

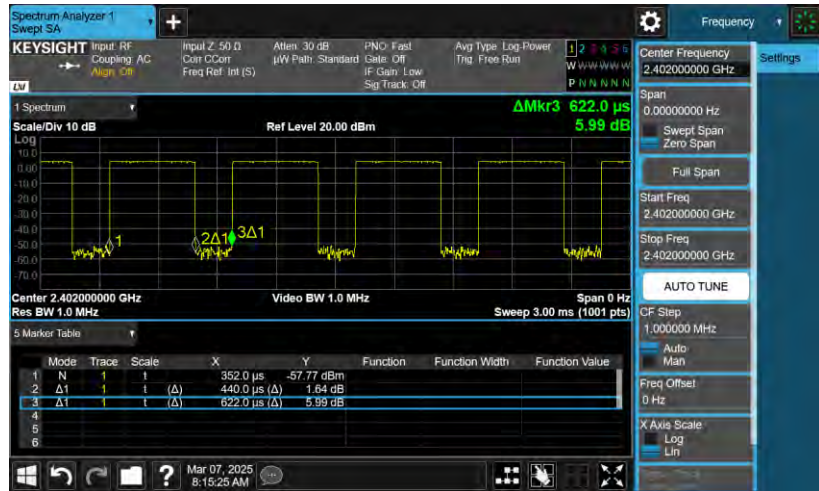
## Appendix B. Test Plots

Right

Duty cycle

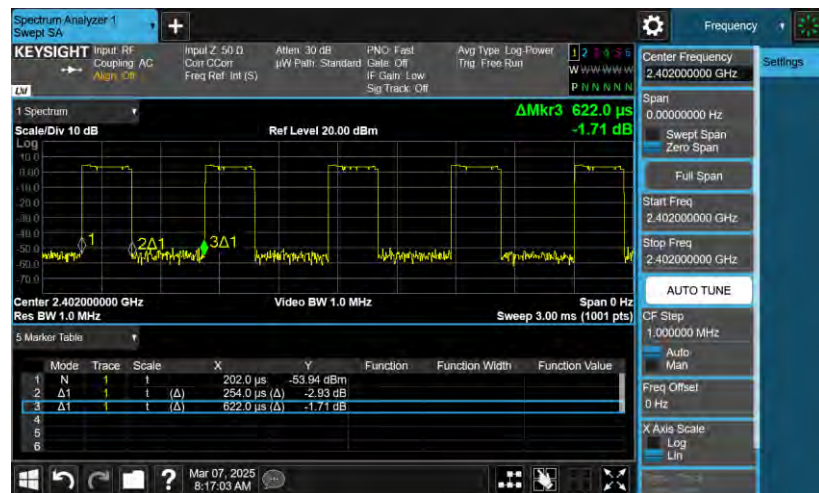
BLE 1M

On+off time



BLE 2M

On+off time



## Out of Band Conducted Spurious Emission

BLE 1M

Low ch



Mid ch



High ch



BLE 2M

Low ch



Mid ch



High ch



Reference level

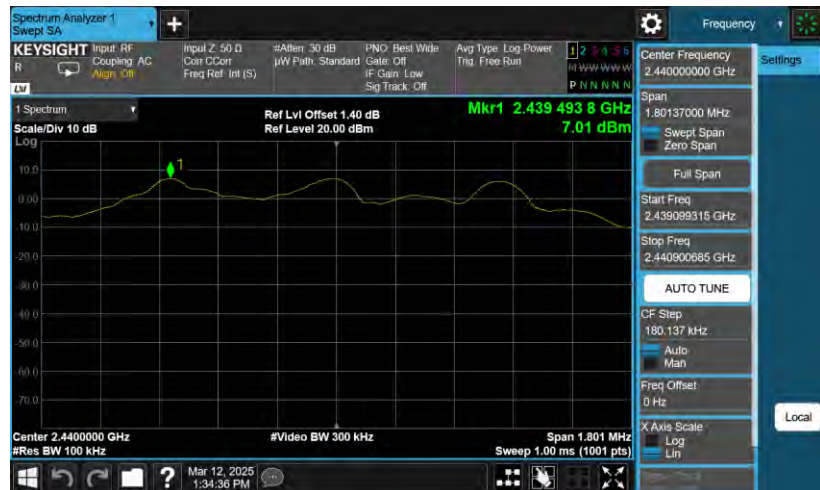
|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>BLE 1M</p> <p>Low ch</p> |  <p>Keysight Spectrum Analyzer screenshot for Low channel. The display shows a spectrum plot with a peak at 2.4017413 GHz. The center frequency is 2.4020000 GHz, and the span is 1.01063400 MHz. The reference level is 20.00 dBm, and the marker level is 6.47 dBm. The resolution bandwidth is 100 kHz, and the video bandwidth is 300 kHz. The sweep time is 1.00 ms (1001 pts).</p> |
| <p>Mid ch</p>               |  <p>Keysight Spectrum Analyzer screenshot for Mid channel. The display shows a spectrum plot with a peak at 2.4397416 GHz. The center frequency is 2.4400000 GHz, and the span is 1.017 MHz. The reference level is 20.00 dBm, and the marker level is 6.93 dBm. The resolution bandwidth is 100 kHz, and the video bandwidth is 300 kHz. The sweep time is 1.00 ms (1001 pts).</p>     |
| <p>High ch</p>              |  <p>Keysight Spectrum Analyzer screenshot for High channel. The display shows a spectrum plot with a peak at 2.4797407 GHz. The center frequency is 2.4800000 GHz, and the span is 1.017 MHz. The reference level is 20.00 dBm, and the marker level is 6.90 dBm. The resolution bandwidth is 100 kHz, and the video bandwidth is 300 kHz. The sweep time is 1.00 ms (1001 pts).</p>   |

BLE 2M

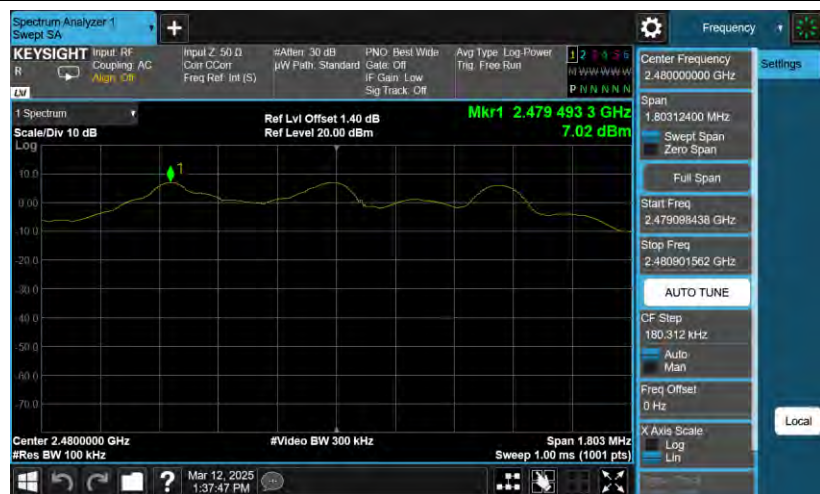
Low ch



Mid ch



High ch



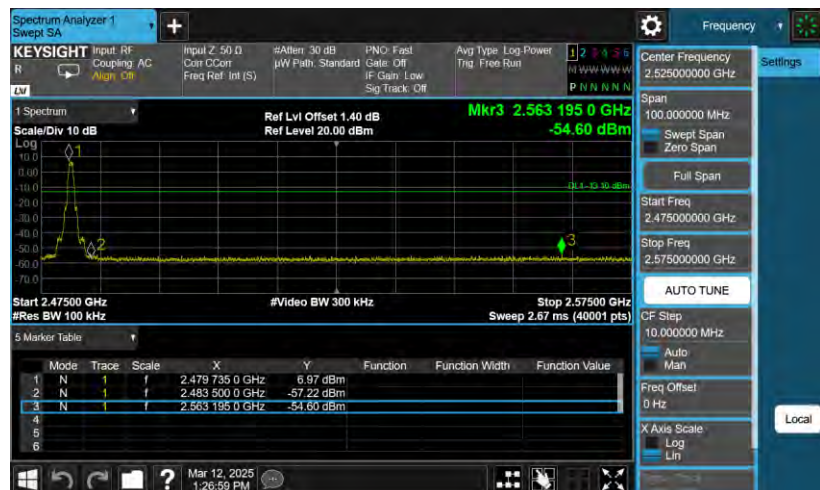
## Conducted Band Edge

BLE 1M

Low ch

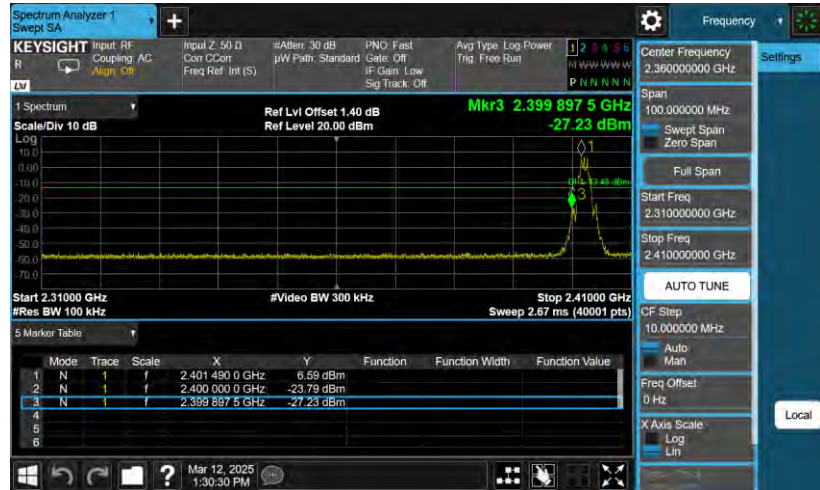


High ch

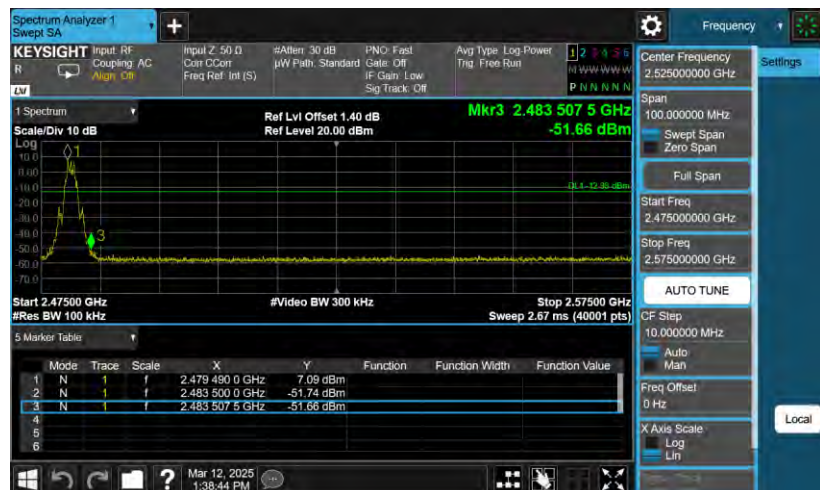


BLE 2M

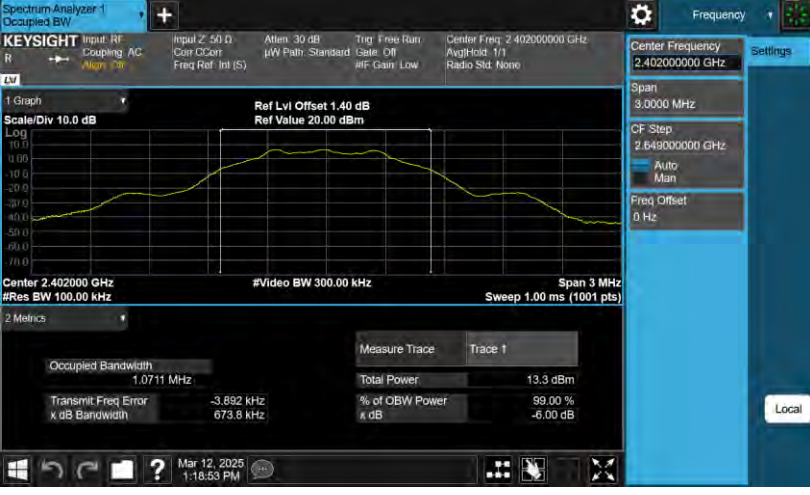
Low ch



High ch



## 6 dB Bandwidth

| BLE 1M  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Low ch  |  <p>Keysight Spectrum Analyzer screenshot for Low channel. The display shows a spectrum plot with a peak at approximately 2.402 GHz. The center frequency is set to 2.402000000 GHz, span is 3.0000 MHz, and resolution bandwidth is 100.00 kHz. The occupied bandwidth is measured as 1.0711 MHz, with a total power of 13.3 dBm and 99.00% of the power within the bandwidth. The transmit frequency error is -3.682 kHz.</p>    |
| Mid ch  |  <p>Keysight Spectrum Analyzer screenshot for Mid channel. The display shows a spectrum plot with a peak at approximately 2.440 GHz. The center frequency is set to 2.440000000 GHz, span is 3.0000 MHz, and resolution bandwidth is 100.00 kHz. The occupied bandwidth is measured as 1.0719 MHz, with a total power of 13.7 dBm and 99.00% of the power within the bandwidth. The transmit frequency error is -5.915 kHz.</p>   |
| High ch |  <p>Keysight Spectrum Analyzer screenshot for High channel. The display shows a spectrum plot with a peak at approximately 2.480 GHz. The center frequency is set to 2.480000000 GHz, span is 3.0000 MHz, and resolution bandwidth is 100.00 kHz. The occupied bandwidth is measured as 1.0710 MHz, with a total power of 13.7 dBm and 99.00% of the power within the bandwidth. The transmit frequency error is -0.280 kHz.</p> |

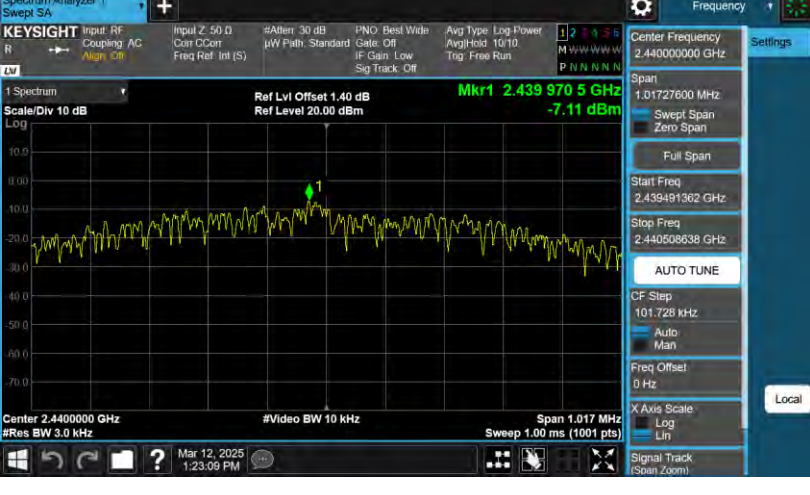
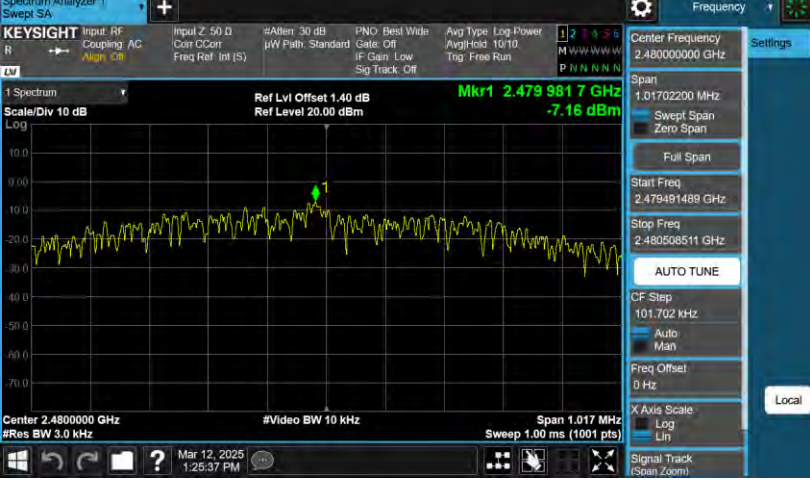
| BLE 2M  |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Low ch  |  <p>Keysight Spectrum Analyzer screenshot for Low channel. The display shows a signal spectrum centered at 2.40200000 GHz with a span of 6.0000 MHz. The CF step is 600.000 kHz and the frequency offset is 0 Hz. The occupied bandwidth is 2.0733 MHz, and the total power is 13.9 dBm. The percentage of OBW power is 99.00%.</p>    |
| Mid ch  |  <p>Keysight Spectrum Analyzer screenshot for Mid channel. The display shows a signal spectrum centered at 2.44000000 GHz with a span of 6.0000 MHz. The CF step is 600.000 kHz and the frequency offset is 0 Hz. The occupied bandwidth is 2.0726 MHz, and the total power is 14.4 dBm. The percentage of OBW power is 99.00%.</p>   |
| High ch |  <p>Keysight Spectrum Analyzer screenshot for High channel. The display shows a signal spectrum centered at 2.48000000 GHz with a span of 6.0000 MHz. The CF step is 600.000 kHz and the frequency offset is 0 Hz. The occupied bandwidth is 2.0731 MHz, and the total power is 14.3 dBm. The percentage of OBW power is 99.00%.</p> |

99 % Occupied Bandwidth

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

| BLE 2M  |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| Low ch  |    |
| Mid ch  |   |
| High ch |  |

Power Density

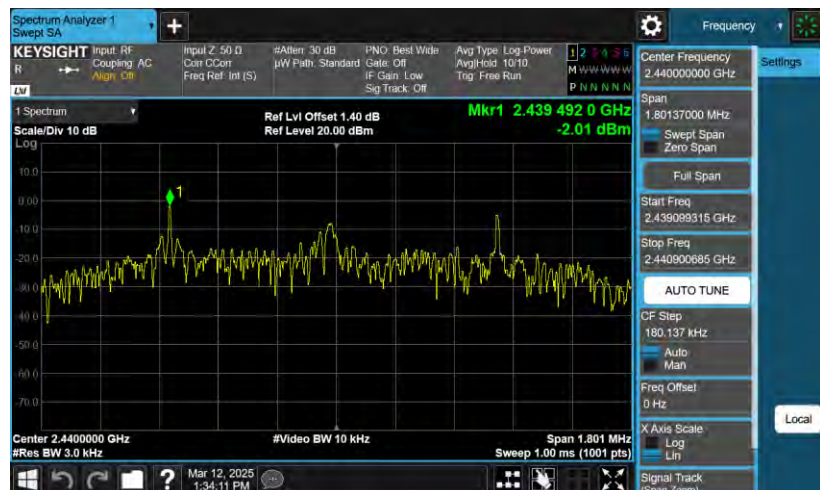
|                             |                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------|
| <p>BLE 1M</p> <p>Low ch</p> |    |
| <p>Mid ch</p>          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

BLE 2M

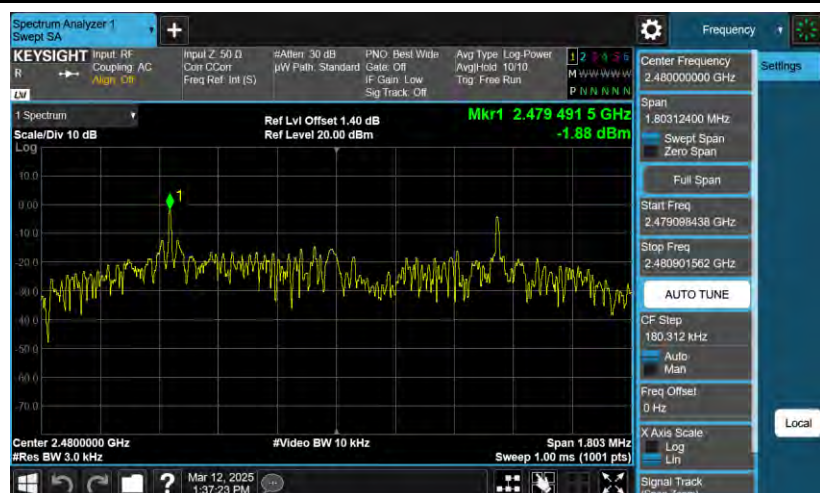
Low ch



Mid ch



High ch

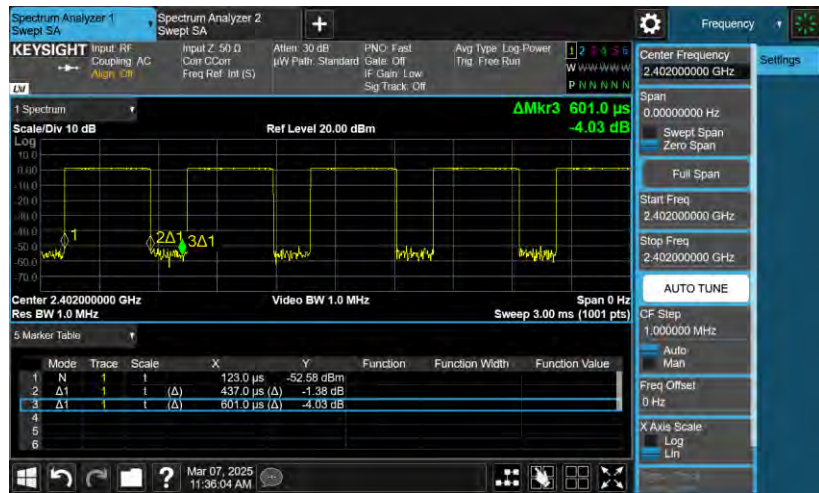


Left

## Duty cycle

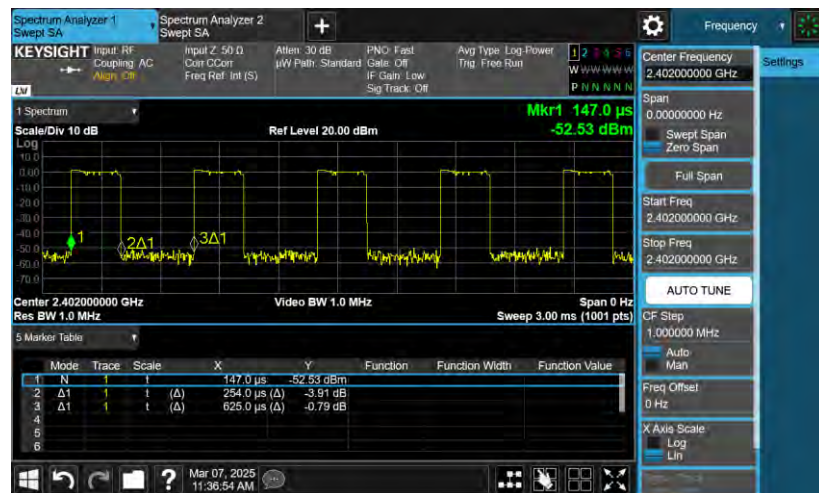
### BLE 1M

On+off time

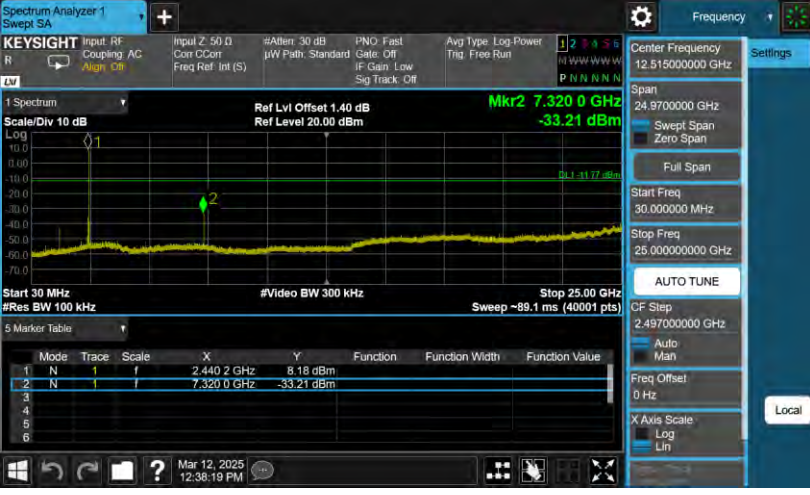
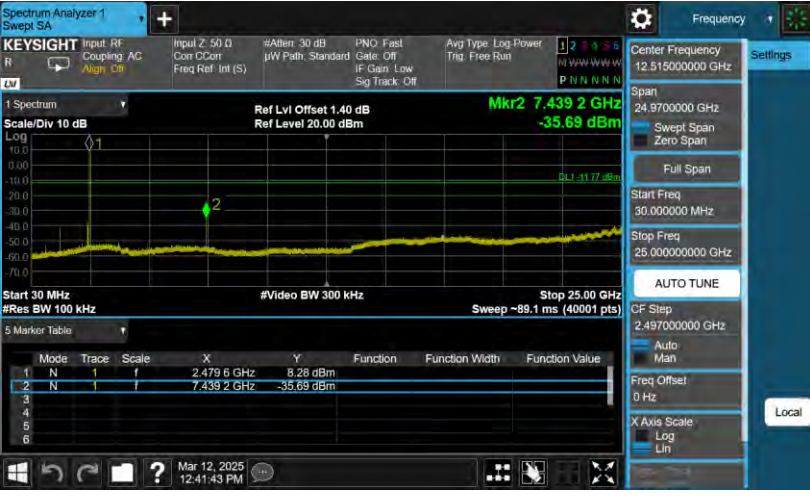


### BLE 2M

On+off time



## Out of Band Conducted Spurious Emission

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

BLE 2M

Low ch



Mid ch

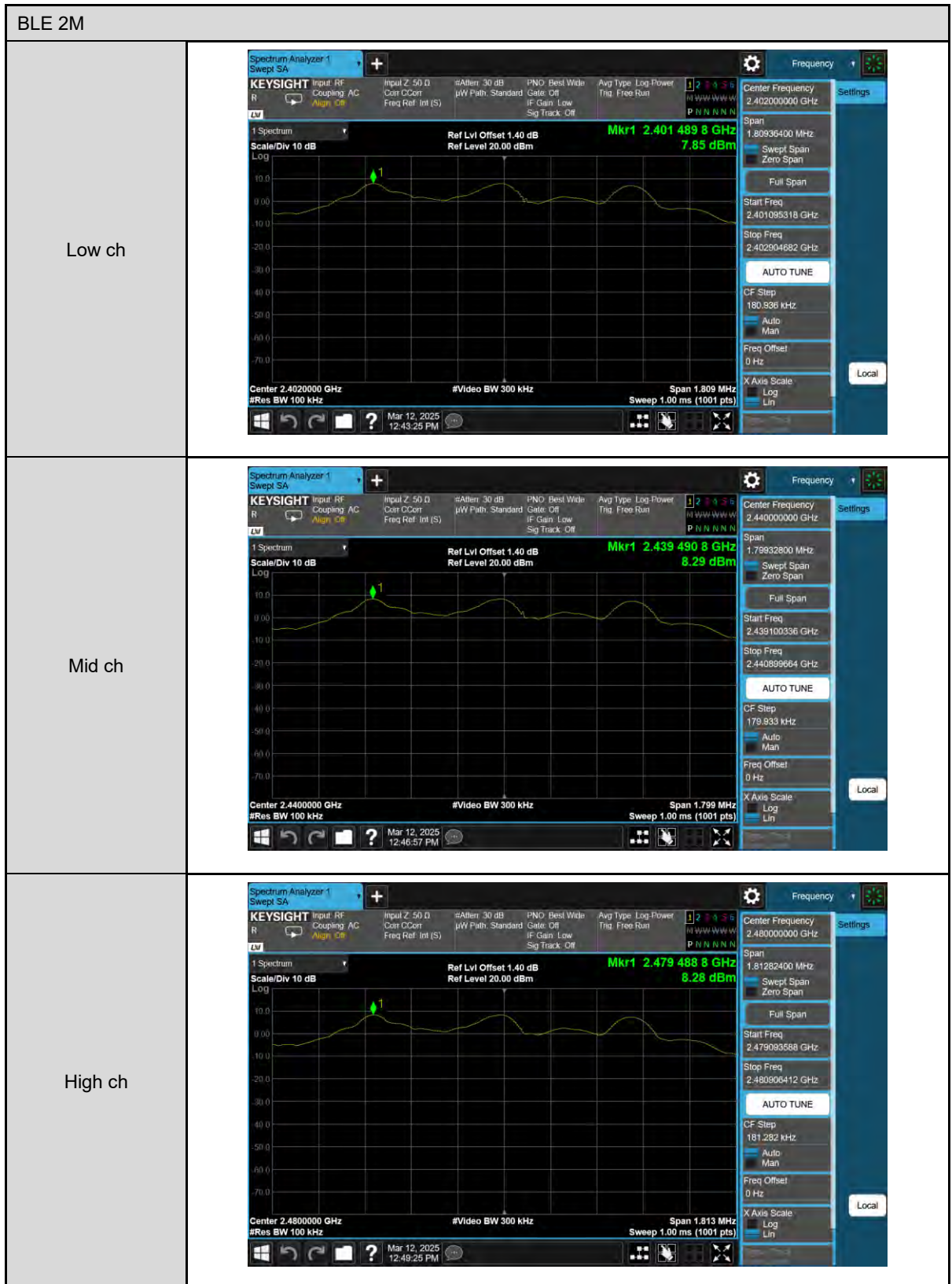


High ch



Reference level

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



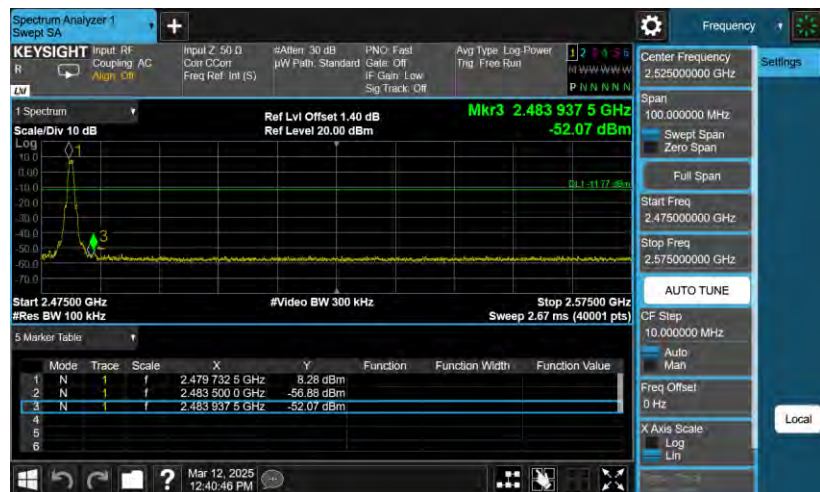
## Conducted Band Edge

BLE 1M

Low ch

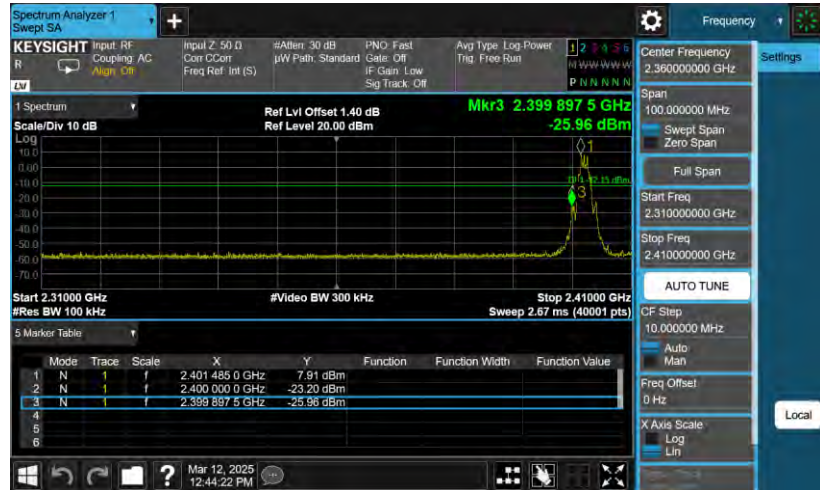


High ch

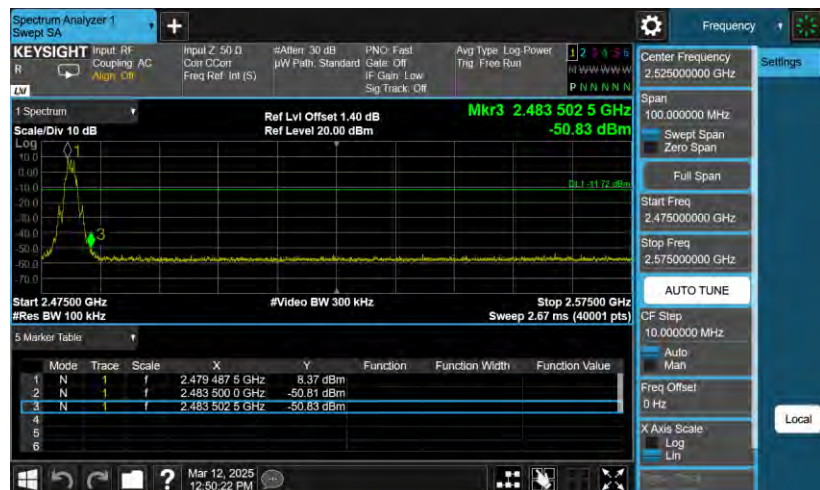


BLE 2M

Low ch



High ch



## 6 dB Bandwidth

| BLE 1M  |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| Low ch  |    |
| Mid ch  |   |
| High ch |  |

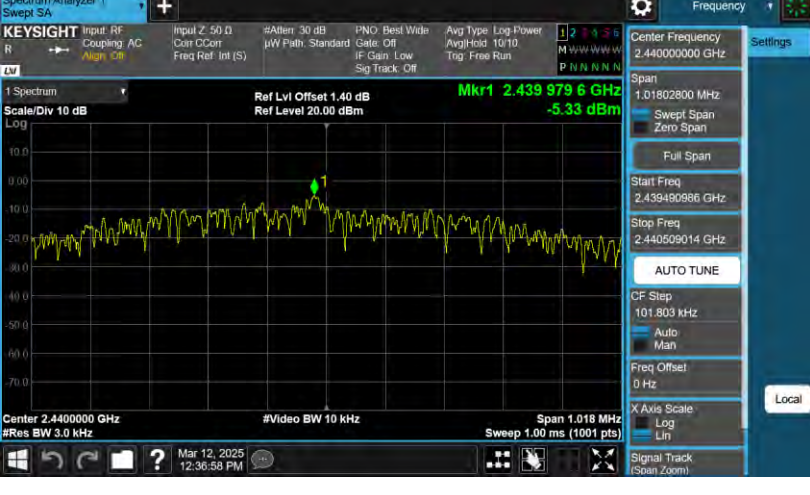
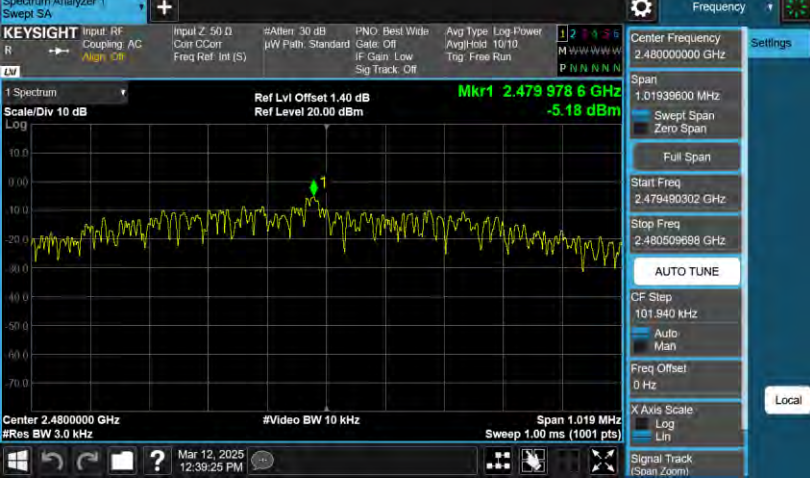
| BLE 2M  |                                                                                                                                                                                                                                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Low ch  |  <p>Center Frequency: 2.40200000 GHz</p> <p>Span: 6.0000 MHz</p> <p>CF Step: 600.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Occupied Bandwidth: 2.0738 MHz</p> <p>Total Power: 15.2 dBm</p> <p>% of OBW Power: 99.00 %</p>   |
| Mid ch  |  <p>Center Frequency: 2.44000000 GHz</p> <p>Span: 6.0000 MHz</p> <p>CF Step: 600.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Occupied Bandwidth: 2.0732 MHz</p> <p>Total Power: 15.6 dBm</p> <p>% of OBW Power: 99.00 %</p>  |
| High ch |  <p>Center Frequency: 2.48000000 GHz</p> <p>Span: 6.0000 MHz</p> <p>CF Step: 600.000 kHz</p> <p>Freq Offset: 0 Hz</p> <p>Occupied Bandwidth: 2.0746 MHz</p> <p>Total Power: 15.6 dBm</p> <p>% of OBW Power: 99.00 %</p> |

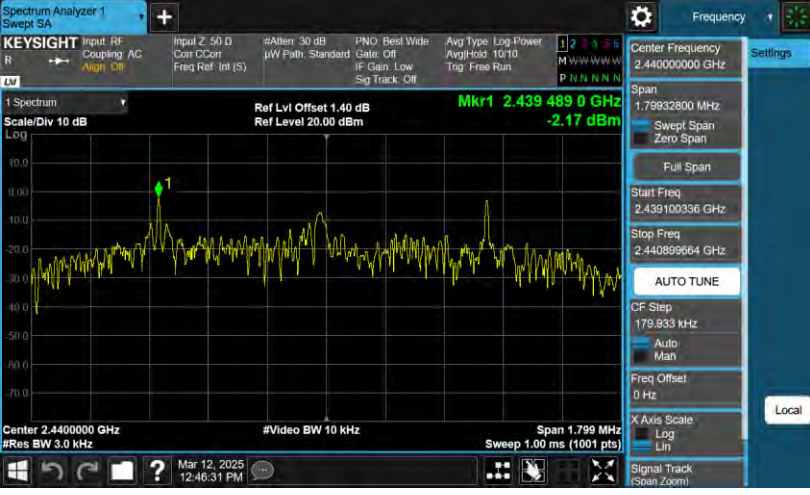
99 % Occupied Bandwidth

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

| BLE 2M  |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| Low ch  |    |
| Mid ch  |   |
| High ch |  |

Power Density

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

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