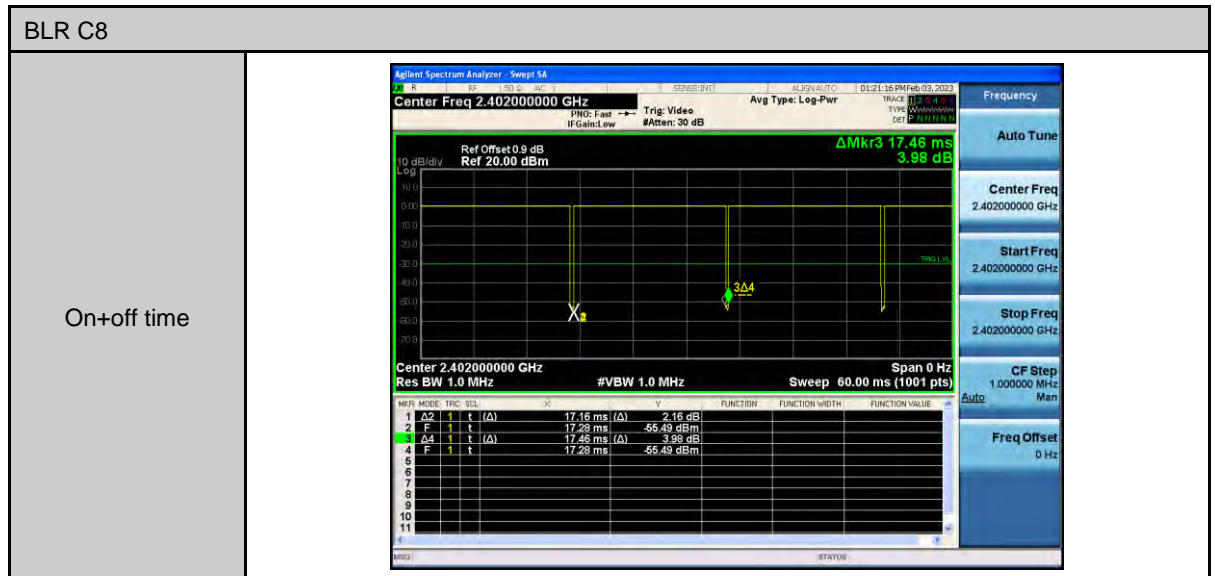
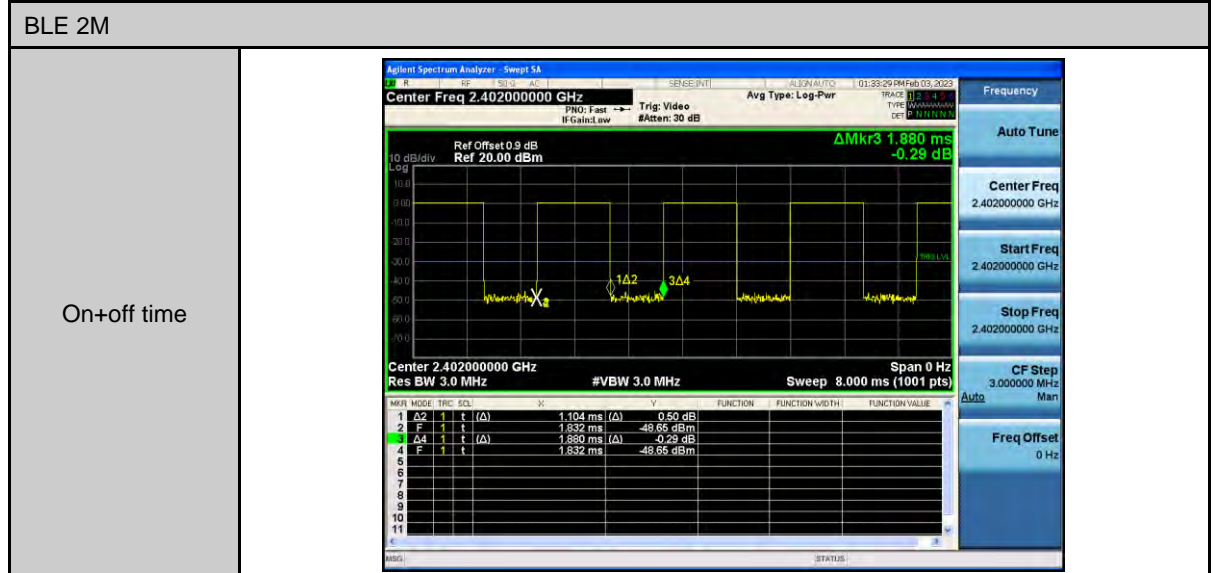
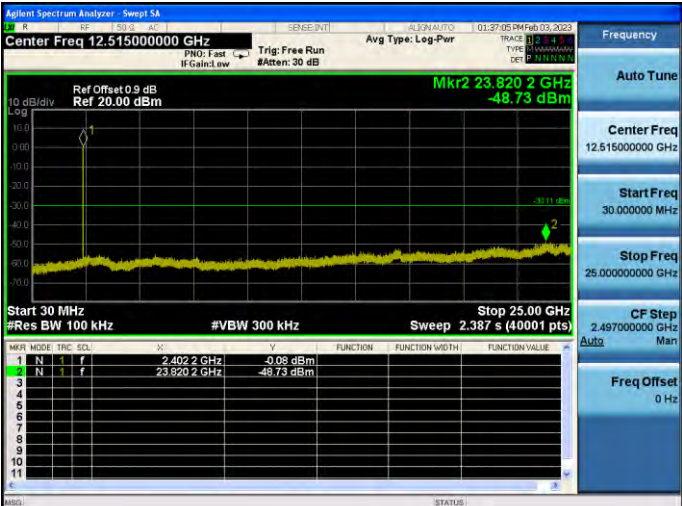
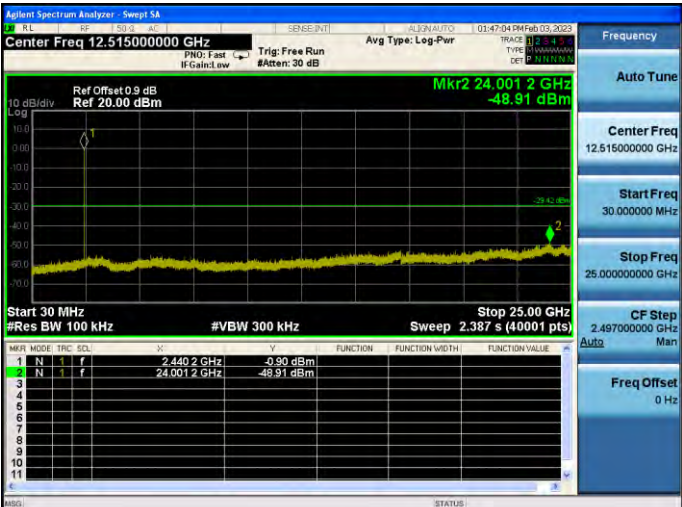
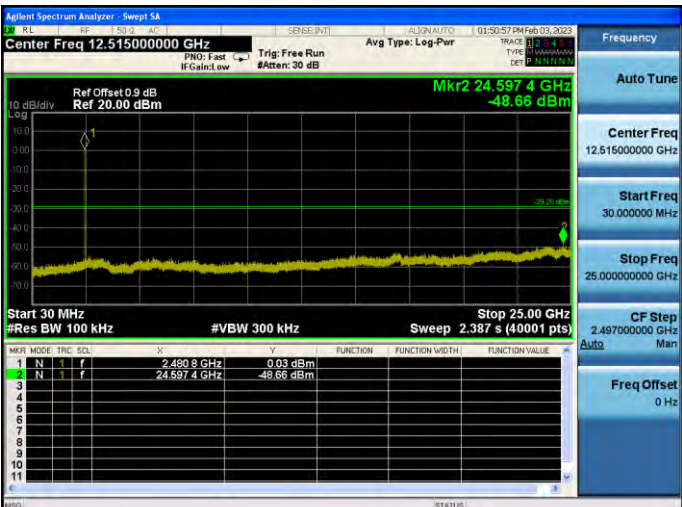


Appendix B. Test Plots

Duty cycle

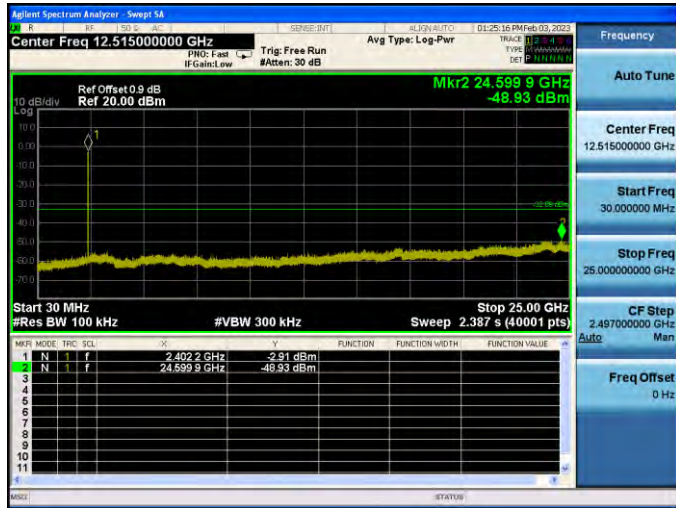


Out of Band Conducted Spurious Emission

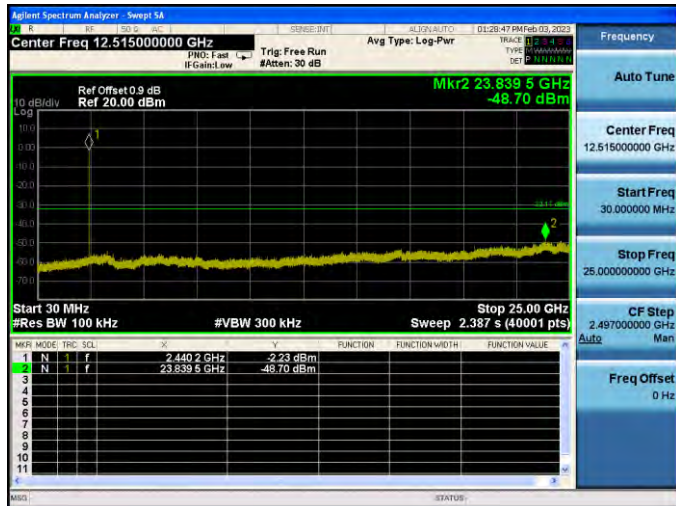
BLE 2M																												
Low ch	 <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Mkr2 23.820 2 GHz -48.73 dBm</p> <p>Start 30 MHz Stop 25.00 GHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SCN</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>f</td> <td>2.402 2 GHz</td> <td>-0.08 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.820 2 GHz</td> <td>-48.73 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MNR	MODE	TRC	SCN	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.402 2 GHz	-0.08 dBm				2	N	1	f	23.820 2 GHz	-48.73 dBm			
MNR	MODE	TRC	SCN	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
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2	N	1	f	23.820 2 GHz	-48.73 dBm																							
Mid ch	 <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Mkr2 24.001 2 GHz -48.91 dBm</p> <p>Start 30 MHz Stop 25.00 GHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SCN</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>f</td> <td>2.440 2 GHz</td> <td>-0.90 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>24.001 2 GHz</td> <td>-48.91 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MNR	MODE	TRC	SCN	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.440 2 GHz	-0.90 dBm				2	N	1	f	24.001 2 GHz	-48.91 dBm			
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High ch	 <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Mkr2 24.597 4 GHz -48.66 dBm</p> <p>Start 30 MHz Stop 25.00 GHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SCN</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>f</td> <td>2.489 8 GHz</td> <td>0.03 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>24.597 4 GHz</td> <td>-48.66 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MNR	MODE	TRC	SCN	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.489 8 GHz	0.03 dBm				2	N	1	f	24.597 4 GHz	-48.66 dBm			
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BLR C8

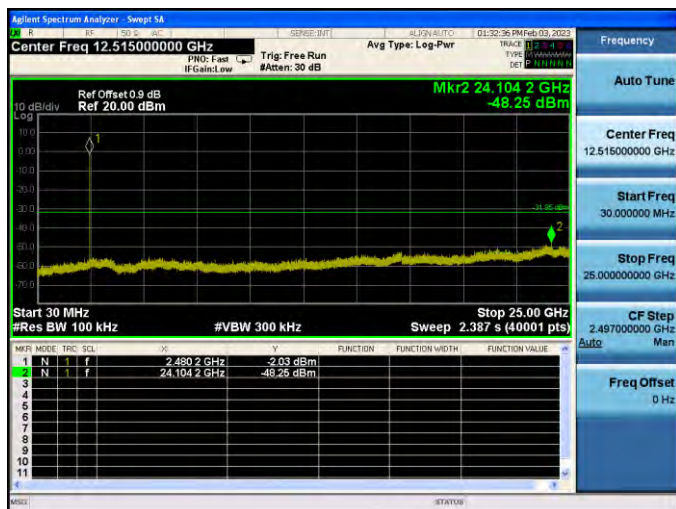
Low ch



Mid ch






High ch

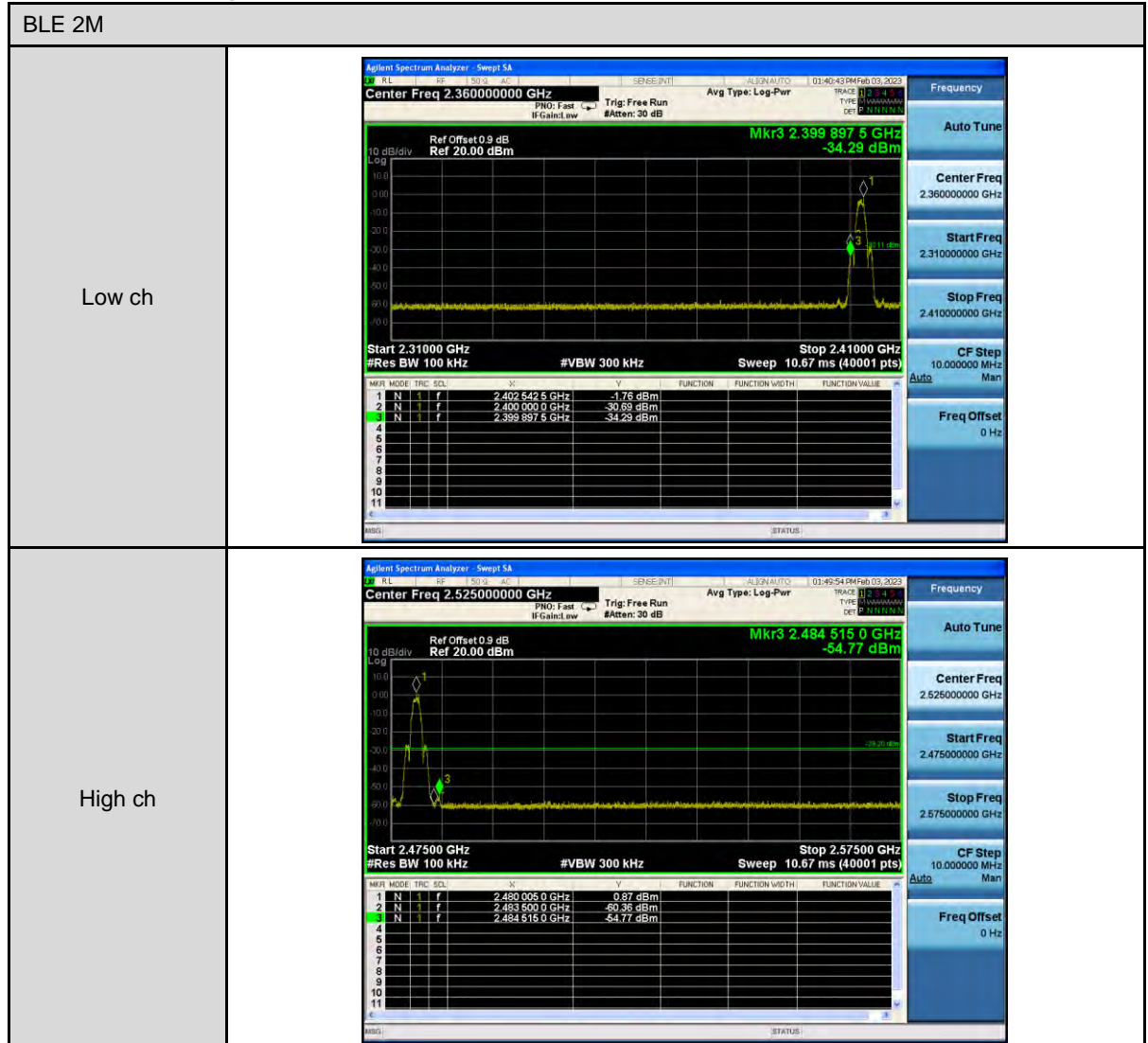


Reference level

BLE 2M	
Low ch	
Mid ch	
High ch	

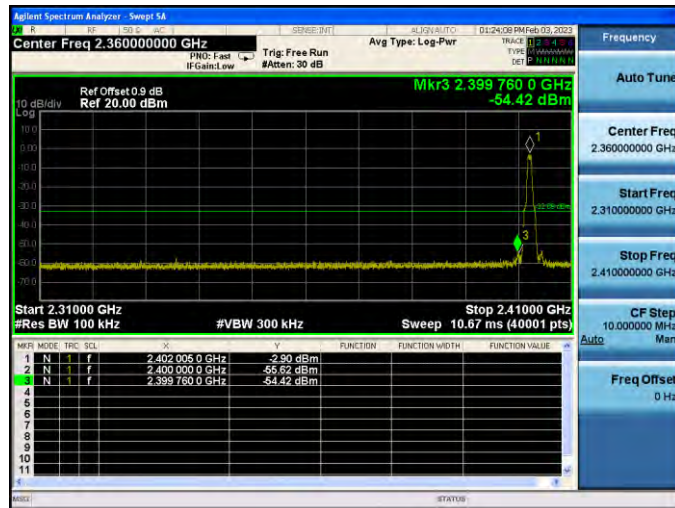
BLR C8	
Low ch	
Mid ch	
High ch	

Conducted Band Edge

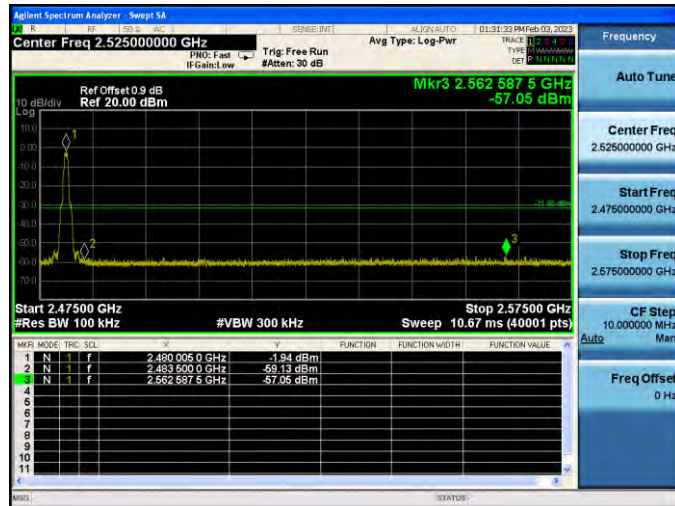


BLR C8

Low ch



High ch



6 dB Bandwidth

BLE 2M	
Low ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.40200000 GHz</p> <p>Ref Offset 0.9 dB Ref 20.00 dBm</p> <p>Center 2.402 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth: 2.0625 MHz</p> <p>Total Power: 7.94 dBm</p> <p>Transmit Freq Error: 8.879 kHz</p> <p>x dB Bandwidth: 1.183 MHz</p> <p>OBW Power: 99.00 %</p> <p>x dB: -6.00 dB</p>
Mid ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.44000000 GHz</p> <p>Ref Offset 0.9 dB Ref 20.00 dBm</p> <p>Center 2.44 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth: 2.0614 MHz</p> <p>Total Power: 8.65 dBm</p> <p>Transmit Freq Error: 8.526 kHz</p> <p>x dB Bandwidth: 1.182 MHz</p> <p>OBW Power: 99.00 %</p> <p>x dB: -6.00 dB</p>
High ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.48000000 GHz</p> <p>Ref Offset 0.9 dB Ref 20.00 dBm</p> <p>Center 2.48 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth: 2.0625 MHz</p> <p>Total Power: 8.88 dBm</p> <p>Transmit Freq Error: 8.683 kHz</p> <p>x dB Bandwidth: 1.184 MHz</p> <p>OBW Power: 99.00 %</p> <p>x dB: -6.00 dB</p>


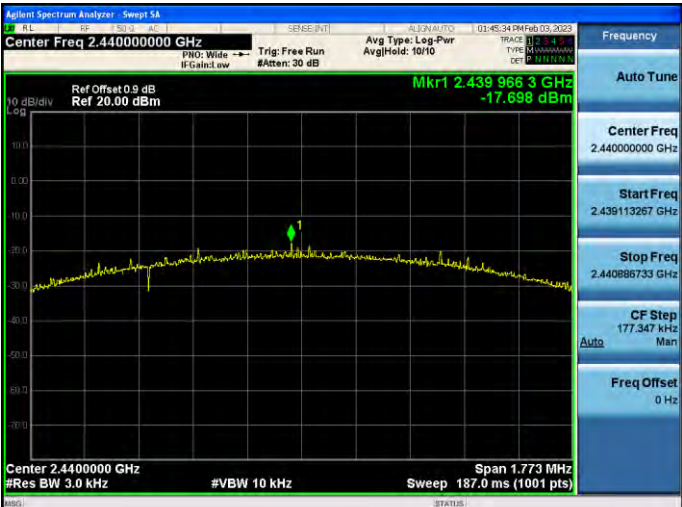

BLR C8	
<p>Low ch</p>	
<p>Mid ch</p>	
<p>High ch</p>	



99 % Occupied Bandwidth

BLE 2M																
Low ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.40200000 GHz</p> <p>Ref Offset 0.9 dB Ref 20.00 dBm</p> <p>Center 2.402 GHz #Res BW 30 kHz</p> <p>Span 6 MHz Sweep 6.333 ms</p> <p>#VBW 100 kHz</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>7.25 dBm</td> </tr> <tr> <td>2.0550 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>15.324 kHz</td> <td>OBW Power</td> </tr> <tr> <td>x dB Bandwidth</td> <td>2.446 MHz</td> <td>x dB</td> </tr> <tr> <td></td> <td></td> <td>-26.00 dB</td> </tr> </table>	Occupied Bandwidth	Total Power	7.25 dBm	2.0550 MHz			Transmit Freq Error	15.324 kHz	OBW Power	x dB Bandwidth	2.446 MHz	x dB			-26.00 dB
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x dB Bandwidth	2.446 MHz	x dB														
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2.0549 MHz																
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x dB Bandwidth	2.447 MHz	x dB														
		-26.00 dB														

BLR C8	
<p>Low ch</p>	
<p>Mid ch</p>	
<p>High ch</p>	

Power Density

BLE 2M	
<p>Low ch</p>	
<p>Mid ch</p>	
<p>High ch</p>	

BLR C8	
<p>Low ch</p>	
<p>Mid ch</p>	
<p>High ch</p>	