# Appendix Test Data

| | | | |
|---|---|---|---|
| Report No.: | 18220WC30263201 | Test Sample No.: | 1-2-2 |
| Start Test Date: | 2023.12.28 | Finish Test Date: | 2023.12.29 |
| Test Engineer: | Hayman Chen | Auditor: | Rock Luo |
| Temperature: | 25.2℃ | Relative Humidity: | 45% |
| Pressure: | 101kPa | | |

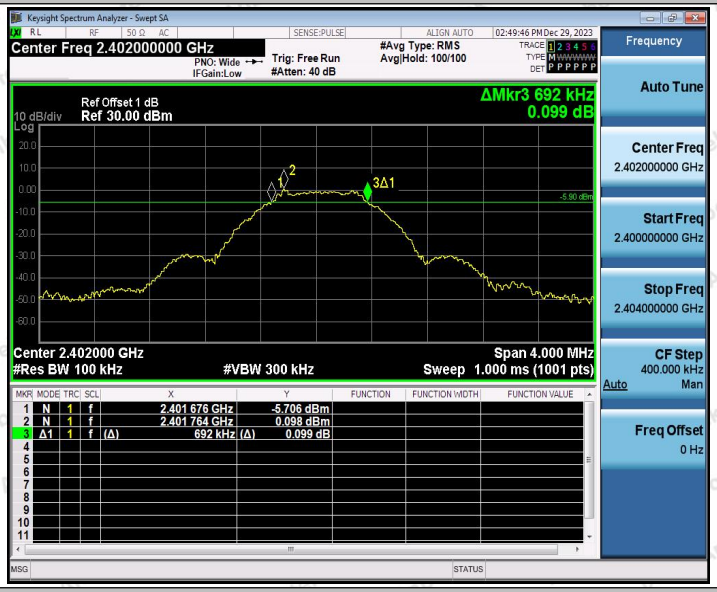
## Appendix A: DTS Bandwidth

### Test Result

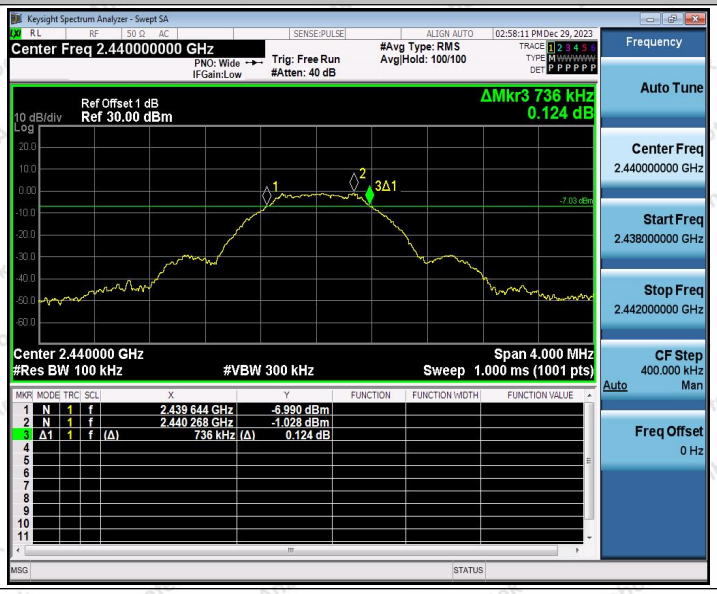
| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 0.692 | 2401.676 | 2402.368 | 0.5 | PASS |
| | | 2440 | 0.736 | 2439.644 | 2440.380 | 0.5 | PASS |
| | | 2480 | 0.728 | 2479.656 | 2480.384 | 0.5 | PASS |

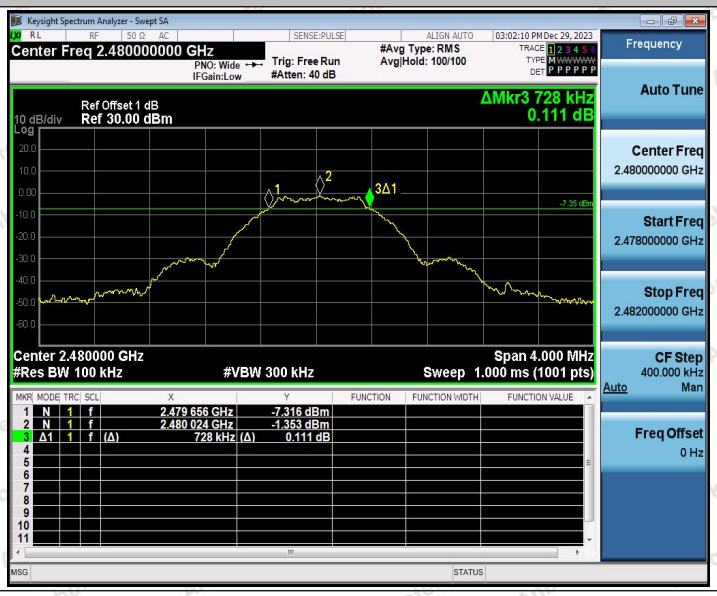
## Test Graphs

BLE_1M_Ant1_2402




BLE_1M_Ant1_2440



| BLE_1M_Ant1_2480 |
| --- |
|  |

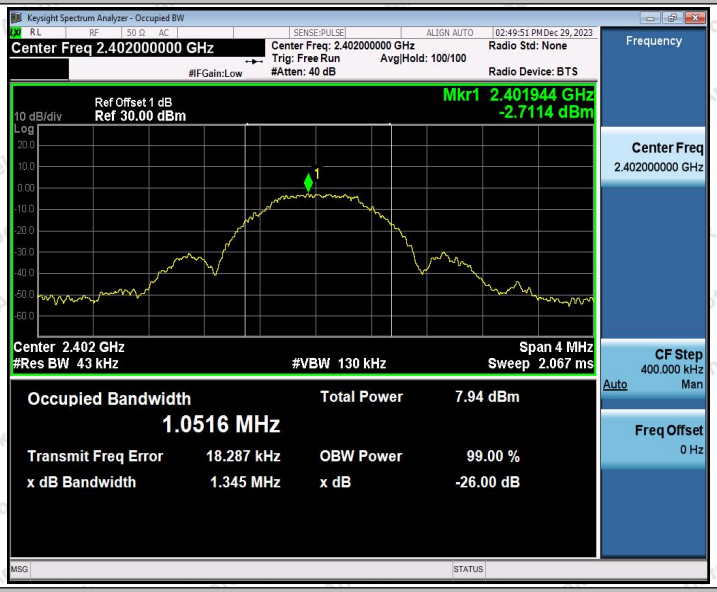
# Appendix B: Occupied Channel Bandwidth

## Test Result

| TestMode | Antenna | Frequency[MHz] | OCB [MHz] | FL[MHz] | FH[MHz] |
|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 1.0516 | 2401.4925 | 2402.5441 |
| | | 2440 | 1.0539 | 2439.4897 | 2440.5436 |
| | | 2480 | 1.0842 | 2479.4748 | 2480.5590 |

## Test Graphs

BLE_1M_Ant1_2402




BLE_1M_Ant1_2440

| BLE_1M_Ant1_2480 |
| --- |
| |

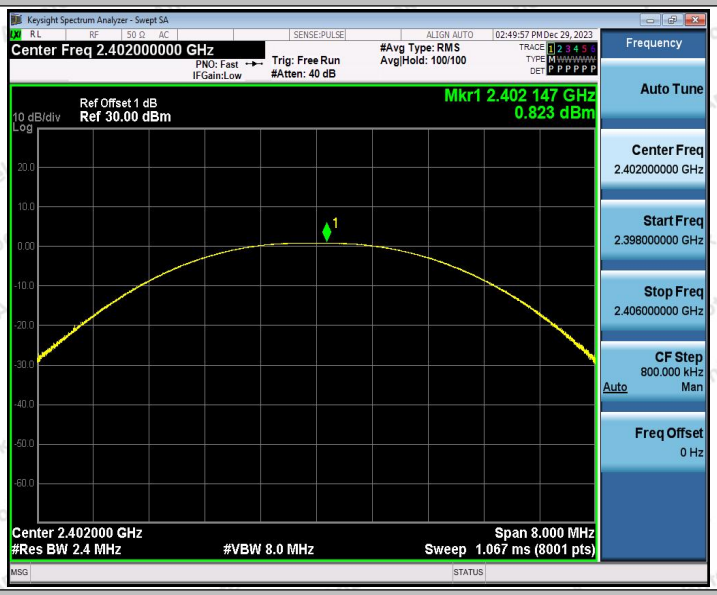
# Appendix C: Maximum conducted output power

## Test Result Peak

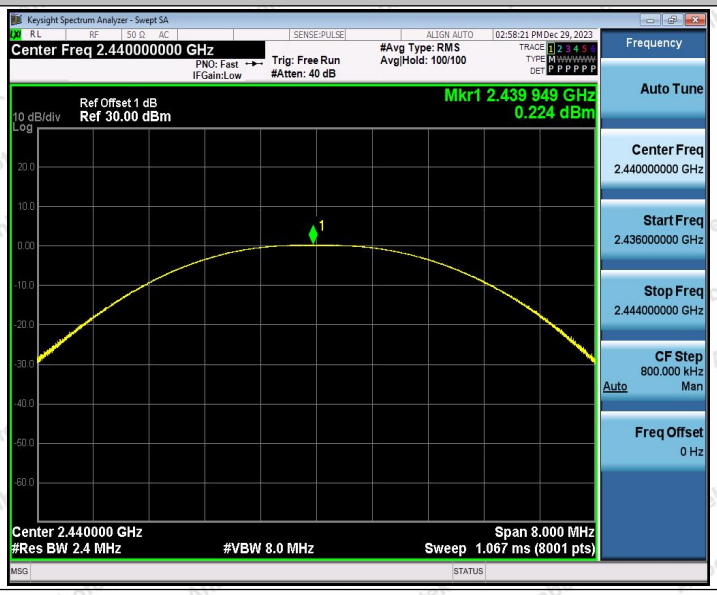
| TestMode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 0.82 | ≤30 | PASS |
| | | 2440 | 0.22 | ≤30 | PASS |
| | | 2480 | -0.37 | ≤30 | PASS |

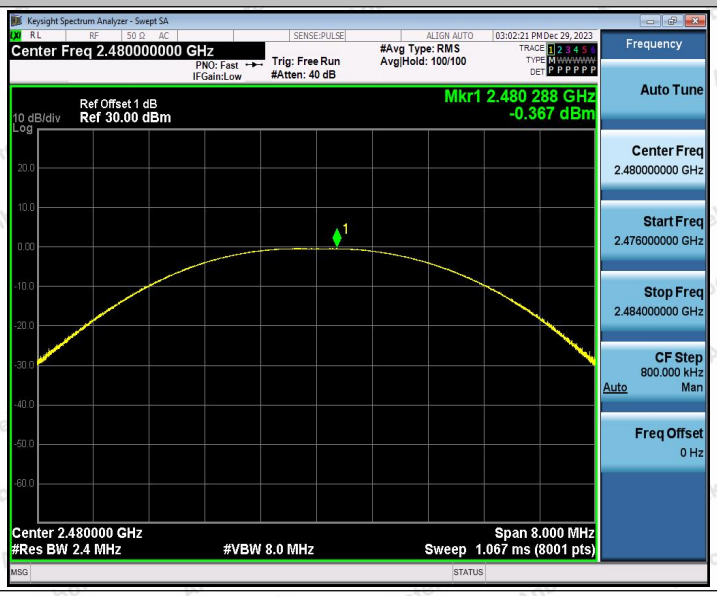
## Test Graphs Peak

BLE_1M_Ant1_2402




BLE_1M_Ant1_2440



| BLE_1M_Ant1_2480 |
| --- |
|  |

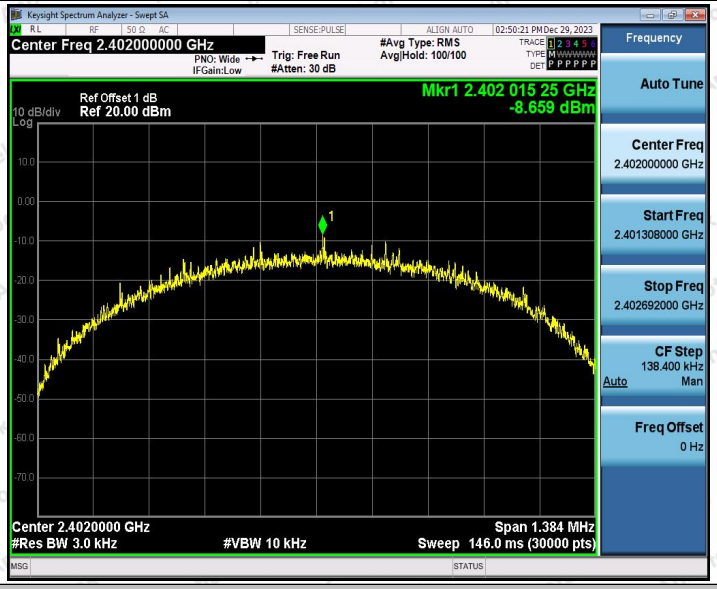
# Appendix D: Maximum power spectral density

## Test Result

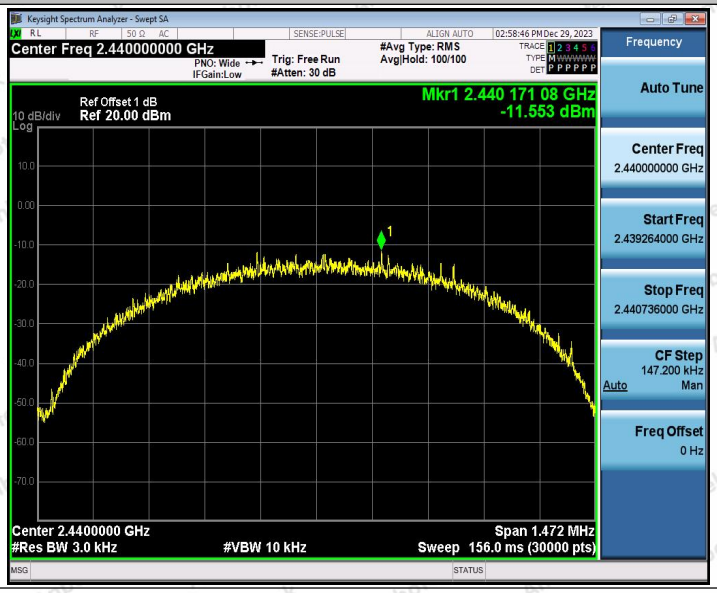
| TestMode | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | -8.66 | ≤8.00 | PASS |
| | | 2440 | -11.55 | ≤8.00 | PASS |
| | | 2480 | -12.56 | ≤8.00 | PASS |

## Test Graphs

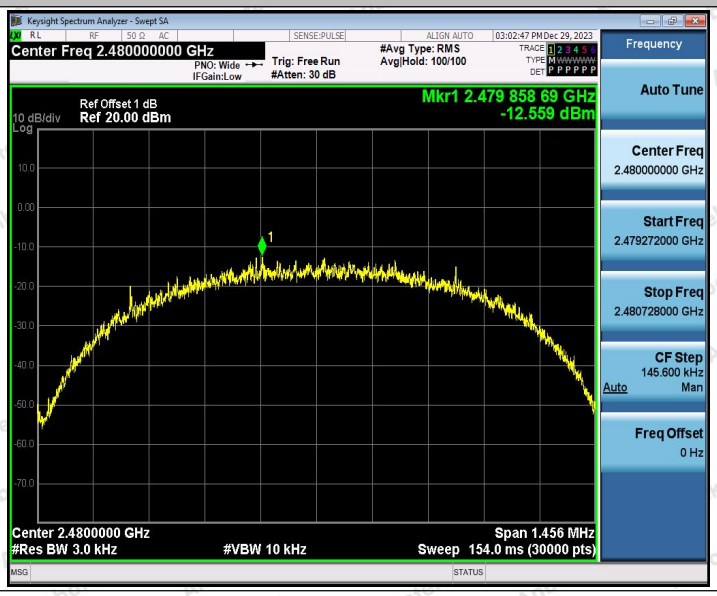
BLE_1M_Ant1_2402




BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



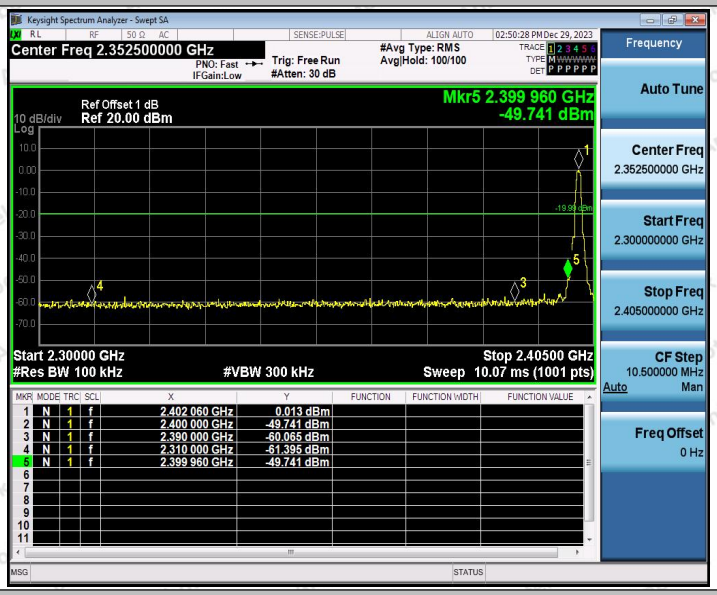
# Appendix E: Band edge measurements

## Test Result

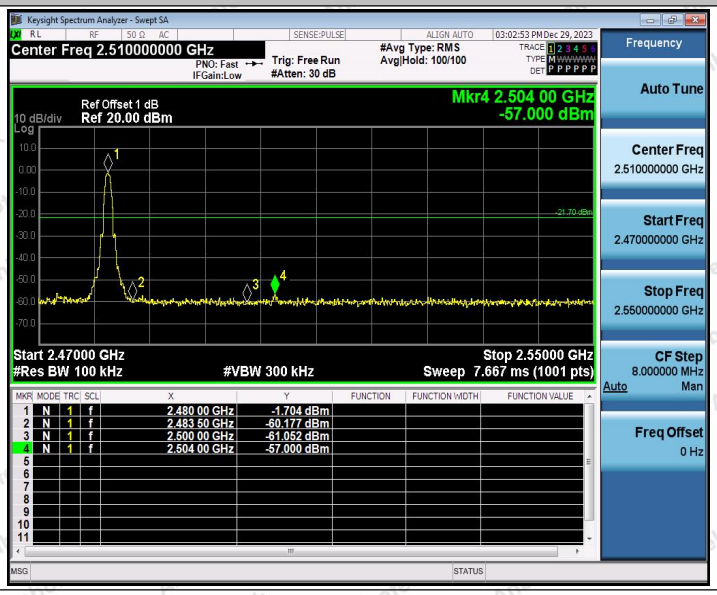
| TestMode | Antenna | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | Low | 2402 | 0.01 | -49.74 | ≤-19.99 | PASS |
| | | High | 2480 | -1.70 | -57 | ≤-21.7 | PASS |

## Test Graphs

BLE_1M_Ant1_Low_2402




BLE_1M_Ant1_High_2480



# Appendix F: Conducted Spurious Emission

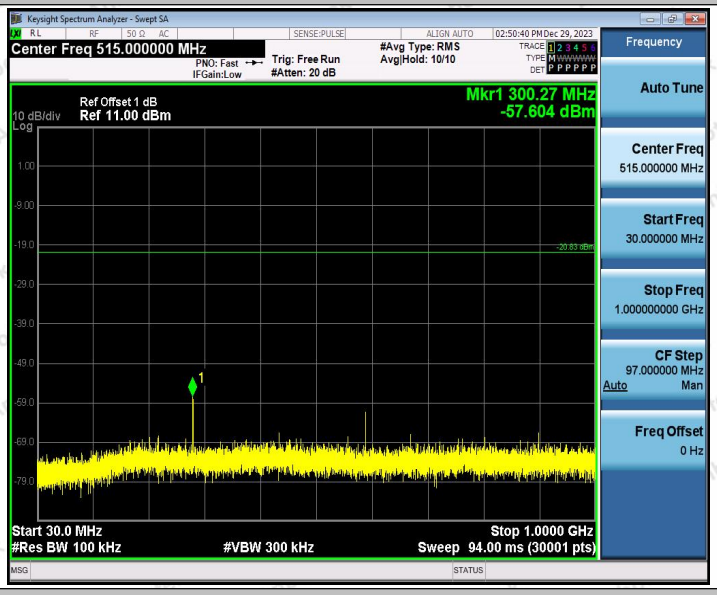
## Test Result

| TestMode | Antenna | Frequency[MHz] | FreqRange[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | Reference | -0.83 | -0.83 | --- | PASS |
| | | | 30~1000 | -0.83 | -57.6 | ≤-20.83 | PASS |
| | | | 1000~26500 | -0.83 | -53.87 | ≤-20.83 | PASS |
| | | 2440 | Reference | -0.41 | -0.41 | --- | PASS |
| | | | 30~1000 | -0.41 | -58.94 | ≤-20.41 | PASS |
| | | | 1000~26500 | -0.41 | -53.98 | ≤-20.41 | PASS |
| | | 2480 | Reference | -2.70 | -2.70 | --- | PASS |
| | | | 30~1000 | -2.70 | -59.16 | ≤-22.7 | PASS |
| | | | 1000~26500 | -2.70 | -53.27 | ≤-22.7 | PASS |

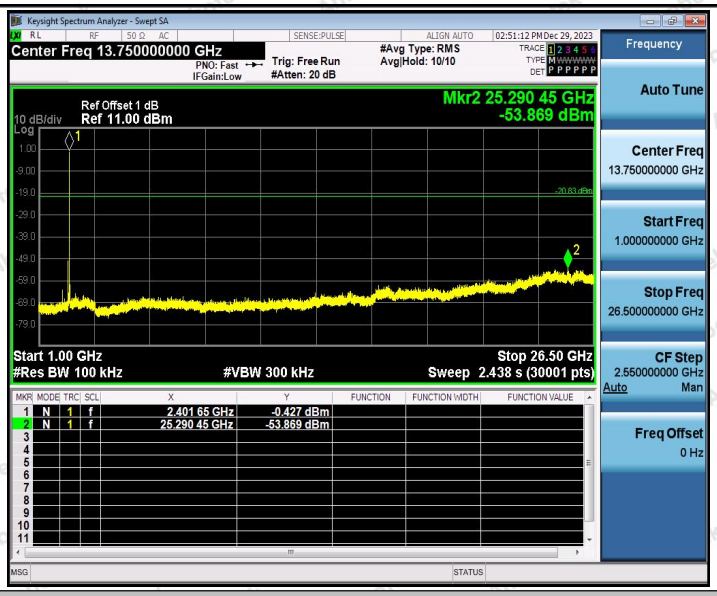
## Test Graphs

BLE_1M_Ant1_2402_0~Reference

BLE_1M_Ant1_2402_30~1000

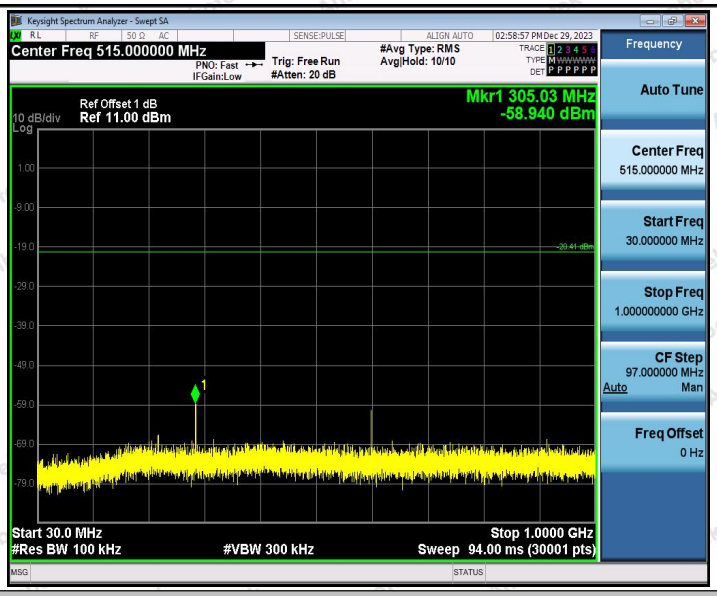



BLE_1M_Ant1_2402_1000~26500

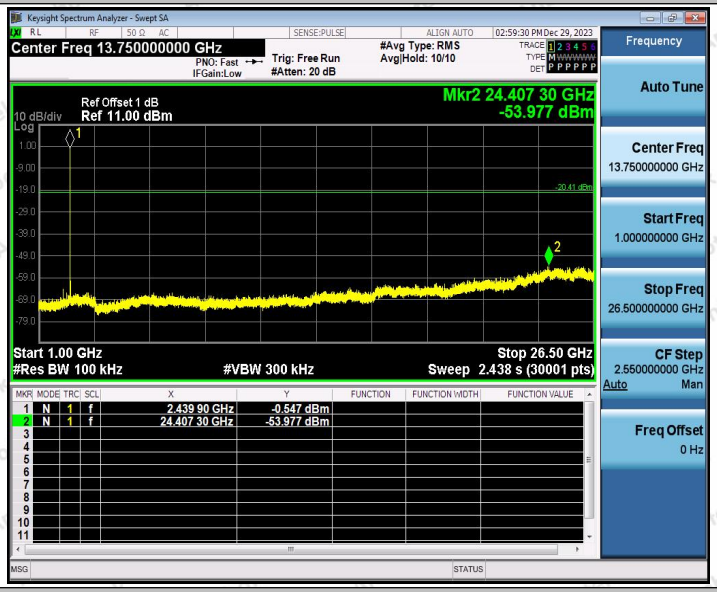



BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000

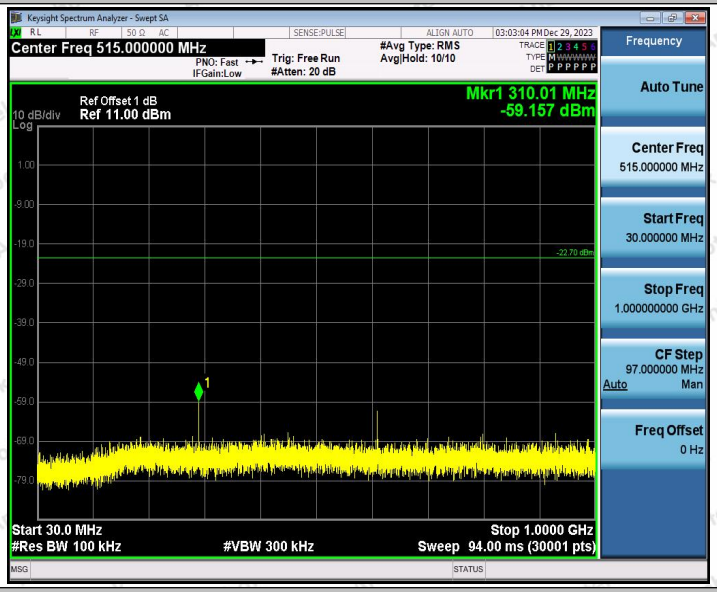



BLE_1M_Ant1_2440_1000~26500

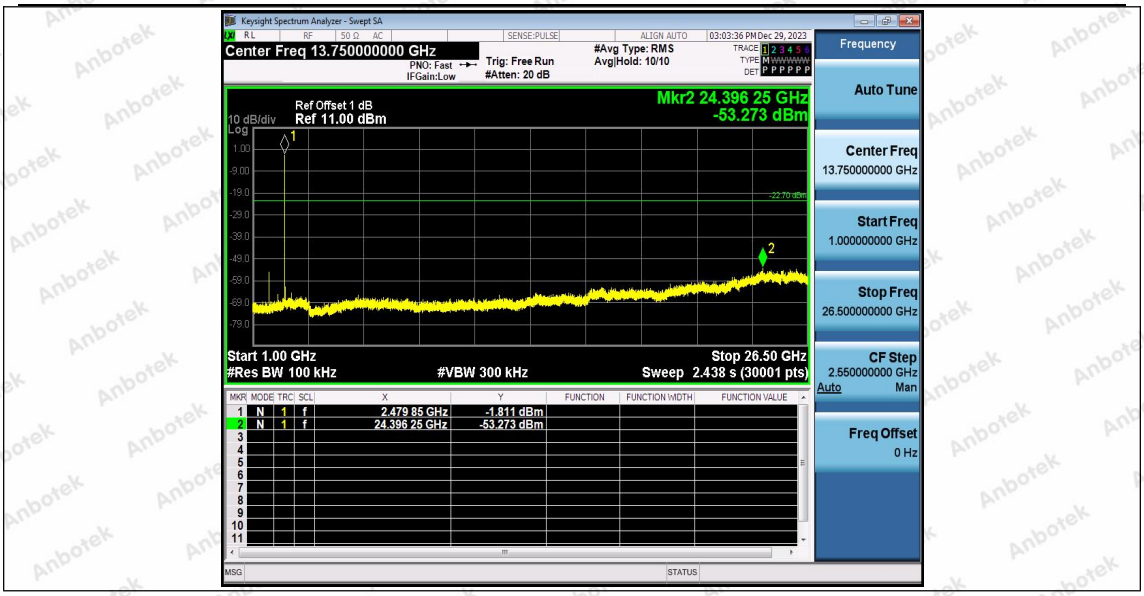



BLE_1M_Ant1_2480_0~Reference

BLE_1M_Ant1_2480_30~1000




BLE_1M_Ant1_2480_1000~26500


Keysight Spectrum Analyzer - Swept SA
Center Freq 13.750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 10/10
03:03:36 PM Dec 29, 2023
Ref Offset 1 dB
10 dB/div
Log
Ref 11.00 dBm
Mkr2 24.396 25 GHz
-53.273 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.438 s (30001 pts)
1 N 1 f 2.479 85 GHz -1.811 dBm
2 N 1 f 24.396 25 GHz -53.273 dBm
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

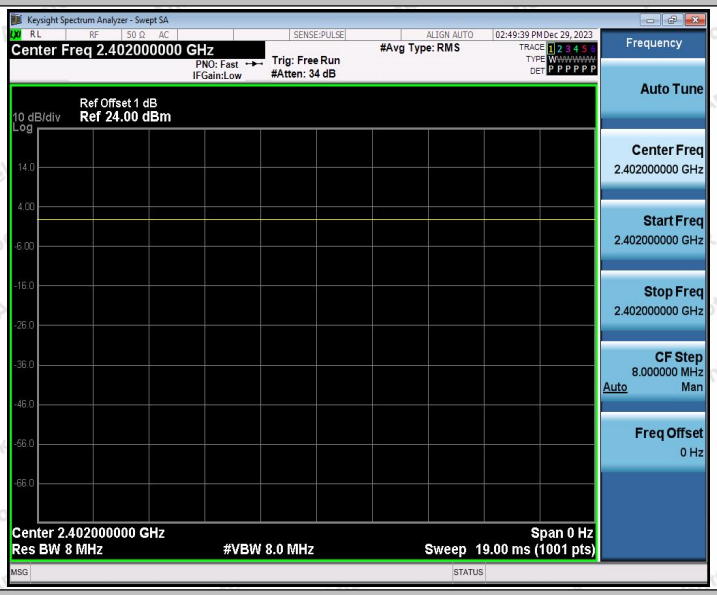
# Appendix G: Duty Cycle

## Test Result

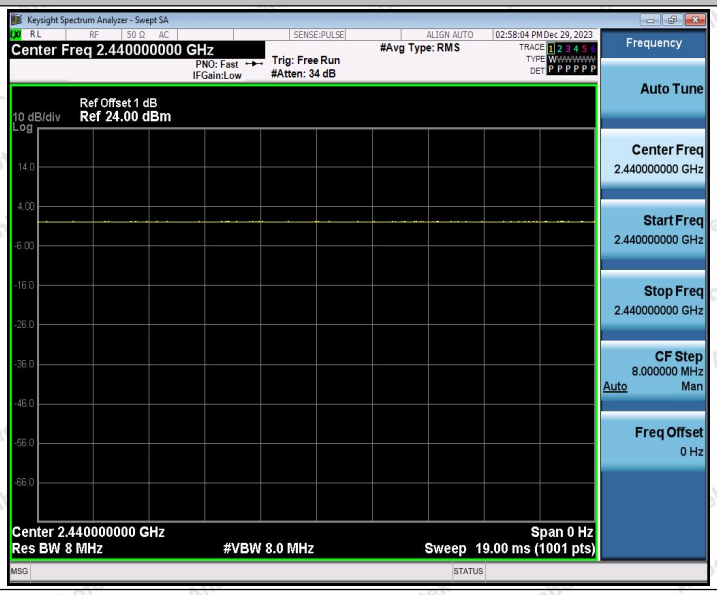
| TestMode | Antenna | Frequency[MHz] | ON Time [ms] | Period [ms] | Duty Cycle [%] | Duty Cycle Factor[dB] |
|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | 19.00 | 19.00 | 100 | 0 |
| | | 2440 | 19.00 | 19.00 | 100 | 0 |
| | | 2480 | 19.00 | 19.00 | 100 | 0 |

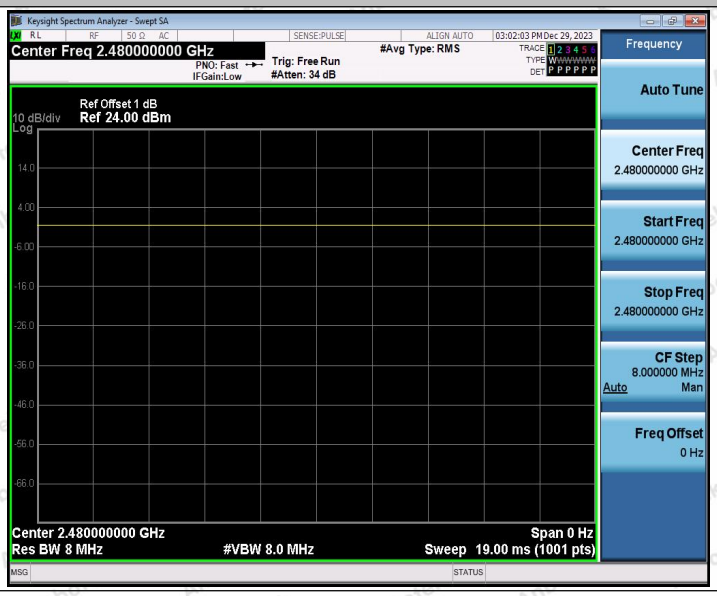
## Test Graphs

BLE_1M_Ant1_2402




BLE_1M_Ant1_2440



| BLE_1M_Ant1_2480 |
| --- |
|  |



---End---