

## RF Test Data for BLE (Conducted Measurements)

| General Description of EUT                                                                      |                                           |
|-------------------------------------------------------------------------------------------------|-------------------------------------------|
| EUT Name:                                                                                       | Portable Gaming Computer(Tablet computer) |
| Model:                                                                                          | AYANEO Pocket Micro                       |
| Sample ID:                                                                                      | HC-C-202407-0066-01-01-2#                 |
| Test Standard:                                                                                  | FCC Part 15.247                           |
| Environmental Conditions                                                                        |                                           |
| Ambient Temperature:                                                                            | 24.3℃                                     |
| Ambient Humidity:                                                                               | 55%RH                                     |
| Test Power Supply:                                                                              | DC 3.85V                                  |
| Test Engineer:                                                                                  | Jolin Lee                                 |
| Note: For a more detailed features description, please refer to the report TBR-C-202407-0066-61 |                                           |

## Contents

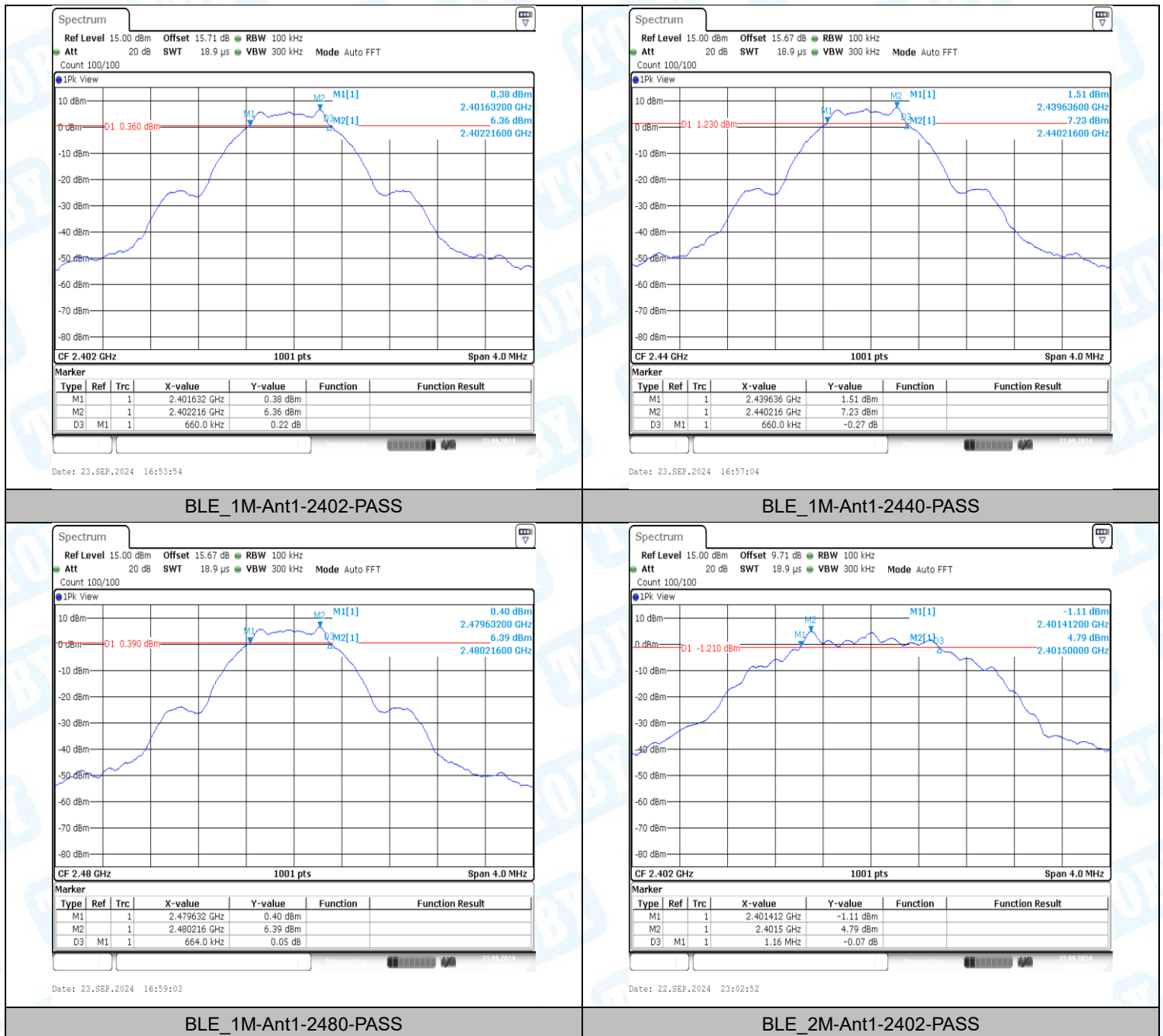
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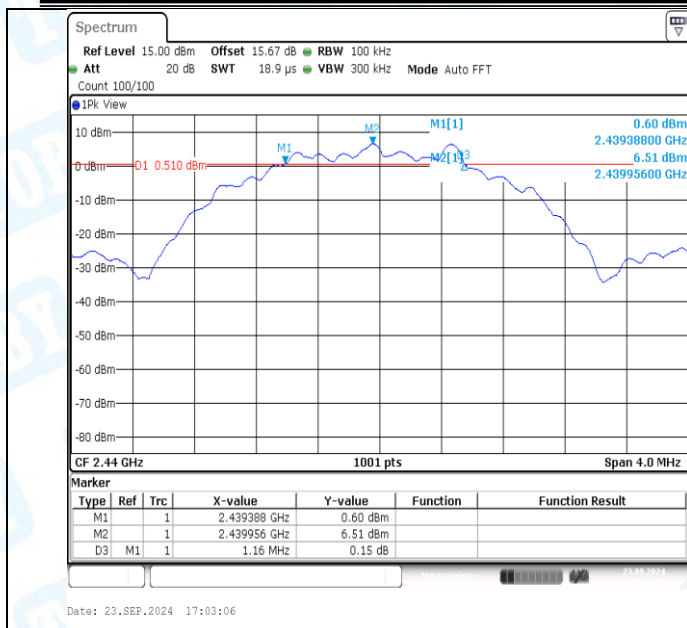
## 1: DTS Bandwidth

### 1.1 Test Result

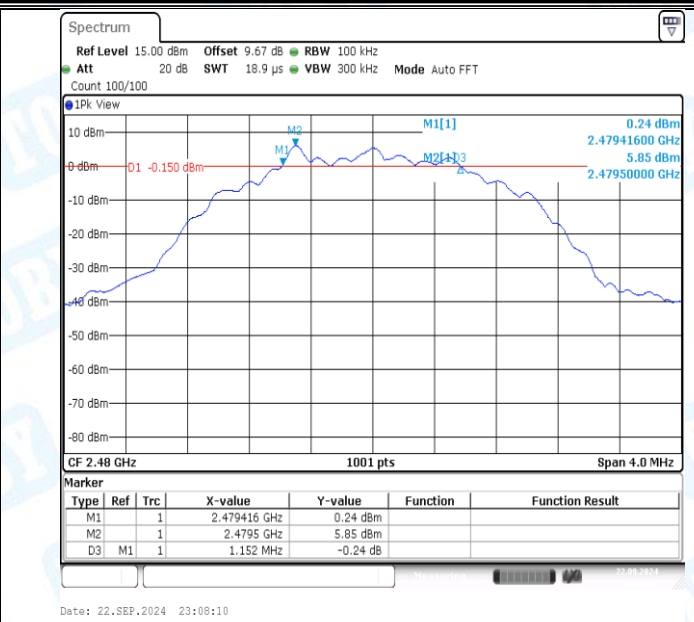
| Test Mode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|----------------|--------------|---------|---------|------------|---------|
| BLE_1M    | Ant1    | 2402           | 0.66         | 2401.63 | 2402.29 | 0.5        | PASS    |
| BLE_1M    | Ant1    | 2440           | 0.66         | 2439.64 | 2440.30 | 0.5        | PASS    |
| BLE_1M    | Ant1    | 2480           | 0.66         | 2479.63 | 2480.30 | 0.5        | PASS    |
| BLE_2M    | Ant1    | 2402           | 1.16         | 2401.41 | 2402.57 | 0.5        | PASS    |
| BLE_2M    | Ant1    | 2440           | 1.16         | 2439.39 | 2440.55 | 0.5        | PASS    |
| BLE_2M    | Ant1    | 2480           | 1.15         | 2479.42 | 2480.57 | 0.5        | PASS    |

## 1.2 Test Graphs





BLE\_2M-Ant1-2440-PASS



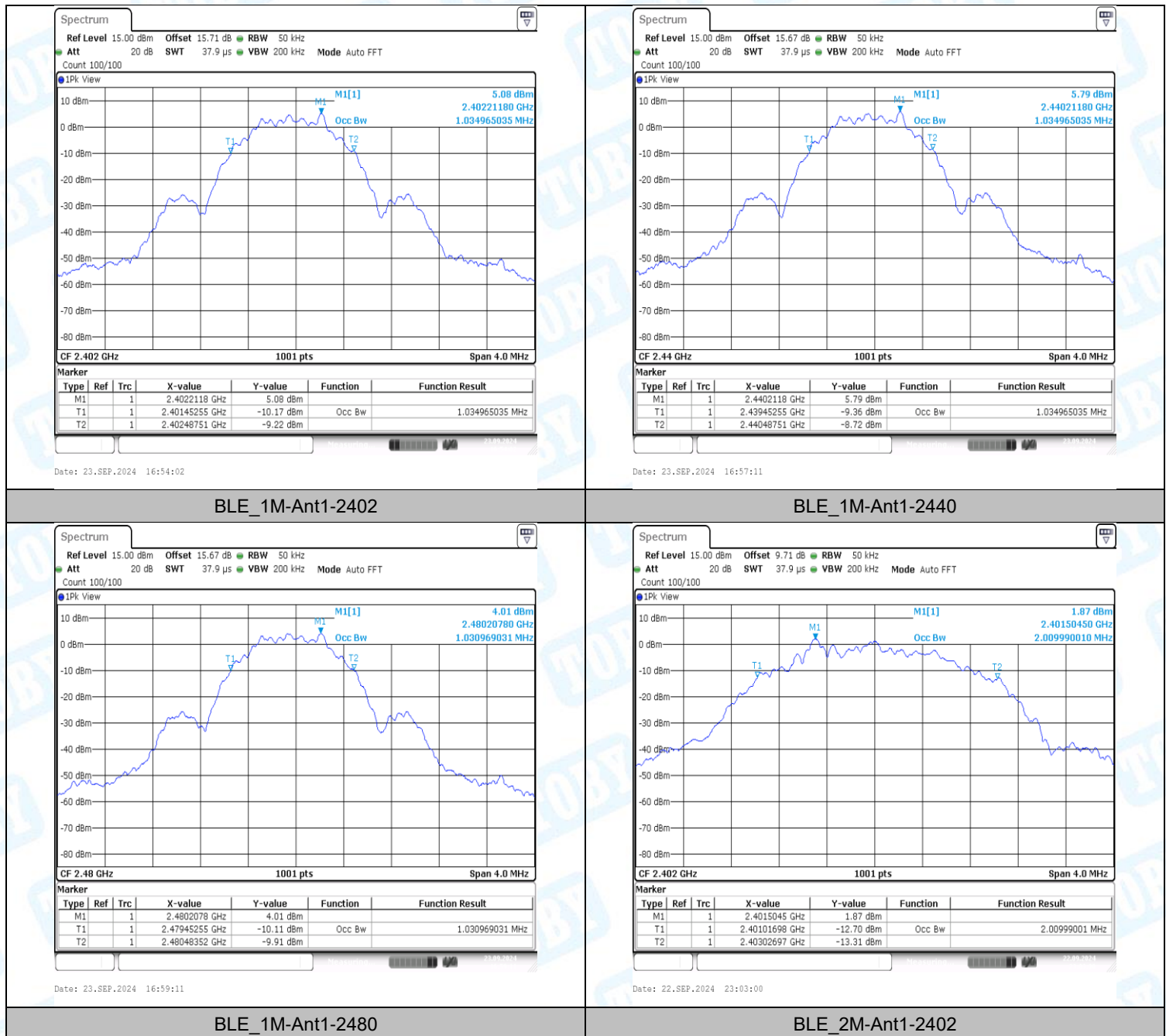
BLE\_2M-Ant1-2480-PASS

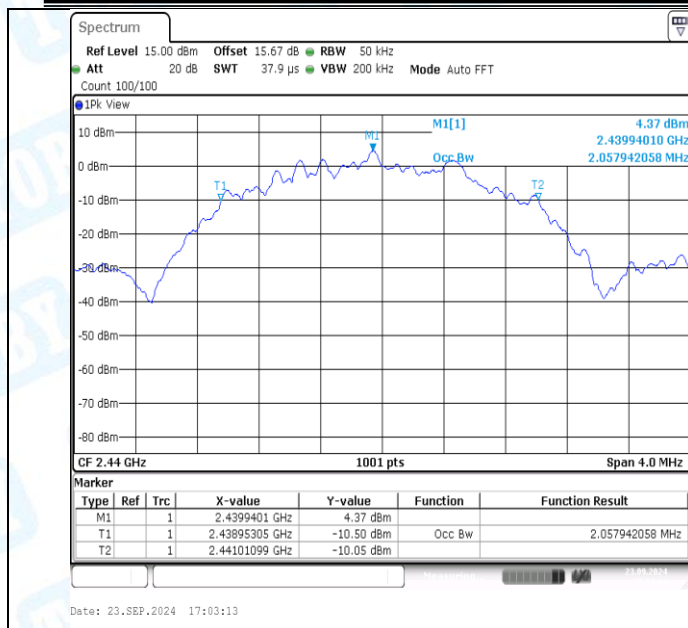
## 2: Occupied Channel Bandwidth

### 2.1 Test Result

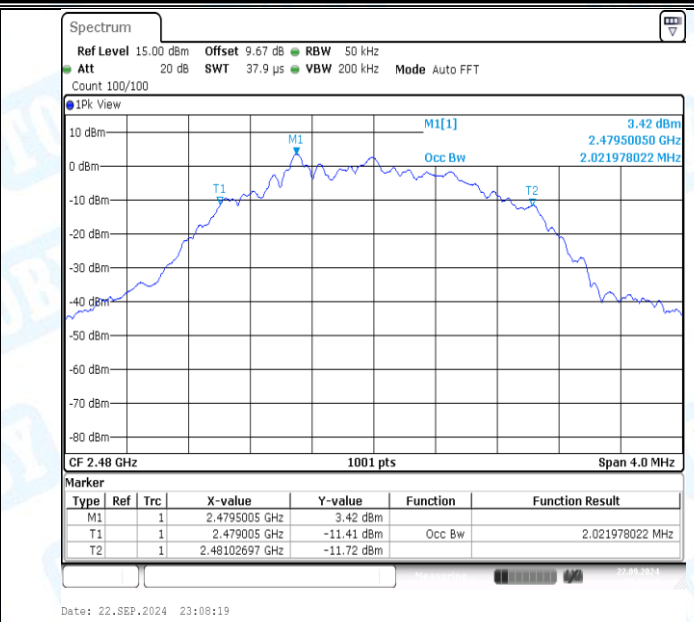
| Test Mode | Antenna | Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|-----------|---------|----------------|-----------|-----------|-----------|------------|---------|
| BLE_1M    | Ant1    | 2402           | 1.035     | 2401.4525 | 2402.4875 | ---        | ---     |
| BLE_1M    | Ant1    | 2440           | 1.035     | 2439.4525 | 2440.4875 | ---        | ---     |
| BLE_1M    | Ant1    | 2480           | 1.031     | 2479.4525 | 2480.4835 | ---        | ---     |
| BLE_2M    | Ant1    | 2402           | 2.01      | 2401.0170 | 2403.0270 | ---        | ---     |
| BLE_2M    | Ant1    | 2440           | 2.058     | 2438.9530 | 2441.0110 | ---        | ---     |
| BLE_2M    | Ant1    | 2480           | 2.022     | 2479.0050 | 2481.0270 | ---        | ---     |

## 2.2 Test Graphs





BLE\_2M-Ant1-2440



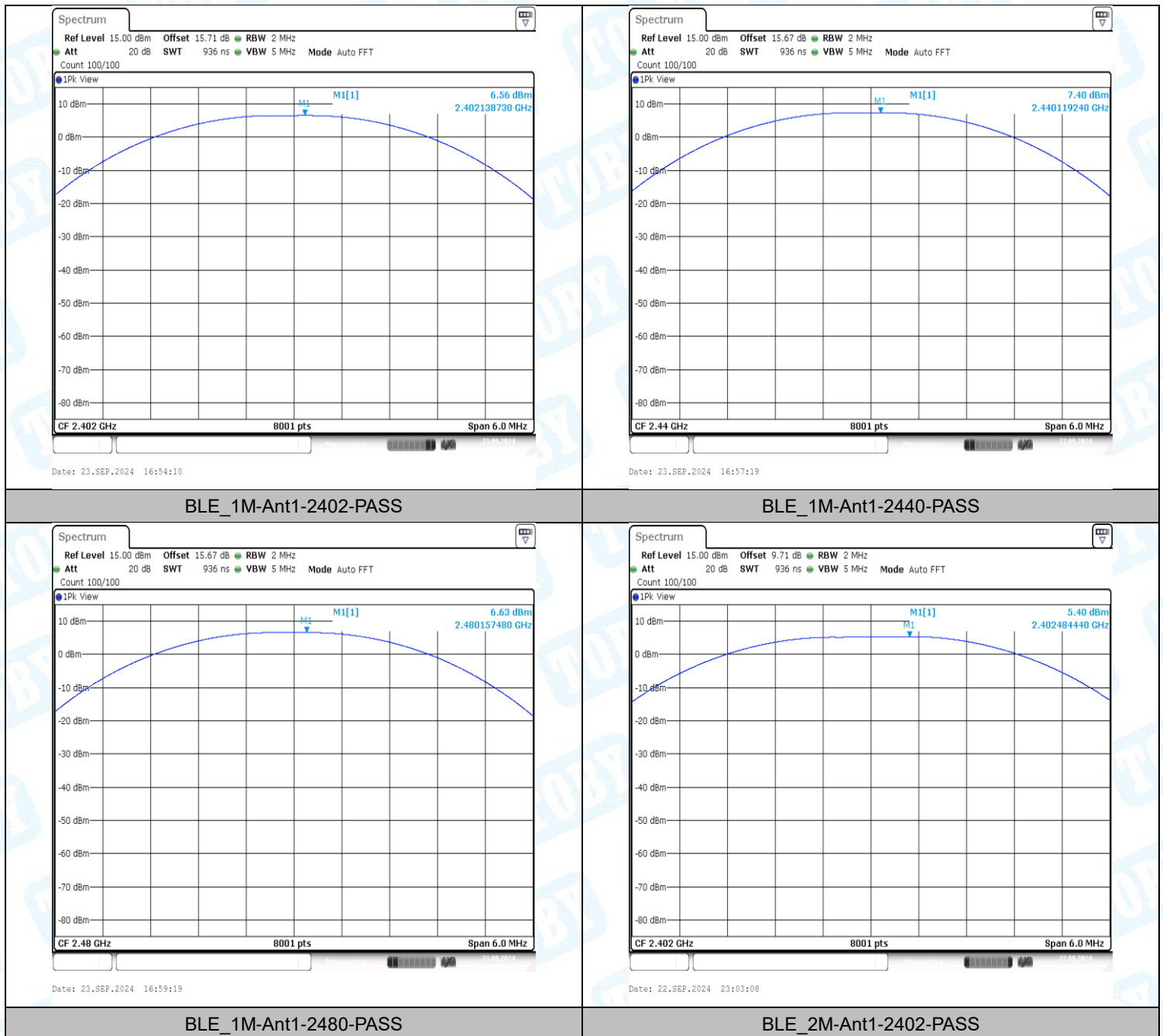
BLE\_2M-Ant1-2480

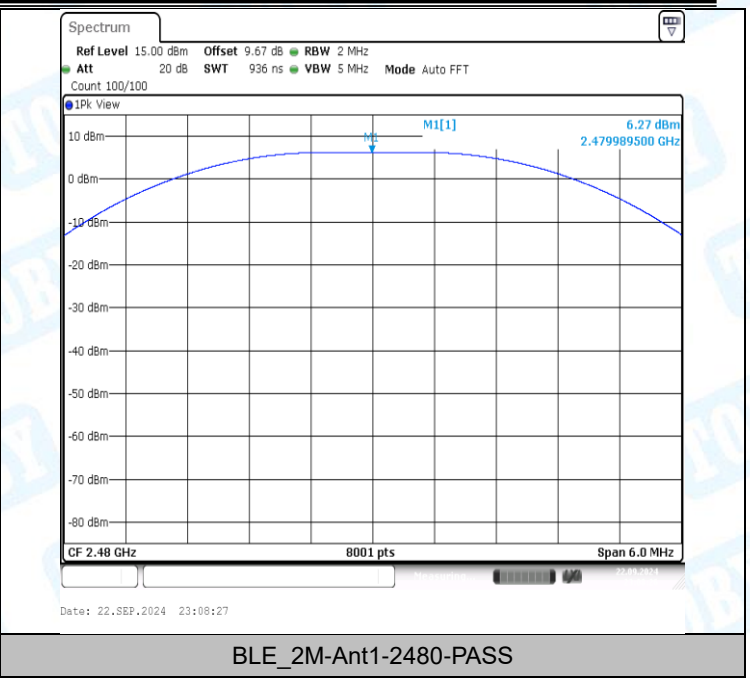
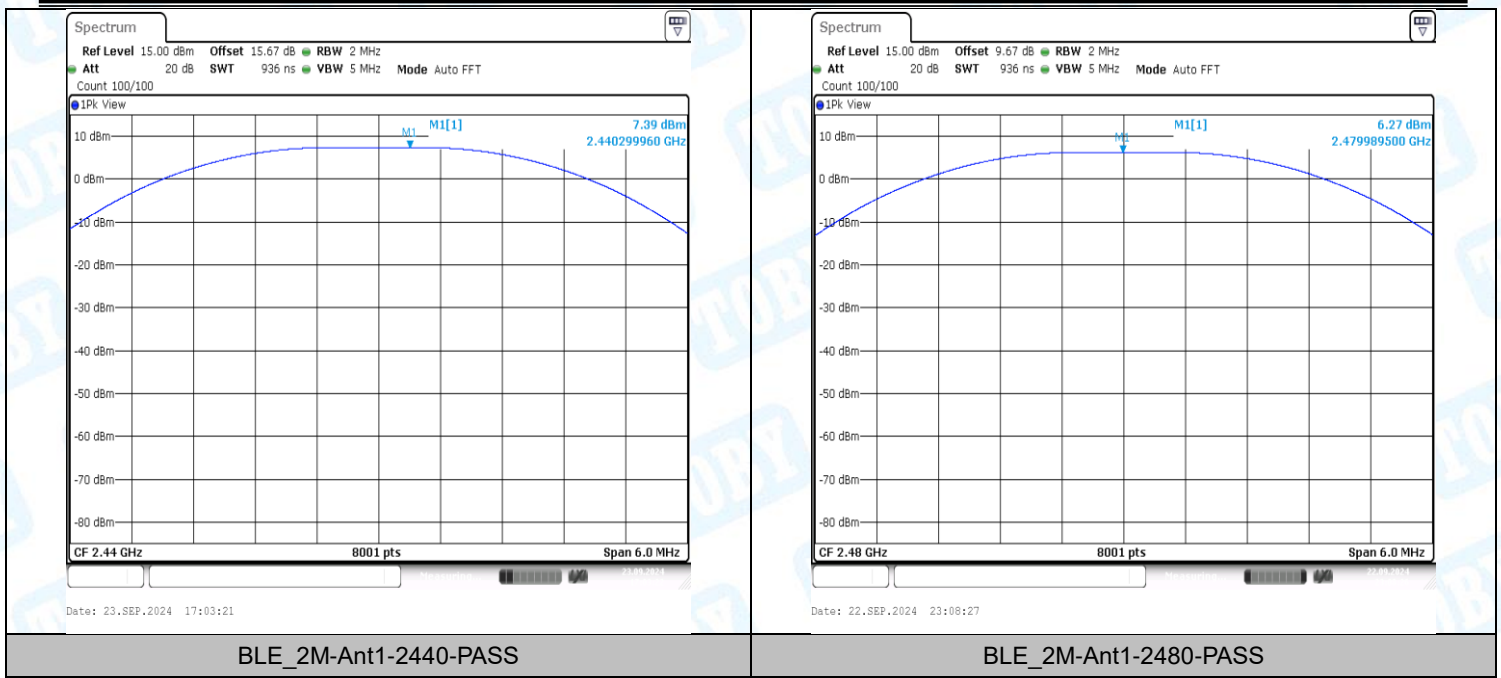
### 3: Maximum conducted output power

#### 3.1 Test Result Peak

| Test Mode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|----------------|---------------------------|----------------------|---------|
| BLE_1M    | Ant1    | 2402           | 6.56                      | ≤30                  | PASS    |
| BLE_1M    | Ant1    | 2440           | 7.40                      | ≤30                  | PASS    |
| BLE_1M    | Ant1    | 2480           | 6.63                      | ≤30                  | PASS    |
| BLE_2M    | Ant1    | 2402           | 5.40                      | ≤30                  | PASS    |
| BLE_2M    | Ant1    | 2440           | 7.39                      | ≤30                  | PASS    |
| BLE_2M    | Ant1    | 2480           | 6.27                      | ≤30                  | PASS    |

### 3.2 Test Graphs Peak



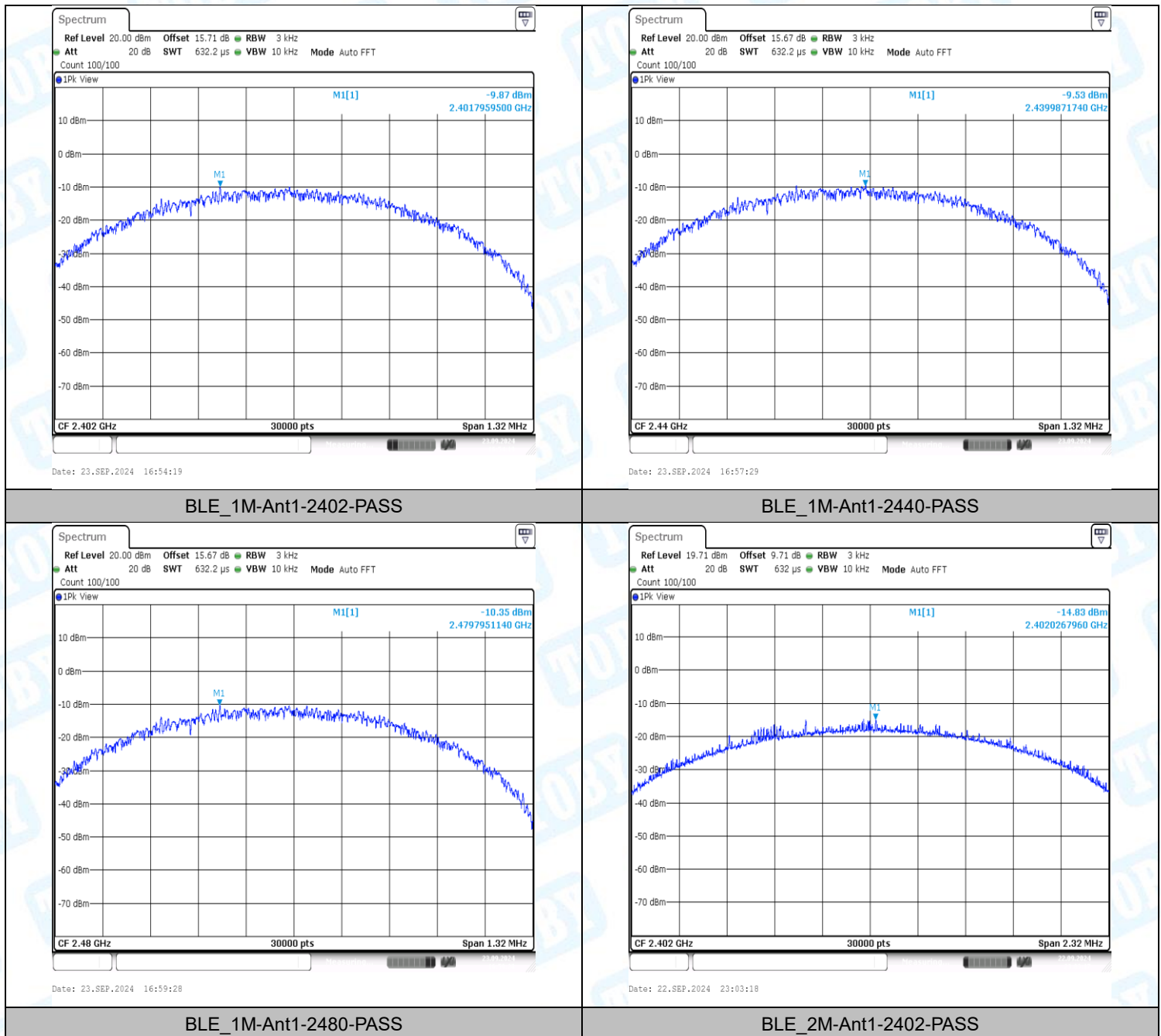


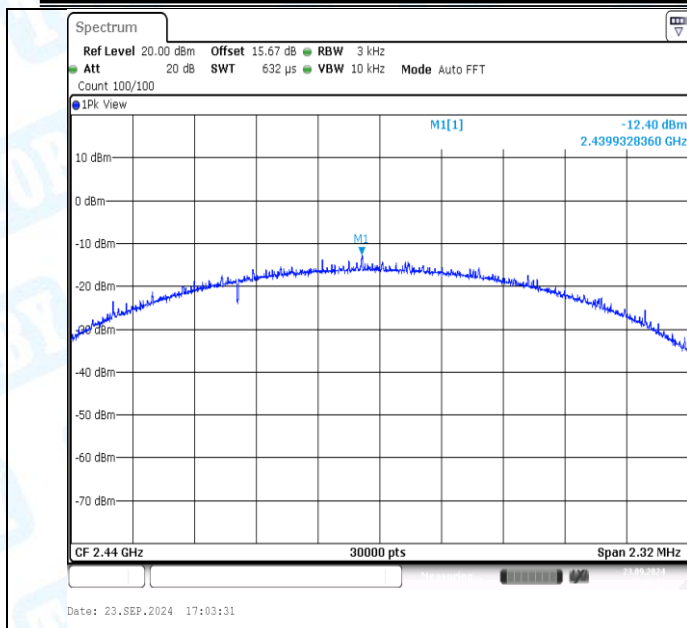
## 4: Maximum power spectral density

### 4.1 Test Result

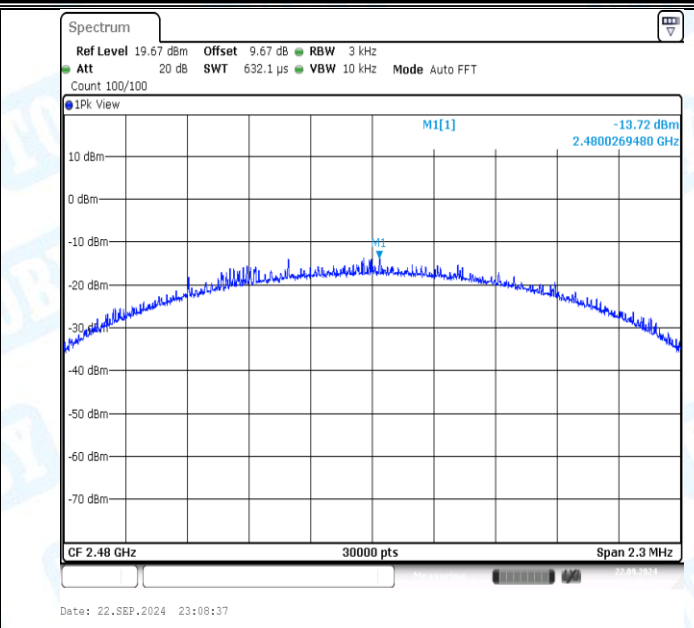
| Test Mode | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|----------------|------------------|-----------------|---------|
| BLE_1M    | Ant1    | 2402           | -9.87            | ≤8.00           | PASS    |
| BLE_1M    | Ant1    | 2440           | -9.53            | ≤8.00           | PASS    |
| BLE_1M    | Ant1    | 2480           | -10.35           | ≤8.00           | PASS    |
| BLE_2M    | Ant1    | 2402           | -14.83           | ≤8.00           | PASS    |
| BLE_2M    | Ant1    | 2440           | -12.40           | ≤8.00           | PASS    |
| BLE_2M    | Ant1    | 2480           | -13.72           | ≤8.00           | PASS    |

## 4.2 Test Graphs





BLE\_2M-Ant1-2440-PASS



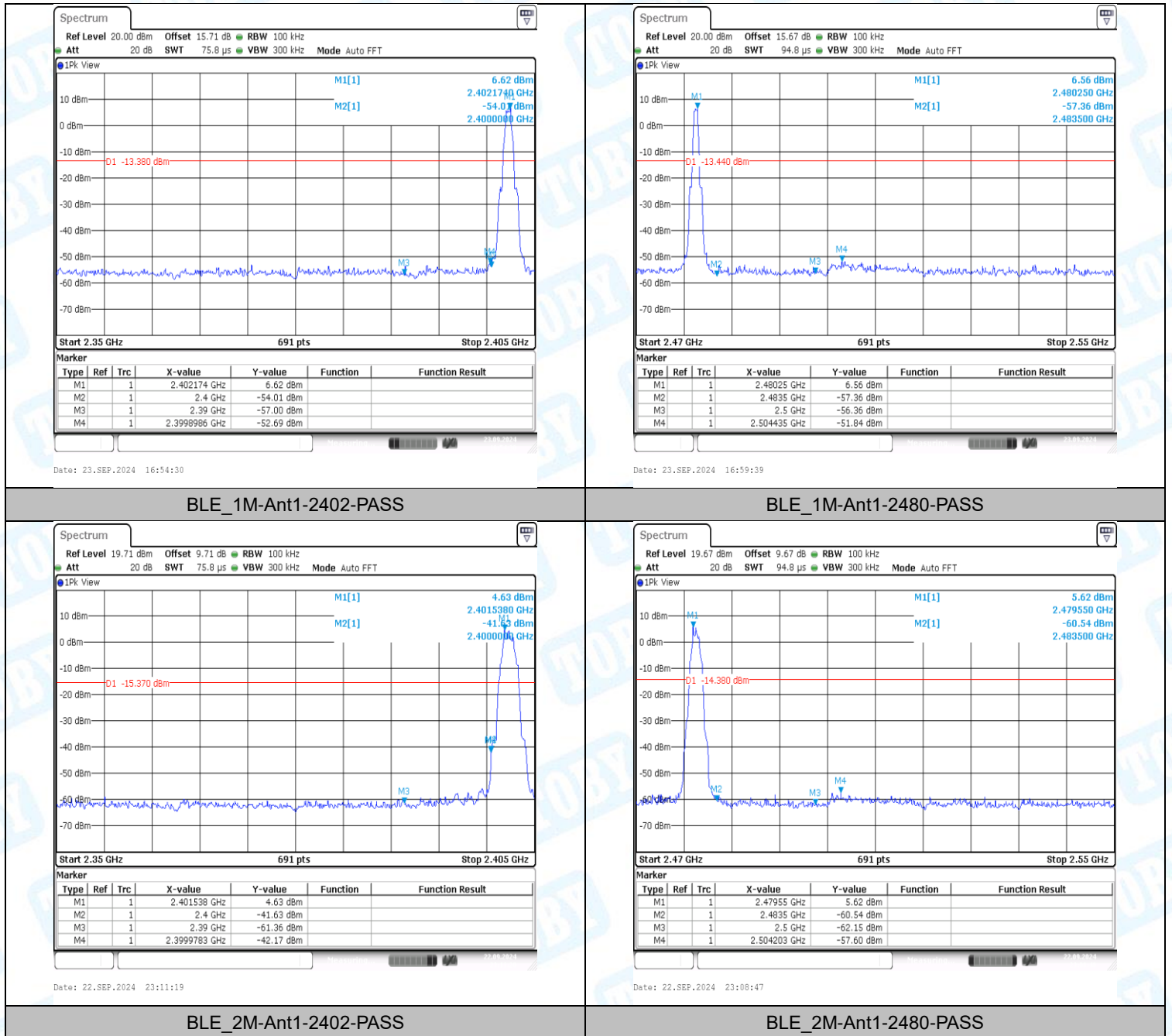
BLE\_2M-Ant1-2480-PASS

## 5: Band edge measurements

### 5.1 Test Result

| Test Mode | Antenna | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------|----------------|---------------|-------------|------------|---------|
| BLE_1M    | Ant1    | Low    | 2402           | 6.62          | -52.69      | ≤-13.38    | PASS    |
| BLE_1M    | Ant1    | High   | 2480           | 6.56          | -51.84      | ≤-13.44    | PASS    |
| BLE_2M    | Ant1    | Low    | 2402           | 4.63          | -42.17      | ≤-15.37    | PASS    |
| BLE_2M    | Ant1    | High   | 2480           | 5.62          | -57.6       | ≤-14.38    | PASS    |

## 5.2 Test Graphs

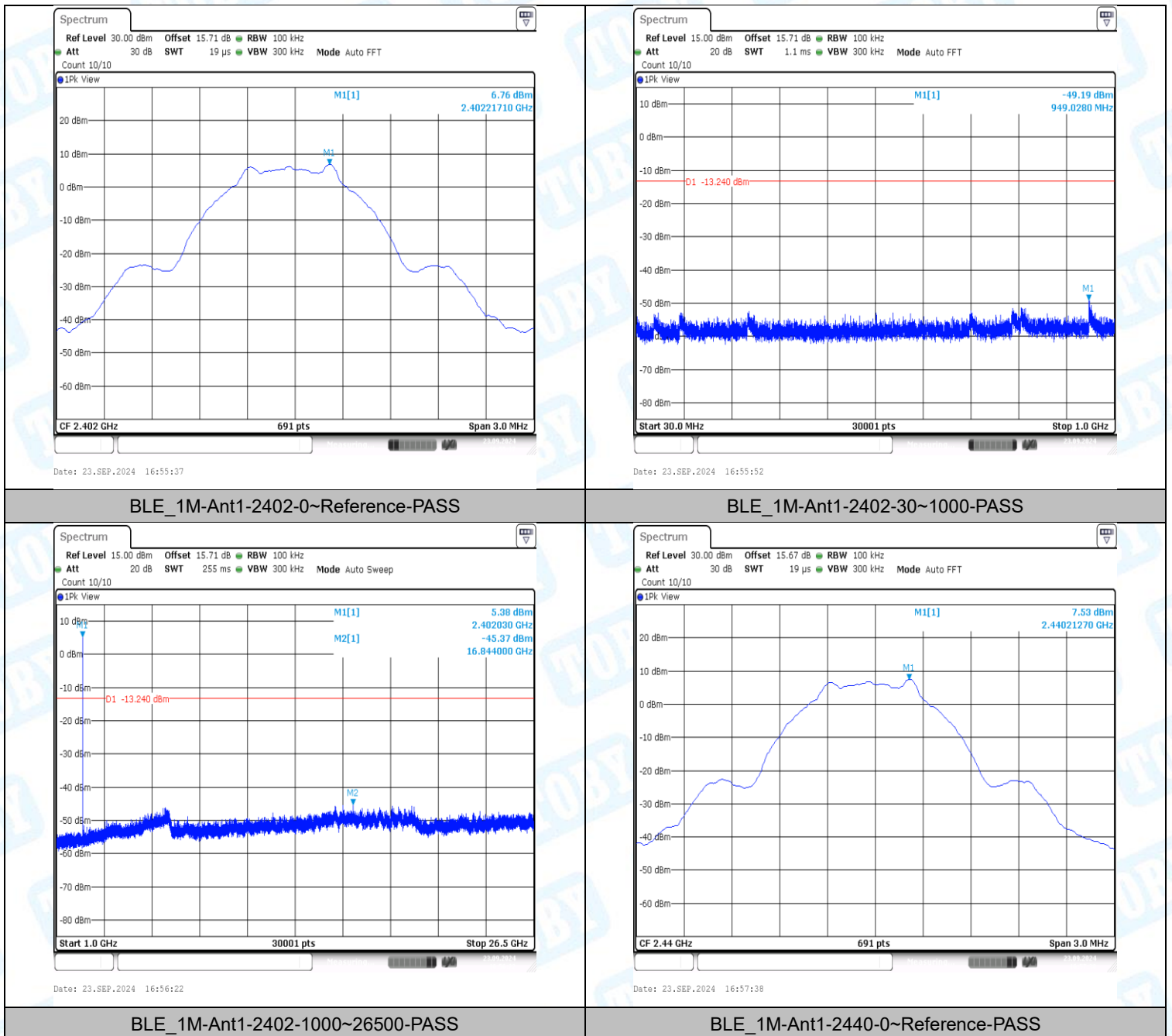


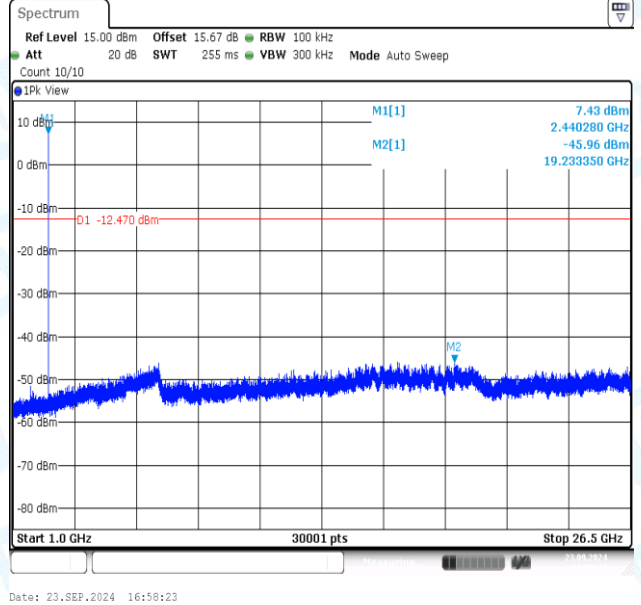
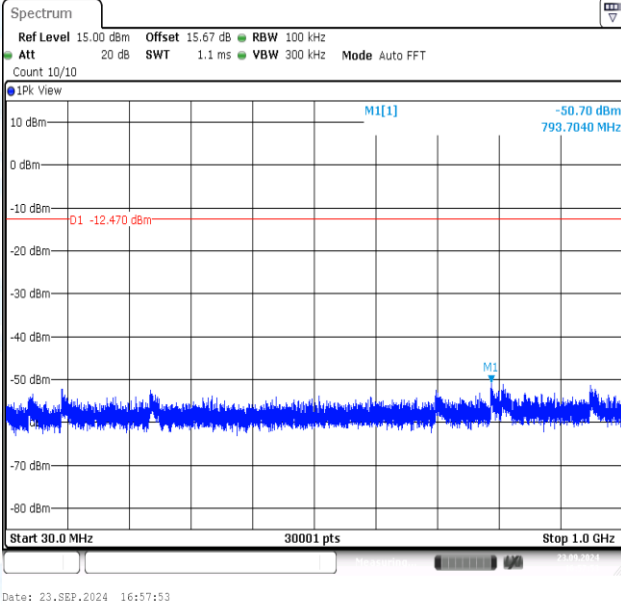
## 6: Conducted Spurious Emission

### 6.1 Test Result

| Test Mode | Antenna | Frequency[MHz] | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|----------------|-----------------|----------------|-------------|------------|---------|
| BLE_1M    | Ant1    | 2402           | 0~Reference     | 6.76           | 6.76        | ---        | PASS    |
| BLE_1M    | Ant1    | 2402           | 30~1000         | 6.76           | -49.19      | ≤-13.24    | PASS    |
| BLE_1M    | Ant1    | 2402           | 1000~26500      | 6.76           | -45.37      | ≤-13.24    | PASS    |
| BLE_1M    | Ant1    | 2440           | 0~Reference     | 7.53           | 7.53        | ---        | PASS    |
| BLE_1M    | Ant1    | 2440           | 30~1000         | 7.53           | -50.7       | ≤-12.47    | PASS    |
| BLE_1M    | Ant1    | 2440           | 1000~26500      | 7.53           | -45.96      | ≤-12.47    | PASS    |
| BLE_1M    | Ant1    | 2480           | 0~Reference     | 6.78           | 6.78        | ---        | PASS    |
| BLE_1M    | Ant1    | 2480           | 30~1000         | 6.78           | -50.59      | ≤-13.22    | PASS    |
| BLE_1M    | Ant1    | 2480           | 1000~26500      | 6.78           | -45.77      | ≤-13.22    | PASS    |
| BLE_2M    | Ant1    | 2402           | 0~Reference     | 4.83           | 4.83        | ---        | PASS    |
| BLE_2M    | Ant1    | 2402           | 30~1000         | 4.83           | -57.24      | ≤-15.17    | PASS    |
| BLE_2M    | Ant1    | 2402           | 1000~26500      | 4.83           | -50.98      | ≤-15.17    | PASS    |
| BLE_2M    | Ant1    | 2440           | 0~Reference     | 6.80           | 6.80        | ---        | PASS    |
| BLE_2M    | Ant1    | 2440           | 30~1000         | 6.80           | -51.13      | ≤-13.2     | PASS    |
| BLE_2M    | Ant1    | 2440           | 1000~26500      | 6.80           | -44.95      | ≤-13.2     | PASS    |
| BLE_2M    | Ant1    | 2480           | 0~Reference     | 5.84           | 5.84        | ---        | PASS    |
| BLE_2M    | Ant1    | 2480           | 30~1000         | 5.84           | -57.02      | ≤-14.16    | PASS    |
| BLE_2M    | Ant1    | 2480           | 1000~26500      | 5.84           | -50.99      | ≤-14.16    | PASS    |

## 6.2 Test Graphs

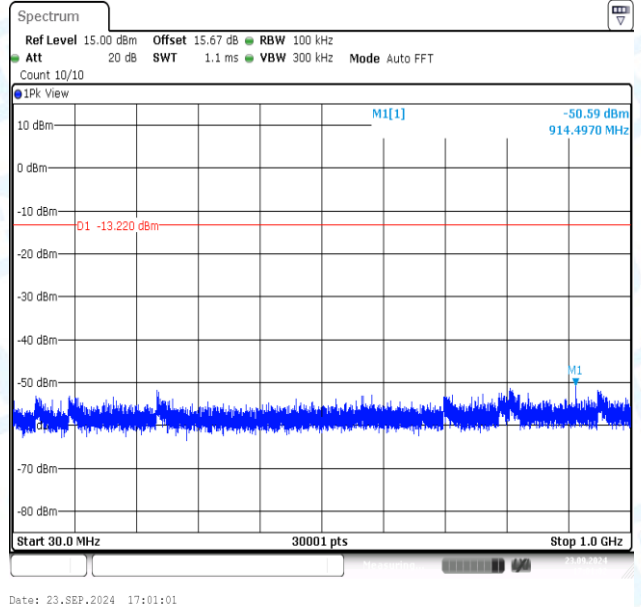




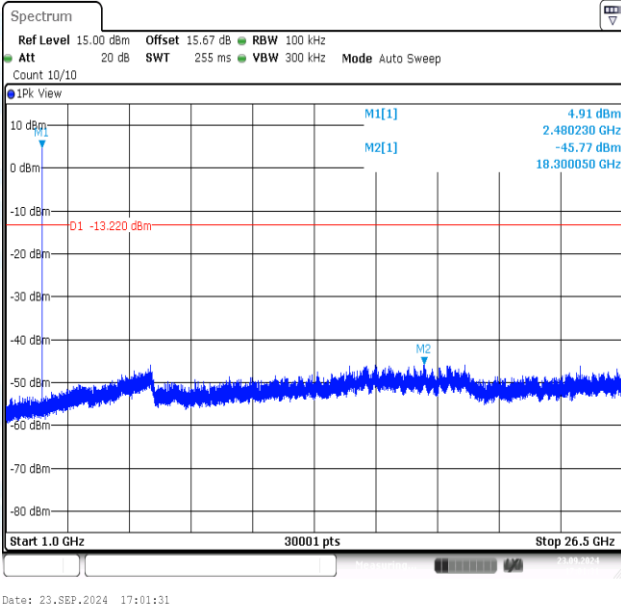
BLE\_1M-Ant1-2440-30~1000-PASS



BLE\_1M-Ant1-2440-1000~26500-PASS



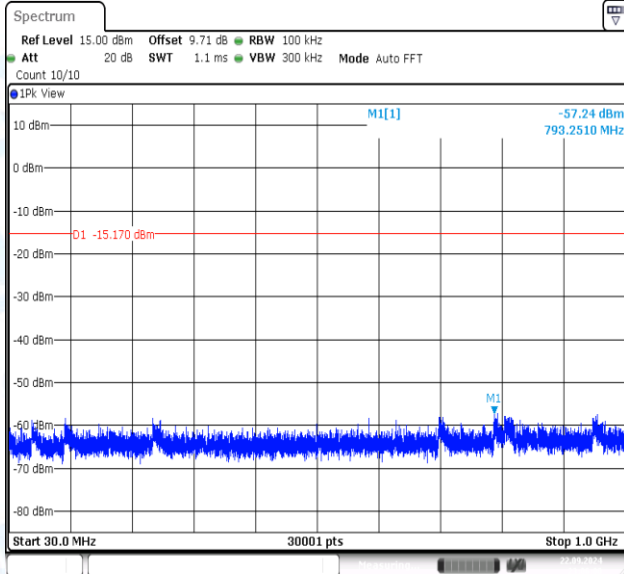
BLE\_1M-Ant1-2480-0~Reference-PASS



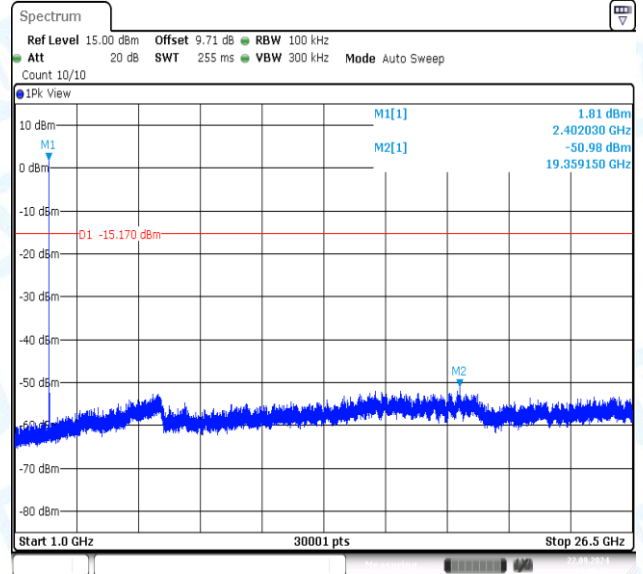
BLE\_1M-Ant1-2480-30~1000-PASS



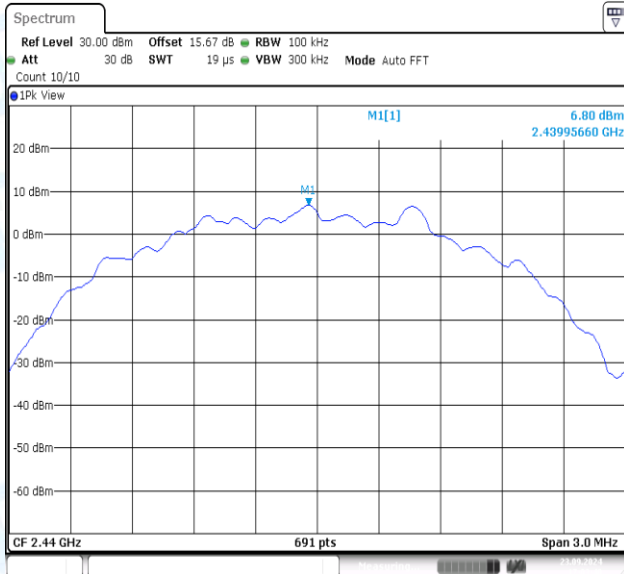
BLE\_1M-Ant1-2480-1000~26500-PASS



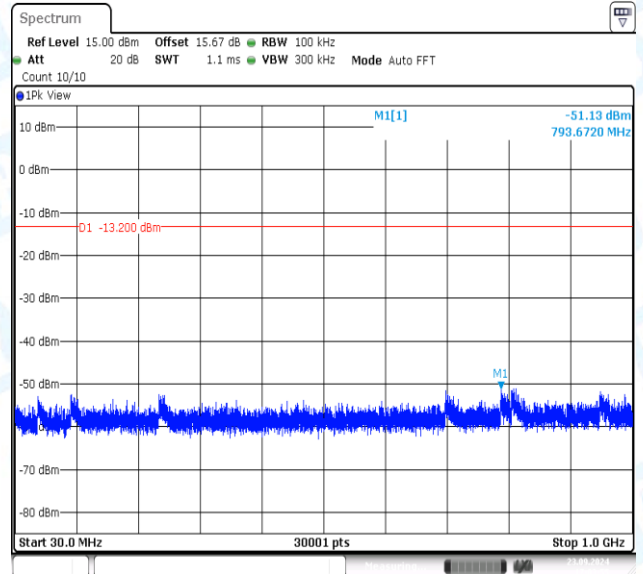
BLE\_2M-Ant1-2402-0~Reference-PASS



BLE\_2M-Ant1-2402-30~1000-PASS

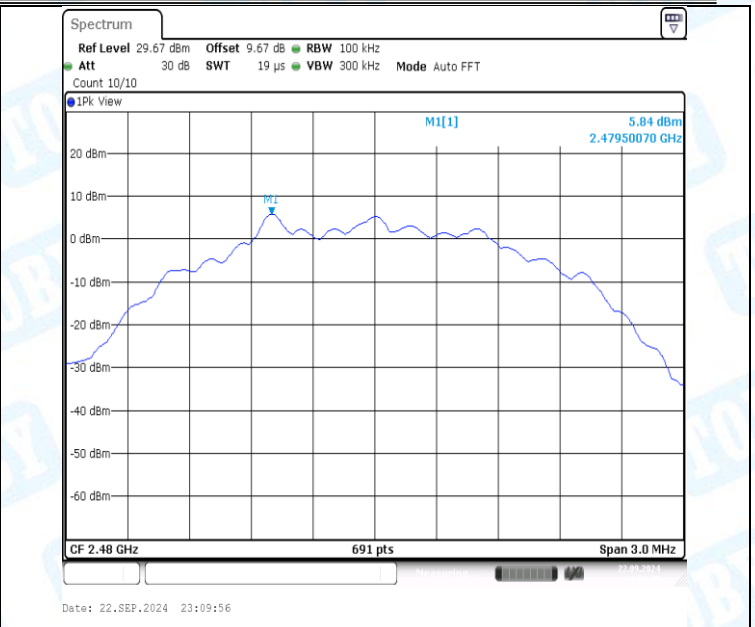
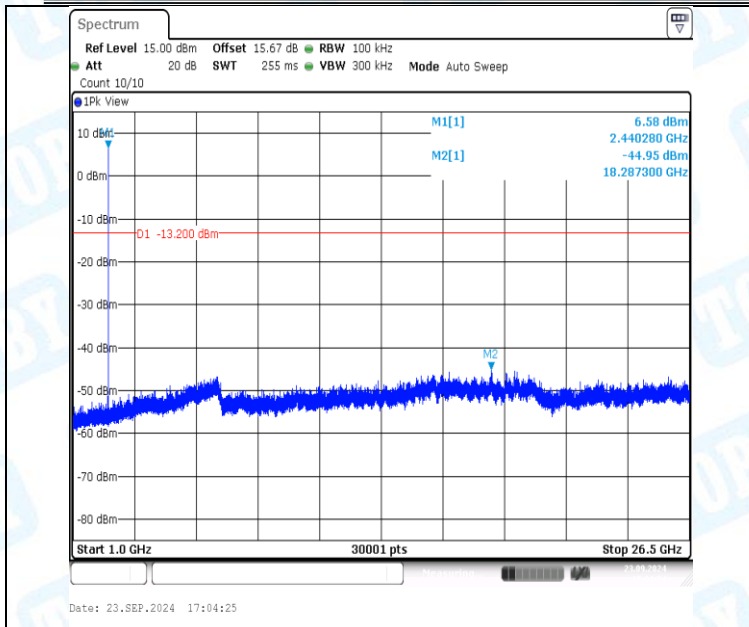


BLE\_2M-Ant1-2402-1000~26500-PASS



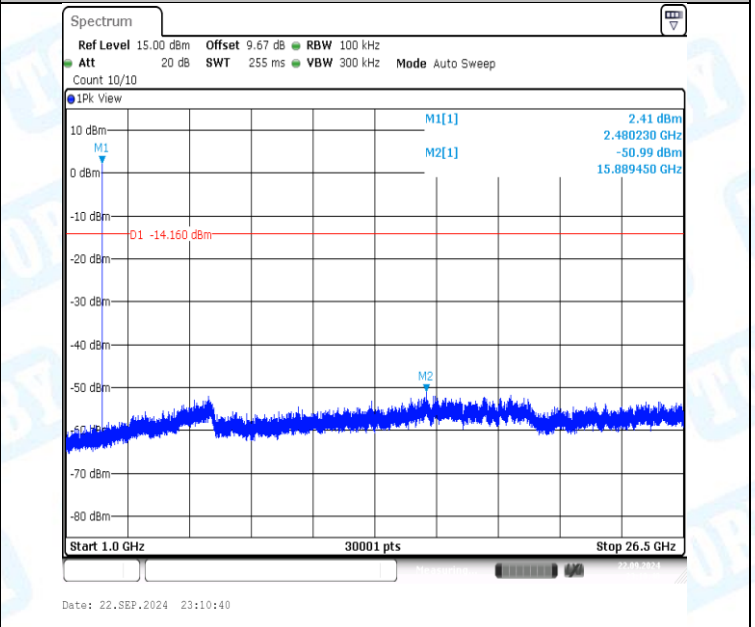
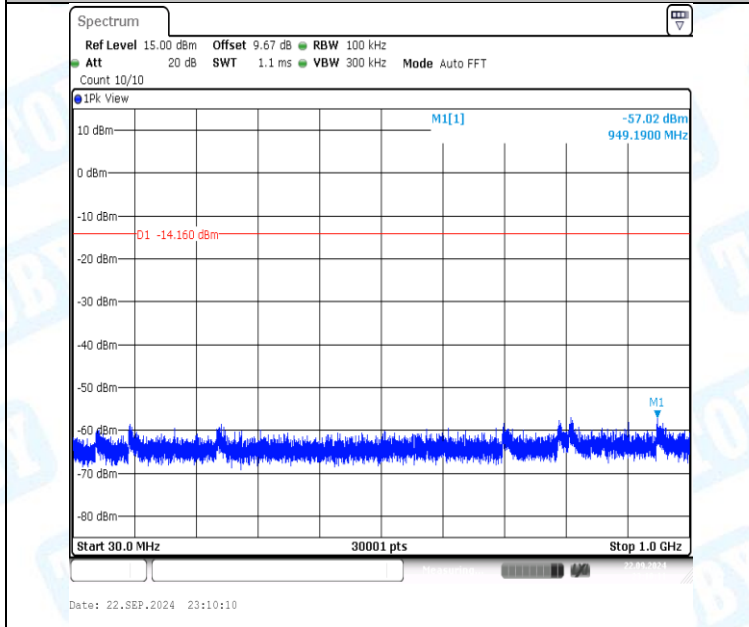
BLE\_2M-Ant1-2440-0~Reference-PASS

BLE\_2M-Ant1-2440-30~1000-PASS



BLE\_2M-Ant1-2440-1000~26500-PASS

BLE\_2M-Ant1-2480-0~Reference-PASS



BLE\_2M-Ant1-2480-30~1000-PASS

BLE\_2M-Ant1-2480-1000~26500-PASS

## 7: Duty Cycle

### 7.1 Test Result

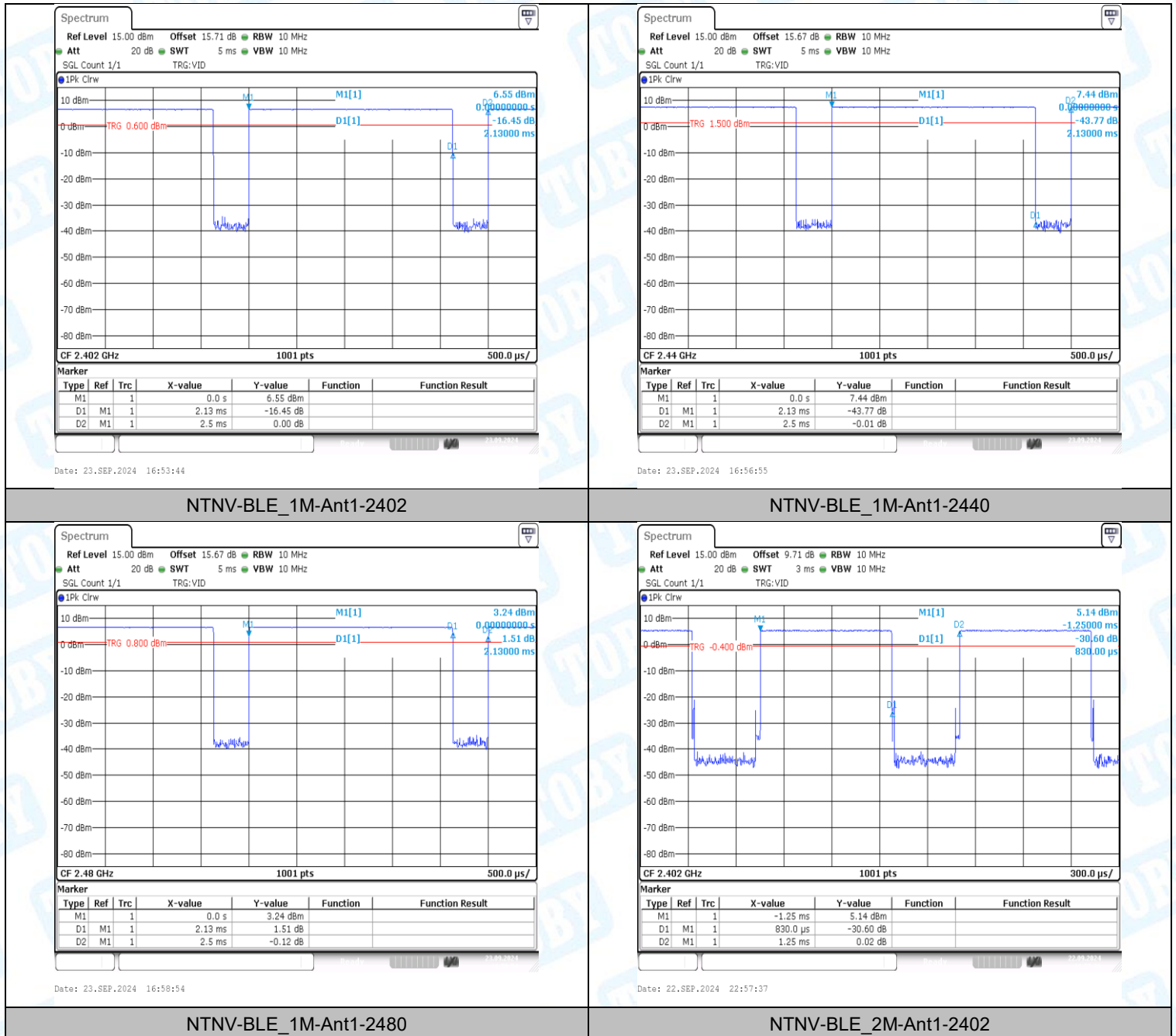
| TestMode | Antenna | Frequency [MHz] | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | DC Factory | 1/T [kHz] |
|----------|---------|-----------------|----------------------------|--------------------------|----------------|------------|-----------|
| BLE_1M   | Ant1    | 2402            | 2.13                       | 2.50                     | 85.20          | 0.70       | 0.47      |
| BLE_1M   | Ant1    | 2440            | 2.13                       | 2.50                     | 85.20          | 0.70       | 0.47      |
| BLE_1M   | Ant1    | 2480            | 2.13                       | 2.50                     | 85.20          | 0.70       | 0.47      |
| BLE_2M   | Ant1    | 2402            | 0.83                       | 1.25                     | 66.40          | 1.78       | 1.20      |
| BLE_2M   | Ant1    | 2440            | 1.07                       | 1.88                     | 56.91          | 2.45       | 0.93      |
| BLE_2M   | Ant1    | 2480            | 0.83                       | 1.25                     | 66.40          | 1.78       | 1.20      |

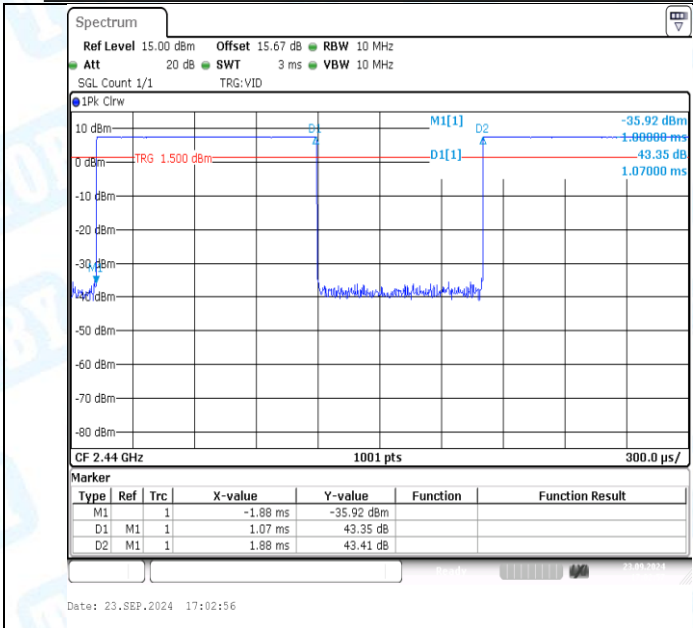
Note: 1, Duty Cycle= Transmission Duration/ Transmission Period

2, DC Factory=10\*Log<sub>10</sub>(1/Duty Cycle)

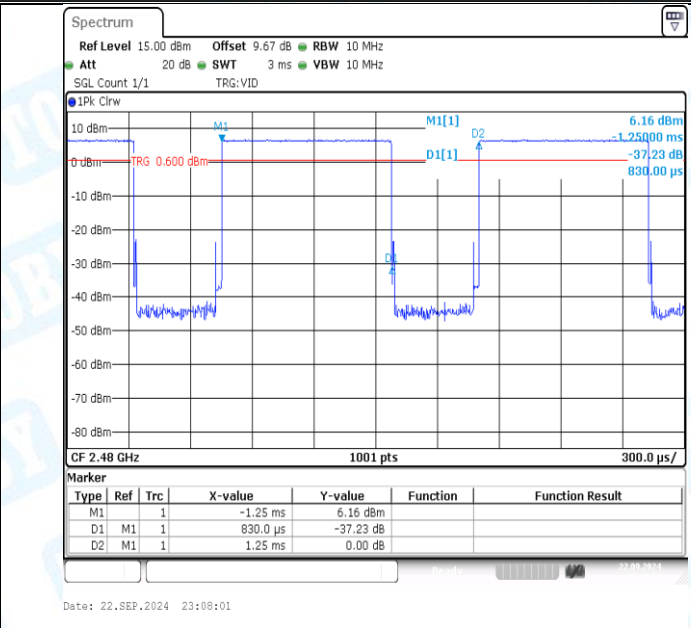
3, 1/T=1/ Transmission Duration

## 7.2 Test Graphs





NTNV-BLE\_2M-Ant1-2440



NTNV-BLE\_2M-Ant1-2480

## 8: Emissions in Restricted Bands

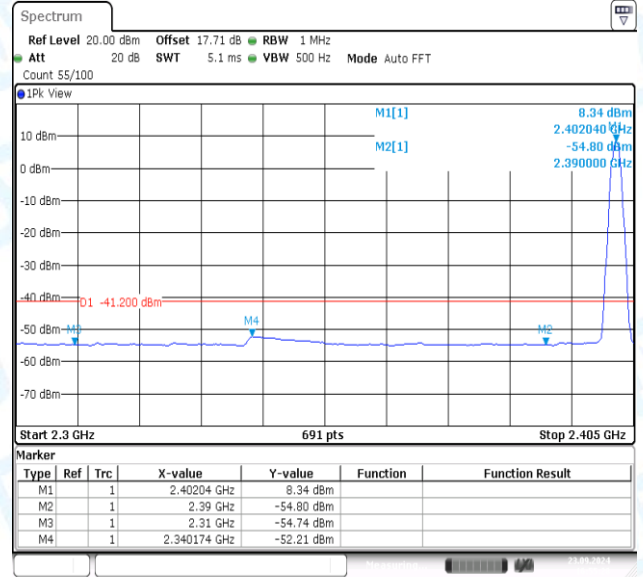
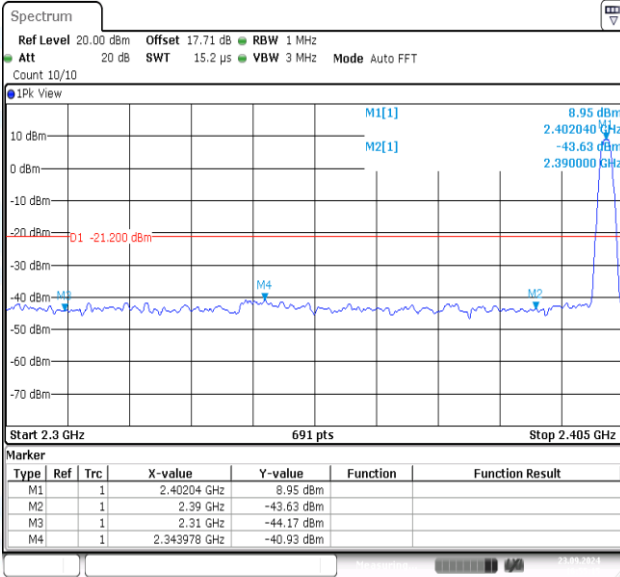
### 8.1 Test Result

| Test Mode | Antenna | ChName | Frequency [MHz] | Detector | Freq [MHz] | Result [dBm] | Limit [dBm] | Result [dBuV/m] | Limit [dBuV/m] | Verdict |
|-----------|---------|--------|-----------------|----------|------------|--------------|-------------|-----------------|----------------|---------|
| BLE_1M    | Ant1    | Low    | 2402            | Peak     | 2390.000   | -43.63       | ≤-21.20     | 51.57           | ≤74            | PASS    |
| BLE_1M    | Ant1    | Low    | 2402            | Peak     | 2310.000   | -44.17       | ≤-21.20     | 51.03           | ≤74            | PASS    |
| BLE_1M    | Ant1    | Low    | 2402            | Peak     | 2343.978   | -40.93       | ≤-21.20     | 54.27           | ≤74            | PASS    |
| BLE_1M    | Ant1    | Low    | 2402            | AV       | 2390.000   | -54.8        | ≤-41.20     | 40.40           | ≤54            | PASS    |
| BLE_1M    | Ant1    | Low    | 2402            | AV       | 2310.000   | -54.74       | ≤-41.20     | 40.46           | ≤54            | PASS    |
| BLE_1M    | Ant1    | Low    | 2402            | AV       | 2340.174   | -52.21       | ≤-41.20     | 42.99           | ≤54            | PASS    |
| BLE_1M    | Ant1    | High   | 2480            | Peak     | 2483.500   | -44.97       | ≤-21.20     | 50.23           | ≤74            | PASS    |
| BLE_1M    | Ant1    | High   | 2480            | Peak     | 2500.000   | -42.55       | ≤-21.20     | 52.65           | ≤74            | PASS    |
| BLE_1M    | Ant1    | High   | 2480            | Peak     | 2495.855   | -42.04       | ≤-21.20     | 53.16           | ≤74            | PASS    |
| BLE_1M    | Ant1    | High   | 2480            | AV       | 2483.500   | -54          | ≤-41.20     | 41.20           | ≤54            | PASS    |
| BLE_1M    | Ant1    | High   | 2480            | AV       | 2500.000   | -54.6        | ≤-41.20     | 40.60           | ≤54            | PASS    |
| BLE_1M    | Ant1    | High   | 2480            | AV       | 2484.377   | -53.87       | ≤-41.20     | 41.33           | ≤54            | PASS    |
| BLE_2M    | Ant1    | Low    | 2402            | Peak     | 2390.000   | -50.44       | ≤-21.20     | 44.76           | ≤74            | PASS    |
| BLE_2M    | Ant1    | Low    | 2402            | Peak     | 2310.000   | -49.84       | ≤-21.20     | 45.36           | ≤74            | PASS    |
| BLE_2M    | Ant1    | Low    | 2402            | Peak     | 2343.217   | -46.91       | ≤-21.20     | 48.29           | ≤74            | PASS    |
| BLE_2M    | Ant1    | Low    | 2402            | AV       | 2390.000   | -60.52       | ≤-41.20     | 34.68           | ≤54            | PASS    |
| BLE_2M    | Ant1    | Low    | 2402            | AV       | 2310.000   | -60.19       | ≤-41.20     | 35.01           | ≤54            | PASS    |
| BLE_2M    | Ant1    | Low    | 2402            | AV       | 2340.174   | -57.52       | ≤-41.20     | 37.68           | ≤54            | PASS    |
| BLE_2M    | Ant1    | High   | 2480            | Peak     | 2483.500   | -43.67       | ≤-21.20     | 51.53           | ≤74            | PASS    |
| BLE_2M    | Ant1    | High   | 2480            | Peak     | 2500.000   | -50.33       | ≤-21.20     | 44.87           | ≤74            | PASS    |
| BLE_2M    | Ant1    | High   | 2480            | Peak     | 2484.493   | -46.1        | ≤-21.20     | 49.10           | ≤74            | PASS    |
| BLE_2M    | Ant1    | High   | 2480            | AV       | 2483.500   | -57.47       | ≤-41.20     | 37.73           | ≤54            | PASS    |
| BLE_2M    | Ant1    | High   | 2480            | AV       | 2500.000   | -60.03       | ≤-41.20     | 35.17           | ≤54            | PASS    |
| BLE_2M    | Ant1    | High   | 2480            | AV       | 2483.797   | -57.62       | ≤-41.20     | 37.58           | ≤54            | PASS    |

Note:

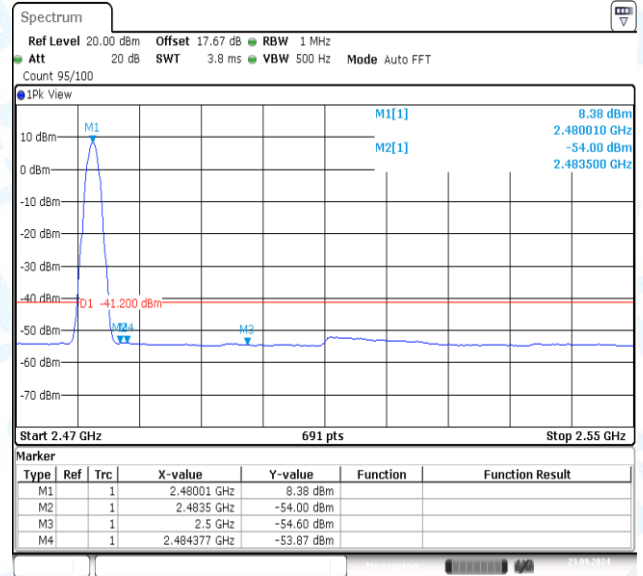
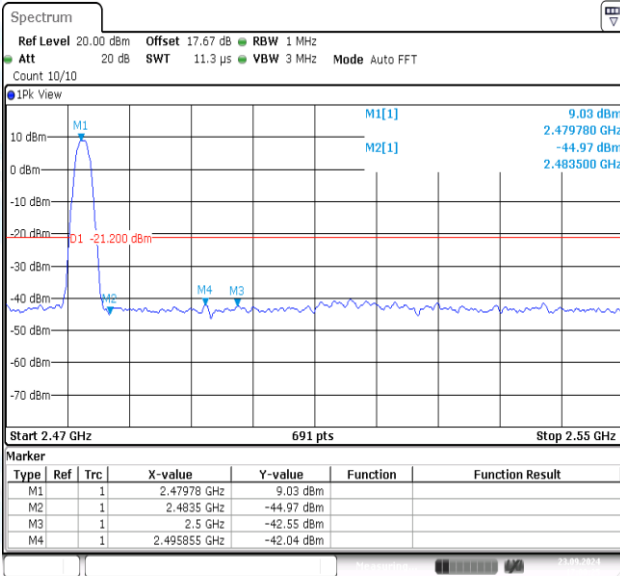
- The Antenna Gain is compensated in the graph.
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

## 8.2 Test Graphs



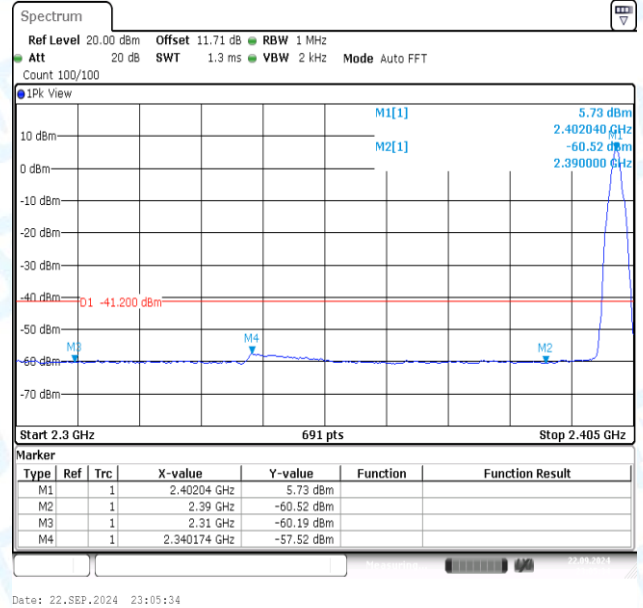
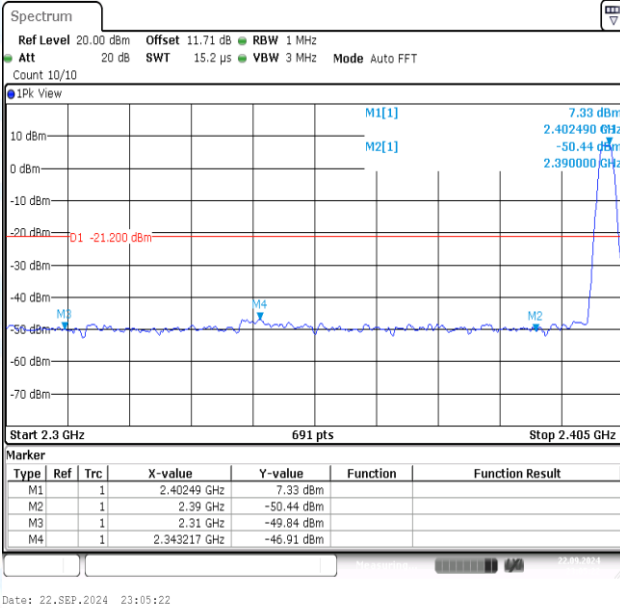
BLE\_1M-Ant1-2402-PASS

BLE\_1M-Ant1-2402-PASS



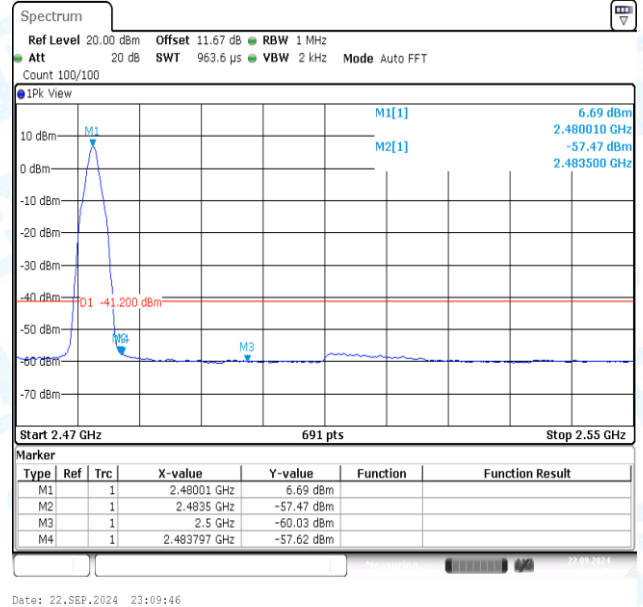
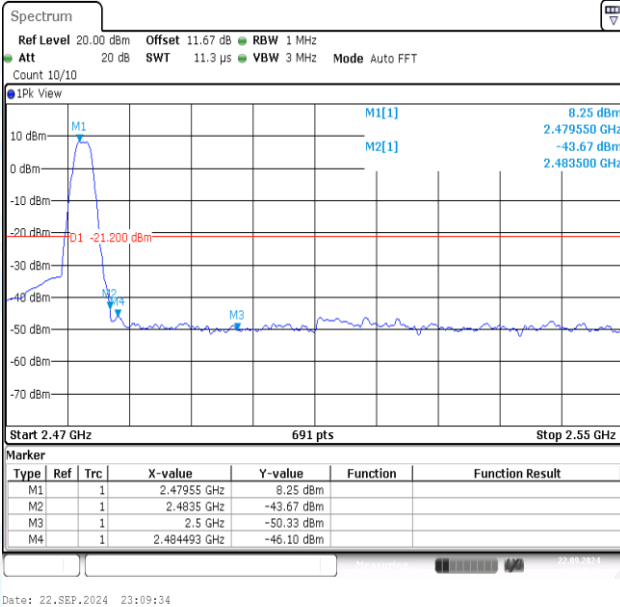
BLE\_1M-Ant1-2480-PASS

BLE\_1M-Ant1-2480-PASS



BLE\_2M-Ant1-2402-PASS

BLE\_2M-Ant1-2402-PASS



BLE\_2M-Ant1-2480-PASS

BLE\_2M-Ant1-2480-PASS

-----END OF THE REPORT-----