

# ANNEX E TEST DATA

## For

|                |                                 |
|----------------|---------------------------------|
| Project No.:   | 8326EU010705W                   |
| Client:        | Shenzhen Qianyan Technology LTD |
| Product Name:  | Govee Gaming Light Bars Pro     |
| Model No.:     | H6048                           |
| FCC ID:        | 2A7VD-H6048                     |
| Technology:    | WiFi 2.4G                       |
| Test Engineer: | <i>Mikoy zhu</i>                |
| Test Date:     | 2025-02-05                      |

## 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

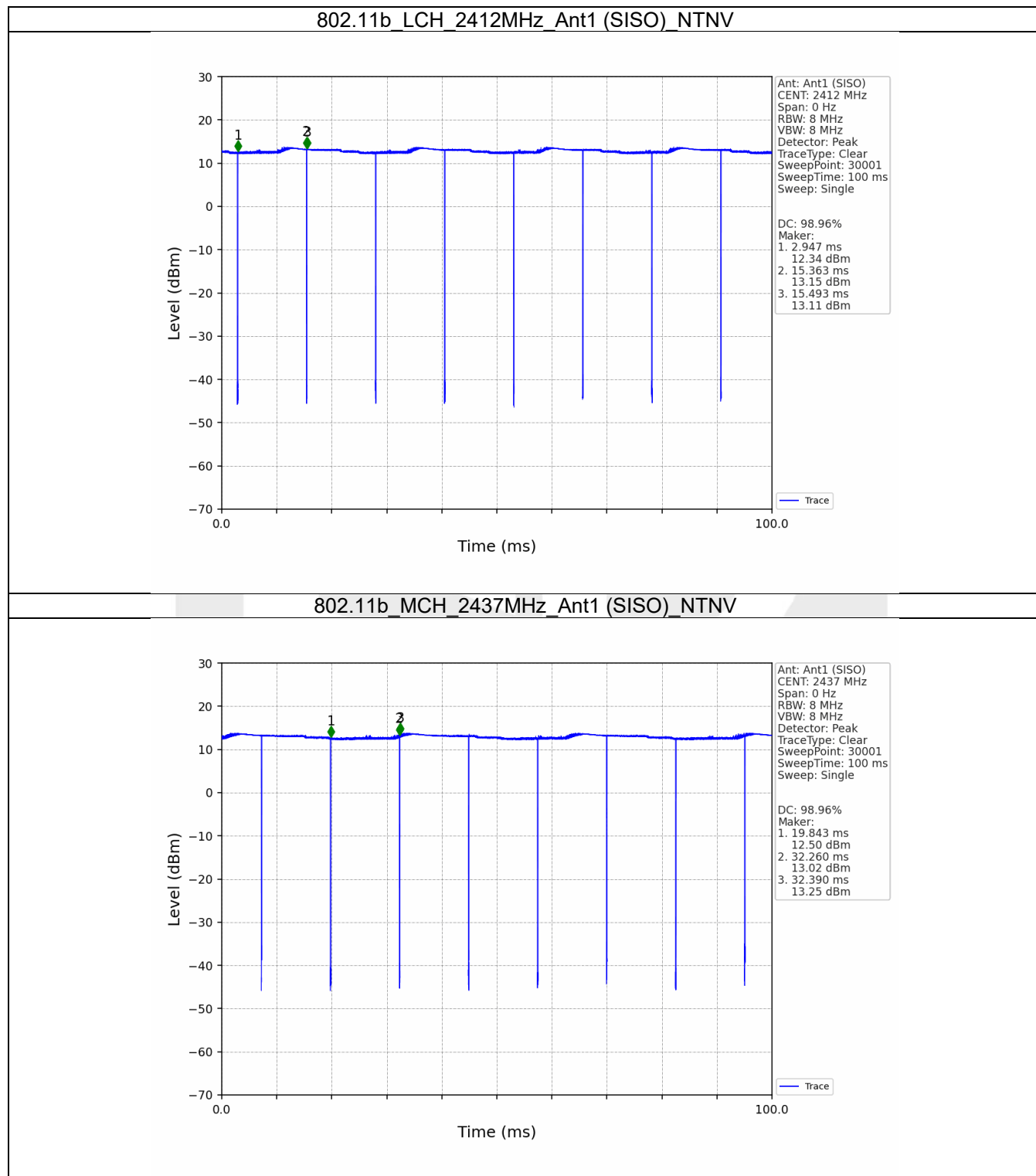
### 1.1 Test Result

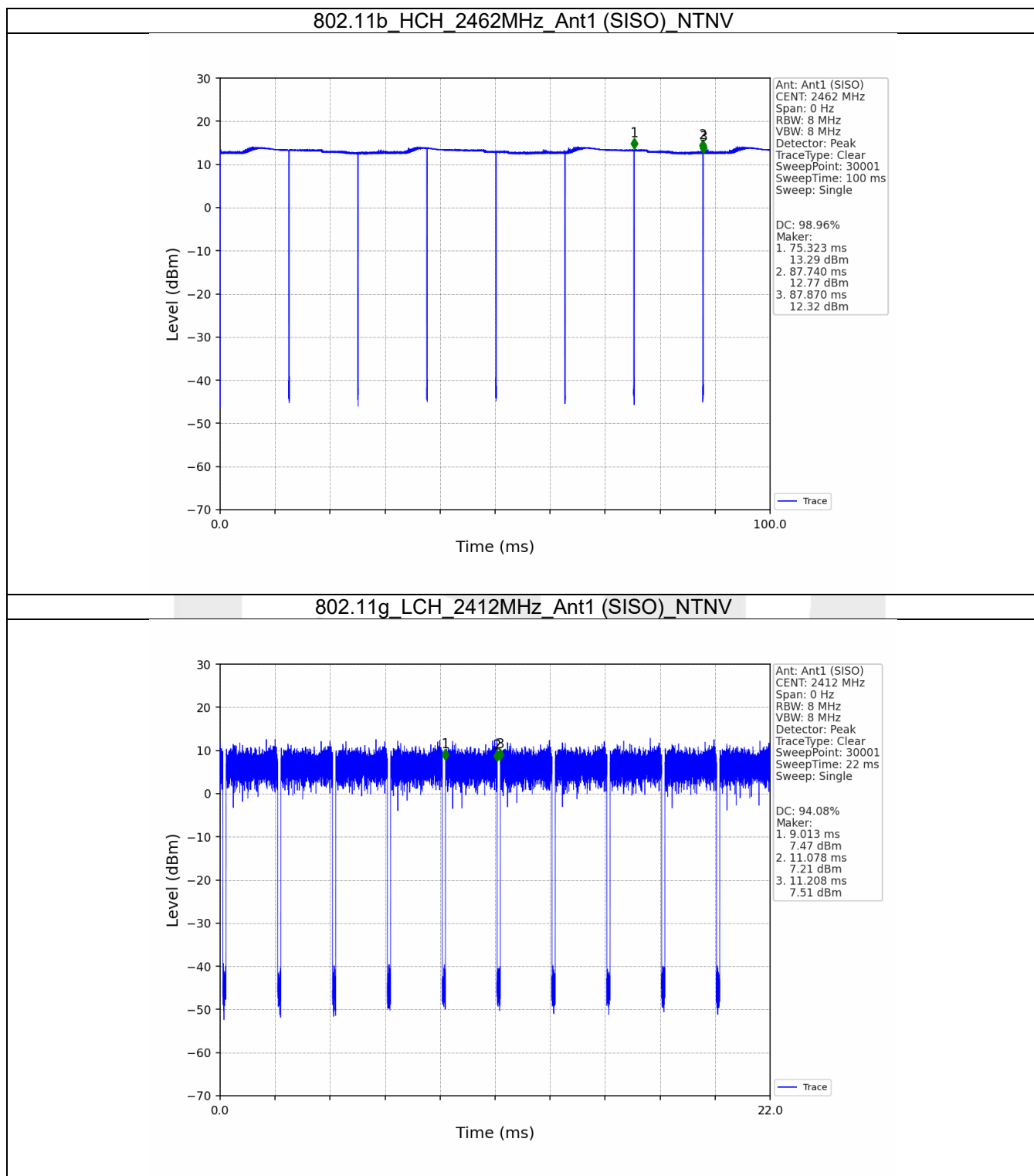
#### 1.1.1 Ant1

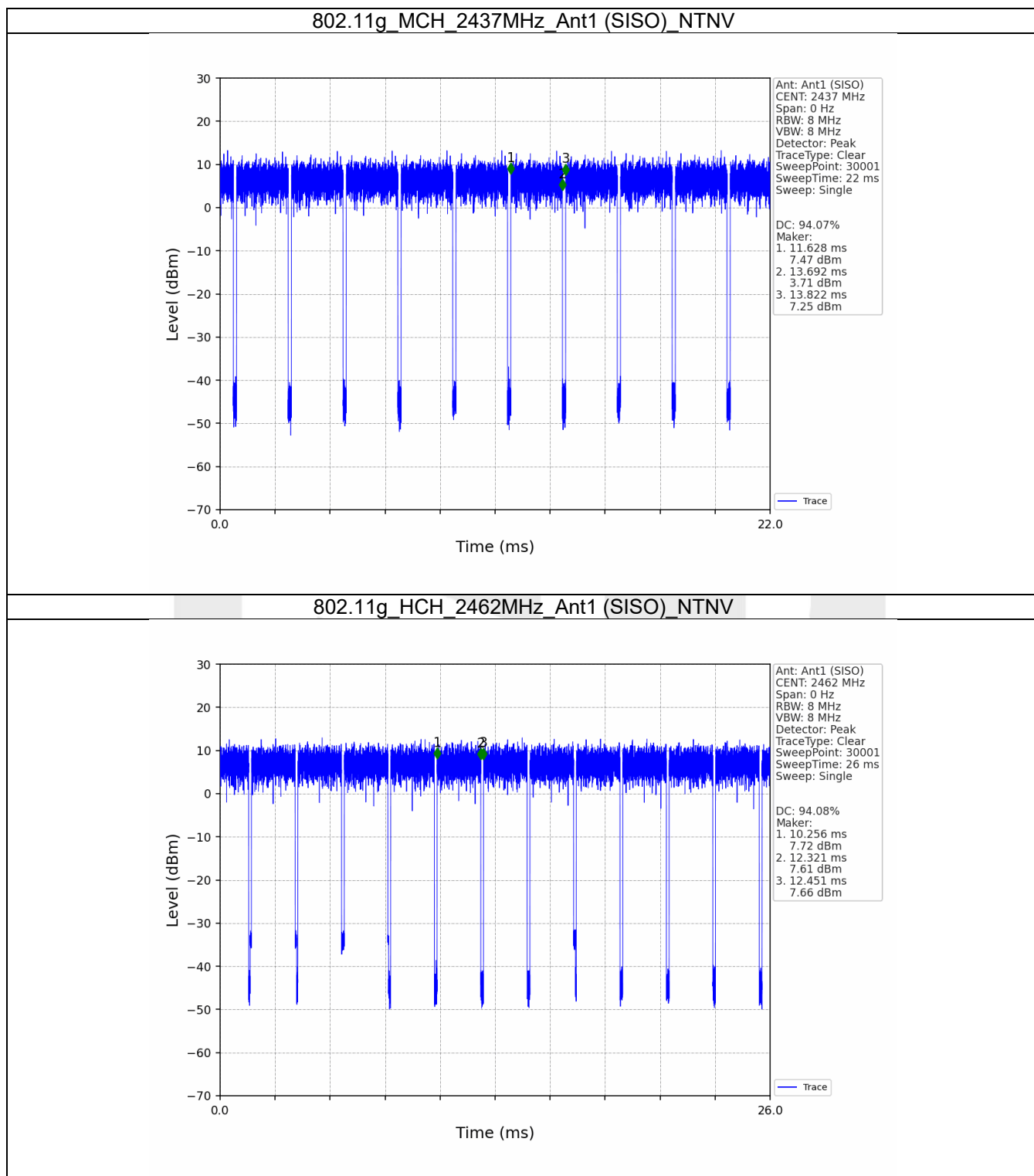
| Ant1           |         |                 |           |             |                |                                   |                       |
|----------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode           | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11b        | SISO    | 2412            | 12.416    | 12.546      | 98.96          | 0.05                              | 0.03                  |
|                |         | 2437            | 12.417    | 12.547      | 98.96          | 0.05                              | 0.03                  |
|                |         | 2462            | 12.417    | 12.547      | 98.96          | 0.05                              | 0.03                  |
| 802.11g        | SISO    | 2412            | 2.065     | 2.195       | 94.08          | 0.27                              | 0.06                  |
|                |         | 2437            | 2.064     | 2.194       | 94.07          | 0.27                              | 0.06                  |
|                |         | 2462            | 2.065     | 2.195       | 94.08          | 0.27                              | 0.04                  |
| 802.11n (HT20) | SISO    | 2412            | 1.921     | 2.051       | 93.66          | 0.28                              | 0.04                  |
|                |         | 2437            | 1.921     | 2.050       | 93.71          | 0.28                              | 0.00                  |
|                |         | 2462            | 1.921     | 2.050       | 93.71          | 0.28                              | 0.04                  |

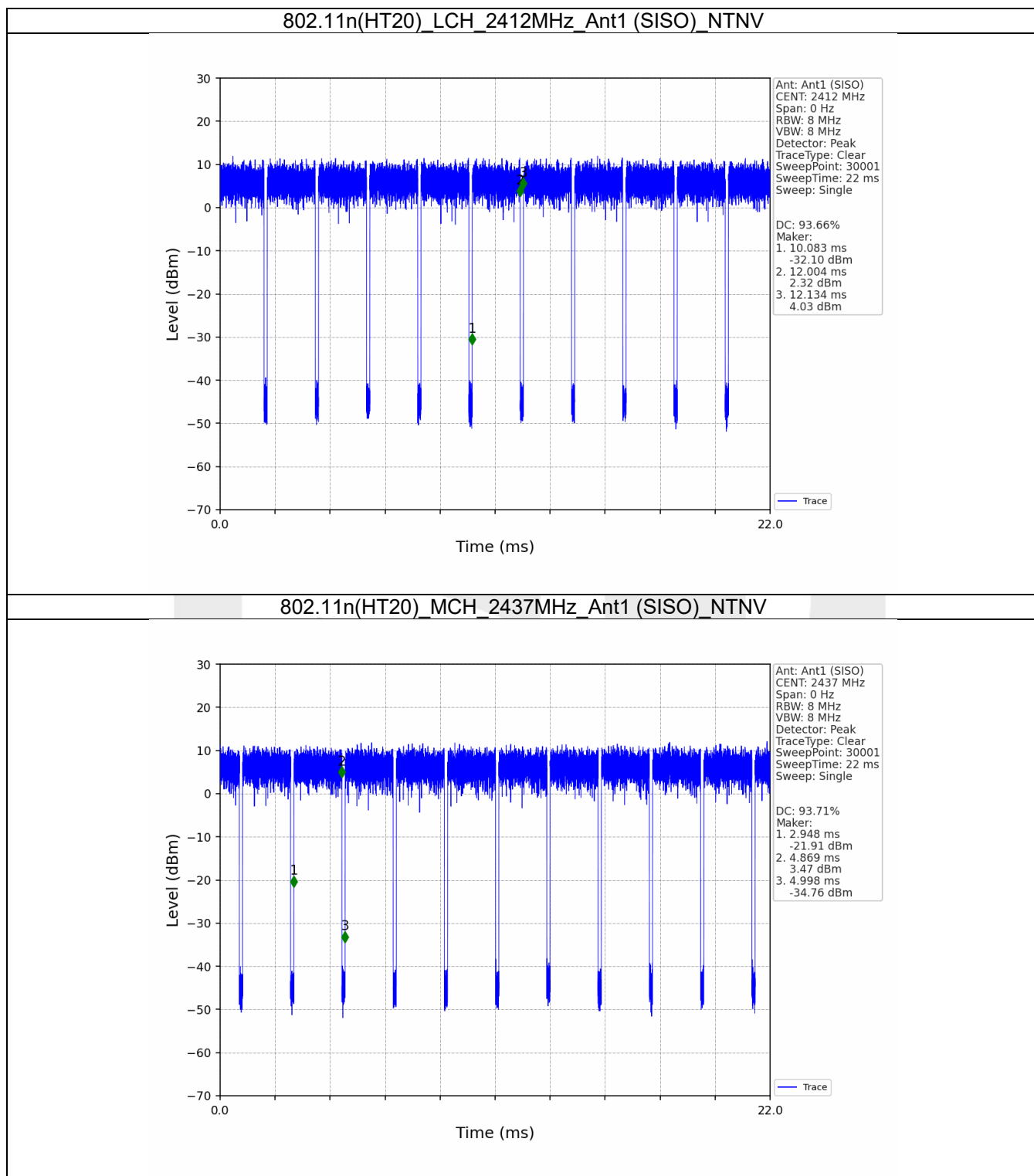
## 1.2 Test Graph

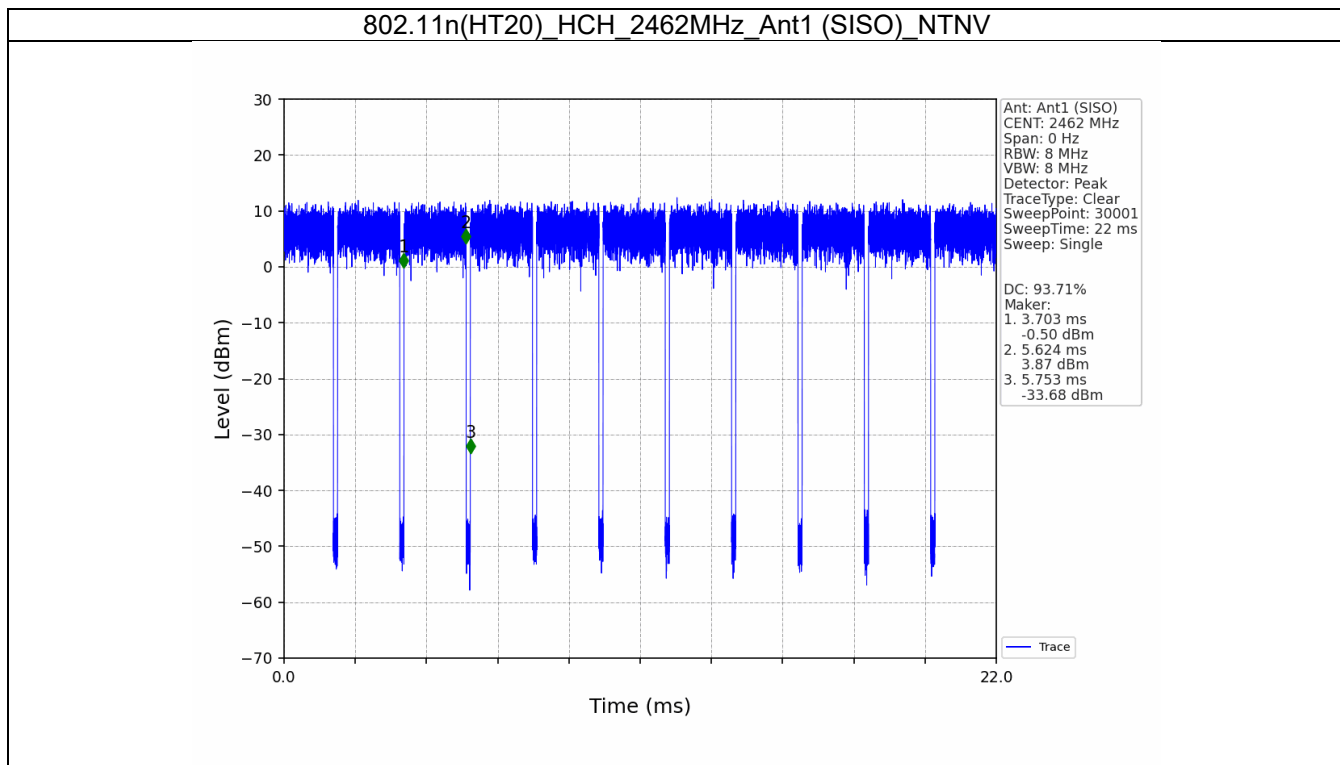
### 1.2.1 Ant1











## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

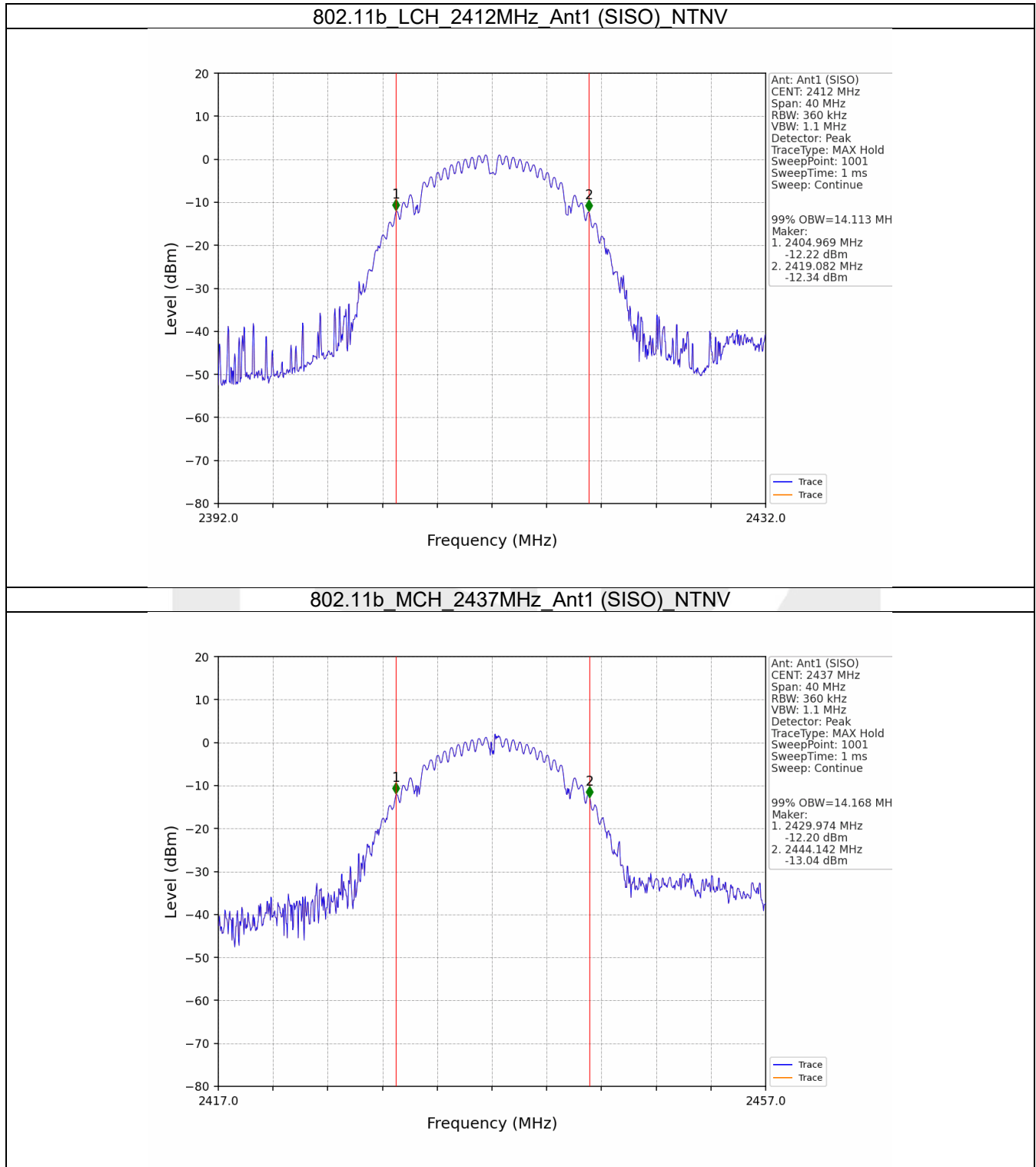
| Mode           | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|----------------|---------|-----------------|-----|------------------------------|-------|---------|
|                |         |                 |     | Result                       | Limit |         |
| 802.11b        | SISO    | 2412            | 1   | 14.113                       | /     | Pass    |
|                |         | 2437            | 1   | 14.168                       | /     | Pass    |
|                |         | 2462            | 1   | 14.055                       | /     | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 17.994                       | /     | Pass    |
|                |         | 2437            | 1   | 18.104                       | /     | Pass    |
|                |         | 2462            | 1   | 17.908                       | /     | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 19.151                       | /     | Pass    |
|                |         | 2437            | 1   | 18.753                       | /     | Pass    |
|                |         | 2462            | 1   | 18.980                       | /     | Pass    |

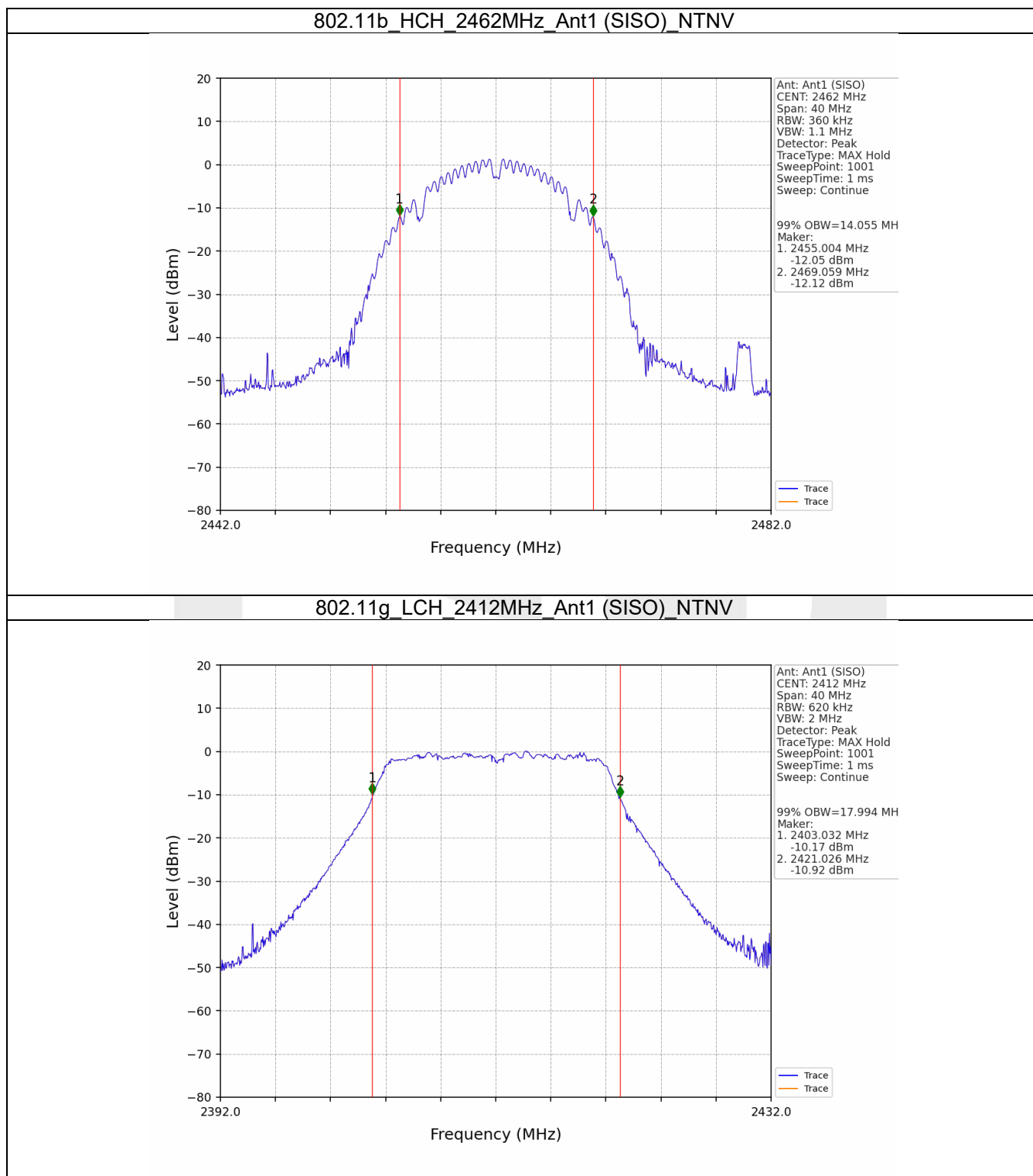
#### 2.1.2 6dB BW

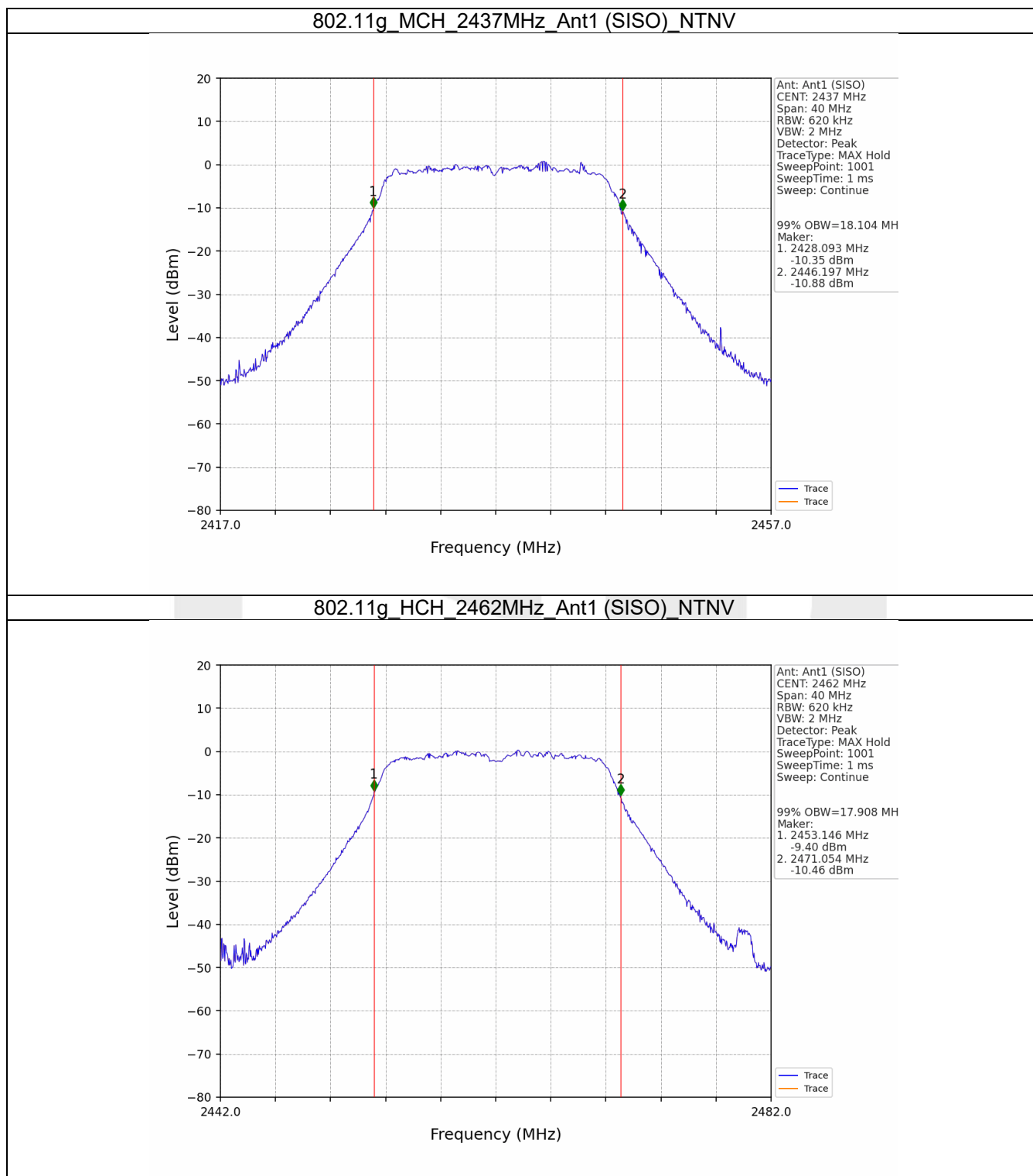
| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11b        | SISO    | 2412            | 1   | 9.255               | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 9.245               | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 9.244               | $\geq 0.5$ | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 16.590              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 16.452              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 16.608              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 18.000              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 17.701              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 17.850              | $\geq 0.5$ | Pass    |

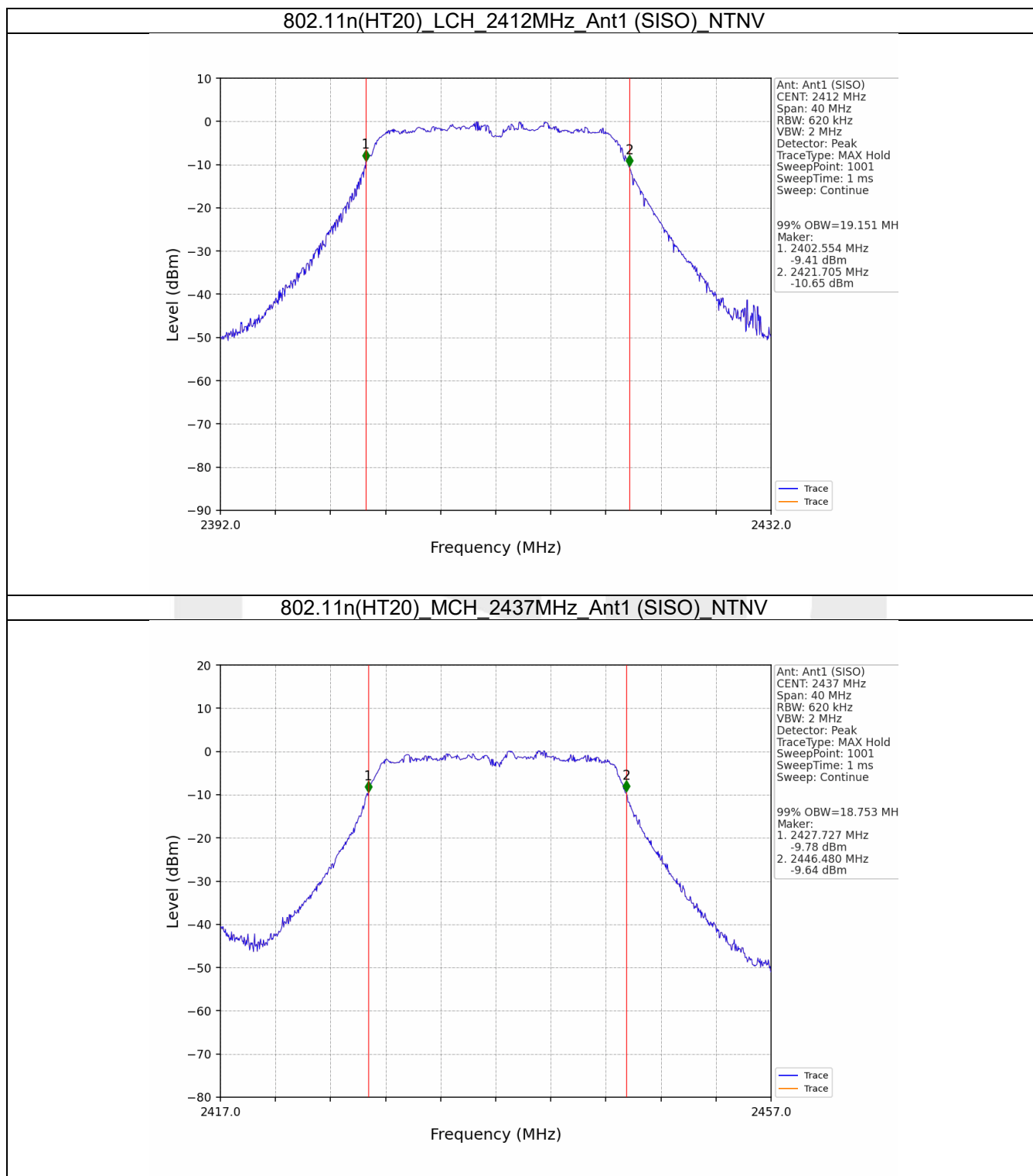
## 2.2 Test Graph

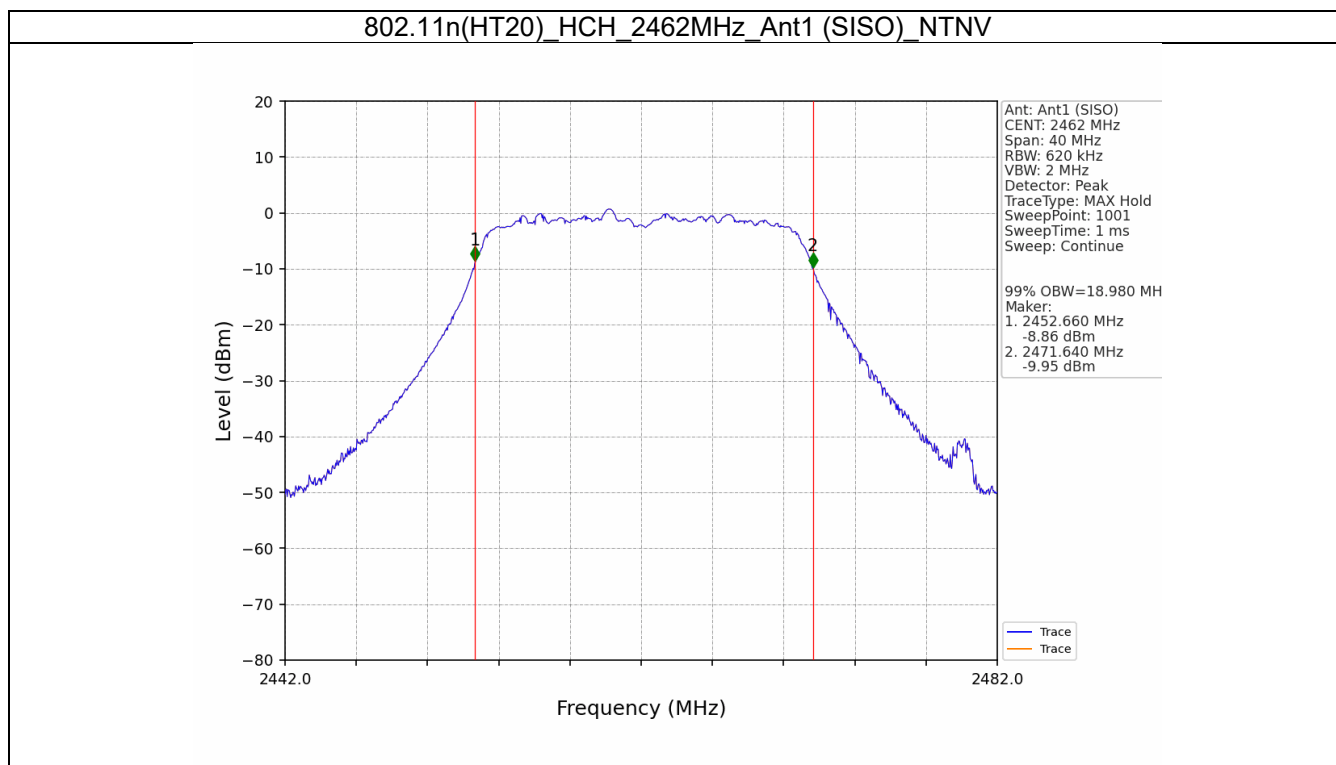
### 2.2.1 OBW



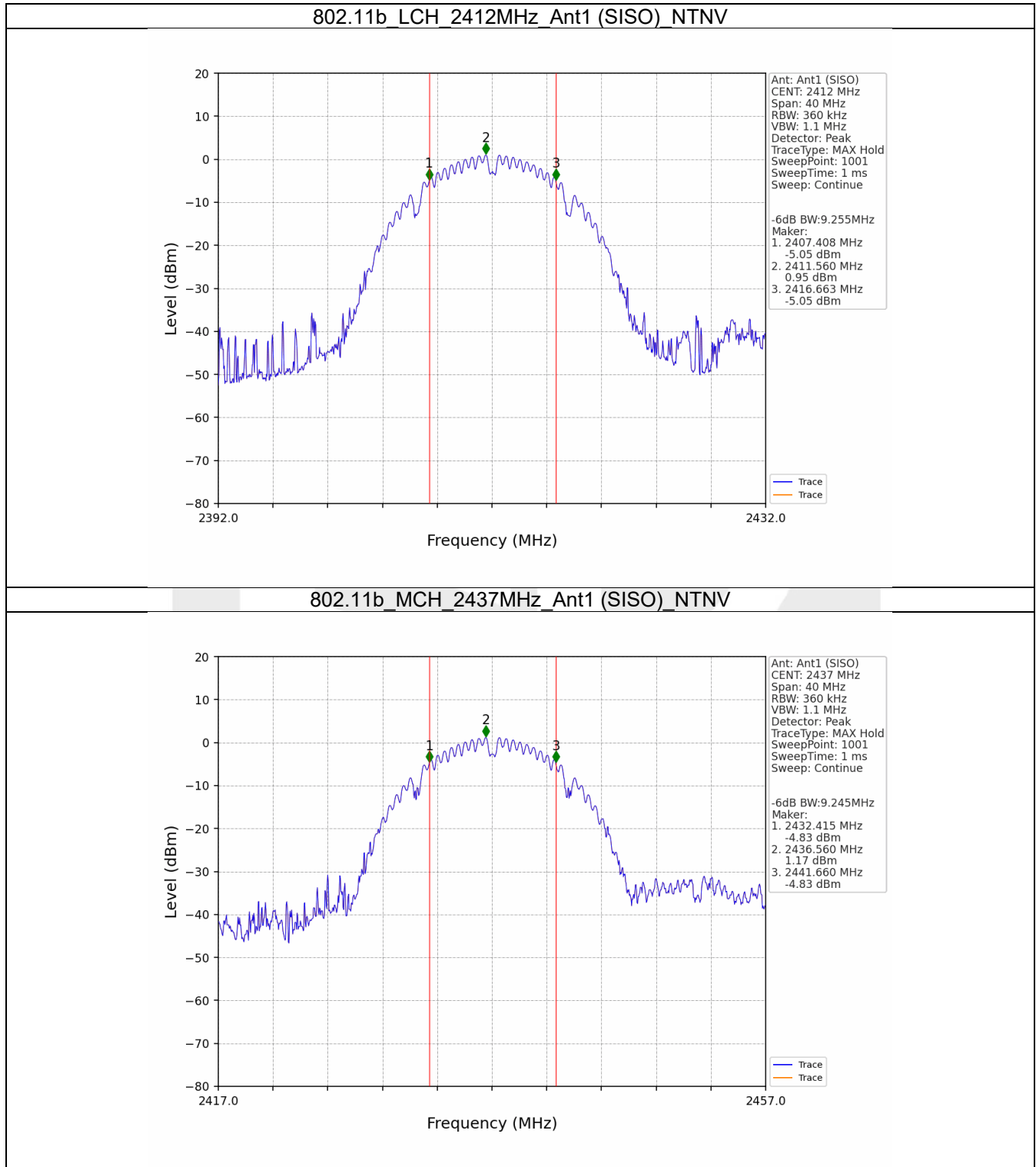


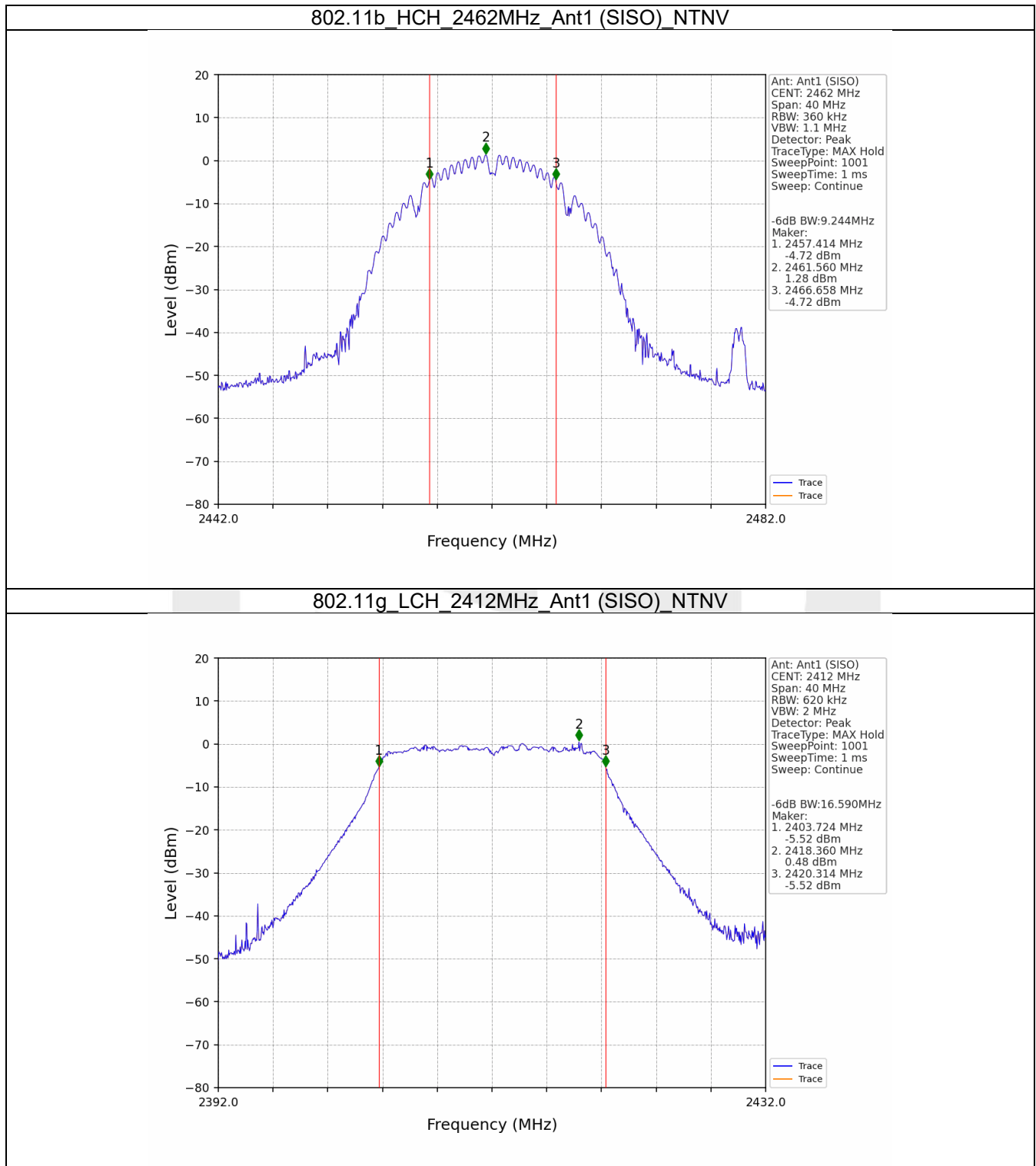


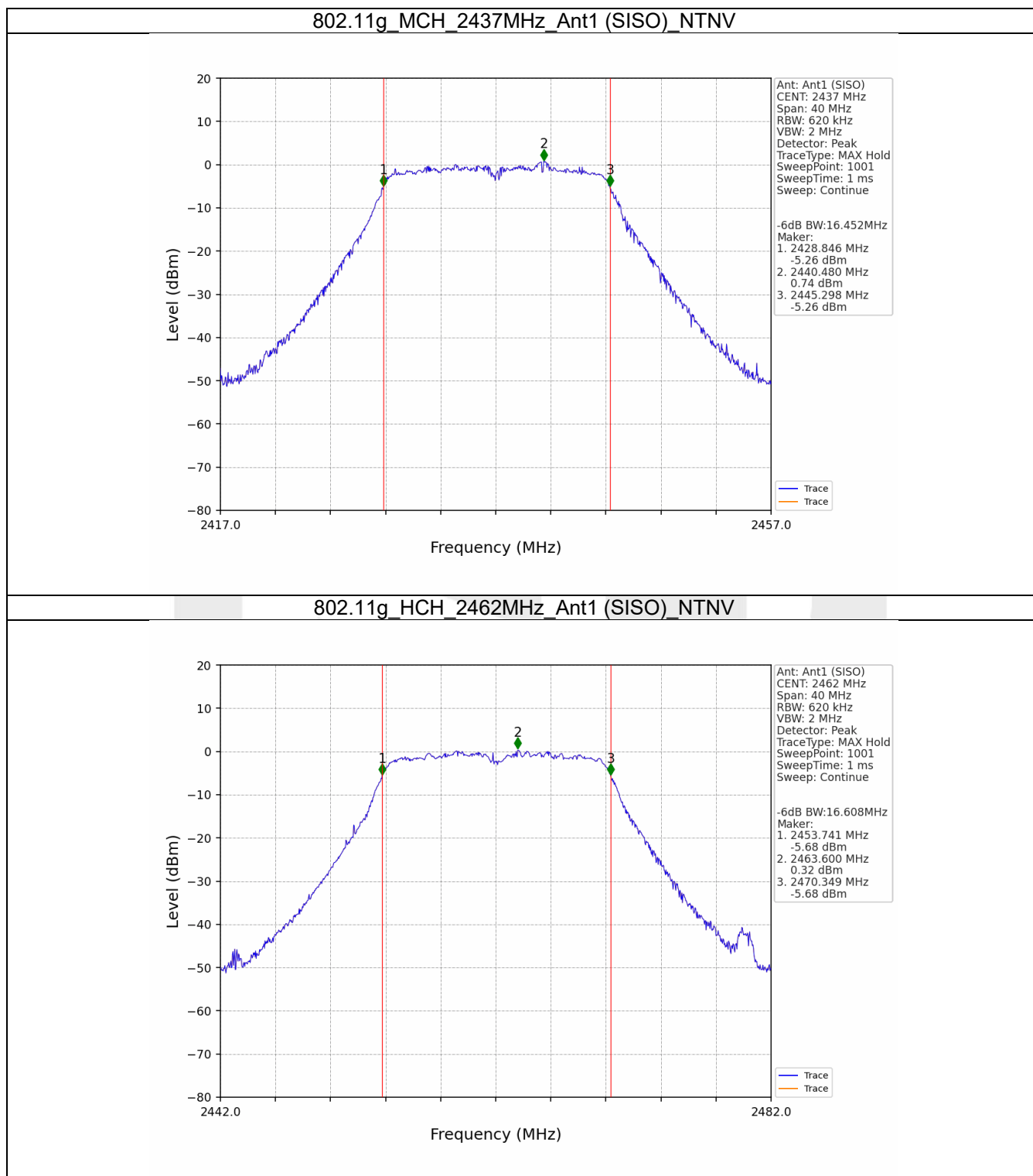


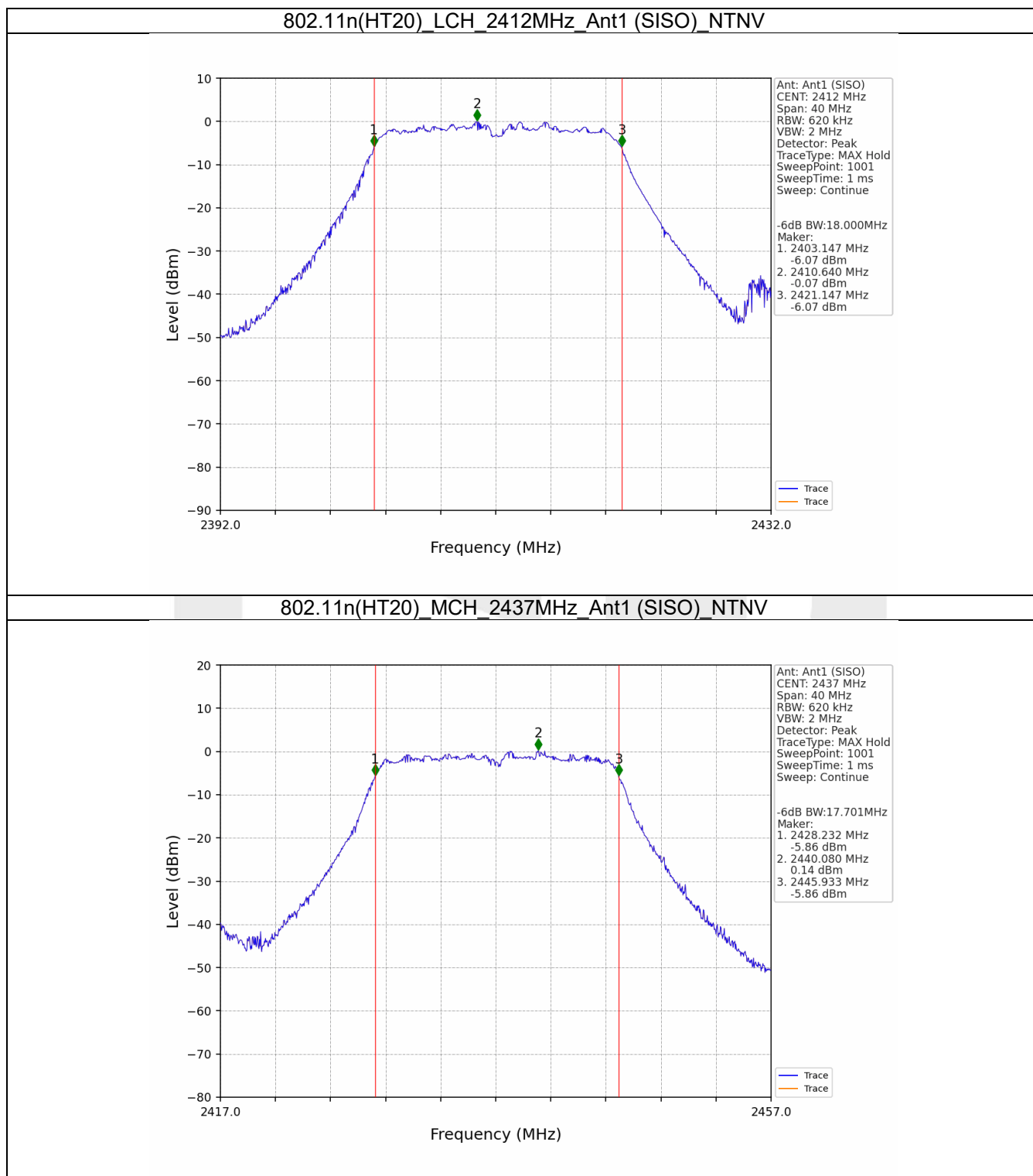


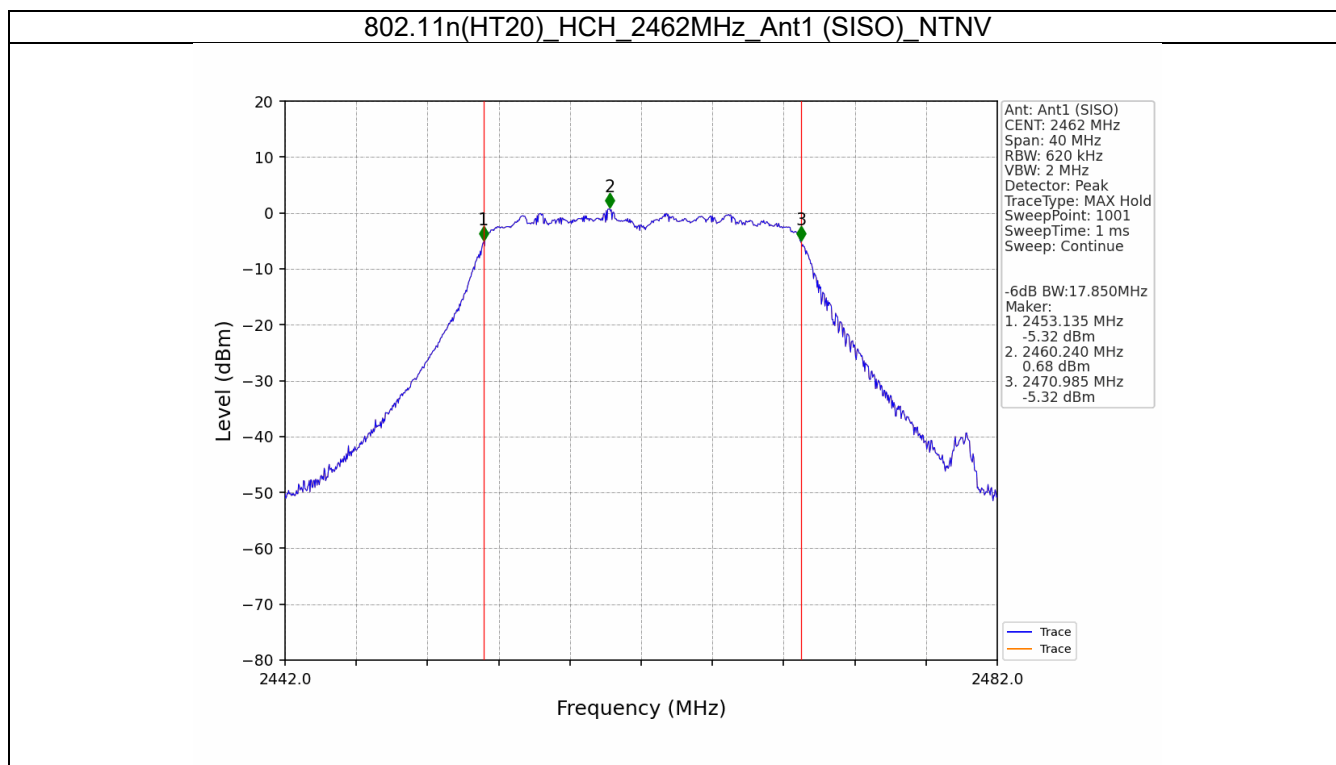
## 2.2.2 6dB BW











### 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            | 11.71                                     | <=30  | Pass    |
|                |         | 2437            | 11.87                                     | <=30  | Pass    |
|                |         | 2462            | 12.03                                     | <=30  | Pass    |
| 802.11g        | SISO    | 2412            | 13.29                                     | <=30  | Pass    |
|                |         | 2437            | 13.48                                     | <=30  | Pass    |
|                |         | 2462            | 13.44                                     | <=30  | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 13.19                                     | <=30  | Pass    |
|                |         | 2437            | 13.42                                     | <=30  | Pass    |
|                |         | 2462            | 13.61                                     | <=30  | Pass    |

#### 4. Maximum Power Spectral Density

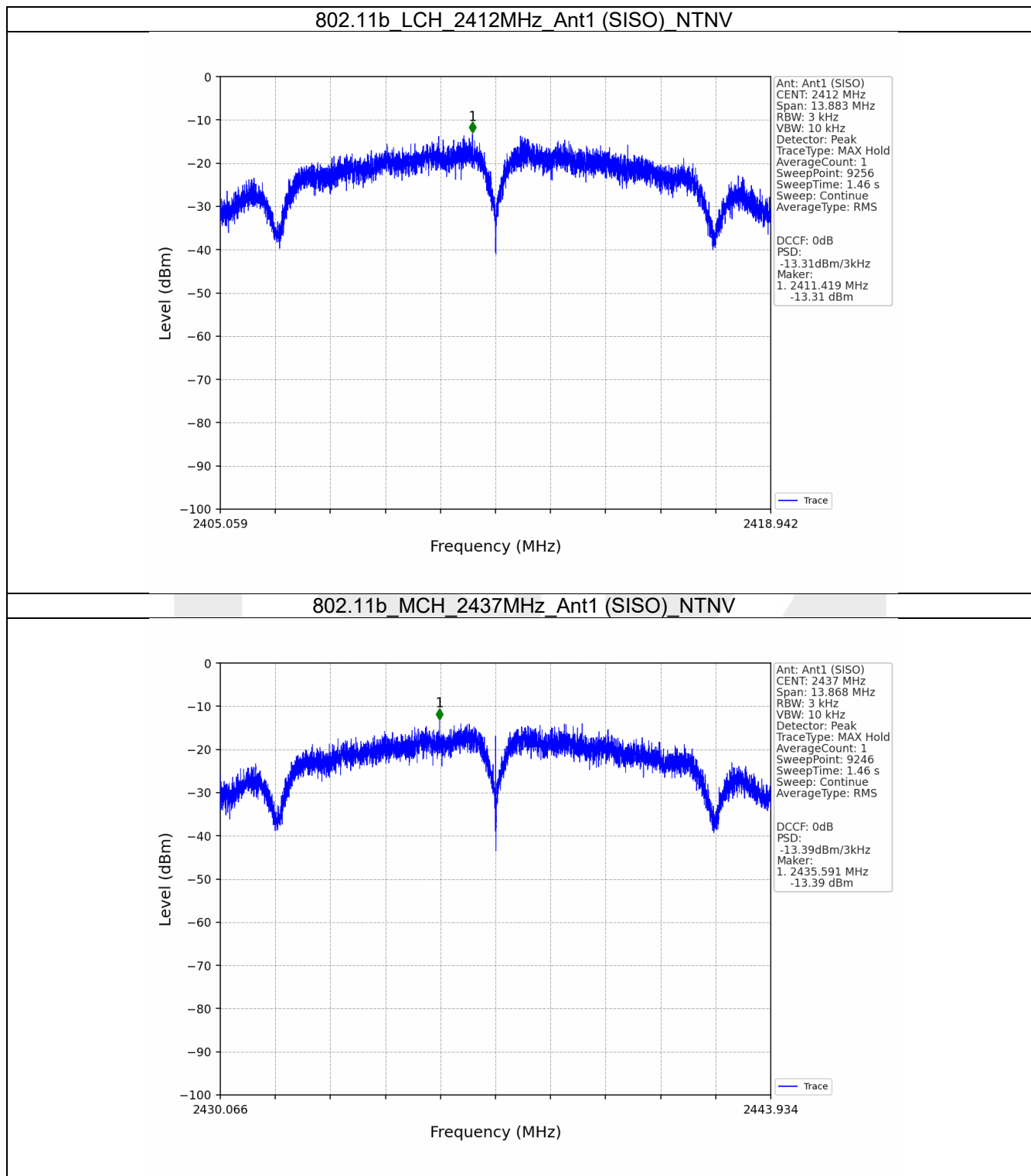
##### 4.1 Test Result

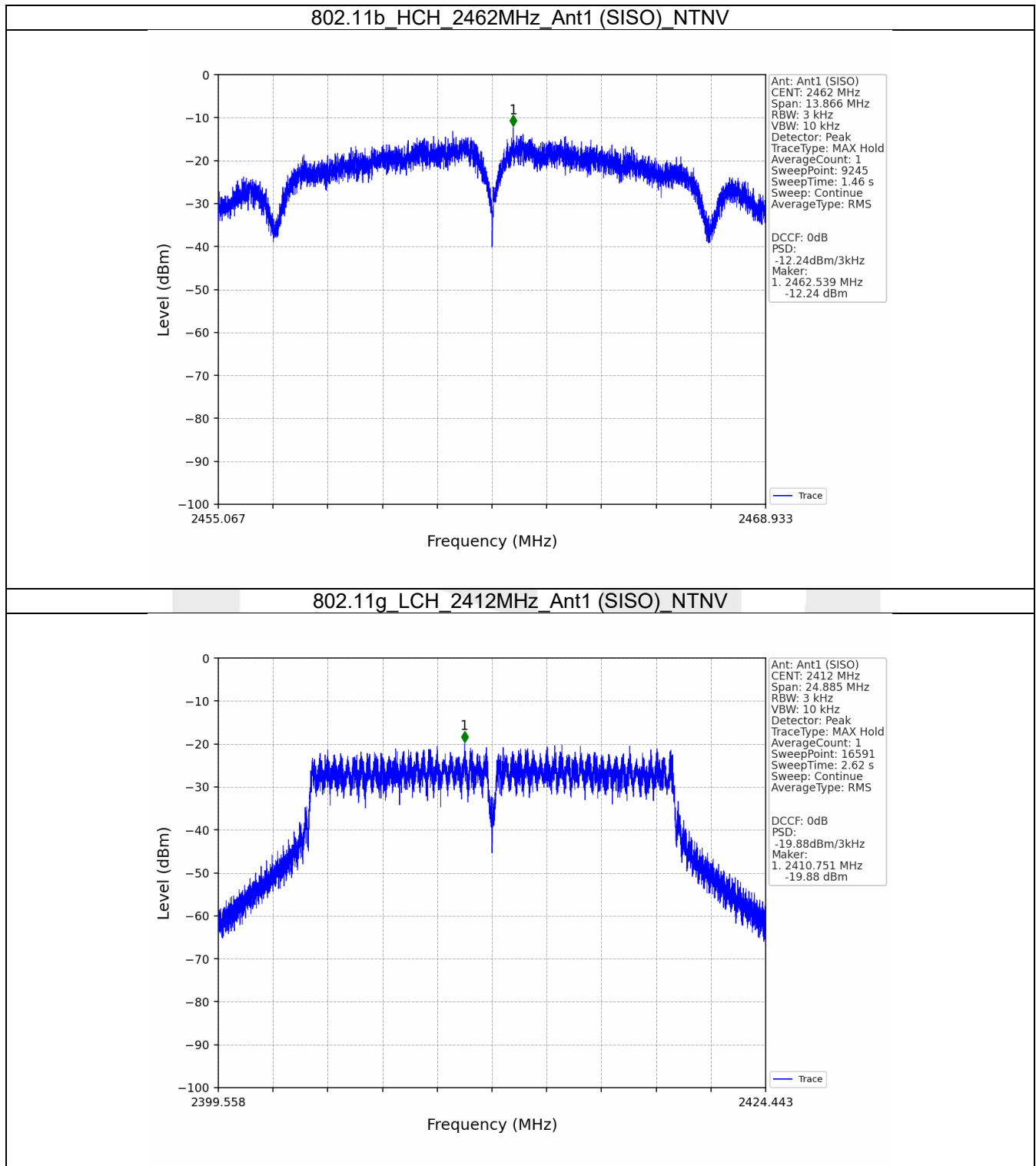
##### 4.1.1 PSD

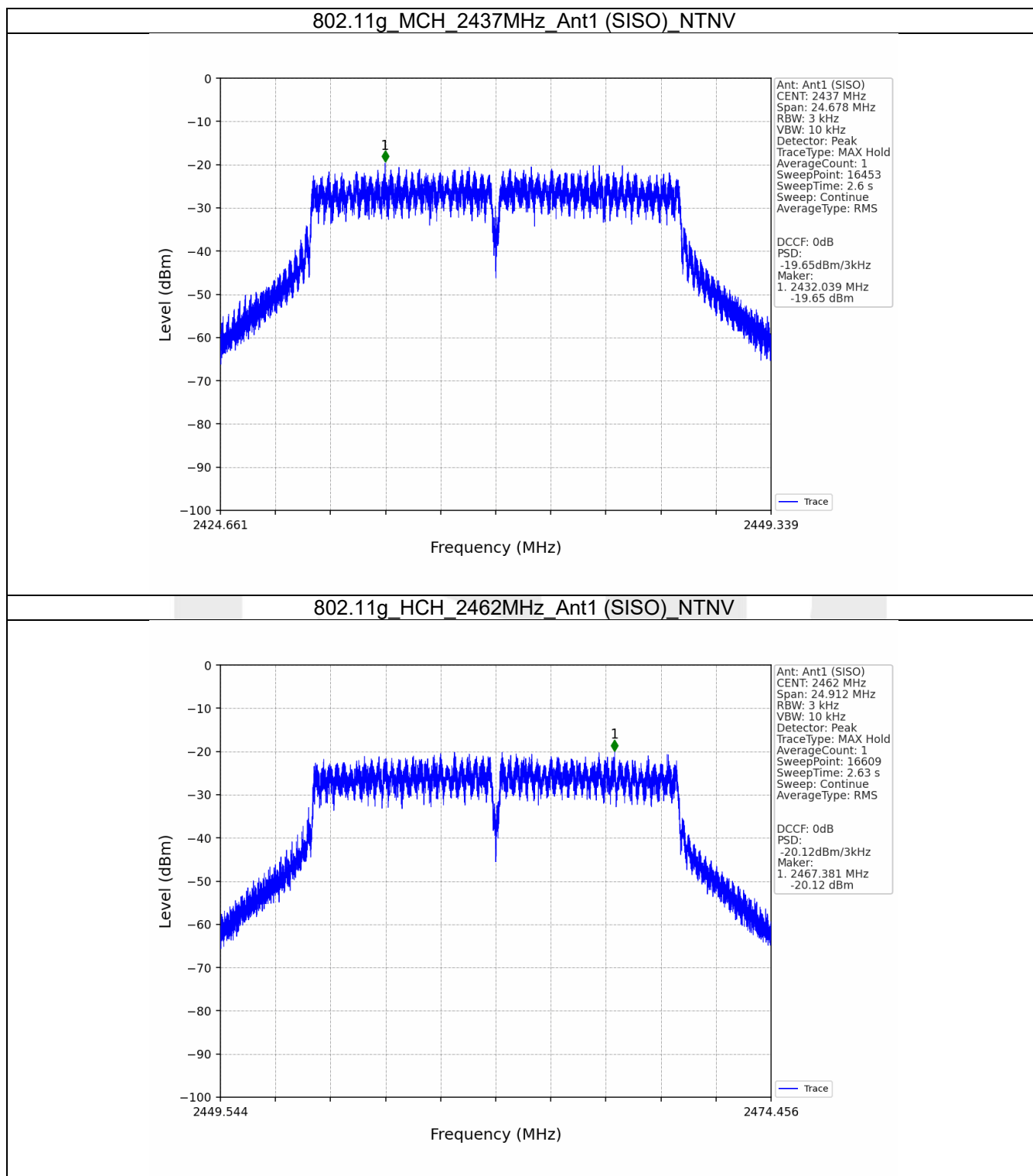
| Mode           | TX Type | Frequency (MHz) | Maximum PSD (dBm/3kHz) |       | Verdict |
|----------------|---------|-----------------|------------------------|-------|---------|
|                |         |                 | ANT1                   | Limit |         |
| 802.11b        | SISO    | 2412            | -13.31                 | <=8   | Pass    |
|                |         | 2437            | -13.39                 | <=8   | Pass    |
|                |         | 2462            | -12.24                 | <=8   | Pass    |
| 802.11g        | SISO    | 2412            | -19.88                 | <=8   | Pass    |
|                |         | 2437            | -19.65                 | <=8   | Pass    |
|                |         | 2462            | -20.12                 | <=8   | Pass    |
| 802.11n (HT20) | SISO    | 2412            | -19.74                 | <=8   | Pass    |
|                |         | 2437            | -19.96                 | <=8   | Pass    |
|                |         | 2462            | -18.54                 | <=8   | Pass    |

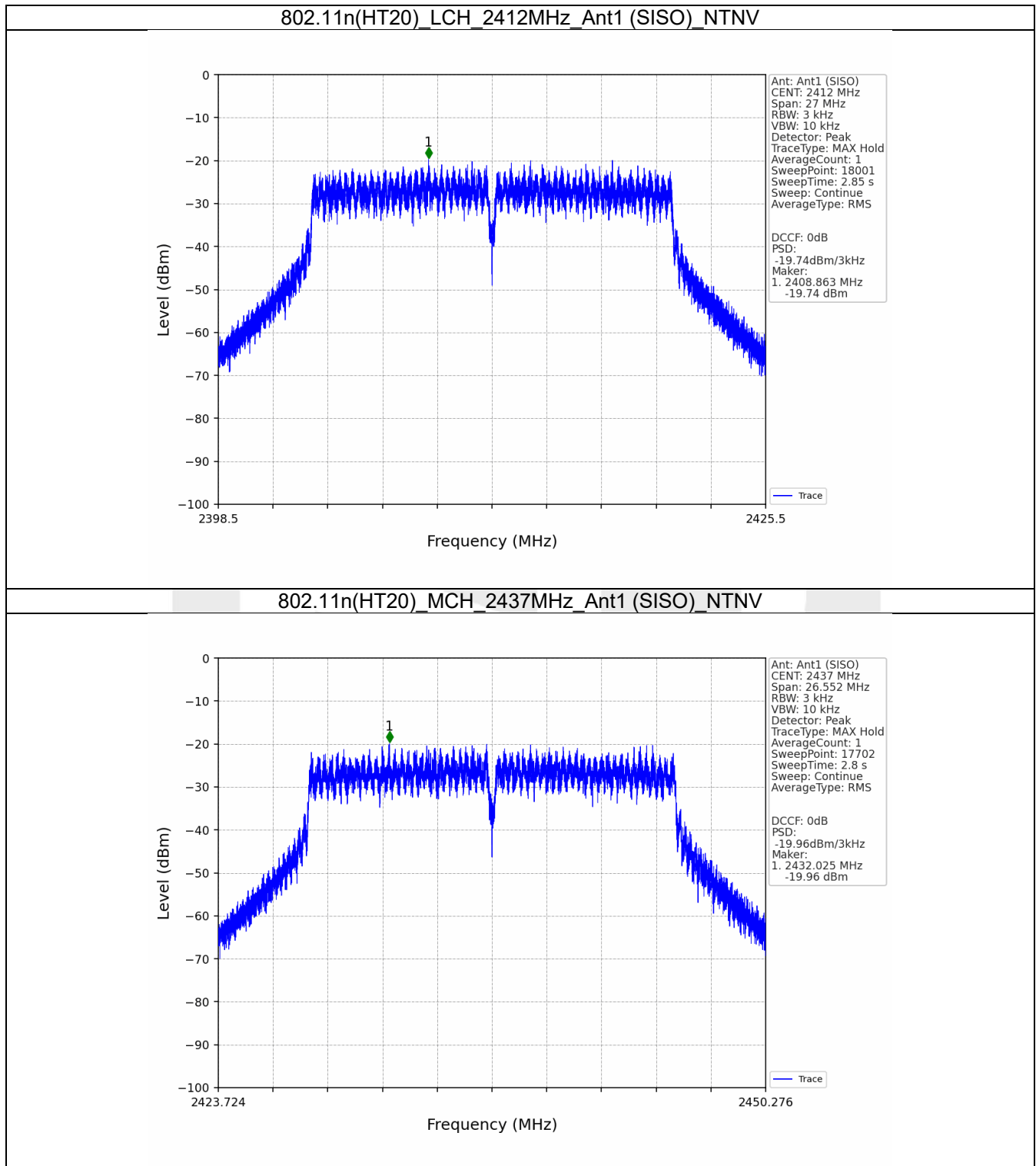
## 4.2 Test Graph

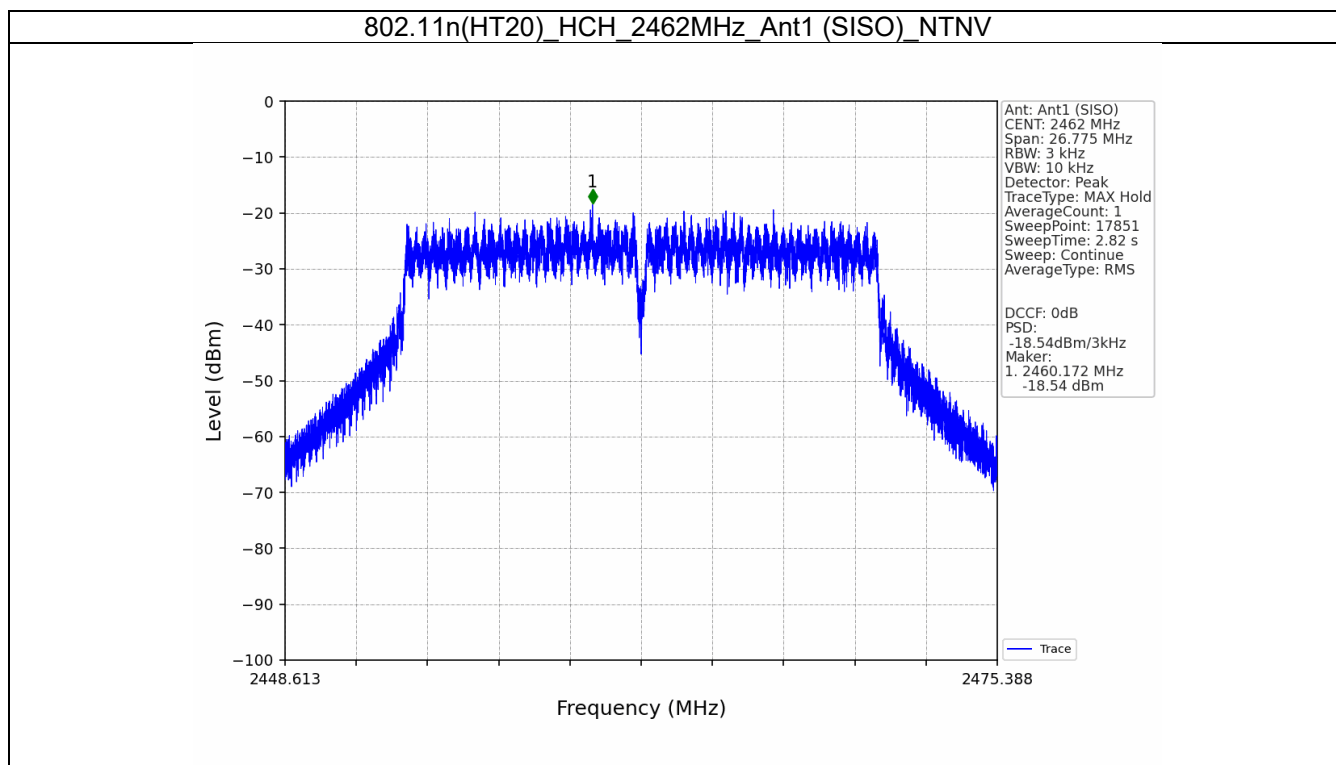
### 4.2.1 PSD











## 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   | 0.56                     |
|                |         | 2437            | 1   | 0.70                     |
|                |         | 2462            | 1   | 1.05                     |
| 802.11g        | SISO    | 2412            | 1   | -5.54                    |
|                |         | 2437            | 1   | -5.19                    |
|                |         | 2462            | 1   | -5.06                    |
| 802.11n (HT20) | SISO    | 2412            | 1   | -5.40                    |
|                |         | 2437            | 1   | -5.61                    |
|                |         | 2462            | 1   | -5.41                    |

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.

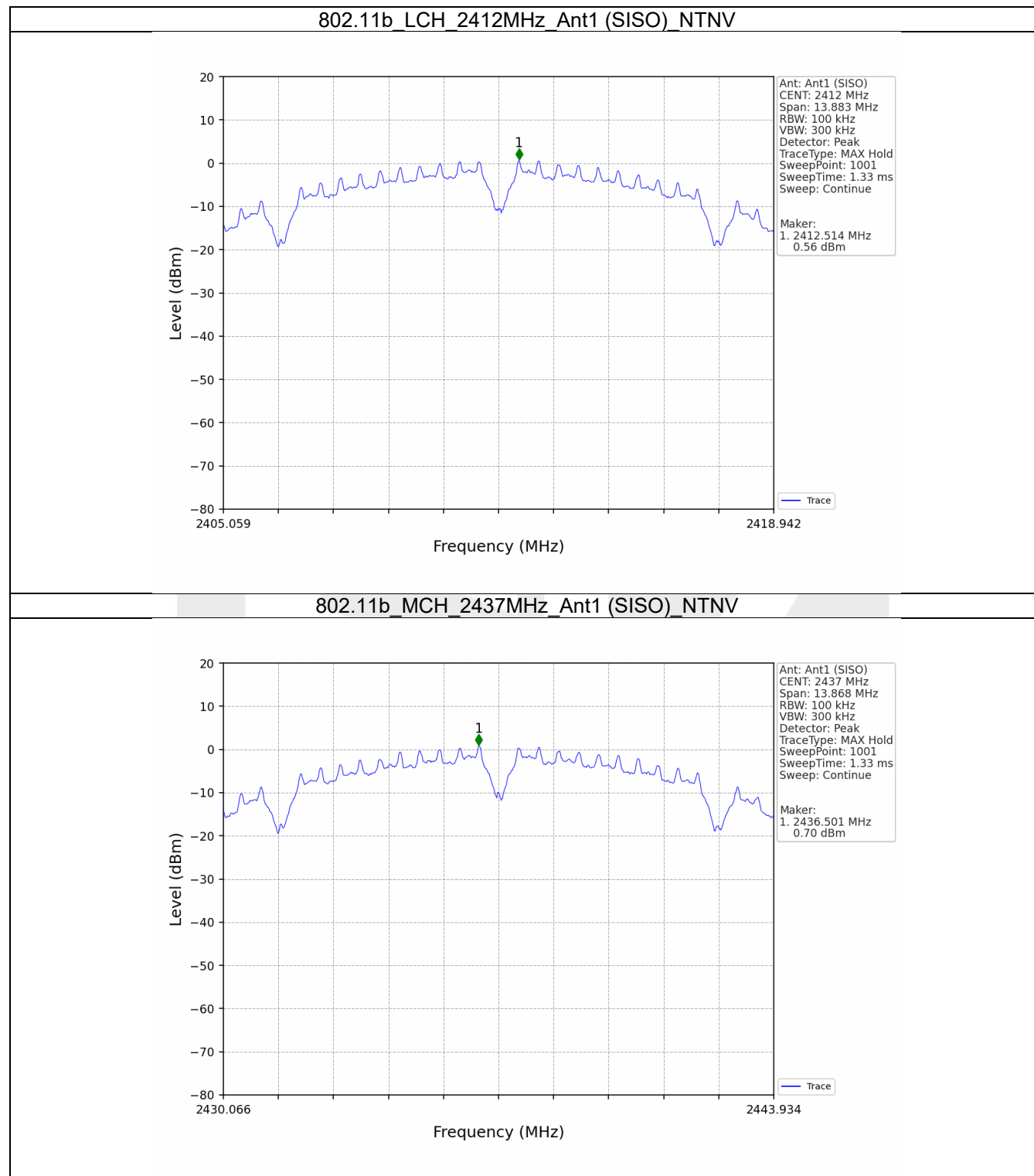
#### 5.1.2 CSE

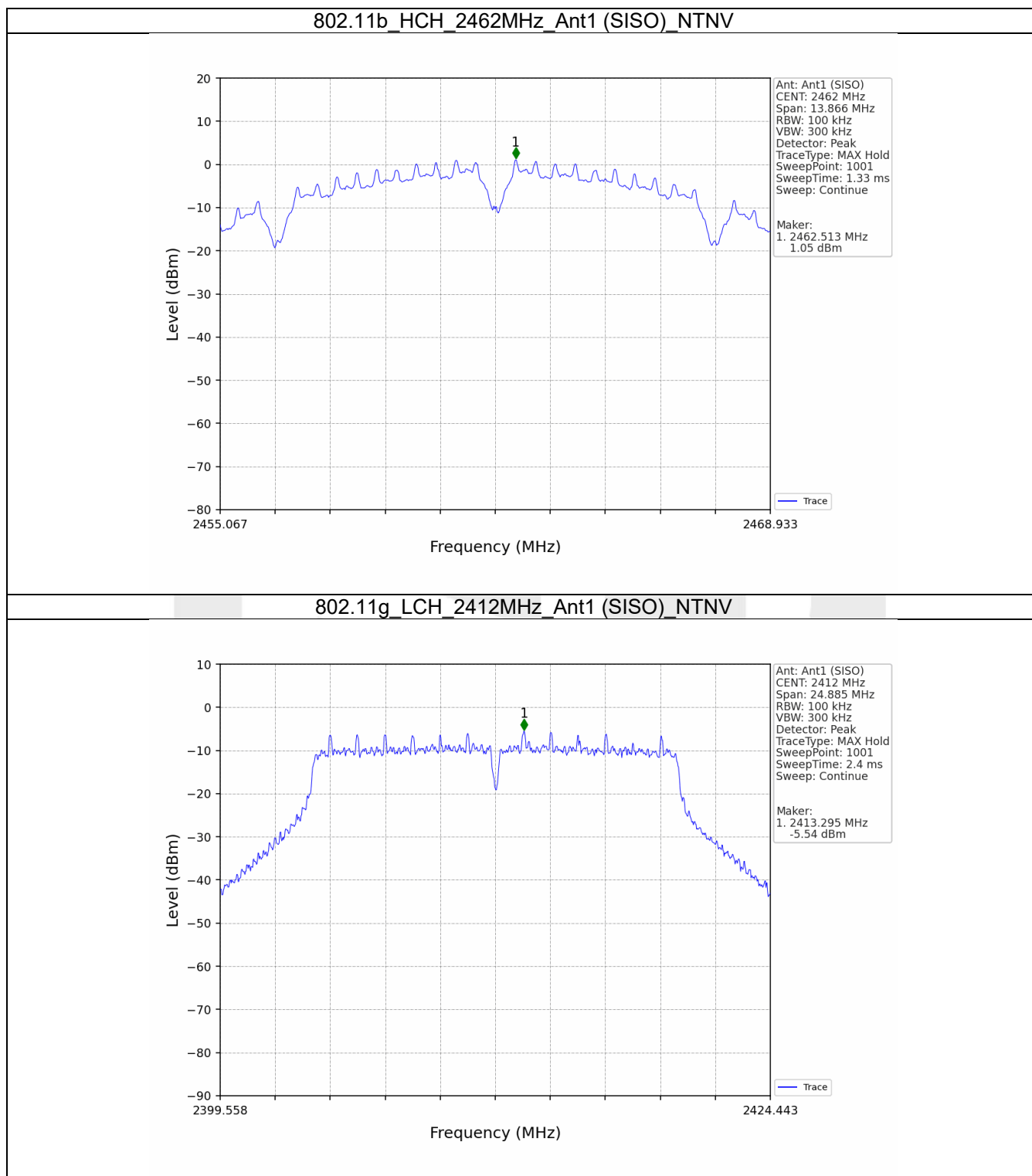
| Mode           | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|----------------|---------|-----------------|-----|--------------------------|-------------|---------|
| 802.11b        | SISO    | 2412            | 1   | 0.56                     | -19.44      | Pass    |
|                |         | 2437            | 1   | 0.70                     | -19.30      | Pass    |
|                |         | 2462            | 1   | 1.05                     | -18.95      | Pass    |
| 802.11g        | SISO    | 2412            | 1   | -5.54                    | -25.54      | Pass    |
|                |         | 2437            | 1   | -5.19                    | -25.19      | Pass    |
|                |         | 2462            | 1   | -5.06                    | -25.06      | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | -5.40                    | -25.40      | Pass    |
|                |         | 2437            | 1   | -5.61                    | -25.61      | Pass    |
|                |         | 2462            | 1   | -5.41                    | -25.41      | Pass    |

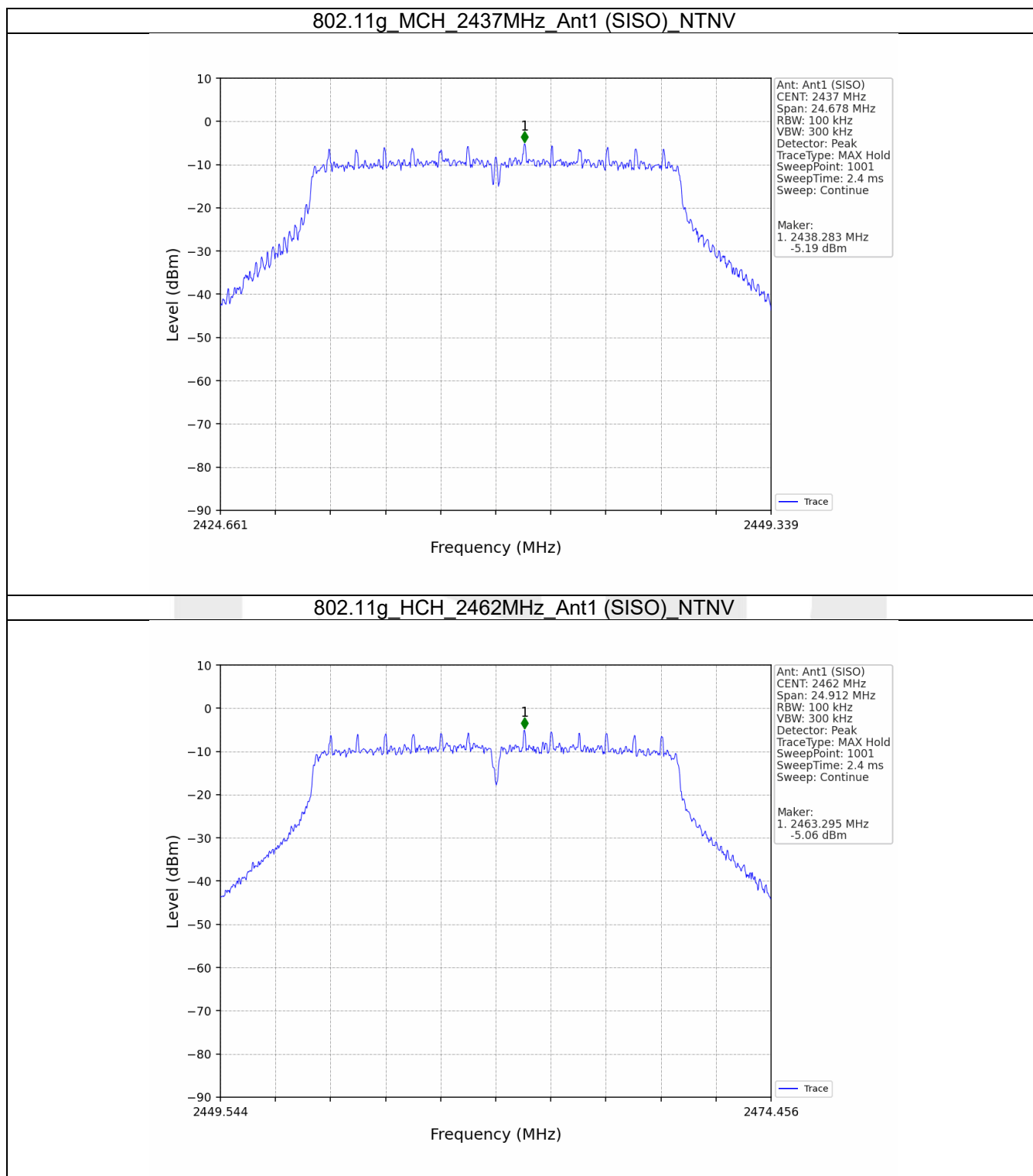
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

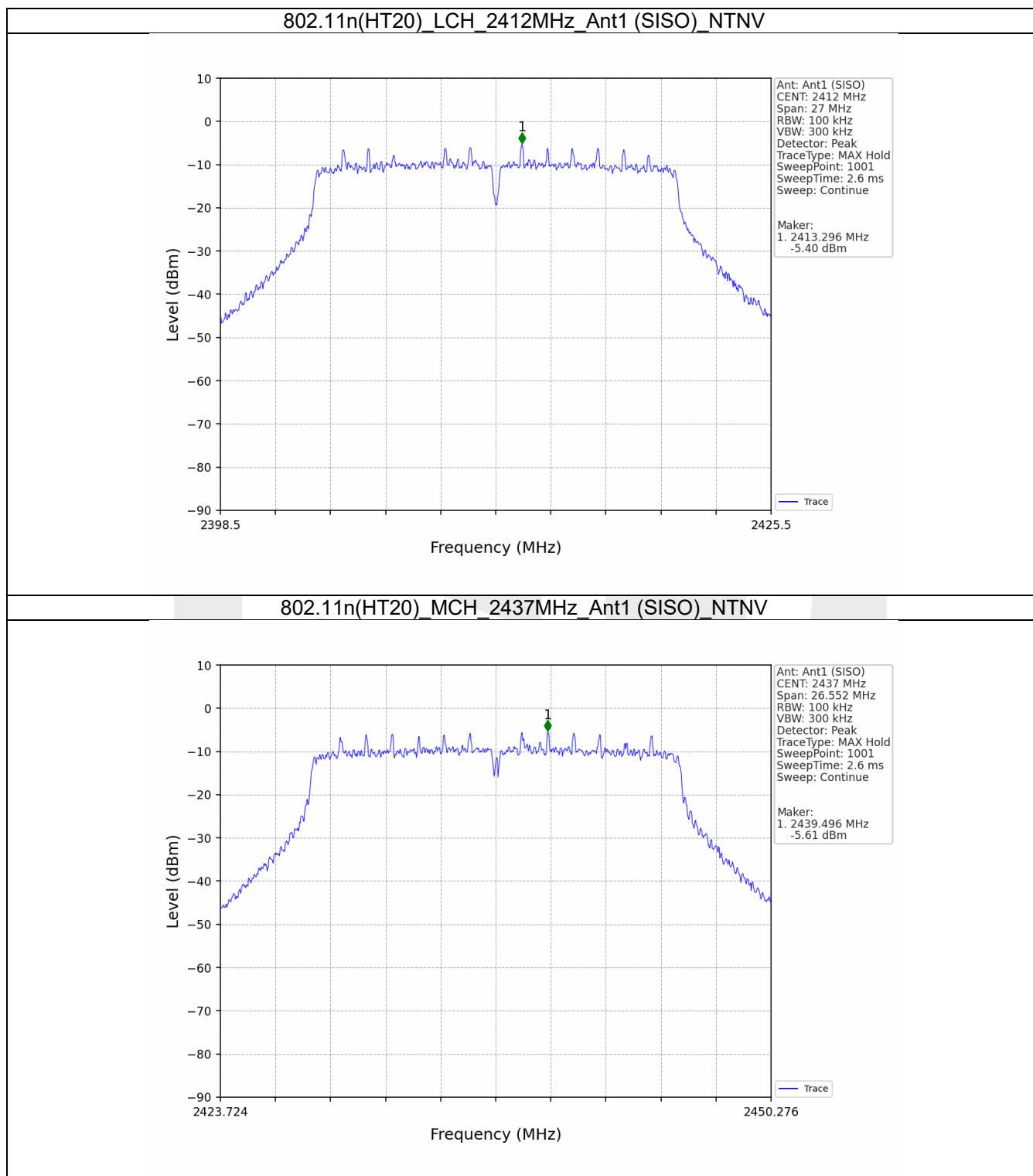
## 5.2 Test Graph

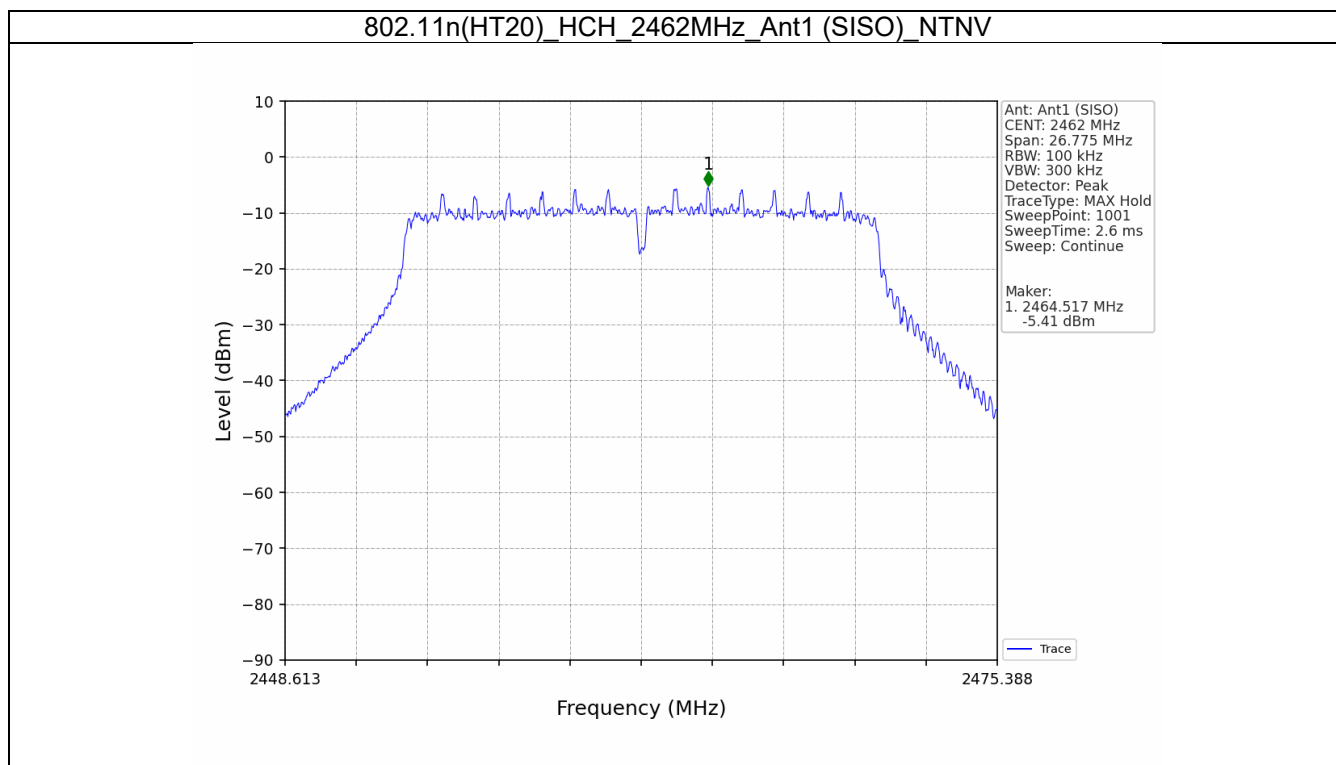
### 5.2.1 Ref



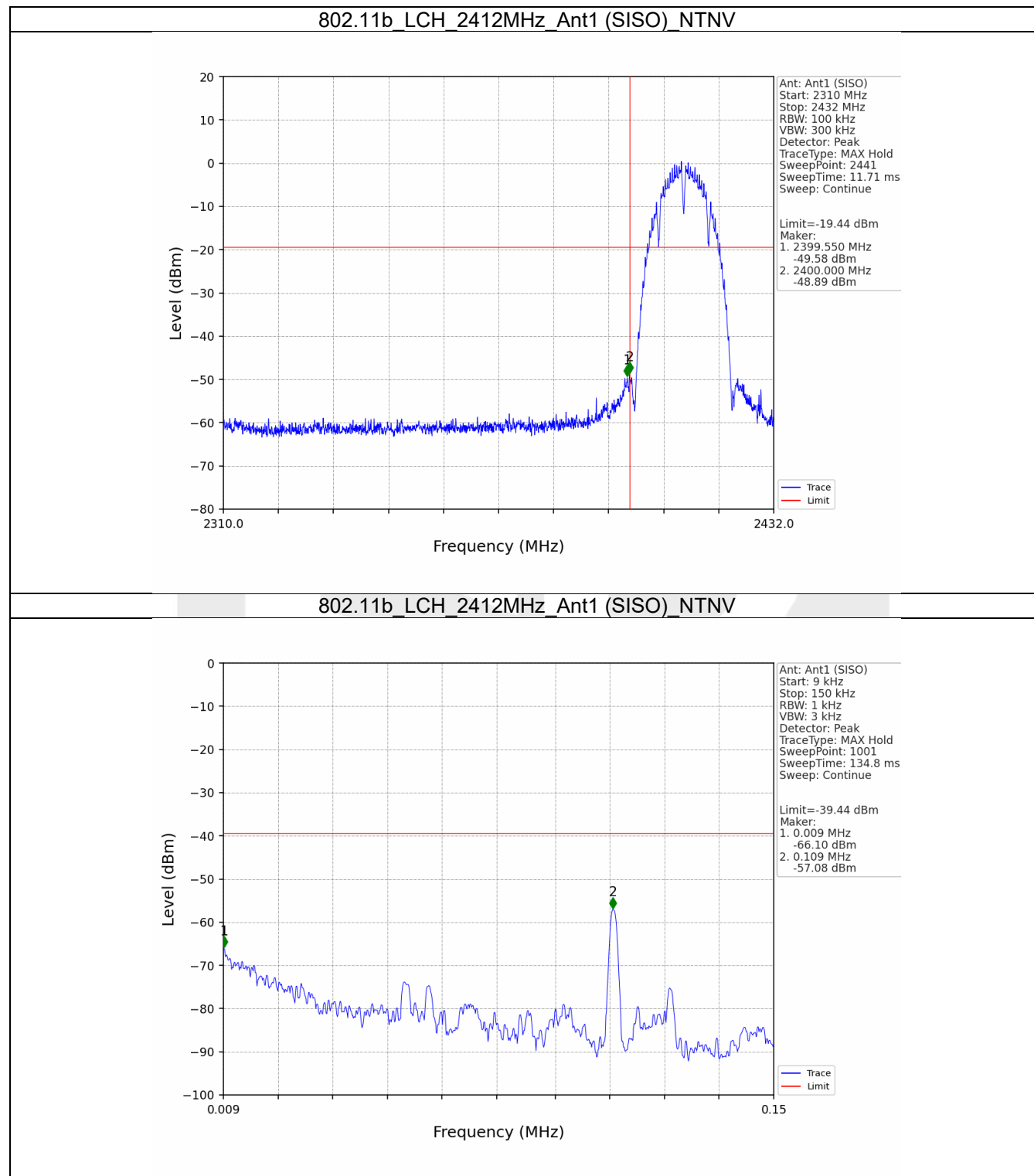


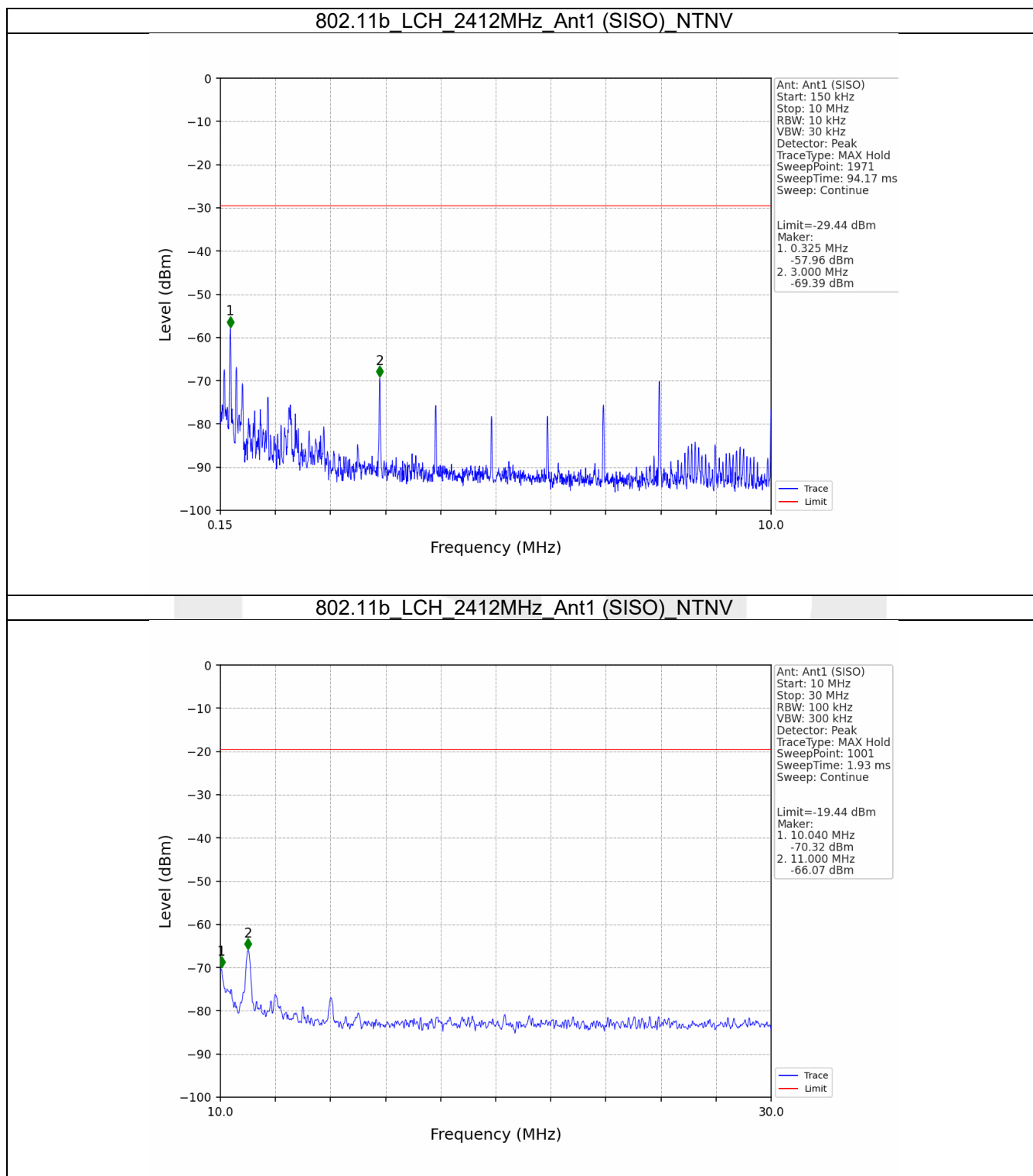


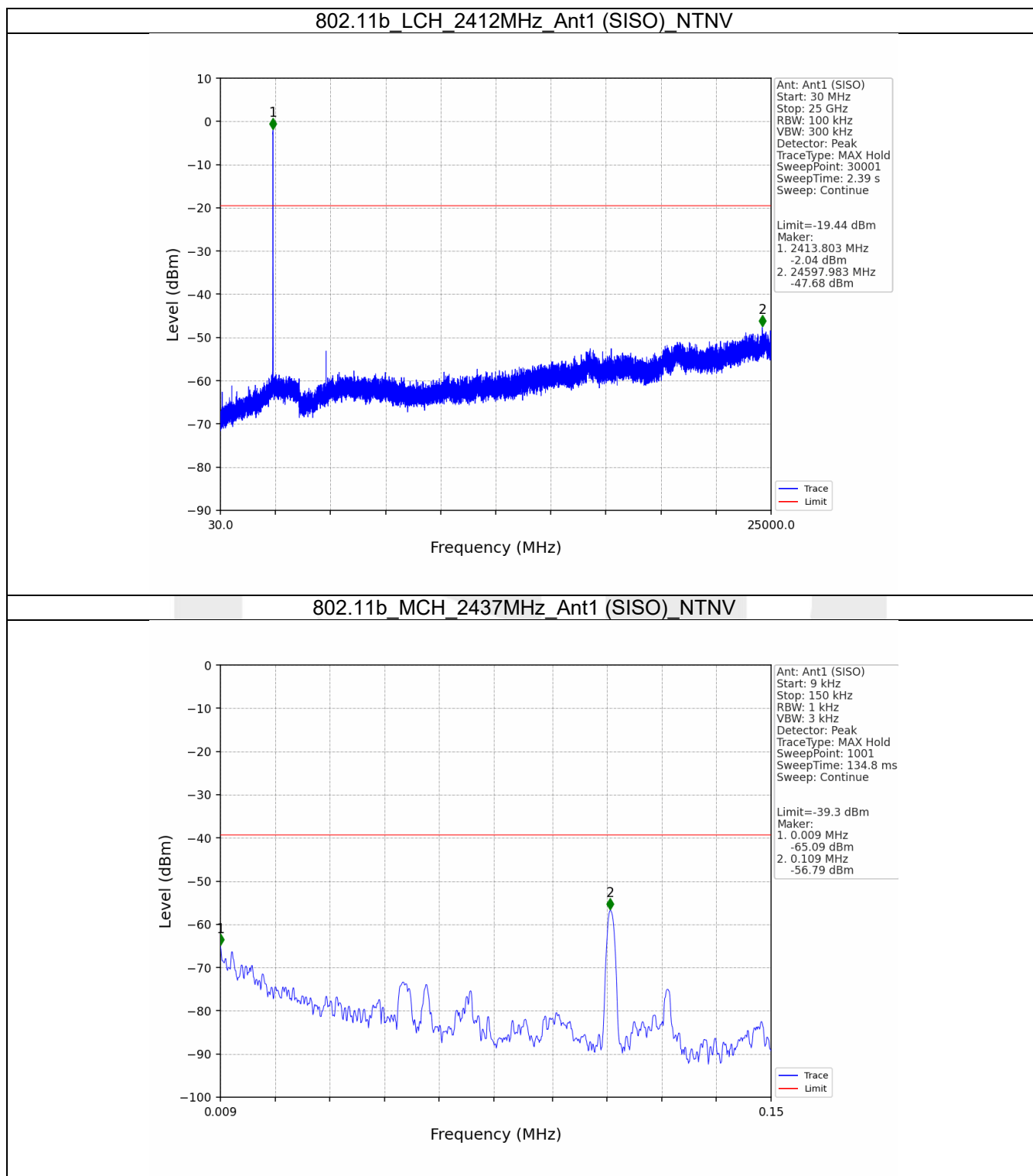


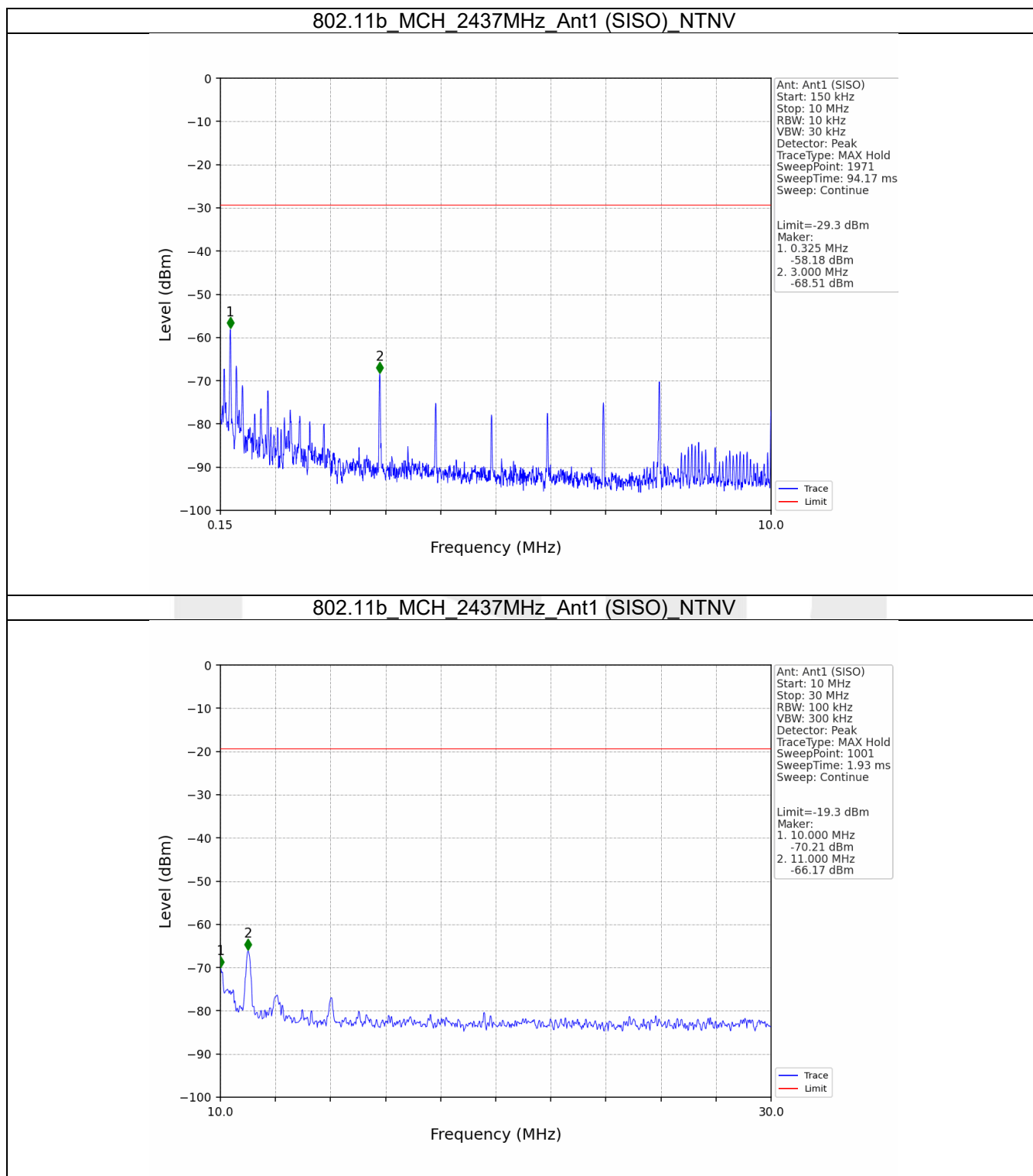


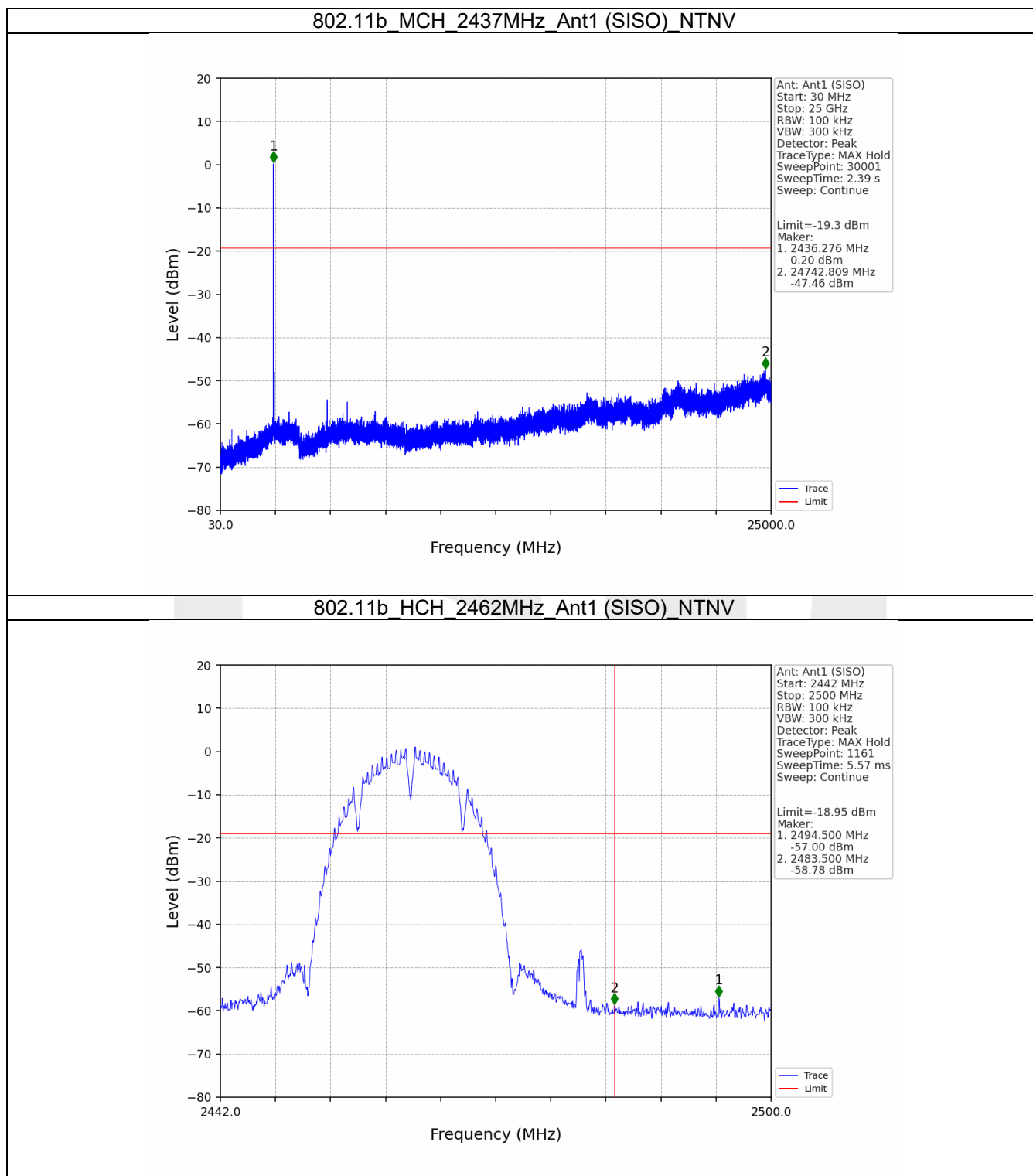
## 5.2.2 CSE

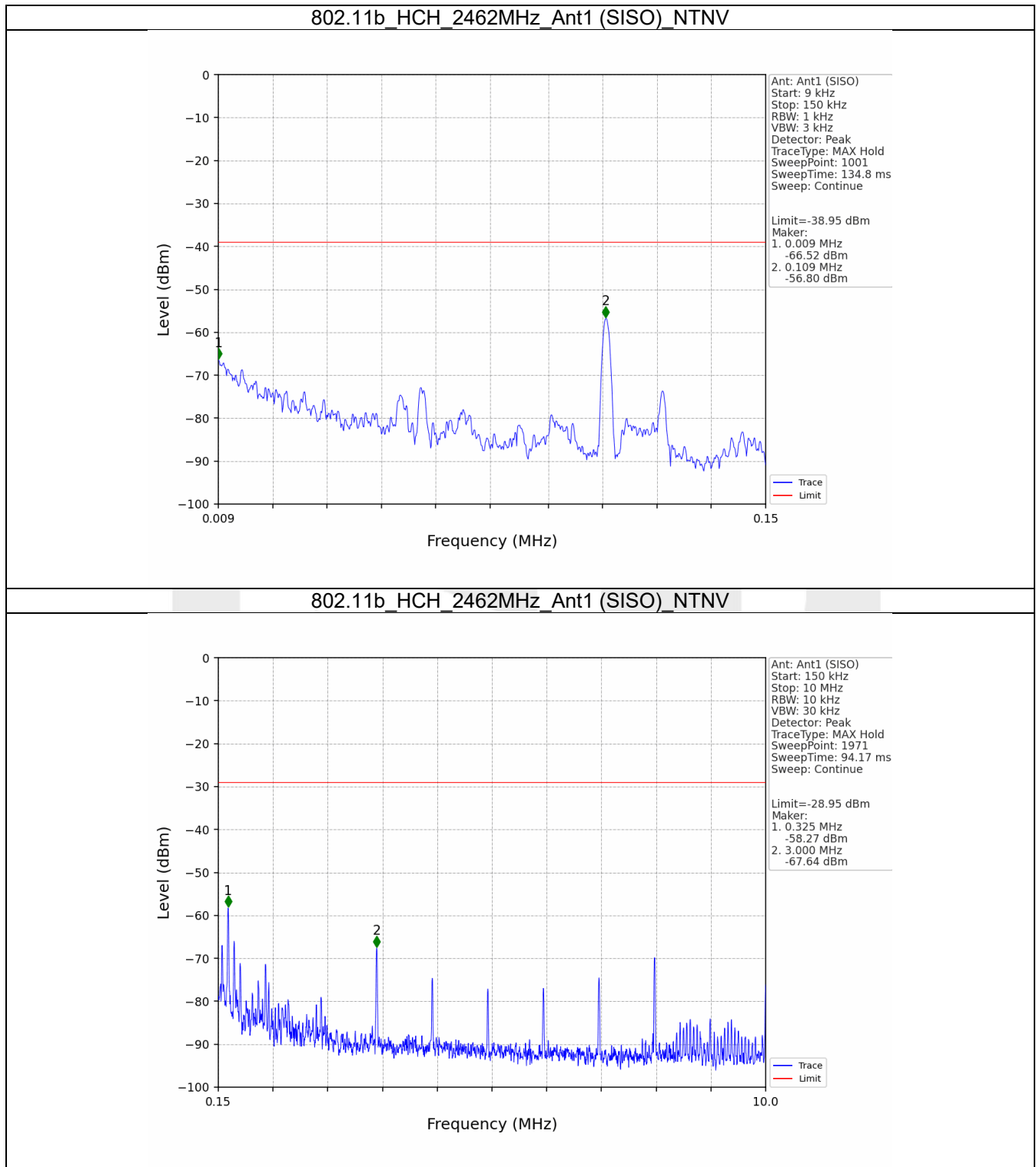


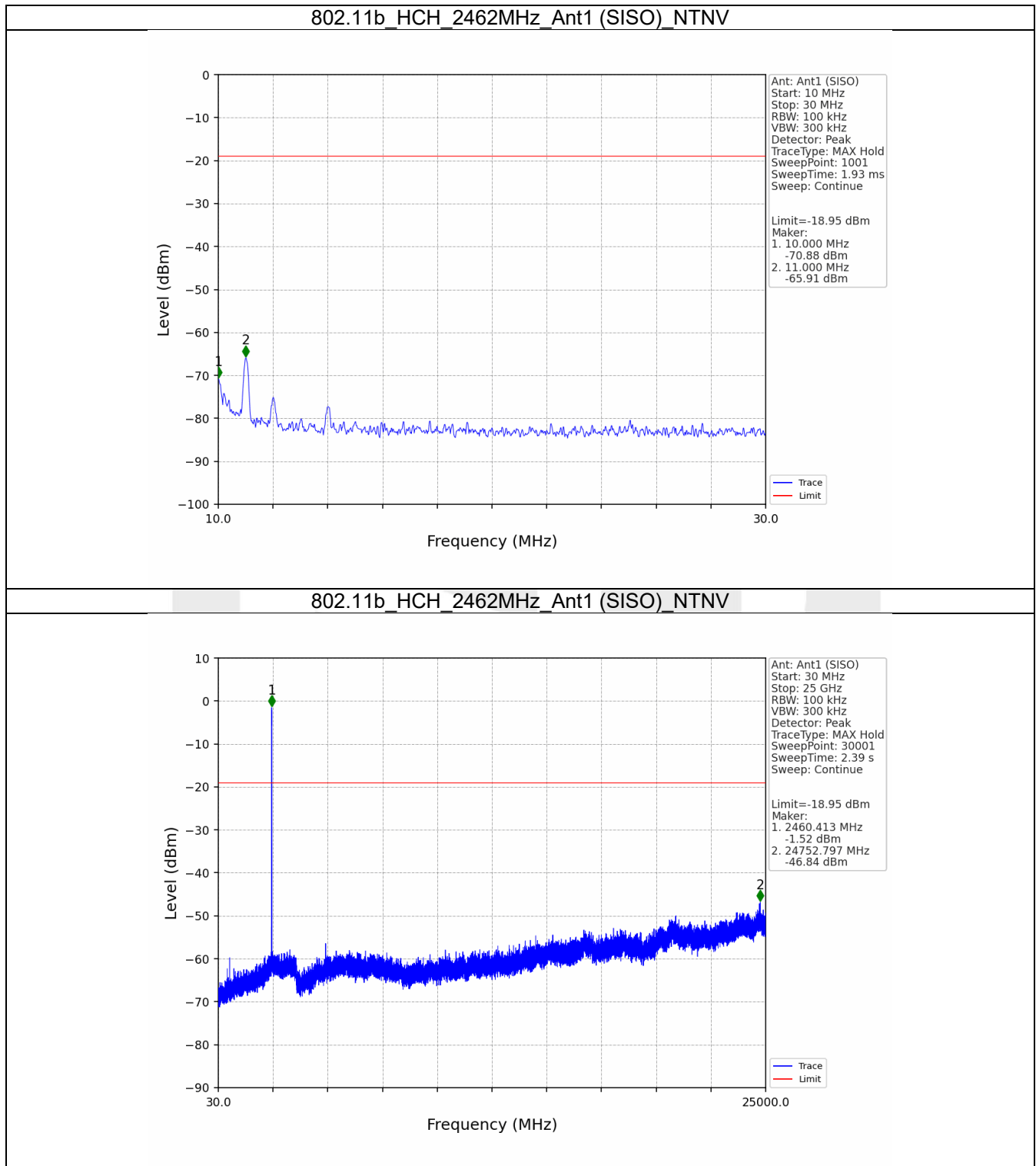


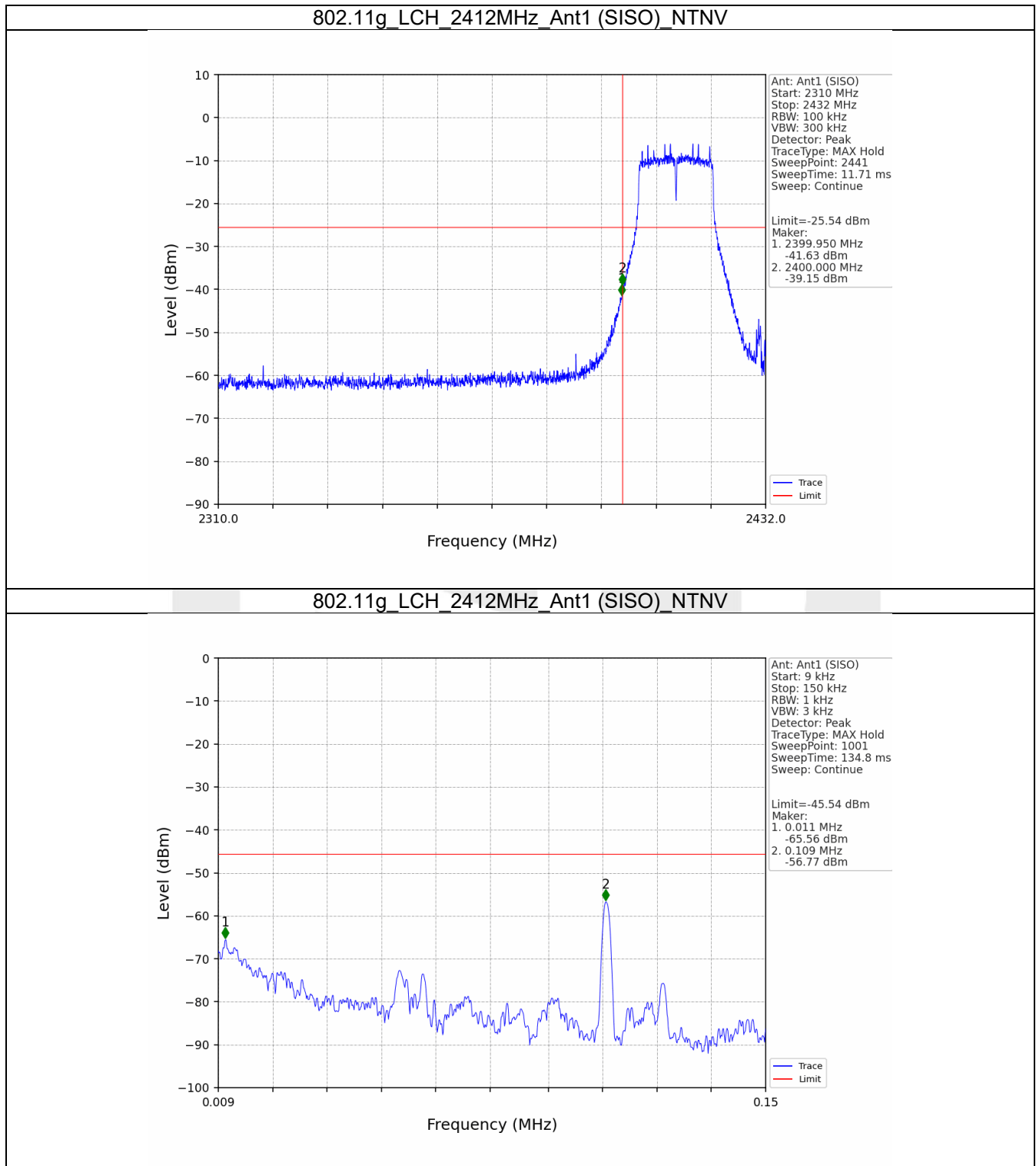


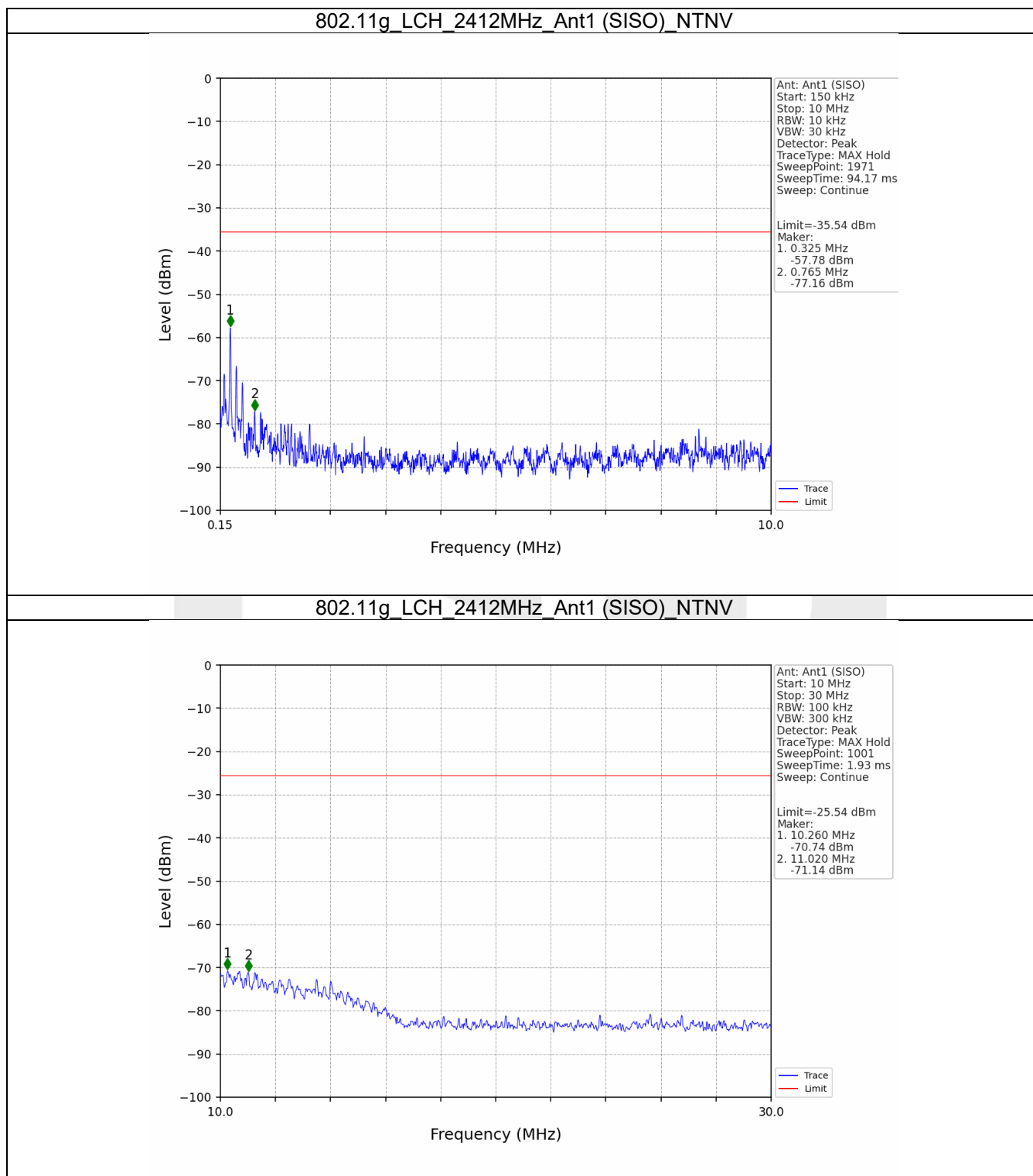


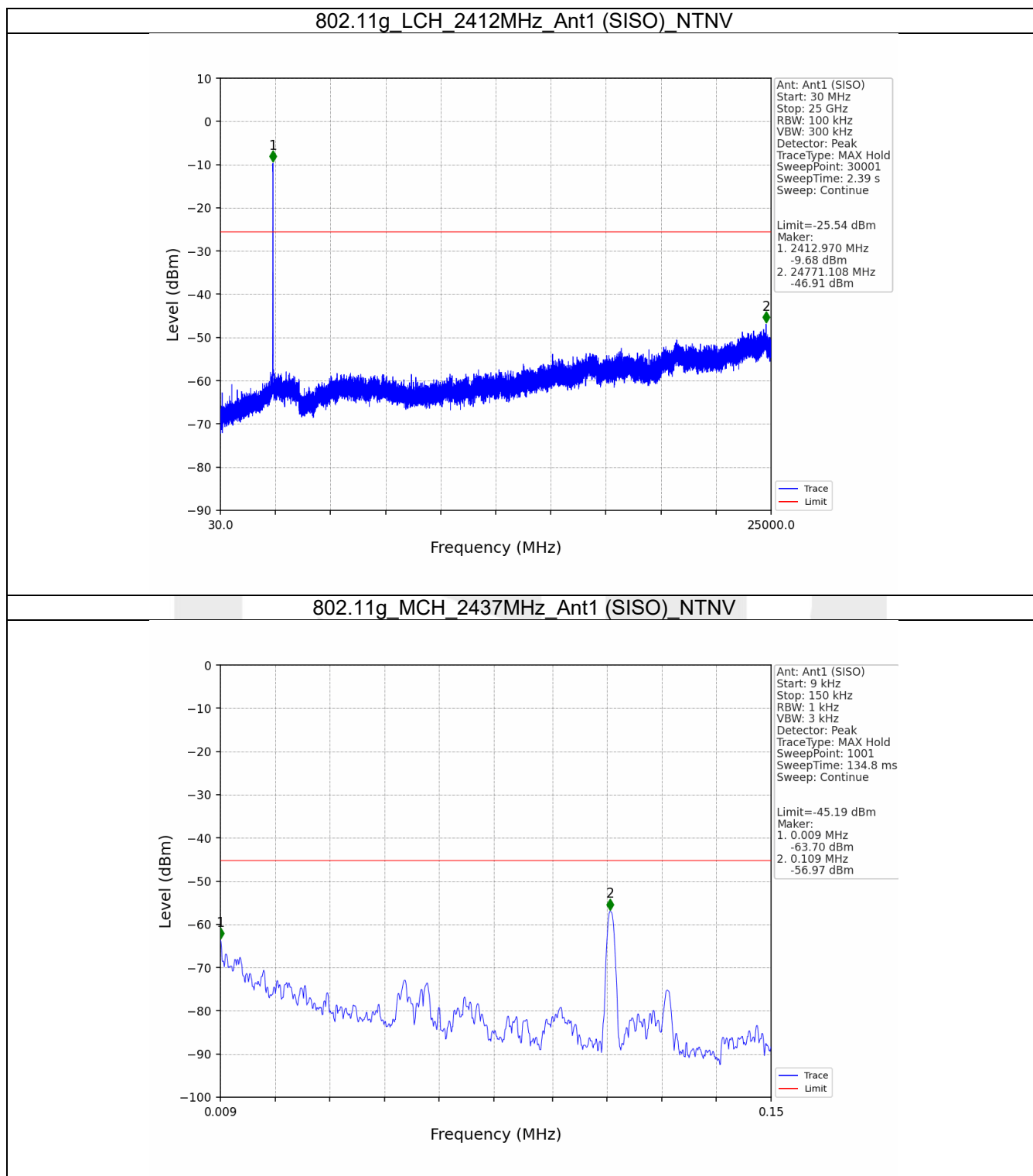


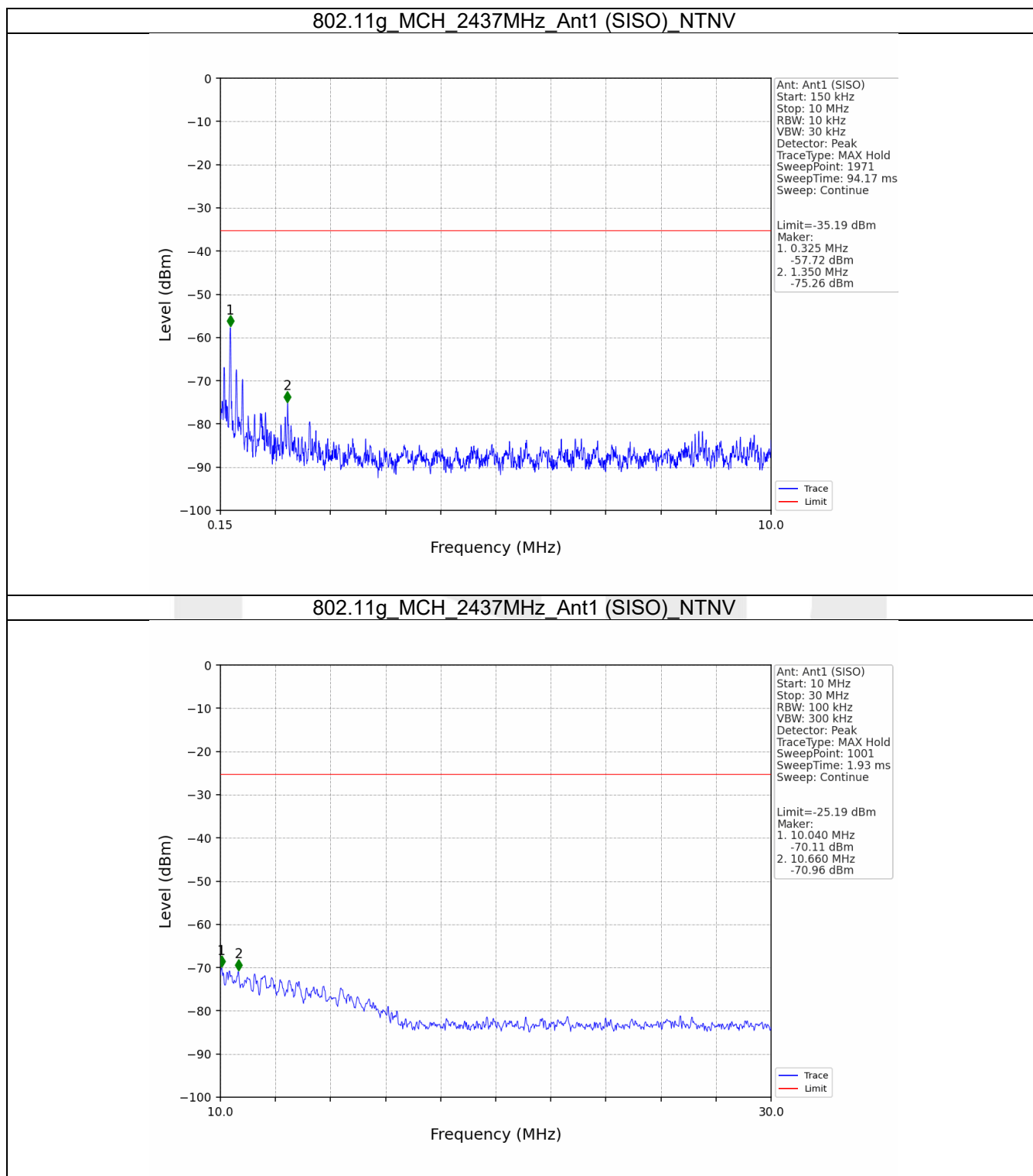


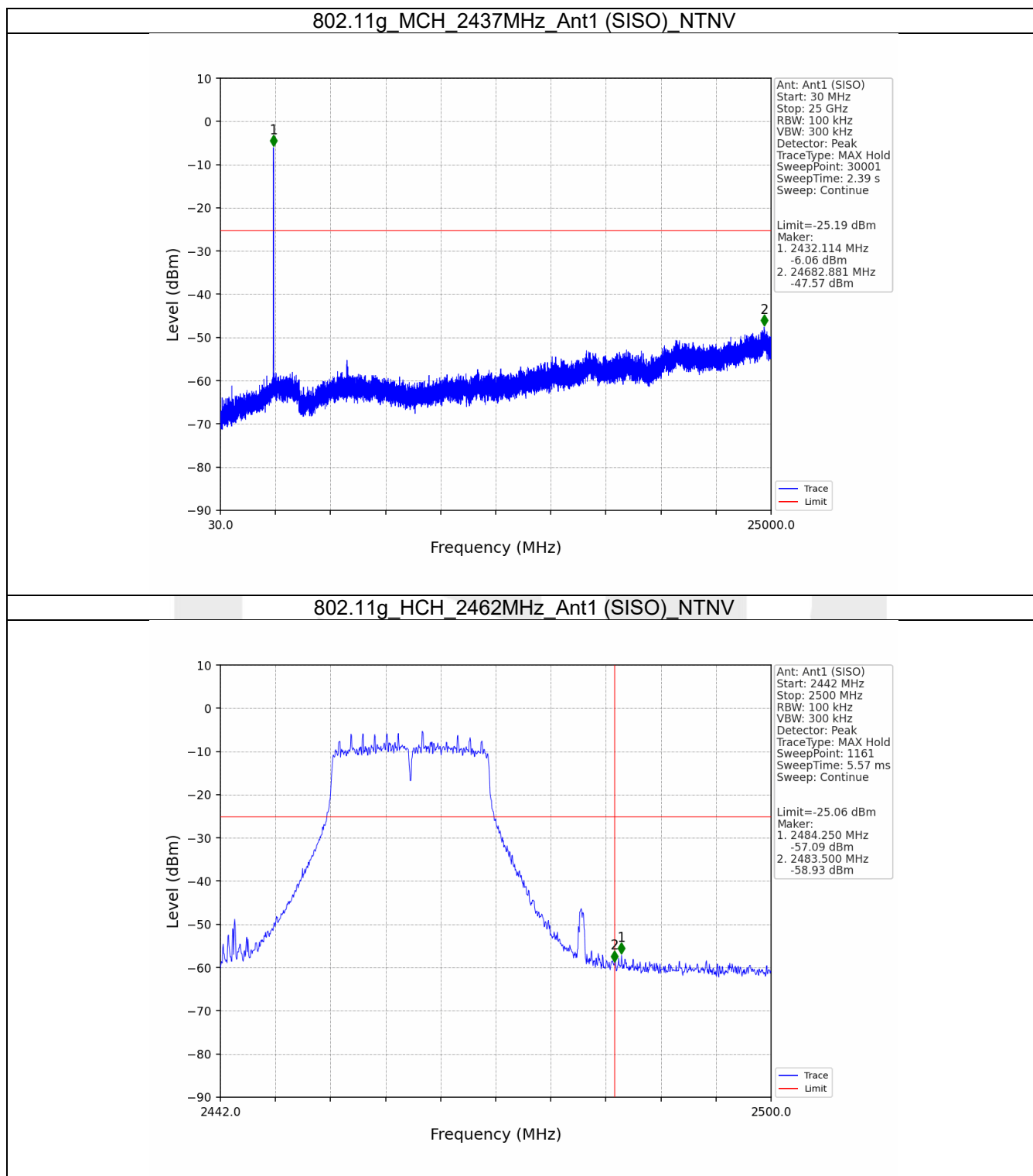


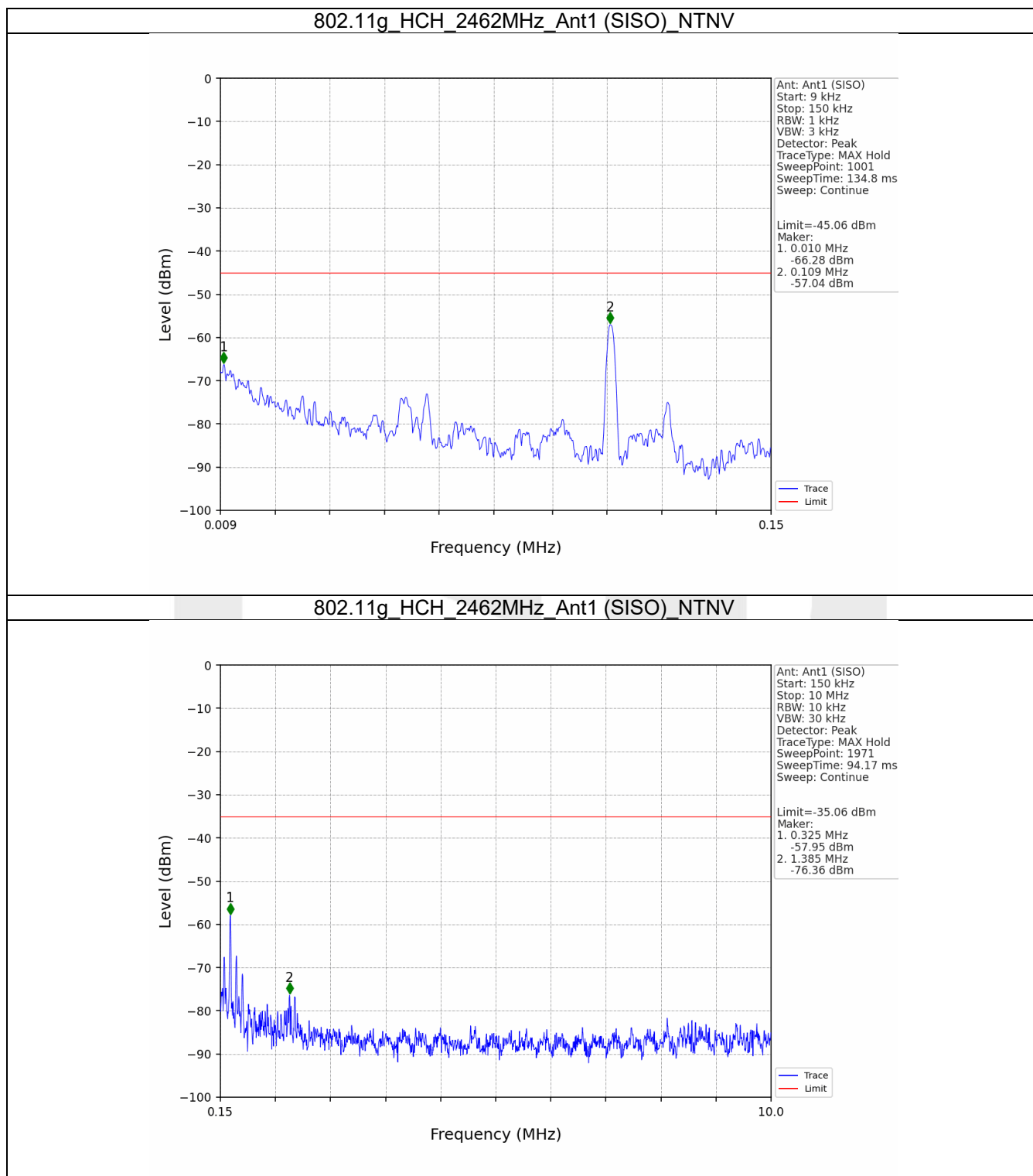


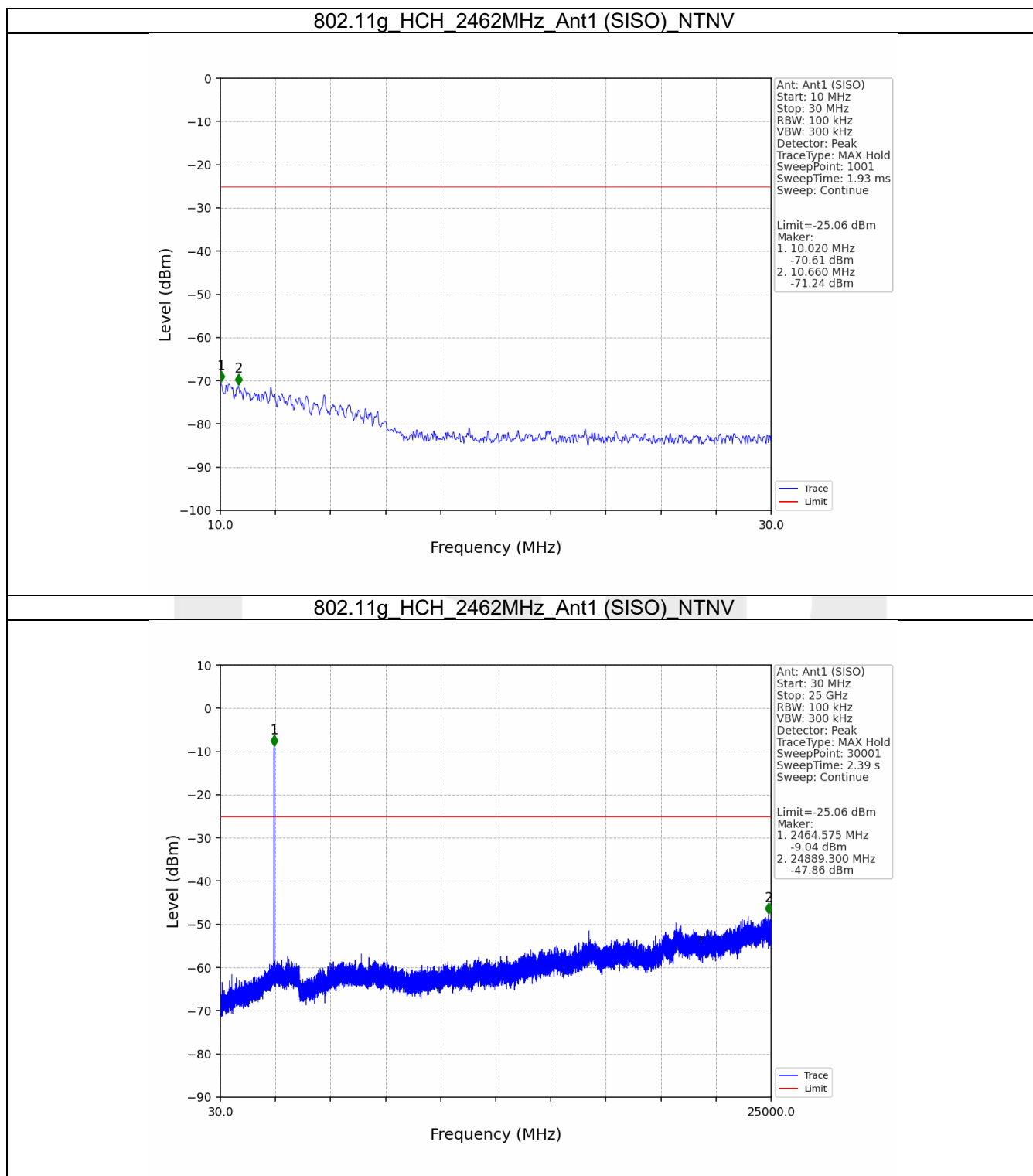


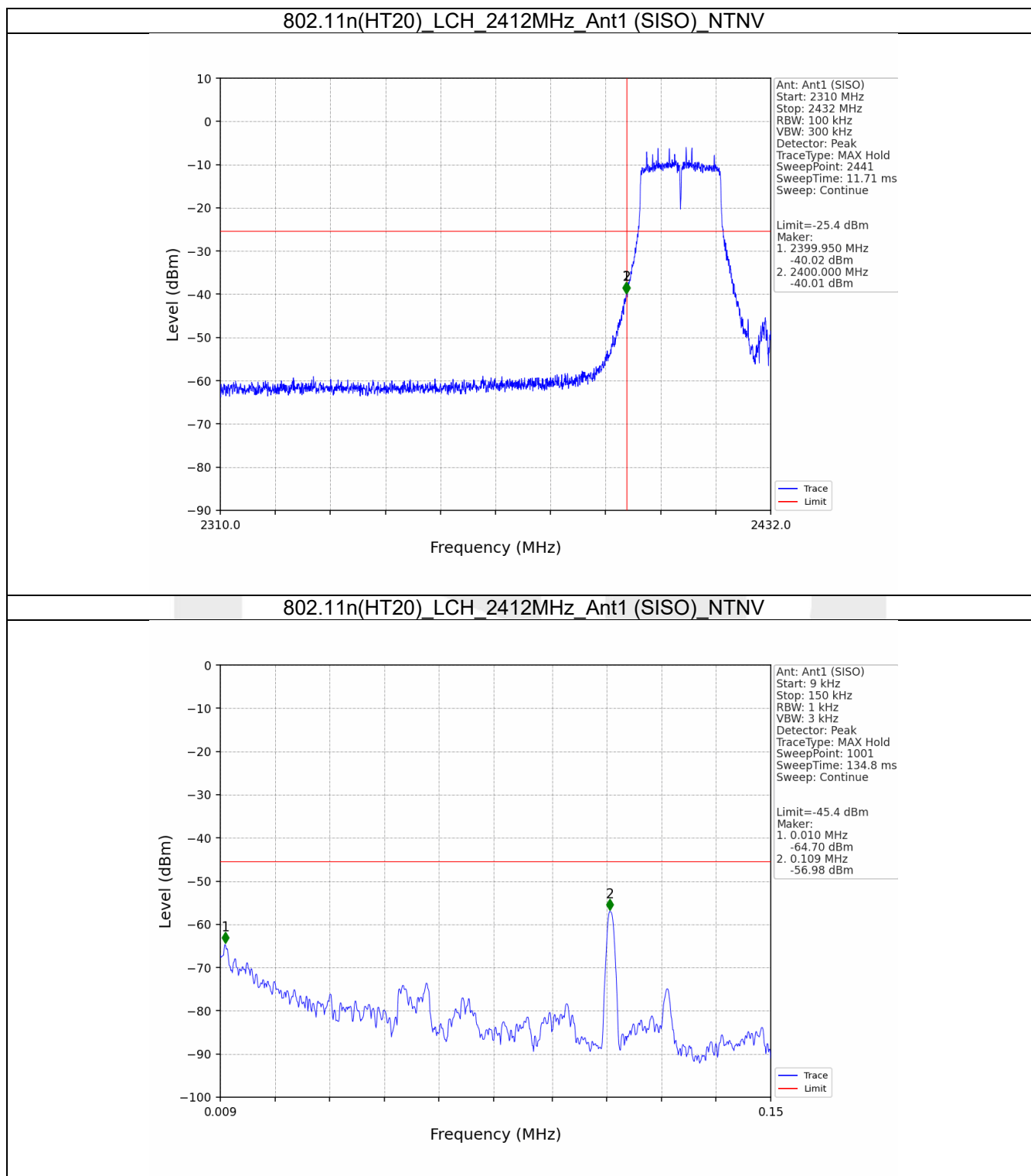


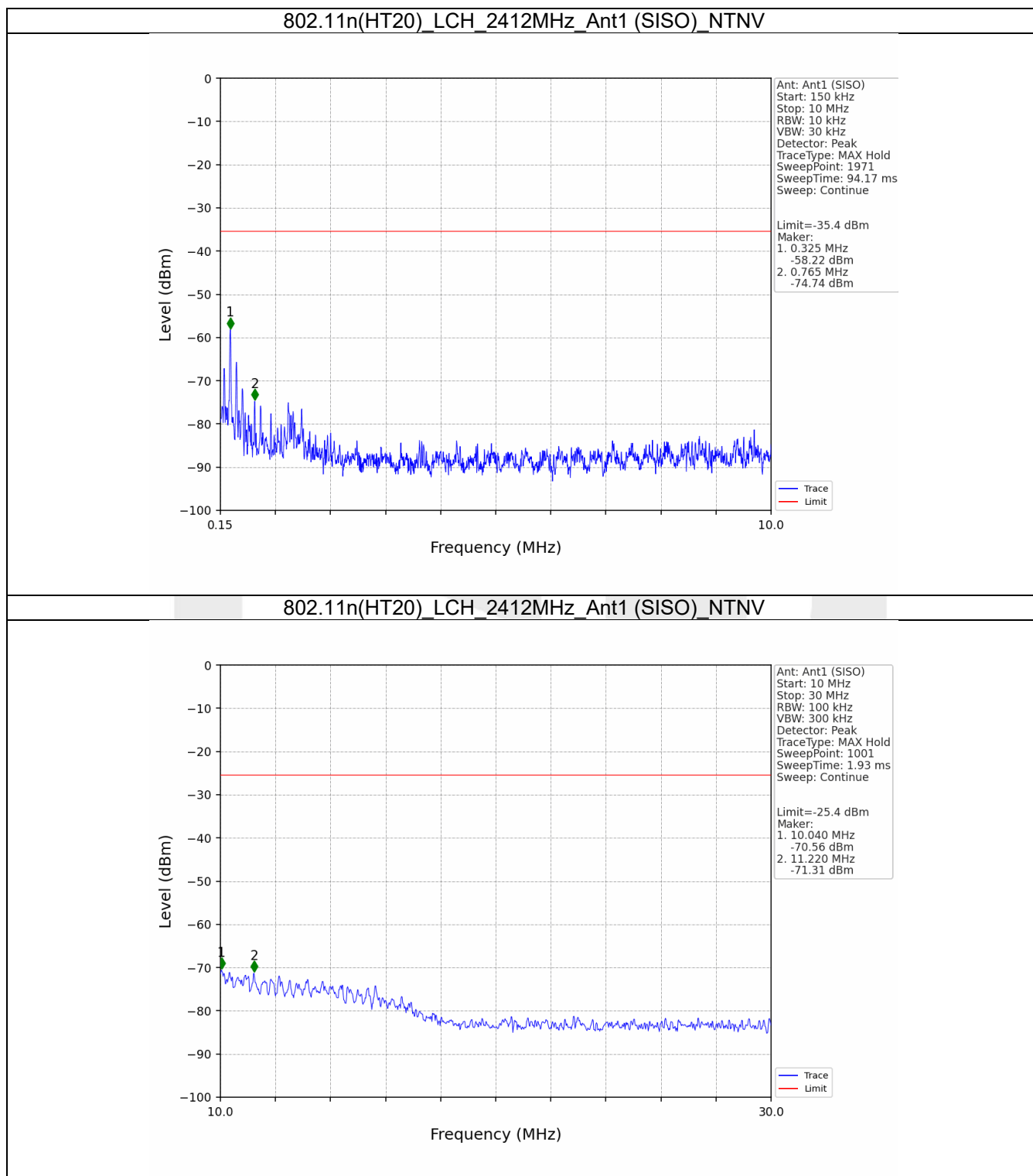


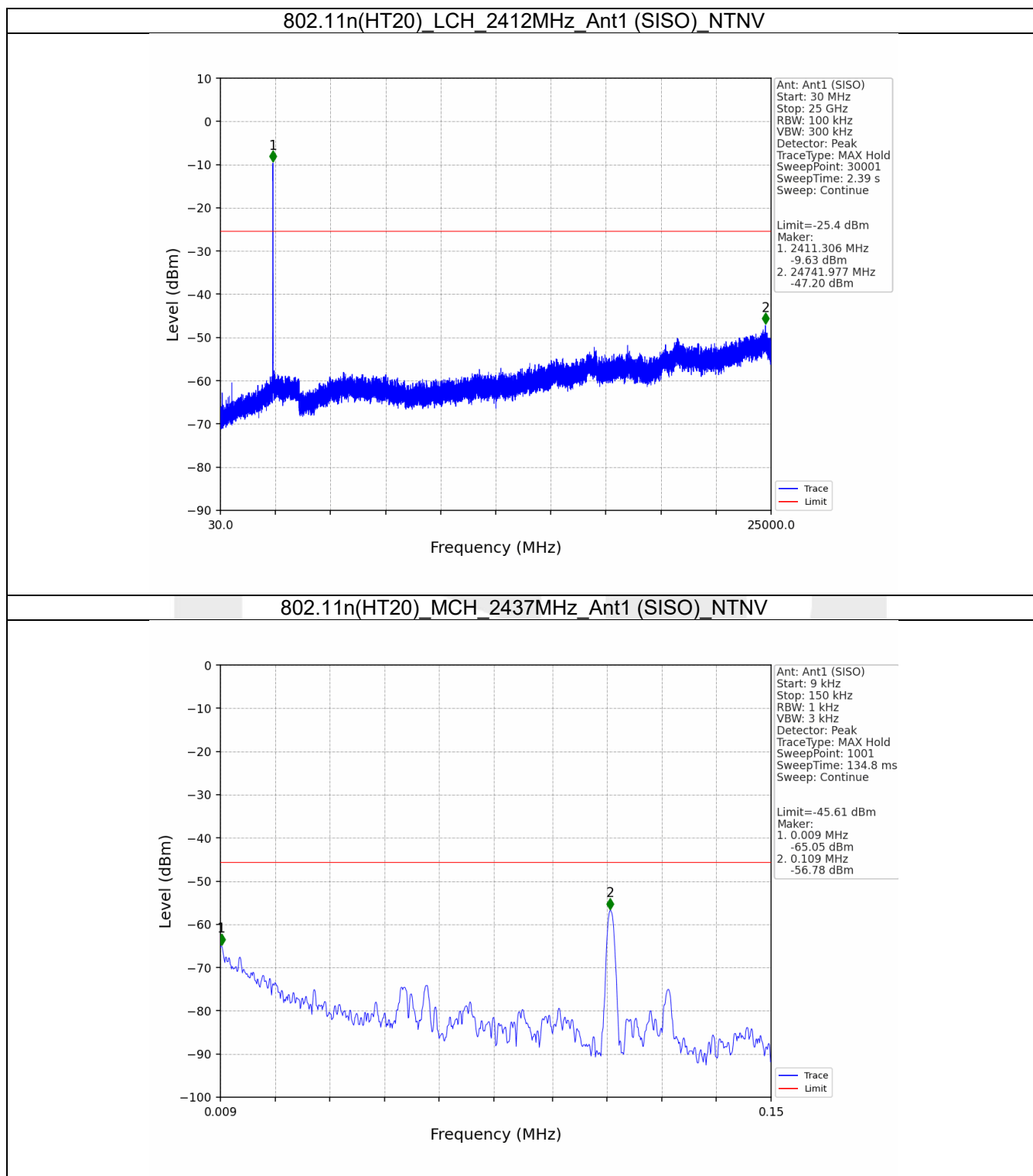


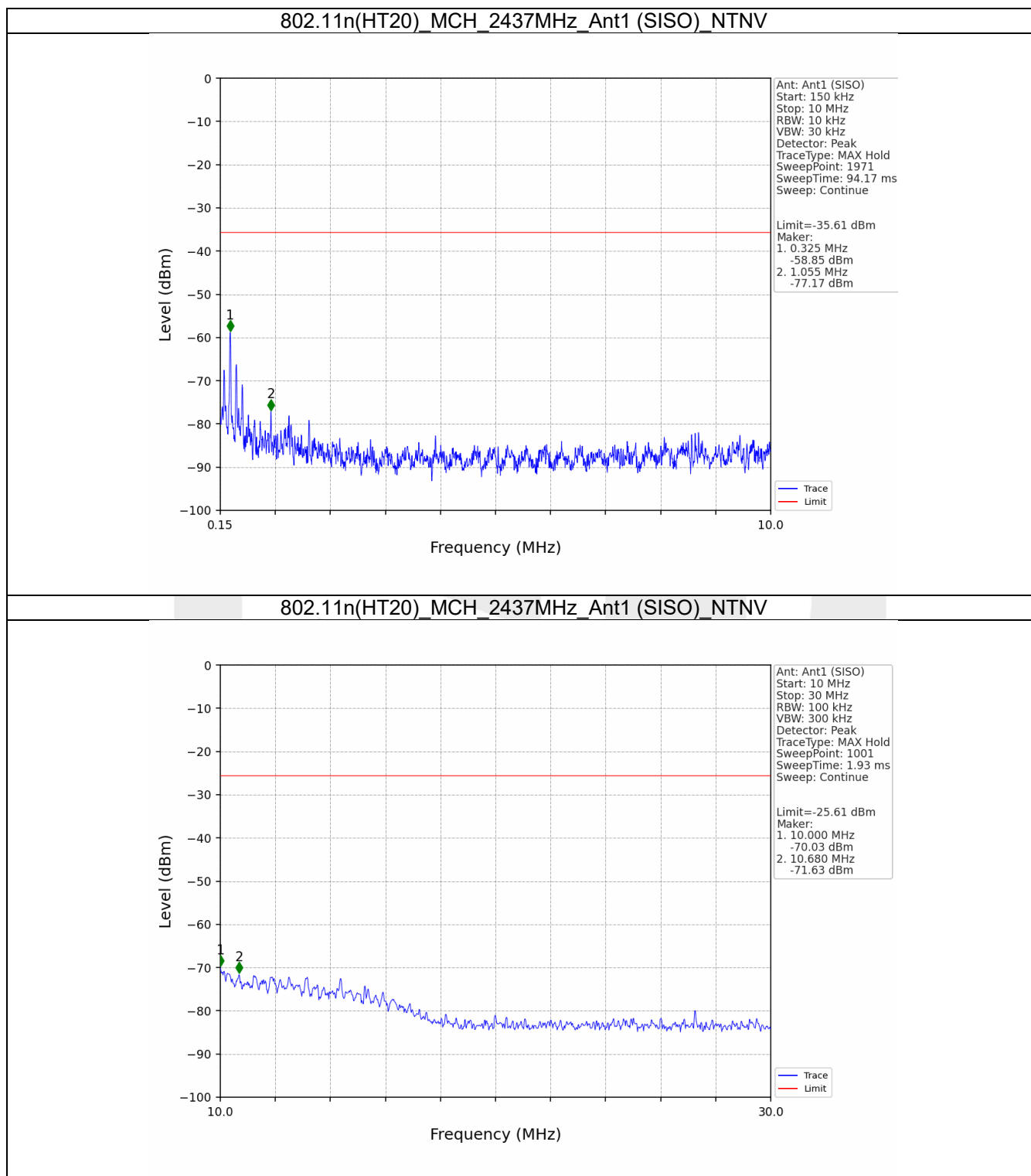


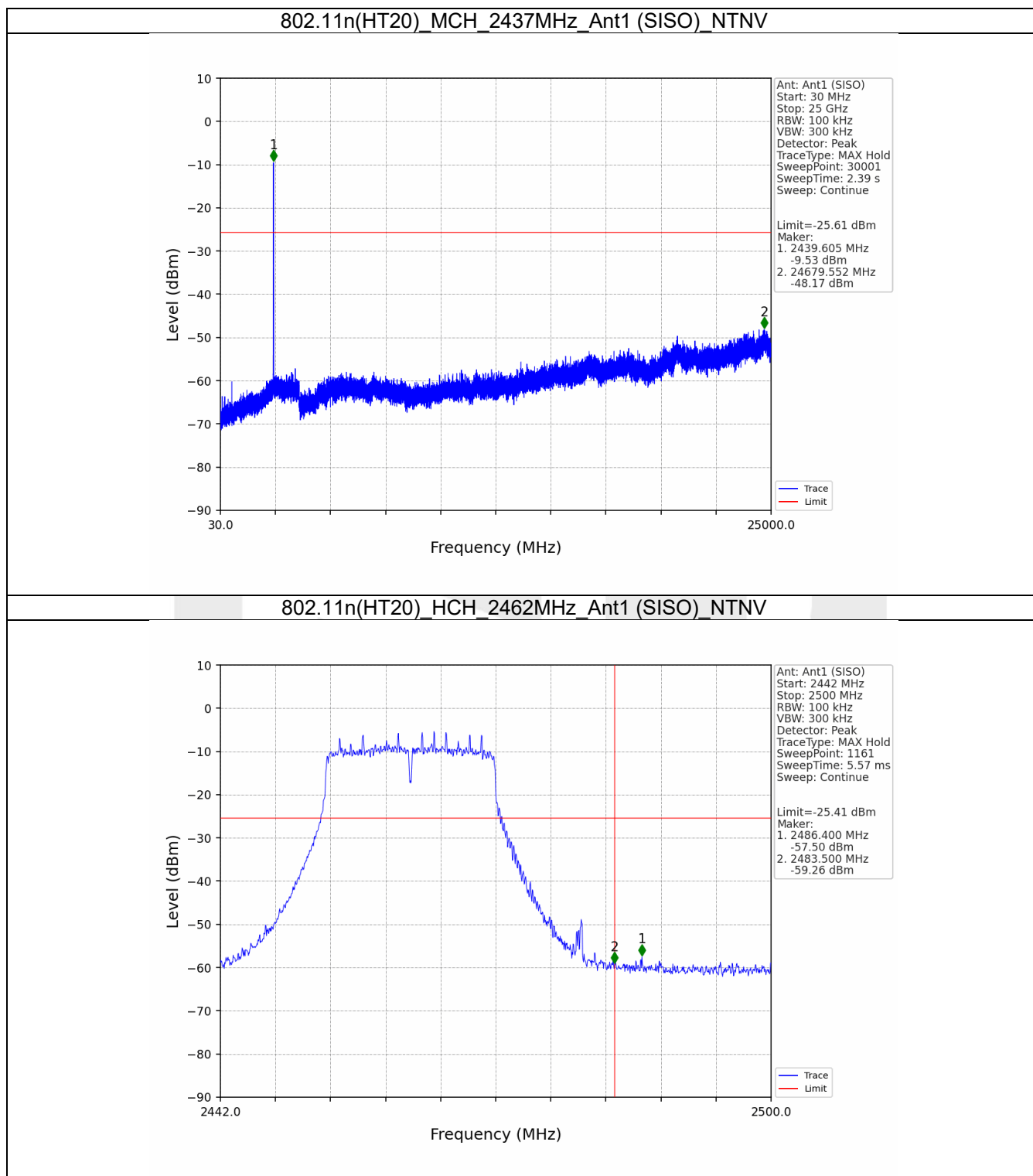


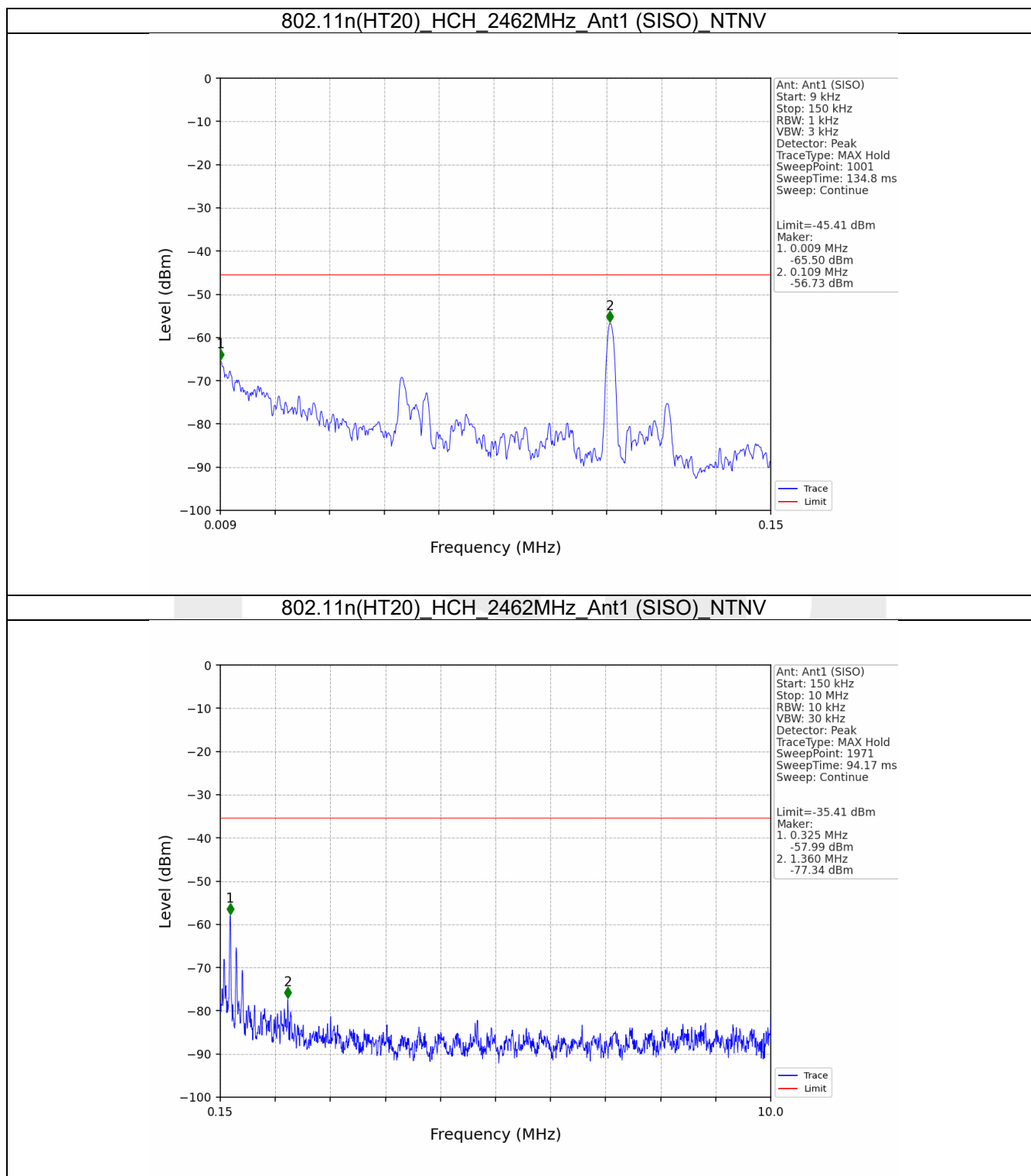


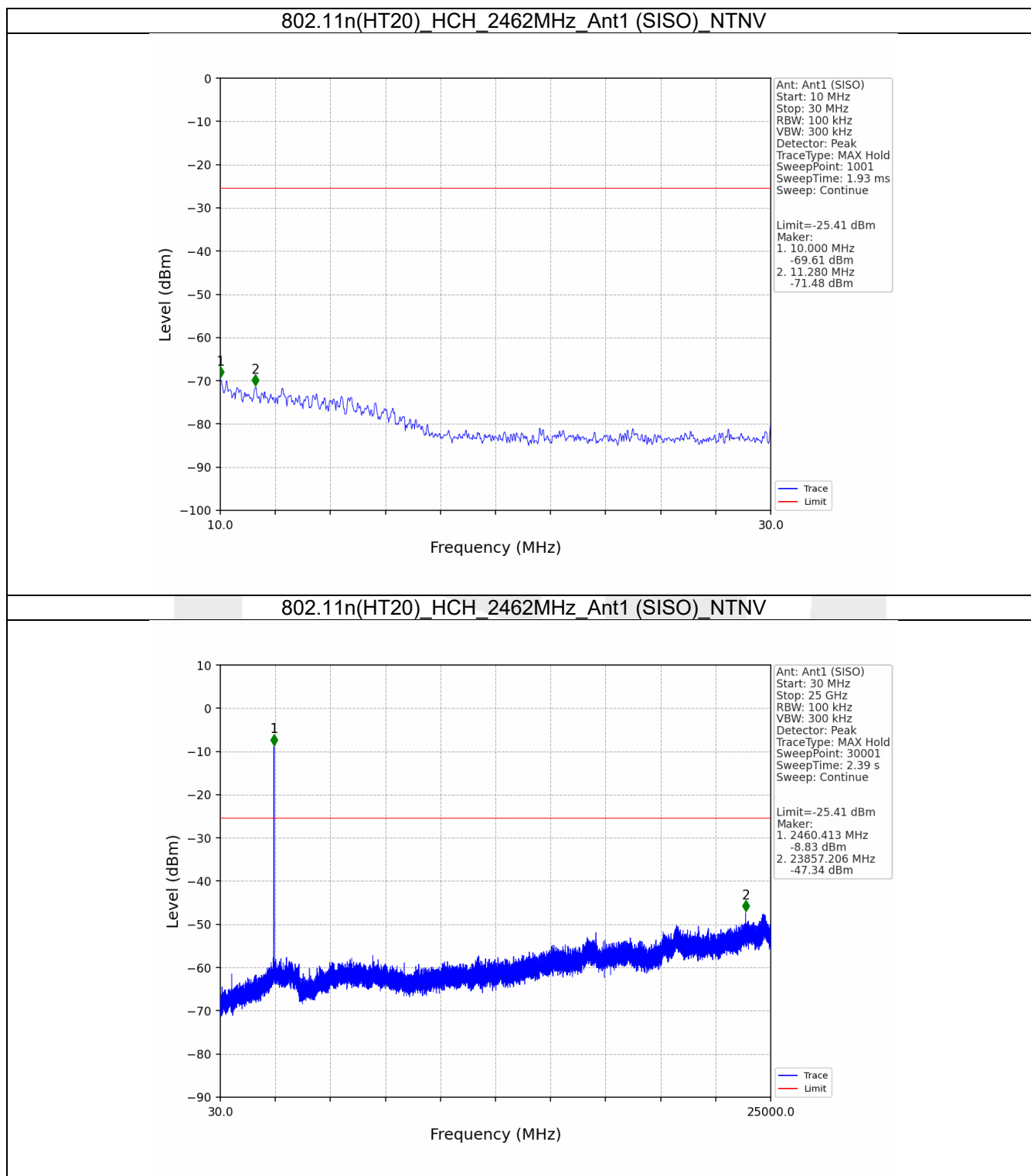












----- End of Report -----