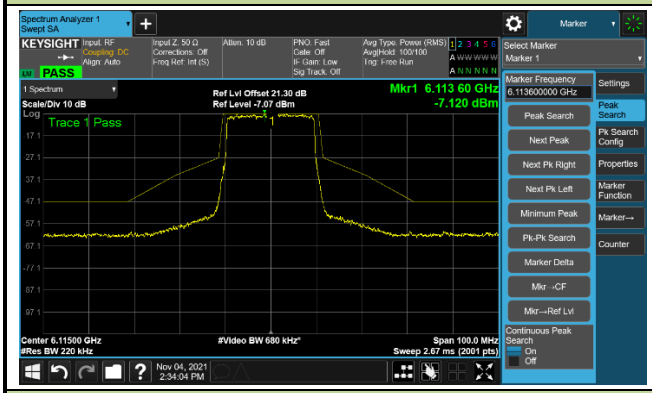
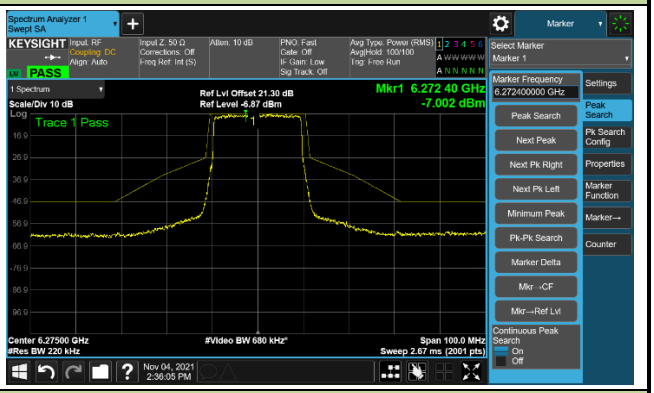
802.11ax-HE20 - Ant 1 (Nss = 2)

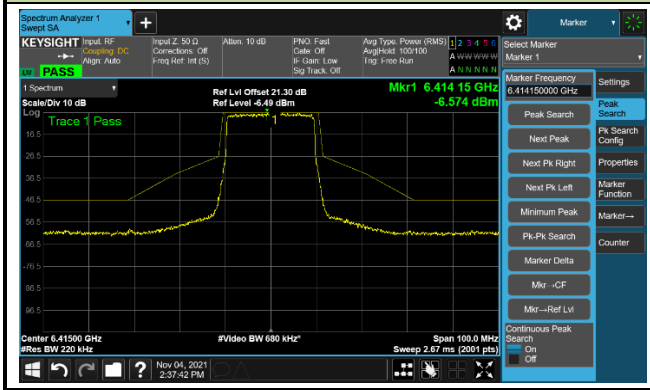
Channel 33 (6115MHz)



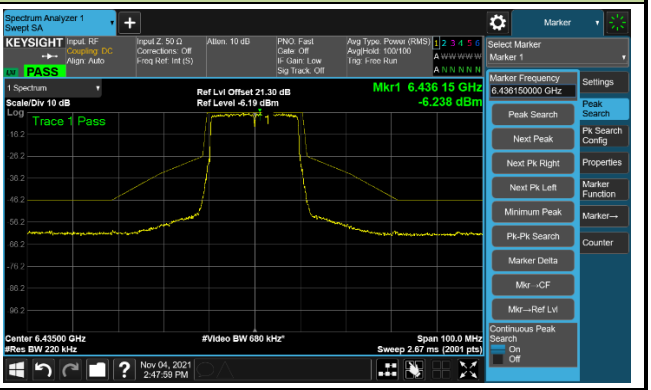
Channel 65 (6275MHz)



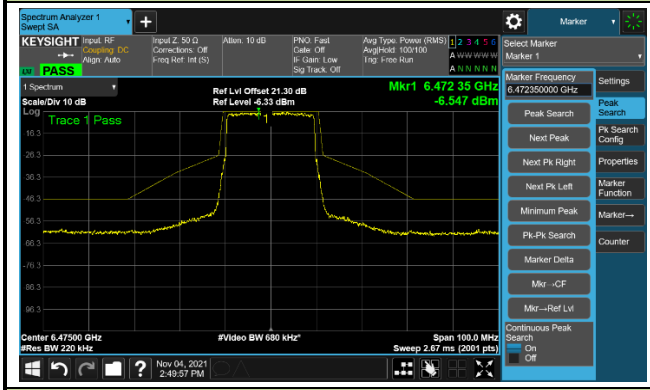
Channel 93 (6415MHz)



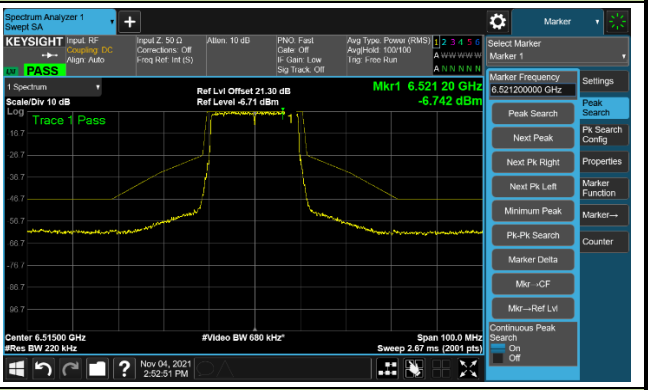
Channel 97 (6435MHz)



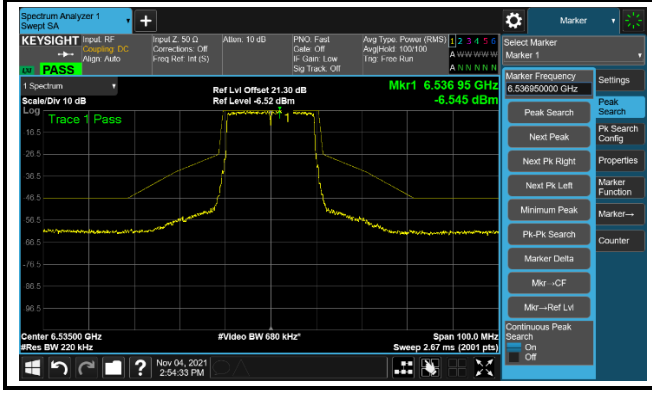
Channel 105 (6475MHz)



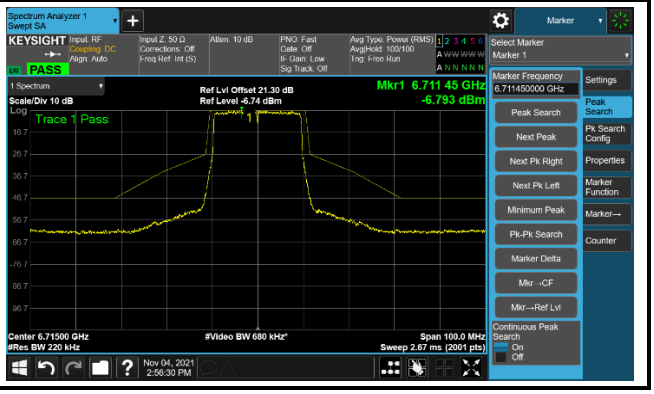
Channel 113 (6515MHz)

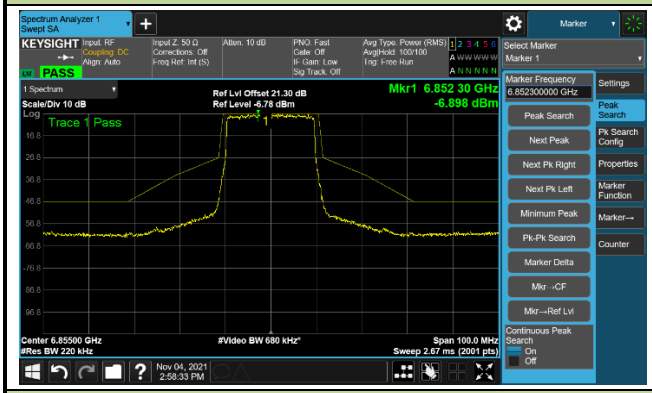
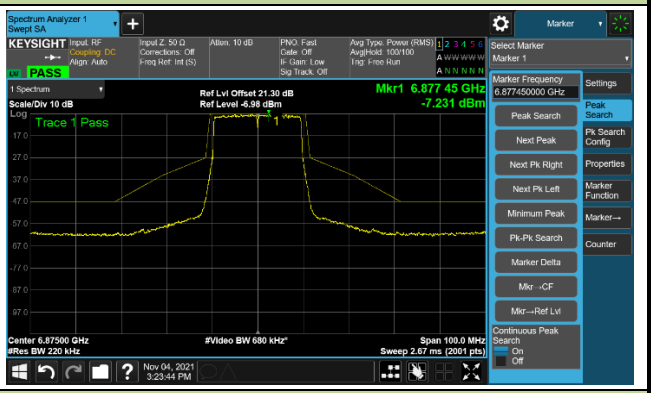
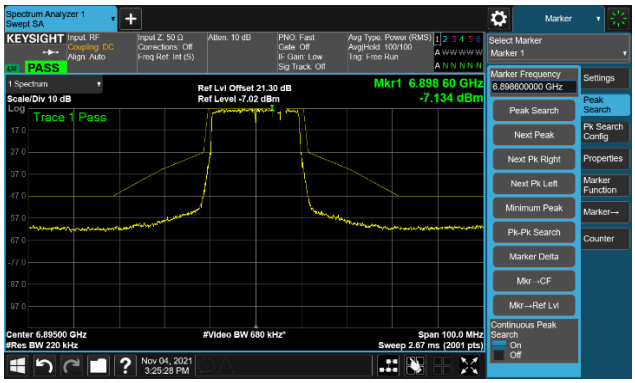
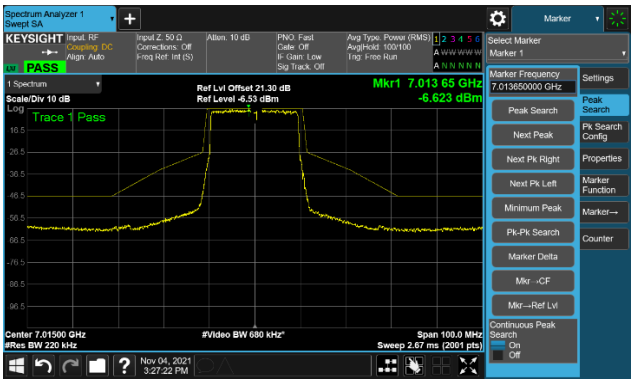
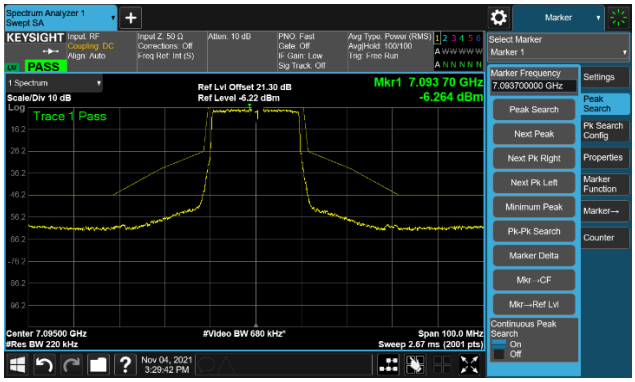


Channel 117 (6535MHz)



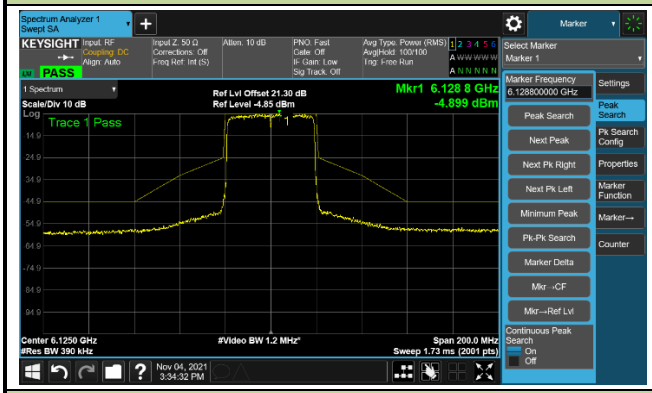
Channel 153 (6715MHz)



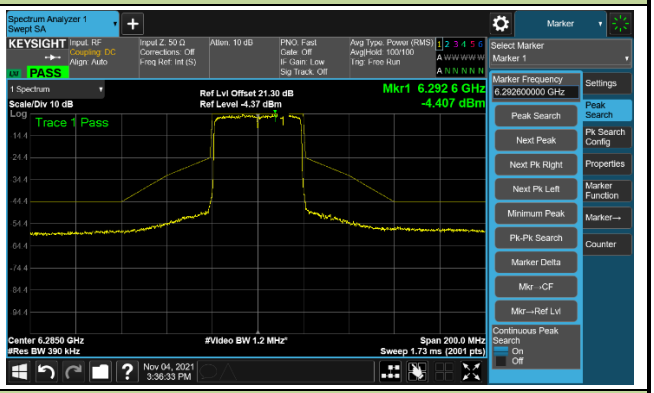
802.11ax-HE20 - Ant 1 (Nss = 2)	
Channel 181 (6855MHz)	Channel 185 (6875MHz)
	
Channel 189 (6895MHz)	Channel 213 (7015MHz)
	
Channel 229 (7095MHz)	
	

802.11ax-HE40 - Ant 1 (Nss = 2)

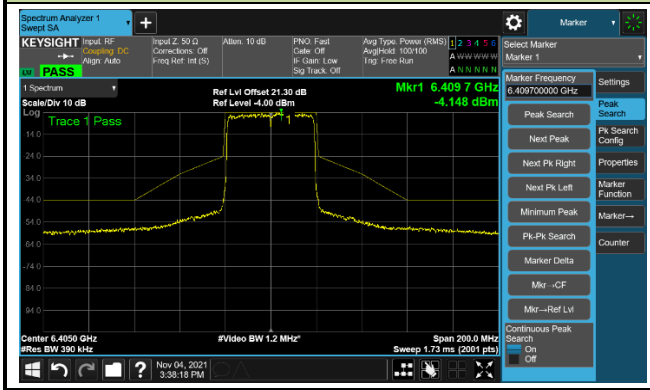
Channel 35 (6125MHz)



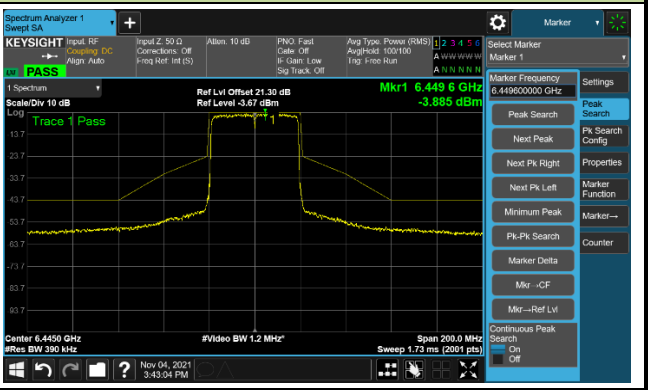
Channel 67 (6285MHz)



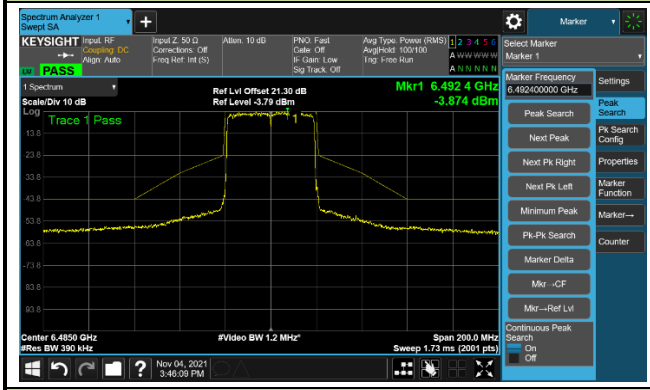
Channel 91 (6405MHz)



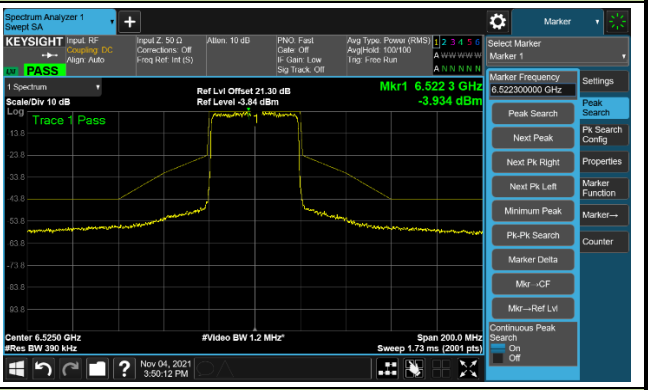
Channel 99 (6445MHz)



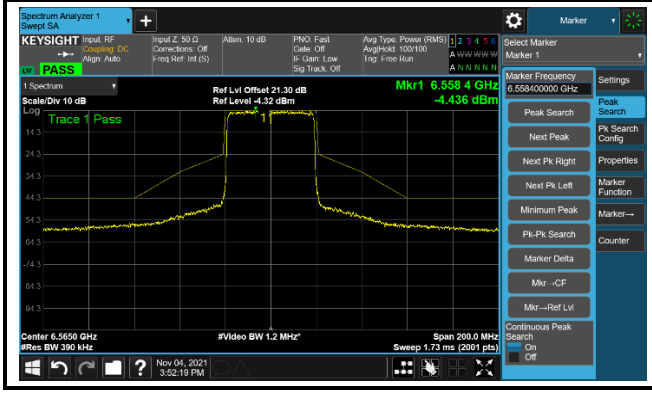
Channel 107 (6485MHz)



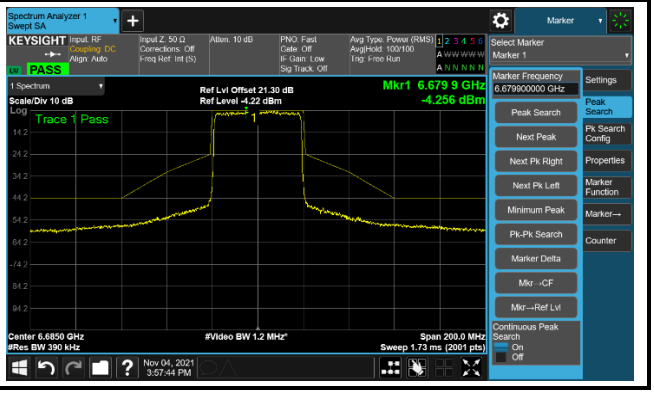
Channel 115 (6525MHz)

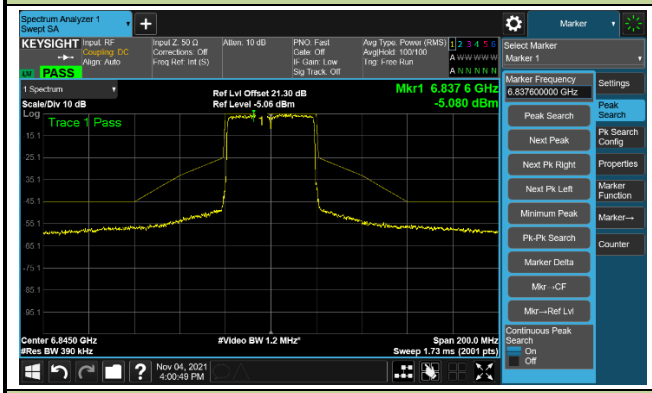
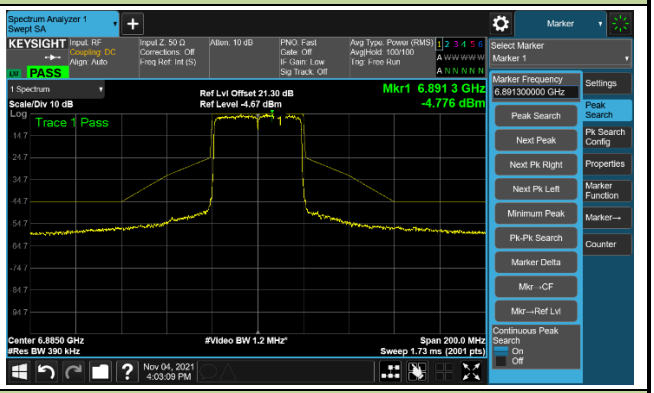
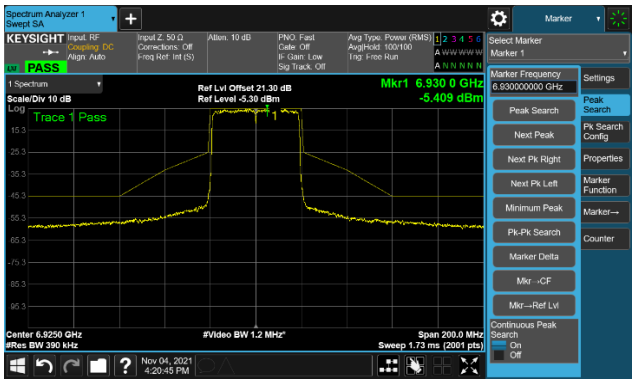
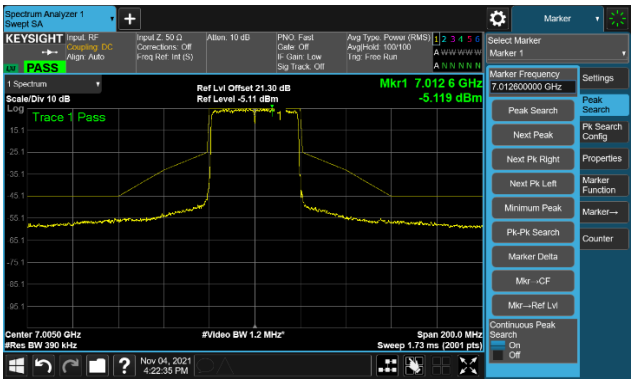
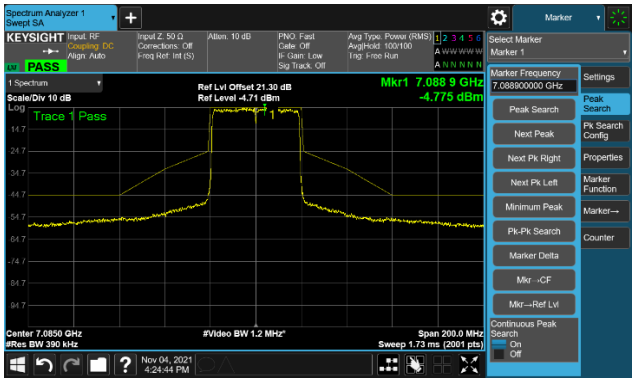


Channel 123 (6565MHz)



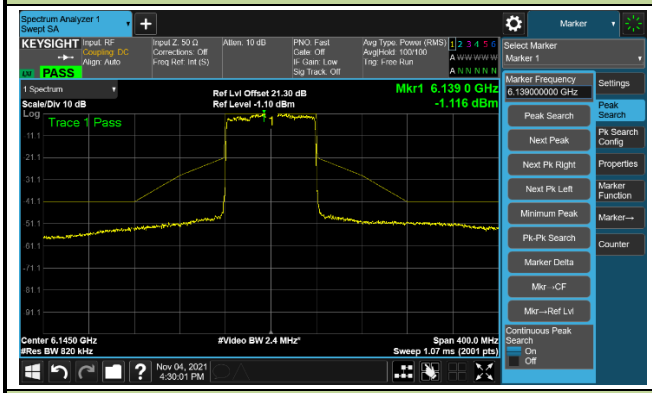
Channel 147 (6685MHz)



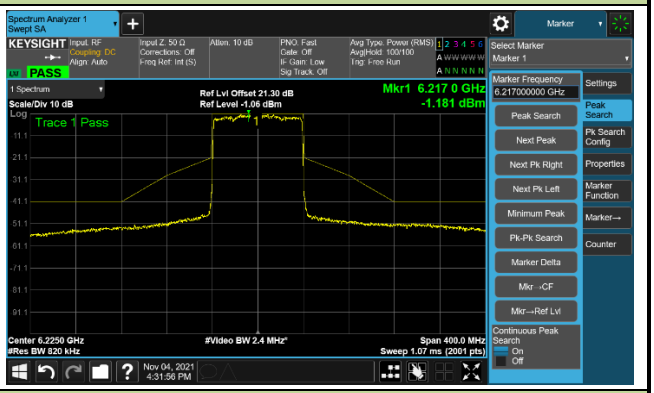
802.11ax-HE40 - Ant 1 (Nss = 2)	
Channel 179 (6845MHz)	Channel 187 (6885MHz)
	
Channel 195 (6925MHz)	Channel 211 (7005MHz)
	
Channel 211 (7085MHz)	
	

802.11ax-HE80 - Ant 1 (Nss = 2)

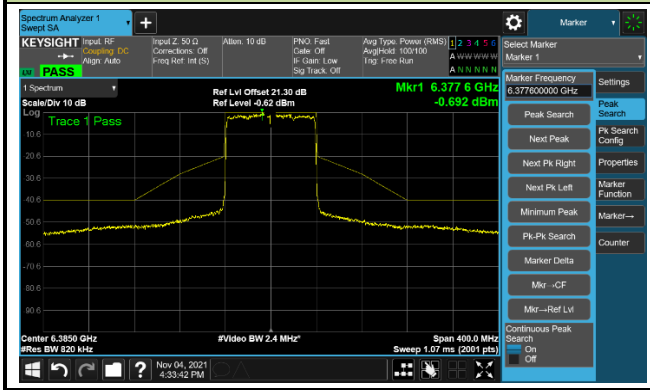
Channel 39 (6145MHz)



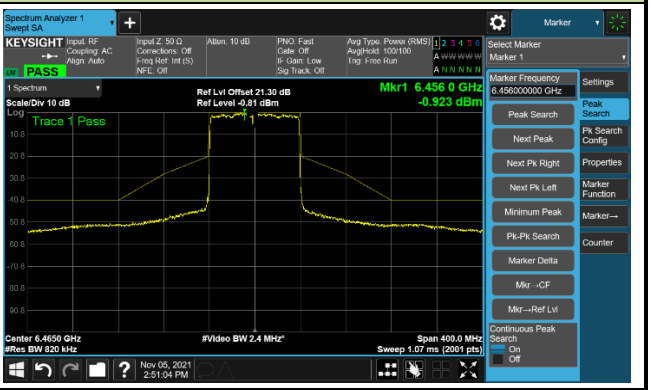
Channel 55 (6225MHz)



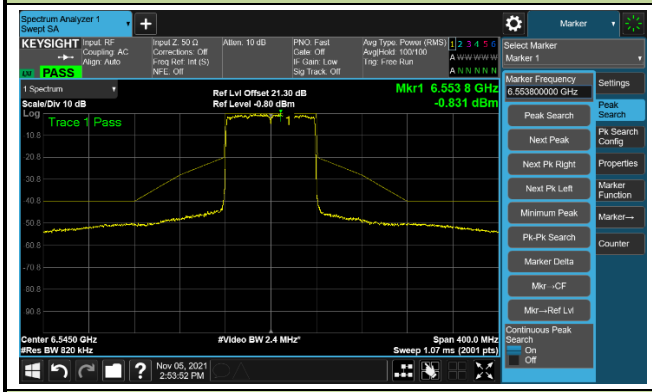
Channel 87 (6385MHz)



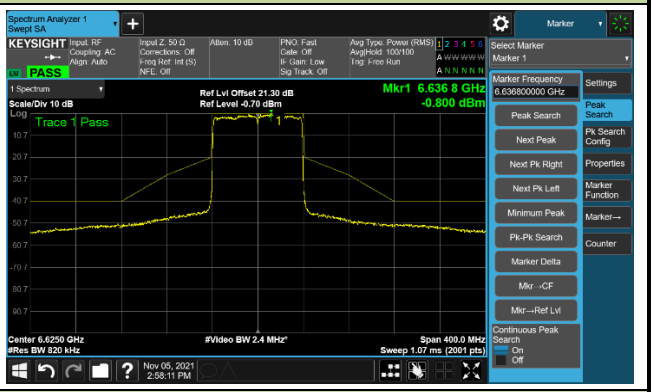
Channel 103 (6465MHz)



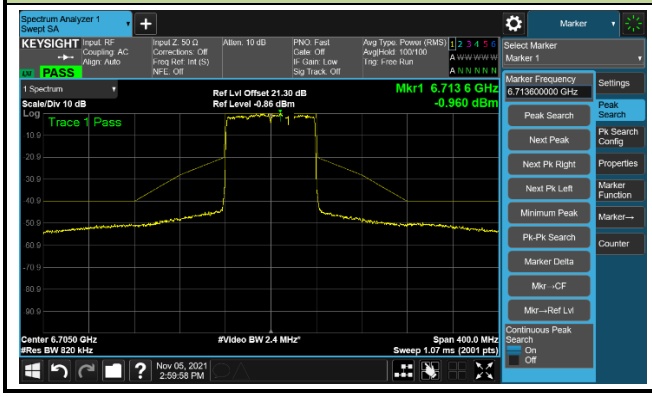
Channel 119 (6545MHz)



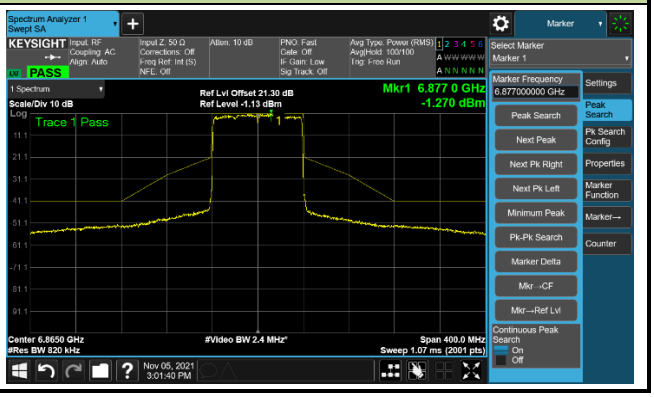
Channel 135 (6625MHz)

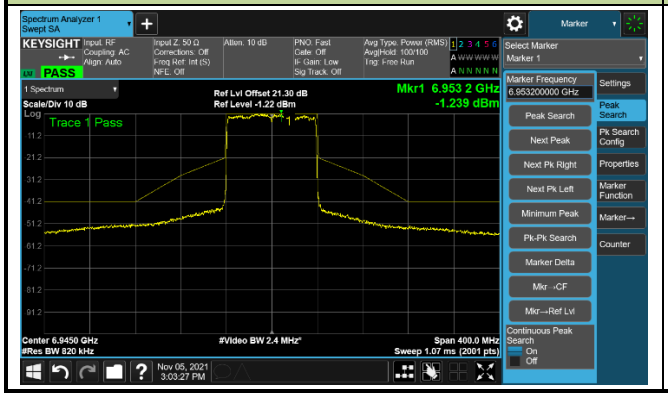
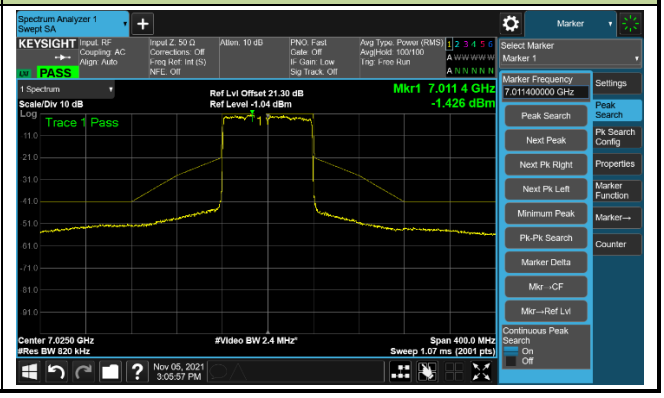


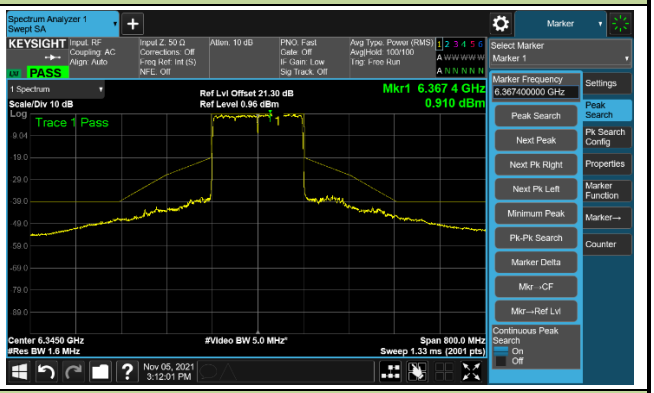
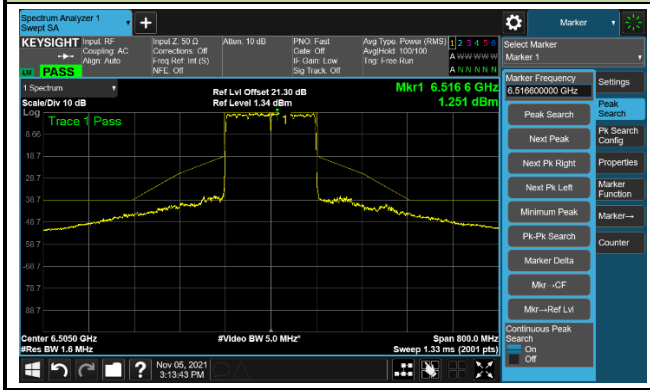
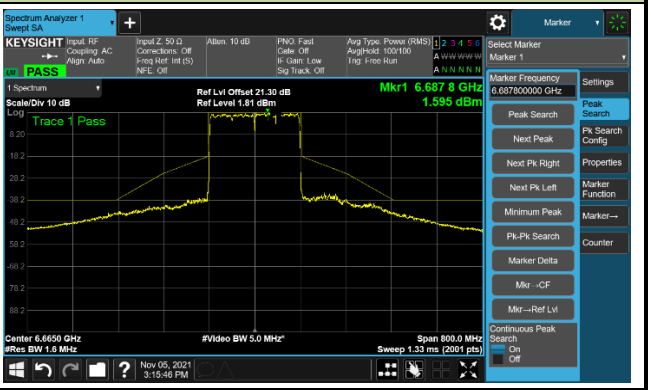
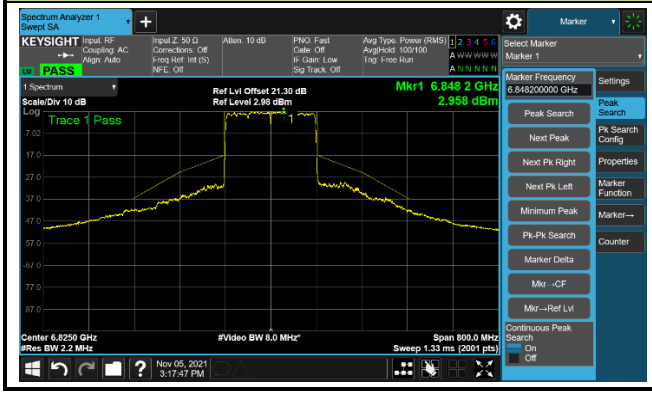
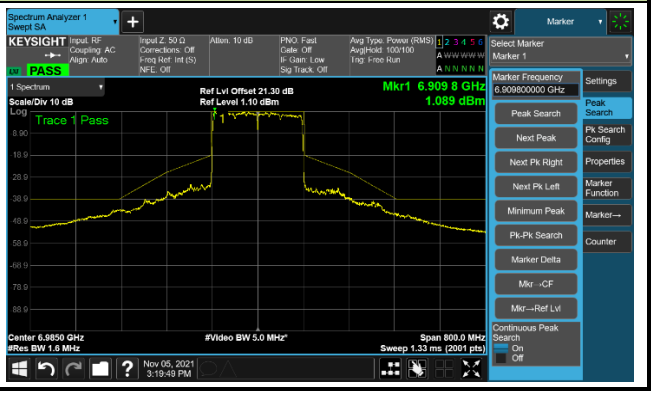
Channel 151 (6705MHz)



Channel 183 (6865MHz)



802.11ax-HE80 - Ant 1 (Nss = 2)	
Channel 199 (6945MHz)	Channel 215 (7025MHz)
	

802.11ax-HE160 - Ant 1 (Nss = 2)	
Channel 47 (6185MHz)	Channel 79 (6345MHz)
	
Channel 111 (6505MHz)	Channel 143 (6665MHz)
	
Channel 175 (6825MHz)	Channel 207 (6985MHz)
	

A.5 Frequency Stability Test Result

Test Site	WZ-TR3	Test Engineer	Liz Yuan
Test Date	2021/01/10		
Test Mode	6115MHz (Carrier Mode)		

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 30	-9.16	-9.60	-9.87	-9.94
		- 20	-9.33	-9.61	-9.89	-9.96
		- 10	-9.36	-9.68	-9.90	-9.99
		0	-9.39	-9.73	-9.90	-10.00
		+ 10	-9.43	-9.75	-9.89	-10.00
		+ 20	-9.47	-9.77	-9.90	-10.04
		+ 30	-9.51	-9.78	-9.90	-10.04
		+ 40	-9.53	-9.80	-9.91	-10.08
		+ 50	-9.54	-9.82	-9.91	-10.09
115%	138	+ 20	-9.56	-9.83	-9.91	-10.10
85%	102	+ 20	-9.59	-9.85	-9.92	-10.13

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} $*10^6$.

A.6 Contention Based Protocol Test Result

Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2022/01/20		

Test Channel	Bandwidth (MHz)	Freq. (MHz)	Interference Freq. (MHz)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Ant. Gain	AWGN Signal Level (at Antenna Port) dBm	Detected Number	Detection Probability (%)	Limit (%)	Test Result
Operation Band: U-NII 5										
33	20	6115	6115	-66	1.0	-65	10	100	90	Pass
47	160	6185	6110	-66	1.0	-65	10	100	90	Pass
47	160	6185	6185	-63	1.0	-62	10	100	90	Pass
47	160	6185	6260	-63	1.0	-62	10	100	90	Pass
Operation Band: U-NII 6										
97	20	6435	6435	-69	1.0	-68	10	100	90	Pass
103	80	6465	6430	-68	1.0	-67	10	100	90	Pass
103	80	6465	6465	-66	1.0	-65	10	100	90	Pass
103	80	6465	6500	-67	1.0	-66	10	100	90	Pass
Operation Band: U-NII 7										
153	20	6715	6715	-66	1.0	-65	10	100	90	Pass
143	160	6665	6590	-65	1.0	-64	10	100	90	Pass
143	160	6665	6665	-63	1.0	-62	10	100	90	Pass
143	160	6665	6740	-63	1.0	-62	10	100	90	Pass
Operation Band: U-NII 8										
213	20	7015	7015	-63	1.0	-62	10	100	90	Pass
207	160	6985	6910	-65	1.0	-64	10	100	90	Pass
207	160	6985	6985	-62	1.0	-61	10	100	90	Pass
207	160	6985	7060	-63	1.0	-62	10	100	90	Pass

Note 1: Incumbent Signal Level = AWGN Signal Level (at Antenna port) – Antenna Gain, it's equivalent to incumbent signal level with reference to a 0dBi antenna gain, and this power level is less than or equal to the detection threshold (-62 dBm).

Note 2: AWGN Signal Level at antenna port is the actual injected level at antenna port.

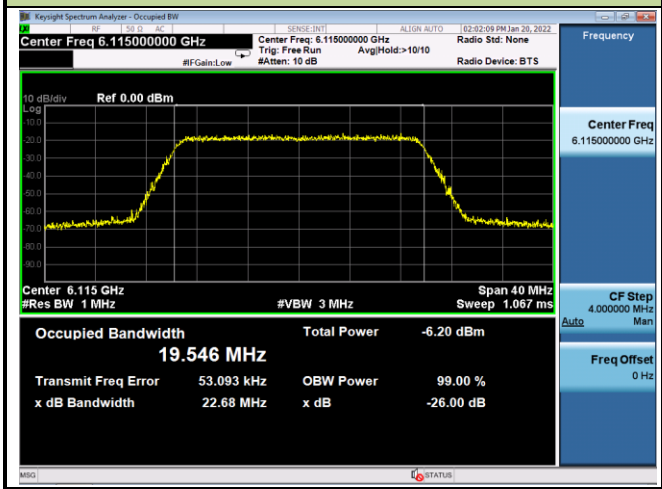
Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2022/01/20		
Remark	Lowest Interference (AWGN) Level Check		

Test Channel	Bandwidth (MHz)	Freq. (MHz)	Interference Freq. (MHz)	AWGN Signal Level (at Antenna Port) dBm	EUT Status
Operation Band: U-NII 5					
33	20	6115	6115	-65	Stop transmission
				-69	Stop but with Beacon signal
47	160	6185	6110	-65	Stop transmission
				-69	Stop but with Beacon signal
47	160	6185	6185	-62	Stop transmission
				-66	Stop but with Beacon signal
47	160	6185	6260	-62	Stop transmission
				-67	Stop but with Beacon signal
Operation Band: U-NII 6					
97	20	6435	6435	-68	Stop transmission
				-71	Stop but with Beacon signal
103	80	6465	6430	-67	Stop transmission
				-70	Stop but with Beacon signal
103	80	6465	6465	-65	Stop transmission
				-67	Stop but with Beacon signal
103	80	6465	6500	-66	Stop transmission
				-69	Stop but with Beacon signal
Operation Band: U-NII 7					
153	20	6715	6715	-65	Stop transmission
				-70	Stop but with Beacon signal
143	160	6665	6590	-64	Stop transmission
				-66	Stop but with Beacon signal
143	160	6665	6665	-62	Stop transmission
				-66	Stop but with Beacon signal
143	160	6665	6740	-62	Stop transmission
				-67	Stop but with Beacon signal

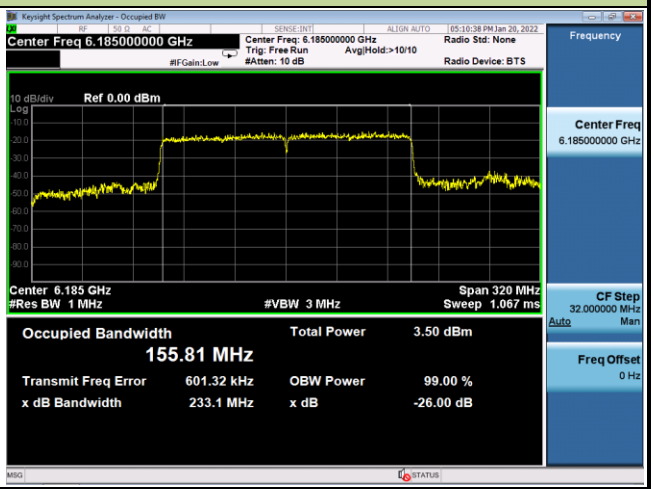
Test Channel	Bandwidth (MHz)	Freq. (MHz)	Interference Freq. (MHz)	AWGN Signal Level (at Antenna Port) dBm	EUT Status
Operation Band: U-NII 8					
213	20	7015	7015	-62	Stop transmission
				-66	Stop but with Beacon signal
207	160	6985	6910	-64	Stop transmission
				-67	Stop but with Beacon signal
207	160	6985	6985	-61	Stop transmission
				-64	Stop but with Beacon signal
207	160	6985	7060	-62	Stop transmission
				-65	Stop but with Beacon signal

EUT Tx Waveform

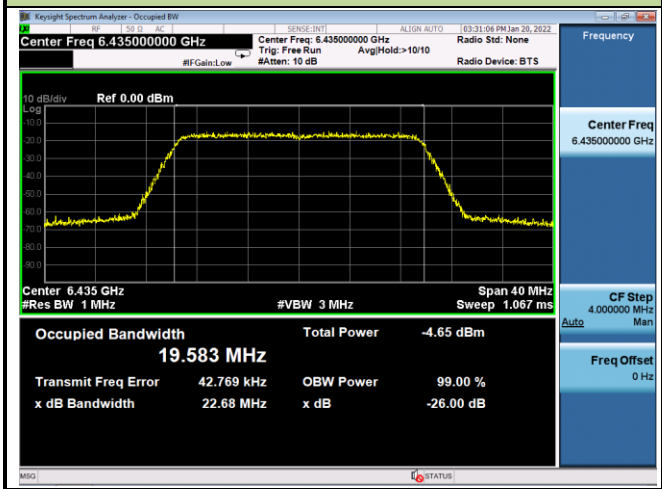
802.11ax-HE20 / CH33



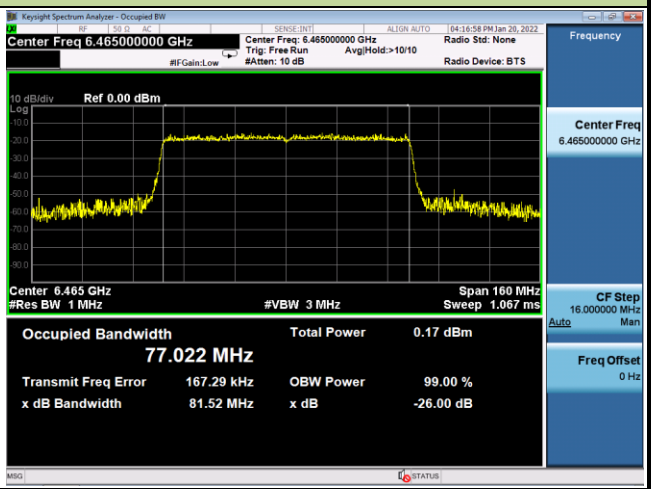
802.11ax-HE160 / CH47



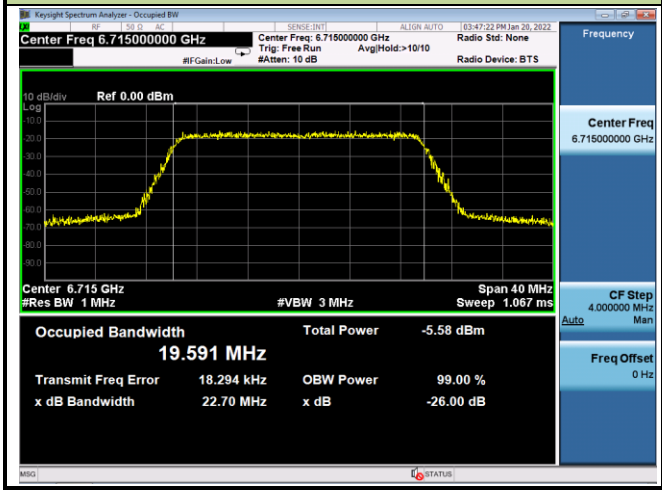
802.11ax-HE20 / CH97



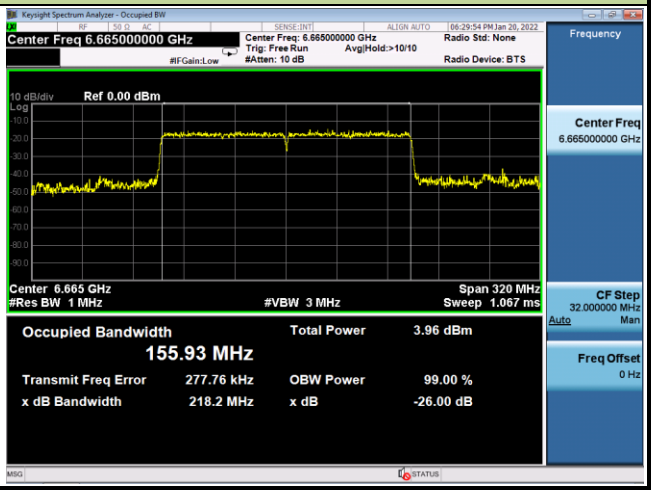
802.11ax-HE80 / CH103

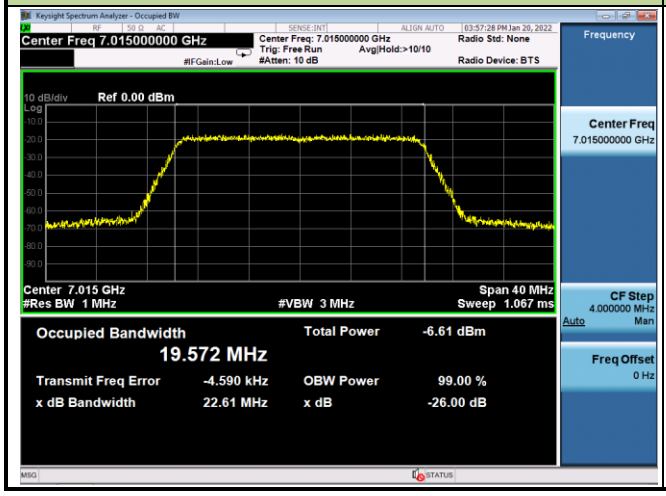
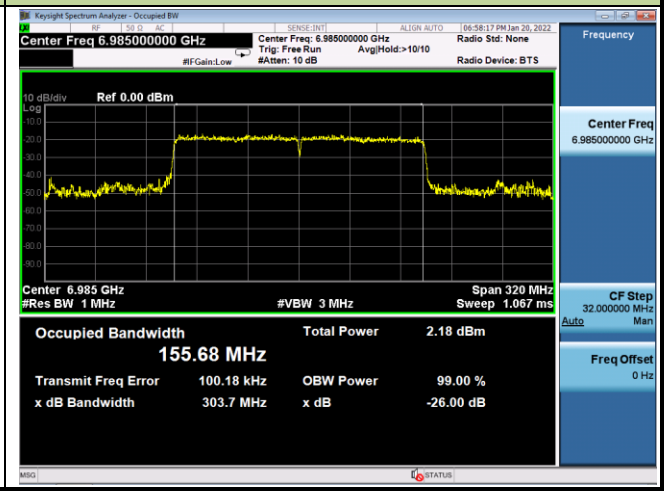


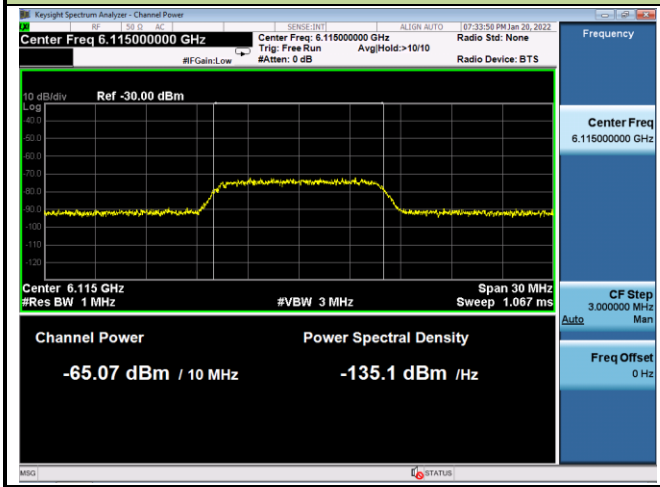
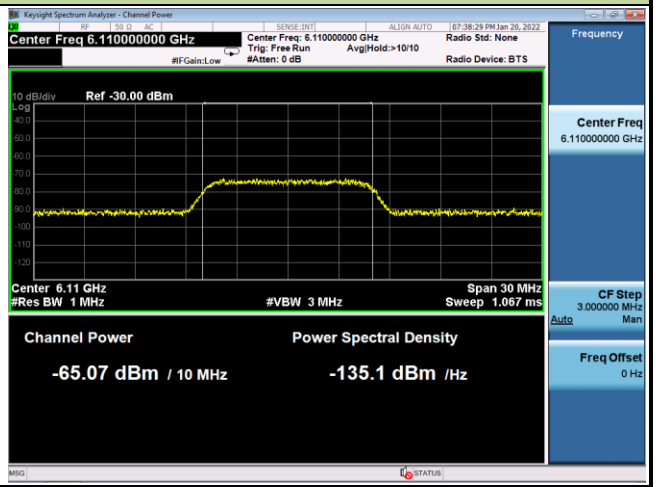
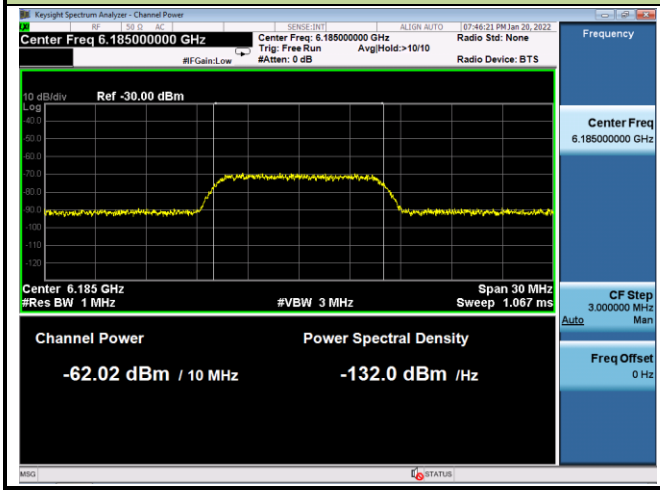
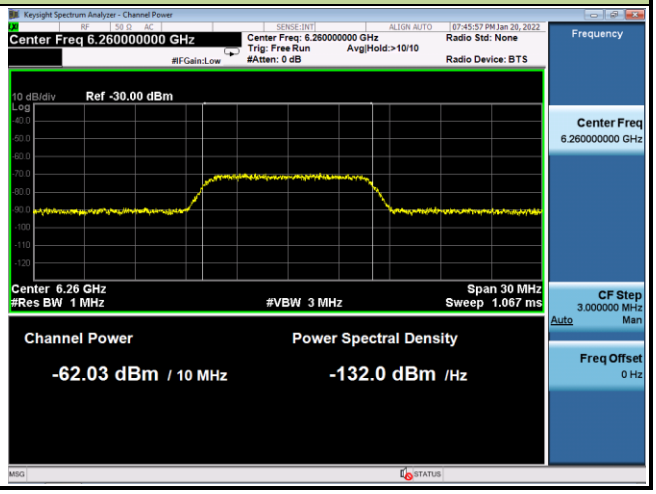
802.11ax-HE20 / CH153

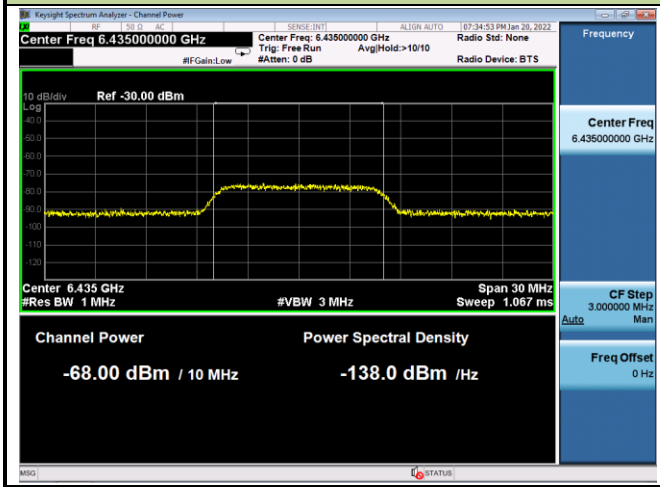
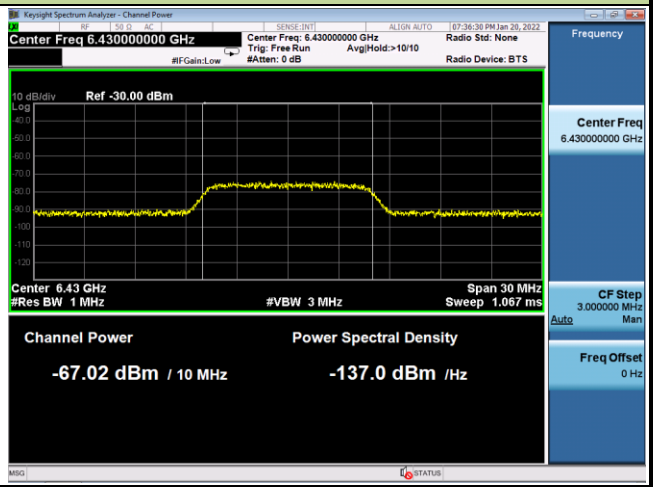
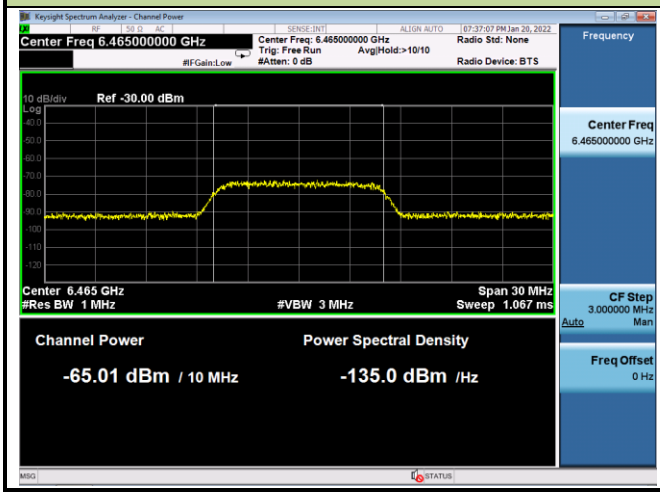
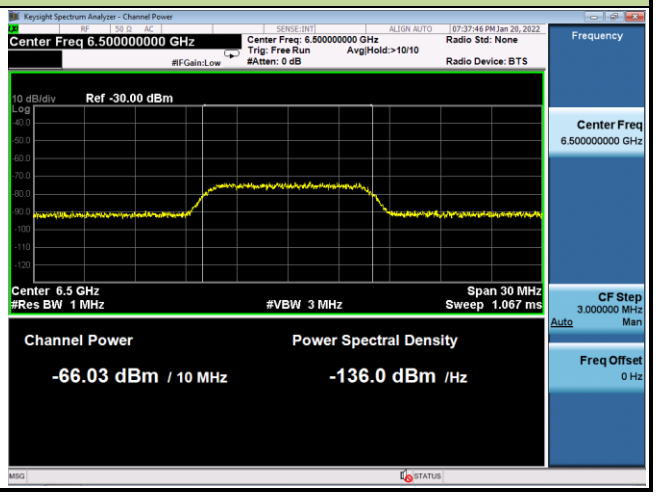


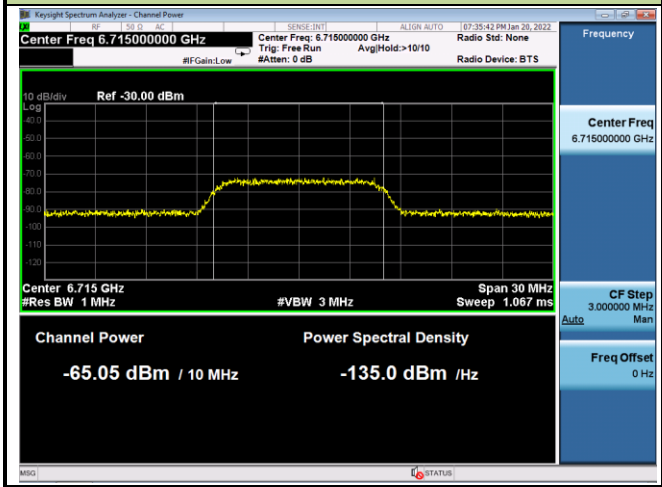
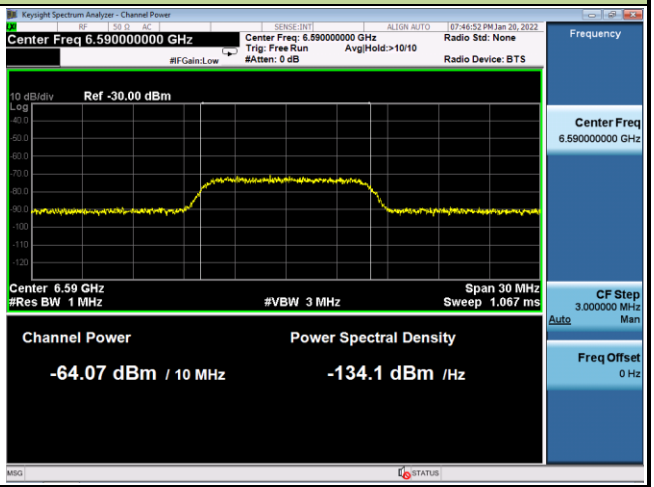
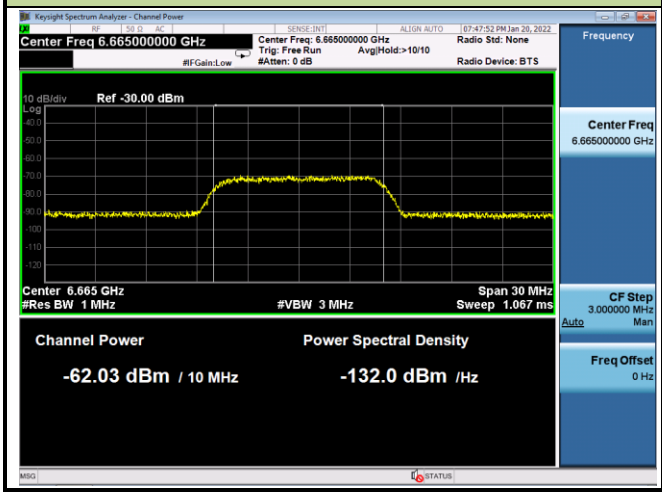
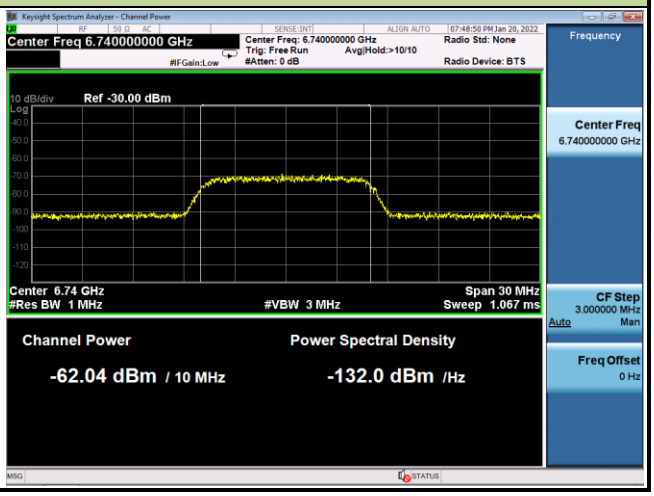
802.11ax-HE160 / CH143

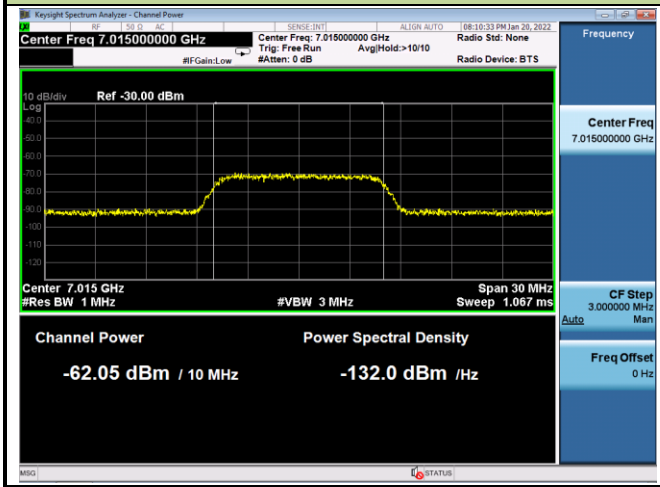
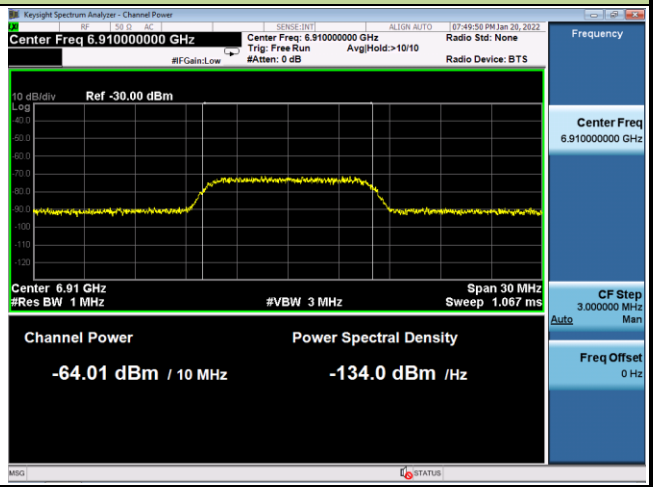
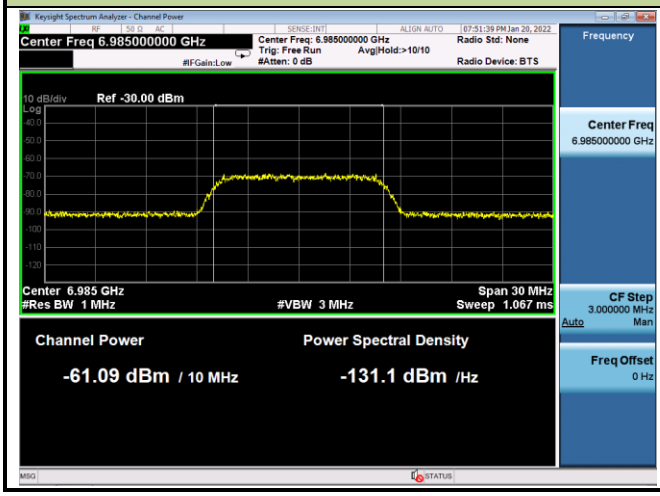
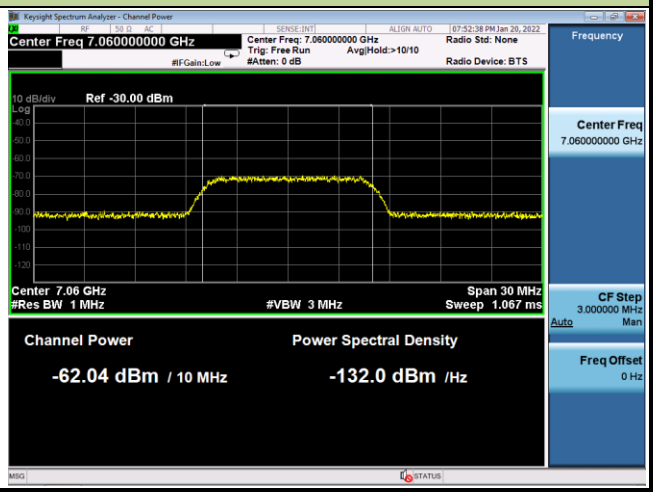


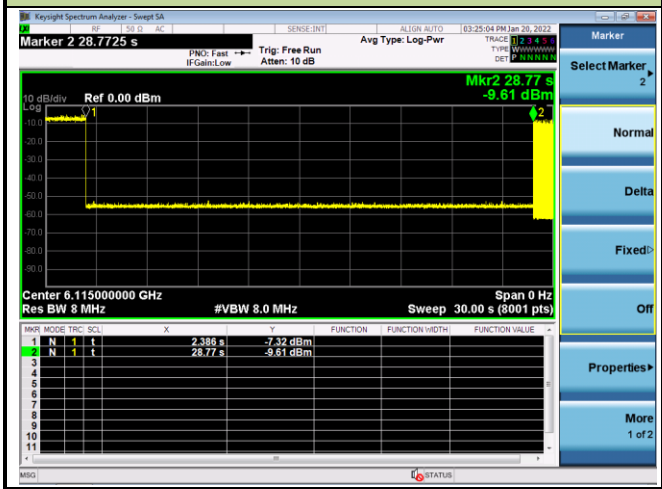
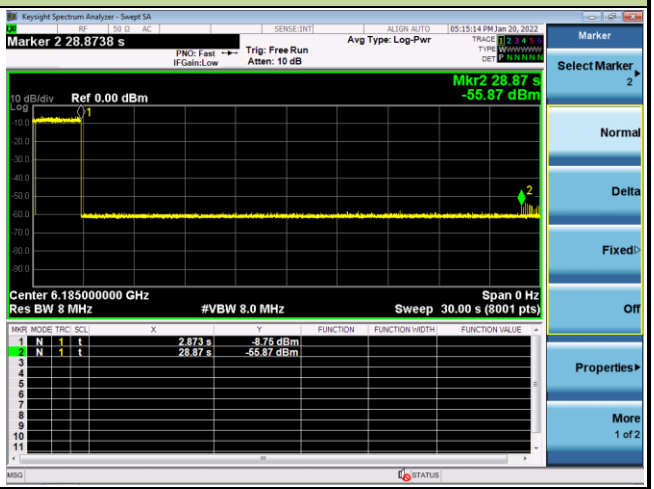
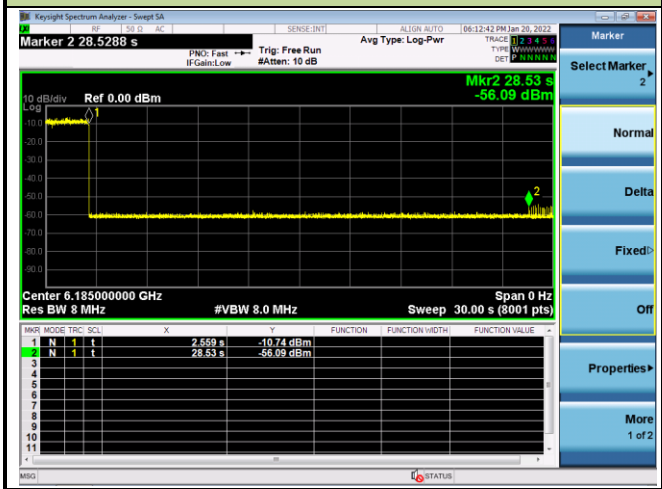
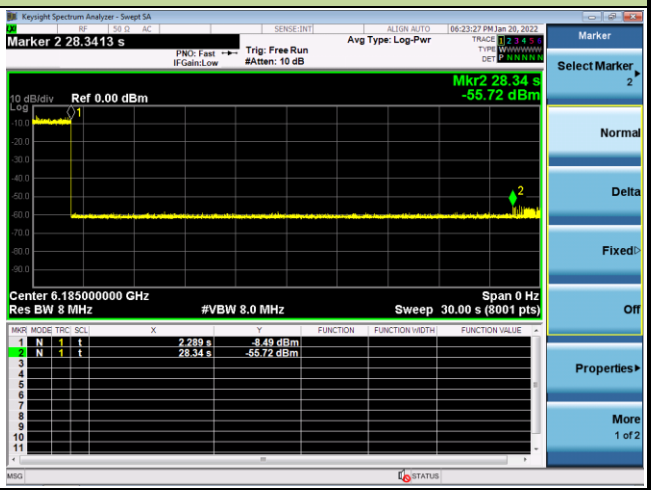
802.11ax-HE20 / CH213	802.11ax-HE160 / CH207
	

AWGN Signal Level (at Antenna Port) Calibration Plots (NII-5 Band)	
802.11ax-HE20 / CH33	802.11ax-HE160 / CH47 (Low Edge)
	
802.11ax-HE160 / CH47 (Middle)	802.11ax-HE160 / CH47 (High Edge)
	

AWGN Signal Level (at Antenna Port) Calibration Plots (NII-6 Band)	
802.11ax-HE20 / CH97	802.11ax-HE80 / CH103 (Low Edge)
	
802.11ax-HE80 / CH103 (Middle)	802.11ax-HE80 / CH103 (High Edge)
	

AWGN Signal Level (at Antenna Port) Calibration Plots (NII-7 Band)	
802.11ax-HE20 / CH153	802.11ax-HE160 / CH143 (Low Edge)
	
802.11ax-HE160 / CH143 (Middle)	802.11ax-HE160 / CH143 (High Edge)
	

AWGN Signal Level (at Antenna Port) Calibration Plots (NII-8 Band)	
802.11ax-HE20 / CH213	802.11ax-HE160 / CH207 (Low Edge)
	
802.11ax-HE160 / CH207 (Middle)	802.11ax-HE160 / CH207 (High Edge)
	

Test Result of EUT ceased transmission (NII-5 Band)	
802.11ax-HE20 / CH33	802.11ax-HE160 / CH47 (Low Edge)
	
802.11ax-HE160 / CH47 (Middle)	802.11ax-HE160 / CH47 (High Edge)
	
Note – M1: Injection of AWGN Signal, M2: Removal of AWGN Signal	