

5.2.6. Contention Based Protocol Measurement

Band	Bandwidth (MHz)	AWGN Freq. (MHz)	Number of Times	Number of Detection	AWGN Detection Probability (%)	Limit Probability (%)	Result
U-NII-5	20	6135	10	10	100	90	PASS
	160	6110	10	10	100	90	PASS
		6185	10	10	100	90	PASS
		6260	10	10	100	90	PASS
U-NII-6	20	6455	10	10	100	90	PASS
	160	6430	10	10	100	90	PASS
		6505	10	10	100	90	PASS
		6580	10	10	100	90	PASS
U-NII-7	20	6695	10	10	100	90	PASS
	160	6590	10	10	100	90	PASS
		6665	10	10	100	90	PASS
		6740	10	10	100	90	PASS
U-NII-8	20	7015	10	10	100	90	PASS
	160	6910	10	10	100	90	PASS
		6985	10	10	100	90	PASS
		7060	10	10	100	90	PASS

Note 1 : Adjusted power = Injected (AWGN) power (dBm) – Antenna Gain (dBi).

Note 2 : Injected (AWGN) power Include Path Loss.

Contention Based Protocol Threshold Level Verify												
UNII	Bandwidth (MHz)	Channel	Frequency (MHz)	Interference Freq (MHz)	Injected (AWGN) power (dBm)	Antenna Gain (dBi)	The Lowest Detection Level of AWGN Interference (dBm)	Detection Limit (dBm)	Situation of EUT			
5	20	37	6135	6135	-79.01	1.99	-81.00	-62.00	OFF			
					-80.01	1.99	-82.00	-62.00	Minimal			
					-81.01	1.99	-83.00	-62.00	ON			
	160	47	6185	6110	-75.01	1.99	-77.00	-62.00	OFF			
					-76.01	1.99	-78.00	-62.00	Minimal			
					-78.01	1.99	-80.00	-62.00	ON			
				6185	-69.01	1.99	-71.00	-62.00	OFF			
					-70.01	1.99	-72.00	-62.00	Minimal			
					-71.01	1.99	-73.00	-62.00	ON			
				6260	-73.01	1.99	-75.00	-62.00	OFF			
					-74.01	1.99	-76.00	-62.00	Minimal			
					-76.01	1.99	-78.00	-62.00	ON			
6	20	101	6455	6455	-76.44	2.56	-79.00	-62.00	OFF			
					-77.44	2.56	-80.00	-62.00	Minimal			
					-80.44	2.56	-83.00	-62.00	ON			
	160	111	6430	-72.44	2.56	-75.00	-62.00	OFF				
				-73.44	2.56	-76.00	-62.00	Minimal				
				-75.44	2.56	-78.00	-62.00	ON				
			6505	-66.44	2.56	-69.00	-62.00	OFF				
				-67.44	2.56	-70.00	-62.00	Minimal				
				-69.44	2.56	-72.00	-62.00	ON				
			6580	-71.44	2.56	-74.00	-62.00	OFF				
				-72.44	2.56	-75.00	-62.00	Minimal				
				-74.44	2.56	-77.00	-62.00	ON				
			7	20	149	6695	6695	-77.44	2.56	-80.00	-62.00	OFF
								-78.44	2.56	-81.00	-62.00	Minimal
								-80.44	2.56	-83.00	-62.00	ON
160	143	6590		-72.44	2.56	-75.00	-62.00	OFF				
				-73.44	2.56	-76.00	-62.00	Minimal				
				-74.44	2.56	-77.00	-62.00	ON				
		6665		-69.44	2.56	-72.00	-62.00	OFF				
				-70.44	2.56	-73.00	-62.00	Minimal				
				-71.44	2.56	-74.00	-62.00	ON				
		6740		-72.44	2.56	-75.00	-62.00	OFF				
				-73.44	2.56	-76.00	-62.00	Minimal				
				-75.44	2.56	-78.00	-62.00	ON				

Note 1 : Adjusted power = Injected (AWGN) power (dBm) – Antenna Gain (dBi).

Note 2 : Injected (AWGN) power Include Path Loss.

Contention Based Protocol Threshold Level Verify									
UNII	Bandwidth (MHz)	Channel	Frequency (MHz)	Interference Freq (MHz)	Injected (AWGN) power (dBm)	Antenna Gain (dBi)	The Lowest Detection Level of AWGN Interference (dBm)	Detection Limit (dBm)	Situation of EUT
8	20	213	7015	7015	-75	2.00	-77.00	-62.00	OFF
					-76	2.00	-78.00	-62.00	Minimal
					-79	2.00	-81.00	-62.00	ON
	160	207	6985	6910	-74	2.00	-76.00	-62.00	OFF
					-75	2.00	-77.00	-62.00	Minimal
					-77	2.00	-79.00	-62.00	ON
				6985	-63	2.00	-65.00	-62.00	OFF
					-64	2.00	-66.00	-62.00	Minimal
					-65	2.00	-67.00	-62.00	ON
				7060	-69	2.00	-71.00	-62.00	OFF
					-70	2.00	-72.00	-62.00	Minimal
					-72	2.00	-74.00	-62.00	ON

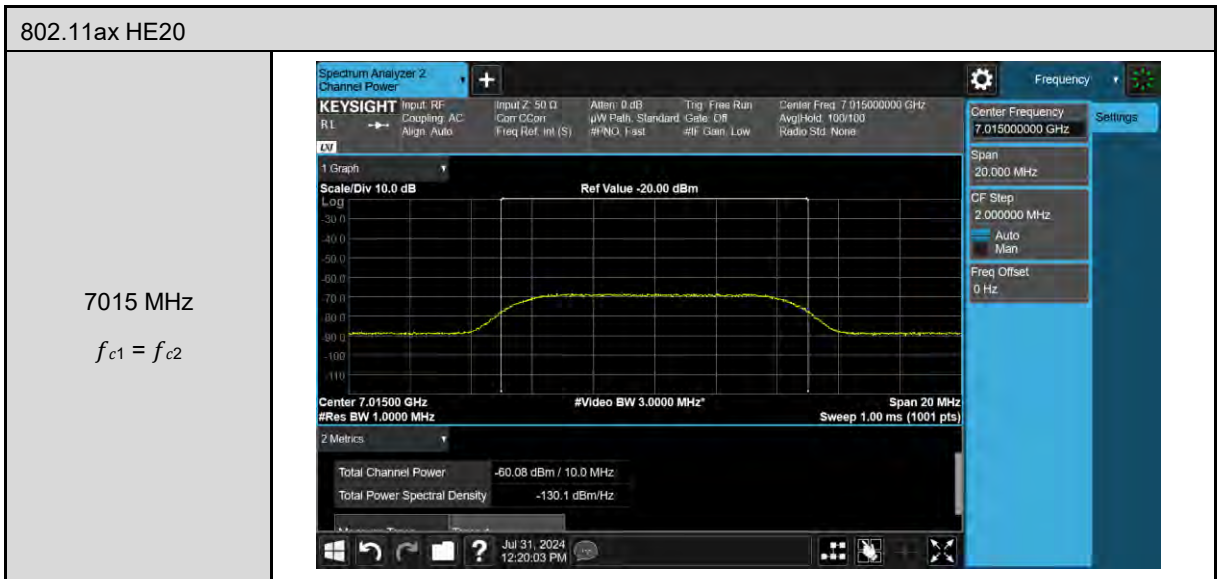
Note 1 : Adjusted power = Injected (AWGN) power (dBm) – Antenna Gain (dBi).

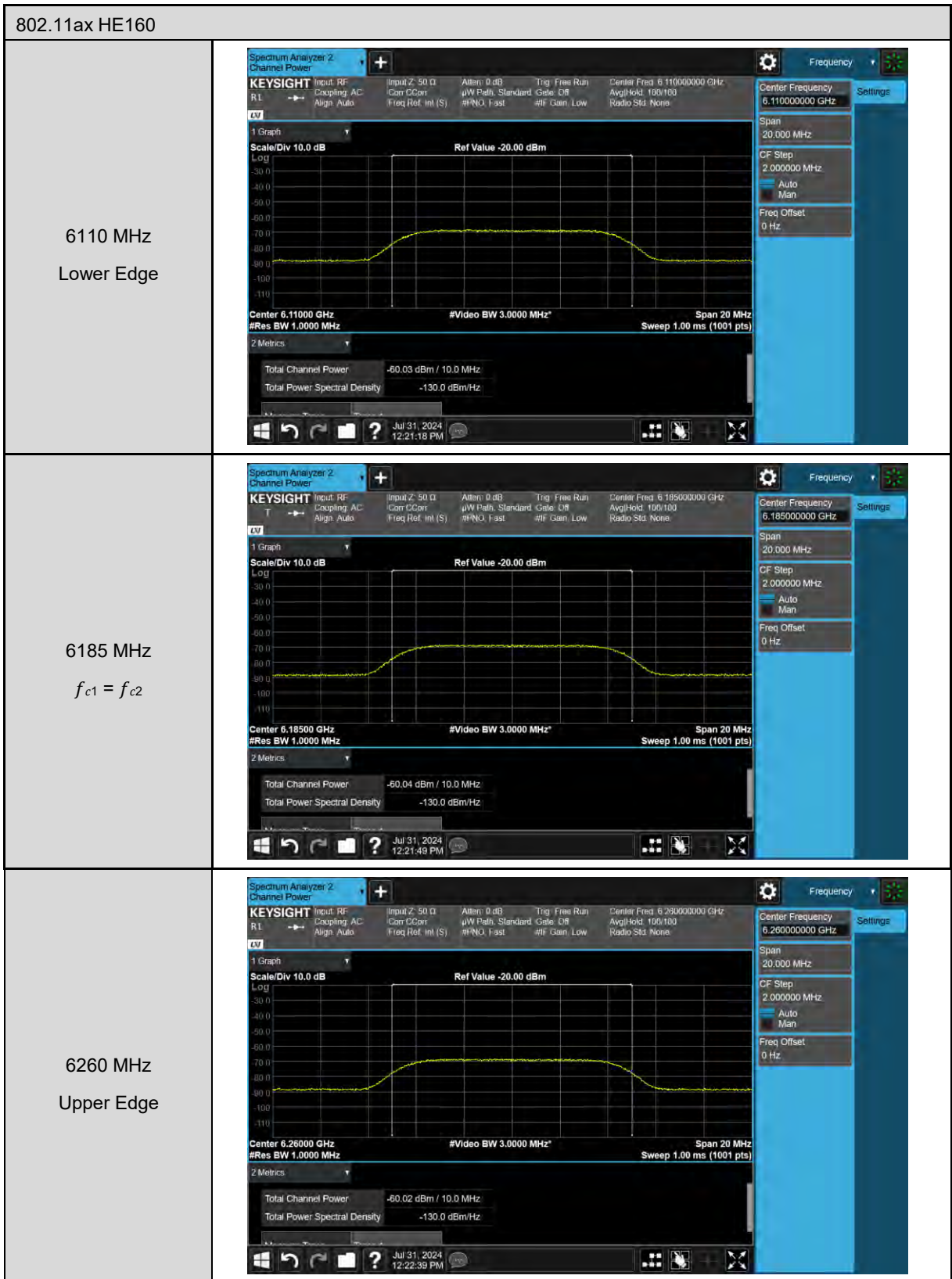
Note 2 : Injected (AWGN) power Include Path Loss.

■ Test Graphs

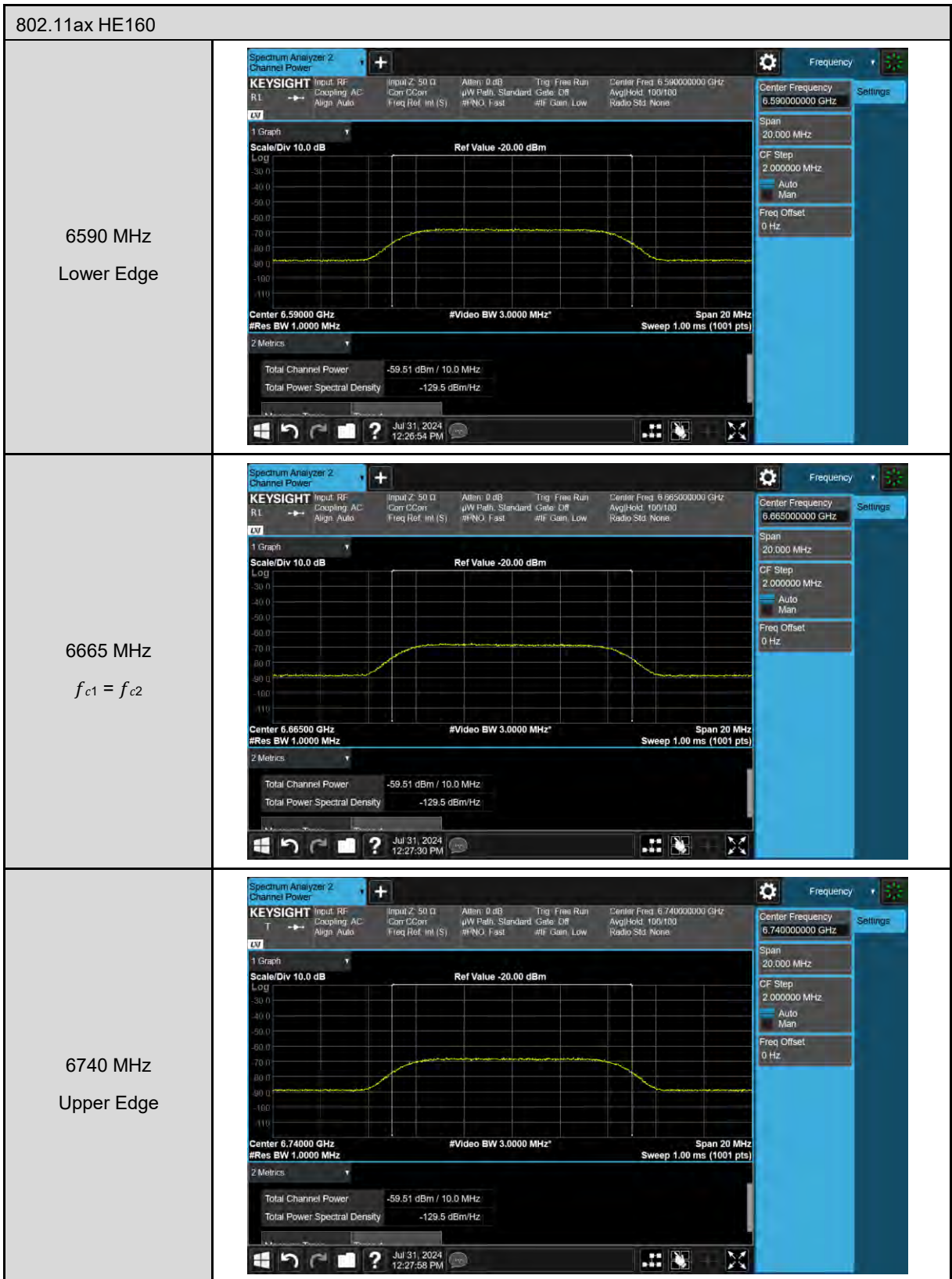
Threshold level of AWGN interference Plot

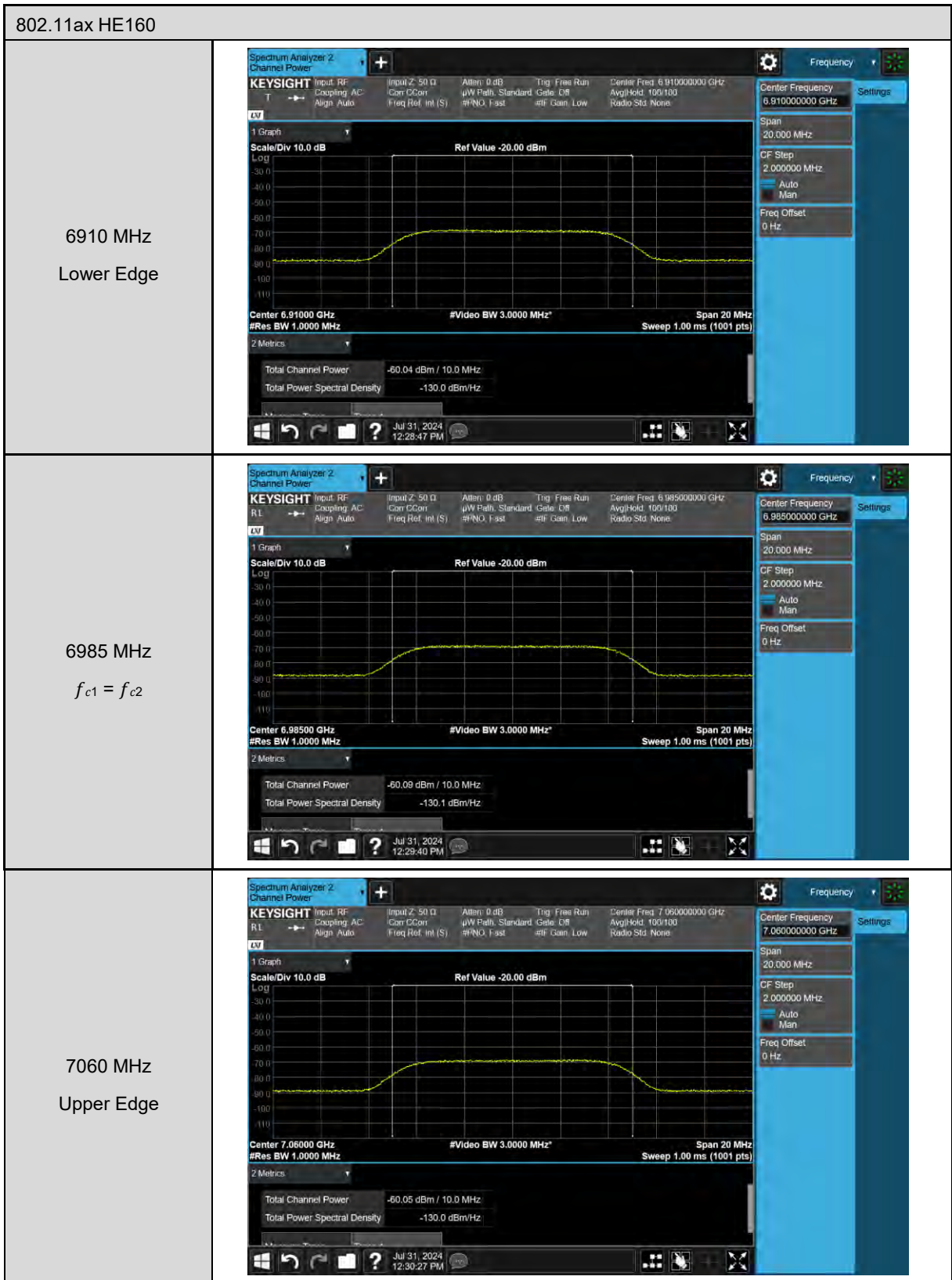
802.11ax HE20	
<p>6135 MHz</p> <p>$f_{c1} = f_{c2}$</p>	
<p>6455 MHz</p> <p>$f_{c1} = f_{c2}$</p>	
<p>6695 MHz</p> <p>$f_{c1} = f_{c2}$</p>	





802.11ax HE160	
<p>6430 MHz Lower Edge</p>	
<p>6505 MHz $f_{c1} = f_{c2}$</p>	
<p>6580 MHz Upper Edge</p>	

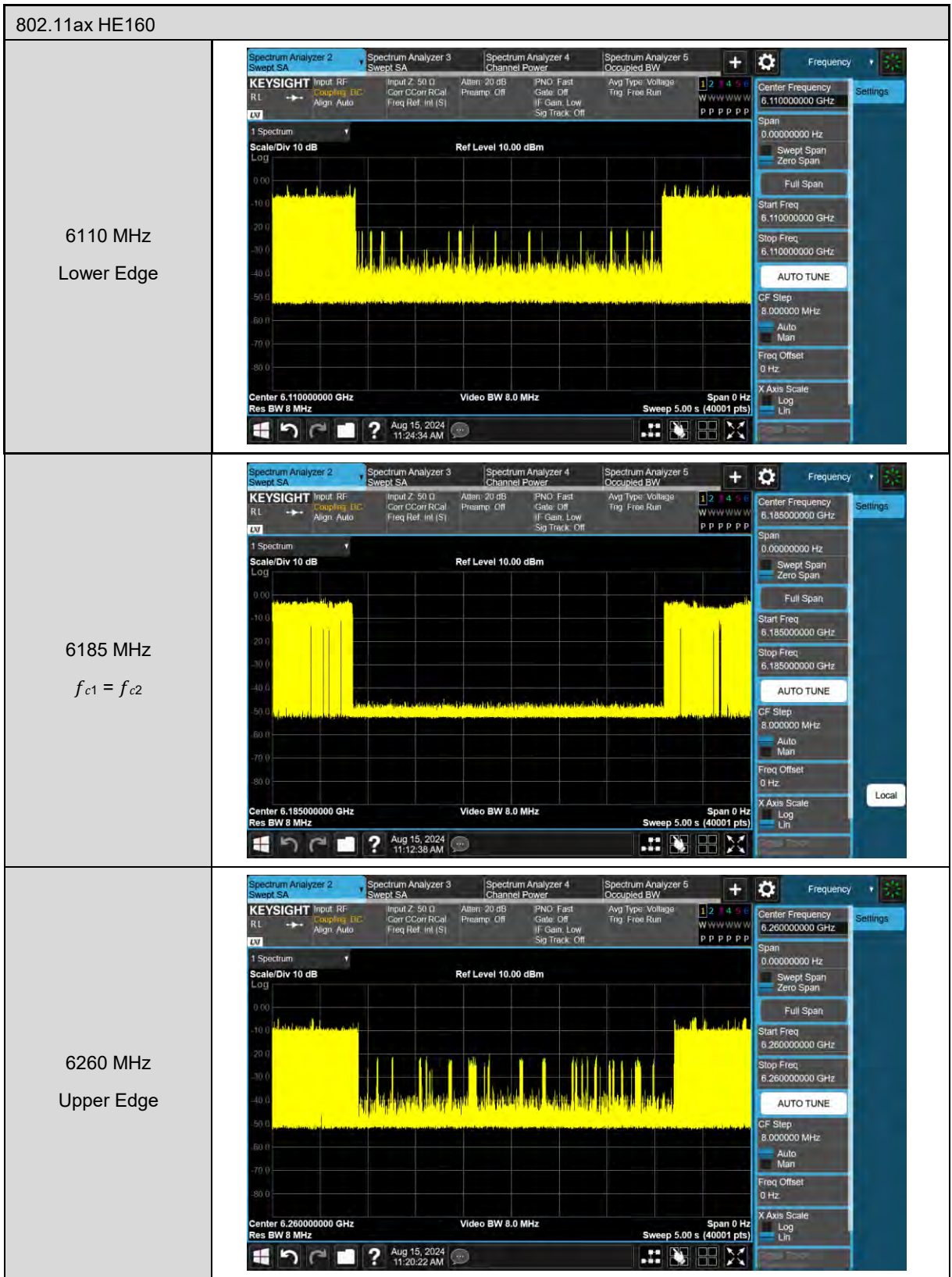




Contention Based Protocol Plot

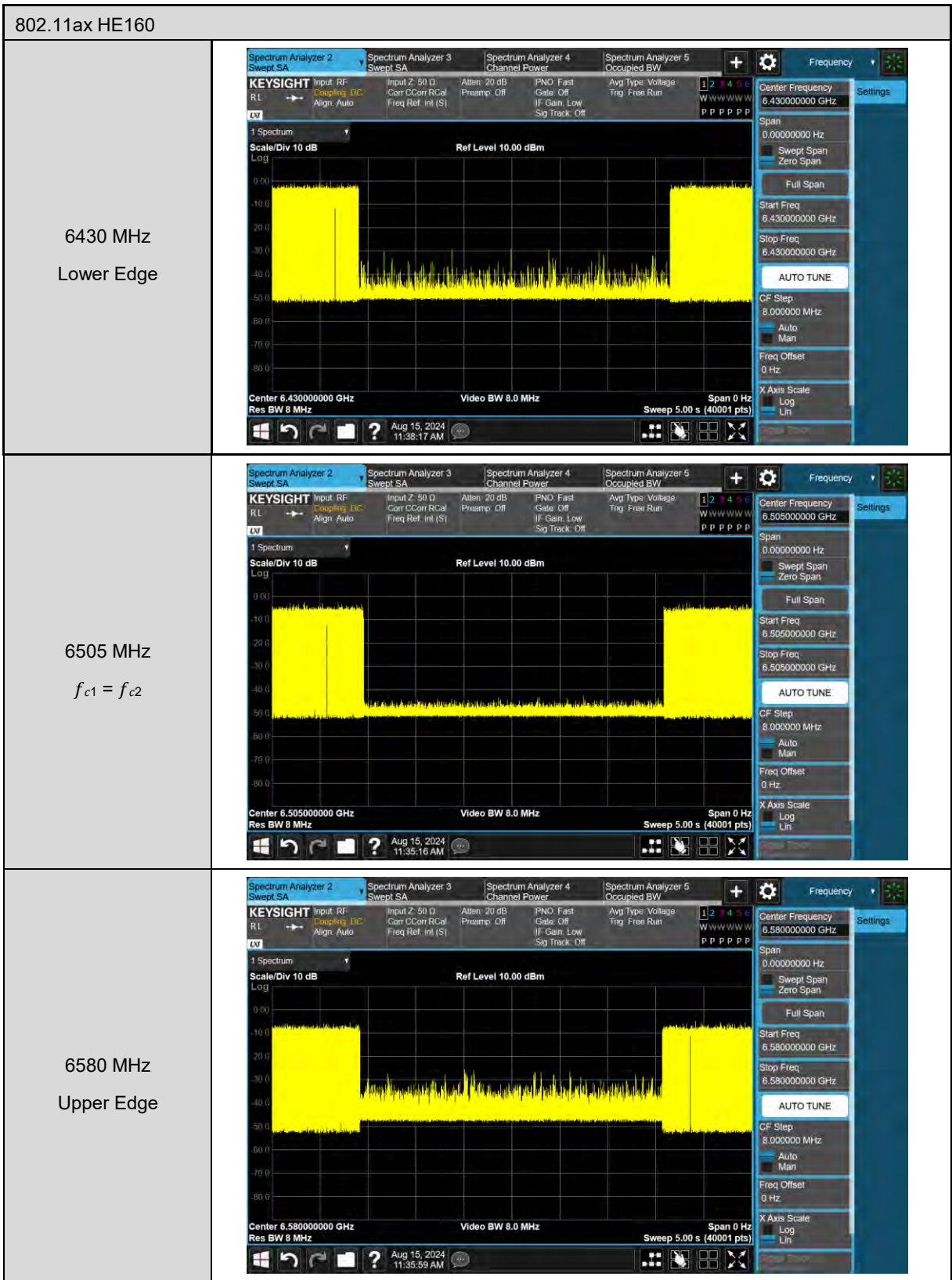
UNII 5:



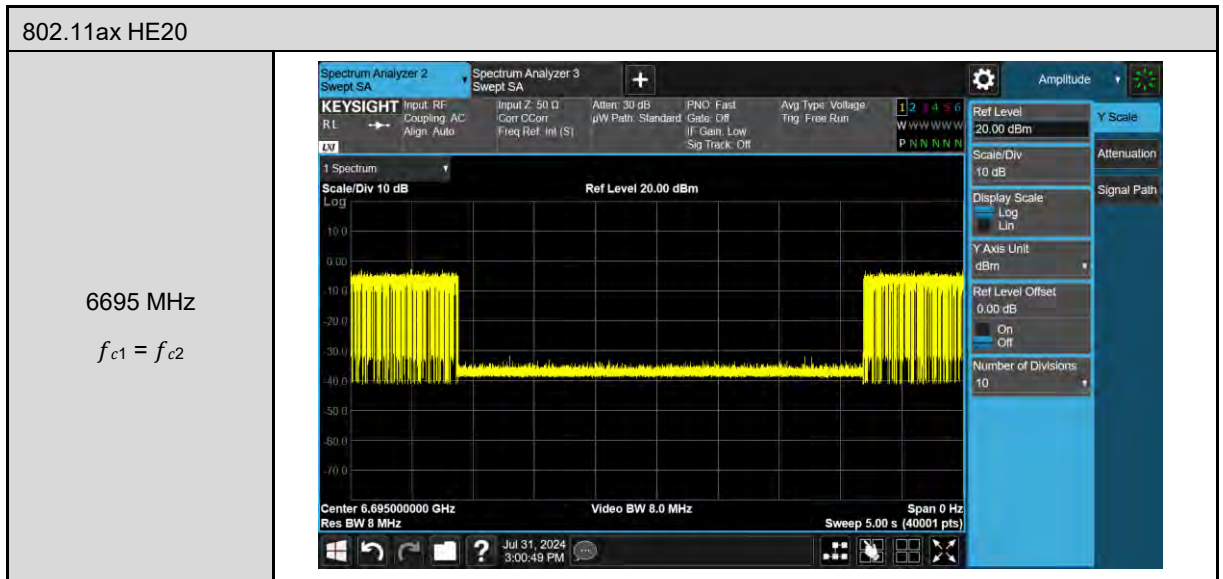


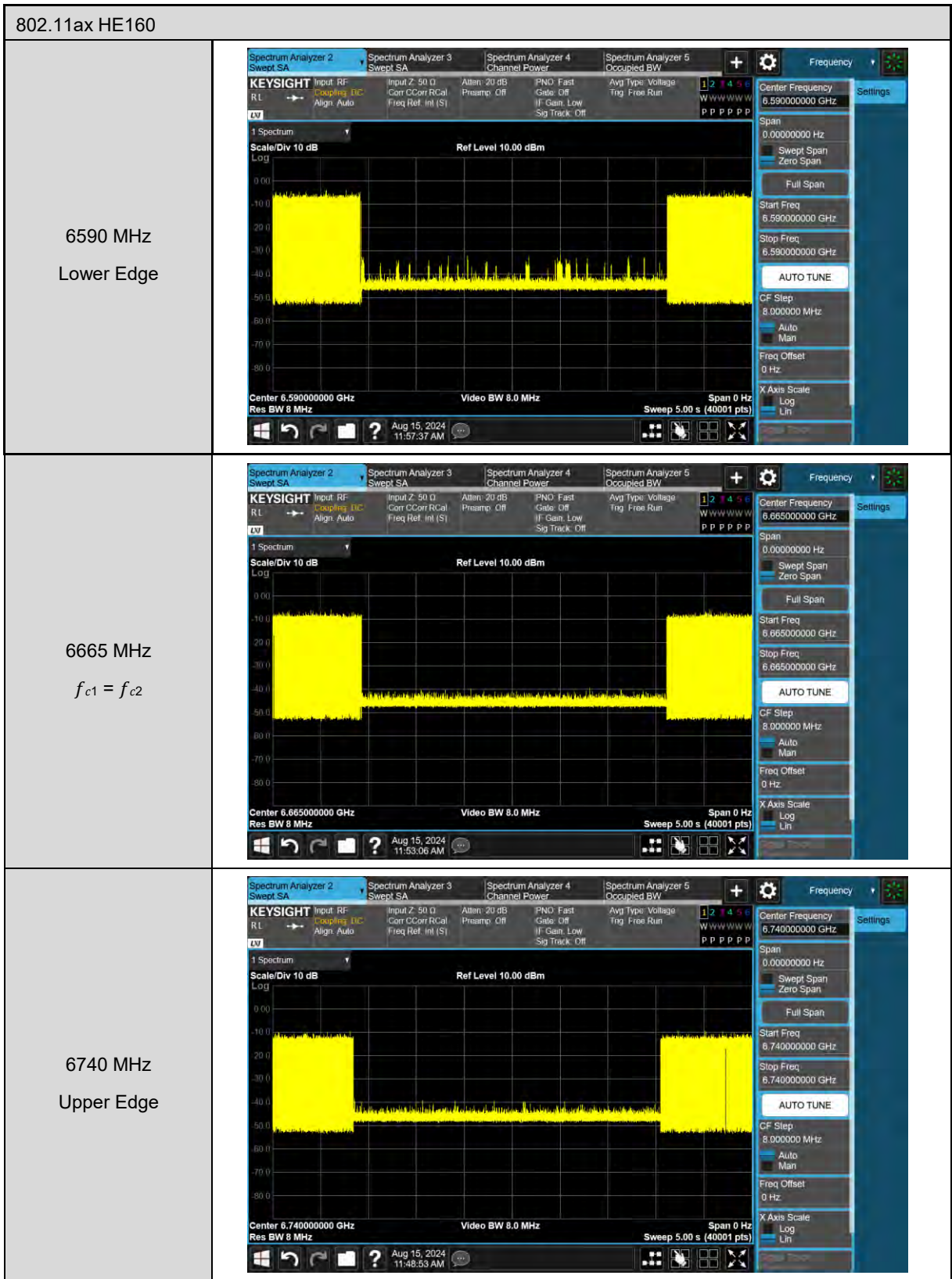
UNII 6:





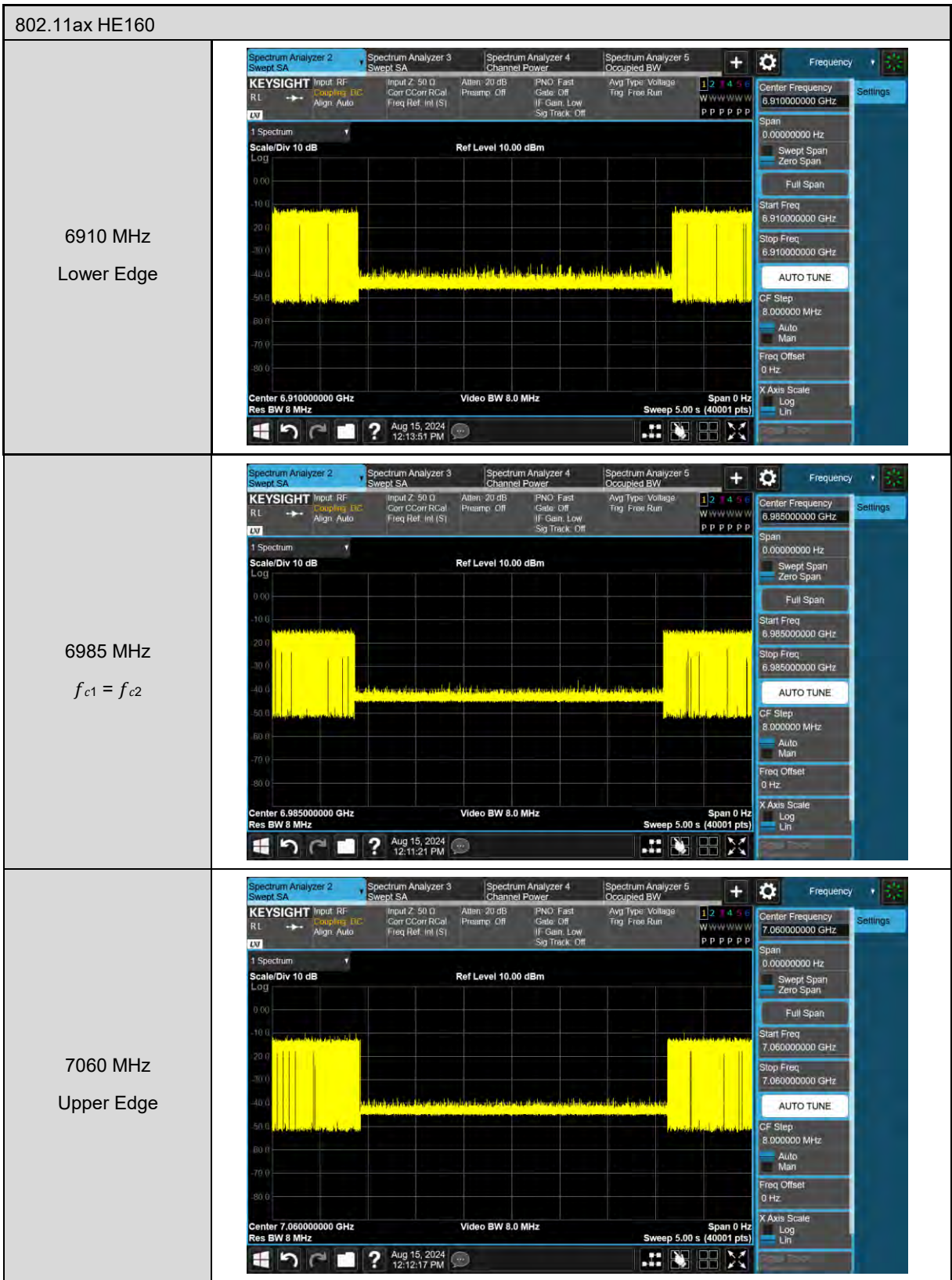
UNII 7:





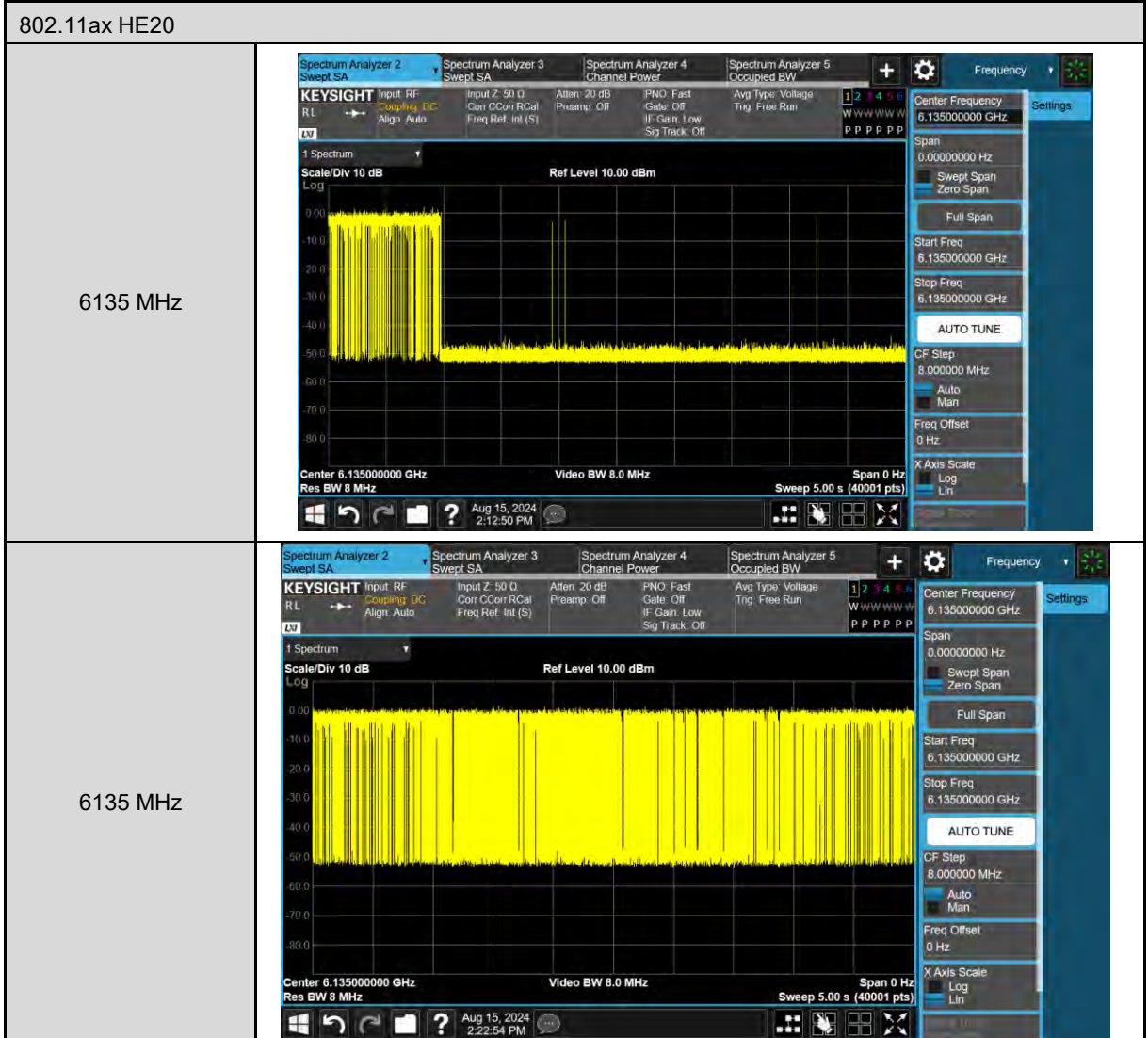
UNII 8:

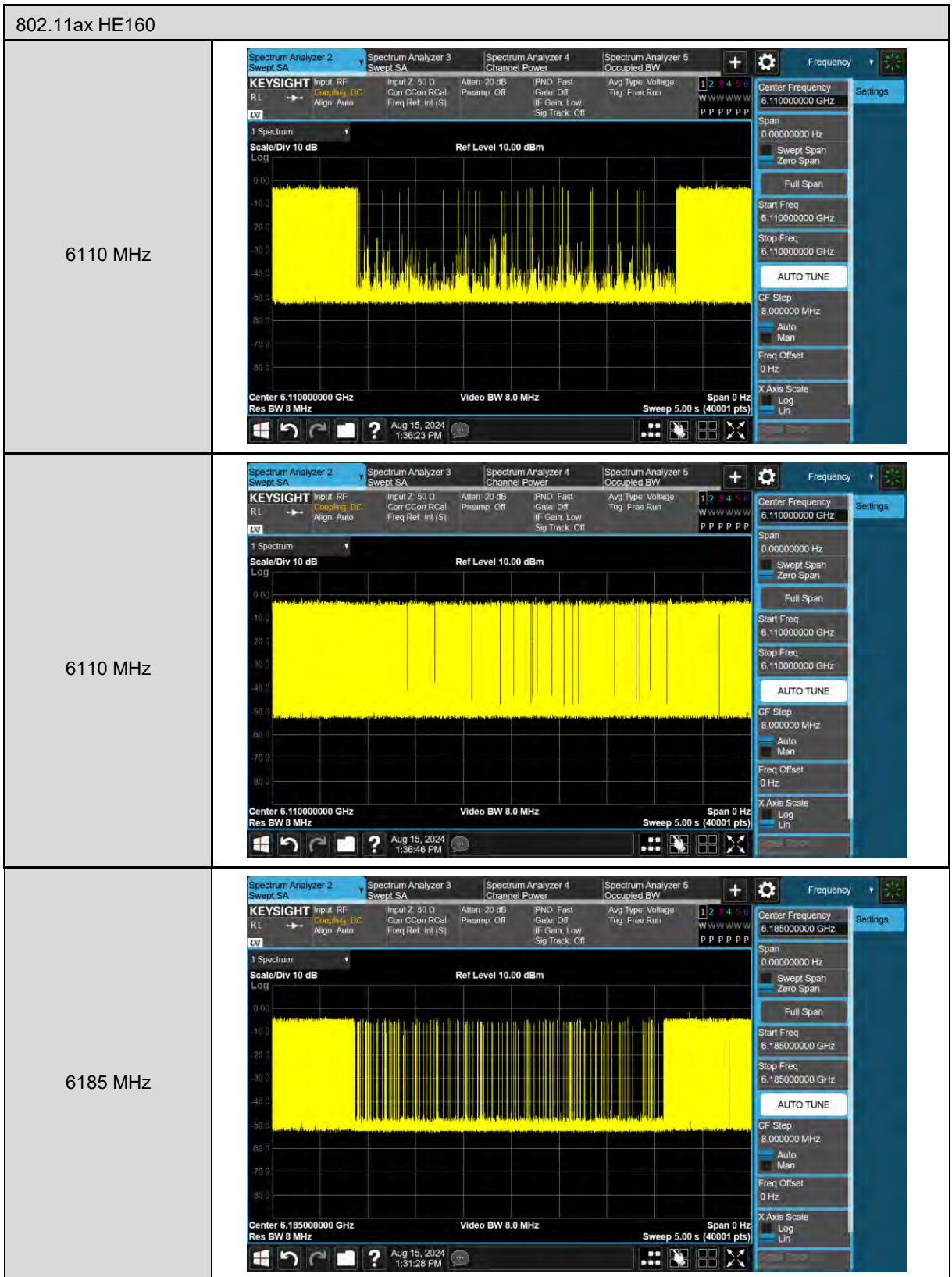




Contention Based Protocol Threshold Level Verify

UNII 5:

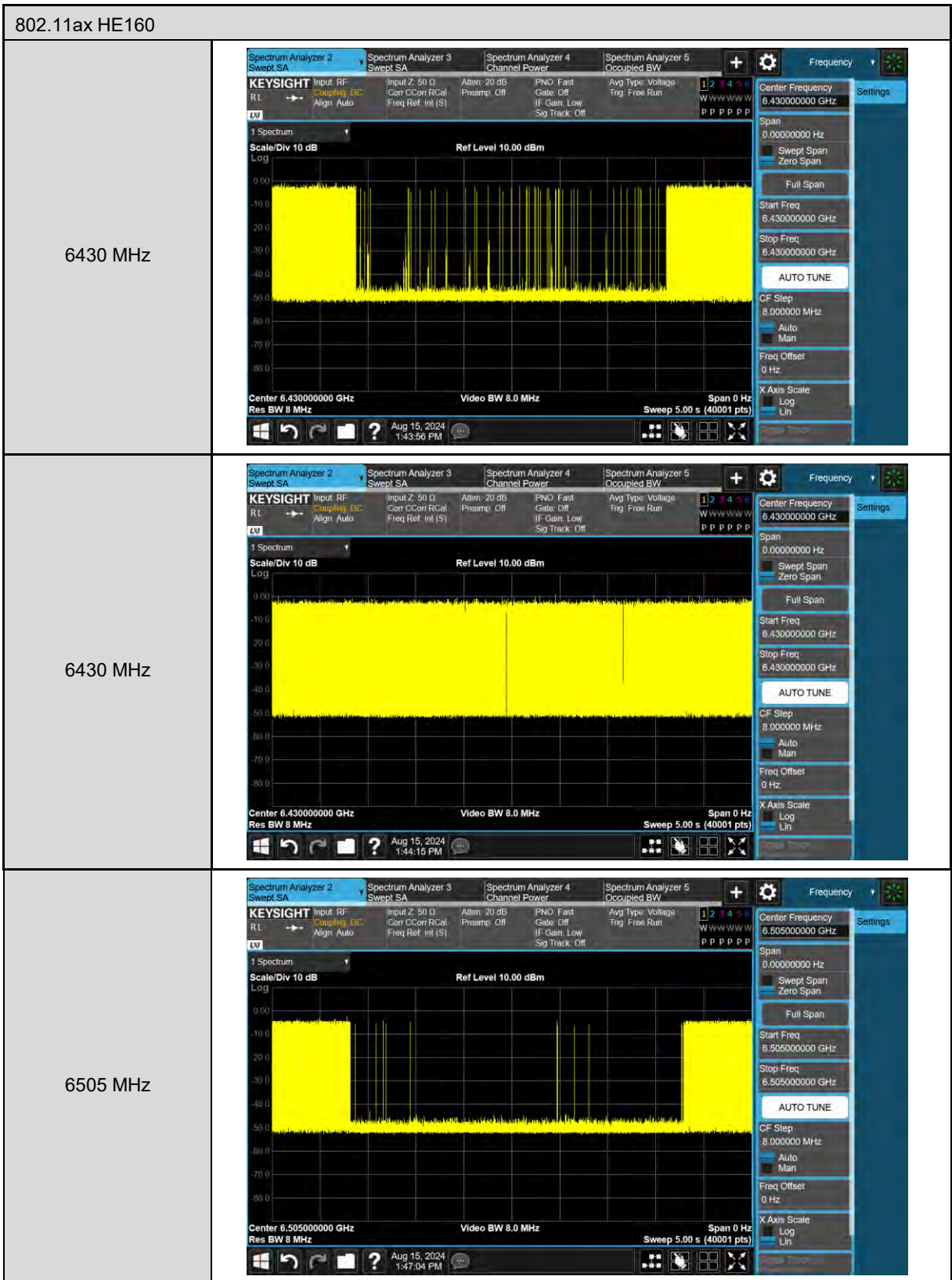




802.11ax HE160	
6185 MHz	
6260 MHz	
6260 MHz	

UNII 6:

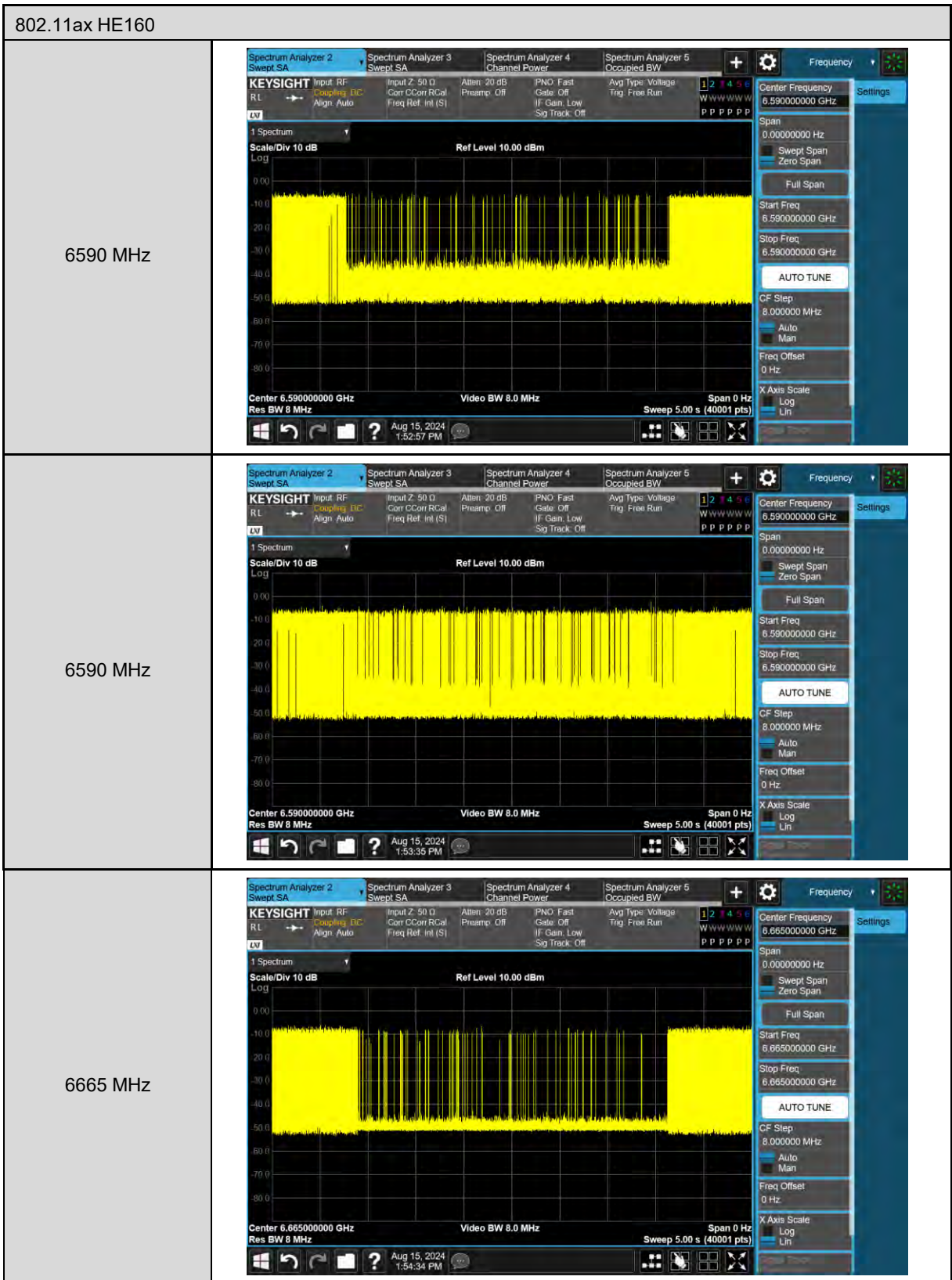


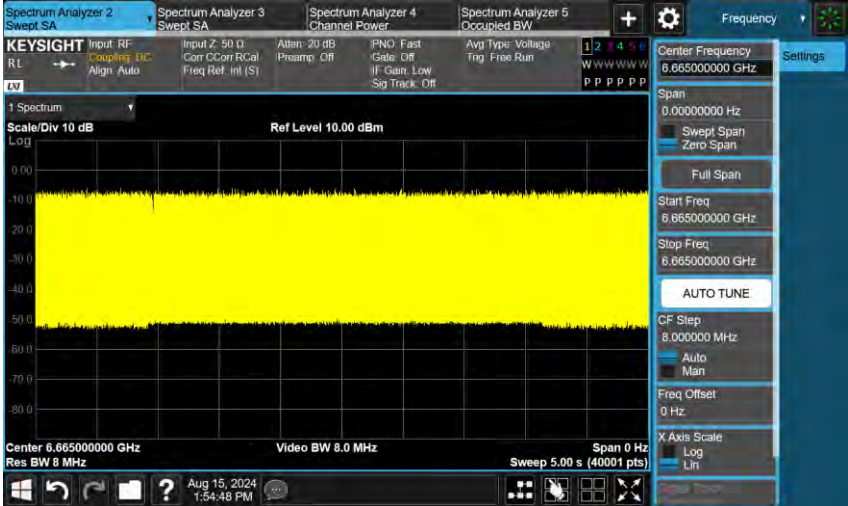

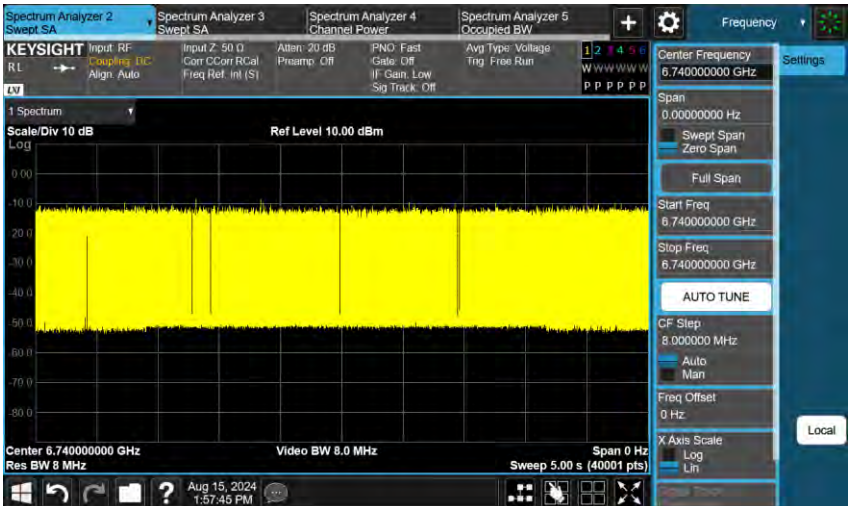


802.11ax HE160	
6505 MHz	
6580 MHz	
6580 MHz	

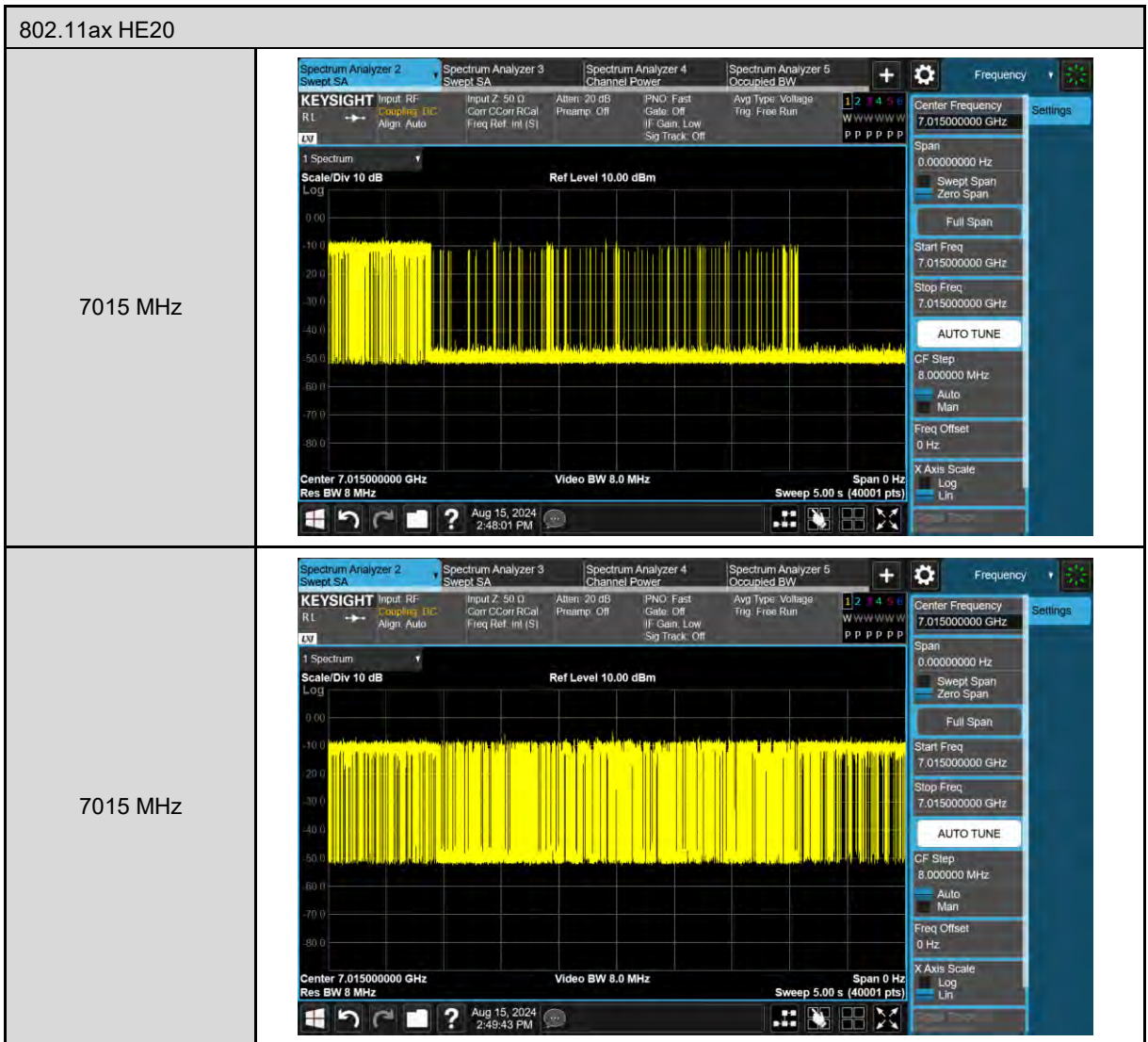
UNII 7:

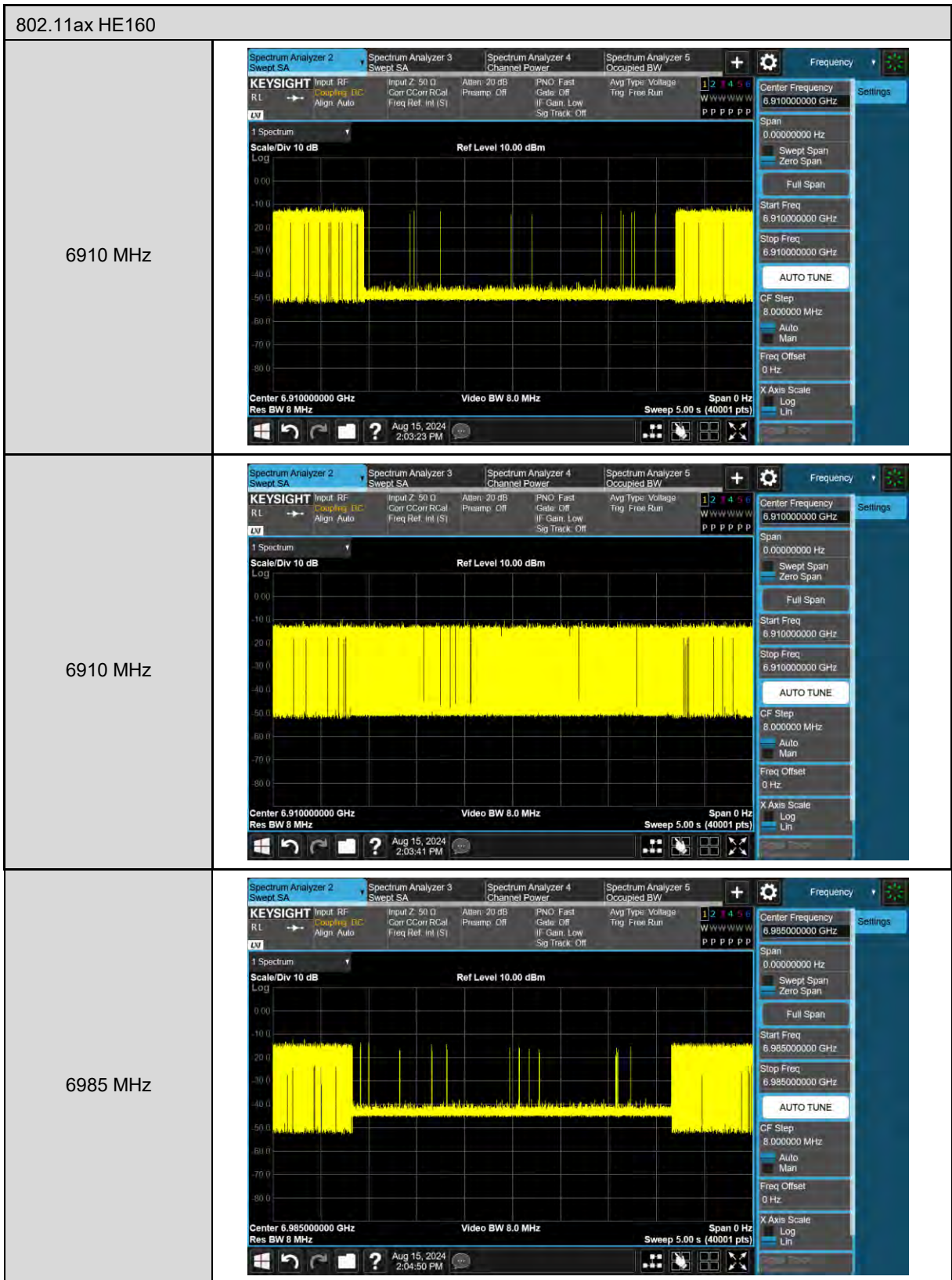




802.11ax HE160	
6665 MHz	 <p>The screenshot shows a Keysight Spectrum Analyzer with the center frequency set to 6.665000000 GHz. The signal is a dense, continuous yellow band across the entire span, indicating a wideband signal. The scale is 10 dB/div and the resolution bandwidth is 8 MHz.</p>
6740 MHz	 <p>The screenshot shows a Keysight Spectrum Analyzer with the center frequency set to 6.740000000 GHz. The signal consists of several distinct vertical spikes or narrowband components, with a lower level of noise floor between them. The scale is 10 dB/div and the resolution bandwidth is 8 MHz.</p>
6740 MHz	 <p>The screenshot shows a Keysight Spectrum Analyzer with the center frequency set to 6.740000000 GHz. The signal shows vertical spikes similar to the previous screenshot, but with a significantly higher and more uniform noise floor across the span. The scale is 10 dB/div and the resolution bandwidth is 8 MHz.</p>

UNII 8:





802.11ax HE160	
6985 MHz	
7060 MHz	
7060 MHz	

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