

## Appendix RF test data for BLE

## 1. Frequency Error

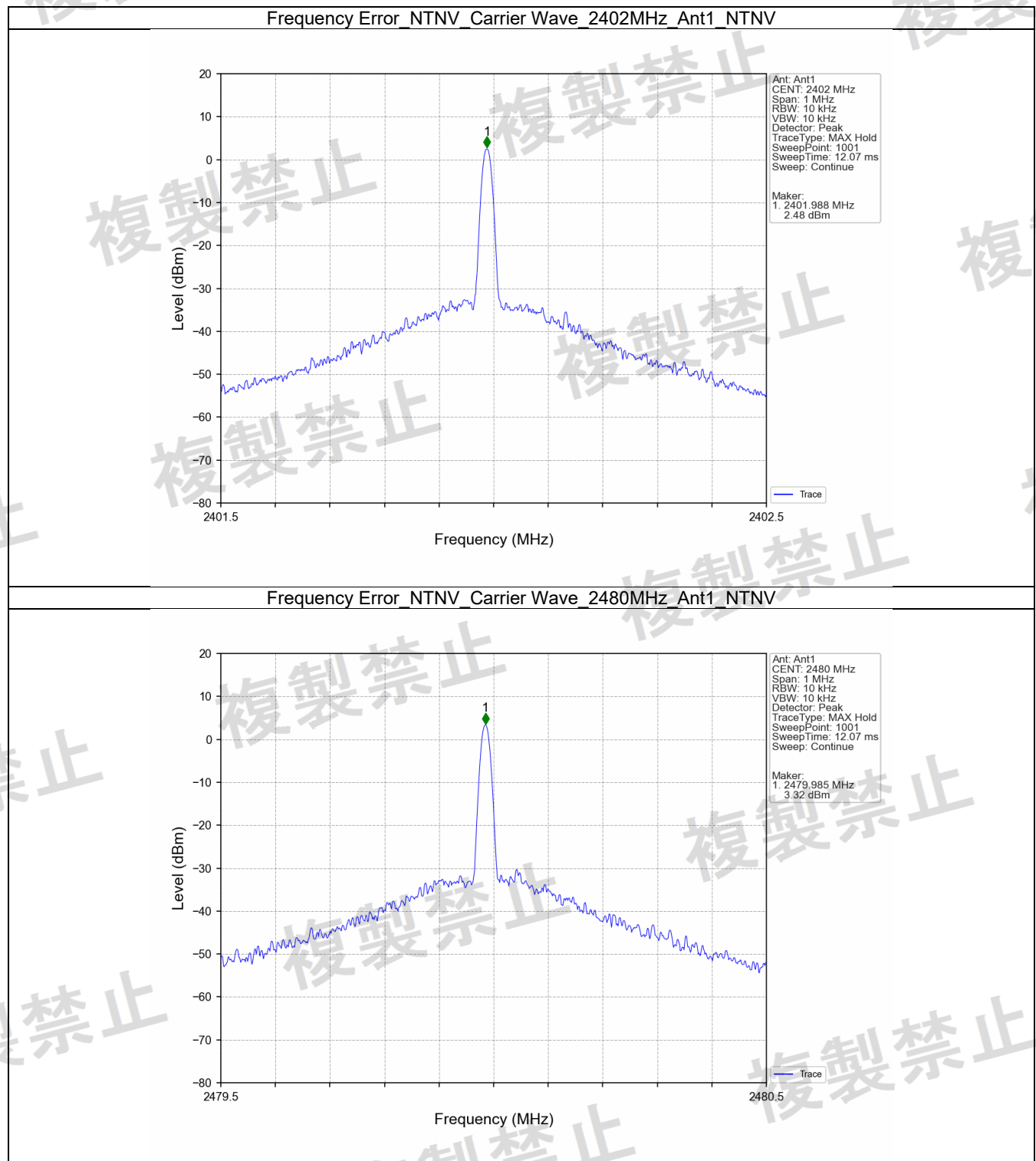
### 1.1 Test Result

#### 1.1.1 Ant1

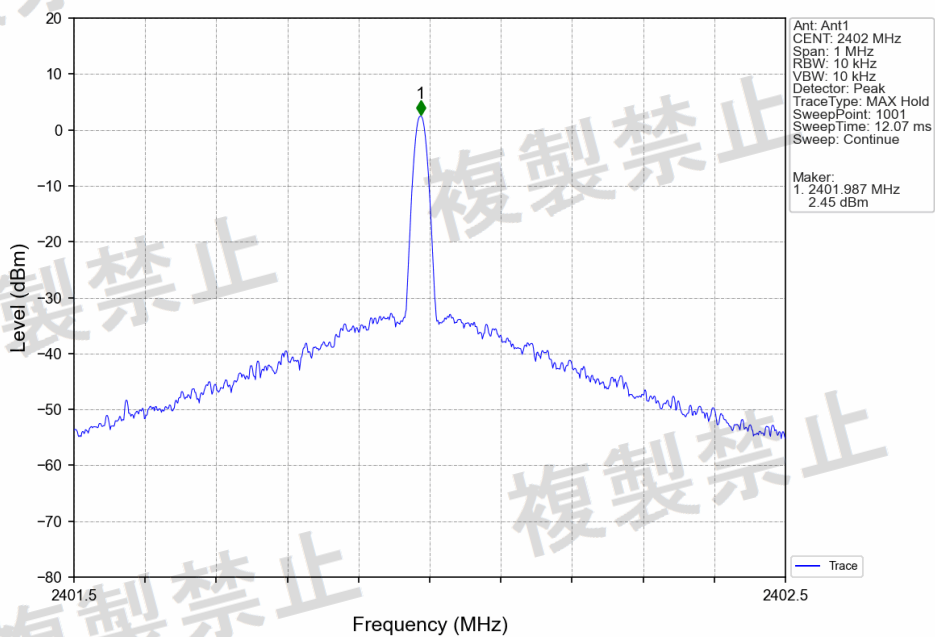
| Ant1 |              |         |                 |                          |                 |           |         |
|------|--------------|---------|-----------------|--------------------------|-----------------|-----------|---------|
| ENV  | Mode         | TX Type | Frequency (MHz) | Measured Frequency (MHz) | Tolerance (ppm) |           | Verdict |
|      |              |         |                 |                          | Result          | Limit     |         |
| NTNV | Carrier Wave | SISO    | 2402            | 2401.988                 | -5.00           | -50 to 50 | Pass    |
|      |              |         | 2480            | 2479.985                 | -6.05           | -50 to 50 | Pass    |
| NTLV | Carrier Wave | SISO    | 2402            | 2401.987                 | -5.41           | -50 to 50 | Pass    |
|      |              |         | 2480            | 2479.985                 | -6.05           | -50 to 50 | Pass    |
| NTHV | Carrier Wave | SISO    | 2402            | 2401.987                 | -5.41           | -50 to 50 | Pass    |
|      |              |         | 2480            | 2479.985                 | -6.05           | -50 to 50 | Pass    |

## 1.2 Test Graph

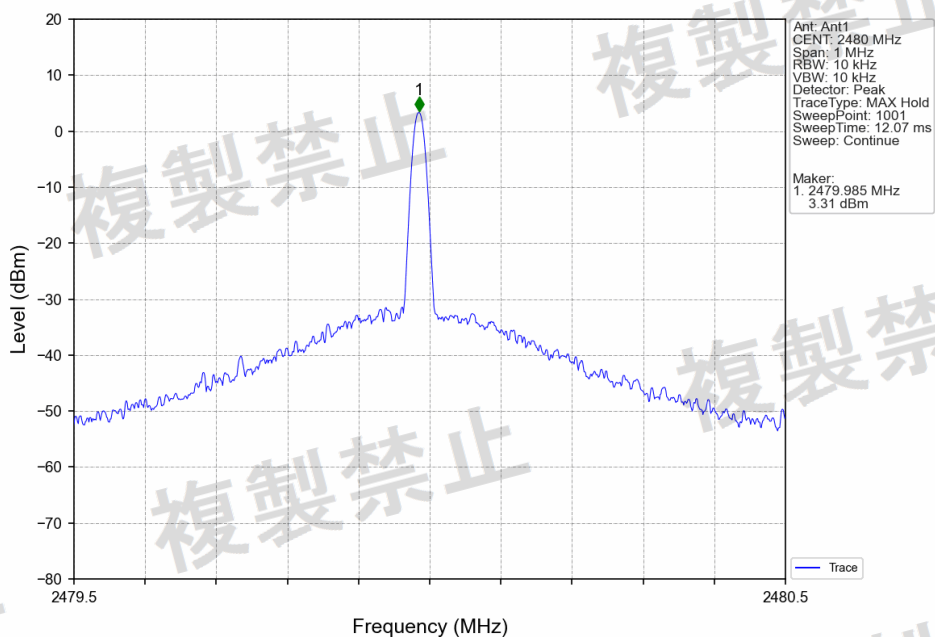
### 1.2.1 Ant1



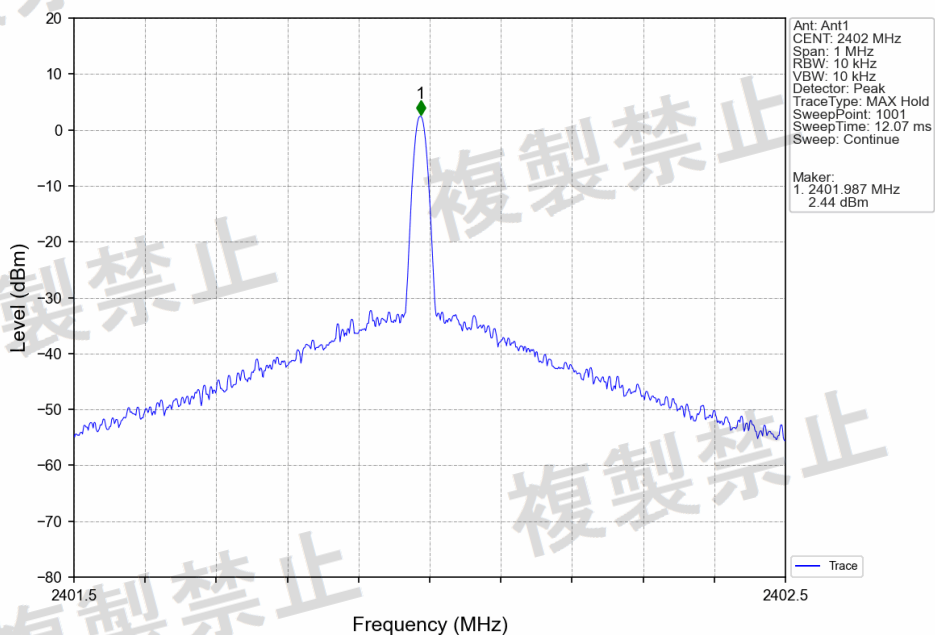
Frequency Error NTLV Carrier Wave 2402MHz Ant1 NTLV



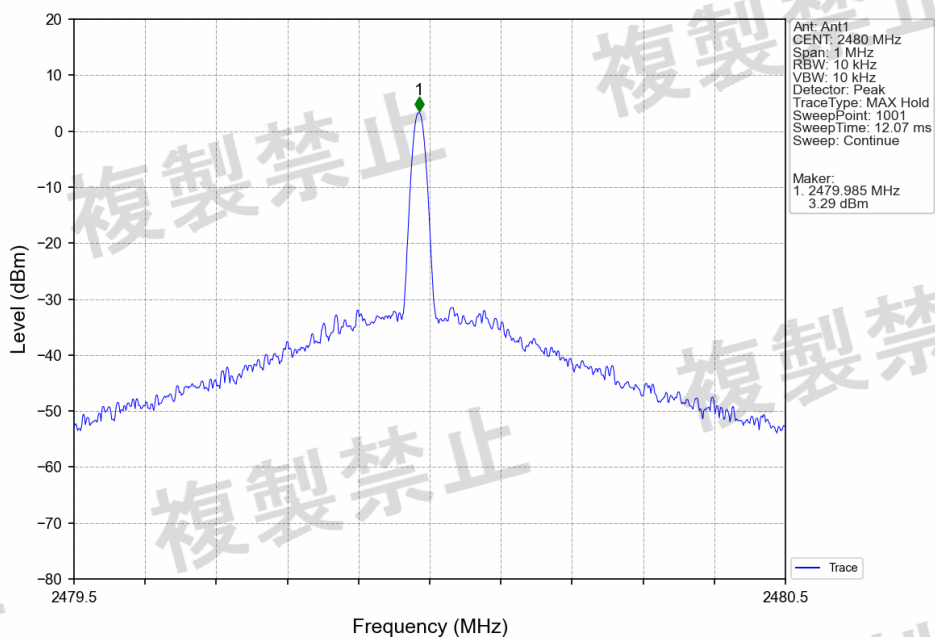
Frequency Error NTLV Carrier Wave 2480MHz Ant1 NTLV



Frequency Error NTHV Carrier Wave 2402MHz Ant1 NTHV



Frequency Error NTHV Carrier Wave 2480MHz Ant1 NTHV



## 2. Occupied Bandwidth

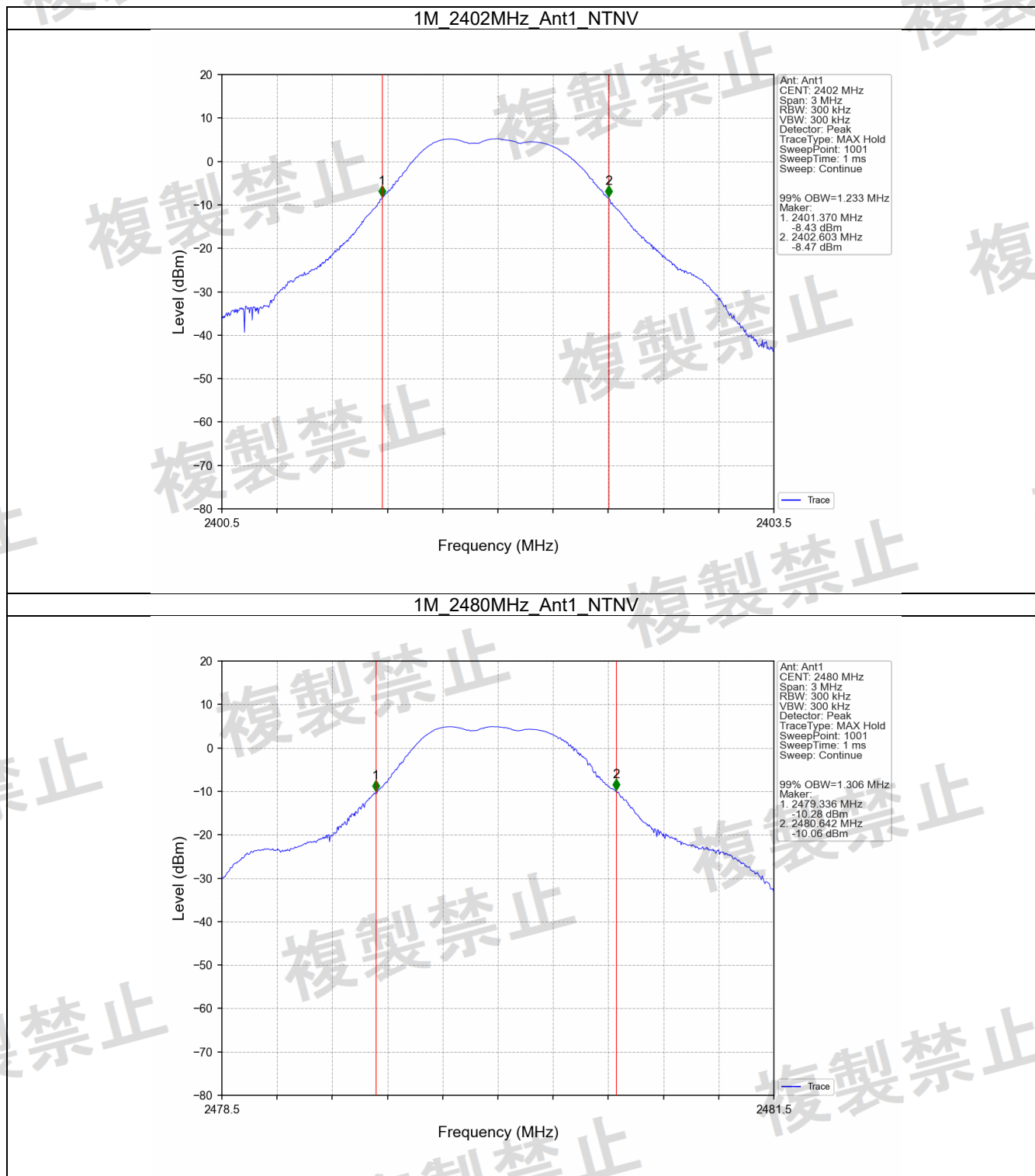
### 2.1 Test Result

#### 2.1.1 OBW

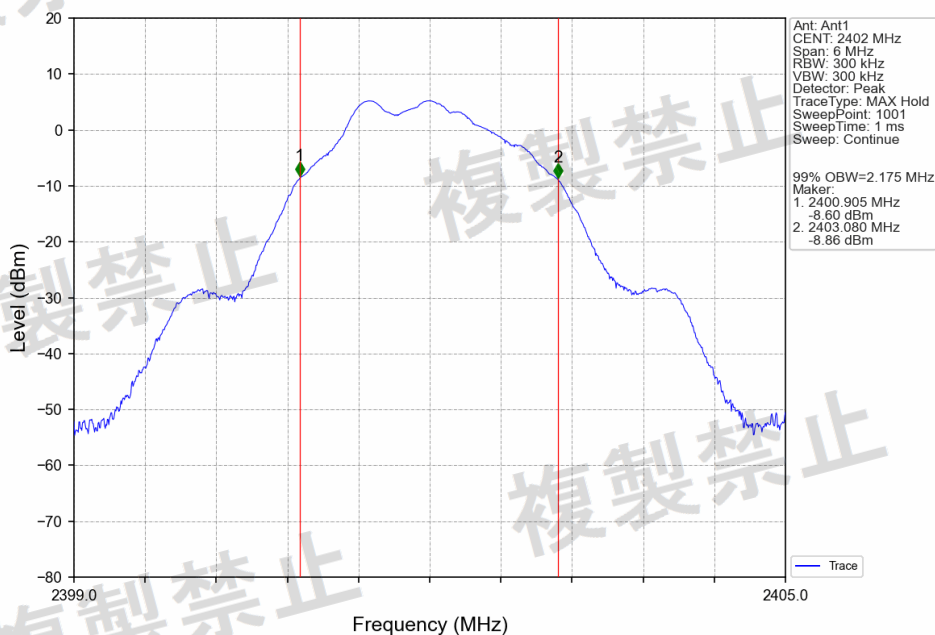
| ENV  | Mode | TX Type | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------|------|---------|-----------------|------------------------------|-------|---------|
|      |      |         |                 | ANT1                         | Limit |         |
| NTNV | 1M   | SISO    | 2402            | 1.233                        | <=26  | Pass    |
|      |      |         | 2480            | 1.306                        | <=26  | Pass    |
|      | 2M   | SISO    | 2402            | 2.175                        | <=26  | Pass    |
|      |      |         | 2480            | 2.231                        | <=26  | Pass    |
| NTLV | 1M   | SISO    | 2402            | 1.233                        | <=26  | Pass    |
|      |      |         | 2480            | 1.309                        | <=26  | Pass    |
|      | 2M   | SISO    | 2402            | 2.175                        | <=26  | Pass    |
|      |      |         | 2480            | 2.232                        | <=26  | Pass    |
| NTHV | 1M   | SISO    | 2402            | 1.233                        | <=26  | Pass    |
|      |      |         | 2480            | 1.309                        | <=26  | Pass    |
|      | 2M   | SISO    | 2402            | 2.175                        | <=26  | Pass    |
|      |      |         | 2480            | 2.231                        | <=26  | Pass    |

## 2.2 Test Graph

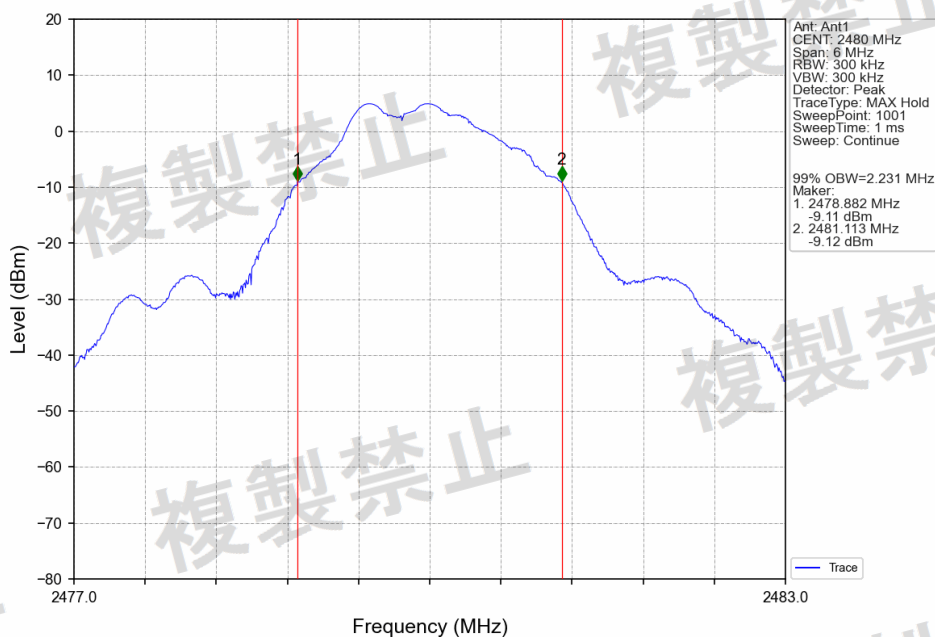
### 2.2.1 OBW



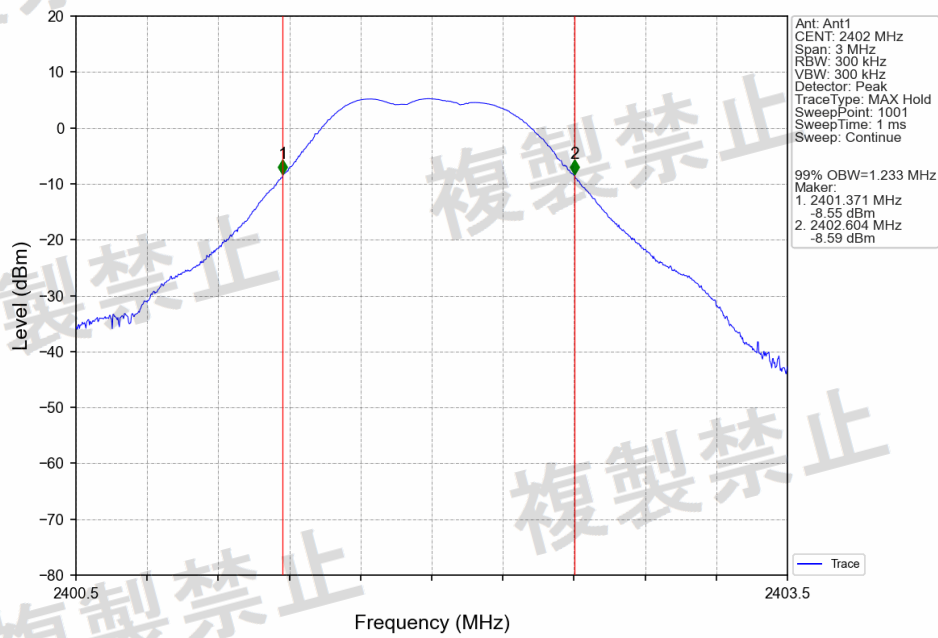
2M 2402MHz Ant1 NTV



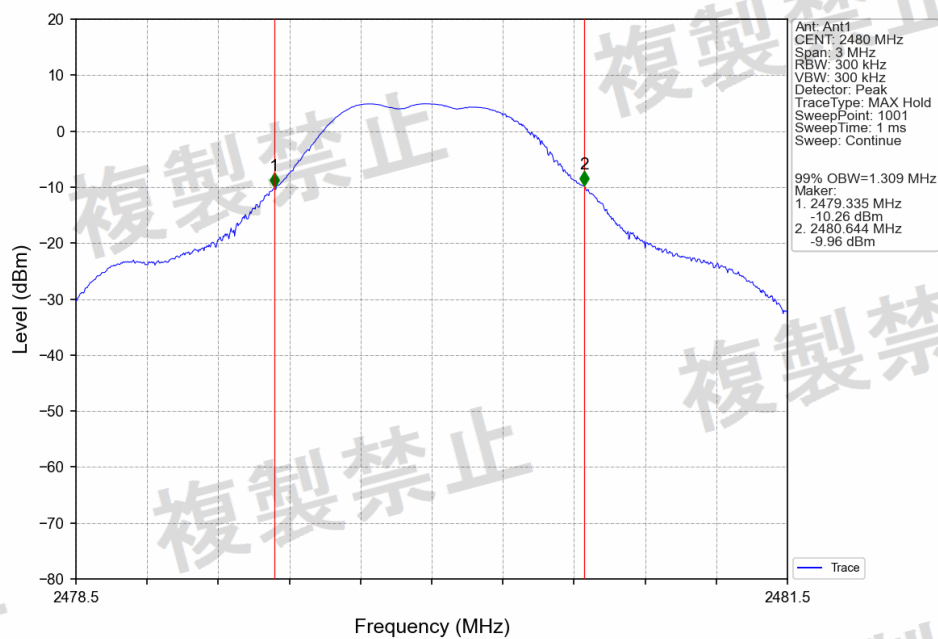
2M 2480MHz Ant1 NTV



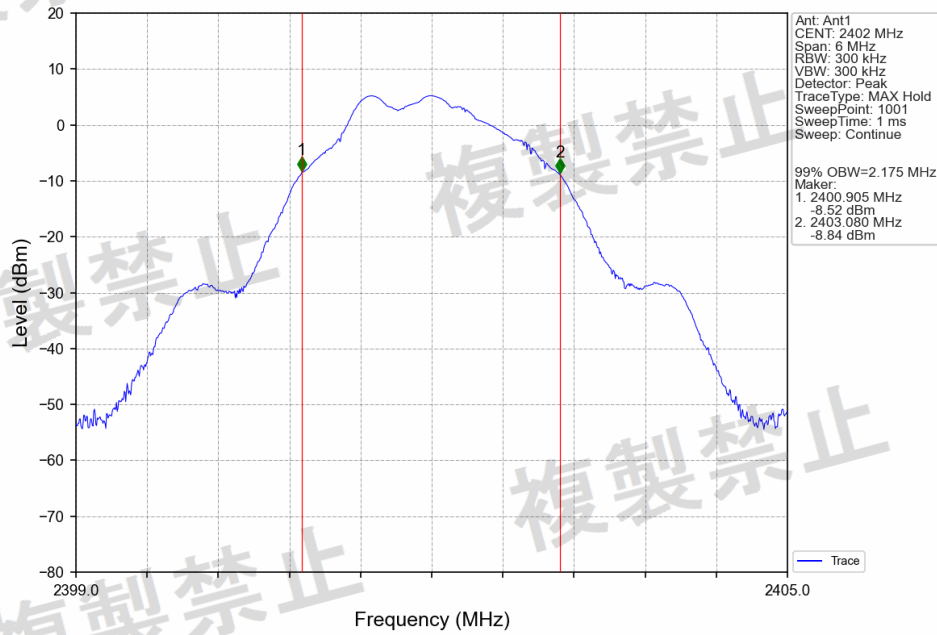
1M 2402MHz\_Ant1\_NTLV



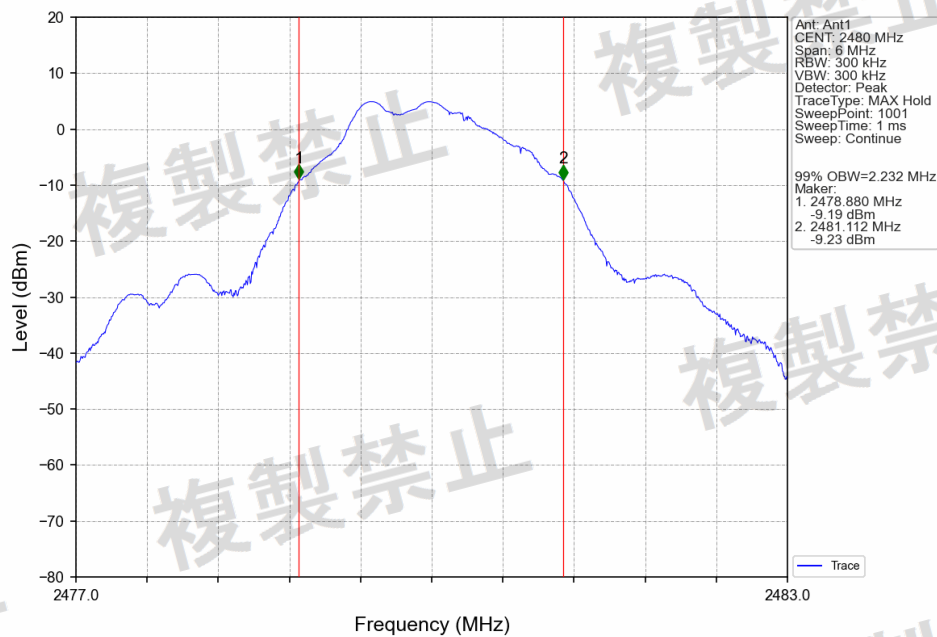
1M\_2480MHz\_Ant1\_NTLV

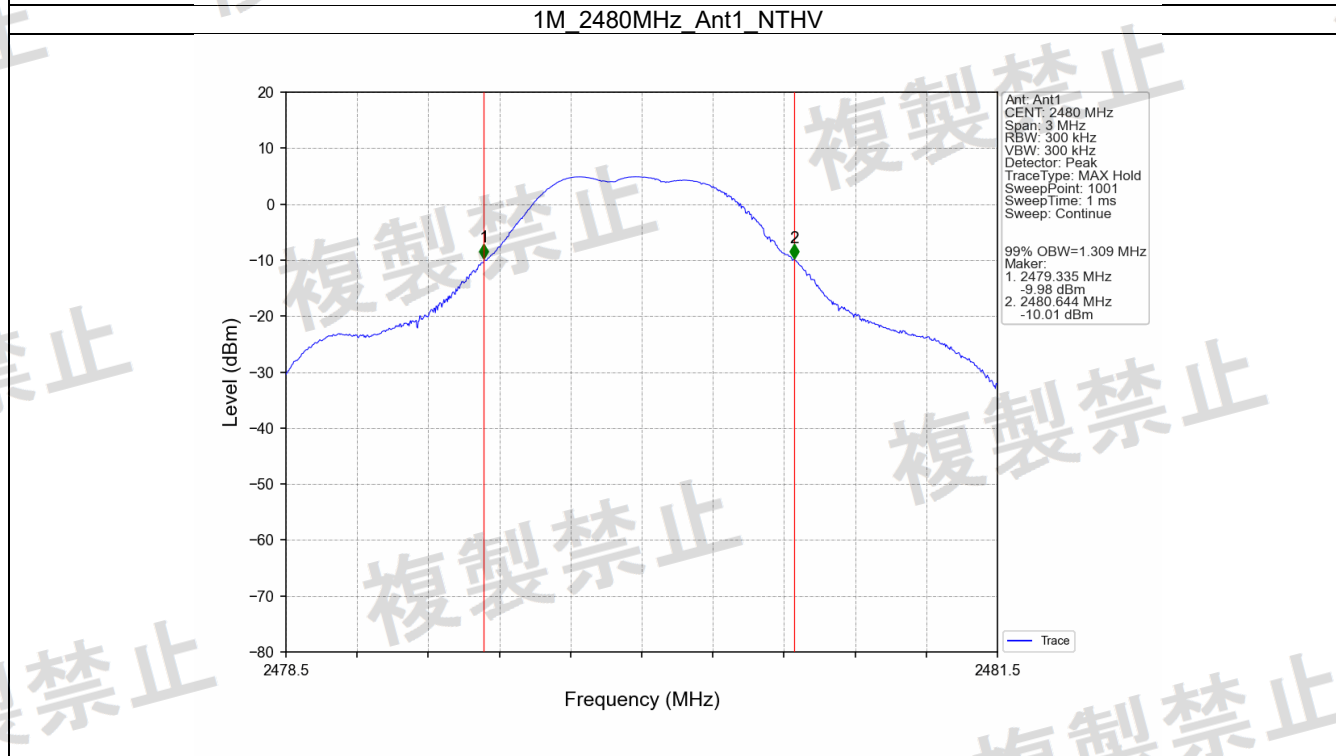
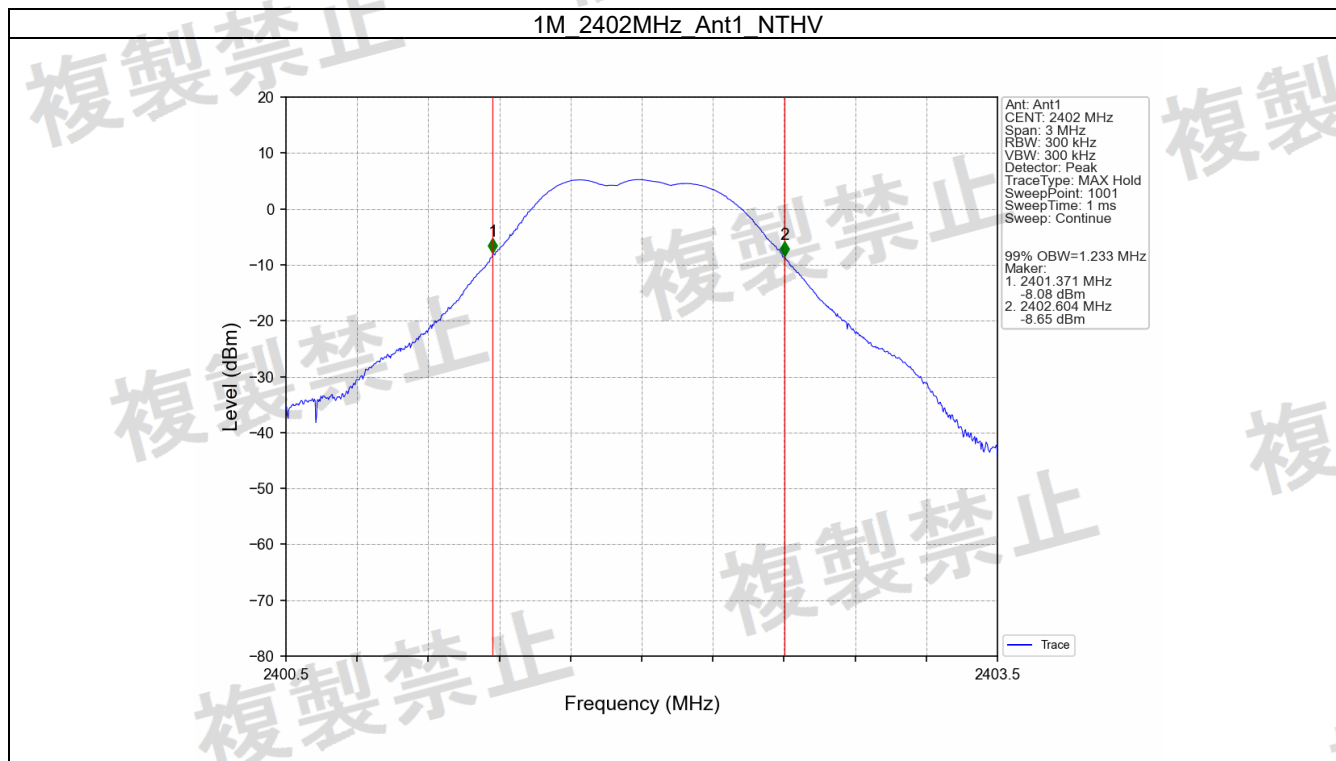


2M 2402MHz Ant1 NTLV

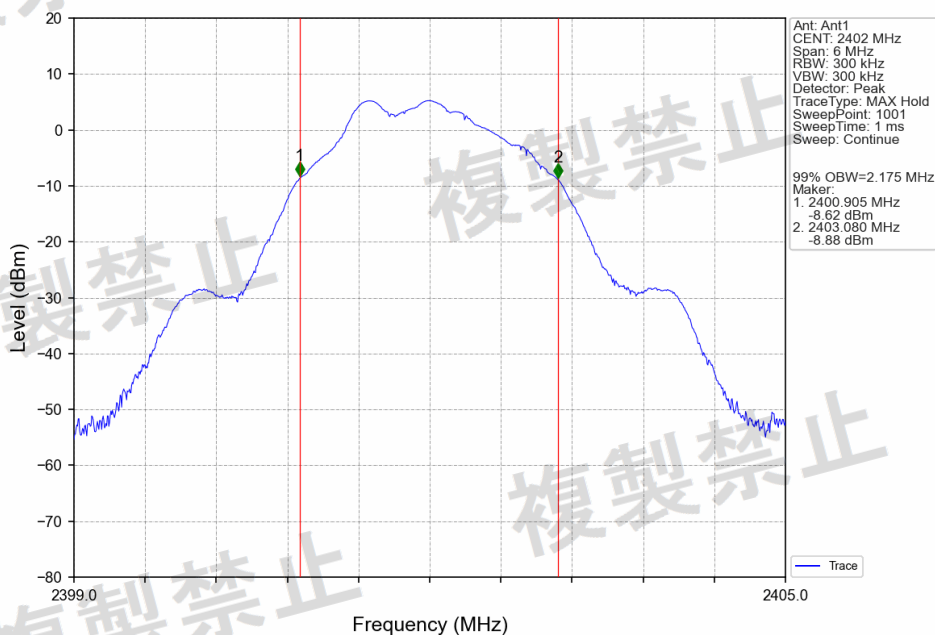


2M 2480MHz Ant1 NTLV

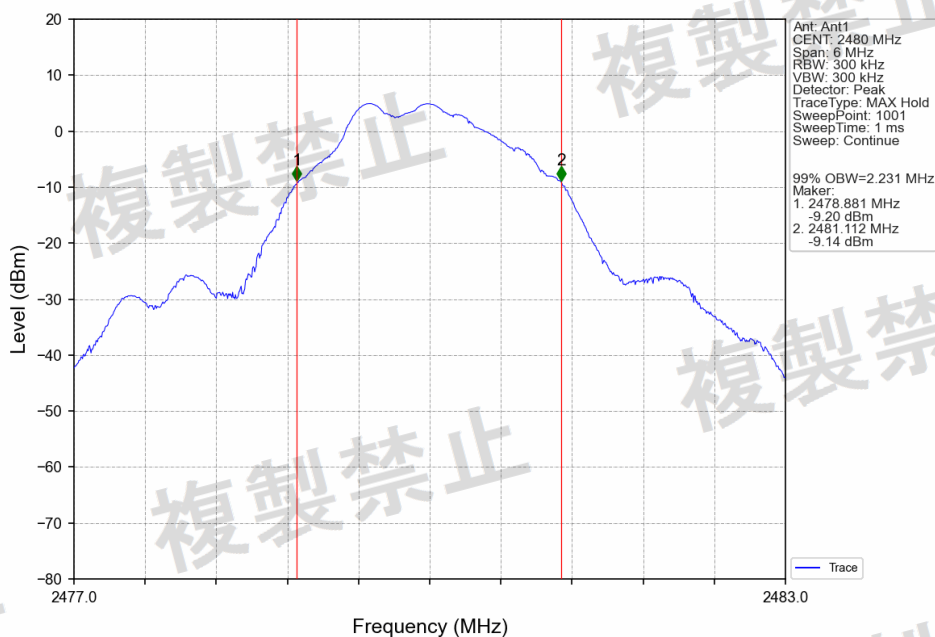




2M\_2402MHz\_Ant1\_NTHV



2M\_2480MHz\_Ant1\_NTHV



### 3. Spread Bandwidth

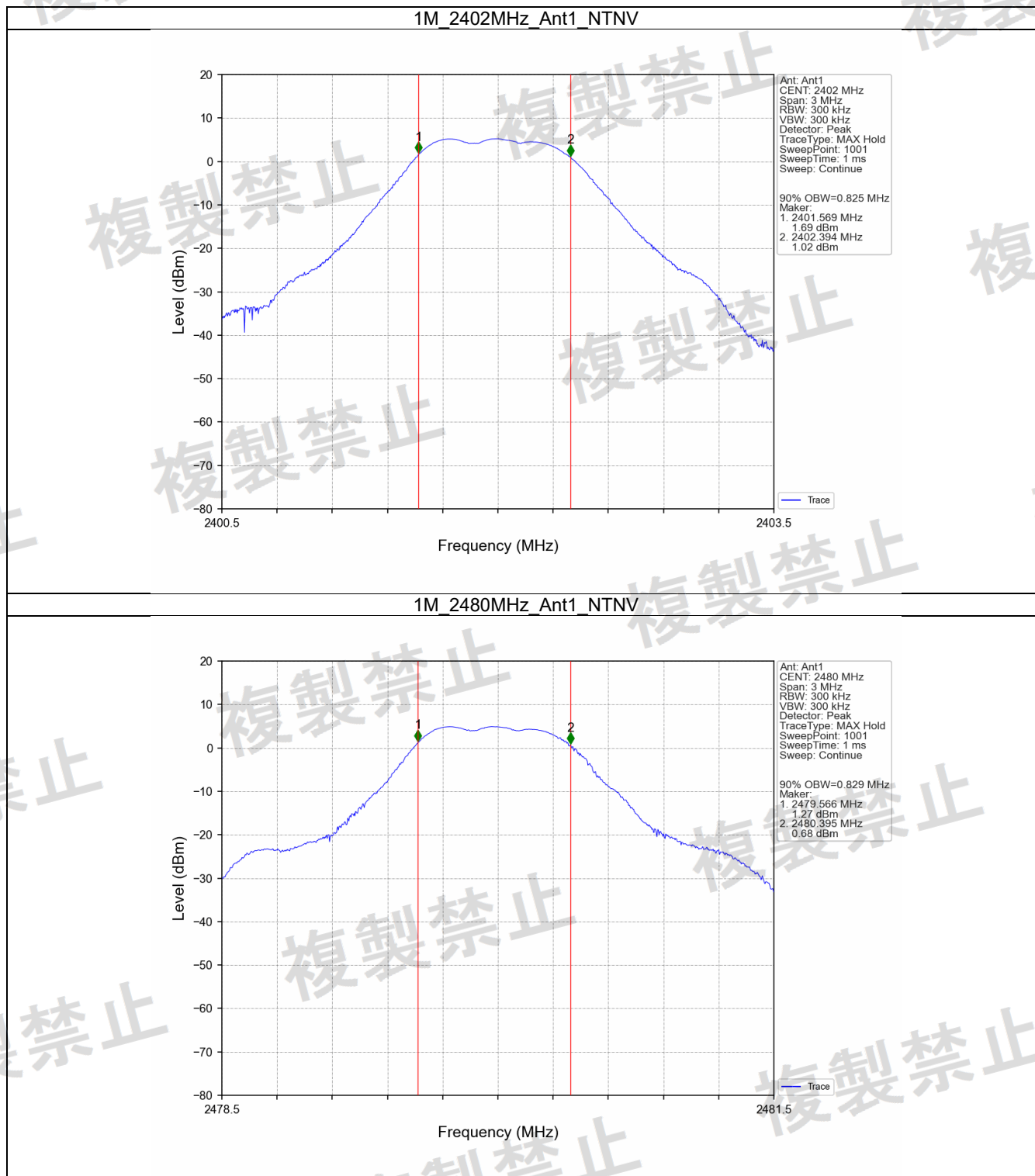
#### 3.1 Test Result

##### 3.1.1 SPBW

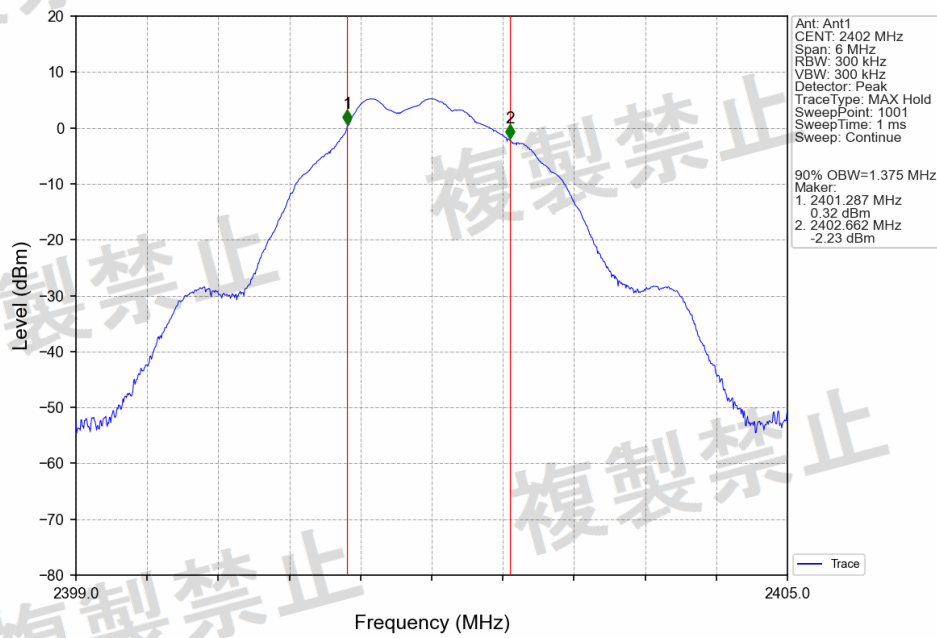
| ENV  | Mode | TX Type | Frequency (MHz) | Spread Bandwidth (MHz) |            | Verdict |
|------|------|---------|-----------------|------------------------|------------|---------|
|      |      |         |                 | ANT1                   | Limit      |         |
| NTNV | 1M   | SISO    | 2402            | 0.825                  | $\geq 0.5$ | Pass    |
|      |      |         | 2480            | 0.829                  | $\geq 0.5$ | Pass    |
|      | 2M   | SISO    | 2402            | 1.375                  | $\geq 0.5$ | Pass    |
|      |      |         | 2480            | 1.378                  | $\geq 0.5$ | Pass    |
| NTLV | 1M   | SISO    | 2402            | 0.824                  | $\geq 0.5$ | Pass    |
|      |      |         | 2480            | 0.830                  | $\geq 0.5$ | Pass    |
|      | 2M   | SISO    | 2402            | 1.370                  | $\geq 0.5$ | Pass    |
|      |      |         | 2480            | 1.380                  | $\geq 0.5$ | Pass    |
| NTHV | 1M   | SISO    | 2402            | 0.824                  | $\geq 0.5$ | Pass    |
|      |      |         | 2480            | 0.830                  | $\geq 0.5$ | Pass    |
|      | 2M   | SISO    | 2402            | 1.376                  | $\geq 0.5$ | Pass    |
|      |      |         | 2480            | 1.377                  | $\geq 0.5$ | Pass    |

## 3.2 Test Graph

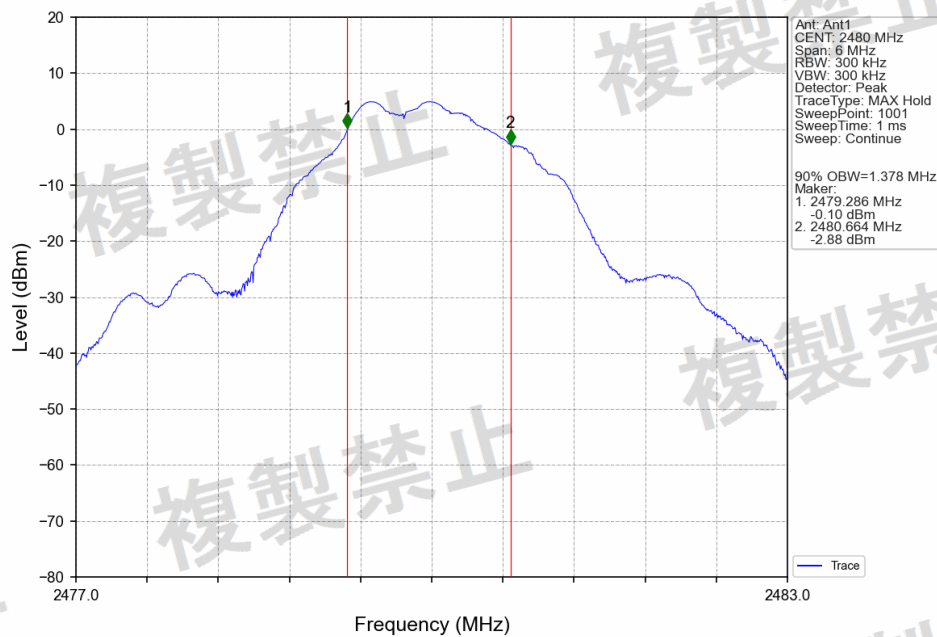
### 3.2.1 SPBW



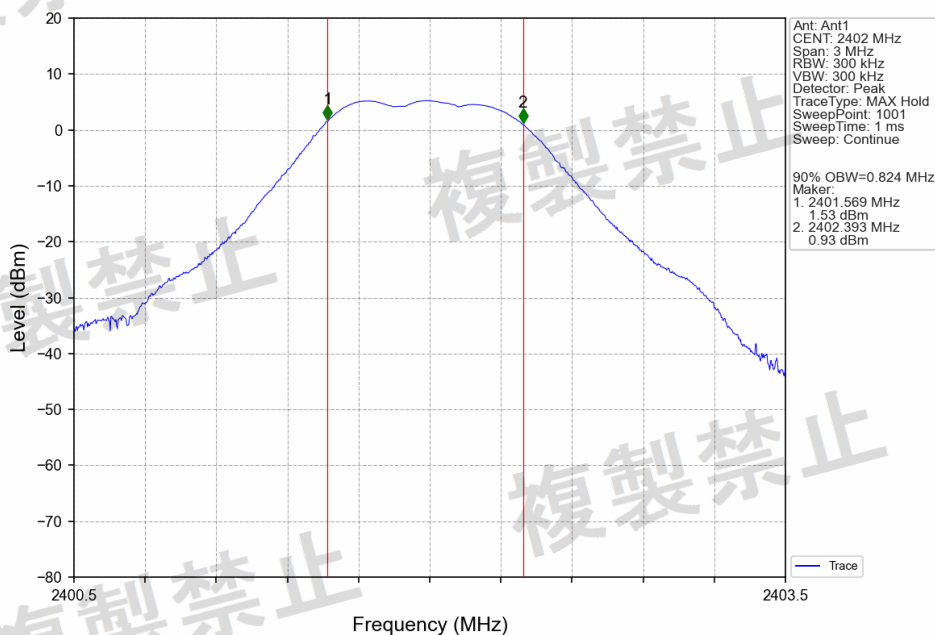
2M 2402MHz Ant1 NTV



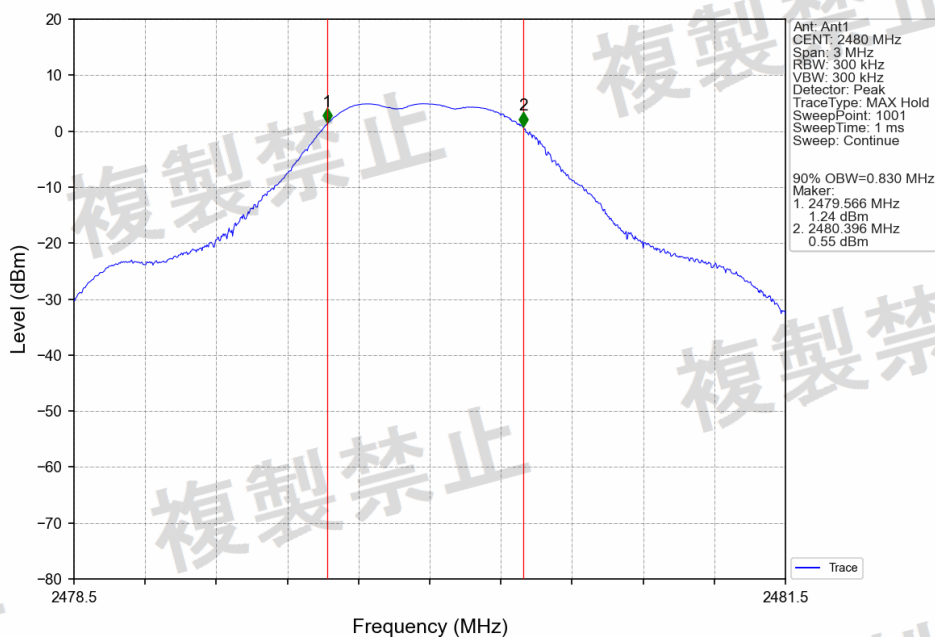
2M 2480MHz Ant1 NTV



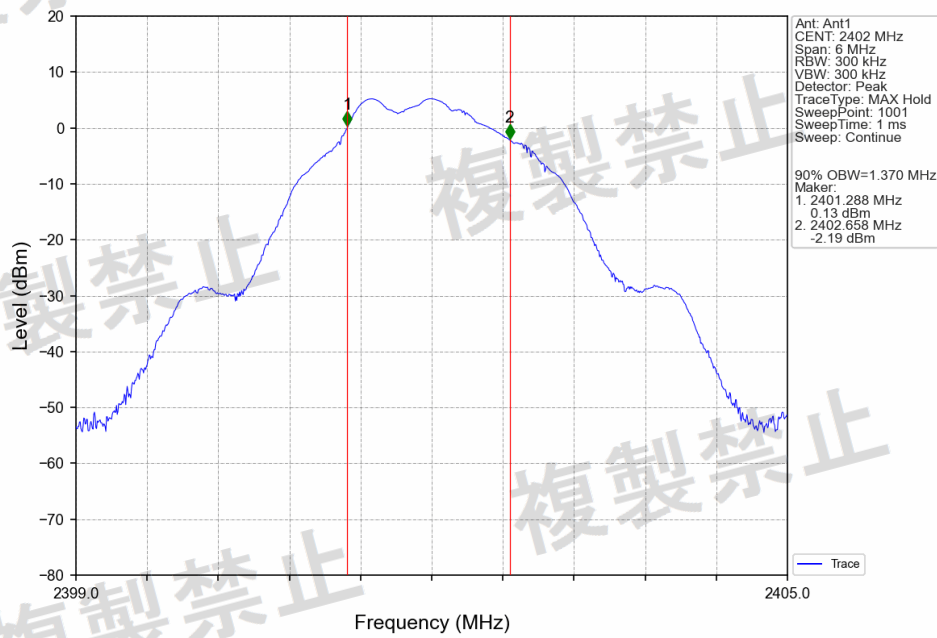
1M 2402MHz Ant1 NTLV



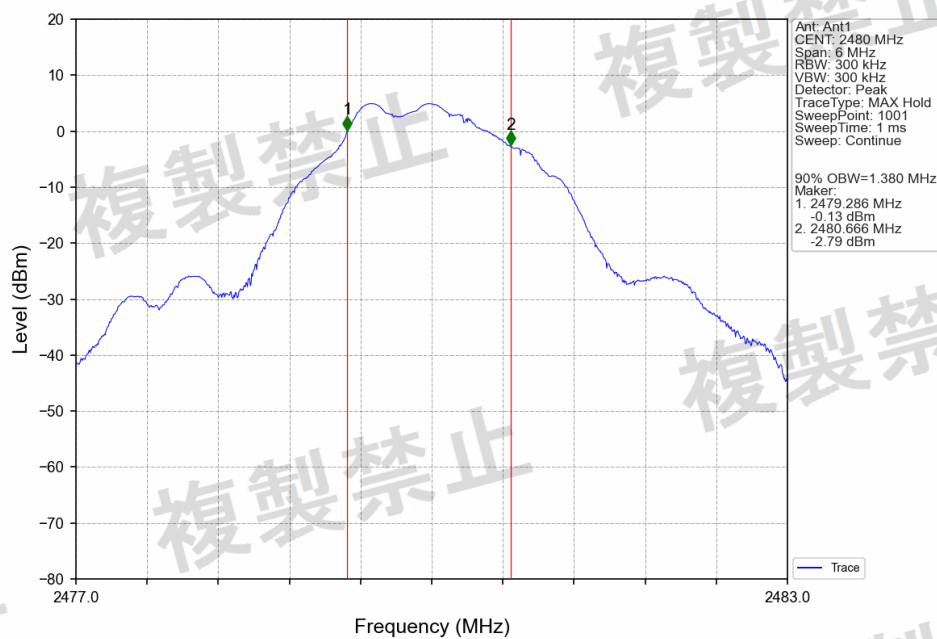
1M 2480MHz Ant1 NTLV



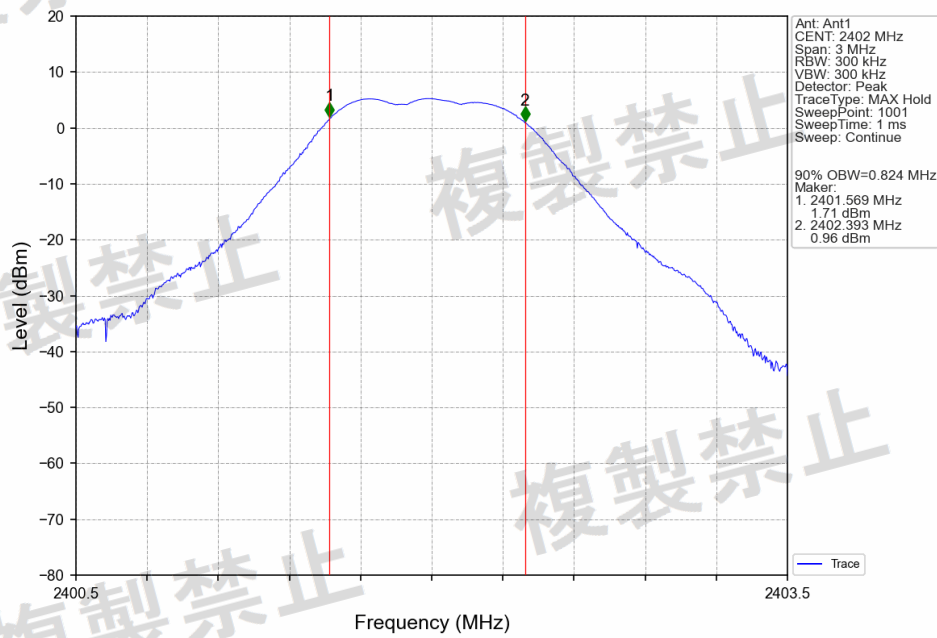
2M 2402MHz Ant1 NTLV



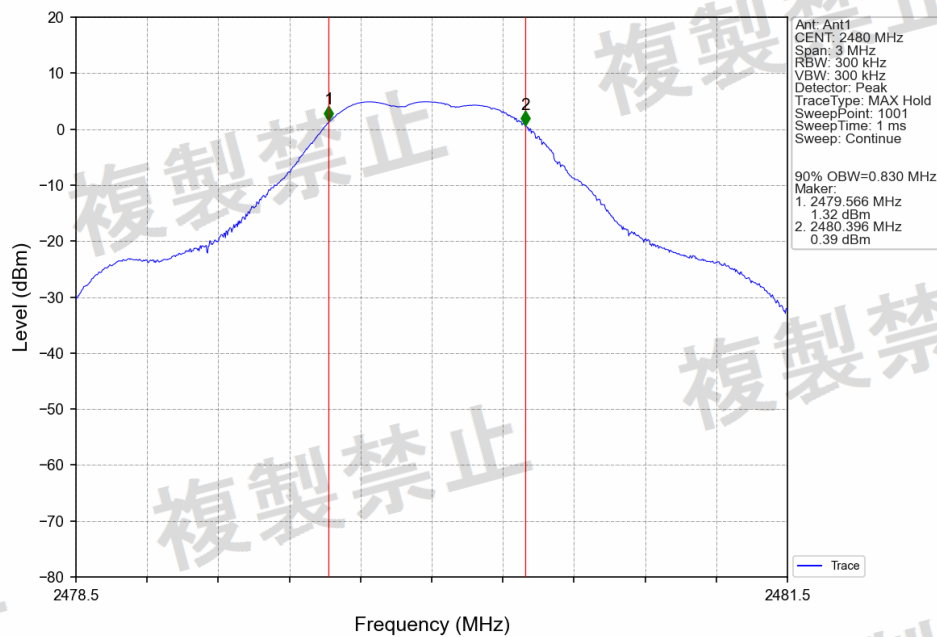
2M 2480MHz Ant1 NTLV



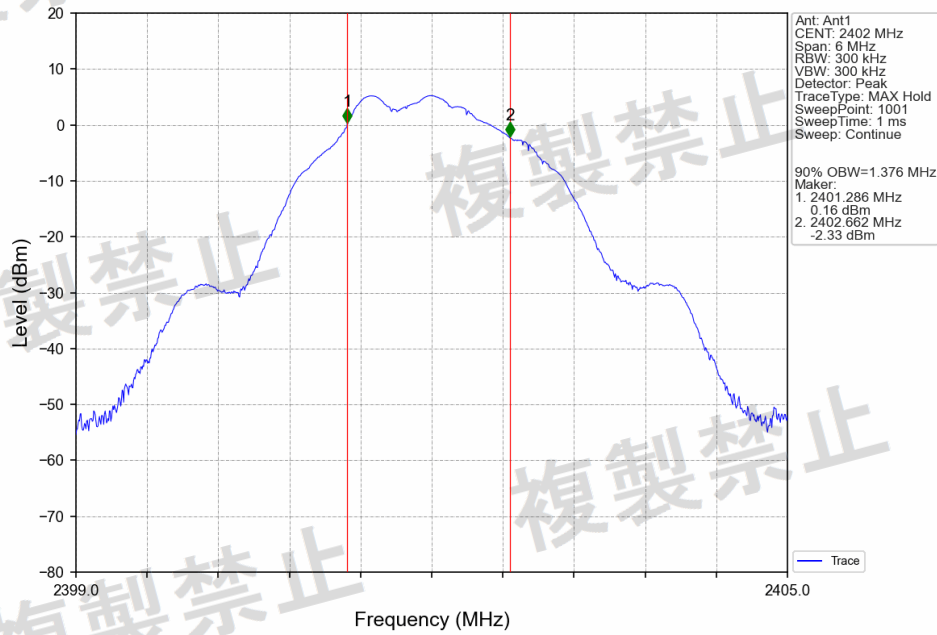
1M\_2402MHz\_Ant1\_NTHV



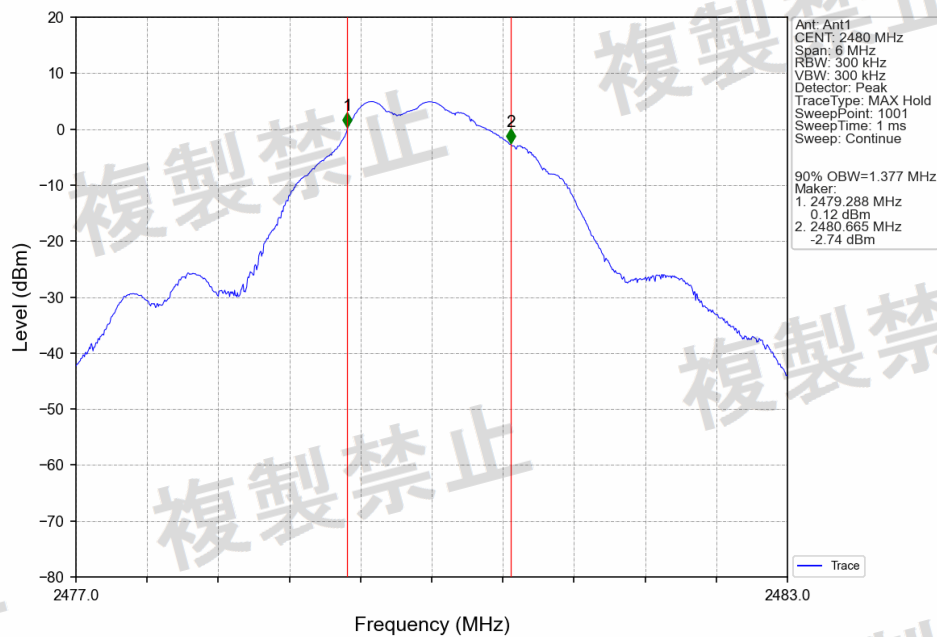
1M\_2480MHz\_Ant1\_NTHV



2M 2402MHz Ant1 NTHV



2M 2480MHz Ant1 NTHV



## 4. Antenna Power

### 4.1 Test Result

#### 4.1.1 Power

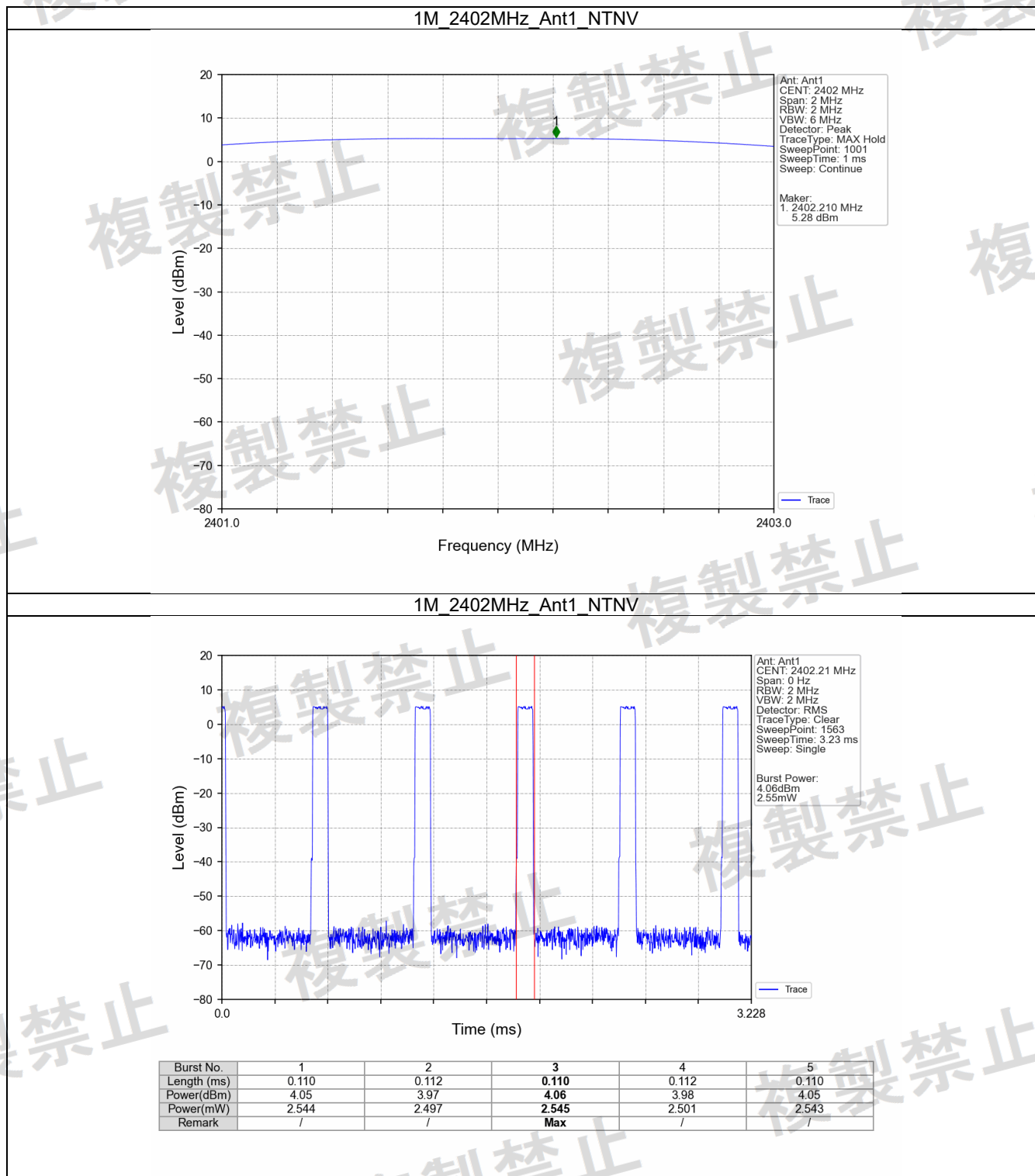
| ENV  | Mode | TX Type | Frequency (MHz) | ANT | Antenna Power (mW) |              | Nominal Power (mW) | Tolerance (%) |           | Verdict |
|------|------|---------|-----------------|-----|--------------------|--------------|--------------------|---------------|-----------|---------|
|      |      |         |                 |     | Measured           | Limit        |                    | Measured      | Limit     |         |
| NTNV | 1M   | SISO    | 2402            | 1   | 2.545              | $\leq 10.00$ | 2.700              | -5.74         | $\leq 20$ | Pass    |
|      |      |         | 2480            | 1   | 2.568              | $\leq 10.00$ | 2.700              | -4.89         | $\leq 20$ | Pass    |
|      | 2M   | SISO    | 2402            | 1   | 2.405              | $\leq 10.00$ | 2.600              | -7.50         | $\leq 20$ | Pass    |
|      |      |         | 2480            | 1   | 2.471              | $\leq 10.00$ | 2.500              | -1.16         | $\leq 20$ | Pass    |
| NTLV | 1M   | SISO    | 2402            | 1   | 2.707              | $\leq 10.00$ | 2.700              | 0.26          | $\leq 20$ | Pass    |
|      |      |         | 2480            | 1   | 2.690              | $\leq 10.00$ | 2.700              | -0.37         | $\leq 20$ | Pass    |
|      | 2M   | SISO    | 2402            | 1   | 2.632              | $\leq 10.00$ | 2.600              | 1.23          | $\leq 20$ | Pass    |
|      |      |         | 2480            | 1   | 2.471              | $\leq 10.00$ | 2.500              | -1.16         | $\leq 20$ | Pass    |
| NTHV | 1M   | SISO    | 2402            | 1   | 2.745              | $\leq 10.00$ | 2.700              | 1.67          | $\leq 20$ | Pass    |
|      |      |         | 2480            | 1   | 2.590              | $\leq 10.00$ | 2.700              | -4.07         | $\leq 20$ | Pass    |
|      | 2M   | SISO    | 2402            | 1   | 2.625              | $\leq 10.00$ | 2.600              | 0.96          | $\leq 20$ | Pass    |
|      |      |         | 2480            | 1   | 2.271              | $\leq 10.00$ | 2.500              | -9.16         | $\leq 20$ | Pass    |

#### 4.1.2 EIRP

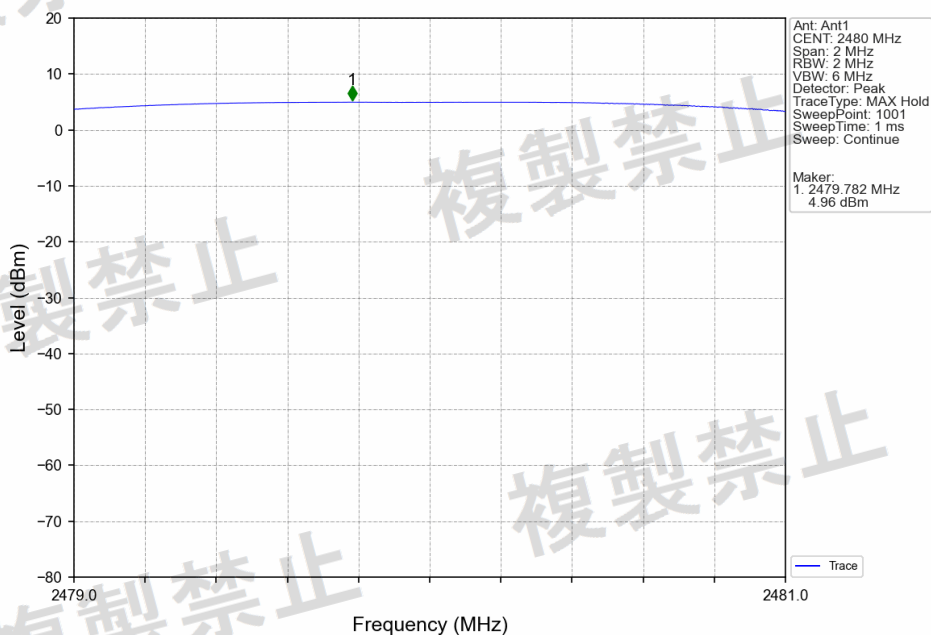
| ENV  | Mode | TX Type | Frequency (MHz) | ANT | Gain (dBi) | EIRP (dBm) |              | Verdict |
|------|------|---------|-----------------|-----|------------|------------|--------------|---------|
|      |      |         |                 |     |            | Result     | Limit        |         |
| NTNV | 1M   | SISO    | 2402            | 1   | -0.58      | 3.48       | $\leq 12.14$ | Pass    |
|      |      |         | 2480            | 1   | -0.58      | 3.52       | $\leq 12.14$ | Pass    |
|      | 2M   | SISO    | 2402            | 1   | -0.58      | 3.23       | $\leq 12.14$ | Pass    |
|      |      |         | 2480            | 1   | -0.58      | 3.35       | $\leq 12.14$ | Pass    |
| NTLV | 1M   | SISO    | 2402            | 1   | -0.58      | 3.74       | $\leq 12.14$ | Pass    |
|      |      |         | 2480            | 1   | -0.58      | 3.72       | $\leq 12.14$ | Pass    |
|      | 2M   | SISO    | 2402            | 1   | -0.58      | 3.62       | $\leq 12.14$ | Pass    |
|      |      |         | 2480            | 1   | -0.58      | 3.35       | $\leq 12.14$ | Pass    |
| NTHV | 1M   | SISO    | 2402            | 1   | -0.58      | 3.81       | $\leq 12.14$ | Pass    |
|      |      |         | 2480            | 1   | -0.58      | 3.55       | $\leq 12.14$ | Pass    |
|      | 2M   | SISO    | 2402            | 1   | -0.58      | 3.61       | $\leq 12.14$ | Pass    |
|      |      |         | 2480            | 1   | -0.58      | 2.98       | $\leq 12.14$ | Pass    |

## 4.2 Test Graph

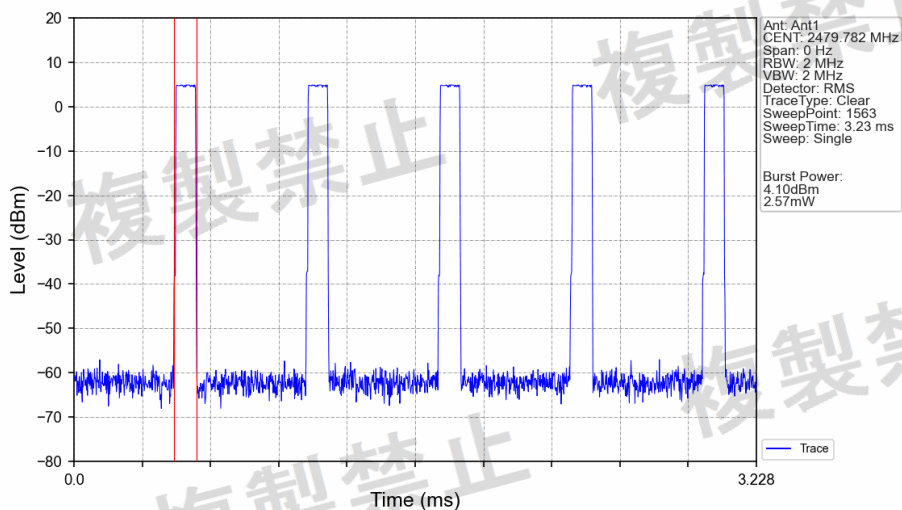
### 4.2.1 Power



1M\_2480MHz\_Ant1\_NTNV



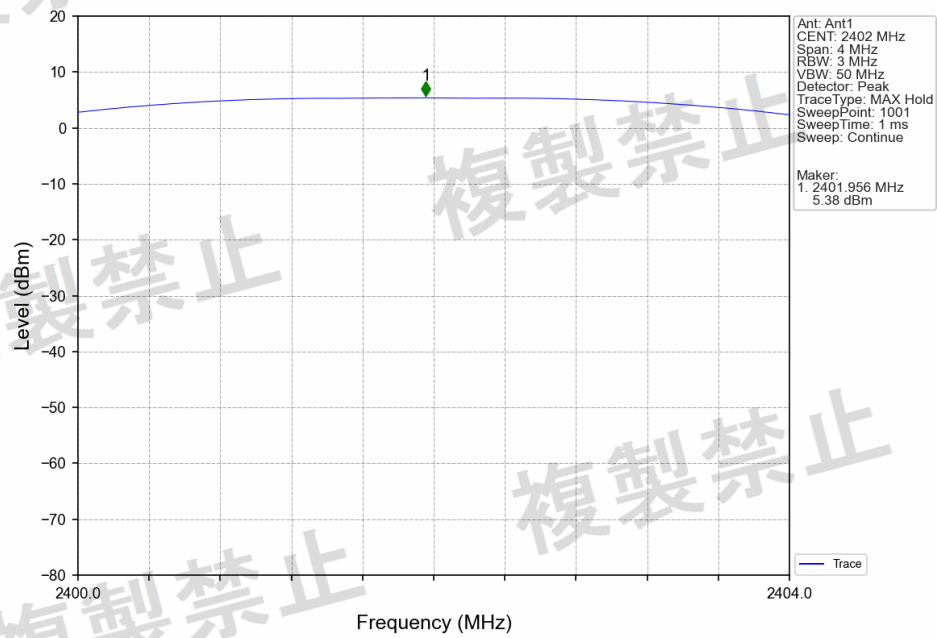
1M\_2480MHz\_Ant1\_NTNV



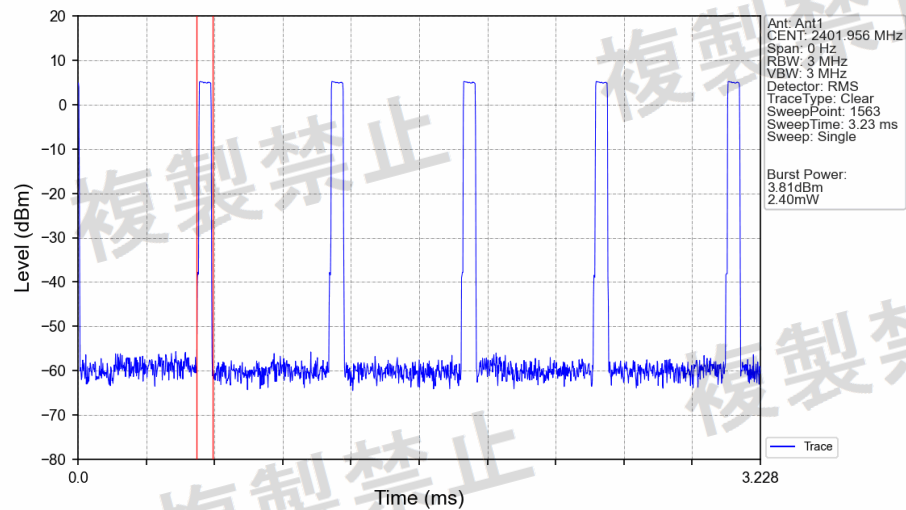
| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.107 | 0.107 | 0.110 | 0.110 | 0.107 |
| Power(dBm)  | 4.10  | 4.09  | 4.01  | 4.01  | 4.09  |
| Power(mW)   | 2.568 | 2.565 | 2.517 | 2.519 | 2.567 |
| Remark      | Max   | /     | /     | /     | /     |



2M 2402MHz Ant1 NTV



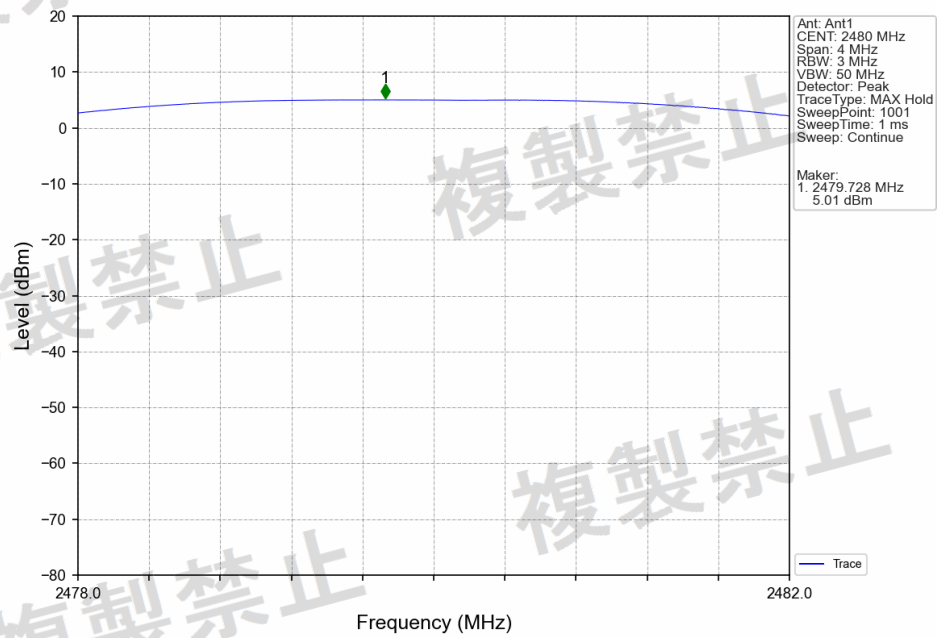
2M\_2402MHz\_Ant1\_NTV



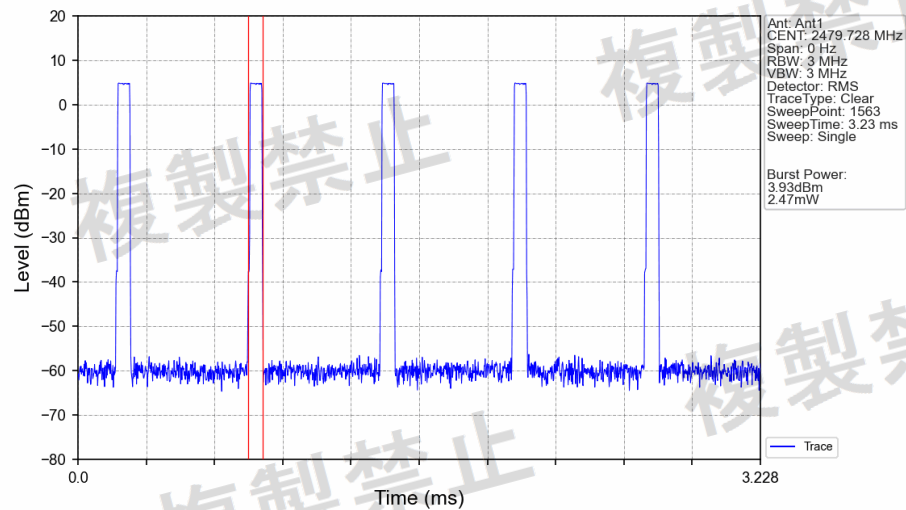
| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.074 | 0.074 | 0.074 | 0.074 | 0.074 |
| Power(dBm)  | 3.81  | 3.80  | 3.80  | 3.80  | 3.81  |
| Power(mW)   | 2.405 | 2.401 | 2.401 | 2.401 | 2.402 |
| Remark      | Max   | /     | /     | /     | /     |



2M 2480MHz Ant1 NTV

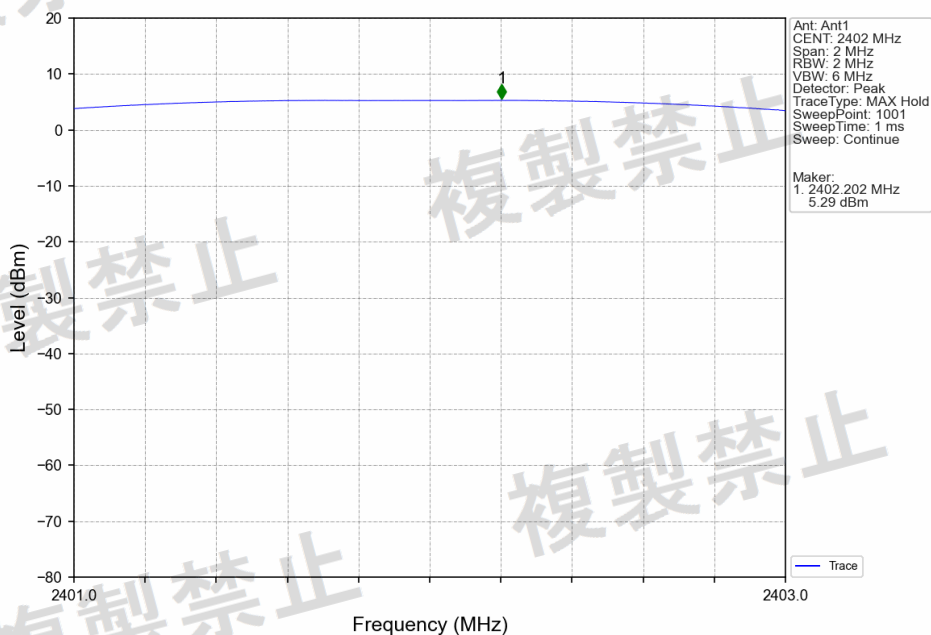


2M\_2480MHz\_Ant1\_NTNV

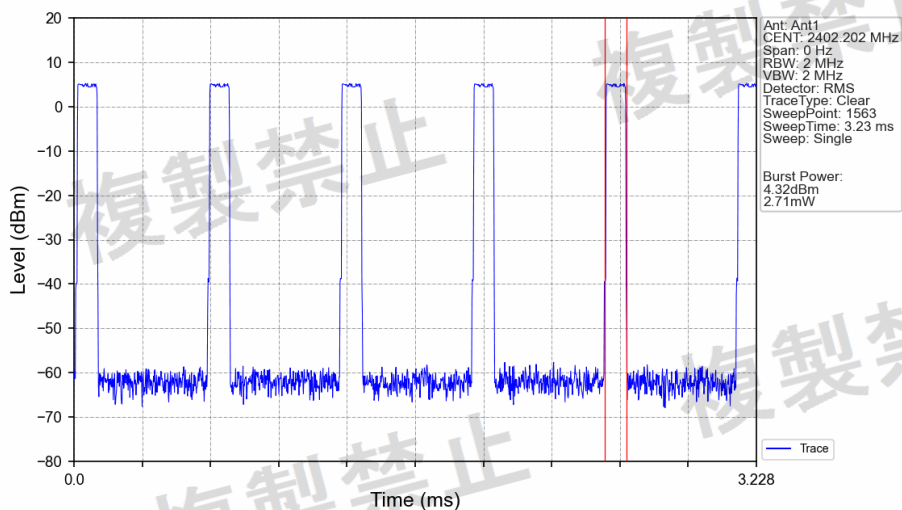


| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.068 | 0.068 | 0.068 | 0.070 | 0.068 |
| Power(dBm)  | 3.93  | 3.93  | 3.92  | 3.80  | 3.93  |
| Power(mW)   | 2.471 | 2.471 | 2.468 | 2.397 | 2.469 |
| Remark      | /     | Max   | /     | /     | /     |

1M 2402MHz Ant1 NTLV



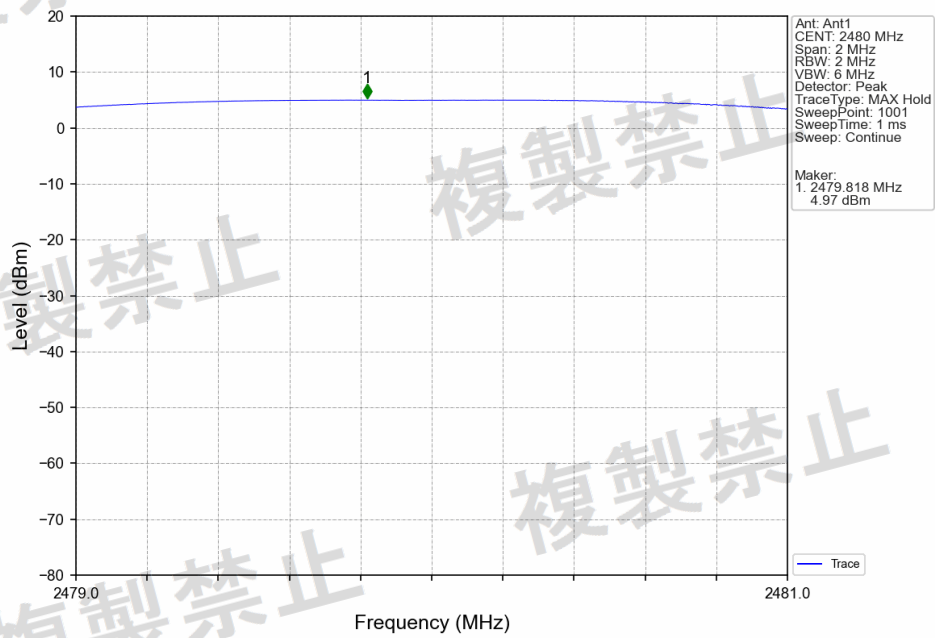
1M\_2402MHz\_Ant1\_NTLV



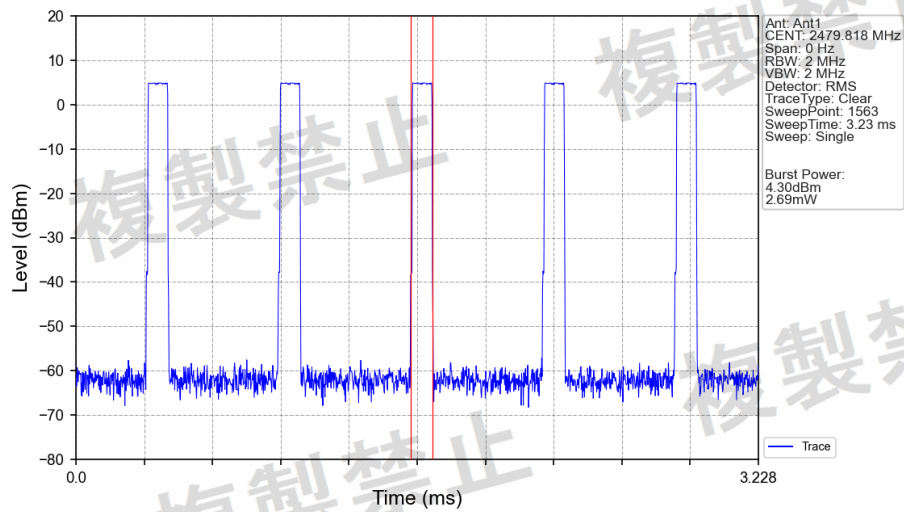
| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.105 | 0.105 | 0.105 | 0.105 | 0.103 |
| Power(dBm)  | 4.24  | 4.24  | 4.24  | 4.24  | 4.32  |
| Power(mW)   | 2.655 | 2.657 | 2.655 | 2.655 | 2.707 |
| Remark      | /     | /     | /     | /     | Max   |



1M 2480MHz Ant1 NTLV



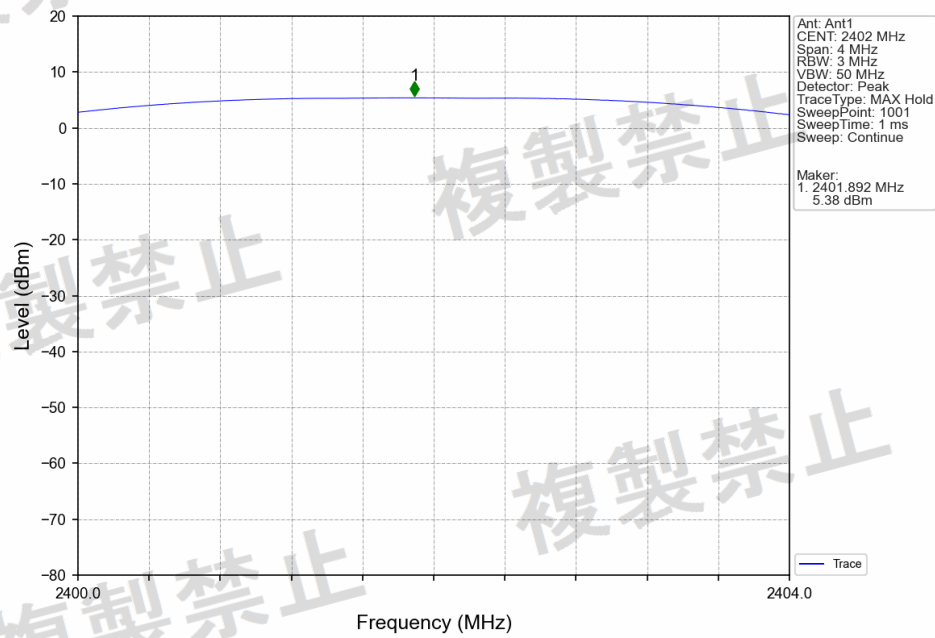
1M\_2480MHz\_Ant1\_NTLV



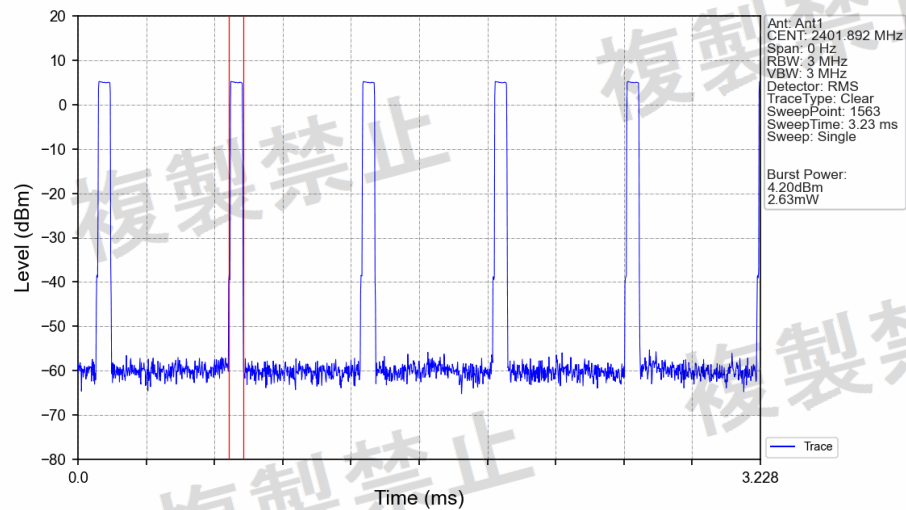
| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.105 | 0.105 | 0.103 | 0.105 | 0.103 |
| Power(dBm)  | 4.21  | 4.21  | 4.30  | 4.21  | 4.30  |
| Power(mW)   | 2.637 | 2.637 | 2.690 | 2.636 | 2.689 |
| Remark      | /     | /     | Max   | /     | /     |



2M 2402MHz Ant1 NTLV



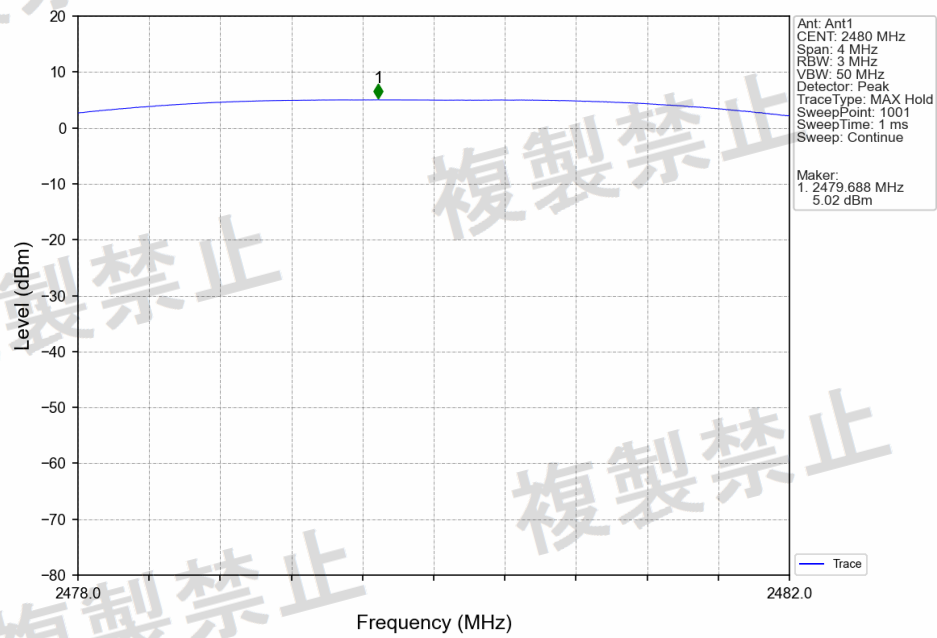
2M\_2402MHz\_Ant1\_NTLV



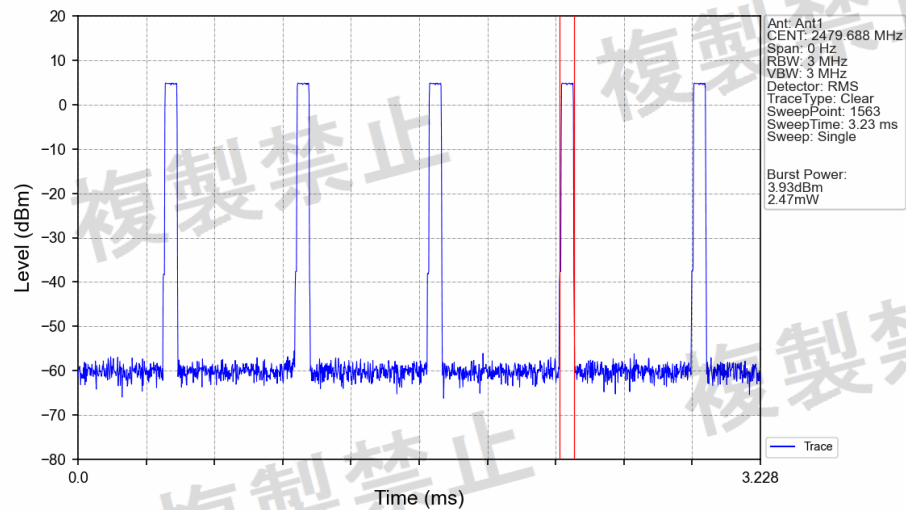
| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.070 | 0.068 | 0.070 | 0.068 | 0.068 |
| Power(dBm)  | 4.07  | 4.20  | 4.07  | 4.20  | 4.20  |
| Power(mW)   | 2.554 | 2.632 | 2.552 | 2.628 | 2.627 |
| Remark      | /     | Max   | /     | /     | /     |



2M 2480MHz Ant1 NTLV

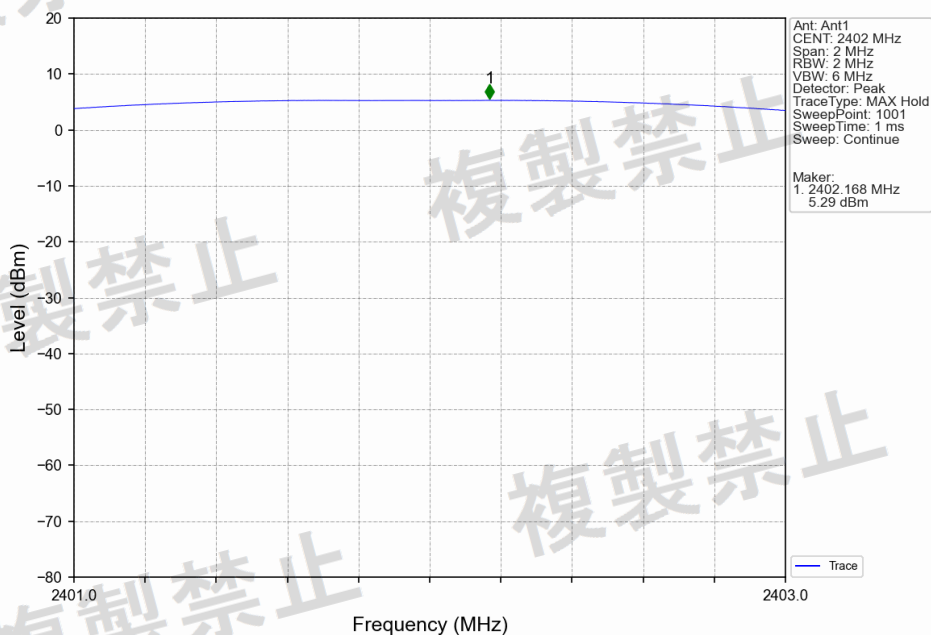


2M\_2480MHz\_Ant1\_NTLV

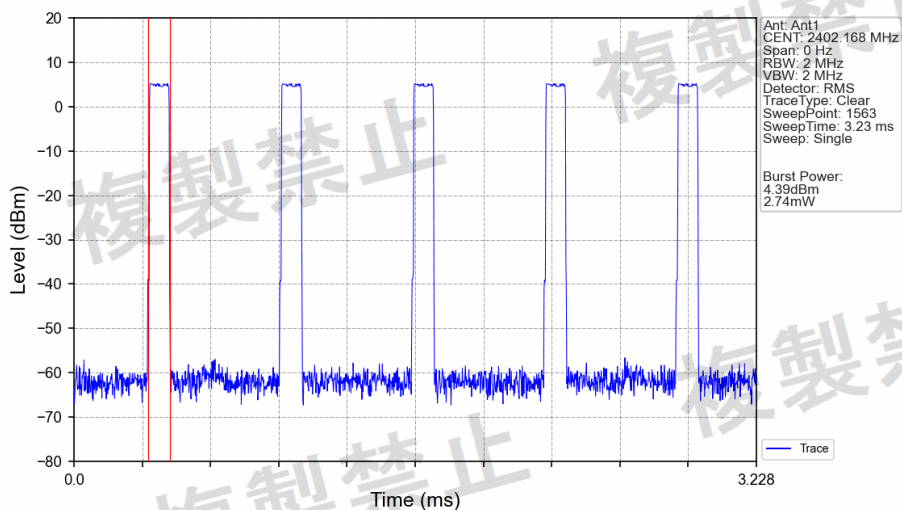


| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.068 | 0.070 | 0.068 | 0.068 | 0.068 |
| Power(dBm)  | 3.93  | 3.79  | 3.93  | 3.93  | 3.93  |
| Power(mW)   | 2.469 | 2.395 | 2.470 | 2.471 | 2.470 |
| Remark      | /     | /     | /     | Max   | /     |

1M\_2402MHz\_Ant1\_NTHV



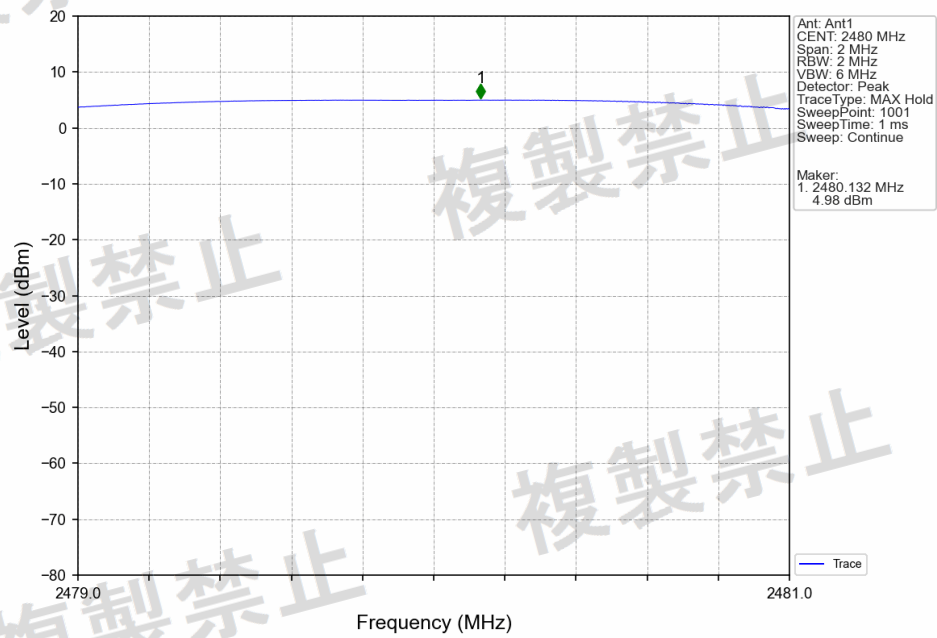
1M\_2402MHz\_Ant1\_NTHV



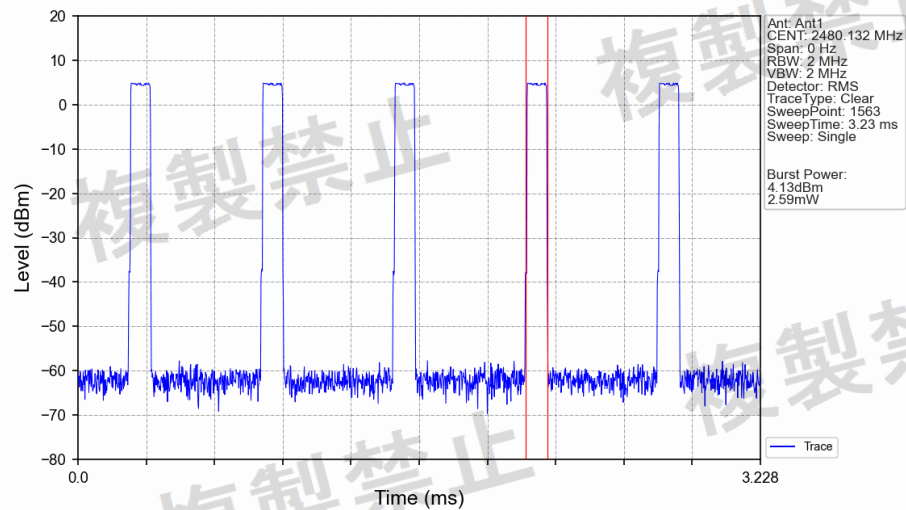
| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.103 | 0.105 | 0.103 | 0.105 | 0.105 |
| Power(dBm)  | 4.39  | 4.29  | 4.38  | 4.30  | 4.29  |
| Power(mW)   | 2.745 | 2.688 | 2.744 | 2.689 | 2.688 |
| Remark      | Max   | /     | /     | /     | /     |



1M\_2480MHz\_Ant1\_NTHV



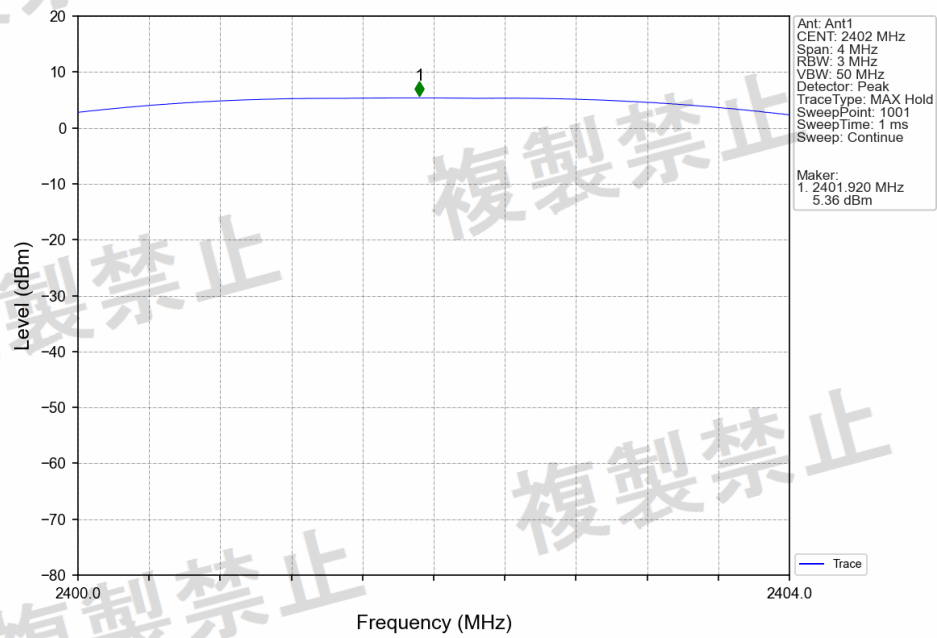
1M\_2480MHz\_Ant1\_NTHV



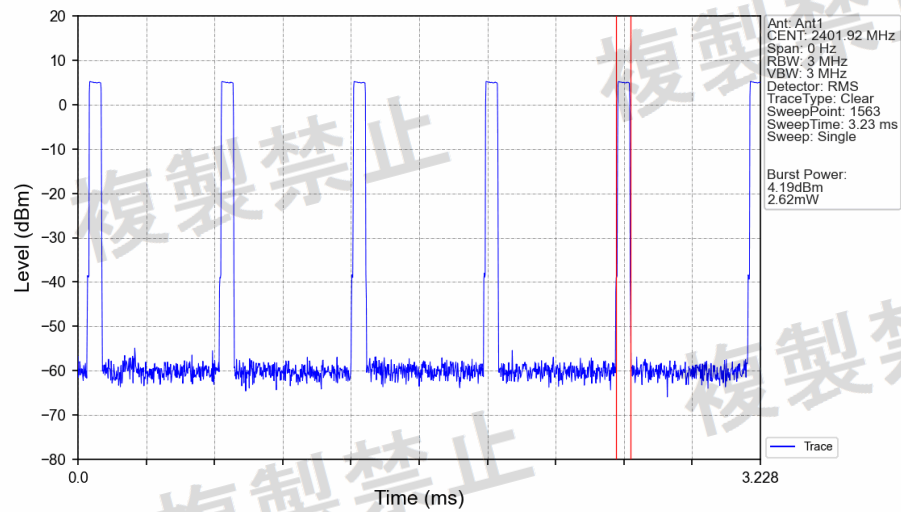
| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.105 | 0.105 | 0.105 | 0.103 | 0.105 |
| Power(dBm)  | 4.05  | 4.05  | 4.05  | 4.13  | 4.05  |
| Power(mW)   | 2.538 | 2.538 | 2.539 | 2.590 | 2.538 |
| Remark      | /     | /     | /     | Max   | /     |



2M 2402MHz Ant1 NTHV

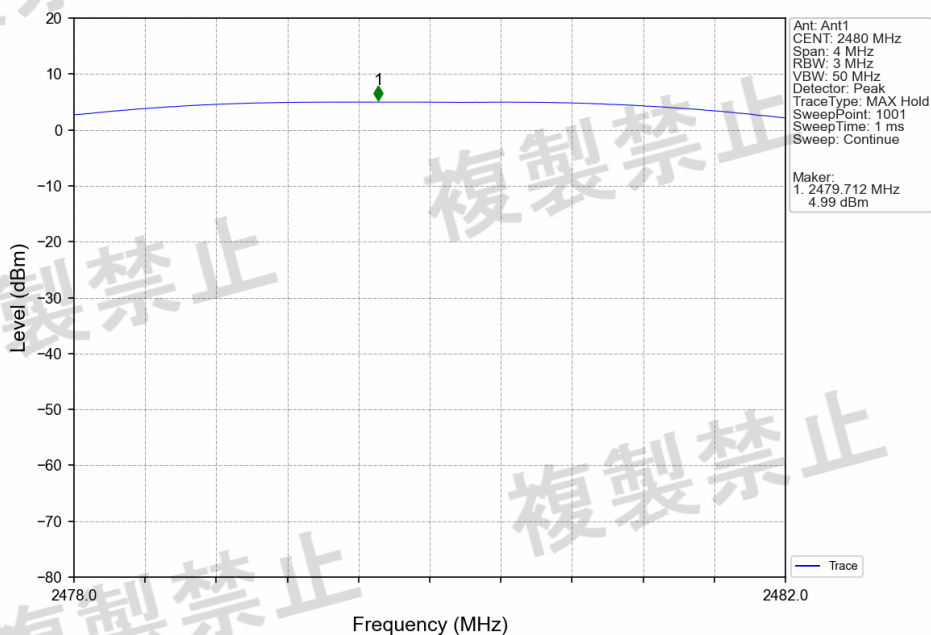


2M\_2402MHz\_Ant1\_NTHV

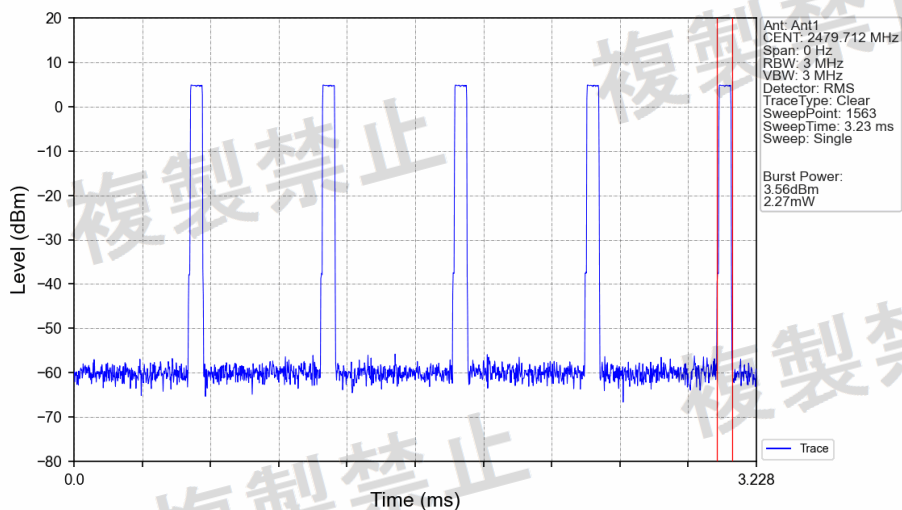


| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.068 | 0.068 | 0.070 | 0.068 | 0.068 |
| Power(dBm)  | 4.19  | 4.19  | 4.05  | 4.19  | 4.19  |
| Power(mW)   | 2.622 | 2.624 | 2.544 | 2.625 | 2.625 |
| Remark      | /     | /     | /     | /     | Max   |

2M 2480MHz Ant1 NTHV



2M\_2480MHz\_Ant1\_NTHV



| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.074 | 0.074 | 0.076 | 0.074 | 0.074 |
| Power(dBm)  | 3.56  | 3.56  | 3.44  | 3.56  | 3.56  |
| Power(mW)   | 2.268 | 2.268 | 2.206 | 2.268 | 2.271 |
| Remark      | /     | /     | /     | /     | Max   |

## 5. Spurious Emission Intensity

### 5.1 Test Result

#### 5.1.1 TxSe\_NTNV

| NTNV |         |             |     |             |            |             |                     |                    |                     |                    |                 |         |
|------|---------|-------------|-----|-------------|------------|-------------|---------------------|--------------------|---------------------|--------------------|-----------------|---------|
| Mode | TX Type | Freq. (MHz) | ANT | Freq. Range |            | Marker      |                     |                    |                     |                    | Limit (uW /MHz) | Verdict |
|      |         |             |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm /MHz) | PK Power (uW /MHz) | AV Power (dBm /MHz) | AV Power (uW /MHz) |                 |         |
| 1M   | SISO    | 2402        | 1   | 30          | 2387       | 1747.5      | -53.28              | 0.005              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2399.987    | -30.22              | 0.951              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2485.476    | -50.28              | 0.009              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 4804.5      | -49.01              | 0.013              | /                   | /                  | 2.5             | Pass    |
|      |         | 2480        | 1   | 30          | 2387       | 2384.5      | -53.35              | 0.005              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2394.852    | -54.00              | 0.004              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2483.552    | -48.89              | 0.013              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 7440        | -44.09              | 0.039              | /                   | /                  | 2.5             | Pass    |
| 2M   | SISO    | 2402        | 1   | 30          | 2387       | 2306.5      | -53.43              | 0.005              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2399.987    | -18.04              | 15.704             | -22.91              | 5.117              | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2491.599    | -53.11              | 0.005              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 4803.5      | -47.74              | 0.017              | /                   | /                  | 2.5             | Pass    |
|      |         | 2480        | 1   | 30          | 2387       | 2384.5      | -52.81              | 0.005              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2389.743    | -53.51              | 0.004              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2483.513    | -40.28              | 0.094              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 7441        | -42.26              | 0.059              | /                   | /                  | 2.5             | Pass    |

#### 5.1.2 TxSe\_NTLV

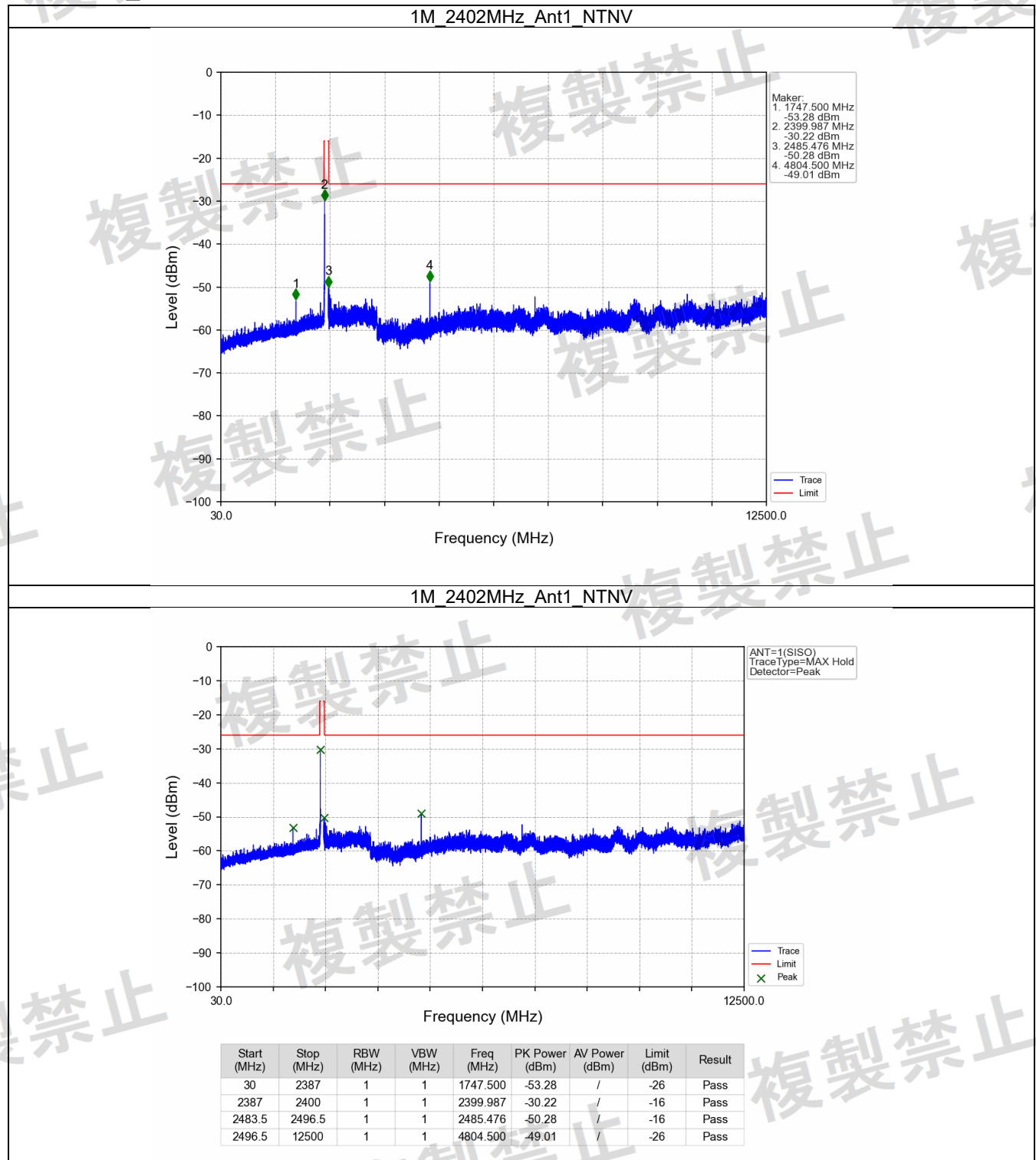
| NTLV |         |             |     |             |            |             |                     |                    |                     |                    |                 |         |
|------|---------|-------------|-----|-------------|------------|-------------|---------------------|--------------------|---------------------|--------------------|-----------------|---------|
| Mode | TX Type | Freq. (MHz) | ANT | Freq. Range |            | Marker      |                     |                    |                     |                    | Limit (uW /MHz) | Verdict |
|      |         |             |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm /MHz) | PK Power (uW /MHz) | AV Power (dBm /MHz) | AV Power (uW /MHz) |                 |         |
| 1M   | SISO    | 2402        | 1   | 30          | 2387       | 1922.5      | -48.96              | 0.013              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2399.987    | -30.14              | 0.968              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2484.943    | -51.04              | 0.008              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 2571.5      | -44.73              | 0.034              | /                   | /                  | 2.5             | Pass    |
|      |         | 2480        | 1   | 30          | 2387       | 2384.5      | -52.27              | 0.006              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2396.321    | -53.15              | 0.005              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2483.578    | -47.90              | 0.016              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 7441        | -43.40              | 0.046              | /                   | /                  | 2.5             | Pass    |
| 2M   | SISO    | 2402        | 1   | 30          | 2387       | 1756.5      | -49.44              | 0.011              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2399.987    | -18.18              | 15.205             | -22.92              | 5.105              | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2496.474    | -53.11              | 0.005              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 4804        | -48.50              | 0.014              | /                   | /                  | 2.5             | Pass    |
|      |         | 2480        | 1   | 30          | 2387       | 2384        | -52.61              | 0.005              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2394.904    | -53.56              | 0.004              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2483.526    | -40.58              | 0.087              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 7439        | -44.77              | 0.033              | /                   | /                  | 2.5             | Pass    |

### 5.1.3 TxSe\_NTHV

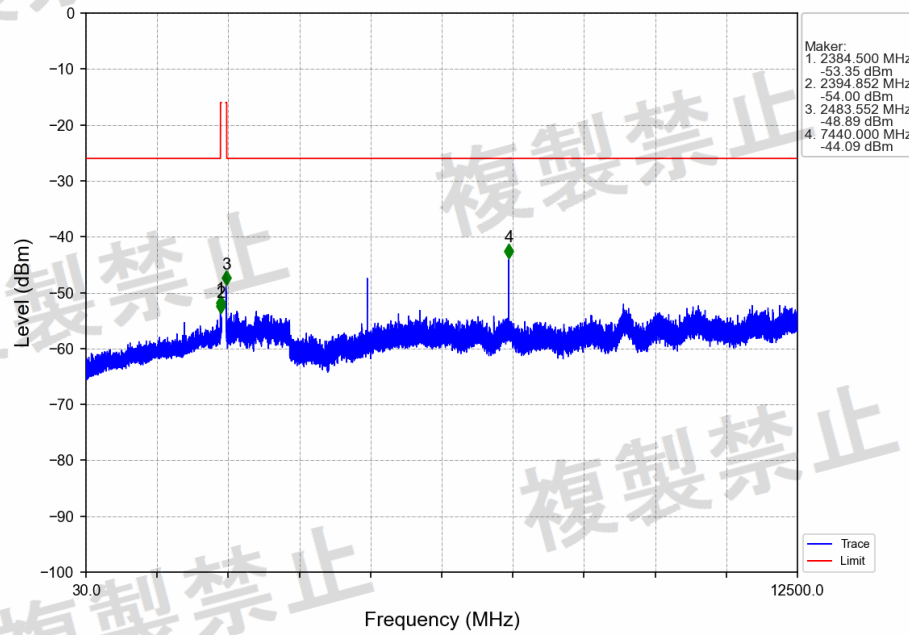
| NTHV |         |             |     |             |            |             |                     |                    |                     |                    |                 |         |
|------|---------|-------------|-----|-------------|------------|-------------|---------------------|--------------------|---------------------|--------------------|-----------------|---------|
| Mode | TX Type | Freq. (MHz) | ANT | Freq. Range |            | Marker      |                     |                    |                     |                    | Limit (uW /MHz) | Verdict |
|      |         |             |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm /MHz) | PK Power (uW /MHz) | AV Power (dBm /MHz) | AV Power (uW /MHz) |                 |         |
| 1M   | SISO    | 2402        | 1   | 30          | 2387       | 2306.5      | -53.46              | 0.005              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2399.961    | -30.42              | 0.908              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2485.372    | -47.06              | 0.020              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 4804.5      | -47.31              | 0.019              | /                   | /                  | 2.5             | Pass    |
|      |         | 2480        | 1   | 30          | 2387       | 2384.5      | -53.54              | 0.004              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2393.227    | -53.43              | 0.005              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2483.591    | -48.01              | 0.016              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 7440.5      | -42.74              | 0.053              | /                   | /                  | 2.5             | Pass    |
| 2M   | SISO    | 2402        | 1   | 30          | 2387       | 1747        | -53.74              | 0.004              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2399.987    | -18.10              | 15.488             | -22.90              | 5.129              | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2493.094    | -53.58              | 0.004              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 4804.5      | -47.93              | 0.016              | /                   | /                  | 2.5             | Pass    |
|      |         | 2480        | 1   | 30          | 2387       | 1755.5      | -49.36              | 0.012              | /                   | /                  | 2.5             | Pass    |
|      |         |             |     | 2387        | 2400       | 2396.711    | -53.24              | 0.005              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2483.5      | 2496.5     | 2483.513    | -40.25              | 0.094              | /                   | /                  | 25              | Pass    |
|      |         |             |     | 2496.5      | 12500      | 7440.5      | -42.01              | 0.063              | /                   | /                  | 2.5             | Pass    |

## 5.2 Test Graph

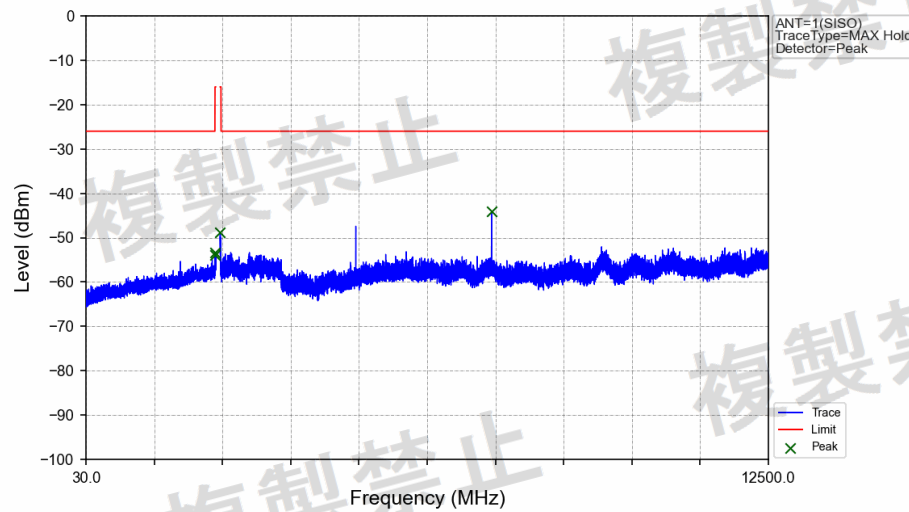
### 5.2.1 TxSe\_NTNV



1M\_2480MHz\_Ant1\_NTNV

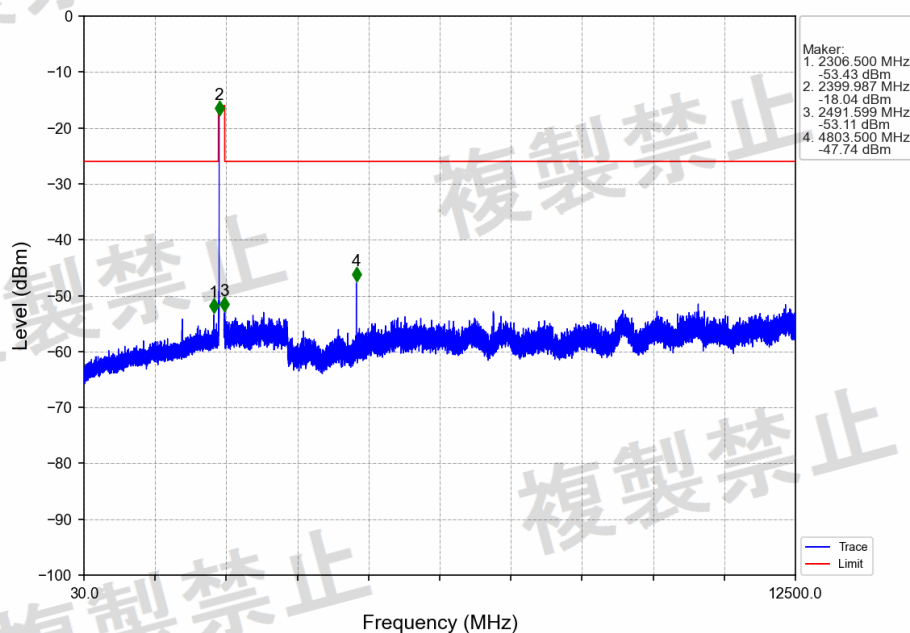


1M\_2480MHz\_Ant1\_NTNV

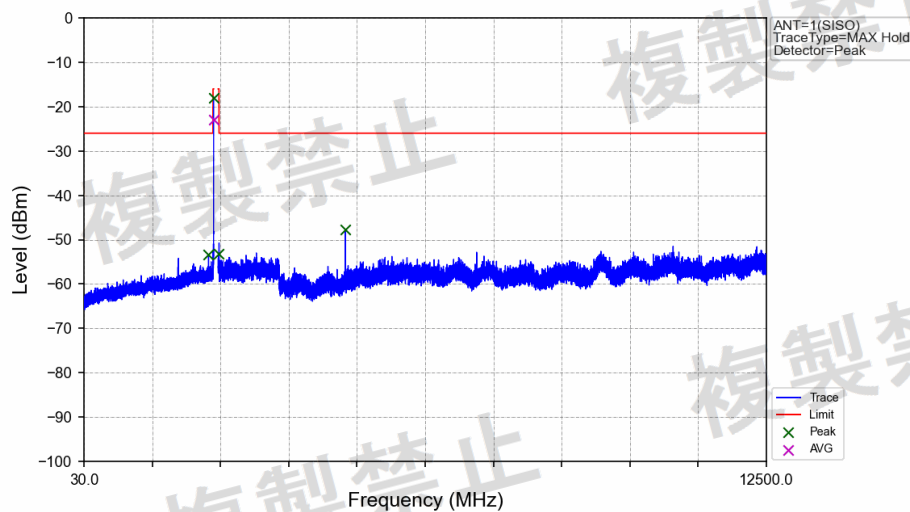


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2384.500   | -53.35         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2394.852   | -54.00         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.552   | -48.89         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 7440.000   | -44.09         | /              | -26         | Pass   |

2M\_2402MHz\_Ant1\_NTNV

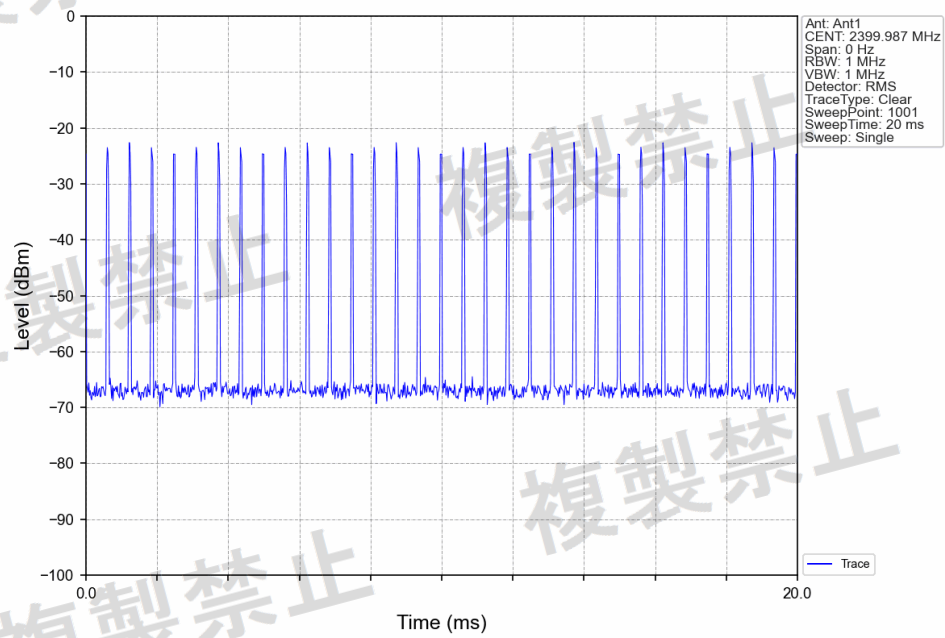


2M\_2402MHz\_Ant1\_NTNV

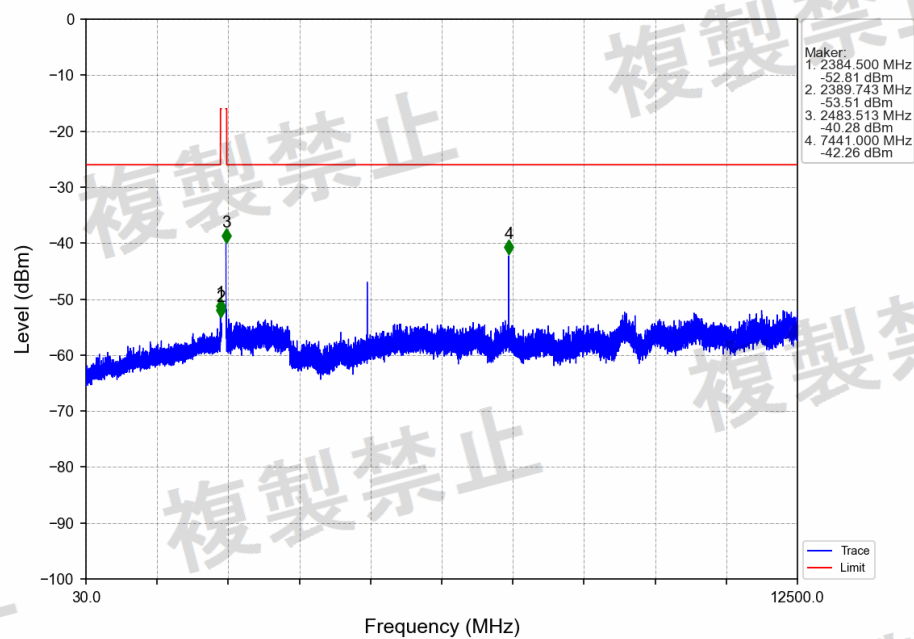


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2306.500   | -53.43         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.987   | -18.04         | -22.91         | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2491.599   | -53.11         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4803.500   | -47.74         | /              | -26         | Pass   |

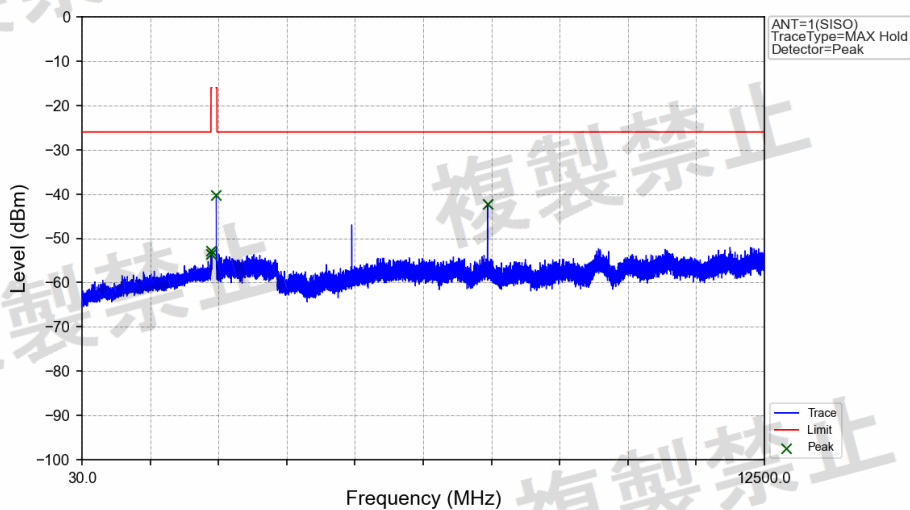
2M 2402MHz Ant1 NTV



2M 2480MHz Ant1 NTV

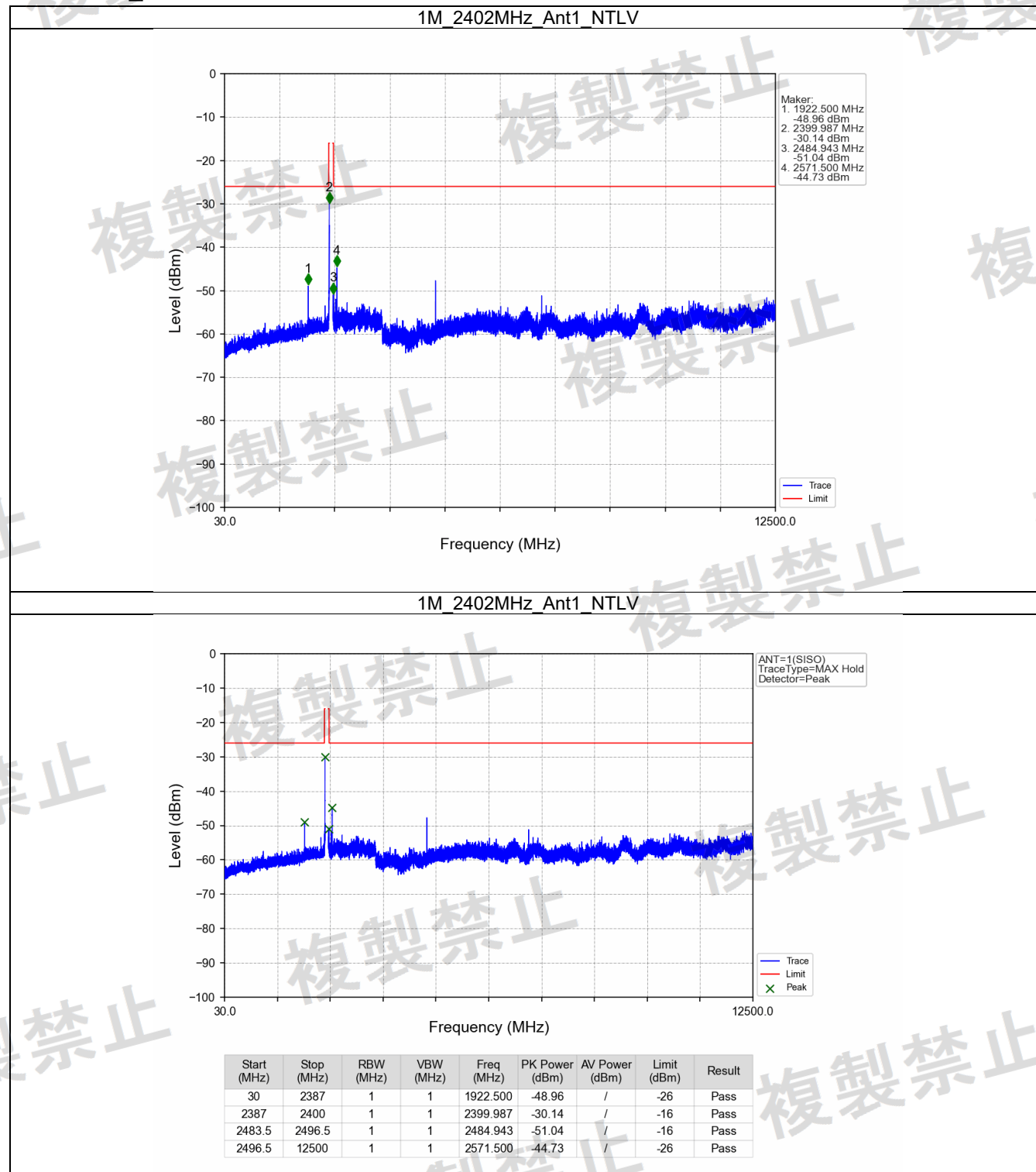


## 2M 2480MHz Ant1 NTN

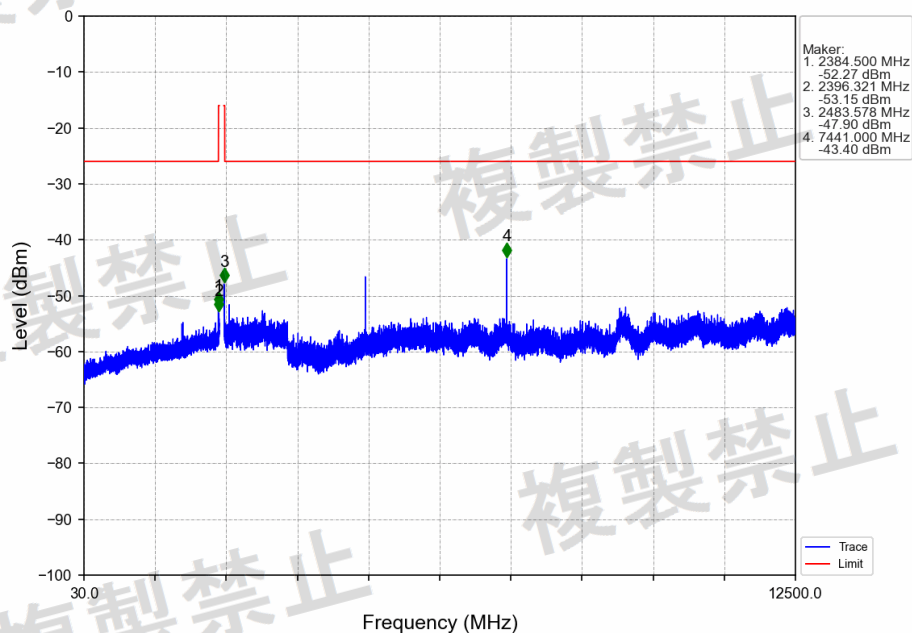


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2384.500   | -52.81         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2389.743   | -53.51         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.513   | -40.28         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 7441.000   | -42.26         | /              | -26         | Pass   |

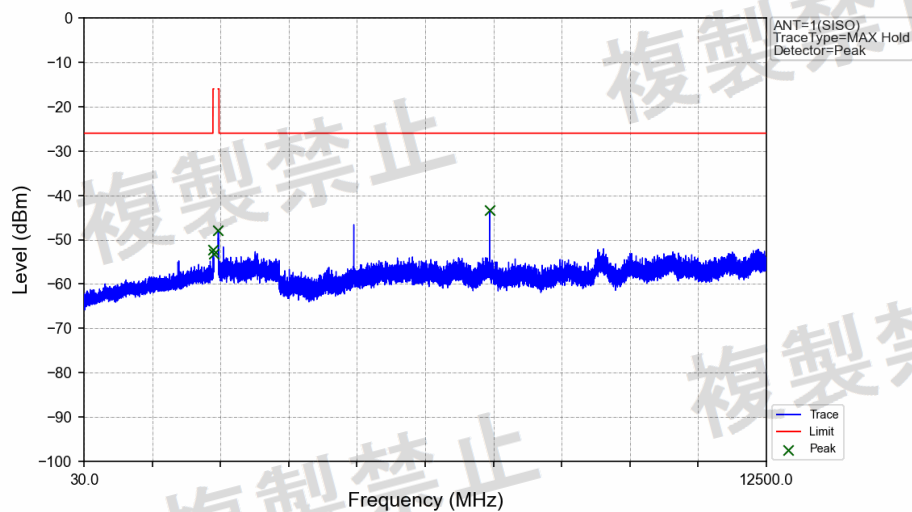
### 5.2.2 TxSe\_NTLV



1M 2480MHz Ant1 NTLV

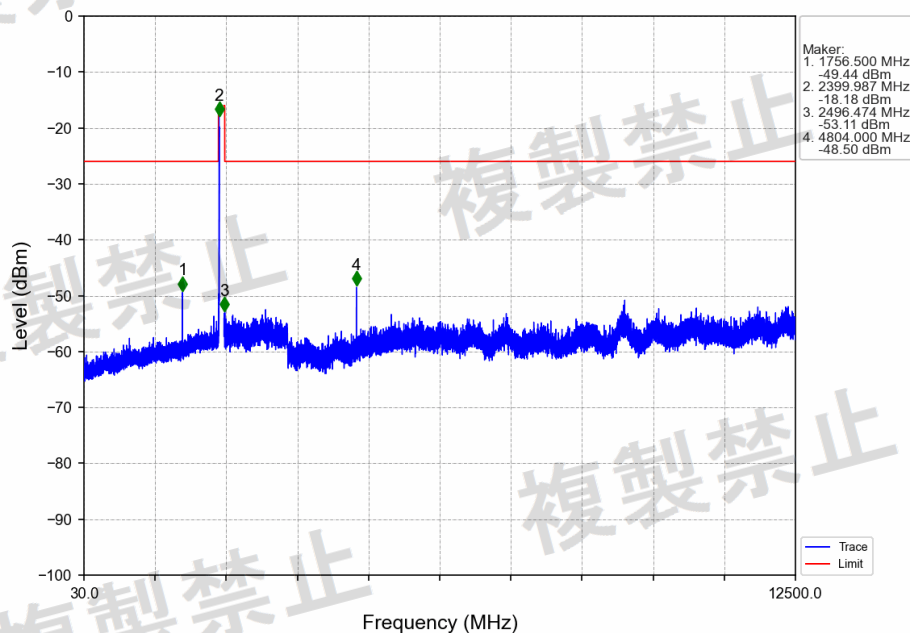


1M\_2480MHz\_Ant1\_NTLV

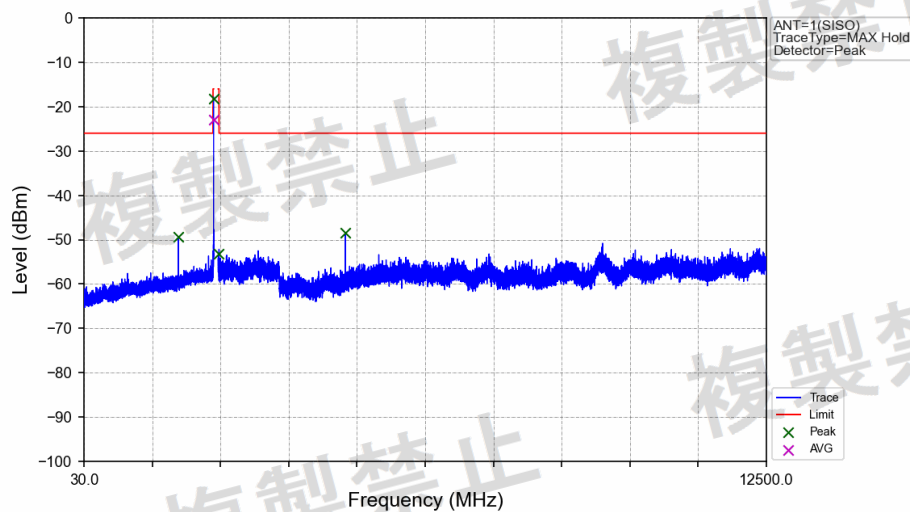


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2384.500   | -52.27         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2396.321   | -53.15         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.578   | -47.90         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 7441.000   | -43.40         | /              | -26         | Pass   |

2M 2402MHz Ant1 NTLV

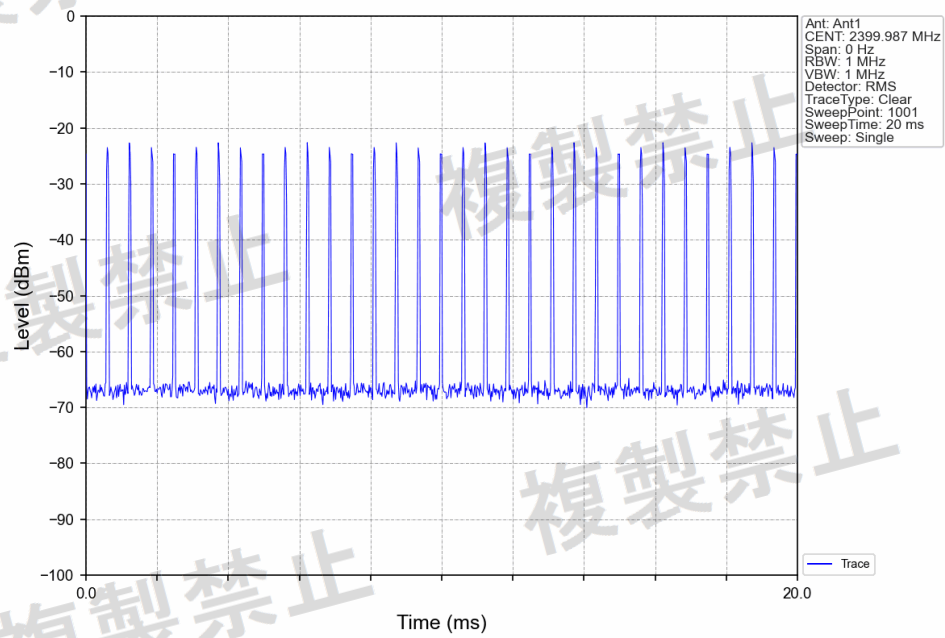


2M\_2402MHz\_Ant1\_NTLV

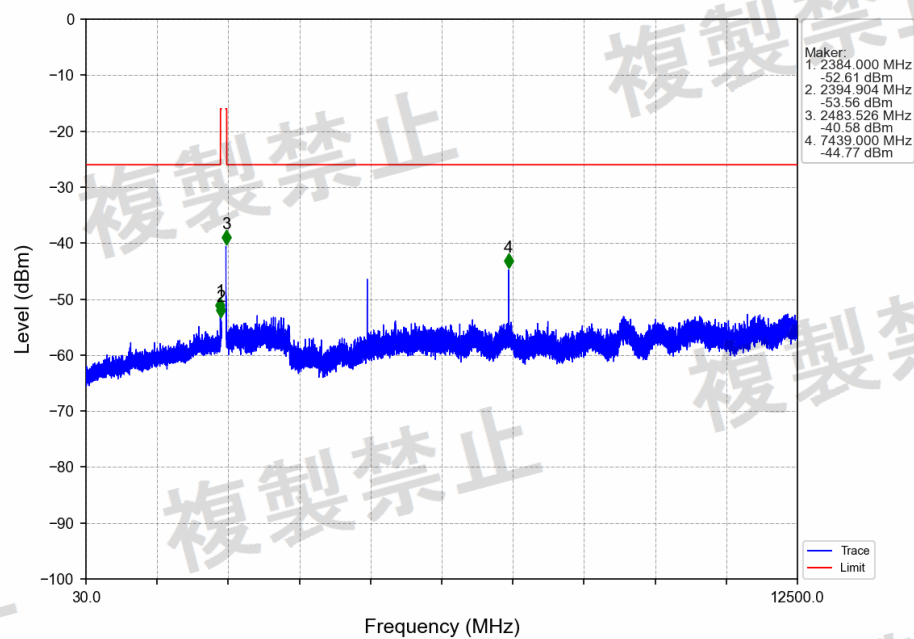


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1756.500   | -49.44         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.987   | -18.18         | -22.92         | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2496.474   | -53.11         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4804.000   | -48.50         | /              | -26         | Pass   |

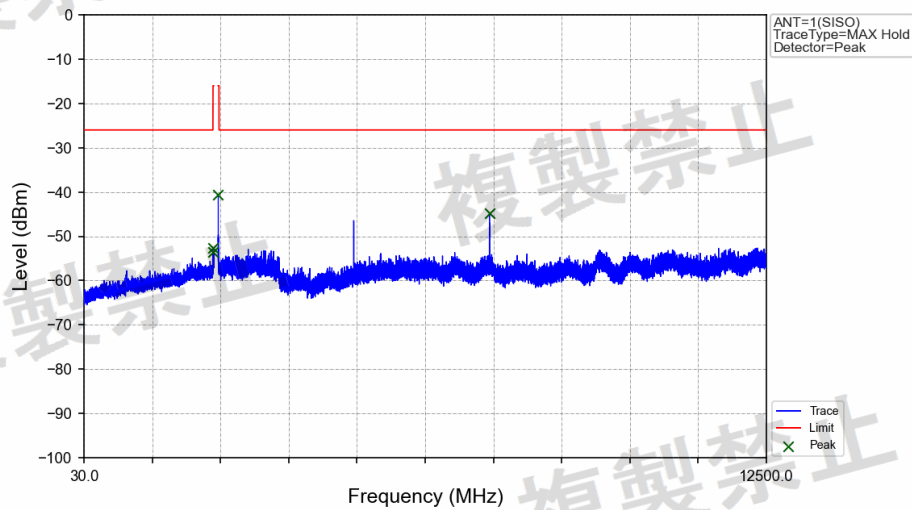
2M 2402MHz\_Ant1\_NTLV



2M\_2480MHz\_Ant1\_NTLV

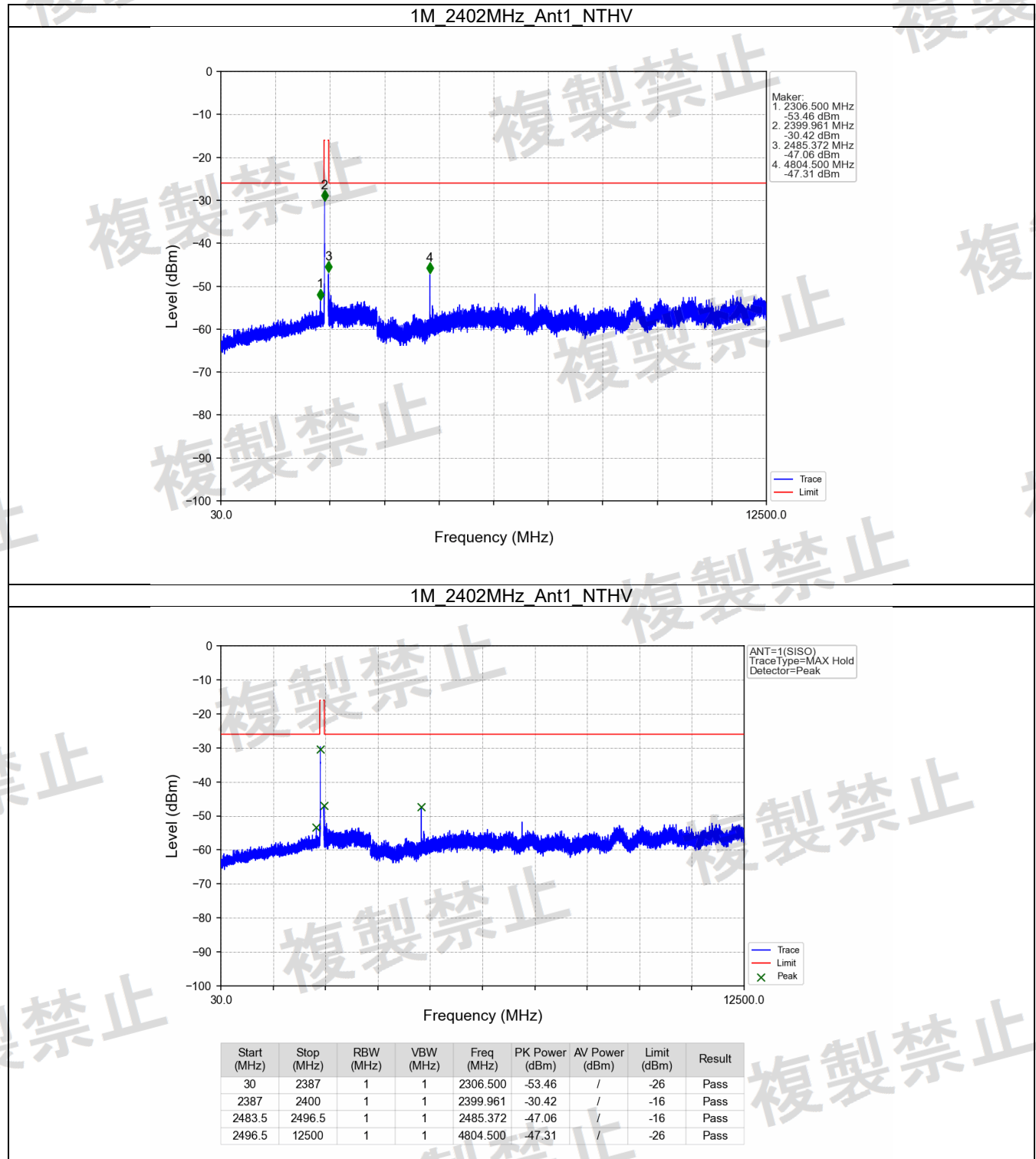


## 2M 2480MHz Ant1 NTLV

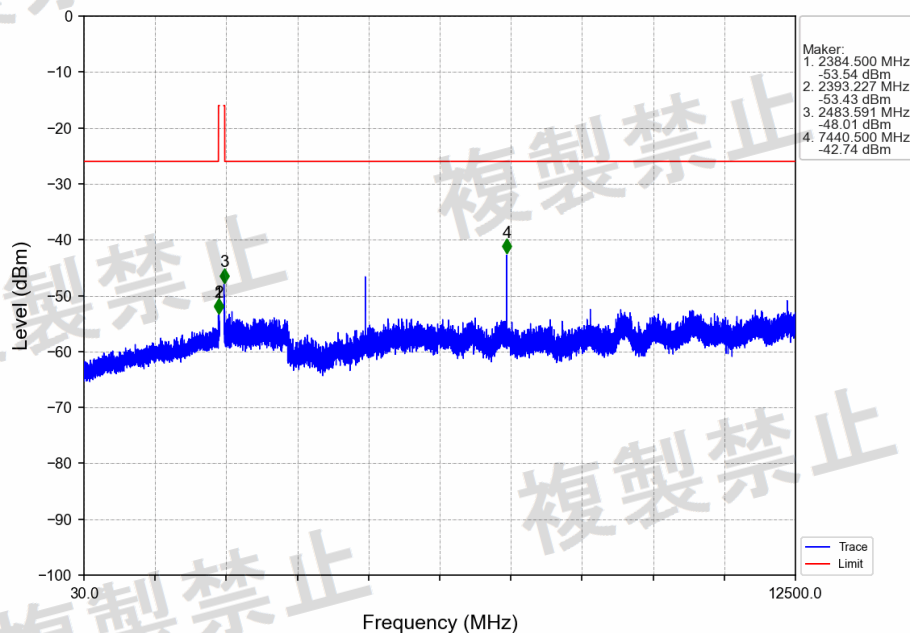


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2384.000   | -52.61         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2394.904   | -53.56         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.526   | -40.58         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 7439.000   | -44.77         | /              | -26         | Pass   |

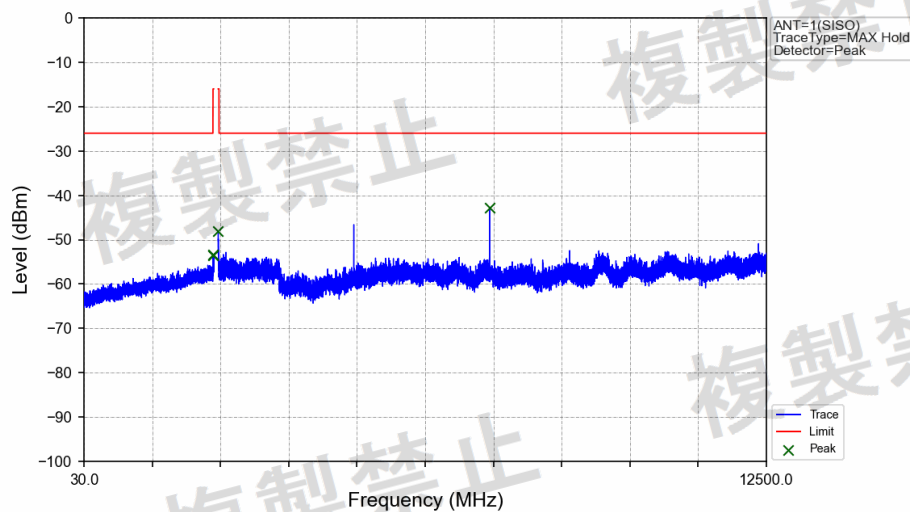
### 5.2.3 TxSe\_NTHV



1M\_2480MHz\_Ant1\_NTHV

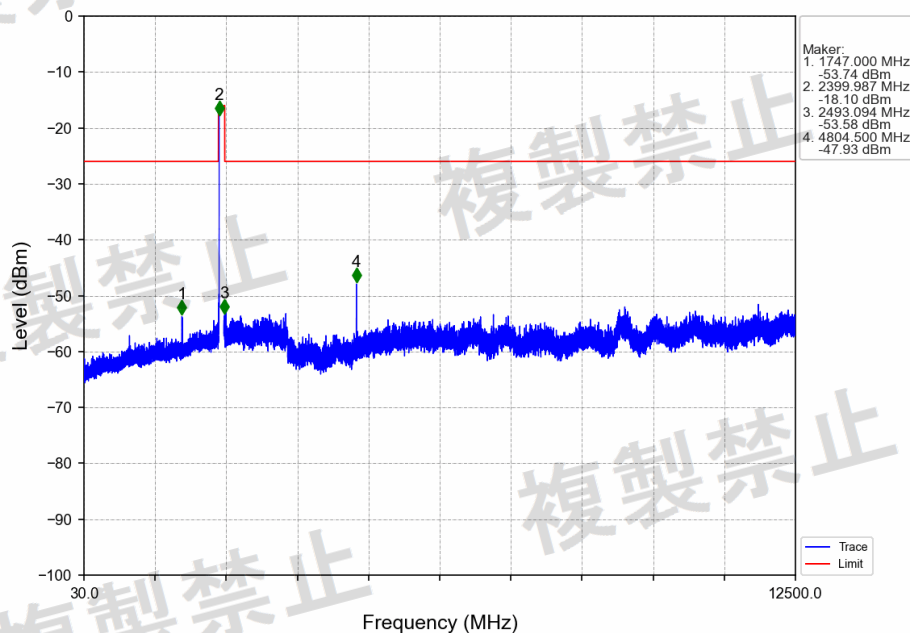


1M\_2480MHz\_Ant1\_NTHV

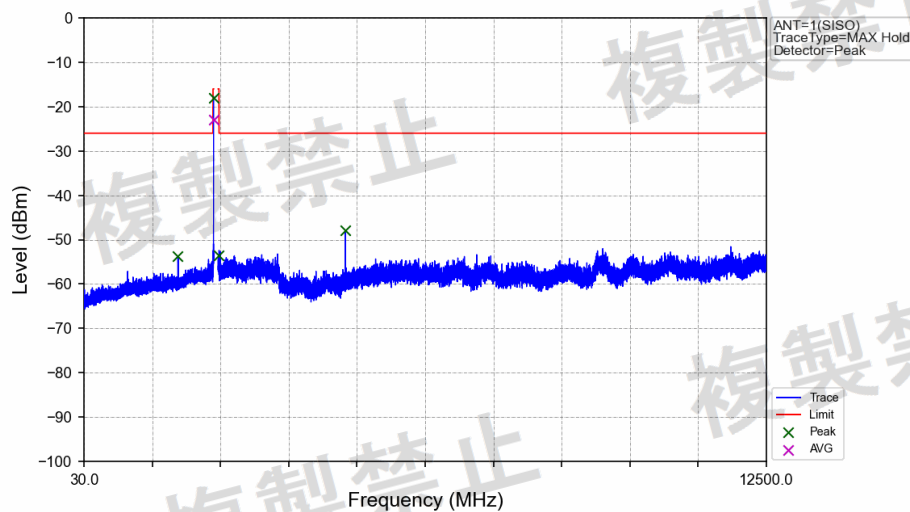


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2384.500   | -53.54         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2393.227   | -53.43         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.591   | -48.01         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 7440.500   | -42.74         | /              | -26         | Pass   |

2M\_2402MHz\_Ant1\_NTHV

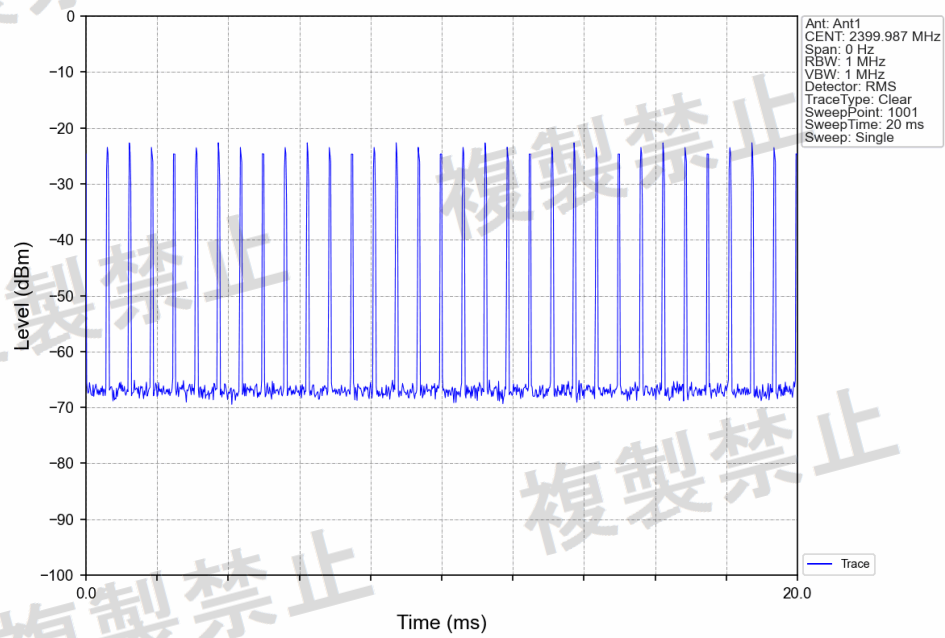


2M\_2402MHz\_Ant1\_NTHV

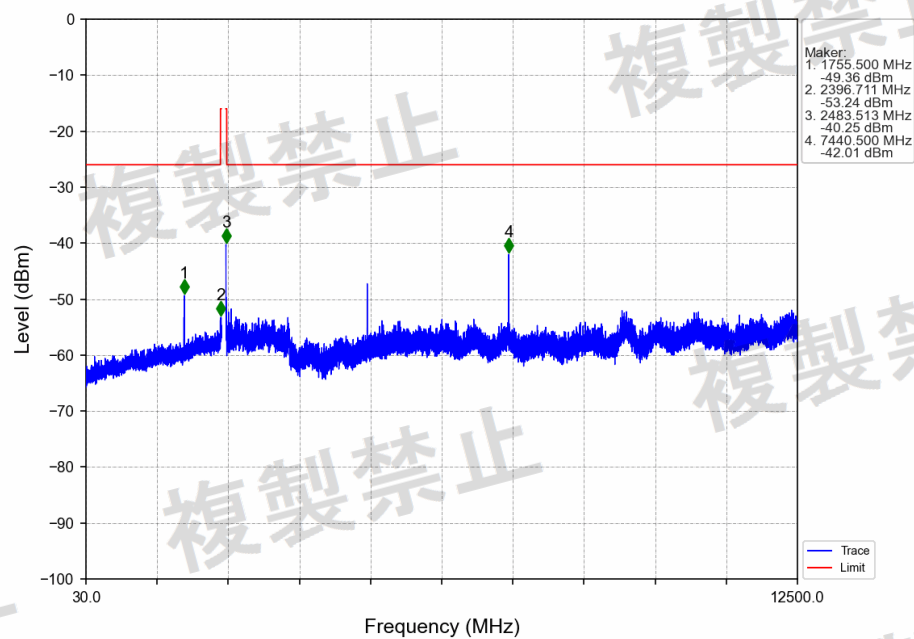


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1747.000   | -53.74         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.987   | -18.10         | -22.90         | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2493.094   | -53.58         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4804.500   | -47.93         | /              | -26         | Pass   |

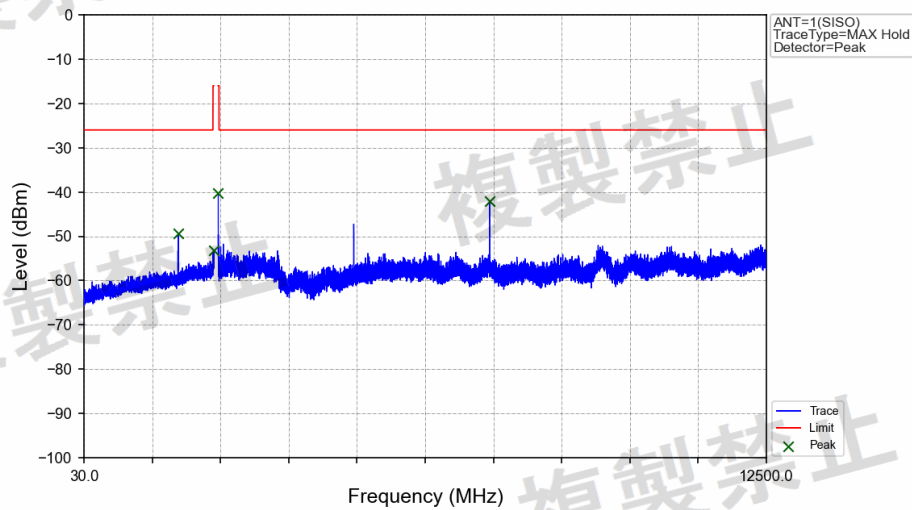
2M 2402MHz Ant1 NTHV



2M 2480MHz Ant1 NTHV



## 2M 2480MHz Ant1 NTHV



| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1755.500   | -49.36         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2396.711   | -53.24         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.513   | -40.25         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 7440.500   | -42.01         | /              | -26         | Pass   |

## 6. Secondary Radiated Emission

### 6.1 Test Result

#### 6.1.1 RxSe\_NTNV

| NTNV |         |             |     |             |            |             |                |               |                |               |            |         |
|------|---------|-------------|-----|-------------|------------|-------------|----------------|---------------|----------------|---------------|------------|---------|
| Mode | TX Type | Freq. (MHz) | ANT | Freq. Range |            | Marker      |                |               |                |               | Limit (nW) | Verdict |
|      |         |             |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm) | PK Power (nW) | AV Power (dBm) | AV Power (nW) |            |         |
| 1M   | SISO    | 2402        | 1   | 30          | 1000       | 779.95      | -84.76         | 0.003         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 12332       | -67.93         | 0.161         | /              | /             | 20         | Pass    |
|      |         | 2480        | 1   | 30          | 1000       | 871.2       | -84.70         | 0.003         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 12307.5     | -67.83         | 0.165         | /              | /             | 20         | Pass    |
| 2M   | SISO    | 2402        | 1   | 30          | 1000       | 951.3       | -84.29         | 0.004         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 11733.5     | -67.79         | 0.166         | /              | /             | 20         | Pass    |
|      |         | 2480        | 1   | 30          | 1000       | 819.25      | -82.82         | 0.005         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 3202        | -68.13         | 0.154         | /              | /             | 20         | Pass    |

#### 6.1.2 RxSe\_NTLV

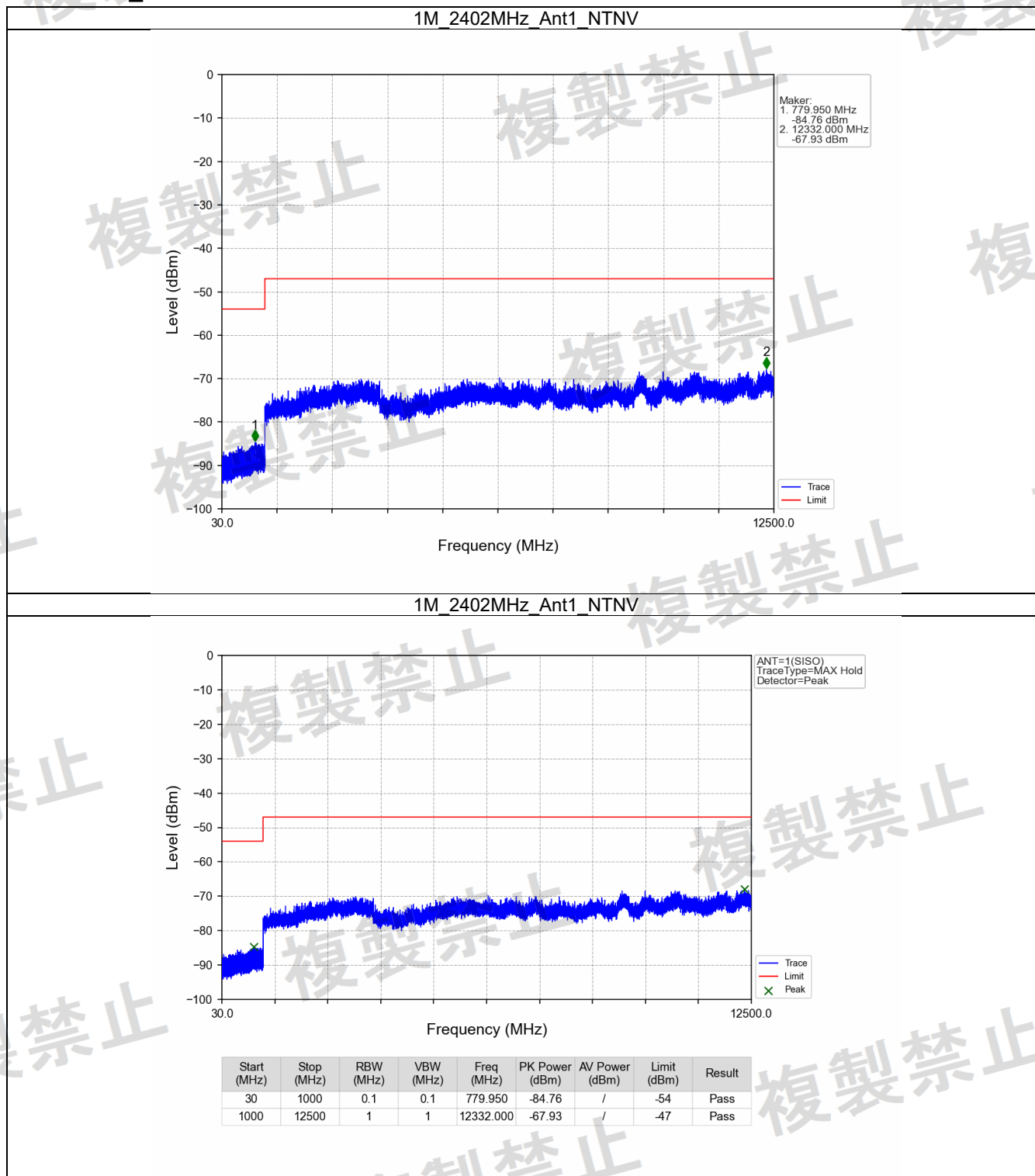
| NTLV |         |             |     |             |            |             |                |               |                |               |            |         |
|------|---------|-------------|-----|-------------|------------|-------------|----------------|---------------|----------------|---------------|------------|---------|
| Mode | TX Type | Freq. (MHz) | ANT | Freq. Range |            | Marker      |                |               |                |               | Limit (nW) | Verdict |
|      |         |             |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm) | PK Power (nW) | AV Power (dBm) | AV Power (nW) |            |         |
| 1M   | SISO    | 2402        | 1   | 30          | 1000       | 685.9       | -84.42         | 0.004         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 9446.5      | -67.13         | 0.194         | /              | /             | 20         | Pass    |
|      |         | 2480        | 1   | 30          | 1000       | 921.6       | -83.86         | 0.004         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 11145       | -67.67         | 0.171         | /              | /             | 20         | Pass    |
| 2M   | SISO    | 2402        | 1   | 30          | 1000       | 955.9       | -84.31         | 0.004         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 12397.5     | -67.55         | 0.176         | /              | /             | 20         | Pass    |
|      |         | 2480        | 1   | 30          | 1000       | 750.65      | -84.14         | 0.004         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 12376       | -67.83         | 0.165         | /              | /             | 20         | Pass    |

#### 6.1.3 RxSe\_NTHV

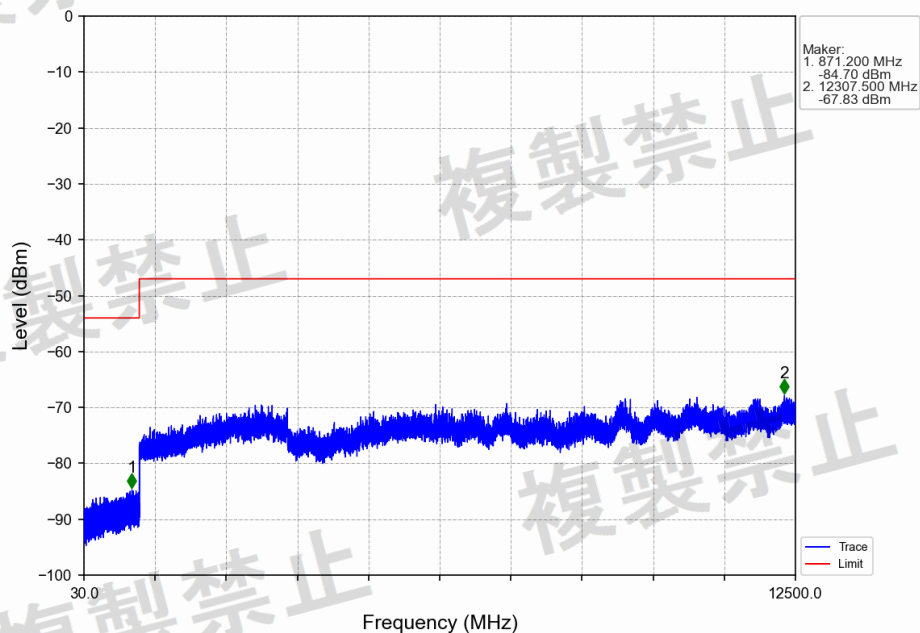
| NTHV |         |             |     |             |            |             |                |               |                |               |            |         |
|------|---------|-------------|-----|-------------|------------|-------------|----------------|---------------|----------------|---------------|------------|---------|
| Mode | TX Type | Freq. (MHz) | ANT | Freq. Range |            | Marker      |                |               |                |               | Limit (nW) | Verdict |
|      |         |             |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm) | PK Power (nW) | AV Power (dBm) | AV Power (nW) |            |         |
| 1M   | SISO    | 2402        | 1   | 30          | 1000       | 906.8       | -84.74         | 0.003         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 11168.5     | -67.56         | 0.175         | /              | /             | 20         | Pass    |
|      |         | 2480        | 1   | 30          | 1000       | 813.6       | -84.27         | 0.004         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 12227.5     | -67.32         | 0.185         | /              | /             | 20         | Pass    |
| 2M   | SISO    | 2402        | 1   | 30          | 1000       | 803.2       | -84.85         | 0.003         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 12453       | -68.10         | 0.155         | /              | /             | 20         | Pass    |
|      |         | 2480        | 1   | 30          | 1000       | 936.65      | -84.50         | 0.004         | /              | /             | 4          | Pass    |
|      |         |             |     | 1000        | 12500      | 9547.5      | -67.11         | 0.195         | /              | /             | 20         | Pass    |

## 6.2 Test Graph

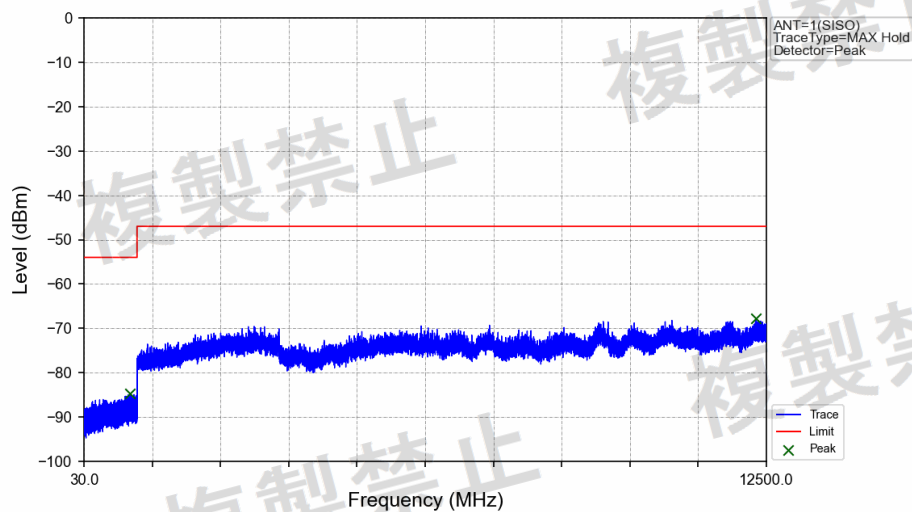
### 6.2.1 RxSe\_NTNV



1M\_2480MHz\_Ant1\_NTNV

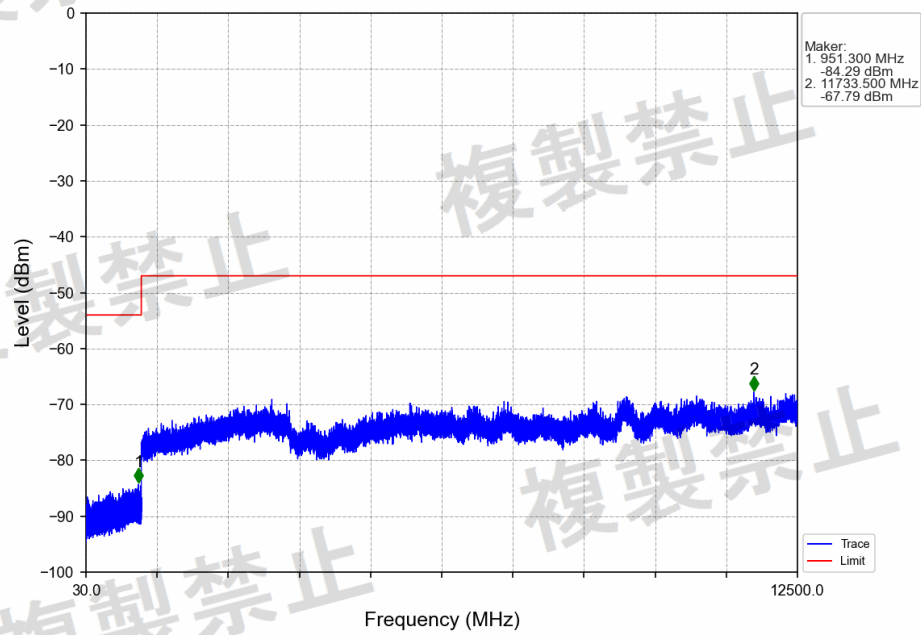


1M\_2480MHz\_Ant1\_NTNV

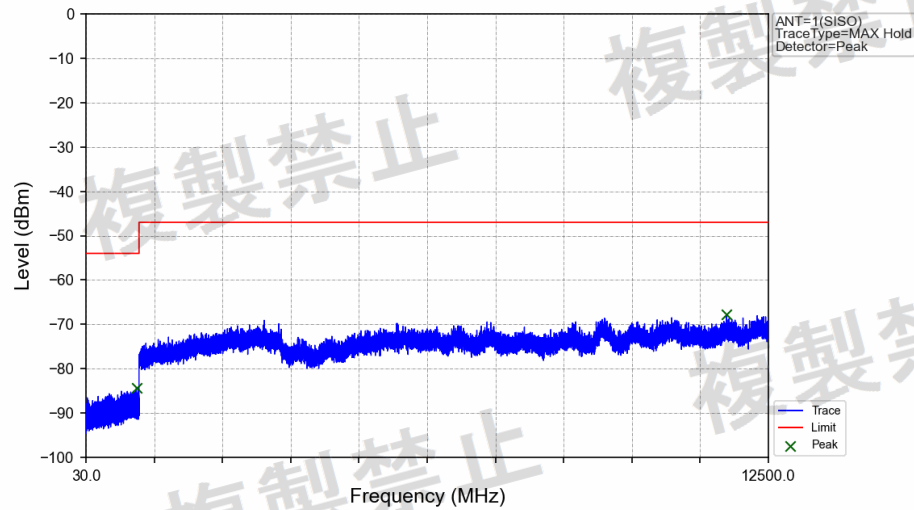


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 871.200    | -84.70         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 12307.500  | -67.83         | /              | -47         | Pass   |

2M 2402MHz Ant1 NTV

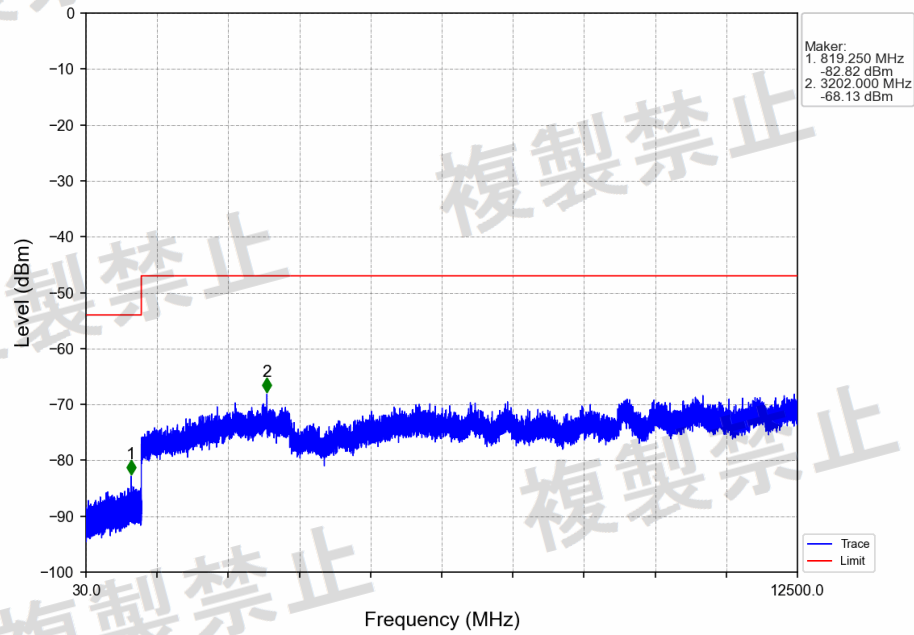


2M\_2402MHz\_Ant1\_NTNV

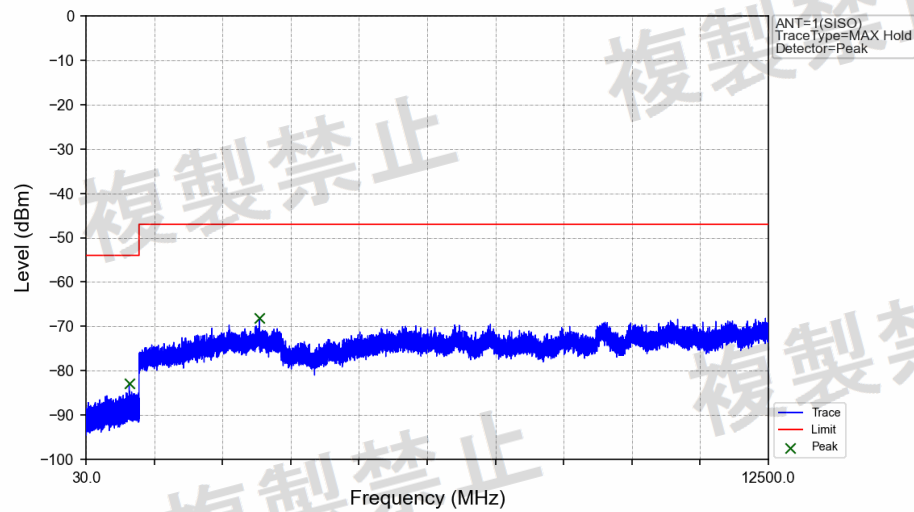


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 951.300    | -84.29         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 11733.500  | -67.79         | /              | -47         | Pass   |

2M 2480MHz Ant1 NTNV

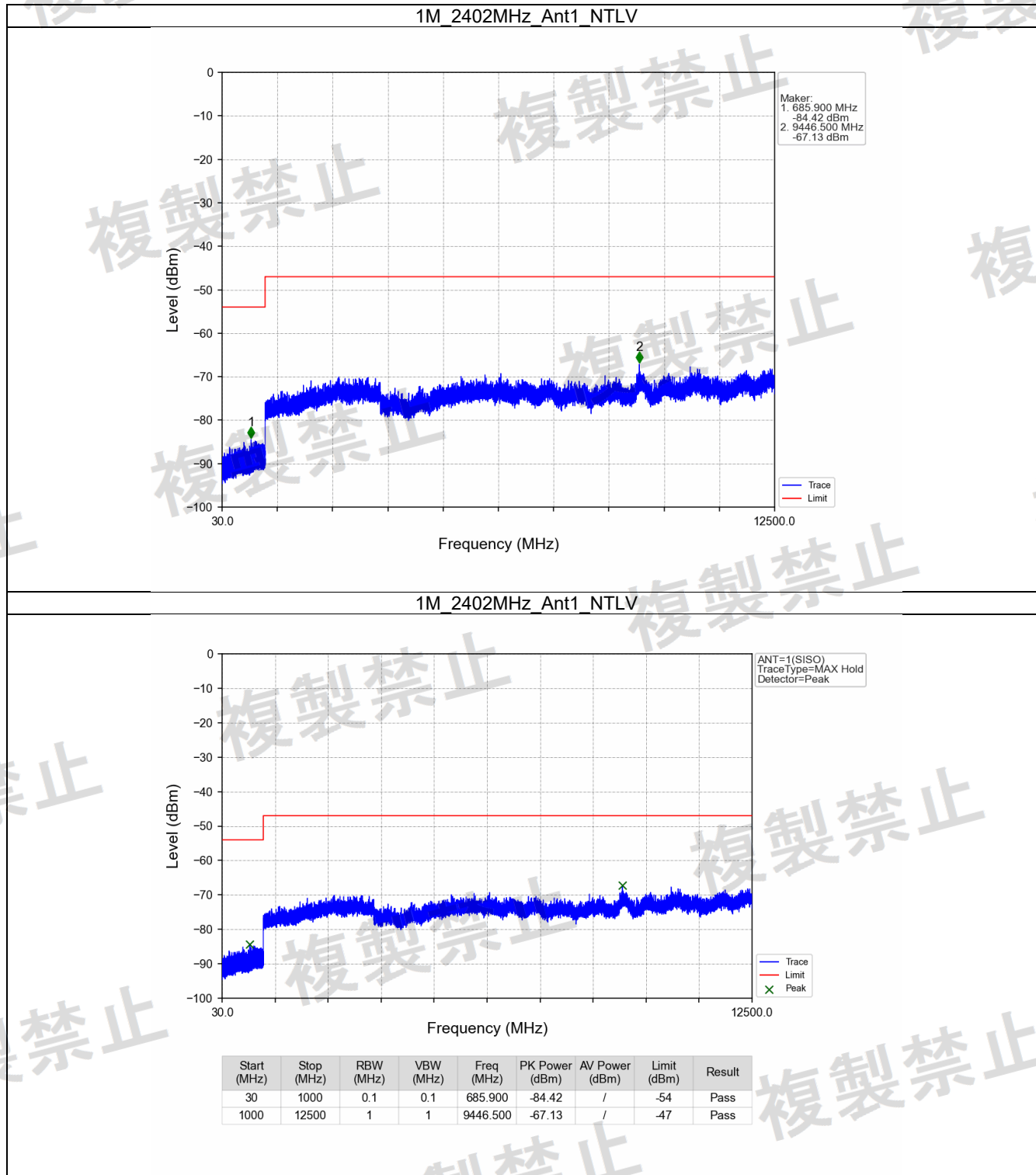


2M\_2480MHz\_Ant1\_NTNV

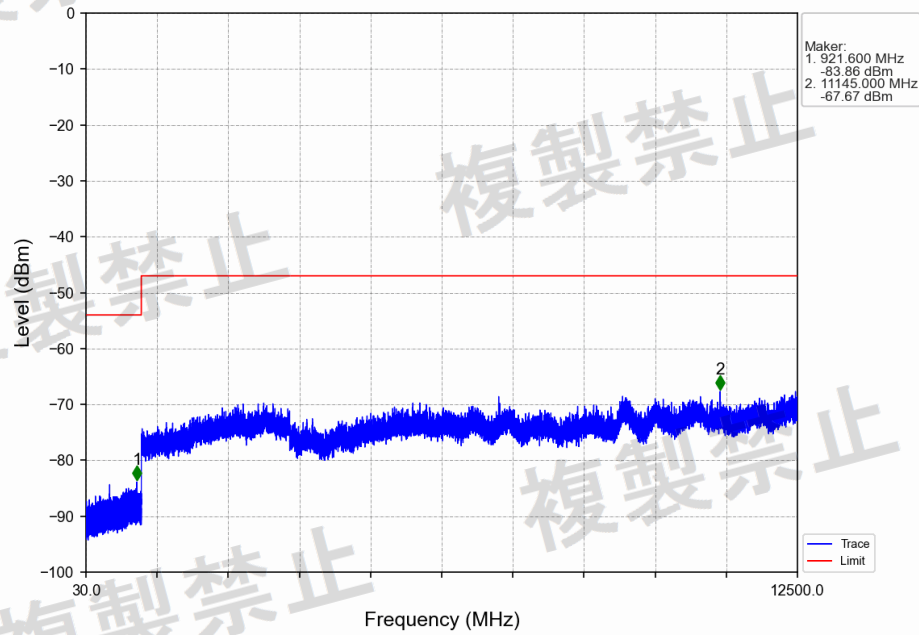


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 819.250    | -82.82         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 3202.000   | -68.13         | /              | -47         | Pass   |

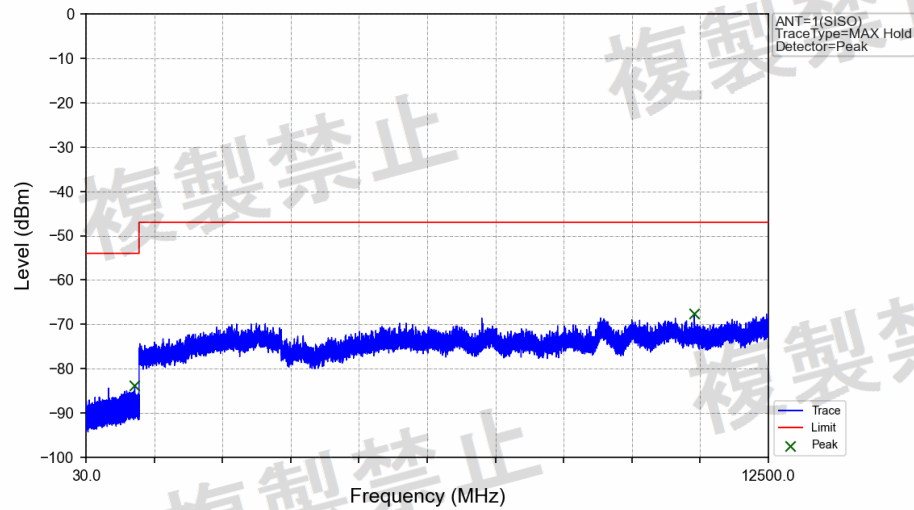
## 6.2.2 RxSe\_NTLV



1M 2480MHz Ant1 NTLV

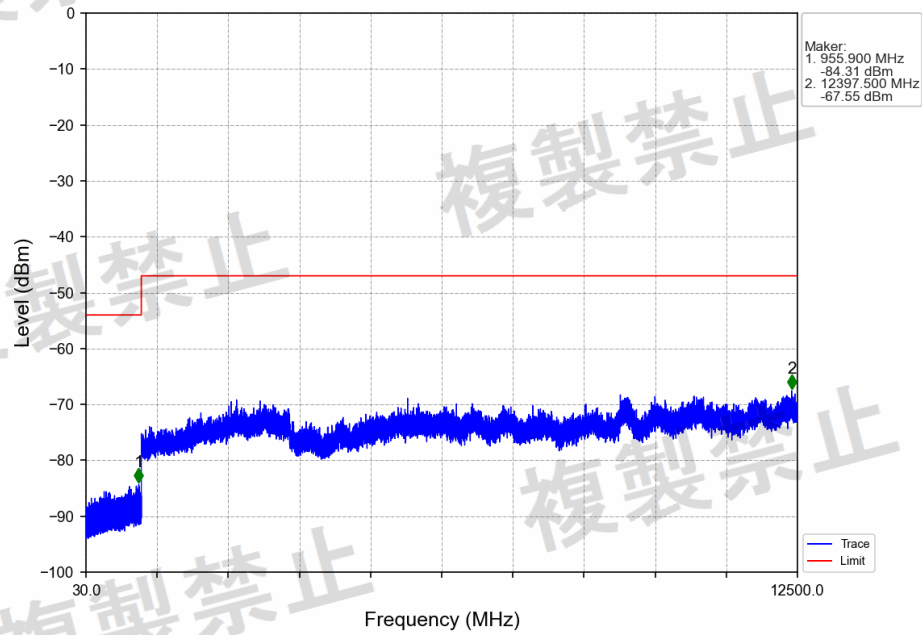


1M\_2480MHz\_Ant1\_NTLV

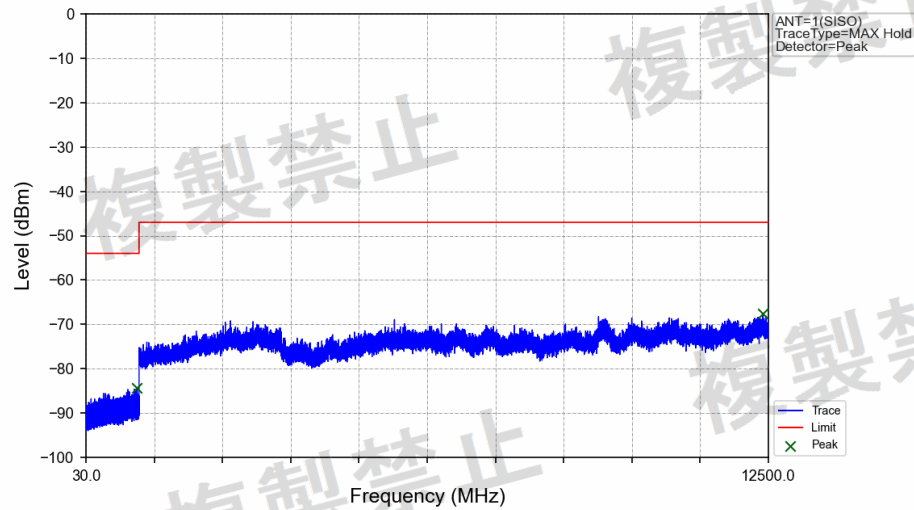


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 921.600    | -83.86         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 11145.000  | -67.67         | /              | -47         | Pass   |

2M 2402MHz Ant1 NTLV

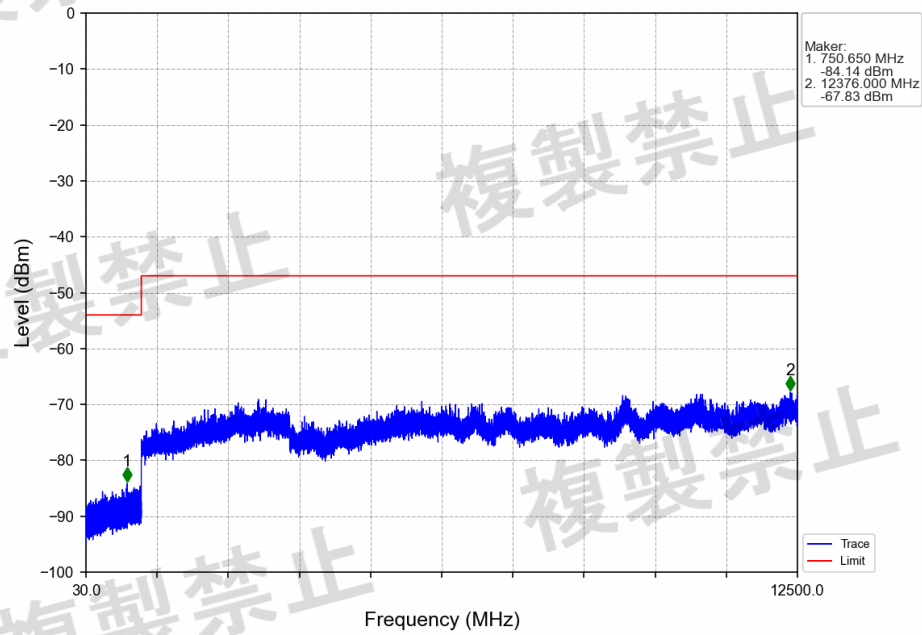


2M\_2402MHz\_Ant1\_NTLV

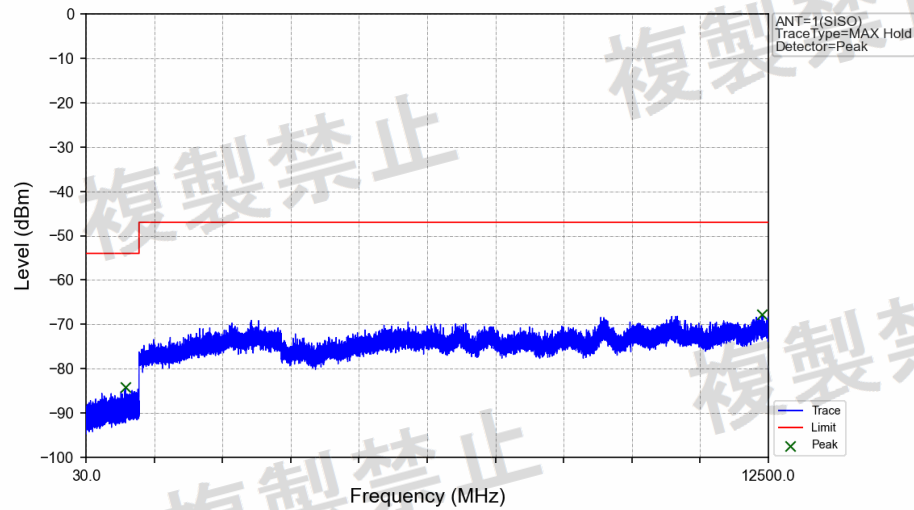


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 955.900    | -84.31         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 12397.500  | -67.55         | /              | -47         | Pass   |

2M 2480MHz Ant1 NTLV

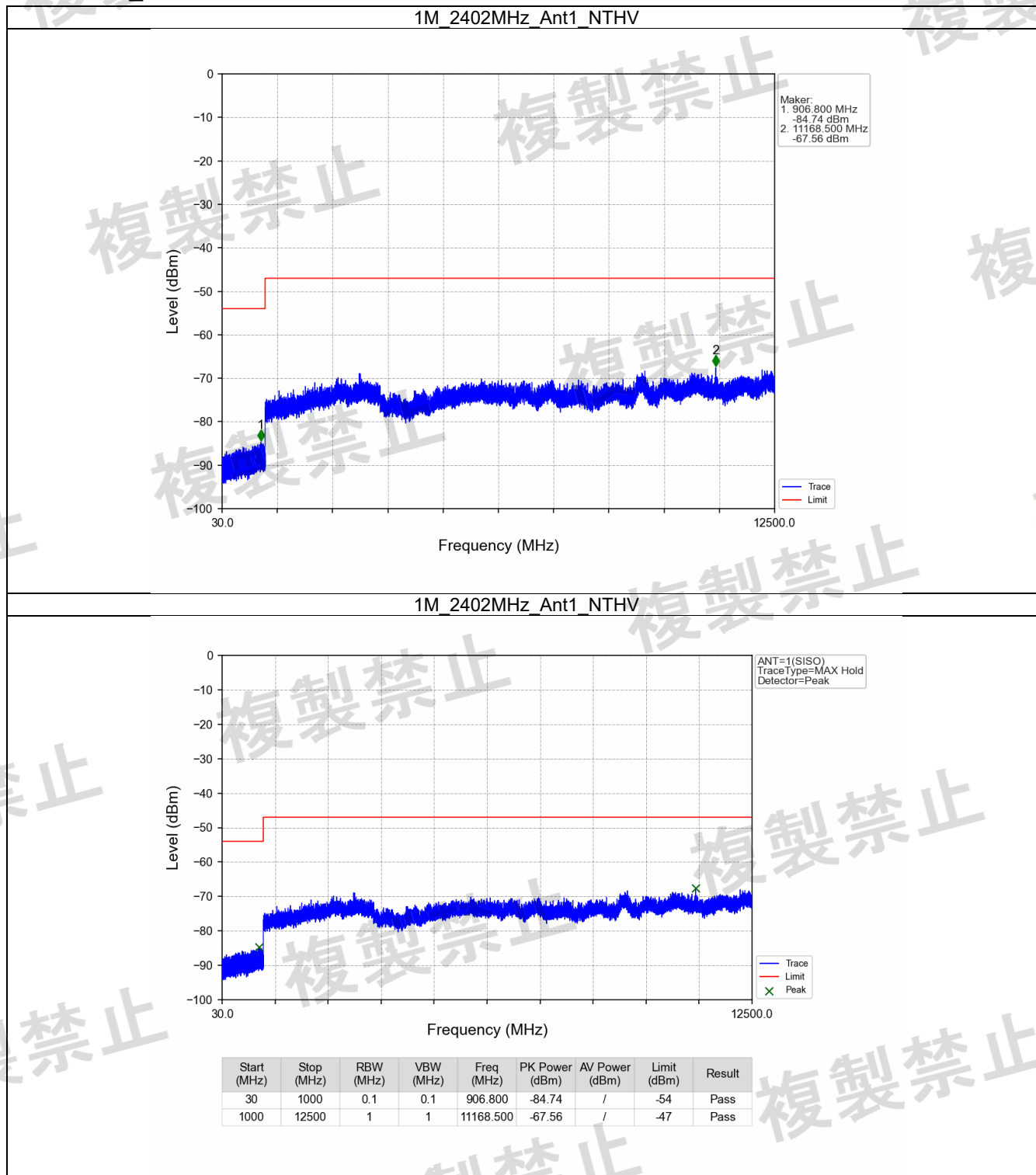


2M\_2480MHz\_Ant1\_NTLV

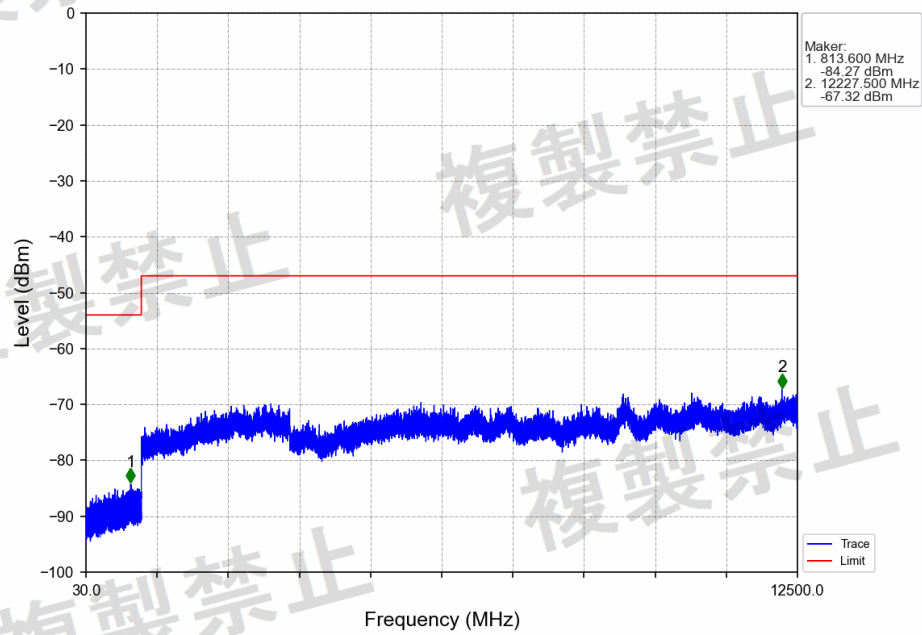


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 750.650    | -84.14         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 12376.000  | -67.83         | /              | -47         | Pass   |

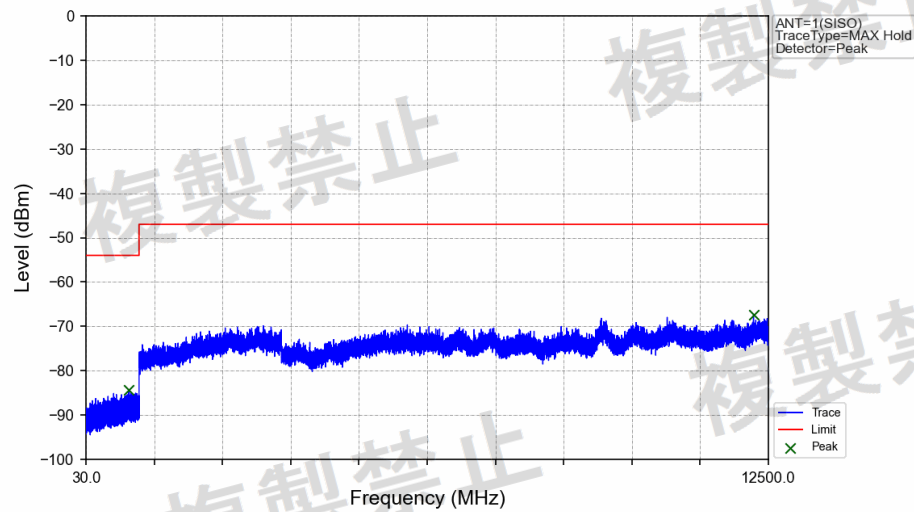
### 6.2.3 RxSe\_NTHV



1M\_2480MHz\_Ant1\_NTHV

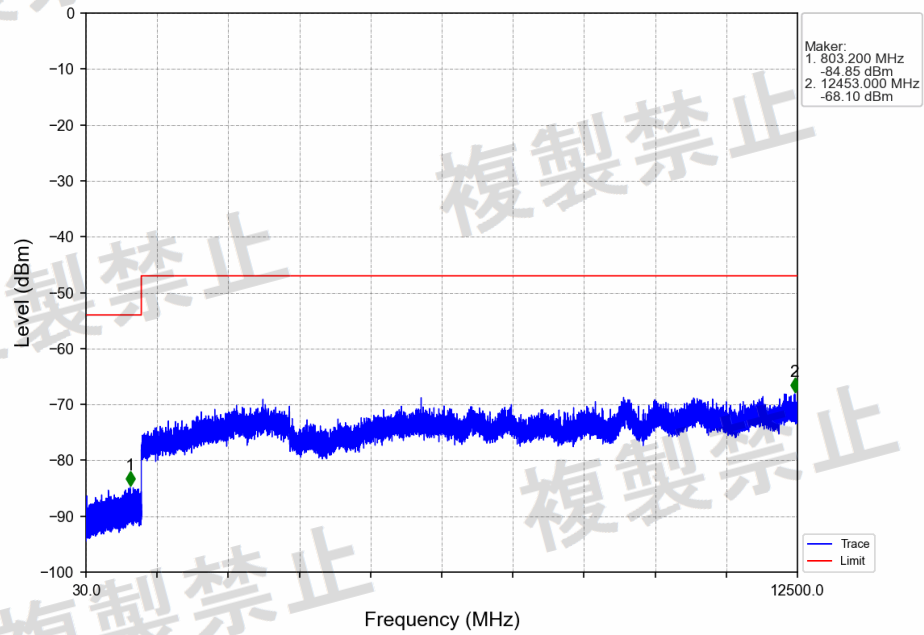


1M\_2480MHz\_Ant1\_NTHV

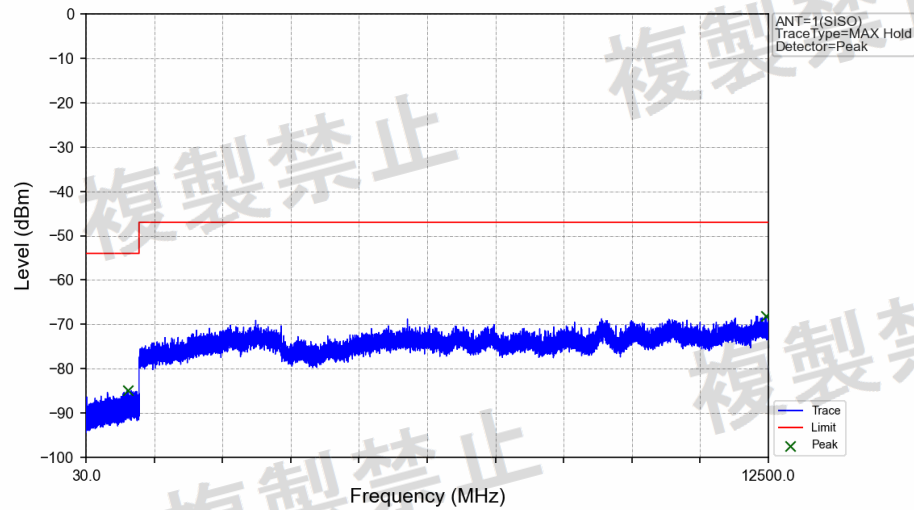


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 813.600    | -84.27         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 12227.500  | -67.32         | /              | -47         | Pass   |

2M 2402MHz Ant1 NTHV



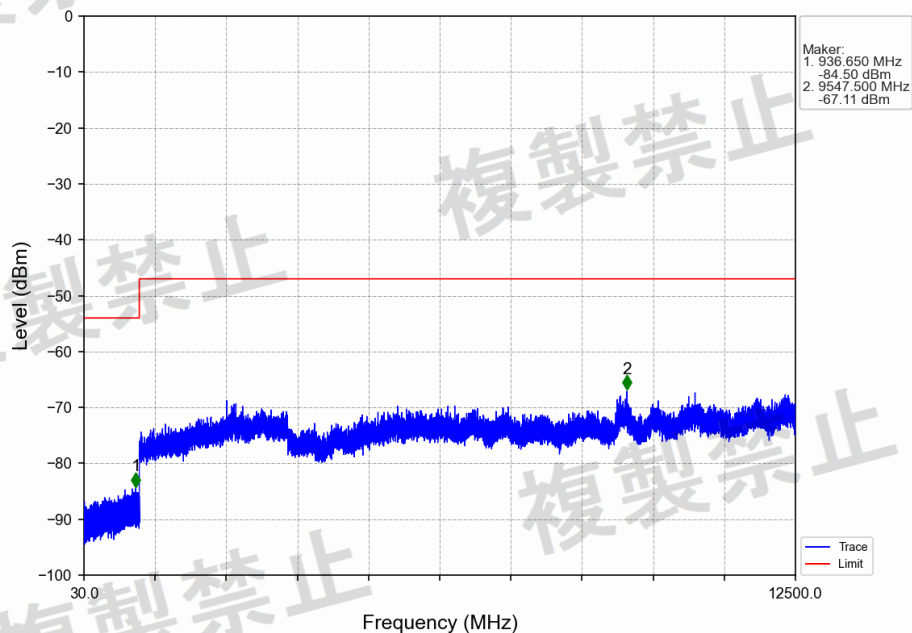
2M\_2402MHz\_Ant1\_NTHV



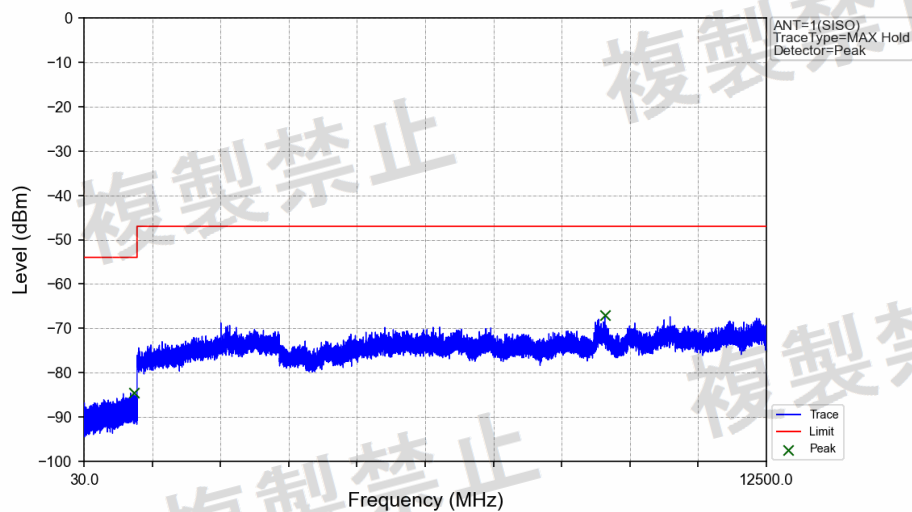
| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 803.200    | -84.85         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 12453.000  | -68.10         | /              | -47         | Pass   |



2M 2480MHz Ant1 NTHV



2M\_2480MHz\_Ant1\_NTHV



| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 936.650    | -84.50         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 9547.500   | -67.11         | /              | -47         | Pass   |

\*\*\*\*\* End of Report \*\*\*\*\*