

## Appendix A

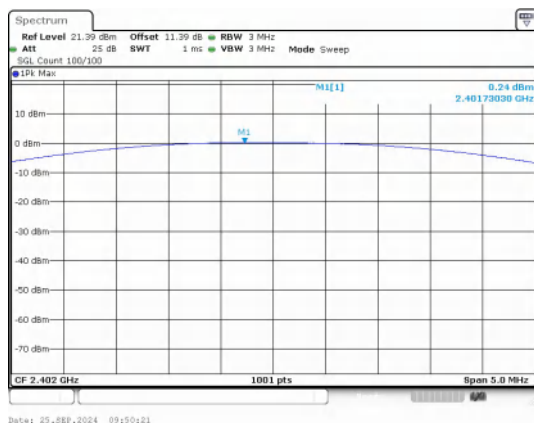
|                |                |
|----------------|----------------|
| Report No.:    | CISRR240921203 |
| FCC ID:        | 2A5C6-Y04H     |
| Product Name:  | Smart Tracker  |
| Model No.:     | Y04H           |
| Test Engineer: | Lucas Huang    |
| Supervised by: | Rory Huang     |

# 1) Conducted Output Power

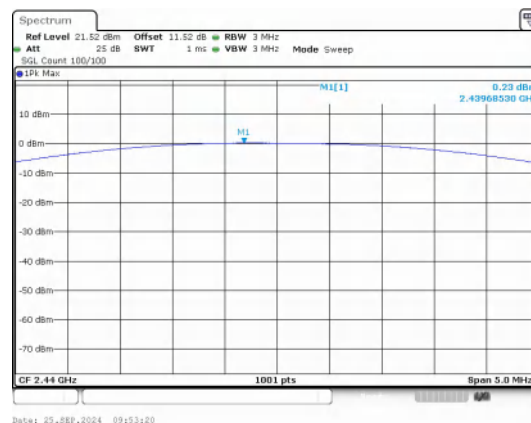
## Test Result

| Mode   | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|--------|---------|-------------------------|------------------------|-------------|--------|
| BLE 1M | 0       | 0.24                    | 1.06                   | ≤30         | PASS   |
|        | 19      | 0.23                    | 1.05                   | ≤30         | PASS   |
|        | 39      | 0.52                    | 1.13                   | ≤30         | PASS   |
| BLE 2M | 0       | 0.31                    | 1.07                   | ≤30         | PASS   |
|        | 19      | 0.67                    | 1.17                   | ≤30         | PASS   |
|        | 39      | 0.89                    | 1.23                   | ≤30         | PASS   |

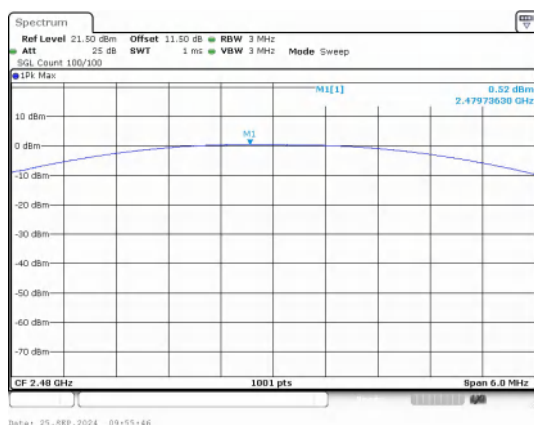
## Test Graphs



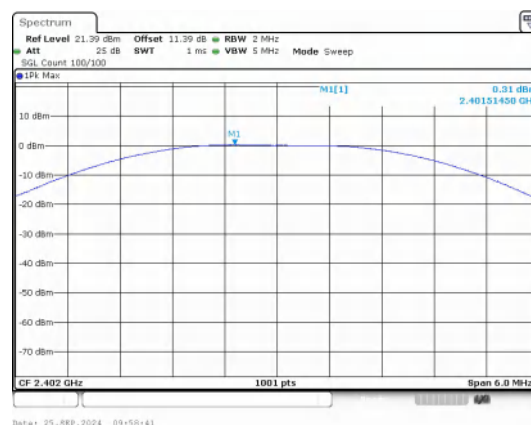
Peak Output Power  
BLE 1M\_Channel 0



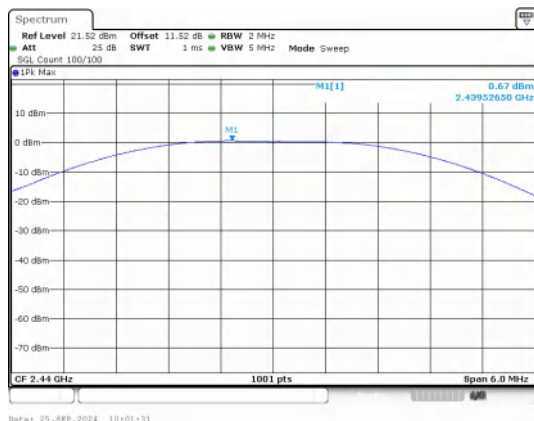
Peak Output Power  
BLE 1M\_Channel 19



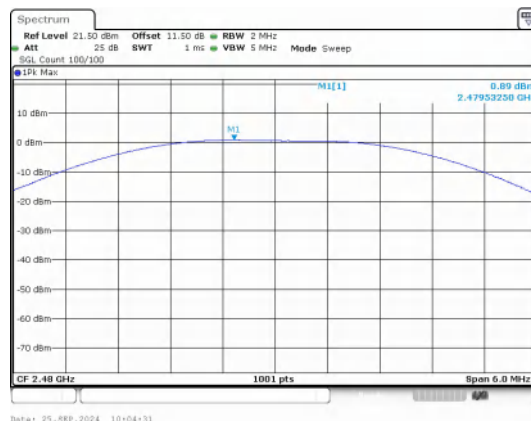
Peak Output Power  
BLE 1M\_Channel 39



Peak Output Power  
BLE 2M\_Channel 0



**Peak Output Power**  
**BLE 2M\_Channel 19**



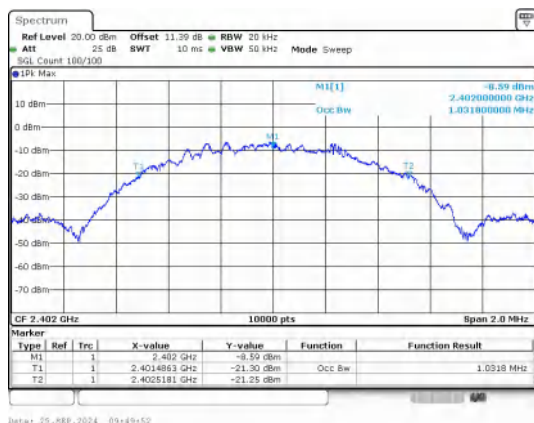
**Peak Output Power**  
**BLE 2M\_Channel 39**

## 2) 99% Bandwidth

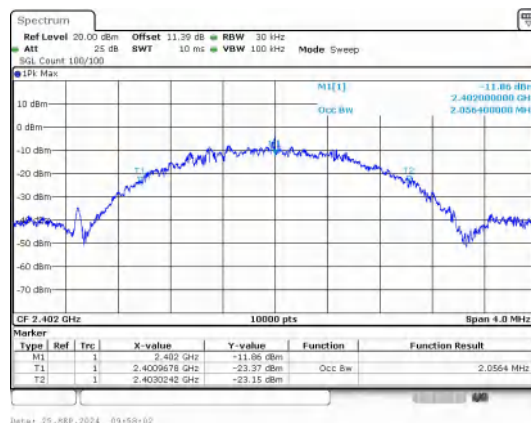
### Test Result

| Mode   | Channel | Center Frequency (MHz) | 99% BW (MHz) |
|--------|---------|------------------------|--------------|
| BLE 1M | 0       | 2402                   | 1.0318       |
| BLE 1M | 19      | 2440                   | 1.0334       |
| BLE 1M | 39      | 2480                   | 1.0332       |
| BLE 2M | 0       | 2402                   | 2.0564       |
| BLE 2M | 19      | 2440                   | 2.0544       |
| BLE 2M | 39      | 2480                   | 2.0648       |

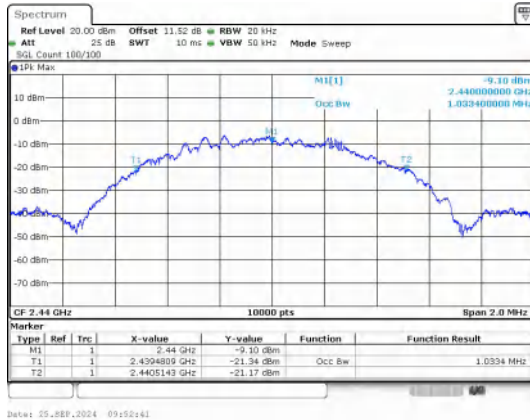
### Test Graphs



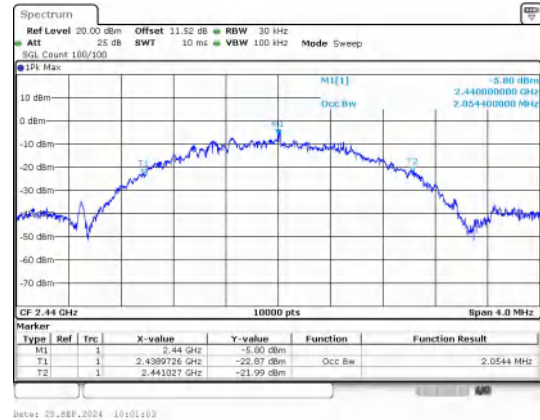
**BLE 1M\_Channel 0**



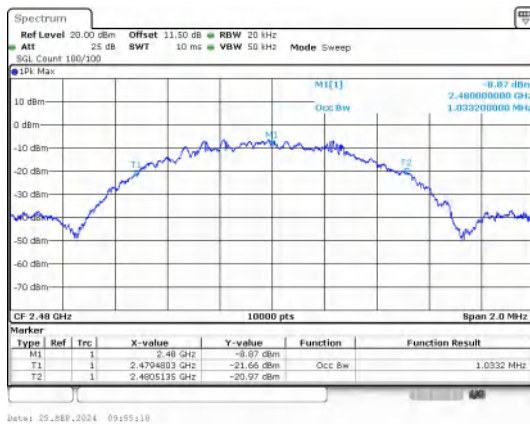
**BLE 2M\_Channel 0**



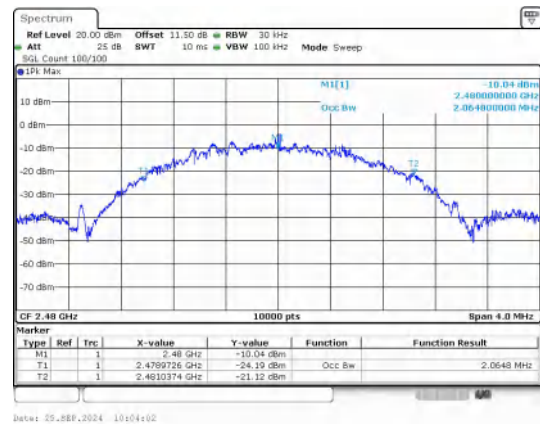
BLE 1M\_Channel 19



BLE 2M\_Channel 19



BLE 1M\_Channel 39



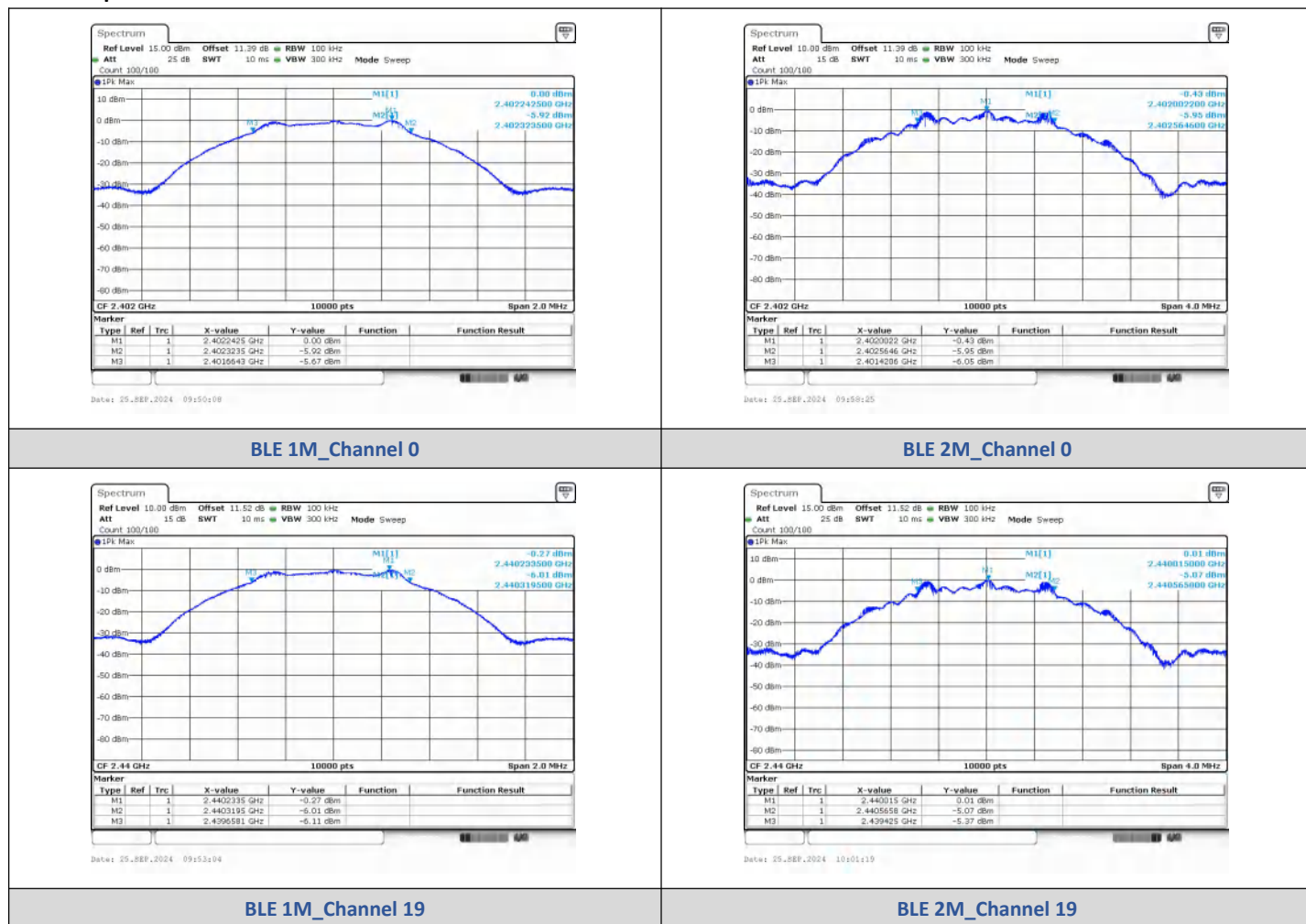
BLE 2M\_Channel 39

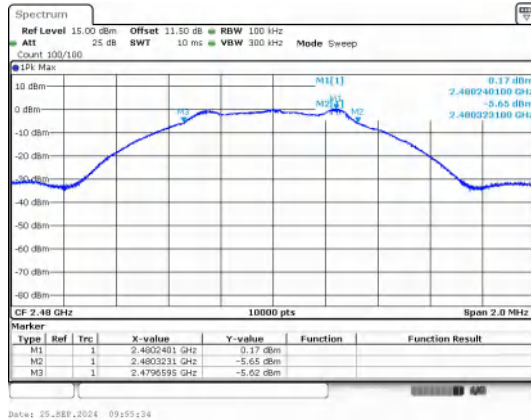
### 3) 6dB Bandwidth

#### Test Result

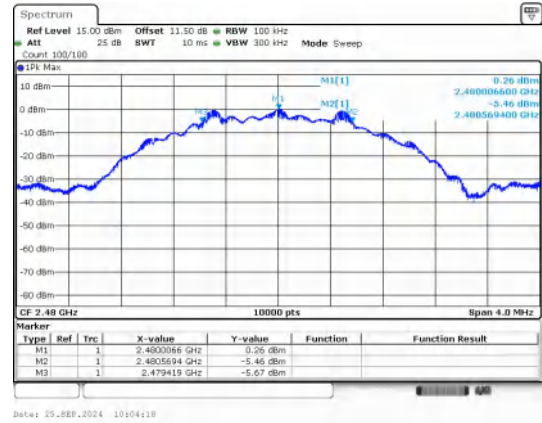
| Mode   | Channel | Center Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz) | Result |
|--------|---------|------------------------|----------------------|-------------|--------|
| BLE 1M | 0       | 2402                   | 0.6600               | ≥0.5        | PASS   |
|        | 19      | 2440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

#### Test Graphs





BLE 1M\_Channel 39



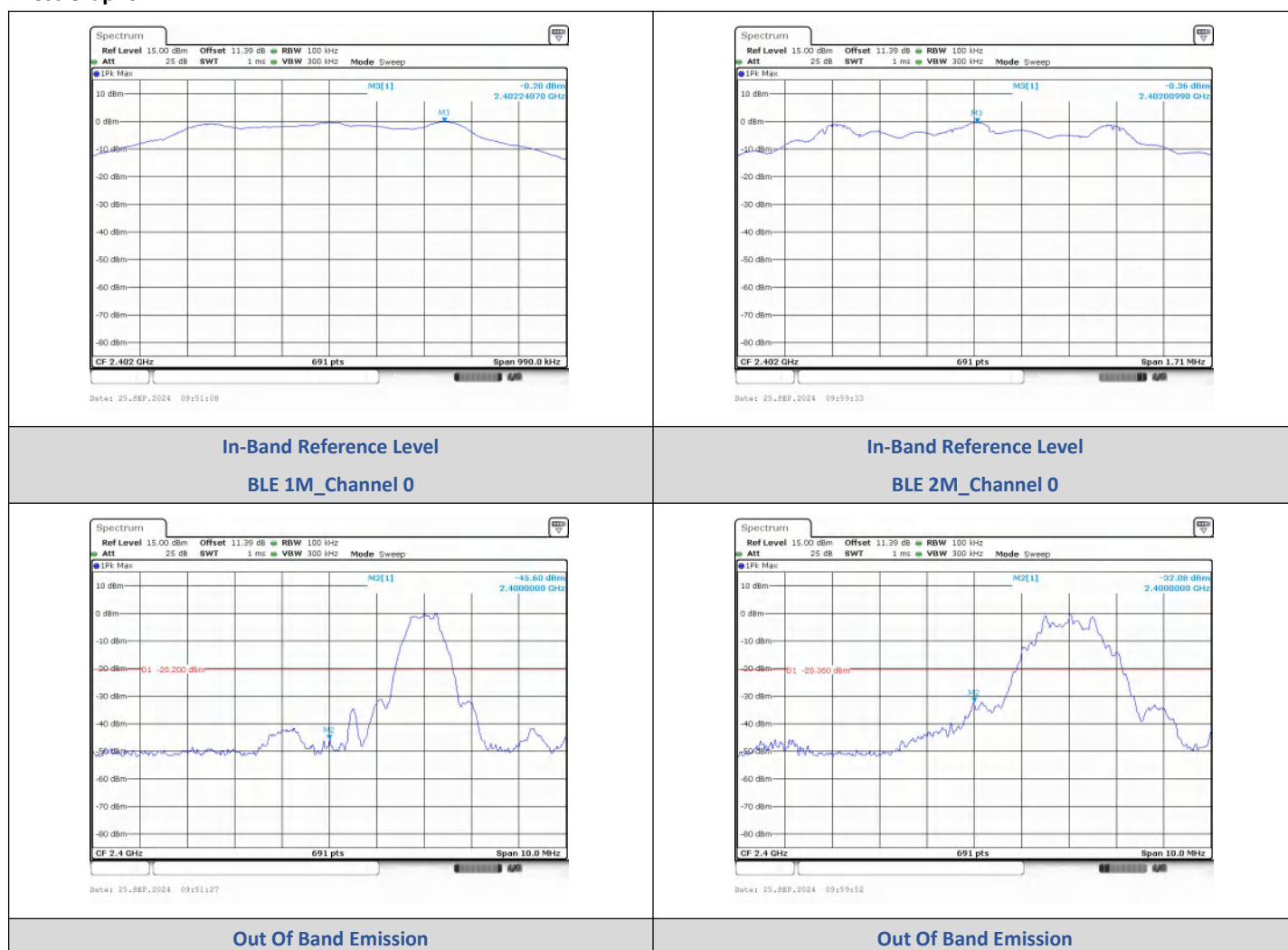
BLE 2M\_Channel 39

## 4) Conducted Out Of Band Emission

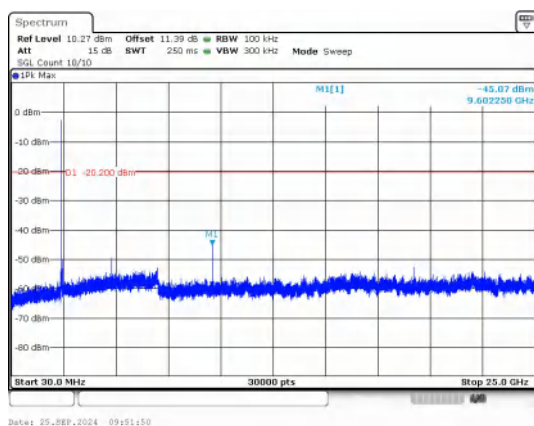
### Test Result

| Mode   | Channel | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|--------|---------|------------------------------|--------------------------|-------------|-----------------|--------|
| BLE 1M | 0       | 2399.00                      | -42.346                  | -20.2       | -22.146         | PASS   |
|        |         | 2400.00                      | -45.596                  | -20.2       | -25.396         | PASS   |
|        |         | 9602.20                      | -45.066                  | -20.2       | -24.866         | PASS   |
|        | 19      | 9753.73                      | -41.296                  | -20.16      | -21.136         | PASS   |
|        |         | 2483.50                      | -44.777                  | -19.89      | -24.887         | PASS   |
|        |         | 9914.37                      | -42.116                  | -19.89      | -22.226         | PASS   |
| BLE 2M | 0       | 2400.00                      | -32.080                  | -20.36      | -11.720         | PASS   |
|        |         | 9602.25                      | -45.998                  | -20.36      | -25.638         | PASS   |
|        | 19      | 9753.73                      | -41.751                  | -19.98      | -21.771         | PASS   |
|        |         | 2483.50                      | -48.506                  | -19.69      | -28.816         | PASS   |
|        | 39      | 9914.37                      | -42.511                  | -19.69      | -22.821         | PASS   |
|        |         |                              |                          |             |                 |        |

### Test Graphs

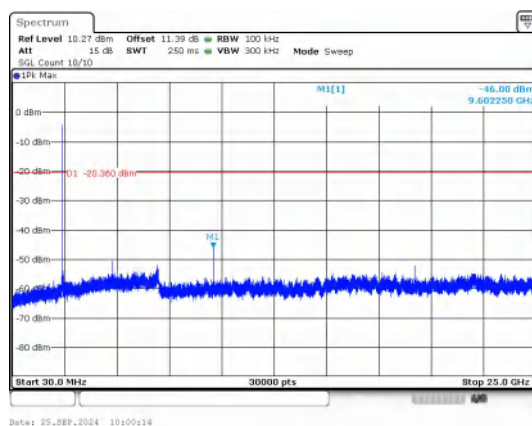


BLE 1M\_Channel 0



Date: 25 SEP, 2024 09:51:50

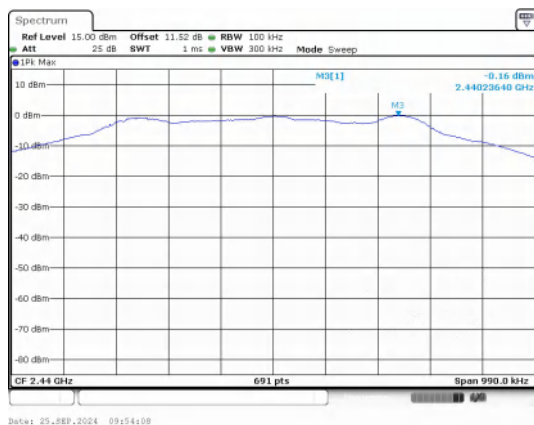
BLE 2M\_Channel 0



Date: 25 SEP, 2024 10:00:16

30.0 MHz - 25000.0 MHz

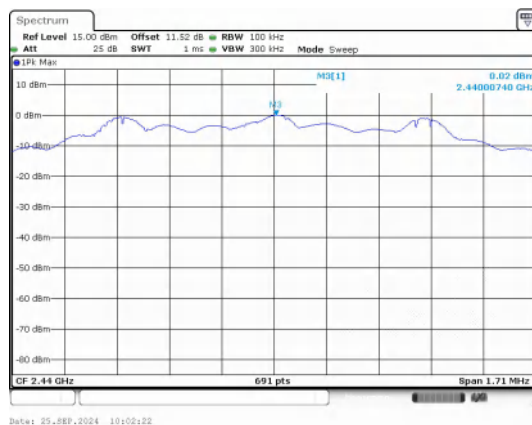
BLE 1M\_Channel 0



Date: 25 SEP, 2024 09:54:08

30.0 MHz - 25000.0 MHz

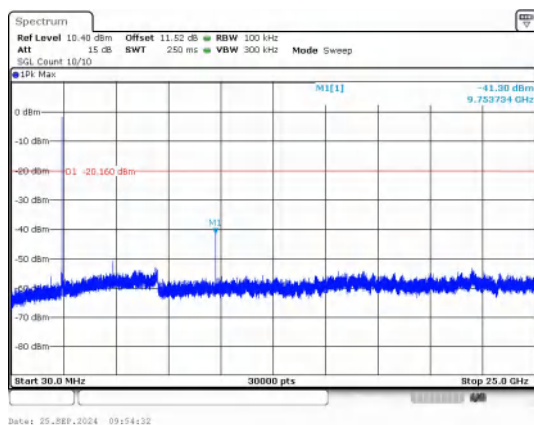
BLE 2M\_Channel 0



Date: 25 SEP, 2024 10:02:22

In-Band Reference Level

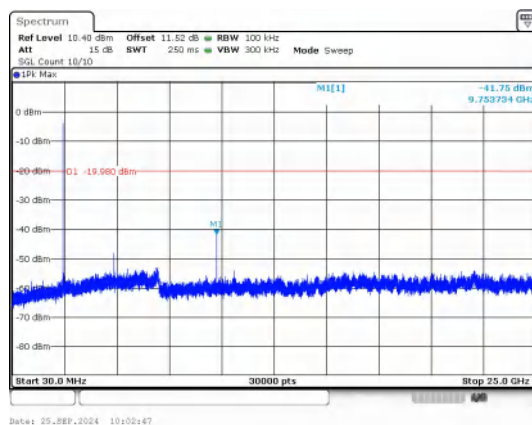
BLE 1M\_Channel 19



Date: 25 SEP, 2024 09:54:22

In-Band Reference Level

BLE 2M\_Channel 19



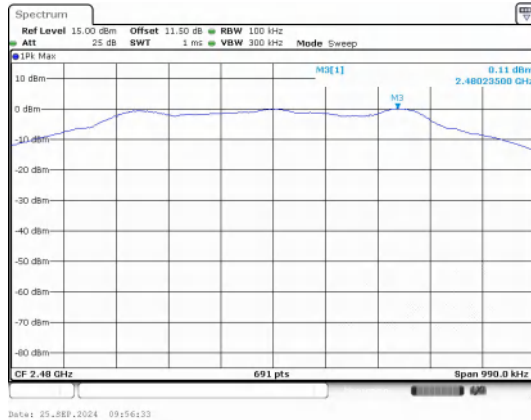
Date: 25 SEP, 2024 10:02:47

30.0 MHz - 25000.0 MHz

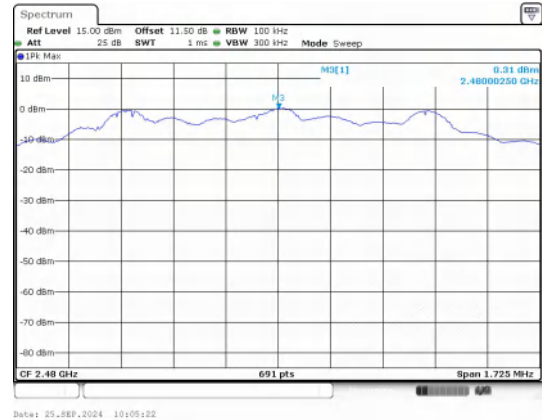
BLE 1M\_Channel 19

30.0 MHz - 25000.0 MHz

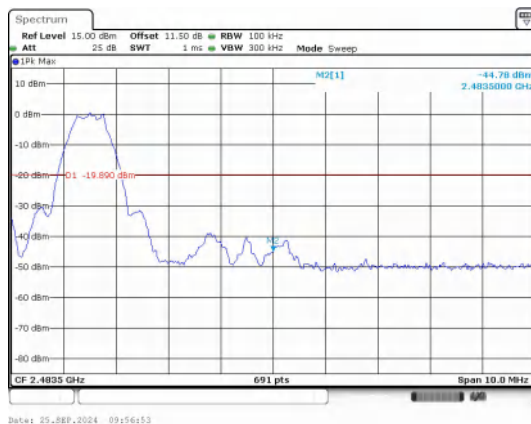
BLE 2M\_Channel 19



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



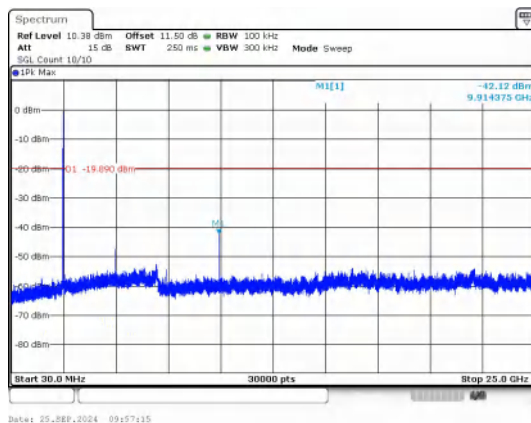
**In-Band Reference Level**  
**BLE 2M\_Channel 39**



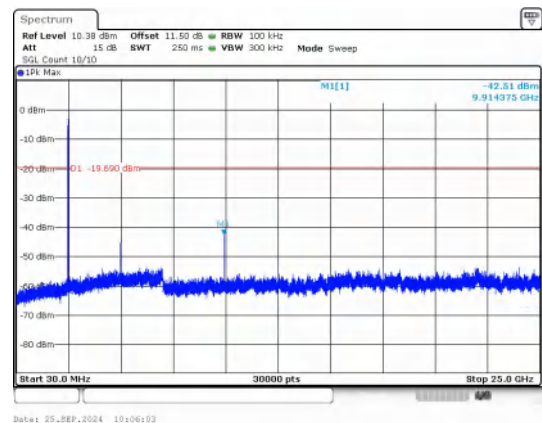
**Out Of Band Emission**  
**BLE 1M\_Channel 39**



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



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



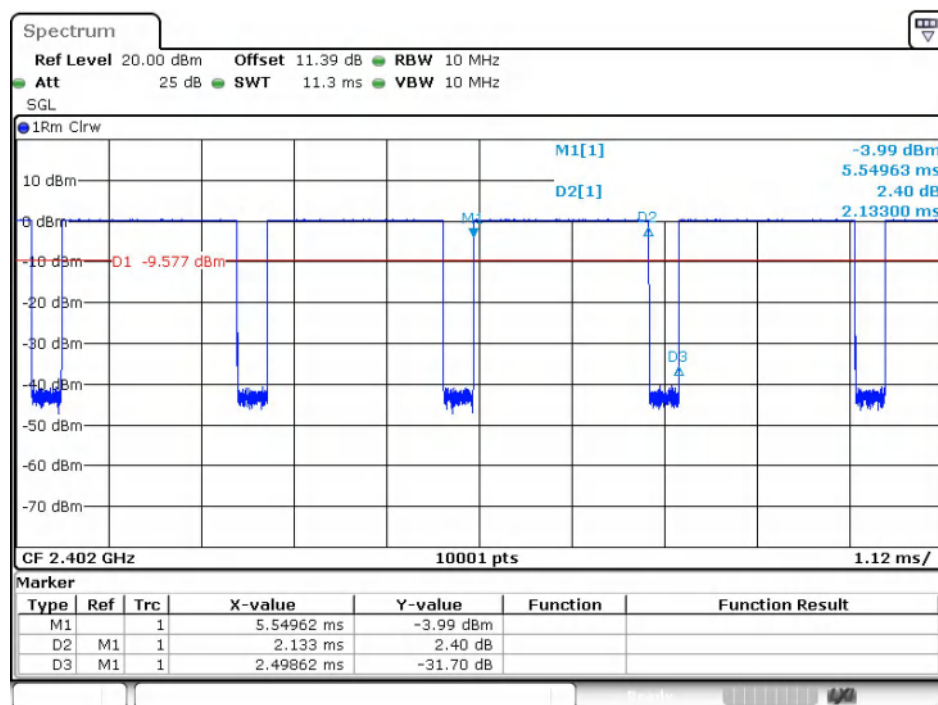
**30.0 MHz - 25000.0 MHz**  
**BLE 2M\_Channel 39**

## 5) Duty Cycle

### Test Result

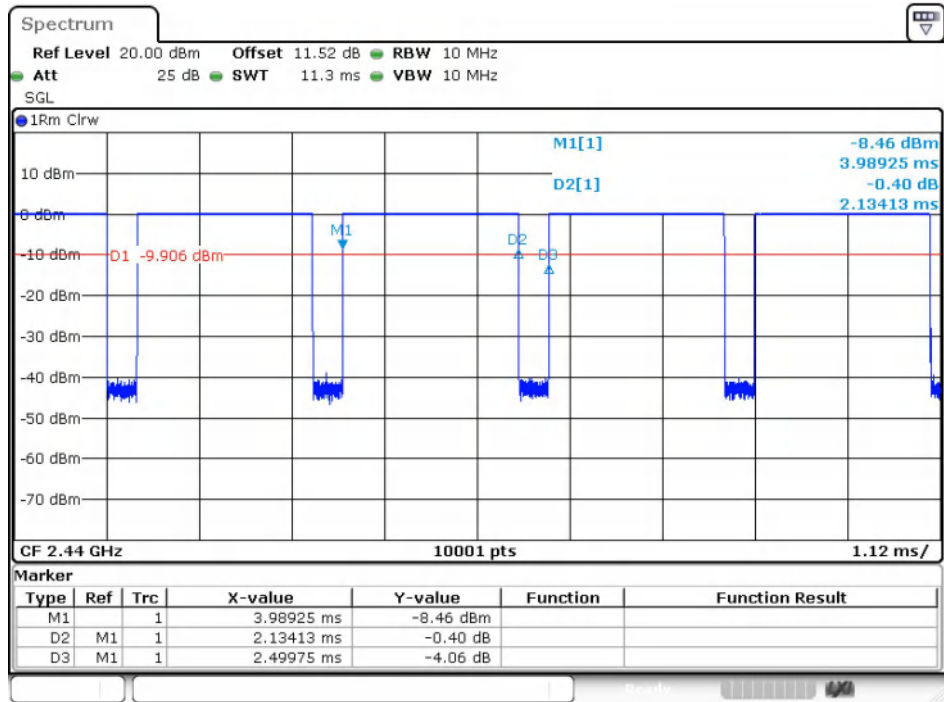
| Mode   | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T  |
|--------|---------|--------------|-------------|----------------|---------------------|------------------------|------|
| BLE 1M | 0       | 2.133        | 2.499       | 85.37          | 0.8537              | 0.6869                 | 0.47 |
|        | 19      | 2.134        | 2.500       | 85.37          | 0.8537              | 0.6869                 | 0.47 |
|        | 39      | 2.133        | 2.499       | 85.37          | 0.8537              | 0.6869                 | 0.47 |
| BLE 2M | 0       | 1.081        | 2.499       | 43.27          | 0.4327              | 3.6381                 | 0.93 |
|        | 19      | 1.081        | 2.499       | 43.27          | 0.4327              | 3.6381                 | 0.93 |
|        | 39      | 1.081        | 2.499       | 43.27          | 0.4327              | 3.6381                 | 0.93 |

### Test Graphs



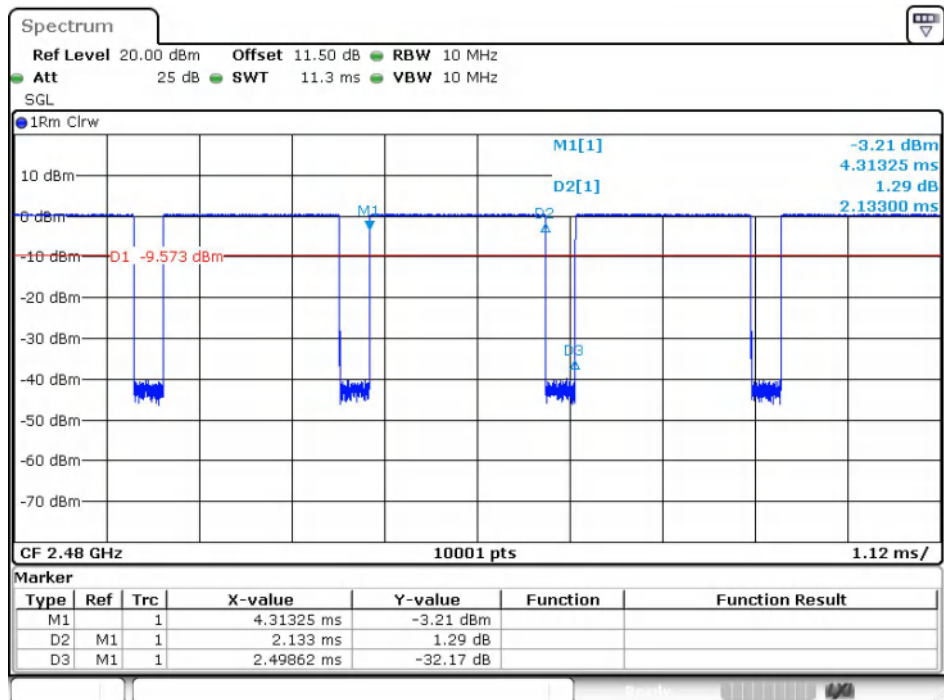
Date: 25.SEP.2024 09:49:38

BLE 1M\_Channel 0



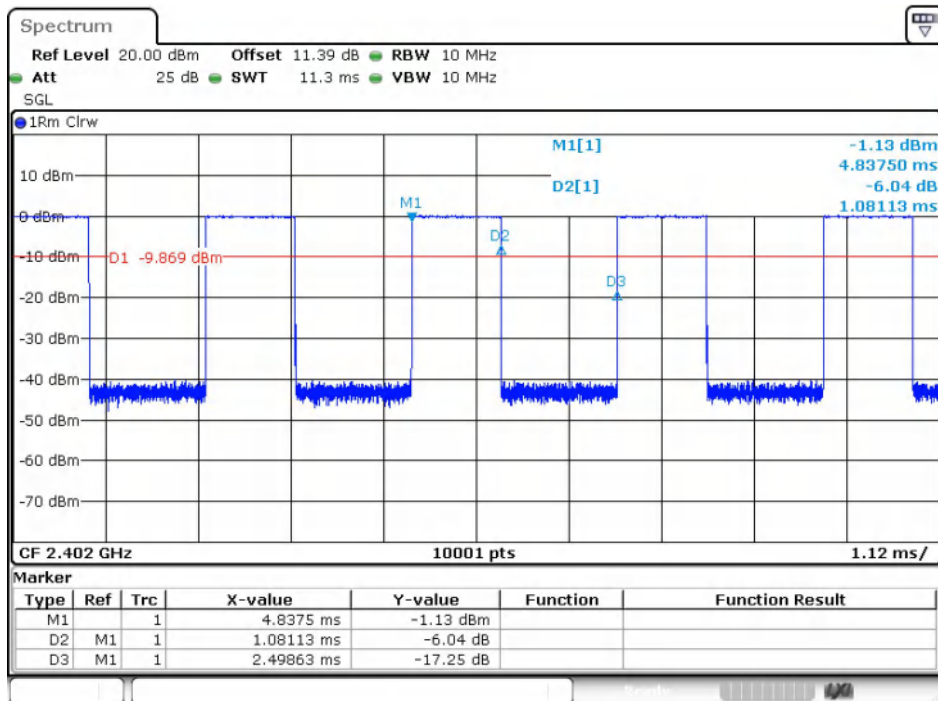
Date: 25.SEP.2024 09:52:27

### BLE 1M\_Channel 19



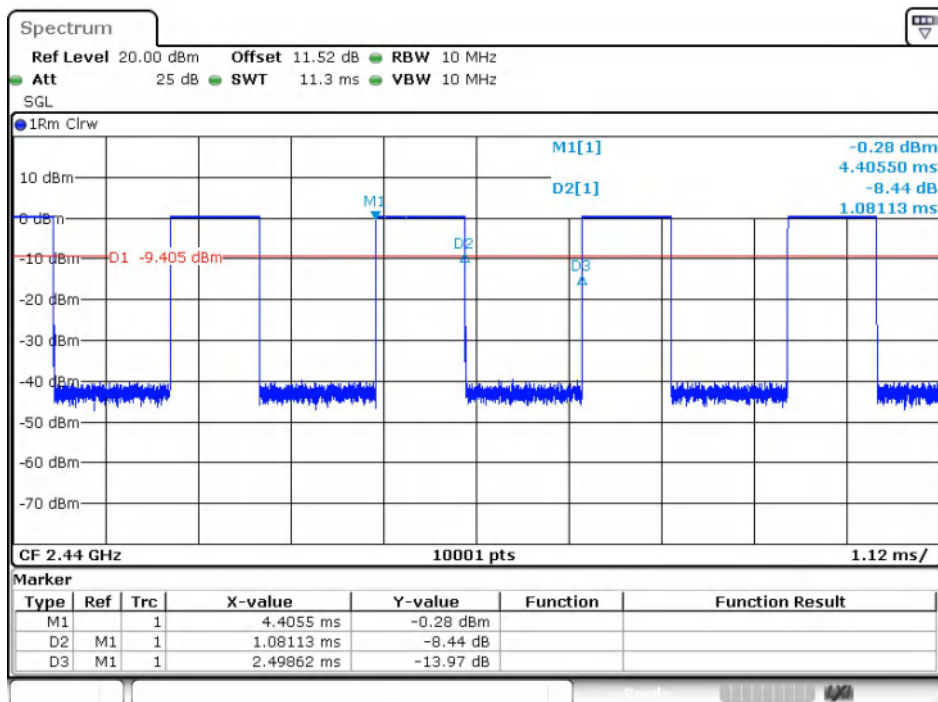
Date: 25.SEP.2024 09:55:04

### BLE 1M\_Channel 39



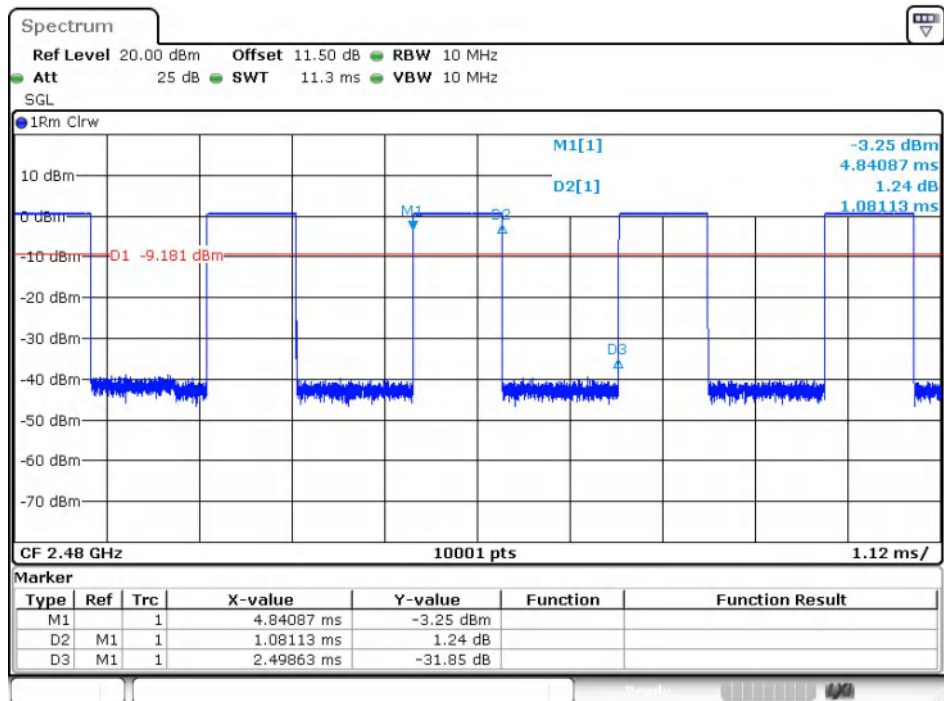
Date: 25.SEP.2024 09:57:48

### BLE 2M\_Channel 0



Date: 25.SEP.2024 10:00:48

### BLE 2M\_Channel 19



Date: 25.SEP.2024 10:03:48

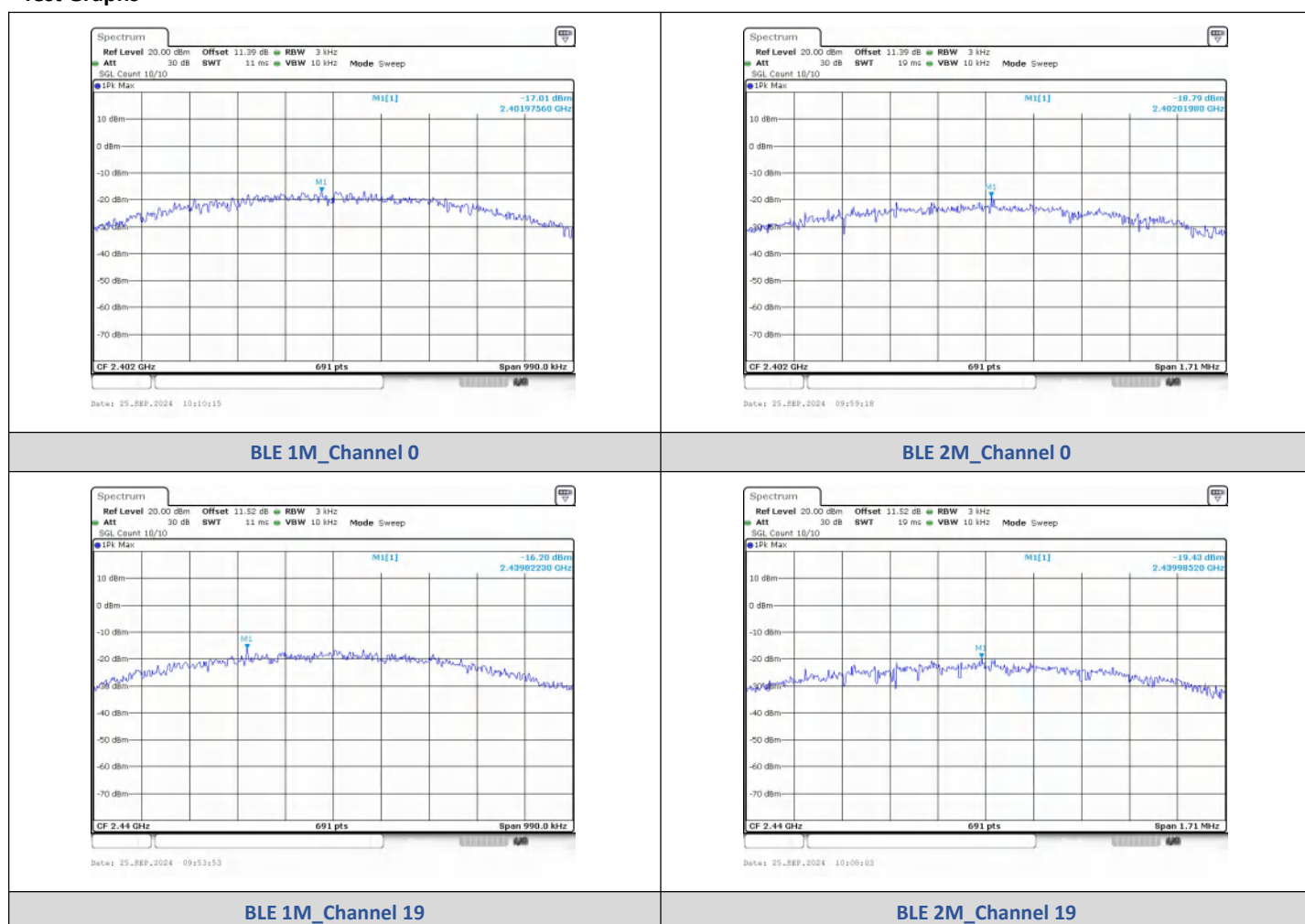
BLE 2M\_Channel 39

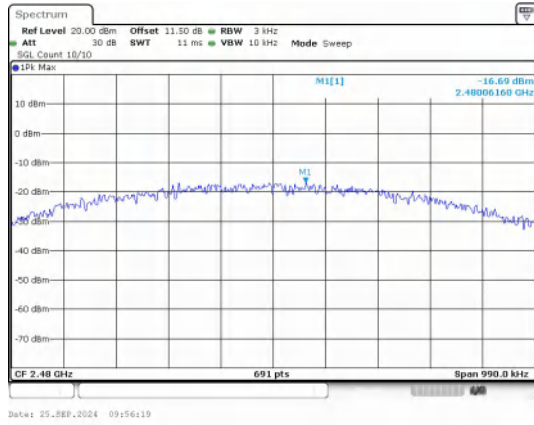
## 6) Power Spectral Density

### Test Result

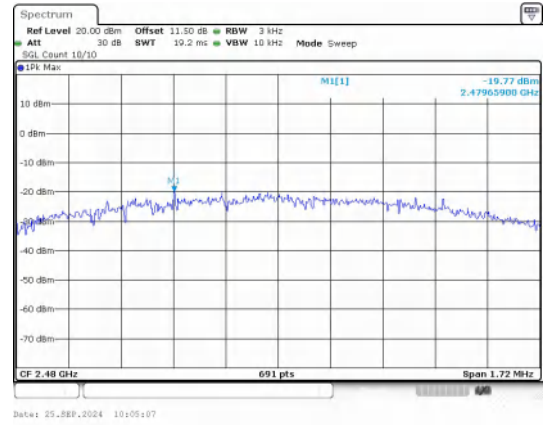
| Mode   | Channel | PSD (dBm/3kHz) | Limit (dBm/3kHz) | Result |
|--------|---------|----------------|------------------|--------|
| BLE 1M | 0       | -17.01         | ≤8               | PASS   |
| BLE 1M | 19      | -16.20         | ≤8               | PASS   |
| BLE 1M | 39      | -16.69         | ≤8               | PASS   |
| BLE 2M | 0       | -18.79         | ≤8               | PASS   |
| BLE 2M | 19      | -19.43         | ≤8               | PASS   |
| BLE 2M | 39      | -19.77         | ≤8               | PASS   |

### Test Graphs





BLE 1M\_Channel 39



BLE 2M\_Channel 39