

# Appendix A

|                |                  |
|----------------|------------------|
| Report No.:    | CISRR23120401001 |
| FCC ID:        | 2BD95-ZSCYZS1    |
| Product Name:  | Smart Cylinder   |
| Model No.:     | S1               |
| Test Engineer: | Lucas Huang      |
| Supervised by: | Rory Huang       |

## 1) Conducted Peak Output Power

### Test Result

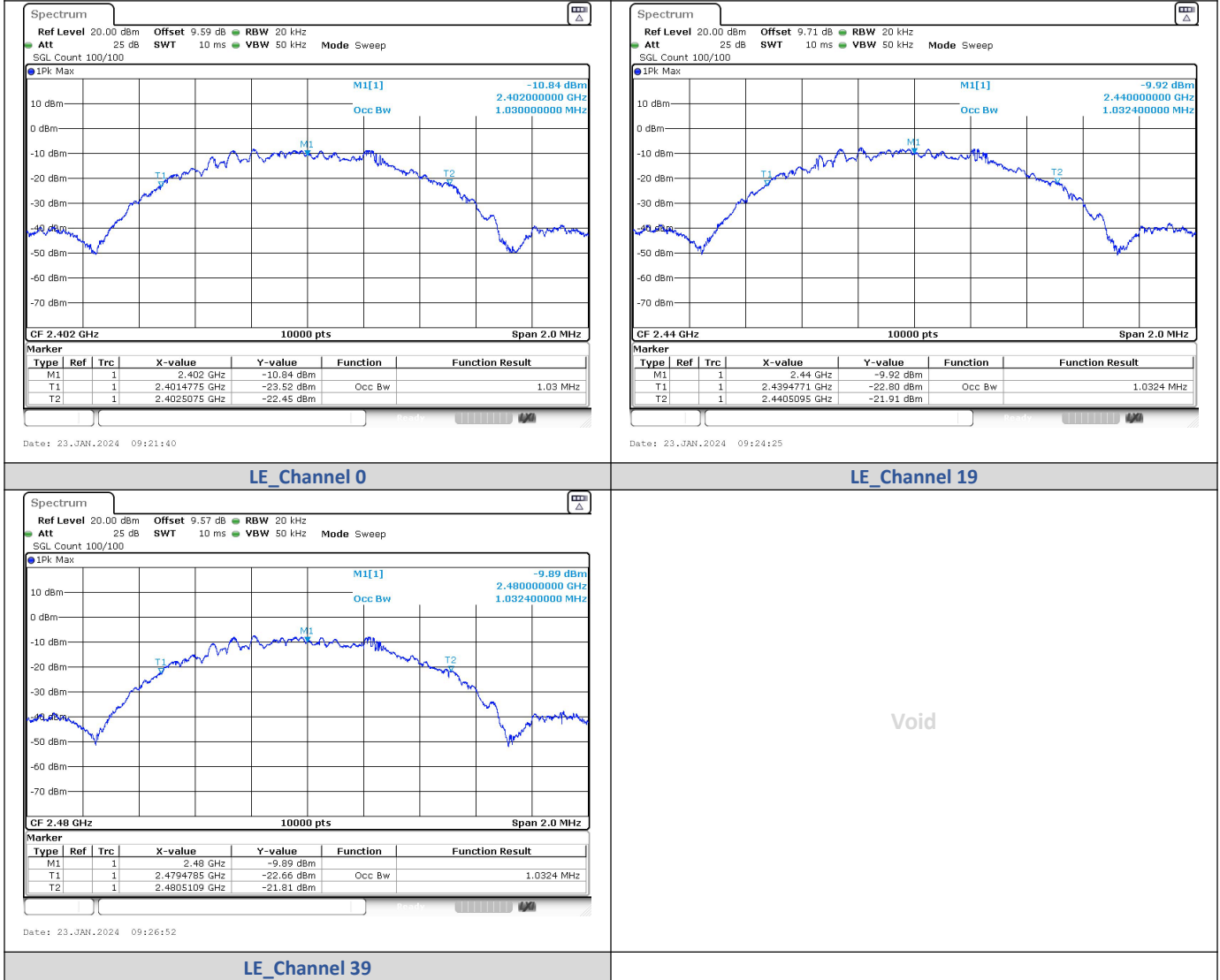
| Mode | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|------|---------|-------------------------|------------------------|-------------|--------|
| LE   | 0       | -1.288                  | 0.74                   | 30          | PASS   |
|      | 19      | -0.897                  | 0.81                   | 30          | PASS   |
|      | 39      | -0.748                  | 0.84                   | 30          | PASS   |

## 2) 99% Bandwidth

### Test Result

| Mode | Channel | 99% BW (MHz) |
|------|---------|--------------|
| LE   | 0       | 1.0300       |
| LE   | 19      | 1.0320       |
| LE   | 39      | 1.0320       |

### Test Graphs

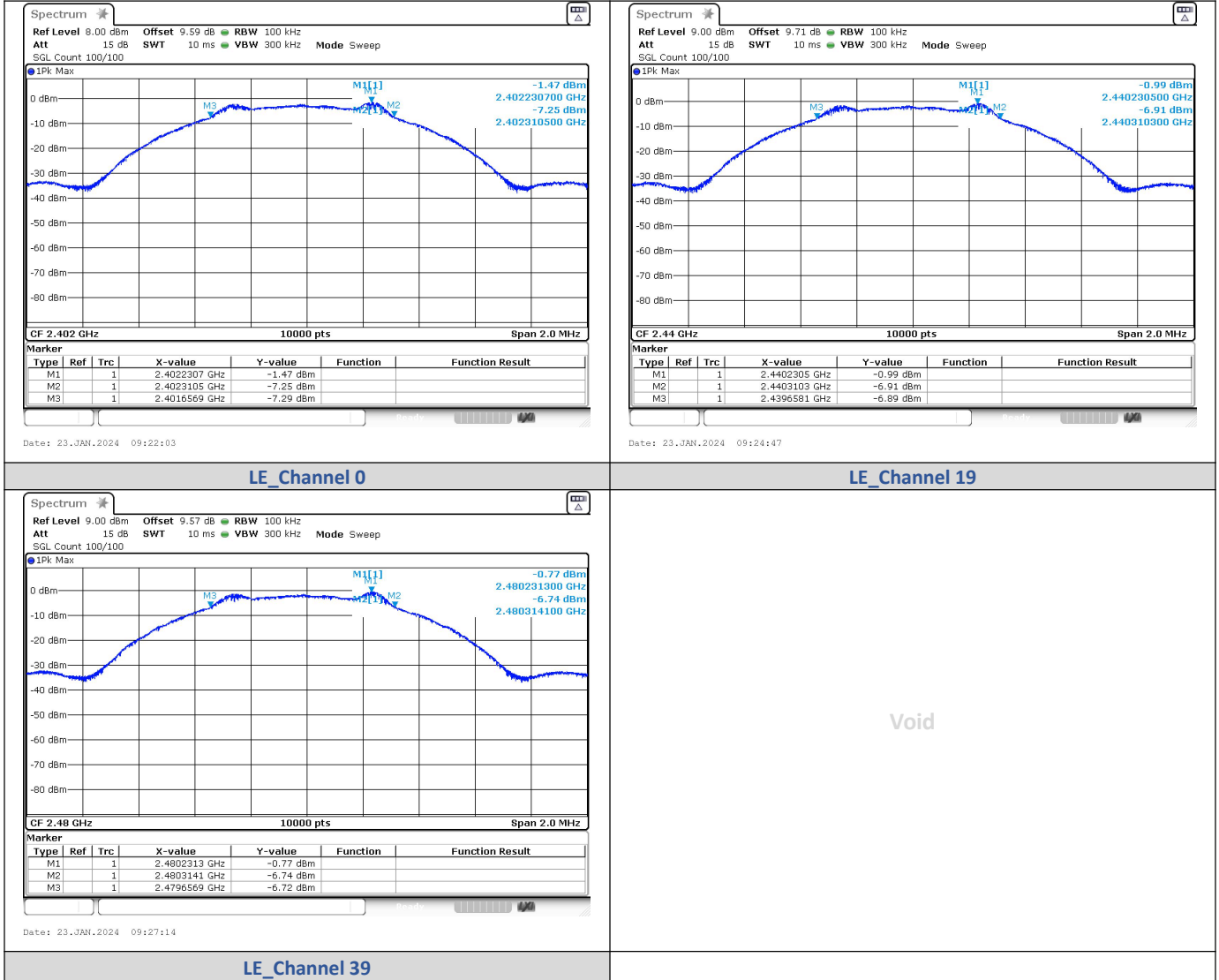


### 3) 6dB Bandwidth

#### Test Result

| Mode | Channel | Center Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz) | Result |
|------|---------|------------------------|----------------------|-------------|--------|
| LE   | 0       | 2402                   | 0.6500               | 0.5         | PASS   |
|      | 19      | 2440                   | 0.6500               |             | PASS   |
|      | 39      | 2480                   | 0.6500               |             | PASS   |

#### Test Graphs

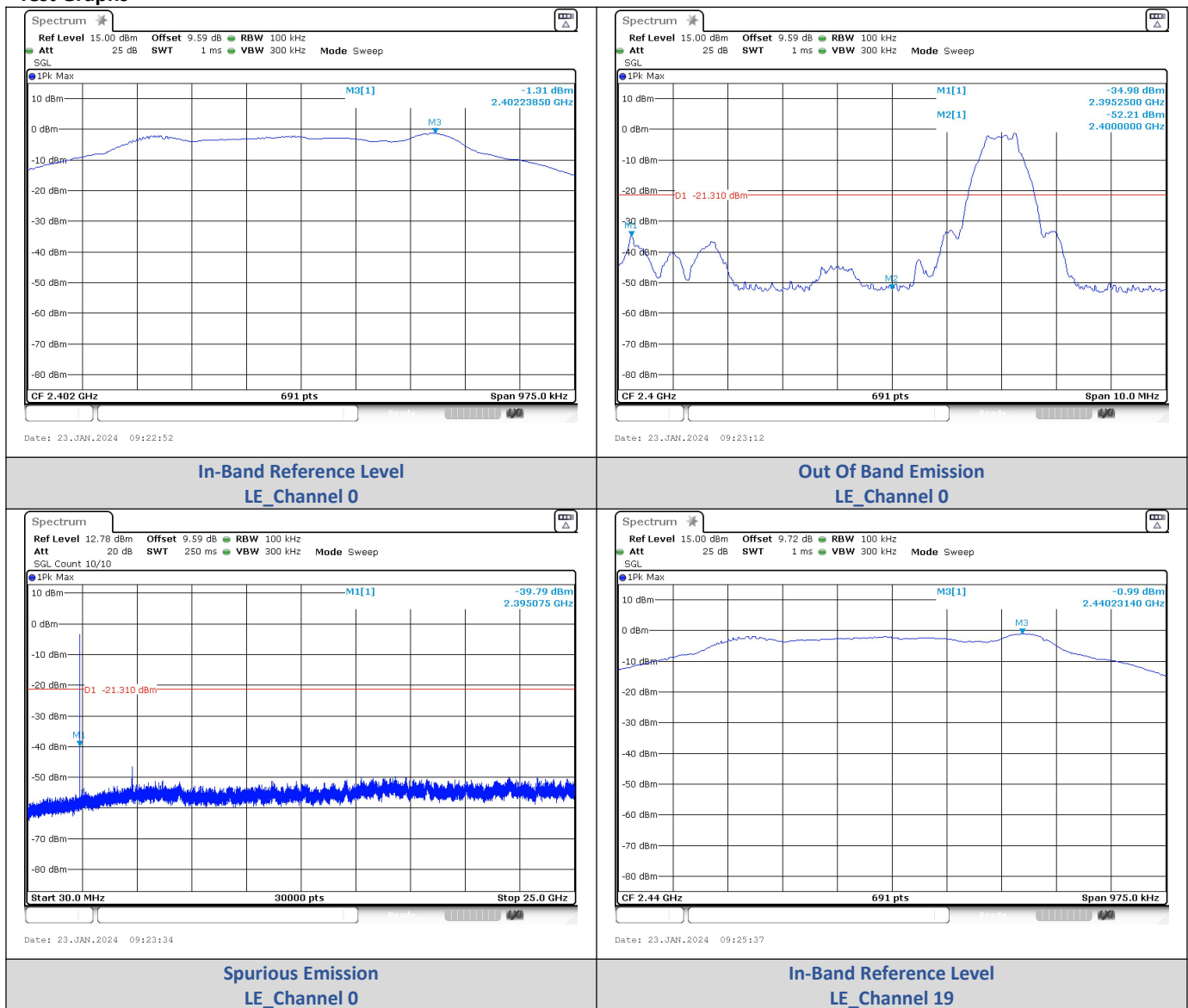


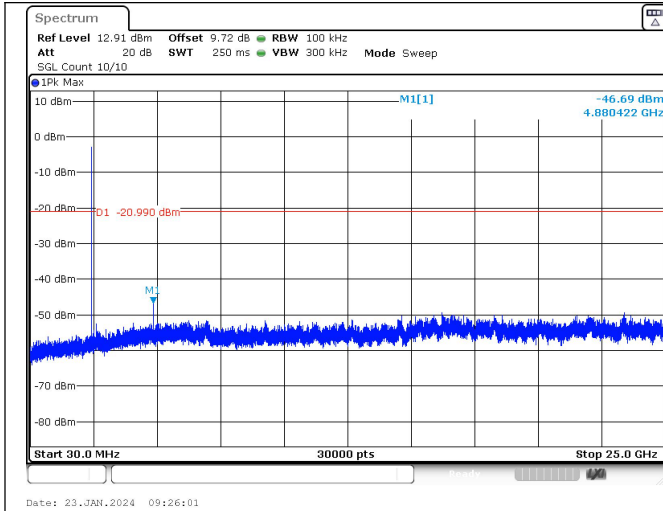
## 4) Conducted Out Of Band Emission

### Test Result

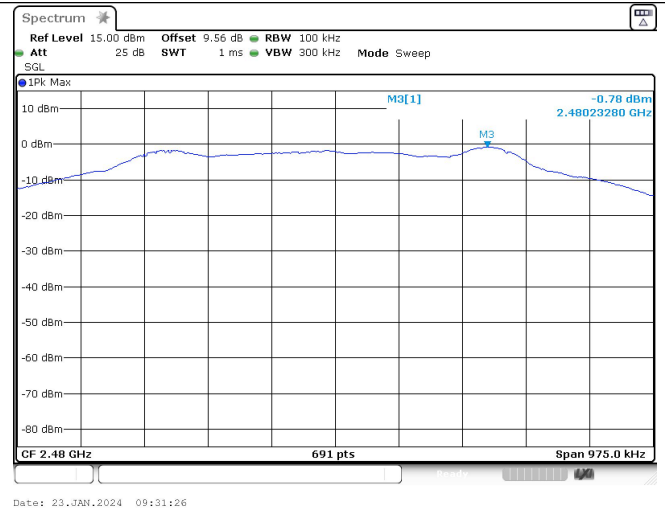
| Mode | Channel | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|------|---------|------------------------------|--------------------------|-------------|-----------------|--------|
| LE   | 0       | 2400.00                      | -52.210                  | -21.31      | -30.900         | PASS   |
|      |         | 2395.25                      | -34.982                  | -21.31      | -13.672         | PASS   |
|      |         | 2395.10                      | -39.787                  | -21.31      | -18.477         | PASS   |
|      | 19      | 4880.42                      | -46.694                  | -20.99      | -25.704         | PASS   |
|      | 39      | 2483.50                      | -51.431                  | -20.78      | -30.651         | PASS   |
|      |         | 4959.49                      | -45.502                  | -20.78      | -24.722         | PASS   |

### Test Graphs

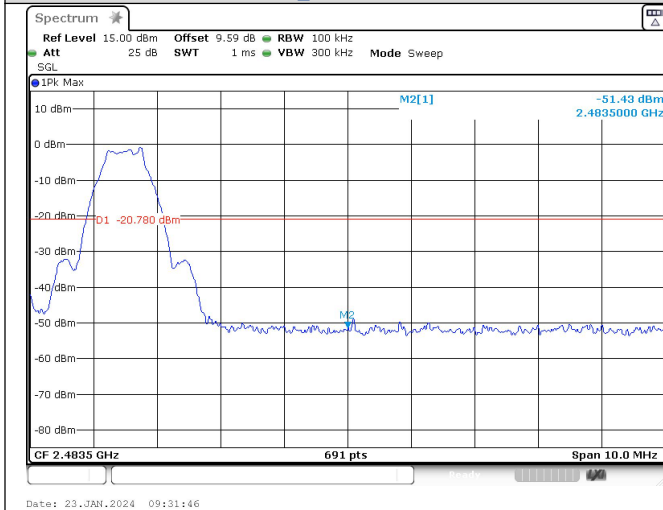




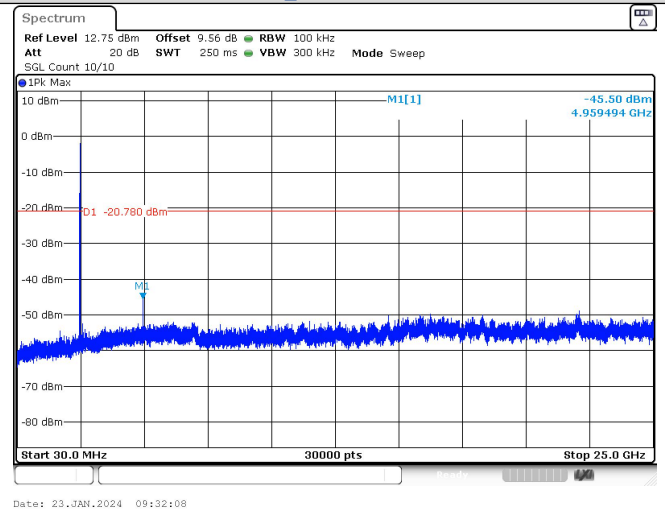
Spurious Emissions  
LE\_Channel 19



In-Band Reference Level  
LE\_Channel 39



Out Of Band Emission  
LE\_Channel 39



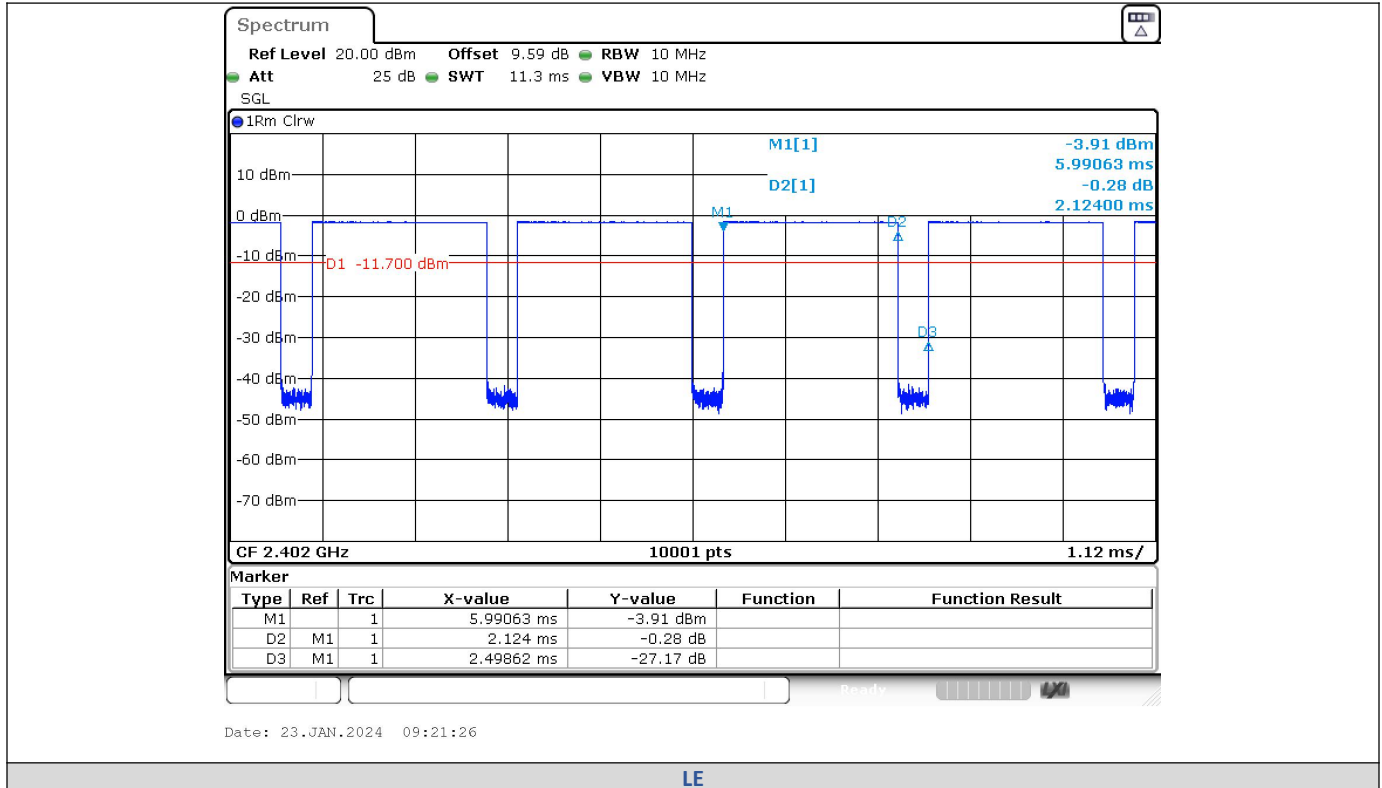
Spurious Emission  
LE\_Channel 39

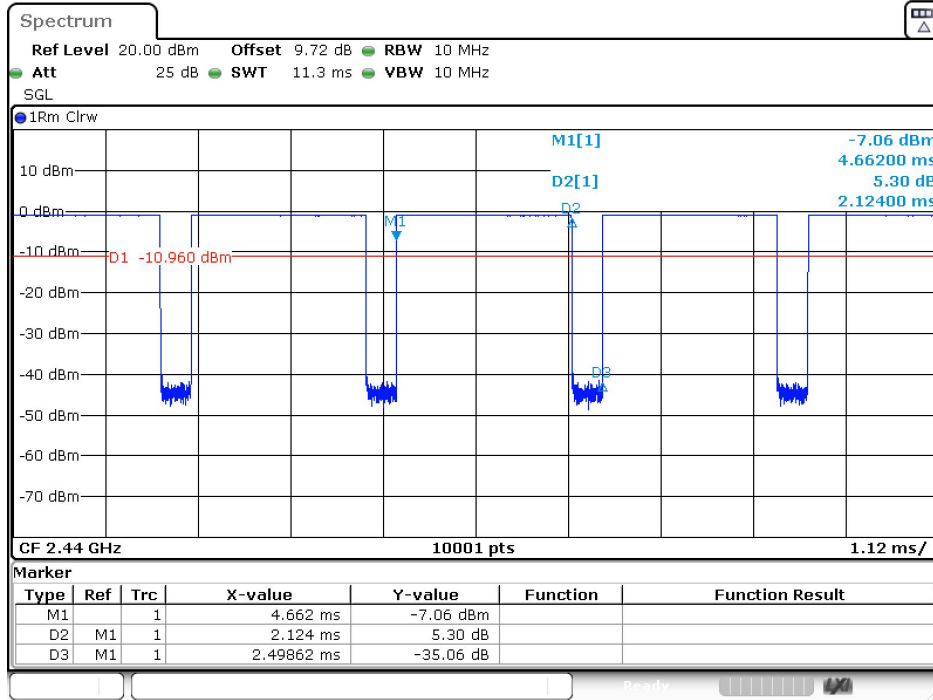
## 5) Duty Cycle

### Test Result

| Mode | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T  |
|------|---------|--------------|-------------|----------------|---------------------|------------------------|------|
| LE   | 0       | 2.124        | 2.499       | 85.01          | 0.8501              | 0.7053                 | 0.47 |
|      | 19      | 2.124        | 2.499       | 85.01          | 0.8501              | 0.7053                 | 0.47 |
|      | 39      | 2.124        | 2.499       | 85.01          | 0.8501              | 0.7053                 | 0.47 |

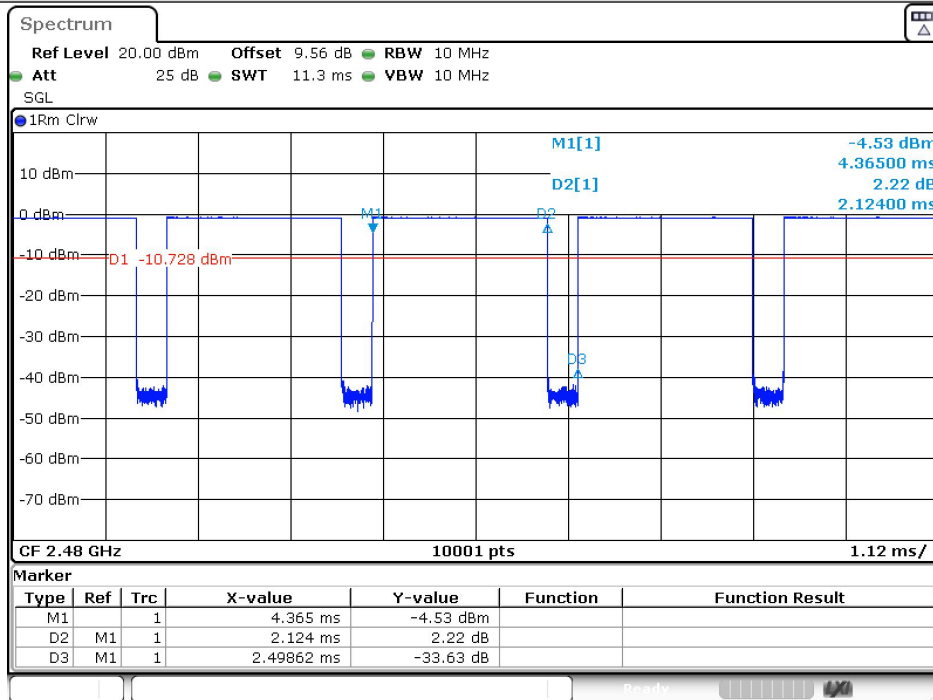
### Test Graphs





Date: 23.JAN.2024 09:24:10

LE



Date: 23.JAN.2024 09:26:37

LE

## 6) Power Spectral Density

### Test Result

| Mode | Channel | PSD (dBm/3kHz) | Limit (dBm/3kHz) | Result |
|------|---------|----------------|------------------|--------|
| LE   | 0       | -17.673        | 8                | PASS   |
| LE   | 19      | -17.436        | 8                | PASS   |
| LE   | 39      | -17.215        | 8                | PASS   |

### Test Graphs

