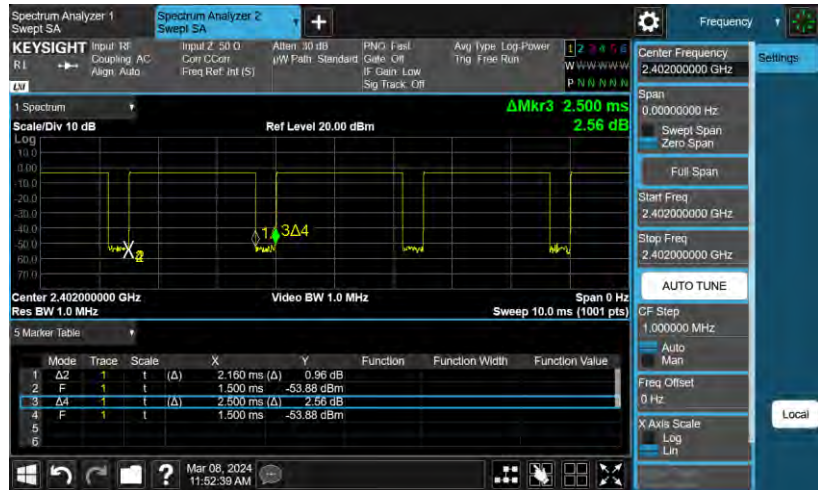


## Appendix B. Test Plots

### Duty cycle

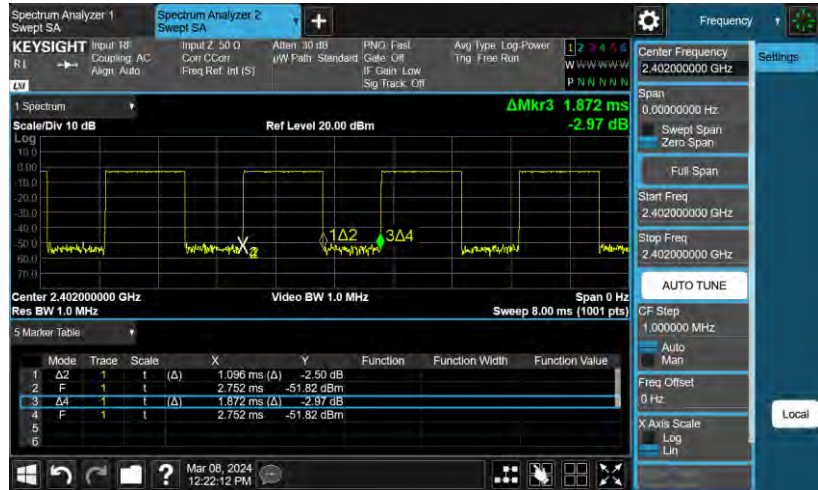
#### BLE 1M

On-off time



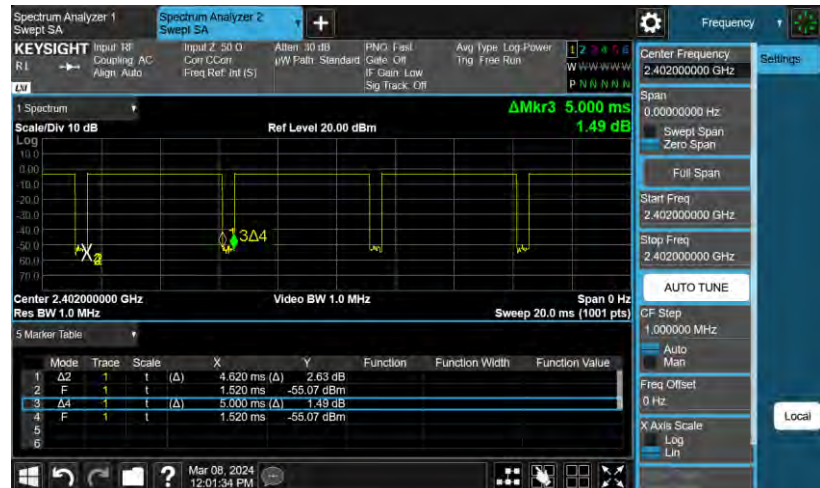
#### BLE 2M

On-off time



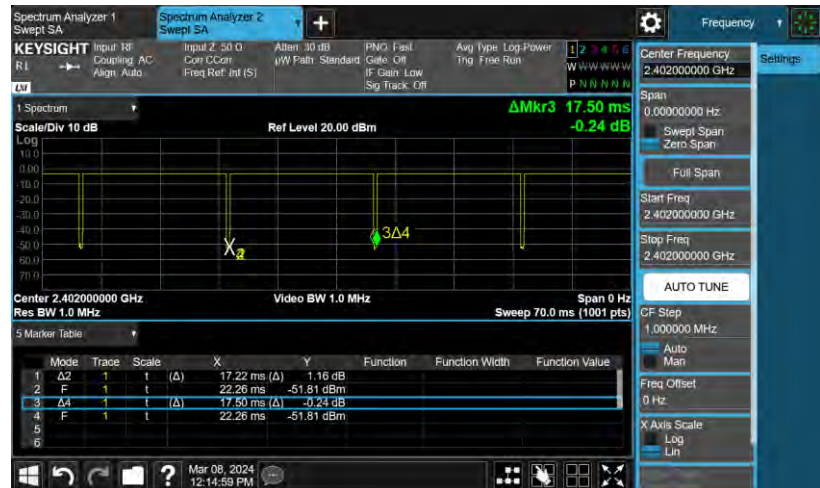
BLR C2

On+off time

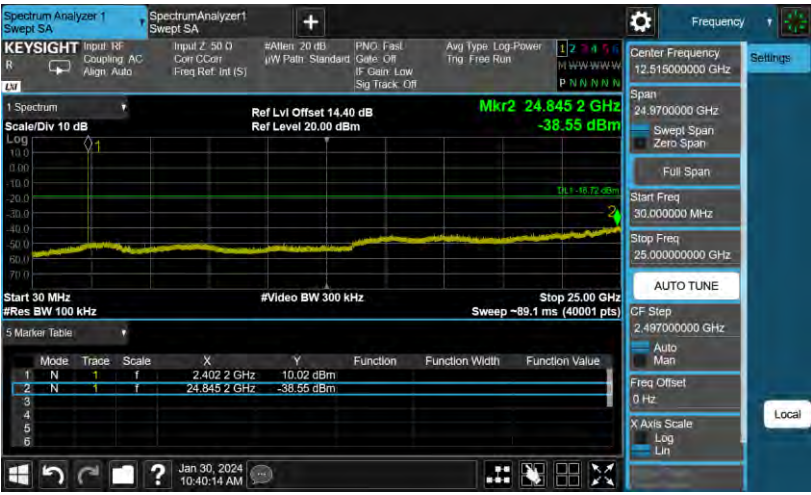

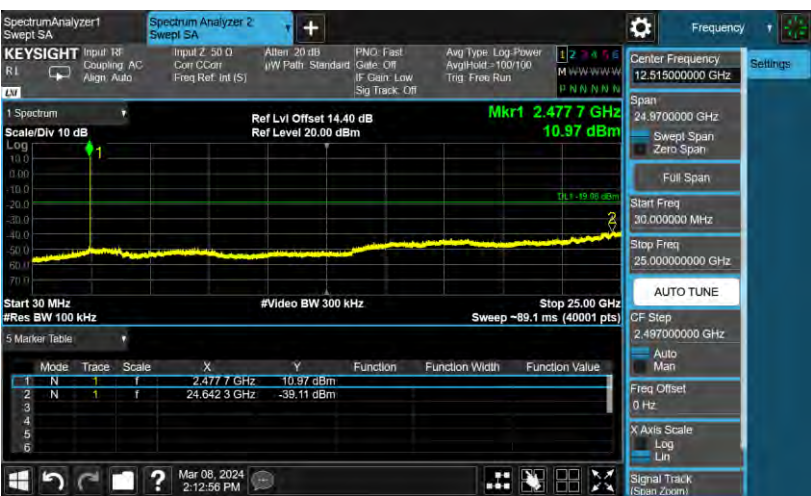


BLR C8

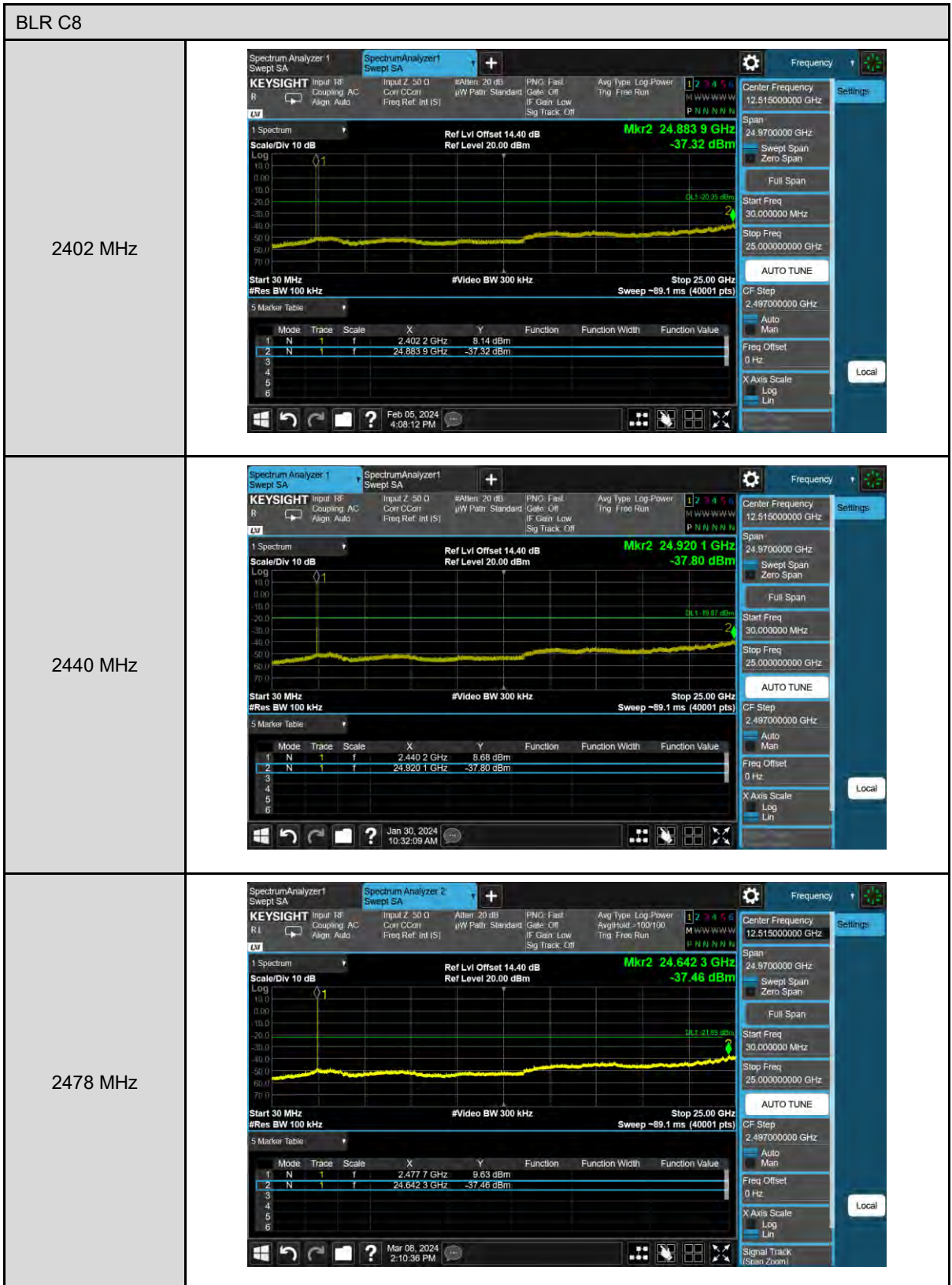
On+off time

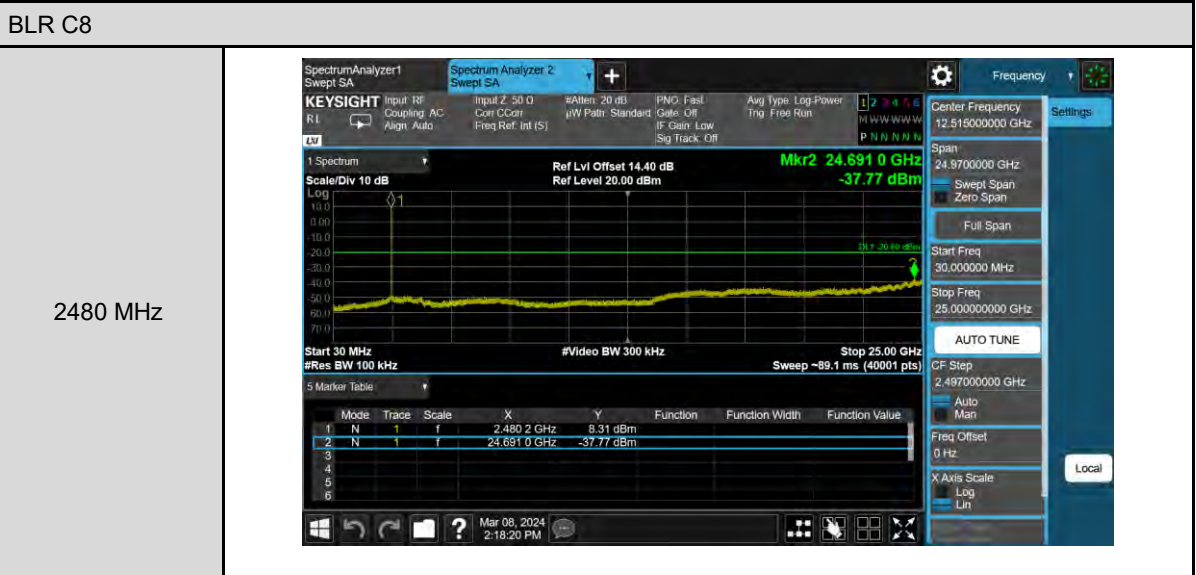


Out of Band Conducted Spurious Emission

BLE 2M																									
2402 MHz	 <p>Center Frequency: 12.515000000 GHz</p> <p>Span: 24.9700000 GHz</p> <p>Start Freq: 30.000000 MHz</p> <p>Stop Freq: 25.000000000 GHz</p> <p>Scale/Div: 10 dB</p> <p>Ref Lvl Offset: 14.40 dB</p> <p>Ref Level: 20.00 dBm</p> <p>Mkr2: 24.845 2 GHz, -38.55 dBm</p> <table border="1"> <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>10.02 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>24.845 2 GHz</td> <td>-38.55 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value	1	N	1	2.402 2 GHz	10.02 dBm				2	N	1	24.845 2 GHz	-38.55 dBm			
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1	N	1	2.402 2 GHz	10.02 dBm																					
2	N	1	24.845 2 GHz	-38.55 dBm																					
2440 MHz	 <p>Center Frequency: 12.515000000 GHz</p> <p>Span: 24.9700000 GHz</p> <p>Start Freq: 30.000000 MHz</p> <p>Stop Freq: 25.000000000 GHz</p> <p>Scale/Div: 10 dB</p> <p>Ref Lvl Offset: 14.40 dB</p> <p>Ref Level: 20.00 dBm</p> <p>Mkr2: 24.854 5 GHz, -38.59 dBm</p> <table border="1"> <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>2.440 2 GHz</td> <td>11.08 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>24.854 5 GHz</td> <td>-38.59 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value	1	N	1	2.440 2 GHz	11.08 dBm				2	N	1	24.854 5 GHz	-38.59 dBm			
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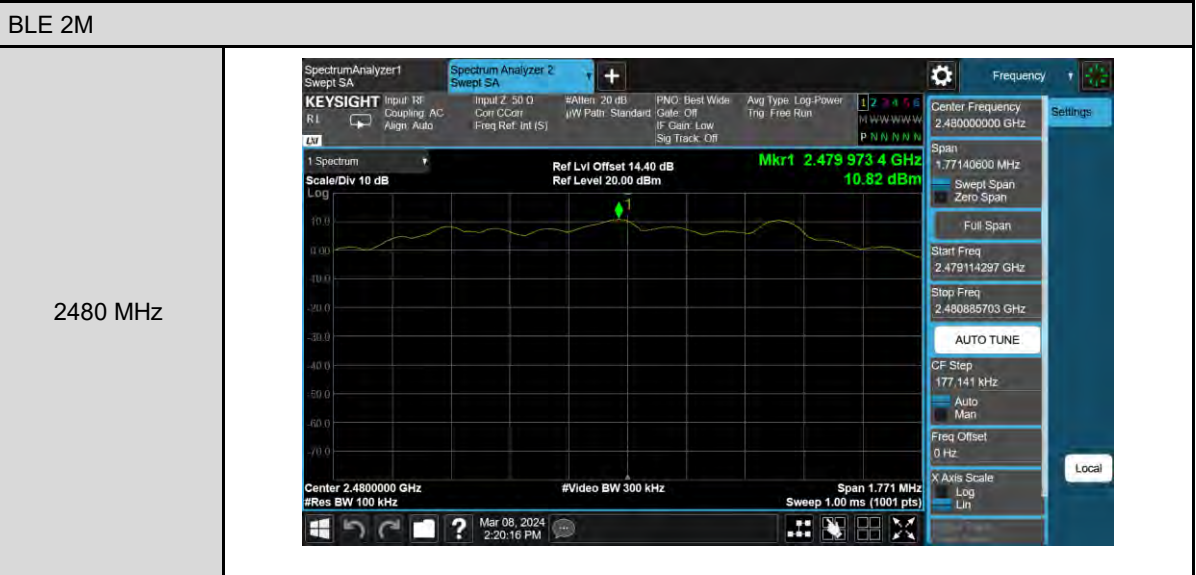






Reference level

<p>BLE 2M</p> <p>2402 MHz</p>	
<p>2440 MHz</p>	
<p>2478 MHz</p>	





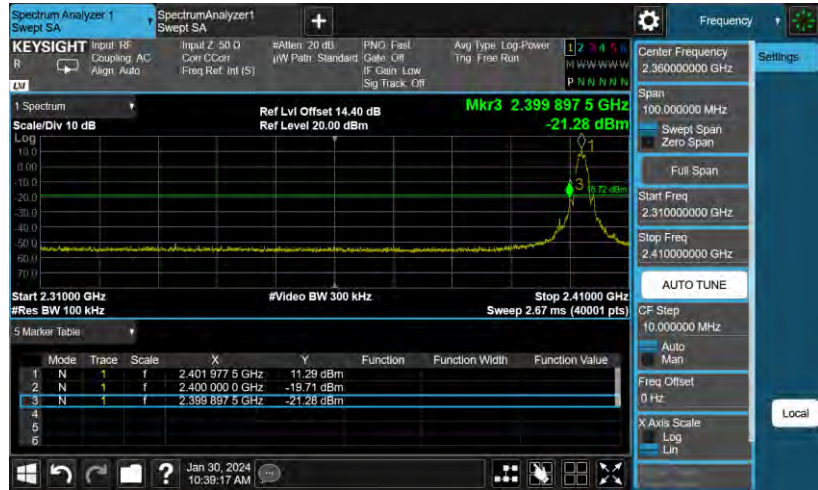
BLR C8	
2402 MHz	
2440 MHz	
2478 MHz	



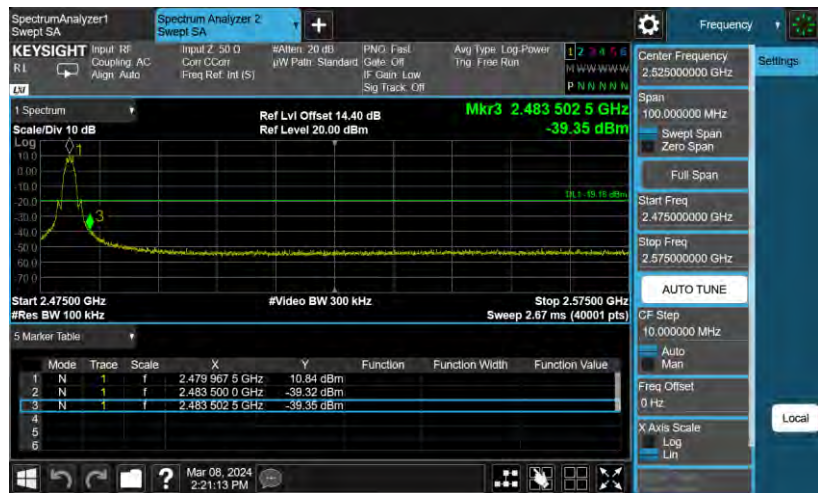
Conducted Band Edge

BLE 2M

2402 MHz

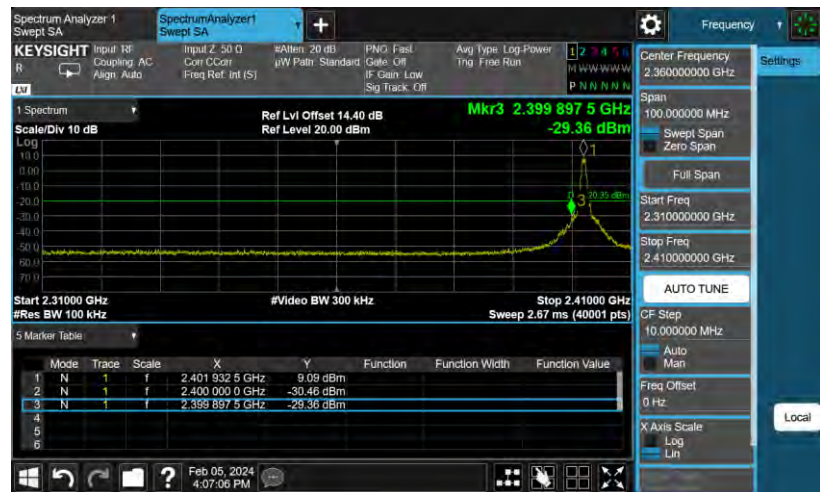


2480 MHz

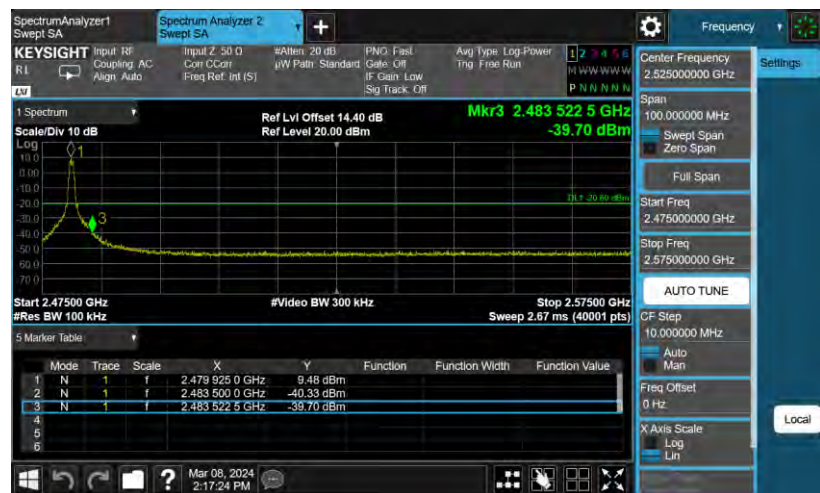


BLR C8

2402 MHz



2480 MHz

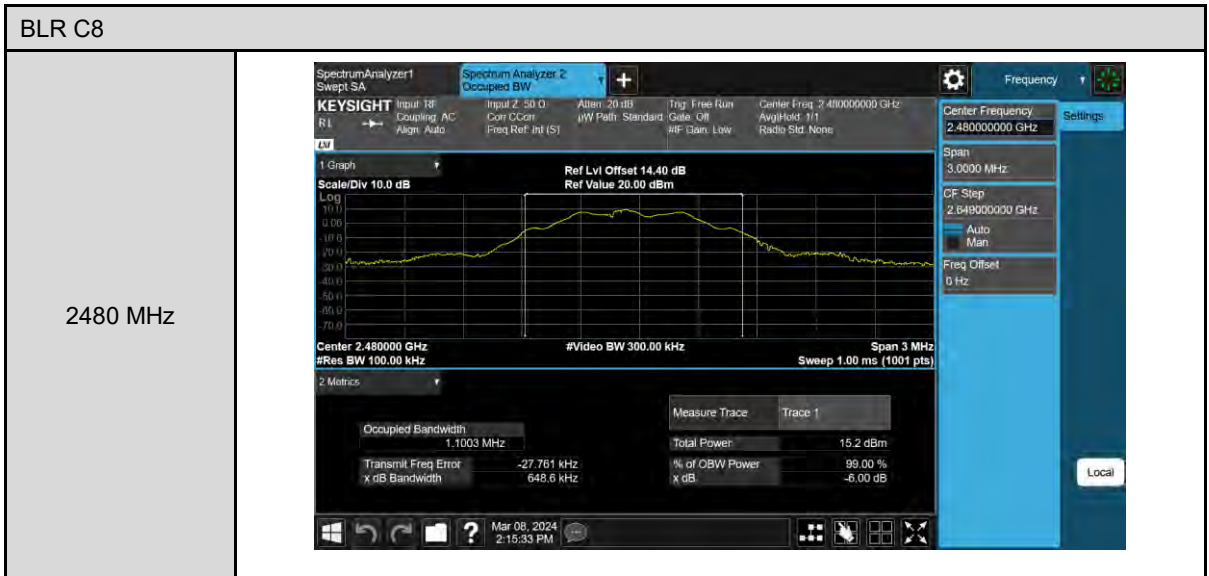


6 dB Bandwidth

BLE 2M	
2402 MHz	
2440 MHz	
2478 MHz	



BLR C8	
2402 MHz	<p>Center 2.402000 GHz #Res BW 100.00 kHz #Video BW 300.00 kHz Sweep 1.00 ms (1001 pts)</p> <p>1 Graph Scale/Div 10.0 dB Ref Lvl Offset 14.40 dB Ref Value 20.00 dBm</p> <p>2 Metrics Occupied Bandwidth 1.0660 MHz Total Power 15.3 dBm Transmit Freq Error -31.551 kHz % of OBW Power 99.00 % x dB Bandwidth 637.4 kHz x dB -6.00 dB</p>
2440 MHz	<p>Center 2.440000 GHz #Res BW 100.00 kHz #Video BW 300.00 kHz Sweep 1.00 ms (1001 pts)</p> <p>1 Graph Scale/Div 10.0 dB Ref Lvl Offset 14.40 dB Ref Value 20.00 dBm</p> <p>2 Metrics Occupied Bandwidth 1.0688 MHz Total Power 16.0 dBm Transmit Freq Error -34.354 kHz % of OBW Power 99.00 % x dB Bandwidth 641.1 kHz x dB -6.00 dB</p>
2478 MHz	<p>Center 2.478000 GHz #Res BW 100.00 kHz #Video BW 300.00 kHz Sweep 1.00 ms (1001 pts)</p> <p>1 Graph Scale/Div 10.0 dB Ref Lvl Offset 14.40 dB Ref Value 20.00 dBm</p> <p>2 Metrics Occupied Bandwidth 1.0741 MHz Total Power 14.8 dBm Transmit Freq Error -41.923 kHz % of OBW Power 99.00 % x dB Bandwidth 685.3 kHz x dB -6.00 dB</p>



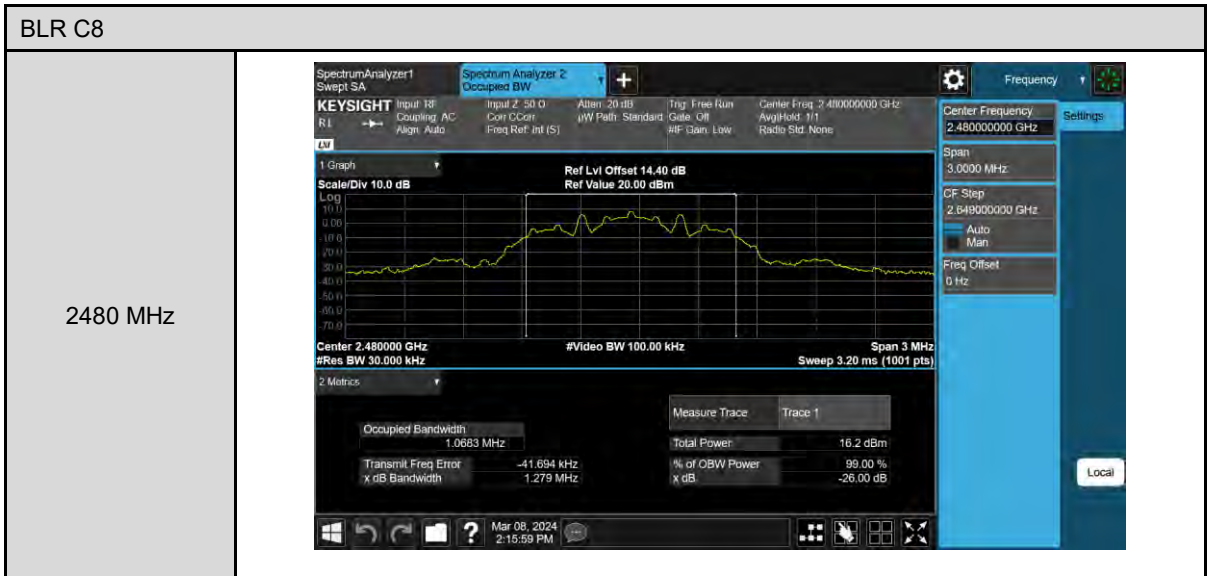


99 % Occupied Bandwidth

BLE 2M	
2402 MHz	<p>Center Frequency: 2.402000000 GHz</p> <p>Span: 6.0000 MHz</p> <p>CF Step: 800.000 kHz</p> <p>Scale/Div: 10.0 dB</p> <p>Ref Lvl Offset: 14.40 dB</p> <p>Ref Value: 20.00 dBm</p> <p>Center: 2.402000 GHz</p> <p>#Res BW: 30.000 kHz</p> <p>#Video BW: 100.00 kHz</p> <p>Span: 6 MHz</p> <p>Sweep: 6.33 ms (1001 pts)</p> <p>Occupied Bandwidth: 2.0729 MHz</p> <p>Total Power: 17.8 dBm</p> <p>% of OBW Power: 99.00 %</p> <p>Transmit Freq Error: -7.482 kHz</p> <p>x dB Bandwidth: 2.463 MHz</p> <p>Jan 30, 2024 10:37:50 AM</p>
2440 MHz	<p>Center Frequency: 2.440000000 GHz</p> <p>Span: 6.0000 MHz</p> <p>CF Step: 800.000 kHz</p> <p>Scale/Div: 10.0 dB</p> <p>Ref Lvl Offset: 14.40 dB</p> <p>Ref Value: 20.00 dBm</p> <p>Center: 2.440000 GHz</p> <p>#Res BW: 30.000 kHz</p> <p>#Video BW: 100.00 kHz</p> <p>Span: 6 MHz</p> <p>Sweep: 6.33 ms (1001 pts)</p> <p>Occupied Bandwidth: 2.0968 MHz</p> <p>Total Power: 17.8 dBm</p> <p>% of OBW Power: 99.00 %</p> <p>Transmit Freq Error: -12.660 kHz</p> <p>x dB Bandwidth: 2.500 MHz</p> <p>Jan 30, 2024 10:41:44 AM</p>
2478 MHz	<p>Center Frequency: 2.478000000 GHz</p> <p>Span: 6.0000 MHz</p> <p>CF Step: 800.000 kHz</p> <p>Scale/Div: 10.0 dB</p> <p>Ref Lvl Offset: 14.40 dB</p> <p>Ref Value: 20.00 dBm</p> <p>Center: 2.478000 GHz</p> <p>#Res BW: 30.000 kHz</p> <p>#Video BW: 100.00 kHz</p> <p>Span: 6 MHz</p> <p>Sweep: 6.33 ms (1001 pts)</p> <p>Occupied Bandwidth: 2.1014 MHz</p> <p>Total Power: 18.3 dBm</p> <p>% of OBW Power: 99.00 %</p> <p>Transmit Freq Error: -32.035 kHz</p> <p>x dB Bandwidth: 2.521 MHz</p> <p>Mar 06, 2024 1:46:16 PM</p>



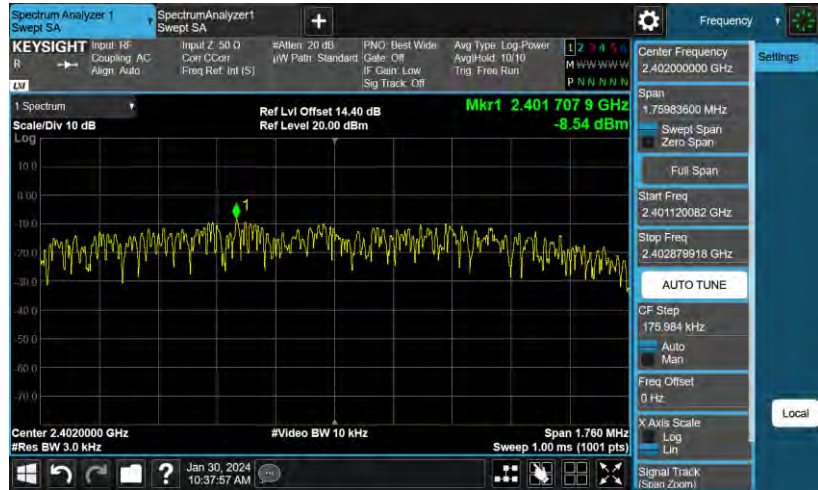
BLR C8													
2402 MHz	<p>Center Frequency: 2.402000000 GHz Span: 3.0000 MHz CF Step: 300.000 kHz Freq Offset: 0 Hz</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>1.0605 MHz</td> <td>Total Power</td> <td>16.0 dBm</td> </tr> <tr> <td>Transmit Freq Error</td> <td>-33.026 kHz</td> <td>% of OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>1.279 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> </table>	Occupied Bandwidth	1.0605 MHz	Total Power	16.0 dBm	Transmit Freq Error	-33.026 kHz	% of OBW Power	99.00 %	x dB Bandwidth	1.279 MHz	x dB	-26.00 dB
Occupied Bandwidth	1.0605 MHz	Total Power	16.0 dBm										
Transmit Freq Error	-33.026 kHz	% of OBW Power	99.00 %										
x dB Bandwidth	1.279 MHz	x dB	-26.00 dB										
2440 MHz	<p>Center Frequency: 2.440000000 GHz Span: 3.0000 MHz CF Step: 300.000 kHz Freq Offset: 0 Hz</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>1.0646 MHz</td> <td>Total Power</td> <td>16.7 dBm</td> </tr> <tr> <td>Transmit Freq Error</td> <td>-33.696 kHz</td> <td>% of OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>1.282 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> </table>	Occupied Bandwidth	1.0646 MHz	Total Power	16.7 dBm	Transmit Freq Error	-33.696 kHz	% of OBW Power	99.00 %	x dB Bandwidth	1.282 MHz	x dB	-26.00 dB
Occupied Bandwidth	1.0646 MHz	Total Power	16.7 dBm										
Transmit Freq Error	-33.696 kHz	% of OBW Power	99.00 %										
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Transmit Freq Error	-41.368 kHz	% of OBW Power	99.00 %										
x dB Bandwidth	1.276 MHz	x dB	-26.00 dB										



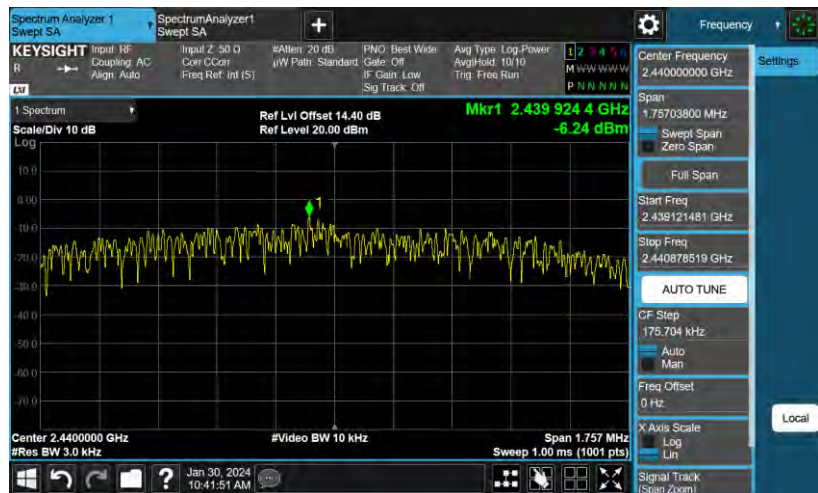
Power Density

BLE 2M

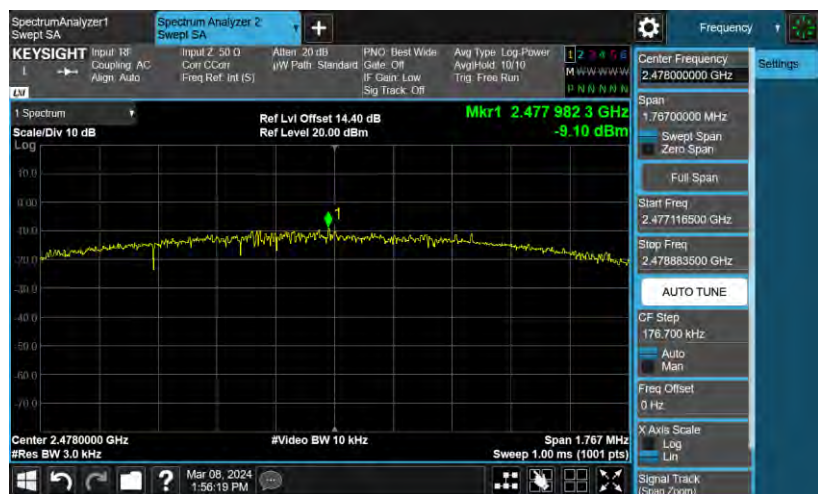
2402 MHz

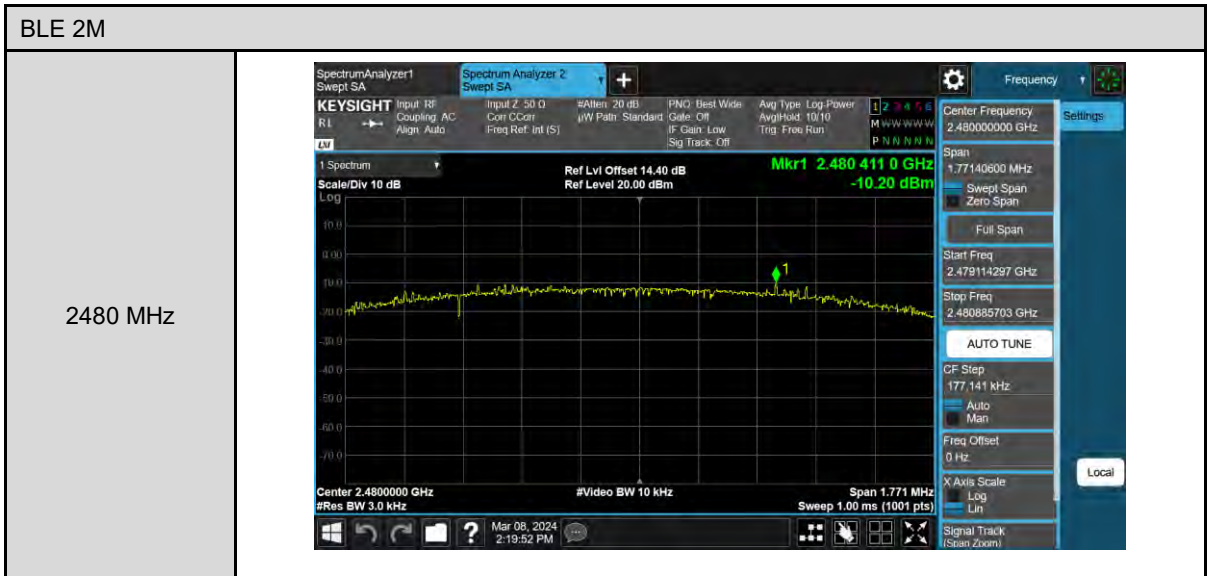


2440 MHz



2478 MHz





<p>BLR C8</p> <p>2402 MHz</p>	
<p>2440 MHz</p>	
<p>2478 MHz</p>	

BLR C8

2480 MHz

