

## Appendix: Bluetooth LE

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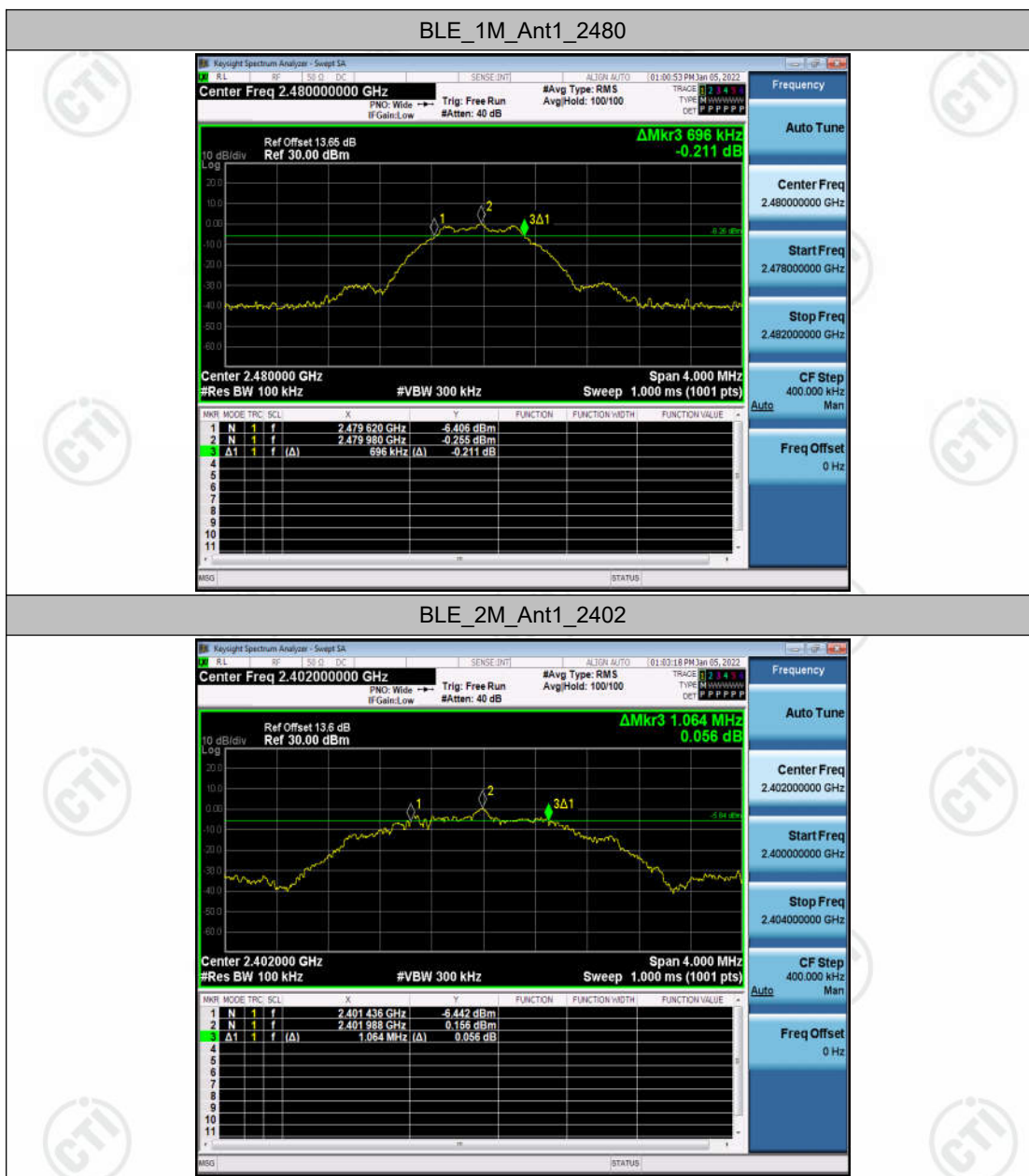
Appendix A: DTS Bandwidth

Test Result

| Test Mode | Antenna | Channel | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|--------------|----------|----------|------------|---------|
| BLE_1M    | Ant1    | 2402    | 0.680        | 2401.632 | 2402.312 | 0.5        | PASS    |
|           |         | 2440    | 0.720        | 2439.628 | 2440.348 | 0.5        | PASS    |
|           |         | 2480    | 0.696        | 2479.620 | 2480.316 | 0.5        | PASS    |
| BLE_2M    | Ant1    | 2402    | 1.064        | 2401.436 | 2402.500 | 0.5        | PASS    |
|           |         | 2440    | 1.144        | 2439.408 | 2440.552 | 0.5        | PASS    |
|           |         | 2480    | 1.132        | 2479.408 | 2480.540 | 0.5        | PASS    |

Test Graphs





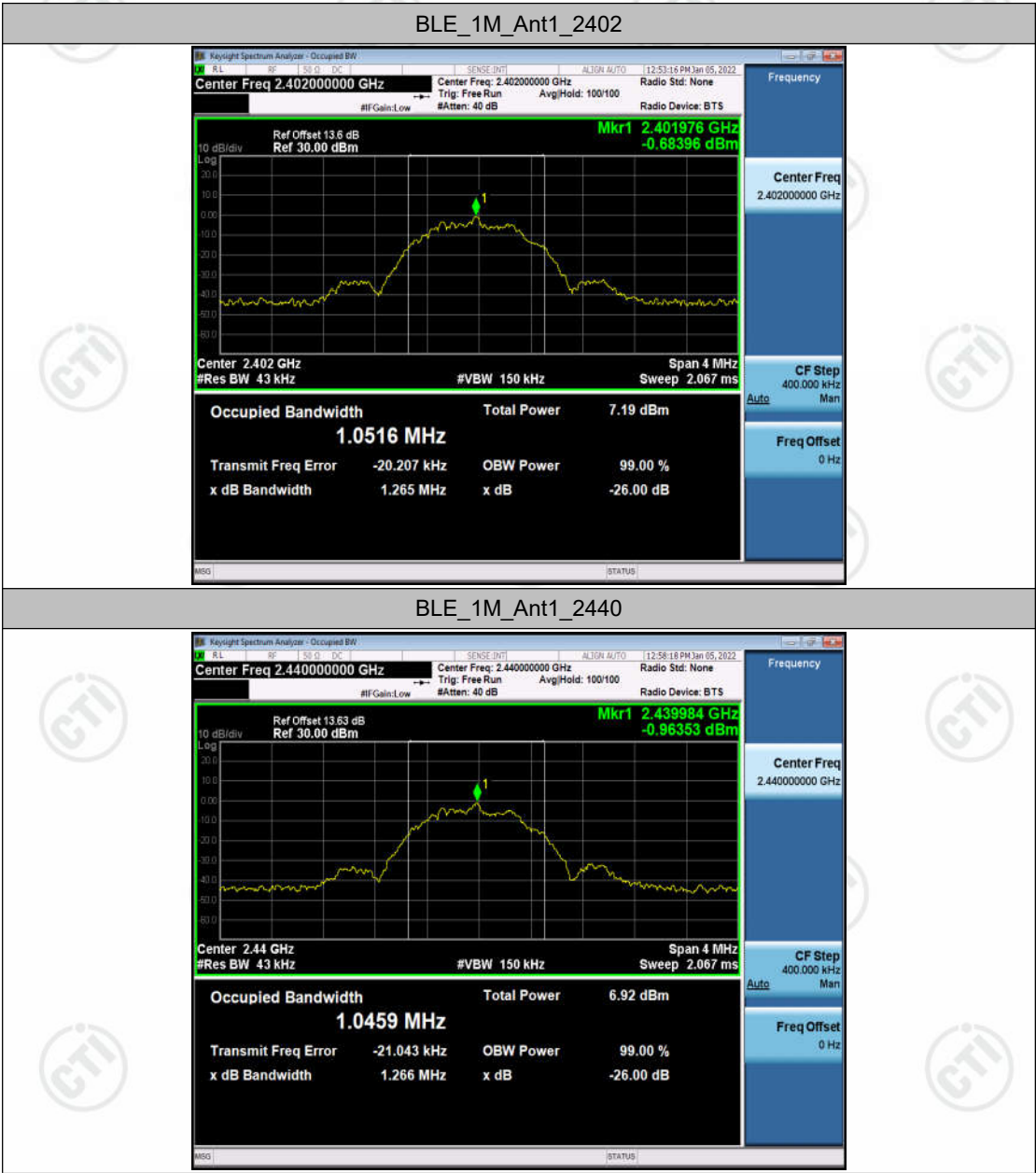


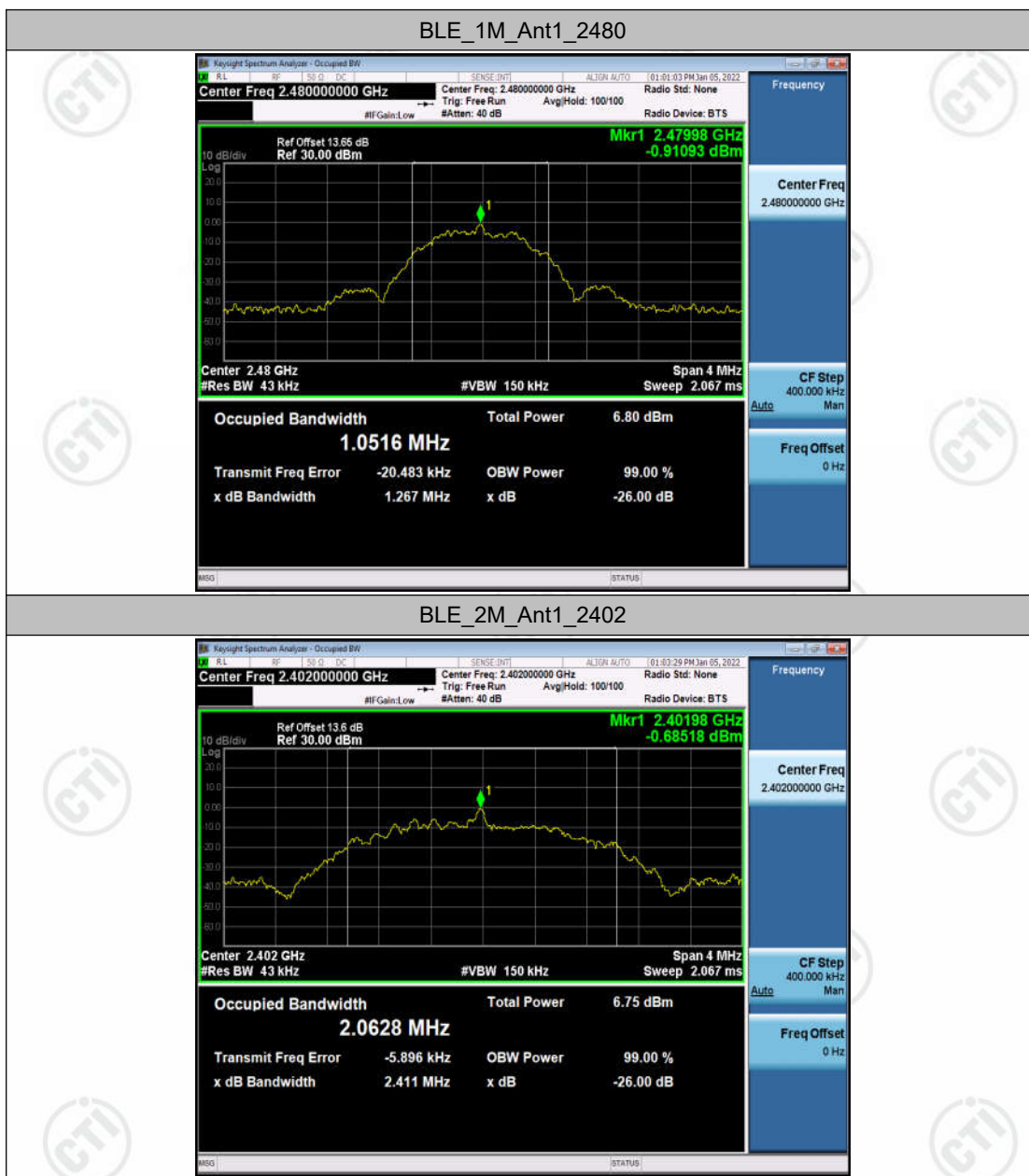
Appendix B: Occupied Channel Bandwidth

Test Result

| Test Mode | Antenna | Channel | OCB [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|-----------|----------|----------|------------|---------|
| BLE_1M    | Ant1    | 2402    | 1.0516    | 2401.454 | 2402.506 | ---        | PASS    |
|           |         | 2440    | 1.0459    | 2439.456 | 2440.502 | ---        | PASS    |
|           |         | 2480    | 1.0516    | 2479.454 | 2480.505 | ---        | PASS    |
| BLE_2M    | Ant1    | 2402    | 2.0628    | 2400.963 | 2403.026 | ---        | PASS    |
|           |         | 2440    | 2.0712    | 2438.957 | 2441.028 | ---        | PASS    |
|           |         | 2480    | 2.0690    | 2478.956 | 2481.025 | ---        | PASS    |

Test Graphs





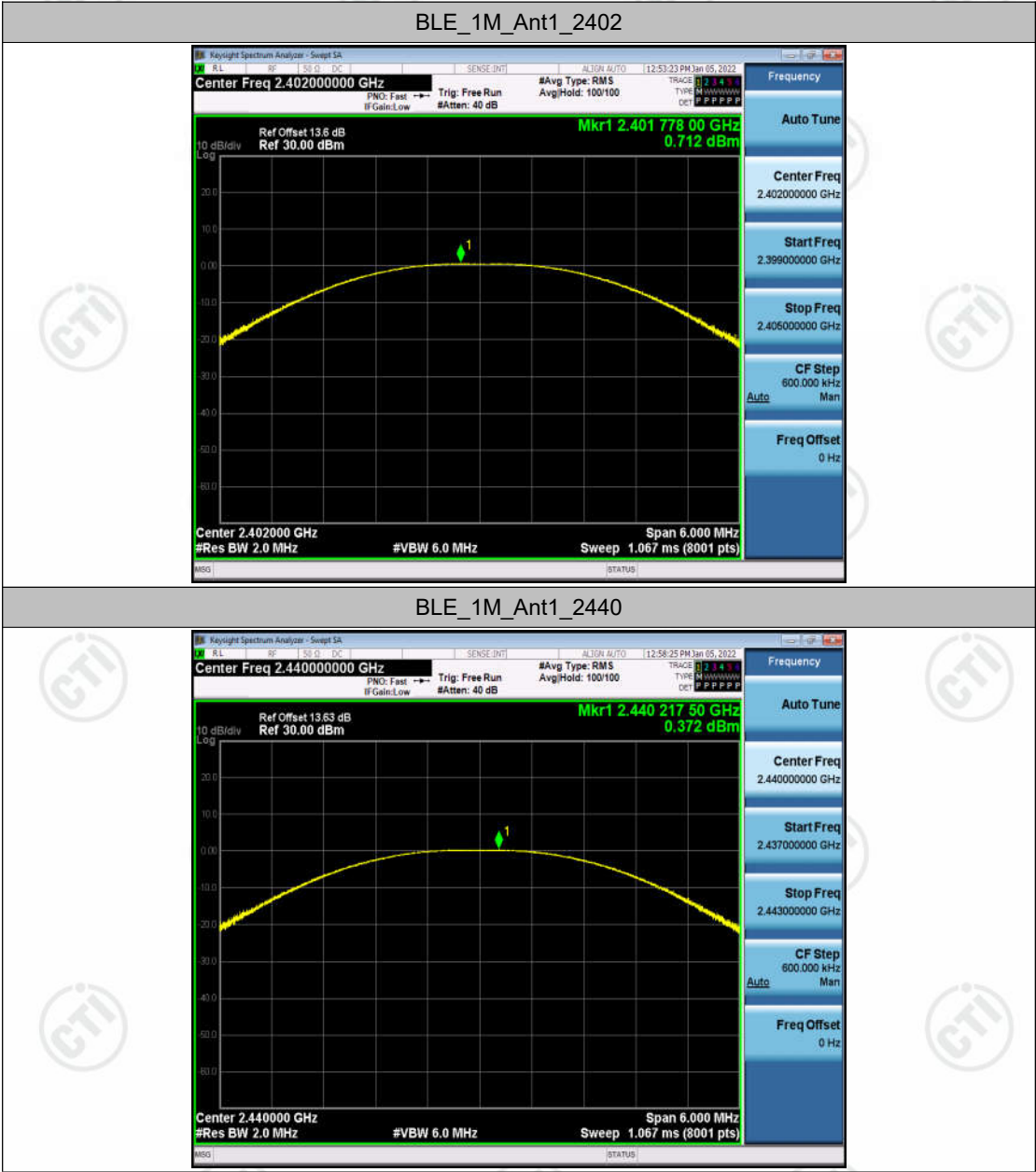


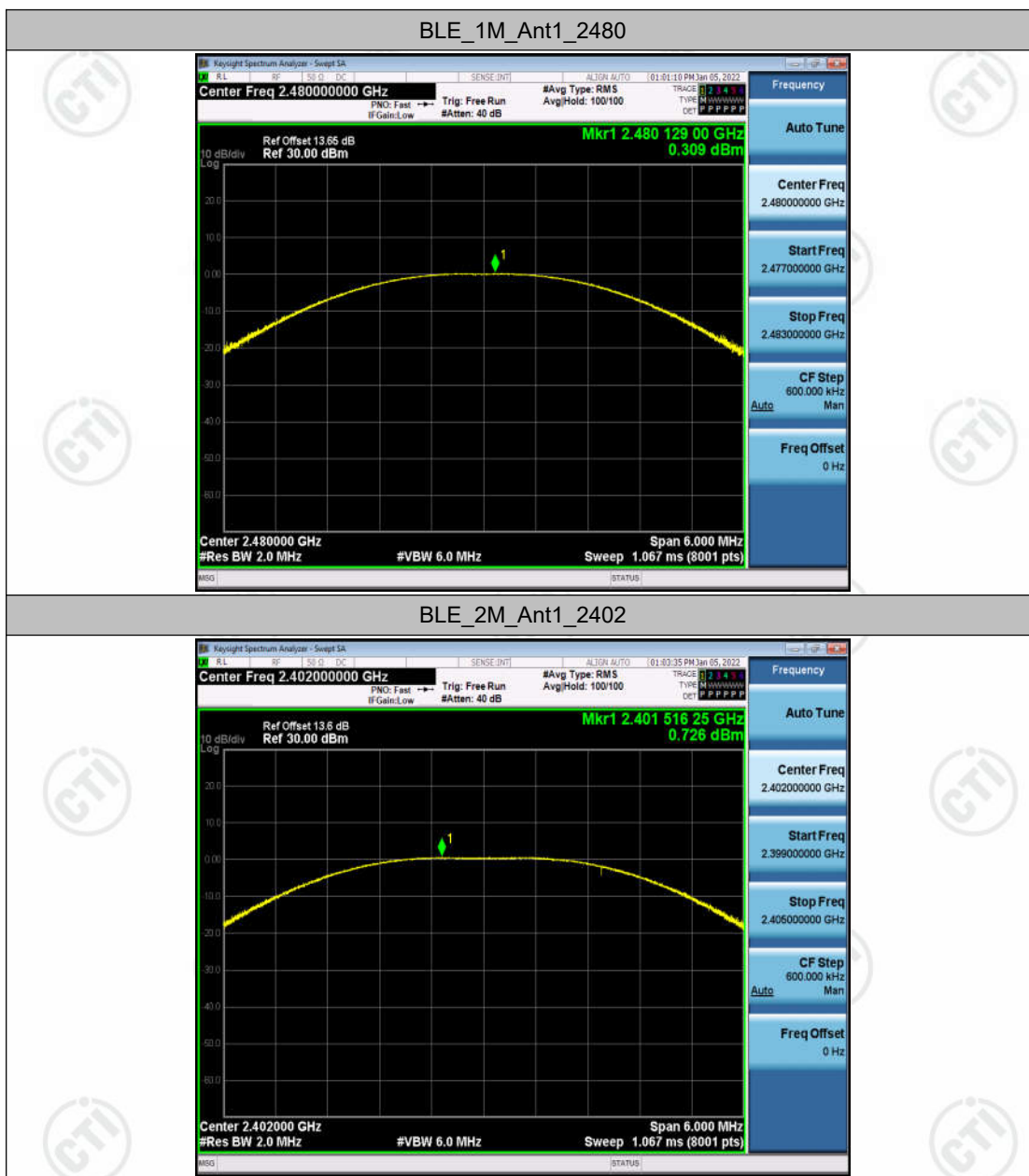
Appendix C: Maximum conducted output power

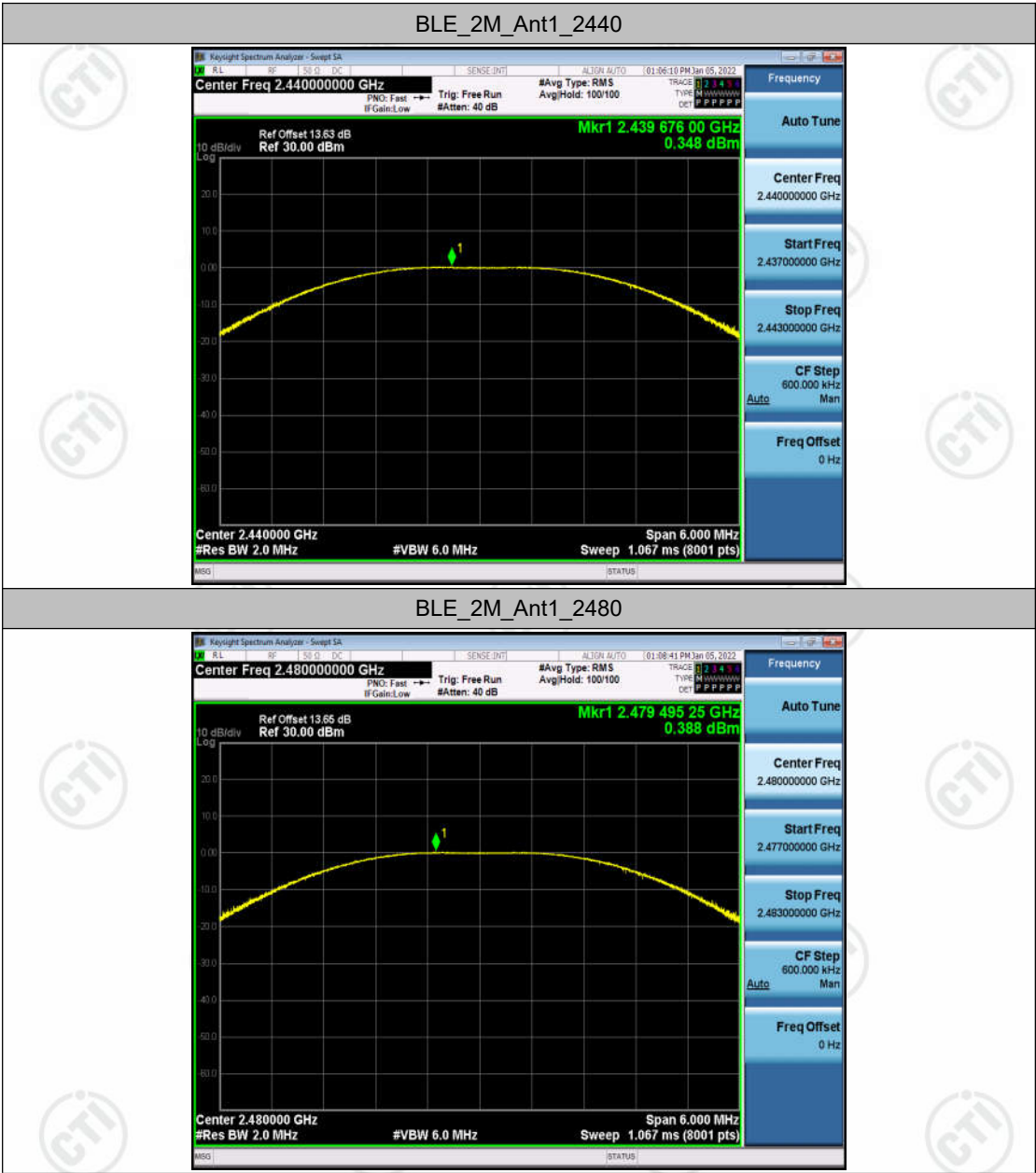
Test Result

| Test Mode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|---------|-------------|------------|---------|
| BLE_1M    | Ant1    | 2402    | 0.71        | <=30       | PASS    |
|           |         | 2440    | 0.37        | <=30       | PASS    |
|           |         | 2480    | 0.31        | <=30       | PASS    |
| BLE_2M    | Ant1    | 2402    | 0.73        | <=30       | PASS    |
|           |         | 2440    | 0.35        | <=30       | PASS    |
|           |         | 2480    | 0.39        | <=30       | PASS    |

Test Graphs





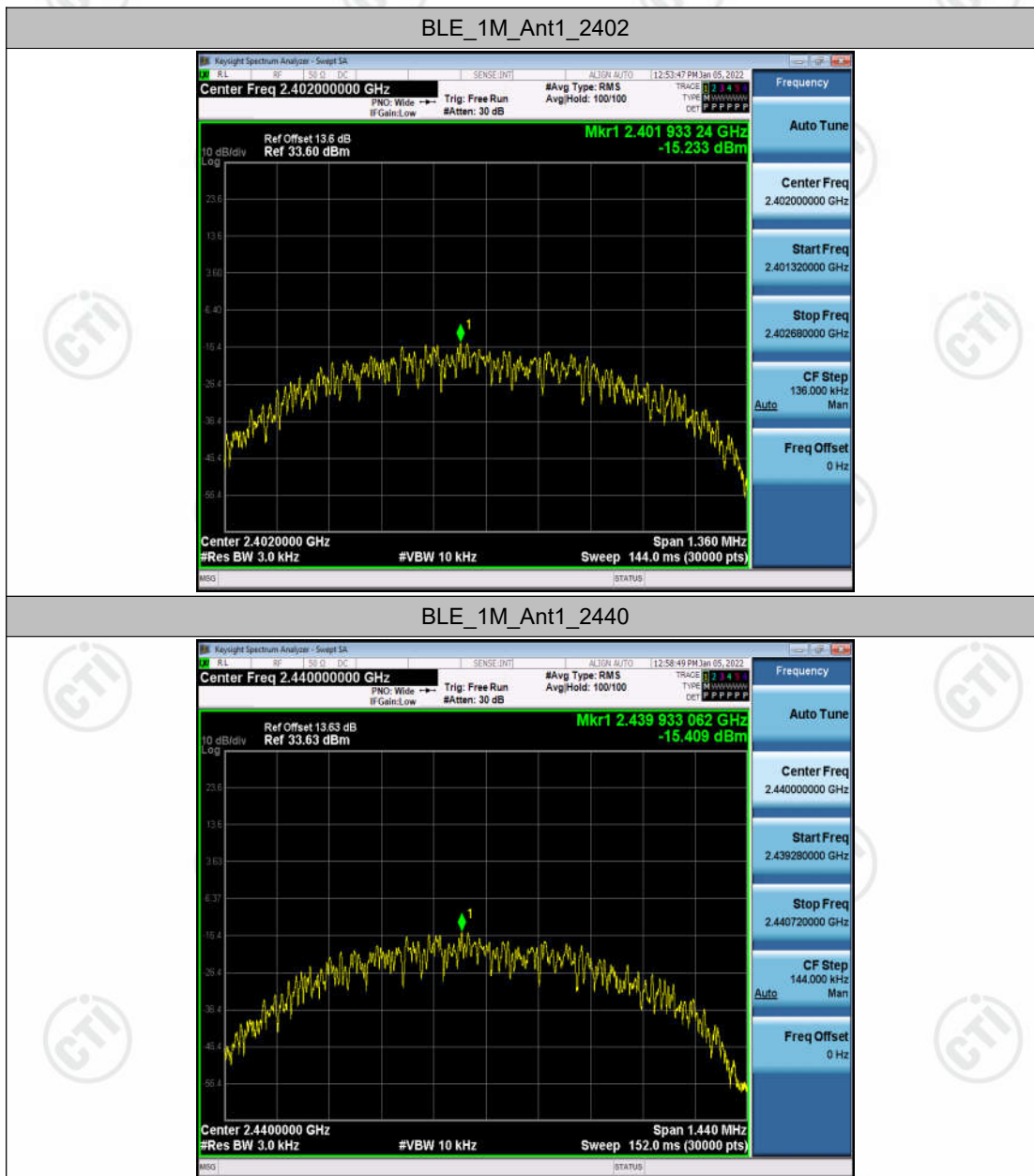


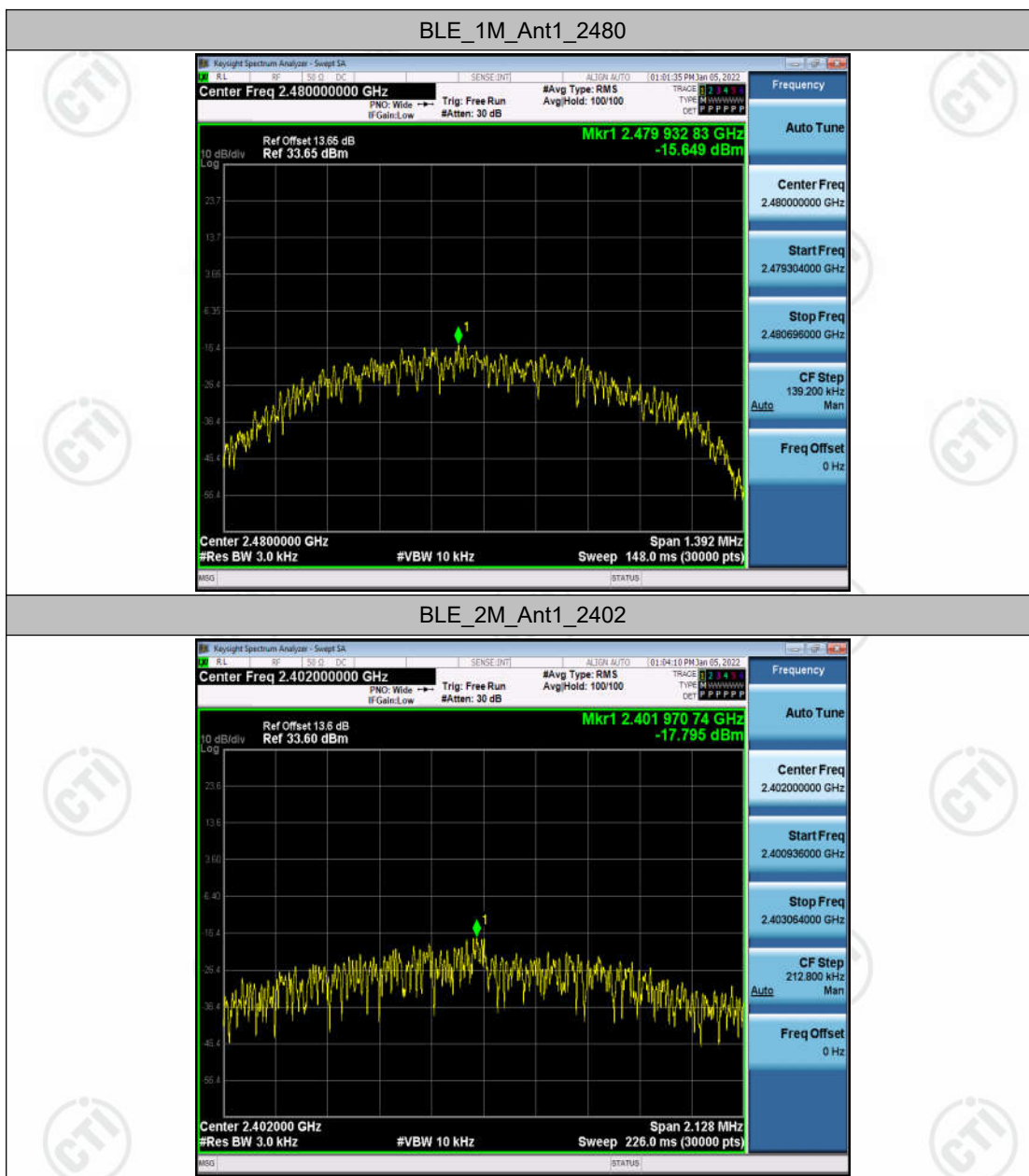
Appendix D: Maximum power spectral density

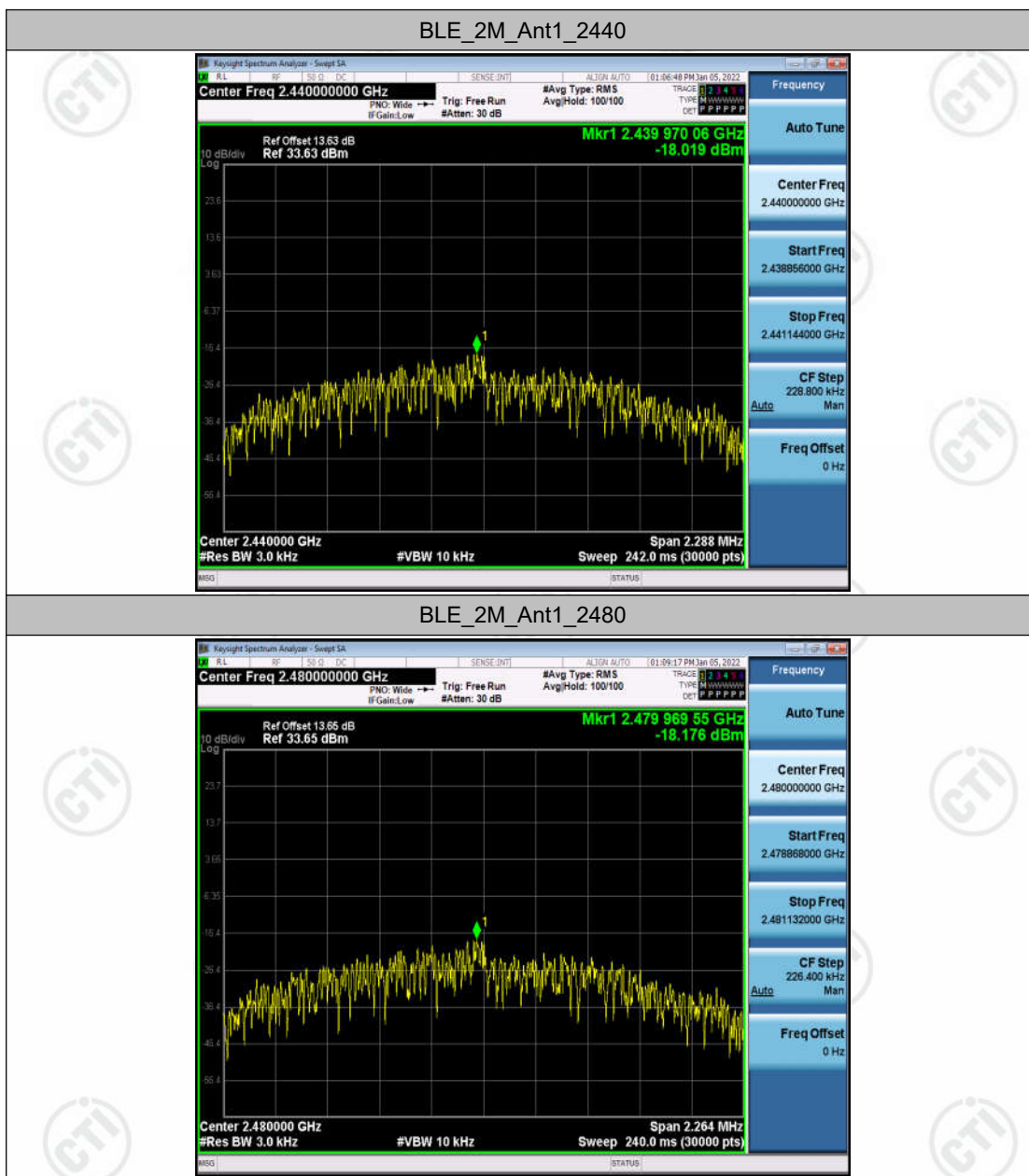
Test Result

| Test Mode | Antenna | Channel | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|---------|----------------------|-----------------|---------|
| BLE_1M    | Ant1    | 2402    | -15.23               | <=8             | PASS    |
|           |         | 2440    | -15.41               | <=8             | PASS    |
|           |         | 2480    | -15.65               | <=8             | PASS    |
| BLE_2M    | Ant1    | 2402    | -17.8                | <=8             | PASS    |
|           |         | 2440    | -18.02               | <=8             | PASS    |
|           |         | 2480    | -18.18               | <=8             | PASS    |

## Test Graphs





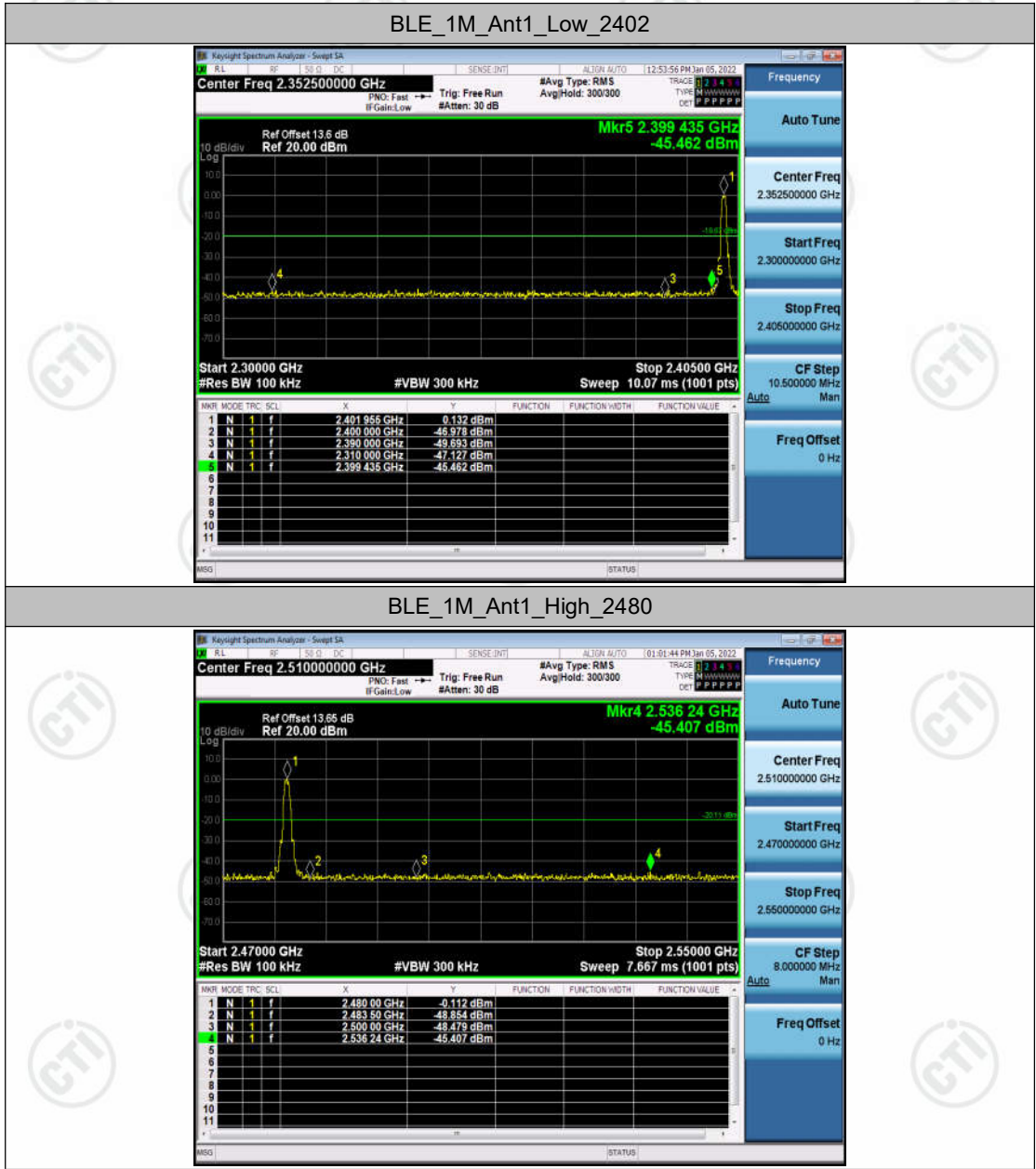


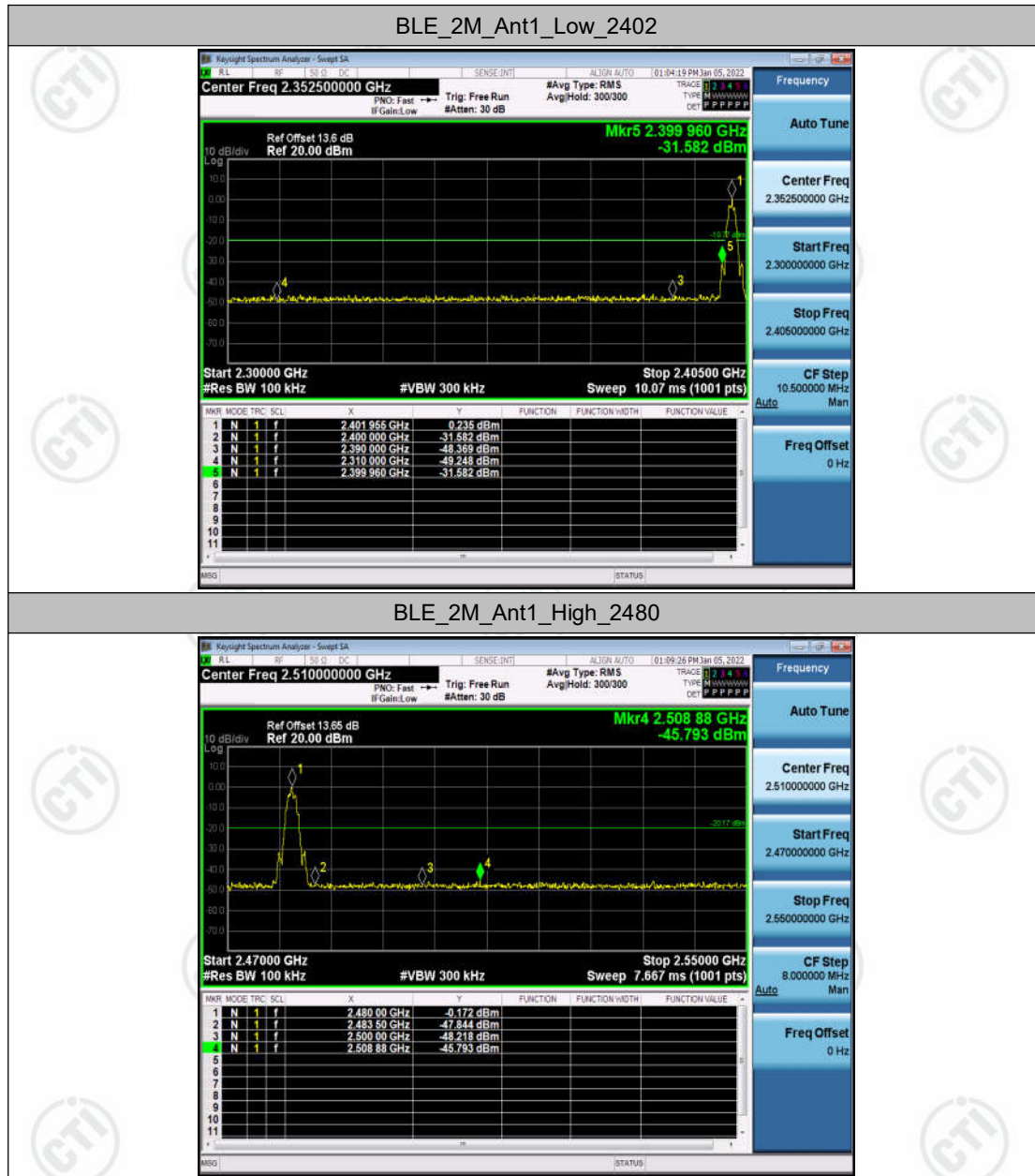
Appendix E: Band edge measurements

Test Result

| Test Mode | Antenna | ChName | Channel | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------|---------|---------------|-------------|------------|---------|
| BLE_1M    | Ant1    | Low    | 2402    | 0.13          | -45.46      | <=-19.87   | PASS    |
|           |         | High   | 2480    | -0.11         | -45.41      | <=-20.11   | PASS    |
| BLE_2M    | Ant1    | Low    | 2402    | 0.24          | -31.58      | <=-19.77   | PASS    |
|           |         | High   | 2480    | -0.17         | -45.79      | <=-20.17   | PASS    |

Test Graphs



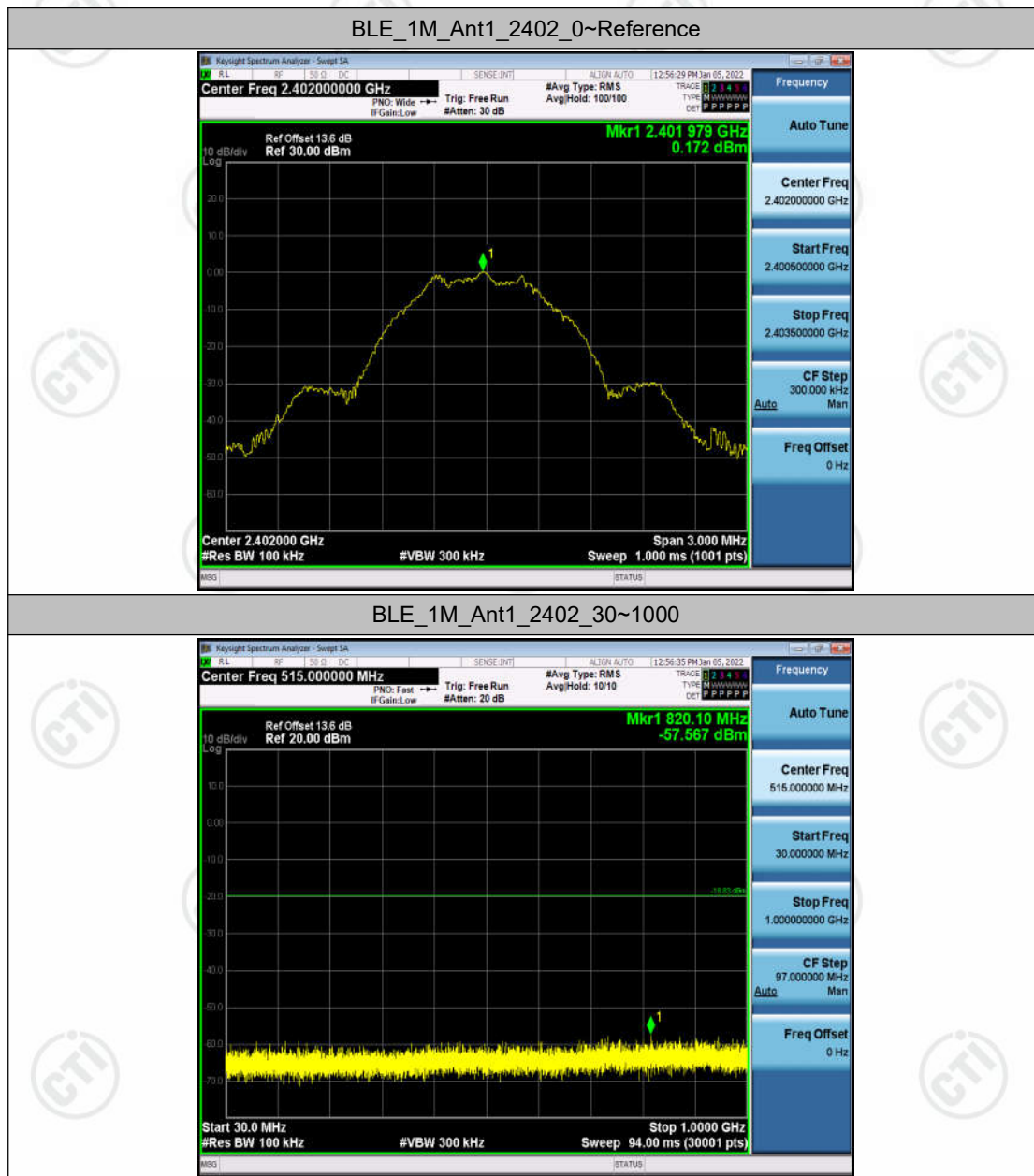


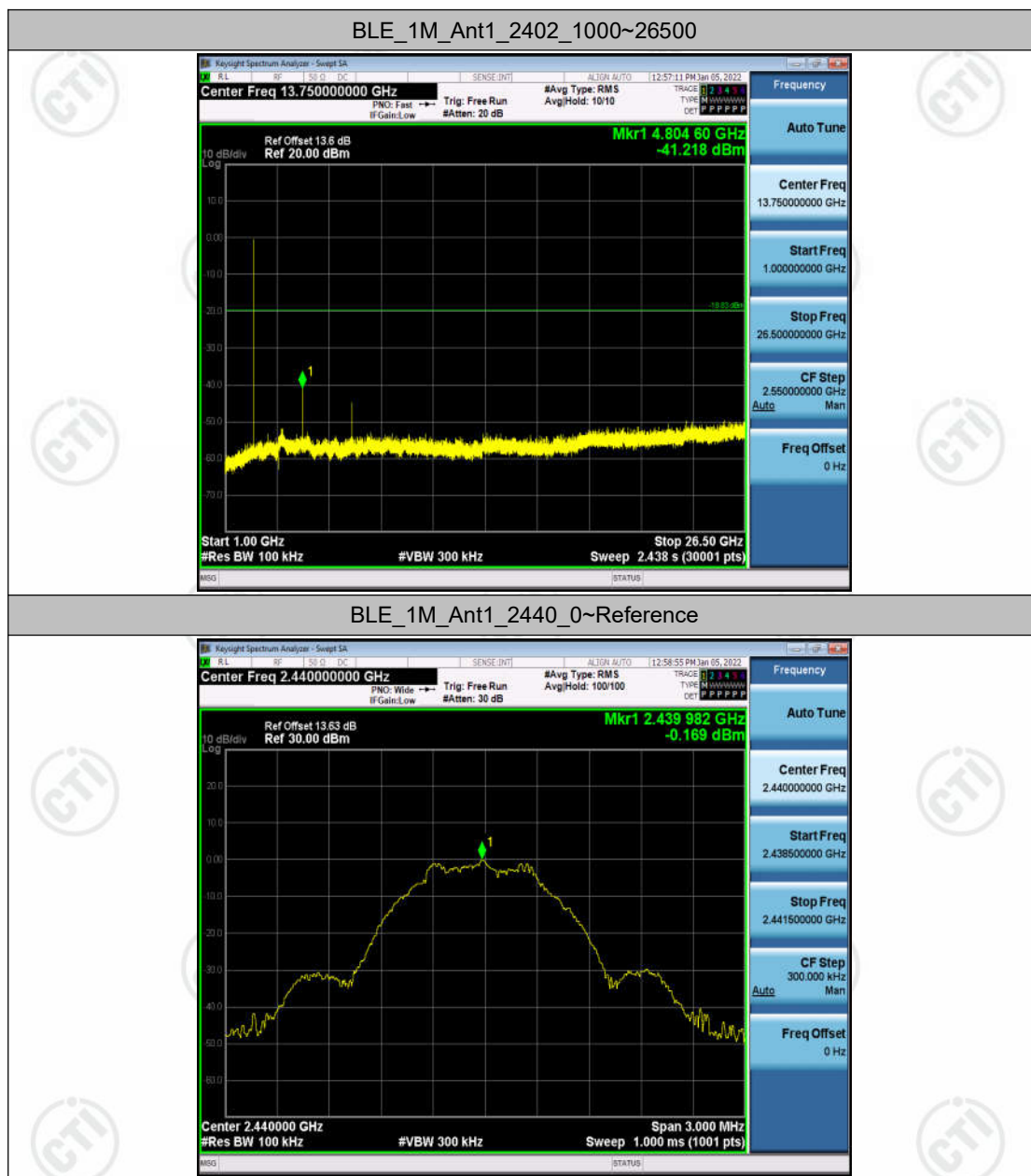
## Appendix F: Conducted Spurious Emission

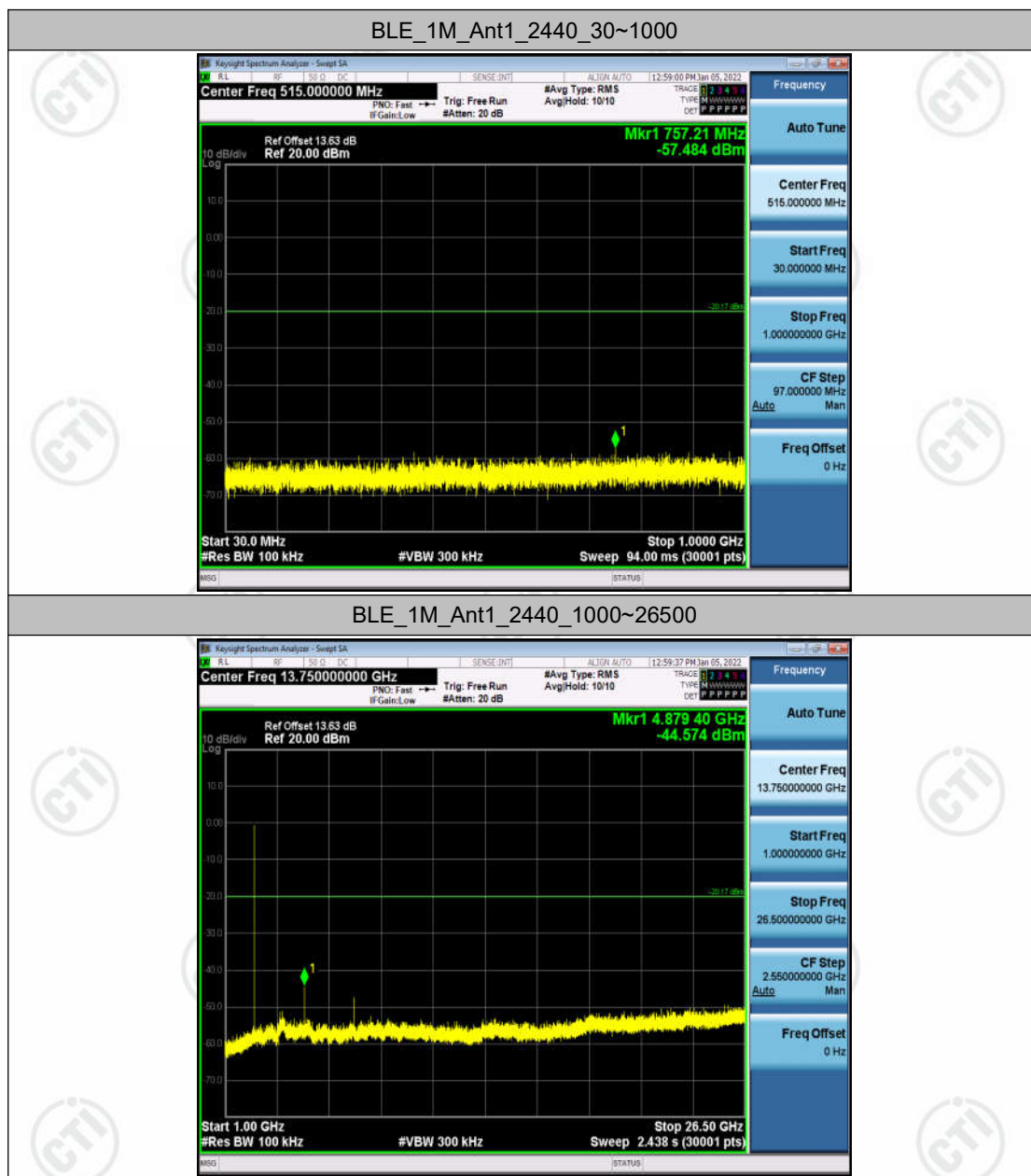
### Test Result

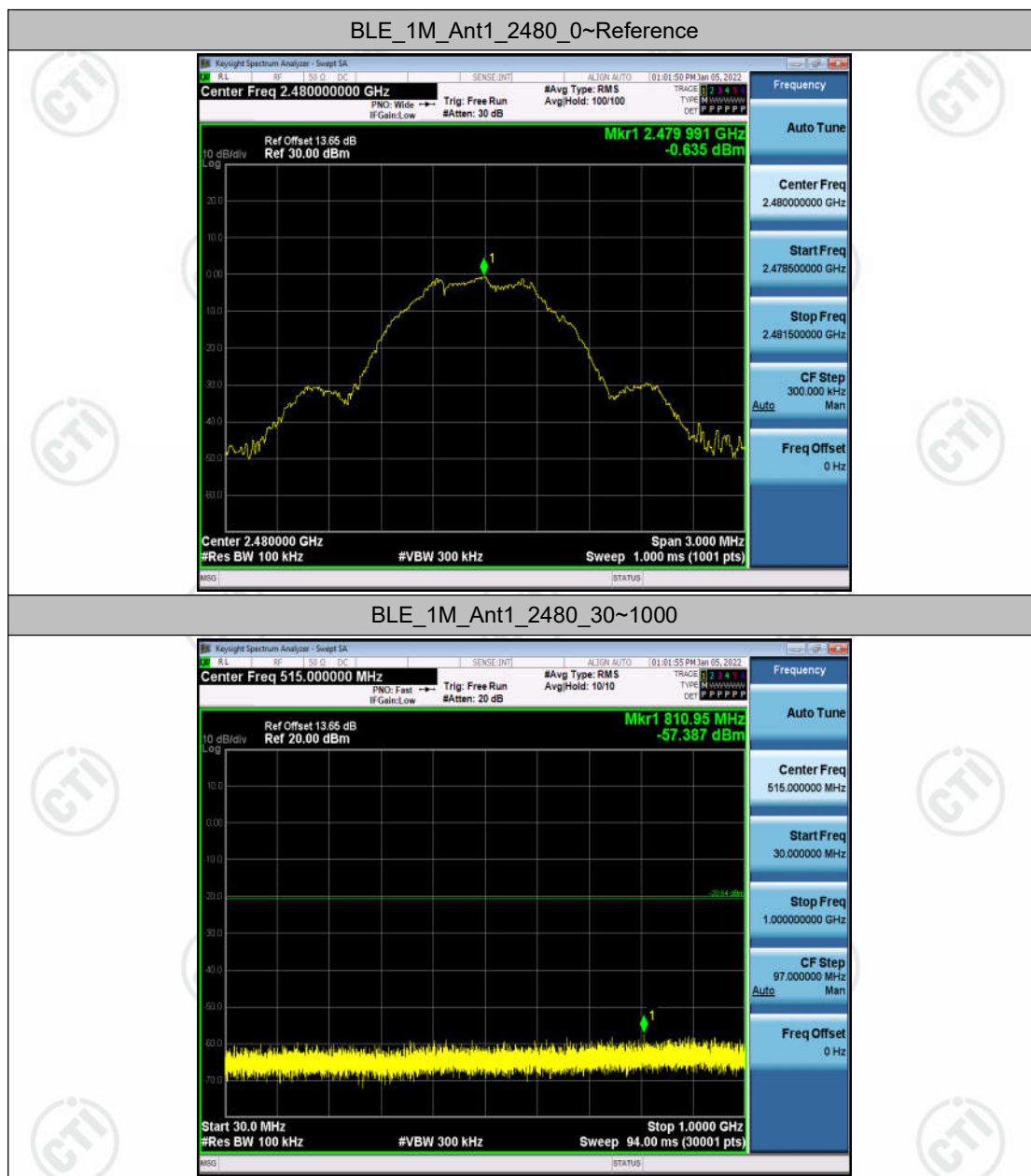
| Test Mode | Antenna | Channel | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|---------|-----------------|----------------|-------------|------------|---------|
| BLE_1M    | Ant1    | 2402    | Reference       | 0.17           | 0.17        | ---        | PASS    |
|           |         |         | 30~1000         | ---            | -57.567     | <=-19.828  | PASS    |
|           |         |         | 1000~26500      | ---            | -41.218     | <=-19.828  | PASS    |
|           |         | 2440    | Reference       | -0.17          | -0.17       | ---        | PASS    |
|           |         |         | 30~1000         | ---            | -57.484     | <=-20.169  | PASS    |
|           |         |         | 1000~26500      | ---            | -44.574     | <=-20.169  | PASS    |
|           |         | 2480    | Reference       | -0.64          | -0.64       | ---        | PASS    |
|           |         |         | 30~1000         | ---            | -57.387     | <=-20.635  | PASS    |
|           |         |         | 1000~26500      | ---            | -40.369     | <=-20.635  | PASS    |
| BLE_2M    | Ant1    | 2402    | Reference       | 0.03           | 0.03        | ---        | PASS    |
|           |         |         | 30~1000         | ---            | -56.799     | <=-19.971  | PASS    |
|           |         |         | 1000~26500      | ---            | -46.385     | <=-19.971  | PASS    |
|           |         | 2440    | Reference       | -0.24          | -0.24       | ---        | PASS    |
|           |         |         | 30~1000         | ---            | -57.437     | <=-20.241  | PASS    |
|           |         |         | 1000~26500      | ---            | -44.036     | <=-20.241  | PASS    |
|           |         | 2480    | Reference       | -0.32          | -0.32       | ---        | PASS    |
|           |         |         | 30~1000         | ---            | -57.848     | <=-20.322  | PASS    |
|           |         |         | 1000~26500      | ---            | -44.658     | <=-20.322  | PASS    |

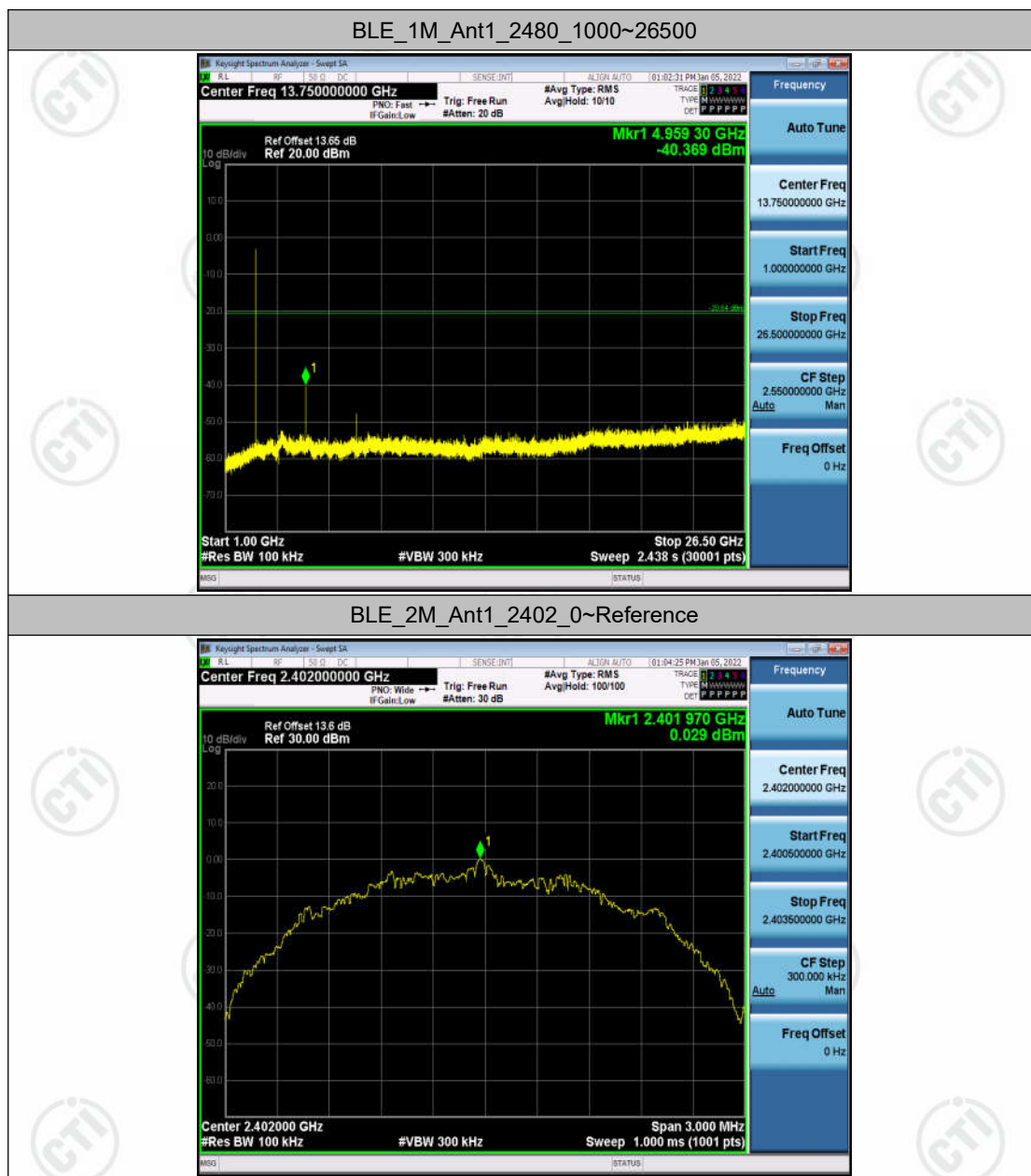
## Test Graphs

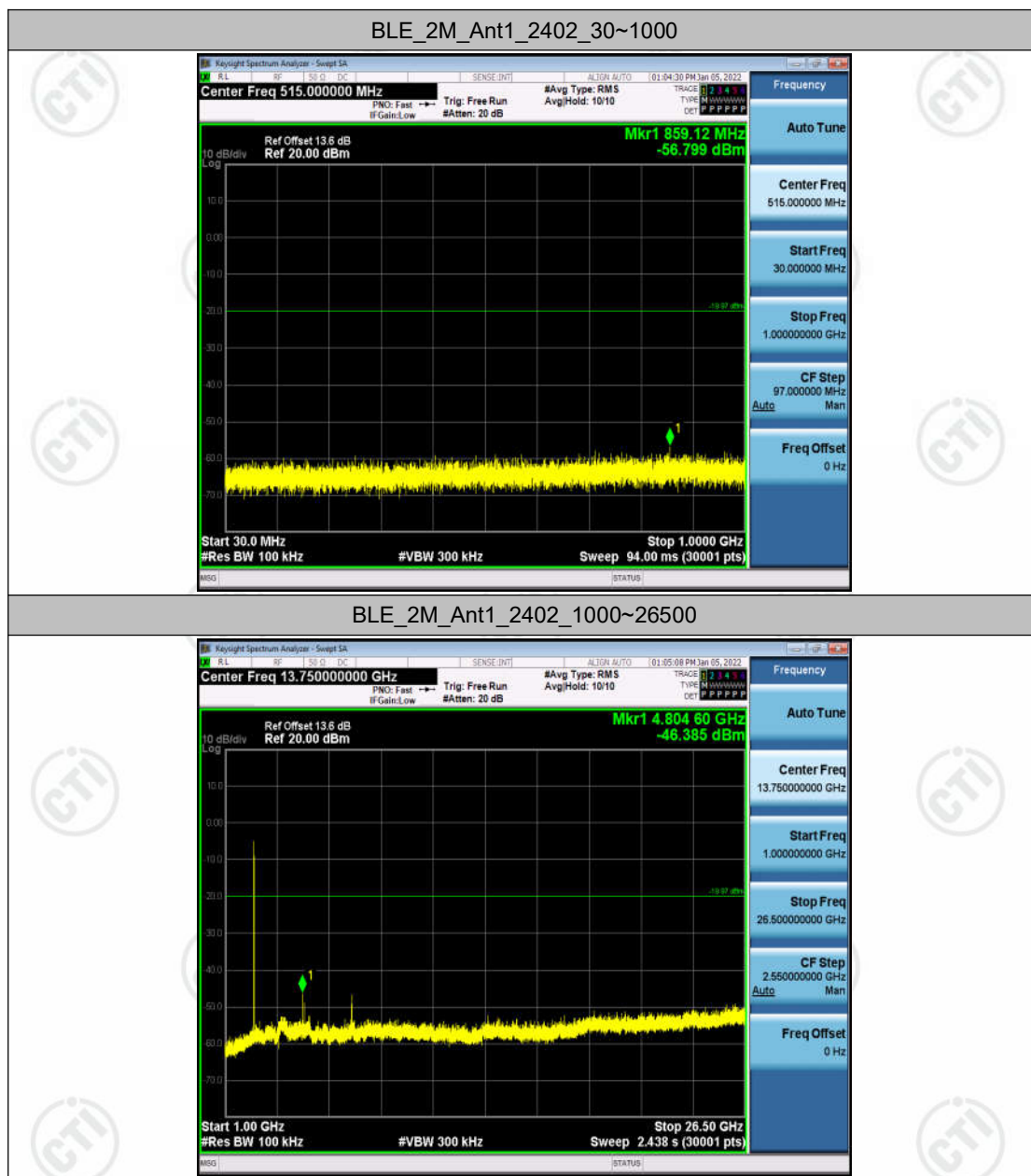


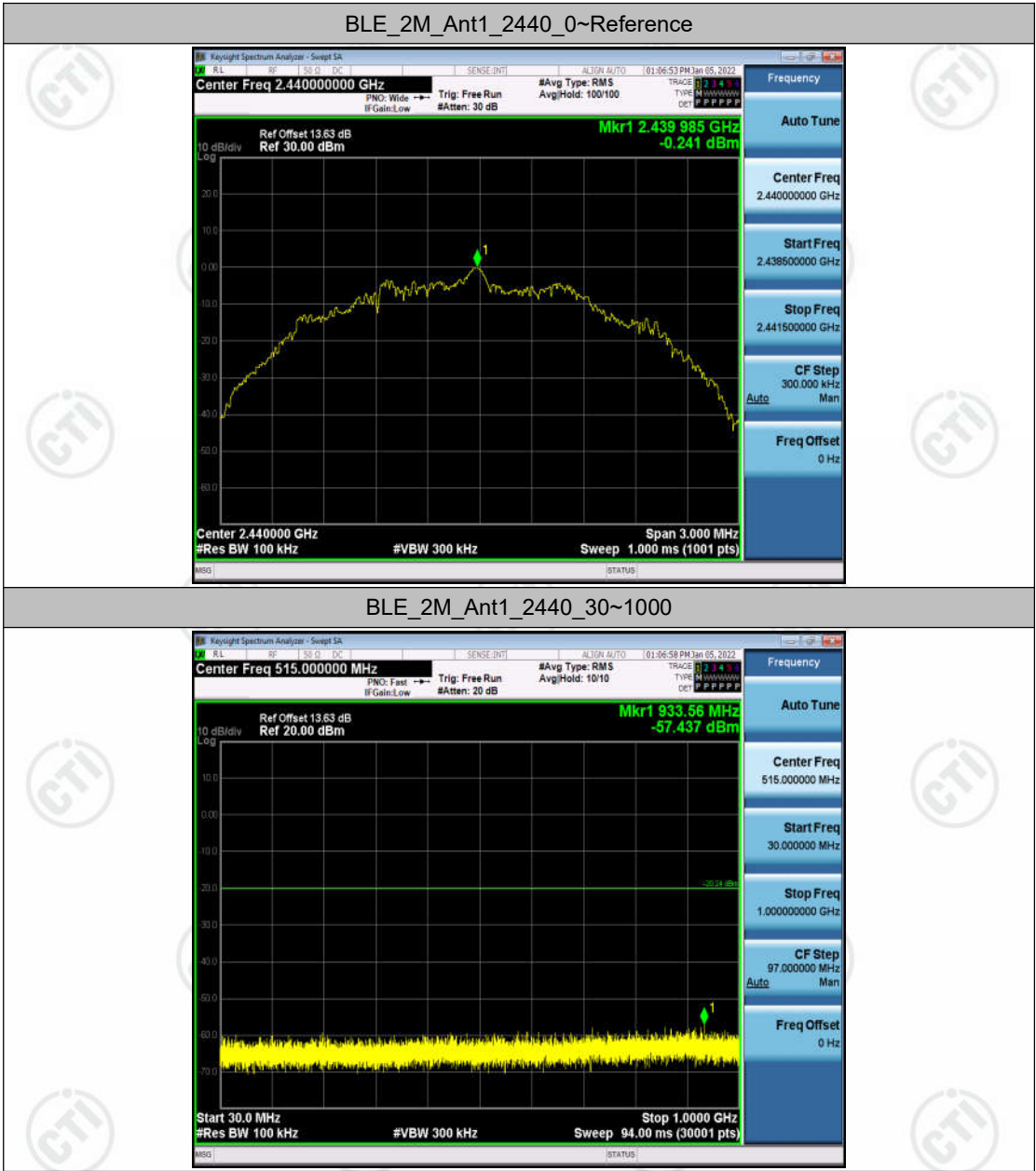


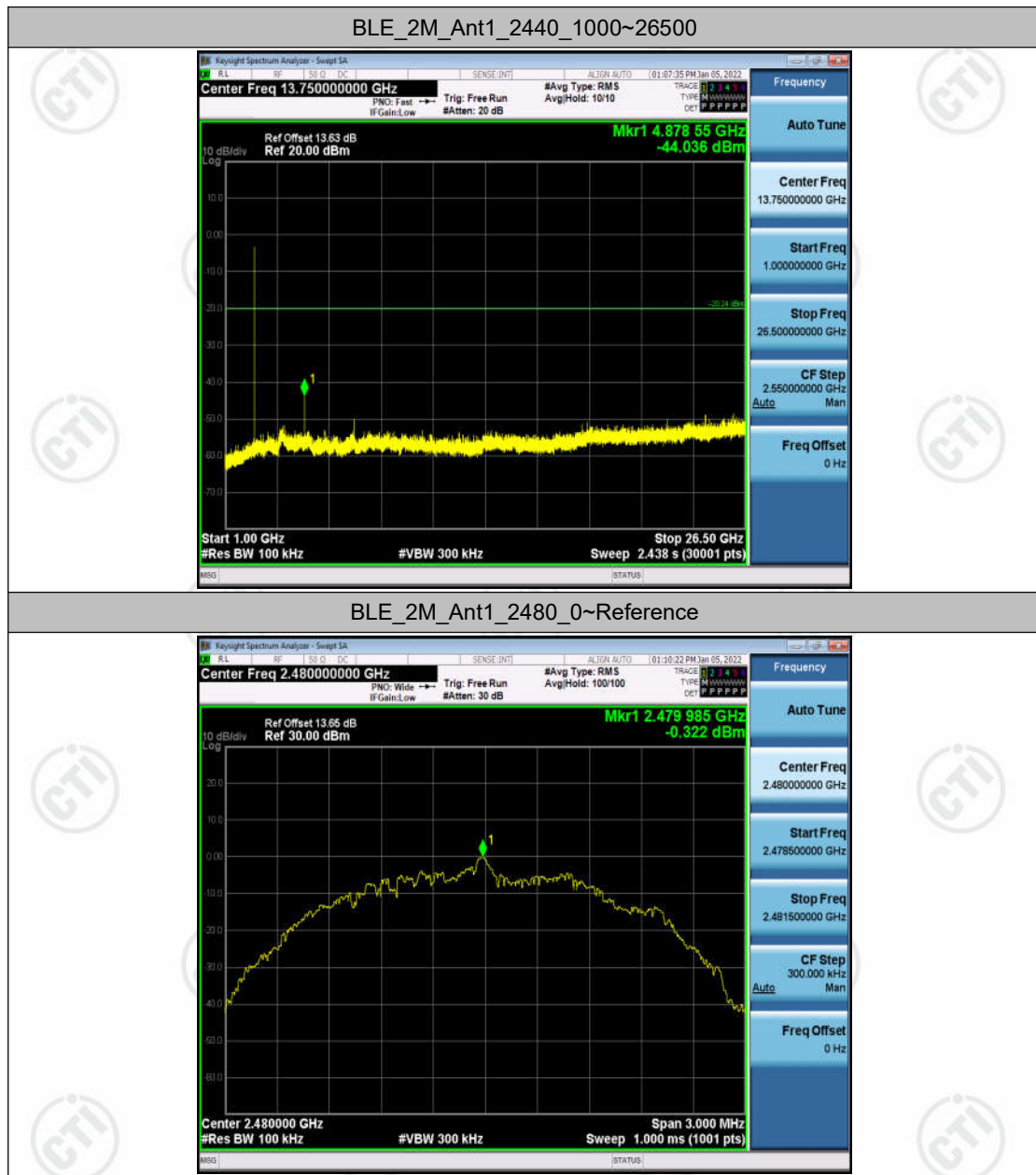


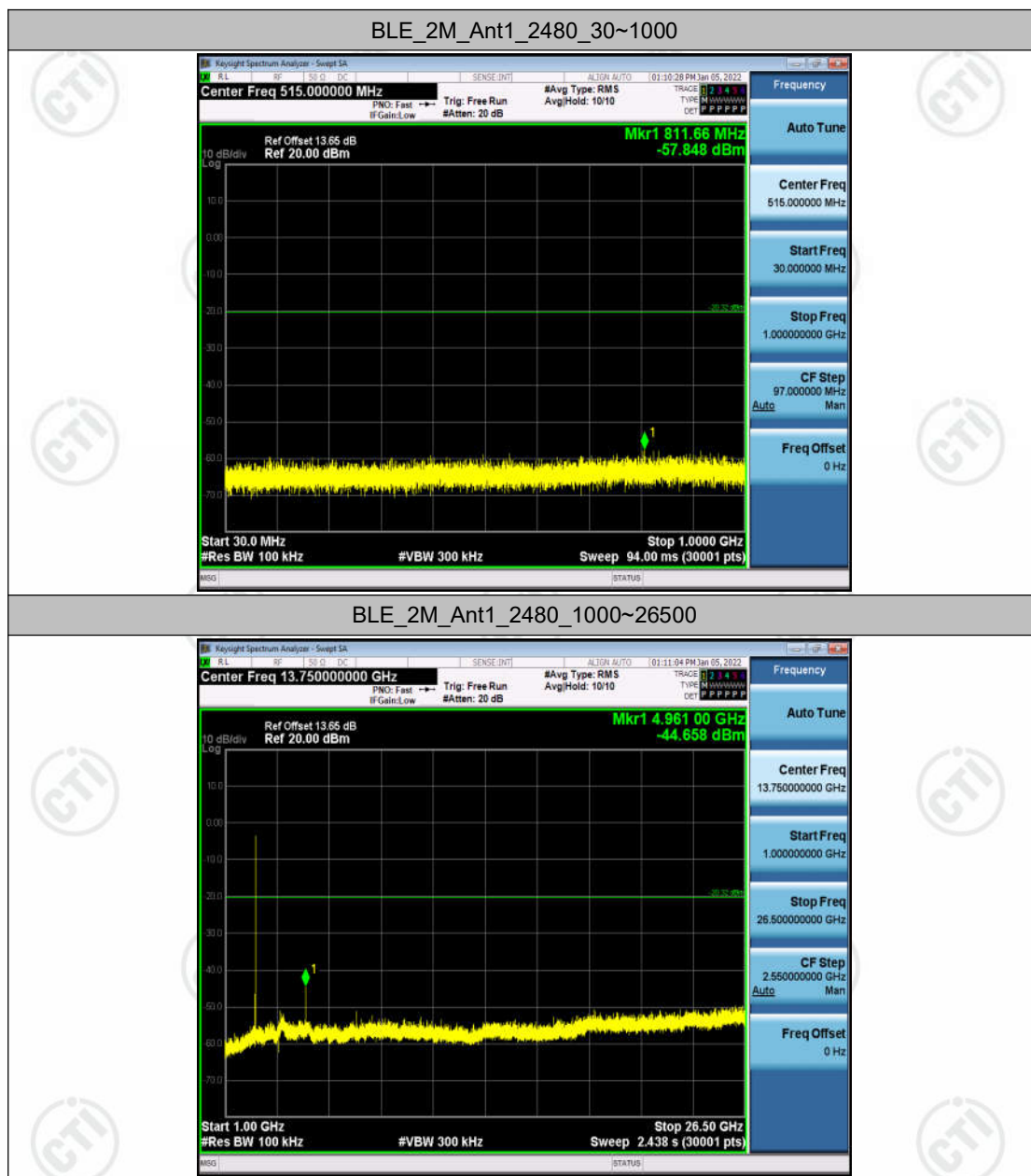










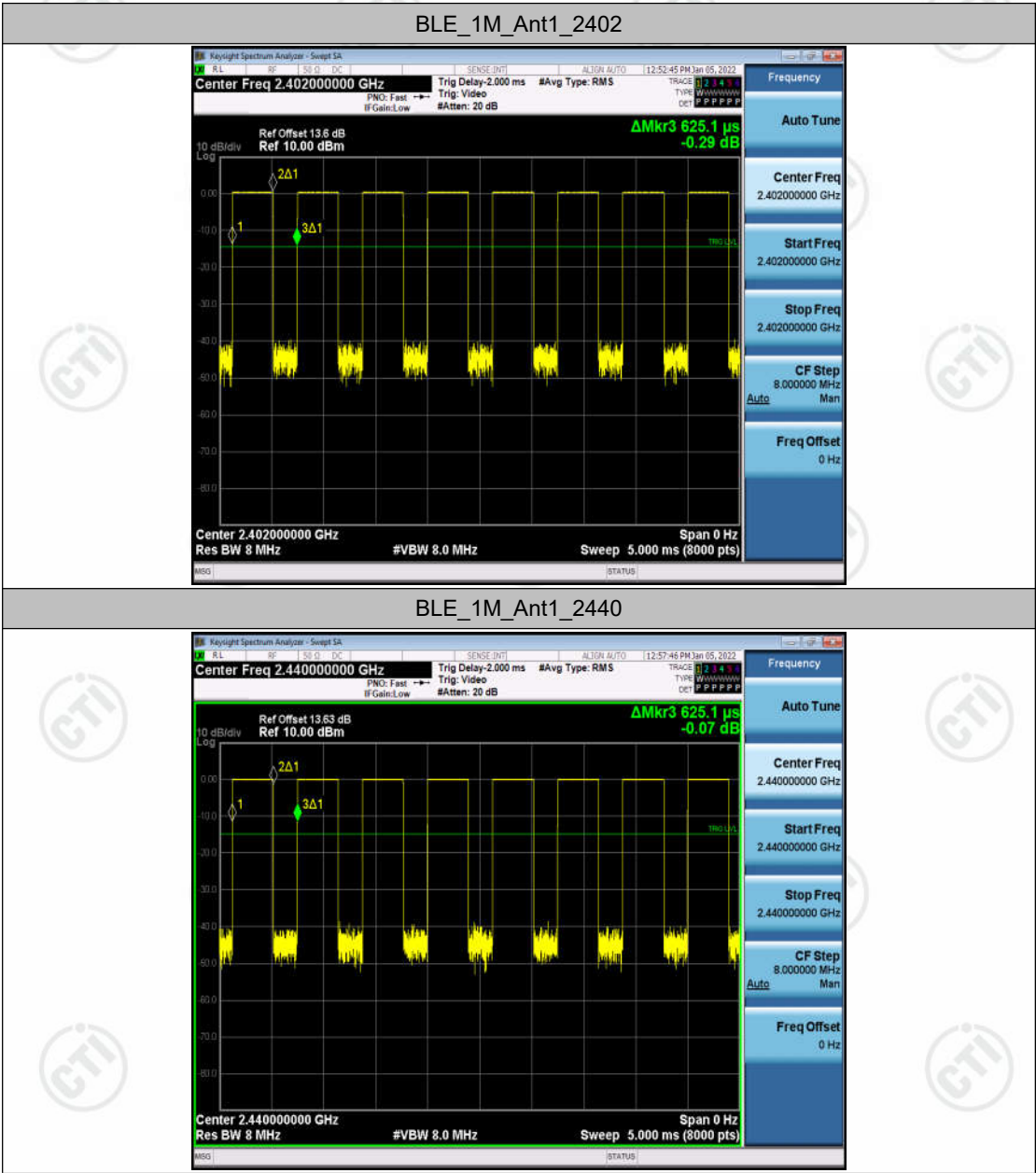


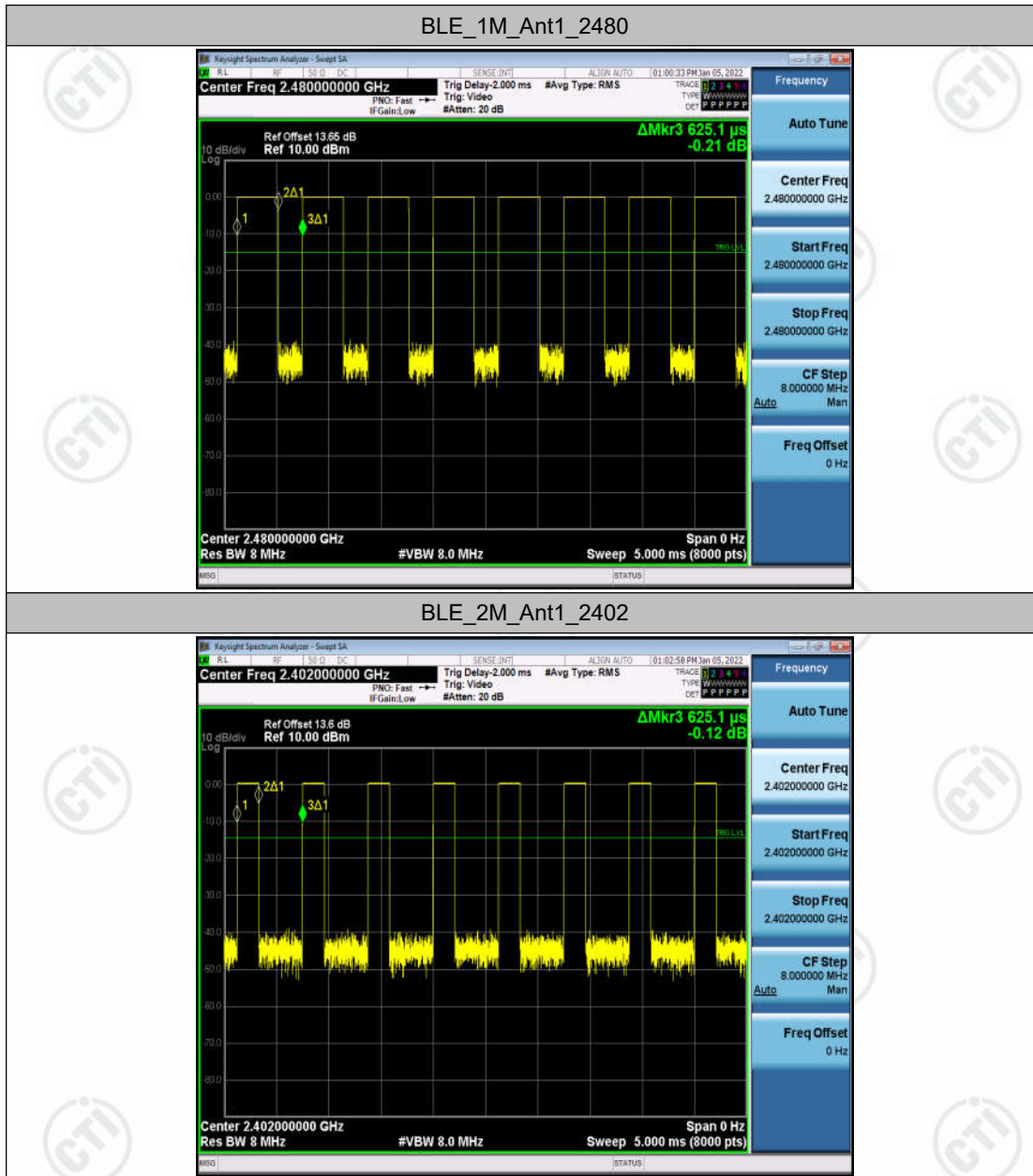
Appendix G: Duty Cycle

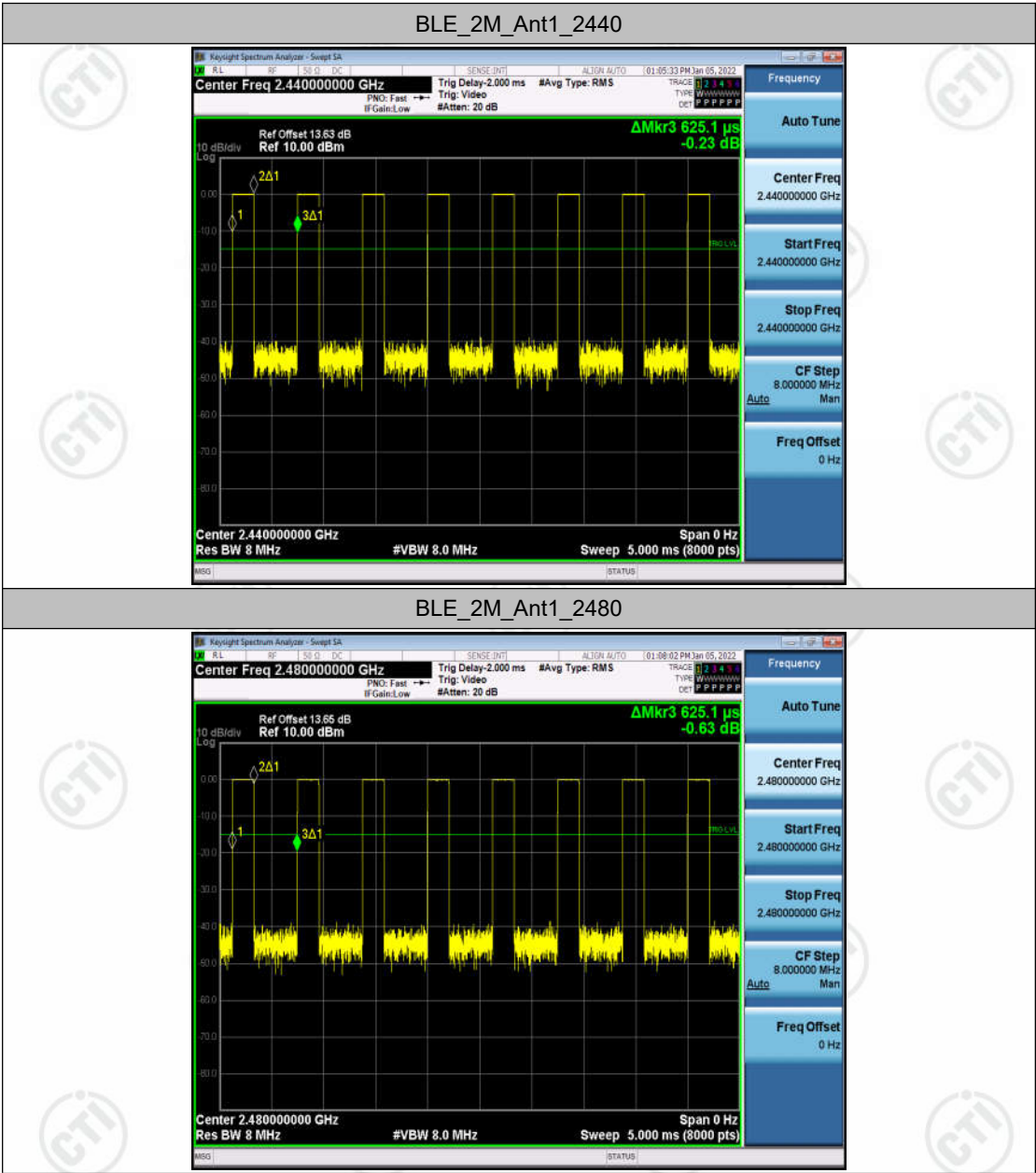
Test Result

| Test Mode | Antenna | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Limit | Verdict |
|-----------|---------|---------|----------------------------|--------------------------|----------------|-------|---------|
| BLE_1M    | Ant1    | 2402    | 0.39                       | 0.63                     | 63.00          | ---   | PASS    |
|           |         | 2440    | 0.39                       | 0.63                     | 63.00          | ---   | PASS    |
|           |         | 2480    | 0.39                       | 0.63                     | 63.00          | ---   | PASS    |
| BLE_2M    | Ant1    | 2402    | 0.21                       | 0.63                     | 33.30          | ---   | PASS    |
|           |         | 2440    | 0.21                       | 0.63                     | 33.20          | ---   | PASS    |
|           |         | 2480    | 0.21                       | 0.63                     | 33.30          | ---   | PASS    |

Test Graphs







\*\*\* End of Report \*\*\*