

## **Appendix RF Test Data for BLE**

**Company:** : **Shenzhen Envision Technology Innovation Co.,  
Ltd.**

**EUT** : **Massager**

**FCC ID:** : **2A9F7-LEINUO-APP**

**Model Number** : **Leinuo-App**

**Report No.** : **HTT202507551F01**

**Reviewed By** : **Heber He**

## 1. Duty Cycle

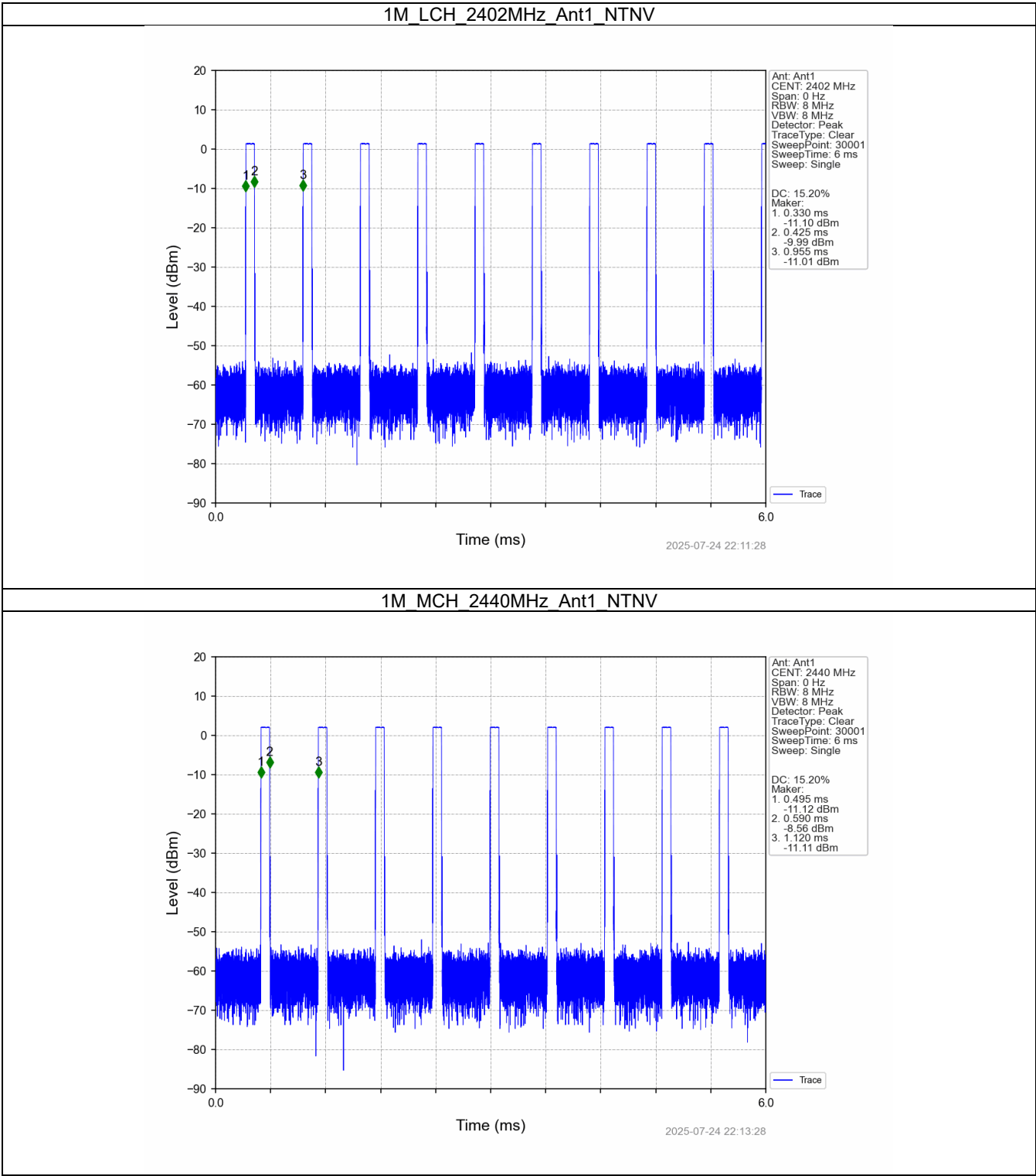
### 1.1 Test Result

#### 1.1.1 Ant1

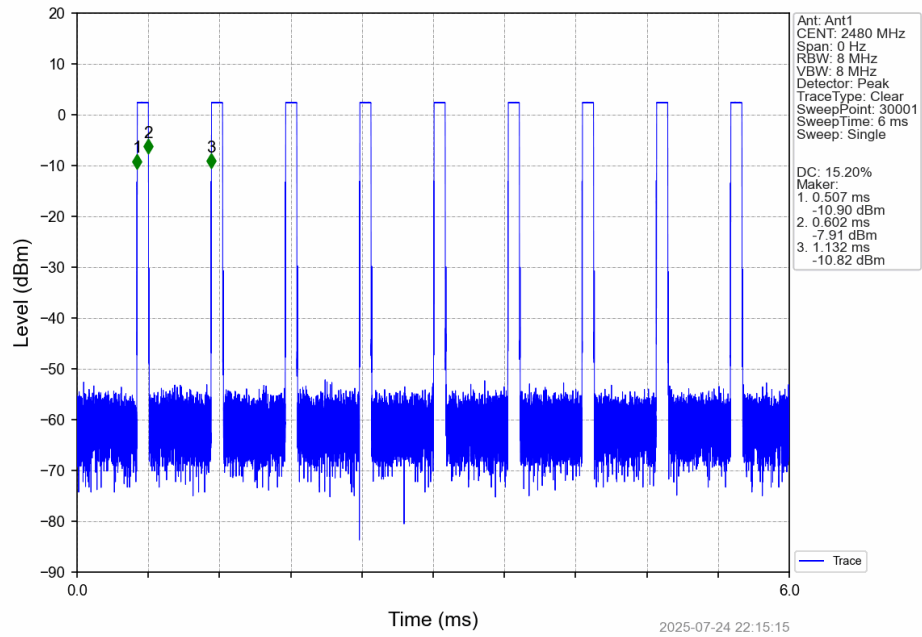
| Ant1 |         |                 |           |             |                |                                   |                       |
|------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 1M   | SISO    | 2402            | 0.095     | 0.625       | 15.20          | 8.18                              | 0.00                  |
|      |         | 2440            | 0.095     | 0.625       | 15.20          | 8.18                              | 0.00                  |
|      |         | 2480            | 0.095     | 0.625       | 15.20          | 8.18                              | 0.00                  |
| 2M   | SISO    | 2402            | 0.063     | 0.625       | 10.08          | 9.97                              | 0.00                  |
|      |         | 2440            | 0.063     | 0.625       | 10.08          | 9.97                              | 0.00                  |
|      |         | 2480            | 0.063     | 0.625       | 10.08          | 9.97                              | 0.03                  |

# 1.2 Test Graph

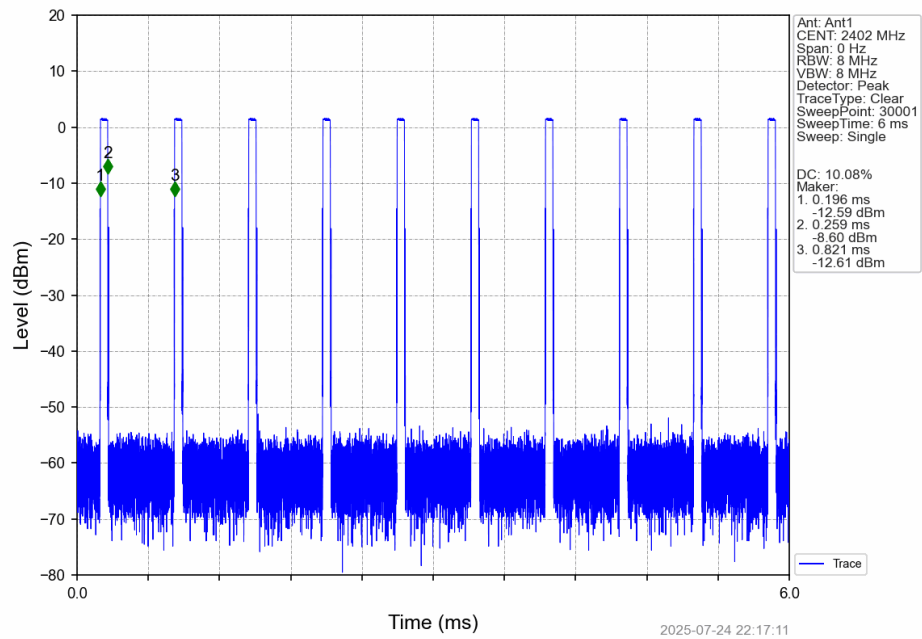
## 1.2.1 Ant1



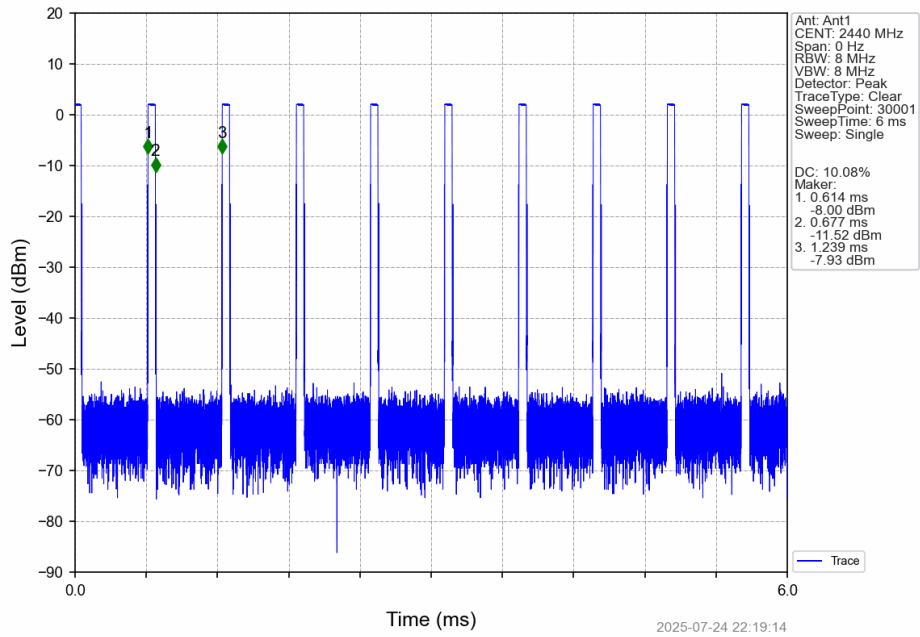
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



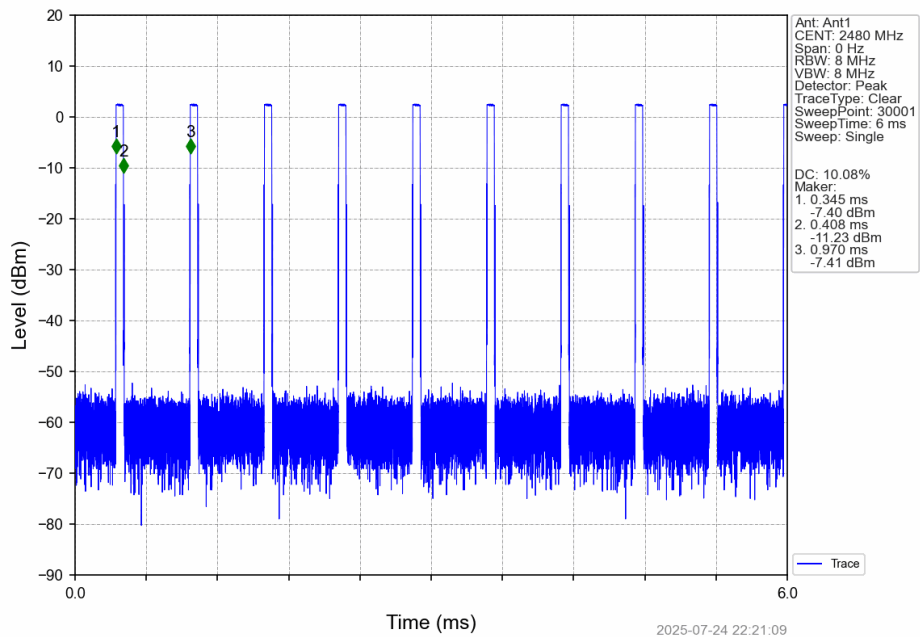
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



# 2M\_MCH\_2440MHz\_Ant1\_NTNV



# 2M\_HCH\_2480MHz\_Ant1\_NTNV



## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

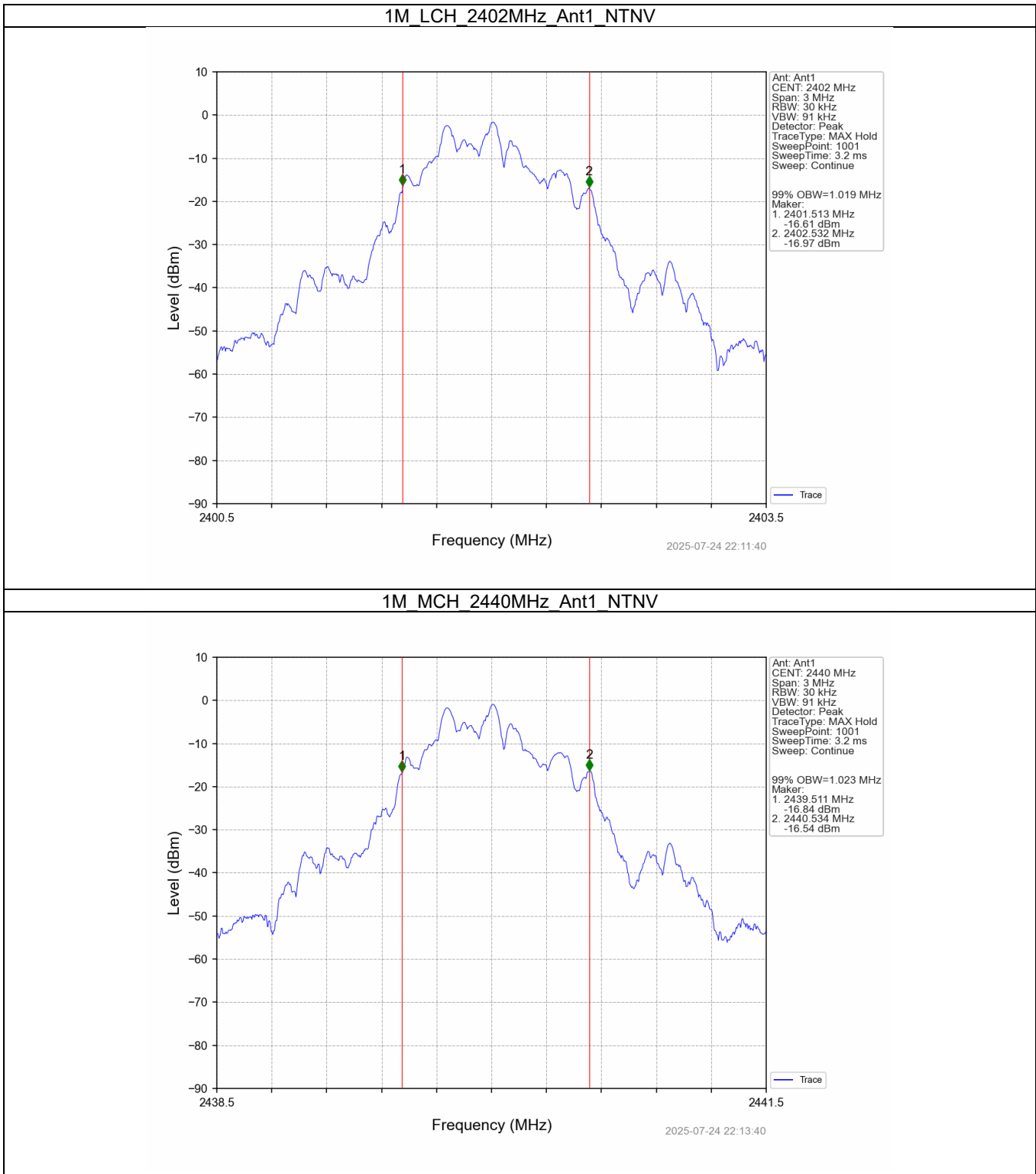
| Mode | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------|---------|-----------------|-----|------------------------------|-------|---------|
|      |         |                 |     | Result                       | Limit |         |
| 1M   | SISO    | 2402            | 1   | 1.019                        | /     | Pass    |
|      |         | 2440            | 1   | 1.023                        | /     | Pass    |
|      |         | 2480            | 1   | 1.022                        | /     | Pass    |
| 2M   | SISO    | 2402            | 1   | 2.051                        | /     | Pass    |
|      |         | 2440            | 1   | 2.053                        | /     | Pass    |
|      |         | 2480            | 1   | 2.054                        | /     | Pass    |

#### 2.1.2 6dB BW

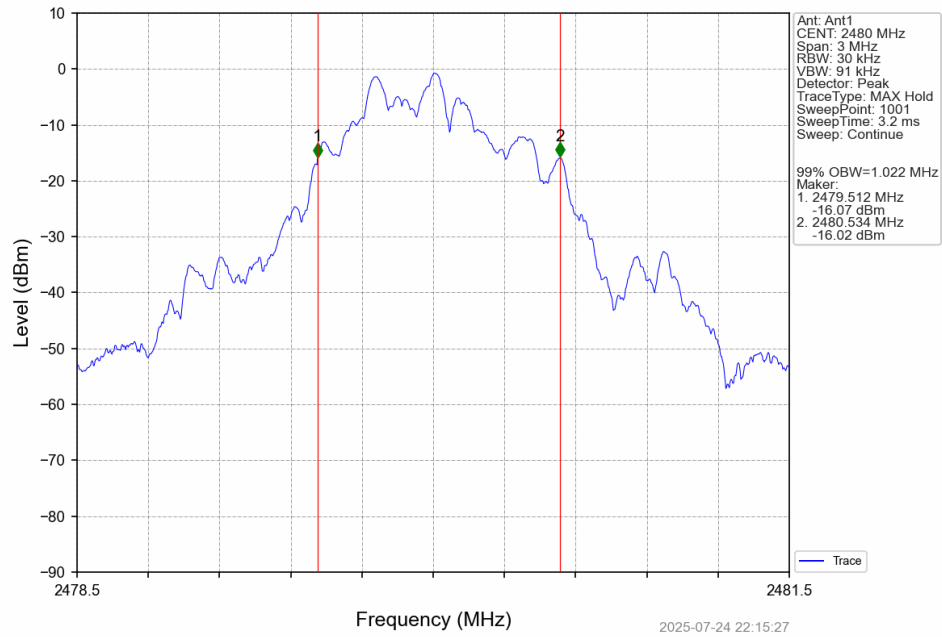
| Mode | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|------|---------|-----------------|-----|---------------------|------------|---------|
|      |         |                 |     | Result              | Limit      |         |
| 1M   | SISO    | 2402            | 1   | 0.512               | $\geq 0.5$ | Pass    |
|      |         | 2440            | 1   | 0.506               | $\geq 0.5$ | Pass    |
|      |         | 2480            | 1   | 0.501               | $\geq 0.5$ | Pass    |
| 2M   | SISO    | 2402            | 1   | 0.857               | $\geq 0.5$ | Pass    |
|      |         | 2440            | 1   | 0.855               | $\geq 0.5$ | Pass    |
|      |         | 2480            | 1   | 0.845               | $\geq 0.5$ | Pass    |

# 2.2 Test Graph

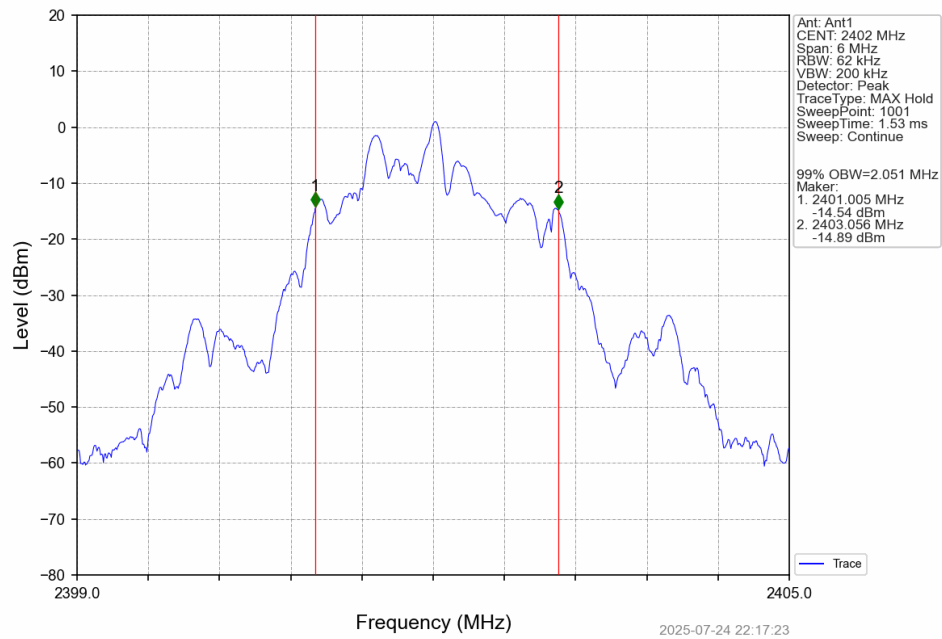
## 2.2.1 OBW



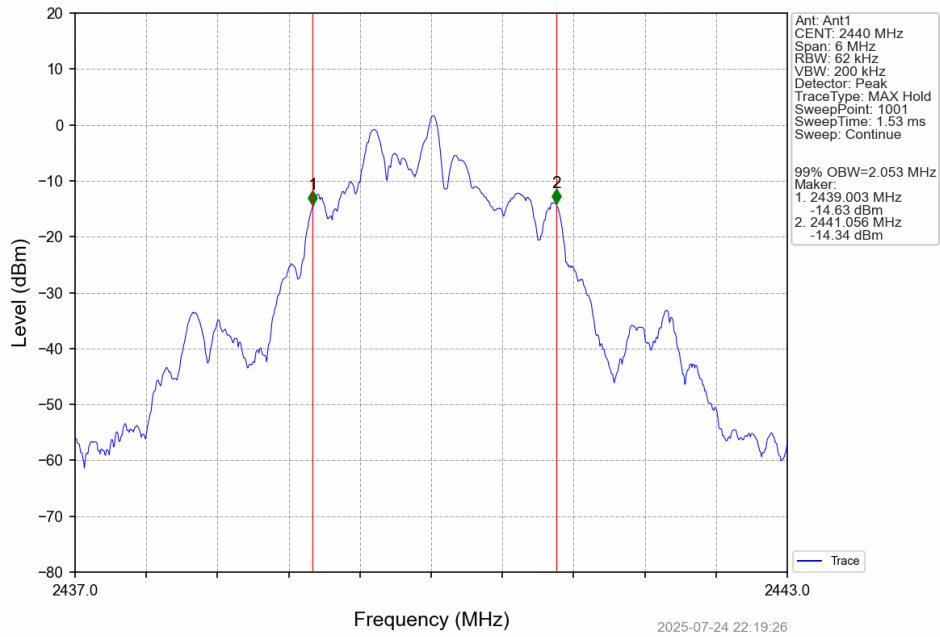
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



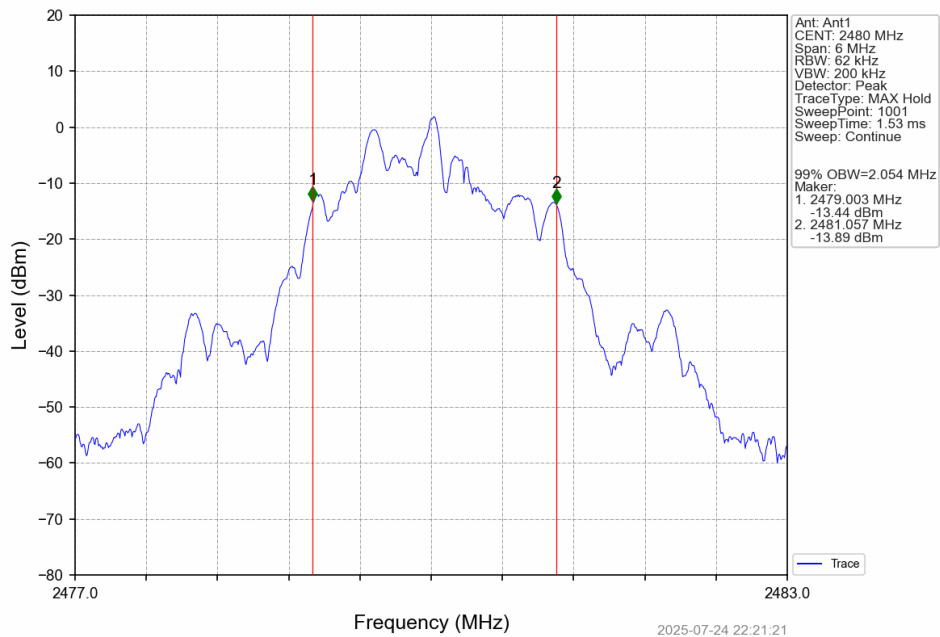
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



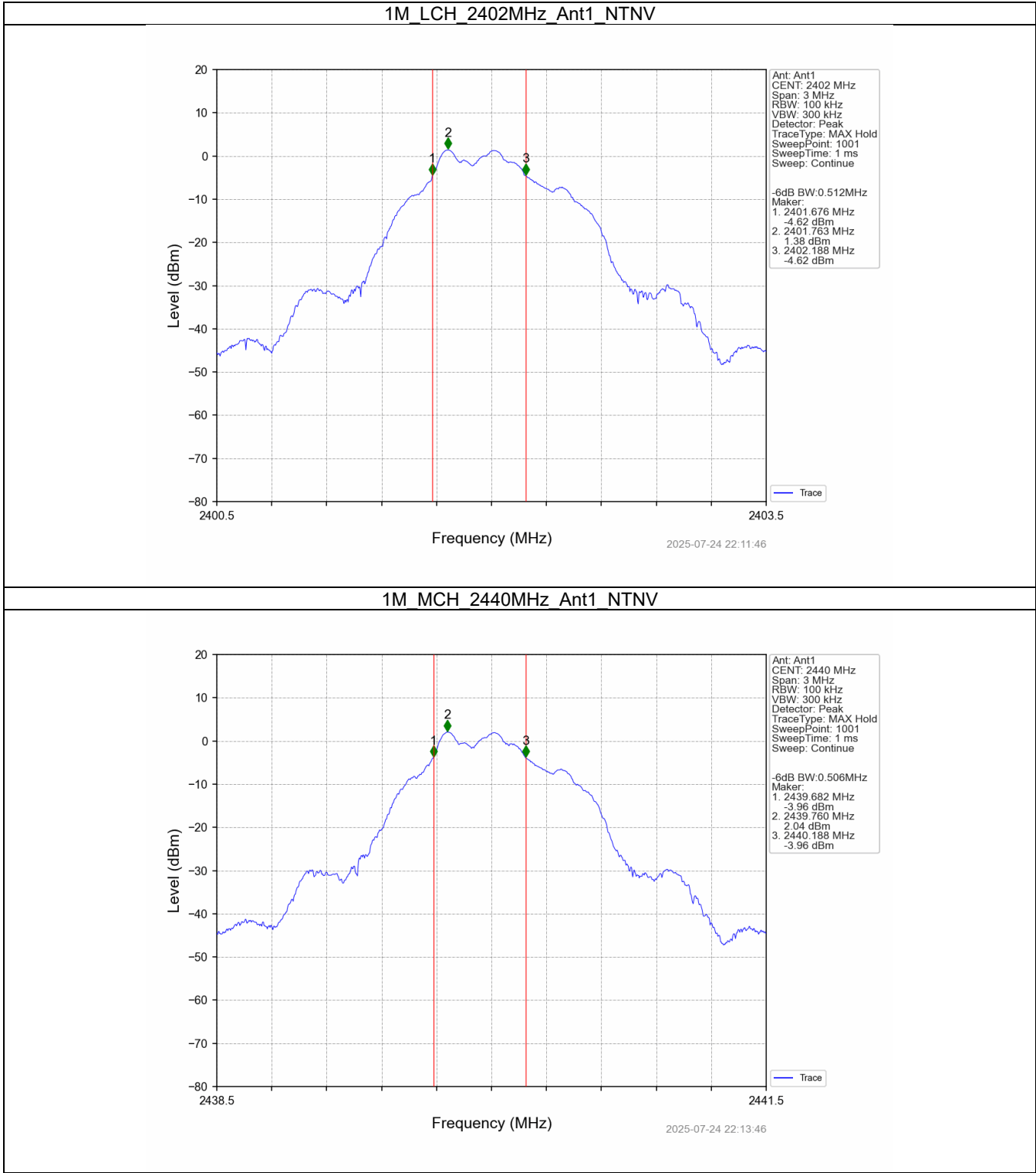
### 2M\_MCH\_2440MHz\_Ant1\_NTNV



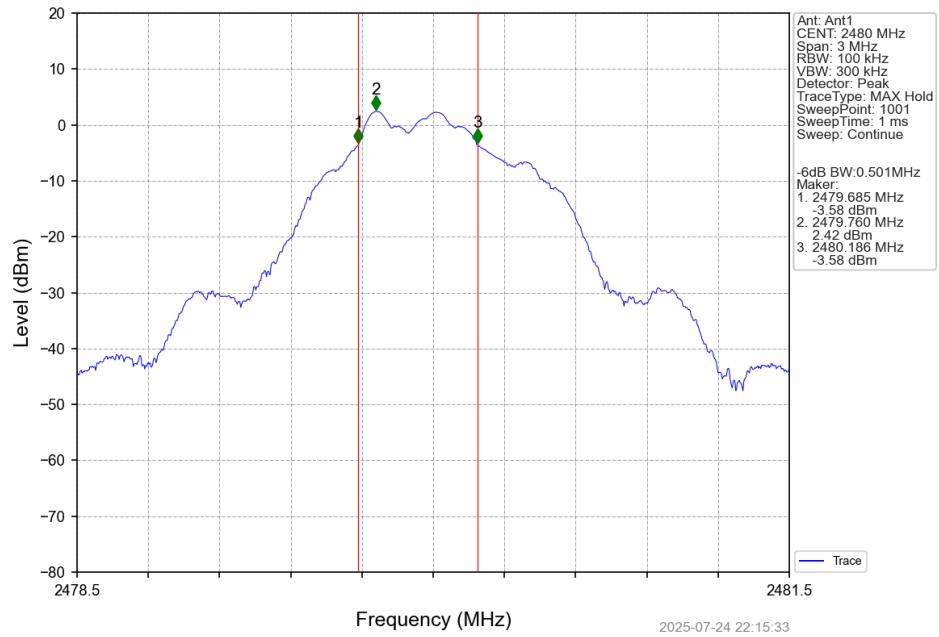
### 2M\_HCH\_2480MHz\_Ant1\_NTNV



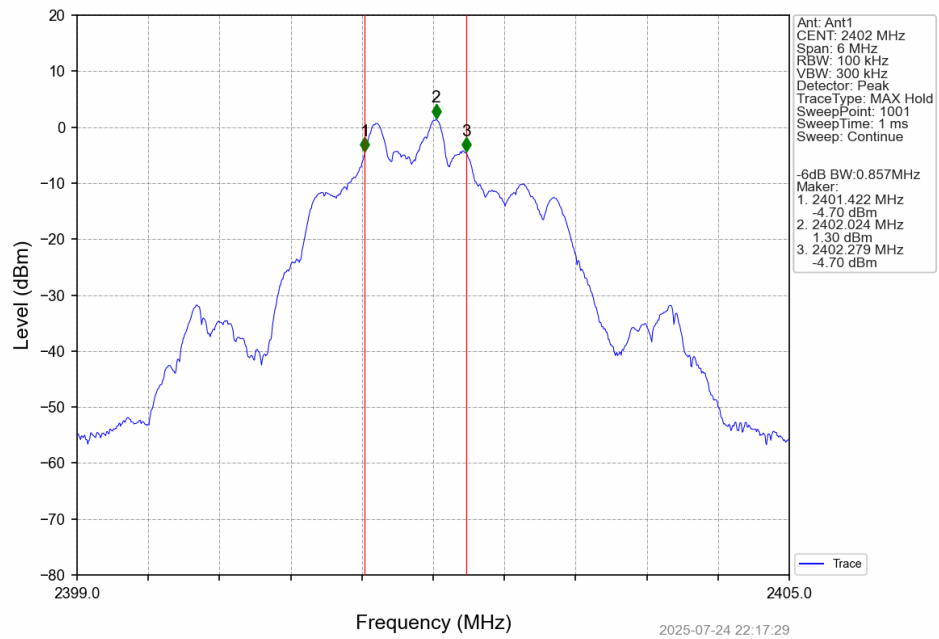
2.2.2 6dB BW



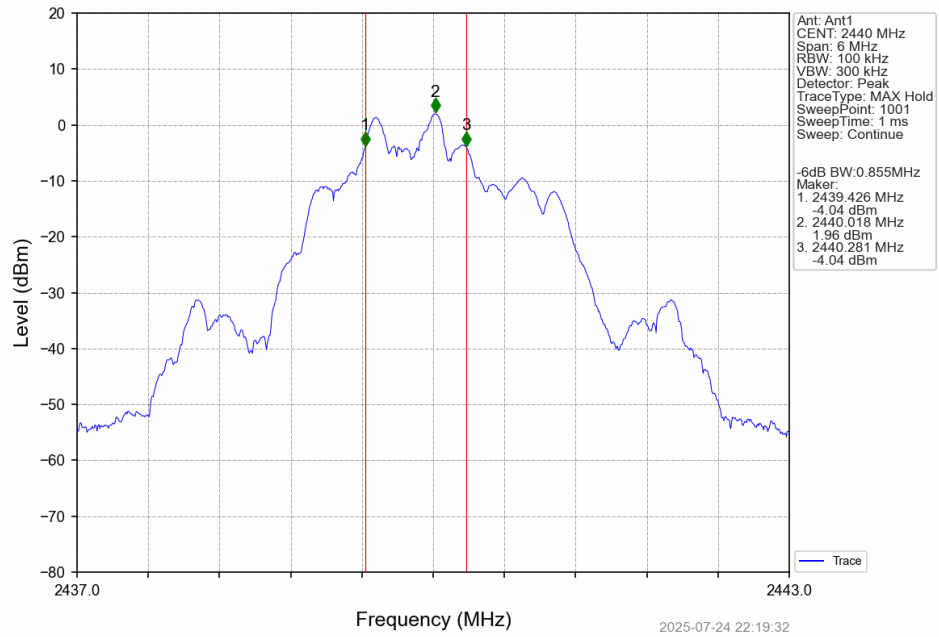
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



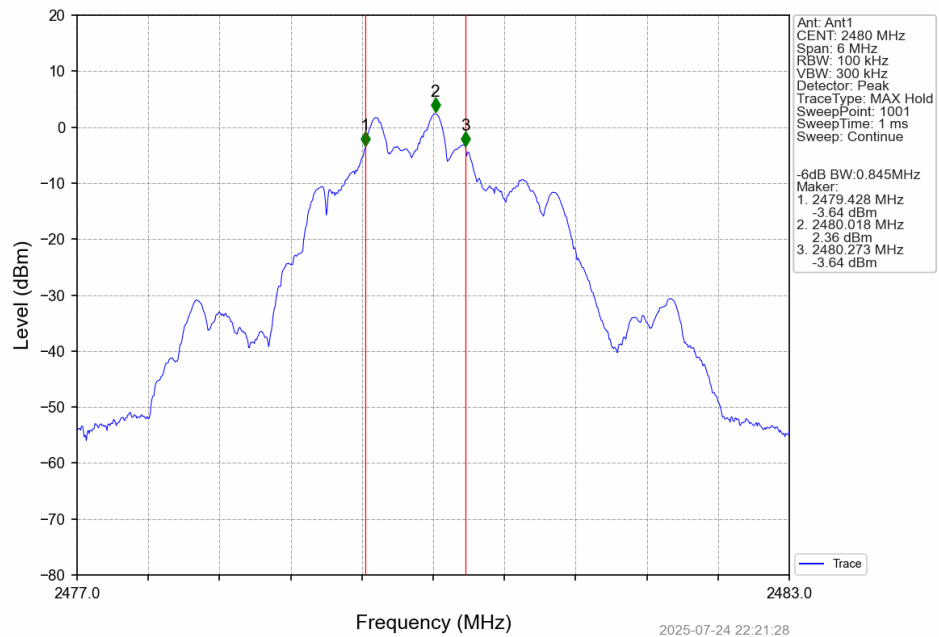
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



### 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            | 1.42                                      | <=30  | Pass    |
|      |         | 2440            | 2.07                                      | <=30  | Pass    |
|      |         | 2480            | 2.43                                      | <=30  | Pass    |
| 2M   | SISO    | 2402            | 1.41                                      | <=30  | Pass    |
|      |         | 2440            | 2.06                                      | <=30  | Pass    |
|      |         | 2480            | 2.43                                      | <=30  | Pass    |

## 4. Maximum Power Spectral Density

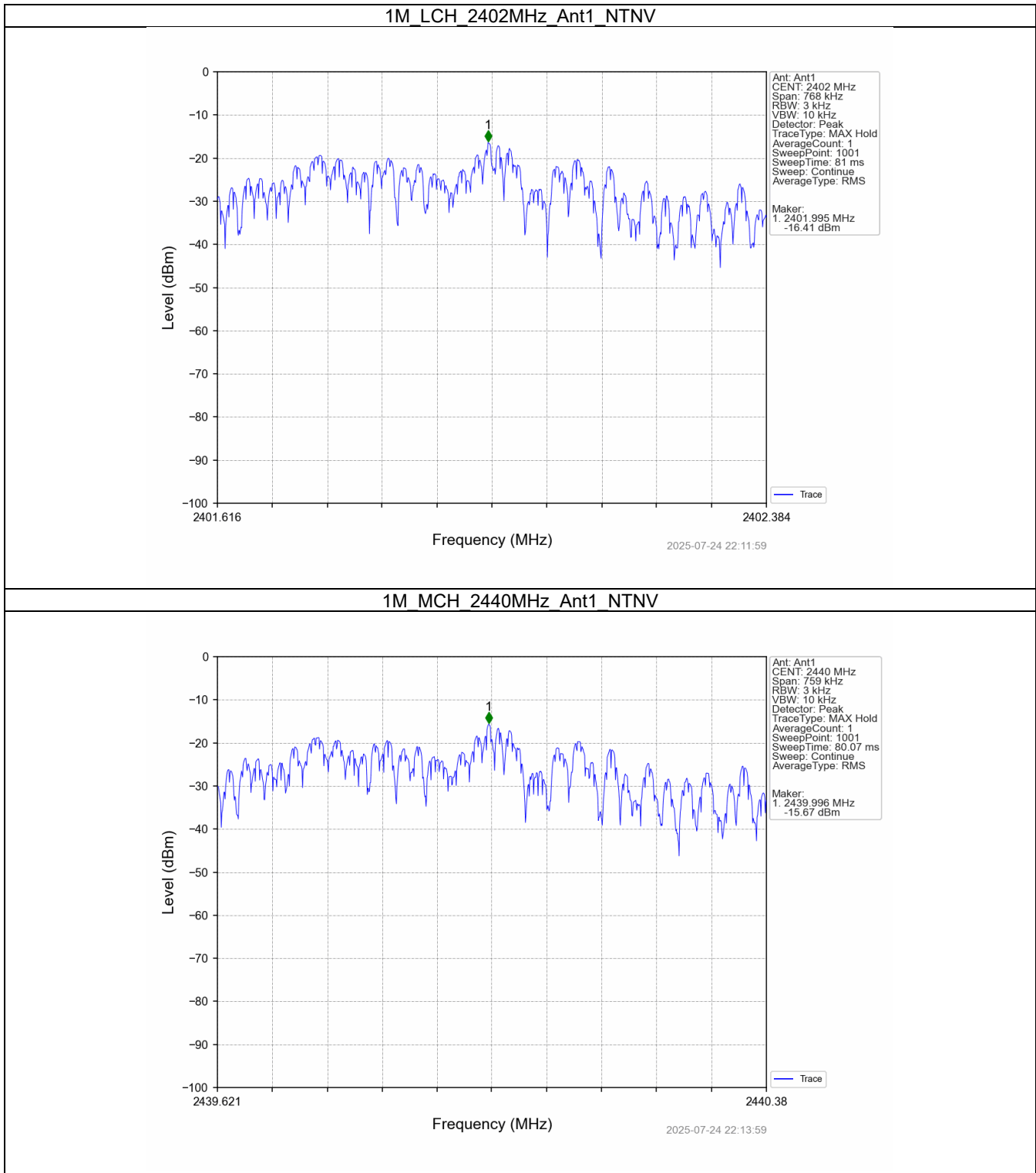
### 4.1 Test Result

#### 4.1.1 PSD

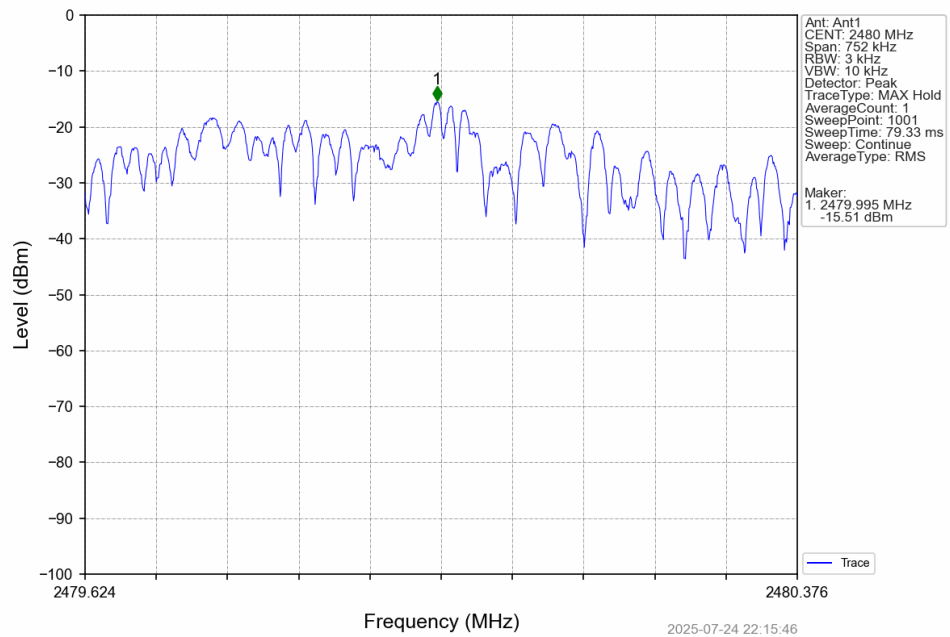
| Mode | TX Type | Frequency (MHz) | Maximum PSD (dBm/3kHz) |       | Verdict |
|------|---------|-----------------|------------------------|-------|---------|
|      |         |                 | ANT1                   | Limit |         |
| 1M   | SISO    | 2402            | -16.41                 | <=8   | Pass    |
|      |         | 2440            | -15.67                 | <=8   | Pass    |
|      |         | 2480            | -15.51                 | <=8   | Pass    |
| 2M   | SISO    | 2402            | -18.94                 | <=8   | Pass    |
|      |         | 2440            | -18.31                 | <=8   | Pass    |
|      |         | 2480            | -18.05                 | <=8   | Pass    |

# 4.2 Test Graph

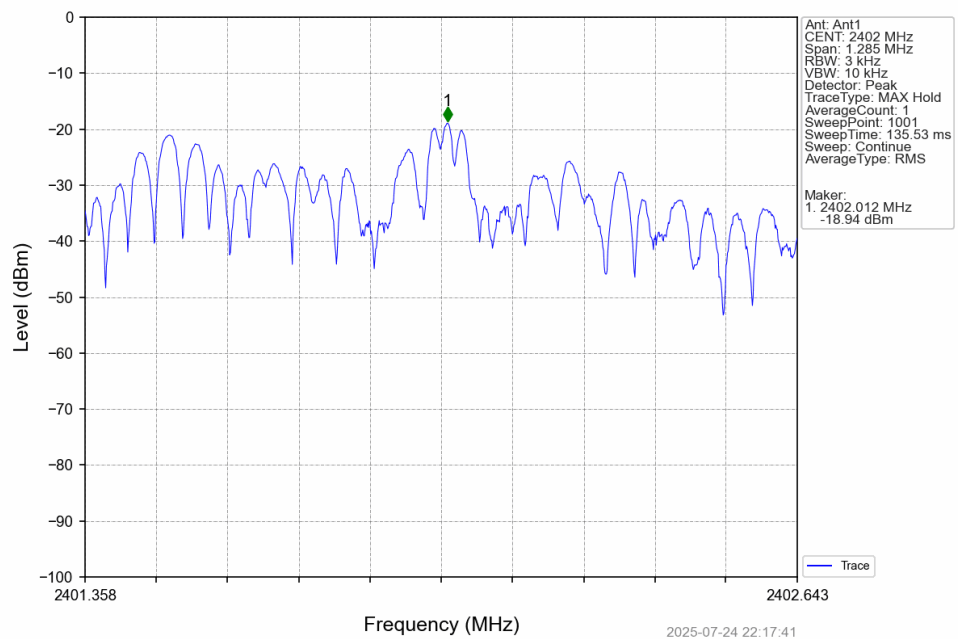
## 4.2.1 PSD



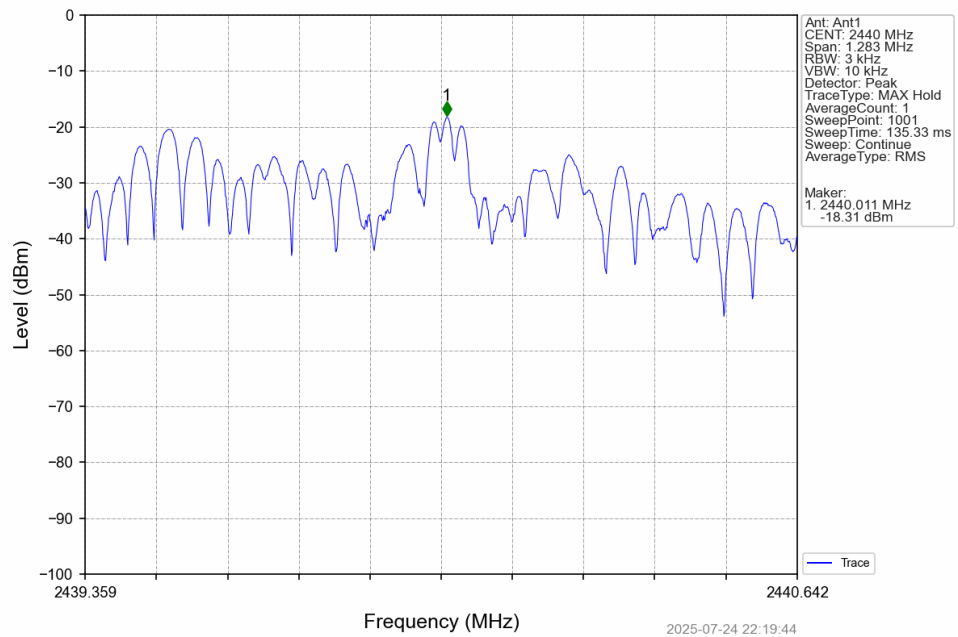
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



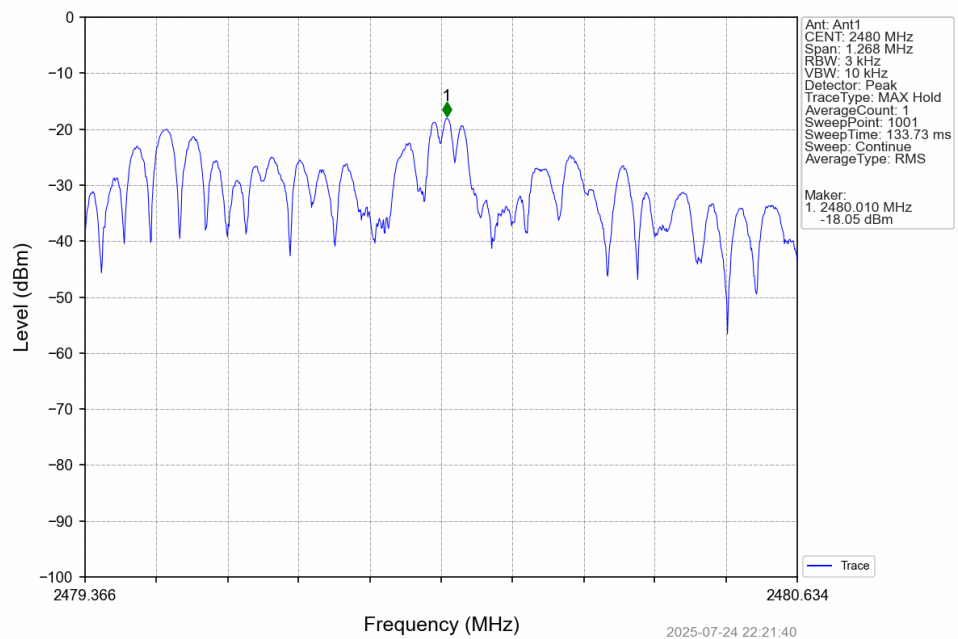
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



### 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

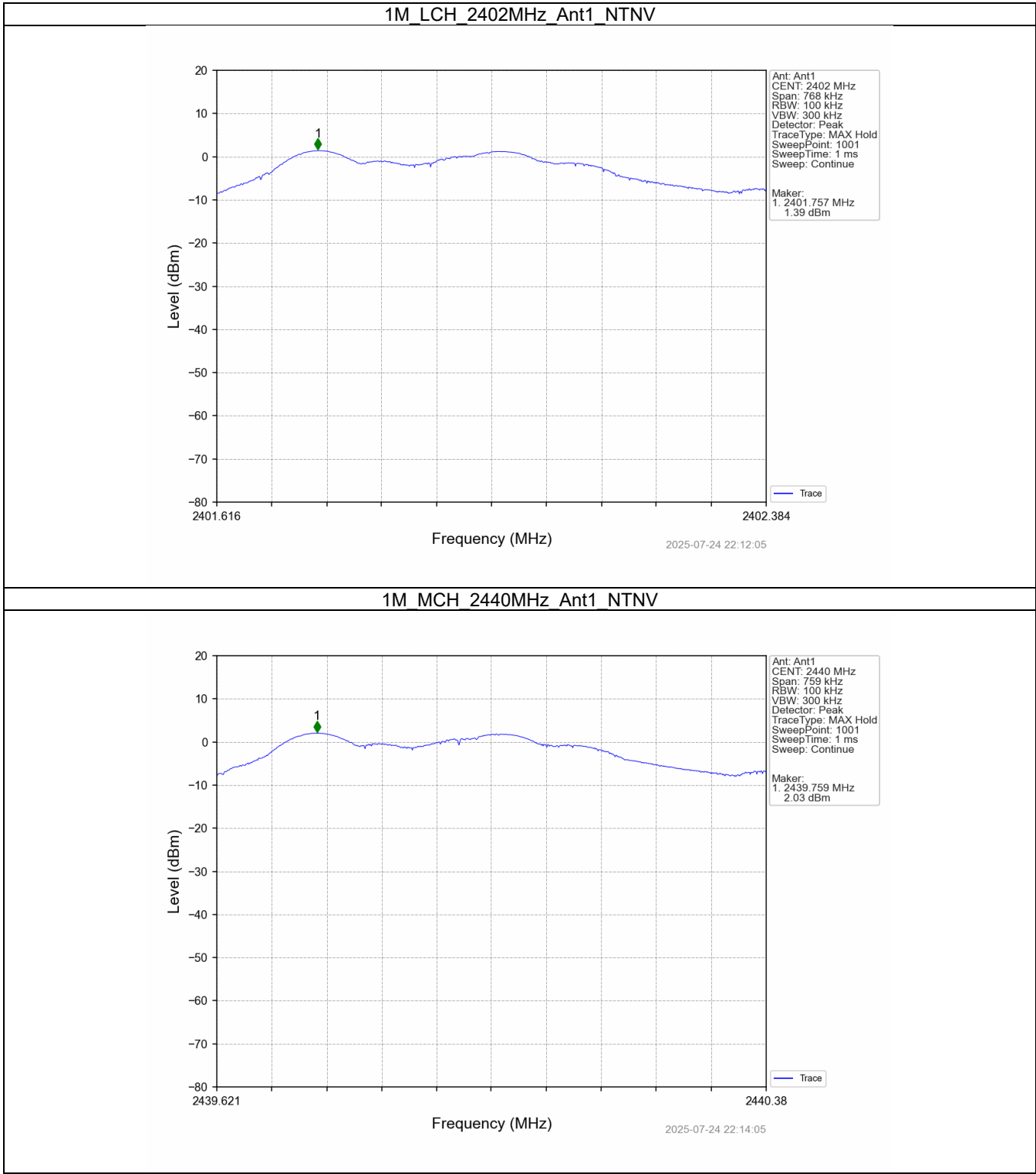
| Mode                                                                                                                                            | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-----|--------------------------|
| 1M                                                                                                                                              | SISO    | 2402            | 1   | 1.39                     |
|                                                                                                                                                 |         | 2440            | 1   | 2.03                     |
|                                                                                                                                                 |         | 2480            | 1   | 2.41                     |
| 2M                                                                                                                                              | SISO    | 2402            | 1   | 1.18                     |
|                                                                                                                                                 |         | 2440            | 1   | 1.79                     |
|                                                                                                                                                 |         | 2480            | 1   | 2.19                     |
| Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level. |         |                 |     |                          |

#### 5.1.2 CSE

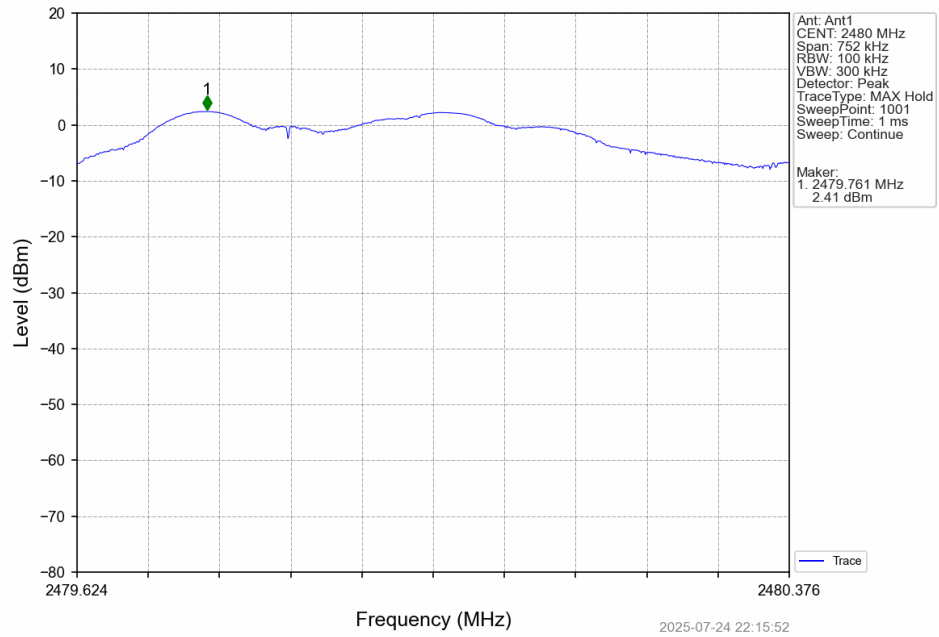
| Mode                                                                                                                                            | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-----|--------------------------|-------------|---------|
| 1M                                                                                                                                              | SISO    | 2402            | 1   | 2.41                     | -17.59      | Pass    |
|                                                                                                                                                 |         | 2440            | 1   | 2.41                     | -17.59      | Pass    |
|                                                                                                                                                 |         | 2480            | 1   | 2.41                     | -17.59      | Pass    |
| 2M                                                                                                                                              | SISO    | 2402            | 1   | 2.19                     | -17.81      | Pass    |
|                                                                                                                                                 |         | 2440            | 1   | 2.19                     | -17.81      | Pass    |
|                                                                                                                                                 |         | 2480            | 1   | 2.19                     | -17.81      | Pass    |
| Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level. |         |                 |     |                          |             |         |

5.2 Test Graph

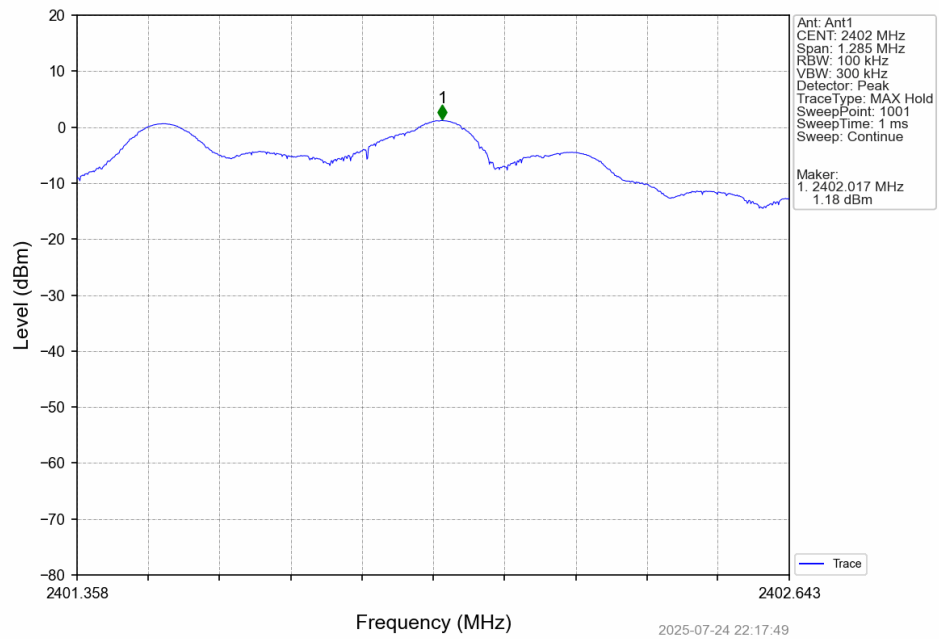
5.2.1 Ref



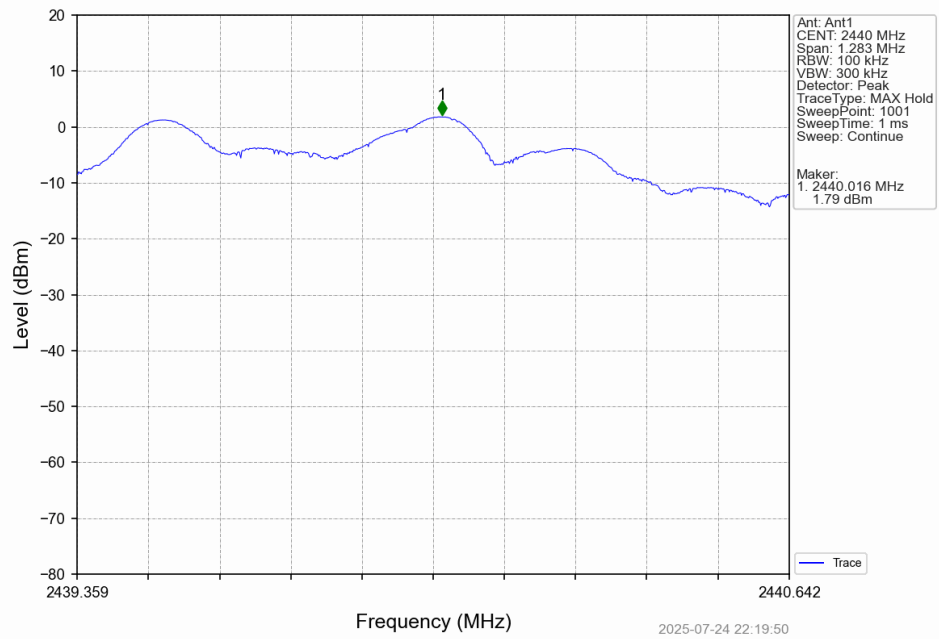
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



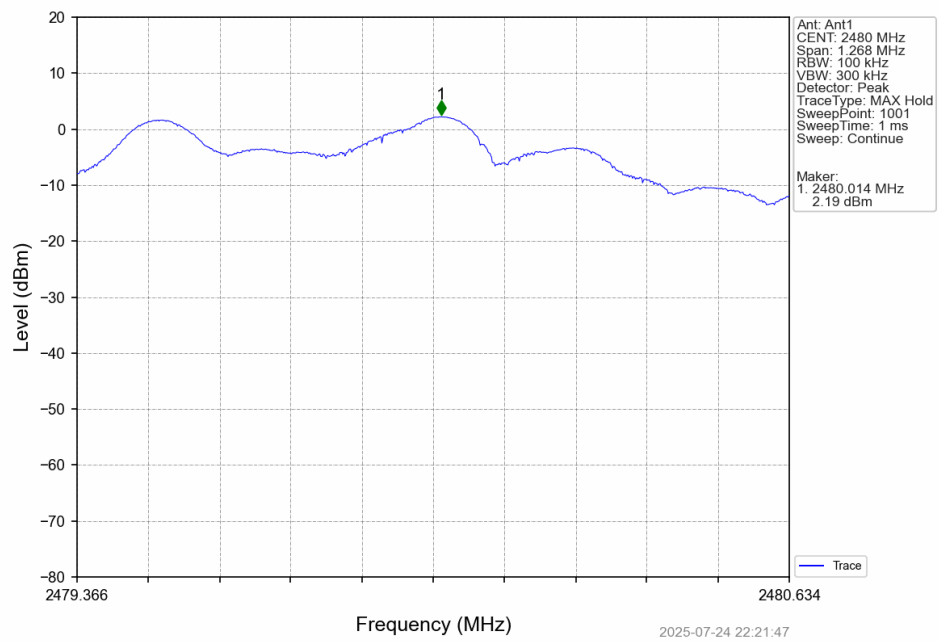
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



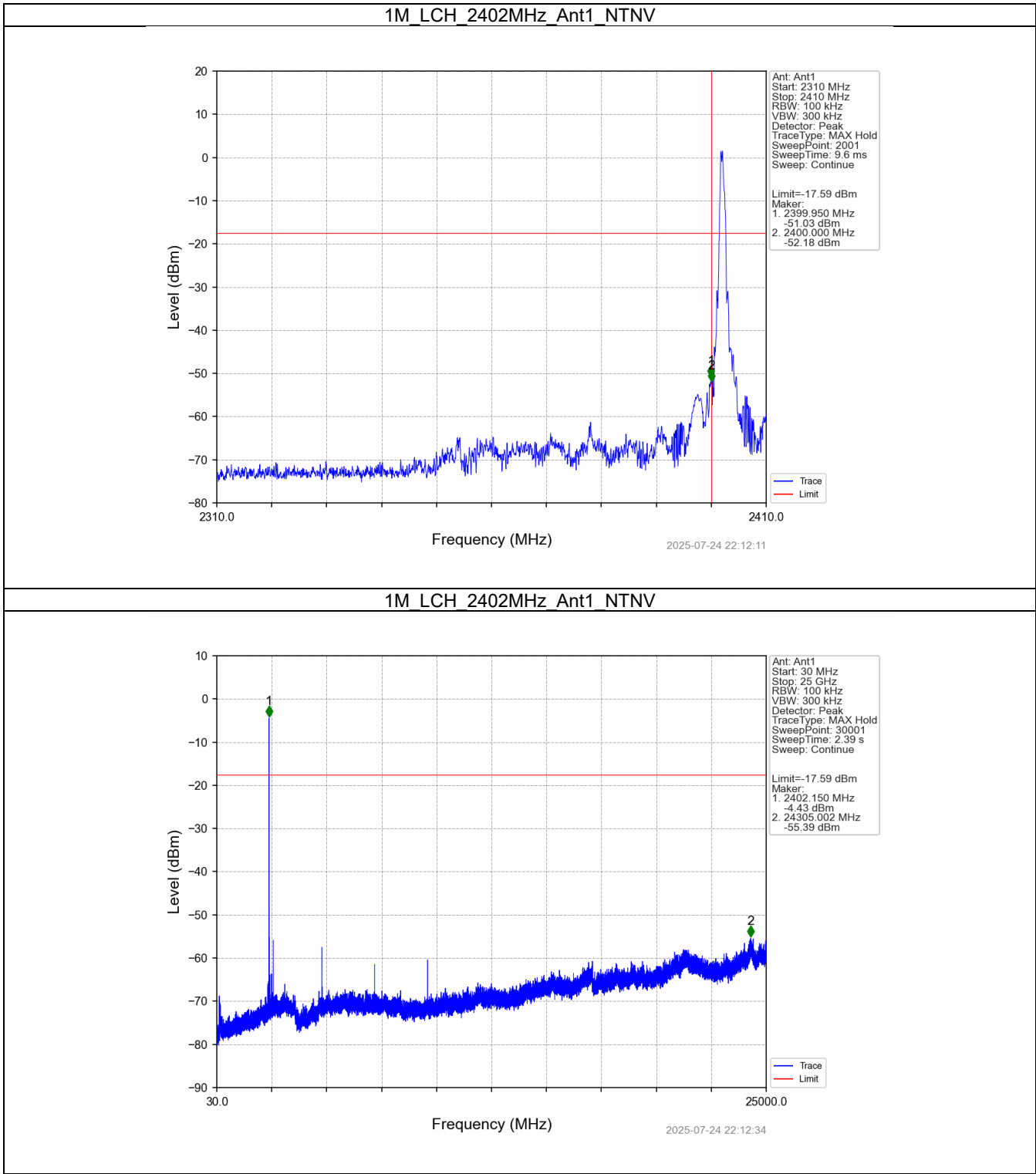
# 2M\_MCH\_2440MHz\_Ant1\_NTNV



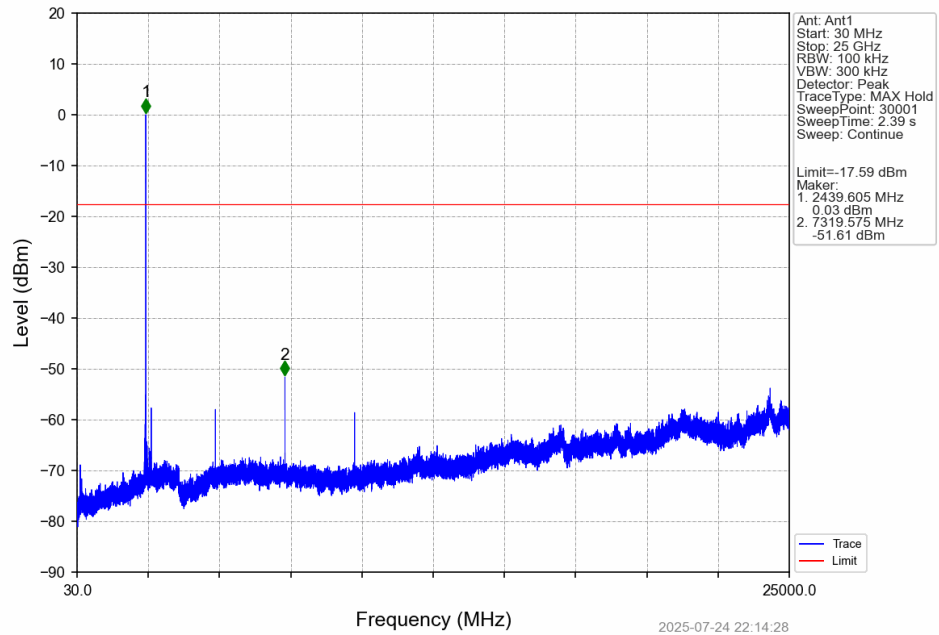
# 2M\_HCH\_2480MHz\_Ant1\_NTNV



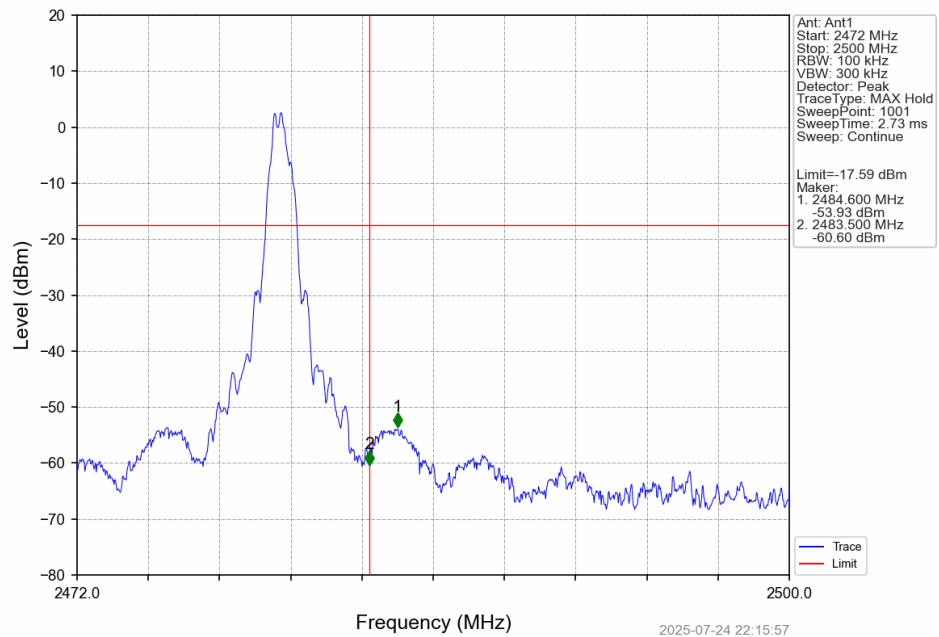
5.2.2 CSE



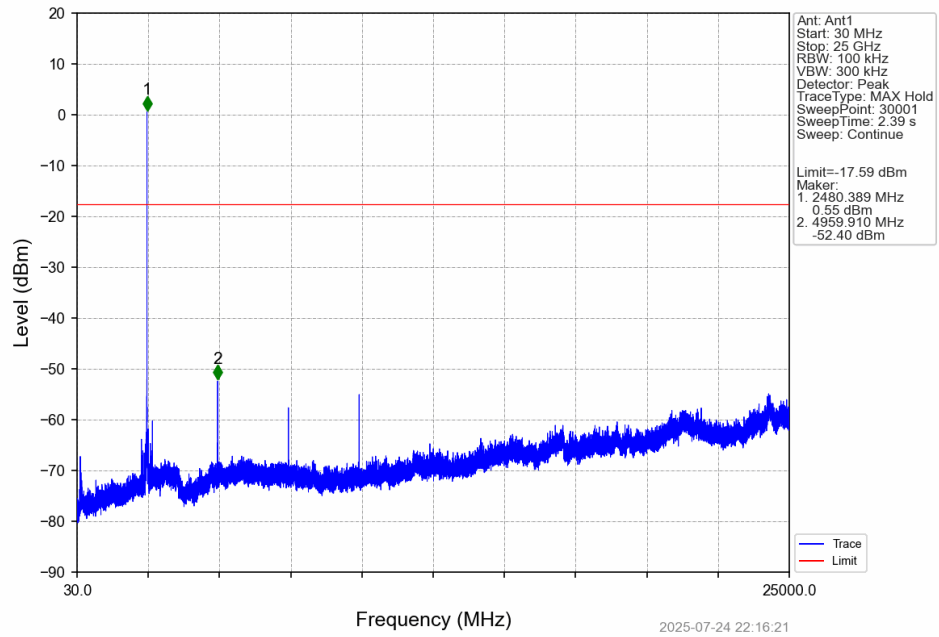
# 1M\_MCH\_2440MHz\_Ant1\_NTNV



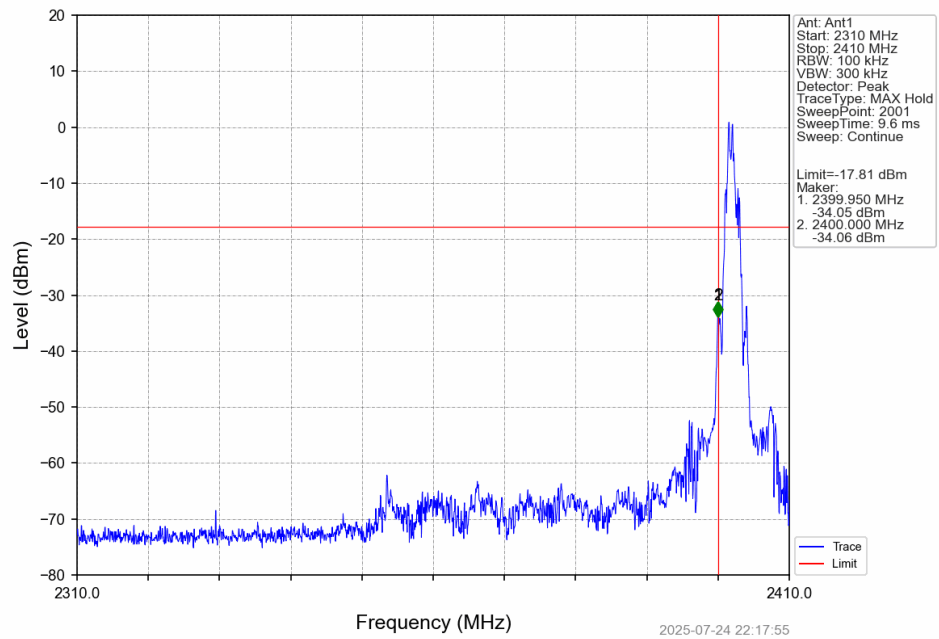
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



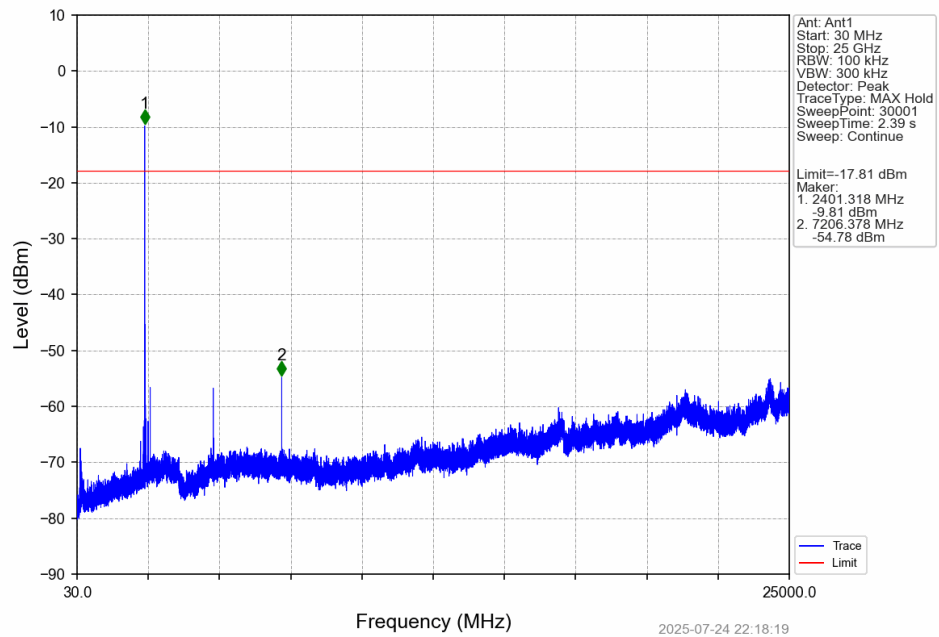
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



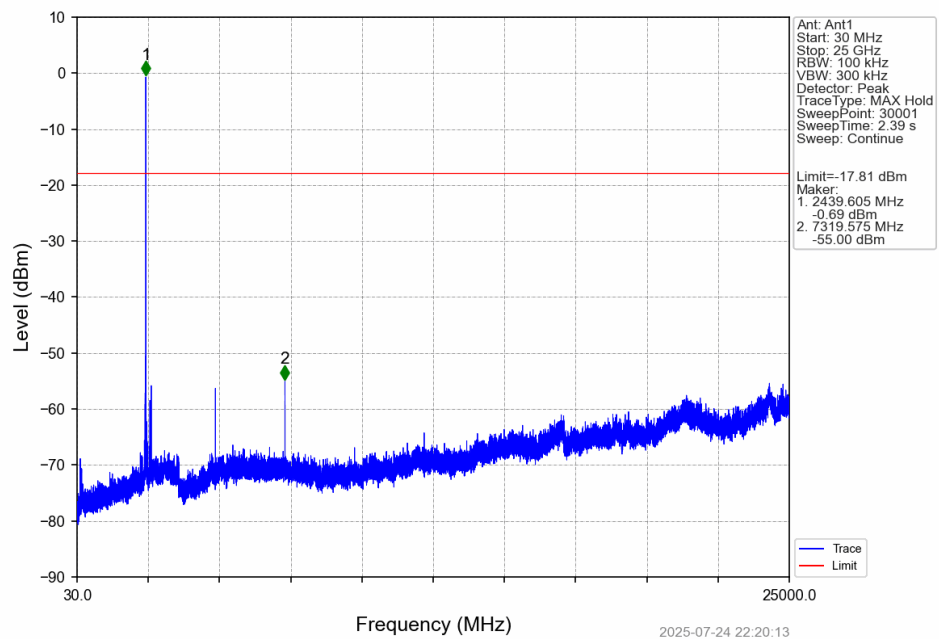
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



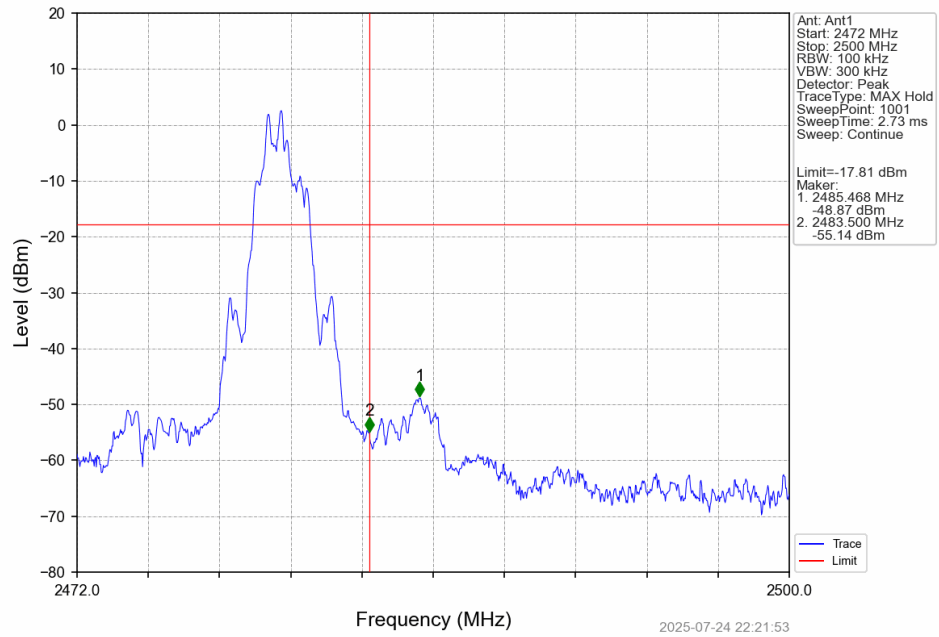
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



# 2M\_MCH\_2440MHz\_Ant1\_NTNV



# 2M\_HCH\_2480MHz\_Ant1\_NTNV



# 2M\_HCH\_2480MHz\_Ant1\_NTNV

