# Appendix Report

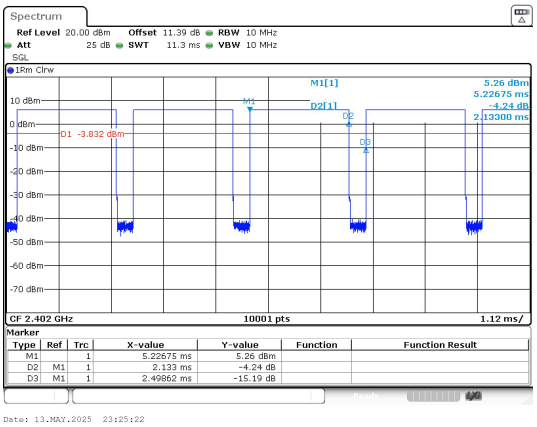
| | |
|---|---|
| Project No.: | CISR250508016 |
| Test Engineer: | James Wang |
| Supervised by: | Rory Huang |

# 1) Duty Cycle

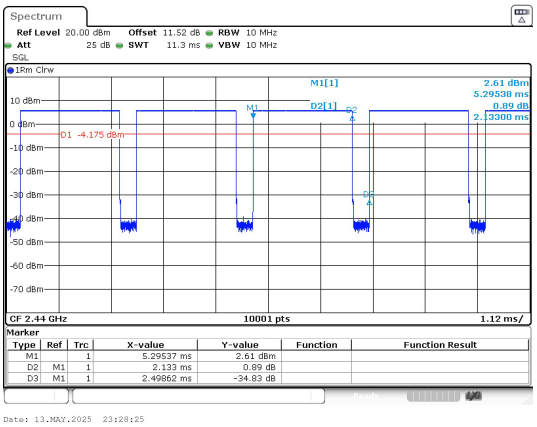
### Test Result

| Mode | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T |
|---|---|---|---|---|---|---|---|
| BLE 1M | 0 | 2.133 | 2.499 | 85.37 | 0.8537 | 0.6869 | 0.4688 |
| | 19 | 2.133 | 2.499 | 85.37 | 0.8537 | 0.6869 | 0.4688 |
| | 39 | 2.134 | 2.500 | 85.37 | 0.8537 | 0.6869 | 0.4686 |

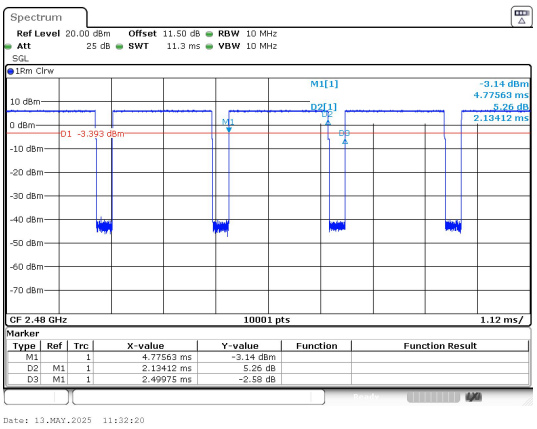
### Test Graphs




BLE 1M_Channel 0




BLE 1M_Channel 19



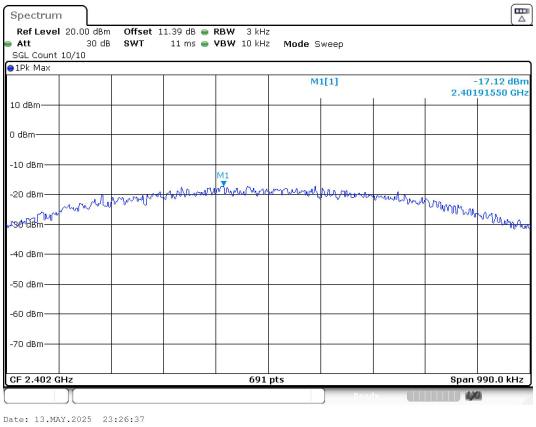

BLE 1M_Channel 39

# 2) Power Spectral Density

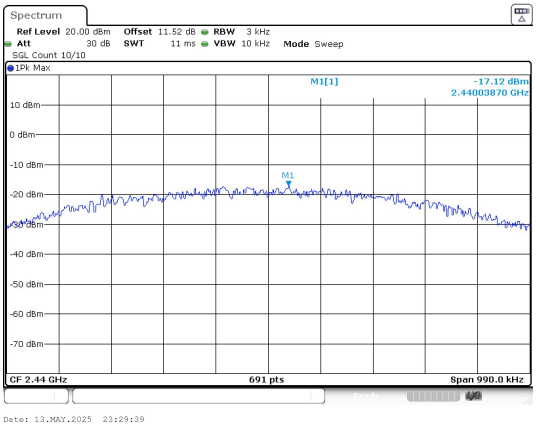
### Test Result

| Mode | Channel | PSD (dBm/3kHz) | Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| BLE 1M | 0 | -17.120 | ≤8 | PASS |
| BLE 1M | 19 | -17.120 | ≤8 | PASS |
| BLE 1M | 39 | -17.590 | ≤8 | PASS |

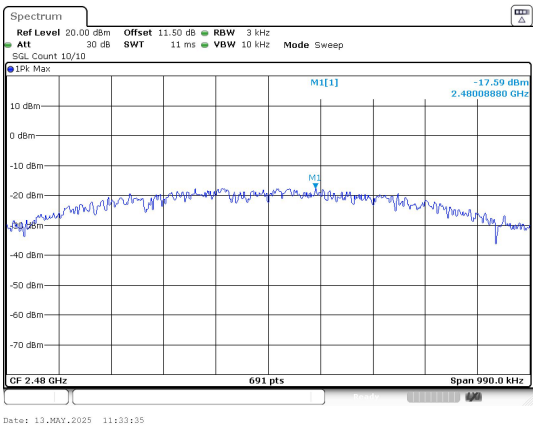
### Test Graphs




BLE 1M_Channel 0




BLE 1M_Channel 19



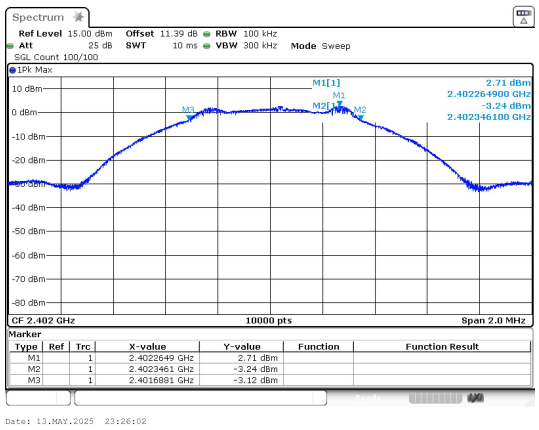

BLE 1M_Channel 39

# 3) 6dB Bandwidth

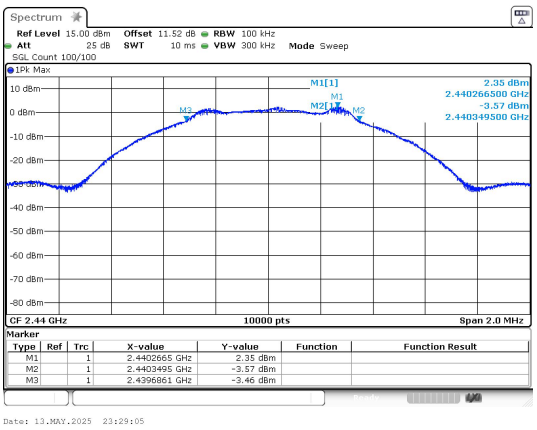
## Test Result

| Mode | Channel | Center Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz) | Result |
|---|---|---|---|---|---|
| BLE 1M | 0 | 2402 | 0.6600 | ≥0.5 | PASS |
| | 19 | 2440 | 0.6600 | | PASS |
| | 39 | 2480 | 0.6600 | | PASS |

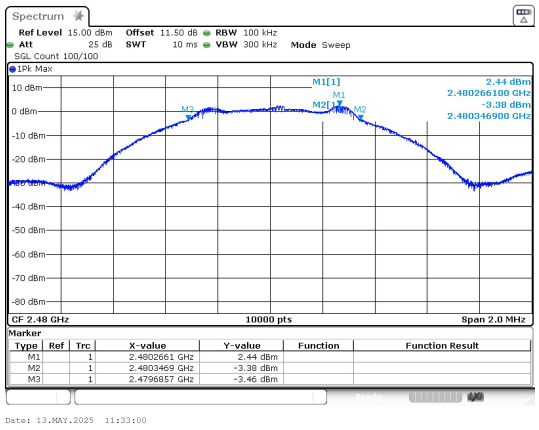
## Test Graphs




BLE 1M_Channel 0




BLE 1M_Channel 19



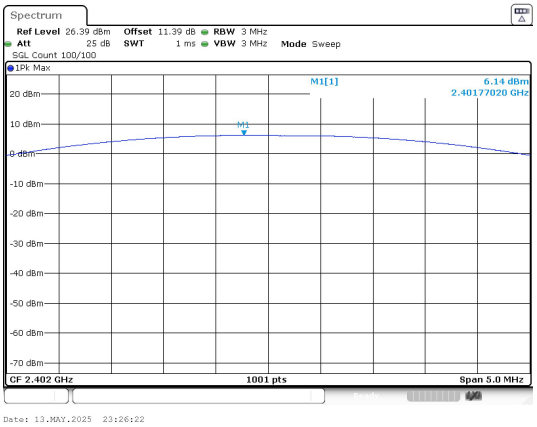

BLE 1M_Channel 39

# 4) Conducted Output Power

### Test Result

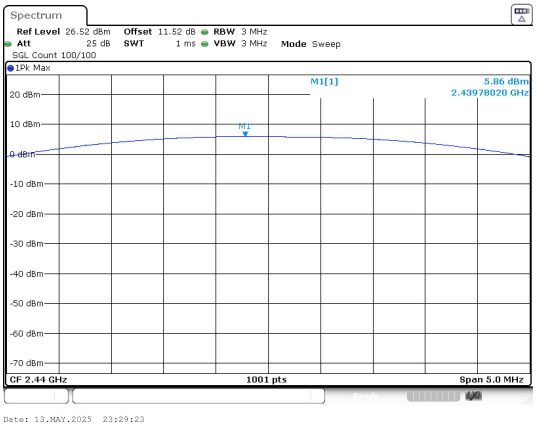
| Mode | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|---|---|---|---|---|---|
| BLE 1M | 0 | 6.14 | 4.11 | ≤30 | PASS |
| | 19 | 5.86 | 3.85 | ≤30 | PASS |
| | 39 | 6.90 | 4.9 | ≤30 | PASS |

### Test Graphs



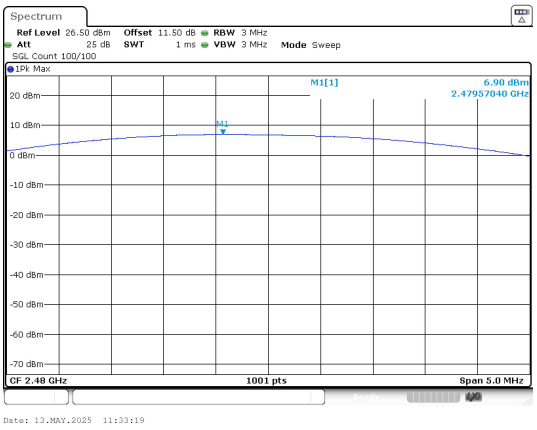

Peak Output Power

BLE 1M_Channel 0




Peak Output Power

BLE 1M_Channel 19




Peak Output Power

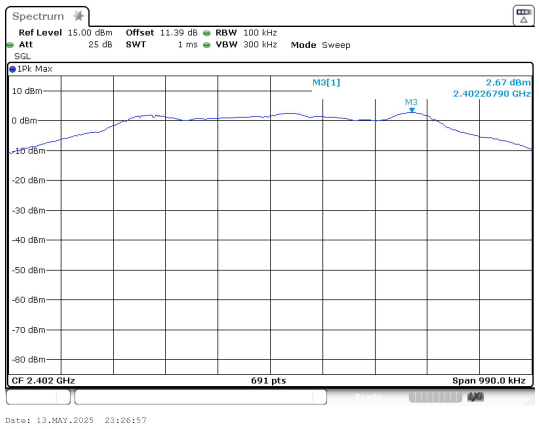
BLE 1M_Channel 39

# 5) Conducted Out Of Band Emission

### Test Result

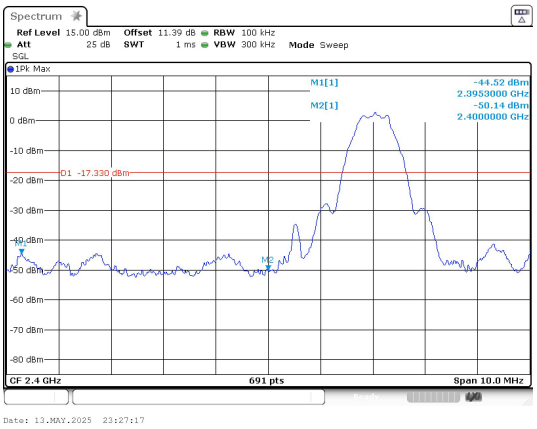
| Mode | Channel | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|---|---|---|---|---|---|---|
| BLE 1M | 0 | 2395.30 | -44.516 | -17.33 | -27.186 | PASS |
| | | 2400.00 | -50.140 | -17.33 | -32.810 | PASS |
| | | 7206.80 | -44.429 | -17.33 | -27.099 | PASS |
| | 19 | 9753.73 | -45.196 | -17.65 | -27.546 | PASS |
| | 39 | 2483.50 | -43.610 | -17.55 | -26.060 | PASS |
| | | 9914.37 | -43.049 | -17.55 | -25.499 | PASS |

### Test Graphs



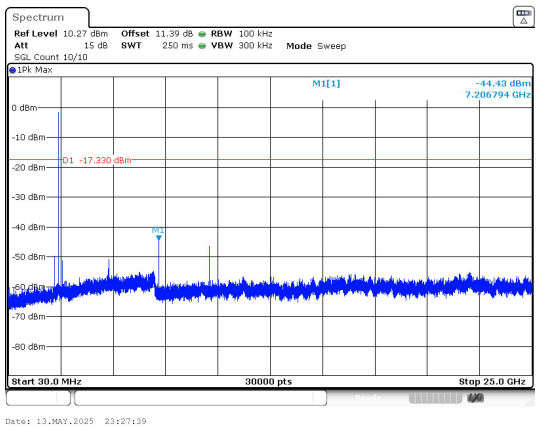

In-Band Reference Level

BLE 1M_Channel 0



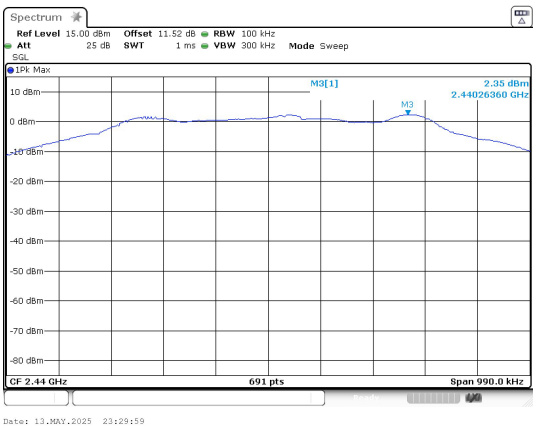

Out Of Band Emission

BLE 1M_Channel 0



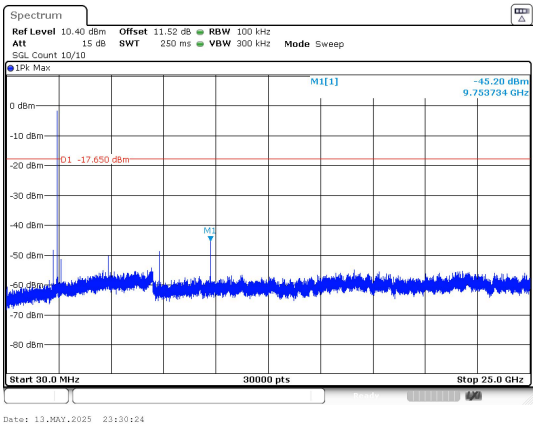

30.0 MHz - 25000.0 MHz

BLE 1M_Channel 0



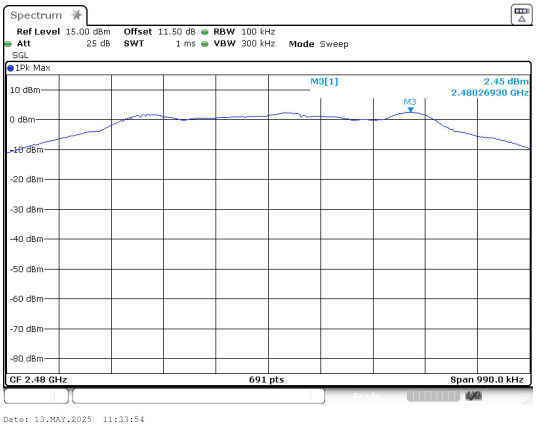

In-Band Reference Level

BLE 1M_Channel 19



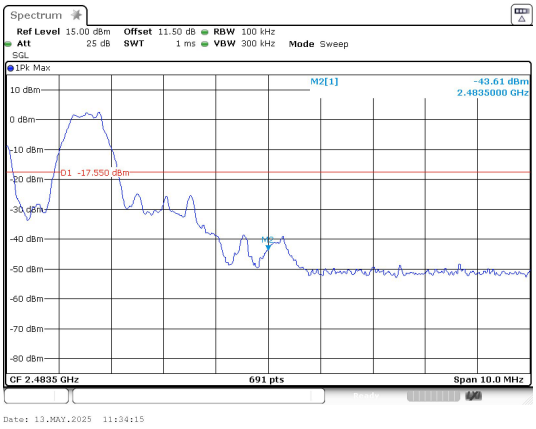

**30.0 MHz - 25000.0 MHz**

**BLE 1M_Channel 19**



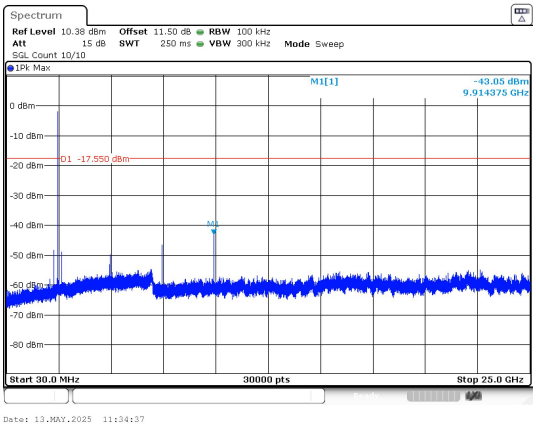

**In-Band Reference Level**

**BLE 1M_Channel 39**




**Out Of Band Emission**

**BLE 1M_Channel 39**




**30.0 MHz - 25000.0 MHz**

**BLE 1M_Channel 39**

------End of the report-----