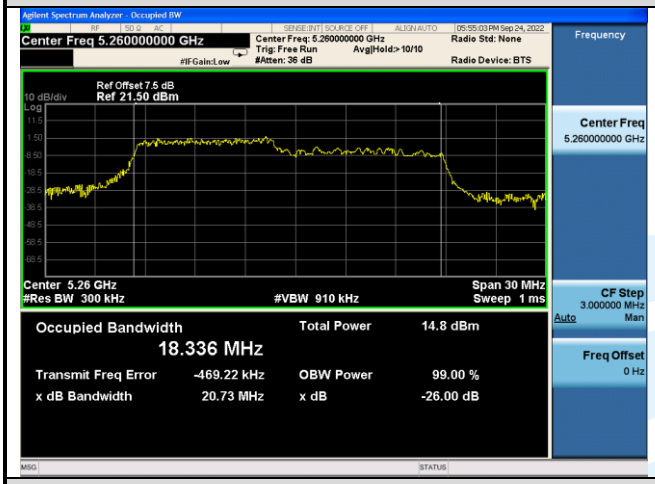
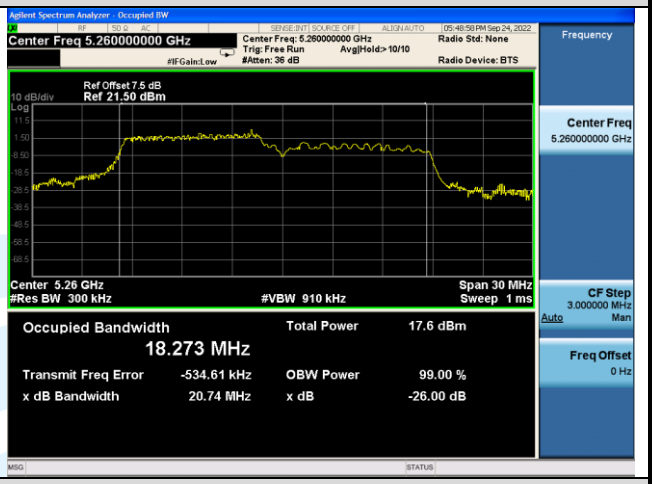
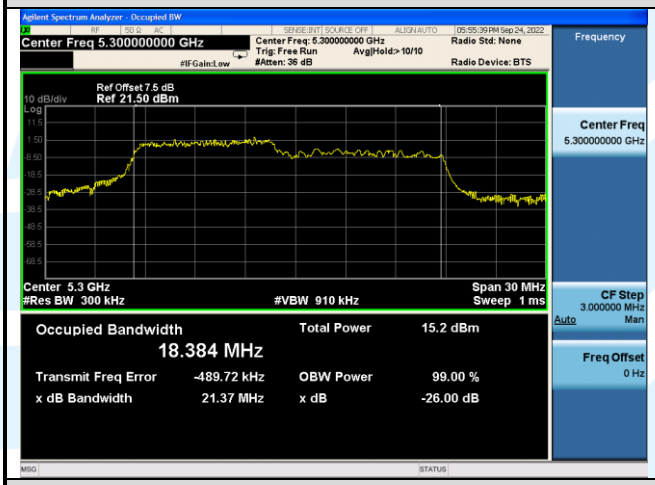
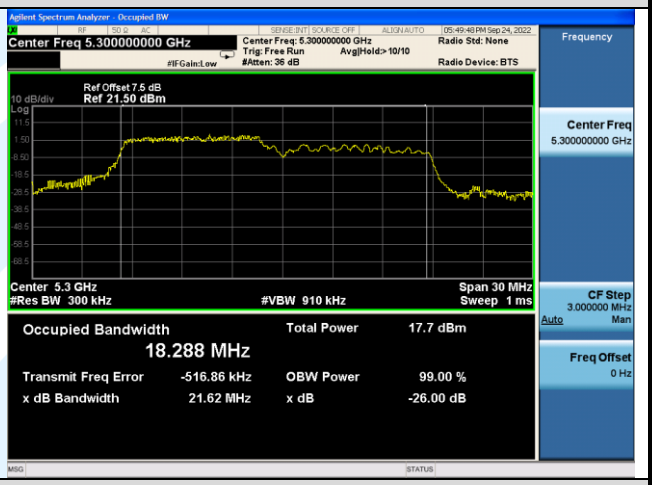
Channel 52



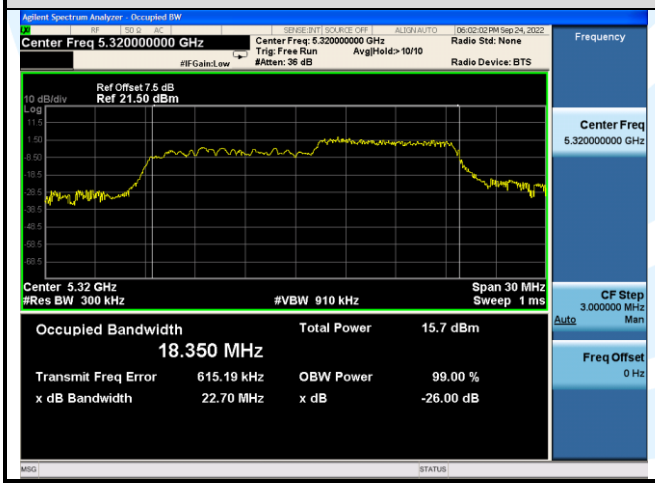


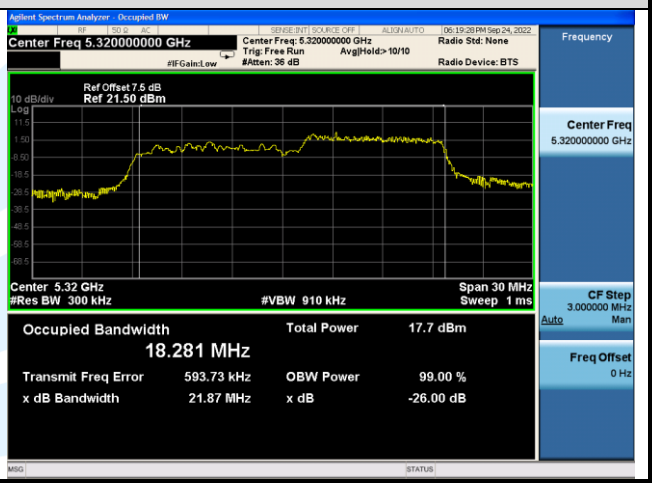
Channel 60



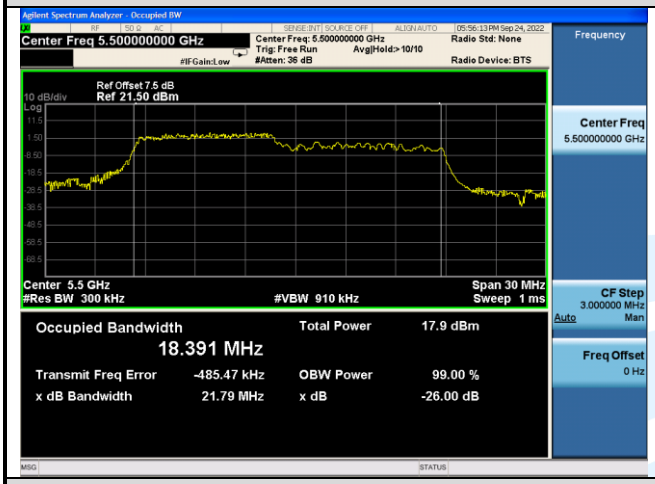


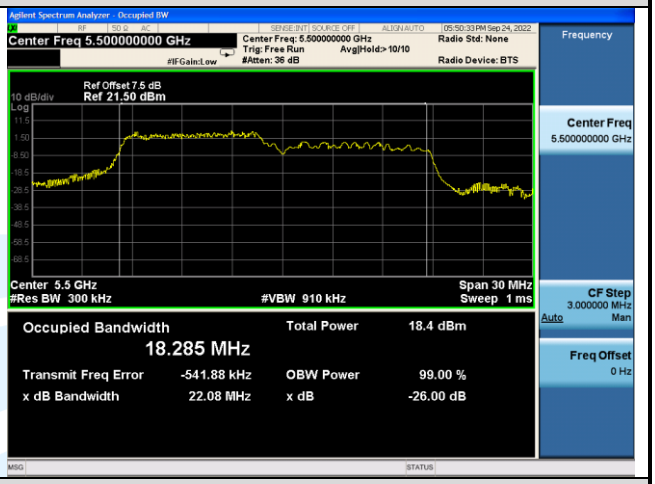
Channel 64



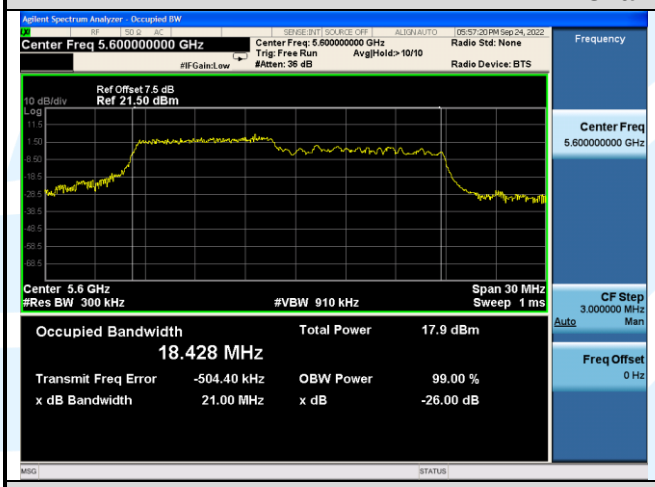


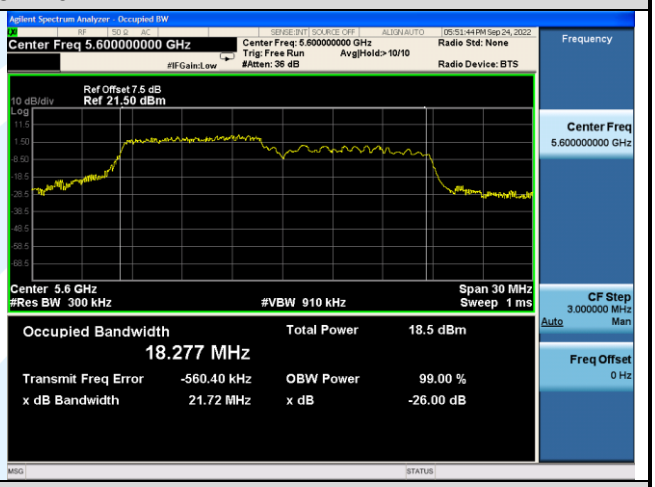
Channel 100



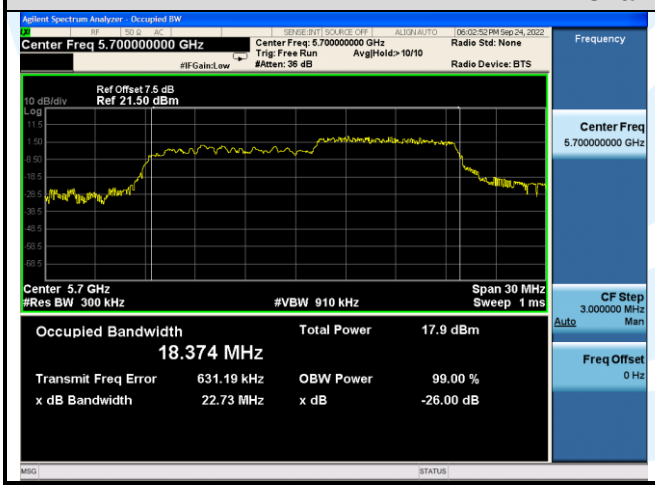


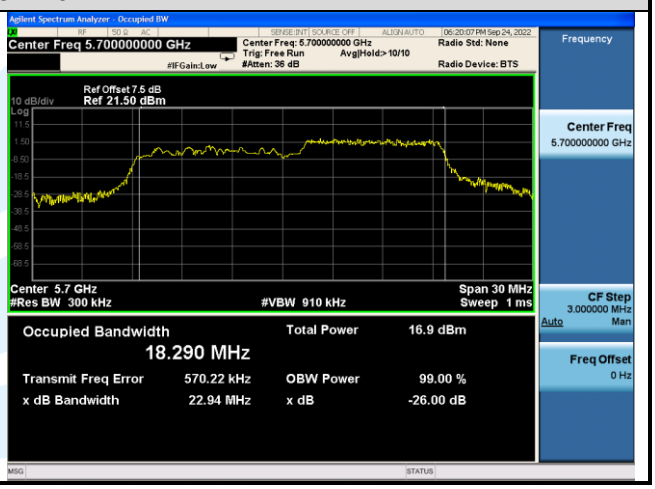
Channel 120

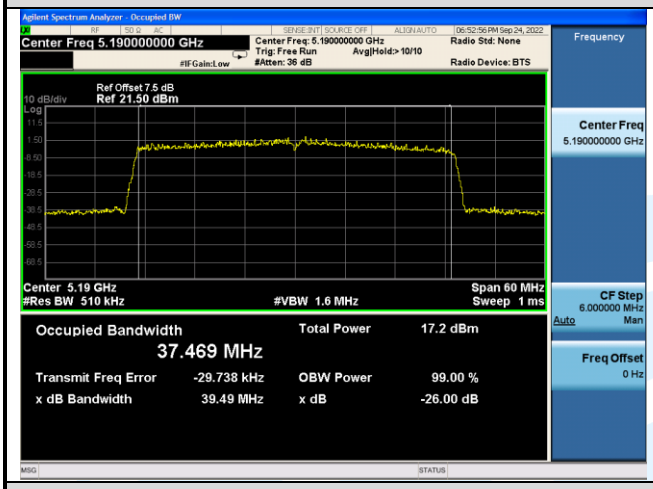
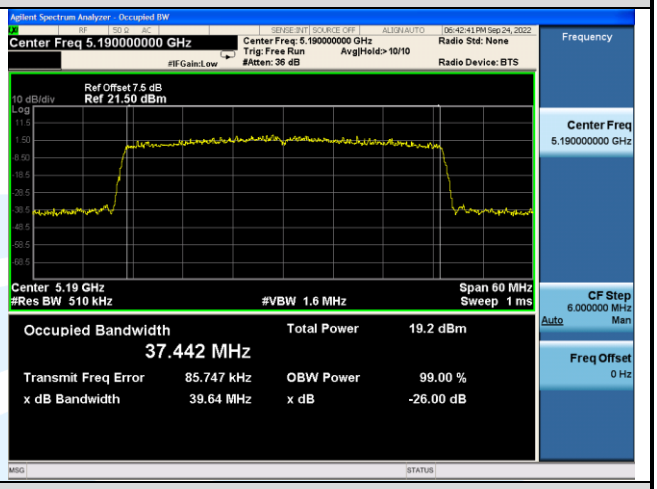
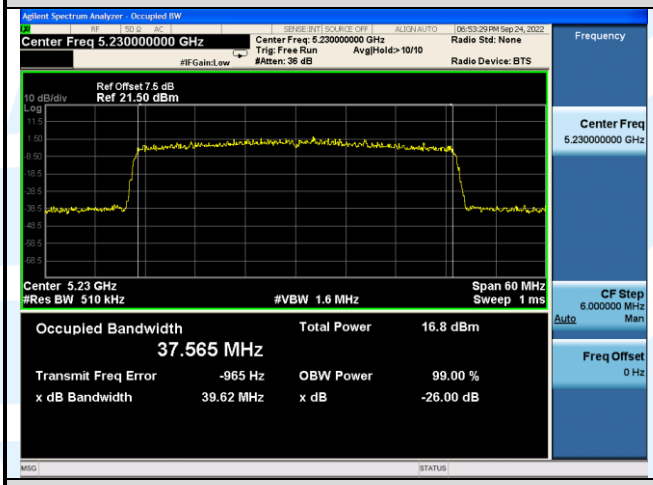
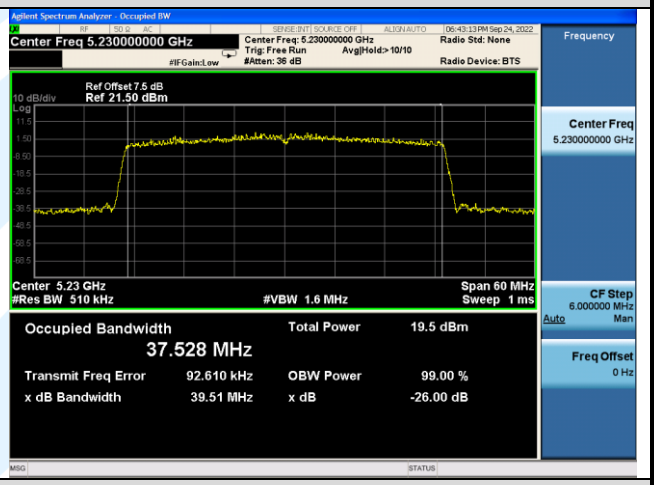
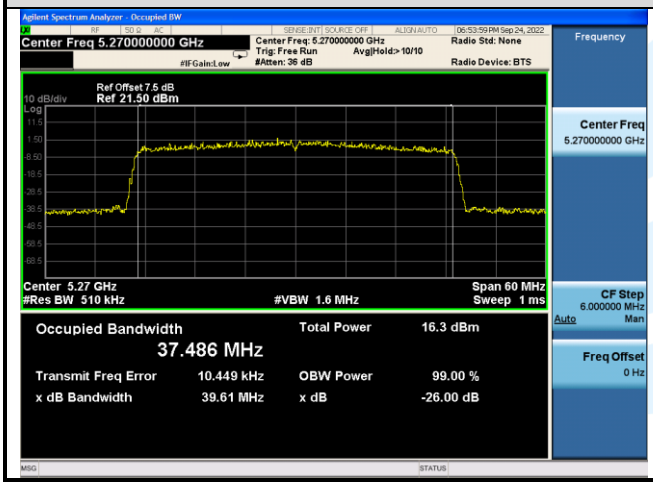
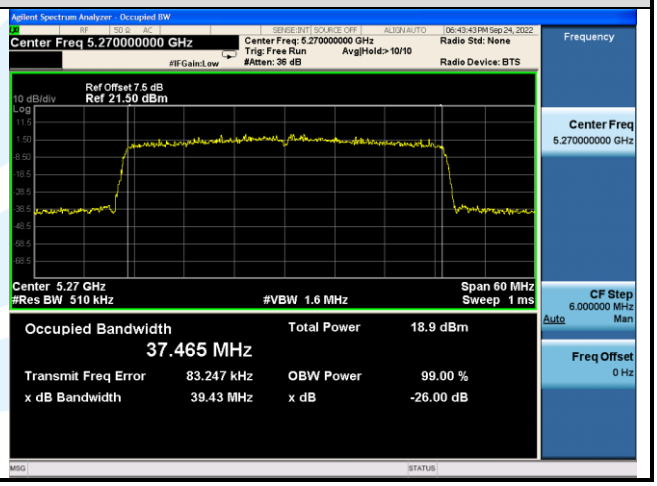




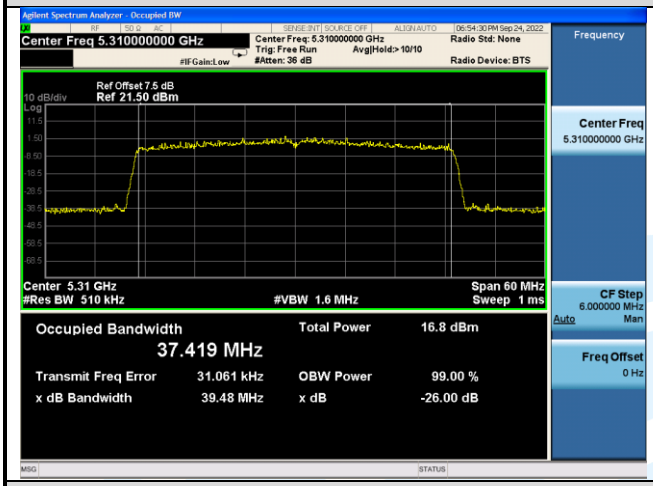
Channel 140

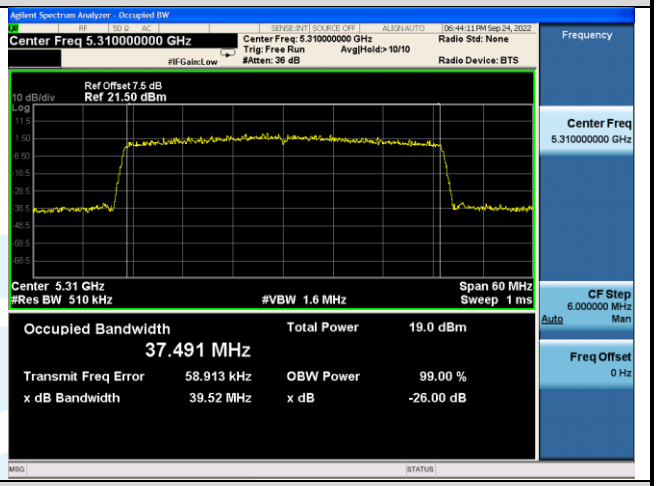




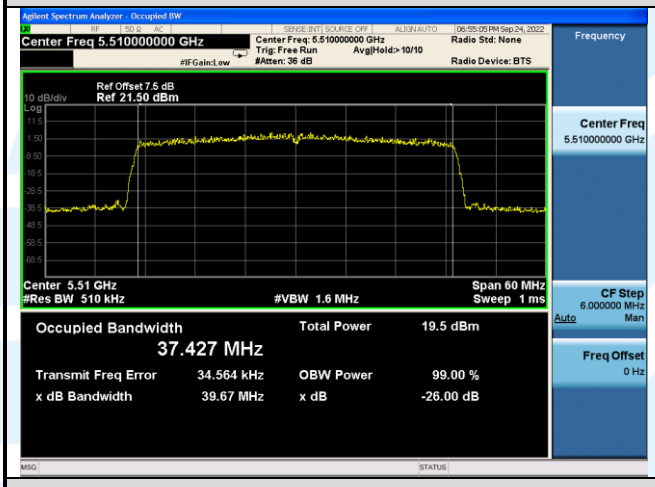
IEEE 802.11ax-HE40_SU_ant0	IEEE 802.11ax-HE40_SU_ant1
Channel 38	
	
Channel 46	
	
Channel 54	
	

Channel 62

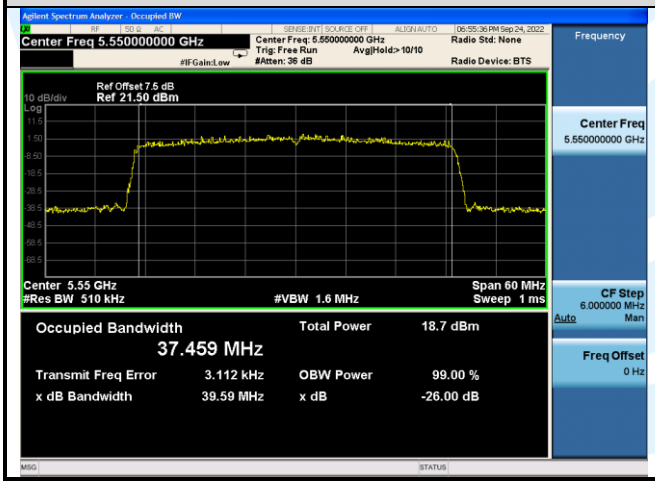


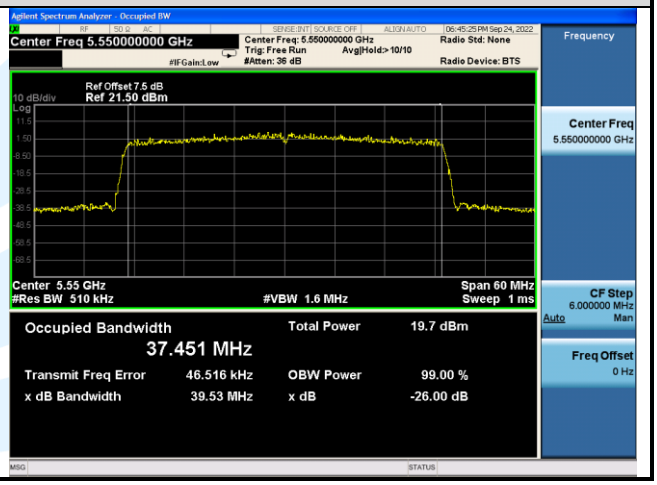


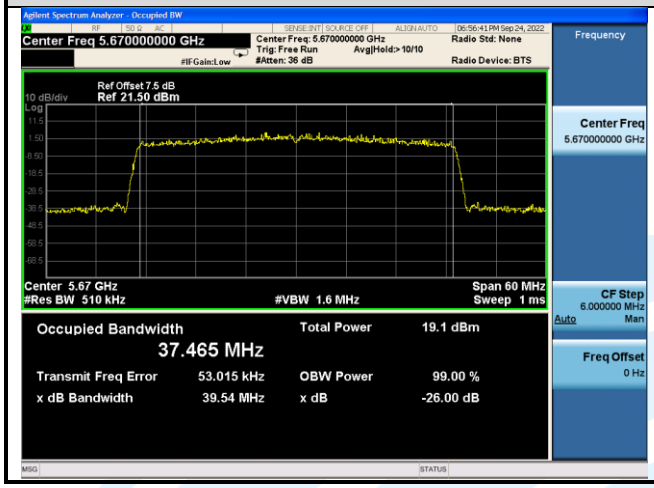
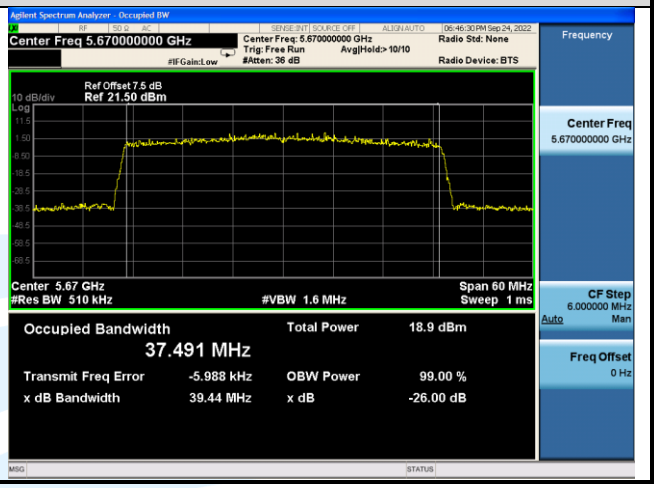
Channel 102

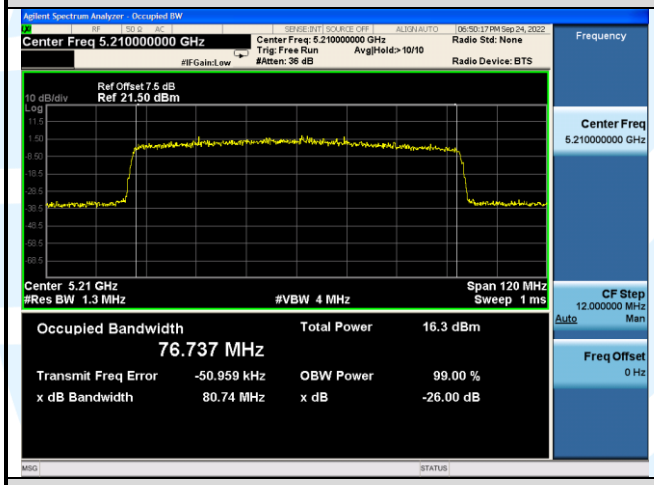
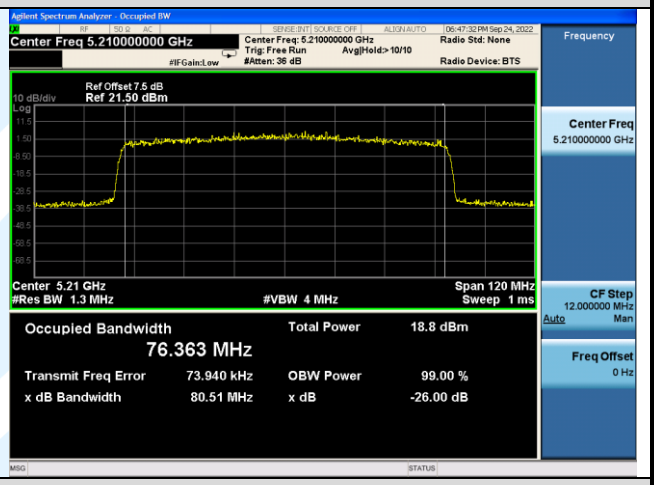
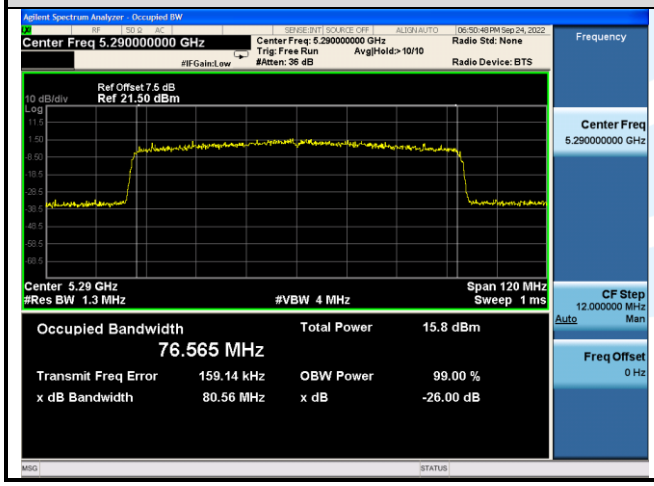
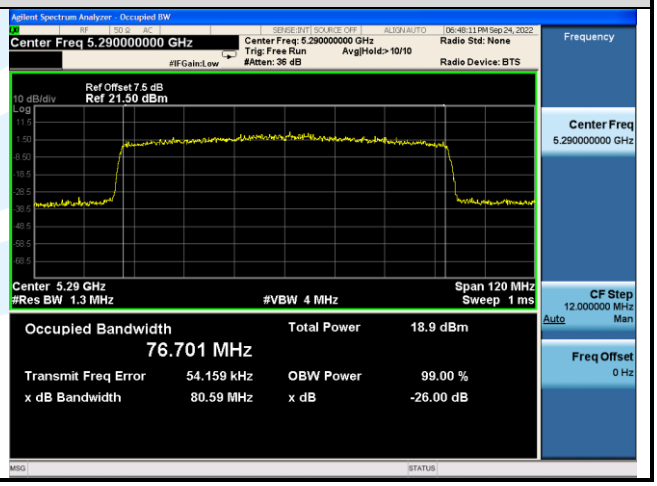


Channel 110

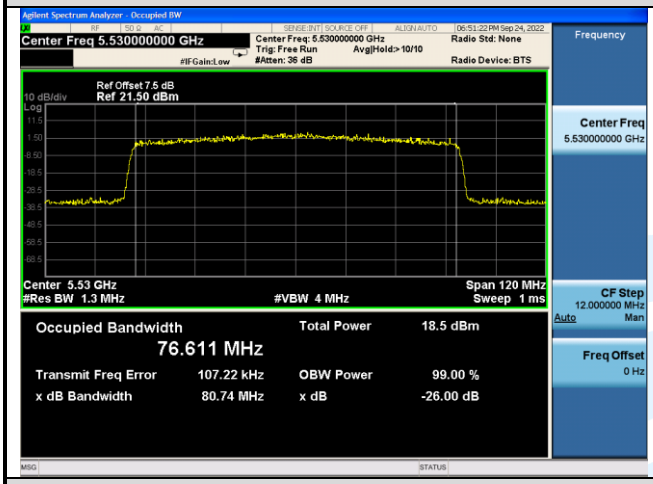


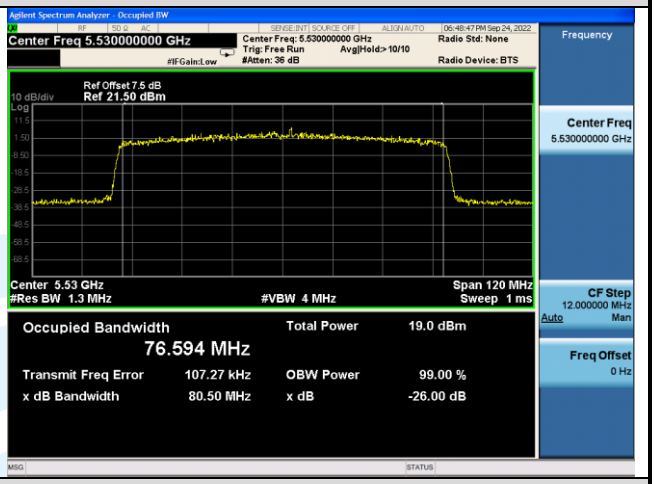


Channel 134	
	

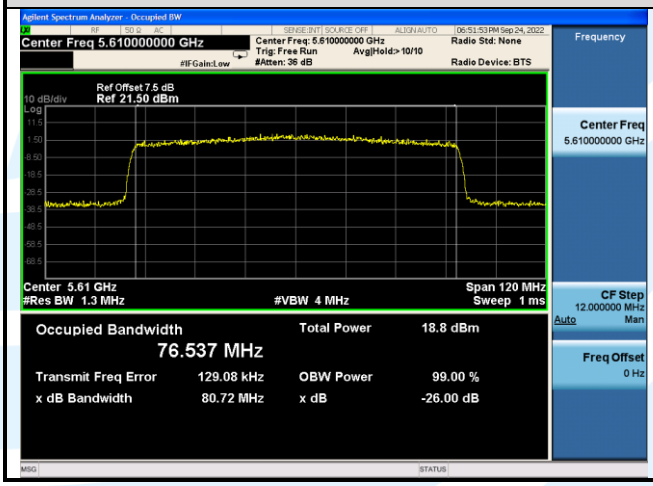
IEEE 802.11ax-HE80_SU_ant0	IEEE 802.11ax-HE80_SU_ant1
Channel 42	
	
Channel 58	
	

Channel 106





Channel 122



5.46 DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 15 Subpart C Section 15.407 (e)

Test Method: KDB 789033 D02 v02r01Section C.2

Limit: Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure:

The output from the transmitter was connected to an attenuator and then to the input of the RF Spectrum Analyzer.

Spectrum analyzer according to the following Settings:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 * RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.5.3 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Transmitter mode

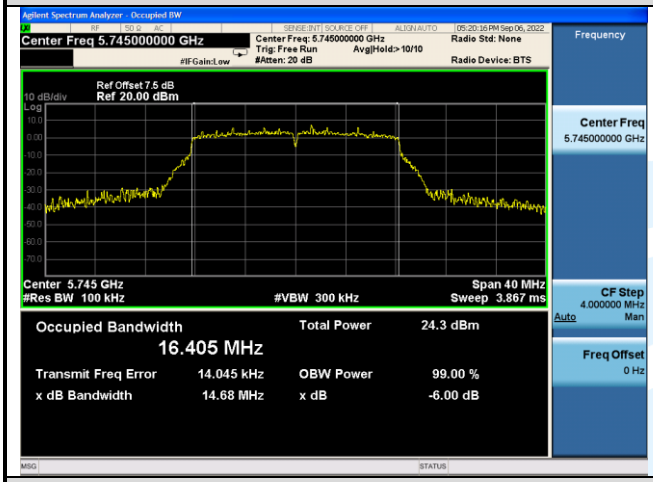
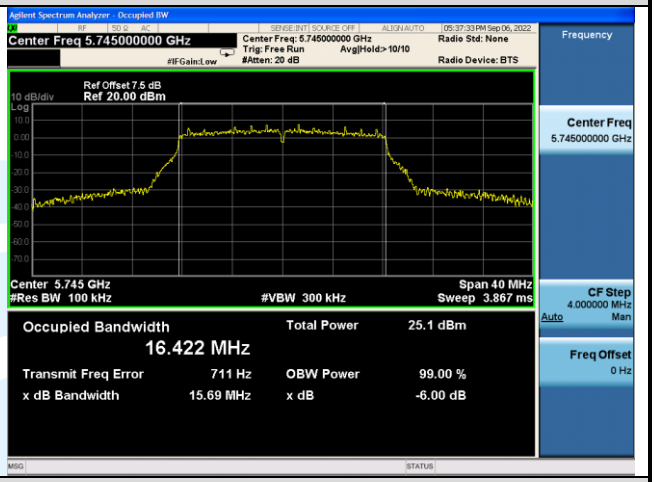
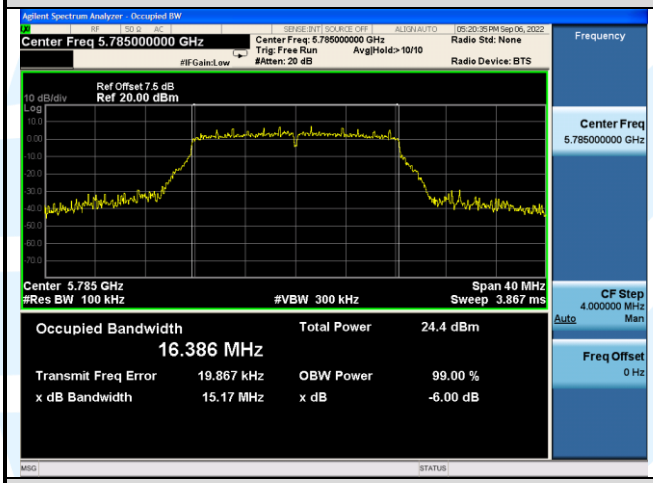
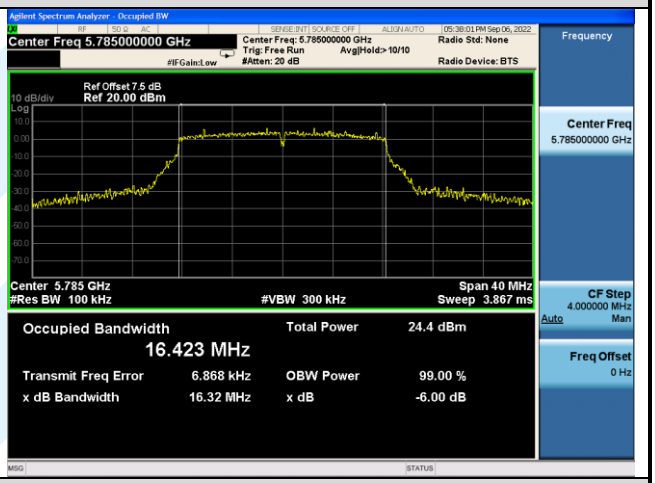
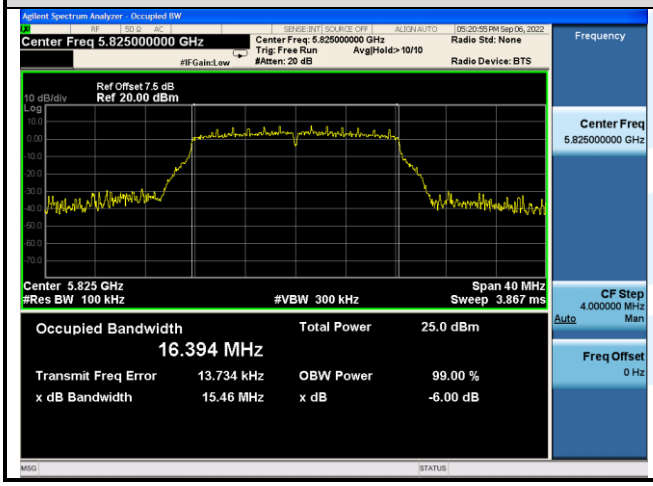
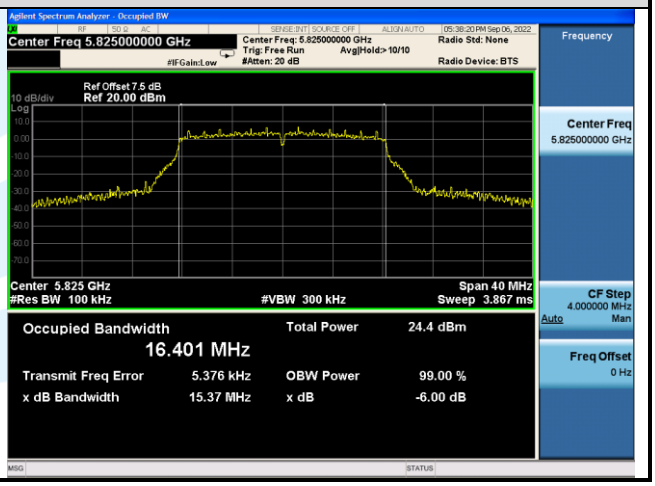
Test Results: Pass

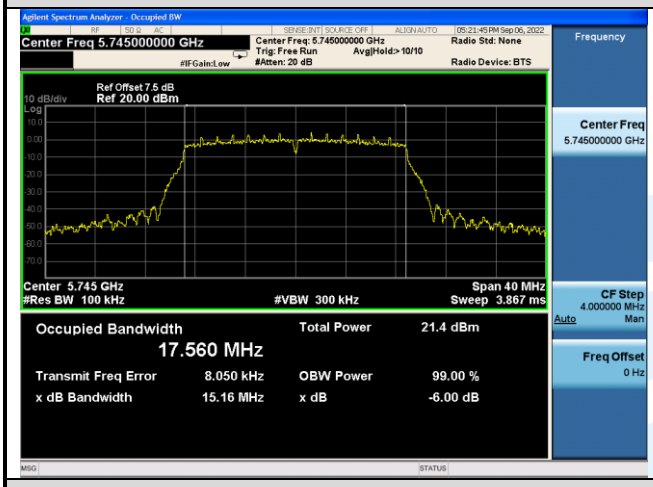
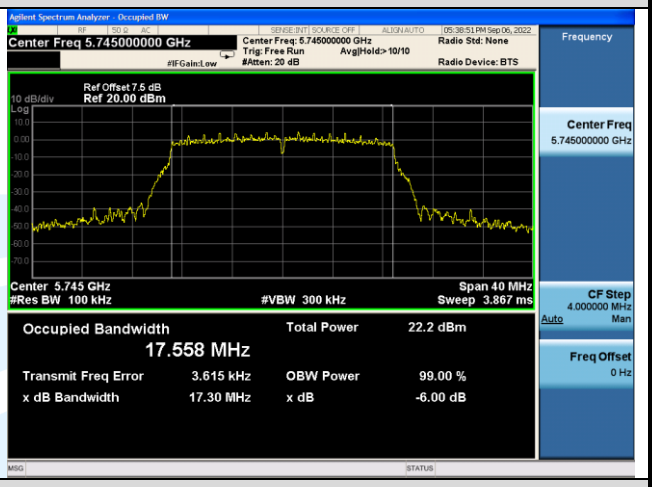
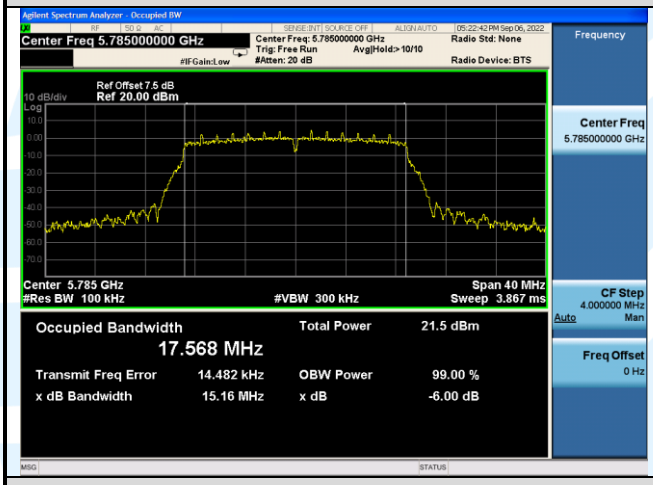
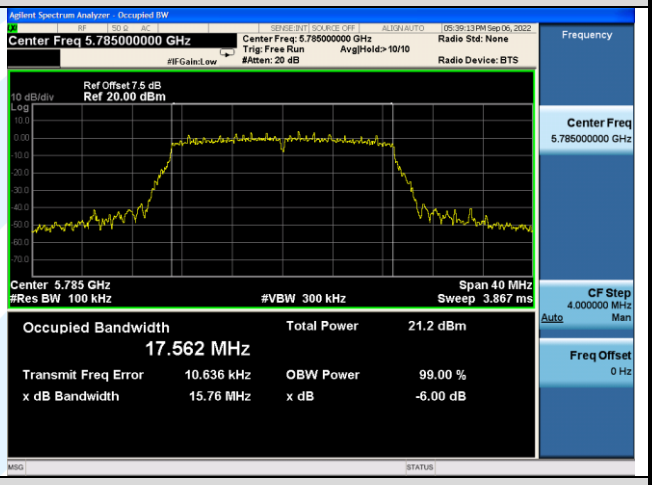
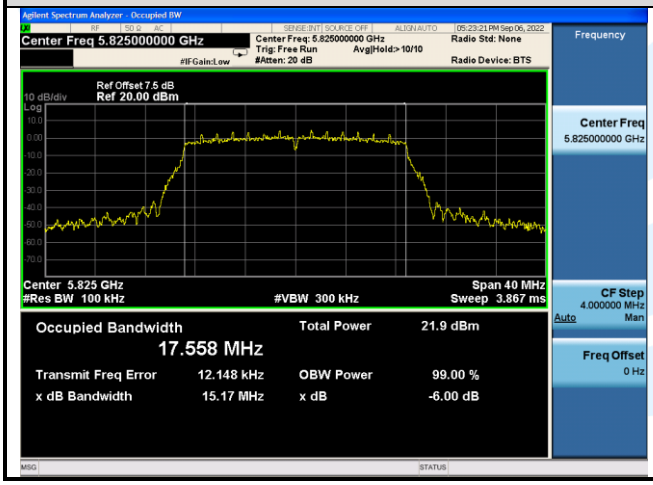
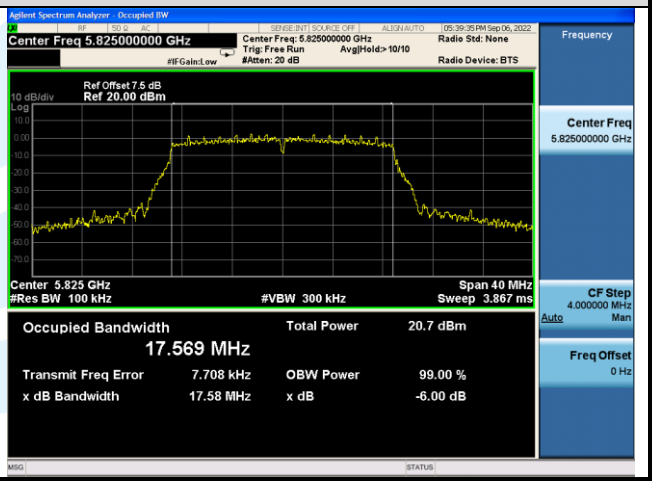
Test Data:

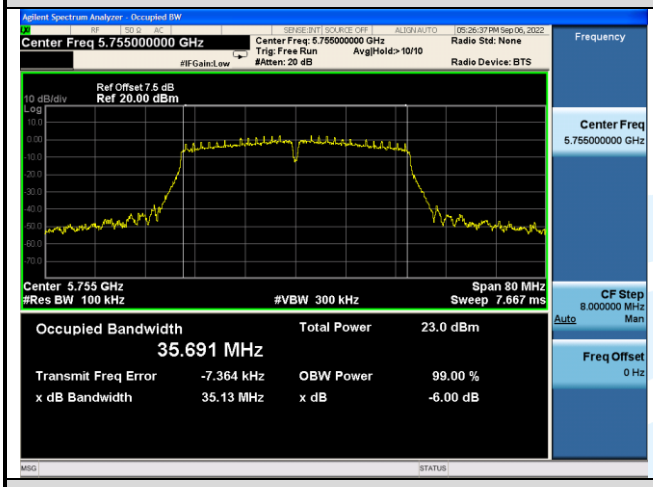
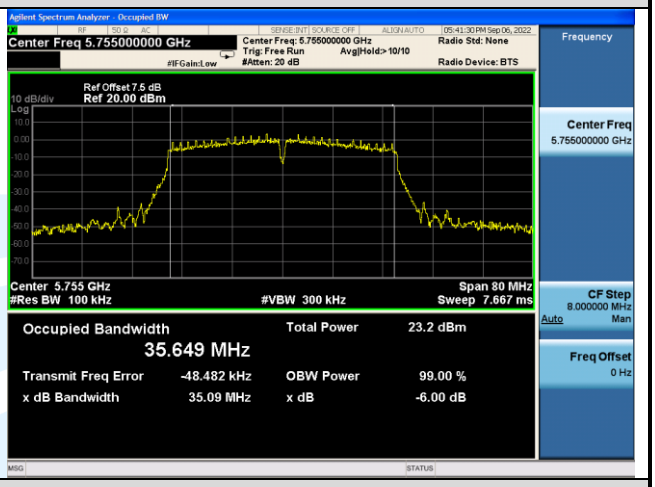
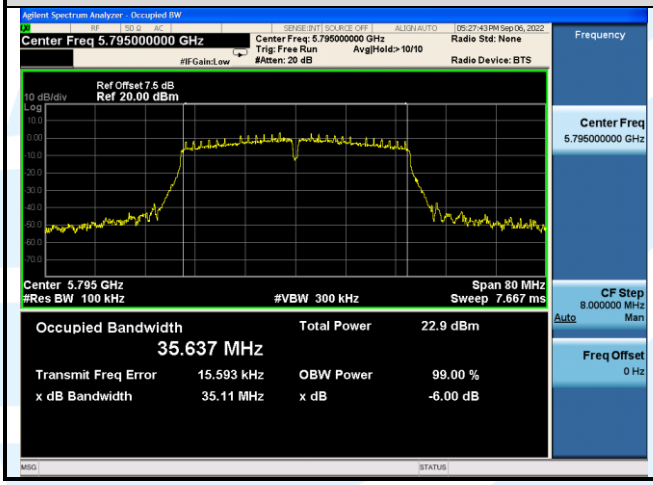
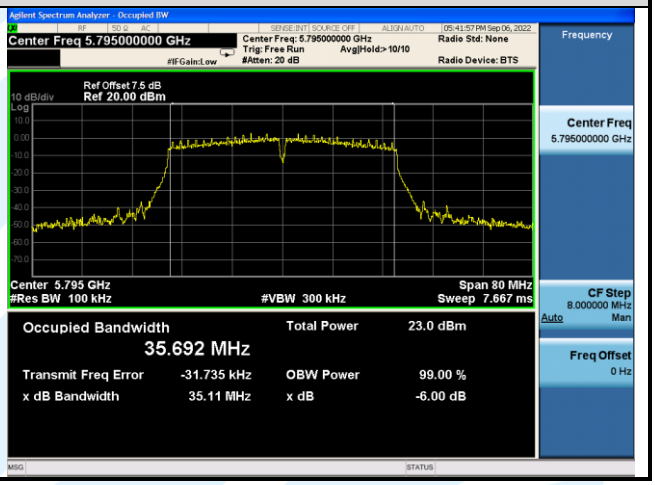
Mode	Channel	Freq. (MHz)	RU	6 dB Bandwidth (MHz)	
				Ant. 0	Ant. 1
IEEE 802.11a	149	5745	N/A	14.68	15.69
	157	5785		15.17	16.32
	165	5825		15.46	15.37
IEEE 802.11n-HT20	149	5745	N/A	15.16	17.30
	157	5785		15.16	15.76
	165	5825		15.17	17.58
IEEE 802.11n-HT40	151	5755	N/A	35.13	35.09
	159	5795		35.11	35.11
IEEE 802.11ac-VHT20	149	5745	N/A	15.37	17.18
	157	5785		17.31	17.49
	165	5825		16.17	15.74
IEEE 802.11ac-VHT40	151	5755	N/A	35.11	35.12
	159	5755		35.11	35.09
IEEE 802.11ac-VHT80	155	5775	N/A	75.27	75.26
IEEE 802.11ax-HE20	149	5745	26RU0	20.70	20.80
			52RU37	22.91	20.78
			106RU53	22.05	22.03
			SU	18.67	18.50
	157	5785	26RU4	18.46	18.16
			52RU39	18.79	18.52
			106RU53	21.79	21.64
			SU	18.53	18.47
	165	5825	26RU8	20.73	21.19
			52RU40	21.17	22.16
			106RU54	23.17	22.03
			SU	18.81	18.92

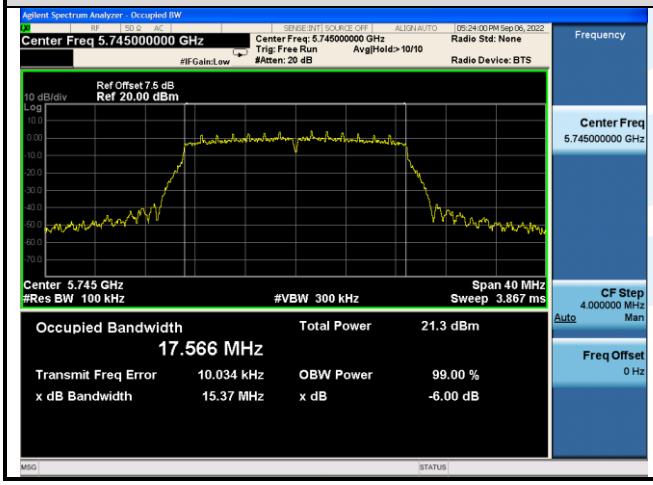
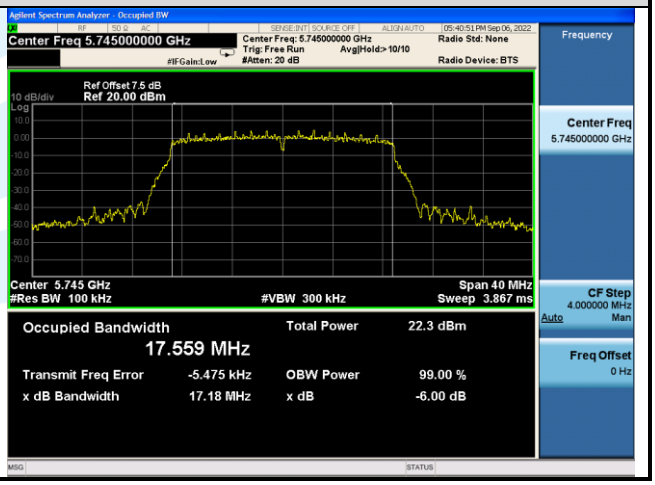
IEEE 802.11ax-HE40	151	5755	SU	35.22	35.15
	159	5795	SU	36.10	35.16
IEEE 802.11ax-HE80	155	5775	SU	75.28	73.99

The test plots as follows:

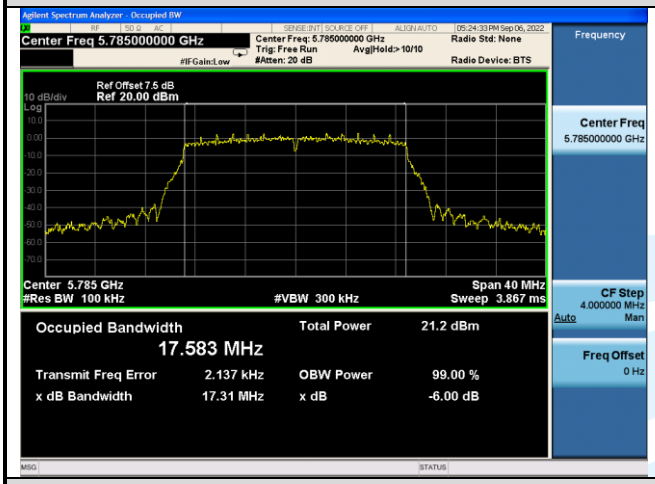
IEEE 802.11a_ant0	IEEE 802.11a_ant1
Channel 149	
	
Channel 157	
	
Channel 165	
	

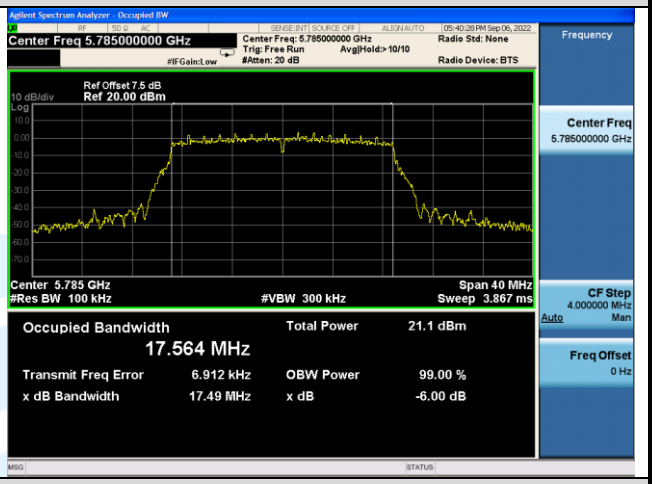
IEEE 802.11n-HT20_ant0	IEEE 802.11n-HT20_ant1
Channel 149	
	
Channel 157	
	
Channel 165	
	

IEEE 802.11n-HT40_ant0	IEEE 802.11n-HT40_ant1
Channel 151	
	
Channel 159	
	

IEEE 802.11ac-VHT20_ant0	IEEE 802.11ac-VHT20_ant1
Channel 149	
	

Channel 157





Channel 165