

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

**Company:** : CHIGEE TECHNOLOGY CO., LTD.

**EUT** : CG Navigator holder for BMW

**FCC ID:** : 2A95C-BNH1

**Model Number** : BNH-1

**Report No.** : HTT2026041358F01

**Reviewed By** : Heber He

## 1. Duty Cycle

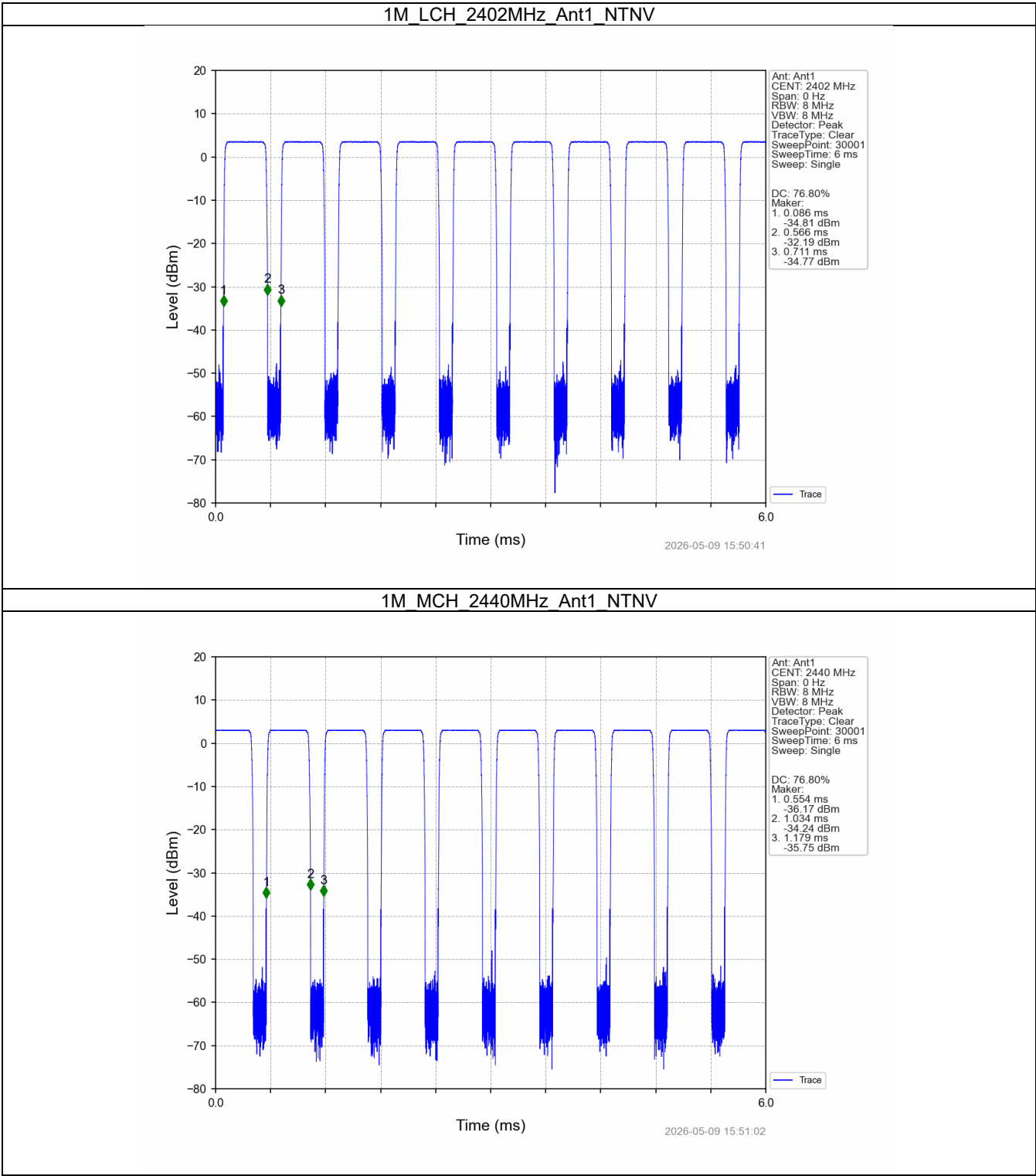
### 1.1 Test Result

#### 1.1.1 Ant1

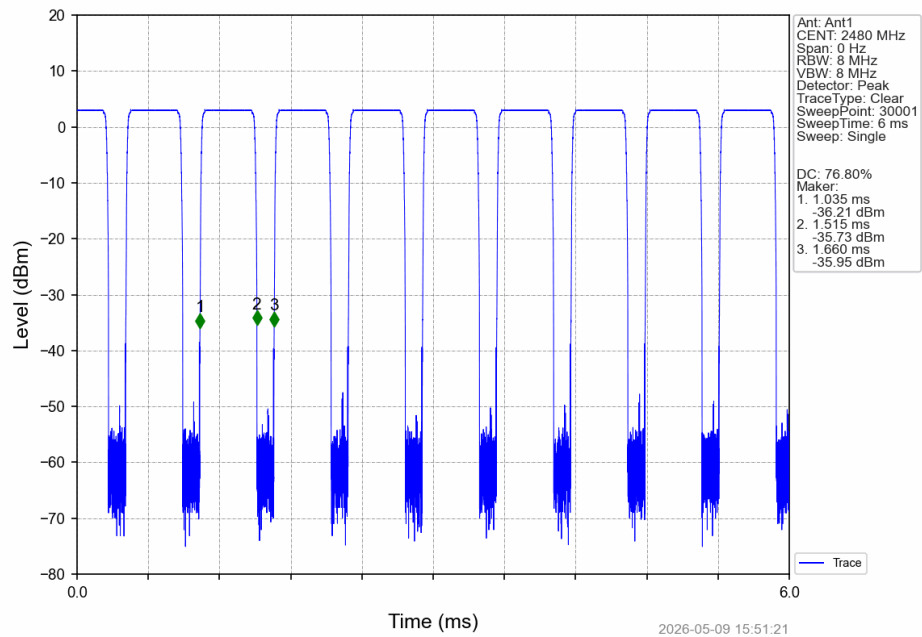
| Ant1 |         |                 |           |             |                |                                   |                       |
|------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 1M   | SISO    | 2402            | 0.480     | 0.625       | 76.80          | 1.15                              | 0.03                  |
|      |         | 2440            | 0.480     | 0.625       | 76.80          | 1.15                              | 0.02                  |
|      |         | 2480            | 0.480     | 0.625       | 76.80          | 1.15                              | 0.02                  |
| 2M   | SISO    | 2402            | 0.296     | 0.625       | 47.36          | 3.25                              | 0.02                  |
|      |         | 2440            | 0.296     | 0.625       | 47.36          | 3.25                              | 0.03                  |
|      |         | 2480            | 0.296     | 0.625       | 47.36          | 3.25                              | 0.00                  |

# 1.2 Test Graph

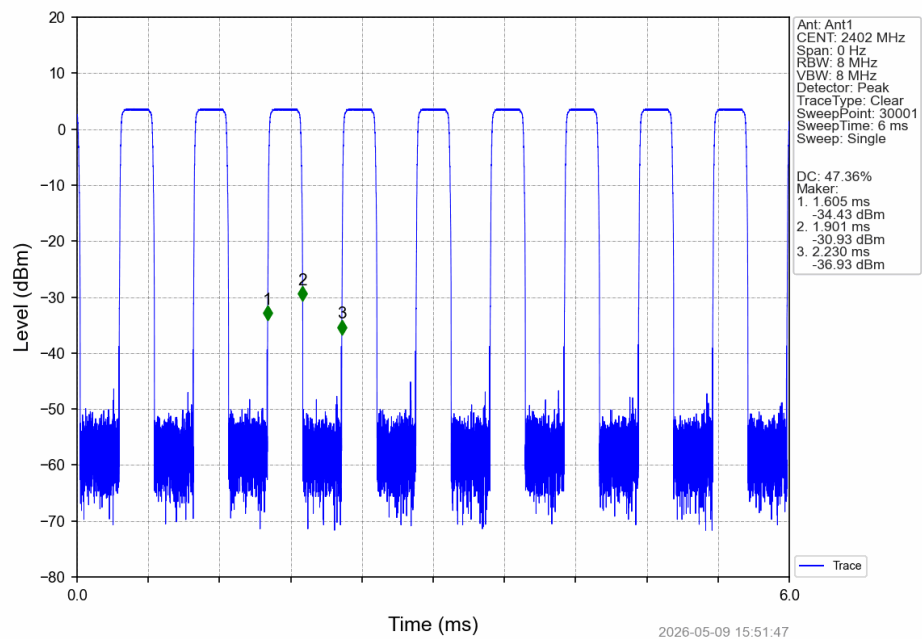
## 1.2.1 Ant1



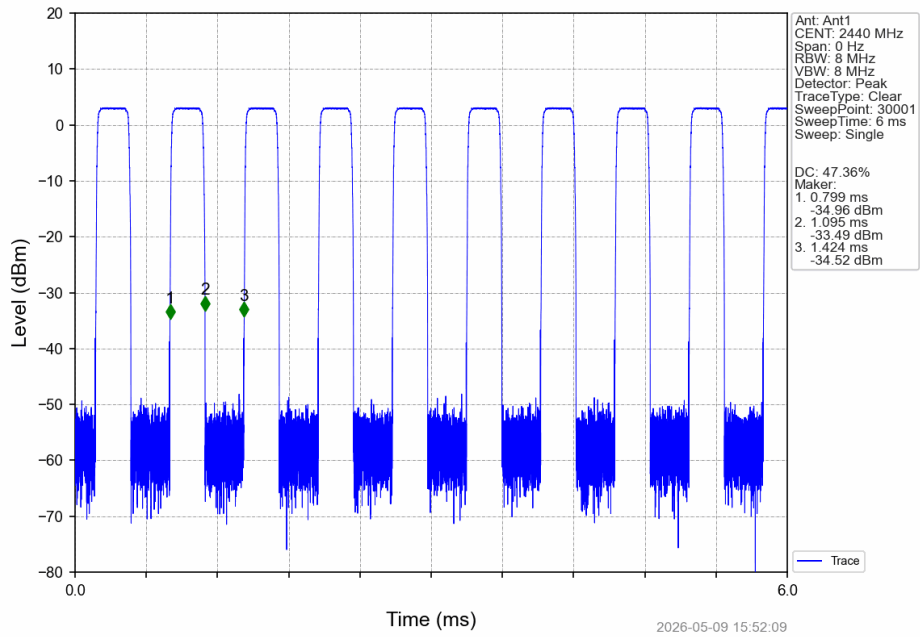
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



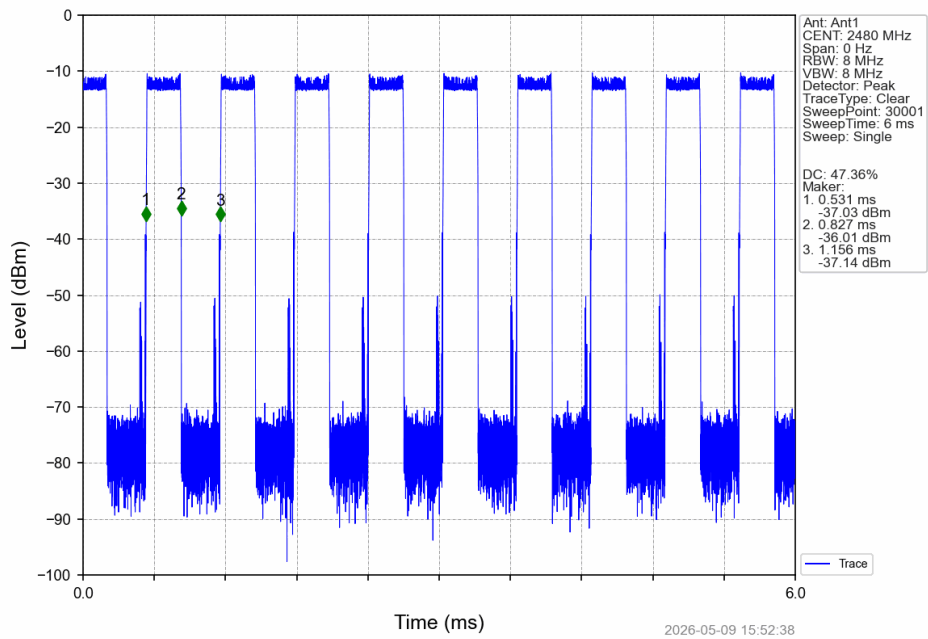
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



# 2M\_MCH\_2440MHz\_Ant1\_NTNV



# 2M\_HCH\_2480MHz\_Ant1\_NTNV



## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

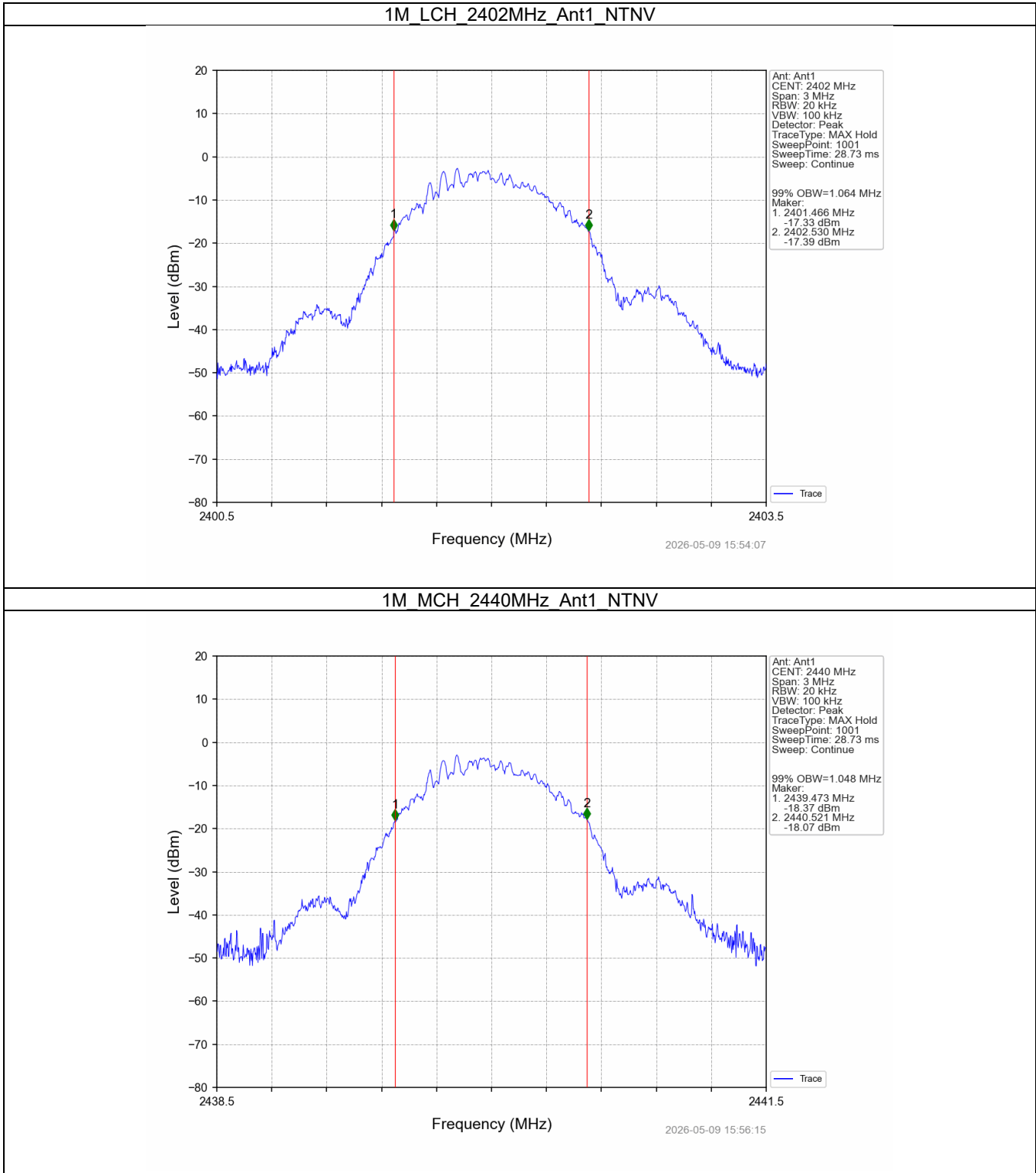
| Mode | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------|---------|-----------------|-----|------------------------------|-------|---------|
|      |         |                 |     | Result                       | Limit |         |
| 1M   | SISO    | 2402            | 1   | 1.064                        | /     | Pass    |
|      |         | 2440            | 1   | 1.048                        | /     | Pass    |
|      |         | 2480            | 1   | 1.075                        | /     | Pass    |
| 2M   | SISO    | 2402            | 1   | 2.015                        | /     | Pass    |
|      |         | 2440            | 1   | 2.011                        | /     | Pass    |
|      |         | 2480            | 1   | 2.025                        | /     | Pass    |

#### 2.1.2 6dB BW

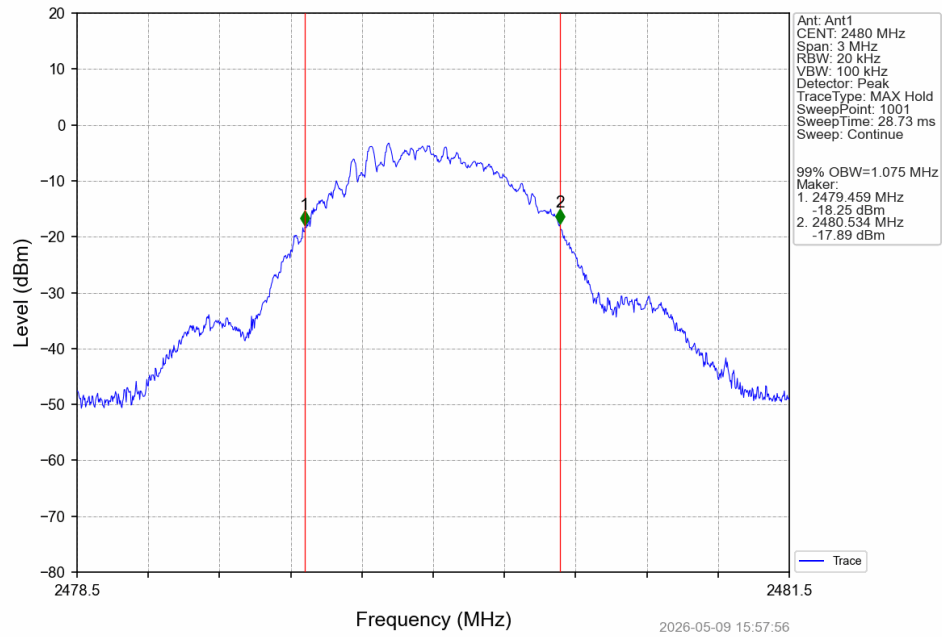
| Mode | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|------|---------|-----------------|-----|---------------------|------------|---------|
|      |         |                 |     | Result              | Limit      |         |
| 1M   | SISO    | 2402            | 1   | 0.716               | $\geq 0.5$ | Pass    |
|      |         | 2440            | 1   | 0.711               | $\geq 0.5$ | Pass    |
|      |         | 2480            | 1   | 0.768               | $\geq 0.5$ | Pass    |
| 2M   | SISO    | 2402            | 1   | 1.295               | $\geq 0.5$ | Pass    |
|      |         | 2440            | 1   | 1.304               | $\geq 0.5$ | Pass    |
|      |         | 2480            | 1   | 1.318               | $\geq 0.5$ | Pass    |

2.2 Test Graph

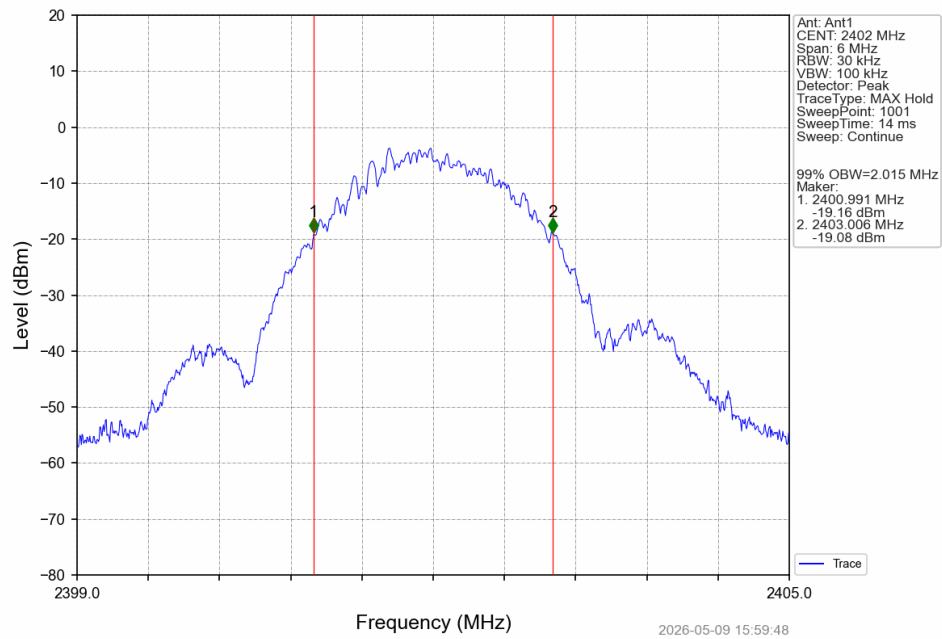
2.2.1 OBW



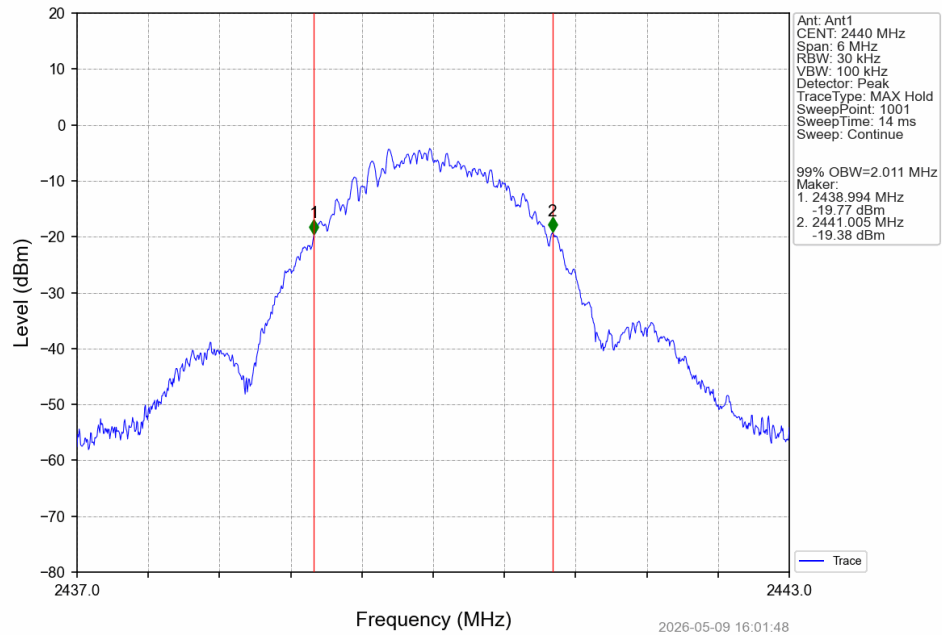
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



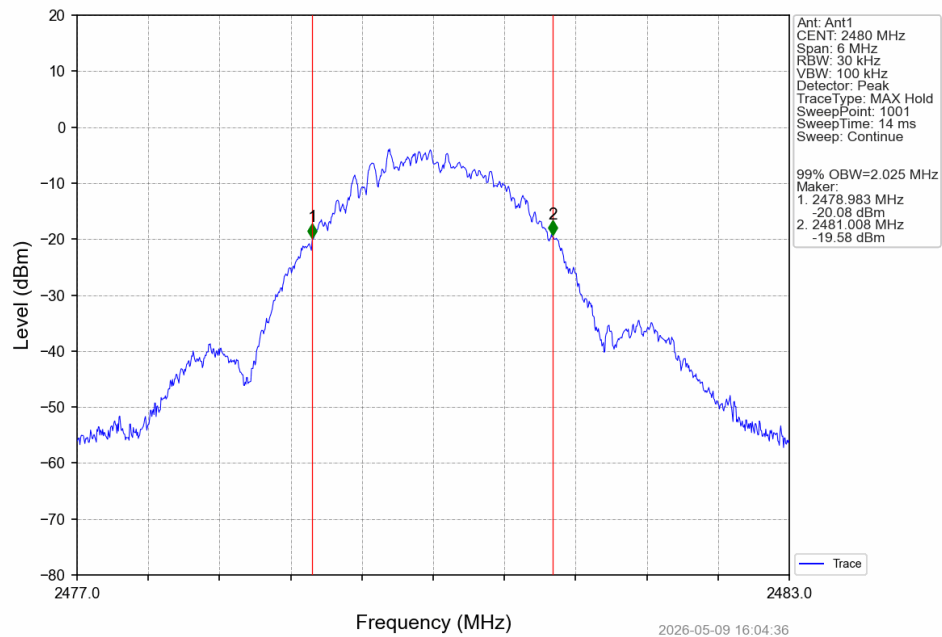
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



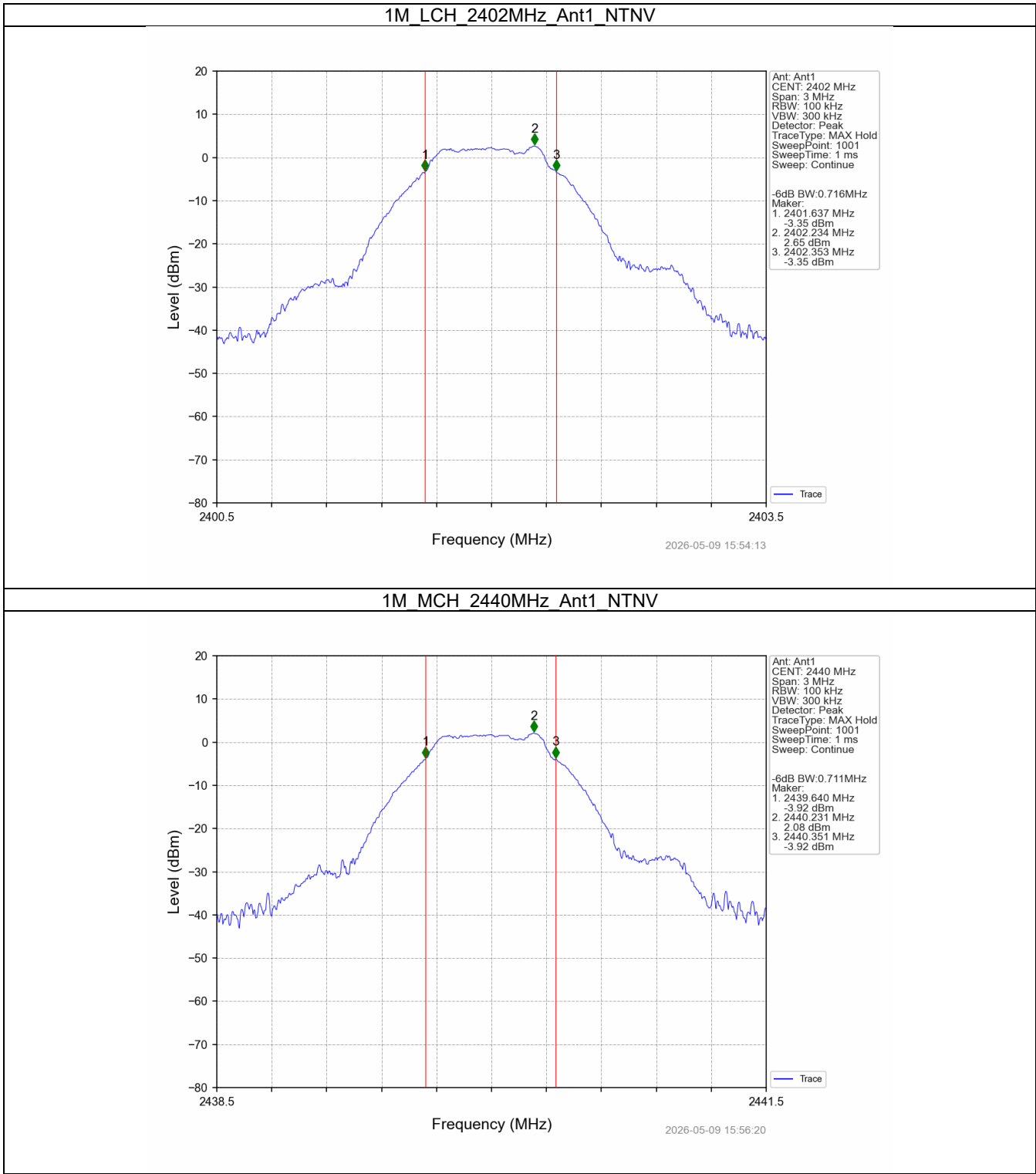
### 2M\_MCH\_2440MHz\_Ant1\_NTNV



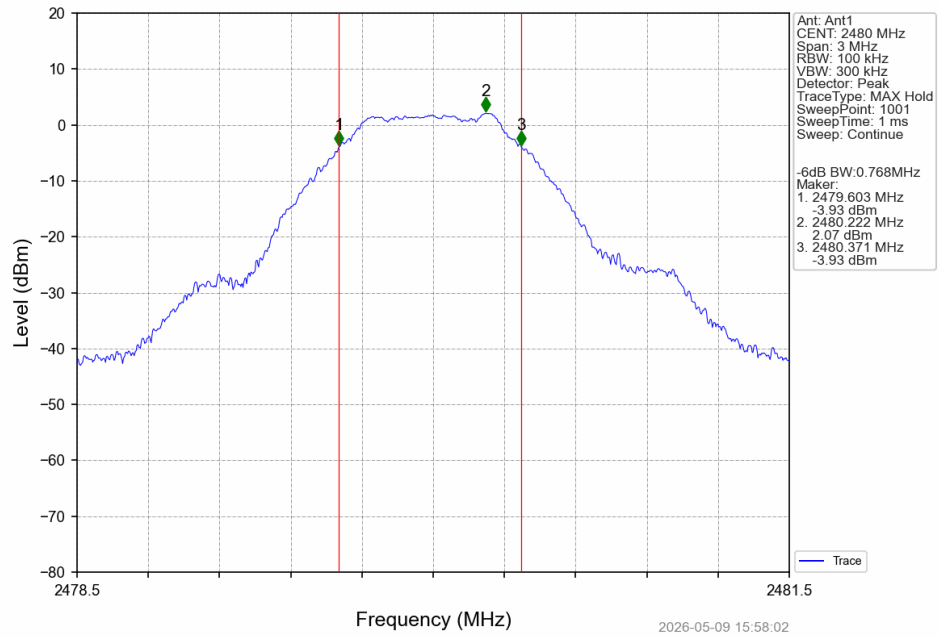
### 2M\_HCH\_2480MHz\_Ant1\_NTNV



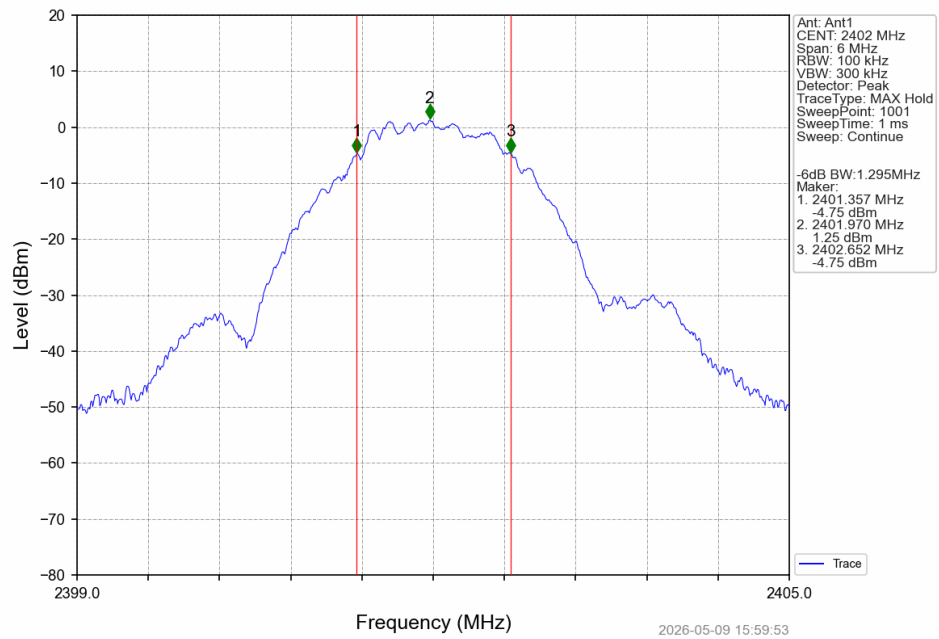
2.2.2 6dB BW



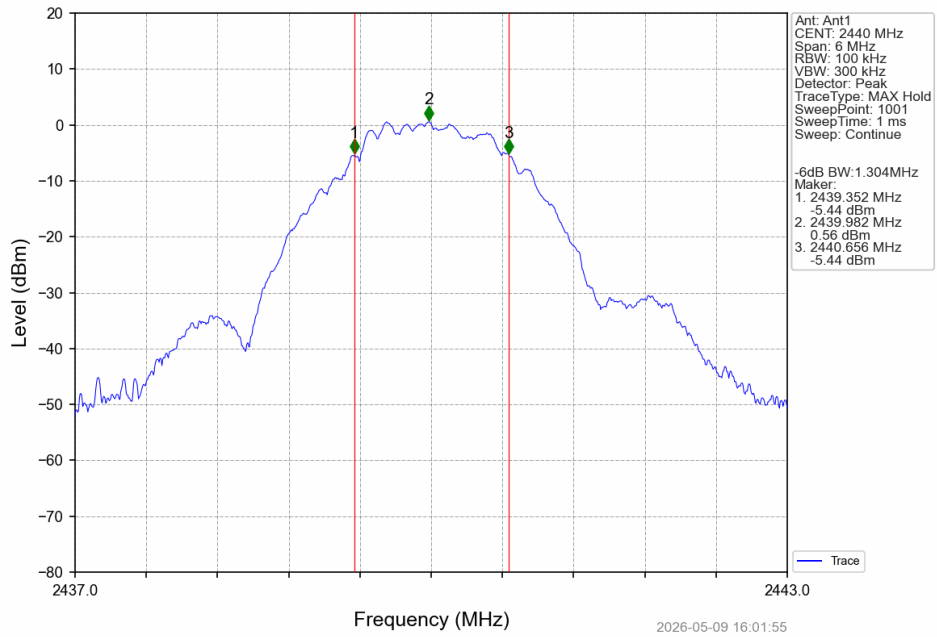
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



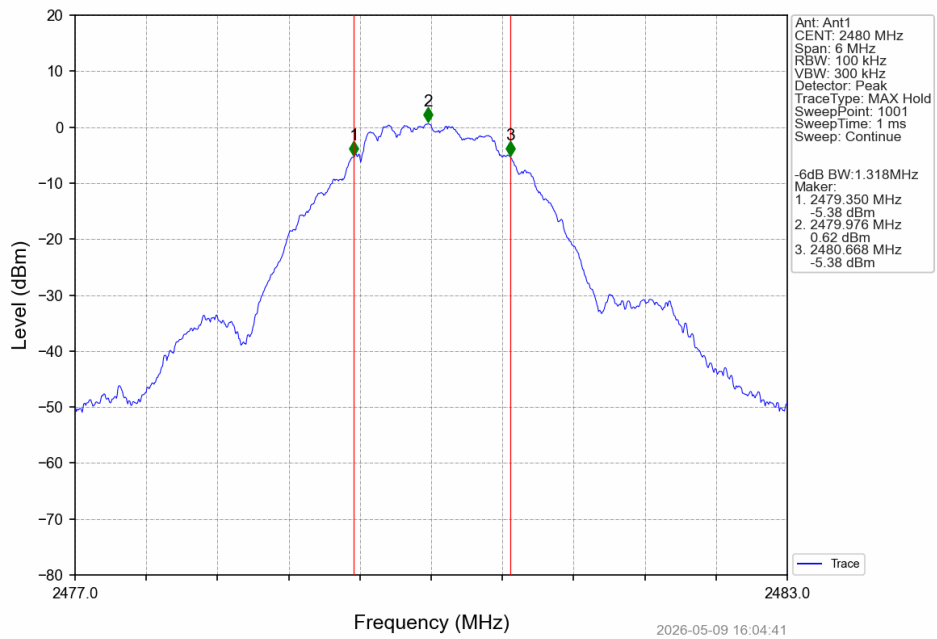
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



# 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            | 3.48                                      | <=30  | Pass    |
|      |         | 2440            | 2.94                                      | <=30  | Pass    |
|      |         | 2480            | 2.95                                      | <=30  | Pass    |
| 2M   | SISO    | 2402            | 3.47                                      | <=30  | Pass    |
|      |         | 2440            | 2.97                                      | <=30  | Pass    |
|      |         | 2480            | 2.98                                      | <=30  | Pass    |

## 4. Maximum Power Spectral Density

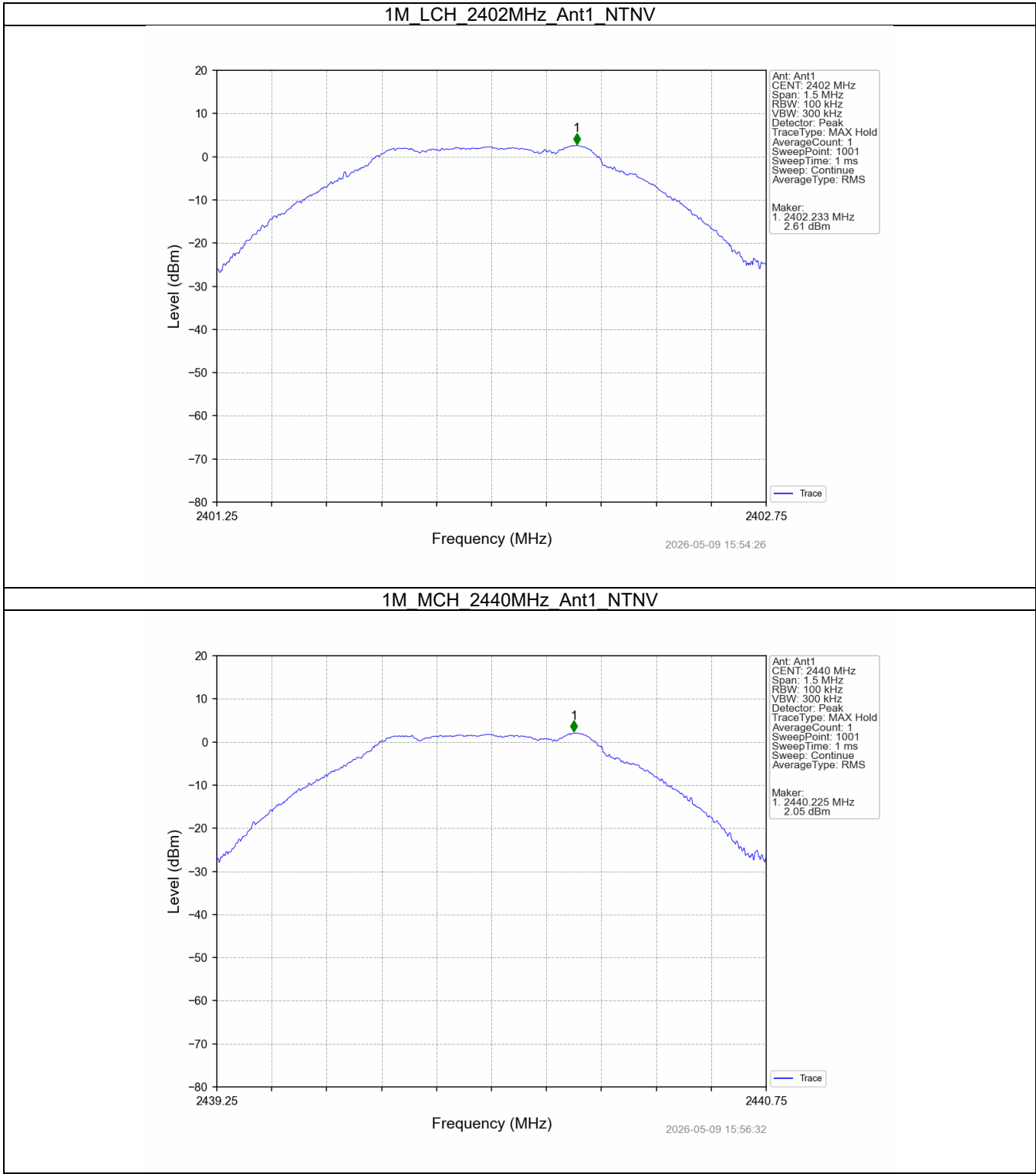
### 4.1 Test Result

#### 4.1.1 PSD

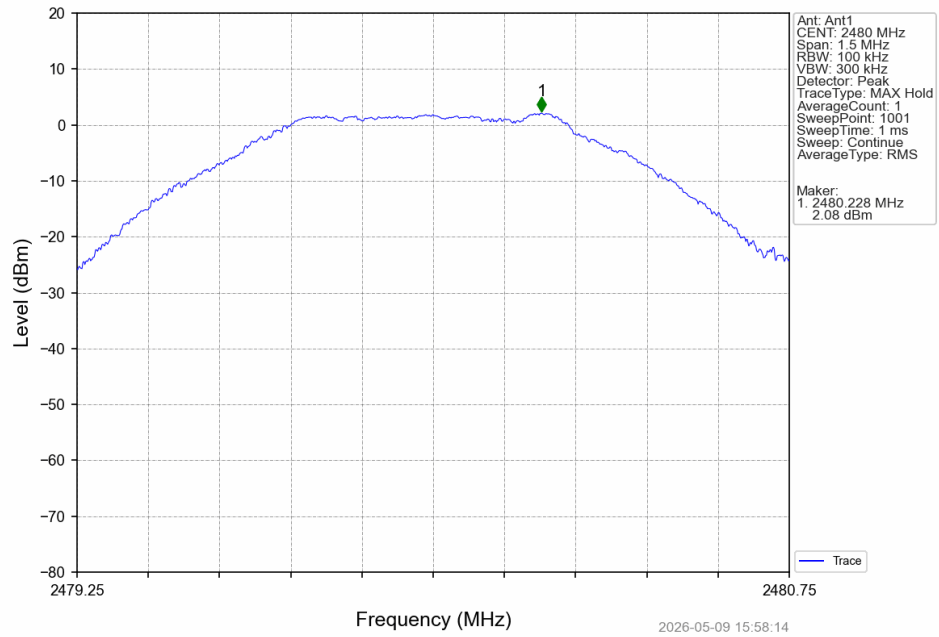
| Mode | TX Type | Frequency (MHz) | Maximum PSD (dBm) |                 | Verdict |
|------|---------|-----------------|-------------------|-----------------|---------|
|      |         |                 | ANT1              | Limit(dBm/3kHz) |         |
| 1M   | SISO    | 2402            | 2.61dBm/100kHz    | <=8             | Pass    |
|      |         | 2440            | 2.05dBm/100kHz    | <=8             | Pass    |
|      |         | 2480            | 2.08dBm/100kHz    | <=8             | Pass    |
| 2M   | SISO    | 2402            | 1.17dBm/100kHz    | <=8             | Pass    |
|      |         | 2440            | 0.40dBm/100kHz    | <=8             | Pass    |
|      |         | 2480            | 0.77dBm/100kHz    | <=8             | Pass    |

4.2 Test Graph

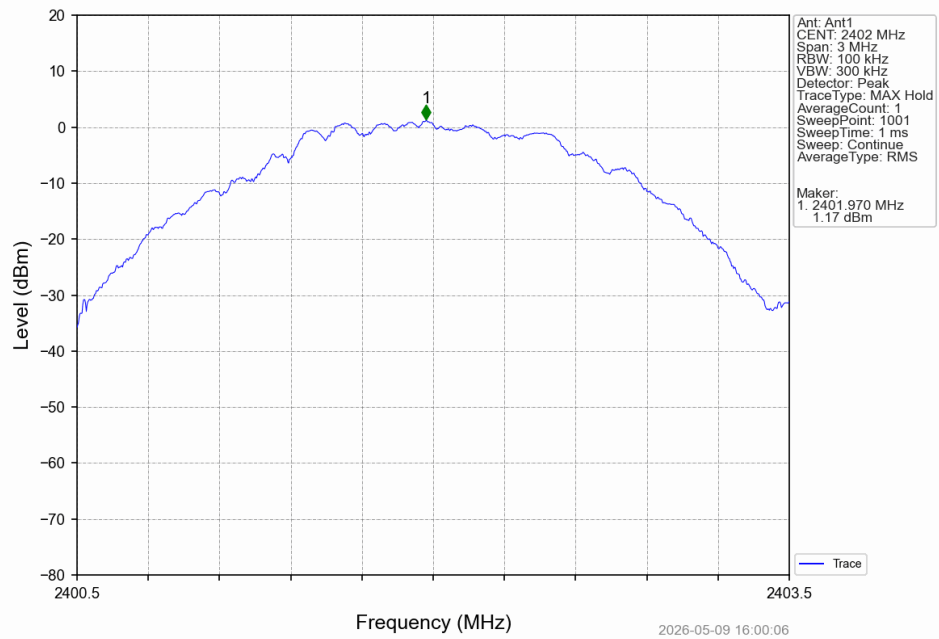
4.2.1 PSD



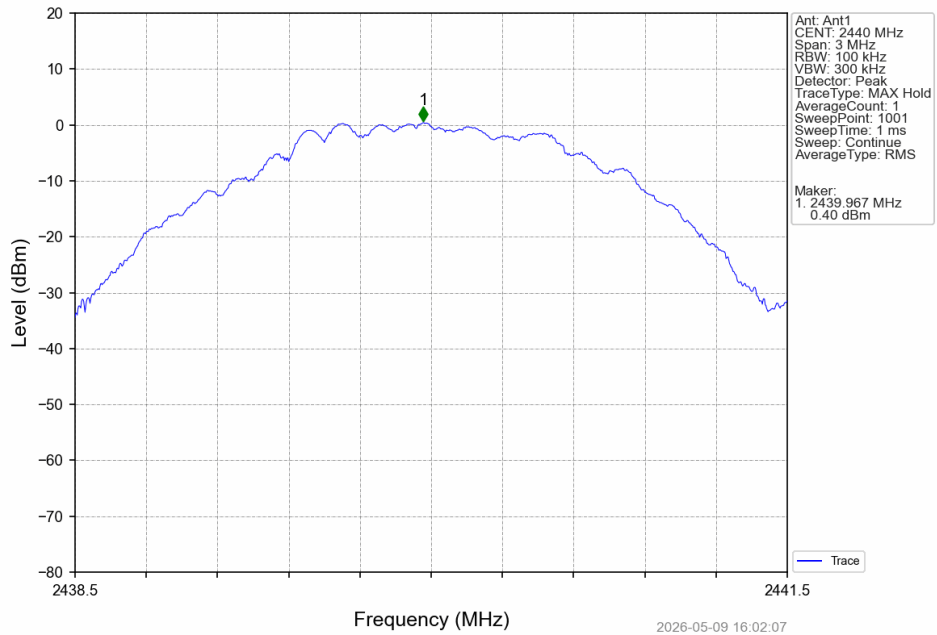
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



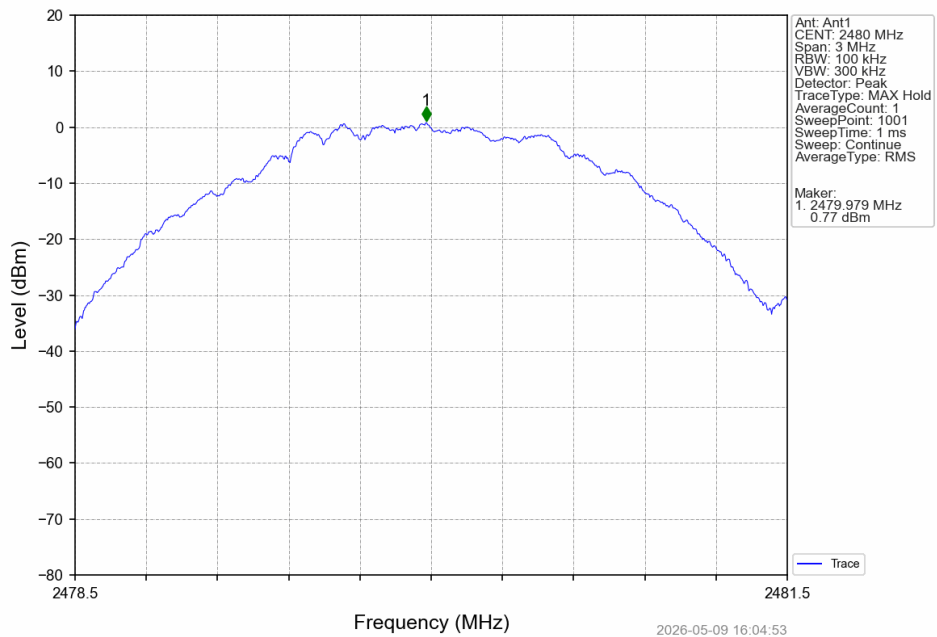
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



### 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

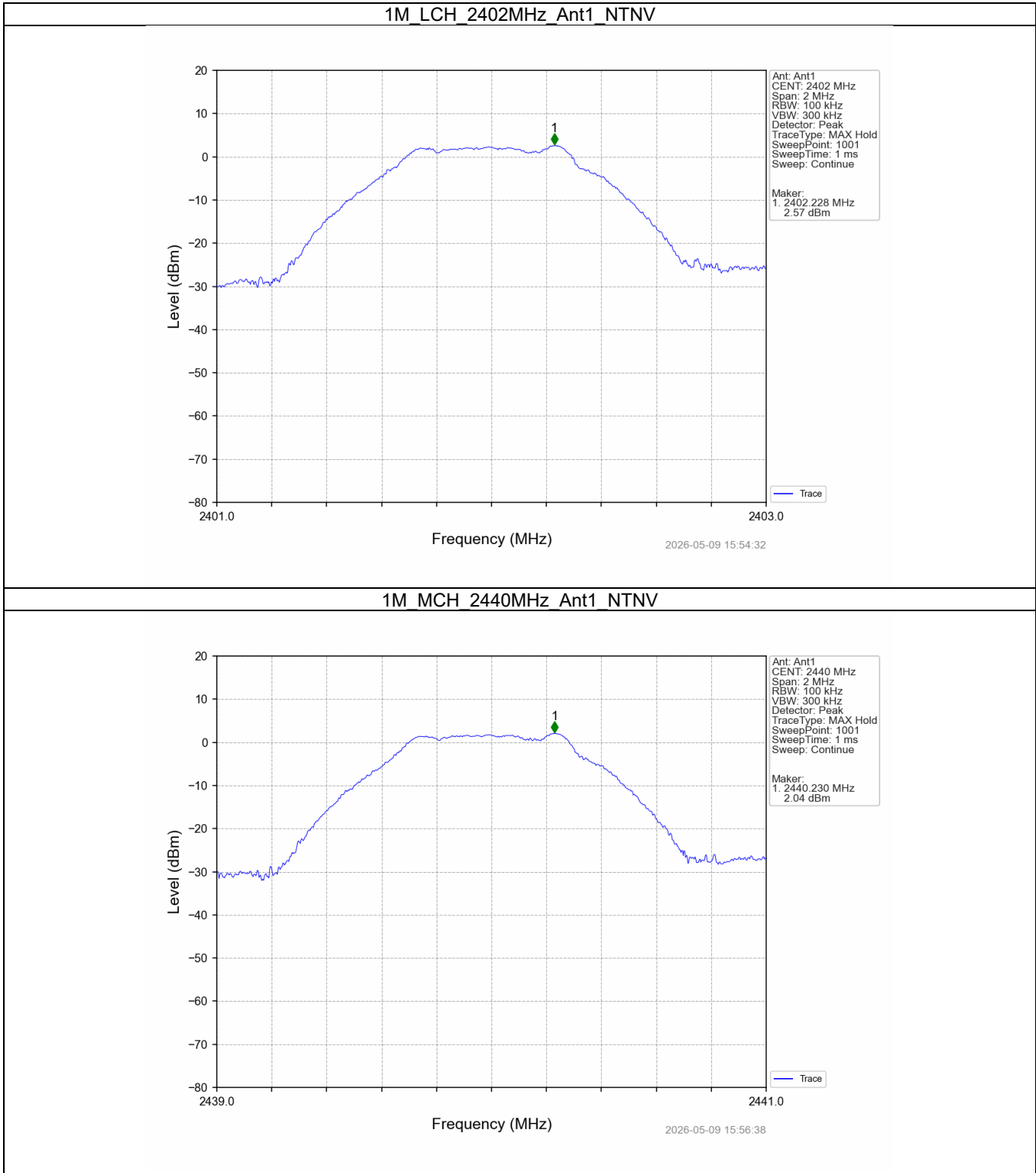
| Mode | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) |
|------|---------|-----------------|-----|--------------------------|
| 1M   | SISO    | 2402            | 1   | 2.57                     |
|      |         | 2440            | 1   | 2.04                     |
|      |         | 2480            | 1   | 2.06                     |
| 2M   | SISO    | 2402            | 1   | 1.18                     |
|      |         | 2440            | 1   | 0.45                     |
|      |         | 2480            | 1   | 0.62                     |

#### 5.1.2 CSE

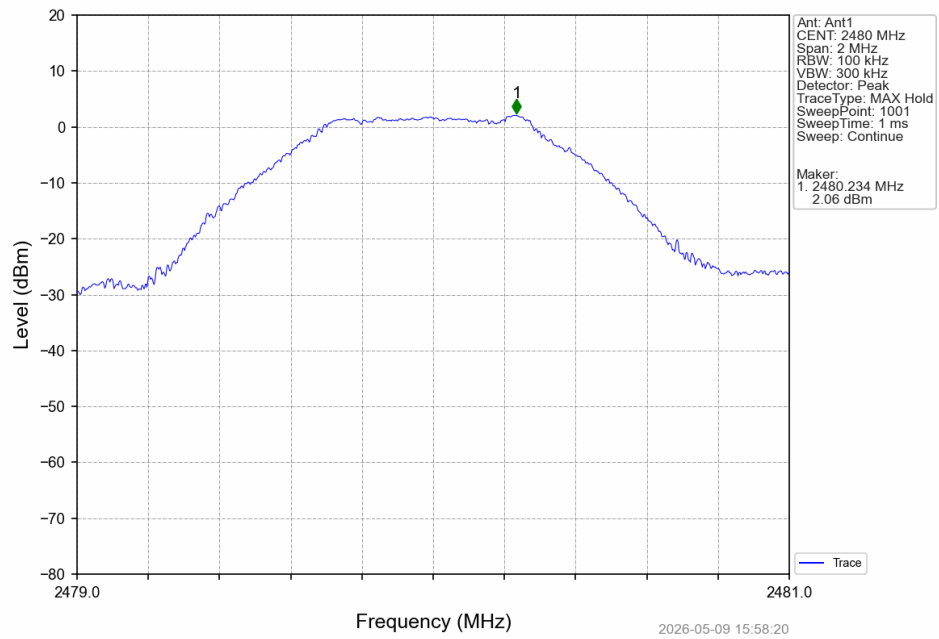
| Mode | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|------|---------|-----------------|-----|--------------------------|-------------|---------|
| 1M   | SISO    | 2402            | 1   | 2.57                     | -17.43      | Pass    |
|      |         | 2440            | 1   | 2.04                     | -17.96      | Pass    |
|      |         | 2480            | 1   | 2.06                     | -17.94      | Pass    |
| 2M   | SISO    | 2402            | 1   | 1.18                     | -18.82      | Pass    |
|      |         | 2440            | 1   | 0.45                     | -19.55      | Pass    |
|      |         | 2480            | 1   | 0.62                     | -19.38      | Pass    |

5.2 Test Graph

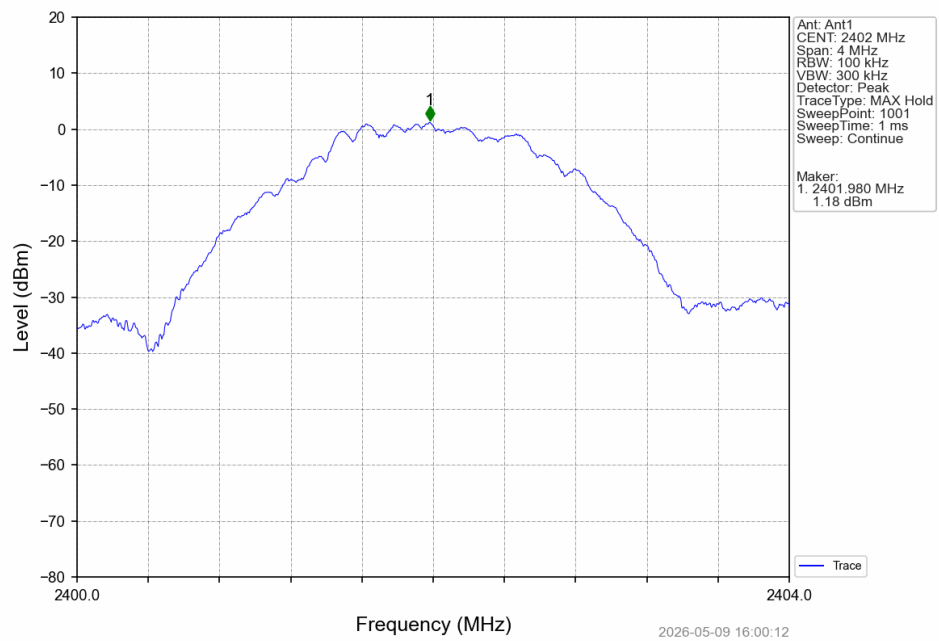
5.2.1 Ref



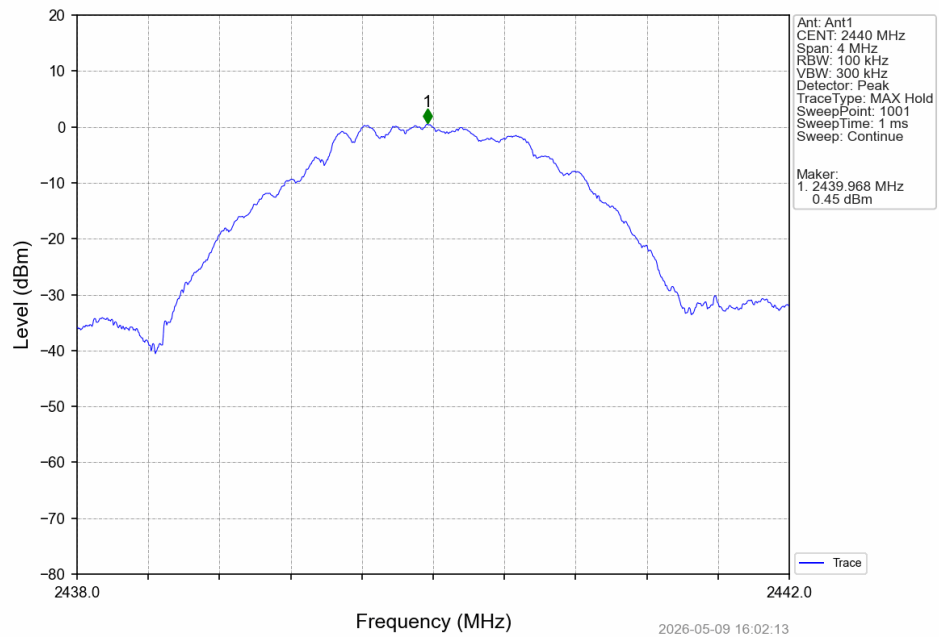
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



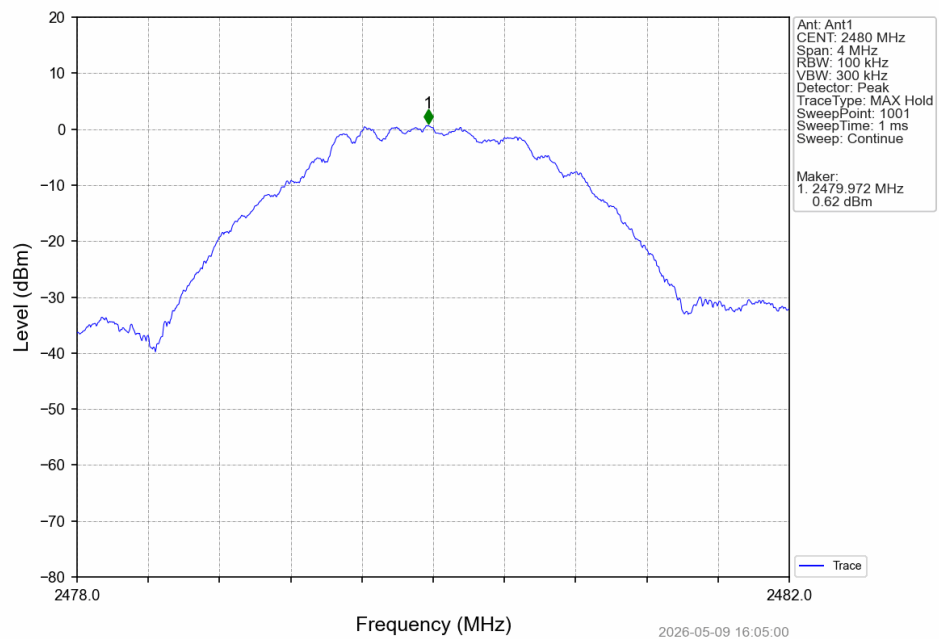
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



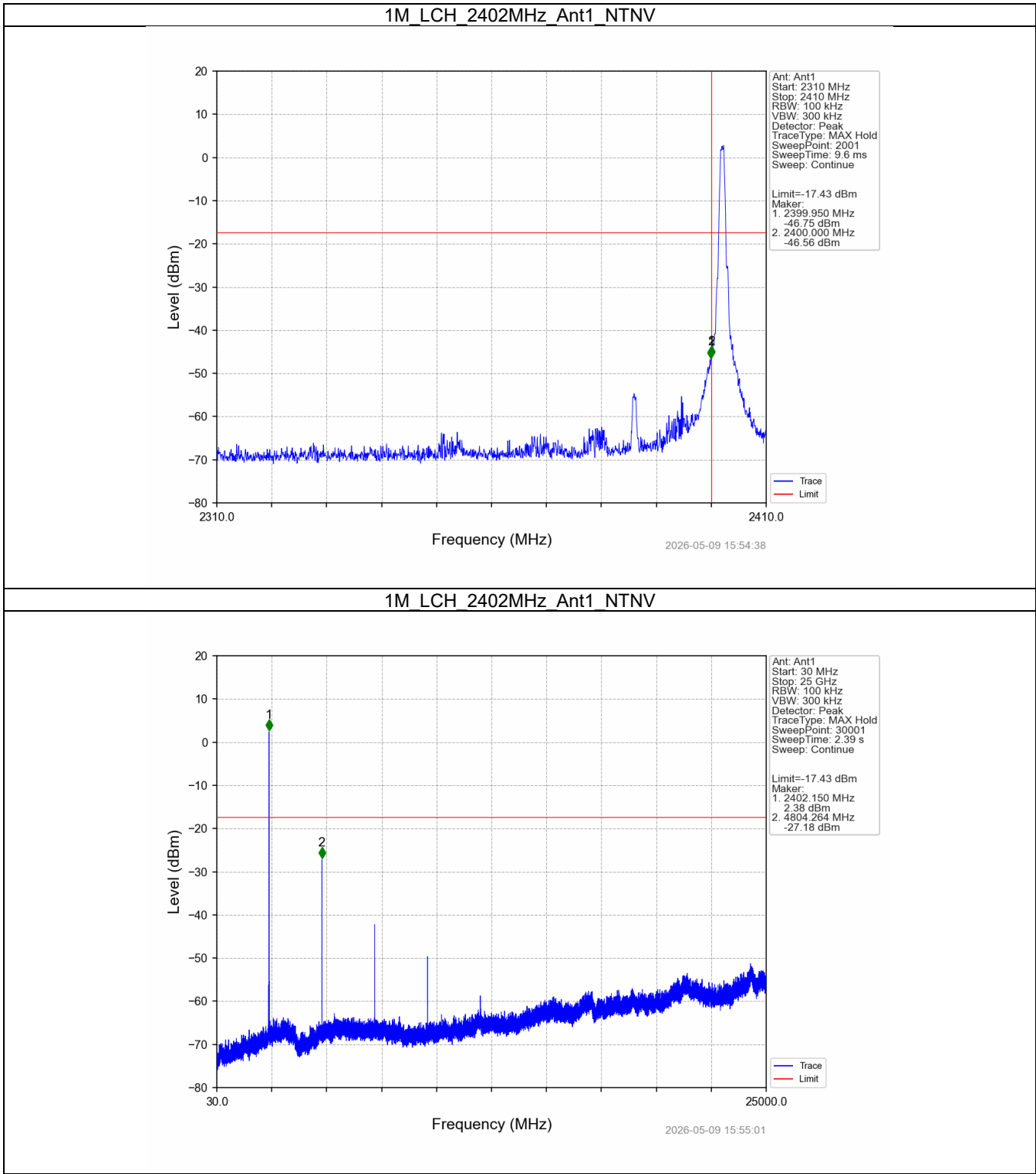
### 2M\_MCH\_2440MHz\_Ant1\_NTNV



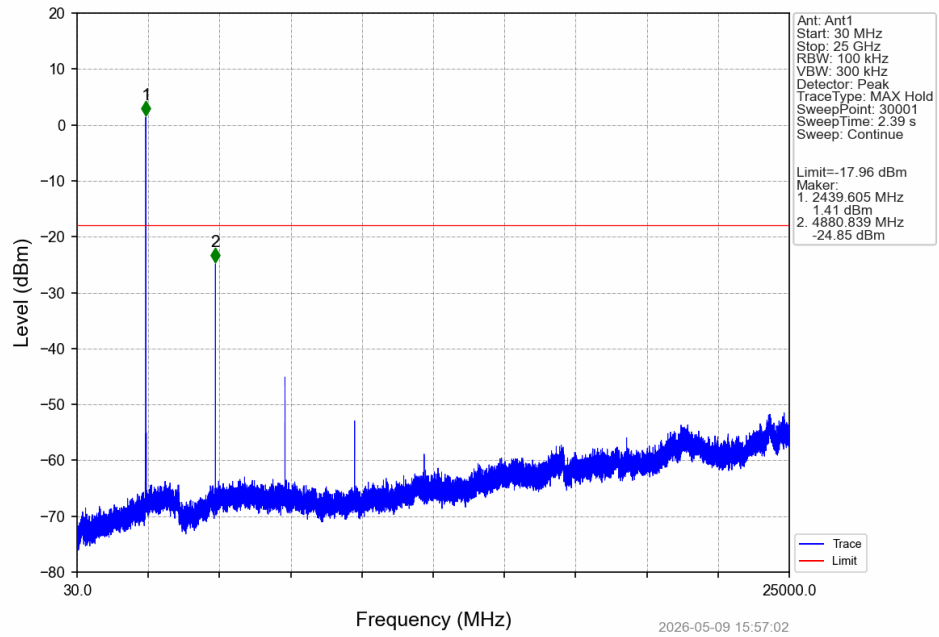
### 2M\_HCH\_2480MHz\_Ant1\_NTNV



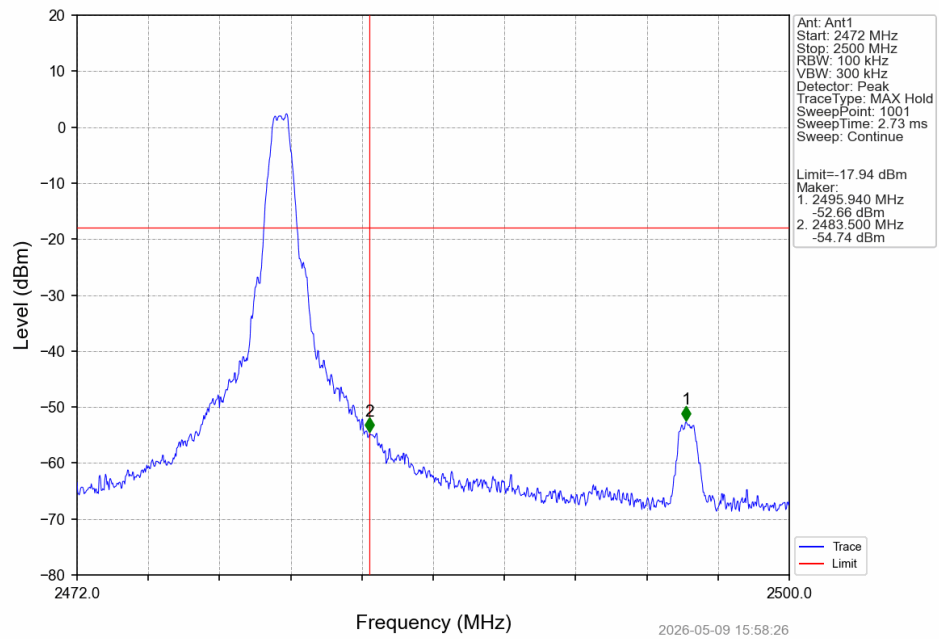
5.2.2 CSE



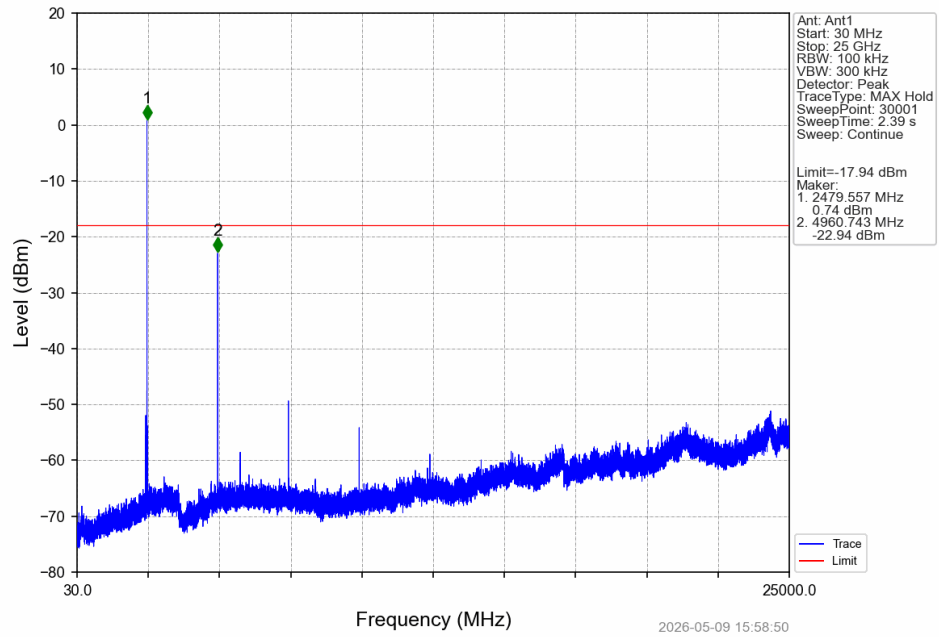
# 1M\_MCH\_2440MHz\_Ant1\_NTNV



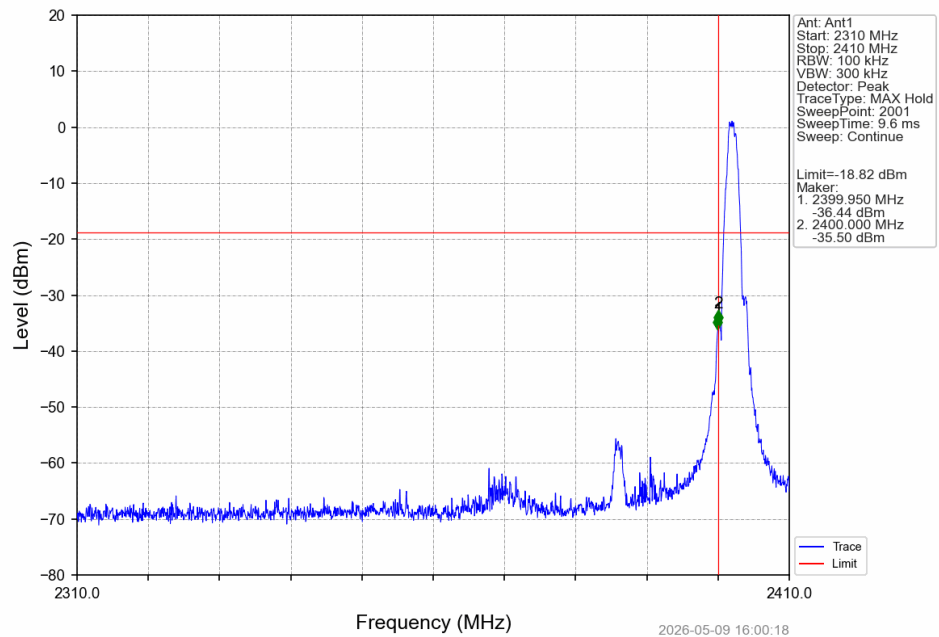
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



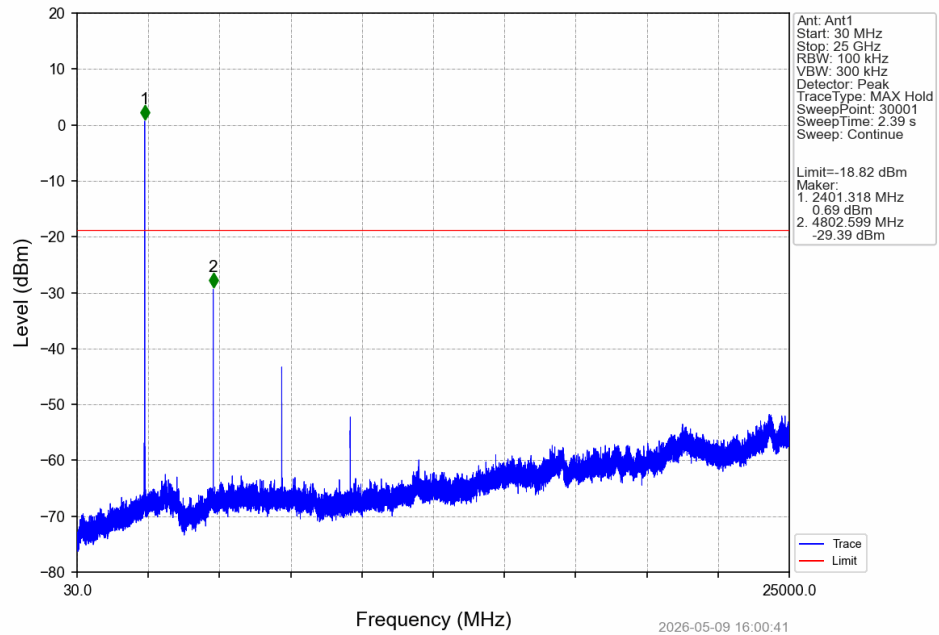
# 1M\_HCH\_2480MHz\_Ant1\_NTNV



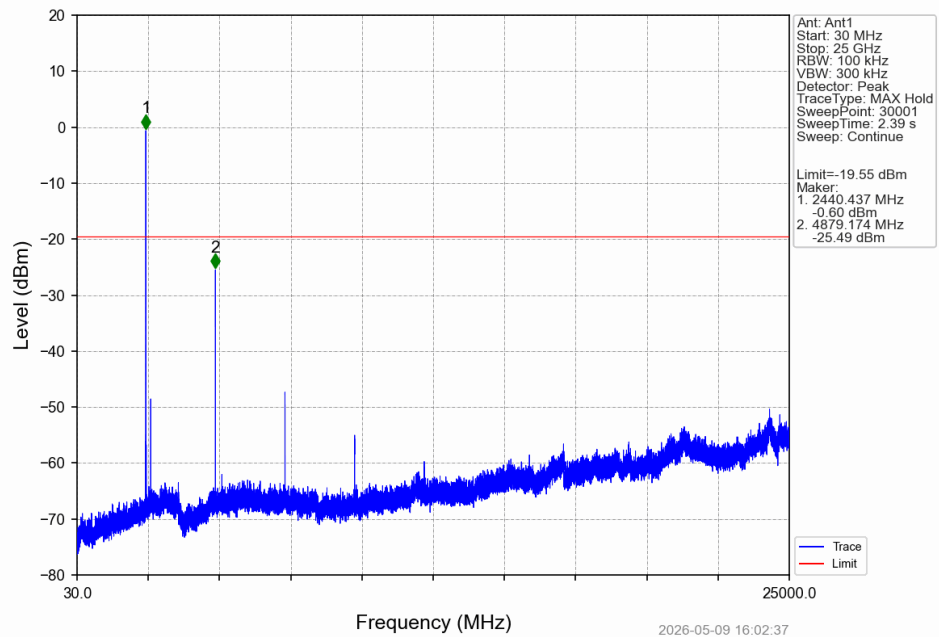
# 2M\_LCH\_2402MHz\_Ant1\_NTNV



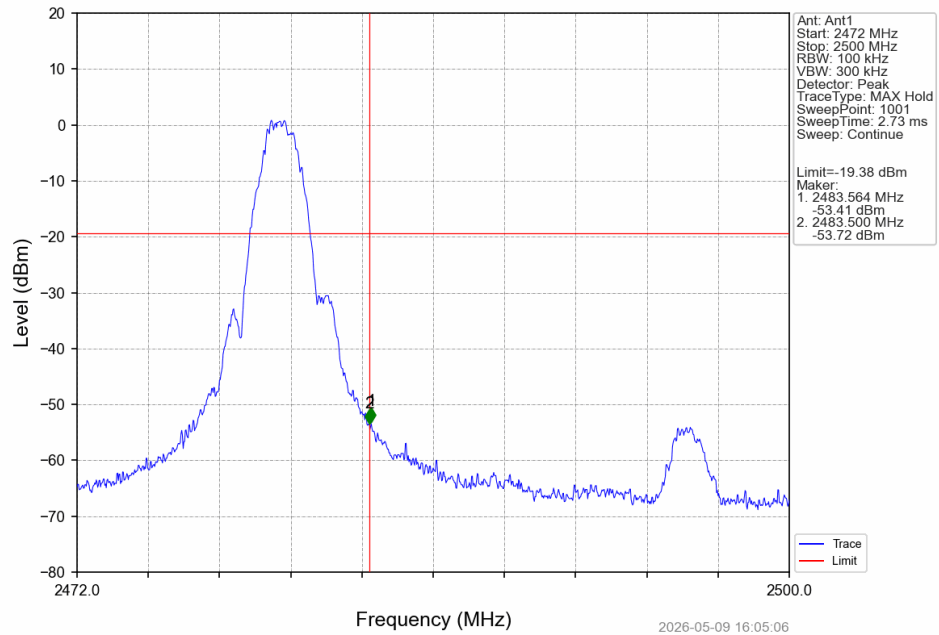
### 2M\_LCH\_2402MHz\_Ant1\_NTNV



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



# 2M\_HCH\_2480MHz\_Ant1\_NTNV



# 2M\_HCH\_2480MHz\_Ant1\_NTNV

