

# Test Data Appendix For BLE

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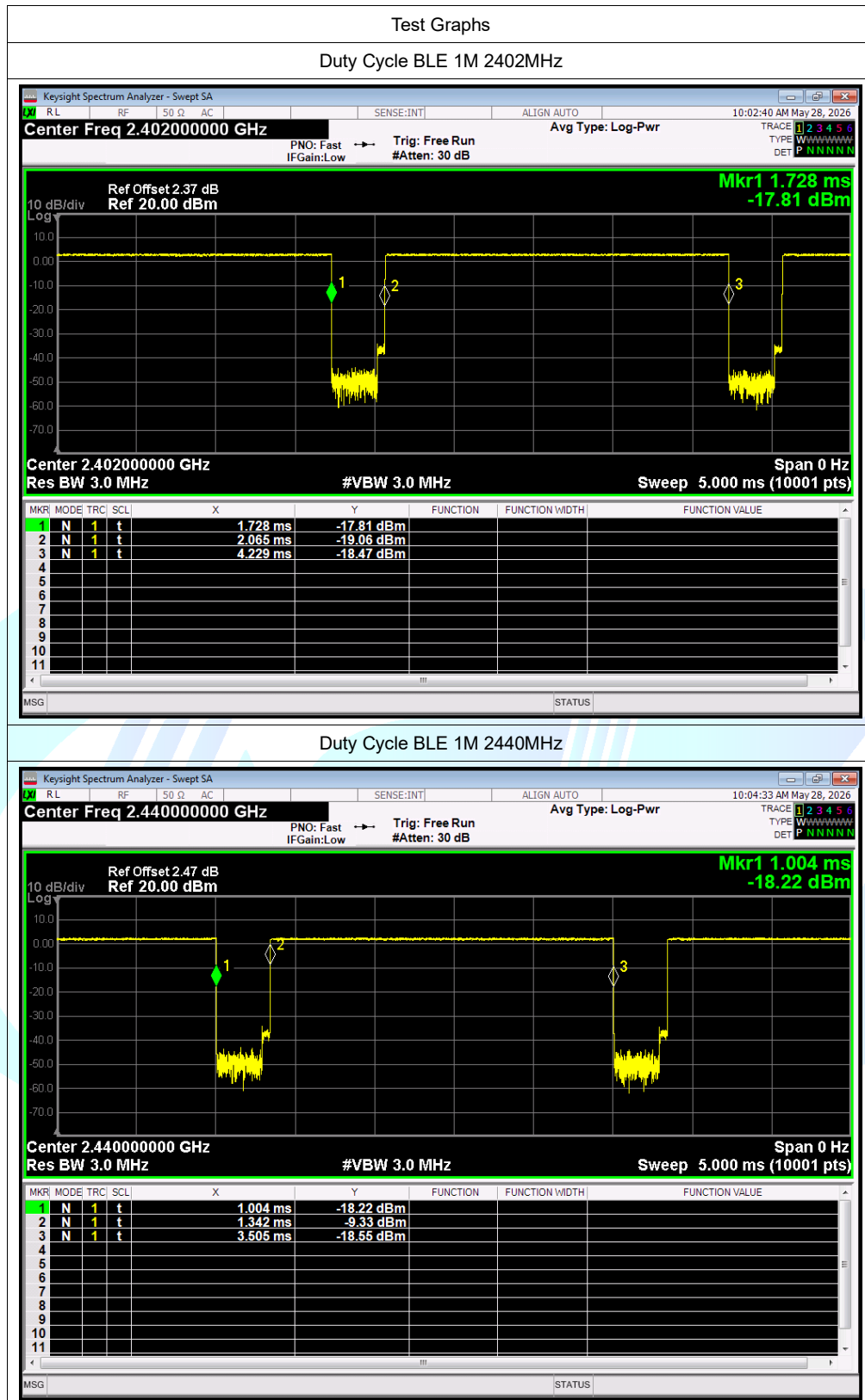
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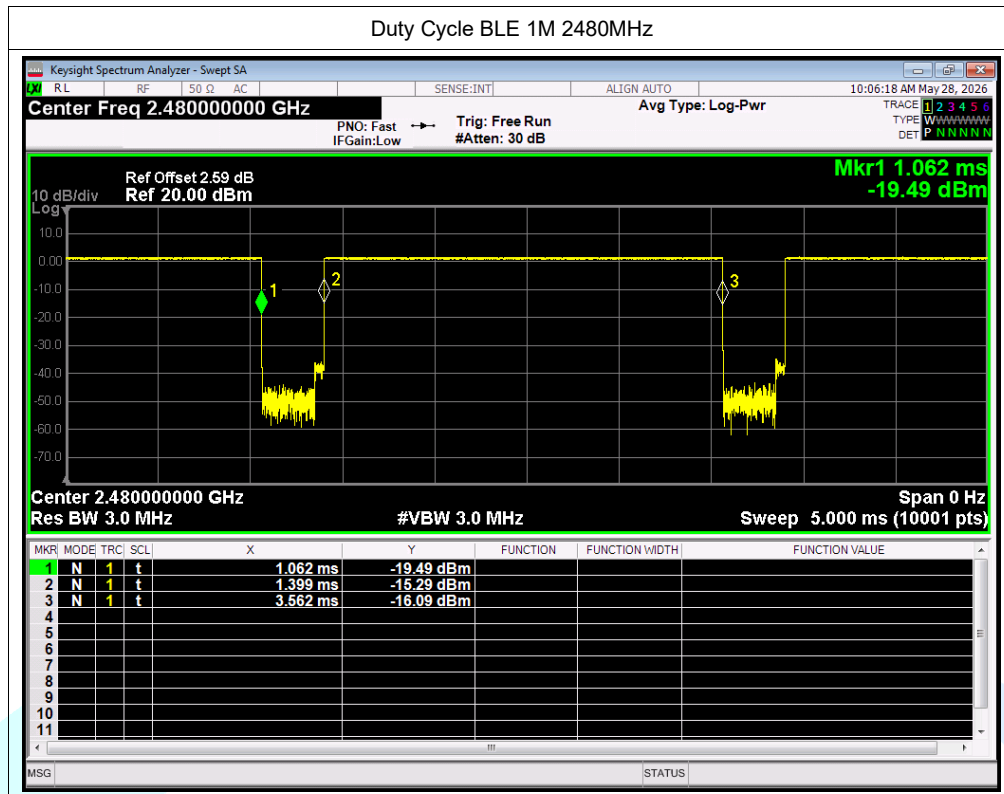


## Duty Cycle

| Mode   | Frequency (MHz) | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|--------|-----------------|----------------|------------------------|-----------|
| BLE 1M | 2402            | 86.52          | 0.63                   | 0.46      |
|        | 2440            | 86.5           | 0.63                   | 0.46      |
|        | 2480            | 86.52          | 0.63                   | 0.46      |



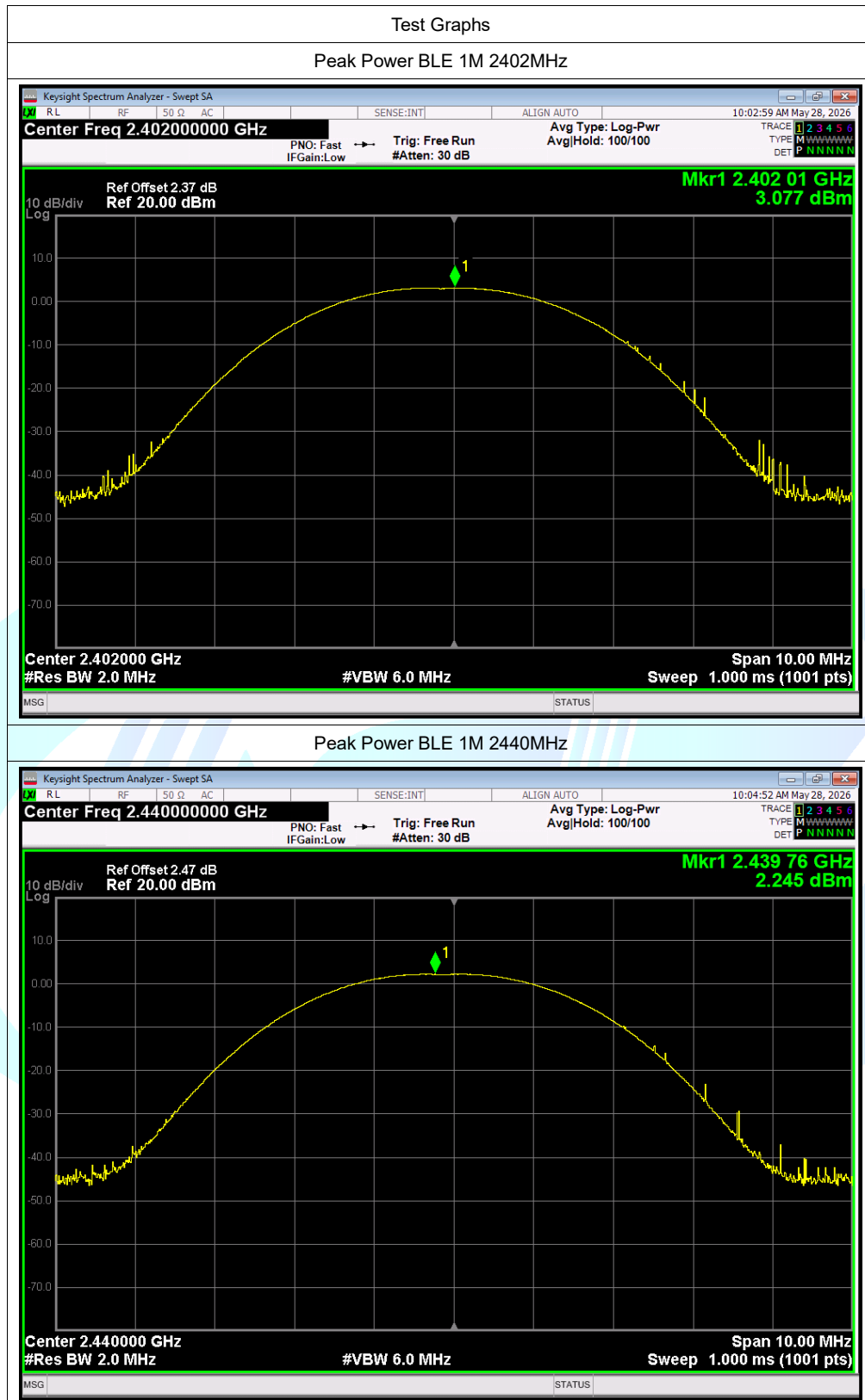


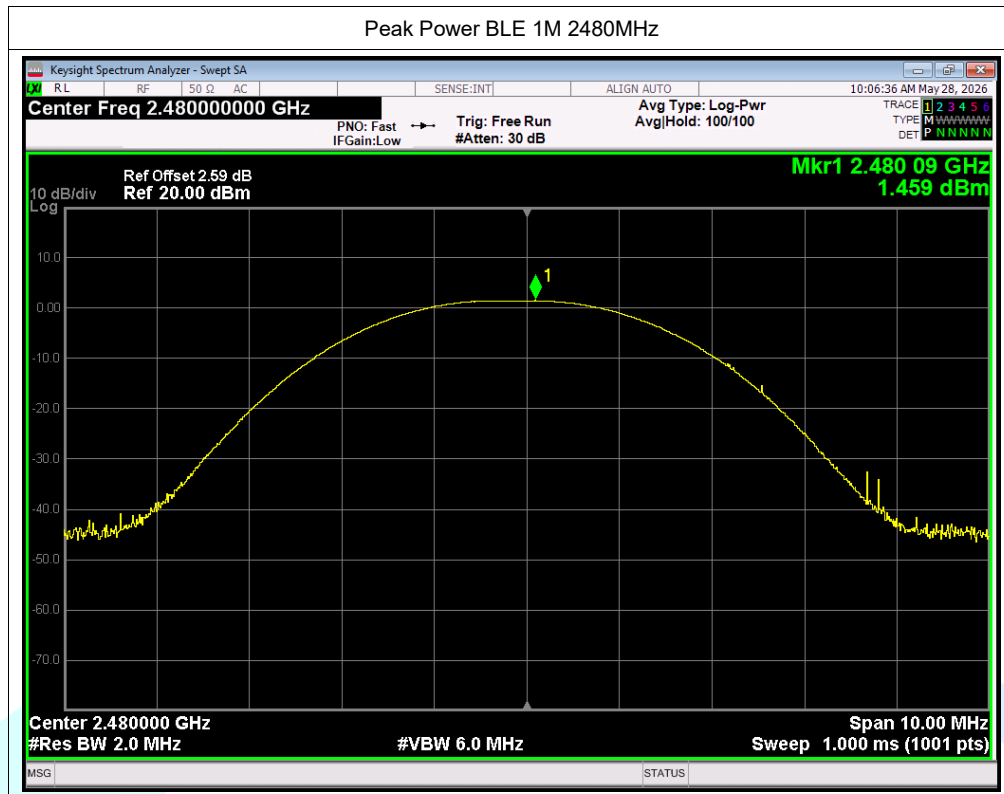


**Maximum Peak Conducted Output Power**

| Mode   | Freq.<br>(MHz) | Cond. Power<br>(dBm) | Cond. Limit<br>(dBm) | Verdict |
|--------|----------------|----------------------|----------------------|---------|
| BLE 1M | 2402           | 3.08                 | 30                   | Pass    |
|        | 2440           | 2.25                 | 30                   | Pass    |
|        | 2480           | 1.46                 | 30                   | Pass    |



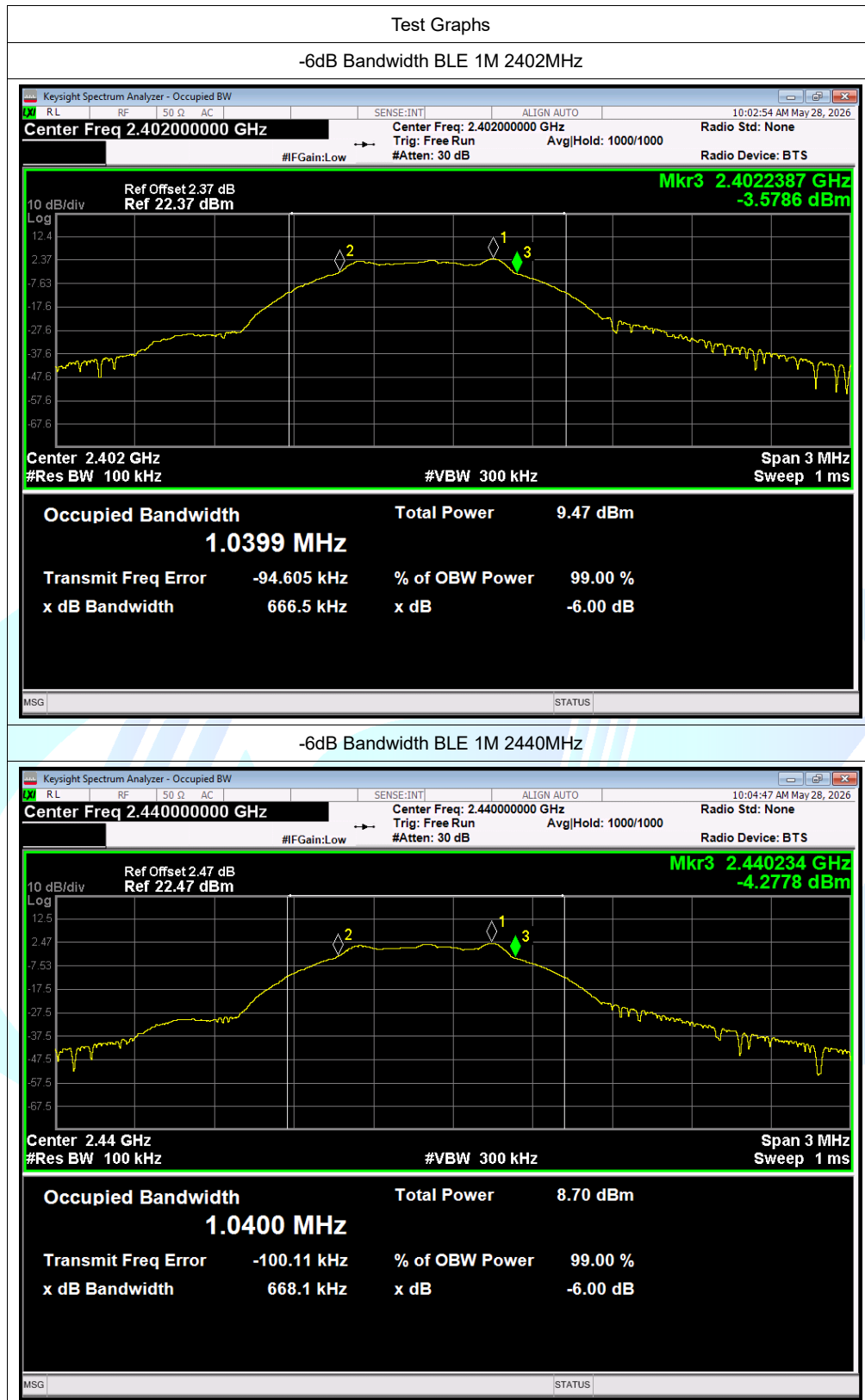




**-6dB Bandwidth**

| Mode   | Frequency (MHz) | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|--------|-----------------|-----------------------|-----------------------------|---------|
| BLE 1M | 2402            | 0.6665                | 0.5                         | Pass    |
|        | 2440            | 0.6681                | 0.5                         | Pass    |
|        | 2480            | 0.6663                | 0.5                         | Pass    |





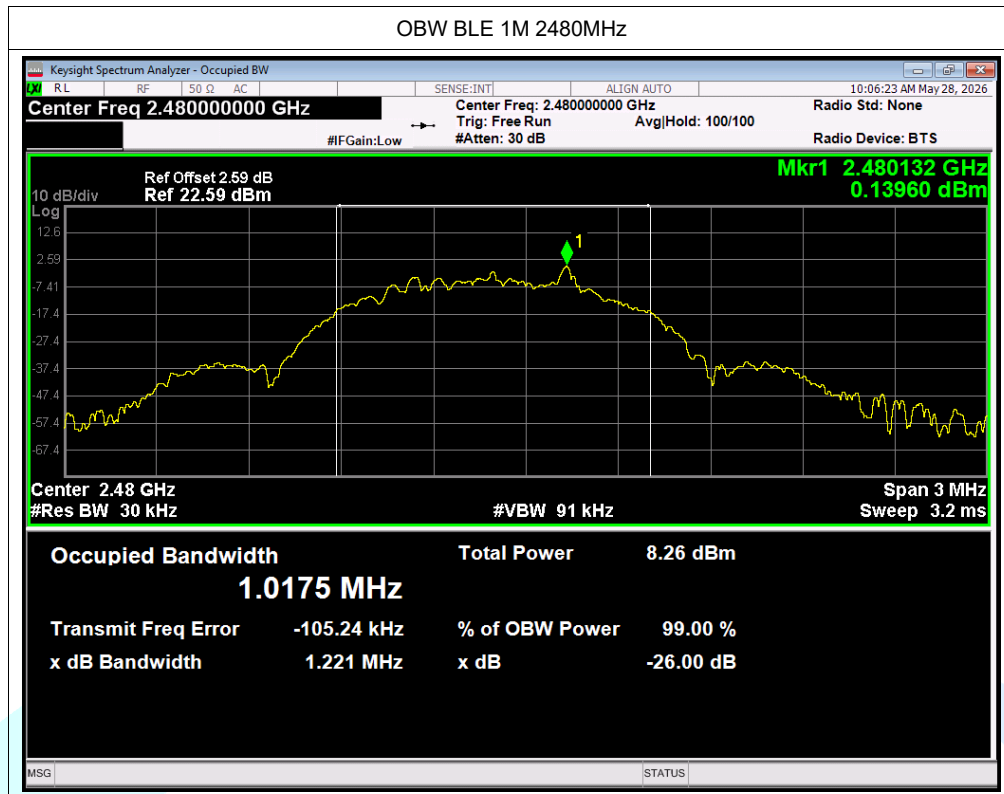


**Occupied Channel Bandwidth**

| Mode   | Frequency<br>(MHz) | 99% OBW<br>(MHz) |
|--------|--------------------|------------------|
| BLE 1M | 2402               | 1.014            |
|        | 2440               | 1.0172           |
|        | 2480               | 1.0175           |



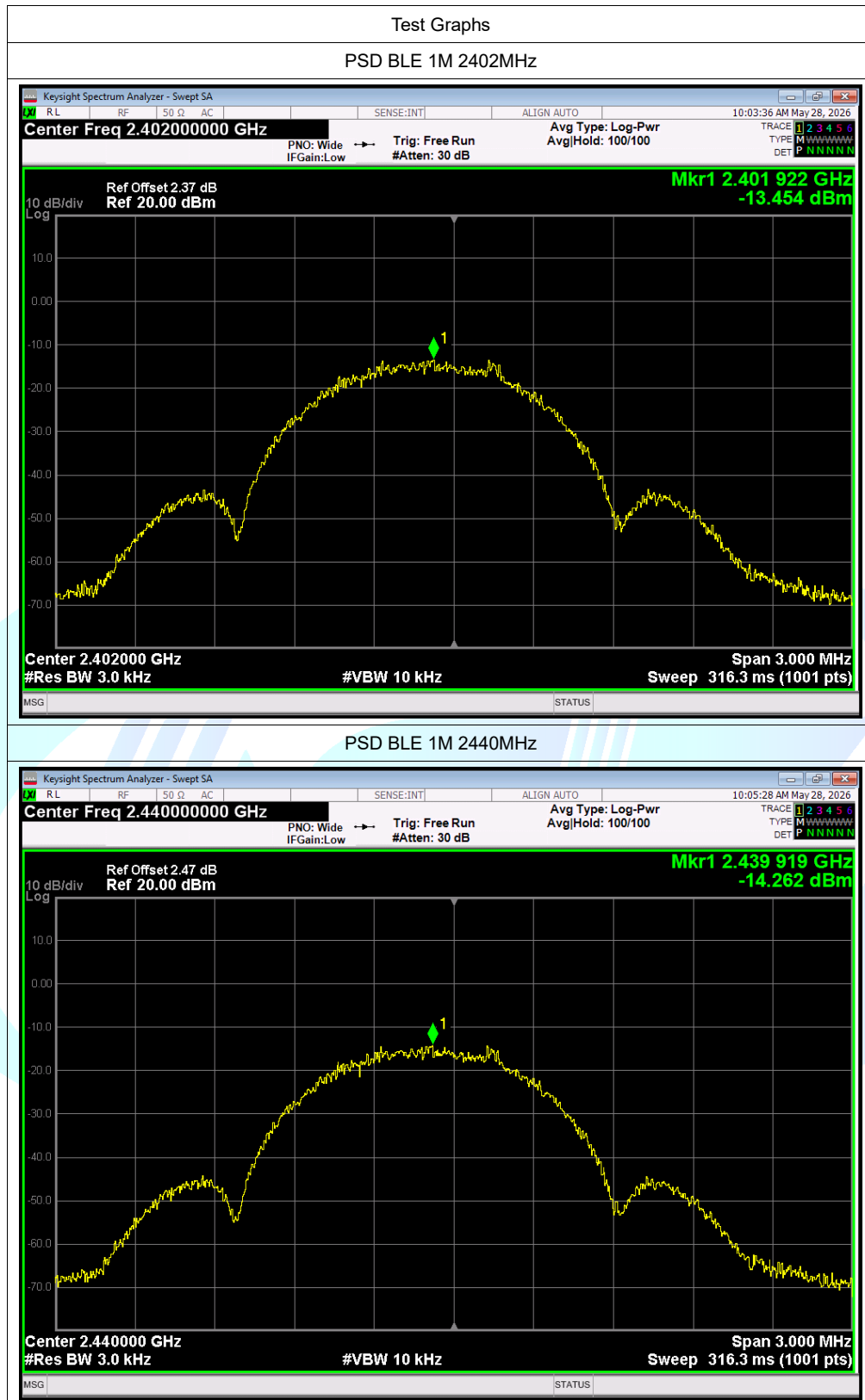


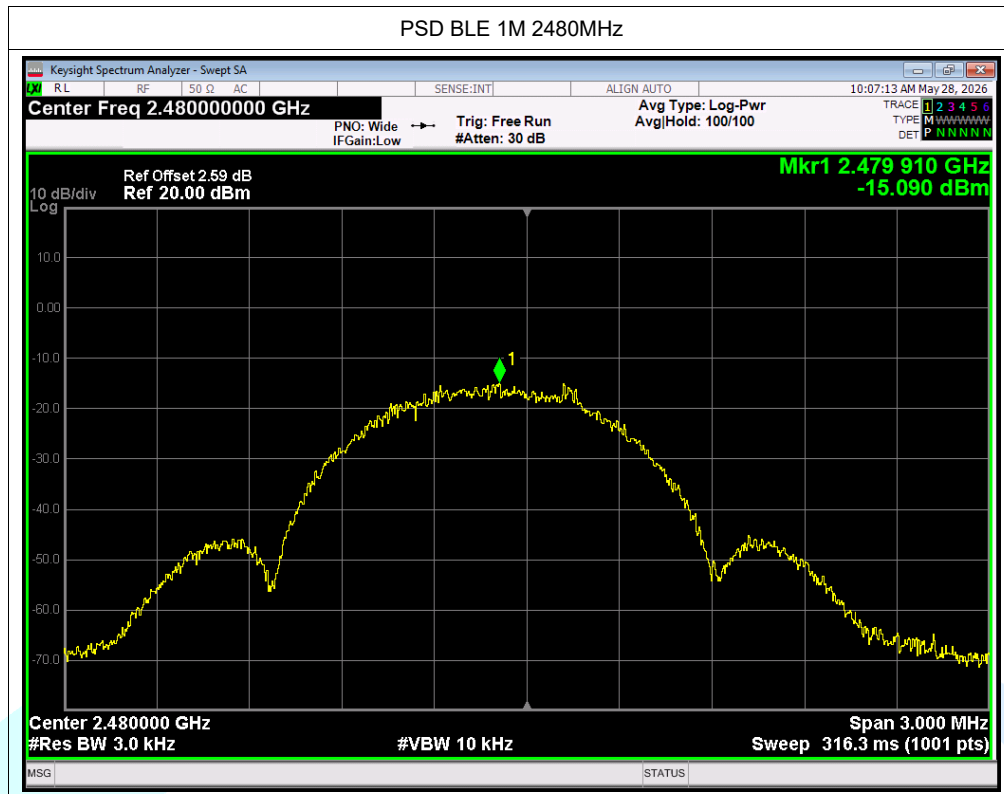


**Maximum Power Spectral Density Level**

| Mode   | Frequency (MHz) | Cond. PSD (dBm/3kHz) | Duty Factor (dB) | Total PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|--------|-----------------|----------------------|------------------|----------------------|------------------|---------|
| BLE 1M | 2402            | -13.45               | 0                | -13.45               | 8                | Pass    |
| BLE 1M | 2440            | -14.26               | 0                | -14.26               | 8                | Pass    |
| BLE 1M | 2480            | -15.09               | 0                | -15.09               | 8                | Pass    |



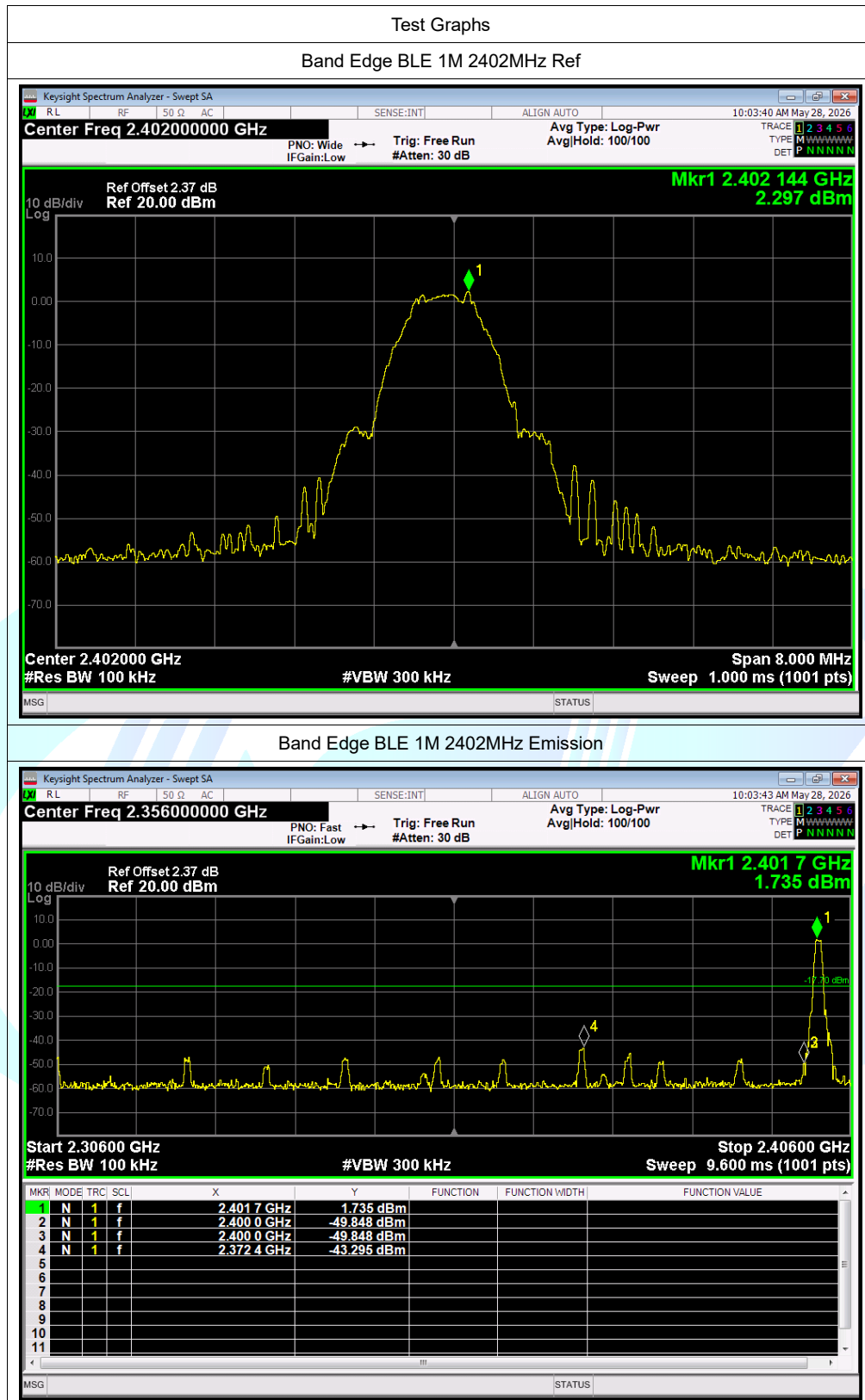


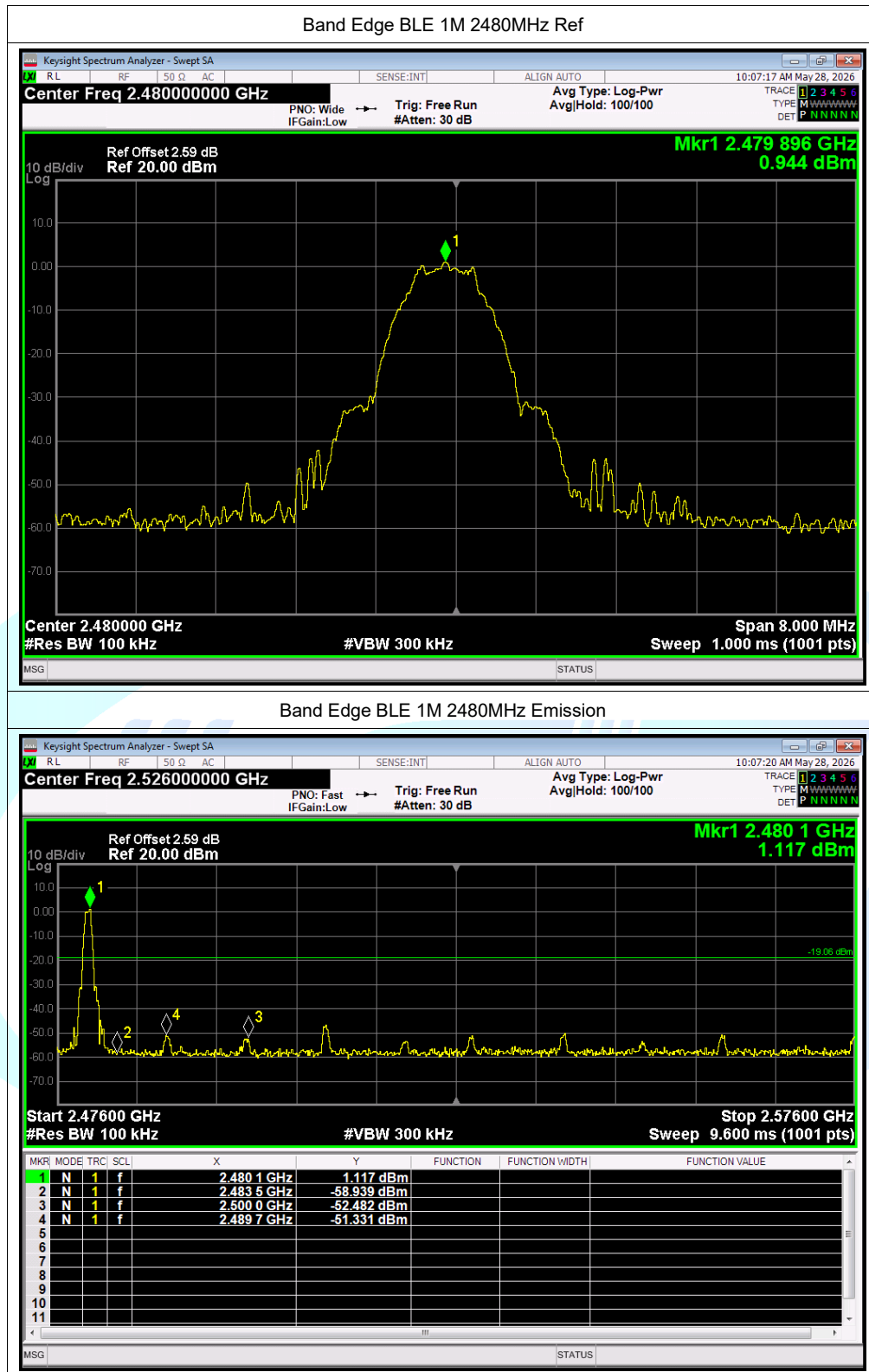


**Band Edge**

| Mode   | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|--------|-----------------|-----------------|-------------|---------|
| BLE 1M | 2402            | -45.59          | -20         | Pass    |
|        | 2480            | -52.27          | -20         | Pass    |







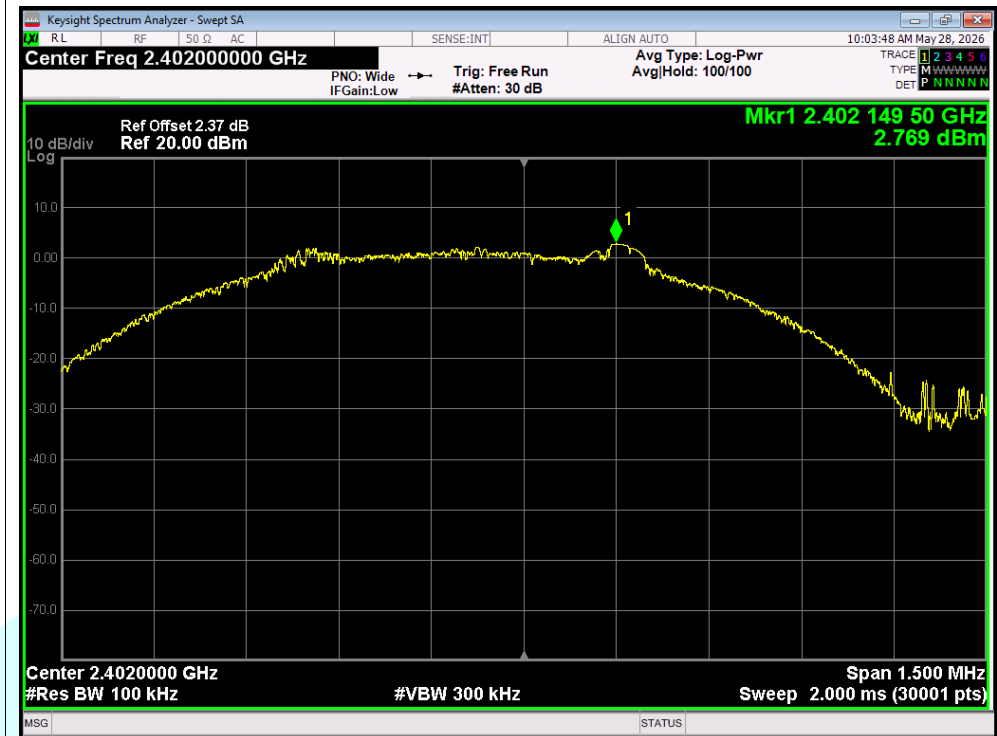
**Conducted RF Spurious Emission**

| Mode   | Frequency<br>(MHz) | Max Value<br>(dBc) | Limit<br>(dBc) | Verdict |
|--------|--------------------|--------------------|----------------|---------|
| BLE 1M | 2402               | -44                | -20            | Pass    |
|        | 2440               | -42.51             | -20            | Pass    |
|        | 2480               | -42.05             | -20            | Pass    |

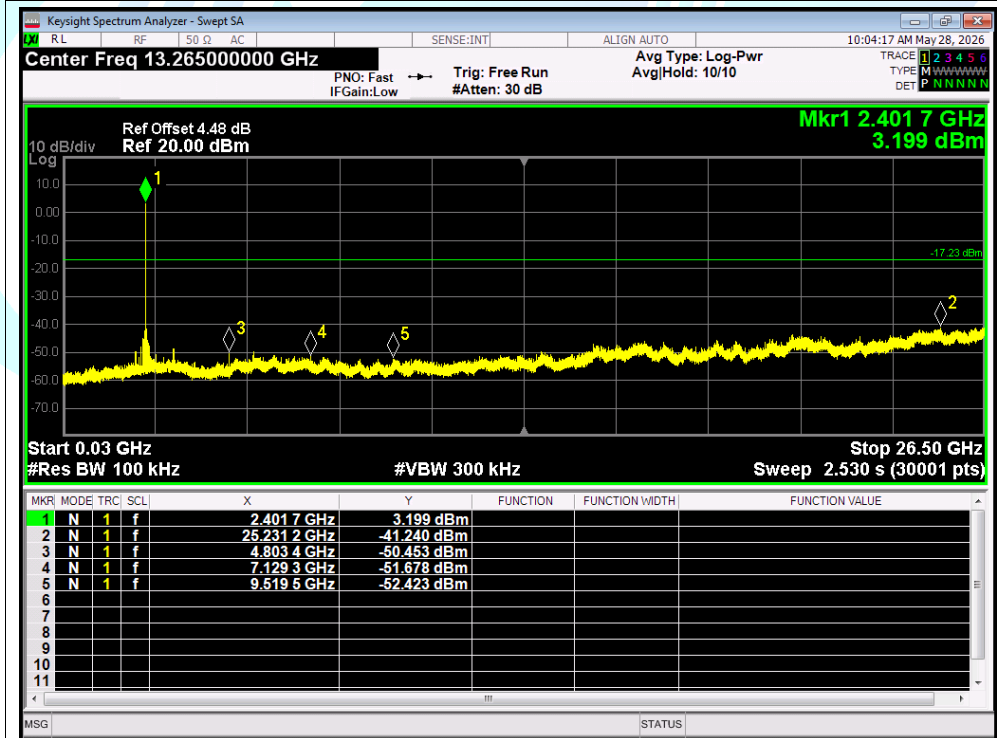


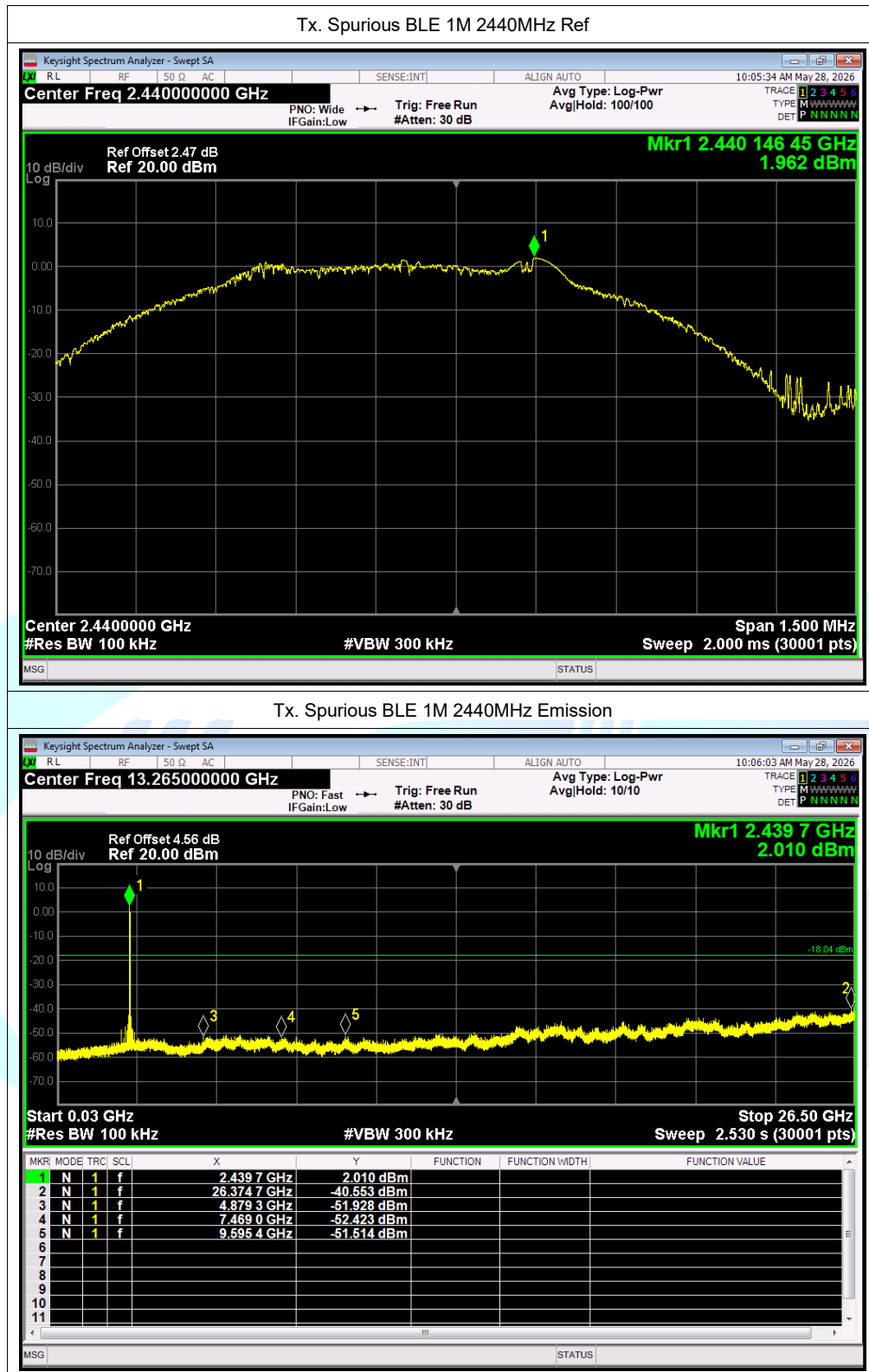
## Test Graphs

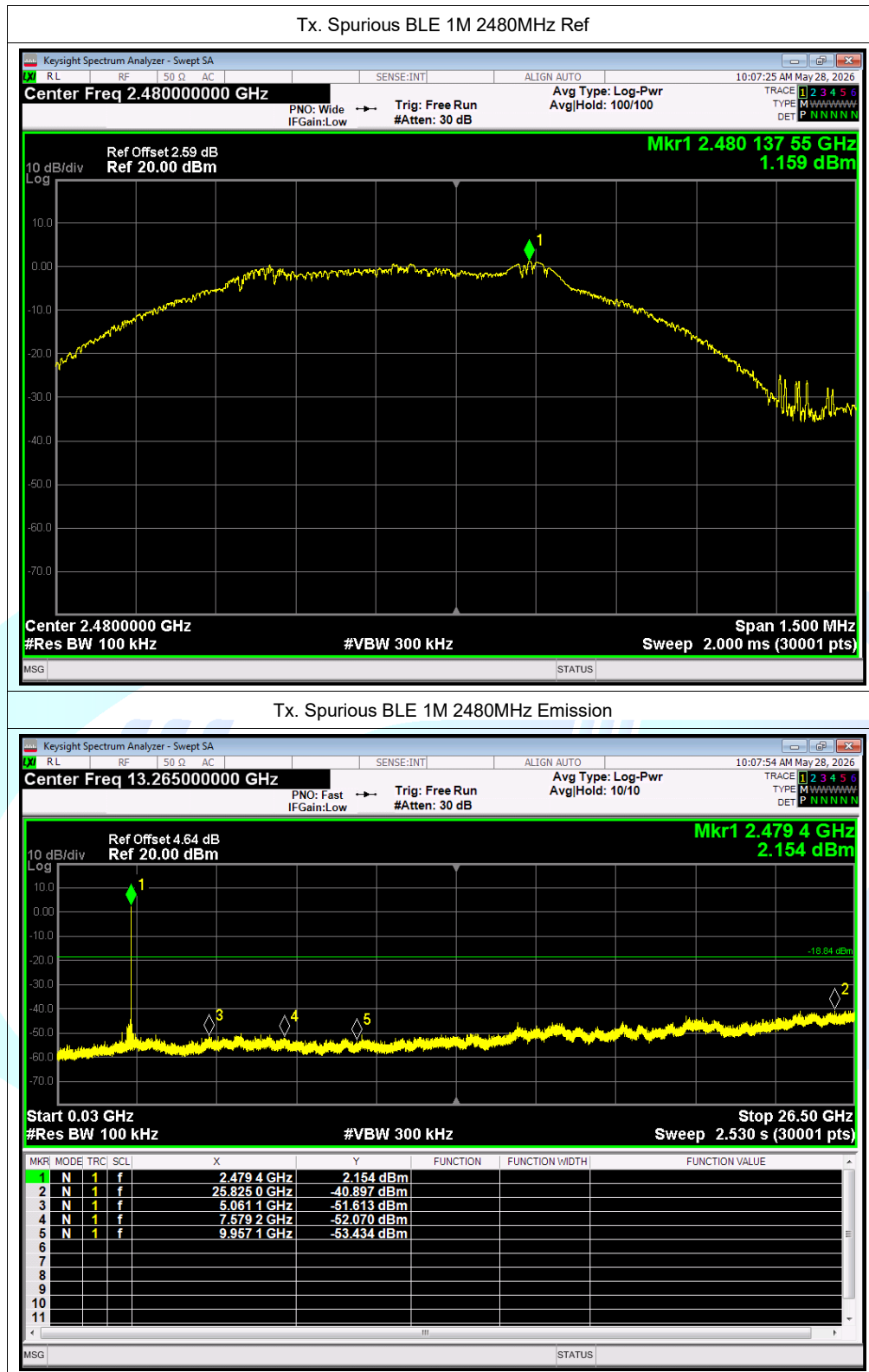
## Tx. Spurious BLE 1M 2402MHz Ref



## Tx. Spurious BLE 1M 2402MHz Emission







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