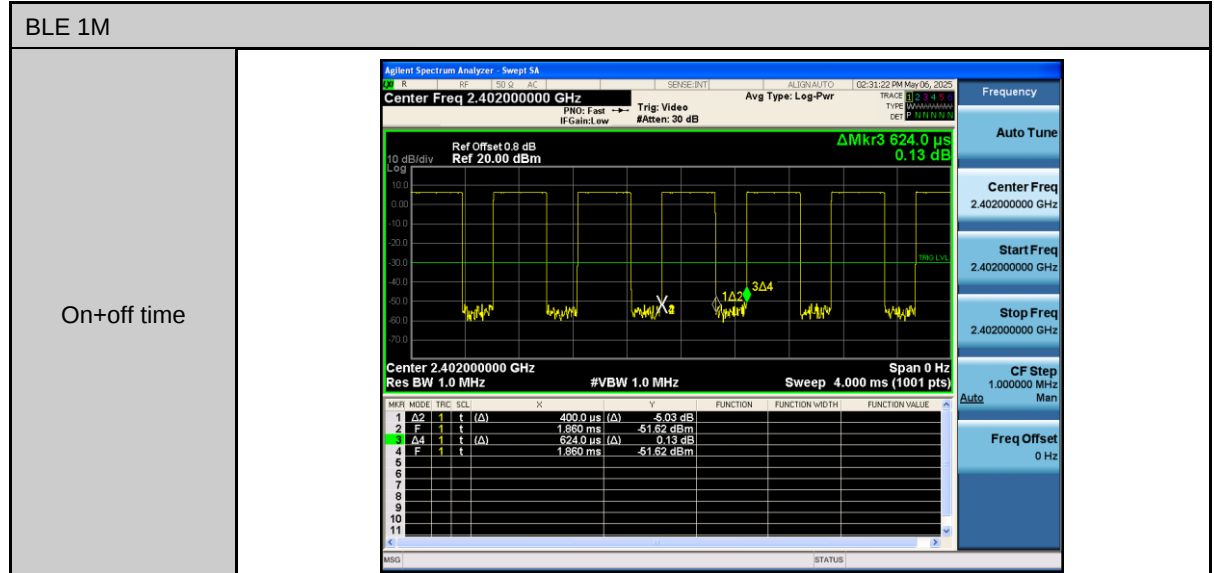
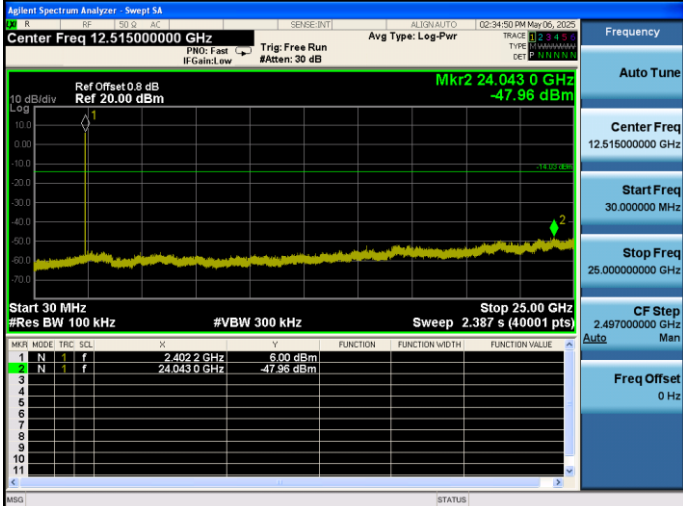
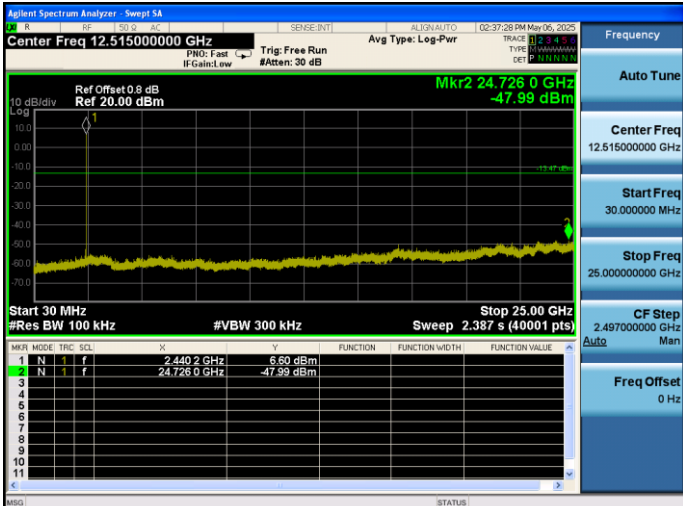
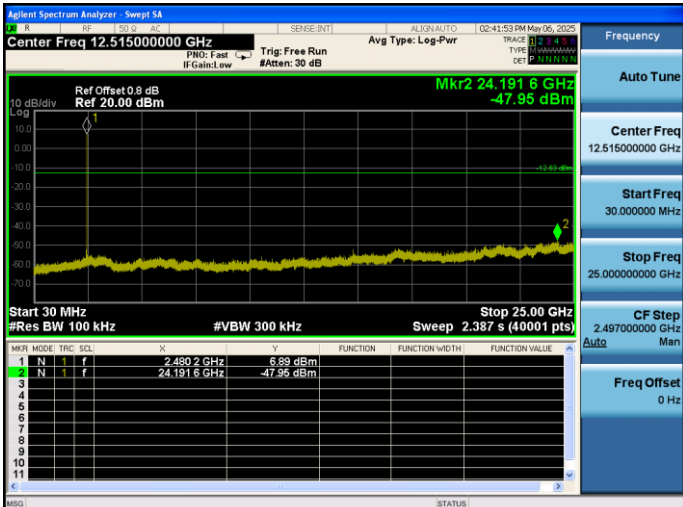


Appendix B. Test Plots

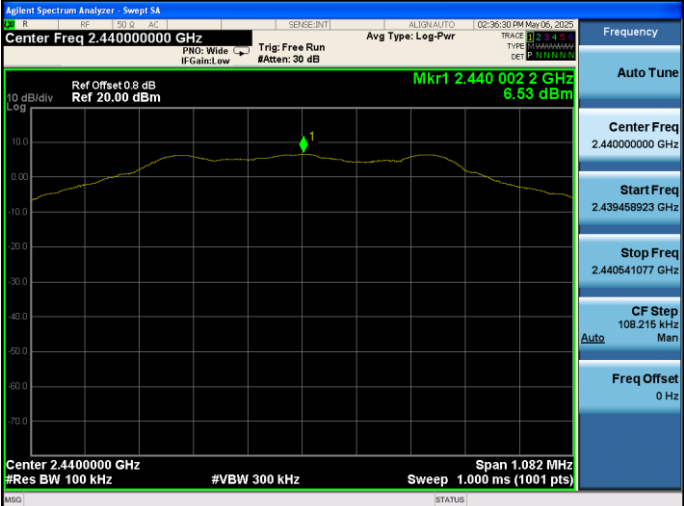
Duty cycle



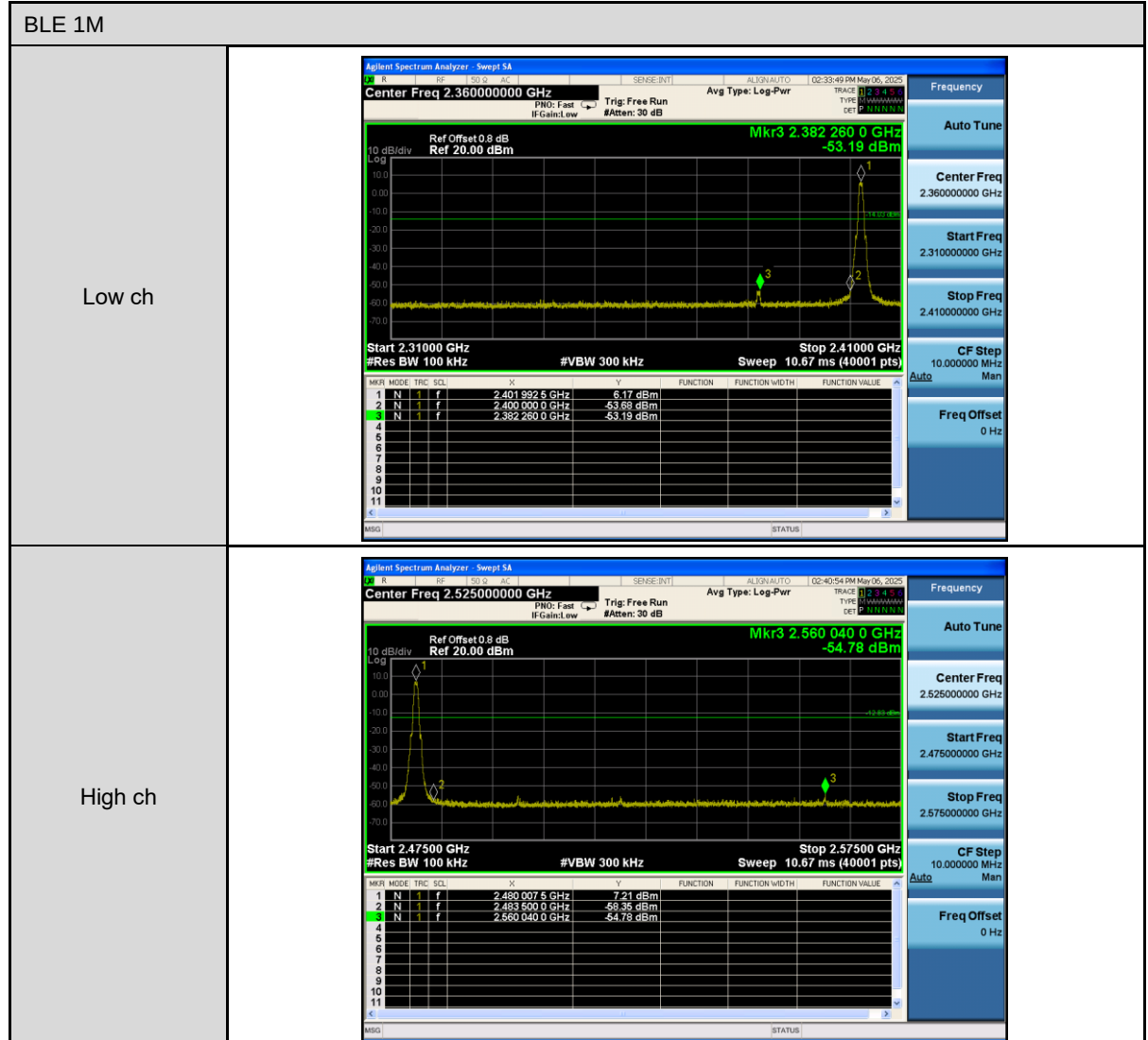
Out of Band Conducted Spurious Emission

BLE 1M																												
Low ch	 Agilent Spectrum Analyzer - Swept SA Center Freq 12.515000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Mkr2 24.0430 GHz -47.96 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts) <table><tr><th>MKR</th><th>MODE</th><th>TRC</th><th>SCL</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>N</td><td>1</td><td>f</td><td>2.4022 GHz</td><td>6.00 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td>24.0430 GHz</td><td>-47.96 dBm</td><td></td><td></td><td></td></tr></table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.4022 GHz	6.00 dBm				2	N	1	f	24.0430 GHz	-47.96 dBm			
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
1	N	1	f	2.4022 GHz	6.00 dBm																							
2	N	1	f	24.0430 GHz	-47.96 dBm																							
Mid ch	 Agilent Spectrum Analyzer - Swept SA Center Freq 12.515000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Mkr2 24.7260 GHz -47.99 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts) <table><tr><th>MKR</th><th>MODE</th><th>TRC</th><th>SCL</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>N</td><td>1</td><td>f</td><td>2.4402 GHz</td><td>6.60 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td>24.7260 GHz</td><td>-47.99 dBm</td><td></td><td></td><td></td></tr></table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.4402 GHz	6.60 dBm				2	N	1	f	24.7260 GHz	-47.99 dBm			
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
1	N	1	f	2.4402 GHz	6.60 dBm																							
2	N	1	f	24.7260 GHz	-47.99 dBm																							
High ch	 Agilent Spectrum Analyzer - Swept SA Center Freq 12.515000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Mkr2 24.1916 GHz -47.95 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts) <table><tr><th>MKR</th><th>MODE</th><th>TRC</th><th>SCL</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>N</td><td>1</td><td>f</td><td>2.4802 GHz</td><td>6.89 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td>24.1916 GHz</td><td>-47.95 dBm</td><td></td><td></td><td></td></tr></table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.4802 GHz	6.89 dBm				2	N	1	f	24.1916 GHz	-47.95 dBm			
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
1	N	1	f	2.4802 GHz	6.89 dBm																							
2	N	1	f	24.1916 GHz	-47.95 dBm																							

Reference level

BLE 1M Low ch	
Mid ch	
High ch	

Conducted Band Edge



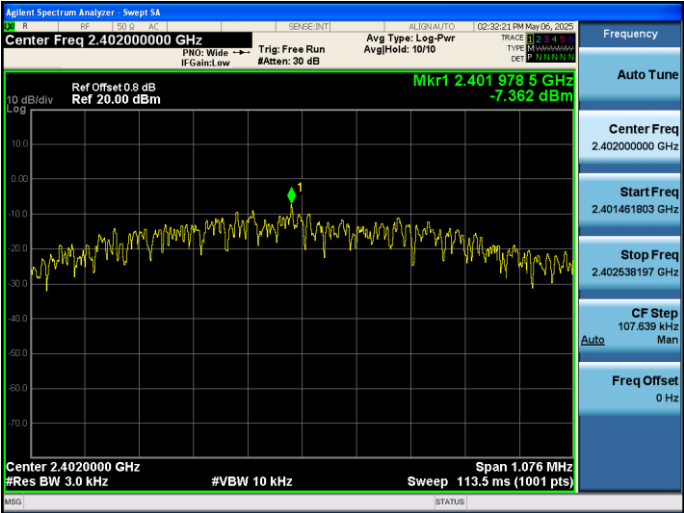
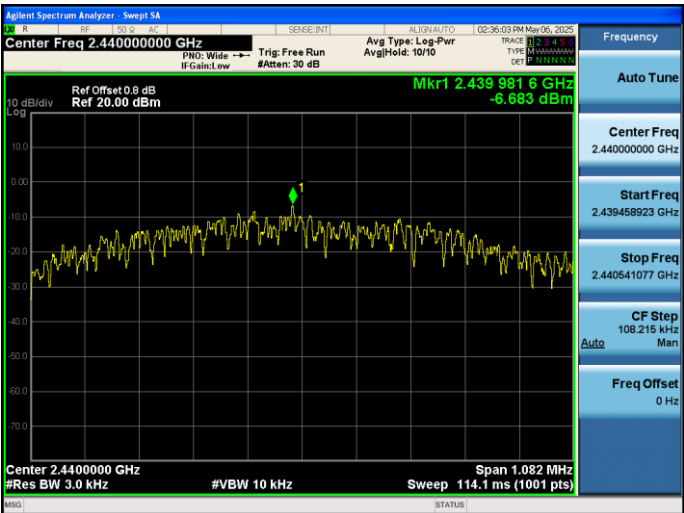
6 dB Bandwidth

BLE 1M	
Low ch	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.402000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Center 2.402 GHz #Res BW 100 kHz #VBW 300 kHz Span 3 MHz Sweep 1 ms Occupied Bandwidth 1.0885 MHz Total Power 13.2 dBm Transmit Freq Error 3.720 kHz OBW Power 99.00 % x dB Bandwidth 717.6 kHz x dB -6.00 dB
Mid ch	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.440000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Center 2.44 GHz #Res BW 100 kHz #VBW 300 kHz Span 3 MHz Sweep 1 ms Occupied Bandwidth 1.0911 MHz Total Power 13.9 dBm Transmit Freq Error 6.386 kHz OBW Power 99.00 % x dB Bandwidth 721.4 kHz x dB -6.00 dB
High ch	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.480000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Center 2.48 GHz #Res BW 100 kHz #VBW 300 kHz Span 3 MHz Sweep 1 ms Occupied Bandwidth 1.0939 MHz Total Power 14.5 dBm Transmit Freq Error 8.577 kHz OBW Power 99.00 % x dB Bandwidth 728.7 kHz x dB -6.00 dB

99 % Occupied Bandwidth

BLE 1M	
Low ch	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.402000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Center 2.402 GHz #Res BW 30 kHz #VBW 100 kHz Span 3 MHz Sweep 3.2 ms Occupied Bandwidth 1.0649 MHz Total Power 13.5 dBm Transmit Freq Error 6.012 kHz OBW Power 99.00 % x dB Bandwidth 1.274 MHz x dB -26.00 dB
Mid ch	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.440000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Center 2.44 GHz #Res BW 30 kHz #VBW 100 kHz Span 3 MHz Sweep 3.2 ms Occupied Bandwidth 1.0659 MHz Total Power 14.2 dBm Transmit Freq Error 8.394 kHz OBW Power 99.00 % x dB Bandwidth 1.278 MHz x dB -26.00 dB
High ch	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.480000000 GHz Ref Offset 0.8 dB Ref 20.00 dBm Center 2.48 GHz #Res BW 30 kHz #VBW 100 kHz Span 3 MHz Sweep 3.2 ms Occupied Bandwidth 1.0671 MHz Total Power 14.7 dBm Transmit Freq Error 10.785 kHz OBW Power 99.00 % x dB Bandwidth 1.309 MHz x dB -26.00 dB

Power Density

BLE 1M	
Low ch	
Mid ch	
High ch	