

## Appendix for 15.247

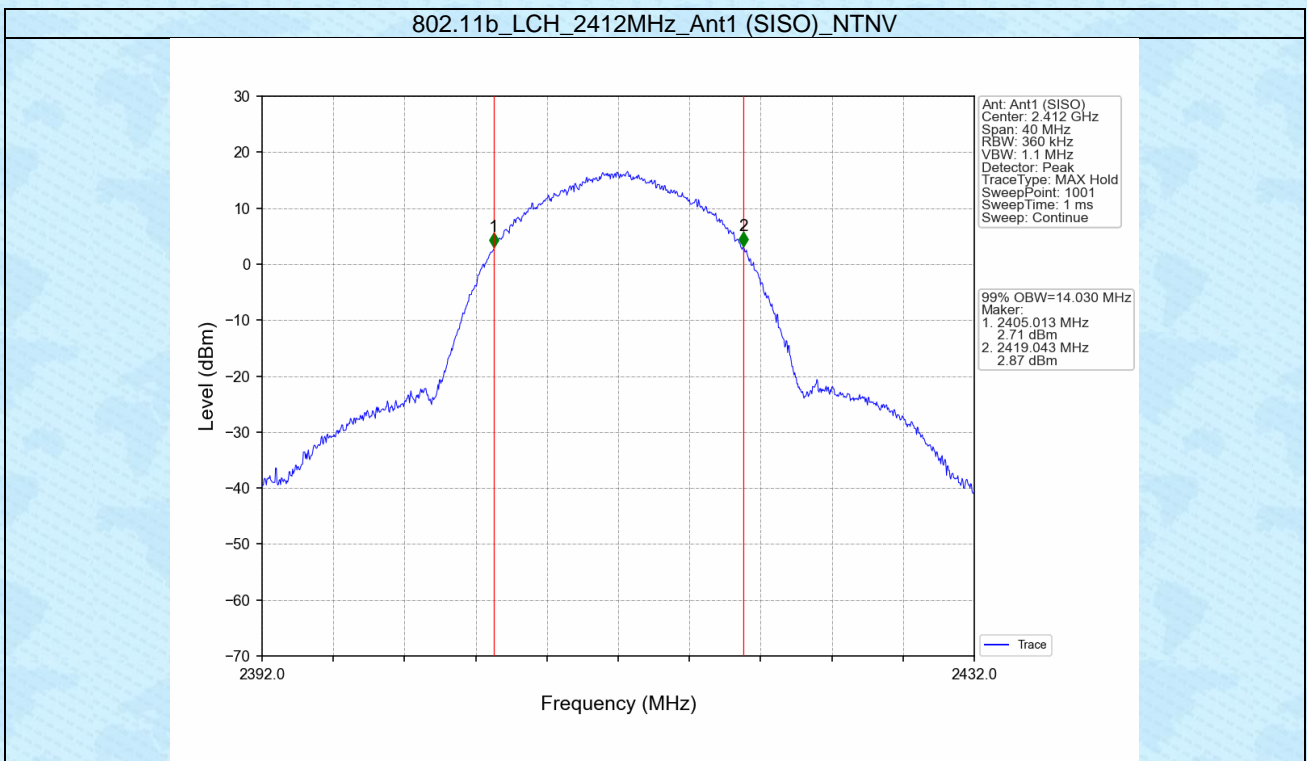
### 1. Bandwidth

#### 1.1 OBW

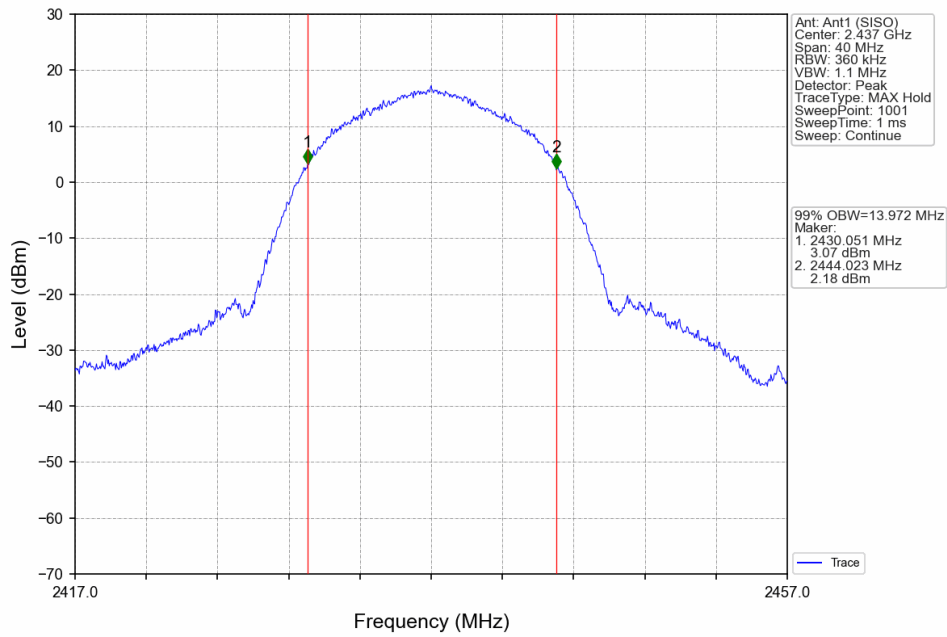
##### 1.1.1 Test Result

| Mode           | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) | Verdict |
|----------------|---------|-----------------|-----|------------------------------|---------|
|                |         |                 |     | Result                       |         |
| 802.11b        | SISO    | 2412            | 1   | 14.030                       | Pass    |
|                |         | 2437            | 1   | 13.972                       | Pass    |
|                |         | 2462            | 1   | 14.027                       | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 17.398                       | Pass    |
|                |         | 2437            | 1   | 17.510                       | Pass    |
|                |         | 2462            | 1   | 17.498                       | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 17.941                       | Pass    |
|                |         | 2437            | 1   | 17.956                       | Pass    |
|                |         | 2462            | 1   | 17.941                       | Pass    |

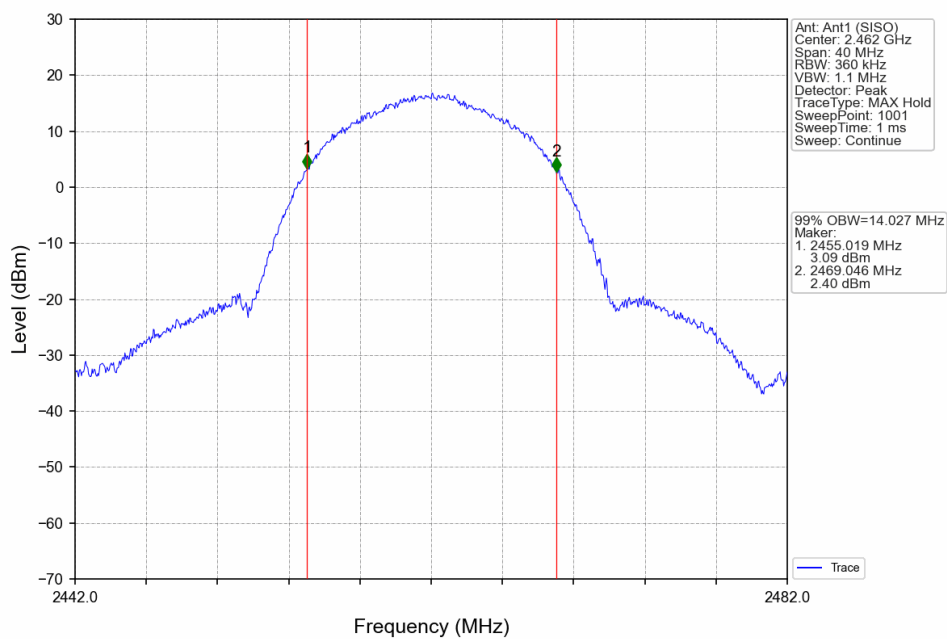
##### 1.1.2 Test Graph



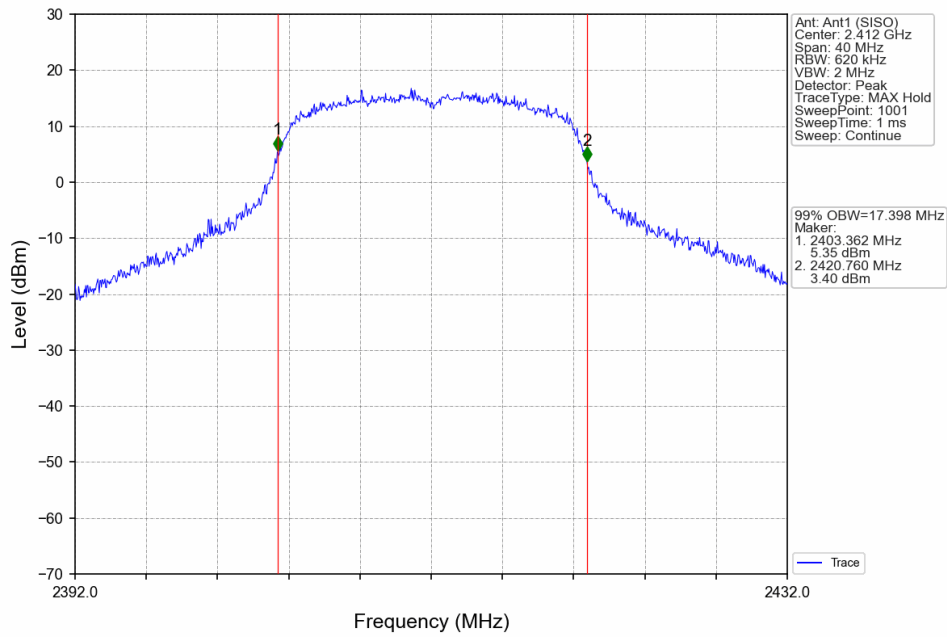
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



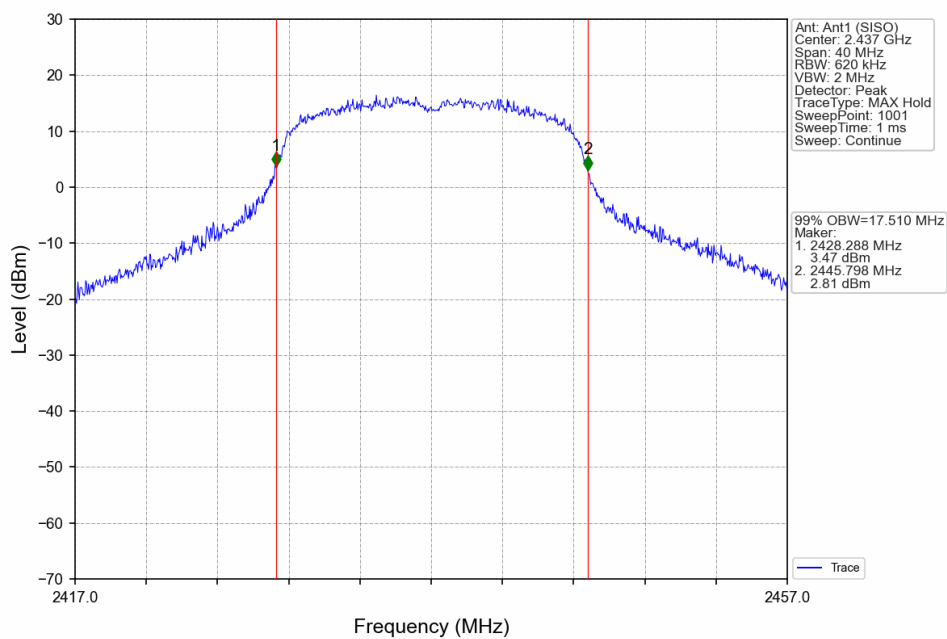
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



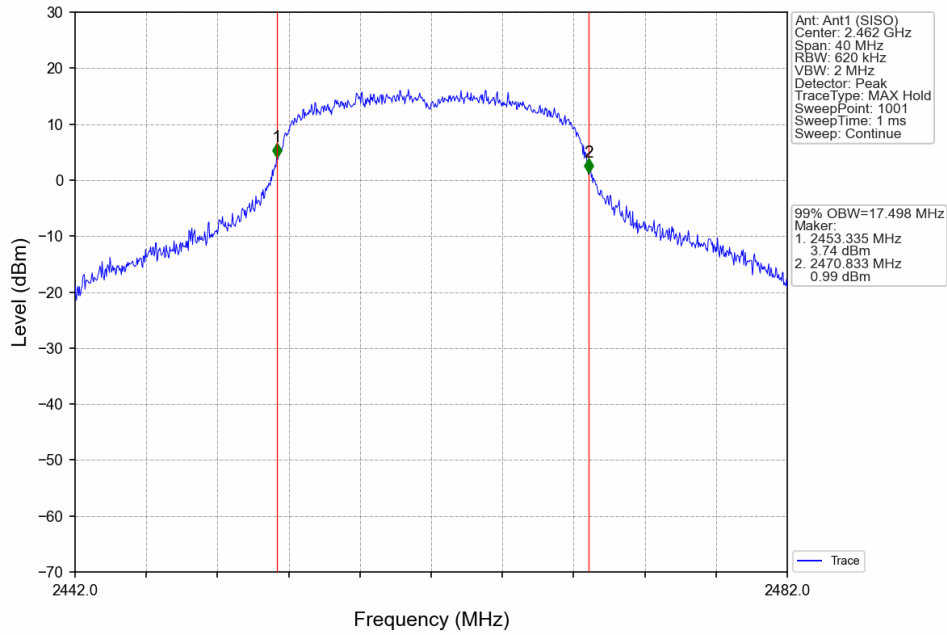
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



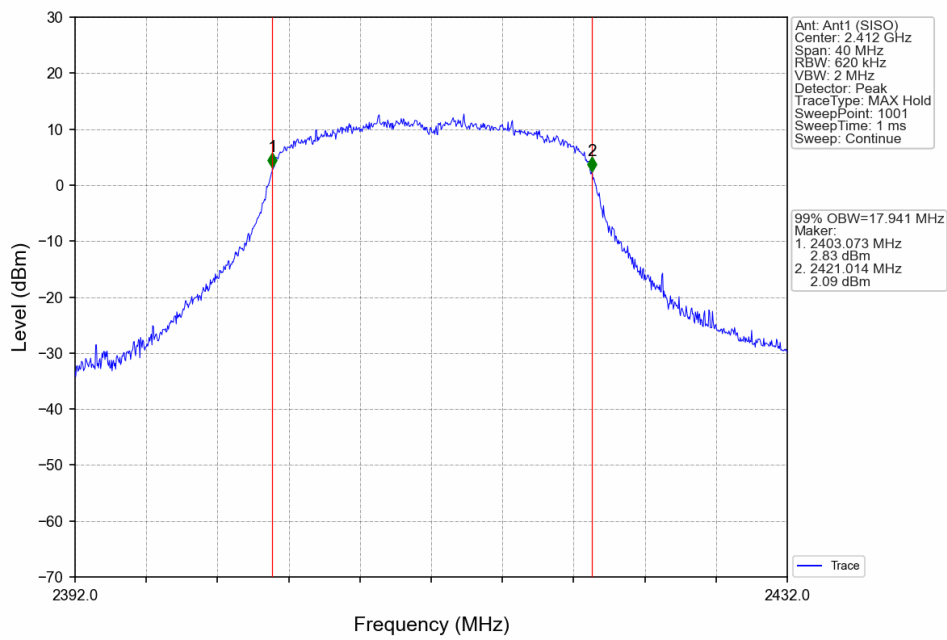
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



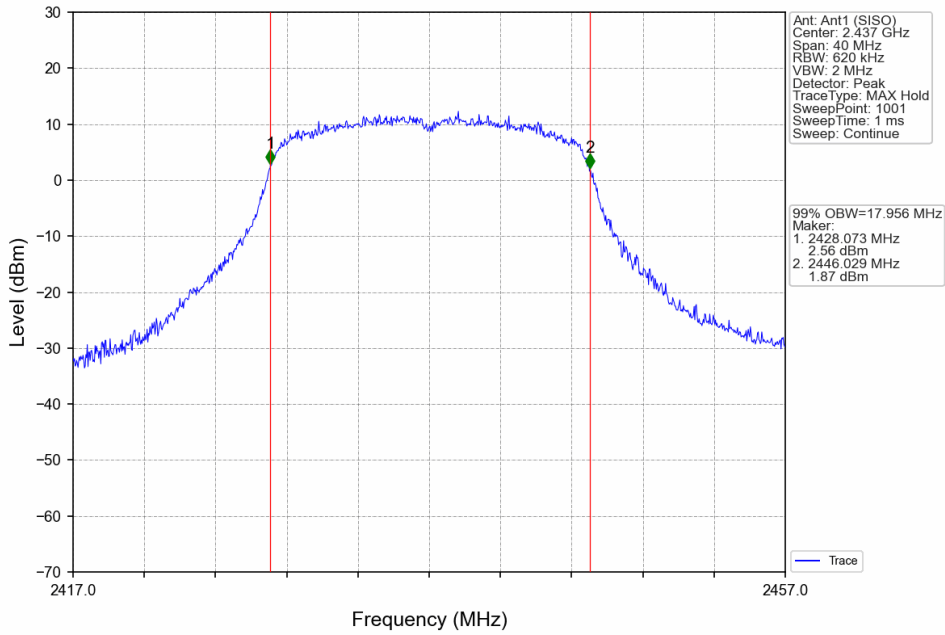
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



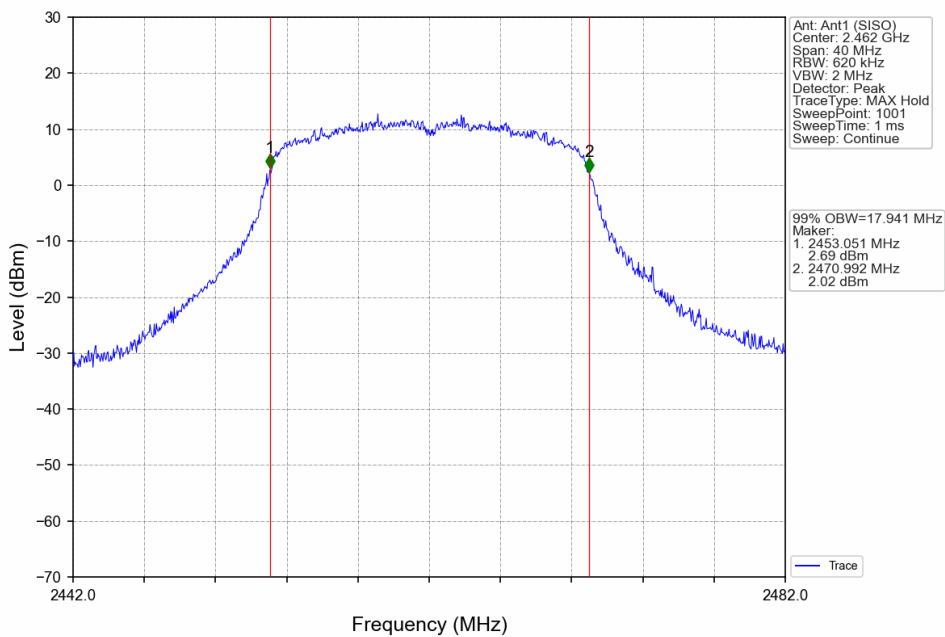
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

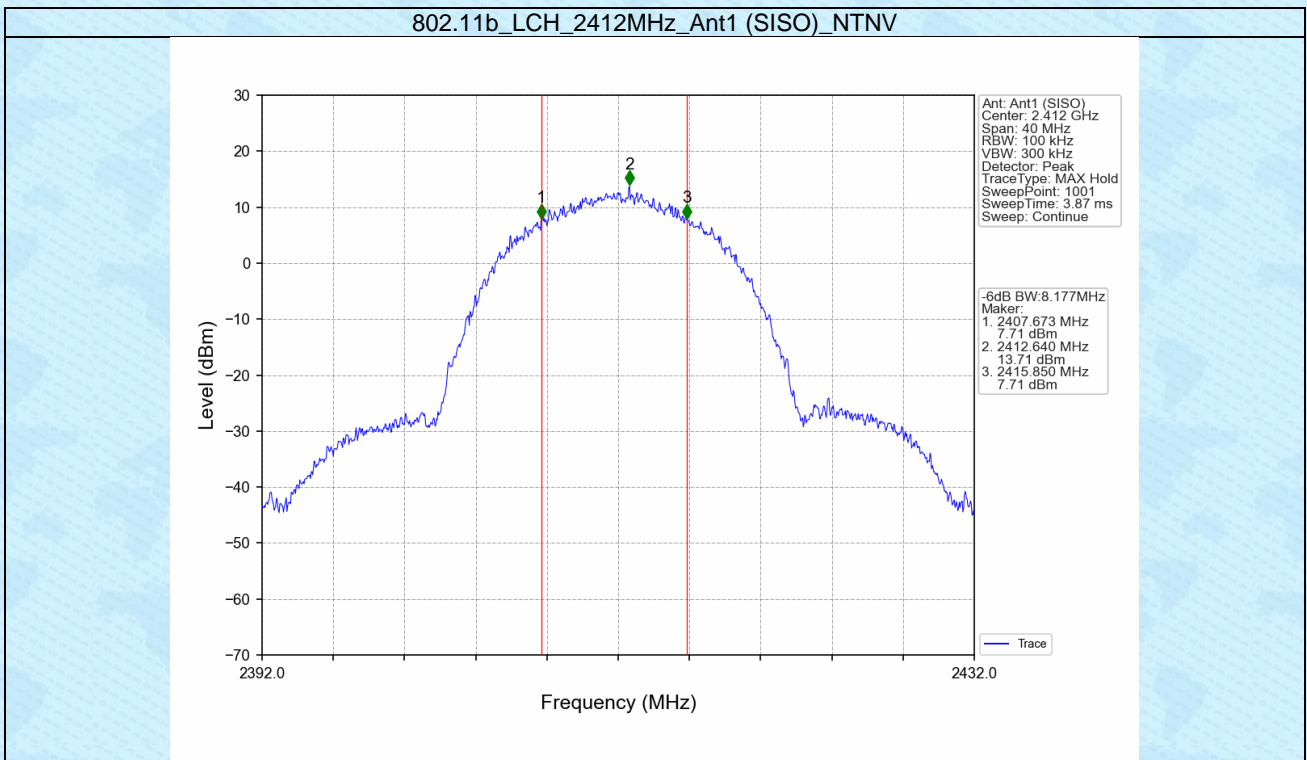


## 1.2 6dB BW

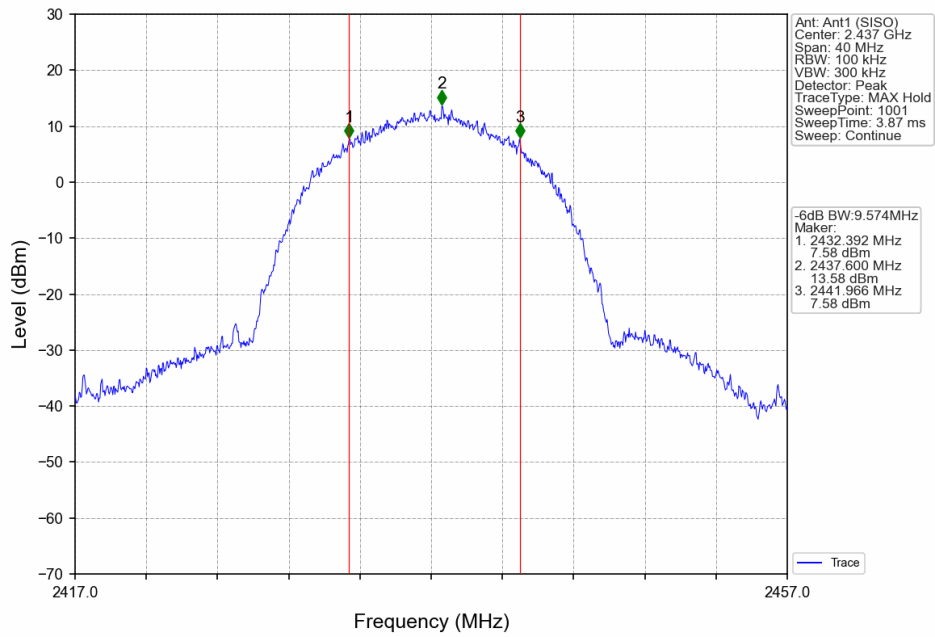
### 1.2.1 Test Result

| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |       | Verdict |
|----------------|---------|-----------------|-----|---------------------|-------|---------|
|                |         |                 |     | Result              | Limit |         |
| 802.11b        | SISO    | 2412            | 1   | 8.177               | >=0.5 | Pass    |
|                |         | 2437            | 1   | 9.574               | >=0.5 | Pass    |
|                |         | 2462            | 1   | 9.629               | >=0.5 | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 15.156              | >=0.5 | Pass    |
|                |         | 2437            | 1   | 15.158              | >=0.5 | Pass    |
|                |         | 2462            | 1   | 15.161              | >=0.5 | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 15.714              | >=0.5 | Pass    |
|                |         | 2437            | 1   | 15.667              | >=0.5 | Pass    |
|                |         | 2462            | 1   | 16.331              | >=0.5 | Pass    |

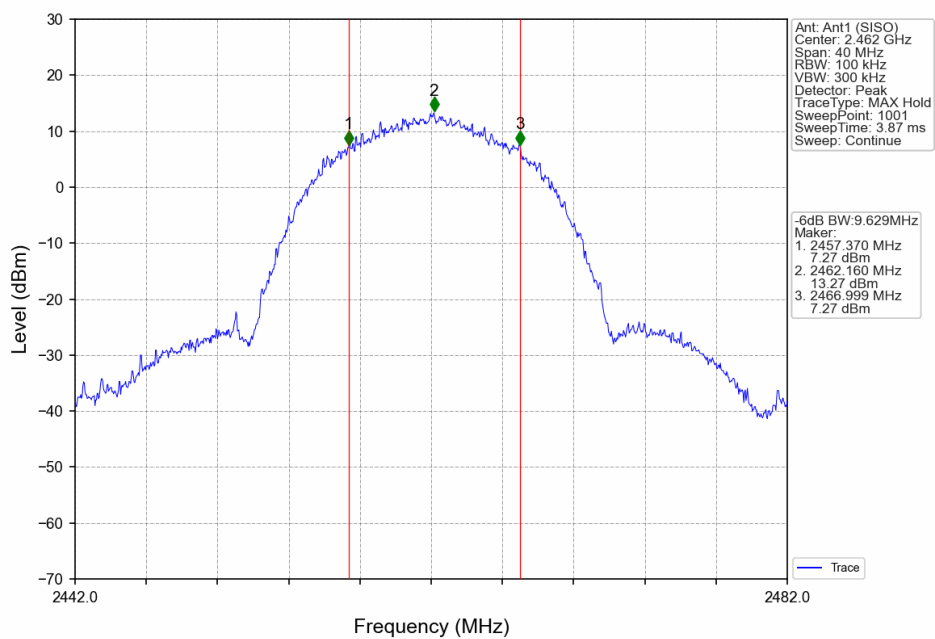
### 1.2.2 Test Graph



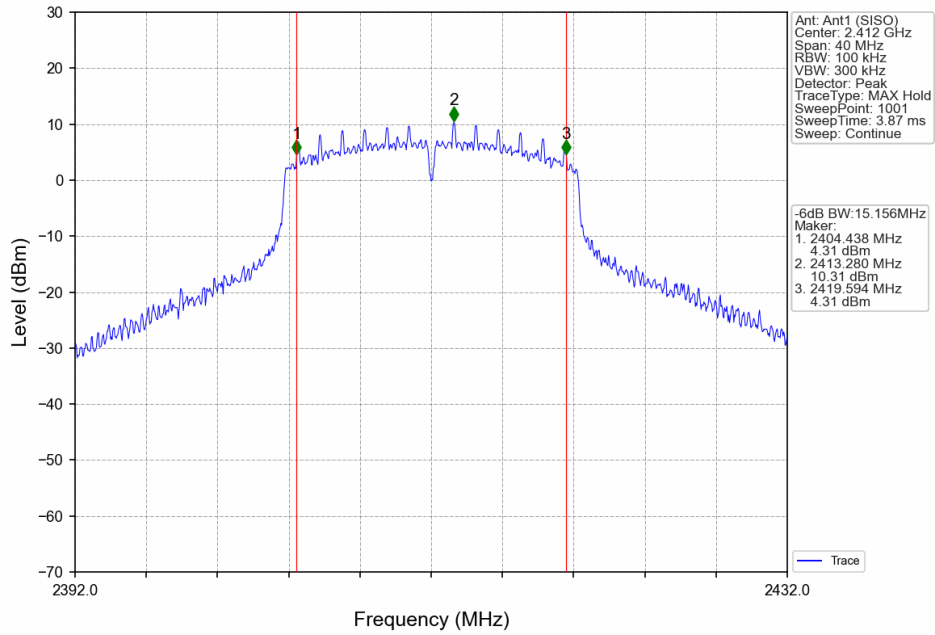
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



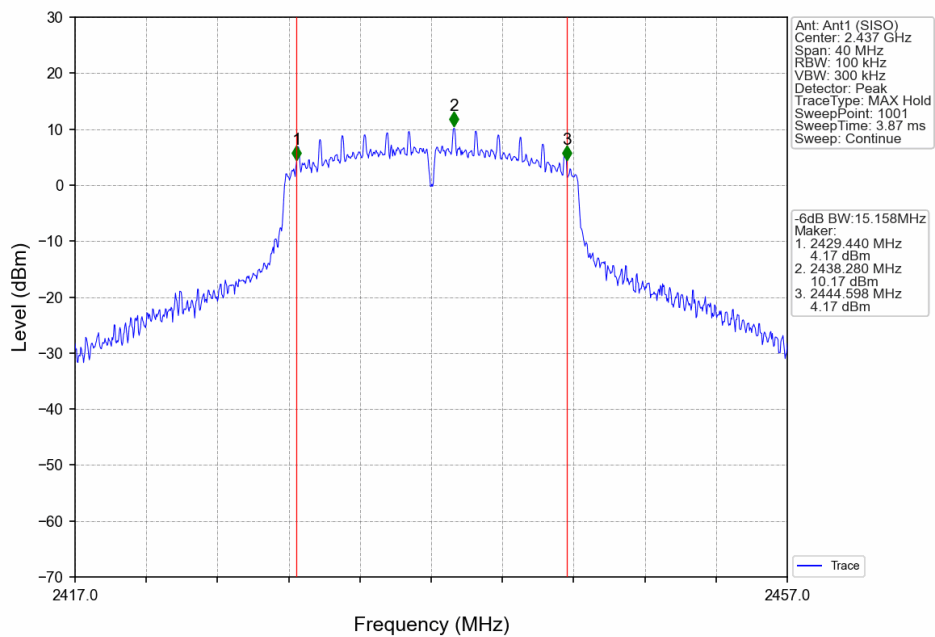
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV

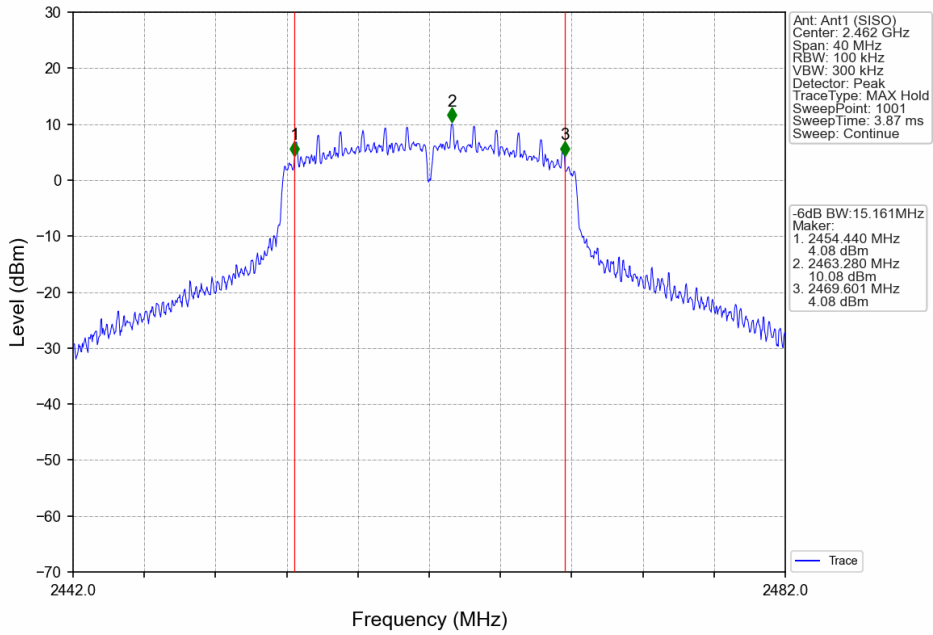


802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

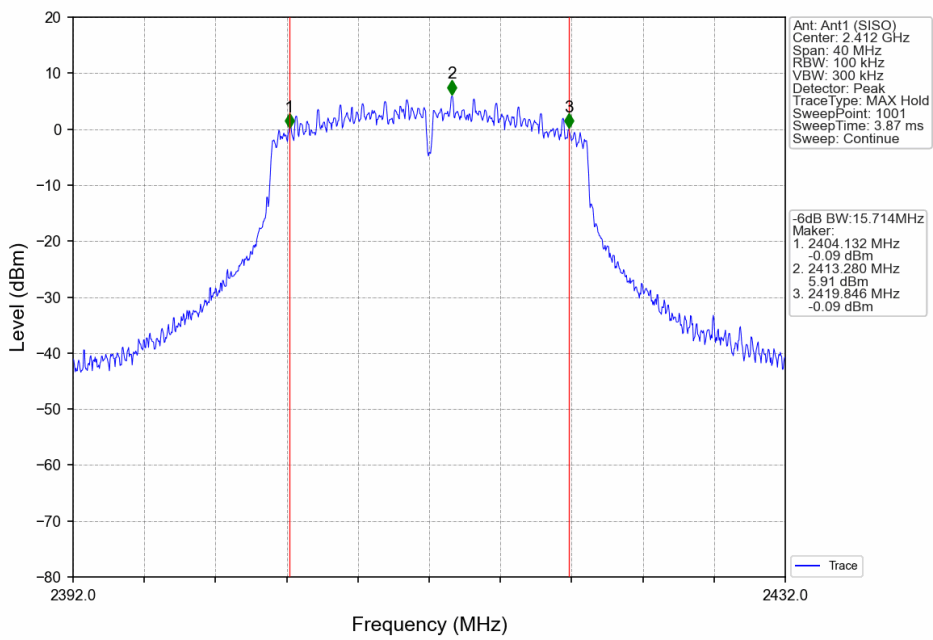




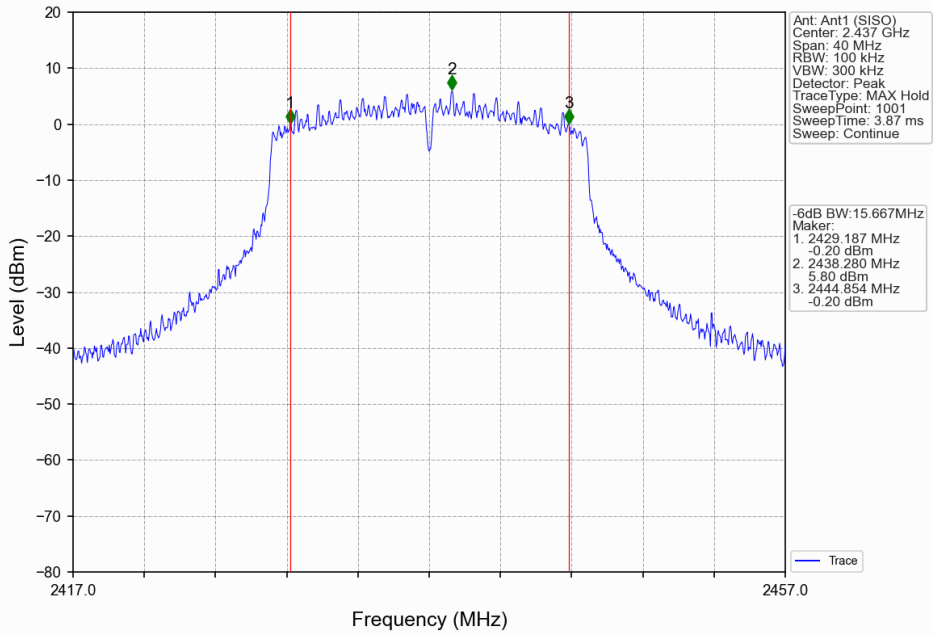
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



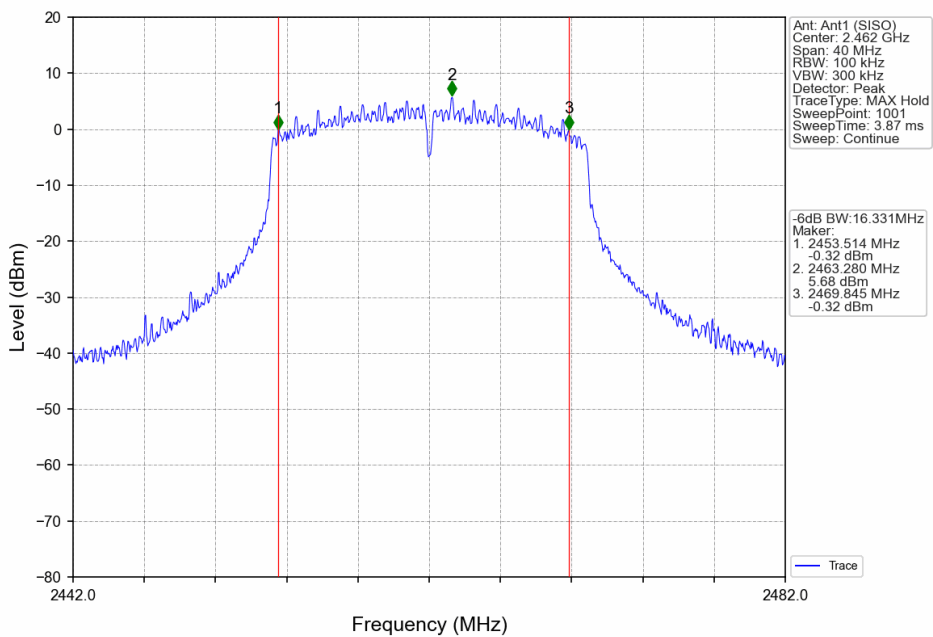
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



## 2. Maximum Conducted Output Power

### 2.1 Test Result

| Mode           | TX Type | Frequency (MHz) | Maximum Peak Conducted Output Power (dBm) |       | Verdict |
|----------------|---------|-----------------|---|-------|---------|
|                |         |                 | ANT1                                      | Limit |         |
| 802.11b        | SISO    | 2412            | 26.92                                     | <=30  | Pass    |
|                |         | 2437            | 27.19                                     | <=30  | Pass    |
|                |         | 2462            | 27.43                                     | <=30  | Pass    |
| 802.11g        | SISO    | 2412            | 27.62                                     | <=30  | Pass    |
|                |         | 2437            | 27.51                                     | <=30  | Pass    |
|                |         | 2462            | 27.43                                     | <=30  | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 23.83                                     | <=30  | Pass    |
|                |         | 2437            | 23.70                                     | <=30  | Pass    |
|                |         | 2462            | 23.79                                     | <=30  | Pass    |

Note1: Antenna Gain: Ant1: -1.71dBi;

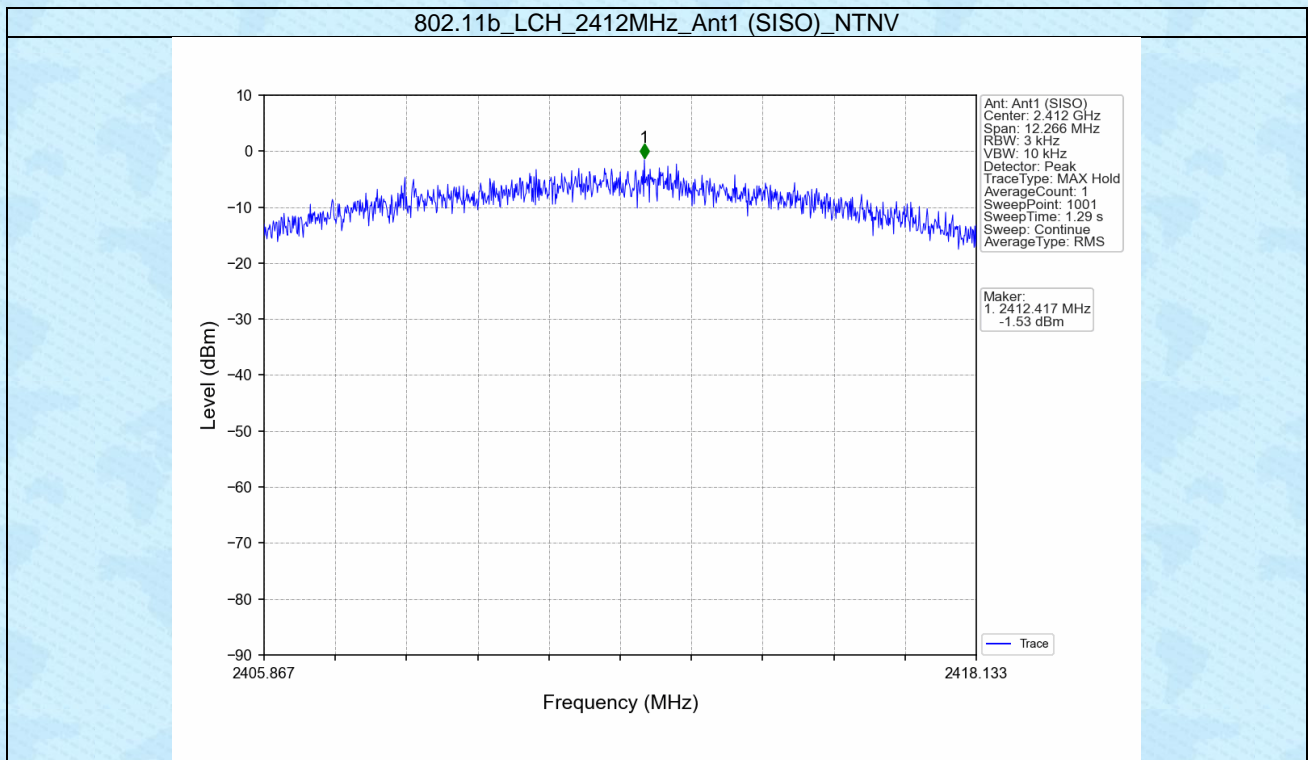
## 3. Maximum Power Spectral Density

### 3.1 Test Result

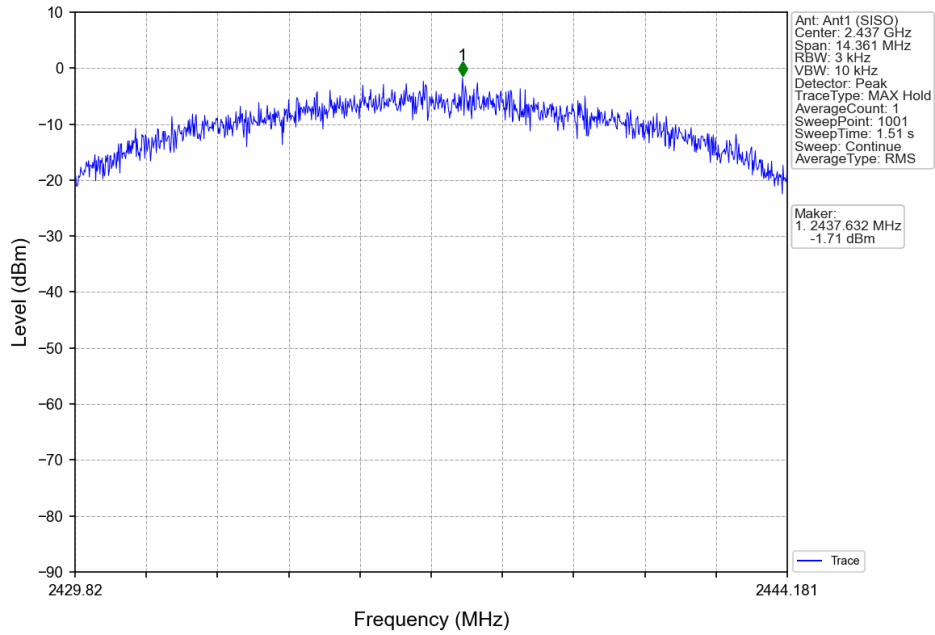
| Mode           | TX Type | Frequency (MHz) | Maximum PSD (dBm/3kHz) |       | Verdict |
|----------------|---------|-----------------|------------------------|-------|---------|
|                |         |                 | ANT1                   | Limit |         |
| 802.11b        | SISO    | 2412            | -1.53                  | <=8   | Pass    |
|                |         | 2437            | -1.71                  | <=8   | Pass    |
|                |         | 2462            | -1.69                  | <=8   | Pass    |
| 802.11g        | SISO    | 2412            | -4.94                  | <=8   | Pass    |
|                |         | 2437            | -2.87                  | <=8   | Pass    |
|                |         | 2462            | -4.13                  | <=8   | Pass    |
| 802.11n (HT20) | SISO    | 2412            | -9.19                  | <=8   | Pass    |
|                |         | 2437            | -10.71                 | <=8   | Pass    |
|                |         | 2462            | -9.12                  | <=8   | Pass    |

Note1: Antenna Gain: Ant1: -1.71dBi;

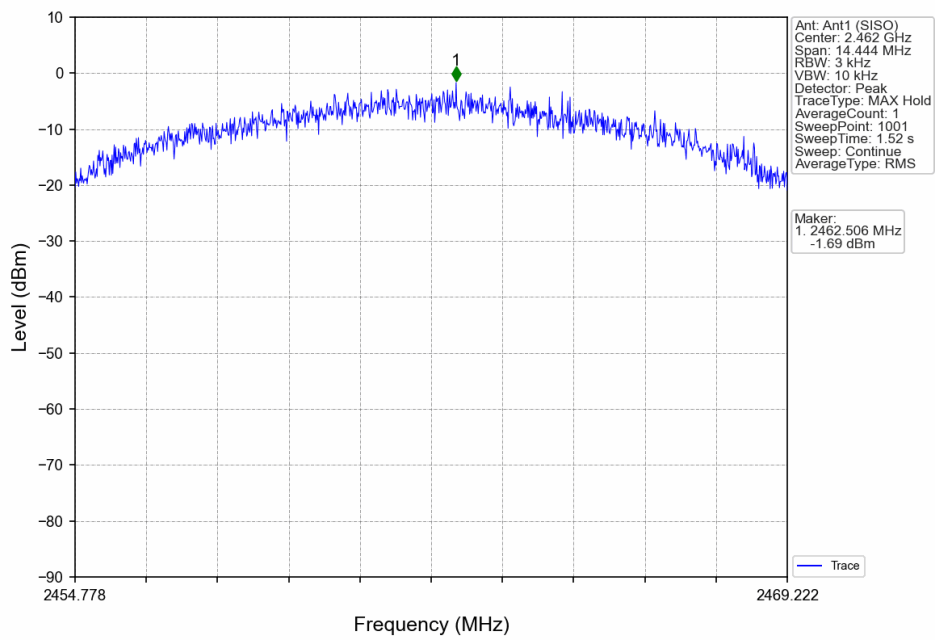
### 3.2 Test Graph



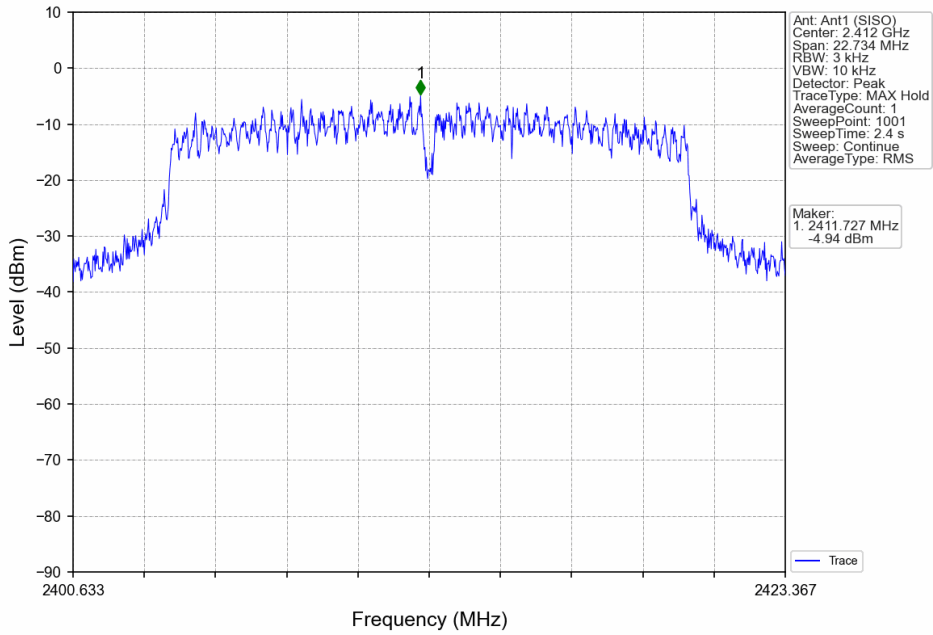
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



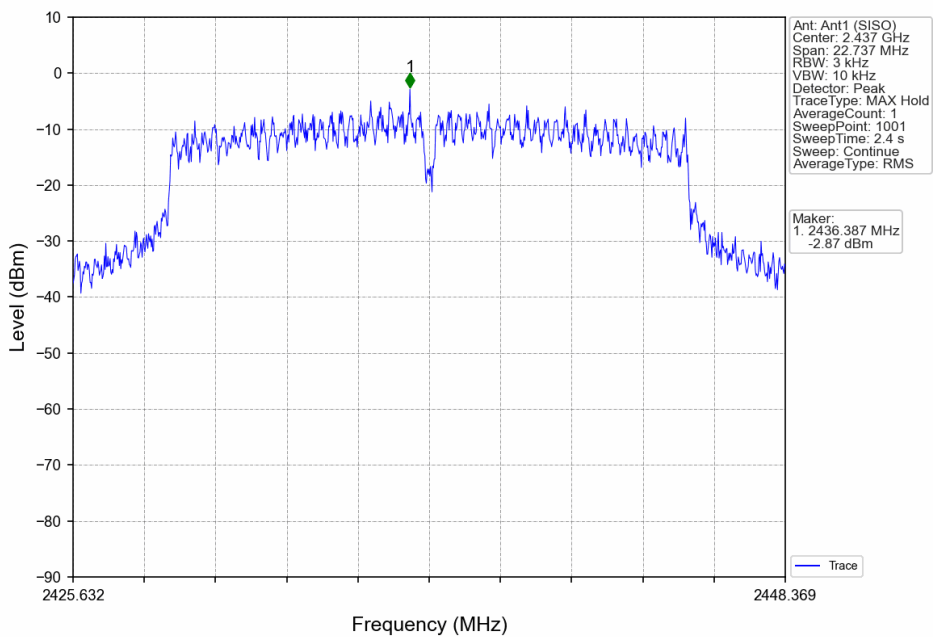
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



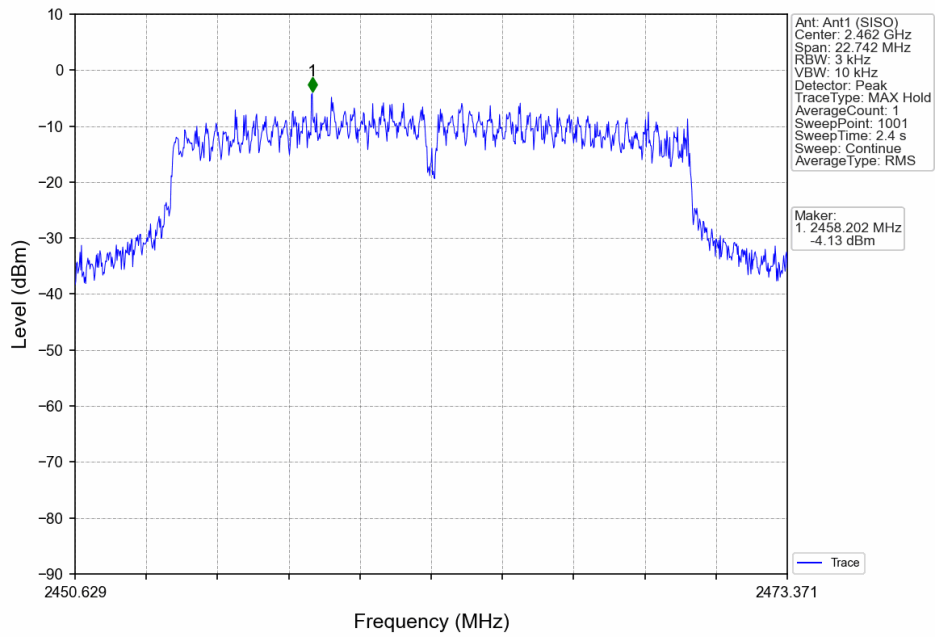
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



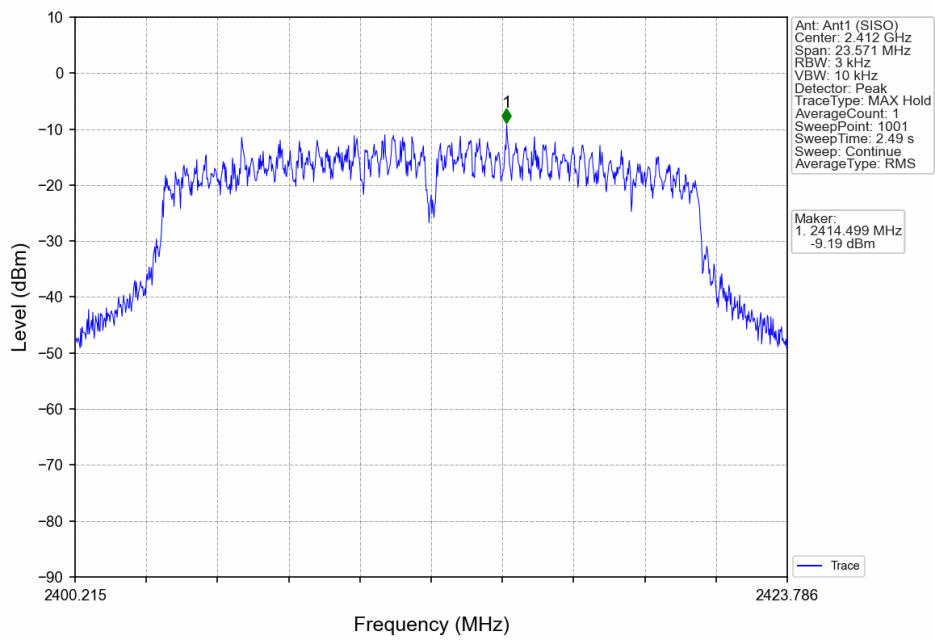
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



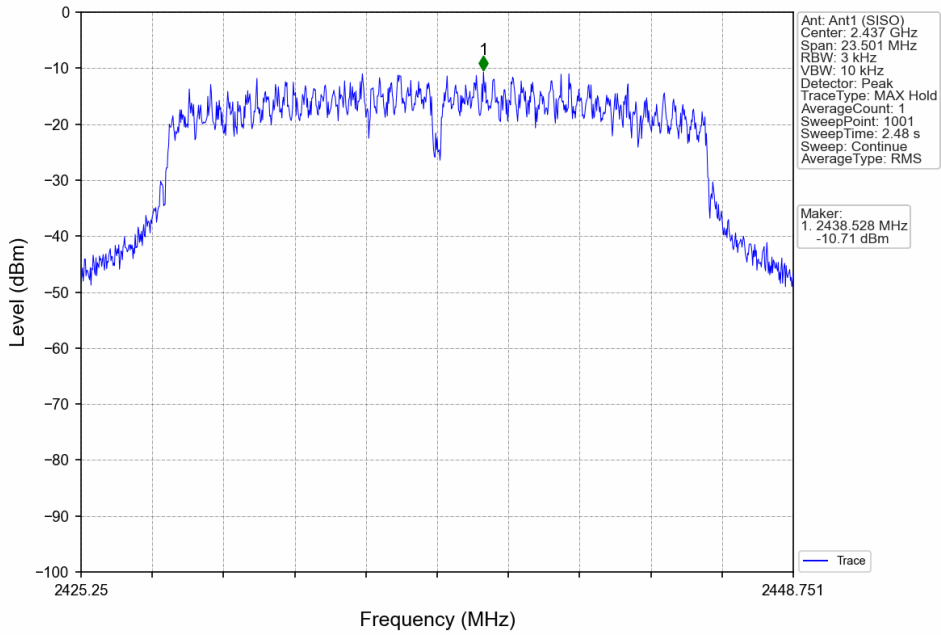
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



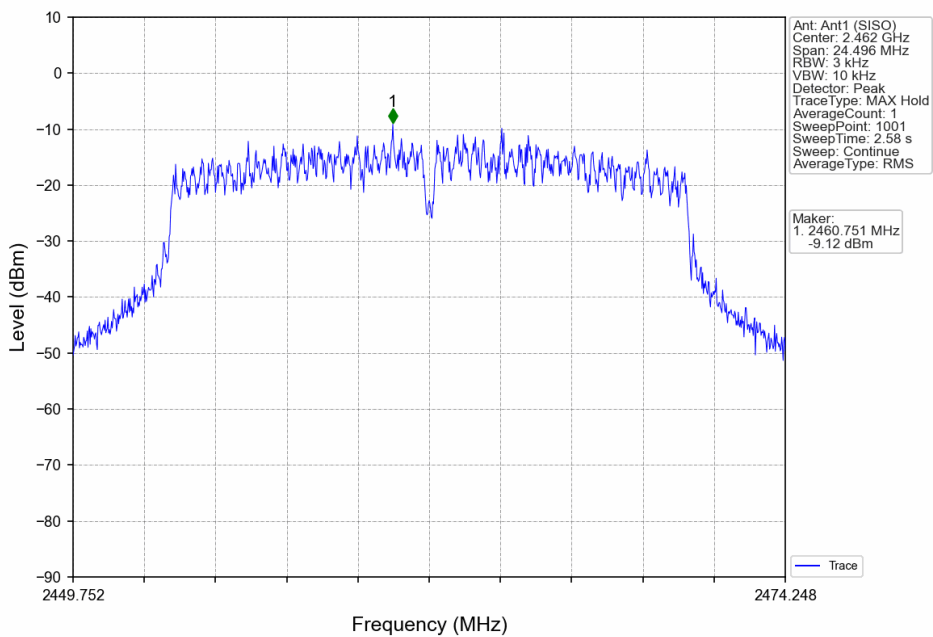
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV





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

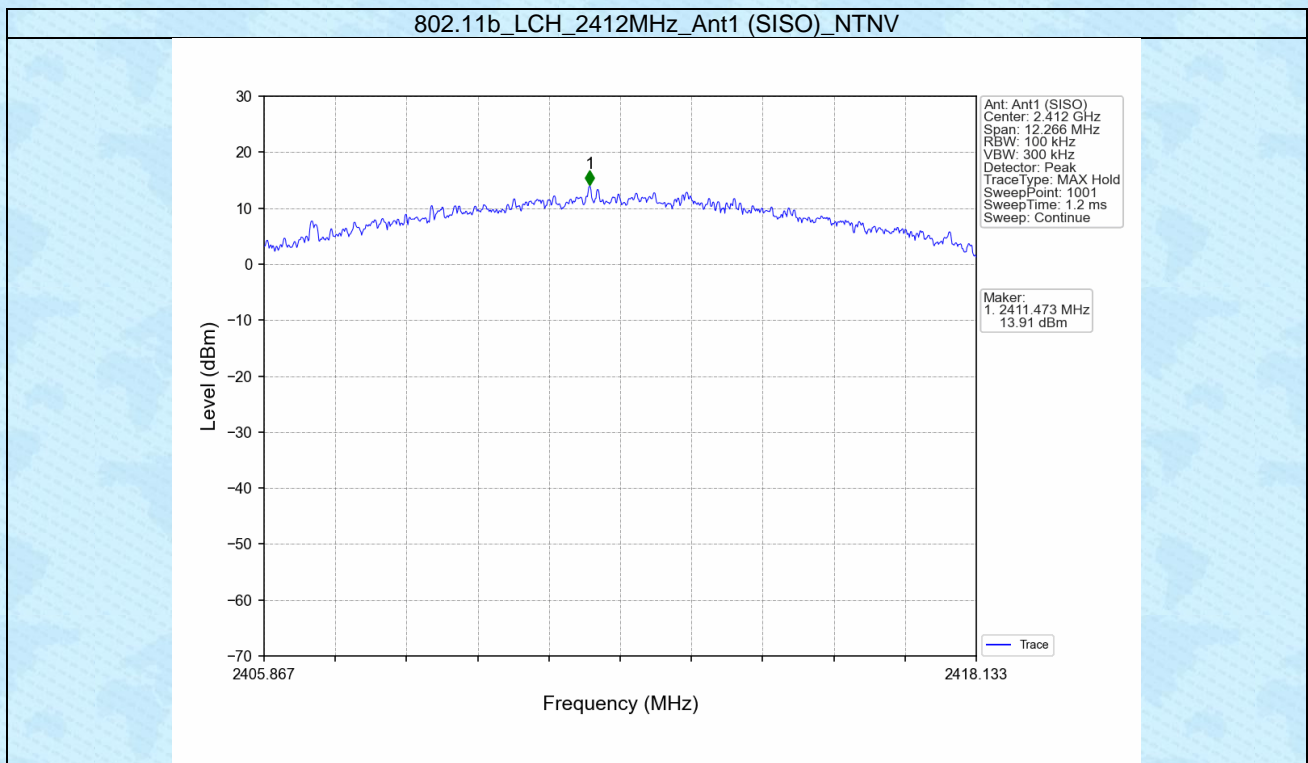
### 4.1 Ref

#### 4.1.1 Test Result

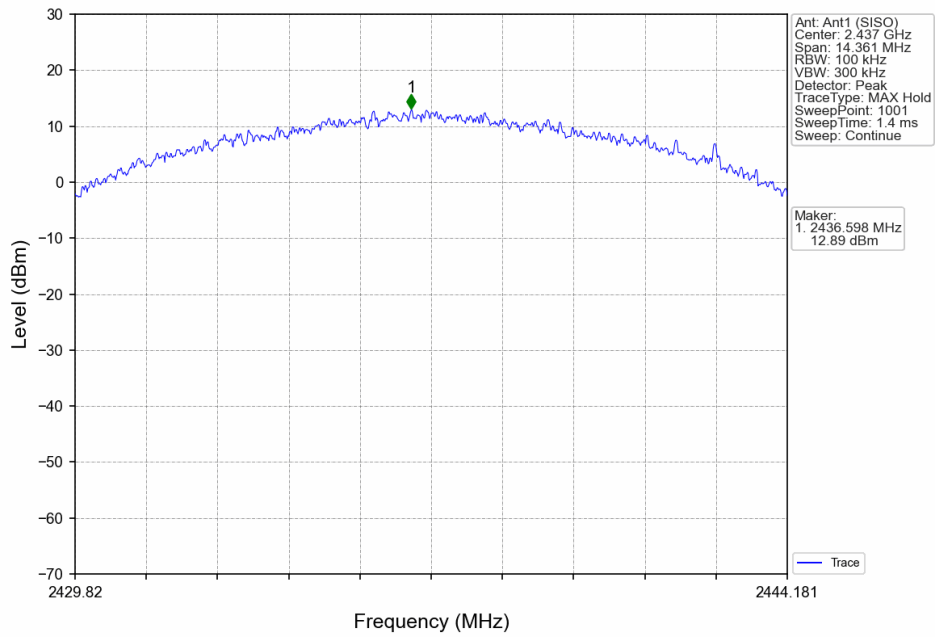
| Mode           | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) |
|----------------|---------|-----------------|-----|--------------------------|
| 802.11b        | SISO    | 2412            | 1   | 13.91                    |
|                |         | 2437            | 1   | 12.89                    |
|                |         | 2462            | 1   | 13.21                    |
| 802.11g        | SISO    | 2412            | 1   | 10.23                    |
|                |         | 2437            | 1   | 10.14                    |
|                |         | 2462            | 1   | 10.02                    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 5.96                     |
|                |         | 2437            | 1   | 5.77                     |
|                |         | 2462            | 1   | 5.67                     |

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

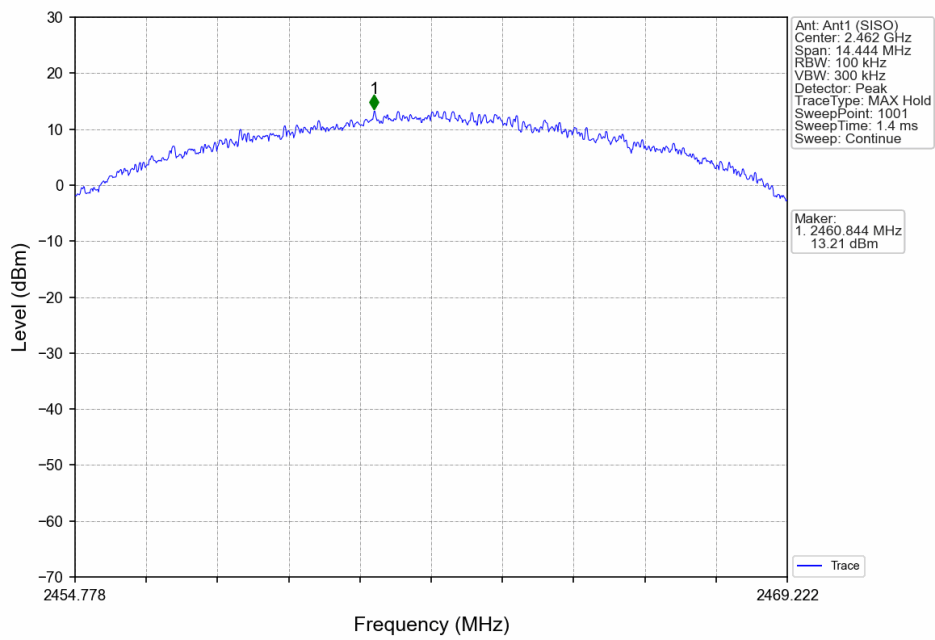
#### 4.1.2 Test Graph



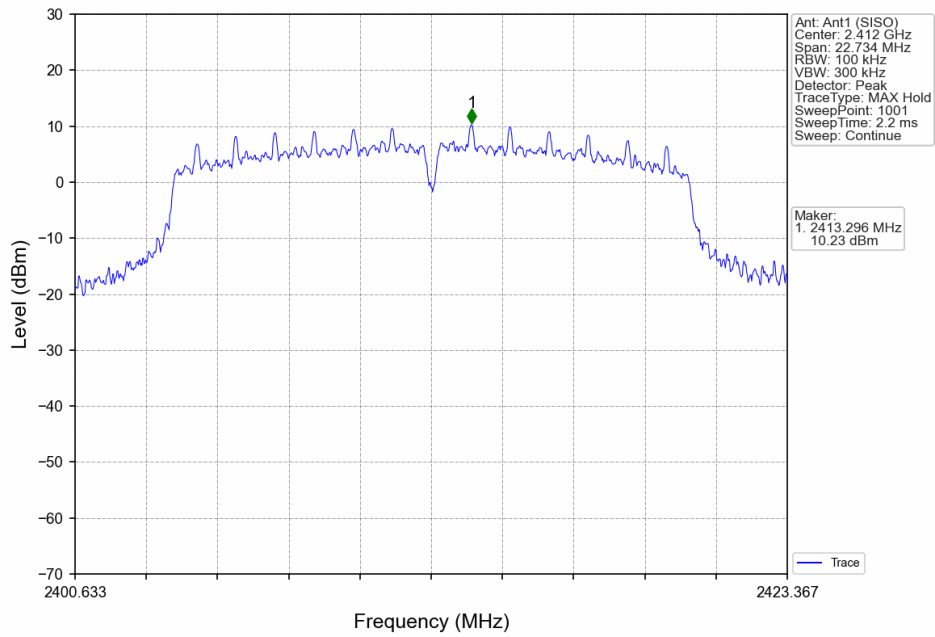
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



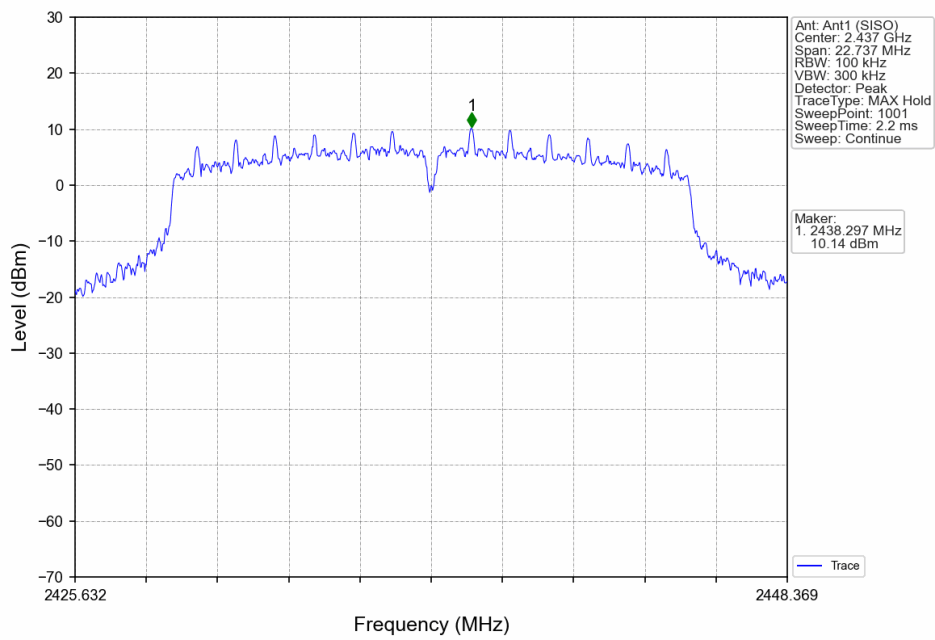
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



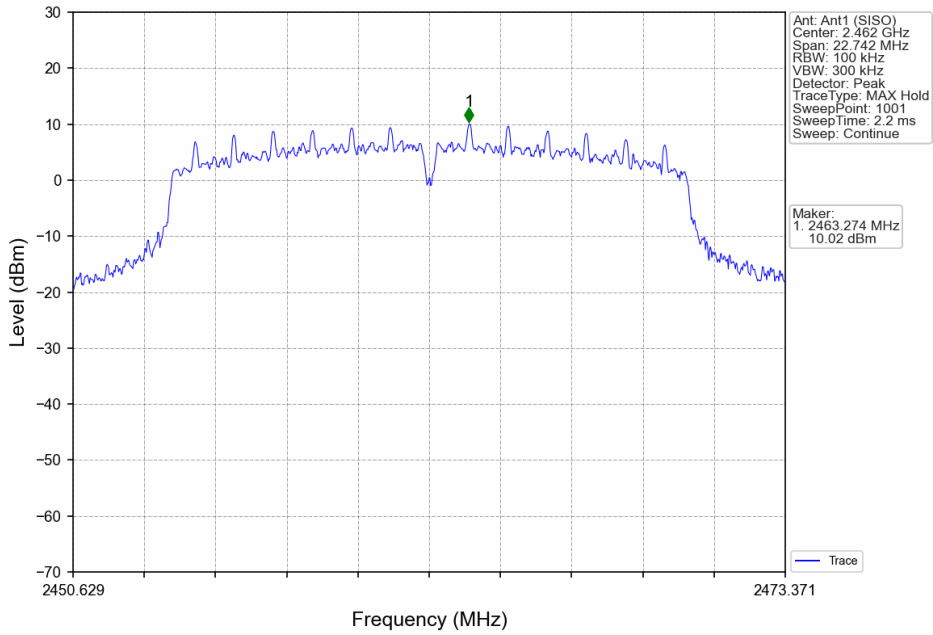
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



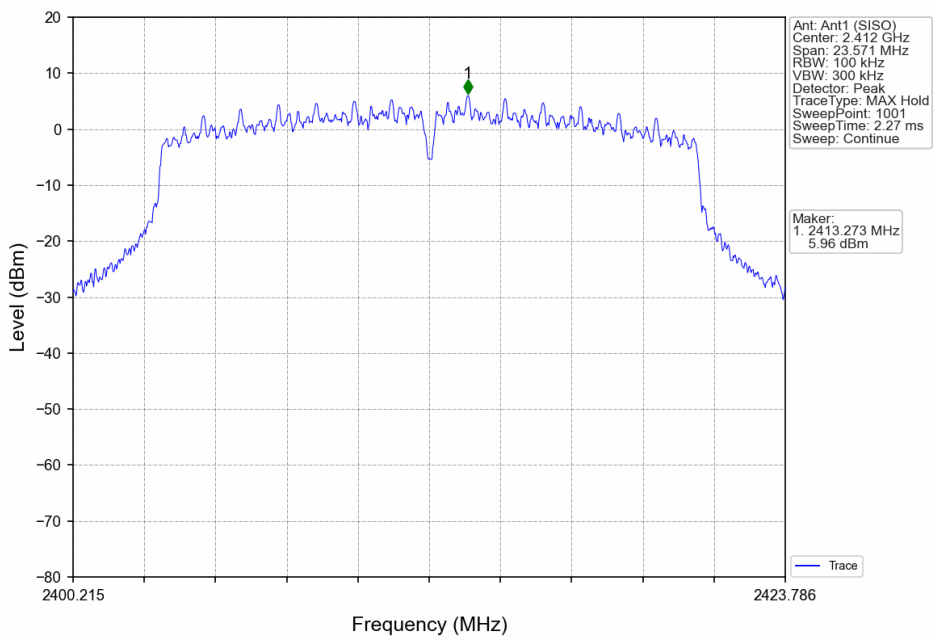
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



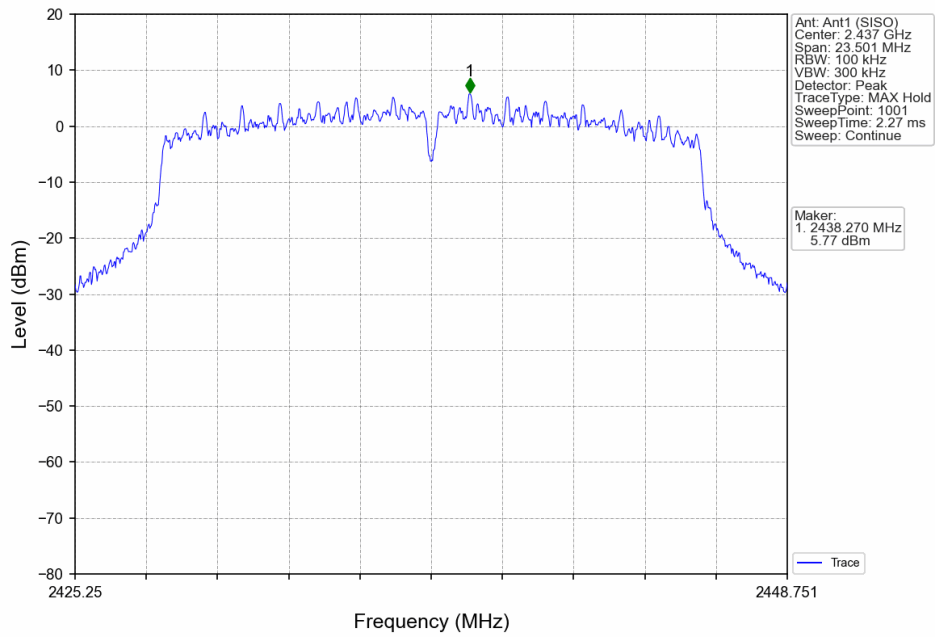
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



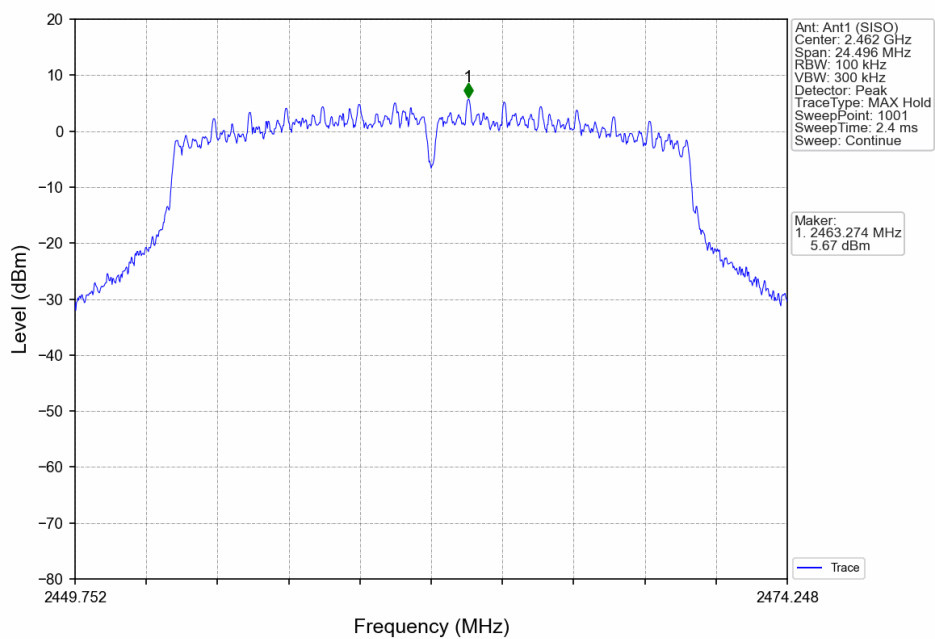
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



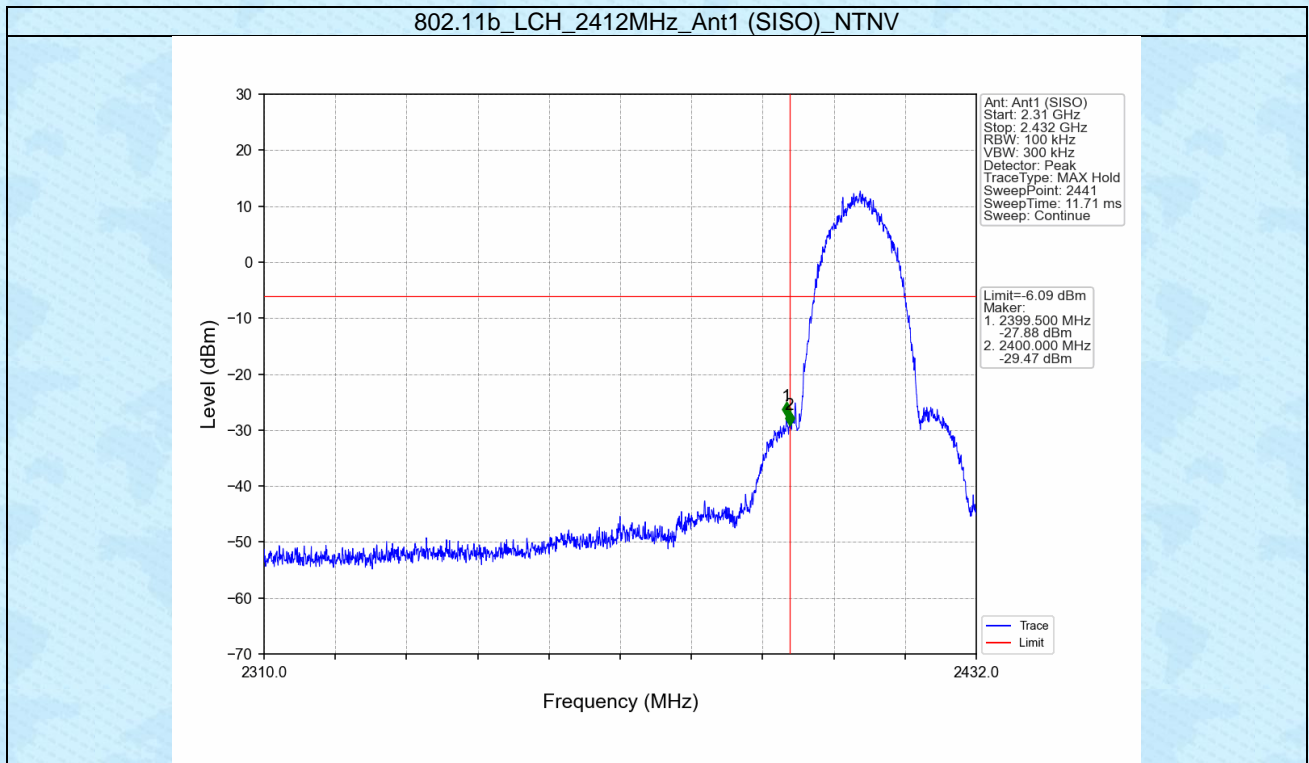
## 4.2 CSE

### 4.2.1 Test Result

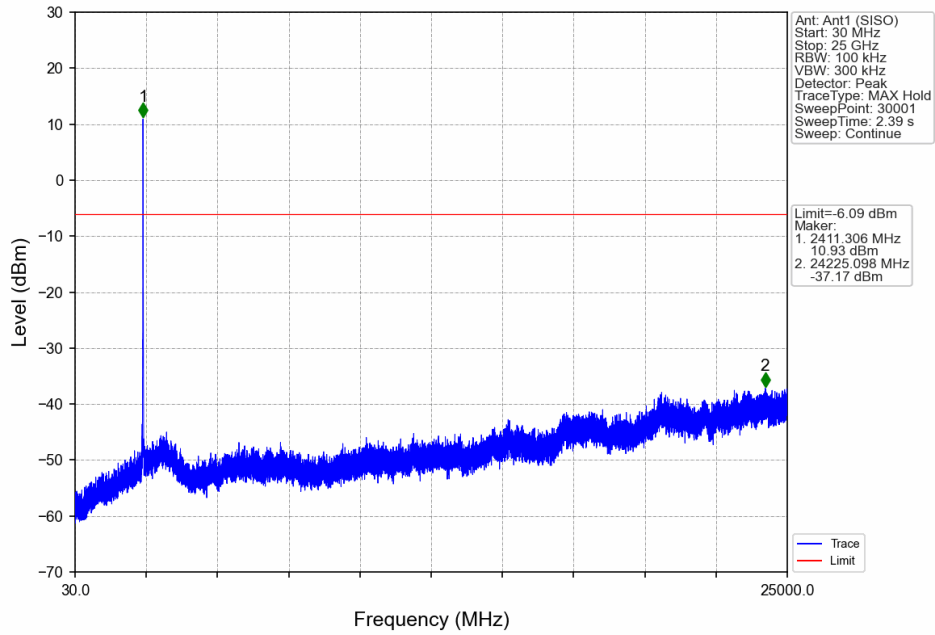
| Mode           | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|----------------|---------|-----------------|-----|--------------------------|-------------|---------|
| 802.11b        | SISO    | 2412            | 1   | 13.91                    | -6.09       | Pass    |
|                |         | 2437            | 1   | 12.89                    | -7.11       | Pass    |
|                |         | 2462            | 1   | 13.21                    | -6.79       | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 10.23                    | -9.77       | Pass    |
|                |         | 2437            | 1   | 10.14                    | -9.86       | Pass    |
|                |         | 2462            | 1   | 10.02                    | -9.98       | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 5.96                     | -14.04      | Pass    |
|                |         | 2437            | 1   | 5.77                     | -14.23      | Pass    |
|                |         | 2462            | 1   | 5.67                     | -14.33      | Pass    |

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

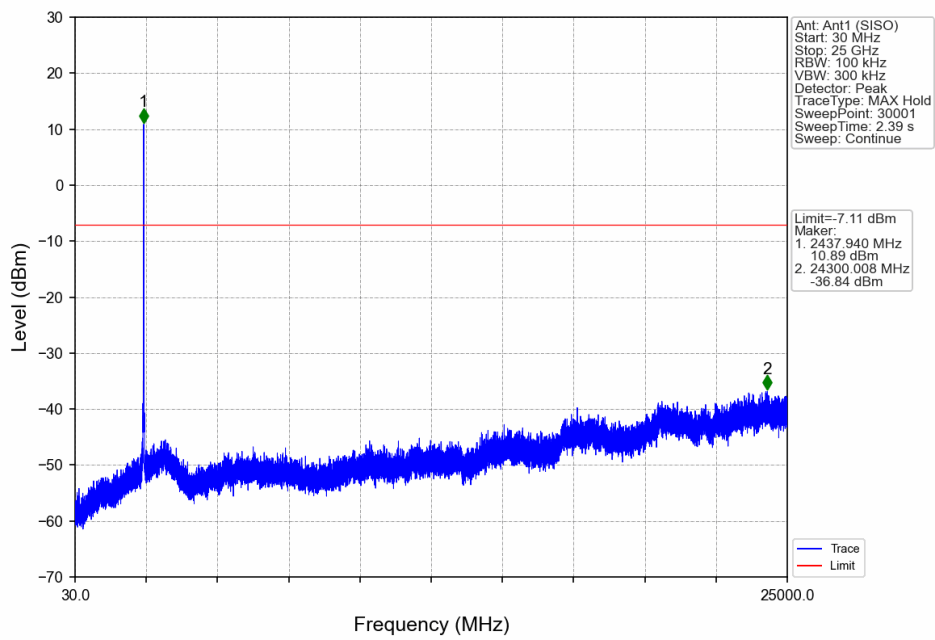
### 4.2.2 Test Graph



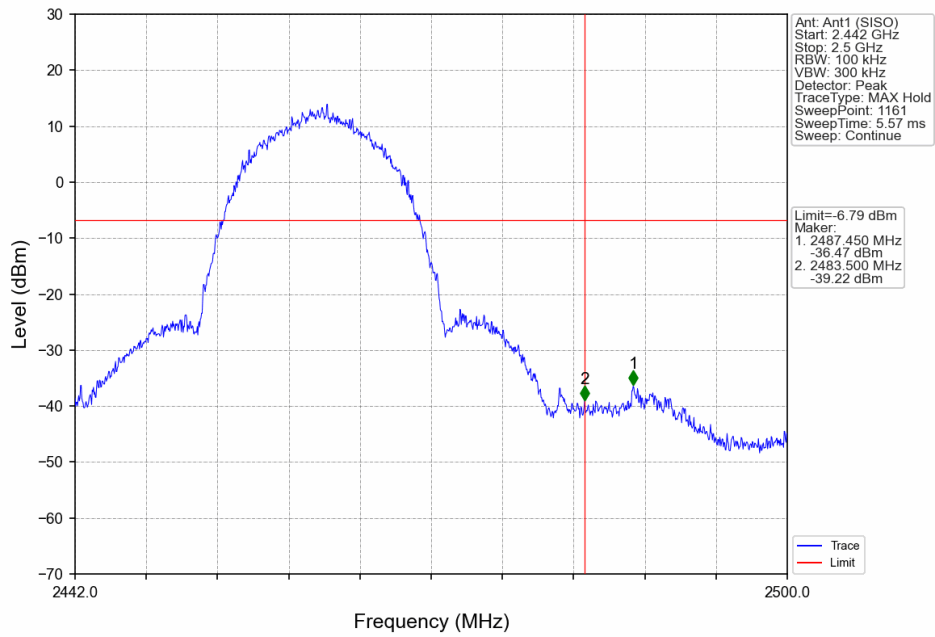
### 802.11b\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



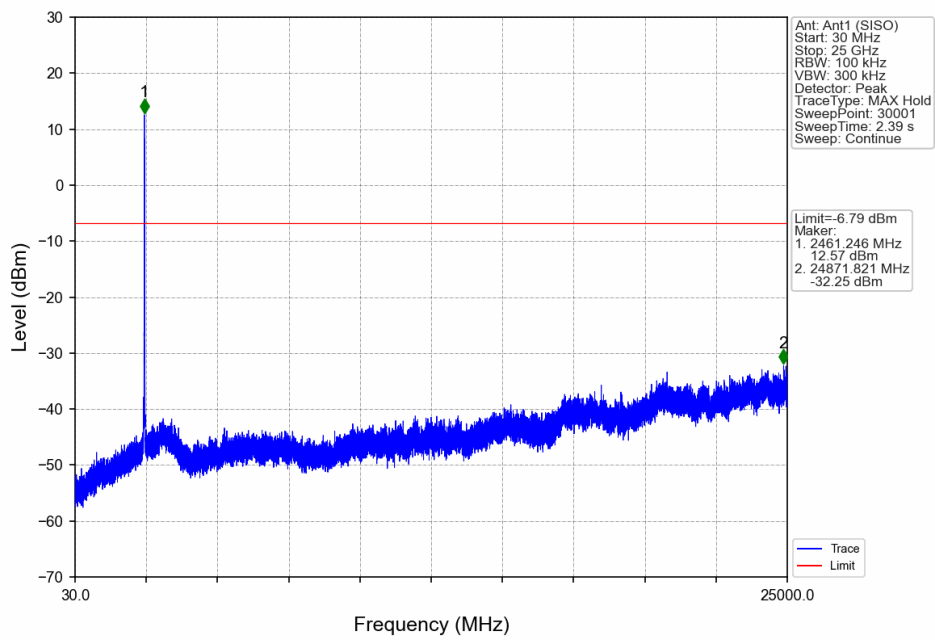
### 802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

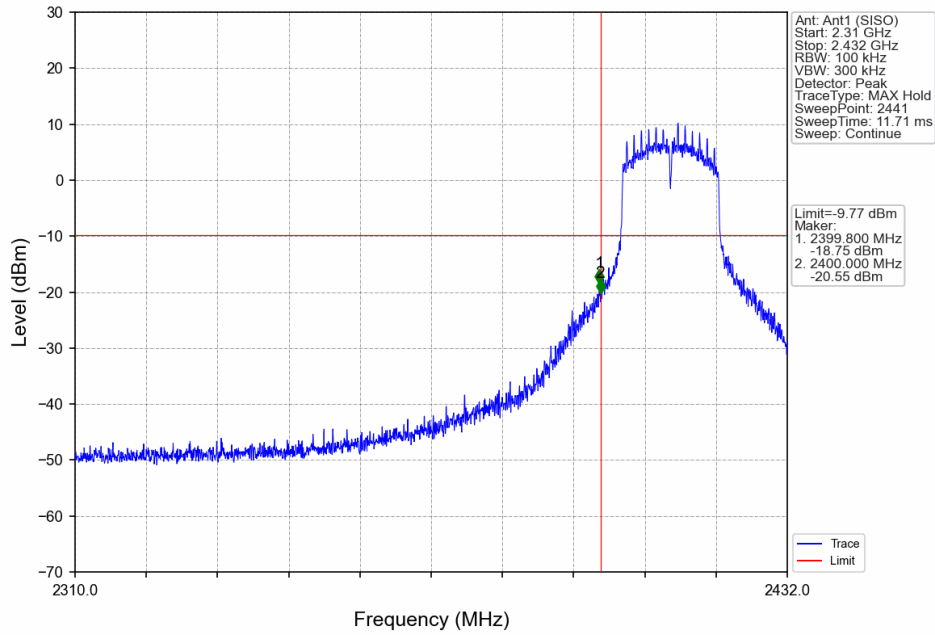


802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

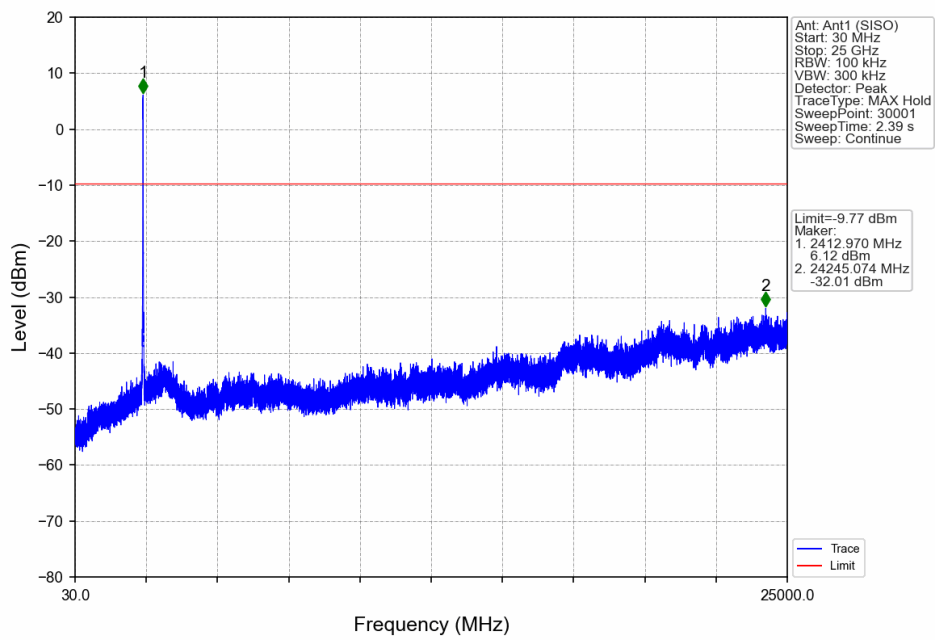




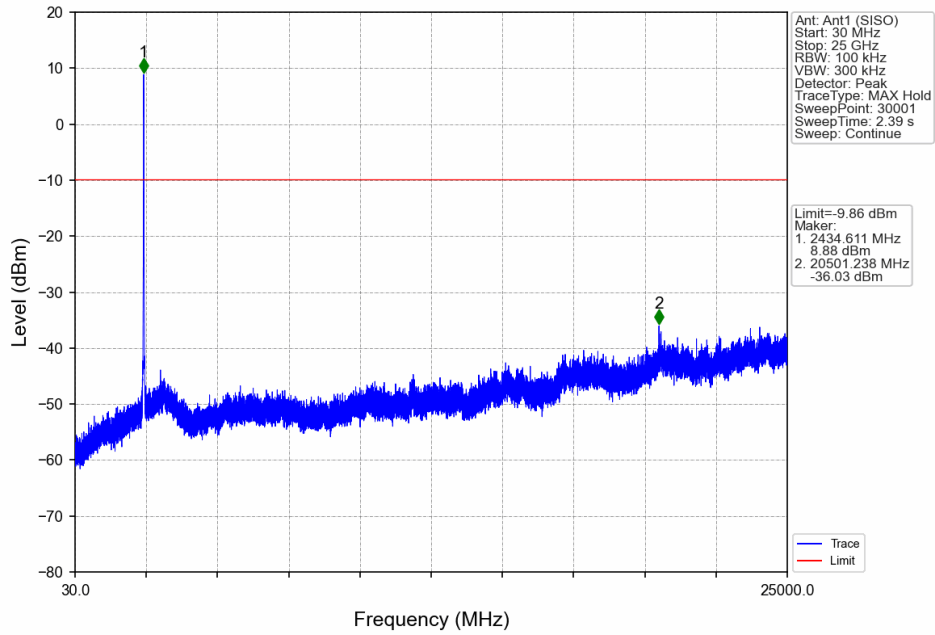
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



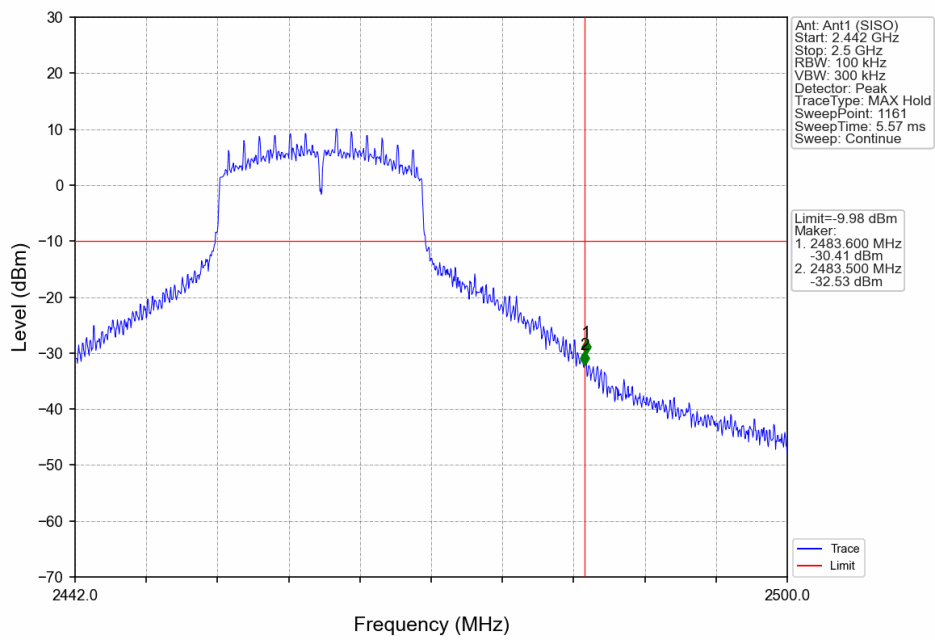
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



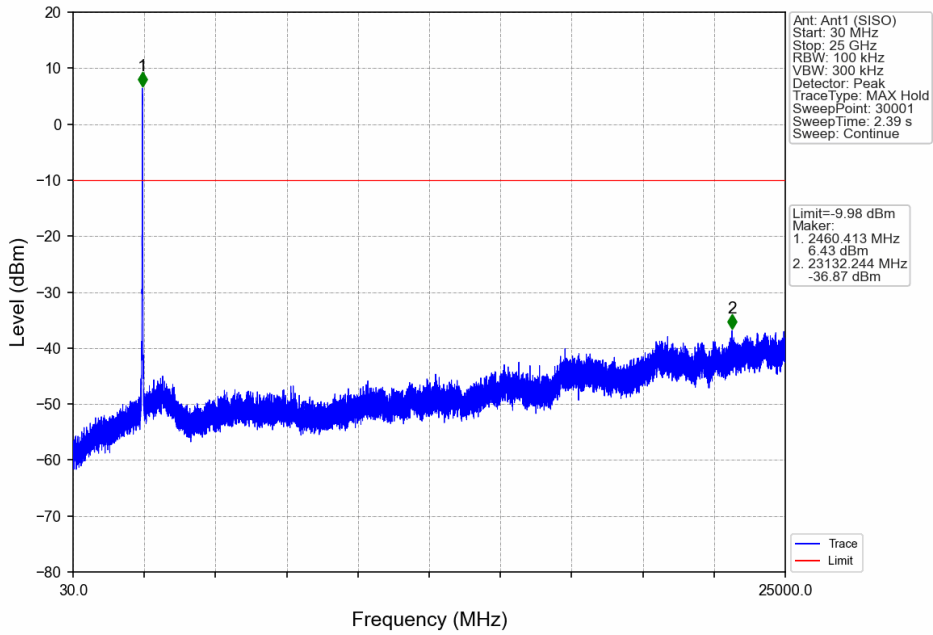
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



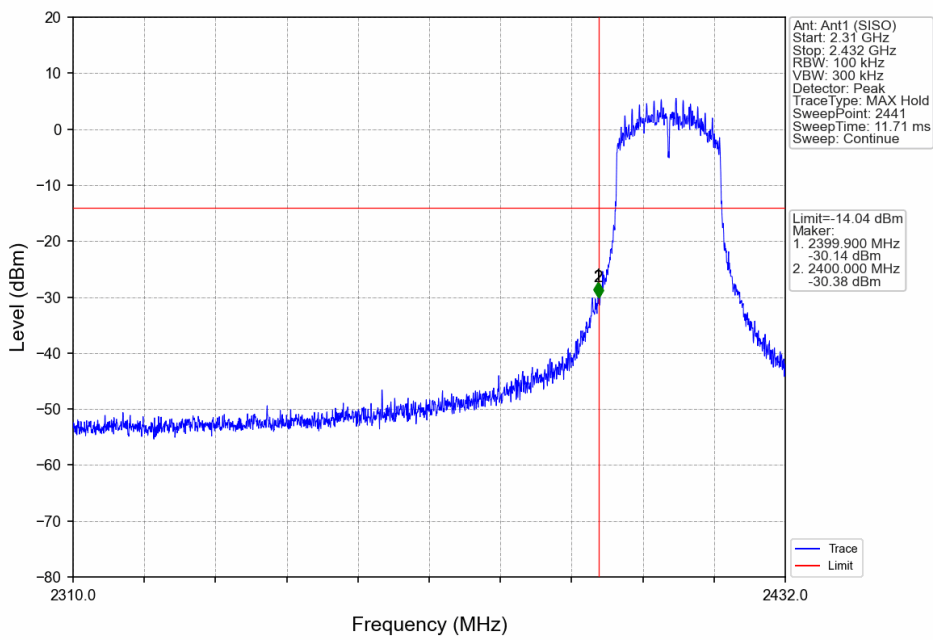
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



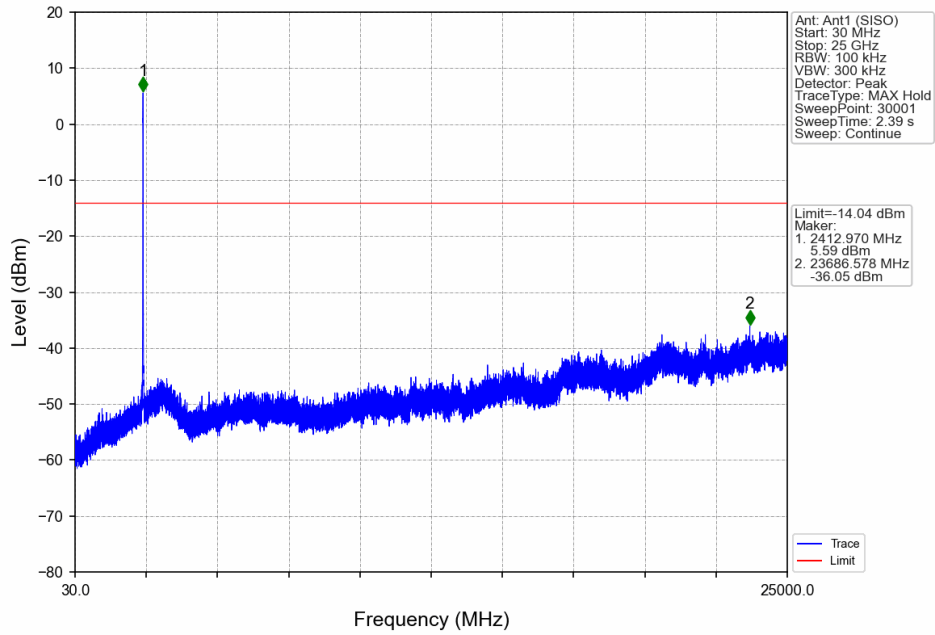
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



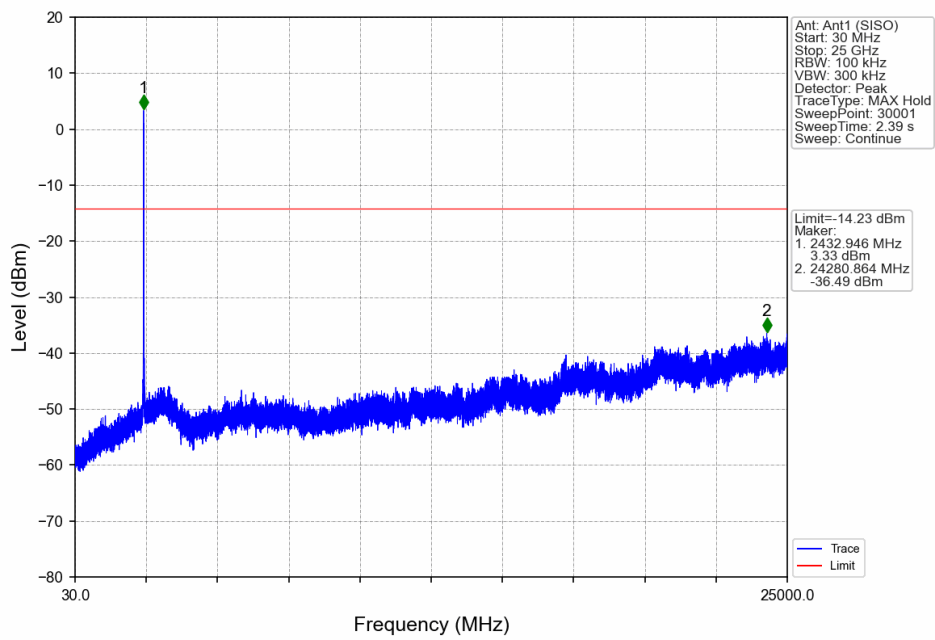
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



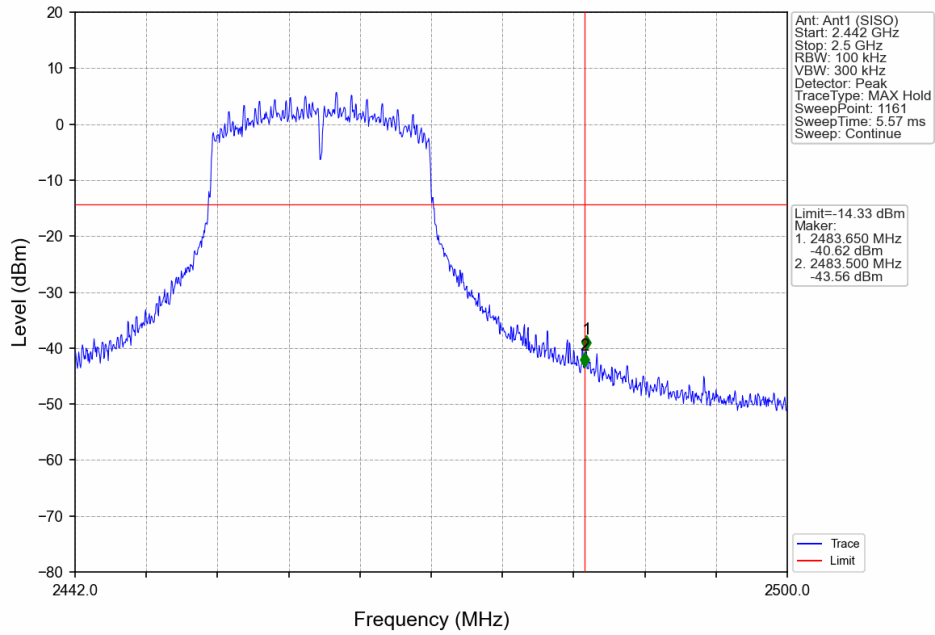
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



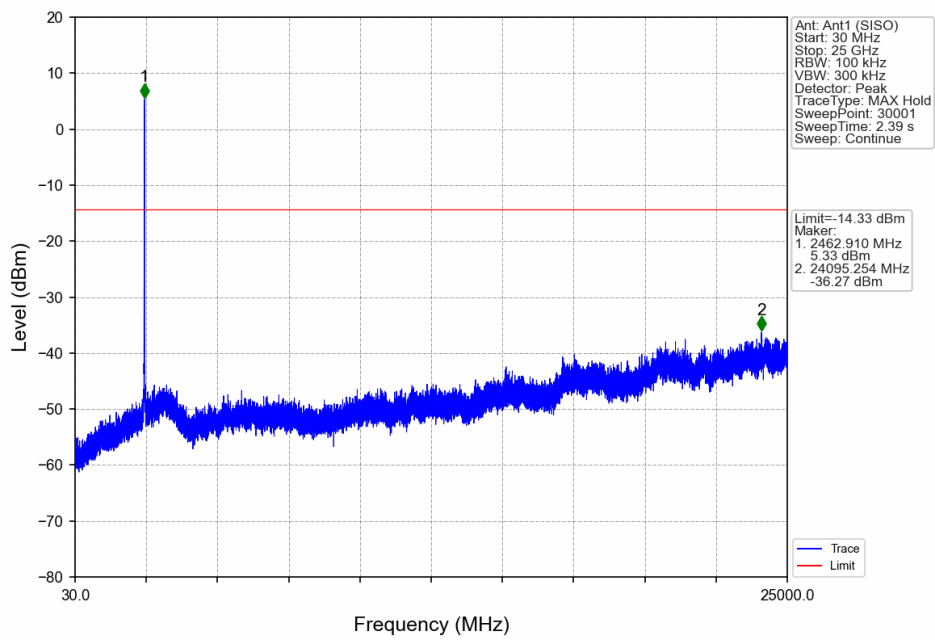
802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



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