

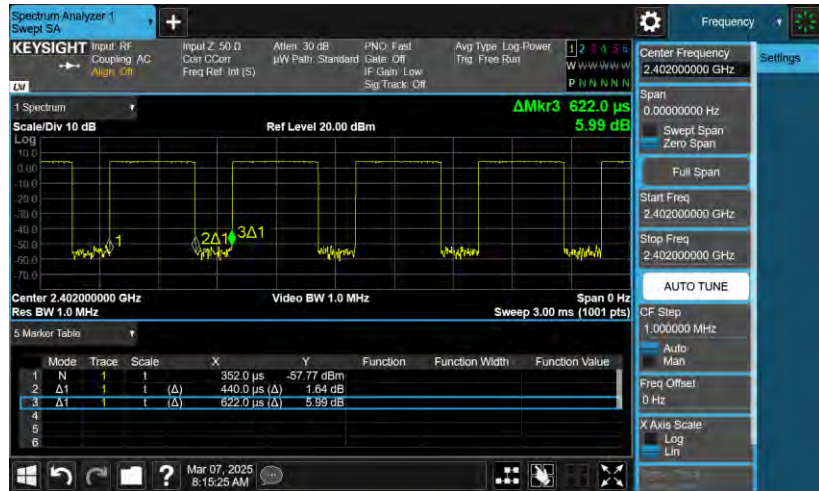
Appendix B. Test Plots

Right

Duty cycle

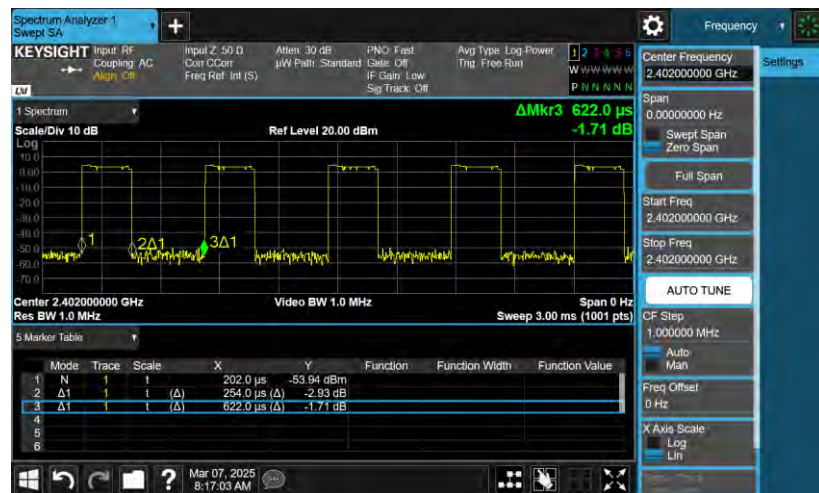
BLE 1M

On+off time



BLE 2M

On+off time



Out of Band Conducted Spurious Emission

BLE 1M	 Low ch
Mid ch	 Mid ch
High ch	 High ch

BLE 2M

Low ch



Mid ch



High ch



Reference level

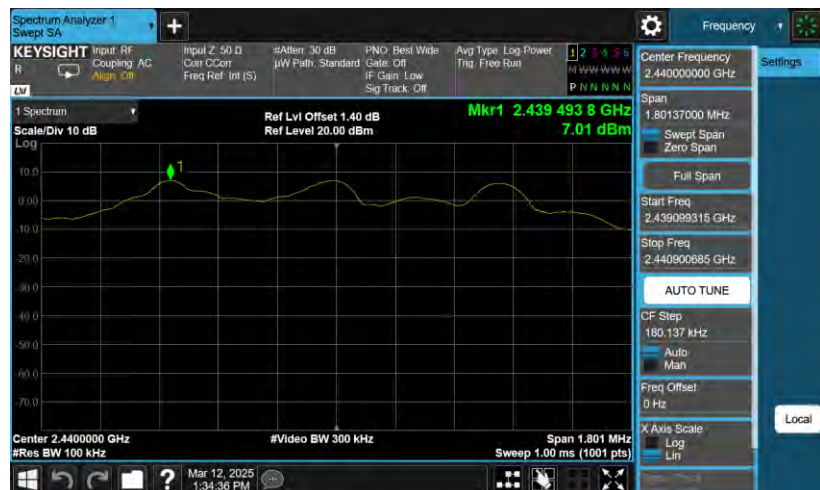
BLE 1M Low ch	
Mid ch	
High ch	

BLE 2M

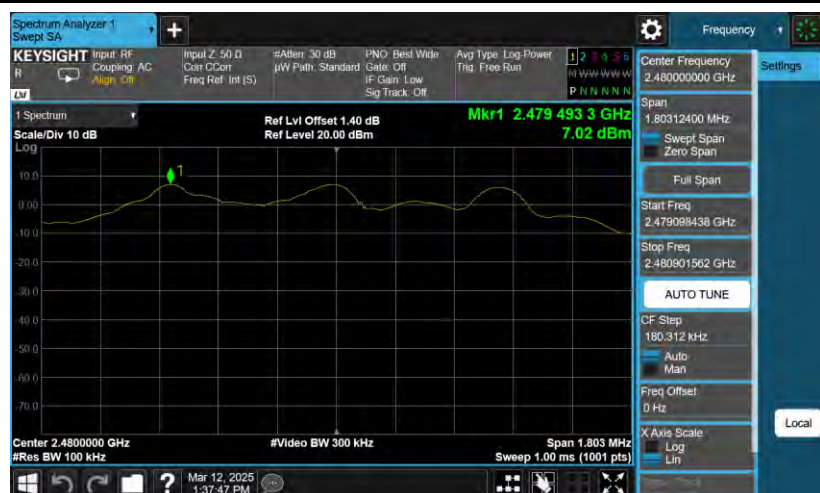
Low ch



Mid ch



High ch



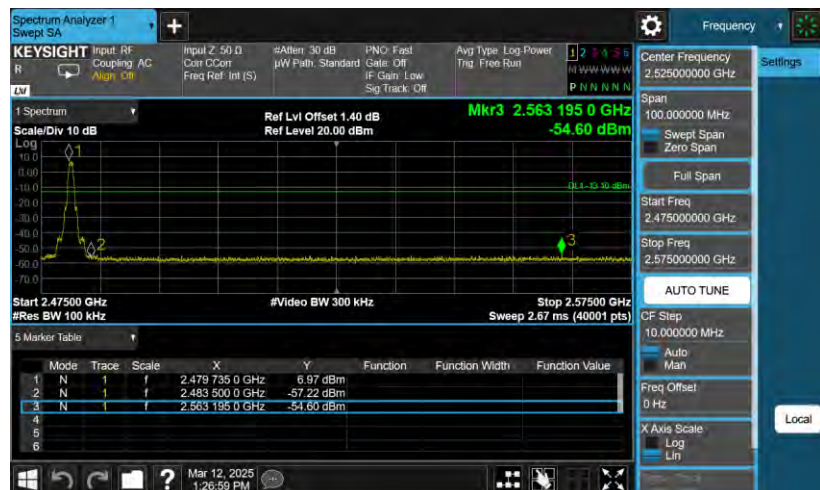
Conducted Band Edge

BLE 1M

Low ch

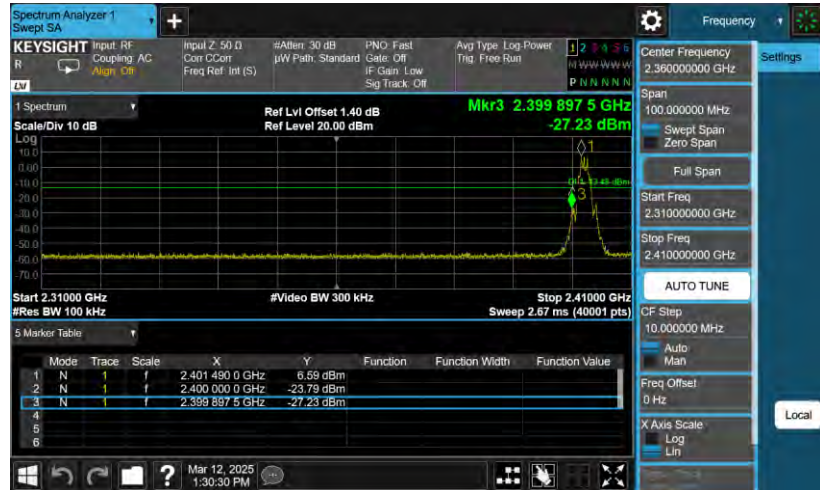


High ch

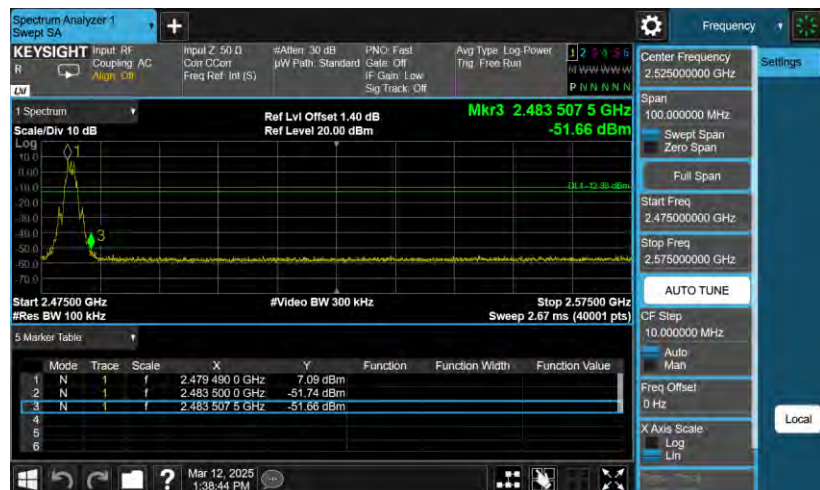


BLE 2M

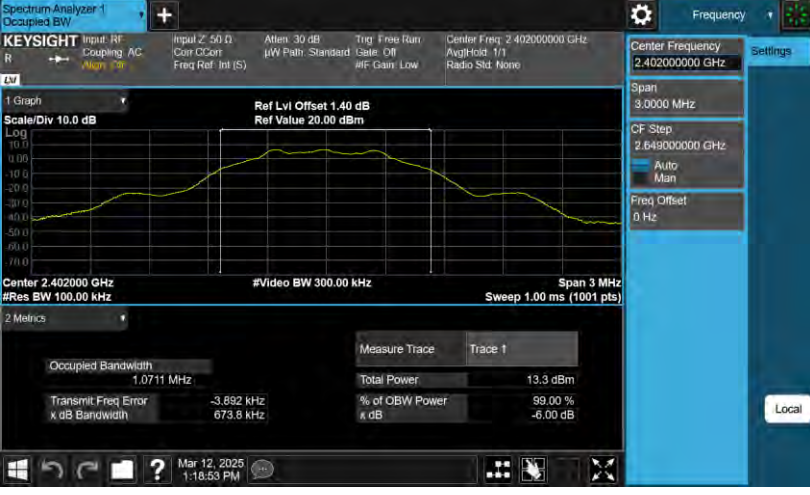
Low ch



High ch



6 dB Bandwidth

BLE 1M	
Low ch	 Keysight Spectrum Analyzer screenshot for Low channel. The display shows a spectrum plot with a peak around 2.402 GHz. The settings are: Center Frequency 2.40200000 GHz, Span 3.0000 MHz, Res BW 100.00 kHz, Video BW 300.00 kHz, Sweep 1.00 ms (1001 pts). The measurement results are: Occupied Bandwidth 1.0711 MHz, Total Power 13.3 dBm, Transmit Freq Error -3.692 kHz, % of OBW Power 99.00%, and x dB Bandwidth -6.00 dB.
Mid ch	 Keysight Spectrum Analyzer screenshot for Mid channel. The display shows a spectrum plot with a peak around 2.440 GHz. The settings are: Center Frequency 2.44000000 GHz, Span 3.0000 MHz, Res BW 100.00 kHz, Video BW 300.00 kHz, Sweep 1.00 ms (1001 pts). The measurement results are: Occupied Bandwidth 1.0719 MHz, Total Power 13.7 dBm, Transmit Freq Error -5.915 kHz, % of OBW Power 99.00%, and x dB Bandwidth -6.00 dB.
High ch	 Keysight Spectrum Analyzer screenshot for High channel. The display shows a spectrum plot with a peak around 2.480 GHz. The settings are: Center Frequency 2.48000000 GHz, Span 3.0000 MHz, Res BW 100.00 kHz, Video BW 300.00 kHz, Sweep 1.00 ms (1001 pts). The measurement results are: Occupied Bandwidth 1.0710 MHz, Total Power 13.7 dBm, Transmit Freq Error -0.280 kHz, % of OBW Power 99.00%, and x dB Bandwidth -6.00 dB.

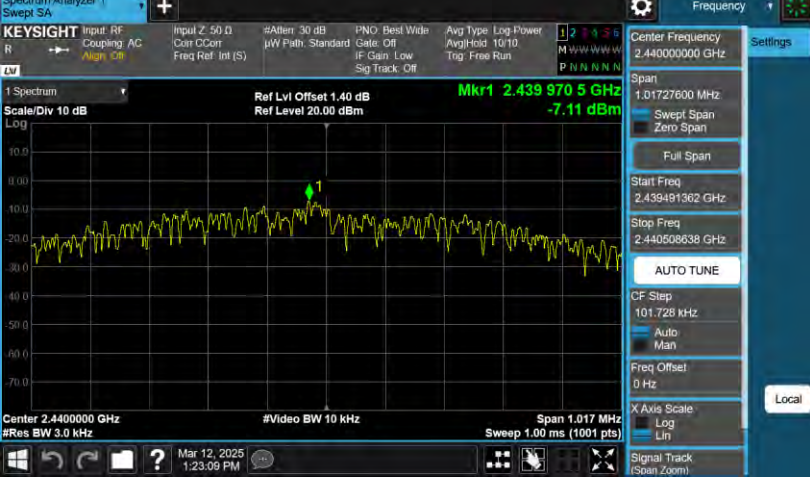
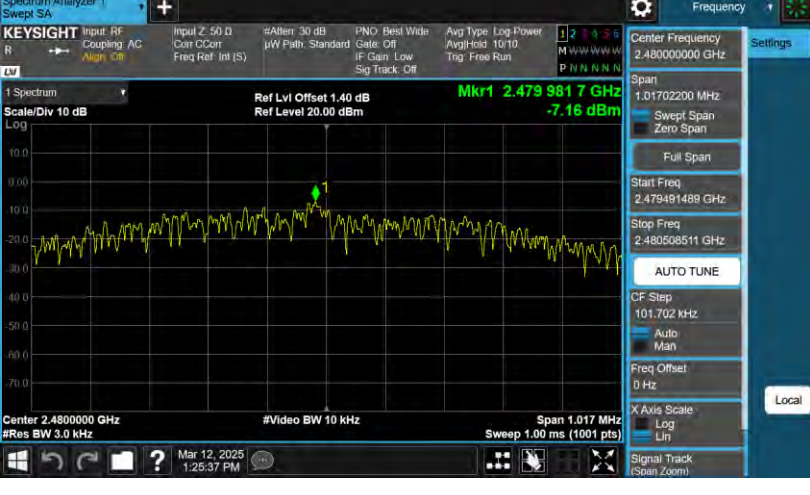
BLE 2M	
Low ch	
Mid ch	
High ch	

99 % Occupied Bandwidth

BLE 1M Low ch	
Mid ch	
High ch	

BLE 2M	
Low ch	 Keysight Spectrum Analyzer screenshot for Low channel. The display shows a spectrum plot with a center frequency of 2.40200000 GHz. The occupied bandwidth is 2.0047 MHz, and the total power is 13.6 dBm. The transmit frequency error is 11.522 kHz, and the percentage of occupied bandwidth power is 99.00%.
Mid ch	 Keysight Spectrum Analyzer screenshot for Mid channel. The display shows a spectrum plot with a center frequency of 2.44000000 GHz. The occupied bandwidth is 2.0032 MHz, and the total power is 14.1 dBm. The transmit frequency error is 12.772 kHz, and the percentage of occupied bandwidth power is 99.00%.
High ch	 Keysight Spectrum Analyzer screenshot for High channel. The display shows a spectrum plot with a center frequency of 2.48000000 GHz. The occupied bandwidth is 2.0049 MHz, and the total power is 14.1 dBm. The transmit frequency error is 13.379 kHz, and the percentage of occupied bandwidth power is 99.00%.

Power Density

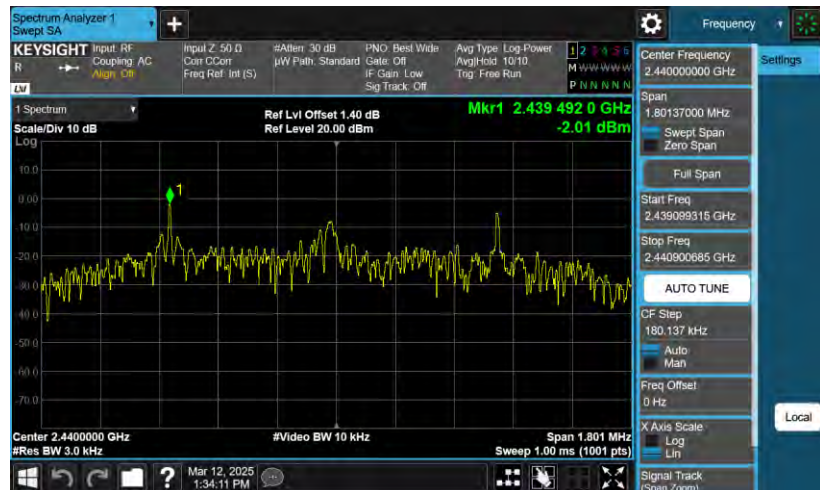
BLE 1M Low ch	
Mid ch	
High ch	

BLE 2M

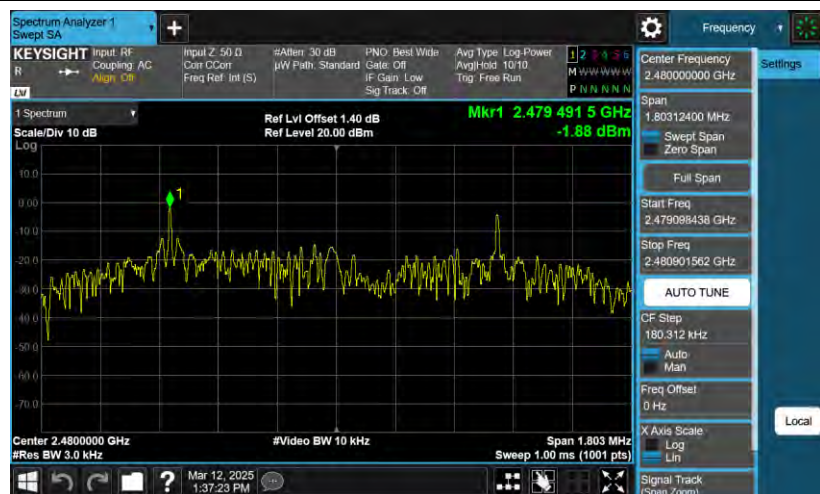
Low ch



Mid ch



High ch

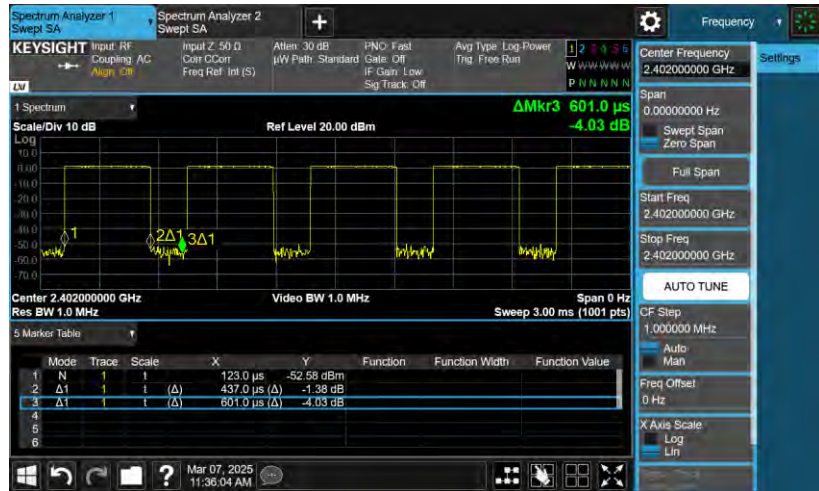


Left

Duty cycle

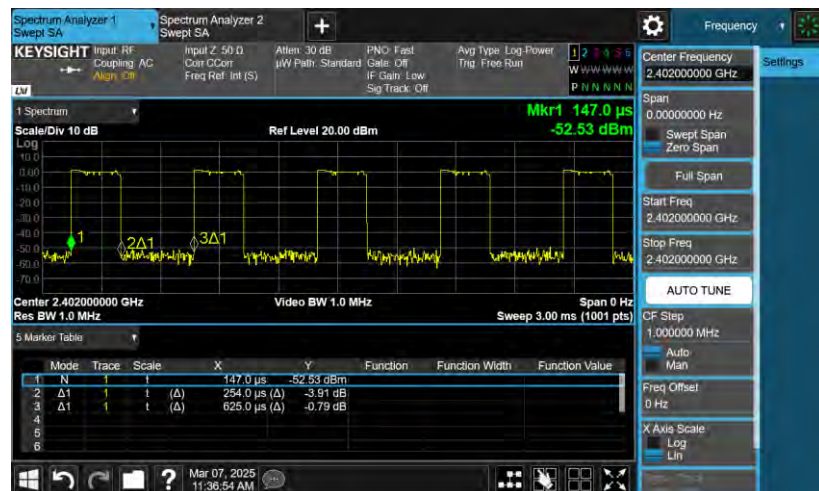
BLE 1M

On+off time



BLE 2M

On+off time



Out of Band Conducted Spurious Emission

BLE 1M

Low ch



Mid ch



High ch



BLE 2M

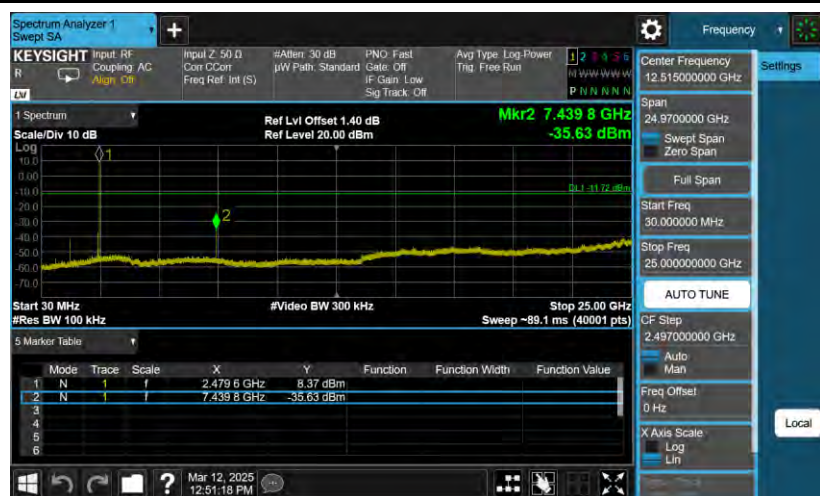
Low ch



Mid ch



High ch



Reference level

BLE 1M Low ch	
Mid ch	
High ch	

BLE 2M Low ch	
Mid ch	
High ch	

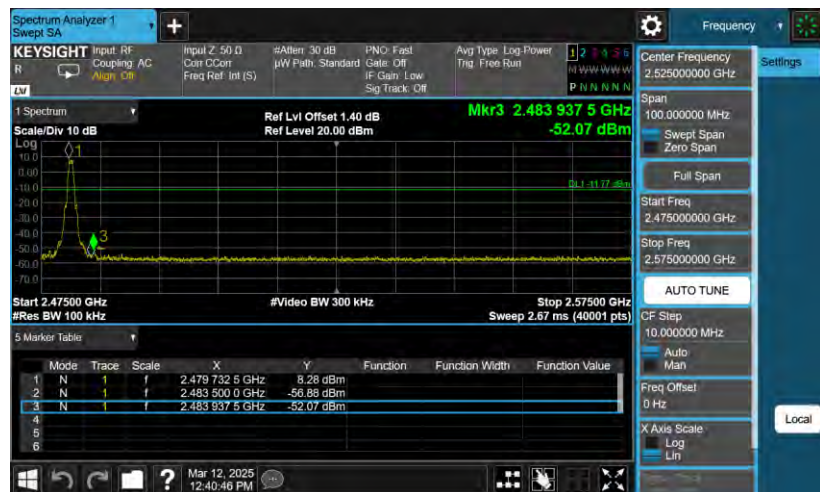
Conducted Band Edge

BLE 1M

Low ch

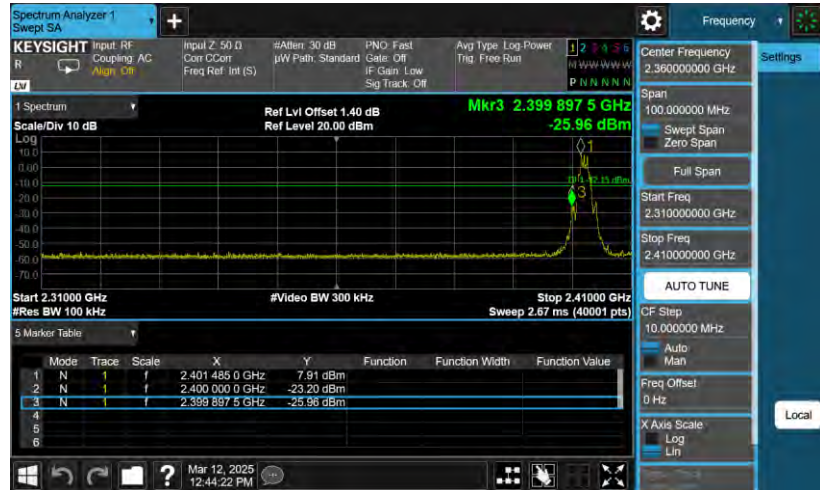


High ch

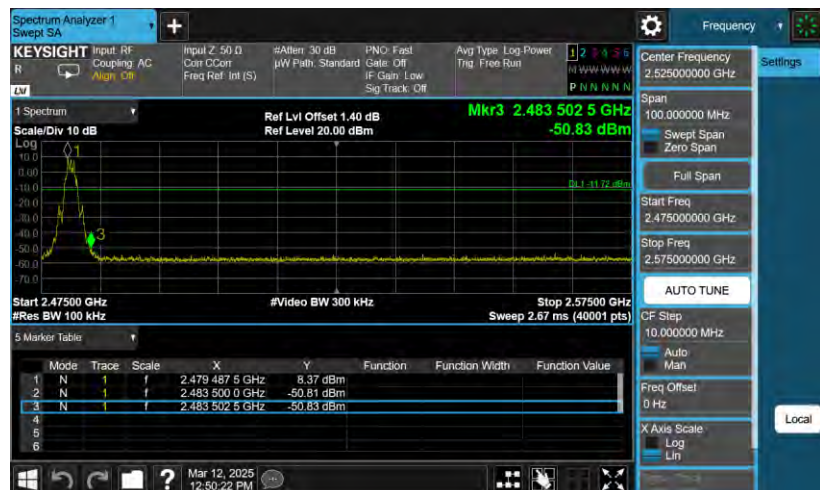


BLE 2M

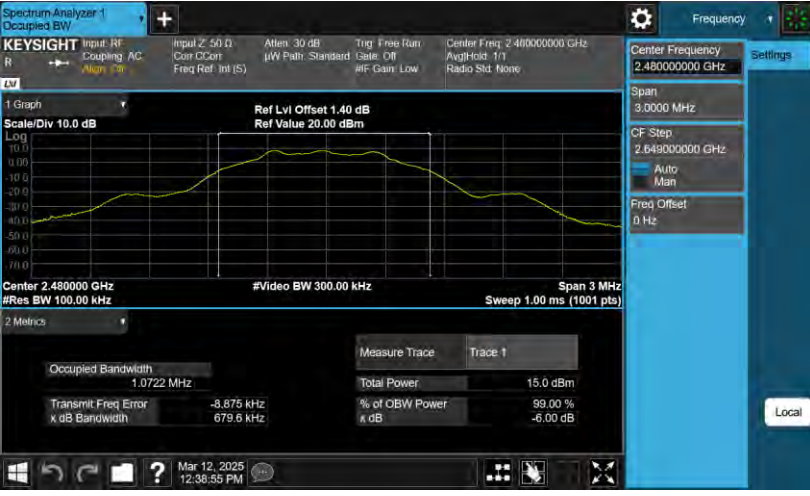
Low ch



High ch



6 dB Bandwidth

BLE 1M Low ch	 Keysight Spectrum Analyzer 1 Occupied BW Center Frequency: 2.40200000 GHz Span: 3.0000 MHz Res BW: 100.00 kHz Occupied Bandwidth: 1.0710 MHz Total Power: 14.6 dBm
Mid ch	 Keysight Spectrum Analyzer 1 Occupied BW Center Frequency: 2.44000000 GHz Span: 3.0000 MHz Res BW: 100.00 kHz Occupied Bandwidth: 1.0725 MHz Total Power: 15.0 dBm
High ch	 Keysight Spectrum Analyzer 1 Occupied BW Center Frequency: 2.48000000 GHz Span: 3.0000 MHz Res BW: 100.00 kHz Occupied Bandwidth: 1.0722 MHz Total Power: 15.0 dBm

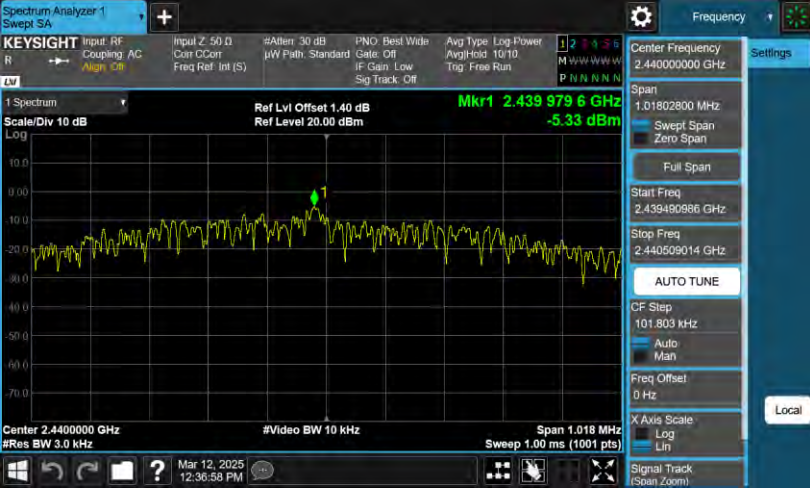
BLE 2M Low ch	
Mid ch	
High ch	

99 % Occupied Bandwidth

BLE 1M Low ch	
Mid ch	
High ch	

BLE 2M	
Low ch	 Center Frequency: 2.402000000 GHz Span: 6.0000 MHz CF Step: 600.000 kHz Freq Offset: 0 Hz Occupied Bandwidth: 2.0041 MHz Total Power: 14.8 dBm Transmit Freq Error: 9.667 kHz % of OBW Power: 99.00%
Mid ch	 Center Frequency: 2.440000000 GHz Span: 6.0000 MHz CF Step: 600.000 kHz Freq Offset: 0 Hz Occupied Bandwidth: 2.0053 MHz Total Power: 15.3 dBm Transmit Freq Error: 10.297 kHz % of OBW Power: 99.00%
High ch	 Center Frequency: 2.480000000 GHz Span: 6.0000 MHz CF Step: 600.000 kHz Freq Offset: 0 Hz Occupied Bandwidth: 2.0056 MHz Total Power: 15.3 dBm Transmit Freq Error: 9.976 kHz % of OBW Power: 99.00%

Power Density

BLE 1M Low ch	
Mid ch	
High ch	

BLE 2M Low ch	
Mid ch	
High ch	