

## Appendix: Bluetooth LE

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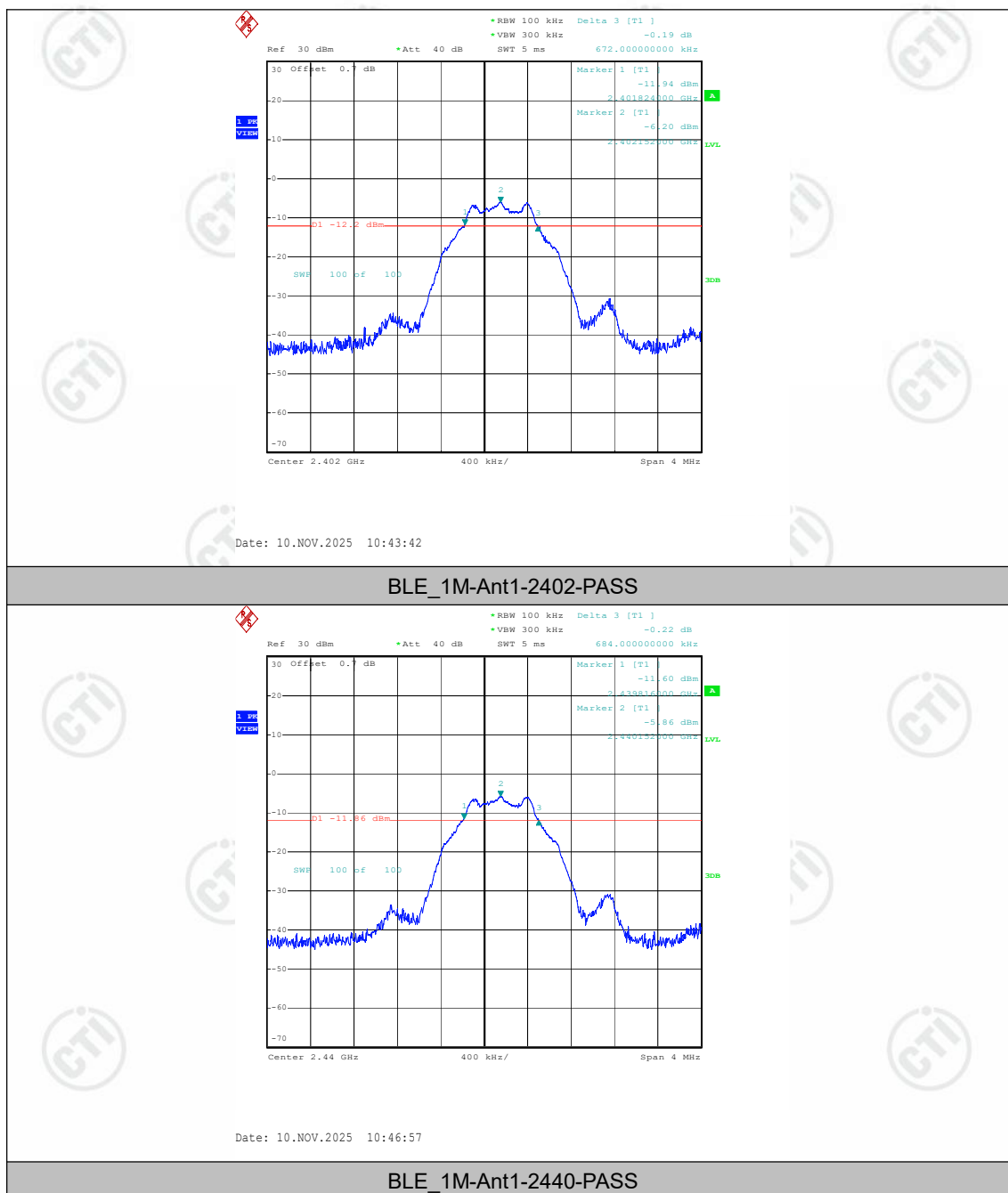
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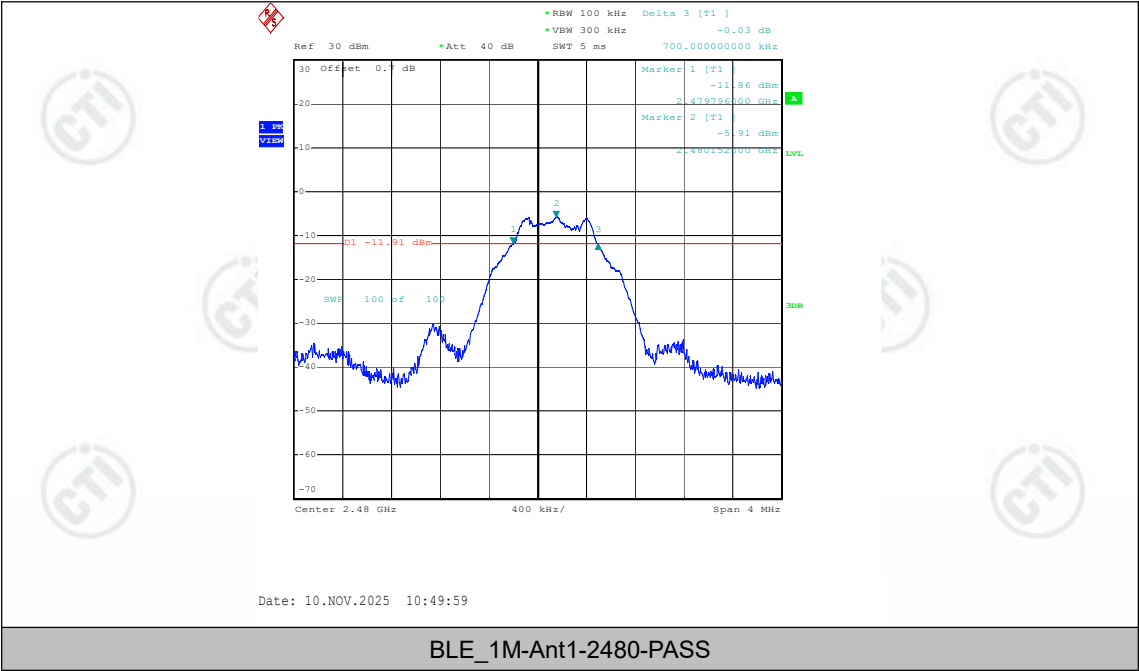
Appendix A: DTS Bandwidth

Test Result

| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|----------|---------|----------------|--------------|---------|---------|------------|---------|
| BLE_1M   | Ant1    | 2402           | 0.67         | 2401.82 | 2402.50 | 0.5        | PASS    |
| BLE_1M   | Ant1    | 2440           | 0.68         | 2439.82 | 2440.50 | 0.5        | PASS    |
| BLE_1M   | Ant1    | 2480           | 0.70         | 2479.80 | 2480.50 | 0.5        | PASS    |

## Test Graphs



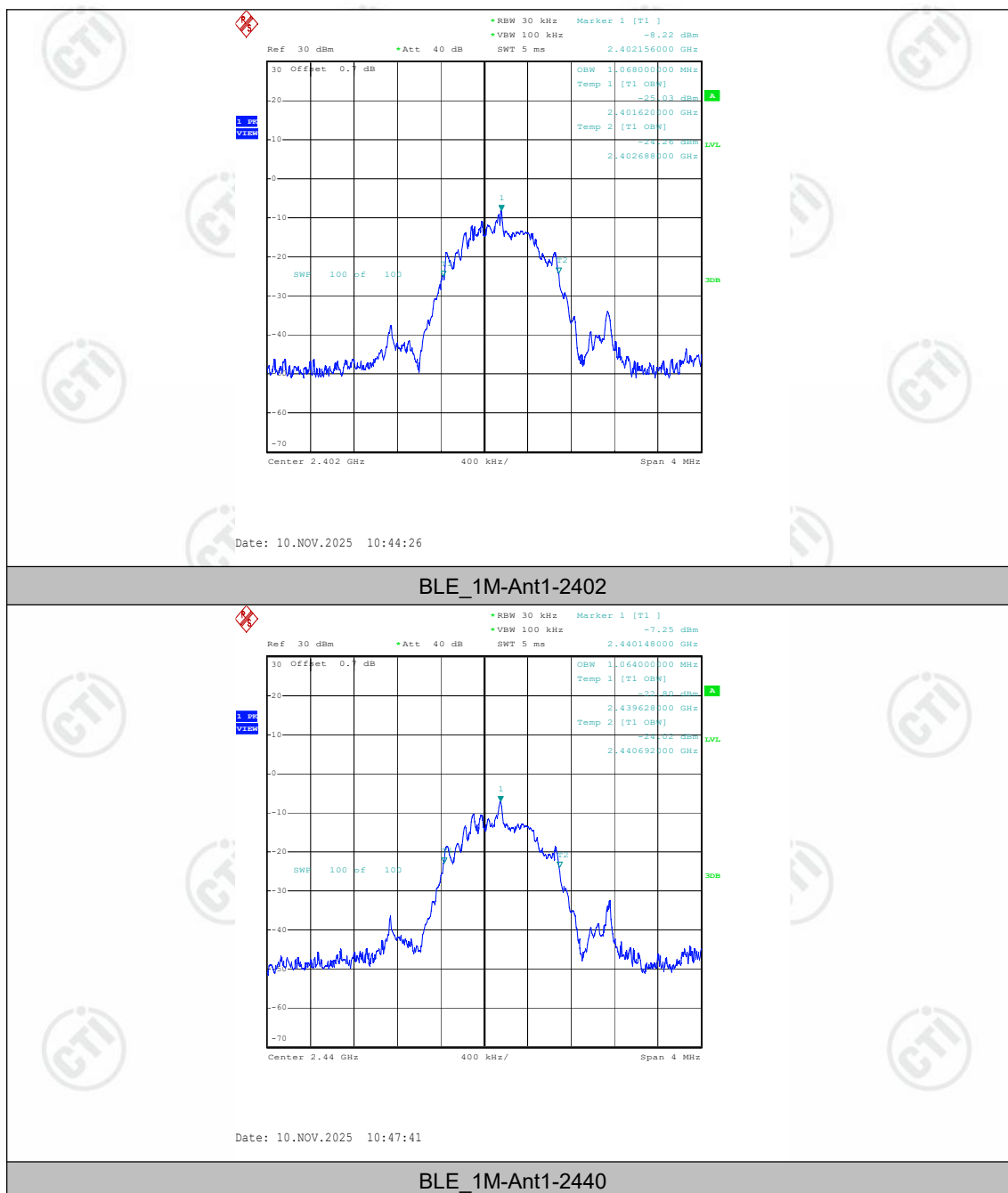


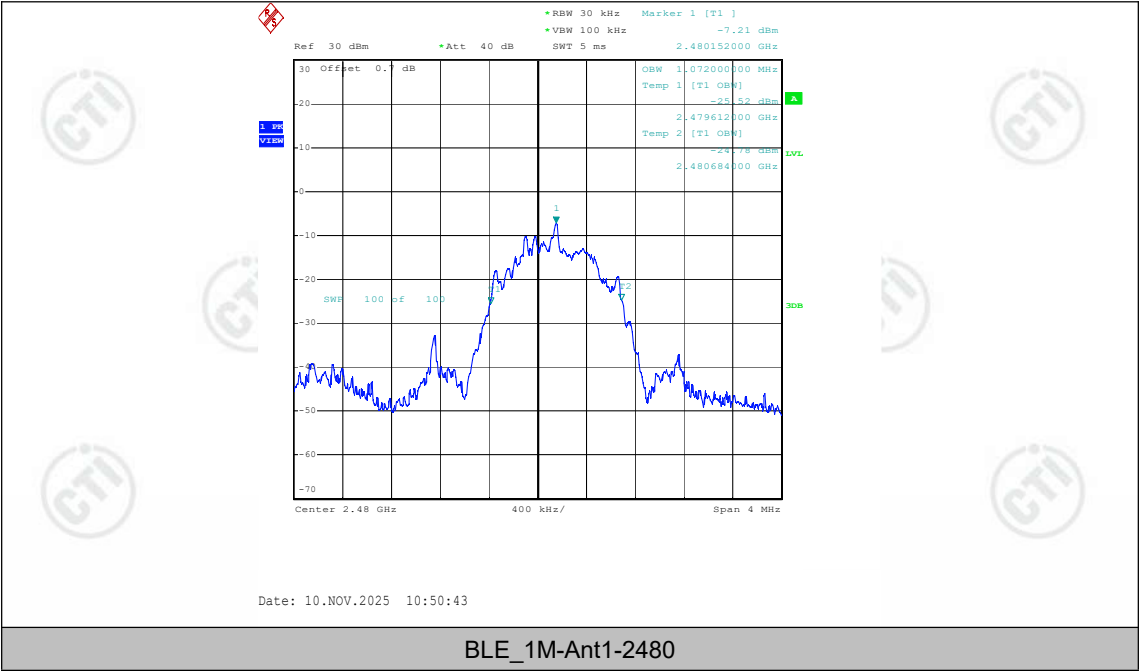
Appendix B: Occupied Channel Bandwidth

Test Result

| TestMode | Antenna | Frequency[MHz] | OCB [MHz] | Limit[MHz] | Verdict |
|----------|---------|----------------|-----------|------------|---------|
| BLE_1M   | Ant1    | 2402           | 1.0680    | ---        | ---     |
| BLE_1M   | Ant1    | 2440           | 1.0640    | ---        | ---     |
| BLE_1M   | Ant1    | 2480           | 1.0720    | ---        | ---     |

## Test Graphs



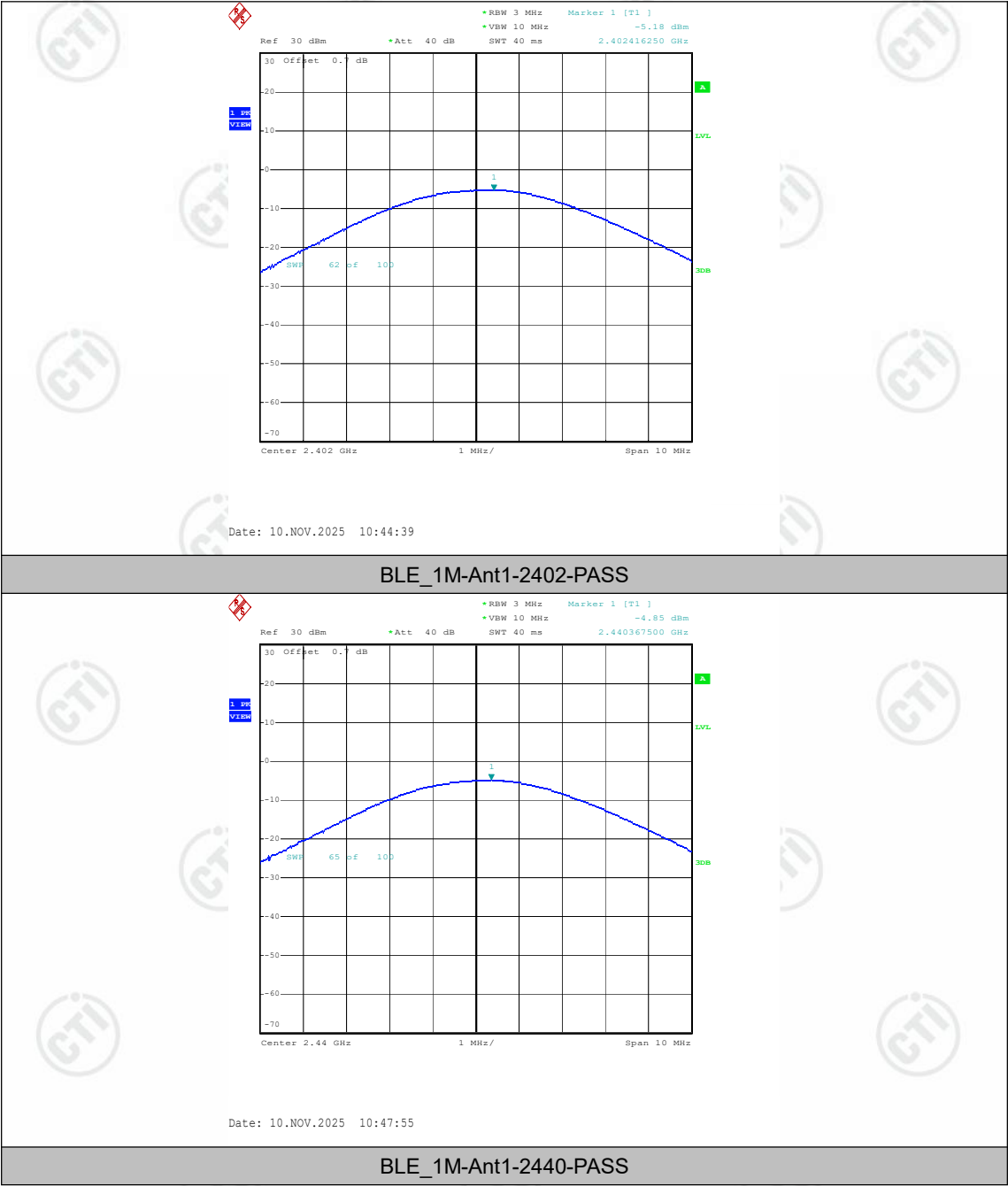


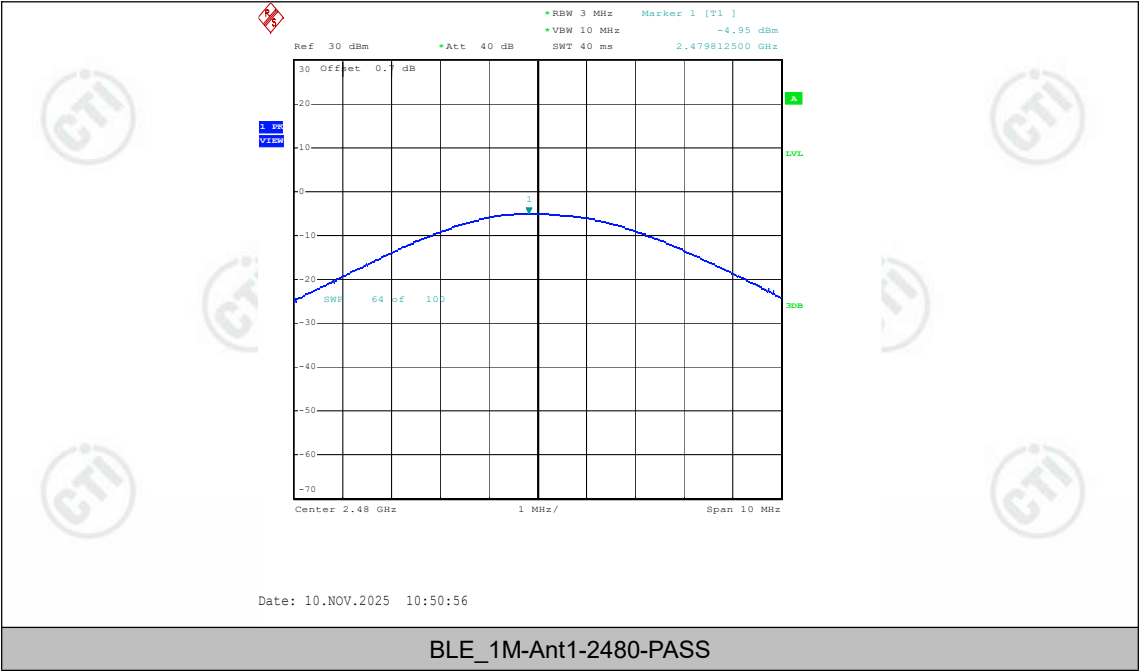
Appendix C: Maximum conducted output power

Test Result Peak

| TestMode | Antenna | Frequency[MHz] | Conducted<br>Peak<br>Power[dBm] | Conducted<br>Limit[dBm] | Verdict |
|----------|---------|----------------|---------------------------------|-------------------------|---------|
| BLE_1M   | Ant1    | 2402           | -5.18                           | ≤30                     | PASS    |
| BLE_1M   | Ant1    | 2440           | -4.85                           | ≤30                     | PASS    |
| BLE_1M   | Ant1    | 2480           | -4.95                           | ≤30                     | PASS    |

Test Graphs Peak



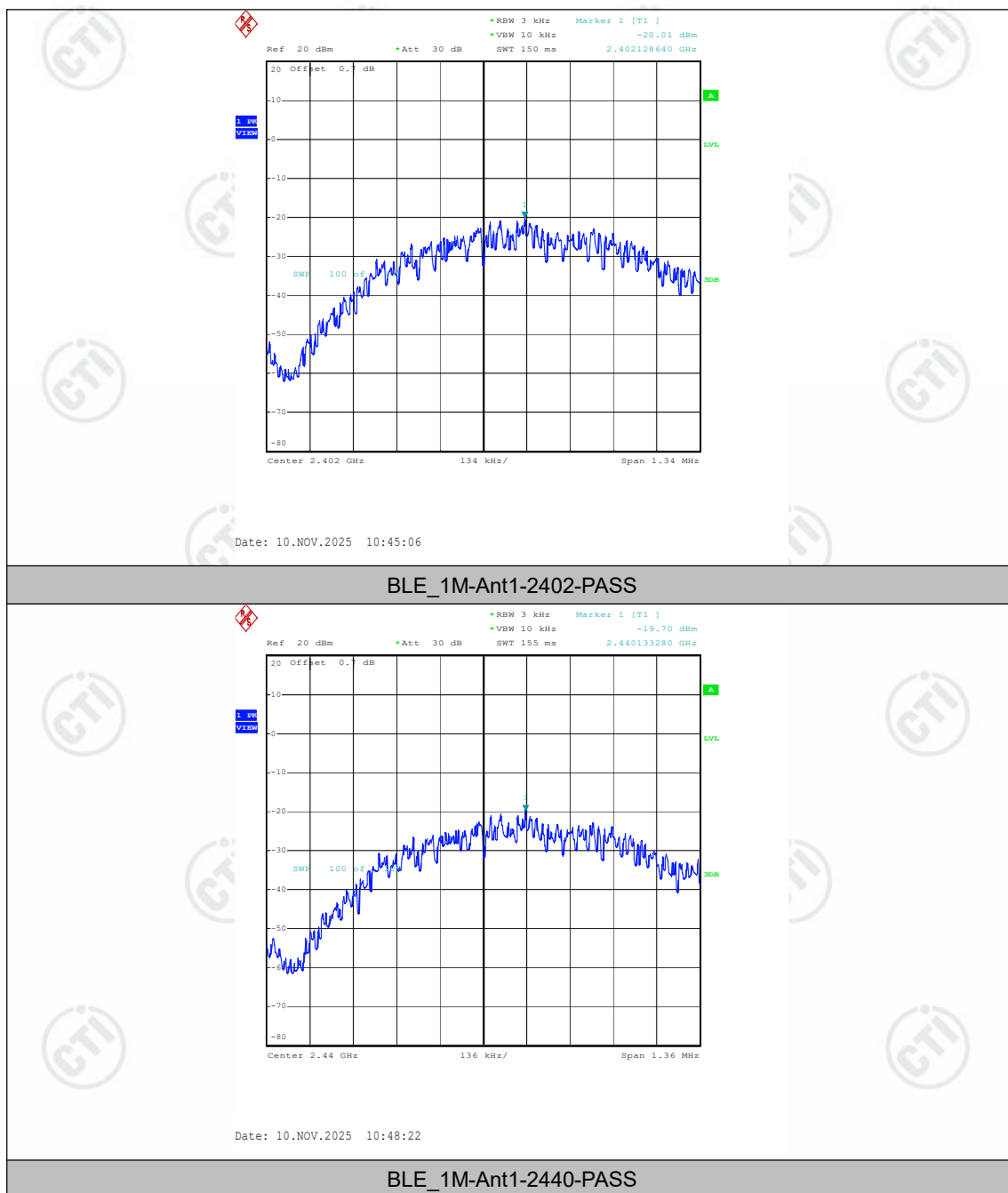


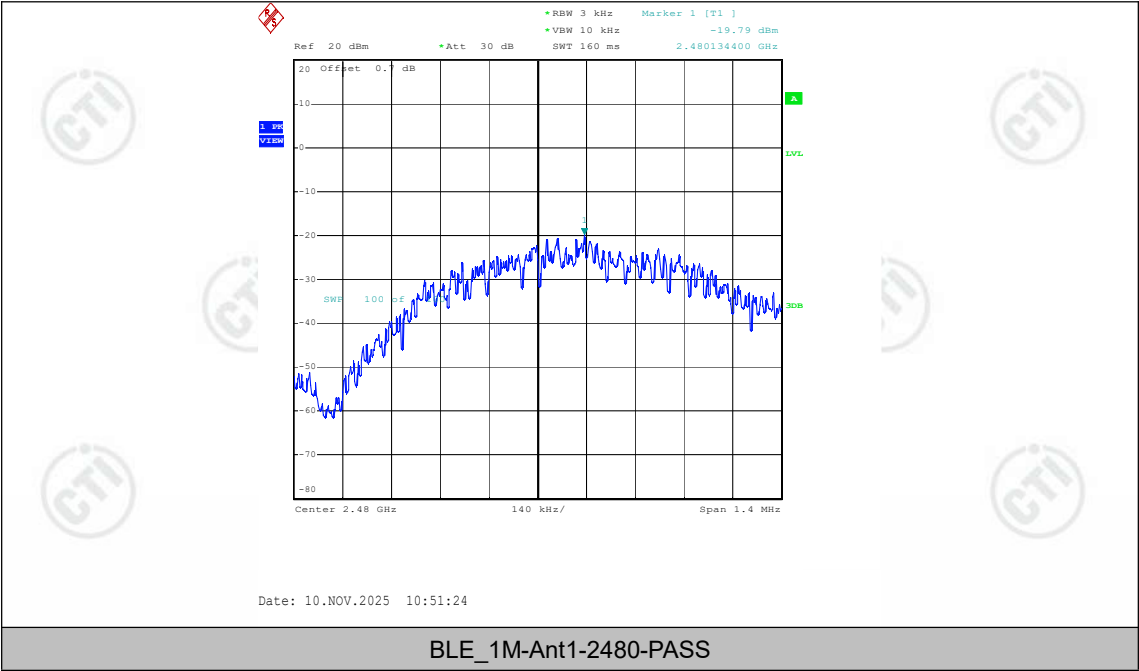
Appendix D: Maximum power spectral density

Test Result

| TestMode | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|----------|---------|----------------|------------------|-----------------|---------|
| BLE_1M   | Ant1    | 2402           | -20.01           | ≤8.00           | PASS    |
| BLE_1M   | Ant1    | 2440           | -19.70           | ≤8.00           | PASS    |
| BLE_1M   | Ant1    | 2480           | -19.79           | ≤8.00           | PASS    |

## Test Graphs



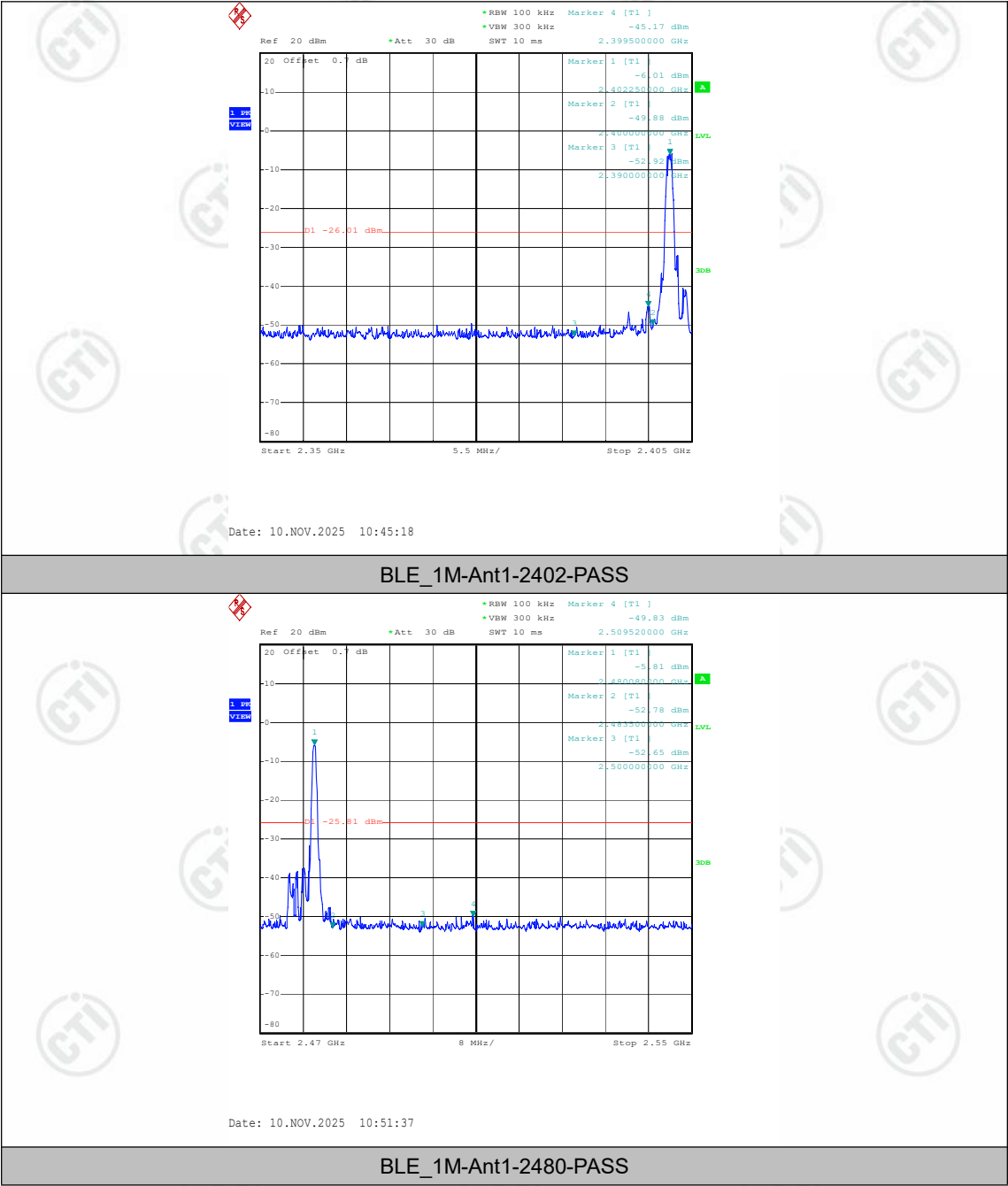


Appendix E: Band edge measurements

Test Result

| TestMode | Antenna | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|--------|----------------|---------------|-------------|------------|---------|
| BLE_1M   | Ant1    | Low    | 2402           | -6.01         | -45.17      | ≤-26.01    | PASS    |
| BLE_1M   | Ant1    | High   | 2480           | -5.81         | -49.83      | ≤-25.81    | PASS    |

Test Graphs

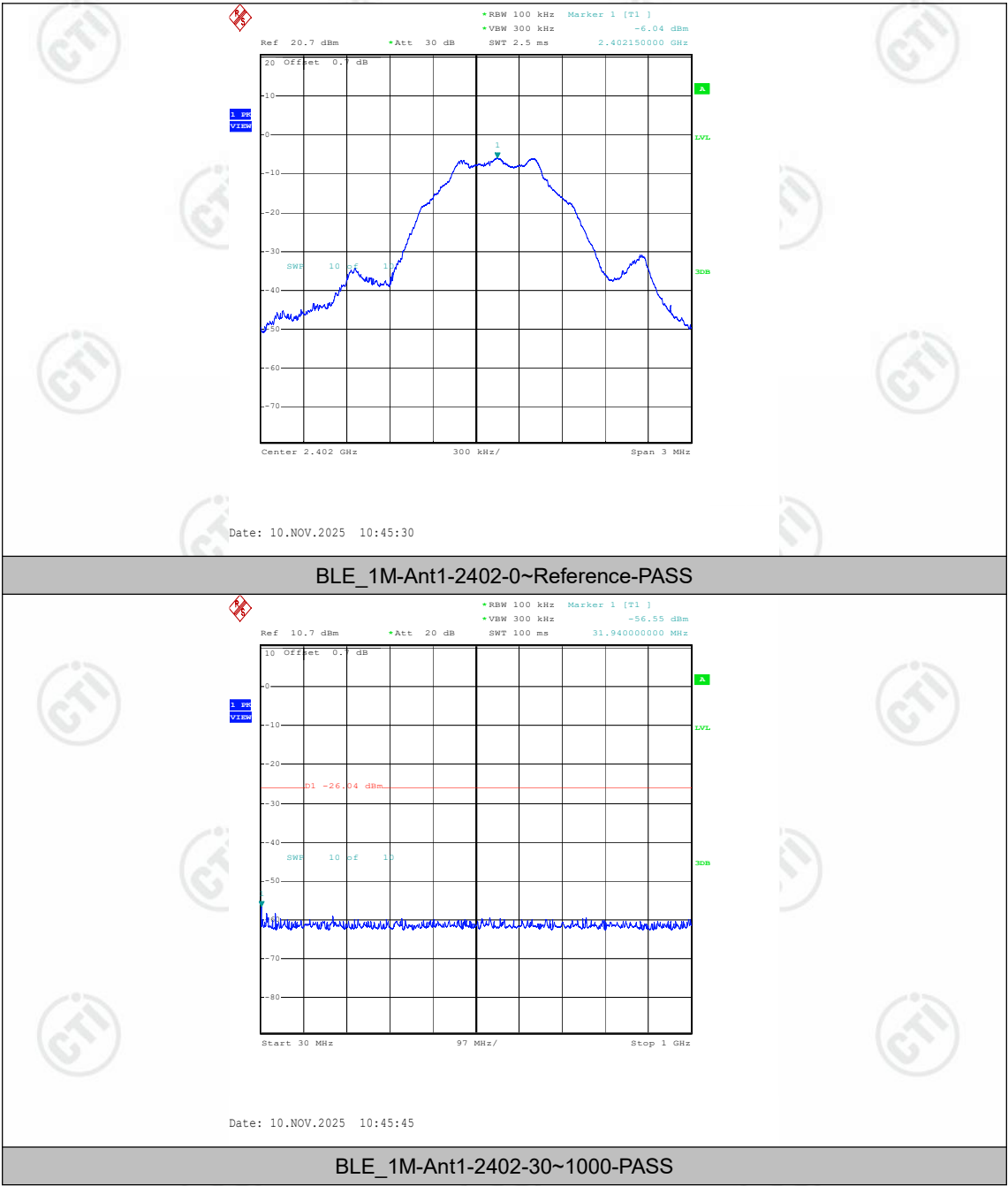


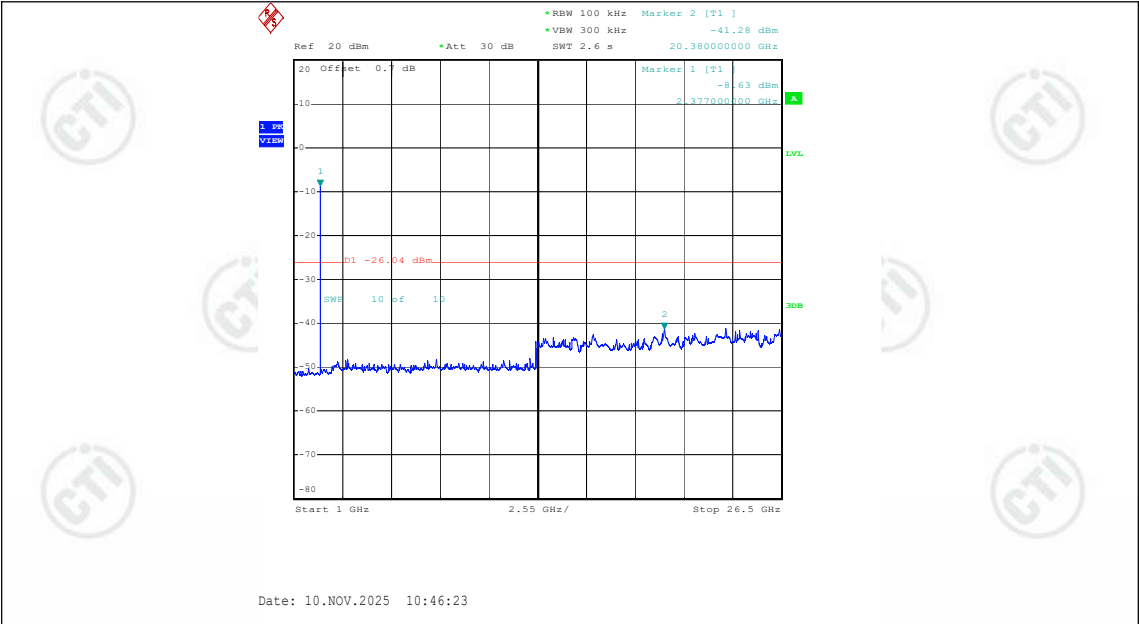
Appendix F: Conducted Spurious Emission

Test Result

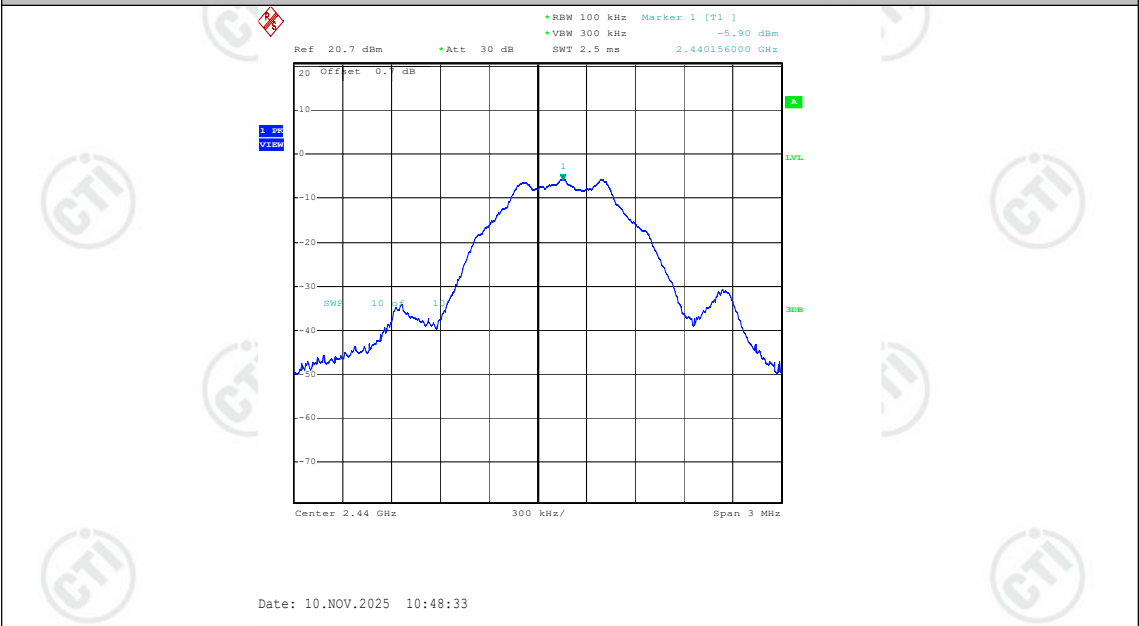
| TestMode | Antenna | Frequency [MHz] | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|-----------------|-----------------|----------------|-------------|------------|---------|
| BLE_1M   | Ant1    | 2402            | 0~Reference     | -6.04          | -6.04       | ---        | PASS    |
| BLE_1M   | Ant1    | 2402            | 30~1000         | -6.04          | -56.55      | ≤-26.04    | PASS    |
| BLE_1M   | Ant1    | 2402            | 1000~26500      | -6.04          | -41.28      | ≤-26.04    | PASS    |
| BLE_1M   | Ant1    | 2440            | 0~Reference     | -5.90          | -5.90       | ---        | PASS    |
| BLE_1M   | Ant1    | 2440            | 30~1000         | -5.90          | -56.62      | ≤-25.9     | PASS    |
| BLE_1M   | Ant1    | 2440            | 1000~26500      | -5.90          | -39.97      | ≤-25.9     | PASS    |
| BLE_1M   | Ant1    | 2480            | 0~Reference     | -5.97          | -5.97       | ---        | PASS    |
| BLE_1M   | Ant1    | 2480            | 30~1000         | -5.97          | -56.95      | ≤-25.97    | PASS    |
| BLE_1M   | Ant1    | 2480            | 1000~26500      | -5.97          | -41.63      | ≤-25.97    | PASS    |

Test Graphs

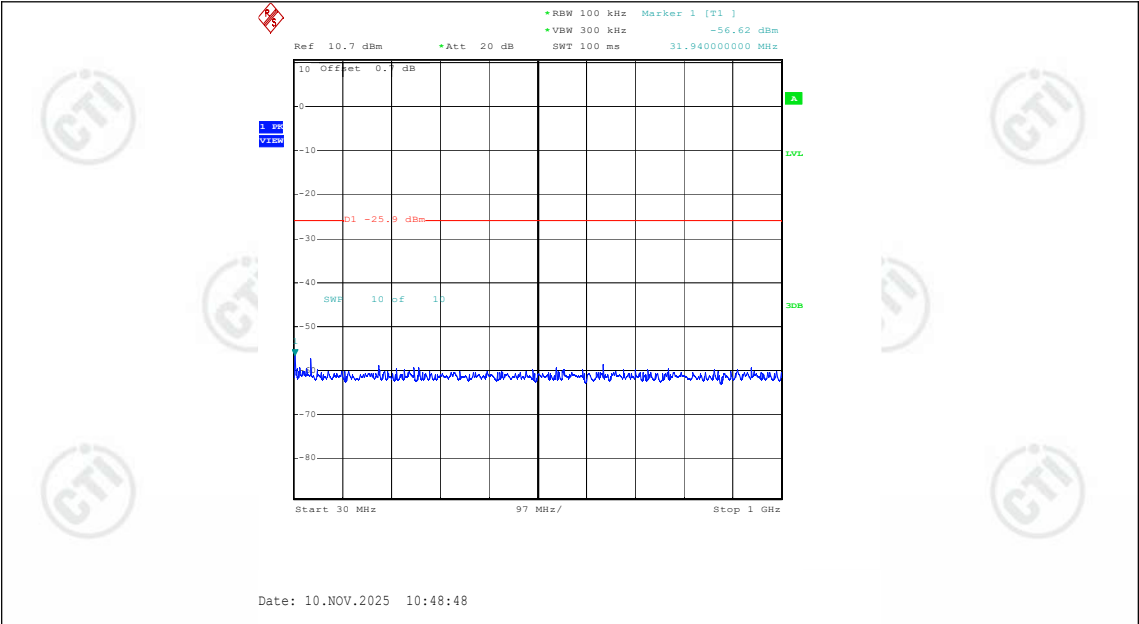




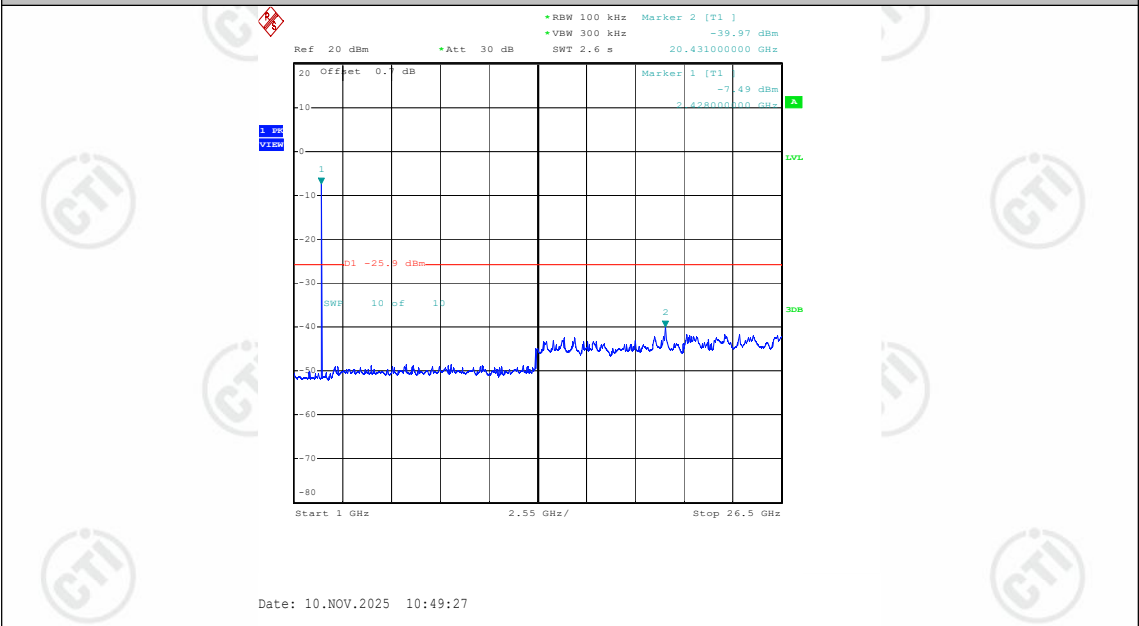
BLE\_1M-Ant1-2402-1000~26500-PASS



BLE\_1M-Ant1-2440-0~Reference-PASS



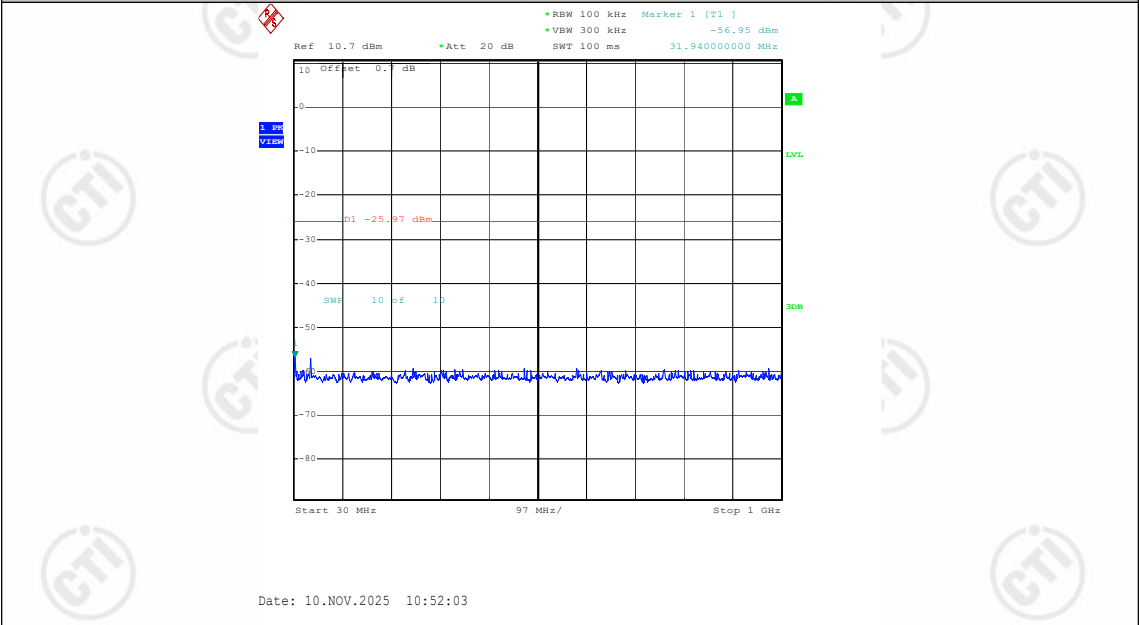
BLE\_1M-Ant1-2440-30~1000-PASS



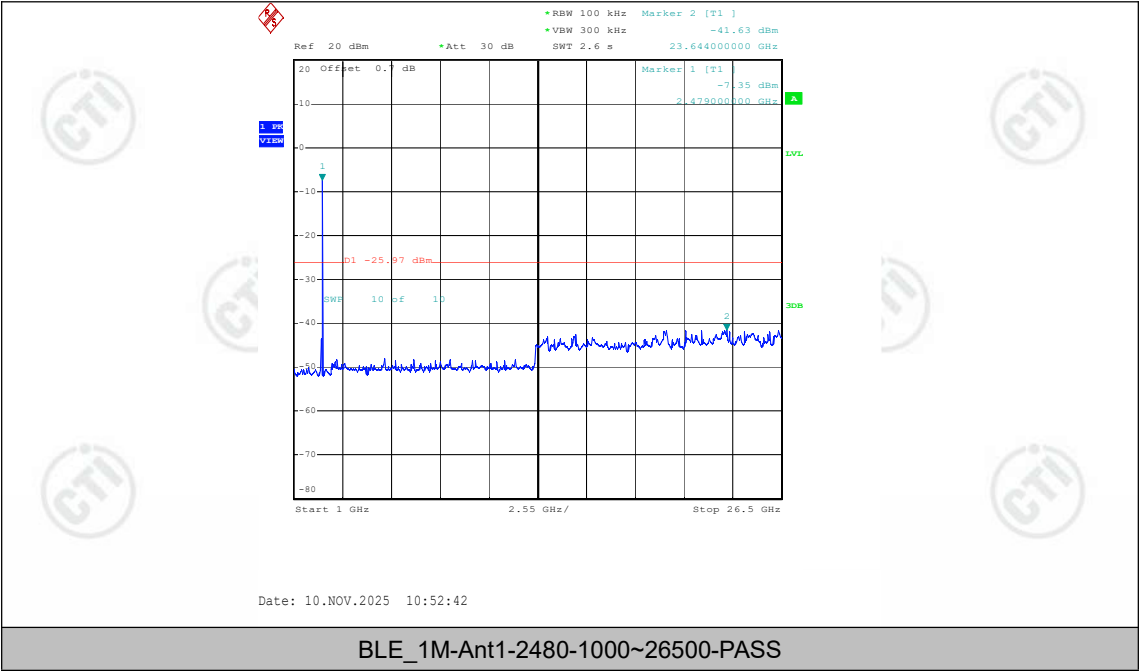
BLE\_1M-Ant1-2440-1000~26500-PASS



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



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



Appendix G: Duty Cycle

Test Result

| TestMode | Antenna | Frequency[MHz] | ON Time [ms] | Period [ms] | Duty Cycle [%] | Duty Cycle Factor[dB] |
|----------|---------|----------------|--------------|-------------|----------------|-----------------------|
| BLE_1M   | Ant1    | 2402           | 0.39         | 0.63        | 61.90          | 2.08                  |
| BLE_1M   | Ant1    | 2440           | 0.40         | 0.63        | 63.49          | 1.97                  |
| BLE_1M   | Ant1    | 2480           | 0.40         | 0.63        | 63.49          | 1.97                  |

Test Graphs

