







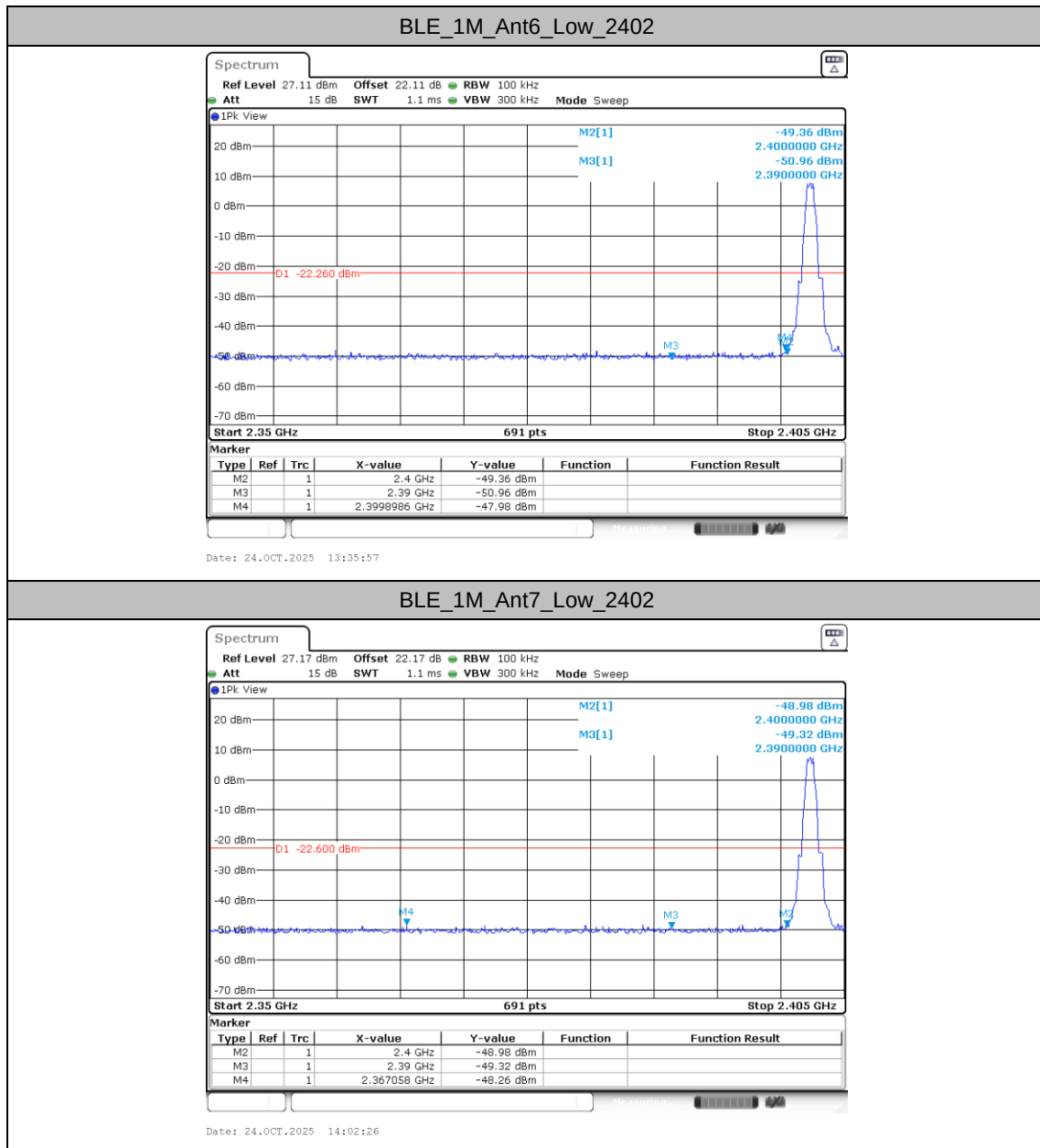
## Band edge measurements

### Test Result

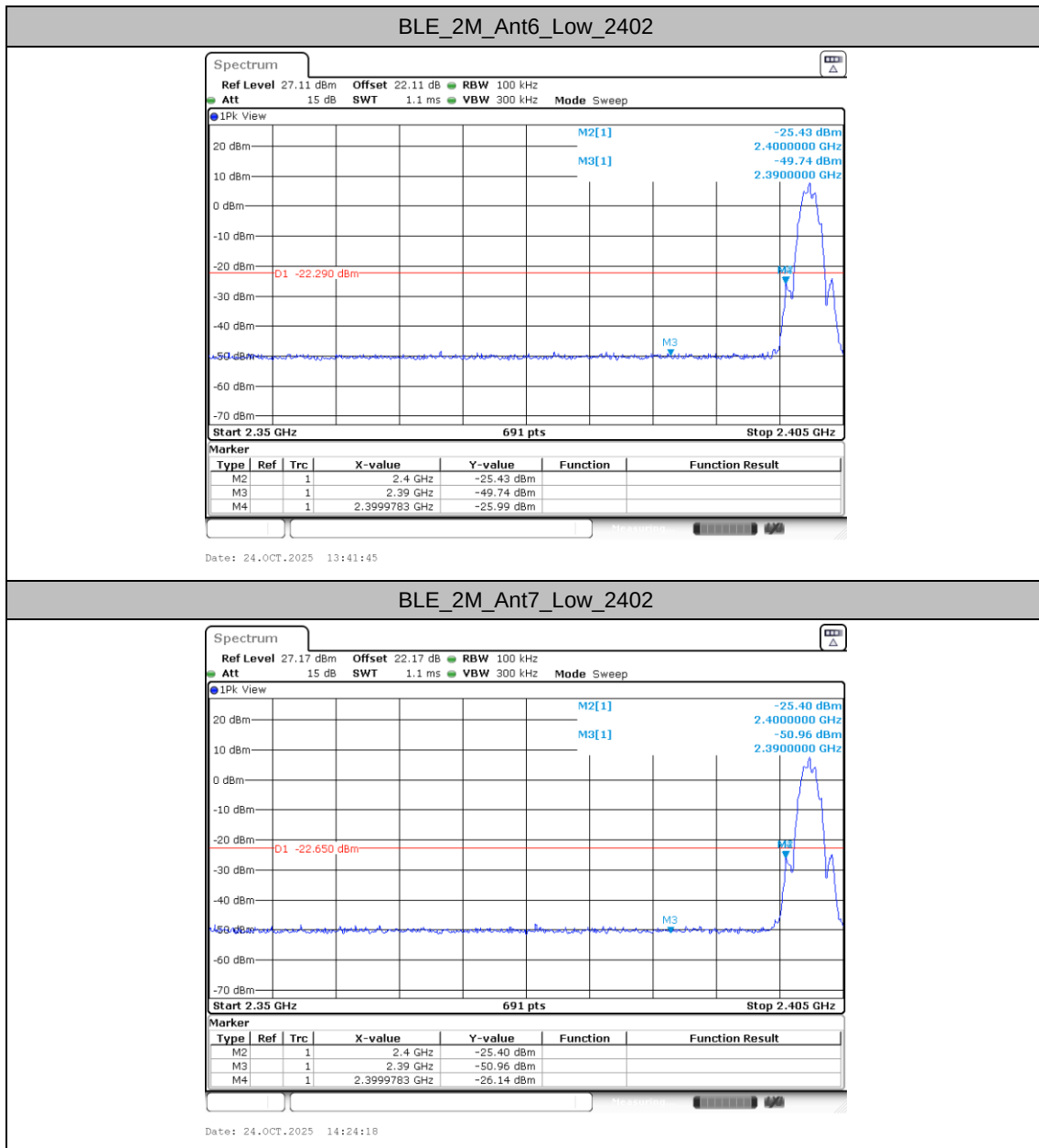
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel[dBm<br>/100KHz] | Result[dBm<br>/100KHz] | Limit[dBm<br>/100KHz] | Verdict |
|----------|---------|--------|-----------|--------------------------|------------------------|-----------------------|---------|
| BLE_1M   | Ant6    | Low    | 2402      | 7.74                     | -47.98                 | ≤-22.26               | PASS    |
|          | Ant7    | Low    | 2402      | 7.40                     | -48.26                 | ≤-22.60               | PASS    |
|          | Ant6    | High   | 2480      | 7.07                     | -47.33                 | ≤-22.93               | PASS    |
|          | Ant7    | High   | 2480      | 6.69                     | -47.72                 | ≤-23.31               | PASS    |
| BLE_2M   | Ant6    | Low    | 2402      | 7.71                     | -25.99                 | ≤-22.29               | PASS    |
|          | Ant7    | Low    | 2402      | 7.35                     | -26.14                 | ≤-22.65               | PASS    |
|          | Ant6    | High   | 2480      | 7.06                     | -47.84                 | ≤-22.94               | PASS    |
|          | Ant7    | High   | 2480      | 6.69                     | -47.72                 | ≤-23.31               | PASS    |
| BLE_125K | Ant6    | Low    | 2402      | 7.53                     | -48.16                 | ≤-22.47               | PASS    |
|          | Ant7    | Low    | 2402      | 7.23                     | -47.71                 | ≤-22.77               | PASS    |
|          | Ant6    | High   | 2480      | 6.87                     | -47.43                 | ≤-23.13               | PASS    |
|          | Ant7    | High   | 2480      | 6.55                     | -47.25                 | ≤-23.45               | PASS    |
| BLE_500K | Ant6    | Low    | 2402      | 8.20                     | -48.23                 | ≤-21.80               | PASS    |
|          | Ant7    | Low    | 2402      | 7.87                     | -48.05                 | ≤-22.13               | PASS    |
|          | Ant6    | High   | 2480      | 7.57                     | -47.28                 | ≤-22.43               | PASS    |
|          | Ant7    | High   | 2480      | 7.23                     | -47.22                 | ≤-22.77               | PASS    |

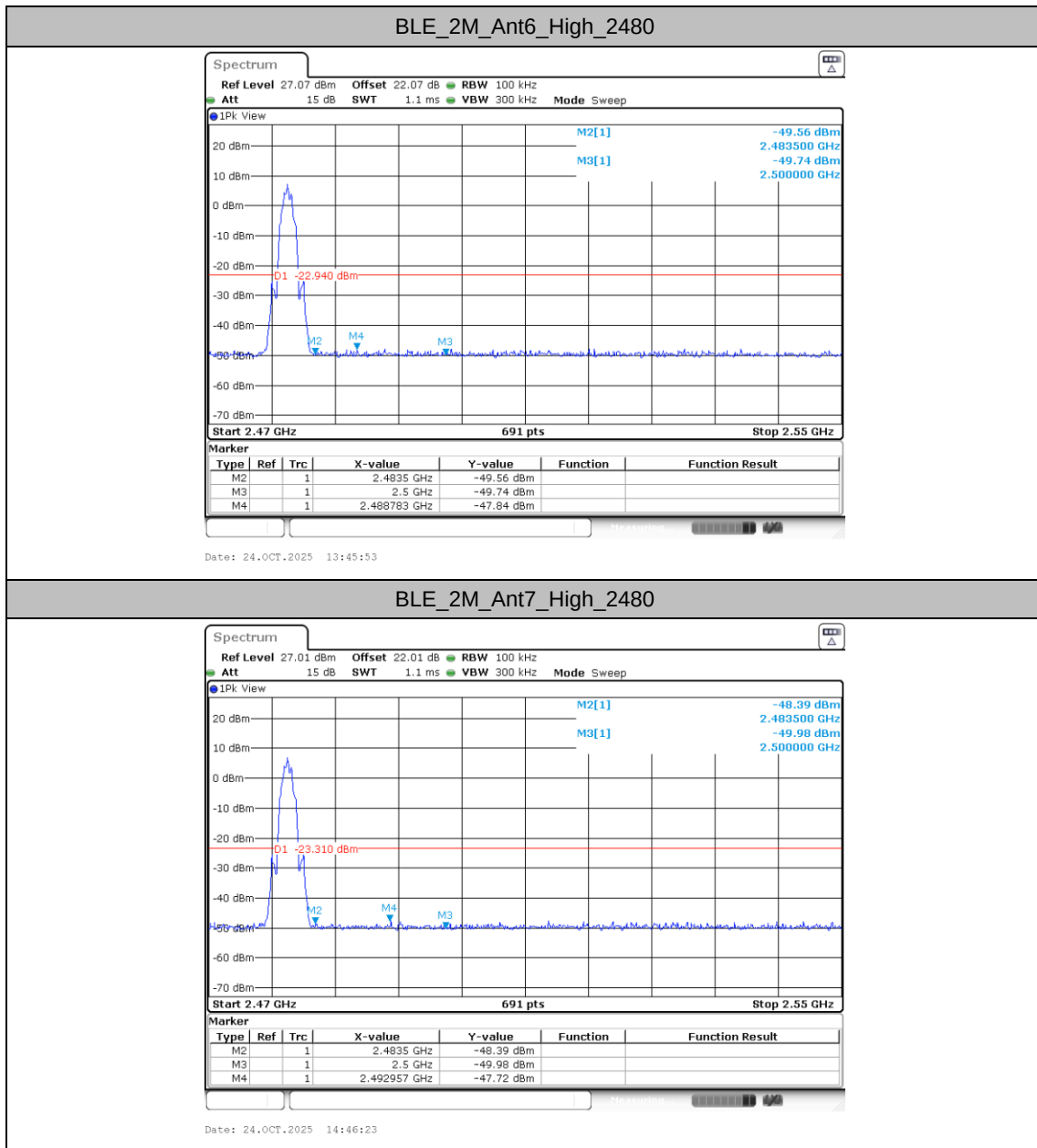


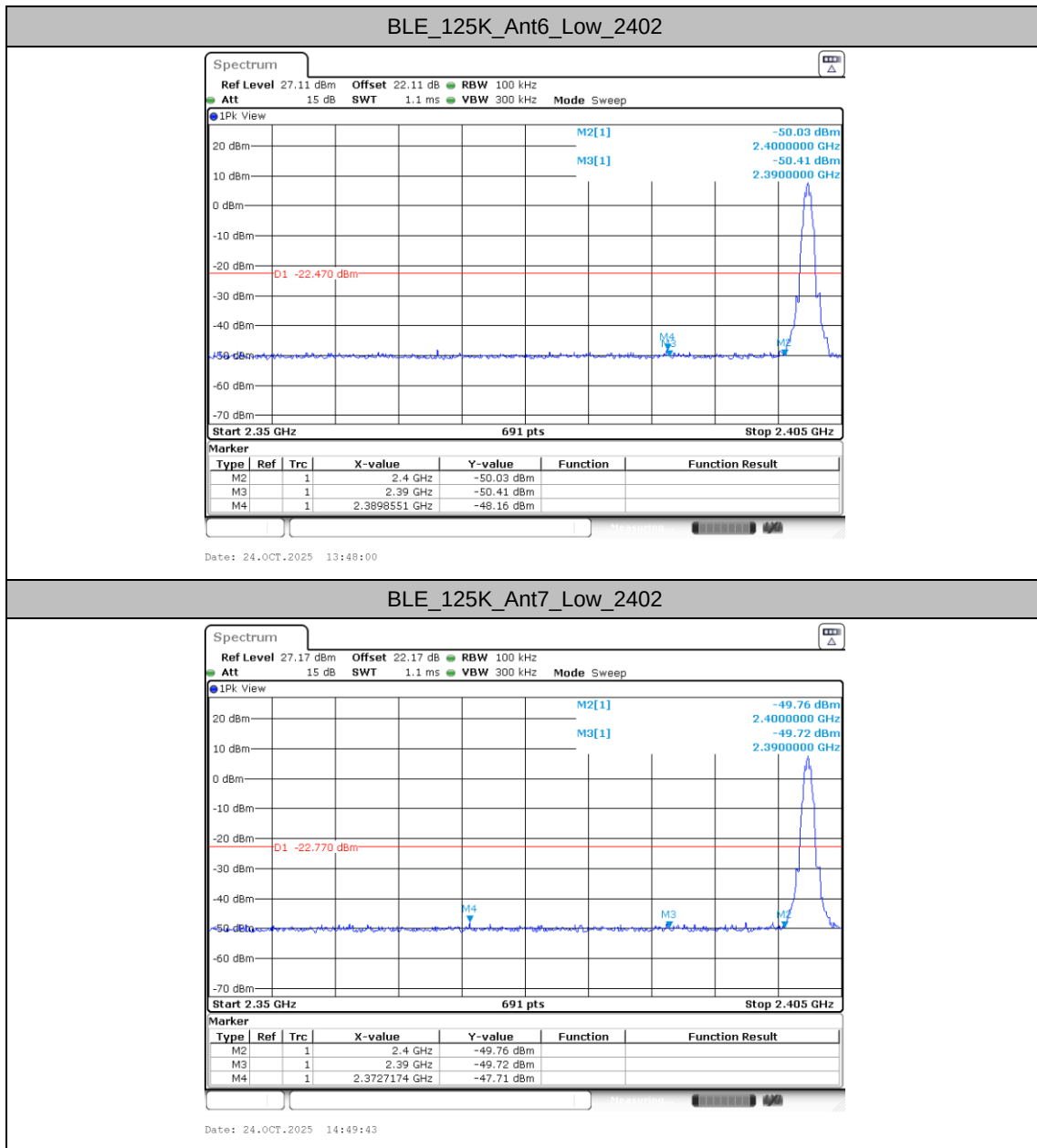
## Test Graphs



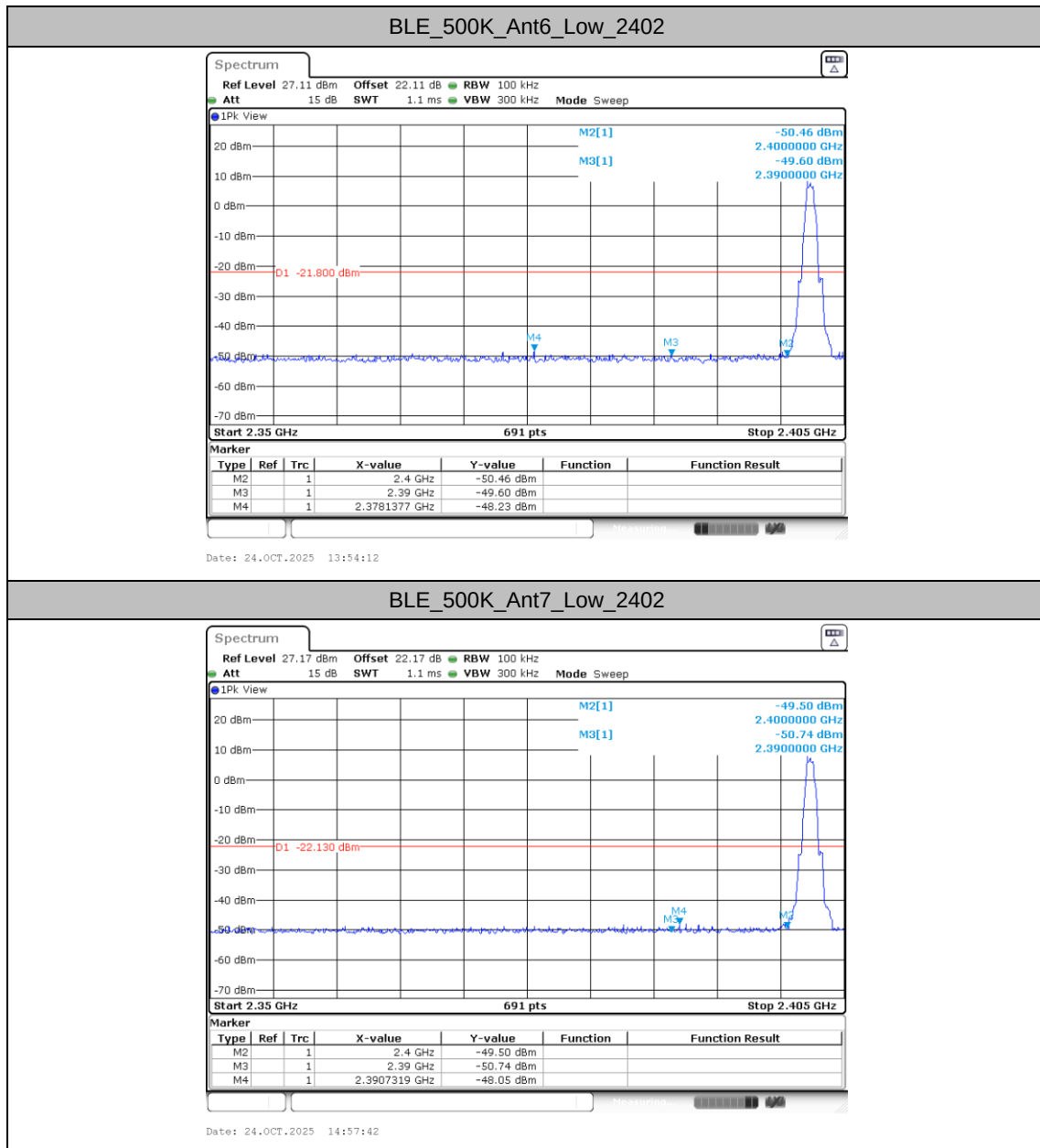
















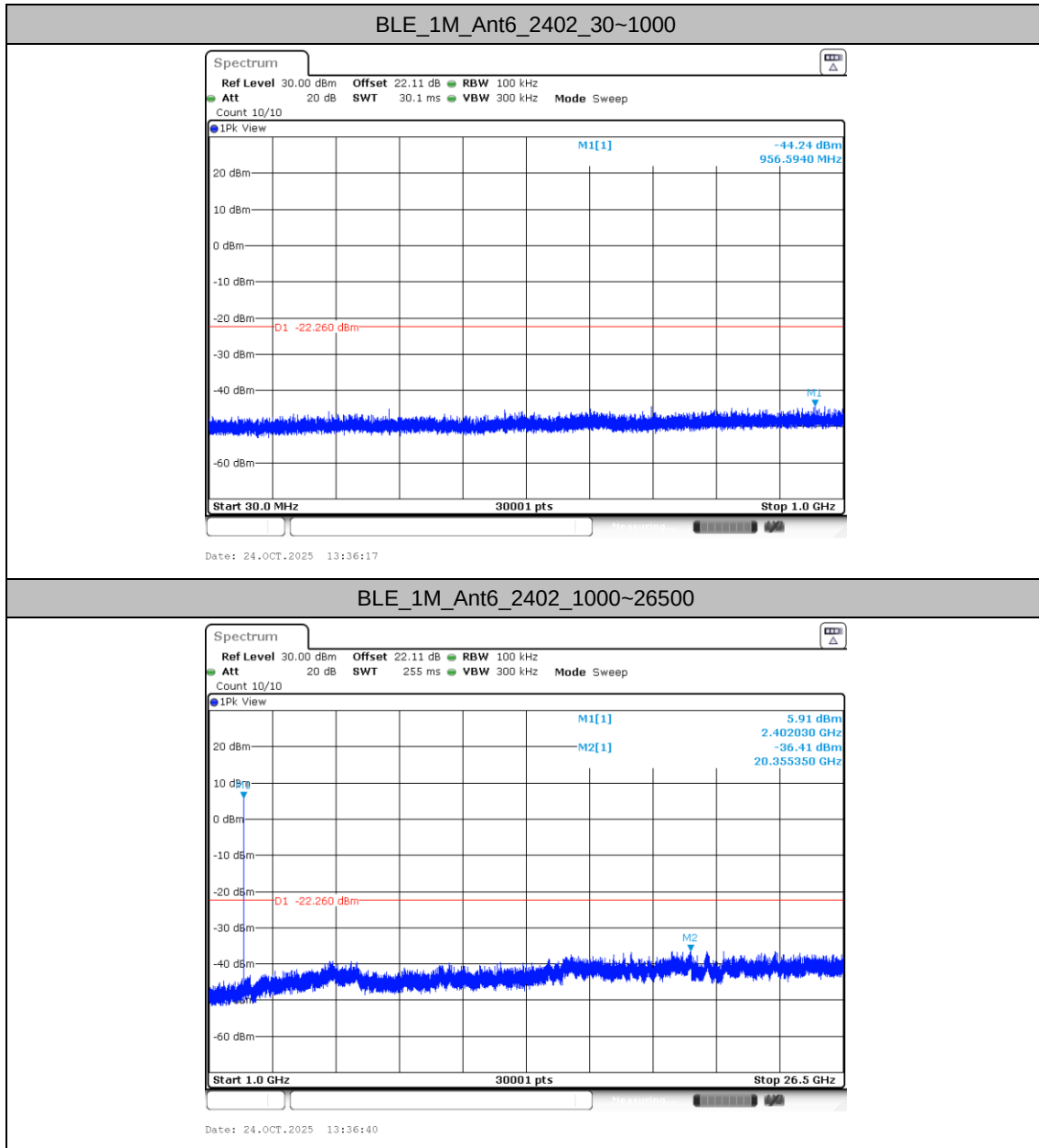
## Conducted Spurious Emission

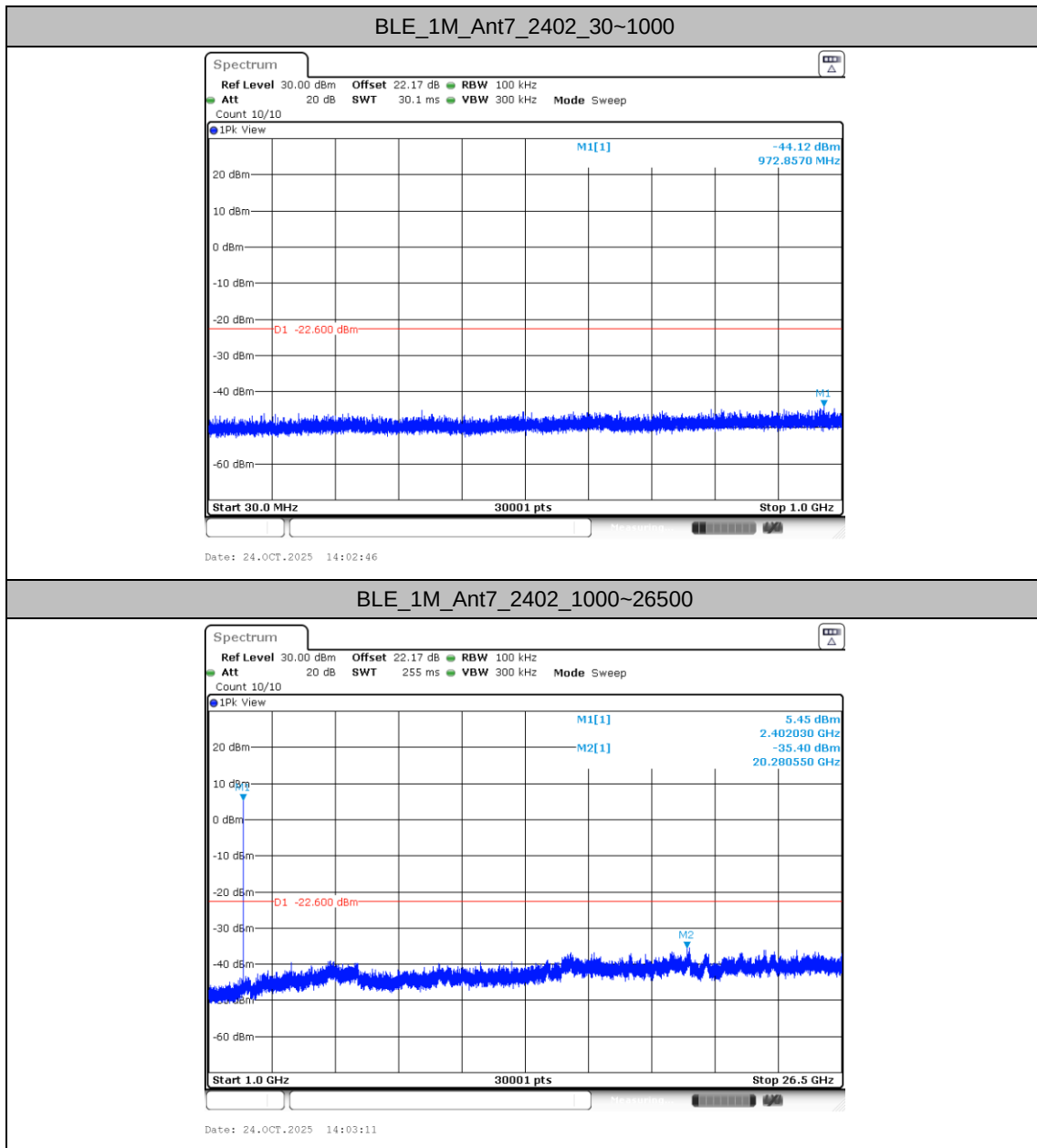
### Test Result

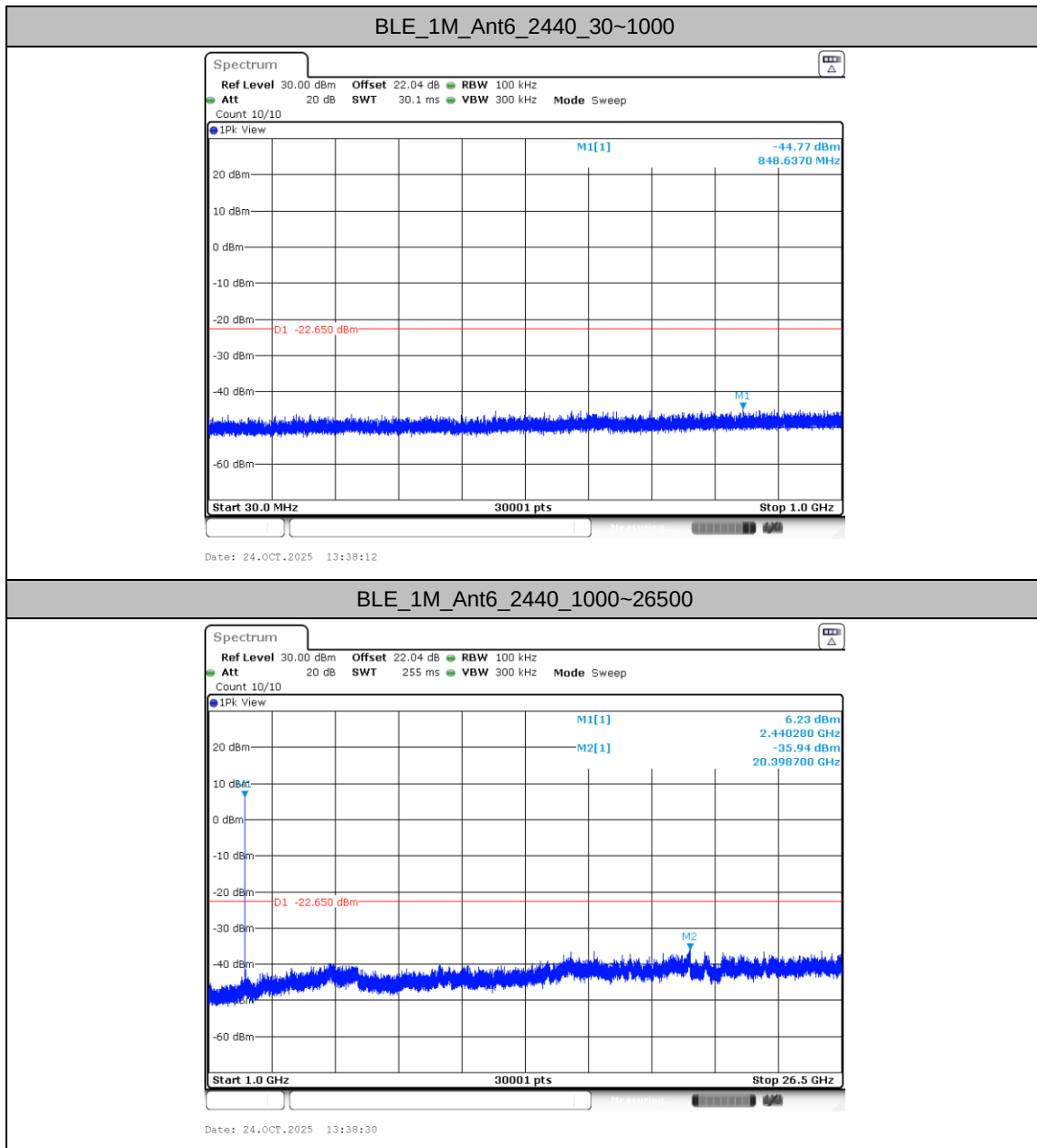
| TestMode | Antenna | Freq(MHz) | FreqRange [MHz] | RefLevel [dBm/100KHz] | Result [dBm/100KHz] | Limit [dBm/100KHz] | Verdict |
|----------|---------|-----------|-----------------|-----------------------|---------------------|--------------------|---------|
| BLE_1M   | Ant6    | 2402      | 30~1000         | 7.74                  | -44.24              | ≤-22.26            | PASS    |
|          |         |           | 1000~26500      | 7.74                  | -36.41              | ≤-22.26            | PASS    |
|          | Ant7    | 2402      | 30~1000         | 7.40                  | -44.12              | ≤-22.60            | PASS    |
|          |         |           | 1000~26500      | 7.40                  | -35.4               | ≤-22.60            | PASS    |
|          | Ant6    | 2440      | 30~1000         | 7.35                  | -44.77              | ≤-22.65            | PASS    |
|          |         |           | 1000~26500      | 7.35                  | -35.94              | ≤-22.65            | PASS    |
|          | Ant7    | 2440      | 30~1000         | 7.12                  | -44.18              | ≤-22.88            | PASS    |
|          |         |           | 1000~26500      | 7.12                  | -34.71              | ≤-22.88            | PASS    |
|          | Ant6    | 2480      | 30~1000         | 7.07                  | -44.59              | ≤-22.93            | PASS    |
|          |         |           | 1000~26500      | 7.07                  | -35.74              | ≤-22.93            | PASS    |
|          | Ant7    | 2480      | 30~1000         | 6.69                  | -44.14              | ≤-23.31            | PASS    |
|          |         |           | 1000~26500      | 6.69                  | -35.58              | ≤-23.31            | PASS    |
| BLE_2M   | Ant6    | 2402      | 30~1000         | 7.71                  | -44.17              | ≤-22.29            | PASS    |
|          |         |           | 1000~26500      | 7.71                  | -35.89              | ≤-22.29            | PASS    |
|          | Ant7    | 2402      | 30~1000         | 7.35                  | -44.33              | ≤-22.65            | PASS    |
|          |         |           | 1000~26500      | 7.35                  | -35.58              | ≤-22.65            | PASS    |
|          | Ant6    | 2440      | 30~1000         | 7.32                  | -44.58              | ≤-22.68            | PASS    |
|          |         |           | 1000~26500      | 7.32                  | -35.79              | ≤-22.68            | PASS    |
|          | Ant7    | 2440      | 30~1000         | 7.10                  | -44.07              | ≤-22.90            | PASS    |
|          |         |           | 1000~26500      | 7.10                  | -35.36              | ≤-22.90            | PASS    |
|          | Ant6    | 2480      | 30~1000         | 7.06                  | -43.73              | ≤-22.94            | PASS    |
|          |         |           | 1000~26500      | 7.06                  | -35.51              | ≤-22.94            | PASS    |
|          | Ant7    | 2480      | 30~1000         | 6.69                  | -44.34              | ≤-23.31            | PASS    |
|          |         |           | 1000~26500      | 6.69                  | -35.82              | ≤-23.31            | PASS    |
| BLE_125K | Ant6    | 2402      | 30~1000         | 7.53                  | -43.66              | ≤-22.47            | PASS    |
|          |         |           | 1000~26500      | 7.53                  | -34.69              | ≤-22.47            | PASS    |
|          | Ant7    | 2402      | 30~1000         | 7.23                  | -44.37              | ≤-22.77            | PASS    |
|          |         |           | 1000~26500      | 7.23                  | -35.25              | ≤-22.77            | PASS    |
|          | Ant6    | 2440      | 30~1000         | 7.13                  | -44.4               | ≤-22.87            | PASS    |
|          |         |           | 1000~26500      | 7.13                  | -35.84              | ≤-22.87            | PASS    |
|          | Ant7    | 2440      | 30~1000         | 6.98                  | -43.83              | ≤-23.02            | PASS    |
|          |         |           | 1000~26500      | 6.98                  | -36.06              | ≤-23.02            | PASS    |
|          | Ant6    | 2480      | 30~1000         | 6.87                  | -43.99              | ≤-23.13            | PASS    |
|          |         |           | 1000~26500      | 6.87                  | -35.73              | ≤-23.13            | PASS    |
|          | Ant7    | 2480      | 30~1000         | 6.55                  | -43.99              | ≤-23.45            | PASS    |
|          |         |           | 1000~26500      | 6.55                  | -36.14              | ≤-23.45            | PASS    |
| BLE_500K | Ant6    | 2402      | 30~1000         | 8.20                  | -44.6               | ≤-21.80            | PASS    |
|          |         |           | 1000~26500      | 8.20                  | -35.46              | ≤-21.80            | PASS    |
|          | Ant7    | 2402      | 30~1000         | 7.87                  | -44.16              | ≤-22.13            | PASS    |
|          |         |           | 1000~26500      | 7.87                  | -35.35              | ≤-22.13            | PASS    |
|          | Ant6    | 2440      | 30~1000         | 7.82                  | -44.73              | ≤-22.18            | PASS    |
|          |         |           | 1000~26500      | 7.82                  | -36.01              | ≤-22.18            | PASS    |
|          | Ant7    | 2440      | 30~1000         | 7.63                  | -44.44              | ≤-22.37            | PASS    |
|          |         |           | 1000~26500      | 7.63                  | -36.12              | ≤-22.37            | PASS    |
|          | Ant6    | 2480      | 30~1000         | 7.57                  | -44.47              | ≤-22.43            | PASS    |
|          |         |           | 1000~26500      | 7.57                  | -36.02              | ≤-22.43            | PASS    |
|          | Ant7    | 2480      | 30~1000         | 7.23                  | -44.24              | ≤-22.77            | PASS    |
|          |         |           | 1000~26500      | 7.23                  | -35.68              | ≤-22.77            | PASS    |

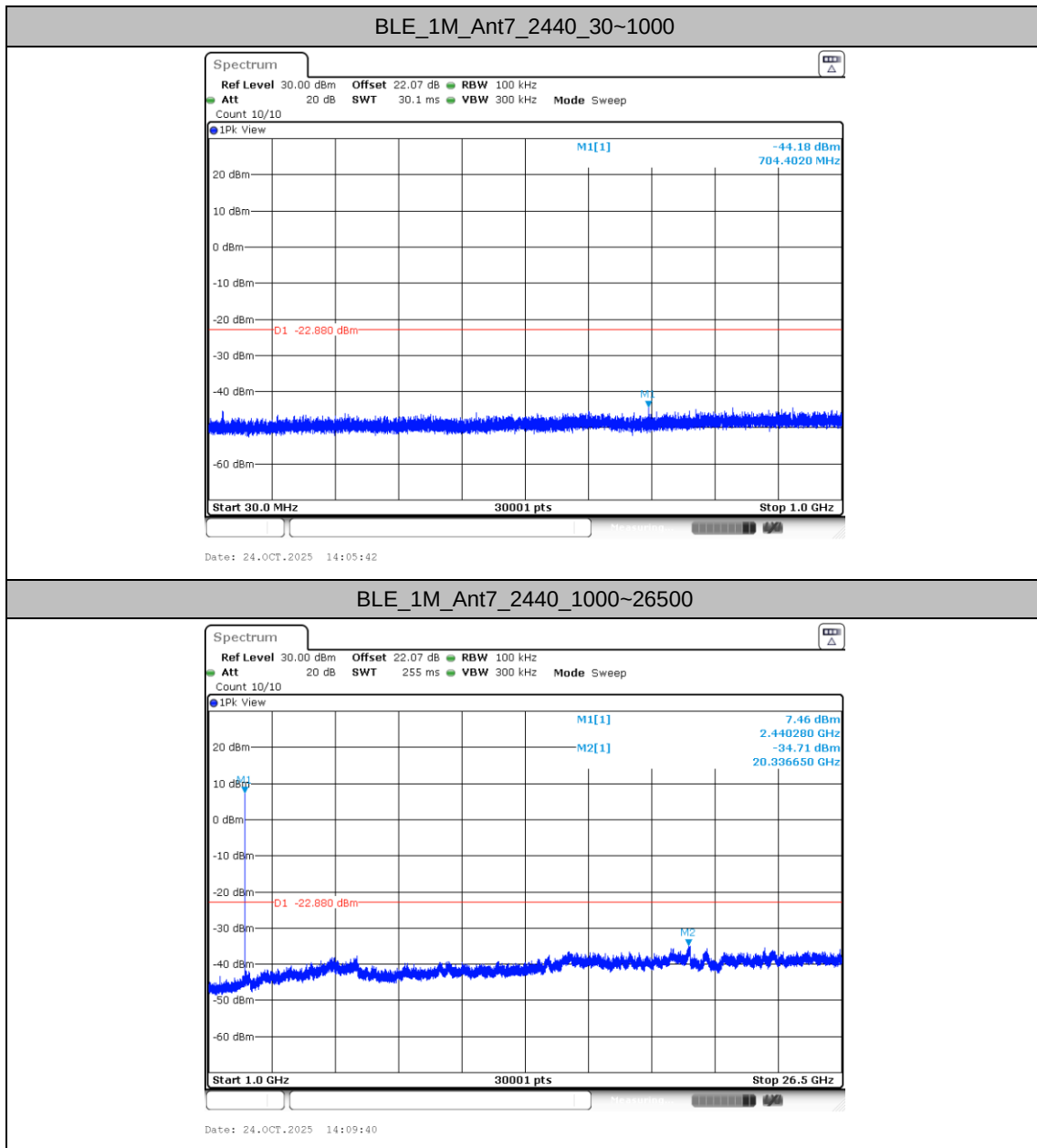


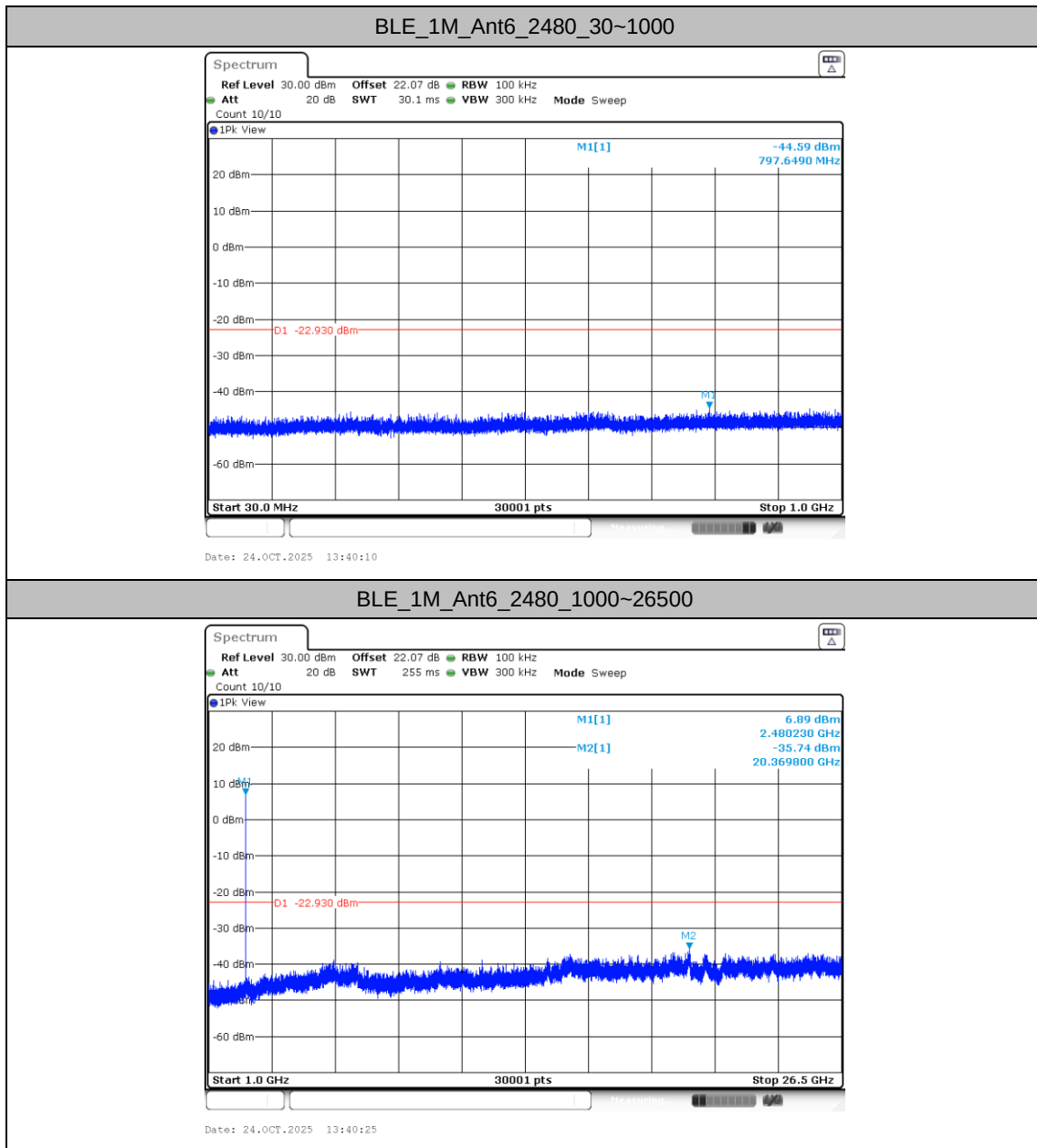
## Test Graphs

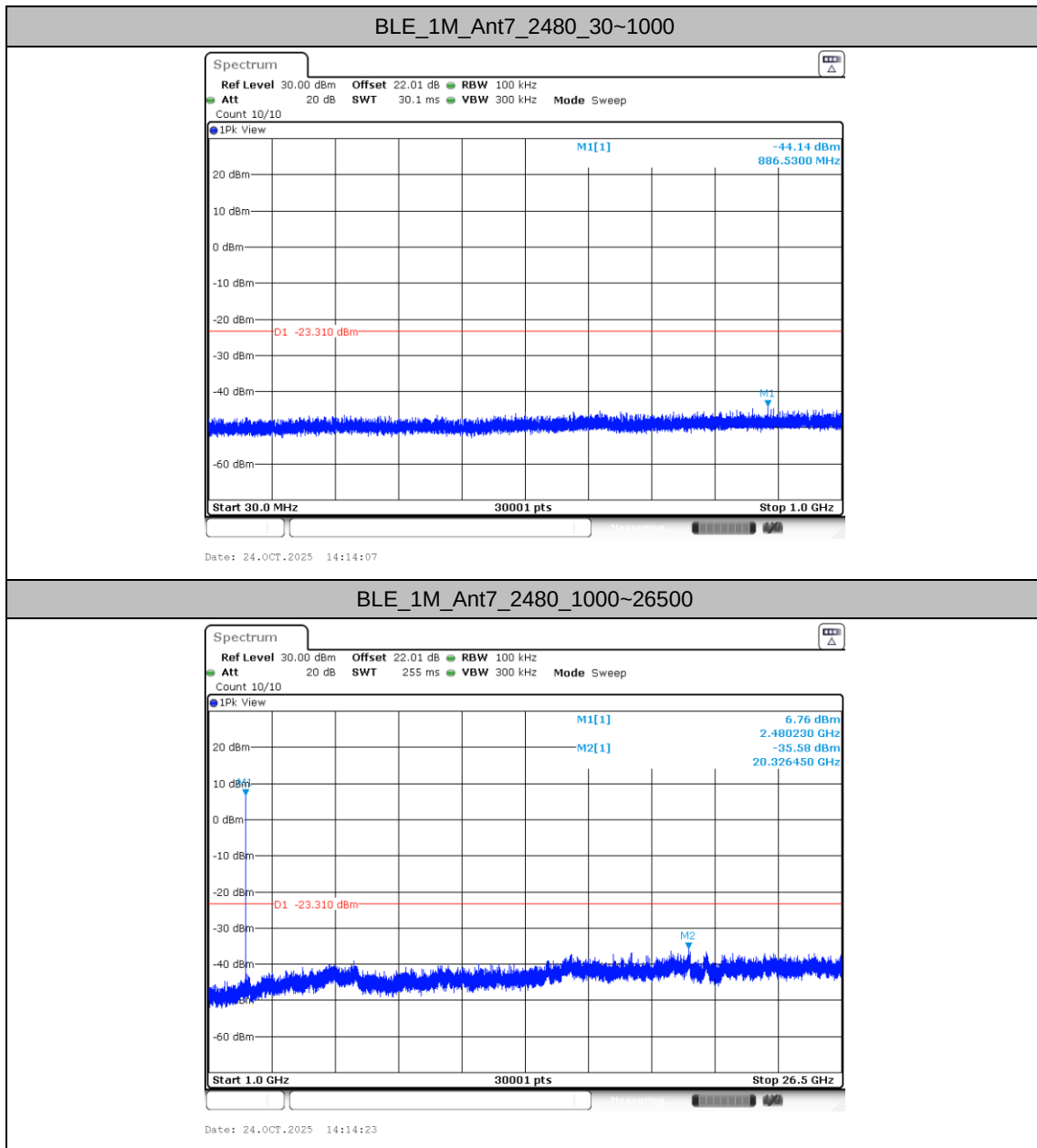


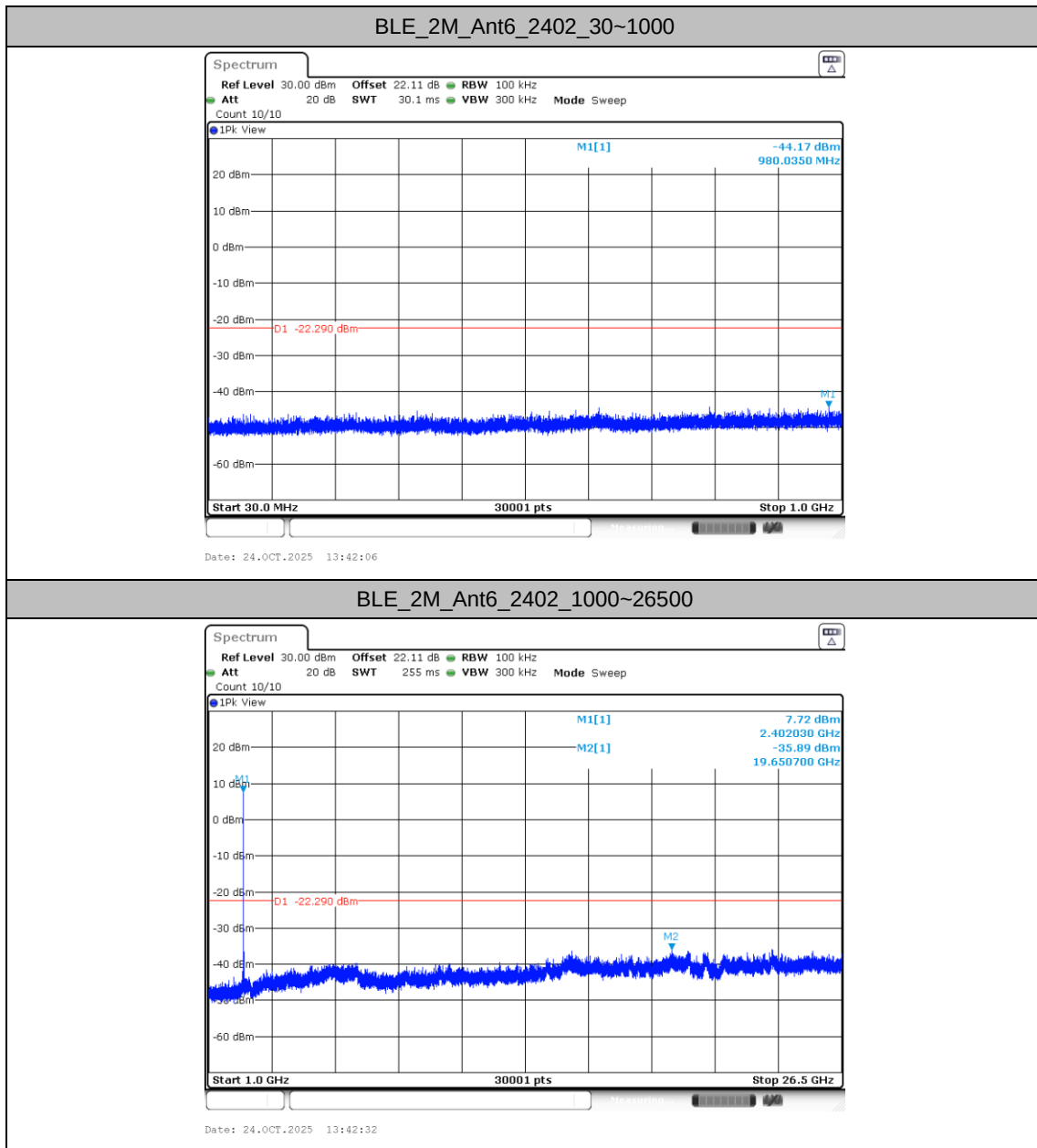


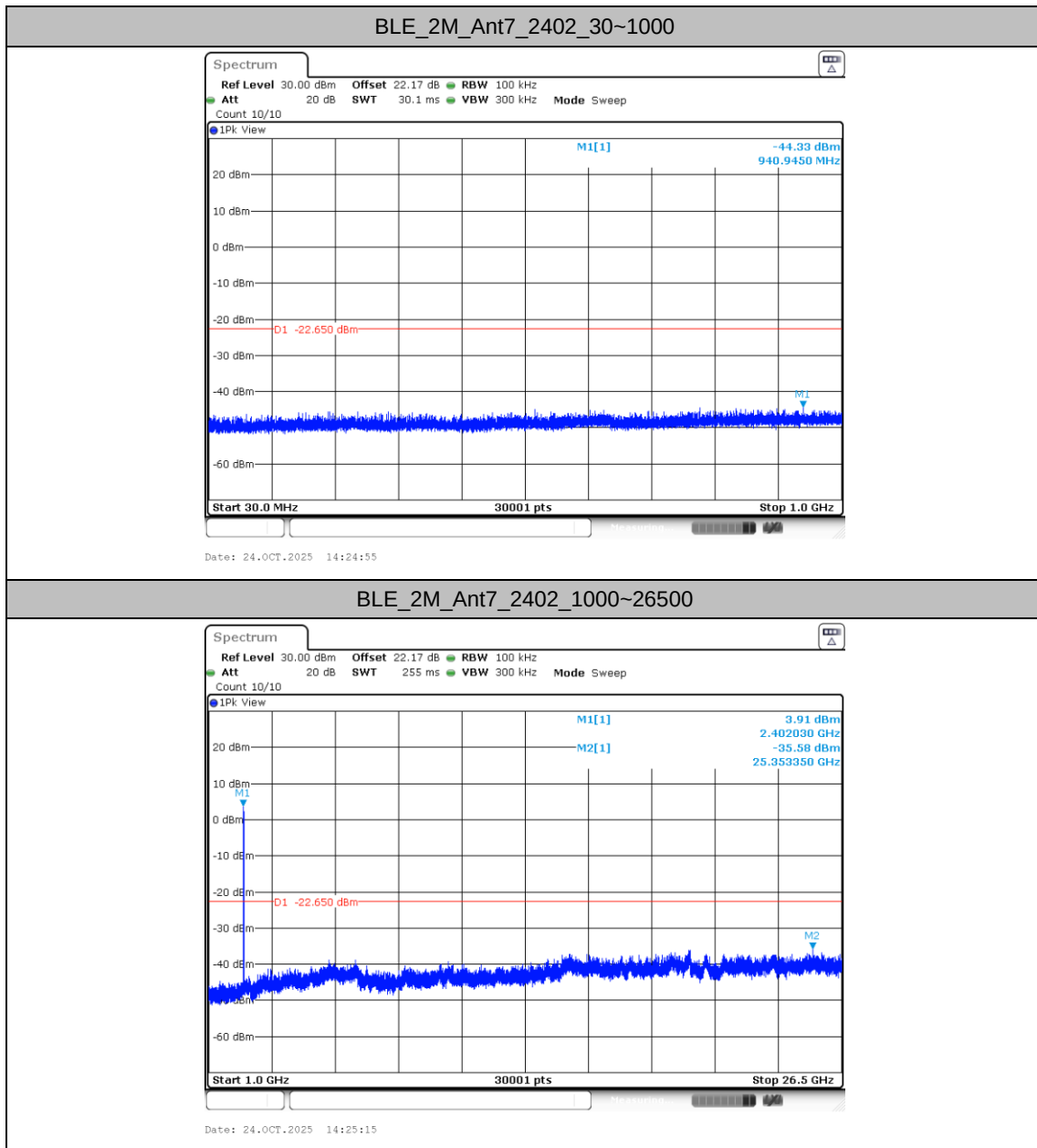


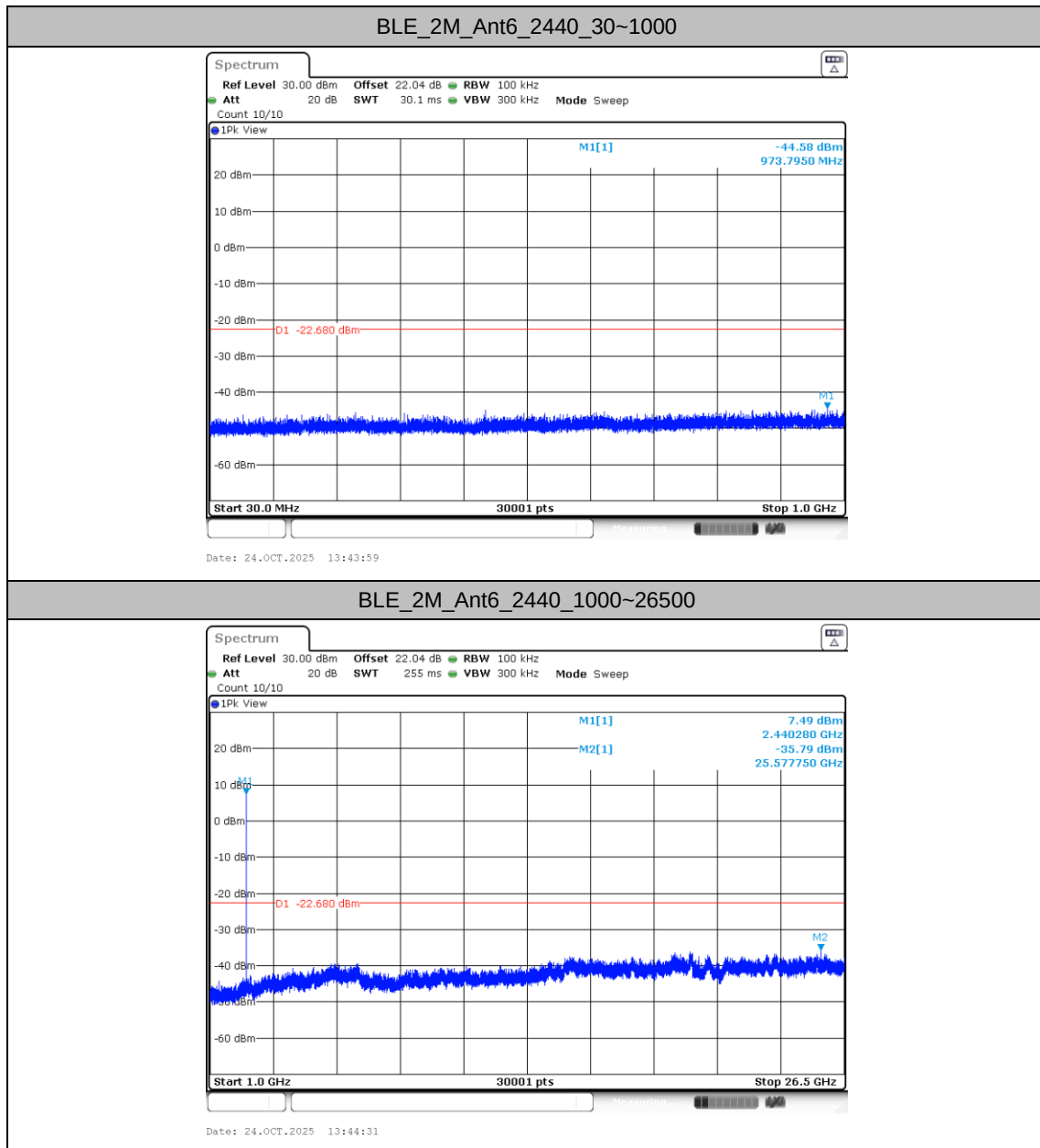


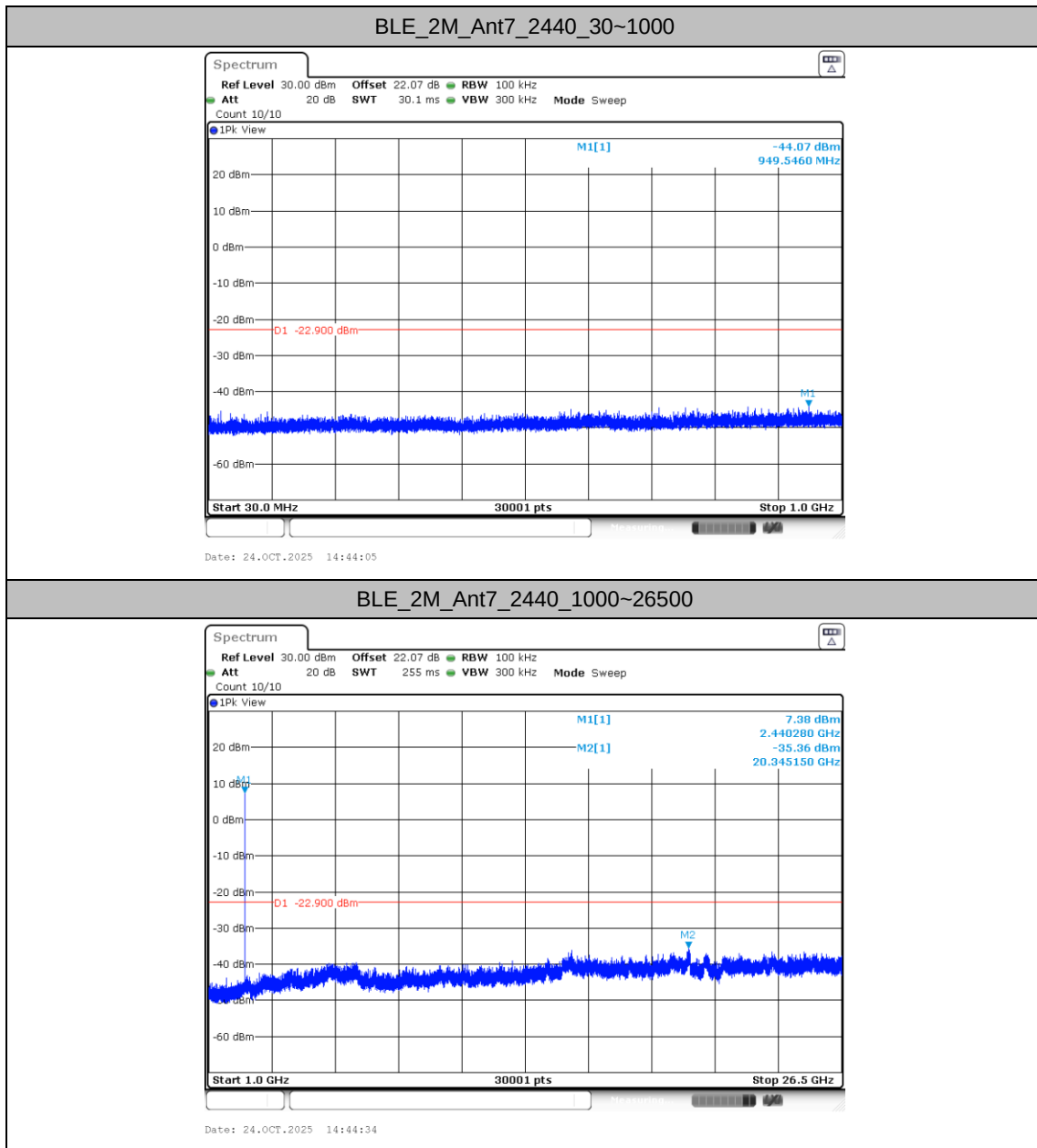


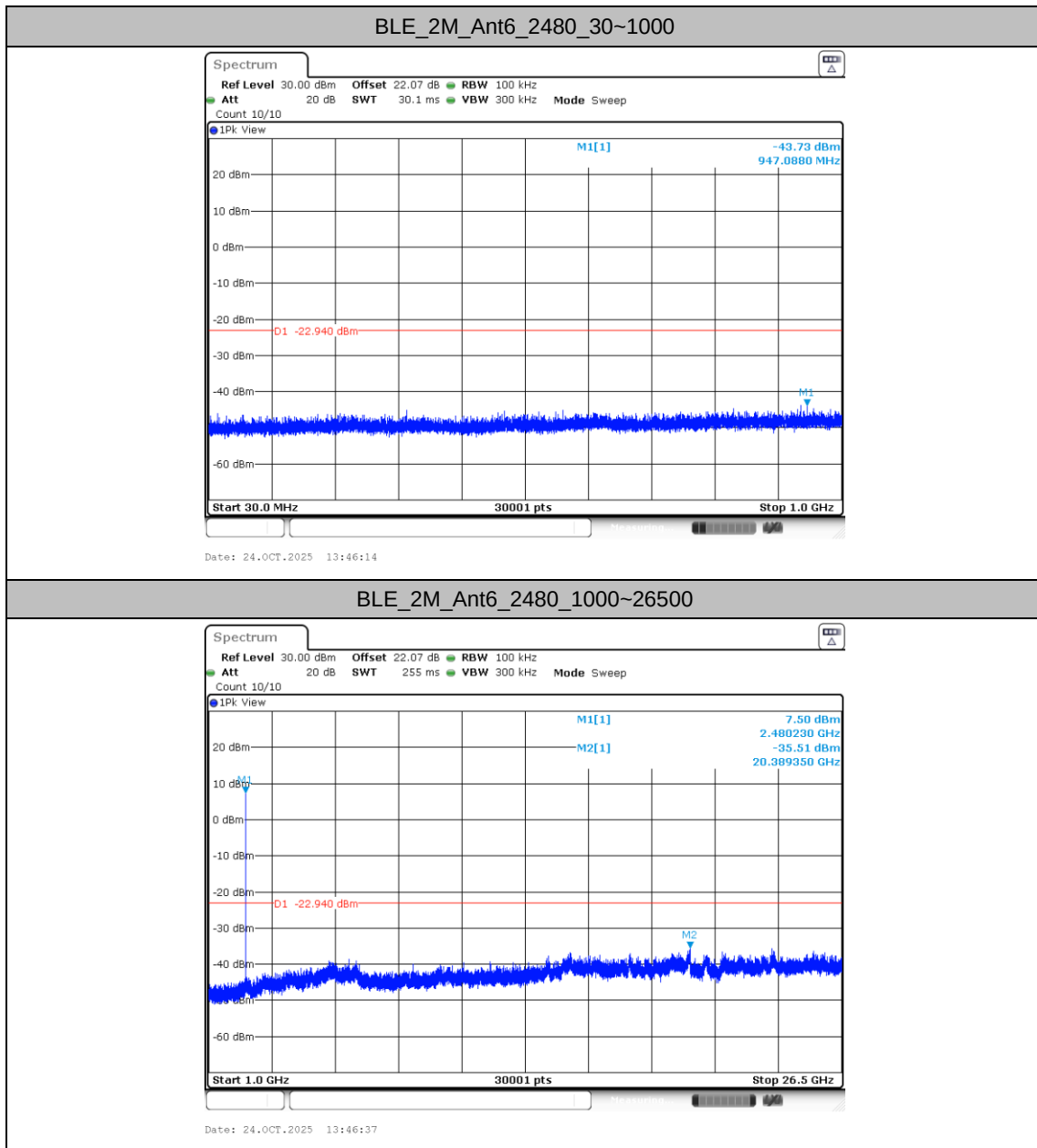


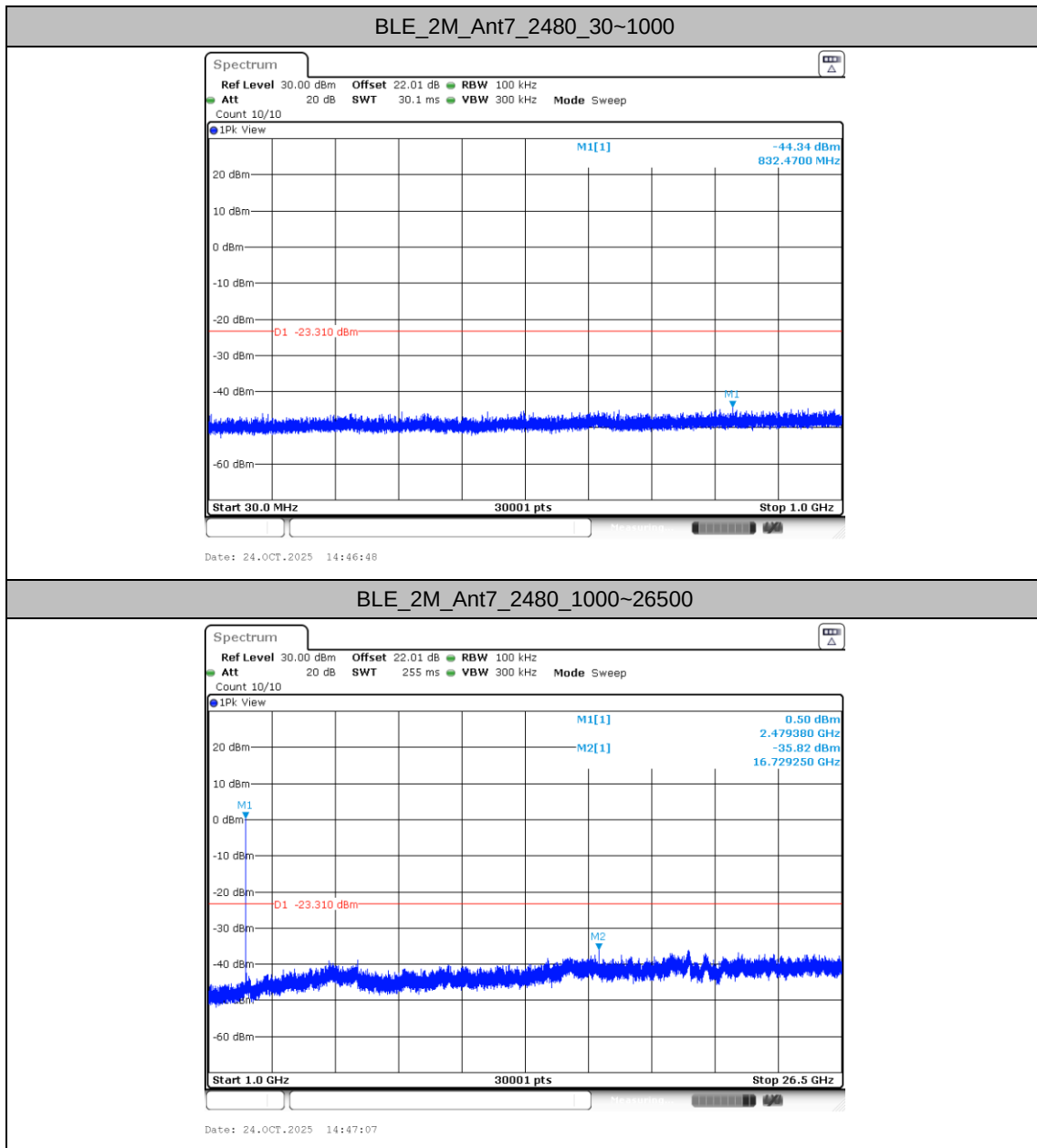


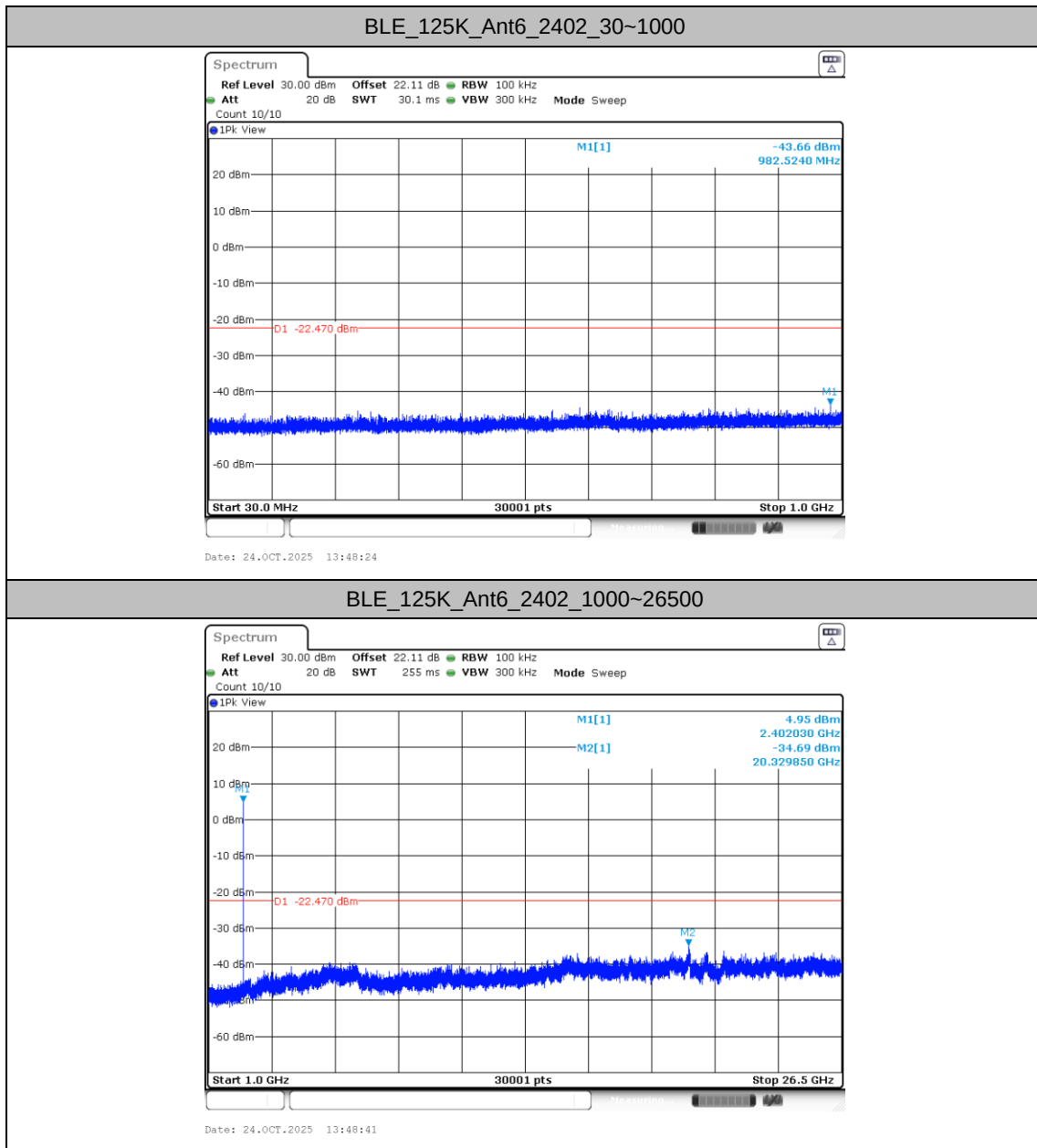


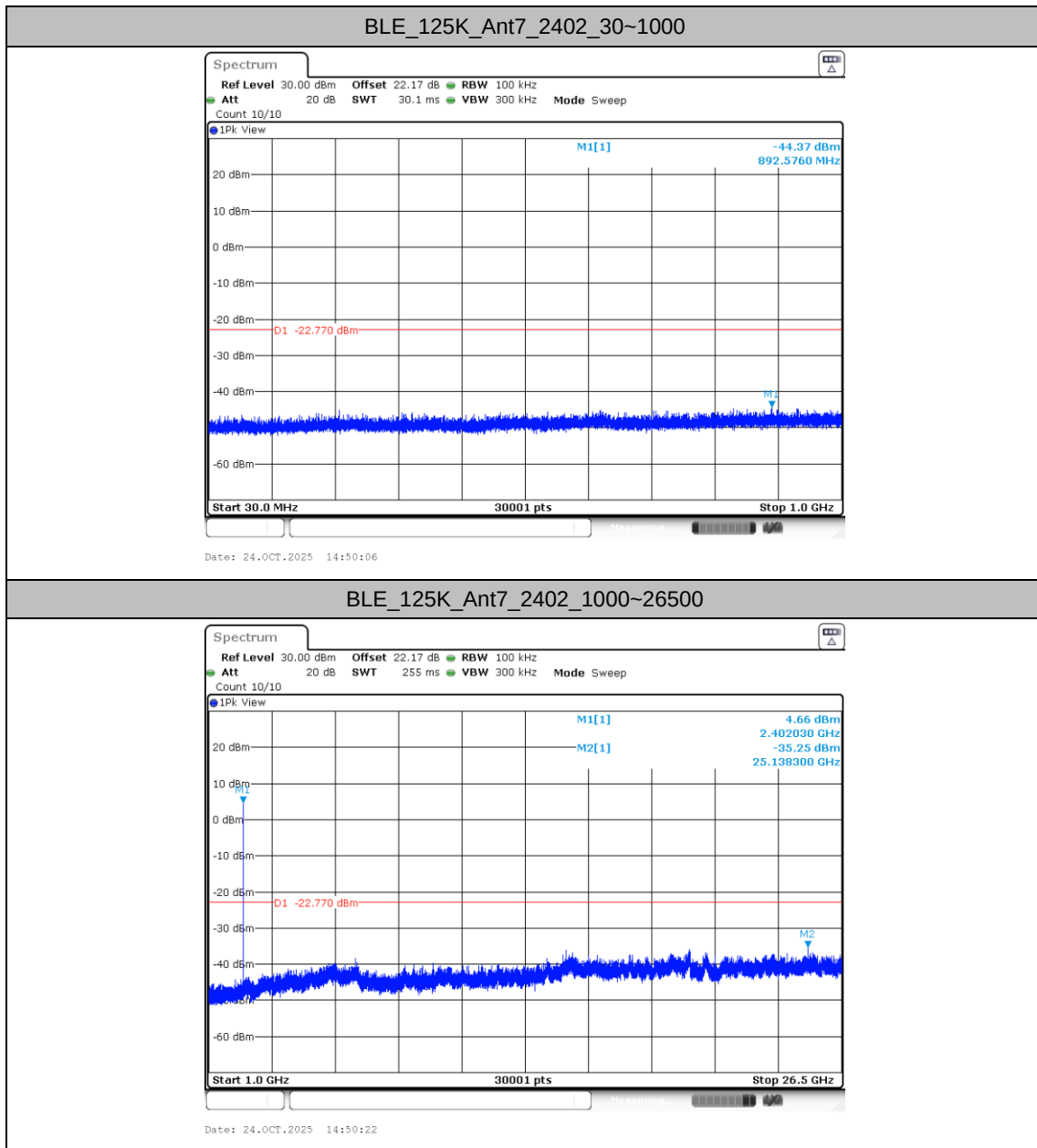


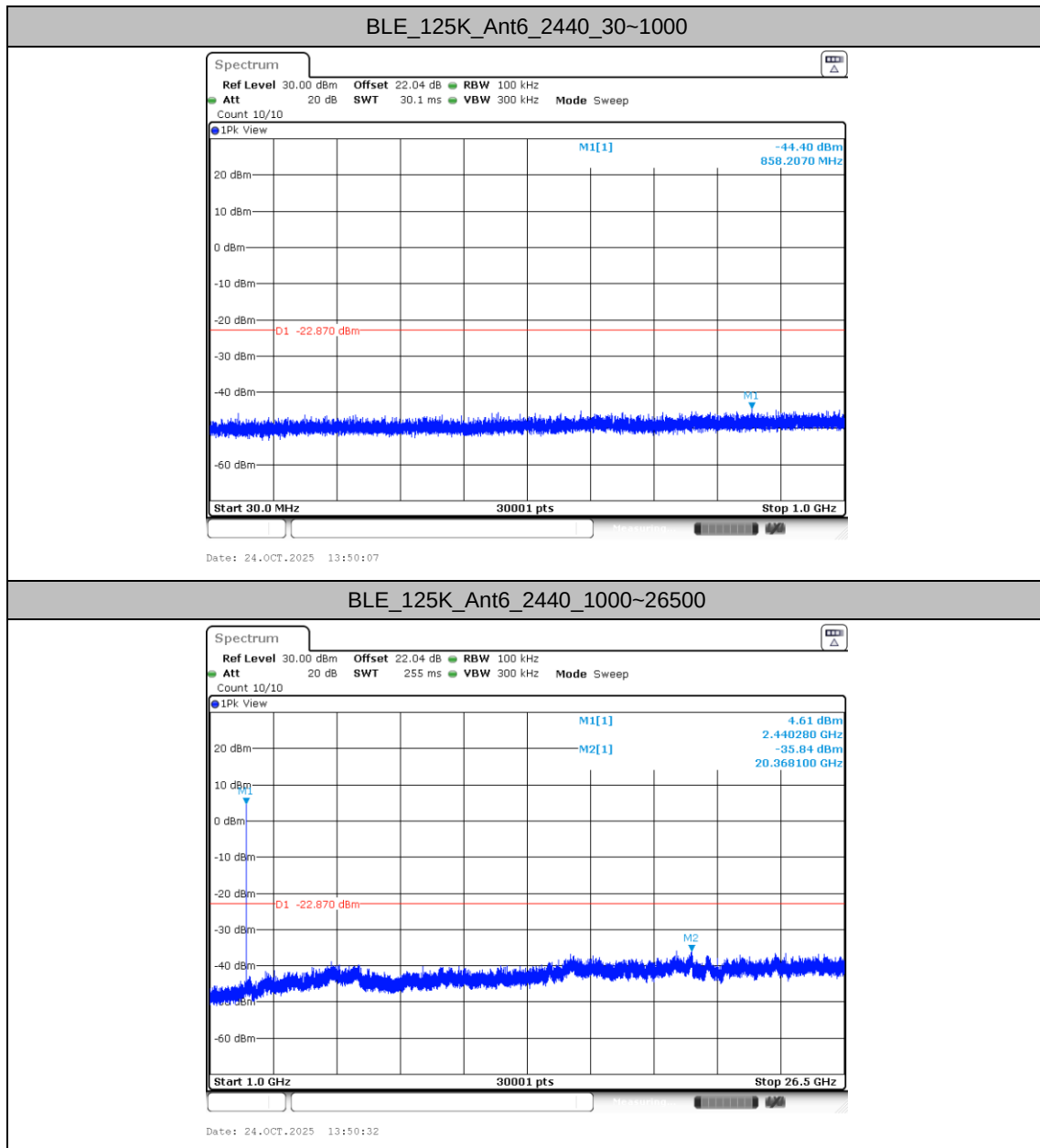


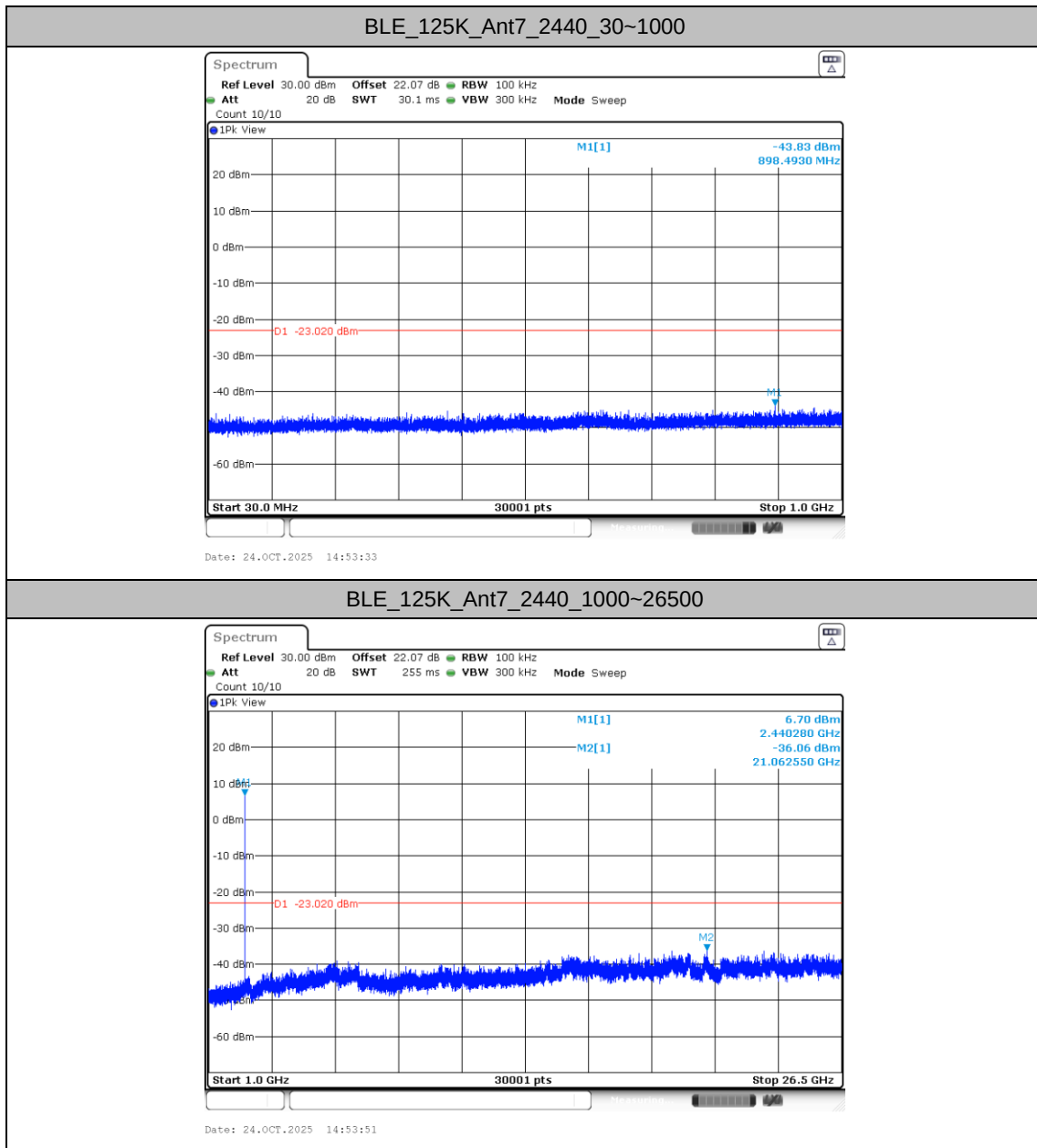


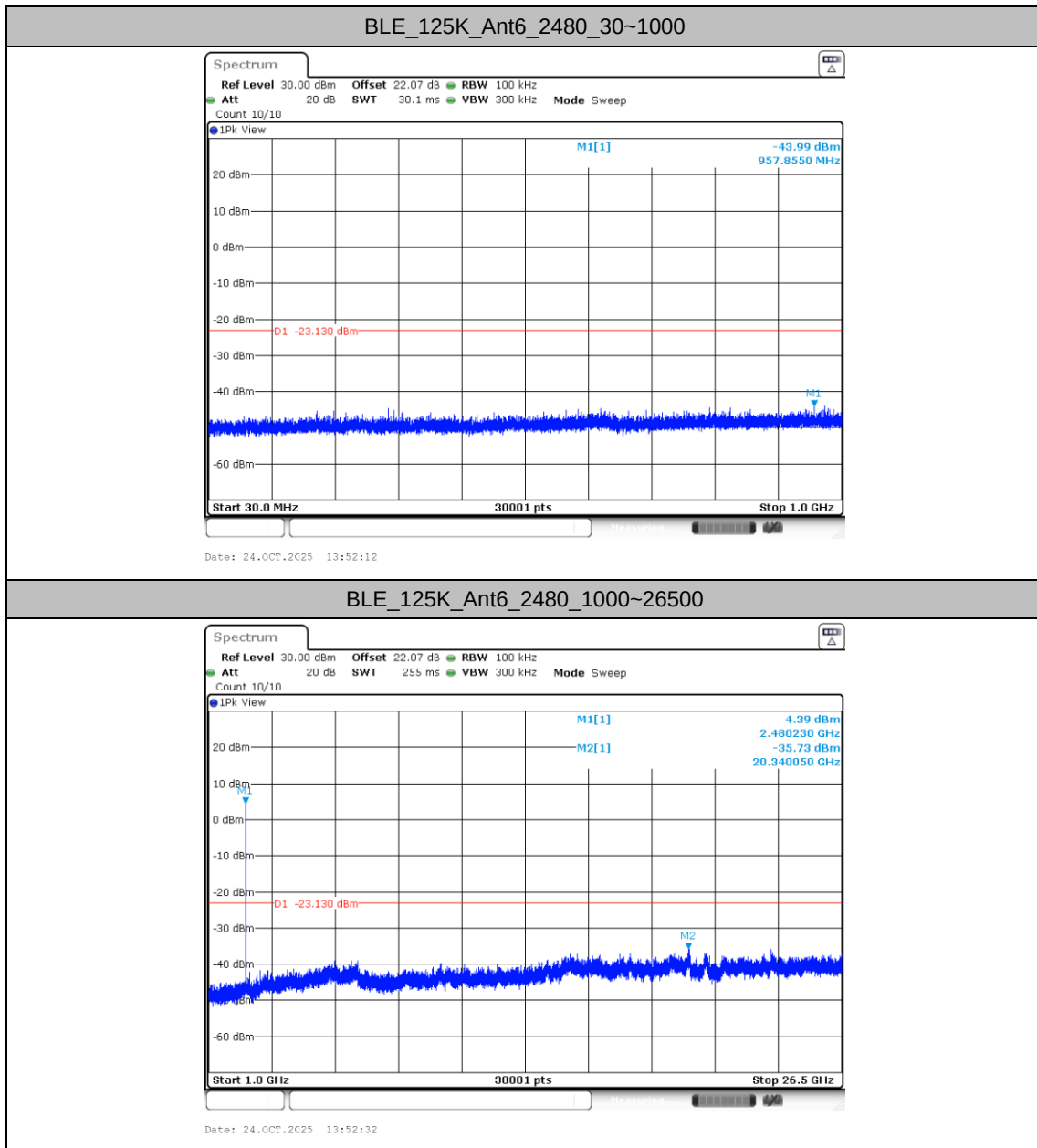


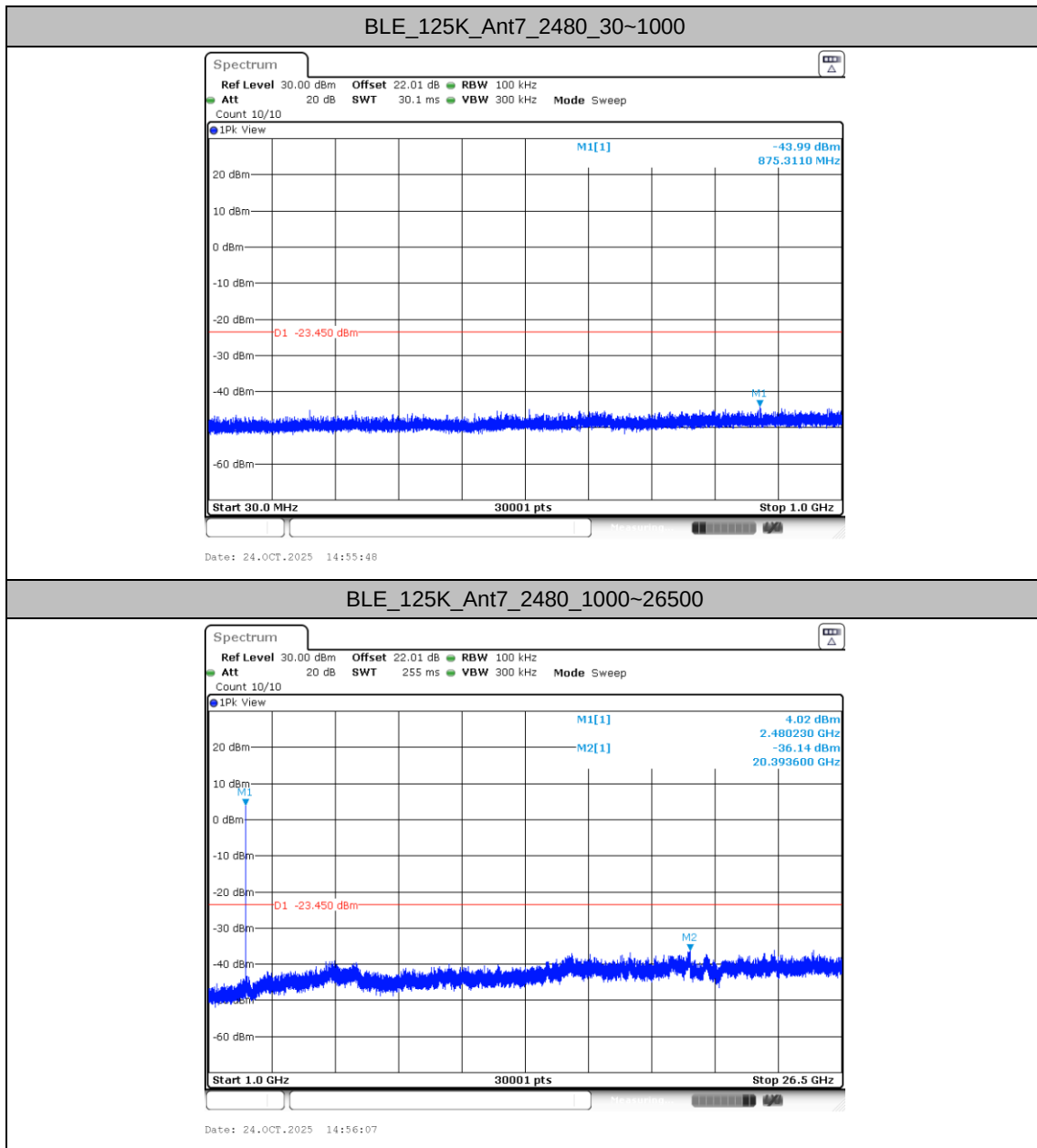


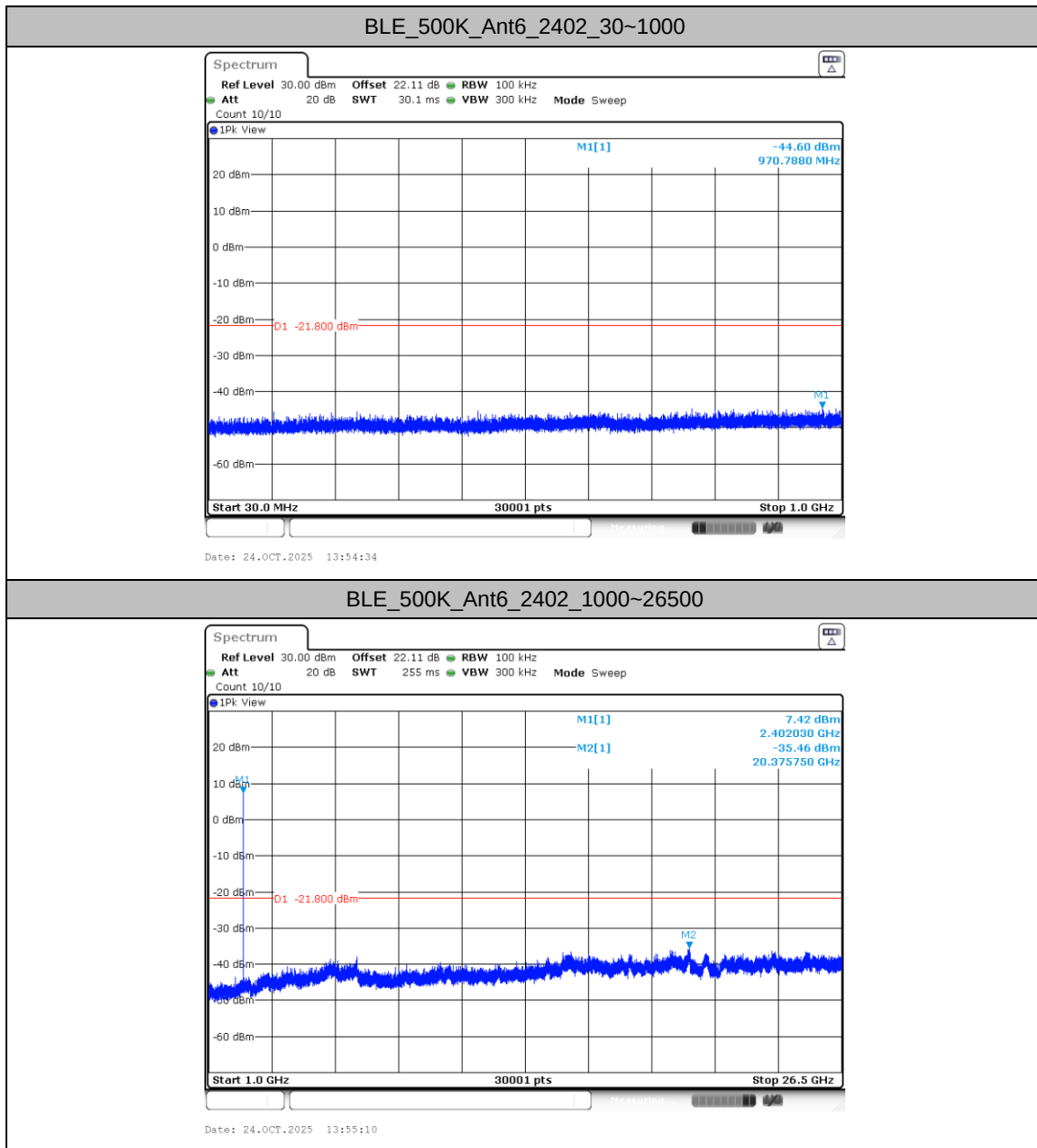


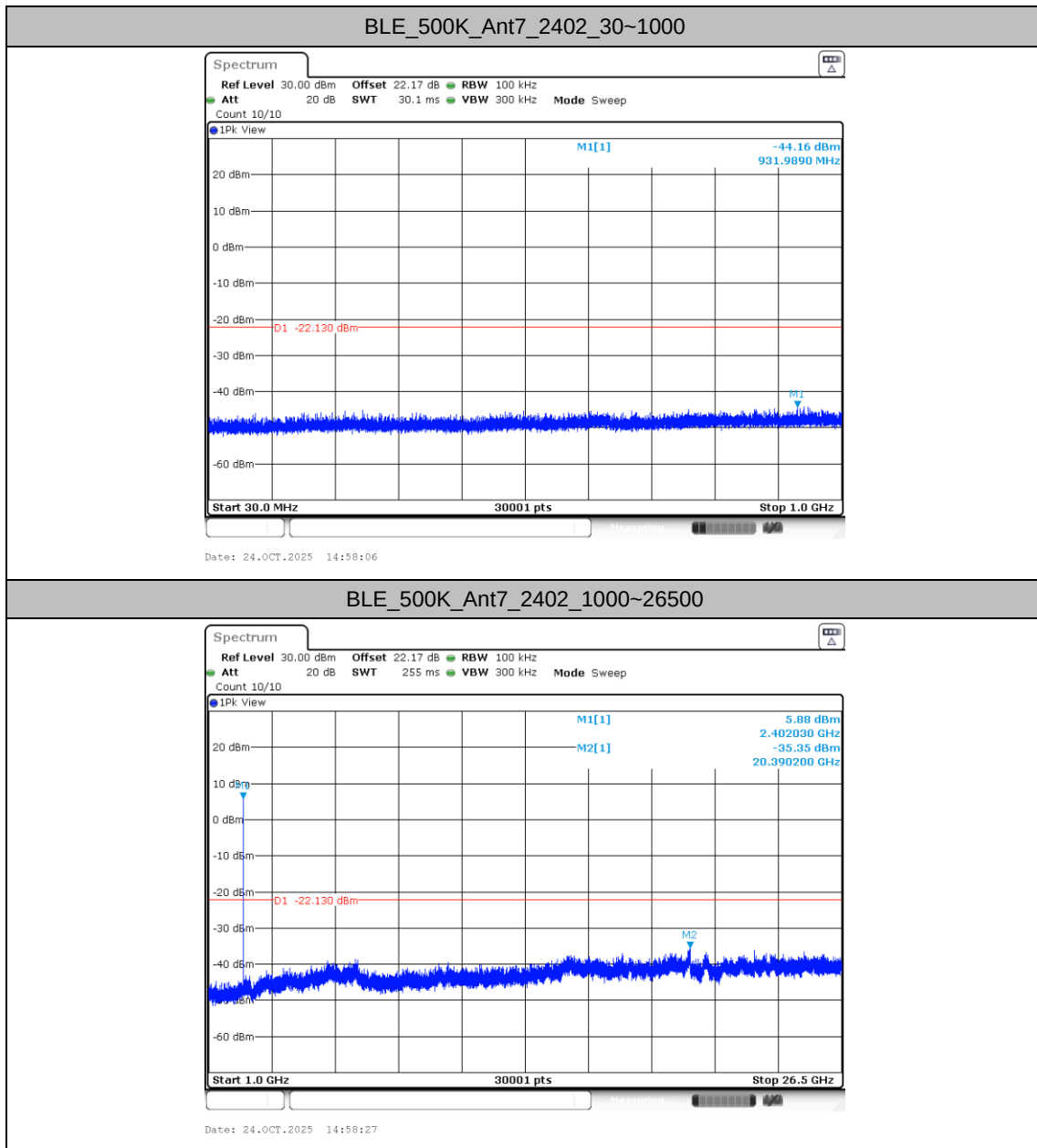


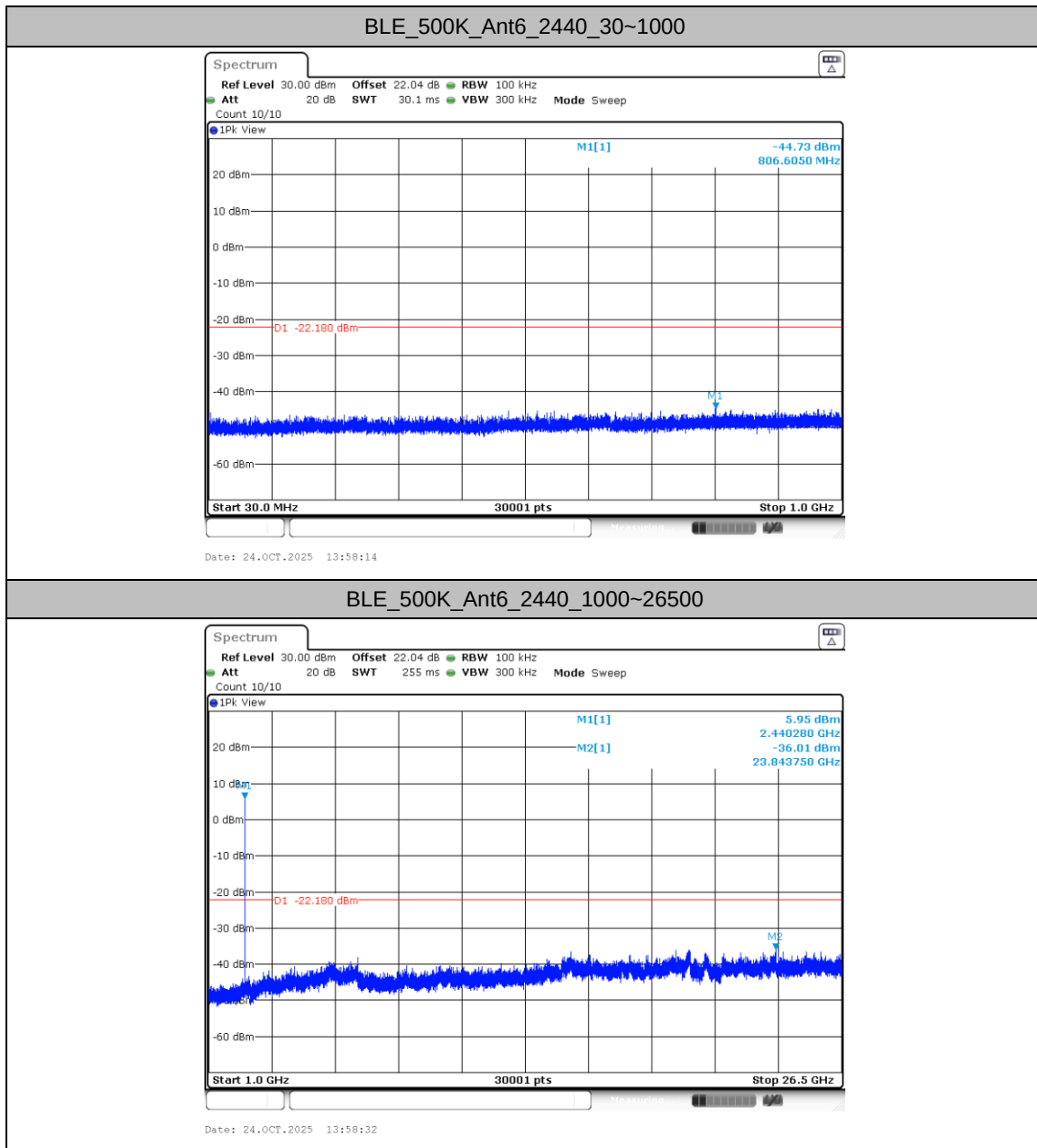


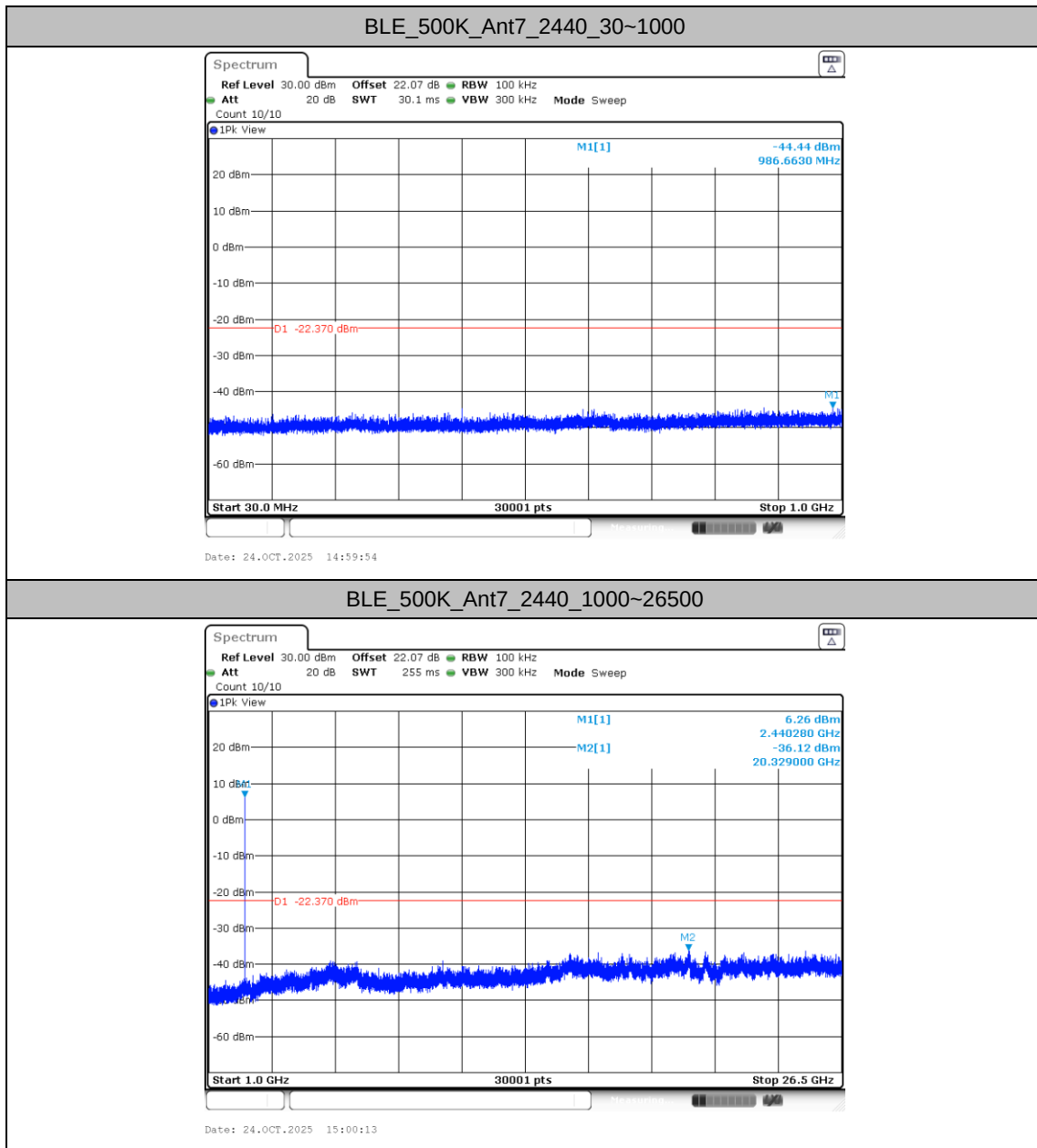


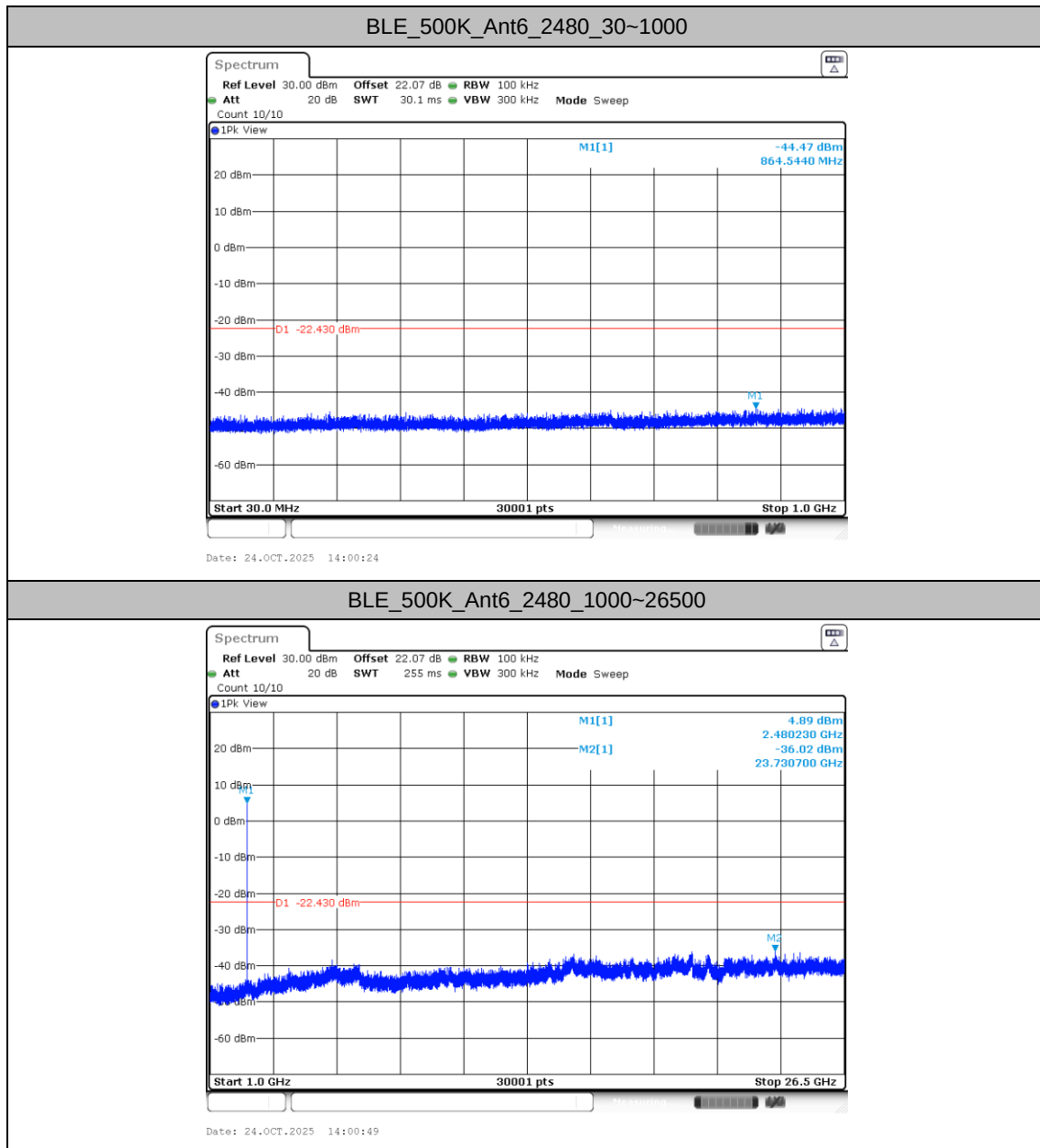


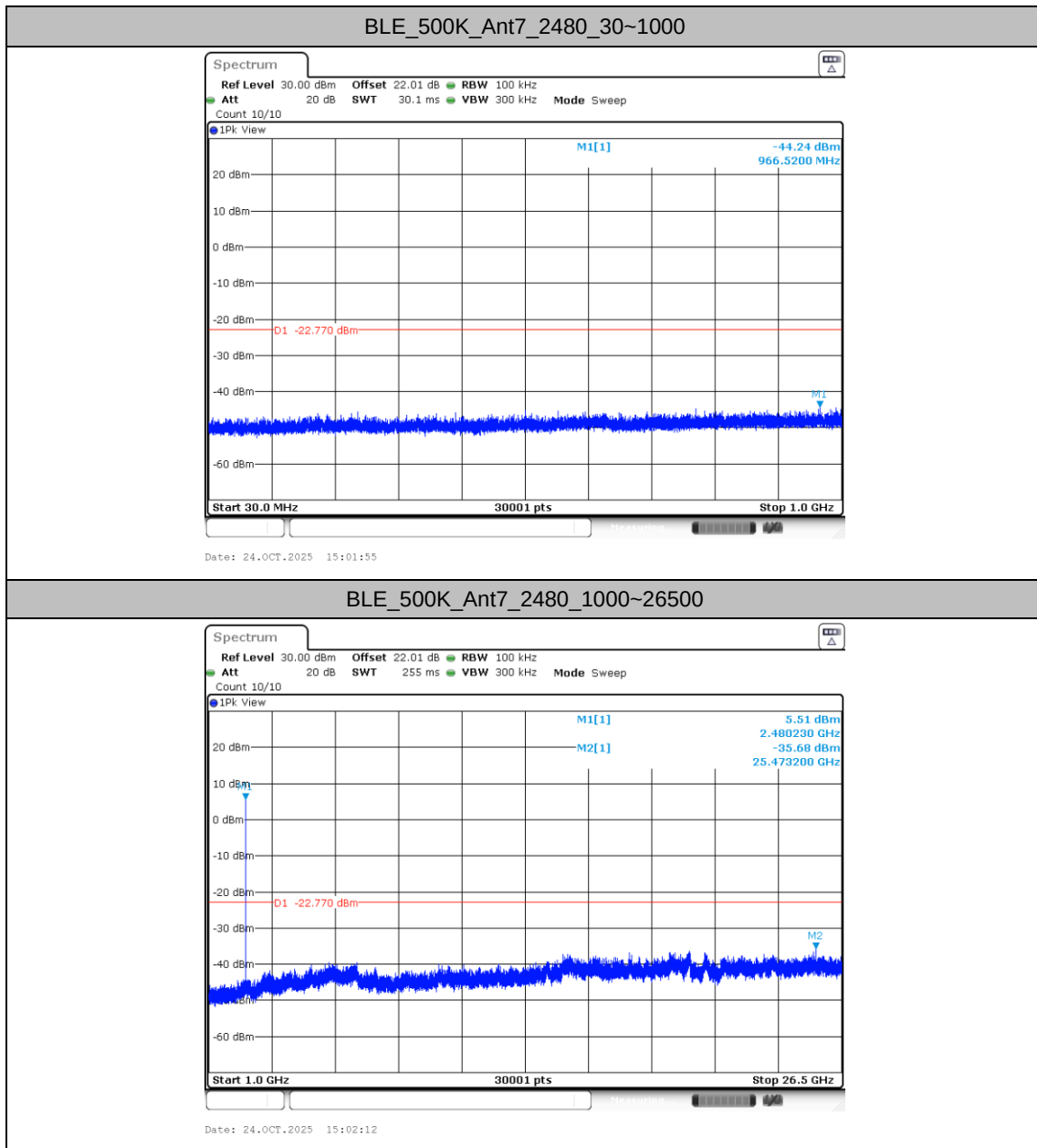














## &lt;BLE CS GFSK&gt;

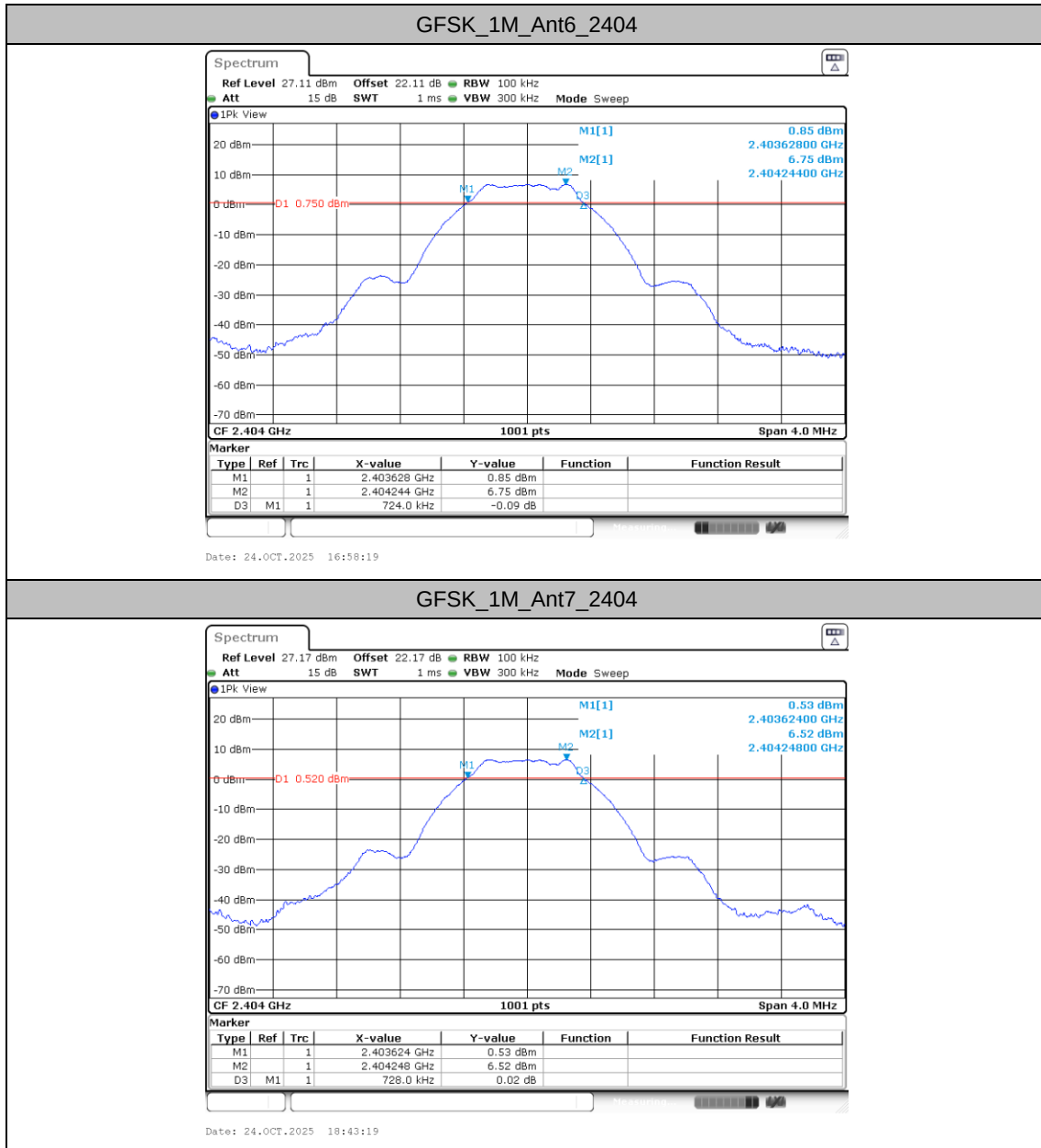
## DTS Bandwidth

## Test Result

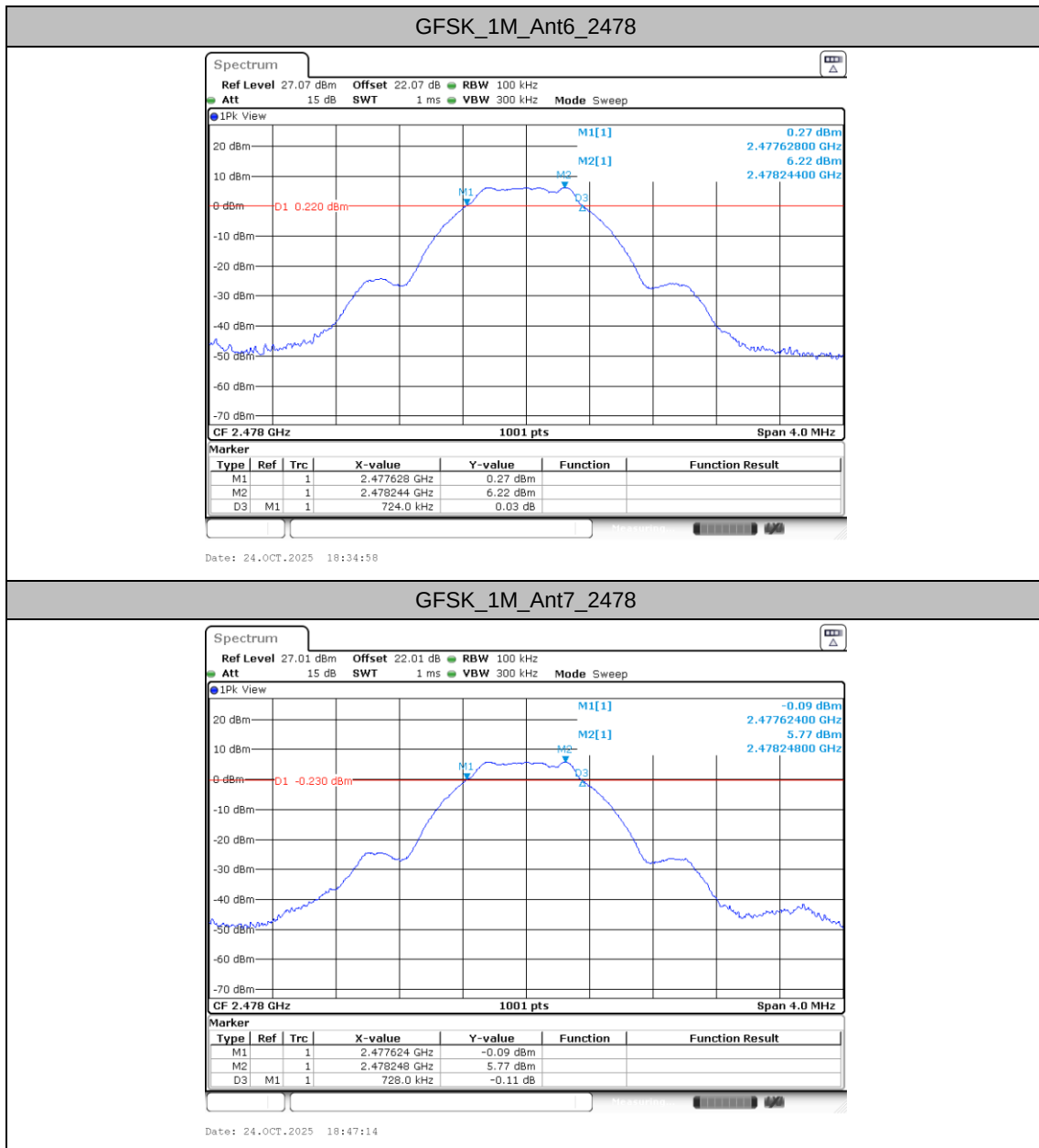
| TestMode | Antenna | Freq(MHz) | DTS BW<br>[MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------------|---------|---------|------------|---------|
| GFSK_1M  | Ant6    | 2404      | 0.72            | 2403.63 | 2404.35 | 0.5        | PASS    |
|          | Ant7    | 2404      | 0.73            | 2403.62 | 2404.35 | 0.5        | PASS    |
|          | Ant6    | 2440      | 0.73            | 2439.62 | 2440.35 | 0.5        | PASS    |
|          | Ant7    | 2440      | 0.73            | 2439.62 | 2440.35 | 0.5        | PASS    |
|          | Ant6    | 2478      | 0.72            | 2477.63 | 2478.35 | 0.5        | PASS    |
|          | Ant7    | 2478      | 0.73            | 2477.62 | 2478.35 | 0.5        | PASS    |
| GFSK_2M  | Ant6    | 2404      | 1.38            | 2403.31 | 2404.68 | 0.5        | PASS    |
|          | Ant7    | 2404      | 1.38            | 2403.31 | 2404.68 | 0.5        | PASS    |
|          | Ant6    | 2440      | 1.38            | 2439.31 | 2440.68 | 0.5        | PASS    |
|          | Ant7    | 2440      | 1.38            | 2439.31 | 2440.68 | 0.5        | PASS    |
|          | Ant6    | 2478      | 1.38            | 2477.31 | 2478.68 | 0.5        | PASS    |
|          | Ant7    | 2478      | 1.38            | 2477.31 | 2478.68 | 0.5        | PASS    |

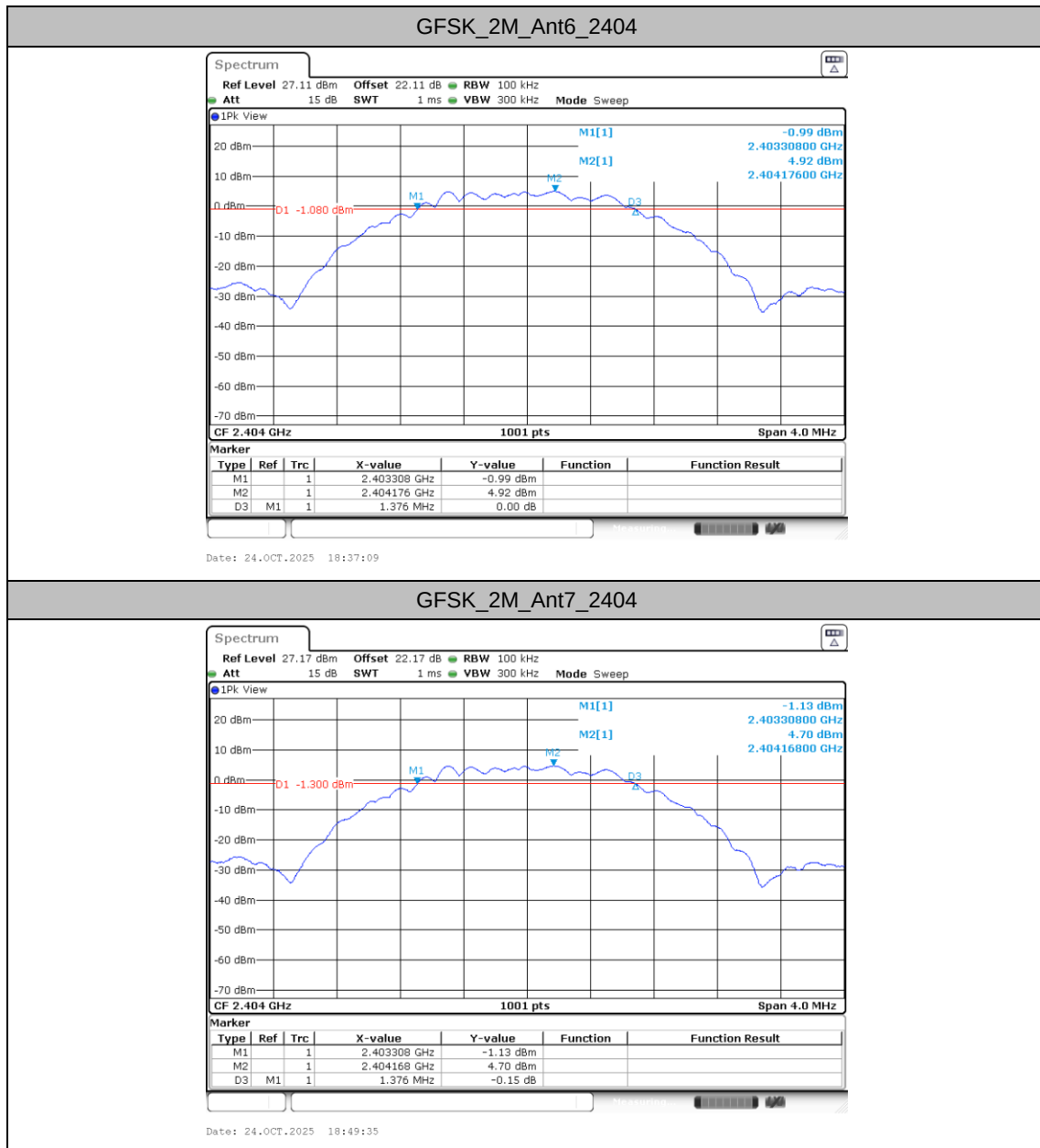


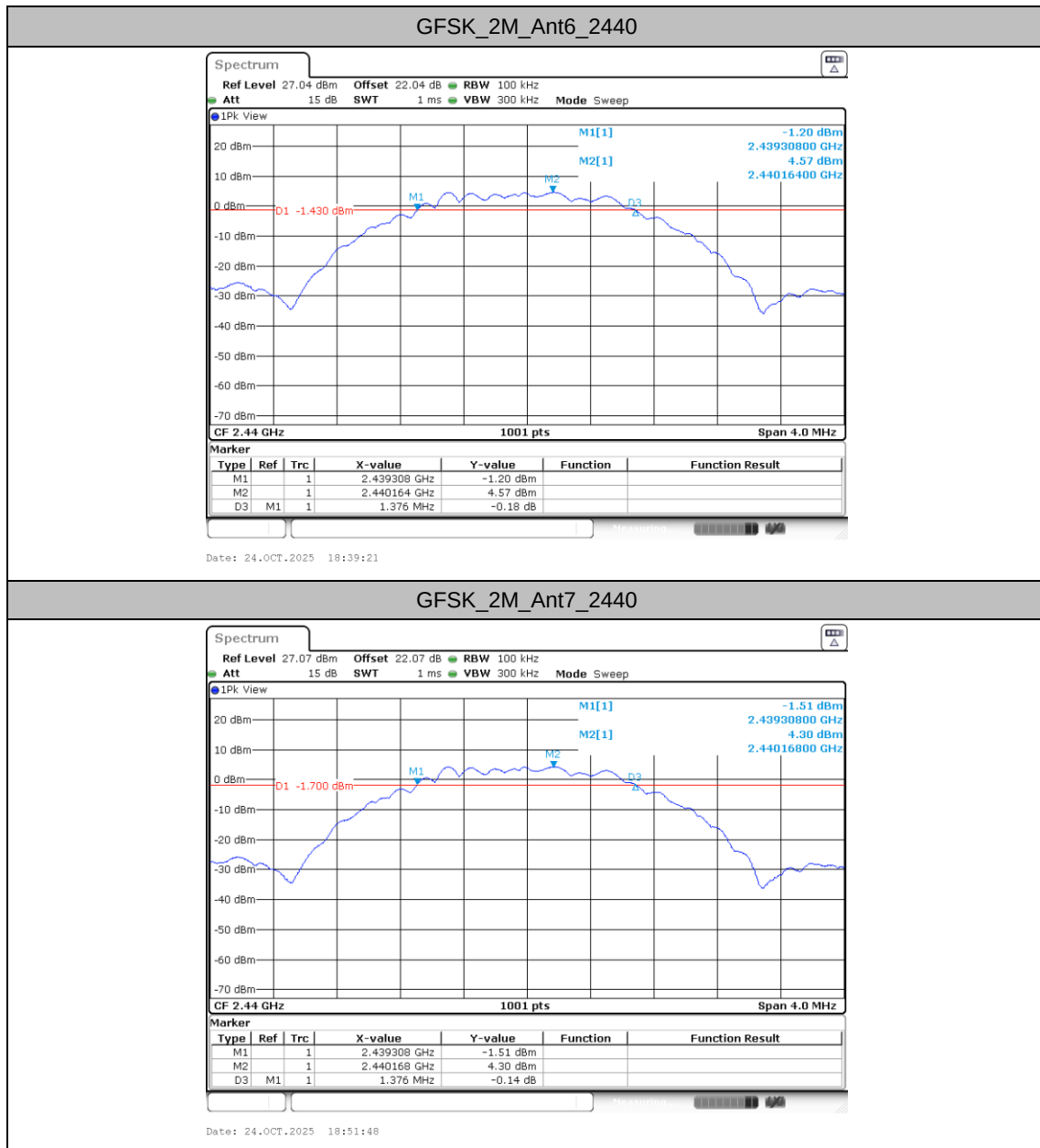
## Test Graphs

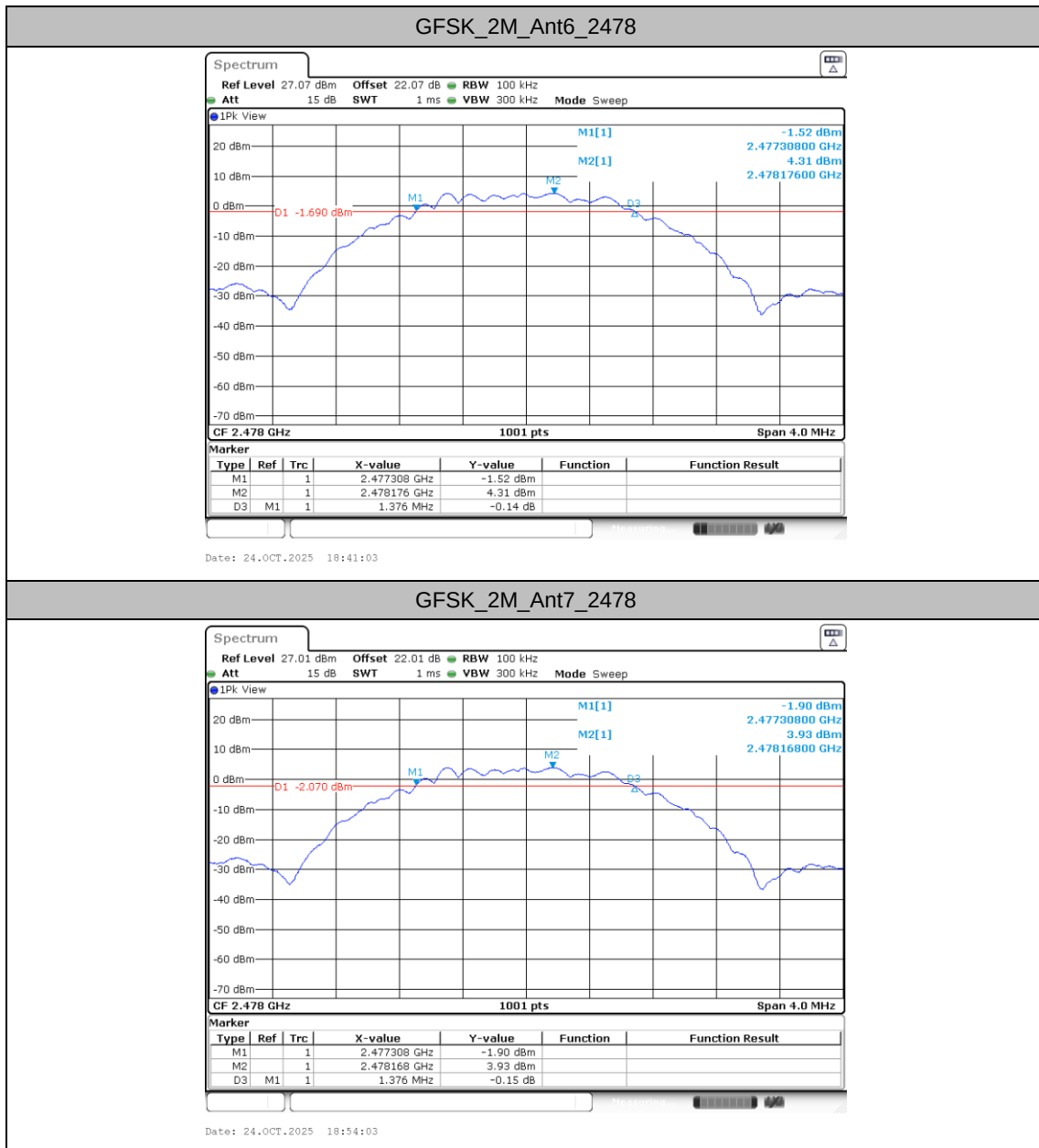














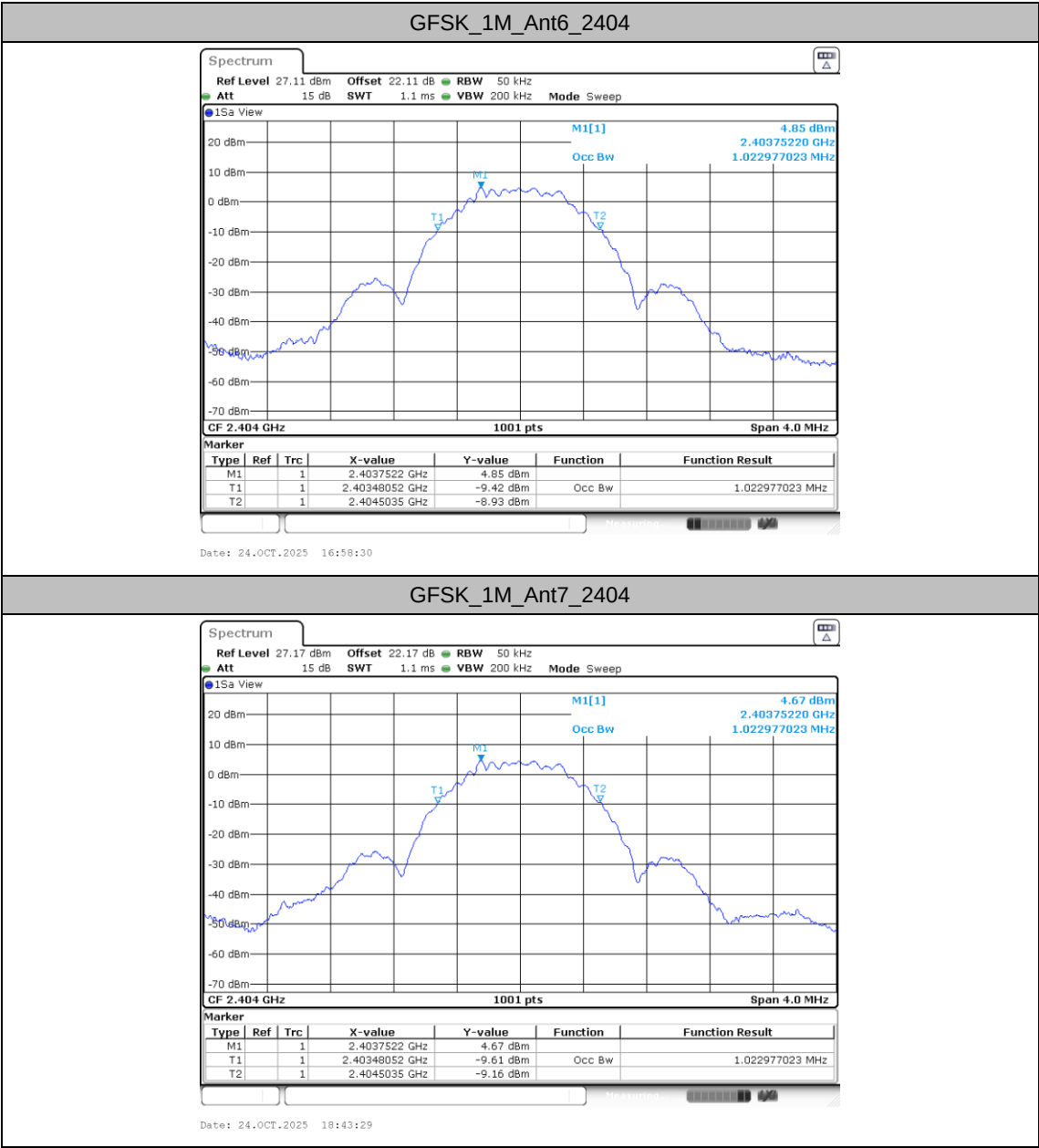
## Occupied Channel Bandwidth

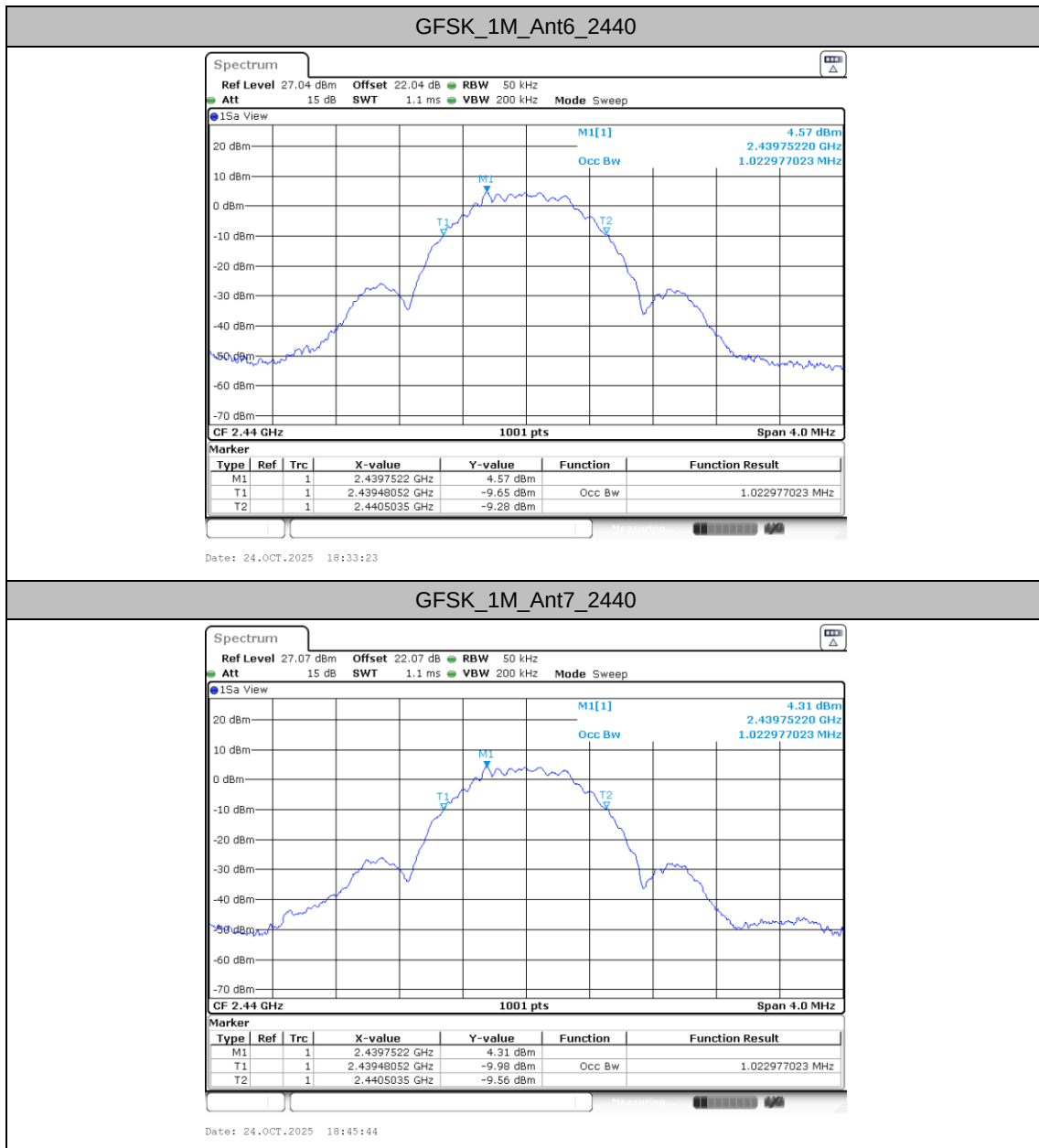
### Test Result

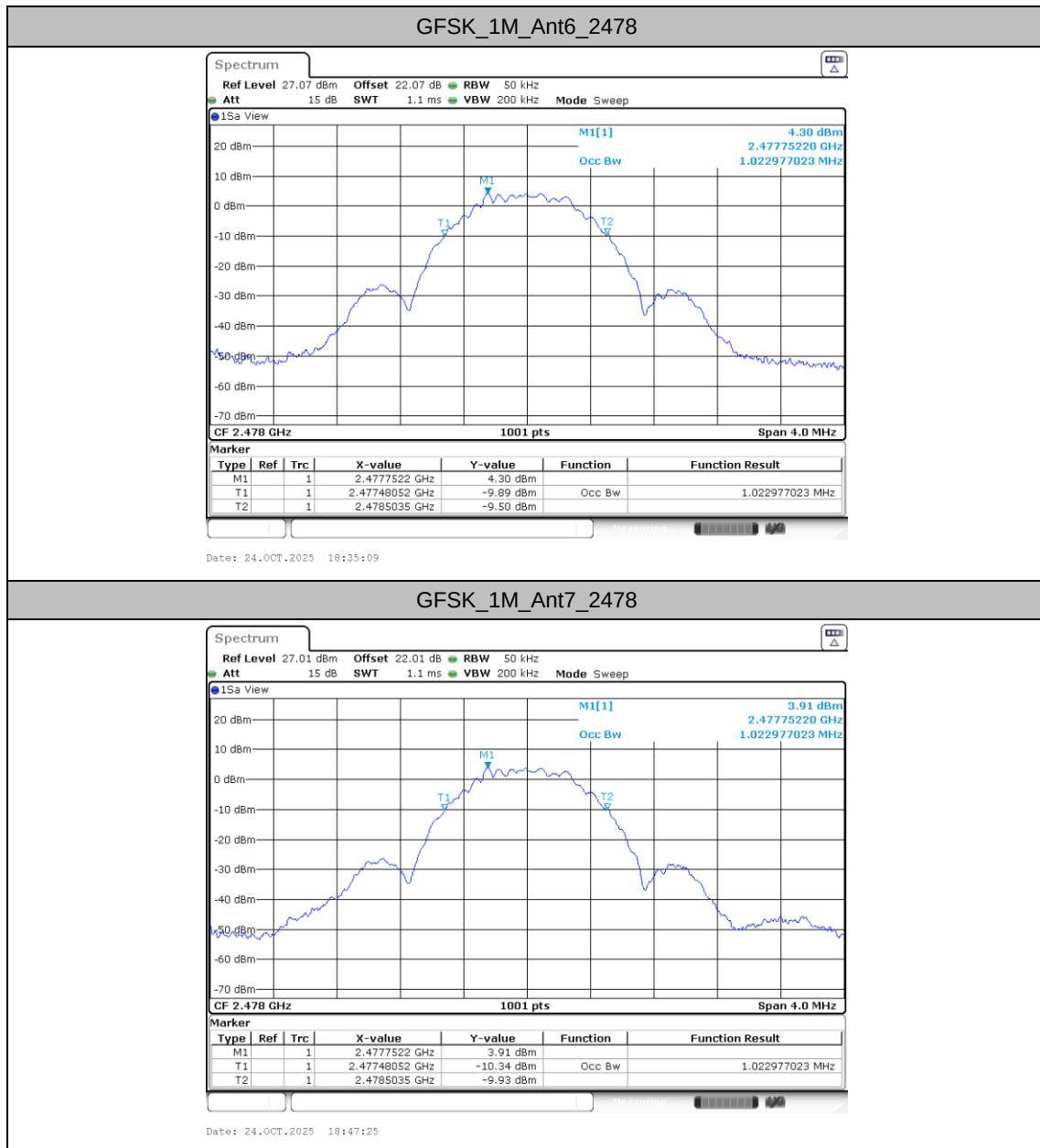
| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| GFSK_1M  | Ant6    | 2404      | 1.023     | 2403.4805 | 2404.5035 | ---        | ---     |
|          | Ant7    | 2404      | 1.023     | 2403.4805 | 2404.5035 | ---        | ---     |
|          | Ant6    | 2440      | 1.023     | 2439.4805 | 2440.5035 | ---        | ---     |
|          | Ant7    | 2440      | 1.023     | 2439.4805 | 2440.5035 | ---        | ---     |
|          | Ant6    | 2478      | 1.023     | 2477.4805 | 2478.5035 | ---        | ---     |
|          | Ant7    | 2478      | 1.023     | 2477.4805 | 2478.5035 | ---        | ---     |
| GFSK_2M  | Ant6    | 2404      | 2.042     | 2402.9810 | 2405.0230 | ---        | ---     |
|          | Ant7    | 2404      | 2.042     | 2402.9810 | 2405.0230 | ---        | ---     |
|          | Ant6    | 2440      | 2.042     | 2438.9770 | 2441.0190 | ---        | ---     |
|          | Ant7    | 2440      | 2.042     | 2438.9770 | 2441.0190 | ---        | ---     |
|          | Ant6    | 2478      | 2.046     | 2476.9770 | 2479.0230 | ---        | ---     |
|          | Ant7    | 2478      | 2.042     | 2476.9770 | 2479.0190 | ---        | ---     |

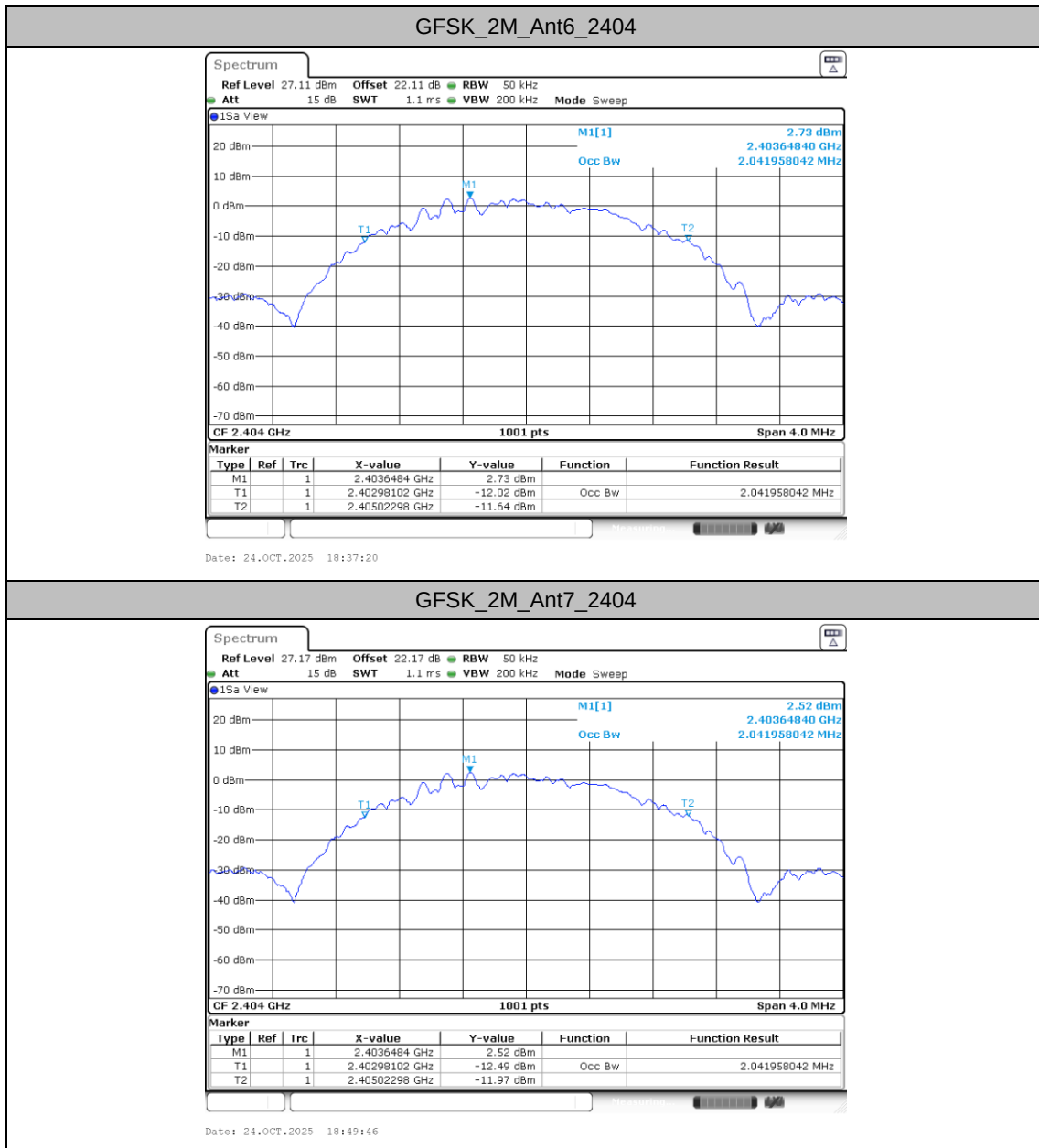


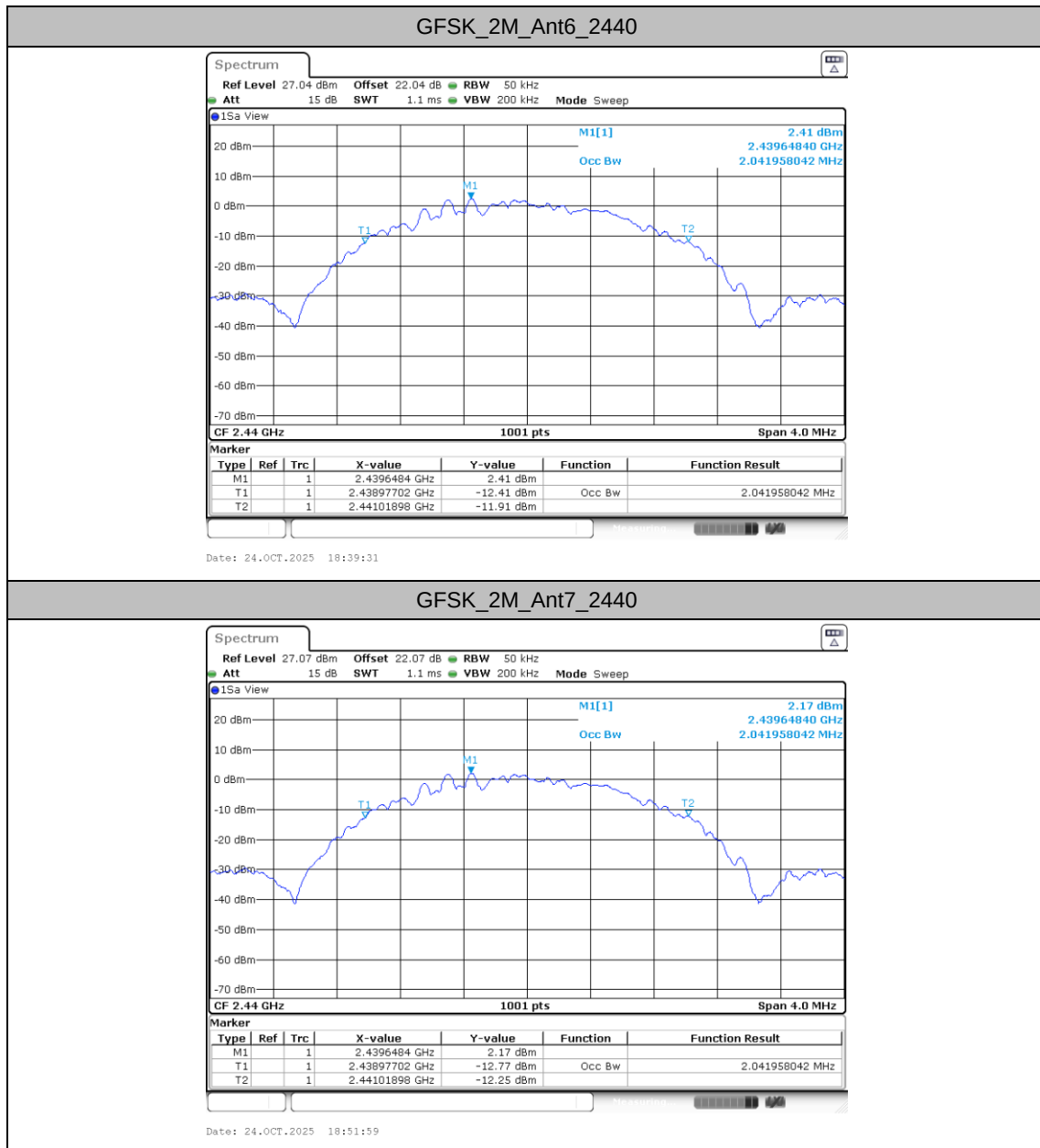
Test Graphs

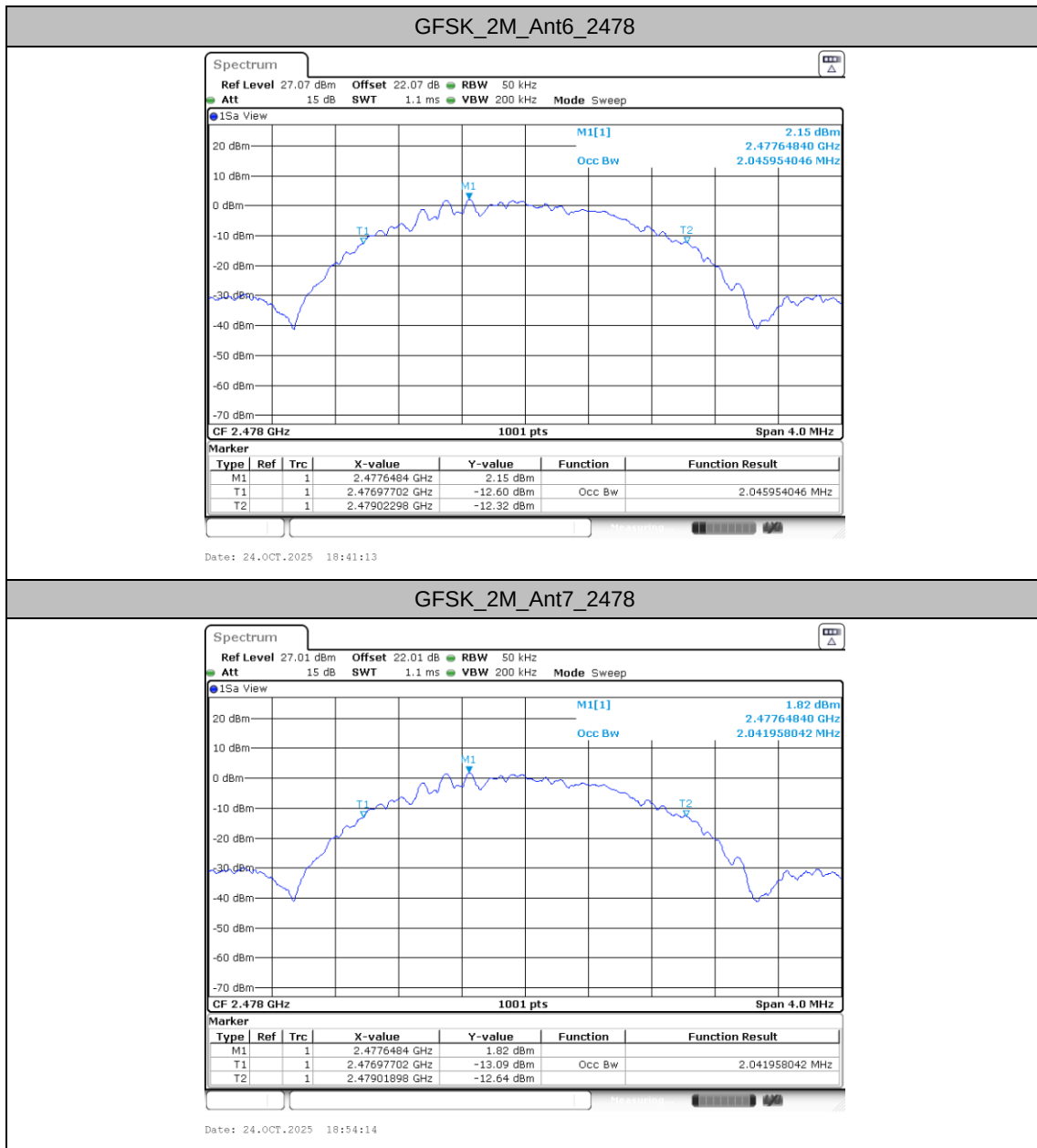














## Maximum conducted output power

### Test Result Peak

| Test Mode | Antenna | CH. | Peak Conducted Power (dBm) | Conducted Power Limit | DG (dBi) | EIRP Power (dBm) | EIRP Power Limit | Pass/Fail | Power Setting |
|-----------|---------|-----|----------------------------|-----------------------|----------|------------------|------------------|-----------|---------------|
| GFSK_1M   | Ant 6   | 2   | 8.32                       | 30.00                 | 0.72     | 9.04             | 36.00            | Pass      | 9             |
|           |         | 38  | 8.23                       | 30.00                 | 0.72     | 8.95             | 36.00            | Pass      | 9             |
|           |         | 76  | 7.99                       | 30.00                 | 0.72     | 8.71             | 36.00            | Pass      | 9             |
| GFSK_2M   | Ant 6   | 2   | 8.33                       | 30.00                 | 0.72     | 9.05             | 36.00            | Pass      | 9             |
|           |         | 38  | 8.24                       | 30.00                 | 0.72     | 8.96             | 36.00            | Pass      | 9             |
|           |         | 76  | 8.04                       | 30.00                 | 0.72     | 8.76             | 36.00            | Pass      | 9             |
| GFSK_1M   | Ant 7   | 2   | 8.24                       | 30.00                 | 1.01     | 9.25             | 36.00            | Pass      | 9             |
|           |         | 38  | 8.06                       | 30.00                 | 1.01     | 9.07             | 36.00            | Pass      | 9             |
|           |         | 76  | 7.87                       | 30.00                 | 1.01     | 8.88             | 36.00            | Pass      | 9             |
| GFSK_2M   | Ant 7   | 2   | 8.21                       | 30.00                 | 1.01     | 9.22             | 36.00            | Pass      | 9             |
|           |         | 38  | 8.07                       | 30.00                 | 1.01     | 9.08             | 36.00            | Pass      | 9             |
|           |         | 76  | 7.93                       | 30.00                 | 1.01     | 8.94             | 36.00            | Pass      | 9             |

**Test Result Average**

| TestMode | Antenna | CH. | Duty Factor (dB) | Average Conducted Power (dBm) | Conducted Power Limit | DG (dBi) | EIRP Power (dBm) | EIRP Power Limit | Pass/Fail | Power Setting |
|----------|---------|-----|------------------|-------------------------------|-----------------------|----------|------------------|------------------|-----------|---------------|
| GFSK_1M  | Ant 6   | 2   | 2.04             | 7.94                          | 30.00                 | 0.72     | 8.66             | 36.00            | Pass      | 9             |
|          |         | 38  | 2.04             | 7.82                          | 30.00                 | 0.72     | 8.54             | 36.00            | Pass      | 9             |
|          |         | 76  | 2.04             | 7.61                          | 30.00                 | 0.72     | 8.33             | 36.00            | Pass      | 9             |
| GFSK_2M  | Ant 6   | 2   | 4.83             | 8.02                          | 30.00                 | 0.72     | 8.74             | 36.00            | Pass      | 9             |
|          |         | 38  | 4.83             | 7.89                          | 30.00                 | 0.72     | 8.61             | 36.00            | Pass      | 9             |
|          |         | 76  | 4.83             | 7.67                          | 30.00                 | 0.72     | 8.39             | 36.00            | Pass      | 9             |
| GFSK_1M  | Ant 7   | 2   | 0.84             | 7.81                          | 30.00                 | 1.01     | 8.82             | 36.00            | Pass      | 9             |
|          |         | 38  | 0.84             | 7.64                          | 30.00                 | 1.01     | 8.65             | 36.00            | Pass      | 9             |
|          |         | 76  | 0.84             | 7.45                          | 30.00                 | 1.01     | 8.46             | 36.00            | Pass      | 9             |
| GFSK_2M  | Ant 7   | 2   | 2.47             | 7.88                          | 30.00                 | 1.01     | 8.89             | 36.00            | Pass      | 9             |
|          |         | 38  | 2.47             | 7.72                          | 30.00                 | 1.01     | 8.73             | 36.00            | Pass      | 9             |
|          |         | 76  | 2.47             | 7.52                          | 30.00                 | 1.01     | 8.53             | 36.00            | Pass      | 9             |



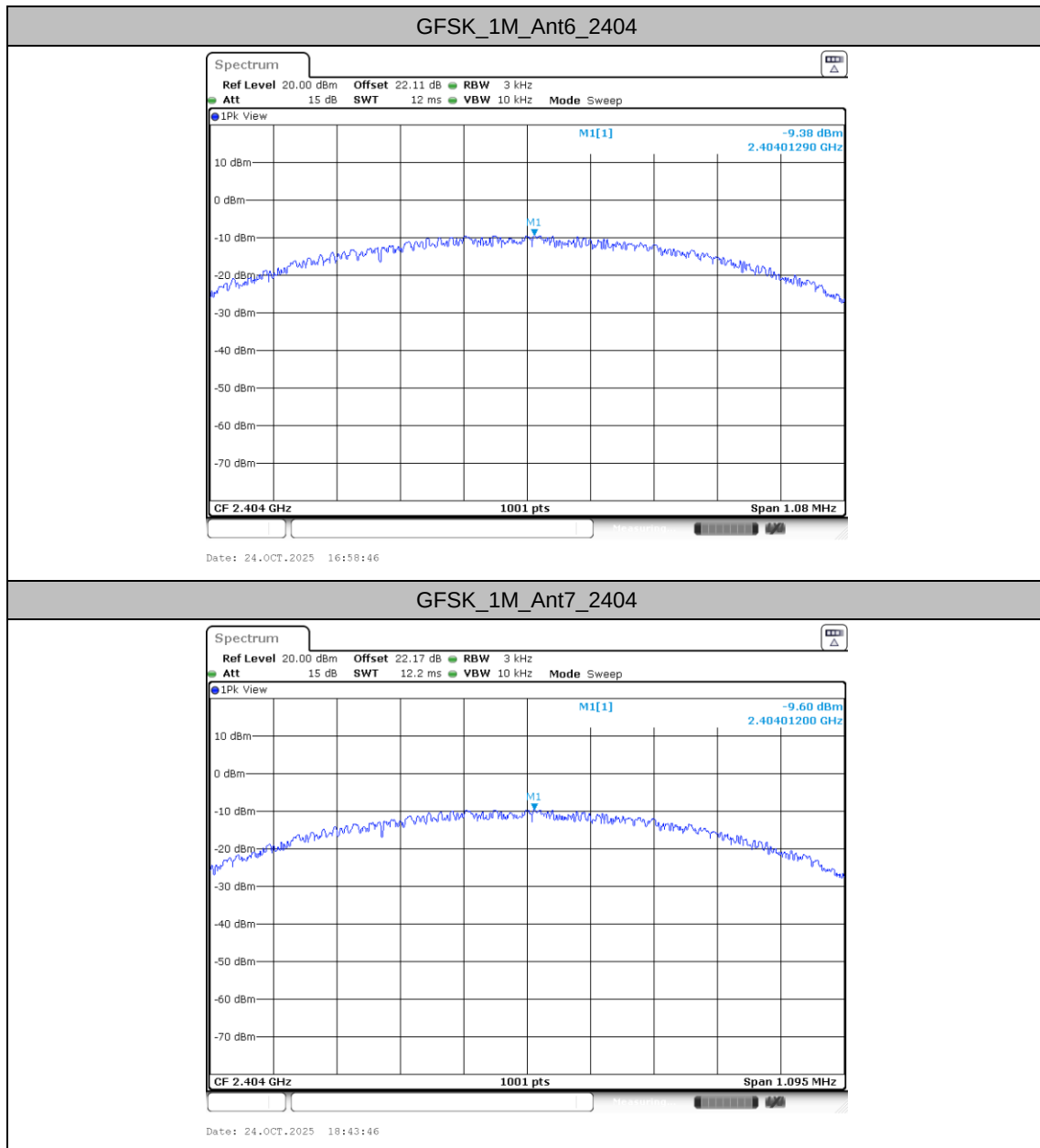
## Maximum power spectral density

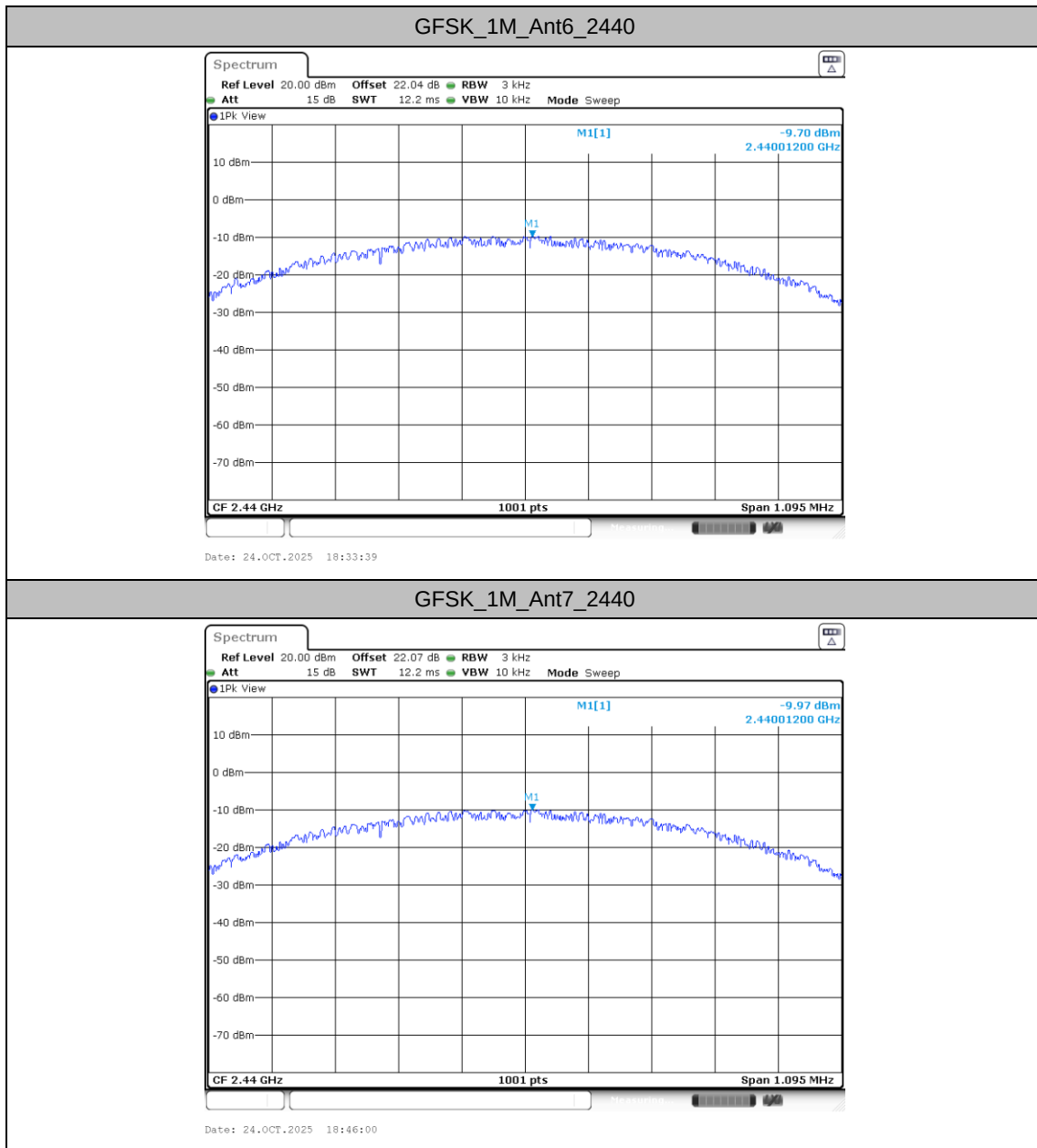
### Test Result

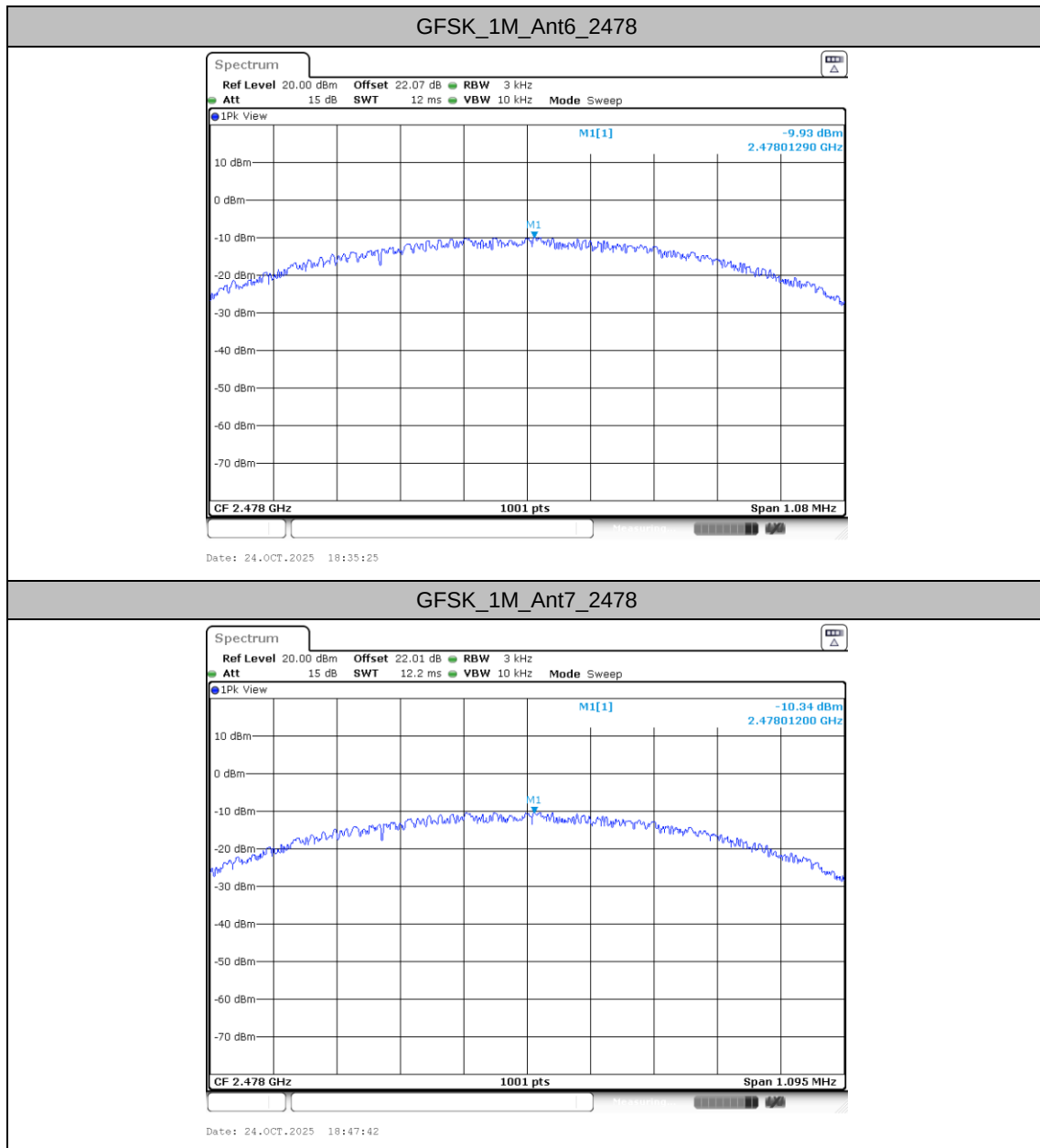
| TestMode | Antenna | Freq(MHz) | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|----------|---------|-----------|------------------|-----------------|---------|
| GFSK_1M  | Ant6    | 2404      | -9.38            | ≤8.00           | PASS    |
|          | Ant7    | 2404      | -9.60            | ≤8.00           | PASS    |
|          | Ant6    | 2440      | -9.70            | ≤8.00           | PASS    |
|          | Ant7    | 2440      | -9.97            | ≤8.00           | PASS    |
|          | Ant6    | 2478      | -9.93            | ≤8.00           | PASS    |
|          | Ant7    | 2478      | -10.34           | ≤8.00           | PASS    |
| GFSK_2M  | Ant6    | 2404      | -14.67           | ≤8.00           | PASS    |
|          | Ant7    | 2404      | -14.89           | ≤8.00           | PASS    |
|          | Ant6    | 2440      | -15.01           | ≤8.00           | PASS    |
|          | Ant7    | 2440      | -15.28           | ≤8.00           | PASS    |
|          | Ant6    | 2478      | -15.26           | ≤8.00           | PASS    |
|          | Ant7    | 2478      | -15.67           | ≤8.00           | PASS    |



## Test Graphs

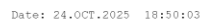


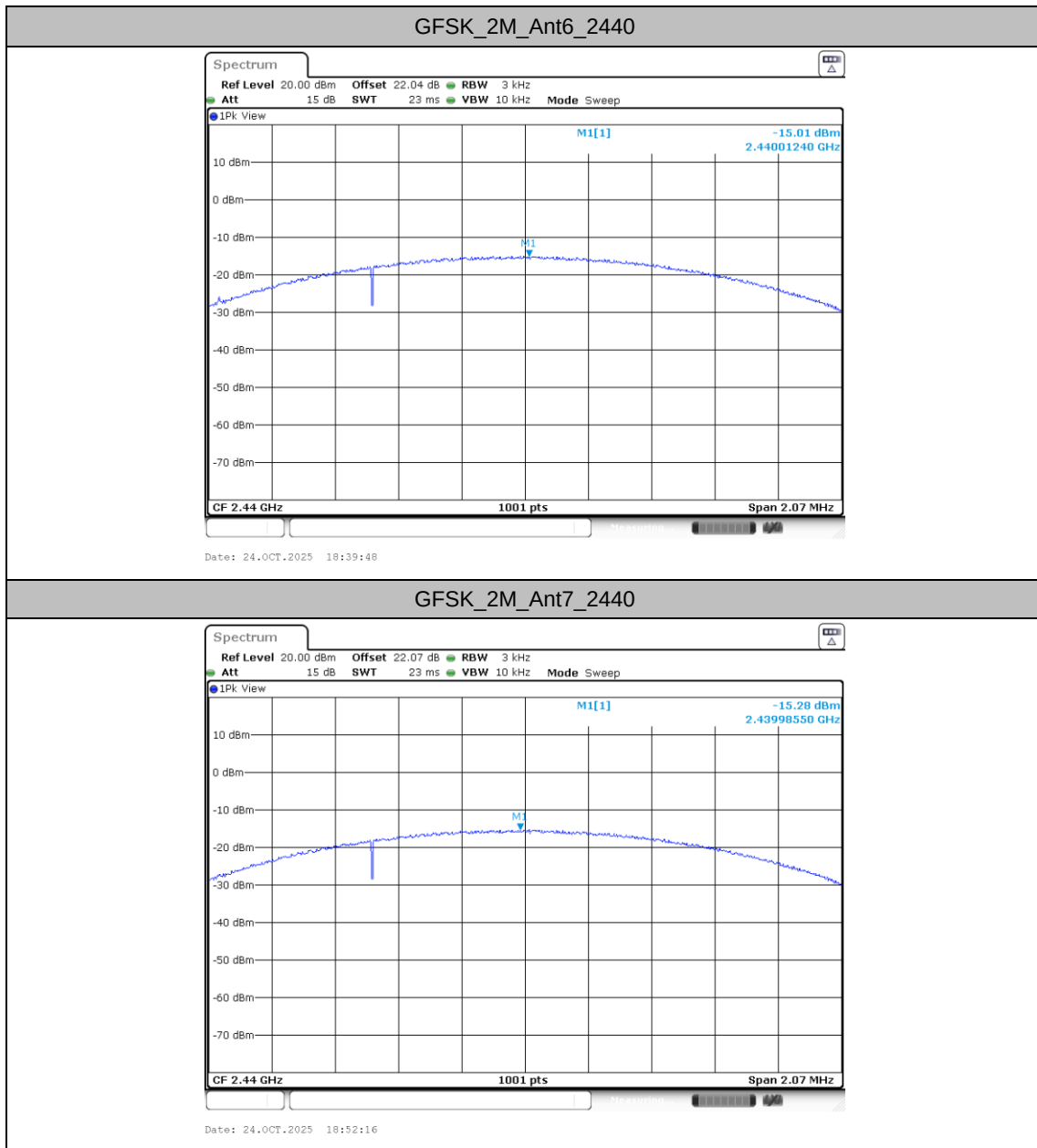


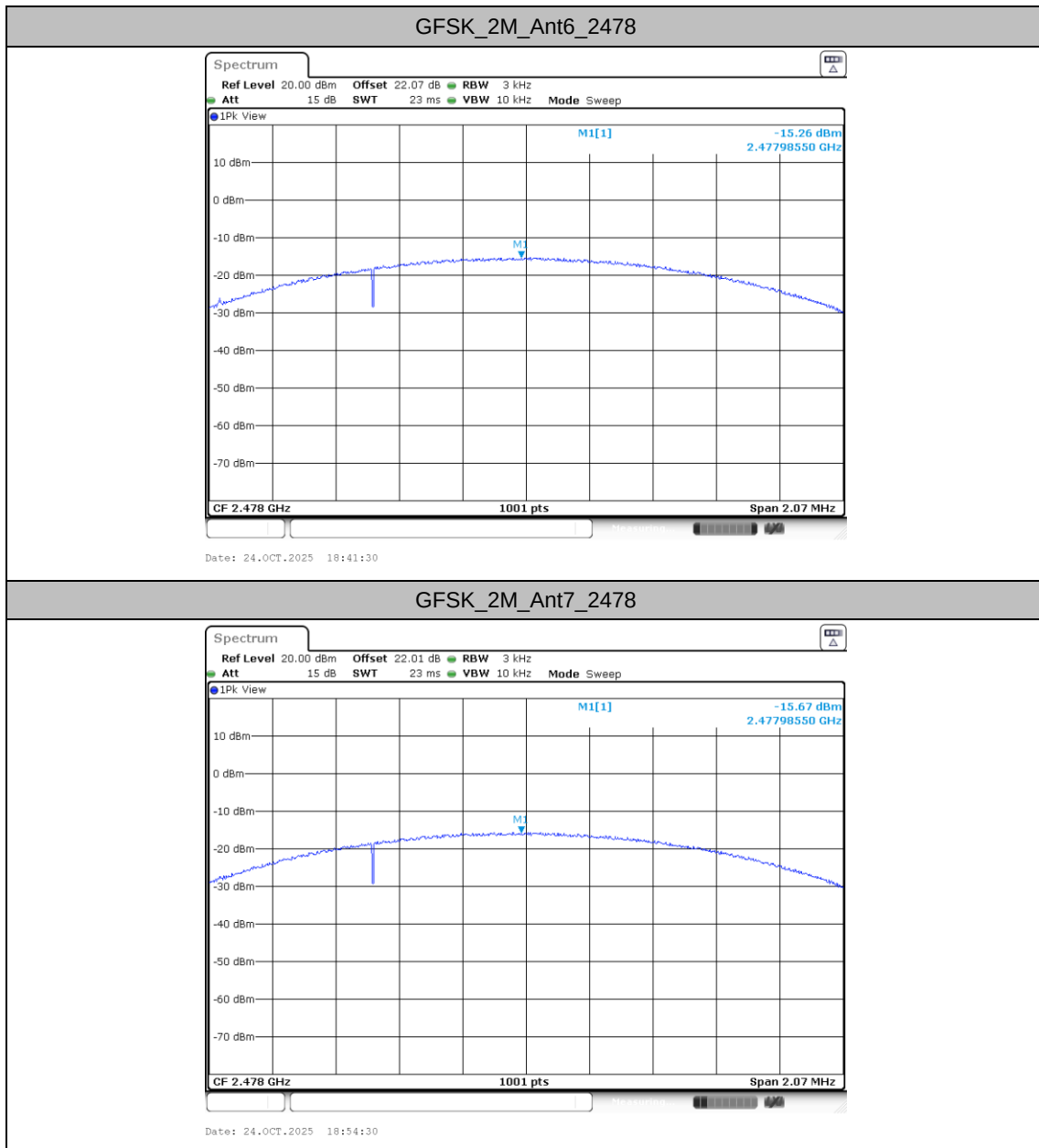




GFSK\_2M\_Ant7\_2404









## Reference level measurement

### Test Result

| TestMode | Antenna | Freq(MHz) | Max.Point[MHz] | Result[dBm/100KHz] |
|----------|---------|-----------|----------------|--------------------|
| GFSK_1M  | Ant6    | 2404      | 2404.00        | 6.75               |
|          | Ant7    | 2404      | 2404.00        | 6.54               |
|          | Ant6    | 2440      | 2440.00        | 6.44               |
|          | Ant7    | 2440      | 2440.00        | 6.17               |
|          | Ant6    | 2478      | 2478.25        | 6.21               |
|          | Ant7    | 2478      | 2478.00        | 5.80               |
| GFSK_2M  | Ant6    | 2404      | 2404.17        | 4.82               |
|          | Ant7    | 2404      | 2403.50        | 4.59               |
|          | Ant6    | 2440      | 2439.50        | 4.50               |
|          | Ant7    | 2440      | 2439.50        | 4.23               |
|          | Ant6    | 2478      | 2477.50        | 4.24               |
|          | Ant7    | 2478      | 2477.50        | 3.91               |



## Test Graphs

