





























5.3.3. Contention Based Protocol Measurement

Contention Based Protocol							
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									
Band	Bandwidth (MHz)	Channel	Frequency (MHz)	Injected signal (AWGN)		Antenna Gain (dBi)	Adjusted Power (dBm)	Detection Level	EUT Tx Status
				Freq. (MHz)	Power (dBm)				
U-NII-5	20	37	6135	6135	-62.26	2.74	-65.00	-62.00	OFF
					-63.26	2.74	-66.00	-62.00	Minimal
					-72.26	2.74	-75.00	-62.00	ON
	160	47	6185	6110	-71.26	2.74	-74.00	-62.00	OFF
					-72.26	2.74	-75.00	-62.00	Minimal
					-74.26	2.74	-77.00	-62.00	ON
				6185	-69.26	2.74	-72.00	-62.00	OFF
					-70.26	2.74	-73.00	-62.00	Minimal
					-71.26	2.74	-74.00	-62.00	ON
				6260	-69.26	2.74	-72.00	-62.00	OFF
					-70.26	2.74	-73.00	-62.00	Minimal
					-75.26	2.74	-78.00	-62.00	ON
U-NII-6	20	101	6455	6455	-61.31	1.69	-63.00	-62.00	OFF
					-62.31	1.69	-64.00	-62.00	Minimal
					-73.31	1.69	-75.00	-62.00	ON
	160	111	6505	6430	-71.31	1.69	-73.00	-62.00	OFF
					-72.31	1.69	-74.00	-62.00	Minimal
					-74.31	1.69	-76.00	-62.00	ON
				6505	-62.31	1.69	-64.00	-62.00	OFF
					-63.31	1.69	-65.00	-62.00	Minimal
					-69.31	1.69	-71.00	-62.00	ON
				6580	-65.31	1.69	-67.00	-62.00	OFF
					-66.31	1.69	-68.00	-62.00	Minimal
					-73.31	1.69	-75.00	-62.00	ON

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

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

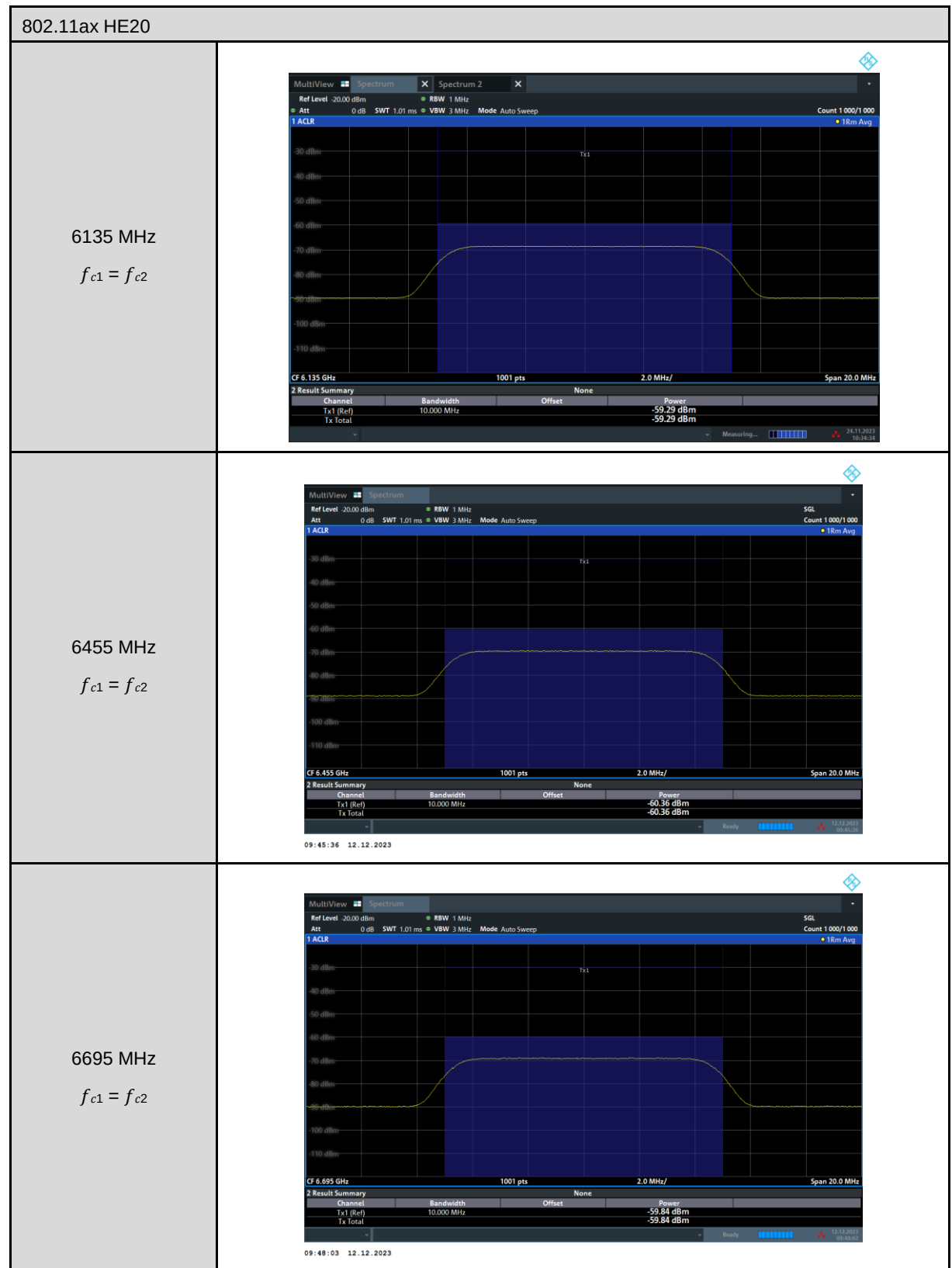
Contention Based Protocol Threshold Level Verify									
Band	Bandwidth (MHz)	Channel	Frequency (MHz)	Injected signal (AWGN)		Antenna Gain (dBi)	Adjusted Power (dBm)	Detection Level	EUT Tx Status
				Freq. (MHz)	Power (dBm)				
U-NII-7	20	149	6695	6695	-60.78	2.22	-63.00	-62.00	OFF
					-61.78	2.22	-64.00	-62.00	Minimal
					-79.78	2.22	-82.00	-62.00	ON
	160	143	6665	6590	-69.78	2.22	-72.00	-62.00	OFF
					-70.78	2.22	-73.00	-62.00	Minimal
					-72.78	2.22	-75.00	-62.00	ON
				6665	-65.78	2.22	-68.00	-62.00	OFF
					-66.78	2.22	-69.00	-62.00	Minimal
					-68.78	2.22	-71.00	-62.00	ON
				6740	-72.78	2.22	-75.00	-62.00	OFF
					-73.78	2.22	-76.00	-62.00	Minimal
					-74.78	2.22	-77.00	-62.00	ON
U-NII-8	20	213	7015	7015	-60.13	2.87	-63.00	-62.00	OFF
					-61.13	2.87	-64.00	-62.00	Minimal
					-81.13	2.87	-84.00	-62.00	ON
	160	207	6985	6910	-68.13	2.87	-71.00	-62.00	OFF
					-69.13	2.87	-72.00	-62.00	Minimal
					-71.13	2.87	-74.00	-62.00	ON
				6985	-65.13	2.87	-68.00	-62.00	OFF
					-66.13	2.87	-69.00	-62.00	Minimal
					-67.13	2.87	-70.00	-62.00	ON
				7060	-66.13	2.87	-69.00	-62.00	OFF
					-67.13	2.87	-70.00	-62.00	Minimal
					-69.13	2.87	-72.00	-62.00	ON

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

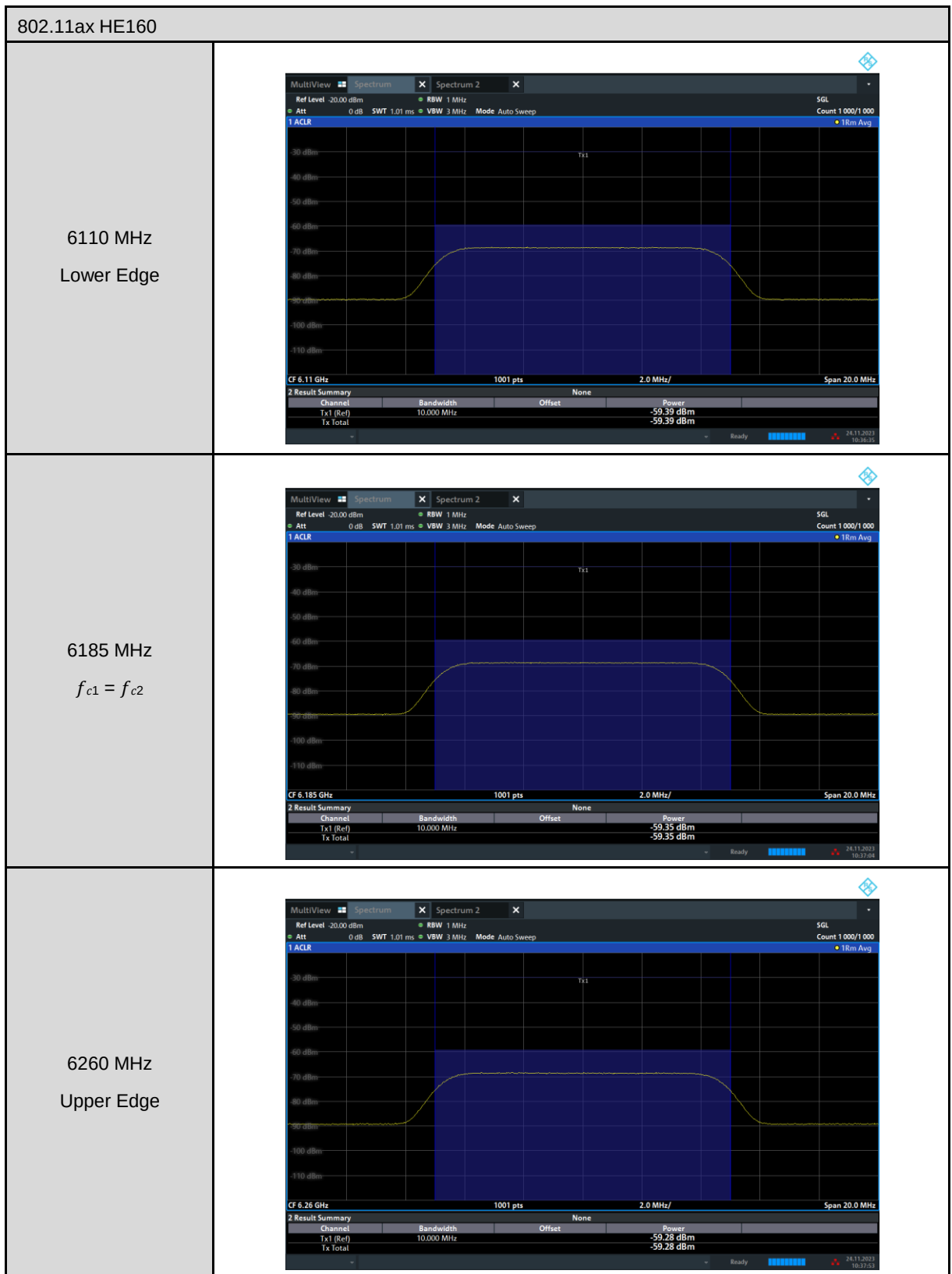
Note 2 : Injected (AWGN) power Include Path Loss.

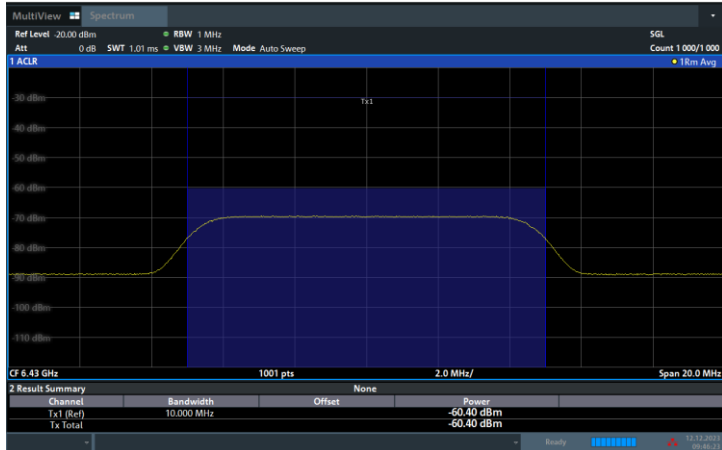
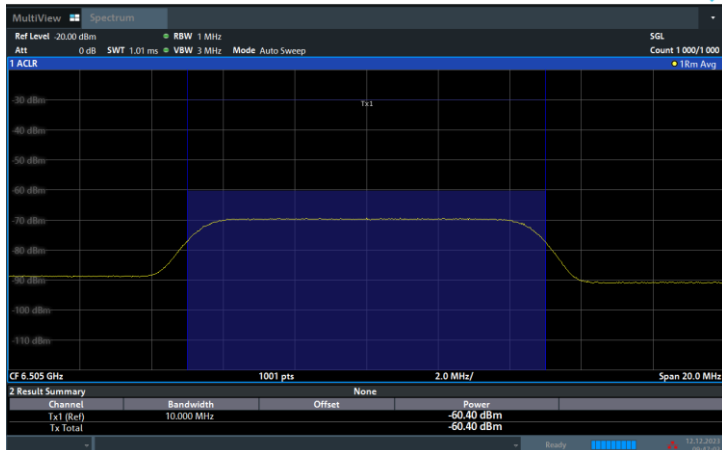
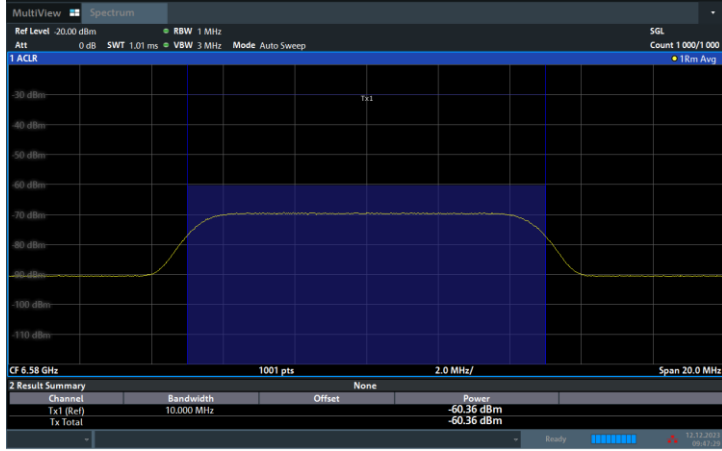
Test Graphs

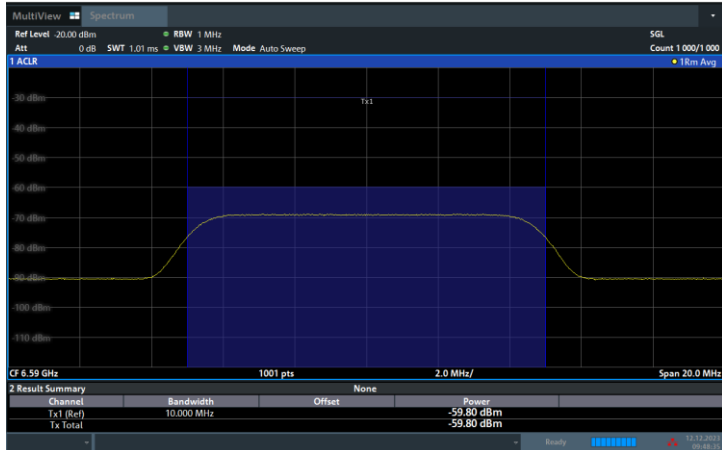
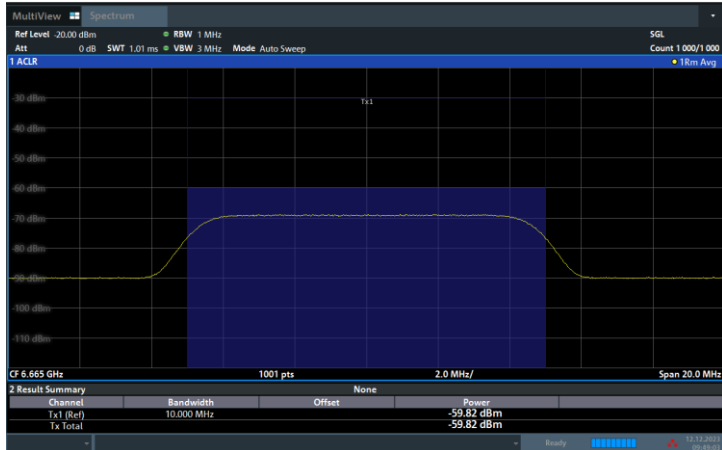
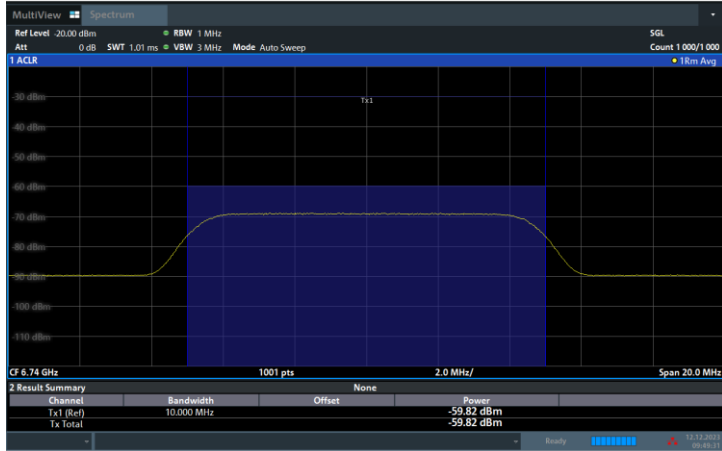
Threshold level of AWGN interference Plot

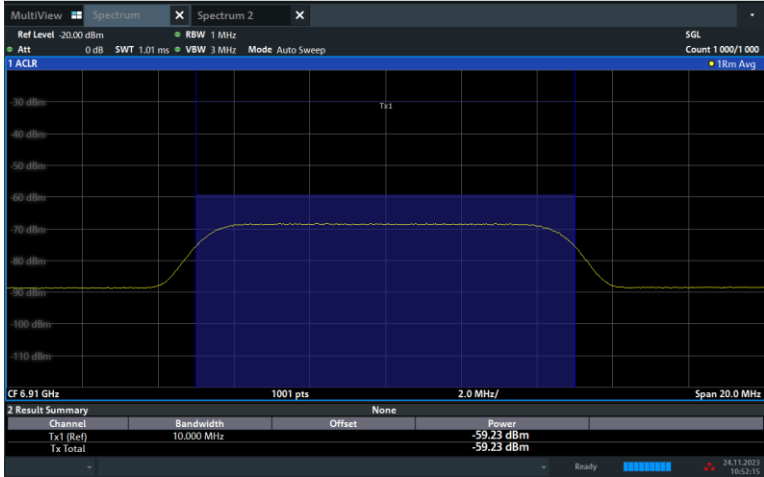
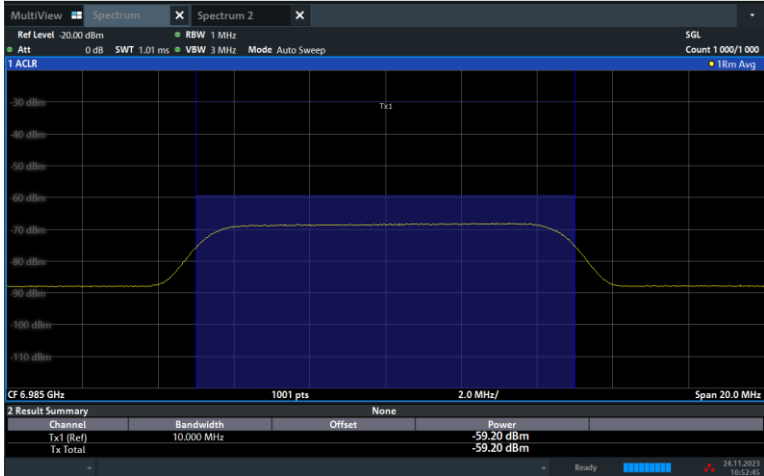
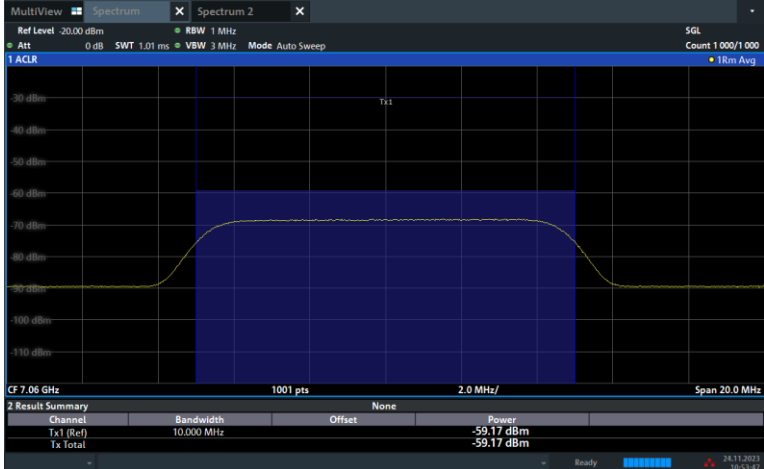






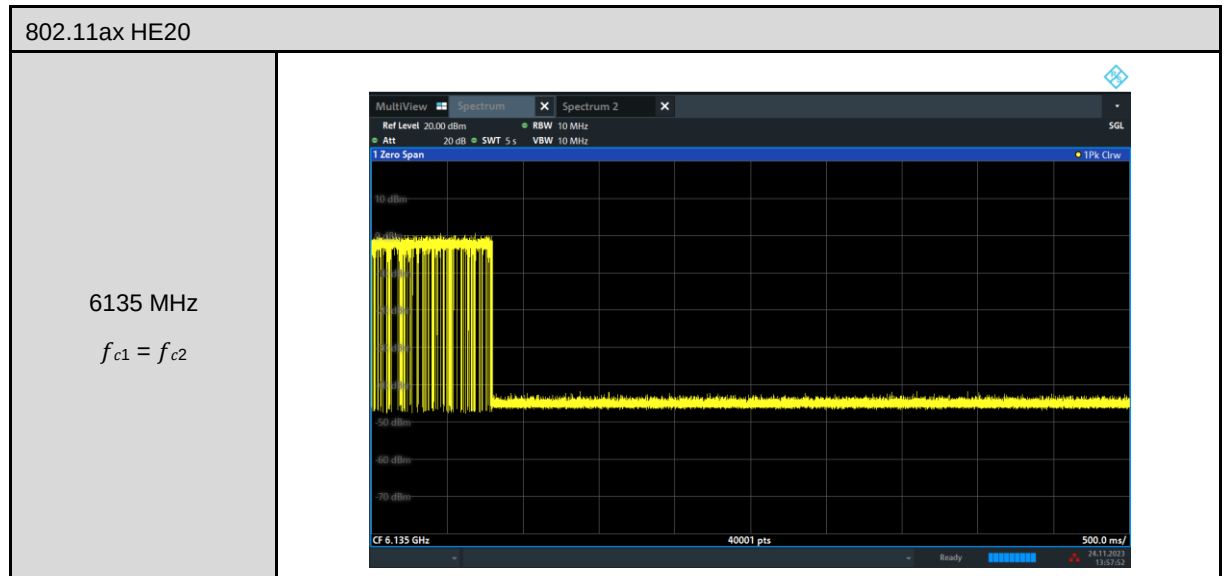
802.11ax HE16Q	6430 MHz Lower Edge  MultiView Spectrum Ref Level: -20.00 dBm Att: 0 dB RBW: 1 MHz VBW: 3 MHz Mode: Auto Sweep SGL Count: 1 000/1 000 18km Avg CF 6.43 GHz 1001 pts 2.0 MHz/ Span 20.0 MHz 2 Result Summary <table><tr><th>Channel</th><th>Bandwidth</th><th>Offset</th><th>Power</th></tr><tr><td>Tx1 (Ref)</td><td>10.000 MHz</td><td>None</td><td>-60.40 dBm</td></tr><tr><td>Tx Total</td><td></td><td></td><td>-60.40 dBm</td></tr></table> 09:46:23 12.12.2023	Channel	Bandwidth	Offset	Power	Tx1 (Ref)	10.000 MHz	None	-60.40 dBm	Tx Total			-60.40 dBm
Channel	Bandwidth	Offset	Power										
Tx1 (Ref)	10.000 MHz	None	-60.40 dBm										
Tx Total			-60.40 dBm										
6505 MHz $f_{c1} = f_{c2}$	6505 MHz $f_{c1} = f_{c2}$  MultiView Spectrum Ref Level: -20.00 dBm Att: 0 dB RBW: 1 MHz VBW: 3 MHz Mode: Auto Sweep SGL Count: 1 000/1 000 18km Avg CF 6.505 GHz 1001 pts 2.0 MHz/ Span 20.0 MHz 2 Result Summary <table><tr><th>Channel</th><th>Bandwidth</th><th>Offset</th><th>Power</th></tr><tr><td>Tx1 (Ref)</td><td>10.000 MHz</td><td>None</td><td>-60.40 dBm</td></tr><tr><td>Tx Total</td><td></td><td></td><td>-60.40 dBm</td></tr></table> 09:47:03 12.12.2023	Channel	Bandwidth	Offset	Power	Tx1 (Ref)	10.000 MHz	None	-60.40 dBm	Tx Total			-60.40 dBm
Channel	Bandwidth	Offset	Power										
Tx1 (Ref)	10.000 MHz	None	-60.40 dBm										
Tx Total			-60.40 dBm										
6580 MHz Upper Edge	6580 MHz Upper Edge  MultiView Spectrum Ref Level: -20.00 dBm Att: 0 dB RBW: 1 MHz VBW: 3 MHz Mode: Auto Sweep SGL Count: 1 000/1 000 18km Avg CF 6.58 GHz 1001 pts 2.0 MHz/ Span 20.0 MHz 2 Result Summary <table><tr><th>Channel</th><th>Bandwidth</th><th>Offset</th><th>Power</th></tr><tr><td>Tx1 (Ref)</td><td>10.000 MHz</td><td>None</td><td>-60.36 dBm</td></tr><tr><td>Tx Total</td><td></td><td></td><td>-60.36 dBm</td></tr></table> 09:47:30 12.12.2023	Channel	Bandwidth	Offset	Power	Tx1 (Ref)	10.000 MHz	None	-60.36 dBm	Tx Total			-60.36 dBm
Channel	Bandwidth	Offset	Power										
Tx1 (Ref)	10.000 MHz	None	-60.36 dBm										
Tx Total			-60.36 dBm										

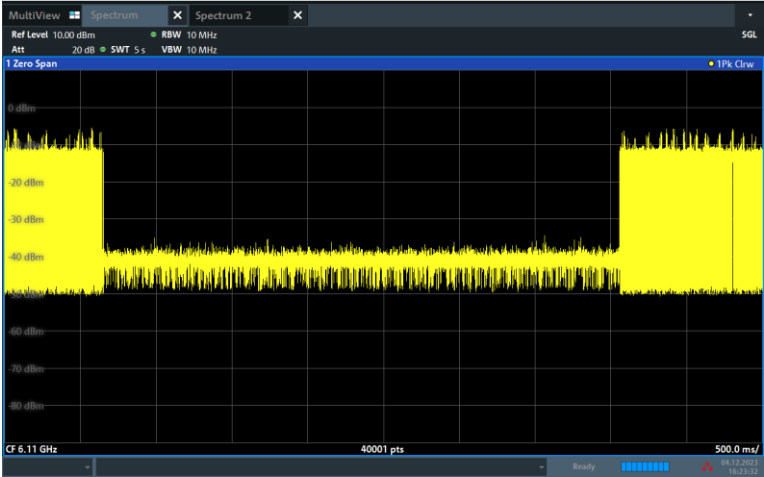
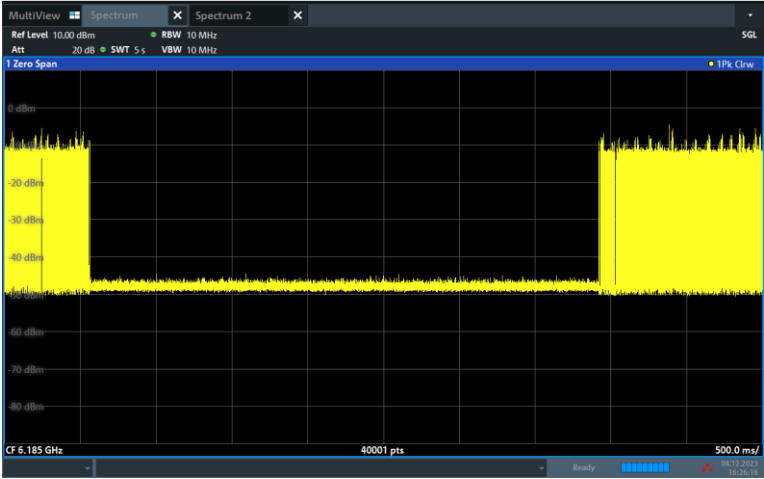
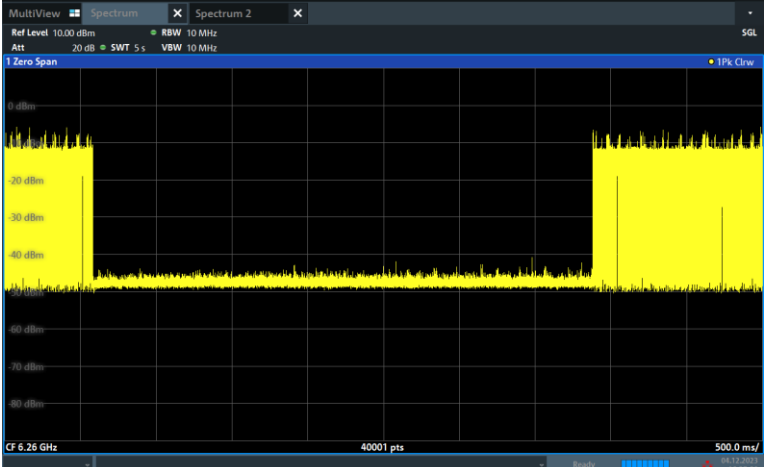
802.11ax HE160													
6590 MHz Lower Edge	 MultiView Spectrum Ref Level: -20.00 dBm Att: 0 dB RBW: 1 MHz VBW: 3 MHz Mode: Auto Sweep SGL Count: 1 000/1 000 18km Avg CF 6.59 GHz 1001 pts 2.0 MHz/ Span 20.0 MHz 2 Result Summary <table><tr><th>Channel</th><th>Bandwidth</th><th>Offset</th><th>Power</th></tr><tr><td>Tx1 (Ref)</td><td>10.000 MHz</td><td>None</td><td>-59.80 dBm</td></tr><tr><td>Tx Total</td><td></td><td></td><td>-59.80 dBm</td></tr></table> 09:48:36 12.12.2023	Channel	Bandwidth	Offset	Power	Tx1 (Ref)	10.000 MHz	None	-59.80 dBm	Tx Total			-59.80 dBm
Channel	Bandwidth	Offset	Power										
Tx1 (Ref)	10.000 MHz	None	-59.80 dBm										
Tx Total			-59.80 dBm										
6665 MHz $f_{c1} = f_{c2}$	 MultiView Spectrum Ref Level: -20.00 dBm Att: 0 dB RBW: 1 MHz VBW: 3 MHz Mode: Auto Sweep SGL Count: 1 000/1 000 18km Avg CF 6.665 GHz 1001 pts 2.0 MHz/ Span 20.0 MHz 2 Result Summary <table><tr><th>Channel</th><th>Bandwidth</th><th>Offset</th><th>Power</th></tr><tr><td>Tx1 (Ref)</td><td>10.000 MHz</td><td>None</td><td>-59.82 dBm</td></tr><tr><td>Tx Total</td><td></td><td></td><td>-59.82 dBm</td></tr></table> 09:49:03 12.12.2023	Channel	Bandwidth	Offset	Power	Tx1 (Ref)	10.000 MHz	None	-59.82 dBm	Tx Total			-59.82 dBm
Channel	Bandwidth	Offset	Power										
Tx1 (Ref)	10.000 MHz	None	-59.82 dBm										
Tx Total			-59.82 dBm										
6740 MHz Upper Edge	 MultiView Spectrum Ref Level: -20.00 dBm Att: 0 dB RBW: 1 MHz VBW: 3 MHz Mode: Auto Sweep SGL Count: 1 000/1 000 18km Avg CF 6.74 GHz 1001 pts 2.0 MHz/ Span 20.0 MHz 2 Result Summary <table><tr><th>Channel</th><th>Bandwidth</th><th>Offset</th><th>Power</th></tr><tr><td>Tx1 (Ref)</td><td>10.000 MHz</td><td>None</td><td>-59.82 dBm</td></tr><tr><td>Tx Total</td><td></td><td></td><td>-59.82 dBm</td></tr></table> 09:49:32 12.12.2023	Channel	Bandwidth	Offset	Power	Tx1 (Ref)	10.000 MHz	None	-59.82 dBm	Tx Total			-59.82 dBm
Channel	Bandwidth	Offset	Power										
Tx1 (Ref)	10.000 MHz	None	-59.82 dBm										
Tx Total			-59.82 dBm										

802.11ax HE160	
6910 MHz Lower Edge	
6985 MHz $f_{c1} = f_{c2}$	
7060 MHz Upper Edge	

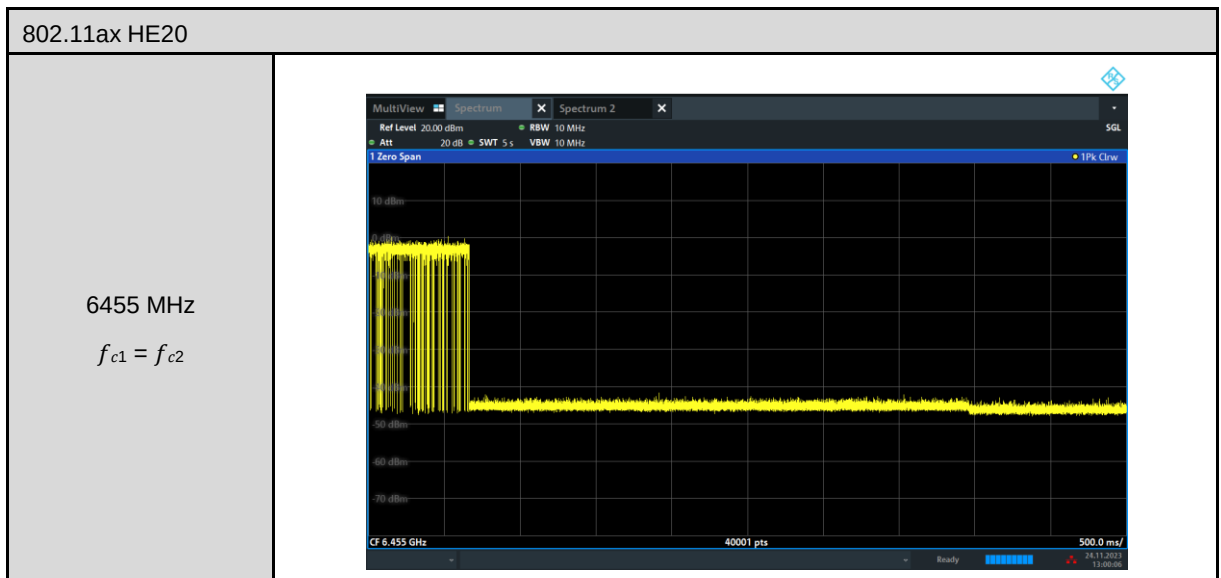
Contention Based Protocol Plot

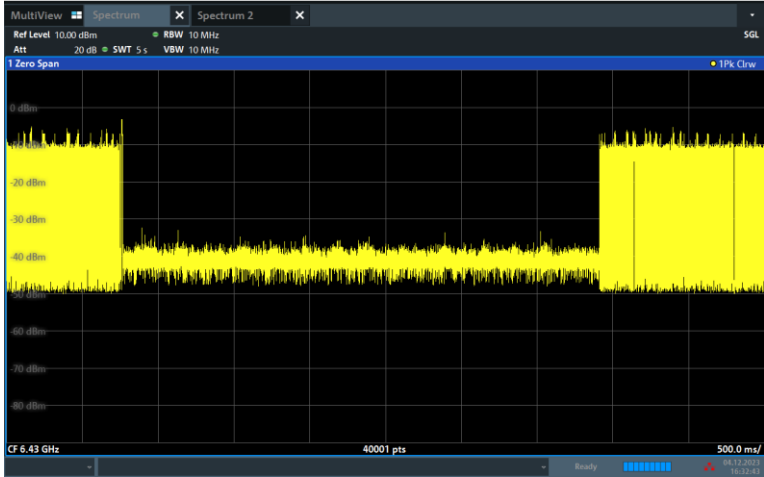
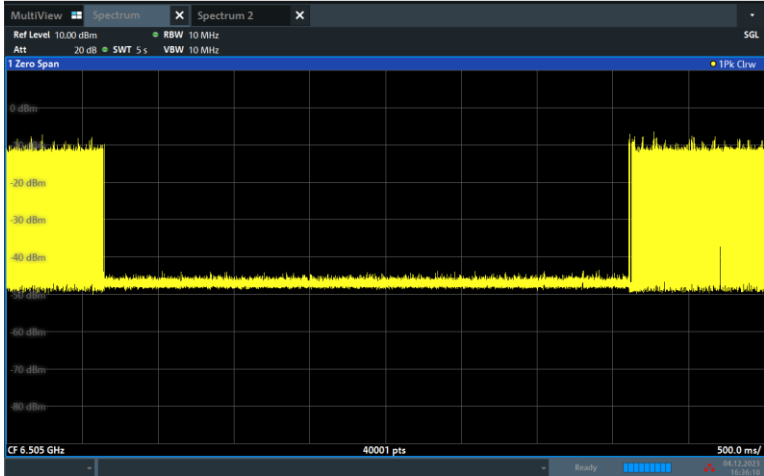
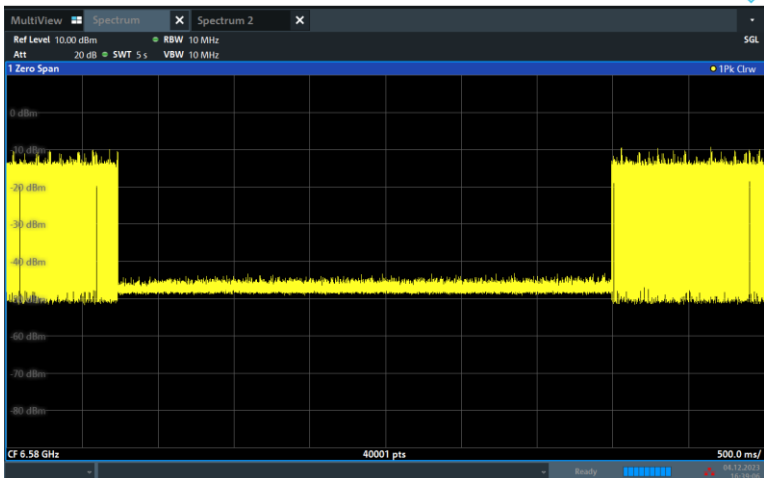
UNII 5:



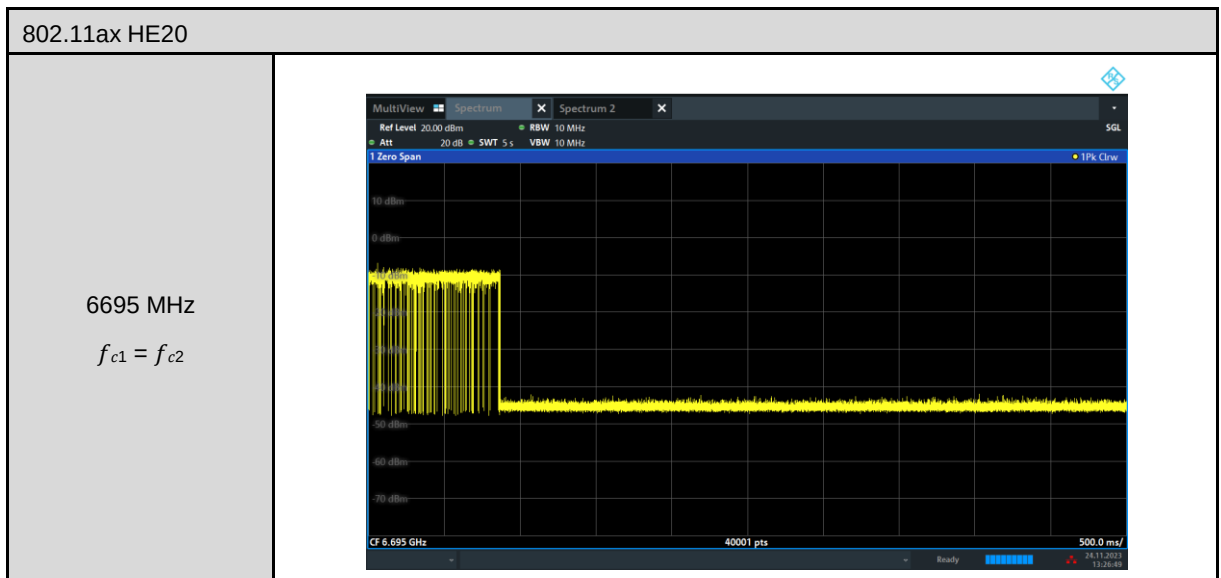
802.11ax HE160	6110 MHz Lower Edge 
6185 MHz $f_{c1} = f_{c2}$	
6260 MHz Upper Edge	

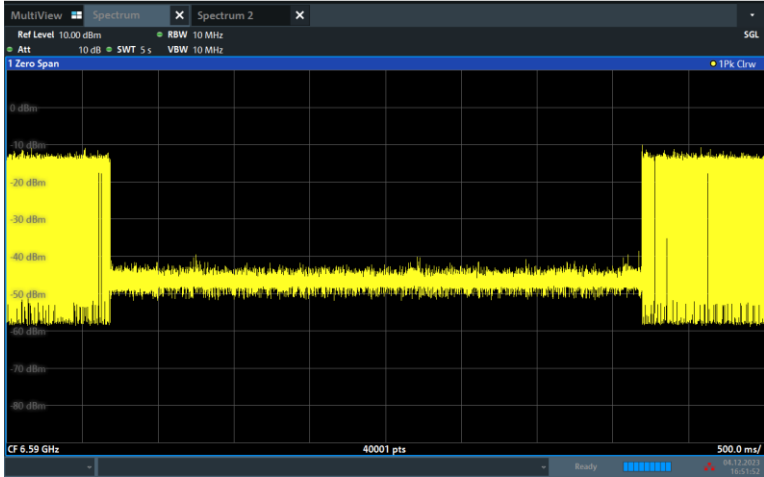
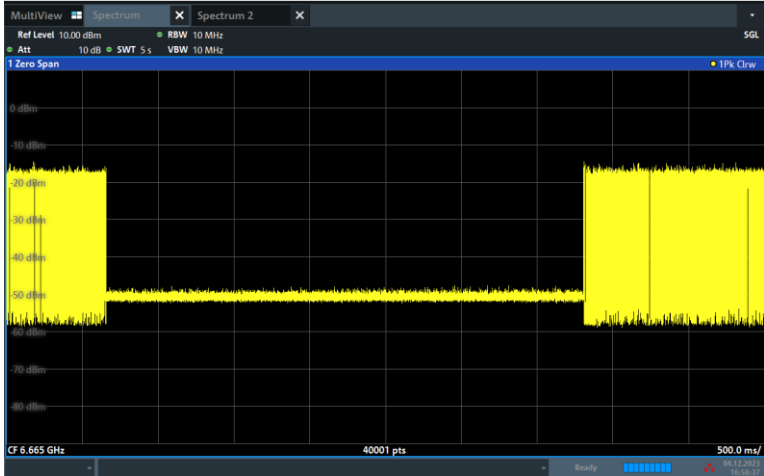
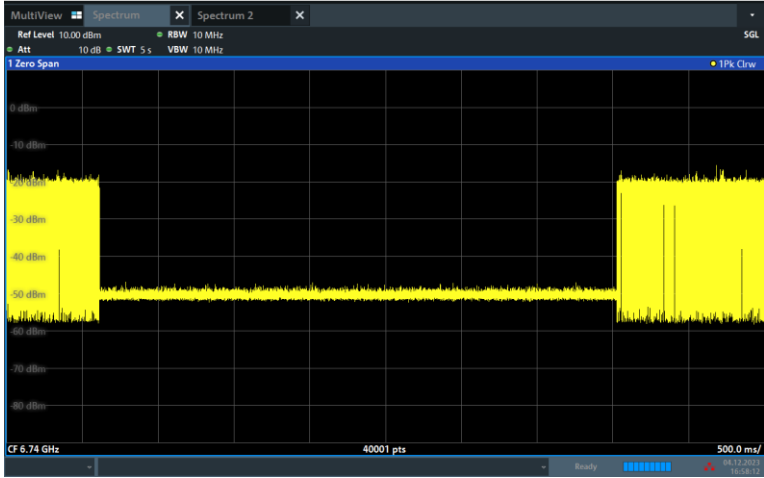
UNII 6



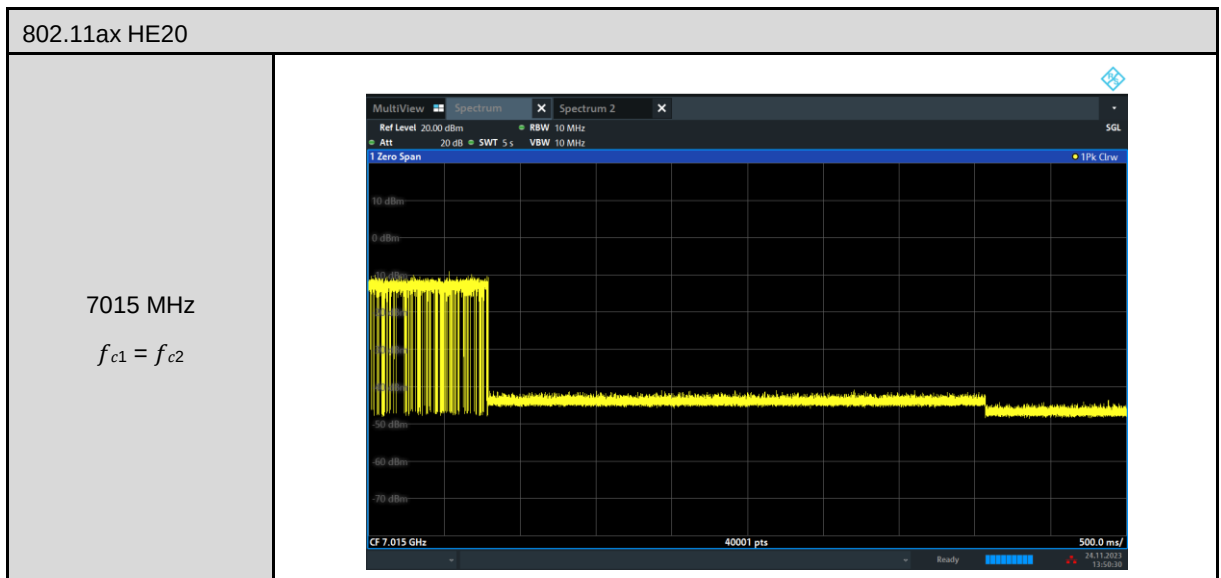
802.11ax HE160 6430 MHz Lower Edge	
6505 MHz $f_{c1} = f_{c2}$	
6580 MHz Upper Edge	

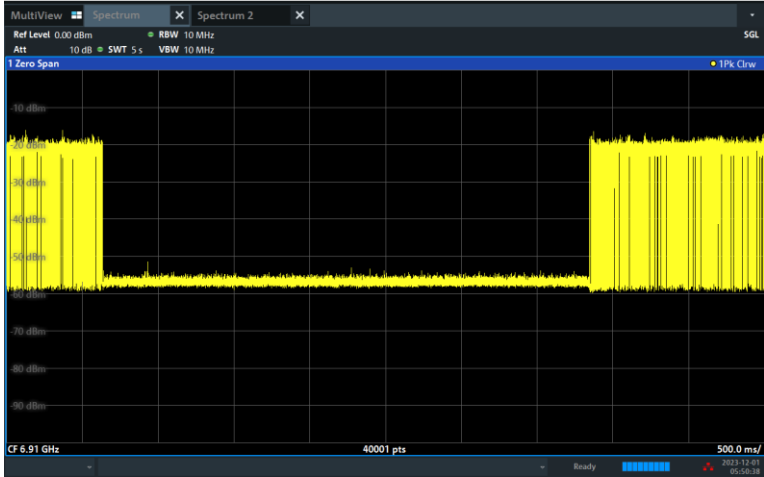
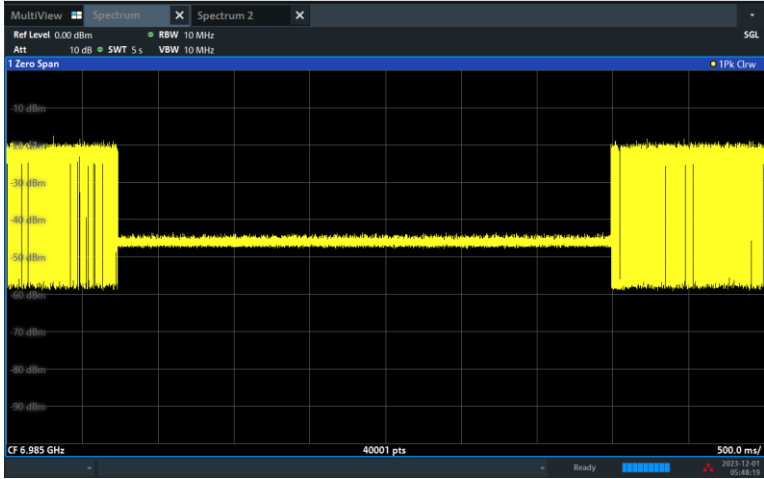
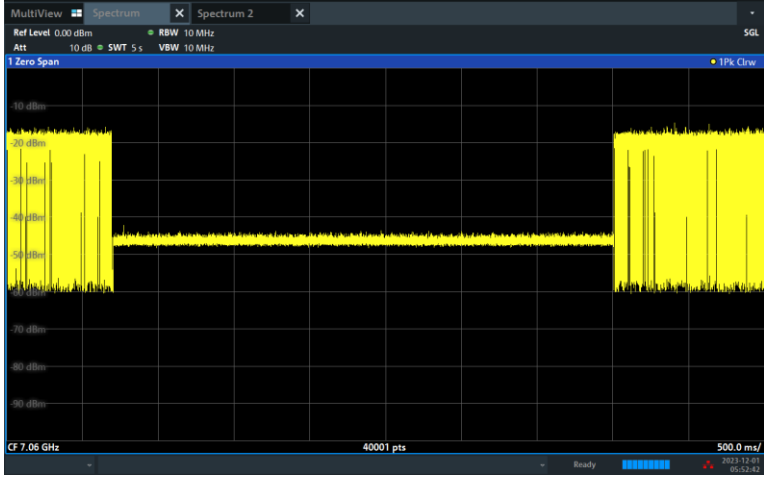
UNII 7:



802.11ax HE160	
6590 MHz Lower Edge	
6665 MHz $f_{c1} = f_{c2}$	
6740 MHz Upper Edge	

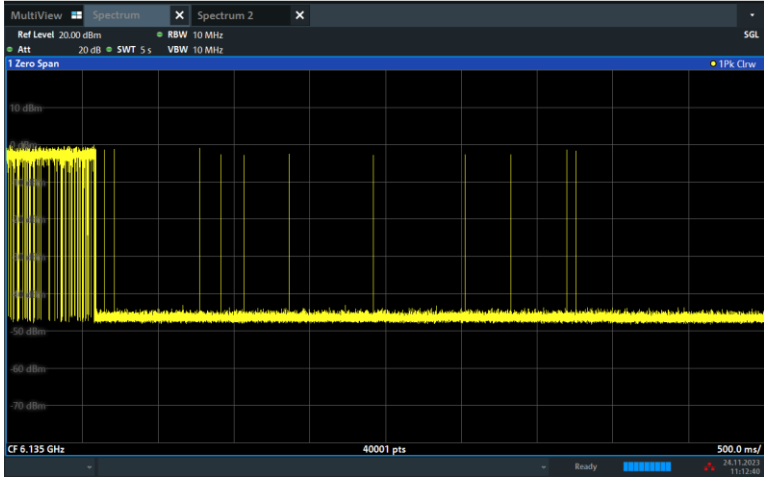
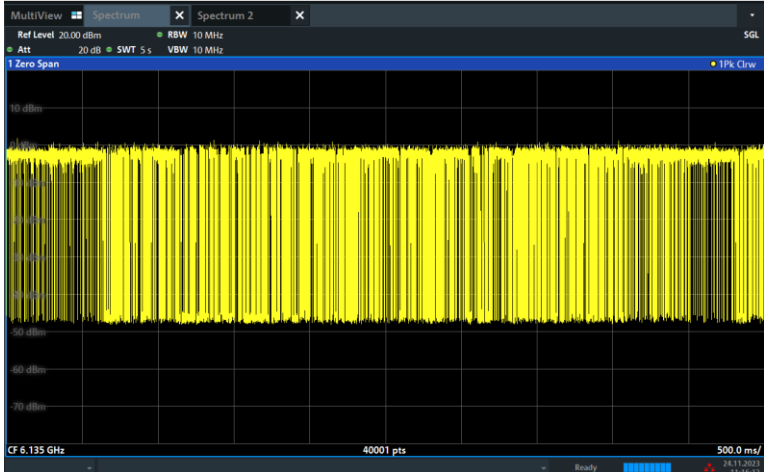
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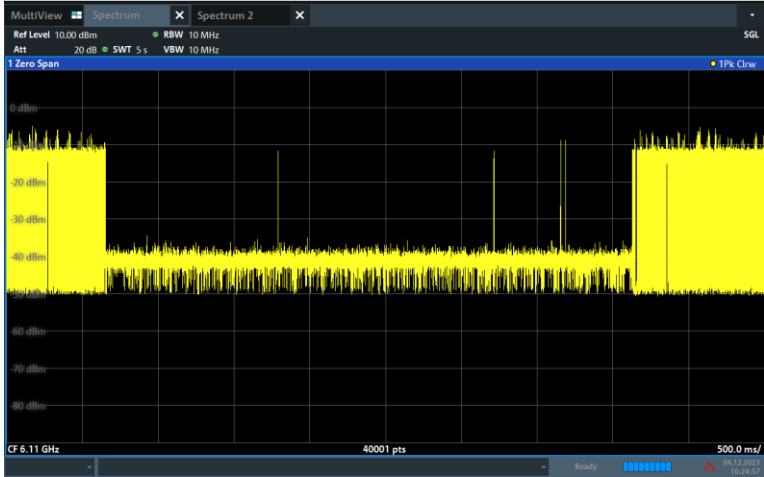
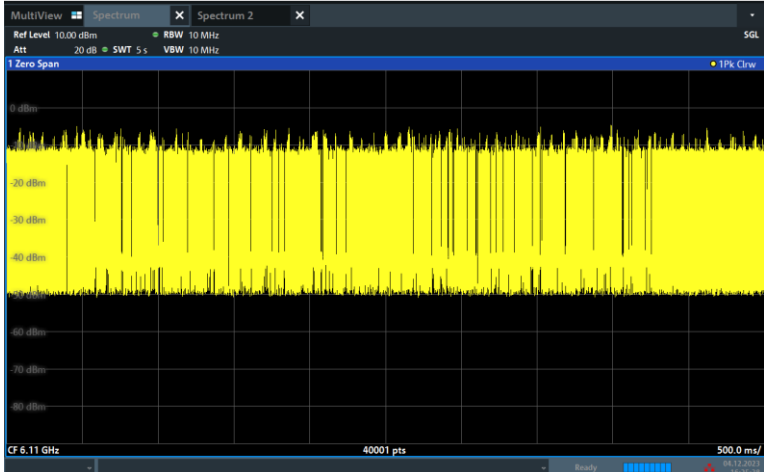
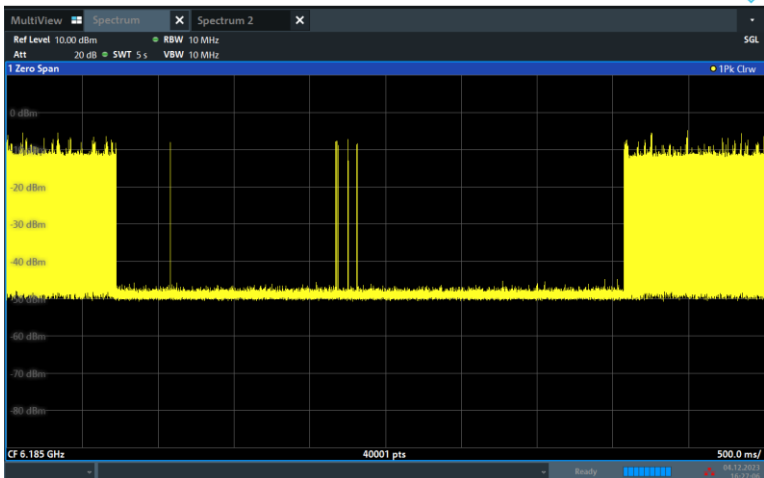


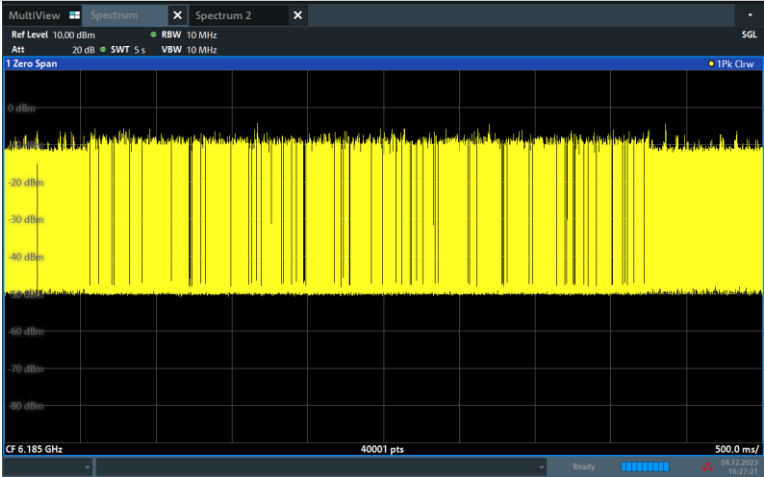
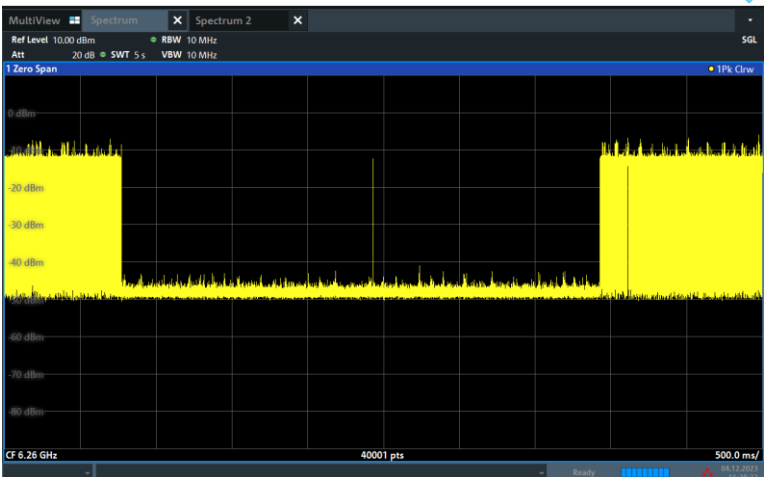
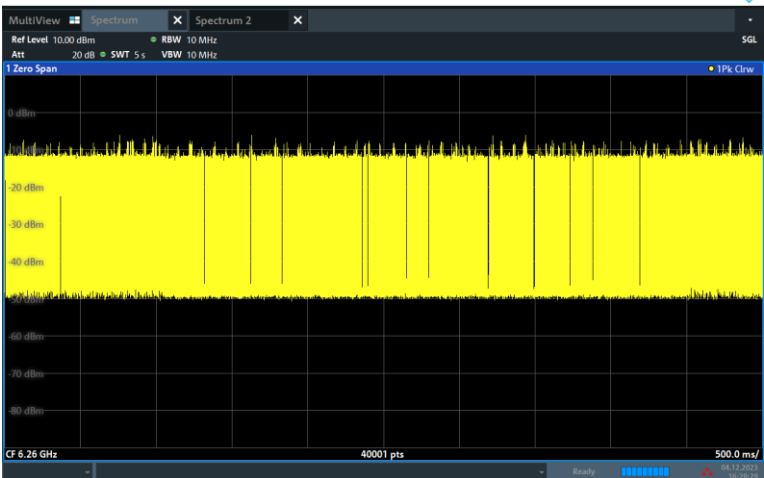
802.11ax HE160	6910 MHz Lower Edge 
6985 MHz $f_{c1} = f_{c2}$	
7060 MHz Upper Edge	

Contention Based Protocol Threshold Level Verify

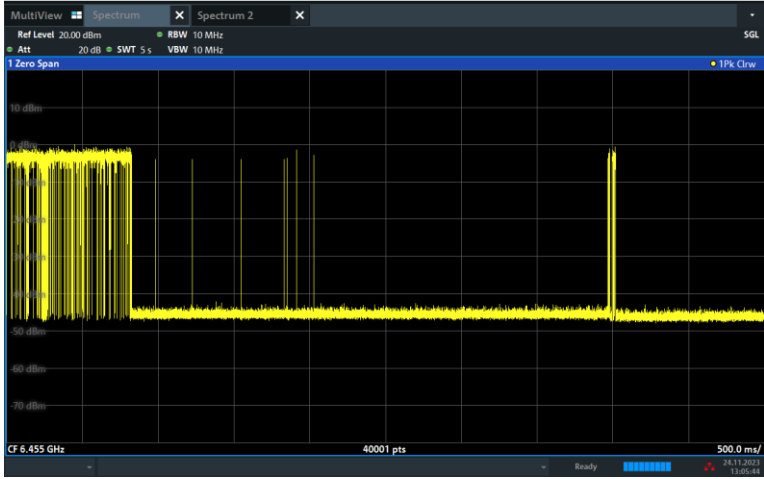
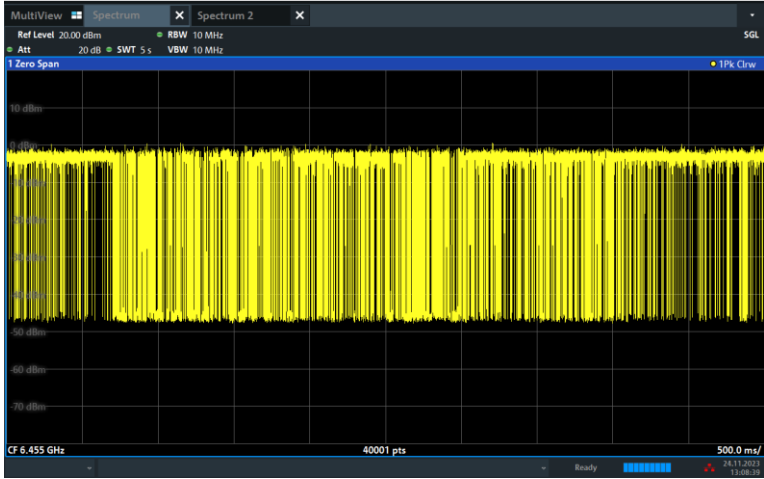
UNII 5:

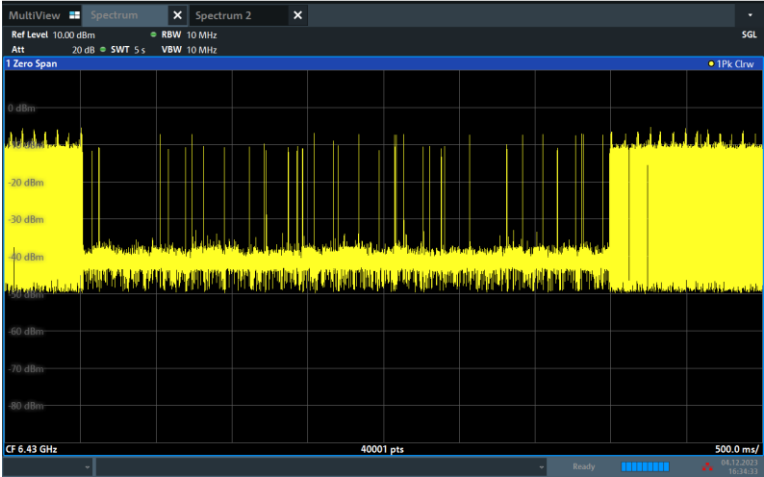
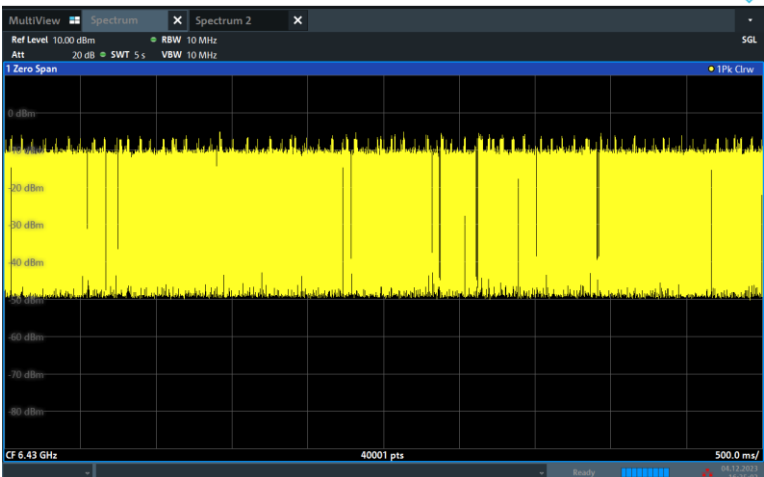
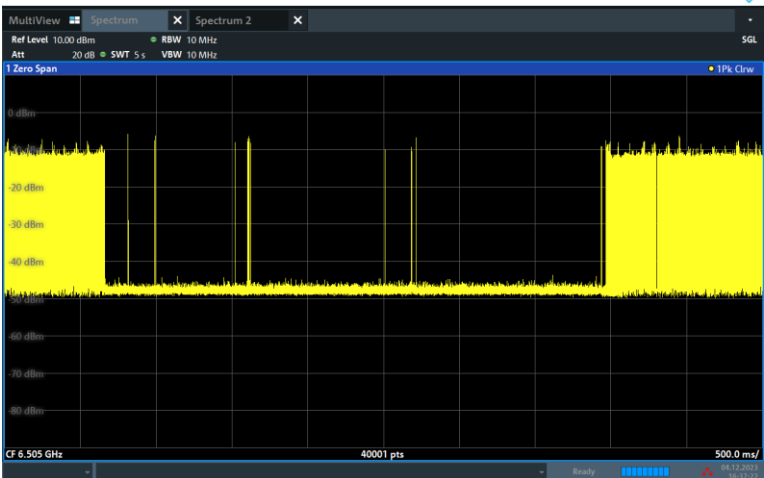
802.11ax HE20	
6135 MHz	

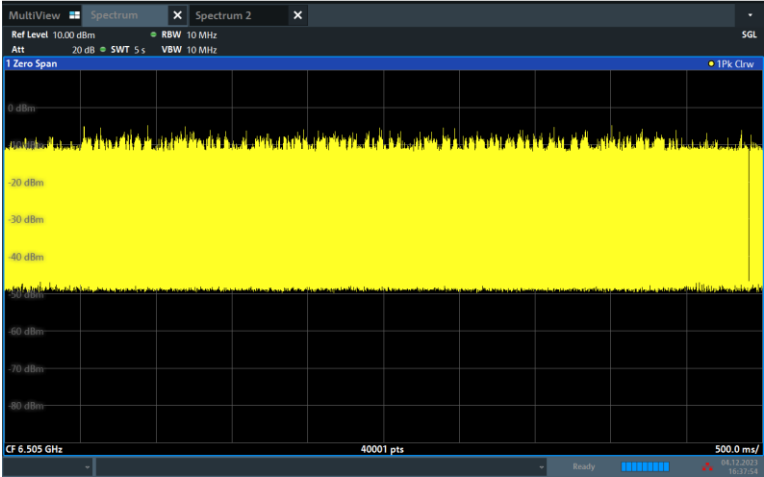
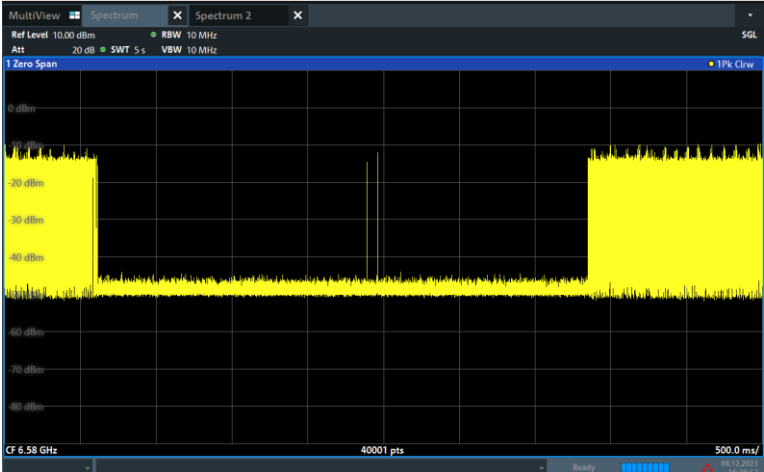
802.11ax HE160	
6110 MHz	
6185 MHz	

802.11ax HE160	
6185 MHz	
6260 MHz	
6260 MHz	

UNII 6:

802.11ax HE20	 6455 MHz
6455 MHz	 6455 MHz

802.11ax HE160	
6430 MHz	
6430 MHz	
6505 MHz	

802.11ax HE160	
6580 MHz	
6580 MHz	