmonic test will follow this same test configuration.
3. For Bluetooth: EUT Y axis generated the worst test result for Restricted Frequency Bands Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Unintentional 1GHz~5th Harmonic test will follow this same test configuration.
4. For Zigbee: EUT Y axis generated the worst test result for Restricted Frequency Bands Intentional 1GHz~10th Harmonic test, thus the measurement for Unwanted Emissions Below 1GHz Unintentional 1GHz~5th Harmonic test will follow this same test configuration.

The EUT could be powered by adapter or PoE. EUT + Adapter generated the worst test result for Unwanted Emissions Below 1GHz Unintentional – CRX test, thus the measurement for Emissions in Unwanted Emissions Unintentional 1GHz~5th Harmonic test will follow this same test configuration.

For WLAN 5GHz: There are two modes of EUT for WLAN 5GHz. One is 8TX mode, and the other is 4TX mode. 8TX mode is the highest power was selected to test and record in this report.

1	EUT Y axis + Adapter (WLAN 2.4GHz)
2	EUT Z axis + Adapter (WLAN 5GHz - 8TX mode)
3	EUT Y axis + Adapter (Bluetooth)
4	EUT Y axis + Adapter (Zigbee)

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

Operating Mode Intentional 1GHz~10th Harmonic	Intentional – CTX
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The EUT was performed at Y axis and Z axis position for Unwanted Emissions test.

1. For 4TX mode: The worst case was found at Y axis. So the measurement will follow this same test configuration.
2. For 8TX mode: The worst case was found at Z axis. So the measurement will follow this same test configuration.



configuration.	
1	4TX mode: EUT Y axis + Adapter
2	8TX mode: EUT Z axis + Adapter

Note1: The EUT could be powered by adapter or PoE. The adapter and PoE were for measurement only, it would not be marketed.

Equipment	Brand Name	Model Name	FCC ID
Adapter	Ruckus	740-64277-001	N/A
PoE	Ruckus	GRT-480125A	N/A

Note2: The applicant declared that the accessories of this case were for measurement only and it would not be marketed. The accessories will be provided and inspected by the laboratory (or the applicant).

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting/receiving mode.

2.4 Accessories

N/A



2.5 Support Equipment

For AC Conduction (Intentional-CTX):

Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
A	PoE/LAN NB	DELL	E6430	N/A	Provided by Lab.
B	Flash disk3.0	Transcend	JetFlash-700	N/A	Provided by Lab.
C	PoE	Ruckus	GRT-480125A	N/A	Provided by applicant.

For AC Conduction (Unintentional-CRX):

Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
A	LAN NB	DELL	E6430	N/A	Provided by Lab.
B	Flash disk3.0	Transcend	JetFlash-700	N/A	Provided by Lab.
C	Adapter	Ruckus	740-64277-001	N/A	Provided by applicant.

For Radiated (Below 1GHz: Intentional-CTX):

Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
A	LAN NB	DELL	E4300	N/A	Provided by Lab.
B	Adapter	Ruckus	740-64277-001	N/A	Provided by applicant.
C	Flash disk3.0	Silicon Power	B06	N/A	Provided by Lab.

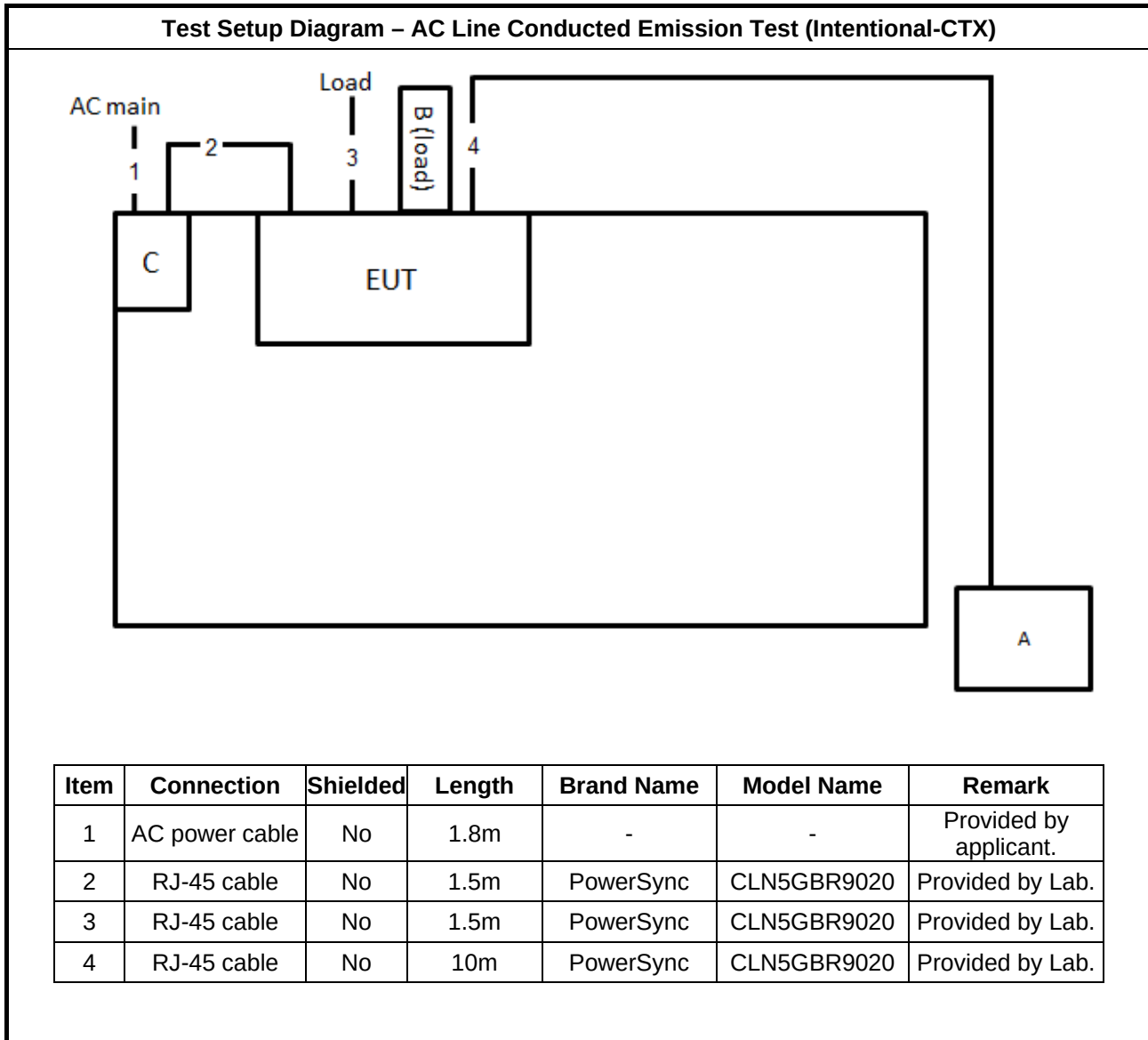
For Radiated (Below 1GHz: Unintentional-CRX / Above 1GHz: Unintentional 1GHz~5th Harmonic):

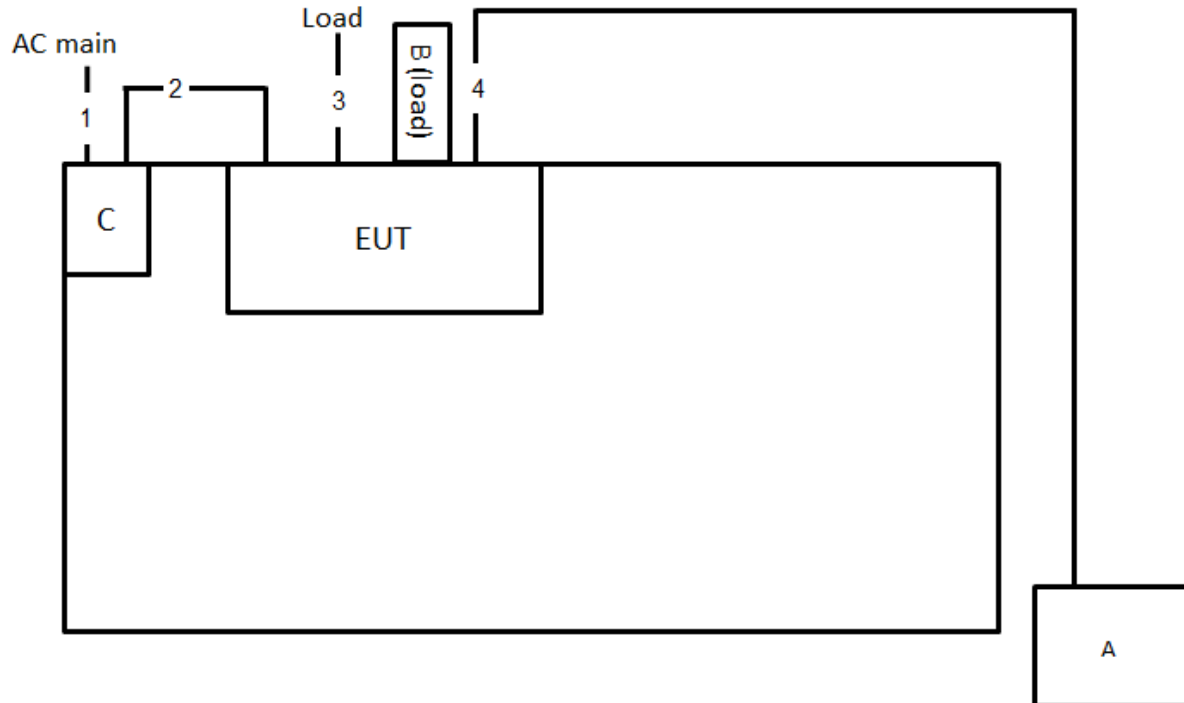
Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
A	LAN NB	DELL	E4300	N/A	Provided by Lab.
B	Flash disk3.0	Silicon Power	B06	N/A	Provided by Lab.
C	Adapter	Ruckus	740-64277-001	N/A	Provided by applicant.

For Radiated (Above 1GHz: Intentional 1GHz~10th Harmonic) and RF Conducted:

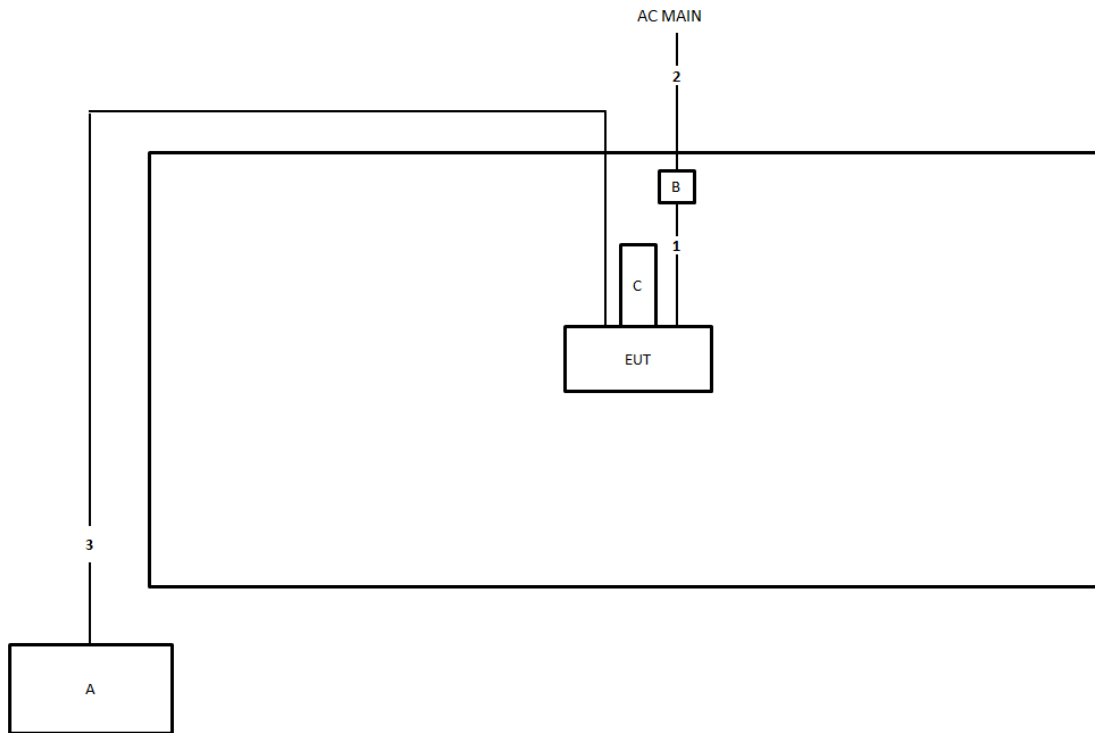
Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
A	LAN NB	DELL	E4300	N/A	Provided by Lab.
B	Adapter	Ruckus	740-64277-001	N/A	Provided by applicant.

2.6 Test Setup Diagram

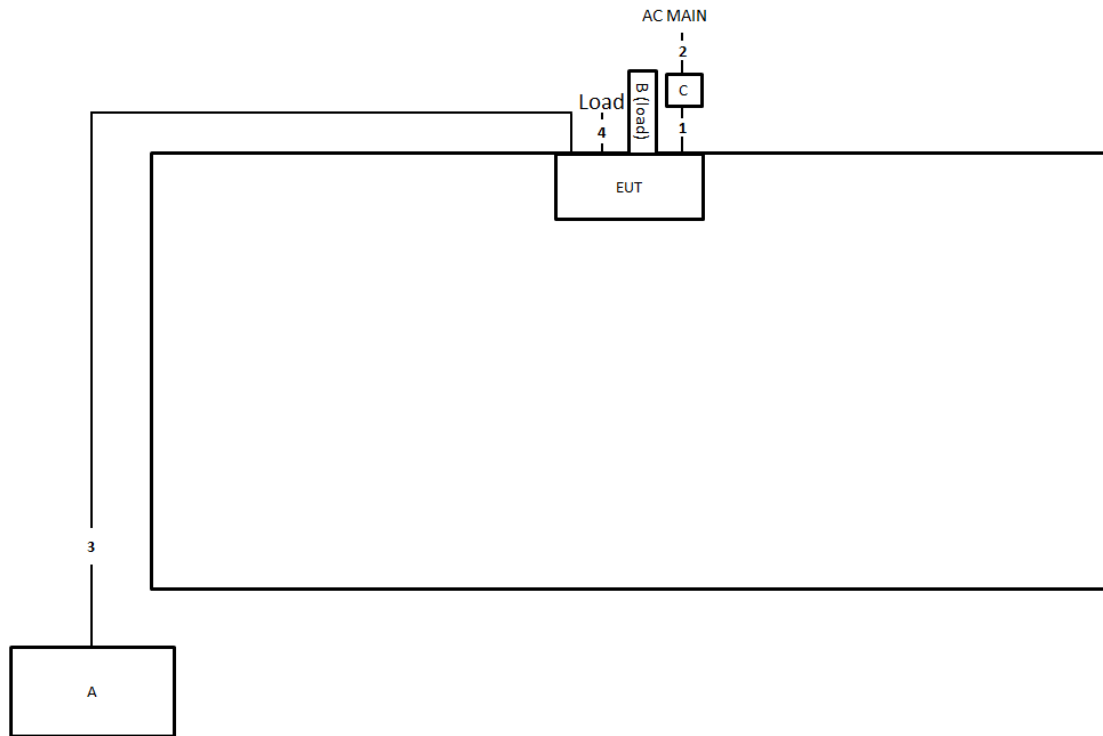


Test Setup Diagram – AC Line Conducted Emission Test (Unintentional-CRX)


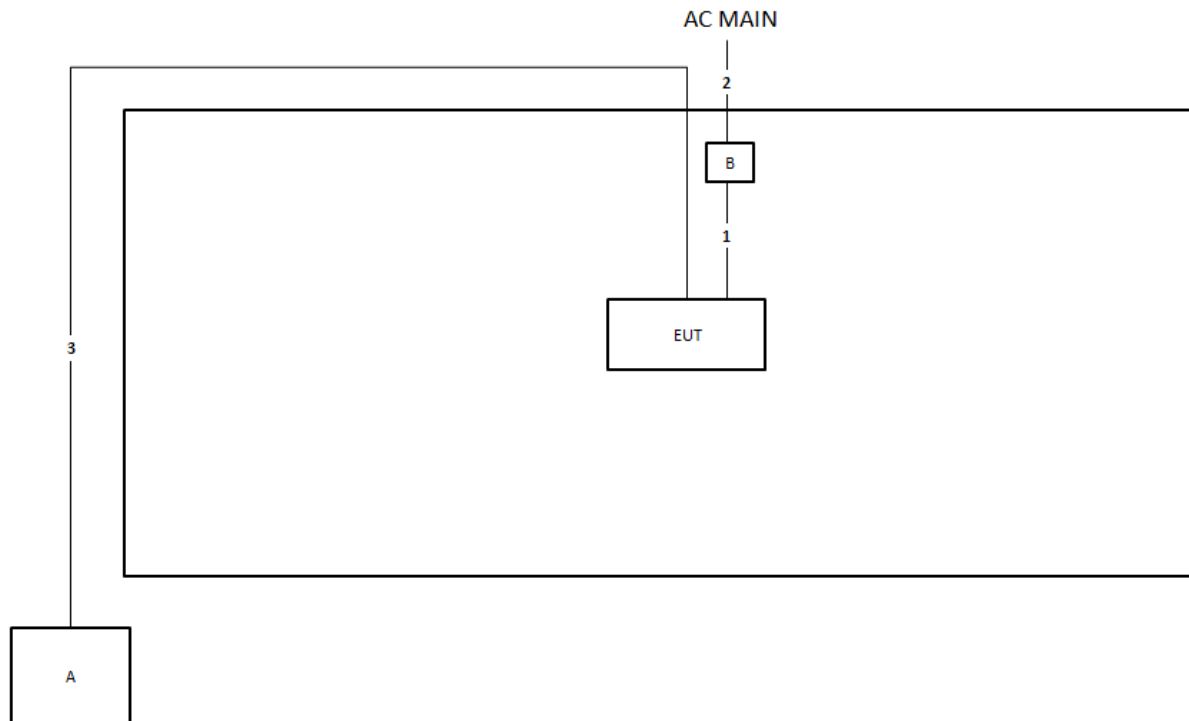
Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	AC power cable	No	1.8m	-	-	Provided by Lab.
2	DC power cable	No	1.2m	Ruckus	740-64277-001	Provided by applicant.
3	RJ-45 cable	No	1.5m	PowerSync	CLN5GBR9020	Provided by Lab.
4	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab.

Test Setup Diagram - Radiated Test (Below 1GHz: Intentional-CTX)


Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	DC Power cable	No	1.2m	Ruckus	740-64277-001	Provided by applicant.
2	AC Power cable	No	1.8m	-	-	Provided by Lab.
3	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab.

Test Setup Diagram - Radiated Test (Below 1GHz: Unintentional-CRX / Above 1GHz: Unintentional 1GHz~5th Harmonic)


Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	DC power cable	No	1.2m	Ruckus	740-64277-001	Provided by applicant.
2	AC power cable	No	1.8m	-	-	Provided by Lab.
3	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab.
4	RJ-45 cable	No	1.5m	PowerSync	CLN5GBR9020	Provided by Lab.

Test Setup Diagram - Radiated Test (Above 1GHz: Intentional 1GHz~10th Harmonic)


Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	DC power cable	No	1.2m	Ruckus	740-64277-001	Provided by applicant.
2	AC power cable	No	1.8m	-	-	Provided by Lab.
3	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab.

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

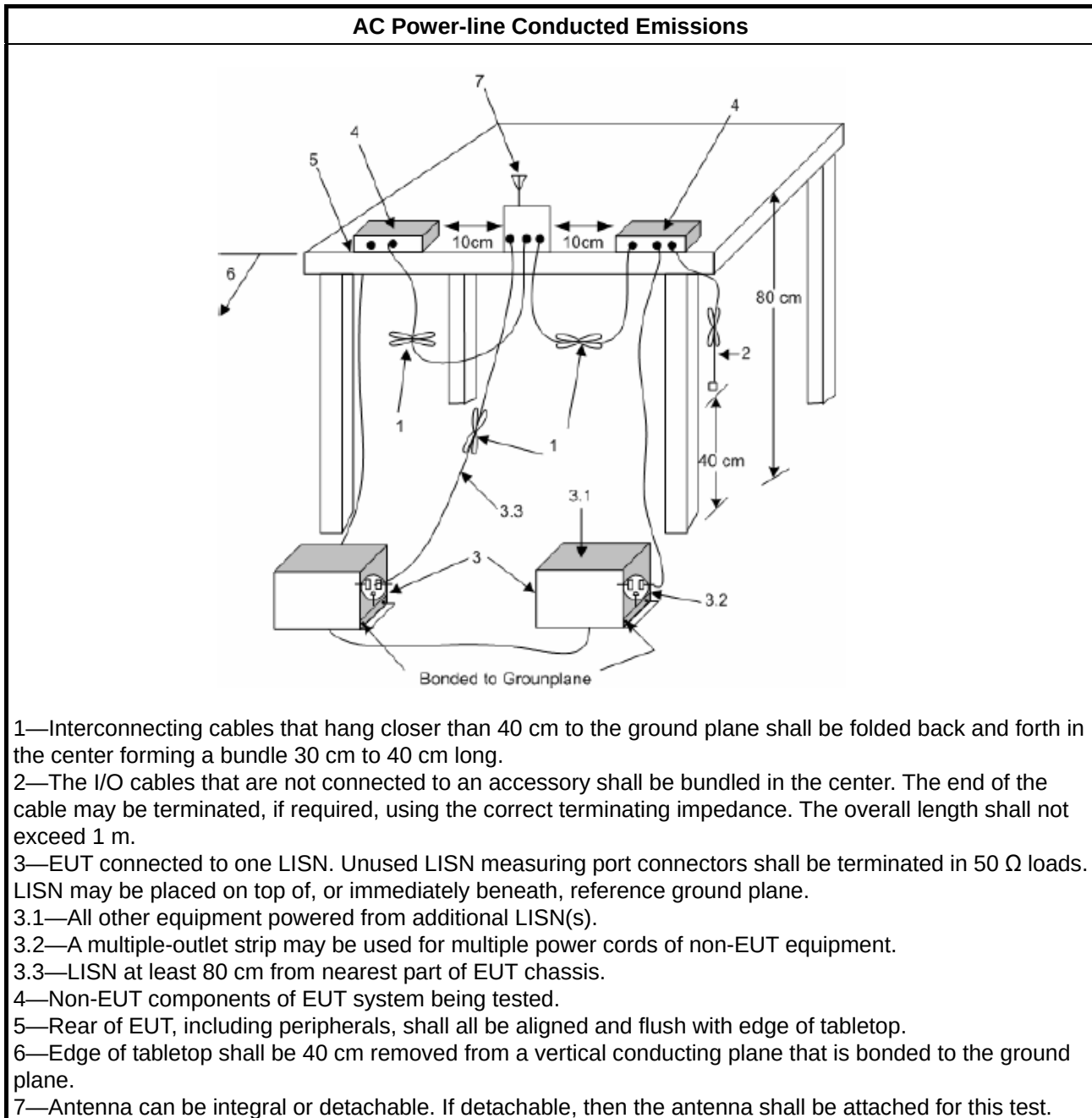
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☒	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$.

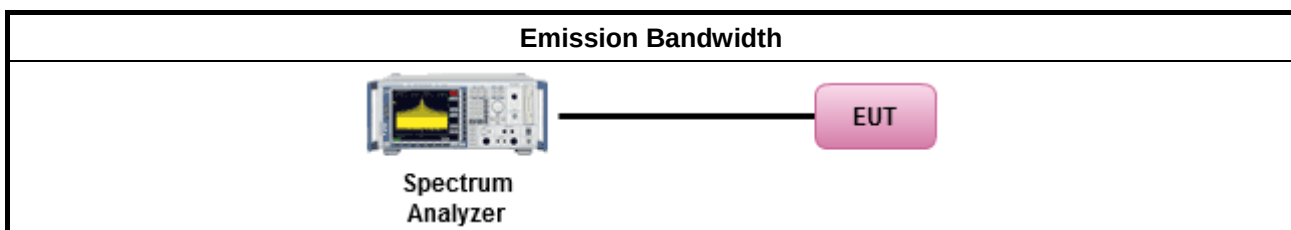
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
☐	- Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] - Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ - Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. - Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
☐ For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

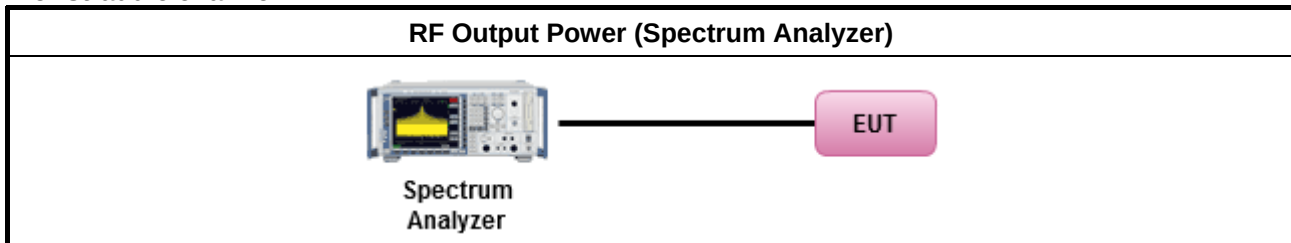
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

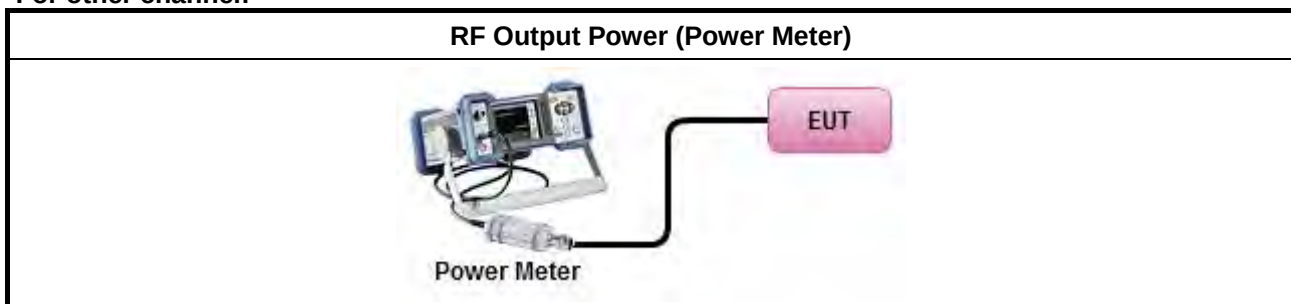
Test Method	
Maximum Conducted Output Power	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup

For straddle channel:



For other channel:



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
	- Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. - Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
☐ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

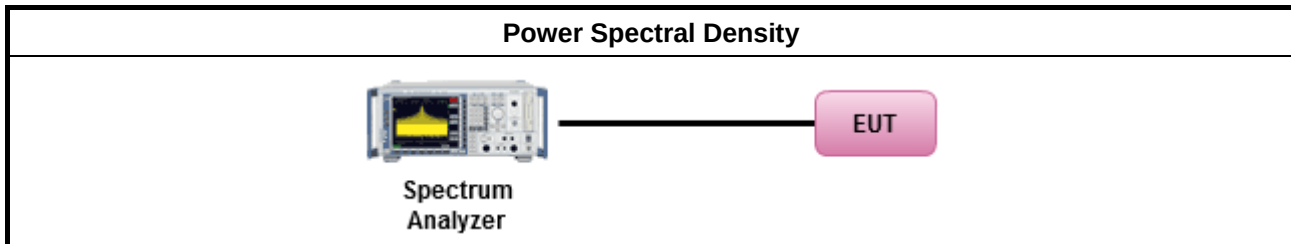
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐ Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	
[duty cycle ≥ 98% or external video / power trigger]	
☒ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).	
☐ Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)	
duty cycle < 98% and average over on/off periods with duty factor	
☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	
☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of



linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

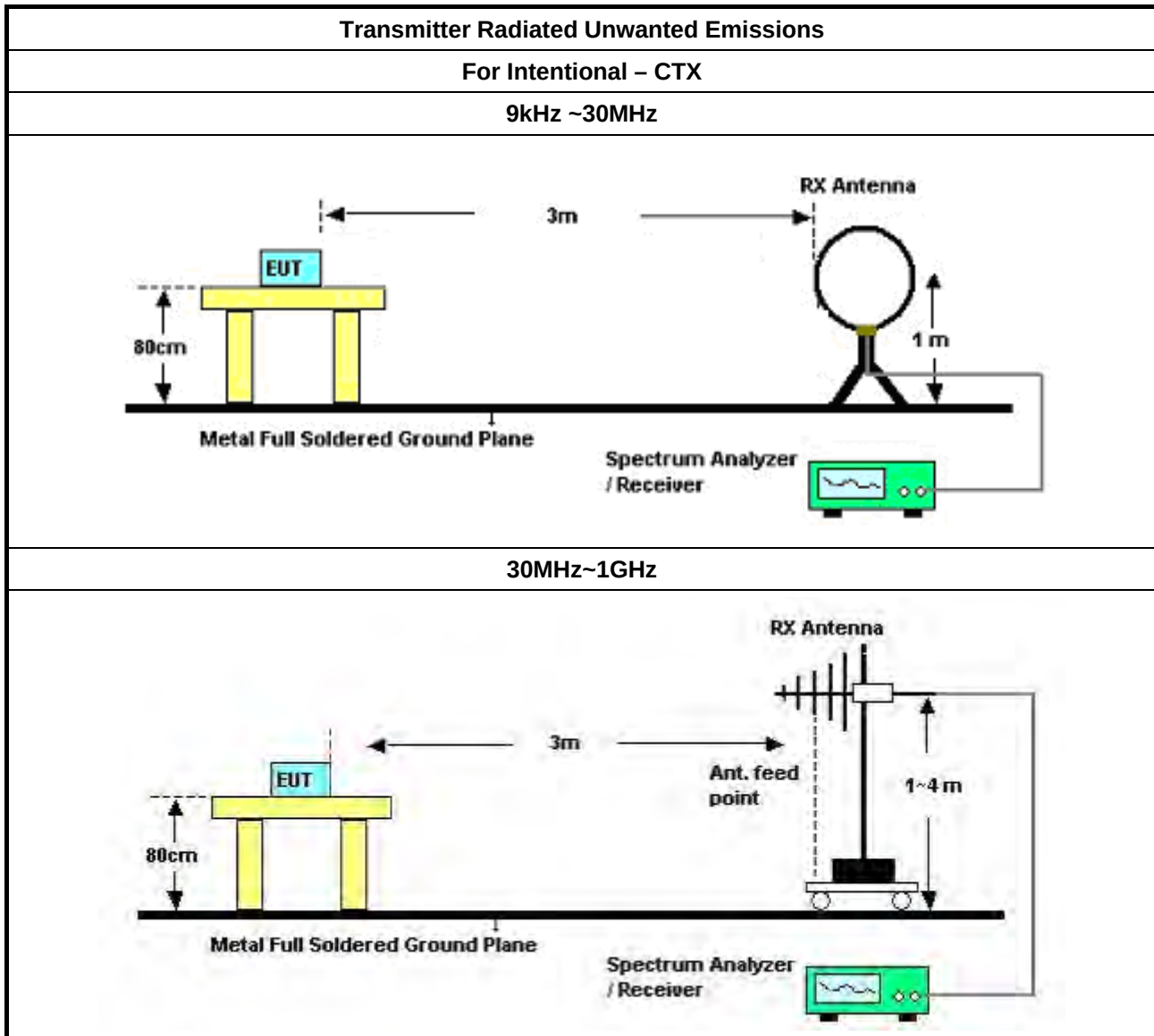
3.5.2 Measuring Instruments

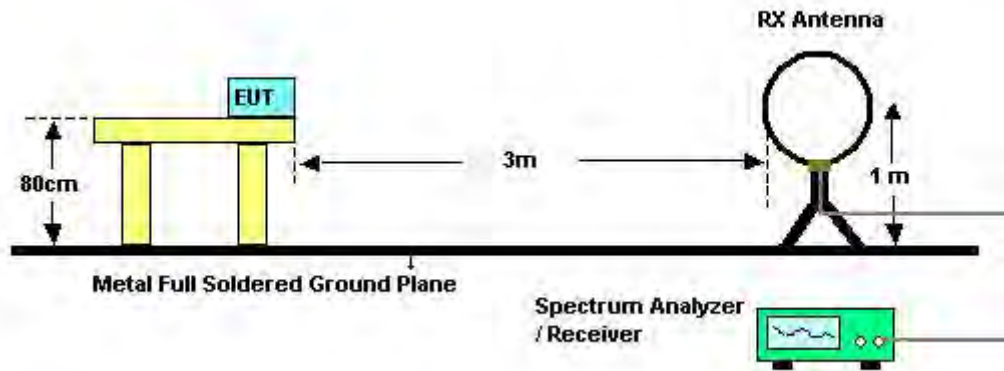
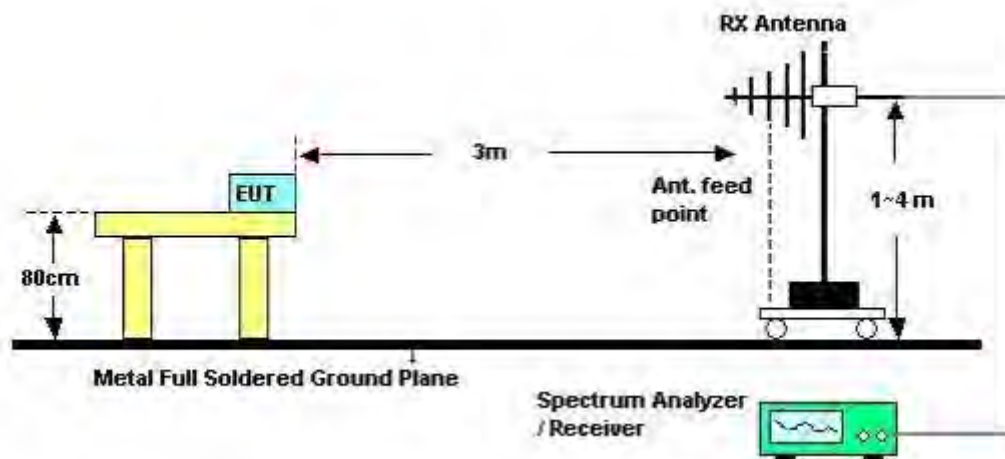
Refer a test equipment and calibration data table in this test report.

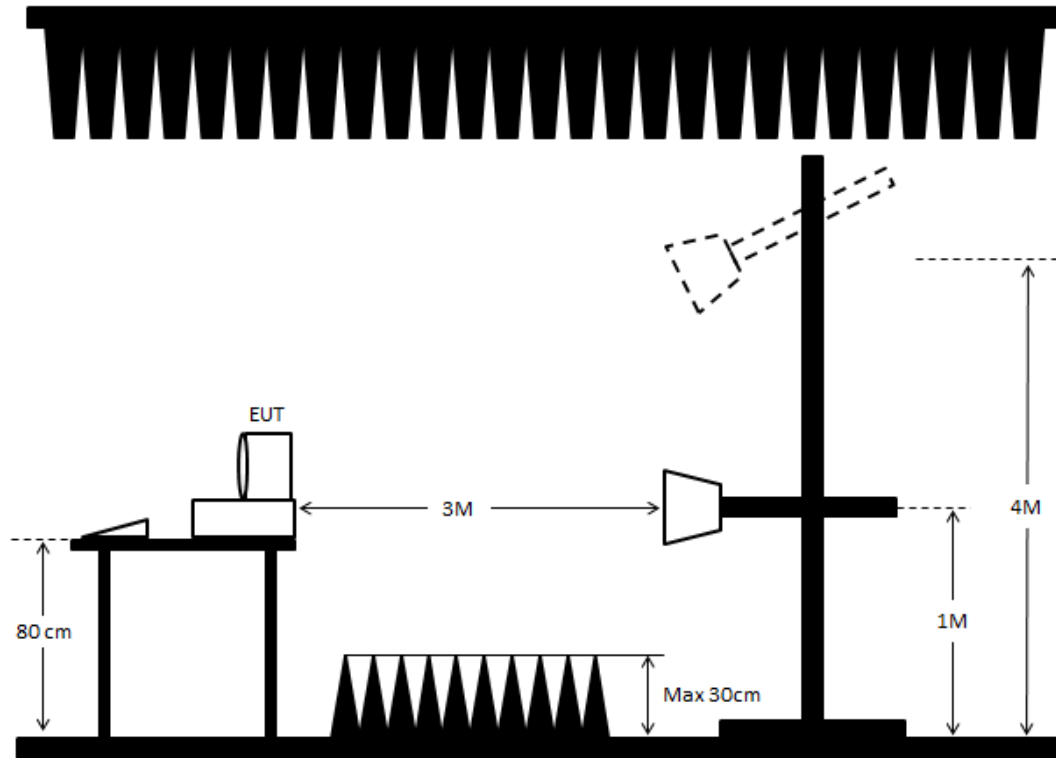
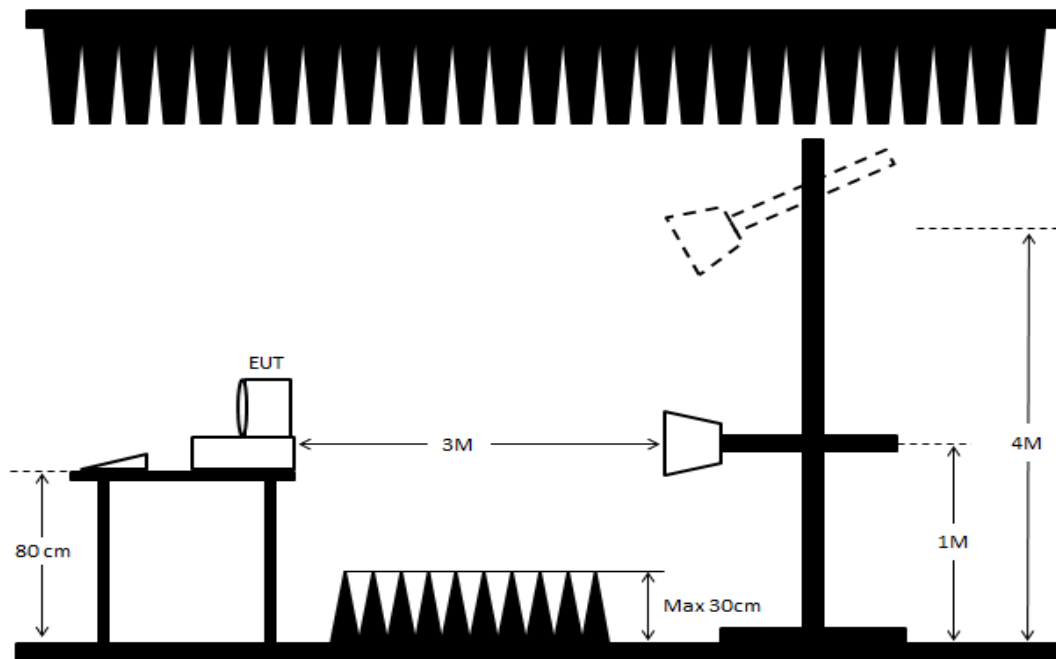
3.5.3 Test Procedures

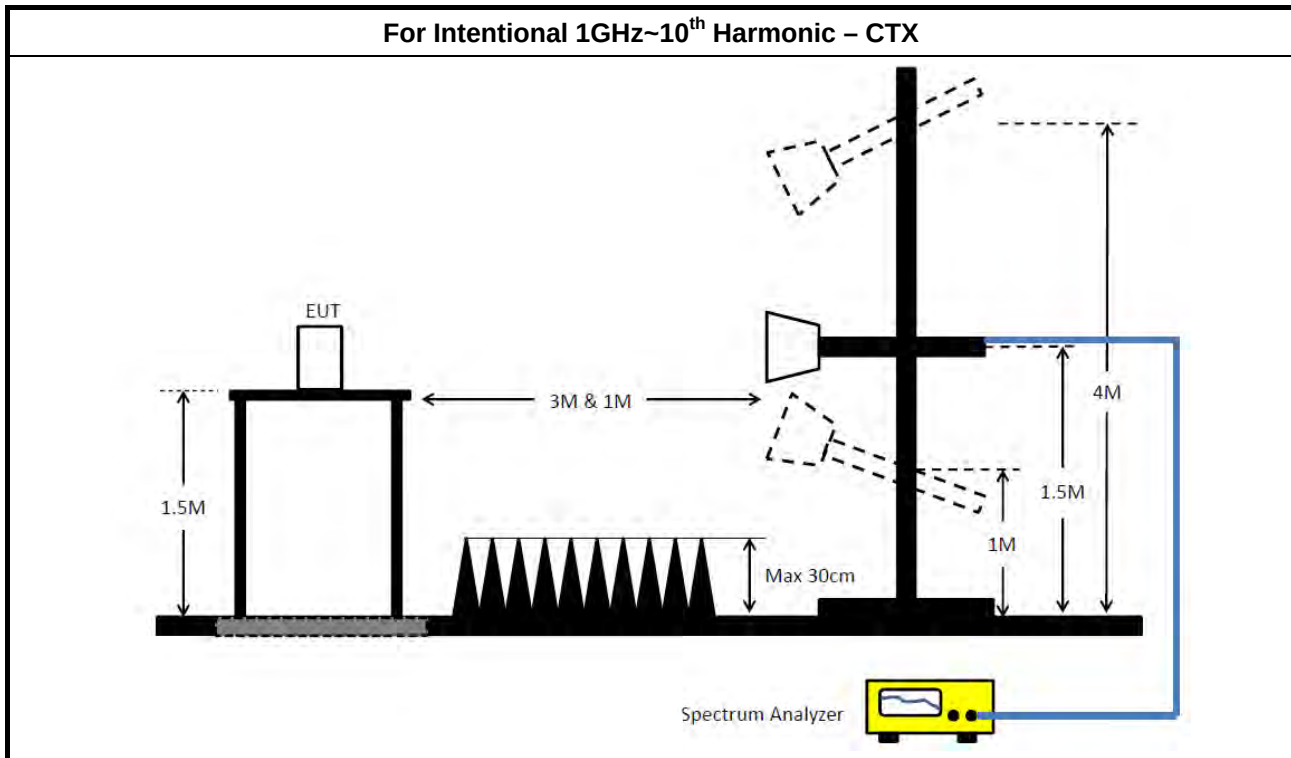
Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.	
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup



For Unintentional – CRX
9kHz ~30MHz

30MHz~1GHz


For Unintentional 1GHz~5th Harmonic – CRX (1,000~18,000 MHz)

For Unintentional 1GHz~5th Harmonic – CRX (18,000~30,000 MHz)




3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor (if applicable) = Level.

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 20, 2020	May 19, 2021	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 27, 2020	Mar. 26, 2021	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1291	1GHz~18GHz	Oct. 05, 2019	Oct. 04, 2020	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 28, 2020	Apr. 27, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Apr. 15, 2020	Apr. 14, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Jul. 03, 2020	Jul. 02, 2021	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	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-28	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Feb. 01, 2020	Jan. 31, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH06-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Aug. 03, 2019	Aug. 02, 2020	Radiation (03CH06-CB)
Horn Antenna	COM-POWER	AH-118	071028	1GHz ~ 18GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH06-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 21, 2020	May 20, 2021	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 07, 2020	May 06, 2021	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH06-CB)
RF Cable-low	HUBER+SUHNER	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 21, 2020	Apr. 20, 2021	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH02-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Aug. 22, 2018	Aug. 21, 2019	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH02-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH02-CB)
High Cable	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)
High Cable	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH02-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 20, 2020	Jan. 19, 2021	Radiation (03CH03-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Dec. 19, 2019	Dec.18, 2020	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 05, 2020	May 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 18, 2019	Nov. 17, 2020	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH01-CB)

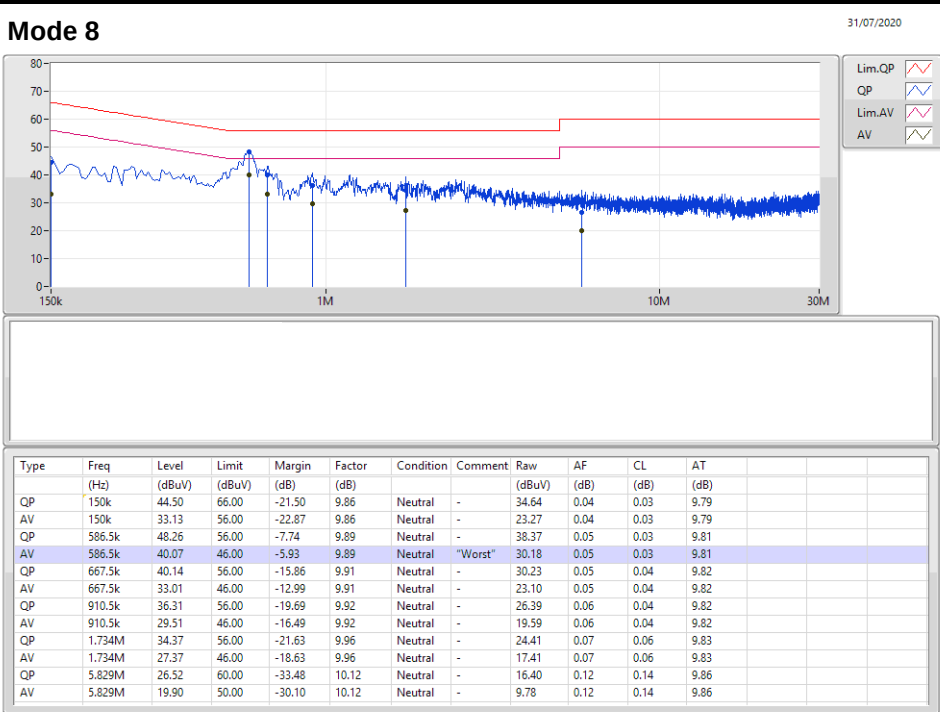
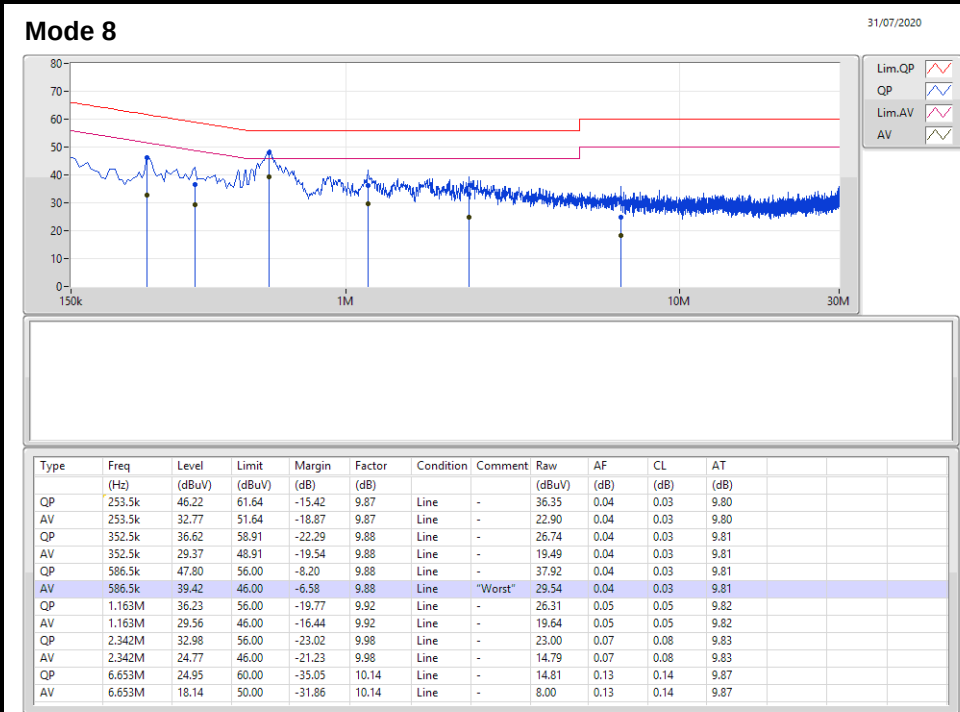
Note: Calibration Interval of instruments listed above is one year.

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



Summary of Intentional – CTX

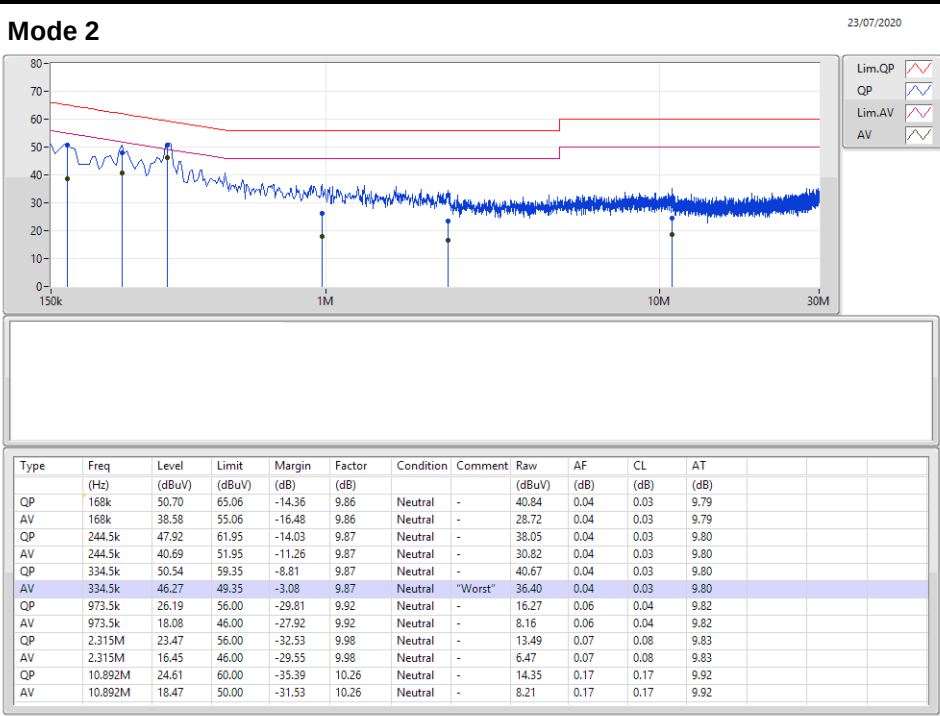
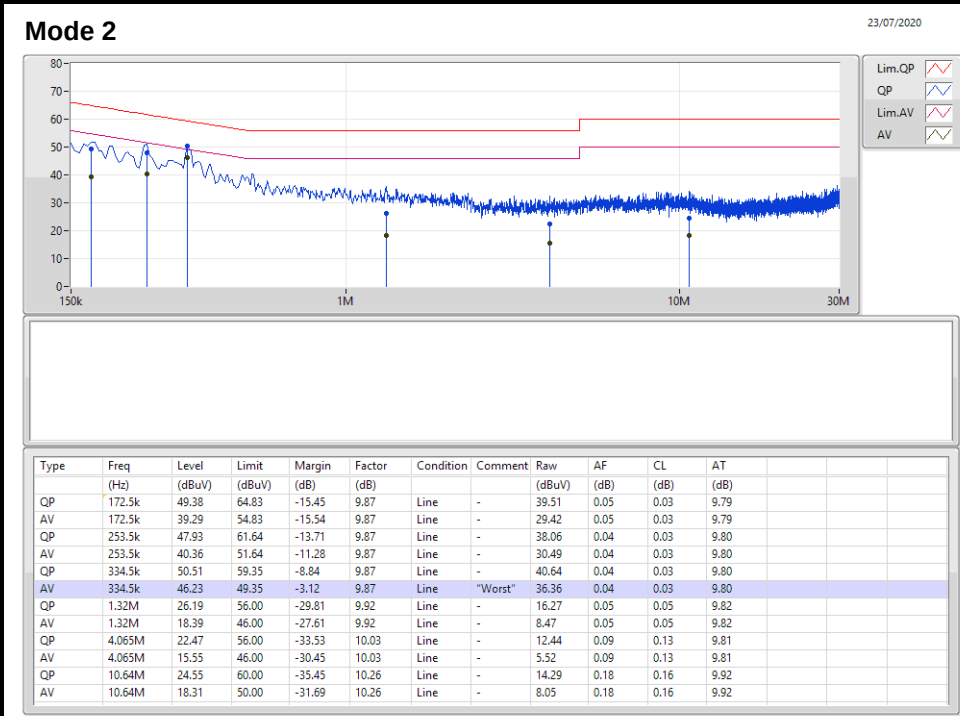
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 8	Pass	AV	586.5k	40.07	46.00	-5.93	Neutral





Summary of Unintentional – CRX

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	334.5k	46.27	49.35	-3.08	Neutral





For non-beamforming function:
4TX mode <20MHz, 40MHz, 80MHz>:
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	37.65M	21.619M	21M6D1D	19.38M	16.252M
802.11ax HEW20_Nss1,(MCS0)_4TX	44.49M	22.279M	22M3D1D	20.7M	18.771M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.4M	37.841M	37M8D1D	40.38M	37.601M
802.11ax HEW80_Nss1,(MCS0)_4TX	83.28M	77.241M	77M2D1D	82.2M	77.121M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.95M	16.462M	16M5D1D	18.69M	16.282M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.54M	19.01M	19M0D1D	20.91M	18.891M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.34M	37.841M	37M8D1D	40.68M	37.661M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.68M	77.241M	77M2D1D	82.08M	77.001M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.59M	16.402M	16M4D1D	14.665M	13.188M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.48M	18.981M	19M0D1D	15.575M	14.465M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.22M	37.841M	37M8D1D	35.588M	33.733M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.8M	77.241M	77M2D1D	76.26M	73.046M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.29M	30.075M	30M1D1D	3.135M	3.448M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.93M	31.844M	31M8D1D	4.38M	4.603M
802.11ax HEW40_Nss1,(MCS0)_4TX	38.04M	76.222M	76M2D1D	3.915M	4.138M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.28M	77.961M	78M0D1D	3.96M	4.288M

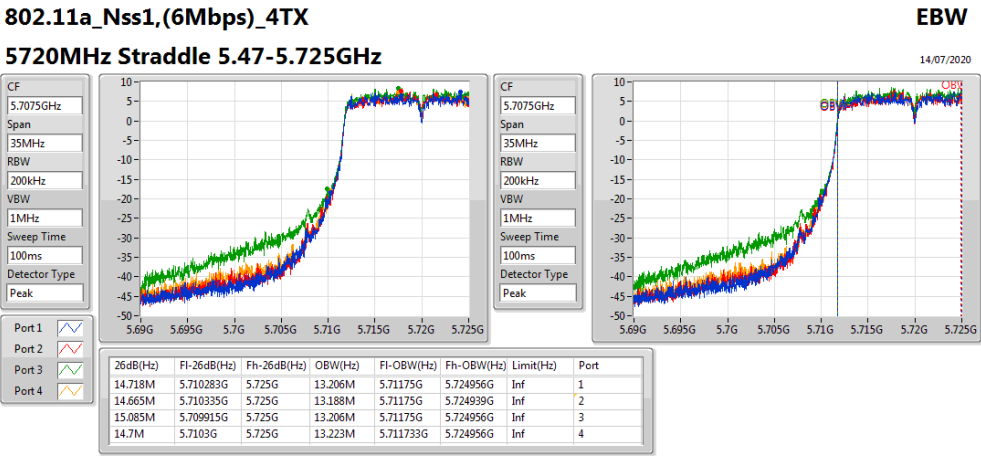
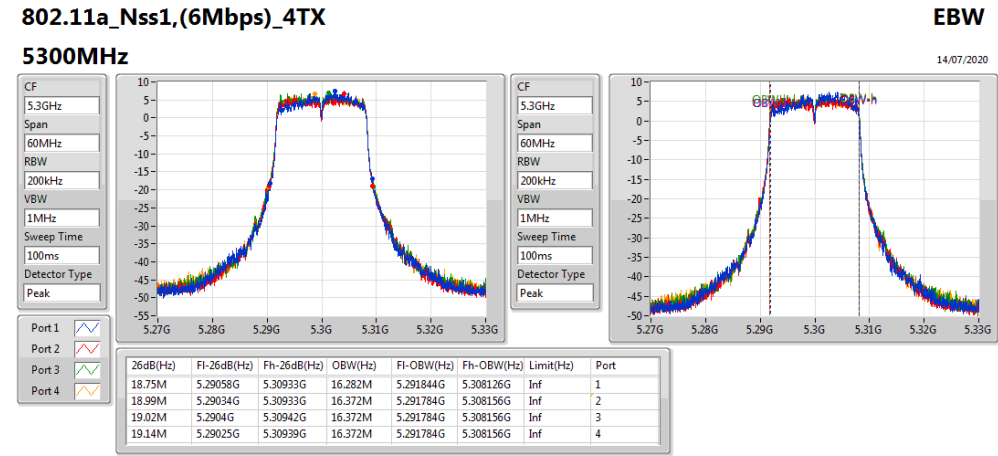
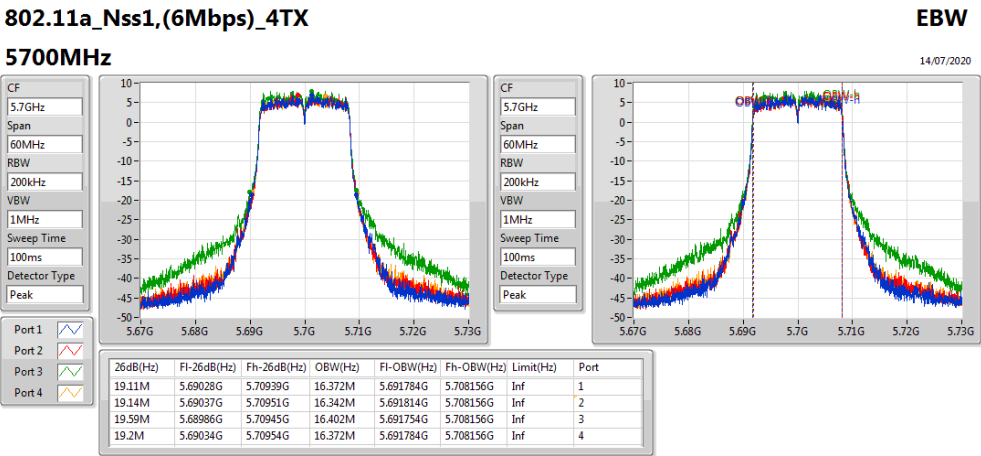
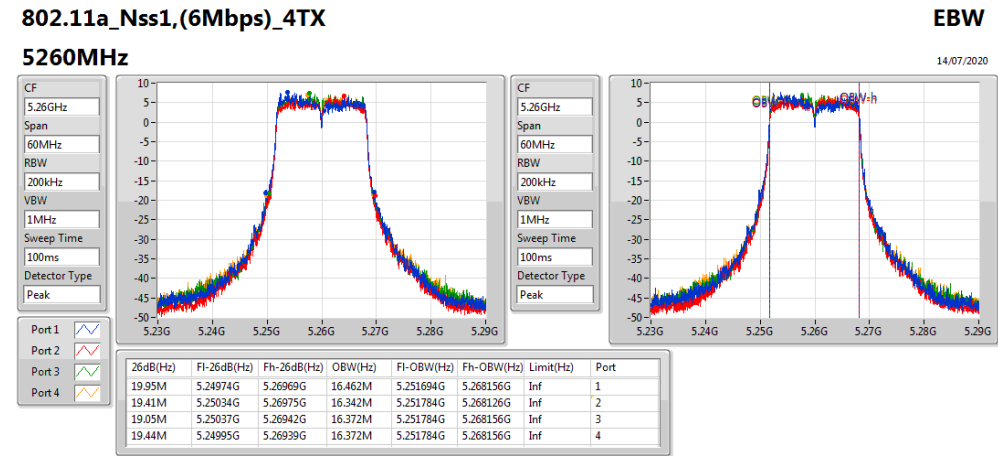
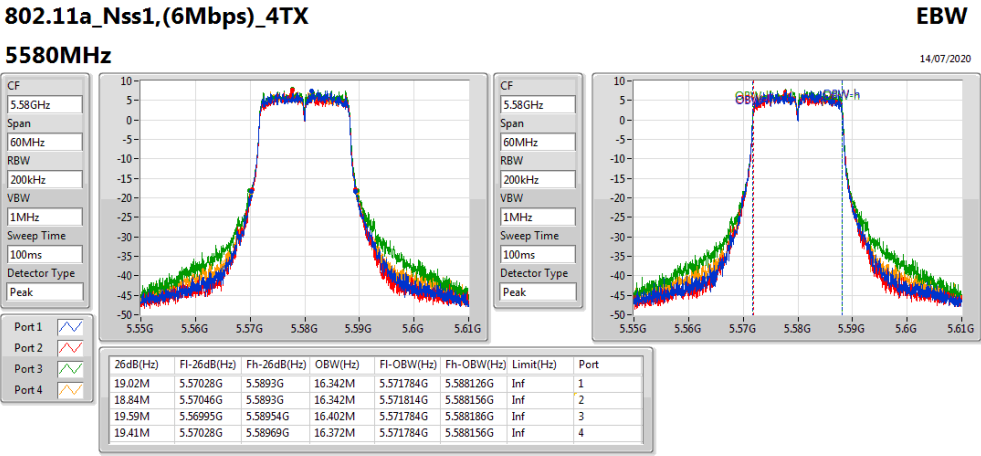
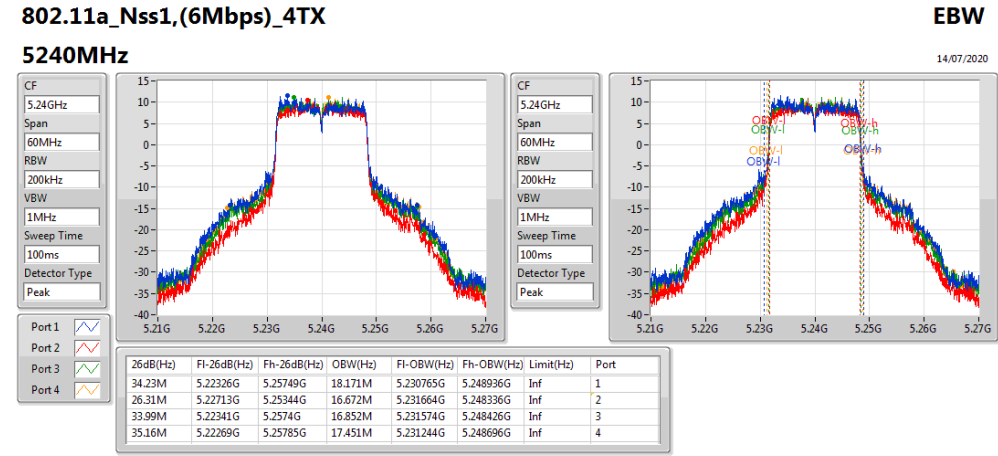
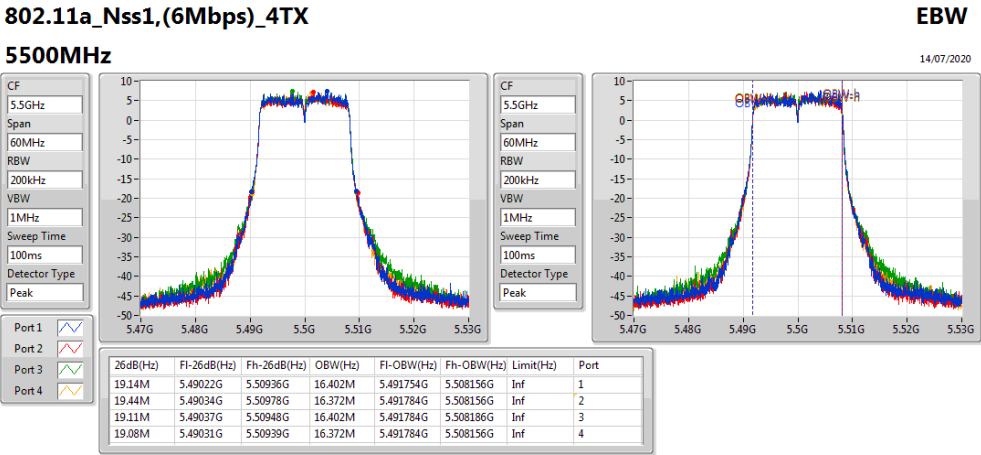
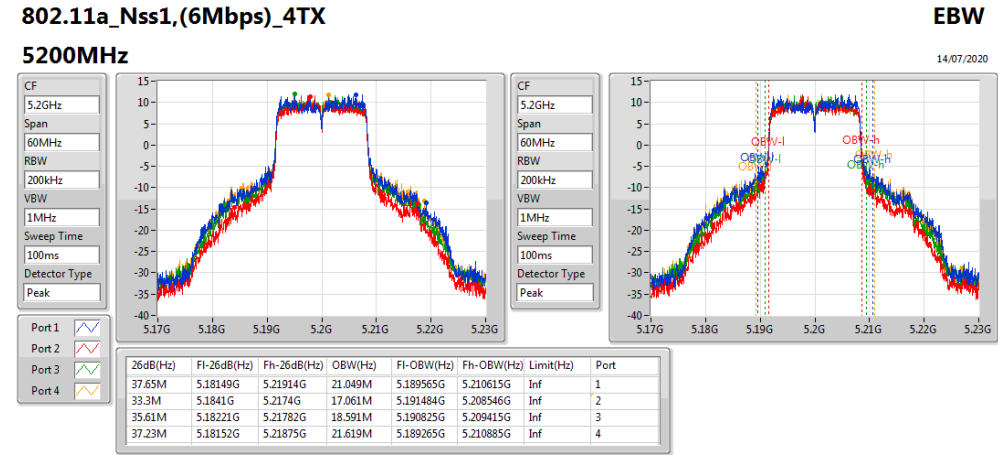
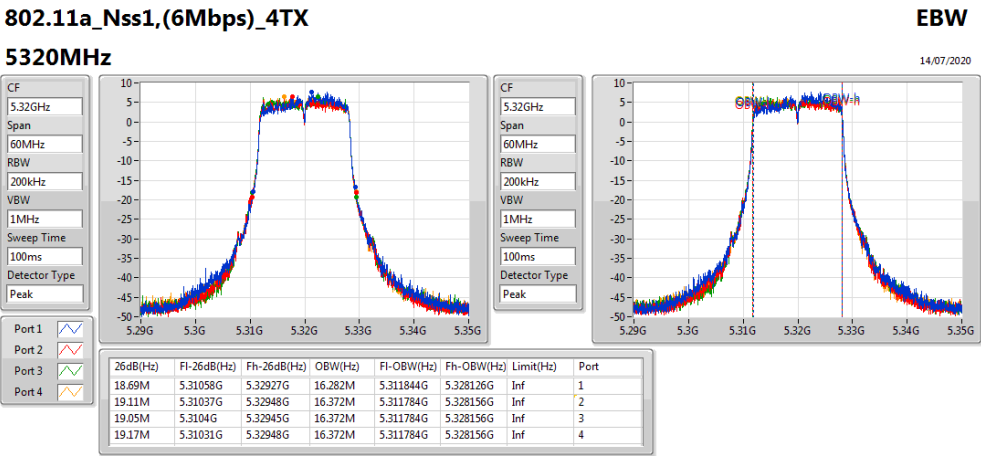
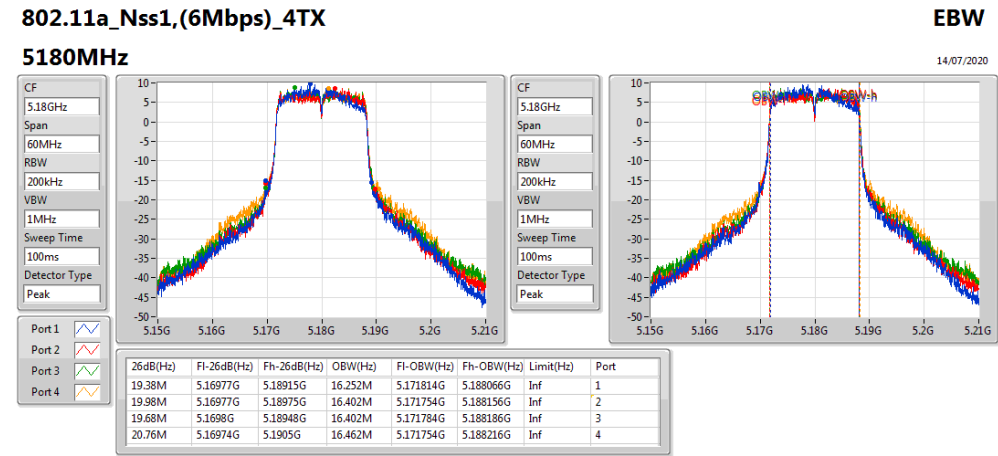
Max-N dB = Maximum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; Min-OBW = Minimum 99% occupied bandwidth;

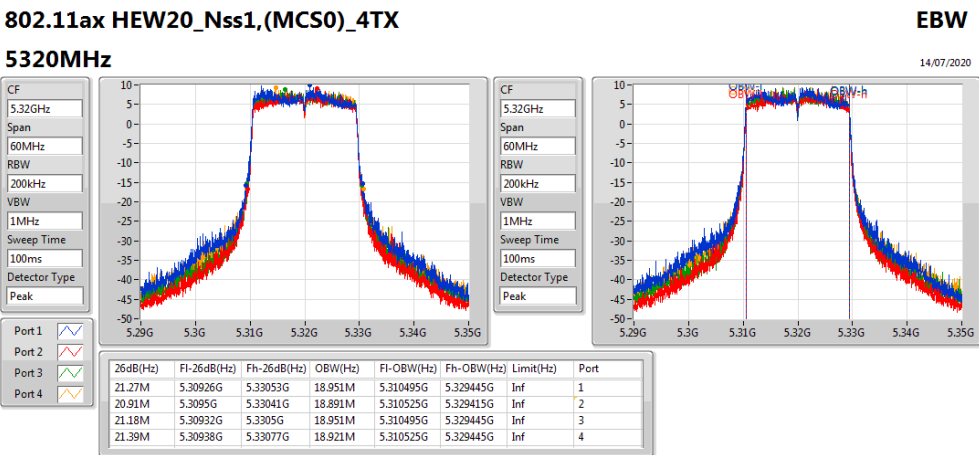
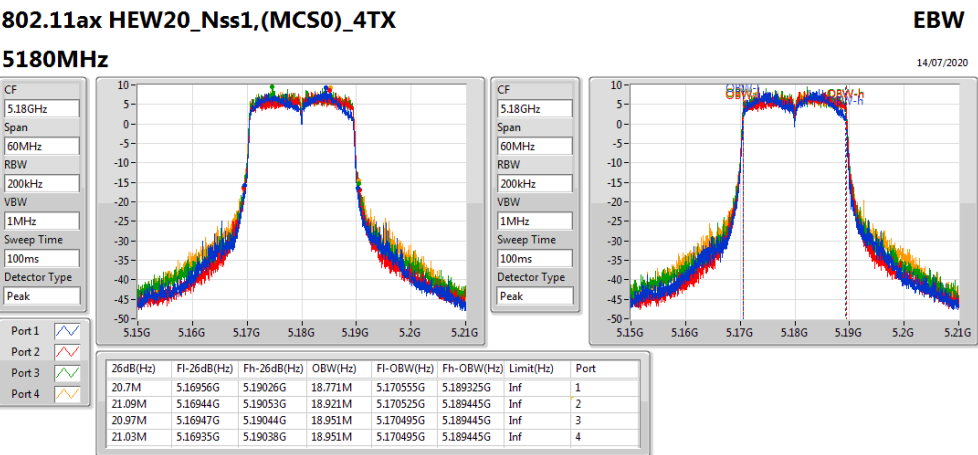
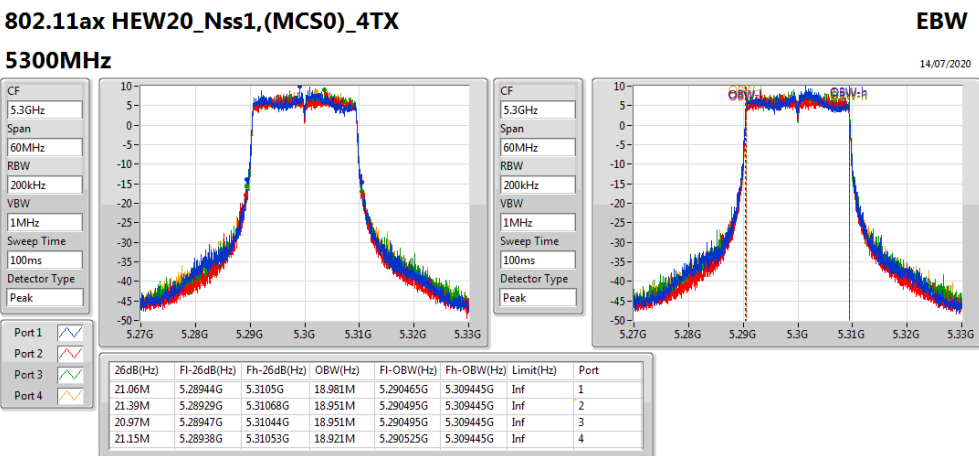
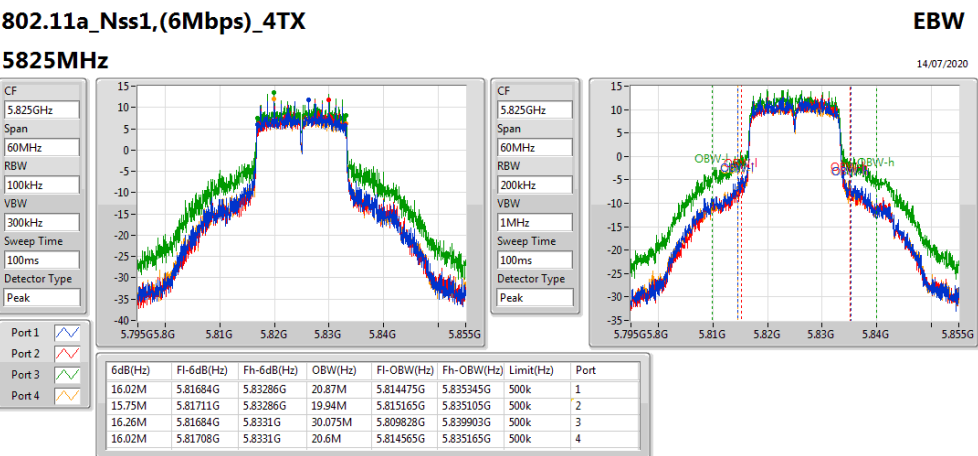
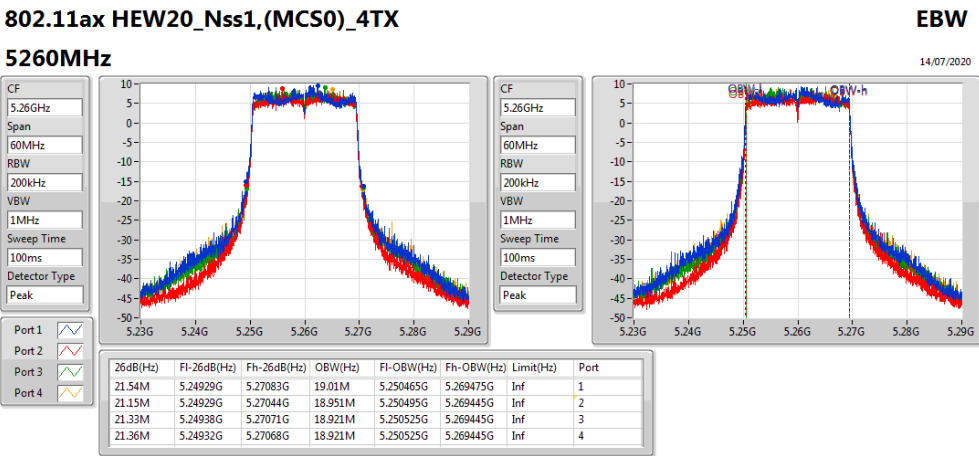
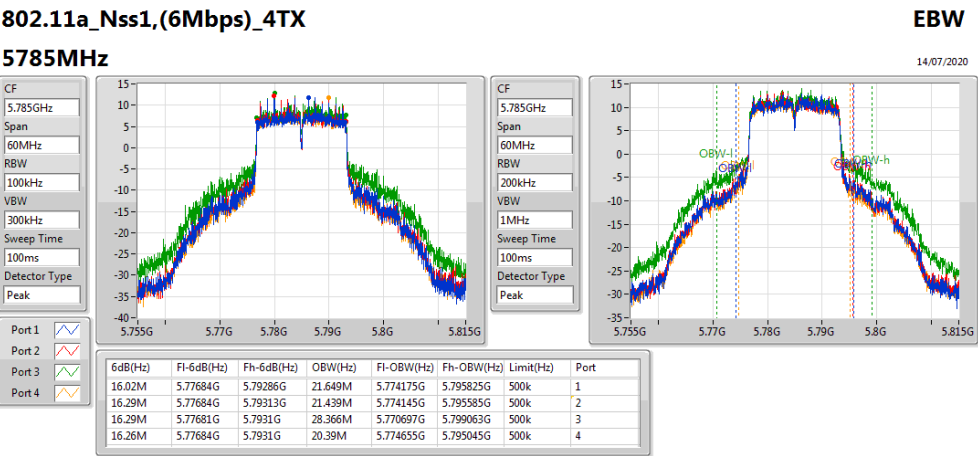
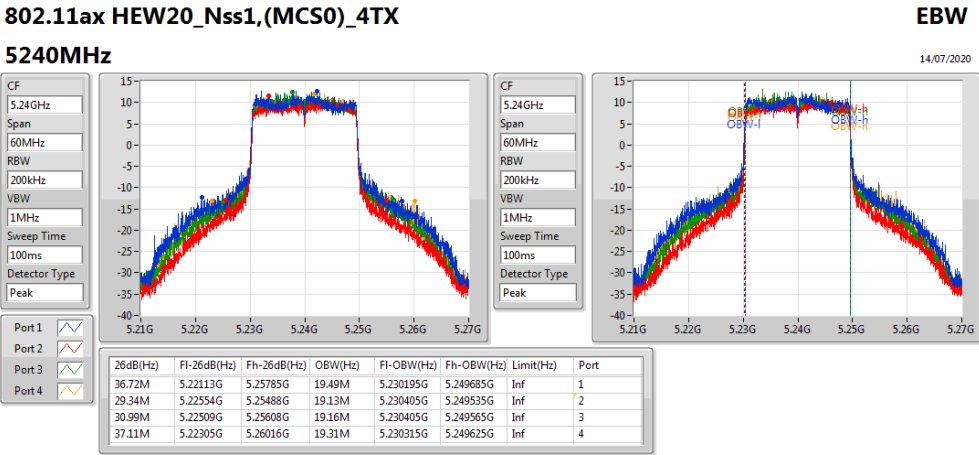
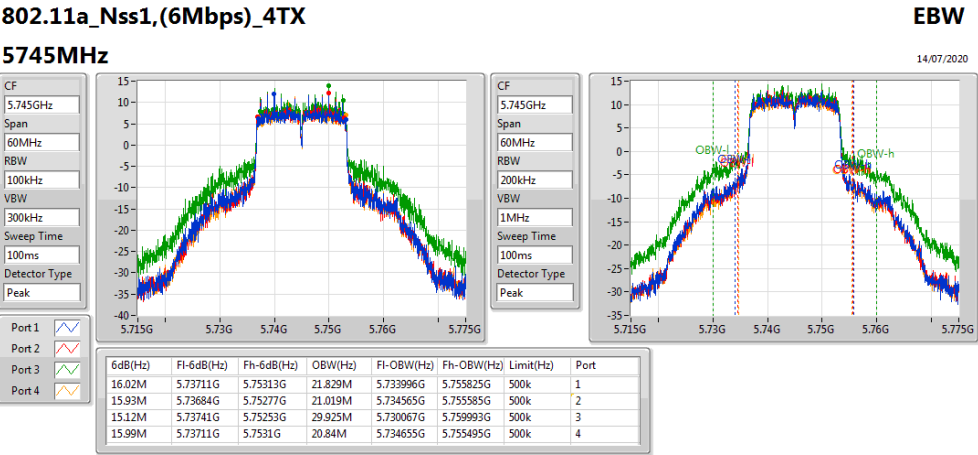
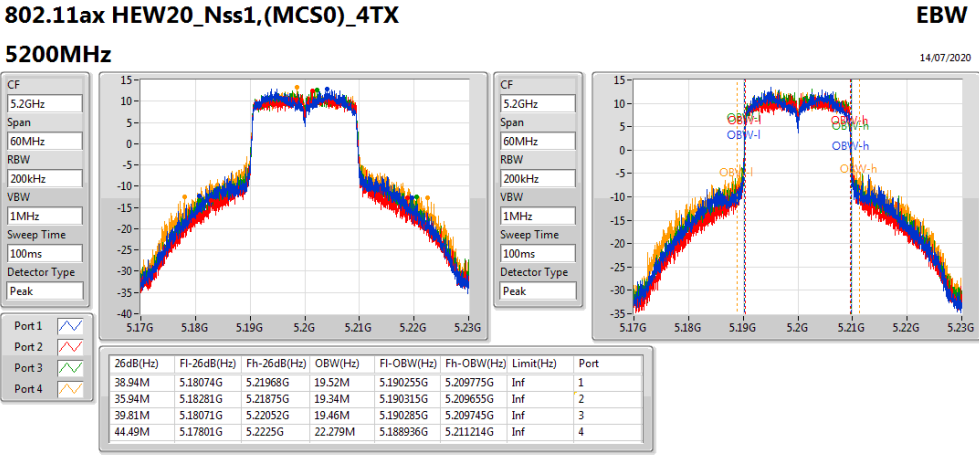
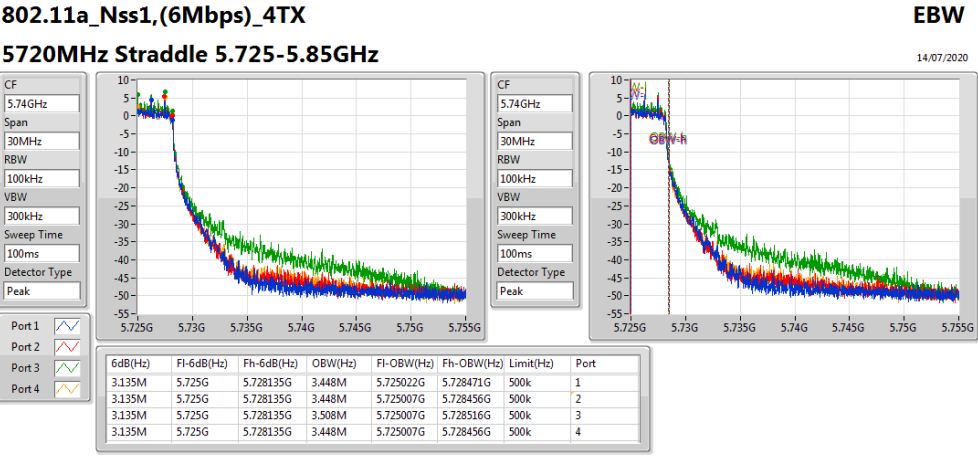


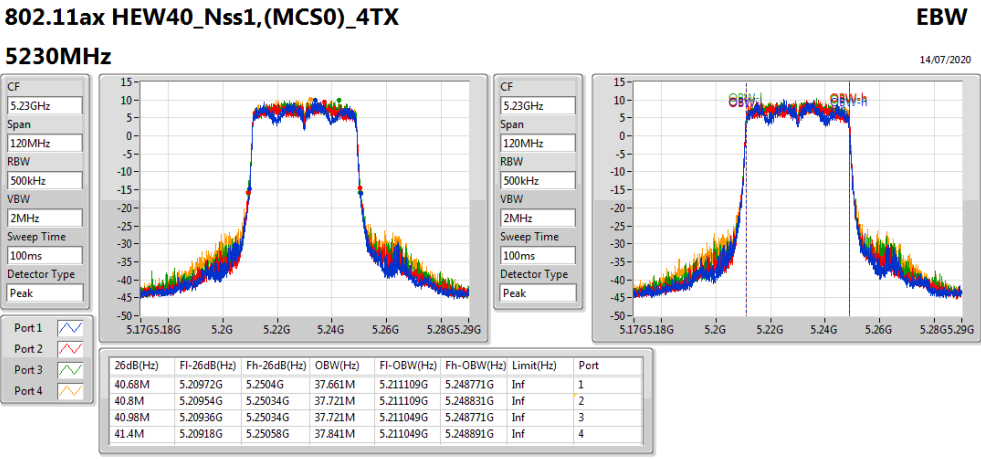
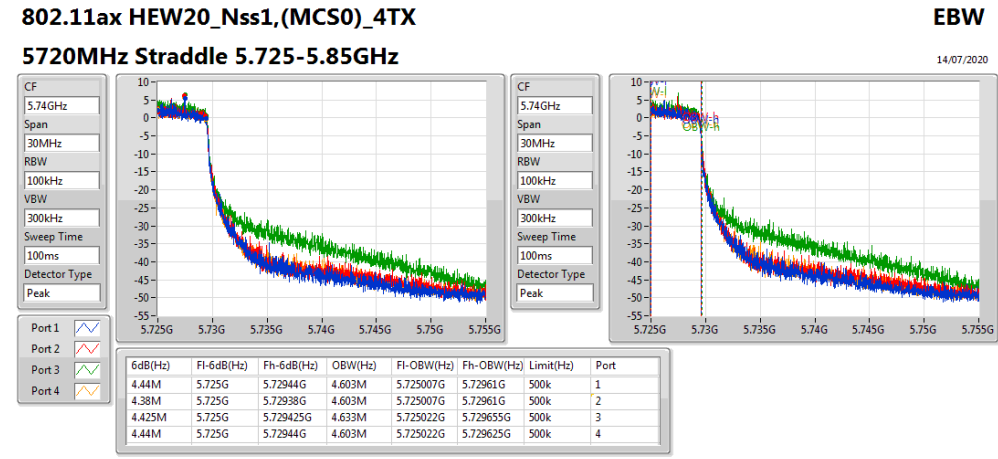
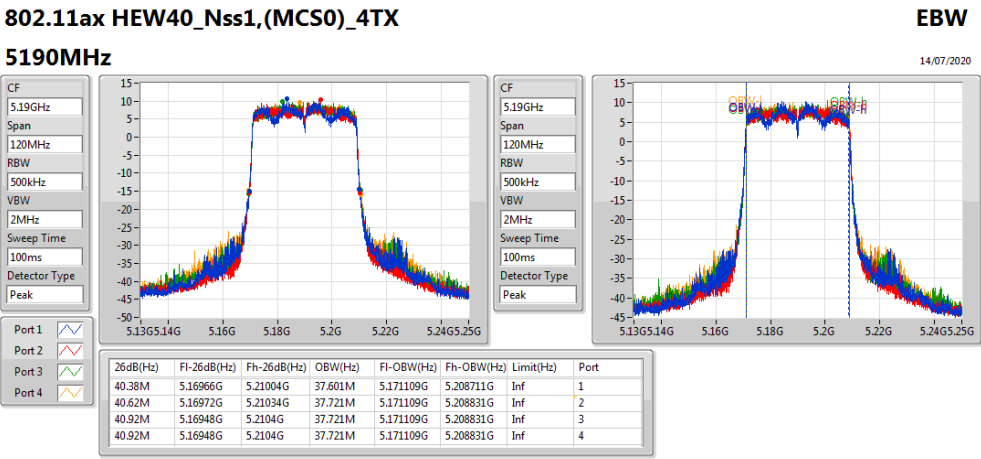
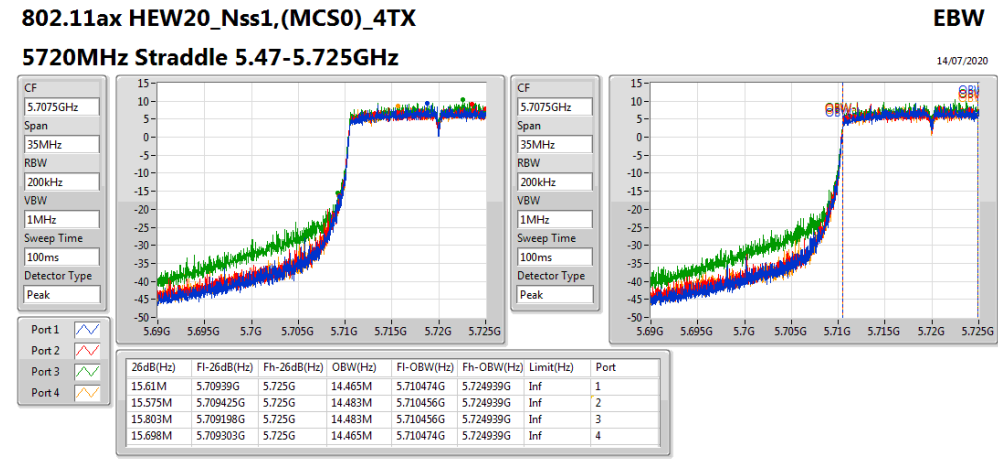
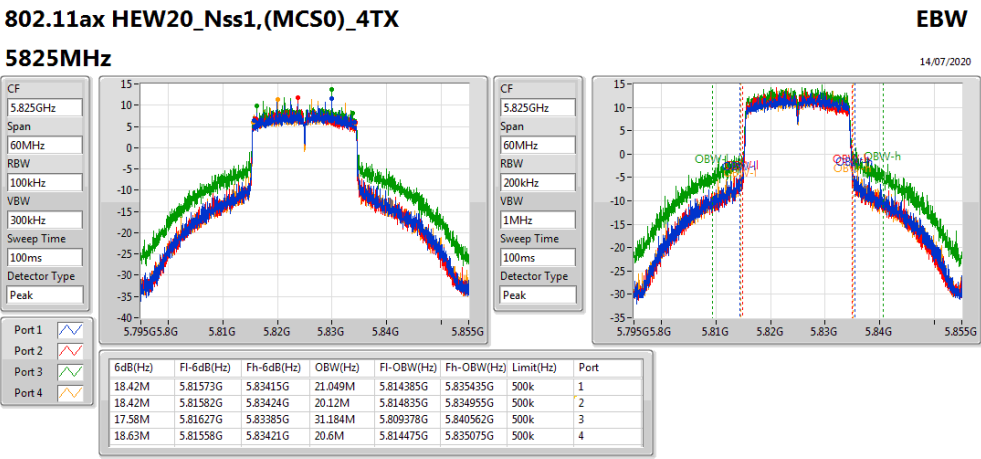
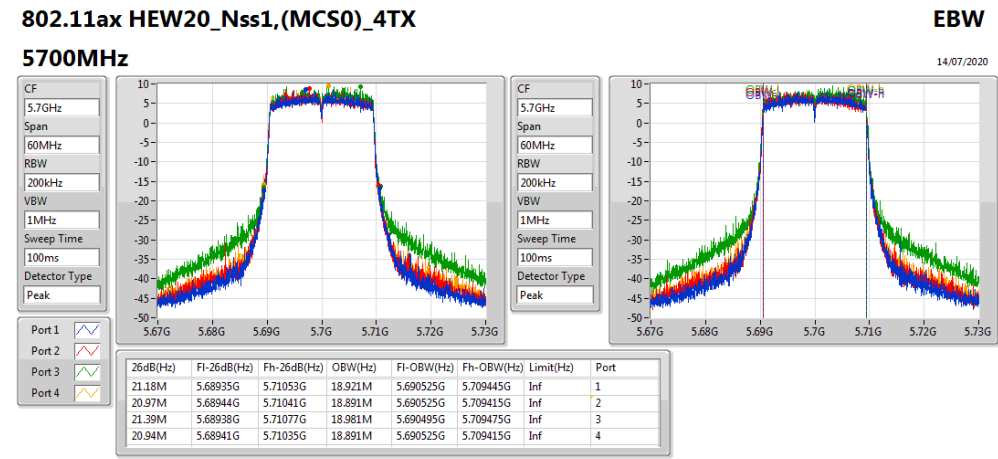
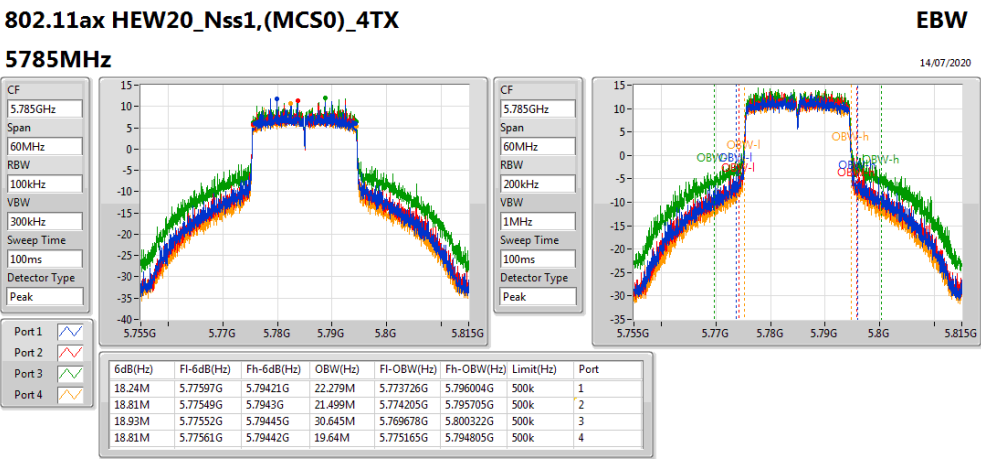
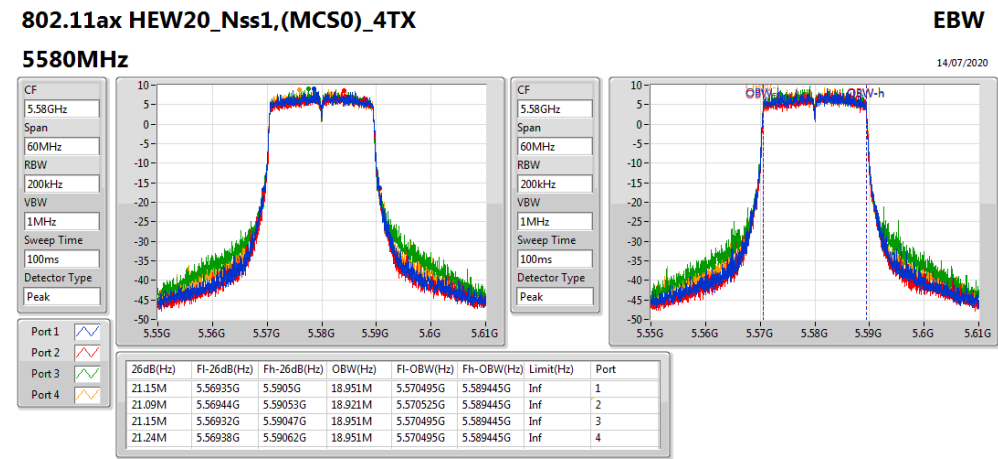
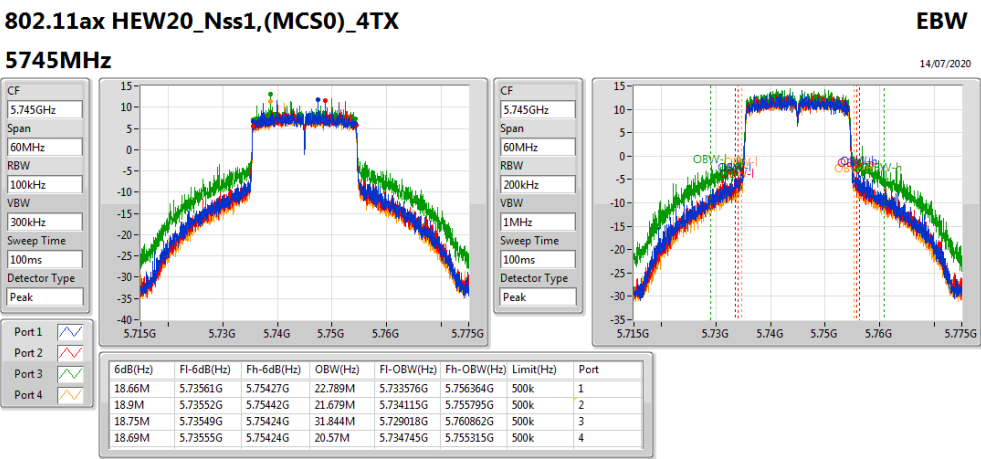
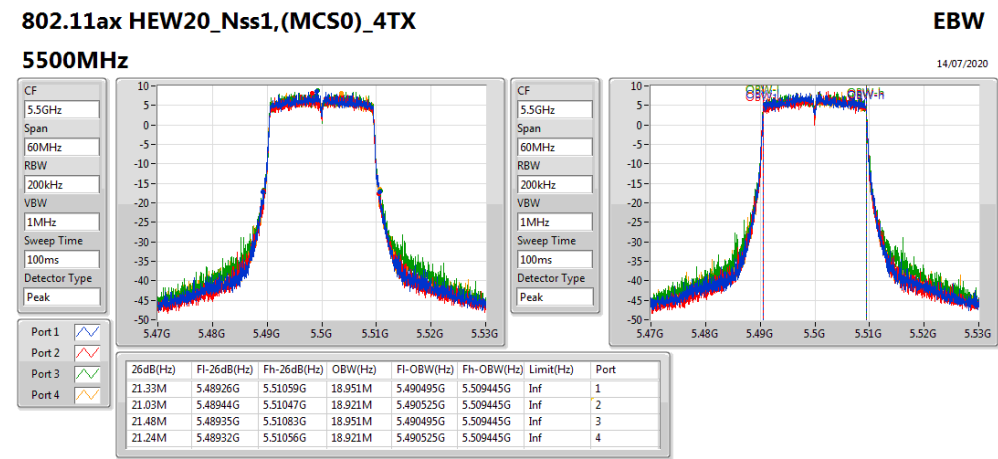
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.38M	16.252M	19.98M	16.402M	19.68M	16.402M	20.76M	16.462M
5200MHz	Pass	Inf	37.65M	21.049M	33.3M	17.061M	35.61M	18.591M	37.23M	21.619M
5240MHz	Pass	Inf	34.23M	18.171M	26.31M	16.672M	33.99M	16.852M	35.16M	17.451M
5260MHz	Pass	Inf	19.95M	16.462M	19.41M	16.342M	19.05M	16.372M	19.44M	16.372M
5300MHz	Pass	Inf	18.75M	16.282M	18.99M	16.372M	19.02M	16.372M	19.14M	16.372M
5320MHz	Pass	Inf	18.69M	16.282M	19.11M	16.372M	19.05M	16.372M	19.17M	16.372M
5500MHz	Pass	Inf	19.14M	16.402M	19.44M	16.372M	19.11M	16.402M	19.08M	16.372M
5580MHz	Pass	Inf	19.02M	16.342M	18.84M	16.342M	19.59M	16.402M	19.41M	16.372M
5700MHz	Pass	Inf	19.11M	16.372M	19.14M	16.342M	19.59M	16.402M	19.2M	16.372M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.718M	13.206M	14.665M	13.188M	15.085M	13.206M	14.7M	13.223M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.135M	3.448M	3.135M	3.448M	3.135M	3.508M	3.135M	3.448M
5745MHz	Pass	500k	16.02M	21.829M	15.93M	21.019M	15.12M	29.925M	15.99M	20.84M
5785MHz	Pass	500k	16.02M	21.649M	16.29M	21.439M	16.29M	28.366M	16.26M	20.39M
5825MHz	Pass	500k	16.02M	20.87M	15.75M	19.94M	16.26M	30.075M	16.02M	20.6M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.7M	18.771M	21.09M	18.921M	20.97M	18.951M	21.03M	18.951M
5200MHz	Pass	Inf	38.94M	19.52M	35.94M	19.34M	39.81M	19.46M	44.49M	22.279M
5240MHz	Pass	Inf	36.72M	19.49M	29.34M	19.13M	30.99M	19.16M	37.11M	19.31M
5260MHz	Pass	Inf	21.54M	19.01M	21.15M	18.951M	21.33M	18.921M	21.36M	18.921M
5300MHz	Pass	Inf	21.06M	18.981M	21.39M	18.951M	20.97M	18.951M	21.15M	18.921M
5320MHz	Pass	Inf	21.27M	18.951M	20.91M	18.891M	21.18M	18.951M	21.39M	18.921M
5500MHz	Pass	Inf	21.33M	18.951M	21.03M	18.921M	21.48M	18.951M	21.24M	18.921M
5580MHz	Pass	Inf	21.15M	18.951M	21.09M	18.921M	21.15M	18.951M	21.24M	18.951M
5700MHz	Pass	Inf	21.18M	18.921M	20.97M	18.891M	21.39M	18.981M	20.94M	18.891M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.61M	14.465M	15.575M	14.483M	15.803M	14.483M	15.698M	14.465M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	4.603M	4.38M	4.603M	4.425M	4.633M	4.44M	4.603M
5745MHz	Pass	500k	18.66M	22.789M	18.9M	21.679M	18.75M	31.844M	18.69M	20.57M
5785MHz	Pass	500k	18.24M	22.279M	18.81M	21.499M	18.93M	30.645M	18.81M	19.64M
5825MHz	Pass	500k	18.42M	21.049M	18.42M	20.12M	17.58M	31.184M	18.63M	20.6M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.38M	37.601M	40.62M	37.721M	40.92M	37.721M	40.92M	37.721M
5230MHz	Pass	Inf	40.68M	37.661M	40.8M	37.721M	40.98M	37.721M	41.4M	37.841M
5270MHz	Pass	Inf	40.68M	37.661M	41.04M	37.781M	41.1M	37.841M	41.28M	37.781M
5310MHz	Pass	Inf	40.74M	37.781M	41.16M	37.781M	41.34M	37.721M	40.86M	37.781M
5510MHz	Pass	Inf	40.86M	37.781M	40.86M	37.721M	40.86M	37.721M	40.86M	37.661M
5550MHz	Pass	Inf	41.22M	37.841M	41.16M	37.781M	40.74M	37.721M	40.68M	37.781M
5670MHz	Pass	Inf	41.04M	37.841M	40.86M	37.781M	40.92M	37.781M	40.68M	37.721M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.625M	33.733M	35.588M	33.733M	35.813M	33.771M	35.663M	33.733M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.035M	4.153M	4.11M	4.168M	4.02M	4.438M	3.915M	4.138M
5755MHz	Pass	500k	37.8M	38.561M	37.62M	38.381M	37.56M	51.874M	37.32M	38.261M
5795MHz	Pass	500k	38.04M	57.271M	37.74M	56.312M	36.9M	76.222M	37.32M	49.535M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	77.121M	82.56M	77.121M	82.32M	77.241M	83.28M	77.121M
5290MHz	Pass	Inf	82.2M	77.001M	82.08M	77.001M	82.68M	77.121M	82.08M	77.241M
5530MHz	Pass	Inf	81.96M	77.001M	82.08M	77.001M	81.96M	77.001M	81.96M	77.121M
5610MHz	Pass	Inf	82.8M	77.121M	81.96M	77.001M	82.68M	77.241M	82.08M	77.121M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.493M	73.123M	76.338M	73.046M	76.88M	73.201M	76.26M	73.201M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	4.333M	4.005M	4.288M	4.035M	7.331M	4.05M	4.318M
5775MHz	Pass	500k	76.92M	77.361M	75.6M	77.361M	77.28M	77.961M	73.32M	77.361M

Port X-N dB = Port X 6dB down bandwidth for UNII-3 band / 26dB down bandwidth for other band; Port X-OBW = Port X 99% occupied bandwidth;



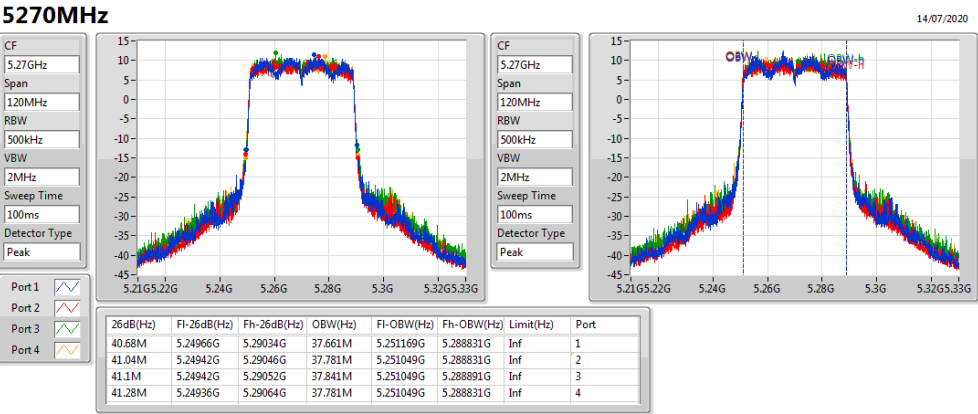






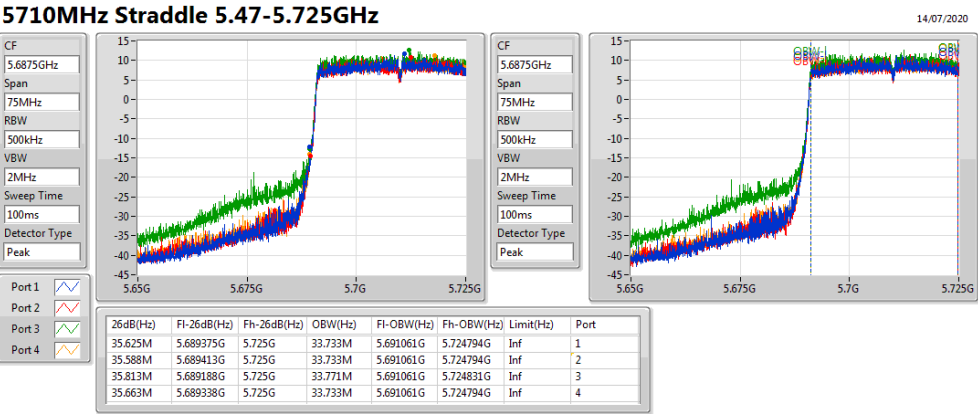
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EBW



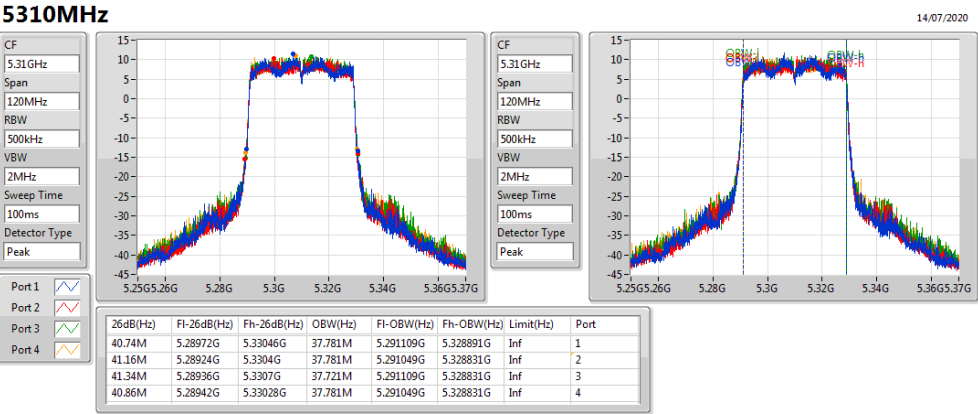
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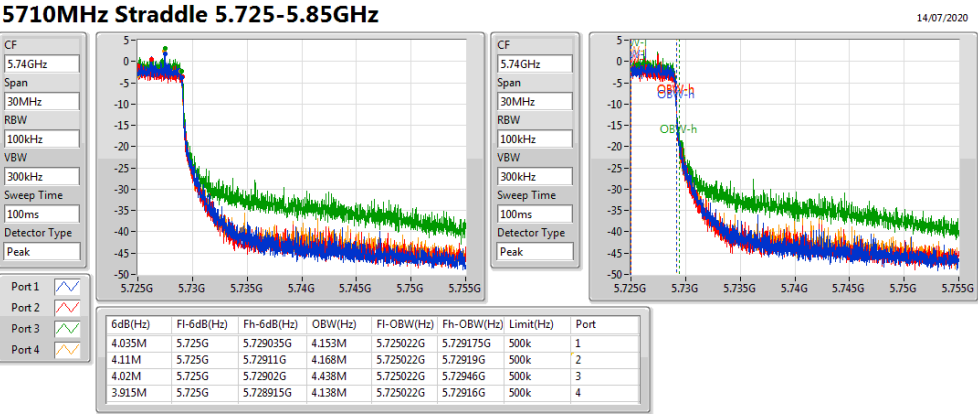
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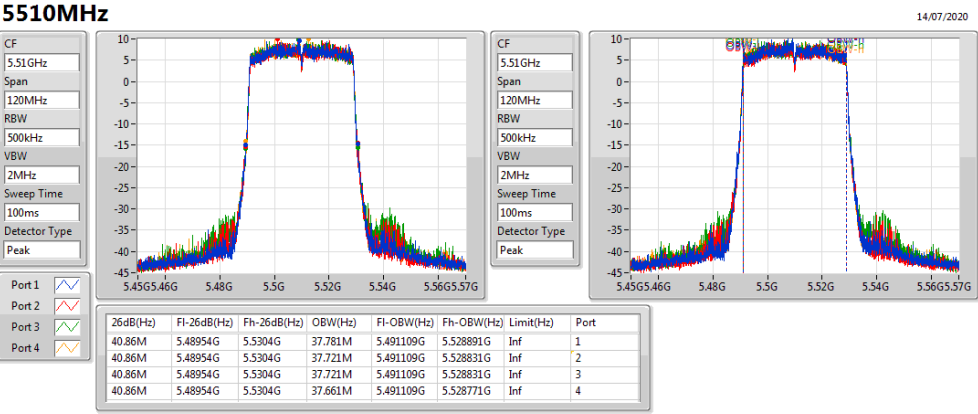
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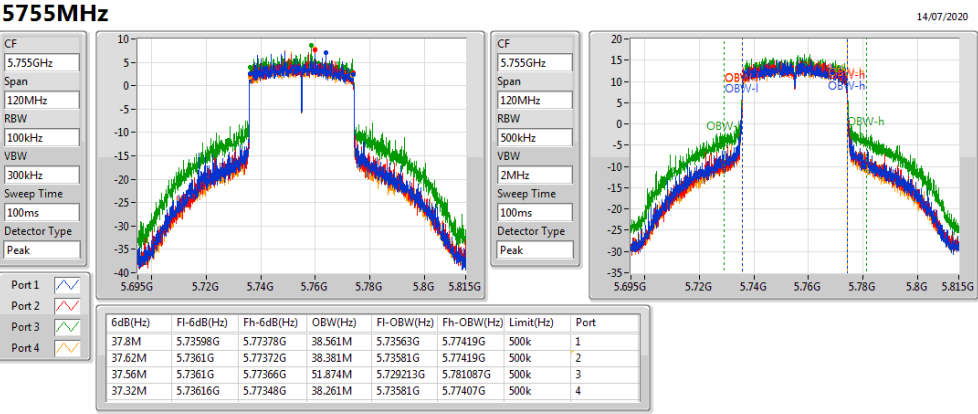
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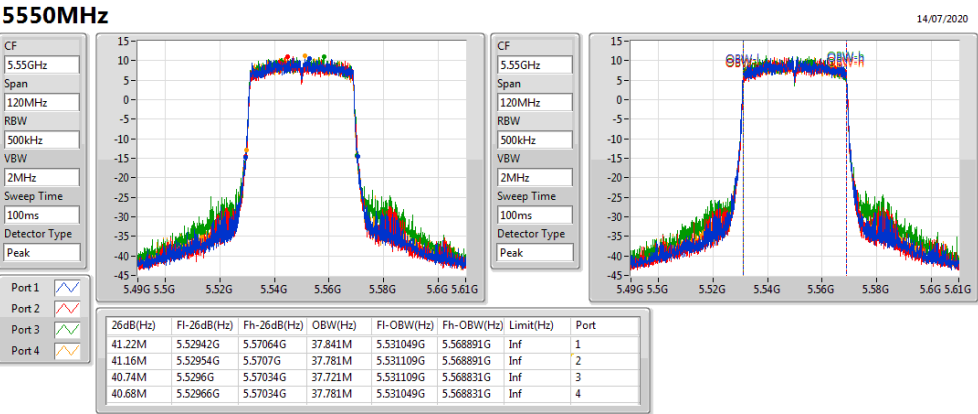
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW



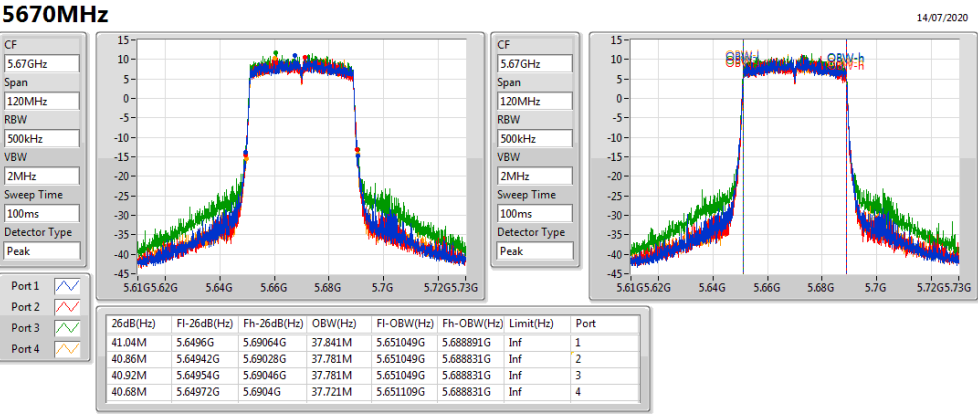
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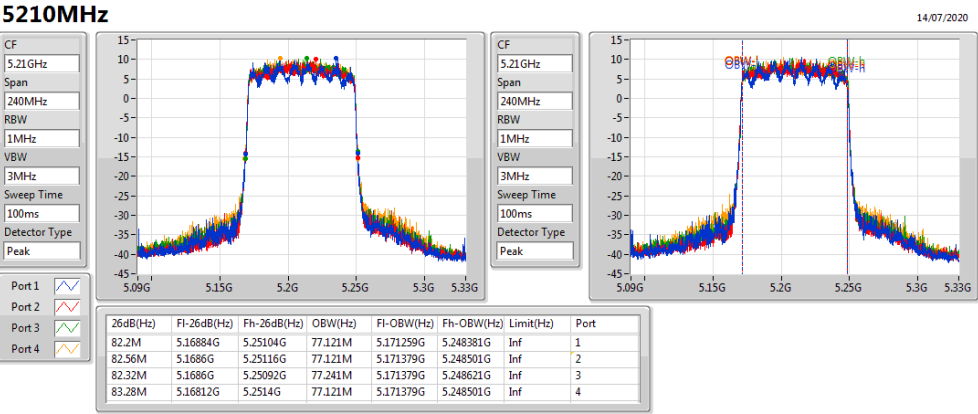
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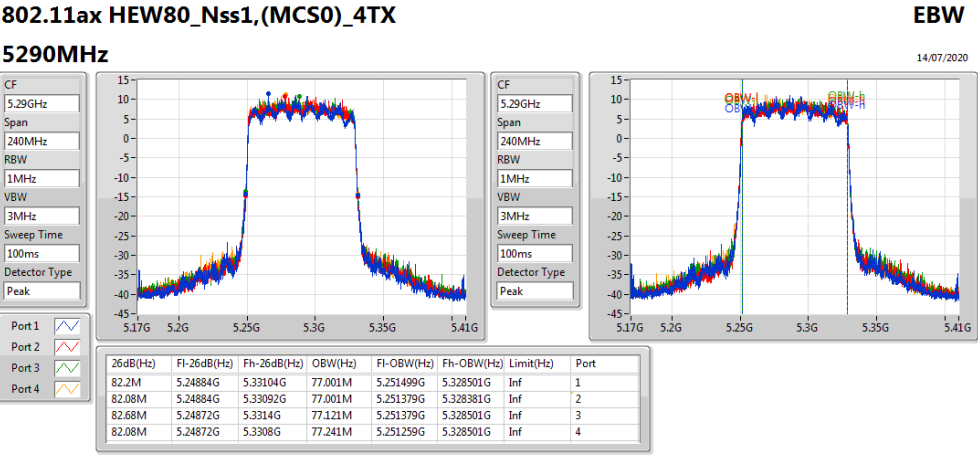
EBW



802.11ax HEW80_Nss1,(MCS0)_4TX

EBW







4TX mode <160MHz (80+80MHz)>:
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_4TX	82.6M	77.241M	77M2D1D	82.04M	77.241M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_4TX	149.8M	77.521M	77M5D1D	81.76M	77.241M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW80+80_Nss2,(MCS0)_4TX	82.6M	77.521M	77M5D1D	82.04M	76.962M

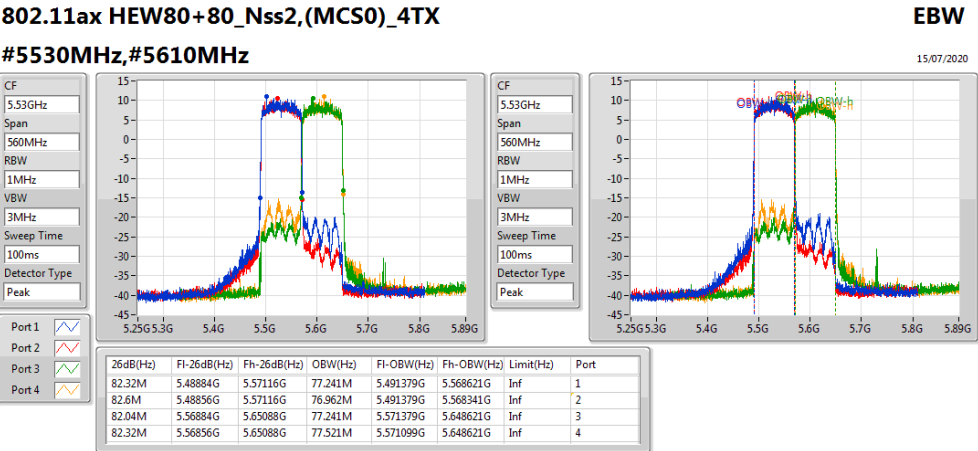
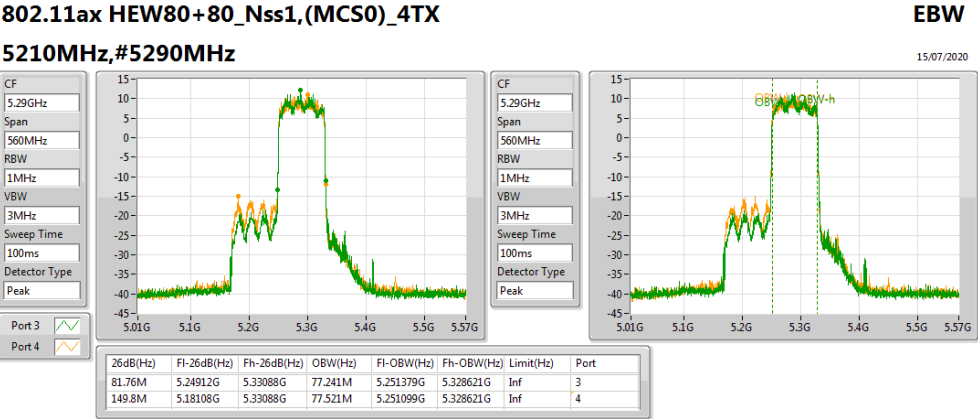
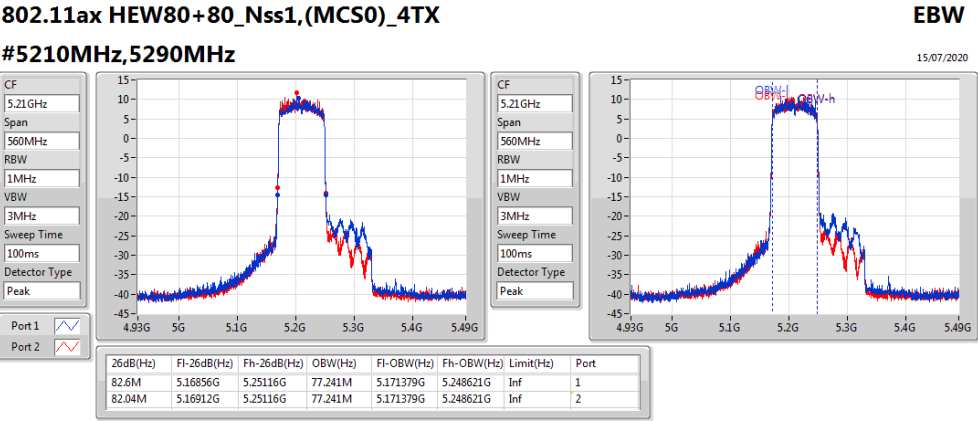
Max-N dB = Maximum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; **Min-OBW** = Minimum 99% occupied bandwidth;



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	Inf	82.6M	77.241M	82.04M	77.241M				
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	Inf					81.76M	77.241M	149.8M	77.521M
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	Inf	82.32M	77.241M	82.6M	76.962M	82.04M	77.241M	82.32M	77.521M

Port X-N dB = Port X 6dB down bandwidth for UNII-3 band / 26dB down bandwidth for other band; Port X-OBW = Port X 99% occupied bandwidth;





8TX mode <20MHz, 40MHz, 80MHz>:
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	20.31M	16.402M	16M4D1D	18.57M	16.252M
802.11ax HEW20_Nss1,(MCS0)_8TX	21.69M	18.981M	19M0D1D	20.76M	18.771M
802.11ax HEW40_Nss1,(MCS0)_8TX	48.6M	37.961M	38M0D1D	40.8M	37.721M
802.11ax HEW80_Nss1,(MCS0)_8TX	83.16M	77.241M	77M2D1D	81.84M	77.001M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	19.41M	16.432M	16M4D1D	18.75M	16.282M
802.11ax HEW20_Nss1,(MCS0)_8TX	21.48M	18.951M	19M0D1D	20.73M	18.801M
802.11ax HEW40_Nss1,(MCS0)_8TX	41.28M	37.901M	37M9D1D	40.68M	37.661M
802.11ax HEW80_Nss1,(MCS0)_8TX	82.56M	77.361M	77M4D1D	81.84M	77.001M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	19.92M	16.432M	16M4D1D	14.63M	13.223M
802.11ax HEW20_Nss1,(MCS0)_8TX	21.6M	18.981M	19M0D1D	15.54M	14.465M
802.11ax HEW40_Nss1,(MCS0)_8TX	41.34M	37.901M	37M9D1D	35.288M	33.733M
802.11ax HEW80_Nss1,(MCS0)_8TX	82.68M	77.361M	77M4D1D	76.028M	73.123M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	16.32M	16.792M	16M8D1D	3.09M	3.658M
802.11ax HEW20_Nss1,(MCS0)_8TX	19.05M	19.16M	19M2D1D	4.35M	4.588M
802.11ax HEW40_Nss1,(MCS0)_8TX	38.28M	38.441M	38M4D1D	3.93M	4.198M
802.11ax HEW80_Nss1,(MCS0)_8TX	77.76M	77.361M	77M4D1D	3.975M	4.183M

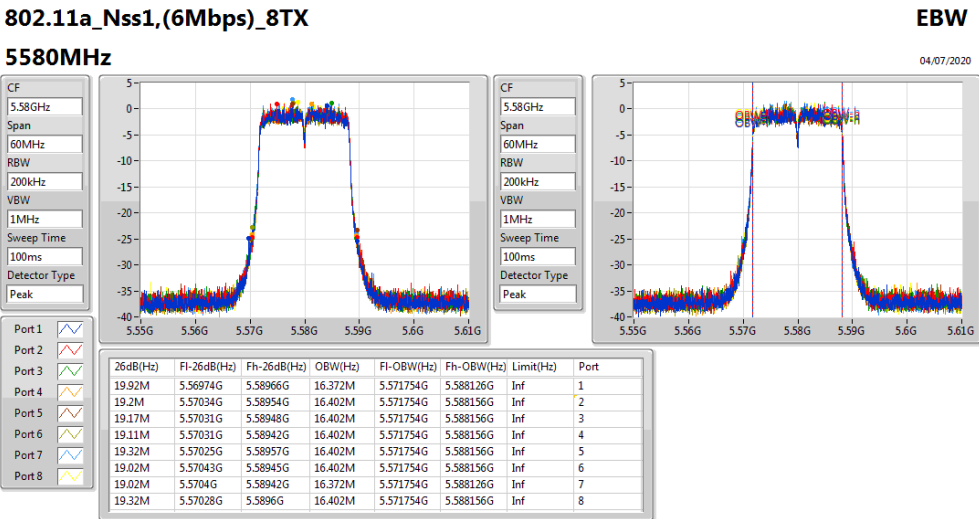
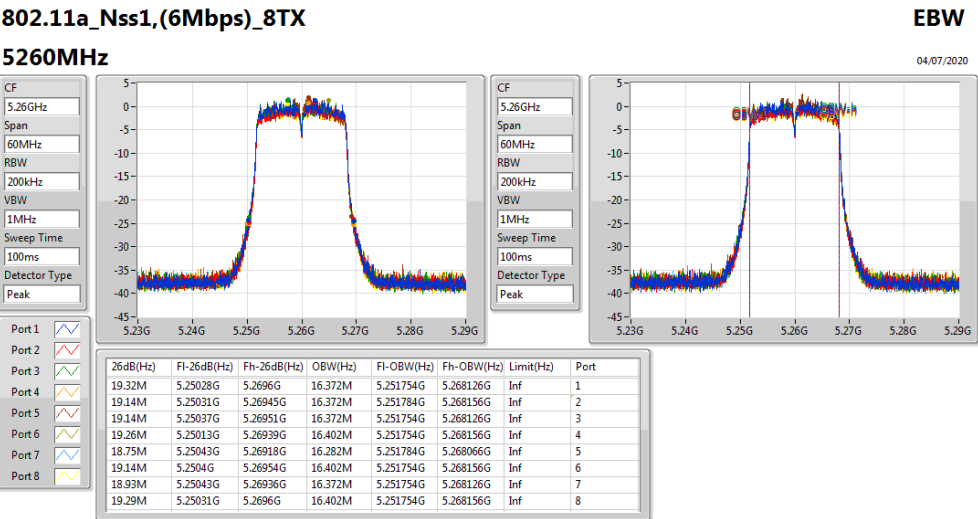
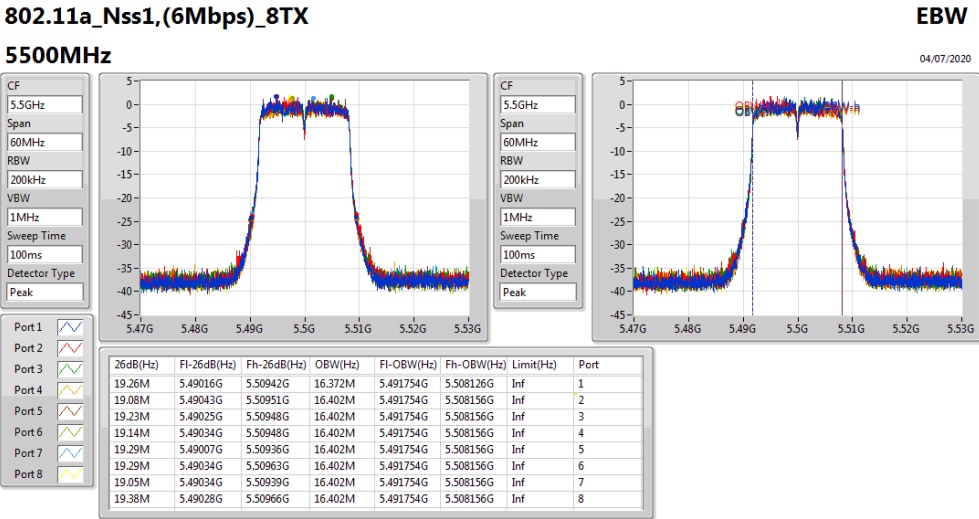
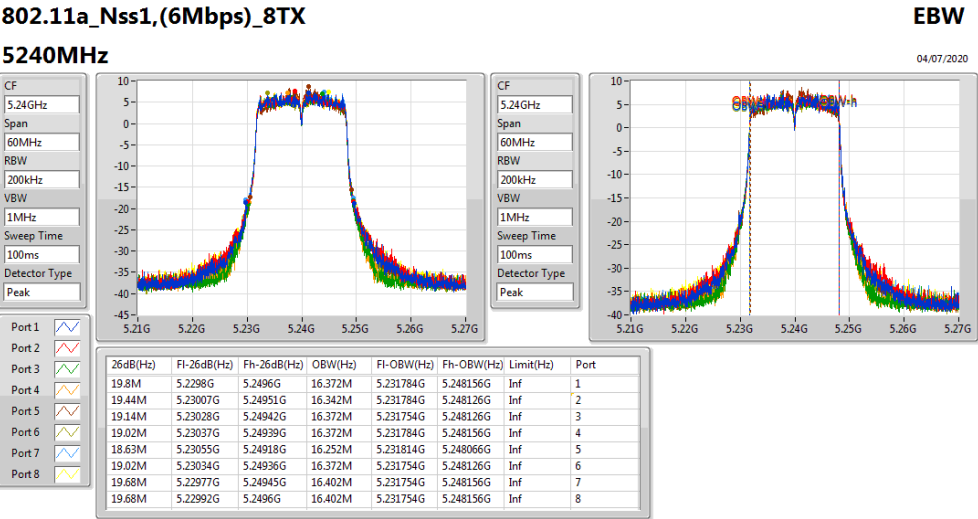
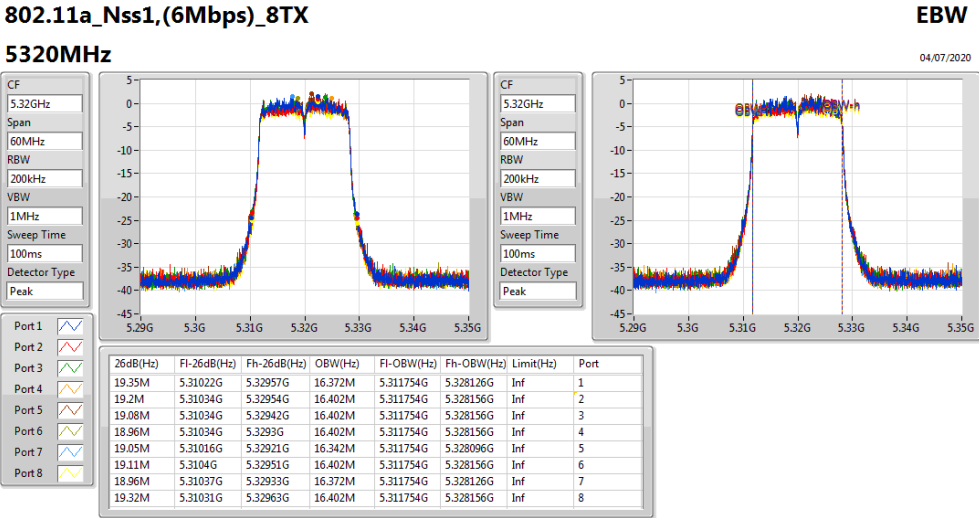
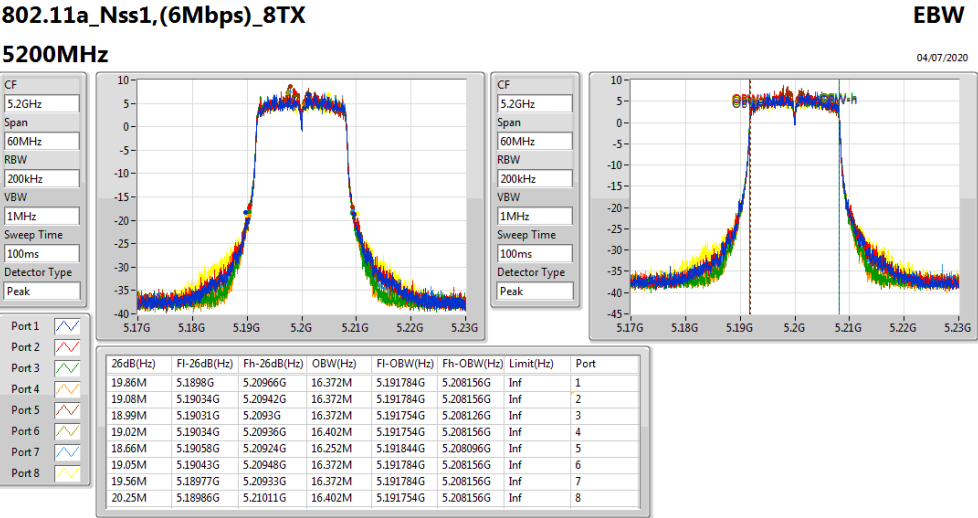
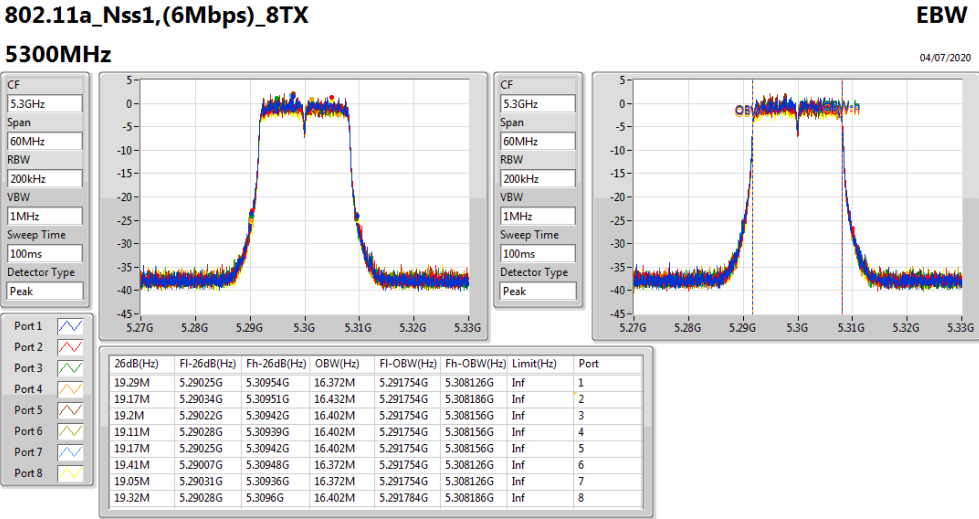
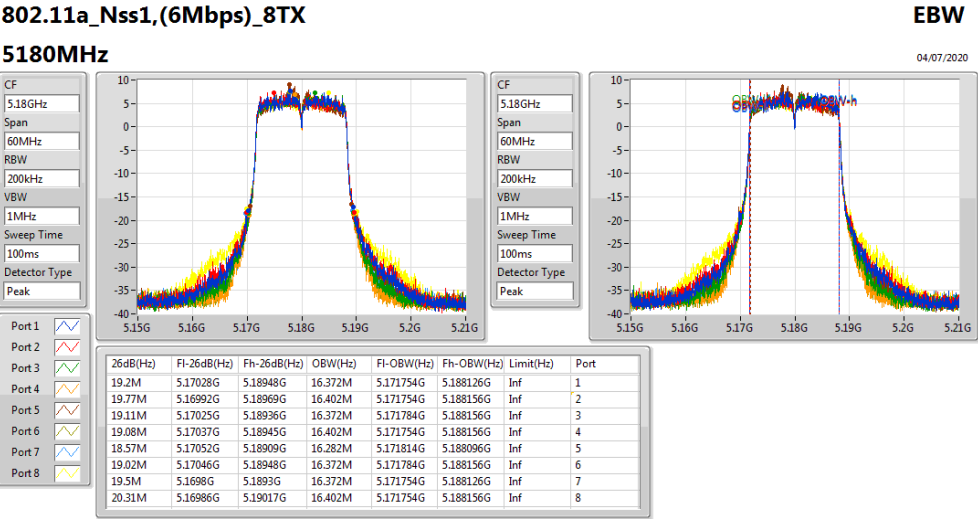
Max-N dB = Maximum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; Min-OBW = Minimum 99% occupied bandwidth;

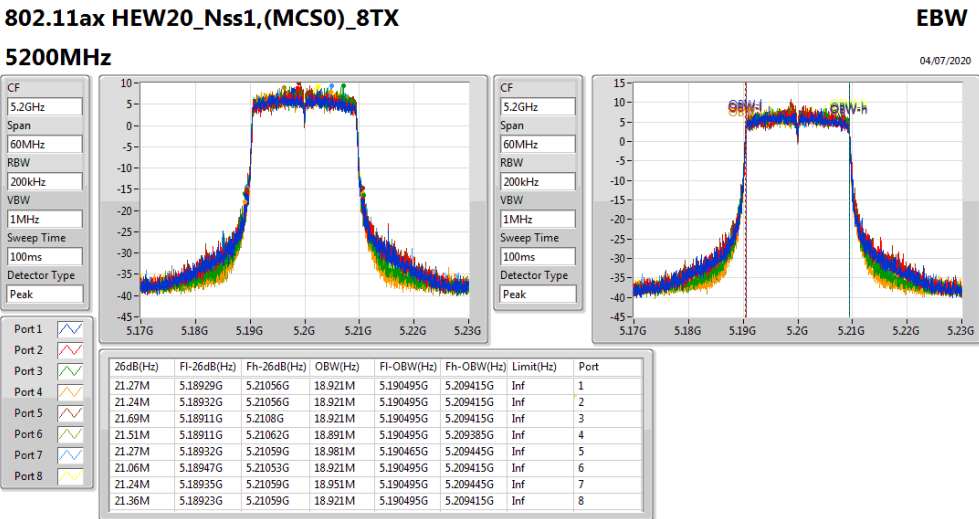
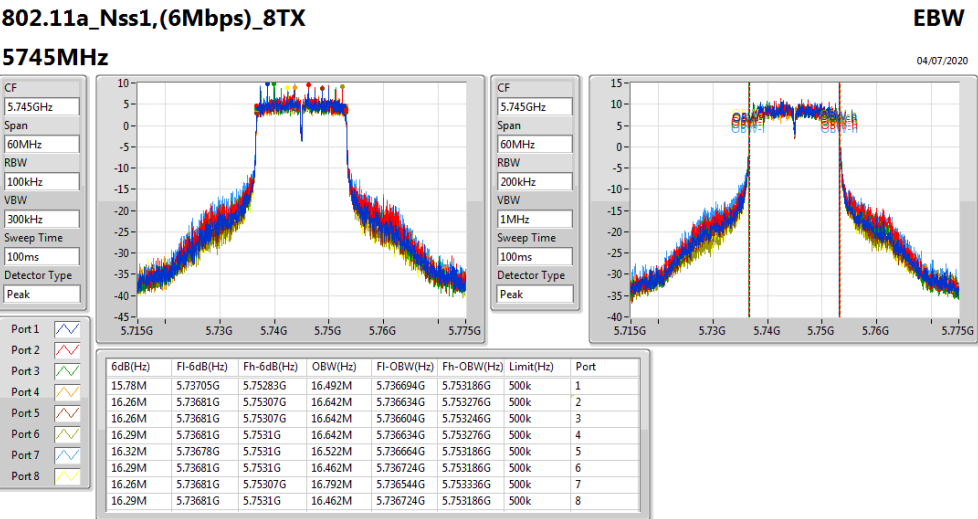
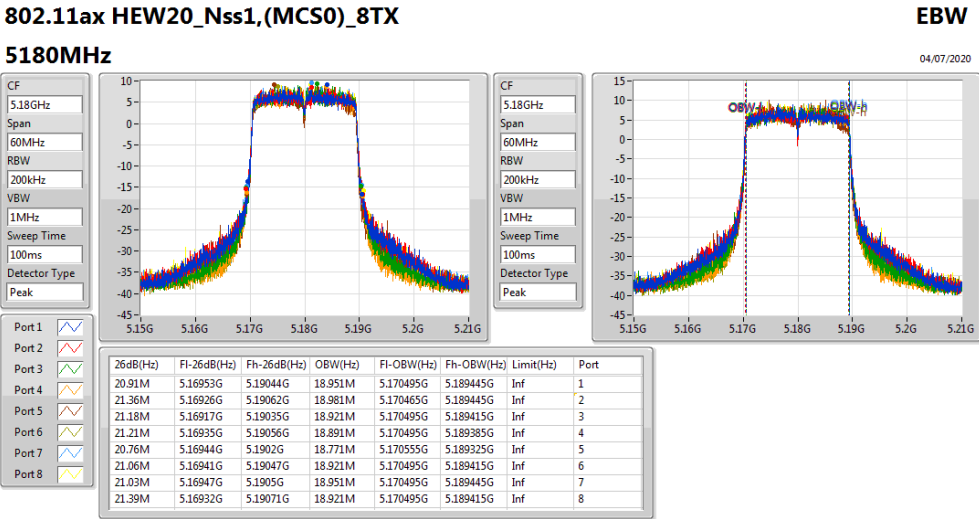
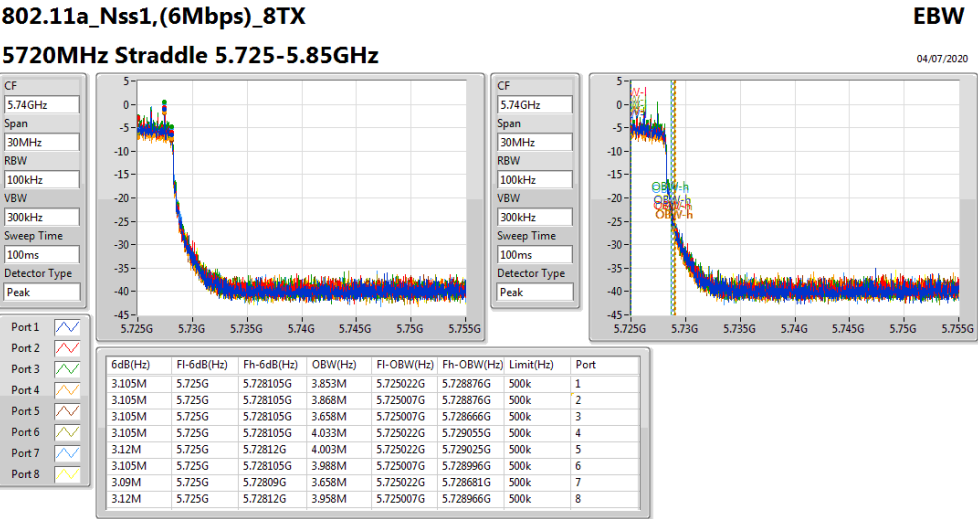
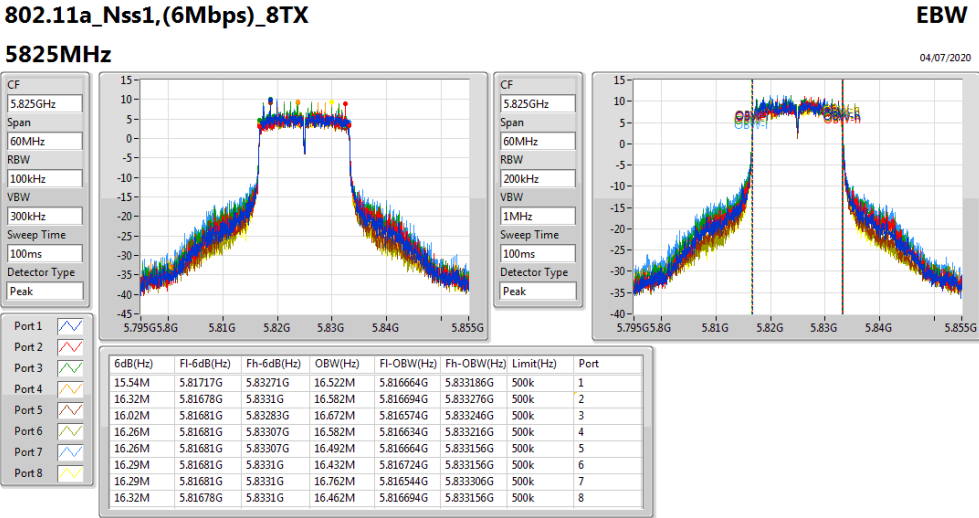
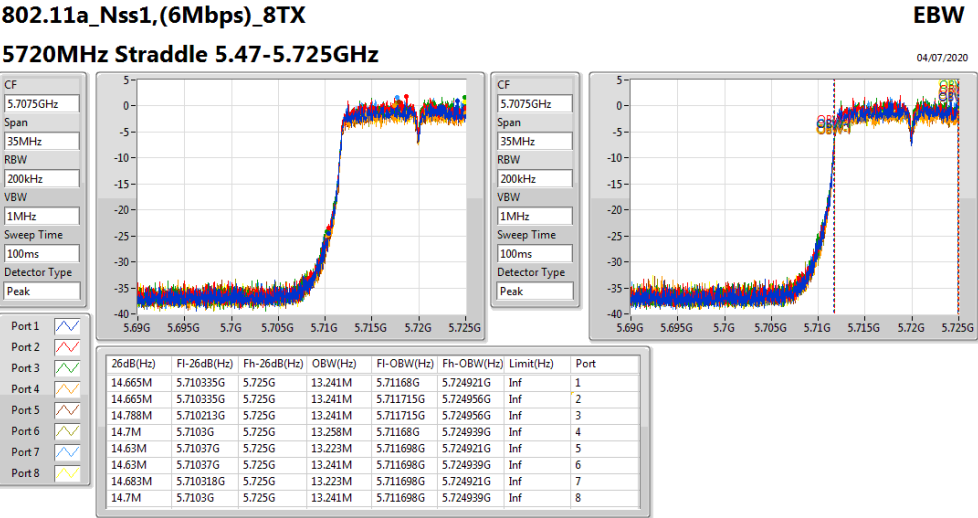
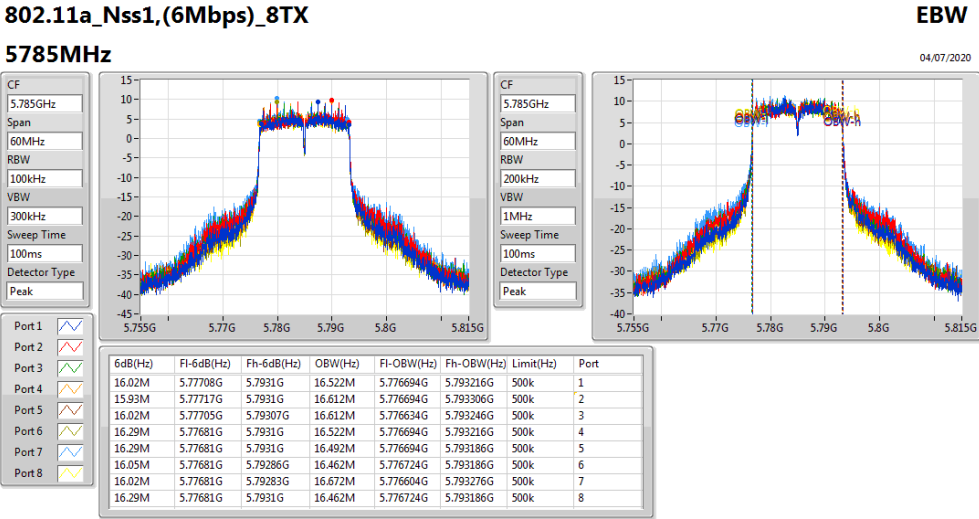
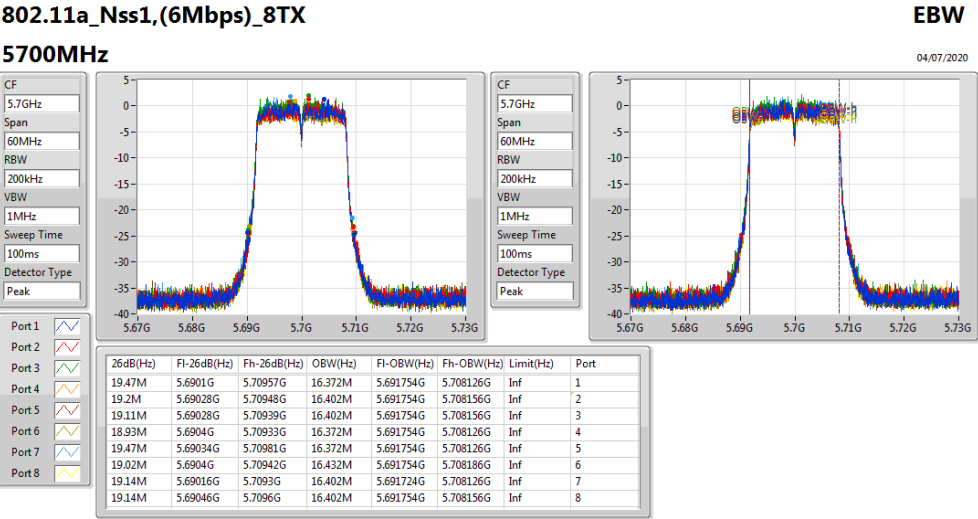


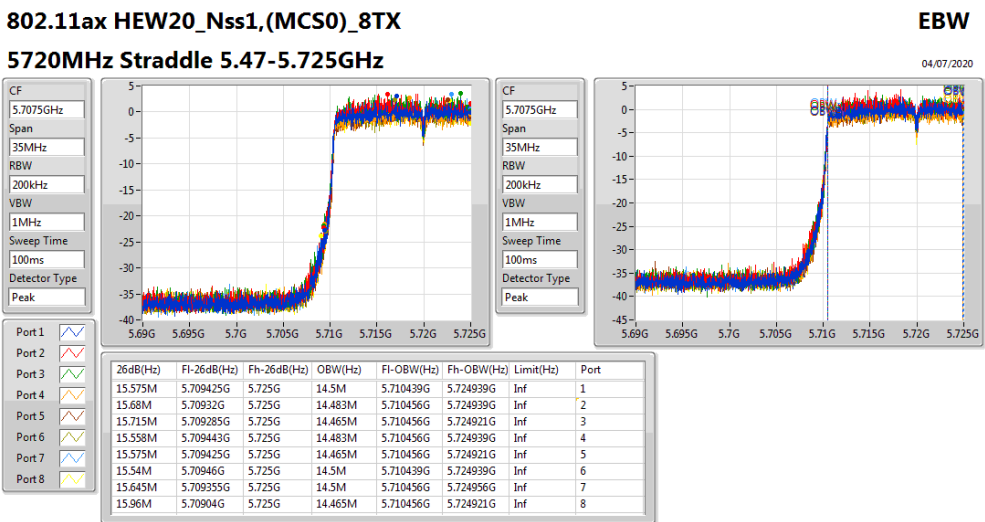
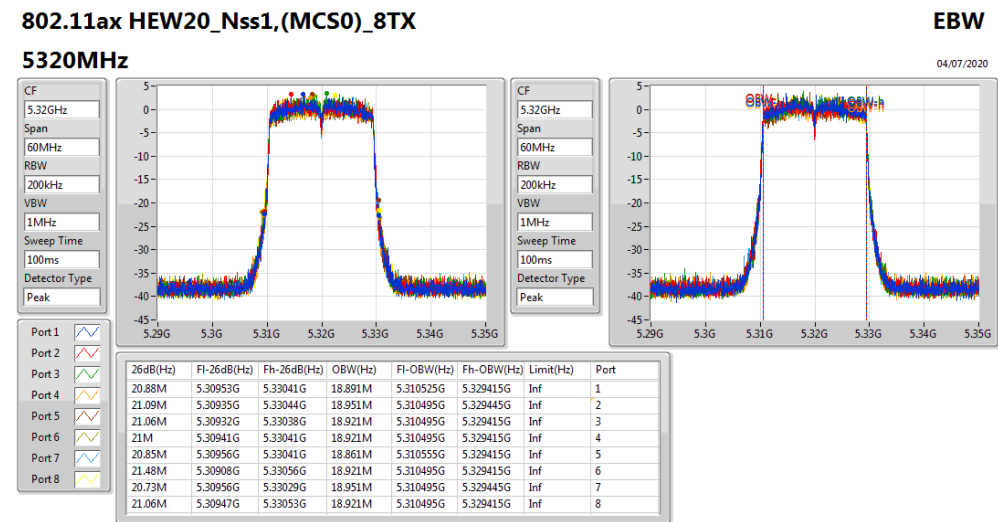
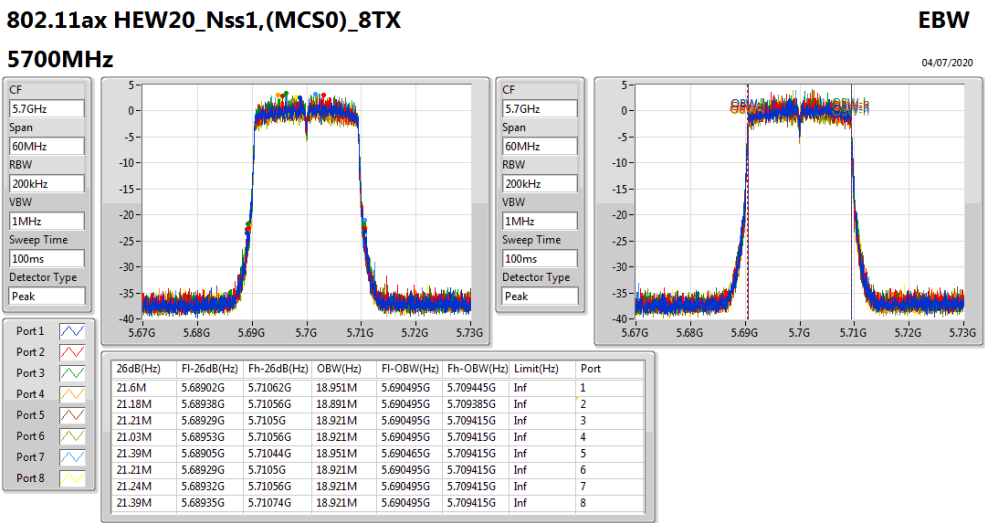
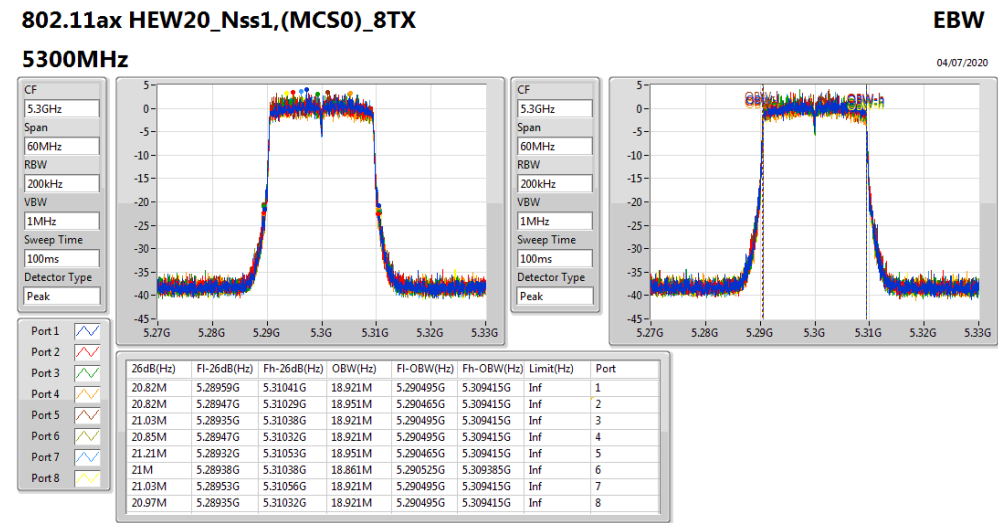
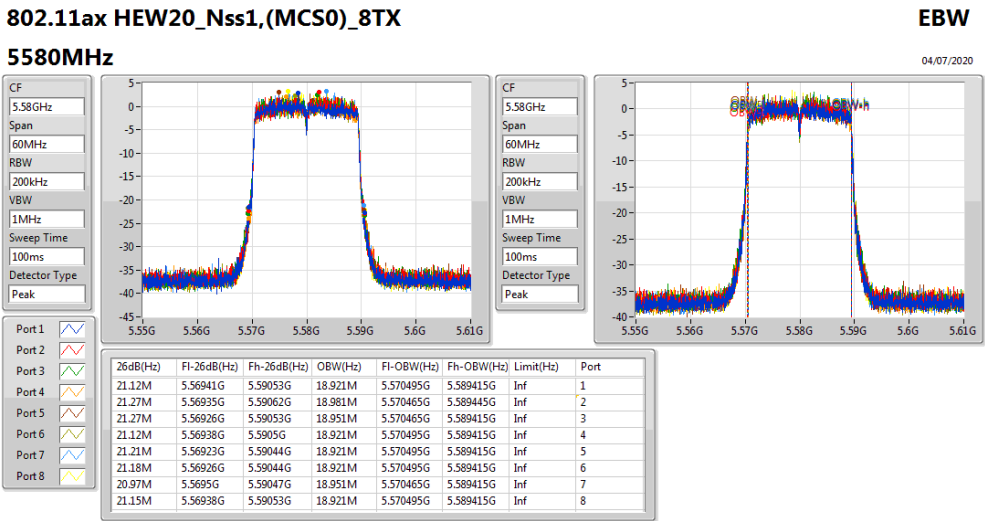
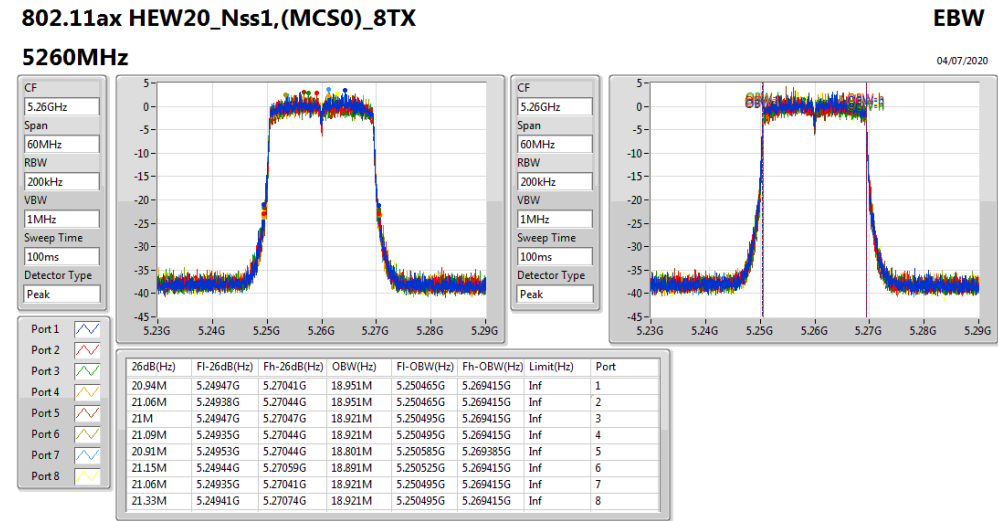
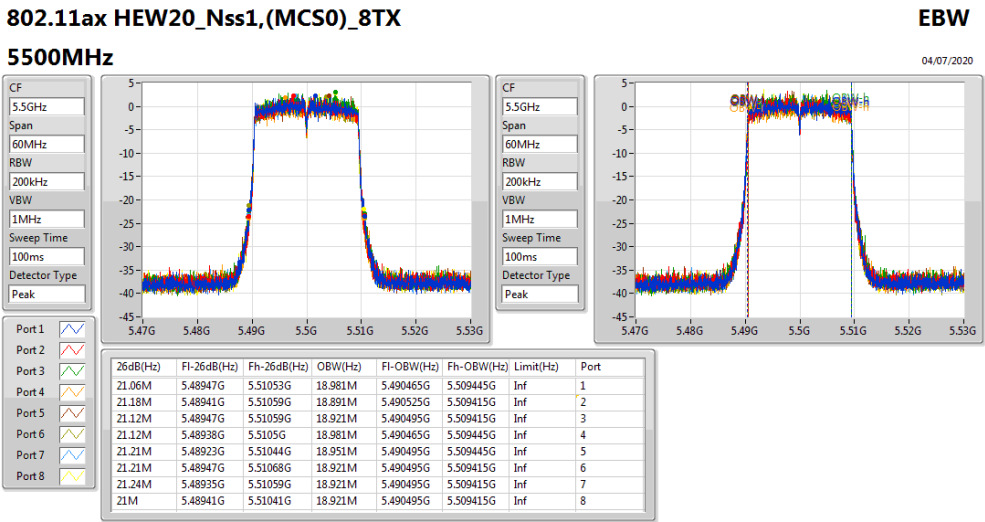
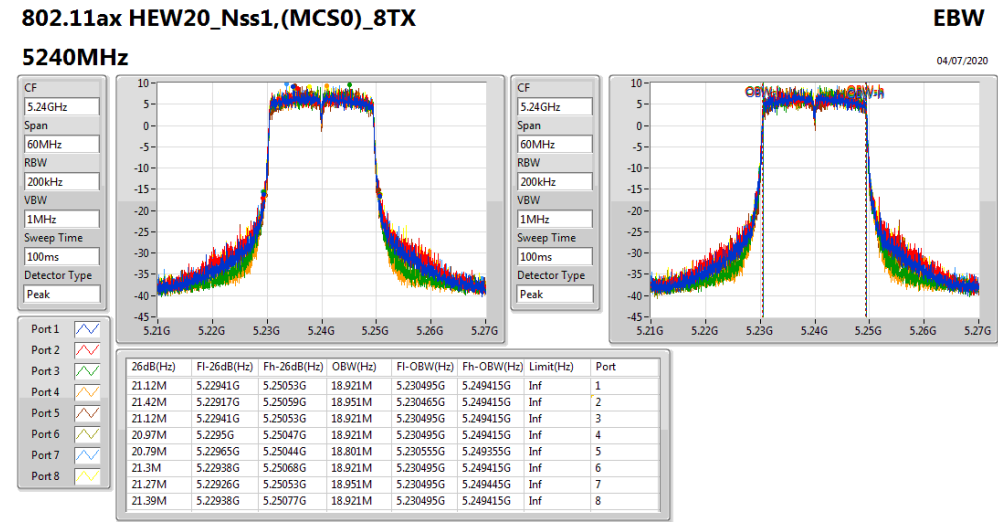
Result

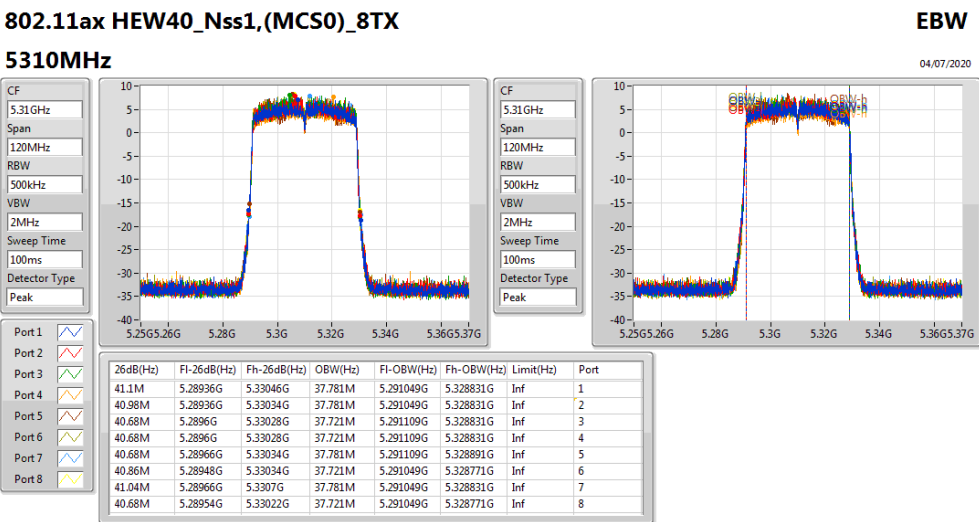
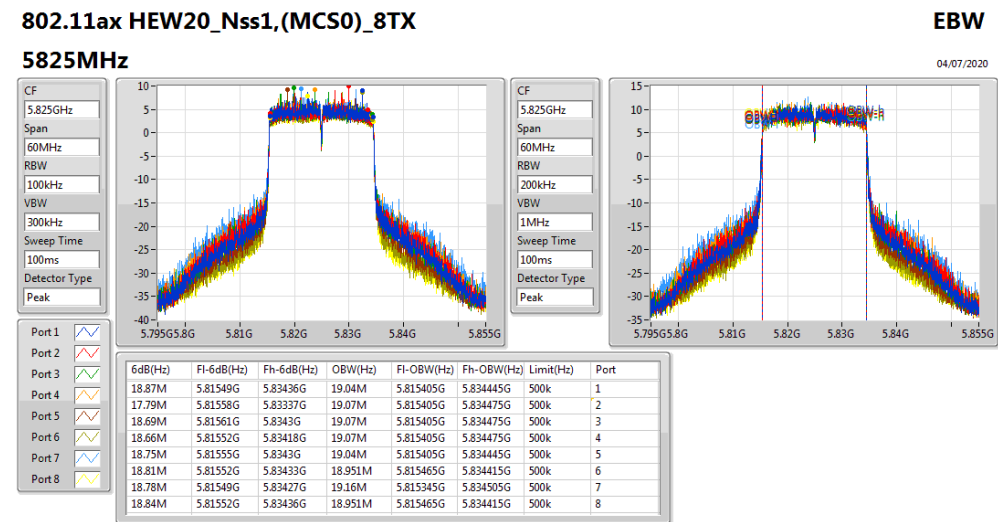
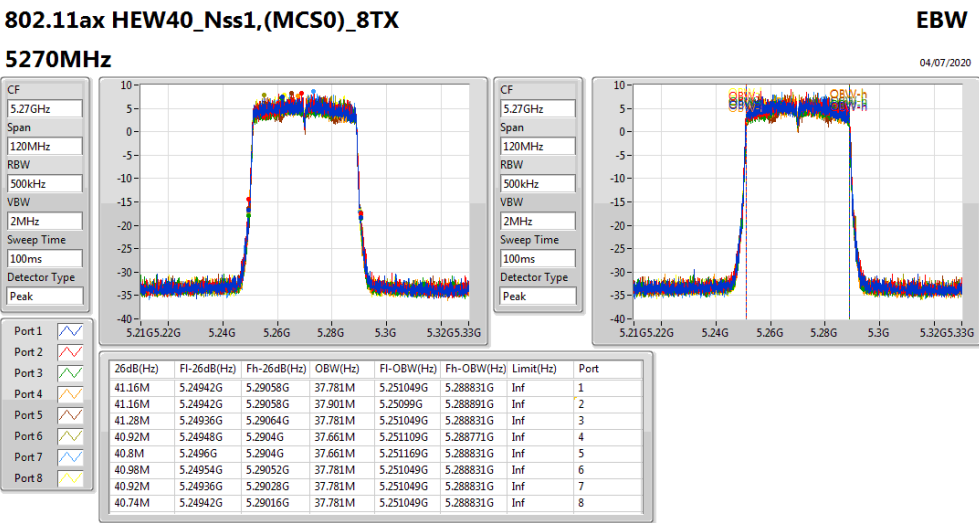
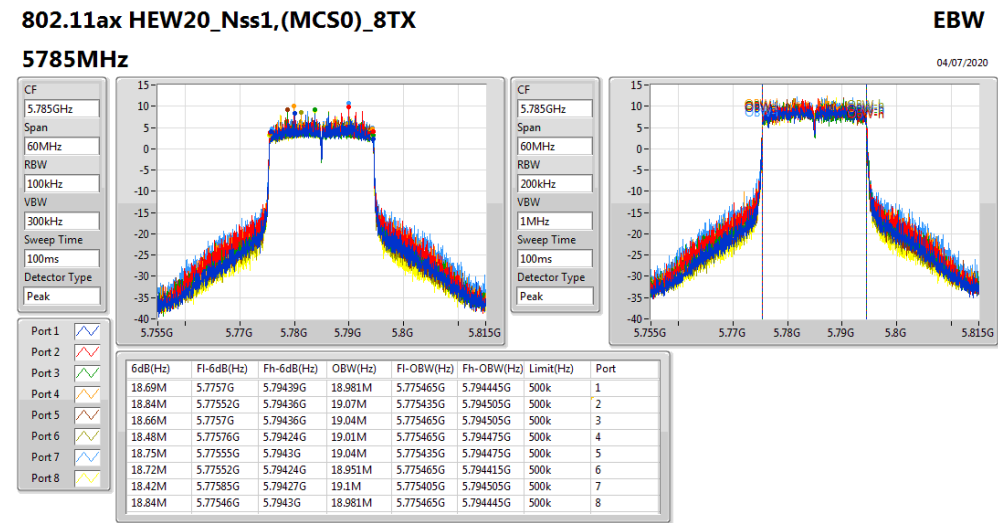
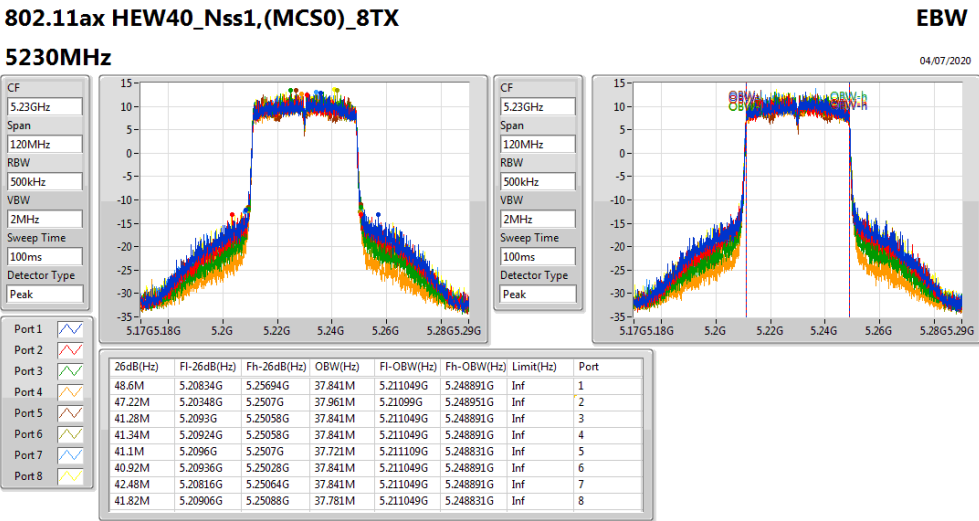
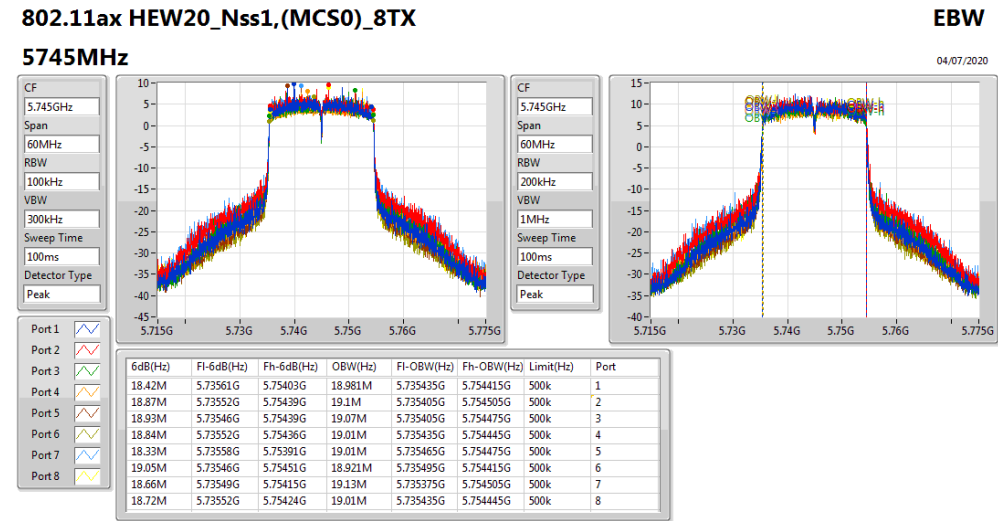
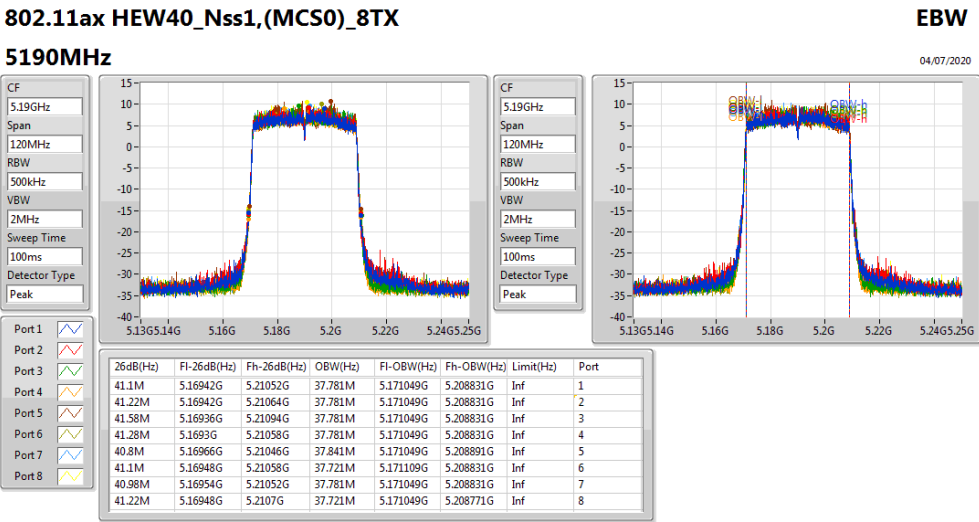
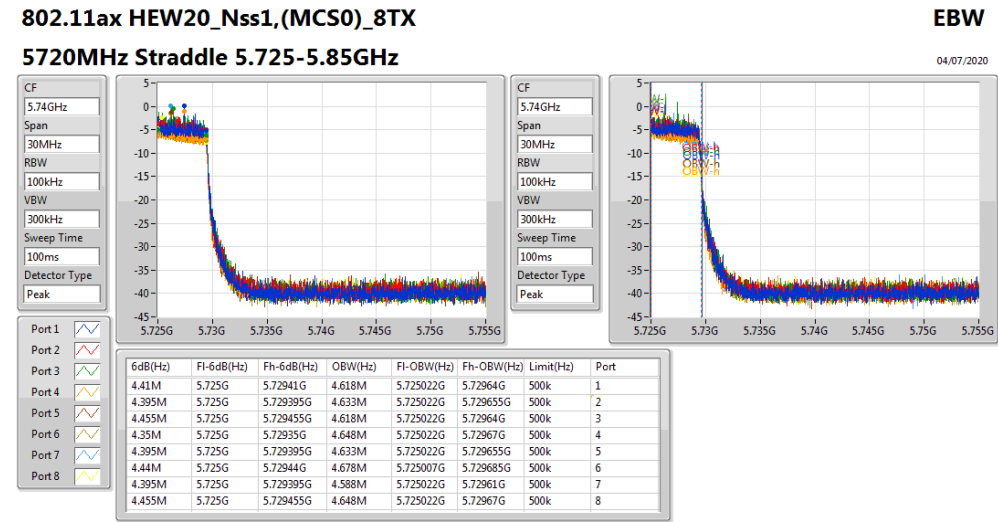
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)	Port 5-N dB (Hz)	Port 5-OBW (Hz)	Port 6-N dB (Hz)	Port 6-OBW (Hz)	Port 7-N dB (Hz)	Port 7-OBW (Hz)	Port 8-N dB (Hz)	Port 8-OBW (Hz)
802.11a_Nss1,(6Mbps)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.2M	16.372M	19.77M	16.402M	19.11M	16.372M	19.08M	16.402M	18.57M	16.282M	19.02M	16.372M	19.5M	16.372M	20.31M	16.402M
5200MHz	Pass	Inf	19.86M	16.372M	19.08M	16.372M	18.99M	16.372M	19.02M	16.402M	18.66M	16.252M	19.05M	16.372M	19.56M	16.372M	20.25M	16.402M
5240MHz	Pass	Inf	19.8M	16.372M	19.44M	16.342M	19.14M	16.372M	19.02M	16.372M	18.63M	16.252M	19.02M	16.372M	19.68M	16.402M	19.68M	16.402M
5260MHz	Pass	Inf	19.32M	16.372M	19.14M	16.372M	19.14M	16.372M	19.26M	16.402M	18.75M	16.282M	19.14M	16.402M	18.93M	16.372M	19.29M	16.402M
5300MHz	Pass	Inf	19.29M	16.372M	19.17M	16.432M	19.2M	16.402M	19.11M	16.402M	19.17M	16.402M	19.41M	16.372M	19.05M	16.372M	19.32M	16.402M
5320MHz	Pass	Inf	19.35M	16.372M	19.2M	16.402M	19.08M	16.402M	18.96M	16.402M	19.05M	16.342M	19.11M	16.402M	18.96M	16.372M	19.32M	16.402M
5500MHz	Pass	Inf	19.26M	16.372M	19.08M	16.402M	19.23M	16.402M	19.14M	16.402M	19.29M	16.402M	19.29M	16.402M	19.05M	16.402M	19.38M	16.402M
5580MHz	Pass	Inf	19.92M	16.372M	19.2M	16.402M	19.17M	16.402M	19.11M	16.402M	19.32M	16.402M	19.02M	16.402M	19.02M	16.372M	19.32M	16.402M
5700MHz	Pass	Inf	19.47M	16.372M	19.2M	16.402M	19.11M	16.402M	18.93M	16.372M	19.47M	16.372M	19.02M	16.432M	19.14M	16.402M	19.14M	16.402M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.665M	13.241M	14.665M	13.241M	14.788M	13.241M	14.7M	13.258M	14.63M	13.223M	14.63M	13.241M	14.683M	13.223M	14.7M	13.241M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.105M	3.853M	3.105M	3.868M	3.105M	3.658M	3.105M	4.033M	3.12M	4.003M	3.105M	3.988M	3.09M	3.658M	3.12M	3.958M
5745MHz	Pass	500k	15.78M	16.492M	16.26M	16.642M	16.26M	16.642M	16.29M	16.642M	16.32M	16.522M	16.29M	16.462M	16.26M	16.792M	16.29M	16.462M
5785MHz	Pass	500k	16.02M	16.522M	15.93M	16.612M	16.02M	16.612M	16.29M	16.522M	16.29M	16.492M	16.05M	16.462M	16.02M	16.672M	16.29M	16.462M
5825MHz	Pass	500k	15.54M	16.522M	16.32M	16.582M	16.02M	16.672M	16.26M	16.582M	16.26M	16.492M	16.29M	16.432M	16.29M	16.762M	16.32M	16.462M
802.11ax HEW20_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.91M	18.951M	21.36M	18.981M	21.18M	18.921M	21.21M	18.891M	20.76M	18.771M	21.06M	18.921M	21.03M	18.951M	21.39M	18.921M
5200MHz	Pass	Inf	21.27M	18.921M	21.24M	18.921M	21.69M	18.921M	21.51M	18.891M	21.27M	18.981M	21.06M	18.921M	21.24M	18.951M	21.36M	18.921M
5240MHz	Pass	Inf	21.12M	18.921M	21.42M	18.951M	21.12M	18.921M	20.97M	18.921M	20.79M	18.801M	21.3M	18.921M	21.27M	18.951M	21.39M	18.921M
5260MHz	Pass	Inf	20.94M	18.951M	21.06M	18.951M	21M	18.921M	21.09M	18.921M	20.91M	18.801M	21.15M	18.891M	21.06M	18.921M	21.33M	18.921M
5300MHz	Pass	Inf	20.82M	18.921M	20.82M	18.951M	21.03M	18.921M	20.85M	18.921M	21.21M	18.951M	21M	18.861M	21.03M	18.921M	20.97M	18.921M
5320MHz	Pass	Inf	20.88M	18.891M	21.09M	18.951M	21.06M	18.921M	21M	18.921M	20.85M	18.861M	21.48M	18.921M	20.73M	18.951M	21.06M	18.921M
5500MHz	Pass	Inf	21.06M	18.981M	21.18M	18.891M	21.12M	18.921M	21.12M	18.981M	21.21M	18.951M	21.21M	18.921M	21.24M	18.921M	21M	18.921M
5580MHz	Pass	Inf	21.12M	18.921M	21.27M	18.981M	21.27M	18.951M	21.12M	18.921M	21.21M	18.921M	21.18M	18.921M	20.97M	18.951M	21.15M	18.921M
5700MHz	Pass	Inf	21.6M	18.951M	21.18M	18.891M	21.21M	18.921M	21.03M	18.921M	21.39M	18.951M	21.21M	18.921M	21.24M	18.921M	21.39M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.575M	14.5M	15.68M	14.483M	15.715M	14.465M	15.558M	14.483M	15.575M	14.465M	15.54M	14.5M	15.645M	14.5M	15.96M	14.465M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.41M	4.618M	4.395M	4.633M	4.455M	4.618M	4.35M	4.648M	4.395M	4.633M	4.44M	4.678M	4.395M	4.588M	4.455M	4.648M
5745MHz	Pass	500k	18.42M	18.981M	18.87M	19.1M	18.93M	19.07M	18.84M	19.01M	18.33M	19.01M	19.05M	18.921M	18.66M	19.13M	18.72M	19.01M
5785MHz	Pass	500k	18.69M	18.981M	18.84M	19.07M	18.66M	19.04M	18.48M	19.01M	18.75M	19.04M	18.72M	18.951M	18.42M	19.1M	18.84M	18.981M
5825MHz	Pass	500k	18.87M	19.04M	17.79M	19.07M	18.69M	19.07M	18.66M	19.07M	18.75M	19.04M	18.81M	18.951M	18.78M	19.16M	18.84M	18.951M
802.11ax HEW40_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.1M	37.781M	41.22M	37.781M	41.58M	37.781M	41.28M	37.781M	40.8M	37.841M	41.1M	37.721M	40.98M	37.781M	41.22M	37.721M
5230MHz	Pass	Inf	48.6M	37.841M	47.22M	37.961M	41.28M	37.841M	41.34M	37.841M	41.1M	37.721M	40.92M	37.841M	42.48M	37.841M	41.82M	37.781M
5270MHz	Pass	Inf	41.16M	37.781M	41.16M	37.901M	41.28M	37.781M	40.92M	37.661M	40.8M	37.661M	40.98M	37.781M	40.92M	37.781M	40.74M	37.781M
5310MHz	Pass	Inf	41.1M	37.781M	40.98M	37.781M	40.68M	37.721M	40.68M	37.721M	40.68M	37.781M	40.86M	37.721M	41.04M	37.781M	40.68M	37.721M
5510MHz	Pass	Inf	40.92M	37.781M	40.8M	37.721M	41.04M	37.781M	41.16M	37.781M	40.62M	37.781M	40.8M	37.781M	40.86M	37.841M	41.1M	37.901M
5550MHz	Pass	Inf	40.92M	37.721M	41.1M	37.661M	40.62M	37.661M	41.16M	37.781M	40.86M	37.781M	40.86M	37.781M	40.62M	37.781M	40.74M	37.781M
5670MHz	Pass	Inf	40.68M	37.721M	40.74M	37.721M	40.68M	37.781M	40.68M	37.781M	40.68M	37.841M	40.8M	37.781M	41.34M	37.721M	41.16M	37.841M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.663M	33.771M	35.288M	33.808M	35.513M	33.808M	35.663M	33.808M	35.4M	33.771M	35.588M	33.733M	35.4M	33.733M	35.625M	33.808M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.93M	4.273M	4.065M	4.198M	4.035M	4.198M	4.065M	4.348M	3.975M	4.333M	4.005M	4.318M	3.945M	4.228M	3.975M	4.288M
5755MHz	Pass	500k	37.2M	37.961M	37.62M	38.261M	38.1M	38.201M	38.28M	38.081M	37.92M	38.081M	37.62M	37.901M	37.86M	38.441M	37.44M	37.901M
5795MHz	Pass	500k	38.04M	37.901M	37.86M	38.201M	37.92M	38.081M	37.62M	38.081M	37.74M	37.961M	37.68M	37.901M	37.44M	38.381M	37.68M	37.901M
802.11ax HEW80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	77.121M	82.08M	77.121M	83.16M	77.241M	82.2M	77.241M	81.96M	77.121M	82.56M	77.121M	81.84M	77.121M	82.32M	77.001M
5290MHz	Pass	Inf	82.08M	77.121M	82.56M	77.361M	82.08M	77.241M	81.84M	77.361M	82.2M	77.121M	82.08M	77.001M	82.44M	77.001M	82.08M	77.121M
5530MHz	Pass	Inf	82.44M	77.241M	82.08M	77.241M	82.56M	77.001M	82.2M	77.121M	82.2M	77.241M	82.08M	77.121M	82.32M	77.241M	82.56M	77.121M
5610MHz	Pass	Inf	82.2M	77.121M	81.84M	77.001M	82.56M	77.121M	82.68M	77.241M	82.44M	77.241M	81.96M	77.121M	82.32M	77.121M	82.2M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.105M	73.201M	76.338M	73.123M	76.26M	73.201M	76.105M	73.201M	76.338M	73.201M	76.183M	73.278M	76.183M	73.201M	76.028M	73.278M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.005M	4.183M	3.975M	4.183M	4.02M	4.198M	4.05M	4.183M	4.035M	4.183M	4.02M	4.213M	4.02M	4.198M	4.02M	4.213M
5775MHz	Pass	500k	76.8M	77.121M	73.08M	77.241M	77.16M	77.361M	75M	77.241M	77.76M	77.361M	77.4M	77.001M	76.44M	77.361M	75M	77.361M

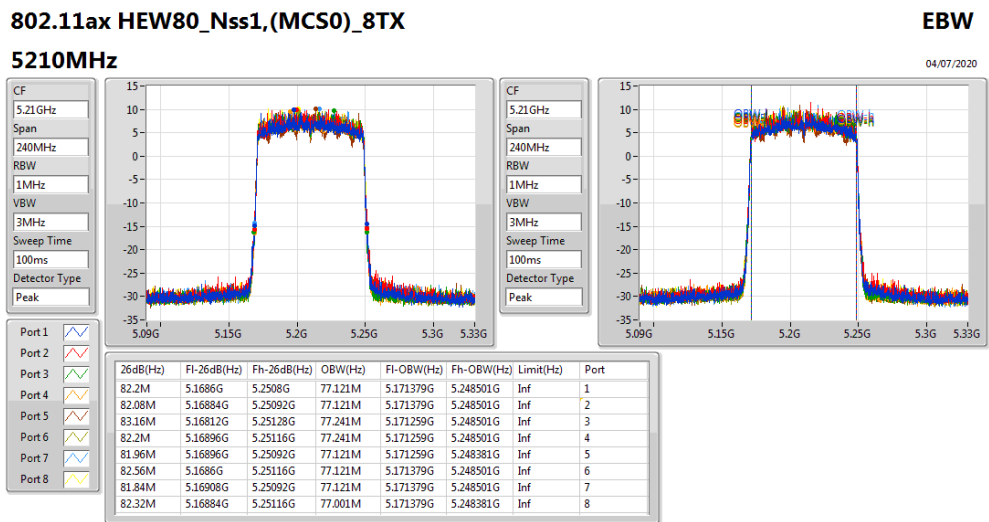
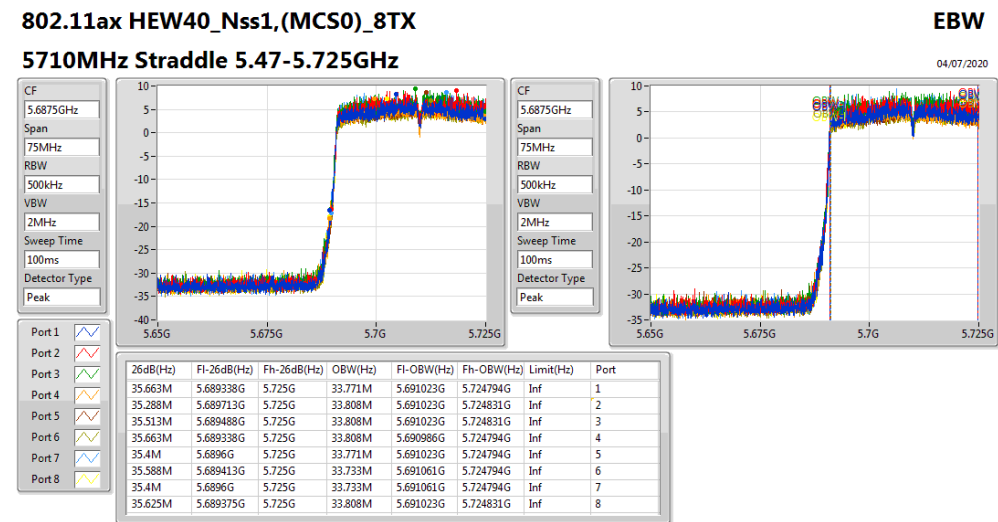
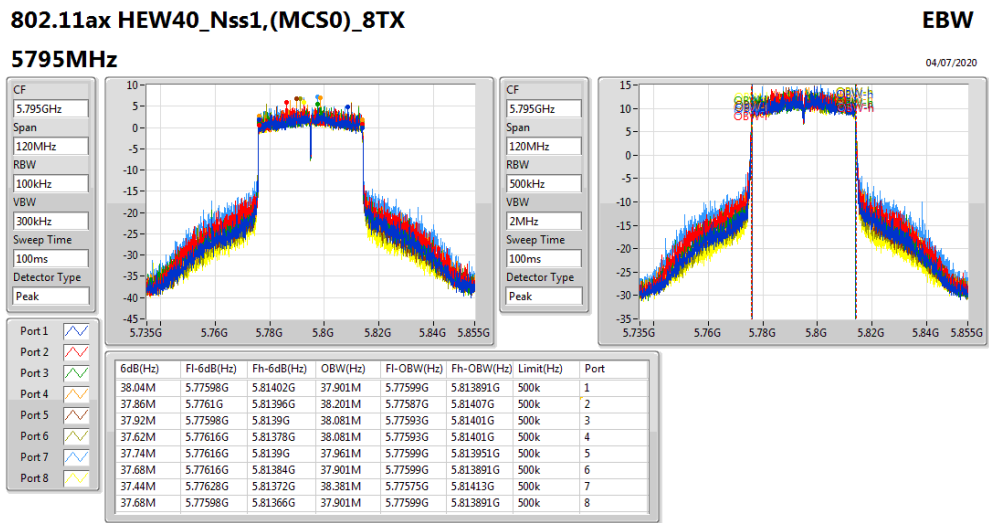
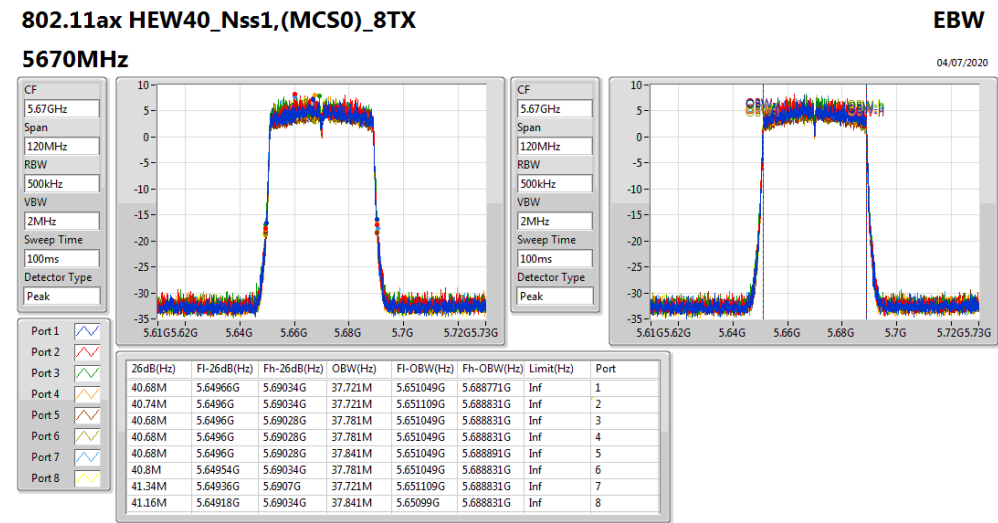
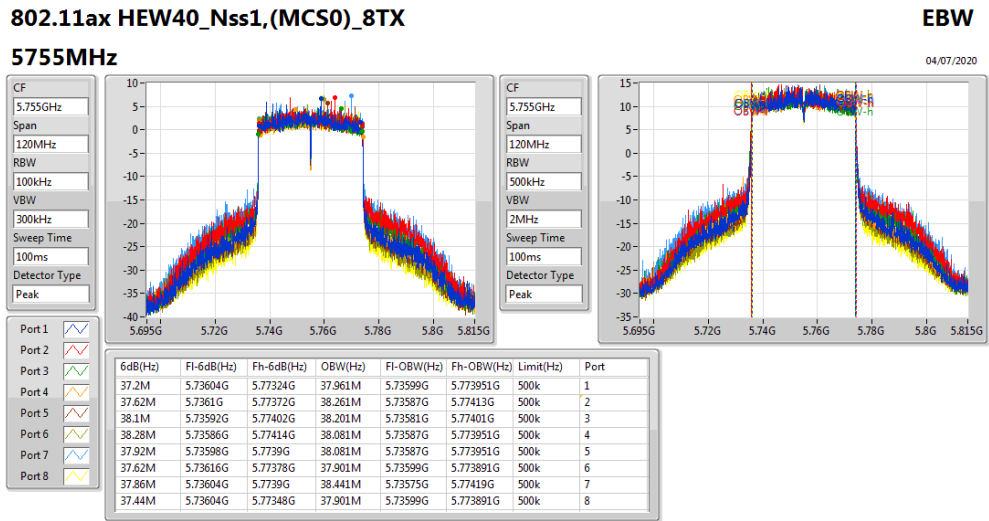
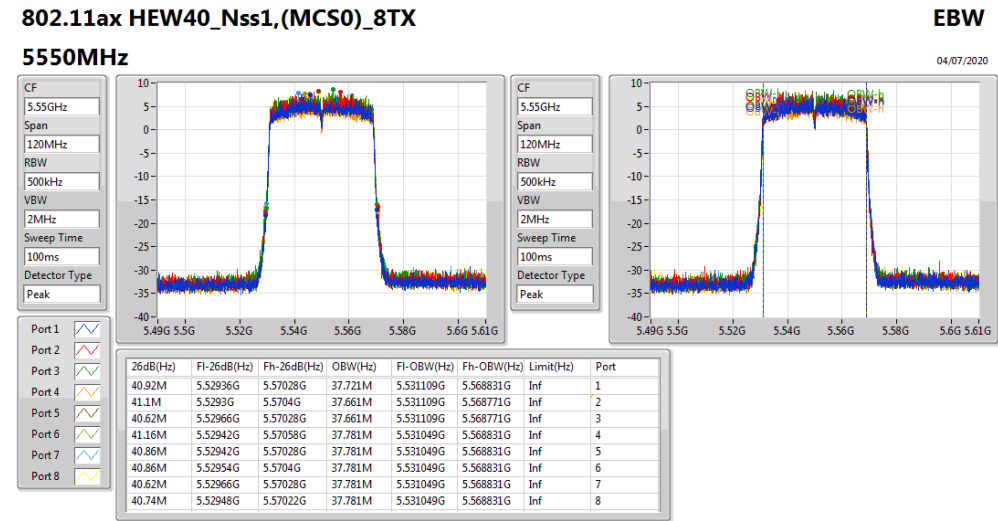
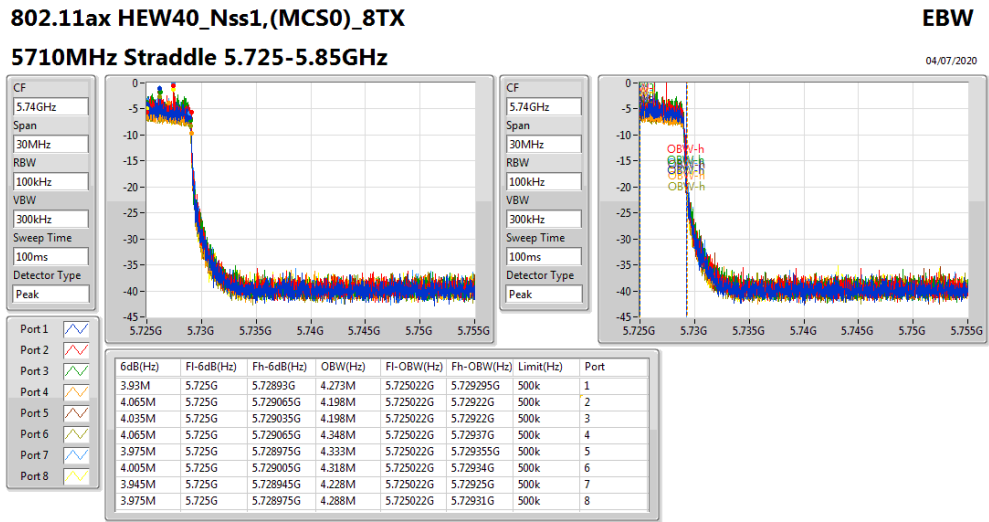
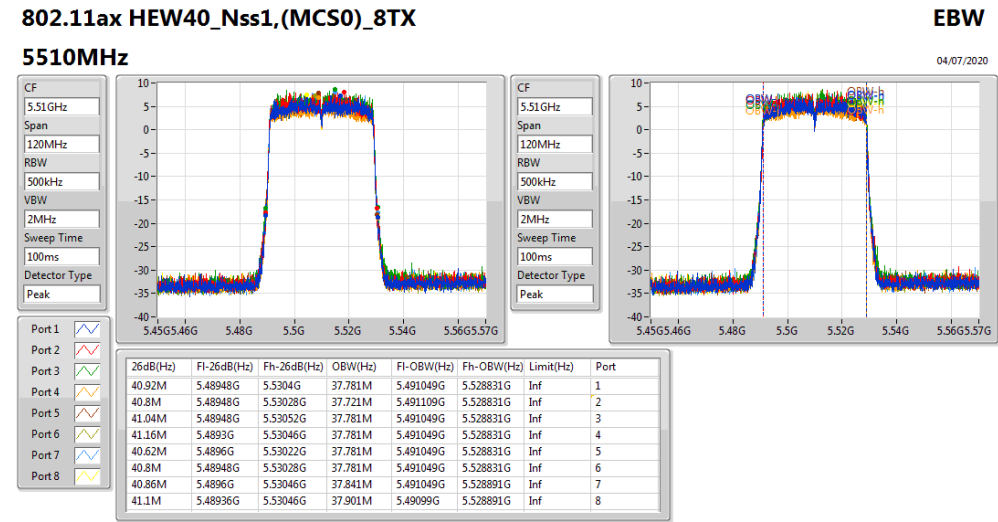
Port X-N dB = Port X 6dB down bandwidth for UNII-3 band / 26dB down bandwidth for other band; Port X-OBW = Port X 99% occupied bandwidth;

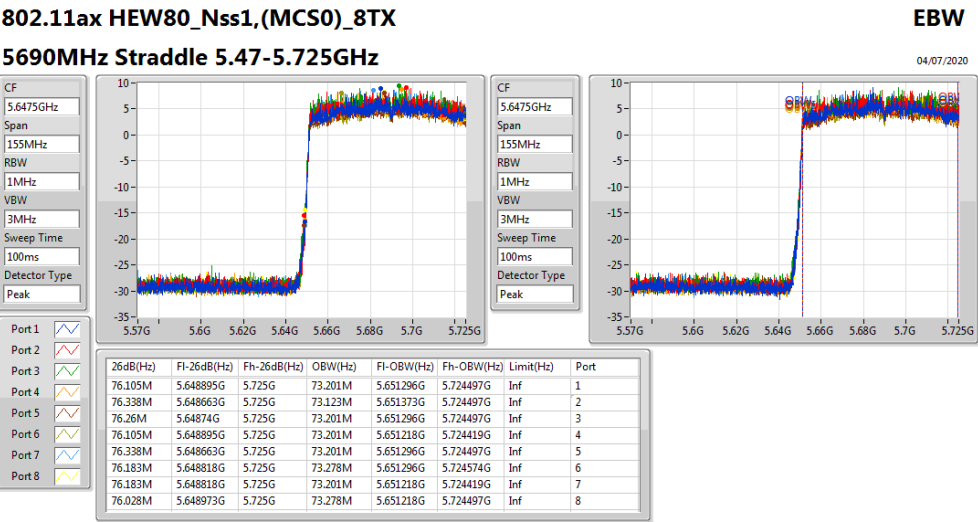
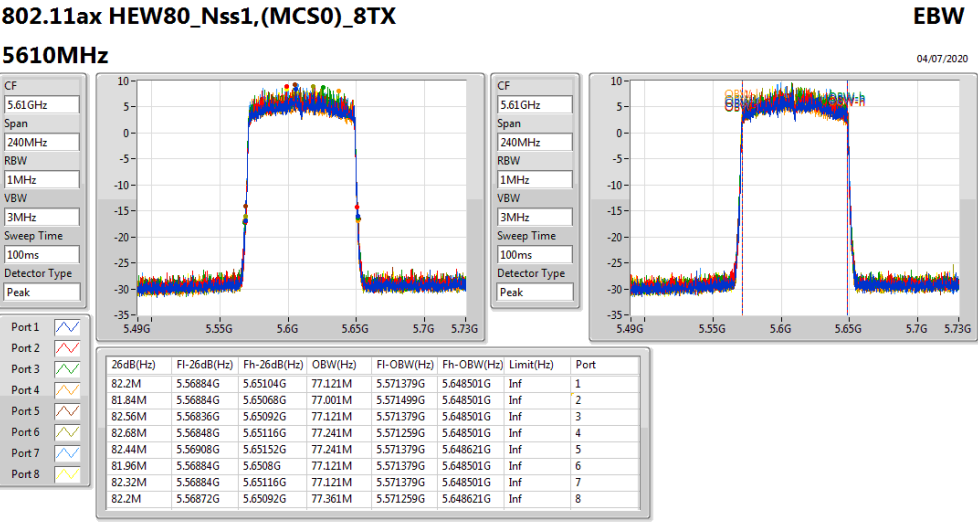
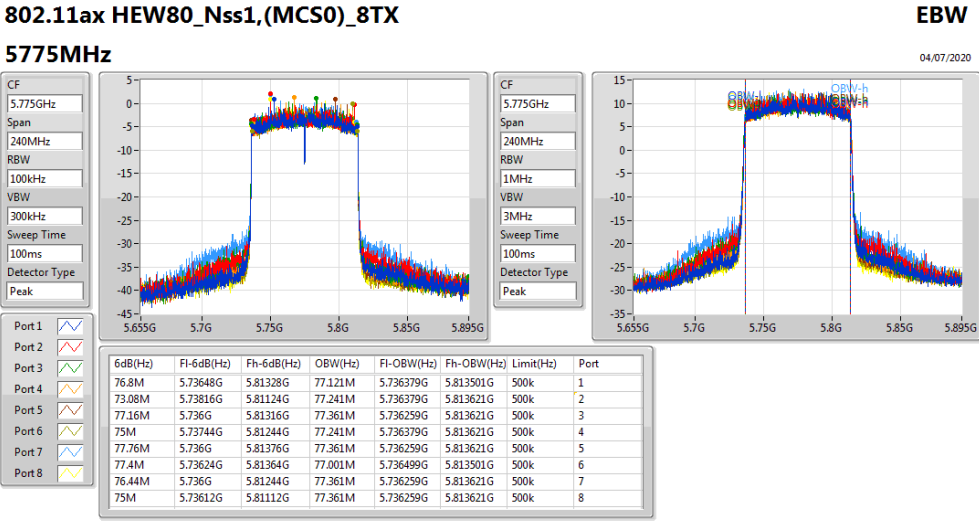
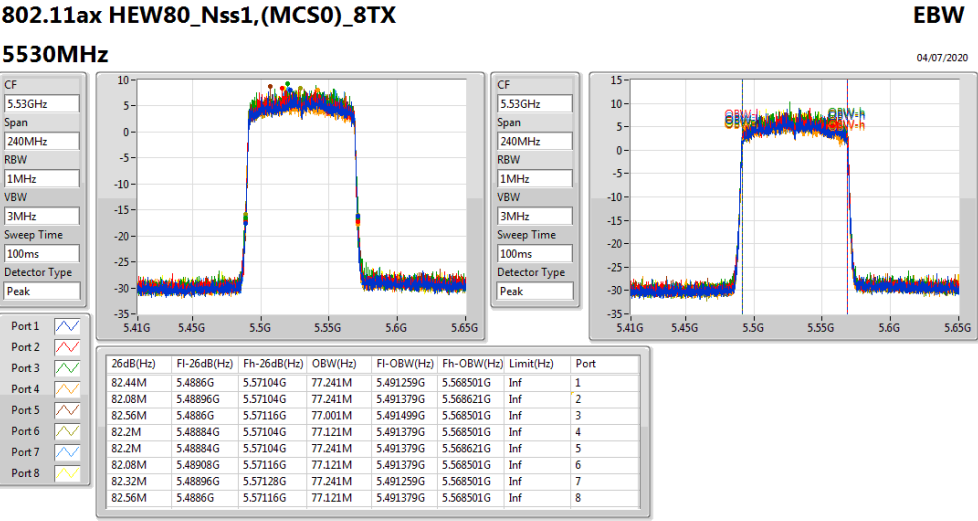
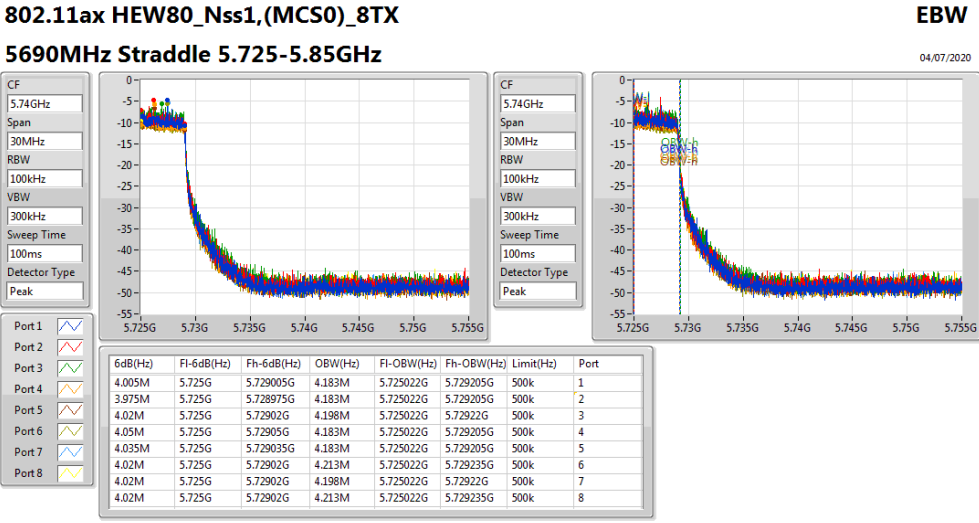
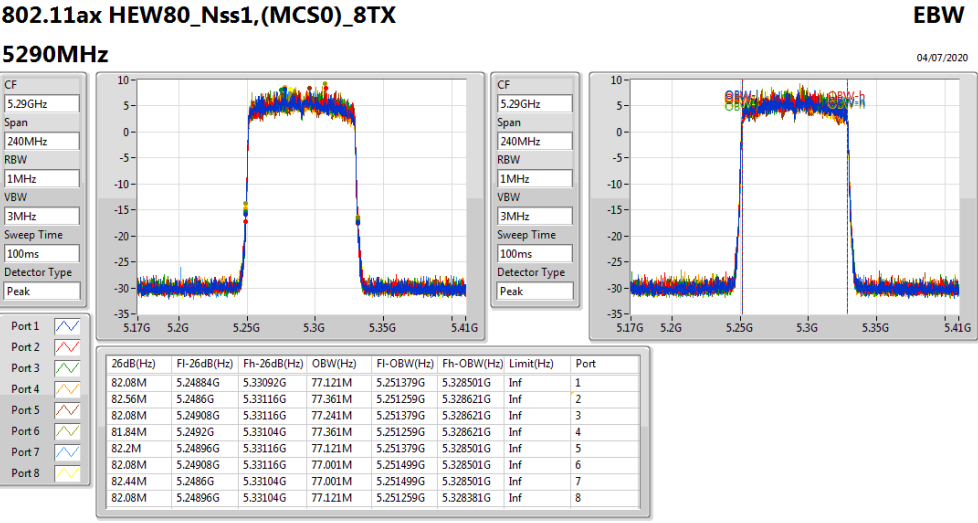














8TX mode <160MHz (80+80MHz)>:
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	82.32M	77.361M	77M4D1D	82.08M	77.121M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	82.68M	77.241M	77M2D1D	81.84M	77.121M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW80+80_Nss2,(MCS0)_8TX	83.16M	77.241M	77M2D1D	81.96M	77.121M

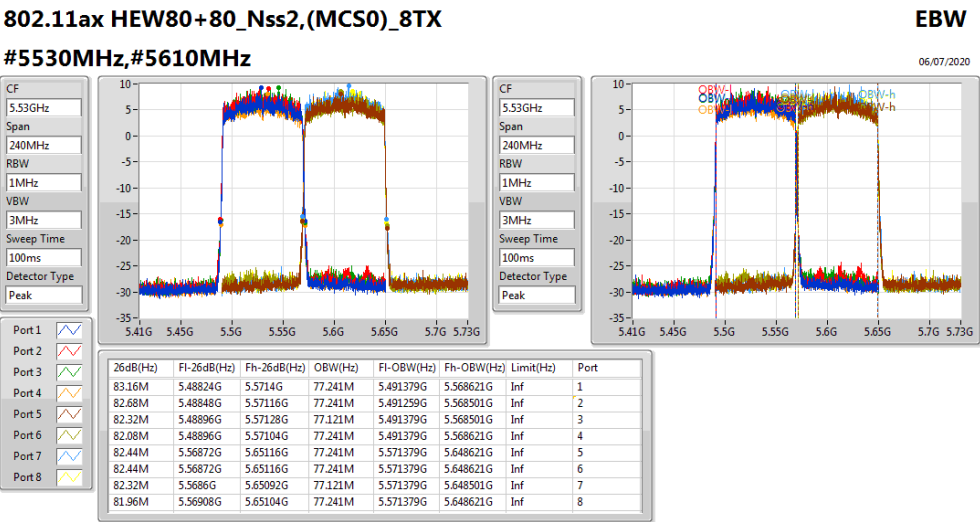
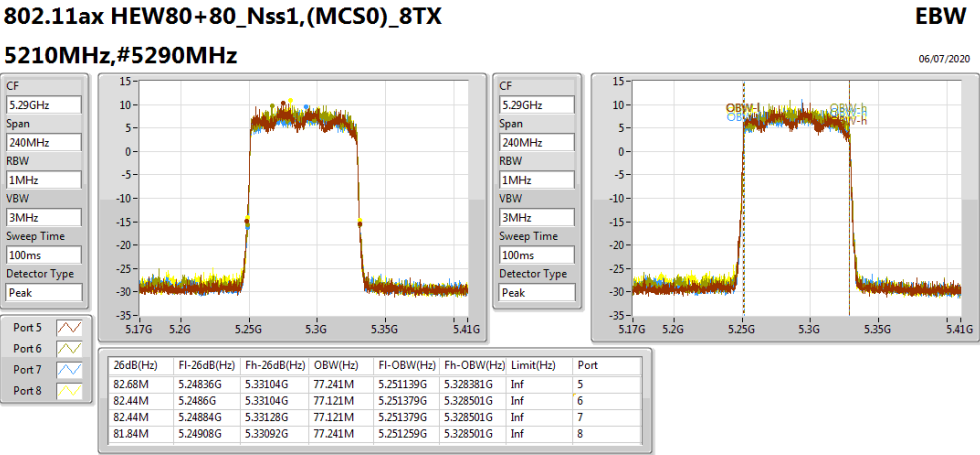
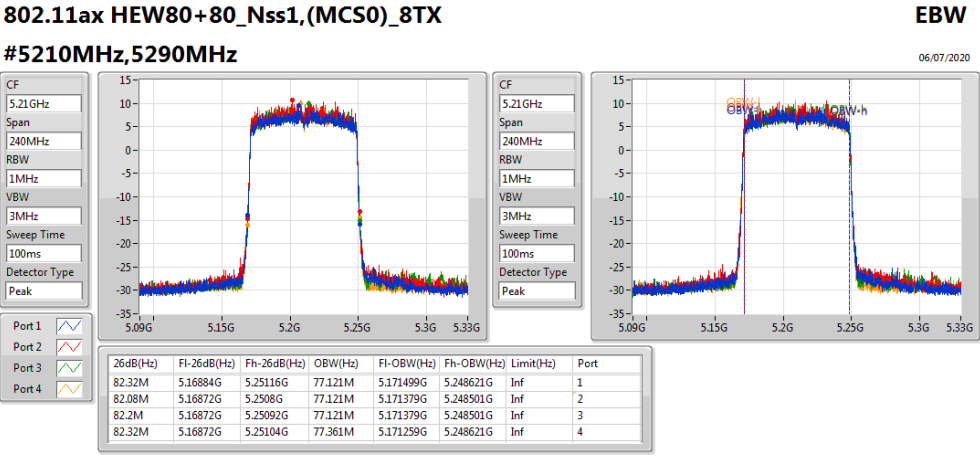
Max-N dB = Maximum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for UNII-3 band / Maximum 26dB down bandwidth for other band; Min-OBW = Minimum 99% occupied bandwidth;



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)	Port 5-N dB (Hz)	Port 5-OBW (Hz)	Port 6-N dB (Hz)	Port 6-OBW (Hz)	Port 7-N dB (Hz)	Port 7-OBW (Hz)	Port 8-N dB (Hz)	Port 8-OBW (Hz)
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	Inf	82.32M	77.121M	82.08M	77.121M	82.2M	77.121M	82.32M	77.361M								
5210MHz,#5290MHz	Pass	Inf									82.68M	77.241M	82.44M	77.121M	82.44M	77.121M	81.84M	77.241M
802.11ax HEW80+80_Nss2,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	Inf	83.16M	77.241M	82.68M	77.241M	82.32M	77.121M	82.08M	77.241M	82.44M	77.241M	82.44M	77.241M	82.32M	77.121M	81.96M	77.241M

Port X-N dB = Port X 6dB down bandwidth for UNII-3 band / 26dB down bandwidth for other band; Port X-OBW = Port X 99% occupied bandwidth;





For non-beamforming function:
4TX mode <20MHz, 40MHz, 80MHz>:
Summary

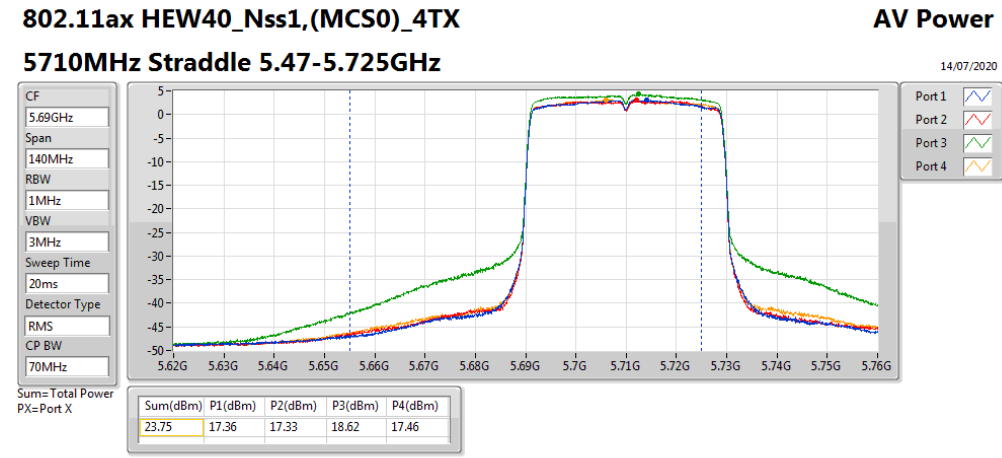
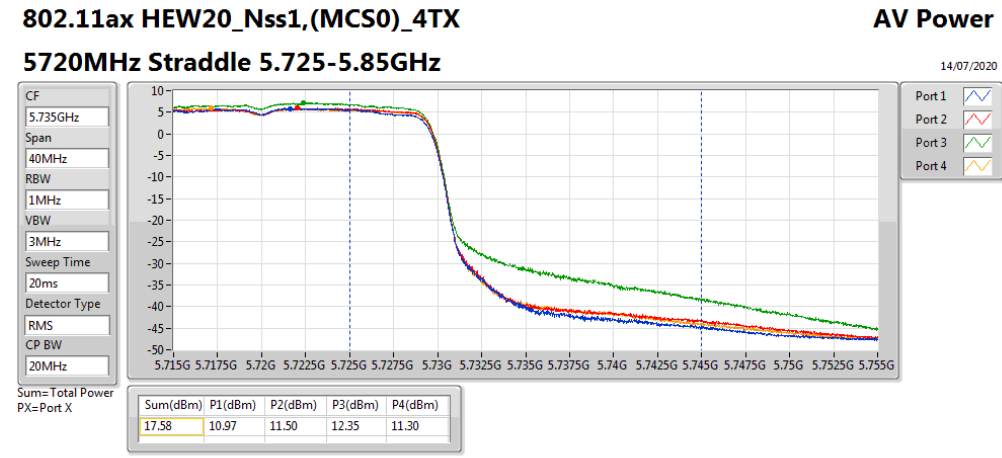
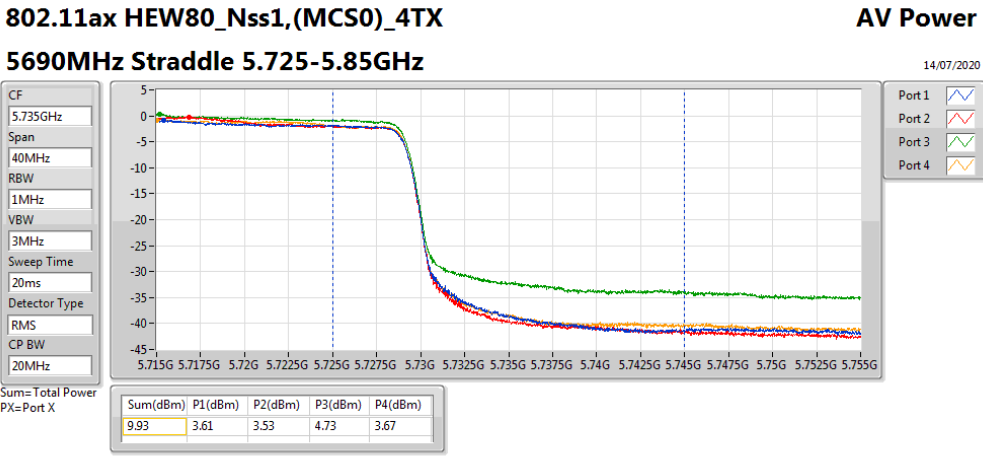
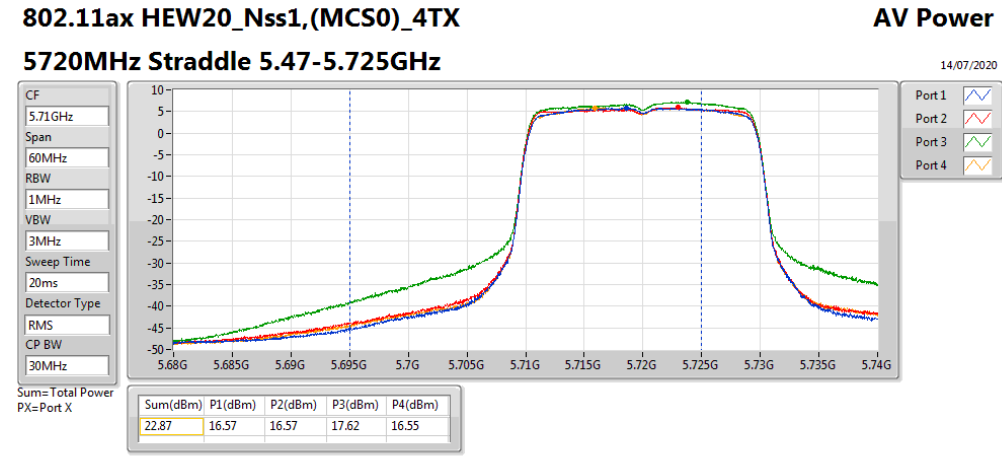
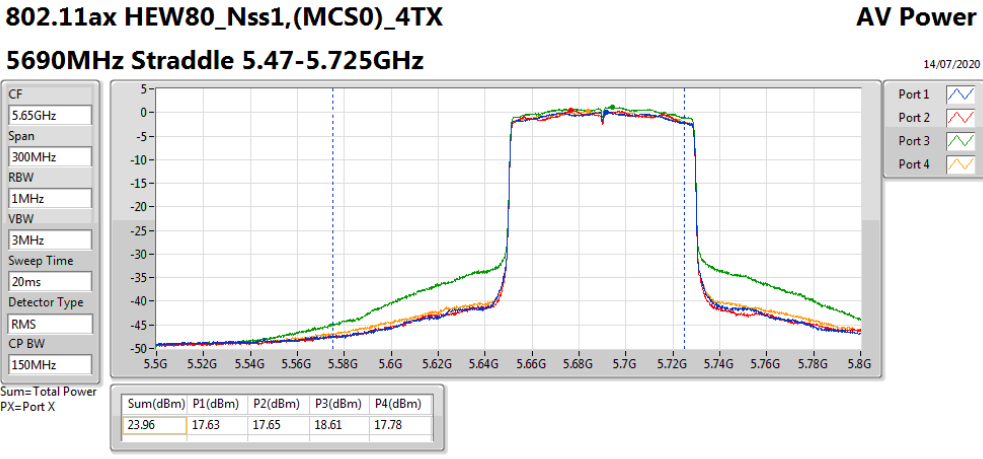
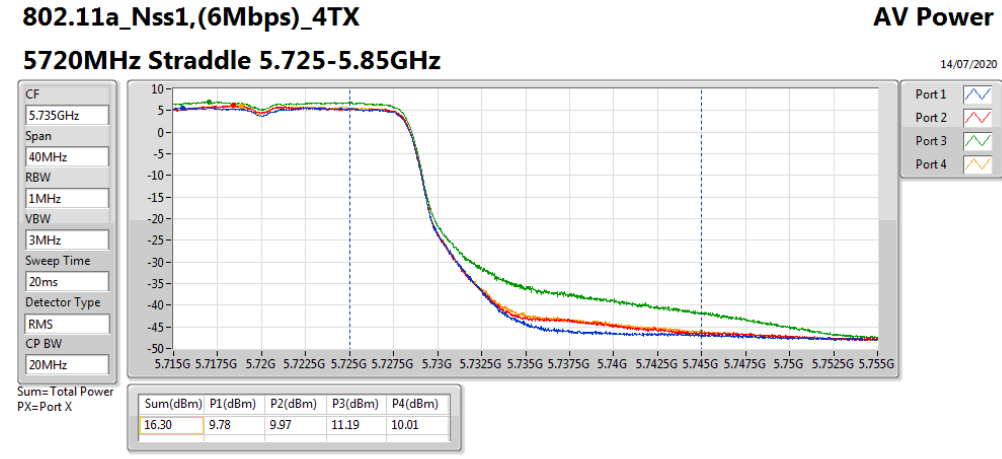
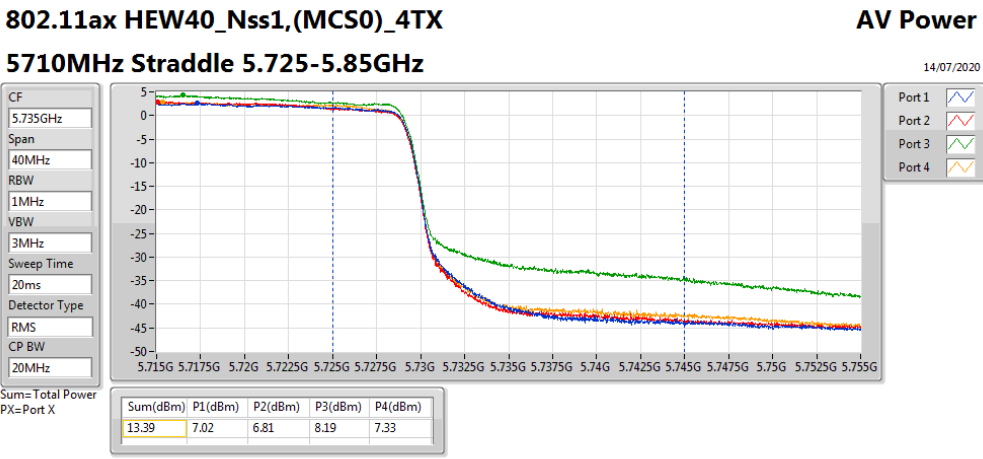
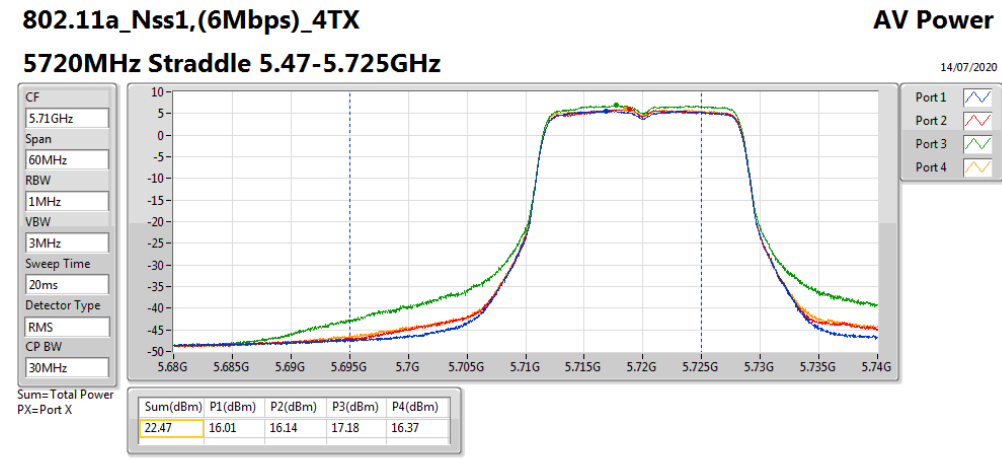
Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	27.65	0.58210
802.11ax HEW20_Nss1,(MCS0)_4TX	27.73	0.59293
802.11ax HEW40_Nss1,(MCS0)_4TX	22.84	0.19231
802.11ax HEW80_Nss1,(MCS0)_4TX	22.43	0.17498
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.51	0.22439
802.11ax HEW20_Nss1,(MCS0)_4TX	23.93	0.24717
802.11ax HEW40_Nss1,(MCS0)_4TX	23.93	0.24717
802.11ax HEW80_Nss1,(MCS0)_4TX	22.62	0.18281
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.77	0.23823
802.11ax HEW20_Nss1,(MCS0)_4TX	23.94	0.24774
802.11ax HEW40_Nss1,(MCS0)_4TX	23.84	0.24210
802.11ax HEW80_Nss1,(MCS0)_4TX	23.96	0.24889
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	28.89	0.77446
802.11ax HEW20_Nss1,(MCS0)_4TX	28.99	0.79250
802.11ax HEW40_Nss1,(MCS0)_4TX	29.77	0.94842
802.11ax HEW80_Nss1,(MCS0)_4TX	26.52	0.44875



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	1.50	19.06	18.87	19.12	19.08	25.05	30.00
5200MHz	Pass	1.50	21.75	21.17	21.81	21.77	27.65	30.00
5240MHz	Pass	1.50	21.23	20.53	21.24	21.08	27.05	30.00
5260MHz	Pass	1.50	17.36	16.95	17.28	17.46	23.29	23.80
5300MHz	Pass	1.50	17.43	17.16	17.78	17.57	23.51	23.73
5320MHz	Pass	1.50	17.61	17.02	17.42	17.47	23.41	23.72
5500MHz	Pass	1.50	17.44	17.24	17.73	17.43	23.48	23.81
5580MHz	Pass	1.50	17.14	17.05	17.79	17.43	23.38	23.75
5700MHz	Pass	1.50	17.40	17.40	18.54	17.54	23.77	23.81
5720MHz Straddle 5.47-5.725GHz	Pass	1.50	16.01	16.14	17.18	16.37	22.47	22.66
5720MHz Straddle 5.725-5.85GHz	Pass	1.50	9.78	9.97	11.19	10.01	16.30	30.00
5745MHz	Pass	1.50	22.54	22.71	23.62	22.49	28.89	30.00
5785MHz	Pass	1.50	22.36	22.56	23.34	22.34	28.69	30.00
5825MHz	Pass	1.50	22.50	22.13	23.81	22.44	28.79	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	1.50	17.59	17.42	17.77	17.94	23.70	30.00
5200MHz	Pass	1.50	21.78	21.39	21.79	21.87	27.73	30.00
5240MHz	Pass	1.50	21.51	20.60	21.39	21.24	27.22	30.00
5260MHz	Pass	1.50	17.77	17.60	18.17	18.09	23.93	23.98
5300MHz	Pass	1.50	17.78	17.61	17.87	17.74	23.77	23.98
5320MHz	Pass	1.50	17.88	17.34	17.86	17.88	23.77	23.98
5500MHz	Pass	1.50	17.75	17.66	17.96	17.67	23.78	23.98
5580MHz	Pass	1.50	17.81	17.58	18.25	18.02	23.94	23.98
5700MHz	Pass	1.50	17.43	17.58	18.63	17.72	23.89	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.50	16.57	16.57	17.62	16.55	22.87	22.92
5720MHz Straddle 5.725-5.85GHz	Pass	1.50	10.97	11.50	12.35	11.30	17.58	30.00
5745MHz	Pass	1.50	22.73	22.88	23.66	22.51	28.99	30.00
5785MHz	Pass	1.50	22.52	22.75	23.49	22.29	28.81	30.00
5825MHz	Pass	1.50	22.63	22.76	23.81	22.53	28.98	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	1.50	16.53	16.66	17.08	16.97	22.84	30.00
5230MHz	Pass	1.50	16.12	16.63	16.99	17.02	22.73	30.00
5270MHz	Pass	1.50	17.89	17.60	18.22	17.92	23.93	23.98
5310MHz	Pass	1.50	17.54	17.53	18.07	17.89	23.78	23.98
5510MHz	Pass	1.50	16.59	16.45	16.80	16.64	22.64	23.98
5550MHz	Pass	1.50	17.86	17.57	18.12	17.69	23.84	23.98
5670MHz	Pass	1.50	17.61	17.48	18.36	17.43	23.76	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	1.50	17.36	17.33	18.62	17.46	23.75	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	1.50	7.02	6.81	8.19	7.33	13.39	30.00
5755MHz	Pass	1.50	22.04	22.24	23.08	21.88	28.36	30.00
5795MHz	Pass	1.50	23.50	23.64	24.59	23.13	29.77	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	1.50	16.09	16.36	16.76	16.42	22.43	30.00
5290MHz	Pass	1.50	16.33	16.53	16.82	16.72	22.62	23.98
5530MHz	Pass	1.50	15.60	16.22	16.74	16.43	22.29	23.98
5610MHz	Pass	1.50	17.80	17.62	18.42	17.84	23.95	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	1.50	17.63	17.65	18.61	17.78	23.96	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	1.50	3.61	3.53	4.73	3.67	9.93	30.00
5775MHz	Pass	1.50	20.16	20.40	21.27	20.04	26.52	30.00

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





4TX mode <160MHz (80+80MHz)>:
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_4TX	20.42	0.11015
5.25-5.35GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_4TX	20.72	0.11803
5.47-5.725GHz	-	-
802.11ax HEW80+80_Nss2,(MCS0)_4TX	23.48	0.22284



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	1.50	17.36	17.46			20.42	30.00
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	1.50			17.75	17.67	20.72	23.98
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	1.50	17.78	17.61	17.16	17.24	23.48	23.98

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



8TX mode <20MHz, 40MHz, 80MHz>:
Summary

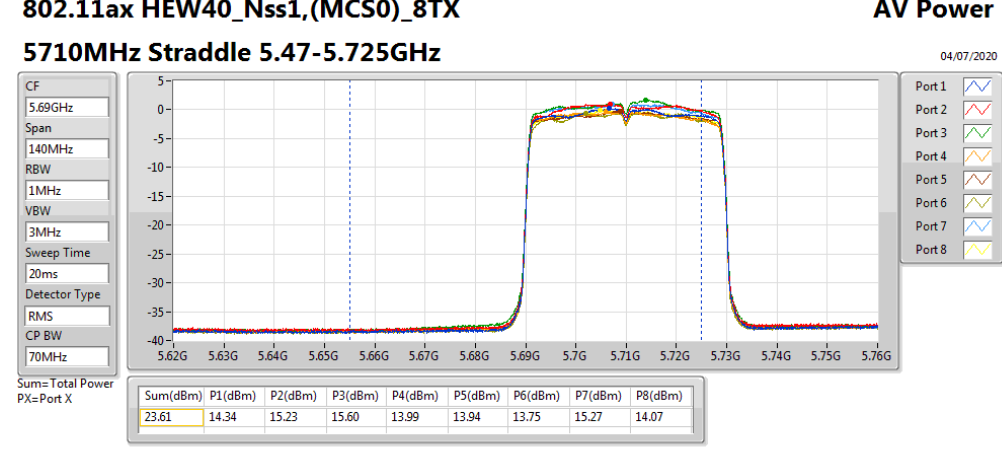
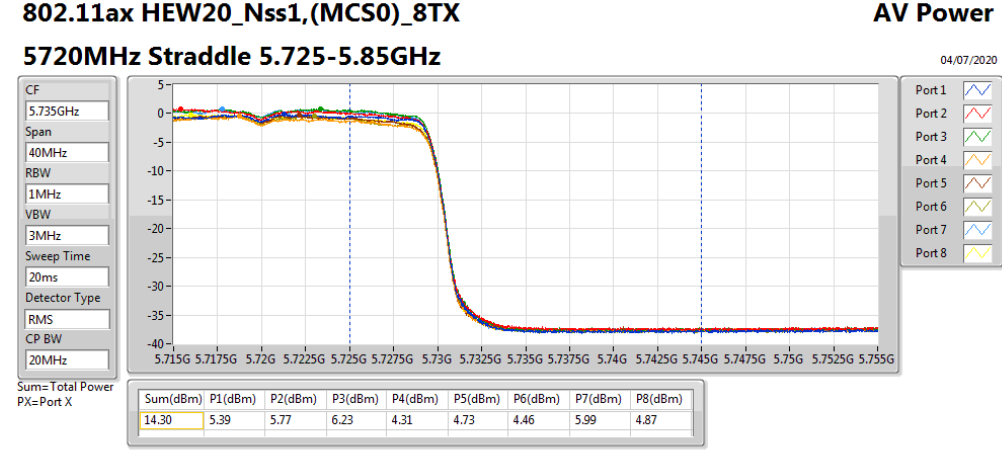
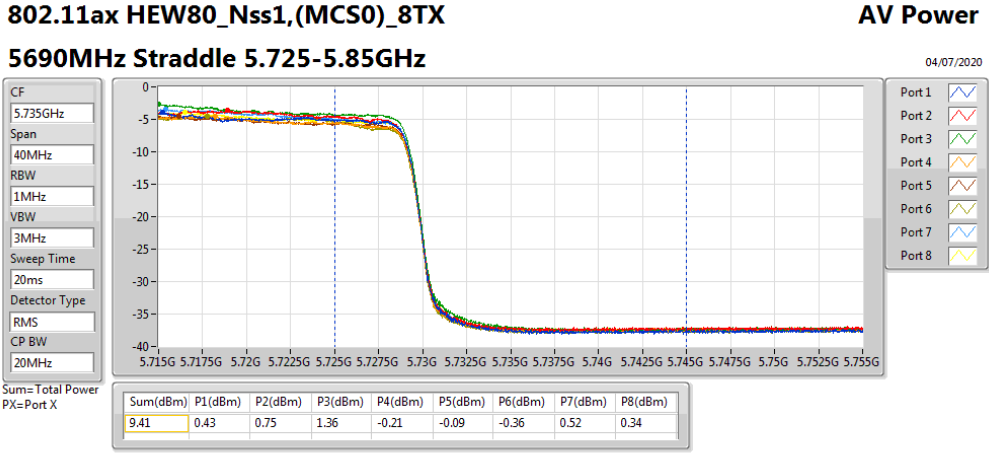
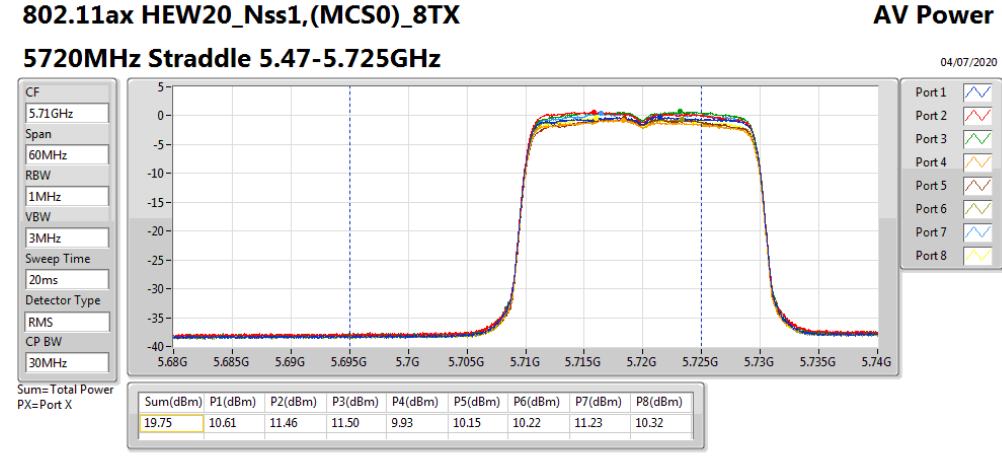
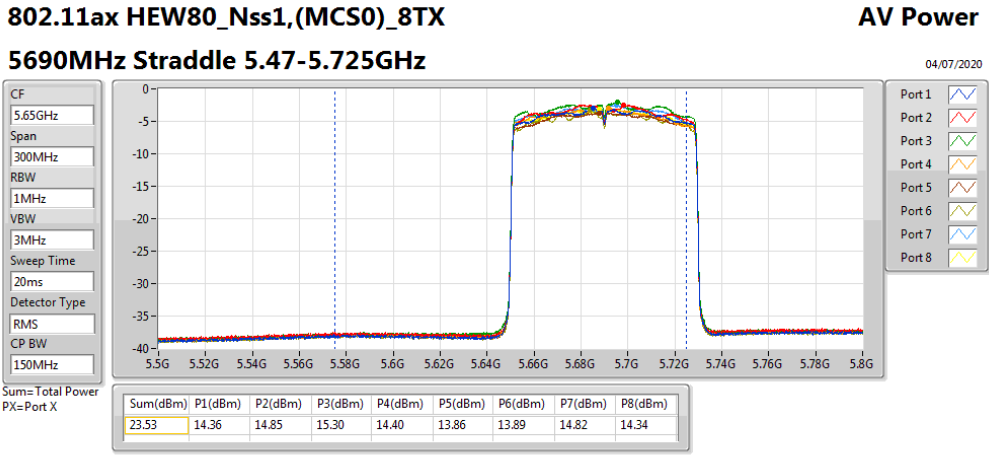
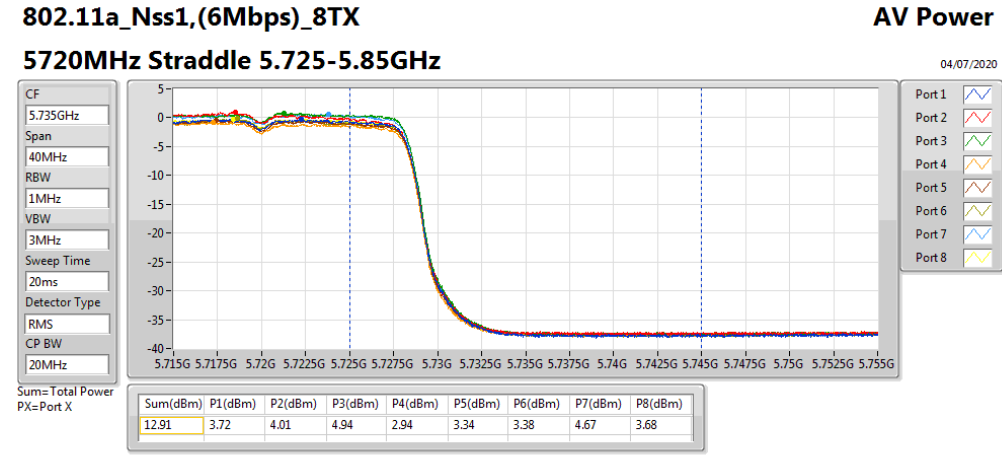
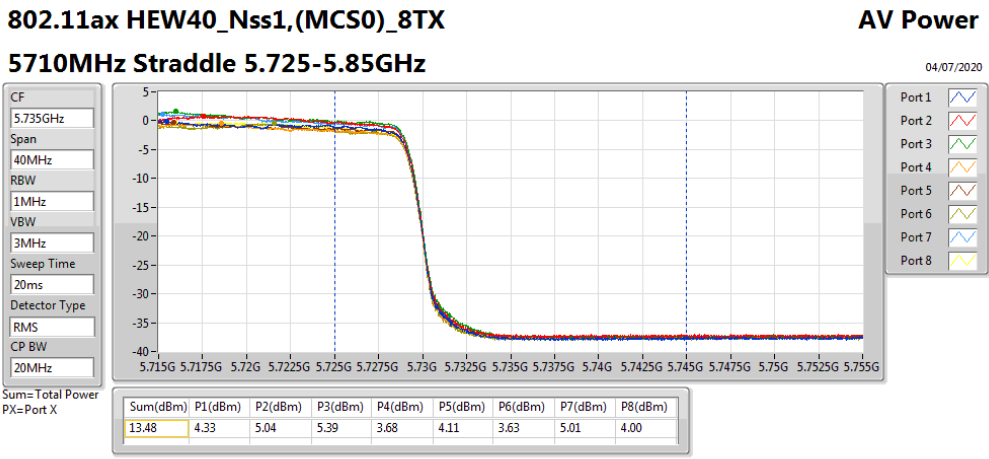
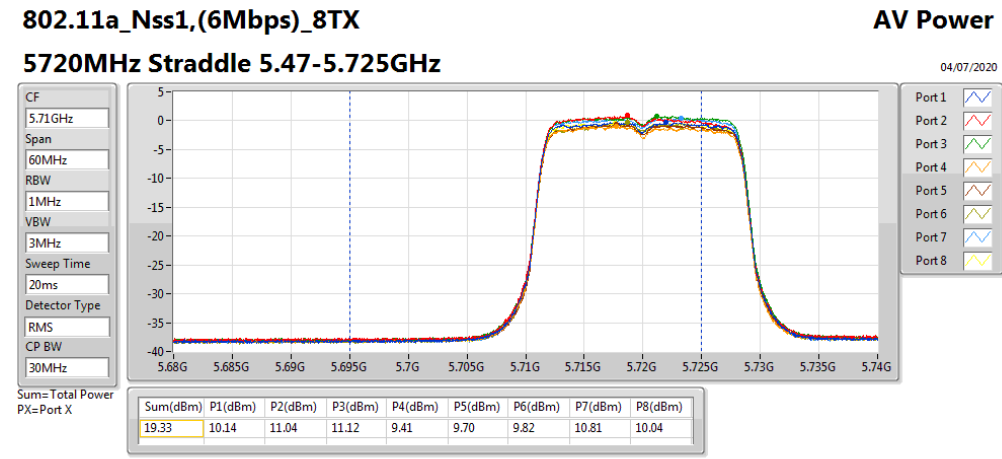
Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	26.34	0.43053
802.11ax HEW20_Nss1,(MCS0)_8TX	27.13	0.51642
802.11ax HEW40_Nss1,(MCS0)_8TX	28.62	0.72778
802.11ax HEW80_Nss1,(MCS0)_8TX	25.20	0.33113
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	20.38	0.10914
802.11ax HEW20_Nss1,(MCS0)_8TX	21.19	0.13152
802.11ax HEW40_Nss1,(MCS0)_8TX	23.95	0.24831
802.11ax HEW80_Nss1,(MCS0)_8TX	23.73	0.23605
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	20.57	0.11402
802.11ax HEW20_Nss1,(MCS0)_8TX	20.93	0.12388
802.11ax HEW40_Nss1,(MCS0)_8TX	23.84	0.24210
802.11ax HEW80_Nss1,(MCS0)_8TX	23.95	0.24831
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	29.71	0.93541
802.11ax HEW20_Nss1,(MCS0)_8TX	29.81	0.95719
802.11ax HEW40_Nss1,(MCS0)_8TX	29.98	0.99541
802.11ax HEW80_Nss1,(MCS0)_8TX	27.86	0.61094



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.50	17.22	17.43	17.37	17.03	17.48	17.28	17.44	17.22	26.34	30.00
5200MHz	Pass	4.50	16.84	17.18	17.06	16.96	17.49	17.23	17.47	16.74	26.16	30.00
5240MHz	Pass	4.50	17.28	17.34	17.12	17.36	17.49	17.18	17.62	17.01	26.33	30.00
5260MHz	Pass	4.50	11.36	10.81	11.17	10.65	11.06	11.28	11.34	10.88	20.11	23.73
5300MHz	Pass	4.50	11.47	11.34	11.33	11.06	11.55	11.63	11.51	10.86	20.38	23.80
5320MHz	Pass	4.50	11.42	11.07	11.46	11.13	11.58	11.29	11.30	10.93	20.31	23.78
5500MHz	Pass	4.50	11.57	11.73	11.75	11.12	11.30	11.42	11.70	11.67	20.57	23.80
5580MHz	Pass	4.50	10.92	11.25	11.15	11.01	10.97	11.14	11.47	11.41	20.20	23.79
5700MHz	Pass	4.50	11.14	11.38	12.02	10.84	10.72	10.55	11.62	10.93	20.21	23.77
5720MHz Straddle 5.47-5.725GHz	Pass	4.50	10.14	11.04	11.12	9.41	9.70	9.82	10.81	10.04	19.33	22.65
5720MHz Straddle 5.725-5.85GHz	Pass	4.50	3.72	4.01	4.94	2.94	3.34	3.38	4.67	3.68	12.91	30.00
5745MHz	Pass	4.50	20.74	21.02	20.56	20.30	20.45	20.66	21.06	20.61	29.71	30.00
5785MHz	Pass	4.50	20.23	20.57	20.51	20.48	20.42	20.54	21.09	20.31	29.56	30.00
5825MHz	Pass	4.50	20.51	20.44	20.85	20.43	20.35	20.11	20.96	20.22	29.52	30.00
802.11ax HEW20_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.50	17.95	17.90	18.08	17.98	17.96	18.05	18.32	18.53	27.13	30.00
5200MHz	Pass	4.50	17.67	17.86	17.95	17.74	18.32	17.79	18.36	18.07	27.01	30.00
5240MHz	Pass	4.50	17.90	17.93	17.98	17.58	18.01	17.96	18.26	18.41	27.04	30.00
5260MHz	Pass	4.50	11.95	11.84	11.46	11.66	11.78	12.05	12.11	12.02	20.89	23.98
5300MHz	Pass	4.50	12.29	12.15	12.05	11.61	12.54	12.09	12.43	12.04	21.19	23.98
5320MHz	Pass	4.50	12.15	12.08	12.20	11.68	12.04	11.94	12.07	12.02	21.06	23.98
5500MHz	Pass	4.50	11.71	11.69	12.23	11.11	11.73	11.51	11.70	11.93	20.74	23.98
5580MHz	Pass	4.50	11.56	11.80	12.05	11.55	11.71	11.78	12.12	12.05	20.86	23.98
5700MHz	Pass	4.50	11.86	12.28	12.45	11.86	11.49	11.21	12.27	11.66	20.93	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.50	10.61	11.46	11.50	9.93	10.15	10.22	11.23	10.32	19.75	22.91
5720MHz Straddle 5.725-5.85GHz	Pass	4.50	5.39	5.77	6.23	4.31	4.73	4.46	5.99	4.87	14.30	30.00
5745MHz	Pass	4.50	20.76	21.29	20.59	20.15	20.56	20.66	21.19	20.92	29.81	30.00
5785MHz	Pass	4.50	20.25	20.84	20.08	20.90	20.57	20.62	20.57	20.35	29.56	30.00
5825MHz	Pass	4.50	20.69	20.56	20.40	20.81	20.22	20.20	21.18	20.15	29.57	30.00
802.11ax HEW40_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	1.50	16.35	16.52	16.53	16.25	16.98	16.62	16.78	16.94	25.66	30.00
5230MHz	Pass	1.50	19.50	19.48	19.72	19.30	19.69	19.31	19.49	20.15	28.62	30.00
5270MHz	Pass	1.50	14.63	15.05	14.57	14.47	14.88	15.20	15.44	15.04	23.95	23.98
5310MHz	Pass	1.50	14.76	14.84	15.03	14.14	14.82	15.01	14.97	14.73	23.83	23.98
5510MHz	Pass	1.50	14.62	15.08	15.34	14.39	14.80	14.67	14.81	14.68	23.84	23.98
5550MHz	Pass	1.50	14.48	14.97	15.33	14.05	14.89	14.65	14.84	15.01	23.82	23.98
5670MHz	Pass	1.50	14.34	15.10	15.15	14.75	14.10	14.18	14.79	14.41	23.65	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	1.50	14.34	15.23	15.60	13.99	13.94	13.75	15.27	14.07	23.61	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	1.50	4.33	5.04	5.39	3.68	4.11	3.63	5.01	4.00	13.48	30.00
5755MHz	Pass	1.50	21.10	21.46	21.02	20.83	20.72	20.28	21.41	20.63	29.98	30.00
5795MHz	Pass	1.50	20.61	21.23	20.75	21.09	20.93	20.82	21.45	20.51	29.96	30.00
802.11ax HEW80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	1.50	15.85	15.73	16.29	15.97	16.02	16.19	16.59	16.62	25.20	30.00
5290MHz	Pass	1.50	14.61	14.51	14.81	14.29	14.80	14.99	14.87	14.69	23.73	23.98
5530MHz	Pass	1.50	14.47	14.76	15.24	14.15	14.58	14.45	14.74	14.86	23.70	23.98
5610MHz	Pass	1.50	14.45	14.88	15.26	14.34	14.77	14.84	15.51	15.21	23.95	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	1.50	14.36	14.85	15.30	14.40	13.86	13.89	14.82	14.34	23.53	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	1.50	0.43	0.75	1.36	-0.21	-0.09	-0.36	0.52	0.34	9.41	30.00
5775MHz	Pass	1.50	18.56	19.02	18.67	18.63	18.61	18.69	19.71	18.58	27.86	30.00

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





8TX mode <160MHz (80+80MHz)>:
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	22.13	0.16331
5.25-5.35GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	22.04	0.15996
5.47-5.725GHz	-	-
802.11ax HEW80+80_Nss2,(MCS0)_8TX	23.96	0.24889



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	1.50	15.77	16.54	16.12	15.95					22.13	30.00
5210MHz,#5290MHz	Pass	1.50					15.72	16.34	15.77	16.20	22.04	23.98
802.11ax HEW80+80_Nss2,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	1.50	14.69	15.26	15.23	14.19	14.61	14.56	15.55	15.14	23.96	23.98

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



For beamforming function:
4TX mode <20MHz, 40MHz, 80MHz>:
Summary

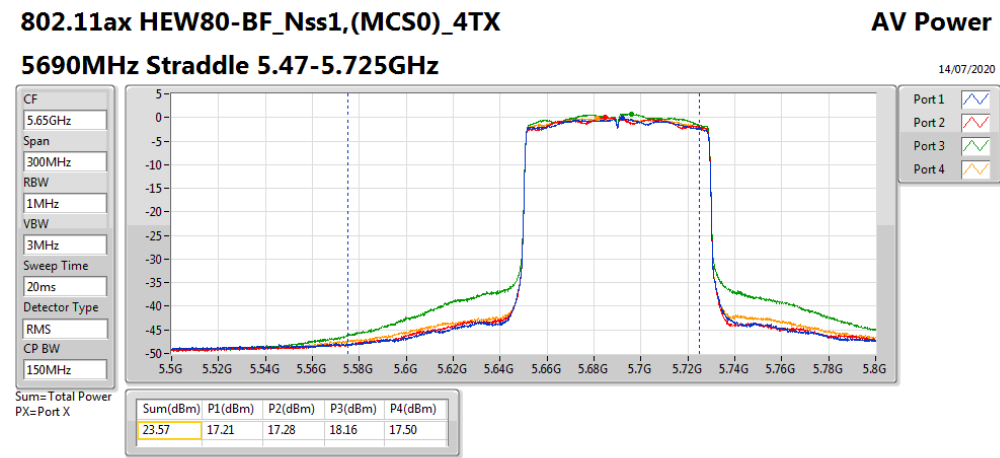
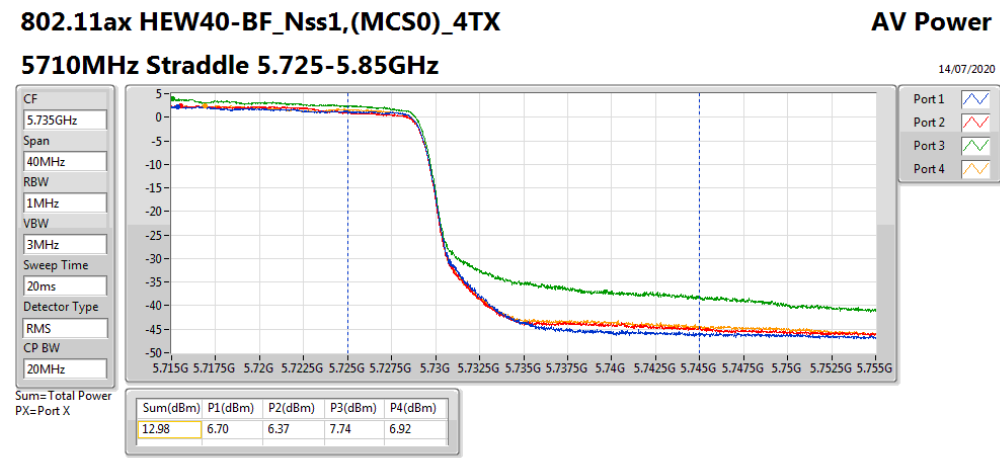
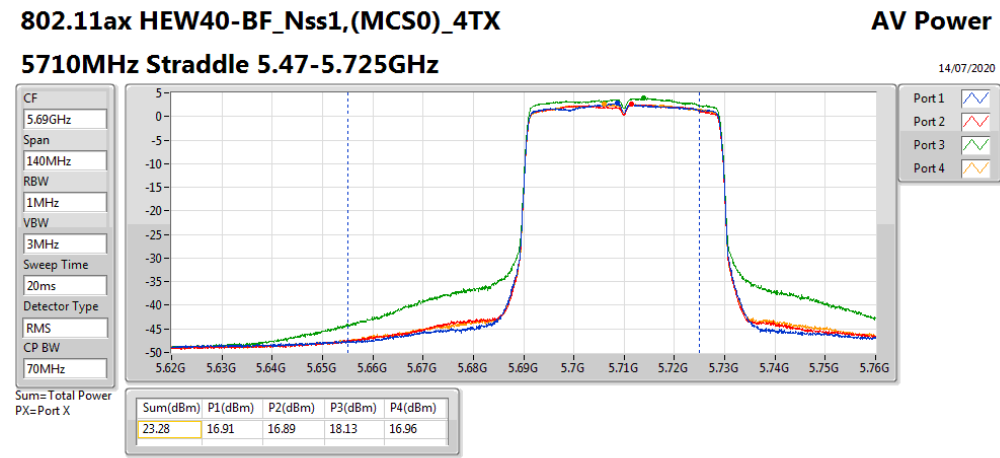
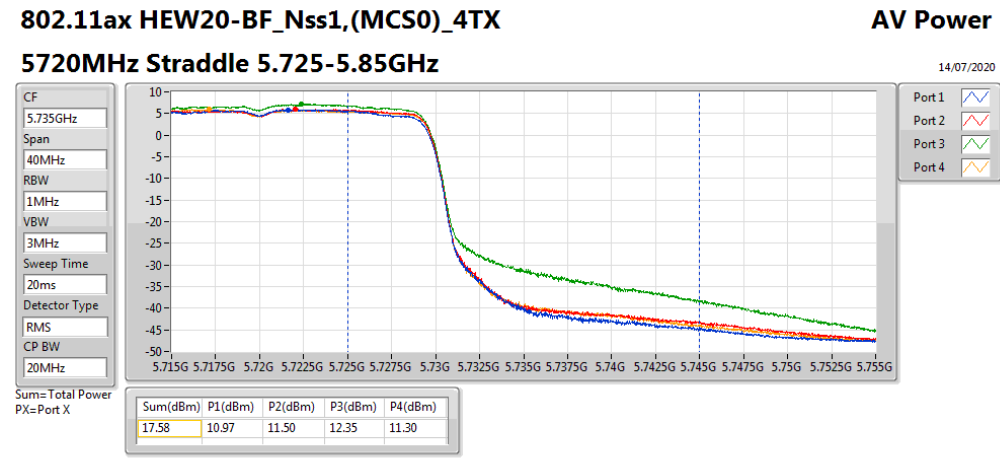
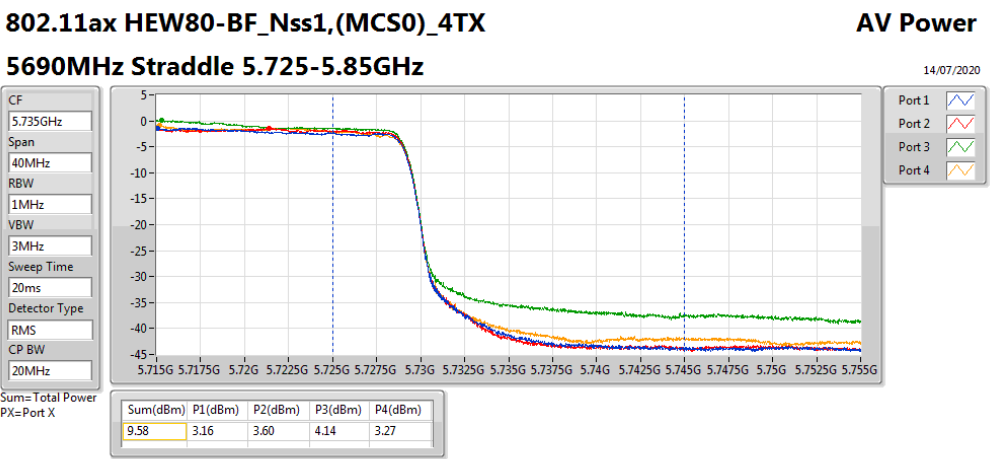
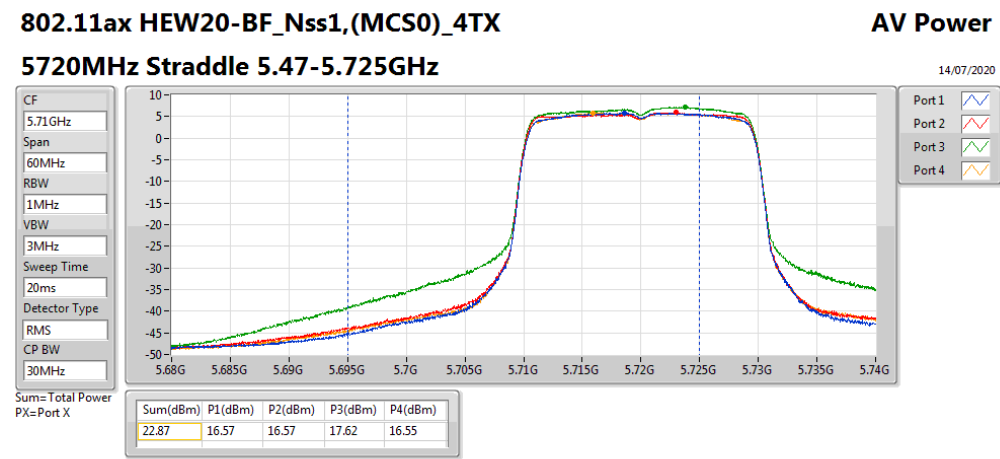
Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	27.73	0.59293
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	22.84	0.19231
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.43	0.17498
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.53	0.22542
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.55	0.22646
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.62	0.18281
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.63	0.23067
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.41	0.21928
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.57	0.22751
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	28.99	0.79250
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	29.28	0.84723
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	26.52	0.44875



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.27	17.59	17.42	17.77	17.94	23.70	29.73
5200MHz	Pass	6.27	21.78	21.39	21.79	21.87	27.73	29.73
5240MHz	Pass	6.27	21.51	20.6	21.39	21.24	27.22	29.73
5260MHz	Pass	6.27	17.69	17.05	17.59	17.66	23.53	23.71
5300MHz	Pass	6.27	17.32	17.01	17.47	17.21	23.28	23.71
5320MHz	Pass	6.27	17.29	16.95	17.29	17.30	23.23	23.71
5500MHz	Pass	6.27	17.32	17.07	17.44	17.12	23.26	23.71
5580MHz	Pass	6.27	17.45	17.37	18.14	17.45	23.63	23.71
5700MHz	Pass	6.27	17.01	17.26	18.23	17.10	23.45	23.71
5720MHz Straddle 5.47-5.725GHz	Pass	6.27	16.57	16.57	17.62	16.55	22.87	23.71
5720MHz Straddle 5.725-5.85GHz	Pass	6.27	10.97	11.5	12.35	11.3	17.58	29.73
5745MHz	Pass	6.27	22.73	22.88	23.66	22.51	28.99	29.73
5785MHz	Pass	6.27	22.52	22.75	23.49	22.29	28.81	29.73
5825MHz	Pass	6.27	22.63	22.76	23.81	22.53	28.98	29.73
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.27	16.53	16.66	17.08	16.97	22.84	29.73
5230MHz	Pass	6.27	16.12	16.63	16.99	17.02	22.73	29.73
5270MHz	Pass	6.27	17.80	17.08	17.69	17.51	23.55	23.71
5310MHz	Pass	6.27	17.06	16.90	17.53	17.45	23.26	23.71
5510MHz	Pass	6.27	16.59	16.45	16.8	16.64	22.64	23.71
5550MHz	Pass	6.27	17.37	16.98	17.50	17.37	23.33	23.71
5670MHz	Pass	6.27	17.23	17.18	17.84	17.26	23.41	23.71
5710MHz Straddle 5.47-5.725GHz	Pass	6.27	16.91	16.89	18.13	16.96	23.28	23.71
5710MHz Straddle 5.725-5.85GHz	Pass	6.27	6.70	6.37	7.74	6.92	12.98	29.73
5755MHz	Pass	6.27	22.04	22.24	23.08	21.88	28.36	29.73
5795MHz	Pass	6.27	22.88	23.11	24.19	22.69	29.28	29.73
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.27	16.09	16.36	16.76	16.42	22.43	29.73
5290MHz	Pass	6.27	16.33	16.53	16.82	16.72	22.62	23.71
5530MHz	Pass	6.27	15.6	16.22	16.74	16.43	22.29	23.71
5610MHz	Pass	6.27	17.46	17.14	17.95	17.41	23.52	23.71
5690MHz Straddle 5.47-5.725GHz	Pass	6.27	17.21	17.28	18.16	17.50	23.57	23.71
5690MHz Straddle 5.725-5.85GHz	Pass	6.27	3.16	3.60	4.14	3.27	9.58	29.73
5775MHz	Pass	6.27	20.16	20.4	21.27	20.04	26.52	29.73

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





4TX mode <160MHz (80+80MHz)>:
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	20.42	0.11015
5.25-5.35GHz	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	20.72	0.11803
5.47-5.725GHz	-	-
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	23.48	0.22284



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	4.51	17.36	17.46			20.42	30.00
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	1.50			17.75	17.67	20.72	23.98
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	4.51	17.78	17.61	17.16	17.24	23.48	23.98

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



8TX mode <20MHz, 40MHz, 80MHz>:
Summary

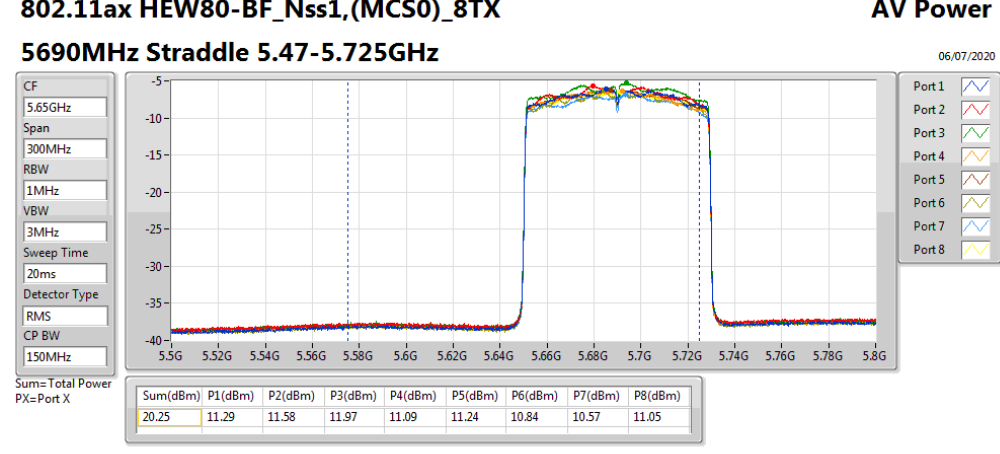
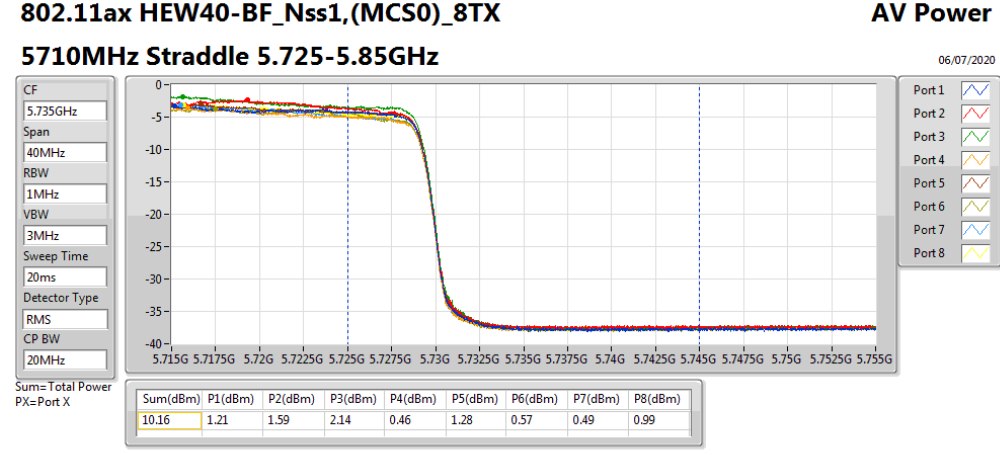
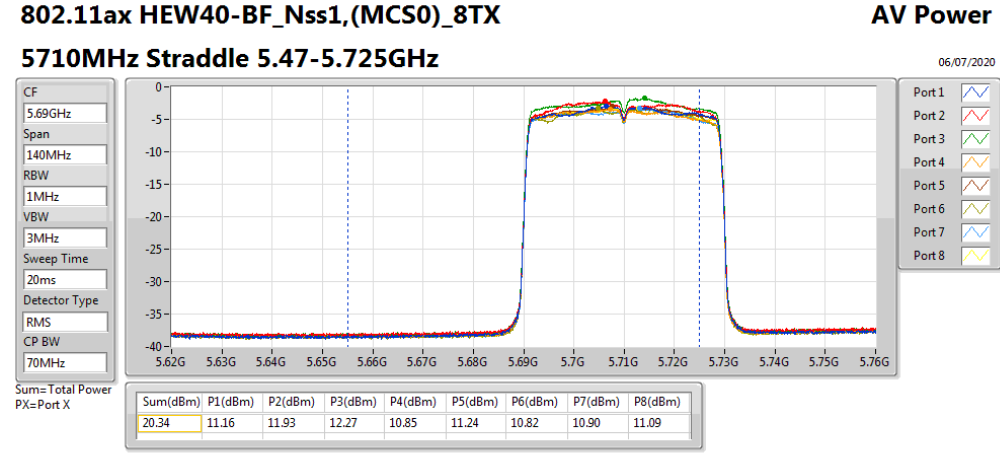
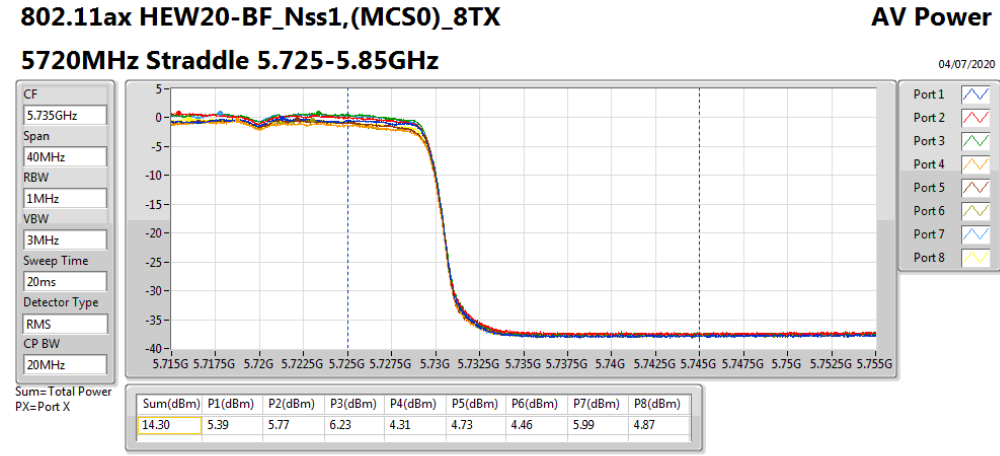
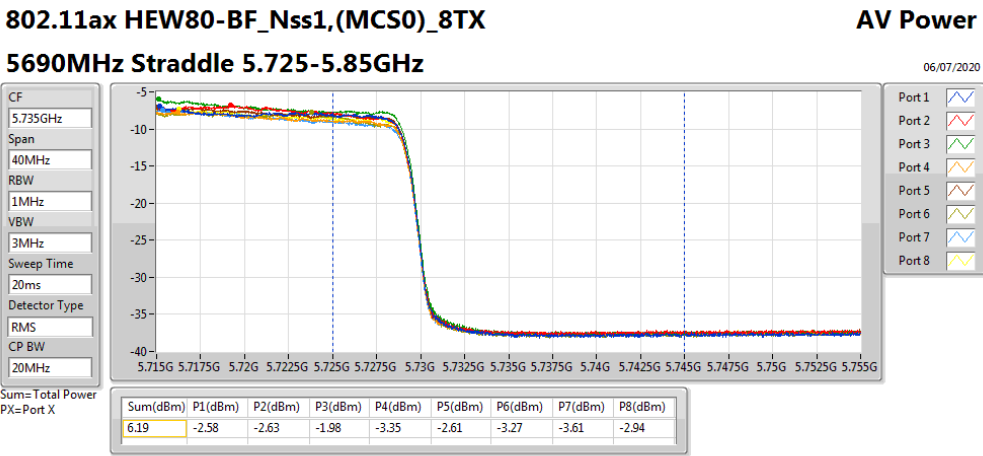
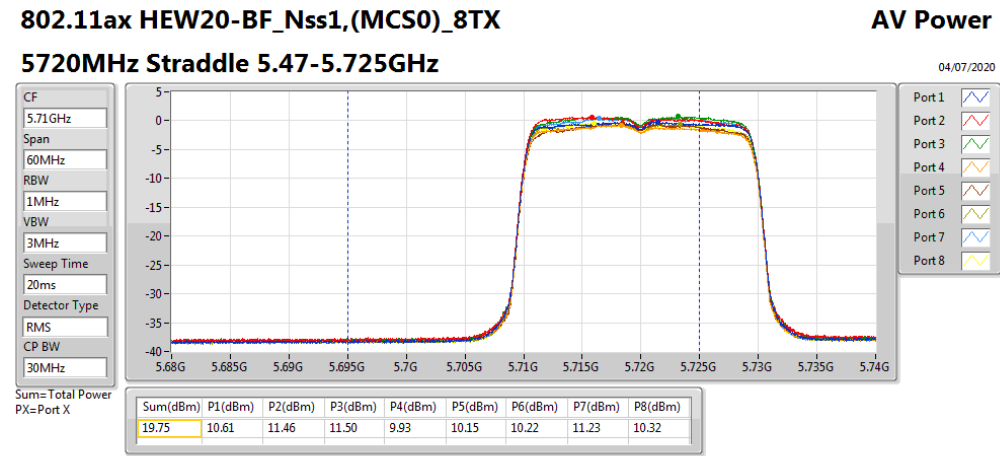
Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	26.51	0.44771
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	26.22	0.41879
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	25.20	0.33113
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	20.50	0.11220
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	20.42	0.11015
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	20.34	0.10814
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	20.39	0.10940
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	20.51	0.11246
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	20.32	0.10765
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	26.42	0.43853
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	26.51	0.44771
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	26.26	0.42267



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	9.29	17.32	17.36	17.21	17.48	17.63	17.35	17.66	17.82	26.51	26.71
5200MHz	Pass	9.29	17.03	17.29	17.09	17.01	18.04	17.15	17.63	17.44	26.38	26.71
5240MHz	Pass	9.29	17.24	17.37	17.29	17.17	17.75	17.25	17.71	17.79	26.48	26.71
5260MHz	Pass	9.29	11.29	11.1	10.82	11.05	11.33	11.46	11.46	11.31	20.26	20.69
5300MHz	Pass	9.29	11.56	11.48	11.2	10.85	11.75	11.47	11.78	11.48	20.49	20.69
5320MHz	Pass	9.29	11.59	11.43	11.57	11.03	11.67	11.53	11.42	11.45	20.50	20.69
5500MHz	Pass	9.29	11.23	11.57	11.69	10.57	11.36	10.97	11.39	11.20	20.29	20.69
5580MHz	Pass	9.29	11.03	11.45	11.41	10.98	11.43	11.24	11.71	11.54	20.39	20.69
5700MHz	Pass	9.29	11.22	11.75	11.93	11.18	11.23	10.57	11.81	11.03	20.39	20.69
5720MHz Straddle 5.47-5.725GHz	Pass	9.29	10.61	11.46	11.5	9.93	10.15	10.22	11.23	10.32	19.75	20.69
5720MHz Straddle 5.725-5.85GHz	Pass	9.29	5.39	5.77	6.23	4.31	4.73	4.46	5.99	4.87	14.30	26.71
5745MHz	Pass	9.29	17.22	17.94	17.29	16.80	17.40	17.24	17.67	17.48	26.42	26.71
5785MHz	Pass	9.29	16.66	17.52	17.06	17.42	17.44	16.94	17.64	16.93	26.24	26.71
5825MHz	Pass	9.29	17.31	17.20	17.63	17.53	17.22	16.71	17.73	16.79	26.31	26.71
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	9.29	16.35	16.52	16.53	16.25	16.98	16.62	16.78	16.94	25.66	26.71
5230MHz	Pass	9.29	16.86	17.27	16.98	16.85	17.78	17.02	17.31	17.38	26.22	26.71
5270MHz	Pass	9.29	11.59	11.50	10.86	11.08	11.55	11.62	11.35	11.47	20.42	20.69
5310MHz	Pass	9.29	11.30	11.47	11.57	10.61	11.56	11.45	11.04	11.38	20.34	20.69
5510MHz	Pass	9.29	11.29	11.68	12.04	10.54	11.62	11.24	10.61	11.38	20.36	20.69
5550MHz	Pass	9.29	10.78	11.52	11.61	10.69	11.82	11.14	10.71	11.51	20.27	20.69
5670MHz	Pass	9.29	11.58	11.84	11.99	11.59	11.49	11.17	10.76	11.30	20.51	20.69
5710MHz Straddle 5.47-5.725GHz	Pass	9.29	11.16	11.93	12.27	10.85	11.24	10.82	10.90	11.09	20.34	20.69
5710MHz Straddle 5.725-5.85GHz	Pass	9.29	1.21	1.59	2.14	0.46	1.28	0.57	0.49	0.99	10.16	26.71
5755MHz	Pass	9.29	17.42	17.98	17.61	17.12	17.73	17.36	17.10	17.45	26.51	26.71
5795MHz	Pass	9.29	17.01	17.78	17.45	17.59	17.70	17.12	17.10	17.00	26.39	26.71
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	9.29	15.85	15.73	16.29	15.97	16.02	16.19	16.59	16.62	25.20	26.71
5290MHz	Pass	9.29	11.19	11.57	11.32	10.90	11.51	11.54	11.05	11.38	20.34	20.69
5530MHz	Pass	9.29	11.07	11.48	11.69	10.61	11.62	11.12	10.64	11.40	20.25	20.69
5610MHz	Pass	9.29	11.08	10.79	11.67	10.76	11.72	11.49	10.96	11.70	20.32	20.69
5690MHz Straddle 5.47-5.725GHz	Pass	9.29	11.29	11.58	11.97	11.09	11.24	10.84	10.57	11.05	20.25	20.69
5690MHz Straddle 5.725-5.85GHz	Pass	9.29	-2.58	-2.63	-1.98	-3.35	-2.61	-3.27	-3.61	-2.94	6.19	26.71
5775MHz	Pass	9.29	17.08	17.64	17.11	17.08	17.57	17.14	17.09	17.09	26.26	26.71

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





8TX mode <160MHz (80+80MHz)>:
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	22.13	0.16331
5.25-5.35GHz	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	22.04	0.15996
5.47-5.725GHz	-	-
802.11ax HEW80+80-BF_Nss2,(MCS0)_8TX	23.39	0.21827



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	6.27	15.77	16.54	16.12	15.95	-	-	-	-	22.13	29.73
5210MHz,#5290MHz	Pass	6.27	-	-	-	-	15.72	16.34	15.77	16.2	22.04	23.71
802.11ax HEW80+80-BF_Nss2,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	6.27	14.26	14.38	14.97	13.71	14.55	13.98	14.23	14.67	23.39	23.71

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



For non-beamforming function:
4TX mode <20MHz, 40MHz, 80MHz>:
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_4TX	14.31
802.11ax HEW20_Nss1,(MCS0)_4TX	14.24
802.11ax HEW40_Nss1,(MCS0)_4TX	6.62
802.11ax HEW80_Nss1,(MCS0)_4TX	3.34
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_4TX	10.70
802.11ax HEW20_Nss1,(MCS0)_4TX	10.68
802.11ax HEW40_Nss1,(MCS0)_4TX	7.74
802.11ax HEW80_Nss1,(MCS0)_4TX	3.54
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_4TX	10.64
802.11ax HEW20_Nss1,(MCS0)_4TX	10.58
802.11ax HEW40_Nss1,(MCS0)_4TX	7.89
802.11ax HEW80_Nss1,(MCS0)_4TX	4.85
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	14.54
802.11ax HEW20_Nss1,(MCS0)_4TX	13.94
802.11ax HEW40_Nss1,(MCS0)_4TX	11.82
802.11ax HEW80_Nss1,(MCS0)_4TX	5.88

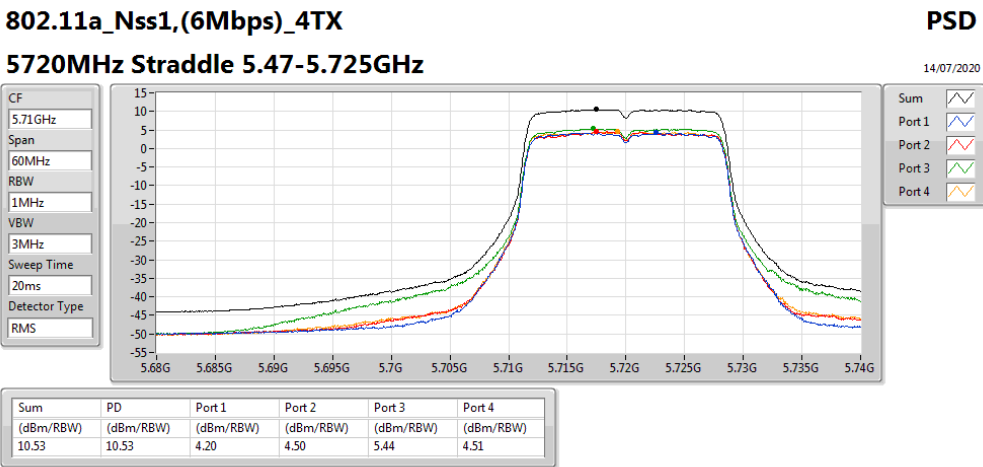
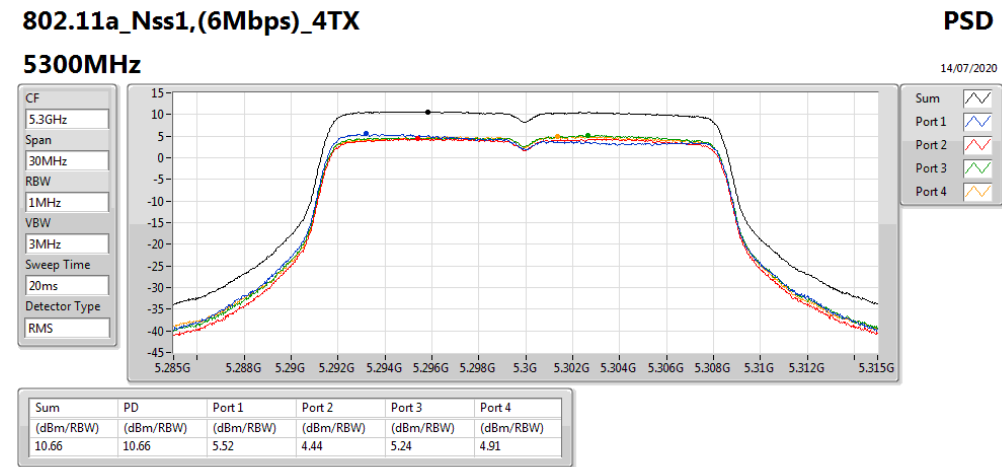
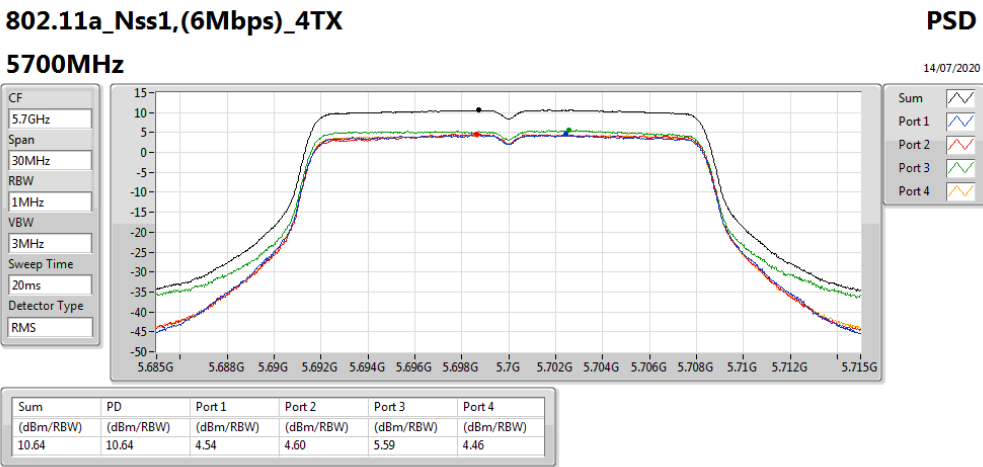
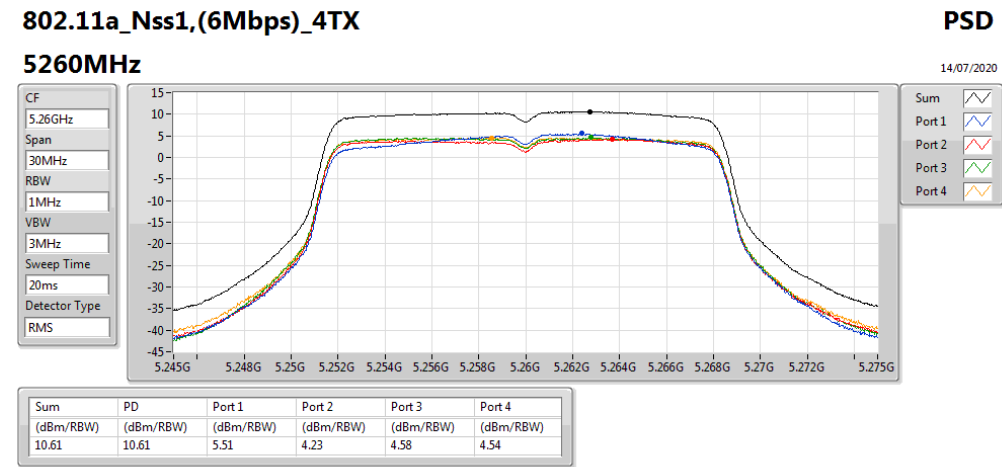
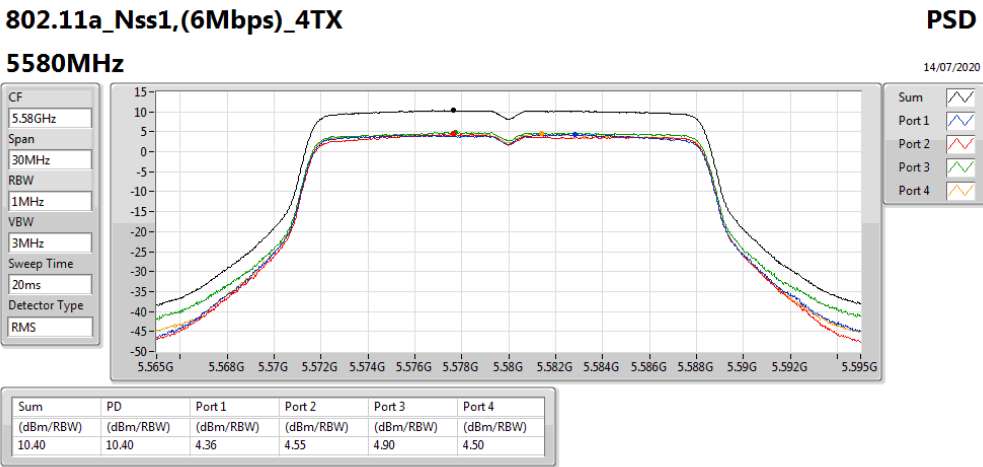
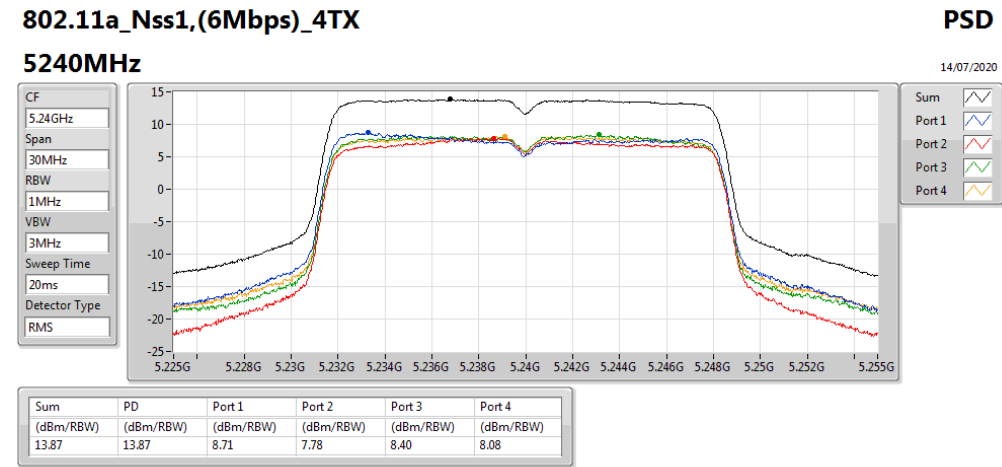
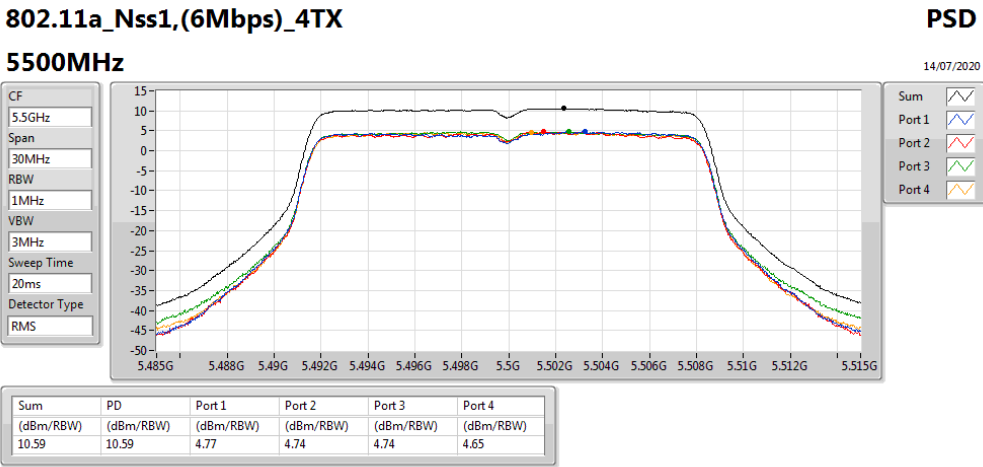
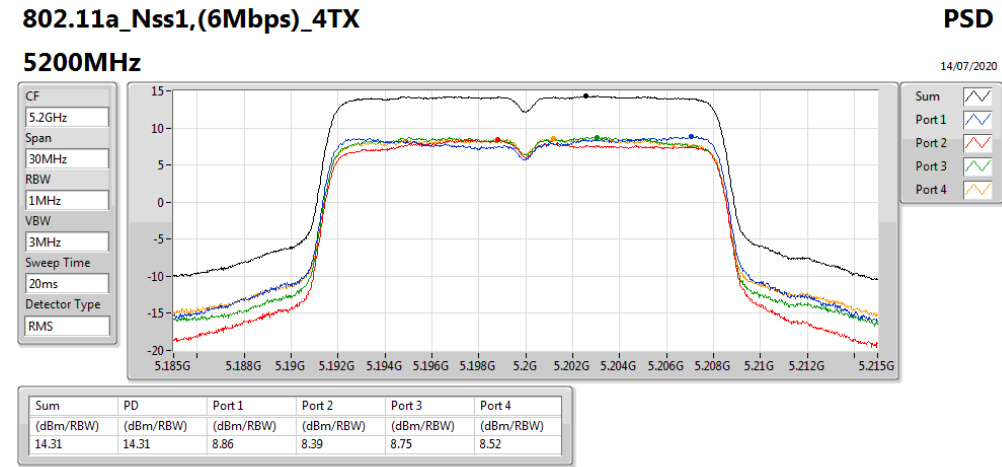
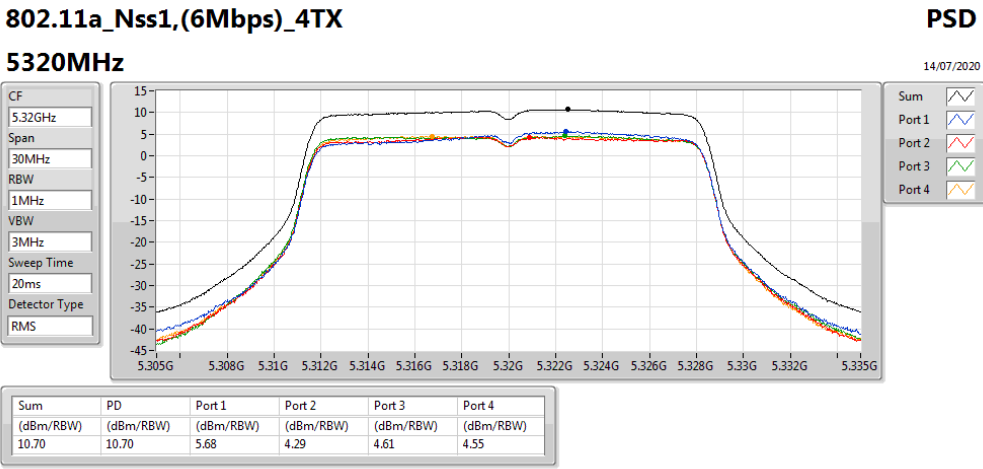
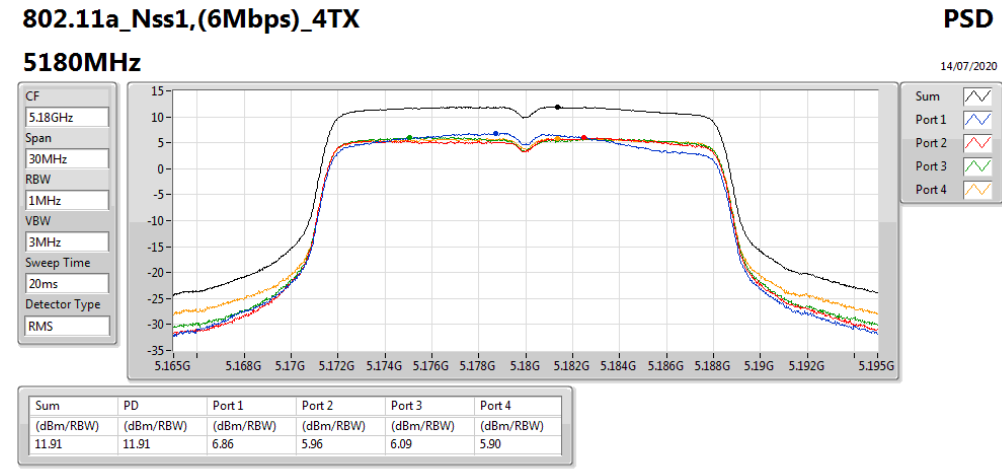
RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

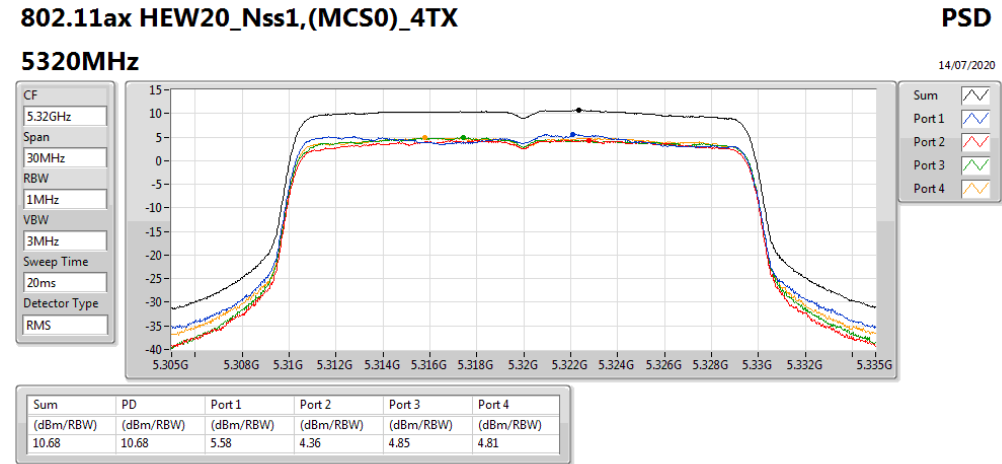
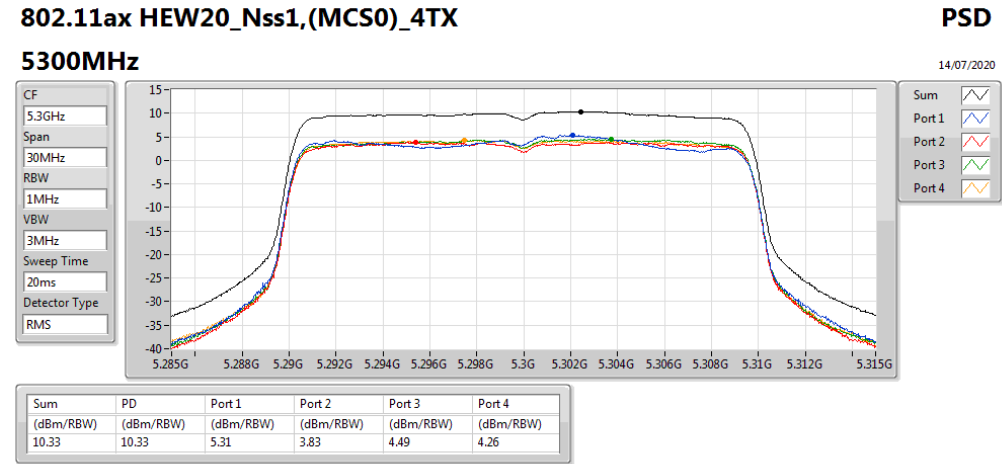
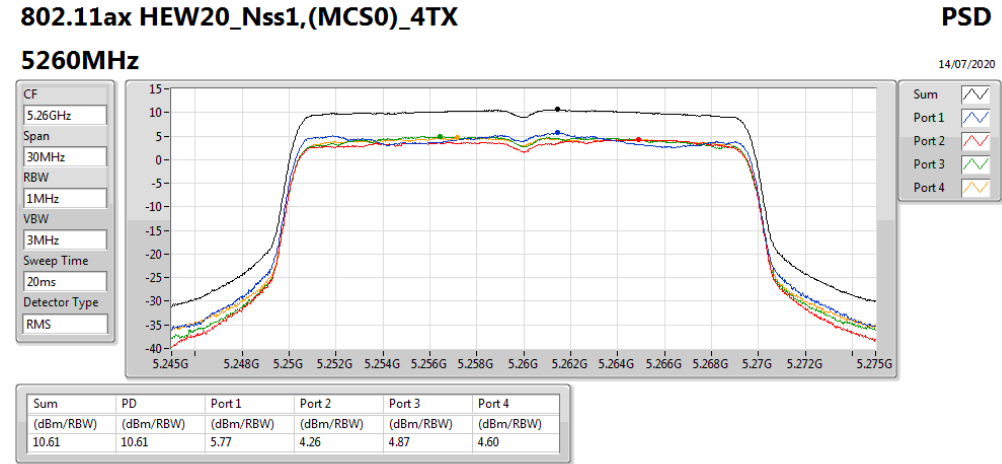
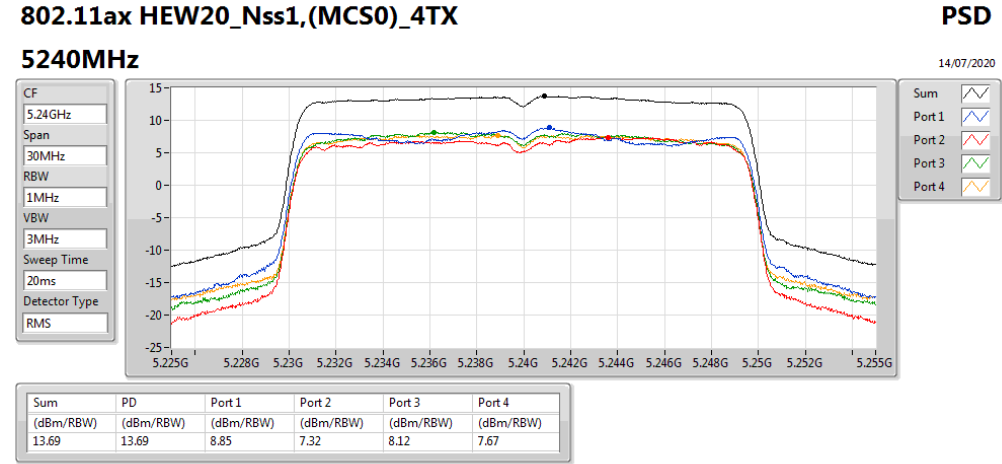
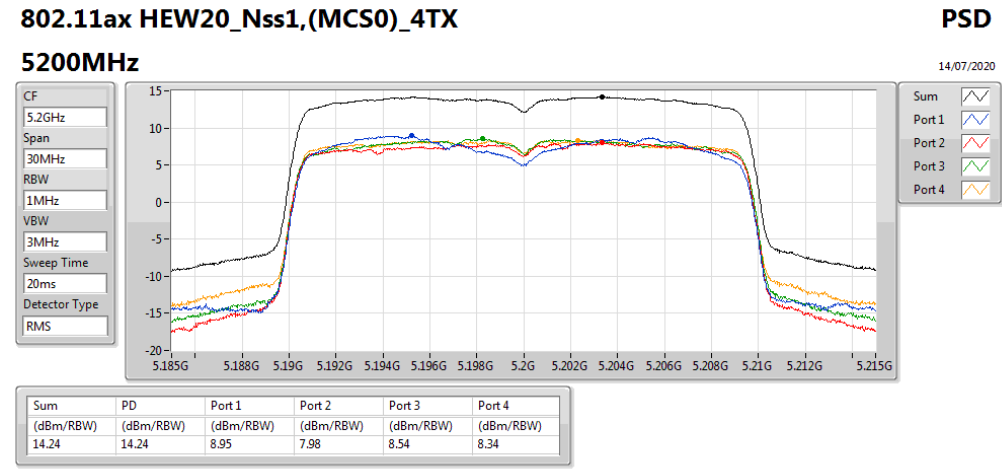
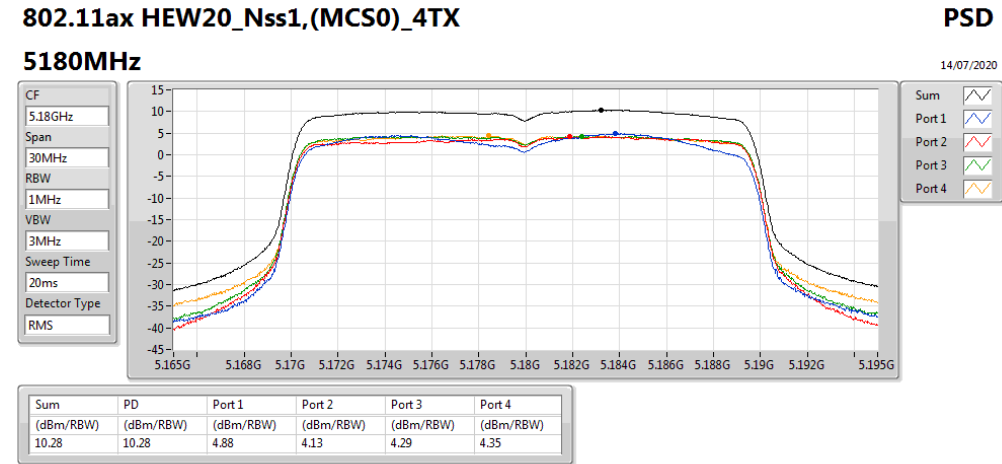
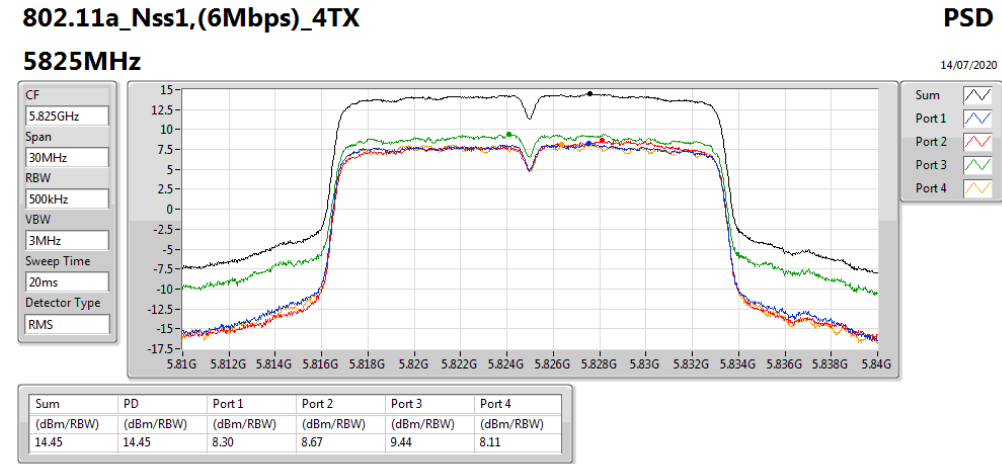
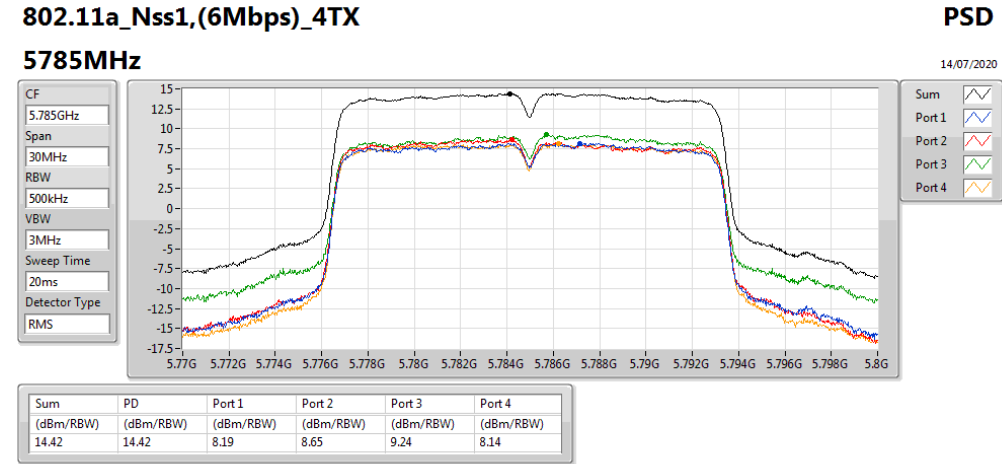
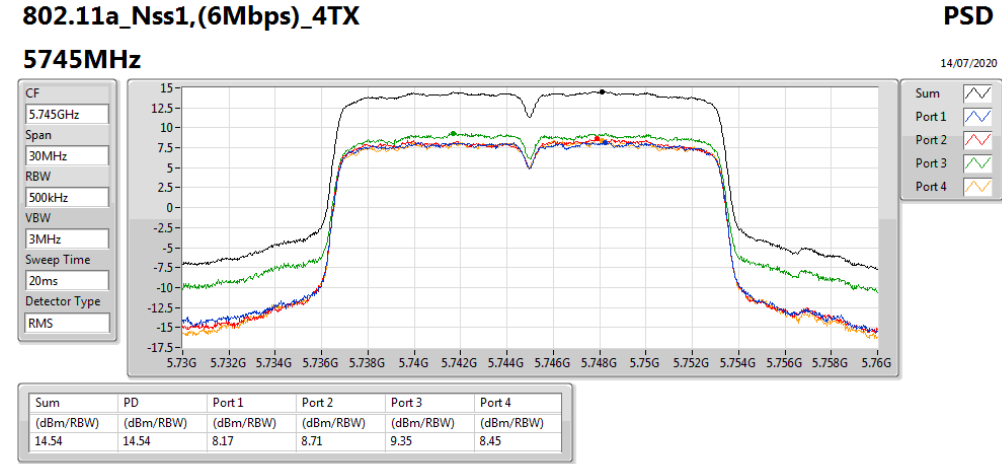
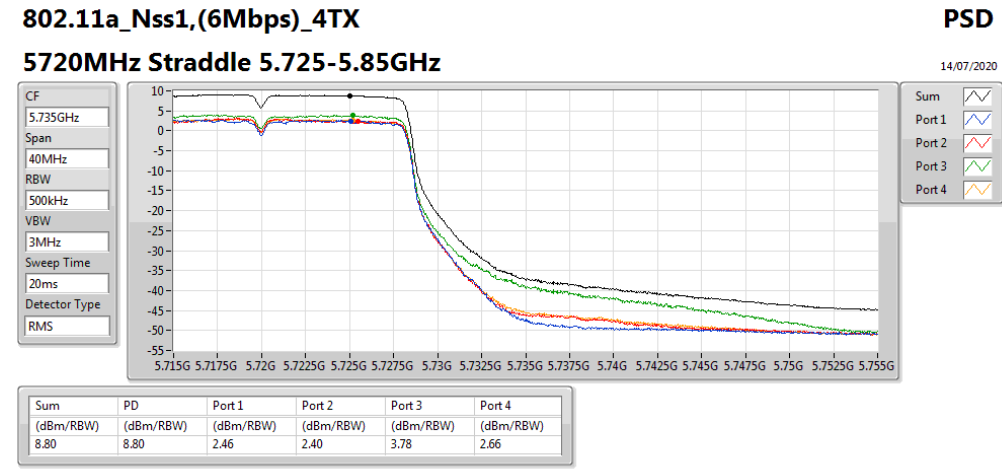


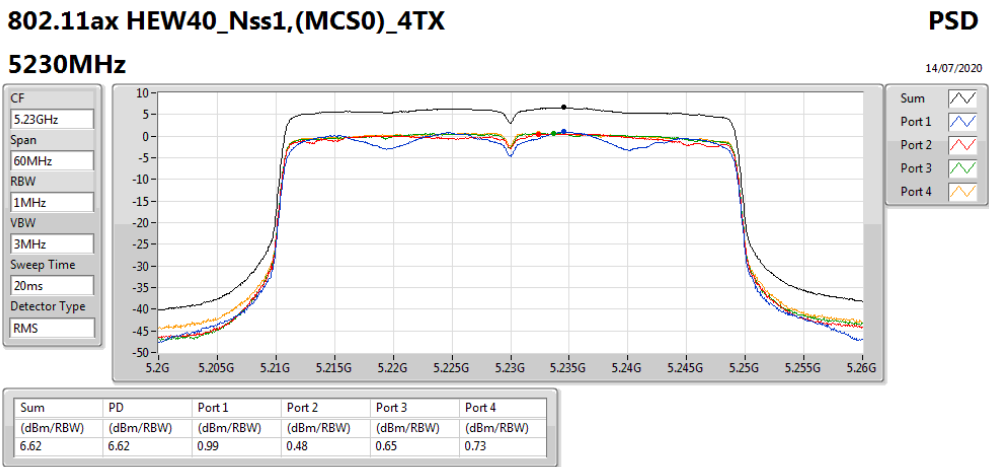
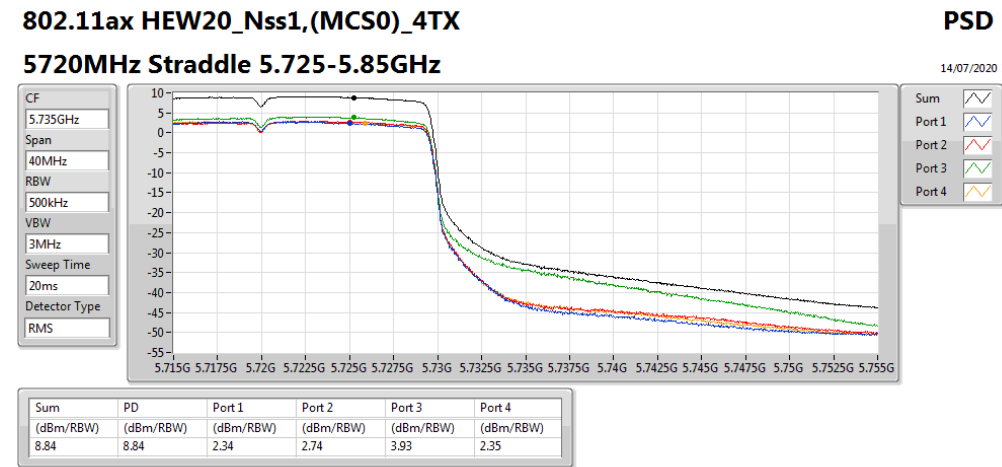
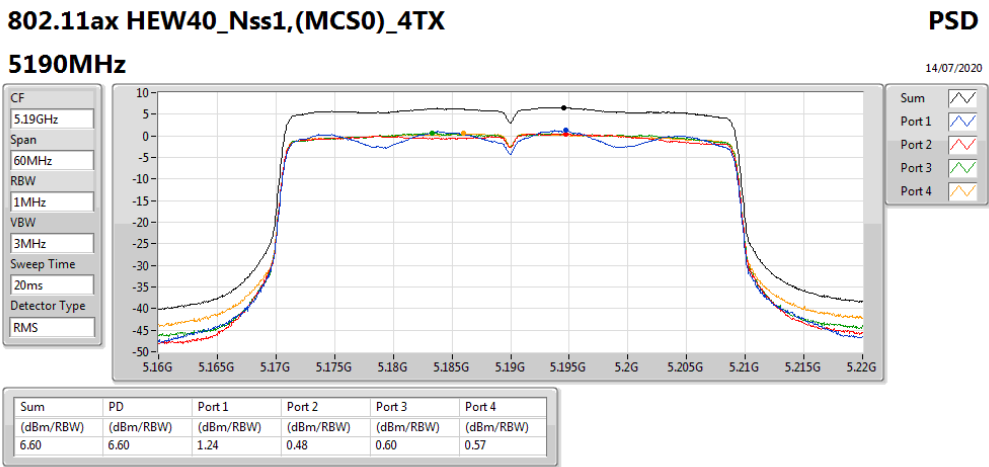
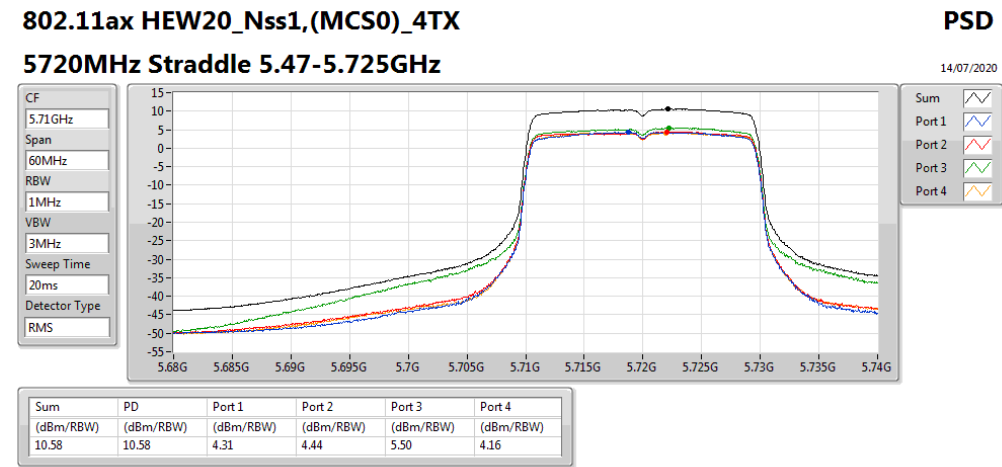
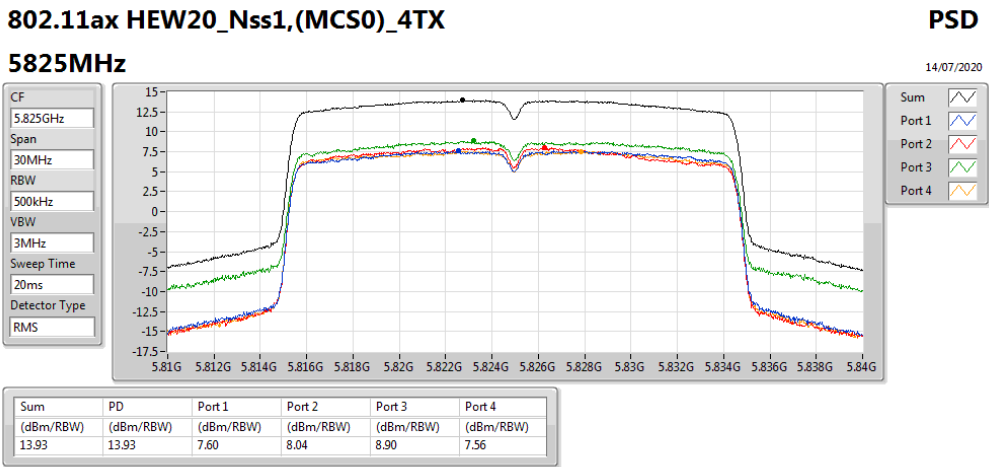
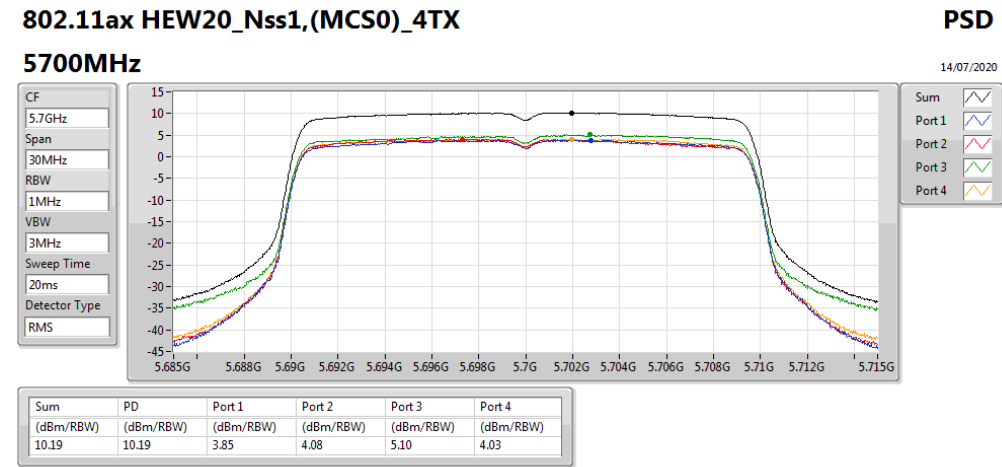
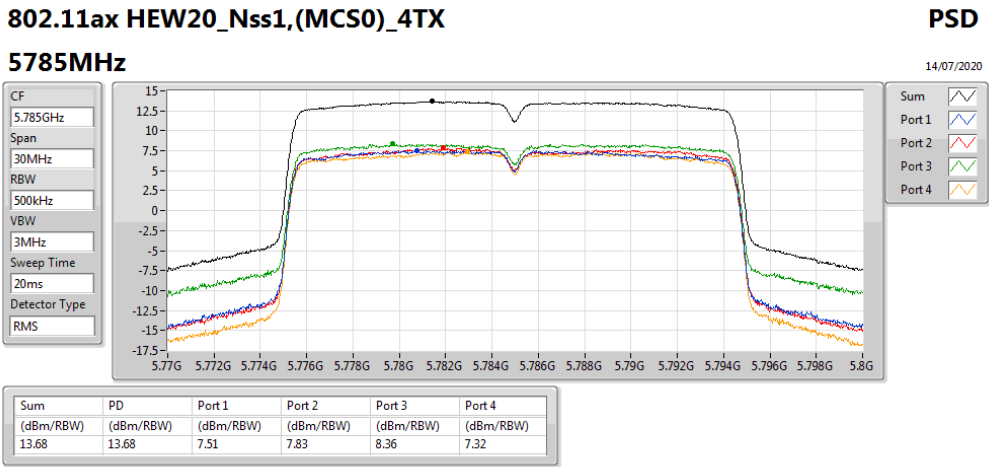
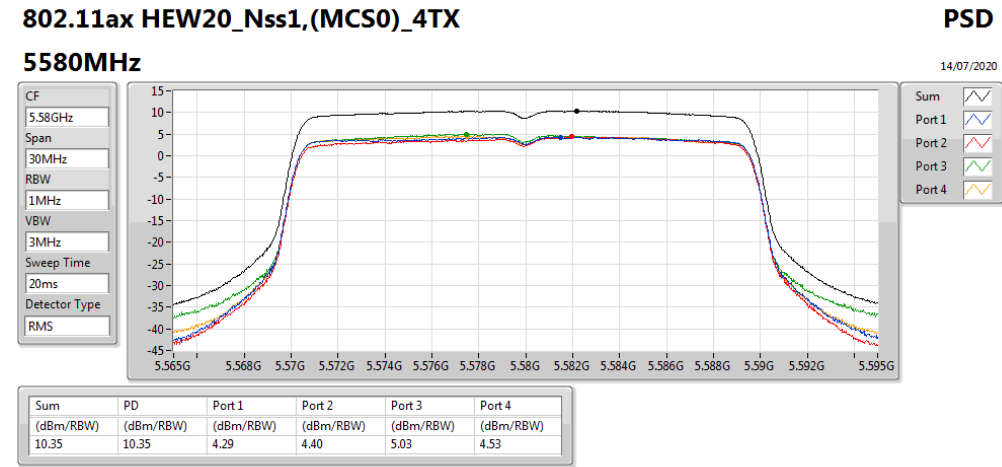
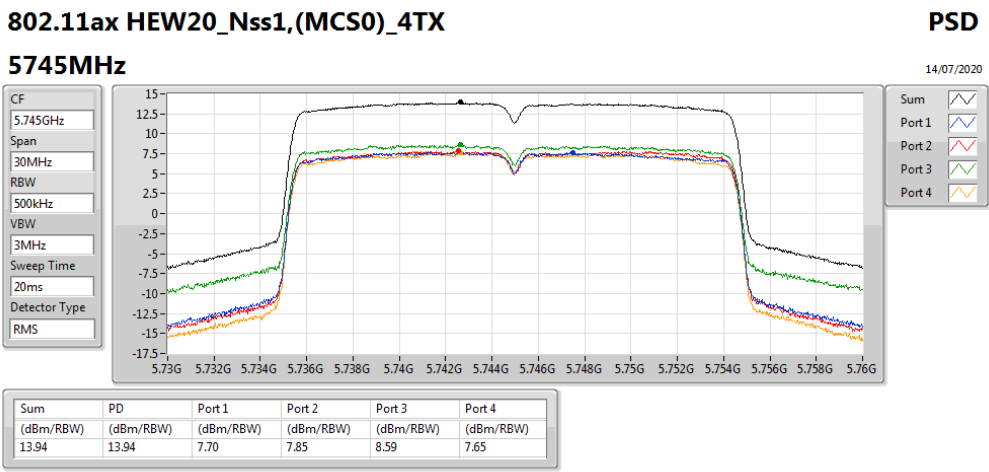
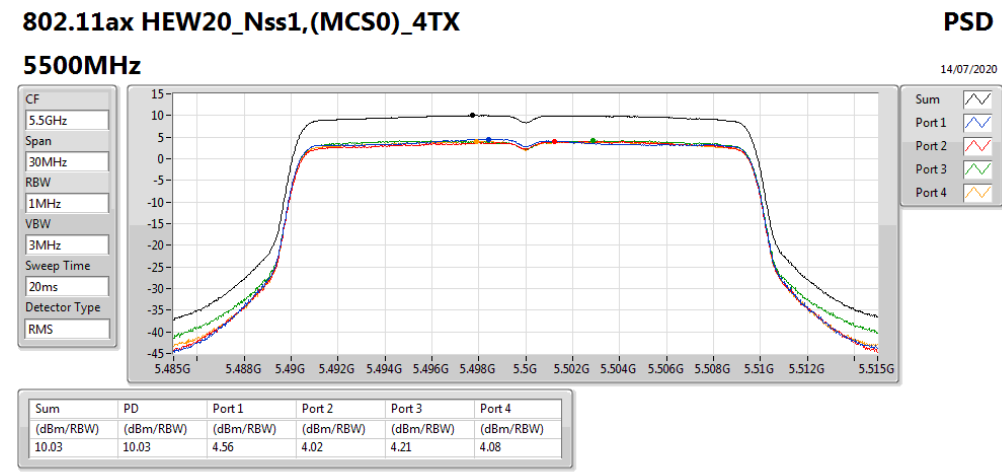
Result

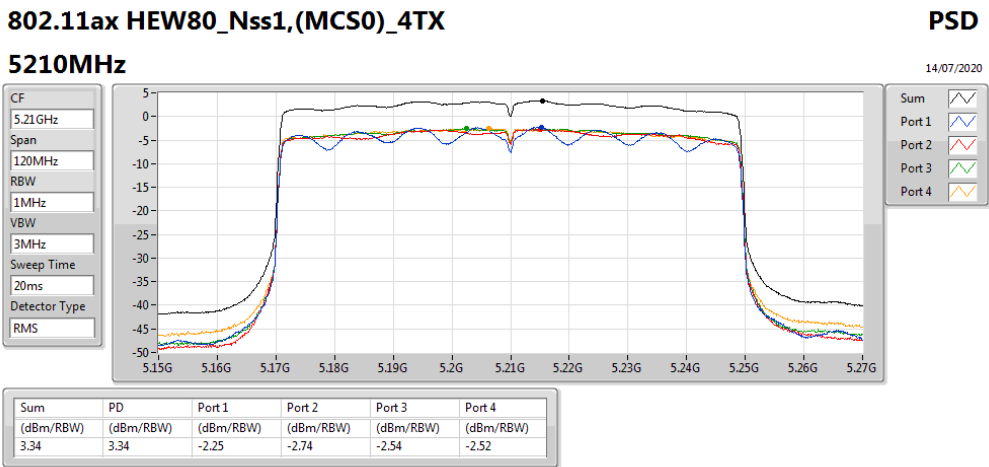
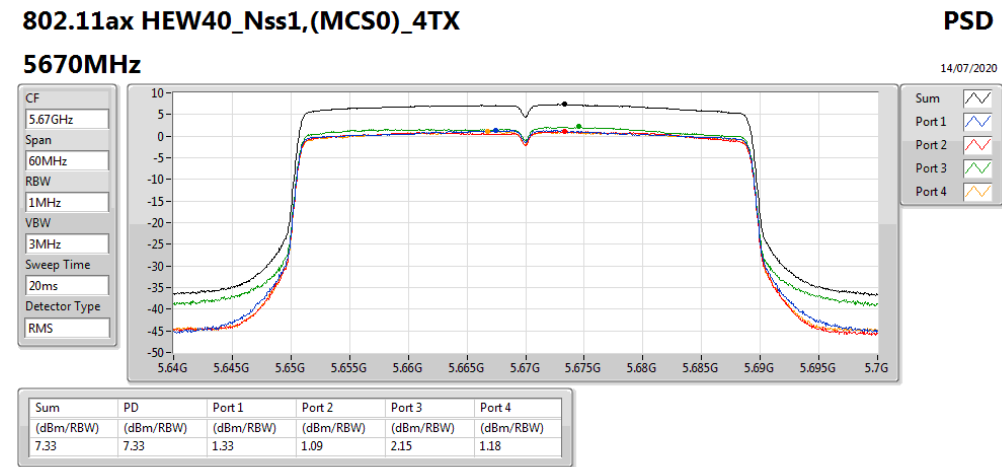
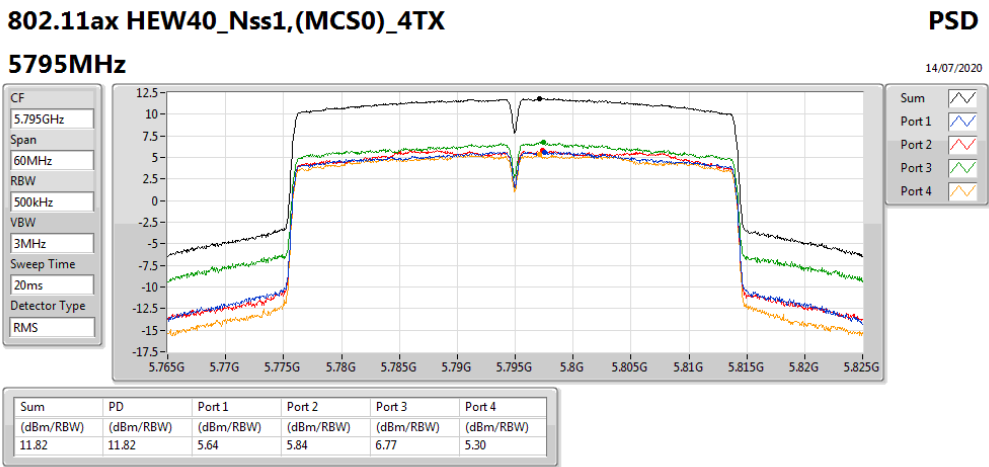
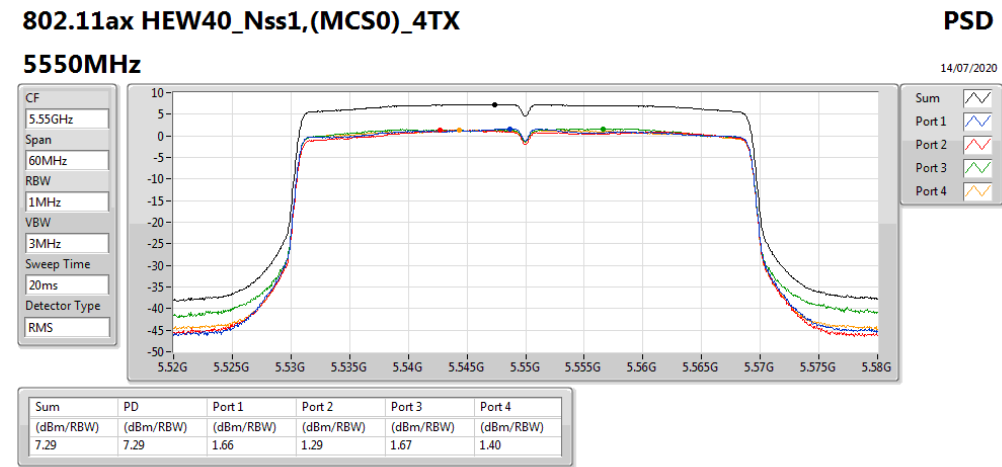
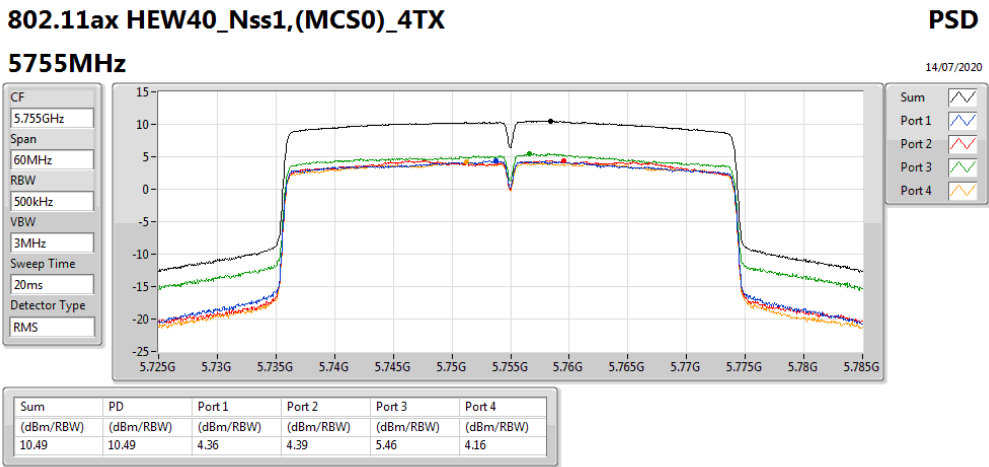
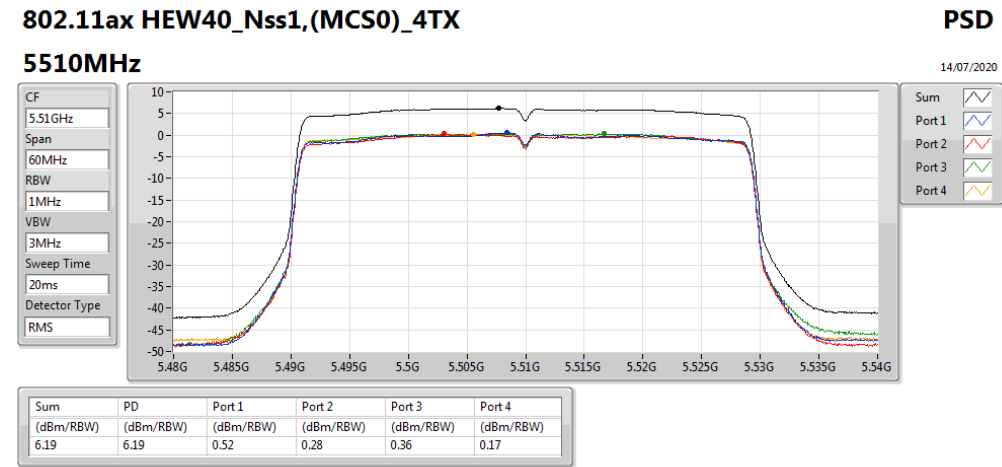
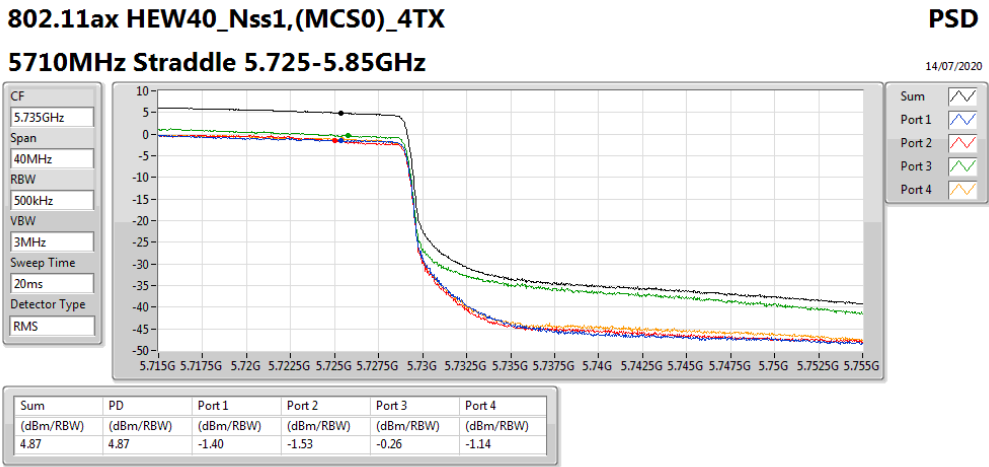
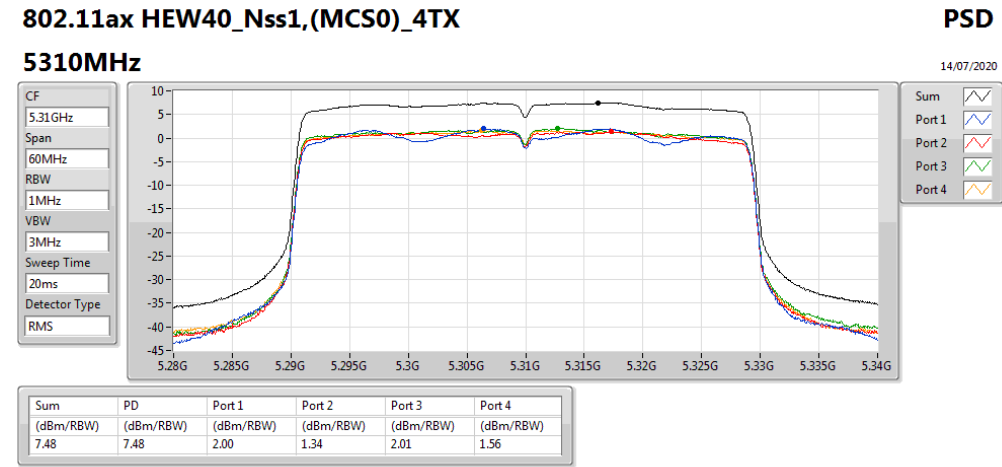
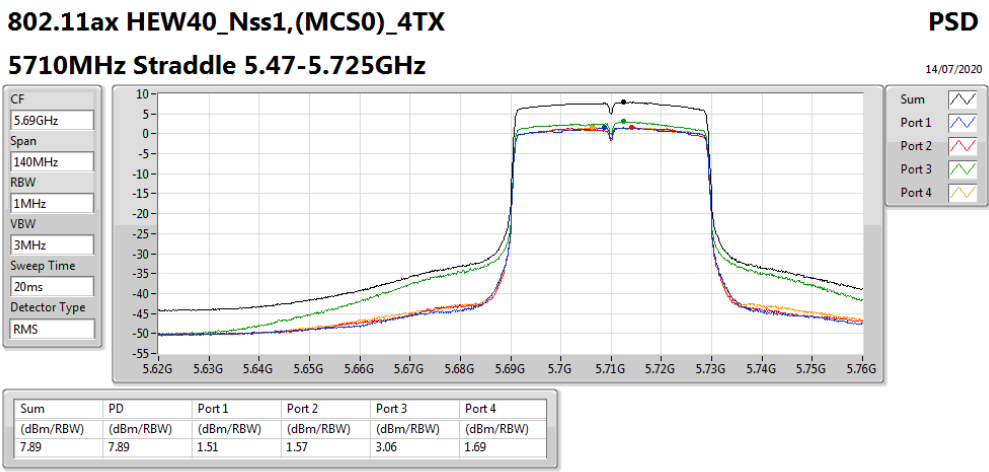
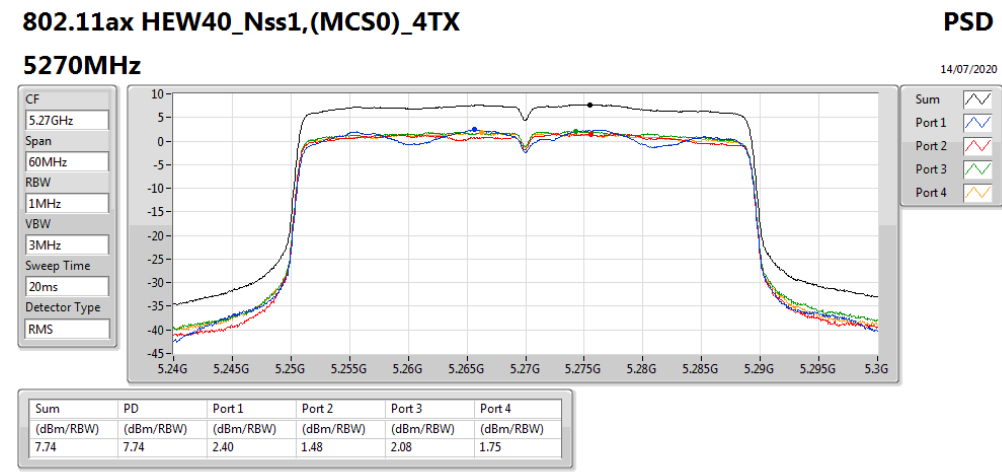
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.27	6.86	5.96	6.09	5.90	11.91	16.73
5200MHz	Pass	6.27	8.86	8.39	8.75	8.52	14.31	16.73
5240MHz	Pass	6.27	8.71	7.78	8.40	8.08	13.87	16.73
5260MHz	Pass	6.27	5.51	4.23	4.58	4.54	10.61	10.73
5300MHz	Pass	6.27	5.52	4.44	5.24	4.91	10.66	10.73
5320MHz	Pass	6.27	5.68	4.29	4.61	4.55	10.70	10.73
5500MHz	Pass	6.27	4.77	4.74	4.74	4.65	10.59	10.73
5580MHz	Pass	6.27	4.36	4.55	4.90	4.50	10.40	10.73
5700MHz	Pass	6.27	4.54	4.60	5.59	4.46	10.64	10.73
5720MHz Straddle 5.47-5.725GHz	Pass	6.27	4.20	4.50	5.44	4.51	10.53	10.73
5720MHz Straddle 5.725-5.85GHz	Pass	6.27	2.46	2.40	3.78	2.66	8.80	29.73
5745MHz	Pass	6.27	8.17	8.71	9.35	8.45	14.54	29.73
5785MHz	Pass	6.27	8.19	8.65	9.24	8.14	14.42	29.73
5825MHz	Pass	6.27	8.30	8.67	9.44	8.11	14.45	29.73
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.27	4.88	4.13	4.29	4.35	10.28	16.73
5200MHz	Pass	6.27	8.95	7.98	8.54	8.34	14.24	16.73
5240MHz	Pass	6.27	8.85	7.32	8.12	7.67	13.69	16.73
5260MHz	Pass	6.27	5.77	4.26	4.87	4.60	10.61	10.73
5300MHz	Pass	6.27	5.31	3.83	4.49	4.26	10.33	10.73
5320MHz	Pass	6.27	5.58	4.36	4.85	4.81	10.68	10.73
5500MHz	Pass	6.27	4.56	4.02	4.21	4.08	10.03	10.73
5580MHz	Pass	6.27	4.29	4.40	5.03	4.53	10.35	10.73
5700MHz	Pass	6.27	3.85	4.08	5.10	4.03	10.19	10.73
5720MHz Straddle 5.47-5.725GHz	Pass	6.27	4.31	4.44	5.50	4.16	10.58	10.73
5720MHz Straddle 5.725-5.85GHz	Pass	6.27	2.34	2.74	3.93	2.35	8.84	29.73
5745MHz	Pass	6.27	7.70	7.85	8.59	7.65	13.94	29.73
5785MHz	Pass	6.27	7.51	7.83	8.36	7.32	13.68	29.73
5825MHz	Pass	6.27	7.60	8.04	8.90	7.56	13.93	29.73
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.27	1.24	0.48	0.60	0.57	6.60	16.73
5230MHz	Pass	6.27	0.99	0.48	0.65	0.73	6.62	16.73
5270MHz	Pass	6.27	2.40	1.48	2.08	1.75	7.74	10.73
5310MHz	Pass	6.27	2.00	1.34	2.01	1.56	7.48	10.73
5510MHz	Pass	6.27	0.52	0.28	0.36	0.17	6.19	10.73
5550MHz	Pass	6.27	1.66	1.29	1.67	1.40	7.29	10.73
5670MHz	Pass	6.27	1.33	1.09	2.15	1.18	7.33	10.73
5710MHz Straddle 5.47-5.725GHz	Pass	6.27	1.51	1.57	3.06	1.69	7.89	10.73
5710MHz Straddle 5.725-5.85GHz	Pass	6.27	-1.40	-1.53	-0.26	-1.14	4.87	29.73
5755MHz	Pass	6.27	4.36	4.39	5.46	4.16	10.49	29.73
5795MHz	Pass	6.27	5.64	5.84	6.77	5.30	11.82	29.73
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.27	-2.25	-2.74	-2.54	-2.52	3.34	16.73
5290MHz	Pass	6.27	-1.85	-2.45	-2.25	-2.44	3.54	10.73
5530MHz	Pass	6.27	-2.43	-2.68	-2.35	-2.74	3.11	10.73
5610MHz	Pass	6.27	-1.35	-1.29	-0.65	-1.24	4.72	10.73
5690MHz Straddle 5.47-5.725GHz	Pass	6.27	-1.35	-1.04	-0.40	-1.28	4.85	10.73
5690MHz Straddle 5.725-5.85GHz	Pass	6.27	-5.06	-5.02	-3.85	-4.89	1.25	29.73
5775MHz	Pass	6.27	-0.37	-0.06	0.84	-0.67	5.88	29.73

DG = Directional Gain; For UNII-1, UNII-2A and UNII-2C, RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;











802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

CF5.29GHz

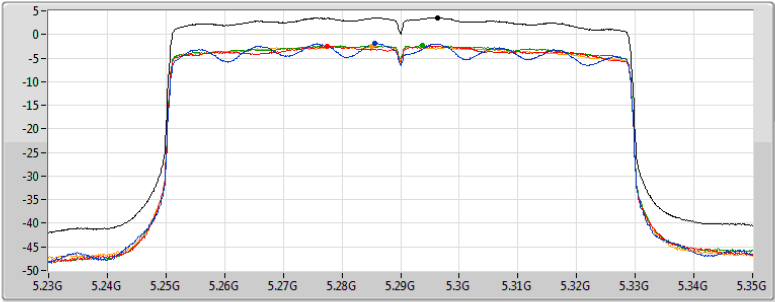
Span120MHz

RBW1MHz

VBW3MHz

Sweep Time20ms

Detector TypeRMS



Sum

Port 1

Port 2

Port 3

Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.54	3.54	-1.85	-2.45	-2.25	-2.44

802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

CF5.53GHz

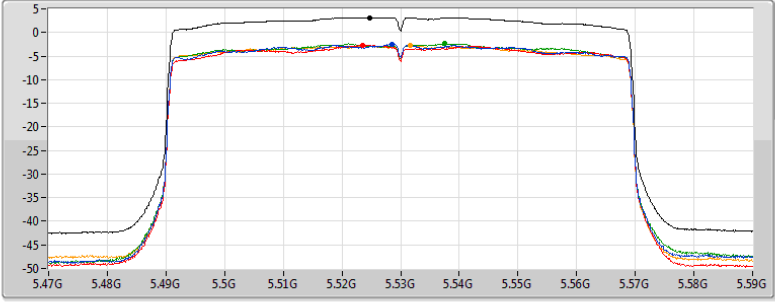
Span120MHz

RBW1MHz

VBW3MHz

Sweep Time20ms

Detector TypeRMS



Sum

Port 1

Port 2

Port 3

Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.11	3.11	-2.43	-2.68	-2.35	-2.74

802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

CF5.61GHz

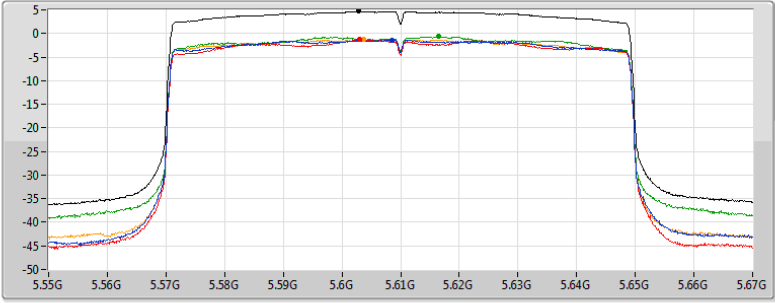
Span120MHz

RBW1MHz

VBW3MHz

Sweep Time20ms

Detector TypeRMS



Sum

Port 1

Port 2

Port 3

Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.72	4.72	-1.35	-1.29	-0.65	-1.24

802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

CF5.65GHz

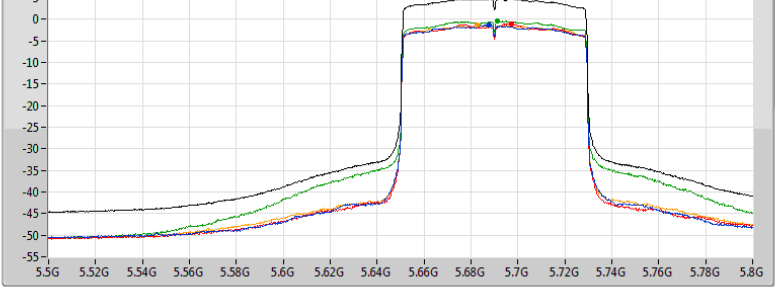
Span300MHz

RBW1MHz

VBW3MHz

Sweep Time20ms

Detector TypeRMS



Sum

Port 1

Port 2

Port 3

Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.85	4.85	-1.35	-1.04	-0.40	-1.28

802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz

CF5.735GHz

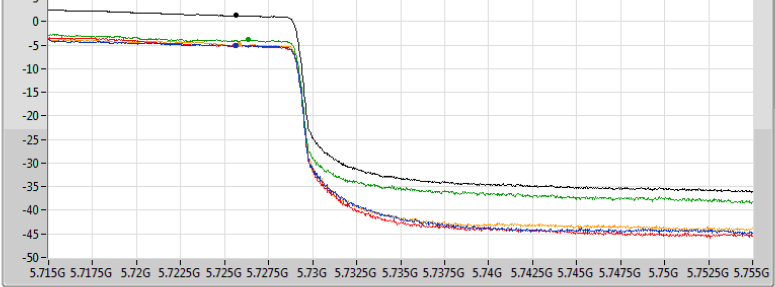
Span40MHz

RBW500kHz

VBW3MHz

Sweep Time20ms

Detector TypeRMS



Sum

Port 1

Port 2

Port 3

Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.25	1.25	-5.06	-5.02	-3.85	-4.89

802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

CF5.775GHz

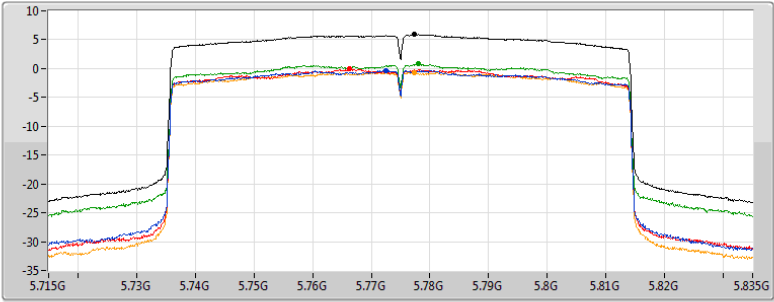
Span120MHz

RBW500kHz

VBW3MHz

Sweep Time20ms

Detector TypeRMS



Sum

Port 1

Port 2

Port 3

Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.88	5.88	-0.37	-0.06	0.84	-0.67



4TX mode <160MHz (80+80MHz)>:
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ax HEW80+80_Nss1,(MCS0)_4TX	0.72
5.25-5.35GHz	-
802.11ax HEW80+80_Nss1,(MCS0)_4TX	1.42
5.47-5.725GHz	-
802.11ax HEW80+80_Nss2,(MCS0)_4TX	1.27

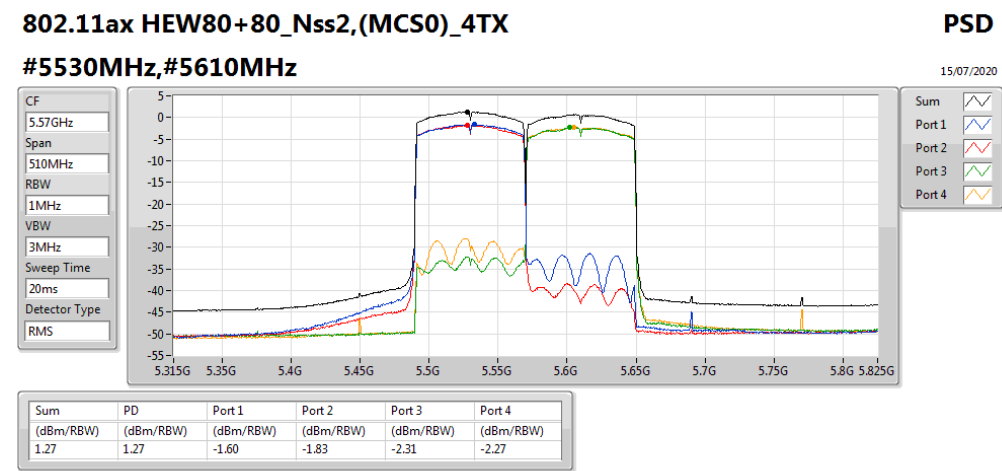
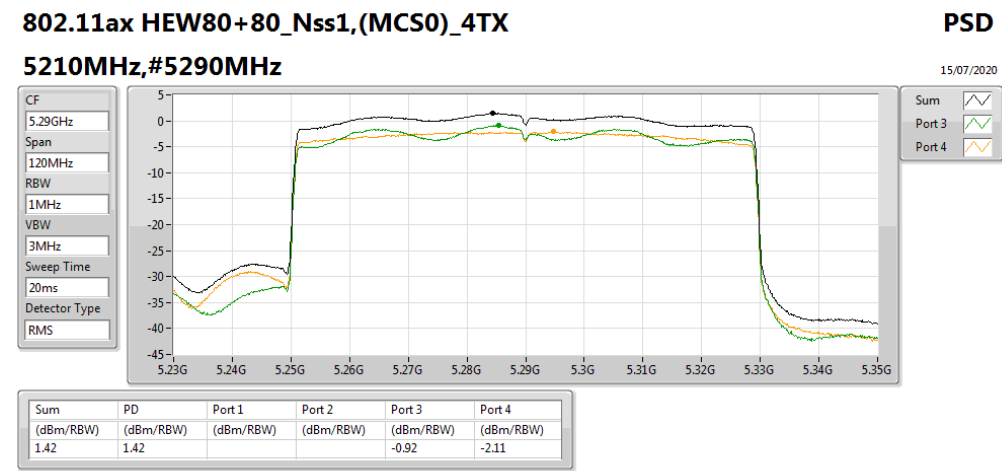
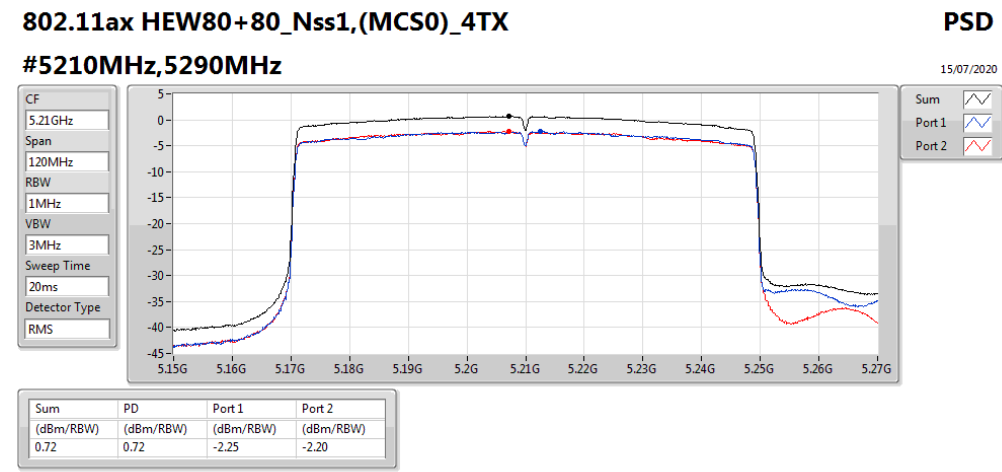
RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	4.51	-2.25	-2.20			0.72	17.00
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	1.50			-0.92	-2.11	1.42	11.00
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	4.51	-1.60	-1.83	-2.31	-2.27	1.27	11.00

DG = Directional Gain; For UNII-1, UNII-2A and UNII-2C, **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;





8TX mode <20MHz, 40MHz, 80MHz>:
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_8TX	13.68
802.11ax HEW20_Nss1,(MCS0)_8TX	13.66
802.11ax HEW40_Nss1,(MCS0)_8TX	12.48
802.11ax HEW80_Nss1,(MCS0)_8TX	6.16
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_8TX	7.46
802.11ax HEW20_Nss1,(MCS0)_8TX	7.66
802.11ax HEW40_Nss1,(MCS0)_8TX	7.68
802.11ax HEW80_Nss1,(MCS0)_8TX	4.63
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_8TX	7.62
802.11ax HEW20_Nss1,(MCS0)_8TX	7.50
802.11ax HEW40_Nss1,(MCS0)_8TX	7.67
802.11ax HEW80_Nss1,(MCS0)_8TX	4.85
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_8TX	15.35
802.11ax HEW20_Nss1,(MCS0)_8TX	14.78
802.11ax HEW40_Nss1,(MCS0)_8TX	12.41
802.11ax HEW80_Nss1,(MCS0)_8TX	7.07

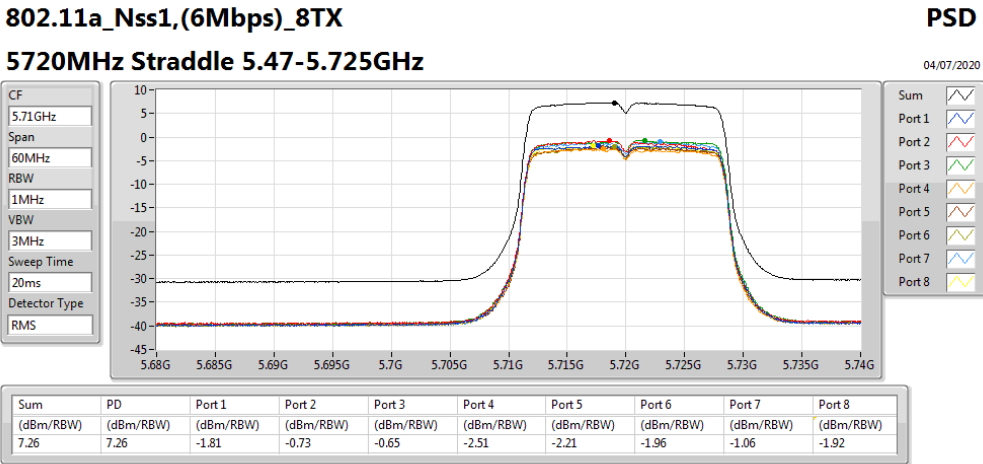
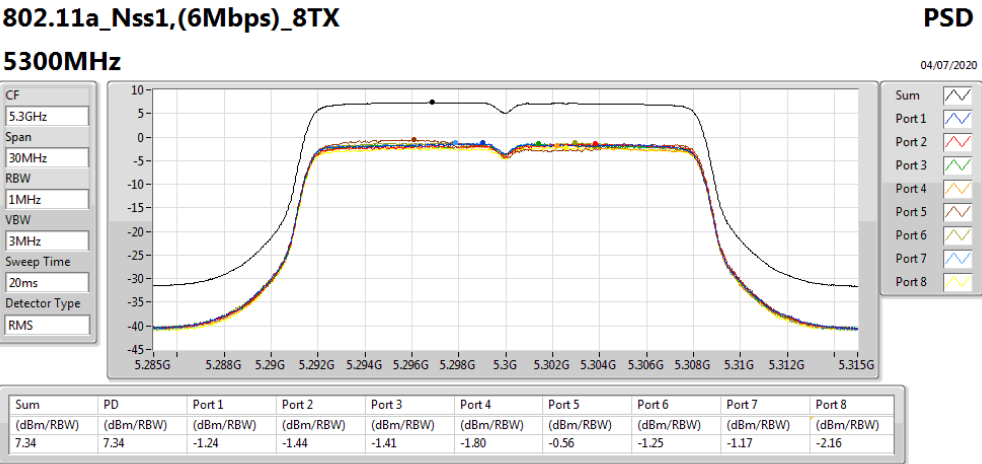
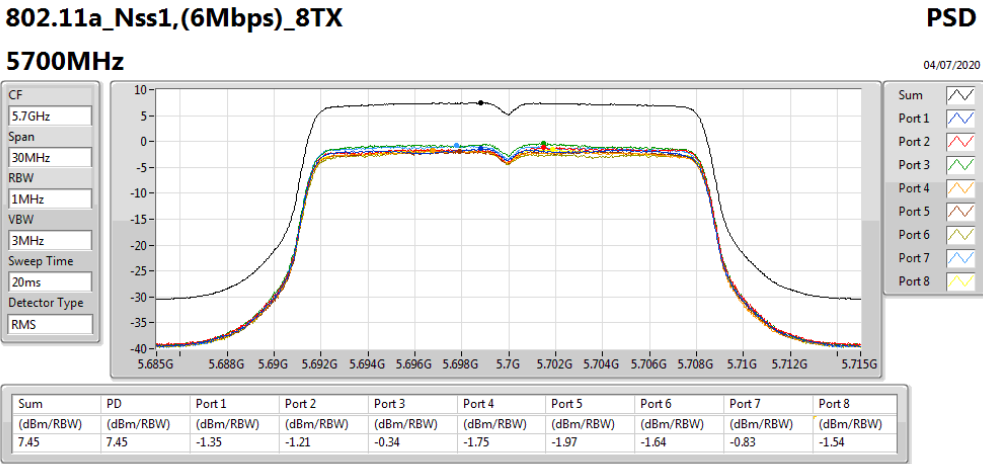
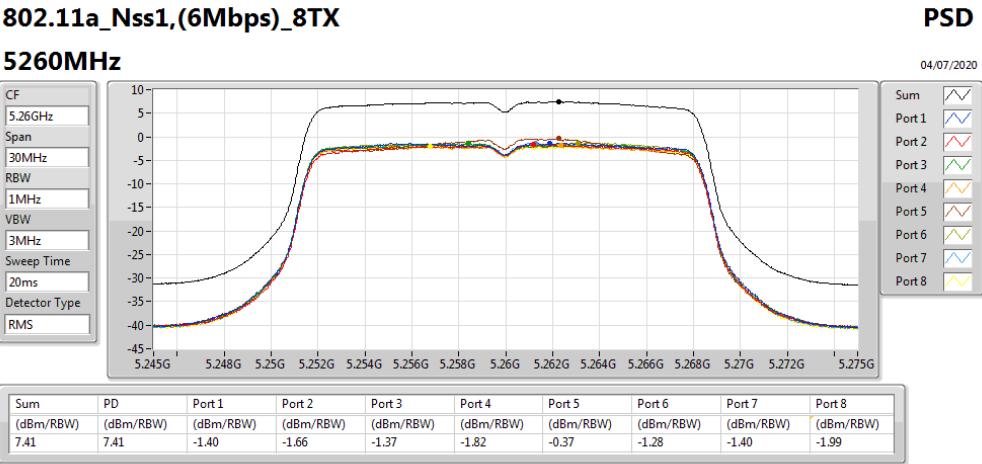
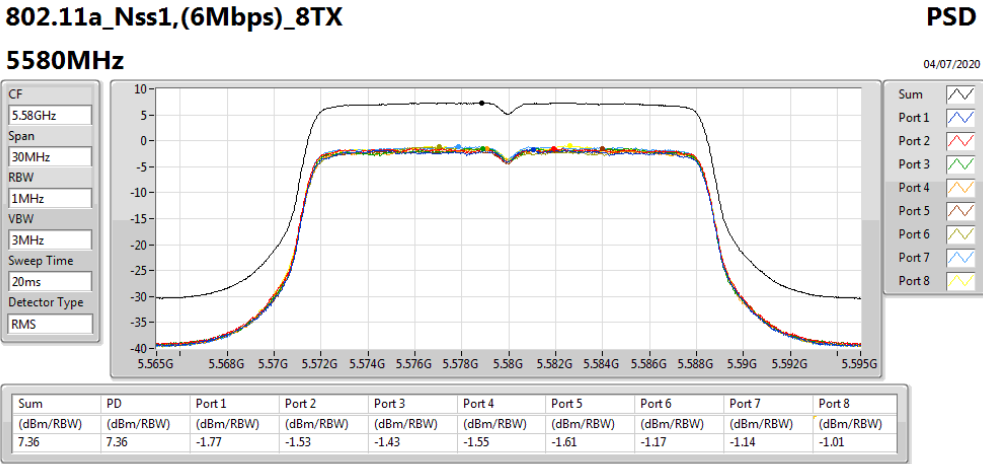
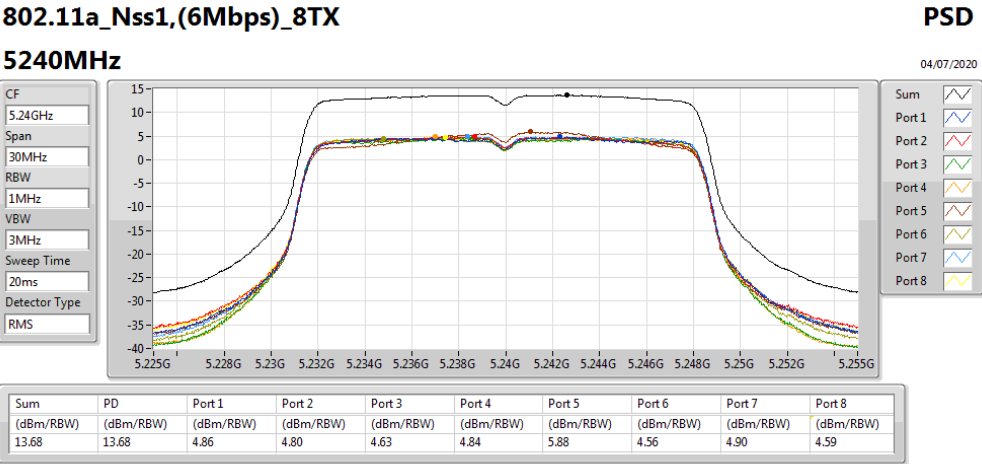
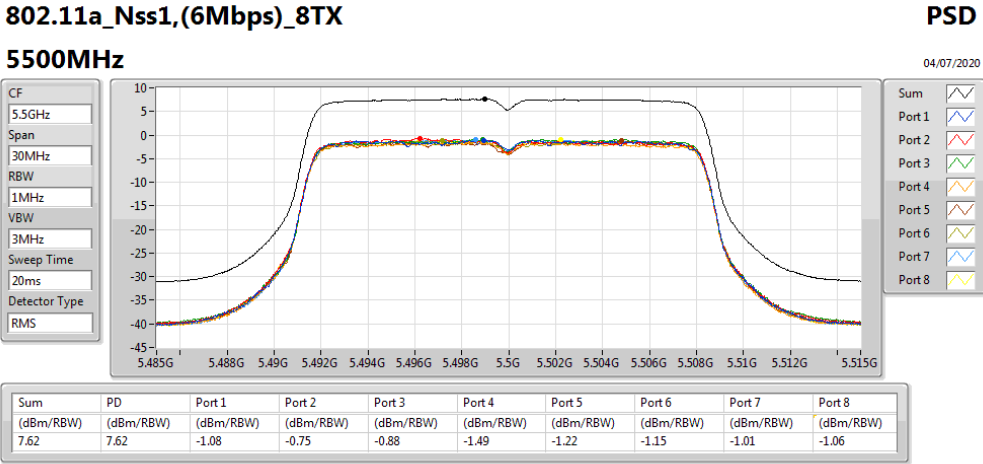
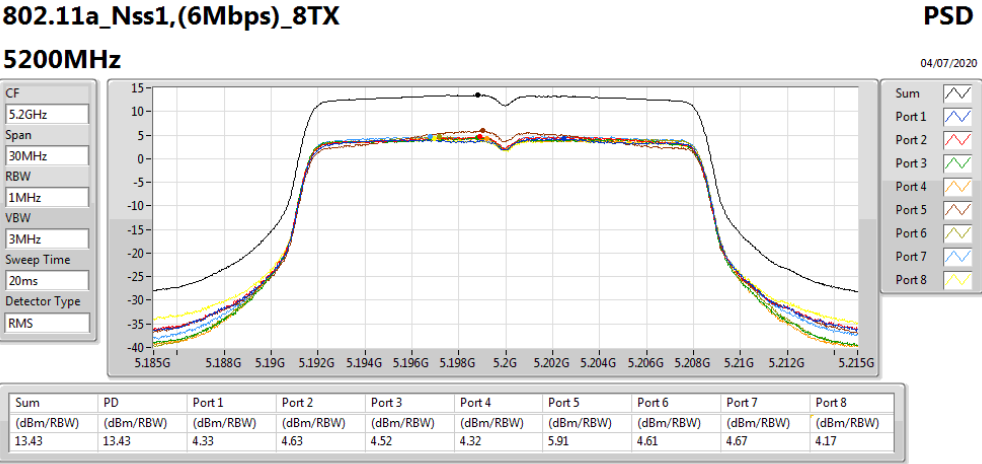
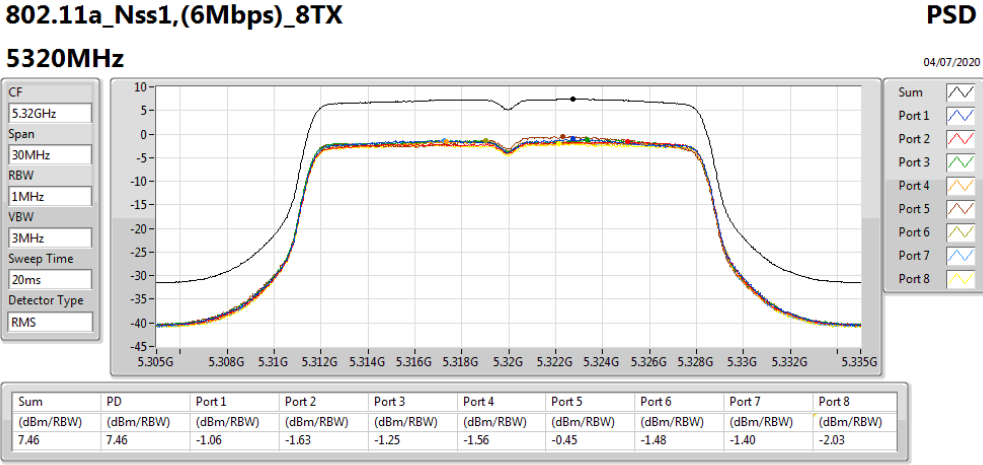
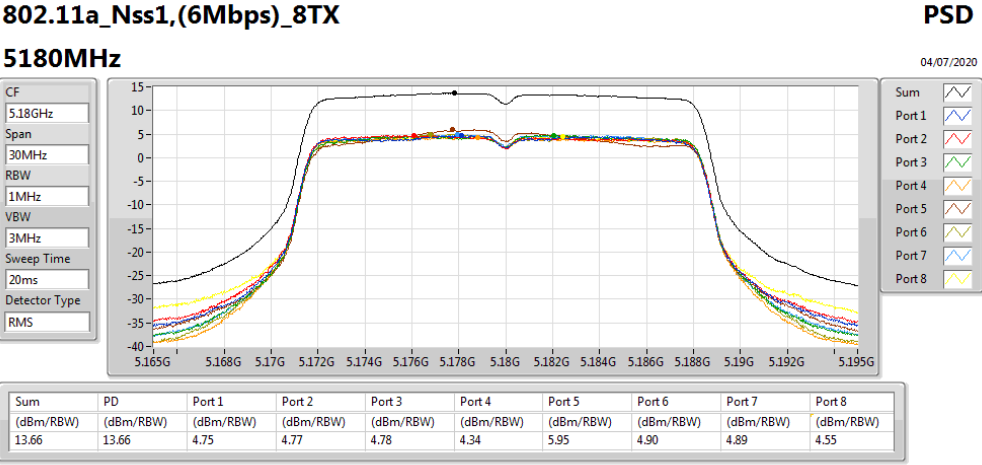
RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

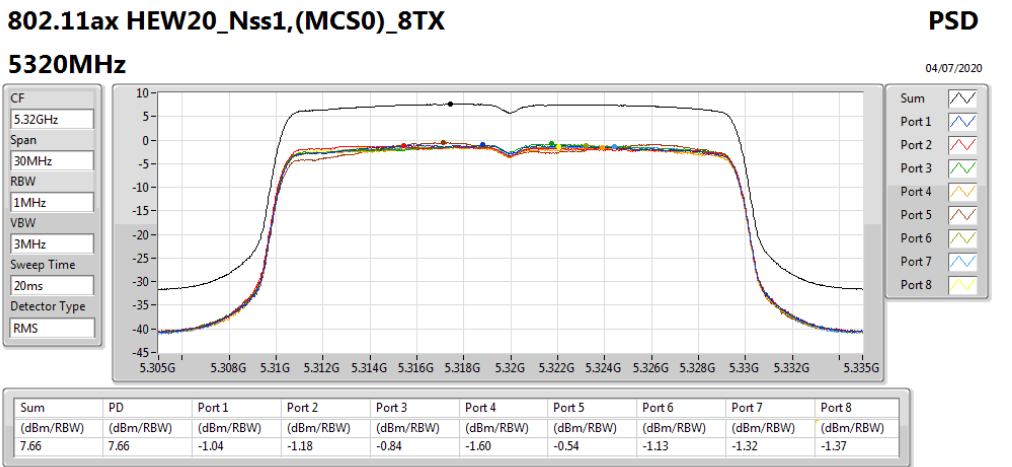
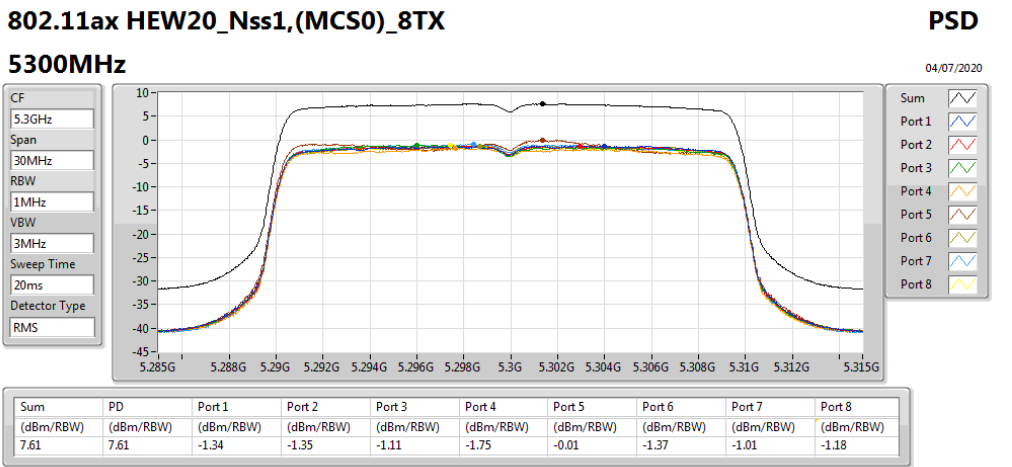
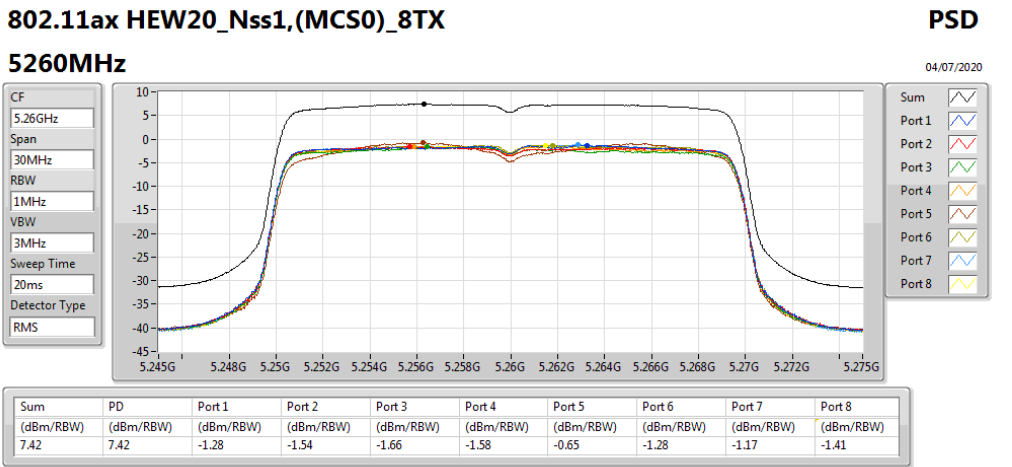
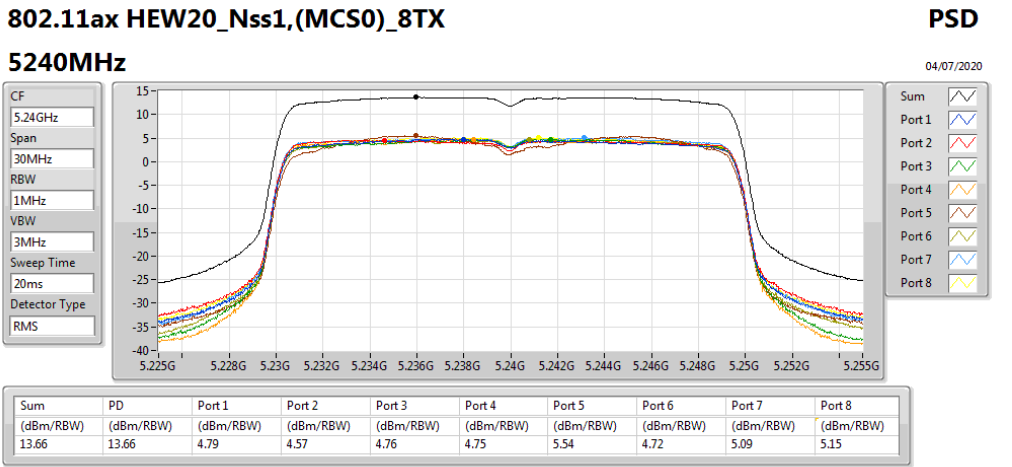
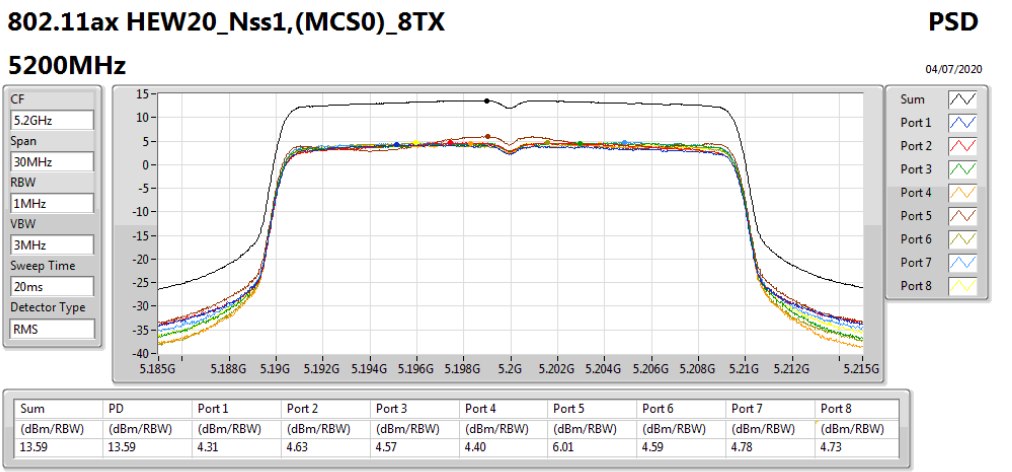
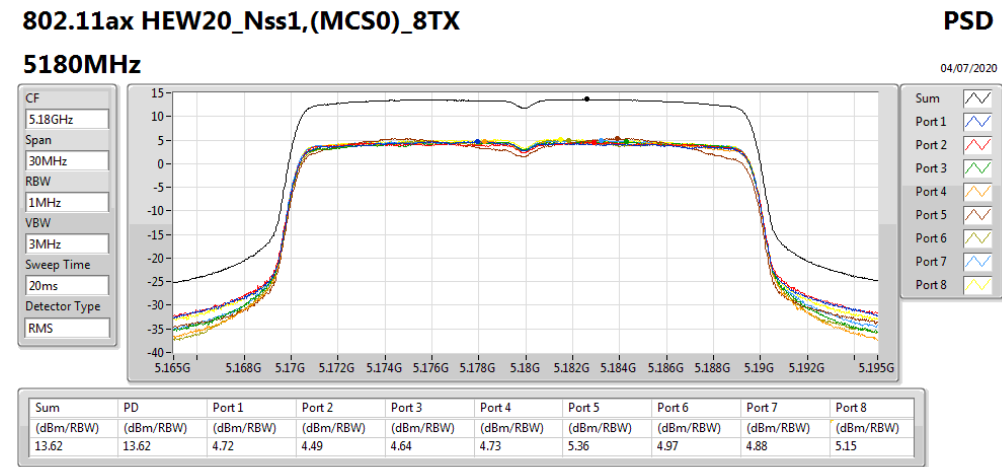
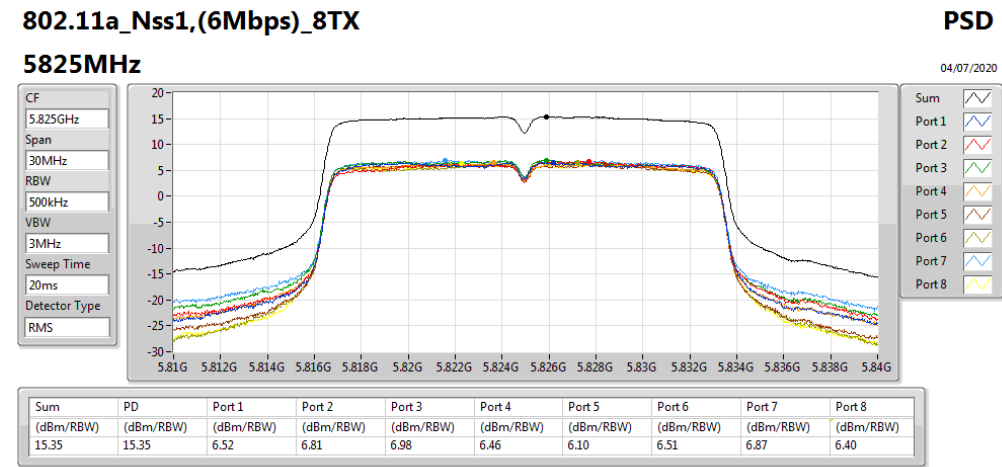
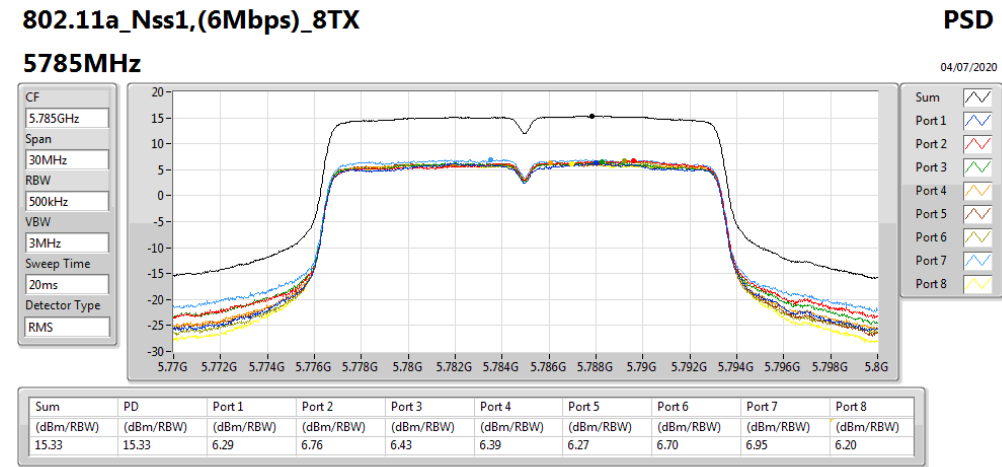
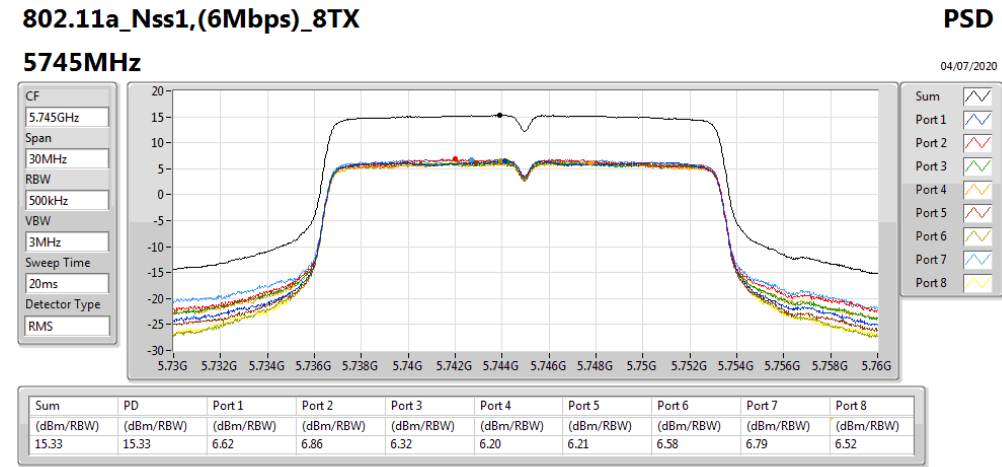
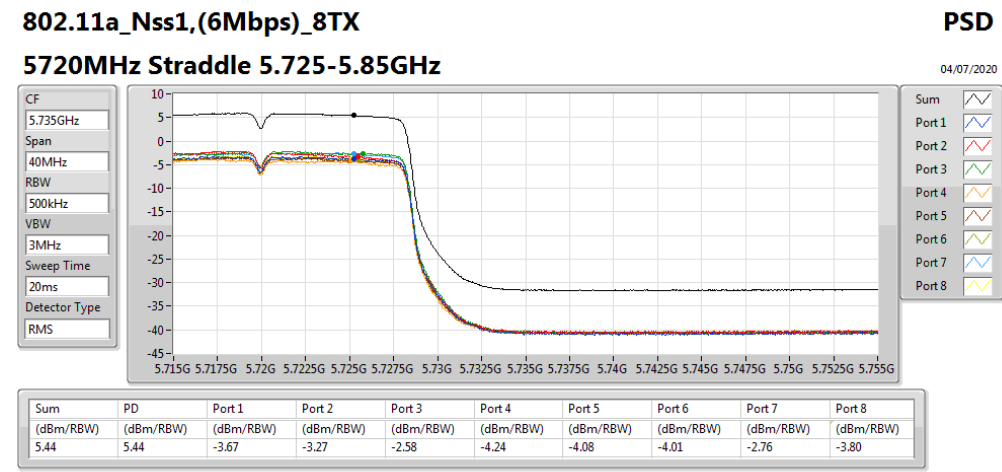


Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	Port 5 (dBm/RBW)	Port 6 (dBm/RBW)	Port 7 (dBm/RBW)	Port 8 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	9.29	4.75	4.77	4.78	4.34	5.95	4.90	4.89	4.55	13.66	13.71
5200MHz	Pass	9.29	4.33	4.63	4.52	4.32	5.91	4.61	4.67	4.17	13.43	13.71
5240MHz	Pass	9.29	4.86	4.80	4.63	4.84	5.88	4.56	4.90	4.59	13.68	13.71
5260MHz	Pass	9.29	-1.40	-1.66	-1.37	-1.82	-0.37	-1.28	-1.40	-1.99	7.41	7.71
5300MHz	Pass	9.29	-1.24	-1.44	-1.41	-1.80	-0.56	-1.25	-1.17	-2.16	7.34	7.71
5320MHz	Pass	9.29	-1.06	-1.63	-1.25	-1.56	-0.45	-1.48	-1.40	-2.03	7.46	7.71
5500MHz	Pass	9.29	-1.08	-0.75	-0.88	-1.49	-1.22	-1.15	-1.01	-1.06	7.62	7.71
5580MHz	Pass	9.29	-1.77	-1.53	-1.43	-1.55	-1.61	-1.17	-1.14	-1.01	7.36	7.71
5700MHz	Pass	9.29	-1.35	-1.21	-0.34	-1.75	-1.97	-1.64	-0.83	-1.54	7.45	7.71
5720MHz Straddle 5.47-5.725GHz	Pass	9.29	-1.81	-0.73	-0.65	-2.51	-2.21	-1.96	-1.06	-1.92	7.26	7.71
5720MHz Straddle 5.725-5.85GHz	Pass	9.29	-3.67	-3.27	-2.58	-4.24	-4.08	-4.01	-2.76	-3.80	5.44	26.71
5745MHz	Pass	9.29	6.62	6.86	6.32	6.20	6.21	6.58	6.79	6.52	15.33	26.71
5785MHz	Pass	9.29	6.29	6.76	6.43	6.39	6.27	6.70	6.95	6.20	15.33	26.71
5825MHz	Pass	9.29	6.52	6.81	6.98	6.46	6.10	6.51	6.87	6.40	15.35	26.71
802.11ax HEW20_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	9.29	4.72	4.49	4.64	4.73	5.36	4.97	4.88	5.15	13.62	13.71
5200MHz	Pass	9.29	4.31	4.63	4.57	4.40	6.01	4.59	4.78	4.73	13.59	13.71
5240MHz	Pass	9.29	4.79	4.57	4.76	4.75	5.54	4.72	5.09	5.15	13.66	13.71
5260MHz	Pass	9.29	-1.28	-1.54	-1.66	-1.58	-0.65	-1.28	-1.17	-1.41	7.42	7.71
5300MHz	Pass	9.29	-1.34	-1.35	-1.11	-1.75	-0.01	-1.37	-1.01	-1.18	7.61	7.71
5320MHz	Pass	9.29	-1.04	-1.18	-0.84	-1.60	-0.54	-1.13	-1.32	-1.37	7.66	7.71
5500MHz	Pass	9.29	-1.55	-1.47	-1.19	-2.20	-1.62	-1.53	-1.47	-1.48	7.28	7.71
5580MHz	Pass	9.29	-1.63	-1.52	-1.51	-1.77	-1.42	-1.29	-1.07	-1.19	7.30	7.71
5700MHz	Pass	9.29	-1.40	-0.78	-0.84	-1.25	-1.89	-1.82	-0.86	-1.48	7.50	7.71
5720MHz Straddle 5.47-5.725GHz	Pass	9.29	-1.70	-0.87	-0.71	-2.14	-1.89	-1.92	-1.01	-2.01	7.33	7.71
5720MHz Straddle 5.725-5.85GHz	Pass	9.29	-3.47	-2.83	-2.34	-4.25	-3.78	-4.07	-2.86	-3.66	5.58	26.71
5745MHz	Pass	9.29	6.07	6.57	5.89	5.29	5.70	5.94	6.11	6.09	14.78	26.71
5785MHz	Pass	9.29	5.32	6.14	5.37	6.14	5.74	6.36	6.42	5.63	14.68	26.71
5825MHz	Pass	9.29	5.99	5.88	5.44	6.12	5.66	5.95	6.40	5.46	14.66	26.71
802.11ax HEW40_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	9.29	0.24	0.77	0.41	0.18	1.57	0.50	0.82	0.75	9.43	13.71
5230MHz	Pass	9.29	3.58	3.82	3.71	3.39	4.44	3.57	3.88	4.04	12.48	13.71
5270MHz	Pass	9.29	-1.33	-1.05	-1.62	-1.59	-0.54	-0.89	-0.82	-1.38	7.68	7.71
5310MHz	Pass	9.29	-1.60	-1.21	-0.97	-2.18	-0.71	-1.08	-1.37	-1.59	7.46	7.71
5510MHz	Pass	9.29	-1.38	-0.82	-0.43	-1.99	-1.22	-1.10	-1.13	-1.46	7.51	7.71
5550MHz	Pass	9.29	-1.61	-1.19	-0.97	-2.04	-1.20	-1.38	-1.36	-1.15	7.38	7.71
5670MHz	Pass	9.29	-1.50	-1.29	-0.83	-1.43	-1.99	-1.55	-1.33	-1.77	7.35	7.71
5710MHz Straddle 5.47-5.725GHz	Pass	9.29	-1.35	-0.66	-0.12	-1.70	-1.76	-1.93	-0.60	-1.61	7.67	7.71
5710MHz Straddle 5.725-5.85GHz	Pass	9.29	-3.99	-3.01	-3.10	-4.76	-4.35	-4.68	-3.58	-4.22	5.06	26.71
5755MHz	Pass	9.29	3.45	3.86	3.37	3.17	3.49	3.41	4.22	3.15	12.30	26.71
5795MHz	Pass	9.29	3.28	3.88	3.56	3.75	3.47	3.52	4.33	3.03	12.41	26.71
802.11ax HEW80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	9.29	-3.10	-2.38	-2.80	-3.08	-2.06	-2.53	-2.37	-2.29	6.16	13.71
5290MHz	Pass	9.29	-4.40	-4.15	-4.22	-4.84	-3.46	-3.94	-4.07	-4.22	4.63	7.71
5530MHz	Pass	9.29	-4.49	-3.96	-3.60	-5.13	-4.00	-4.47	-4.13	-4.15	4.49	7.71
5610MHz	Pass	9.29	-4.26	-3.65	-3.45	-4.50	-4.03	-3.97	-3.13	-3.64	4.85	7.71
5690MHz Straddle 5.47-5.725GHz	Pass	9.29	-4.58	-3.98	-3.66	-4.58	-5.13	-4.73	-4.02	-4.74	4.36	7.71
5690MHz Straddle 5.725-5.85GHz	Pass	9.29	-7.82	-7.33	-7.21	-8.40	-8.53	-8.34	-7.81	-8.23	1.01	26.71
5775MHz	Pass	9.29	-1.87	-1.46	-1.95	-1.82	-1.94	-1.50	-0.77	-1.94	7.07	26.71

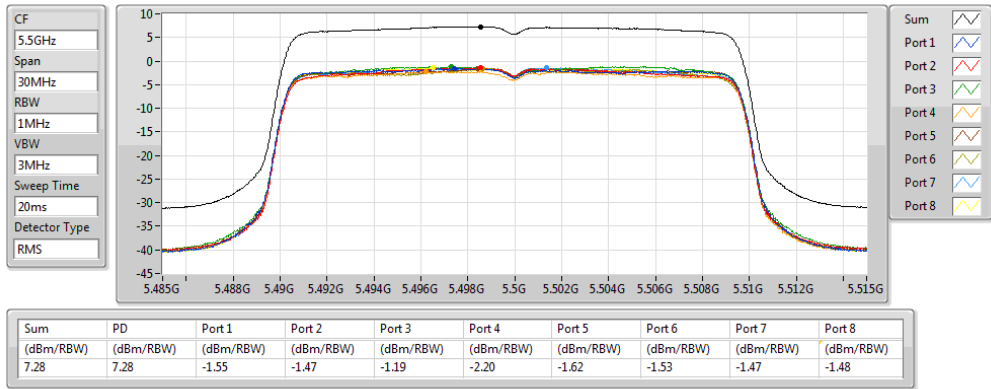
DG = Directional Gain; For UNII-1, UNII-2A and UNII-2C, RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;





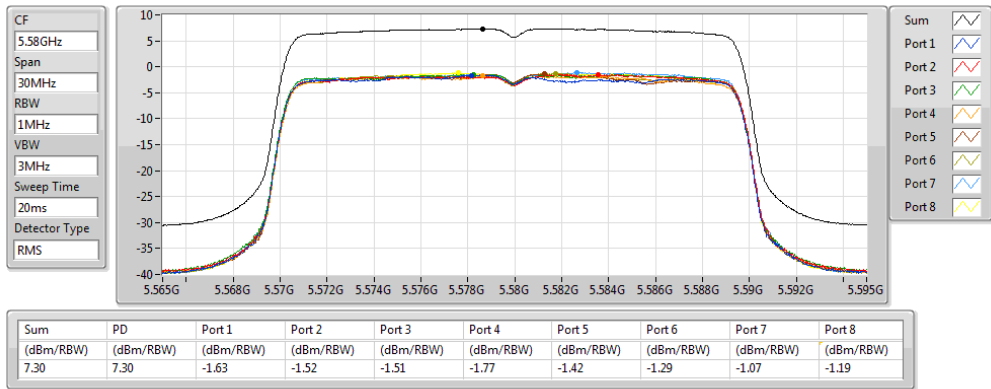
802.11ax HEW20_Nss1,(MCS0)_8TX

5500MHz



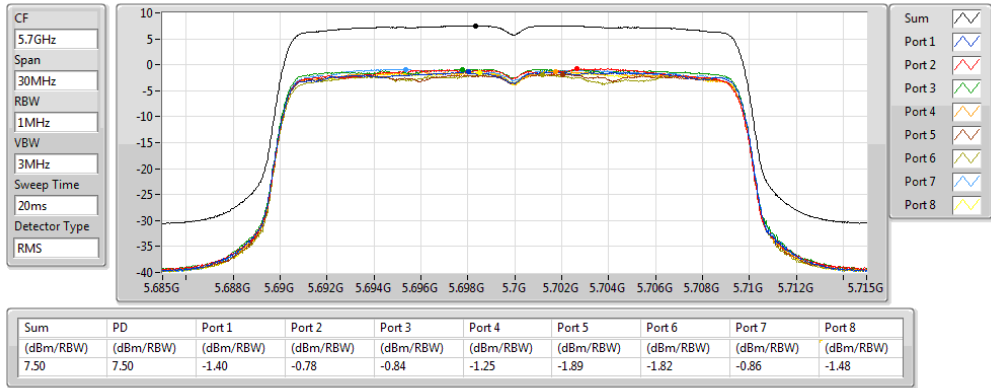
802.11ax HEW20_Nss1,(MCS0)_8TX

5580MHz



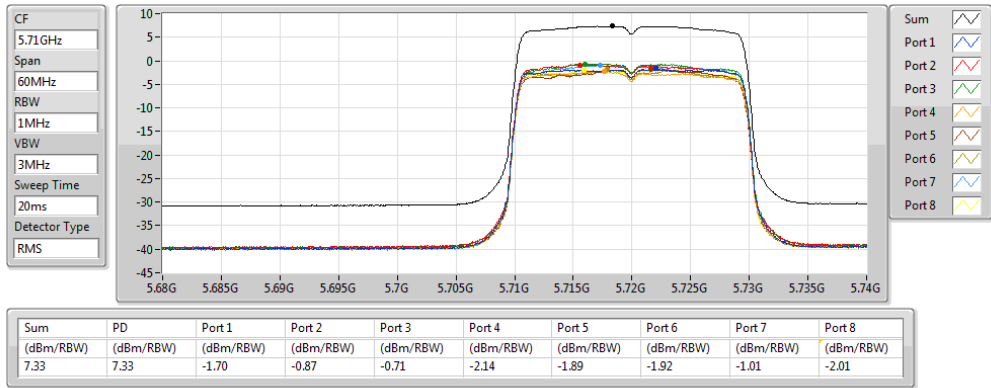
802.11ax HEW20_Nss1,(MCS0)_8TX

5700MHz



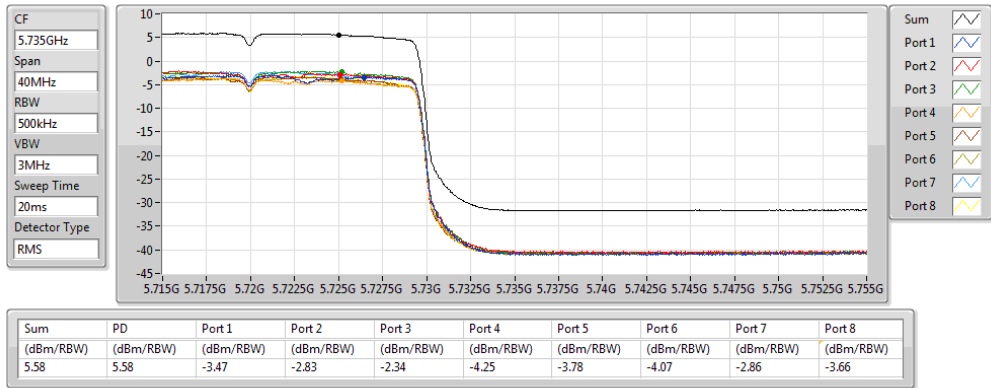
802.11ax HEW20_Nss1,(MCS0)_8TX

5720MHz Straddle 5.47-5.725GHz



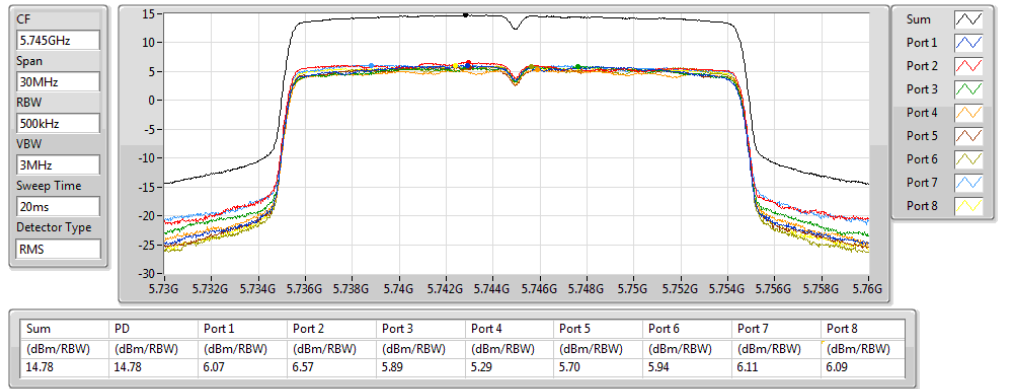
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5720MHz Straddle 5.725-5.85GHz



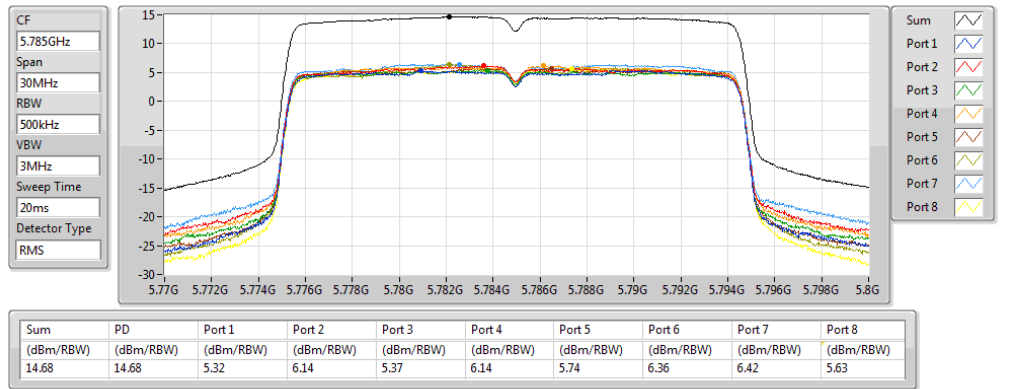
802.11ax HEW20_Nss1,(MCS0)_8TX

5745MHz



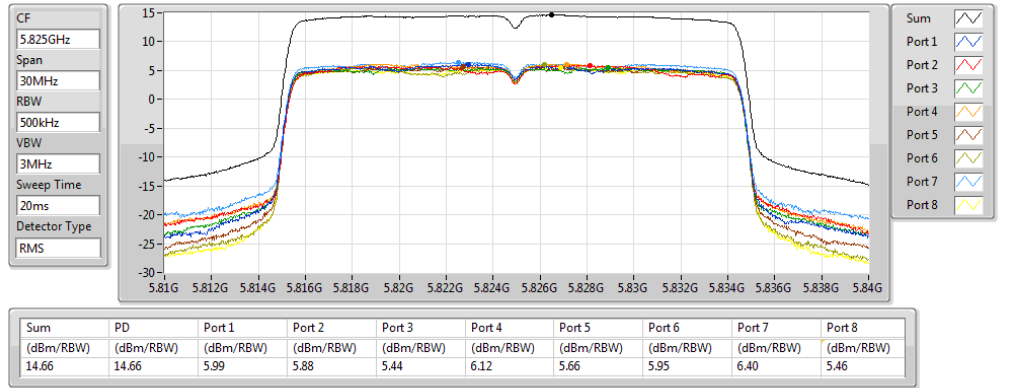
802.11ax HEW20_Nss1,(MCS0)_8TX

5785MHz



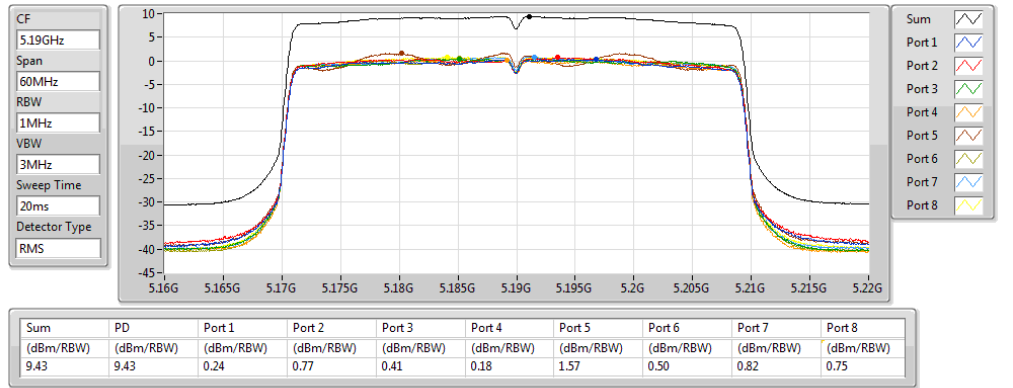
802.11ax HEW20_Nss1,(MCS0)_8TX

5825MHz



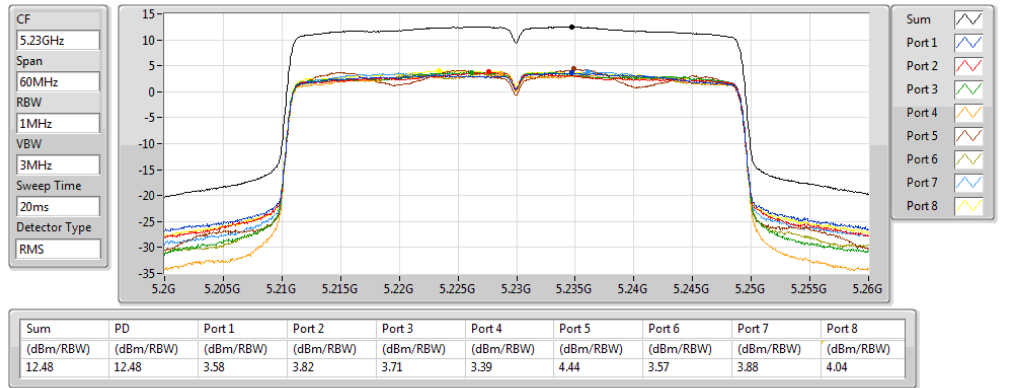
802.11ax HEW40_Nss1,(MCS0)_8TX

5190MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

5230MHz

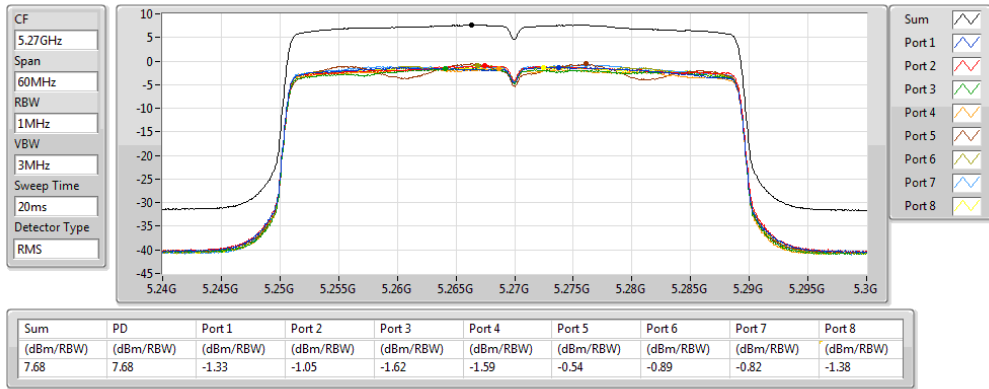


802.11ax HEW40_Nss1,(MCS0)_8TX

5270MHz

PSD

04/07/2020

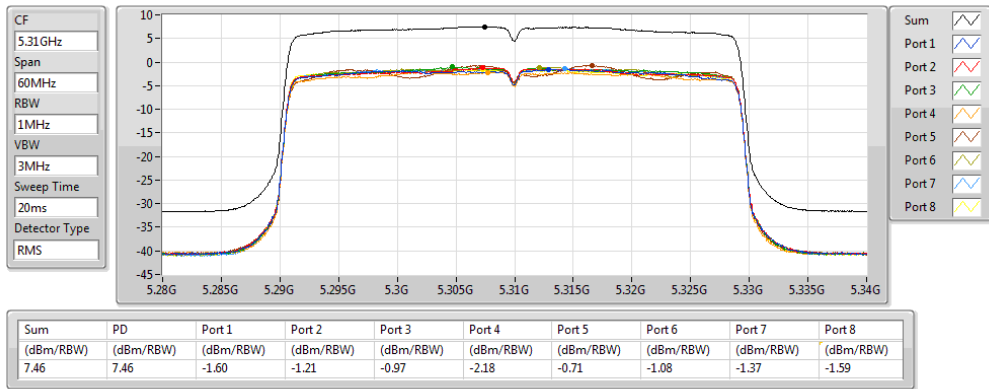


802.11ax HEW40_Nss1,(MCS0)_8TX

5310MHz

PSD

04/07/2020

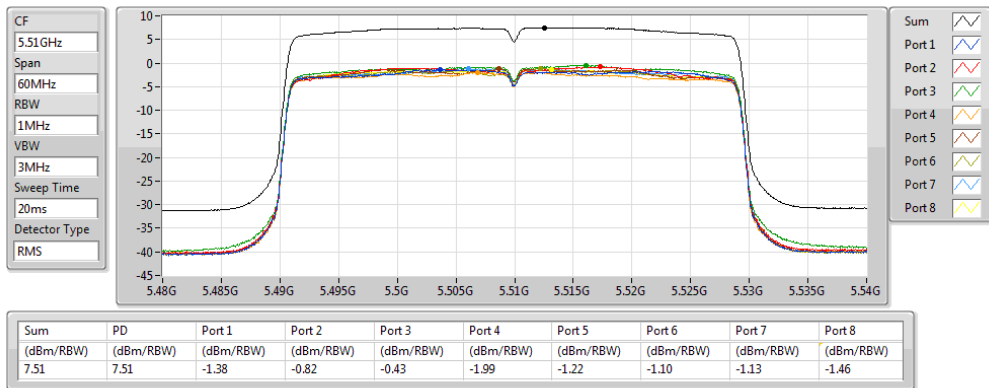


802.11ax HEW40_Nss1,(MCS0)_8TX

5510MHz

PSD

04/07/2020

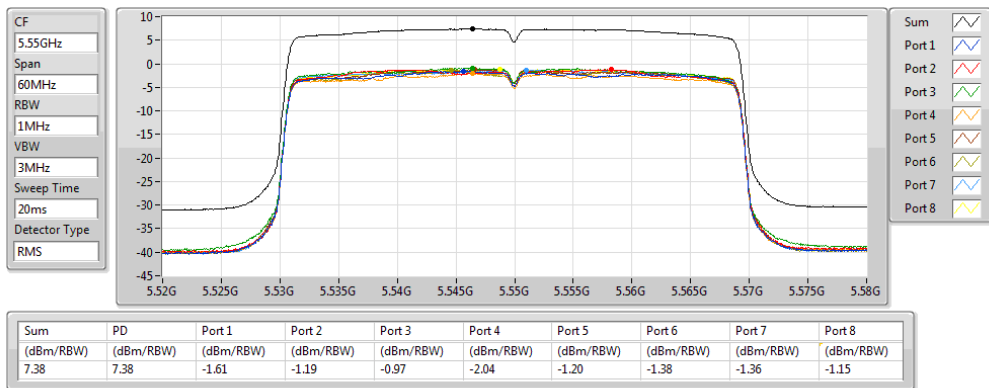


802.11ax HEW40_Nss1,(MCS0)_8TX

5550MHz

PSD

04/07/2020

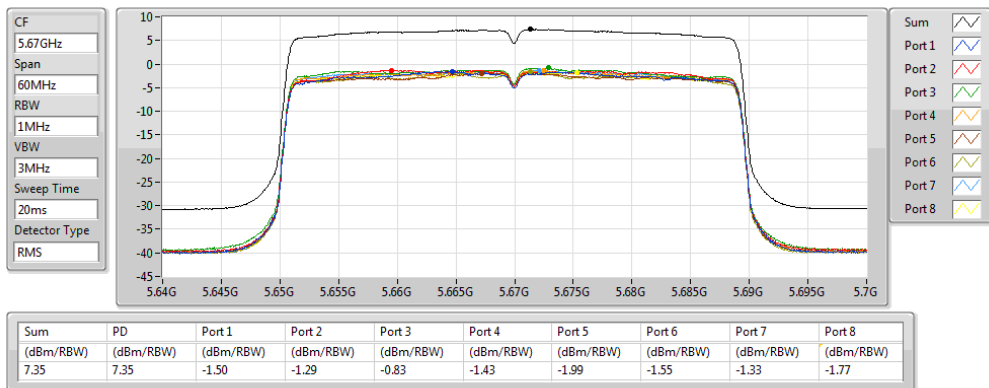


802.11ax HEW40_Nss1,(MCS0)_8TX

5670MHz

PSD

04/07/2020

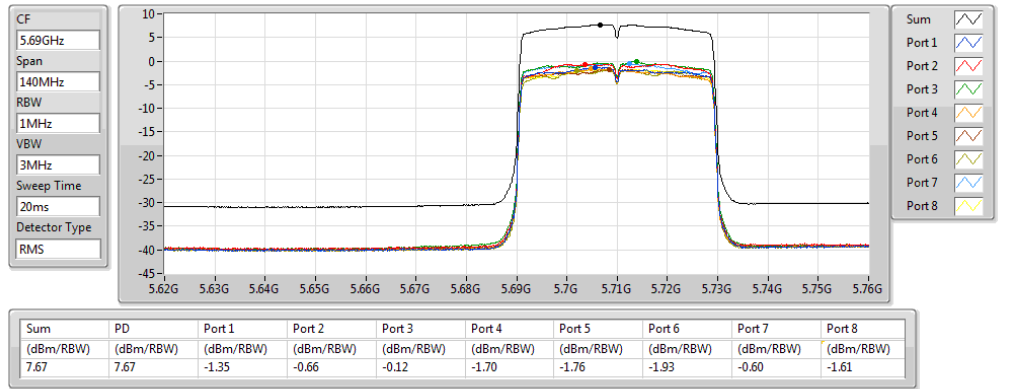


802.11ax HEW40_Nss1,(MCS0)_8TX

5710MHz Straddle 5.47-5.725GHz

PSD

04/07/2020

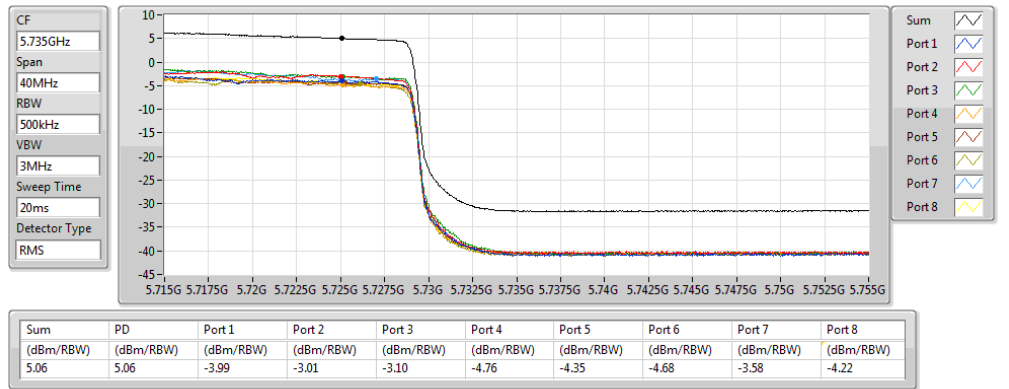


802.11ax HEW40_Nss1,(MCS0)_8TX

5710MHz Straddle 5.725-5.85GHz

PSD

04/07/2020

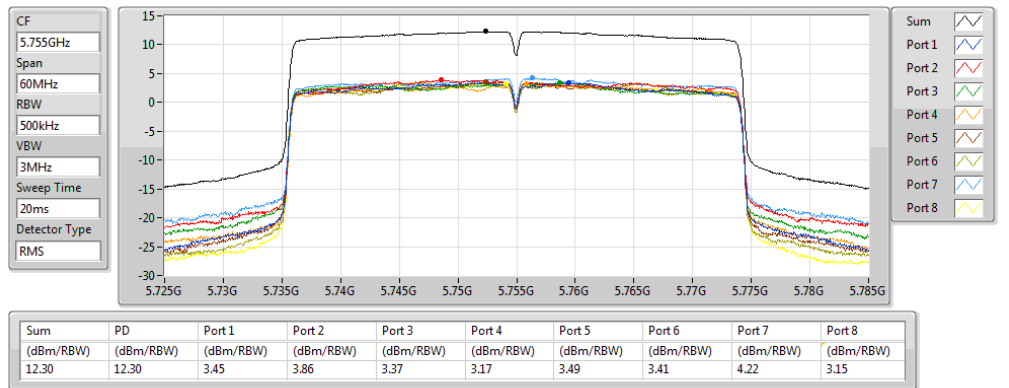


802.11ax HEW40_Nss1,(MCS0)_8TX

5755MHz

PSD

04/07/2020

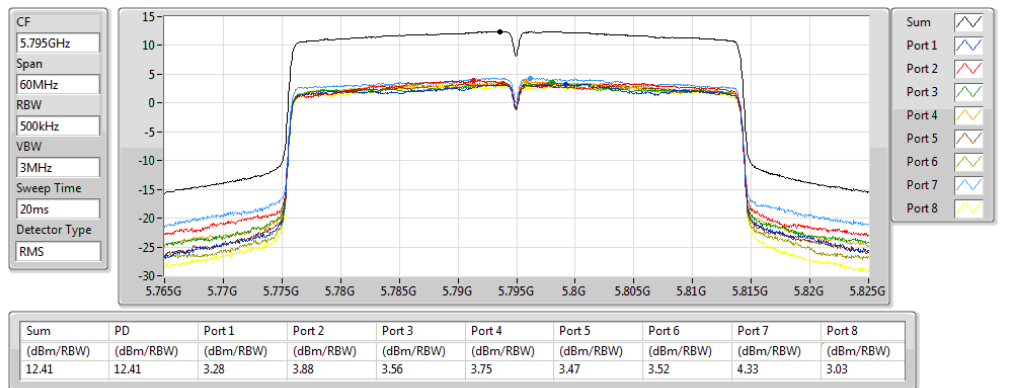


802.11ax HEW40_Nss1,(MCS0)_8TX

5795MHz

PSD

04/07/2020

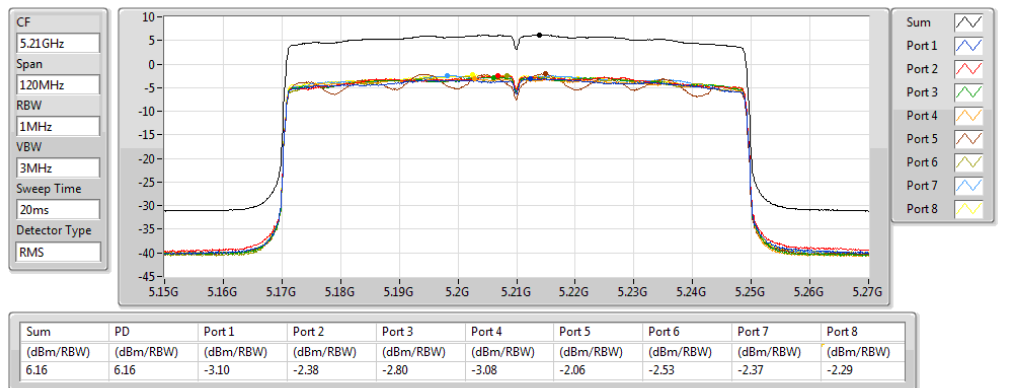


802.11ax HEW80_Nss1,(MCS0)_8TX

5210MHz

PSD

04/07/2020



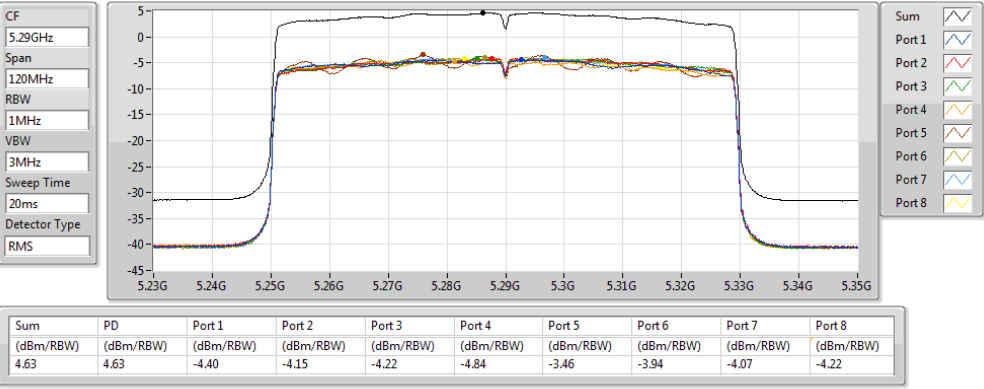


802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

5290MHz

04/07/2020

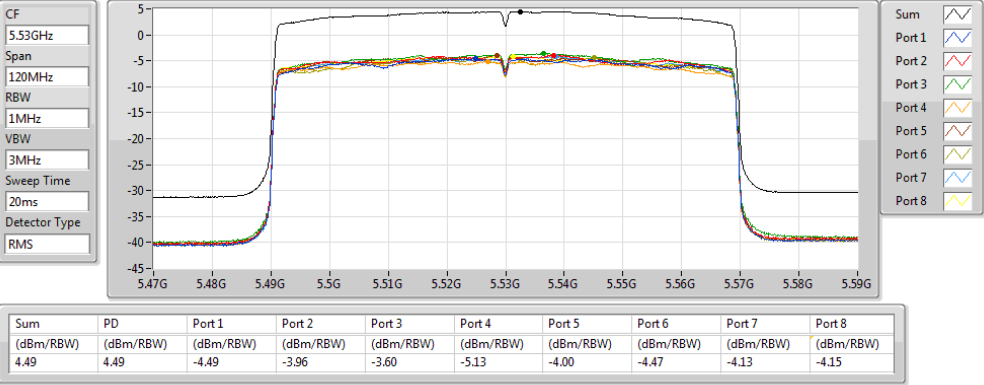


802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

5530MHz

04/07/2020

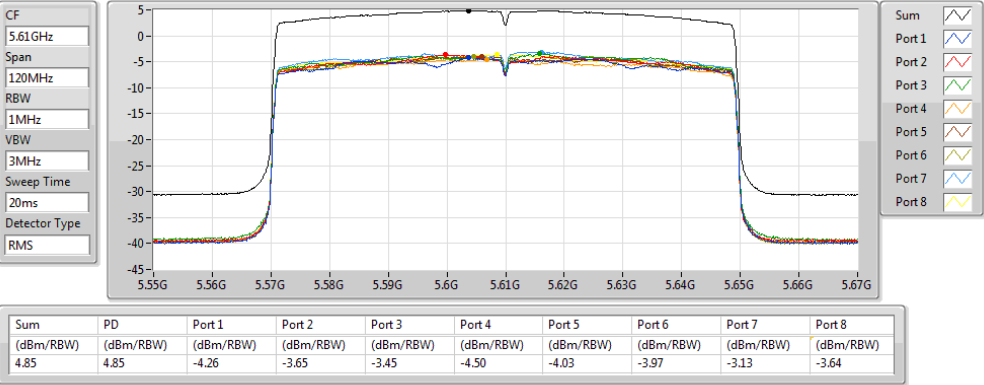


802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

5610MHz

04/07/2020

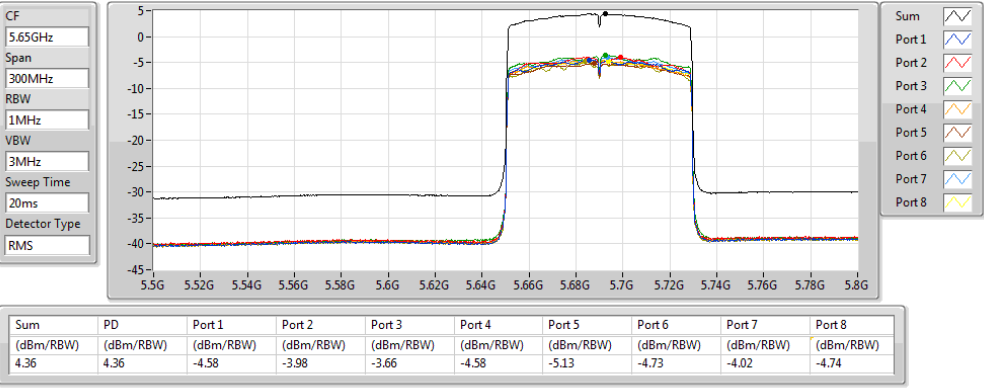


802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

5690MHz Straddle 5.47-5.725GHz

04/07/2020

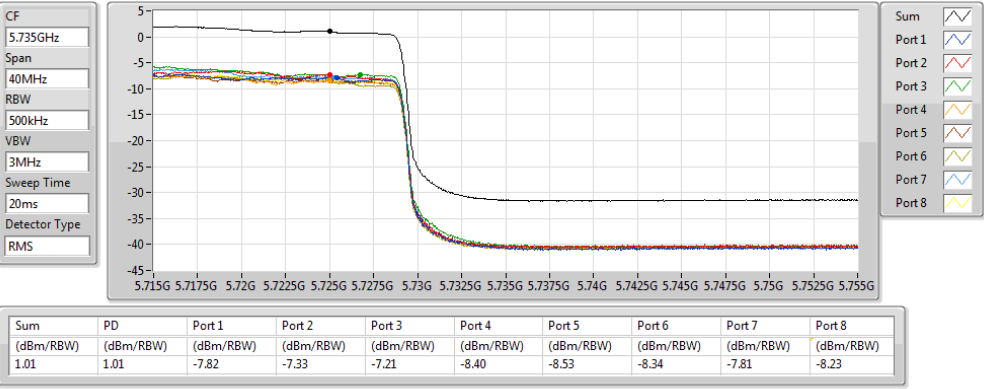


802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

5690MHz Straddle 5.725-5.85GHz

04/07/2020

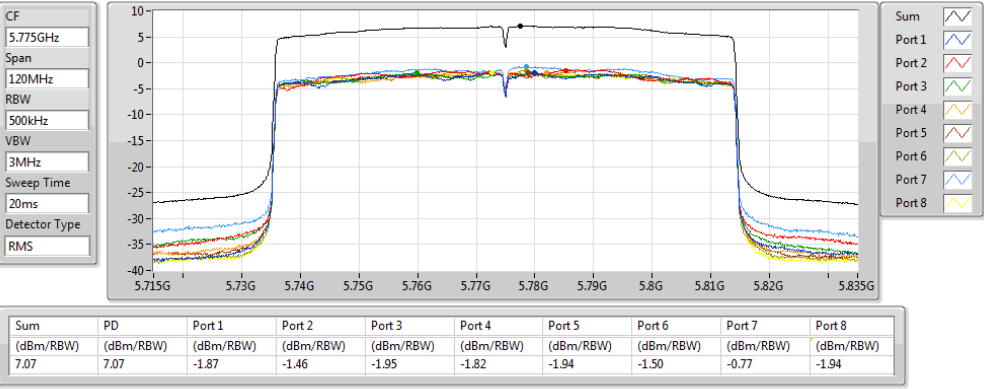


802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

5775MHz

04/07/2020





8TX mode <160MHz (80+80MHz)>:
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	2.79
5.25-5.35GHz	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	3.03
5.47-5.725GHz	-
802.11ax HEW80+80_Nss2,(MCS0)_8TX	1.82

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)	Port 5 (dBm/RBW)	Port 6 (dBm/RBW)	Port 7 (dBm/RBW)	Port 8 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	6.27	-3.30	-2.22	-2.89	-3.37					2.79	16.73
5210MHz,#5290MHz	Pass	6.27					-2.64	-2.47	-3.19	-2.69	3.03	10.73
802.11ax HEW80+80_Nss2,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	6.27	-4.39	-3.67	-3.65	-5.29	-4.38	-4.39	-3.41	-4.03	1.82	10.73

DG = Directional Gain; For UNII-1, UNII-2A and UNII-2C, RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;