

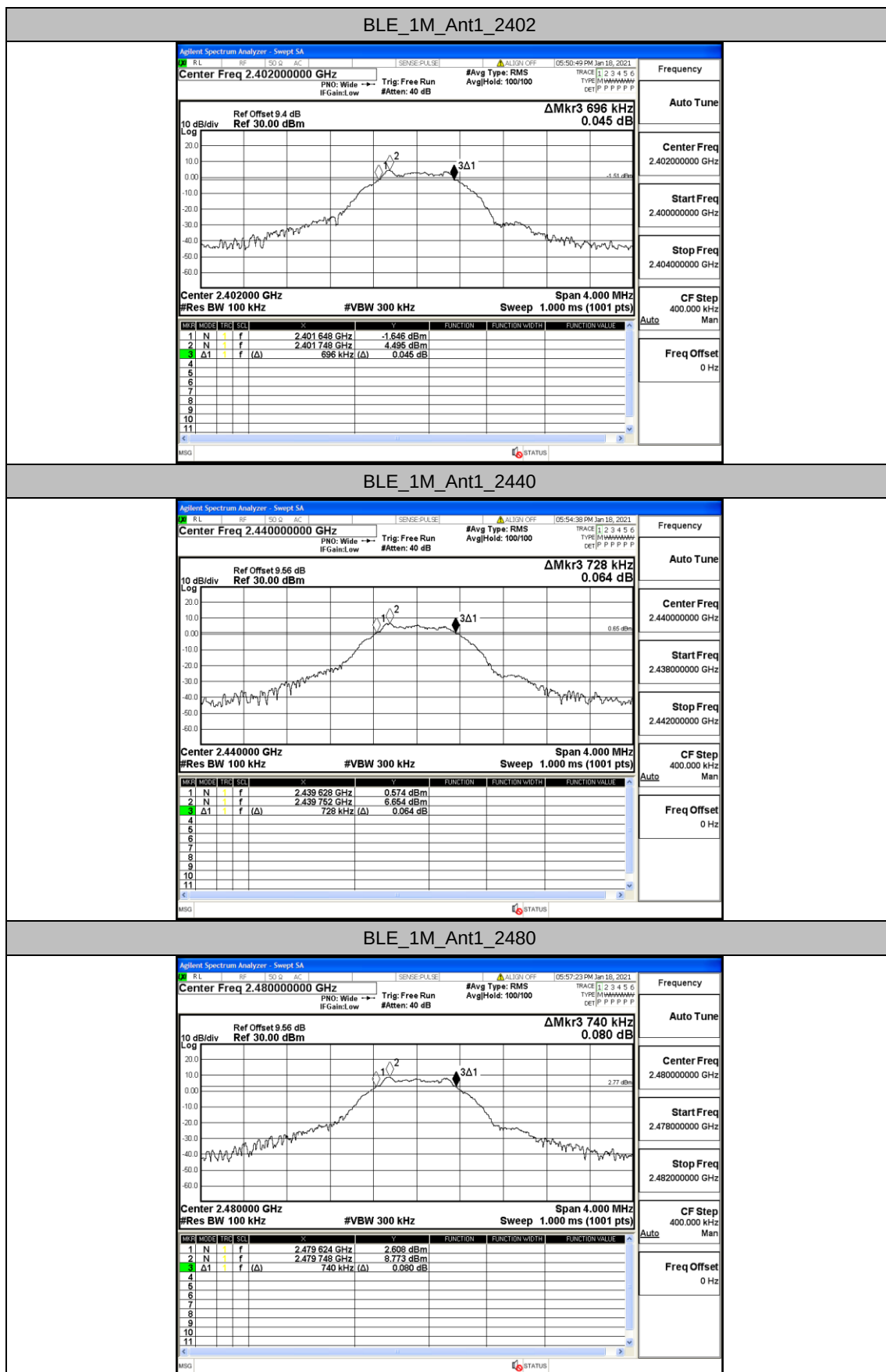
**RF Test Data for BT(BLE) (Conducted Measurement)****Product Name: OTT+DVB****Trade Mark: N/A****Test Model: SH5BFAA****FCC ID: 2AOVU-SH5BFAX****Environmental Conditions**

|                    |           |
|--------------------|-----------|
| Temperature:       | 25.5°C    |
| Relative Humidity: | 55.2%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Anna Hu   |
| Supervised by:     | Hugo Chen |
| NOTE               | N/A       |

**Appendix A: DTS Bandwidth****Test Result**

| TestMode     | Antenna | Channel | DTS BW<br>[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|--------------|---------|---------|-----------------|----------|----------|------------|---------|
| BLE_BT<br>1M | Ant3    | 2402    | 0.696           | 2401.648 | 2402.344 | 0.5        | PASS    |
|              |         | 2440    | 0.728           | 2439.628 | 2440.356 | 0.5        | PASS    |
|              |         | 2480    | 0.740           | 2479.624 | 2480.364 | 0.5        | PASS    |

## Test Graphs

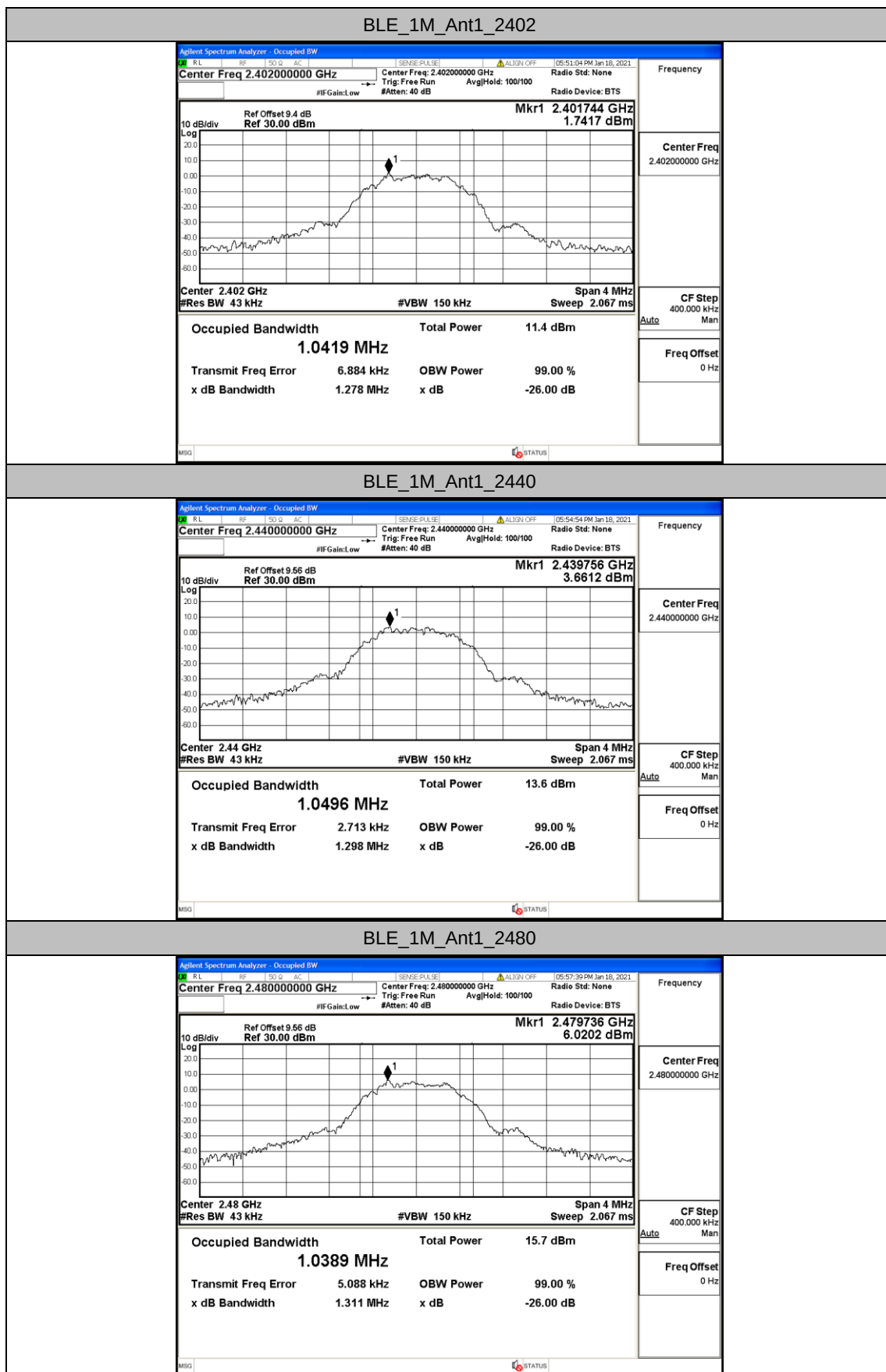


## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode     | Antenna | Channel | OCB [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|--------------|---------|---------|-----------|----------|----------|------------|---------|
| BLE_BT<br>1M | Ant3    | 2402    | 1.0419    | 2401.486 | 2402.528 | ---        | PASS    |
|              |         | 2440    | 1.0496    | 2439.478 | 2440.528 | ---        | PASS    |
|              |         | 2480    | 1.0389    | 2479.486 | 2480.525 | ---        | PASS    |

## Test Graphs

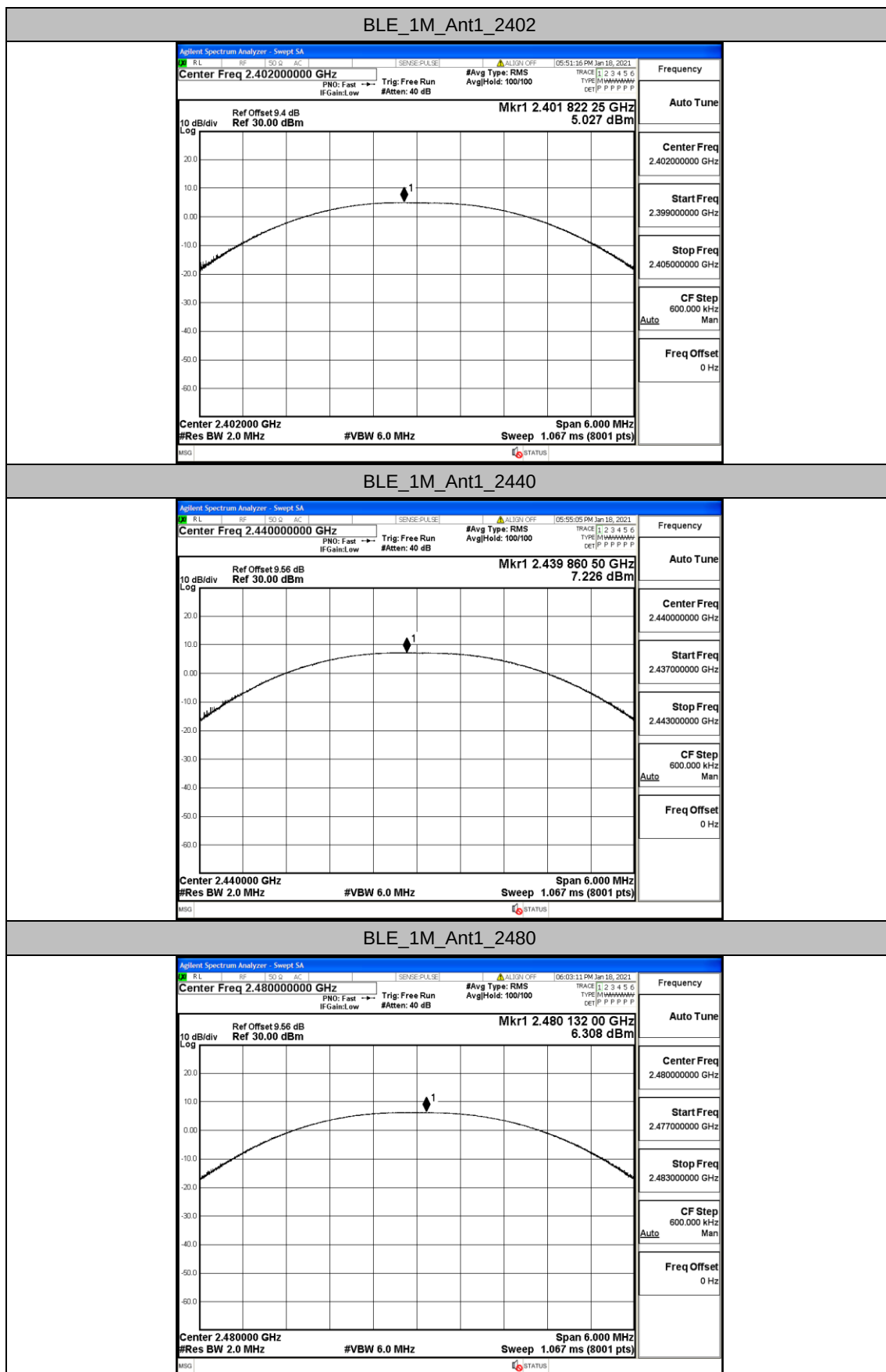


## Appendix C: Maximum conducted output power

### Test Result

| TestMode  | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|---------|-------------|------------|---------|
| BLE_BT 1M | Ant3    | 2402    | 5.03        | <=30       | PASS    |
|           |         | 2440    | 7.23        | <=30       | PASS    |
|           |         | 2480    | 6.31        | <=30       | PASS    |

## Test Graphs

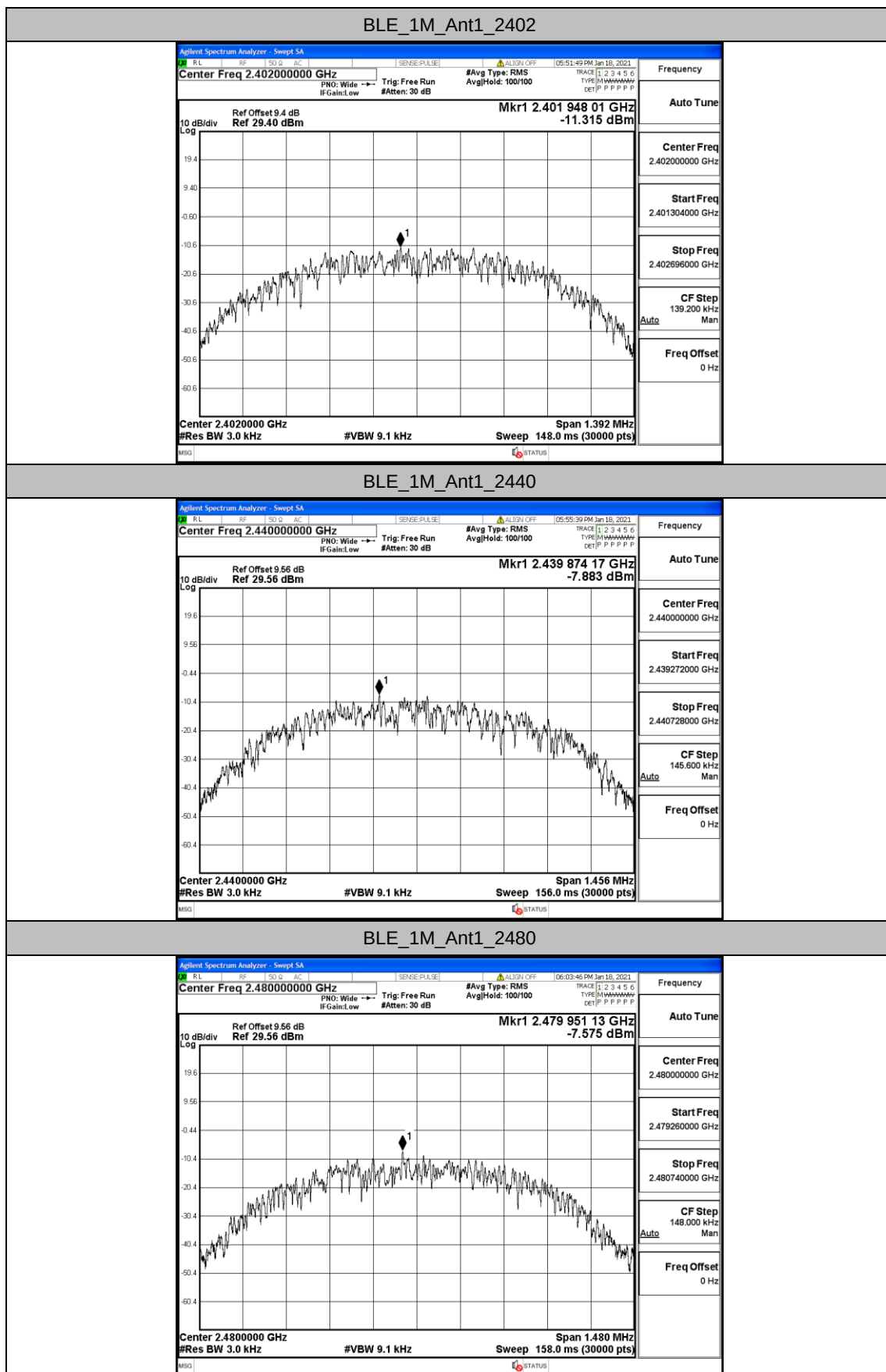


## Appendix D: Maximum power spectral density

### Test Result

| TestMode  | Antenna | Channel | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|---------|----------------------|-----------------|---------|
| BLE_BT 1M | Ant3    | 2402    | -11.32               | <=8             | PASS    |
|           |         | 2440    | -7.88                | <=8             | PASS    |
|           |         | 2480    | -7.58                | <=8             | PASS    |

## Test Graphs



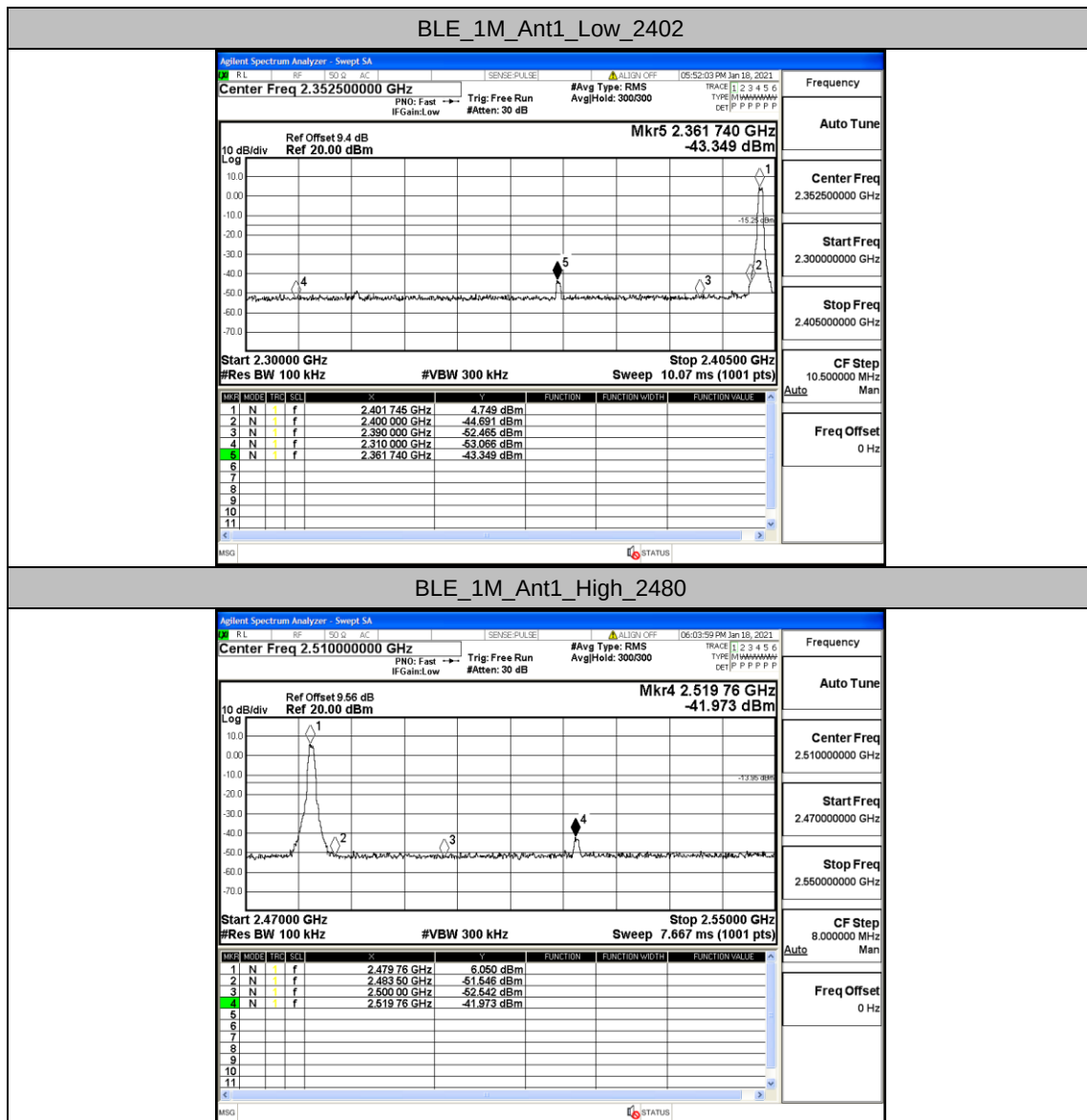


## Appendix E: Band edge measurements

### Test Result

| TestMode     | Antenna | ChName | Channel | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|--------------|---------|--------|---------|---------------|-------------|------------|---------|
| BLE_BT<br>1M | Ant3    | Low    | 2402    | 4.75          | -43.35      | <=-15.25   | PASS    |
|              |         | High   | 2480    | 6.05          | -41.97      | <=-13.95   | PASS    |

## Test Graphs

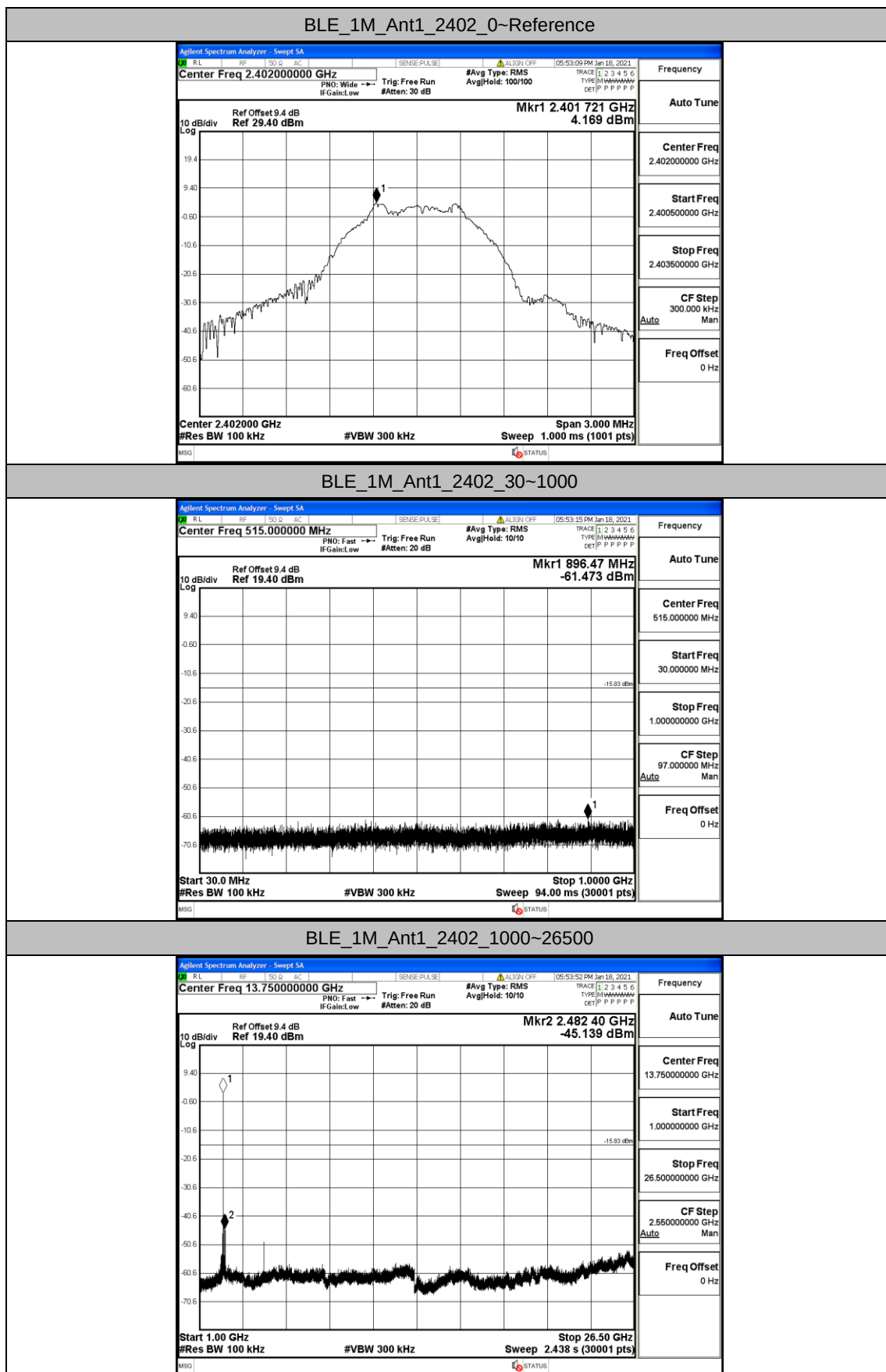


## Appendix F: Conducted Spurious Emission

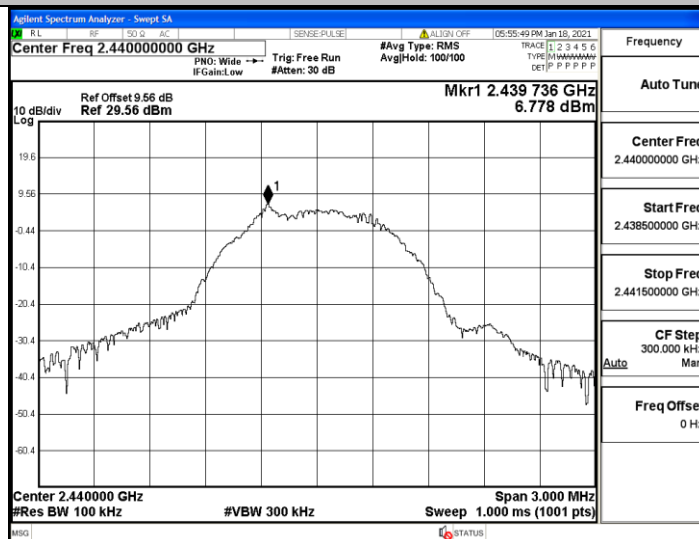
### Test Result

| TestMode | Antenna | Channel | FreqRange<br>[MHz] | RefLevel<br>[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|--------------------|-------------------|-------------|------------|---------|
| BLE_1M   | Ant1    | 2402    | Reference          | 4.17              | 4.17        | ---        | PASS    |
|          |         |         | 30~1000            | 4.17              | -61.47      | <=-15.83   | PASS    |
|          |         |         | 1000~26500         | 4.17              | -45.14      | <=-15.83   | PASS    |
|          |         | 2440    | Reference          | 6.78              | 6.78        | ---        | PASS    |
|          |         |         | 30~1000            | 6.78              | -60.7       | <=-13.22   | PASS    |
|          |         |         | 1000~26500         | 6.78              | -43.38      | <=-13.22   | PASS    |
|          |         | 2480    | Reference          | 5.94              | 5.94        | ---        | PASS    |
|          |         |         | 30~1000            | 5.94              | -61.06      | <=-14.06   | PASS    |
|          |         |         | 1000~26500         | 5.94              | -46.54      | <=-14.06   | PASS    |

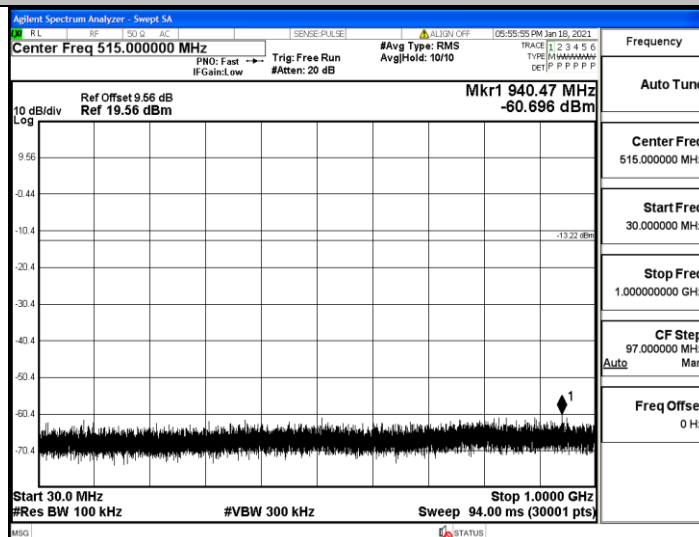
## Test Graphs



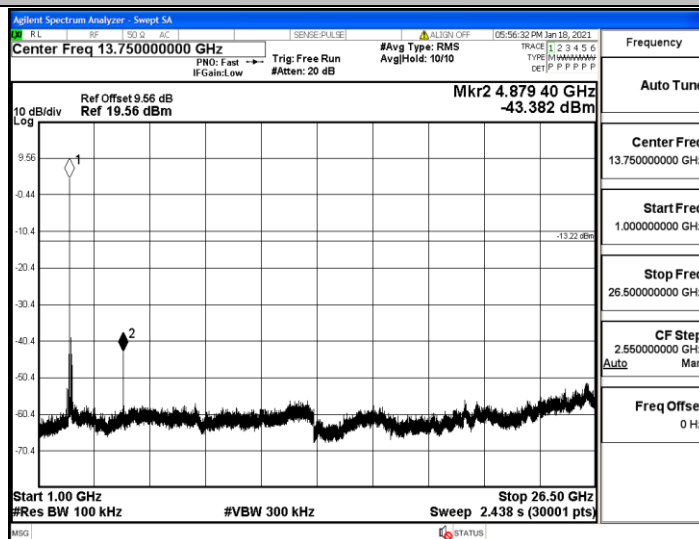
## BLE\_1M\_Ant1\_2440\_0~Reference



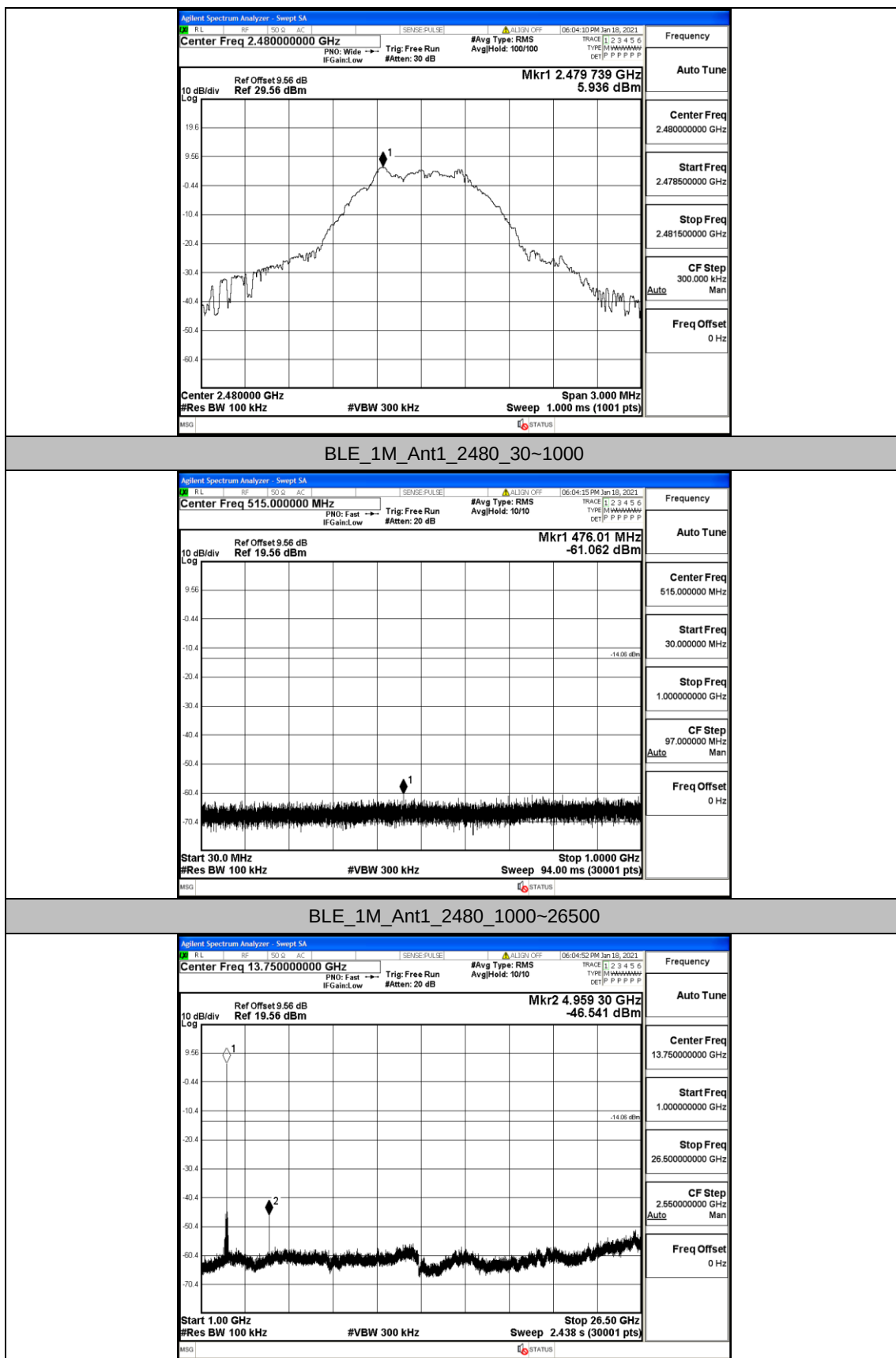
## BLE\_1M\_Ant1\_2440\_30~1000



## BLE\_1M\_Ant1\_2440\_1000~26500



## BLE\_1M\_Ant1\_2480\_0~Reference

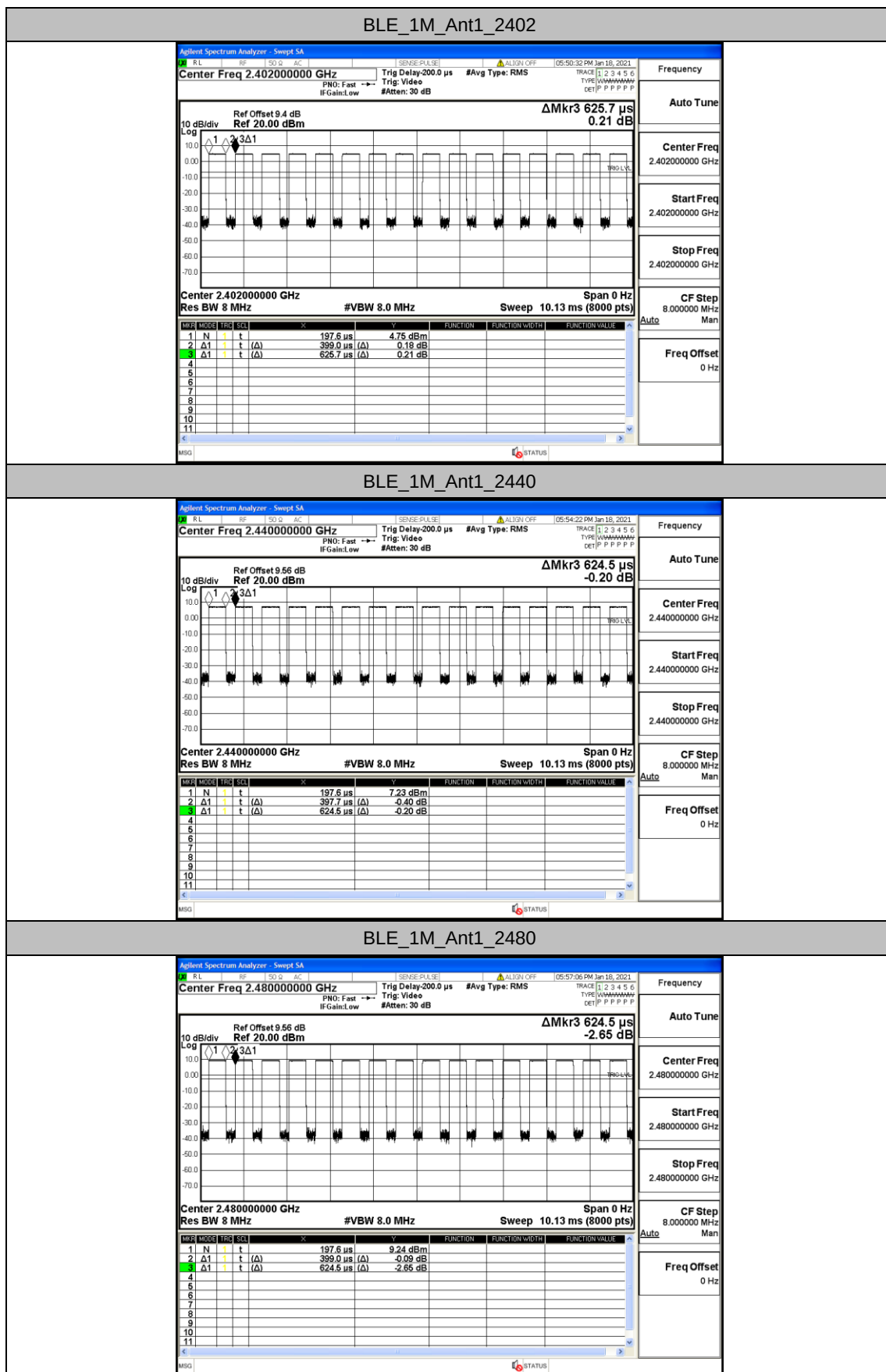


## Appendix G: Duty Cycle

### Test Result

| TestMode  | Antenna | Channel | Transmission<br>Duration [ms] | Transmission<br>Period [ms] | Duty Cycle [%] |
|-----------|---------|---------|-------------------------------|-----------------------------|----------------|
| BLE_BT 1M | Ant3    | 2402    | 0.40                          | 0.63                        | 63.49          |
|           |         | 2440    | 0.40                          | 0.62                        | 64.52          |
|           |         | 2480    | 0.40                          | 0.62                        | 64.52          |

## Test Graphs





## Appendix H: Emissions in Restricted Bands

### Test Result

| TestMode     | Antenna | ChName | Channel | Detector | Freq.<br>[MHz] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|--------------|---------|--------|---------|----------|----------------|-----------------|----------------|---------|
| BLE_BT<br>1M | Ant3    | Low    | 2402    | AV       | 2310.000       | -45.86          | <=-41.20       | PASS    |
|              |         |        |         | AV       | 2390.000       | -45.27          | <=-41.20       | PASS    |
|              |         |        |         | Peak     | 2310.000       | -39.95          | <=-21.20       | PASS    |
|              |         |        |         | Peak     | 2390.000       | -39.91          | <=-21.20       | PASS    |
|              |         | High   | 2480    | AV       | 2483.500       | -42.75          | <=-41.20       | PASS    |
|              |         |        |         | AV       | 2500.000       | -44.99          | <=-41.20       | PASS    |
|              |         |        |         | Peak     | 2483.500       | -37.14          | <=-21.20       | PASS    |
|              |         |        |         | Peak     | 2500.000       | -37.99          | <=-21.20       | PASS    |

Note:

1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. 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.

## Test Graphs

