

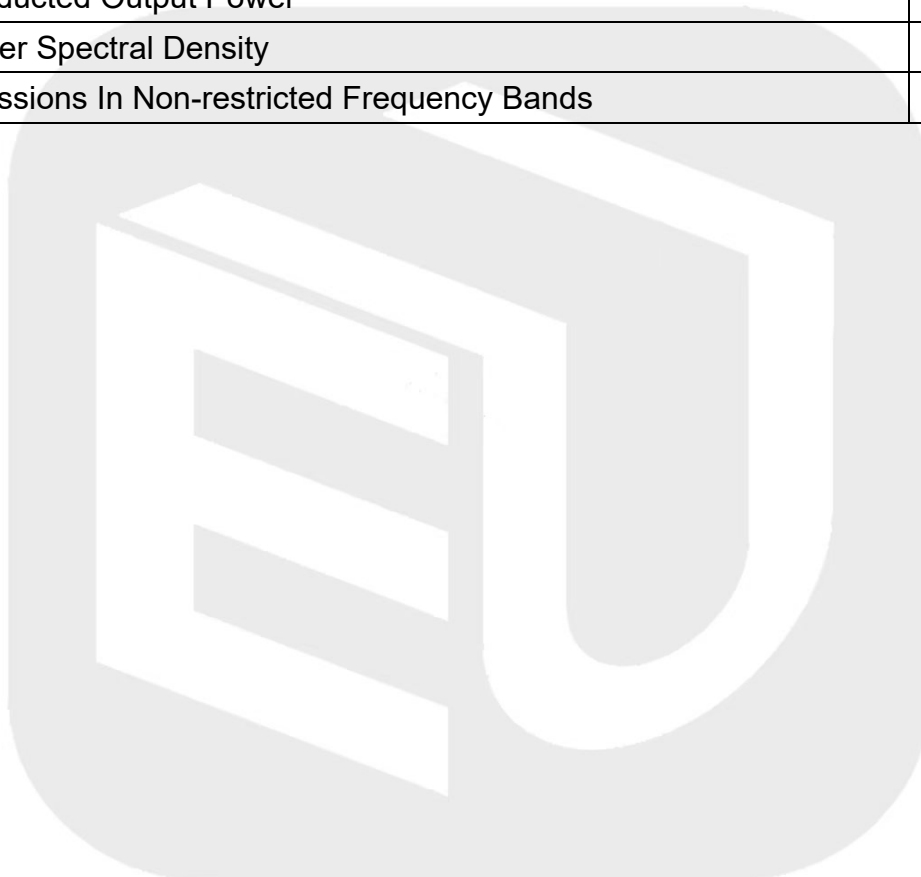
# ANNEX E TEST DATA

## For

|                      |                                             |
|----------------------|---------------------------------------------|
| Project No.:         | 8236EU011102W                               |
| Client:              | Shenzhen Qianhai Runway Technology Co., LTD |
| Product Description: | Smart Pet Feeder                            |
| Model No.:           | F11-C-PRO                                   |
| FCC ID:              | 2AU2C-F11CPRO                               |
| Technology:          | WiFi 2.4G                                   |
| Test Engineer:       | <i>Mikoy zhu</i>                            |
| Test Date:           | 2024-12-20                                  |

## 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   |



## 1. Duty Cycle

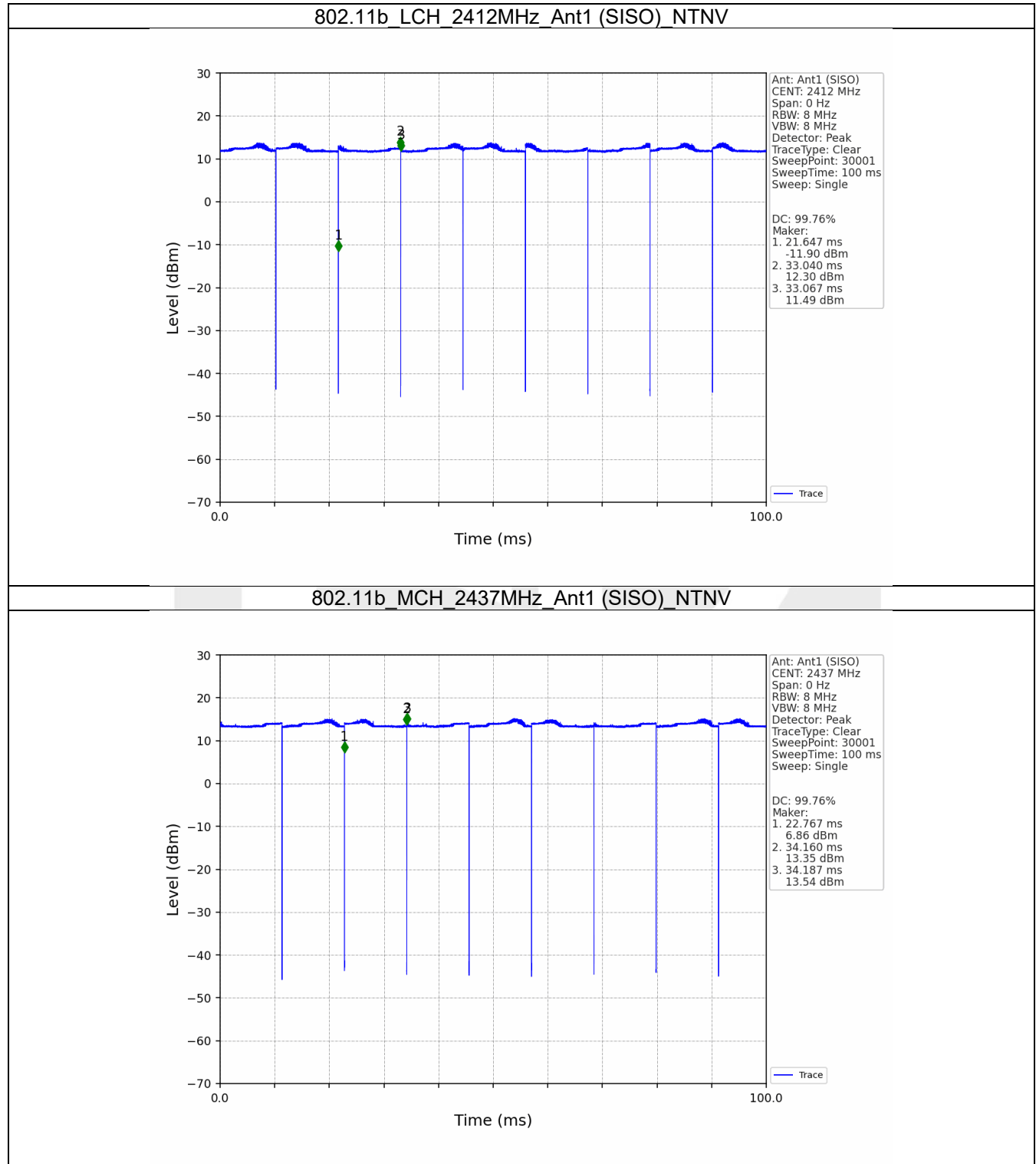
### 1.1 Test Result

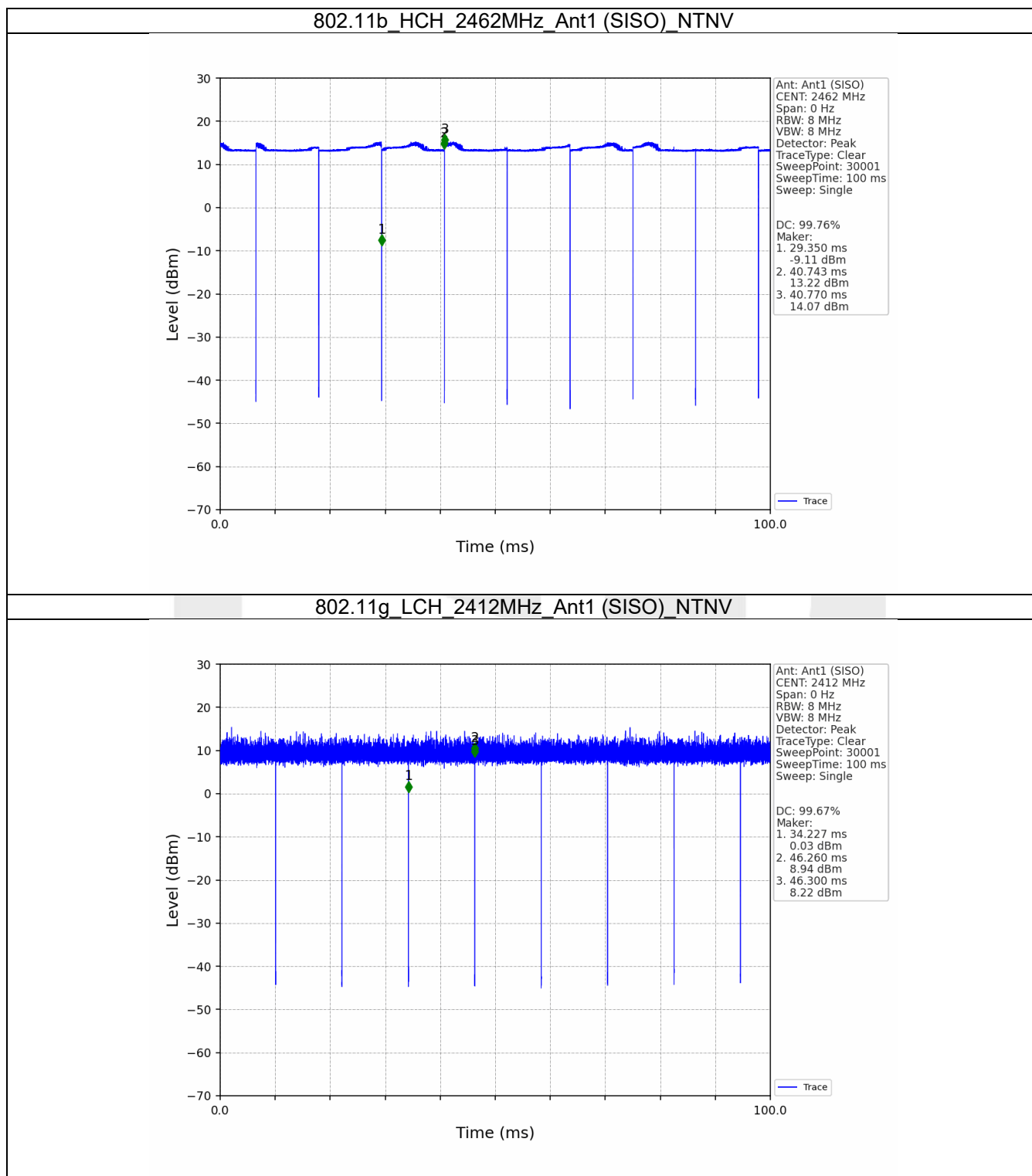
#### 1.1.1 Ant1

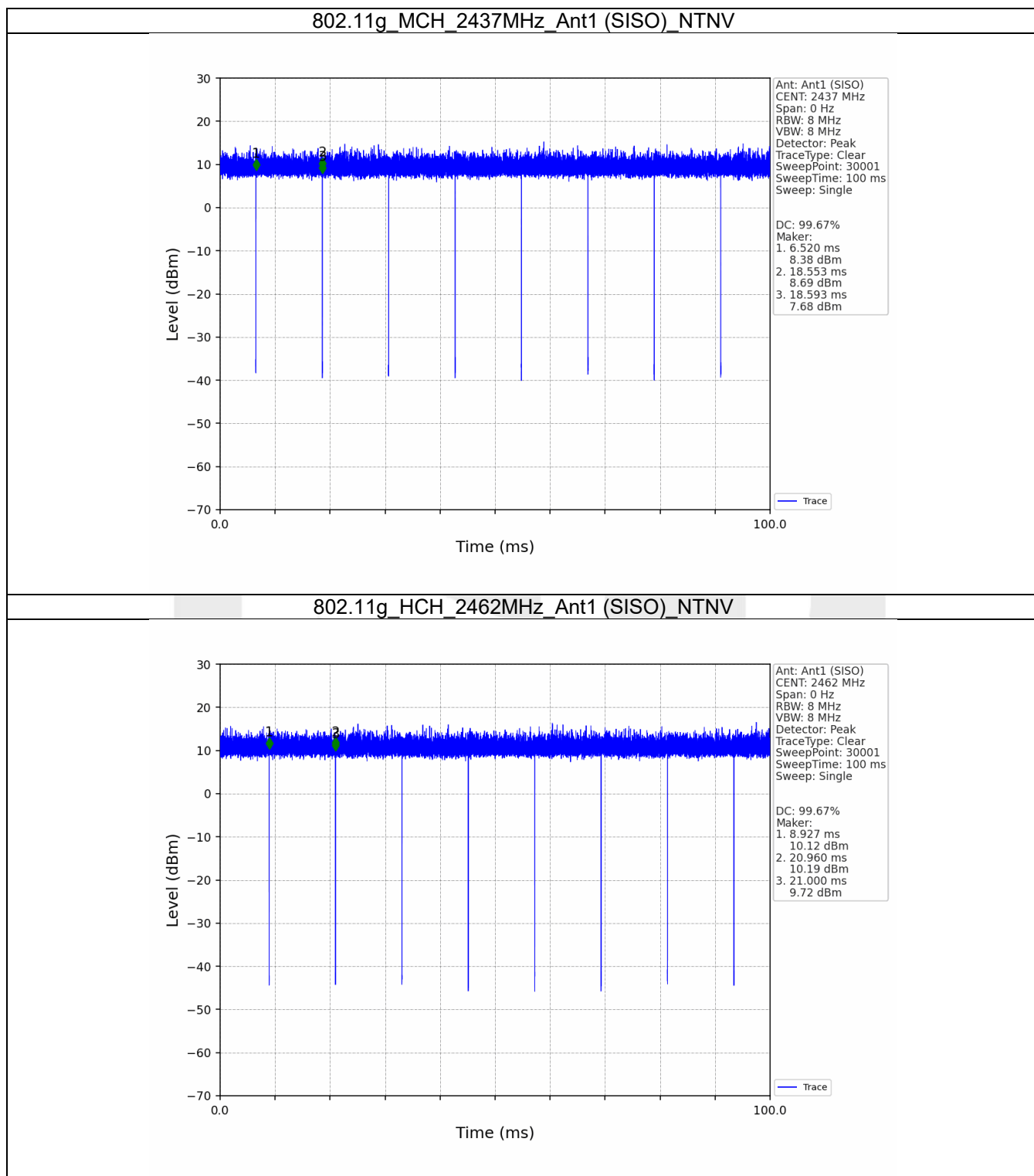
| Ant1           |         |                 |           |             |                |                                   |                       |
|----------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode           | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11b        | SISO    | 2412            | 11.393    | 11.420      | 99.76          | 0.01                              | 0.03                  |
|                |         | 2437            | 11.393    | 11.420      | 99.76          | 0.01                              | 0.03                  |
|                |         | 2462            | 11.393    | 11.420      | 99.76          | 0.01                              | 0.03                  |
| 802.11g        | SISO    | 2412            | 12.033    | 12.073      | 99.67          | 0.01                              | 0.06                  |
|                |         | 2437            | 12.033    | 12.073      | 99.67          | 0.01                              | 0.03                  |
|                |         | 2462            | 12.033    | 12.073      | 99.67          | 0.01                              | 0.06                  |
| 802.11n (HT20) | SISO    | 2412            | 11.124    | 11.147      | 99.79          | 0.01                              | 0.03                  |
|                |         | 2437            | 11.123    | 11.150      | 99.76          | 0.01                              | 0.03                  |
|                |         | 2462            | 11.124    | 11.150      | 99.77          | 0.01                              | 0.06                  |

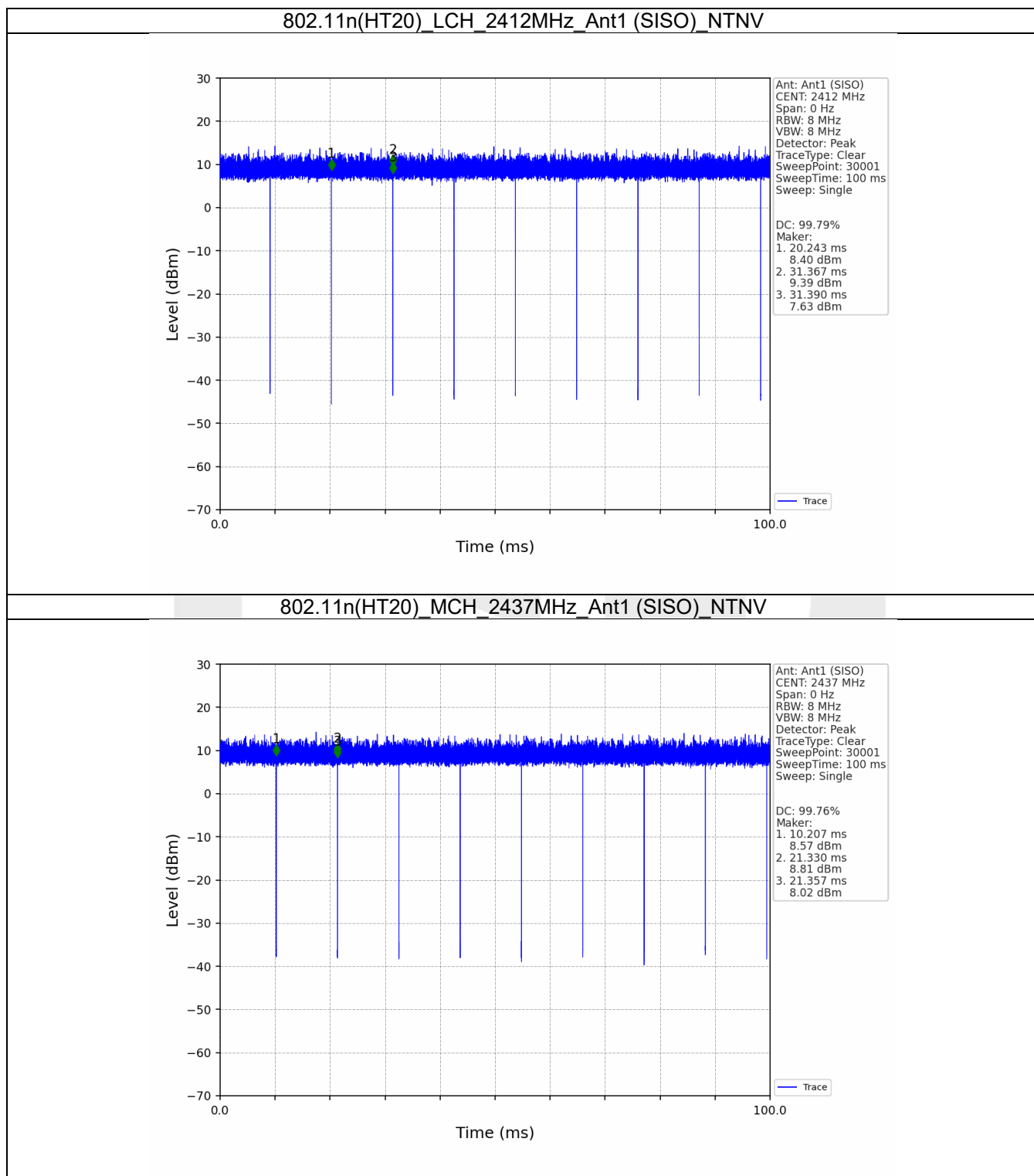
## 1.2 Test Graph

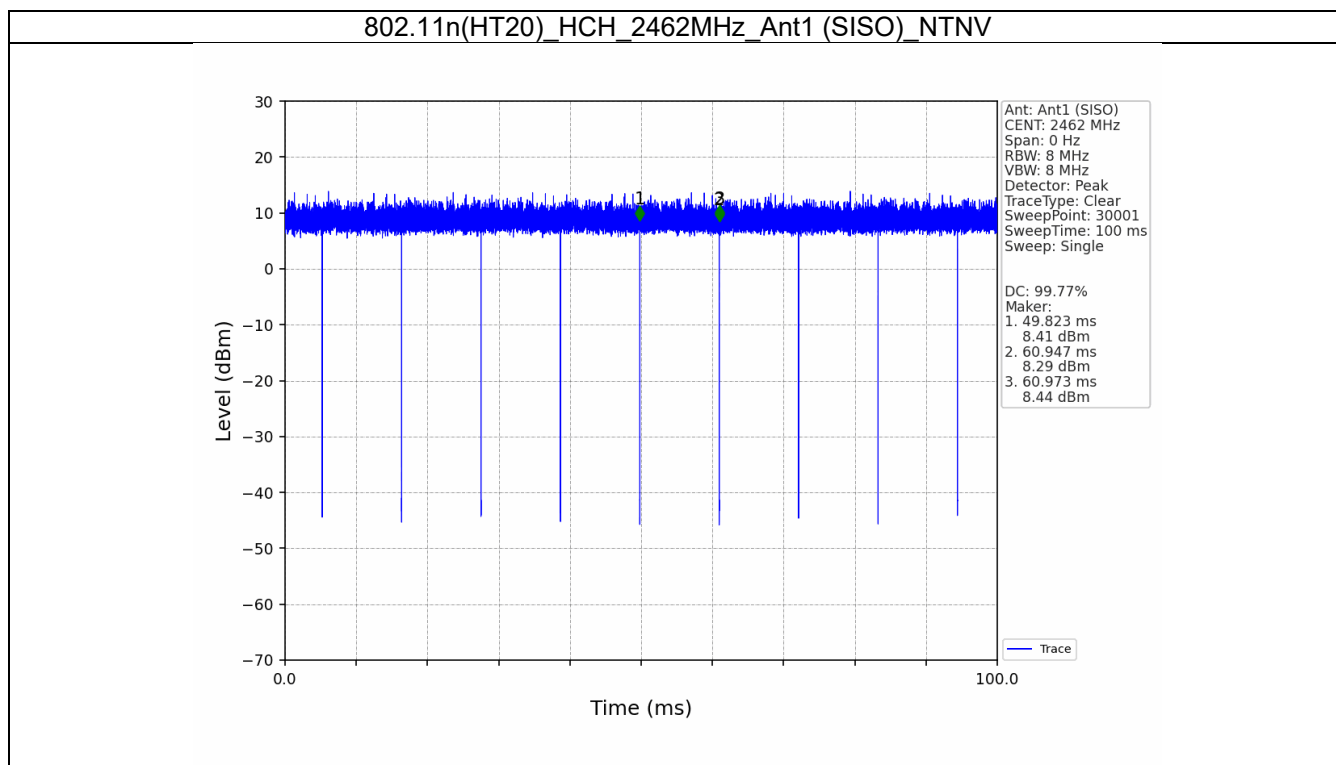
### 1.2.1 Ant1













## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

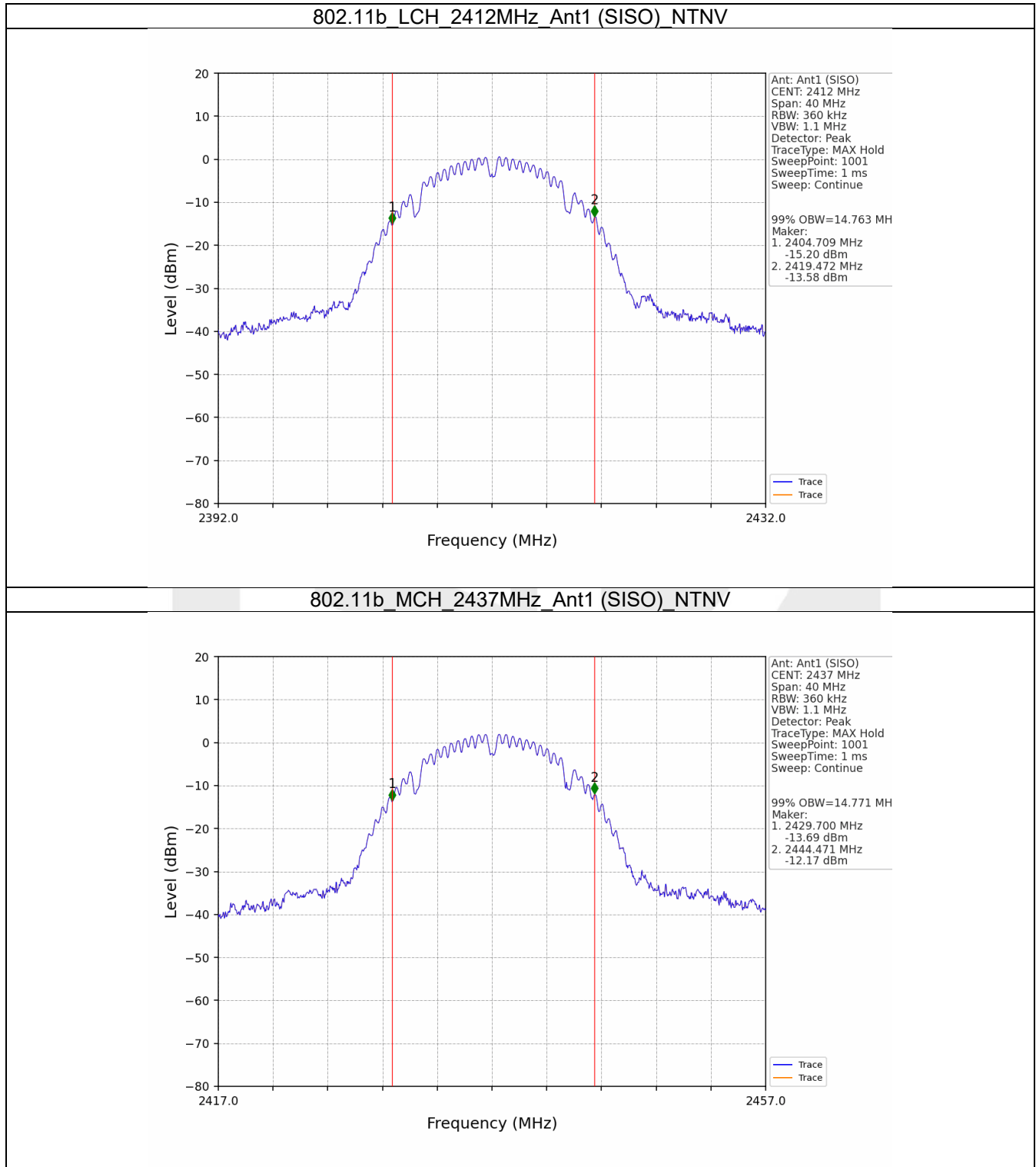
| Mode           | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|----------------|---------|-----------------|-----|------------------------------|-------|---------|
|                |         |                 |     | Result                       | Limit |         |
| 802.11b        | SISO    | 2412            | 1   | 14.763                       | /     | Pass    |
|                |         | 2437            | 1   | 14.771                       | /     | Pass    |
|                |         | 2462            | 1   | 14.764                       | /     | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 17.007                       | /     | Pass    |
|                |         | 2437            | 1   | 17.029                       | /     | Pass    |
|                |         | 2462            | 1   | 17.030                       | /     | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 17.749                       | /     | Pass    |
|                |         | 2437            | 1   | 17.772                       | /     | Pass    |
|                |         | 2462            | 1   | 17.790                       | /     | Pass    |

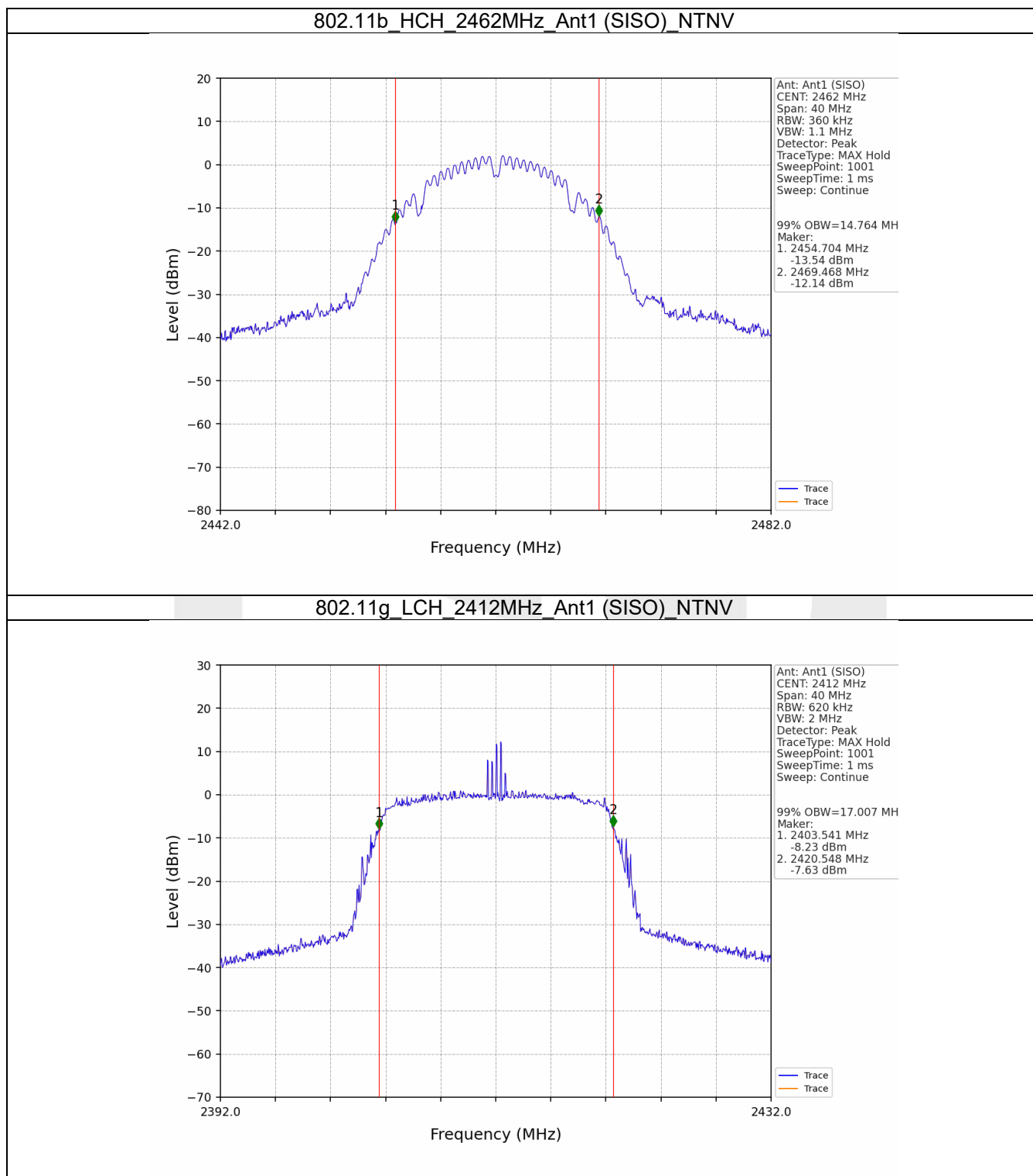
#### 2.1.2 6dB BW

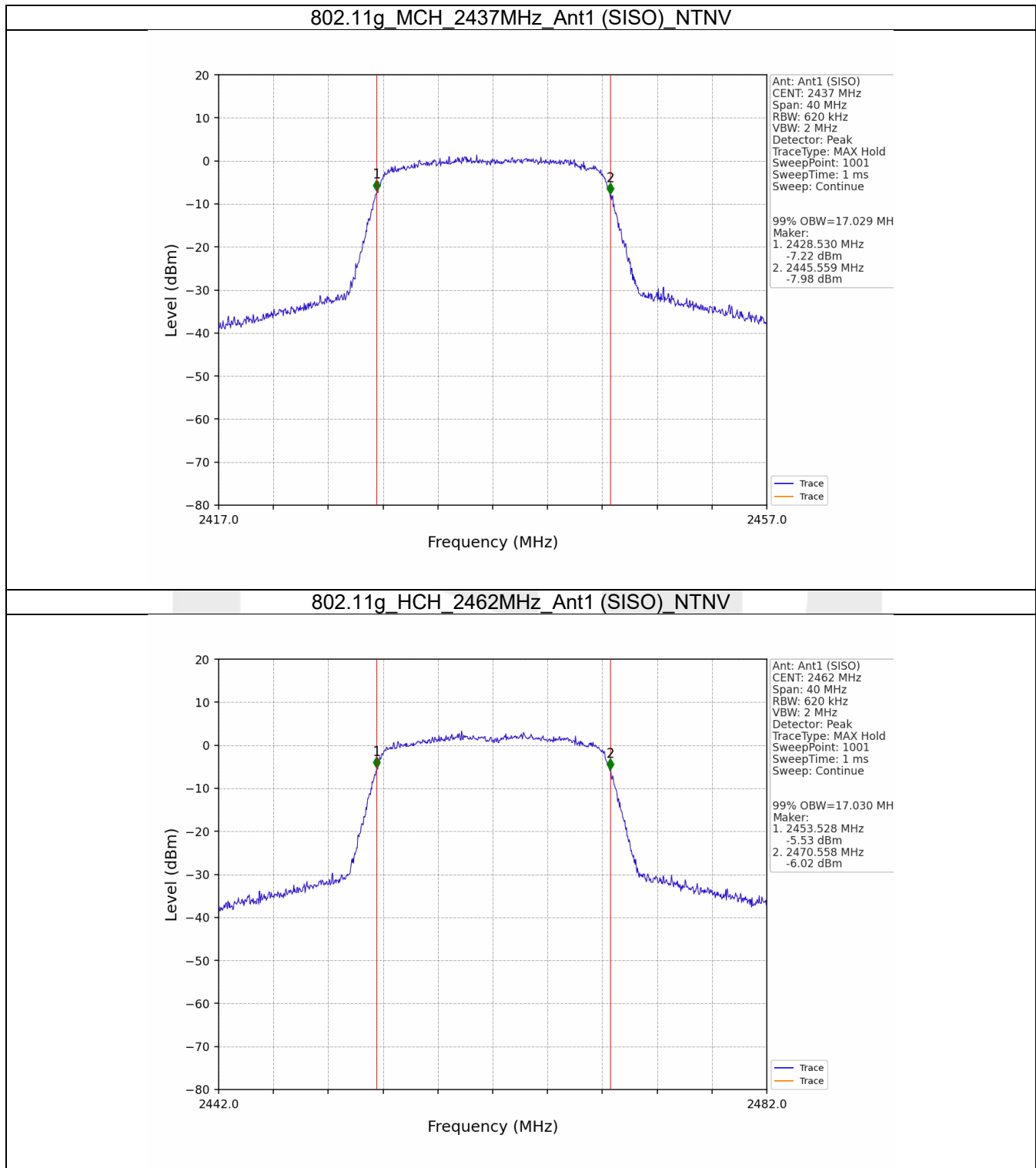
| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11b        | SISO    | 2412            | 1   | 10.146              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 10.173              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 10.132              | $\geq 0.5$ | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 17.053              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 16.407              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 16.534              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 17.145              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 12.846              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 17.248              | $\geq 0.5$ | Pass    |

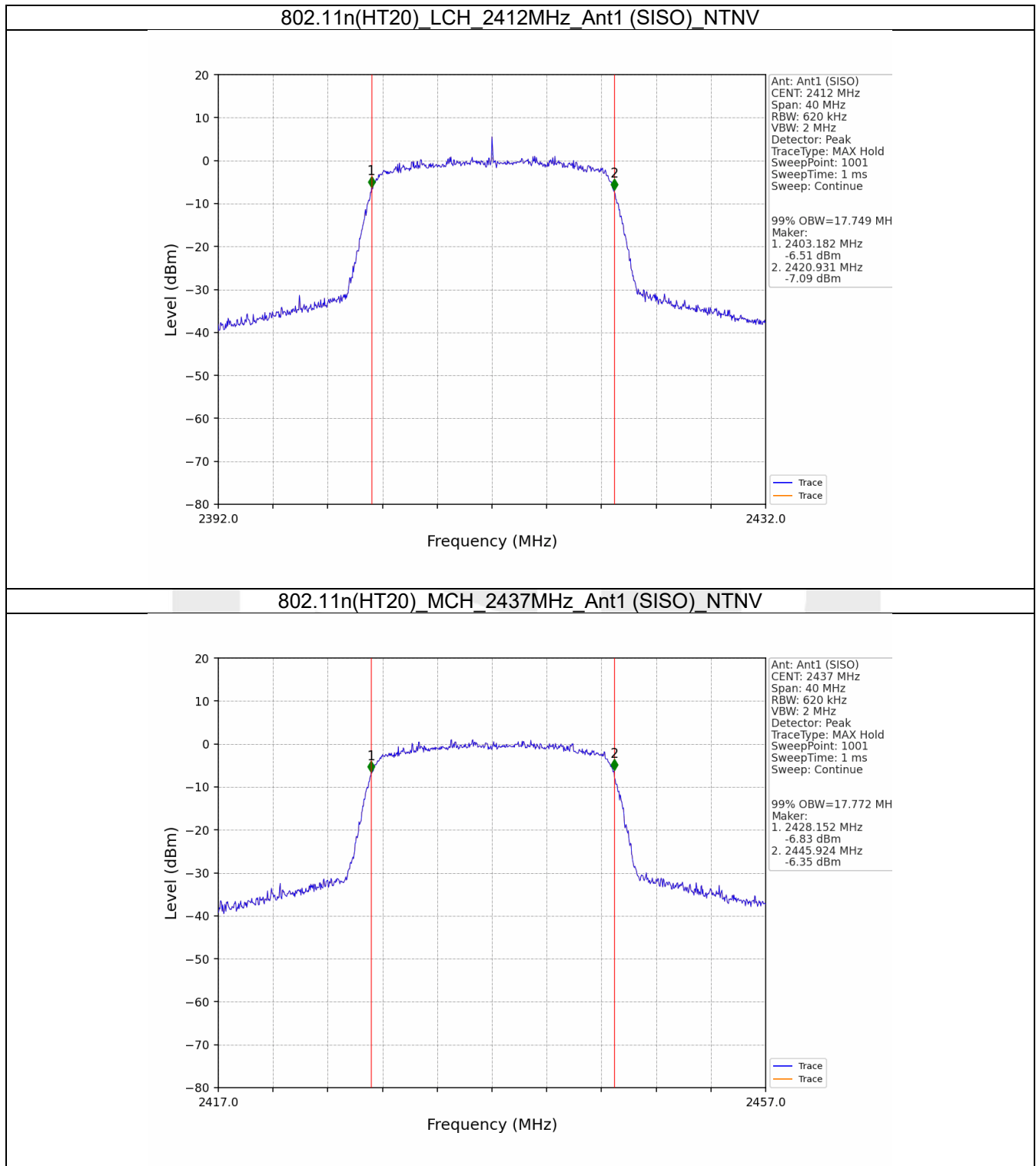
## 2.2 Test Graph

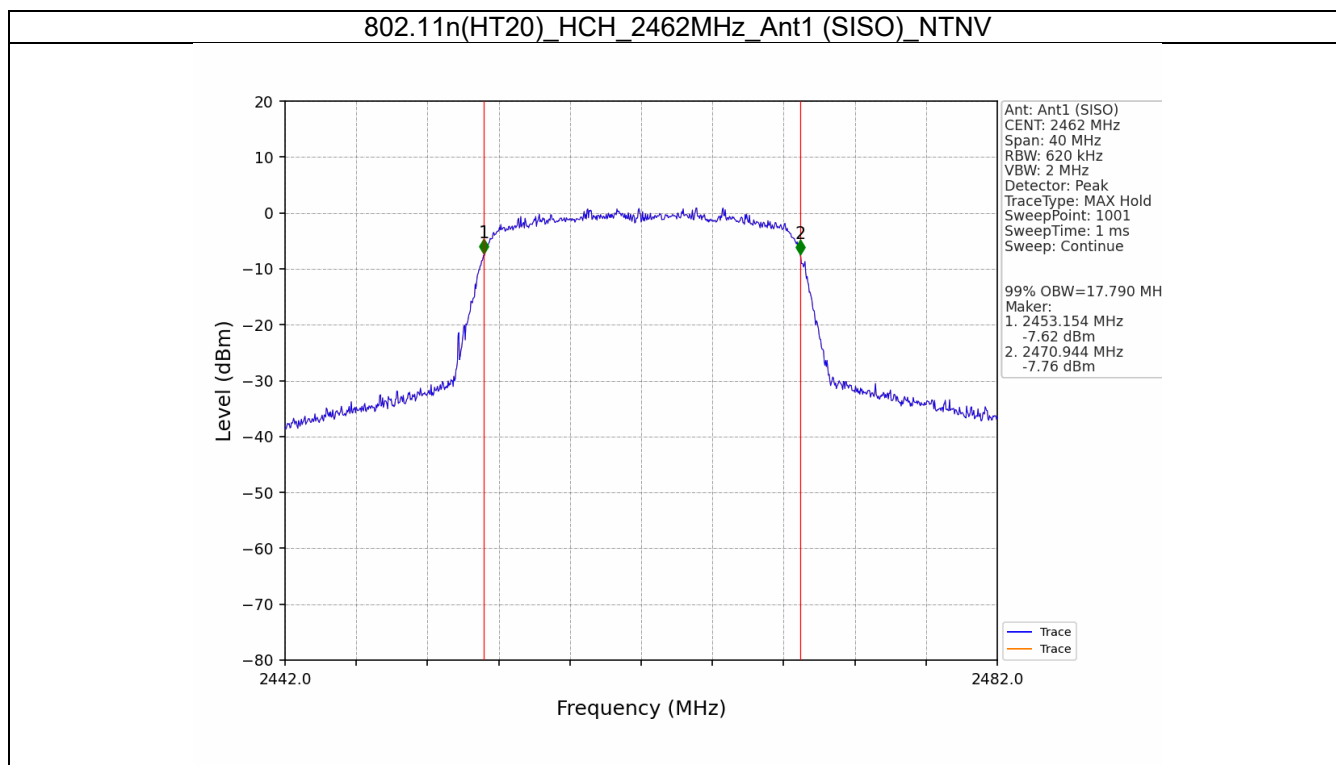
### 2.2.1 OBW



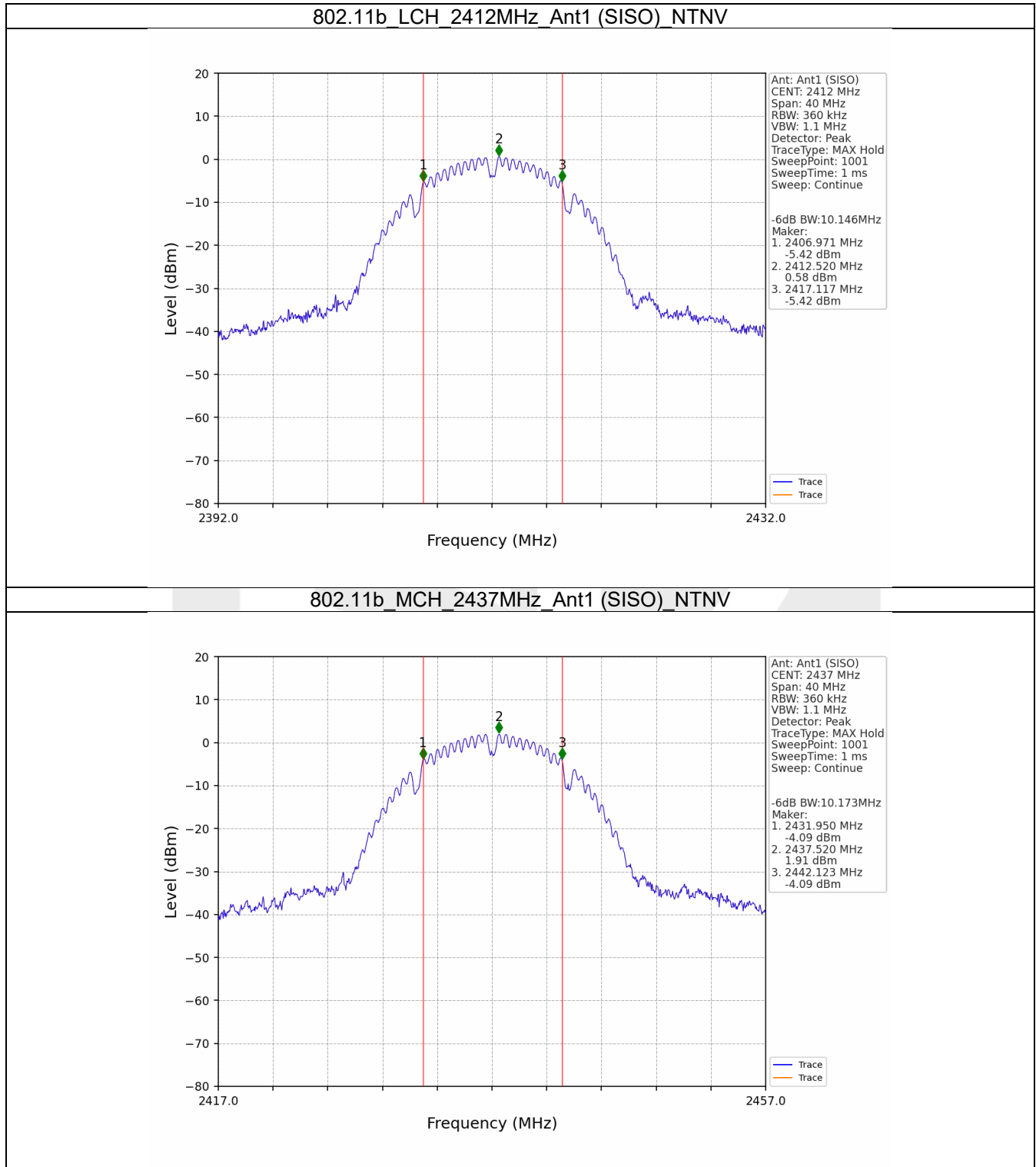


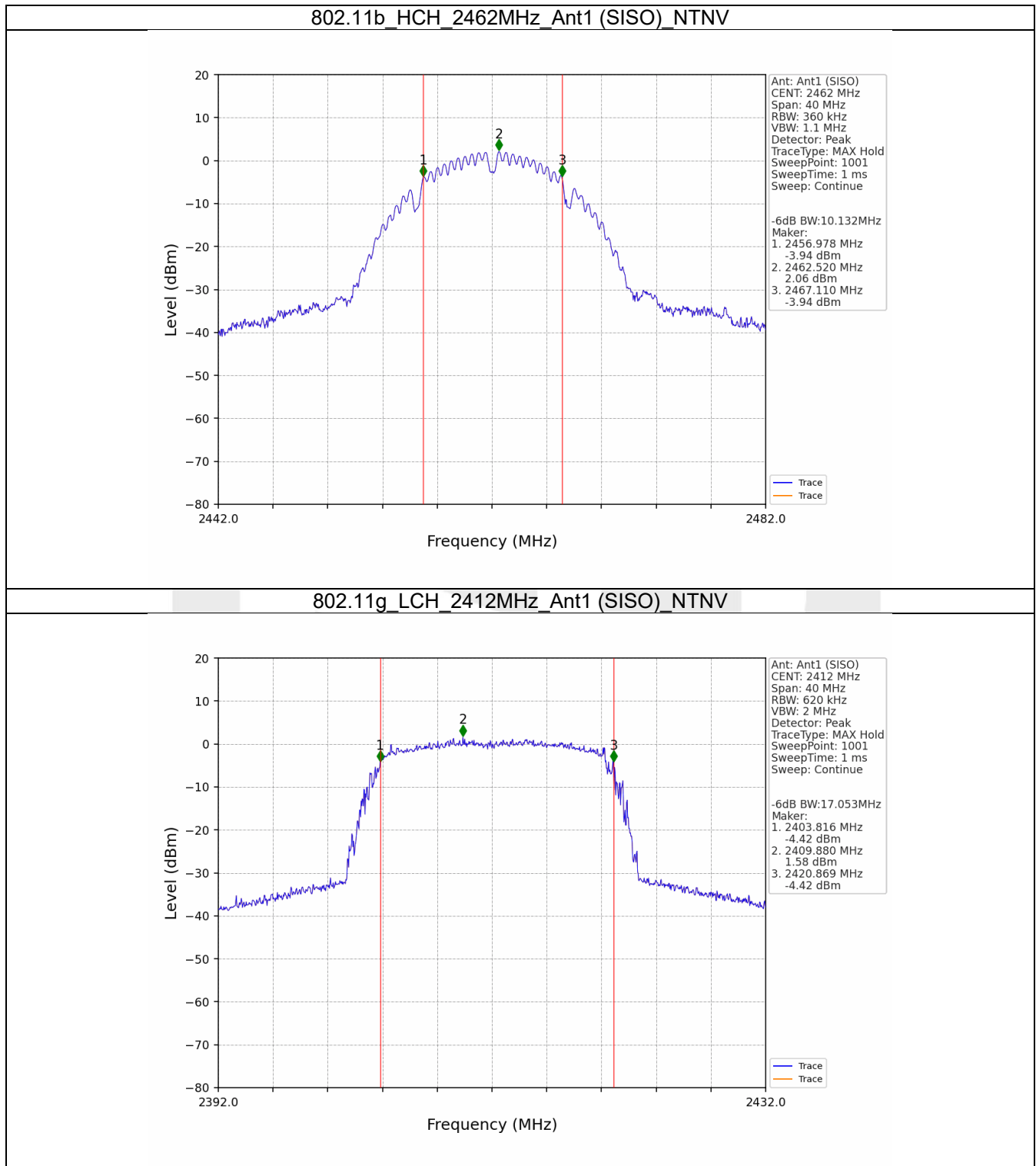




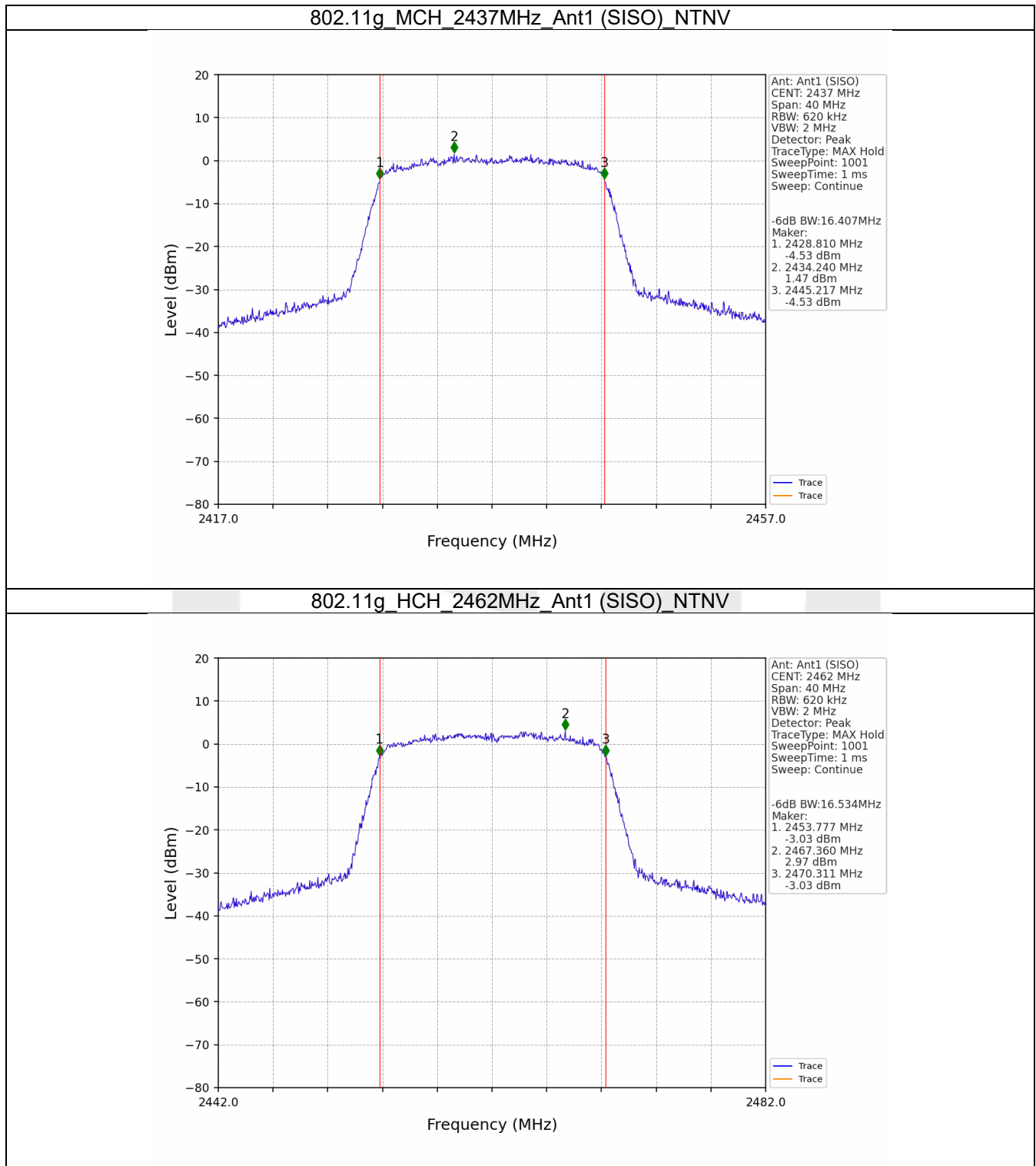


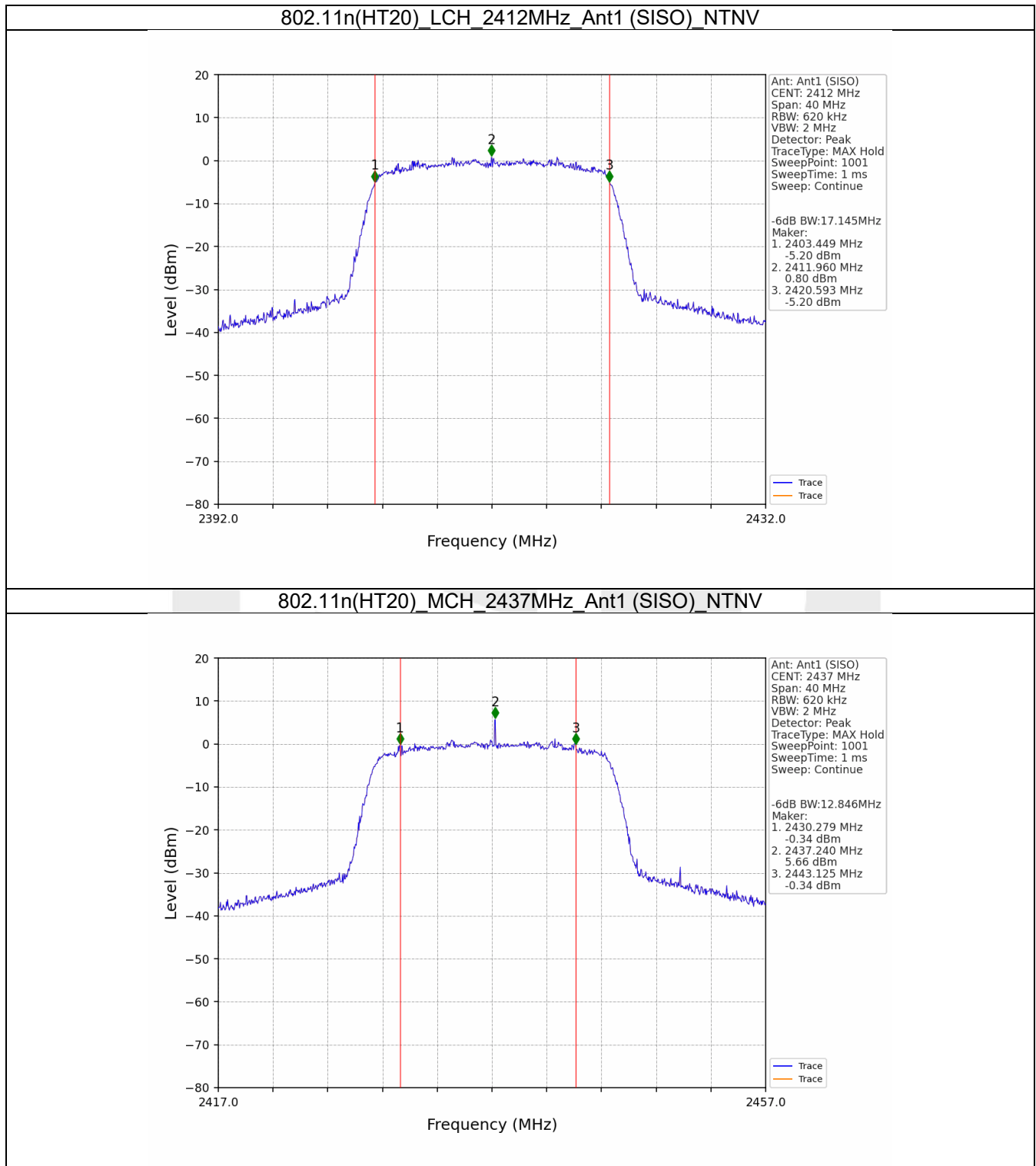
## 2.2.2 6dB BW

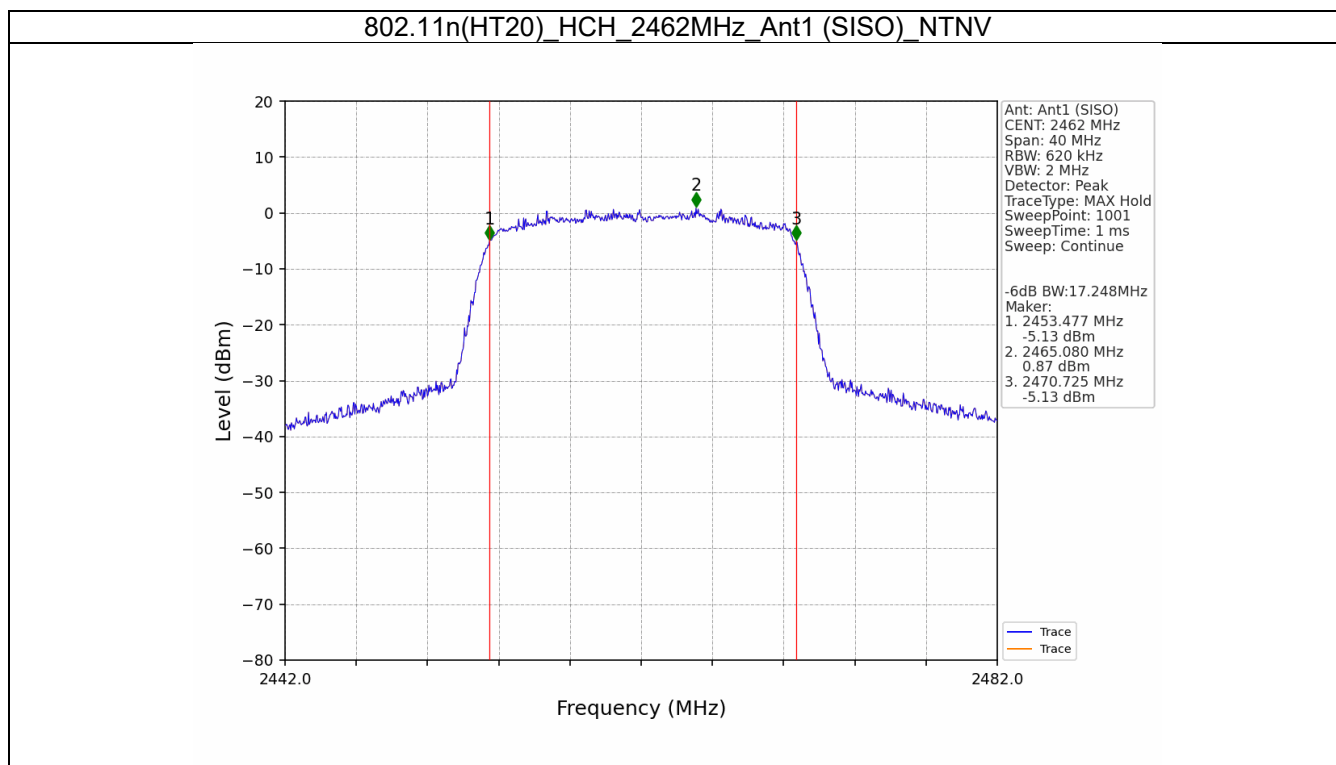












### 3. Maximum Conducted Output Power

#### 3.1 Test Result

##### 3.1.1 Power

| Mode           | TX Type | Frequency (MHz) | Maximum Peak Conducted Output Power (dBm) |       | Verdict |
|----------------|---------|-----------------|-------------------------------------------|-------|---------|
|                |         |                 | ANT1                                      | Limit |         |
| 802.11b        | SISO    | 2412            | 11.50                                     | <=30  | Pass    |
|                |         | 2437            | 13.06                                     | <=30  | Pass    |
|                |         | 2462            | 12.99                                     | <=30  | Pass    |
| 802.11g        | SISO    | 2412            | 14.67                                     | <=30  | Pass    |
|                |         | 2437            | 15.86                                     | <=30  | Pass    |
|                |         | 2462            | 15.88                                     | <=30  | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 13.74                                     | <=30  | Pass    |
|                |         | 2437            | 12.98                                     | <=30  | Pass    |
|                |         | 2462            | 13.53                                     | <=30  | Pass    |

#### 4. Maximum Power Spectral Density

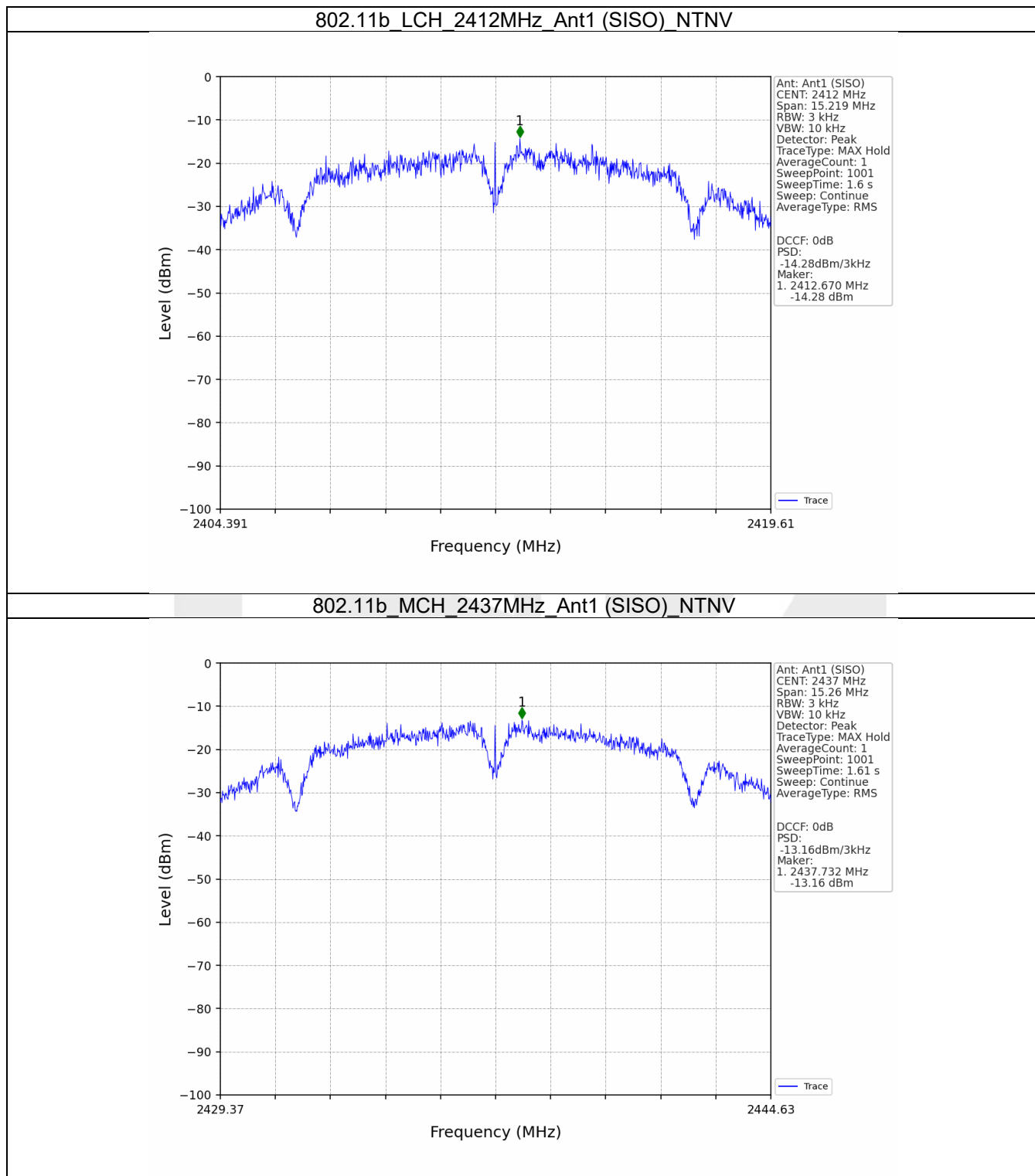
##### 4.1 Test Result

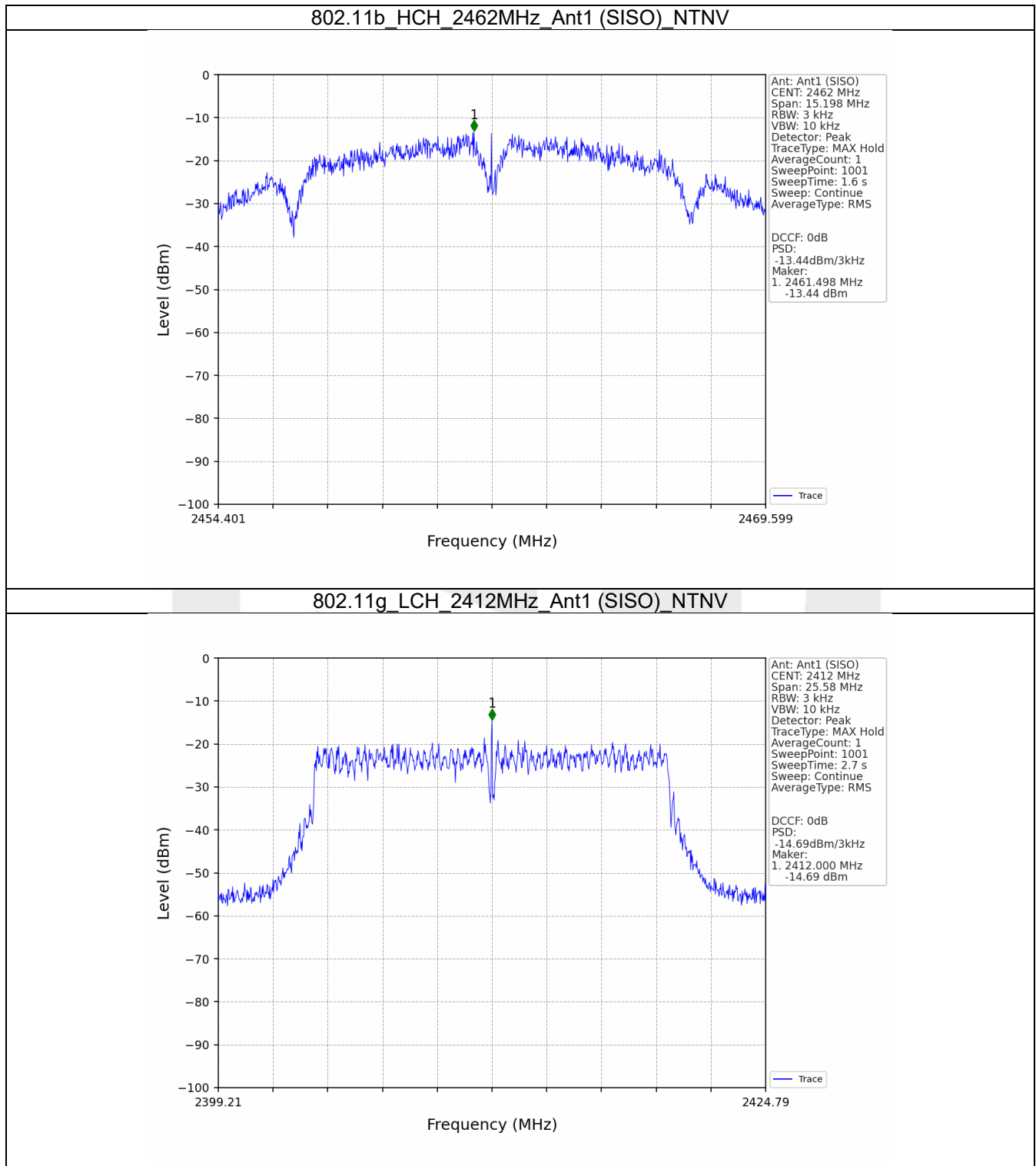
##### 4.1.1 PSD

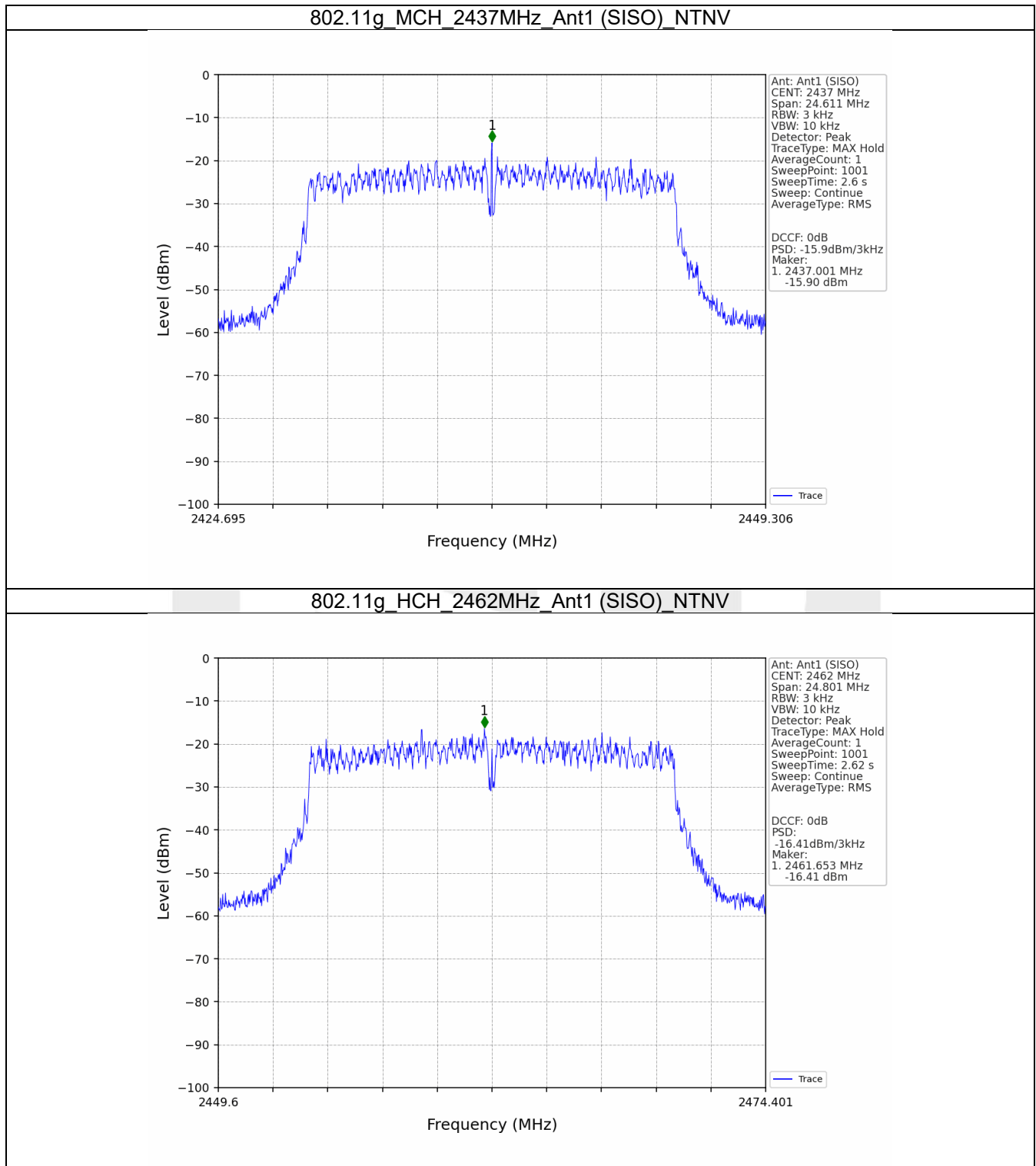
| Mode           | TX Type | Frequency (MHz) | Maximum PSD (dBm/3kHz) |       | Verdict |
|----------------|---------|-----------------|------------------------|-------|---------|
|                |         |                 | ANT1                   | Limit |         |
| 802.11b        | SISO    | 2412            | -14.28                 | <=8   | Pass    |
|                |         | 2437            | -13.16                 | <=8   | Pass    |
|                |         | 2462            | -13.44                 | <=8   | Pass    |
| 802.11g        | SISO    | 2412            | -14.69                 | <=8   | Pass    |
|                |         | 2437            | -15.90                 | <=8   | Pass    |
|                |         | 2462            | -16.41                 | <=8   | Pass    |
| 802.11n (HT20) | SISO    | 2412            | -16.85                 | <=8   | Pass    |
|                |         | 2437            | -11.13                 | <=8   | Pass    |
|                |         | 2462            | -17.06                 | <=8   | Pass    |

## 4.2 Test Graph

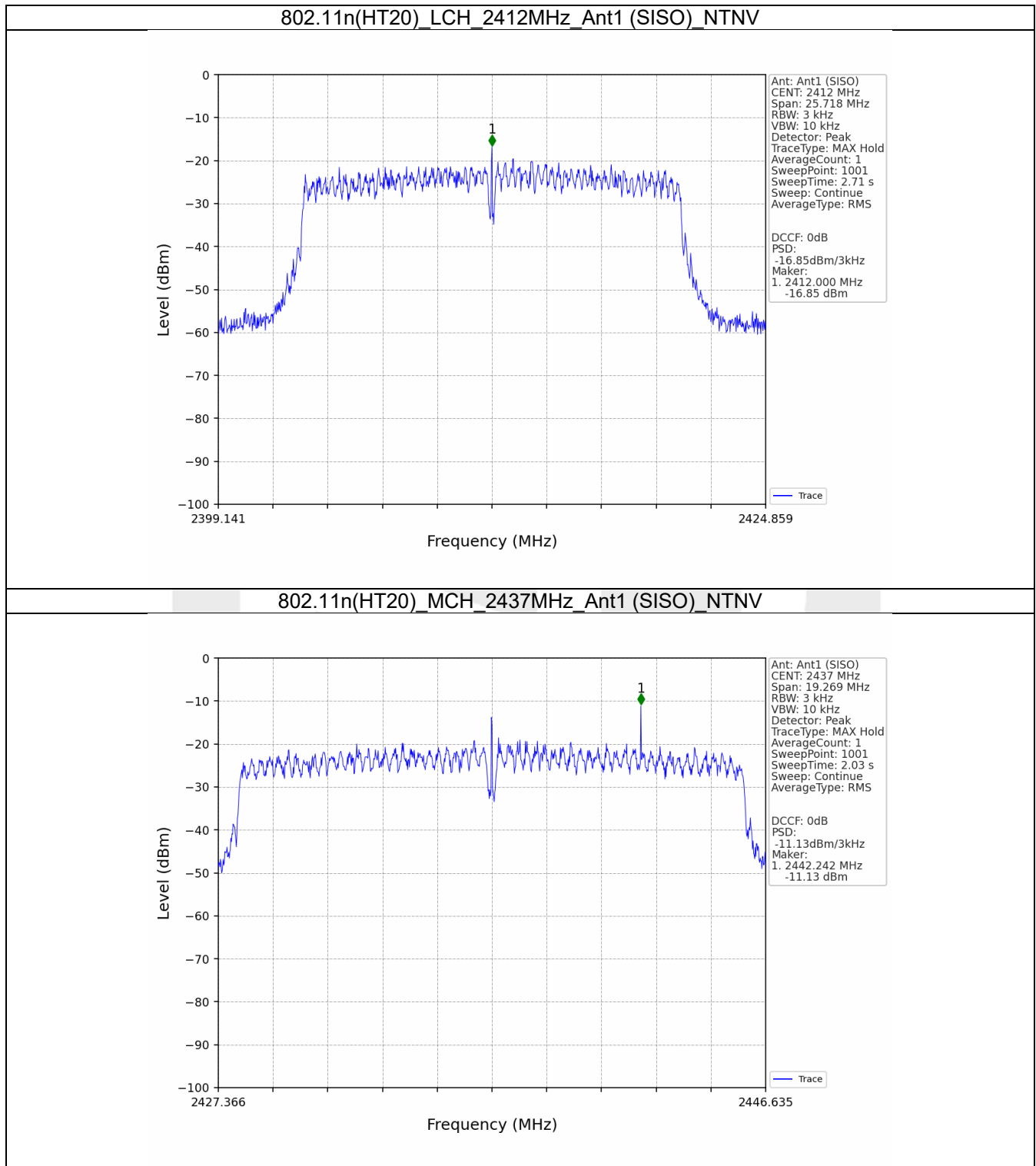
### 4.2.1 PSD

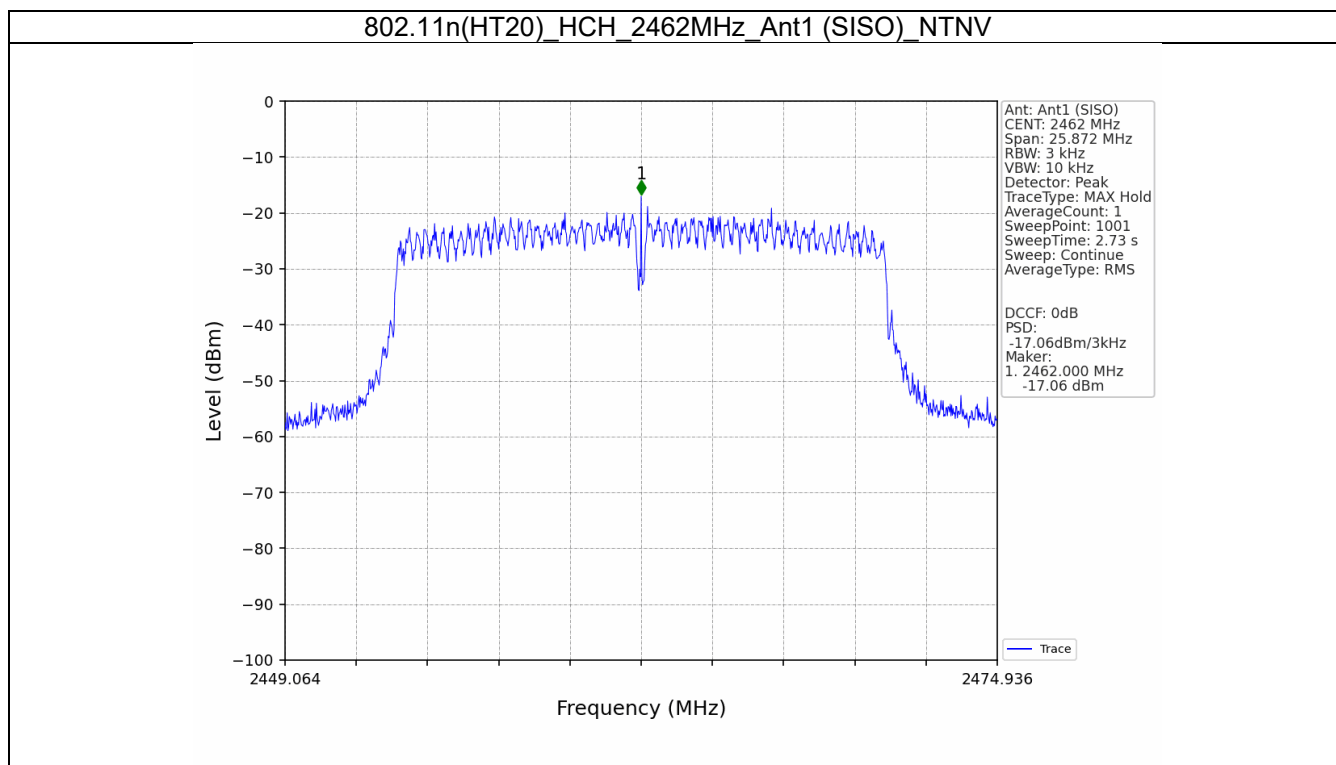












## 5. Unwanted Emissions In Non-restricted Frequency Bands

### 5.1 Test Result

#### 5.1.1 Ref

| Mode           | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) |
|----------------|---------|-----------------|-----|--------------------------|
| 802.11b        | SISO    | 2412            | 1   | -0.51                    |
|                |         | 2437            | 1   | 1.45                     |
|                |         | 2462            | 1   | 1.69                     |
| 802.11g        | SISO    | 2412            | 1   | -4.64                    |
|                |         | 2437            | 1   | -5.64                    |
|                |         | 2462            | 1   | -3.29                    |
| 802.11n (HT20) | SISO    | 2412            | 1   | -6.48                    |
|                |         | 2437            | 1   | -5.47                    |
|                |         | 2462            | 1   | -4.80                    |

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.

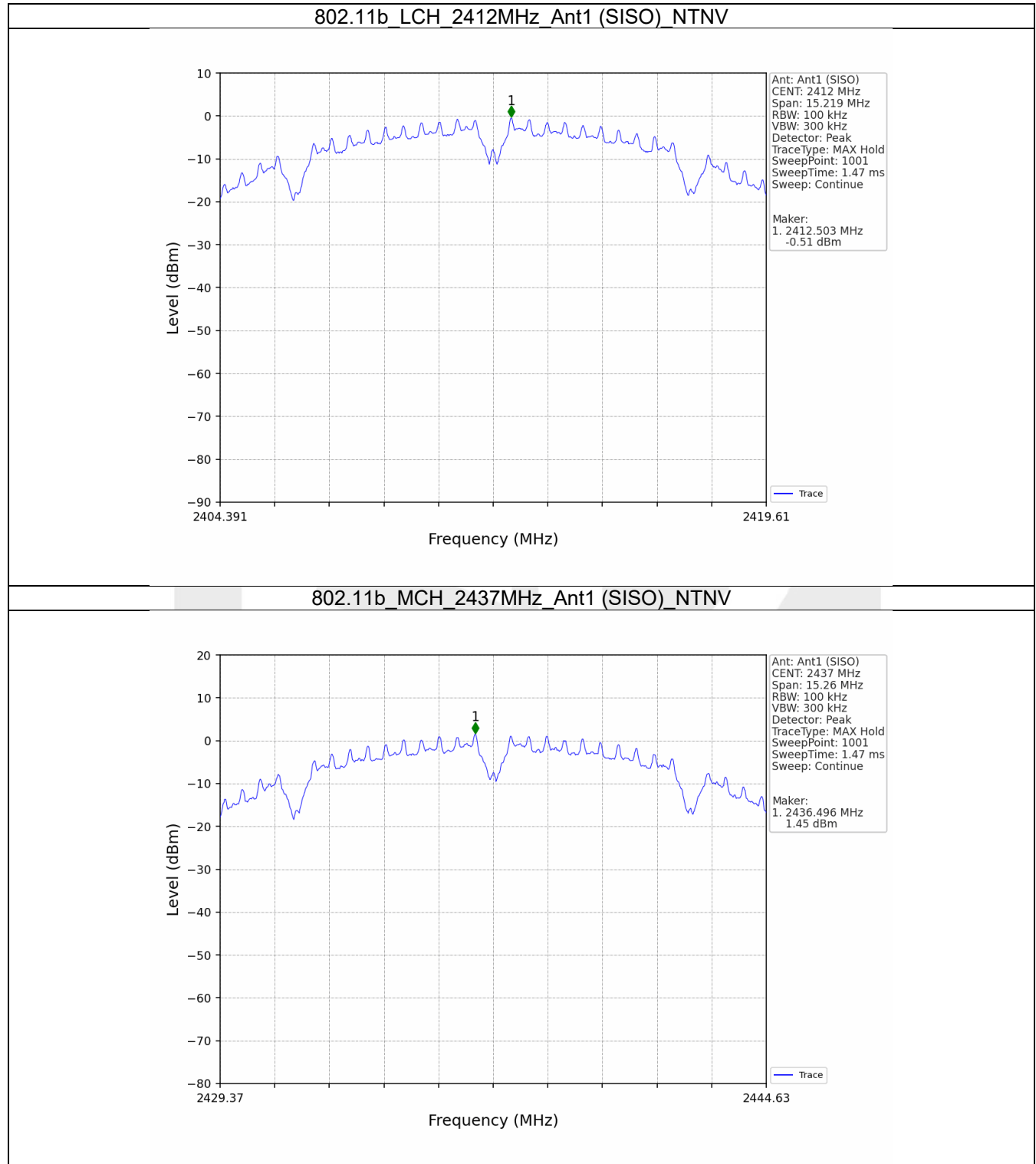
#### 5.1.2 CSE

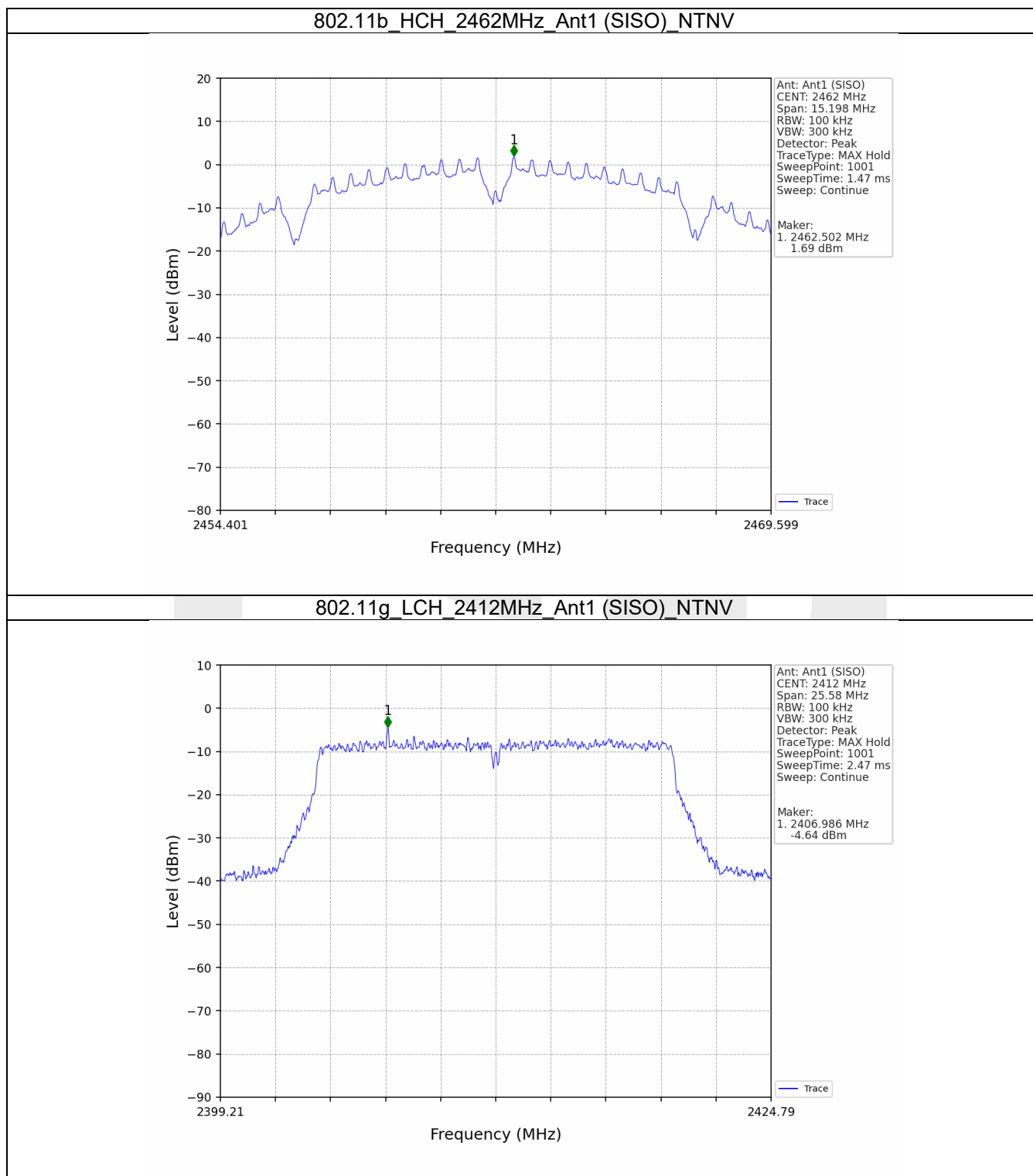
| Mode           | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|----------------|---------|-----------------|-----|--------------------------|-------------|---------|
| 802.11b        | SISO    | 2412            | 1   | -0.51                    | -20.51      | Pass    |
|                |         | 2437            | 1   | 1.45                     | -18.55      | Pass    |
|                |         | 2462            | 1   | 1.69                     | -18.31      | Pass    |
| 802.11g        | SISO    | 2412            | 1   | -4.64                    | -24.64      | Pass    |
|                |         | 2437            | 1   | -5.64                    | -25.64      | Pass    |
|                |         | 2462            | 1   | -3.29                    | -23.29      | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | -6.48                    | -26.48      | Pass    |
|                |         | 2437            | 1   | -5.47                    | -25.47      | Pass    |
|                |         | 2462            | 1   | -4.80                    | -24.80      | Pass    |

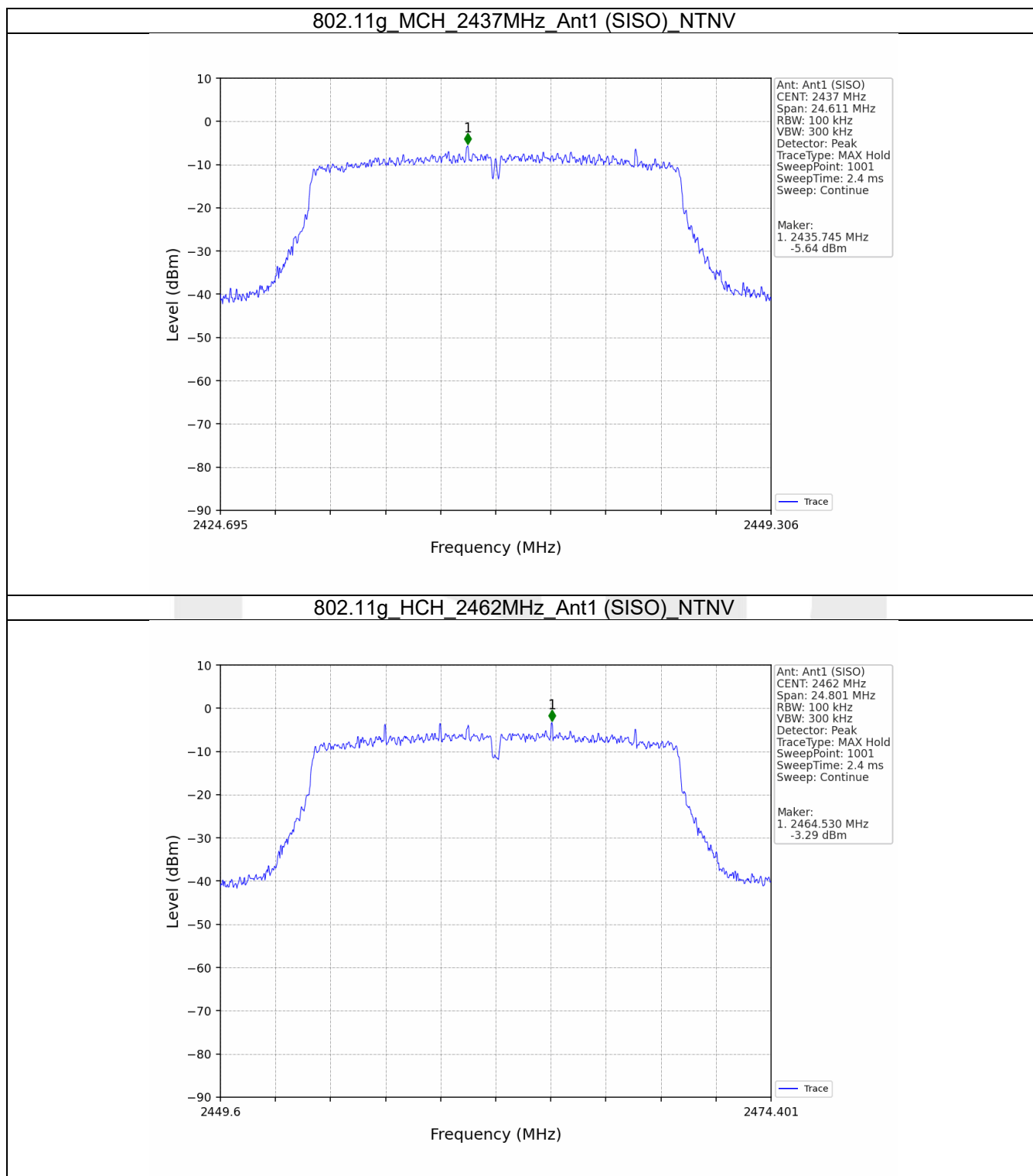
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

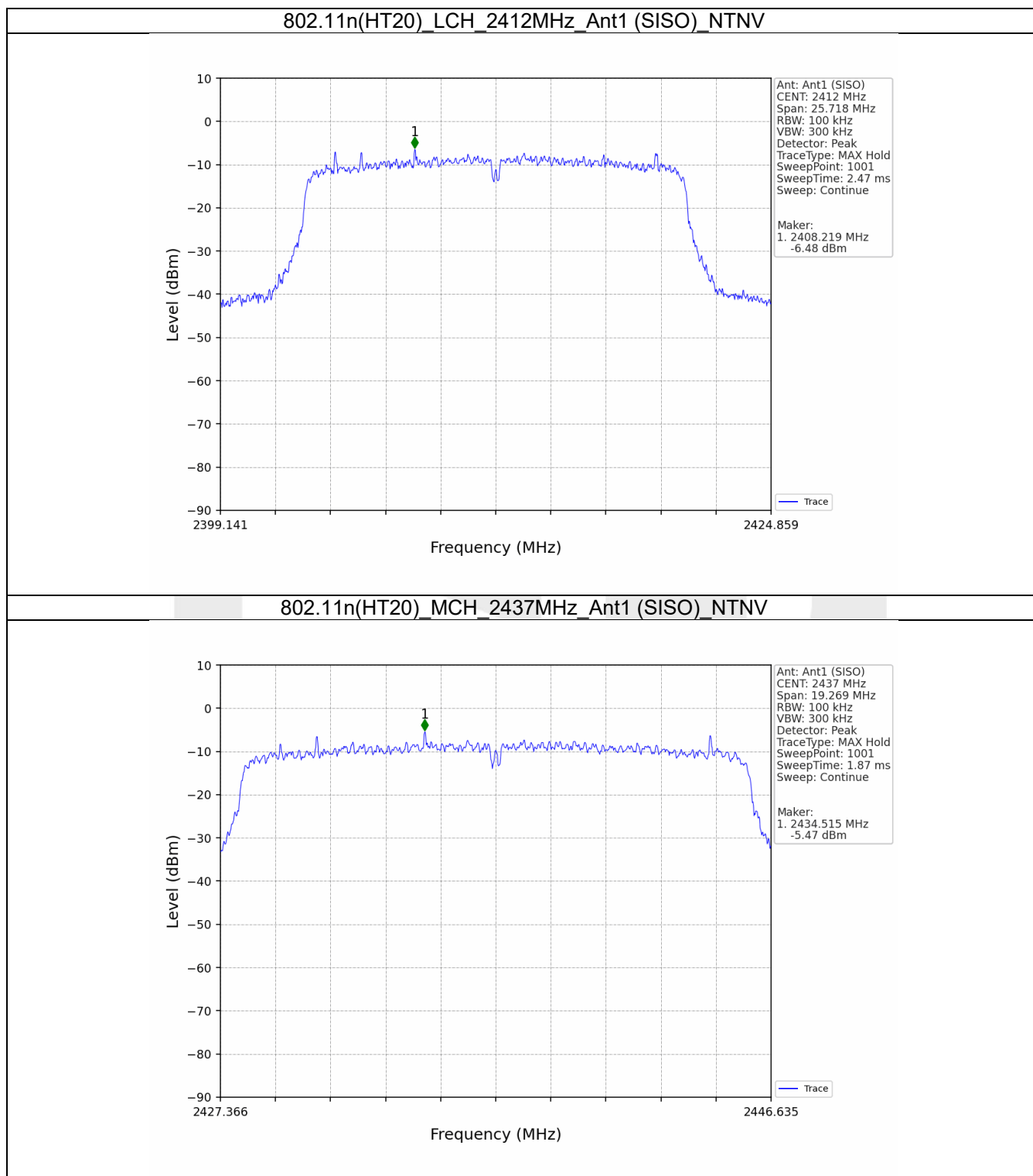
## 5.2 Test Graph

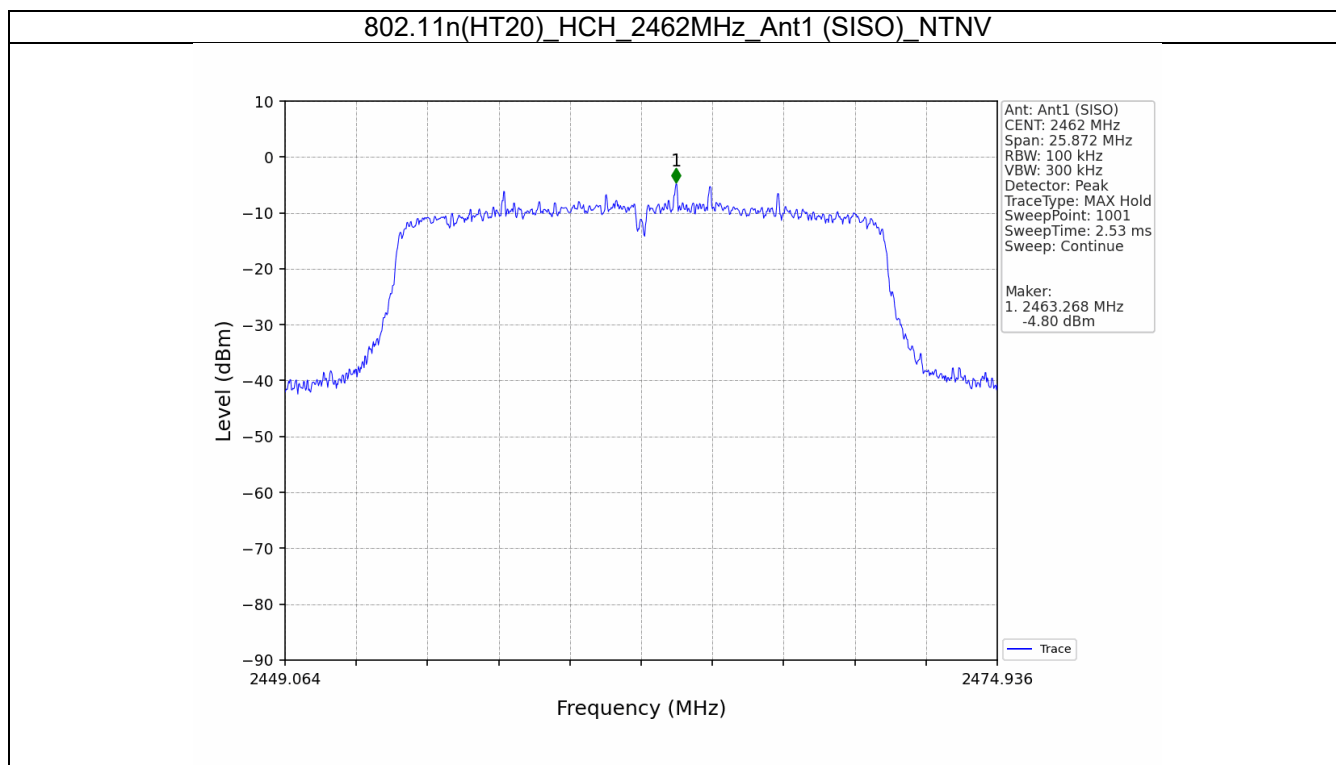
### 5.2.1 Ref





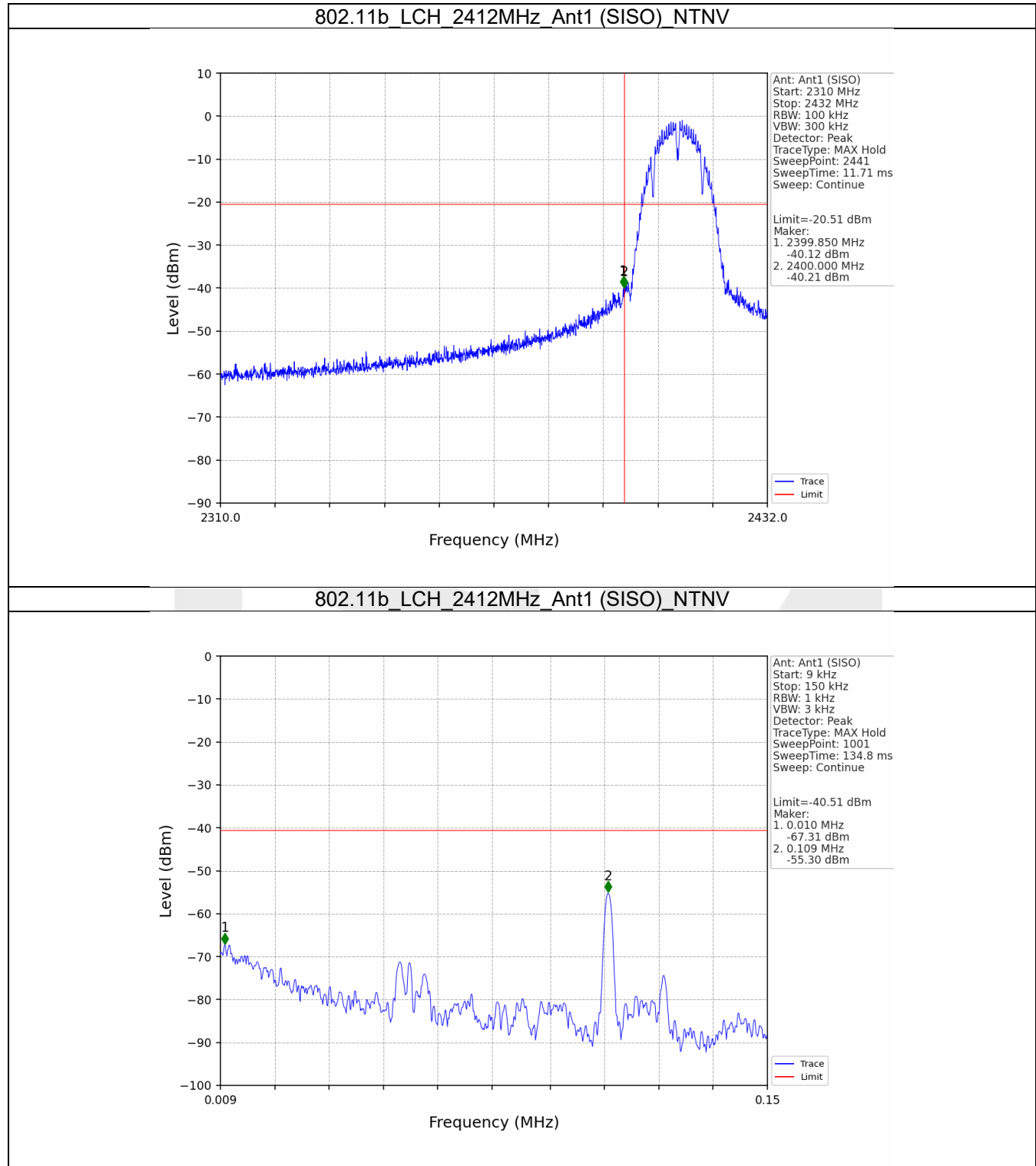


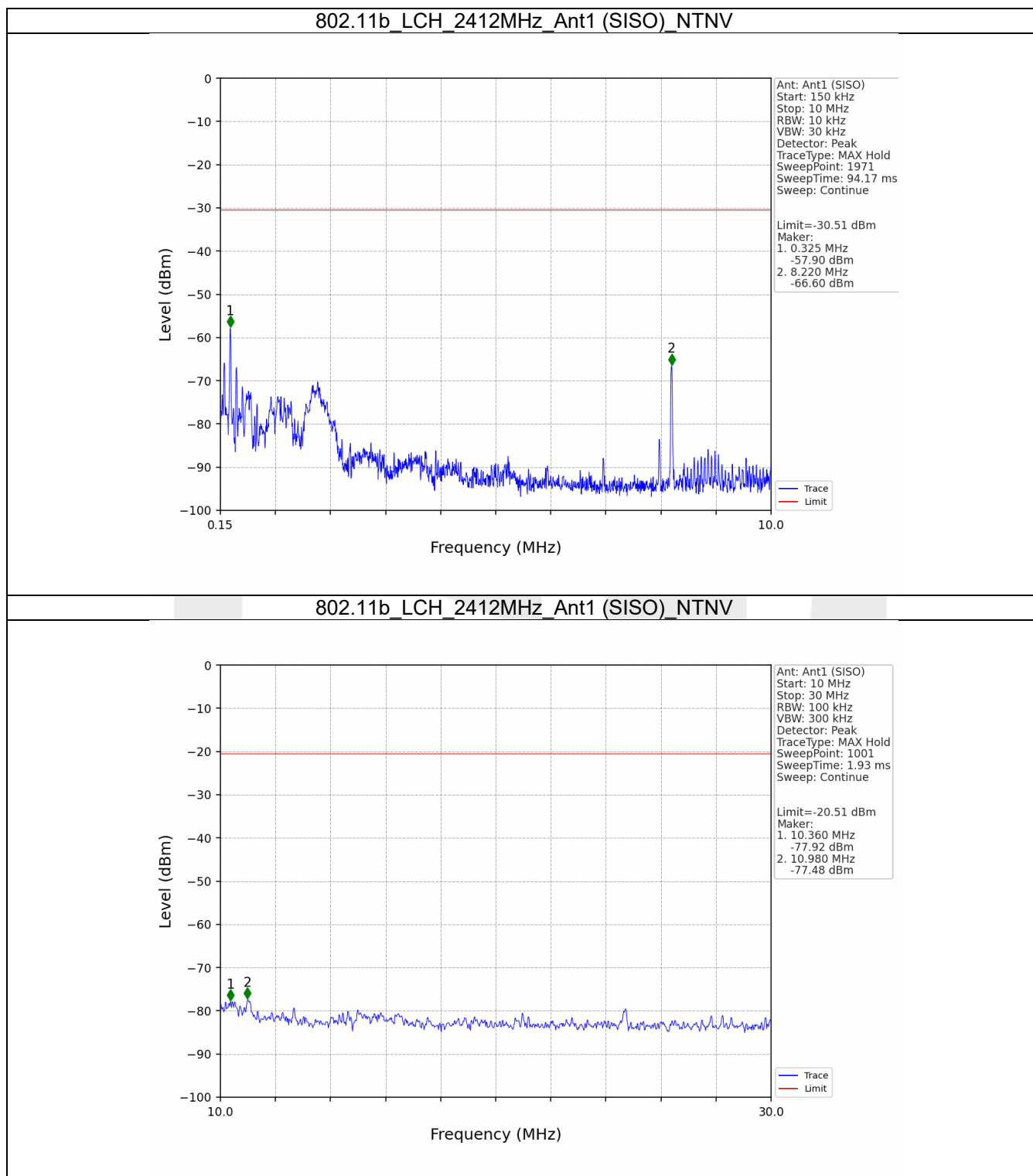


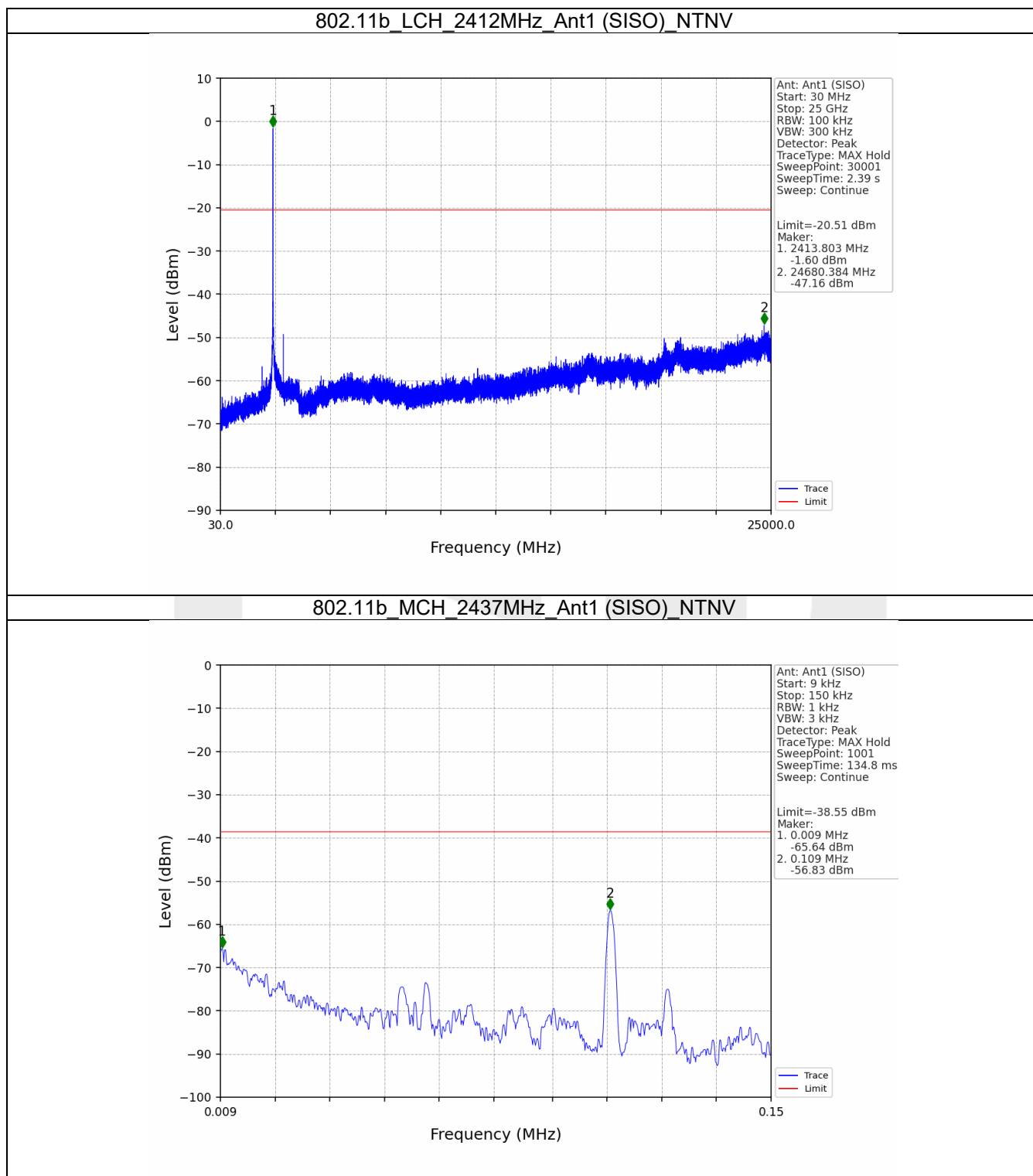


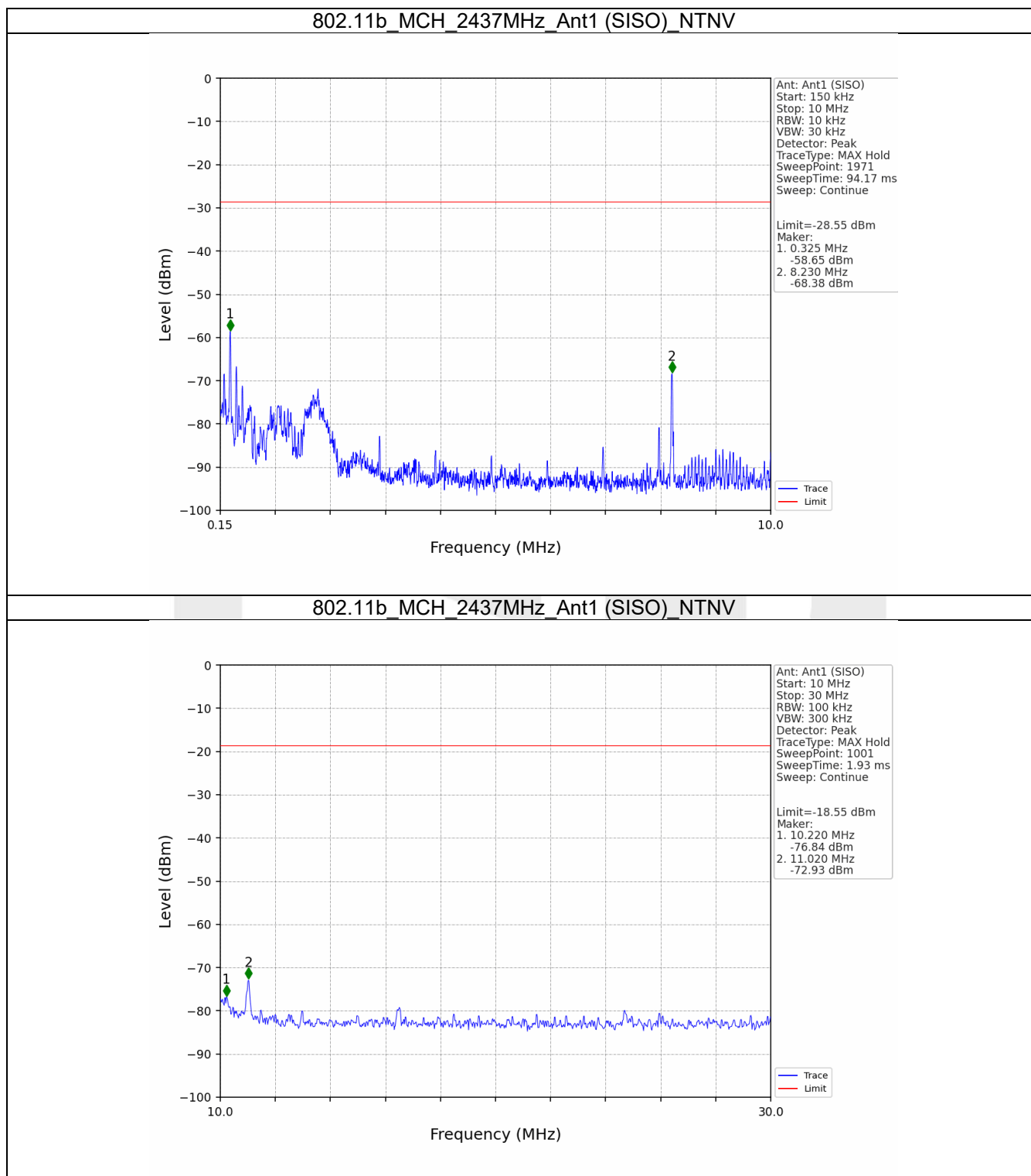


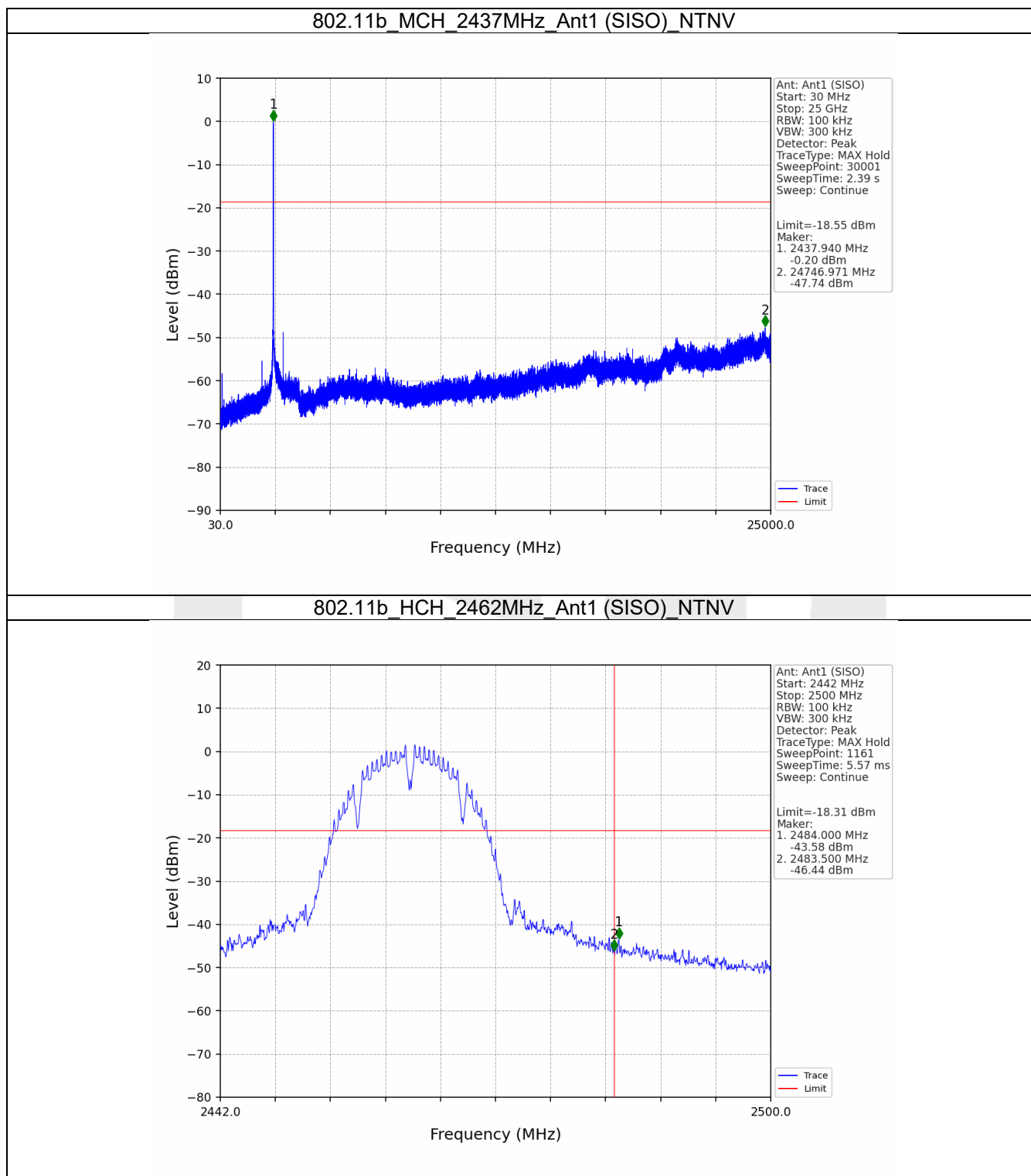
### 5.2.2 CSE

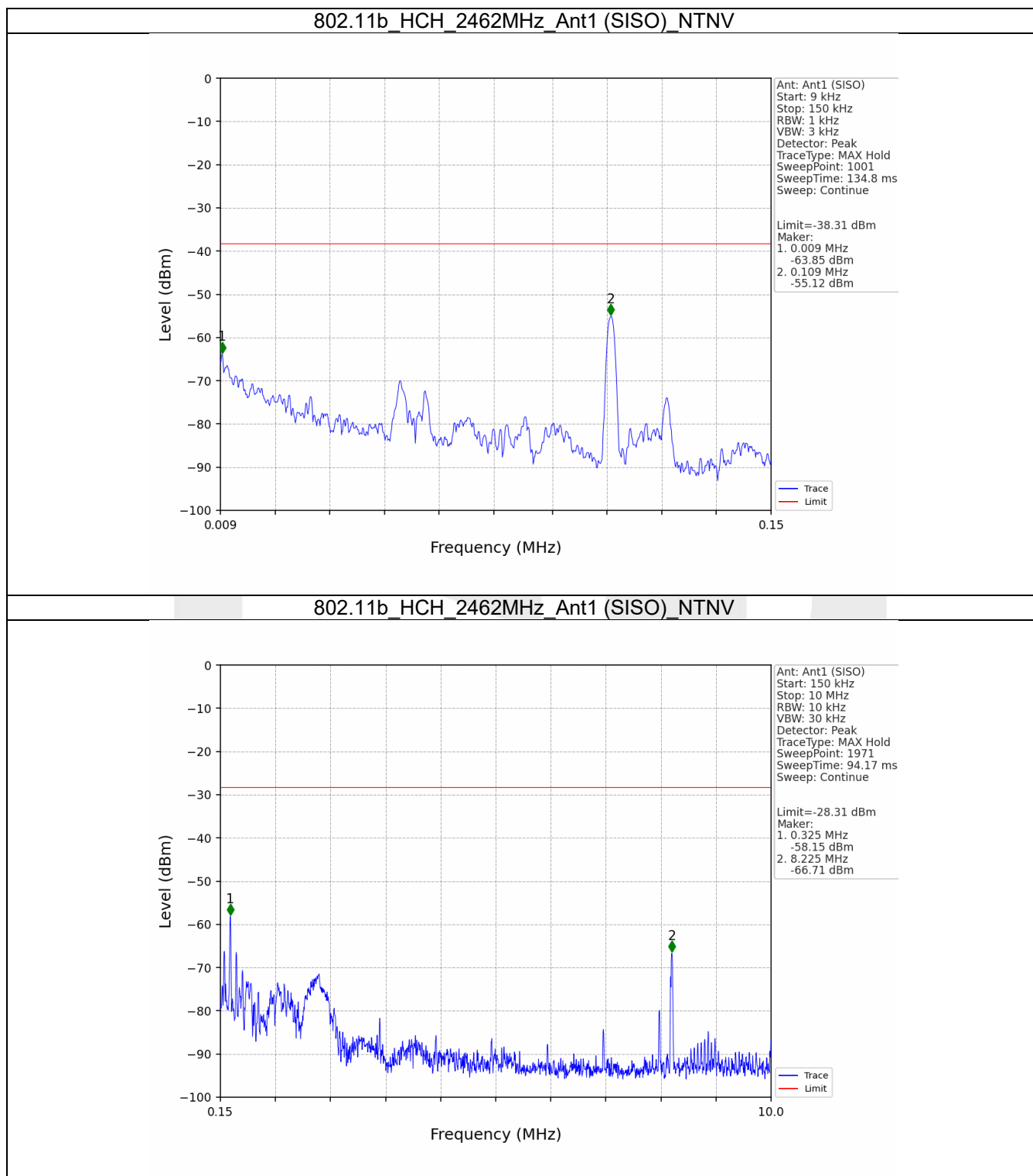


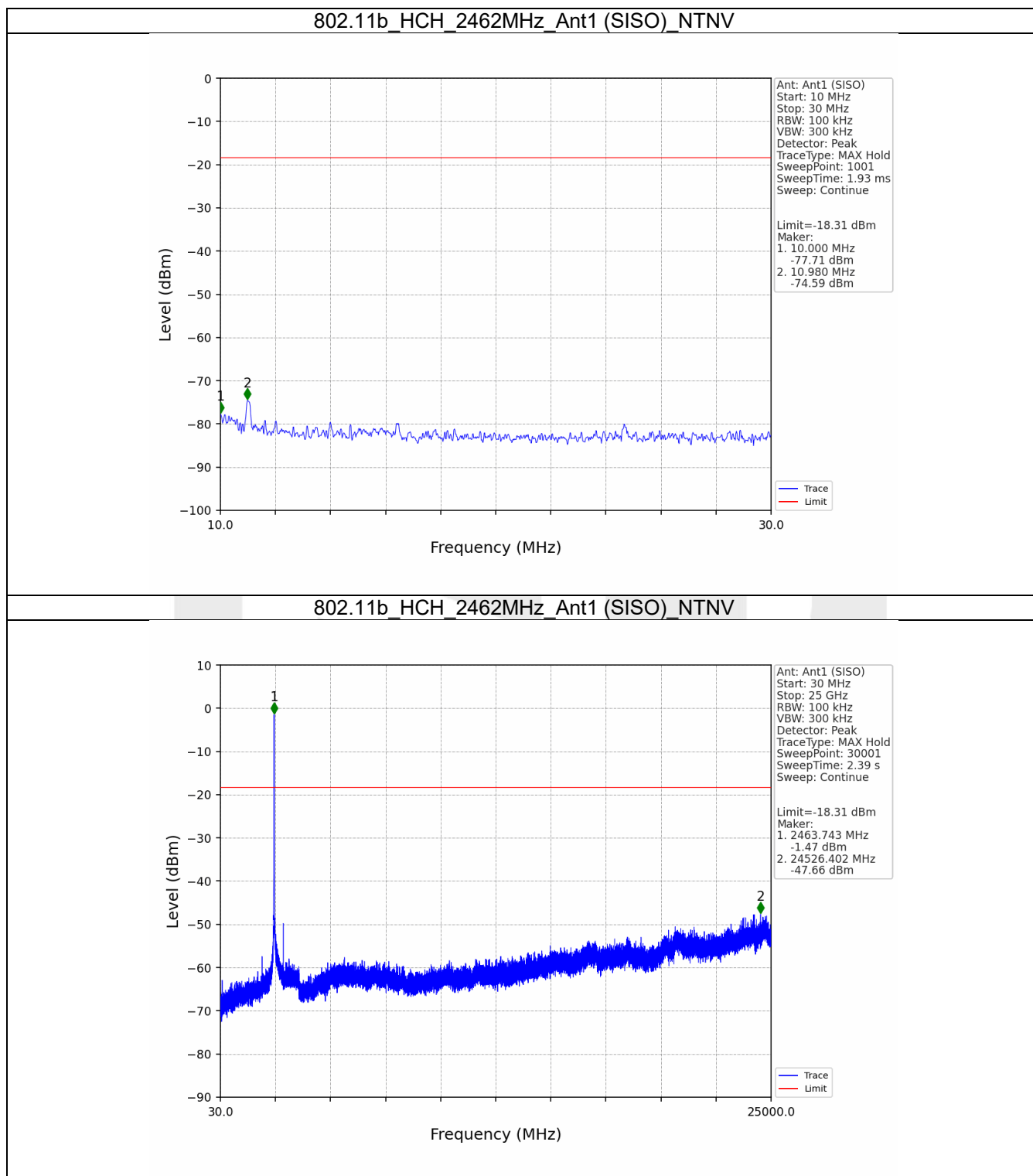


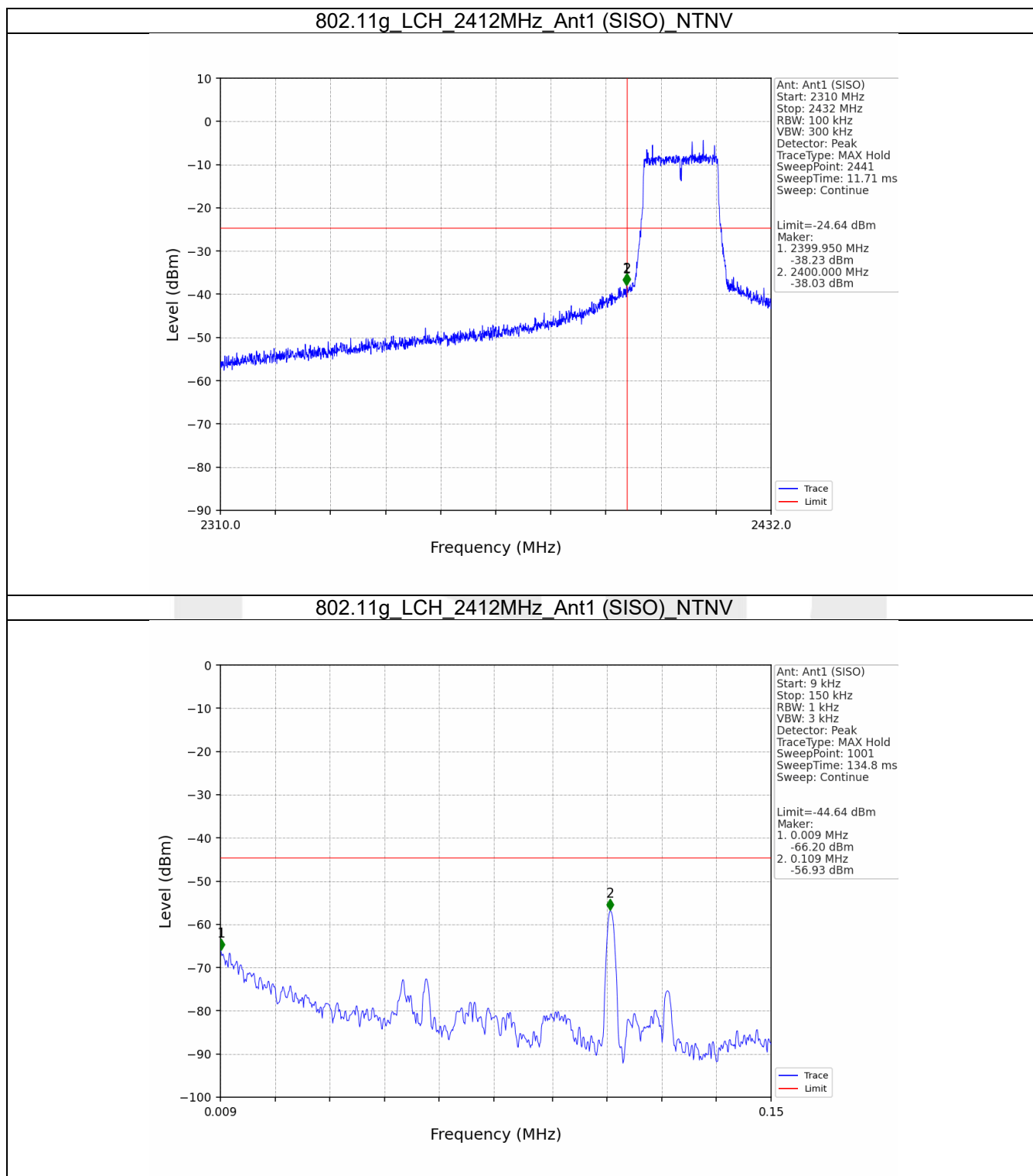




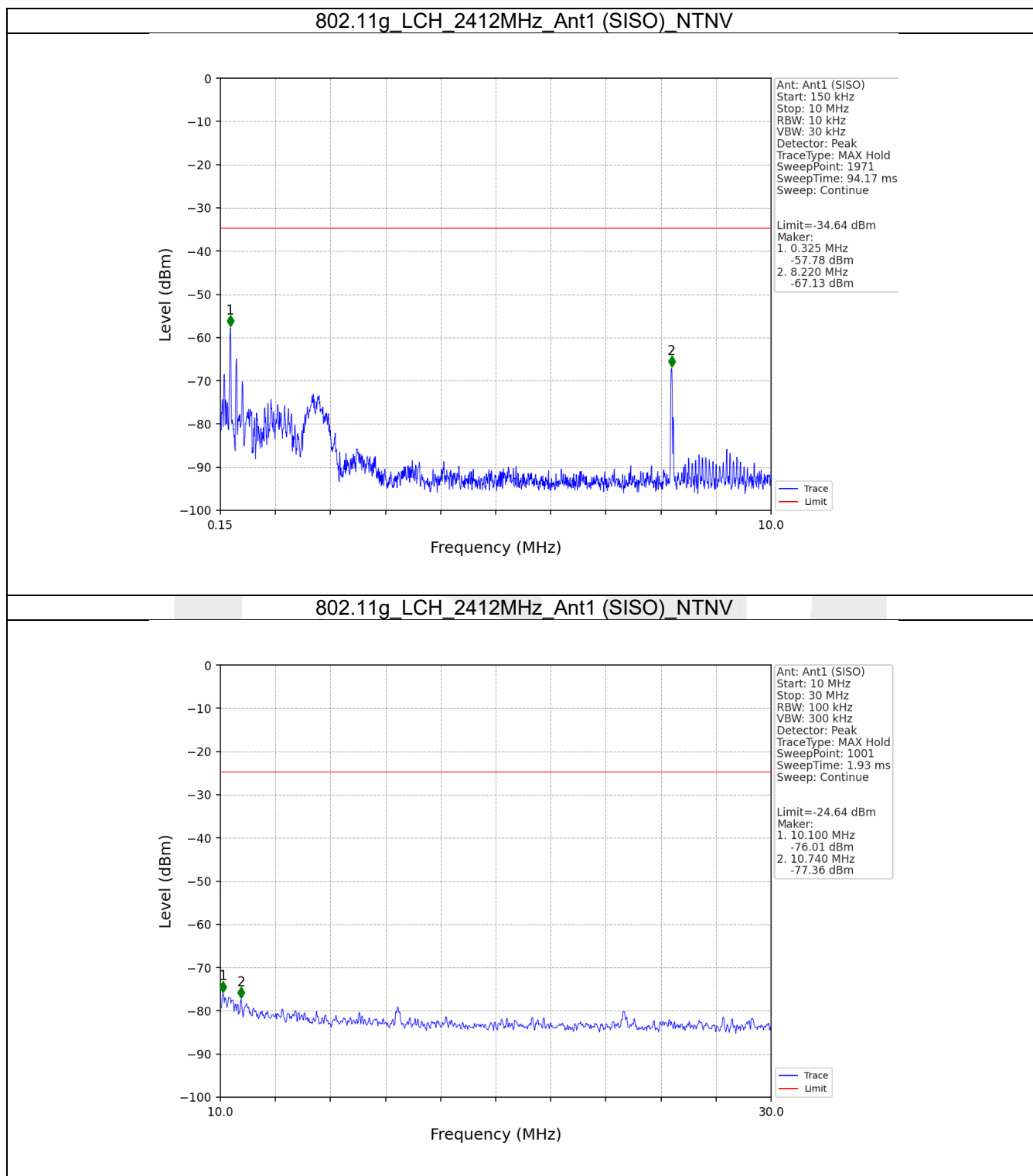


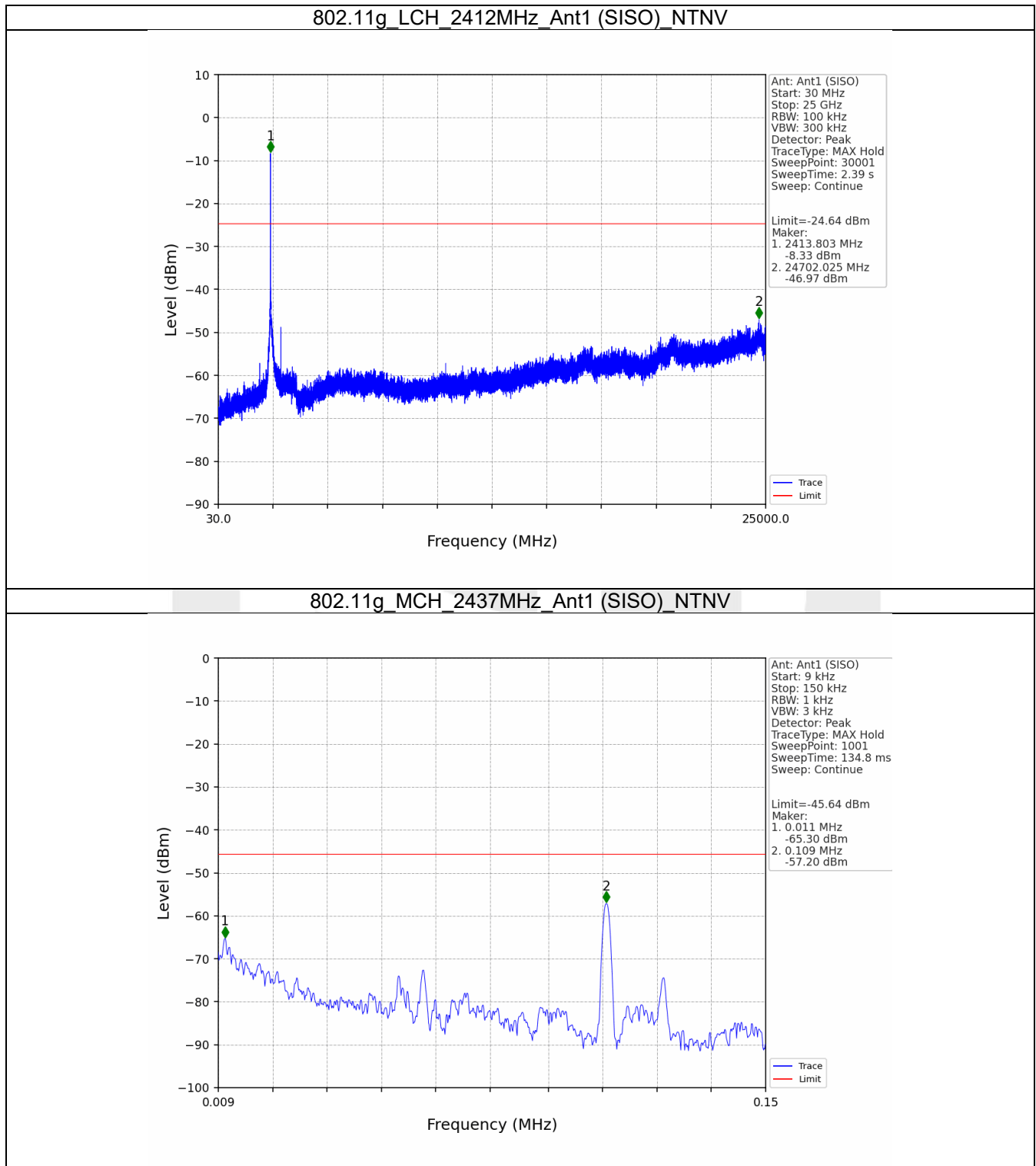


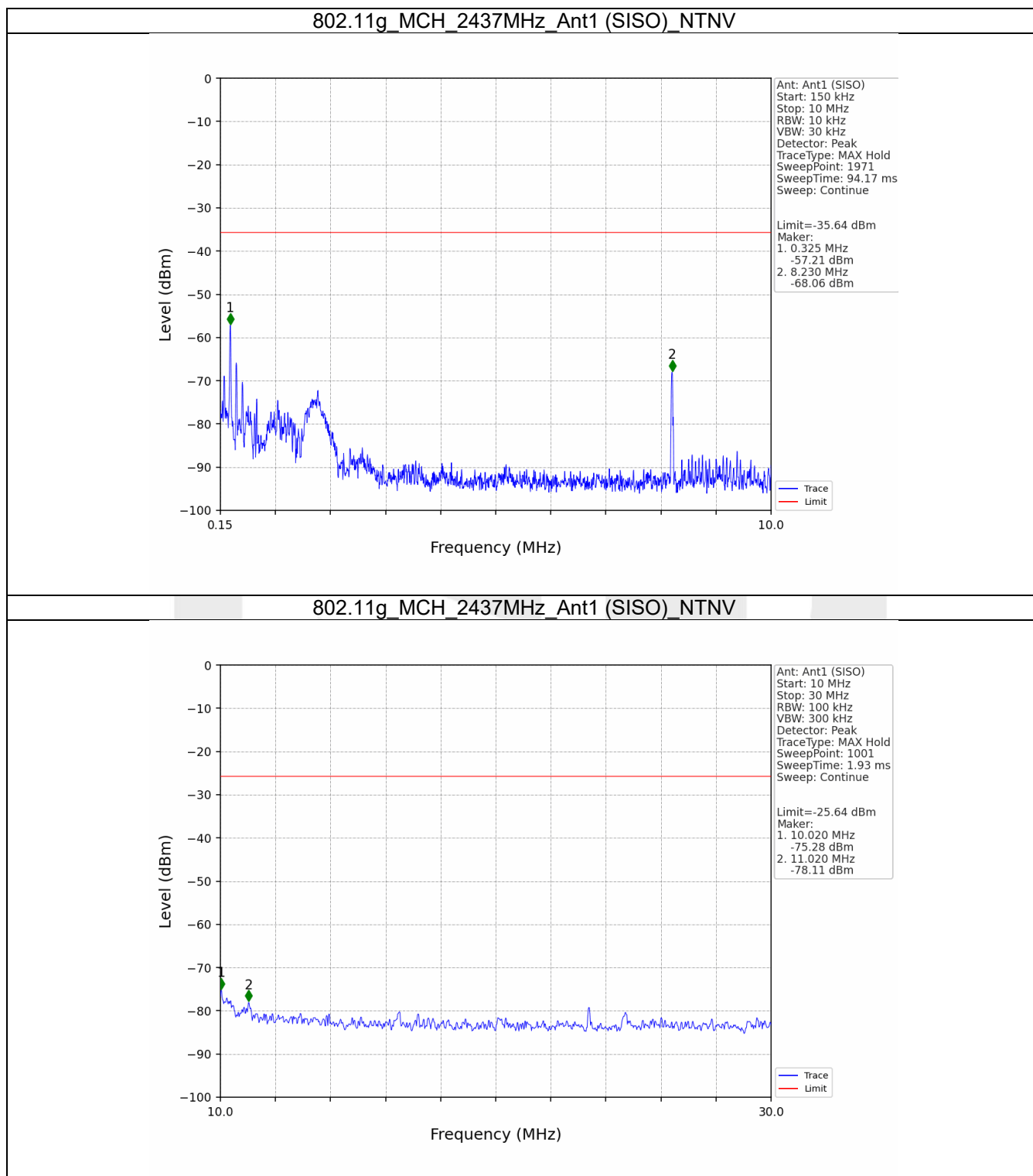


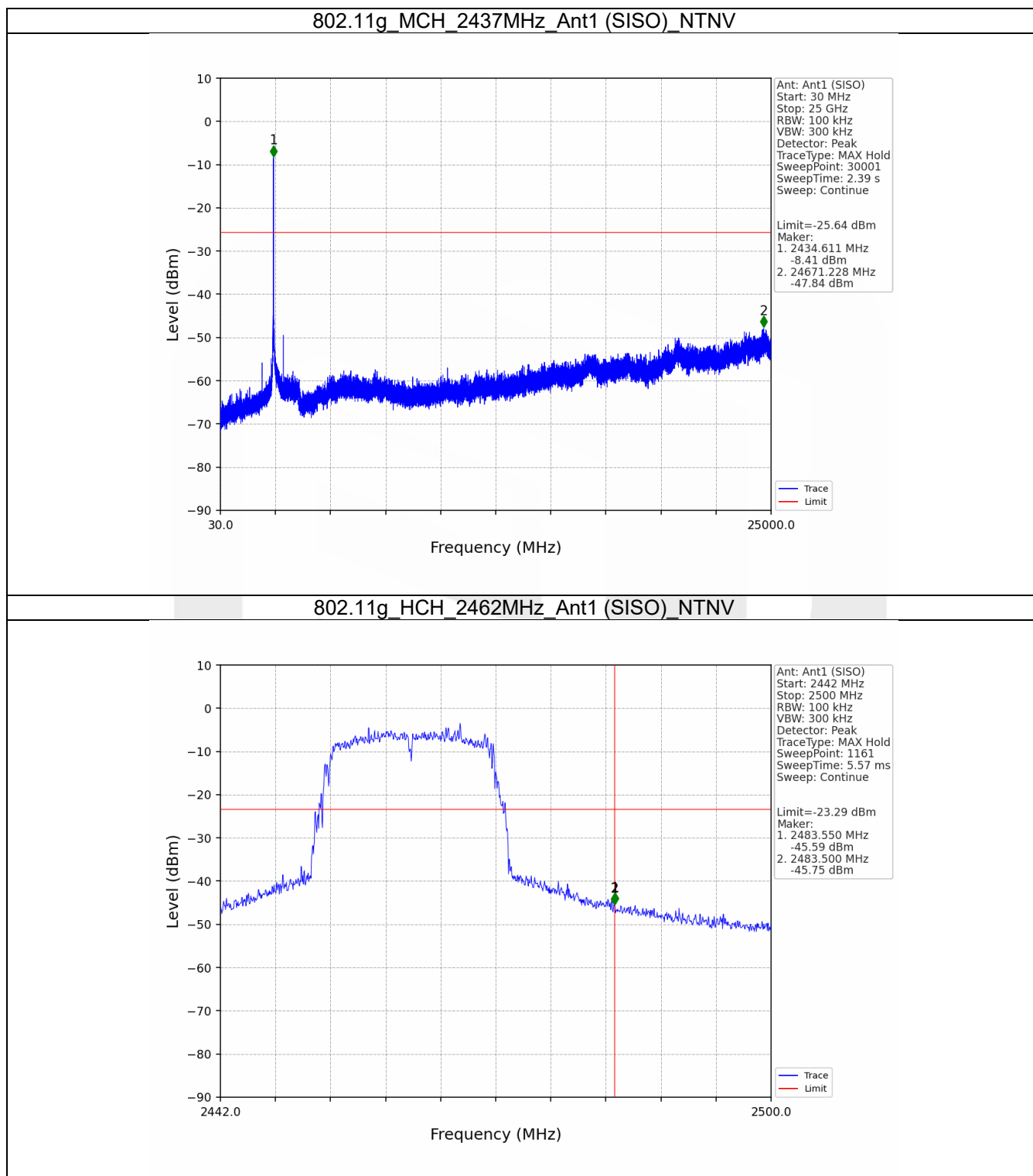


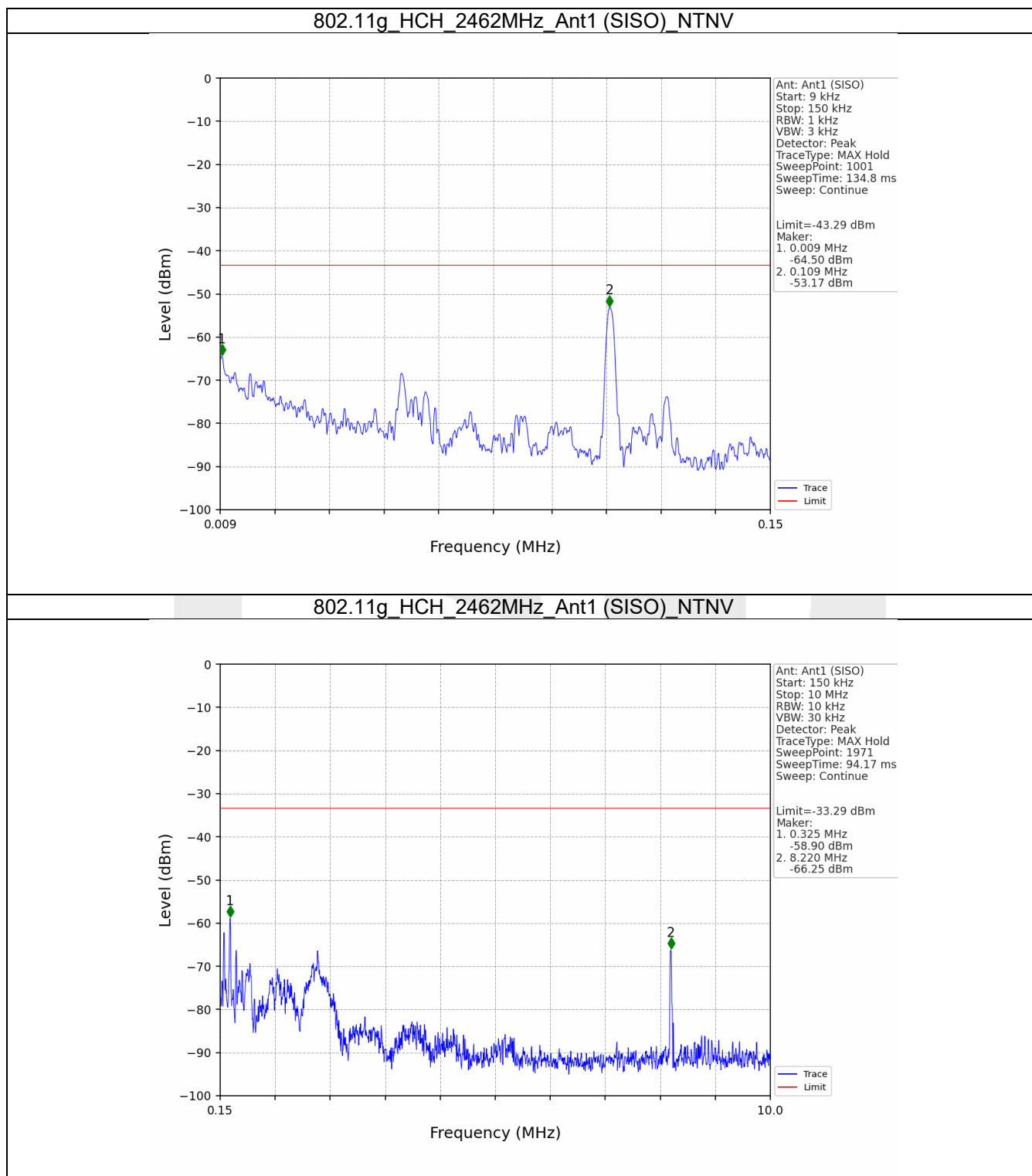


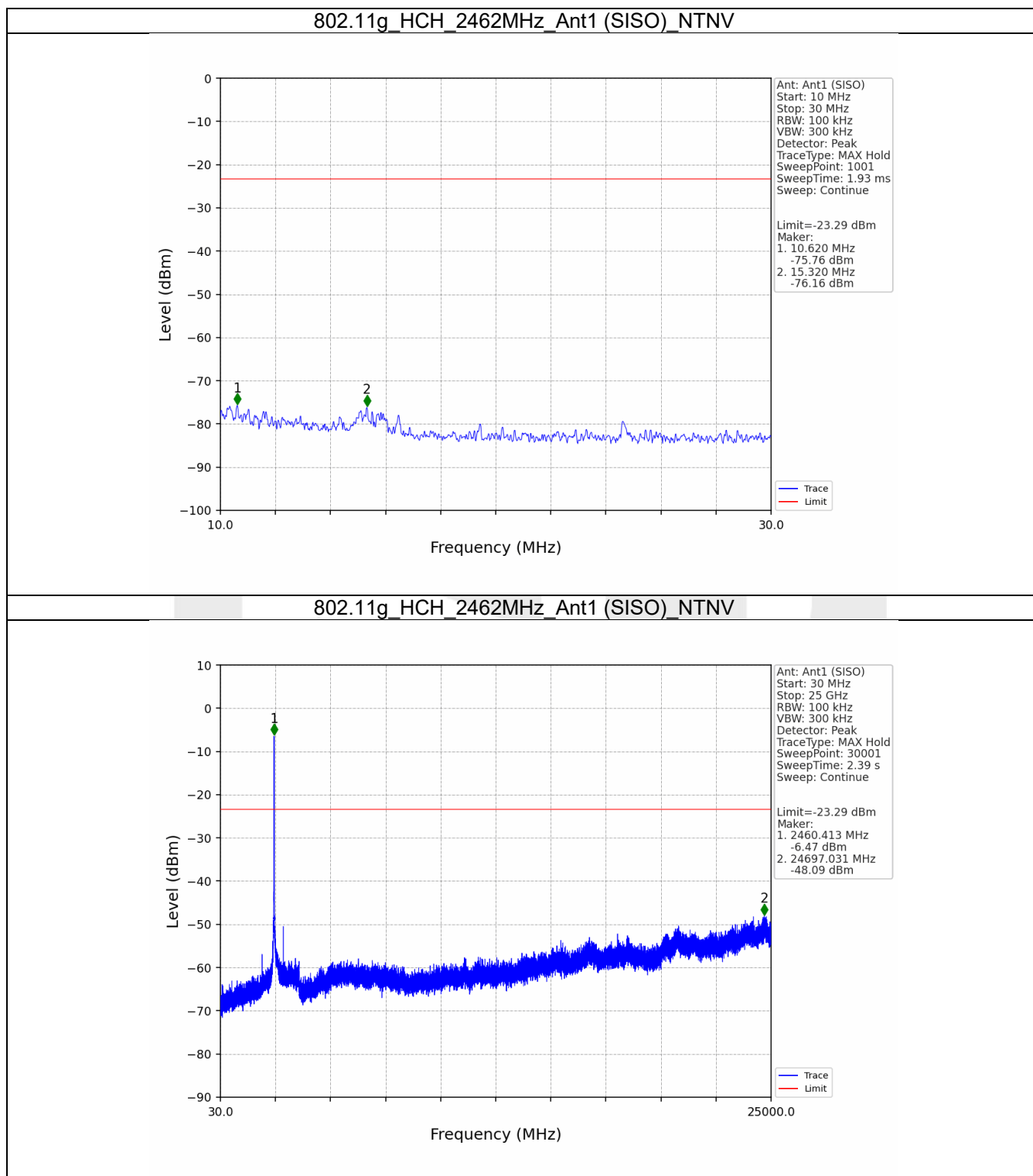


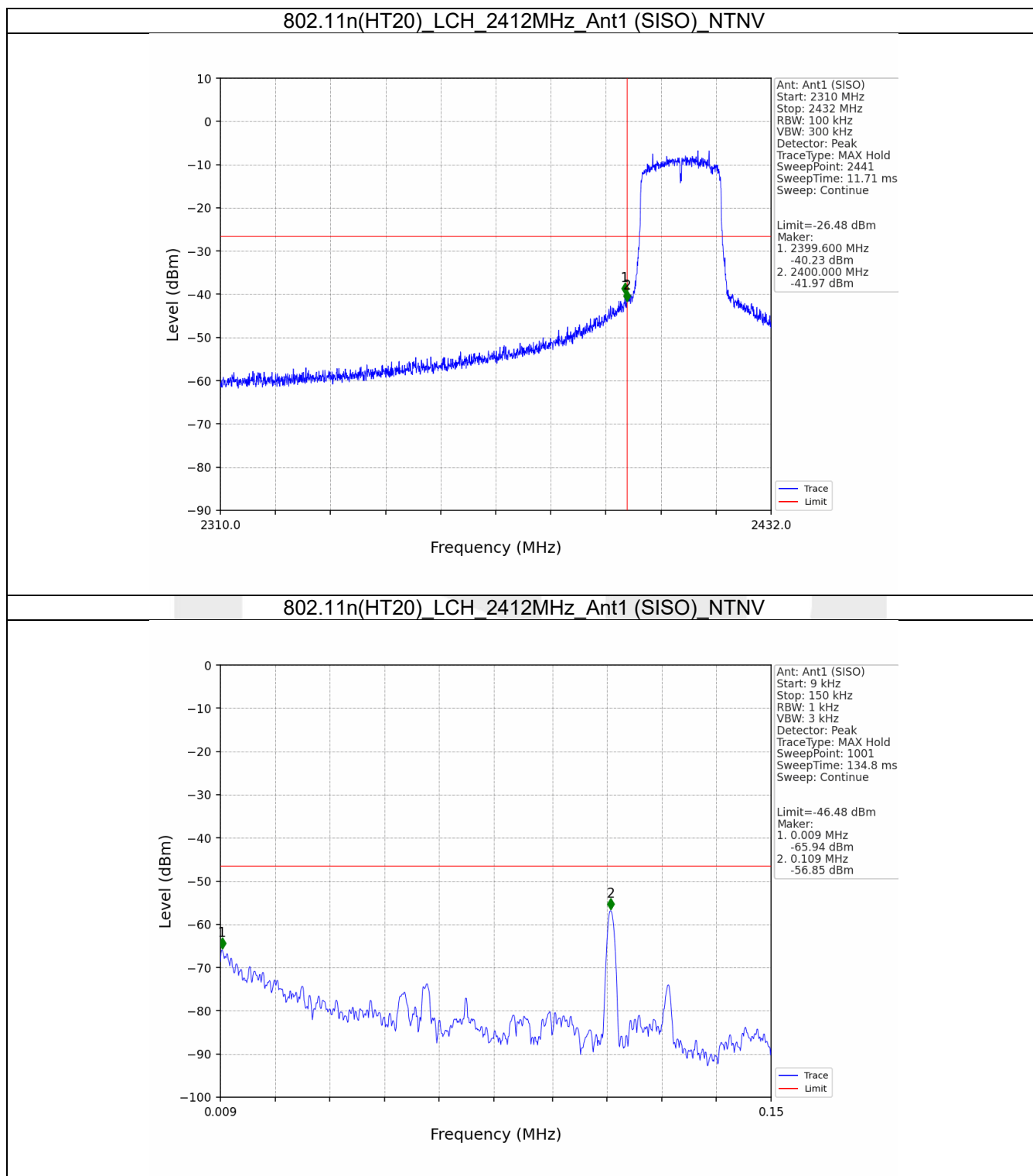


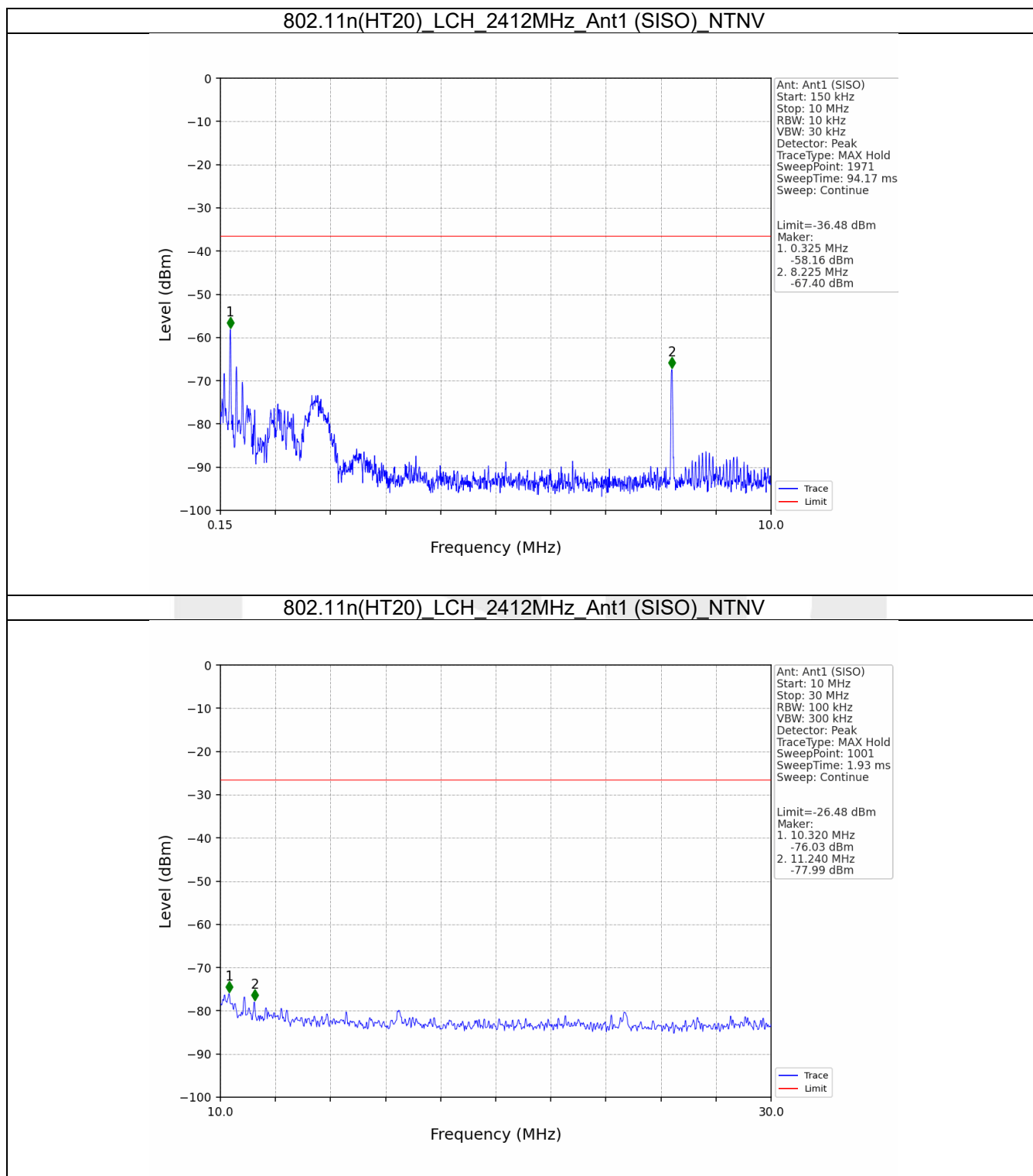




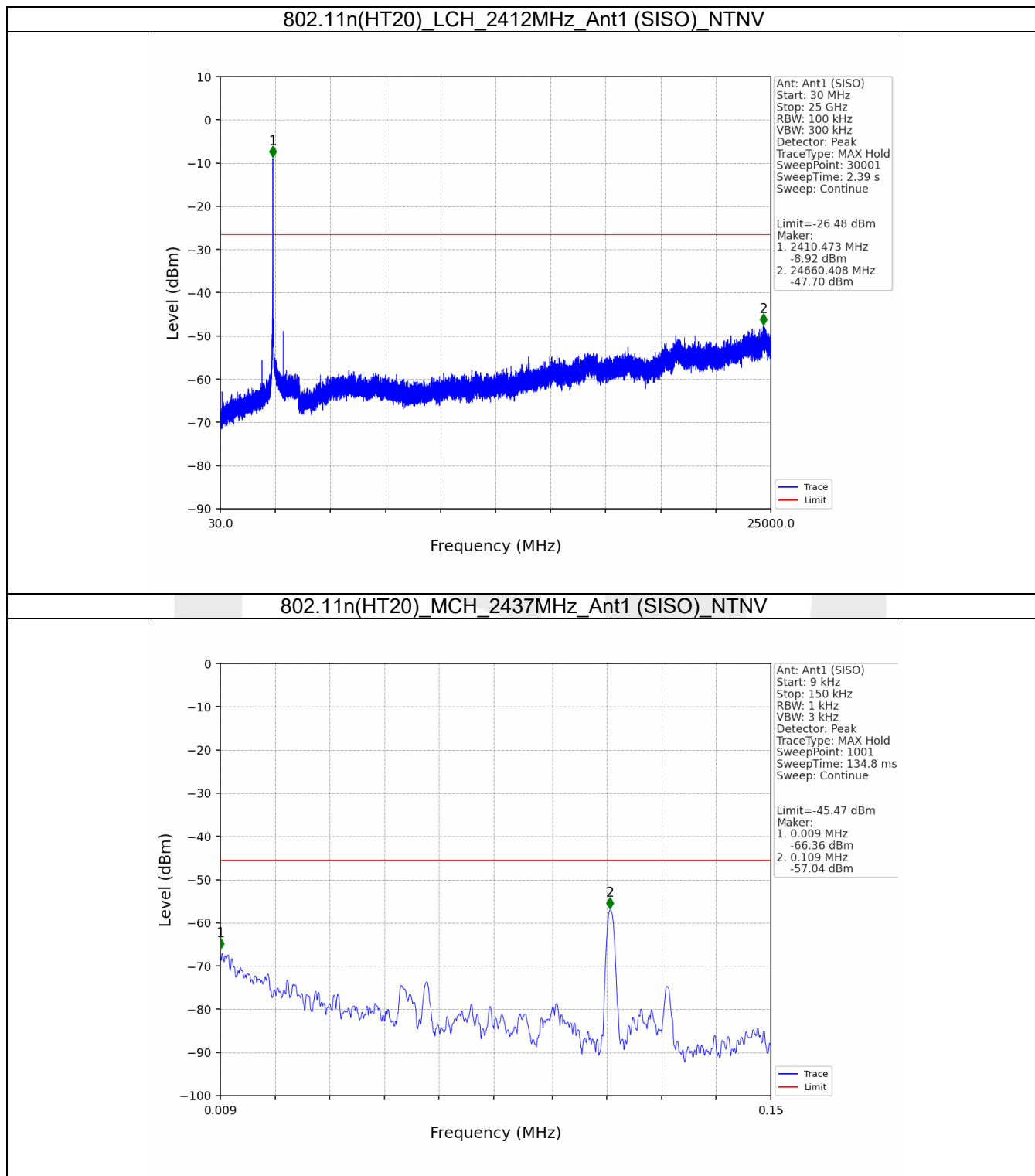


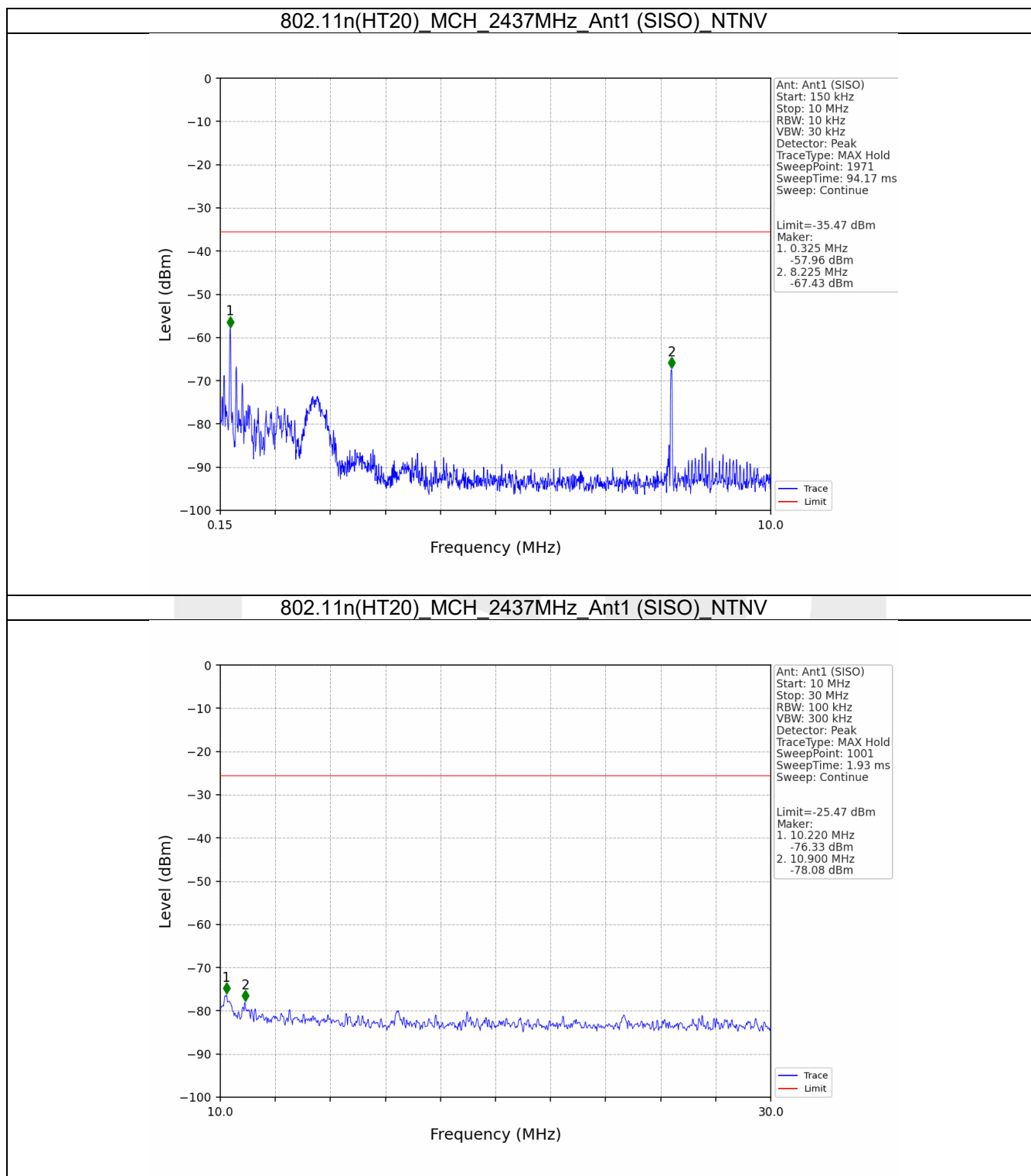


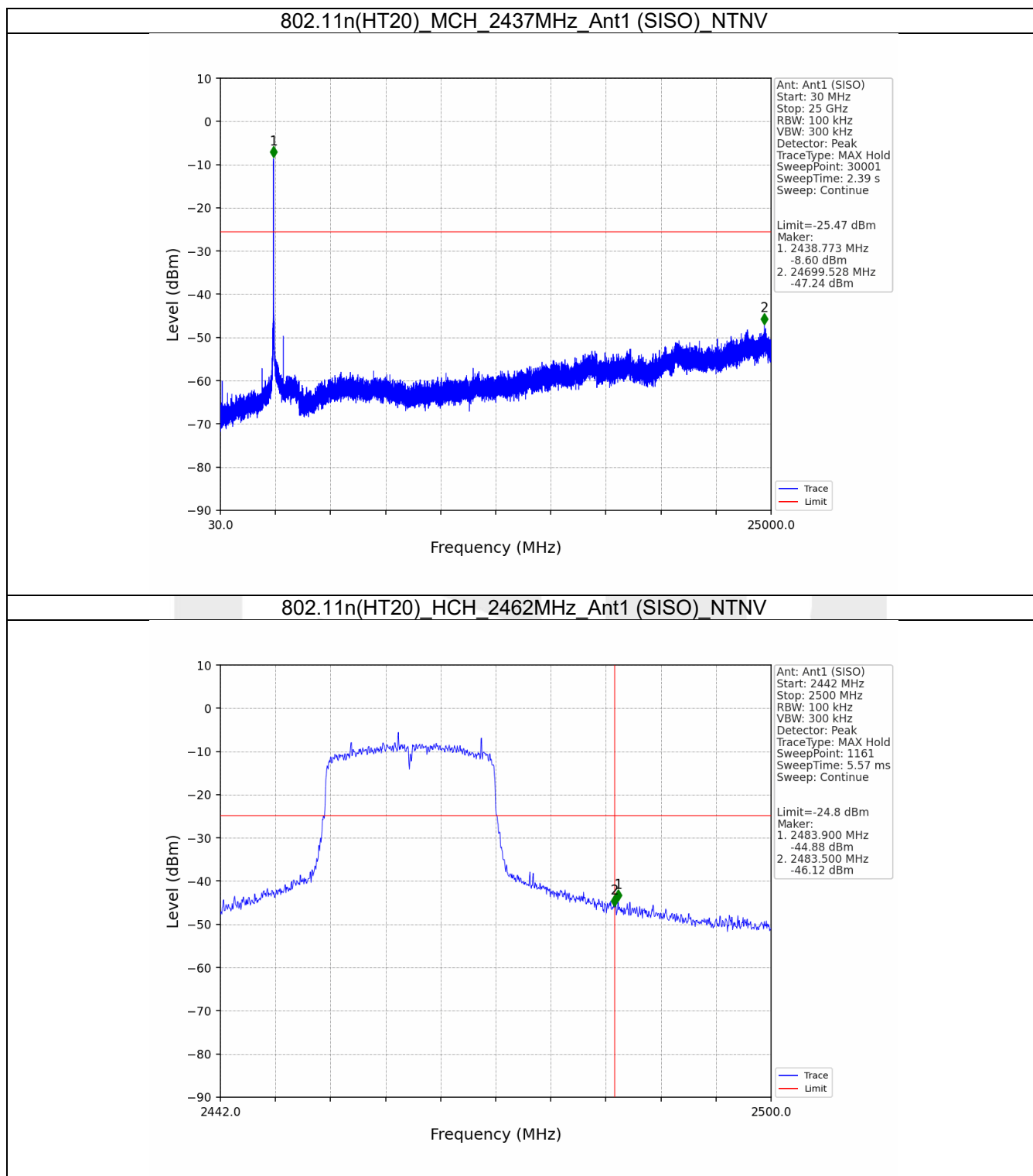


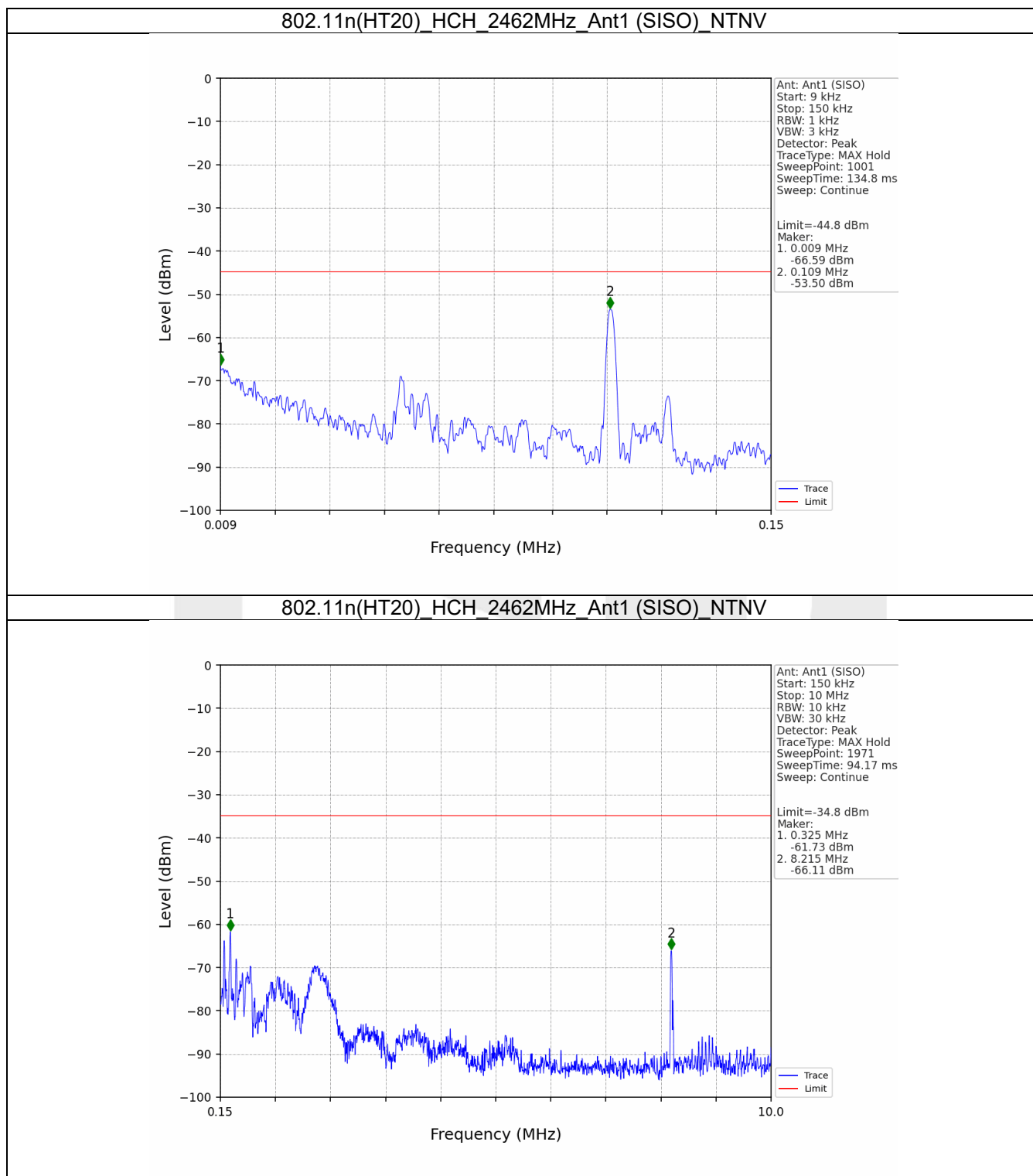


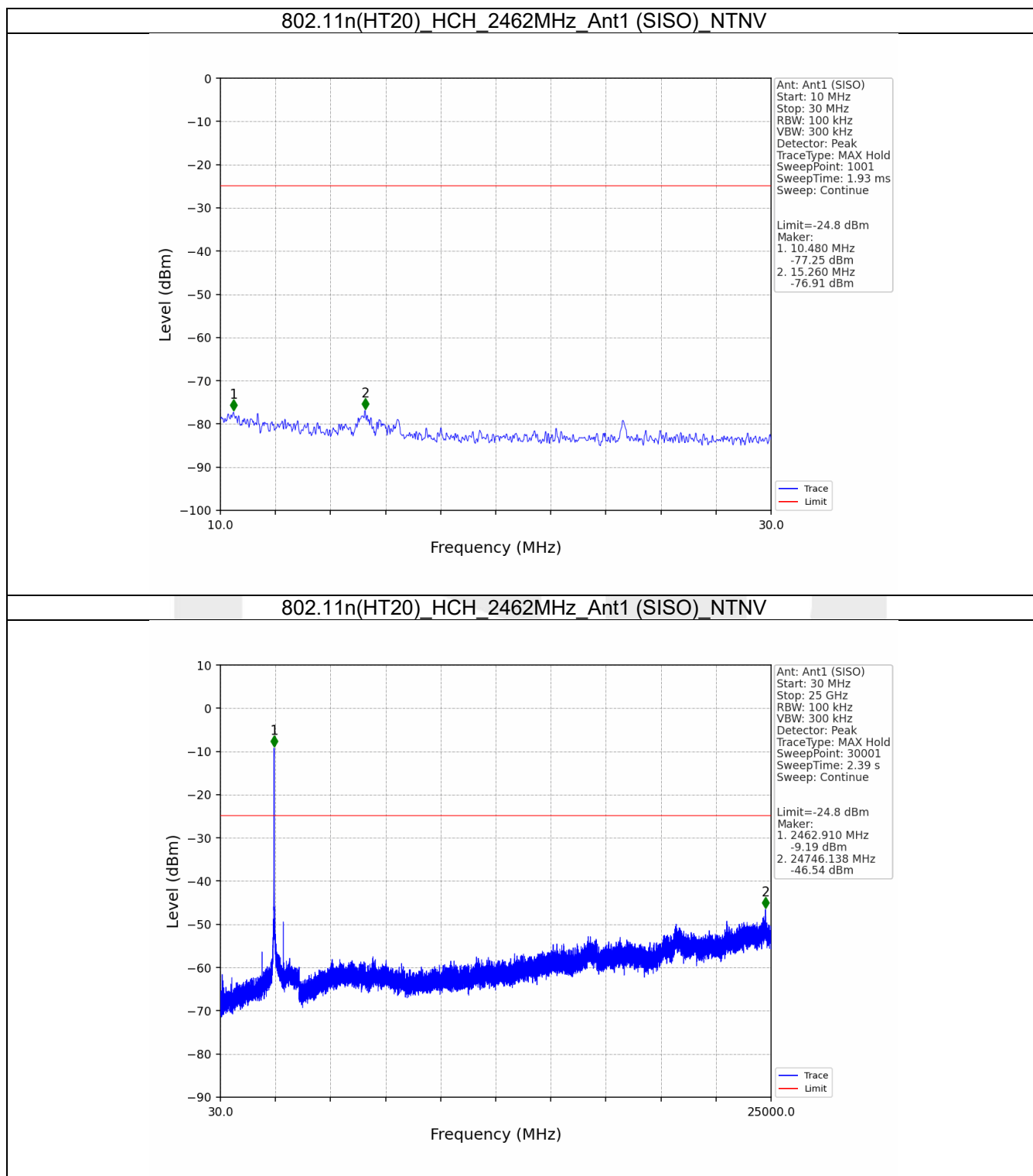












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