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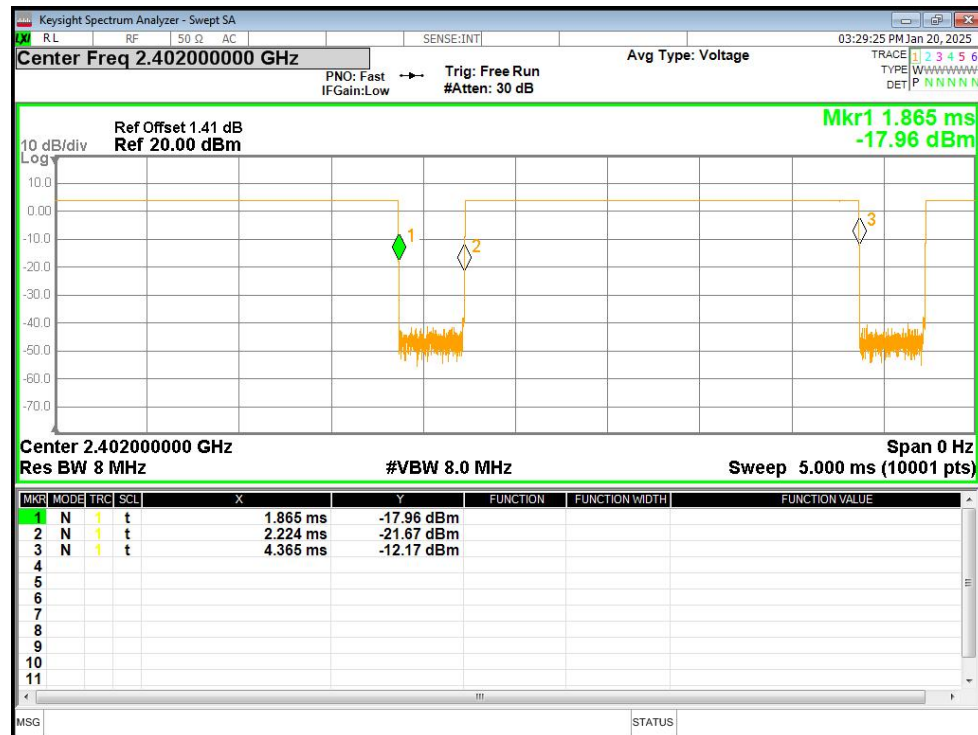
## FCC\_BLE(Part15.247) Test Data

### 1.Duty Cycle

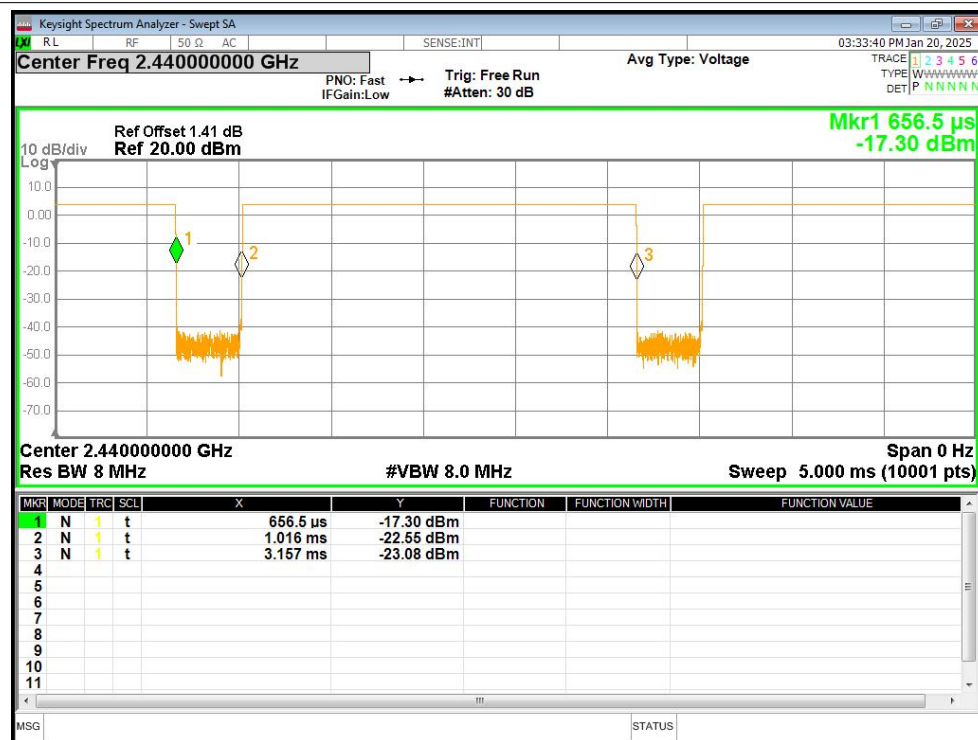
| Mode   | Frequency (MHz) | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|--------|-----------------|----------------|------------------------|-----------|
| BLE 1M | 2402            | 85.64          | 0.67                   | 0.47      |
| BLE 1M | 2440            | 85.64          | 0.67                   | 0.47      |
| BLE 1M | 2480            | 85.64          | 0.67                   | 0.47      |
| BLE 2M | 2402            | 57.85          | 2.38                   | 0.92      |
| BLE 2M | 2440            | 57.88          | 2.37                   | 0.92      |
| BLE 2M | 2480            | 57.87          | 2.38                   | 0.92      |

## Test Graphs

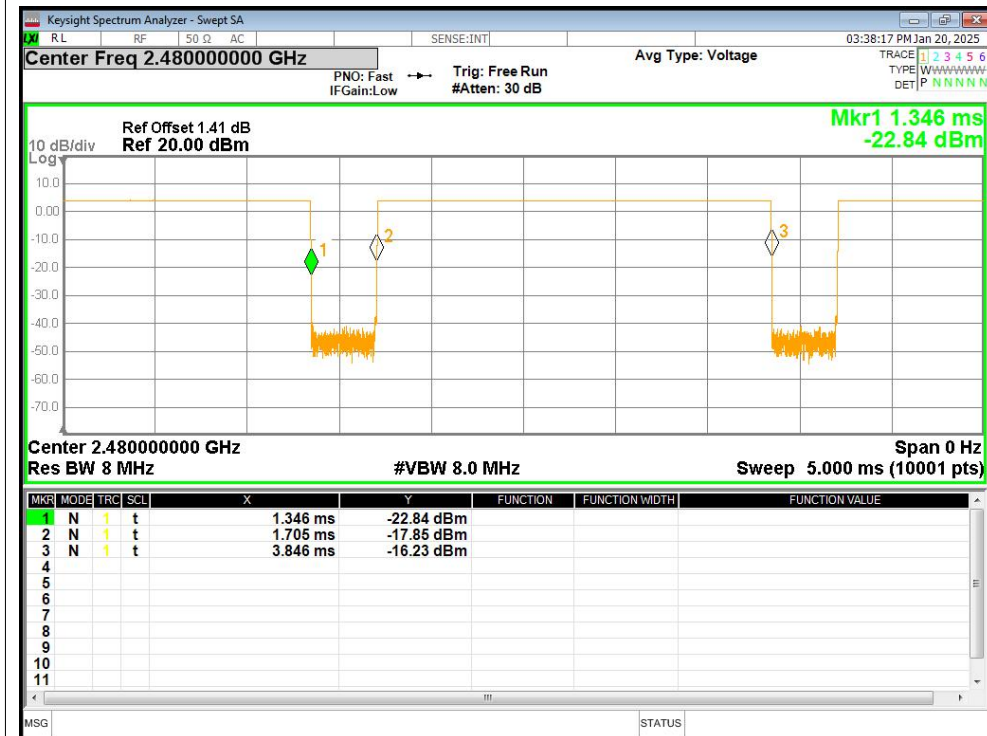
## Duty Cycle NVNT BLE 1M 2402MHz Ant1



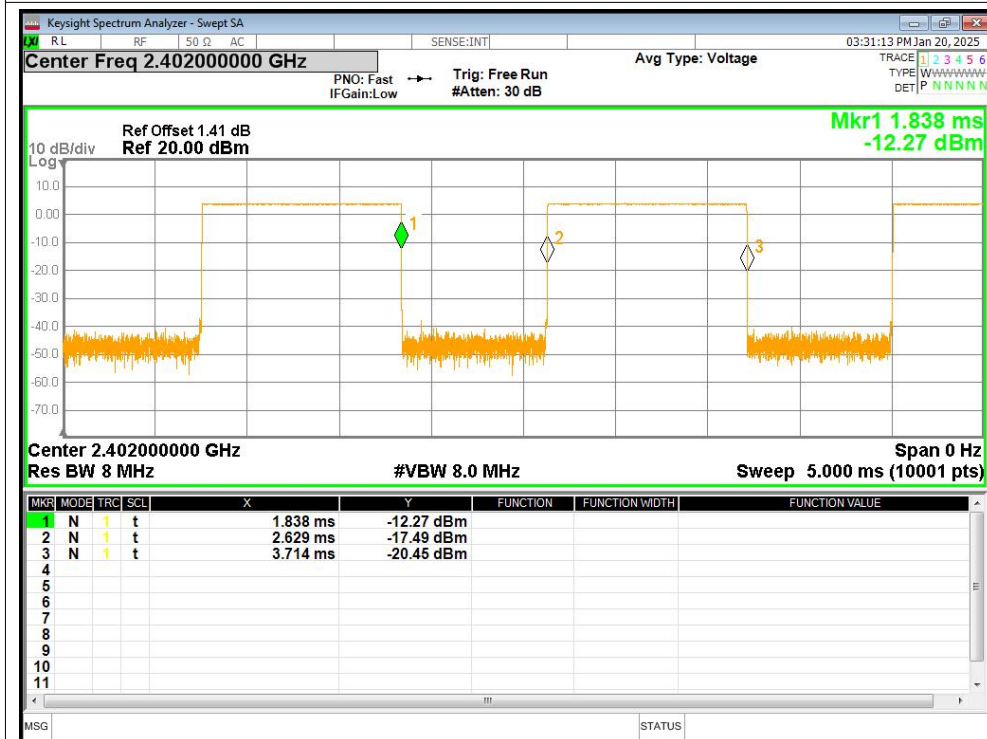
## Duty Cycle NVNT BLE 1M 2440MHz Ant1



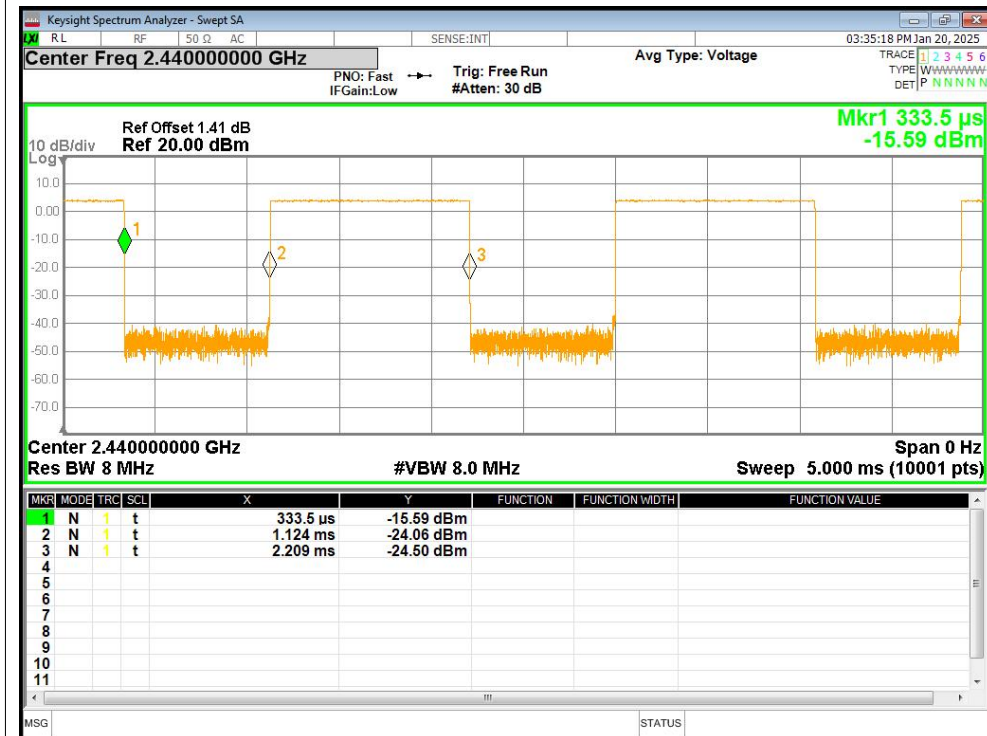
## Duty Cycle NVNT BLE 1M 2480MHz Ant1



## Duty Cycle NVNT BLE 2M 2402MHz Ant1



## Duty Cycle NVNT BLE 2M 2440MHz Ant1



## Duty Cycle NVNT BLE 2M 2480MHz Ant1

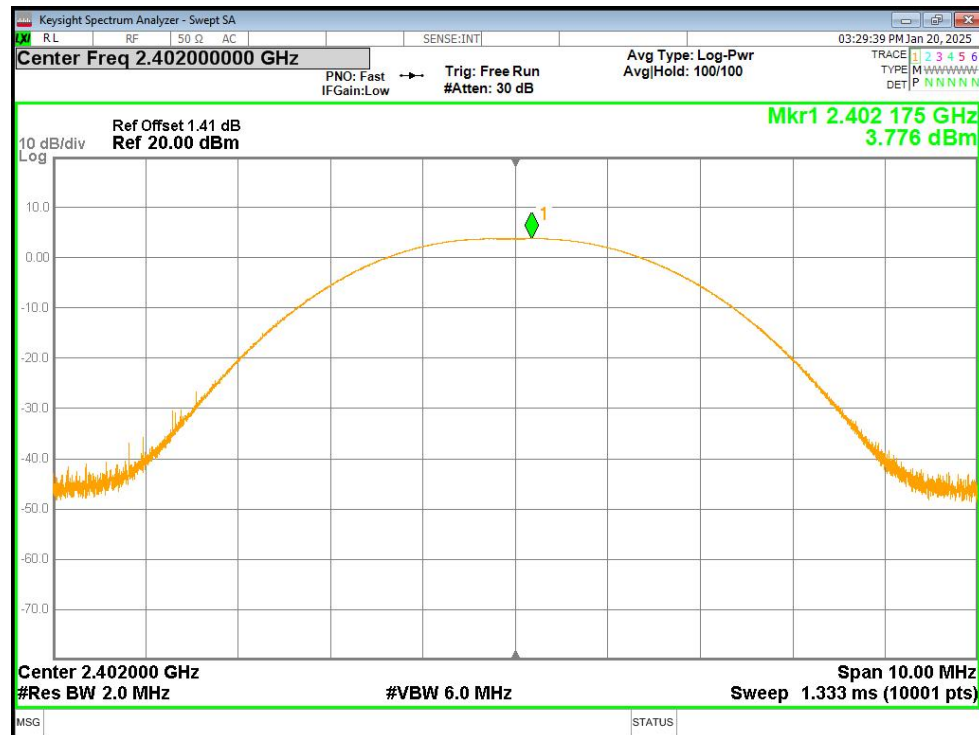


**2.Maximum Peak Conducted Output Power**

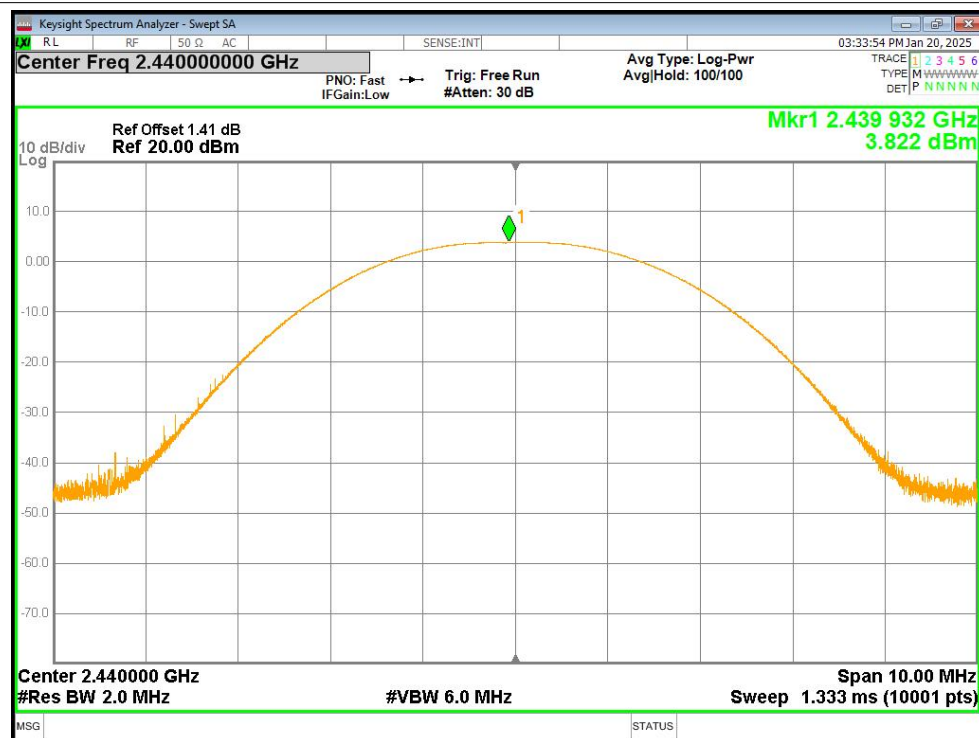
| Mode   | Frequency (MHz) | Total Power (dBm) | Limit (dBm) | Verdict |
|--------|-----------------|-------------------|-------------|---------|
| BLE 1M | 2402            | 3.78              | 30          | Pass    |
| BLE 1M | 2440            | 3.82              | 30          | Pass    |
| BLE 1M | 2480            | 3.83              | 30          | Pass    |
| BLE 2M | 2402            | 3.8               | 30          | Pass    |
| BLE 2M | 2440            | 3.82              | 30          | Pass    |
| BLE 2M | 2480            | 3.84              | 30          | Pass    |

## Test Graphs

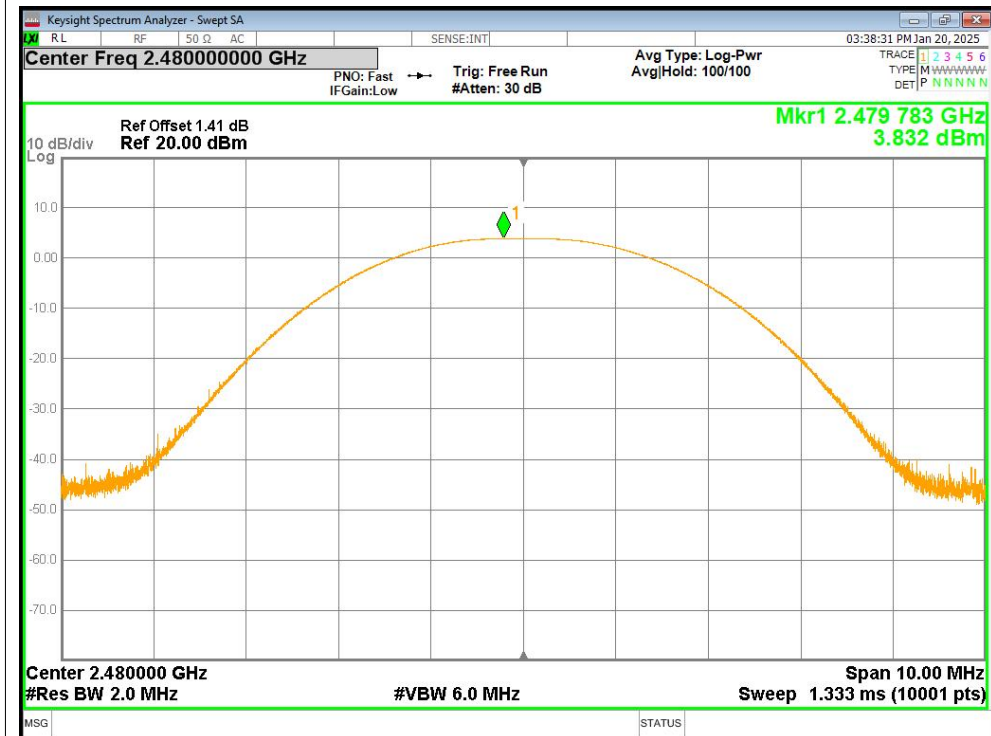
## Peak Power NVNT BLE 1M 2402MHz Ant1



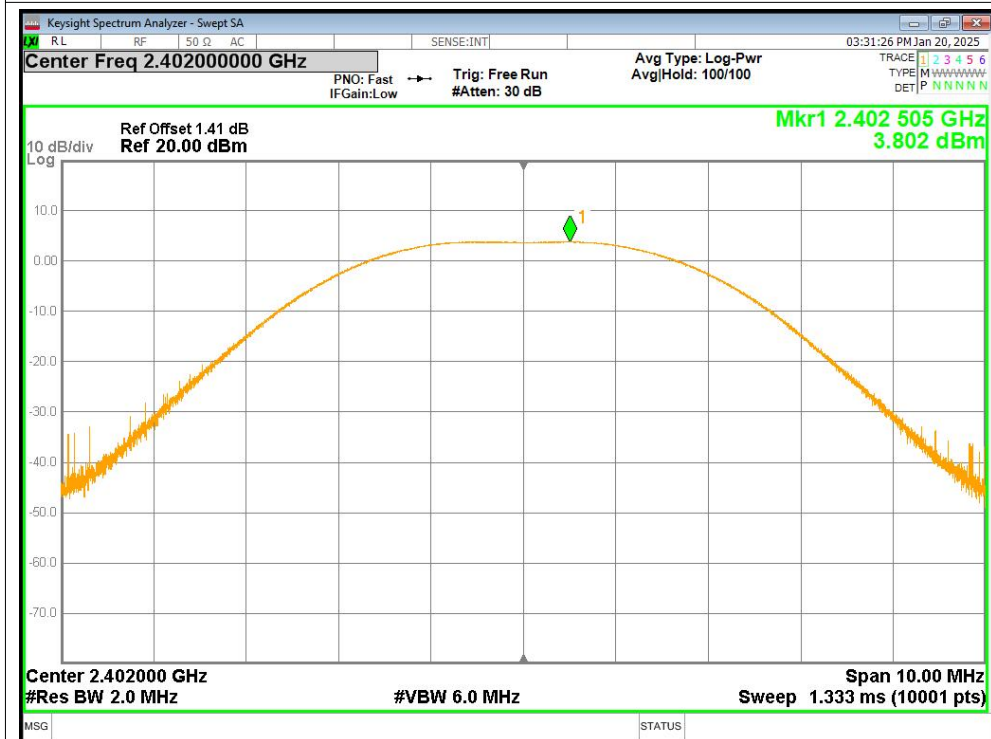
## Peak Power NVNT BLE 1M 2440MHz Ant1



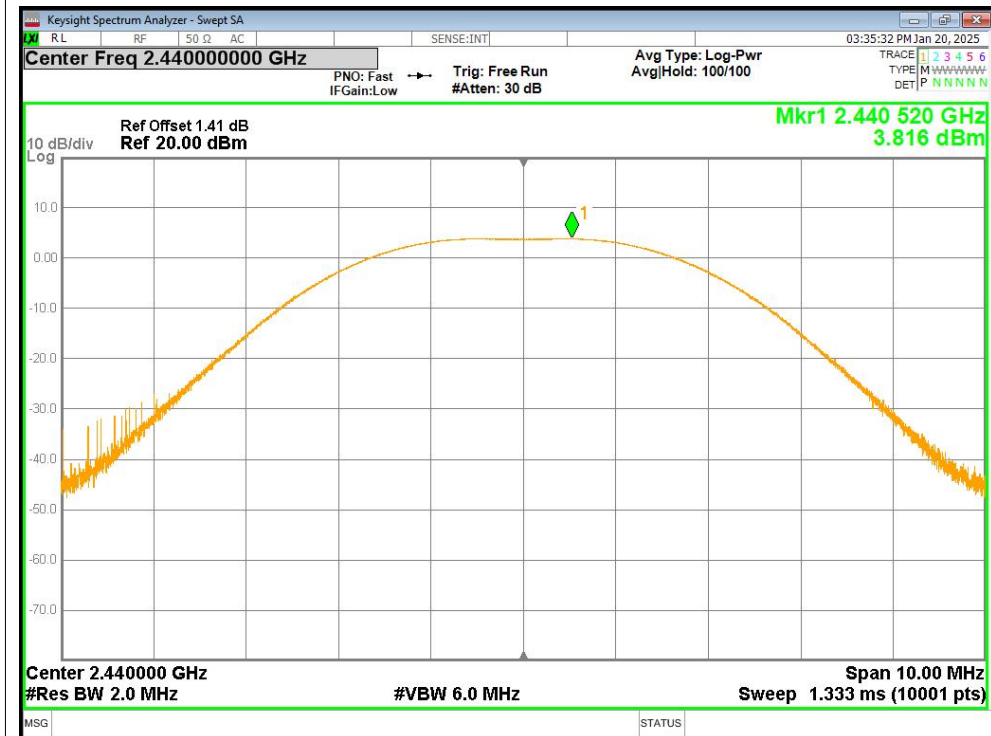
## Peak Power NVNT BLE 1M 2480MHz Ant1



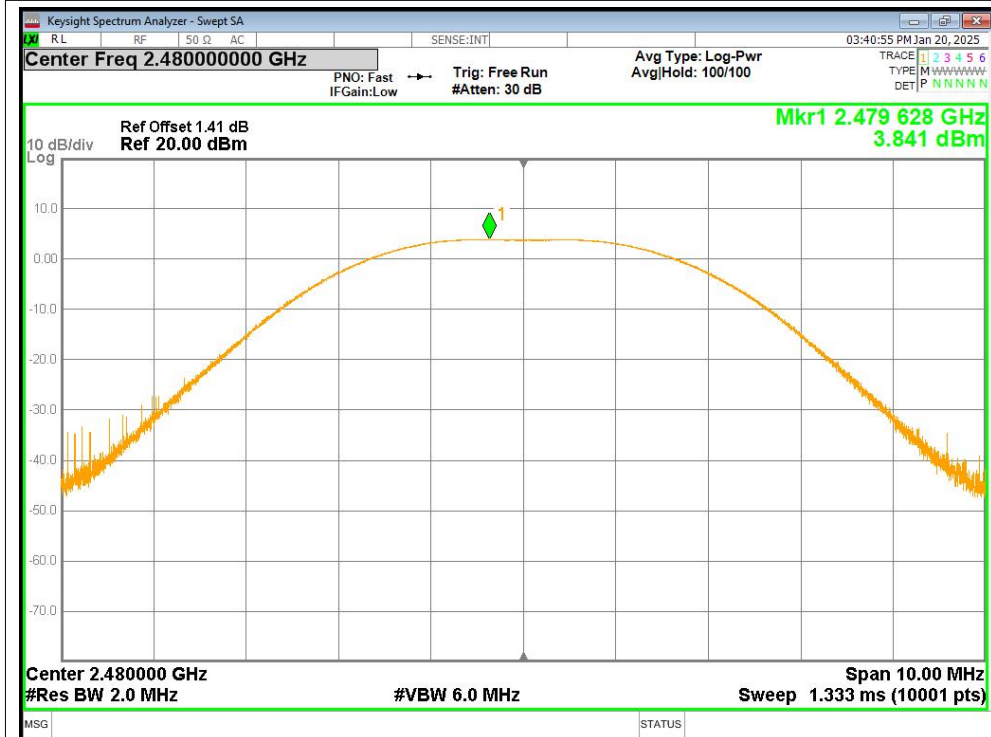
## Peak Power NVNT BLE 2M 2402MHz Ant1



## Peak Power NVNT BLE 2M 2440MHz Ant1



## Peak Power NVNT BLE 2M 2480MHz Ant1



**3.-6dB Bandwidth**

| Mode   | Frequency<br>(MHz) | -6 dB Bandwidth<br>(MHz) | Limit -6 dB Bandwidth<br>(MHz) | Verdict |
|--------|--------------------|--------------------------|--------------------------------|---------|
| BLE 1M | 2402               | 0.68                     | 0.5                            | Pass    |
| BLE 1M | 2440               | 0.659                    | 0.5                            | Pass    |
| BLE 1M | 2480               | 0.659                    | 0.5                            | Pass    |
| BLE 2M | 2402               | 1.133                    | 0.5                            | Pass    |
| BLE 2M | 2440               | 1.113                    | 0.5                            | Pass    |
| BLE 2M | 2480               | 1.236                    | 0.5                            | Pass    |

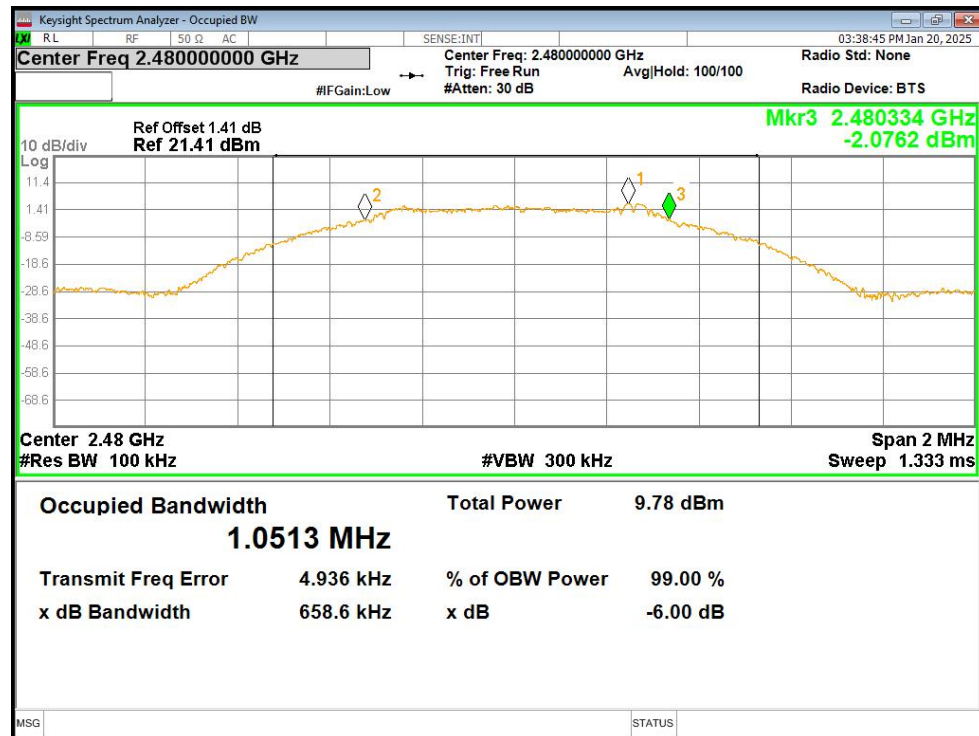
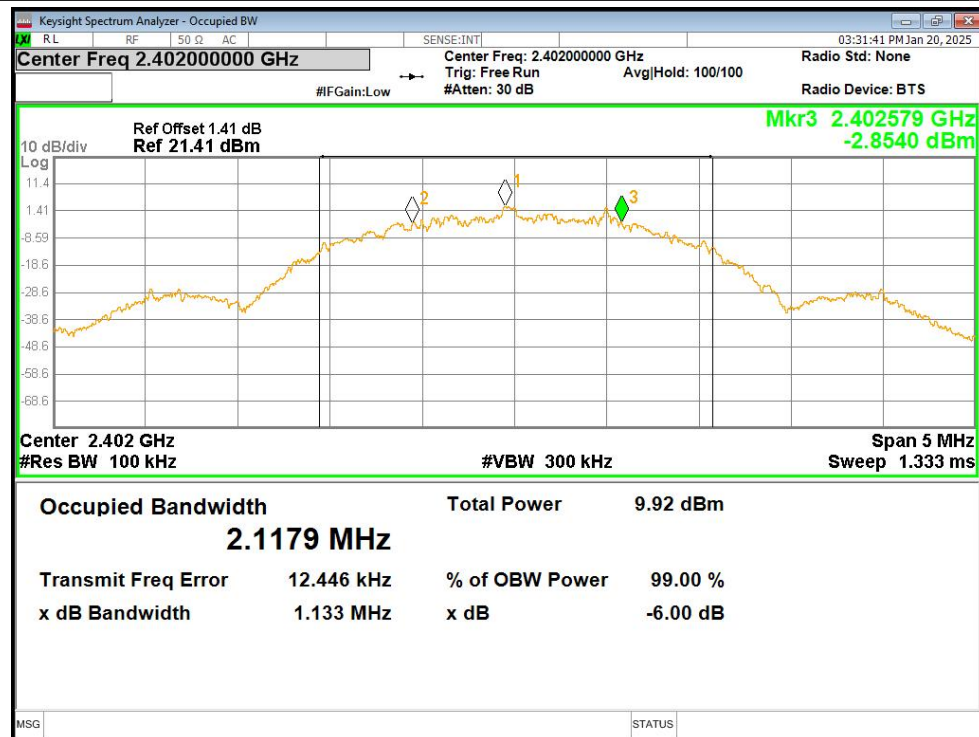
## Test Graphs

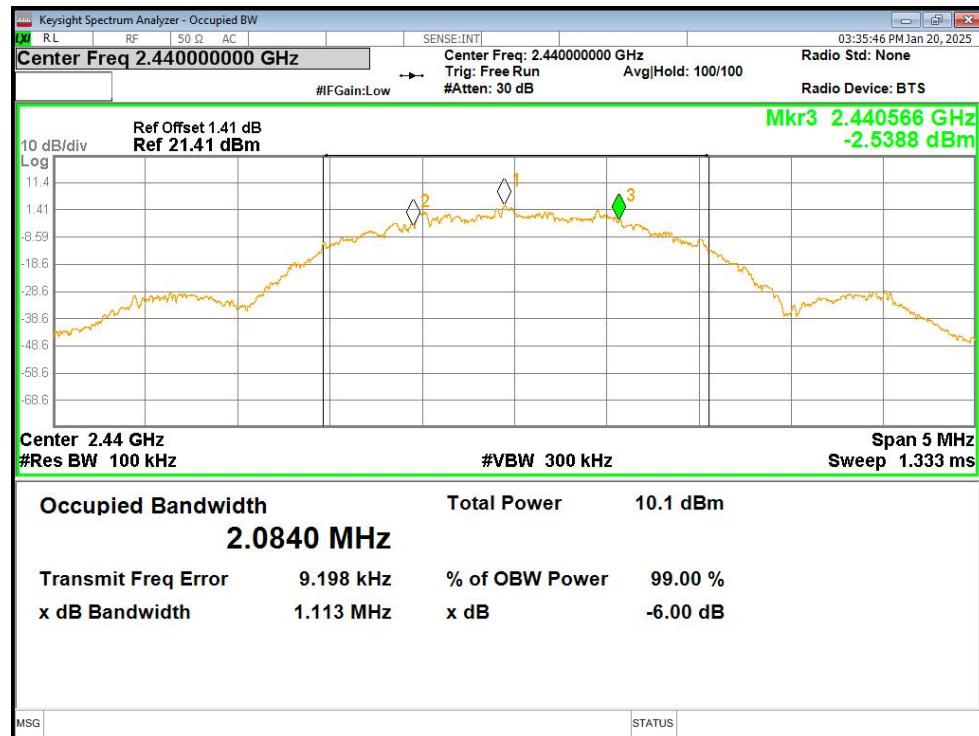
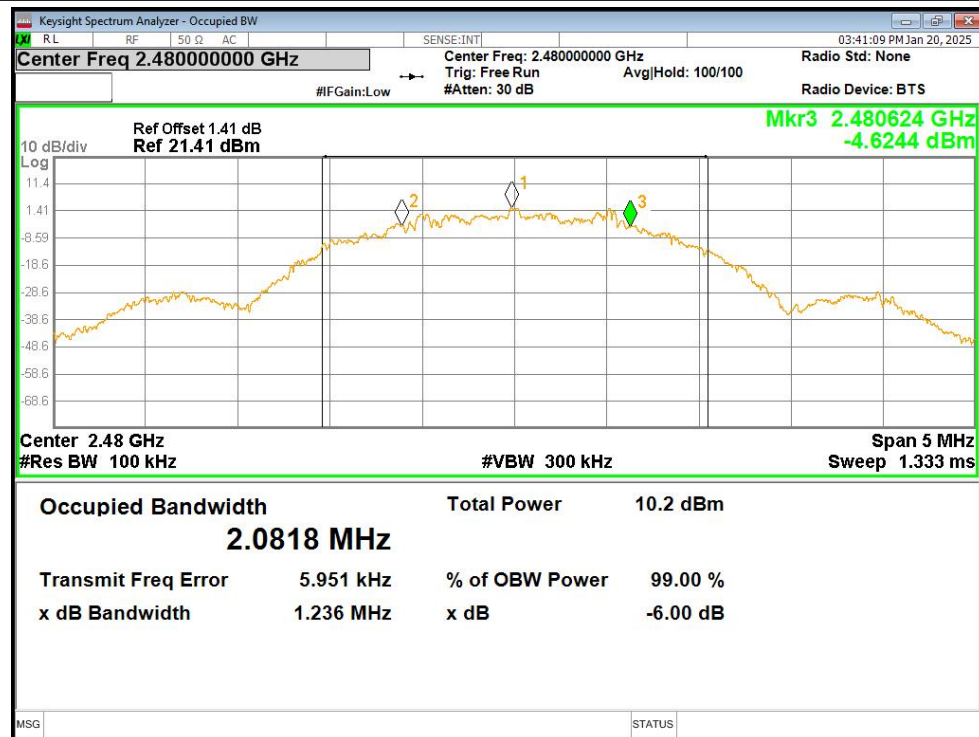
## -6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



## -6dB Bandwidth NVNT BLE 1M 2440MHz Ant1



**-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1****-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1**

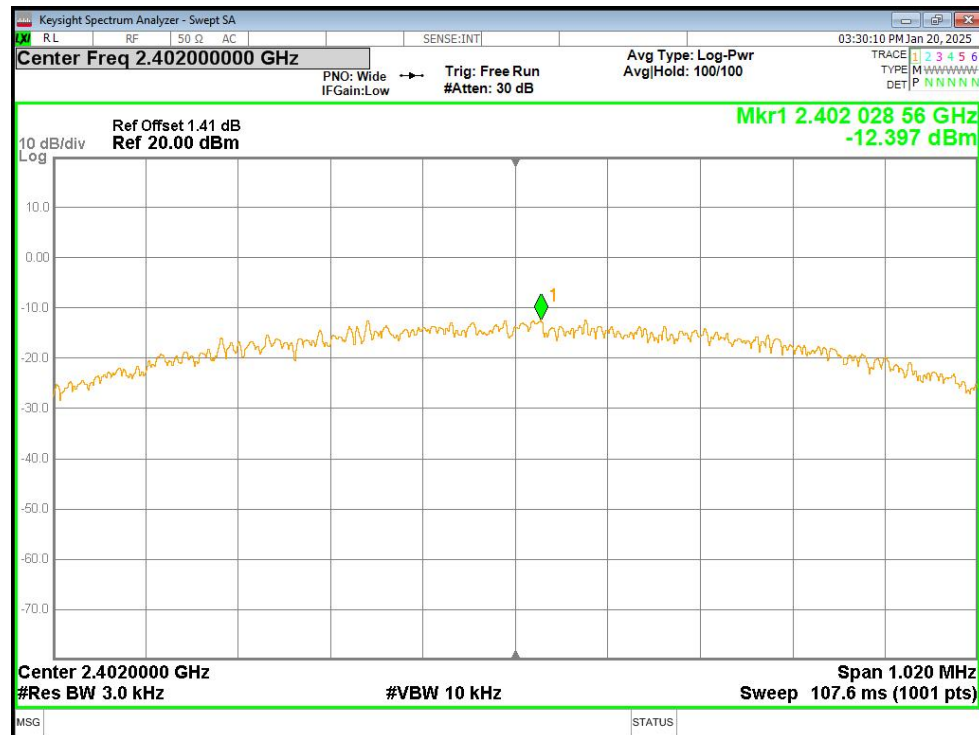
**-6dB Bandwidth NVNT BLE 2M 2440MHz Ant1****-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1**

**4.Maximum Power Spectral Density Level**

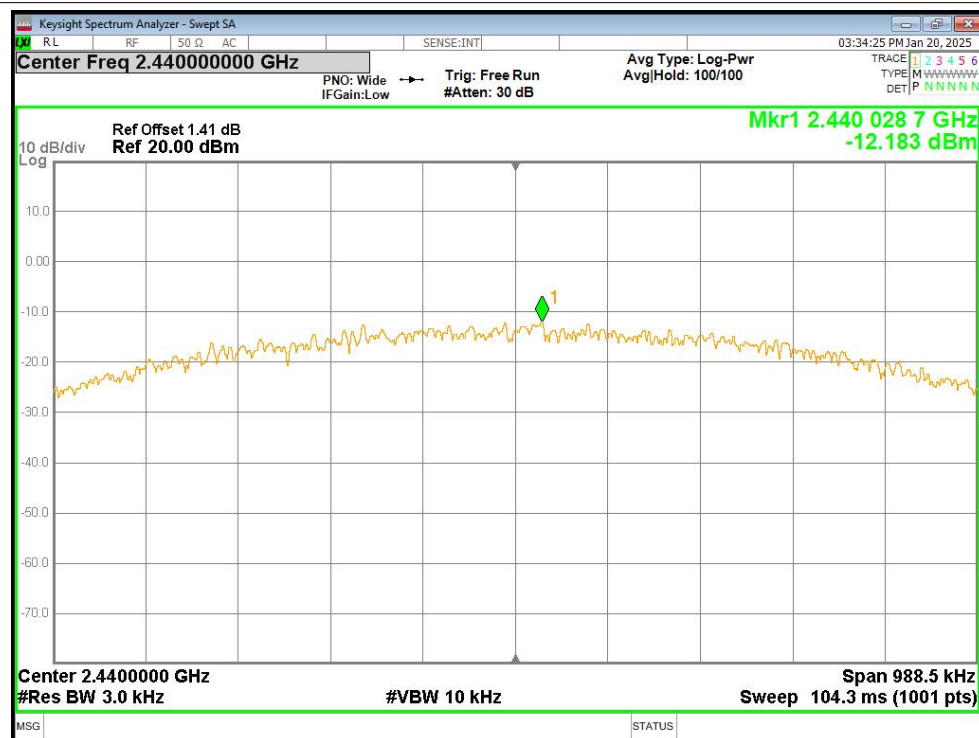
| Mode   | Frequency (MHz) | Total PSD<br>(dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|--------|-----------------|-------------------------|------------------|---------|
| BLE 1M | 2402            | -12.4                   | 8                | Pass    |
| BLE 1M | 2440            | -12.18                  | 8                | Pass    |
| BLE 1M | 2480            | -11.97                  | 8                | Pass    |
| BLE 2M | 2402            | -13.52                  | 8                | Pass    |
| BLE 2M | 2440            | -13.55                  | 8                | Pass    |
| BLE 2M | 2480            | -13.23                  | 8                | Pass    |

## Test Graphs

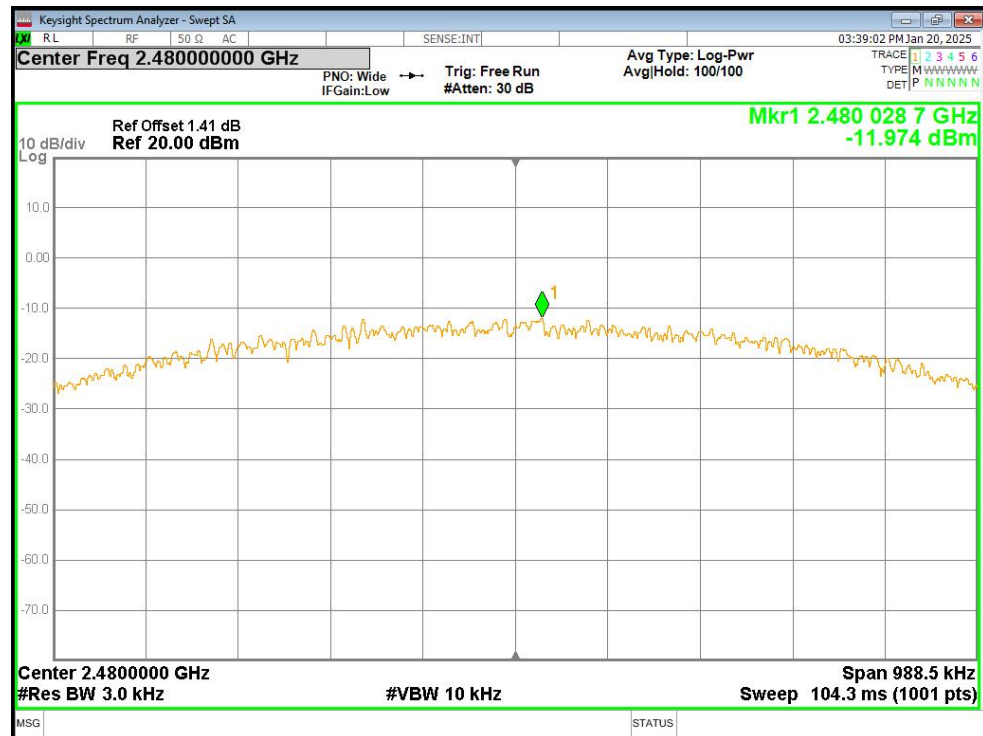
## PSD NVNT BLE 1M 2402MHz Ant1



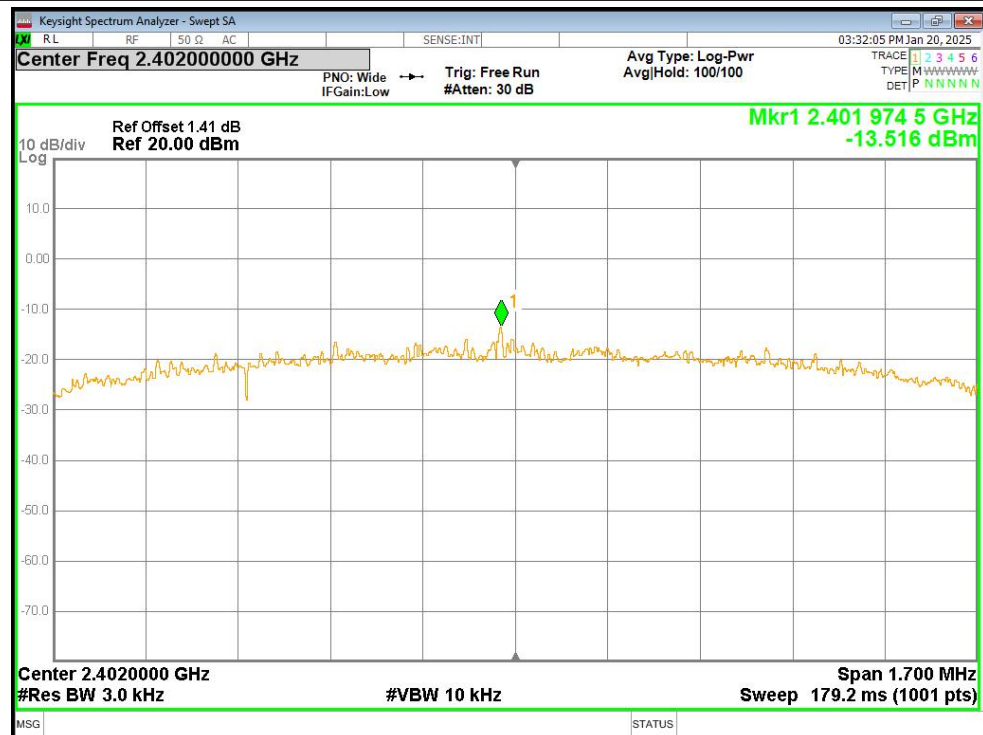
## PSD NVNT BLE 1M 2440MHz Ant1



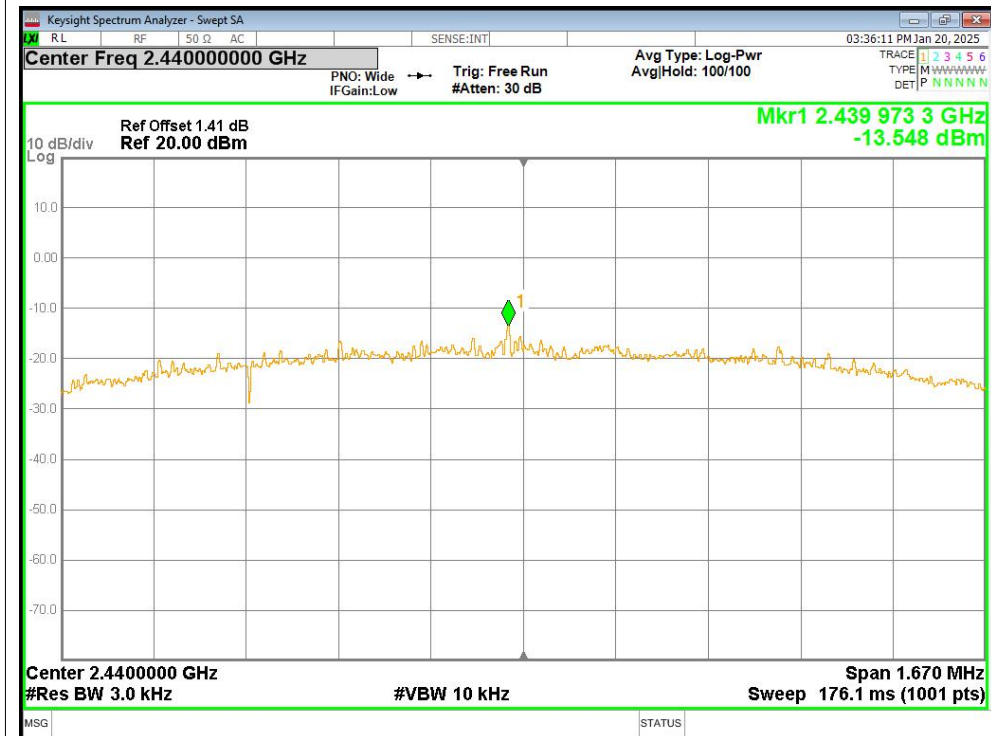
## PSD NVNT BLE 1M 2480MHz Ant1



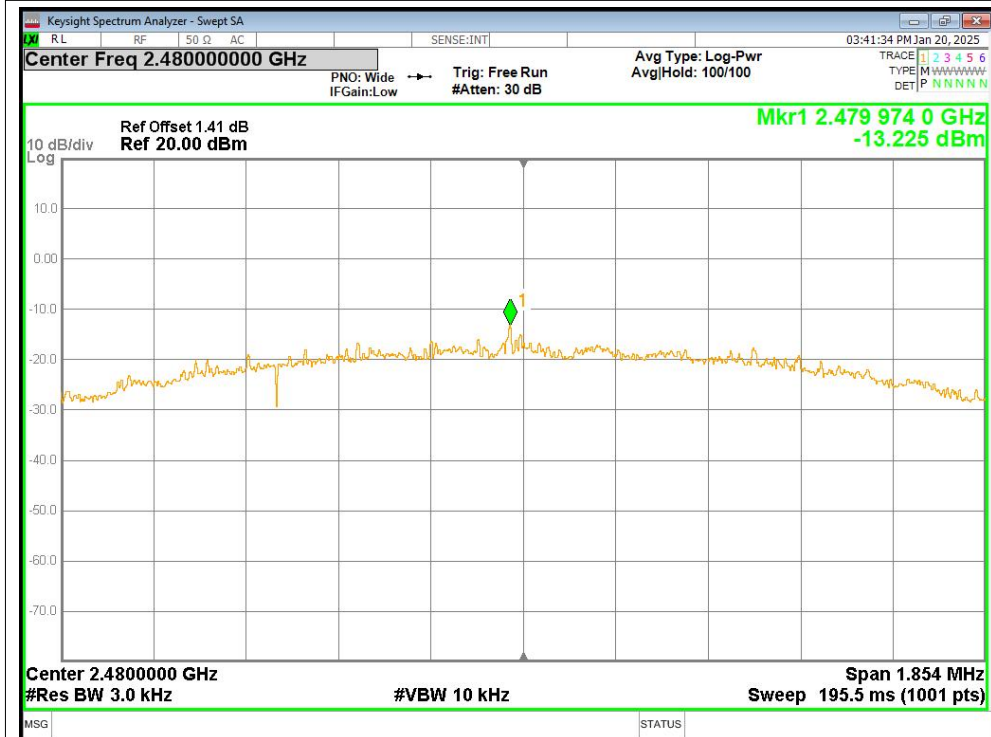
## PSD NVNT BLE 2M 2402MHz Ant1



## PSD NVNT BLE 2M 2440MHz Ant1

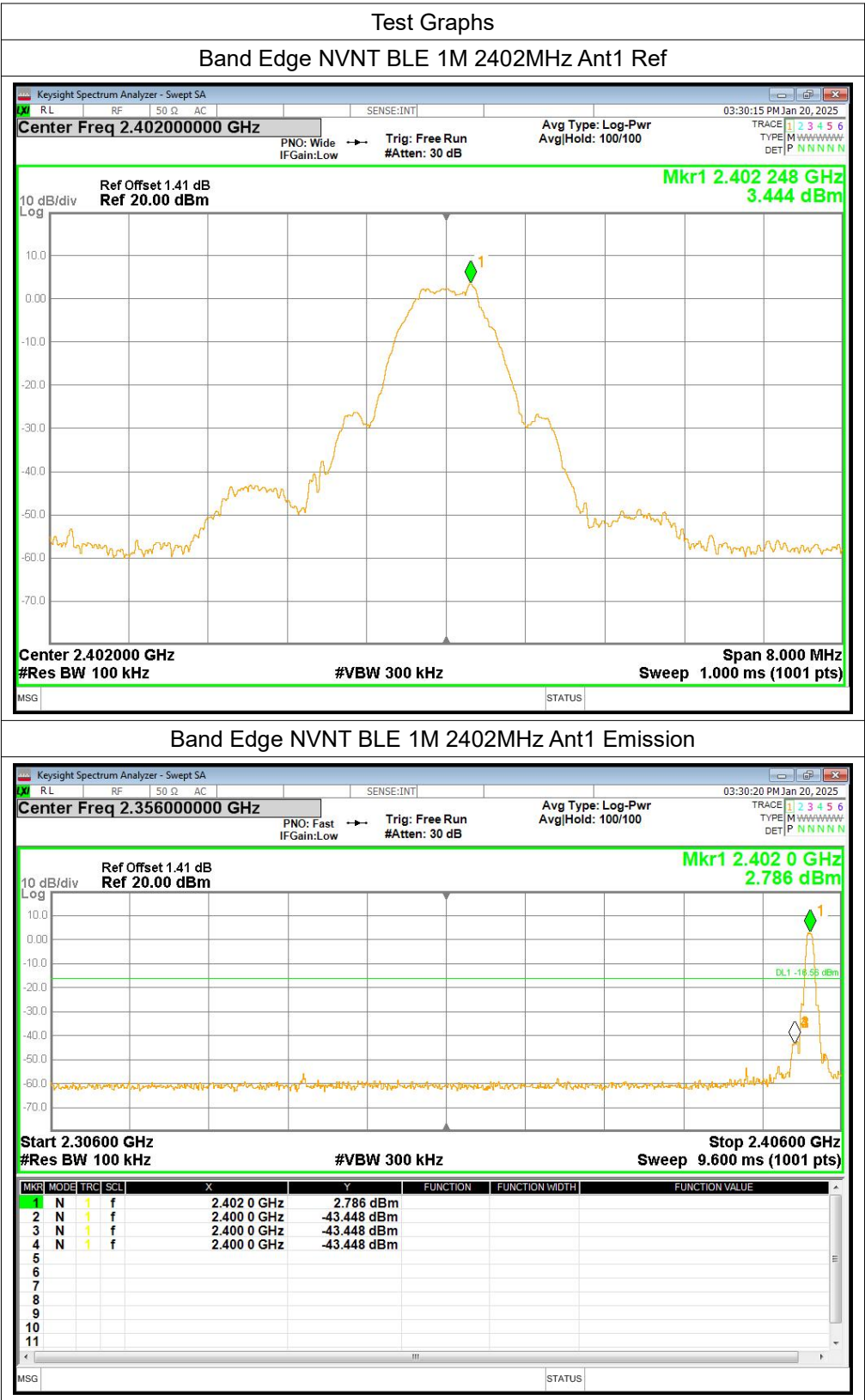


## PSD NVNT BLE 2M 2480MHz Ant1



**5.Band Edge**

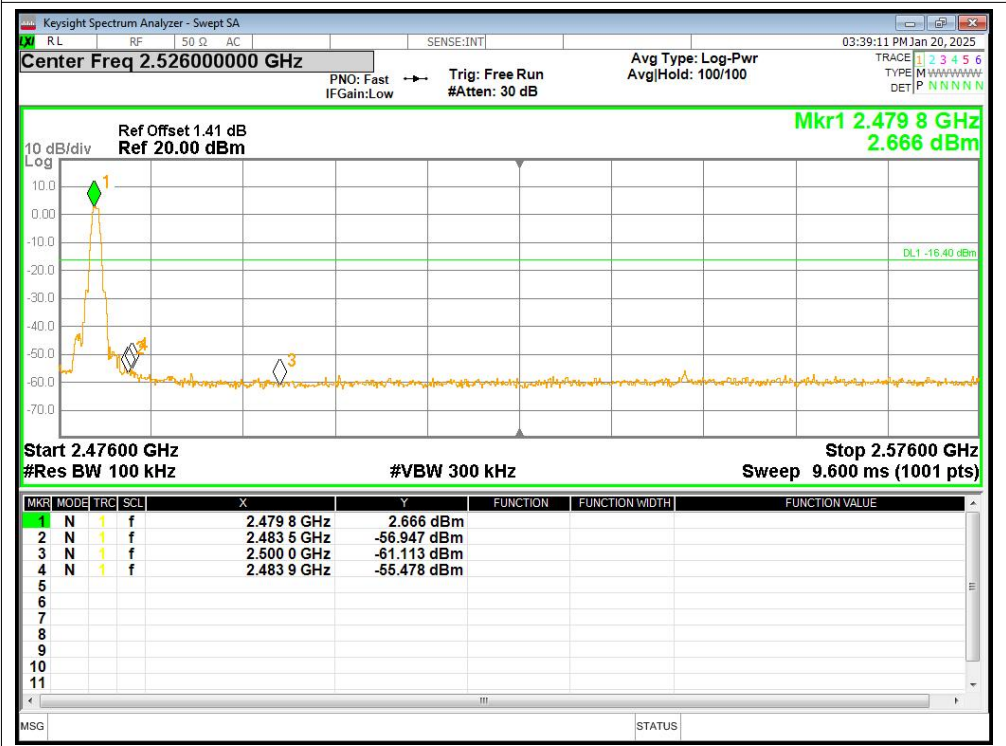
| Mode   | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|--------|-----------------|-----------------|-------------|---------|
| BLE 1M | 2402            | -46.88          | -20         | Pass    |
| BLE 1M | 2480            | -59.07          | -20         | Pass    |
| BLE 2M | 2402            | -27.44          | -20         | Pass    |
| BLE 2M | 2480            | -56.83          | -20         | Pass    |

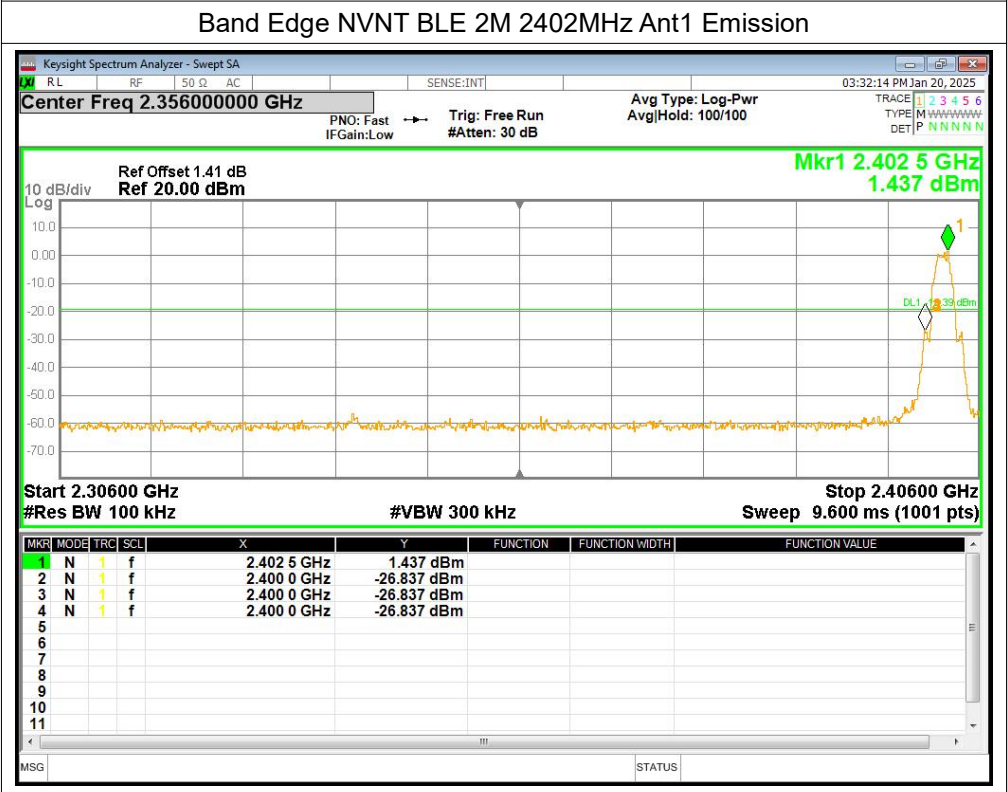


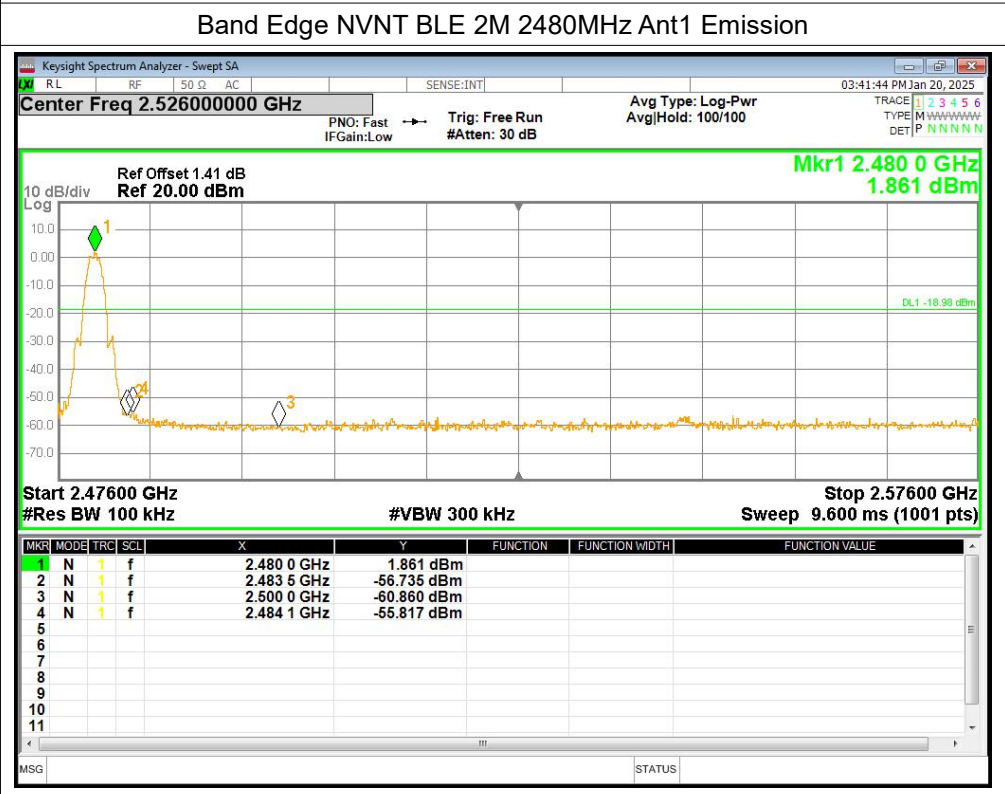
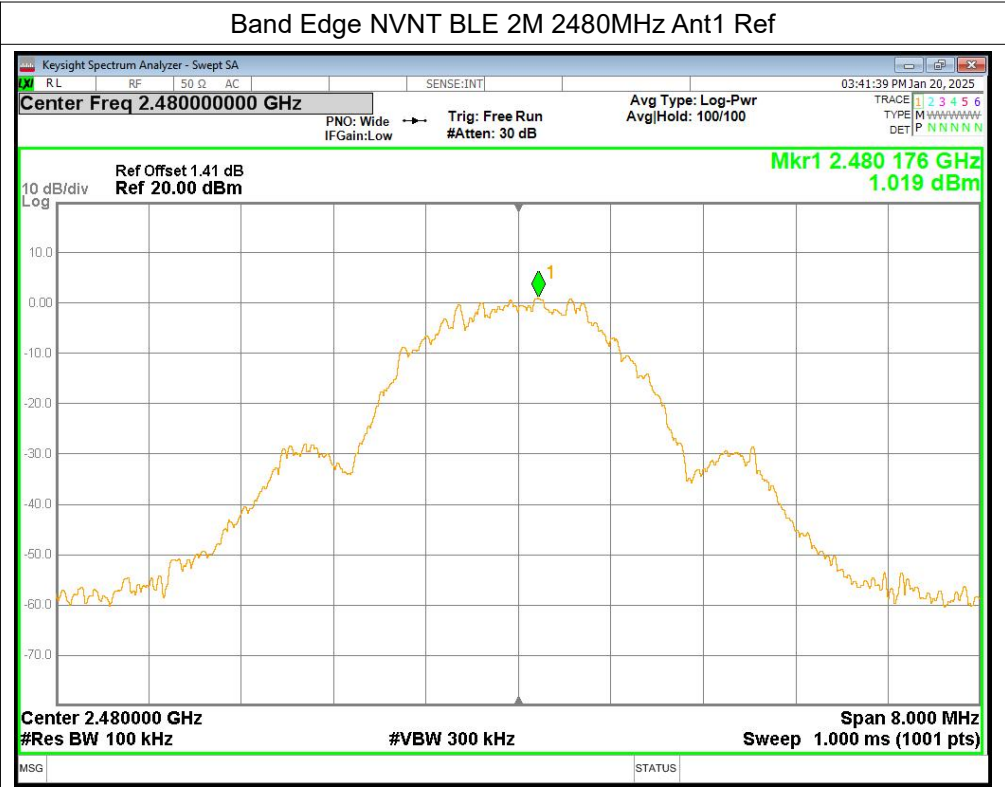
Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission

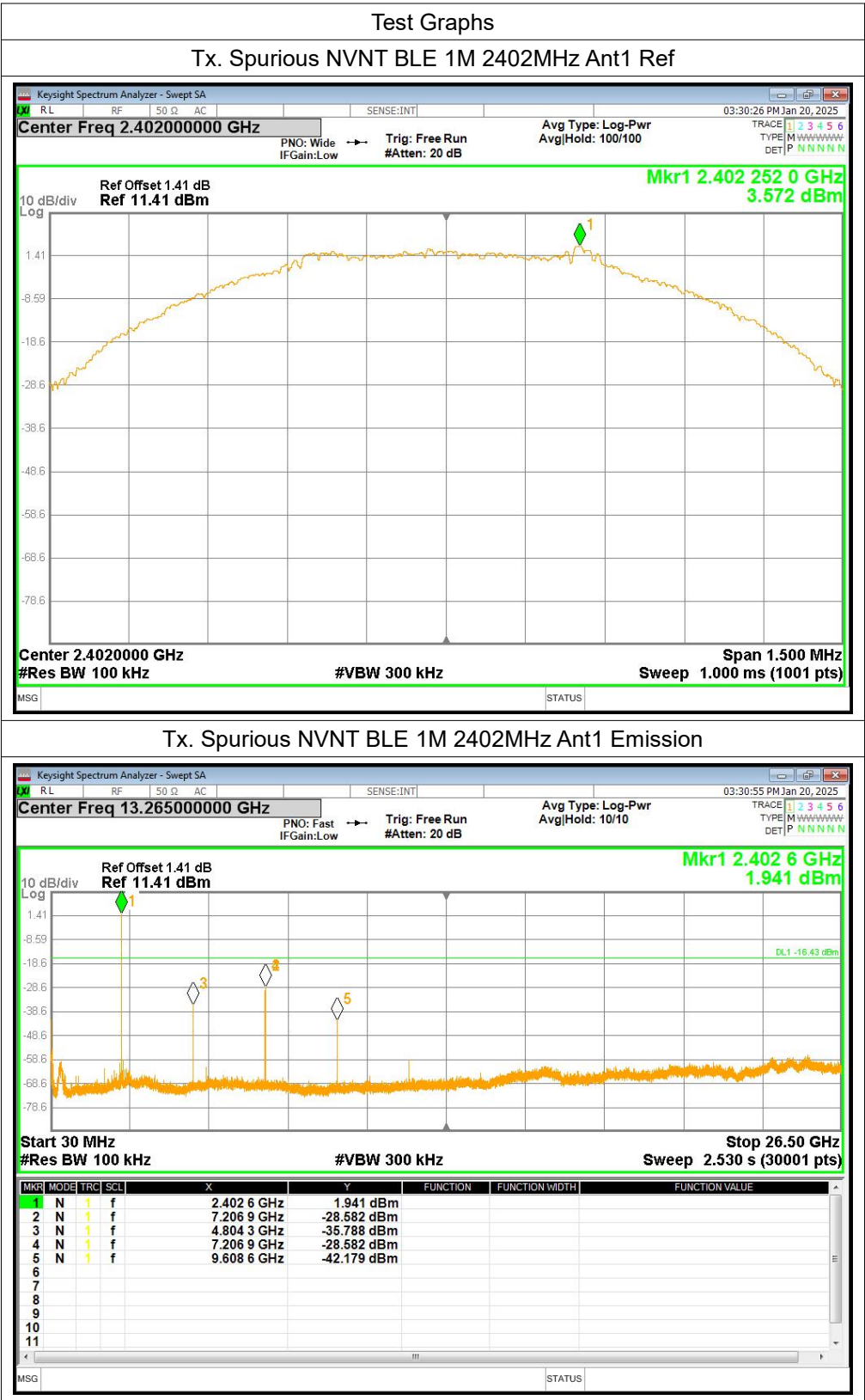




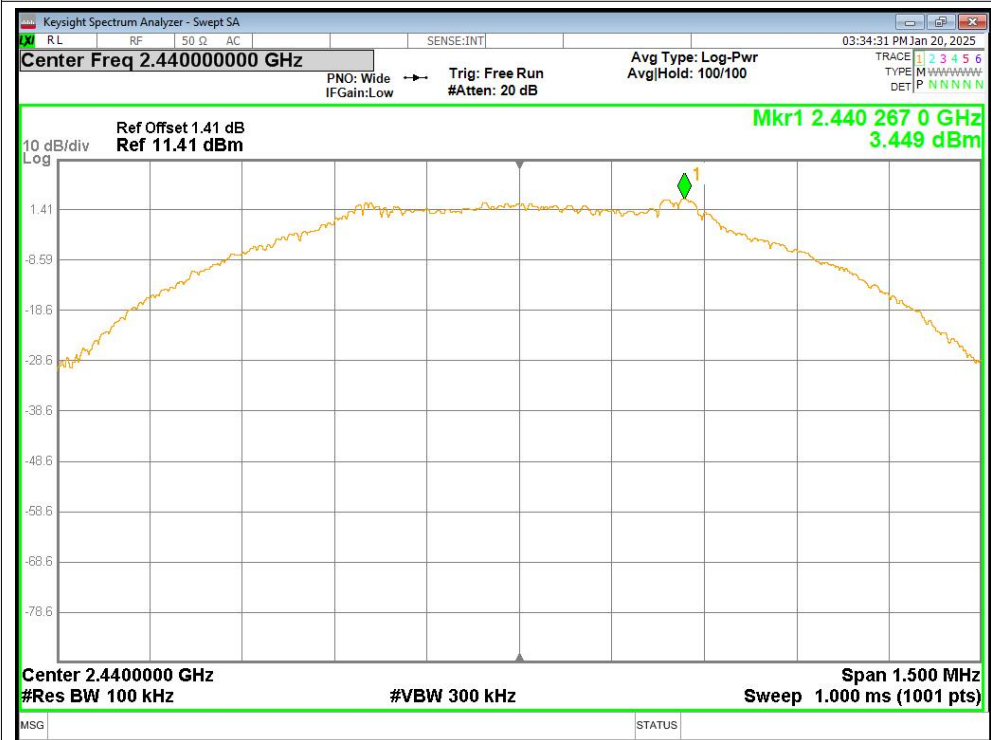


**6. Conducted RF Spurious Emission**

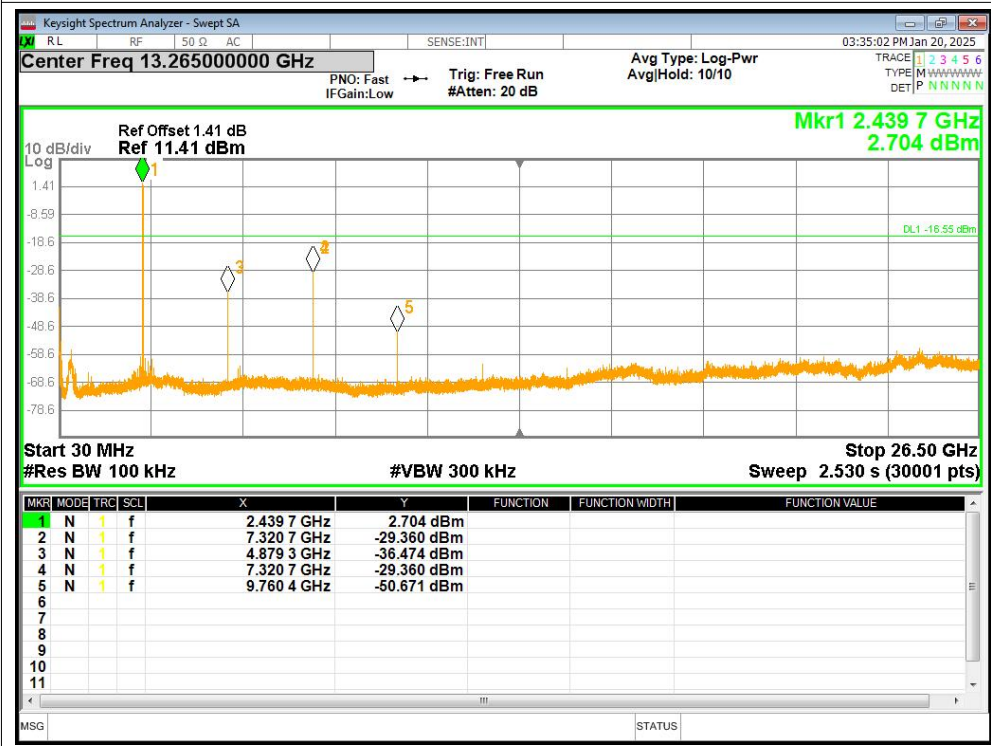
| Mode   | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|--------|-----------------|-----------------|-------------|---------|
| BLE 1M | 2402            | -32.15          | -20         | Pass    |
| BLE 1M | 2440            | -32.81          | -20         | Pass    |
| BLE 1M | 2480            | -34.62          | -20         | Pass    |
| BLE 2M | 2402            | -33.9           | -20         | Pass    |
| BLE 2M | 2440            | -33             | -20         | Pass    |
| BLE 2M | 2480            | -32.83          | -20         | Pass    |



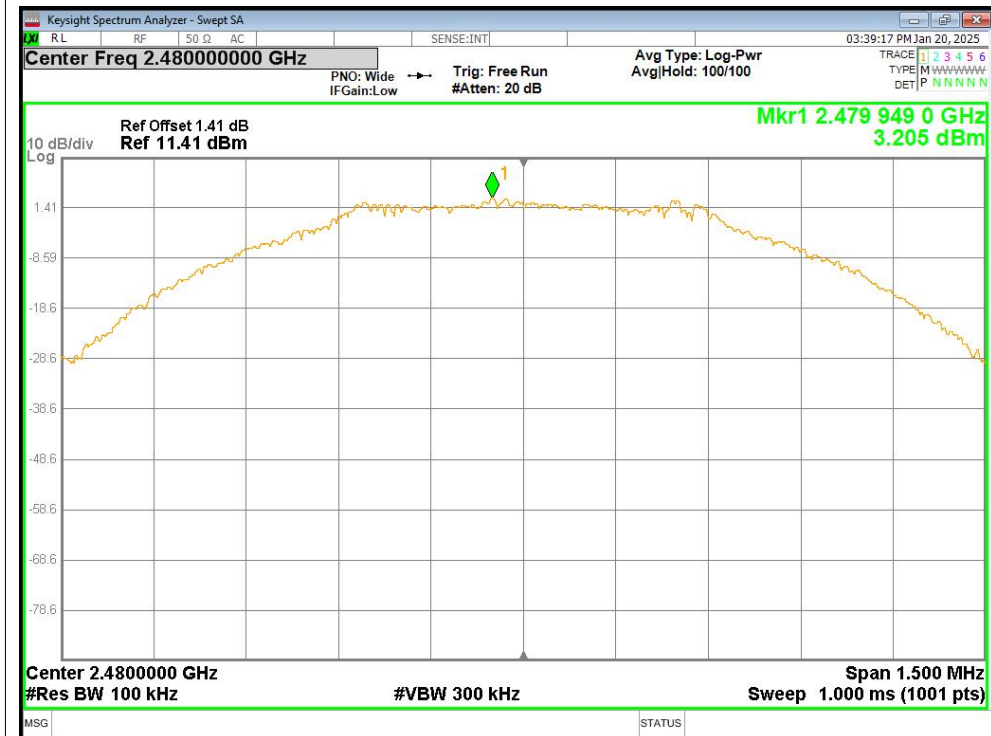
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



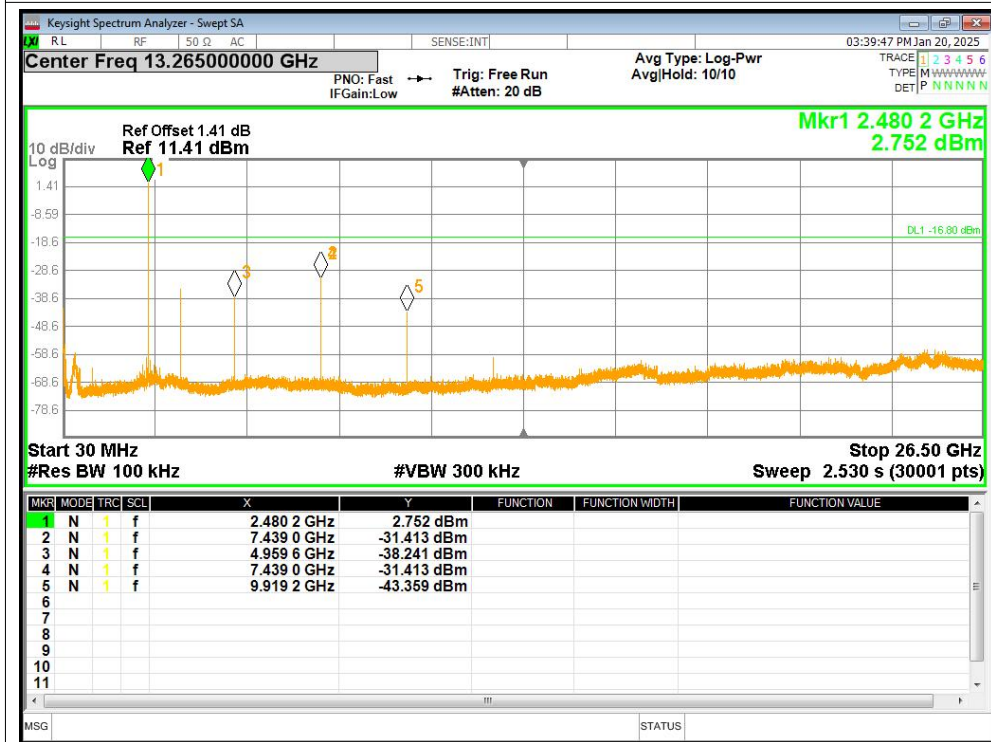
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



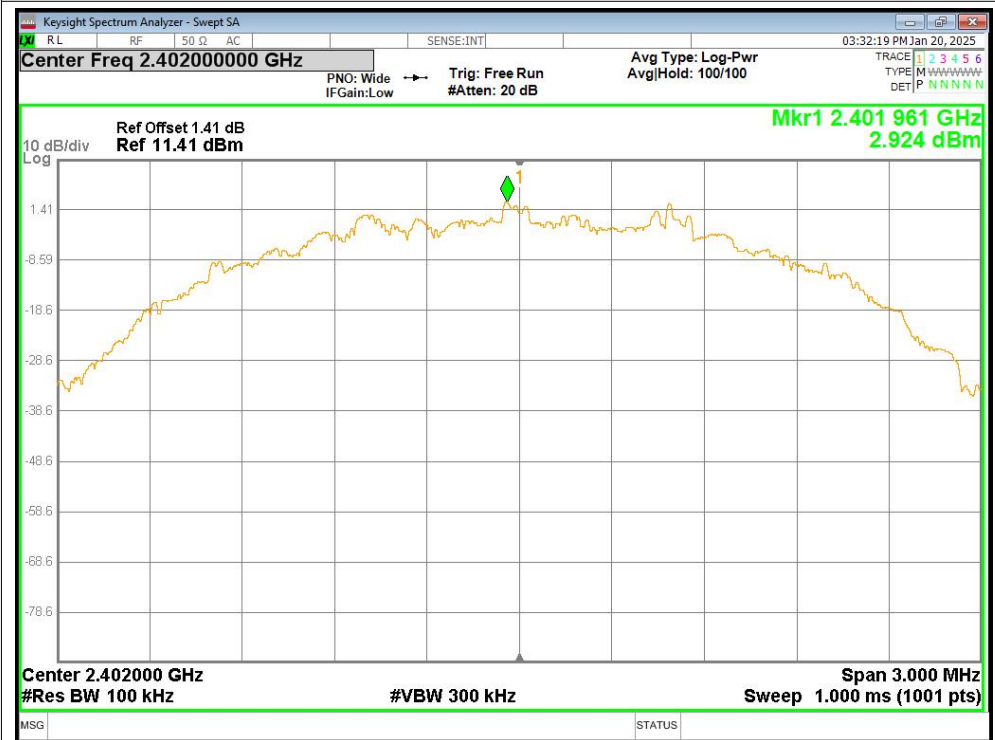
## Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



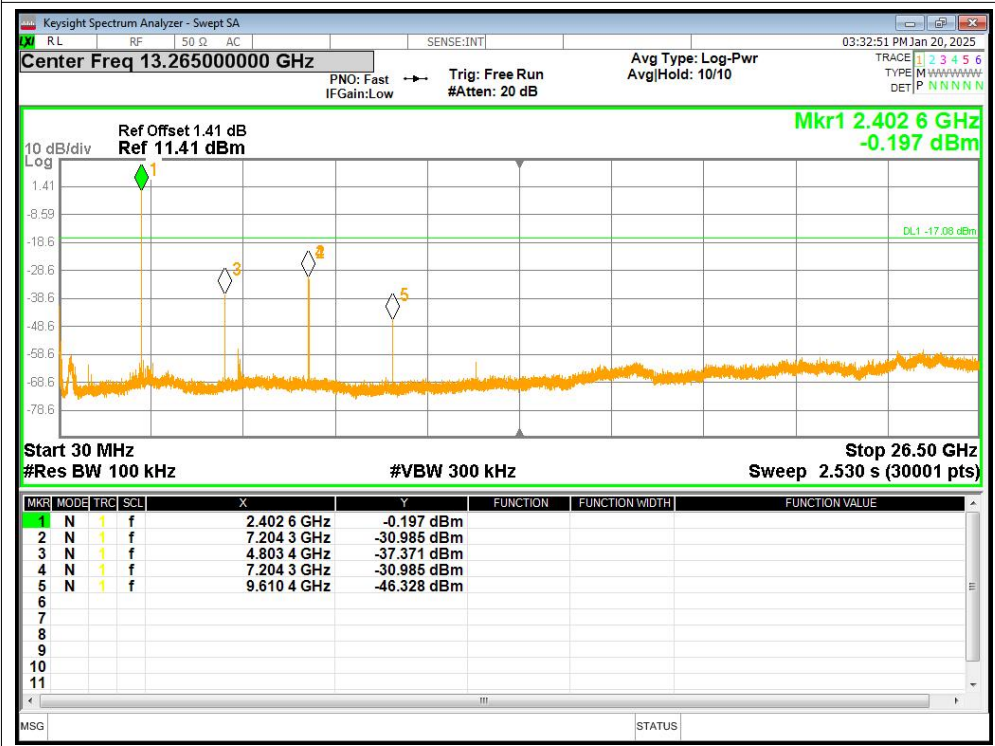
## Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



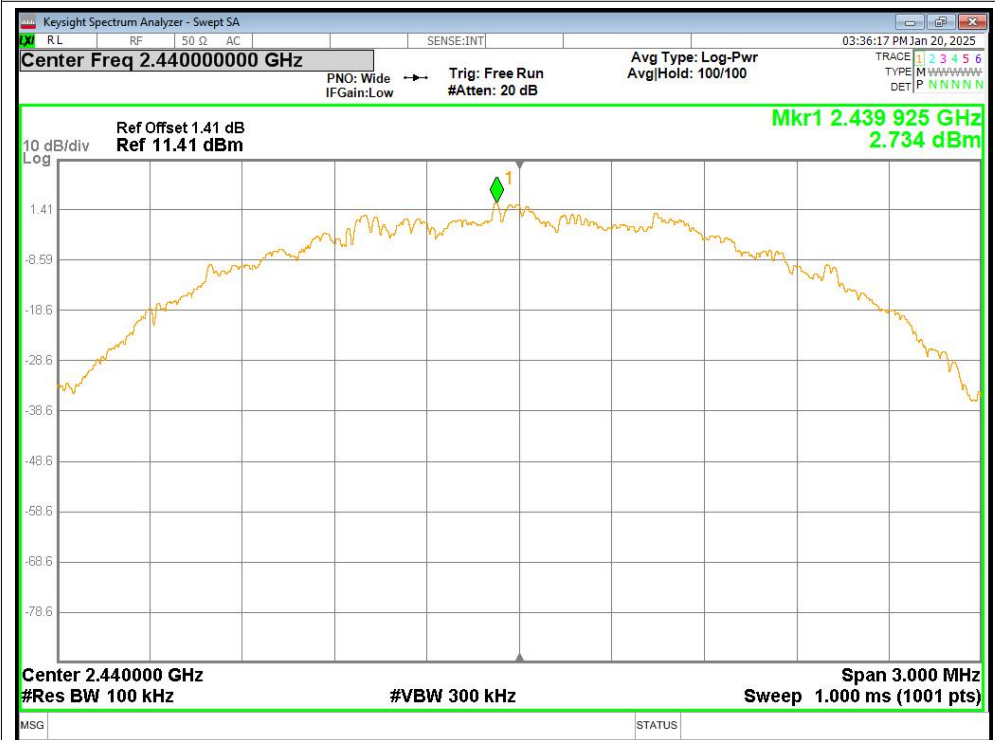
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Ref



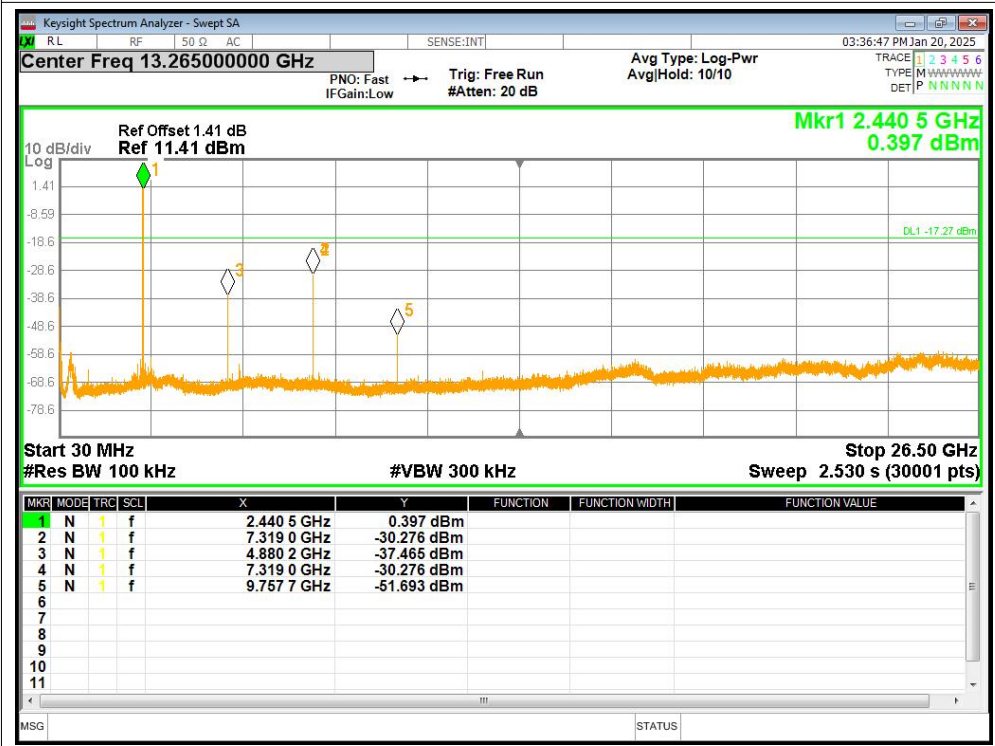
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Emission



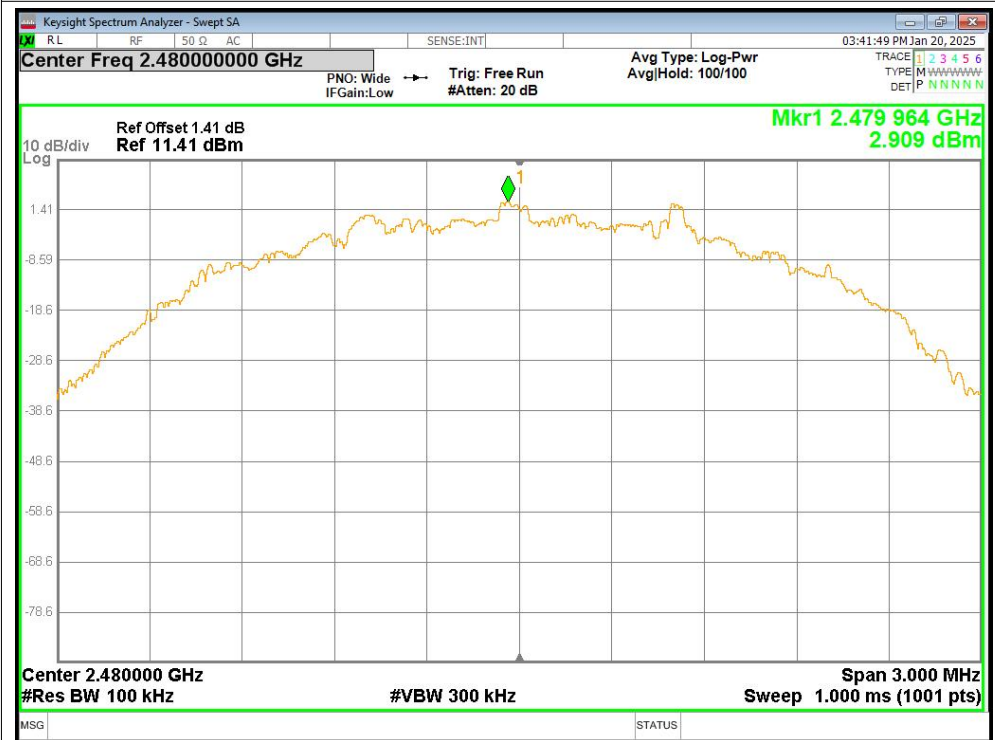
Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Emission

