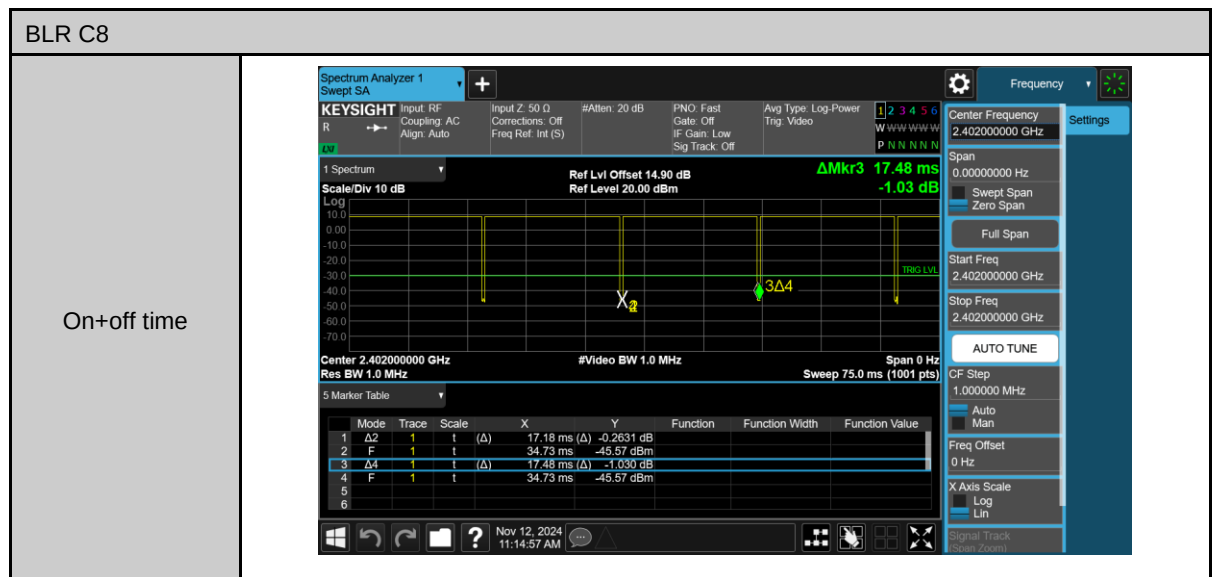
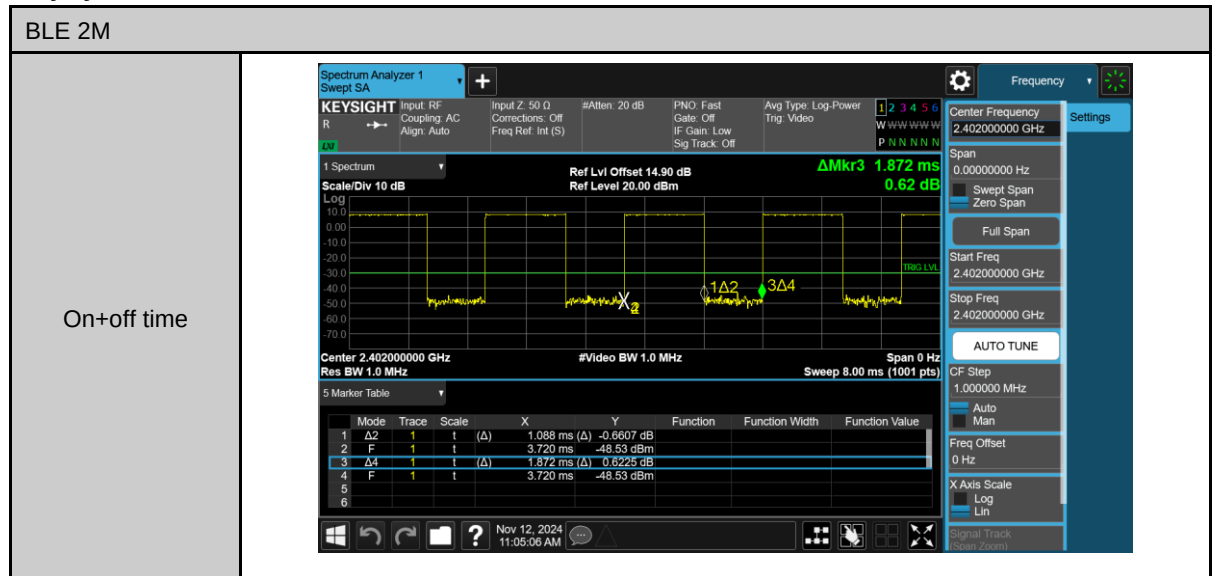
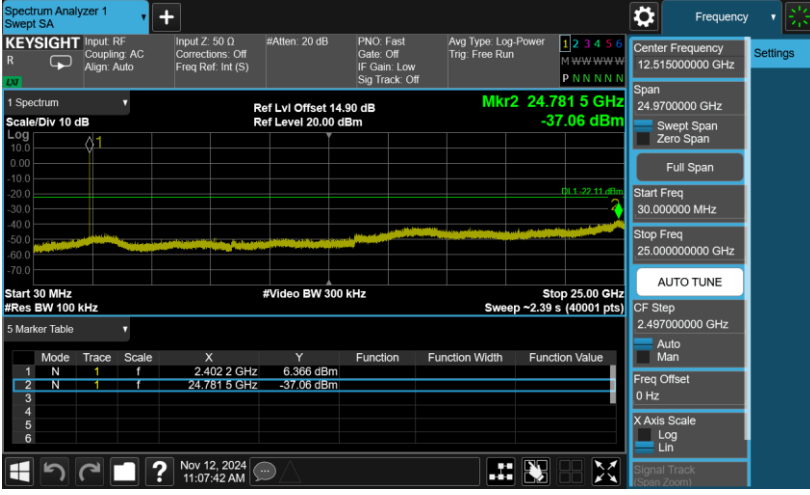
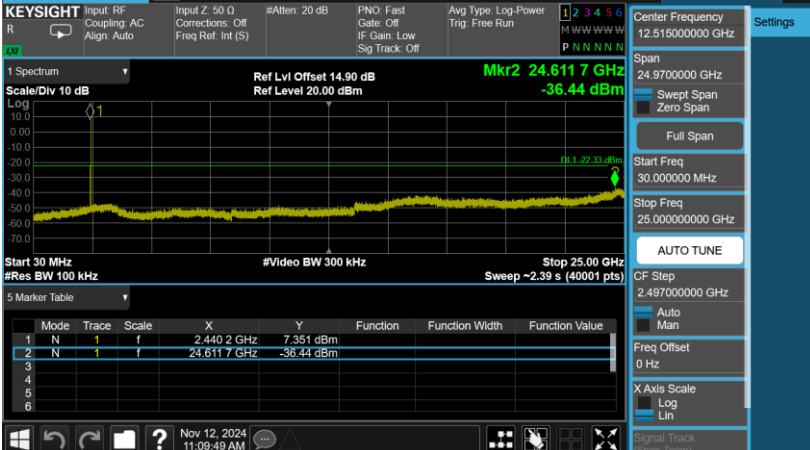
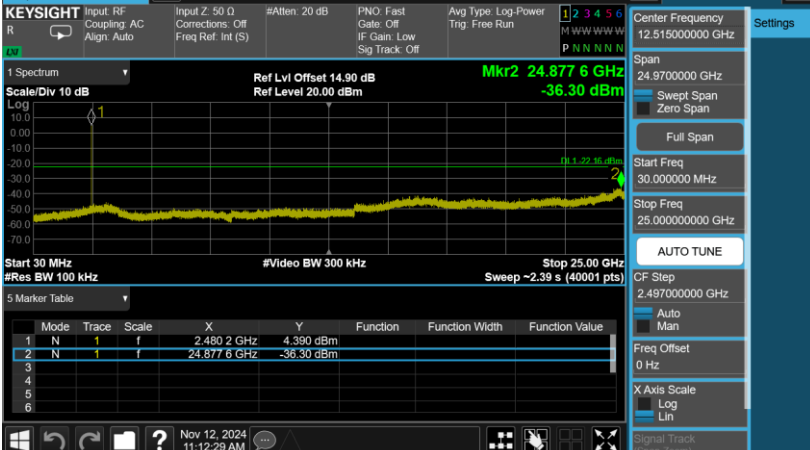


Appendix B. Test Plots

Duty cycle



Out of Band Conducted Spurious Emission

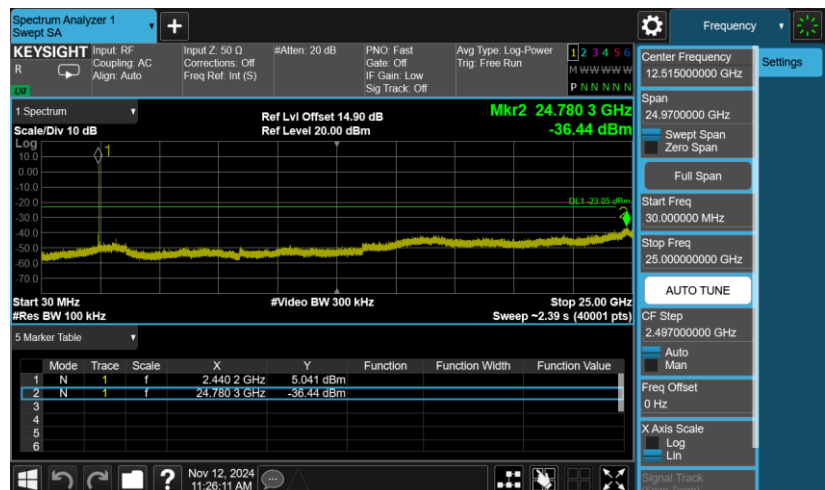
BLE 2M																																																									
Low ch	 Spectrum Analyzer 1 Sweep SA KEYSIGHT Input: RF Coupling: AC Align: Auto Input Z: 50 Ω Corrections: Off Freq Ref: Int (S) #Atten: 20 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Avg Type: Log-Power Trig: Free Run Center Frequency 12.51500000 GHz Span 24.97000000 GHz Sweep Span Zero Span Full Span AUTO TUNE CF Step 2.497000000 GHz Freq Offset 0 Hz X Axis Scale Log Signal Track Scale/Div 10 dB Ref Lvl Offset 14.90 dB Ref Level 20.00 dBm Mkr2 24.781 5 GHz -37.06 dBm Start 30 MHz #Res BW 100 kHz #Video BW 300 kHz Stop 25.00 GHz Sweep ~2.39 s (40001 pts) 5 Marker Table <table><thead><tr><th>Mode</th><th>Trace</th><th>Scale</th><th>X</th><th>Y</th><th>Function</th><th>Function Width</th><th>Function Value</th></tr></thead><tbody><tr><td>1</td><td>N</td><td>1</td><td>2.402 2 GHz</td><td>6.366 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>24.781 5 GHz</td><td>-37.06 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> Nov 12, 2024 11:07:42 AM	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value	1	N	1	2.402 2 GHz	6.366 dBm				2	N	1	24.781 5 GHz	-37.06 dBm				3								4								5								6							
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value																																																		
1	N	1	2.402 2 GHz	6.366 dBm																																																					
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Mode	Trace	Scale	X	Y	Function	Function Width	Function Value																																																		
1	N	1	2.440 2 GHz	7.351 dBm																																																					
2	N	1	24.611 7 GHz	-36.44 dBm																																																					
3																																																									
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5																																																									
6																																																									
High ch	 Spectrum Analyzer 1 Sweep SA KEYSIGHT Input: RF Coupling: AC Align: Auto Input Z: 50 Ω Corrections: Off Freq Ref: Int (S) #Atten: 20 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Avg Type: Log-Power Trig: Free Run Center Frequency 12.51500000 GHz Span 24.97000000 GHz Sweep Span Zero Span Full Span AUTO TUNE CF Step 2.497000000 GHz Freq Offset 0 Hz X Axis Scale Log Signal Track Scale/Div 10 dB Ref Lvl Offset 14.90 dB Ref Level 20.00 dBm Mkr2 24.877 6 GHz -36.30 dBm Start 30 MHz #Res BW 100 kHz #Video BW 300 kHz Stop 25.00 GHz Sweep ~2.39 s (40001 pts) 5 Marker Table <table><thead><tr><th>Mode</th><th>Trace</th><th>Scale</th><th>X</th><th>Y</th><th>Function</th><th>Function Width</th><th>Function Value</th></tr></thead><tbody><tr><td>1</td><td>N</td><td>1</td><td>2.480 2 GHz</td><td>4.390 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>24.877 6 GHz</td><td>-36.30 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> Nov 12, 2024 11:12:29 AM	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value	1	N	1	2.480 2 GHz	4.390 dBm				2	N	1	24.877 6 GHz	-36.30 dBm				3								4								5								6							
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value																																																		
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3																																																									
4																																																									
5																																																									
6																																																									

BLR C8

Low ch



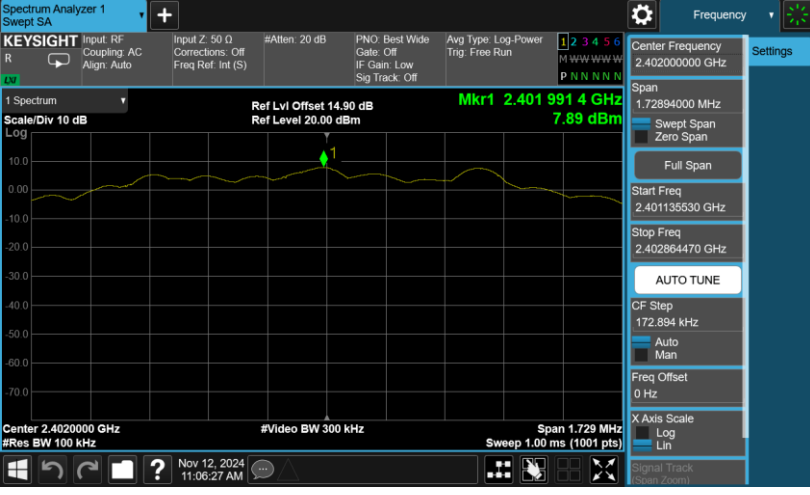
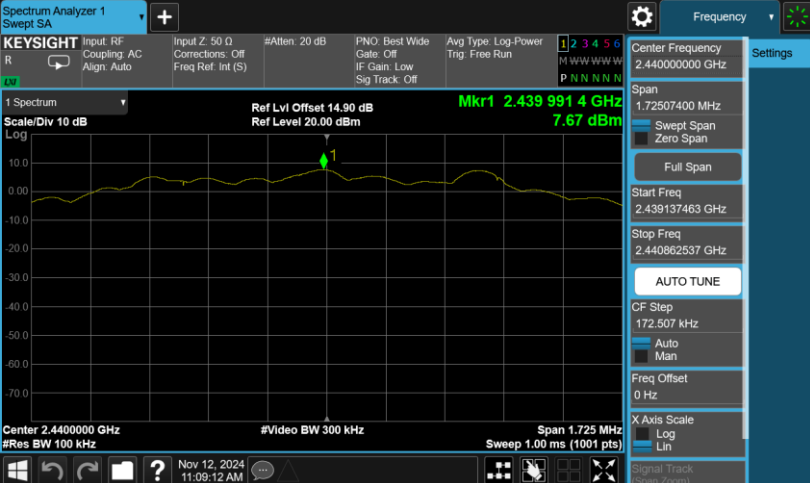
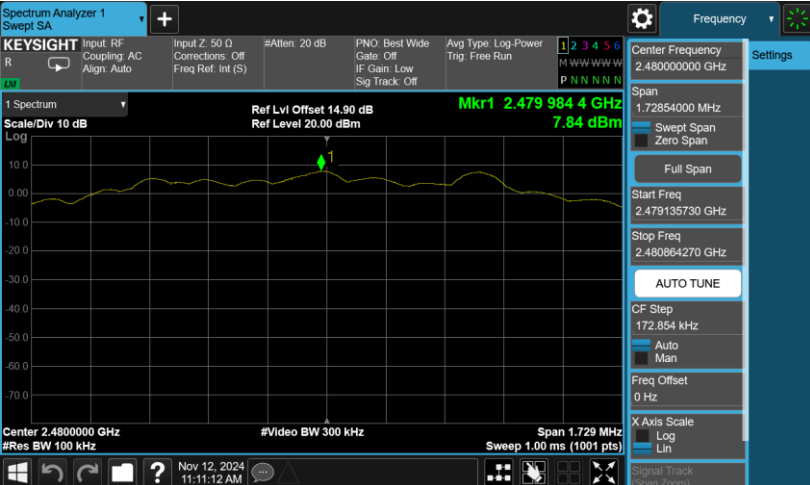
Mid ch



High ch

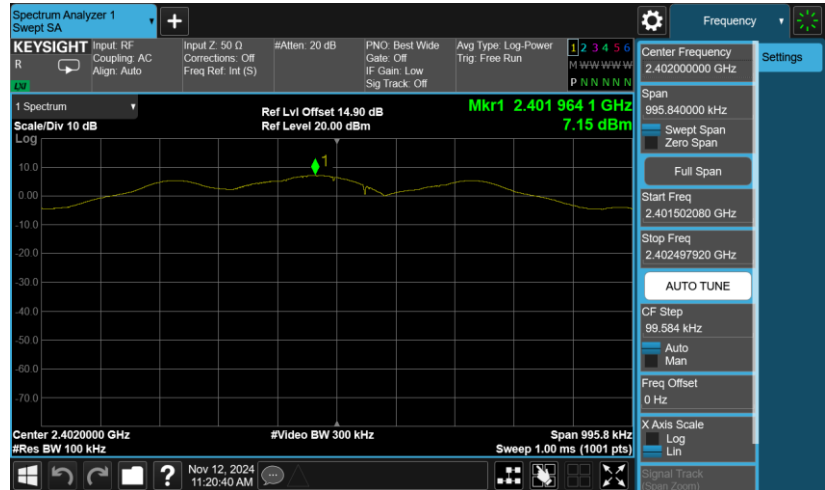


Reference level

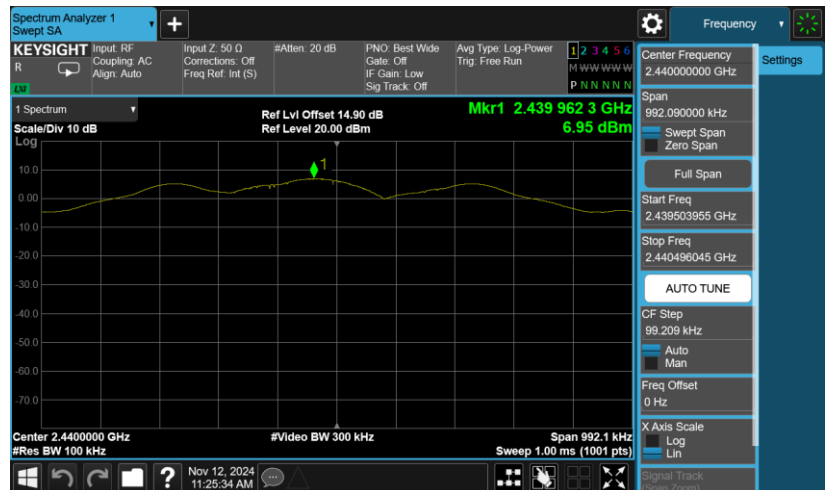
BLE 2M Low ch	
Mid ch	
High ch	

BLR C8

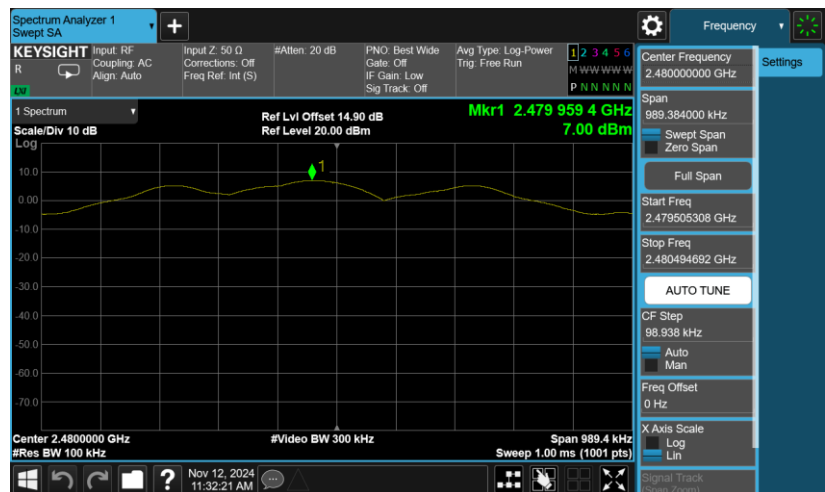
Low ch



Mid ch



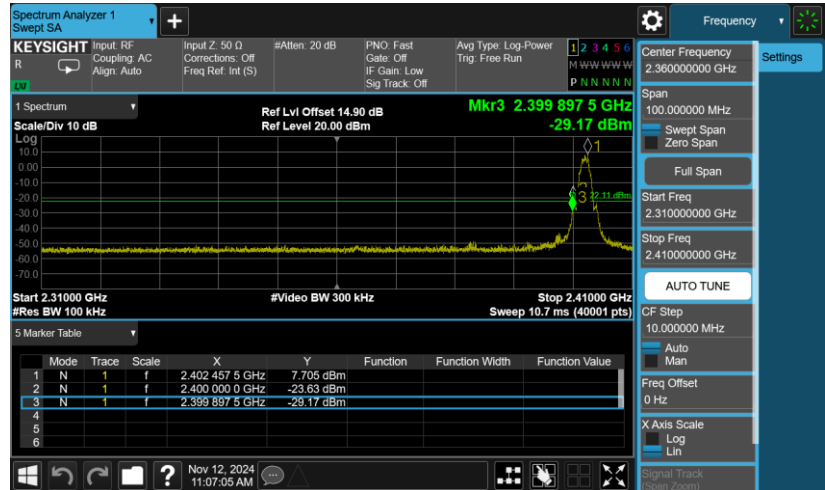
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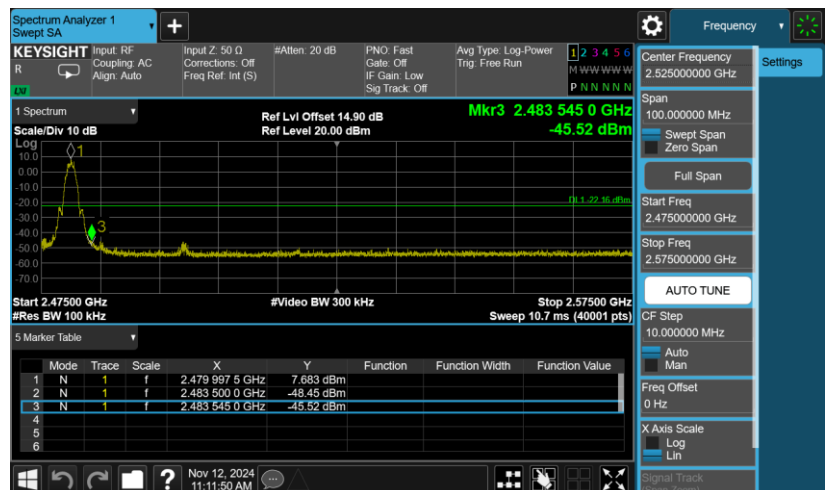
Conducted Band Edge

BLE 2M

Low ch

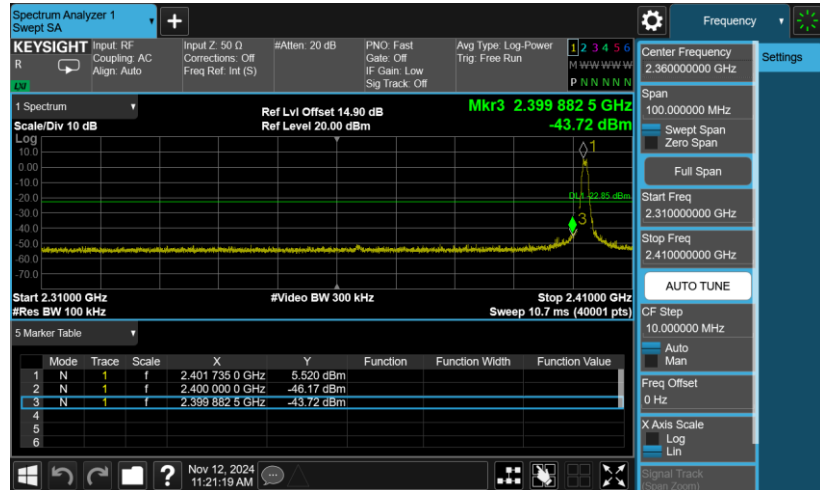


High ch

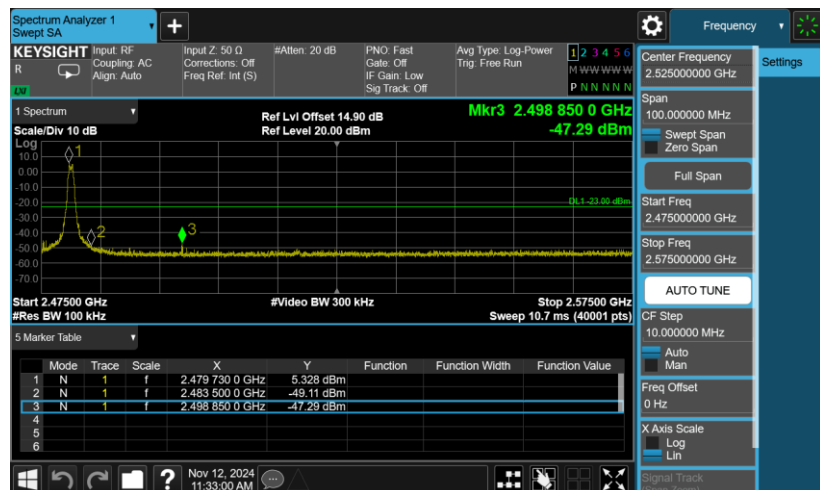


BLR C8

Low ch



High ch

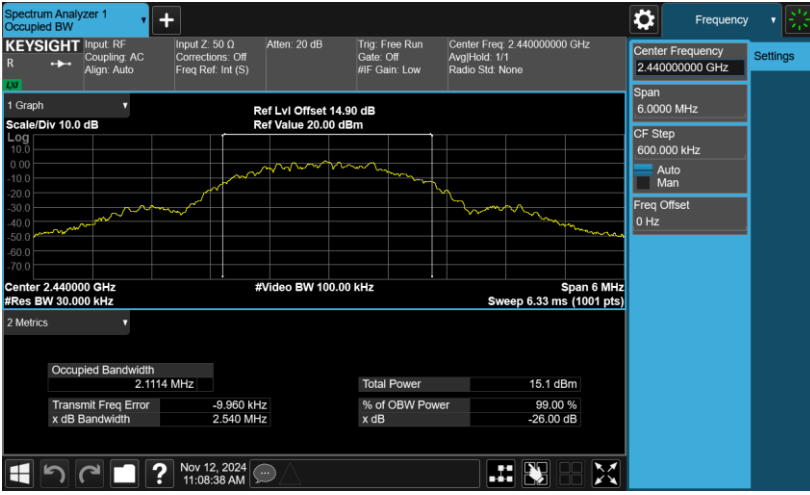


6 dB Bandwidth

BLE 2M	
Low ch	
Mid ch	
High ch	

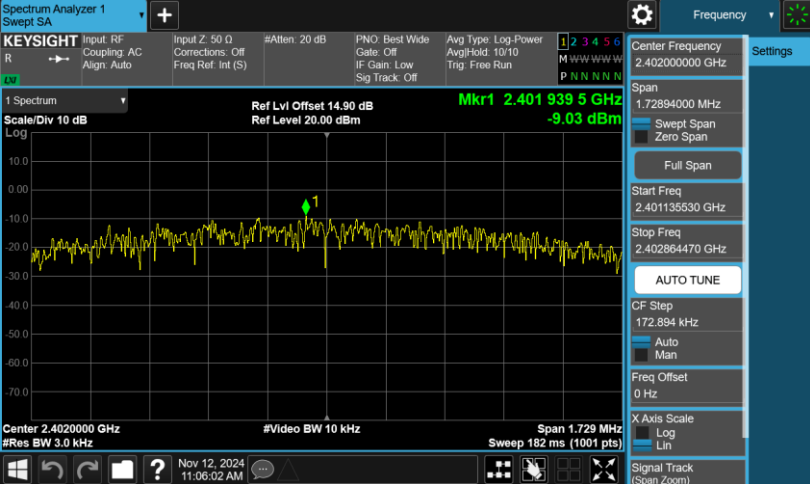
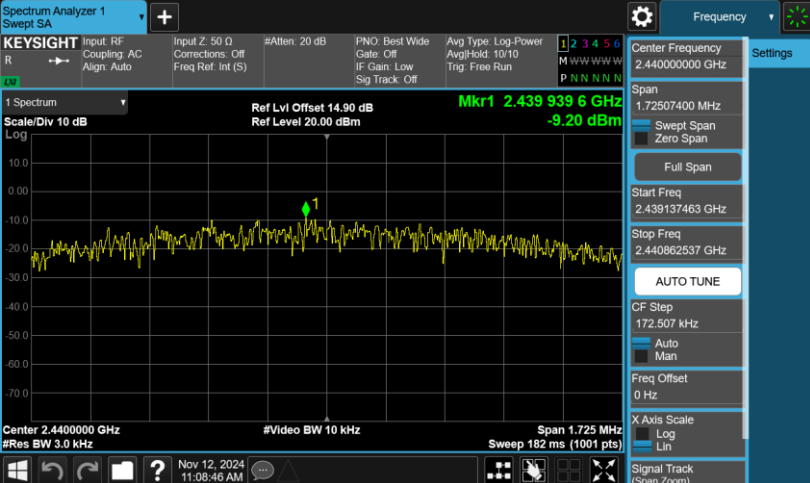
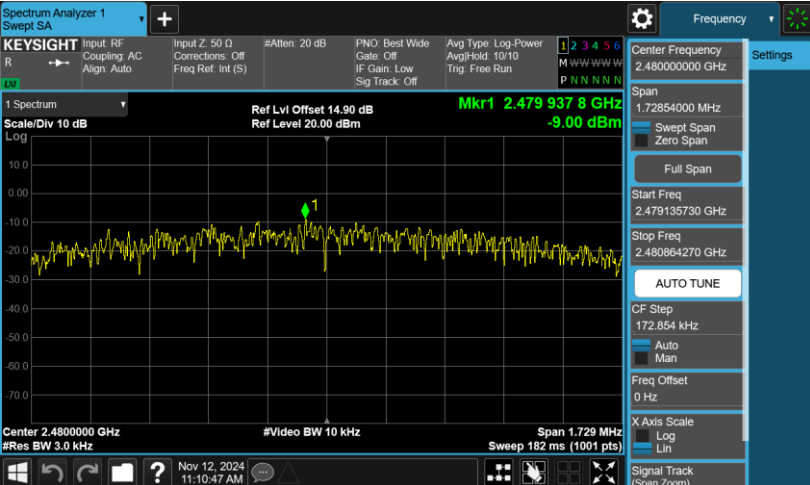
BLR C8	 Low ch
Mid ch	 Mid ch
High ch	 High ch

99 % Occupied Bandwidth

BLE 2M	
Low ch	
Mid ch	
High ch	

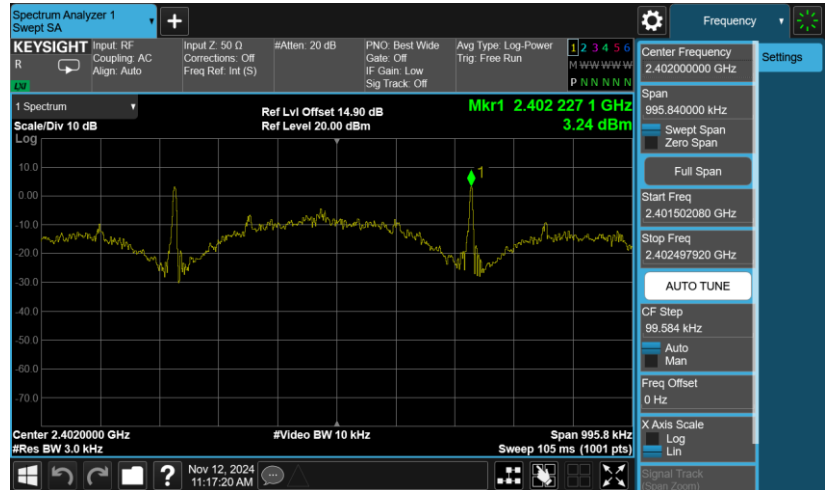
BLR C8	
Mid ch	
High ch	

Power Density

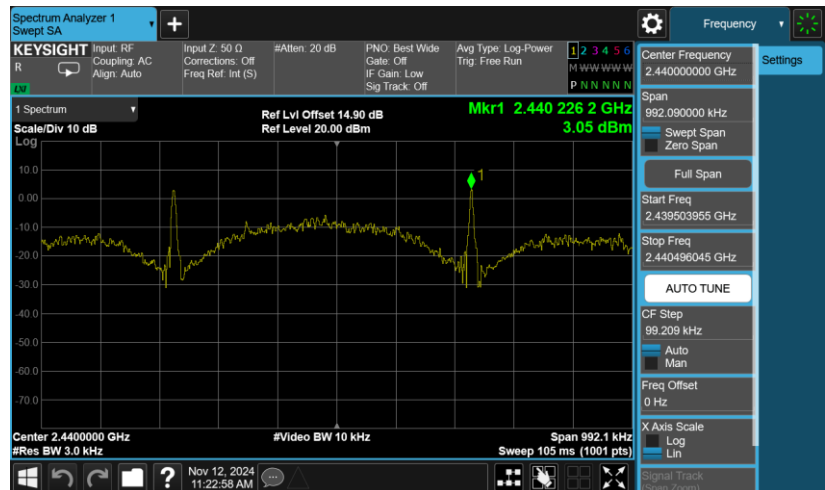
BLE 2M	
Low ch	
Mid ch	
High ch	

BLR C8

Low ch



Mid ch



High ch

