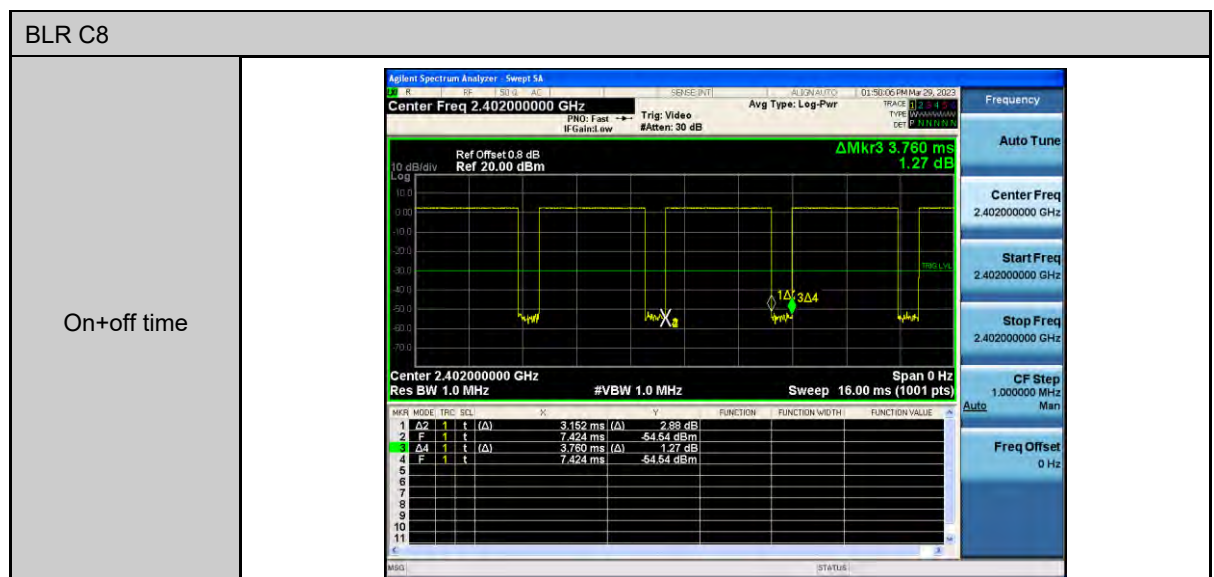
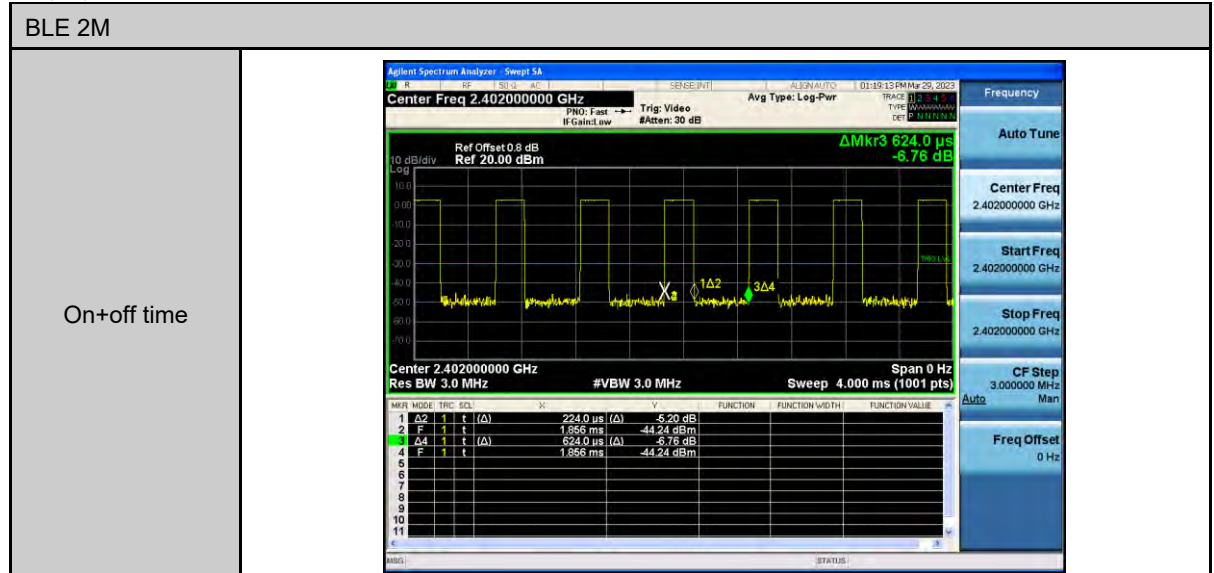
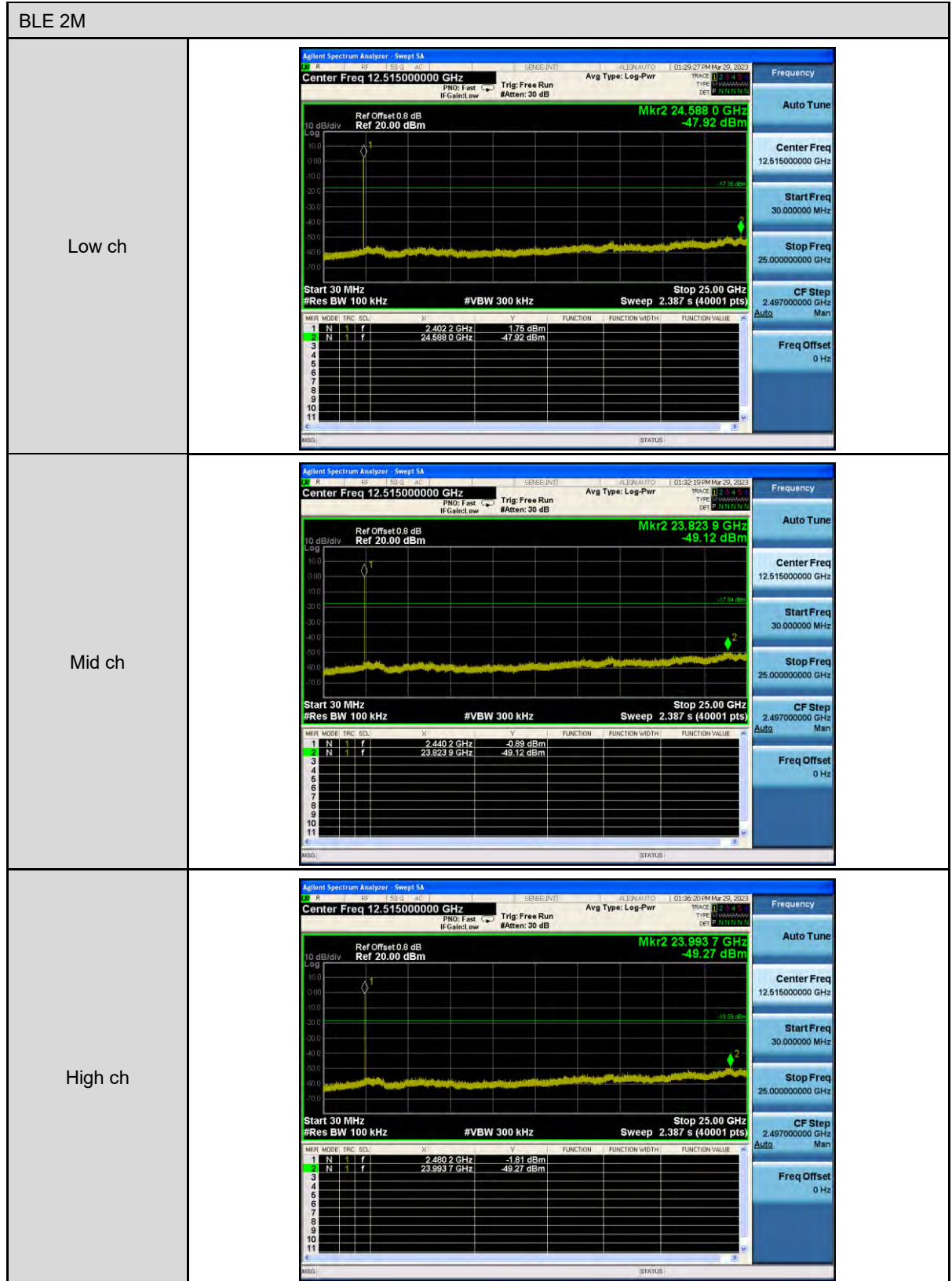


Appendix B. Test Plots

Duty cycle





Out of Band Conducted Spurious Emission



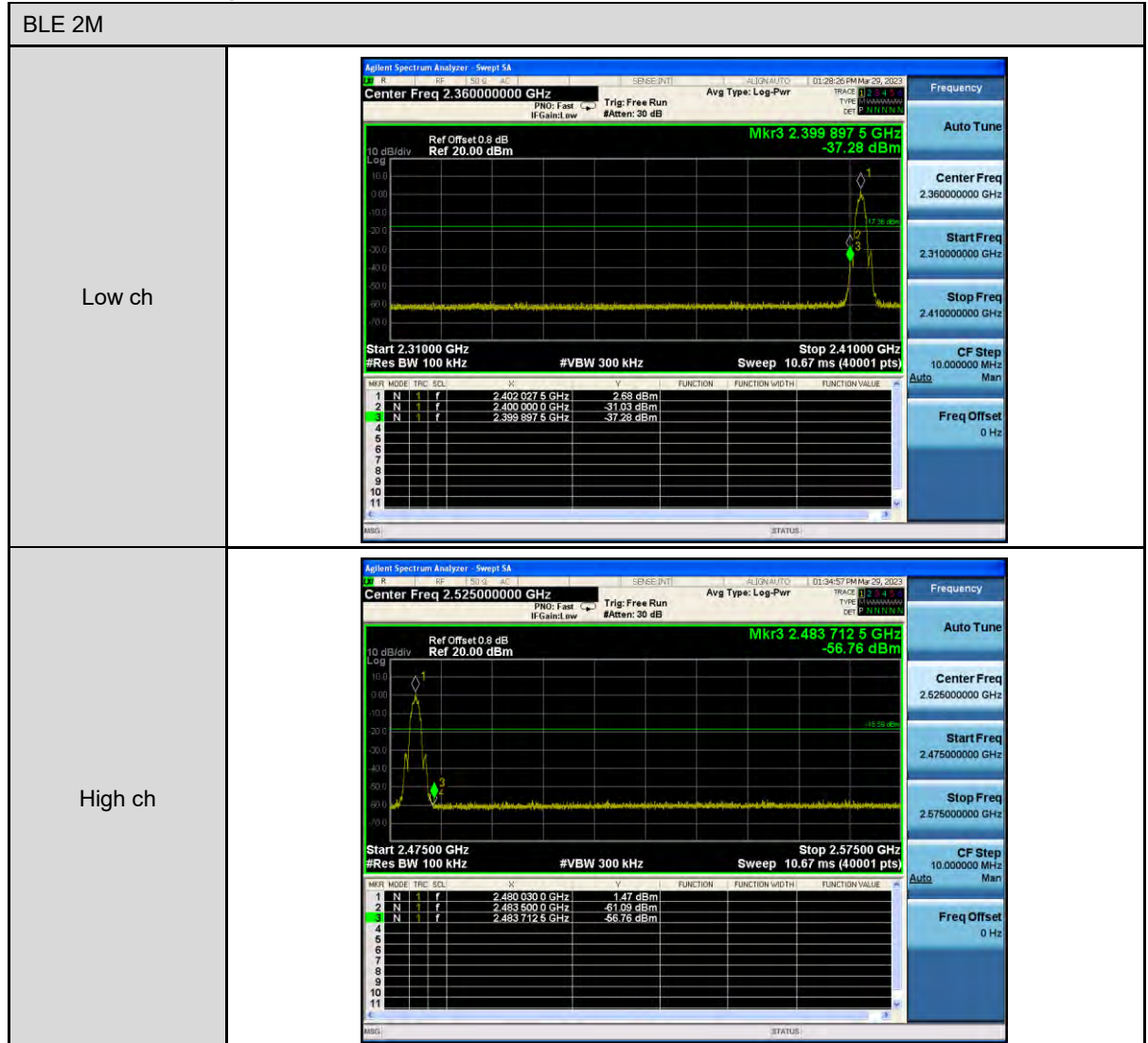
BLR C8																			
Low ch	<p>Agilent Spectrum Analyzer - Sweep SA Center Freq 12.51500000 GHz Ref Offset 0.9 dB Ref 20.00 dBm Mkr2 23,957.5 GHz -49.56 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 25.00 GHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRG</th> <th>SCN</th> <th>F</th> <th>P</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>23,957.5 GHz</td> <td>-49.56 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRG	SCN	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	23,957.5 GHz	-49.56 dBm			
MKR	MODE	TRG	SCN	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE											
1	N	1	f	23,957.5 GHz	-49.56 dBm														
Mid ch	<p>Agilent Spectrum Analyzer - Sweep SA Center Freq 12.51500000 GHz Ref Offset 0.9 dB Ref 20.00 dBm Mkr2 23,743.4 GHz -48.77 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 25.00 GHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRG</th> <th>SCN</th> <th>F</th> <th>P</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>23,743.4 GHz</td> <td>-48.77 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRG	SCN	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	23,743.4 GHz	-48.77 dBm			
MKR	MODE	TRG	SCN	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE											
1	N	1	f	23,743.4 GHz	-48.77 dBm														
High ch	<p>Agilent Spectrum Analyzer - Sweep SA Center Freq 12.51500000 GHz Ref Offset 0.9 dB Ref 20.00 dBm Mkr2 23,927.5 GHz -49.36 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 25.00 GHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRG</th> <th>SCN</th> <th>F</th> <th>P</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>23,927.5 GHz</td> <td>-49.36 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRG	SCN	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	23,927.5 GHz	-49.36 dBm			
MKR	MODE	TRG	SCN	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE											
1	N	1	f	23,927.5 GHz	-49.36 dBm														

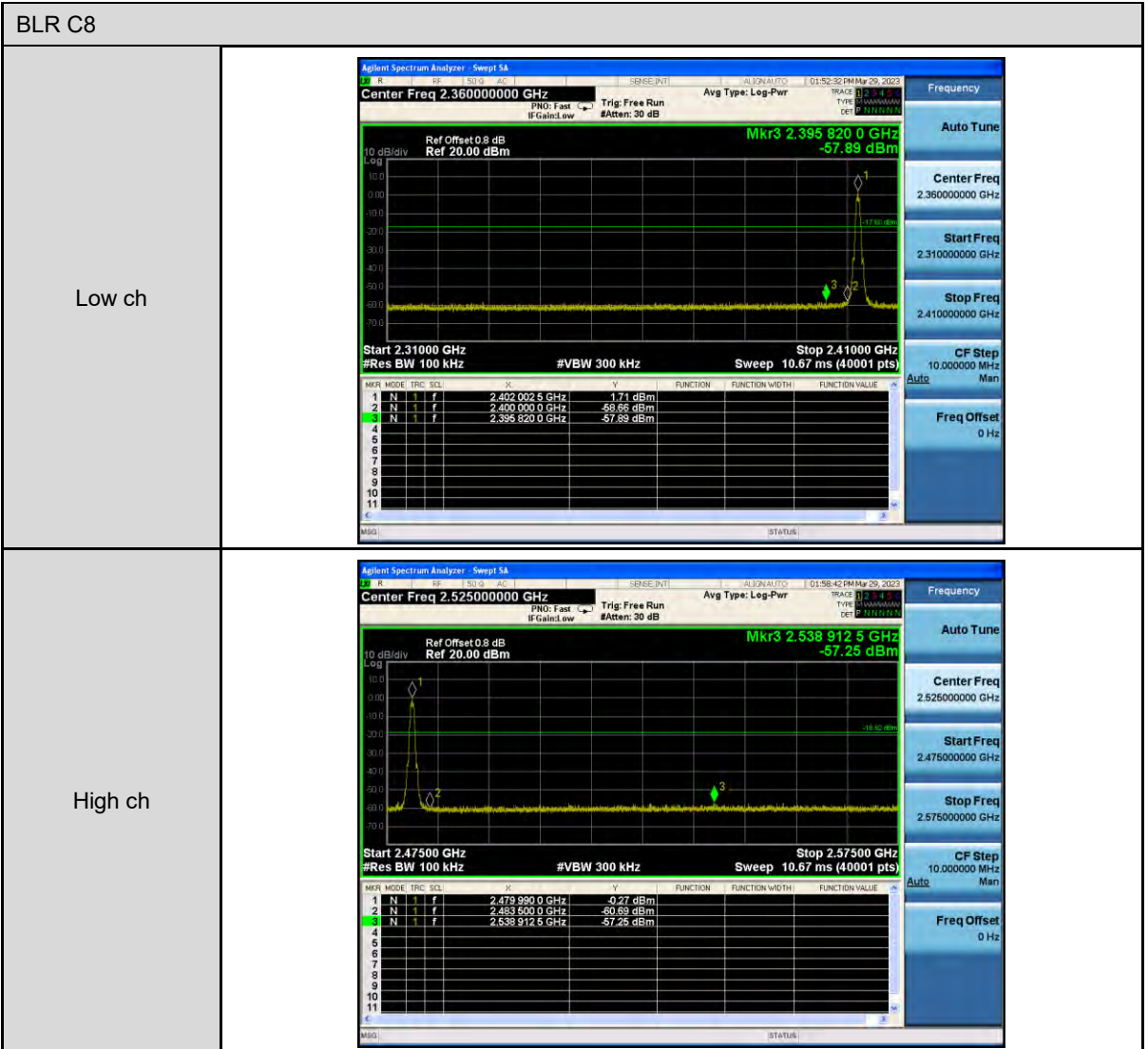
Reference level

BLE 2M	
Low ch	 <p>Agilent Spectrum Analyzer: Swept SA Center Freq 2.40200000 GHz Mkr1 2.402 022 4 GHz 2.84 dBm Center 2.4020000 GHz #Res BW 100 kHz #VBW 300 kHz Span 1.722 MHz Sweep 1.000 ms (1001 pts)</p>
Mid ch	 <p>Agilent Spectrum Analyzer: Swept SA Center Freq 2.44000000 GHz Mkr1 2.440 021 7 GHz 2.06 dBm Center 2.4400000 GHz #Res BW 100 kHz #VBW 300 kHz Span 1.447 MHz Sweep 1.000 ms (1001 pts)</p>
High ch	 <p>Agilent Spectrum Analyzer: Swept SA Center Freq 2.48000000 GHz Mkr1 2.480 022 4 GHz 1.41 dBm Center 2.4800000 GHz #Res BW 100 kHz #VBW 300 kHz Span 1.723 MHz Sweep 1.000 ms (1001 pts)</p>

BLR C8	
Low ch	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.40200000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Mkr1 2.402 012 6 GHz 2.40 dBm Span 902.8 kHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.000 ms (1001 pts)</p>
Mid ch	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.44000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Mkr1 2.440 011 7 GHz 1.75 dBm Span 901.6 kHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.000 ms (1001 pts)</p>
High ch	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.48000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Mkr1 2.480 015 4 GHz 1.08 dBm Span 904.5 kHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.000 ms (1001 pts)</p>

Conducted Band Edge





6 dB Bandwidth

BLE 2M	
Low ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.40200000 GHz</p> <p>Ref Offset 0.8 dB Ref 20.00 dBm</p> <p>Center 2.402 GHz #Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 6 MHz Sweep 1 ms</p> <p>Occupied Bandwidth: 2.0739 MHz</p> <p>Total Power: 9.81 dBm</p> <p>Transmit Freq Error: 35.263 kHz</p> <p>x dB Bandwidth: 1.148 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 0.8 dB Ref 20.00 dBm</p> <p>Center 2.44 GHz #Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 6 MHz Sweep 1 ms</p> <p>Occupied Bandwidth: 2.0727 MHz</p> <p>Total Power: 9.39 dBm</p> <p>Transmit Freq Error: 33.591 kHz</p> <p>x dB Bandwidth: 964.7 kHz</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 0.8 dB Ref 20.00 dBm</p> <p>Center 2.48 GHz #Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 6 MHz Sweep 1 ms</p> <p>Occupied Bandwidth: 2.0758 MHz</p> <p>Total Power: 8.53 dBm</p> <p>Transmit Freq Error: 34.843 kHz</p> <p>x dB Bandwidth: 1.149 MHz</p> <p>OBW Power: 99.00 %</p> <p>x dB: -6.00 dB</p>




BLR C8	
<p>Low ch</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.402000000 GHz</p> <p>Ref Offset: 0.0 dB Ref 20.00 dBm</p> <p>Center 2.402 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth 1.0344 MHz</p> <p>Total Power 6.75 dBm</p> <p>Transmit Freq Error 15.852 kHz x dB Bandwidth 601.8 kHz</p> <p>OBW Power 99.00 % x dB -6.00 dB</p>
<p>Mid ch</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.440000000 GHz</p> <p>Ref Offset: 0.0 dB Ref 20.00 dBm</p> <p>Center 2.44 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth 1.0319 MHz</p> <p>Total Power 6.23 dBm</p> <p>Transmit Freq Error 13.935 kHz x dB Bandwidth 601.1 kHz</p> <p>OBW Power 99.00 % x dB -6.00 dB</p>
<p>High ch</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.480000000 GHz</p> <p>Ref Offset: 0.0 dB Ref 20.00 dBm</p> <p>Center 2.48 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth 1.0316 MHz</p> <p>Total Power 5.62 dBm</p> <p>Transmit Freq Error 14.249 kHz x dB Bandwidth 603.0 kHz</p> <p>OBW Power 99.00 % x dB -6.00 dB</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: 0.8 dB, Ref: 20.00 dBm</p> <p>Occupied Bandwidth: 2.0624 MHz</p> <p>Total Power: 3.98 dBm</p> <p>Transmit Freq Error: 36.100 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 2.408 MHz</p> <p>x dB: -26.00 dB</p>
Mid ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 2.44000000 GHz</p> <p>Ref Offset: 0.8 dB, Ref: 20.00 dBm</p> <p>Occupied Bandwidth: 2.0460 MHz</p> <p>Total Power: 3.85 dBm</p> <p>Transmit Freq Error: 40.637 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 2.463 MHz</p> <p>x dB: -26.00 dB</p>
High ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 2.48000000 GHz</p> <p>Ref Offset: 0.8 dB, Ref: 20.00 dBm</p> <p>Occupied Bandwidth: 2.0592 MHz</p> <p>Total Power: 3.03 dBm</p> <p>Transmit Freq Error: 35.182 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 2.410 MHz</p> <p>x dB: -26.00 dB</p>

BLR C8	
Low ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.402000000 GHz</p> <p>Ref Offset: 0.0 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 1.0489 MHz</p> <p>Total Power: 7.65 dBm</p> <p>Transmit Freq Error: 14.872 kHz</p> <p>OBW Power: 99.00 %</p>
Mid ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.440000000 GHz</p> <p>Ref Offset: 0.0 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 1.0485 MHz</p> <p>Total Power: 7.03 dBm</p> <p>Transmit Freq Error: 13.208 kHz</p> <p>OBW Power: 99.00 %</p>
High ch	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.480000000 GHz</p> <p>Ref Offset: 0.0 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 1.0489 MHz</p> <p>Total Power: 6.38 dBm</p> <p>Transmit Freq Error: 13.100 kHz</p> <p>OBW Power: 99.00 %</p>

Power Density

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

BLR C8	
Low ch	
Mid ch	
High ch	