



# RF Test Data

## For

|                      |                                  |
|----------------------|----------------------------------|
| Project No.:         | DLE-251010058R                   |
| Client:              | Zhuhai Quin Technology Co., Ltd. |
| Manufacturer:        | Zhuhai Quin Technology Co., Ltd. |
| Product Description: | Portable Label Maker             |
| Model Number:        | DM170                            |
| Test Engineer:       | Alisa Song                       |
| Test Date:           | 2025-09-30                       |

## Test Summary

| Item                                                 | Result |
|------------------------------------------------------|--------|
| Duty Cycle                                           | Pass   |
| Bandwidth                                            | Pass   |
| Maximum Conducted Output Power                       | Pass   |
| Maximum Power Spectral Density                       | Pass   |
| Unwanted Emissions In Non-restricted Frequency Bands | Pass   |
| Frequency Error                                      | Pass   |



# 1. Duty Cycle

## 1.1 Test Result

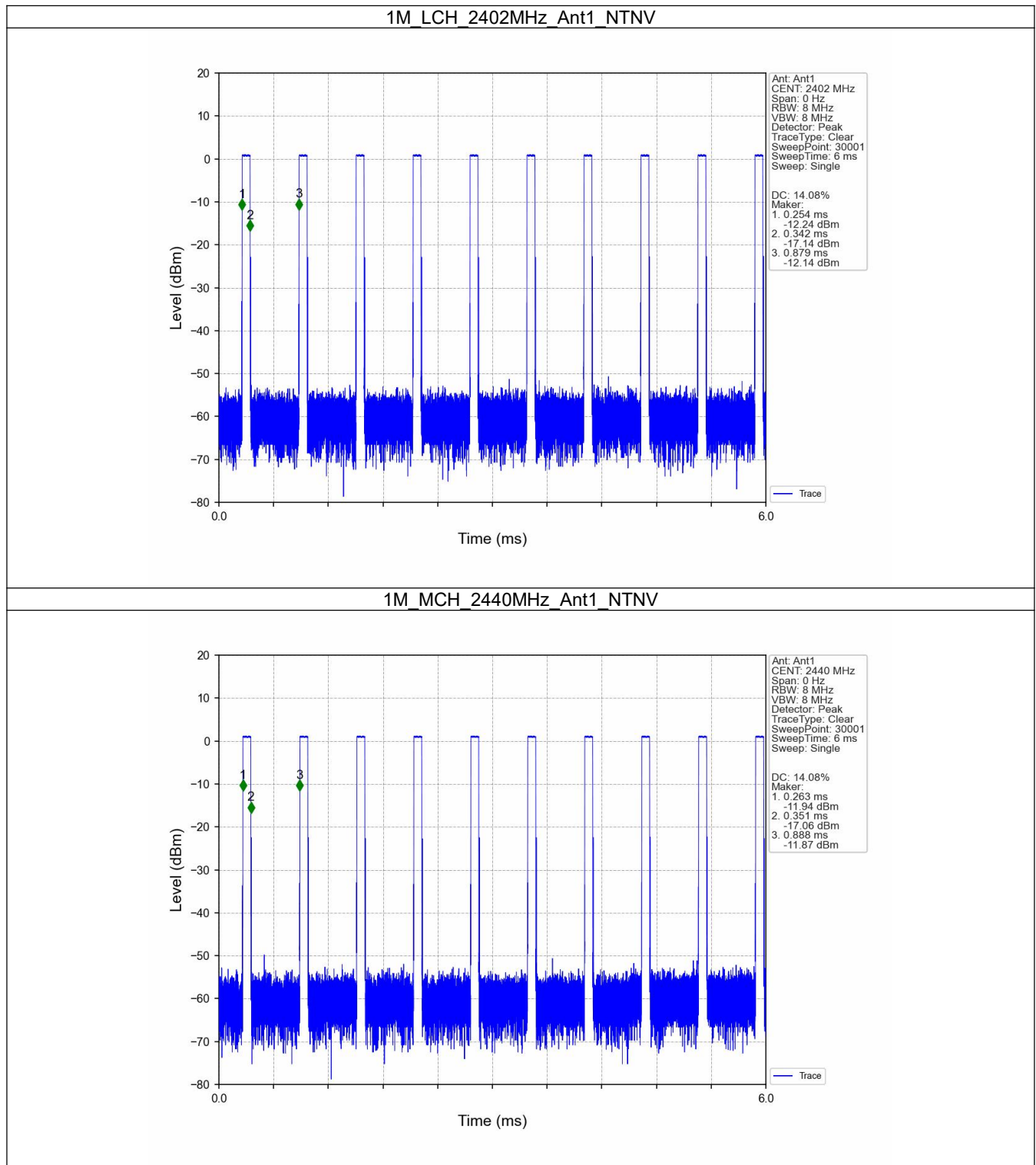
### 1.1.1 Ant1

| Ant1 |         |                 |           |             |                |                                   |                       |
|------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 1M   | SISO    | 2402            | 0.088     | 0.625       | 14.08          | 8.51                              | 0.03                  |
|      |         | 2440            | 0.088     | 0.625       | 14.08          | 8.51                              | 0.03                  |
|      |         | 2480            | 0.088     | 0.625       | 14.08          | 8.51                              | 0.03                  |
| 2M   | SISO    | 2402            | 0.056     | 0.625       | 8.96           | 10.48                             | 0.03                  |
|      |         | 2440            | 0.056     | 0.625       | 8.96           | 10.48                             | 0.00                  |
|      |         | 2480            | 0.057     | 0.625       | 9.12           | 10.40                             | 0.00                  |



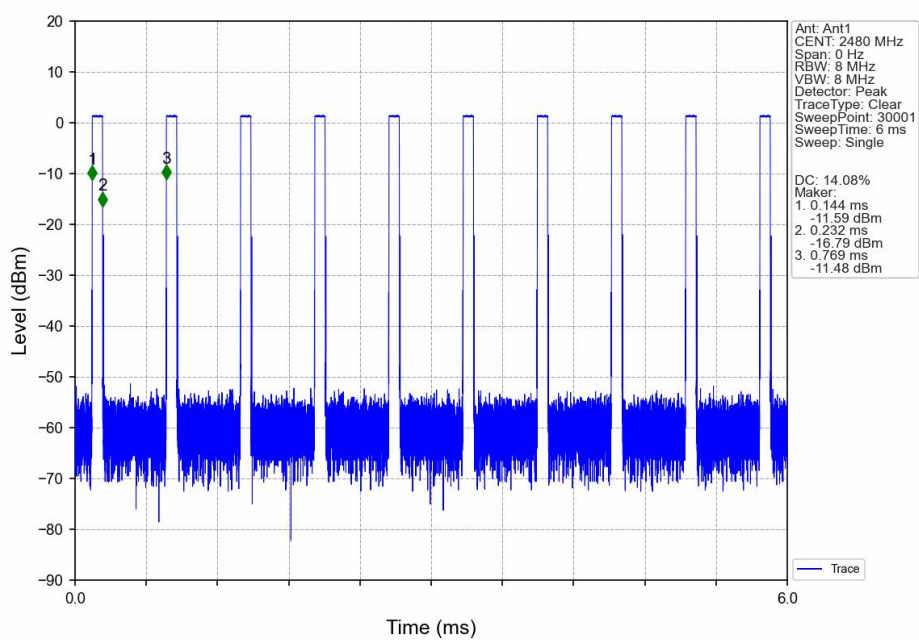
## 1.2 Test Graph

### 1.2.1 Ant1

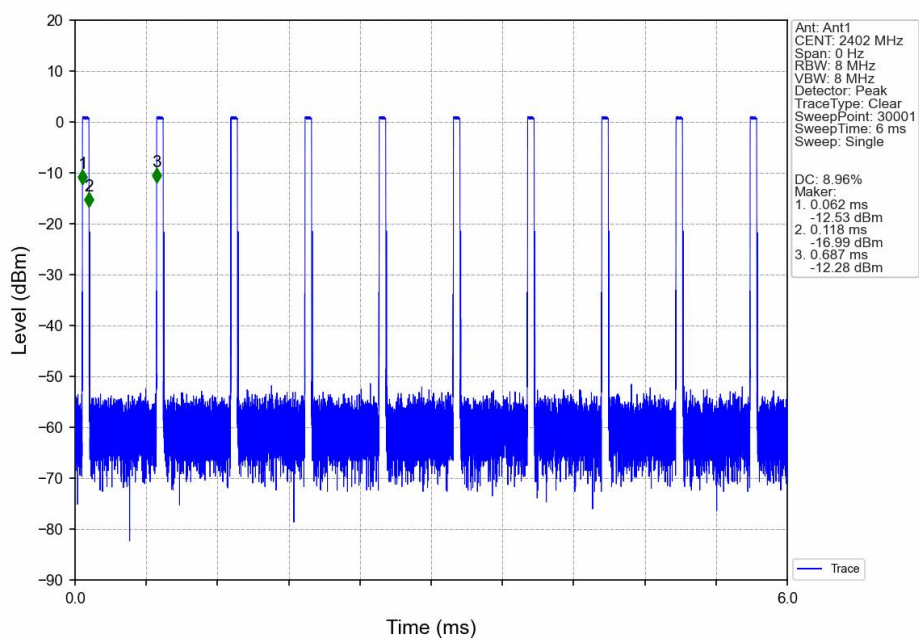




### 1M\_HCH\_2480MHz\_Ant1\_NTNV

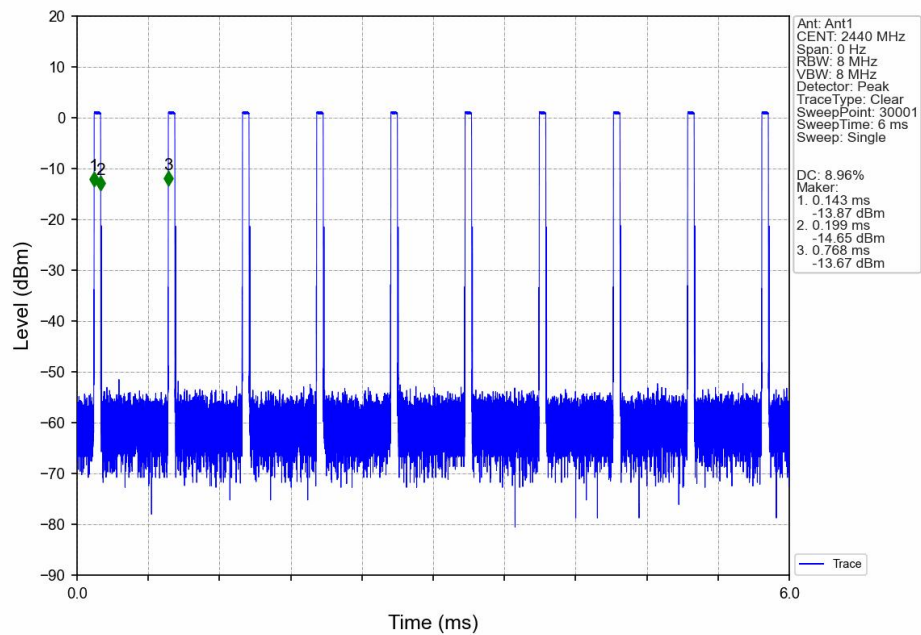


### 2M\_LCH\_2402MHz\_Ant1\_NTNV

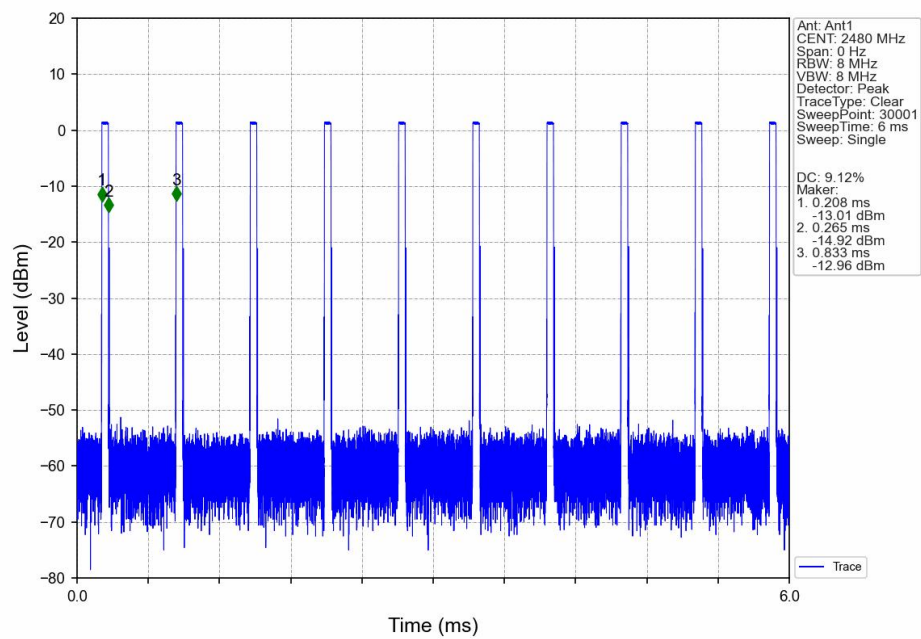




### 2M\_MCH\_2440MHz\_Ant1\_NTNV



### 2M\_HCH\_2480MHz\_Ant1\_NTNV





## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

| Mode | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------|---------|-----------------|-----|------------------------------|-------|---------|
|      |         |                 |     | Result                       | Limit |         |
| 1M   | SISO    | 2402            | 1   | 1.031                        | /     | Pass    |
|      |         | 2440            | 1   | 1.038                        | /     | Pass    |
|      |         | 2480            | 1   | 1.043                        | /     | Pass    |
| 2M   | SISO    | 2402            | 1   | 2.068                        | /     | Pass    |
|      |         | 2440            | 1   | 2.069                        | /     | Pass    |
|      |         | 2480            | 1   | 2.071                        | /     | Pass    |

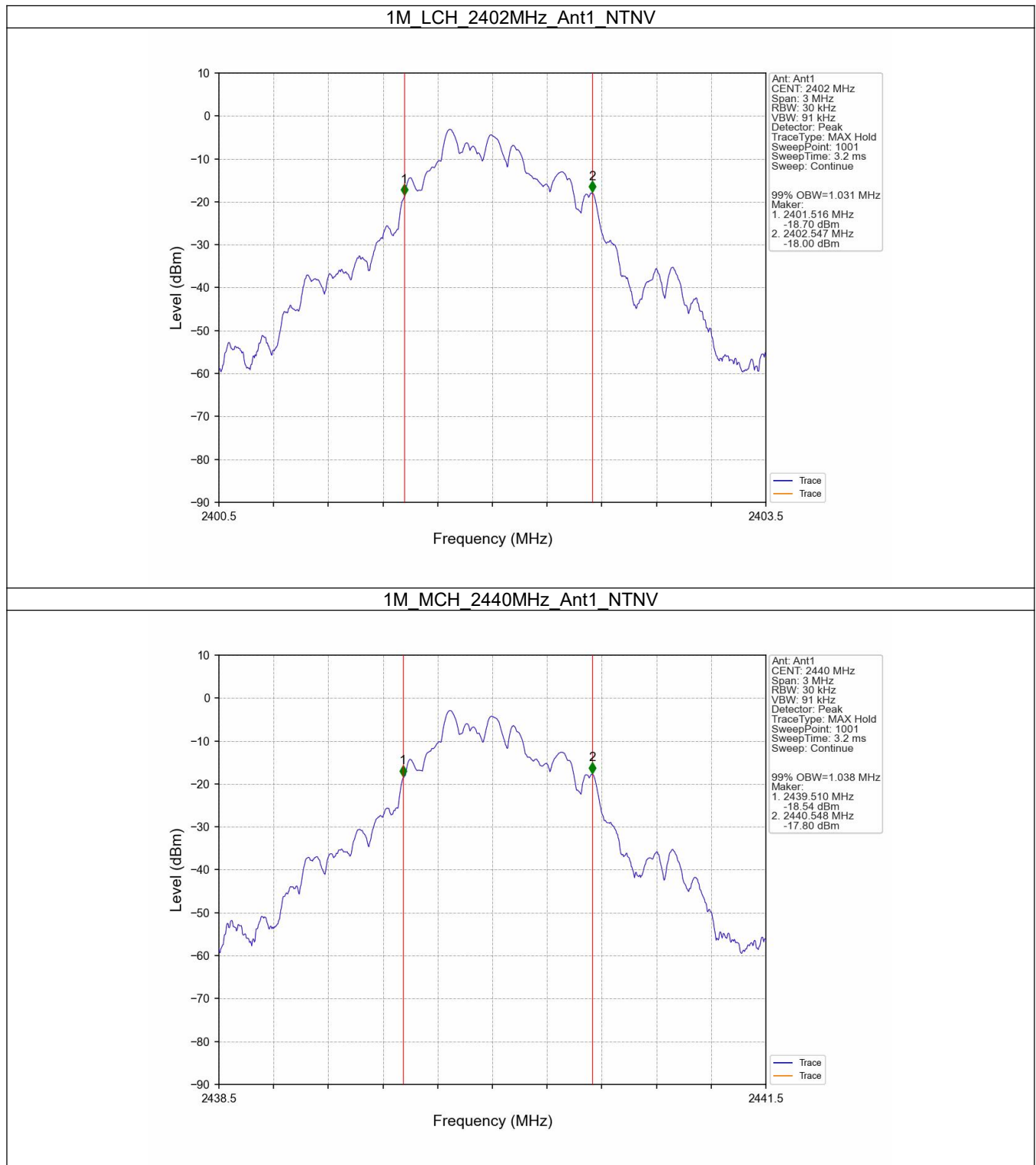
#### 2.1.2 6dB BW

| Mode | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|------|---------|-----------------|-----|---------------------|------------|---------|
|      |         |                 |     | Result              | Limit      |         |
| 1M   | SISO    | 2402            | 1   | 0.507               | $\geq 0.5$ | Pass    |
|      |         | 2440            | 1   | 0.512               | $\geq 0.5$ | Pass    |
|      |         | 2480            | 1   | 0.520               | $\geq 0.5$ | Pass    |
| 2M   | SISO    | 2402            | 1   | 0.876               | $\geq 0.5$ | Pass    |
|      |         | 2440            | 1   | 0.878               | $\geq 0.5$ | Pass    |
|      |         | 2480            | 1   | 0.872               | $\geq 0.5$ | Pass    |



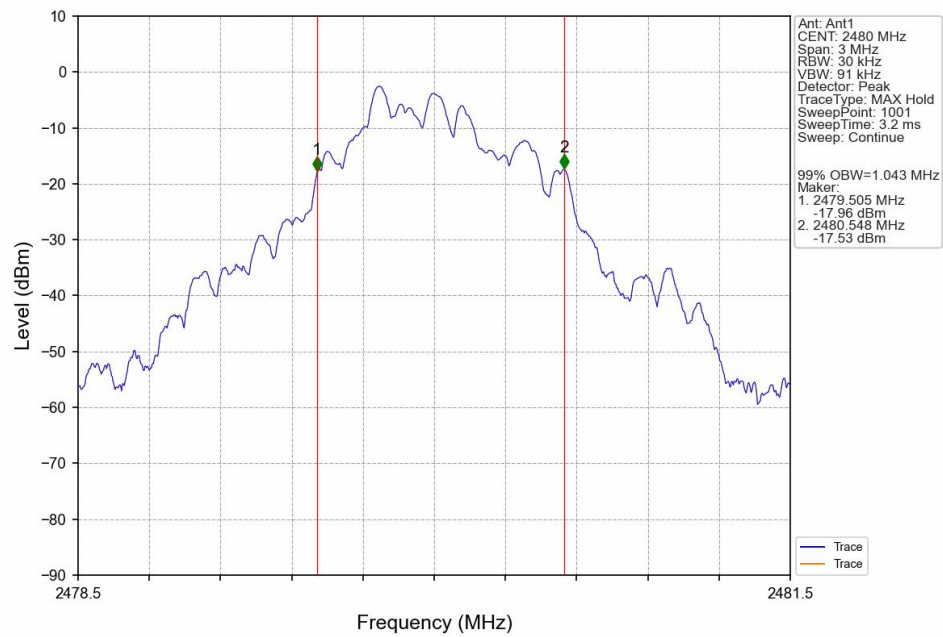
## 2.2 Test Graph

### 2.2.1 OBW

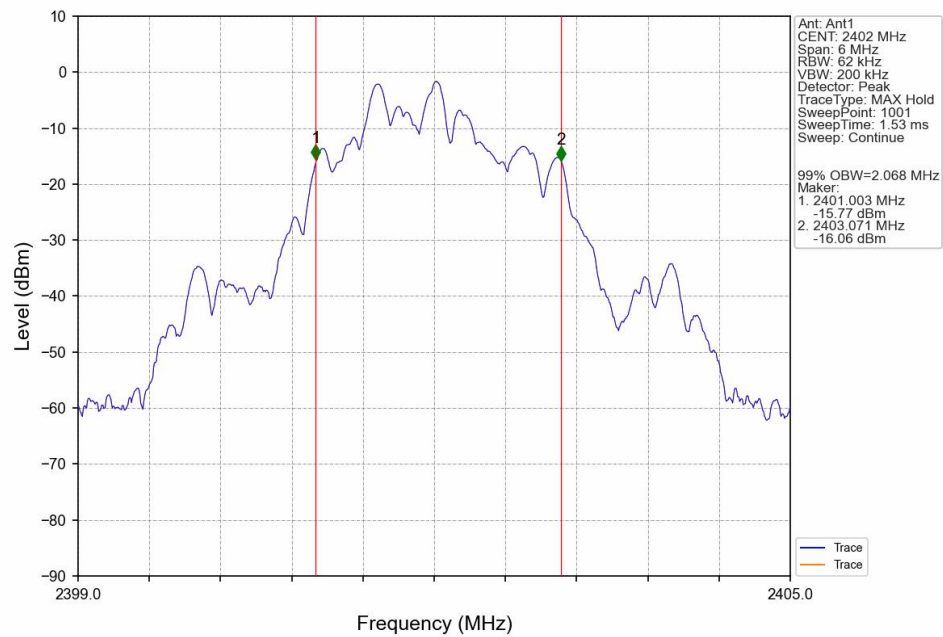




### 1M\_HCH\_2480MHz\_Ant1\_NTNV

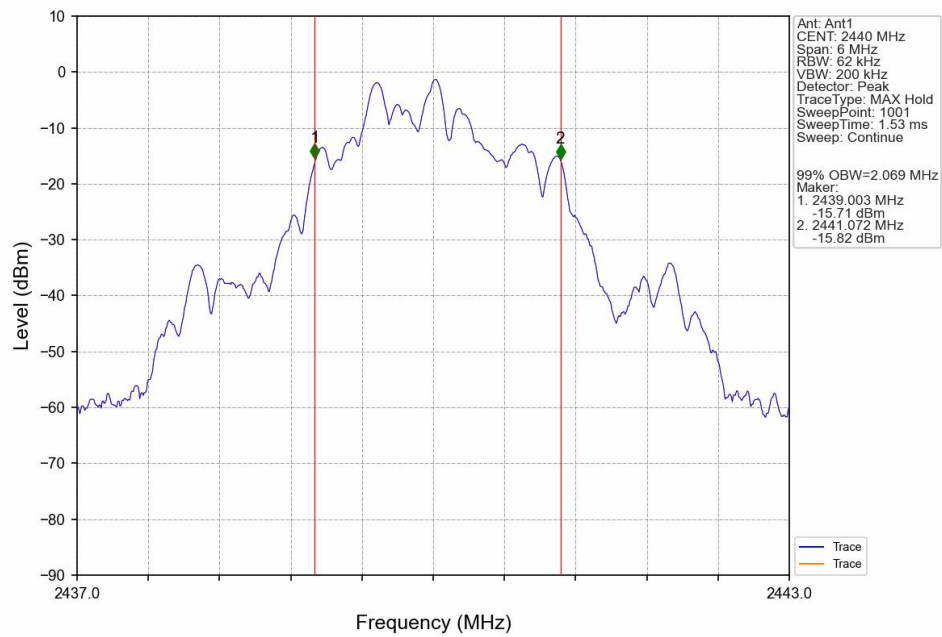


### 2M\_LCH\_2402MHz\_Ant1\_NTNV

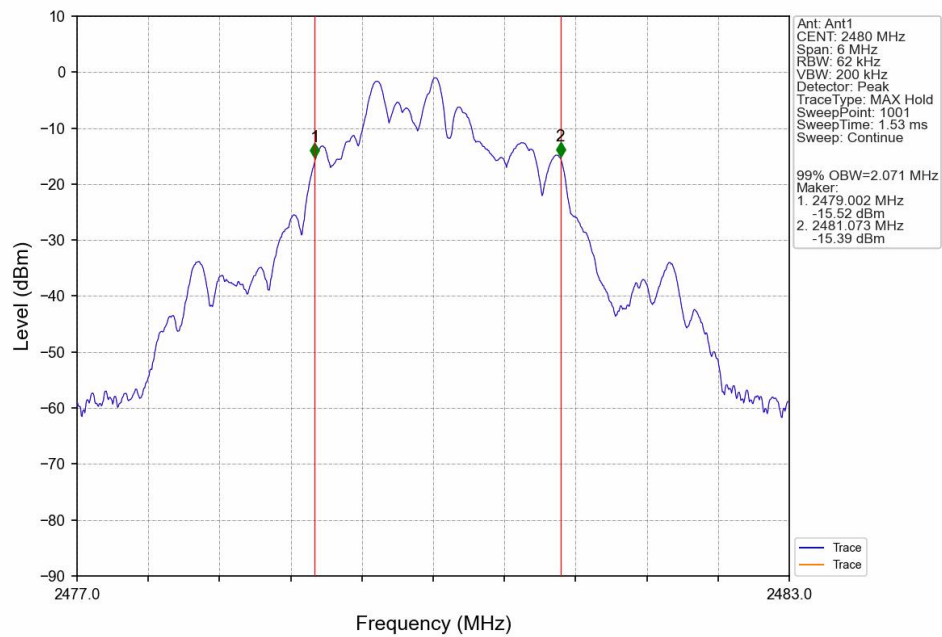




### 2M\_MCH\_2440MHz\_Ant1\_NTNV

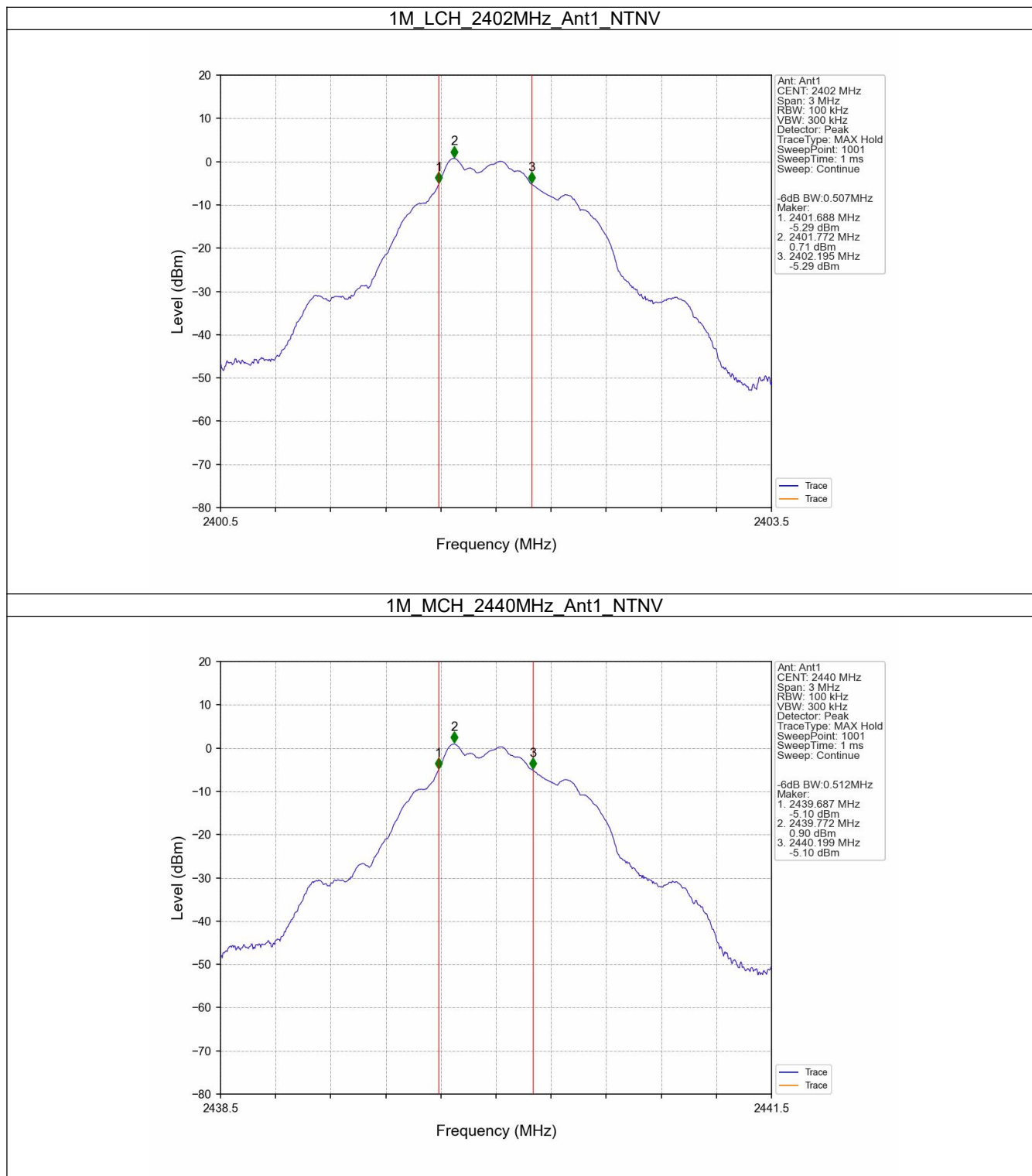


### 2M\_HCH\_2480MHz\_Ant1\_NTNV



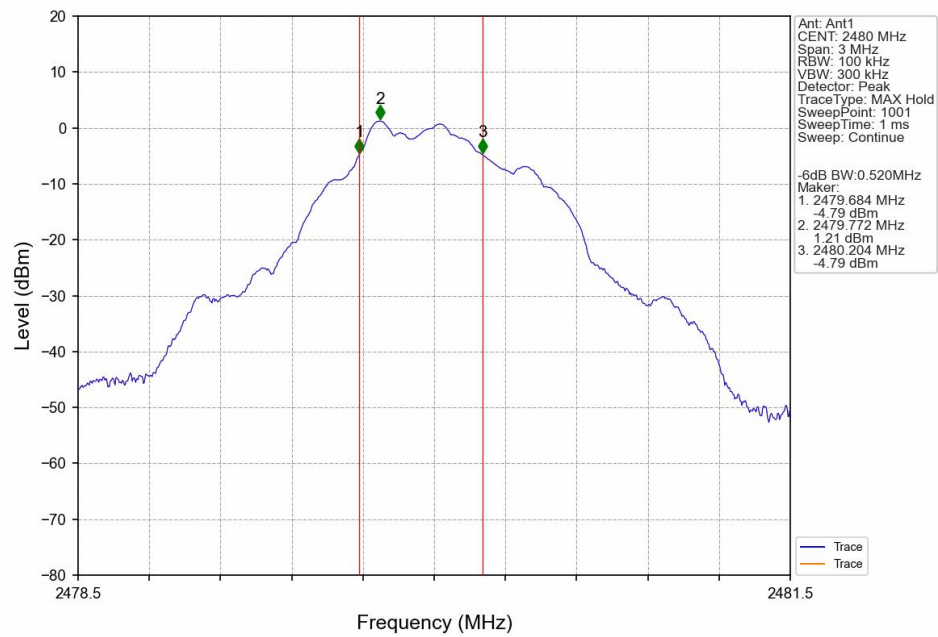


## 2.2.2 6dB BW

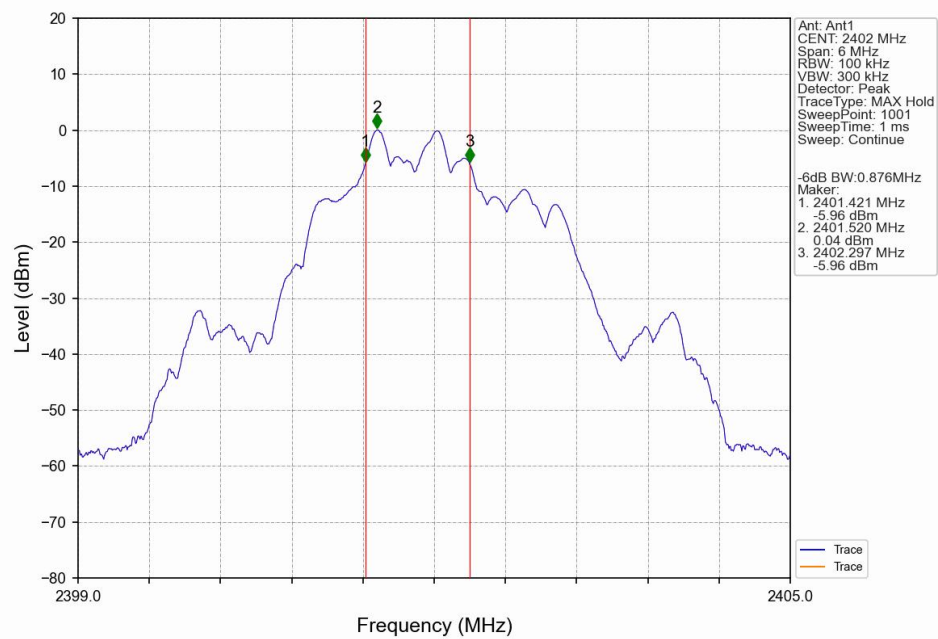




### 1M\_HCH\_2480MHz\_Ant1\_NTNV

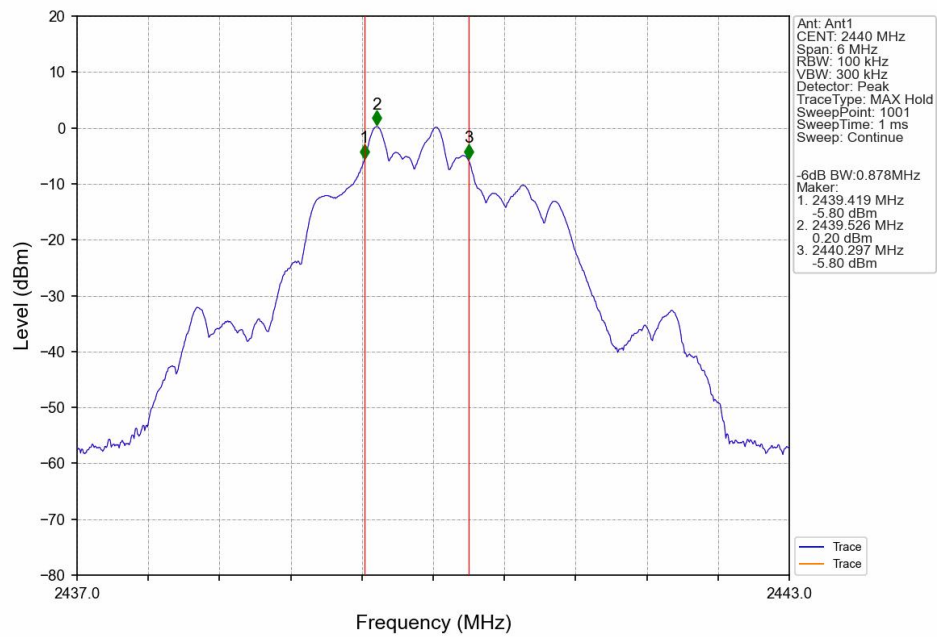


### 2M\_LCH\_2402MHz\_Ant1\_NTNV

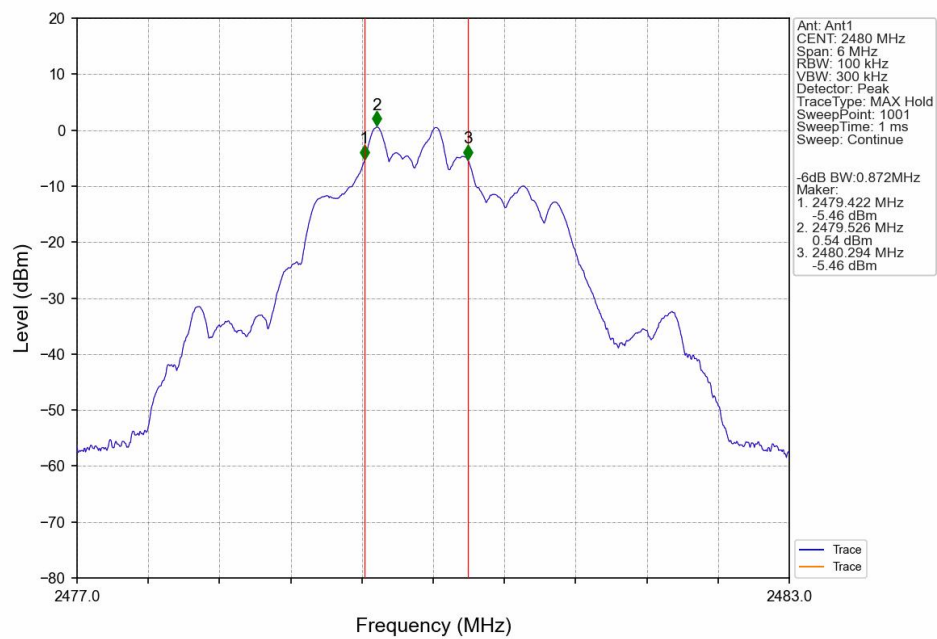




### 2M\_MCH\_2440MHz\_Ant1\_NTNV



### 2M\_HCH\_2480MHz\_Ant1\_NTNV





### 3. Maximum Conducted Output Power

#### 3.1 Test Result

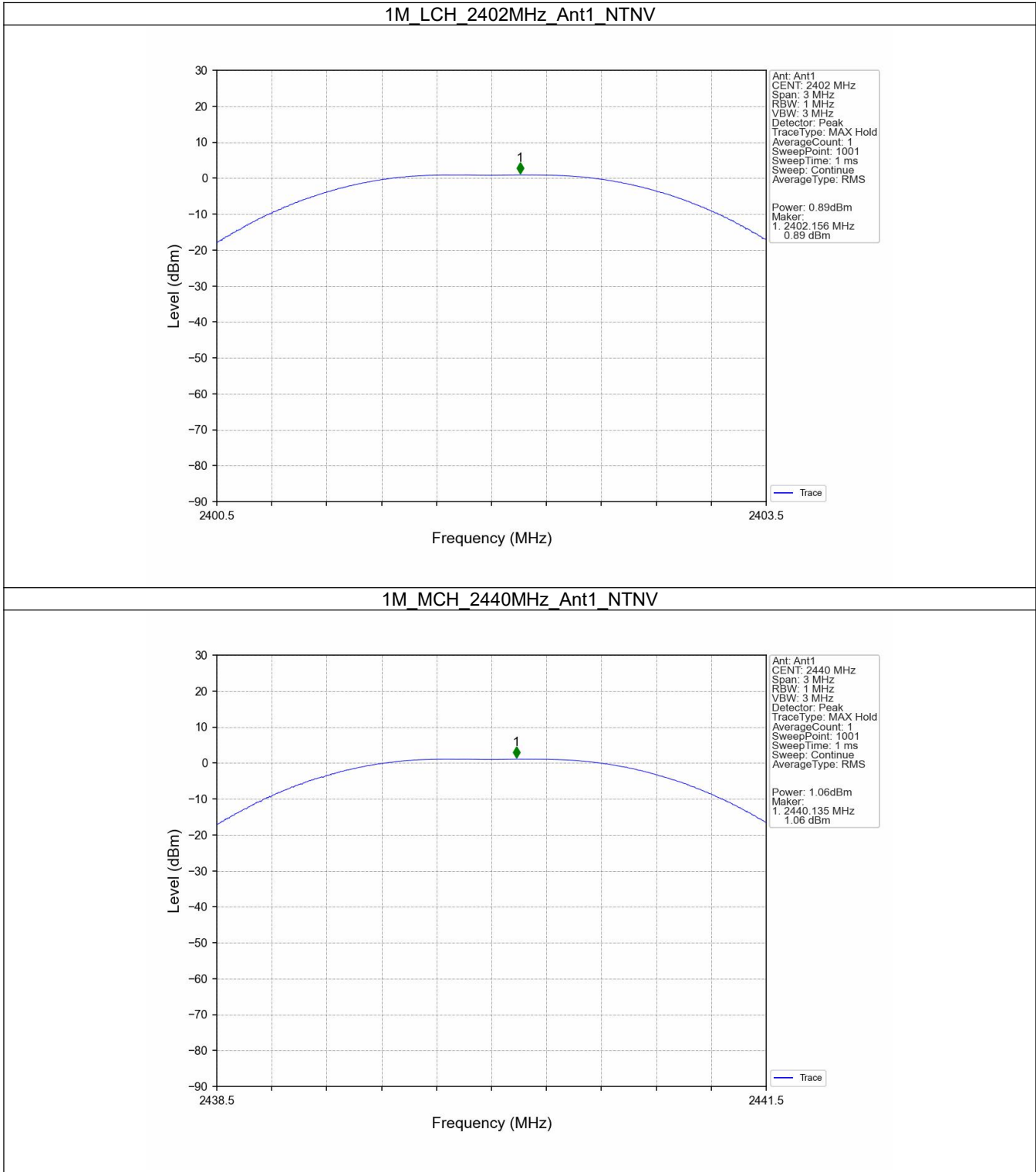
##### 3.1.1 Power

| Mode                                 | TX Type | Frequency (MHz) | Maximum Peak Conducted Output Power (dBm) |       | Verdict |
|--------------------------------------|---------|-----------------|-------------------------------------------|-------|---------|
|                                      |         |                 | ANT1                                      | Limit |         |
| 1M                                   | SISO    | 2402            | 0.89                                      | <=30  | Pass    |
|                                      |         | 2440            | 1.06                                      | <=30  | Pass    |
|                                      |         | 2480            | 1.38                                      | <=30  | Pass    |
| 2M                                   | SISO    | 2402            | 0.80                                      | <=30  | Pass    |
|                                      |         | 2440            | 0.99                                      | <=30  | Pass    |
|                                      |         | 2480            | 1.29                                      | <=30  | Pass    |
| Note1: Antenna Gain: Ant1: -0.58dBi: |         |                 |                                           |       |         |



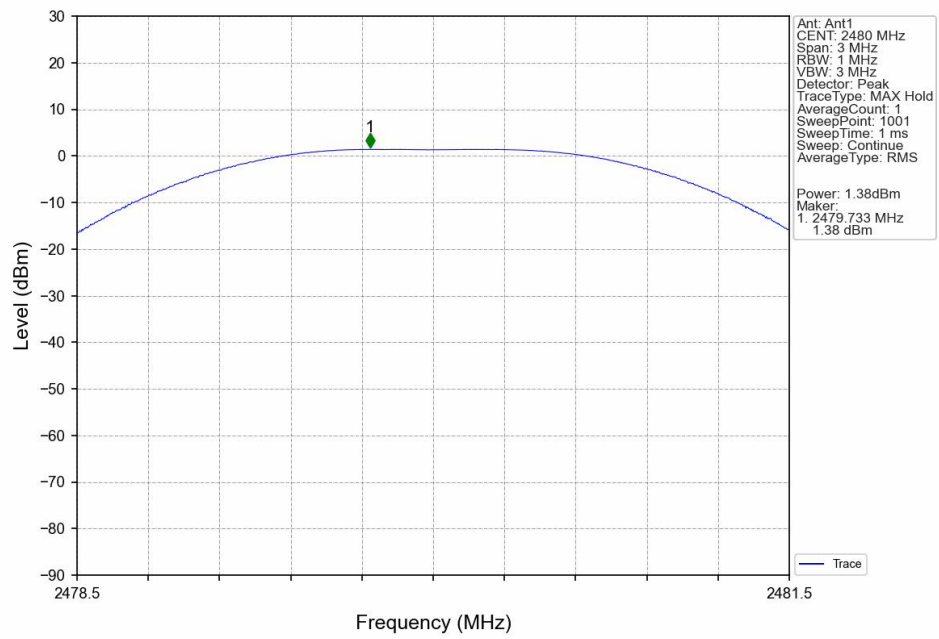
### 3.2 Test Graph

#### 3.2.1 Power

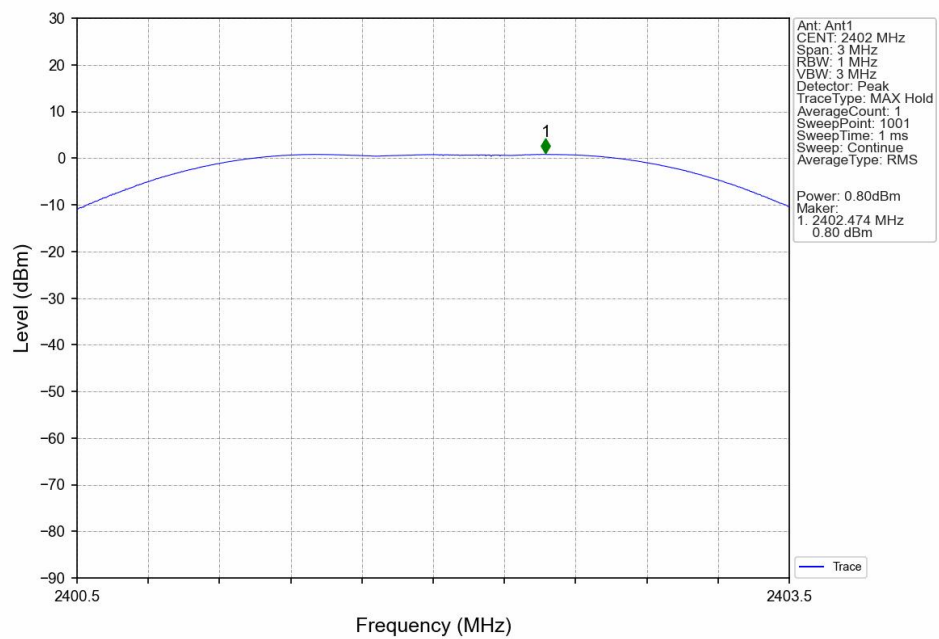




### 1M\_HCH\_2480MHz\_Ant1\_NTNV

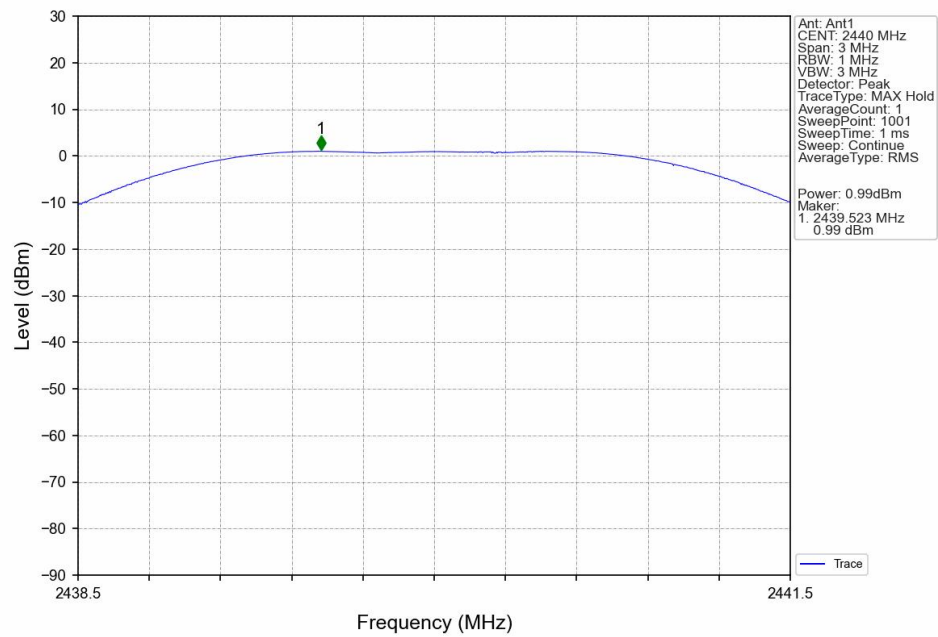


### 2M\_LCH\_2402MHz\_Ant1\_NTNV

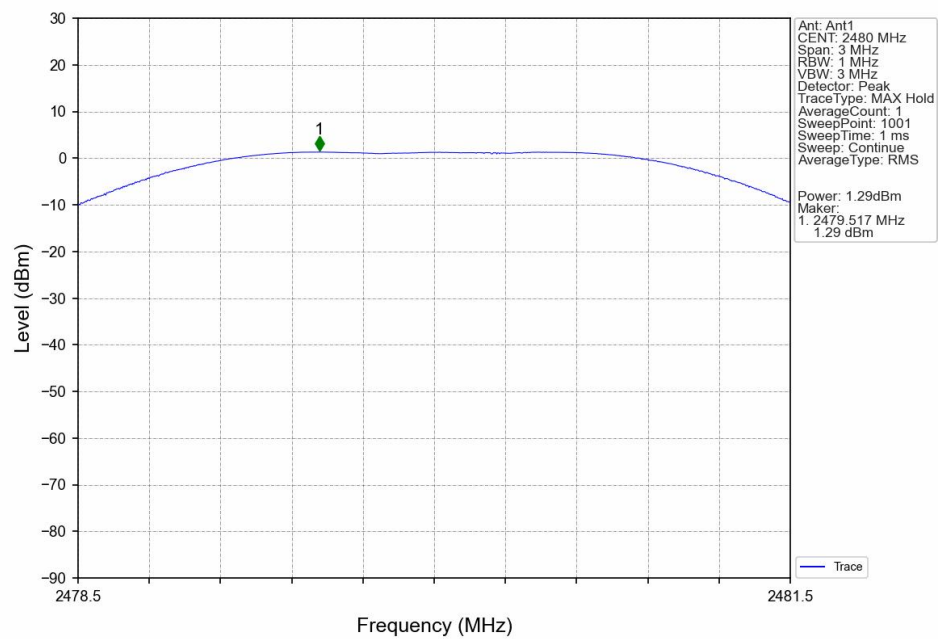




### 2M\_MCH\_2440MHz\_Ant1\_NTNV



### 2M\_HCH\_2480MHz\_Ant1\_NTNV





## 4. Maximum Power Spectral Density

### 4.1 Test Result

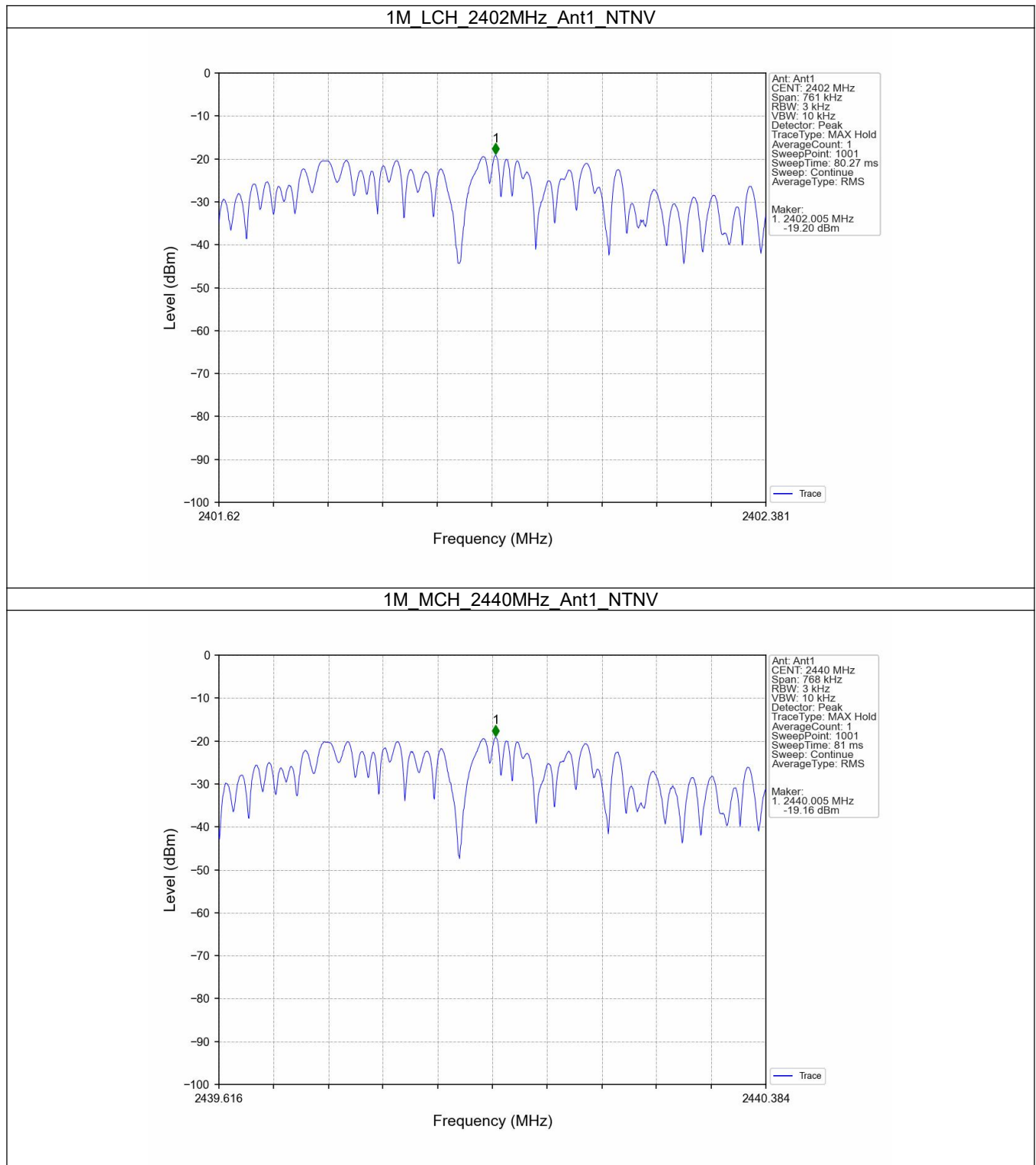
#### 4.1.1 PSD

| Mode                                 | TX Type | Frequency (MHz) | Maximum PSD (dBm/3kHz) |       | Verdict |
|--------------------------------------|---------|-----------------|------------------------|-------|---------|
|                                      |         |                 | ANT1                   | Limit |         |
| 1M                                   | SISO    | 2402            | -19.20                 | <=8   | Pass    |
|                                      |         | 2440            | -19.16                 | <=8   | Pass    |
|                                      |         | 2480            | -19.04                 | <=8   | Pass    |
| 2M                                   | SISO    | 2402            | -21.69                 | <=8   | Pass    |
|                                      |         | 2440            | -21.49                 | <=8   | Pass    |
|                                      |         | 2480            | -21.16                 | <=8   | Pass    |
| Note1: Antenna Gain: Ant1: -0.58dBi: |         |                 |                        |       |         |



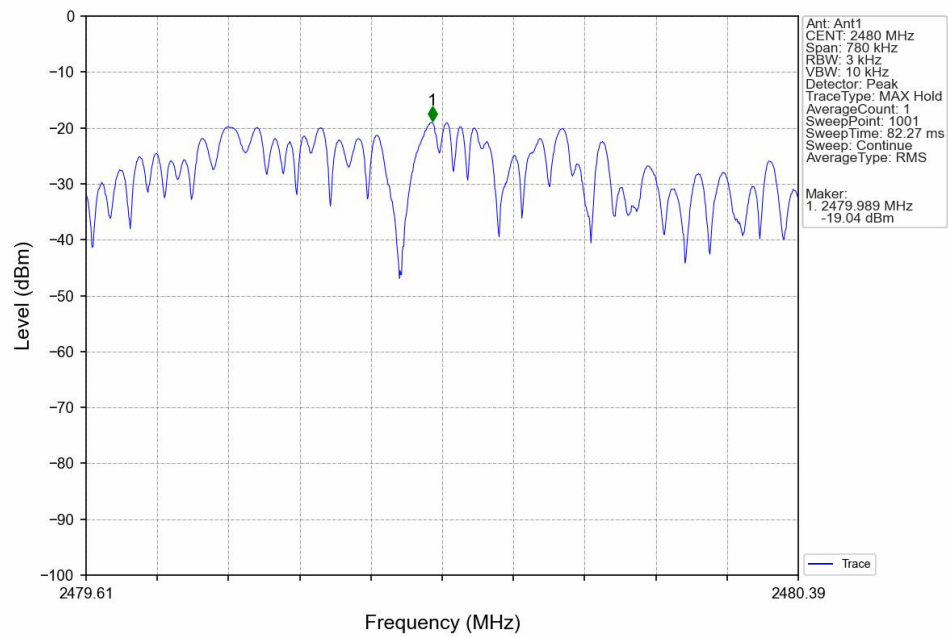
## 4.2 Test Graph

### 4.2.1 PSD

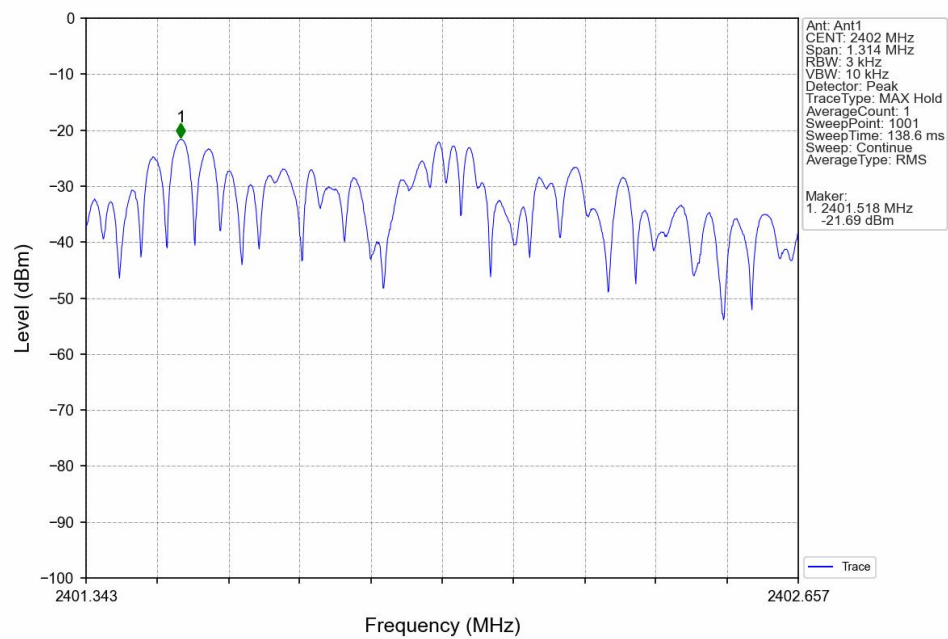




### 1M\_HCH\_2480MHz\_Ant1\_NTNV

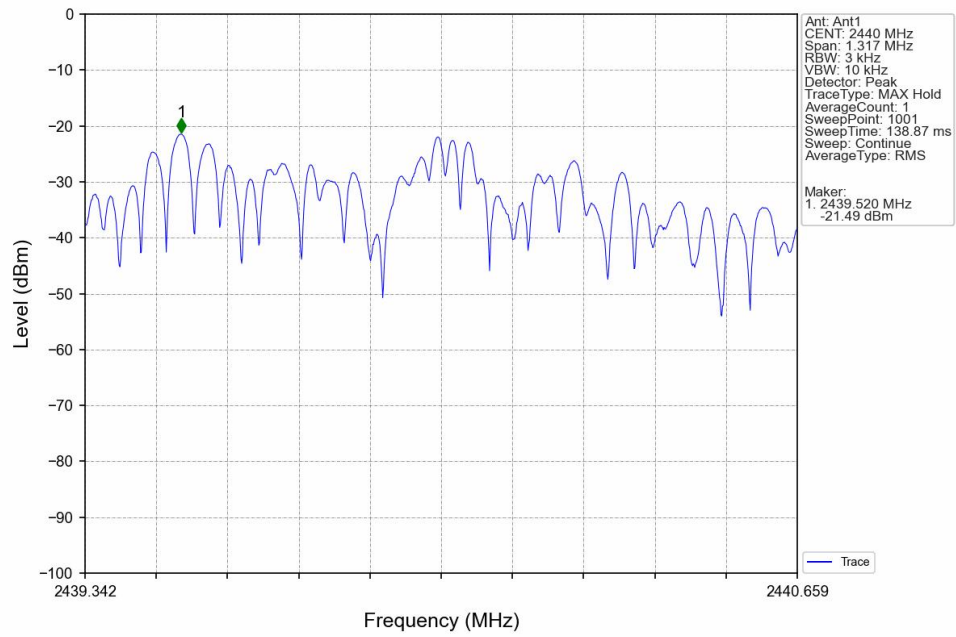


### 2M\_LCH\_2402MHz\_Ant1\_NTNV

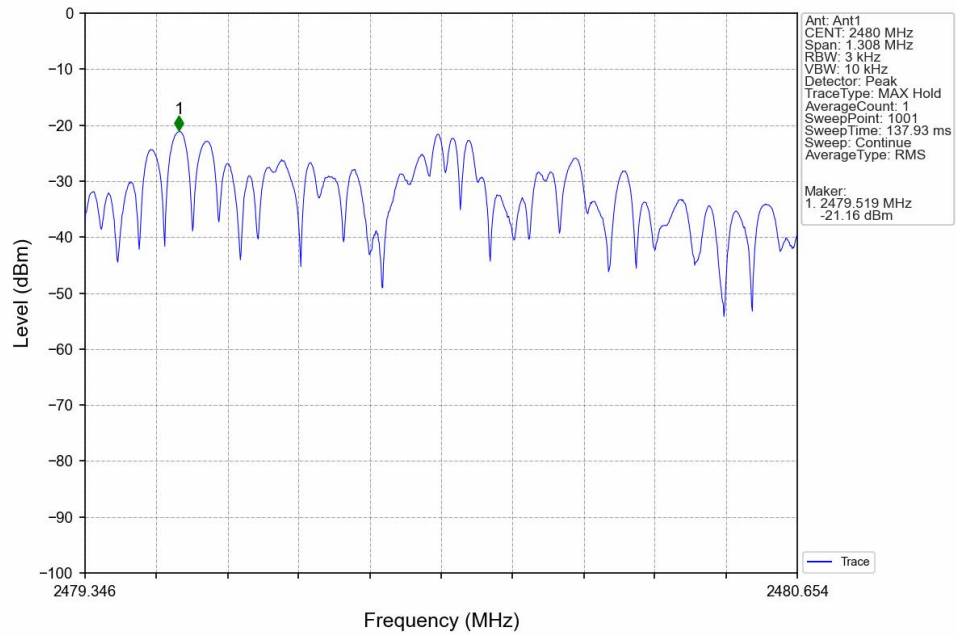




### 2M\_MCH\_2440MHz\_Ant1\_NTNV



### 2M\_HCH\_2480MHz\_Ant1\_NTNV





## 5. Unwanted Emissions In Non-restricted Frequency Bands

### 5.1 Test Result

#### 5.1.1 Ref

| Mode | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) |
|------|---------|-----------------|-----|--------------------------|
| 1M   | SISO    | 2402            | 1   | 0.72                     |
|      |         | 2440            | 1   | 0.89                     |
|      |         | 2480            | 1   | 0.86                     |
| 2M   | SISO    | 2402            | 1   | -0.04                    |
|      |         | 2440            | 1   | 0.18                     |
|      |         | 2480            | 1   | 0.50                     |

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

#### 5.1.2 CSE

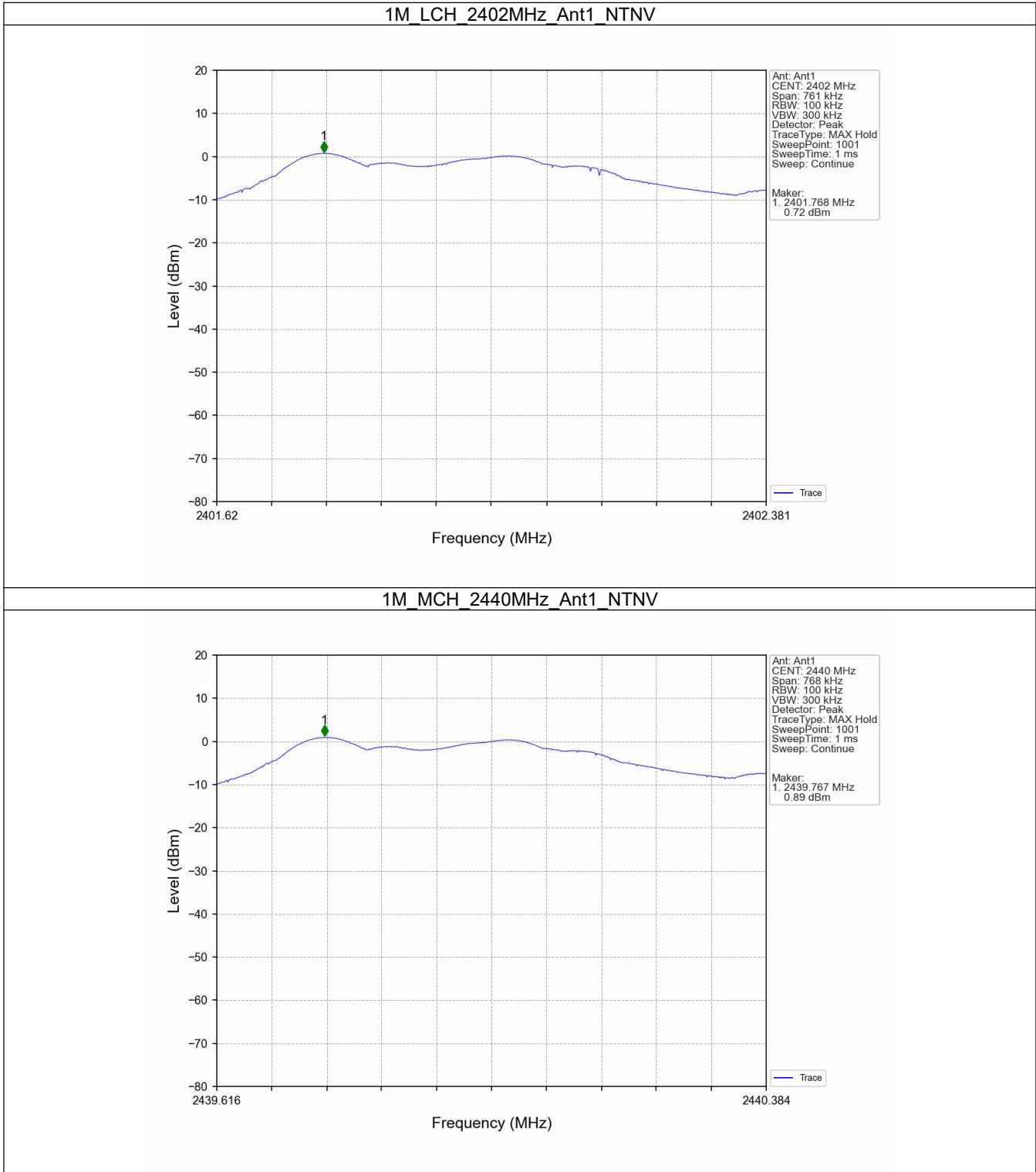
| Mode | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|------|---------|-----------------|-----|--------------------------|-------------|---------|
| 1M   | SISO    | 2402            | 1   | 0.72                     | -19.28      | Pass    |
|      |         | 2440            | 1   | 0.89                     | -19.11      | Pass    |
|      |         | 2480            | 1   | 0.86                     | -19.14      | Pass    |
| 2M   | SISO    | 2402            | 1   | -0.04                    | -20.04      | Pass    |
|      |         | 2440            | 1   | 0.18                     | -19.82      | Pass    |
|      |         | 2480            | 1   | 0.50                     | -19.50      | Pass    |

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.



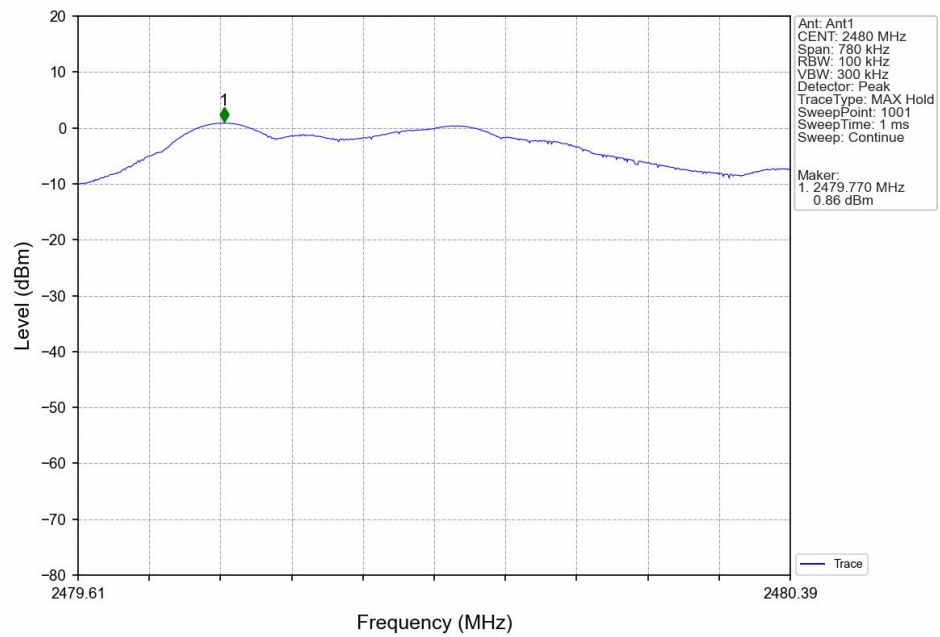
## 5.2 Test Graph

### 5.2.1 Ref

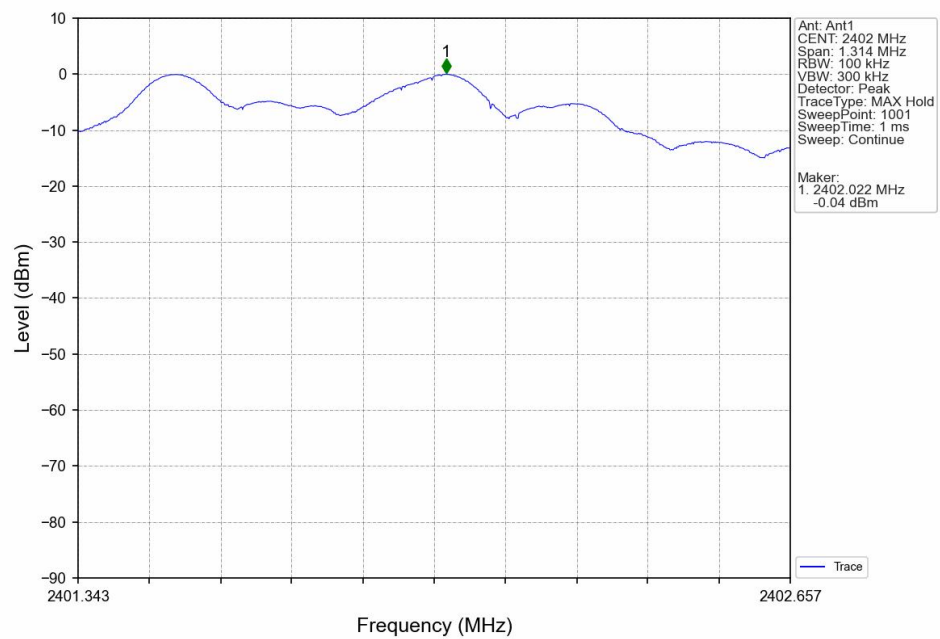




### 1M\_HCH\_2480MHz\_Ant1\_NTNV

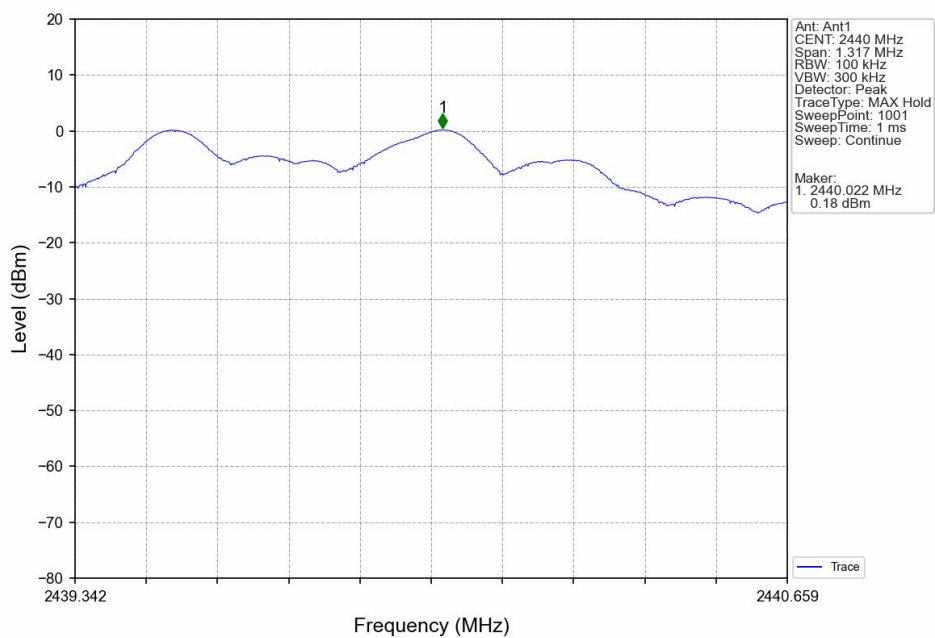


### 2M\_LCH\_2402MHz\_Ant1\_NTNV

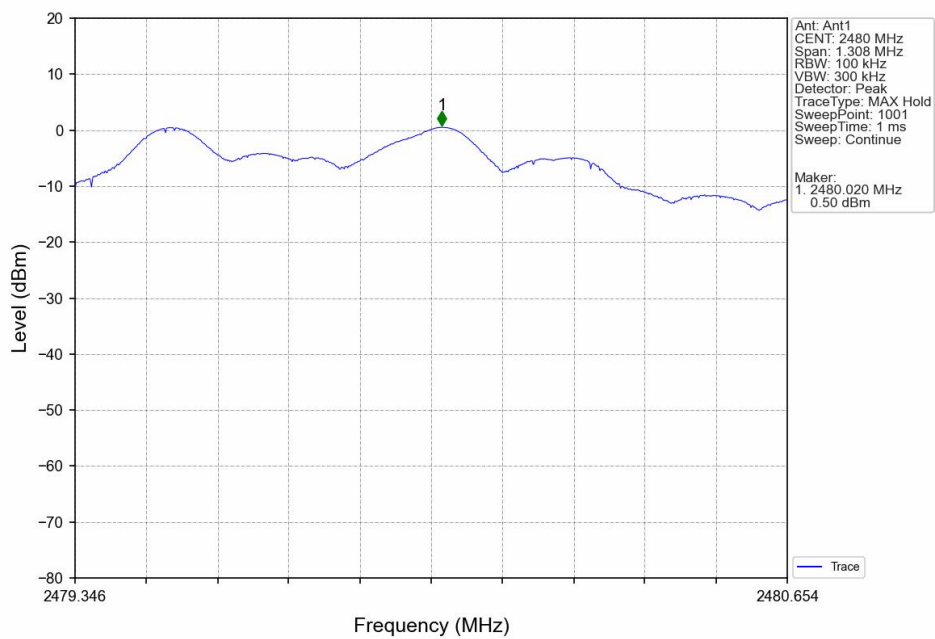




### 2M\_MCH\_2440MHz\_Ant1\_NTNV

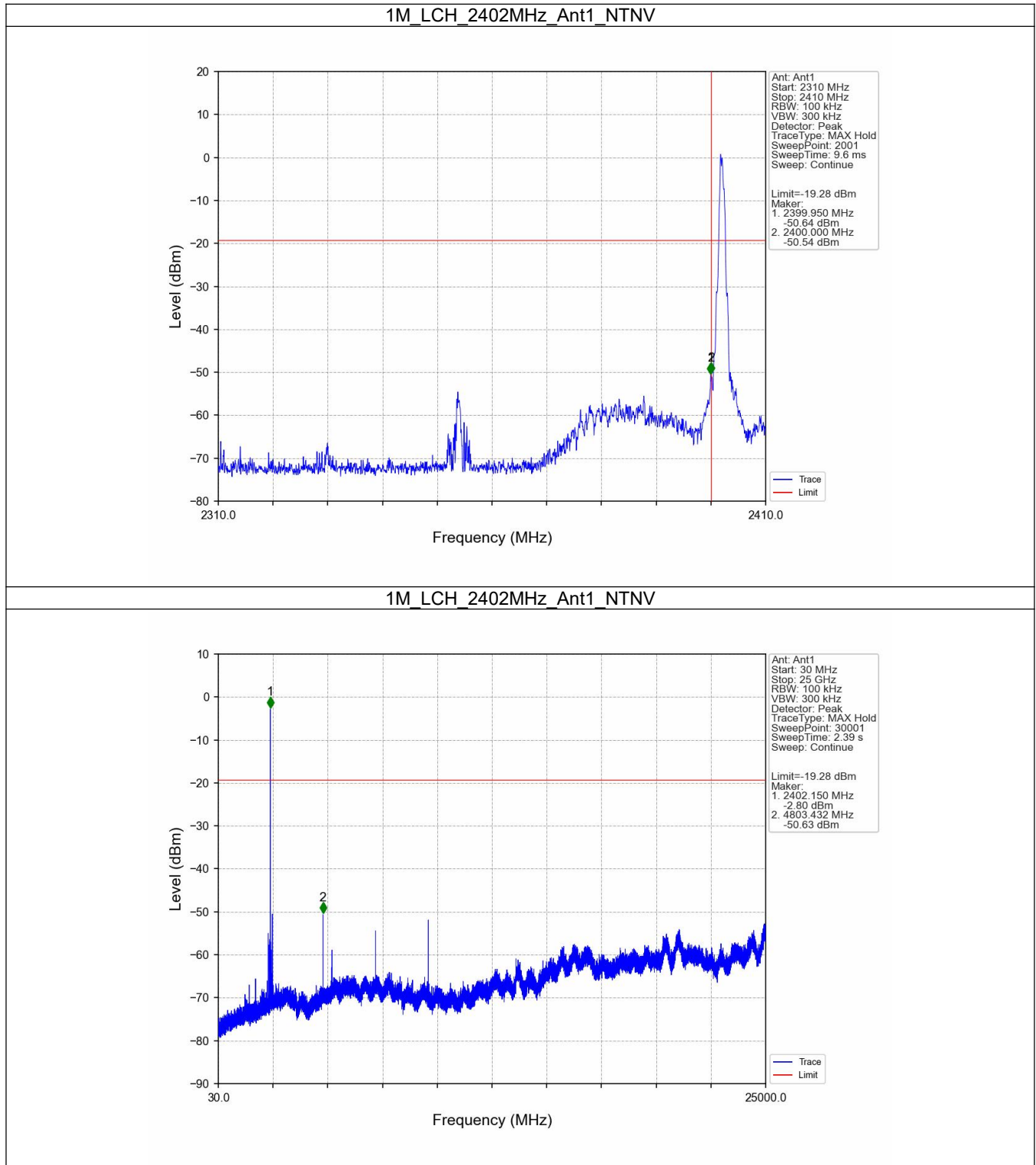


### 2M\_HCH\_2480MHz\_Ant1\_NTNV



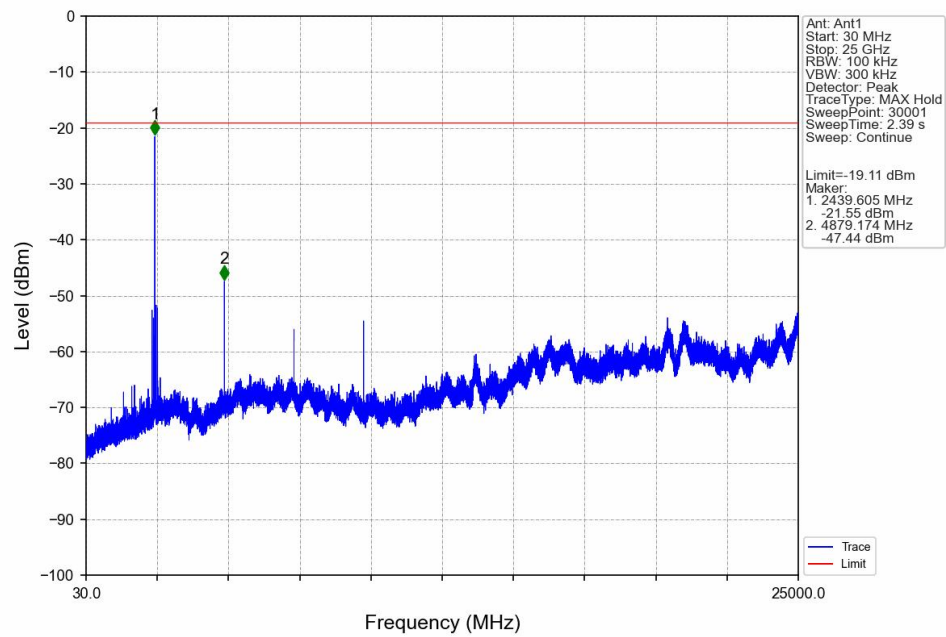


## 5.2.2 CSE

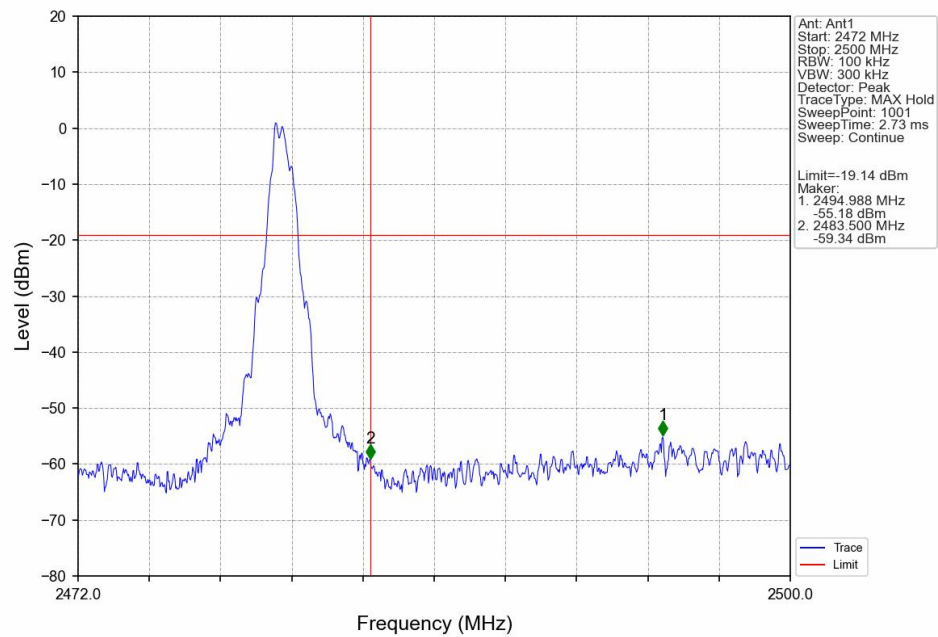




1M\_MCH\_2440MHz\_Ant1\_NTNV

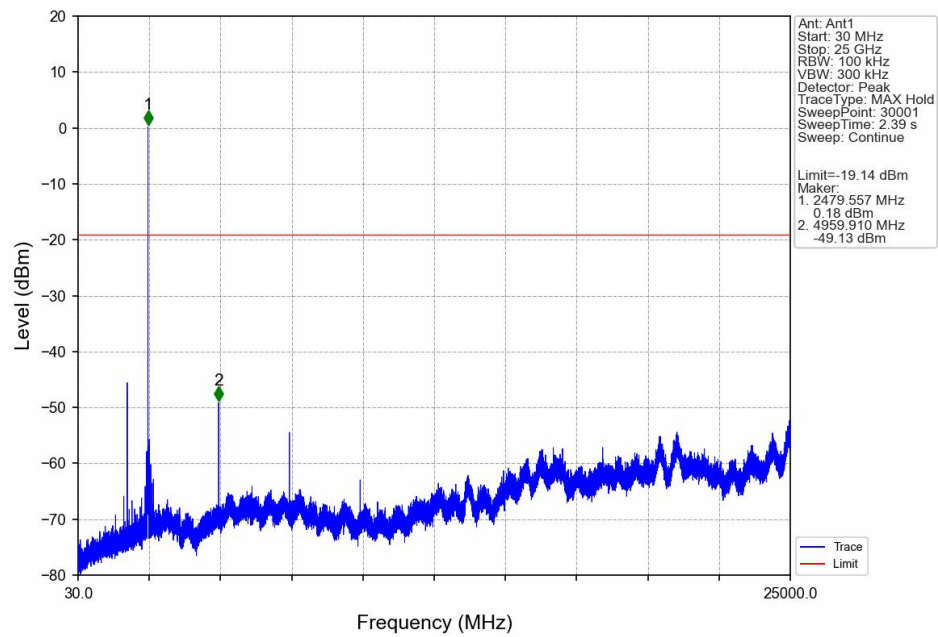


1M\_HCH\_2480MHz\_Ant1\_NTNV

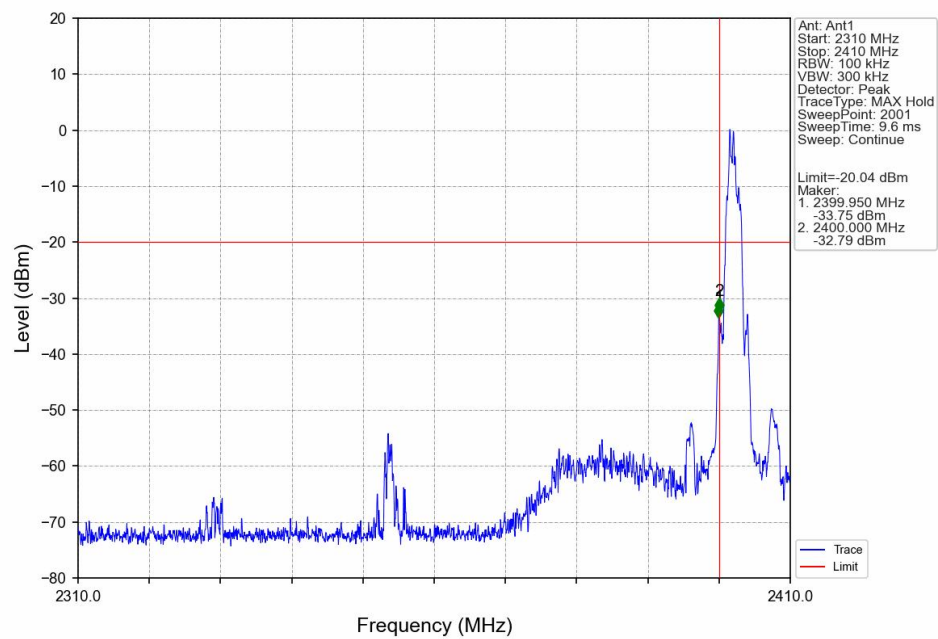




### 1M\_HCH\_2480MHz\_Ant1\_NTNV

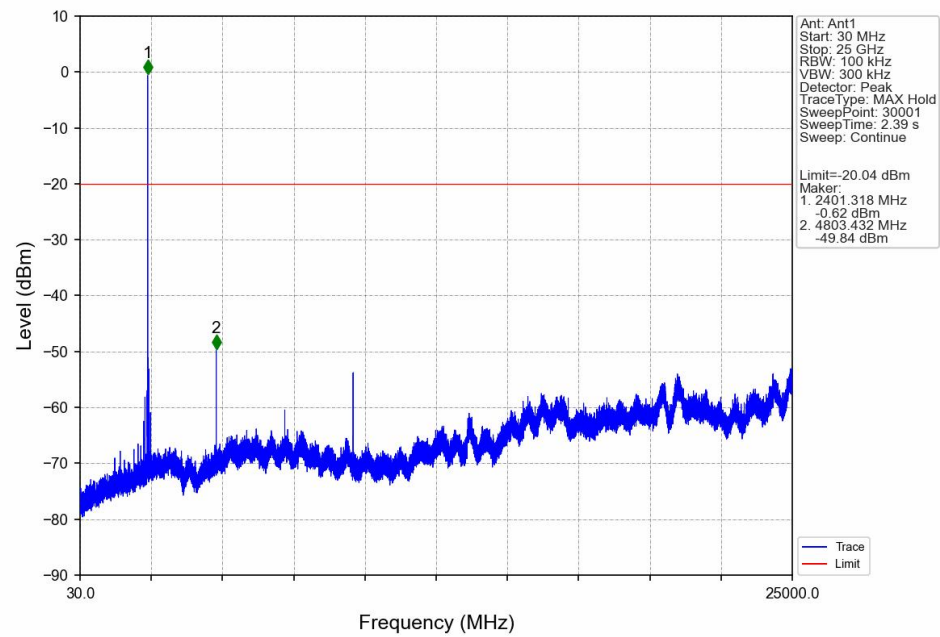


### 2M\_LCH\_2402MHz\_Ant1\_NTNV

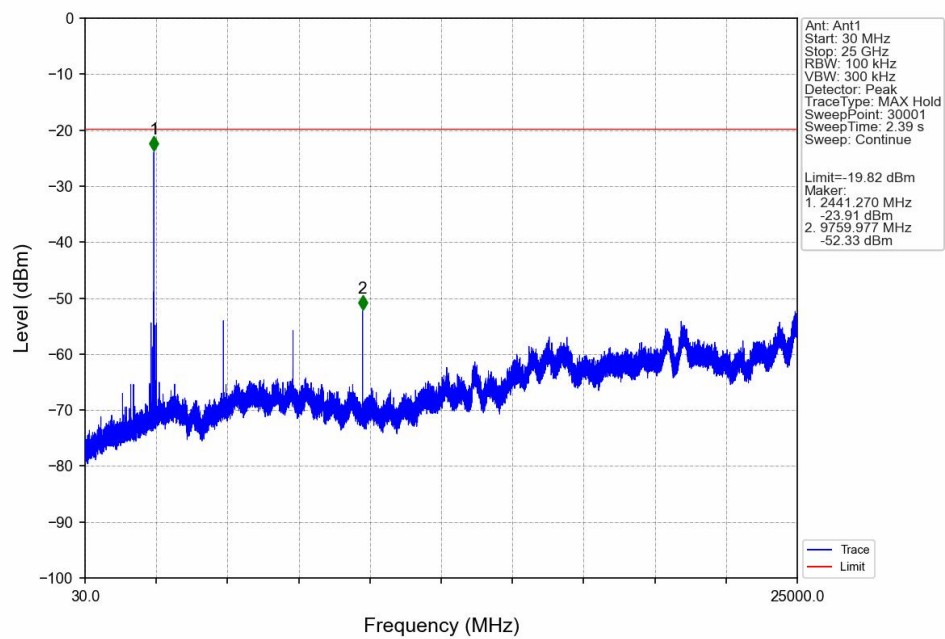




2M\_LCH\_2402MHz\_Ant1\_NTNV

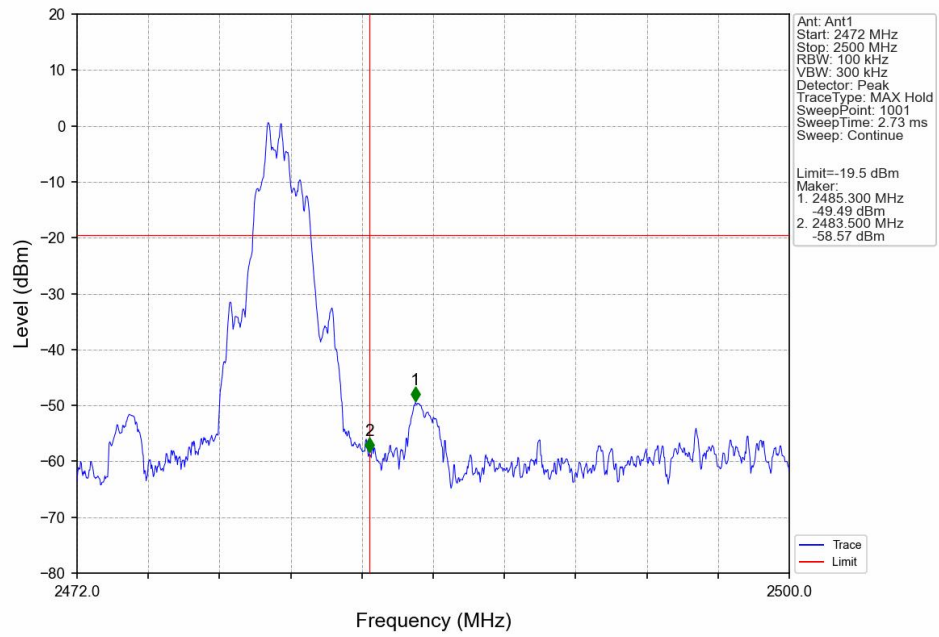


2M\_MCH\_2440MHz\_Ant1\_NTNV





2M\_HCH\_2480MHz\_Ant1\_NTNV



2M\_HCH\_2480MHz\_Ant1\_NTNV

