

# Appendix Report

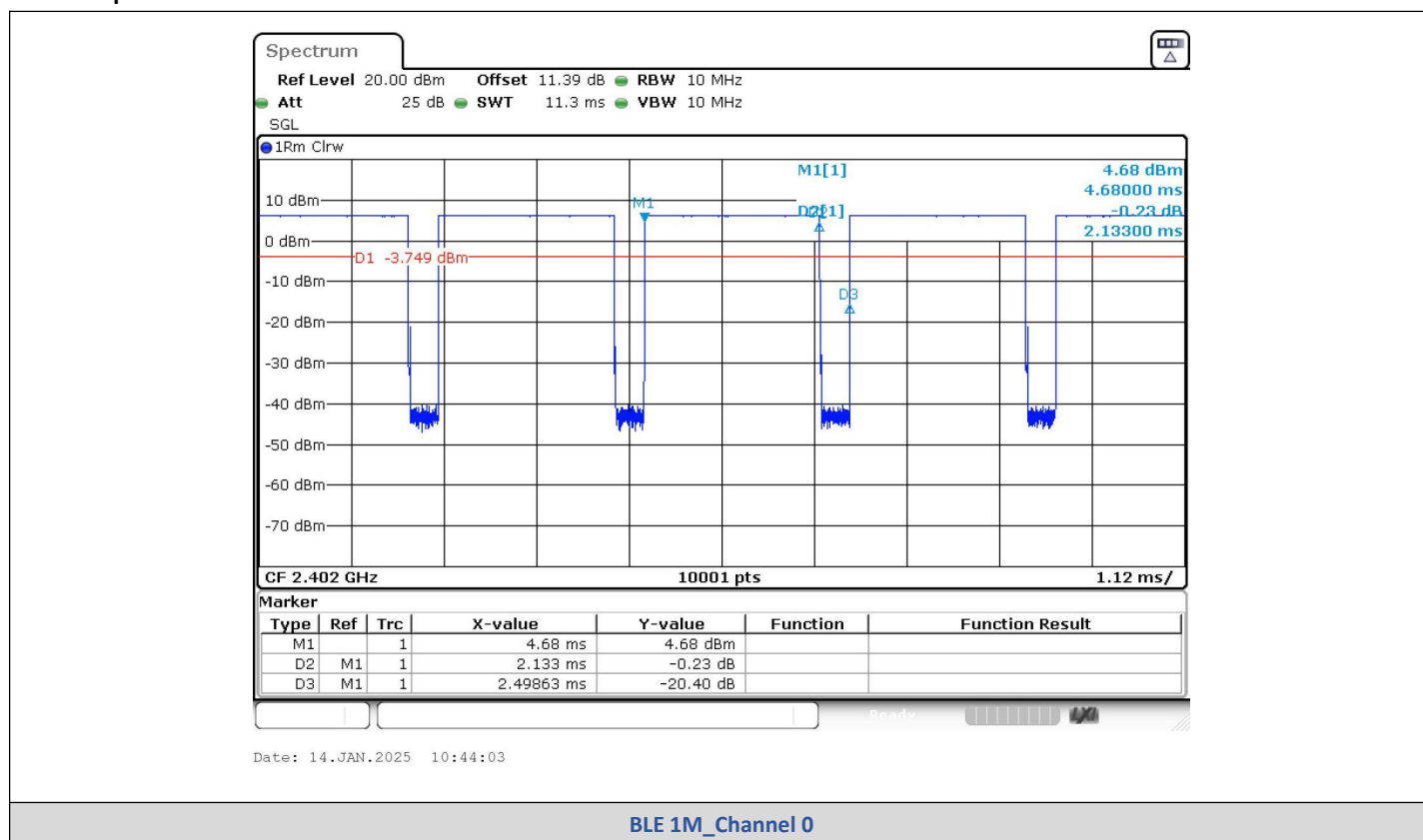
|                |                  |
|----------------|------------------|
| Report No.:    | CISRR25010804304 |
| Test Engineer: | Mark Fu          |
| Supervised by: | Rory Huang       |

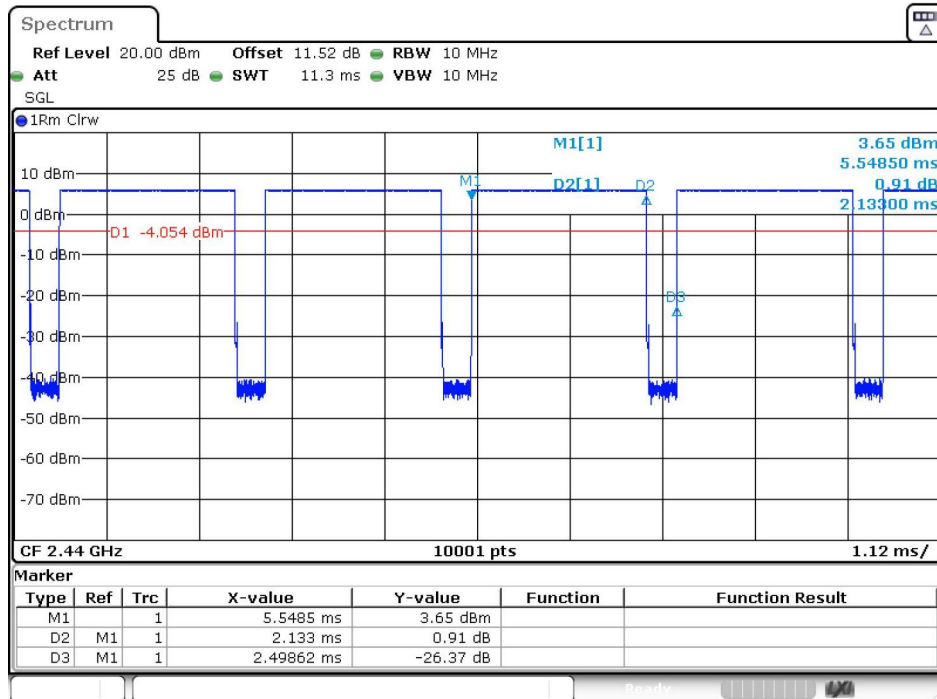
## 1) Duty Cycle

### 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      | 2.133        | 2.499       | 85.37          | 0.8537              | 0.6869                 | 0.4688 |
| BLE 2M | 0       | 1.081        | 2.499       | 43.27          | 0.4327              | 3.6381                 | 0.9251 |
|        | 19      | 1.075        | 2.482       | 43.29          | 0.4329              | 3.6361                 | 0.9302 |
|        | 39      | 1.081        | 2.499       | 43.27          | 0.4327              | 3.6381                 | 0.9251 |

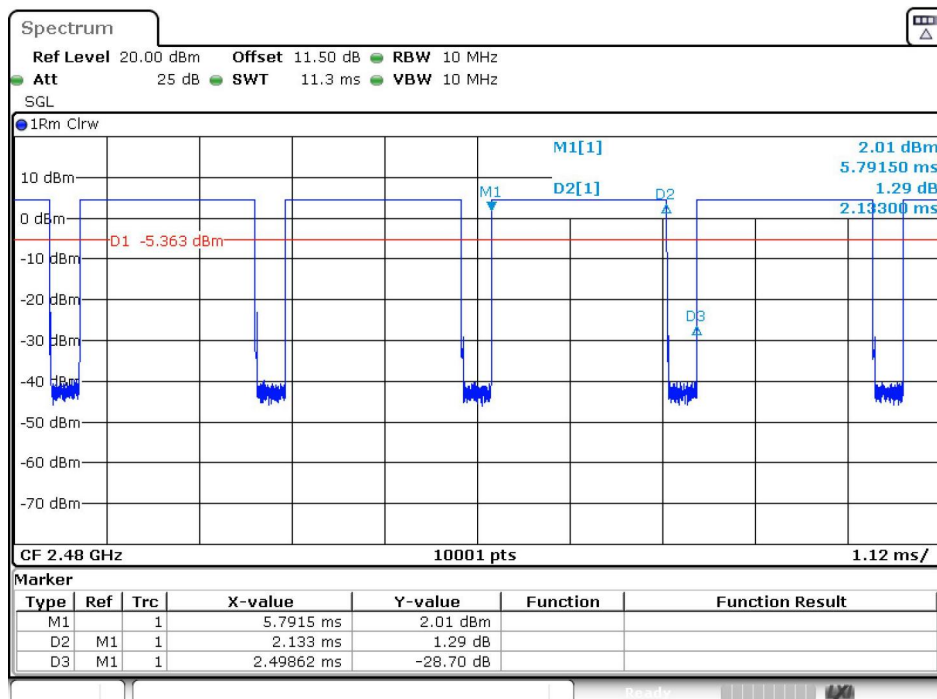
### Test Graphs





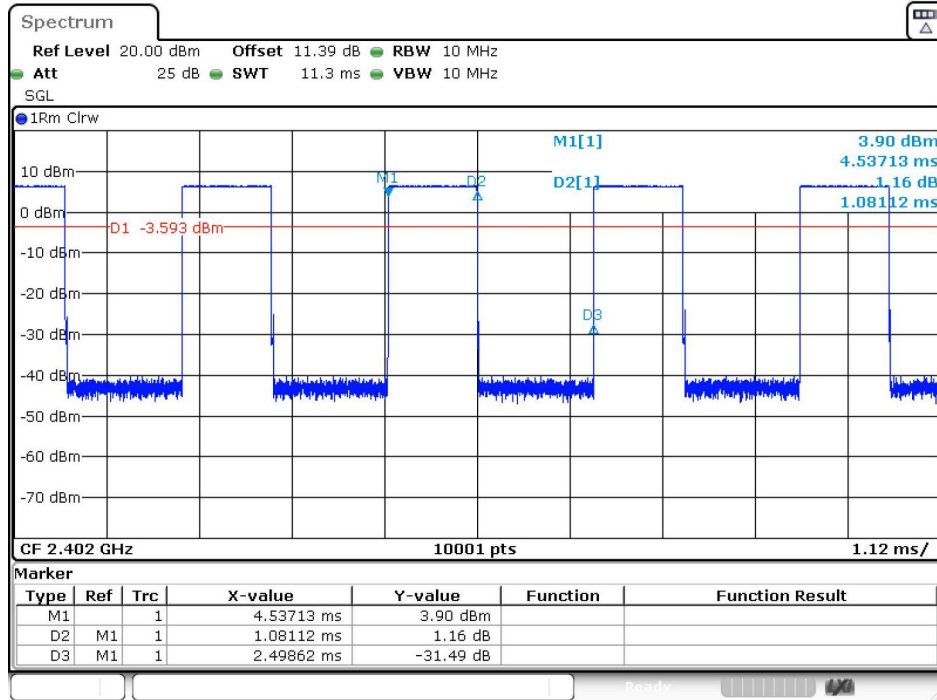
Date: 14.JAN.2025 10:46:40

### BLE 1M\_Channel 19



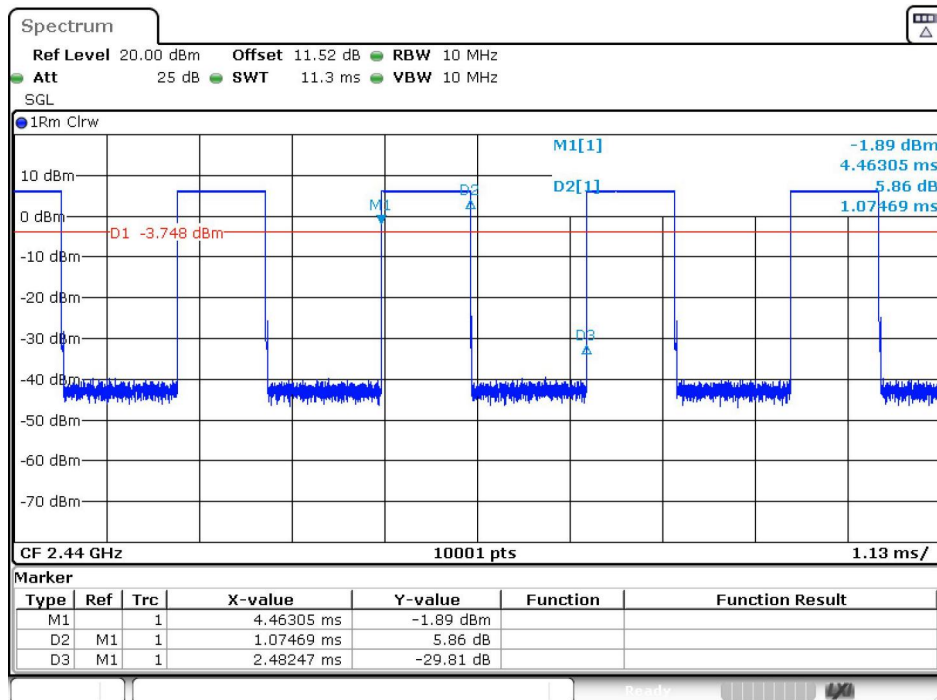
Date: 14.JAN.2025 10:49:04

### BLE 1M\_Channel 39



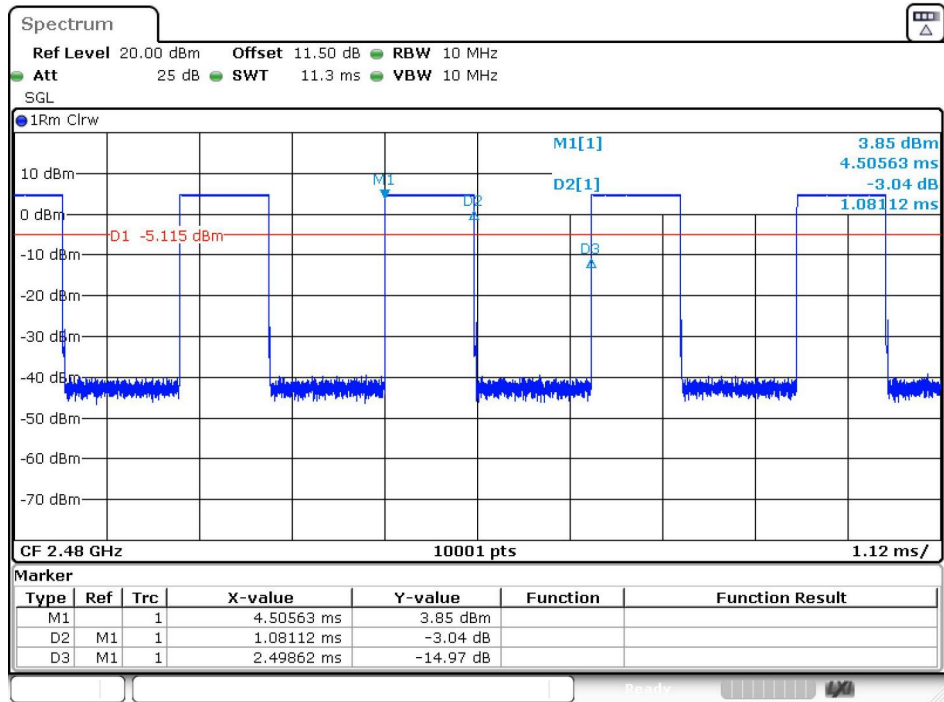
Date: 14.JAN.2025 10:51:48

### BLE 2M\_Channel 0



Date: 14.JAN.2025 10:55:34

### BLE 2M\_Channel 19



Date: 14.JAN.2025 10:57:58

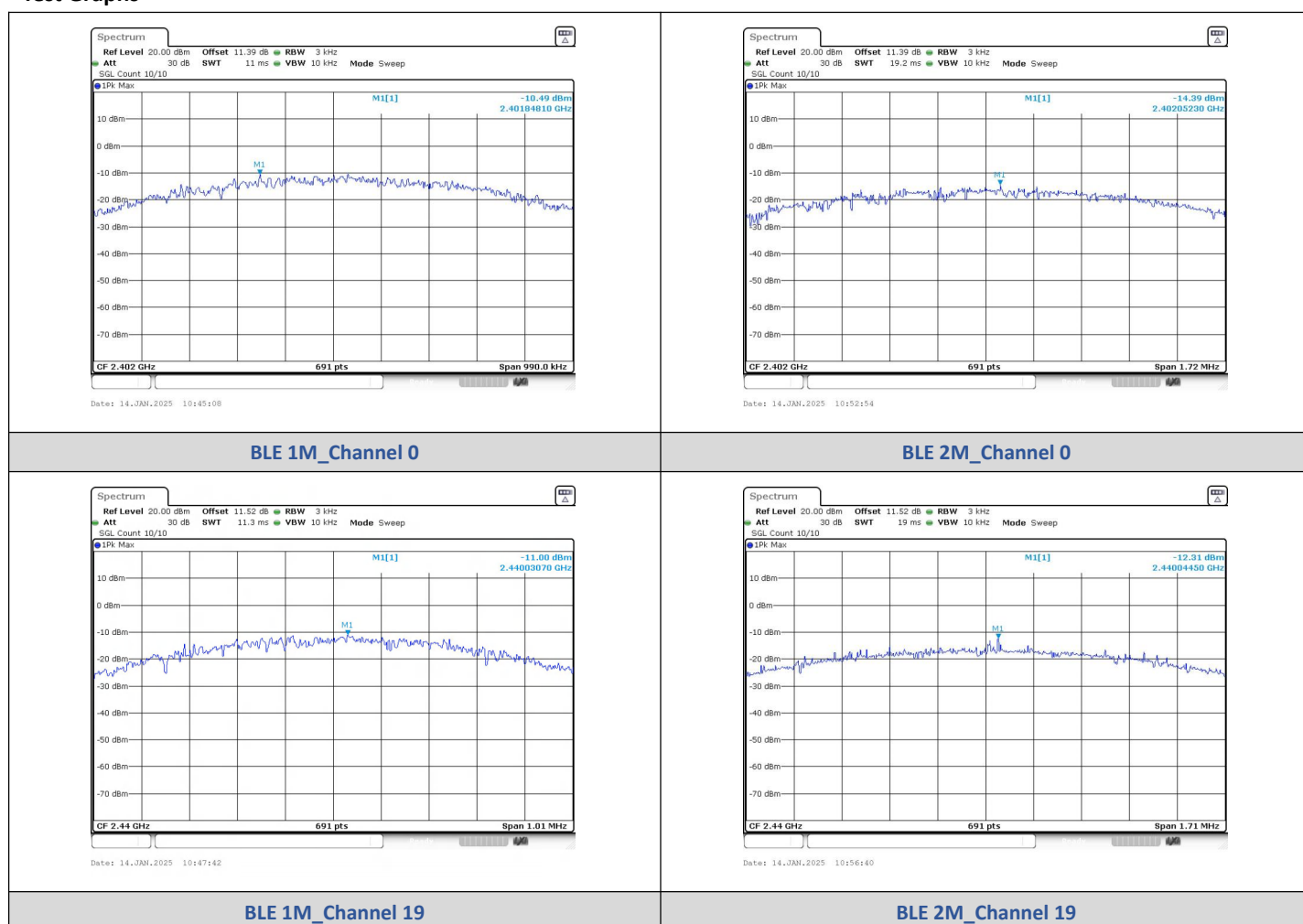
BLE 2M\_Channel 39

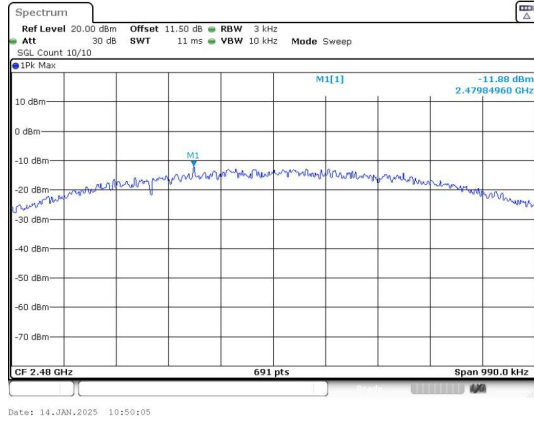
## 2) Power Spectral Density

### Test Result

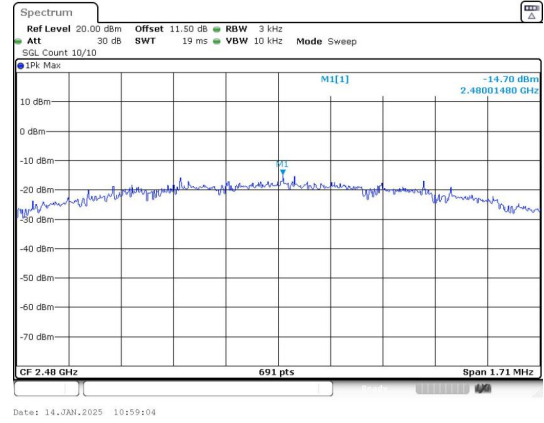
| Mode   | Channel | PSD (dBm/3kHz) | Limit (dBm/3kHz) | Result |
|--------|---------|----------------|------------------|--------|
| BLE 1M | 0       | -10.490        | ≤8               | PASS   |
| BLE 1M | 19      | -11.000        | ≤8               | PASS   |
| BLE 1M | 39      | -11.880        | ≤8               | PASS   |
| BLE 2M | 0       | -14.390        | ≤8               | PASS   |
| BLE 2M | 19      | -12.310        | ≤8               | PASS   |
| BLE 2M | 39      | -14.700        | ≤8               | PASS   |

### Test Graphs





BLE 1M\_Channel 39



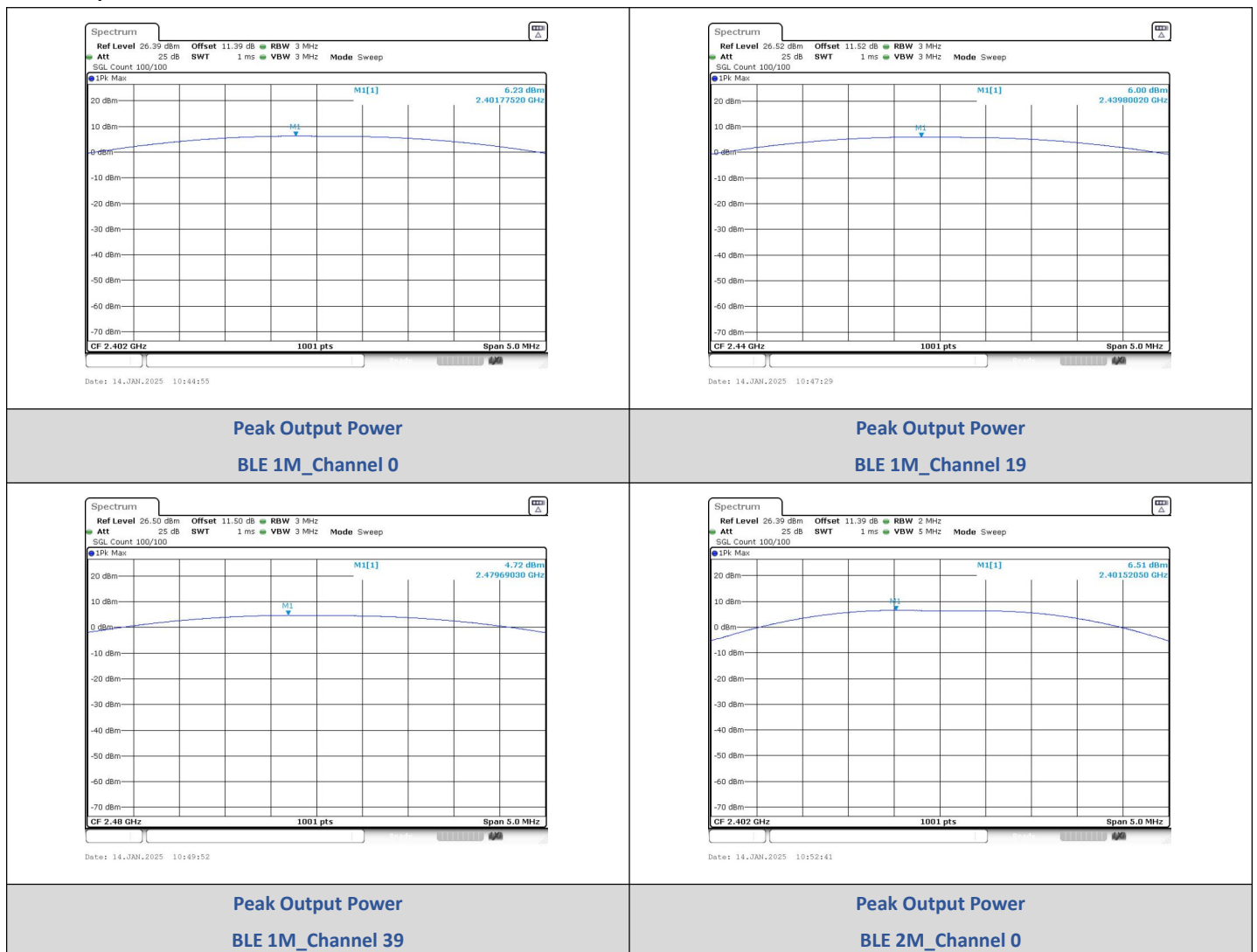
BLE 2M\_Channel 39

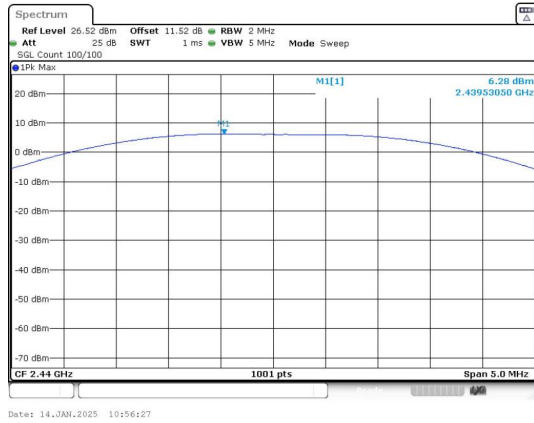
### 3) Conducted Output Power

#### Test Result

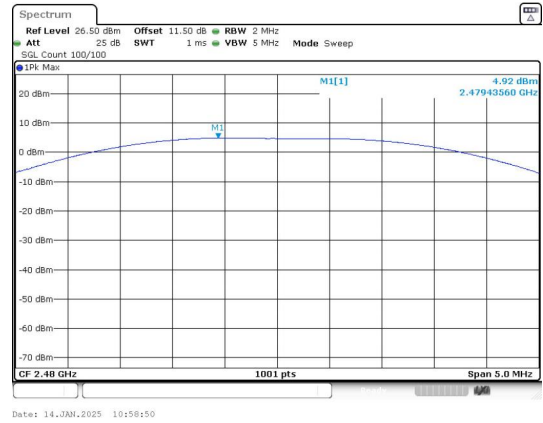
| Mode   | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|--------|---------|-------------------------|------------------------|-------------|--------|
| BLE 1M | 0       | 6.23                    | 4.2                    | ≤30         | PASS   |
|        | 19      | 6.00                    | 3.98                   | ≤30         | PASS   |
|        | 39      | 4.72                    | 2.96                   | ≤30         | PASS   |
| BLE 2M | 0       | 6.51                    | 4.48                   | ≤30         | PASS   |
|        | 19      | 6.28                    | 4.25                   | ≤30         | PASS   |
|        | 39      | 4.92                    | 3.1                    | ≤30         | PASS   |

#### Test Graphs





Peak Output Power  
BLE 2M\_Channel 19



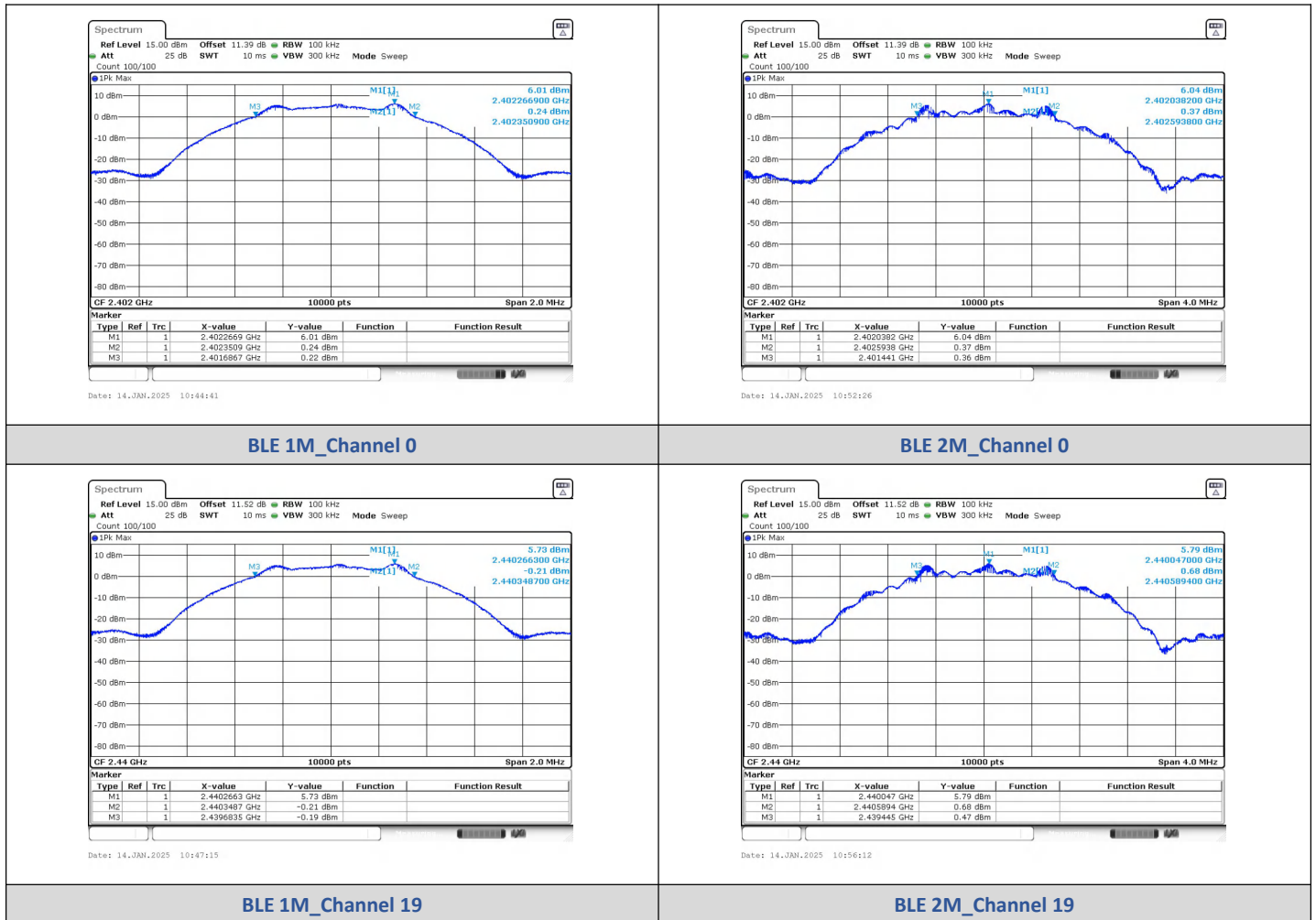
Peak Output Power  
BLE 2M\_Channel 39

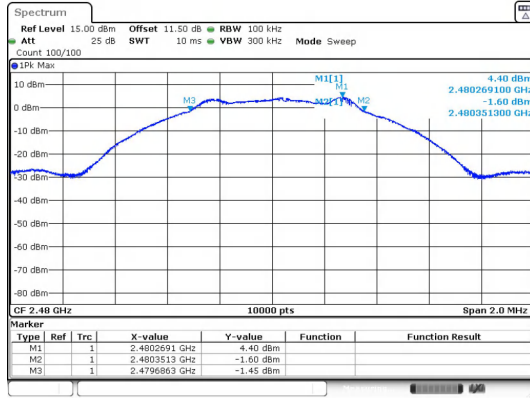
## 4) 6dB Bandwidth

### Test Result

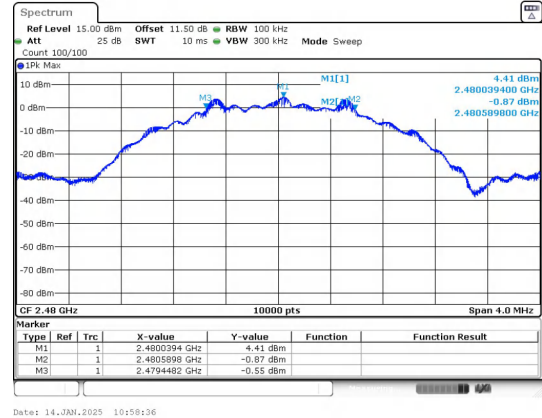
| Mode   | Channel | Center Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz) | Result |
|--------|---------|------------------------|----------------------|-------------|--------|
| BLE 1M | 0       | 2402                   | 0.6600               | ≥0.5        | PASS   |
|        | 19      | 2440                   | 0.6700               |             | PASS   |
|        | 39      | 2480                   | 0.6600               |             | PASS   |
| BLE 2M | 0       | 2402                   | 1.150                |             | PASS   |
|        | 19      | 2440                   | 1.140                |             | PASS   |
|        | 39      | 2480                   | 1.140                |             | PASS   |

### Test Graphs





BLE 1M\_Channel 39



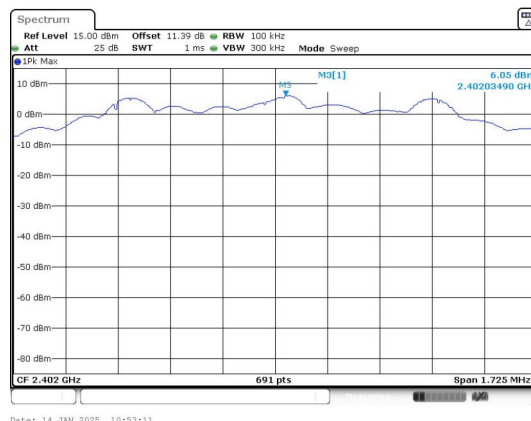
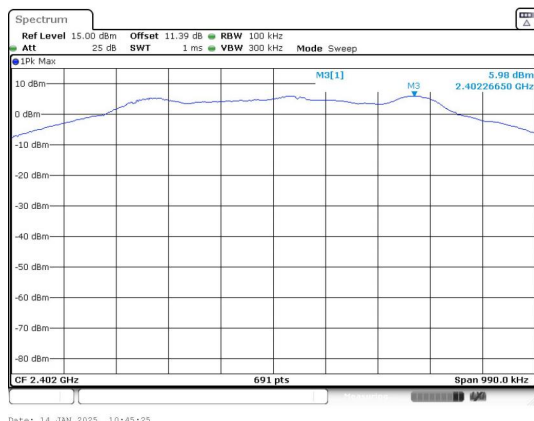
BLE 2M\_Channel 39

## 5) Conducted Out Of Band Emission

### Test Result

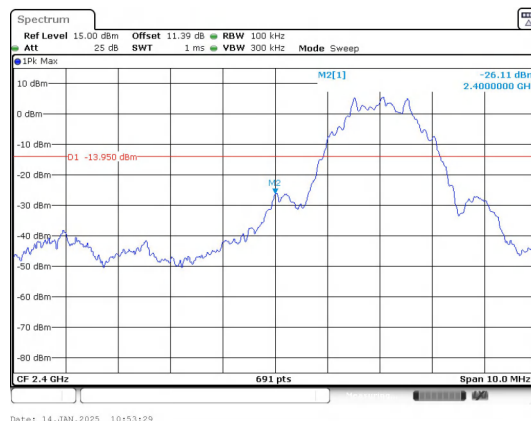
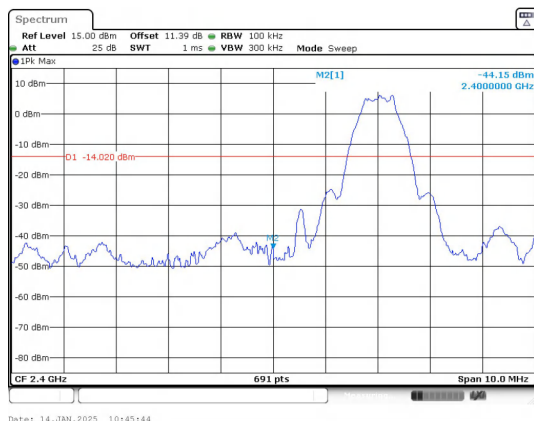
| Mode   | Channel | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|--------|---------|------------------------------|--------------------------|-------------|-----------------|--------|
| BLE 1M | 0       | 2399.00                      | -41.596                  | -14.02      | -27.576         | PASS   |
|        |         | 2400.00                      | -44.150                  | -14.02      | -30.130         | PASS   |
|        |         | 7206.80                      | -41.835                  | -14.02      | -27.815         | PASS   |
|        | 19      | 9753.73                      | -39.599                  | -14.25      | -25.349         | PASS   |
|        |         | 2483.50                      | -45.310                  | -15.56      | -29.750         | PASS   |
|        |         | 9914.37                      | -37.158                  | -15.56      | -21.598         | PASS   |
| BLE 2M | 0       | 2400.00                      | -26.110                  | -13.95      | -12.160         | PASS   |
|        |         | 9602.25                      | -41.127                  | -13.95      | -27.177         | PASS   |
|        | 19      | 9753.73                      | -40.102                  | -14.2       | -25.902         | PASS   |
|        |         | 2483.50                      | -50.100                  | -15.57      | -34.530         | PASS   |
|        | 39      | 9914.37                      | -36.839                  | -15.57      | -21.269         | PASS   |
|        |         |                              |                          |             |                 |        |

### Test Graphs



In-Band Reference Level  
BLE 1M\_Channel 0

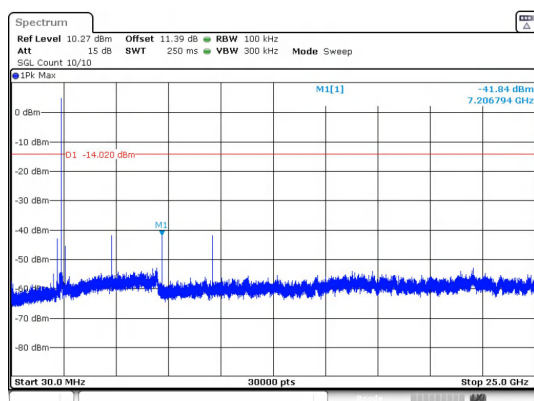
In-Band Reference Level  
BLE 2M\_Channel 0



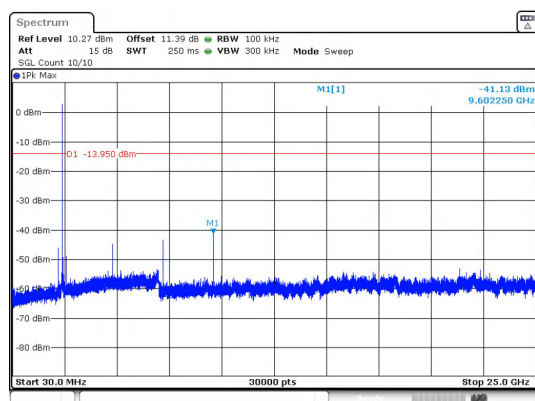
Out Of Band Emission

Out Of Band Emission

BLE 1M\_Channel 0

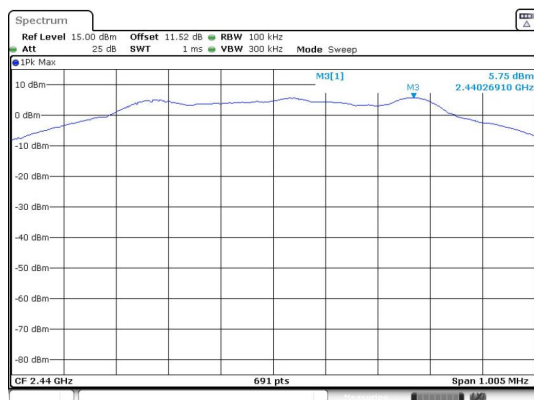


BLE 2M\_Channel 0



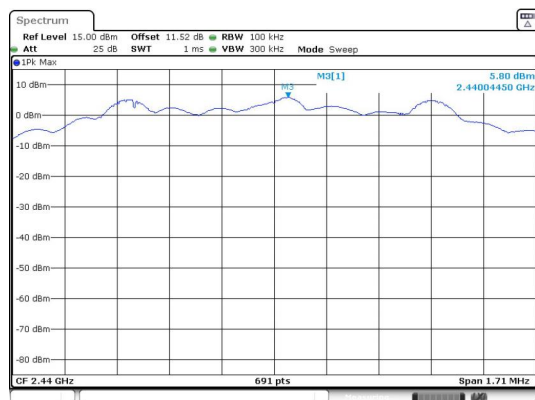
30.0 MHz - 25000.0 MHz

BLE 1M\_Channel 0



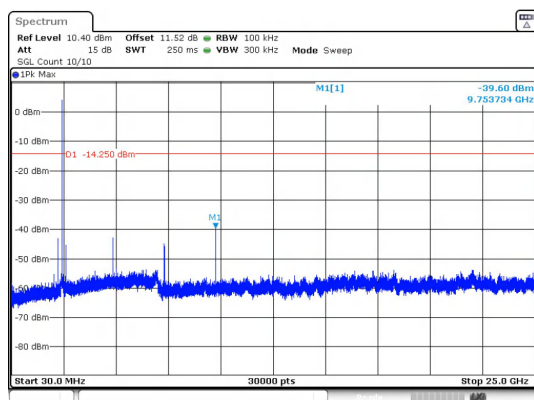
30.0 MHz - 25000.0 MHz

BLE 2M\_Channel 0



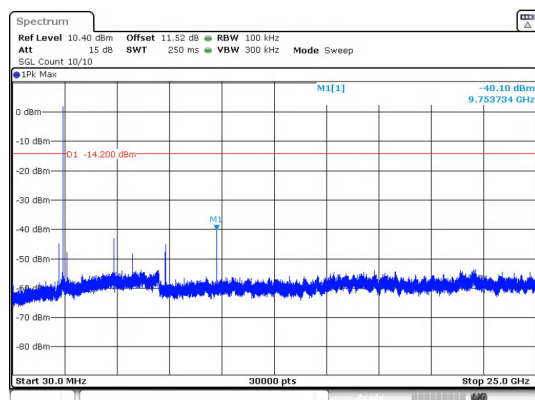
In-Band Reference Level

BLE 1M\_Channel 19



In-Band Reference Level

BLE 2M\_Channel 19

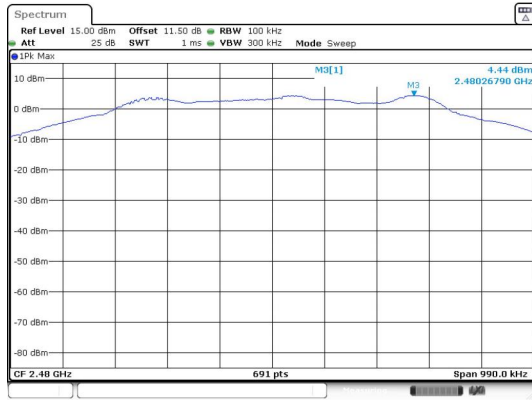


30.0 MHz - 25000.0 MHz

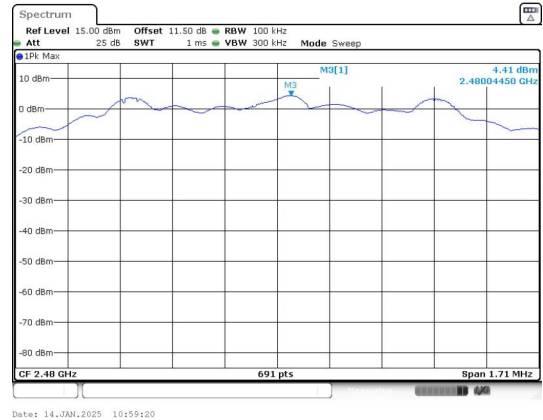
BLE 1M\_Channel 19

30.0 MHz - 25000.0 MHz

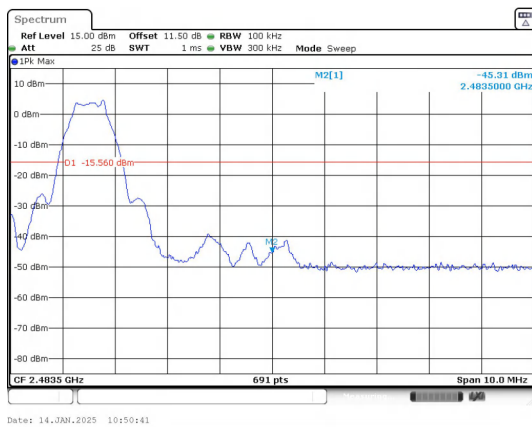
BLE 2M\_Channel 19



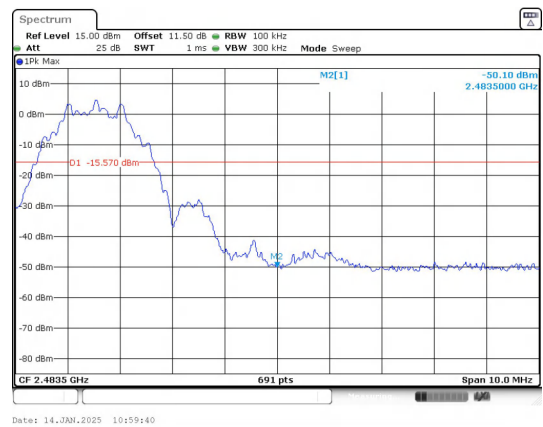
**In-Band Reference Level  
BLE 1M\_Channel 39**



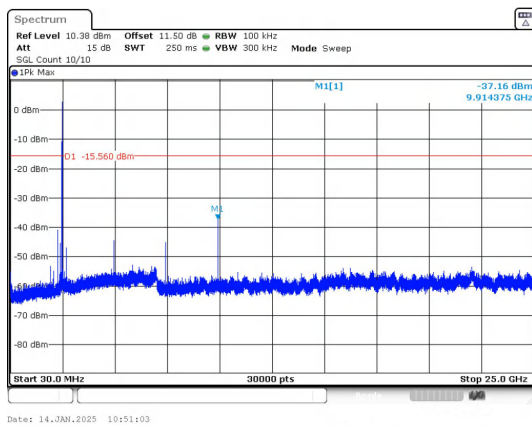
**In-Band Reference Level  
BLE 2M\_Channel 39**



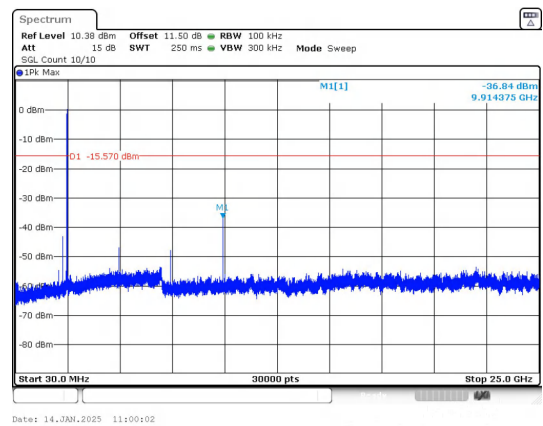
**Out Of Band Emission  
BLE 1M\_Channel 39**



**Out Of Band Emission  
BLE 2M\_Channel 39**



**30.0 MHz - 25000.0 MHz  
BLE 1M\_Channel 39**



**30.0 MHz - 25000.0 MHz  
BLE 2M\_Channel 39**

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