# Appendix for Bluetooth BLE mode

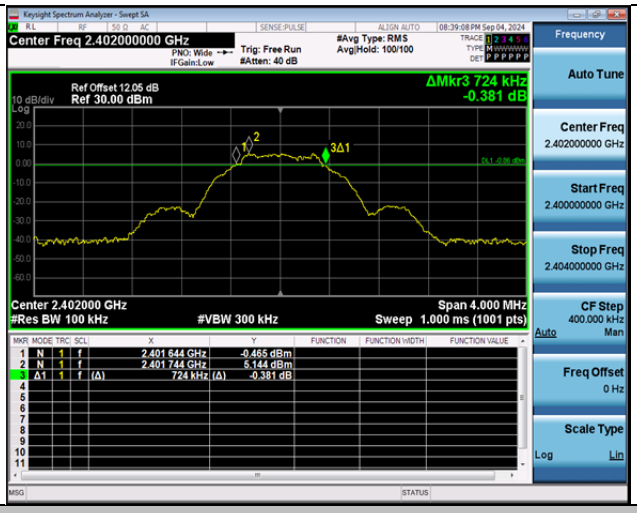
Product Name: InTOUCH04A-AllyW
Model No: InAIO040A

# Appendix A: DTS Bandwidth

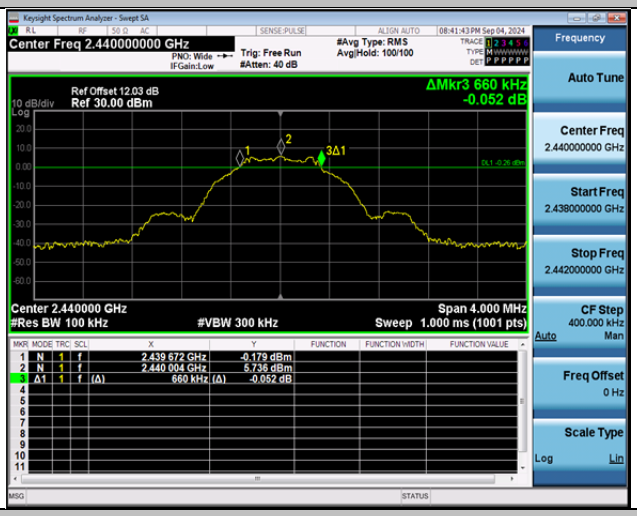
## Test Result

| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 0.724 | 2401.644 | 2402.368 | 0.5 | PASS |
| BLE_1M | Ant1 | 2440 | 0.660 | 2439.672 | 2440.332 | 0.5 | PASS |
| BLE_1M | Ant1 | 2480 | 0.684 | 2479.660 | 2480.344 | 0.5 | PASS |

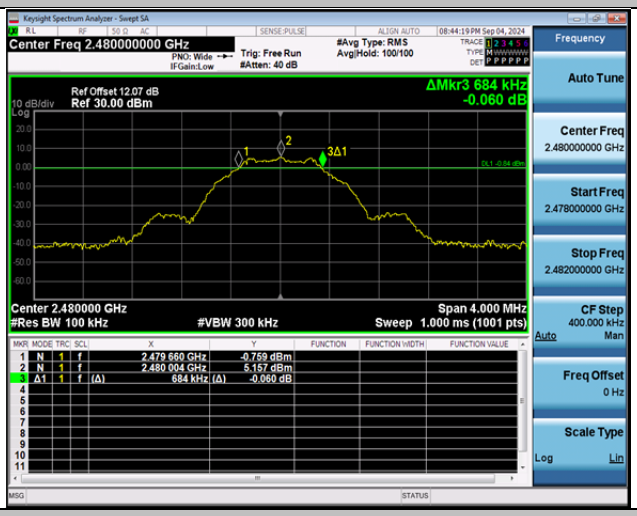
## Test Graphs




BLE_1M-Ant1-2402-PASS




BLE_1M-Ant1-2440-PASS



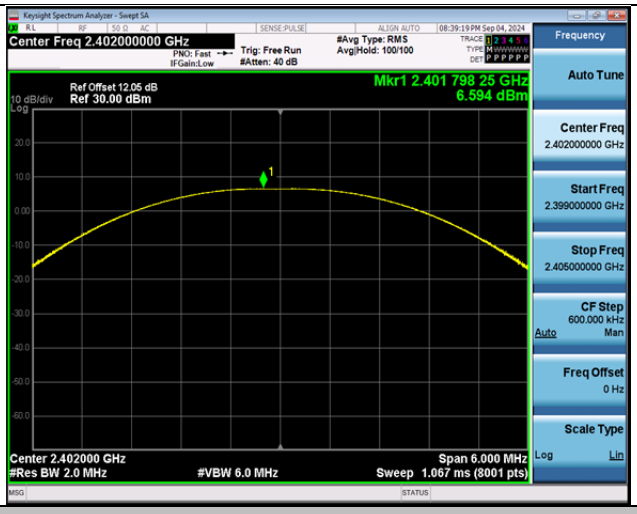

BLE_1M-Ant1-2480-PASS

# Appendix B: Maximum conducted output power

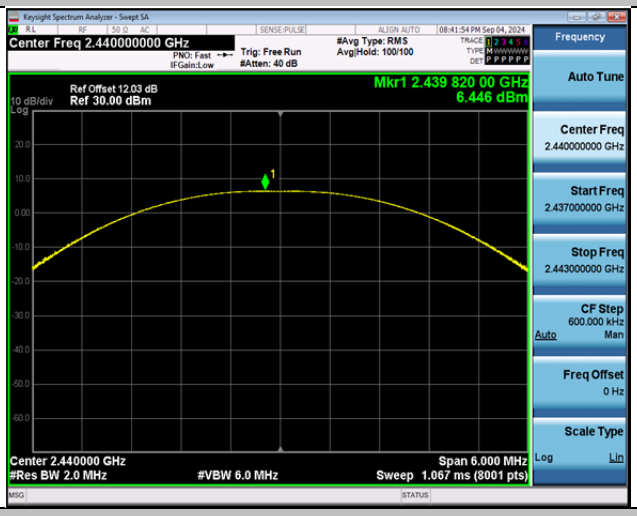
## Test Result Peak

| TestMode | Antenna | Frequency[MHz] | Conducted Peak Powert[dBm] | Conducted Limit[dBm] | Verdict |
|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 6.59 | ≤30 | PASS |
| BLE_1M | Ant1 | 2440 | 6.45 | ≤30 | PASS |
| BLE_1M | Ant1 | 2480 | 5.87 | ≤30 | PASS |

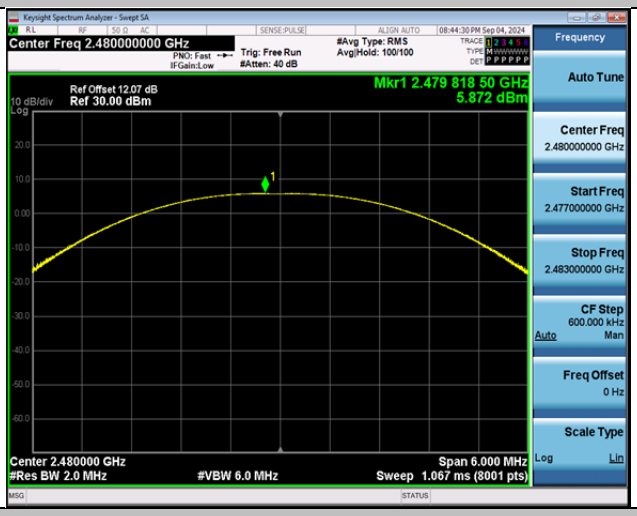
## Test Graphs Peak




BLE_1M-Ant1-2402-PASS




BLE_1M-Ant1-2440-PASS



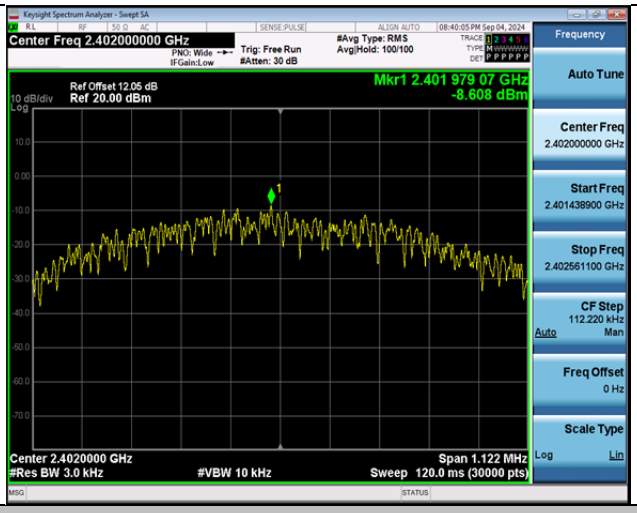

BLE_1M-Ant1-2480-PASS

# Appendix C: Maximum power spectral density

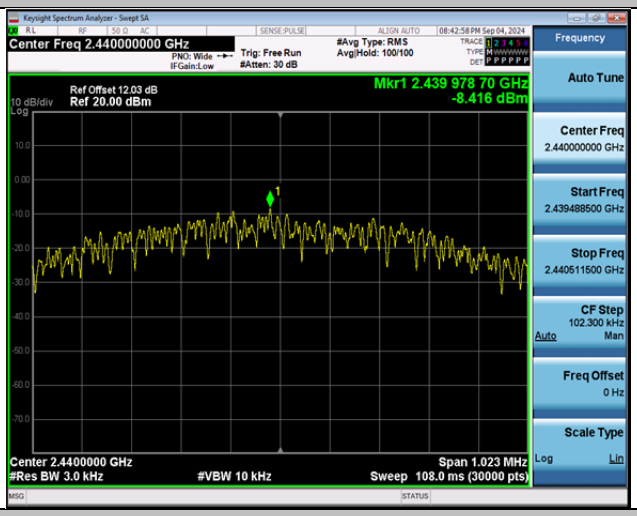
## Test Result

| TestMode | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | -8.61 | ≤8.00 | PASS |
| BLE_1M | Ant1 | 2440 | -8.42 | ≤8.00 | PASS |
| BLE_1M | Ant1 | 2480 | -9.04 | ≤8.00 | PASS |

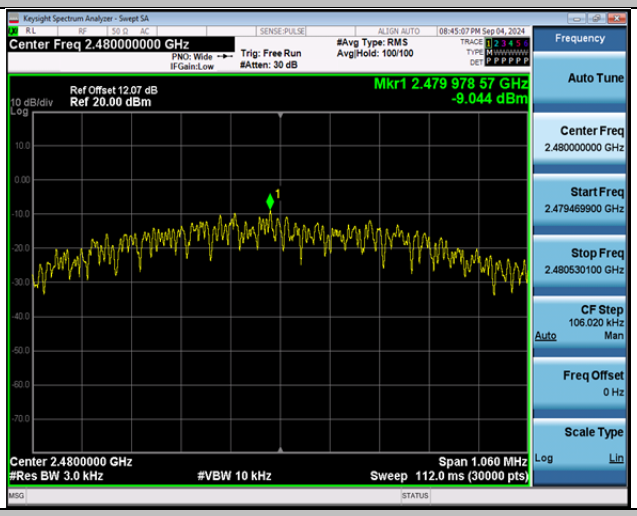
## Test Graphs




BLE_1M-Ant1-2402-PASS




BLE_1M-Ant1-2440-PASS



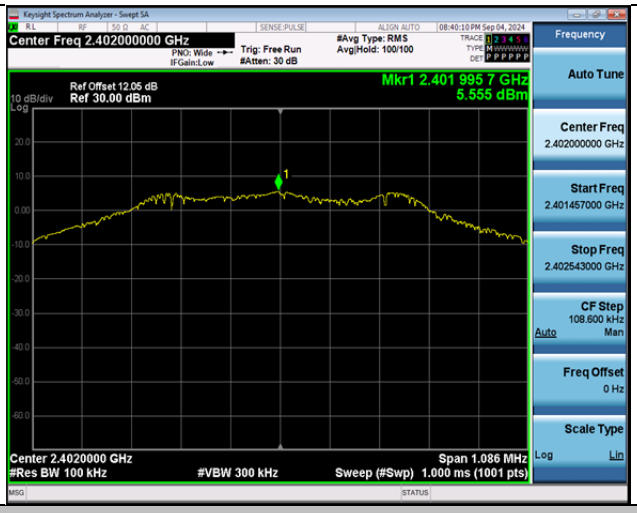

BLE_1M-Ant1-2480-PASS

# Appendix D: Reference level measurement

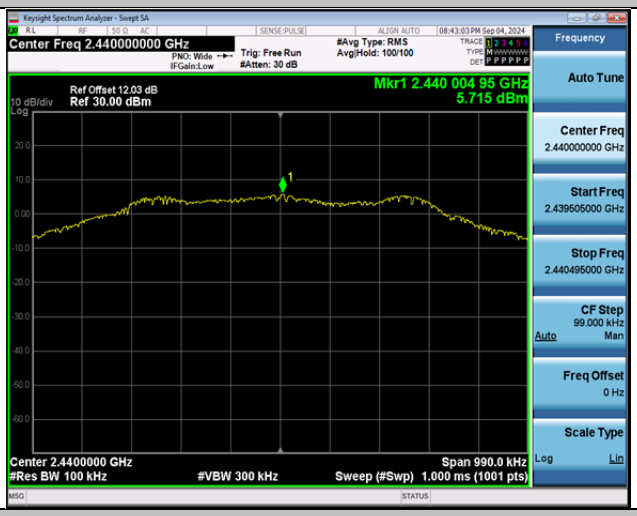
## Test Result

| TestMode | Antenna | Freq(MHz) | Max.Point[MHz] | Result[dBm] |
|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 2402.00 | 5.56 |
| BLE_1M | Ant1 | 2440 | 2440.00 | 5.72 |
| BLE_1M | Ant1 | 2480 | 2480.00 | 5.12 |

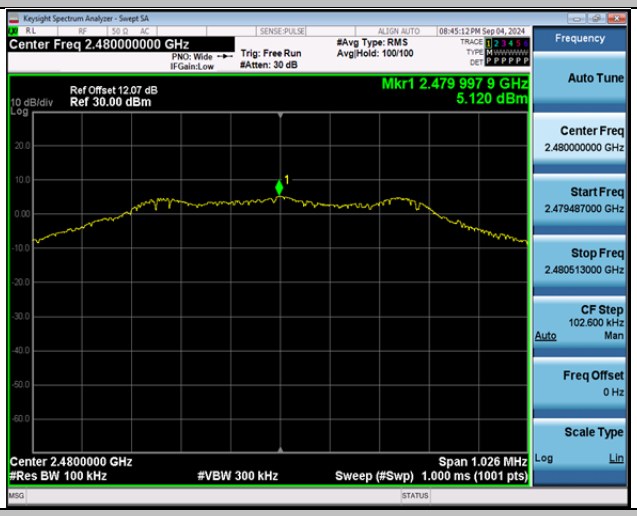
## Test Graphs




BLE_1M-Ant1-2402-PASS




BLE_1M-Ant1-2440-PASS



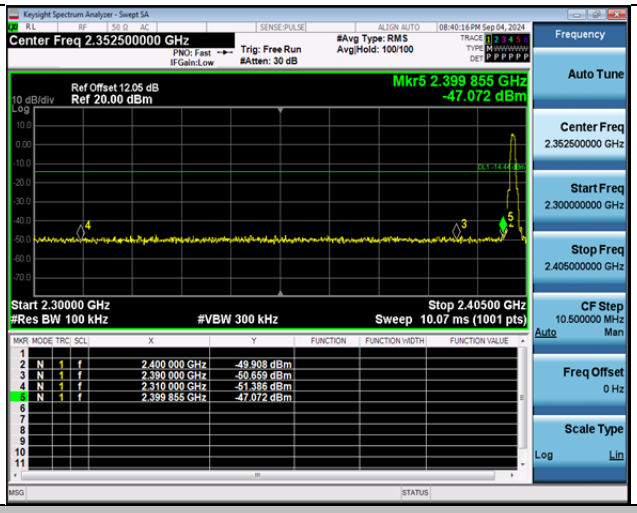

BLE_1M-Ant1-2480-PASS

# Appendix E: Band edge measurements

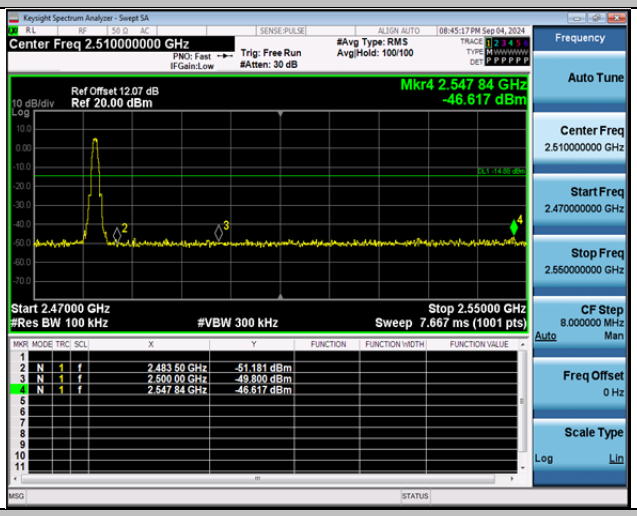
## Test Result

| TestMode | Antenna | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | Low | 2402 | 5.56 | -47.07 | ≤-14.44 | PASS |
| BLE_1M | Ant1 | High | 2480 | 5.12 | -46.62 | ≤-14.88 | PASS |

## Test Graphs




BLE_1M-Ant1-2402-PASS



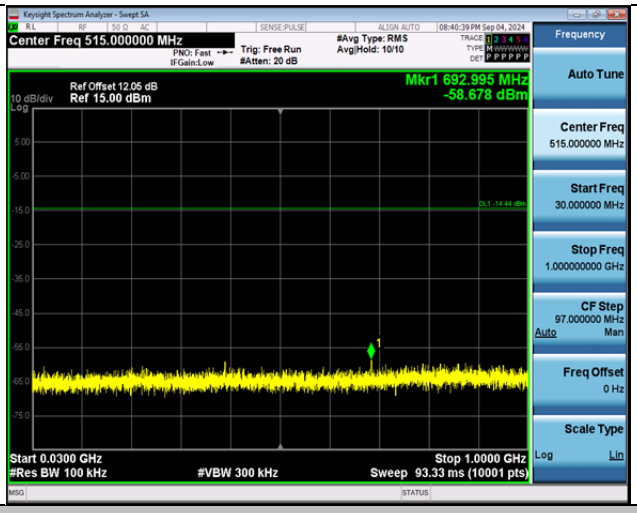

BLE_1M-Ant1-2480-PASS

# Appendix F: Conducted Spurious Emission

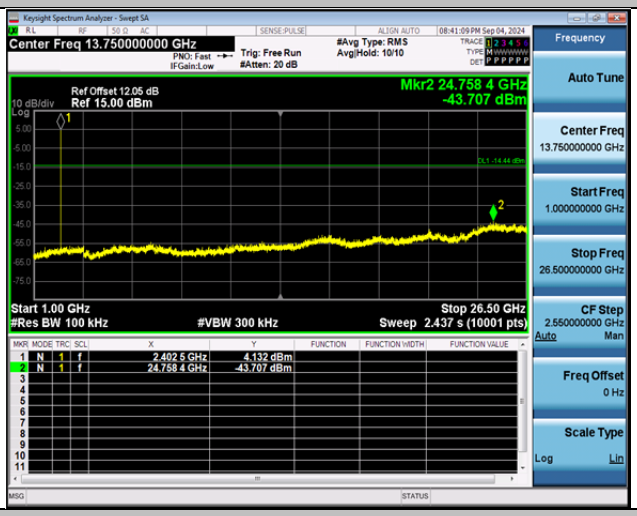
## Test Result

| TestMode | Antenna | Frequency[MHz] | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 30~1000 | 5.56 | -58.68 | ≤-14.44 | PASS |
| BLE_1M | Ant1 | 2402 | 1000~26500 | 5.56 | -43.71 | ≤-14.44 | PASS |
| BLE_1M | Ant1 | 2440 | 30~1000 | 5.72 | -59.44 | ≤-14.28 | PASS |
| BLE_1M | Ant1 | 2440 | 1000~26500 | 5.72 | -44.35 | ≤-14.28 | PASS |
| BLE_1M | Ant1 | 2480 | 30~1000 | 5.12 | -58.8 | ≤-14.88 | PASS |
| BLE_1M | Ant1 | 2480 | 1000~26500 | 5.12 | -43.92 | ≤-14.88 | PASS |

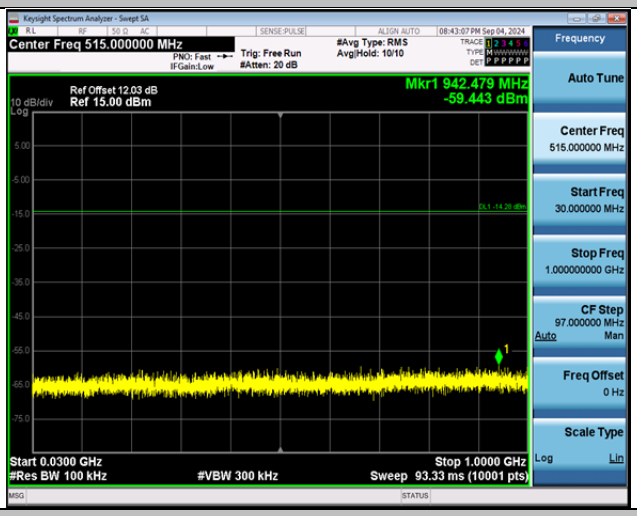
## Test Graphs



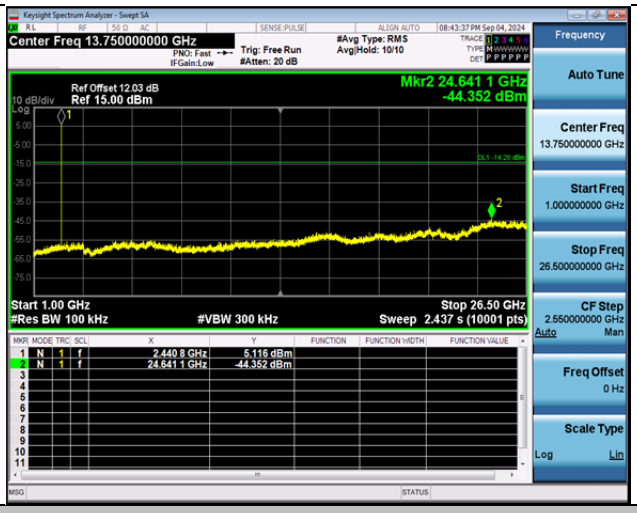

BLE_1M-Ant1-2402-30~1000-PASS



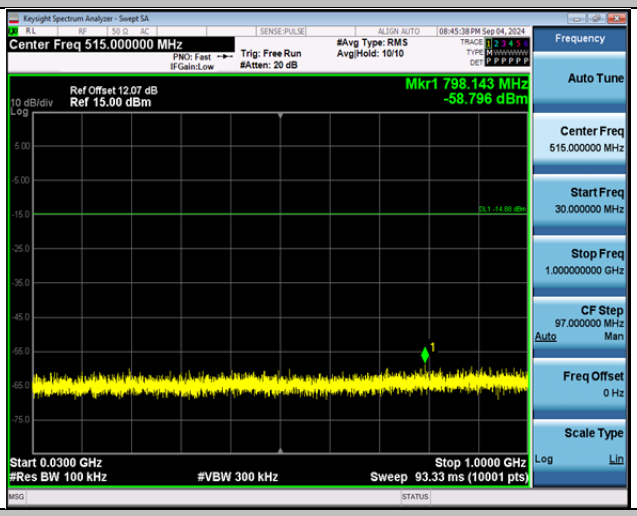

BLE_1M-Ant1-2402-1000~26500-PASS



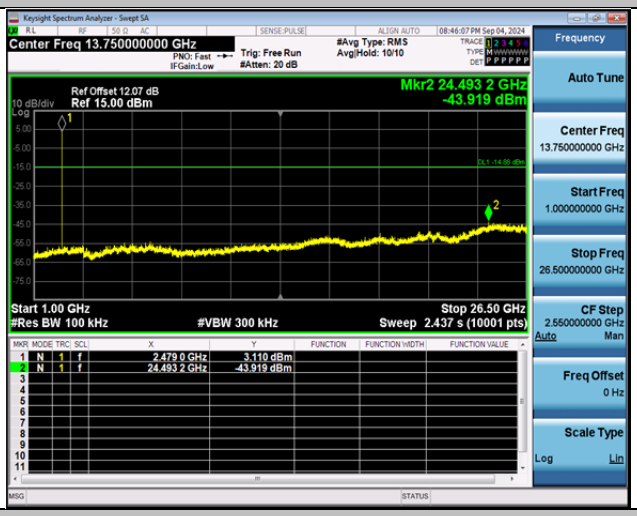

BLE_1M-Ant1-2440-30~1000-PASS




BLE_1M-Ant1-2440-1000~26500-PASS




BLE_1M-Ant1-2480-30~1000-PASS




BLE_1M-Ant1-2480-1000~26500-PASS