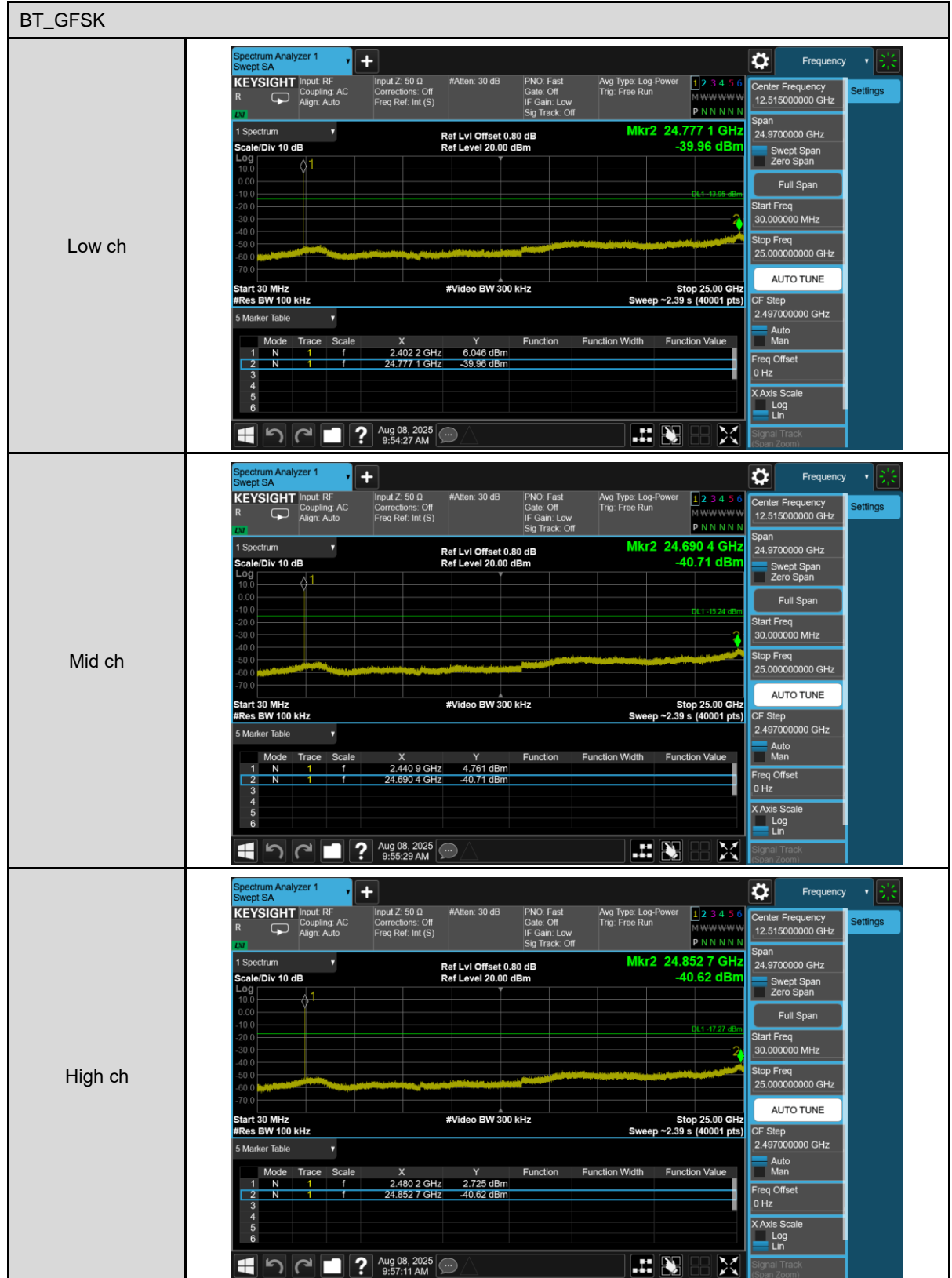
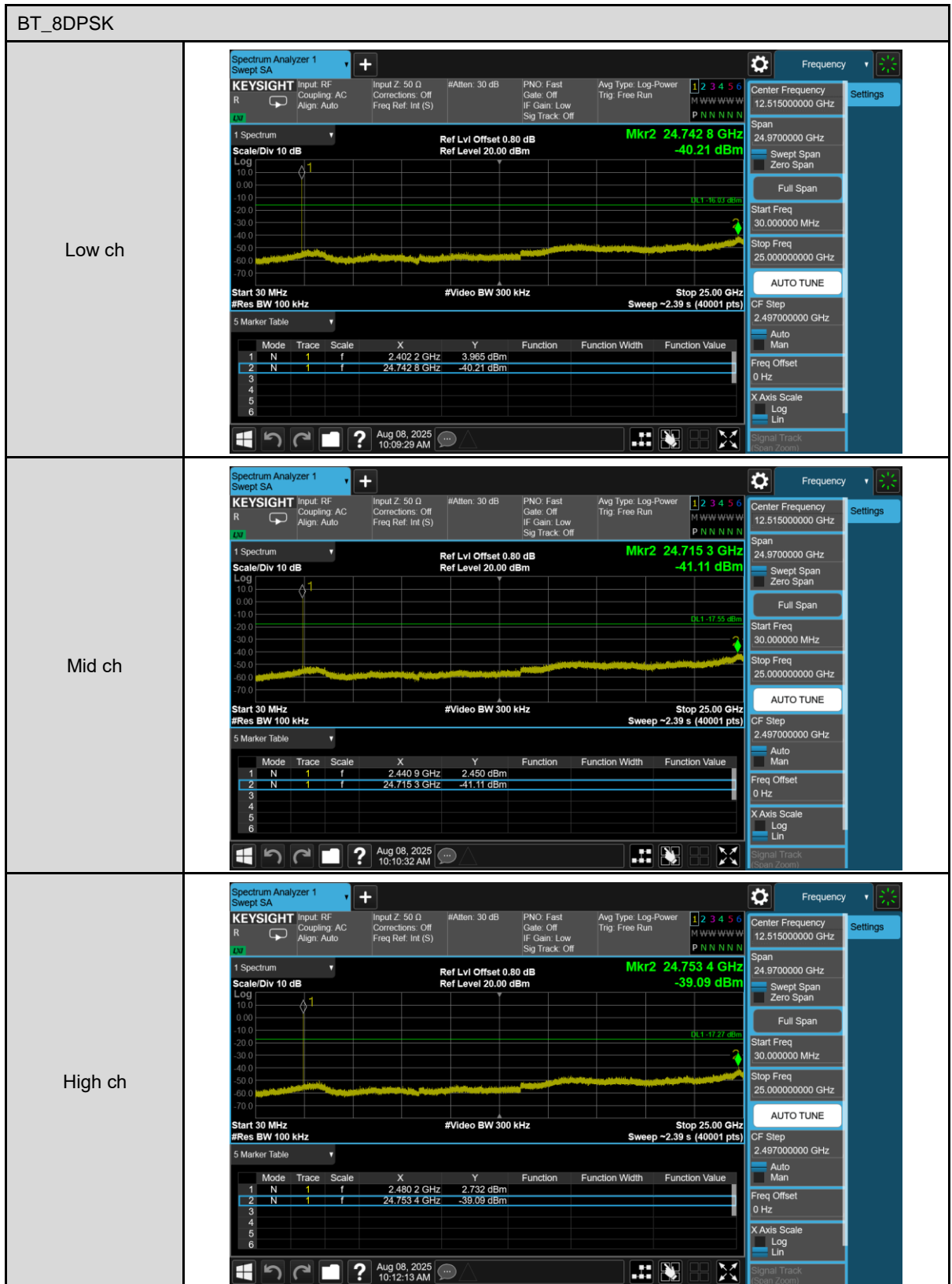


## Appendix B. Test Plots

### Out of Band Conducted Spurious Emission

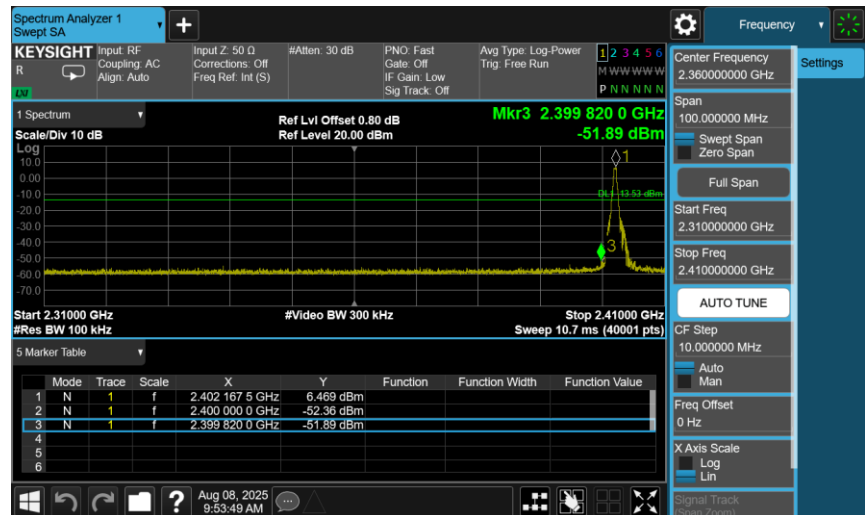




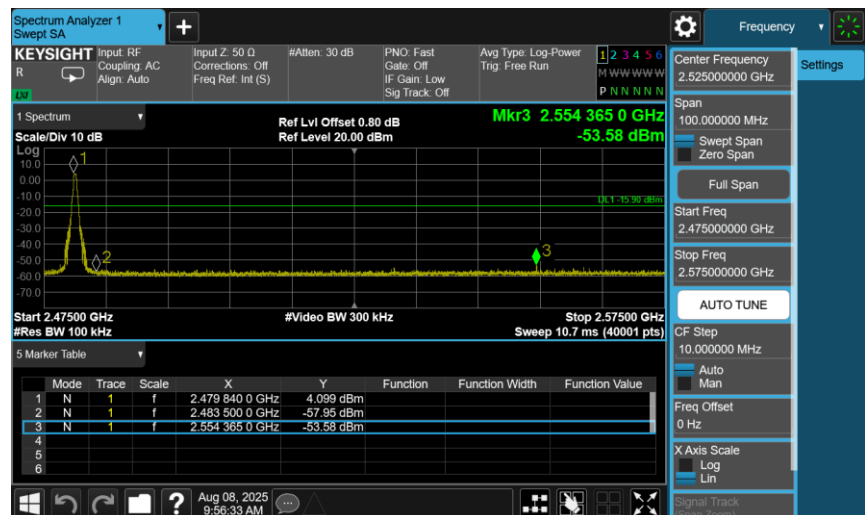
## Conducted Band Edge

BT\_GFSK\_Non-Hopping

Low ch

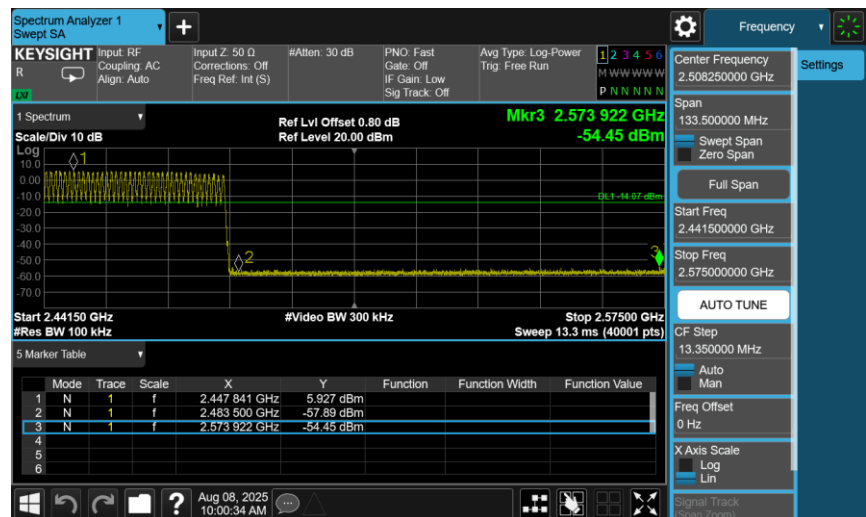
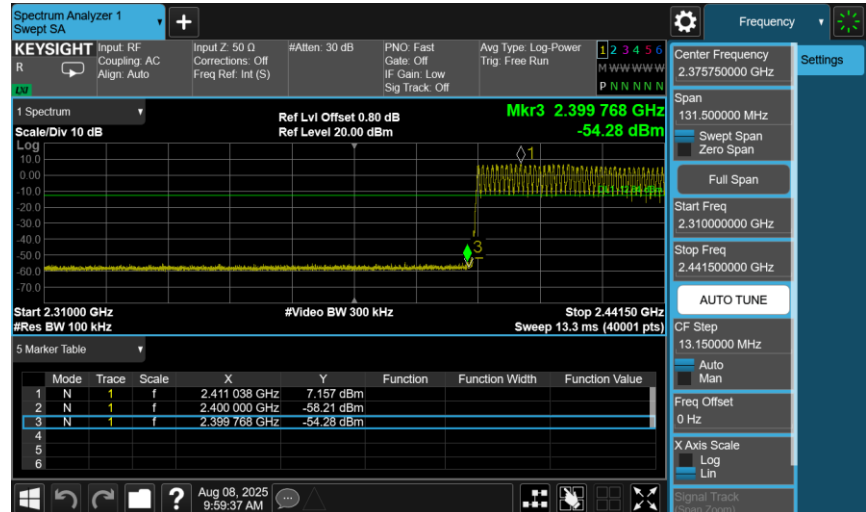


High ch



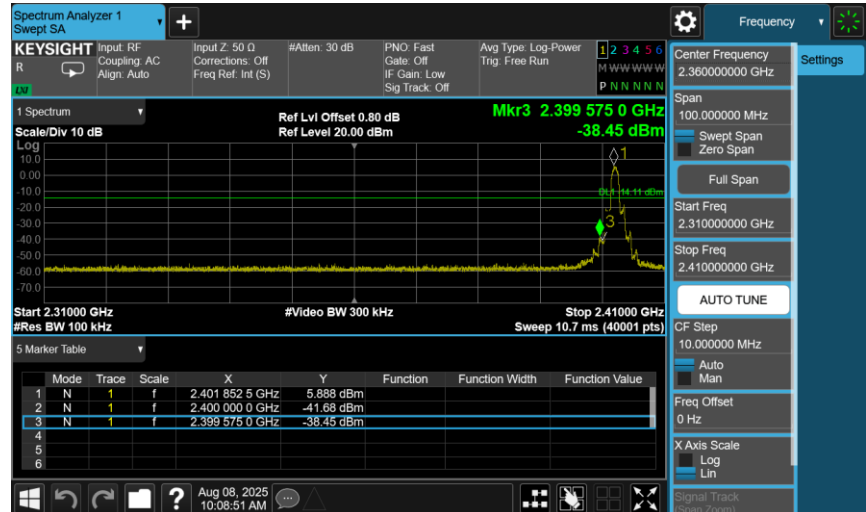
BT\_GFSK\_Hopping

Low ch-High ch

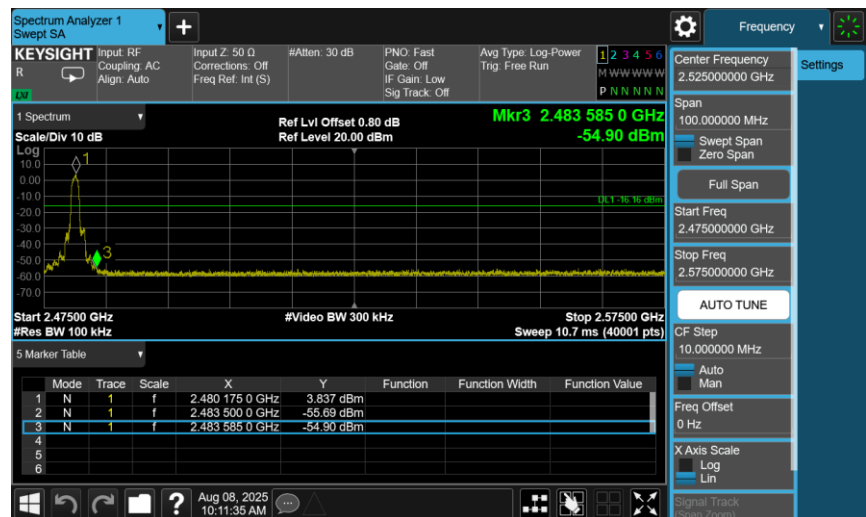


BT\_8DPSK \_Non-Hopping

Low ch

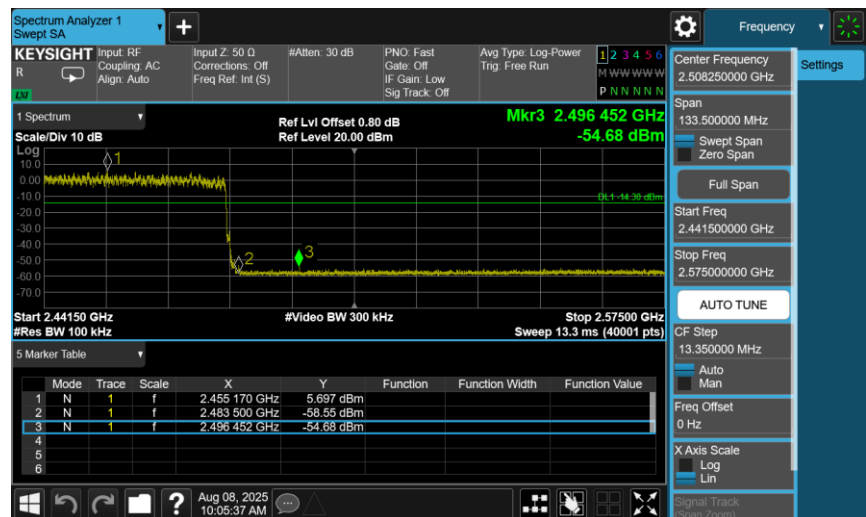
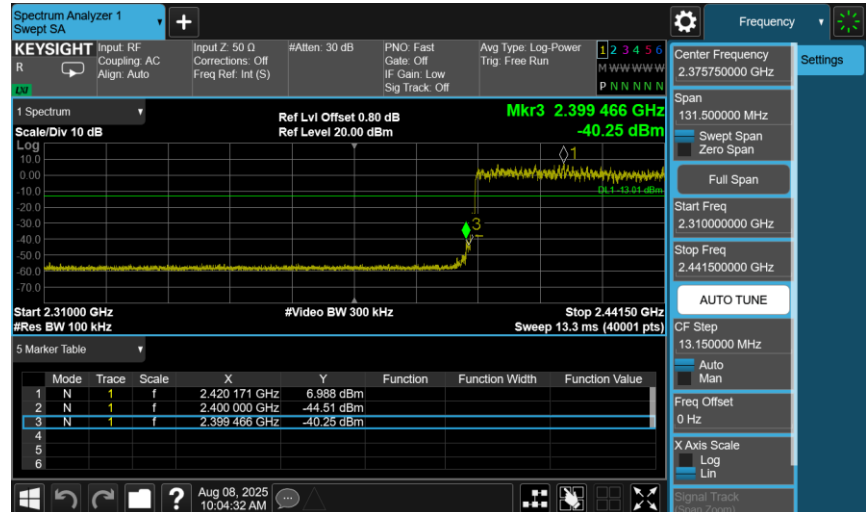


High ch



BT\_8DPSK\_Hopping

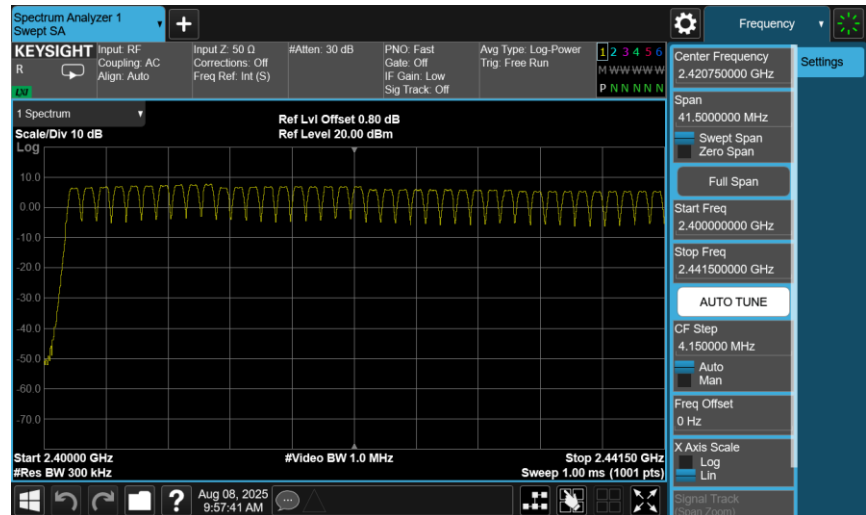
Low ch-High ch



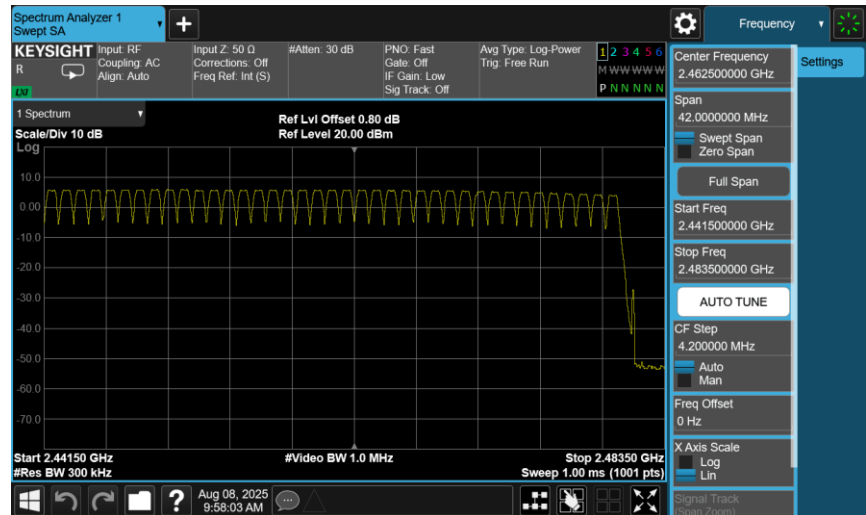
# Number of Hopping

BT\_GFSK

CH00 - CH39

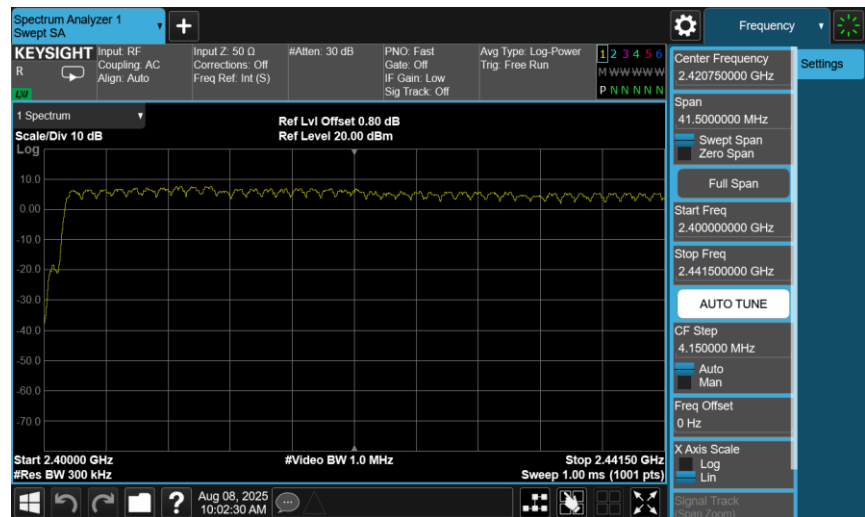


CH39- CH78

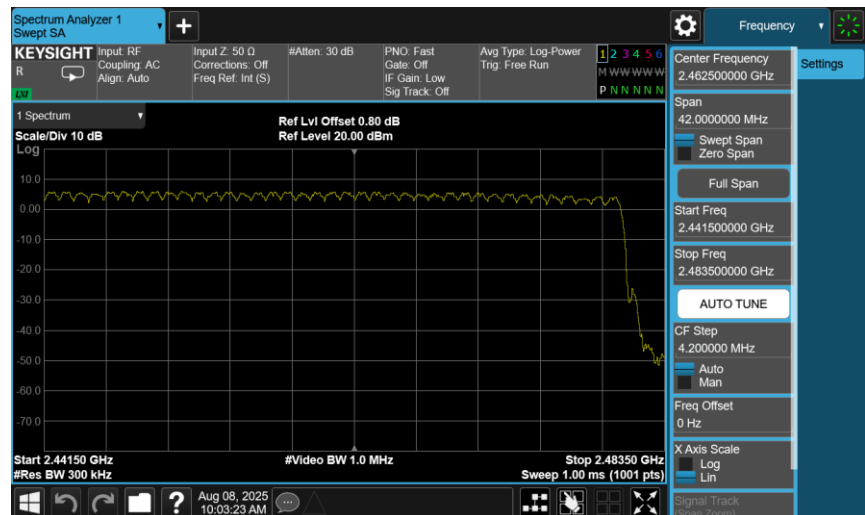


BT\_8DPSK

CH00 - CH39

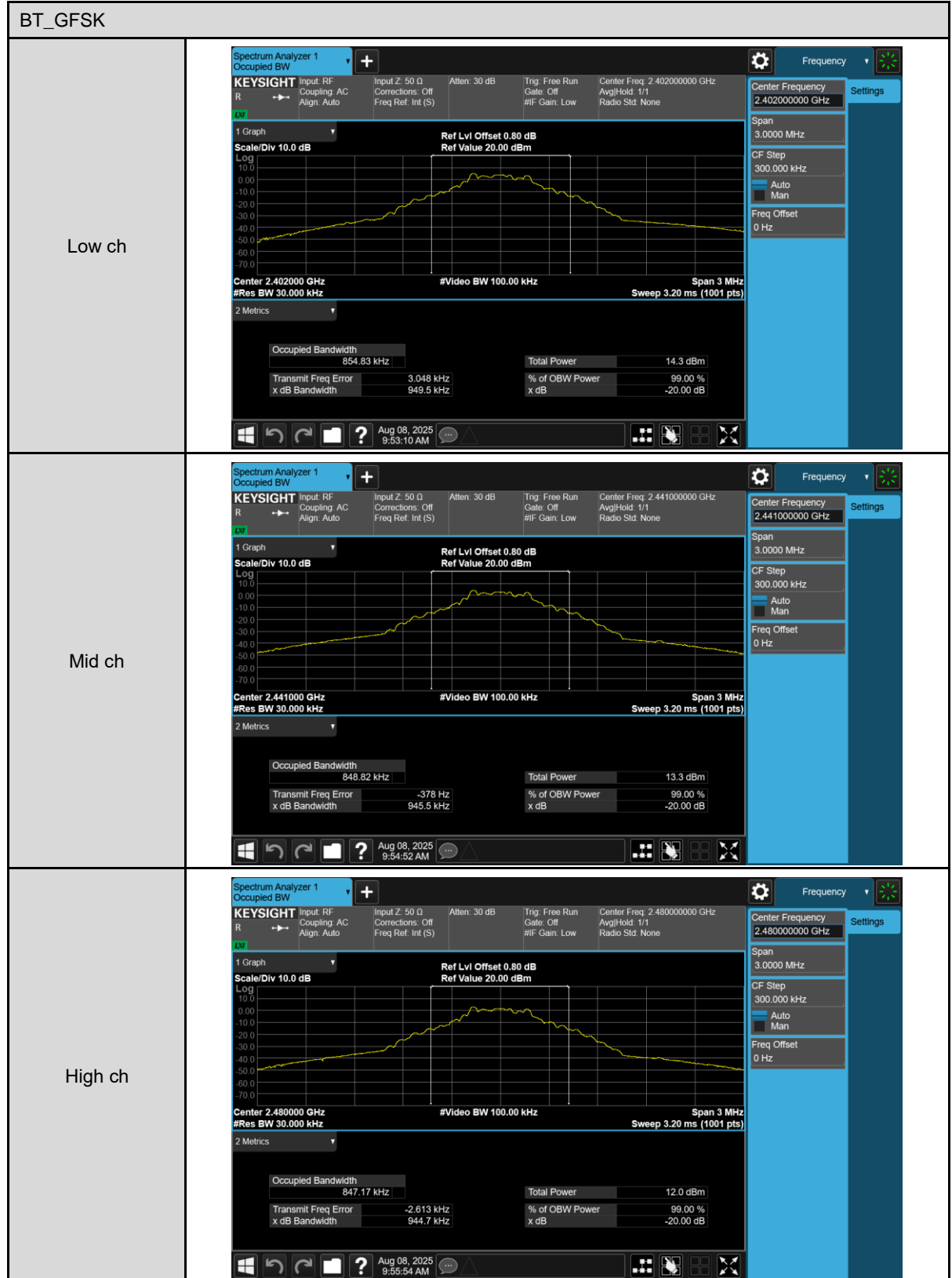


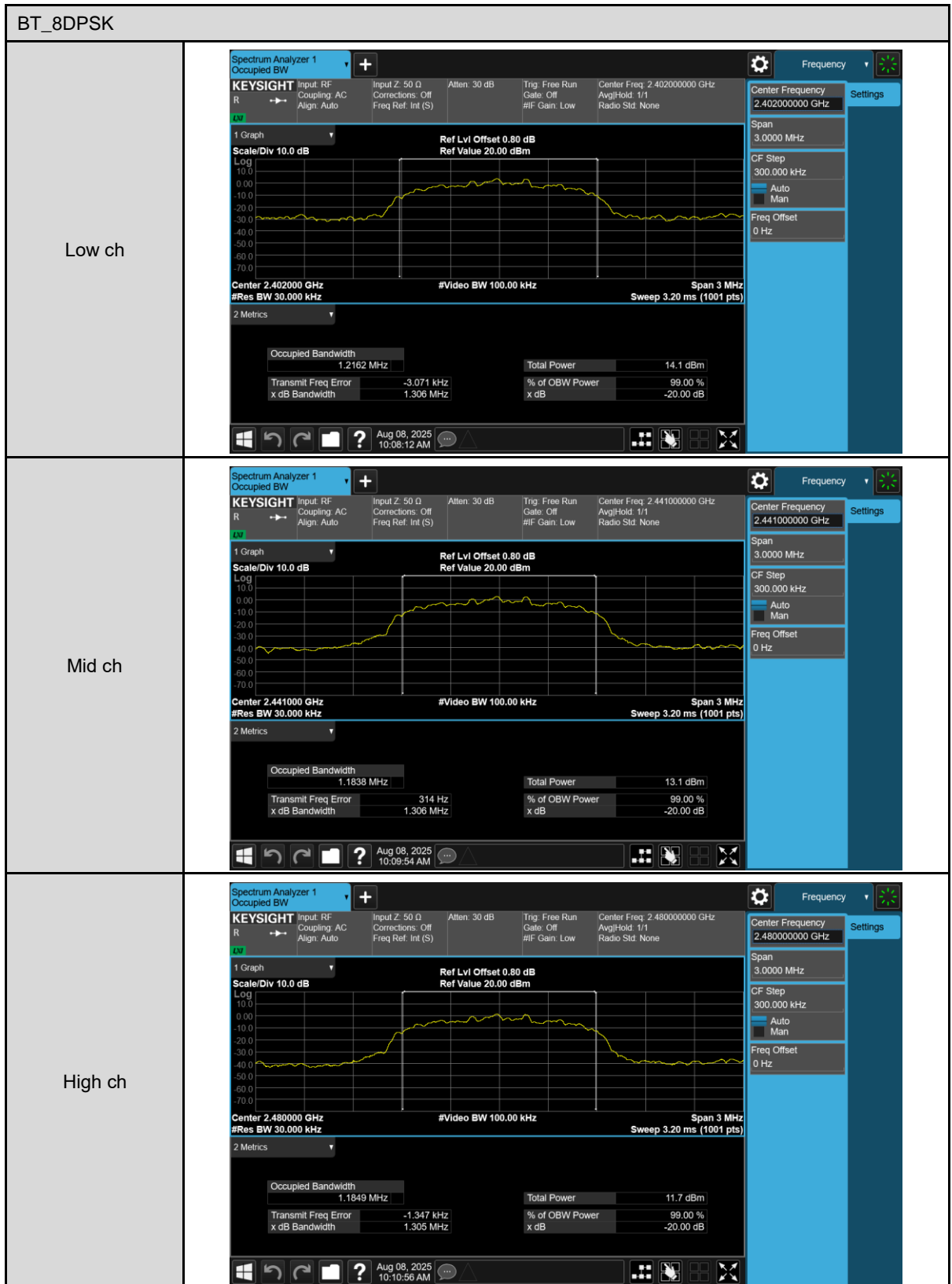
CH39- CH78



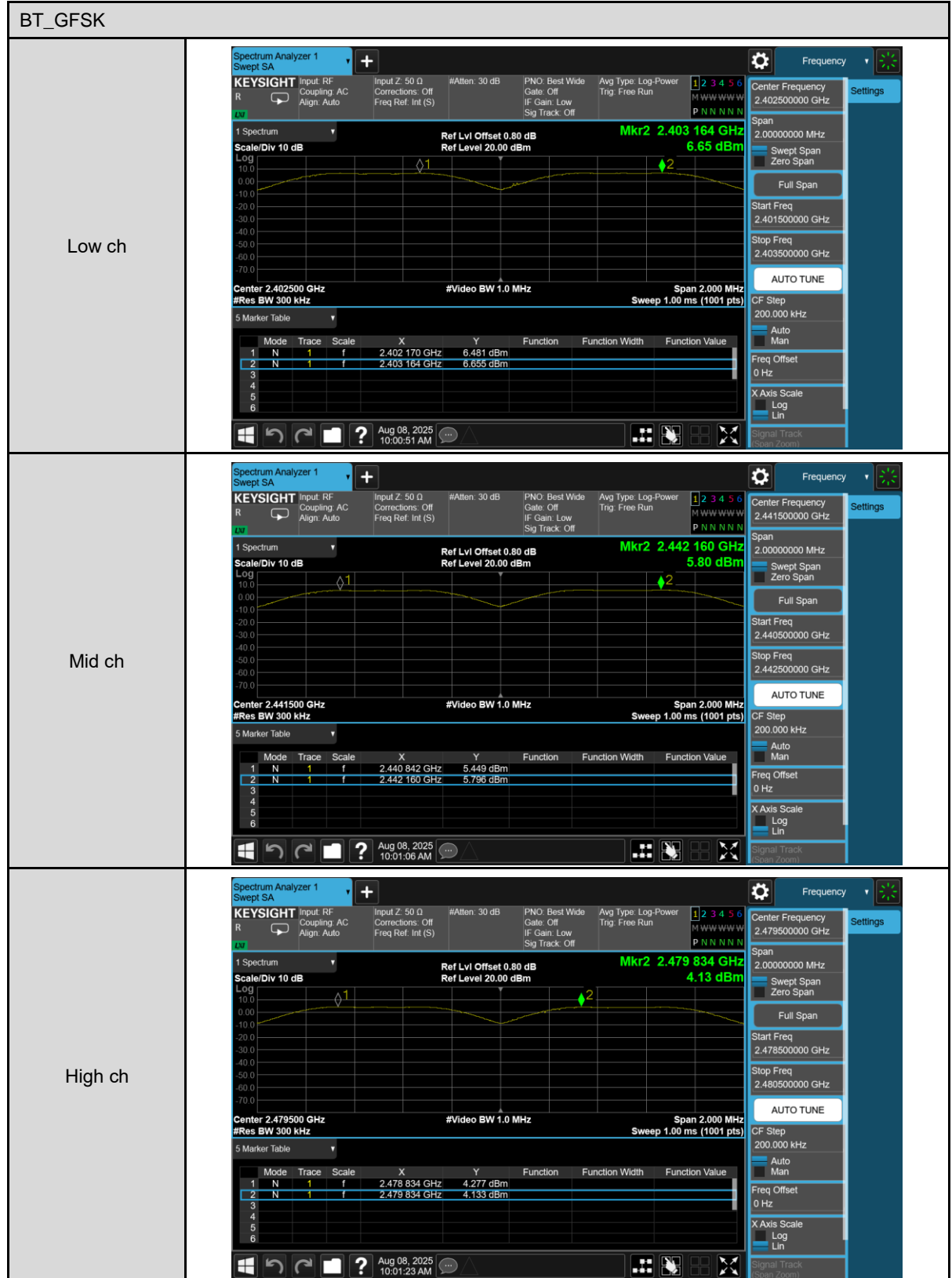


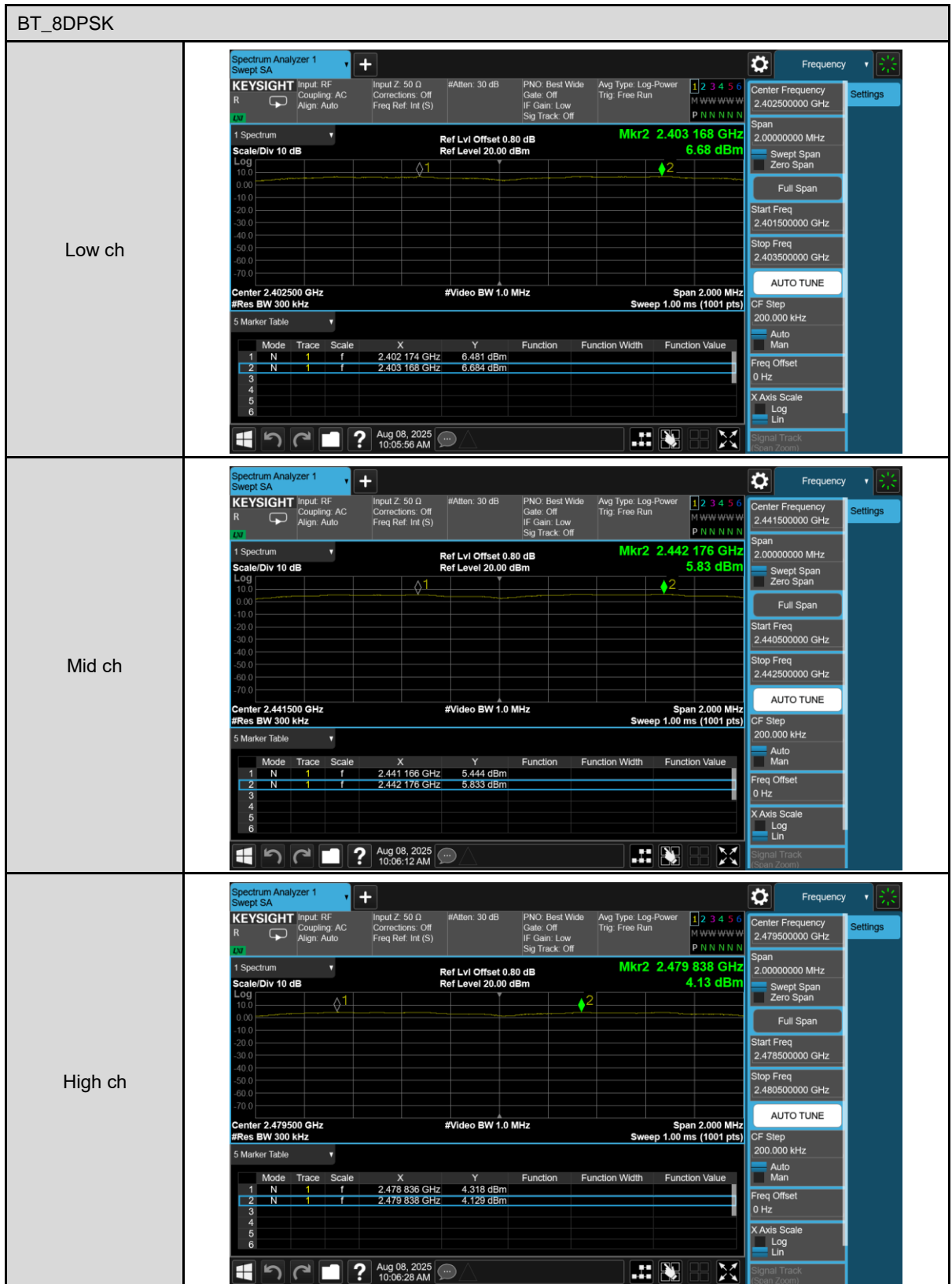
## 20 dB RF Bandwidth & 99 % Occupied Bandwidth





# Carrier Frequency Separation



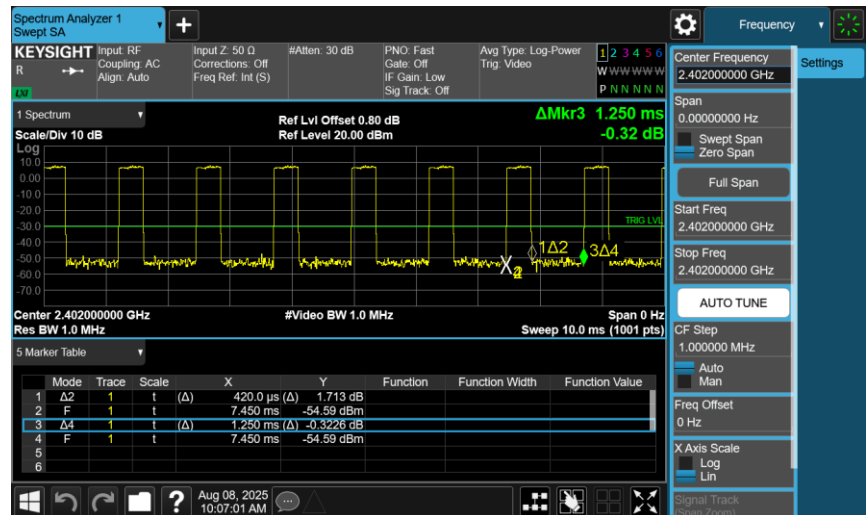


# Time of Occupancy (Dwell Time)

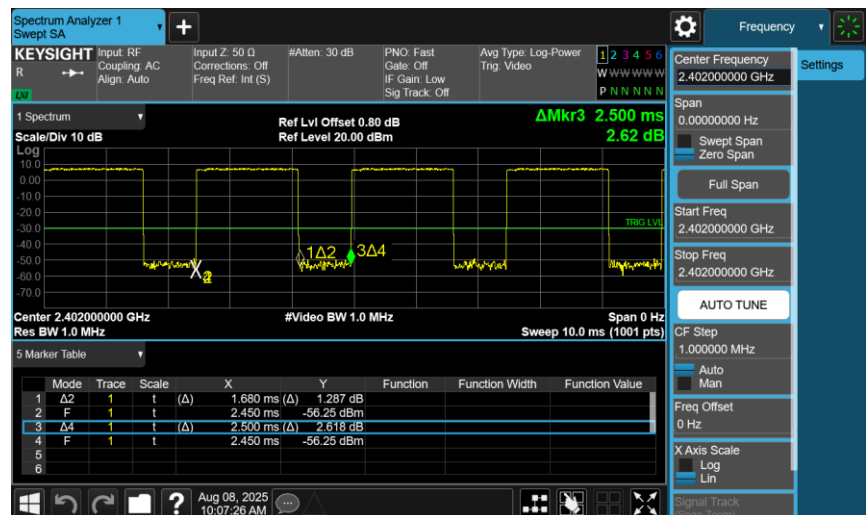
BT_GFSK																																																																
DH1	<div><div><div><div><div><div>Spectrum Analyzer 1</div><div>Sweep SA</div></div><div><div><div><div><div><div>KEYSIGHT</div><div>Input: RF</div><div>Coupling: AC</div><div>Align: Auto</div></div><div><div>Input Z: 50 Ω</div><div>Corrections: Off</div><div>Freq Ref: Int (S)</div></div><div><div>#Atten: 30 dB</div><div>PNO: Fast</div><div>Gate: Off</div><div>IF Gain: Low</div><div>Sig Track: Off</div></div><div><div>Avg Type: Log-Power</div><div>Trig: Video</div></div></div><div><div>1 2 3 4 5 6</div><div>WWW WWW</div><div>P N N N N N</div></div></div><div><div>Center Frequency</div><div>2.402000000 GHz</div></div><div><div>Span</div><div>0.00000000 Hz</div></div><div><div>Start Freq</div><div>2.402000000 GHz</div></div><div><div>Stop Freq</div><div>2.402000000 GHz</div></div><div><div>AUTO TUNE</div></div><div><div>CF Step</div><div>1.000000 MHz</div></div><div><div>Freq Offset</div><div>0 Hz</div></div><div><div>X Axis Scale</div><div>Log</div></div><div><div>Signal Track</div><div>(Span Zoom)</div></div></div><div><div>1 Spectrum</div><div>Scale/Div 10 dB</div><div>Ref Lvl Offset 0.80 dB</div><div>Ref Level 20.00 dBm</div><div><math>\Delta Mkr3</math> 1.250 ms</div><div>0.03 dB</div></div><div><div>Center 2.402000000 GHz</div><div>#Video BW 1.0 MHz</div><div>Span 0 Hz</div><div>Res BW 1.0 MHz</div><div>Sweep 10.0 ms (1001 pts)</div></div><div><div>5 Marker Table</div><table><tr><th></th><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><tr><td>1</td><td><math>\Delta 2</math></td><td>1</td><td>t</td><td>(<math>\Delta</math>)</td><td>430.0 <math>\mu</math>s (<math>\Delta</math>)</td><td>-1.734 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>1</td><td>t</td><td></td><td>1.190 ms</td><td>-53.39 dBm</td><td></td><td></td></tr><tr><td>3</td><td><math>\Delta 4</math></td><td>1</td><td>t</td><td>(<math>\Delta</math>)</td><td>1.250 ms (<math>\Delta</math>)</td><td>0.03087 dB</td><td></td><td></td></tr><tr><td>4</td><td>F</td><td>1</td><td>t</td><td></td><td>1.190 ms</td><td>-53.39 dBm</td><td></td><td></td></tr><tr><td>5</td><td></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><td></td></tr></table></div><div><div>Aug 08, 2025</div><div>9:51:55 AM</div></div></div></div></div></div></div>		Mode	Trace	Scale	X	Y	Function	Function Width	Function Value	1	$\Delta 2$	1	t	( $\Delta$ )	430.0 $\mu$ s ( $\Delta$ )	-1.734 dB			2	F	1	t		1.190 ms	-53.39 dBm			3	$\Delta 4$	1	t	( $\Delta$ )	1.250 ms ( $\Delta$ )	0.03087 dB			4	F	1	t		1.190 ms	-53.39 dBm			5									6								
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5																																																																
6																																																																
DH3	<div><div><div><div><div><div>Spectrum Analyzer 1</div><div>Sweep SA</div></div><div><div><div><div><div><div>KEYSIGHT</div><div>Input: RF</div><div>Coupling: AC</div><div>Align: Auto</div></div><div><div>Input Z: 50 Ω</div><div>Corrections: Off</div><div>Freq Ref: Int (S)</div></div><div><div>#Atten: 30 dB</div><div>PNO: Fast</div><div>Gate: Off</div><div>IF Gain: Low</div><div>Sig Track: Off</div></div><div><div>Avg Type: Log-Power</div><div>Trig: Video</div></div></div><div><div>1 2 3 4 5 6</div><div>WWW WWW</div><div>P N N N N N</div></div></div><div><div>Center Frequency</div><div>2.402000000 GHz</div></div><div><div>Span</div><div>0.00000000 Hz</div></div><div><div>Start Freq</div><div>2.402000000 GHz</div></div><div><div>Stop Freq</div><div>2.402000000 GHz</div></div><div><div>AUTO TUNE</div></div><div><div>CF Step</div><div>1.000000 MHz</div></div><div><div>Freq Offset</div><div>0 Hz</div></div><div><div>X Axis Scale</div><div>Log</div></div><div><div>Signal Track</div><div>(Span Zoom)</div></div></div><div><div>1 Spectrum</div><div>Scale/Div 10 dB</div><div>Ref Lvl Offset 0.80 dB</div><div>Ref Level 20.00 dBm</div><div><math>\Delta Mkr3</math> 2.510 ms</div><div>0.78 dB</div></div><div><div>Center 2.402000000 GHz</div><div>#Video BW 1.0 MHz</div><div>Span 0 Hz</div><div>Res BW 1.0 MHz</div><div>Sweep 10.0 ms (1001 pts)</div></div><div><div>5 Marker Table</div><table><tr><th></th><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><tr><td>1</td><td><math>\Delta 2</math></td><td>1</td><td>t</td><td>(<math>\Delta</math>)</td><td>1.690 ms (<math>\Delta</math>)</td><td>1.690 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>1</td><td>t</td><td></td><td>2.440 ms</td><td>-53.20 dBm</td><td></td><td></td></tr><tr><td>3</td><td><math>\Delta 4</math></td><td>1</td><td>t</td><td>(<math>\Delta</math>)</td><td>2.510 ms (<math>\Delta</math>)</td><td>0.7790 dB</td><td></td><td></td></tr><tr><td>4</td><td>F</td><td>1</td><td>t</td><td></td><td>2.440 ms</td><td>-53.20 dBm</td><td></td><td></td></tr><tr><td>5</td><td></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><td></td></tr></table></div><div><div>Aug 08, 2025</div><div>9:52:25 AM</div></div></div></div></div></div></div>		Mode	Trace	Scale	X	Y	Function	Function Width	Function Value	1	$\Delta 2$	1	t	( $\Delta$ )	1.690 ms ( $\Delta$ )	1.690 dB			2	F	1	t		2.440 ms	-53.20 dBm			3	$\Delta 4$	1	t	( $\Delta$ )	2.510 ms ( $\Delta$ )	0.7790 dB			4	F	1	t		2.440 ms	-53.20 dBm			5									6								
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DH5	<div><div><div><div><div><div>Spectrum Analyzer 1</div><div>Sweep SA</div></div><div><div><div><div><div><div>KEYSIGHT</div><div>Input: RF</div><div>Coupling: AC</div><div>Align: Auto</div></div><div><div>Input Z: 50 Ω</div><div>Corrections: Off</div><div>Freq Ref: Int (S)</div></div><div><div>#Atten: 30 dB</div><div>PNO: Fast</div><div>Gate: Off</div><div>IF Gain: Low</div><div>Sig Track: Off</div></div><div><div>Avg Type: Log-Power</div><div>Trig: Video</div></div></div><div><div>1 2 3 4 5 6</div><div>WWW WWW</div><div>P N N N N N</div></div></div><div><div>Center Frequency</div><div>2.402000000 GHz</div></div><div><div>Span</div><div>0.00000000 Hz</div></div><div><div>Start Freq</div><div>2.402000000 GHz</div></div><div><div>Stop Freq</div><div>2.402000000 GHz</div></div><div><div>AUTO TUNE</div></div><div><div>CF Step</div><div>1.000000 MHz</div></div><div><div>Freq Offset</div><div>0 Hz</div></div><div><div>X Axis Scale</div><div>Log</div></div><div><div>Signal Track</div><div>(Span Zoom)</div></div></div><div><div>1 Spectrum</div><div>Scale/Div 10 dB</div><div>Ref Lvl Offset 0.80 dB</div><div>Ref Level 20.00 dBm</div><div><math>\Delta Mkr3</math> 3.735 ms</div><div>-0.18 dB</div></div><div><div>Center 2.402000000 GHz</div><div>#Video BW 1.0 MHz</div><div>Span 0 Hz</div><div>Res BW 1.0 MHz</div><div>Sweep 15.0 ms (1001 pts)</div></div><div><div>5 Marker Table</div><table><tr><th></th><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><tr><td>1</td><td><math>\Delta 2</math></td><td>1</td><td>t</td><td>(<math>\Delta</math>)</td><td>2.940 ms (<math>\Delta</math>)</td><td>-3.810 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>1</td><td>t</td><td></td><td>3.675 ms</td><td>-50.66 dBm</td><td></td><td></td></tr><tr><td>3</td><td><math>\Delta 4</math></td><td>1</td><td>t</td><td>(<math>\Delta</math>)</td><td>3.735 ms (<math>\Delta</math>)</td><td>-0.1779 dB</td><td></td><td></td></tr><tr><td>4</td><td>F</td><td>1</td><td>t</td><td></td><td>3.675 ms</td><td>-50.66 dBm</td><td></td><td></td></tr><tr><td>5</td><td></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><td></td></tr></table></div><div><div>Aug 08, 2025</div><div>9:52:46 AM</div></div></div></div></div></div></div>		Mode	Trace	Scale	X	Y	Function	Function Width	Function Value	1	$\Delta 2$	1	t	( $\Delta$ )	2.940 ms ( $\Delta$ )	-3.810 dB			2	F	1	t		3.675 ms	-50.66 dBm			3	$\Delta 4$	1	t	( $\Delta$ )	3.735 ms ( $\Delta$ )	-0.1779 dB			4	F	1	t		3.675 ms	-50.66 dBm			5									6								
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BT\_8DPSK

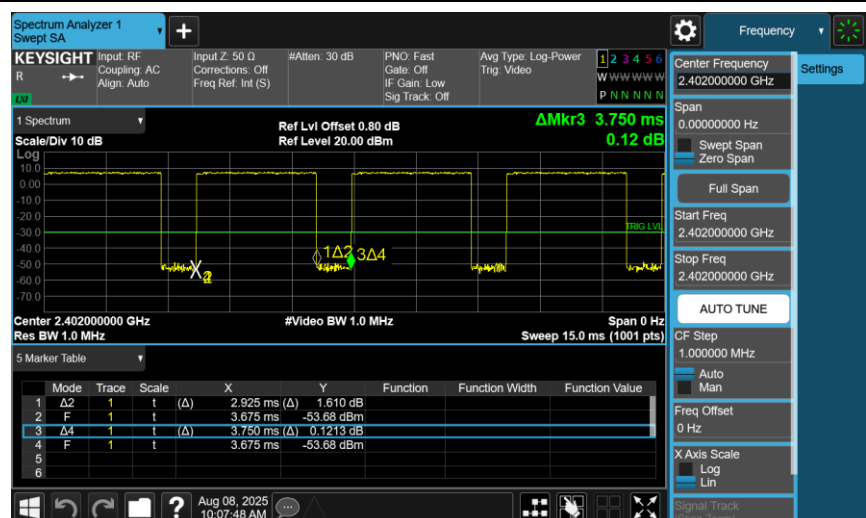
3DH1



3DH3



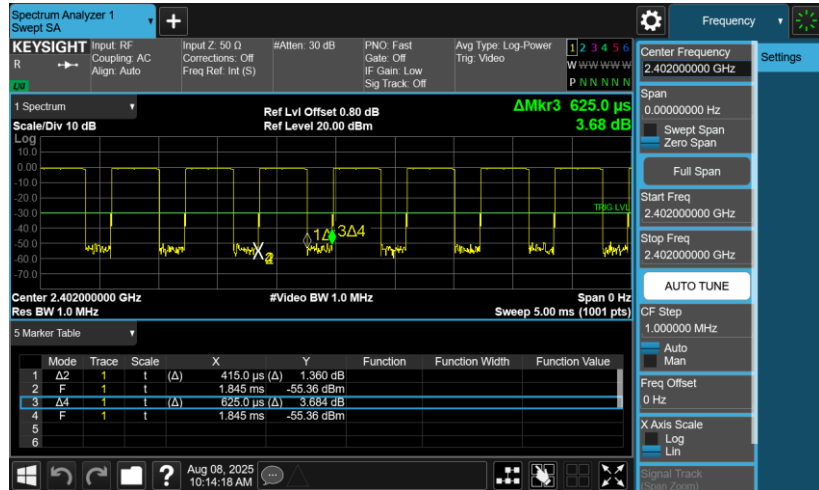
3DH5



## Duty cycle

BLE 1M

On+off time



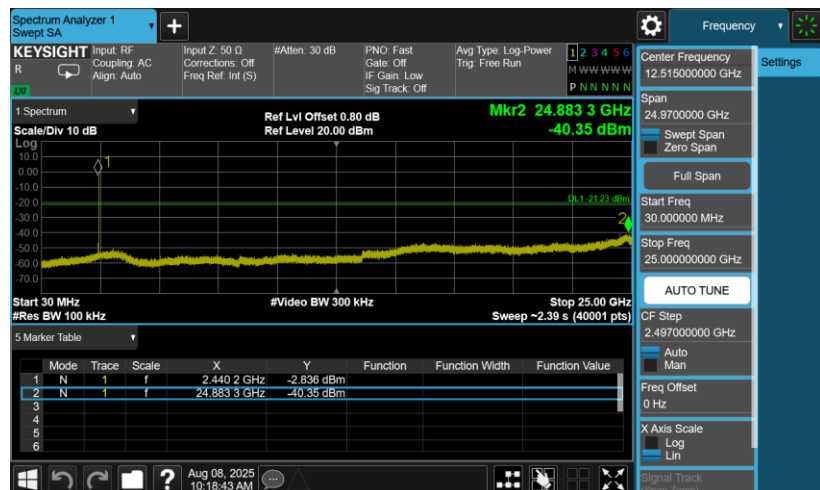
# Out of Band Conducted Spurious Emission

BLE 1M

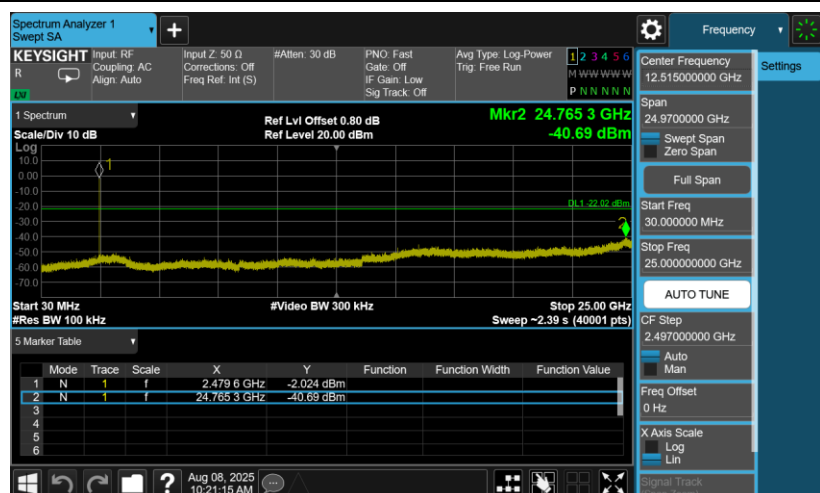
Low ch



Mid ch






High ch





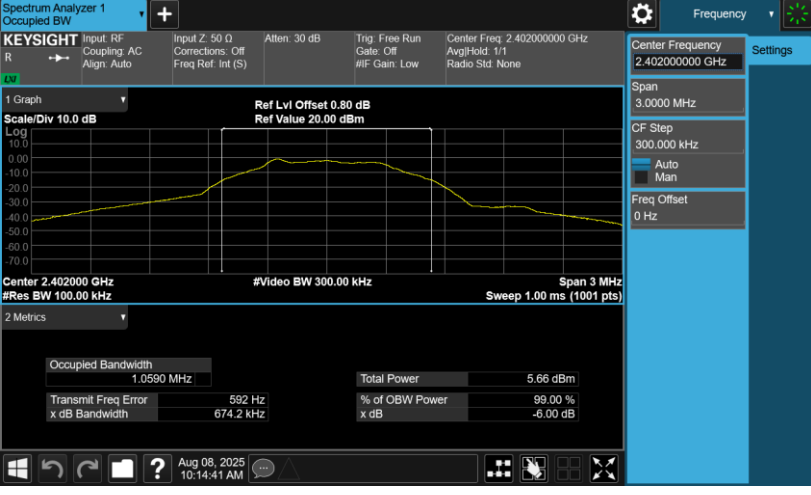


# Reference level

<p>BLE 1M</p> <p>Low ch</p>	
<p>Mid ch</p>	
<p>High ch</p>	



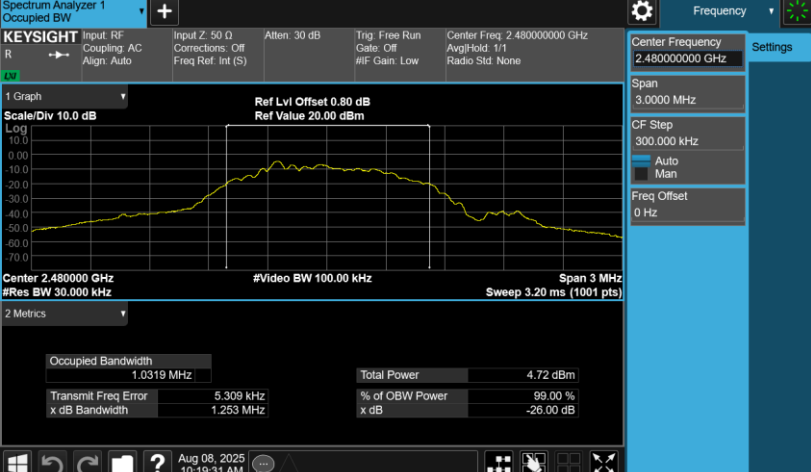
## Conducted Band Edge



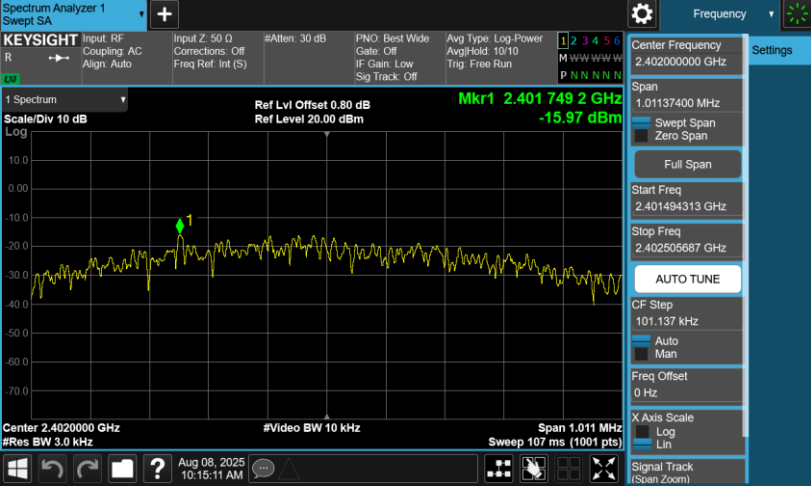
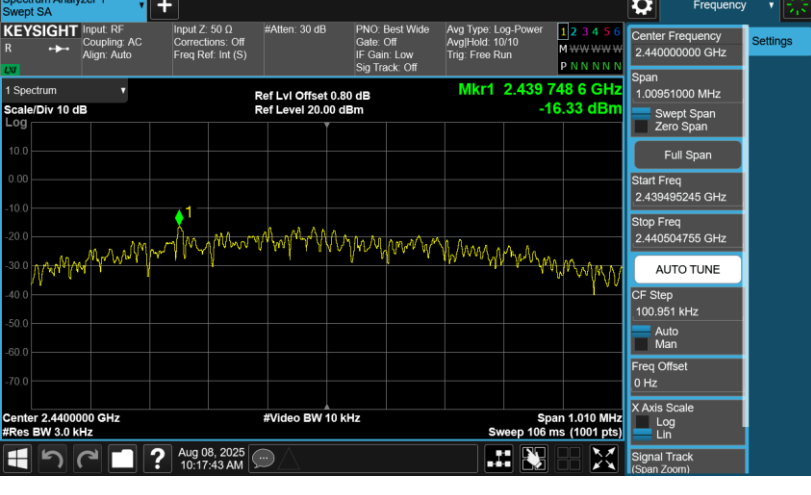
## 6 dB Bandwidth

<p>BLE 1M</p> <p>Low ch</p>	 <p>Center Frequency: 2.40200000 GHz</p> <p>Span: 3.0000 MHz</p> <p>CF Step: 300.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Center Freq: 2.4020000 GHz</p> <p>#Res BW: 100.00 kHz</p> <p>#Video BW: 300.00 kHz</p> <p>Sweep: 1.00 ms (1001 pts)</p> <p>Occupied Bandwidth: 1.0590 MHz</p> <p>Total Power: 5.66 dBm</p> <p>Transmit Freq Error: 592 kHz</p> <p>% of OBW Power: 99.00 %</p> <p>x dB Bandwidth: 674.2 kHz</p> <p>x dB: -6.00 dB</p>
<p>Mid ch</p>	 <p>Center Frequency: 2.44000000 GHz</p> <p>Span: 3.0000 MHz</p> <p>CF Step: 300.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Center Freq: 2.4400000 GHz</p> <p>#Res BW: 100.00 kHz</p> <p>#Video BW: 300.00 kHz</p> <p>Sweep: 1.00 ms (1001 pts)</p> <p>Occupied Bandwidth: 1.0608 MHz</p> <p>Total Power: 5.18 dBm</p> <p>Transmit Freq Error: -1.957 kHz</p> <p>% of OBW Power: 99.00 %</p> <p>x dB Bandwidth: 673.0 kHz</p> <p>x dB: -6.00 dB</p>
<p>High ch</p>	 <p>Center Frequency: 2.48000000 GHz</p> <p>Span: 3.0000 MHz</p> <p>CF Step: 300.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Center Freq: 2.4800000 GHz</p> <p>#Res BW: 100.00 kHz</p> <p>#Video BW: 300.00 kHz</p> <p>Sweep: 1.00 ms (1001 pts)</p> <p>Occupied Bandwidth: 1.0616 MHz</p> <p>Total Power: 4.35 dBm</p> <p>Transmit Freq Error: -3.835 kHz</p> <p>% of OBW Power: 99.00 %</p> <p>x dB Bandwidth: 670.2 kHz</p> <p>x dB: -6.00 dB</p>

# 99 % Occupied Bandwidth

<p>BLE 1M</p> <p>Low ch</p>	 <p>Center Frequency: 2.40200000 GHz</p> <p>Span: 3.0000 MHz</p> <p>CF Step: 300.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Occupied Bandwidth: 1.0288 MHz</p> <p>Total Power: 6.02 dBm</p> <p>Transmit Freq Error: 8.691 kHz</p> <p>% of OBW Power: 99.00 %</p>
<p>Mid ch</p>	 <p>Center Frequency: 2.44000000 GHz</p> <p>Span: 3.0000 MHz</p> <p>CF Step: 300.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Occupied Bandwidth: 1.0304 MHz</p> <p>Total Power: 5.56 dBm</p> <p>Transmit Freq Error: 7.060 kHz</p> <p>% of OBW Power: 99.00 %</p>
<p>High ch</p>	 <p>Center Frequency: 2.48000000 GHz</p> <p>Span: 3.0000 MHz</p> <p>CF Step: 300.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Occupied Bandwidth: 1.0319 MHz</p> <p>Total Power: 4.72 dBm</p> <p>Transmit Freq Error: 5.309 kHz</p> <p>% of OBW Power: 99.00 %</p>

## Power Density

<p>BLE 1M</p> <p>Low ch</p>	
<p>Mid ch</p>	
<p>High ch</p>	