



## Appendix B

### RF Test Data for BT (BLE) (Conducted Measurement)

Product Name: smart watch

Trade Mark: N/A

Test Model: IW06

#### Environmental Conditions

|                    |             |
|--------------------|-------------|
| Temperature:       | 25.4° C     |
| Relative Humidity: | 52.4%       |
| ATM Pressure:      | 100.0 kPa   |
| Test Engineer:     | Emiya lin   |
| Supervised by:     | Simba Haung |



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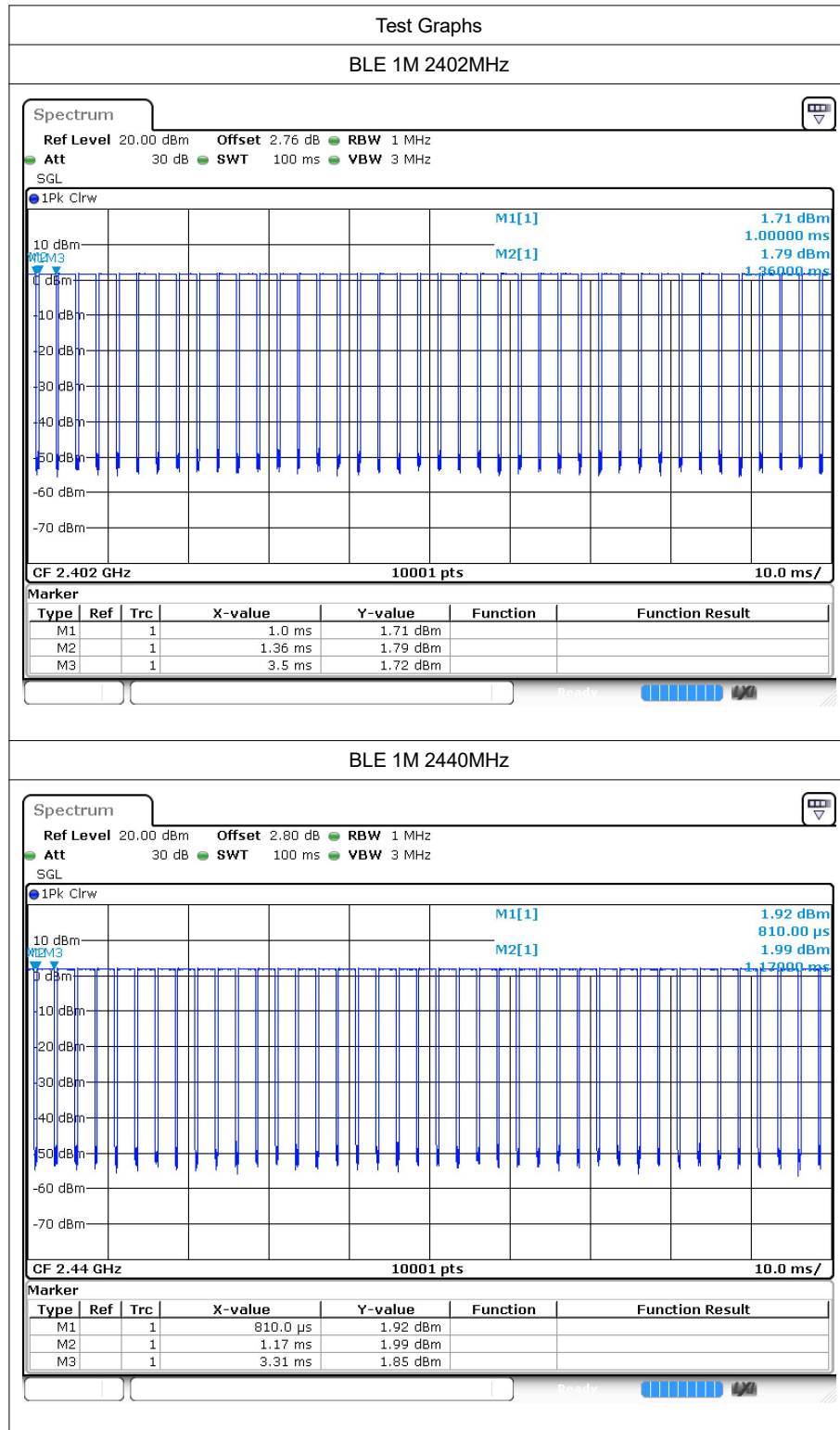


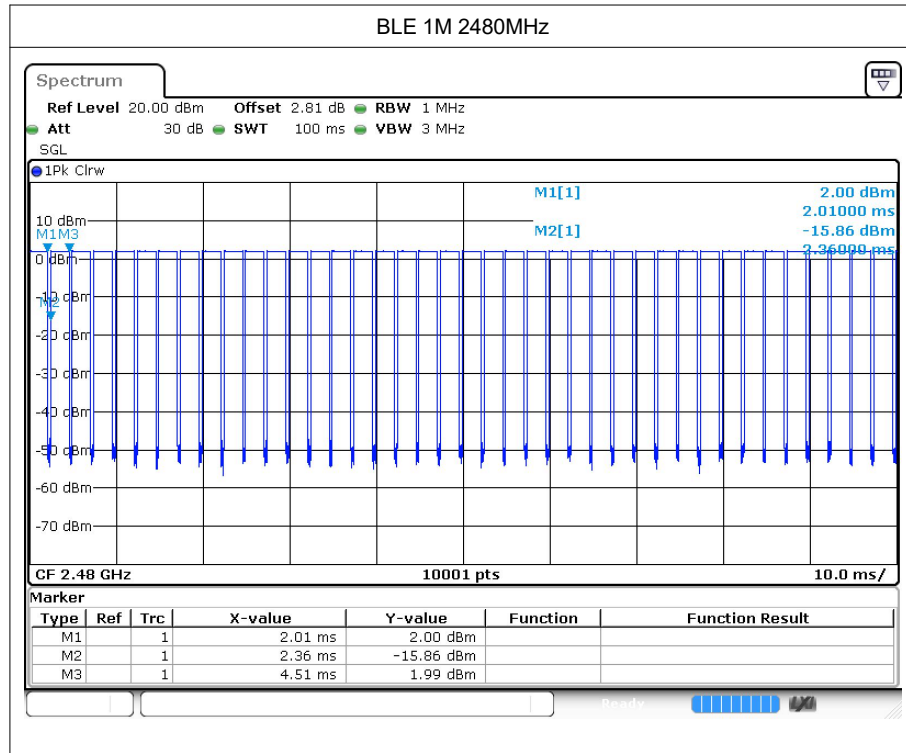
# 1 Duty Cycle

## 1.1 Test Result

| Mode   | Frequency (MHz) | Duty Cycle (%) | Correction Factor | 1/T (kHz) |
|--------|-----------------|----------------|-------------------|-----------|
| BLE 1M | 2402            | 86             | 0.65              | 0.47      |
| BLE 1M | 2440            | 86             | 0.65              | 0.47      |
| BLE 1M | 2480            | 86.4           | 0.63              | 0.47      |

## 1.2 Test Graphs





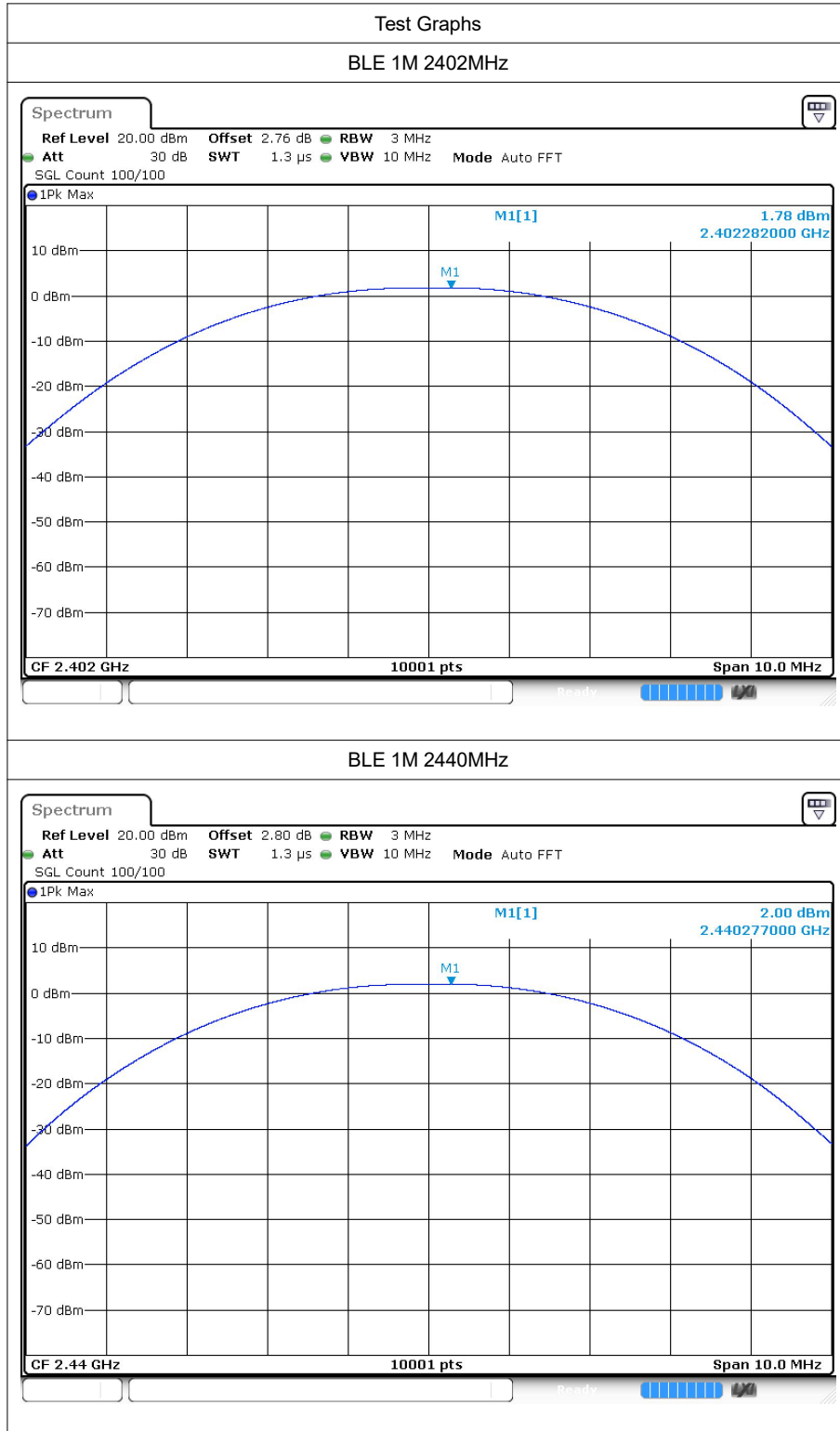


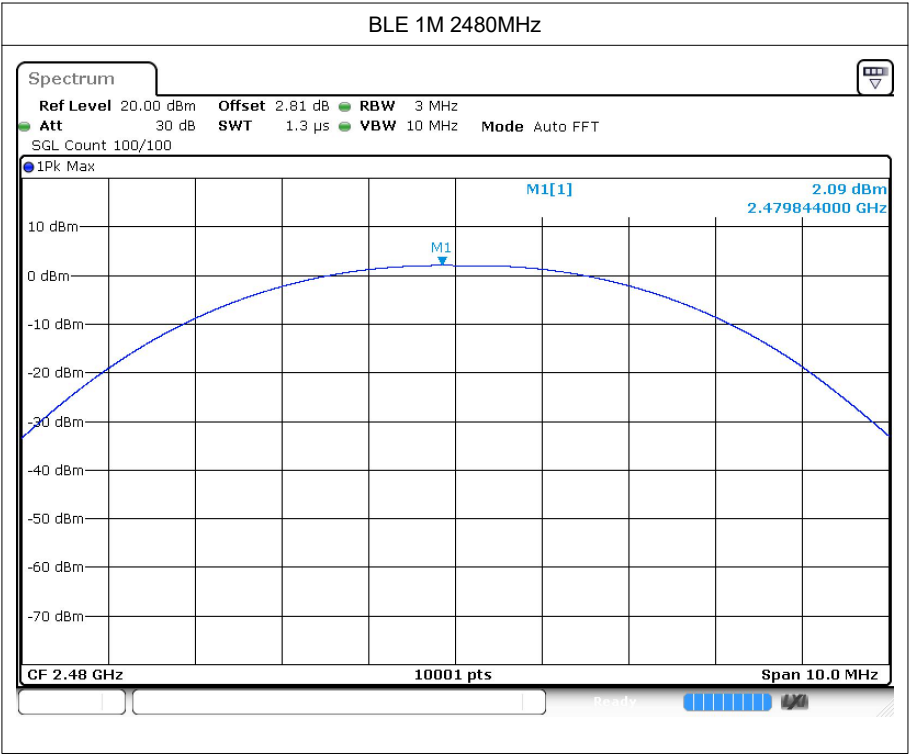
## 2 Maximum Conducted Output Power

### 2.1 Test Result

| Mode   | Frequency (MHz) | Conducted Power<br>(dBm) | Limit (dBm) | Verdict |
|--------|-----------------|--------------------------|-------------|---------|
| BLE 1M | 2402            | 1.78                     | 30          | Pass    |
| BLE 1M | 2440            | 2                        | 30          | Pass    |
| BLE 1M | 2480            | 2.09                     | 30          | Pass    |

## 2.2 Test Graphs





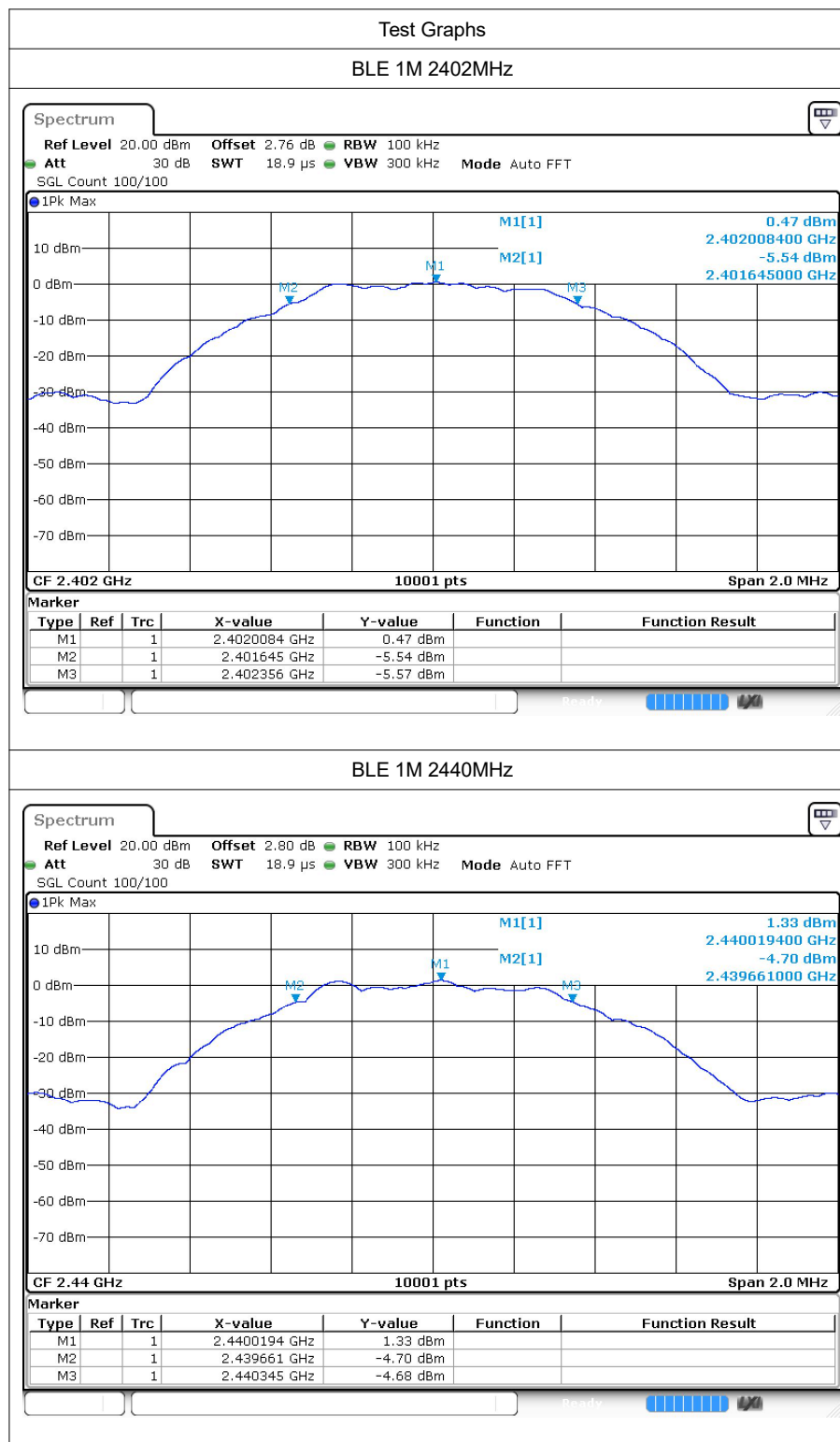


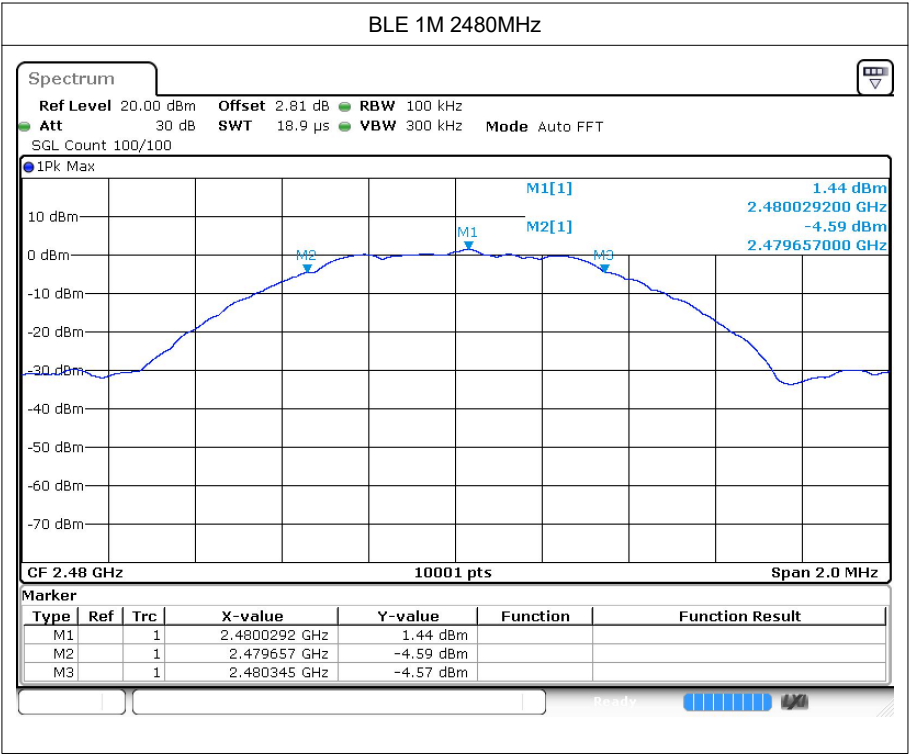
### 3 -6dB Bandwidth

#### 3.1 Test Result

| Mode   | Frequency (MHz) | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|--------|-----------------|-----------------------|-----------------------------|---------|
| BLE 1M | 2402            | 0.711                 | 0.5                         | Pass    |
| BLE 1M | 2440            | 0.684                 | 0.5                         | Pass    |
| BLE 1M | 2480            | 0.688                 | 0.5                         | Pass    |

## 3.2 Test Graphs



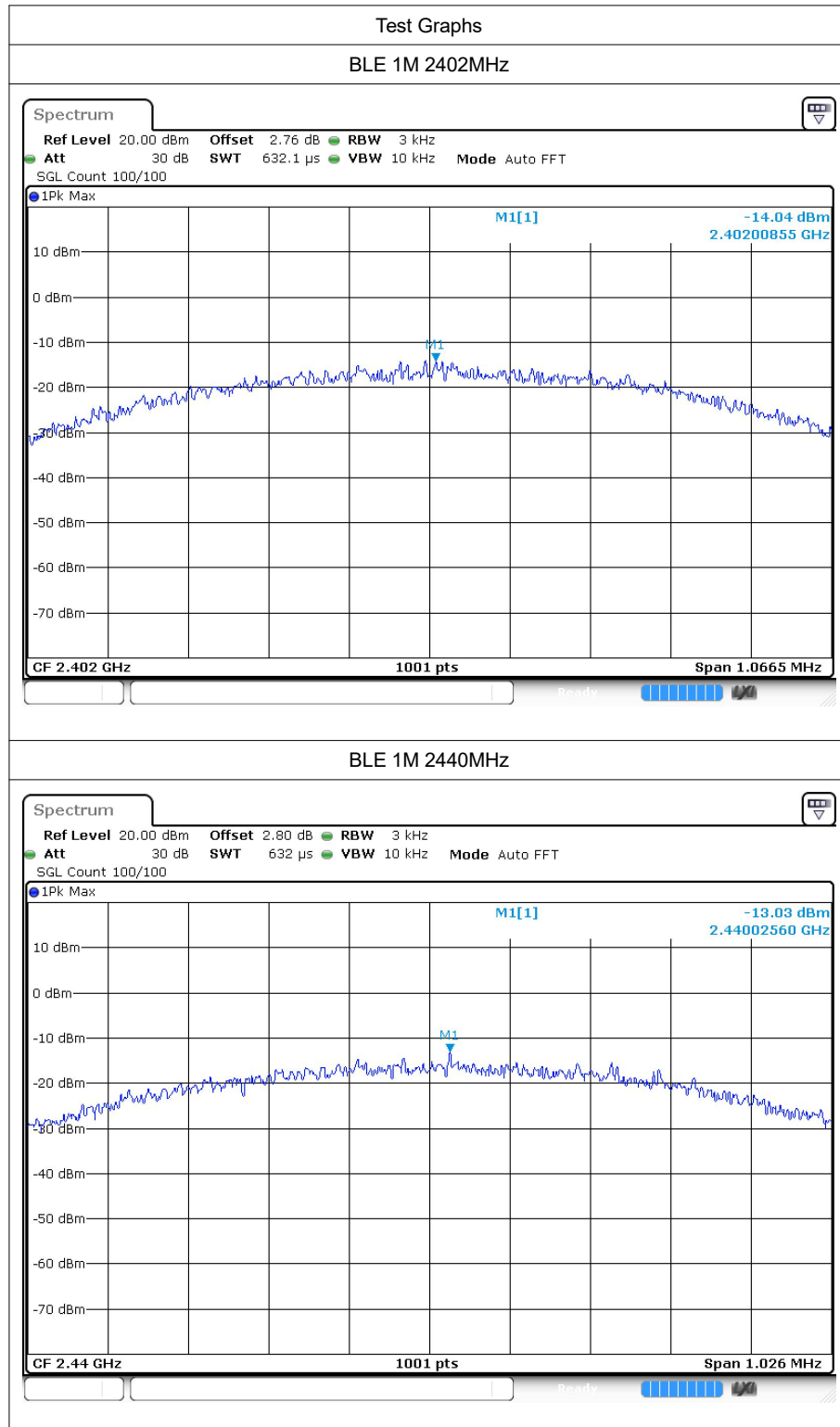


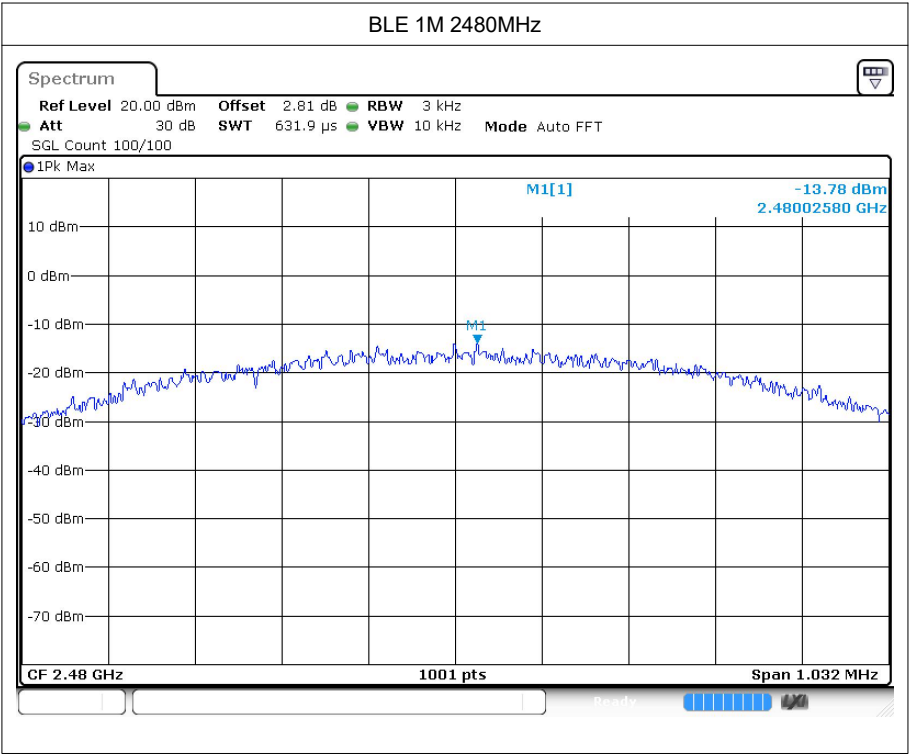
## 4 Maximum Power Spectral Density Level

### 4.1 Test Result

| Mode   | Frequency (MHz) | Conducted PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
|--------|-----------------|-----------------------------|---------------------|---------|
| BLE 1M | 2402            | -14.04                      | ≤8                  | Pass    |
| BLE 1M | 2440            | -13.03                      | ≤8                  | Pass    |
| BLE 1M | 2480            | -13.78                      | ≤8                  | Pass    |

## 4.2 Test Graphs





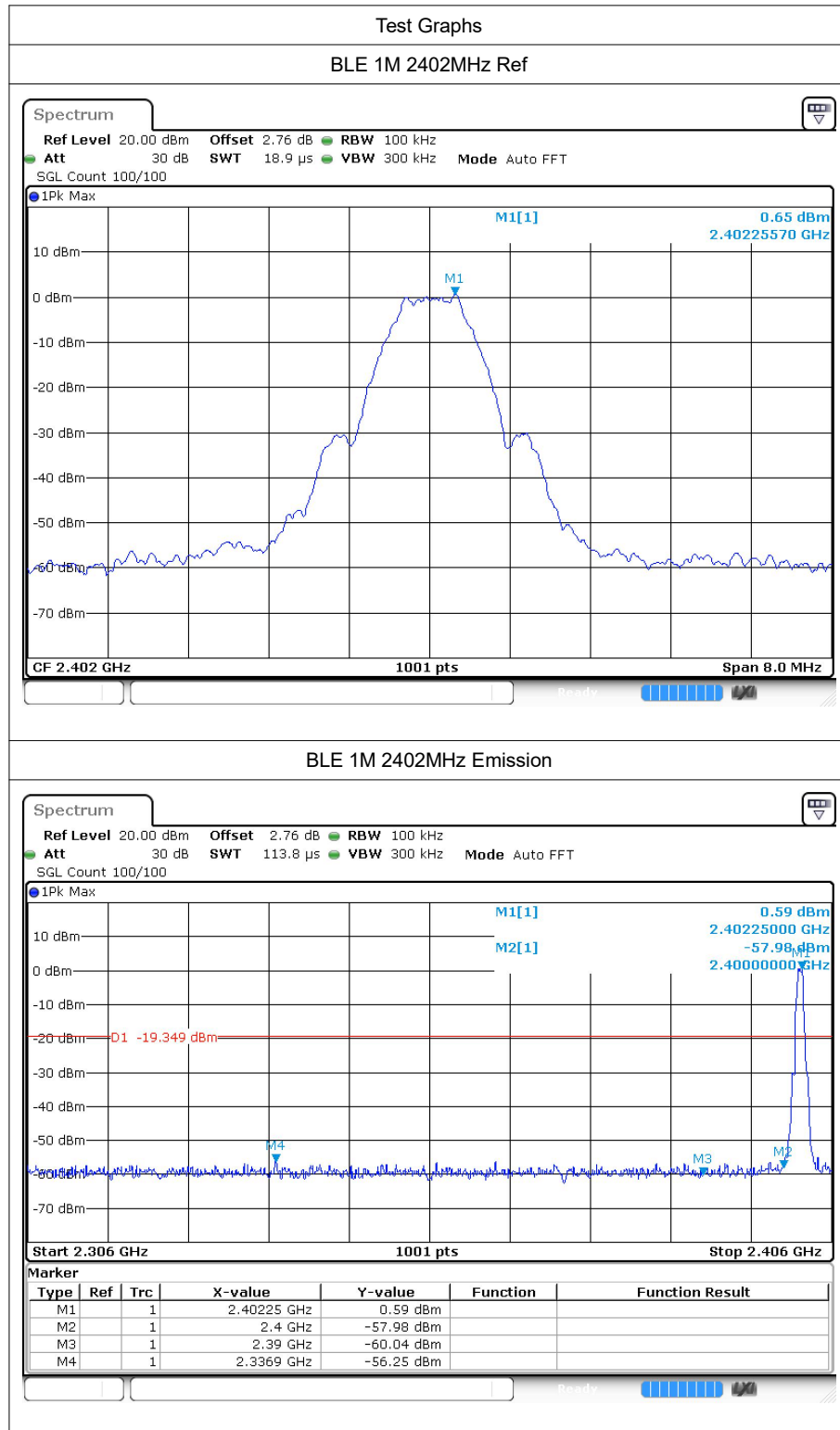


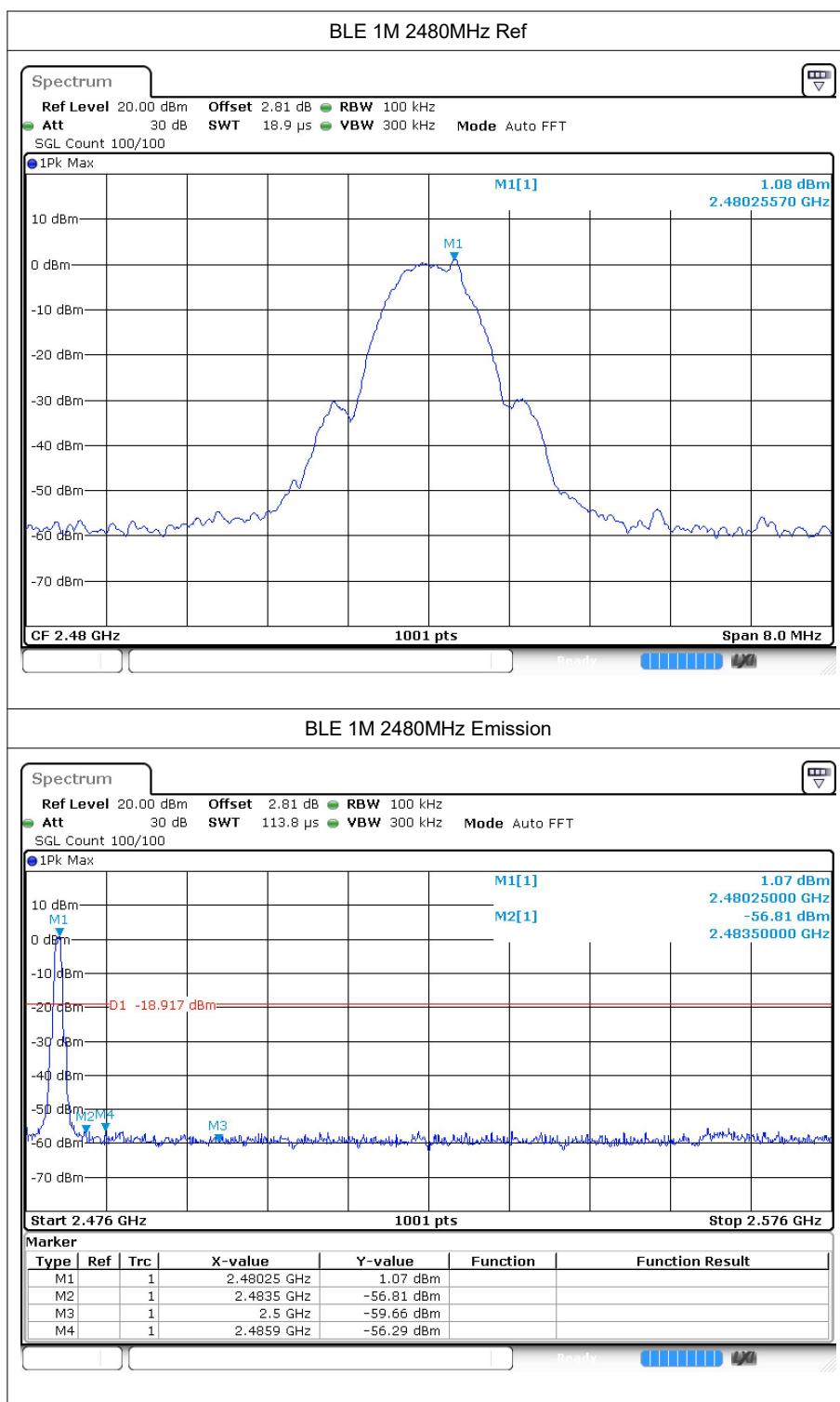
## 5 Band Edge

### 5.1 Test Result

| Mode   | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|--------|-----------------|-----------------|-------------|---------|
| BLE 1M | 2402            | -56.89          | -20         | Pass    |
| BLE 1M | 2480            | -57.36          | -20         | Pass    |

## 5.2 Test Graphs



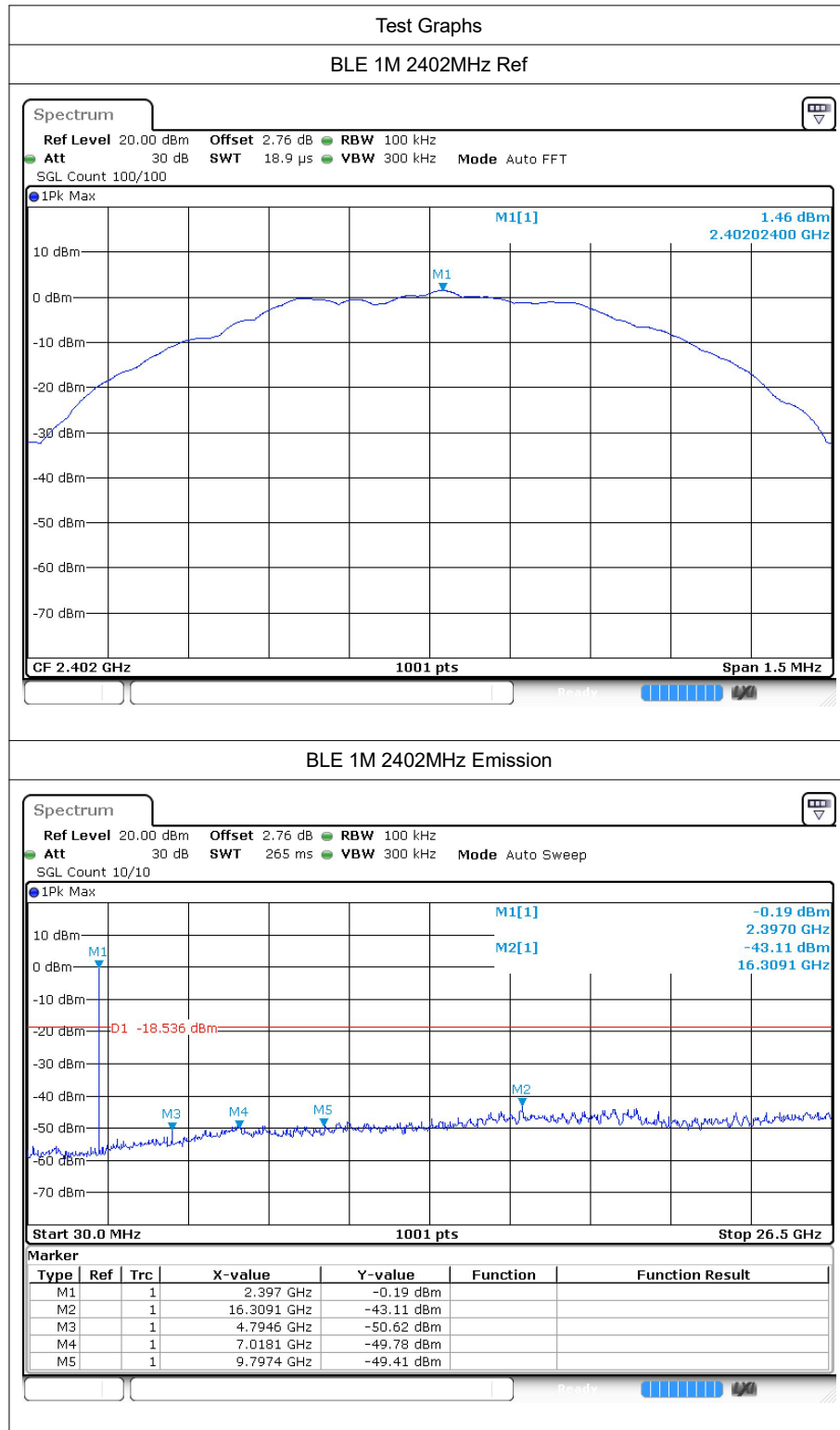


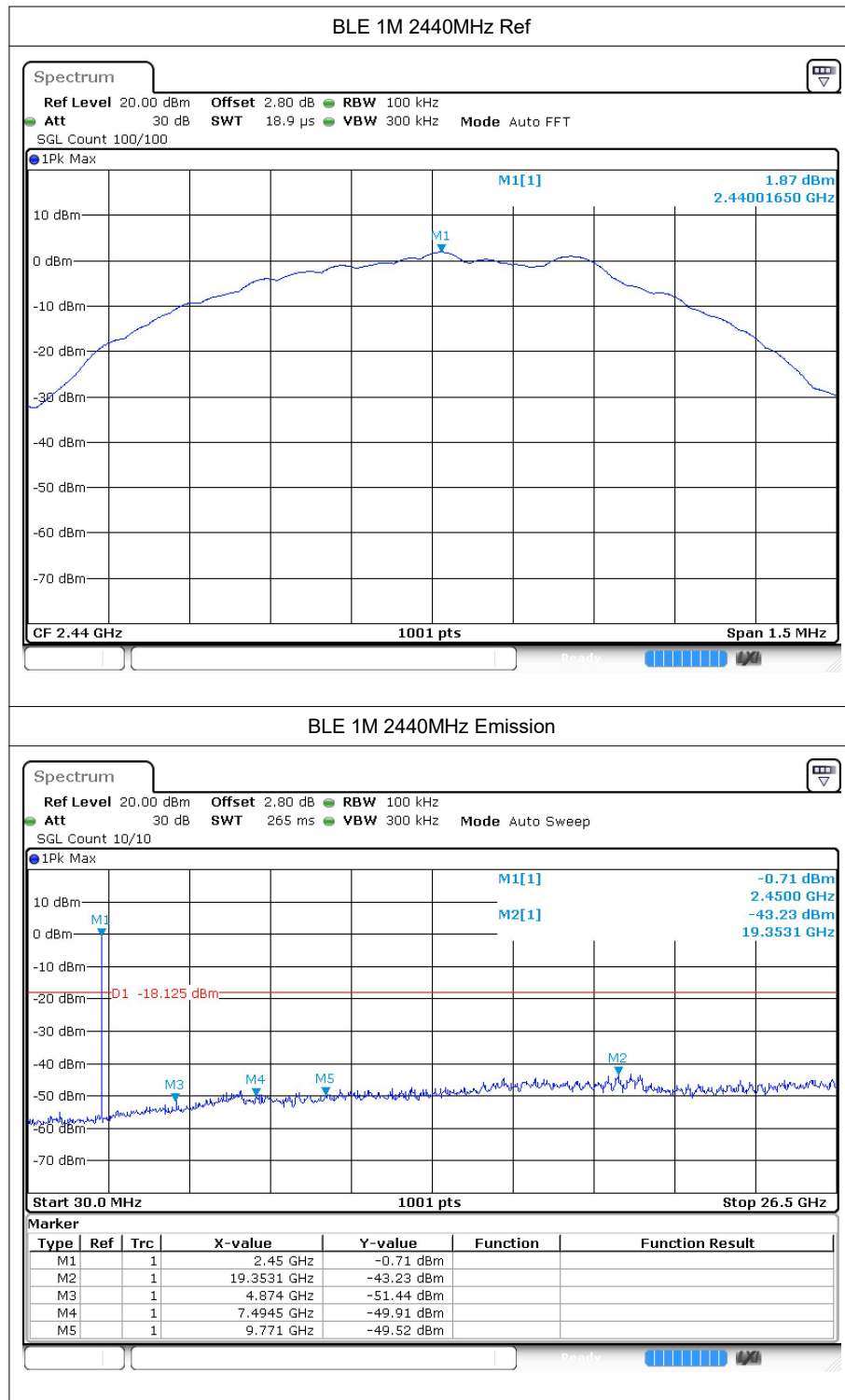
## 6 Conducted RF Spurious Emission

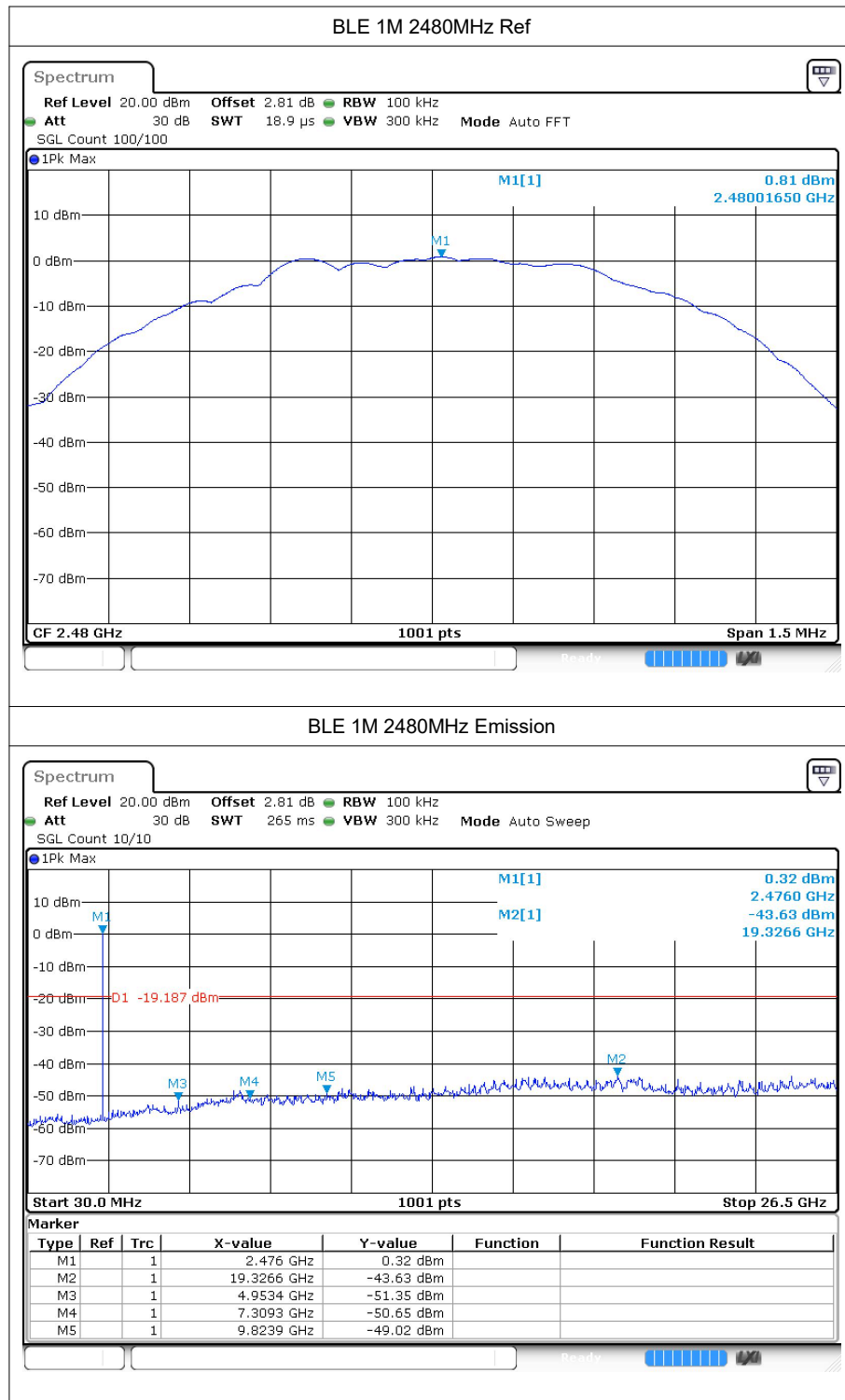
### 6.1 Test Result

| Mode   | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|--------|-----------------|-----------------|-------------|---------|
| BLE 1M | 2402            | -44.57          | -20         | Pass    |
| BLE 1M | 2440            | -45.1           | -20         | Pass    |
| BLE 1M | 2480            | -44.43          | -20         | Pass    |

## 6.2 Test Graphs







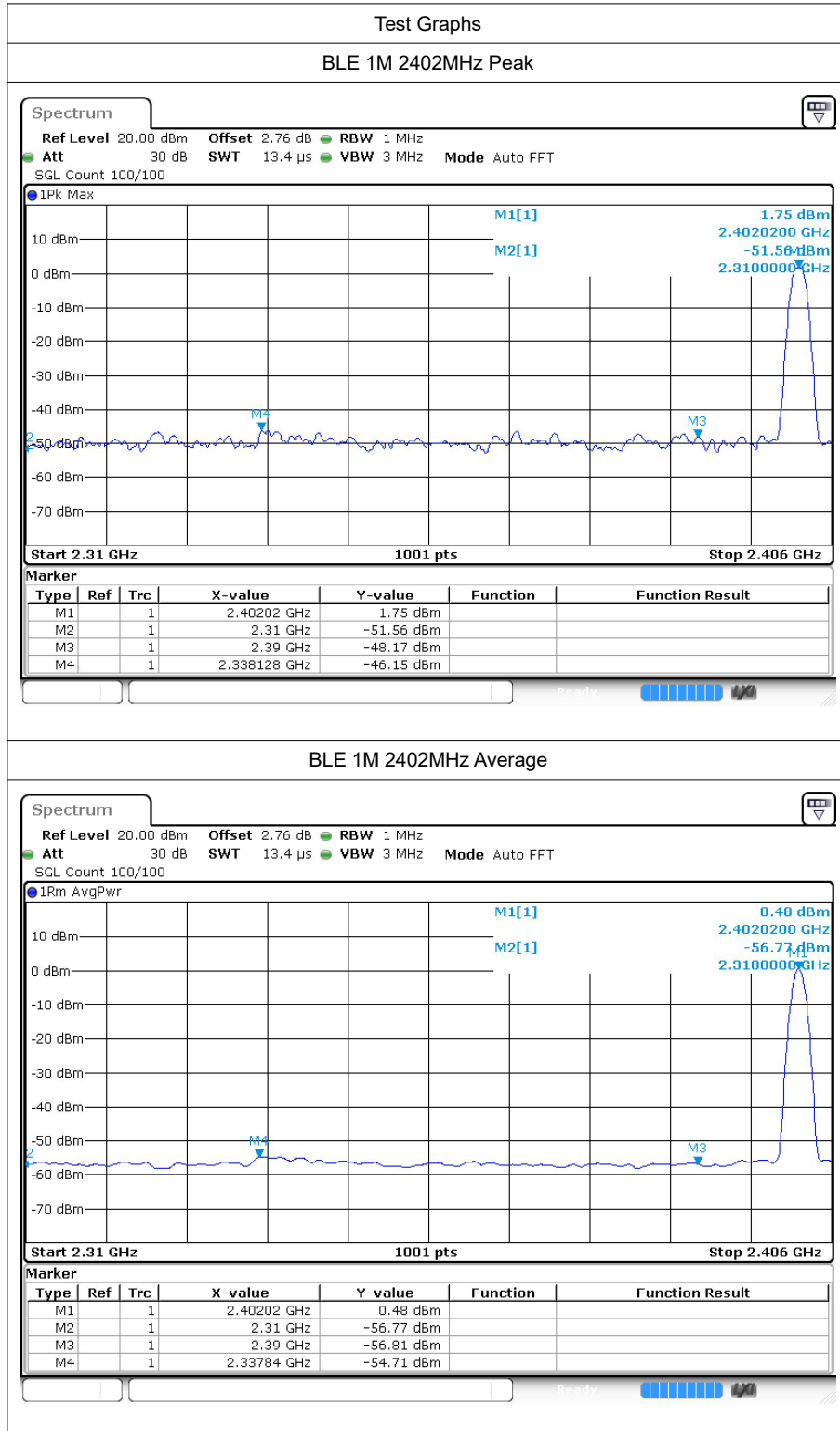


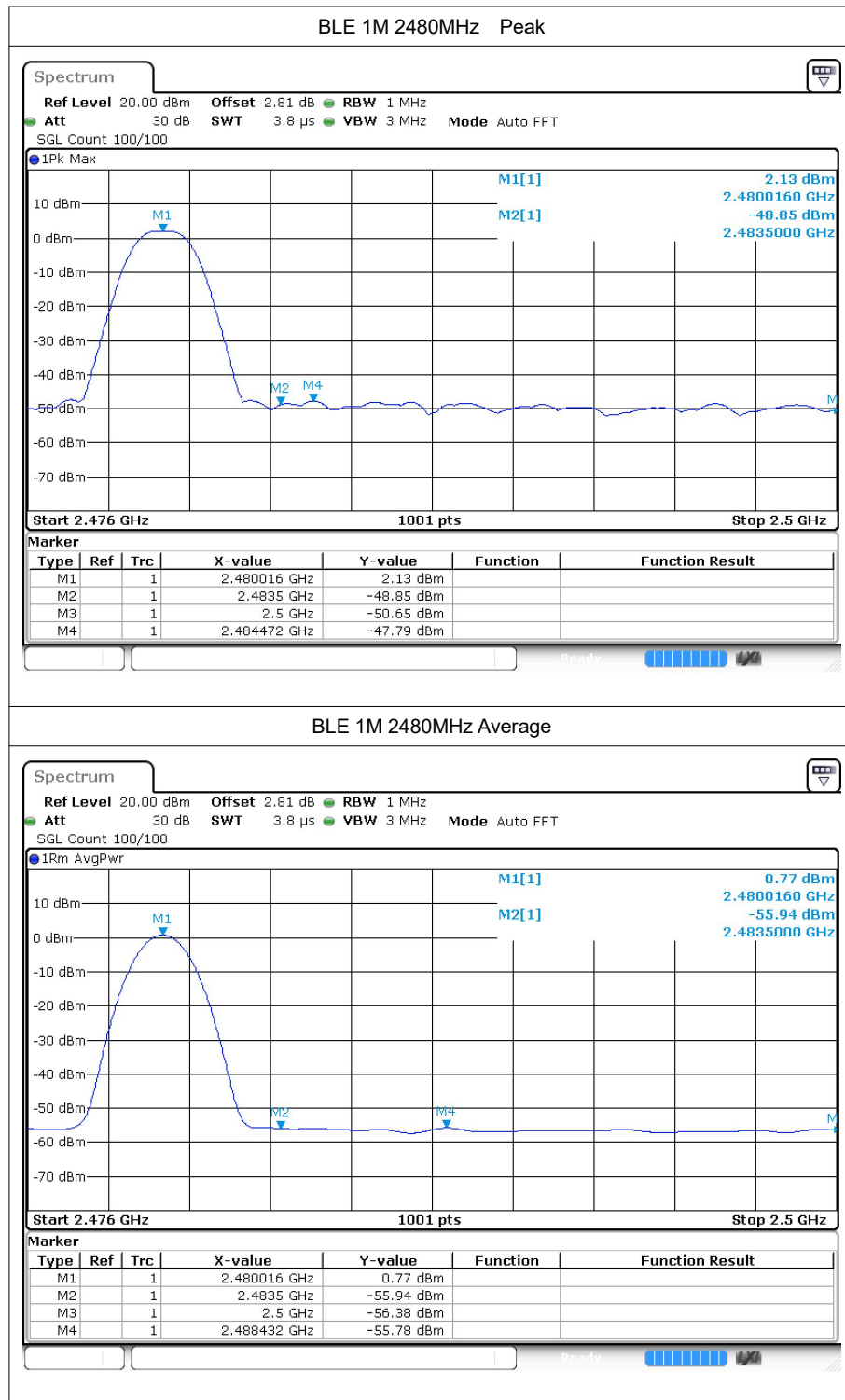
## 7 Restrict Band

### 7.1 Test Result

| Mode   | Frequency<br>(MHz) | Spur Freq<br>(MHz) | Power<br>(dBm) | Gain<br>(dBi) | Duty<br>Factor | E<br>(dBuV/m) | Detector | Limit<br>(dBuV/m) | Verdict |
|--------|--------------------|--------------------|----------------|---------------|----------------|---------------|----------|-------------------|---------|
| BLE 1M | 2402               | 2310               | -51.56         | 2             | -              | 45.7          | Peak     | 74                | Pass    |
| BLE 1M | 2402               | 2310               | -56.77         | 2             | 0.65           | 41.14         | Average  | 54                | Pass    |
| BLE 1M | 2402               | 2338.128           | -46.15         | 2             | -              | 51.11         | Peak     | 74                | Pass    |
| BLE 1M | 2402               | 2337.84            | -54.7          | 2             | 0.65           | 43.21         | Average  | 54                | Pass    |
| BLE 1M | 2402               | 2390               | -48.17         | 2             | -              | 49.09         | Peak     | 74                | Pass    |
| BLE 1M | 2402               | 2390               | -56.81         | 2             | 0.65           | 41.1          | Average  | 54                | Pass    |
| BLE 1M | 2480               | 2483.5             | -48.85         | 2             | -              | 48.41         | Peak     | 74                | Pass    |
| BLE 1M | 2480               | 2483.5             | -55.94         | 2             | 0.63           | 41.95         | Average  | 54                | Pass    |
| BLE 1M | 2480               | 2484.472           | -47.78         | 2             | -              | 49.48         | Peak     | 74                | Pass    |
| BLE 1M | 2480               | 2488.432           | -55.77         | 2             | 0.63           | 42.12         | Average  | 54                | Pass    |
| BLE 1M | 2480               | 2500               | -50.65         | 2             | -              | 46.61         | Peak     | 74                | Pass    |
| BLE 1M | 2480               | 2500               | -56.38         | 2             | 0.63           | 41.51         | Average  | 54                | Pass    |

## 7.2 Test Graphs





---The End---