Testing Laboratory 1190

FCC RADIO TEST REPORT

FCC ID	:	RSE-OWA3111
Equipment Name	:	MESH Extender
Trade Name	:	Technicolor
Model Number	:	OWA3111, GFEX310
Product Code	:	MESH Extender
Applicant	:	Technicolor Delivery Technologies Belgium Prins Boudewijnlaan 47 Edegem B-2650 Belgium
Standard	:	47 CFR FCC Part 15 Subpart E § 15.407

The product was received on Jun. 08, 2020, and testing was started from Jun. 08, 2020 and completed on Jul. 17, 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.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR071024AB	01	Initial issue of report	Aug. 12, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Measured	Limit
2.1	15.407(b)(6)	AC Power Line Conducted Emissions	PASS	370.5kHz 30.44dBuV (Margin -18.05dB)	-
2.2	15.407(a)	26dB Spectrum Bandwidth and 99% Occupied Bandwidth	PASS	99% Occupied Bandwidth [MHz]: **For CDD Mode:** 11a: 19.310MHz 11ax(20M): 19.400MHz 11ax(40M): 37.901MHz 11ax(80M): 77.001MHz **For TXBF Mode:** 11ax(20M): 19.430MHz 11ax(40M): 37.841MHz 11ax(80M): 77.121MHz 26dB Bandwidth [MHz]: **For CDD Mode:** 11a: 36.600MHz 11ax(20M): 36.570MHz 11ax(40M): 60.360MHz 11ax(80M): 81.960MHz **For TXBF Mode:** 11ax(20M): 40.290MHz 11ax(40M): 60.240MHz 11ax(80M): 81.840MHz	-
2.3	15.407(e)	6dB Bandwidth and 99% Occupied Bandwidth for U-NII-3	PASS	99% Occupied Bandwidth [MHz]: **For CDD Mode:** 11a: 16.350MHz 11ax(20M): 19.250MHz 11ax(40M): 37.841MHz 11ax(80M): 77.241MHz **For TXBF Mode:** 11ax(20M): 19.250MHz 11ax(40M): 37.841MHz 11ax(80M): 77.241MHz 6dB Bandwidth [MHz]: **For CDD Mode:** 11a: 17.121MHz 11ax(20M): 18.960MHz 11ax(40M): 37.680MHz 11ax(80M): 76.800MHz **For TXBF Mode:** 11ax(20M): 19.050MHz 11ax(40M): 37.680MHz 11ax(80M): 77.280MHz	≥500kHz

2.4	15.407(a) (1/2/3)	Maximum Conducted Output Power	PASS	**For CDD Mode:** 5150-5250MHz Power [dBm]: 11a: 27.68 dBm 11ax(20M): 27.73 dBm 11ax(40M): 26.91 dBm 11ax(80M): 22.20 dBm 5725-5850MHz Power [dBm]: 11a: 28.41 dBm 11ax(20M): 28.79 dBm 11ax(40M): 28.52 dBm 11ax(80M): 28.35 dBm **For TXBF Mode:** 5150-5250MHz Power [dBm]: Nss 1 MCS0 1S2T 11ax(20M): 27.04 dBm 11ax(40M): 28.58 dBm 11ax(80M): 28.38 dBm 5725-5850MHz Power [dBm]: Nss 1 MCS0 1S4T 11ax(20M): 28.90 dBm 11ax(40M): 28.58 dBm 11ax(80M): 28.38 dBm Nss 2 MCS0 2S4T 11ax(20M): 28.91 dBm 11ax(40M): 28.56 dBm 11ax(80M): 28.58 dBm Nss 3 MCS0 3S4T 11ax(20M): 28.78 dBm 11ax(40M): 28.66 dBm 11ax(80M): 28.52 dBm	Power [dBm] 5150-5250MHz:30 5725-5850MHz:30
2.5	15.407(a) (1/2/3)	Power Spectral Density	PASS	**For CDD Mode:** 5150-5250MHz [dBm/MHz]: 11a: 14.66 dBm/MHz 11ax(20M): 14.13 dBm/MHz 11ax(40M): 5.96 dBm/MHz 11ax(80M): 3.16 dBm/MHz 5725-5850MHz [dBm/500kHz]: 11a: 13.74 dBm/500kHz 11ax(20M): 13.72 dBm/500kHz 11ax(40M): 10.60 dBm/500kHz 11ax(80M): 7.87 dBm/500kHz **For TXBF Mode:** 5150-5250MHz [dBm/MHz]: Nss 1 MCS0 1S2T 11ax(20M): 13.47 dBm/MHz 11ax(40M): 11.23 dBm/MHz 11ax(80M): 3.87 dBm/MHz 5725-5850MHz [dBm/500kHz]: Nss 1 MCS0 1S4T 11ax(20M): 13.82 dBm/500kHz	5150-5250MHz:17 [dBm/MHz] 5725-5850MHz:30 [dBm/500kHz]

				11ax(40M): 10.45 dBm/500kHz 11ax(80M): 7.72 dBm/500kHz Nss 2 MCS0 2S4T 11ax(20M): 13.78 dBm/500kHz 11ax(40M): 10.99 dBm/500kHz 11ax(80M): 8.46 dBm/500kHz Nss 3 MCS0 3S4T 11ax(20M): 14.27 dBm/500kHz 11ax(40M): 11.27 dBm/500kHz 11ax(80M): 8.78 dBm/500kHz	
2.6	15.407(b) (1/2/3/4/6)	Radiated Emissions	PASS	17.3524GHz 68.15dBuV/m (Margin -0.05dB)	-
		Band Edge Emissions		5.1492GHz 53.95dBuV/m (Margin -0.05dB)	-
2.7	15.407(g)	Frequency Stability	PASS	14.1175 ppm	Signal shall remain in-band
2.8	15.203	Antenna Requirements	PASS	-	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer. 2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Cindy Peng

1. General Information

1.1. Product Details

Items	Description			
Equipment Name	MESH Extender			
Trade Name	Technicolor			
Model Number	OWA3111, GFEX310			
Product Code	MESH Extender			
FCC ID	RSE-OWA3111			
Power Type	From power adapter			
Antenna Type	Please see Section 1.10			
EUT Stage	■	Product Unit	□	Pre-Sample
Operating Band, Conducted Output Power	**U-NII-1** 5150~5250MHz		■	IEEE 802.11a: 27.68 dBm
			■	IEEE 802.11ax (20MHz): 27.73 dBm
			■	IEEE 802.11ax (40MHz): 27.62 dBm
			■	IEEE 802.11ax (80MHz): 22.88 dBm
	U-NII-3 5725~5850MHz		■	IEEE 802.11a: 28.41 dBm
			■	IEEE 802.11ax (20MHz): 28.91 dBm
			■	IEEE 802.11ax (40MHz): 28.66 dBm
			■	IEEE 802.11ax (80MHz): 28.58 dBm
Product Type	**U-NII-1** 5150~5250MHz		For IEEE 802.11a: WLAN (2TX, 2RX) For IEEE 802.11n: WLAN (2TX, 2RX) For IEEE 802.11ac: WLAN (2TX, 2RX) For IEEE 802.11ax: WLAN (2TX, 2RX)	
	U-NII-3 5725~5850MHz		For IEEE 802.11a: WLAN (4TX, 4RX) For IEEE 802.11n: WLAN (4TX, 4RX) For IEEE 802.11ac: WLAN (4TX, 4RX) For IEEE 802.11ax: WLAN (4TX, 4RX)	
Nominal Channel Bandwidth	20MHz/40MHz/80MHz			

Modulation	802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM)See the below table. 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM/ 256QAM) See the below table 802.11ax: OFDMA (BPSK / QPSK / 16QAM / 64QAM/ 256QAM/1024QAM) See the below table	
Data Rate (Mbps)	**U-NII-1** 5150~5250MHz	11a mode: OFDM (6/9/12/18/24/36/48/54) 11n(20MHz) mode: MCS0~MCS15 11n(40MHz) mode: MCS0~MCS15 11ac(20MHz) mode: MCS0~MCS9 for Nss1~Nss2 See the below table 11ac(40MHz) mode: MCS0~MCS9 for Nss1~Nss2 See the below table 11ac(80MHz) mode: MCS0~MCS9 for Nss1~Nss2 See the below table 11ax(20MHz) mode: MCS0~MCS11 for Nss1~Nss2 See the below table 11ax(40MHz) mode: MCS0~MCS11 for Nss1~Nss2 See the below table 11ax(80MHz) mode: MCS0~MCS11 for Nss1~Nss2 See the below table

	U-NII-3 5725~5850MHz	11a mode: OFDM (6/9/12/18/24/36/48/54) 11n(20MHz) mode: MCS0~MCS31 11n(40MHz) mode: MCS0~MCS31 11ac(20MHz) mode: MCS0~MCS9 for Nss1~Nss4 See the below table 11ac(40MHz) mode: MCS0~MCS9 for Nss1~Nss4 See the below table 11ac(80MHz) mode: MCS0~MCS9 for Nss1~Nss4 See the below table 11ax(20MHz) mode: MCS0~MCS11 for Nss1~Nss4 See the below table 11ax(40MHz) mode: MCS0~MCS11 for Nss1~Nss4 See the below table 11ax(80MHz) mode: MCS0~MCS11 for Nss1~Nss4 See the below table
Beam forming Function	■ With Beam forming	□ Without Beam forming
I/O Ports	LAN Port x 1 WAN Port x 1 USB Port x 1	
Hardware Version	BETA 2	
Software Version	19.4.0292-4849007-20200616180558-f2534517ca3ad3f315c2e982b801eb89d87dc5a6	

802.11n Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11n 20MHz Nss=1	MCS0	6.5	7.2	11n 40MHz Nss=1	MCS0	13.5	15
	MCS1	13	14.4		MCS1	27	30
	MCS2	19.5	21.7		MCS2	40.5	45
	MCS3	26	28.9		MCS3	54	60
	MCS4	39	43.3		MCS4	81	90
	MCS5	52	57.8		MCS5	108	120
	MCS6	58.5	65		MCS6	121.5	135
	MCS7	65	72.2		MCS7	135	150
11n 20MHz Nss=2	MCS8	13	14.4	11n 40MHz Nss=2	MCS8	27	30
	MCS9	26	28.9		MCS9	54	60
	MCS10	39	43.3		MCS10	81	90
	MCS11	52	57.8		MCS11	108	120
	MCS12	78	86.7		MCS12	162	180
	MCS13	104	115.6		MCS13	216	240
	MCS14	117	130		MCS14	243	270
	MCS15	130	144.4		MCS15	270	300
11n 20MHz Nss=3	MCS16	19.5	21.7	11n 40MHz Nss=3	MCS16	40.5	45
	MCS17	39	43.3		MCS17	81	90
	MCS18	58.5	65		MCS18	121.5	135
	MCS19	78	86.7		MCS19	162	180
	MCS20	117	130		MCS20	243	270
	MCS21	156	173.3		MCS21	324	360
	MCS22	175.5	195		MCS22	364.5	405
	MCS23	195	216.7		MCS23	405	450
11n 20MHz Nss=4	MCS24	26	28.9	11n 40MHz Nss=4	MCS24	54	60
	MCS25	52	57.8		MCS25	108	120
	MCS26	78	86.7		MCS26	162	180
	MCS27	104	115.6		MCS27	216	240
	MCS28	156	173.3		MCS28	324	360
	MCS29	208	231.1		MCS29	432	480
	MCS30	234	260		MCS30	486	540
	MCS31	260	288.9		MCS31	540	600

802.11ac Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz Nss=1	MCS0	6.5	7.2	11ac 40MHz Nss=1	MCS0	13.5	15.0	11ac 80MHz Nss=1	MCS0	29.3	32.5
	MCS1	13.0	14.4		MCS1	27	30.0		MCS1	58.5	65.0
	MCS2	19.5	21.7		MCS2	40.5	45.0		MCS2	87.8	97.5
	MCS3	26	28.9		MCS3	54	60.0		MCS3	117.0	130.0
	MCS4	39	43.3		MCS4	81	90.0		MCS4	175.5	195.0
	MCS5	52	57.8		MCS5	108	120.0		MCS5	234.0	260.0
	MCS6	58.5	65		MCS6	121.5	135.0		MCS6	263.3	292.5
	MCS7	65	72.2		MCS7	135.0	150.0		MCS7	292.5	325.0
	MCS8	78	86.7		MCS8	162.0	180.0		MCS8	351.0	390.0
	MCS9	Note	Note		MCS9	180.0	200.0		MCS9	390.0	433.3
NOTE: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.											
Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz Nss=2	MCS0	13.0	14.4	11ac 40MHz Nss=2	MCS0	27.0	30.0	11ac 80MHz Nss=2	MCS0	58.5	65.0
	MCS1	26.0	28.9		MCS1	54.0	60.0		MCS1	117.0	130.0
	MCS2	39.0	43.3		MCS2	81.0	90.0		MCS2	175.5	195.0
	MCS3	52.0	57.8		MCS3	108.-0	120.0		MCS3	234.0	260.0
	MCS4	78.0	86.7		MCS4	162.0	180.0		MCS4	351.0	390.0
	MCS5	104.0	115.6		MCS5	216.0	240.0		MCS5	468.0	520.0
	MCS6	117.0	130.0		MCS6	243.0	270.0		MCS6	526.5	585.0
	MCS7	130.0	144.4		MCS7	270.0	300.0		MCS7	585.0	650.0
	MCS8	156.0	173.3		MCS8	324.0	360.0		MCS8	702.0	780.0
	MCS9	13.0	14.4		MCS9	360.0	400.0		MCS9	780.0	866.7

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz Nss=3	MCS0	19.5	21.7	11ac 40MHz Nss=3	MCS0	40.5	45.0	11ac 80MHz Nss=3	MCS0	87.8	97.5
	MCS1	39.0	43.3		MCS1	81.0	90.0		MCS1	175.5	195.0
	MCS2	58.5	65.0		MCS2	121.5	135.0		MCS2	263.3	292.5
	MCS3	78.0	86.7		MCS3	162.0	180.0		MCS3	351.0	190.0
	MCS4	117.0	130		MCS4	243.0	270.0		MCS4	526.5	585.0
	MCS5	156.0	173.3		MCS5	324.0	360.0		MCS5	702.0	780.0
	MCS6	175.5	195.0		MCS6	364.5	405.0		MCS6	Note	Note
	MCS7	195.0	216.7		MCS7	405.0	450.0		MCS7	877.5	975.0
	MCS8	234.0	260.0		MCS8	486.0	540.0		MCS8	1053.0	1170.0
	MCS9	260.0	228.9		MCS9	540.0	600.0		MCS9	1170.0	1300.0
NOTE: MCS 6 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.											

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz Nss=4	MCS0	26.0	28.9	11ac 40MHz Nss=4	MCS0	54.0	60.0	11ac 80MHz Nss=4	MCS0	117.0	130.0
	MCS1	52.0	57.8		MCS1	108.0	120.0		MCS1	234.0	260.0
	MCS2	78.0	86.7		MCS2	162.0	180.0		MCS2	351.0	390.0
	MCS3	104.0	115.6		MCS3	216.0	240.0		MCS3	468.0	520.0
	MCS4	156.0	173.3		MCS4	324.0	360.0		MCS4	702.0	780.0
	MCS5	208.0	231.1		MCS5	432.0	480.0		MCS5	936.0	1040.0
	MCS6	234.0	260.0		MCS6	486.0	540.0		MCS6	1053.0	1170.0
	MCS7	260.0	288.9		MCS7	540.0	600.0		MCS7	1170.0	1300.0
	MCS8	312.0	346.7		MCS8	648.0	720.0		MCS8	1404.0	1560.0
	MCS9	Note	Note		MCS9	720.0	800.0		MCS9	1560.0	1733.3
NOTE: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.											

802.11ax Data Rate spec

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MH NSS=1	MCS0	8.6	8.1	7.3	11ax 40MHz NSS=1	MCS0	17.2	16.3	14.6	11ax 80MHz NSS=1	MCS0	36	34	30.6
	MCS1	17.2	16.3	14.6		MCS1	34.4	32.5	29.3		MCS1	72.1	68.1	61.3
	MCS2	25.8	24.4	21.9		MCS2	51.6	48.8	43.9		MCS2	108.1	102.1	91.9
	MCS3	34.4	32.5	29.3		MCS3	68.8	65	58.5		MCS3	144.1	136.1	122.5
	MCS4	51.6	48.8	43.9		MCS4	103.2	97.5	87.8		MCS4	216.2	204.2	183.8
	MCS5	68.8	65	58.5		MCS5	137.6	130	117		MCS5	288.2	272.2	245
	MCS6	77.4	73.1	65.8		MCS6	154.9	146.3	131.6		MCS6	324.3	306.3	275.6
	MCS7	86	81.3	73.1		MCS7	172.1	162.5	146.3		MCS7	360.3	340.3	306.3
	MCS8	103.2	97.5	87.8		MCS8	206.5	195	175.5		MCS8	432.4	408.3	367.5
	MCS9	114.7	108.3	97.5		MCS9	229.4	216.7	195		MCS9	480.4	453.7	408.3
	MCS10	129	121.9	109.7		MCS10	258.1	243.8	219.4		MCS10	540.4	510.4	459.4
	MCS11	143.4	135.4	121.9		MCS11	286.8	270.8	243.8		MCS11	600.5	567.1	510.4

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MHz NSS=2	MCS0	17.2	16.3	14.6	11ax 40MHz NSS=2	MCS0	34.4	32.5	29.3	11ax 80MHz NSS=2	MCS0	72.1	68.1	61.3
	MCS1	34.4	32.5	29.3		MCS1	68.8	65	58.5		MCS1	144.1	136.1	122.5
	MCS2	51.6	48.8	43.9		MCS2	103.2	97.5	87.8		MCS2	216.2	204.2	183.8
	MCS3	68.8	65	58.5		MCS3	137.6	130	117		MCS3	288.2	272.2	245
	MCS4	103.2	97.5	87.8		MCS4	206.5	195	175.5		MCS4	432.4	408.3	367.5
	MCS5	137.6	130	117		MCS5	275.3	260	234		MCS5	576.5	544.4	490
	MCS6	154.9	146.3	131.6		MCS6	309.7	292.5	263.3		MCS6	648.5	612.5	551.3
	MCS7	172.1	162.5	146.3		MCS7	344.1	325	292.5		MCS7	720.6	680.6	612.5
	MCS8	206.5	195	175.5		MCS8	412.`9	390	351		MCS8	864.7	816.7	735
	MCS9	229.4	216.7	195		MCS9	458.8	433.3	390		MCS9	960.8	907.4	816.7
	MCS10	258.1	243.8	219.4		MCS10	516.2	487.5	438.8		MCS10	1080.9	1020.8	918.8
	MCS11	286.8	270.8	243.8		MCS11	573.5	541.7	487.5		MCS11	1201	1134.3	1020.8

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MHz NSS=3	MCS0	25.8	24.4	21.9	11ax 40MHz NSS=3	MCS0	51.6	48.8	43.9	11ax 80MHz NSS=3	MCS0	108.1	102.1	91.9
	MCS1	51.6	48.8	43.9		MCS1	103.2	97.5	87.8		MCS1	216.2	204.2	183.8
	MCS2	77.4	73.1	65.8		MCS2	154.9	146.3	131.6		MCS2	324.3	306.3	275.6
	MCS3	103.2	97.5	87.8		MCS3	206.5	195	175.5		MCS3	432.4	408.3	367.5
	MCS4	154.9	146.3	131.6		MCS4	309.7	292.5	263.3		MCS4	648.5	612.5	551.3
	MCS5	206.5	195	175.5		MCS5	412.9	390	351		MCS5	864.7	816.7	735
	MCS6	232.3	219.4	197.4		MCS6	464.6	438.8	394.9		MCS6	972.8	918.8	826.9
	MCS7	258.1	243.8	219.4		MCS7	516.2	487.5	438.8		MCS7	1080.9	1020.8	918.8
	MCS8	309.7	292.5	263.3		MCS8	619.4	585	526.5		MCS8	1297.1	1225	1102.5
	MCS9	344.1	325	292.5		MCS9	688.2	650	585		MCS9	1441.2	1361.1	1225
	MCS10	387.1	365.6	329.1		MCS10	774.3	731.3	658.1		MCS10	1621.3	1531.3	1378.1
	MCS11	430.1	406.3	365.6		MCS11	860.3	812.5	731.3		MCS11	1801.5	1701.4	1531.3

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MHz NSS=4	MCS0	34.4	32.5	29.3	11ax 40MHz NSS=4	MCS0	68.8	65	58.5	11ax 80MHz NSS=4	MCS0	144.1	136.1	122.5
	MCS1	68.8	65	58.5		MCS1	137.6	130	117		MCS1	288.2	272.2	245
	MCS2	103.2	97.5	87.8		MCS2	206.5	195	175.5		MCS2	432.4	408.3	367.5
	MCS3	137.6	130	117		MCS3	275.3	260	234		MCS3	576.5	544.4	490
	MCS4	206.5	195	175.5		MCS4	412.9	390	351		MCS4	864.7	816.7	735
	MCS5	275.3	260	234		MCS5	550.6	520	468		MCS5	1152.9	1088.9	980
	MCS6	309.7	292.5	263.3		MCS6	619.4	585	526.5		MCS6	1297.1	1225	1102.5
	MCS7	344.1	325	292.5		MCS7	688.2	650	585		MCS7	1441.2	1361.1	1225
	MCS8	412.9	390	351		MCS8	825.9	780	702		MCS8	1729.4	1633.3	1470
	MCS9	458.8	433.3	390		MCS9	917.6	866.7	780		MCS9	1921.6	1814.8	1633.3
	MCS10	516.2	487.5	438.8		MCS10	1032.4	975	877.5		MCS10	2161.8	2041.7	1837.5
	MCS11	573.5	541.7	487.5		MCS11	1147.1	1083.3	975		MCS11	2401.9	2268.5	2041.7

1.2. Accessories

Adapter

Model	ADS-24FUA-12 12024EPCU
Technicolor P/N	6265293A
ID	01
Manufacturer	HONOR
Input Power	100-240V~50/60Hz, MAX. 0.7A
Output Power	12V, 2.0A
Cable Length	Non-shielded 1.2m

RJ-45 cable

Cable Length	Non-shielded 1.5m

1.3. Information Provided by the Manufacturer

Interface Availability

Interface / Model Number	Internal AC~DC Power Input:100~240V Output: DC 12Vdc 2A	LAN 10/100/1000 Mbps	WAN 10/100/1000 Mbps	USB 2.0	WLAN IEEE 802.11a/b/g/n/ac/ax (2.4GHz 2*2) (5GHz L 2*2 ax) (5GHz H 4*4 ax)
OWA3111, GFEX310	● (2A)	● (1 port)	● (1 port)	● (1 port)	●

Note:

● : Equipped

○ : Not Equipped

1.4. Applicable Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

- 47 CFR FCC Part 15 Subpart E § 15.407
- ANSI C63.10-2013
- FCC KDB 789033 D02 General U-NII Test Procedures New Rules v02r0112/14/2017

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

- FCC KDB 662911 D01 Multiple Transmitter Output v02r01, 10/31/2013
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

All test items have been performed and recorded as per the above standards.

1.5. Table for Multiple Listing

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

Model Number	Description
OWA3111	For marketing reason the same product will be covered by different name.
GFEX310	

From the above models, model: OWA3111 was selected as representative model for the test and its data was recorded in this report.

1.6. Cabling Attached to the Equipment

Table 1- Cable and Interconnection

Interface	Cable type	Cable length delivered with the modem	"Real life" Cable length that can be attached to this type of interface	Cable length to be used for testing	Internal/external connection
WAN	UTP Cat 5	1 meter	> 10 meter	10 meter	External
LAN	UTP Cat 5	1 meter	> 10 meter	10 meter	Intermal
USB	STP	1 meter	< 3meter	1 meter	Internal
AC power	-	-	-	-	External

1.7. Panel Drawing

1.8. Transmit Operating Modes

<For 5150~5250MHz>

Transmit Operating Mode							Transmit Muitiple Antennas					
■	Operating mode 1 (single antenna)						■	1TX				
■	Operating mode 2 (muitiple antenna, no beam forming)						■	2TX	□	3TX	□	4TX
■	Operating mode 3 (muitiple antenna, with beam forming)						■	2TX	□	3TX	□	4TX
■	802.11a	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11n(20MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11n(40MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11ac(20MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11ac(40MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11ac(80MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11ax(20MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11ax(40MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		
■	802.11ax(80MHz)	Operating mode	■	1TX	■	2TX	□	3TX	□	4TX		

For IEEE802.11a,

6Mbps~54Mbps: 1TX; 2TX;

For IEEE802.11n,

MCS0~MCS7: 1 Stream 1TX, 1 Stream 2TX;

MCS8~MCS15: 2 Stream 2TX;

For IEEE802.11ac 20MHz,

Nss1MCS0~Nss1MCS8: 1Stream 1TX, 1Stream 2TX;

Nss2MCS0~Nss2MCS9: 2 Stream 2TX;

For IEEE802.11ac 40/80MHz,

Nss1MCS0~Nss1MCS9: 1Stream 1TX, 1Stream 2TX;

Nss2MCS0~Nss2MCS9: 2 Stream 2TX;

For IEEE802.11ax 20/40/80MHz,

Nss1MCS0~Nss1MCS11: 1Stream 1TX, 1Stream 2TX;

Nss2MCS0~Nss2MCS11: 2 Stream 2TX;

<For 5725~5850MHz>

Transmit Operating Mode							Transmit Muitiple Antennas					
■	Operating mode 1 (single antenna)						■	1TX				
■	Operating mode 2 (muitiple antenna, no beam forming)						■	2TX	■	3TX	■	4TX
■	Operating mode 3 (muitiple antenna, with beam forming)						■	2TX	■	3TX	■	4TX
■	802.11a	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11n(20MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11n(40MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ac(20MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ac(40MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ac(80MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ax(20MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ax(40MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ax(80MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		

For IEEE802.11a,

6Mbps~54Mbps: 1TX; 2TX; 3TX; 4TX

For IEEE802.11n,

MCS0~MCS7: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 3TX, 1 Stream 4TX;

MCS8~MCS15: 2 Stream 2TX, 2 Stream 3TX, 2 Stream 4TX;

MCS16~MCS23: 3 Stream 3TX, 3 Stream 4TX;

MCS24~MCS31: 4 stream 4TX.

For IEEE802.11ac 20MHz,

Nss1 MCS0~Nss1MCS8: 1Stream 1TX, 1Stream 2TX, 1Stream 3TX, 1 Stream 4TX;

Nss2 MCS0~Nss2MCS9: 2 Stream 2TX, 2Stream 3TX, 2 Stream 4TX;

Nss3 MCS0~Nss3MCS9: 3Stream 3TX, 3 Stream 4TX;

Nss4 MCS0~Nss4MCS9: 4 stream 4TX.

For IEEE802.11ac 40/80MHz,

Nss1 MCS0~Nss1MCS9: 1Stream 1TX, 1Stream 2TX, 1Stream 3TX, 1 Stream 4TX;

Nss2 MCS0~Nss2MCS9: 2 Stream 2TX, 2Stream 3TX, 2 Stream 4TX;

Nss3 MCS0~Nss3MCS9: 3Stream 3TX, 3 Stream 4TX;

Nss4 MCS0~Nss4MCS9: 4 stream 4TX.

For IEEE802.11ax 20/40/80MHz,

Nss1 MCS0~Nss1MCS11: 1Stream 1TX, 1Stream 2TX, 1Stream 3TX, 1 Stream 4TX;

Nss2 MCS0~Nss2MCS11: 2 Stream 2TX, 2Stream 3TX, 2 Stream 4TX;

Nss3 MCS0~Nss3MCS11: 3Stream 3TX, 3 Stream 4TX;

Nss4 MCS0~Nss4MCS11: 4 stream 4TX.

1.9. Antenna Requirement

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

1.10. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Cable Length
5GHz-Ant. 1	WALSIN	RFPCA291205IMLB303	PCB Antenna	I-PEX	5150~5250MHz	50mm
5GHz-Ant. 2	WALSIN	RFPCA291203IMLB302	PCB Antenna	I-PEX	5150~5250MHz	30mm
5GHz-Ant. 3	WALSIN	RFPCA160905IM5B302	PCB Antenna	I-PEX	5725~5850MHz	55mm
5GHz-Ant. 4	WALSIN	RFPCA160906IM5B303	PCB Antenna	I-PEX	5725~5850MHz	65mm
5GHz-Ant. 5	SUNRISE	02081S4-001	Metal Antenna	N/A	5725~5850MHz	-
5GHz-Ant. 6	WALSIN	RFPCA160904IM5B303	PCB Antenna	I-PEX	5725~5850MHz	40mm

Antenna Photo:

Number of Transmitter Antennas & Bandwidth

<For 5150~5250MHz>

Number of Transmitter Antennas	1TX			2TX		
Bandwidth Mode	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz
802.11a	V	X	X	V	X	X
802.11n	V	V	X	V	V	X
802.11ac	V	V	V	V	V	V
802.11ax	V	V	V	V	V	V

<For 5725~5850MHz>

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

Frequency	Maximum Gain (dBi) for CDD mode					
	CDD mode (1 Stream 2 TX) for Power Gain (KDB 662911 Option 1)			CDD mode (1 Stream 2 TX) for PSD Gain (KDB 662911 Option 2)		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	4.46	-	-	5.80	-	-
5190MHz	-	4.46	-	-	5.89	-
5200MHz	4.51	-	-	5.93	-	-
5210MHz	-	-	4.56	-	-	5.84
5230MHz	-	4.67	-	-	5.96	-
5240MHz	4.66	-	-	6.01	-	-
Frequency	Maximum Gain (dBi) for CDD mode					
	CDD mode (1 Stream 4 TX) for Power Gain (KDB 662911 Option 1)			CDD mode (1 Stream 4 TX) for PSD Gain (KDB 662911 Option 2)		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5745MHz	4.79	-	-	6.81	-	-
5755MHz	-	5.37	-	-	6.74	-
5775MHz	-	-	5.37	-	-	6.73
5785MHz	4.63	-	-	6.69	-	-
5795MHz	-	5.23	-	-	6.66	-
5825MHz	4.60	-	-	6.87	-	-

Frequency	Maximum Gain (dBi) for TXBF mode TXBF mode (1 Stream 2 TX) for Power Gain and PSD Gain (KDB 662911 Option 2)		
	20 MHz	40 MHz	80MHz
5180MHz	5.80	-	-
5190MHz	-	5.89	-
5200MHz	5.93	-	-
5210MHz	-	-	5.84
5230MHz	-	5.96	-
5240MHz	6.01	-	-

Frequency	Maximum Gain (dBi) for TXBF mode TXBF mode (1 Stream 4 TX) for Power Gain and PSD Gain (KDB 662911 Option 2)		
	20 MHz	40 MHz	80MHz
5745MHz	6.81	-	-
5755MHz	-	6.74	-
5775MHz	-	-	6.73
5785MHz	6.69	-	-
5795MHz	-	6.66	-
5825MHz	6.87	-	-

Frequency	Maximum Gain (dBi) for TXBF mode TXBF mode (2 Stream 4 TX) for Power Gain and PSD Gain (KDB 662911 Option 2)		
	20 MHz	40 MHz	80MHz
5745MHz	5.40	-	-
5755MHz	-	5.45	-
5775MHz	-	-	5.39
5785MHz	5.36	-	-
5795MHz	-	5.31	-
5825MHz	5.60	-	-

Frequency	Maximum Gain (dBi) for TXBF mode		
	TXBF mode (3 Stream 4 TX) for Power Gain and PSD Gain (KDB 662911 Option 1)		
	20 MHz	40 MHz	80MHz
5745MHz	3.44	-	-
5755MHz	-	3.42	-
5775MHz	-	-	3.61
5785MHz	3.43	-	-
5795MHz	-	3.34	-
5825MHz	3.51	-	-

Note:

1. Antenna Gain refer to "OWA3111_NAM_Directional_Gain_20200120" files

2. Maximum Correlated Directional Gain = $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

3. Maximum Uncorrelated Directional Gain = $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

1.11. Table for Carrier Frequencies

9 channels are provided for 802.11a / 802.11n / 802.11ac / 802.11ax (20MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250MHz	36	5180 MHz	44	5220 MHz
	40	5200 MHz	48	5240 MHz
5725~5850MHz	149	5745 MHz	161	5805 MHz
	153	5765 MHz	165	5825 MHz
	157	5785 MHz	-	-

4 channels are provided for 802.11n / 802.11ac / 802.11ax (40MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250MHz	38	5190 MHz	46	5230 MHz
5725~5850MHz	151	5755 MHz	159	5795 MHz

2 channels are provided for 802.11ac / 802.11ax (80MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250MHz	42	5210 MHz	-	-
5725~5850MHz	155	5775 MHz	-	-

1.12. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. The following table is a list of the test modes shown in this test report.

Test Items	Mode		Channel	Data Rate	Ant.
AC Power Conducted Emission	CTX		-	-	-
Max. Conducted Output Power	11a	OFDM/ BPSK	36/40/48	1S2T CDD 6Mbps	1+2
			149/157/165	1S4T CDD 6Mbps	3+4+5+6
	11ax(20MHz)	OFDMA/ BPSK	36/40/48	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			149/157/165	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(40MHz)		38/46	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			151/159	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(80MHz)		42	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			155	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	

Power Spectral Density	11a	OFDM/ BPSK	36/40/48	1S2T CDD 6Mbps	1+2
			149/157/165	1S4T CDD 6Mbps	3+4+5+6
	11ax(20MHz)	OFDMA/ BPSK	36/40/48	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			149/157/165	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(40MHz)		38/46	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			151/159	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(80MHz)		42	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			155	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
26dB Spectrum Bandwidth & 99% Occupied Bandwidth Measurement	11a	OFDM/ BPSK	36/40/48	1S2T CDD 6Mbps	1+2
	11ax(20MHz)	OFDMA/ BPSK	36/40/48	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	1+2
	11ax(40MHz)		38/46	1S2T CDD Nss1 MCS0	1+2

				1S2T TXBF Nss 1 MCS 0	1+2
	11ax(80MHz)		42	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	1+2
6dB Spectrum Bandwidth and 99% Occupied Bandwidth Measurement (U-NII-3)	11a	OFDM/ BPSK	149/157/165	1S4T CDD 6Mbps	3+4+5+6
	11ax(20MHz)	OFDMA/ BPSK	149/157/165	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(40MHz)		151/159	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(80MHz)		155	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
Radiated Emission Below 1GHz	CTX		-	-	-
Radiated Emission Above 1GHz& Band Edge Emission	11ax(20MHz)	OFDMA/ BPSK	36/40/48	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			149/157/165	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(40MHz)		38/46	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			151/159	1S4T CDD Nss1 MCS0	3+4+5+6

				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
	11ax(80MHz)		42	1S2T CDD Nss1 MCS0	1+2
				1S2T TXBF Nss 1 MCS 0	
			155	1S4T CDD Nss1 MCS0	3+4+5+6
				1S4T TXBF Nss 1 MCS 0	
				2S4T TXBF Nss 2 MCS 0	
				3S4T TXBF Nss 3 MCS 0	
Frequency Stability	20 MHz	Un-mo dulation	36/40/48	-	1+2
			149/157/165	-	3+4+5+6
	40 MHz		38/46	-	1+2
			151/159	-	3+4+5+6
	80 MHz		42	-	1+2
			155	-	3+4+5+6

Note1: The device with multiple operating mode, measurements on the middle channel were tested to determine the worst case mode. (Each modulation family were tested in band edge, spurious emission and in band PSD after investigate worst case mode)

Note 2: Base on tx core command, the 802.11a default mode are Low band 1S2T and High band 1S4T CDD , the 802.11ax 20MHz/ 40MHz/80MHz, default Low band mode are 1S2T CDD ,1S2T TxBF,High band mode are 1S4T CDD ,1S4T TxBF,2S4T TxBF,3S4T TXBF.
wl -i wl1 txcore
txcore enabled bitmap (Nsts {4..1}) 0x00 0x00 0x03 0x03
txcore mask OFDM 0x03 CCK 0x03
wl -i wl2_1 txcore
txcore enabled bitmap (Nsts {4..1}) 0x0f 0x0f 0x0f 0x0f
txcore mask OFDM 0x0f CCK 0x0f

Note 3: Base on same power setting, the Low band 802.11a 1S2T CDD mode covered by 802.11ax 1S2T TXBF mode, and the High band 802.11a 1S4T CDD mode covered by 802.11ax 1S4T TXBF mode, SDM mode cover by the CDD mode with the same setting.

Note 4: The power setting for 802.11ac 20MHz and 40MHz are same or lower than 802.11ax 20MHz/ 40MHz.

Note 5: The EUT can only be used at Y axis position.

Note 6: AC power line conducted emissions and radiated emissions below 1GHz only worse case is selected for photos and test system connection diagram presentaion in the report.

The following test modes were performed for all tests:

For AC Power Conducted Emission test:

Test Mode 1: CTX mode, EUT – WLAN 2.4GHz

Test Mode 2: CTX mode, EUT – WLAN 5GHz Band 1

Test Mode 3: CTX mode, EUT – WLAN 5GHz Band 4

For Radiated Emission Below 1GHz test:

Test Mode 1: CTX mode, EUT Y axis – WLAN 2.4GHz

Test Mode 2: CTX mode, EUT Y axis – WLAN 5GHz Band 1

Test Mode 3: CTX mode, EUT Y axis – WLAN 5GHz Band 4

For Radiated Emission Above 1GHz test:

Test Mode 1: CTX mode, EUT Y axis

For Co-location MPE and Radiated Emission Co-location Test:

The EUT could be applied with WLAN 2.4GHz function, WLAN 5GHz Band 1 function and WLAN 5GHz Band 4 function.

For Co-location Maximum Permissible Exposure: Co-location Maximum Permissible Exposure (Please refer to FA071024) test is added for simultaneously transmit between WLAN 2.4GHz function, WLAN 5GHz Band 1 function and WLAN 5GHz Band 4 function.

For Radiated Emission Co-location:

Both WLAN 2.4G and WLAN 5G simultaneously could be transmitted with a same antenna.

Radiated Emission Co-location (please refer to Appendix A) test is added for simultaneously transmit between WLAN 2.4GHz function and WLAN 5GHz Band 1 function.

1.13. Table for Testing Locations

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

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Serway Li	24.7~25.9°C / 58~62%	Jul. 01, 2020~Jul. 17, 2020
Radiated Below 1GHz	03CH05-CB	Ron Huang	23.8~26°C / 61~63%	Jun. 08, 2020~Jul. 13, 2020
Radiated Above 1GHz (Co-location)				
Radiated Above 1GHz (Other)	03CH04-CB	Ron Huang	24.8~26.8°C / 53~57%	Jun. 08, 2020~Jul. 13, 2020
AC Conduction	CO02-CB	Wei Li	24~25°C / 59~62%	Jul. 10, 2020

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086D with Industry Canada.

1.14. Table for Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

The Power Setting Parameter					
Test Software Version	19.4.0292-4849007-20200616180558-f2534517ca3ad3f315c2e982b801eb89d87dc5a6				
Worst Modulation Mode	**Number of Transmit Chains (NTX)**	**Frequency (MHz)**	**Maximum Output Power (dBm)**	**Power Setting**	**Data Rate / MCS**
802.11a (CDD)	1 stream 2TX	5180	24.10	84	6 Mbps
802.11a (CDD)	1 stream 2TX	5200	27.68	100	6 Mbps
802.11a (CDD)	1 stream 2TX	5240	27.19	98	6 Mbps
802.11a (CDD)	1 stream 4TX	5745	28.41	94	6 Mbps
802.11a (CDD)	1 stream 4TX	5785	27.02	89	6 Mbps
802.11a (CDD)	1 stream 4TX	5825	28.27	94	6 Mbps
802.11ax 20MHz (CDD)	1 stream 2TX	5180	24.20	84	Nss1 MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 2TX	5200	27.73	100	Nss1 MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 2TX	5240	27.32	98	Nss1 MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5745	28.79	94	Nss1 MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5785	27.54	89	Nss1 MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5825	28.55	94	Nss1 MCS0 (8.6)
802.11ax 20MHz (TXBF)	1 stream 2TX	5180	24.20	84	Nss1 MCS0 (8.6)
802.11ax 20MHz (TXBF)	1 stream 2TX	5200	27.73	100	Nss1 MCS0 (8.6)
802.11ax 20MHz (TXBF)	1 stream 2TX	5240	27.32	98	Nss1 MCS0 (8.6)
802.11ax 20MHz (TXBF)	1 stream 4TX	5745	28.79	94	Nss1 MCS0 (8.6)
802.11ax 20MHz (TXBF)	1 stream 4TX	5785	27.54	89	Nss1 MCS0 (8.6)
802.11ax 20MHz (TXBF)	1 stream 4TX	5825	28.55	94	Nss1 MCS0 (8.6)
802.11ax 20MHz (TXBF)	2 stream 4TX	5745	28.91	94	Nss2 MCS0 (17.2)
802.11ax 20MHz (TXBF)	2 stream 4TX	5785	28.25	92	Nss2 MCS0 (17.2)
802.11ax 20MHz (TXBF)	2 stream 4TX	5825	28.65	94	Nss2 MCS0 (17.2)
802.11ax 20MHz (TXBF)	3 stream 4TX	5745	28.90	94	Nss3 MCS0 (25.8)
802.11ax 20MHz (TXBF)	3 stream 4TX	5785	28.02	91	Nss3 MCS0 (25.8)
802.11ax 20MHz (TXBF)	3 stream 4TX	5825	28.78	94	Nss3 MCS0 (25.8)
802.11ax 40MHz (CDD)	1 stream 2TX	5190	22.34	77	Nss1 MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 2TX	5230	26.91	96	Nss1 MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5755	28.52	94	Nss1 MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5795	28.49	94	Nss1 MCS0 (17.2)
802.11ax 40MHz (TXBF)	1 stream 2TX	5190	22.84	79	Nss1 MCS0 (17.2)
802.11ax 40MHz (TXBF)	1 stream 2TX	5230	27.62	100	Nss1 MCS0 (17.2)
802.11ax 40MHz (TXBF)	1 stream 4TX	5755	28.58	94	Nss1 MCS0 (17.2)
802.11ax 40MHz (TXBF)	1 stream 4TX	5795	28.52	94	Nss1 MCS0 (17.2)
802.11ax 40MHz (TXBF)	2 stream 4TX	5755	28.56	94	Nss2 MCS0 (34.4)
802.11ax 40MHz (TXBF)	2 stream 4TX	5795	28.53	94	Nss2 MCS0 (34.4)
802.11ax 40MHz (TXBF)	3 stream 4TX	5755	28.66	94	Nss3 MCS0 (51.6)
802.11ax 40MHz (TXBF)	3 stream 4TX	5795	28.64	94	Nss3 MCS0 (51.6)
802.11ax 80MHz (CDD)	1 stream 2TX	5210	22.20	77	Nss1 MCS0 (36)
802.11ax 80MHz (CDD)	1 stream 4TX	5775	28.35	94	Nss1 MCS0 (36)
802.11ax 80MHz (TXBF)	1 stream 2TX	5210	22.88	80	Nss1 MCS0 (36)

802.11ax 80MHz (TXBF)	1 stream 4TX	5775	28.38	94	Nss1 MCS0 (36)
802.11ax 80MHz (TXBF)	2 stream 4TX	5775	28.58	94	Nss 2 MCS 0 (72.1)
802.11ax 80MHz (TXBF)	3 stream 4TX	5775	28.52	94	Nss 3 MCS 0 (108.1)

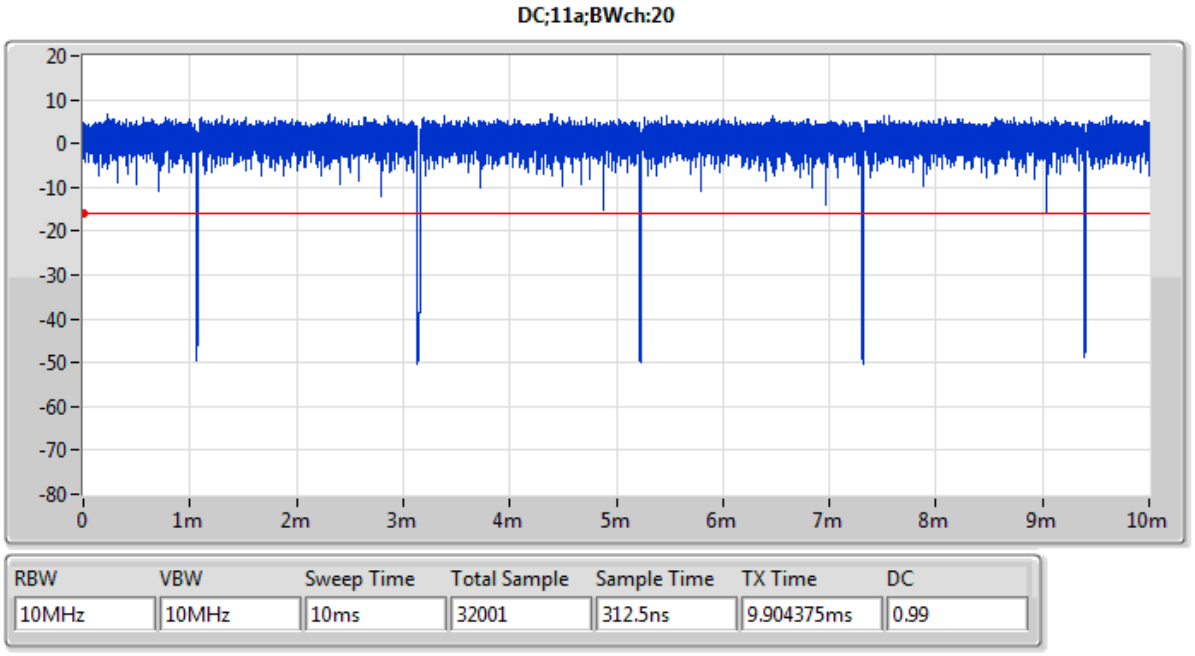
1.15. On Time and Duty Cycle

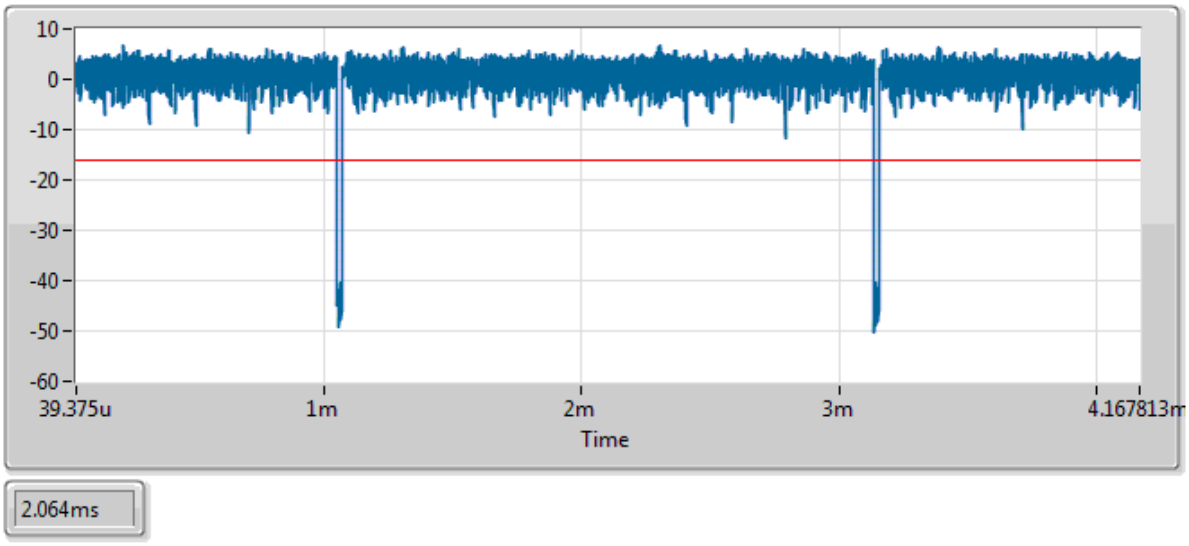
Frequency Band	Mode	Total On Time (ms)	Period (ms)	On Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW/(kHz)
5150~5250 MHz	802.11a 1S2T CDD	9.904	10	2.064	99.0%	0.04	0.01
	802.11ax(20MHz) 1S2T CDD	9.856	10	1.489	98.6%	0.06	0.01
	802.11ax(40MHz) 1S2T CDD	9.744	10	0.774	97.4%	0.11	1.29
	802.11ax(80MHz) 1S2T CDD	9.518	10	0.403	95.2%	0.21	2.48
	802.11ax(20MHz) 1S2T TXBF	9.439	10	2.926	94.4%	0.25	0.34
	802.11ax(40MHz) 1S2T TXBF	18.853	20	4.360	94.3%	0.26	0.23
	802.11ax(80MHz) 1S2T TXBF	28.444	30	4.849	94.8%	0.23	0.21
5725~5850 MHz	802.11a 1S4T CDD	9.904	10	2.064	99.0%	0.04	0.01
	802.11ax(20MHz) 1S4T CDD	9.870	10	1.488	98.7%	0.06	0.01
	802.11ax(40MHz) 1S4T CDD	9.861	10	1.471	98.6%	0.06	0.01
	802.11ax(80MHz) 1S4T CDD	9.876	10	1.404	98.8%	0.05	0.01
	802.11ax(20MHz) 1S4T TXBF	9.388	10	2.926	93.9%	0.27	0.34
	802.11ax(40MHz) 1S4T TXBF	19.248	20	4.360	96.2%	0.17	0.23
	802.11ax(80MHz) 1S4T TXBF	28.778	30	5.194	95.9%	0.18	0.19
	802.11ax(20MHz) 2S4T TXBF	28.759	30	4.372	95.9%	0.18	0.23
	802.11ax(40MHz) 2S4T TXBF	28.245	30	5.089	94.2%	0.26	0.20
	802.11ax(80MHz) 2S4T TXBF	28.793	30	4.834	96.0%	0.18	0.21
	802.11ax(20MHz) 3S4T TXBF	28.841	30	4.864	96.1%	0.17	0.21
	802.11ax(40MHz) 3S4T TXBF	29.156	30	5.336	97.2%	0.12	0.19
	802.11ax(80MHz) 3S4T TXBF	27.263	30	4.732	90.9%	0.42	0.21

Note:
1. Power measurement using sweep trigger and gating of the power meter, duty factor is not required.
2. Duty cycle > 98%, duty factor is not required.

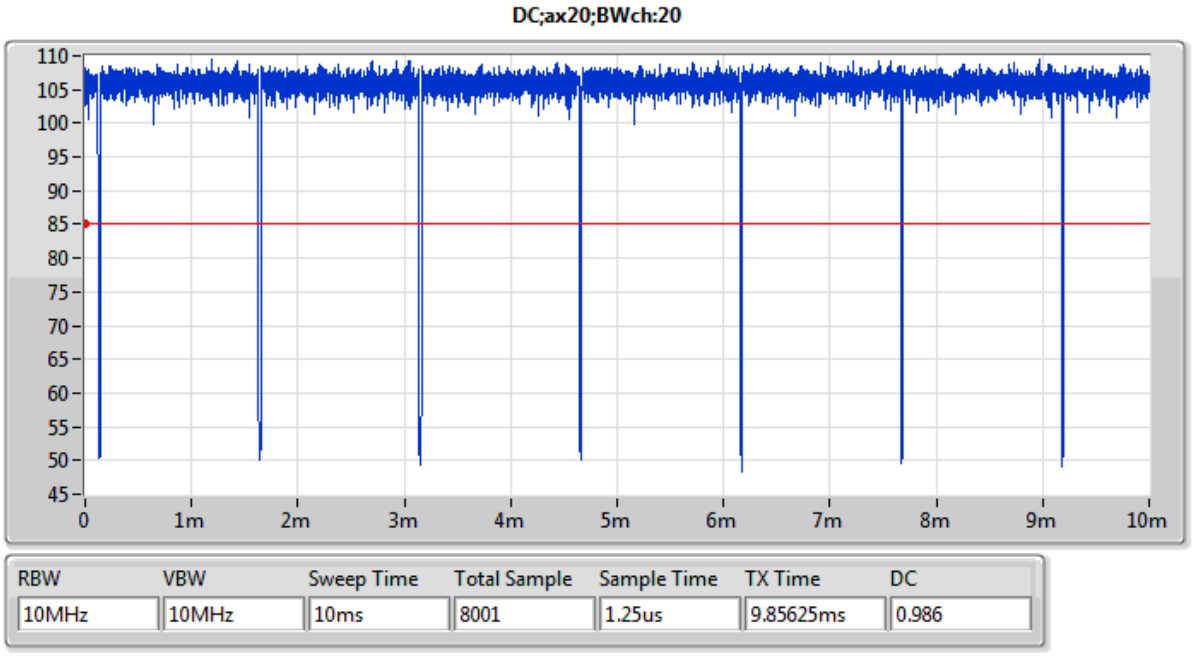
For 5150~5250MHz, Plot:

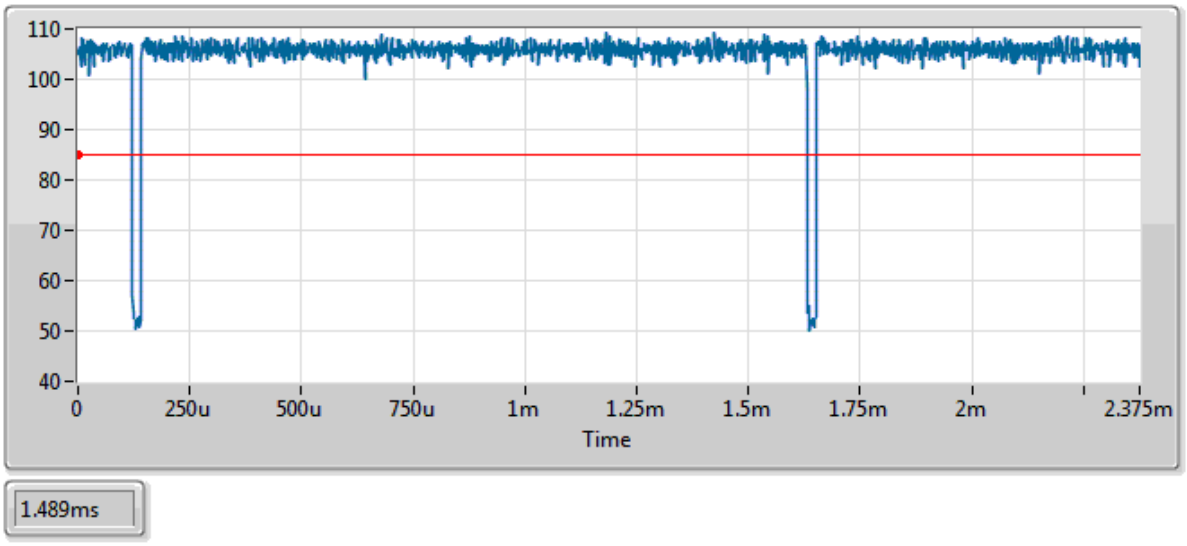
802.11a 1S2T CDD



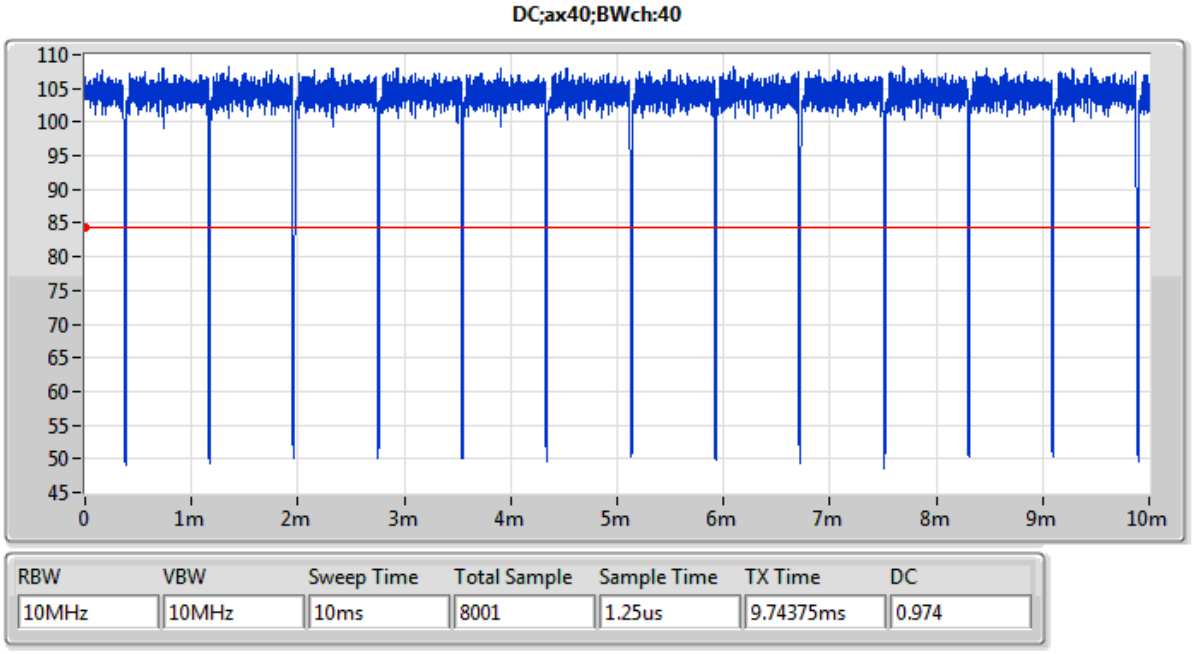


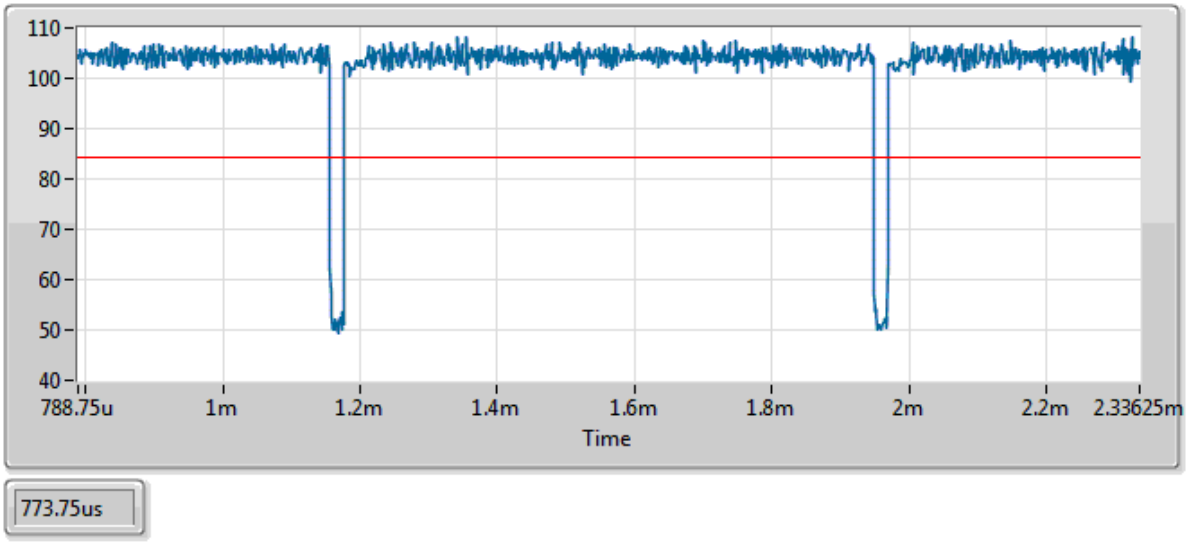
802.11ax(20MHz) 1S2T CDD



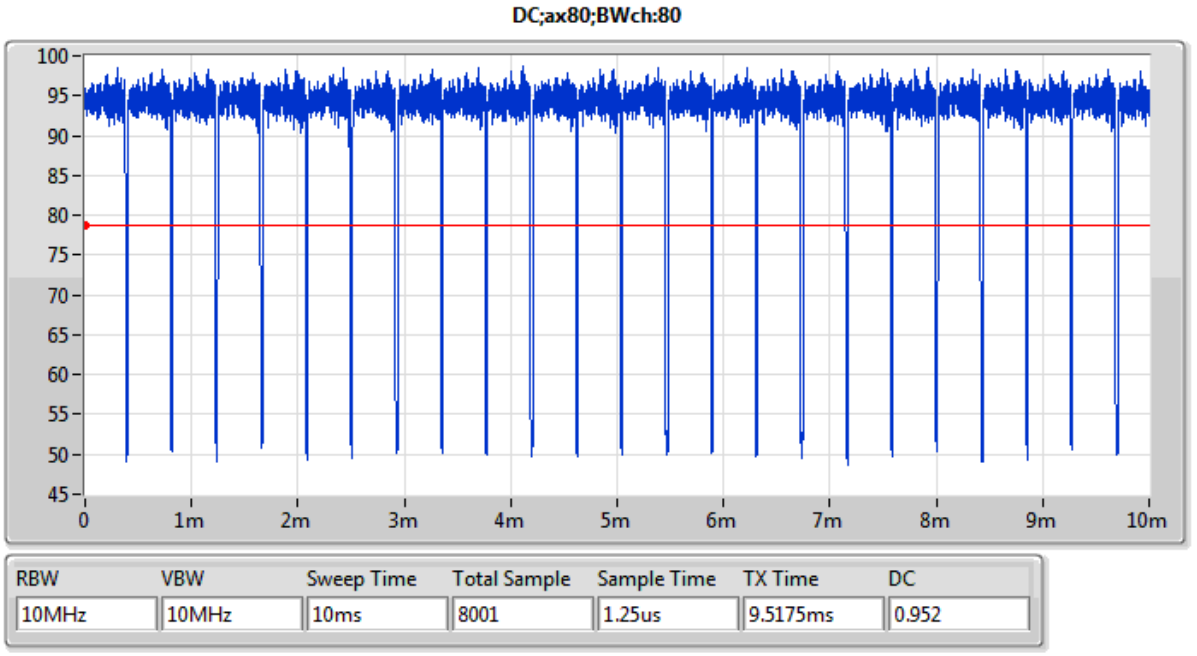


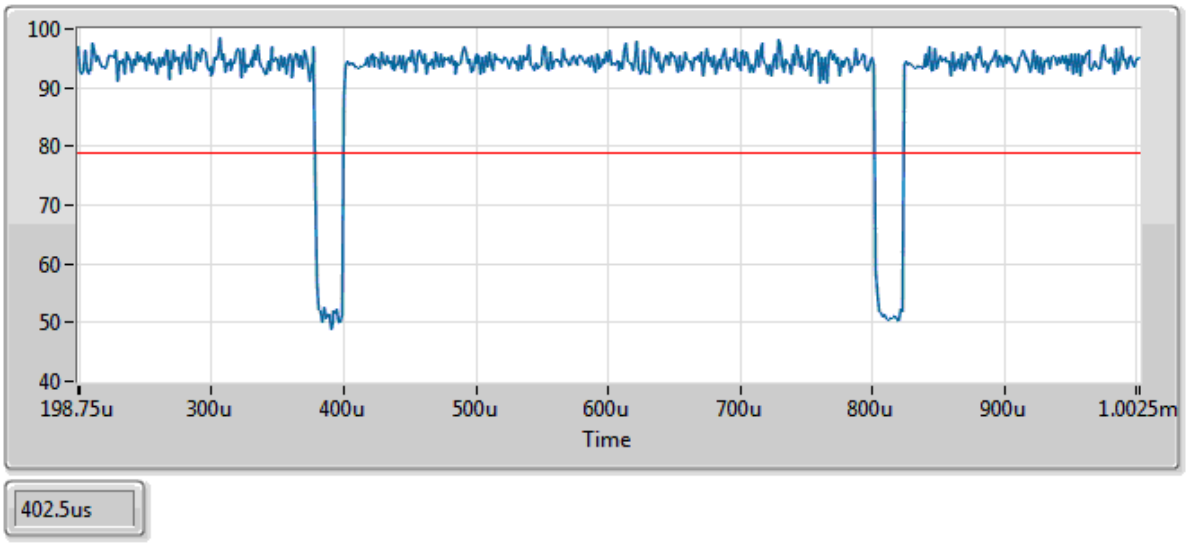
802.11ax(40MHz) 1S2T CDD



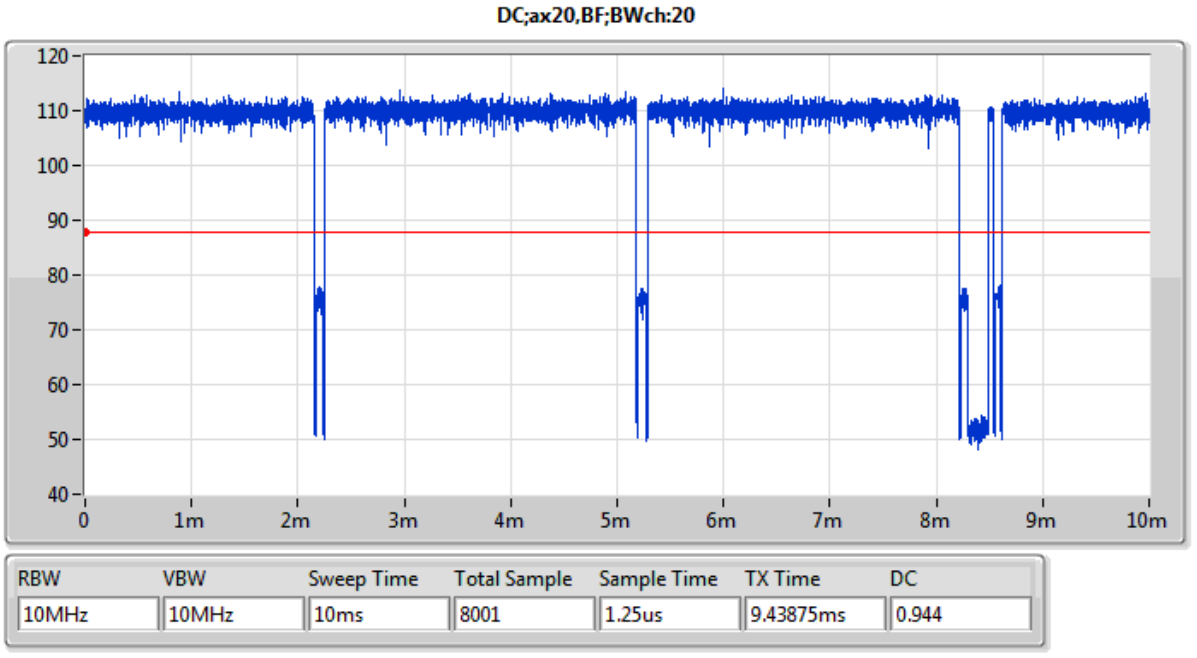


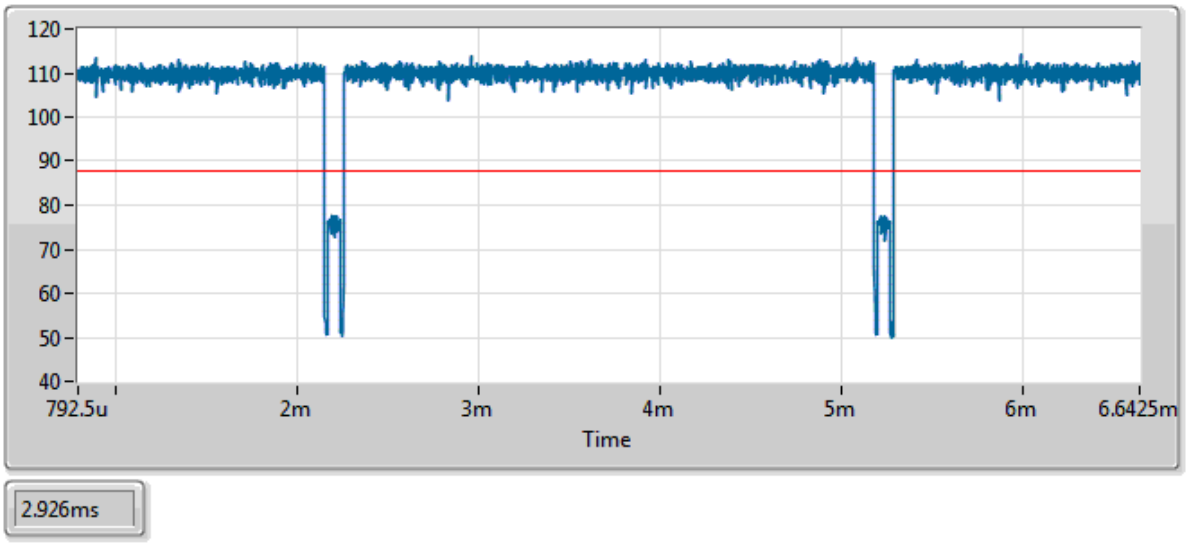
802.11ax(80MHz) 1S2T CDD



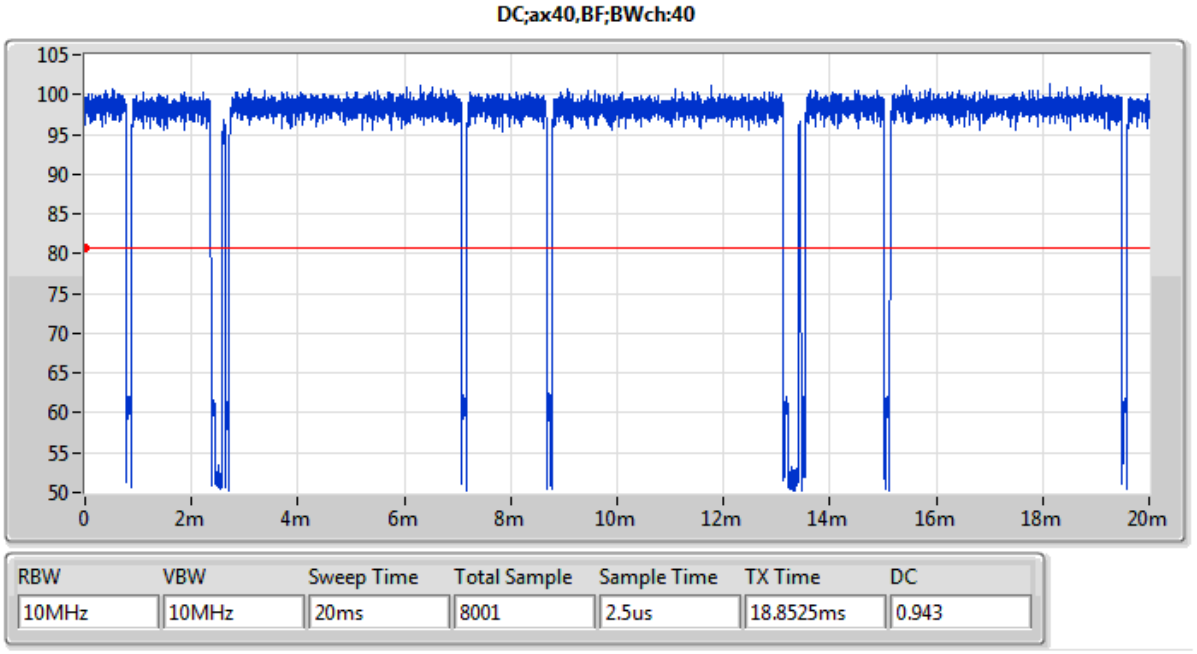


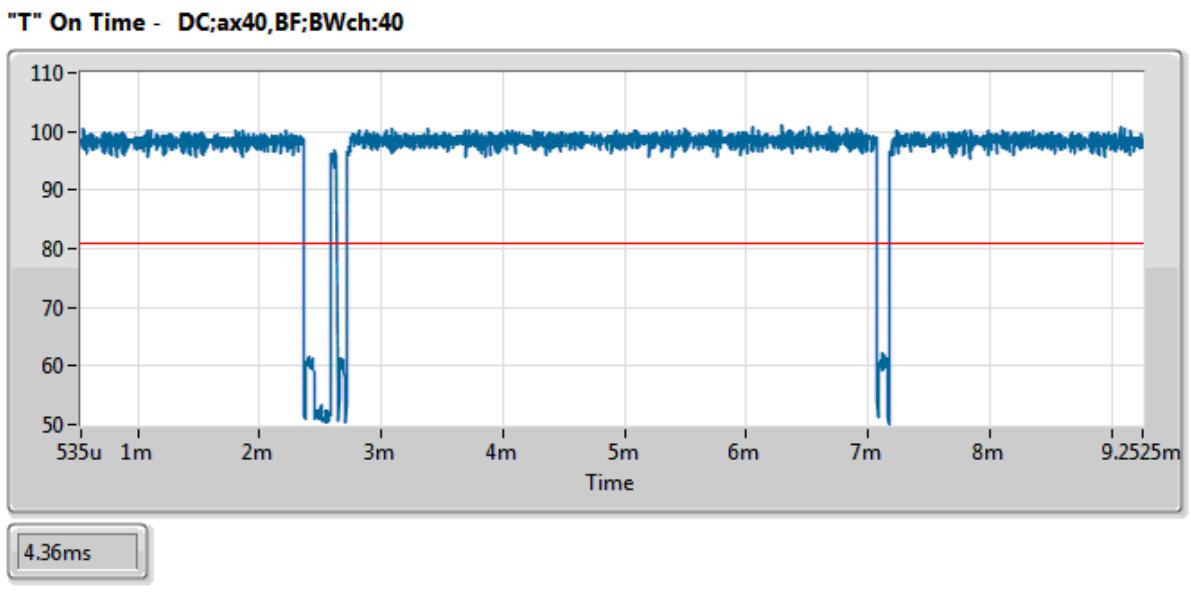
802.11ax(20MHz) 1S2T TXBF



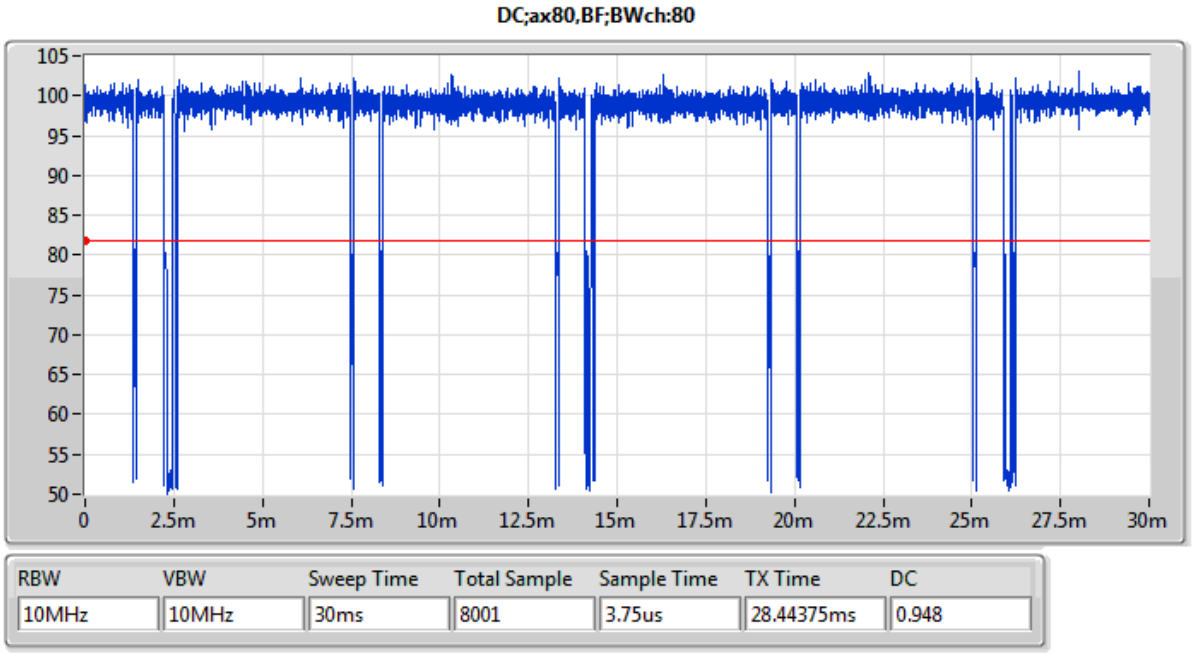


802.11ax(40MHz) 1S2T TXBF

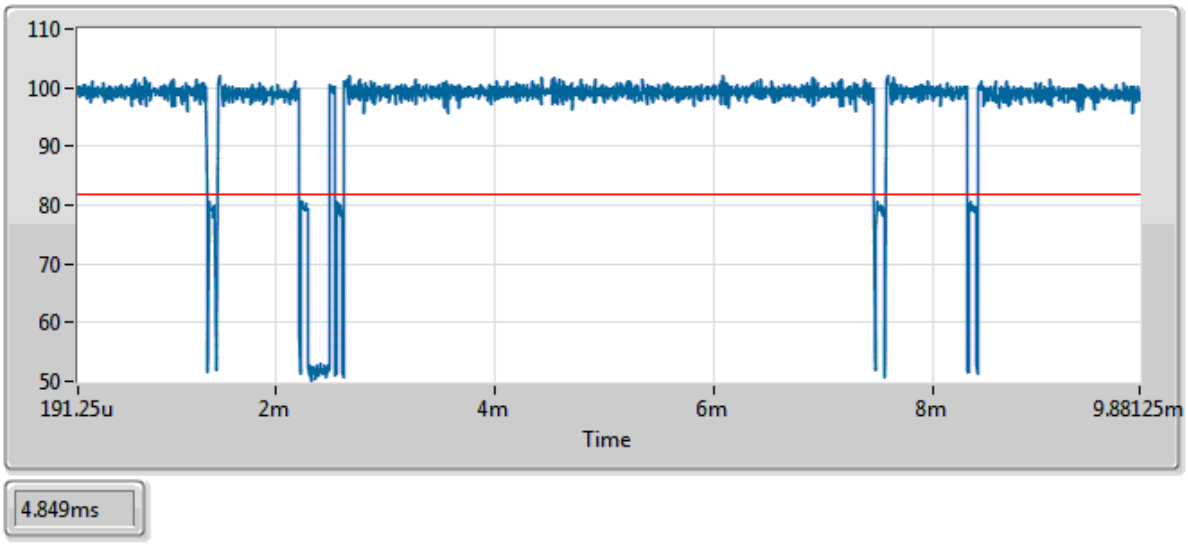




802.11ax(80MHz) 1S2T TXBF

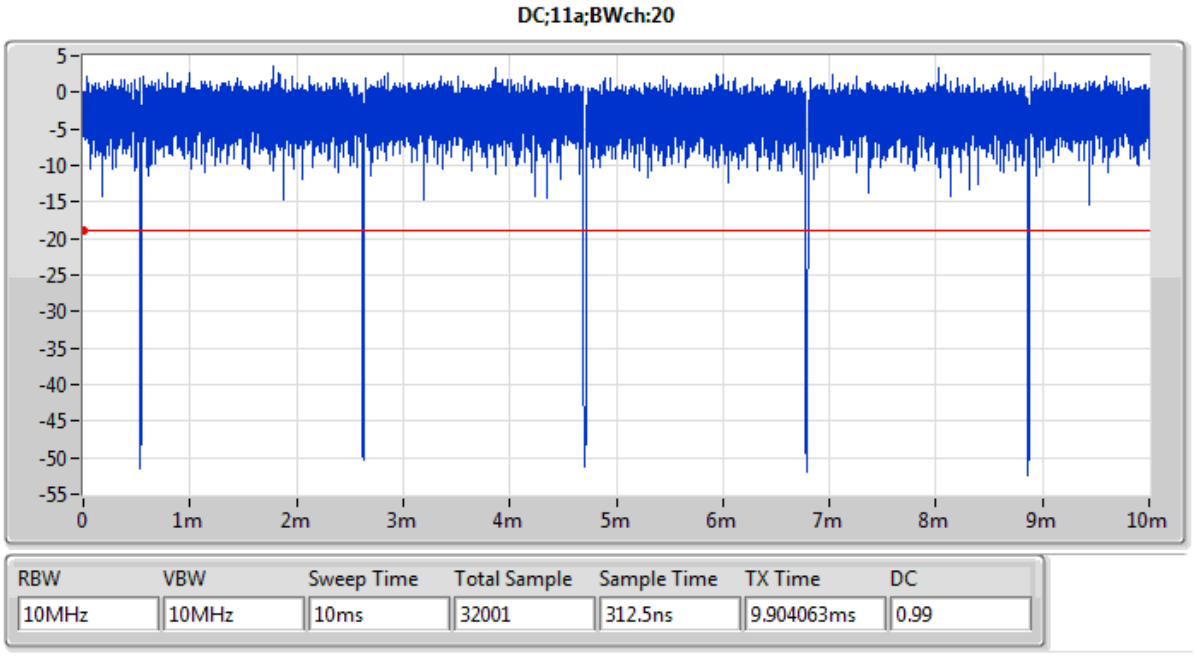


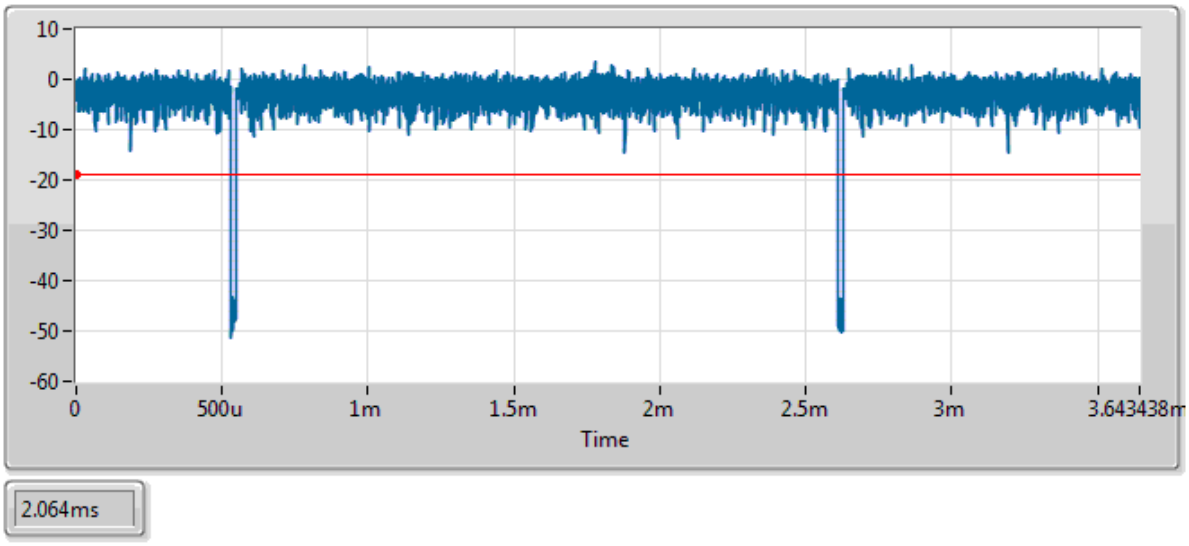
RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	30ms	8001	3.75us	28.44375ms	0.948



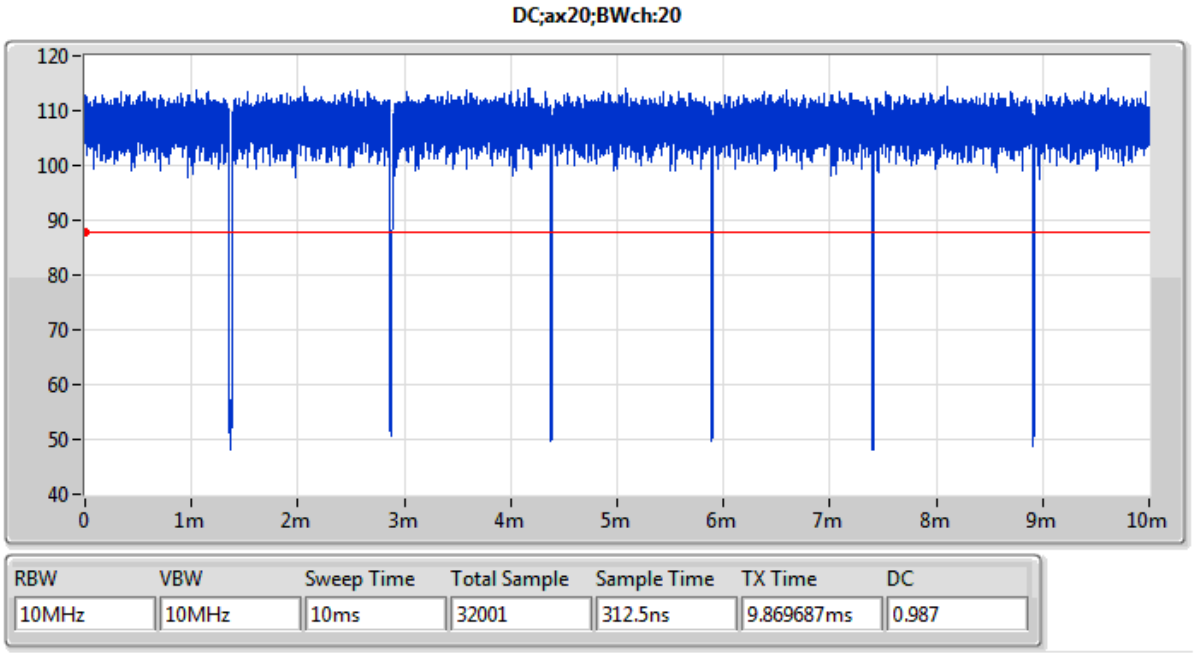
For 5745~5850MHz, Plot:

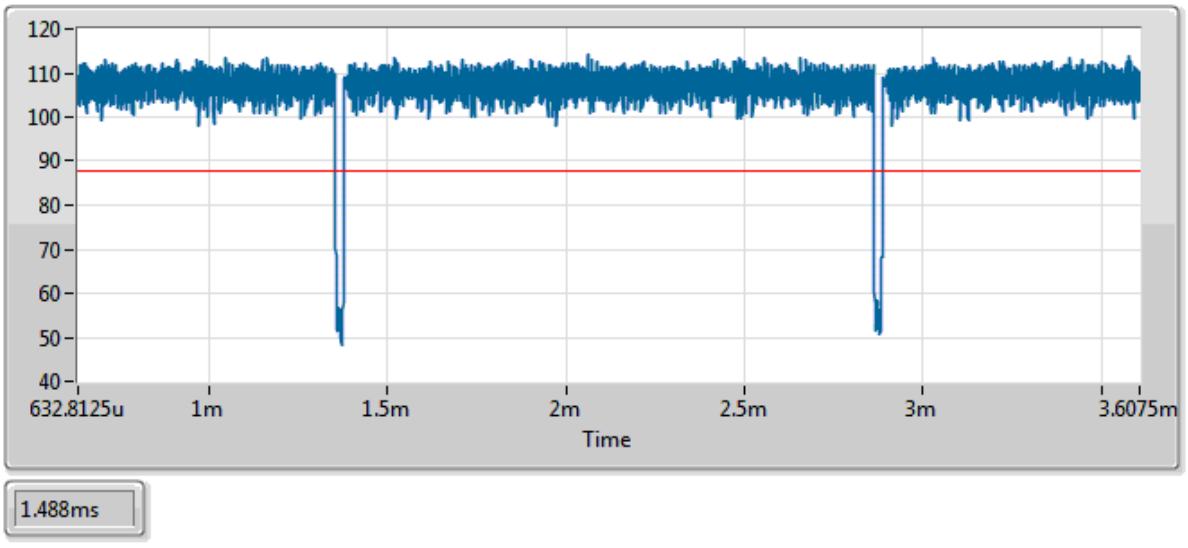
802.11a 1S4T CDD



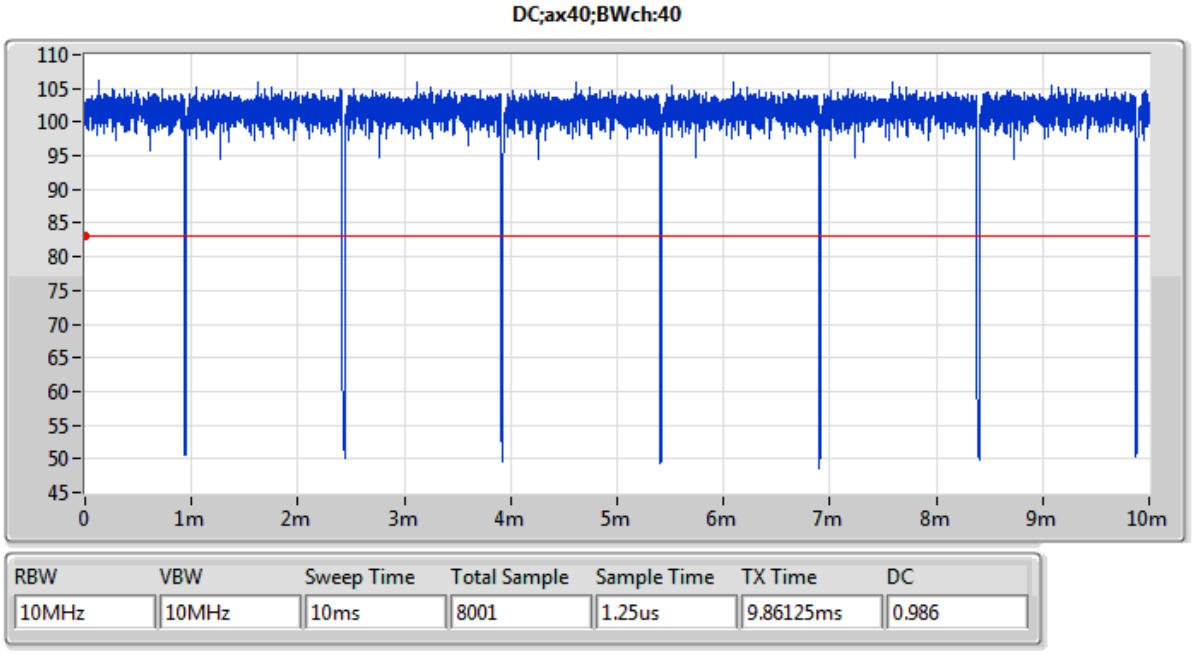


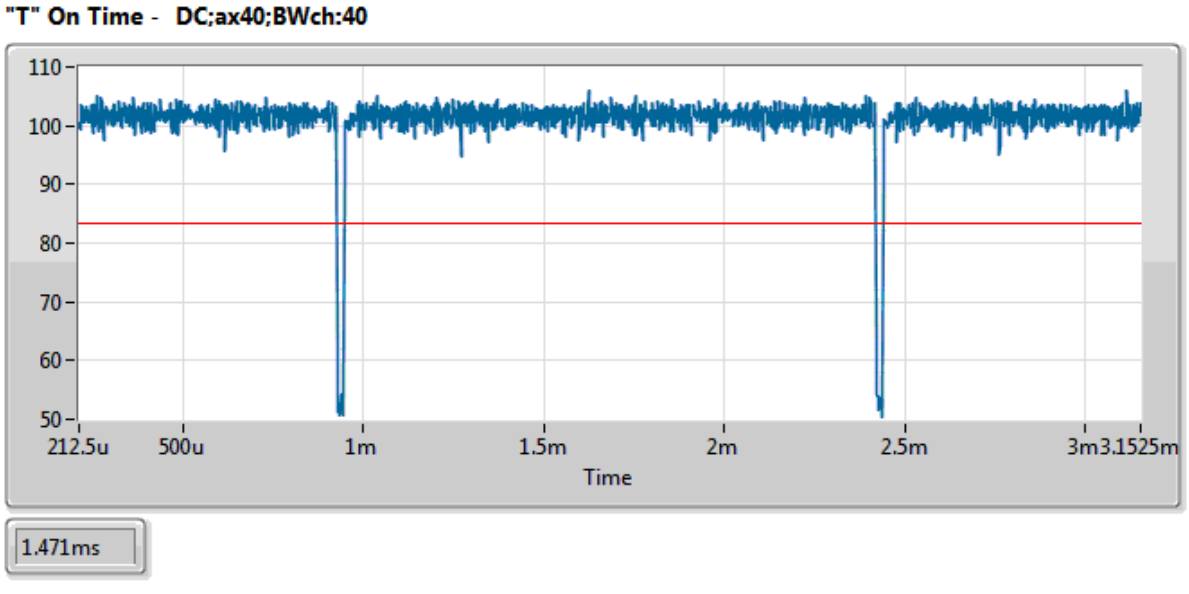
802.11ax(20MHz) 1S4T CDD



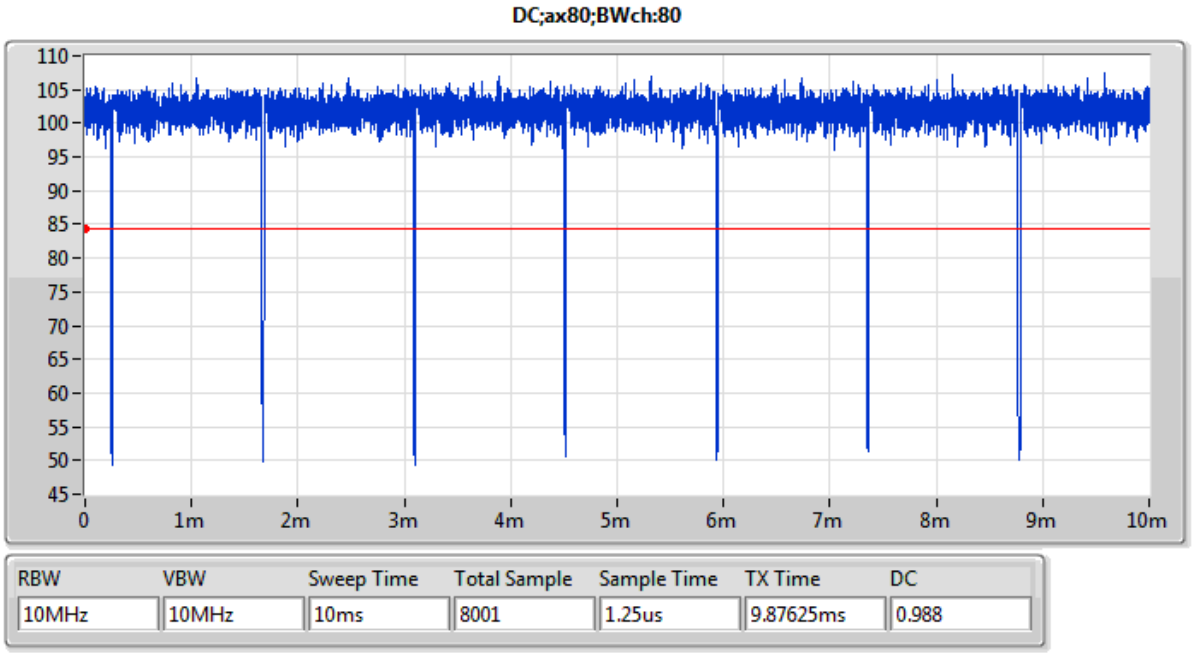


802.11ax(40MHz) 1S4T CDD

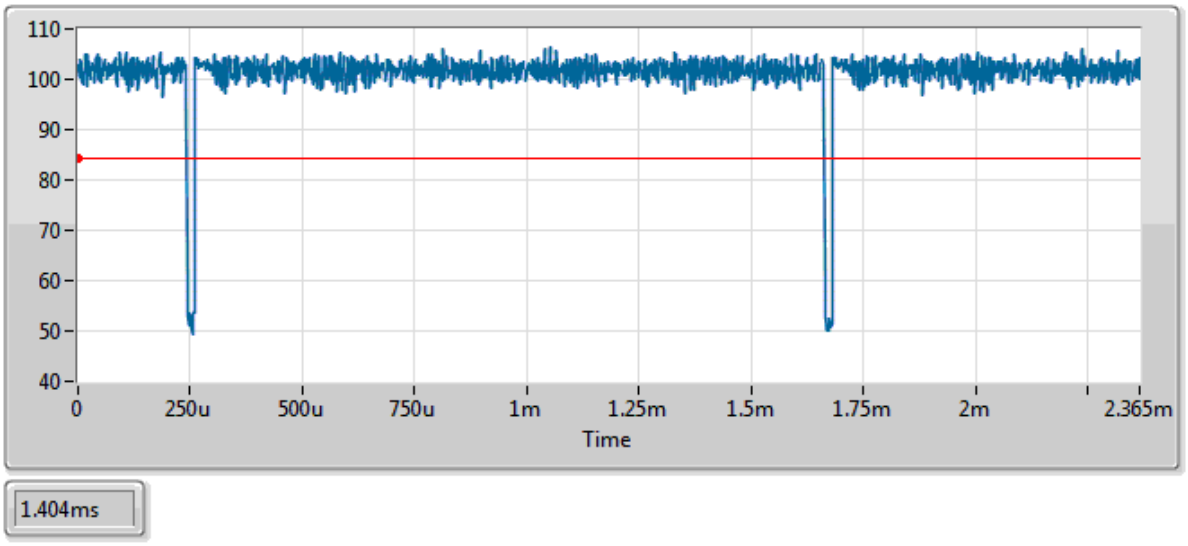




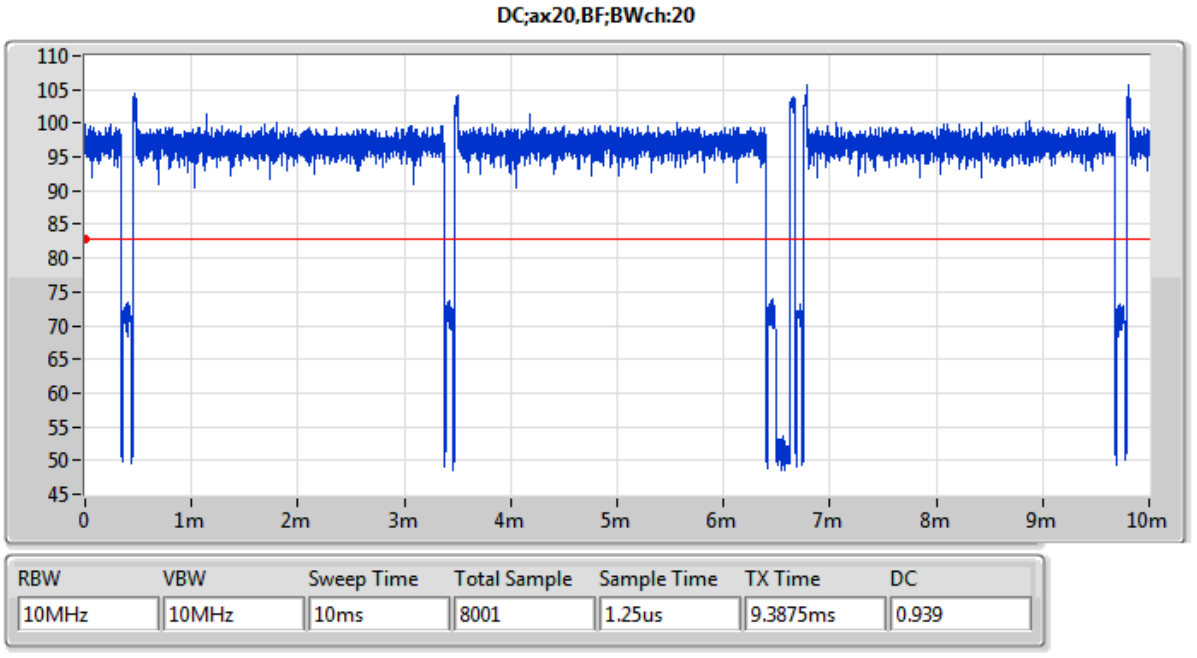
802.11ax(80MHz) 1S4T CDD



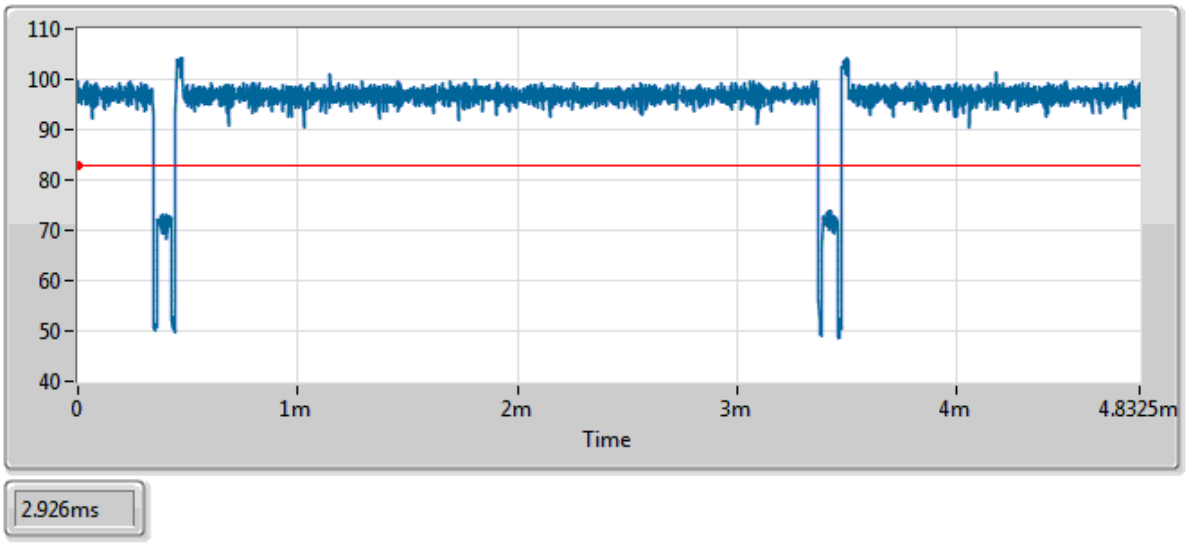
RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	10ms	8001	1.25us	9.87625ms	0.988



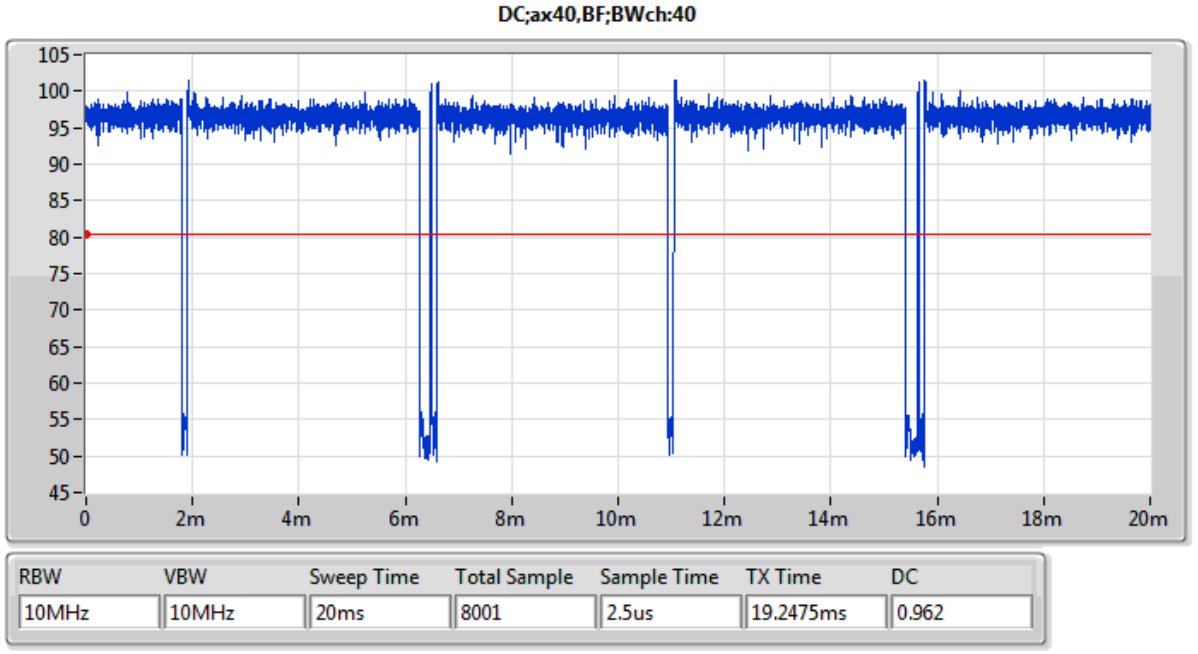
802.11ax(20MHz) 1S4T TXBF



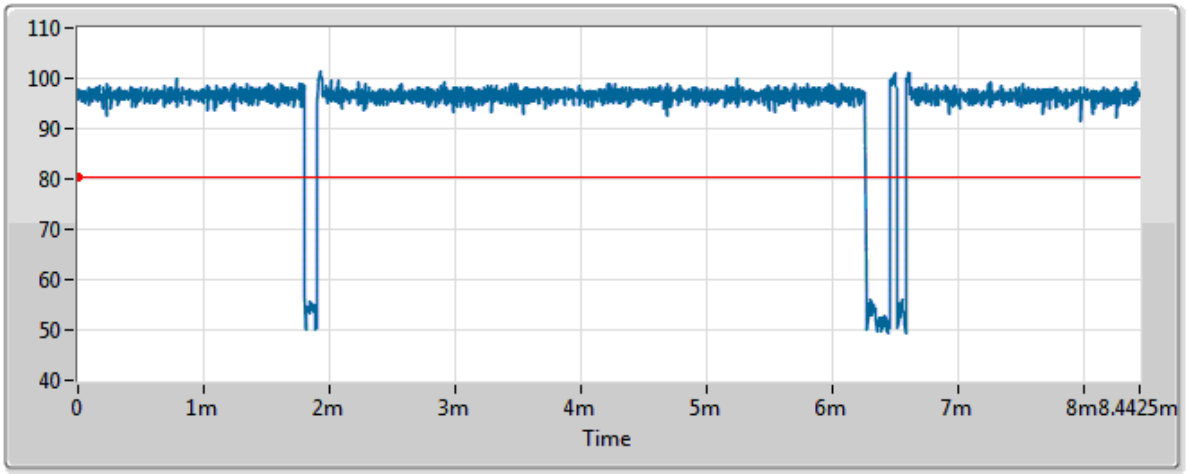
RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	10ms	8001	1.25us	9.3875ms	0.939



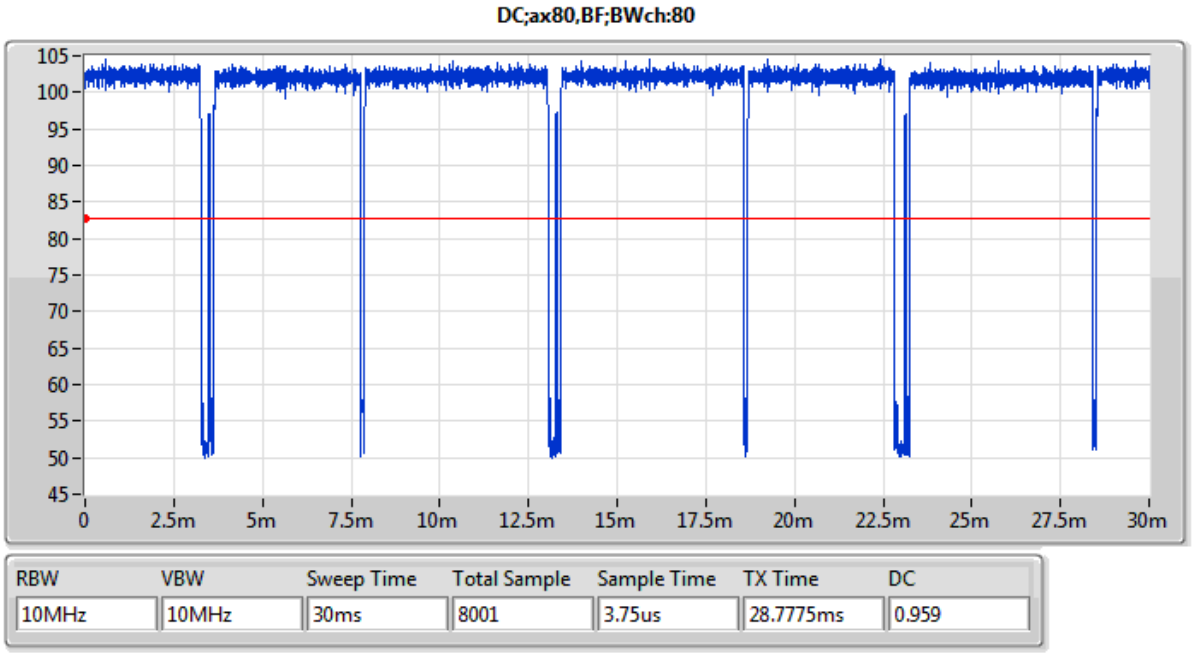
802.11ax(40MHz) 1S4T TXBF



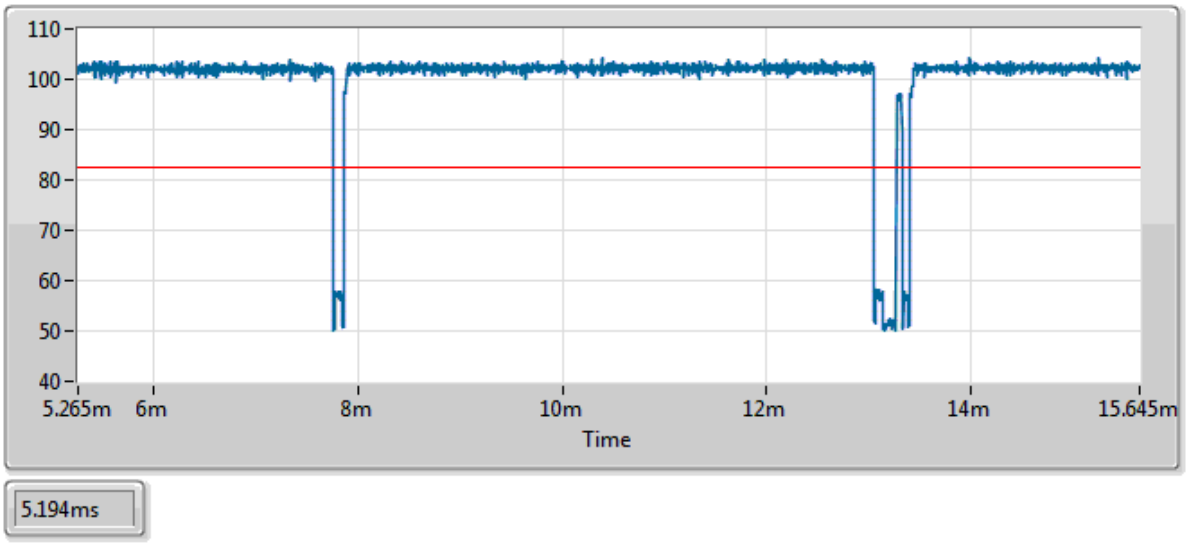
RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	20ms	8001	2.5us	19.2475ms	0.962



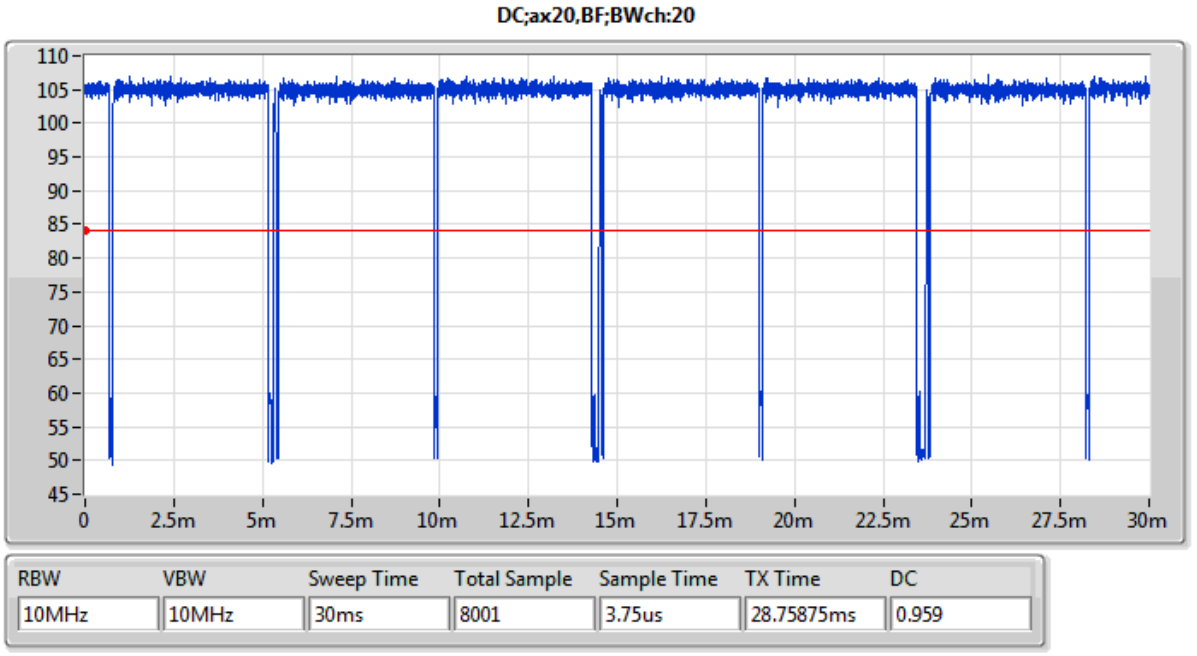
802.11ax(80MHz) 1S4T TXBF

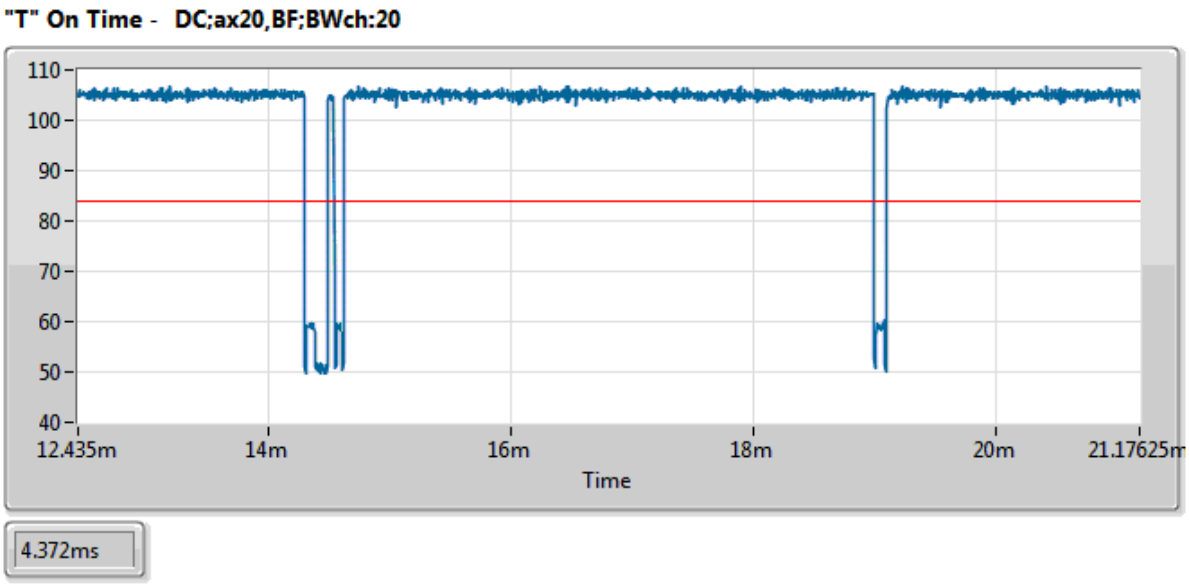


RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	30ms	8001	3.75us	28.7775ms	0.959

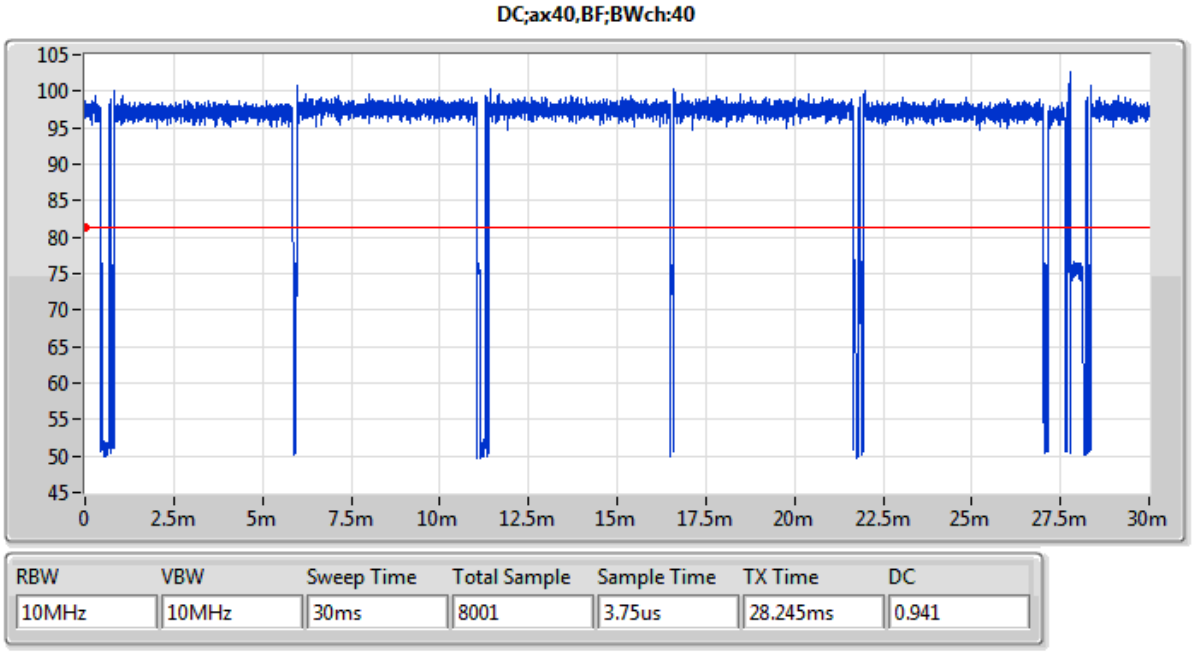


802.11ax(20MHz) 2S4T TXBF

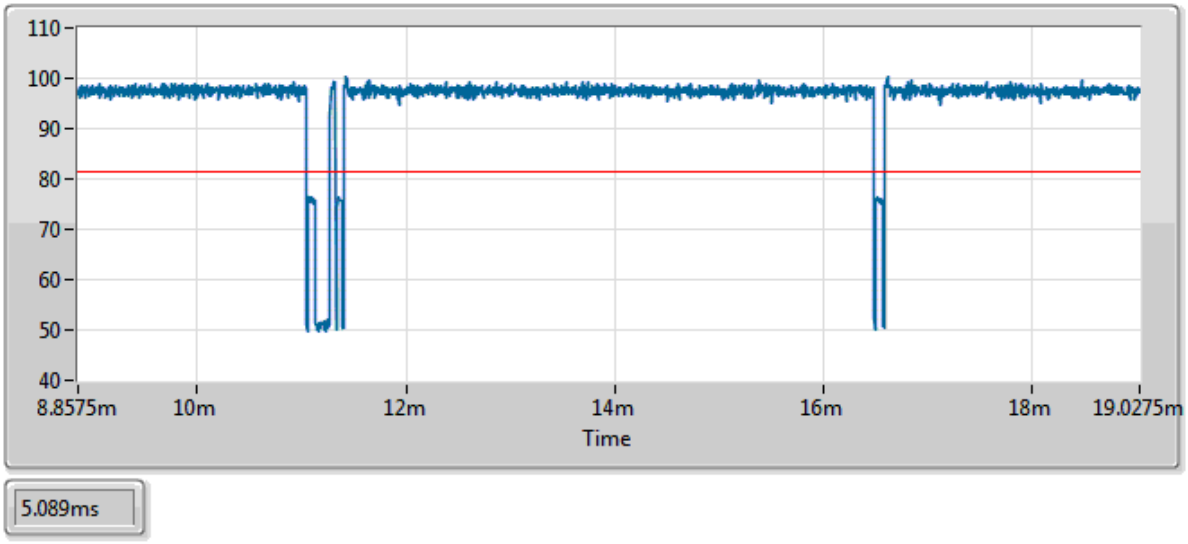




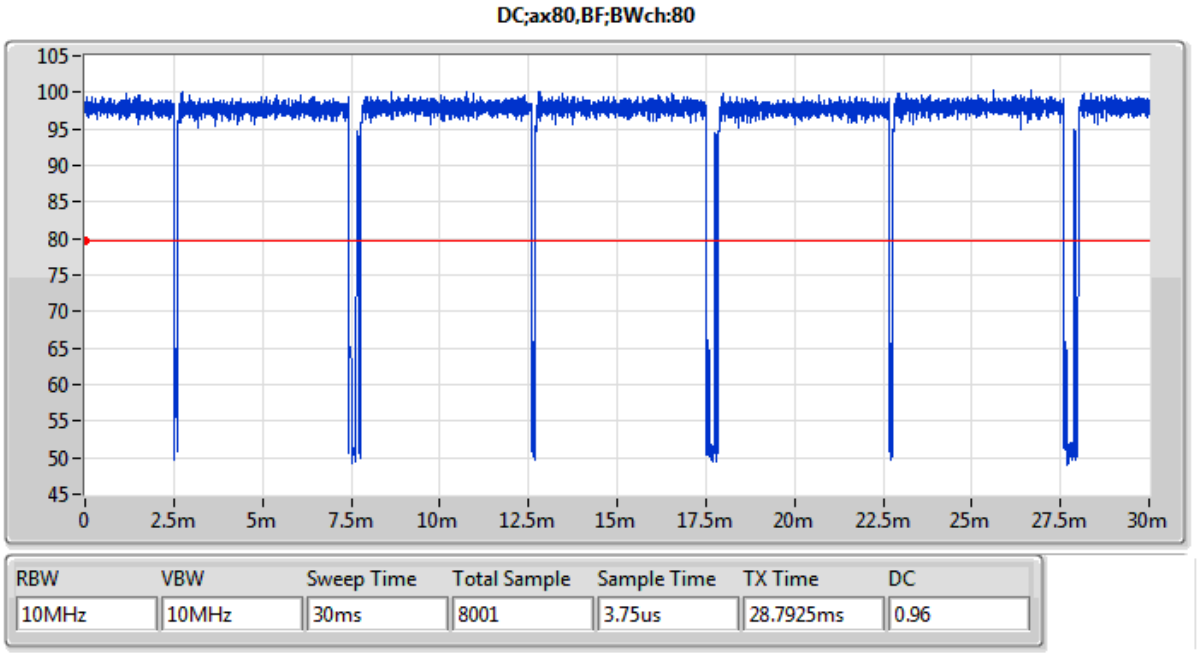
802.11ax(40MHz) 2S4T TXBF

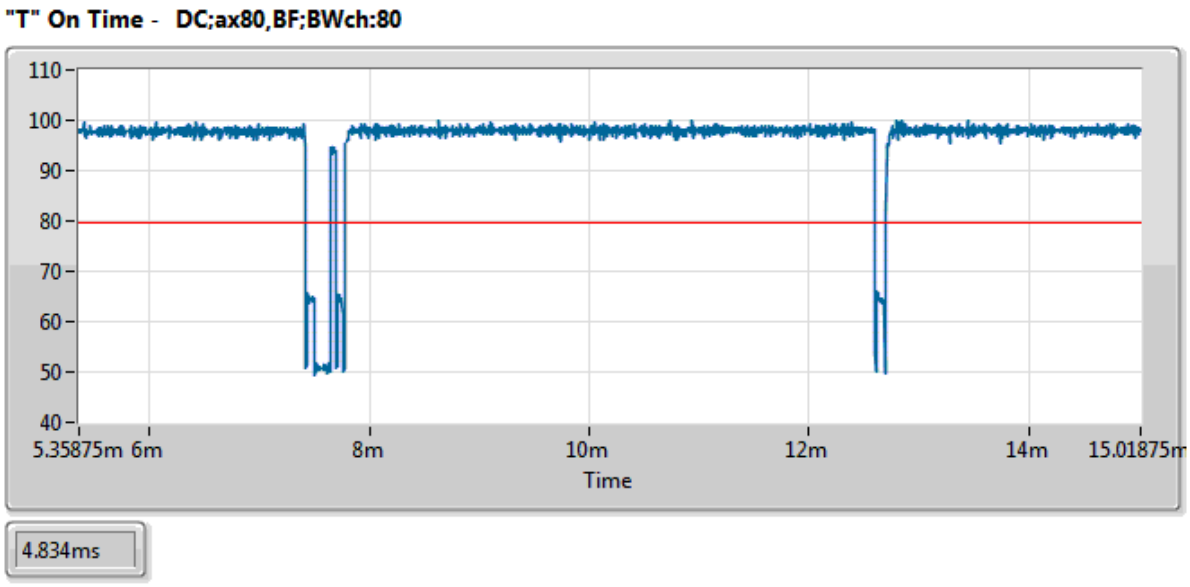


RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	30ms	8001	3.75us	28.245ms	0.941

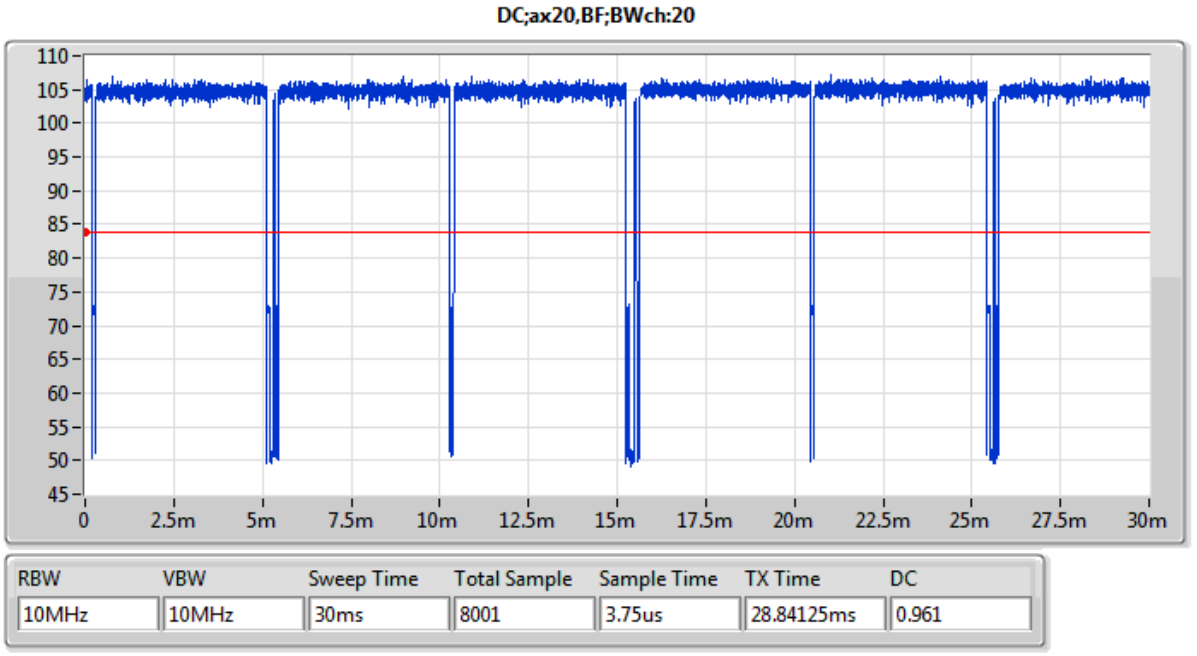


802.11ax(80MHz) 2S4T TXBF

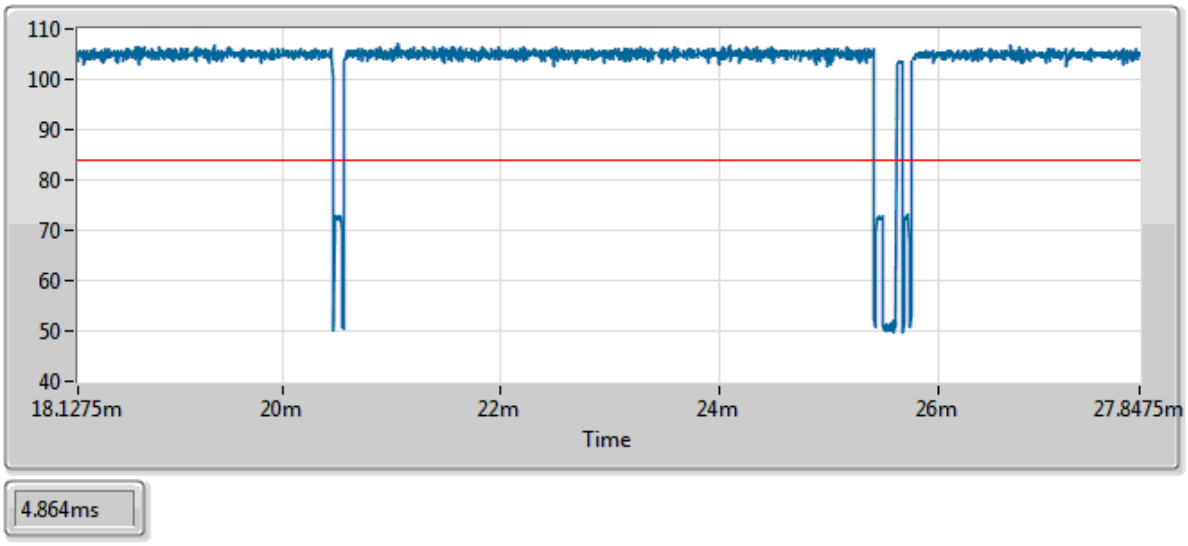




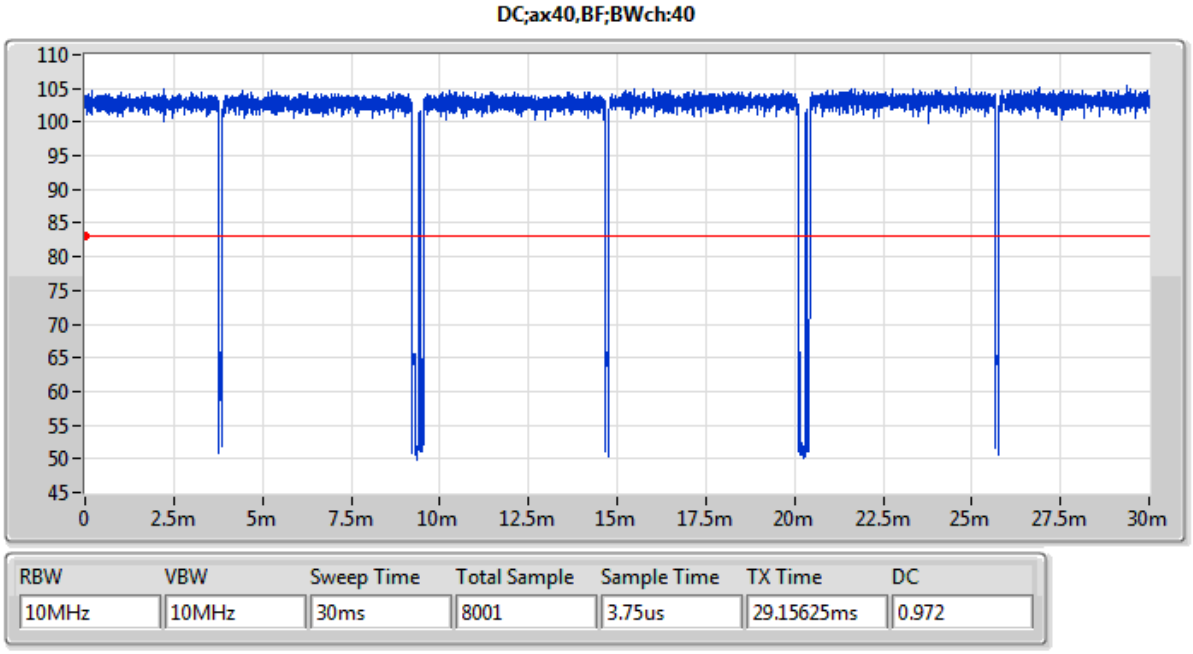
802.11ax(20MHz) 3S4T TXBF

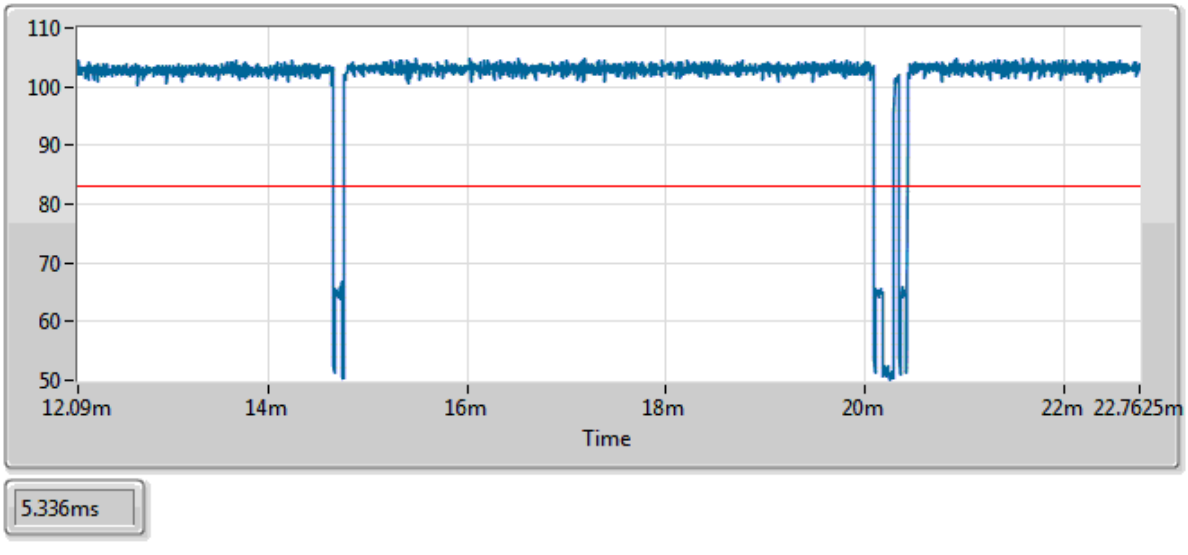


RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	30ms	8001	3.75us	28.84125ms	0.961

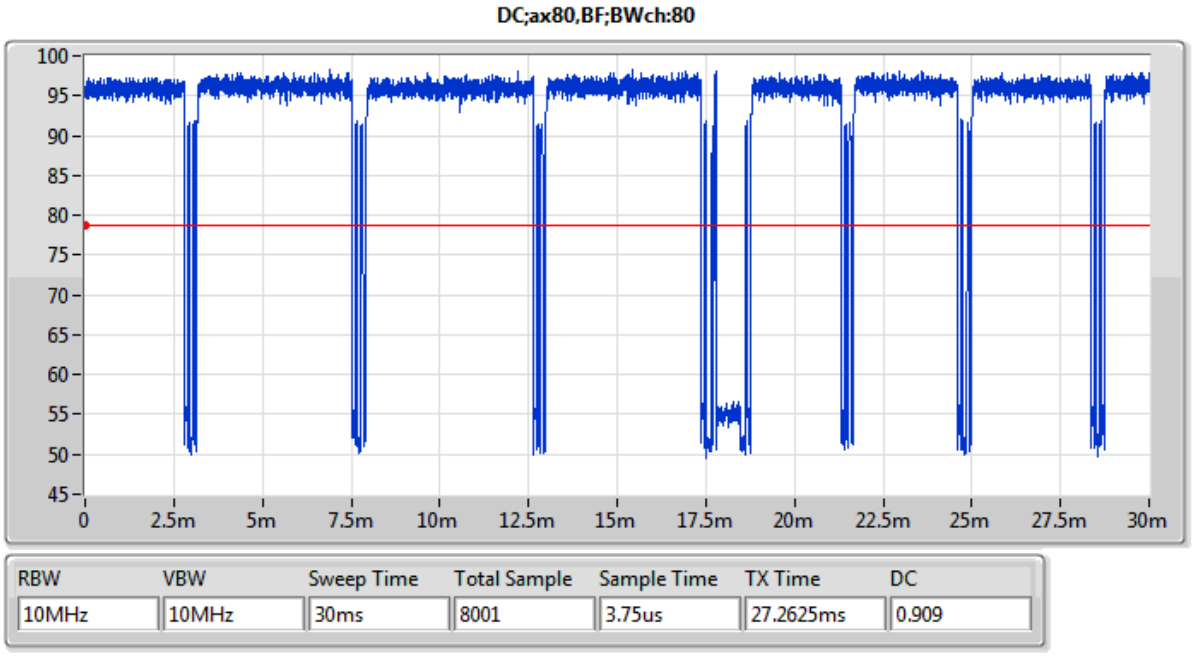


802.11ax(40MHz) 3S4T TXBF

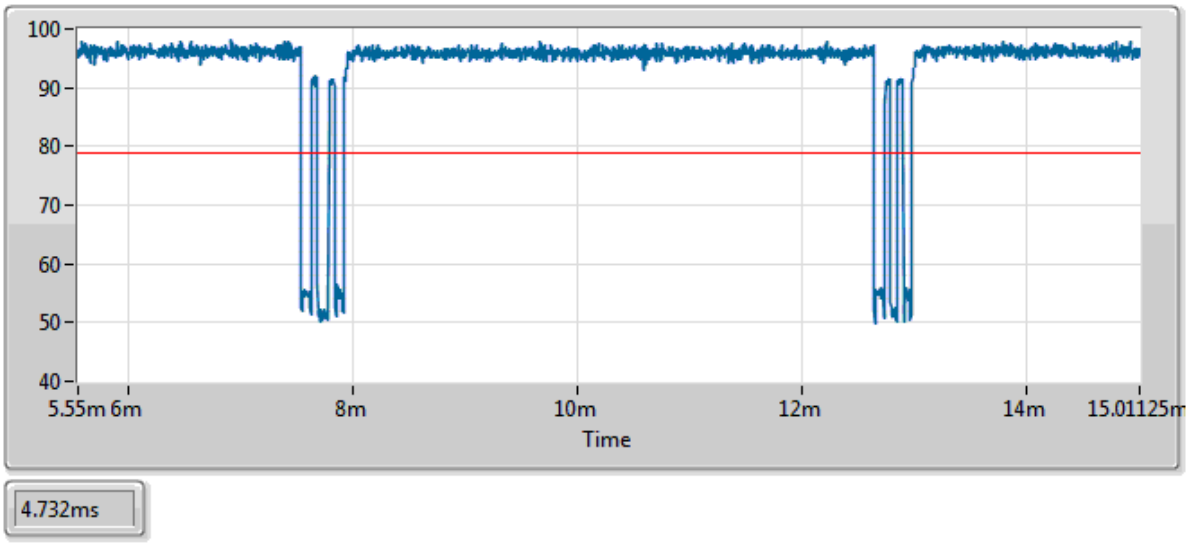




802.11ax(80MHz) 3S4T TXBF



RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
10MHz	10MHz	30ms	8001	3.75us	27.2625ms	0.909



1.16. Table for Supporting Units

For AC Conduction:

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

For Radiated Below 1GHz:

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

For Radiated Above 1GHz (CDD mode) and RF Conducted (CDD mode):

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

For Radiated Above 1GHz (TXBF mode) and RF Conducted (TXBF mode):

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	WLAN AP (RX Device)	ASUS	RT-AX88U	MSQ-RTAXHP00

1.17. EUT Operation during Test

For CTX Mode:

For CDD mode:

The EUT was programmed to be in continuously transmitting mode.

For TXBF mode:

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

The program was executed as follows:

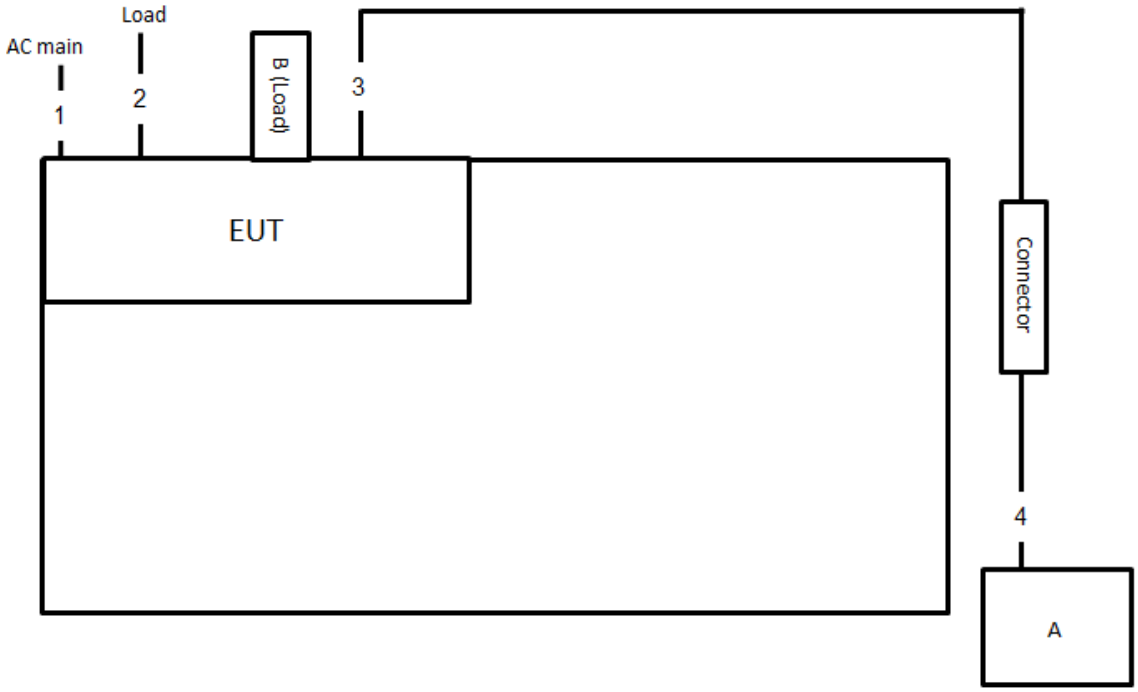
1. During the test, the EUT operation to normal function.
2. Execute command via SSH to fix channel under test.
3. Run "Iperf.exe" to generate traffic to max transmit duty cycle and receive by Rx device.

For Normal Link:

During the test, the EUT operation to normal function.

1.18. Test Configurations

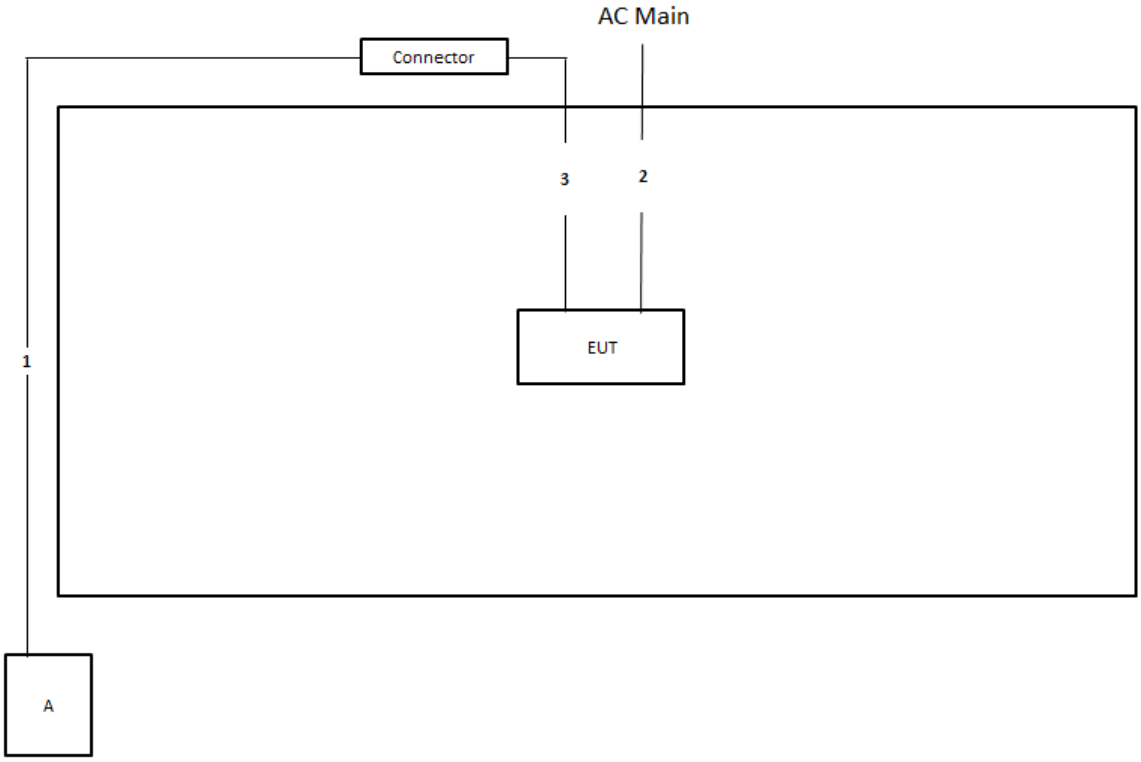
1.18.1. AC Power Line Conduction Emissions Test Configuration



Item	Connection	Shielded	Length
1	Power cable	No	1.2m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	1.5m
4	RJ-45 cable	No	10m

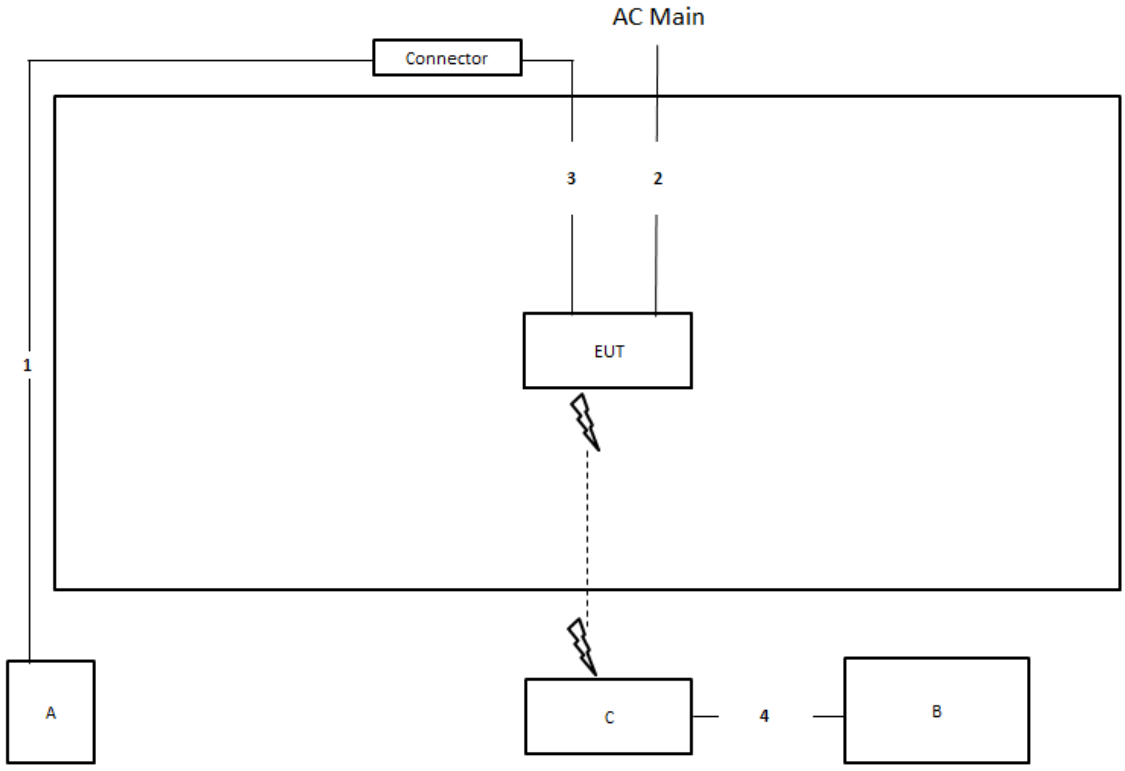
1.18.2. Radiation Emissions Test Configuration

Test Configuration: Below 1GHz and Above 1GHz (CDD mode)



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.2m
3	RJ-45 cable	No	1.5m

Test Configuration: Above 1GHz (TXBF mode)



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.2m
3	RJ-45 cable	No	1.5m
4	RJ-45 cable	No	1m

2. Test Result

2.1. AC Power Line Conducted Emissions Measurement

2.1.1. Limit

For this product that is designed to connect to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency (MHz)	QP Limit (dBuV)	AV Limit (dBuV)
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.		

2.1.2. Measuring Instruments and Setting

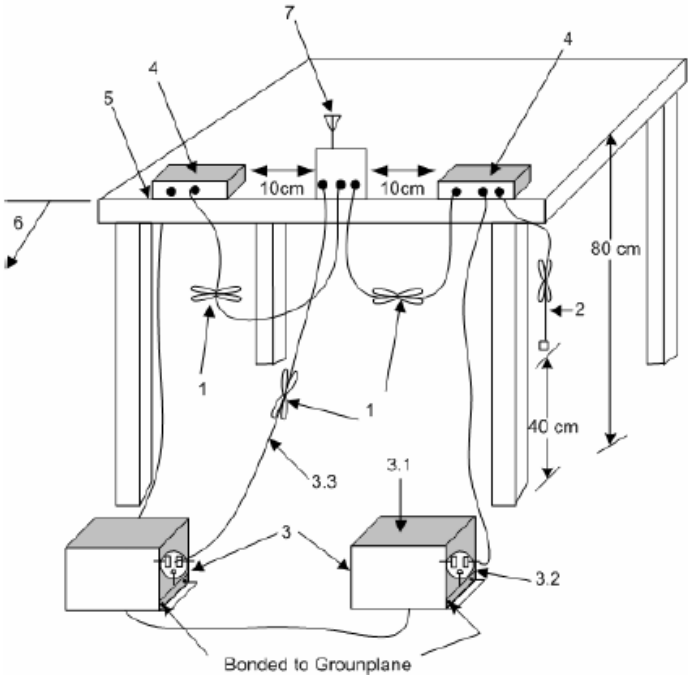
Please refer to section 3 of equipments list in this report. The following table is the setting of the receiver.

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

2.1.3. Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

2.1.4. Test Setup Layout



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

2.1.5. Test Deviation

There is no deviation with the original standard.

2.1.6. EUT Operation during Test

The EUT was placed on the test table and programmed in normal function.

2.1.7. Measurement Results Calculation

The measured Level is calculated using:

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

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

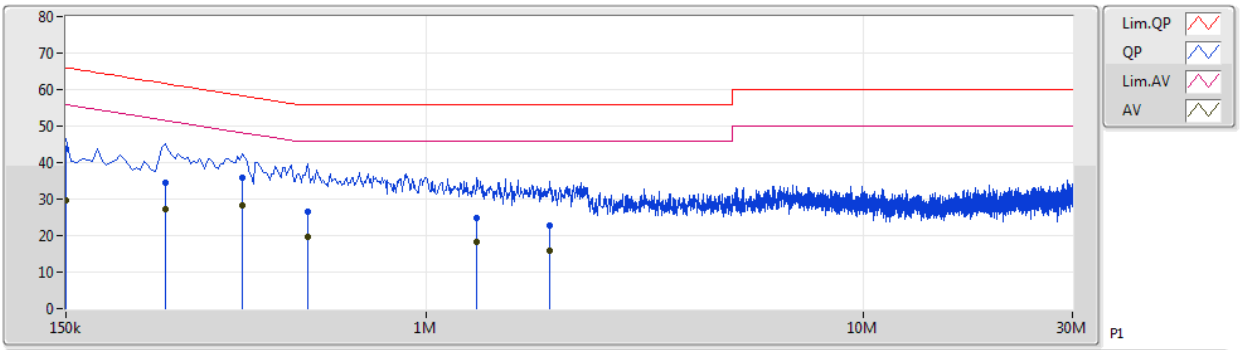
2.1.8. Results of AC Power Line Conducted Emissions Measurement

Mode Configure

Mode	Configure
Mode 1	CTX mode, EUT – WLAN 2.4GHz
Mode 2	CTX mode, EUT – WLAN 5GHz Band 1
Mode 3	CTX mode, EUT – WLAN 5GHz Band 4

Mode 1

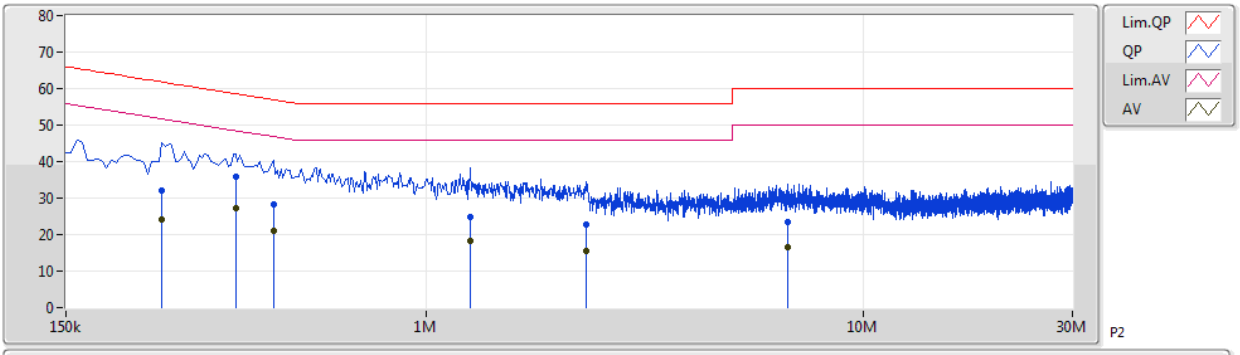
10/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	43.87	66.00	-22.13	10.20	Line	-	33.67	0.05	0.05	10.10
AV	150k	29.55	56.00	-26.45	10.20	Line	-	19.35	0.05	0.05	10.10
QP	253.5k	34.49	61.64	-27.15	10.22	Line	-	24.27	0.05	0.07	10.10
AV	253.5k	27.31	51.64	-24.33	10.22	Line	-	17.09	0.05	0.07	10.10
QP	379.5k	35.77	58.29	-22.52	10.23	Line	-	25.54	0.05	0.08	10.10
AV	379.5k	28.29	48.29	-20.00	10.23	Line	"Worst"	18.06	0.05	0.08	10.10
QP	537k	26.65	56.00	-29.35	10.24	Line	-	16.41	0.05	0.09	10.10
AV	537k	19.66	46.00	-26.34	10.24	Line	-	9.42	0.05	0.09	10.10
QP	1.307M	24.95	56.00	-31.05	10.31	Line	-	14.64	0.07	0.14	10.10
AV	1.307M	18.13	46.00	-27.87	10.31	Line	-	7.82	0.07	0.14	10.10
QP	1.914M	22.68	56.00	-33.32	10.35	Line	-	12.33	0.09	0.16	10.10
AV	1.914M	15.86	46.00	-30.14	10.35	Line	-	5.51	0.09	0.16	10.10

Mode 1

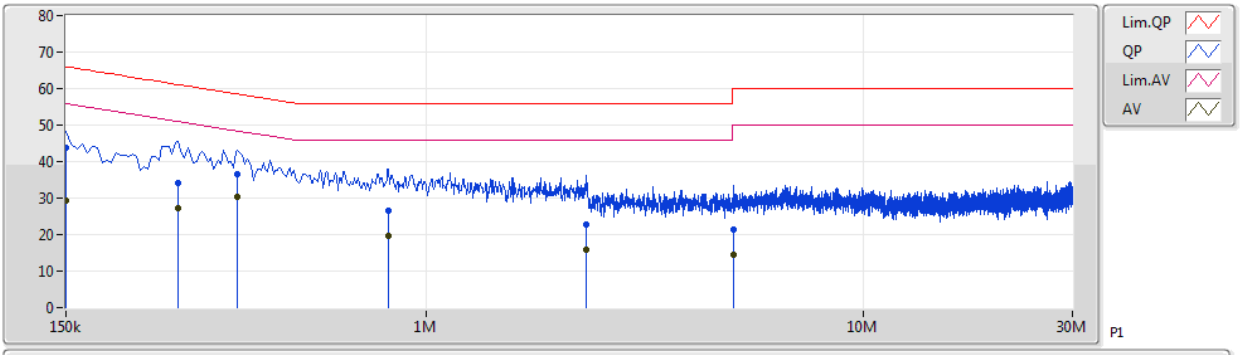
10/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	249k	32.11	61.79	-29.68	10.22	Neutral	-	21.89	0.05	0.07	10.10
AV	249k	24.13	51.79	-27.66	10.22	Neutral	-	13.91	0.05	0.07	10.10
QP	366k	35.75	58.60	-22.85	10.23	Neutral	-	25.52	0.05	0.08	10.10
AV	366k	27.26	48.60	-21.34	10.23	Neutral	"Worst"	17.03	0.05	0.08	10.10
QP	447k	28.18	56.94	-28.76	10.23	Neutral	-	17.95	0.05	0.08	10.10
AV	447k	21.15	46.94	-25.79	10.23	Neutral	-	10.92	0.05	0.08	10.10
QP	1.257M	24.98	56.00	-31.02	10.30	Neutral	-	14.68	0.07	0.13	10.10
AV	1.257M	18.22	46.00	-27.78	10.30	Neutral	-	7.92	0.07	0.13	10.10
QP	2.315M	22.65	56.00	-33.35	10.35	Neutral	-	12.30	0.09	0.16	10.10
AV	2.315M	15.67	46.00	-30.33	10.35	Neutral	-	5.32	0.09	0.16	10.10
QP	6.72M	23.59	60.00	-36.41	10.43	Neutral	-	13.16	0.16	0.16	10.11
AV	6.72M	16.38	50.00	-33.62	10.43	Neutral	-	5.95	0.16	0.16	10.11

Mode 2

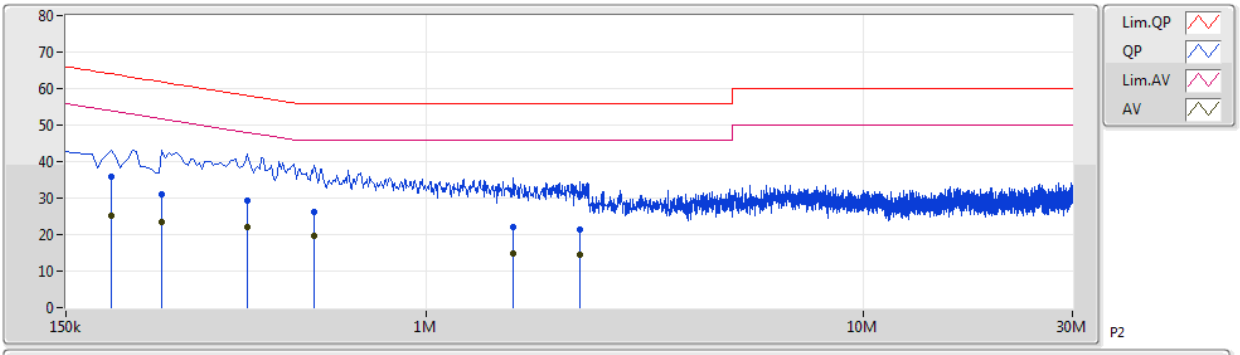
10/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	43.71	66.00	-22.29	10.20	Line	-	33.51	0.05	0.05	10.10
AV	150k	29.22	56.00	-26.78	10.20	Line	-	19.02	0.05	0.05	10.10
QP	271.5k	34.21	61.07	-26.86	10.22	Line	-	23.99	0.05	0.07	10.10
AV	271.5k	27.10	51.07	-23.97	10.22	Line	-	16.88	0.05	0.07	10.10
QP	370.5k	36.70	58.49	-21.79	10.23	Line	-	26.47	0.05	0.08	10.10
AV	370.5k	30.44	48.49	-18.05	10.23	Line	"Worst"	20.21	0.05	0.08	10.10
QP	820.5k	26.42	56.00	-29.58	10.27	Line	-	16.15	0.06	0.11	10.10
AV	820.5k	19.67	46.00	-26.33	10.27	Line	-	9.40	0.06	0.11	10.10
QP	2.319M	22.72	56.00	-33.28	10.36	Line	-	12.36	0.10	0.16	10.10
AV	2.319M	15.70	46.00	-30.30	10.36	Line	-	5.34	0.10	0.16	10.10
QP	5.037M	21.51	60.00	-38.49	10.40	Line	-	11.11	0.15	0.15	10.10
AV	5.037M	14.49	50.00	-35.51	10.40	Line	-	4.09	0.15	0.15	10.10

Mode 2

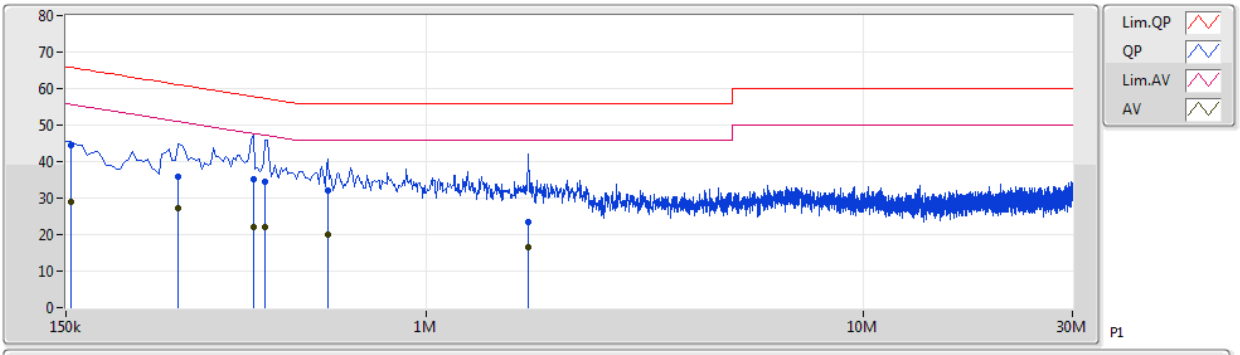
10/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	190.5k	35.90	64.01	-28.11	10.22	Neutral	-	25.68	0.05	0.07	10.10
AV	190.5k	25.13	54.01	-28.88	10.22	Neutral	-	14.91	0.05	0.07	10.10
QP	249k	30.97	61.79	-30.82	10.22	Neutral	-	20.75	0.05	0.07	10.10
AV	249k	23.46	51.79	-28.33	10.22	Neutral	-	13.24	0.05	0.07	10.10
QP	388.5k	29.16	58.10	-28.94	10.23	Neutral	-	18.93	0.05	0.08	10.10
AV	388.5k	22.14	48.10	-25.96	10.23	Neutral	"Worst"	11.91	0.05	0.08	10.10
QP	555k	26.31	56.00	-29.69	10.24	Neutral	-	16.07	0.05	0.09	10.10
AV	555k	19.51	46.00	-26.49	10.24	Neutral	-	9.27	0.05	0.09	10.10
QP	1.581M	21.91	56.00	-34.09	10.32	Neutral	-	11.59	0.07	0.15	10.10
AV	1.581M	15.00	46.00	-31.00	10.32	Neutral	-	4.68	0.07	0.15	10.10
QP	2.243M	21.47	56.00	-34.53	10.34	Neutral	-	11.13	0.08	0.16	10.10
AV	2.243M	14.58	46.00	-31.42	10.34	Neutral	-	4.24	0.08	0.16	10.10

Mode 3

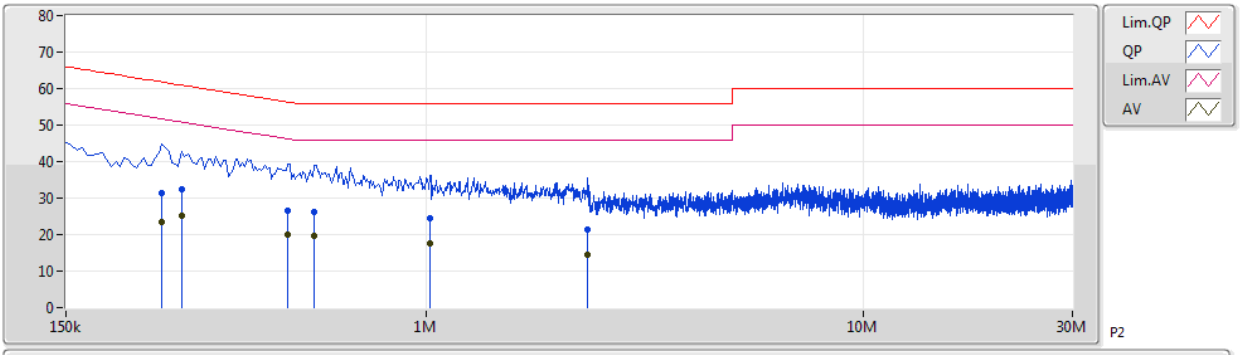
10/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	44.58	65.75	-21.17	10.21	Line	"Worst"	34.37	0.05	0.06	10.10
AV	154.5k	28.94	55.75	-26.81	10.21	Line	-	18.73	0.05	0.06	10.10
QP	271.5k	35.89	61.07	-25.18	10.22	Line	-	25.67	0.05	0.07	10.10
AV	271.5k	27.37	51.07	-23.70	10.22	Line	-	17.15	0.05	0.07	10.10
QP	402k	35.15	57.82	-22.67	10.23	Line	-	24.92	0.05	0.08	10.10
AV	402k	21.95	47.82	-25.87	10.23	Line	-	11.72	0.05	0.08	10.10
QP	429k	34.34	57.28	-22.94	10.23	Line	-	24.11	0.05	0.08	10.10
AV	429k	22.08	47.28	-25.20	10.23	Line	-	11.85	0.05	0.08	10.10
QP	595.5k	31.95	56.00	-24.05	10.25	Line	-	21.70	0.05	0.10	10.10
AV	595.5k	19.98	46.00	-26.02	10.25	Line	-	9.73	0.05	0.10	10.10
QP	1.712M	23.60	56.00	-32.40	10.33	Line	-	13.27	0.08	0.15	10.10
AV	1.712M	16.65	46.00	-29.35	10.33	Line	-	6.32	0.08	0.15	10.10

Mode 3

10/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	249k	31.26	61.79	-30.53	10.22	Neutral	-	21.04	0.05	0.07	10.10
AV	249k	23.58	51.79	-28.21	10.22	Neutral	-	13.36	0.05	0.07	10.10
QP	276k	32.28	60.93	-28.65	10.22	Neutral	-	22.06	0.05	0.07	10.10
AV	276k	25.33	50.93	-25.60	10.22	Neutral	"Worst"	15.11	0.05	0.07	10.10
QP	483k	26.54	56.29	-29.75	10.24	Neutral	-	16.30	0.05	0.09	10.10
AV	483k	19.88	46.29	-26.41	10.24	Neutral	-	9.64	0.05	0.09	10.10
QP	555k	26.22	56.00	-29.78	10.24	Neutral	-	15.98	0.05	0.09	10.10
AV	555k	19.60	46.00	-26.40	10.24	Neutral	-	9.36	0.05	0.09	10.10
QP	1.019M	24.43	56.00	-31.57	10.28	Neutral	-	14.15	0.06	0.12	10.10
AV	1.019M	17.53	46.00	-28.47	10.28	Neutral	-	7.25	0.06	0.12	10.10
QP	2.337M	21.37	56.00	-34.63	10.35	Neutral	-	11.02	0.09	0.16	10.10
AV	2.337M	14.58	46.00	-31.42	10.35	Neutral	-	4.23	0.09	0.16	10.10

2.2. 26dB Emission Bandwidth and 99% Occupied Bandwidth Measurement

2.2.1. Limit

No restriction limits.

2.2.2. Measuring Instruments and Setting

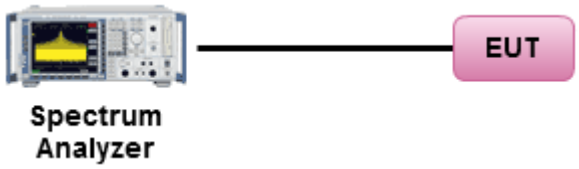
Please refer to section 3 of equipments list in this report. The following table is the setting of the spectrum analyzer.

26dB Bandwidth	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW > RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth	
Spectrum Parameters	**Setting**
Span	1.5 times to 5.0 times the OBW
RBW	1 % to 5 % of the OBW
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold

2.2.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General U-NII Test Procedures New Rules v02r01, in section “Emission bandwidth (C)(1)” & "99 Percent Occupied Bandwidth"(D). 12/14/2017.
3. When measuring Emission bandwidth with multiple antenna systems, add every result of the values by mathematic formula.

2.2.4. Test Setup Layout

26dB Emission Bandwidth and 99% Occupied Bandwidth


2.2.5. Test Deviation

There is no deviation with the original standard.

2.2.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.2.7. Test Result of 26dB Emission Bandwidth and 99% Occupied Bandwidth

Configuration IEEE 802.11a

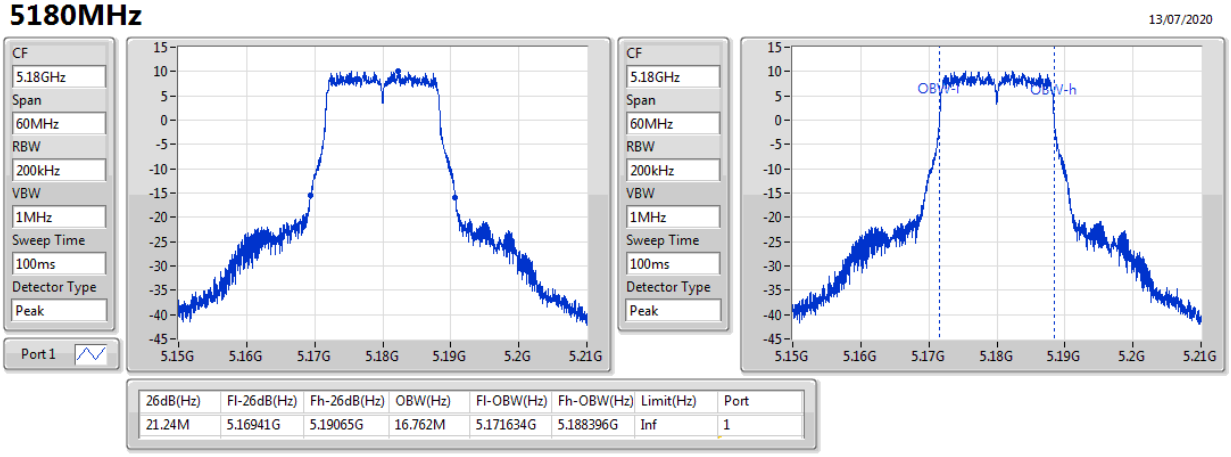
26dB Emission Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	26dB Emission Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11a (CDD)	1 stream 2TX	5180 MHz	21.240	21.690
802.11a (CDD)	1 stream 2TX	5200 MHz	35.970	36.600
802.11a (CDD)	1 stream 2TX	5240 MHz	34.890	35.070

99% Occupied Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	99% Occupied Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11a (CDD)	1 stream 2TX	5180 MHz	16.762	16.762
802.11a (CDD)	1 stream 2TX	5200 MHz	19.190	19.310
802.11a (CDD)	1 stream 2TX	5240 MHz	17.781	18.561

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 1 / CH36 / 5180 MHz

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

5180MHz

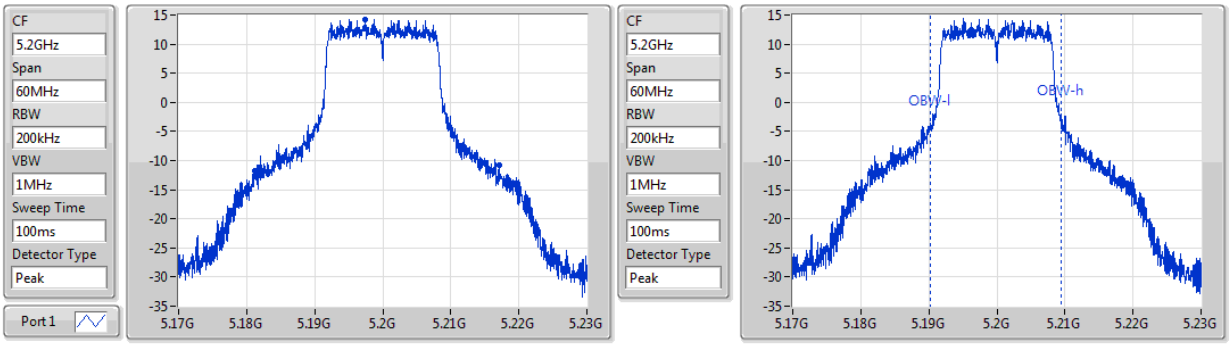


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.24M	5.16941G	5.19065G	16.762M	5.171634G	5.188396G	Inf	1

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 1 / CH40 / 5200 MHz

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

5200MHz

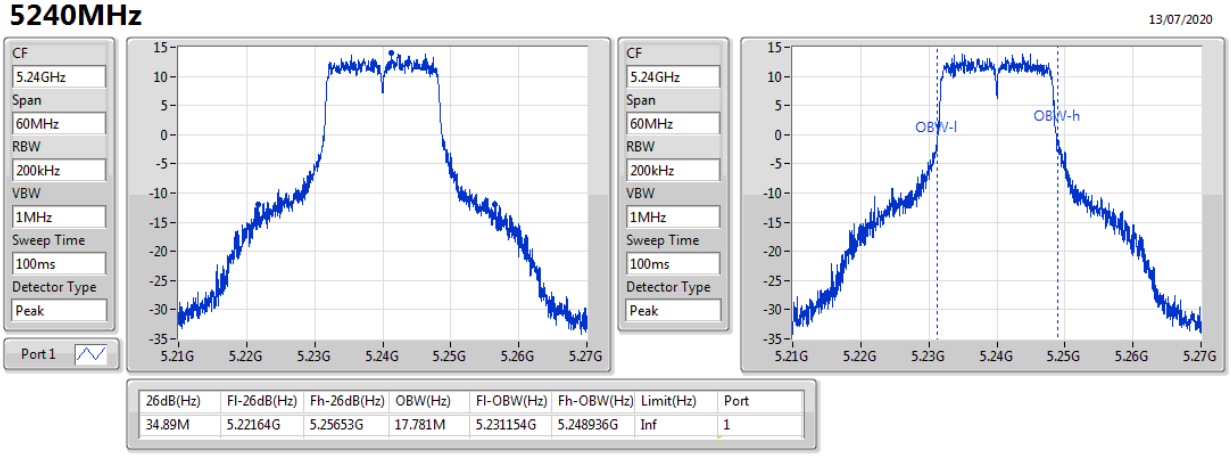


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.97M	5.18119G	5.21716G	19.19M	5.190255G	5.209445G	Inf	1

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 1 / CH48 / 5240 MHz

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

5240MHz

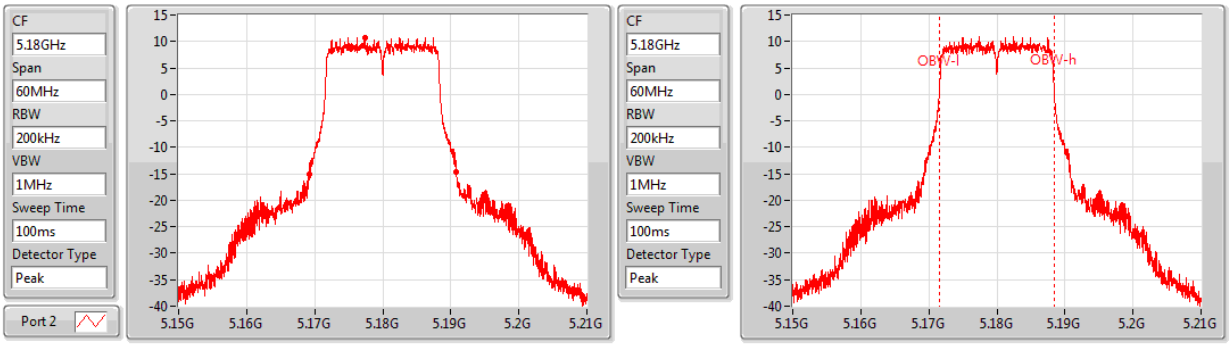


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.89M	5.22164G	5.25653G	17.781M	5.231154G	5.248936G	Inf	1

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 2 / CH36 / 5180 MHz

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

5180MHz

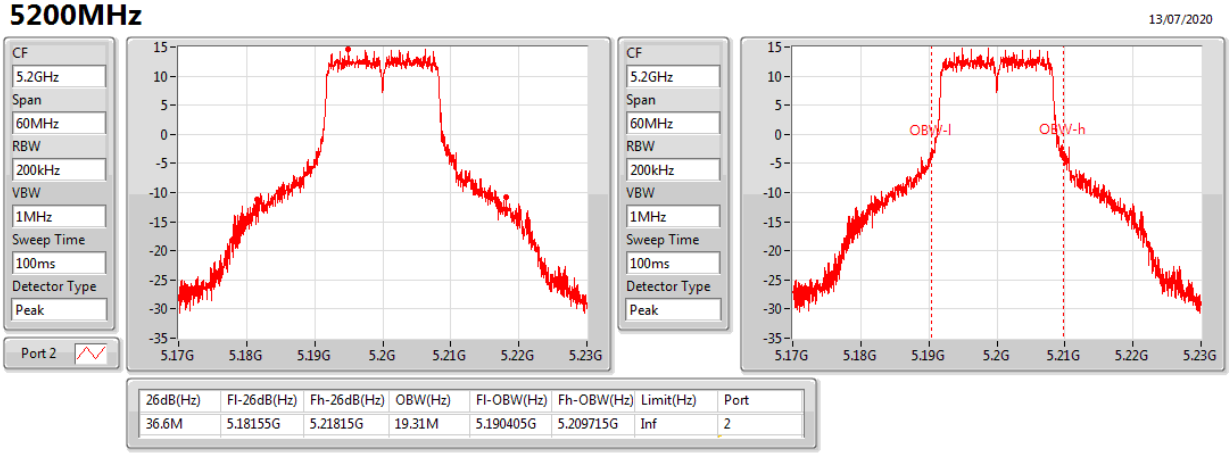


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.69M	5.16914G	5.19083G	16.762M	5.171604G	5.188366G	Inf	2

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 2 / CH40 / 5200 MHz

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

5200MHz

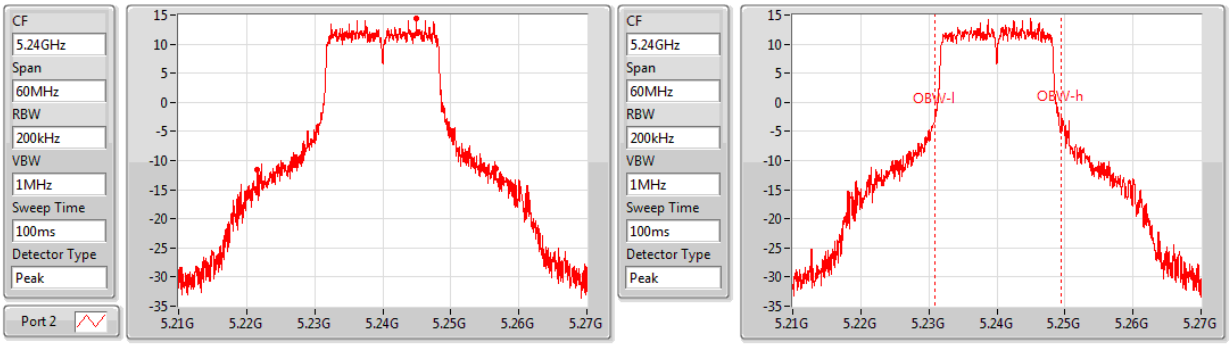


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.6M	5.18155G	5.21815G	19.31M	5.190405G	5.209715G	Inf	2

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 2 / CH48 / 5240 MHz

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

5240MHz



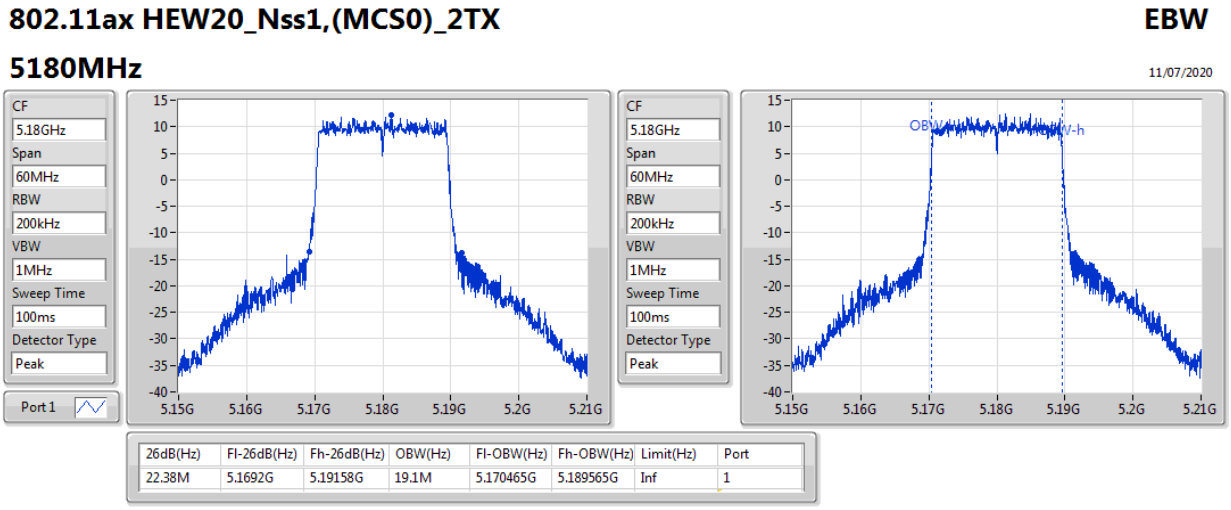
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.07M	5.22155G	5.25662G	18.561M	5.230855G	5.249415G	Inf	2

Configuration IEEE 802.11ax 20MHz

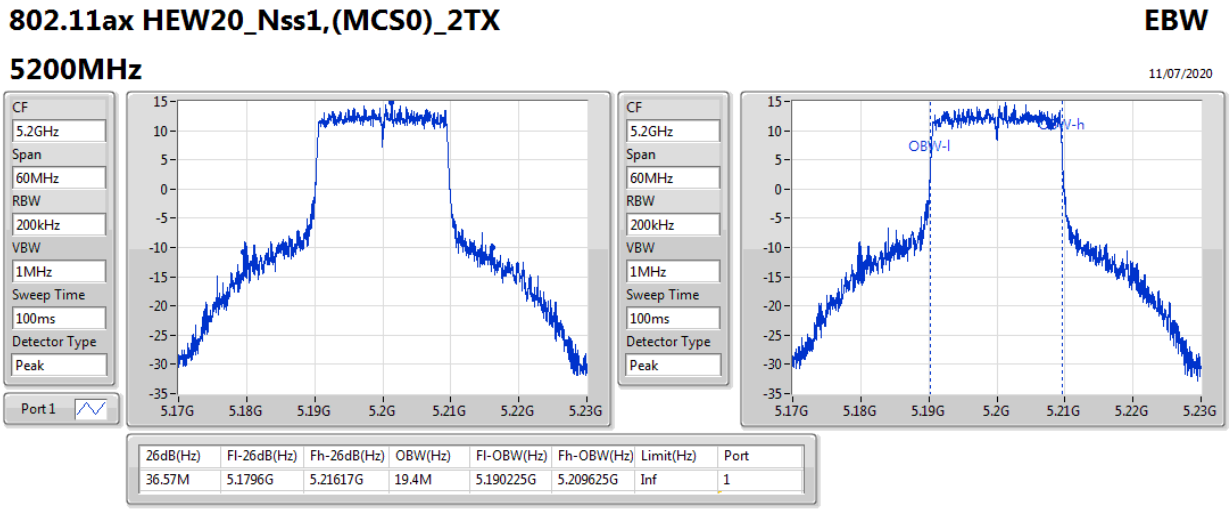
26dB Emission Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	26dB Emission Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11ax 20MHz (CDD)	1 stream 2TX	5180 MHz	22.380	21.390
802.11ax 20MHz (CDD)	1 stream 2TX	5200 MHz	36.570	22.860
802.11ax 20MHz (CDD)	1 stream 2TX	5240 MHz	32.430	23.280
802.11ax 20MHz (TXBF)	1 stream 2TX	5180 MHz	22.770	21.390
802.11ax 20MHz (TXBF)	1 stream 2TX	5200 MHz	40.290	22.740
802.11ax 20MHz (TXBF)	1 stream 2TX	5240 MHz	36.300	22.890

99% Occupied Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	99% Occupied Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11ax 20MHz (CDD)	1 stream 2TX	5180 MHz	19.100	19.070
802.11ax 20MHz (CDD)	1 stream 2TX	5200 MHz	19.400	19.130
802.11ax 20MHz (CDD)	1 stream 2TX	5240 MHz	19.220	19.160
802.11ax 20MHz (TXBF)	1 stream 2TX	5180 MHz	19.070	19.070
802.11ax 20MHz (TXBF)	1 stream 2TX	5200 MHz	19.430	19.130
802.11ax 20MHz (TXBF)	1 stream 2TX	5240 MHz	19.250	19.130

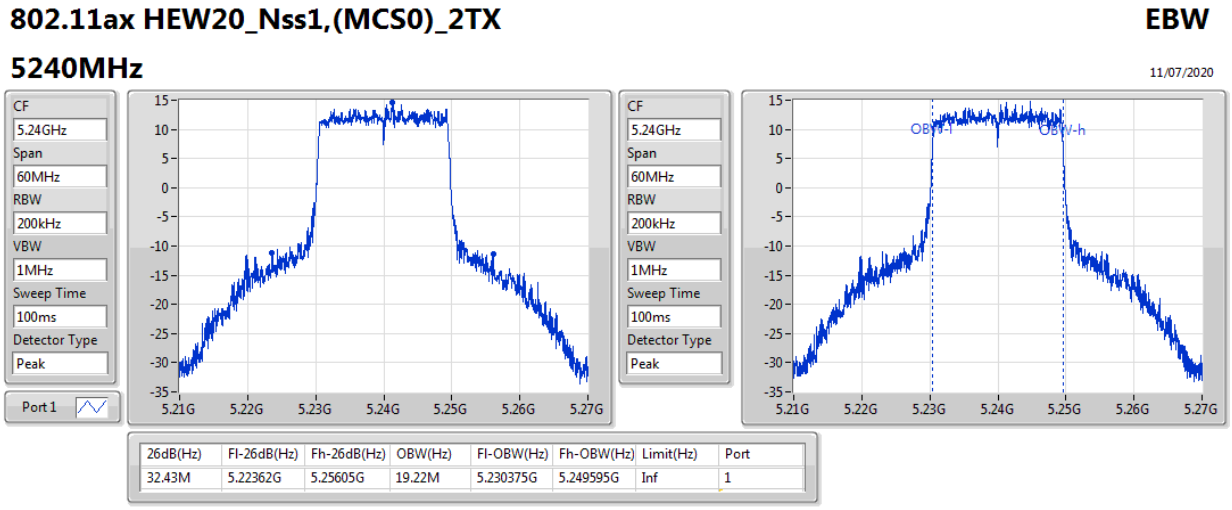
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 / CH36 / 5180 MHz



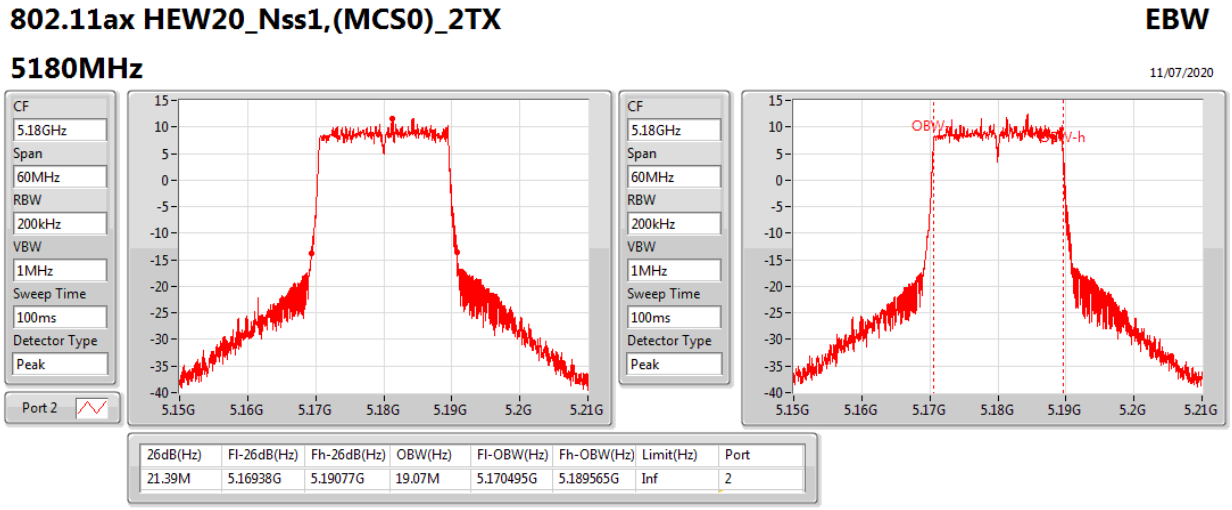
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 / CH40 / 5200 MHz



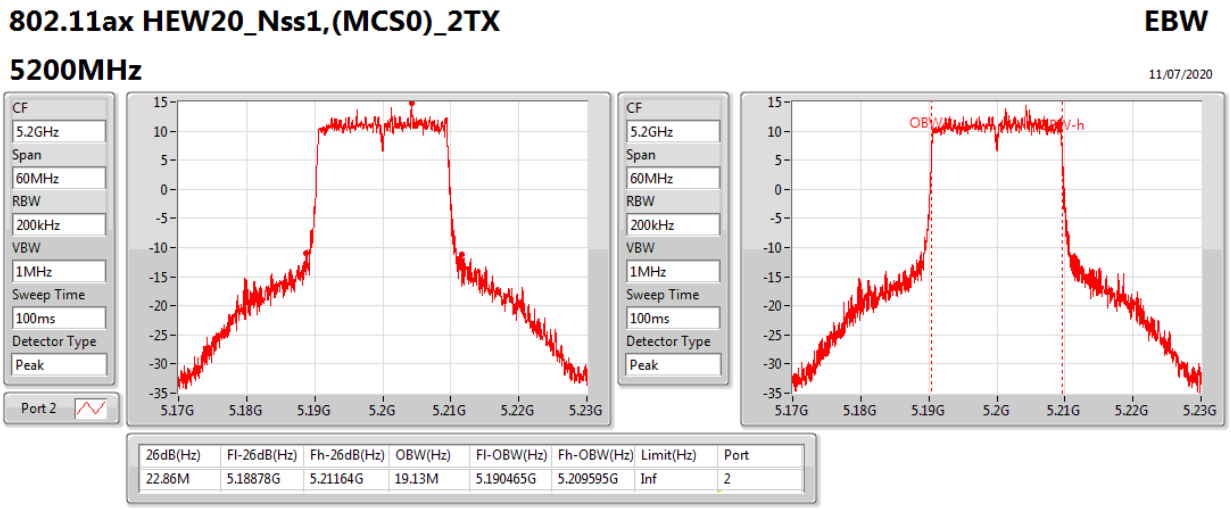
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 / CH48 / 5240 MHz



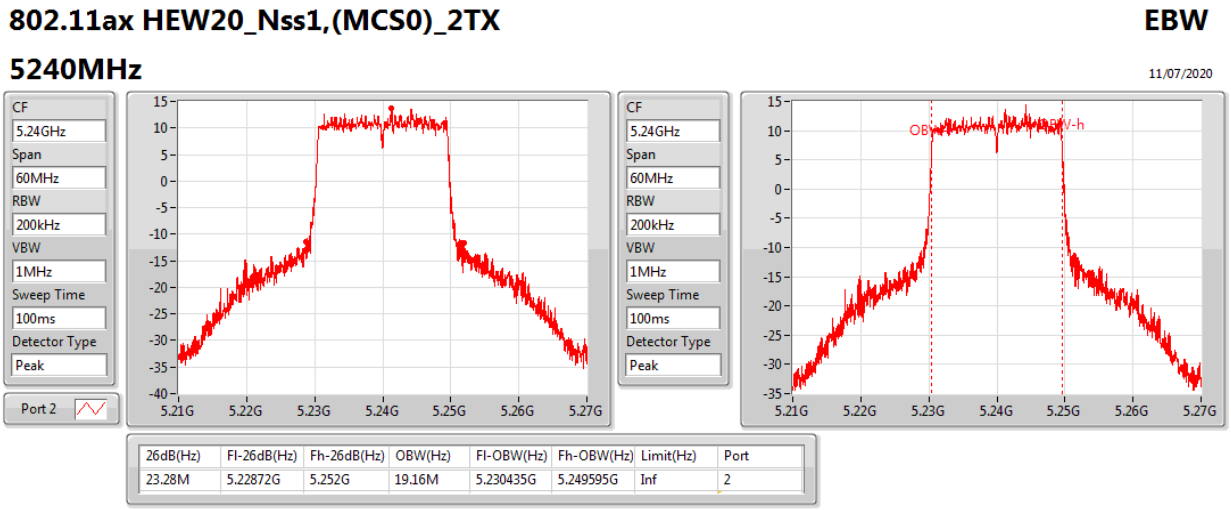
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 2 / CH36 / 5180 MHz



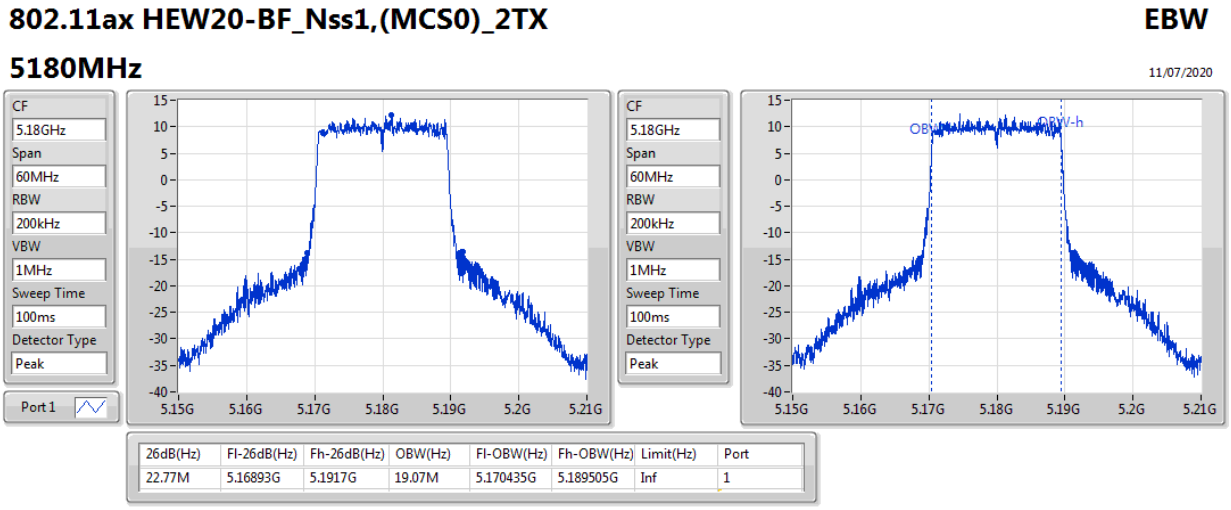
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 2 / CH40 / 5200 MHz



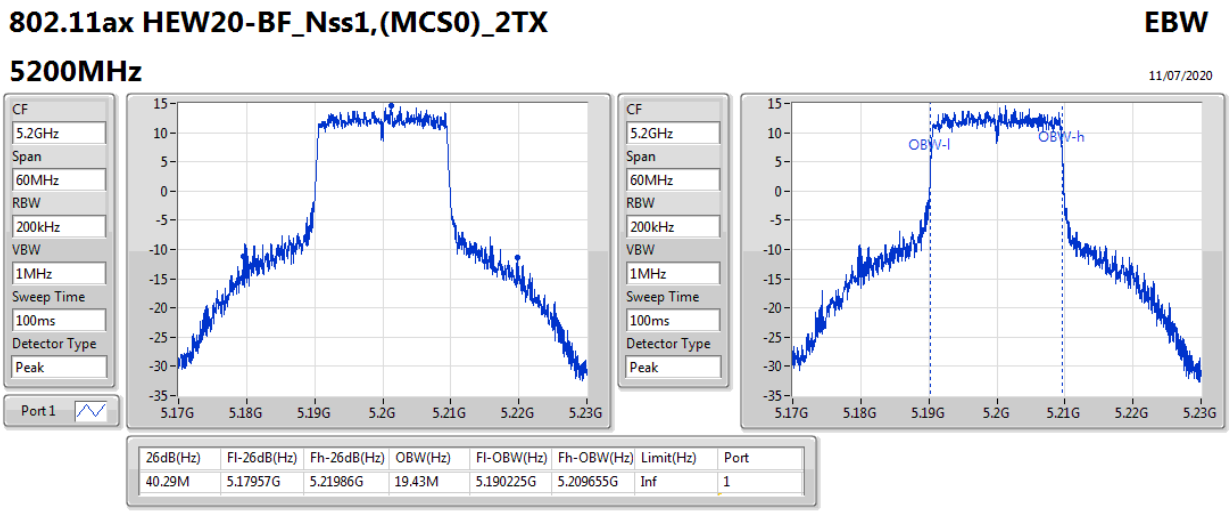
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 2 / CH48 / 5240 MHz



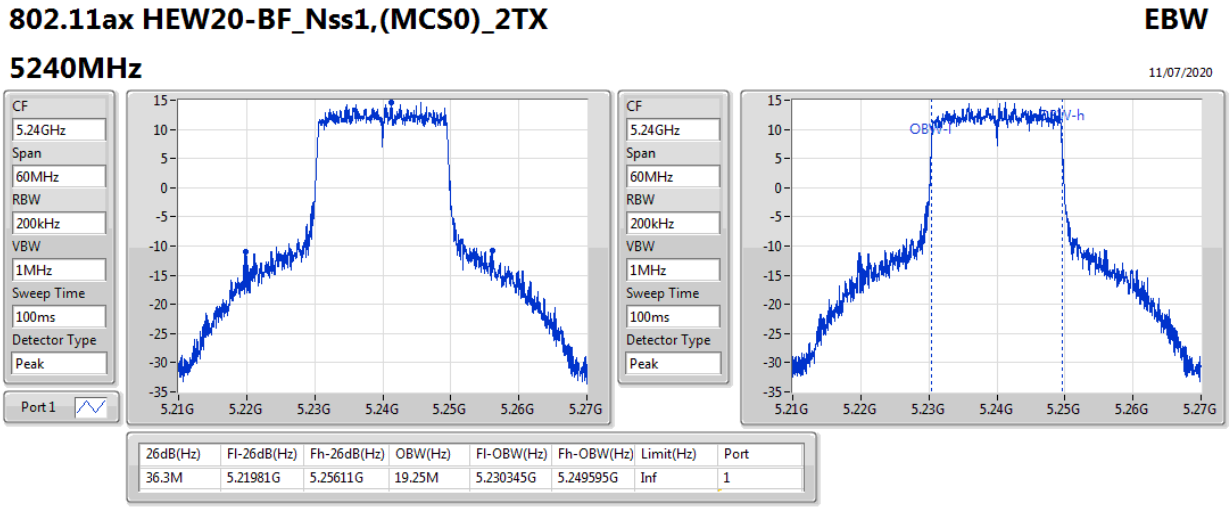
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 / CH36 / 5180 MHz



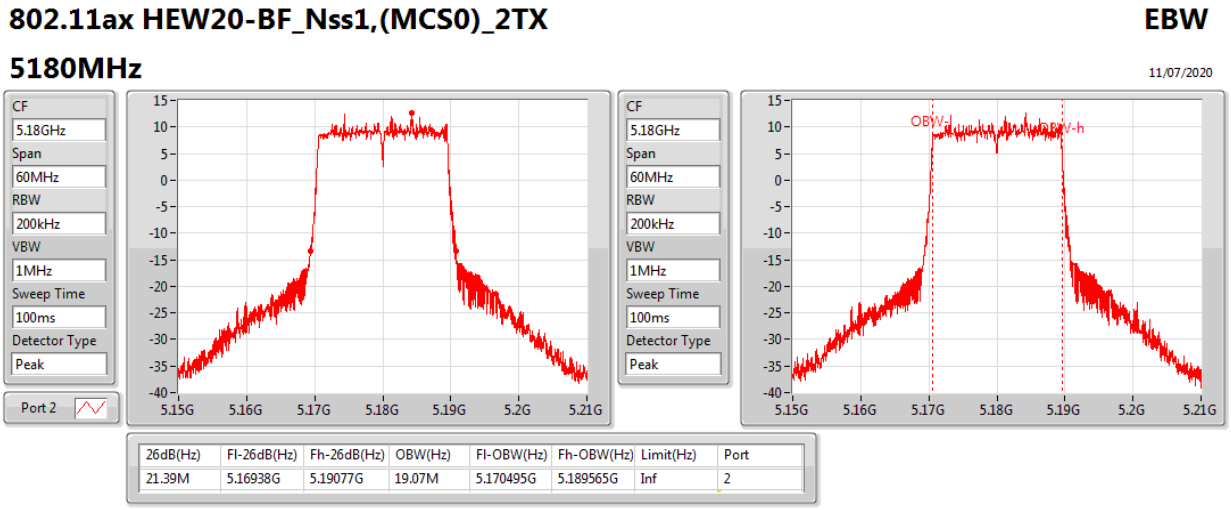
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 / CH40 / 5200 MHz



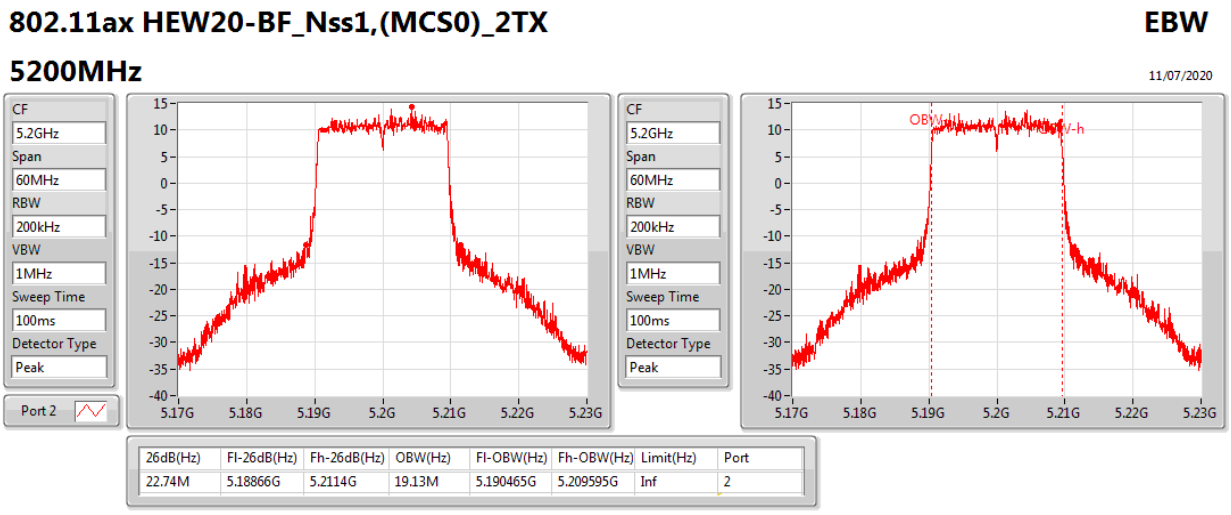
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 / CH48 / 5240 MHz



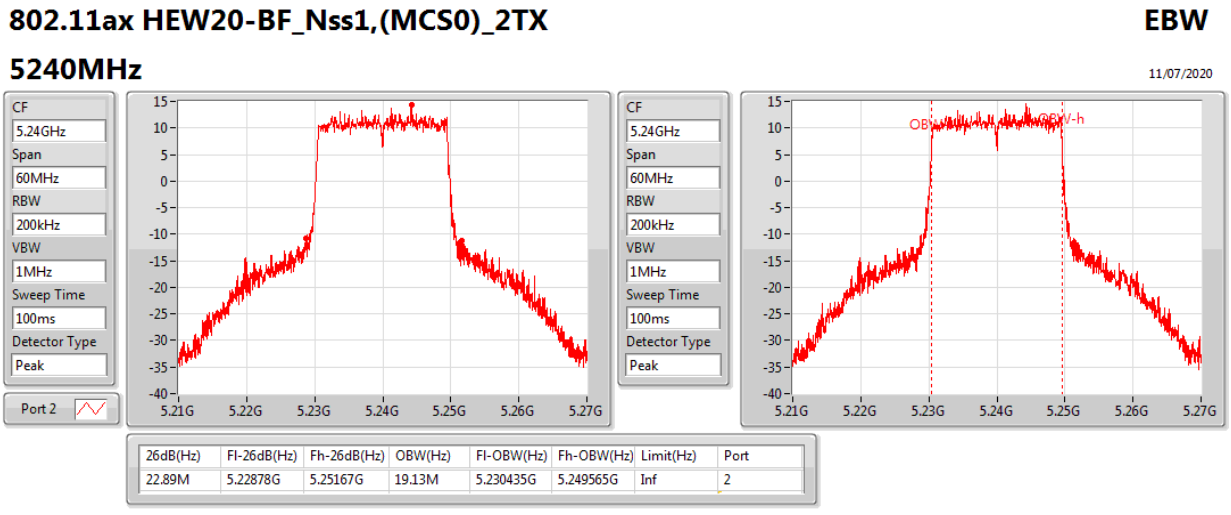
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 2 / CH36 / 5180 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 2 / CH40 / 5200 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 2 / CH48 / 5240 MHz

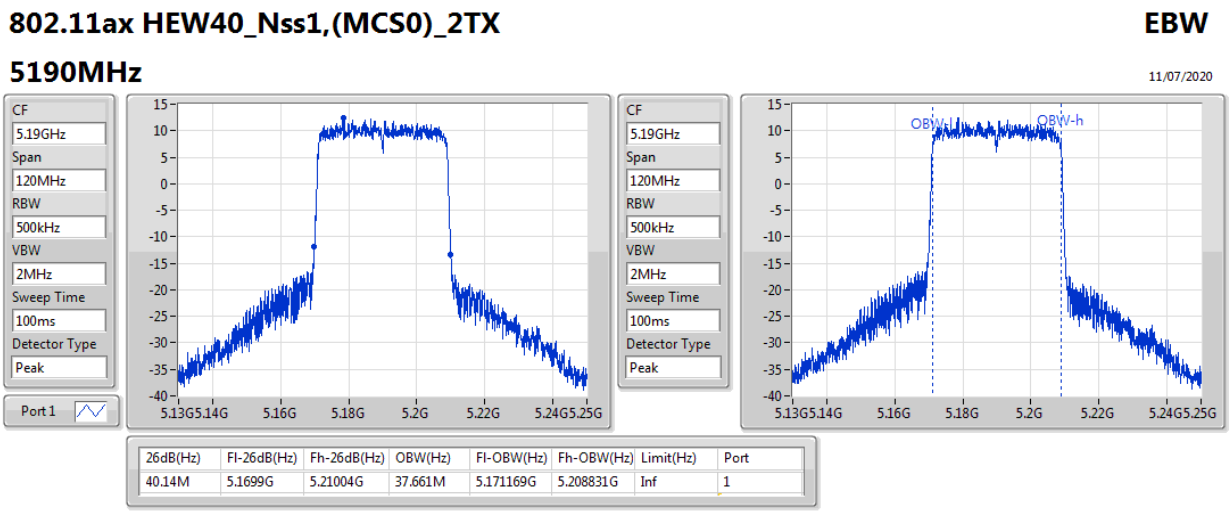


Configuration IEEE 802.11ax 40MHz

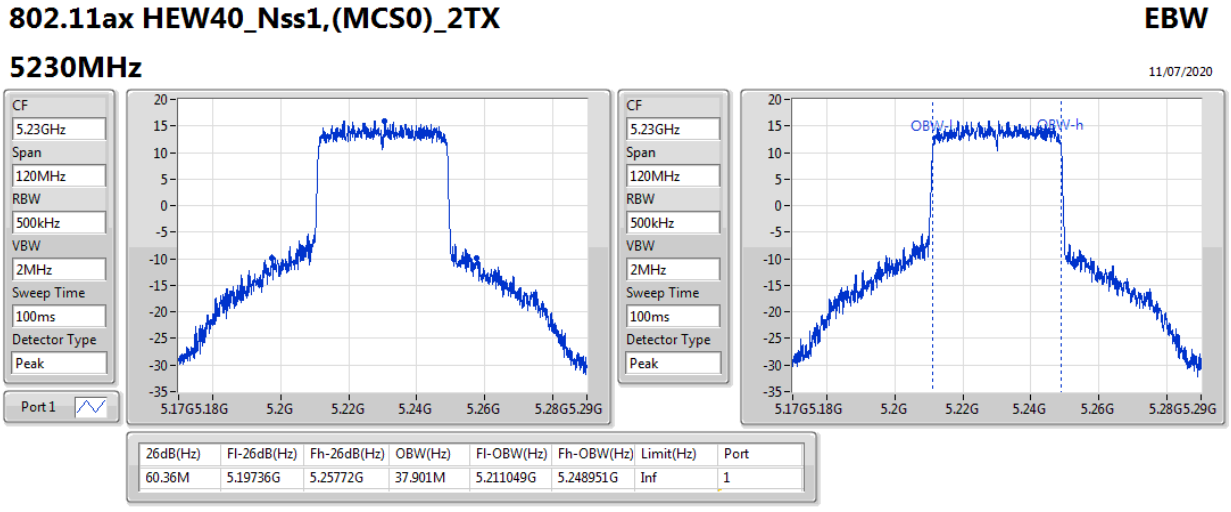
26dB Emission Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	26dB Emission Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11ax 40MHz (CDD)	1 stream 2TX	5190 MHz	40.140	40.140
802.11ax 40MHz (CDD)	1 stream 2TX	5230 MHz	60.360	43.560
802.11ax 40MHz (TXBF)	1 stream 2TX	5190 MHz	40.200	40.080
802.11ax 40MHz (TXBF)	1 stream 2TX	5230 MHz	60.240	43.500

99% Occupied Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	99% Occupied Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11ax 40MHz (CDD)	1 stream 2TX	5190 MHz	37.661	37.661
802.11ax 40MHz (CDD)	1 stream 2TX	5230 MHz	37.901	37.781
802.11ax 40MHz (TXBF)	1 stream 2TX	5190 MHz	37.661	37.661
802.11ax 40MHz (TXBF)	1 stream 2TX	5230 MHz	37.841	37.781

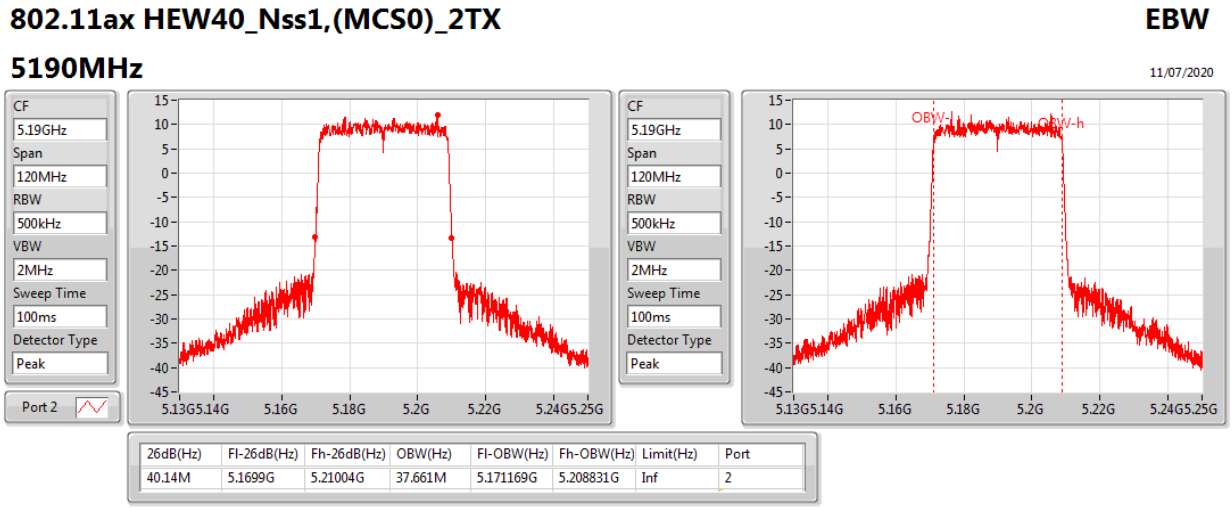
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 / CH38 / 5190 MHz



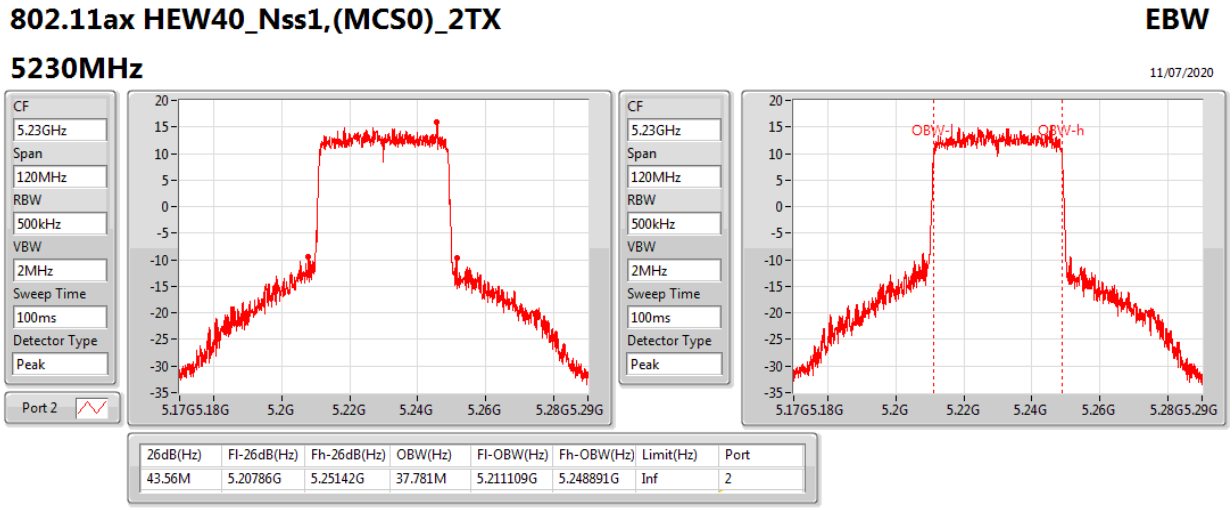
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 / CH46 / 5230 MHz



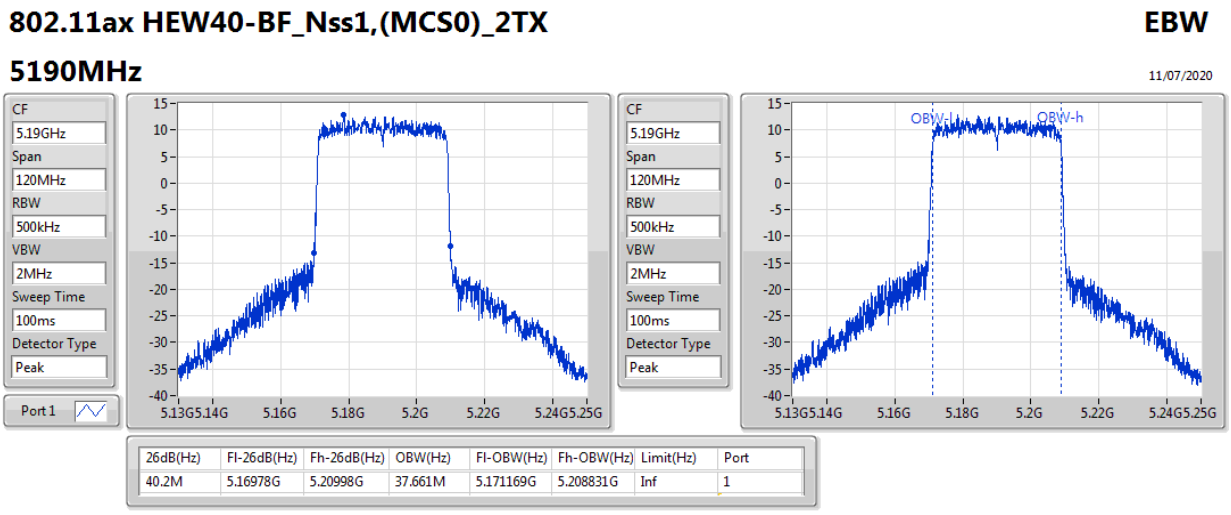
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 2 / CH38 / 5190 MHz



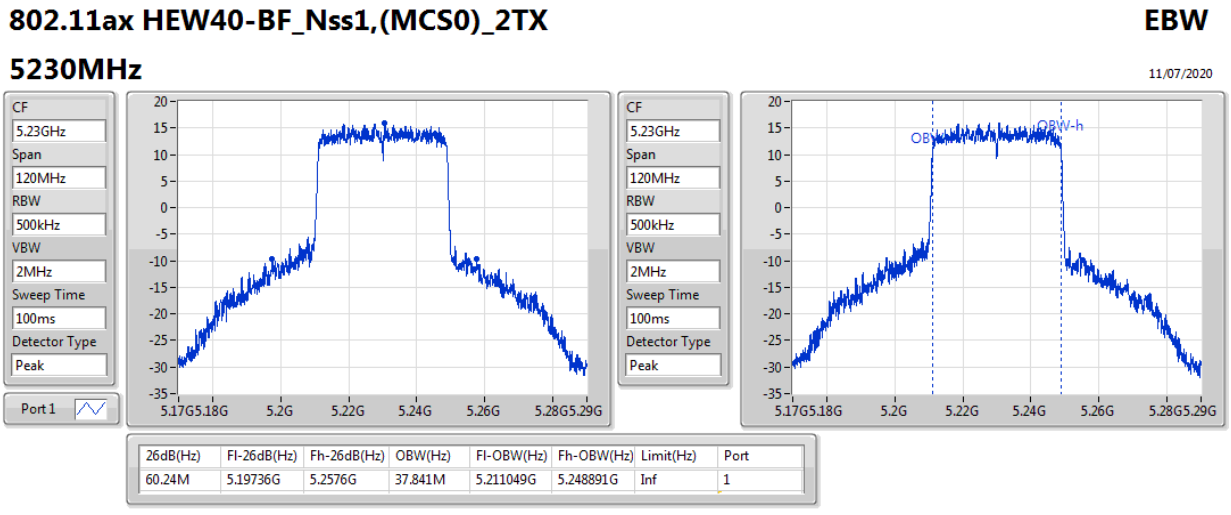
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 2 / CH46 / 5230 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 / CH38 / 5190 MHz



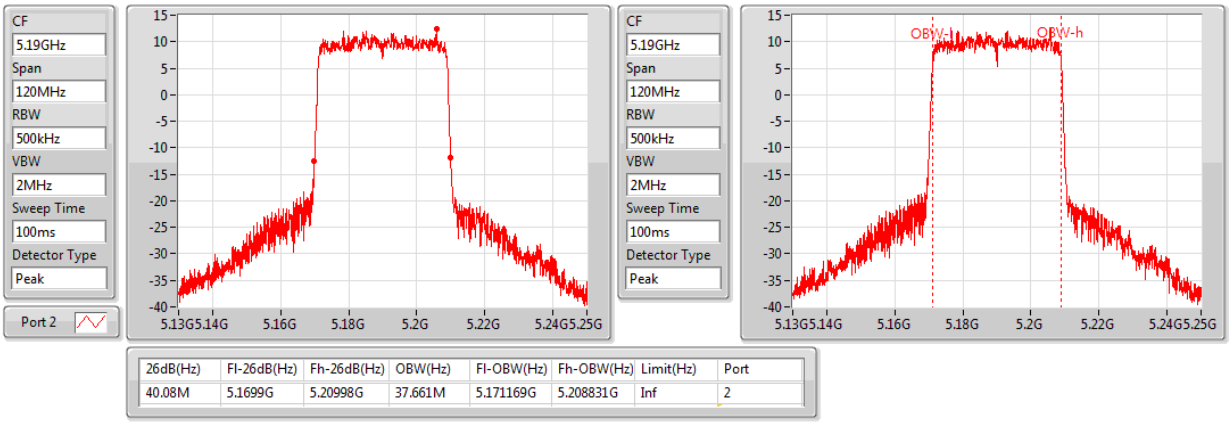
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 / CH46 / 5230 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 2 / CH38 / 5190 MHz

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

5190MHz 11/07/2020

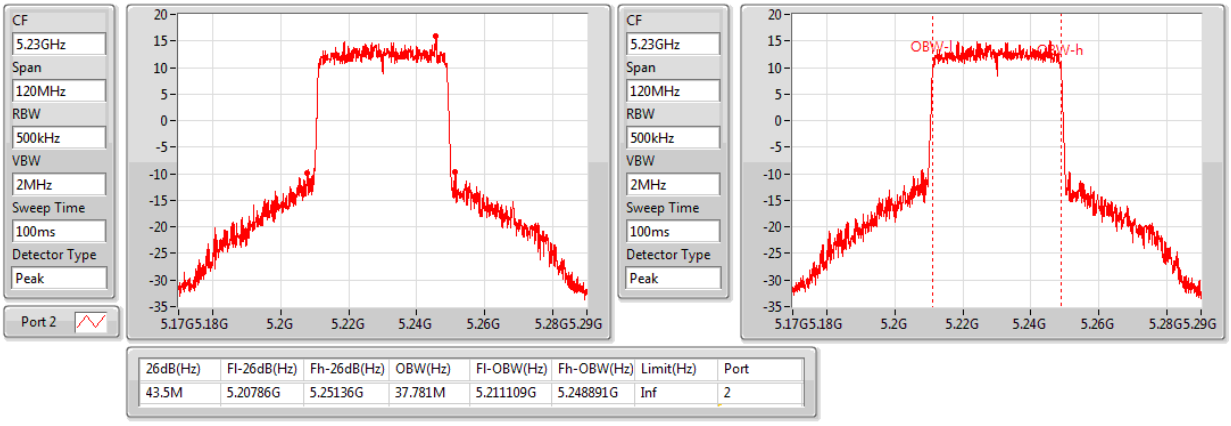


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.08M	5.1699G	5.20998G	37.661M	5.171169G	5.208831G	Inf	2

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 2 / CH46 / 5230 MHz

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

5230MHz 11/07/2020



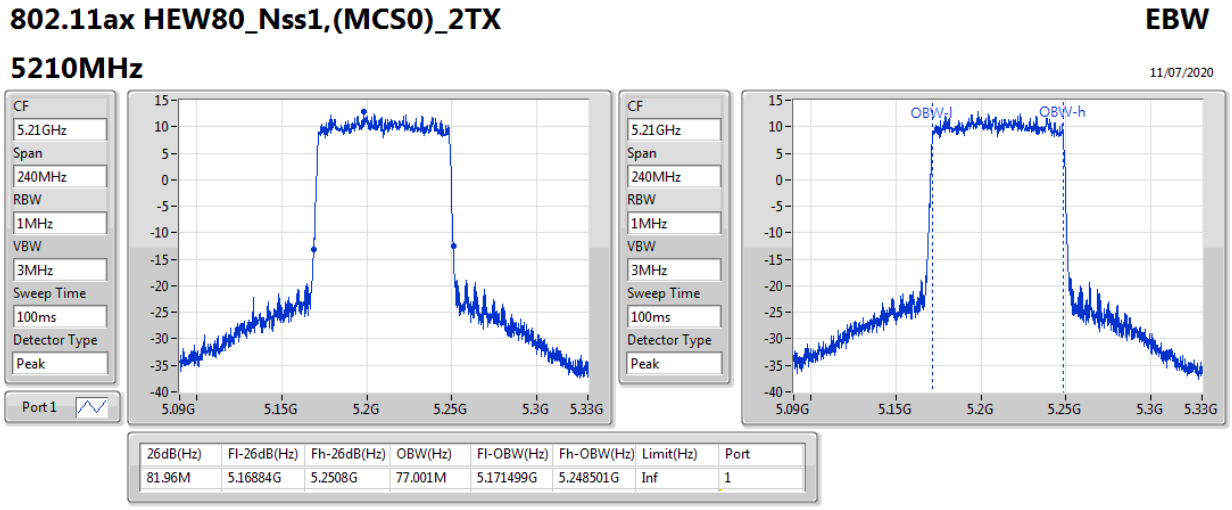
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.5M	5.20786G	5.25136G	37.781M	5.211109G	5.248891G	Inf	2

Configuration IEEE 802.11ax 80MHz

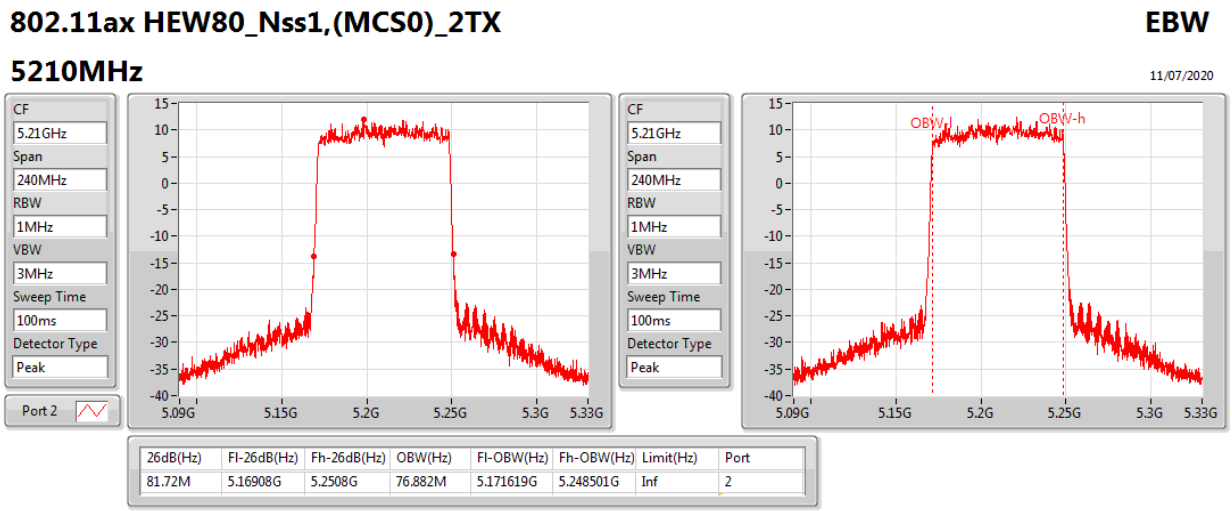
26dB Emission Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	26dB Emission Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11ax 80MHz (CDD)	1 stream 2TX	5210 MHz	81.960	81.720
802.11ax 80MHz (TXBF)	1 stream 2TX	5210 MHz	81.840	81.240

99% Occupied Bandwidth (MHz)				
Mode	Number of Transmit Chains (NTX)	Frequency	99% Occupied Bandwidth (MHz)	
			Ant. 1	Ant. 2
802.11ax 80MHz (CDD)	1 stream 2TX	5210 MHz	77.001	76.882
802.11ax 80MHz (TXBF)	1 stream 2TX	5210 MHz	77.001	77.121

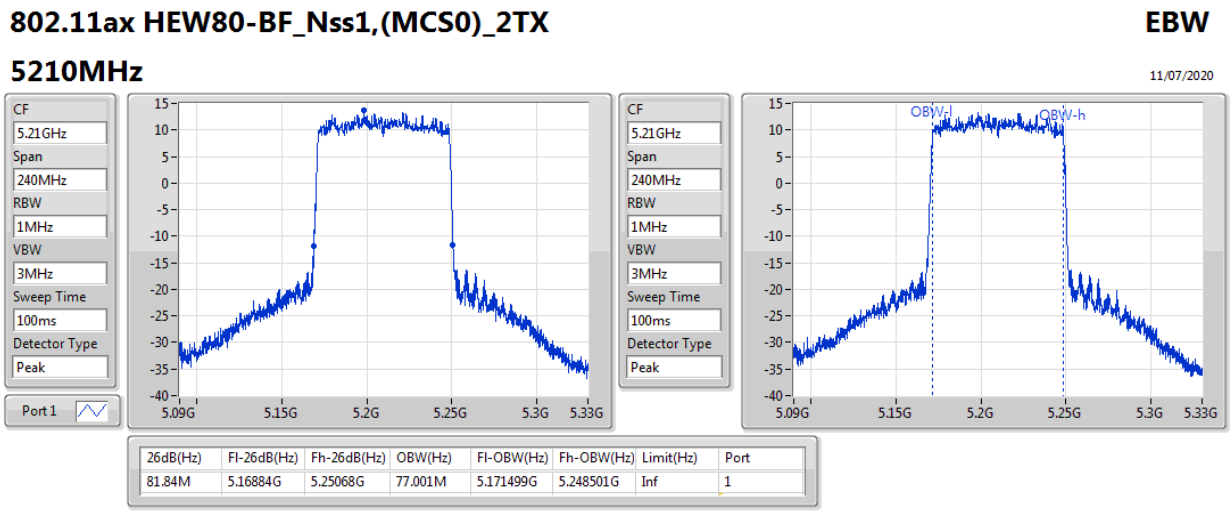
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S2T CDD / Ant. 1 / CH42 / 5210 MHz



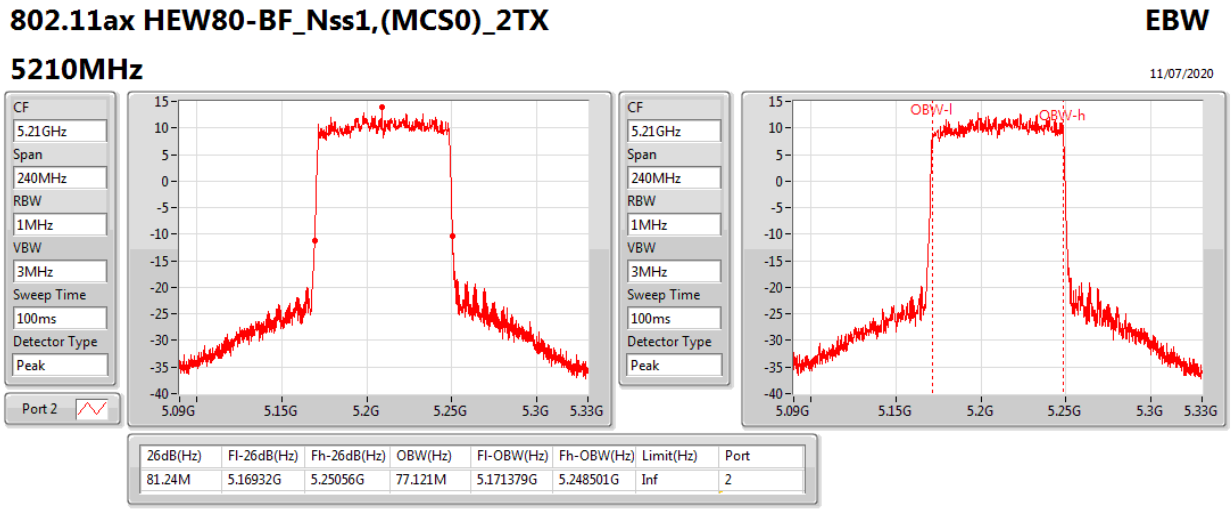
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S2T CDD / Ant. 2 / CH42 / 5210 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / TXBF 1S2T / Ant. 1 / CH42 / 5210 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / TXBF 1S2T / Ant. 2 / CH42 / 5210 MHz



2.3. 6dB Spectrum Bandwidth Measurement

2.3.1. Limit

For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz.

2.3.2. Measuring Instruments and Setting

Please refer to section 3 of equipments list in this report. The following table is the setting of spectrum analyzer.

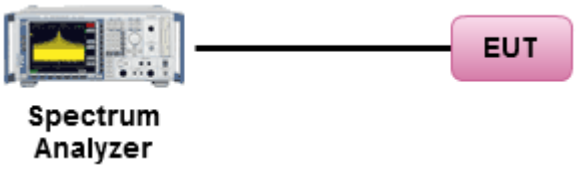
6dB Spectrum Bandwidth	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span Frequency	> 6dB Bandwidth
RBW	100kHz
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth	
Spectrum Parameters	**Setting**
Span	1.5 times to 5.0 times the OBW
RBW	1 % to 5 % of the OBW
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold

2.3.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.
2. Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v02r01, in section “Emission bandwidth (C)(2)” & "99 Percent Occupied Bandwidth"(D). , 12/14/2017
3. Measured the spectrum width with power higher than 6dB account by this measurement.

2.3.4. Test Setup Layout

6dB Spectrum Bandwidth



2.3.5. Test Deviation

There is no deviation with the original standard.

2.3.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

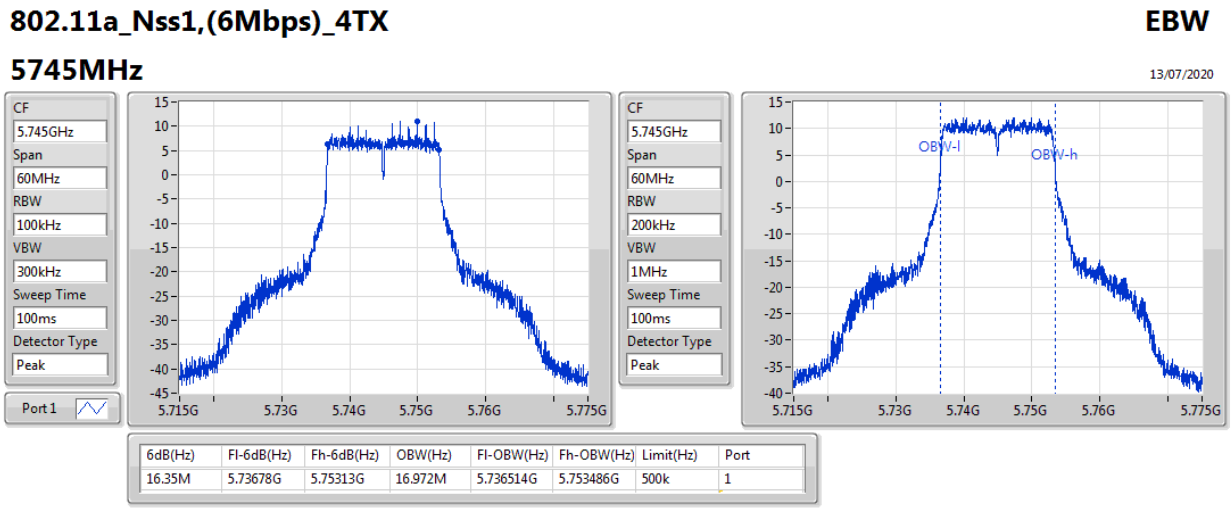
2.3.7. Test Result of 6dB Spectrum Bandwidth

Configuration IEEE 802.11a

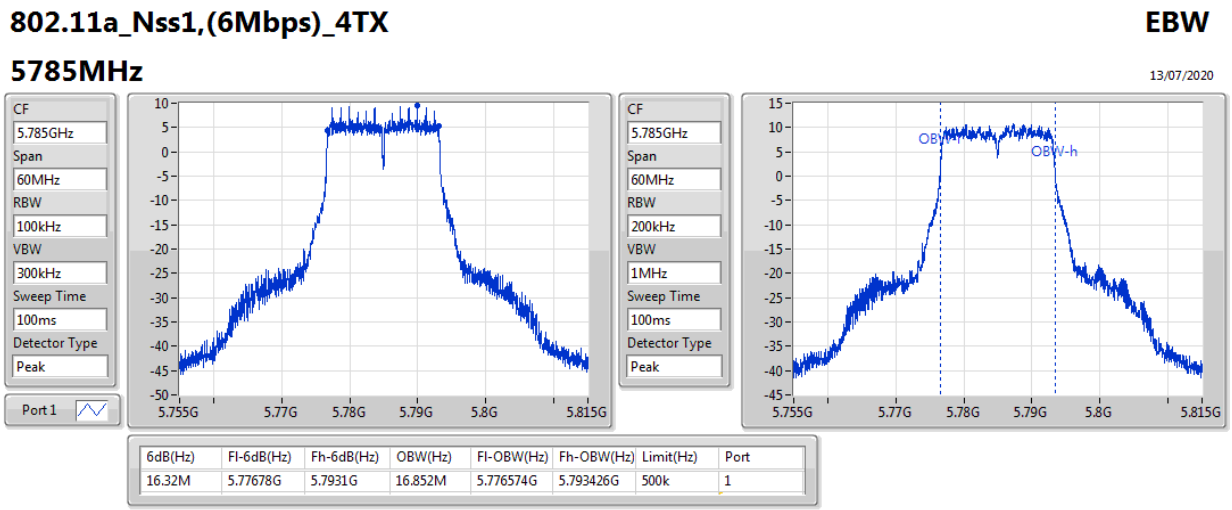
6dB Bandwidth (MHz)								
Mode	**Number of Transmit Chains (NTX)**	**Frequency**	**Ant. 3**	**Ant. 4**	**Ant. 5**	**Ant. 6**	**Min. Limit (kHz)**	**Test Result**
802.11a (CDD)	1 stream 4TX	5745 MHz	16.972	17.001	16.852	16.942	500	**PASS**
	1 stream 4TX	5785 MHz	16.852	16.942	16.762	16.822	500	**PASS**
	1 stream 4TX	5825 MHz	16.942	17.121	16.912	17.001	500	**PASS**

99% Occupied Bandwidth (MHz)							
Mode	**Number of Transmit Chains (NTX)**	**Frequency**	**Ant. 3**	**Ant. 4**	**Ant. 5**	**Ant. 6**	**Test Result**
802.11a (CDD)	1 stream 4TX	5745 MHz	16.350	16.350	16.320	16.320	**PASS**
	1 stream 4TX	5785 MHz	16.320	16.290	16.320	16.350	**PASS**
	1 stream 4TX	5825 MHz	16.320	16.350	16.290	16.350	**PASS**

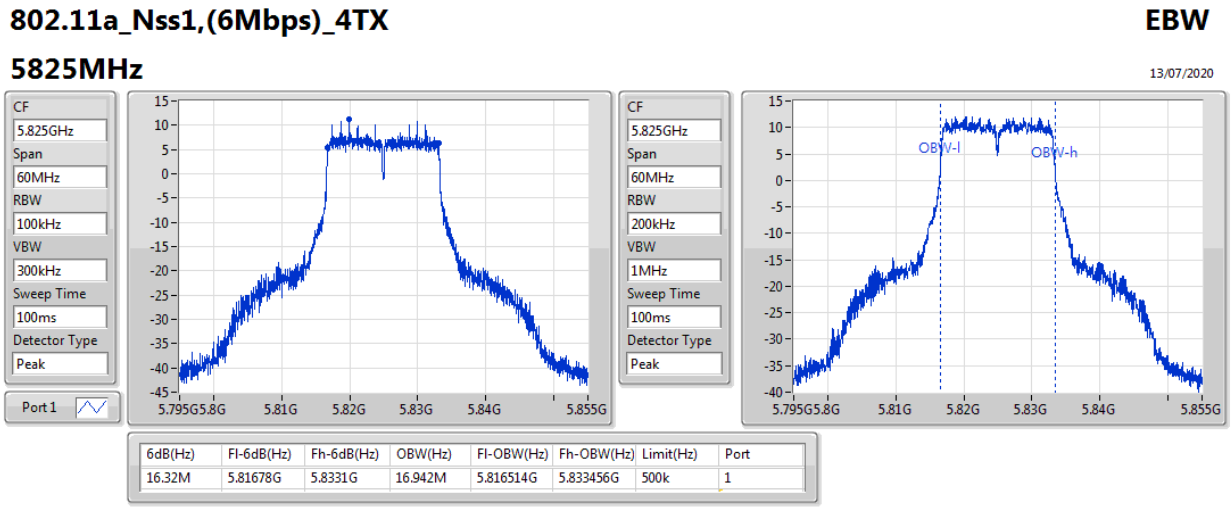
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 3 / CH 149 / 5745 MHz



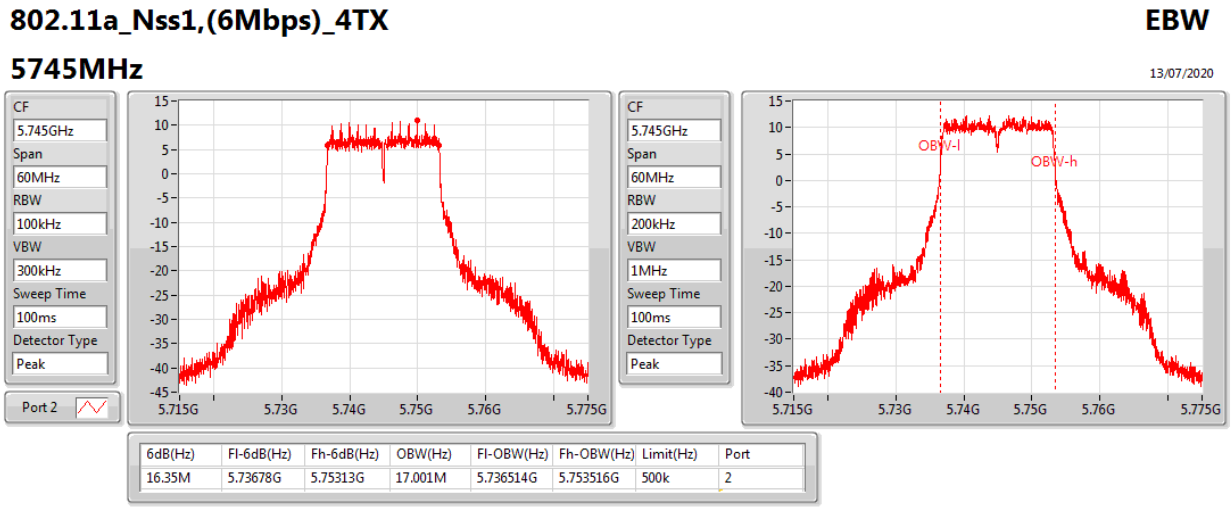
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 3 / CH 157 / 5785 MHz



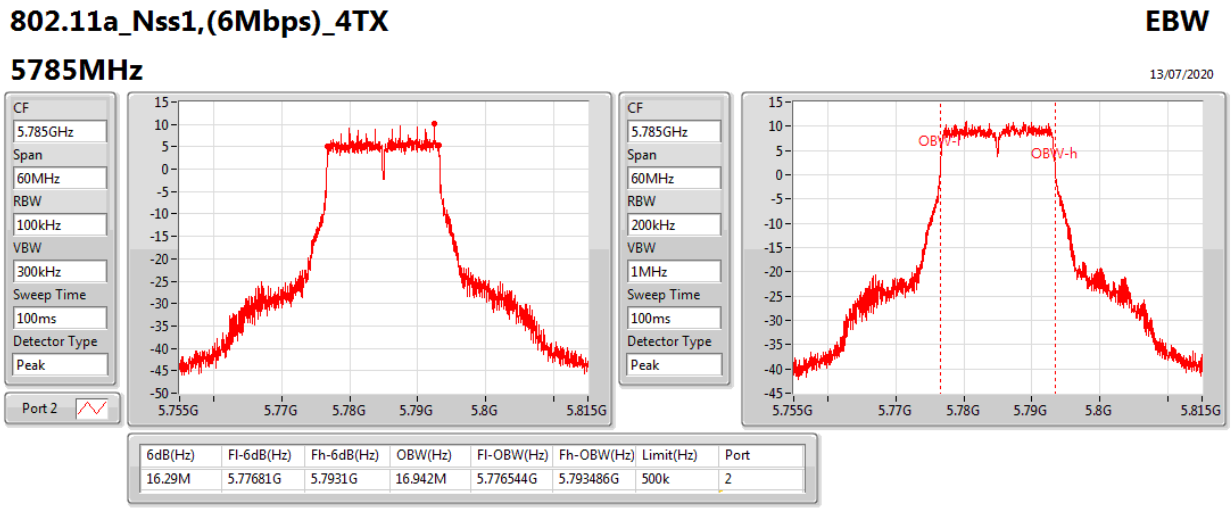
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 3 / CH 165 / 5825 MHz



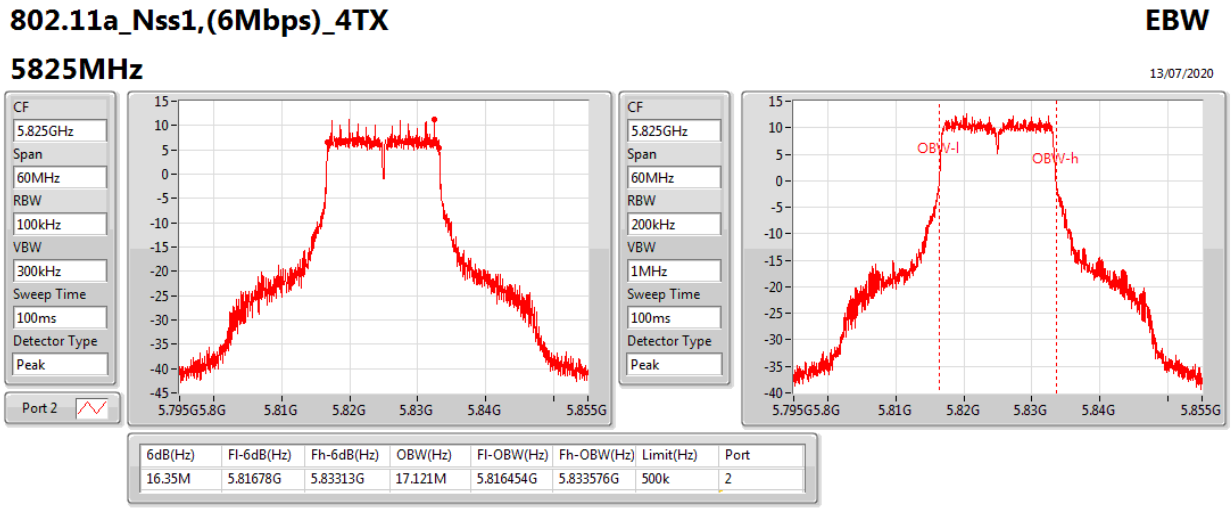
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 4 / CH 149 / 5745 MHz



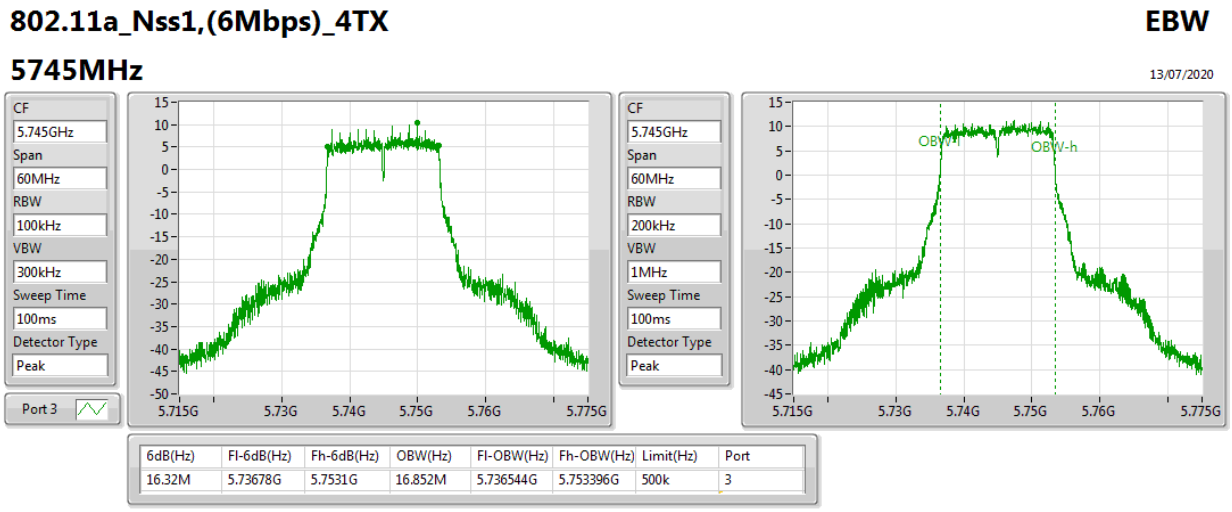
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 4 / CH 157 / 5785 MHz



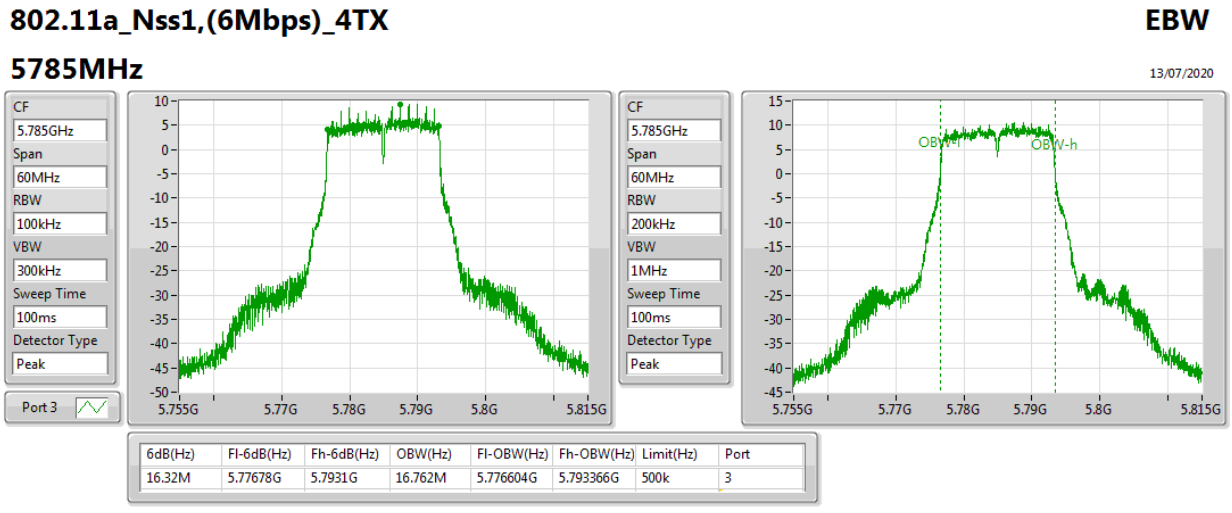
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 4 / CH 165 / 5825 MHz



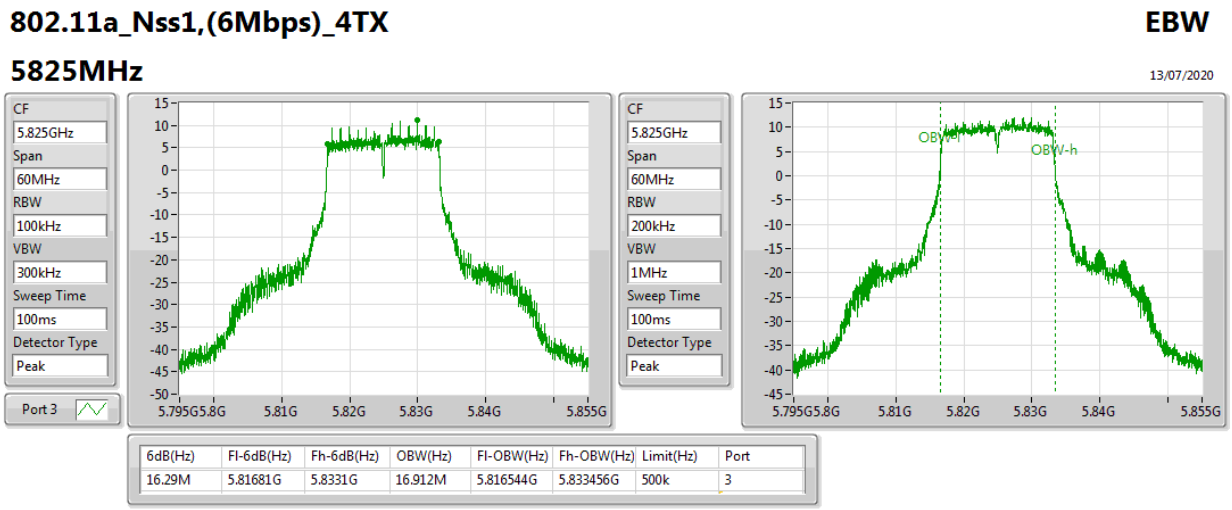
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 5 / CH 149 / 5745 MHz



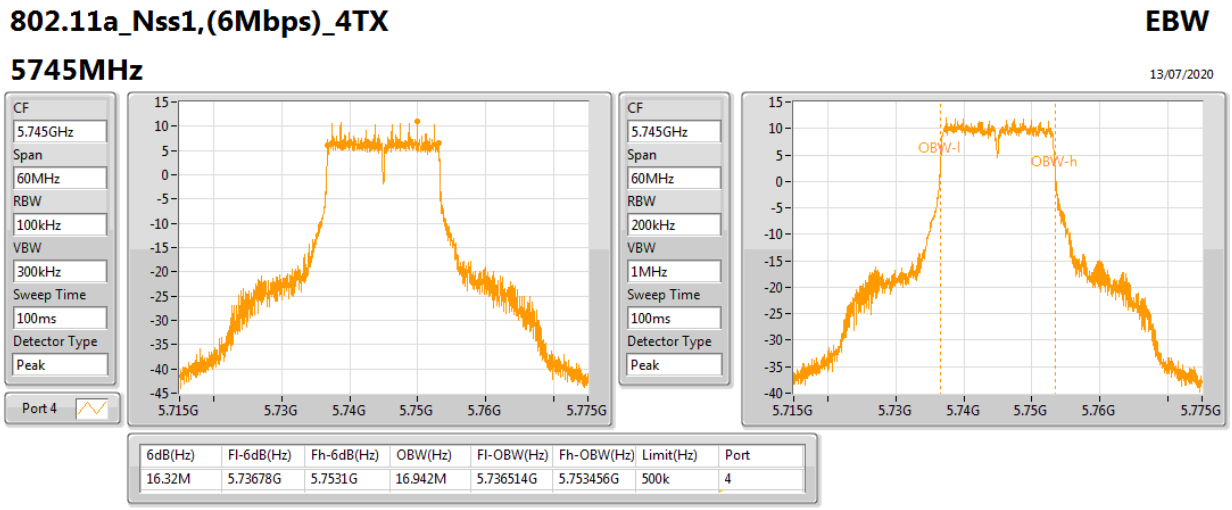
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 5 / CH 157 / 5785 MHz



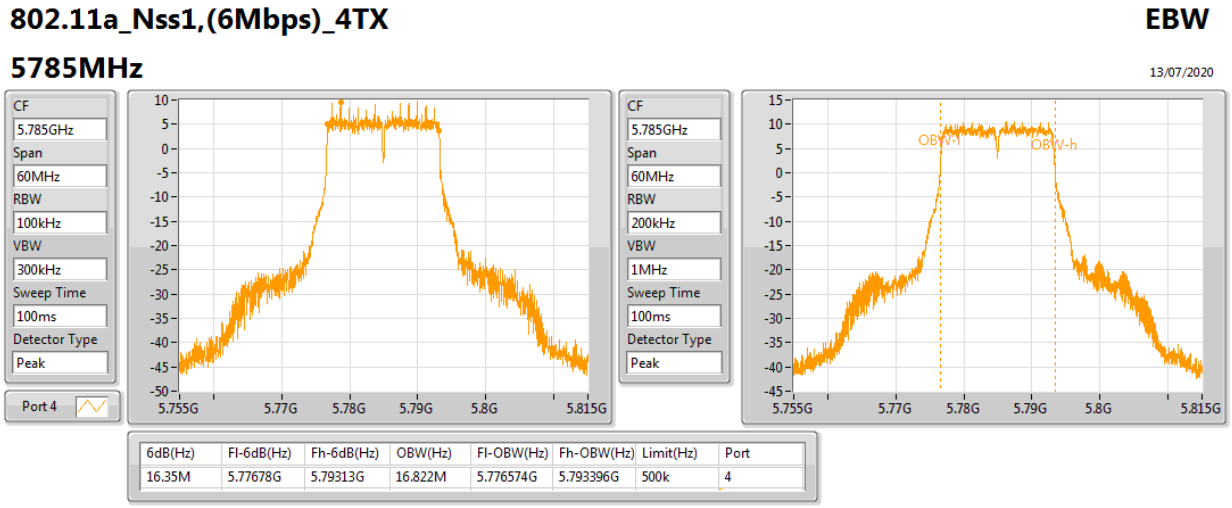
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 5 / CH 165 / 5825 MHz



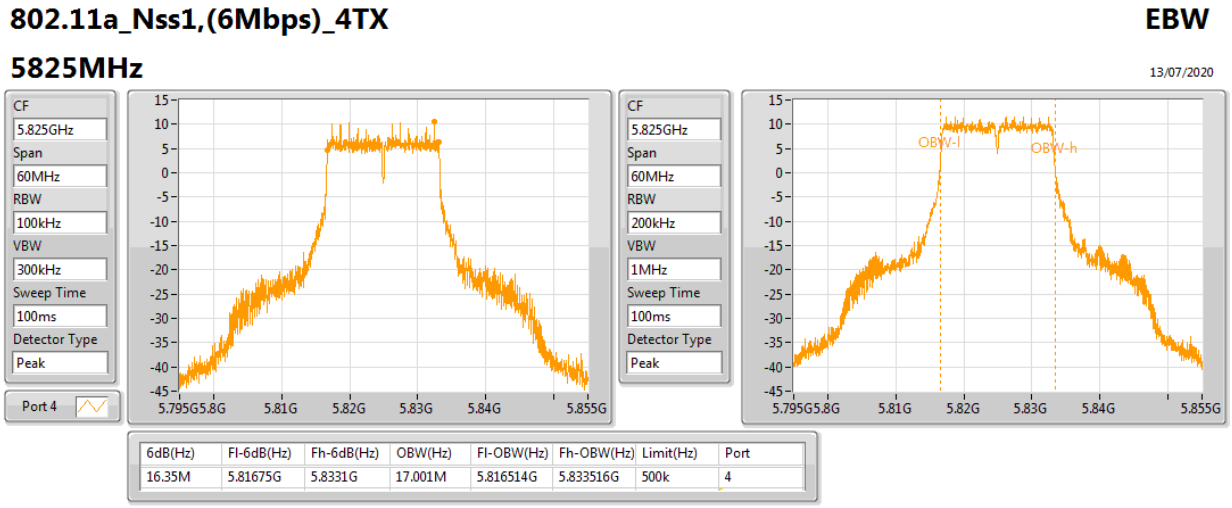
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 6 / CH 149 / 5745 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 6 / CH 157 / 5785 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 6 / CH 165 / 5825 MHz



Configuration IEEE 802.11ax 20MHz

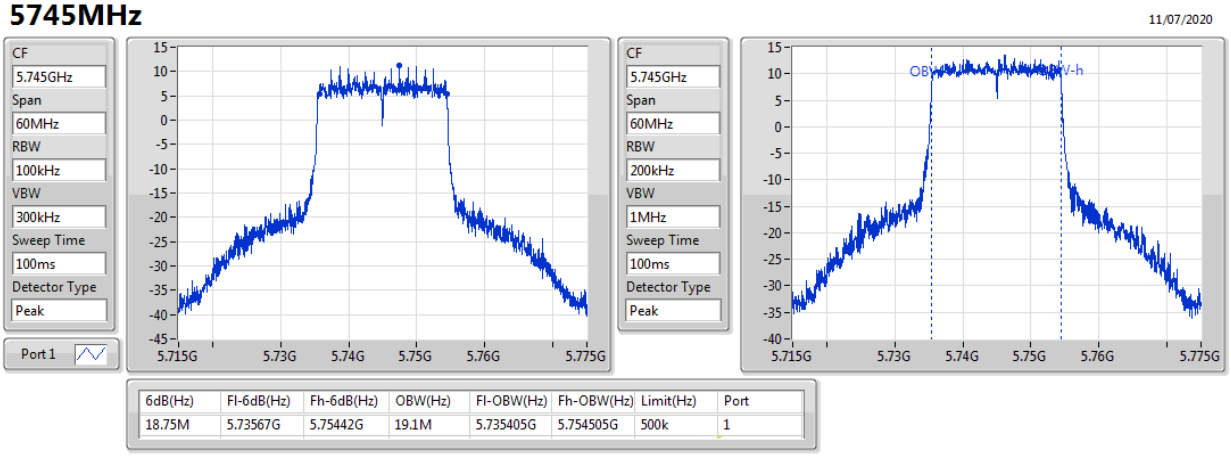
6dB Bandwidth (MHz)								
Mode	Number of Transmit Chains (NTX)	Frequency	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Min. Limit (kHz)	Test Result
802.11ax 20MHz (CDD)	1 stream 4TX	5745 MHz	18.750	18.930	18.720	18.900	500	PASS
802.11ax 20MHz (CDD)	1 stream 4TX	5785 MHz	18.960	18.960	18.660	18.900	500	PASS
802.11ax 20MHz (CDD)	1 stream 4TX	5825 MHz	18.840	18.840	18.900	18.930	500	PASS
802.11ax 20MHz (TXBF)	1 stream 4TX	5745 MHz	18.960	18.930	18.750	18.960	500	PASS
802.11ax 20MHz (TXBF)	1 stream 4TX	5785 MHz	18.960	18.930	18.870	18.900	500	PASS
802.11ax 20MHz (TXBF)	1 stream 4TX	5825 MHz	18.900	18.930	18.960	18.810	500	PASS
802.11ax 20MHz (TXBF)	2 stream 4TX	5745 MHz	18.930	18.600	18.900	18.900	500	PASS
802.11ax 20MHz (TXBF)	2 stream 4TX	5785 MHz	18.870	18.750	18.810	18.720	500	PASS
802.11ax 20MHz (TXBF)	2 stream 4TX	5825 MHz	18.930	18.600	18.780	18.600	500	PASS
802.11ax 20MHz (TXBF)	3 stream 4TX	5745 MHz	19.050	18.990	19.020	18.990	500	PASS
802.11ax 20MHz (TXBF)	3 stream 4TX	5785 MHz	19.050	18.990	19.020	19.020	500	PASS
802.11ax 20MHz (TXBF)	3 stream 4TX	5825 MHz	19.020	18.960	18.780	19.050	500	PASS

99% Occupied Bandwidth (MHz)							
Mode	Number of Transmit Chains (NTX)	Frequency	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Test Result
802.11ax 20MHz (CDD)	1 stream 4TX	5745 MHz	19.100	19.130	19.160	19.250	PASS
802.11ax 20MHz (CDD)	1 stream 4TX	5785 MHz	19.040	19.100	19.100	19.100	PASS
802.11ax 20MHz (CDD)	1 stream 4TX	5825 MHz	19.100	19.160	19.160	19.160	PASS
802.11ax 20MHz (TXBF)	1 stream 4TX	5745 MHz	19.100	19.130	19.190	19.220	PASS
802.11ax 20MHz (TXBF)	1 stream 4TX	5785 MHz	19.040	19.070	19.100	19.160	PASS
802.11ax 20MHz (TXBF)	1 stream 4TX	5825 MHz	19.130	19.130	19.160	19.250	PASS
802.11ax 20MHz (TXBF)	2 stream 4TX	5745 MHz	19.070	19.100	19.070	19.160	PASS
802.11ax 20MHz (TXBF)	2 stream 4TX	5785 MHz	19.070	19.100	19.070	19.130	PASS
802.11ax 20MHz (TXBF)	2 stream 4TX	5825 MHz	19.100	19.160	19.100	19.130	PASS
802.11ax 20MHz (TXBF)	3 stream 4TX	5745 MHz	19.130	19.070	19.100	19.190	PASS
802.11ax 20MHz (TXBF)	3 stream 4TX	5785 MHz	19.130	19.070	19.070	19.190	PASS
802.11ax 20MHz (TXBF)	3 stream 4TX	5825 MHz	19.160	19.130	19.100	19.190	PASS

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 3 / CH 149 / 5745 MHz

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

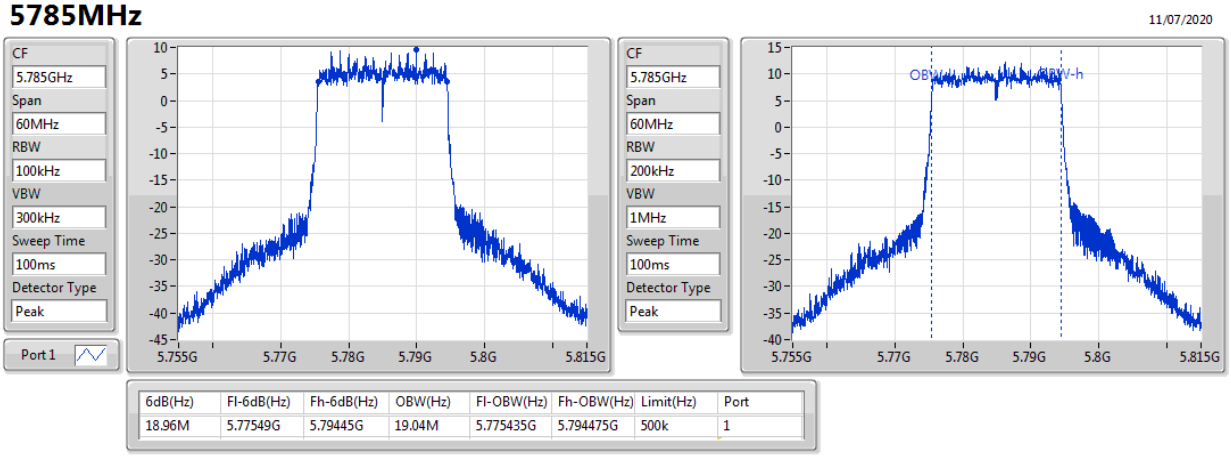
5745MHz



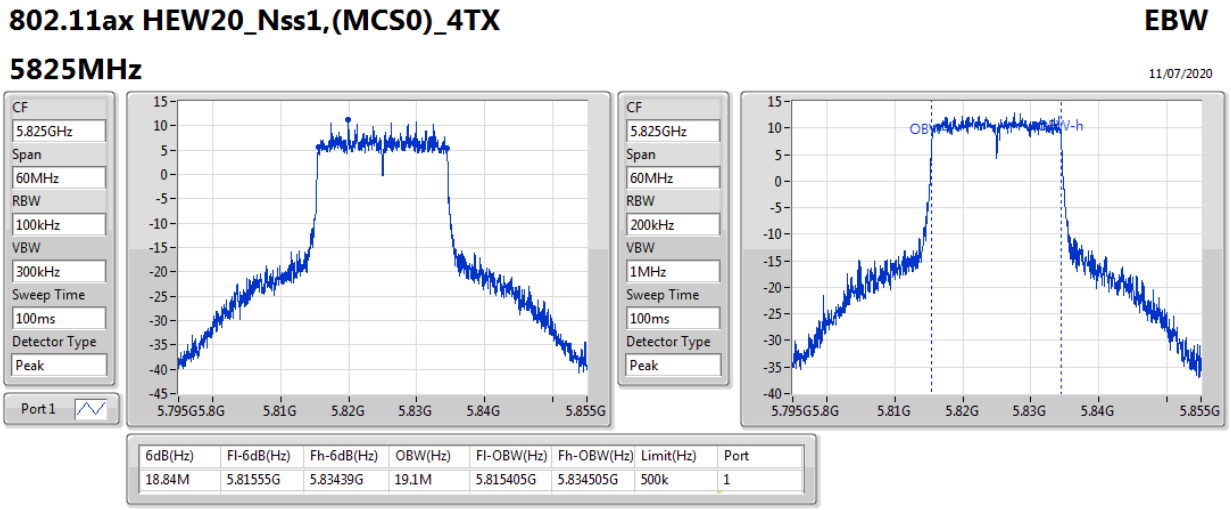
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 3 / CH 157 / 5785 MHz

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

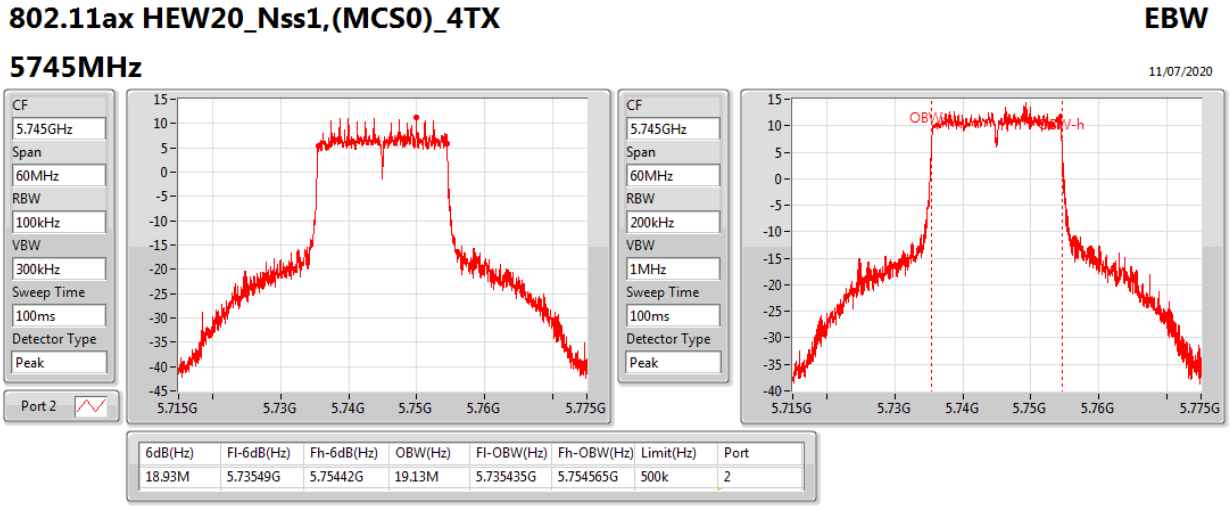
5785MHz



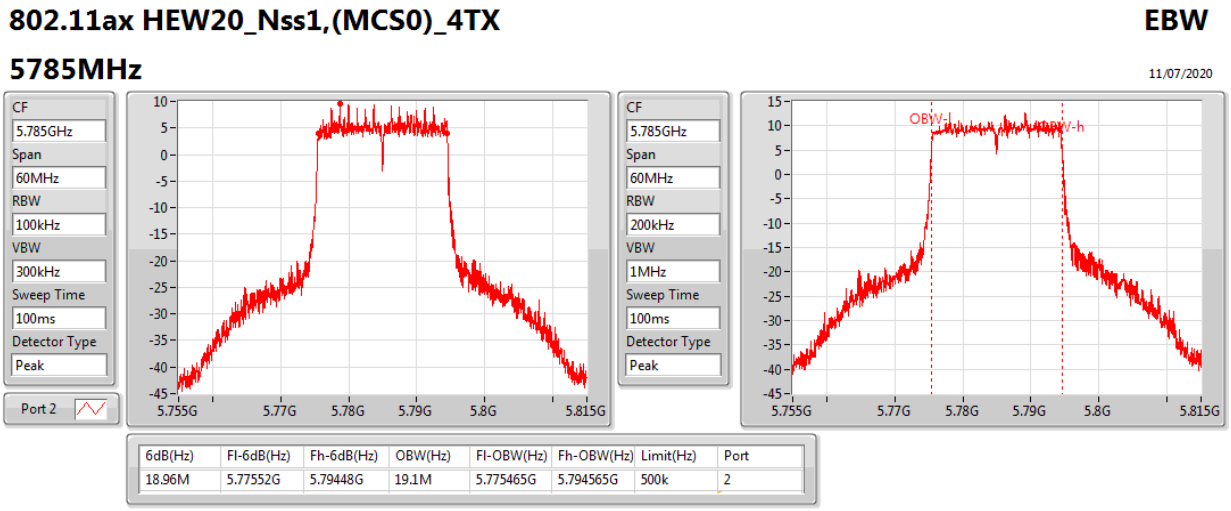
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 3 / CH 165 / 5825 MHz



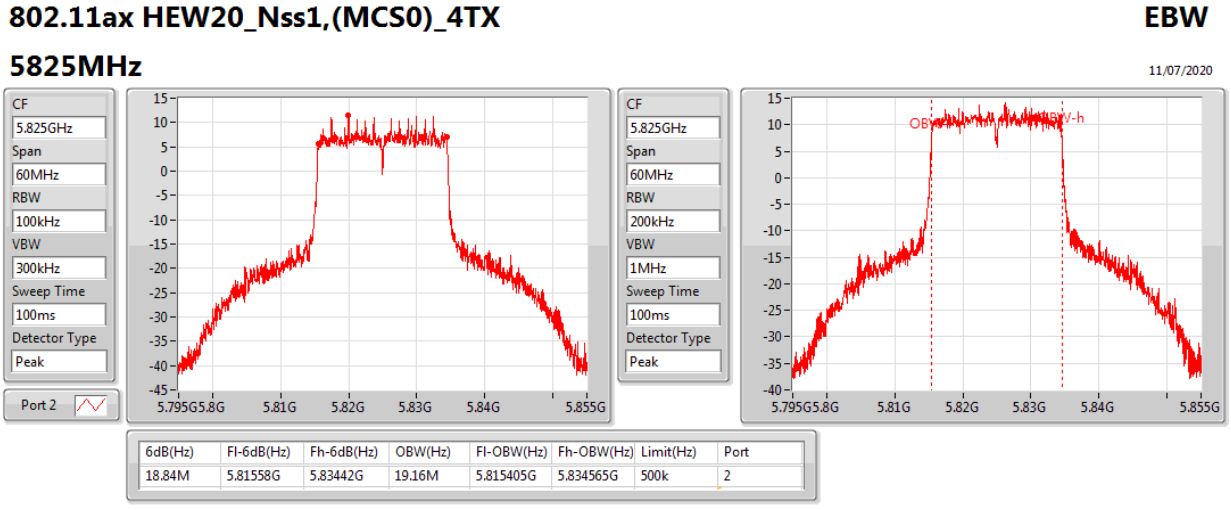
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 4 / CH 149 / 5745 MHz



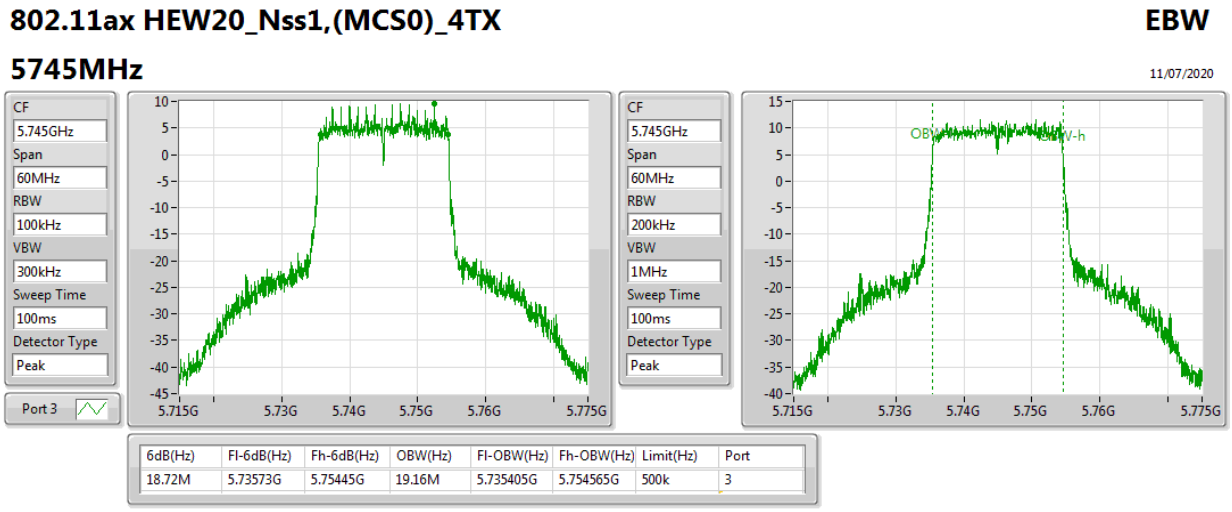
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 4 / CH 157 / 5785 MHz



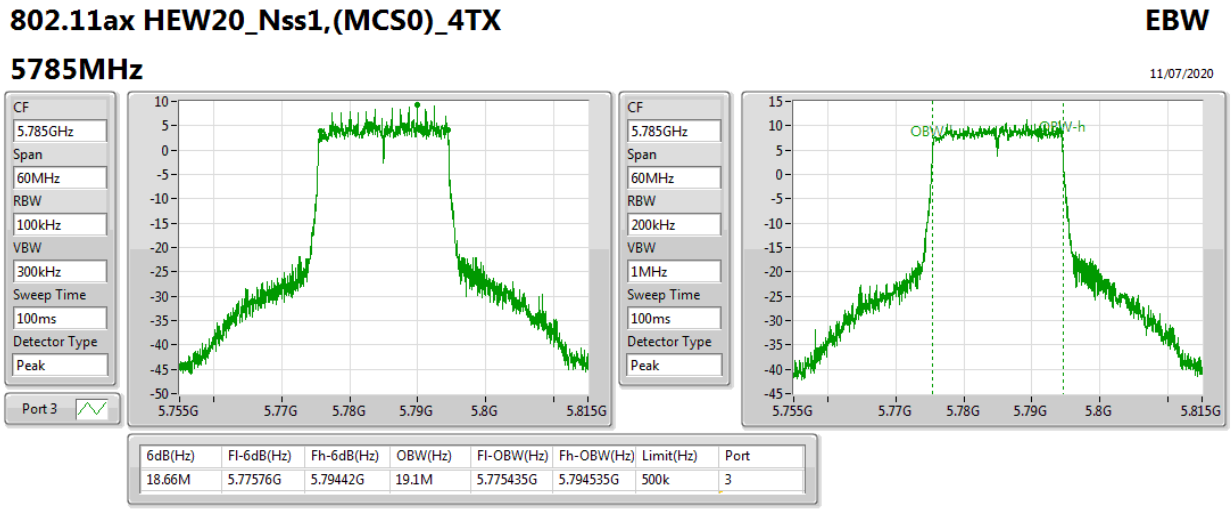
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 4 / CH 165 / 5825 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 5 / CH 149 / 5745 MHz



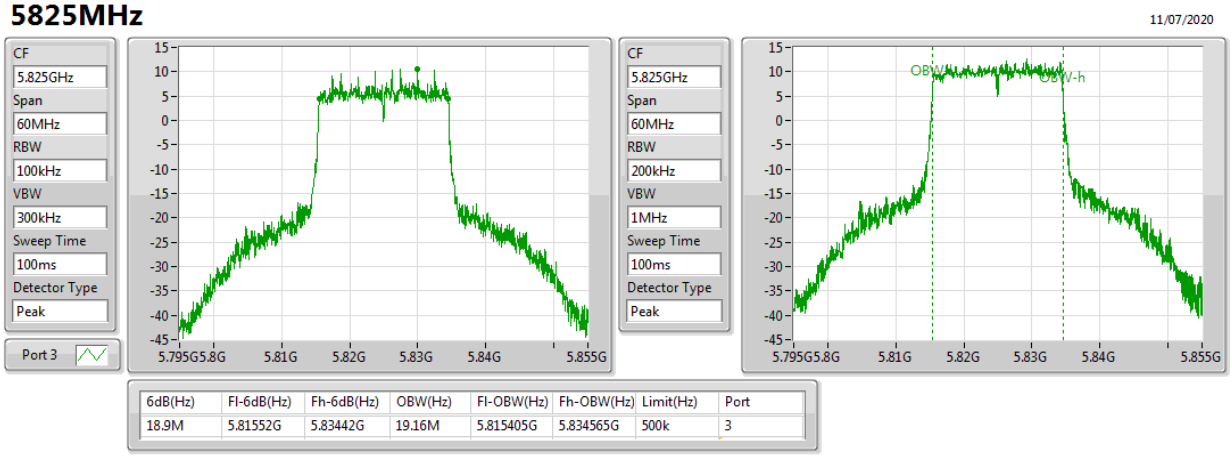
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 5 / CH 157 / 5785 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 5 / CH 165 / 5825 MHz

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

5825MHz

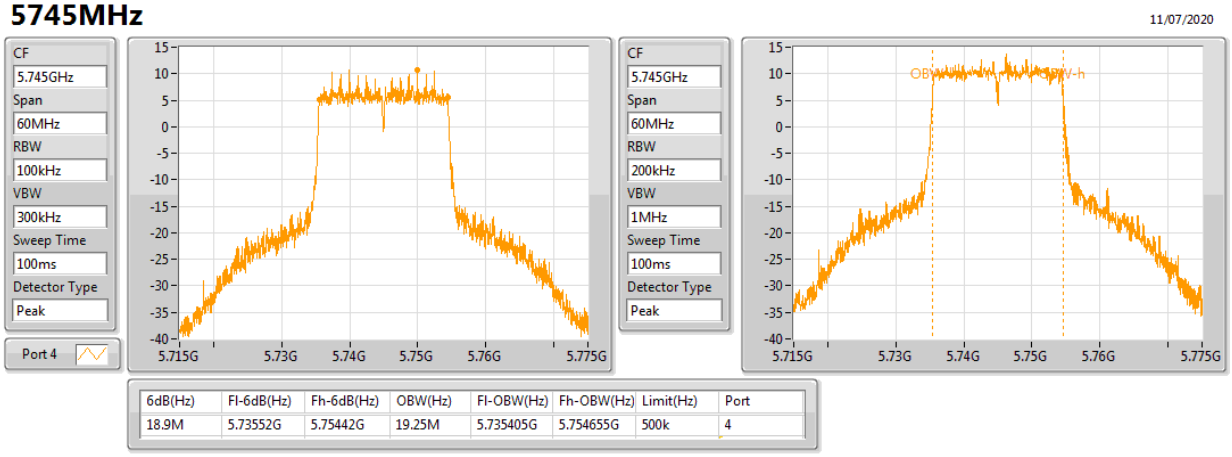


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	5.81552G	5.83442G	19.16M	5.815405G	5.834565G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 6 / CH 149 / 5745 MHz

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

5745MHz

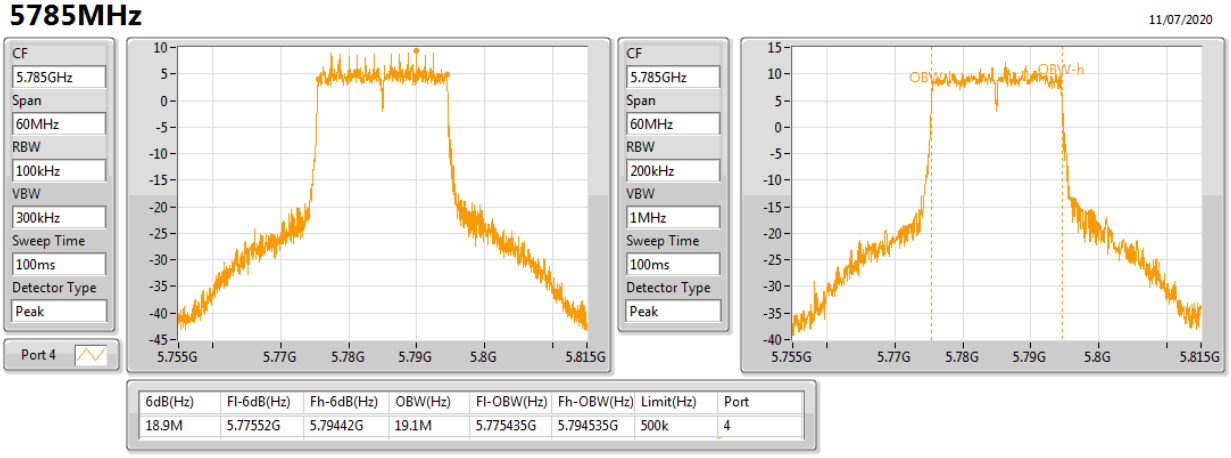


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	5.73552G	5.75442G	19.25M	5.735405G	5.754655G	500k	4

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 6 / CH 157 / 5785 MHz

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

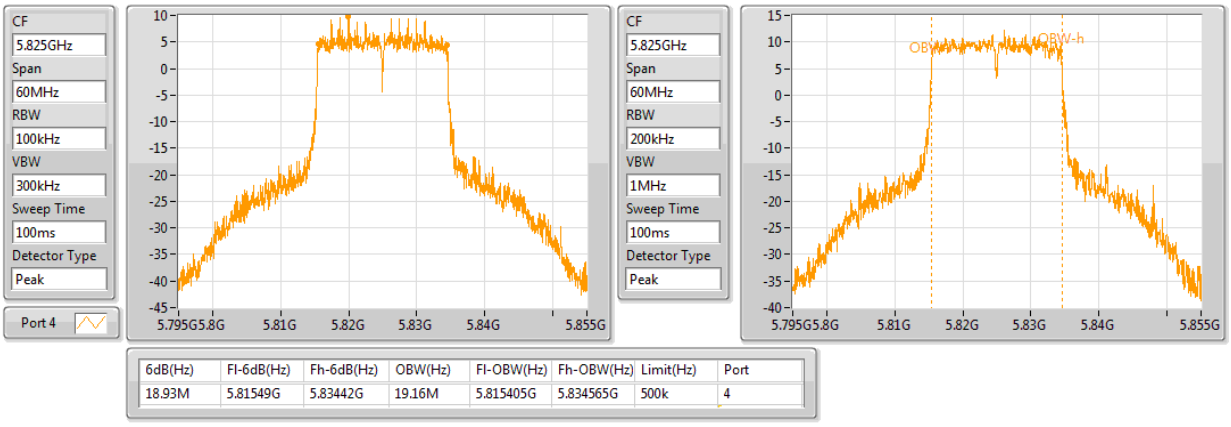
5785MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 6 / CH 165 / 5825 MHz

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

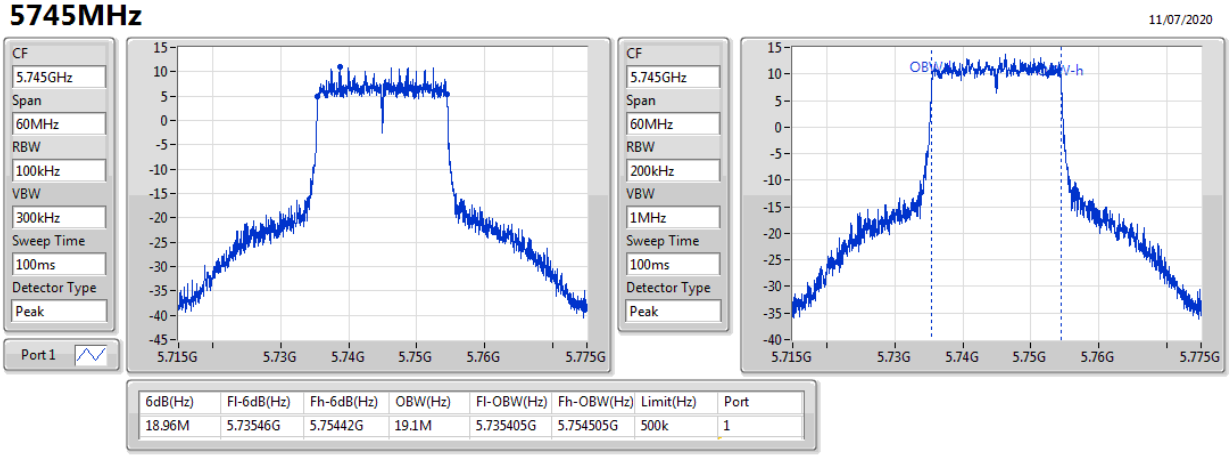
5825MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 3 / CH 149 / 5745 MHz

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

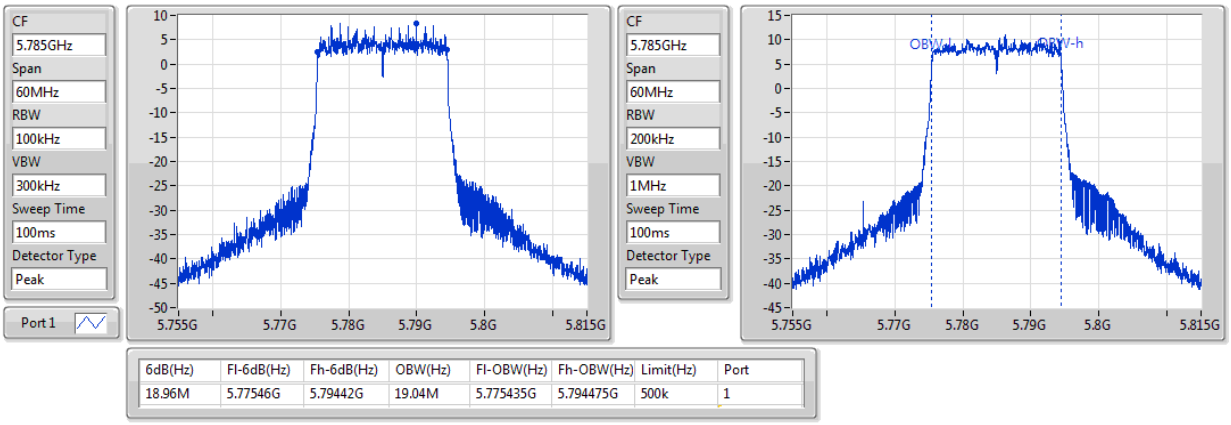
5745MHz



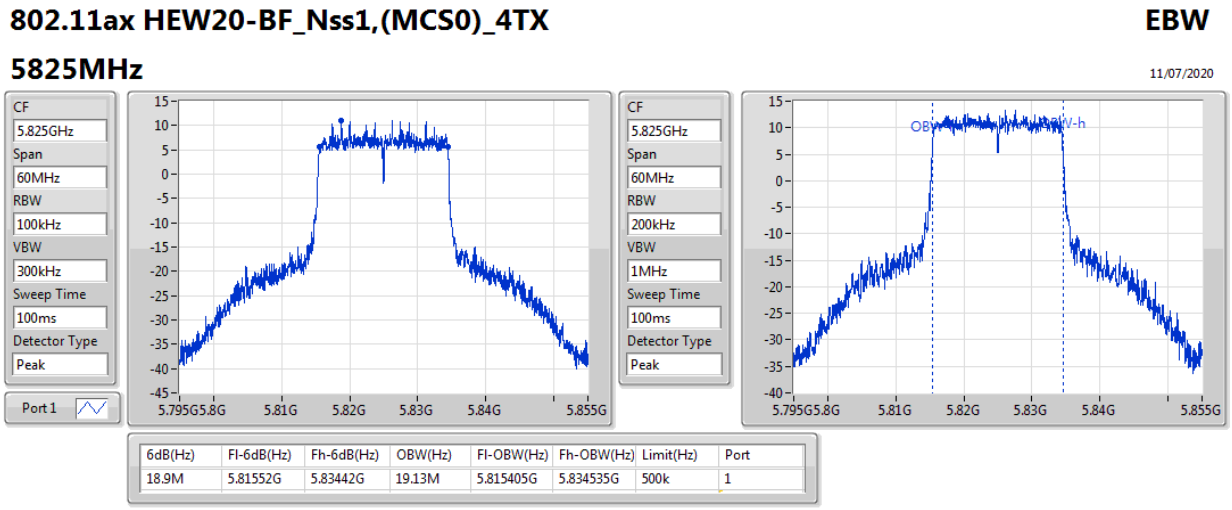
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 3 / CH 157 / 5785 MHz

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

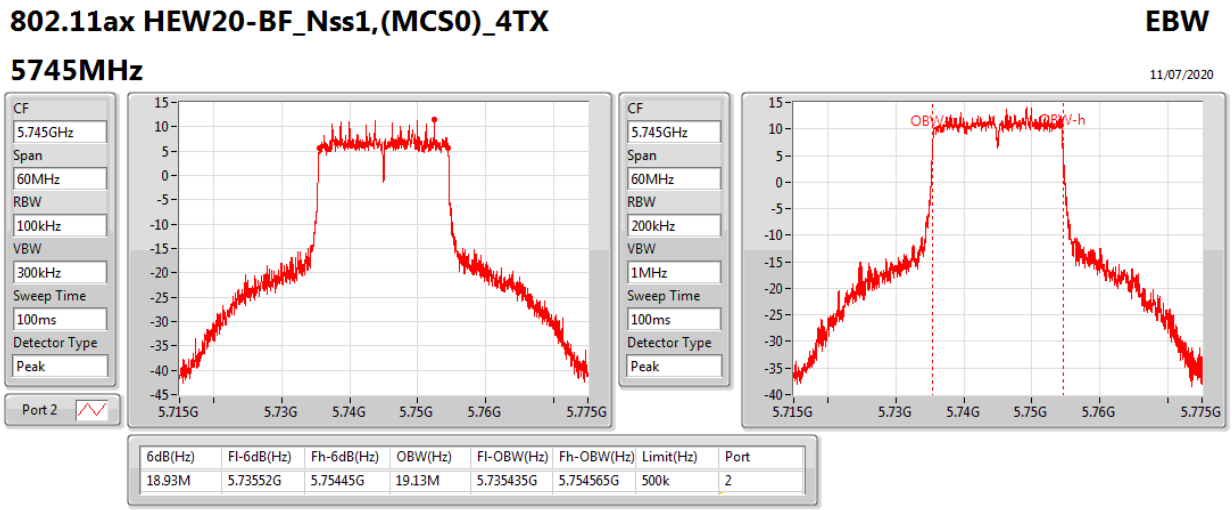
5785MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 3 / CH 165 / 5825 MHz



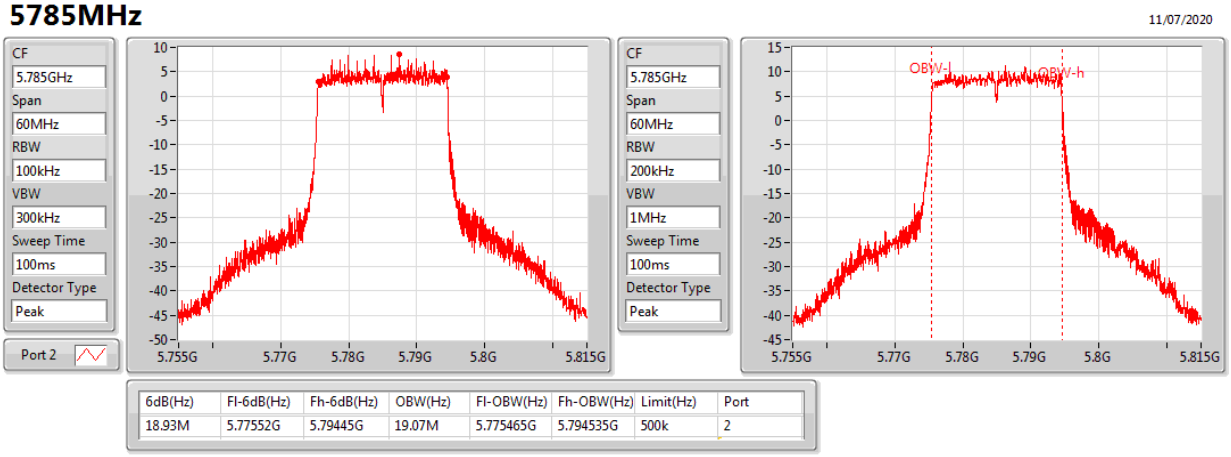
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 4 / CH 149 / 5745 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 4 / CH 157 / 5785 MHz

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

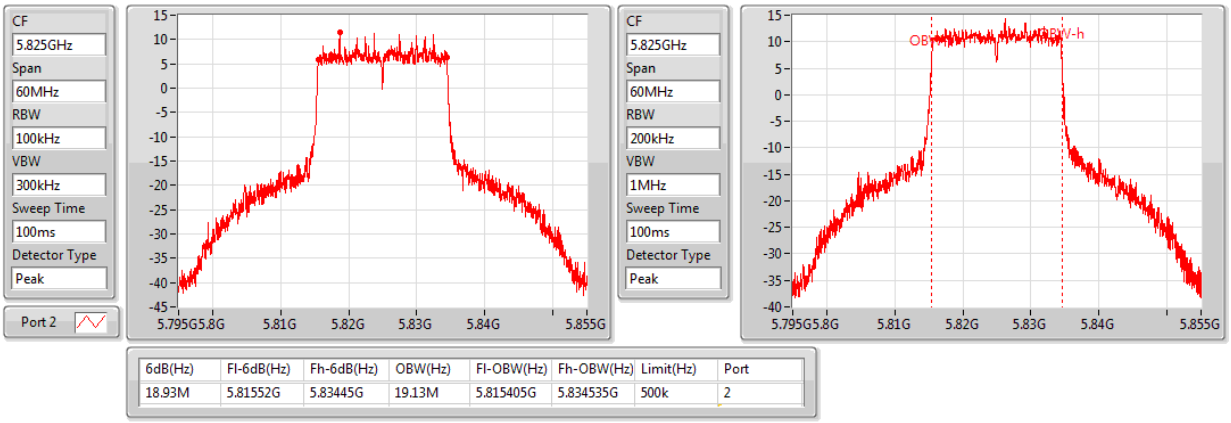
5785MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 4 / CH 165 / 5825 MHz

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

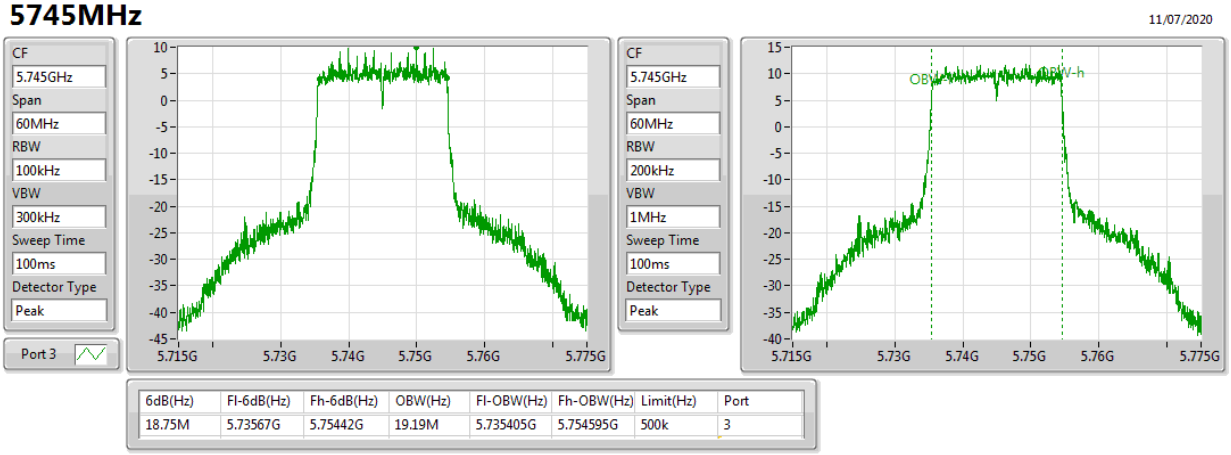
5825MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 5 / CH 149 / 5745 MHz

802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

5745MHz

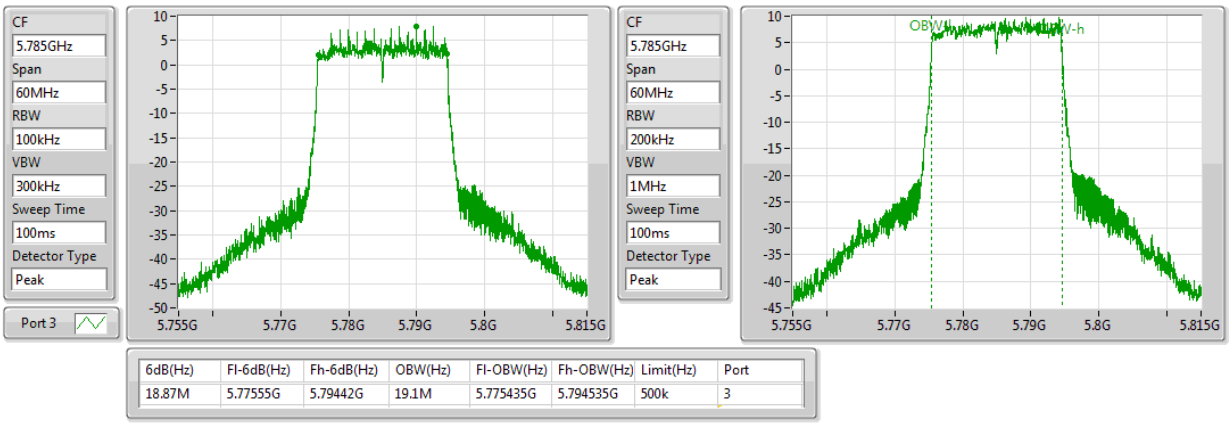


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.75M	5.73567G	5.75442G	19.19M	5.735405G	5.754595G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 5 / CH 157 / 5785 MHz

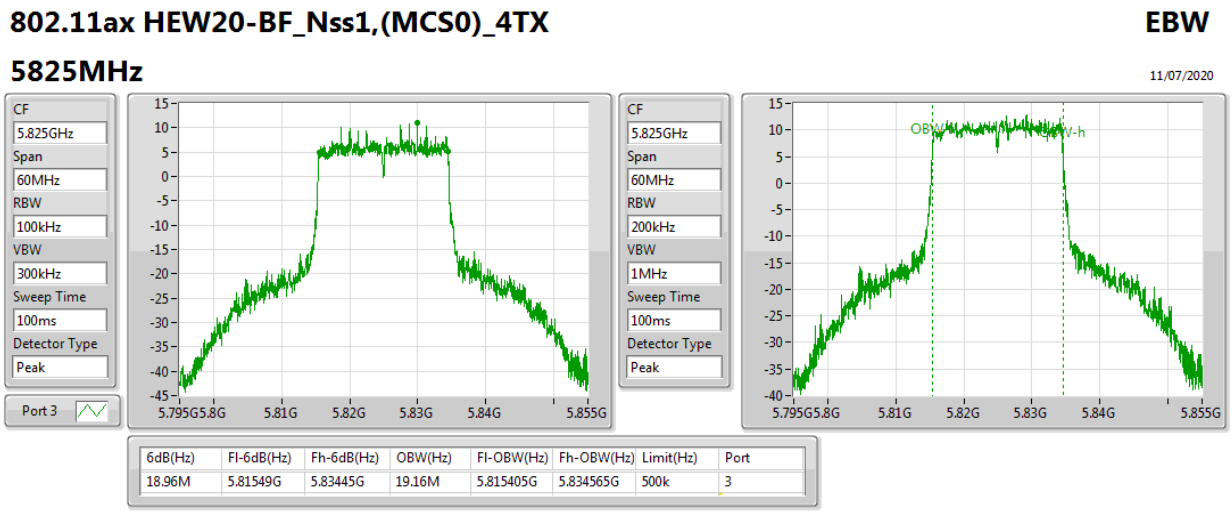
802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

5785MHz

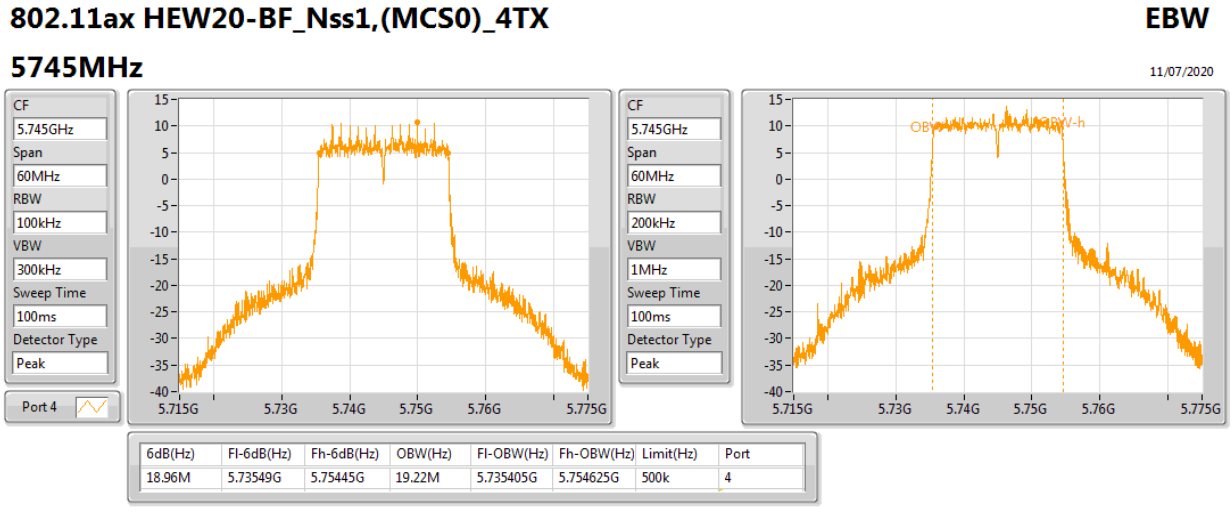


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.87M	5.77555G	5.79442G	19.1M	5.775435G	5.794535G	500k	3

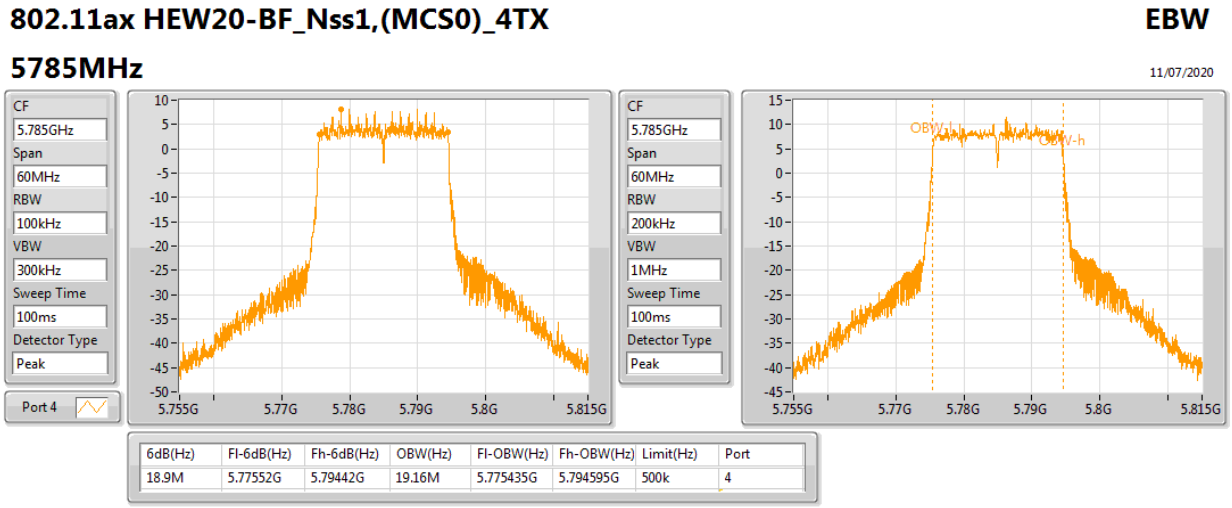
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 5 / CH 165 / 5825 MHz



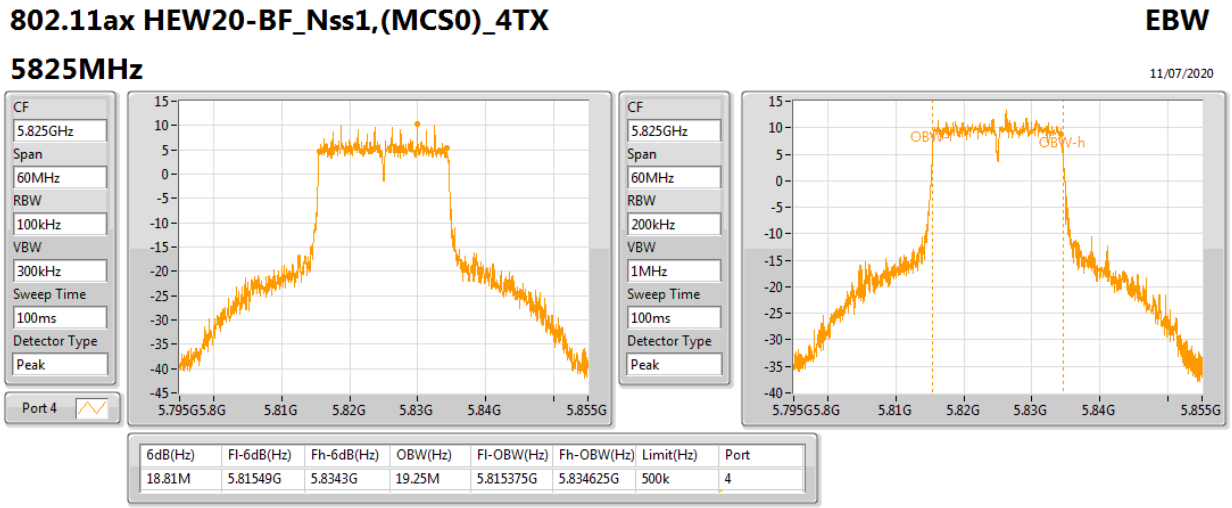
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 6 / CH 149 / 5745 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 6 / CH 157 / 5785 MHz



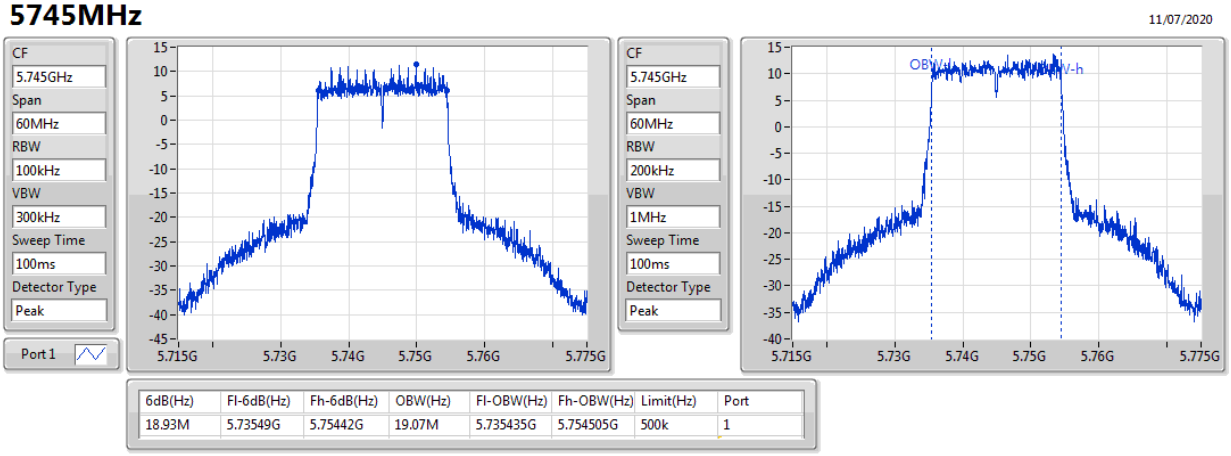
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 6 / CH 165 / 5825 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 3 / CH 149 / 5745 MHz

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

5745MHz

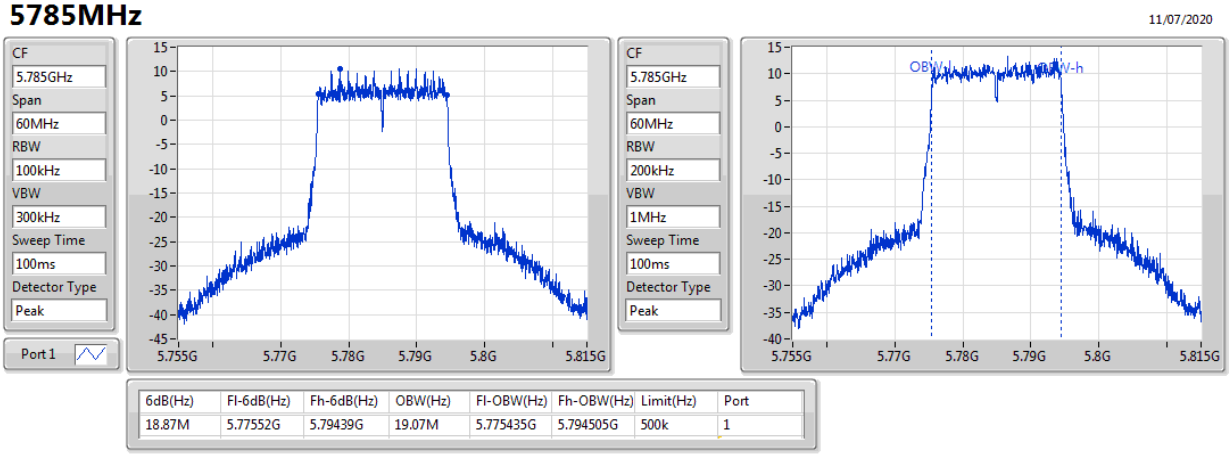


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.93M	5.73549G	5.75442G	19.07M	5.735435G	5.754505G	500k	1

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 3 / CH 157 / 5785 MHz

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

5785MHz

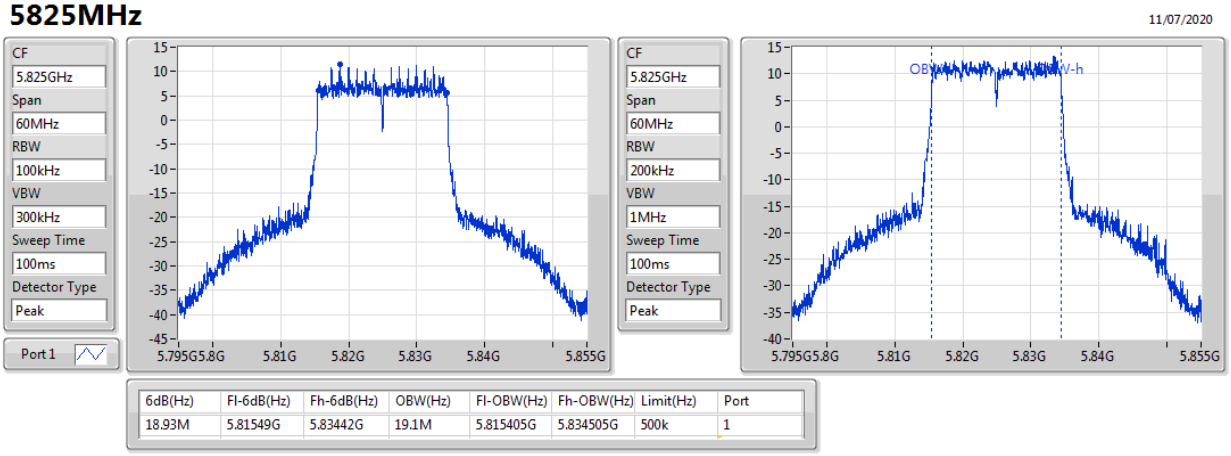


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.87M	5.77552G	5.79439G	19.07M	5.775435G	5.794505G	500k	1

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 3 / CH 165 / 5825 MHz

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

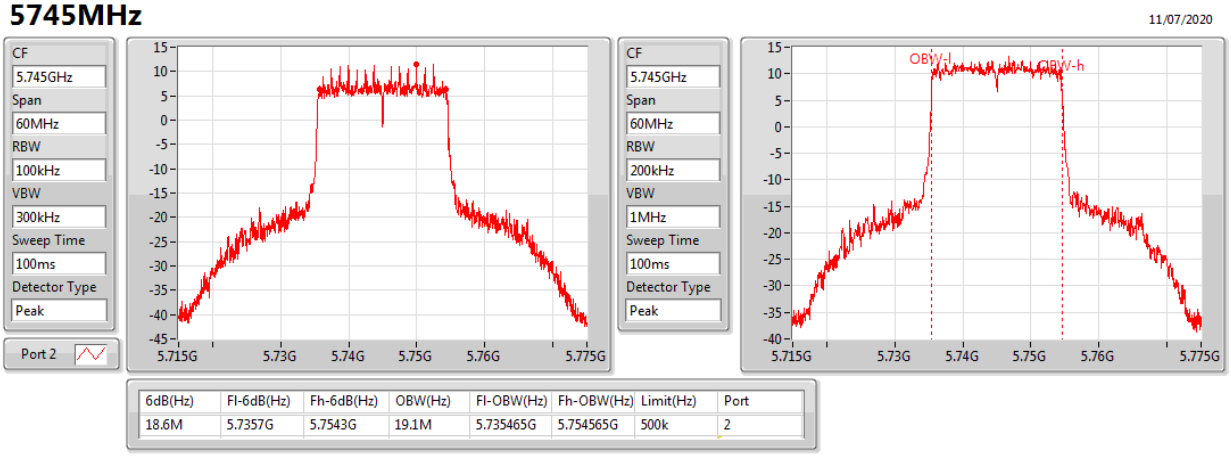
5825MHz



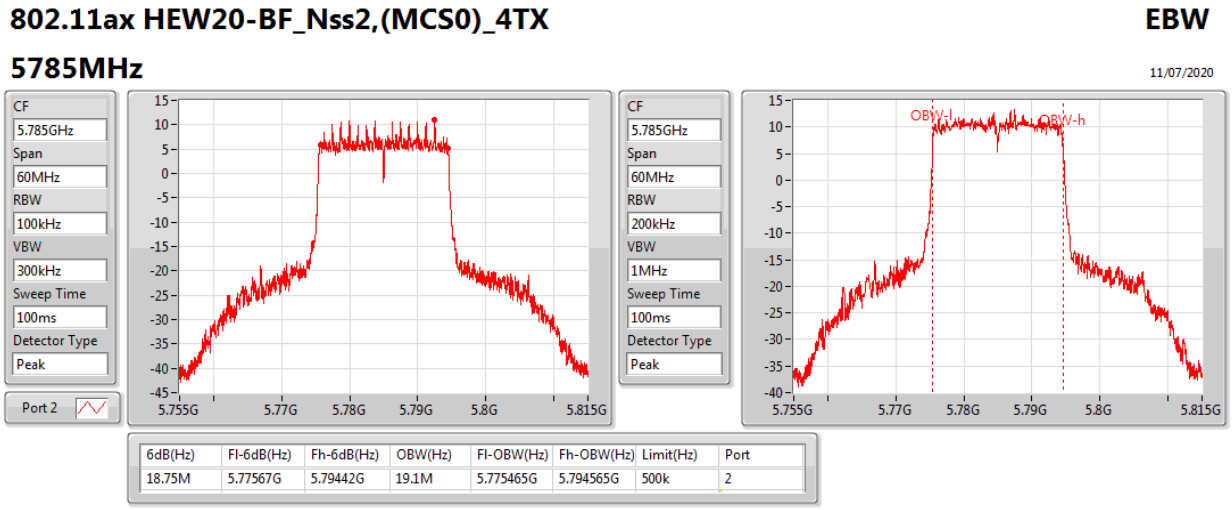
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 4 / CH 149 / 5745 MHz

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

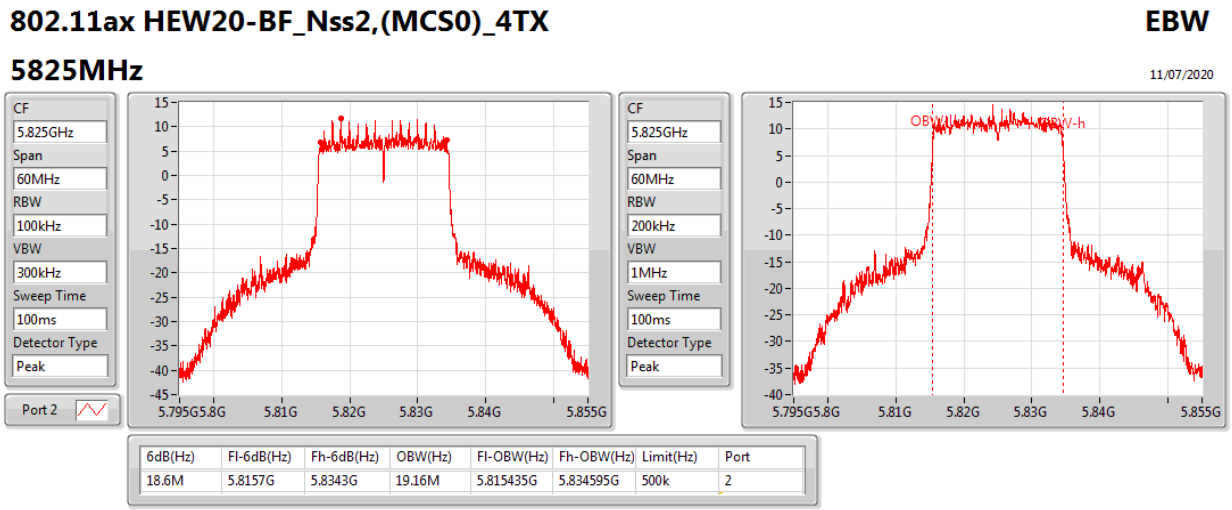
5745MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 4 / CH 157 / 5785 MHz



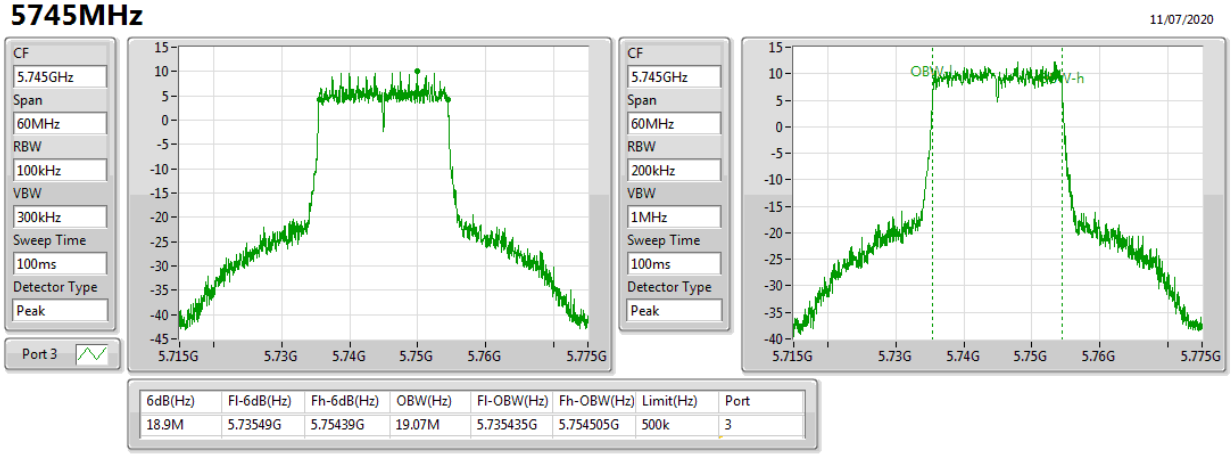
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 4 / CH 165 / 5825 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 5 / CH 149 / 5745 MHz

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

5745MHz

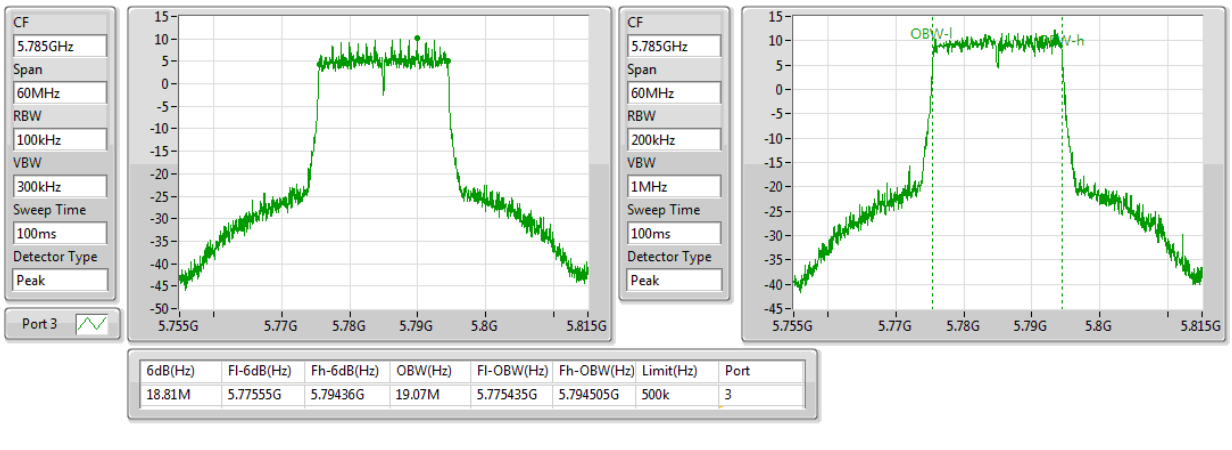


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	5.73549G	5.75439G	19.07M	5.735435G	5.754505G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 5 / CH 157 / 5785 MHz

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

5785MHz

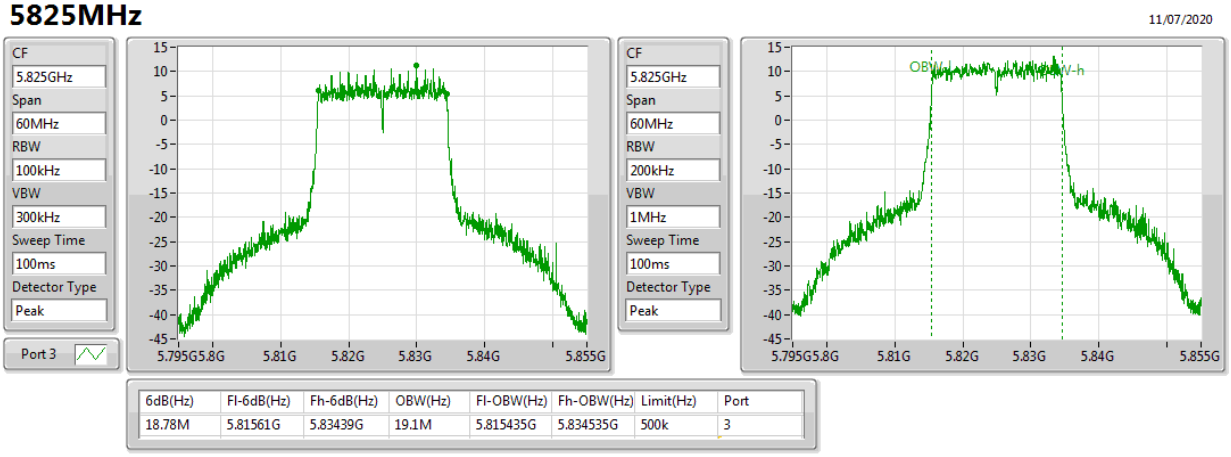


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.81M	5.77555G	5.79436G	19.07M	5.775435G	5.794505G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 5 / CH 165 / 5825 MHz

802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

5825MHz

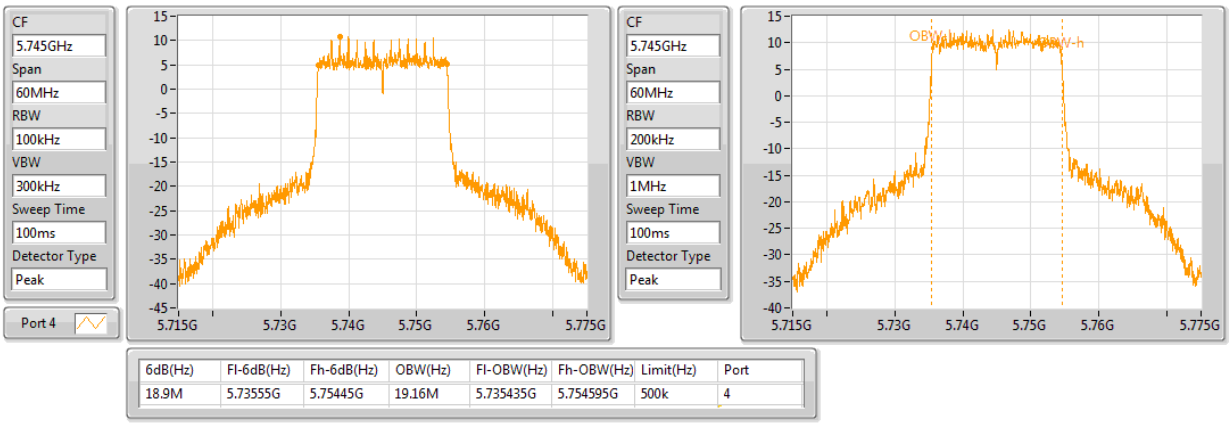


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.78M	5.81561G	5.83439G	19.1M	5.815435G	5.834535G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 6 / CH 149 / 5745 MHz

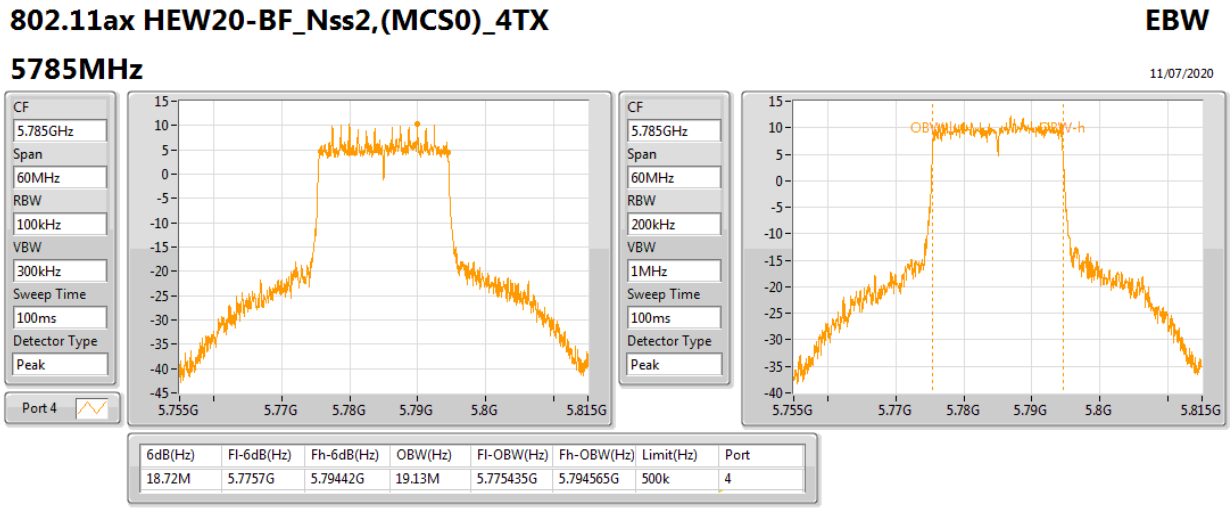
802.11ax HEW20-BF_Nss2,(MCS0)_4TX **EBW**

5745MHz

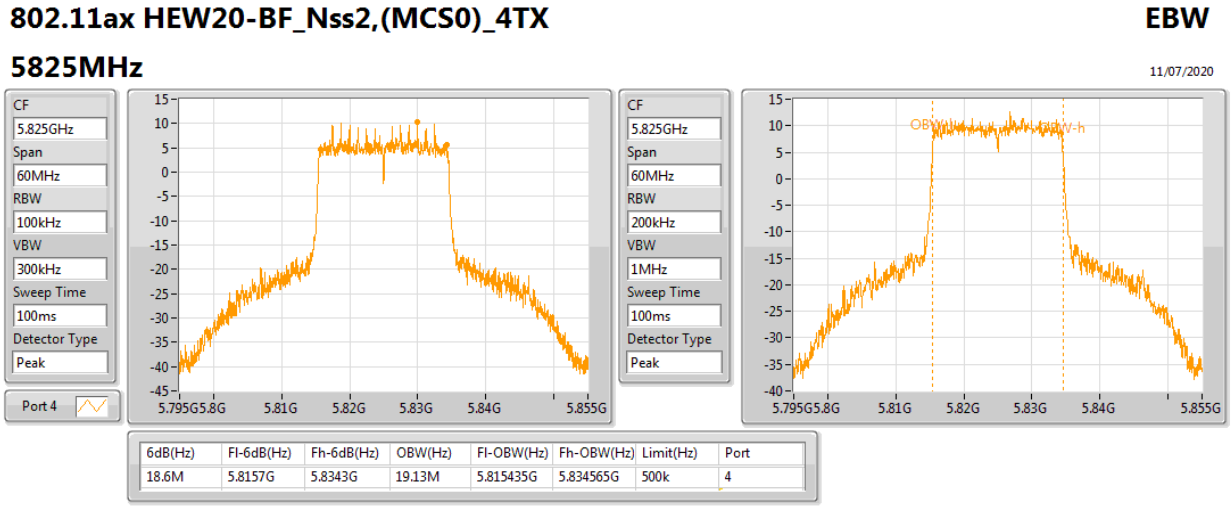


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	5.73555G	5.75445G	19.16M	5.735435G	5.754595G	500k	4

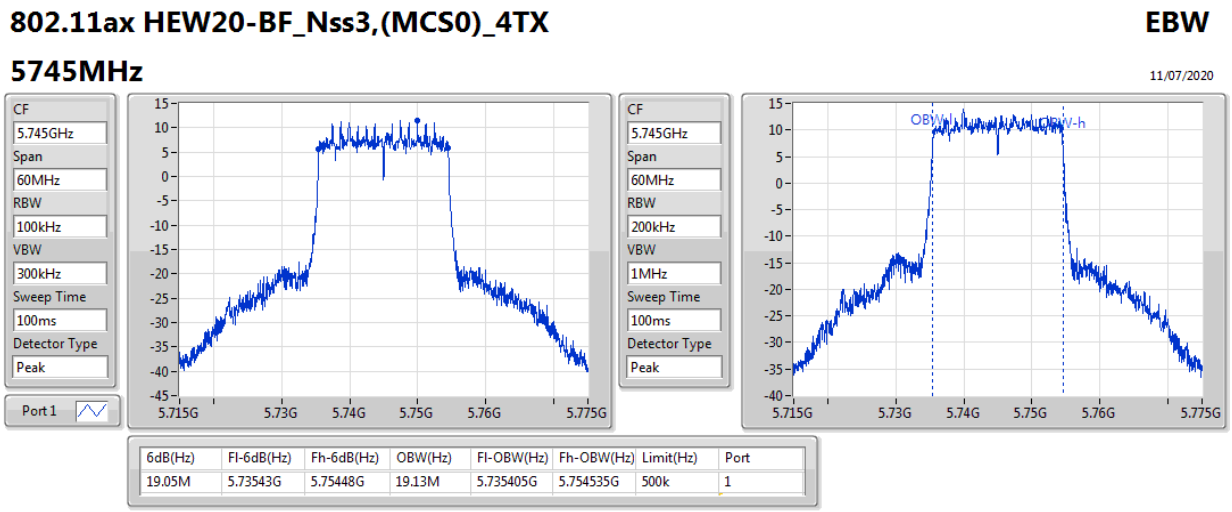
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 6 / CH 157 / 5785 MHz



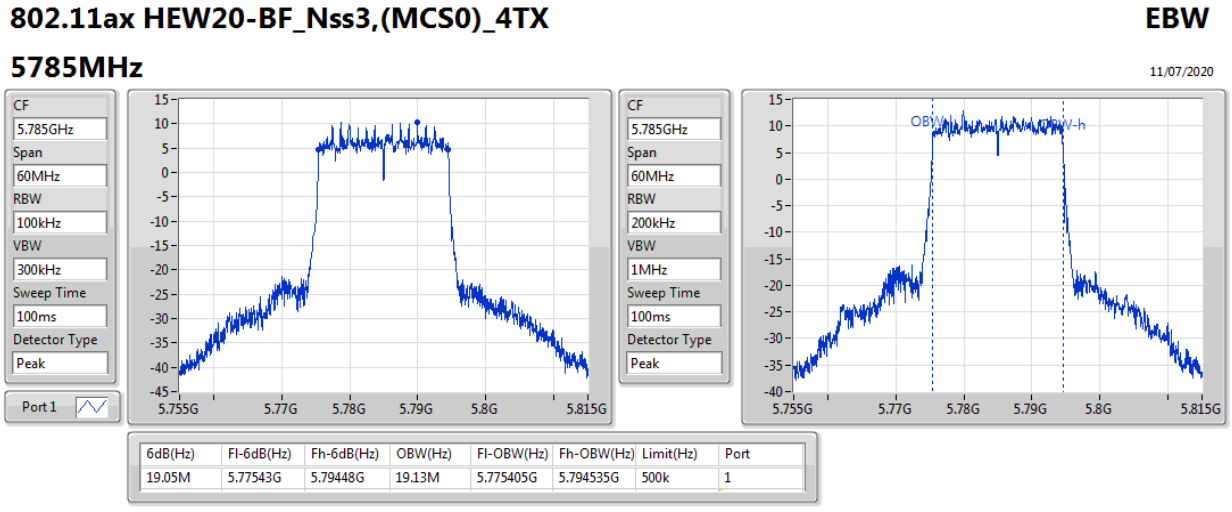
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 6 / CH 165 / 5825 MHz



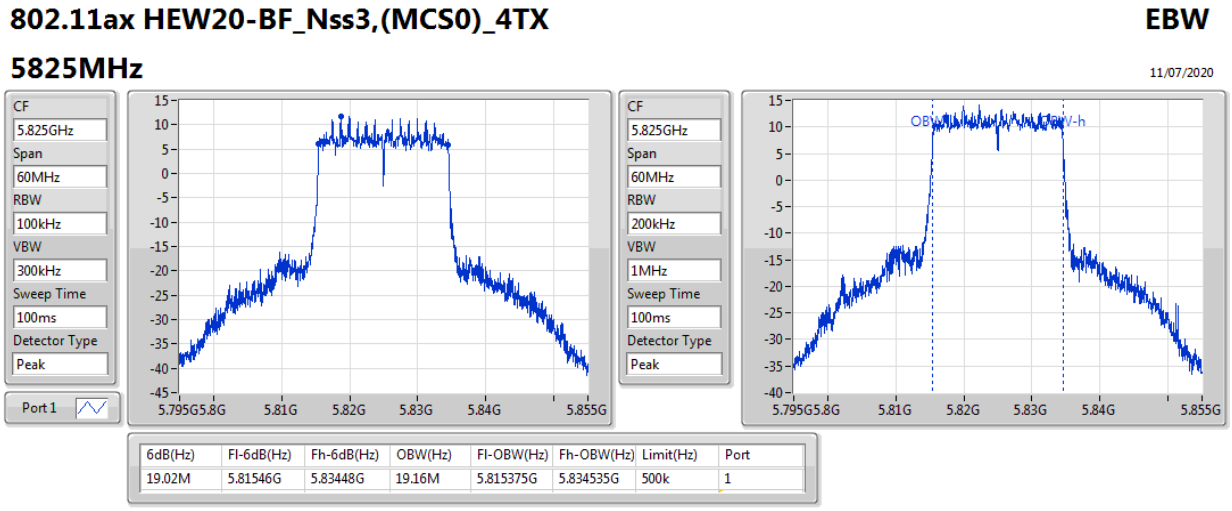
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 3 / CH 149 / 5745 MHz



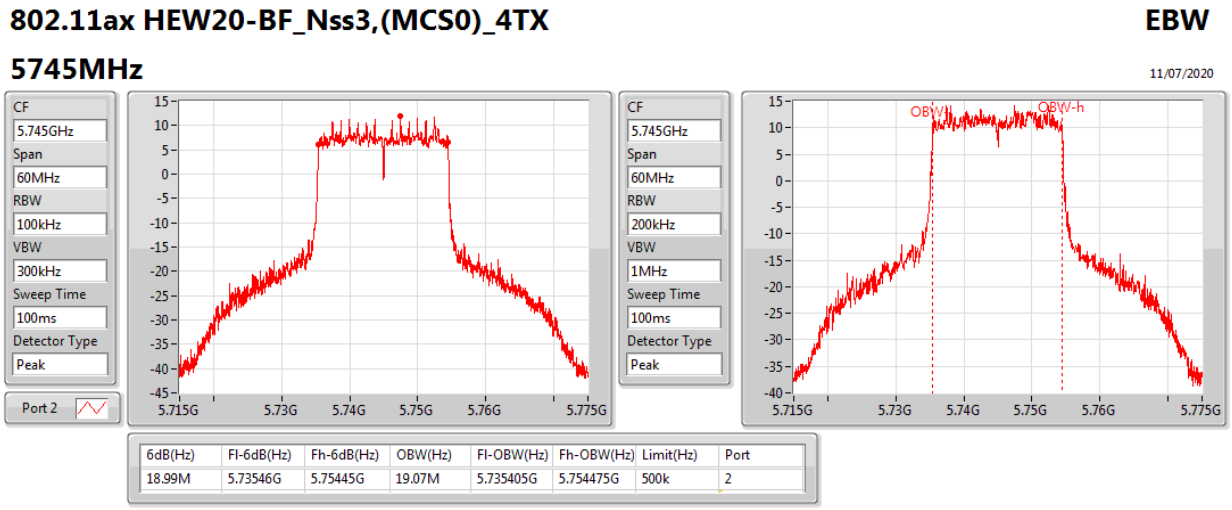
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 3 / CH 157 / 5785 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 3 / CH 165 / 5825 MHz



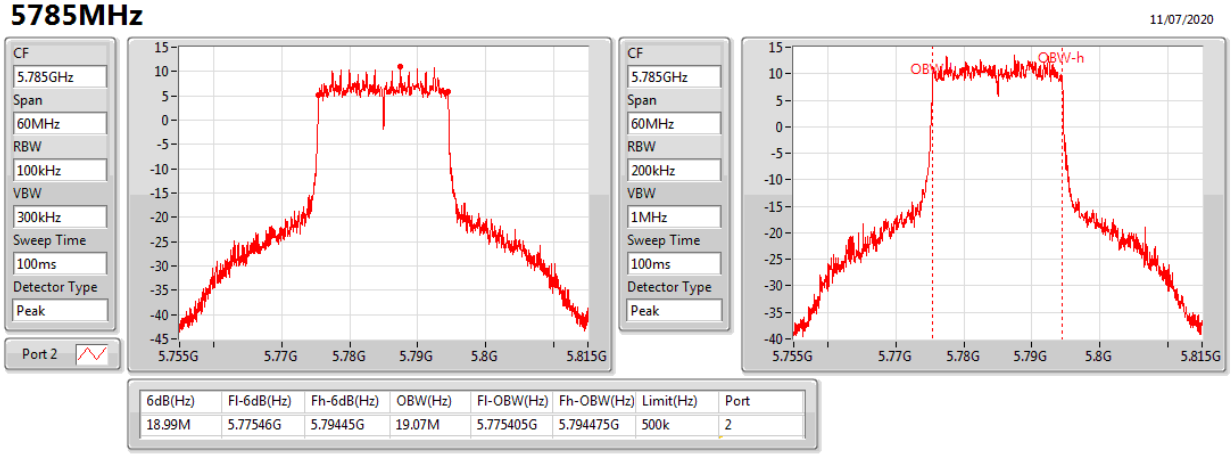
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 4 / CH 149 / 5745 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 4 / CH 157 / 5785 MHz

802.11ax HEW20-BF_Nss3,(MCS0)_4TX **EBW**

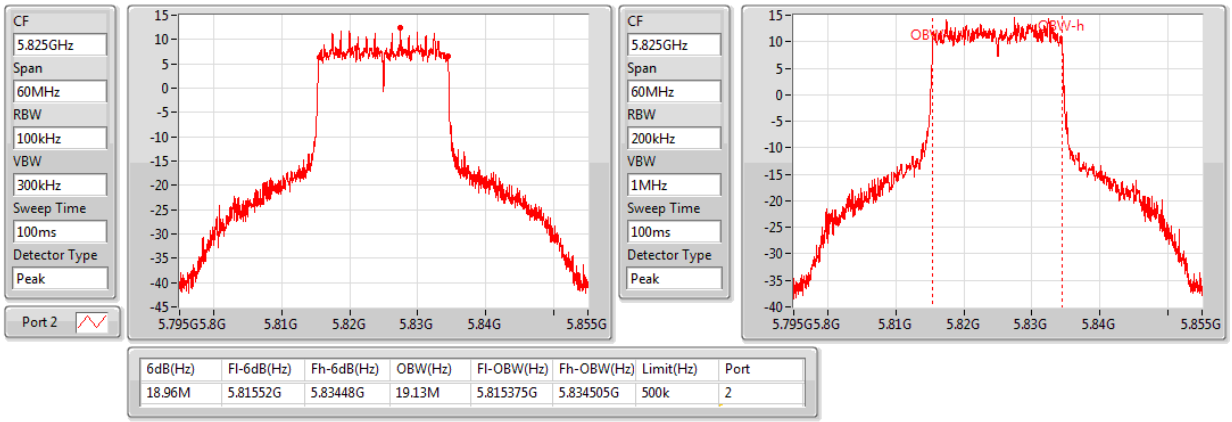
5785MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 4 / CH 165 / 5825 MHz

802.11ax HEW20-BF_Nss3,(MCS0)_4TX **EBW**

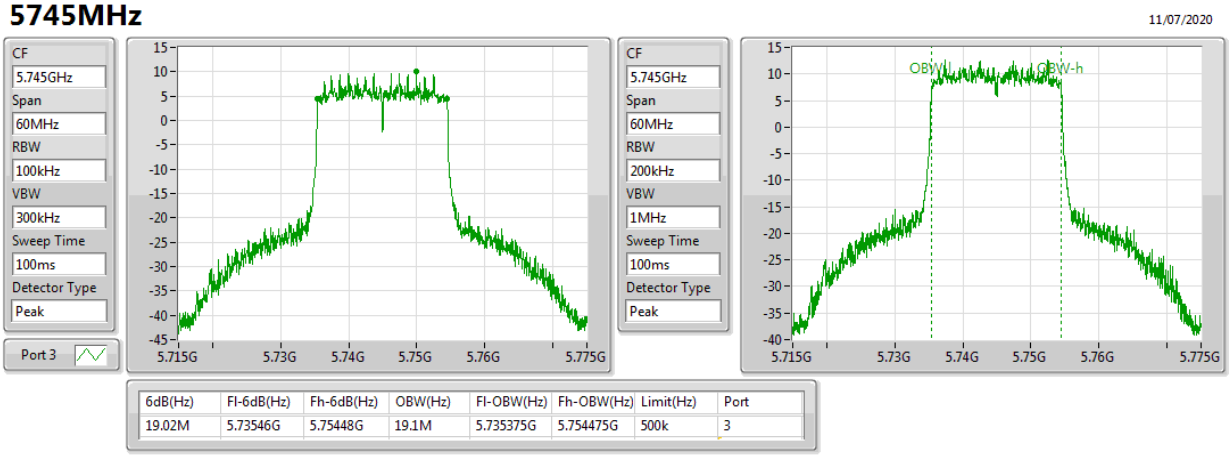
5825MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 5 / CH 149 / 5745 MHz

802.11ax HEW20-BF_Nss3,(MCS0)_4TX **EBW**

5745MHz

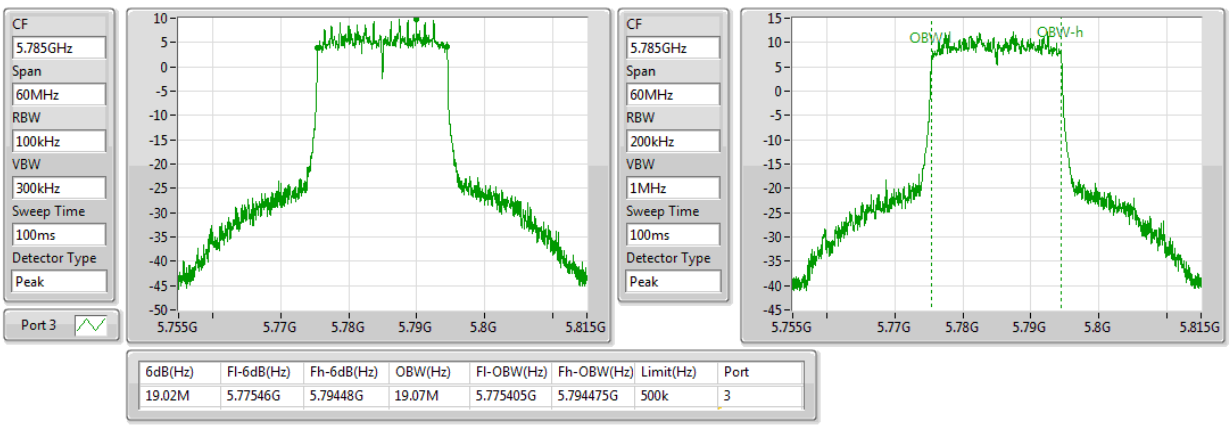


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.02M	5.73546G	5.75448G	19.1M	5.735375G	5.754475G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 5 / CH 157 / 5785 MHz

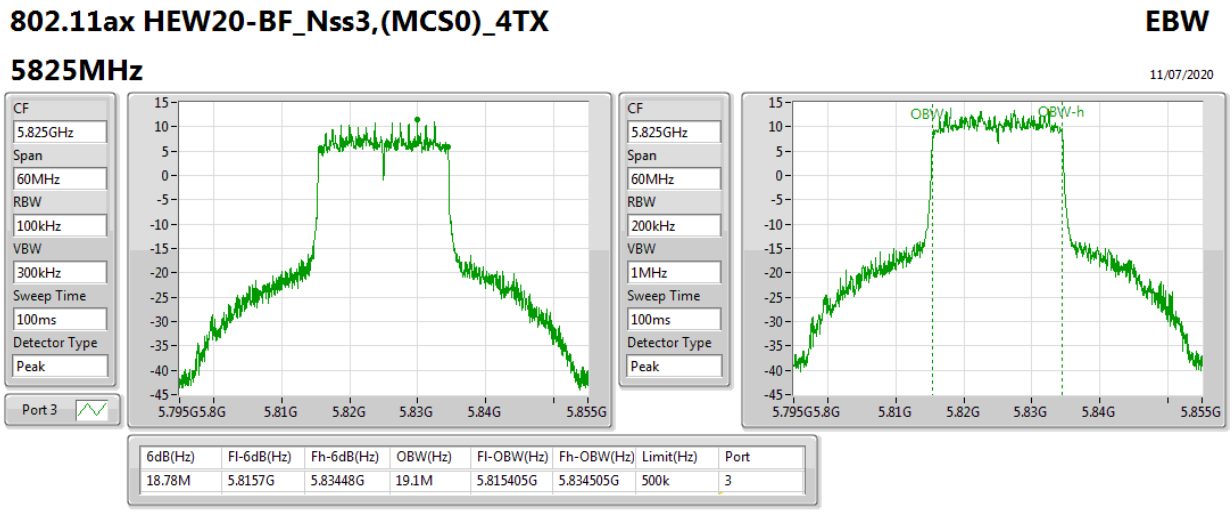
802.11ax HEW20-BF_Nss3,(MCS0)_4TX **EBW**

5785MHz

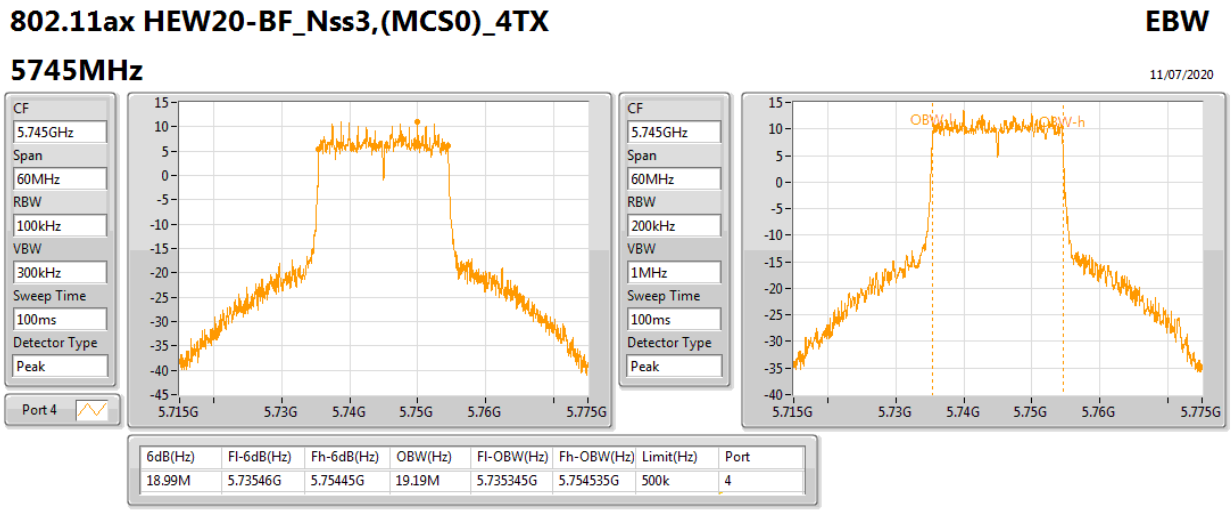


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.02M	5.77546G	5.79448G	19.07M	5.775405G	5.794475G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 5 / CH 165 / 5825 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 6 / CH 149 / 5745 MHz

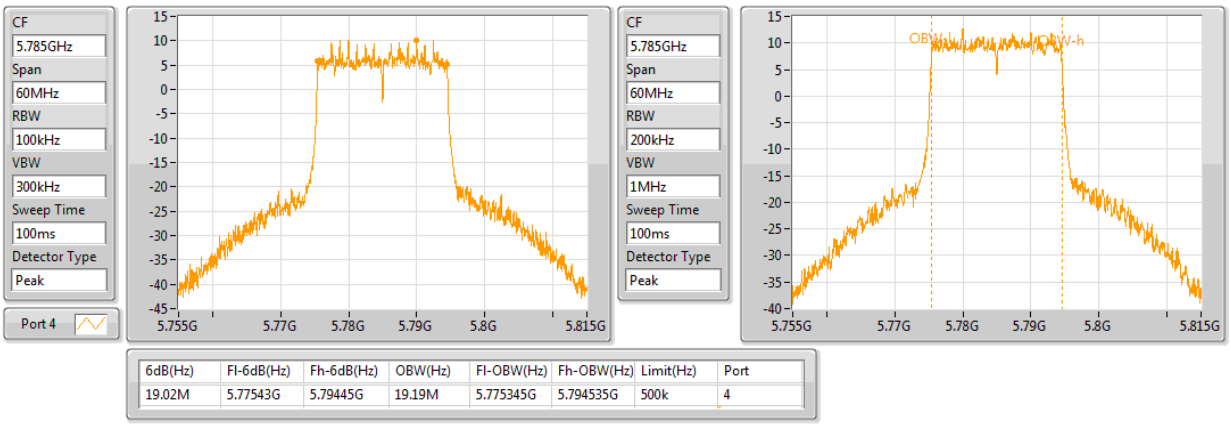


6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 6 / CH 157 / 5785 MHz

802.11ax HEW20-BF_Nss3,(MCS0)_4TX **EBW**

5785MHz

11/07/2020



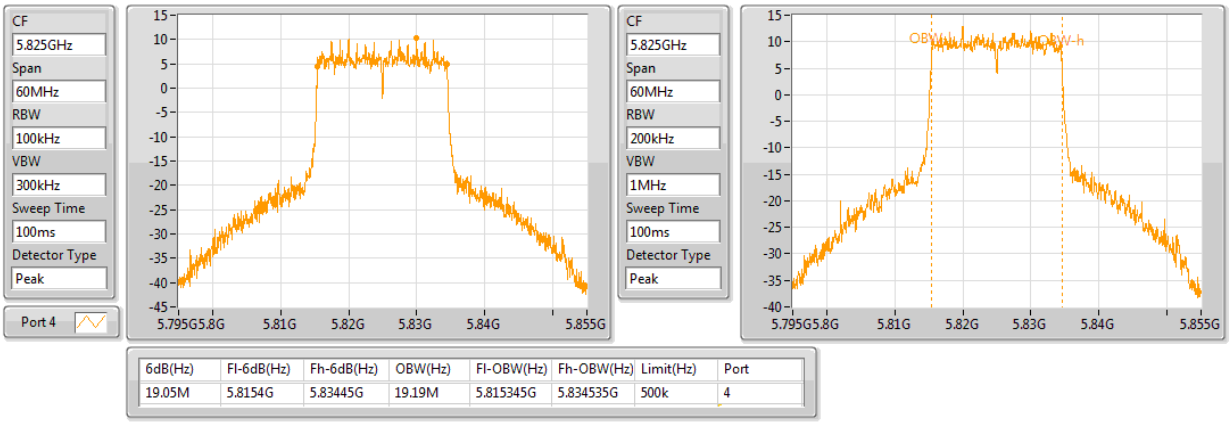
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.02M	5.77543G	5.79445G	19.19M	5.775345G	5.794535G	500k	4

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 6 / CH 165 / 5825 MHz

802.11ax HEW20-BF_Nss3,(MCS0)_4TX **EBW**

5825MHz

11/07/2020



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.05M	5.8154G	5.83445G	19.19M	5.815345G	5.834535G	500k	4

Configuration IEEE 802.11ax 40MHz

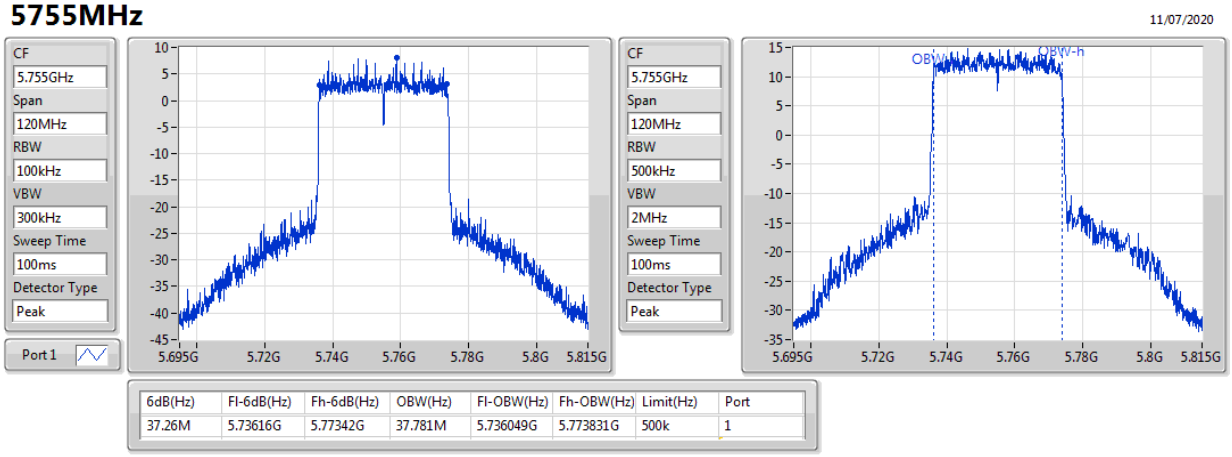
6dB Bandwidth (MHz)								
Mode	Number of Transmit Chains (NTX)	Frequency	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Min. Limit (kHz)	Test Result
802.11ax 40MHz (CDD)	1 stream 4TX	5755 MHz	37.260	37.500	37.320	37.260	500	PASS
802.11ax 40MHz (CDD)	1 stream 4TX	5795 MHz	37.680	36.900	37.680	37.320	500	PASS
802.11ax 40MHz (TXBF)	1 stream 4TX	5755 MHz	37.380	37.140	37.380	37.260	500	PASS
802.11ax 40MHz (TXBF)	1 stream 4TX	5795 MHz	37.620	36.660	36.960	37.140	500	PASS
802.11ax 40MHz (TXBF)	2 stream 4TX	5755 MHz	37.620	37.260	37.500	37.560	500	PASS
802.11ax 40MHz (TXBF)	2 stream 4TX	5795 MHz	37.500	37.560	37.500	37.380	500	PASS
802.11ax 40MHz (TXBF)	3 stream 4TX	5755 MHz	37.320	37.500	37.560	37.320	500	PASS
802.11ax 40MHz (TXBF)	3 stream 4TX	5795 MHz	37.680	37.440	37.560	37.260	500	PASS

99% Occupied Bandwidth (MHz)							
Mode	Number of Transmit Chains (NTX)	Frequency	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Test Result
802.11ax 40MHz (CDD)	1 stream 4TX	5755 MHz	37.781	37.781	37.721	37.841	PASS
802.11ax 40MHz (CDD)	1 stream 4TX	5795 MHz	37.721	37.781	37.781	37.781	PASS
802.11ax 40MHz (TXBF)	1 stream 4TX	5755 MHz	37.781	37.841	37.721	37.781	PASS
802.11ax 40MHz (TXBF)	1 stream 4TX	5795 MHz	37.721	37.781	37.721	37.781	PASS
802.11ax 40MHz (TXBF)	2 stream 4TX	5755 MHz	37.661	37.661	37.661	37.661	PASS
802.11ax 40MHz (TXBF)	2 stream 4TX	5795 MHz	37.661	37.661	37.661	37.661	PASS
802.11ax 40MHz (TXBF)	3 stream 4TX	5755 MHz	37.661	37.721	37.661	37.661	PASS
802.11ax 40MHz (TXBF)	3 stream 4TX	5795 MHz	37.721	37.721	37.661	37.601	PASS

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 3 / CH 151 / 5755 MHz

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

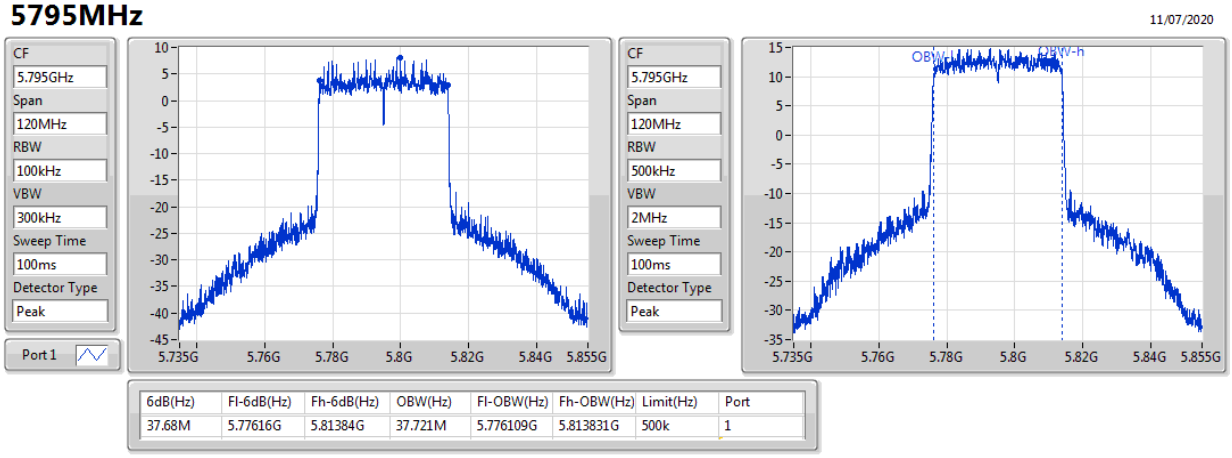
5755MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 3 / CH 159 / 5795 MHz

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

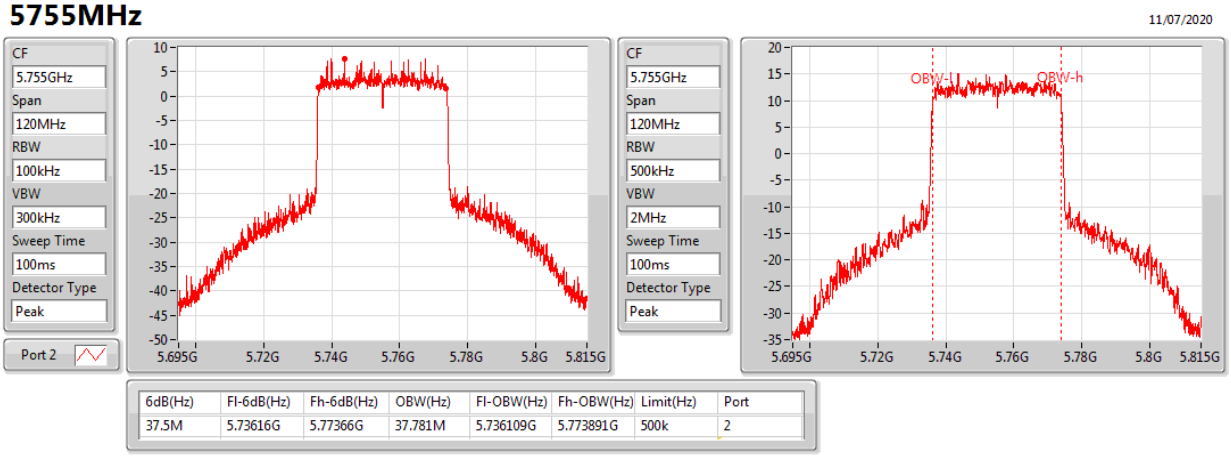
5795MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 4 / CH 151 / 5755 MHz

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

5755MHz

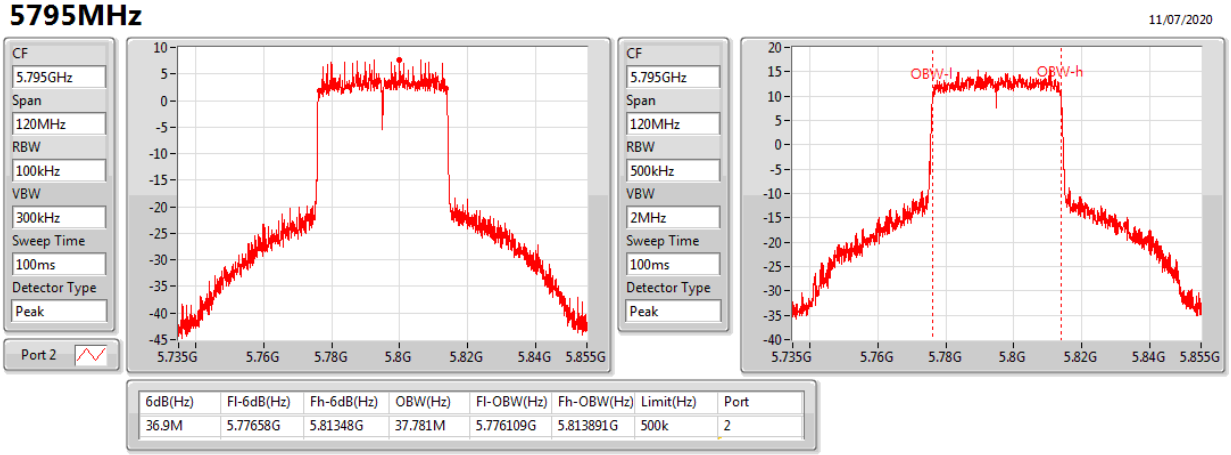


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	5.73616G	5.77366G	37.781M	5.736109G	5.773891G	500k	2

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 4 / CH 159 / 5795 MHz

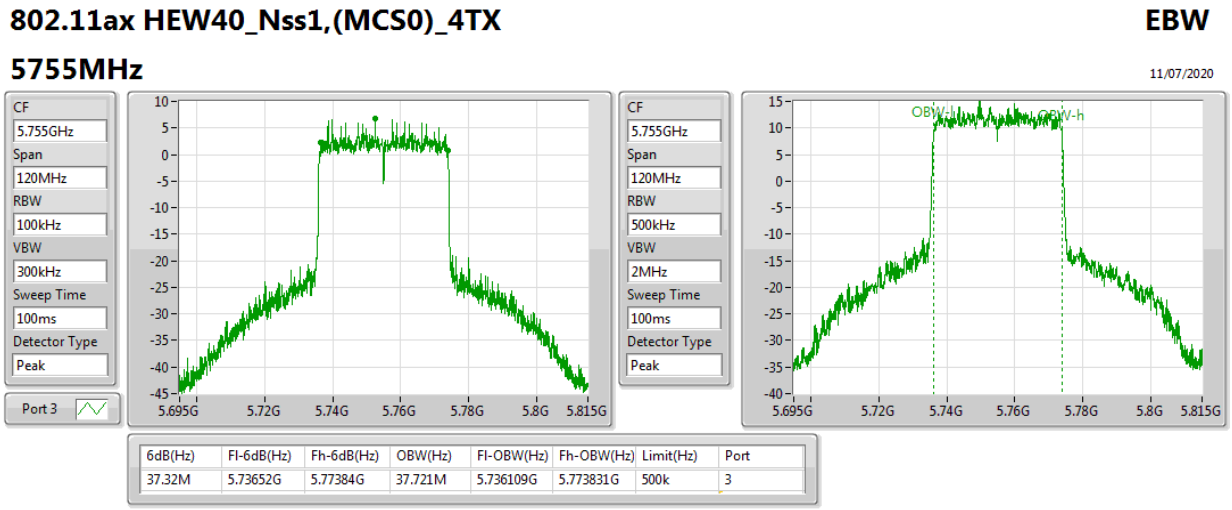
802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

5795MHz

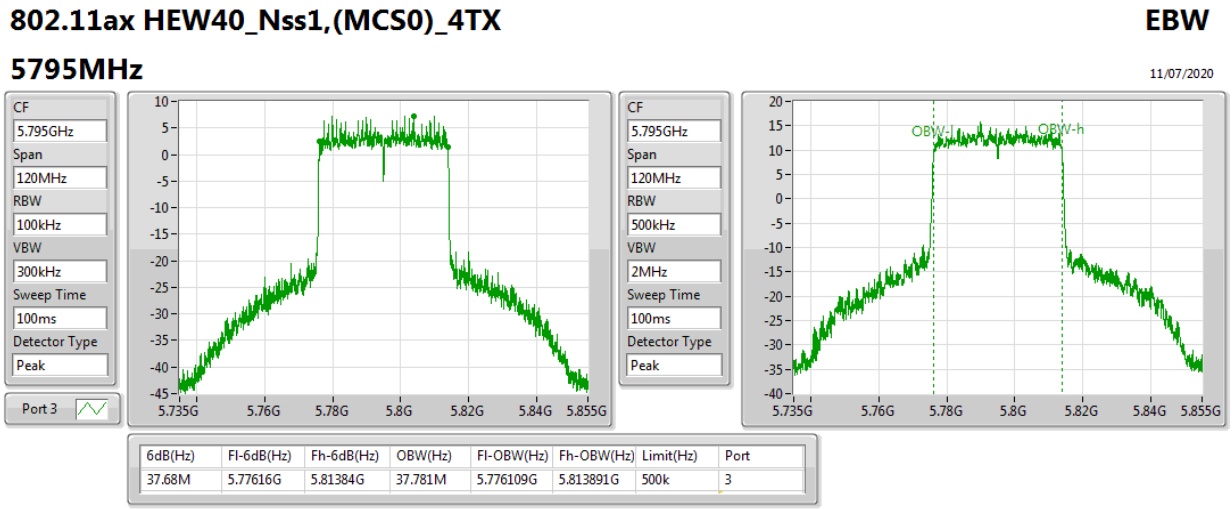


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.9M	5.77658G	5.81348G	37.781M	5.776109G	5.813891G	500k	2

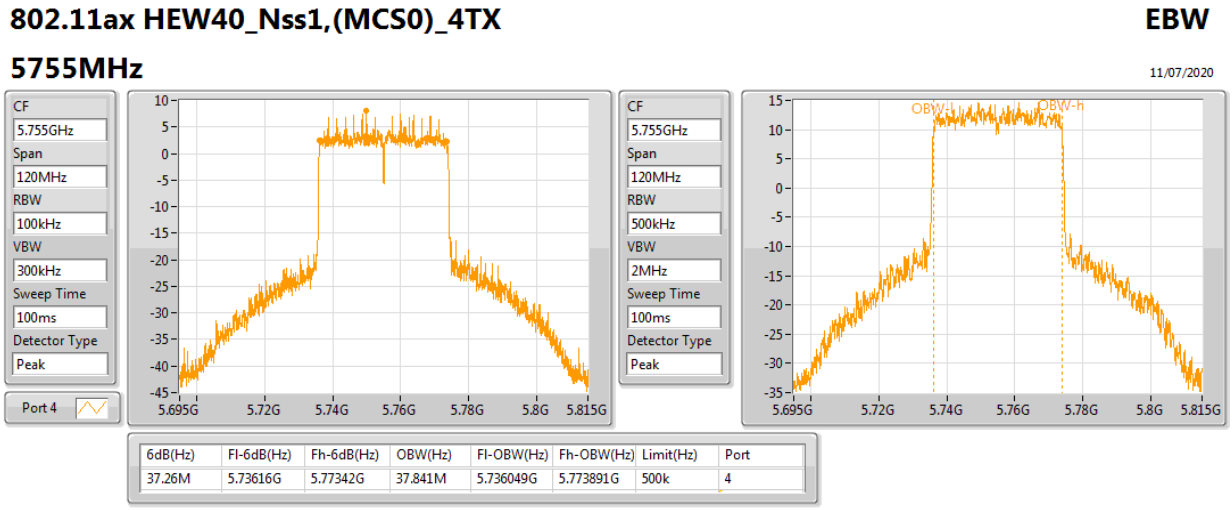
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 5 / CH 151 / 5755 MHz



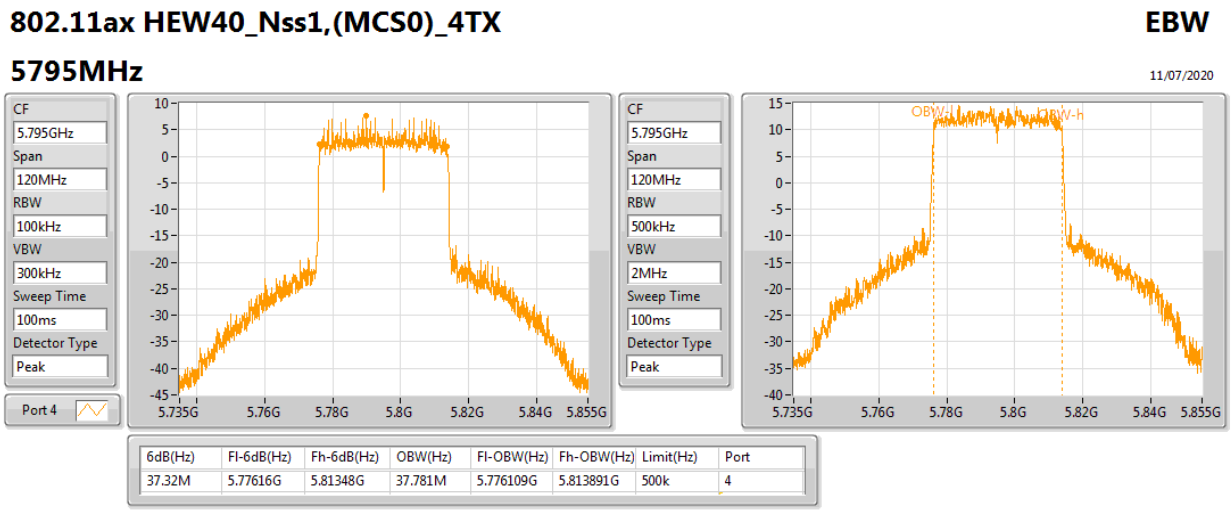
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 5 / CH 159 / 5795 MHz



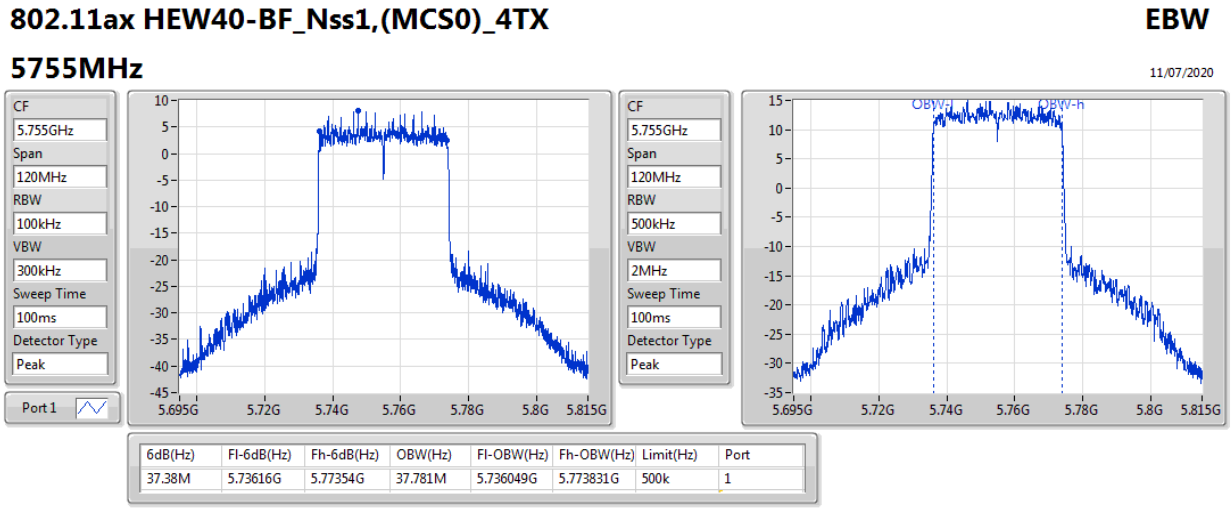
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 6 / CH 151 / 5755 MHz



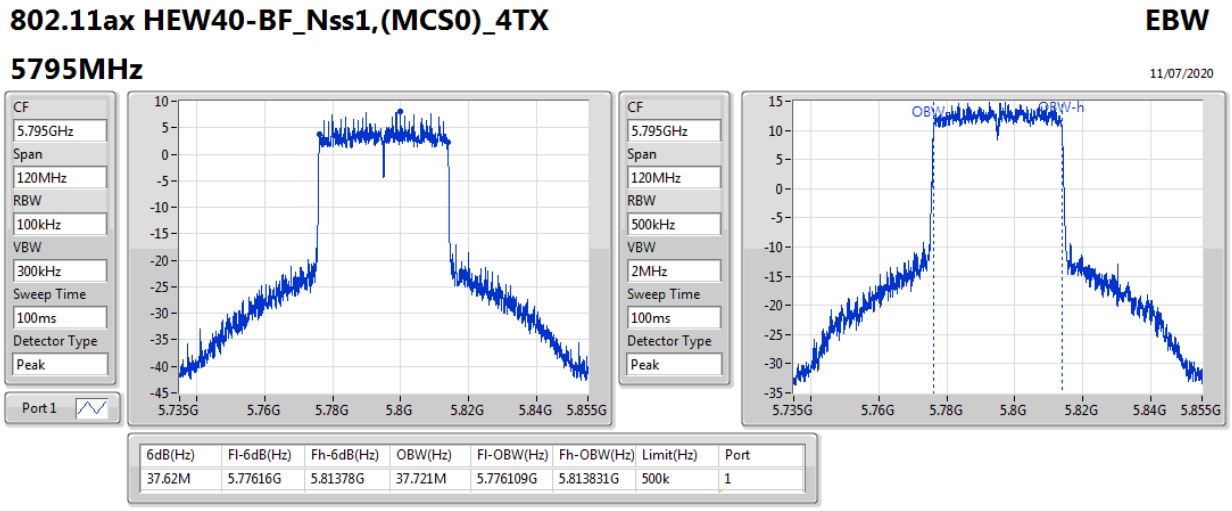
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 6 / CH 159 / 5795 MHz



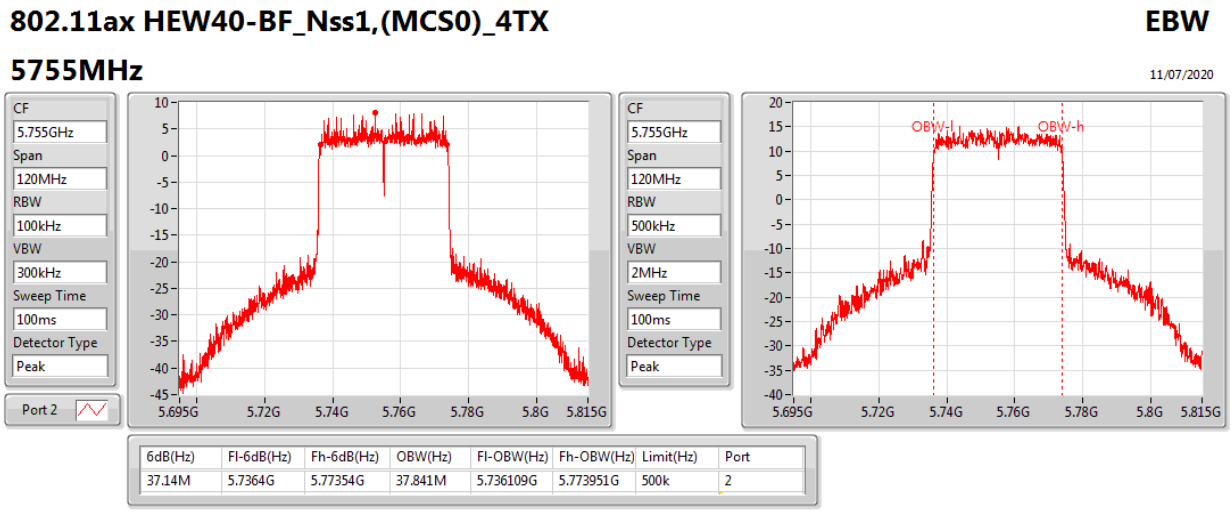
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 3 / CH 151 / 5755 MHz



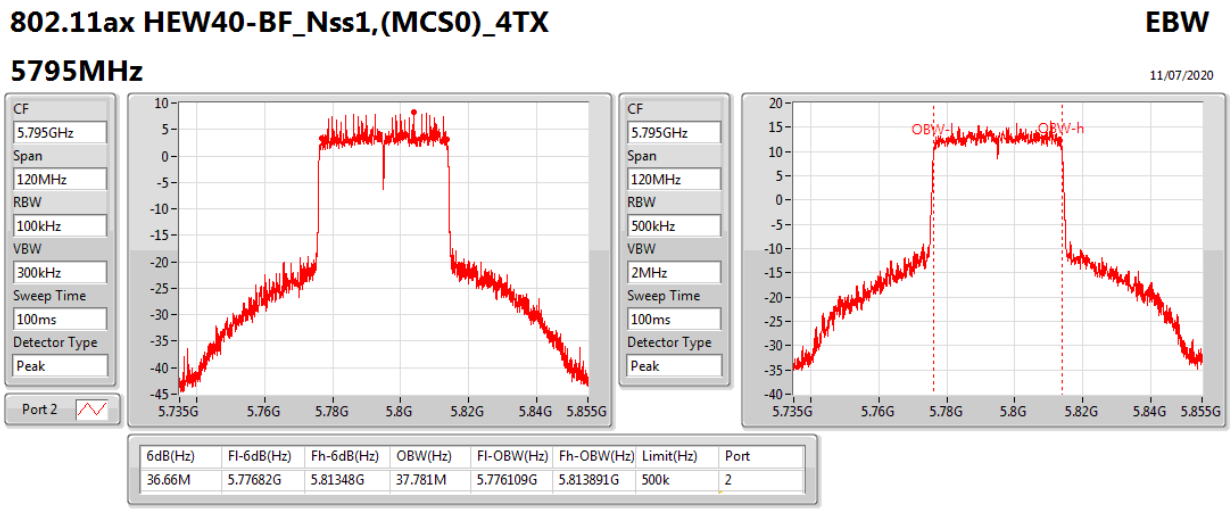
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 3 / CH 159 / 5795 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 4 / CH 151 / 5755 MHz



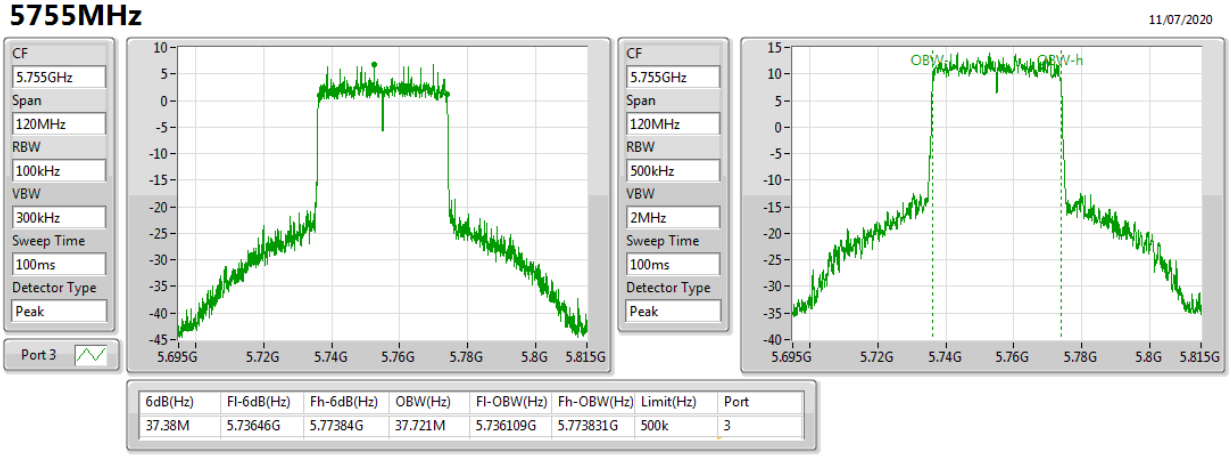
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 4 / CH 159 / 5795 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 5 / CH 151 / 5755 MHz

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

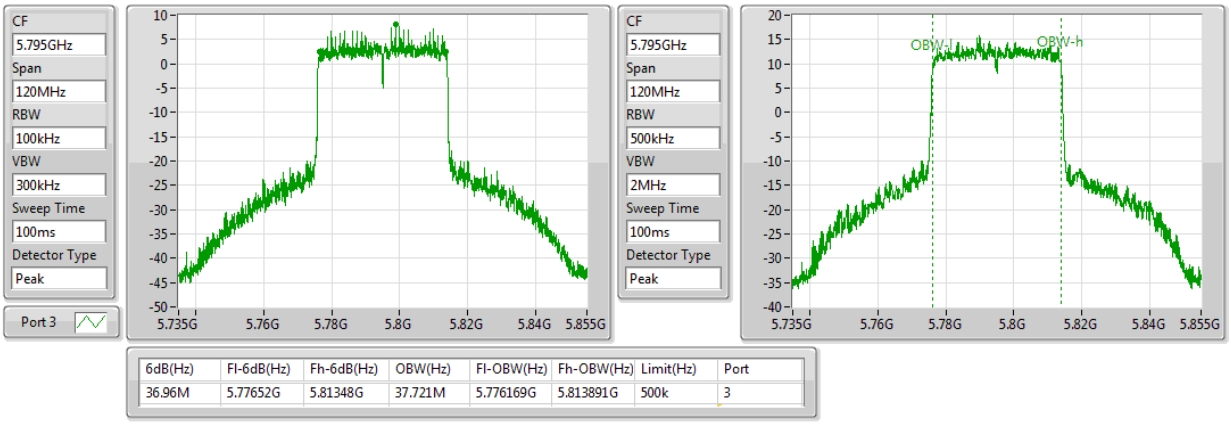
5755MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 5 / CH 159 / 5795 MHz

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

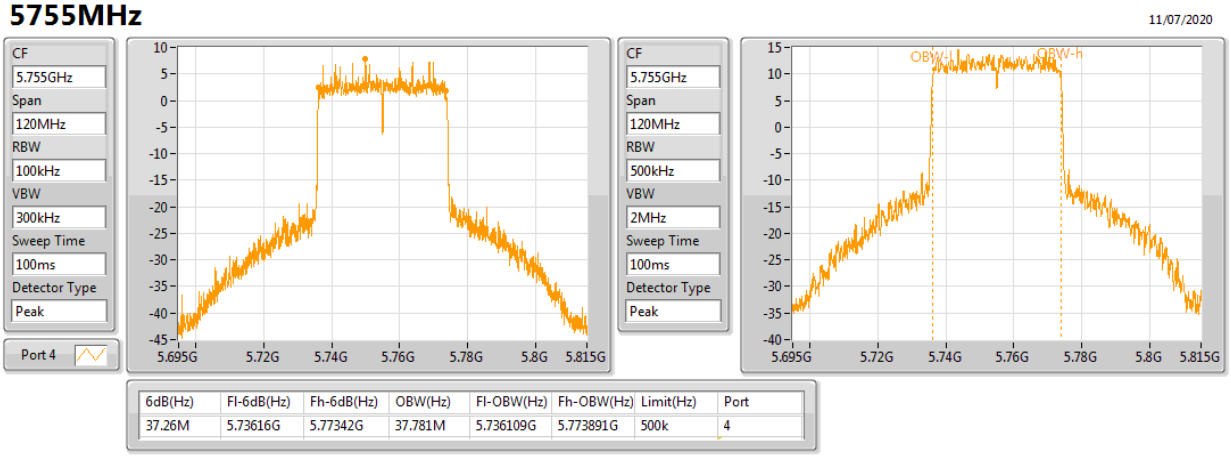
5795MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 6 / CH 151 / 5755 MHz

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

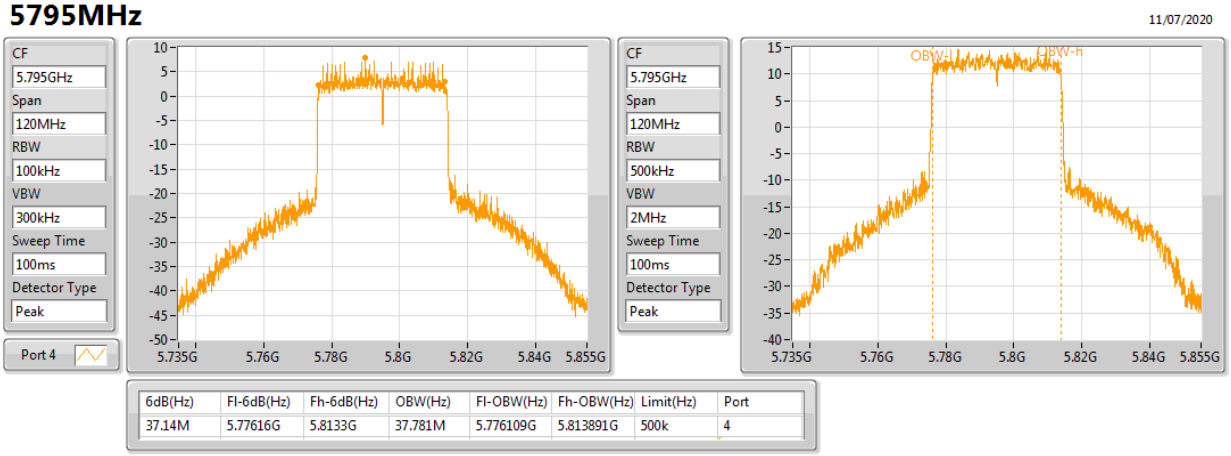
5755MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 6 / CH 159 / 5795 MHz

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

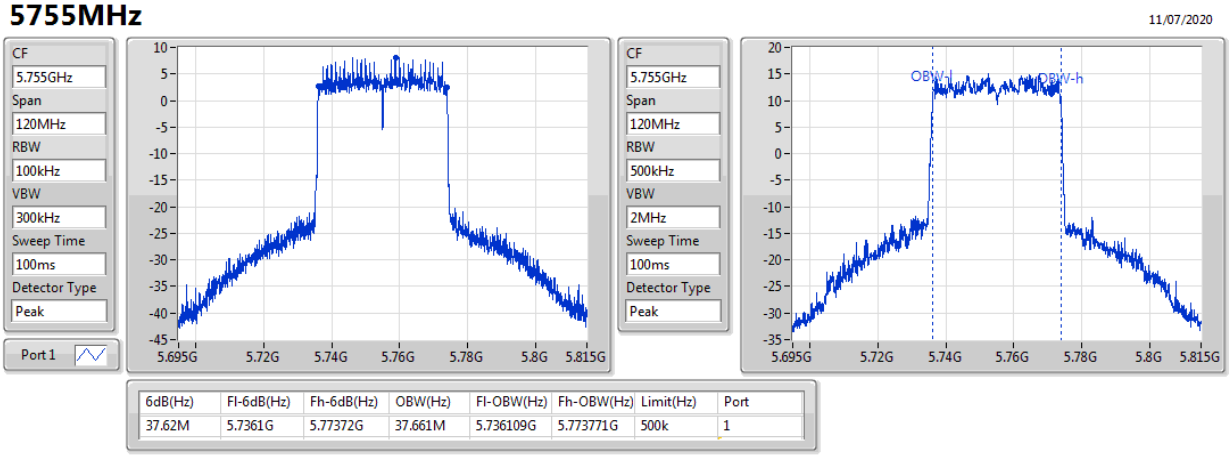
5795MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 3 / CH 151 / 5755 MHz

802.11ax HEW40-BF_Nss2,(MCS0)_4TX **EBW**

5755MHz

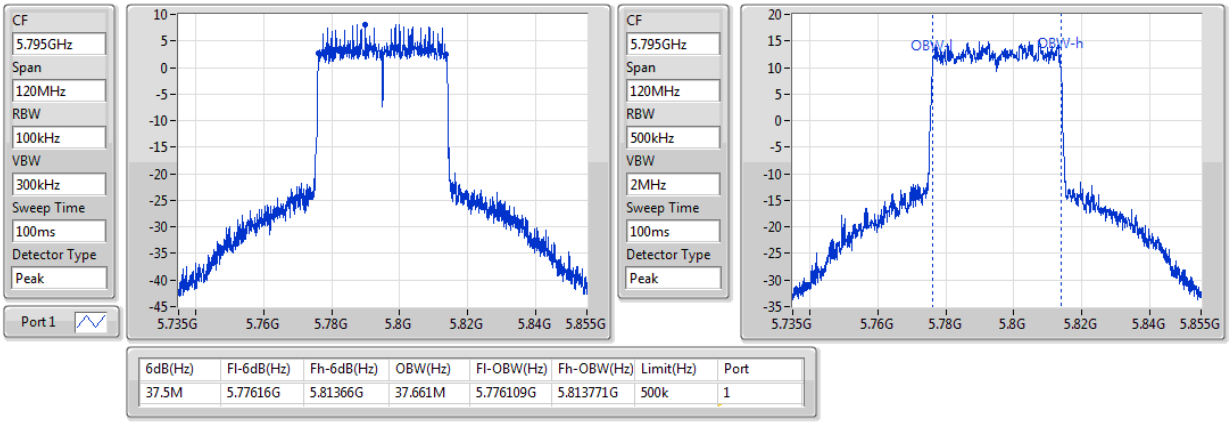


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.62M	5.7361G	5.77372G	37.661M	5.736109G	5.773771G	500k	1

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 3 / CH 159 / 5795 MHz

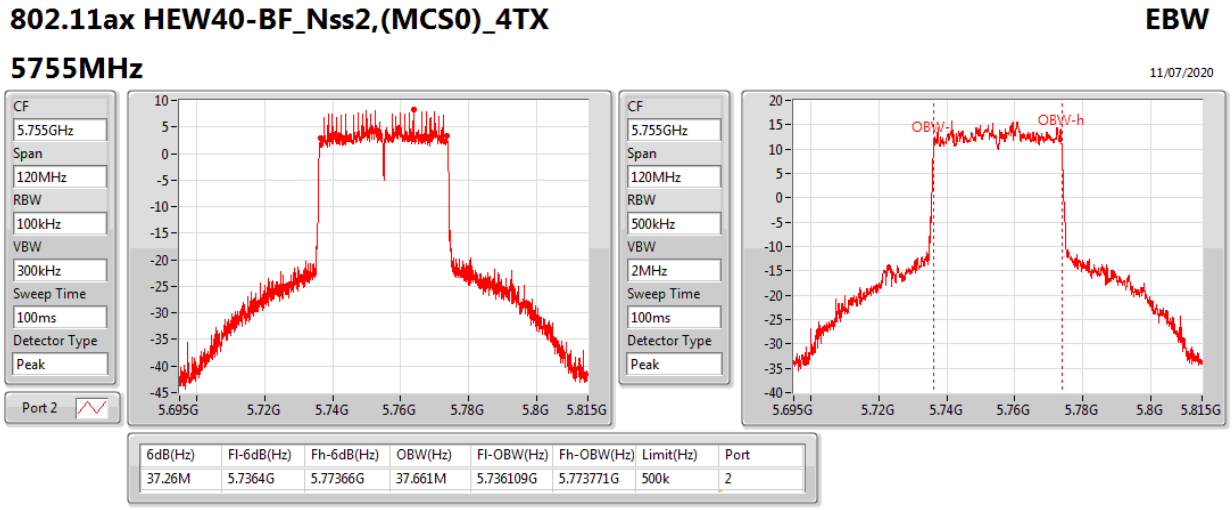
802.11ax HEW40-BF_Nss2,(MCS0)_4TX **EBW**

5795MHz

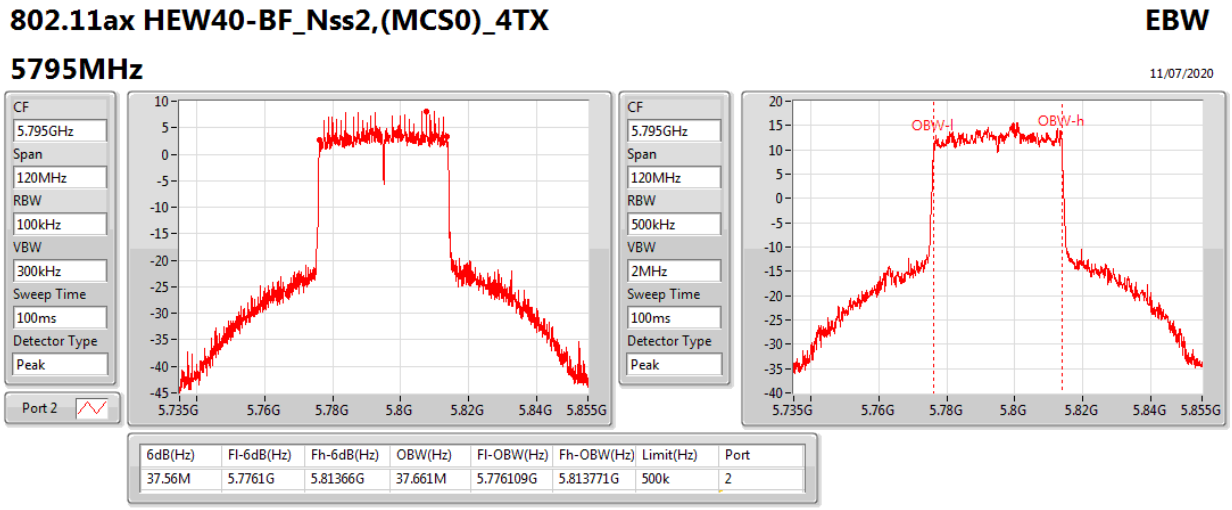


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	5.77616G	5.81366G	37.661M	5.776109G	5.813771G	500k	1

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 4 / CH 151 / 5755 MHz



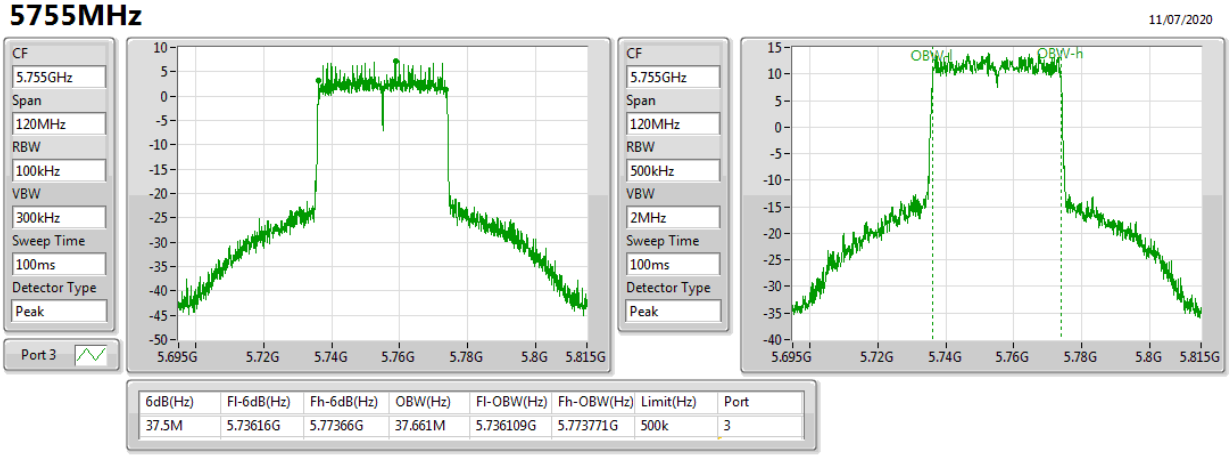
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 4 / CH 159 / 5795 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 5 / CH 151 / 5755 MHz

802.11ax HEW40-BF_Nss2,(MCS0)_4TX **EBW**

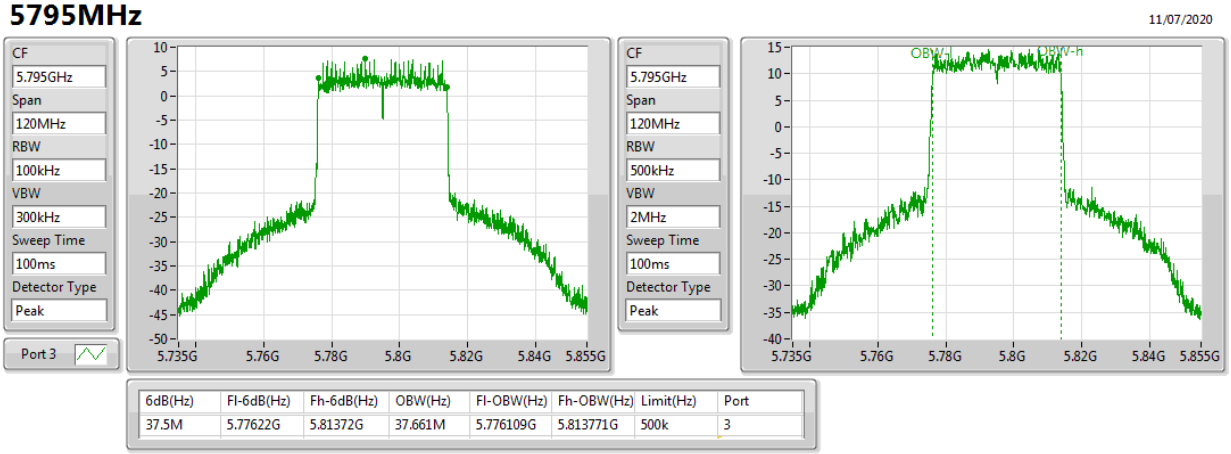
5755MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 5 / CH 159 / 5795 MHz

802.11ax HEW40-BF_Nss2,(MCS0)_4TX **EBW**

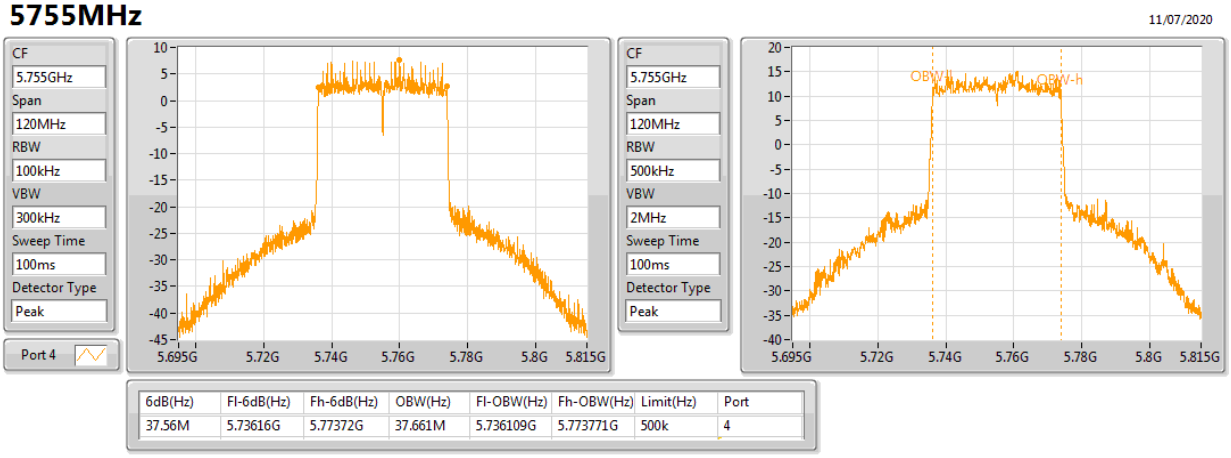
5795MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 6 / CH 151 / 5755 MHz

802.11ax HEW40-BF_Nss2,(MCS0)_4TX **EBW**

5755MHz

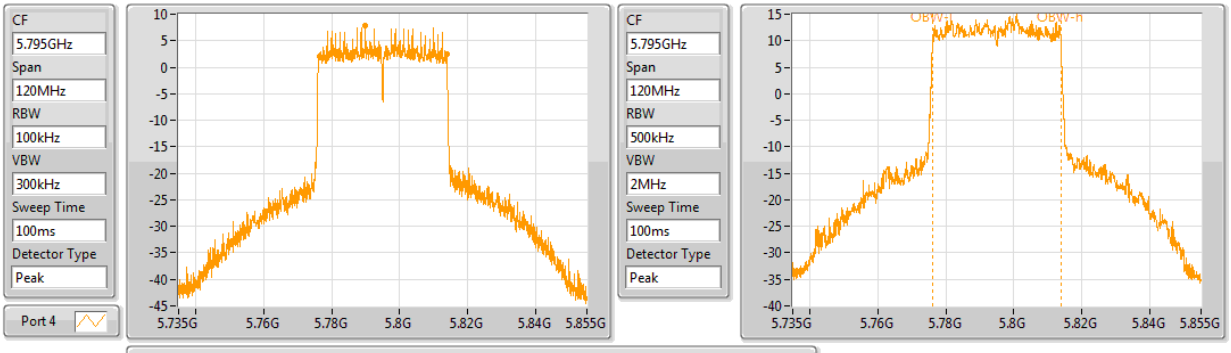


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.56M	5.73616G	5.77372G	37.661M	5.736109G	5.773771G	500k	4

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 6 / CH 159 / 5795 MHz

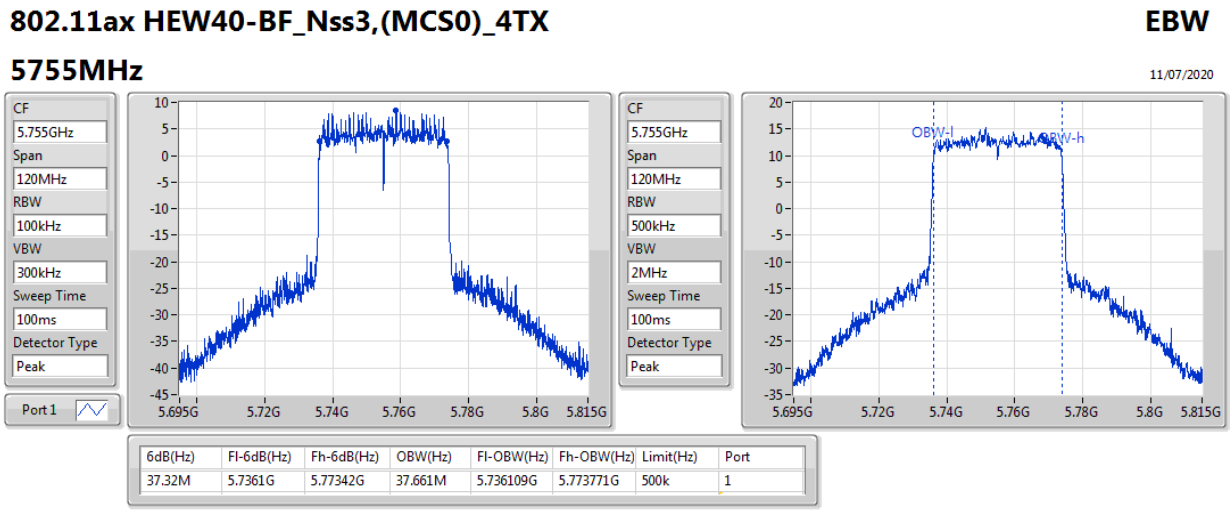
802.11ax HEW40-BF_Nss2,(MCS0)_4TX **EBW**

5795MHz

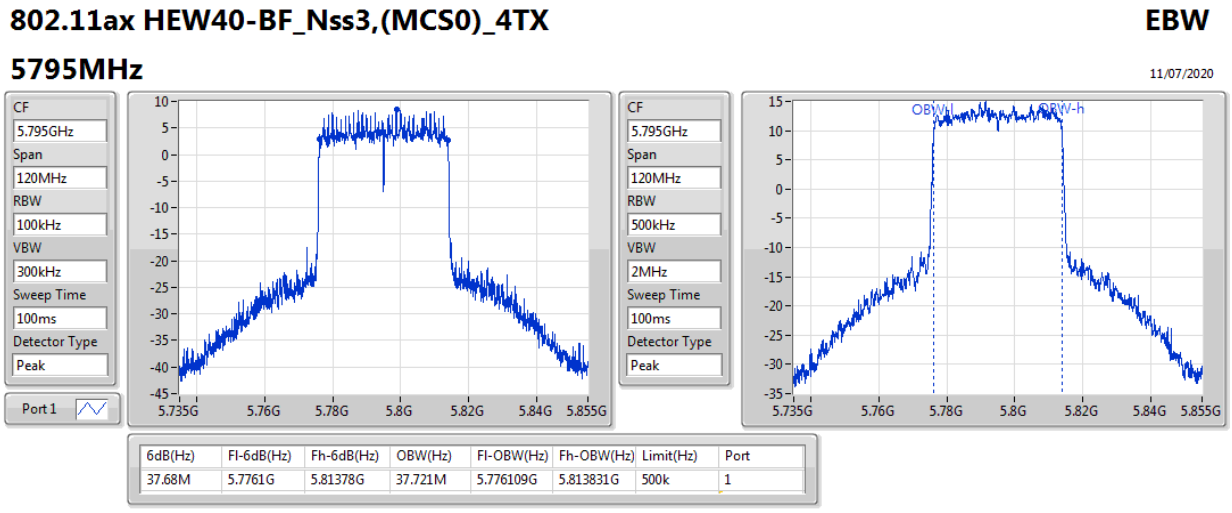


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.38M	5.77634G	5.81372G	37.661M	5.776109G	5.813771G	500k	4

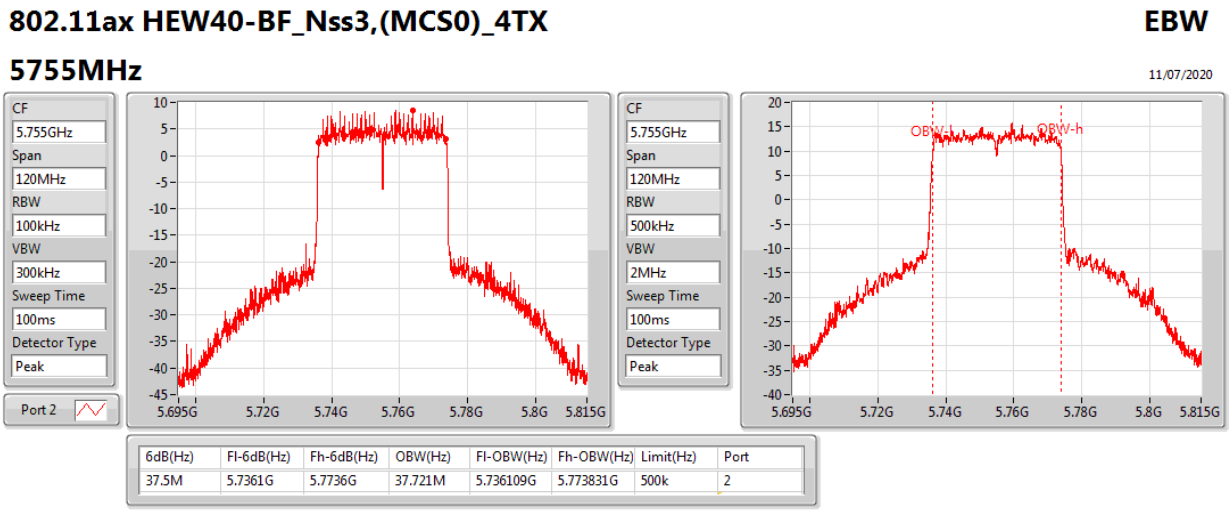
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 3 / CH 151 / 5755 MHz



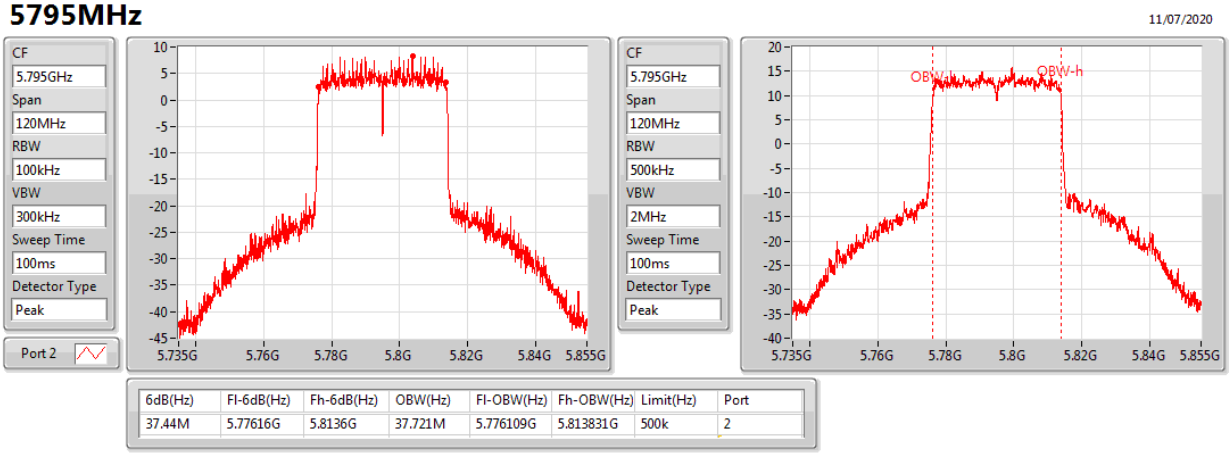
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 3 / CH 159 / 5795 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 4 / CH 151 / 5755 MHz



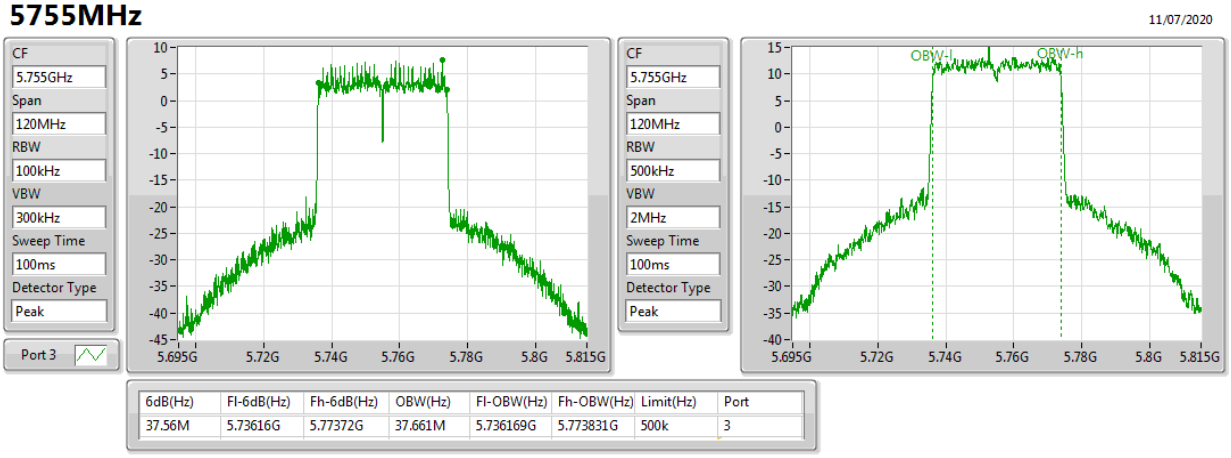
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 4 / CH 159 / 5795 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 5 / CH 151 / 5755 MHz

802.11ax HEW40-BF_Nss3,(MCS0)_4TX **EBW**

5755MHz

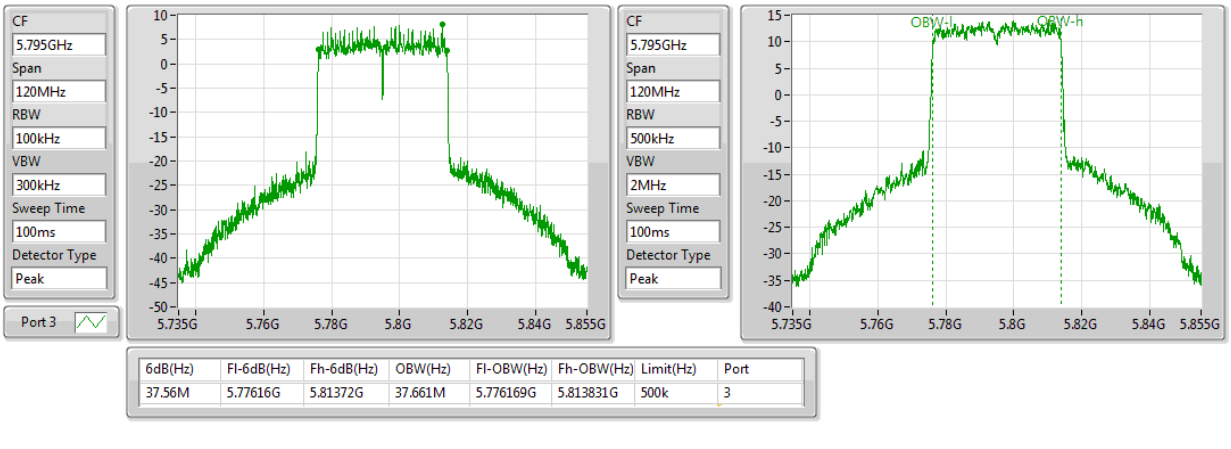


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.56M	5.73616G	5.77372G	37.661M	5.736169G	5.773831G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 5 / CH 159 / 5795 MHz

802.11ax HEW40-BF_Nss3,(MCS0)_4TX **EBW**

5795MHz

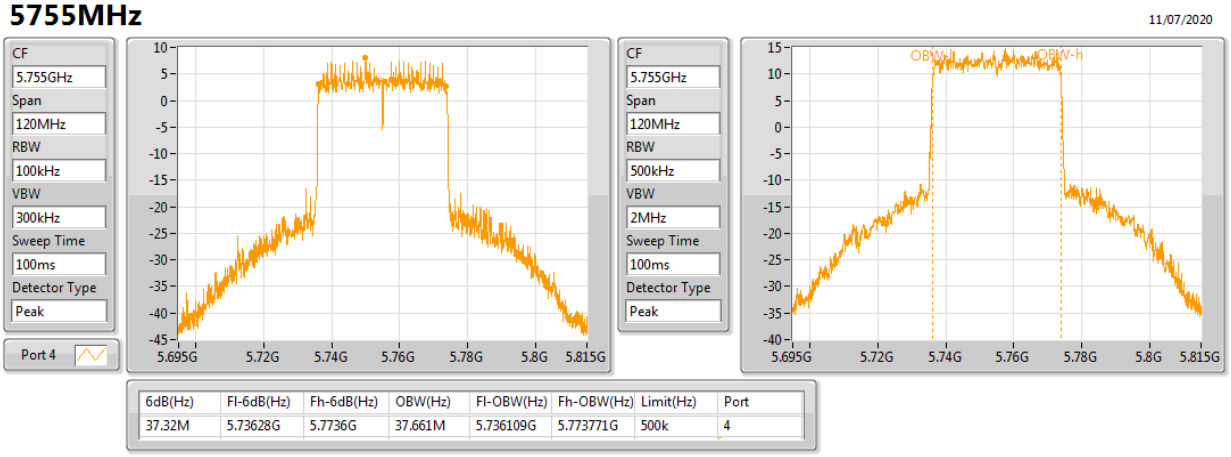


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.56M	5.77616G	5.81372G	37.661M	5.776169G	5.813831G	500k	3

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 6 / CH 151 / 5755 MHz

802.11ax HEW40-BF_Nss3,(MCS0)_4TX **EBW**

5755MHz

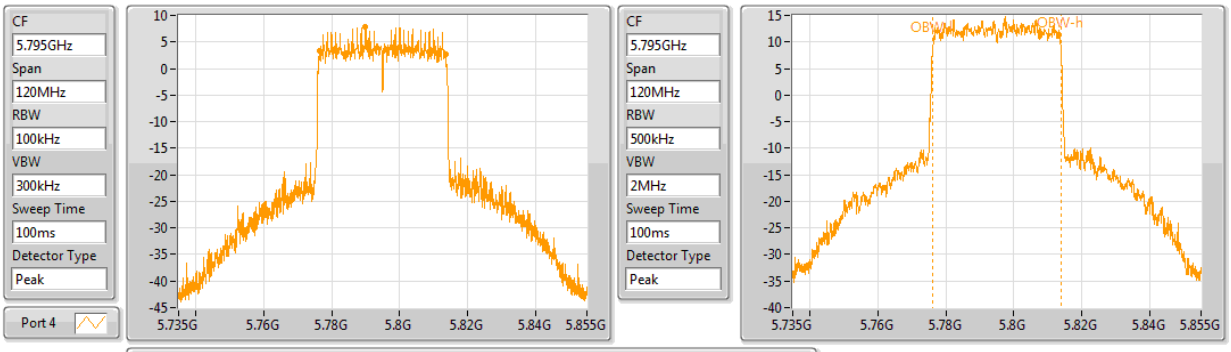


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.32M	5.73628G	5.7736G	37.661M	5.736109G	5.773771G	500k	4

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 6 / CH 159 / 5795 MHz

802.11ax HEW40-BF_Nss3,(MCS0)_4TX **EBW**

5795MHz



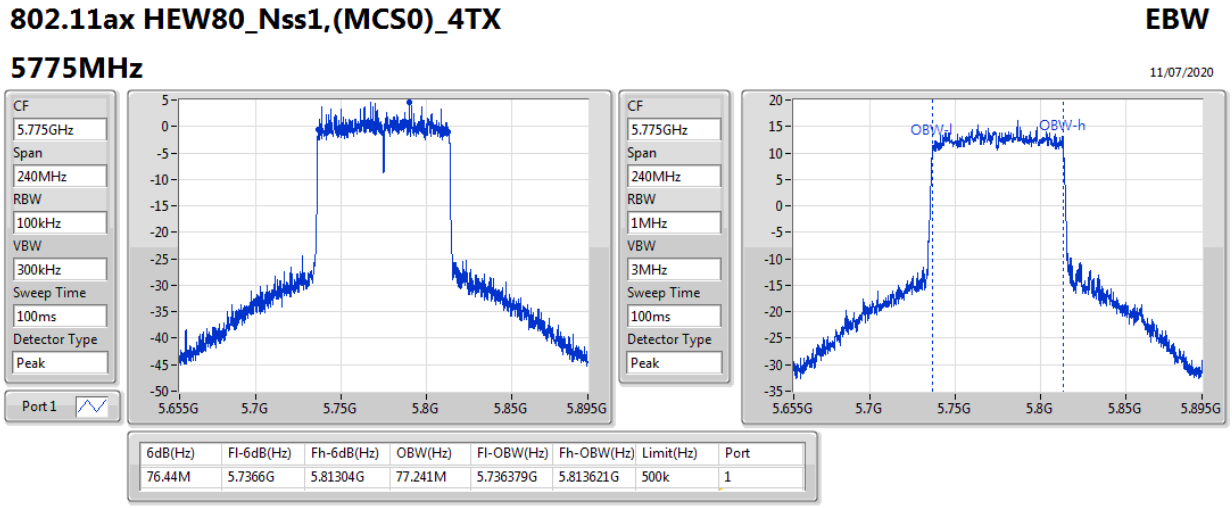
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.26M	5.77634G	5.8136G	37.601M	5.776169G	5.813771G	500k	4

Configuration IEEE 802.11ax 80MHz

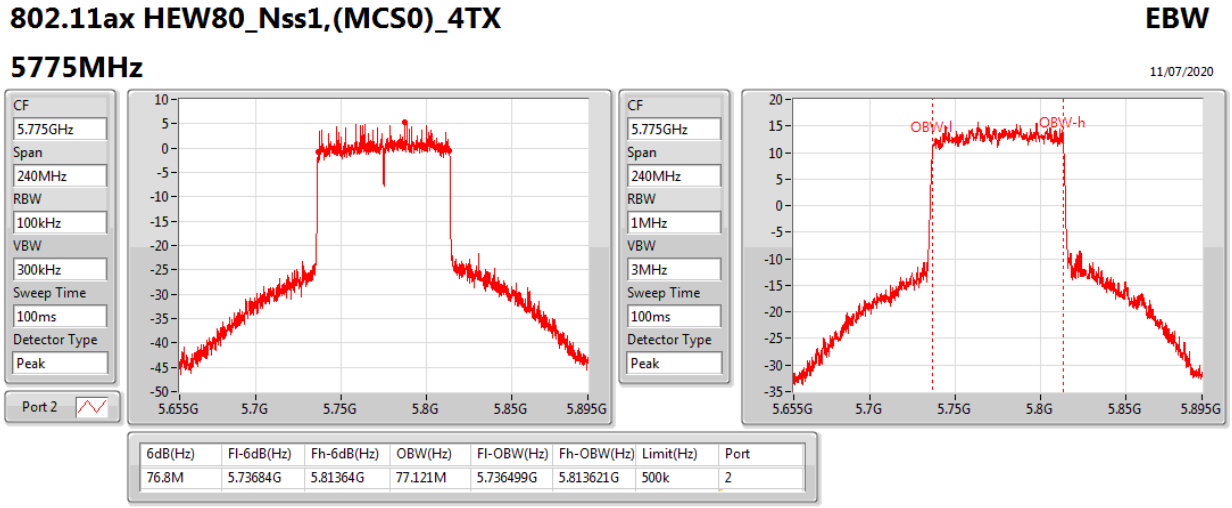
6dB Bandwidth (MHz)								
Mode	Number of Transmit Chains (NTX)	Frequency	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Min. Limit (kHz)	Test Result
802.11ax 80MHz (CDD)	1 stream 4TX	5775 MHz	76.440	76.800	76.320	76.800	500	**PASS**
802.11ax 80MHz (TXBF)	1 stream 4TX	5775 MHz	76.080	76.680	76.320	77.160	500	**PASS**
802.11ax 80MHz (TXBF)	2 stream 4TX	5775 MHz	75.720	76.680	76.440	76.680	500	**PASS**
802.11ax 80MHz (TXBF)	3 stream 4TX	5775 MHz	77.280	76.200	77.160	76.920	500	**PASS**

99% Occupied Bandwidth (MHz)							
Mode	Number of Transmit Chains (NTX)	Frequency	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Test Result
802.11ax 80MHz (CDD)	1 stream 4TX	5775 MHz	77.241	77.121	77.121	77.241	**PASS**
802.11ax 80MHz (TXBF)	1 stream 4TX	5775 MHz	77.241	77.121	77.241	77.121	**PASS**
802.11ax 80MHz (TXBF)	2 stream 4TX	5775 MHz	77.121	77.241	77.241	77.241	**PASS**
802.11ax 80MHz (TXBF)	3 stream 4TX	5775 MHz	77.121	77.241	77.121	77.241	**PASS**

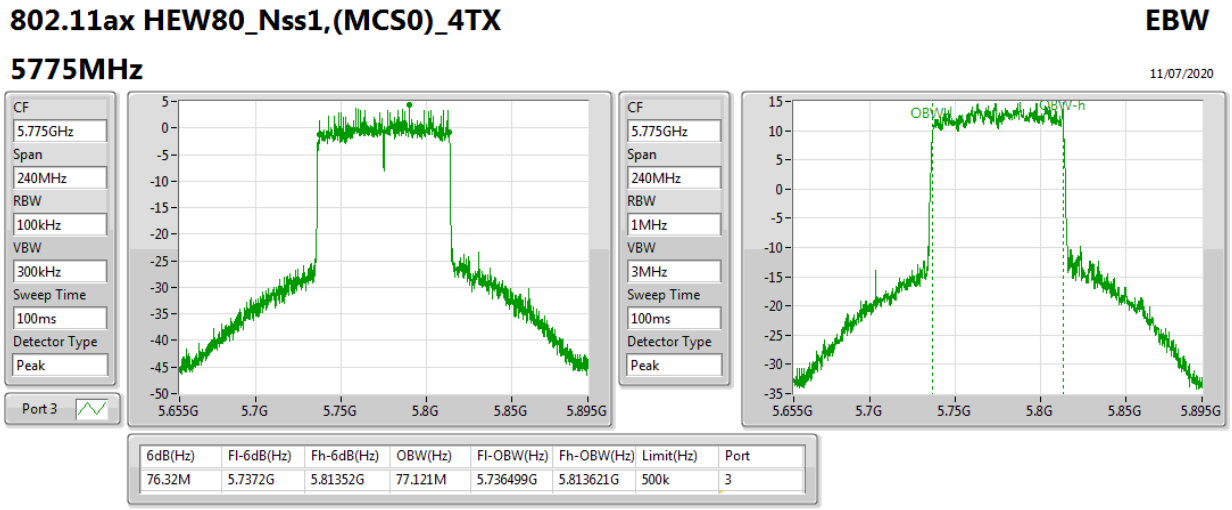
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 3 / CH 155 / 5775 MHz



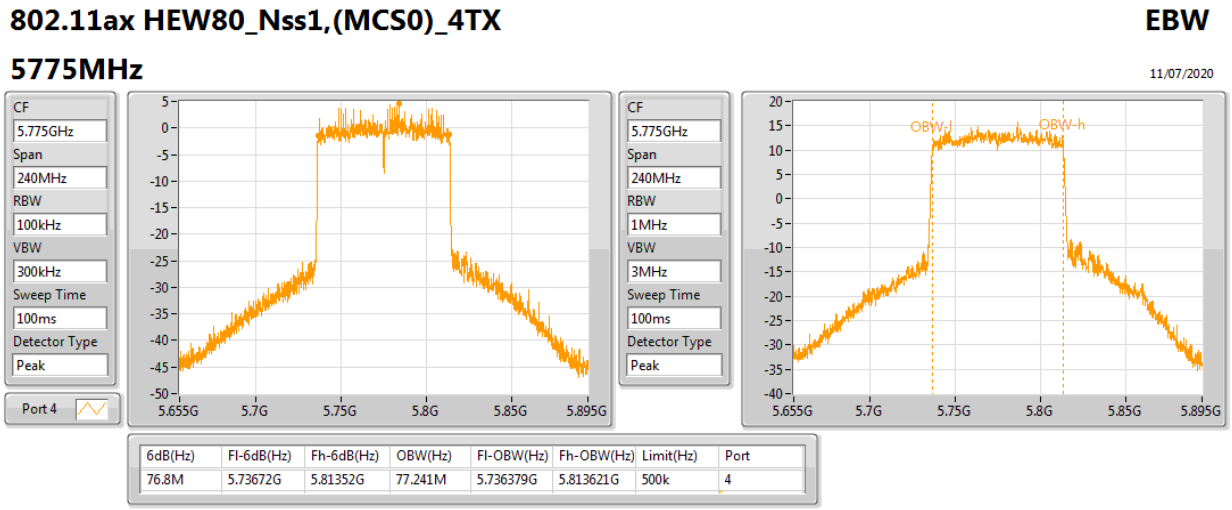
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 4 / CH 155 / 5775 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 5 / CH 155 / 5775 MHz



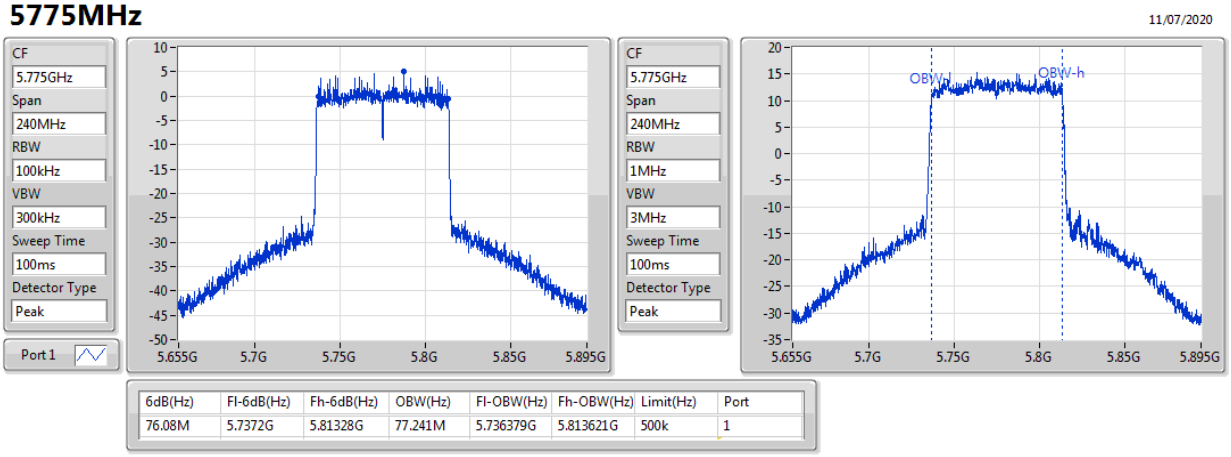
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T CDD / Ant. 6 / CH 155 / 5775 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 3 / CH 155 / 5775 MHz

802.11ax HEW80-BF_Nss1,(MCS0)_4TX **EBW**

5775MHz

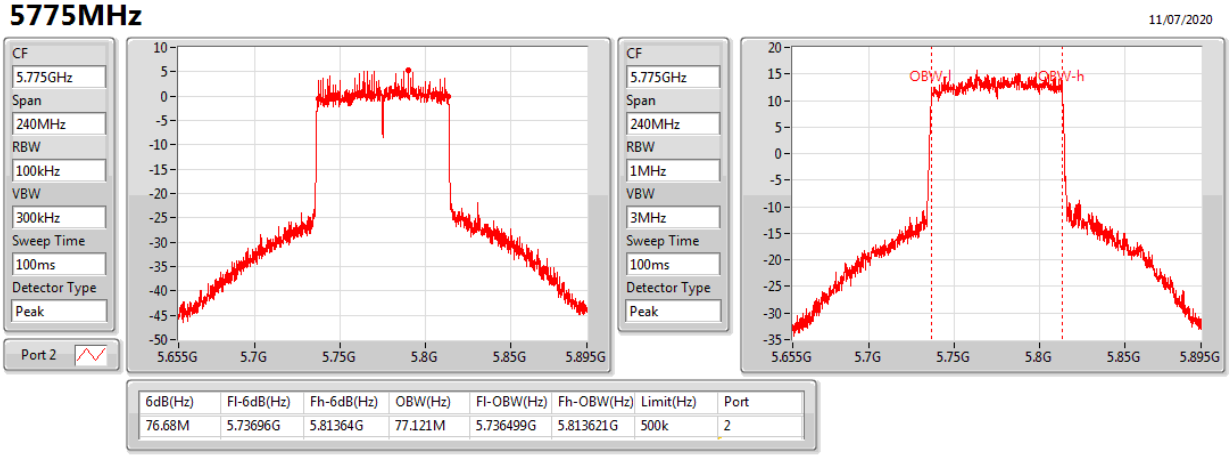


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.08M	5.7372G	5.81328G	77.241M	5.736379G	5.813621G	500k	1

6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 4 / CH 155 / 5775 MHz

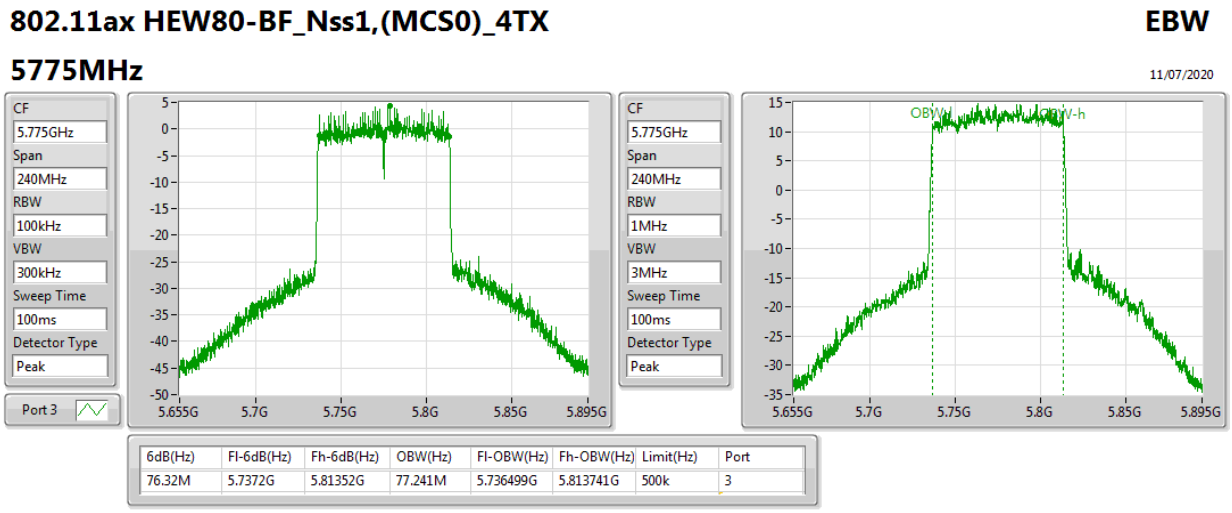
802.11ax HEW80-BF_Nss1,(MCS0)_4TX **EBW**

5775MHz

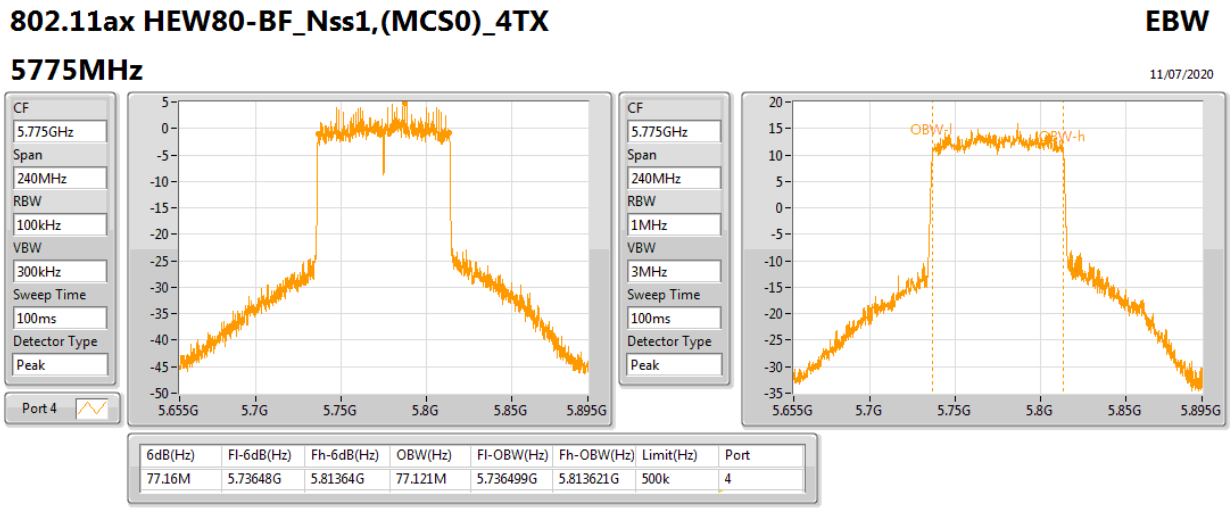


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.68M	5.73696G	5.81364G	77.121M	5.736499G	5.813621G	500k	2

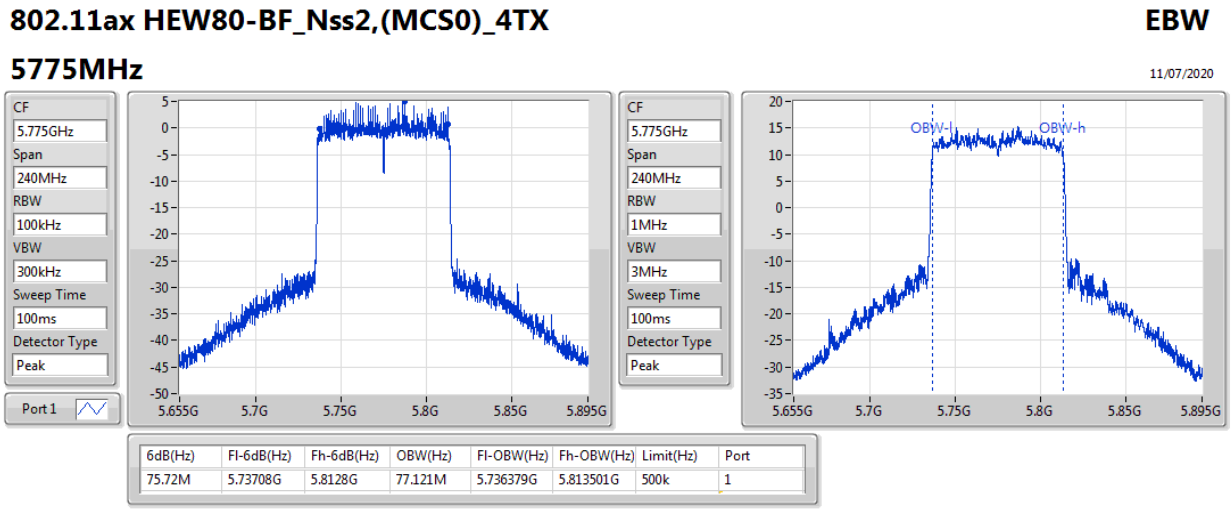
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 5 / CH 155 / 5775 MHz



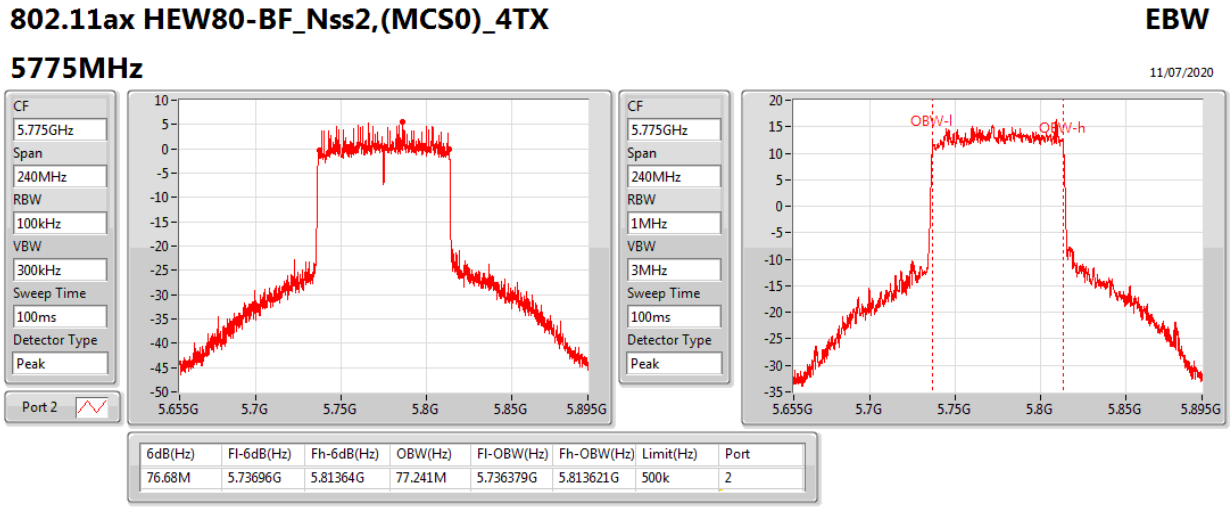
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS0 / 1S4T TXBF / Ant. 6 / CH 155 / 5775 MHz



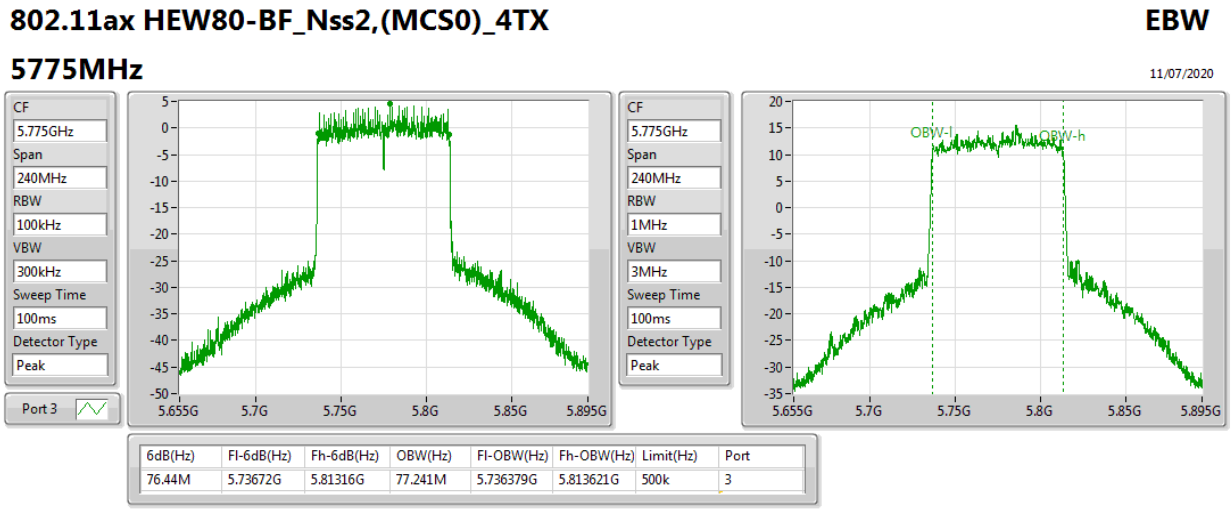
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 3 / CH 155 / 5775 MHz



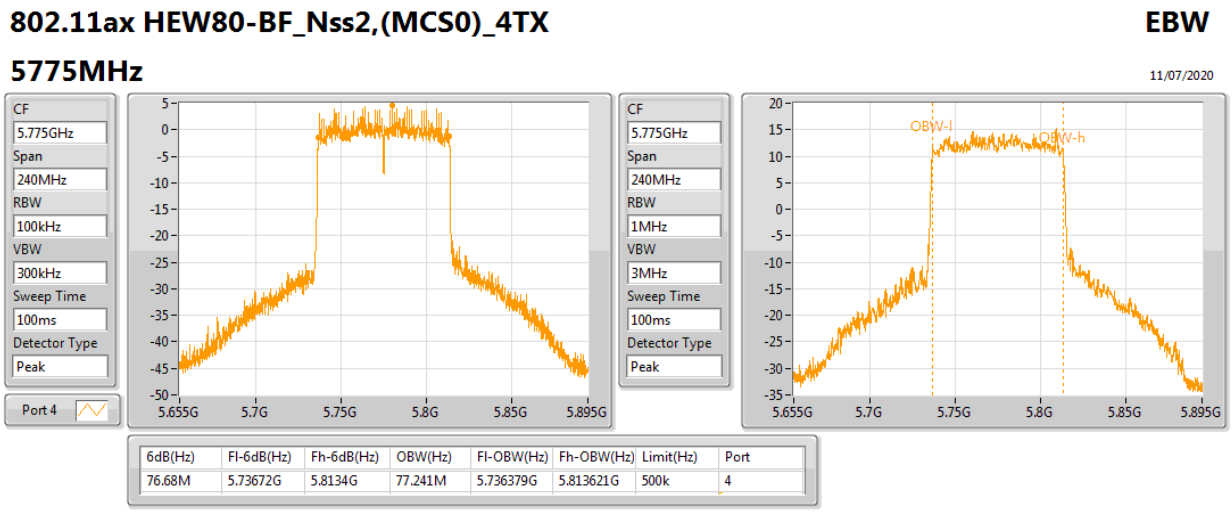
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 4 / CH 155 / 5775 MHz



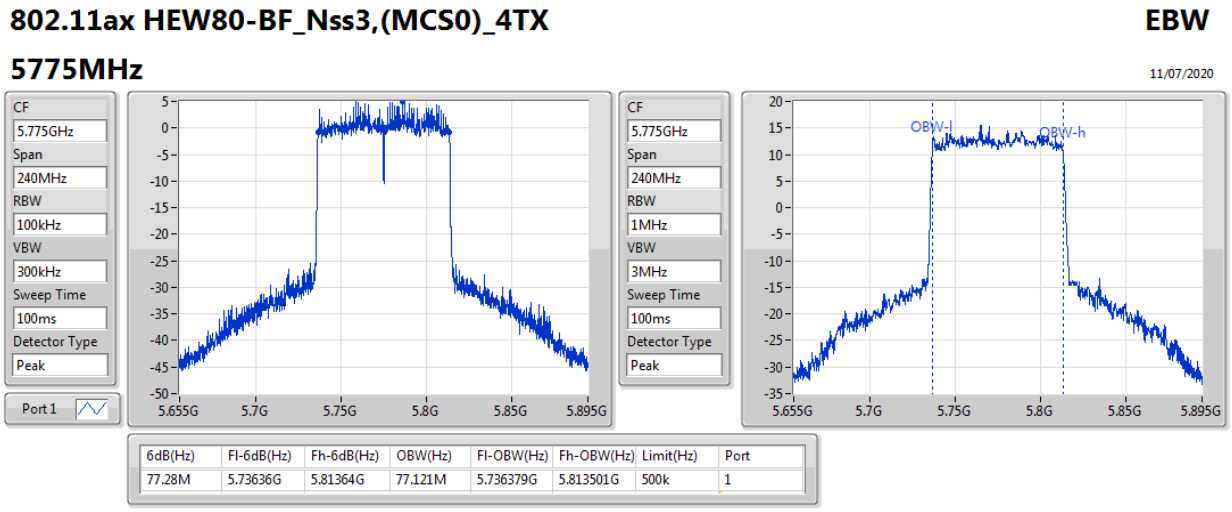
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 5 / CH 155 / 5775 MHz



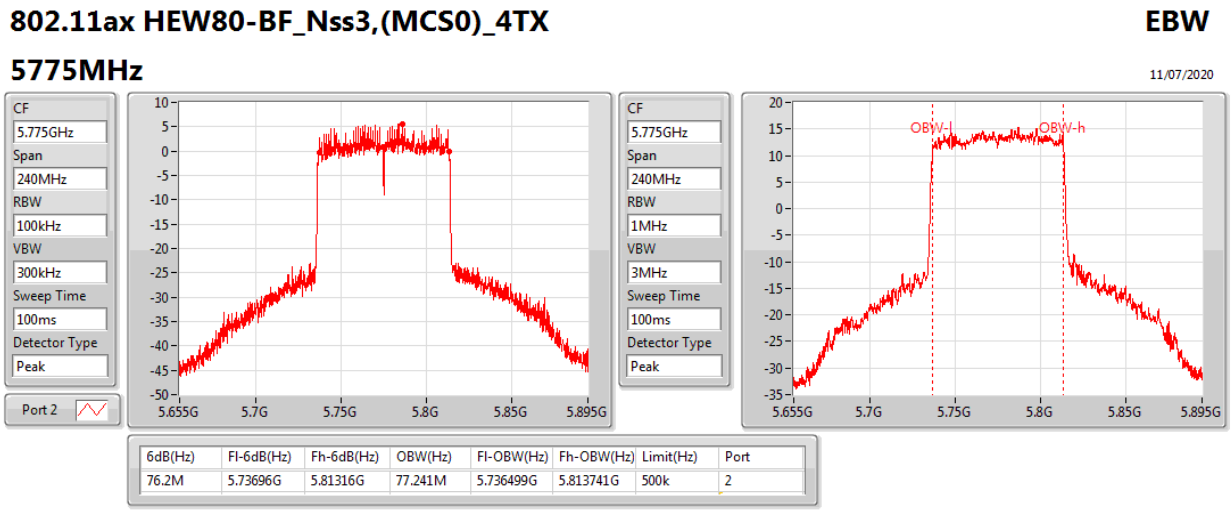
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 2 MCS0 / 2S4T TXBF / Ant. 6 / CH 155 / 5775 MHz



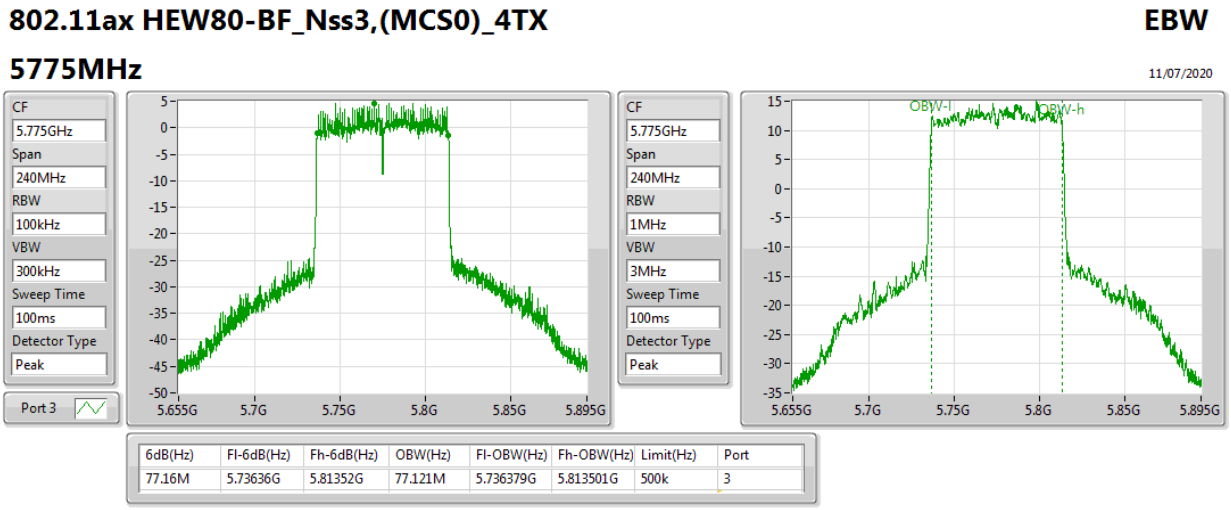
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 3 / CH 155 / 5775 MHz



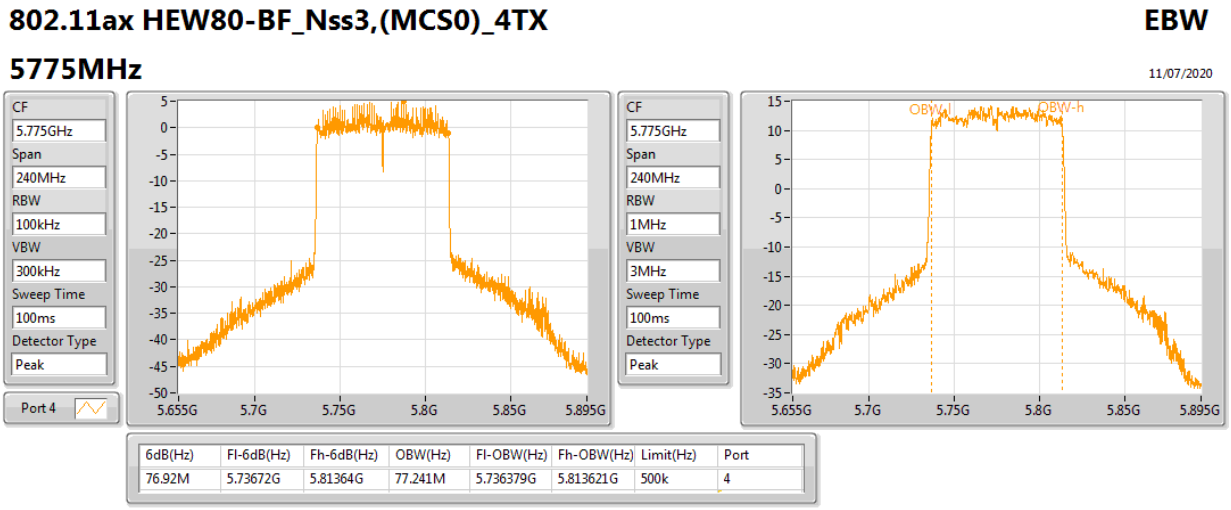
6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 4 / CH 155 / 5775 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 5 / CH 155 / 5775 MHz



6 dB Bandwidth and 99% Occupied Plot on Configuration IEEE 802.11ax 80MHz / Nss 3 MCS0 / 3S4T TXBF / Ant. 6 / CH 155 / 5775 MHz



2.4. Maximum Conducted Output Power Measurement

2.4.1. Limit

Operation Band	EUT Category		Limit
U-NII-1	☐	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	☐	Fixed point-to-point Access Point	1 Watt (30 dBm)
	☒	Indoor Access Point	1 Watt (30 dBm)
	☐	Mobile and Portable client device	250mW (24 dBm)
U-NII-3	☒	---	1 Watt (30 dBm)

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};

Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

2.4.2. Measuring Instruments and Setting

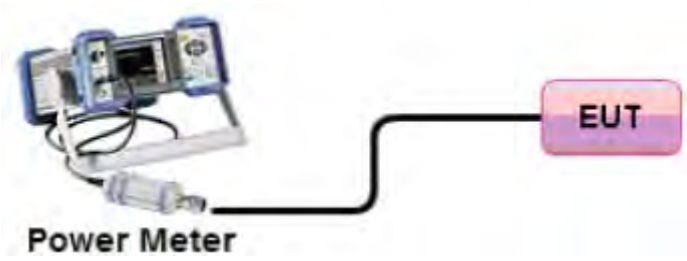
Please refer to section 3 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Power Meter Paramete	Setting
Filter No.	Auto
Measurement time	0.135 s ~ 26 s
Power Sensor	E9327A
Power Meter	E4416A

2.4.3. Test Procedures

1. Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v02r01, in section “Maximum conducted output power Method AVGPM-G” , 12/14/2017
2. The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power sensor and enable the trigger function to get the all on time transmission . Record the average power level.
3. When measuring maximum conducted output power with multiple antenna systems, add every result of the values by mathematic formula.

2.4.4. Test Setup Layout

Maximum Conducted Output Power


2.4.5. Test Deviation

There is no deviation with the original standard.

2.4.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4.7. Test Result of Maximum Conducted Output Power

Configuration IEEE 802.11a

<OFDM, 1S2T, CDD>

Channel	Frequency	Conducted Power (dBm)			Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 1	Ant. 2	Total			
36	5180 MHz	20.79	21.37	24.10	4.46	30.00	**PASS**
40	5200 MHz	24.45	24.88	27.68	4.51	30.00	**PASS**
48	5240 MHz	24.01	24.35	27.19	4.66	30.00	**PASS**

<OFDM, 1S4T, CDD>

Channel	Frequency	Conducted Power (dBm)					Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
149	5745 MHz	22.83	22.51	21.82	22.33	28.41	4.79	30.00	**PASS**
157	5785 MHz	21.03	21.13	20.80	21.04	27.02	4.63	30.00	**PASS**
165	5825 MHz	22.42	22.61	22.01	21.93	28.27	4.60	30.00	**PASS**

Note:

5180 MHz= Antenna Gain= 4.46dBi <6dBi, so the limit doesn't reduce.

5200 MHz= Antenna Gain= 4.51dBi <6dBi, so the limit doesn't reduce.

5240 MHz= Antenna Gain= 4.66dBi <6dBi, so the limit doesn't reduce.

5745 MHz= Antenna Gain= 4.79dBi <6dBi, so the limit doesn't reduce.

5785 MHz= Antenna Gain= 4.63dBi <6dBi, so the limit doesn't reduce.

5825 MHz= Antenna Gain= 4.60dBi <6dBi, so the limit doesn't reduce.

Configuration IEEE 802.11ax 20MHz

<Nss 1 MCS0, 1S2T, CDD>

Channel	Frequency	Conducted Power (dBm)			Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 1	Ant. 2	Total			
36	5180 MHz	20.86	21.49	24.20	4.46	30.00	**PASS**
40	5200 MHz	24.50	24.92	27.73	4.51	30.00	**PASS**
48	5240 MHz	24.17	24.44	27.32	4.66	30.00	**PASS**

<Nss 1 MCS0, 1S4T, CDD>

Channel	Frequency	Conducted Power (dBm)					Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
149	5745 MHz	23.23	22.96	22.15	22.66	28.79	4.79	30.00	**PASS**
157	5785 MHz	21.61	21.78	20.98	21.65	27.54	4.63	30.00	**PASS**
165	5825 MHz	22.59	22.89	22.49	22.13	28.55	4.60	30.00	**PASS**

Note:

5180 MHz= Antenna Gain= 4.46dBi <6dBi, so the limit doesn't reduce.

5200 MHz= Antenna Gain= 4.51dBi <6dBi, so the limit doesn't reduce.

5240 MHz= Antenna Gain= 4.66dBi <6dBi, so the limit doesn't reduce.

5745 MHz= Antenna Gain= 4.79dBi <6dBi, so the limit doesn't reduce.

5785 MHz= Antenna Gain= 4.63dBi <6dBi, so the limit doesn't reduce.

5825 MHz= Antenna Gain= 4.60dBi <6dBi, so the limit doesn't reduce.

<Nss 1 MCS0, 1S2T, TXBF>

Channel	Frequency	Conducted Power (dBm)			Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 1	Ant. 2	Total			
36	5180 MHz	21.36	21.85	24.62	5.80	30.00	**PASS**
40	5200 MHz	23.87	24.19	27.04	5.93	30.00	**PASS**
48	5240 MHz	23.39	23.78	26.60	6.01	29.99	**PASS**

<Nss 1 MCS0, 1S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
149	5745 MHz	23.10	23.05	22.30	22.79	28.84	6.81	29.19	**PASS**
157	5785 MHz	20.37	20.74	19.63	20.56	26.37	6.69	29.31	**PASS**
165	5825 MHz	22.59	22.89	22.70	22.36	28.66	6.87	29.13	**PASS**

Note:

5180 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.80dB<6dBi, so the limit doesn't reduce.

5200 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.93dBi<6dBi, so the limit doesn't reduce.

5240 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.01dBi>6dBi, so the power limit shall be reduced to 30-(6.01-6)=29.99dBm.

5745 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.81dBi>6dBi, so the power limit shall be reduced to 30-(6.81-6)=29.19dBm.

5785 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.69dBi>6dBi, so the power limit shall be reduced to 30-(6.69-6)=29.31dBm.

5825 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.87dBi>6dBi, so the power limit shall be reduced to 30-(6.87-6)=29.13dBm.

<Nss 2 MCS0, 2S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
149	5745 MHz	23.26	23.23	22.09	22.87	28.91	5.40	30.00	**PASS**
157	5785 MHz	22.18	22.54	21.80	22.35	28.25	5.36	30.00	**PASS**
165	5825 MHz	22.65	23.00	22.51	22.31	28.65	5.60	30.00	**PASS**

Note:

5745 MHz= $Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.40dBi<6dBi, so the limit doesn't reduce.

5785 MHz= $Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.36dBi<6dBi, so the limit doesn't reduce.

5825 MHz= $Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.60dBi<6dBi, so the limit doesn't reduce.

<Nss 3 MCS0, 3S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
149	5745 MHz	23.13	23.27	22.12	22.90	28.90	3.44	30.00	**PASS**
157	5785 MHz	21.94	22.31	21.72	22.00	28.02	3.43	30.00	**PASS**
165	5825 MHz	22.72	23.25	22.54	22.47	28.78	3.51	30.00	**PASS**

Note:

5745 MHz= $Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 3.44dBi<6dBi, so the limit doesn't reduce.

5785 MHz= $Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 3.43dBi<6dBi, so the limit doesn't reduce.

5825 MHz= $Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 3.51dBi<6dBi, so the limit doesn't reduce.

Configuration IEEE 802.11ax 40MHz

<Nss 1 MCS0, 1S2T, CDD>

Channel	Frequency	Conducted Power (dBm)			Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 1	Ant. 2	Total			
38	5190 MHz	19.10	19.54	22.34	4.46	30.00	**PASS**
46	5230 MHz	23.72	24.08	26.91	4.67	30.00	**PASS**

<Nss 1 MCS0, 1S4T, CDD>

Channel	Frequency	Conducted Power (dBm)					Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
151	5755 MHz	23.08	22.53	22.23	22.08	28.52	4.72	30.00	**PASS**
159	5795 MHz	22.73	22.65	22.47	22.00	28.49	4.49	30.00	**PASS**

Note:

5190 MHz= Antenna Gain= 4.46dBi <6dBi, so the limit doesn't reduce.

5230 MHz= Antenna Gain= 4.67dBi <6dBi, so the limit doesn't reduce.

5755 MHz= Antenna Gain= 4.72dBi <6dBi, so the limit doesn't reduce.

5795 MHz= Antenna Gain= 4.49dBi <6dBi, so the limit doesn't reduce.

<Nss 1 MCS0, 1S2T, TXBF>

Channel	Frequency	Conducted Power (dBm)			Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 1	Ant. 2	Total			
38	5190 MHz	19.58	20.06	22.84	5.89	30.00	**PASS**
46	5230 MHz	24.35	24.85	27.62	5.96	30.00	**PASS**

<Nss 1 MCS0, 1S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total Conducted Power			
151	5755 MHz	23.17	22.64	22.29	22.05	28.58	6.74	29.26	**PASS**
159	5795 MHz	22.75	22.62	22.52	22.08	28.52	6.66	29.34	**PASS**

Note:

5190 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.89dB<6dBi, so the limit doesn't reduce.

5230 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.96dBi<6dBi, so the limit doesn't reduce.

5755 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.74dBi>6dBi, so the power limit shall be reduced to 30-(6.74-6)=29.26dBm.

5795 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.66dBi>6dBi, so the power limit shall be reduced to 30-(6.66-6)=29.34dBm.

<Nss 2 MCS0, 2S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
151	5755 MHz	23.06	22.79	22.09	22.12	28.56	5.45	30.00	**PASS**
159	5795 MHz	22.78	22.61	22.55	22.05	28.53	5.31	30.00	**PASS**

Note:

5755 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.45dBi<6dBi, so the limit doesn't reduce.

5795 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.31dBi<6dBi, so the limit doesn't reduce.

<Nss 3 MCS0, 3S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
151	5755 MHz	23.09	22.96	22.31	22.12	28.66	3.42	30.00	**PASS**
159	5795 MHz	22.85	22.76	22.57	22.27	28.64	3.34	30.00	**PASS**

Note:

5755 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.42dBi<6dBi, so the limit doesn't reduce.

5795 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.34dBi<6dBi, so the limit doesn't reduce.

Configuration IEEE 802.11ax 80MHz

<Nss 1 MCS0, 1S2T, CDD>

Channel	Frequency	Conducted Power (dBm)			Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 1	Ant. 2	Total			
42	5210 MHz	18.85	19.50	22.20	4.56	30.00	**PASS**

<Nss 1 MCS0, 1S4T, CDD>

Channel	Frequency	Conducted Power (dBm)					Antenna Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
155	5775 MHz	22.57	22.52	22.18	22.01	28.35	4.83	30.00	**PASS**

Note:

5210 MHz= Antenna Gain= 4.56dBi <6dBi, so the limit doesn't reduce.

5775 MHz= Antenna Gain= 4.83dBi <6dBi, so the limit doesn't reduce.

<Nss 1 MCS0, 1S2T, TXBF >

Channel	Frequency	Conducted Power (dBm)			Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 1	Ant. 2	Total			
42	5210 MHz	19.54	20.18	22.88	5.84	30.00	**PASS**

<Nss 1 MCS0, 1S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
155	5775 MHz	22.53	22.38	22.36	22.17	28.38	6.73	29.27	**PASS**

Note:

5210 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.84dB<6dBi, so the limit doesn't reduce.

5775 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.73dBi>6dBi, so the power limit shall be reduced to 30-(6.73-6)=29.27dBm.

<Nss 2 MCS0, 2S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
155	5775 MHz	22.84	22.61	22.50	22.26	28.58	5.39	30.00	**PASS**

Note:

5775 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.39dBi<6dBi, so the limit doesn't reduce.

<Nss 3 MCS0, 3S4T, TXBF>

Channel	Frequency	Conducted Power (dBm)					Directional Gain (dBi)	Max. Limit (dBm)	Result
		Ant. 3	Ant. 4	Ant. 5	Ant. 6	Total			
155	5775 MHz	22.75	22.7	22.46	22.04	28.52	3.61	30.00	**PASS**

Note:

5775 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.61dBi<6dBi, so the limit doesn't reduce.

2.5. Power Spectral Density Measurement

2.5.1. Limit

Operation Band	EUT Category		Limit
U-NII-1	☐	Outdoor Access Point	17dBm/ MHz
	☐	Fixed point-to-point Access Point	
	☒	Indoor Access Point	
	☐	Mobile and Portable client device	11dBm/ MHz
U-NII-3	☒	---	30 dBm/500kHz

2.5.2. Measuring Instruments and Setting

Please refer to section 3 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1 MHz
VBW	≥ 3 MHz
Detector	RMS
Trace	Average
Sweep Time	Auto, trigger set to “free run”
Trace average	100 times

For U-NII-3 band:

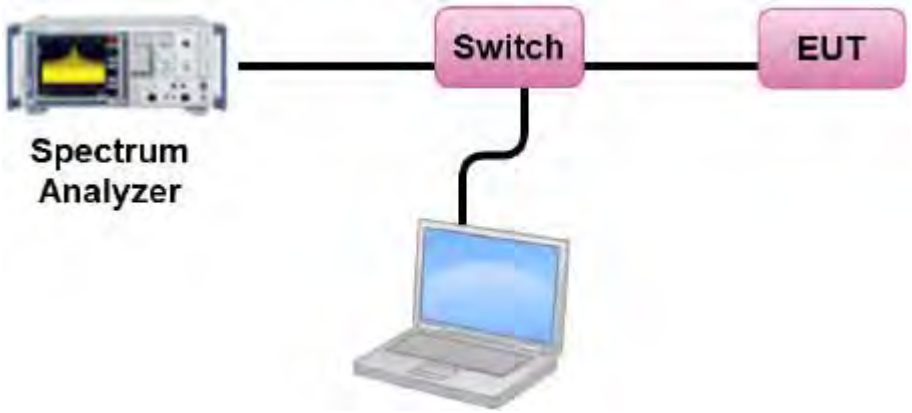
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	500kHz
VBW	≥ 3 RBW
Detector	RMS
Trace	Average
Sweep Time	Auto, trigger set to “free run”
Trace average	100 times

2.5.3. Test Procedures

1. The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.
2. For U-NII-1 Bands, PSD Measure was performed in accordance with 789033 D02 General UNII Test Procedures New Rules v02r01, in section “Maximum conducted output power (E)(2)(d) Method SA-2”, 12/14/2017.
3. For U-NII-3 Band, PSD Measure was performed in accordance with 789033 D02 General UNII Test Procedures New Rules v02r01, in section “Maximum Power Spectral Density (F)(5)” , 12/14/2017
4. Multiple antenna systems was performed in accordance 662911 D01 Multiple Transmitter Output v02r01 in-Band Power Spectral Density (PSD) Measurements (a) Measure and sum the spectra across the outputs (bin-by-bin summing).
5. When measuring 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 Nth output to obtain the value for the first frequency bin of the summed spectrum. The summed spectrum value for each of the other frequency bins is computed in the same way.

2.5.4. Test Setup Layout

Power Spectral Density



2.5.5. Test Deviation

There is no deviation with the original standard.

2.5.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.5.7. Test Result of Power Spectral Density

Configuration IEEE 802.11a

<OFDM / 1S2T CDD / Ant. 1 + Ant. 2>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	10.99	5.80	17.00	**PASS**
40	5200 MHz	14.66	5.93	17.00	**PASS**
48	5240 MHz	14.16	6.01	16.99	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5180 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.80dB<6dBi, so the limit doesn't reduce.

5200 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.93dBi<6dBi, so the limit doesn't reduce.

5240 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.01dBi>6dBi, so the limit shall be reduced to 17-(6.01-6)=16.99 dBm/MHz.

<OFDM / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	13.74	6.81	29.19	**PASS**
157	5785 MHz	12.55	6.69	29.31	**PASS**
165	5825 MHz	13.68	6.87	29.13	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

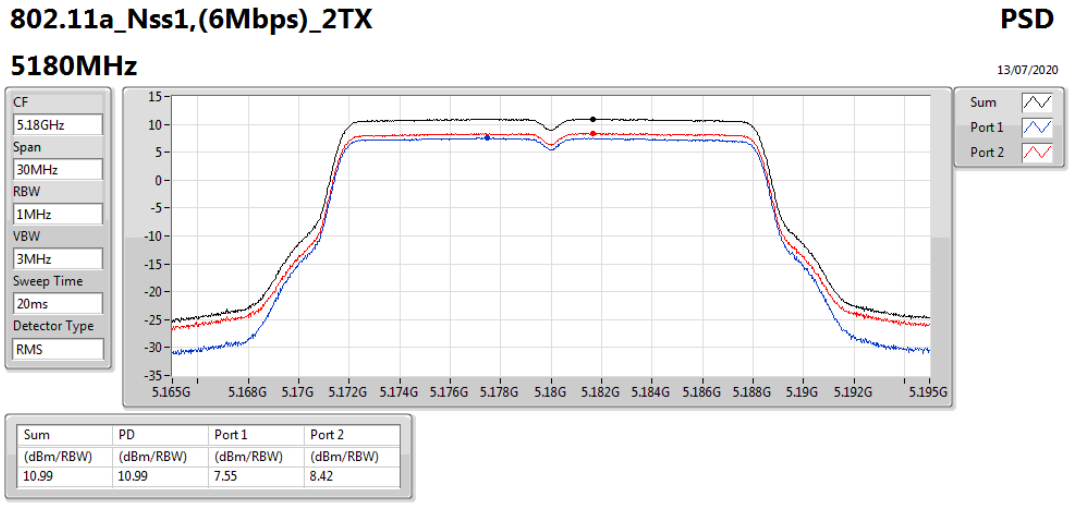
Note 3:

5745 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.81dBi>6dBi, so the limit shall be reduced to 30-(6.81-6)=29.19dBm/500kHz.

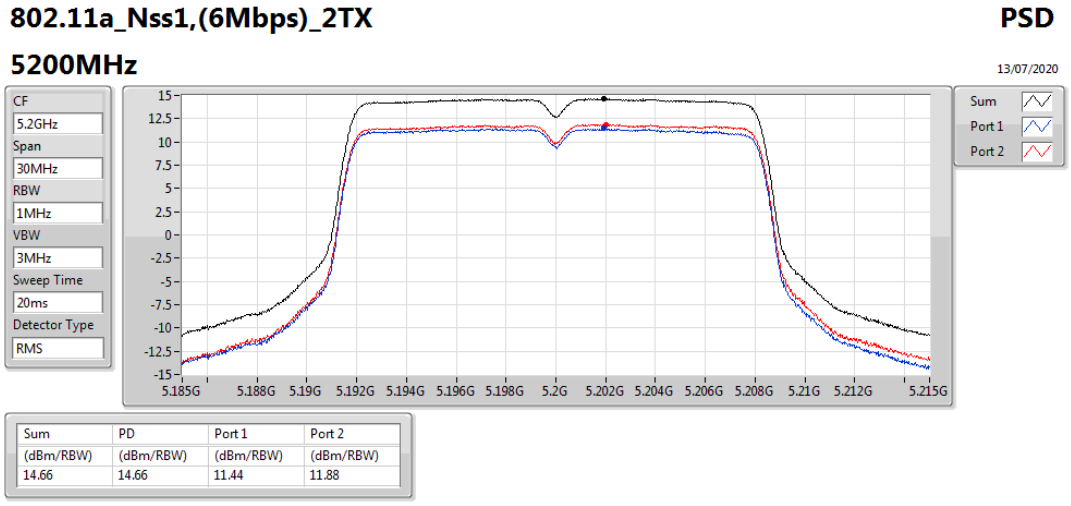
5785 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.69dBi>6dBi, so the limit shall be reduced to 30-(6.69-6)=29.31dBm/500kHz.

5825 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.87dBi>6dBi, so the limit shall be reduced to 30-(6.87-6)=29.13dBm/500kHz.

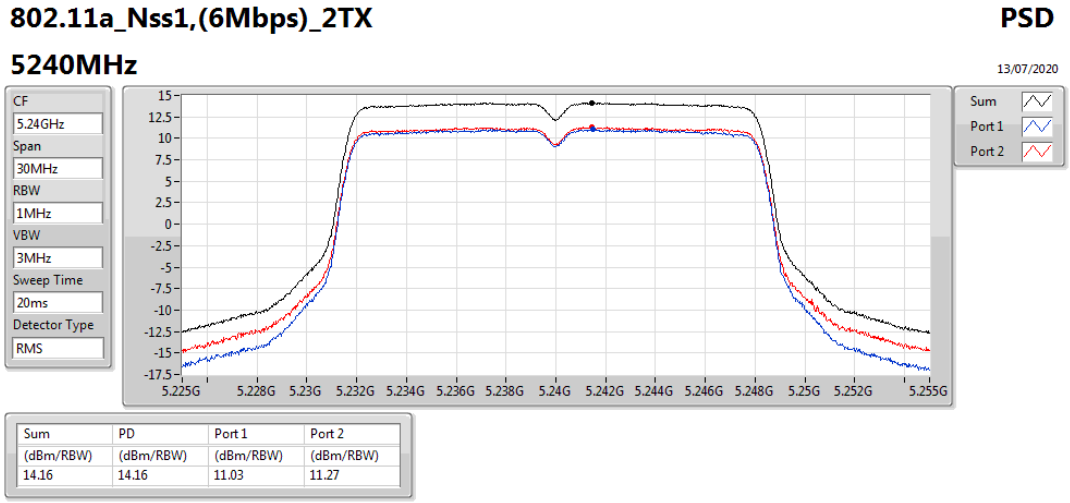
Power Density Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 1 + Ant. 2 / CH36 / 5180 MHz



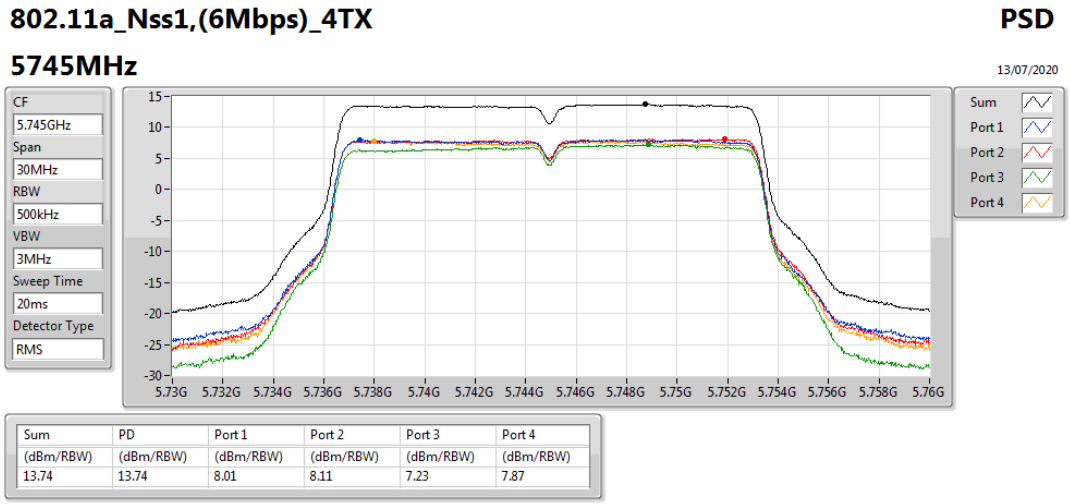
Power Density Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 1 + Ant. 2 / CH40 / 5200 MHz



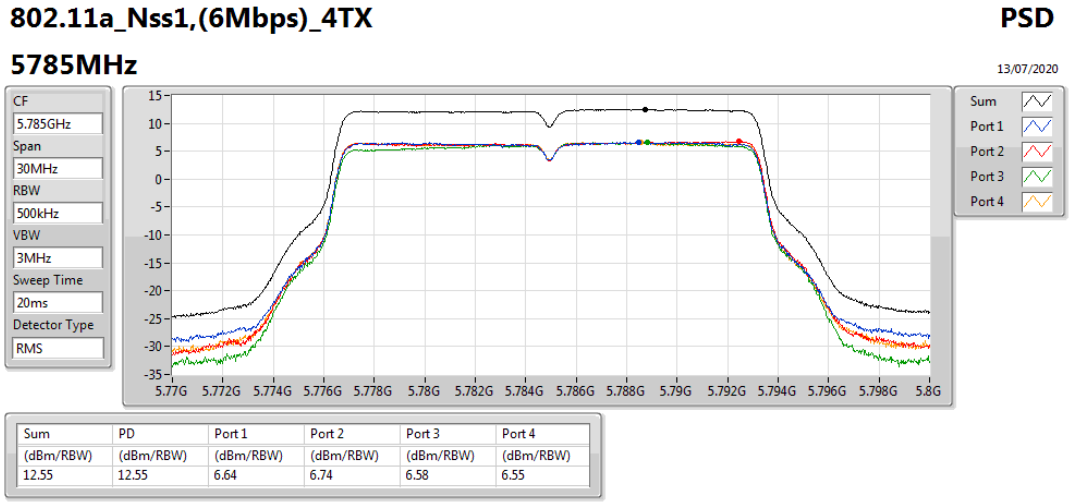
Power Density Plot on Configuration IEEE 802.11a / OFDM / 1S2T CDD / Ant. 1 + Ant. 2 / CH48 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149 / 5745 MHz

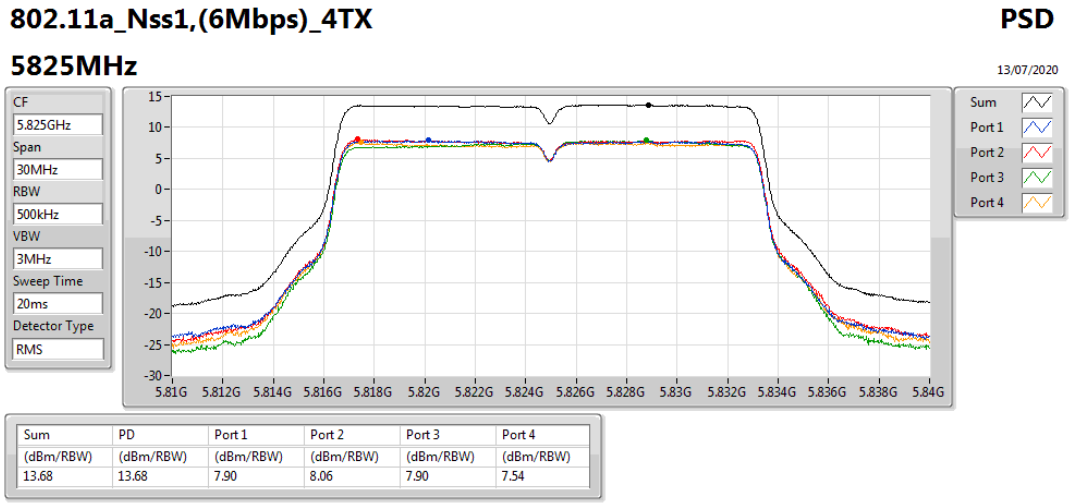


Power Density Plot on Configuration IEEE 802.11a / N Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157 / 5785 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.55	12.55	6.64	6.74	6.58	6.55

Power Density Plot on Configuration IEEE 802.11a / OFDM / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165 / 5825 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.68	13.68	7.90	8.06	7.90	7.54

Configuration IEEE 802.11ax 20MHz

<Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	10.56	5.80	17.00	**PASS**
40	5200 MHz	14.13	5.93	17.00	**PASS**
48	5240 MHz	13.76	6.01	16.99	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5180 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.80dB<6dBi, so the limit doesn't reduce.

5200 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.93dBi<6dBi, so the limit doesn't reduce.

5240 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 6.01dBi>6dBi, so the limit shall be reduced to 17-(6.01-6)=16.99dBm/MHz.

<Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	13.72	6.81	29.19	**PASS**
157	5785 MHz	12.41	6.69	29.31	**PASS**
165	5825 MHz	13.40	6.87	29.13	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5745 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.81dBi>6dBi, so the limit shall be reduced to 30-(6.81-6)=29.19dBm/500kHz.

5785 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.69dBi>6dBi, so the limit shall be reduced to 30-(6.69-6)=29.31dBm/500kHz.

5825 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.87dBi>6dBi, so the limit shall be reduced to 30-(6.87-6)=29.13dBm/500kHz.

<Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	10.88	5.80	17.00	**PASS**
40	5200 MHz	13.47	5.93	17.00	**PASS**
48	5240 MHz	13.01	6.01	16.99	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5180 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.80dB<6dBi, so the limit doesn't reduce.

5200 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.93dBi<6dBi, so the limit doesn't reduce.

5240 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 6.01dBi>6dBi, so the limit shall be reduced to 17-(6.01-6)=16.99dBm/MHz.

<Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	13.82	6.81	29.19	**PASS**
157	5785 MHz	11.37	6.69	29.31	**PASS**
165	5825 MHz	13.77	6.87	29.13	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5745 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.81dBi>6dBi, so the limit shall be reduced to 30-(6.81-6)=29.19dBm/500kHz.

5785 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.69dBi>6dBi, so the limit shall be reduced to 30-(6.69-6)=29.31dBm/500kHz.

5825 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.87dBi>6dBi, so the limit shall be reduced to 30-(6.87-6)=29.13dBm/500kHz.

<Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	13.77	5.40	30.00	**PASS**
157	5785 MHz	13.31	5.36	30.00	**PASS**
165	5825 MHz	13.78	5.60	30.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5745 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.40dBi<6dBi, so the limit doesn't reduce.

5785 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.36dBi<6dBi, so the limit doesn't reduce.

5825 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.60dBi<6dBi, so the limit doesn't reduce.

<Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	14.15	3.44	30.00	**PASS**
157	5785 MHz	13.37	3.43	30.00	**PASS**
165	5825 MHz	14.27	3.51	30.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

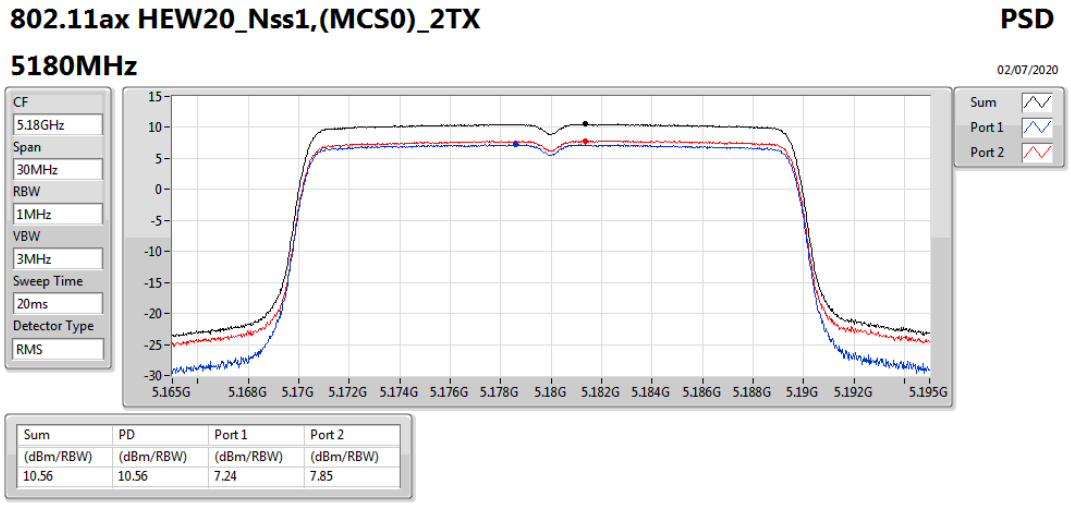
Note 3:

5745 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.44dBi<6dBi, so the limit doesn't reduce.

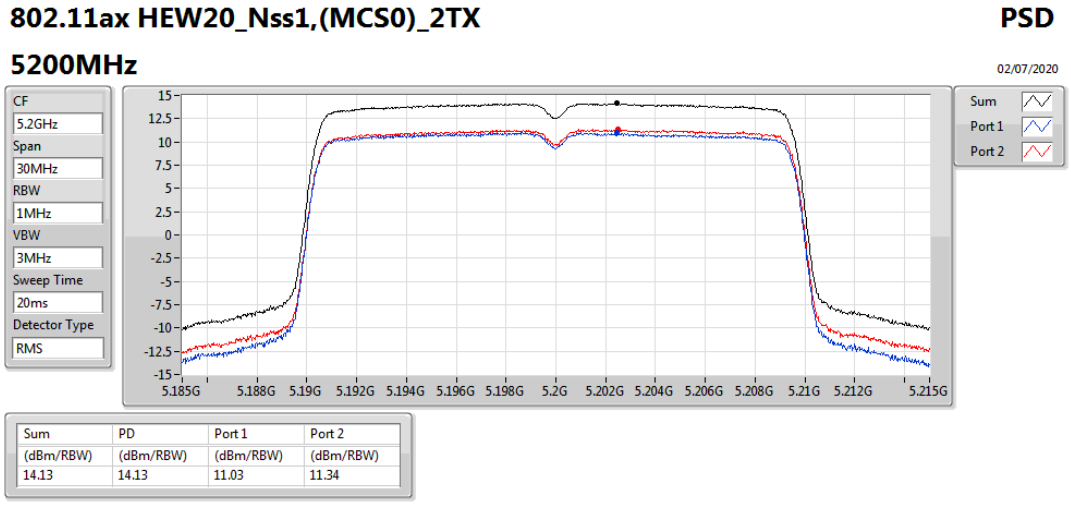
5785 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.43dBi<6dBi, so the limit doesn't reduce.

5825 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.51dBi<6dBi, so the limit doesn't reduce.

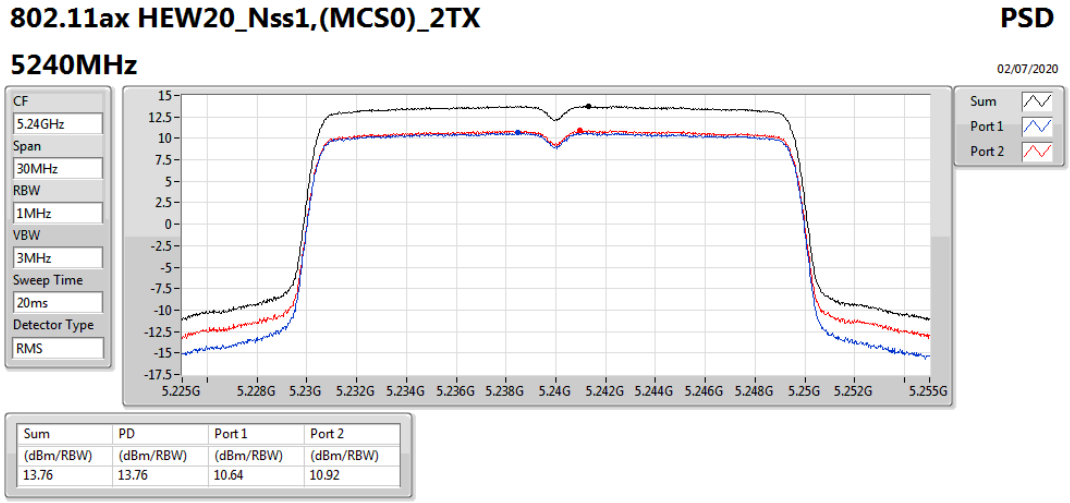
Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH36 / 5180 MHz



Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH40 / 5200 MHz

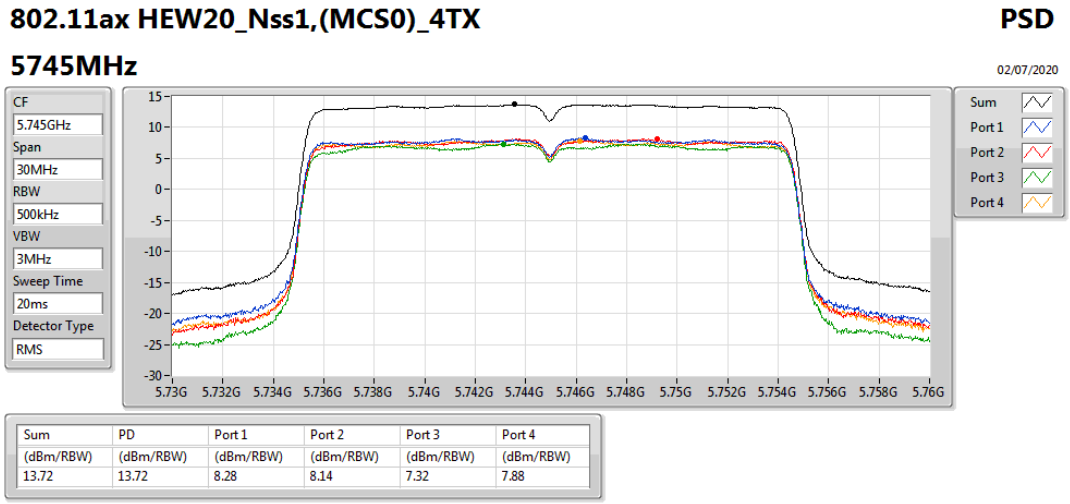


Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH48 / 5240 MHz



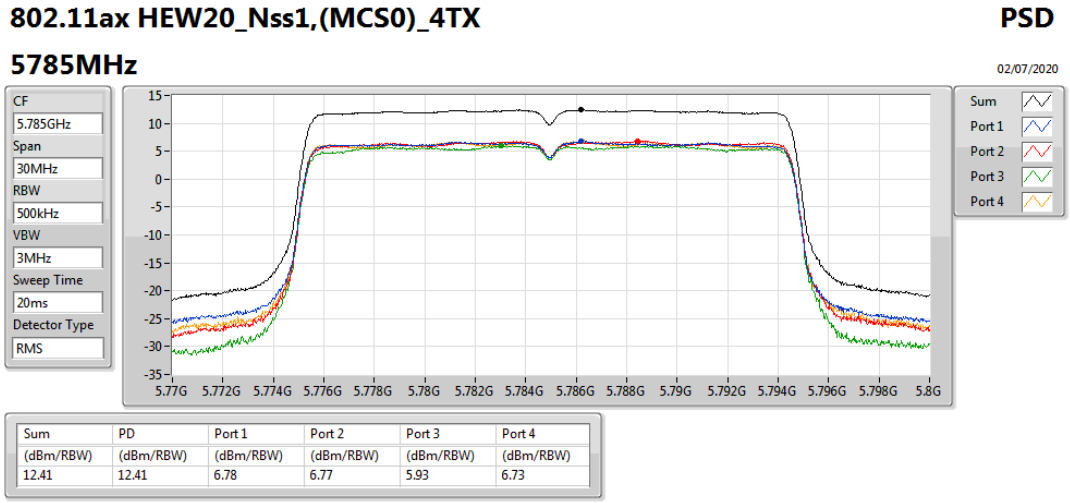
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.76	13.76	10.64	10.92

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149 / 5745 MHz



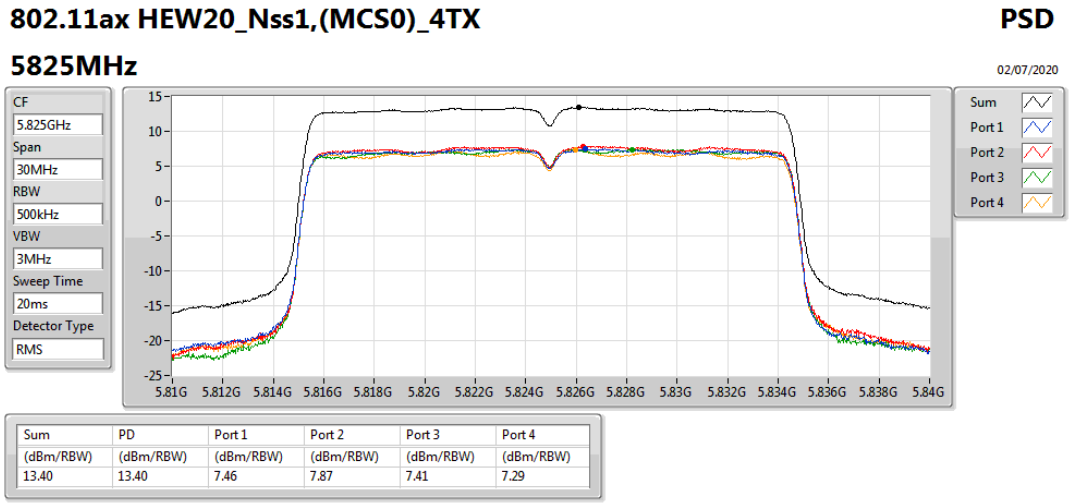
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.72	13.72	8.28	8.14	7.32	7.88

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157 / 5785 MHz



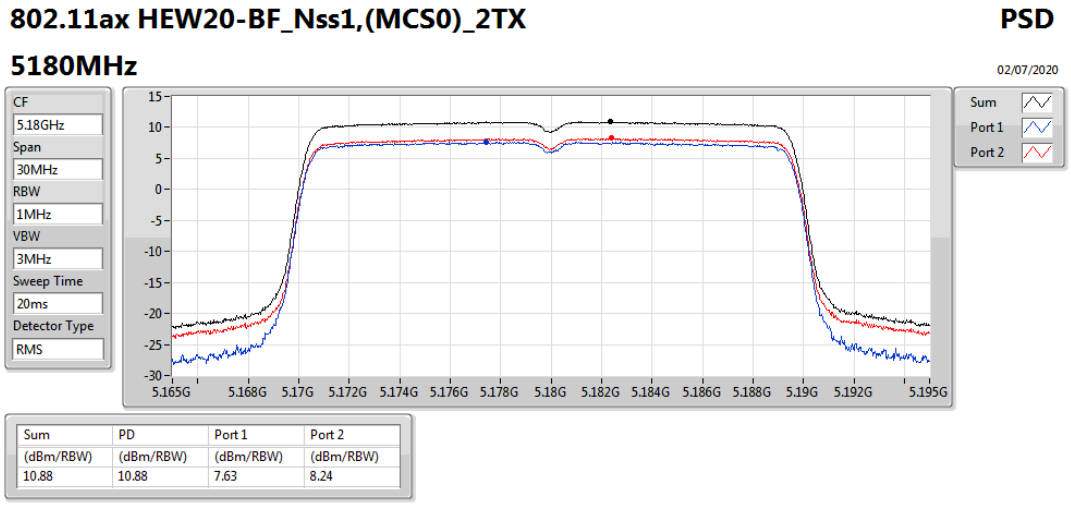
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.41	12.41	6.78	6.77	5.93	6.73

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165 / 5825 MHz



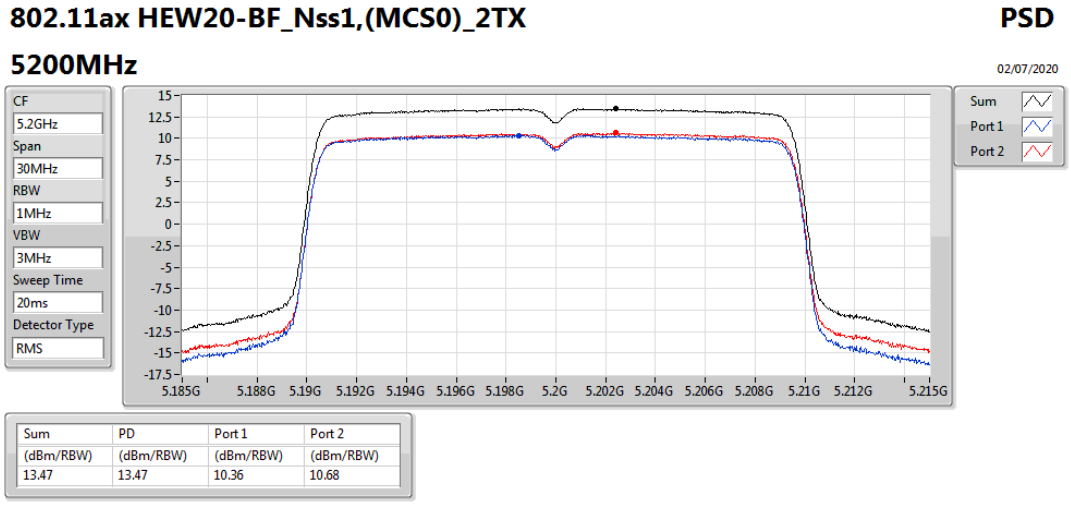
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.40	13.40	7.46	7.87	7.41	7.29

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH36 / 5180 MHz



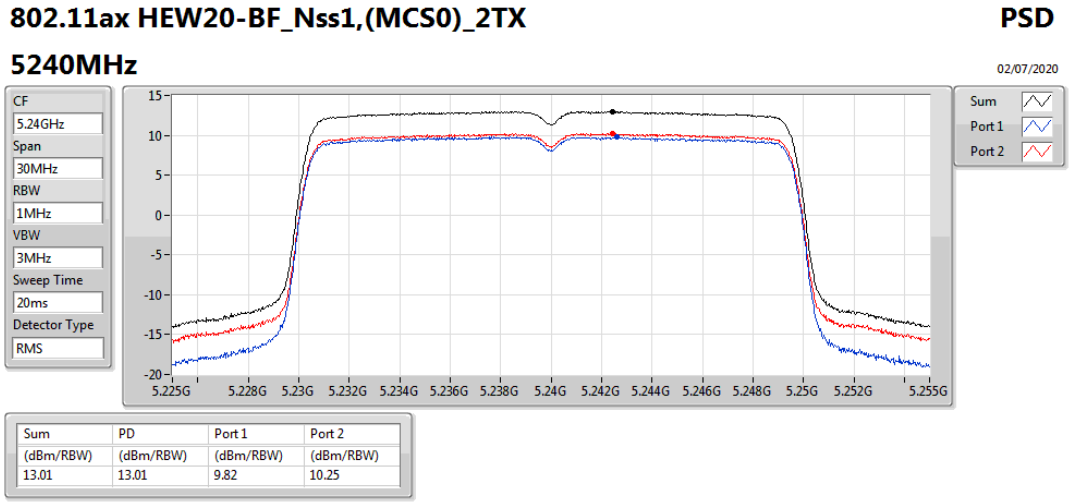
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.88	10.88	7.63	8.24

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH40 / 5200 MHz



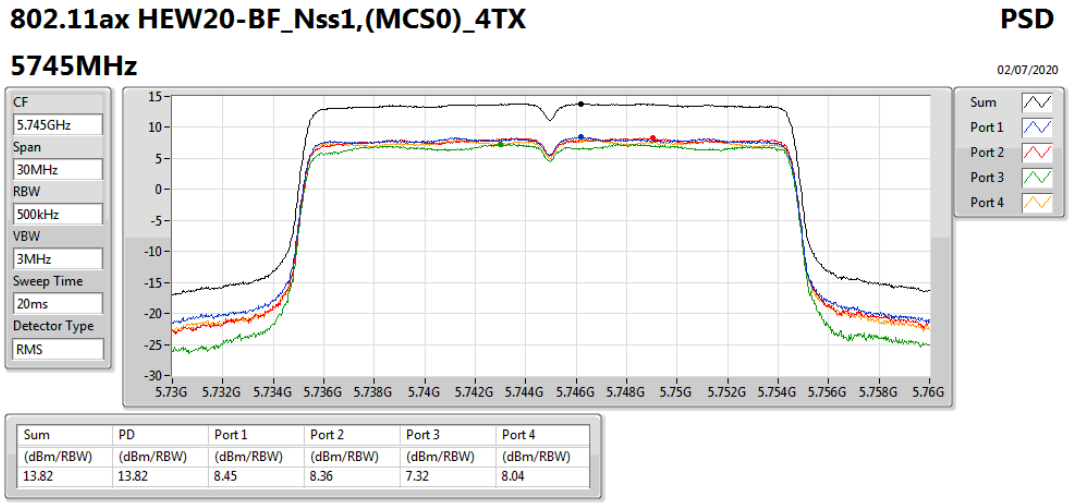
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.47	13.47	10.36	10.68

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH48 / 5240 MHz



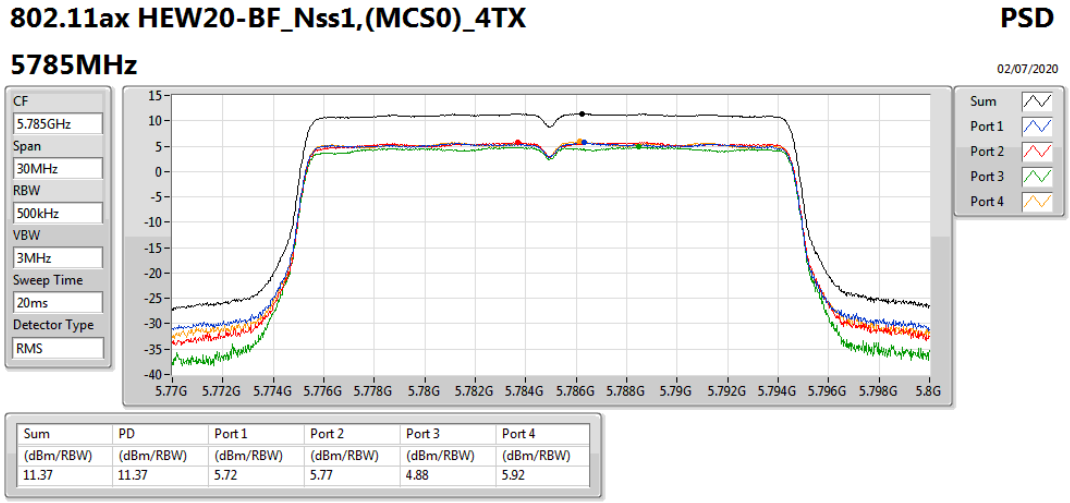
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.01	13.01	9.82	10.25

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149 / 5745 MHz

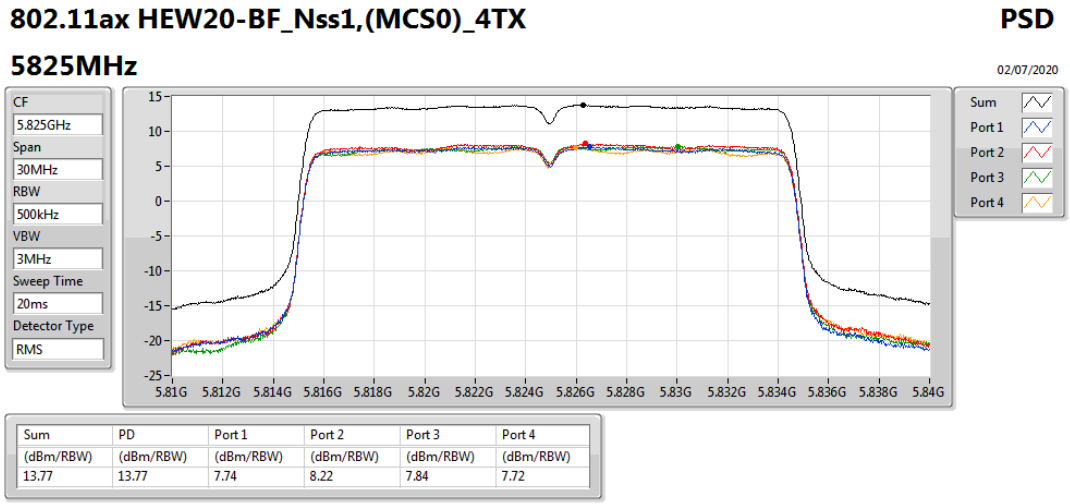


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.82	13.82	8.45	8.36	7.32	8.04

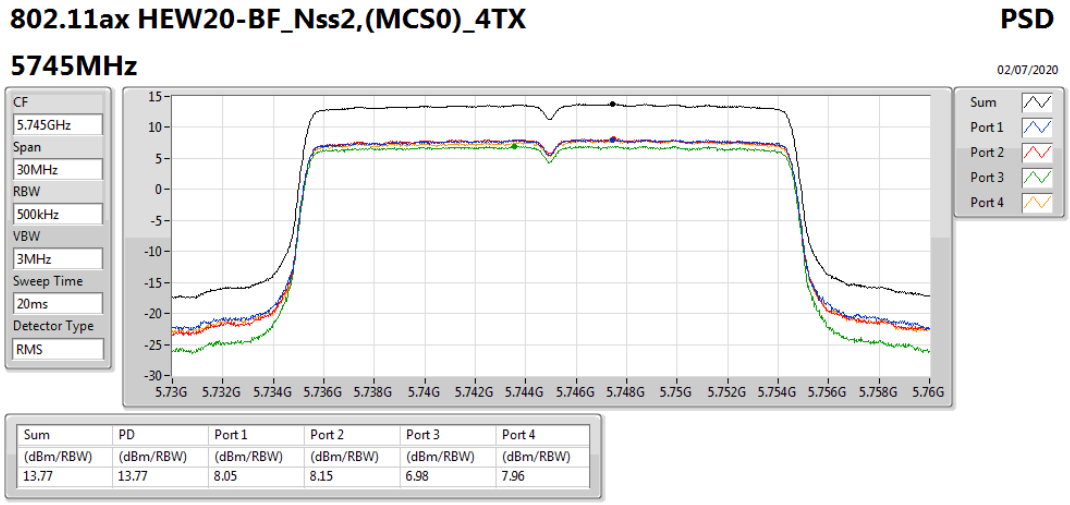
Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157 / 5785 MHz



Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165 / 5825 MHz

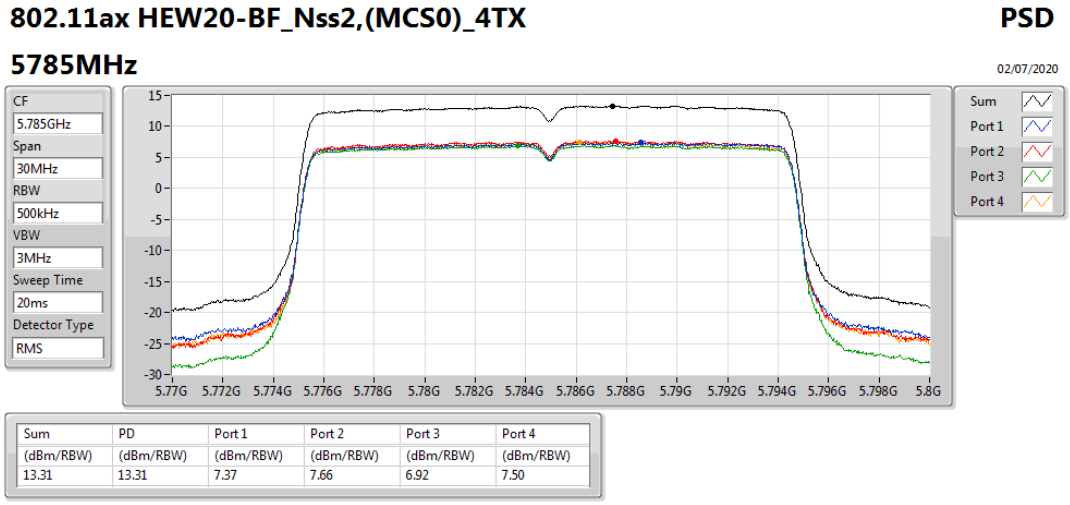


Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149 / 5745 MHz



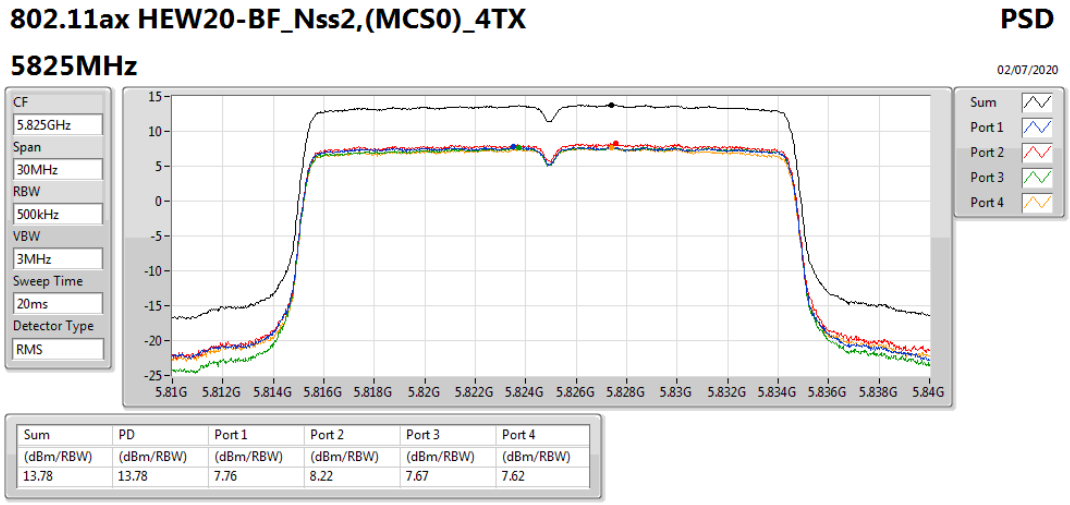
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.77	13.77	8.05	8.15	6.98	7.96

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157 / 5785 MHz



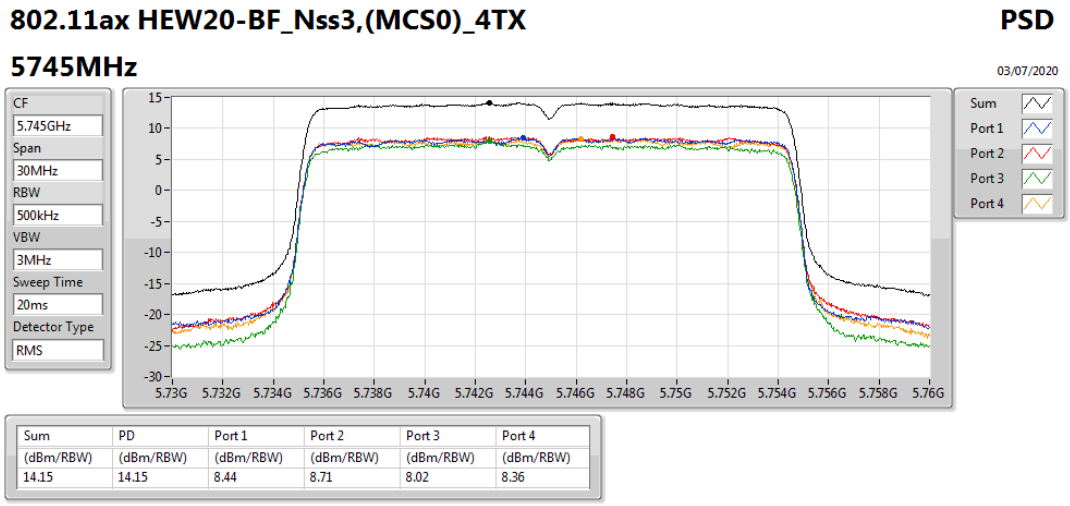
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.31	13.31	7.37	7.66	6.92	7.50

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165 / 5825 MHz



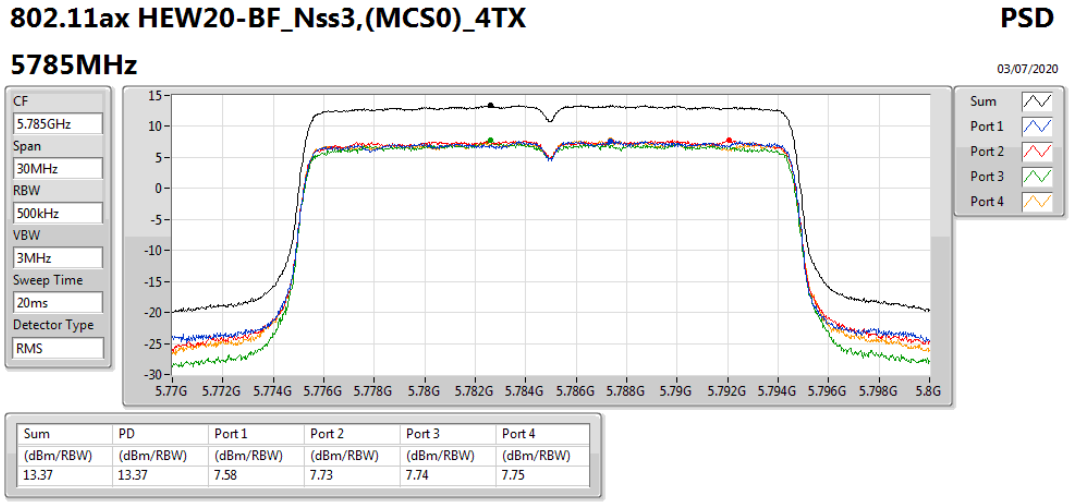
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.78	13.78	7.76	8.22	7.67	7.62

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149 / 5745 MHz



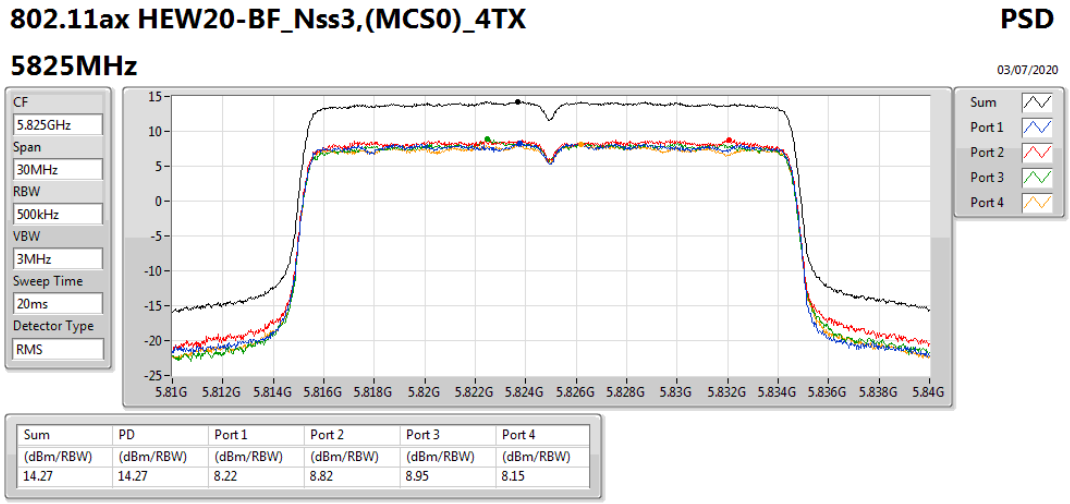
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.15	14.15	8.44	8.71	8.02	8.36

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157 / 5785 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.37	13.37	7.58	7.73	7.74	7.75

Power Density Plot on Configuration IEEE 802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165 / 5825 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.27	14.27	8.22	8.82	8.95	8.15

Configuration IEEE 802.11ax 40MHz

<Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	5.85	5.89	17.00	**PASS**
46	5230 MHz	10.58	5.96	17.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5190 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.89dBi<6dBi, so the limit doesn't reduce.

5230 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.96dBi<6dBi, so the limit doesn't reduce.

<Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	10.57	6.74	29.26	**PASS**
159	5795 MHz	10.60	6.66	29.34	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5755 MHz= $Directional Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 6.74dBi>6dBi, so the limit shall be reduced to 17-(6.74-6)=29.26dBm/MHz.

5795 MHz= $Directional Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 6.66dBi>6dBi, so the limit shall be reduced to 17-(6.66-6)=29.34dBm/MHz.

<Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	6.42	5.89	17.00	**PASS**
46	5230 MHz	11.23	5.96	17.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5190 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.89dBi<6dBi, so the limit doesn't reduce.

5230 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.96dBi<6dBi, so the limit doesn't reduce.

<Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	10.41	6.74	29.26	**PASS**
159	5795 MHz	10.45	6.66	29.34	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5755 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.74dBi>6dBi, so the limit shall be reduced to 17-(6.74-6)=29.26dBm/MHz.

5795 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.66dBi>6dBi, so the limit shall be reduced to 17-(6.66-6)=29.34dBm/MHz.

<Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	10.80	5.45	30.00	**PASS**
159	5795 MHz	10.99	5.31	30.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5755 MHz= $Directional Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.45dBi<6dBi, so the limit doesn't reduce.

5795 MHz= $Directional Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.31dBi<6dBi, so the limit doesn't reduce.

<Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	11.08	3.42	30.00	**PASS**
159	5795 MHz	11.27	3.34	30.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

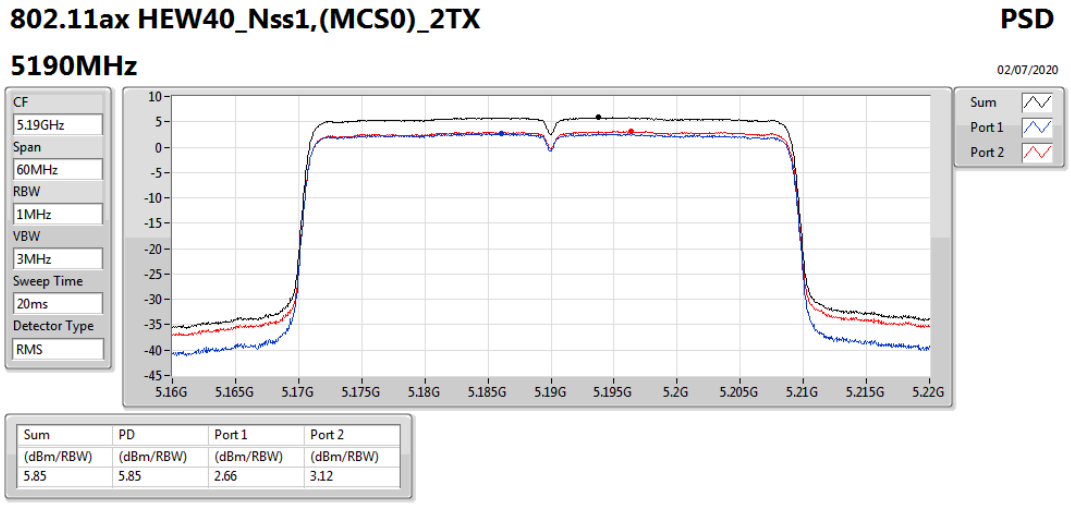
Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

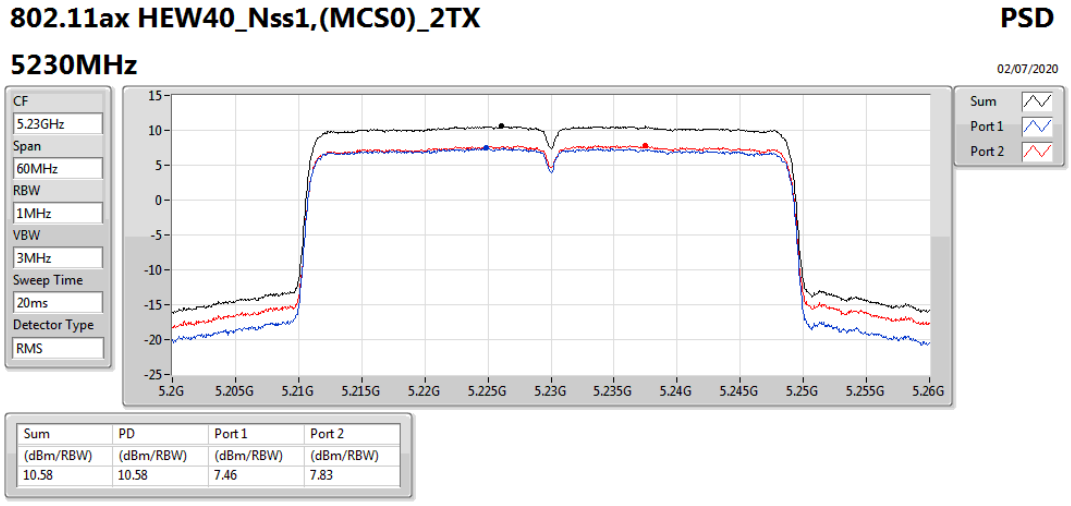
5755 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.42dBi<6dBi, so the limit doesn't reduce.

5795 MHz= $Directional\ Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.34dBi<6dBi, so the limit doesn't reduce.

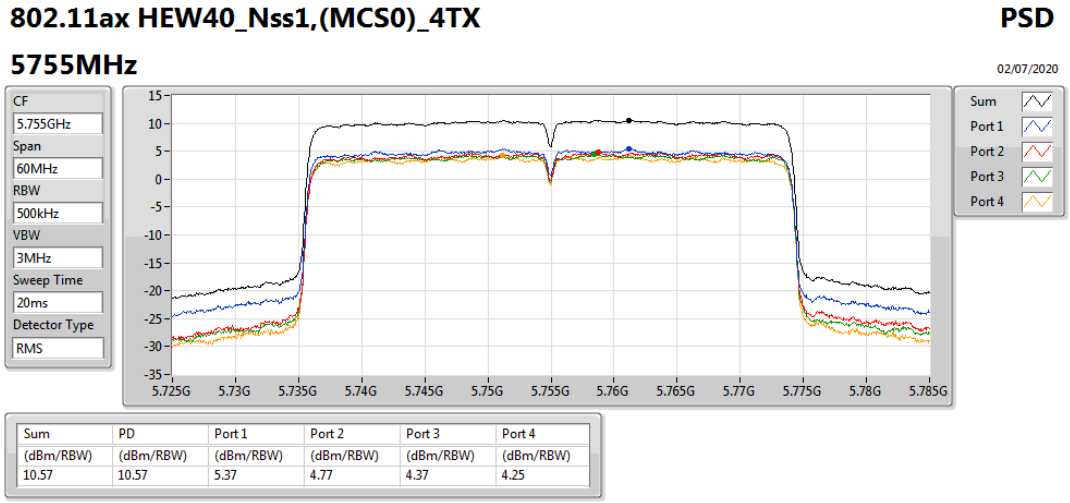
Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH38 / 5190 MHz



Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH46 / 5230 MHz

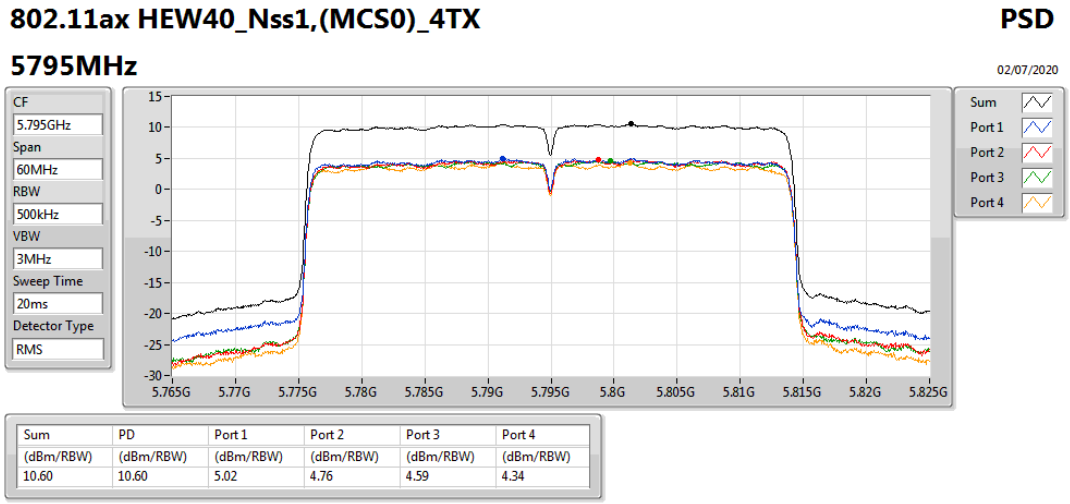


Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151 / 5755 MHz



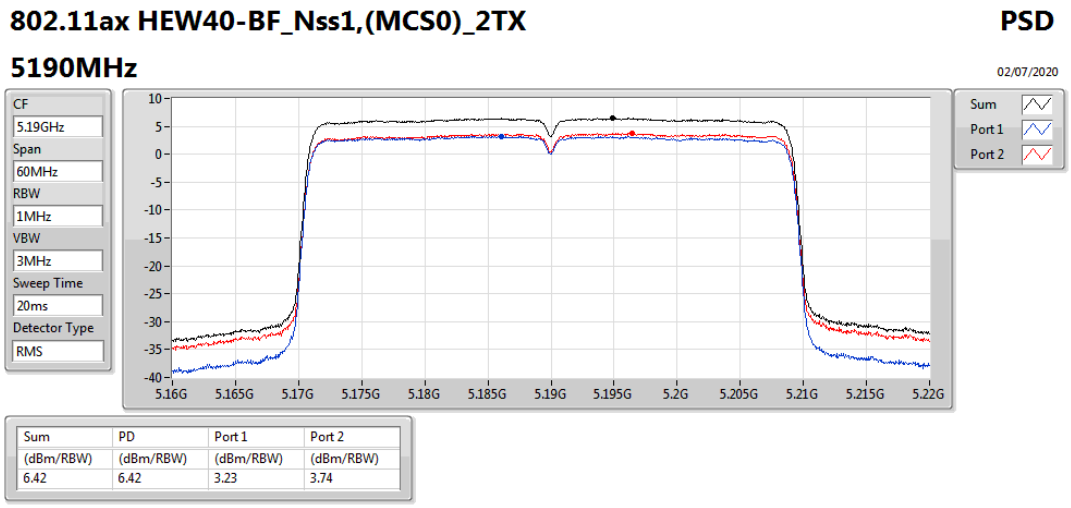
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.57	10.57	5.37	4.77	4.37	4.25

Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159 / 5795 MHz

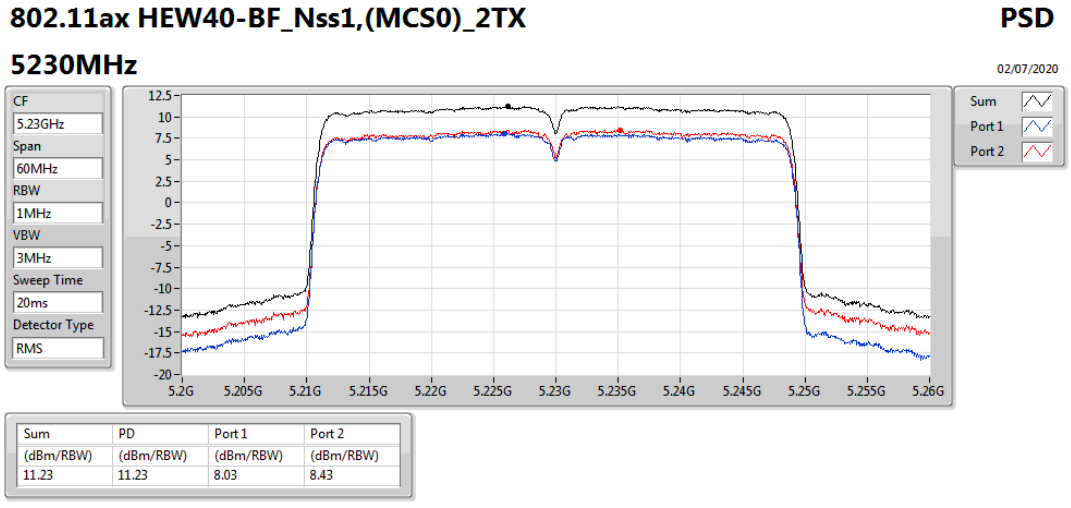


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.60	10.60	5.02	4.76	4.59	4.34

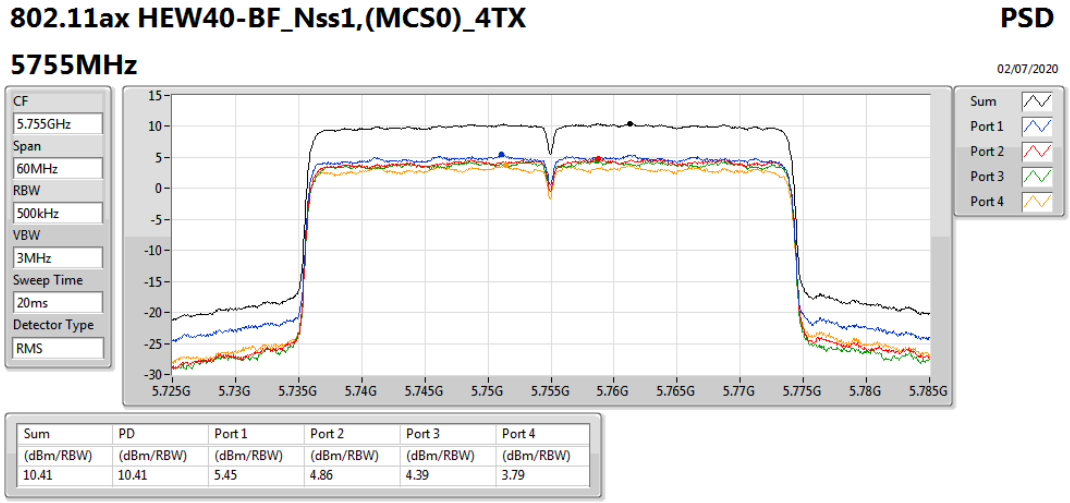
Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH38 / 5190 MHz



Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH46 / 5230 MHz

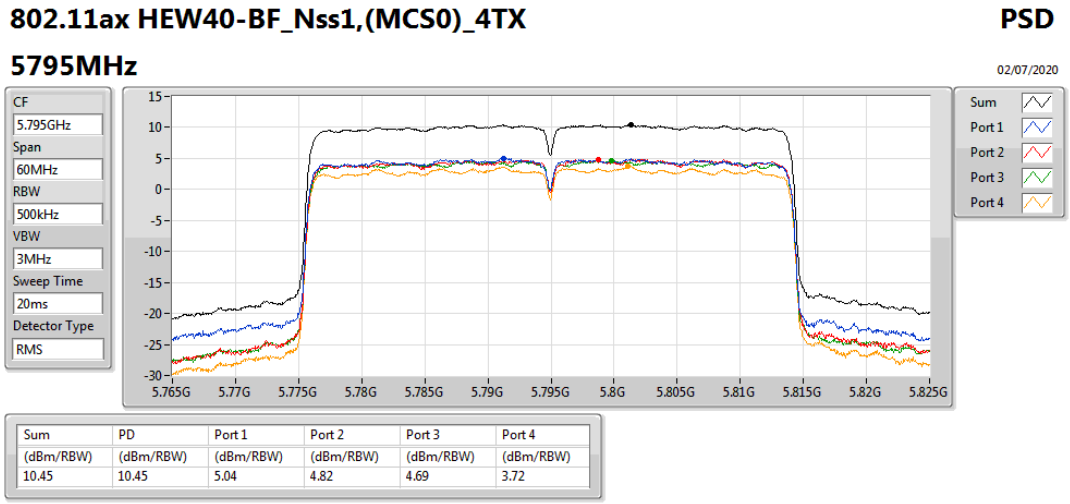


Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151 / 5755 MHz



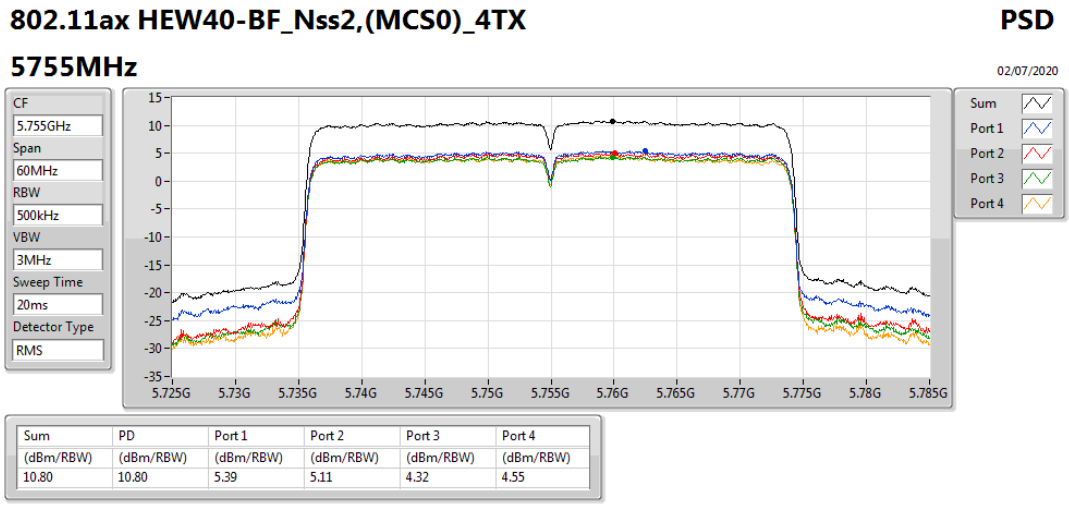
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.41	10.41	5.45	4.86	4.39	3.79

Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159 / 5795 MHz



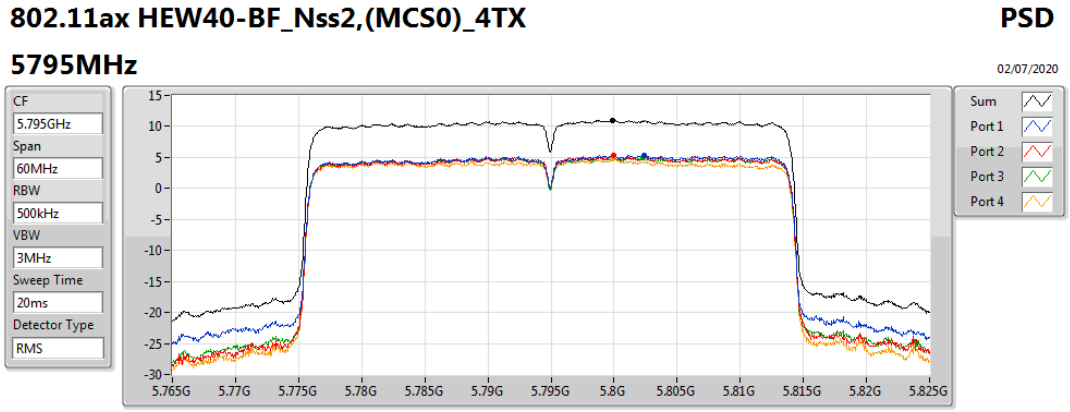
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.45	10.45	5.04	4.82	4.69	3.72

Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151 / 5755 MHz



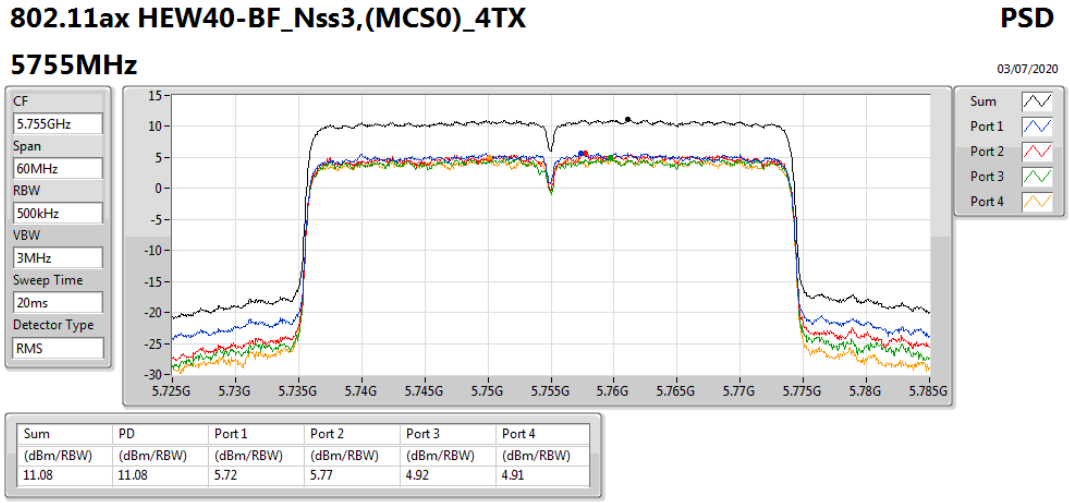
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.80	10.80	5.39	5.11	4.32	4.55

Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159 / 5795 MHz



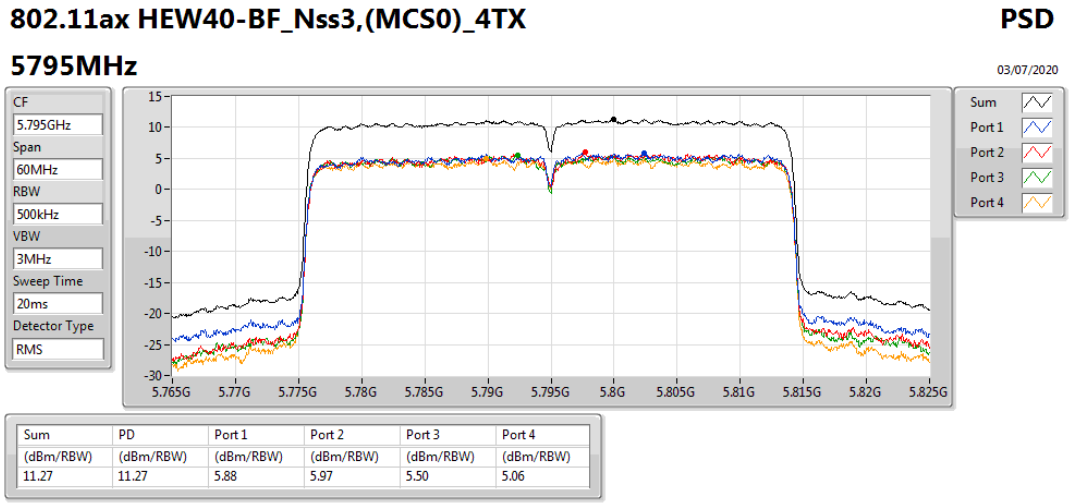
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.99	10.99	5.29	5.29	4.95	4.79

Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151 / 5755 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.08	11.08	5.72	5.77	4.92	4.91

Power Density Plot on Configuration IEEE 802.11ax 40MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159 / 5795 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.27	11.27	5.88	5.97	5.50	5.06

Configuration IEEE 802.11ax 80MHz

<Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	3.16	5.84	17.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5210 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 5.84dBi<6dBi, so the limit doesn't reduce.

<Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	7.87	6.73	29.27	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5775 MHz= $Directiona\ lGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ = 6.73dBi>6dBi, so the limit shall be reduced to 30-(6.73-6)=29.27dBm/500kHz.

<Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	3.87	5.84	17.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5210 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.84dBi<6dBi, so the limit doesn't reduce.

<Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	7.72	6.73	29.27	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5775 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 6.73dBi>6dBi, so the limit shall be reduced to 30-(6.73-6)=29.27dBm/500kHz.

<Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/500kHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	8.46	5.39	30.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

5775 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 5.39dBi<6dBi, so the limit doesn't reduce.

<Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6>

Channel	Frequency	Power Density (dBm/MHz)	Directional Gain (dBi)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	8.78	3.61	30.00	**PASS**

Note 1:

Method 1 of powr density measurement of KDB 789033 is using for calculation totol power density.

Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

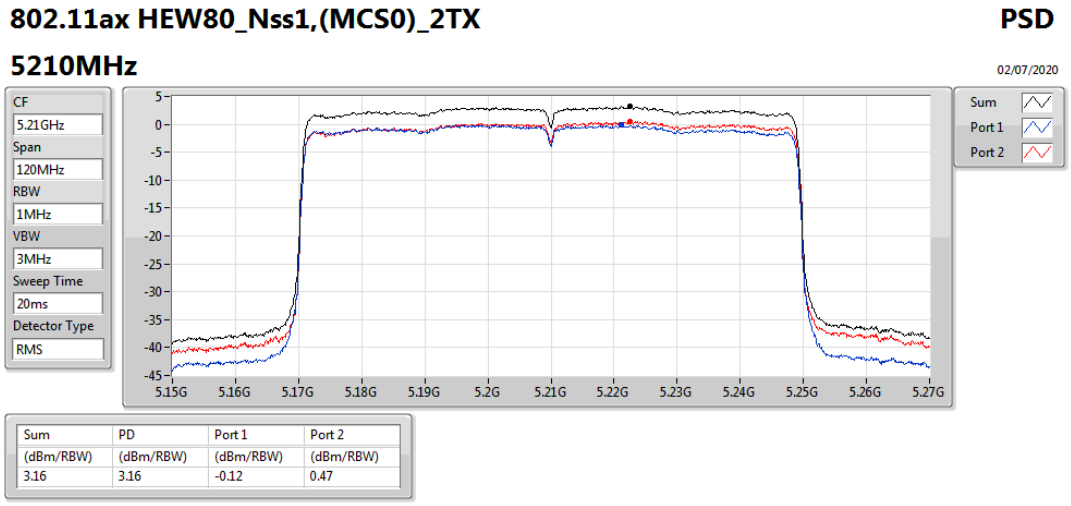
Note 2:

Refer to section 1.14 for duty cycle spectroum plot.

Note 3:

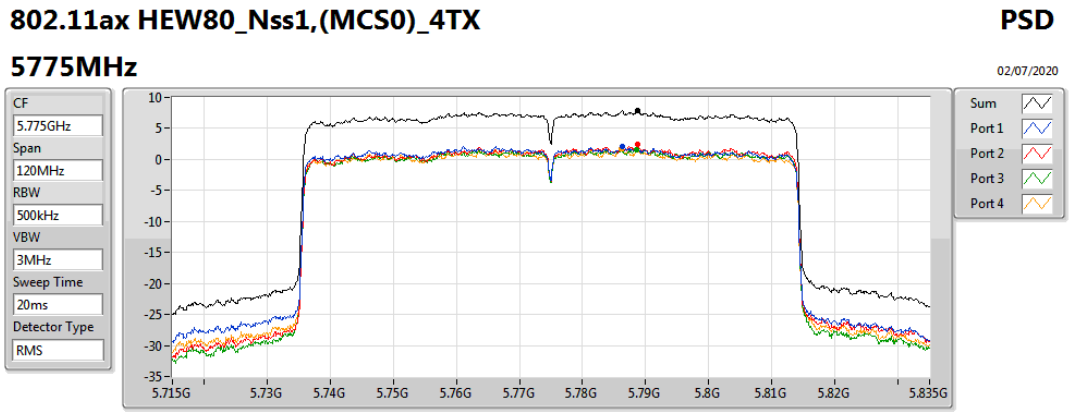
5775 MHz= $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ = 3.61dBi<6dBi, so the limit doesn't reduce.

Power Density Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH42 / 5210 MHz



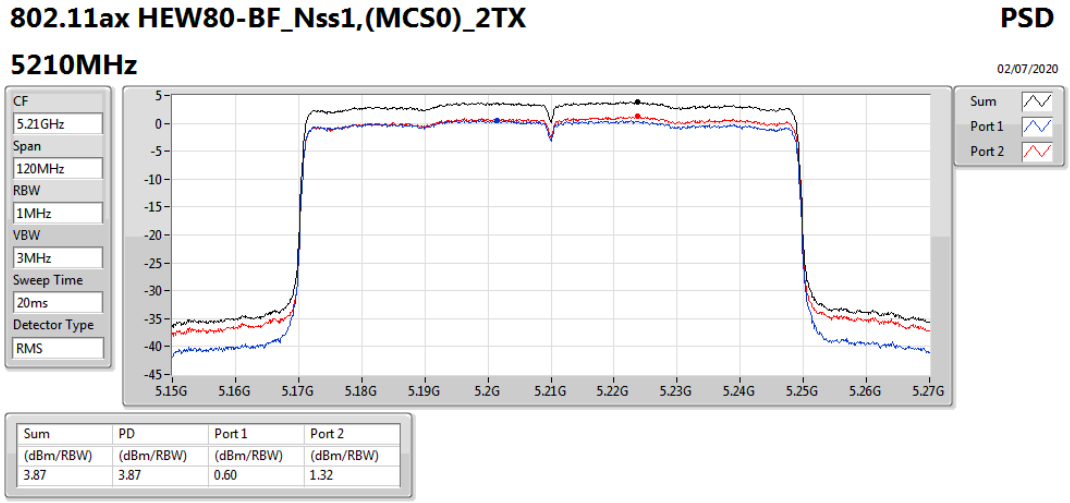
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.16	3.16	-0.12	0.47

Power Density Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155 / 5775 MHz



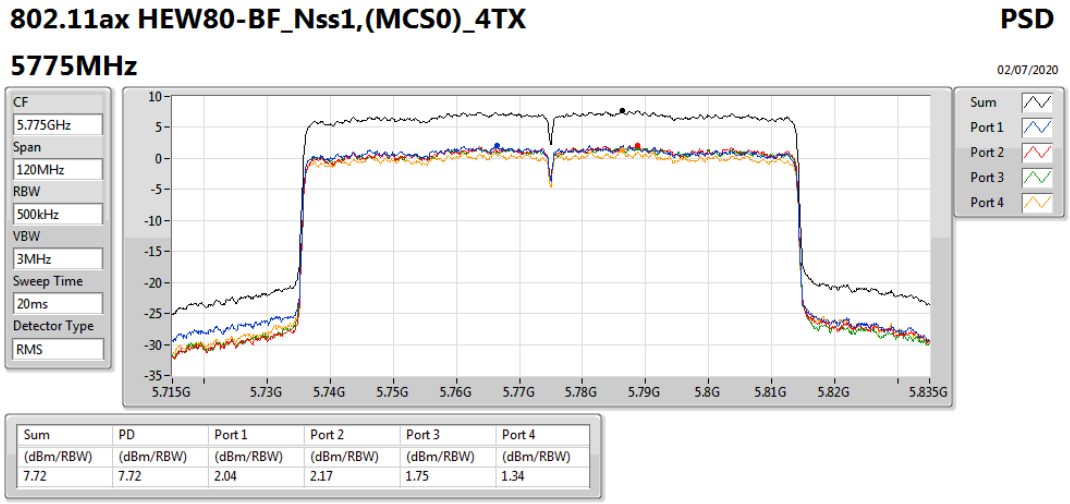
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.87	7.87	2.13	2.37	1.63	1.71

Power Density Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH42 / 5210 MHz



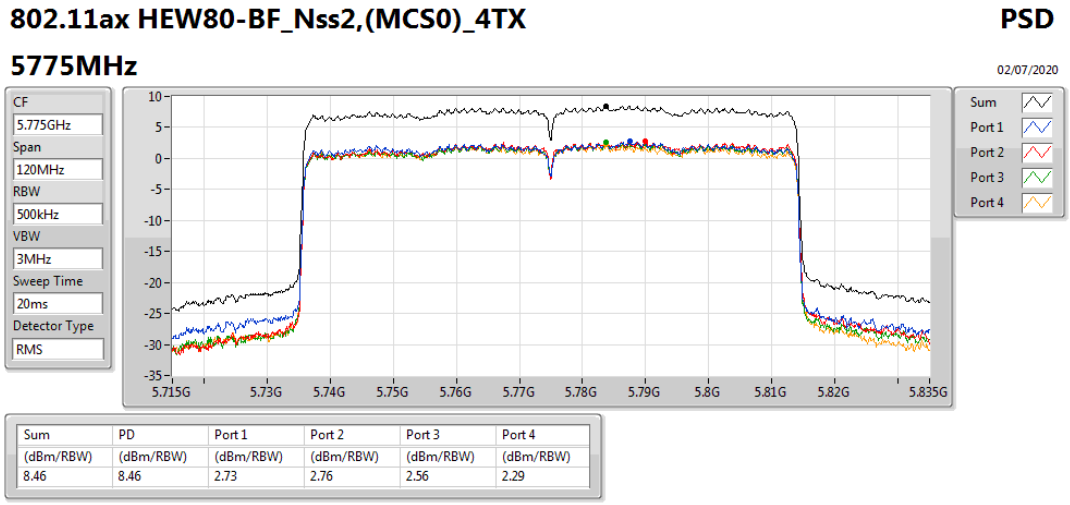
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.87	3.87	0.60	1.32

Power Density Plot on Configuration IEEE 802.11ax 80MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155 / 5775 MHz



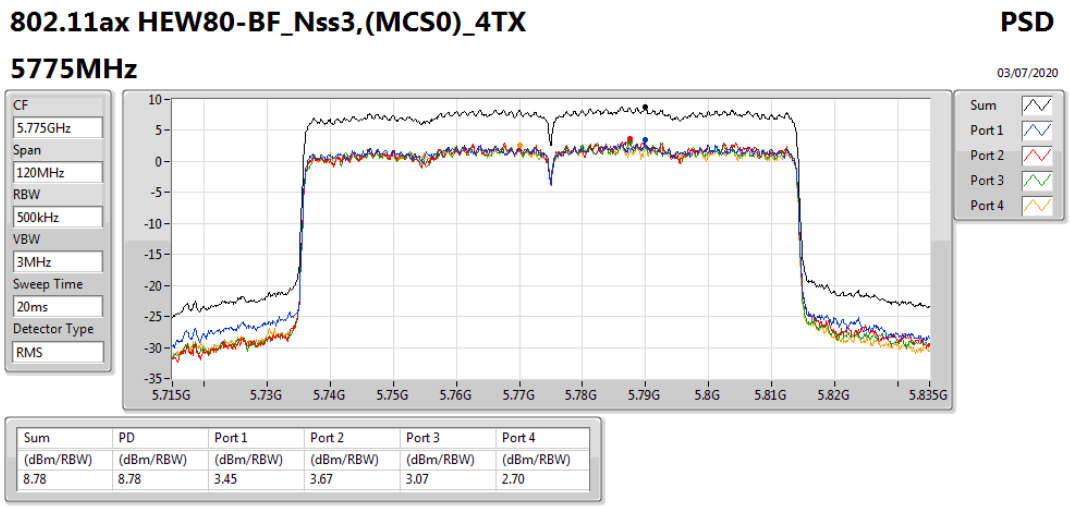
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.72	7.72	2.04	2.17	1.75	1.34

Power Density Plot on Configuration IEEE 802.11ax 80MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155 / 5775 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.46	8.46	2.73	2.76	2.56	2.29

Power Density Plot on Configuration IEEE 802.11ax 80MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155 / 5775 MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.78	8.78	3.45	3.67	3.07	2.70

2.6. Radiated Emissions Measurement

2.6.1. Limit

Radiated emissions which fall within the restricted band specified on 15.205(a) must comply with the radiated emission limits specified as below table:

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note:

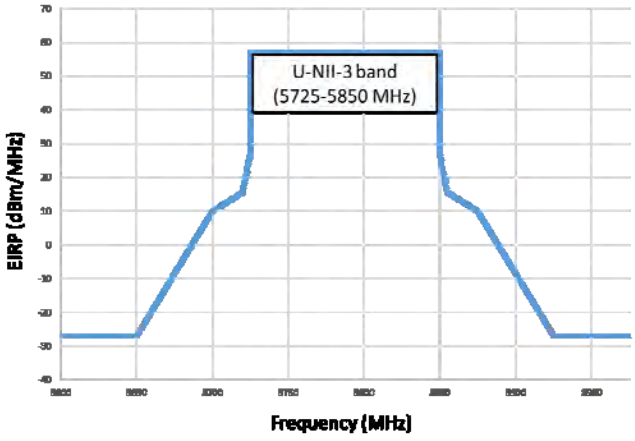
1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBμV/m) = 20 log Emission level (μV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

2.6.2. Limits of Unwanted Emission out of the restricted bands

APPLICABLE TO	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBμV/m)	
U-NII-1 5150~5250MHz	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)	-27dBm/MHz can be substituted by PK: 74 (dBμV/m) AV: 54 (dBμV/m)
U-NII-3 5725~5850MHz	(Note)		

NOTE: 15.407(b)(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) 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.



15.407 new rule(FCC16-24)	
Frequency	Limit(dBm/MHz)
5460	-27
5650	-27
5700	10
5720	15.6
5725	27
5725	N/A
5850	
5850	27
5855	15.6
5875	10
5925	-27
7250	-27

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{100000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts).

2.6.3. Measuring Instruments and Setting

Please refer to section 3 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1 GHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, Duty cycle ≧ 98% 1MHz / 10Hz for Average Duty cycle < 98% 1MHz / (1/T) for Average, where T is pulse time.
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for peak
Detector	Peak
Trace mode	max hold.

Note : According to KDB 789033 D02 v02 r01 G. 6. d) **Method VB**.

As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode.

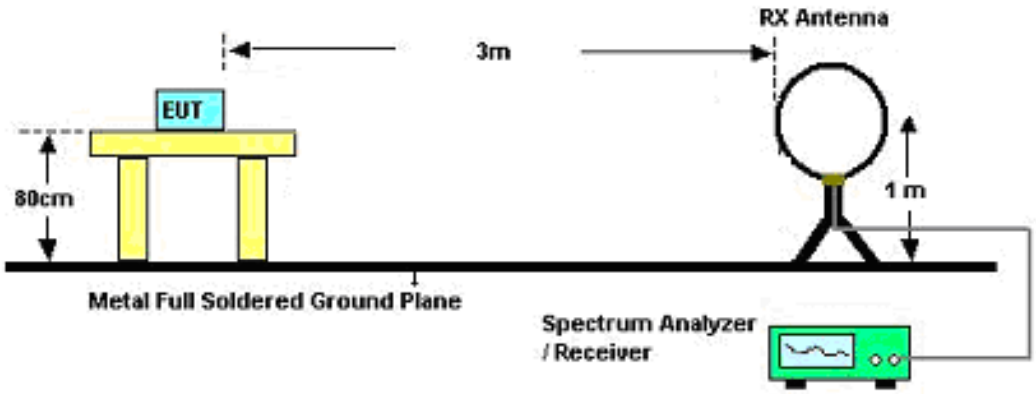
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RBW 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RBW 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RBW 120kHz for QP

2.6.4. Test Procedures

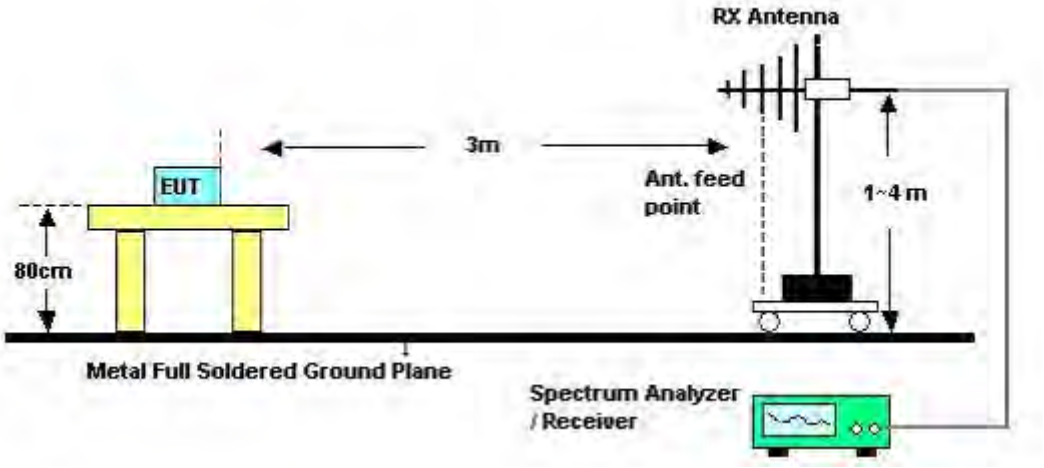
1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meter above ground for below 1G and 1.5 meter above ground for above 1G. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and 3MHz RBW for peak reading. Then 1MHz RBW and 1/T Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

2.6.5. Test Setup Layout

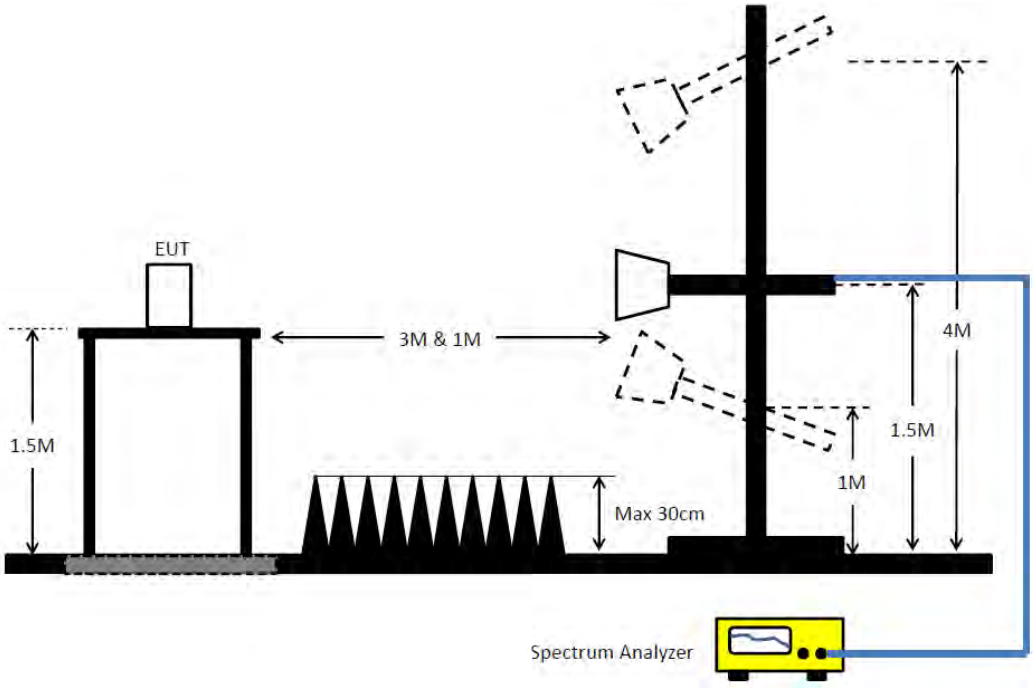
For Radiated Emissions: 9kHz ~30MHz



For Radiated Emissions: 30MHz~1GHz



For Radiated Emissions: Above 1GHz



2.6.6. Test Deviation

There is no deviation with the original standard.

2.6.7. EUT Operation during Test

For CDD mode:

The EUT was programmed to be in continuously transmitting mode.

For TXBF mode:

The EUT was programmed to be in beamforming transmitting mode.

2.6.8. Measurement Results Calculation

The measured Level is calculated using:

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

2.6.9. Radiated 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.

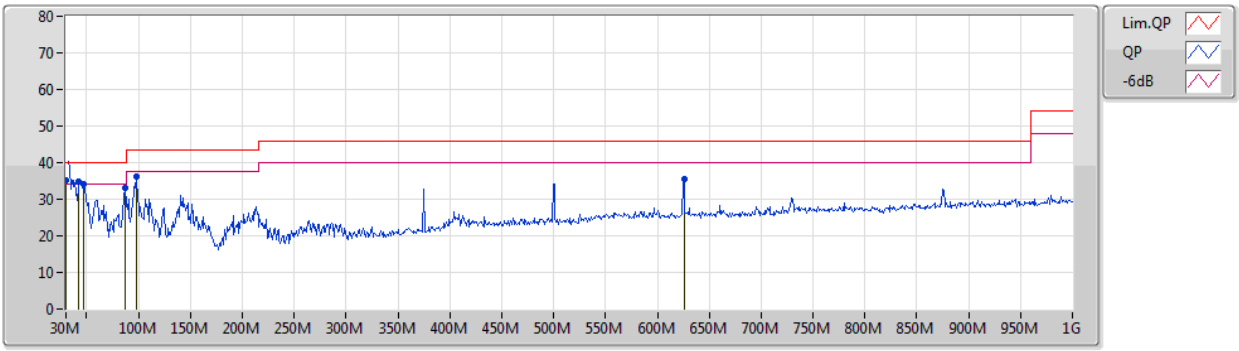
2.6.10. Results of Radiated Emissions (30MHz~1GHz)

Mode Configure

Mode	Configure
Mode 1	CTX mode, EUT Y axis – WLAN 2.4GHz
Mode 2	CTX mode, EUT Y axis – WLAN 5GHz Band 1
Mode 3	CTX mode, EUT Y axis – WLAN 5GHz Band 4

Mode 1

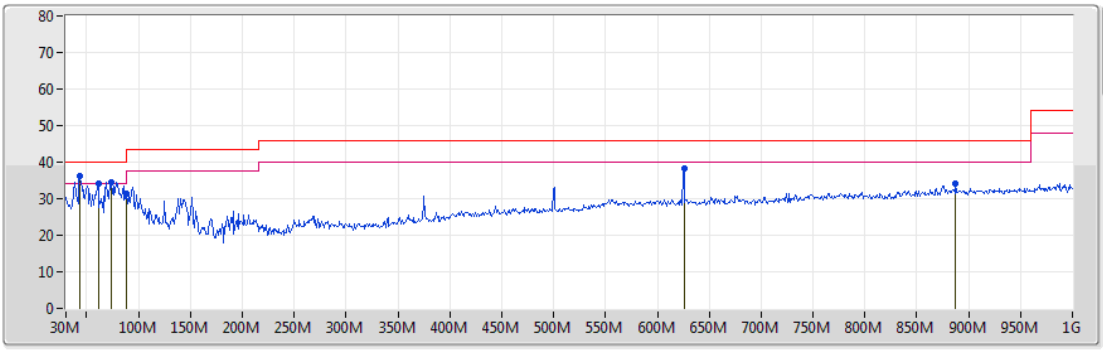
13/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	30M	35.21	40.00	-4.79	-6.17	3	Vertical	360	3.00	"Worst"	41.38	24.19	1.20	31.56
PK	42.61M	34.72	40.00	-5.28	-12.54	3	Vertical	360	2.00	-	47.26	17.61	1.30	31.45
PK	47.46M	34.21	40.00	-5.79	-14.79	3	Vertical	326	2.00	-	49.00	15.55	1.20	31.54
PK	87.23M	33.23	40.00	-6.77	-16.29	3	Vertical	282	3.00	-	49.52	14.12	1.40	31.81
PK	97.9M	36.36	43.50	-7.14	-14.00	3	Vertical	255	3.00	-	50.36	16.39	1.50	31.89
PK	625.58M	35.63	46.00	-10.37	-4.45	3	Vertical	172	1.50	-	40.08	24.41	3.55	32.41

Mode 1

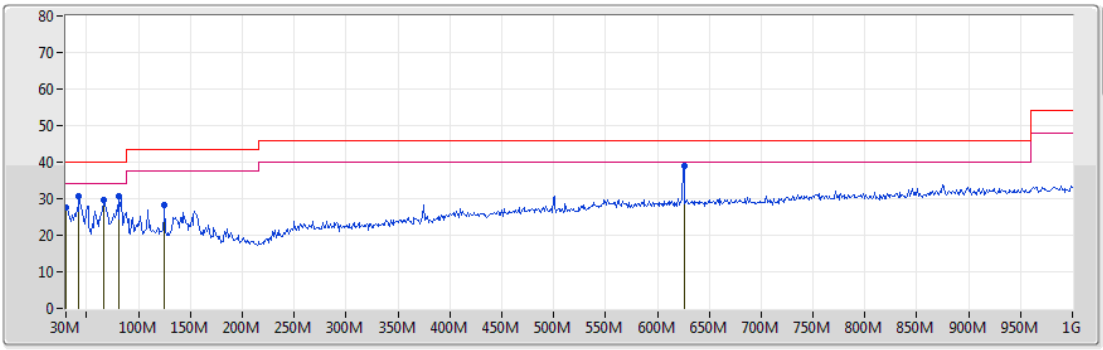
12/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	43.58M	36.23	40.00	-3.77	-13.01	3	Horizontal	360	1.00	"Worst"	49.24	17.19	1.26	31.46
PK	61.04M	34.09	40.00	-5.91	-18.01	3	Horizontal	340	1.50	-	52.10	12.60	1.20	31.81
PK	73.65M	34.52	40.00	-5.48	-17.96	3	Horizontal	183	2.00	-	52.48	12.50	1.30	31.76
PK	88M	31.48	43.50	-12.02	-16.15	3	Horizontal	111	1.25	-	47.63	14.27	1.40	31.82
PK	625.58M	38.11	46.00	-7.89	-4.45	3	Horizontal	286	1.00	-	42.56	24.41	3.55	32.41
PK	887.48M	34.19	46.00	-11.81	-1.90	3	Horizontal	59	2.00	-	36.09	25.94	4.51	32.35

Mode 2

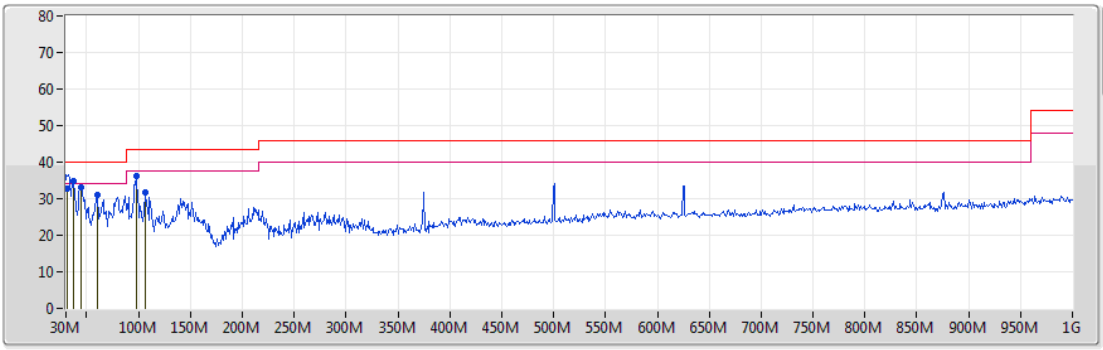
13/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	30M	27.61	40.00	-12.39	-6.17	3	Vertical	307	2.00	-	33.78	24.19	1.20	31.56
PK	42.61M	30.57	40.00	-9.43	-12.54	3	Vertical	182	1.00	-	43.11	17.61	1.30	31.45
PK	65.89M	29.76	40.00	-10.24	-18.07	3	Vertical	248	1.50	-	47.83	12.52	1.22	31.81
PK	81.41M	30.70	40.00	-9.30	-17.32	3	Vertical	359	1.25	-	48.02	13.04	1.40	31.76
PK	125.06M	28.16	43.50	-15.34	-12.07	3	Vertical	104	1.00	-	40.23	17.98	1.73	31.78
PK	625.58M	39.03	46.00	-6.97	-4.45	3	Vertical	235	1.25	"Worst"	43.48	24.41	3.55	32.41

Mode 2

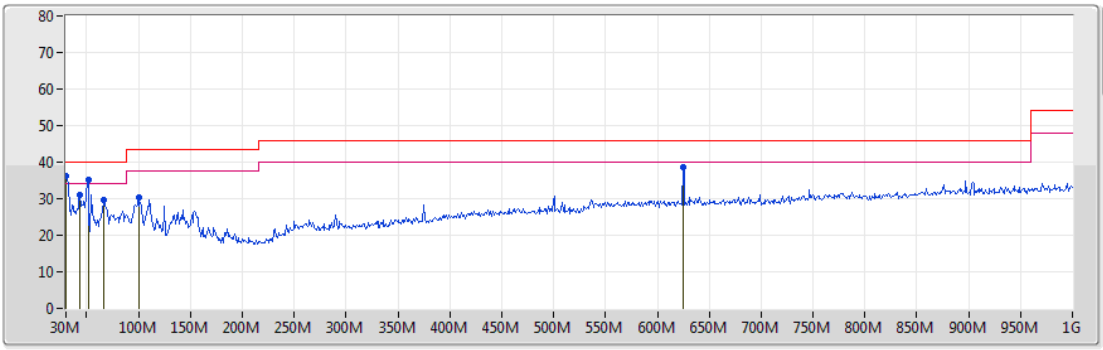
13/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	30.97M	32.60	40.00	-7.40	-6.70	3	Horizontal	123	3.00	-	39.30	23.62	1.22	31.54
PK	36.79M	34.79	40.00	-5.21	-9.31	3	Horizontal	71	3.00	"Worst"	44.10	20.81	1.34	31.46
PK	44.55M	33.18	40.00	-6.82	-13.38	3	Horizontal	360	3.00	-	46.56	16.87	1.22	31.47
PK	60.07M	30.99	40.00	-9.01	-17.92	3	Horizontal	227	3.00	-	48.91	12.69	1.20	31.81
PK	97.9M	36.07	43.50	-7.43	-14.00	3	Horizontal	184	3.00	-	50.07	16.39	1.50	31.89
PK	106.63M	31.58	43.50	-11.92	-12.78	3	Horizontal	281	3.00	-	44.36	17.47	1.57	31.82

Mode 3

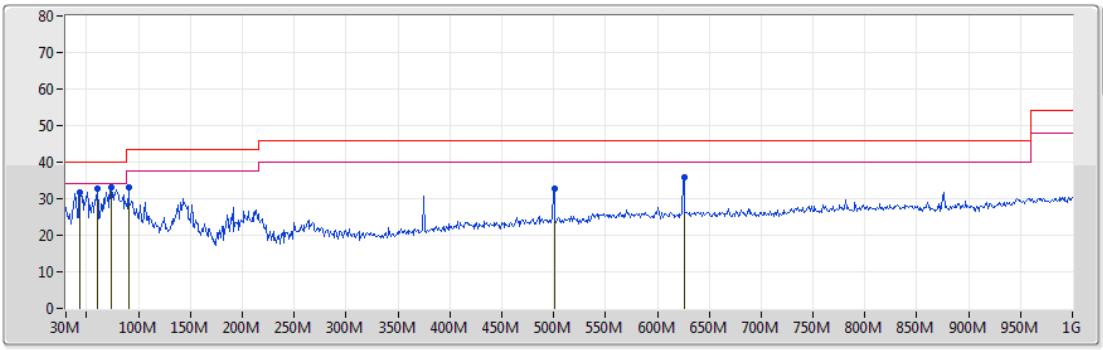
13/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	30M	36.33	40.00	-3.67	-6.17	3	Vertical	328	2.00	"Worst"	42.50	24.19	1.20	31.56
PK	43.58M	31.09	40.00	-8.91	-13.01	3	Vertical	195	1.00	-	44.10	17.19	1.26	31.46
PK	51.34M	35.13	40.00	-4.87	-16.35	3	Vertical	189	1.50	-	51.48	14.13	1.17	31.65
PK	66.86M	29.56	40.00	-10.44	-18.08	3	Vertical	235	1.00	-	47.64	12.48	1.24	31.80
PK	99.84M	30.26	43.50	-13.24	-13.77	3	Vertical	288	2.00	-	44.03	16.62	1.50	31.89
PK	624.61M	38.61	46.00	-7.39	-4.47	3	Vertical	245	1.25	-	43.08	24.39	3.55	32.41

Mode 3

13/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	43.58M	31.78	40.00	-8.22	-13.01	3	Horizontal	218	1.25	-	44.79	17.19	1.26	31.46
PK	60.07M	32.60	40.00	-7.40	-17.92	3	Horizontal	0	1.00	-	50.52	12.69	1.20	31.81
PK	73.65M	33.18	40.00	-6.82	-17.96	3	Horizontal	245	1.00	"Worst"	51.14	12.50	1.30	31.76
PK	90.14M	33.03	43.50	-10.47	-15.63	3	Horizontal	325	1.00	-	48.66	14.82	1.40	31.85
PK	500.45M	32.60	46.00	-13.40	-6.32	3	Horizontal	214	1.00	-	38.92	22.95	3.10	32.37
PK	625.58M	36.03	46.00	-9.97	-4.45	3	Horizontal	285	1.00	-	40.48	24.41	3.55	32.41

2.6.11. Results for Radiated Emissions (1GHz~40GHz)

Following channel(s) was (were) selected for the final test as listed below.

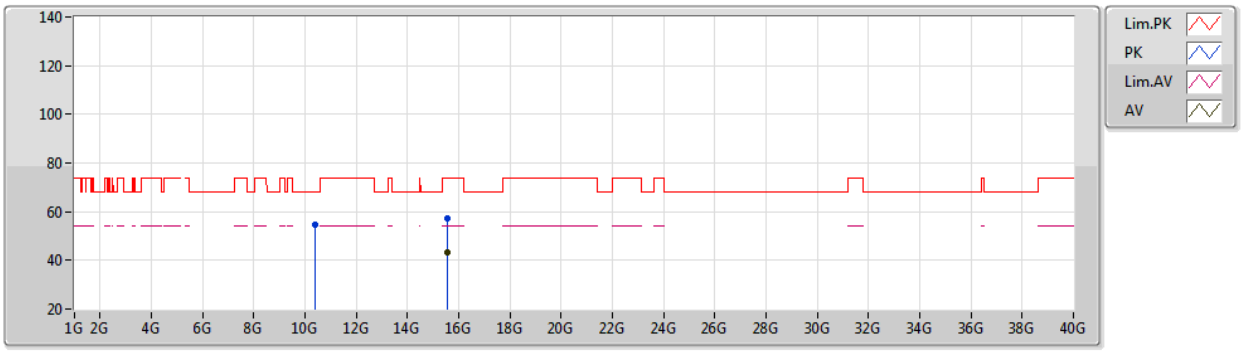
MODE	TX Chain	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ax 20MHz	(1S2T, CDD)	36, 40, 48	OFDMA	BPSK	Nss1 MCS0 (8.6)
802.11ax 20MHz	(1S4T, CDD)	149, 157, 165	OFDMA	BPSK	Nss1 MCS0 (8.6)
802.11ax 20MHz	(1S2T, TXBF)	36, 40, 48	OFDMA	BPSK	Nss 1 MCS0 (8.6)
802.11ax 20MHz	(1S4T, TXBF)	149, 157, 165	OFDMA	BPSK	Nss 1 MCS0 (8.6)
802.11ax 20MHz	(2S4T, TXBF)	149, 157, 165	OFDMA	BPSK	Nss 2 MCS0 (17.2)
802.11ax 20MHz	(3S4T, TXBF)	149, 157, 165	OFDMA	BPSK	Nss 3 MCS0 (25.8)
802.11ax 40MHz	(1S2T, CDD)	38, 46	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(1S4T, CDD)	151, 159	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(1S2T, TXBF)	38, 46	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(1S4T, TXBF)	151, 159	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(2S4T, TXBF)	151, 159	OFDMA	BPSK	Nss 2 MCS 0 (34.4)
802.11ax 40MHz	(3S4T, TXBF)	151, 159	OFDMA	BPSK	Nss 3 MCS 0 (51.6)
802.11ax 80MHz	(1S2T, CDD)	42	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(1S4T, CDD)	155	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(1S2T, TXBF)	42	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(1S4T, TXBF)	155	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(2S4T, TXBF)	155	OFDMA	BPSK	Nss 2 MCS 0 (72.1)
802.11ax 80MHz	(3S4T, TXBF)	155	OFDMA	BPSK	Nss 3 MCS 0 (108.1)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH36	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2020



EUT Y_2TX
Setting 84
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.37932G	54.60	68.20	-13.60	42.41	3	Vertical	15	1.04	-	38.90	7.56	34.27
PK	15.5382G	57.30	74.00	-16.70	44.17	3	Vertical	177	1.72	-	39.11	9.37	35.35
AV	15.54356G	43.32	54.00	-10.68	30.20	3	Vertical	177	1.72	-	39.10	9.37	35.35

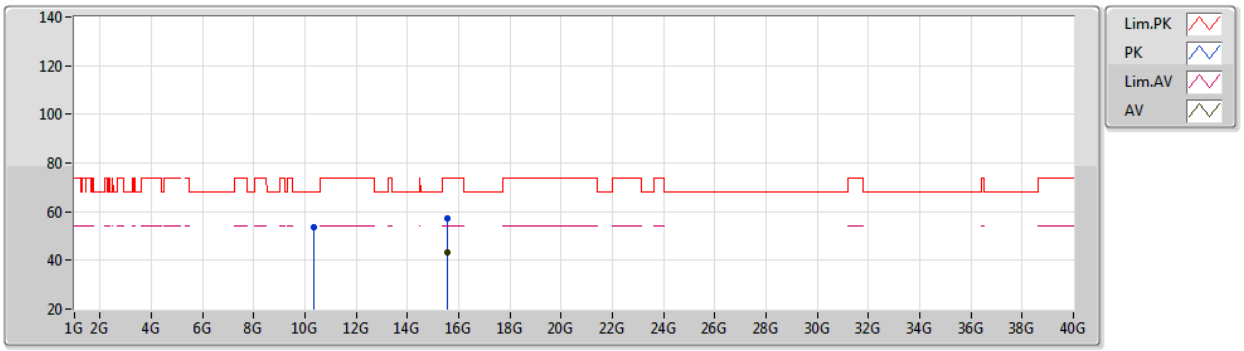
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH36	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2020



EUT Y_2TX
Setting 84
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.36322G	53.45	68.20	-14.75	41.26	3	Horizontal	201	2.17	-	38.89	7.55	34.25
PK	15.54792G	57.32	74.00	-16.68	44.20	3	Horizontal	285	1.20	-	39.10	9.37	35.35
AV	15.54988G	43.22	54.00	-10.78	30.10	3	Horizontal	285	1.20	-	39.10	9.37	35.35

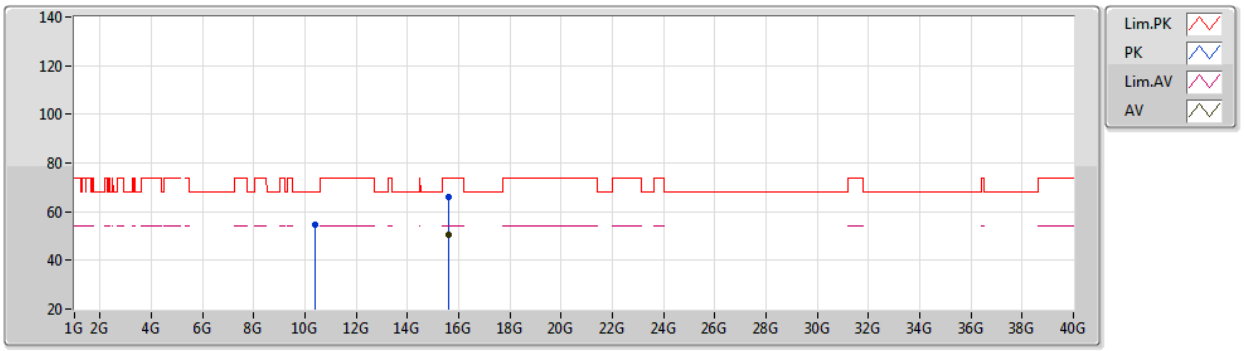
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH40	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2020



EUT Y_2TX
Setting 100
04-E-P-2

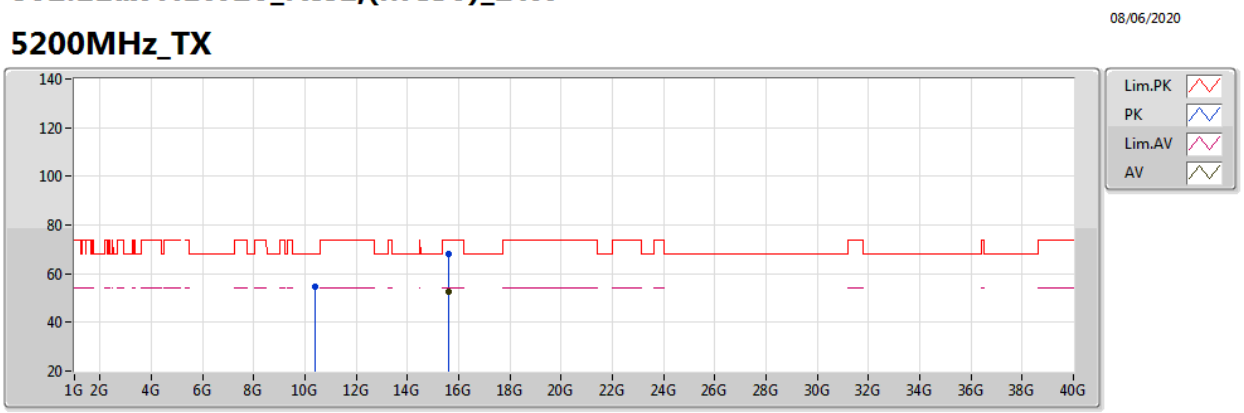
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.3954G	54.69	68.20	-13.51	42.48	3	Vertical	307	1.91	-	38.92	7.57	34.28
PK	15.6G	66.08	74.00	-7.92	53.02	3	Vertical	305	1.76	-	39.04	9.38	35.36
AV	15.6002G	50.66	54.00	-3.34	37.60	3	Vertical	305	1.76	-	39.04	9.38	35.36

Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH40	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_2TX

5200MHz_TX



EUT Y_2TX
Setting 100
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.3988G	54.83	68.20	-13.37	42.62	3	Horizontal	301	1.78	-	38.92	7.57	34.28
PK	15.6073G	68.30	74.00	-5.70	55.25	3	Horizontal	261	1.67	-	39.03	9.38	35.36
AV	15.5999G	52.81	54.00	-1.19	39.75	3	Horizontal	261	1.67	-	39.04	9.38	35.36

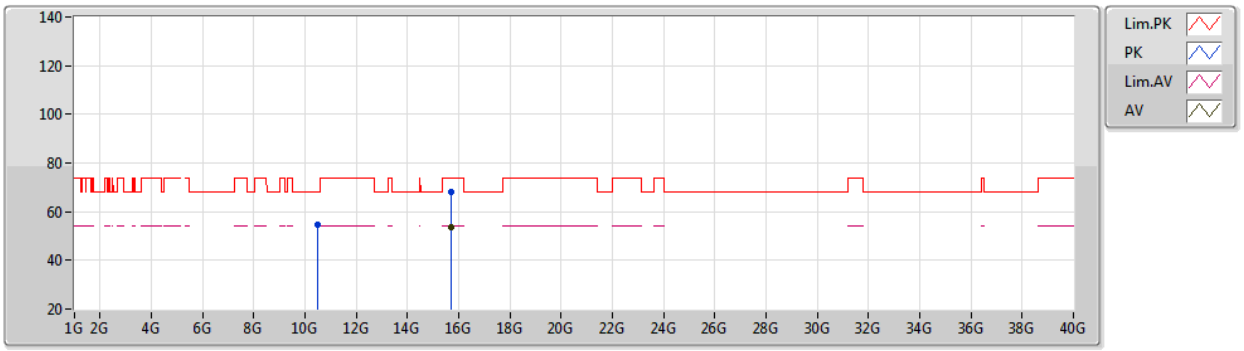
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH48	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2020



EUT Y_2TX
Setting 98
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.48308G	54.49	68.20	-13.71	42.25	3	Vertical	309	2.36	-	38.99	7.61	34.36
PK	15.7235G	68.29	74.00	-5.71	55.39	3	Vertical	308	1.80	-	38.90	9.39	35.39
AV	15.72084G	53.67	54.00	-0.33	40.76	3	Vertical	308	1.80	-	38.91	9.39	35.39

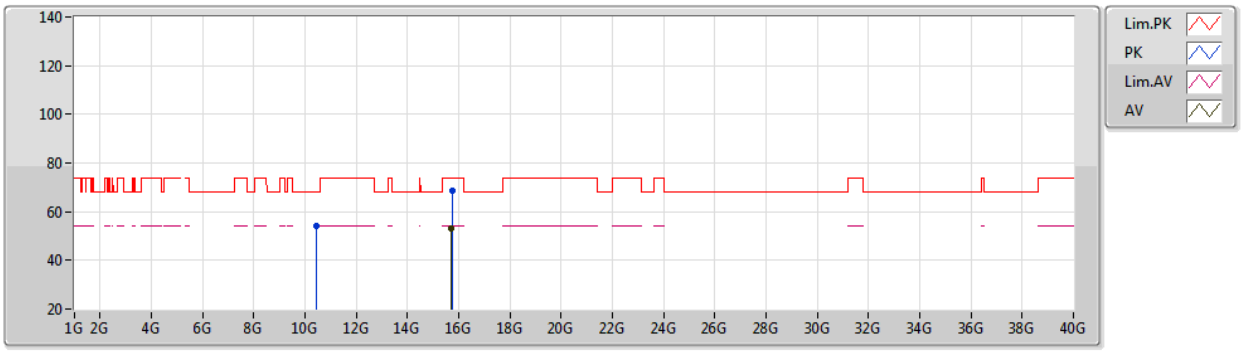
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH48	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2020



EUT Y_2TX
Setting 98
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.46236G	53.96	68.20	-14.24	41.73	3	Horizontal	302	1.73	-	38.97	7.60	34.34
PK	15.7298G	68.68	74.00	-5.32	55.78	3	Horizontal	193	1.65	-	38.90	9.39	35.39
AV	15.7193G	53.25	54.00	-0.75	40.34	3	Horizontal	193	1.65	-	38.91	9.39	35.39

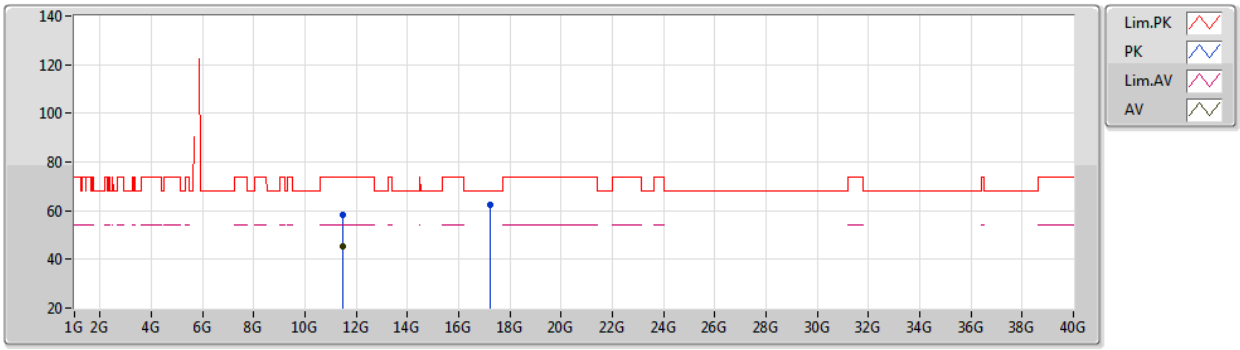
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4926G	58.18	74.00	-15.82	45.84	3	Vertical	313	1.74	-	39.15	8.18	34.99
AV	11.4926G	45.12	54.00	-8.88	32.78	3	Vertical	313	1.74	-	39.15	8.18	34.99
PK	17.241G	62.21	68.20	-5.99	46.51	3	Vertical	294	2.74	-	41.02	10.13	35.45

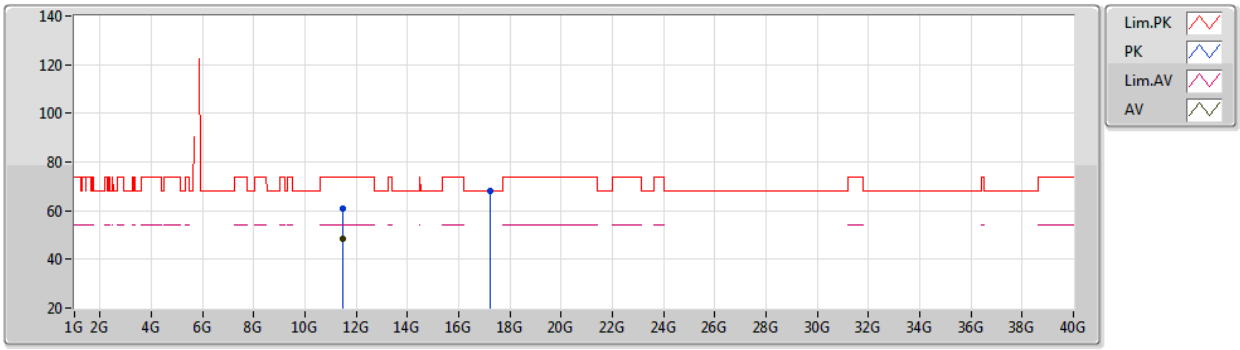
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.493G	60.66	74.00	-13.34	48.32	3	Horizontal	310	2.44	-	39.15	8.18	34.99
AV	11.4928G	48.20	54.00	-5.80	35.86	3	Horizontal	310	2.44	-	39.15	8.18	34.99
PK	17.2368G	68.05	68.20	-0.15	52.36	3	Horizontal	312	1.90	-	41.01	10.13	35.45

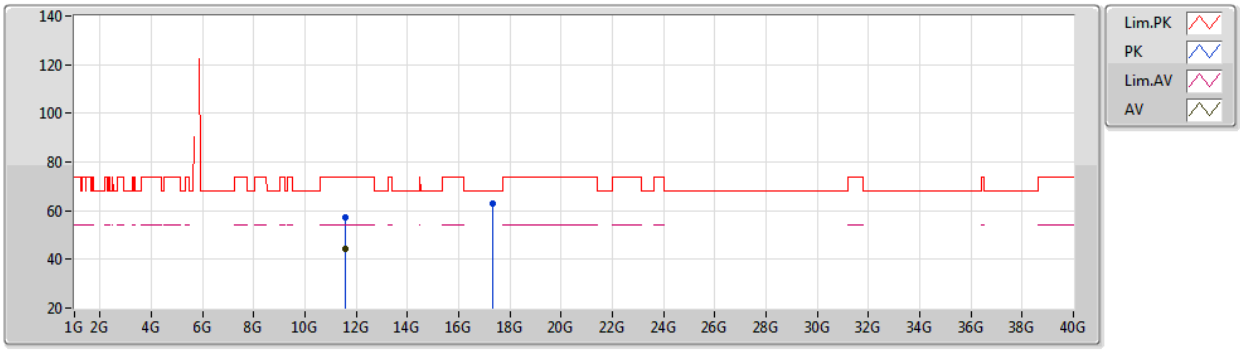
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 89
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.581G	57.49	74.00	-16.51	45.16	3	Vertical	289	2.03	-	39.11	8.24	35.02
AV	11.5712G	44.43	54.00	-9.57	32.11	3	Vertical	289	2.03	-	39.11	8.23	35.02
PK	17.3462G	63.18	68.20	-5.02	47.38	3	Vertical	290	1.66	-	41.11	10.11	35.42

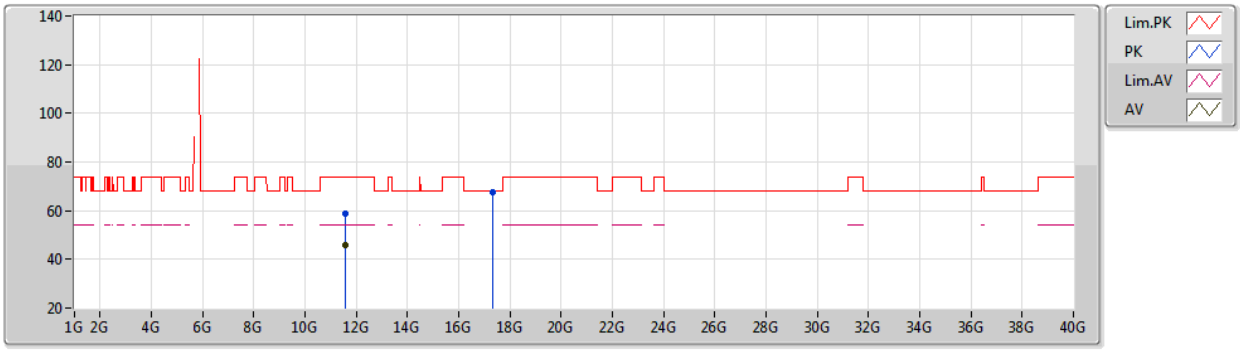
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 89
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5732G	58.66	74.00	-15.34	46.34	3	Horizontal	283	1.80	-	39.11	8.23	35.02
AV	11.5684G	45.84	54.00	-8.16	33.50	3	Horizontal	283	1.80	-	39.12	8.23	35.01
PK	17.35196G	67.54	68.20	-0.66	51.72	3	Horizontal	357	2.29	-	41.12	10.11	35.41

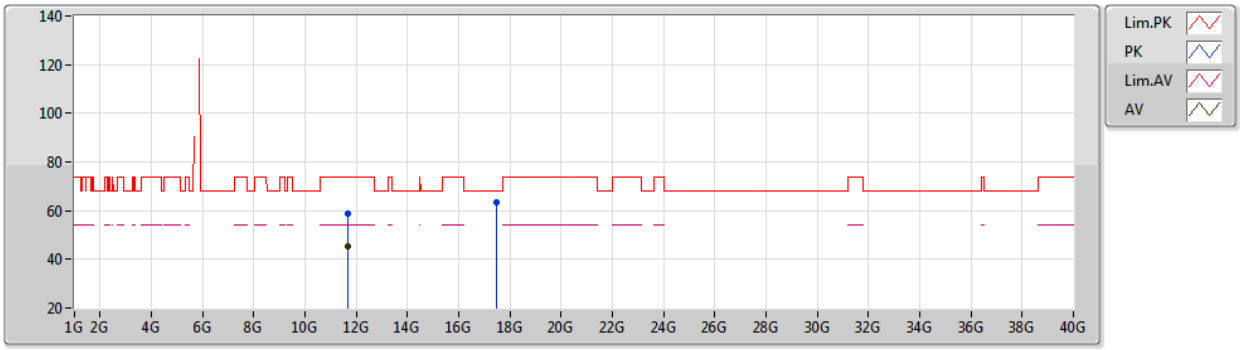
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.64808G	58.95	74.00	-15.05	46.63	3	Vertical	288	2.28	-	39.08	8.28	35.04
AV	11.64808G	45.53	54.00	-8.47	33.21	3	Vertical	288	2.28	-	39.08	8.28	35.04
PK	17.46844G	63.23	68.20	-4.97	47.31	3	Vertical	293	1.70	-	41.22	10.08	35.38

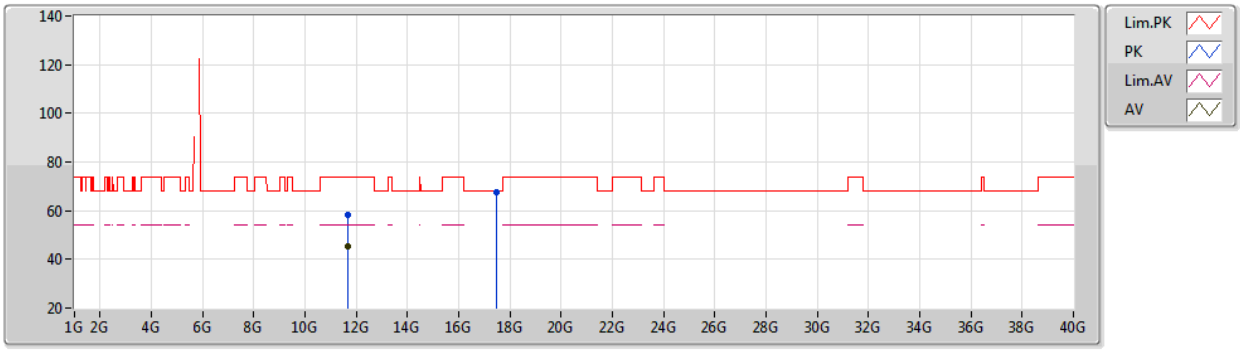
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.65112G	58.29	74.00	-15.71	45.98	3	Horizontal	284	2.81	-	39.07	8.28	35.04
AV	11.6484G	45.59	54.00	-8.41	33.27	3	Horizontal	284	2.81	-	39.08	8.28	35.04
PK	17.47676G	67.65	68.20	-0.55	51.72	3	Horizontal	344	2.31	-	41.23	10.08	35.38

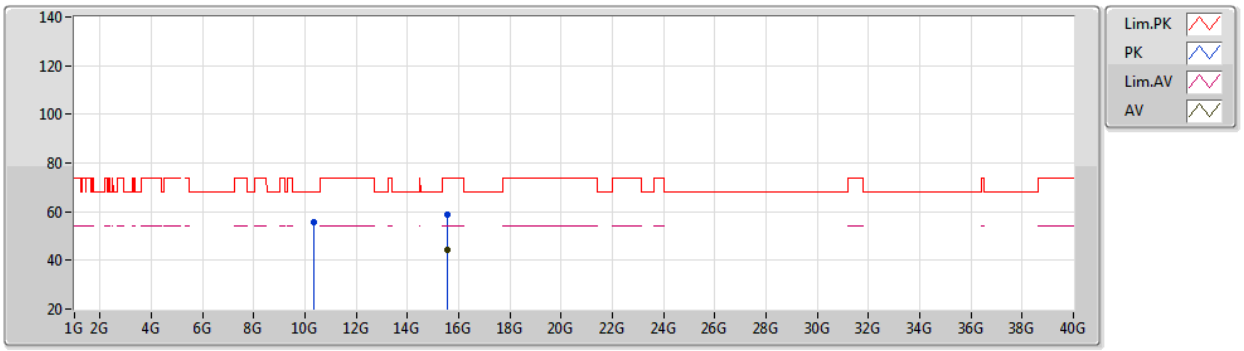
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH36	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2020



EUT Y_2TX
Setting 85
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.35004G	55.67	68.20	-12.53	43.48	3	Vertical	311	2.32	-	38.88	7.55	34.24
PK	15.54816G	58.56	74.00	-15.44	45.44	3	Vertical	308	2.75	-	39.10	9.37	35.35
AV	15.5454G	44.52	54.00	-9.48	31.40	3	Vertical	308	2.75	-	39.10	9.37	35.35

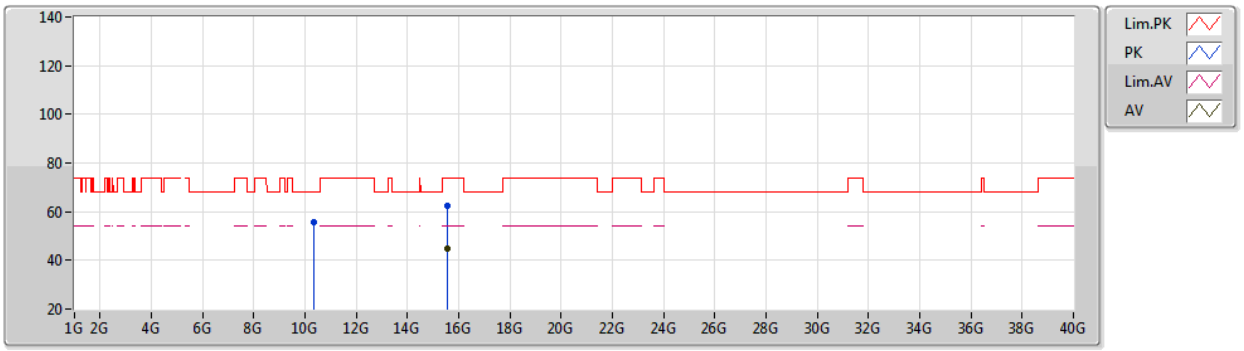
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH36	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2020



EUT Y_2TX
Setting 85
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.35088G	55.59	68.20	-12.61	43.40	3	Horizontal	296	1.80	-	38.88	7.55	34.24
PK	15.53788G	62.61	74.00	-11.39	49.48	3	Horizontal	259	1.57	-	39.11	9.37	35.35
AV	15.54684G	44.67	54.00	-9.33	31.55	3	Horizontal	259	1.57	-	39.10	9.37	35.35

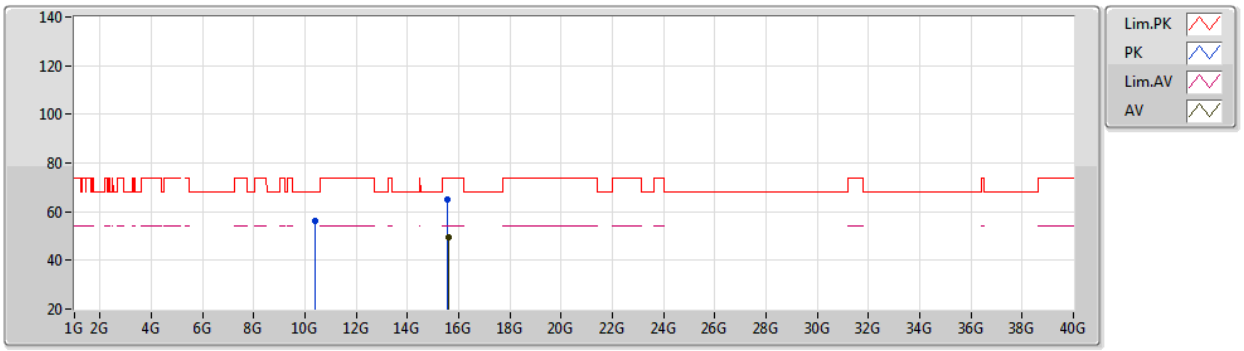
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH40	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2020



EUT Y_2TX
Setting 97
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.3874G	56.13	68.20	-12.07	43.92	3	Vertical	313	1.56	-	38.91	7.57	34.27
PK	15.5814G	65.06	74.00	-8.94	51.98	3	Vertical	327	1.78	-	39.06	9.38	35.36
AV	15.5948G	49.36	54.00	-4.64	36.29	3	Vertical	327	1.78	-	39.05	9.38	35.36

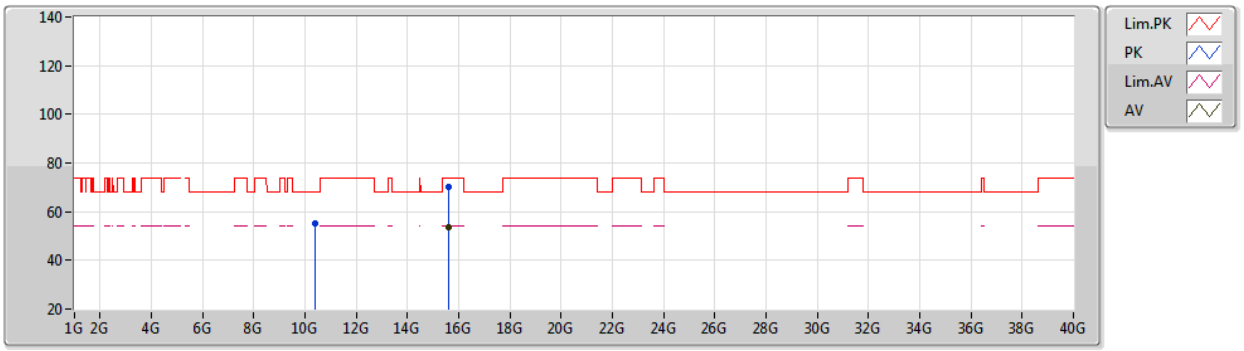
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH40	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2020



EUT Y_2TX
Setting 97
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4118G	55.36	68.20	-12.84	43.15	3	Horizontal	149	1.80	-	38.93	7.58	34.30
PK	15.6112G	70.33	74.00	-3.67	57.28	3	Horizontal	264	1.65	-	39.03	9.38	35.36
AV	15.6036G	53.69	54.00	-0.31	40.63	3	Horizontal	264	1.65	-	39.04	9.38	35.36

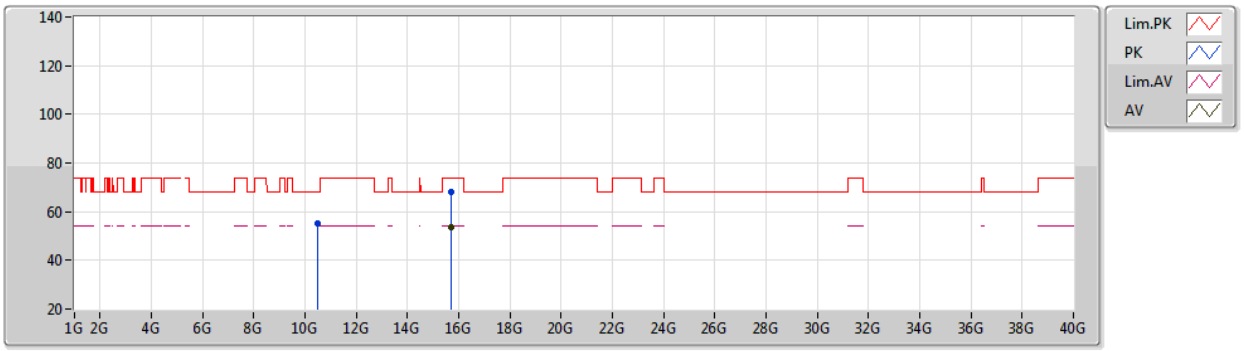
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH48	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2020



EUT Y_2TX
Setting 94
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4822G	55.34	68.20	-12.86	43.10	3	Vertical	306	2.08	-	38.99	7.61	34.36
PK	15.7282G	68.11	74.00	-5.89	55.21	3	Vertical	306	1.79	-	38.90	9.39	35.39
AV	15.7294G	53.78	54.00	-0.22	40.88	3	Vertical	306	1.79	-	38.90	9.39	35.39

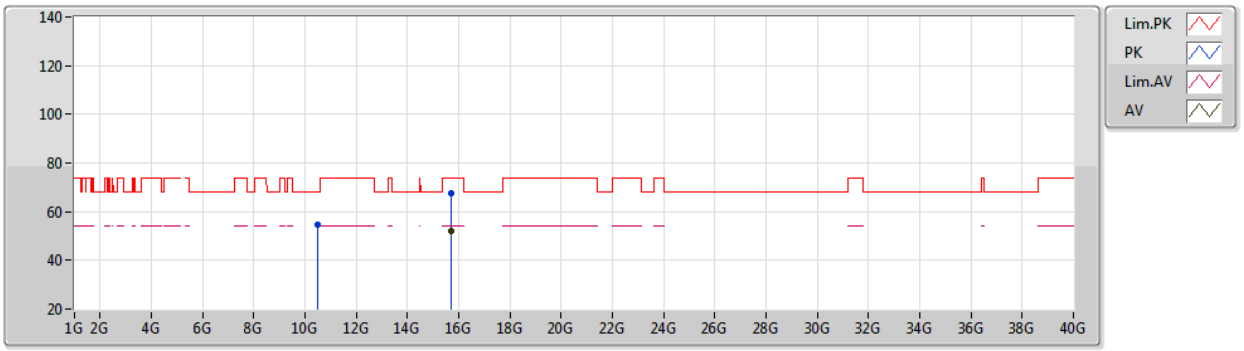
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH48	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2020



EUT Y_2TX
Setting 94
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4865G	54.82	68.20	-13.38	42.59	3	Horizontal	301	1.80	-	38.99	7.61	34.37
PK	15.7162G	67.49	74.00	-6.51	54.58	3	Horizontal	190	1.90	-	38.91	9.39	35.39
AV	15.7222G	52.22	54.00	-1.78	39.31	3	Horizontal	190	1.90	-	38.91	9.39	35.39

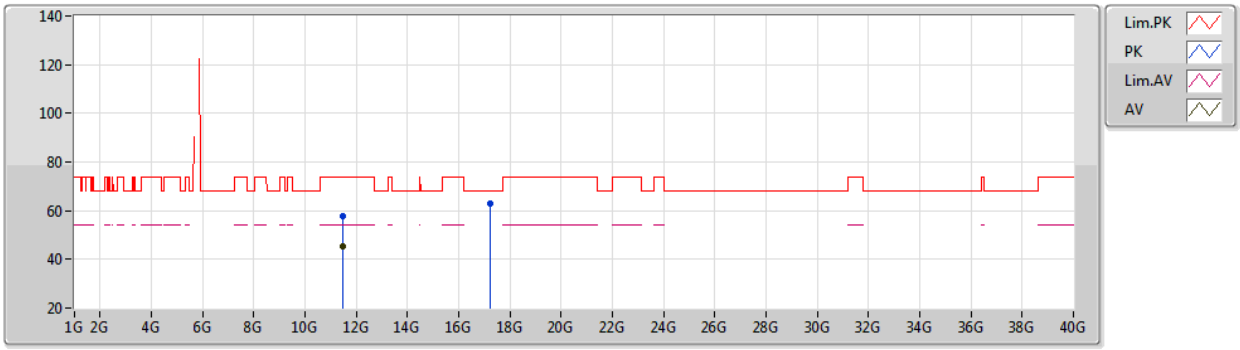
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6/ CH149	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4888G	57.79	74.00	-16.21	45.44	3	Vertical	289	1.72	-	39.16	8.18	34.99
AV	11.49G	45.40	54.00	-8.60	33.05	3	Vertical	289	1.72	-	39.16	8.18	34.99
PK	17.2482G	62.86	68.20	-5.34	47.16	3	Vertical	301	2.79	-	41.02	10.13	35.45

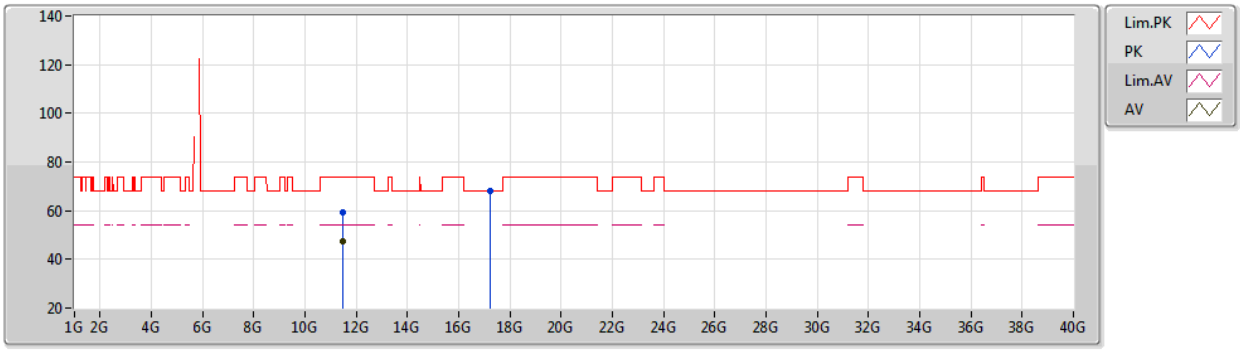
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4896G	59.25	74.00	-14.75	46.90	3	Horizontal	315	1.80	-	39.16	8.18	34.99
AV	11.4898G	47.38	54.00	-6.62	35.03	3	Horizontal	315	1.80	-	39.16	8.18	34.99
PK	17.239G	68.02	68.20	-0.18	52.32	3	Horizontal	314	2.11	-	41.02	10.13	35.45

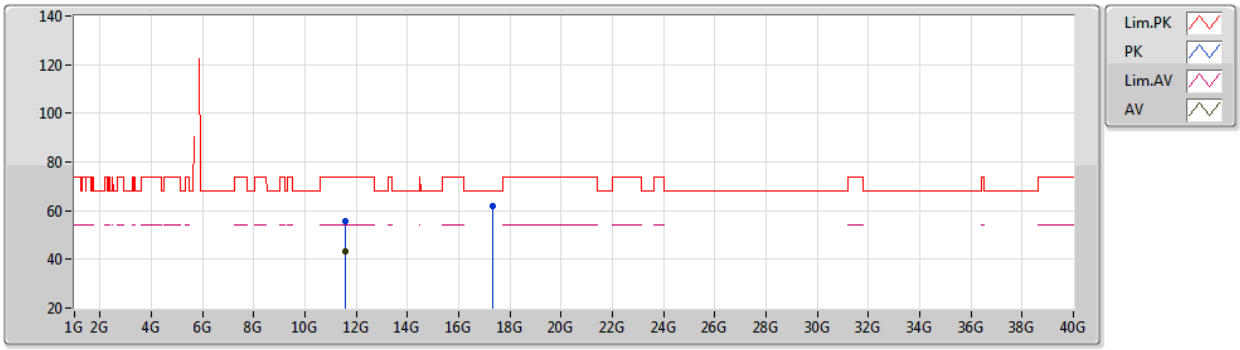
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 84
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5674G	55.71	74.00	-18.29	43.37	3	Vertical	289	1.80	-	39.12	8.23	35.01
AV	11.5698G	43.48	54.00	-10.52	31.15	3	Vertical	289	1.80	-	39.12	8.23	35.02
PK	17.3518G	62.13	68.20	-6.07	46.31	3	Vertical	293	1.62	-	41.12	10.11	35.41

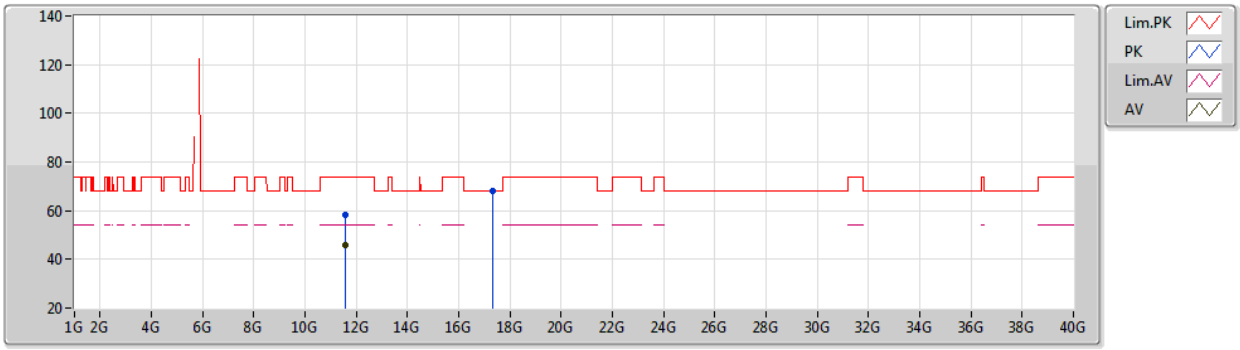
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 84
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5652G	58.32	74.00	-15.68	45.98	3	Horizontal	290	2.02	-	39.12	8.23	35.01
AV	11.5678G	45.75	54.00	-8.25	33.41	3	Horizontal	290	2.02	-	39.12	8.23	35.01
PK	17.3524G	68.15	68.20	-0.05	52.33	3	Horizontal	337	2.26	-	41.12	10.11	35.41

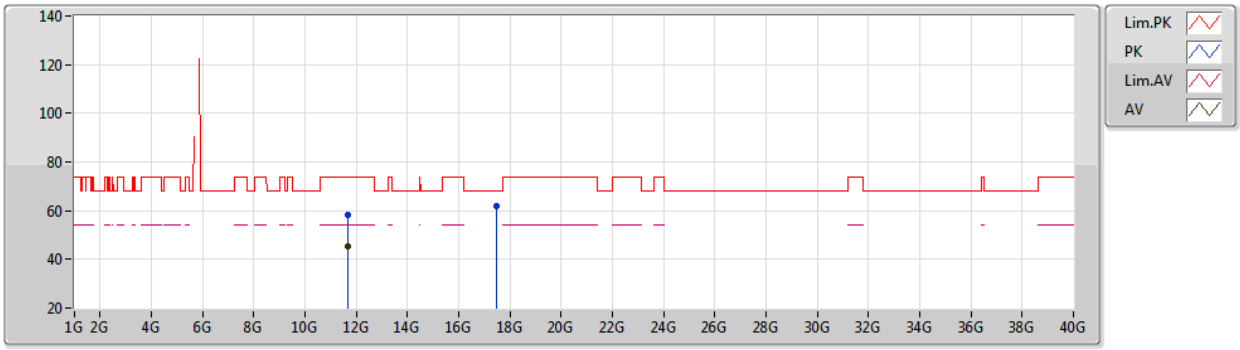
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6498G	58.43	74.00	-15.57	46.11	3	Vertical	321	1.64	-	39.08	8.28	35.04
AV	11.6486G	45.20	54.00	-8.80	32.88	3	Vertical	321	1.64	-	39.08	8.28	35.04
PK	17.485G	62.10	68.20	-6.10	46.16	3	Vertical	248	2.53	-	41.24	10.07	35.37

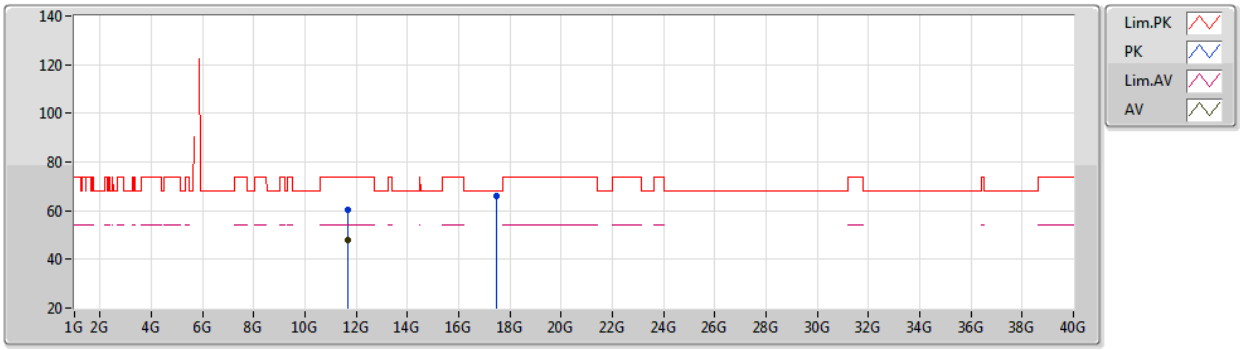
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6604G	60.30	74.00	-13.70	47.98	3	Horizontal	313	2.74	-	39.07	8.29	35.04
AV	11.6482G	47.98	54.00	-6.02	35.66	3	Horizontal	313	2.74	-	39.08	8.28	35.04
PK	17.4786G	65.94	68.20	-2.26	50.01	3	Horizontal	333	2.53	-	41.23	10.08	35.38

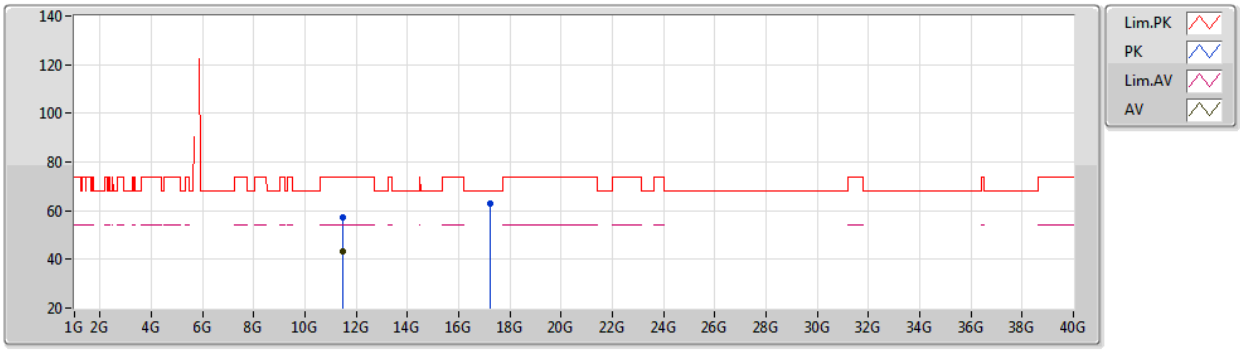
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	V

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4934G	57.29	74.00	-16.71	44.95	3	Vertical	310	1.78	-	39.15	8.18	34.99
AV	11.4902G	43.36	54.00	-10.64	31.02	3	Vertical	310	1.78	-	39.15	8.18	34.99
PK	17.2258G	62.82	68.20	-5.38	47.13	3	Vertical	318	2.46	-	41.00	10.14	35.45

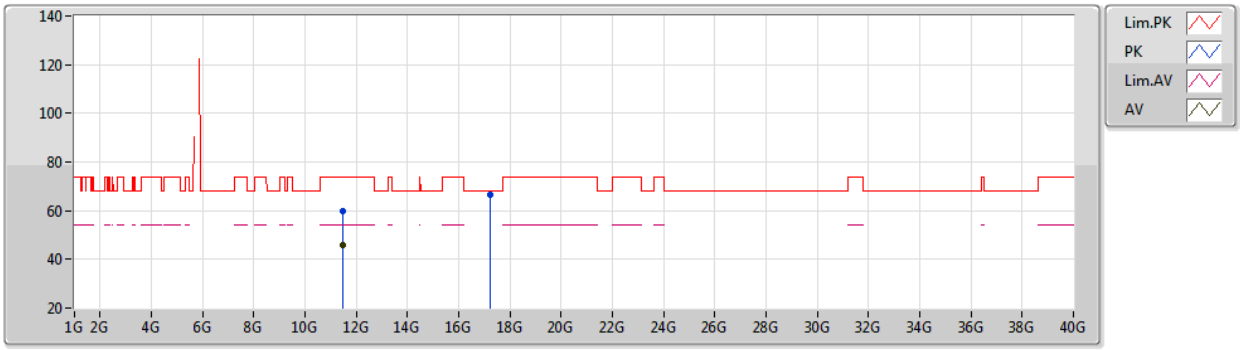
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4936G	59.93	74.00	-14.07	47.59	3	Horizontal	305	2.05	-	39.15	8.18	34.99
AV	11.4911G	46.11	54.00	-7.89	33.77	3	Horizontal	305	2.05	-	39.15	8.18	34.99
PK	17.2378G	66.50	68.20	-1.70	50.81	3	Horizontal	347	1.58	-	41.01	10.13	35.45

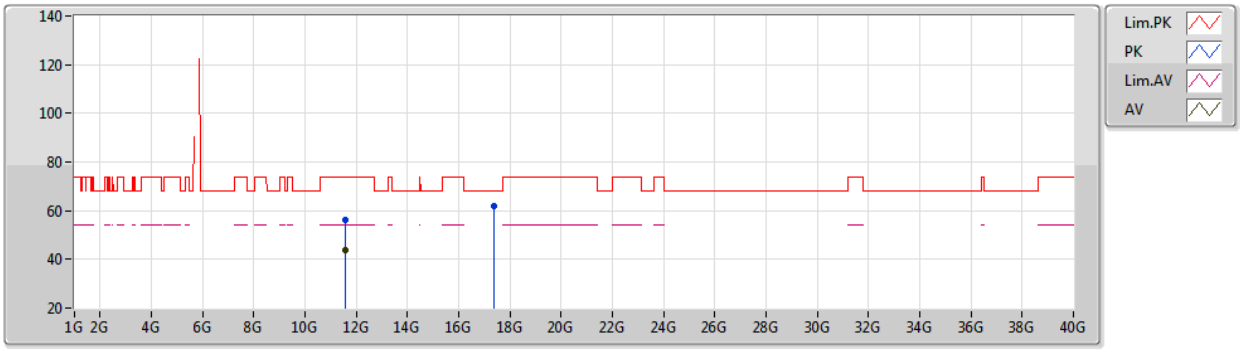
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 92
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.562G	56.39	74.00	-17.61	44.05	3	Vertical	288	1.95	-	39.12	8.23	35.01
AV	11.5646G	43.89	54.00	-10.11	31.55	3	Vertical	288	1.95	-	39.12	8.23	35.01
PK	17.3594G	62.00	68.20	-6.20	46.19	3	Vertical	299	1.89	-	41.12	10.10	35.41

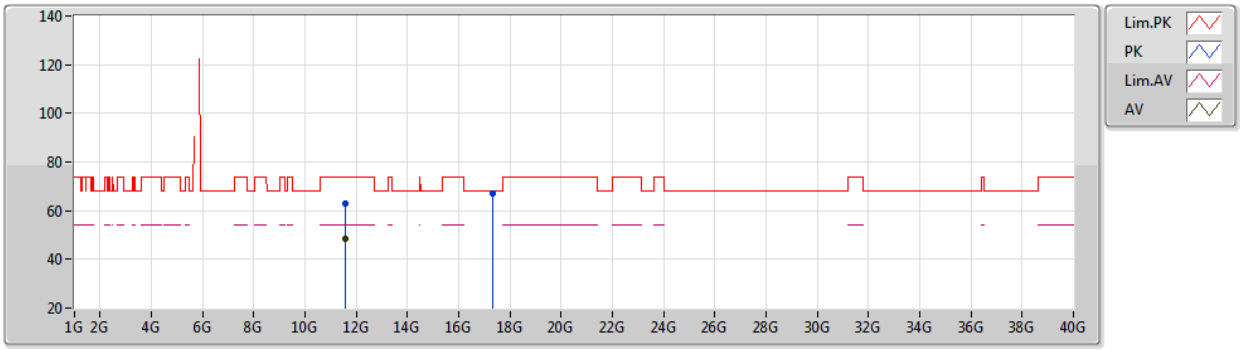
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	H

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 92
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5698G	63.08	74.00	-10.92	50.75	3	Horizontal	314	1.62	-	39.12	8.23	35.02
AV	11.5698G	48.29	54.00	-5.71	35.96	3	Horizontal	314	1.62	-	39.12	8.23	35.02
PK	17.341G	67.17	68.20	-1.03	51.37	3	Horizontal	331	2.31	-	41.11	10.11	35.42

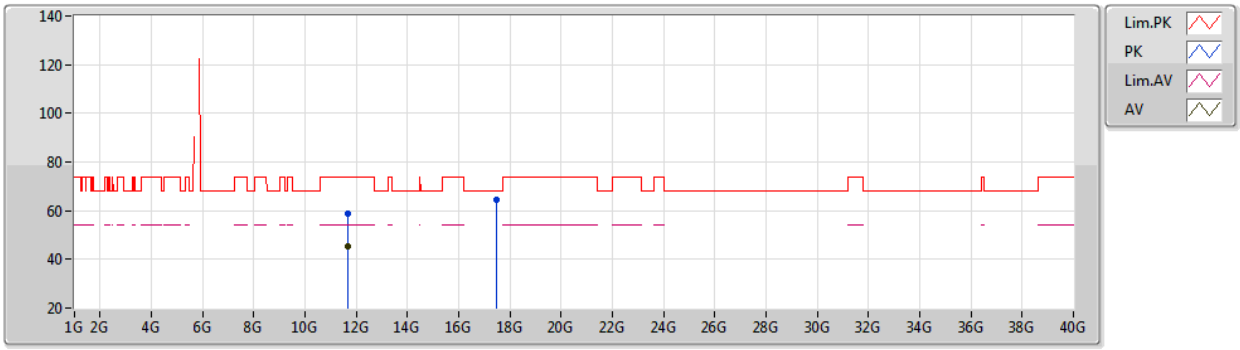
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6535G	58.77	74.00	-15.23	46.46	3	Vertical	312	1.62	-	39.07	8.28	35.04
AV	11.6521G	45.18	54.00	-8.82	32.87	3	Vertical	312	1.62	-	39.07	8.28	35.04
PK	17.4614G	64.52	68.20	-3.68	48.60	3	Vertical	289	1.65	-	41.22	10.08	35.38

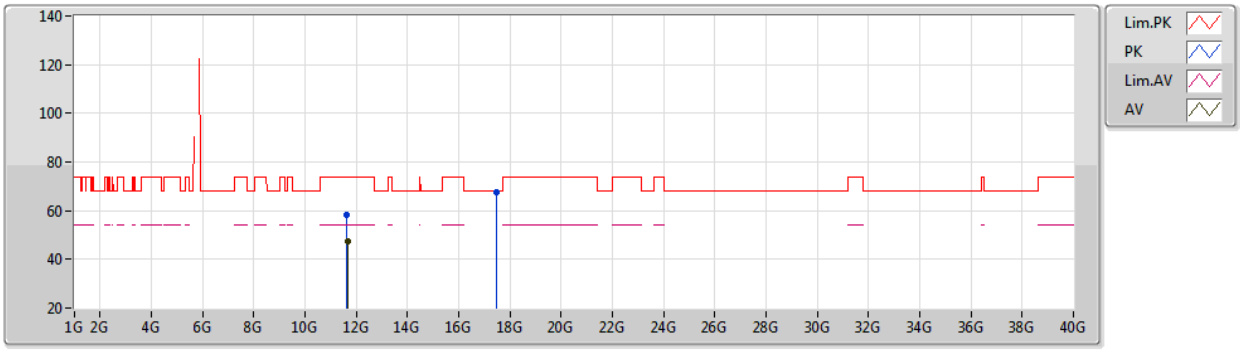
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6439G	58.31	74.00	-15.69	45.99	3	Horizontal	310	2.32	-	39.08	8.28	35.04
AV	11.6497G	47.57	54.00	-6.43	35.25	3	Horizontal	310	2.32	-	39.08	8.28	35.04
PK	17.4606G	67.74	68.20	-0.46	51.83	3	Horizontal	336	1.94	-	41.21	10.08	35.38

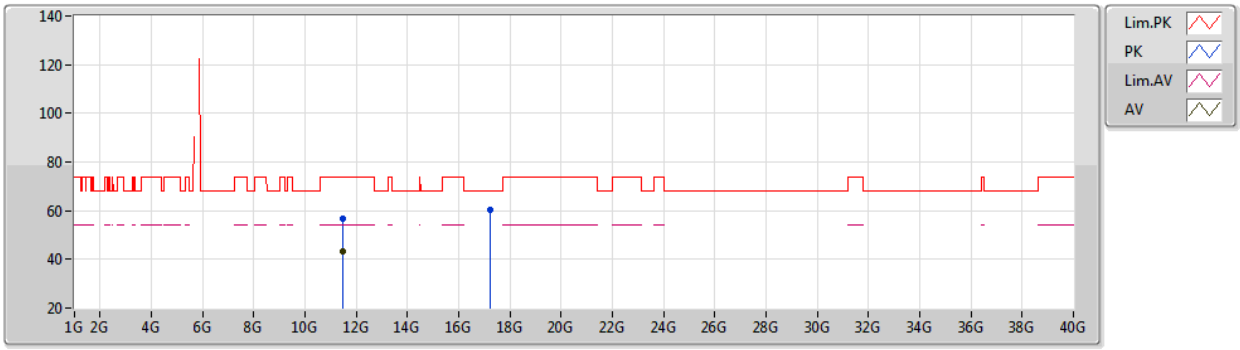
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	V

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4876G	56.62	74.00	-17.38	44.27	3	Vertical	293	1.91	-	39.16	8.18	34.99
AV	11.4898G	43.52	54.00	-10.48	31.17	3	Vertical	293	1.91	-	39.16	8.18	34.99
PK	17.2364G	60.49	68.20	-7.71	44.80	3	Vertical	294	1.63	-	41.01	10.13	35.45

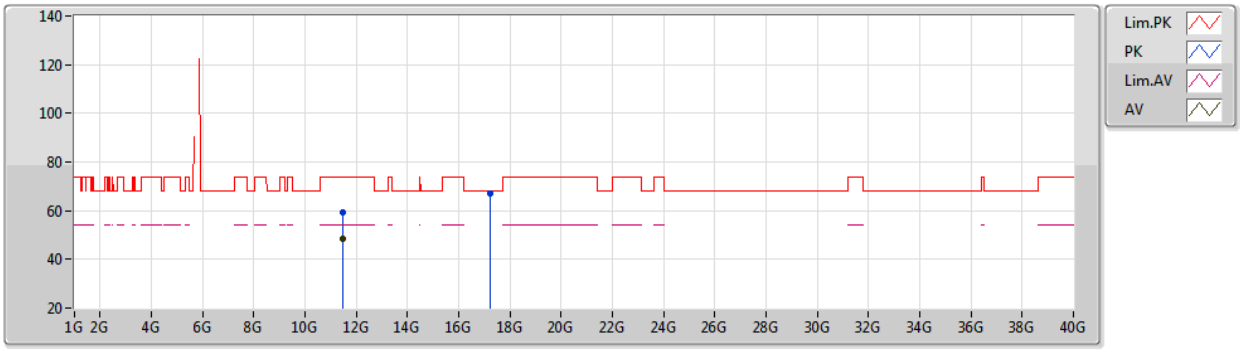
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4828G	59.08	74.00	-14.92	46.74	3	Horizontal	317	1.58	-	39.16	8.17	34.99
AV	11.49G	48.40	74.00	-25.60	36.05	3	Horizontal	317	1.58	-	39.16	8.18	34.99
PK	17.2288G	66.94	68.20	-1.26	51.24	3	Horizontal	323	1.61	-	41.01	10.14	35.45

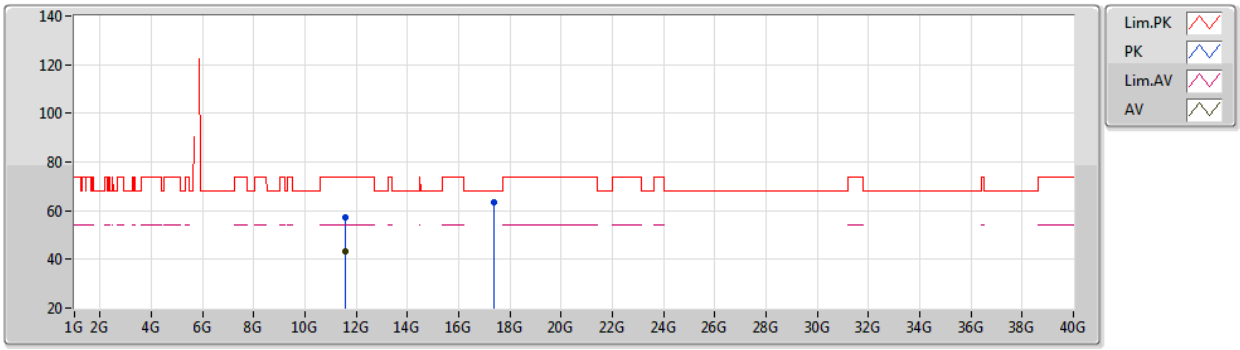
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 91
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5704G	57.19	74.00	-16.81	44.87	3	Vertical	289	1.80	-	39.11	8.23	35.02
AV	11.57G	43.53	54.00	-10.47	31.20	3	Vertical	289	1.80	-	39.12	8.23	35.02
PK	17.3526G	63.53	68.20	-4.67	47.71	3	Vertical	298	1.85	-	41.12	10.11	35.41

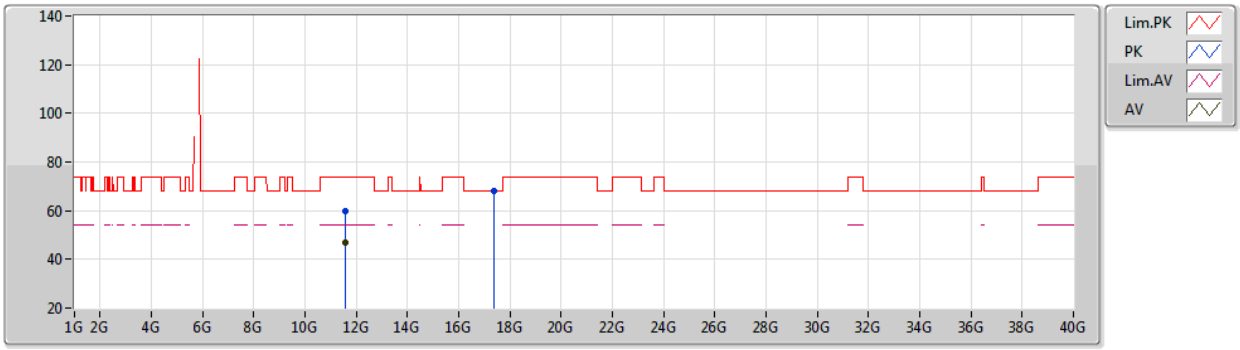
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	H

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 91
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5668G	60.01	74.00	-13.99	47.67	3	Horizontal	287	1.98	-	39.12	8.23	35.01
AV	11.5698G	46.79	54.00	-7.21	34.46	3	Horizontal	287	1.98	-	39.12	8.23	35.02
PK	17.3532G	67.91	68.20	-0.29	52.09	3	Horizontal	337	2.38	-	41.12	10.11	35.41

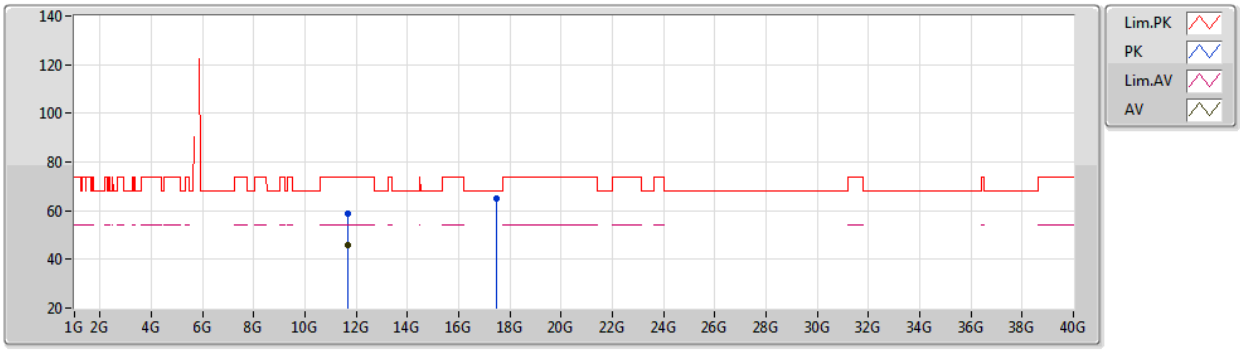
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6494G	58.75	74.00	-15.25	46.43	3	Vertical	264	1.98	-	39.08	8.28	35.04
AV	11.6488G	46.12	54.00	-7.88	33.80	3	Vertical	264	1.98	-	39.08	8.28	35.04
PK	17.4688G	65.25	68.20	-2.95	49.33	3	Vertical	306	2.94	-	41.22	10.08	35.38

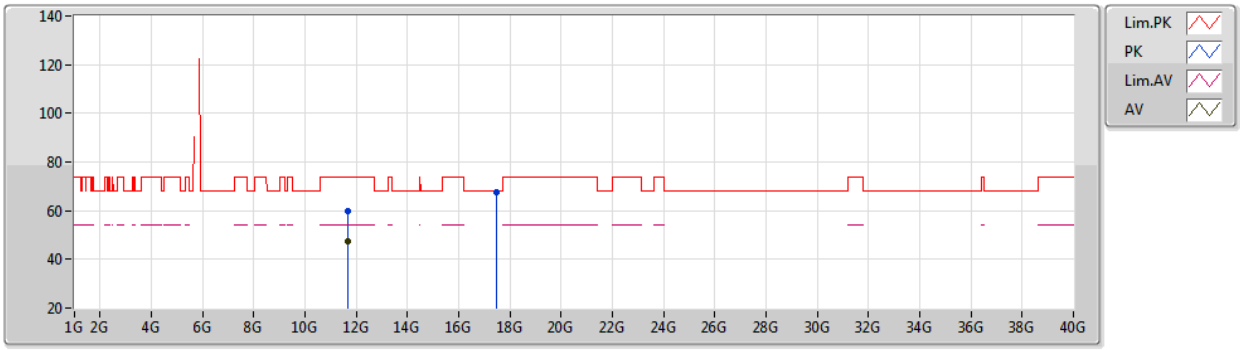
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6616G	59.78	74.00	-14.22	47.46	3	Horizontal	282	2.37	-	39.07	8.29	35.04
AV	11.6628G	47.20	54.00	-6.80	34.88	3	Horizontal	282	2.37	-	39.07	8.29	35.04
PK	17.4818G	67.46	68.20	-0.74	51.54	3	Horizontal	353	2.54	-	41.23	10.07	35.38

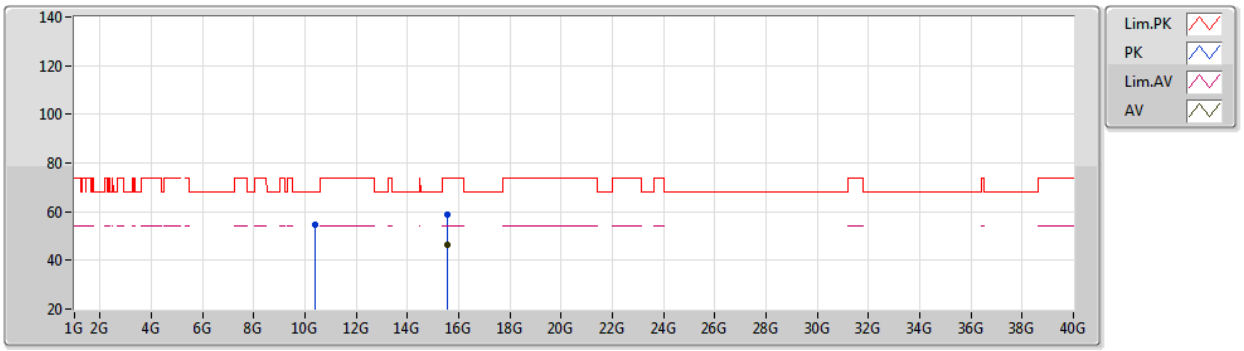
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH38	**Polarization**	V

802.11ax HEW40_Nss1,(MCS0)_2TX

5190MHz_TX

08/06/2020



EUT Y_2TX
Setting 77
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.3787G	54.58	68.20	-13.62	42.39	3	Vertical	274	1.04	-	38.90	7.56	34.27
PK	15.57116G	58.76	74.00	-15.24	45.67	3	Vertical	151	1.00	-	39.07	9.38	35.36
AV	15.57492G	46.27	54.00	-7.73	33.18	3	Vertical	151	1.00	-	39.07	9.38	35.36

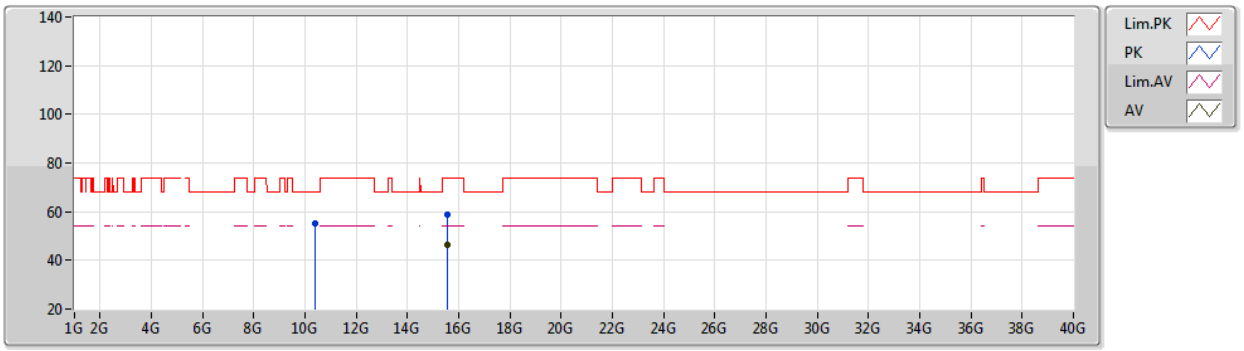
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH38	**Polarization**	H

802.11ax HEW40_Nss1,(MCS0)_2TX

5190MHz_TX

08/06/2020



EUT Y_2TX
Setting 77
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.38102G	55.14	68.20	-13.06	42.95	3	Horizontal	274	1.28	-	38.90	7.56	34.27
PK	15.56884G	58.97	74.00	-15.03	45.88	3	Horizontal	340	1.80	-	39.07	9.38	35.36
AV	15.56646G	46.60	54.00	-7.40	33.49	3	Horizontal	340	1.80	-	39.08	9.38	35.35

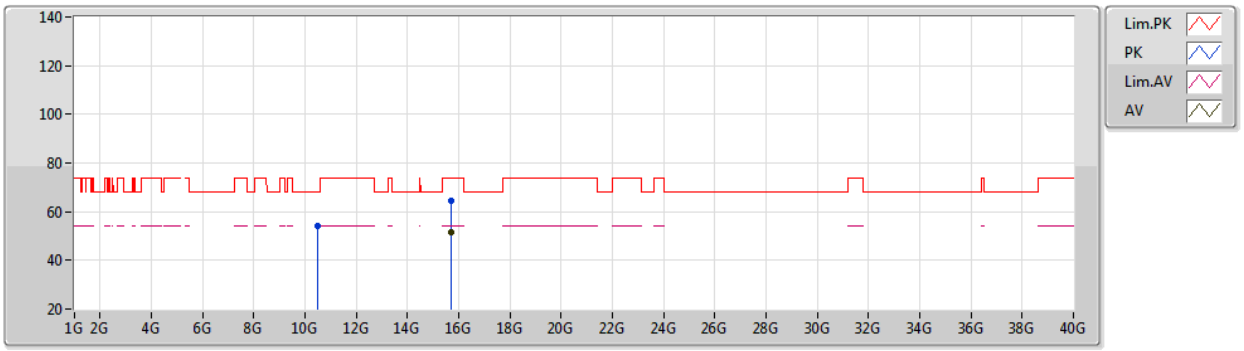
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH46	**Polarization**	V

802.11ax HEW40_Nss1,(MCS0)_2TX

5230MHz_TX

08/06/2020



EUT Y_2TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4686G	54.05	68.20	-14.15	41.83	3	Vertical	310	1.80	-	38.97	7.60	34.35
PK	15.7016G	64.34	74.00	-9.66	51.40	3	Vertical	307	1.80	-	38.93	9.39	35.38
AV	15.6884G	51.46	54.00	-2.54	38.51	3	Vertical	307	1.80	-	38.94	9.39	35.38

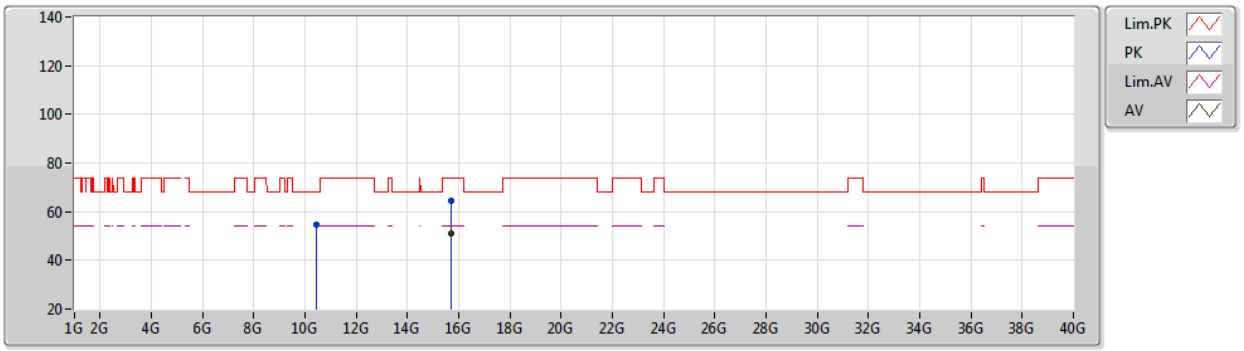
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH46	**Polarization**	H

802.11ax HEW40_Nss1,(MCS0)_2TX

5230MHz_TX

08/06/2020



EUT Y_2TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4553G	54.85	68.20	-13.35	42.63	3	Horizontal	304	1.70	-	38.96	7.60	34.34
PK	15.692G	64.26	74.00	-9.74	51.31	3	Horizontal	195	1.65	-	38.94	9.39	35.38
AV	15.6894G	51.11	54.00	-2.89	38.16	3	Horizontal	195	1.65	-	38.94	9.39	35.38

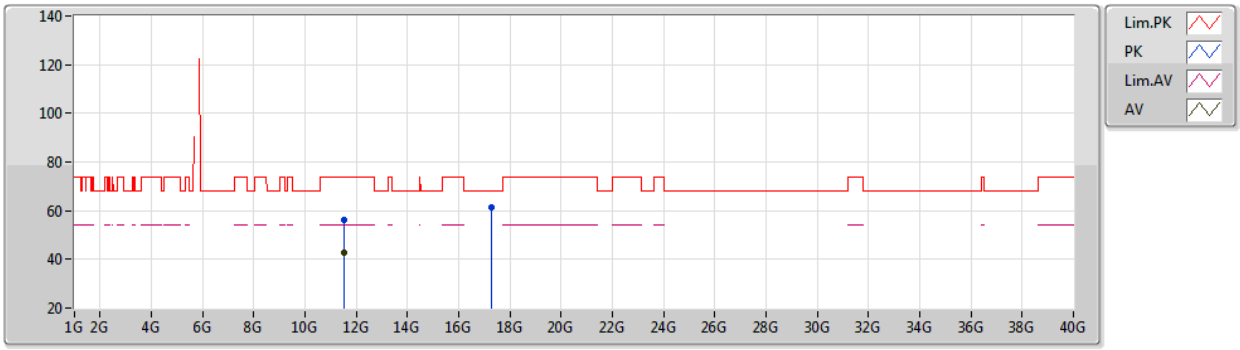
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	V

802.11ax HEW40_Nss1,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.511G	56.22	74.00	-17.78	43.89	3	Vertical	292	2.08	-	39.14	8.19	35.00
AV	11.5109G	42.91	54.00	-11.09	30.58	3	Vertical	292	2.08	-	39.14	8.19	35.00
PK	17.2692G	61.19	68.20	-7.01	45.46	3	Vertical	296	1.90	-	41.04	10.13	35.44

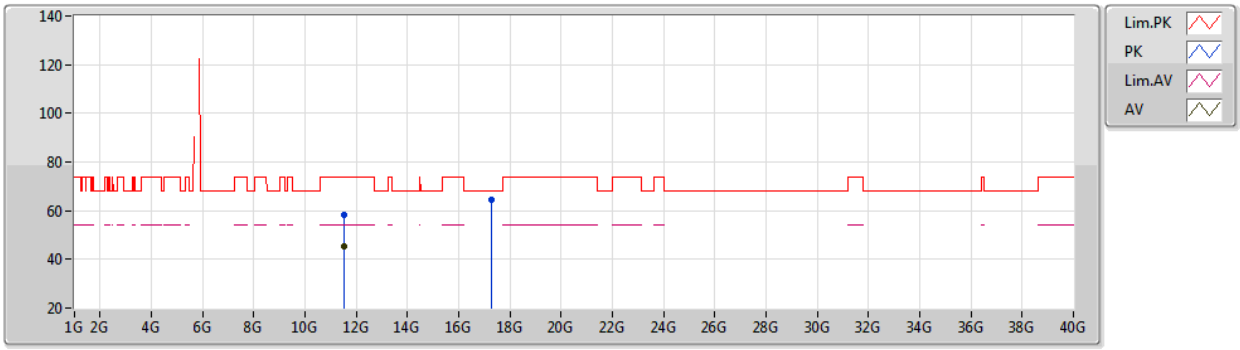
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	H

802.11ax HEW40_Nss1,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5088G	58.15	74.00	-15.85	45.81	3	Horizontal	274	2.37	-	39.15	8.19	35.00
AV	11.504G	45.09	54.00	-8.91	32.75	3	Horizontal	274	2.37	-	39.15	8.19	35.00
PK	17.2669G	64.62	68.20	-3.58	48.89	3	Horizontal	329	2.57	-	41.04	10.13	35.44

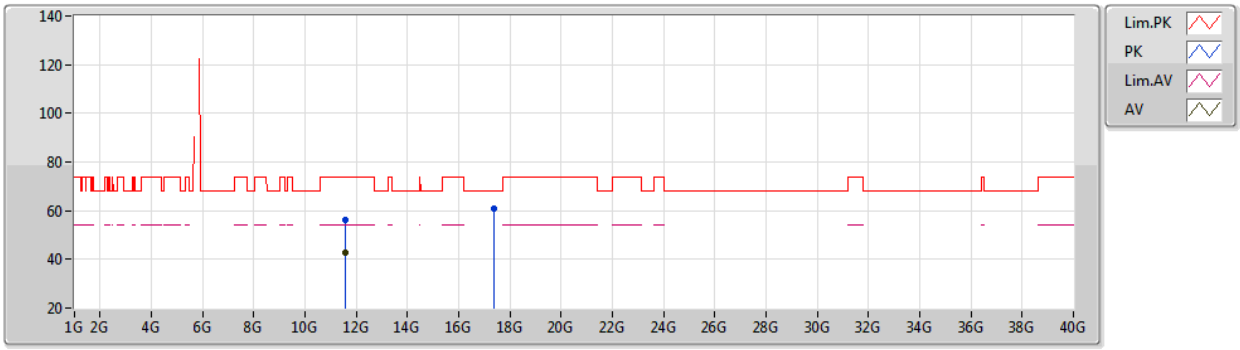
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	V

802.11ax HEW40_Nss1,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.596G	56.46	74.00	-17.54	44.13	3	Vertical	289	1.96	-	39.10	8.25	35.02
AV	11.591G	42.87	54.00	-11.13	30.55	3	Vertical	289	1.96	-	39.10	8.24	35.02
PK	17.3984G	61.03	68.20	-7.17	45.18	3	Vertical	290	1.69	-	41.16	10.09	35.40

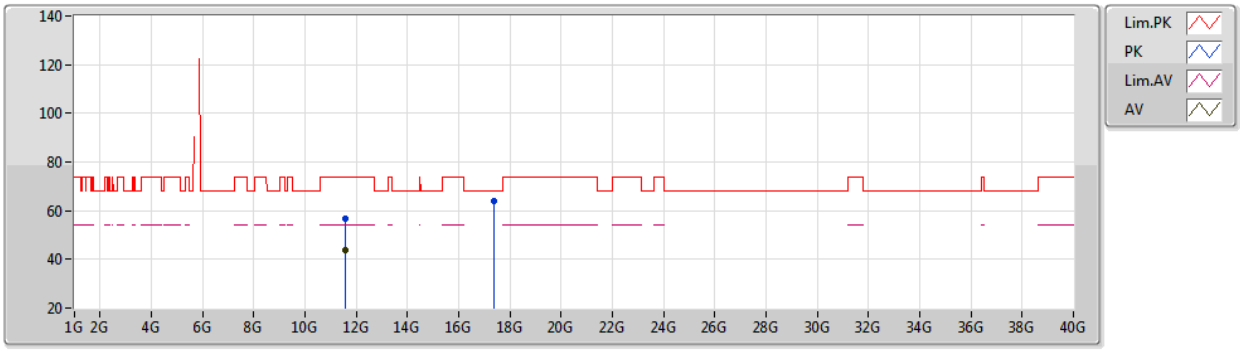
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	H

802.11ax HEW40_Nss1,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5863G	56.91	74.00	-17.09	44.58	3	Horizontal	275	2.35	-	39.11	8.24	35.02
AV	11.584G	43.98	54.00	-10.02	31.65	3	Horizontal	275	2.35	-	39.11	8.24	35.02
PK	17.3724G	63.88	68.20	-4.32	48.05	3	Horizontal	338	2.92	-	41.14	10.10	35.41

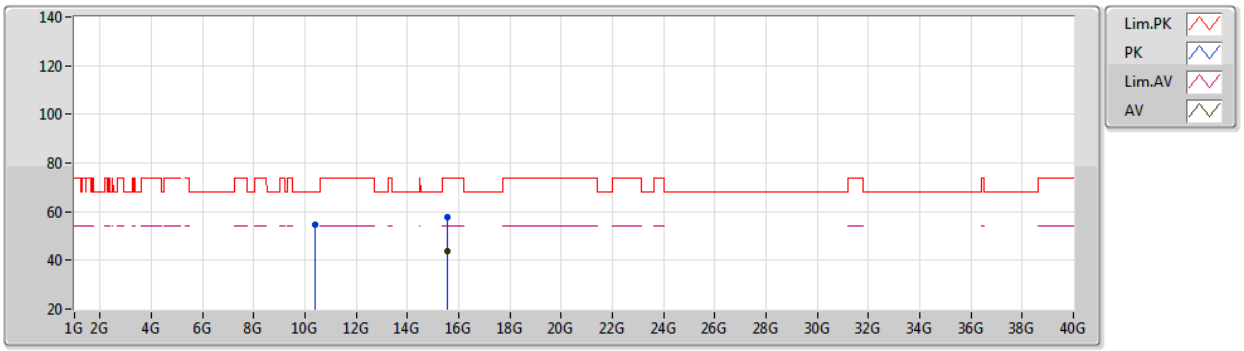
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH38	**Polarization**	V

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5190MHz_TX

08/06/2020



EUT Y_2TX
Setting 79
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.388G	54.40	68.20	-13.80	42.19	3	Vertical	314	1.70	-	38.91	7.57	34.27
PK	15.56428G	57.88	74.00	-16.12	44.77	3	Vertical	264	1.80	-	39.08	9.38	35.35
AV	15.57544G	43.98	54.00	-10.02	30.89	3	Vertical	264	1.80	-	39.07	9.38	35.36

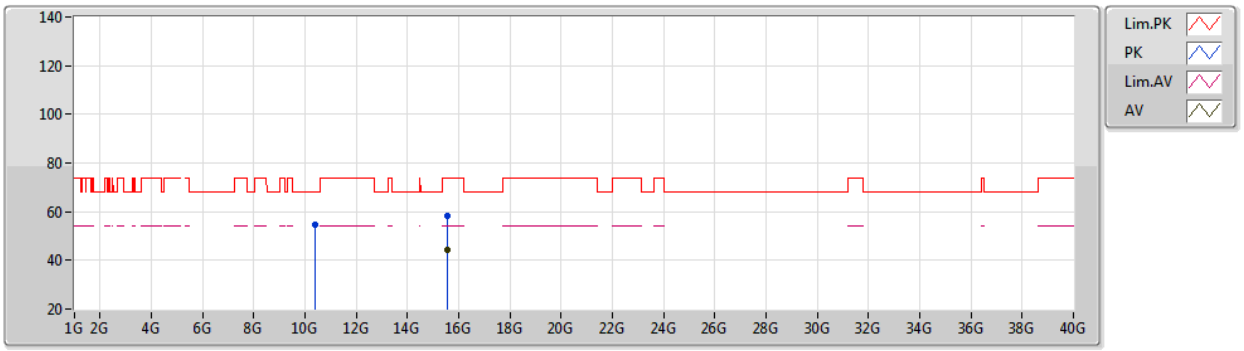
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH38	**Polarization**	H

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5190MHz_TX

08/06/2020



EUT Y_2TX
Setting 79
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.37108G	54.62	68.20	-13.58	42.42	3	Horizontal	298	1.90	-	38.90	7.56	34.26
PK	15.57556G	58.45	74.00	-15.55	45.36	3	Horizontal	42	2.99	-	39.07	9.38	35.36
AV	15.57484G	44.10	54.00	-9.90	31.01	3	Horizontal	42	2.99	-	39.07	9.38	35.36

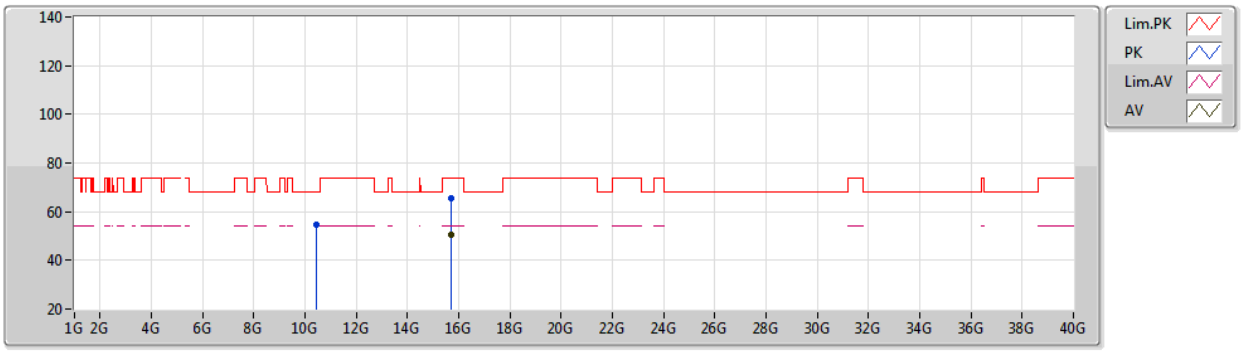
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	8802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH46	**Polarization**	V

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5230MHz_TX

08/06/2020



EUT Y_2TX
Setting 100
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.45092G	54.46	68.20	-13.74	42.23	3	Vertical	311	1.60	-	38.96	7.60	34.33
PK	15.7206G	65.59	74.00	-8.41	52.68	3	Vertical	221	1.77	-	38.91	9.39	35.39
AV	15.7168G	50.43	54.00	-3.57	37.52	3	Vertical	221	1.77	-	38.91	9.39	35.39

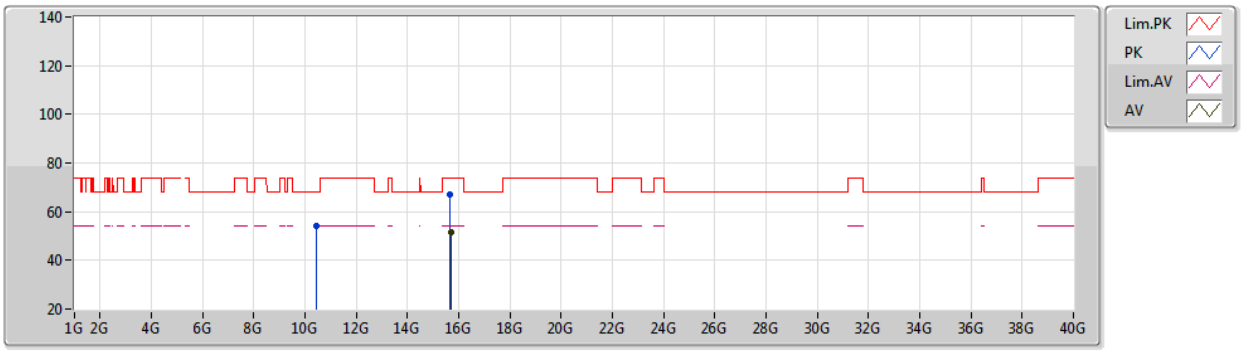
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH46	**Polarization**	H

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5230MHz_TX

08/06/2020



EUT Y_2TX
Setting 100
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4598G	54.01	68.20	-14.19	41.78	3	Horizontal	297	1.80	-	38.97	7.60	34.34
PK	15.6648G	66.98	74.00	-7.02	54.01	3	Horizontal	265	1.97	-	38.97	9.38	35.38
AV	15.6954G	51.36	54.00	-2.64	38.41	3	Horizontal	265	1.97	-	38.94	9.39	35.38

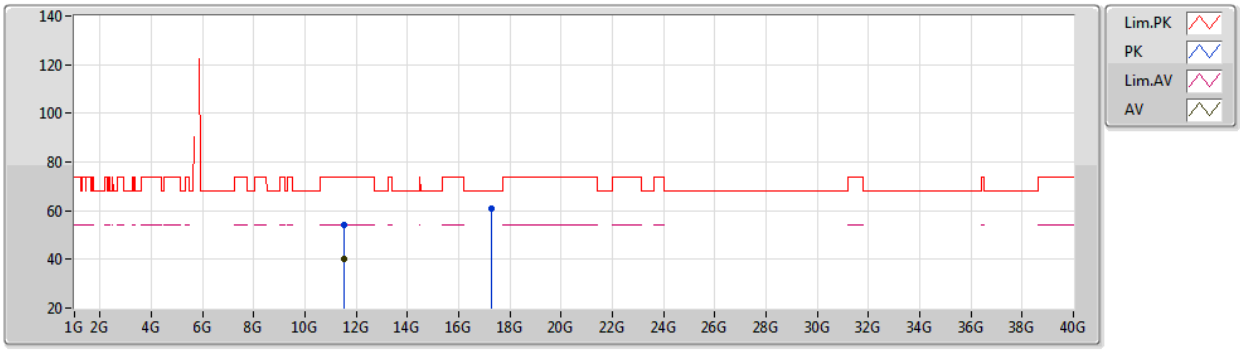
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	V

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.51354G	54.13	74.00	-19.87	41.80	3	Vertical	308	1.62	-	39.14	8.19	35.00
AV	11.505G	40.43	54.00	-13.57	28.09	3	Vertical	308	1.62	-	39.15	8.19	35.00
PK	17.2663G	60.77	68.20	-7.43	45.04	3	Vertical	333	1.30	-	41.04	10.13	35.44

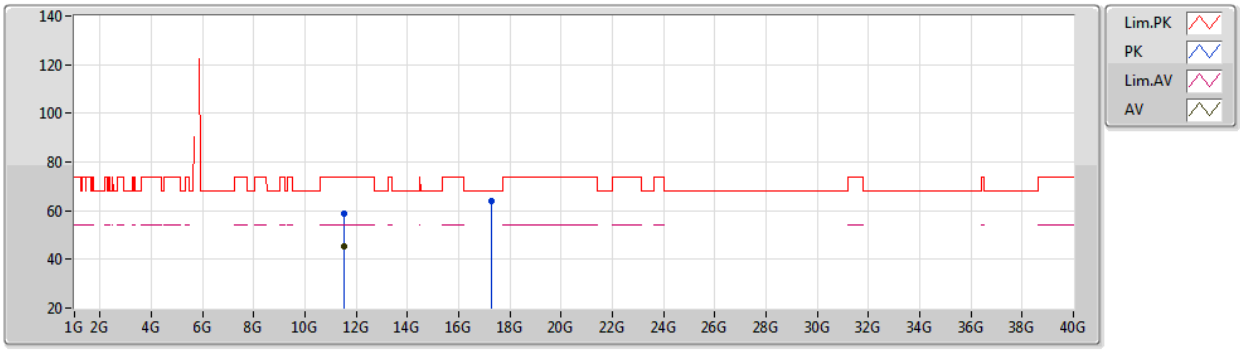
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	H

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5101G	59.05	74.00	-14.95	46.72	3	Horizontal	275	2.03	-	39.14	8.19	35.00
AV	11.5064G	45.24	54.00	-8.76	32.90	3	Horizontal	275	2.03	-	39.15	8.19	35.00
PK	17.2627G	64.04	68.20	-4.16	48.31	3	Horizontal	333	2.18	-	41.04	10.13	35.44

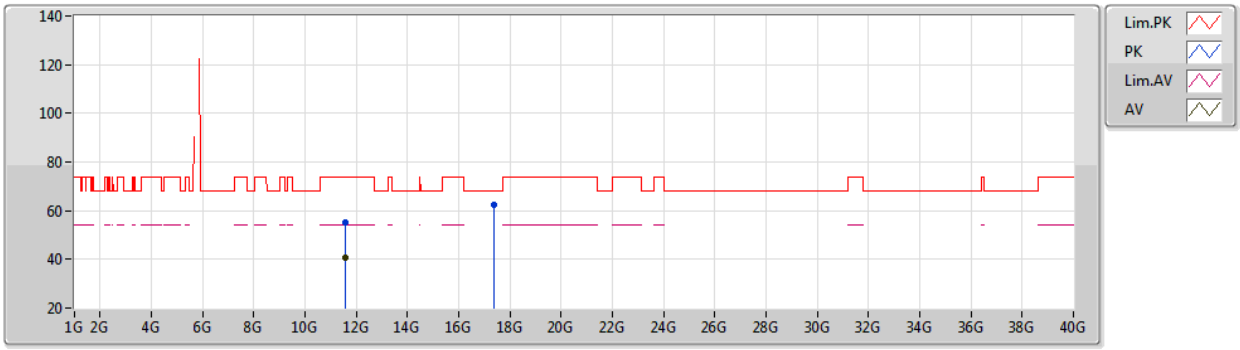
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	V

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.59138G	55.01	74.00	-18.99	42.69	3	Vertical	130	1.16	-	39.10	8.24	35.02
AV	11.58968G	40.76	54.00	-13.24	28.43	3	Vertical	130	1.16	-	39.11	8.24	35.02
PK	17.4004G	62.28	68.20	-5.92	46.43	3	Vertical	93	1.92	-	41.16	10.09	35.40

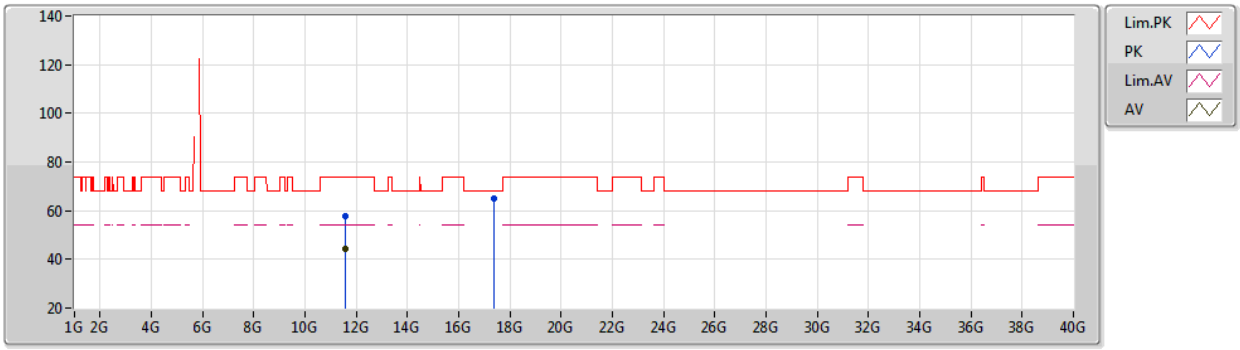
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	H

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.58748G	57.58	74.00	-16.42	45.25	3	Horizontal	284	1.80	-	39.11	8.24	35.02
AV	11.58998G	44.11	54.00	-9.89	31.78	3	Horizontal	284	1.80	-	39.11	8.24	35.02
PK	17.371G	65.02	68.20	-3.18	49.20	3	Horizontal	334	2.14	-	41.13	10.10	35.41

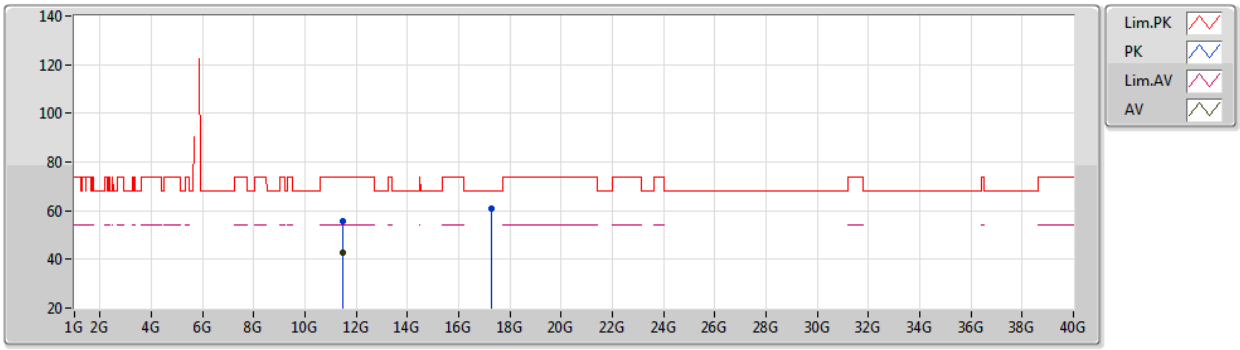
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	V

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4992G	55.59	74.00	-18.41	43.25	3	Vertical	323	1.80	-	39.15	8.18	34.99
AV	11.4918G	42.57	54.00	-11.43	30.23	3	Vertical	323	1.80	-	39.15	8.18	34.99
PK	17.2742G	61.04	68.20	-7.16	45.31	3	Vertical	314	2.47	-	41.05	10.12	35.44

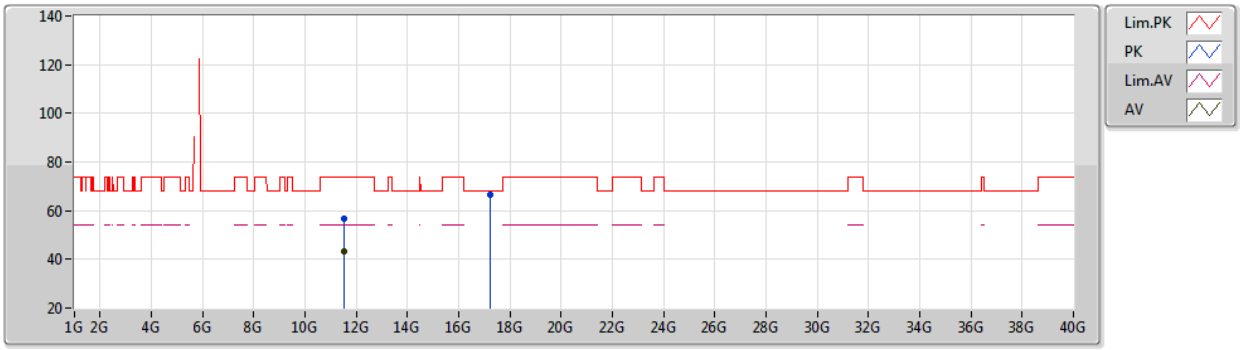
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	H

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.50998G	56.94	74.00	-17.06	44.60	3	Horizontal	257	1.80	-	39.15	8.19	35.00
AV	11.50996G	43.40	54.00	-10.60	31.06	3	Horizontal	257	1.80	-	39.15	8.19	35.00
PK	17.2433G	66.53	68.20	-1.67	50.83	3	Horizontal	309	1.62	-	41.02	10.13	35.45

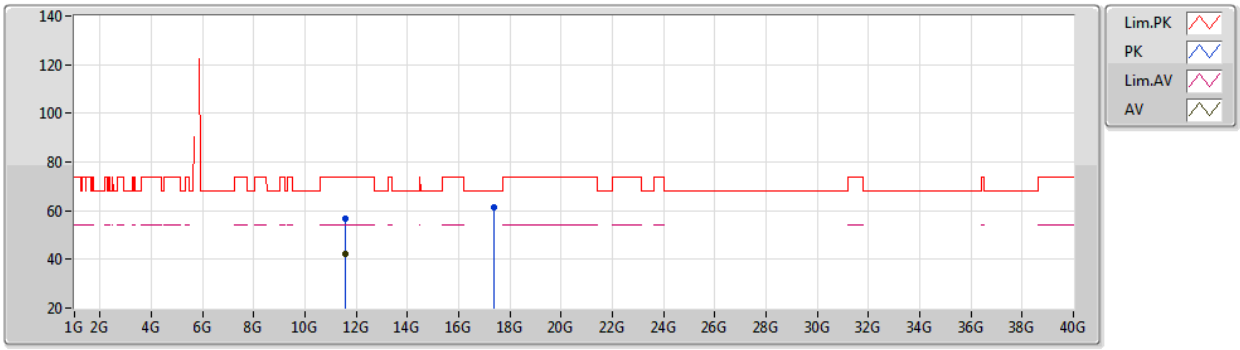
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	V

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.59288G	56.60	74.00	-17.40	44.27	3	Vertical	311	1.56	-	39.10	8.25	35.02
AV	11.58968G	42.21	54.00	-11.79	29.88	3	Vertical	311	1.56	-	39.11	8.24	35.02
PK	17.38088G	61.58	68.20	-6.62	45.75	3	Vertical	6	1.80	-	41.14	10.10	35.41

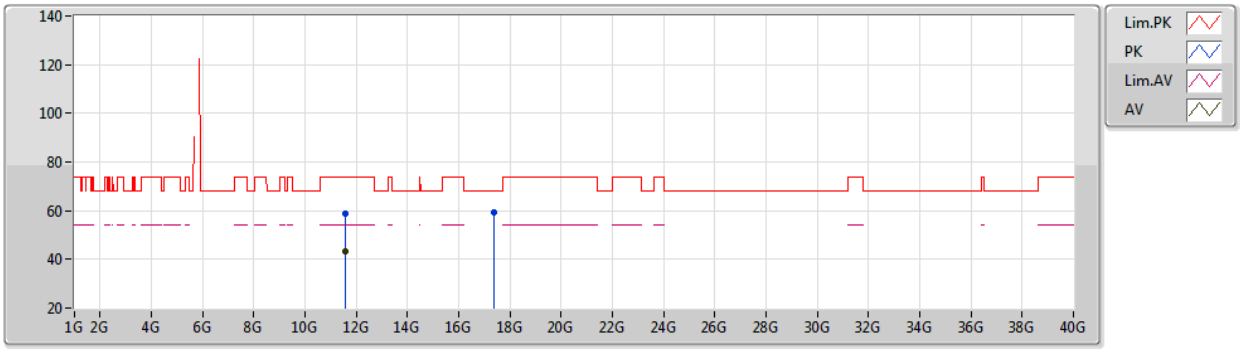
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	H

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5899G	58.85	74.00	-15.15	46.52	3	Horizontal	289	1.80	-	39.11	8.24	35.02
AV	11.5899G	43.34	54.00	-10.66	31.01	3	Horizontal	289	1.80	-	39.11	8.24	35.02
PK	17.3782G	59.06	68.20	-9.14	43.23	3	Horizontal	359	2.73	-	41.14	10.10	35.41

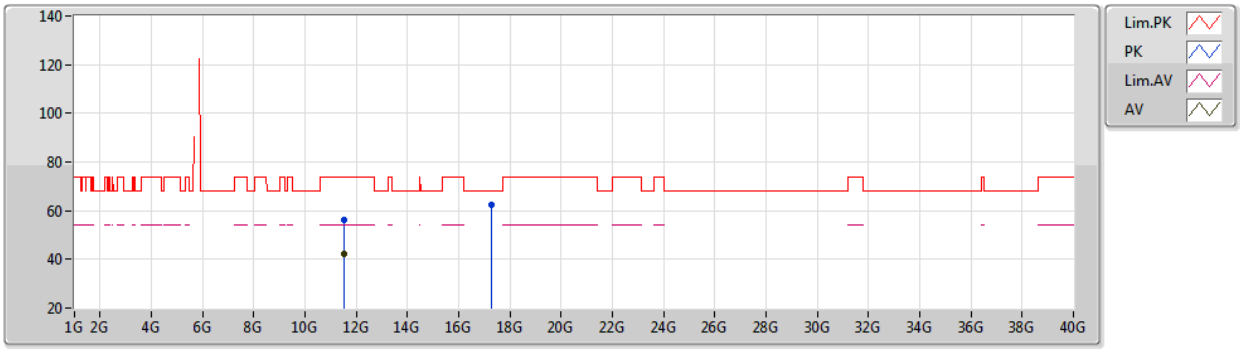
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	V

802.11ax HEW40-BF_Nss3,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.50994G	56.04	74.00	-17.96	43.70	3	Vertical	287	1.80	-	39.15	8.19	35.00
AV	11.50976G	42.21	54.00	-11.79	29.87	3	Vertical	287	1.80	-	39.15	8.19	35.00
PK	17.271G	62.40	68.20	-5.80	46.68	3	Vertical	303	1.87	-	41.04	10.12	35.44

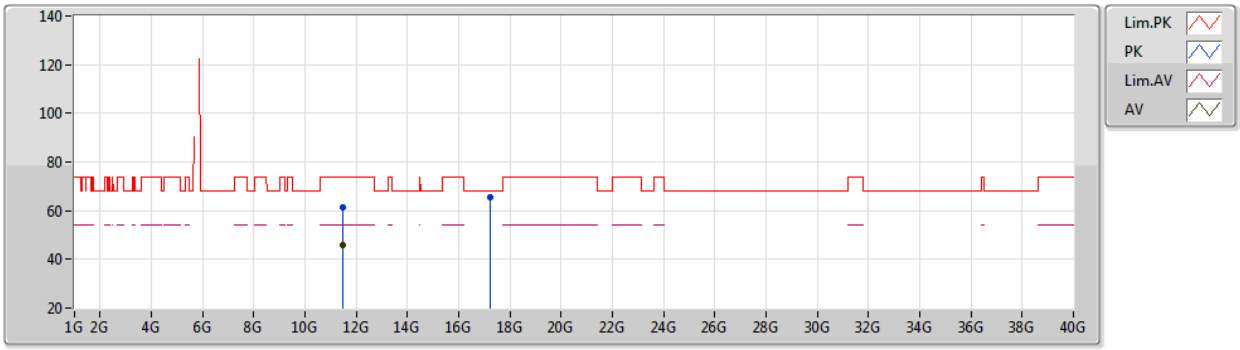
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	H

802.11ax HEW40-BF_Nss3,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4908G	61.14	74.00	-12.86	48.80	3	Horizontal	309	1.55	-	39.15	8.18	34.99
AV	11.4932G	45.94	54.00	-8.06	33.60	3	Horizontal	309	1.55	-	39.15	8.18	34.99
PK	17.2434G	65.61	68.20	-2.59	49.91	3	Horizontal	341	1.56	-	41.02	10.13	35.45

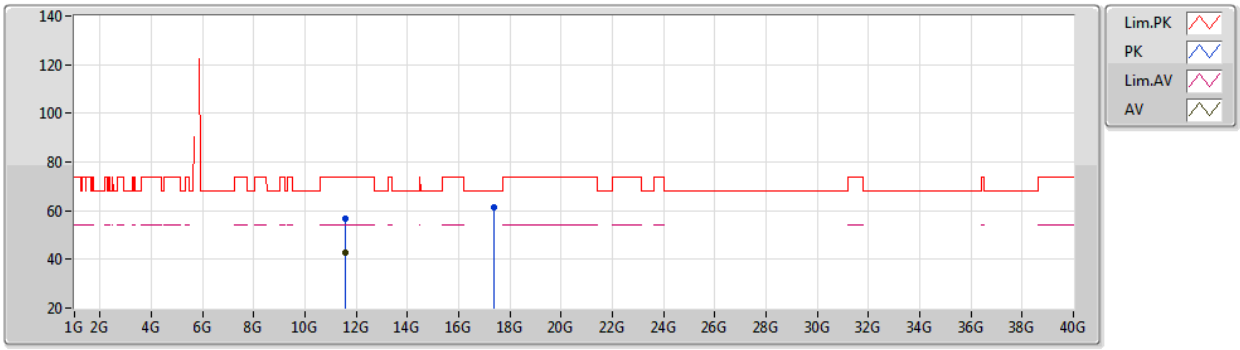
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	V

802.11ax HEW40-BF_Nss3,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.59G	56.60	74.00	-17.40	44.28	3	Vertical	286	1.79	-	39.10	8.24	35.02
AV	11.5728G	42.55	54.00	-11.45	30.23	3	Vertical	286	1.79	-	39.11	8.23	35.02
PK	17.3614G	61.43	68.20	-6.77	45.61	3	Vertical	295	2.77	-	41.13	10.10	35.41

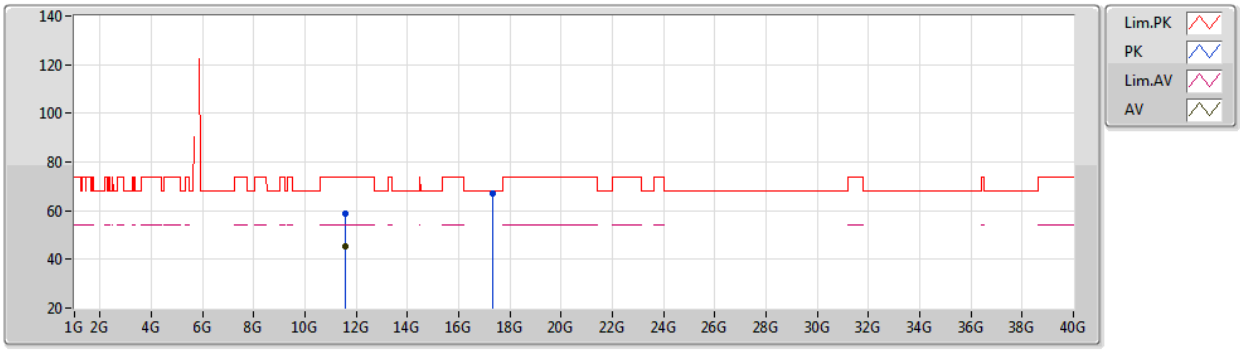
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 40MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH159	**Polarization**	H

802.11ax HEW40-BF_Nss3,(MCS0)_4TX

5795MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5788G	58.81	74.00	-15.19	46.48	3	Horizontal	307	2.43	-	39.11	8.24	35.02
AV	11.577G	45.11	54.00	-8.89	32.78	3	Horizontal	307	2.43	-	39.11	8.24	35.02
PK	17.35G	66.93	68.20	-1.27	51.13	3	Horizontal	360	1.98	-	41.11	10.11	35.42

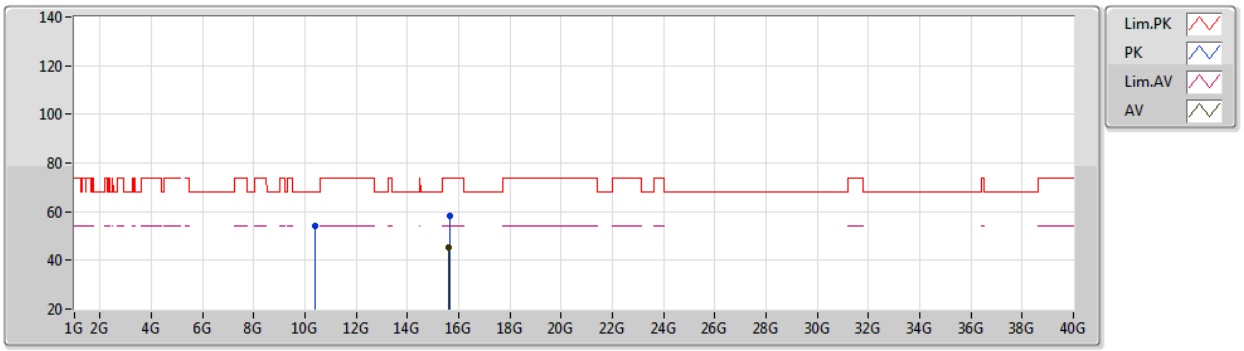
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH42	**Polarization**	V

802.11ax HEW80_Nss1,(MCS0)_2TX

5210MHz_TX

08/06/2020



EUT Y_2TX
Setting 77
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4165G	54.01	68.20	-14.19	41.80	3	Vertical	11	1.61	-	38.93	7.58	34.30
PK	15.63458G	58.25	74.00	-15.75	45.24	3	Vertical	310	1.80	-	39.00	9.38	35.37
AV	15.62562G	45.59	54.00	-8.41	32.57	3	Vertical	310	1.80	-	39.01	9.38	35.37

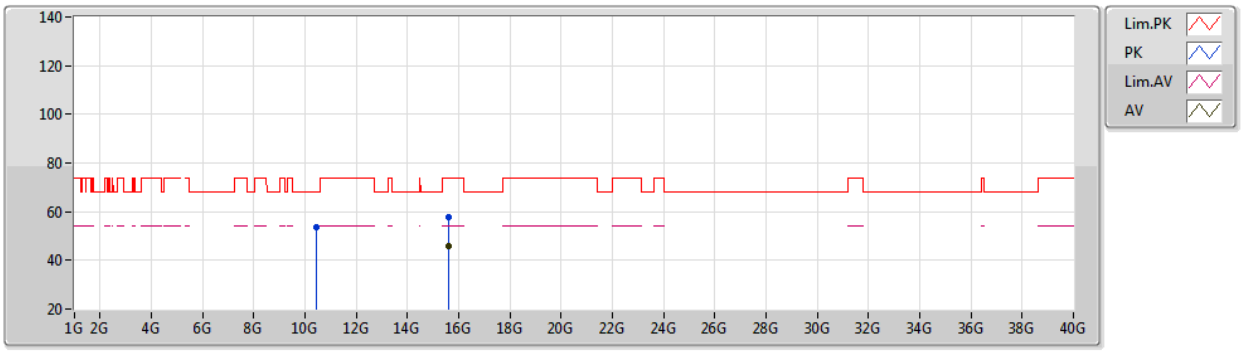
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH42	**Polarization**	H

802.11ax HEW80_Nss1,(MCS0)_2TX

5210MHz_TX

08/06/2020



EUT Y_2TX
Setting 77
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.42062G	53.72	68.20	-14.48	41.51	3	Horizontal	208	1.03	-	38.94	7.58	34.31
PK	15.62958G	57.79	74.00	-16.21	44.77	3	Horizontal	63	2.20	-	39.01	9.38	35.37
AV	15.62894G	45.62	54.00	-8.38	32.60	3	Horizontal	63	2.20	-	39.01	9.38	35.37

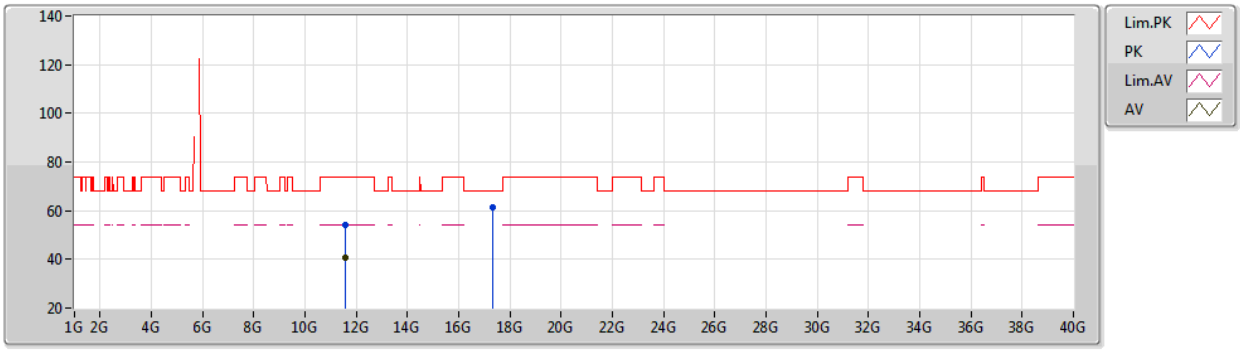
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	V

802.11ax HEW80_Nss1,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.55256G	54.21	74.00	-19.79	41.88	3	Vertical	327	1.73	-	39.12	8.22	35.01
AV	11.55852G	40.73	54.00	-13.27	28.40	3	Vertical	327	1.73	-	39.12	8.22	35.01
PK	17.32452G	61.24	68.20	-6.96	45.46	3	Vertical	327	1.75	-	41.09	10.11	35.42

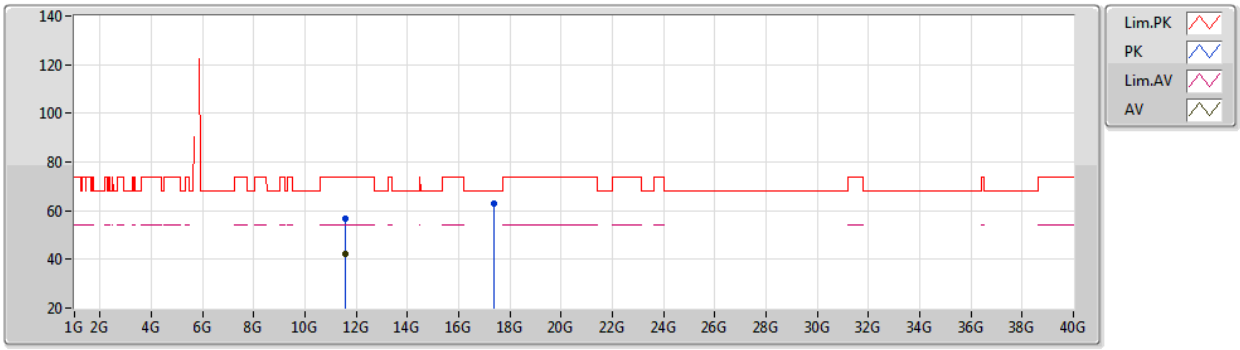
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	H

802.11ax HEW80_Nss1,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5622G	56.57	74.00	-17.43	44.23	3	Horizontal	305	2.42	-	39.12	8.23	35.01
AV	11.5539G	42.37	54.00	-11.63	30.04	3	Horizontal	305	2.42	-	39.12	8.22	35.01
PK	17.361G	63.00	68.20	-5.20	47.19	3	Horizontal	0	2.57	-	41.12	10.10	35.41

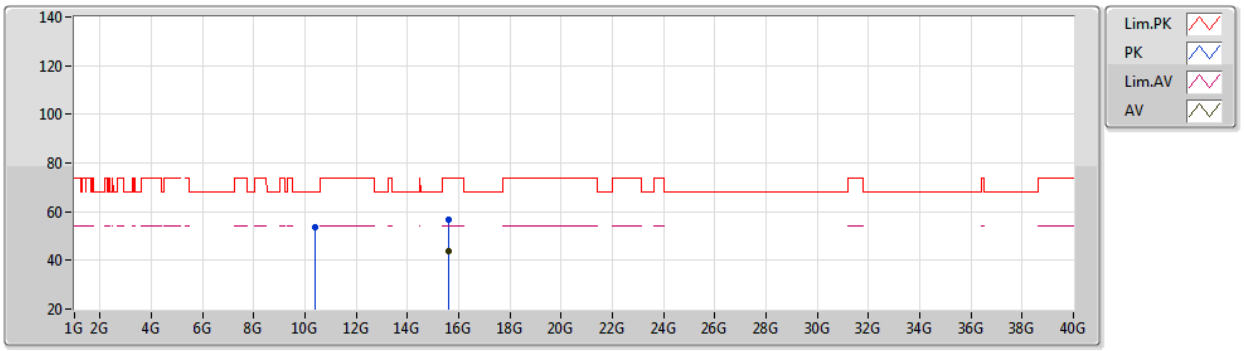
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH42	**Polarization**	V

802.11ax HEW80-BF_Nss1,(MCS0)_2TX

5210MHz_TX

08/06/2020



EUT Y_2TX
Setting 80
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.41592G	53.46	68.20	-14.74	41.25	3	Vertical	77	2.28	-	38.93	7.58	34.30
PK	15.63044G	56.97	74.00	-17.03	43.95	3	Vertical	41	2.24	-	39.01	9.38	35.37
AV	15.63096G	44.04	54.00	-9.96	31.02	3	Vertical	41	2.24	-	39.01	9.38	35.37

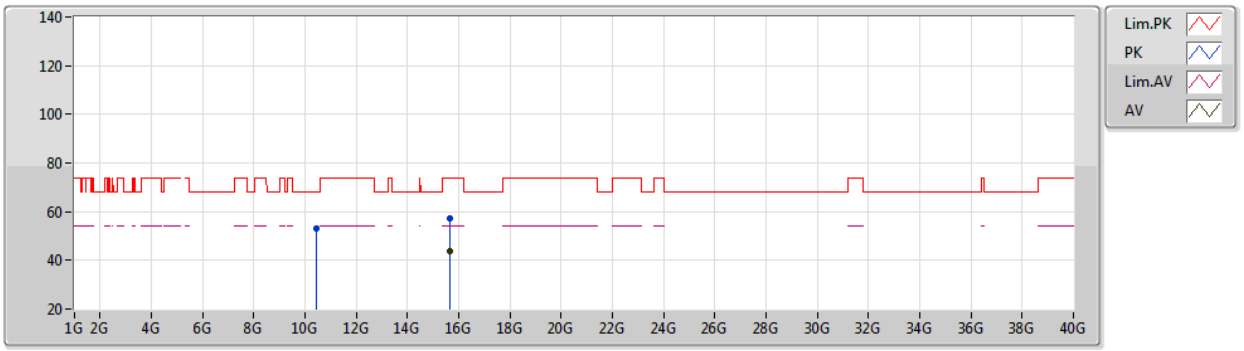
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH42	**Polarization**	H

802.11ax HEW80-BF_Nss1,(MCS0)_2TX

5210MHz_TX

08/06/2020



EUT Y_2TX
Setting 80
04-E-L-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.41806G	53.34	68.20	-14.86	41.13	3	Horizontal	264	2.37	-	38.93	7.58	34.30
PK	15.63206G	57.37	74.00	-16.63	44.36	3	Horizontal	76	2.55	-	39.00	9.38	35.37
AV	15.63298G	44.05	54.00	-9.95	31.04	3	Horizontal	76	2.55	-	39.00	9.38	35.37

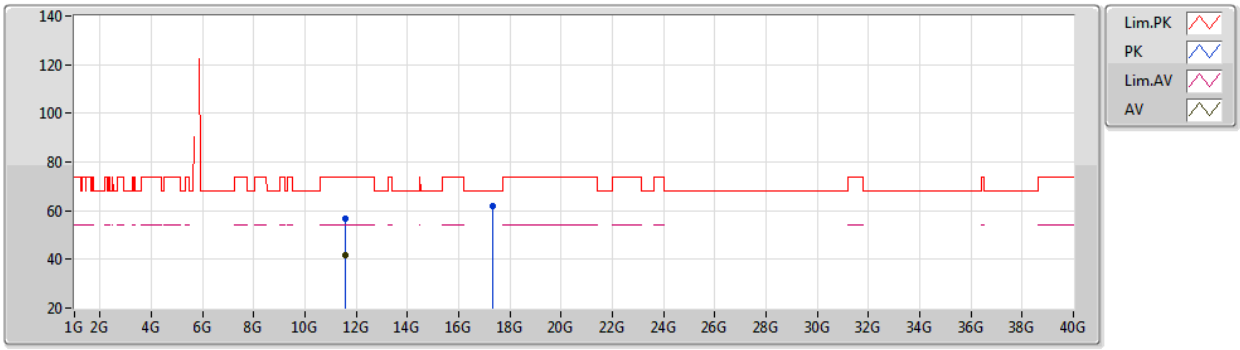
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	V

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5705G	56.67	74.00	-17.33	44.35	3	Vertical	311	1.63	-	39.11	8.23	35.02
AV	11.573G	41.93	54.00	-12.07	29.61	3	Vertical	311	1.63	-	39.11	8.23	35.02
PK	17.32436G	61.78	68.20	-6.42	46.00	3	Vertical	162	1.80	-	41.09	10.11	35.42

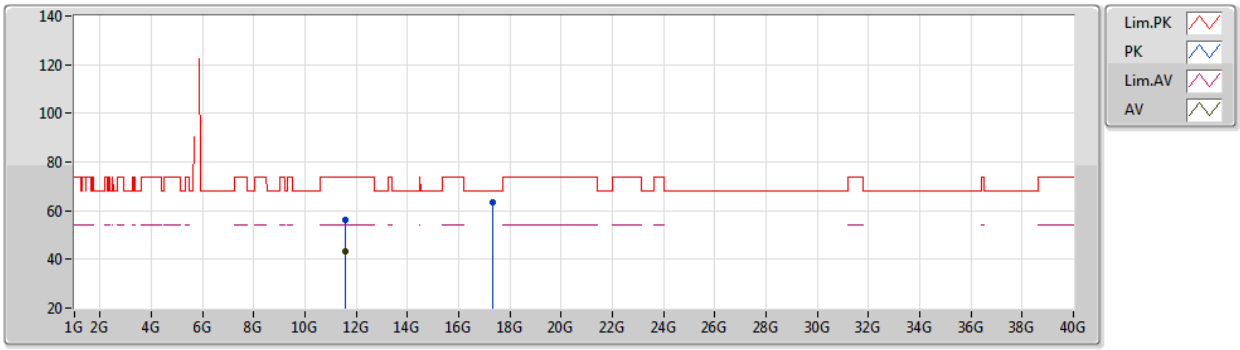
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	H

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.54976G	56.01	74.00	-17.99	43.67	3	Horizontal	309	1.87	-	39.13	8.22	35.01
AV	11.5499G	43.47	54.00	-10.53	31.13	3	Horizontal	309	1.87	-	39.13	8.22	35.01
PK	17.351G	63.50	68.20	-4.70	47.68	3	Horizontal	335	1.46	-	41.12	10.11	35.41

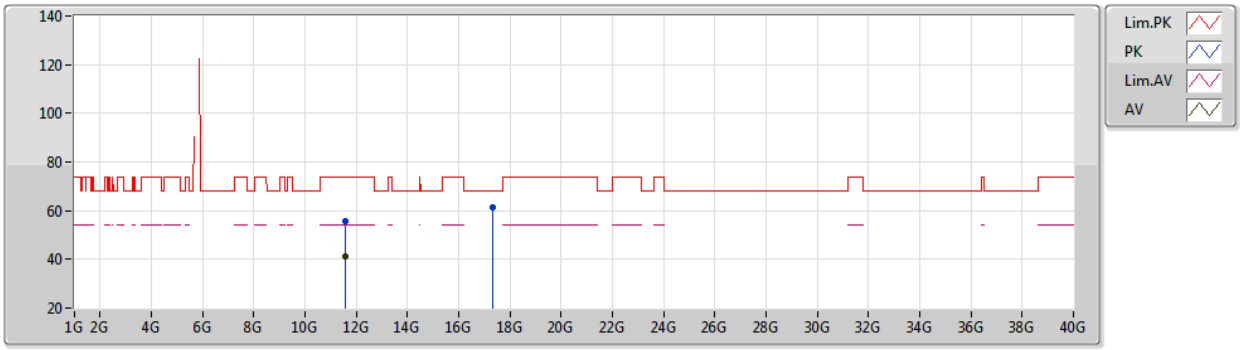
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	V

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.55124G	55.90	74.00	-18.10	43.57	3	Vertical	323	1.58	-	39.12	8.22	35.01
AV	11.54988G	41.04	54.00	-12.96	28.70	3	Vertical	323	1.58	-	39.13	8.22	35.01
PK	17.32436G	61.27	68.20	-6.93	45.49	3	Vertical	321	2.47	-	41.09	10.11	35.42

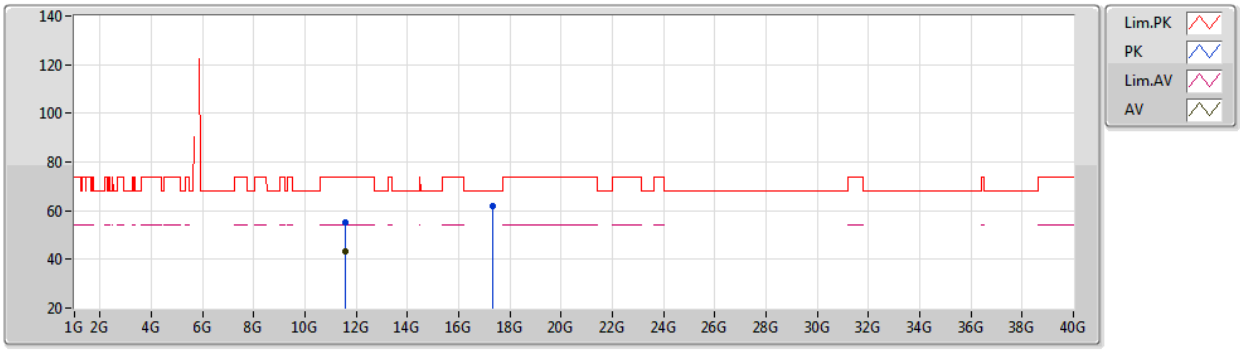
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	H

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.55422G	55.28	74.00	-18.72	42.95	3	Horizontal	311	1.80	-	39.12	8.22	35.01
AV	11.54988G	43.28	54.00	-10.72	30.94	3	Horizontal	311	1.80	-	39.13	8.22	35.01
PK	17.32528G	61.85	68.20	-6.35	46.07	3	Horizontal	262	1.80	-	41.09	10.11	35.42

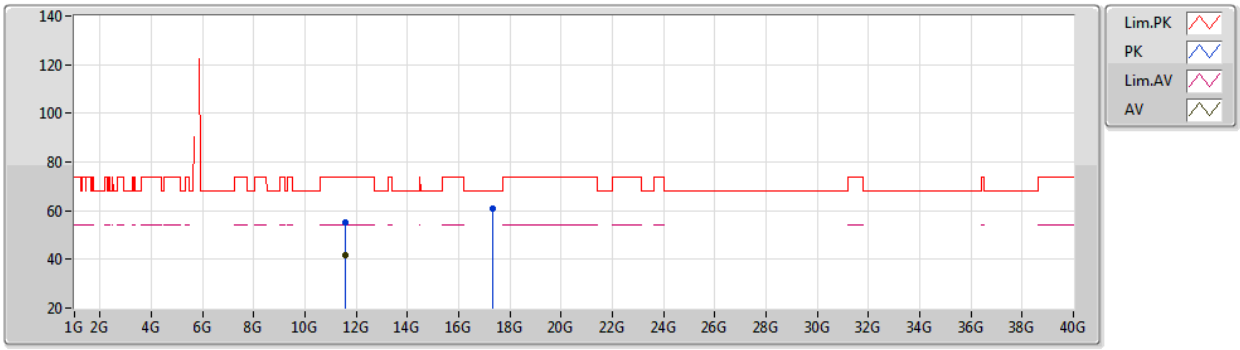
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	V

802.11ax HEW80-BF_Nss3,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5614G	55.24	74.00	-18.76	42.91	3	Vertical	281	1.80	-	39.12	8.22	35.01
AV	11.5498G	41.55	54.00	-12.45	29.21	3	Vertical	281	1.80	-	39.13	8.22	35.01
PK	17.349G	60.77	68.20	-7.43	44.97	3	Vertical	309	2.76	-	41.11	10.11	35.42

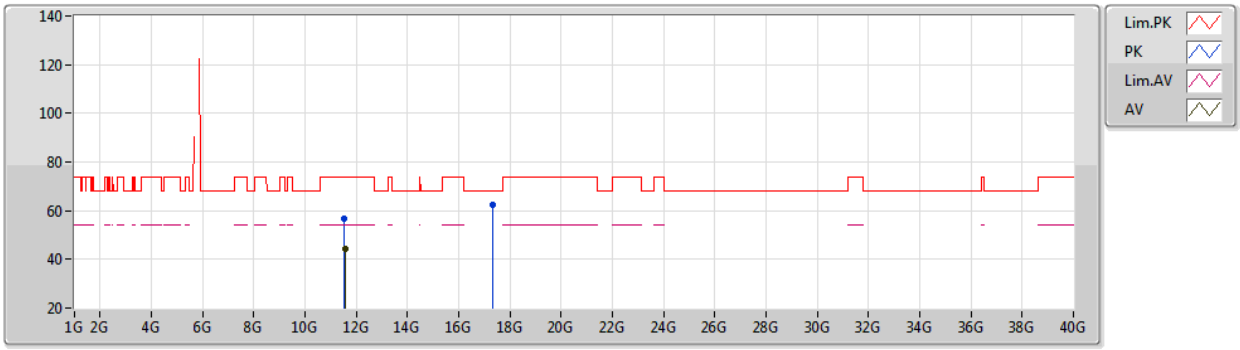
Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Emissions (1GHz~10th Harmonic)			
Operating Mode	802.11ax 80MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH155	**Polarization**	H

802.11ax HEW80-BF_Nss3,(MCS0)_4TX

5775MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5454G	56.82	74.00	-17.18	44.49	3	Horizontal	314	1.58	-	39.13	8.21	35.01
AV	11.54992G	44.40	54.00	-9.60	32.06	3	Horizontal	314	1.58	-	39.13	8.22	35.01
PK	17.31126G	62.59	68.20	-5.61	46.82	3	Horizontal	316	2.00	-	41.08	10.12	35.43

Note 1: The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

2.6.12. Test Result of Band Edge and Fundamental Emissions

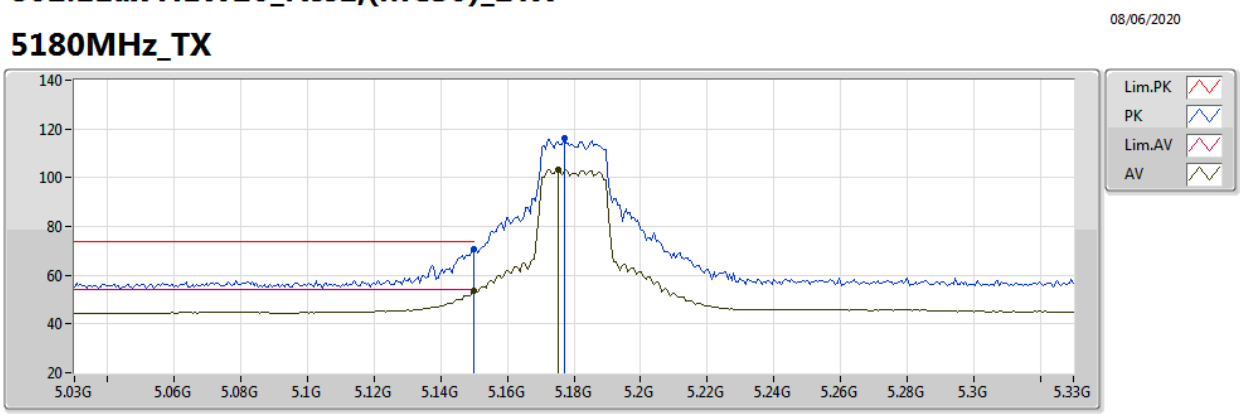
Following channel(s) was (were) selected for the final test as listed below.

MODE	TX Chain	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ax 20MHz	(1S2T, CDD)	36, 40, 48	OFDMA	BPSK	Nss1 MCS0 (8.6)
802.11ax 20MHz	(1S4T, CDD)	149, 157, 165	OFDMA	BPSK	Nss1 MCS0 (8.6)
802.11ax 20MHz	(1S2T, TXBF)	36, 40, 48	OFDMA	BPSK	Nss 1 MCS0 (8.6)
802.11ax 20MHz	(1S4T, TXBF)	149, 157, 165	OFDMA	BPSK	Nss 1 MCS0 (8.6)
802.11ax 20MHz	(2S4T, TXBF)	149, 157, 165	OFDMA	BPSK	Nss 2 MCS0 (17.2)
802.11ax 20MHz	(3S4T, TXBF)	149, 157, 165	OFDMA	BPSK	Nss 3 MCS0 (25.8)
802.11ax 40MHz	(1S2T, CDD)	38, 46	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(1S4T, CDD)	151, 159	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(1S2T, TXBF)	38, 46	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(1S4T, TXBF)	151, 159	OFDMA	BPSK	Nss1 MCS0 (17.2)
802.11ax 40MHz	(2S4T, TXBF)	151, 159	OFDMA	BPSK	Nss 2 MCS 0 (34.4)
802.11ax 40MHz	(3S4T, TXBF)	151, 159	OFDMA	BPSK	Nss 3 MCS 0 (51.6)
802.11ax 80MHz	(1S2T, CDD)	42	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(1S4T, CDD)	155	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(1S2T, TXBF)	42	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(1S4T, TXBF)	155	OFDMA	BPSK	Nss1 MCS0 (36)
802.11ax 80MHz	(2S4T, TXBF)	155	OFDMA	BPSK	Nss 2 MCS 0 (72.1)
802.11ax 80MHz	(3S4T, TXBF)	155	OFDMA	BPSK	Nss 3 MCS 0 (108.1)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH36	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_2TX

5180MHz_TX



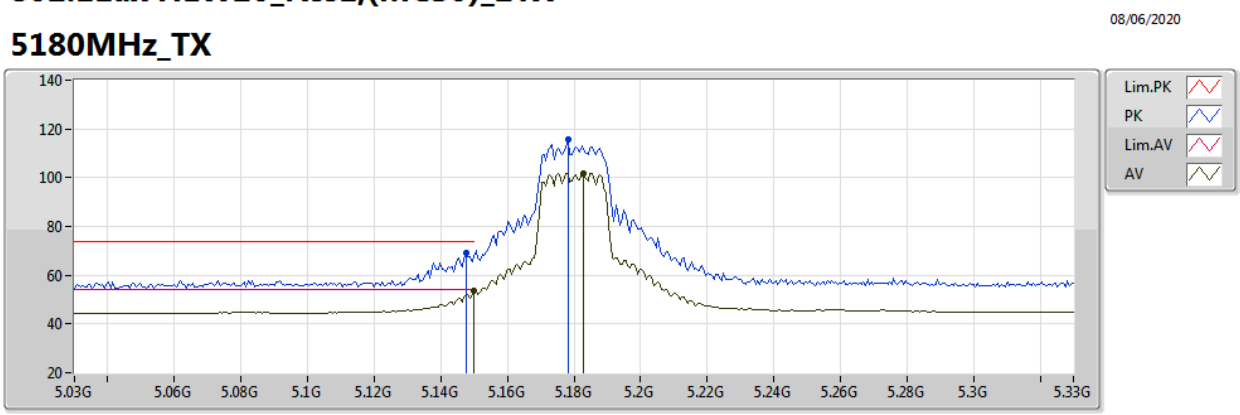
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	70.45	74.00	-3.55	65.66	3	Vertical	210	2.92	-	33.05	5.11	33.37
AV	5.15G	53.71	54.00	-0.29	48.92	3	Vertical	210	2.92	-	33.05	5.11	33.37
PK	5.177G	116.10	Inf	-Inf	111.28	3	Vertical	210	2.92	-	33.08	5.12	33.38
AV	5.1752G	103.15	Inf	-Inf	98.33	3	Vertical	210	2.92	-	33.08	5.12	33.38

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5180MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH36	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_2TX

5180MHz_TX



EUT Y_2TX
Setting 84
04-E-P-2-10

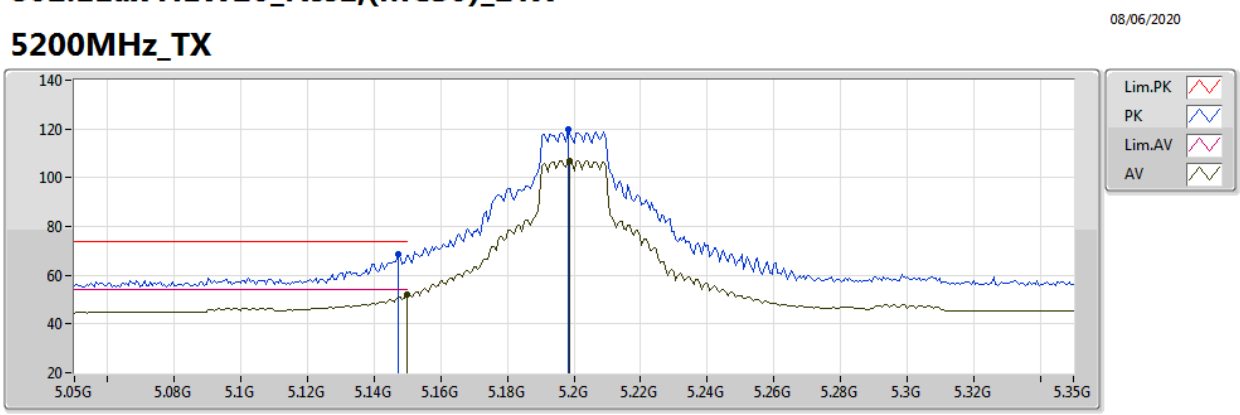
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1476G	68.99	74.00	-5.01	64.21	3	Horizontal	241	1.74	-	33.05	5.10	33.37
AV	5.15G	53.66	54.00	-0.34	48.87	3	Horizontal	241	1.74	-	33.05	5.11	33.37
PK	5.1782G	115.44	Inf	-Inf	110.62	3	Horizontal	241	1.74	-	33.08	5.12	33.38
AV	5.183G	101.81	Inf	-Inf	96.99	3	Horizontal	241	1.74	-	33.08	5.12	33.38

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5180MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH40	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_2TX

5200MHz_TX



EUT Y_2TX
Setting 100
04-E-P-2-10

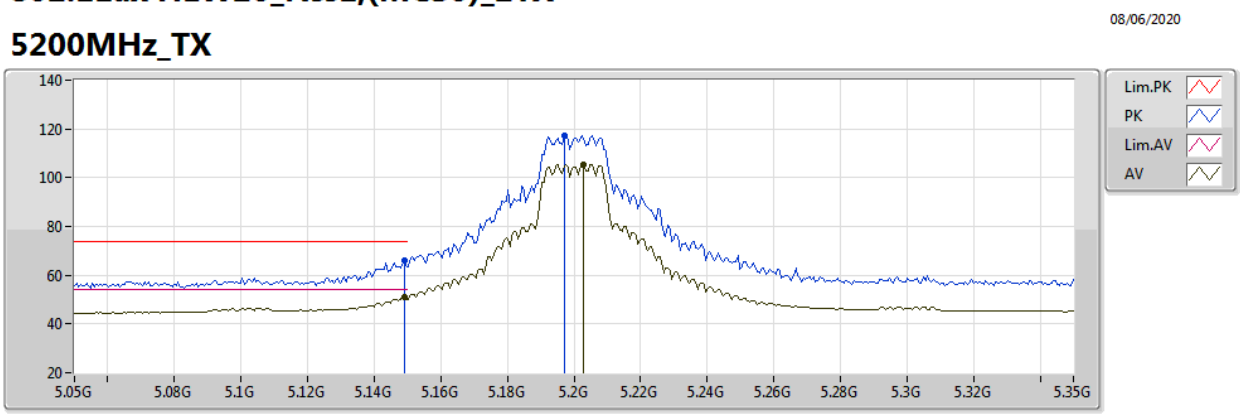
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1472G	68.42	74.00	-5.58	63.64	3	Vertical	180	2.77	-	33.05	5.10	33.37
AV	5.15G	52.05	54.00	-1.95	47.27	3	Vertical	180	2.77	-	33.05	5.10	33.37
PK	5.1982G	119.59	Inf	-Inf	114.74	3	Vertical	180	2.77	-	33.10	5.13	33.38
AV	5.1988G	106.95	Inf	-Inf	102.10	3	Vertical	180	2.77	-	33.10	5.13	33.38

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5200MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH40	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_2TX

5200MHz_TX



EUT Y_2TX
Setting 100
04-E-P-2-10

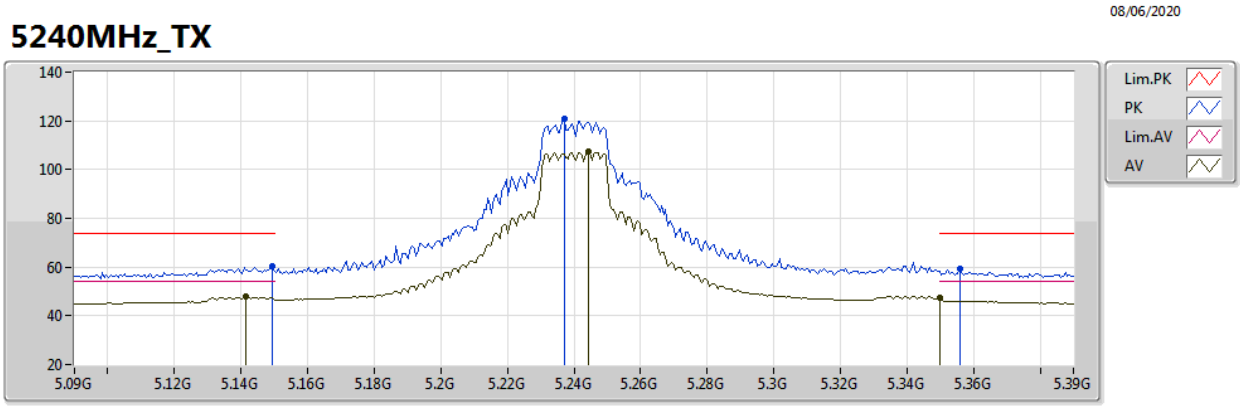
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.149G	65.89	74.00	-8.11	61.11	3	Horizontal	244	1.90	-	33.05	5.10	33.37
AV	5.149G	50.94	54.00	-3.06	46.16	3	Horizontal	244	1.90	-	33.05	5.10	33.37
PK	5.197G	117.41	Inf	-Inf	112.56	3	Horizontal	244	1.90	-	33.10	5.13	33.38
AV	5.203G	105.58	Inf	-Inf	100.73	3	Horizontal	244	1.90	-	33.10	5.13	33.38

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5200MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH48	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_2TX

5240MHz_TX



EUT Y_2TX
Setting 98
04-E-P-2-10

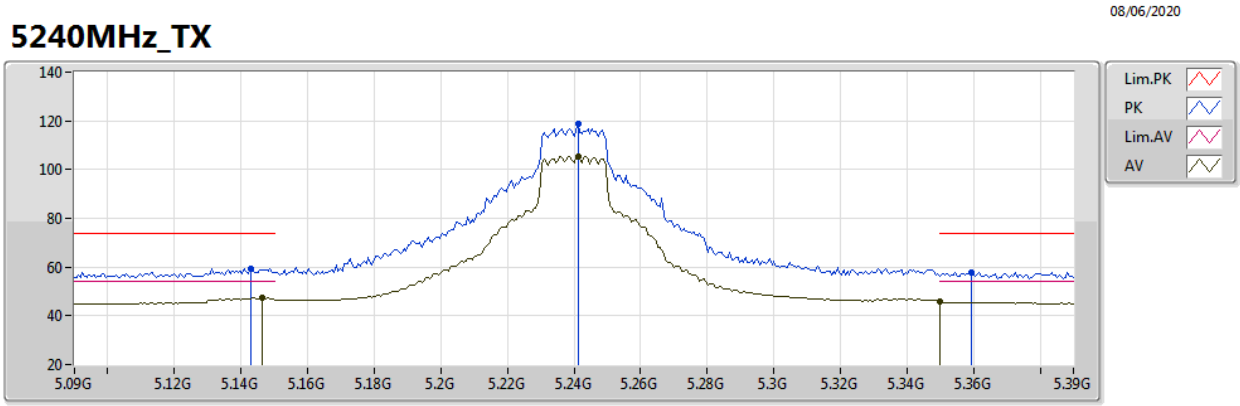
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1494G	60.19	74.00	-13.81	55.41	3	Vertical	300	1.88	-	33.05	5.10	33.37
AV	5.1416G	47.68	54.00	-6.32	42.91	3	Vertical	300	1.88	-	33.04	5.10	33.37
PK	5.237G	120.92	Inf	-Inf	116.01	3	Vertical	300	1.88	-	33.14	5.15	33.38
AV	5.2442G	107.27	Inf	-Inf	102.36	3	Vertical	300	1.88	-	33.14	5.15	33.38
PK	5.3558G	59.14	74.00	-14.86	53.95	3	Vertical	300	1.88	-	33.37	5.21	33.39
AV	5.35G	47.33	54.00	-6.67	42.16	3	Vertical	300	1.88	-	33.35	5.21	33.39

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5240MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH48	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_2TX

5240MHz_TX



EUT Y_2TX
Setting 98
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1428G	59.48	74.00	-14.52	54.71	3	Horizontal	49	1.66	-	33.04	5.10	33.37
AV	5.1464G	47.34	54.00	-6.66	42.56	3	Horizontal	49	1.66	-	33.05	5.10	33.37
PK	5.2412G	118.74	Inf	-Inf	113.83	3	Horizontal	49	1.66	-	33.14	5.15	33.38
AV	5.2412G	105.41	Inf	-Inf	100.50	3	Horizontal	49	1.66	-	33.14	5.15	33.38
PK	5.3594G	57.95	74.00	-16.05	52.75	3	Horizontal	49	1.66	-	33.38	5.21	33.39
AV	5.35G	45.95	54.00	-8.05	40.78	3	Horizontal	49	1.66	-	33.35	5.21	33.39

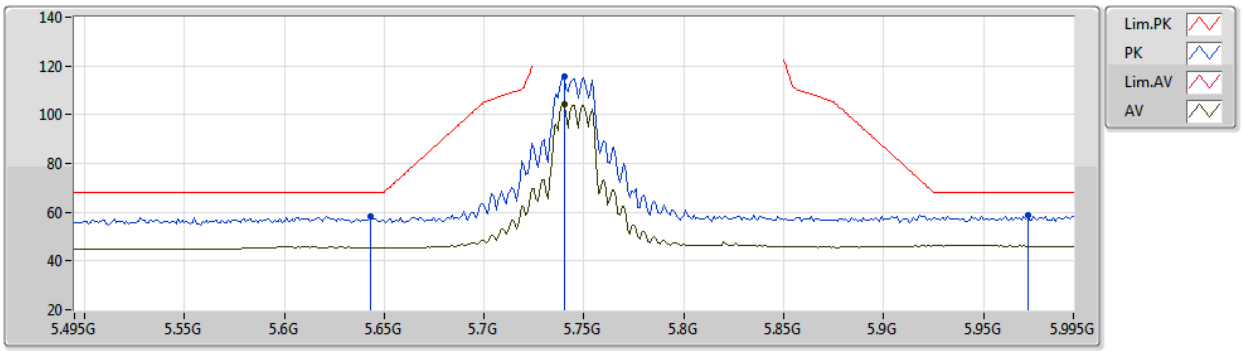
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5240MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

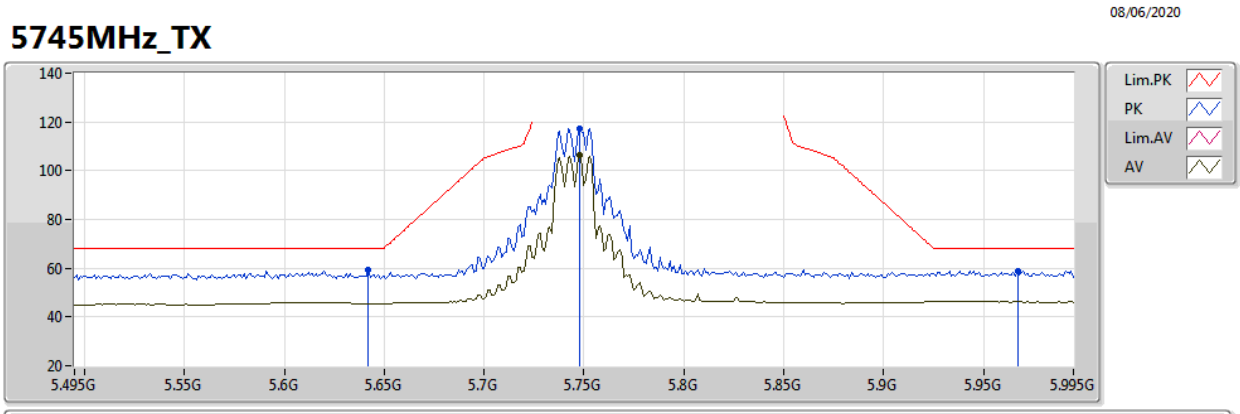
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.643G	58.18	68.20	-10.02	52.12	3	Vertical	120	2.39	-	34.04	5.39	33.37
PK	5.74G	115.53	Inf	-Inf	109.23	3	Vertical	120	2.39	-	34.18	5.47	33.35
AV	5.74G	104.34	Inf	-Inf	98.04	3	Vertical	120	2.39	-	34.18	5.47	33.35
PK	5.972G	58.93	68.20	-9.27	51.41	3	Vertical	120	2.39	-	35.19	5.64	33.31

Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_4TX

5745MHz_TX



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.642G	59.19	68.20	-9.01	53.13	3	Horizontal	320	2.40	-	34.04	5.39	33.37
PK	5.748G	117.46	Inf	-Inf	111.14	3	Horizontal	320	2.40	-	34.20	5.47	33.35
AV	5.748G	106.45	Inf	-Inf	100.13	3	Horizontal	320	2.40	-	34.20	5.47	33.35
PK	5.967G	58.95	68.20	-9.25	51.45	3	Horizontal	320	2.40	-	35.17	5.64	33.31

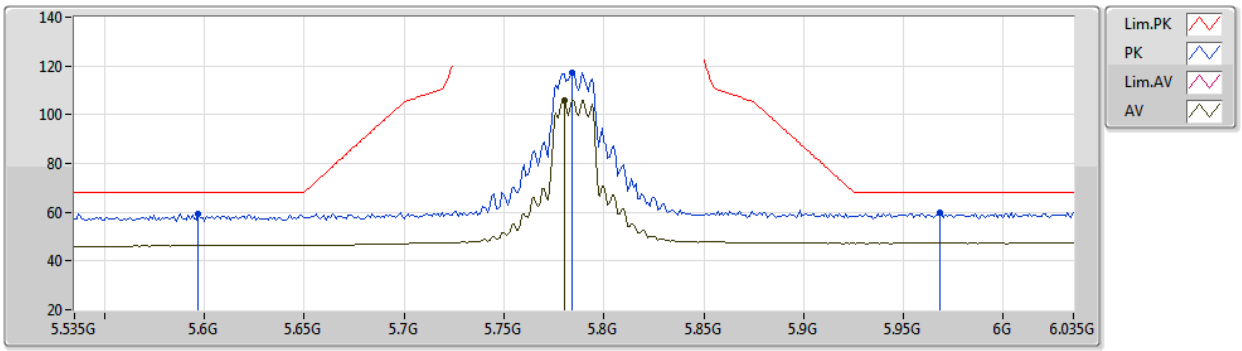
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 89
04-K-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.597G	59.35	68.20	-8.85	53.37	3	Vertical	117	1.83	-	33.99	5.36	33.37
PK	5.784G	117.18	Inf	-Inf	110.75	3	Vertical	117	1.83	-	34.27	5.50	33.34
AV	5.78G	106.11	Inf	-Inf	99.69	3	Vertical	117	1.83	-	34.26	5.50	33.34
PK	5.968G	59.67	68.20	-8.53	52.17	3	Vertical	117	1.83	-	35.17	5.64	33.31

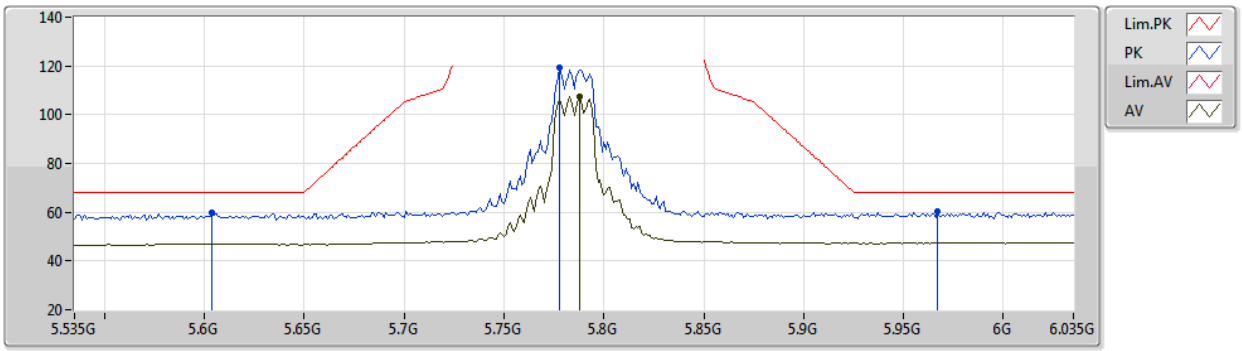
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 89
04-K-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.604G	59.86	68.20	-8.34	53.87	3	Horizontal	315	1.65	-	34.00	5.36	33.37
PK	5.778G	119.37	Inf	-Inf	112.96	3	Horizontal	315	1.65	-	34.26	5.49	33.34
AV	5.788G	107.39	Inf	-Inf	100.95	3	Horizontal	315	1.65	-	34.28	5.50	33.34
PK	5.967G	60.22	68.20	-7.98	52.72	3	Horizontal	315	1.65	-	35.17	5.64	33.31

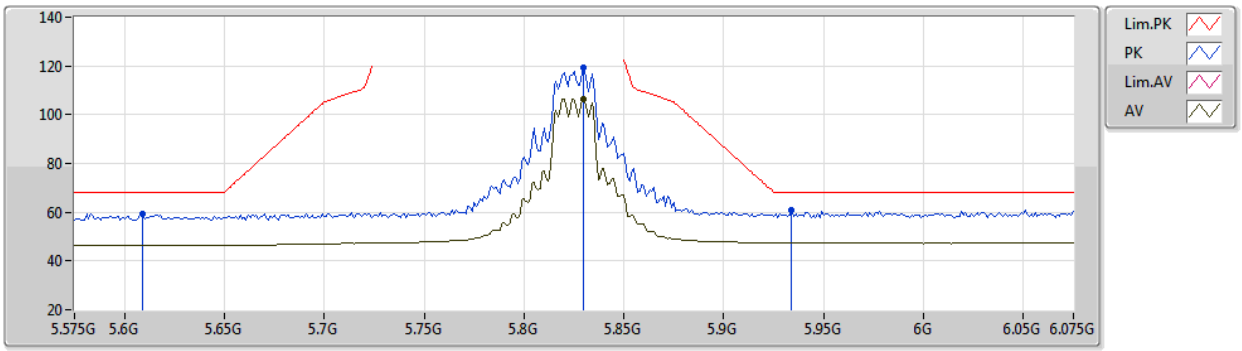
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-K-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.609G	59.54	68.20	-8.66	53.53	3	Vertical	117	1.80	-	34.01	5.37	33.37
PK	5.83G	119.22	Inf	-Inf	112.54	3	Vertical	117	1.80	-	34.48	5.53	33.33
AV	5.83G	106.61	Inf	-Inf	99.93	3	Vertical	117	1.80	-	34.48	5.53	33.33
PK	5.934G	60.73	68.20	-7.47	53.40	3	Vertical	117	1.80	-	35.04	5.61	33.32

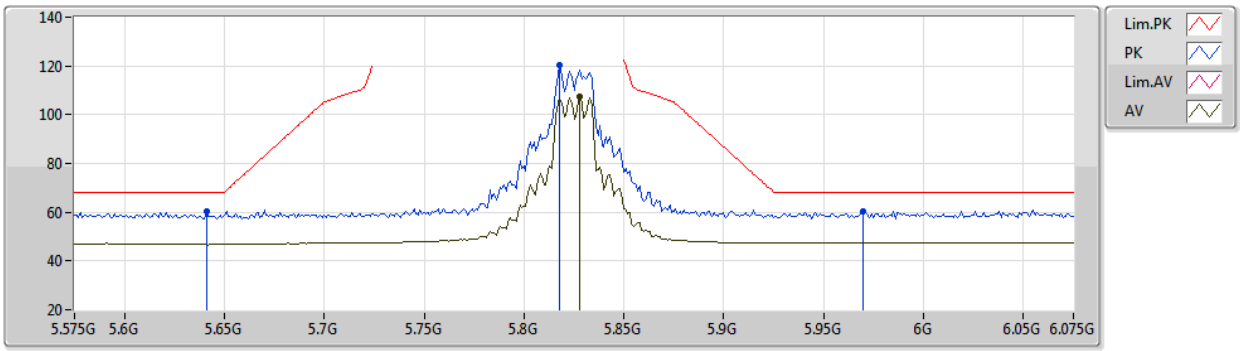
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-K-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.641G	60.30	68.20	-7.90	54.24	3	Horizontal	314	1.80	-	34.04	5.39	33.37
PK	5.818G	120.11	Inf	-Inf	113.52	3	Horizontal	314	1.80	-	34.41	5.52	33.34
AV	5.828G	107.32	Inf	-Inf	100.65	3	Horizontal	314	1.80	-	34.47	5.53	33.33
PK	5.97G	60.56	68.20	-7.64	53.05	3	Horizontal	314	1.80	-	35.18	5.64	33.31

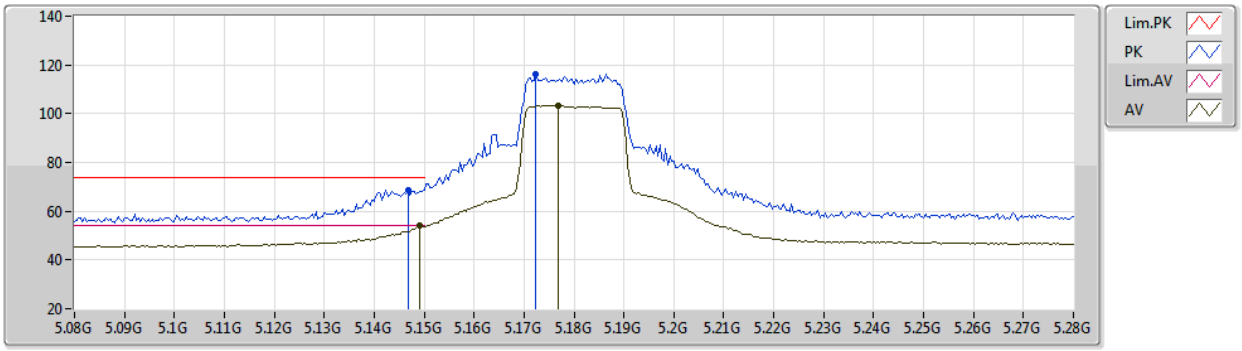
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH36	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2020



EUT Y_2TX
Setting 85
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1468G	68.69	74.00	-5.31	63.91	3	Vertical	240	1.88	-	33.05	5.10	33.37
AV	5.1492G	53.95	54.00	-0.05	49.17	3	Vertical	240	1.88	-	33.05	5.10	33.37
PK	5.1724G	116.23	Inf	-Inf	111.42	3	Vertical	240	1.88	-	33.07	5.12	33.38
AV	5.1768G	103.45	Inf	-Inf	98.63	3	Vertical	240	1.88	-	33.08	5.12	33.38

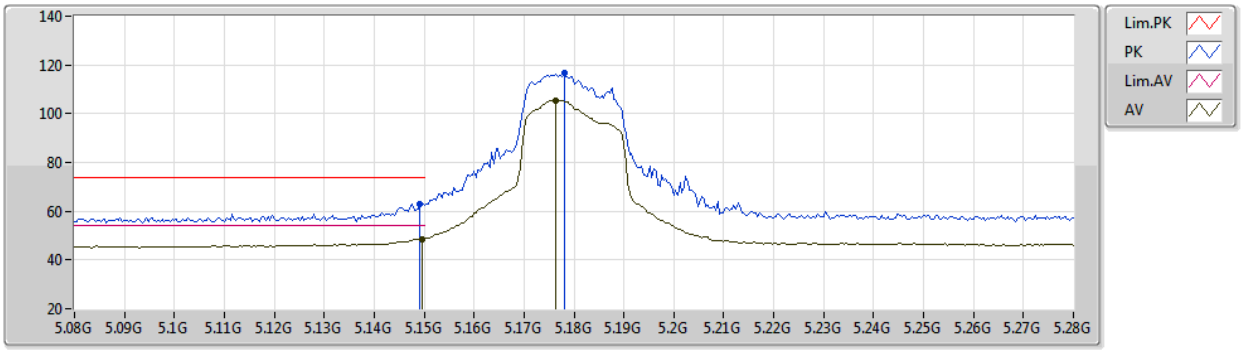
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5180MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH36	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2020



EUT Y_2TX
Setting 85
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1492G	63.10	74.00	-10.90	58.32	3	Horizontal	36	1.74	-	33.05	5.10	33.37
AV	5.1496G	48.49	54.00	-5.51	43.71	3	Horizontal	36	1.74	-	33.05	5.10	33.37
PK	5.178G	116.64	Inf	-Inf	111.82	3	Horizontal	36	1.74	-	33.08	5.12	33.38
AV	5.1764G	105.50	Inf	-Inf	100.68	3	Horizontal	36	1.74	-	33.08	5.12	33.38

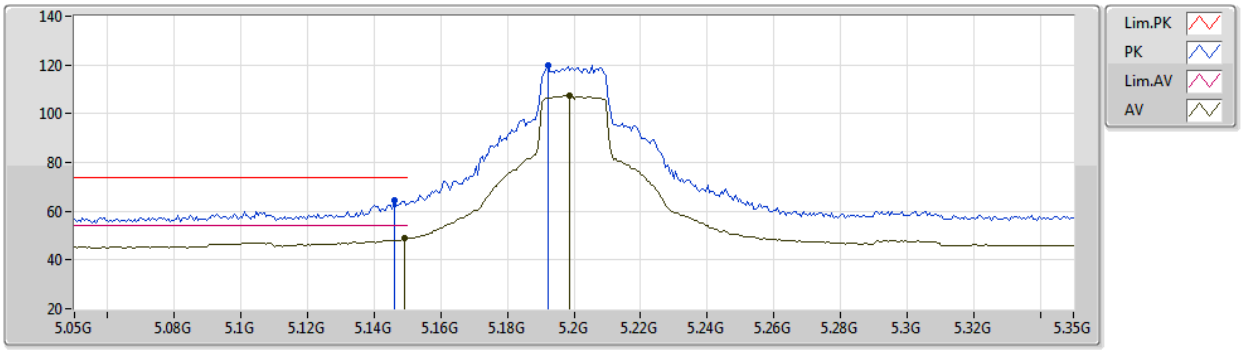
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5180MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH40	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2020



EUT Y_2TX
Setting 97
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.146G	64.30	74.00	-9.70	59.52	3	Vertical	194	2.87	-	33.05	5.10	33.37
AV	5.149G	48.83	54.00	-5.17	44.05	3	Vertical	194	2.87	-	33.05	5.10	33.37
PK	5.1922G	119.73	Inf	-Inf	114.89	3	Vertical	194	2.87	-	33.09	5.13	33.38
AV	5.1988G	107.33	Inf	-Inf	102.48	3	Vertical	194	2.87	-	33.10	5.13	33.38

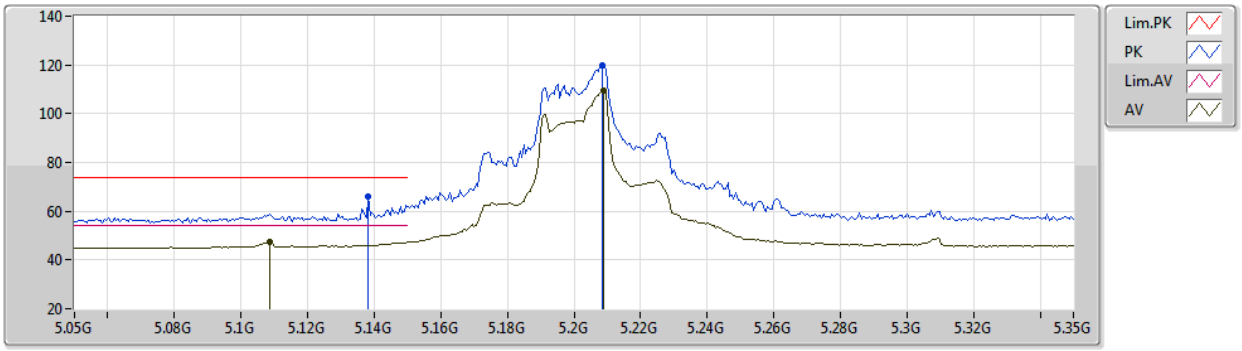
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5200MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH40	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2020



EUT Y_2TX
Setting 97
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1382G	65.80	74.00	-8.20	61.03	3	Horizontal	73	1.48	-	33.04	5.10	33.37
AV	5.1088G	47.50	54.00	-6.50	42.78	3	Horizontal	73	1.48	-	33.01	5.08	33.37
PK	5.2084G	119.69	Inf	-Inf	114.83	3	Horizontal	73	1.48	-	33.11	5.13	33.38
AV	5.209G	109.60	Inf	-Inf	104.74	3	Horizontal	73	1.48	-	33.11	5.13	33.38

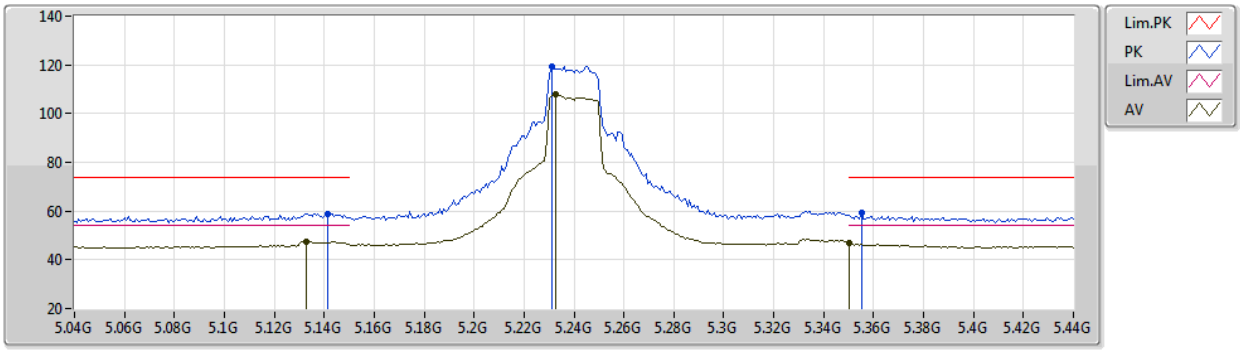
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5200MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH48	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2020



EUT Y_2TX
Setting 94
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1416G	58.96	74.00	-15.04	54.19	3	Vertical	209	2.99	-	33.04	5.10	33.37
AV	5.1328G	47.47	54.00	-6.53	42.71	3	Vertical	209	2.99	-	33.03	5.10	33.37
PK	5.2312G	119.53	Inf	-Inf	114.63	3	Vertical	209	2.99	-	33.13	5.15	33.38
AV	5.2328G	107.73	Inf	-Inf	102.83	3	Vertical	209	2.99	-	33.13	5.15	33.38
PK	5.3552G	59.14	74.00	-14.86	53.95	3	Vertical	209	2.99	-	33.37	5.21	33.39
AV	5.35G	47.06	54.00	-6.94	41.89	3	Vertical	209	2.99	-	33.35	5.21	33.39

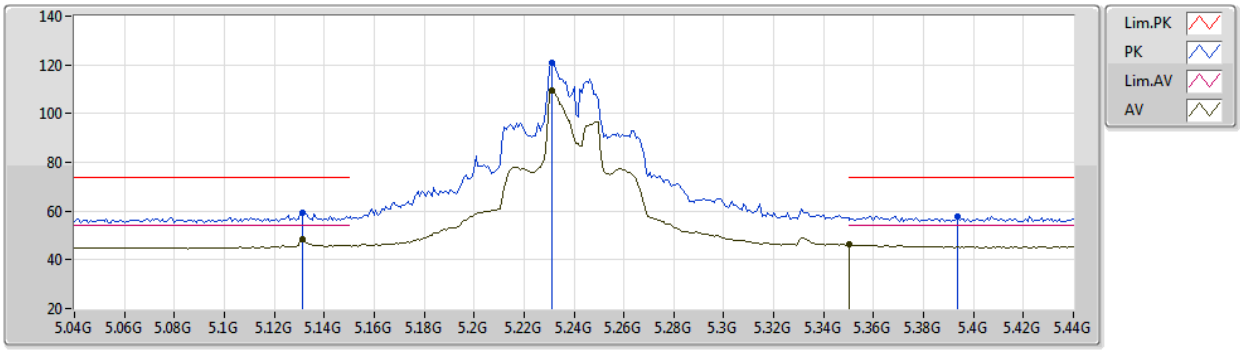
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5240MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / TXBF 1S2T / Ant. 1 + Ant. 2 / CH48	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2020



EUT Y_2TX
Setting 94
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1312G	59.49	74.00	-14.51	54.73	3	Horizontal	243	1.77	-	33.03	5.10	33.37
AV	5.1312G	48.32	54.00	-5.68	43.56	3	Horizontal	243	1.77	-	33.03	5.10	33.37
PK	5.2312G	120.77	Inf	-Inf	115.87	3	Horizontal	243	1.77	-	33.13	5.15	33.38
AV	5.2312G	109.45	Inf	-Inf	104.55	3	Horizontal	243	1.77	-	33.13	5.15	33.38
PK	5.3936G	57.99	74.00	-16.01	52.67	3	Horizontal	243	1.77	-	33.48	5.23	33.39
AV	5.35G	46.20	54.00	-7.80	41.03	3	Horizontal	243	1.77	-	33.35	5.21	33.39

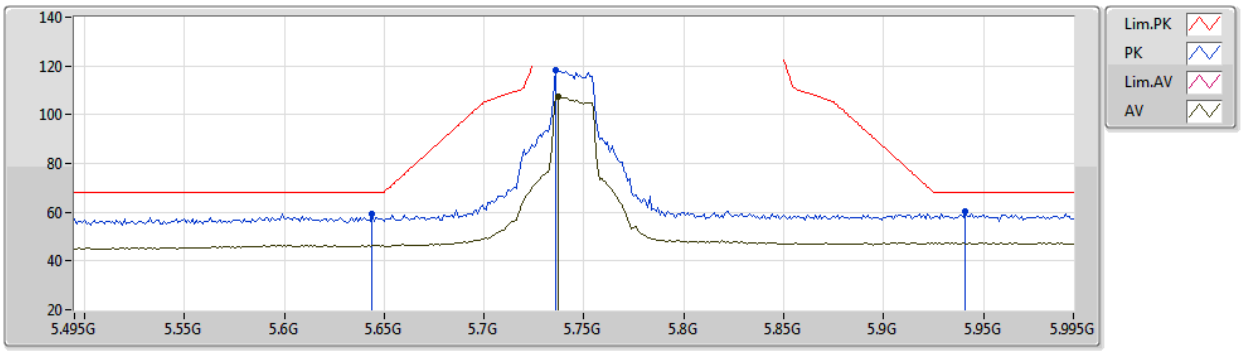
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5240MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.644G	59.40	68.20	-8.80	53.33	3	Vertical	120	1.86	-	34.04	5.40	33.37
PK	5.736G	118.17	Inf	-Inf	111.88	3	Vertical	120	1.86	-	34.17	5.47	33.35
AV	5.737G	107.44	Inf	-Inf	101.15	3	Vertical	120	1.86	-	34.17	5.47	33.35
PK	5.941G	60.18	68.20	-8.02	52.82	3	Vertical	120	1.86	-	35.06	5.62	33.32

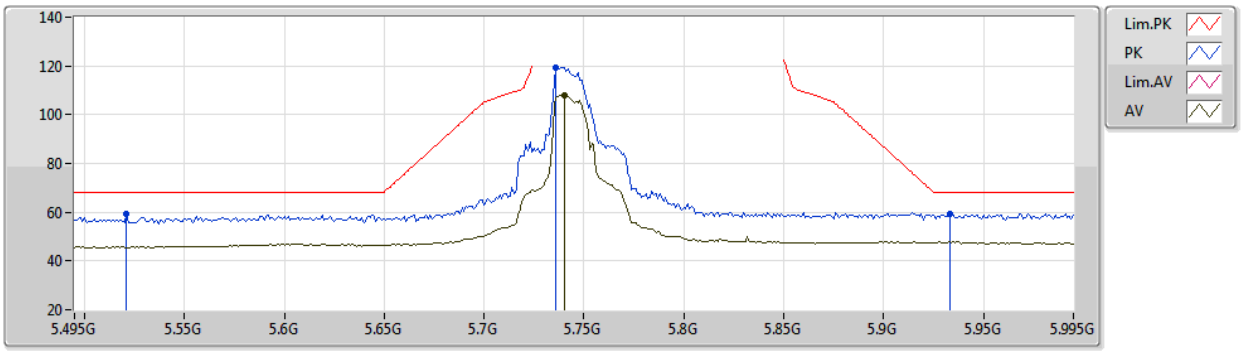
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.521G	59.38	68.20	-8.82	53.63	3	Horizontal	240	1.87	-	33.84	5.30	33.39
PK	5.736G	119.45	Inf	-Inf	113.16	3	Horizontal	240	1.87	-	34.17	5.47	33.35
AV	5.74G	108.04	Inf	-Inf	101.74	3	Horizontal	240	1.87	-	34.18	5.47	33.35
PK	5.933G	59.46	68.20	-8.74	52.14	3	Horizontal	240	1.87	-	35.03	5.61	33.32

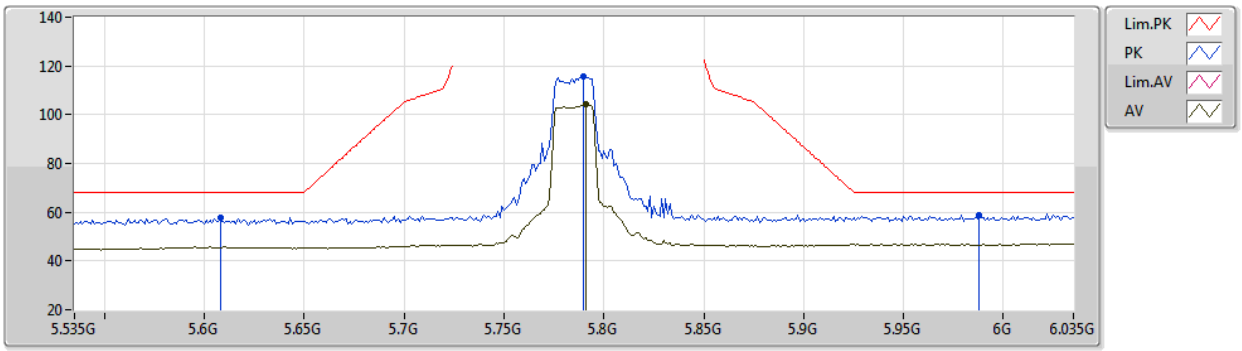
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 84
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.608G	57.69	68.20	-10.51	51.68	3	Vertical	125	1.60	-	34.01	5.37	33.37
PK	5.79G	115.57	Inf	-Inf	109.13	3	Vertical	125	1.60	-	34.28	5.50	33.34
AV	5.791G	104.12	Inf	-Inf	97.68	3	Vertical	125	1.60	-	34.28	5.50	33.34
PK	5.988G	58.59	68.20	-9.61	51.00	3	Vertical	125	1.60	-	35.25	5.65	33.31

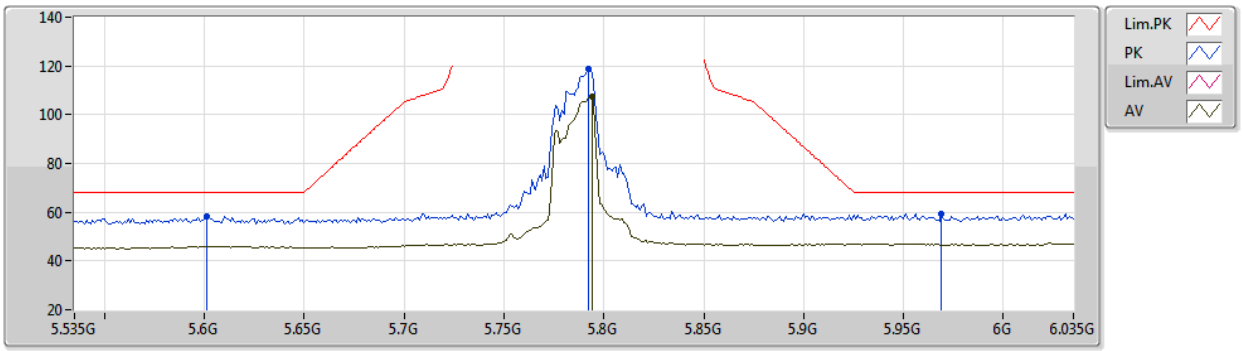
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 84
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.601G	58.11	68.20	-10.09	52.12	3	Horizontal	168	1.69	-	34.00	5.36	33.37
PK	5.792G	118.54	Inf	-Inf	112.10	3	Horizontal	168	1.69	-	34.28	5.50	33.34
AV	5.794G	107.48	Inf	-Inf	101.02	3	Horizontal	168	1.69	-	34.29	5.51	33.34
PK	5.969G	59.38	68.20	-8.82	51.87	3	Horizontal	168	1.69	-	35.18	5.64	33.31

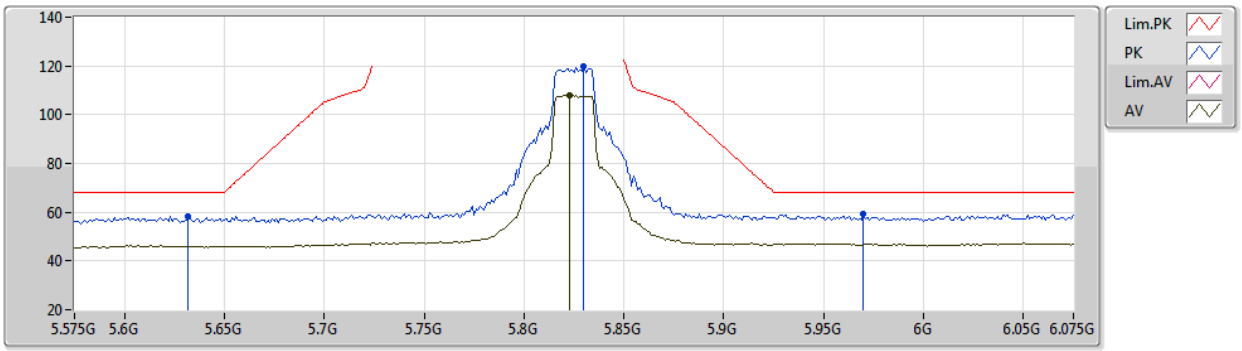
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.632G	58.22	68.20	-9.98	52.17	3	Vertical	120	1.61	-	34.03	5.39	33.37
PK	5.83G	119.88	Inf	-Inf	113.20	3	Vertical	120	1.61	-	34.48	5.53	33.33
AV	5.823G	108.06	Inf	-Inf	101.43	3	Vertical	120	1.61	-	34.44	5.53	33.34
PK	5.97G	59.09	68.20	-9.11	51.58	3	Vertical	120	1.61	-	35.18	5.64	33.31

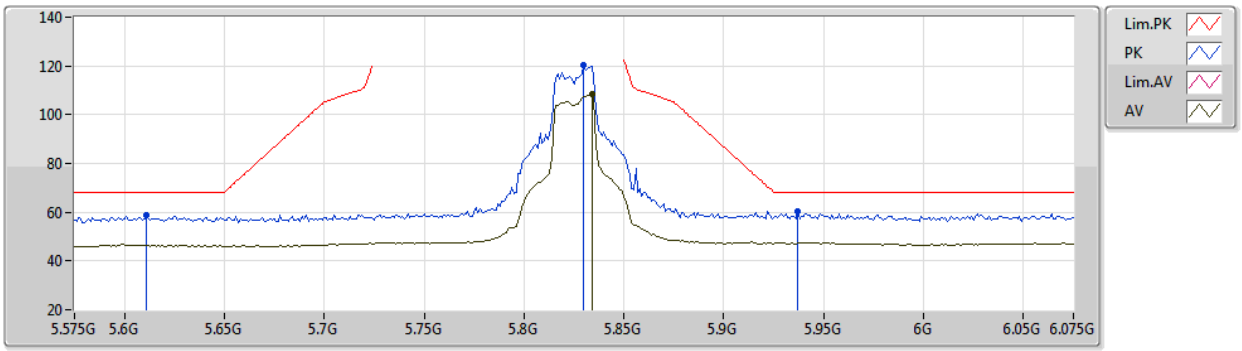
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 1 MCS 0 / 1S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.611G	58.60	68.20	-9.60	52.59	3	Horizontal	173	1.51	-	34.01	5.37	33.37
PK	5.83G	120.51	Inf	-Inf	113.83	3	Horizontal	173	1.51	-	34.48	5.53	33.33
AV	5.834G	108.68	Inf	-Inf	101.97	3	Horizontal	173	1.51	-	34.50	5.54	33.33
PK	5.937G	60.11	68.20	-8.09	52.76	3	Horizontal	173	1.51	-	35.05	5.62	33.32

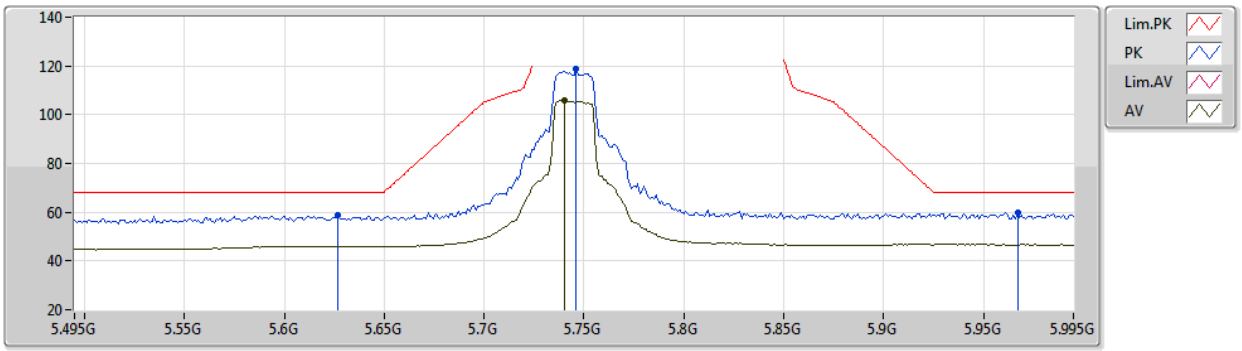
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	V

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.627G	58.66	68.20	-9.54	52.62	3	Vertical	111	2.07	-	34.03	5.38	33.37
PK	5.746G	118.79	Inf	-Inf	112.48	3	Vertical	111	2.07	-	34.19	5.47	33.35
AV	5.74G	105.84	Inf	-Inf	99.54	3	Vertical	111	2.07	-	34.18	5.47	33.35
PK	5.967G	59.78	68.20	-8.42	52.28	3	Vertical	111	2.07	-	35.17	5.64	33.31

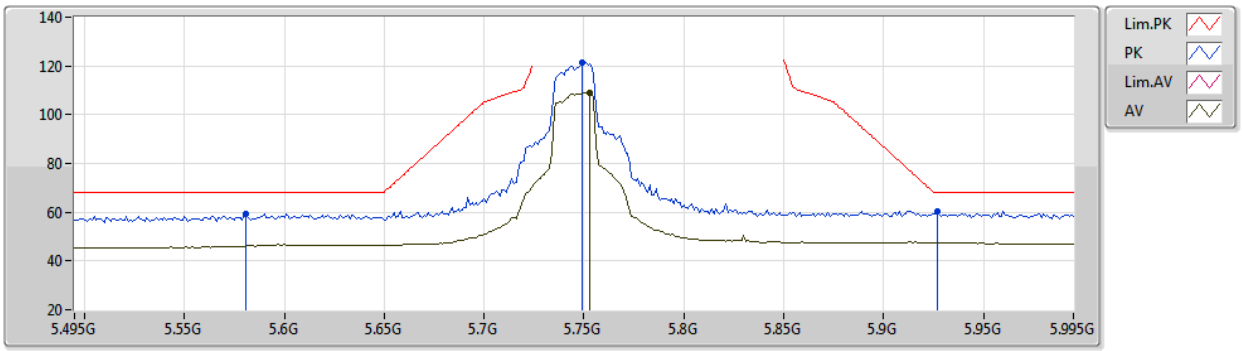
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.581G	59.25	68.20	-8.95	53.31	3	Horizontal	156	1.51	-	33.96	5.35	33.37
PK	5.749G	121.50	Inf	-Inf	115.18	3	Horizontal	156	1.51	-	34.20	5.47	33.35
AV	5.753G	109.16	Inf	-Inf	102.82	3	Horizontal	156	1.51	-	34.21	5.48	33.35
PK	5.927G	60.47	68.20	-7.73	53.17	3	Horizontal	156	1.51	-	35.01	5.61	33.32

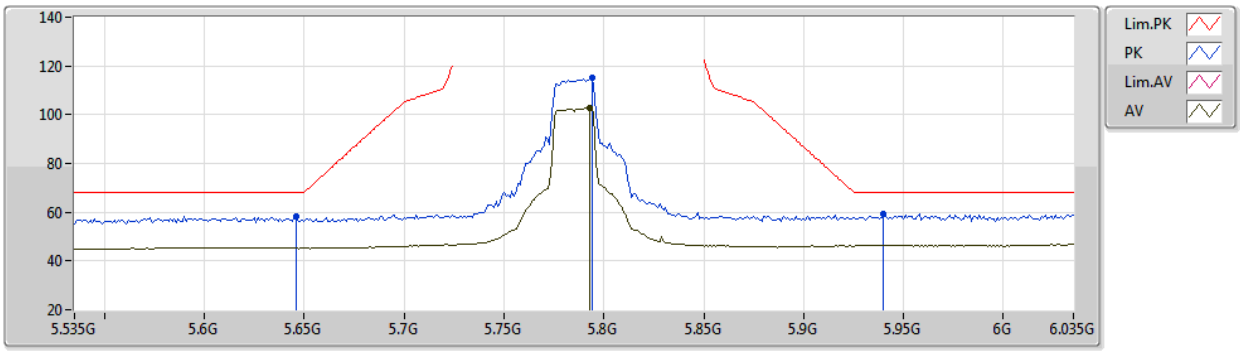
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 92
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.646G	58.42	68.20	-9.78	52.34	3	Vertical	236	1.80	-	34.05	5.40	33.37
PK	5.794G	114.99	Inf	-Inf	108.53	3	Vertical	236	1.80	-	34.29	5.51	33.34
AV	5.793G	102.93	Inf	-Inf	96.47	3	Vertical	236	1.80	-	34.29	5.51	33.34
PK	5.94G	59.42	68.20	-8.78	52.06	3	Vertical	236	1.80	-	35.06	5.62	33.32

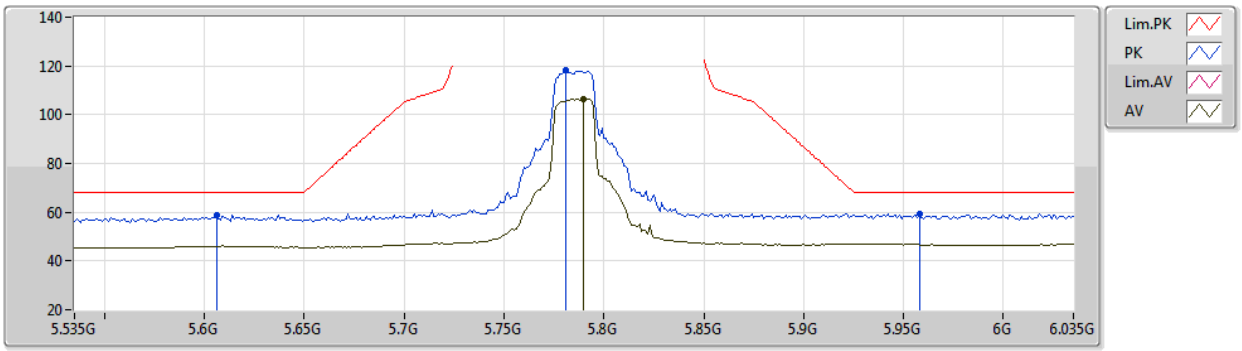
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	H

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 92
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.606G	58.65	68.20	-9.55	52.65	3	Horizontal	158	1.74	-	34.01	5.36	33.37
PK	5.781G	118.48	Inf	-Inf	112.06	3	Horizontal	158	1.74	-	34.26	5.50	33.34
AV	5.79G	106.54	Inf	-Inf	100.10	3	Horizontal	158	1.74	-	34.28	5.50	33.34
PK	5.958G	59.44	68.20	-8.76	51.99	3	Horizontal	158	1.74	-	35.13	5.63	33.31

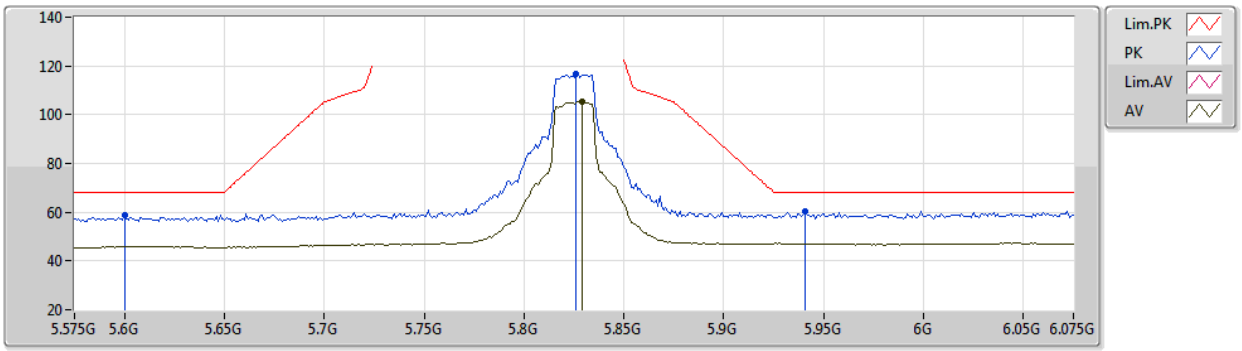
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6G	58.65	68.20	-9.55	52.66	3	Vertical	89	2.16	-	34.00	5.36	33.37
PK	5.826G	116.92	Inf	-Inf	110.26	3	Vertical	89	2.16	-	34.46	5.53	33.33
AV	5.829G	105.50	Inf	-Inf	98.83	3	Vertical	89	2.16	-	34.47	5.53	33.33
PK	5.941G	60.27	68.20	-7.93	52.91	3	Vertical	89	2.16	-	35.06	5.62	33.32

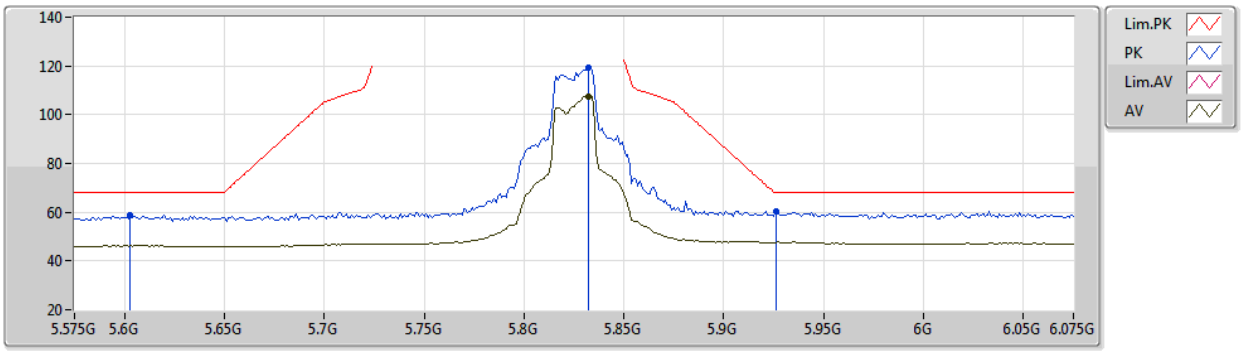
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 2 MCS 0 / 2S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 94
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.603G	58.68	68.20	-9.52	52.69	3	Horizontal	162	1.39	-	34.00	5.36	33.37
PK	5.832G	119.16	Inf	-Inf	112.46	3	Horizontal	162	1.39	-	34.49	5.54	33.33
AV	5.832G	107.61	Inf	-Inf	100.91	3	Horizontal	162	1.39	-	34.49	5.54	33.33
PK	5.926G	60.38	68.20	-7.82	53.09	3	Horizontal	162	1.39	-	35.00	5.61	33.32

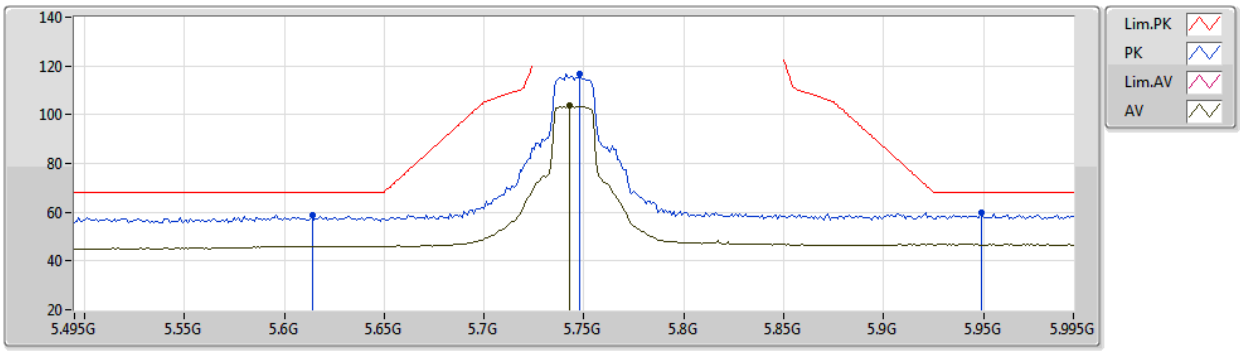
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	V

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.614G	58.72	68.20	-9.48	52.71	3	Vertical	120	1.80	-	34.01	5.37	33.37
PK	5.748G	116.80	Inf	-Inf	110.48	3	Vertical	120	1.80	-	34.20	5.47	33.35
AV	5.743G	103.56	Inf	-Inf	97.25	3	Vertical	120	1.80	-	34.19	5.47	33.35
PK	5.949G	60.06	68.20	-8.14	52.66	3	Vertical	120	1.80	-	35.10	5.62	33.32

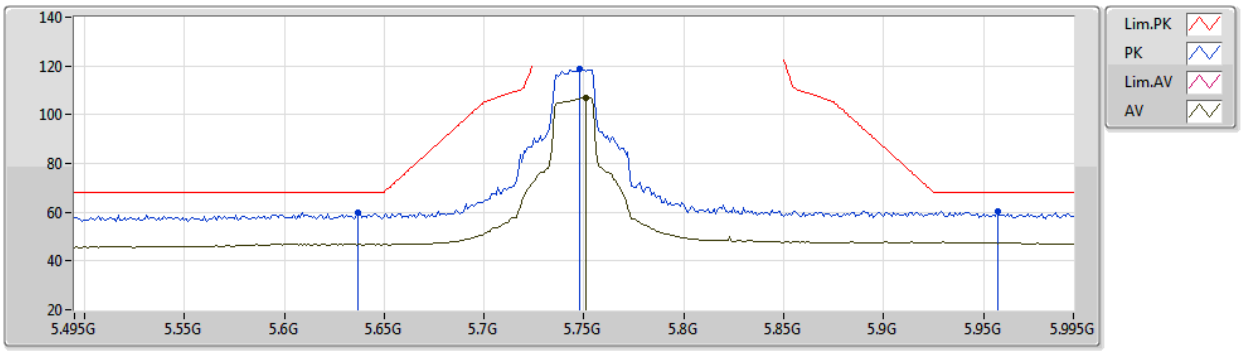
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH149	**Polarization**	H

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5745MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.637G	59.78	68.20	-8.42	53.72	3	Horizontal	161	1.56	-	34.04	5.39	33.37
PK	5.748G	118.65	Inf	-Inf	112.33	3	Horizontal	161	1.56	-	34.20	5.47	33.35
AV	5.751G	107.01	Inf	-Inf	100.68	3	Horizontal	161	1.56	-	34.20	5.48	33.35
PK	5.957G	60.16	68.20	-8.04	52.71	3	Horizontal	161	1.56	-	35.13	5.63	33.31

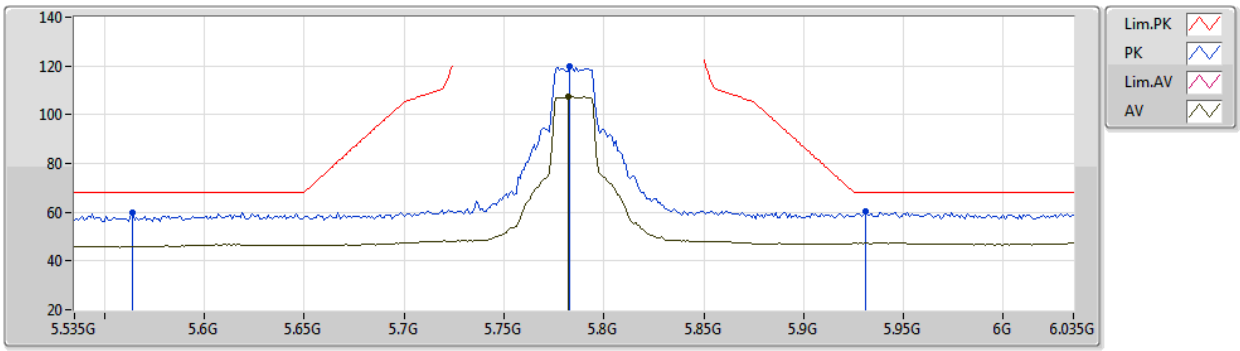
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5745MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	V

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 91
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.564G	59.96	68.20	-8.24	54.08	3	Vertical	123	1.80	-	33.93	5.33	33.38
PK	5.783G	119.66	Inf	-Inf	113.23	3	Vertical	123	1.80	-	34.27	5.50	33.34
AV	5.782G	107.28	Inf	-Inf	100.86	3	Vertical	123	1.80	-	34.26	5.50	33.34
PK	5.931G	60.26	68.20	-7.94	52.95	3	Vertical	123	1.80	-	35.02	5.61	33.32

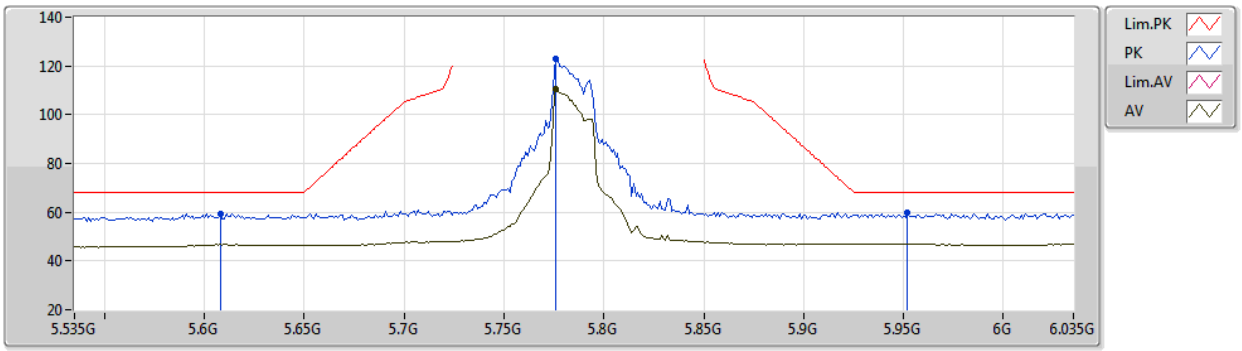
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH157	**Polarization**	H

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5785MHz_TX

08/06/2020



EUT Y_4TX
Setting 91
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.608G	59.47	68.20	-8.73	53.46	3	Horizontal	145	2.24	-	34.01	5.37	33.37
PK	5.776G	123.16	Inf	-Inf	116.76	3	Horizontal	145	2.24	-	34.25	5.49	33.34
AV	5.776G	110.44	Inf	-Inf	104.04	3	Horizontal	145	2.24	-	34.25	5.49	33.34
PK	5.952G	59.79	68.20	-8.41	52.36	3	Horizontal	145	2.24	-	35.11	5.63	33.31

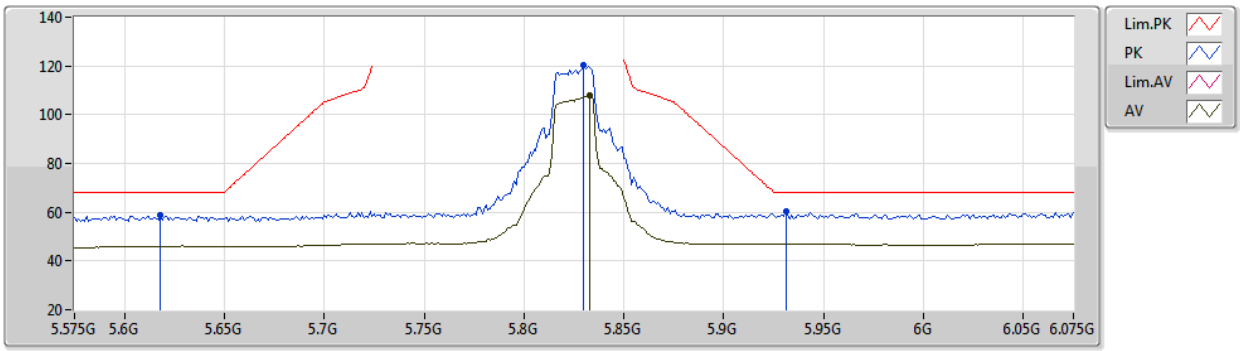
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5785MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	V

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.618G	58.80	68.20	-9.40	52.78	3	Vertical	117	1.57	-	34.02	5.37	33.37
PK	5.83G	120.45	Inf	-Inf	113.77	3	Vertical	117	1.57	-	34.48	5.53	33.33
AV	5.833G	108.08	Inf	-Inf	101.37	3	Vertical	117	1.57	-	34.50	5.54	33.33
PK	5.931G	60.27	68.20	-7.93	52.96	3	Vertical	117	1.57	-	35.02	5.61	33.32

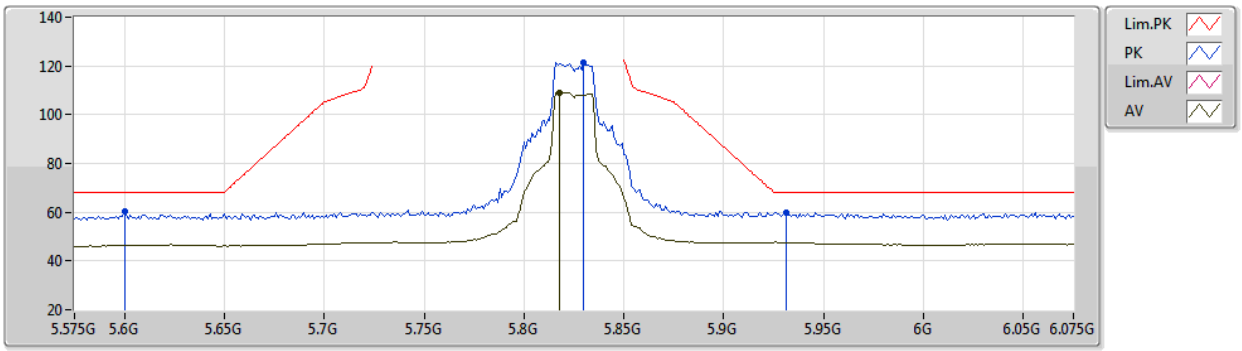
Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 20MHz / Nss 3 MCS 0 / 3S4T TXBF / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH165	**Polarization**	H

802.11ax HEW20-BF_Nss3,(MCS0)_4TX

5825MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-E-P-2-10

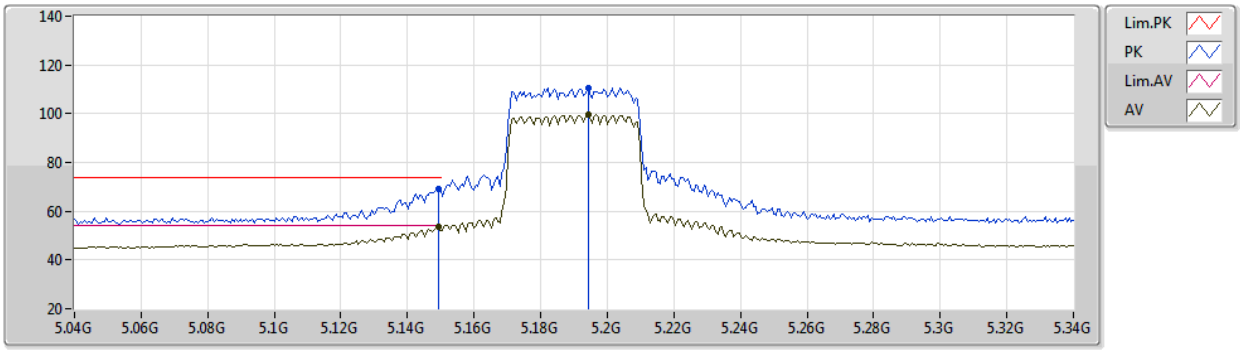
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6G	60.33	68.20	-7.87	54.34	3	Horizontal	163	1.71	-	34.00	5.36	33.37
PK	5.83G	121.27	Inf	-Inf	114.59	3	Horizontal	163	1.71	-	34.48	5.53	33.33
AV	5.818G	109.22	Inf	-Inf	102.63	3	Horizontal	163	1.71	-	34.41	5.52	33.34
PK	5.931G	59.87	68.20	-8.33	52.56	3	Horizontal	163	1.71	-	35.02	5.61	33.32

Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5825MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH38	**Polarization**	V

802.11ax HEW40_Nss1,(MCS0)_2TX

5190MHz_TX



EUT Y_2TX
Setting 77
04-E-P-2-10

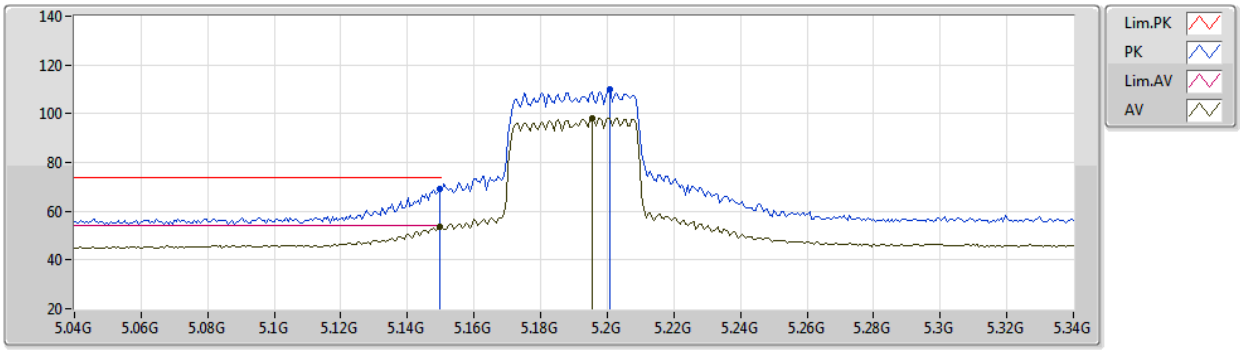
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1492G	69.03	74.00	-4.97	64.25	3	Vertical	183	2.58	-	33.05	5.10	33.37
AV	5.1492G	53.56	54.00	-0.44	48.78	3	Vertical	183	2.58	-	33.05	5.10	33.37
PK	5.1942G	110.59	Inf	-Inf	105.75	3	Vertical	183	2.58	-	33.09	5.13	33.38
AV	5.1942G	99.85	Inf	-Inf	95.01	3	Vertical	183	2.58	-	33.09	5.13	33.38

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5190MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH38	**Polarization**	H

802.11ax HEW40_Nss1,(MCS0)_2TX

5190MHz_TX



EUT Y_2TX
Setting 77
04-E-P-2-10

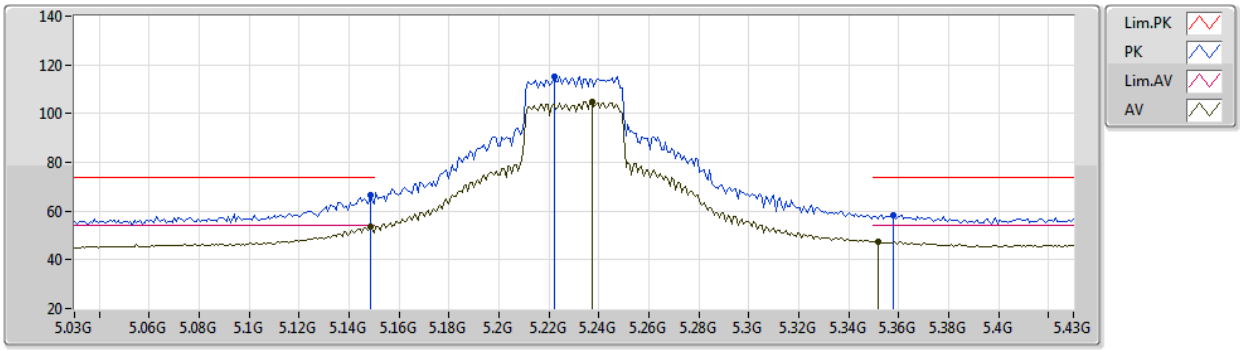
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1498G	69.32	74.00	-4.68	64.54	3	Horizontal	243	1.86	-	33.05	5.10	33.37
AV	5.1498G	53.80	54.00	-0.20	49.02	3	Horizontal	243	1.86	-	33.05	5.10	33.37
PK	5.2008G	110.22	Inf	-Inf	105.37	3	Horizontal	243	1.86	-	33.10	5.13	33.38
AV	5.1954G	98.35	Inf	-Inf	93.50	3	Horizontal	243	1.86	-	33.10	5.13	33.38

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5190MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH46	**Polarization**	V

802.11ax HEW40_Nss1,(MCS0)_2TX

5230MHz_TX



EUT Y_2TX
Setting 96
04-E-P-2-10

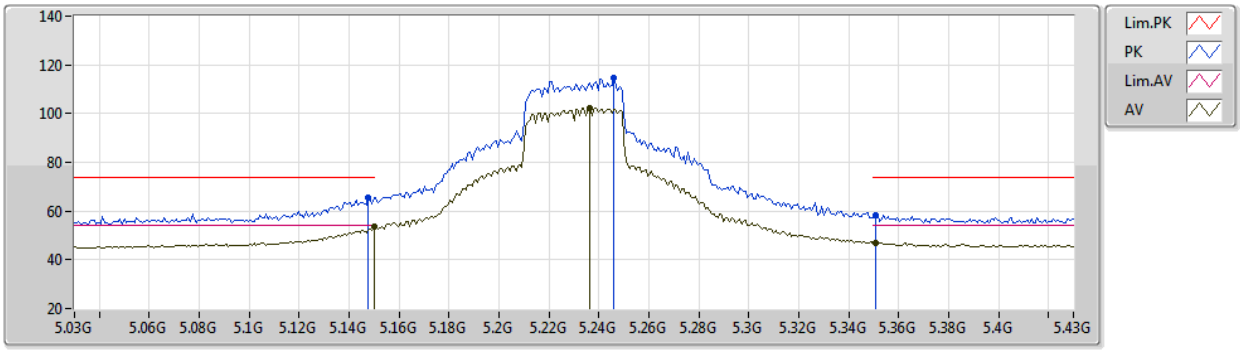
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1484G	66.50	74.00	-7.50	61.72	3	Vertical	183	2.48	-	33.05	5.10	33.37
AV	5.1484G	53.86	54.00	-0.14	49.08	3	Vertical	183	2.48	-	33.05	5.10	33.37
PK	5.222G	115.32	Inf	-Inf	110.44	3	Vertical	183	2.48	-	33.12	5.14	33.38
AV	5.2372G	104.80	Inf	-Inf	99.89	3	Vertical	183	2.48	-	33.14	5.15	33.38
PK	5.358G	58.48	74.00	-15.52	53.29	3	Vertical	183	2.48	-	33.37	5.21	33.39
AV	5.3516G	47.30	54.00	-6.70	42.13	3	Vertical	183	2.48	-	33.35	5.21	33.39

Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5230MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S2T CDD / Ant. 1 + Ant. 2 / CH46	**Polarization**	H

802.11ax HEW40_Nss1,(MCS0)_2TX

5230MHz_TX



EUT Y_2TX
Setting 96
04-E-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1476G	65.77	74.00	-8.23	60.99	3	Horizontal	54	1.80	-	33.05	5.10	33.37
AV	5.15G	53.44	54.00	-0.56	48.65	3	Horizontal	54	1.80	-	33.05	5.11	33.37
PK	5.246G	114.55	Inf	-Inf	109.63	3	Horizontal	54	1.80	-	33.15	5.15	33.38
AV	5.2364G	102.40	Inf	-Inf	97.49	3	Horizontal	54	1.80	-	33.14	5.15	33.38
PK	5.3508G	58.32	74.00	-15.68	53.15	3	Horizontal	54	1.80	-	33.35	5.21	33.39
AV	5.3508G	46.84	54.00	-7.16	41.67	3	Horizontal	54	1.80	-	33.35	5.21	33.39

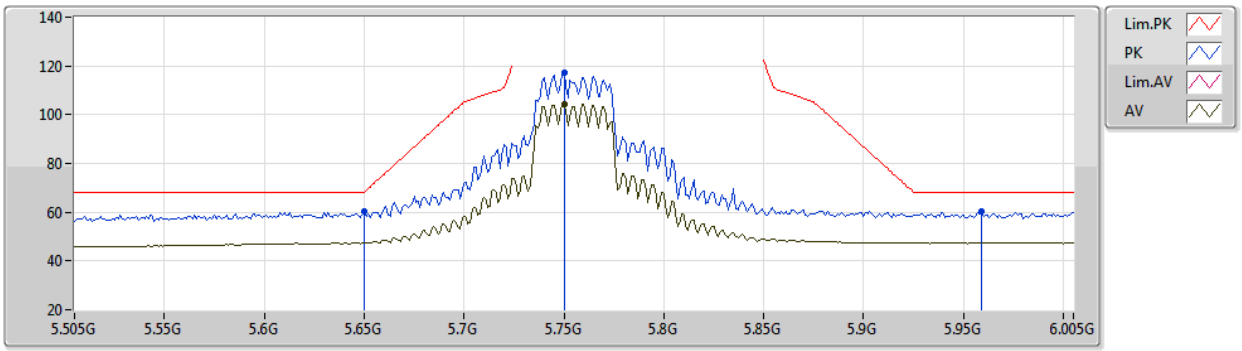
Note 1: Frequencies within 5150~5250 are the fundamental frequencies at 5230MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Band Edge and Fundamental Emissions			
Operating Mode	802.11ax 40MHz / Nss 1 MCS 0 / 1S4T CDD / Ant. 3 + Ant. 4 + Ant. 5 + Ant. 6 / CH151	**Polarization**	V

802.11ax HEW40_Nss1,(MCS0)_4TX

5755MHz_TX

08/06/2020



EUT Y_4TX
Setting 96
04-K-P-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.65G	60.18	68.20	-8.02	54.09	3	Vertical	121	1.92	-	34.05	5.40	33.36
PK	5.75G	117.40	Inf	-Inf	111.08	3	Vertical	121	1.92	-	34.20	5.47	33.35
AV	5.75G	104.46	Inf	-Inf	98.14	3	Vertical	121	1.92	-	34.20	5.47	33.35
PK	5.959G	60.32	68.20	-7.88	52.86	3	Vertical	121	1.92	-	35.14	5.63	33.31

Note 1: Frequencies within 5725~5850 are the fundamental frequencies at 5755MHz
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)