

## 1. Duty Cycle

### 1.1 Test Result

#### 1.1.1 Ant1

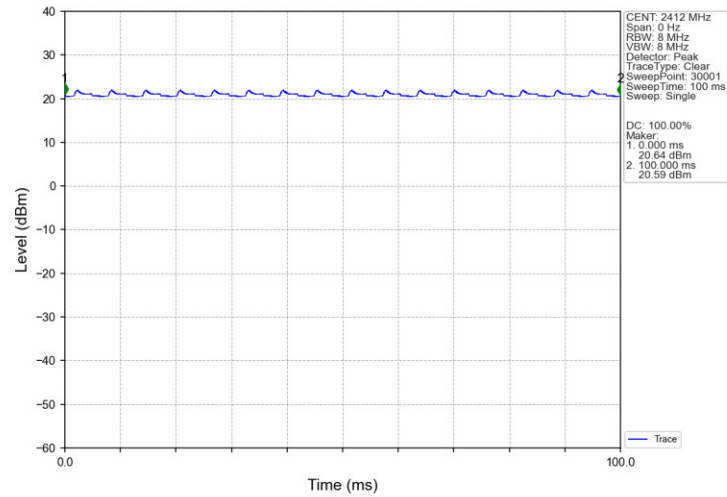
| Ant1           |         |                 |           |             |                |                                   |                       |
|----------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode           | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11b        | SISO    | 2412            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2462            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
| 802.11g        | SISO    | 2412            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2462            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
| 802.11n (HT20) | SISO    | 2412            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2462            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
| 802.11n (HT40) | SISO    | 2422            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2452            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |



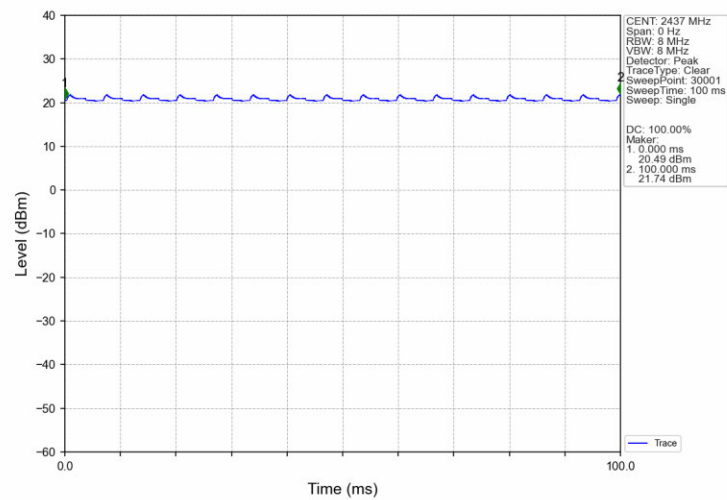
## 1.2 Test Graph

### 1.2.1 Ant1

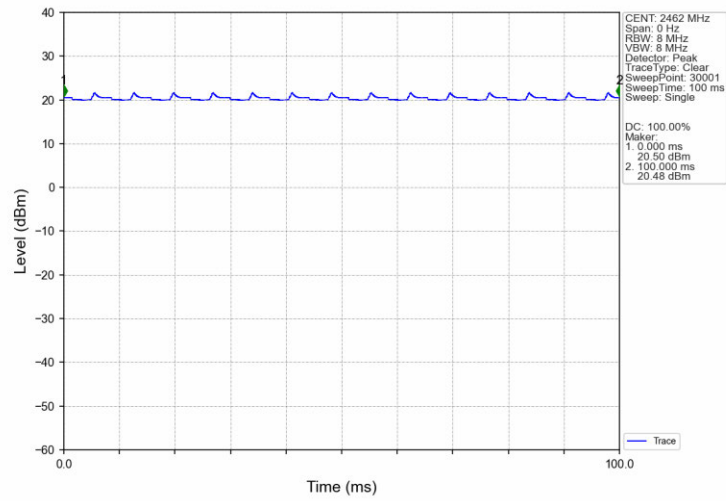
802.11b LCH 2412MHz Ant1 (SISO) NTN



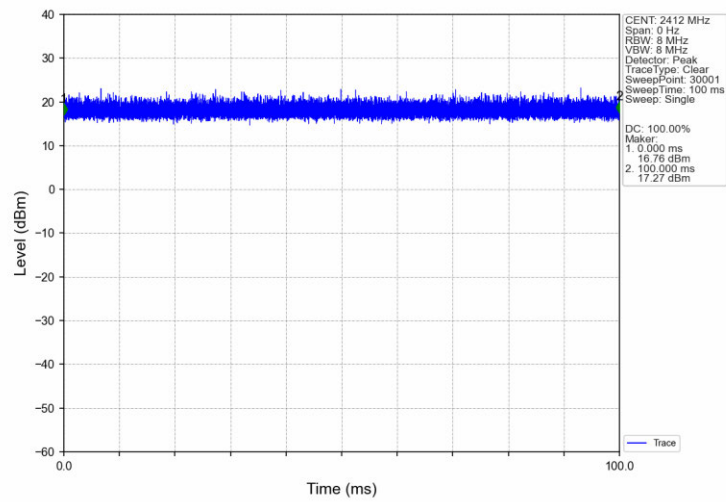
802.11b MCH 2437MHz Ant1 (SISO) NTN



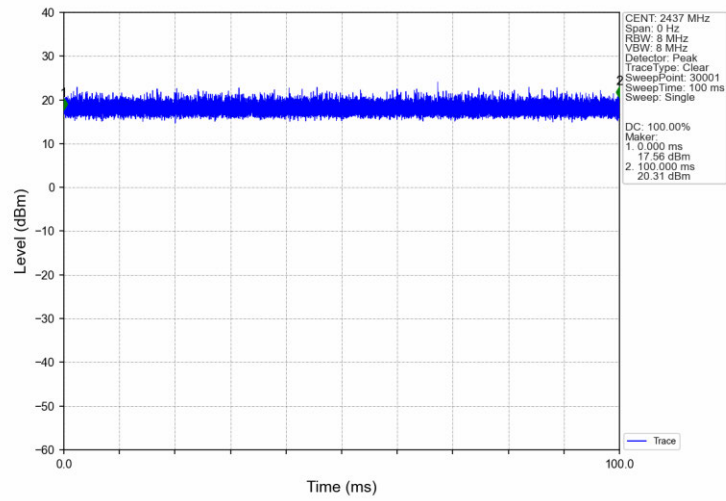
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



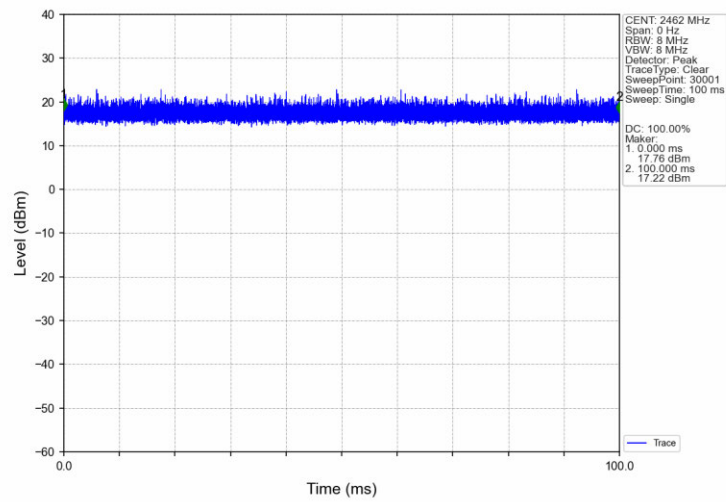
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



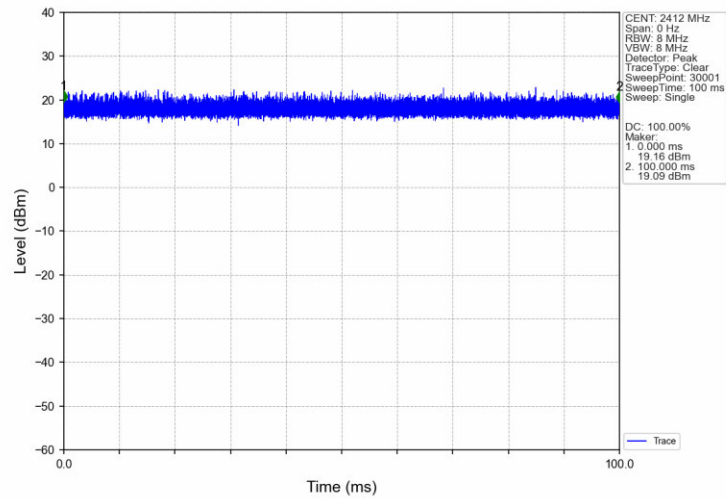
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



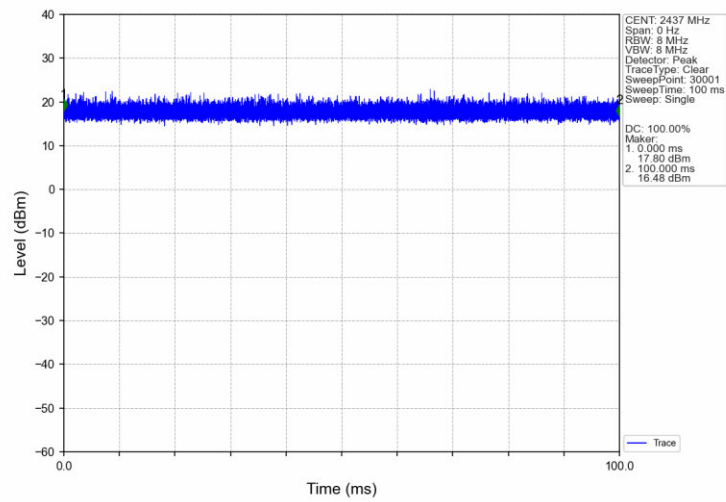
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



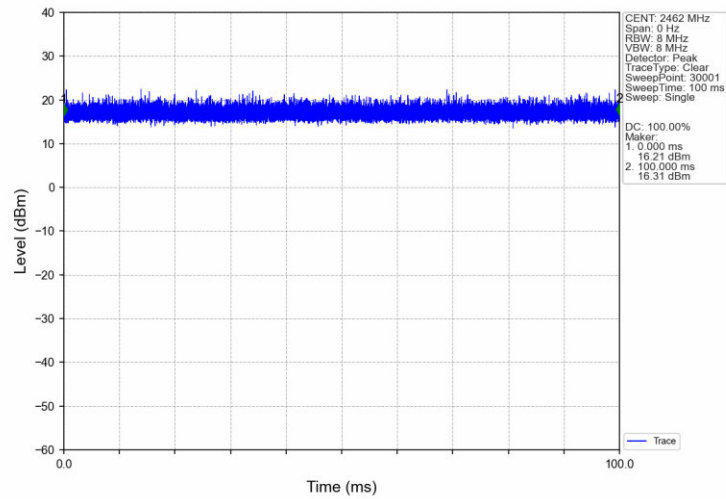
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



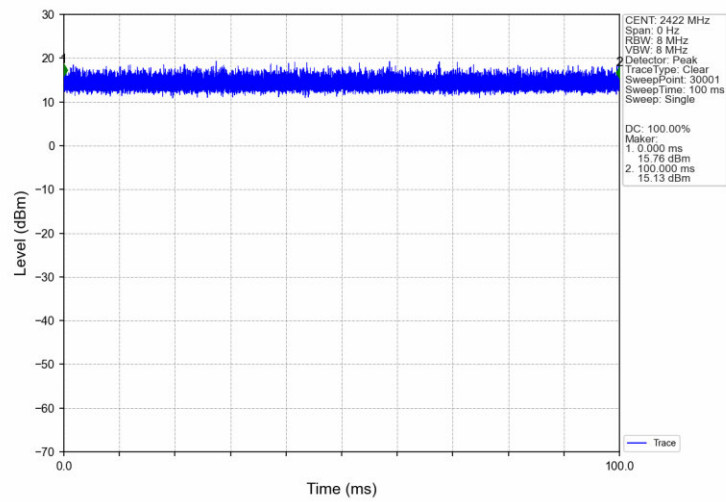
## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



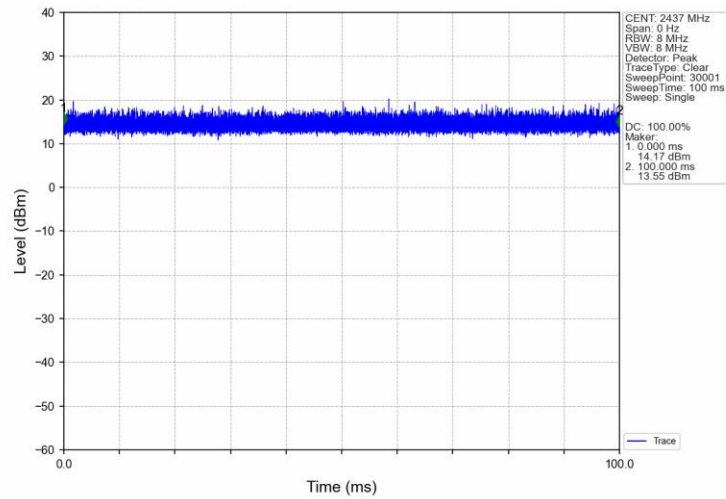
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



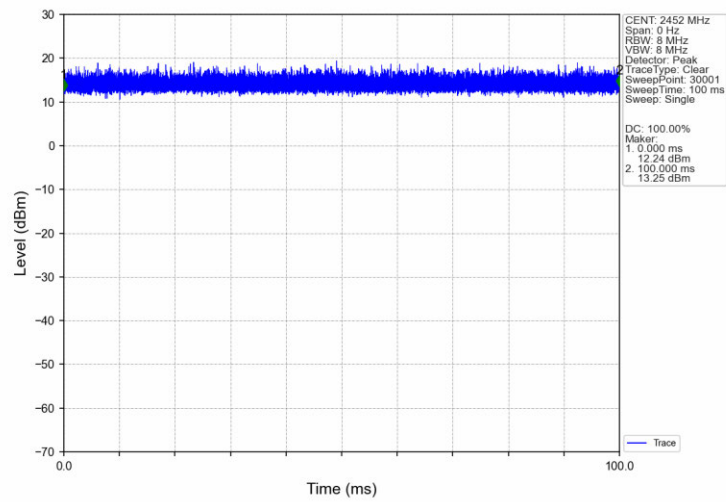
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



## 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   | 13.089                       | /     | Pass    |
|                |         | 2437            | 1   | 13.027                       | /     | Pass    |
|                |         | 2462            | 1   | 13.020                       | /     | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 17.594                       | /     | Pass    |
|                |         | 2437            | 1   | 17.651                       | /     | Pass    |
|                |         | 2462            | 1   | 17.625                       | /     | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 18.388                       | /     | Pass    |
|                |         | 2437            | 1   | 18.365                       | /     | Pass    |
|                |         | 2462            | 1   | 18.372                       | /     | Pass    |
| 802.11n (HT40) | SISO    | 2422            | 1   | 36.933                       | /     | Pass    |
|                |         | 2437            | 1   | 36.817                       | /     | Pass    |
|                |         | 2452            | 1   | 36.814                       | /     | Pass    |

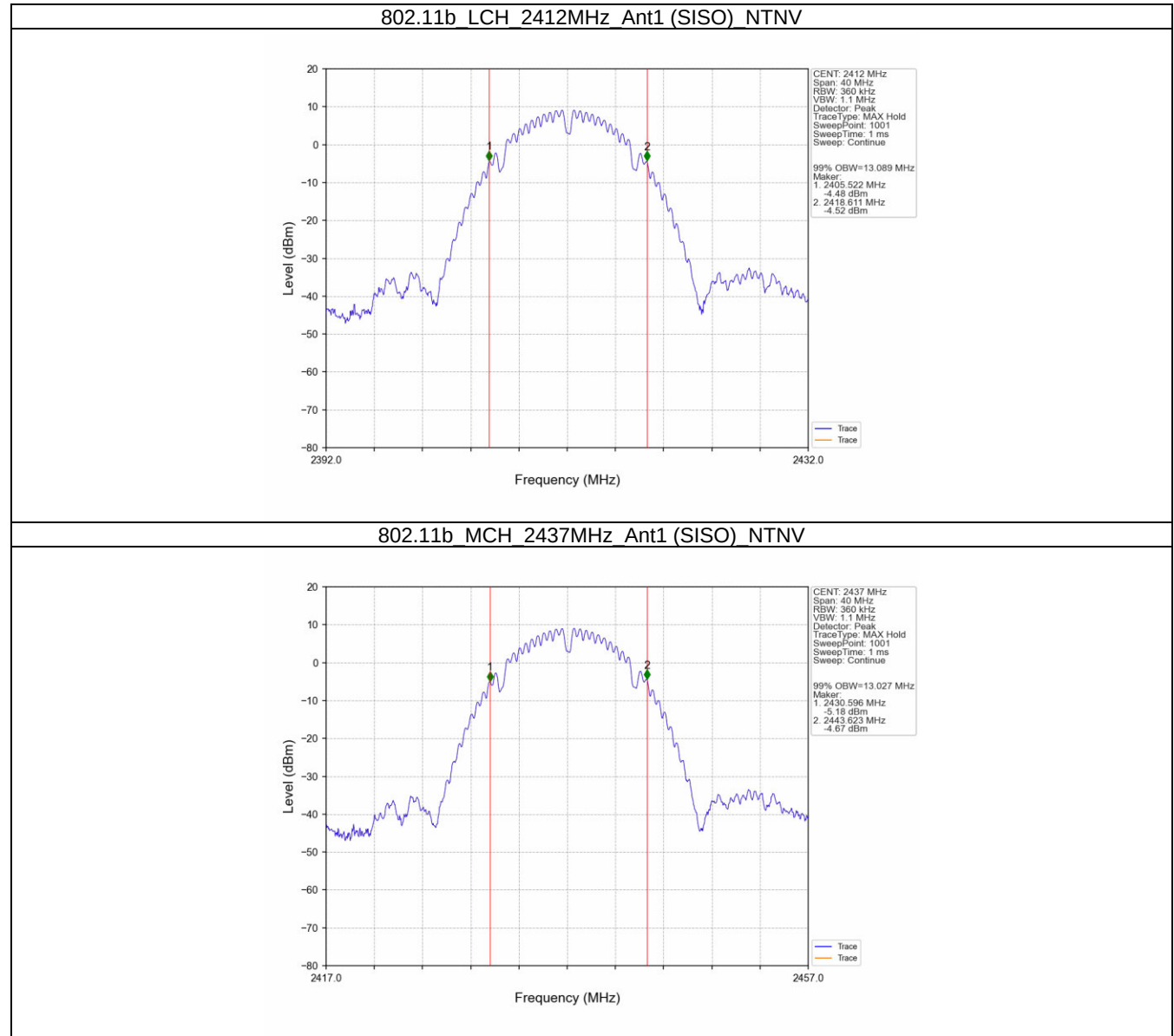
#### 2.1.2 6dB BW

| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11b        | SISO    | 2412            | 1   | 8.089               | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 8.096               | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 8.556               | $\geq 0.5$ | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 16.387              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 16.389              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 16.397              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 17.663              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 17.637              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 17.653              | $\geq 0.5$ | Pass    |
| 802.11n (HT40) | SISO    | 2422            | 1   | 36.405              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 35.999              | $\geq 0.5$ | Pass    |
|                |         | 2452            | 1   | 36.340              | $\geq 0.5$ | Pass    |

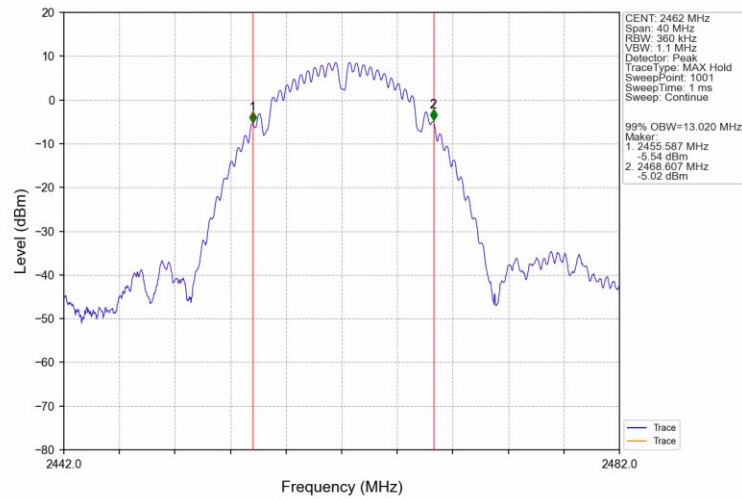


## 2.2 Test Graph

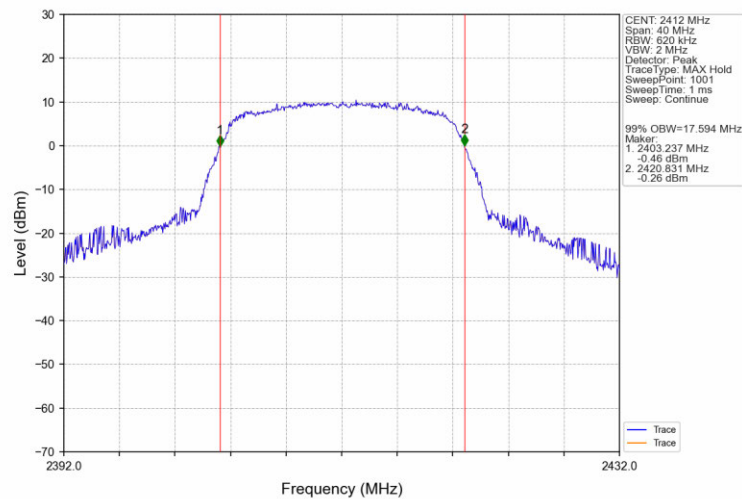
### 2.2.1 OBW



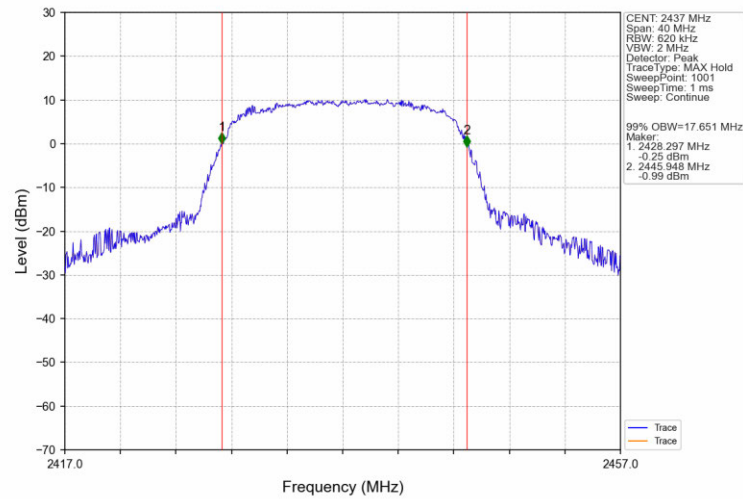
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



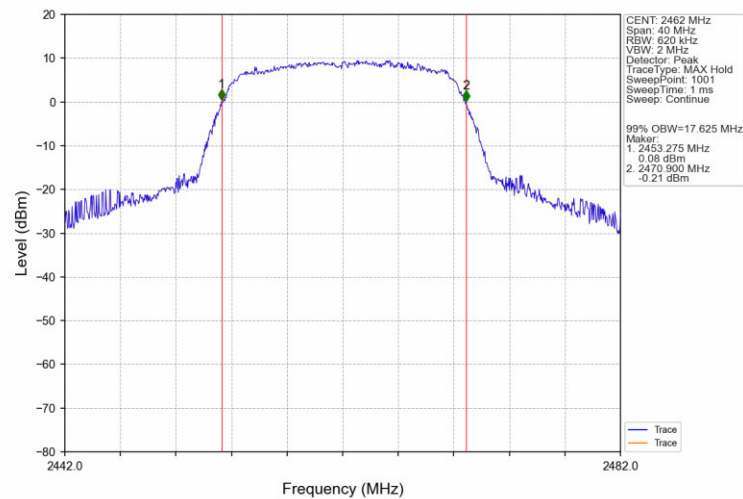
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



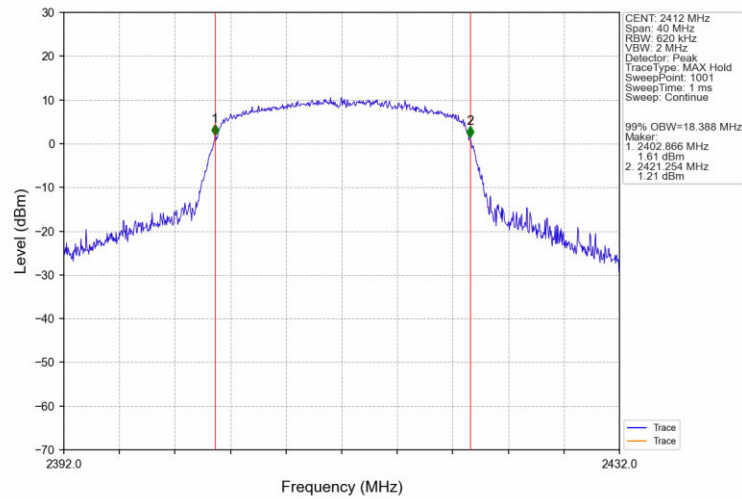
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



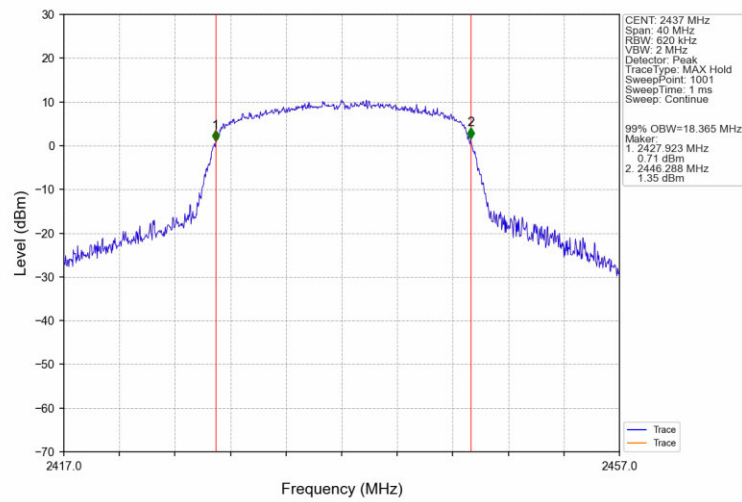
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



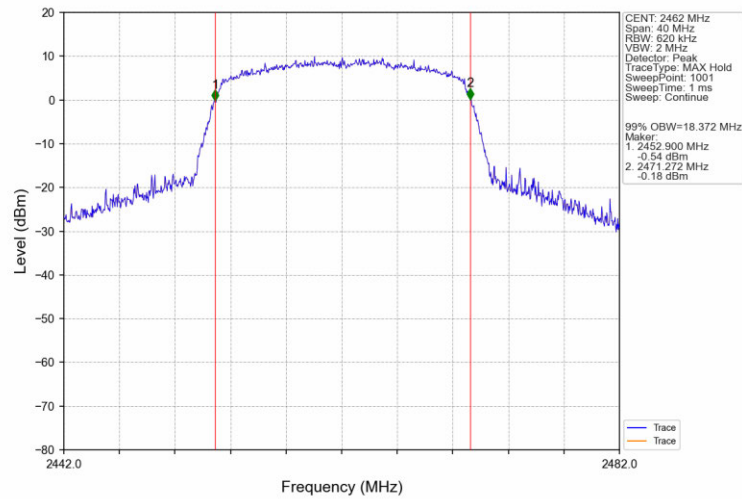
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



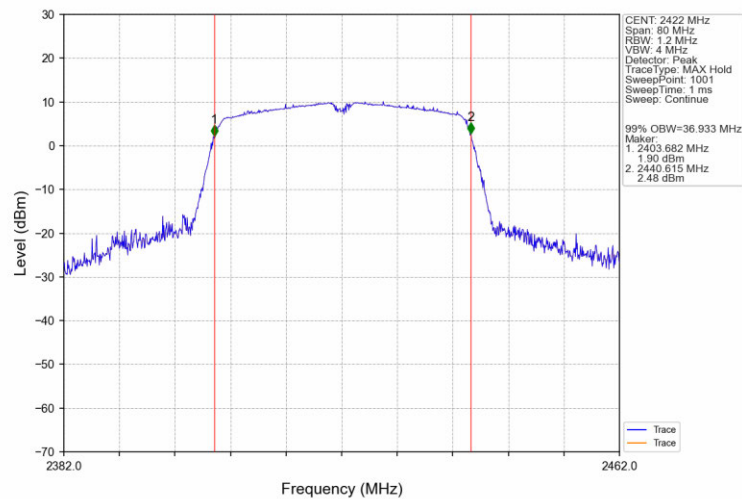
## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



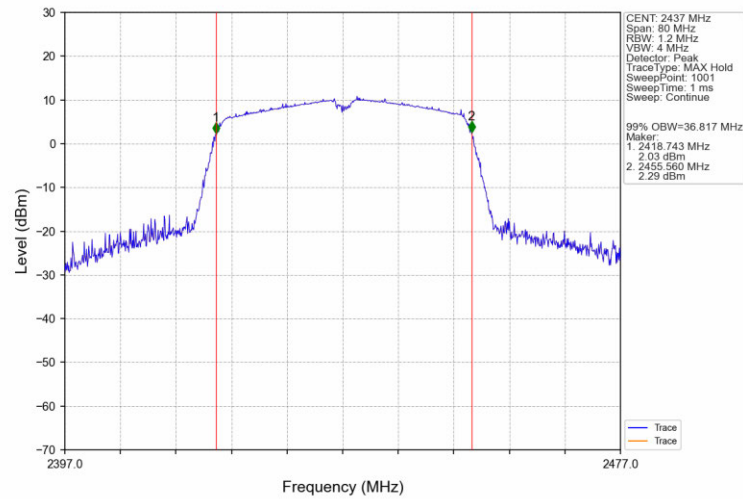
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



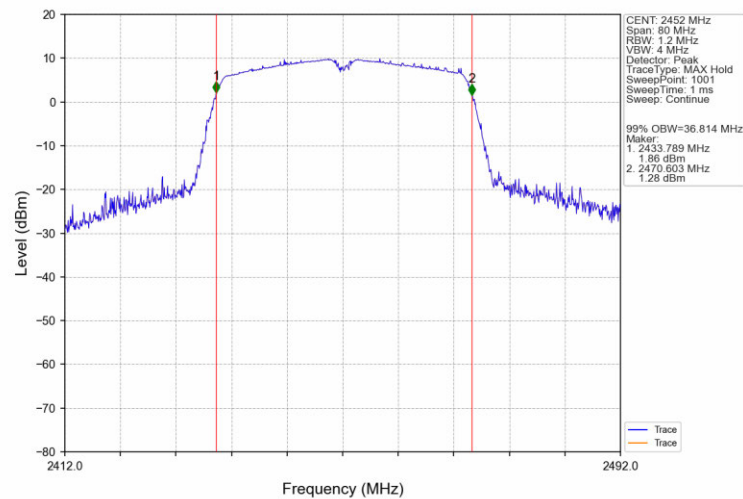
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

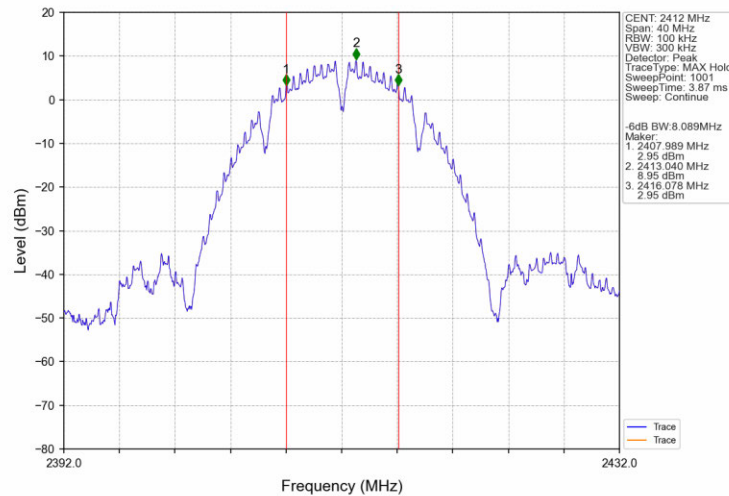


## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV

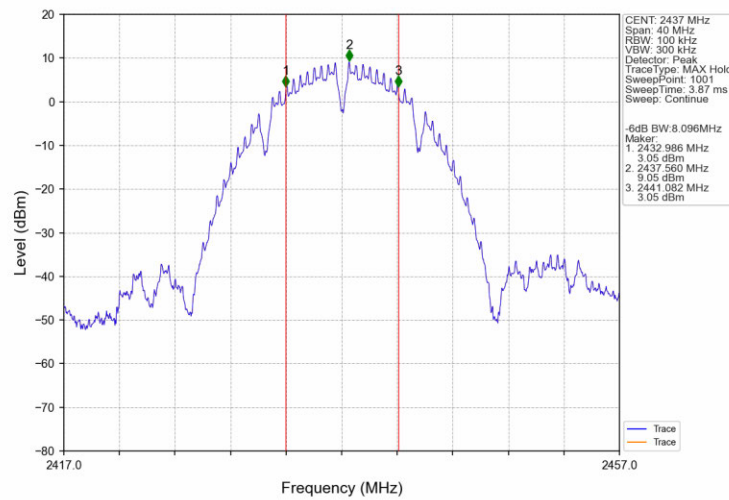


## 2.2.2 6dB BW

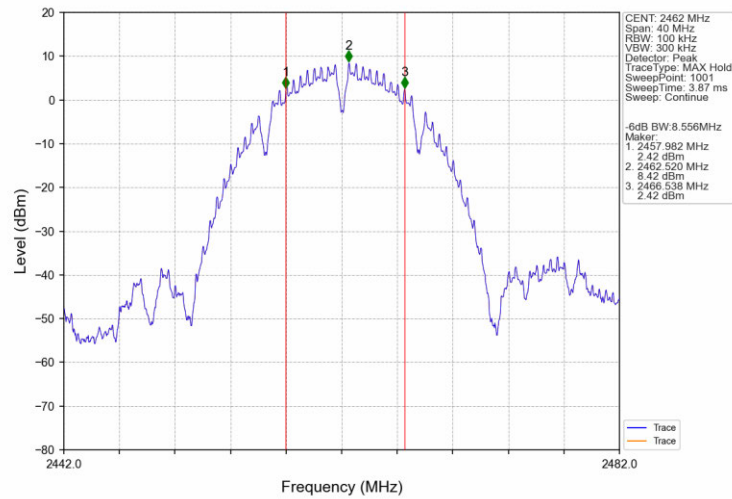
802.11b LCH 2412MHz Ant1 (SISO) NTN



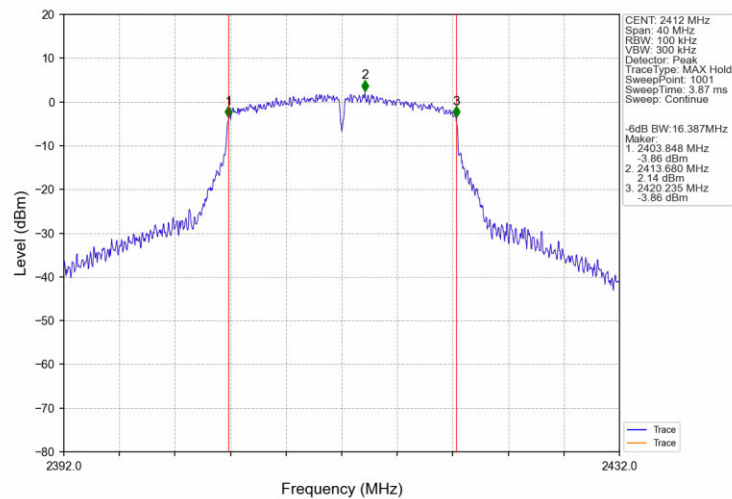
802.11b MCH 2437MHz Ant1 (SISO) NTN



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

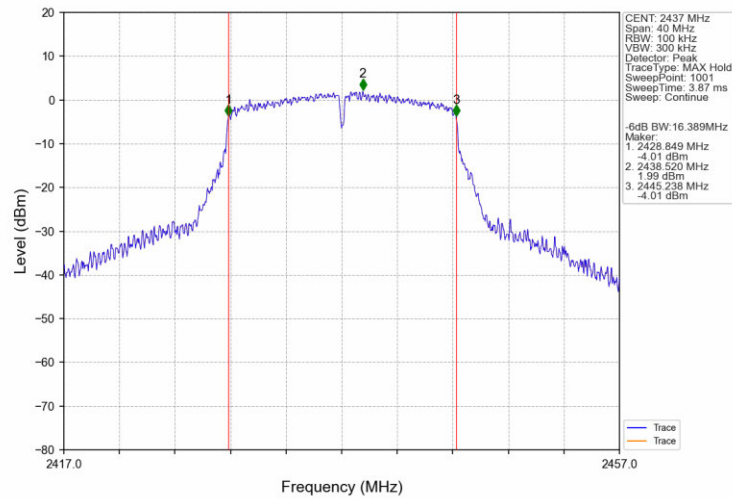


## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV

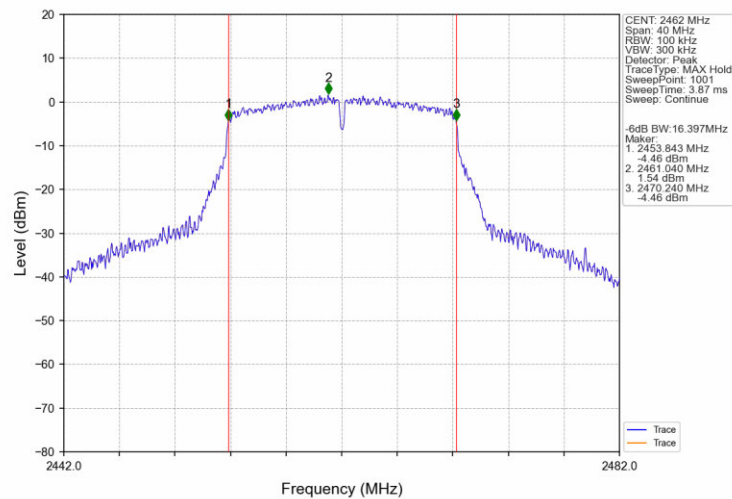




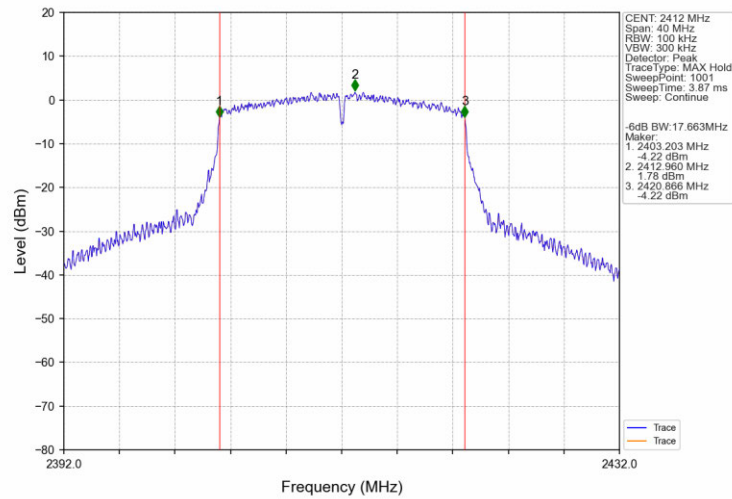
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



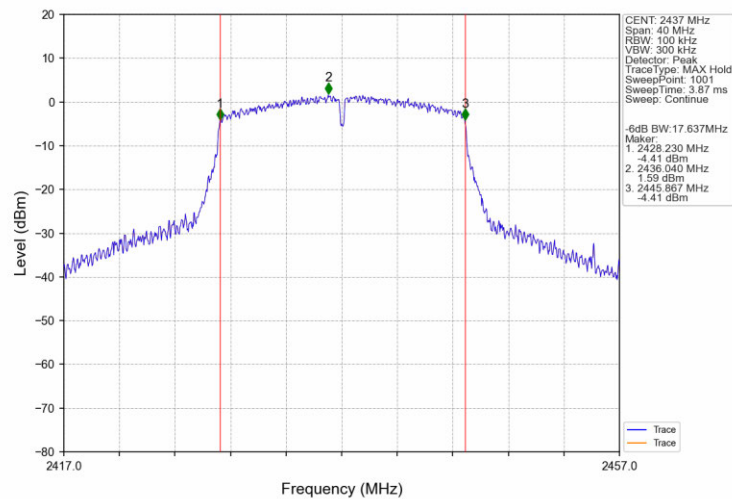
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



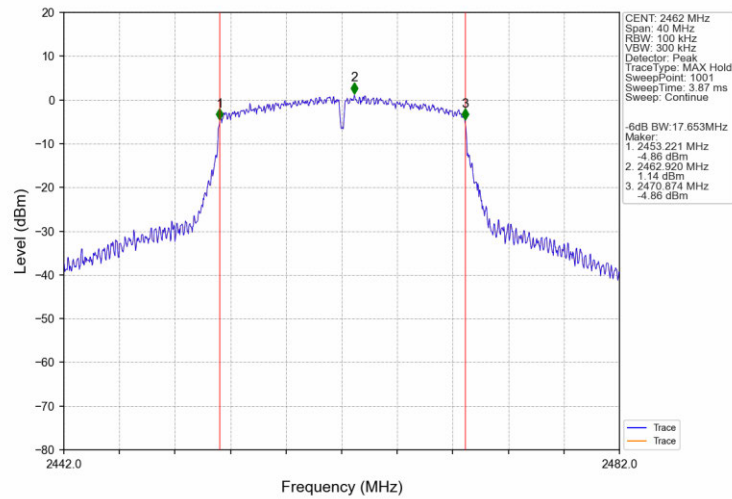
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



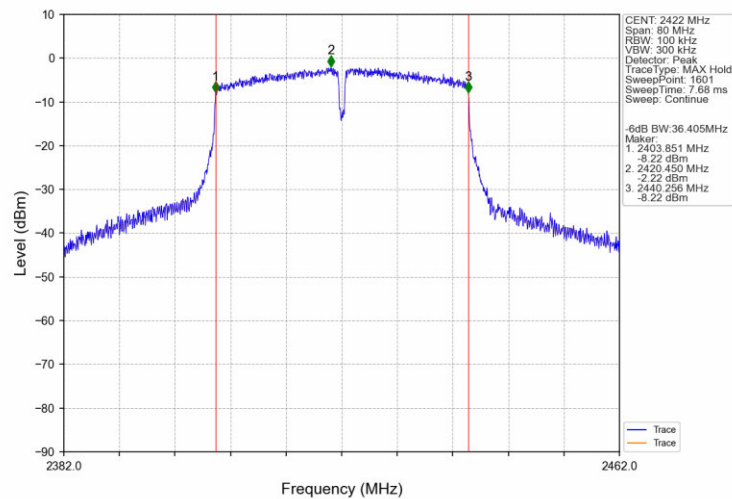
## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



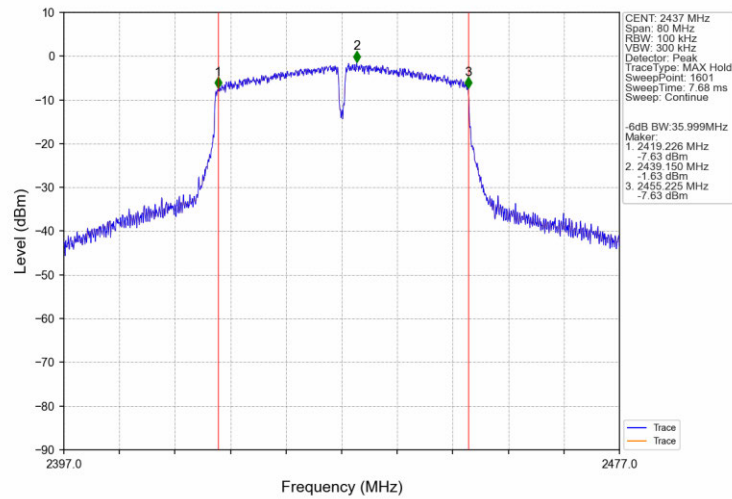
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



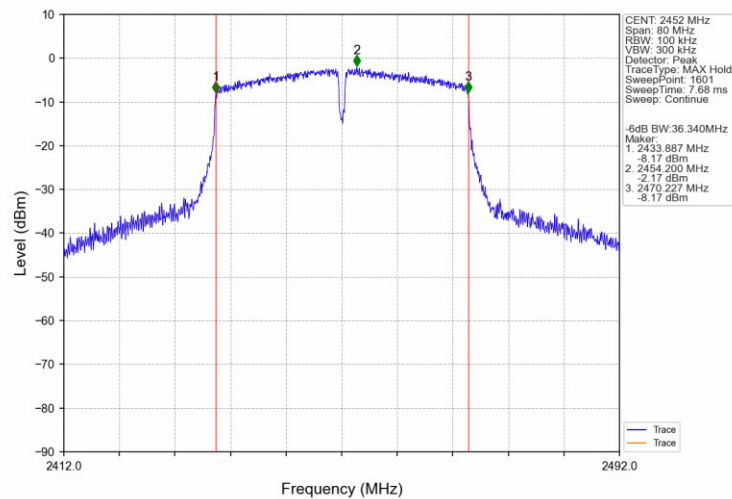
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



### 3. Maximum Conducted Output Power

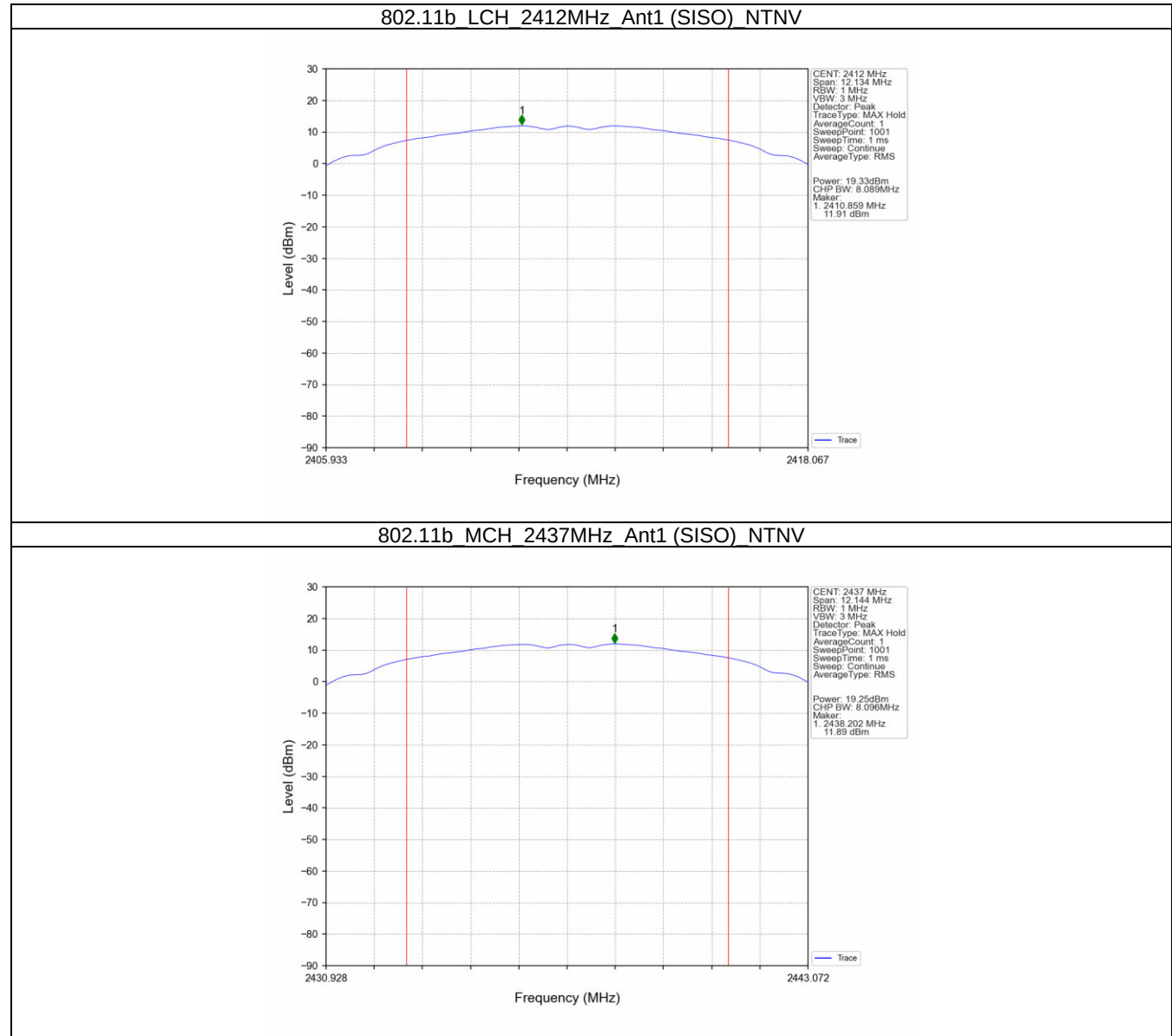
#### 3.1 Test Result

##### 3.1.1 Power

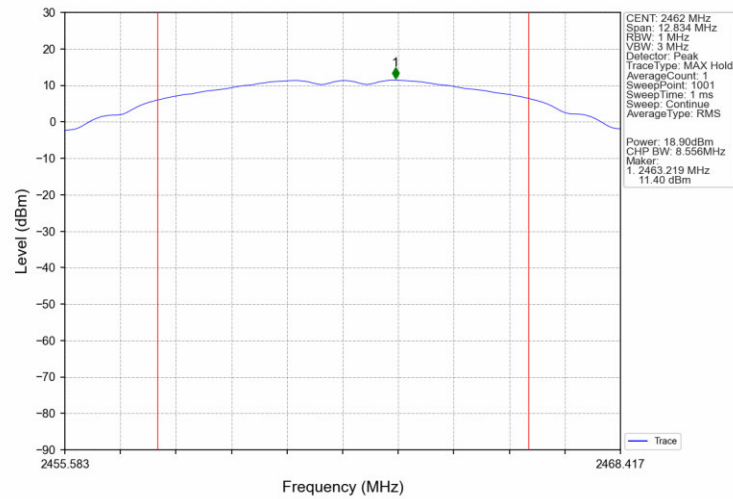
| Mode                                | TX Type | Frequency (MHz) | Maximum Peak Conducted Output Power (dBm) |       | Verdict |
|-------------------------------------|---------|-----------------|-------------------------------------------|-------|---------|
|                                     |         |                 | ANT1                                      | Limit |         |
| 802.11b                             | SISO    | 2412            | 19.33                                     | <=30  | Pass    |
|                                     |         | 2437            | 19.25                                     | <=30  | Pass    |
|                                     |         | 2462            | 18.90                                     | <=30  | Pass    |
| 802.11g                             | SISO    | 2412            | 22.69                                     | <=30  | Pass    |
|                                     |         | 2437            | 22.69                                     | <=30  | Pass    |
|                                     |         | 2462            | 21.95                                     | <=30  | Pass    |
| 802.11n (HT20)                      | SISO    | 2412            | 22.78                                     | <=30  | Pass    |
|                                     |         | 2437            | 22.63                                     | <=30  | Pass    |
|                                     |         | 2462            | 21.91                                     | <=30  | Pass    |
| 802.11n (HT40)                      | SISO    | 2422            | 22.13                                     | <=30  | Pass    |
|                                     |         | 2437            | 21.93                                     | <=30  | Pass    |
|                                     |         | 2452            | 21.79                                     | <=30  | Pass    |
| Note1: Antenna Gain: Ant1: 0.85dBi; |         |                 |                                           |       |         |

## 3.2 Test Graph

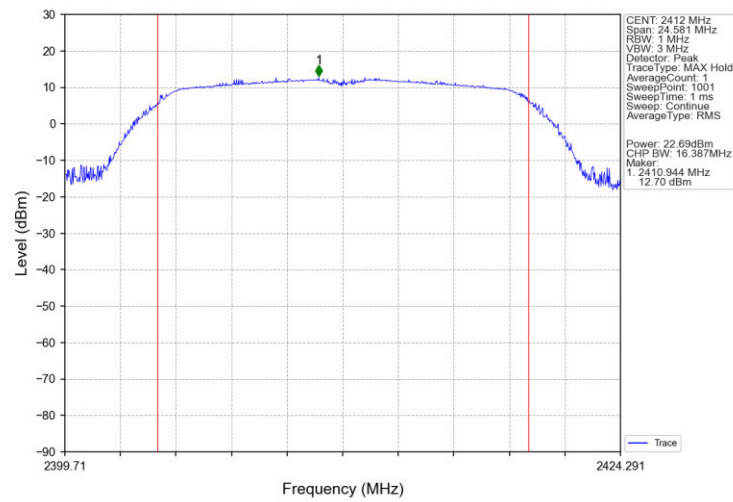
### 3.2.1 Power



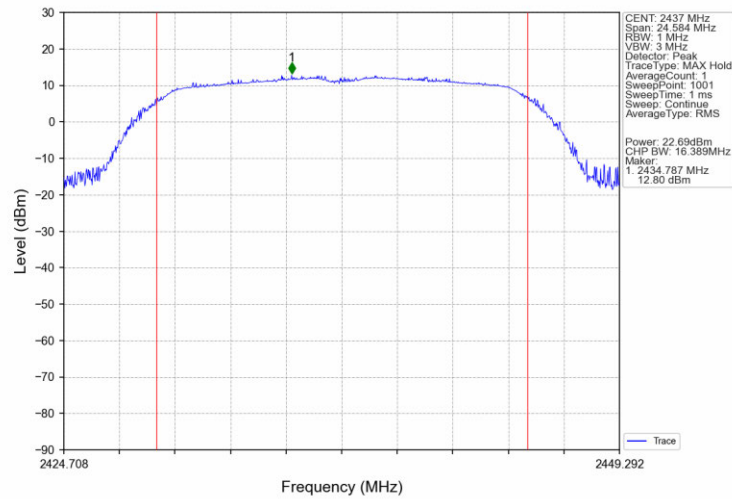
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



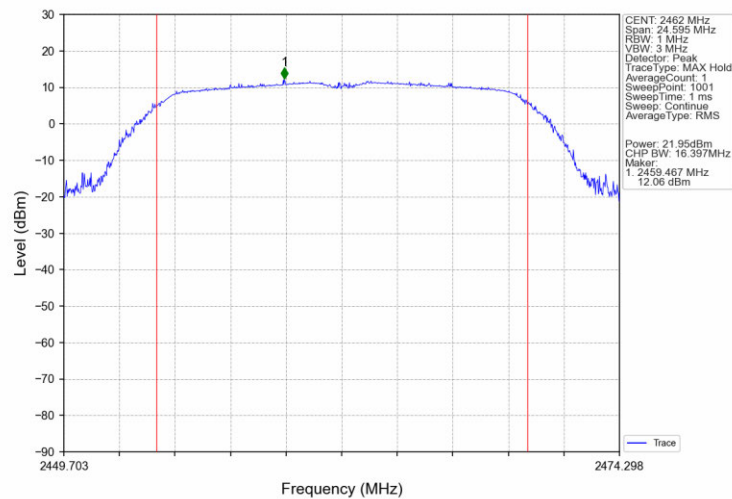
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



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

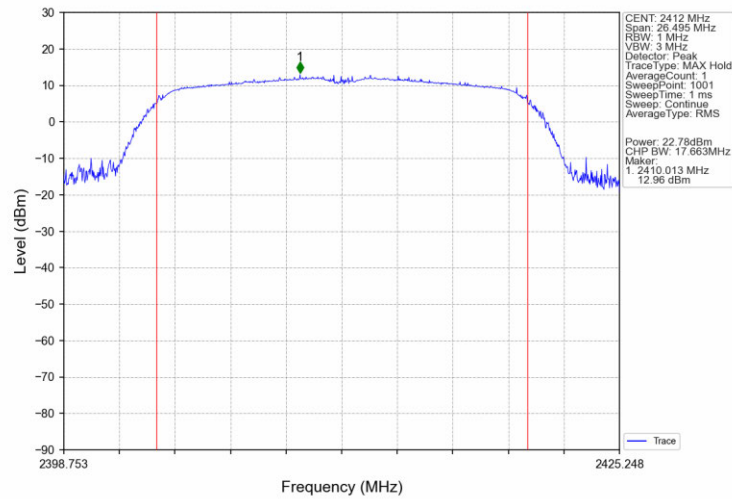


## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

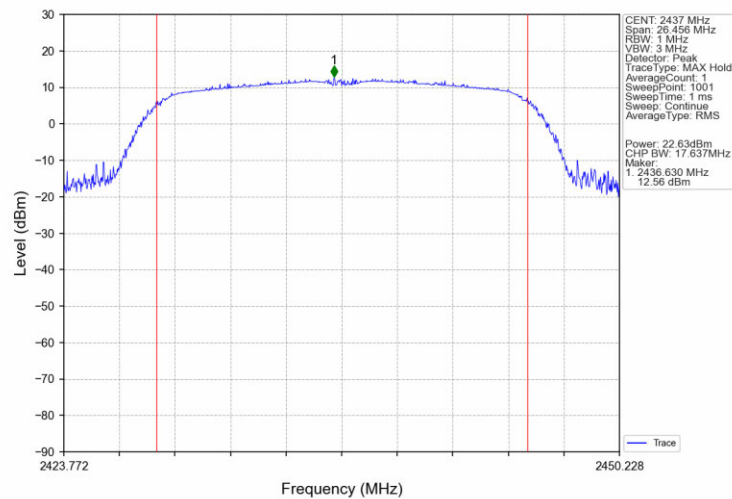




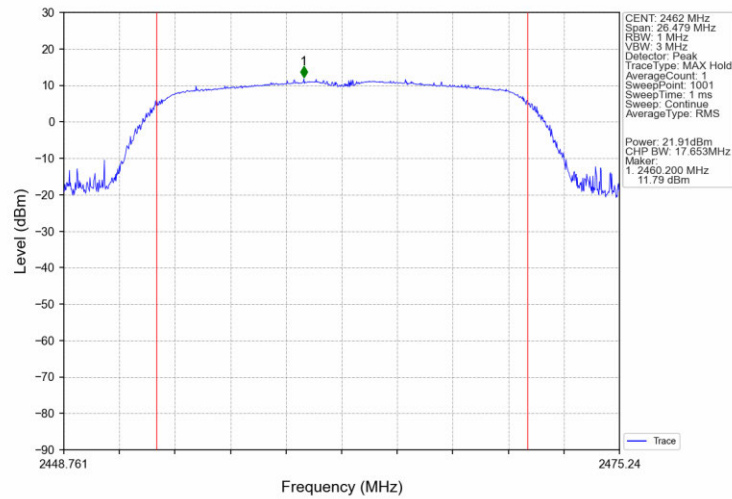
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



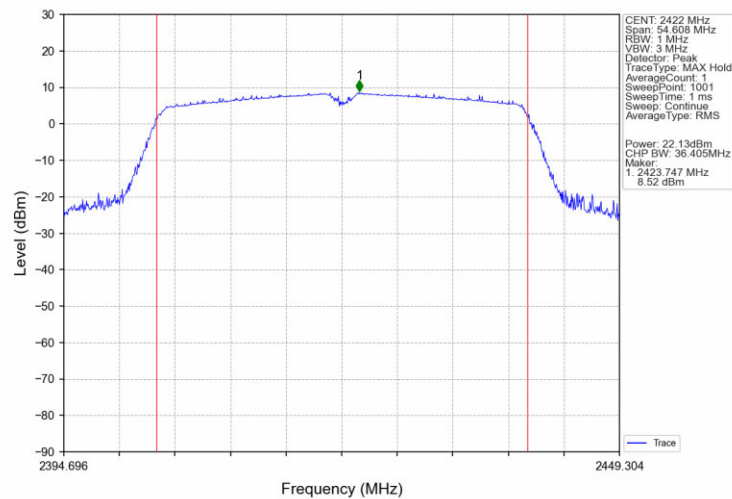
## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



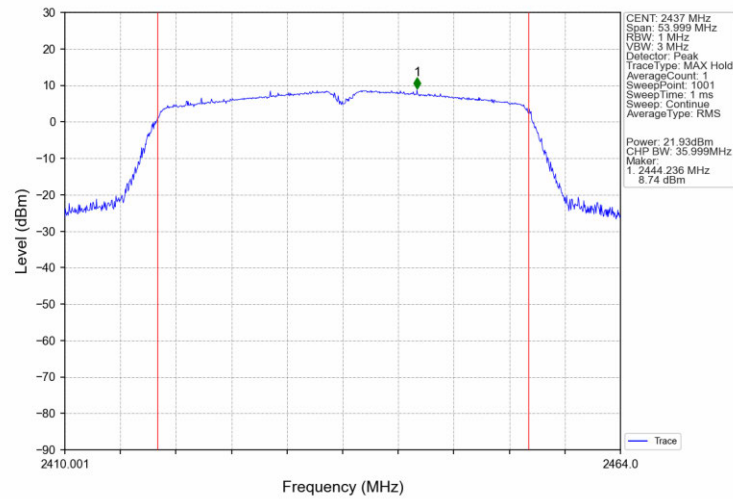
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



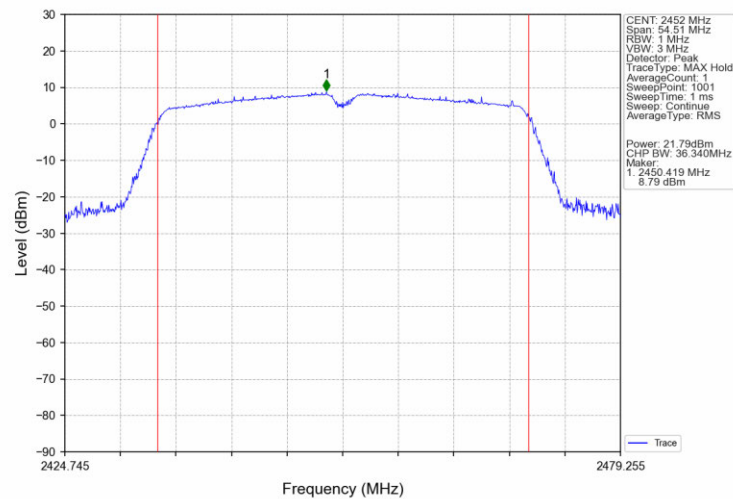
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



## 4. Maximum Power Spectral Density

### 4.1 Test Result

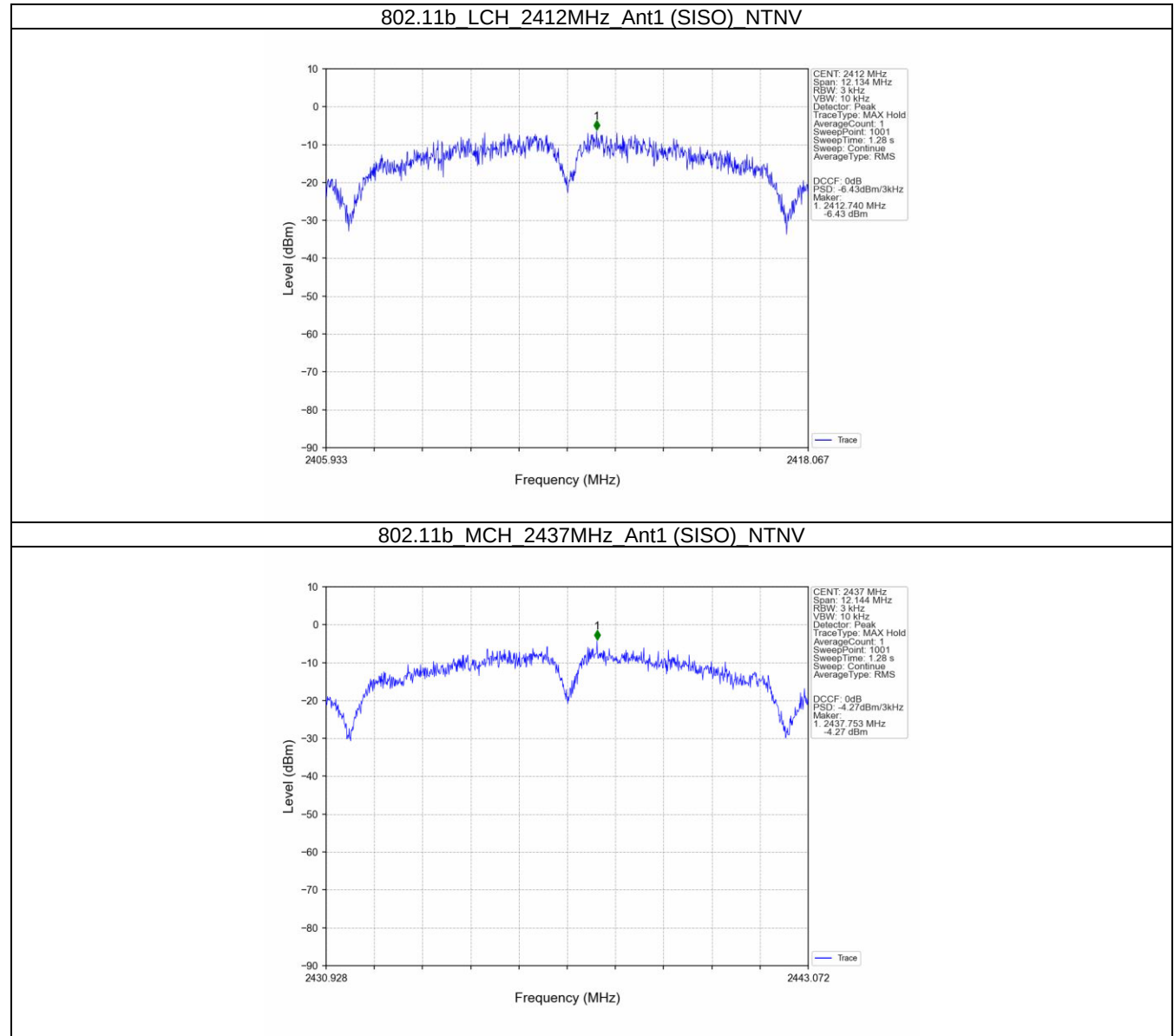
#### 4.1.1 PSD

| Mode           | TX Type | Frequency (MHz) | Maximum PSD (dBm/3kHz) |       | Verdict |
|----------------|---------|-----------------|------------------------|-------|---------|
|                |         |                 | ANT1                   | Limit |         |
| 802.11b        | SISO    | 2412            | -6.43                  | <=8   | Pass    |
|                |         | 2437            | -4.27                  | <=8   | Pass    |
|                |         | 2462            | -6.22                  | <=8   | Pass    |
| 802.11g        | SISO    | 2412            | -9.90                  | <=8   | Pass    |
|                |         | 2437            | -10.07                 | <=8   | Pass    |
|                |         | 2462            | -10.19                 | <=8   | Pass    |
| 802.11n (HT20) | SISO    | 2412            | -10.50                 | <=8   | Pass    |
|                |         | 2437            | -10.39                 | <=8   | Pass    |
|                |         | 2462            | -10.54                 | <=8   | Pass    |
| 802.11n (HT40) | SISO    | 2422            | -14.23                 | <=8   | Pass    |
|                |         | 2437            | -14.16                 | <=8   | Pass    |
|                |         | 2452            | -14.60                 | <=8   | Pass    |

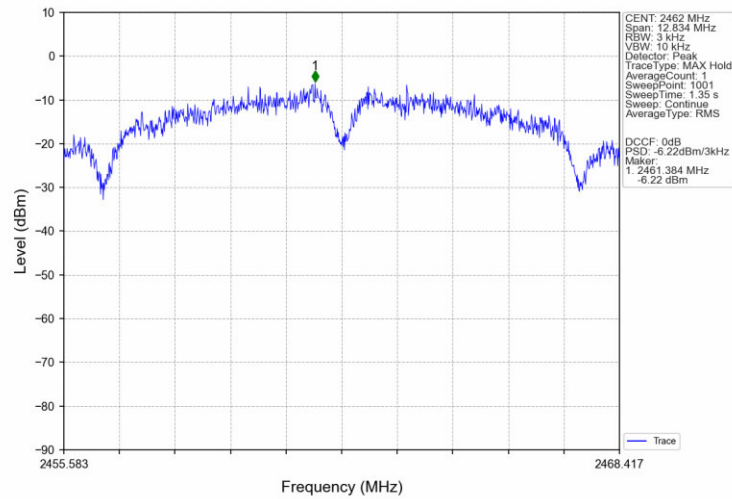
Note1: Antenna Gain: Ant1: 0.85dBi;

## 4.2 Test Graph

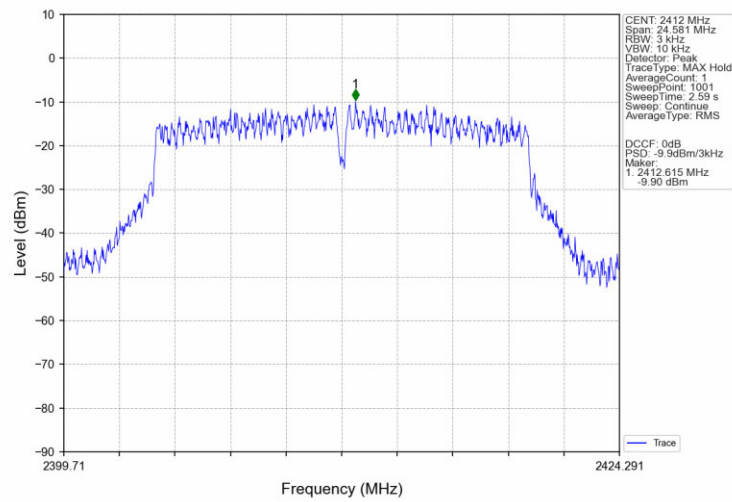
### 4.2.1 PSD



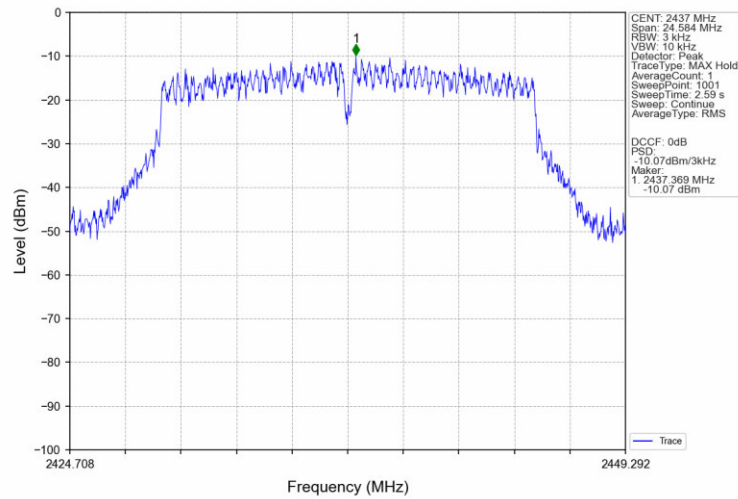
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



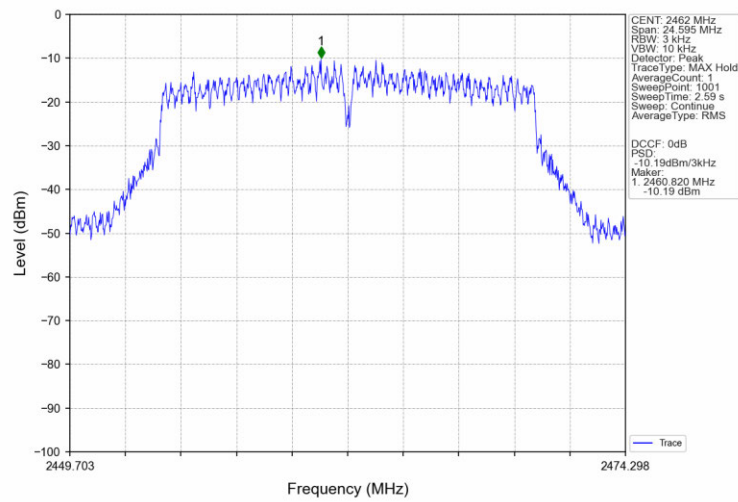
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



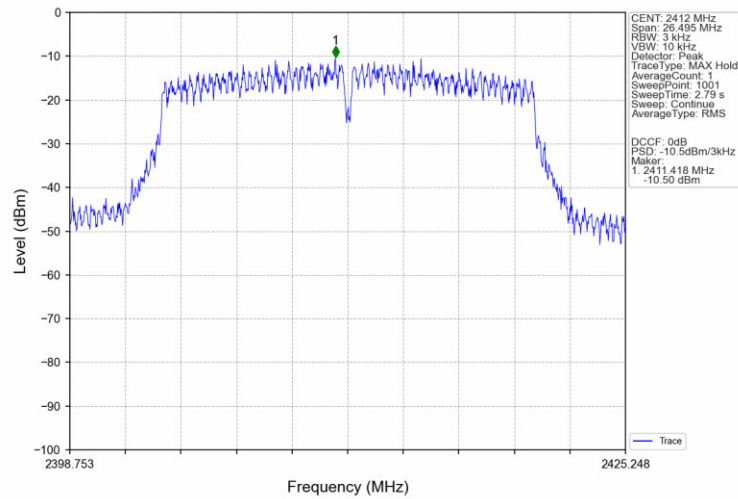
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



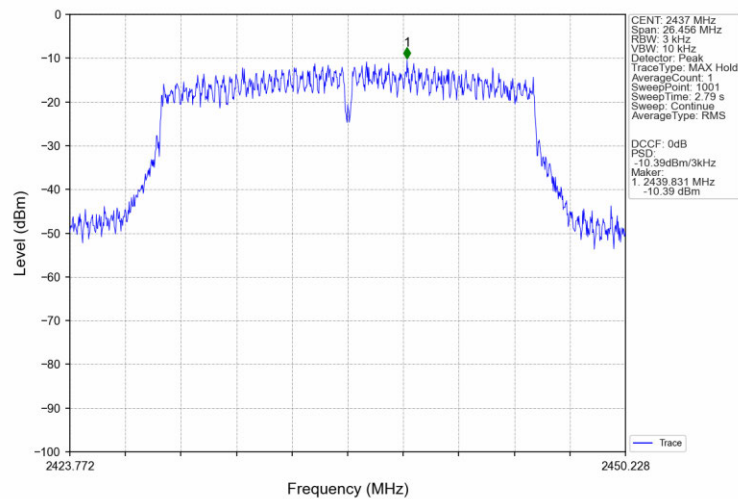
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



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

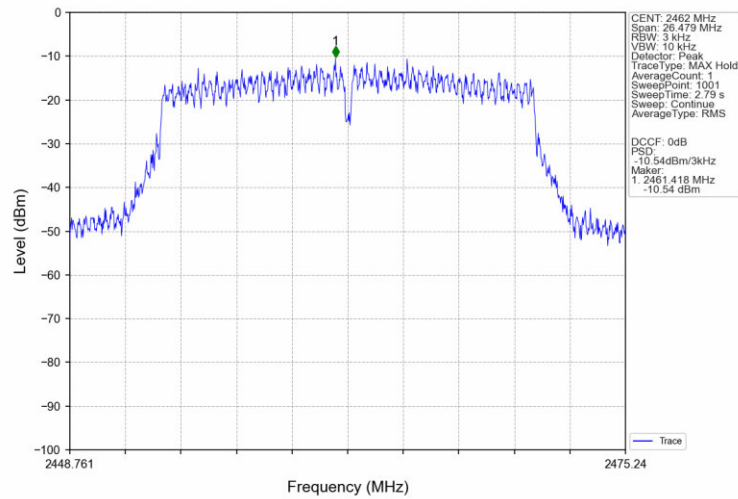


## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

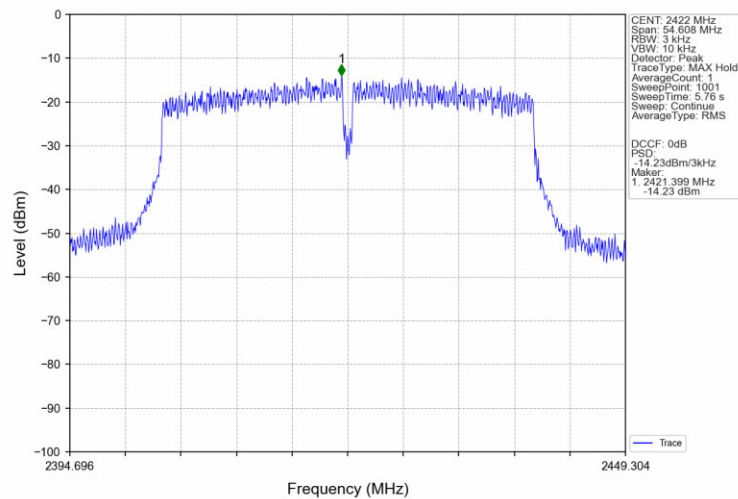




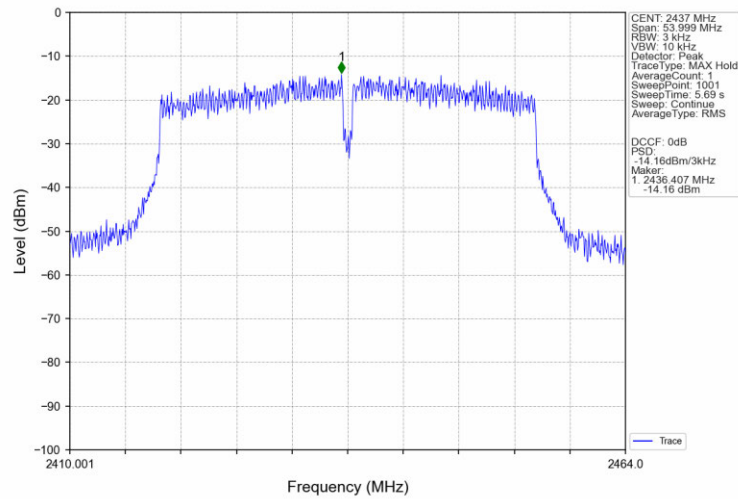
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



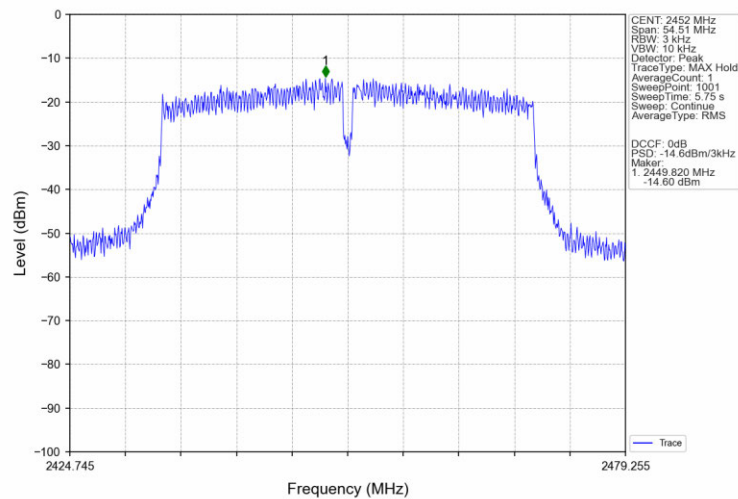
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_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) |
|----------------|---------|-----------------|-----|--------------------------|
| 802.11b        | SISO    | 2412            | 1   | 9.15                     |
|                |         | 2437            | 1   | 8.71                     |
|                |         | 2462            | 1   | 8.43                     |
| 802.11g        | SISO    | 2412            | 1   | 2.00                     |
|                |         | 2437            | 1   | 1.77                     |
|                |         | 2462            | 1   | 1.50                     |
| 802.11n (HT20) | SISO    | 2412            | 1   | 1.69                     |
|                |         | 2437            | 1   | 1.48                     |
|                |         | 2462            | 1   | 1.70                     |
| 802.11n (HT40) | SISO    | 2422            | 1   | -1.87                    |
|                |         | 2437            | 1   | -1.83                    |
|                |         | 2452            | 1   | -1.88                    |

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.

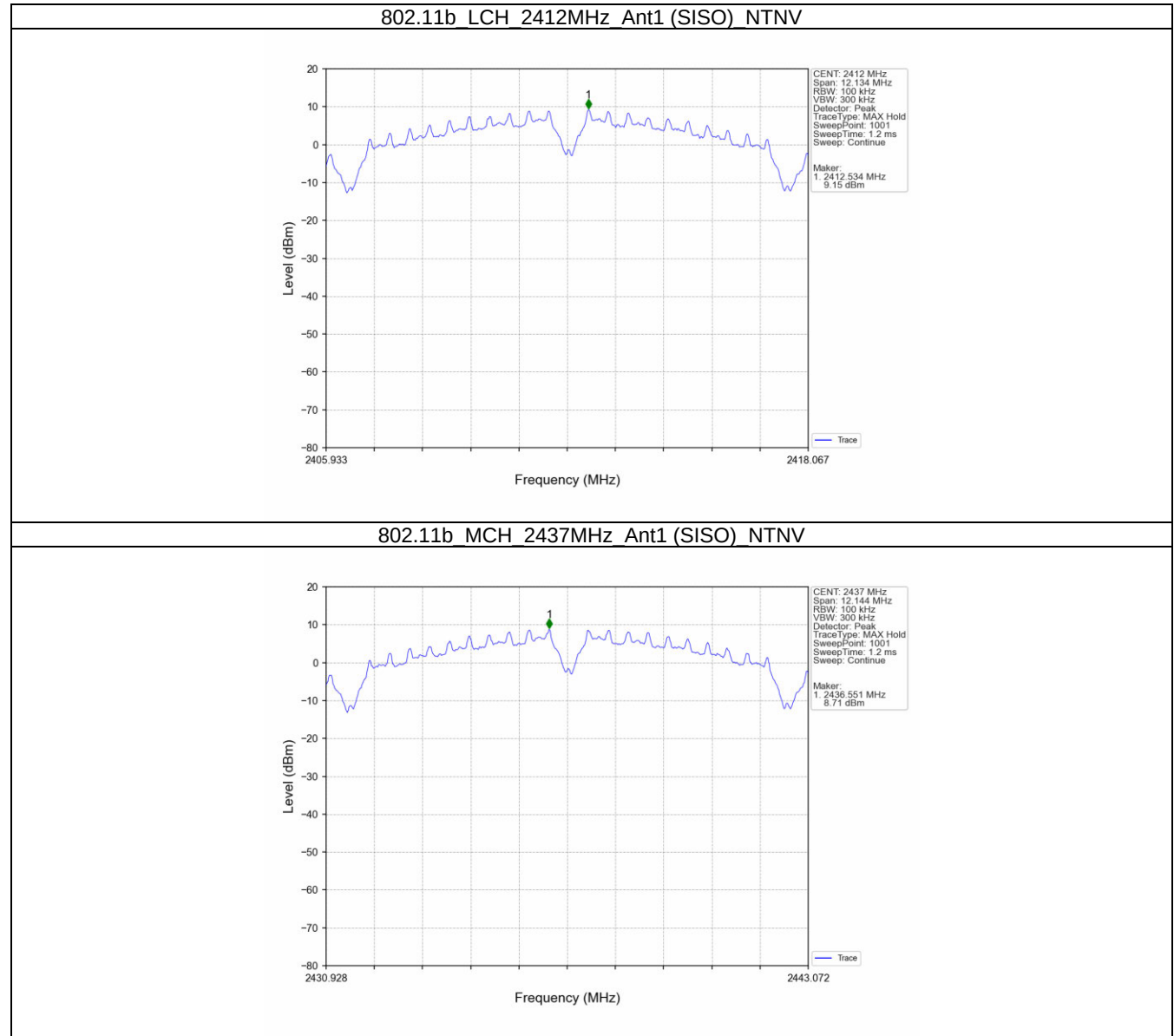
#### 5.1.2 CSE

| Mode           | TX Type | Frequency (MHz) | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|----------------|---------|-----------------|-----|--------------------------|-------------|---------|
| 802.11b        | SISO    | 2412            | 1   | 9.15                     | -10.85      | Pass    |
|                |         | 2437            | 1   | 8.71                     | -11.29      | Pass    |
|                |         | 2462            | 1   | 8.43                     | -11.57      | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 2.00                     | -18.00      | Pass    |
|                |         | 2437            | 1   | 1.77                     | -18.23      | Pass    |
|                |         | 2462            | 1   | 1.50                     | -18.50      | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 1.69                     | -18.31      | Pass    |
|                |         | 2437            | 1   | 1.48                     | -18.52      | Pass    |
|                |         | 2462            | 1   | 1.70                     | -18.30      | Pass    |
| 802.11n (HT40) | SISO    | 2422            | 1   | -1.87                    | -21.87      | Pass    |
|                |         | 2437            | 1   | -1.83                    | -21.83      | Pass    |
|                |         | 2452            | 1   | -1.88                    | -21.88      | Pass    |

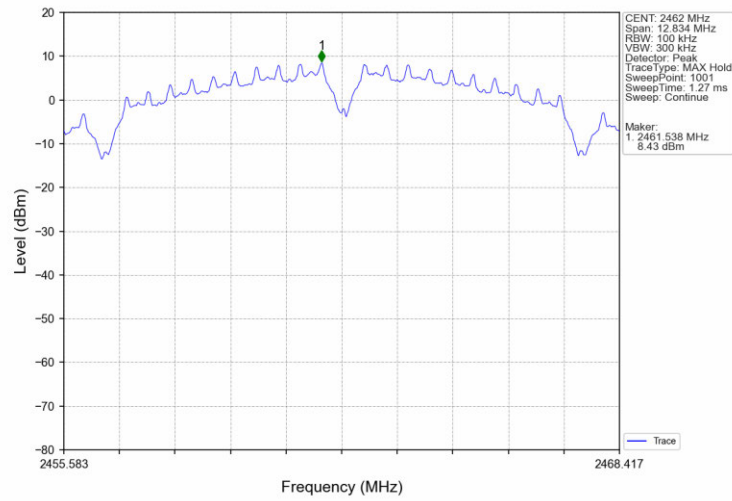
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

## 5.2 Test Graph

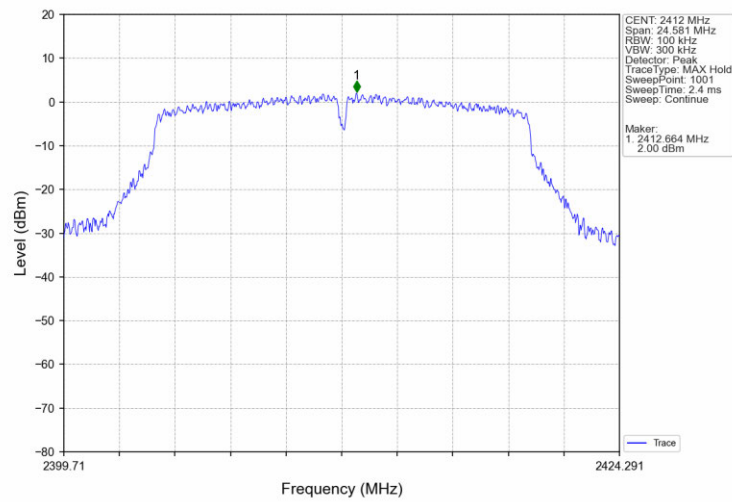
### 5.2.1 Ref



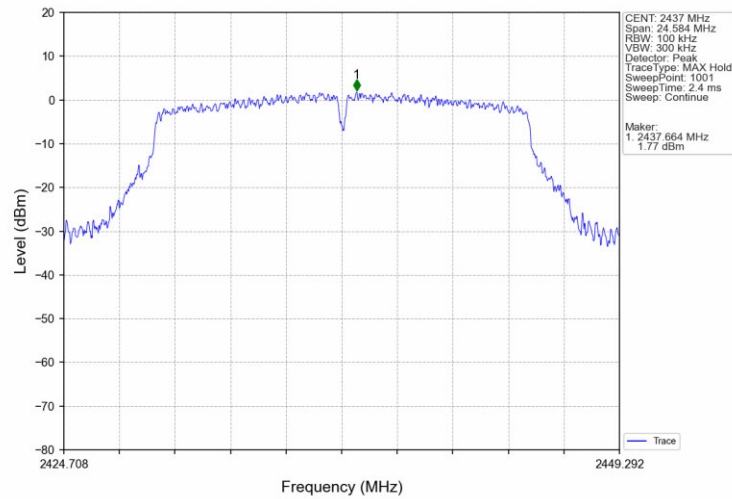
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



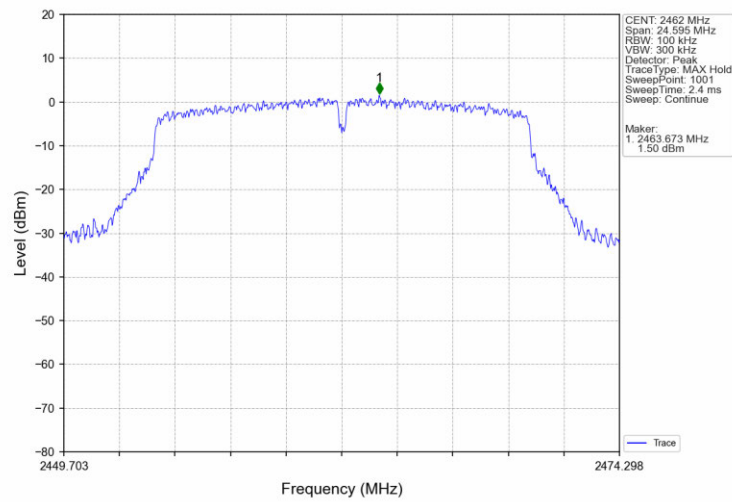
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



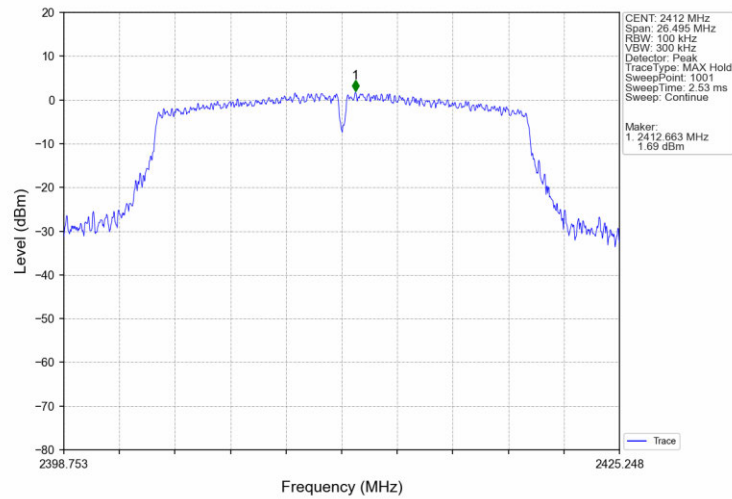
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



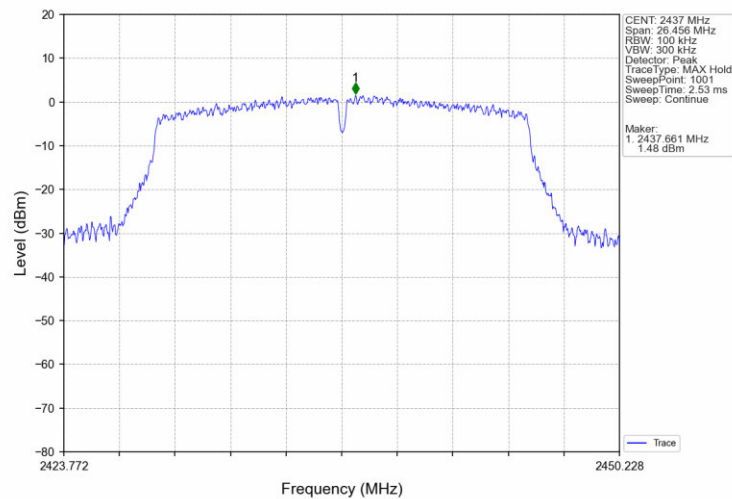
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



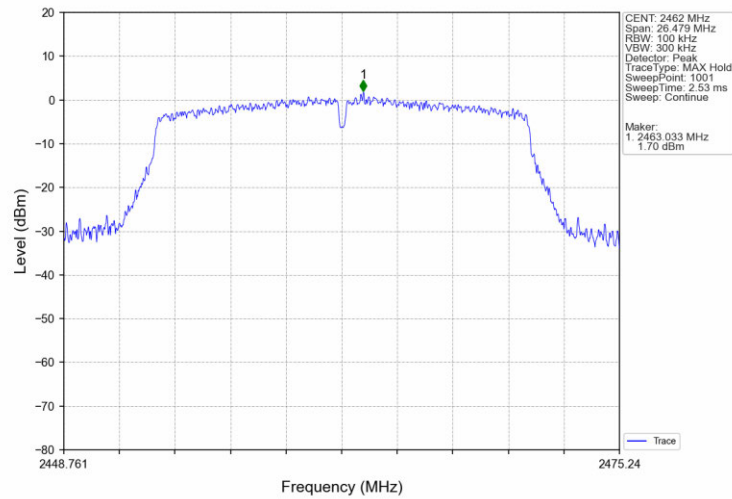
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



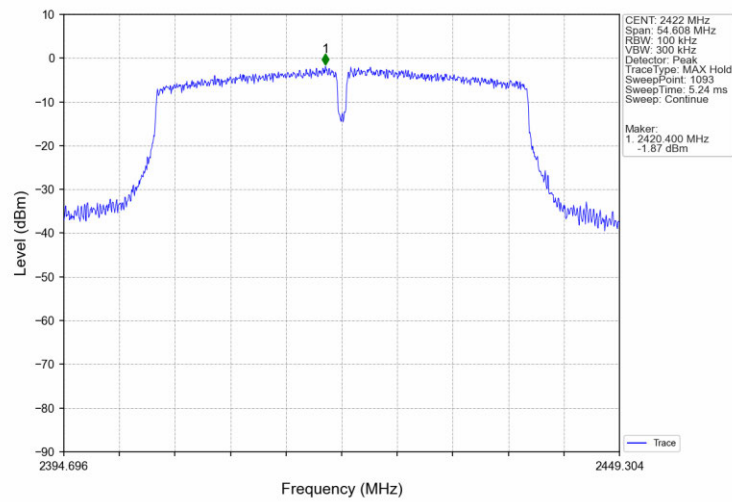
## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



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

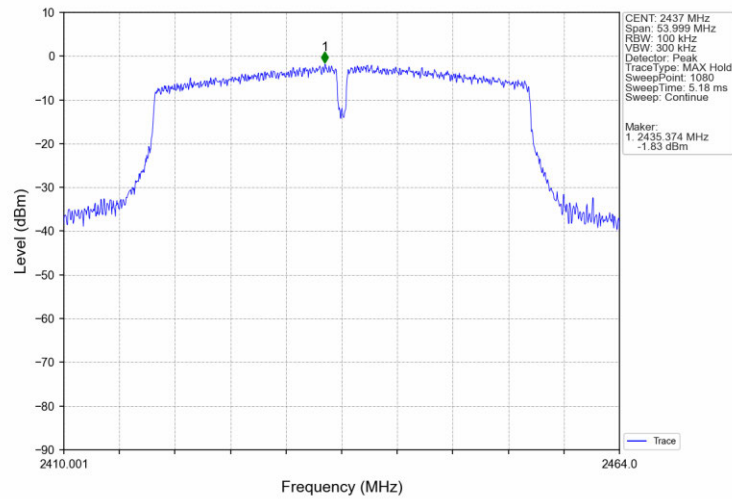


## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV

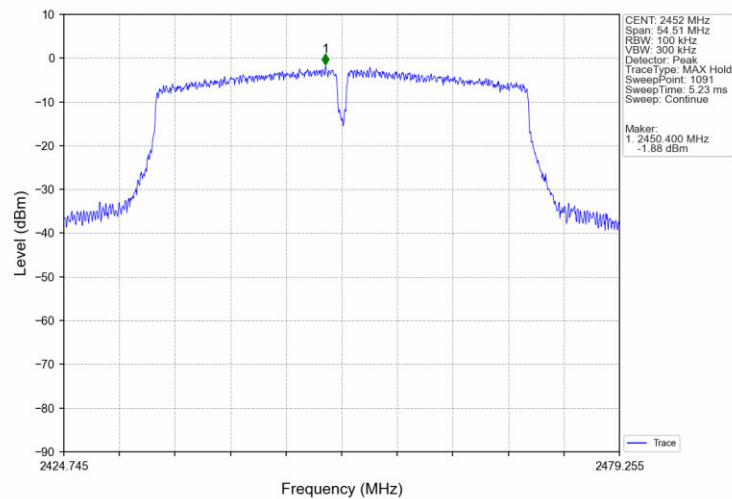




## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

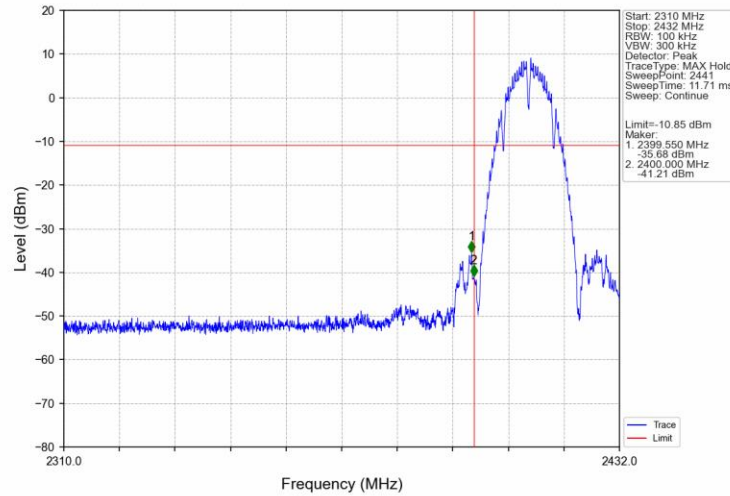


## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV

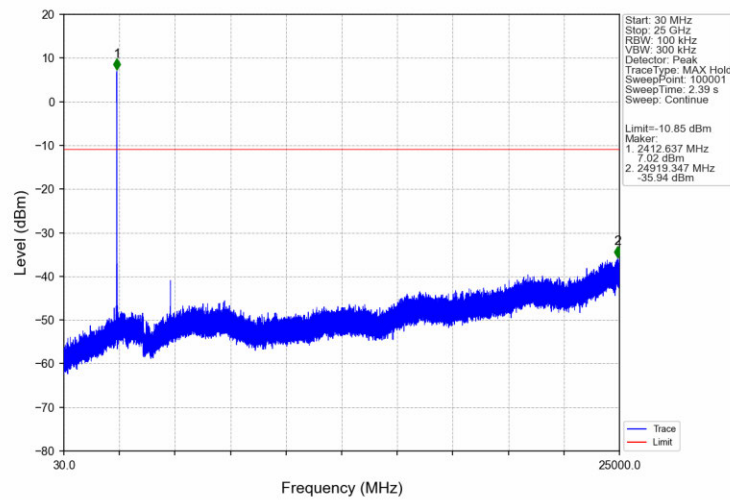


## 5.2.2 CSE

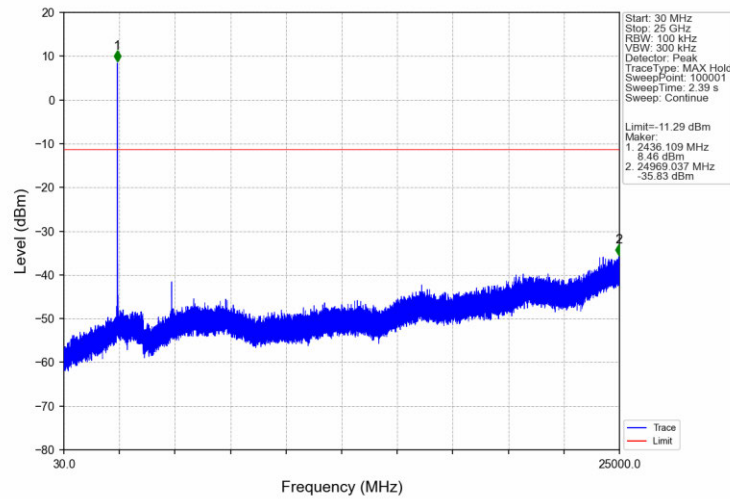
802.11b LCH 2412MHz Ant1 (SISO) NTN



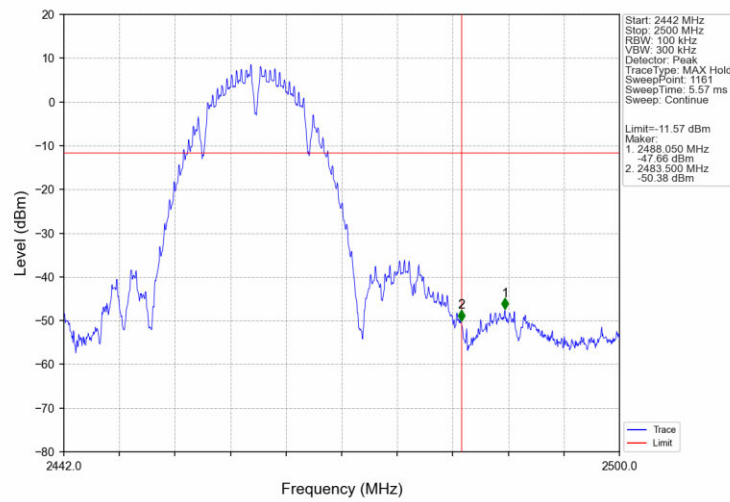
802.11b LCH 2412MHz Ant1 (SISO) NTN



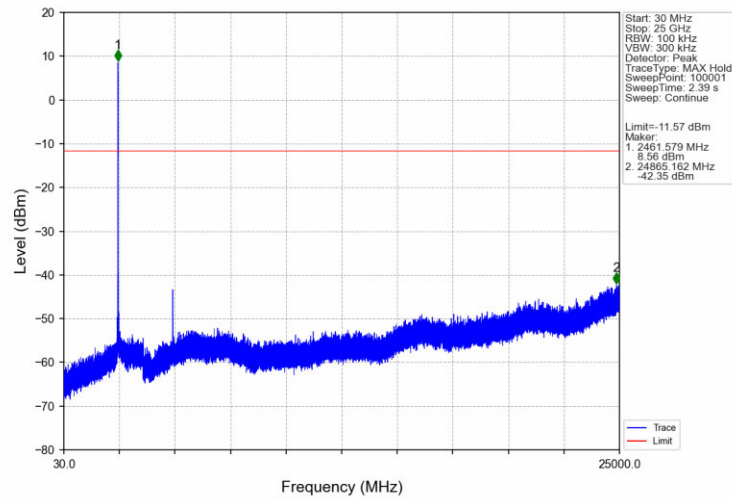
## 802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



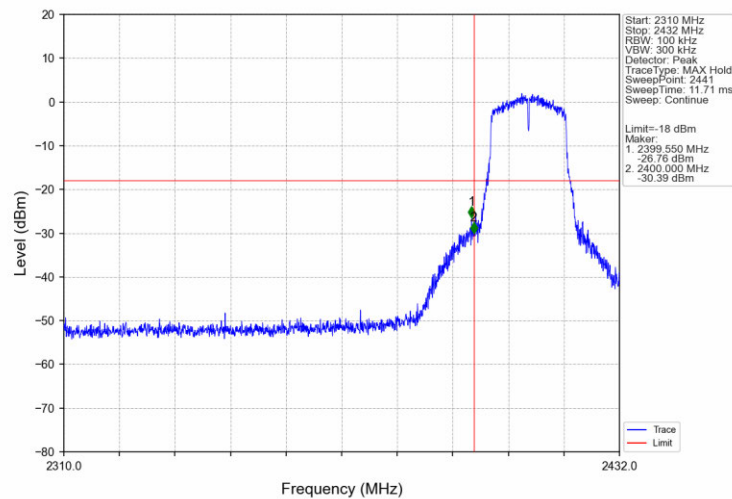
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



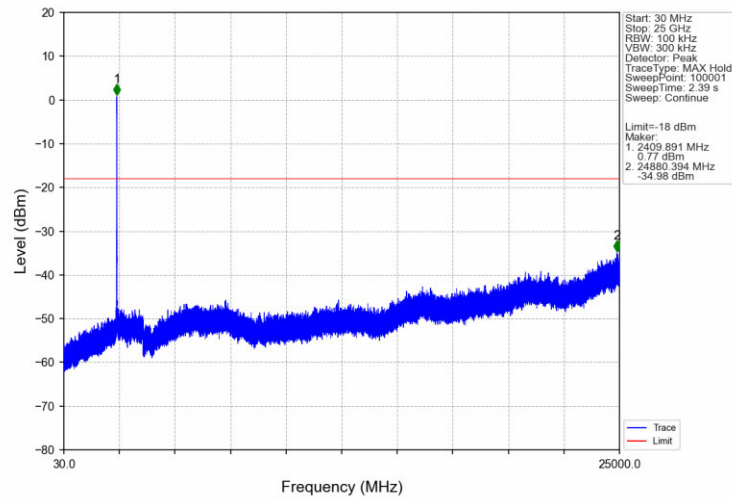
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



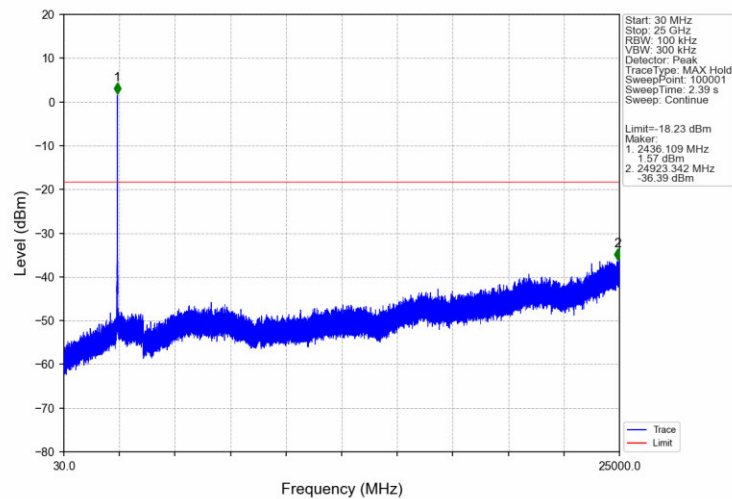
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



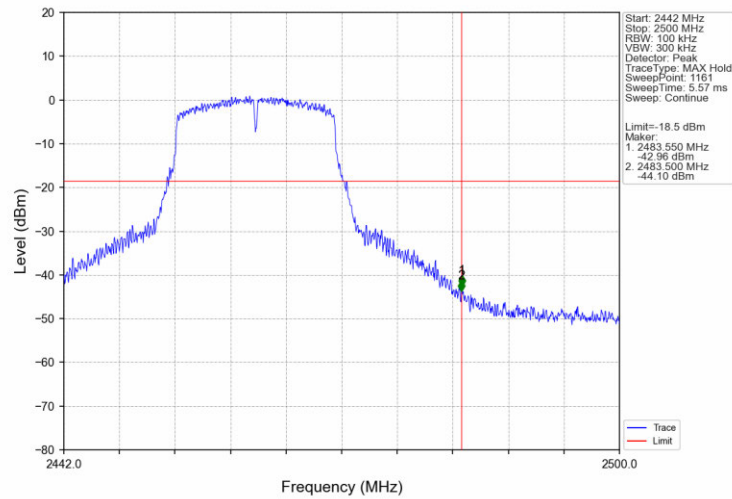
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



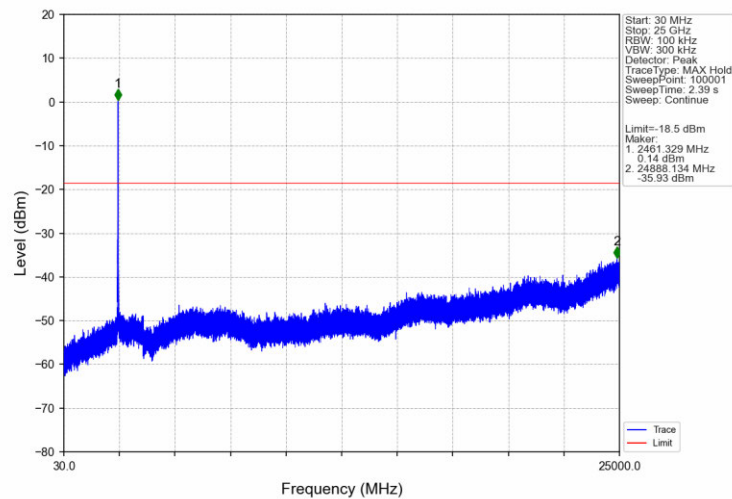
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



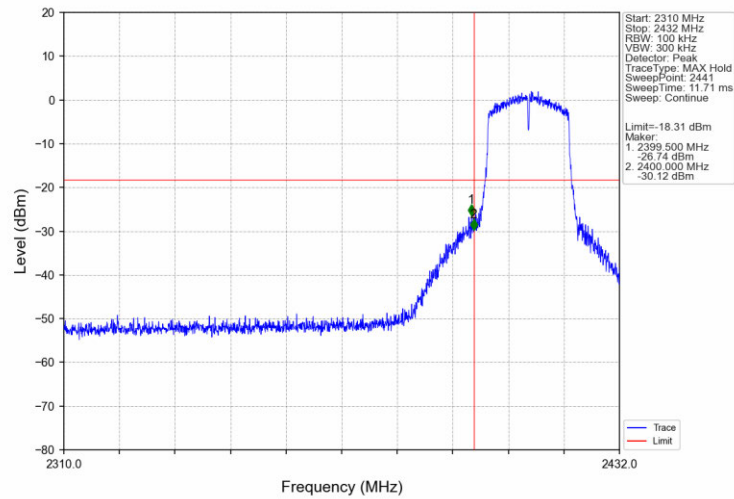
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



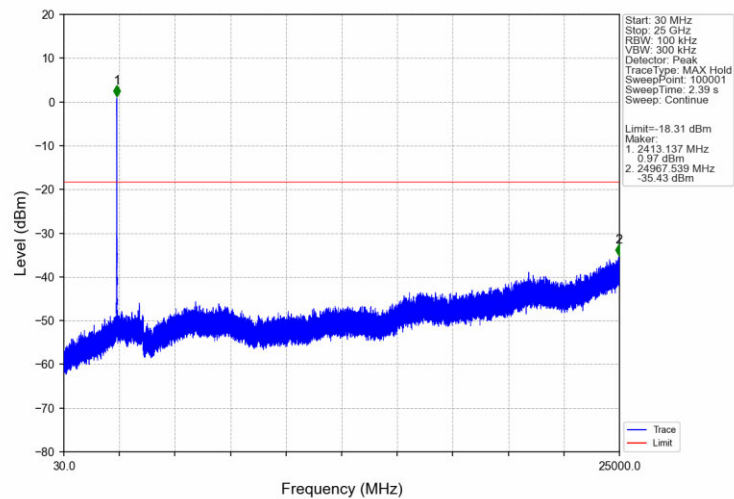
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



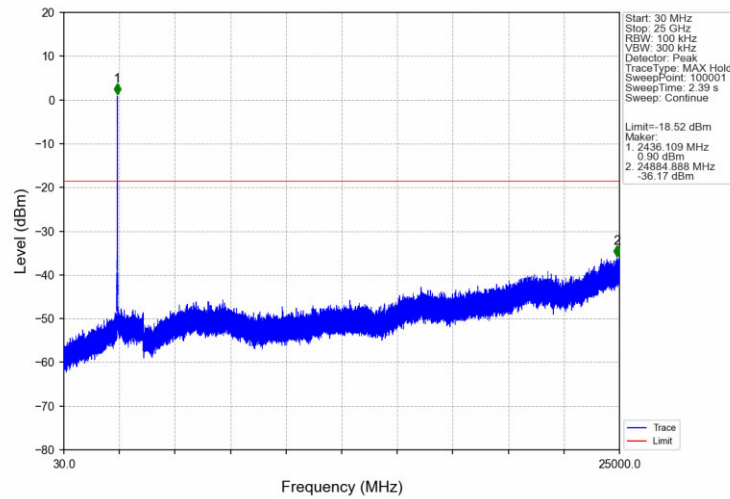
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



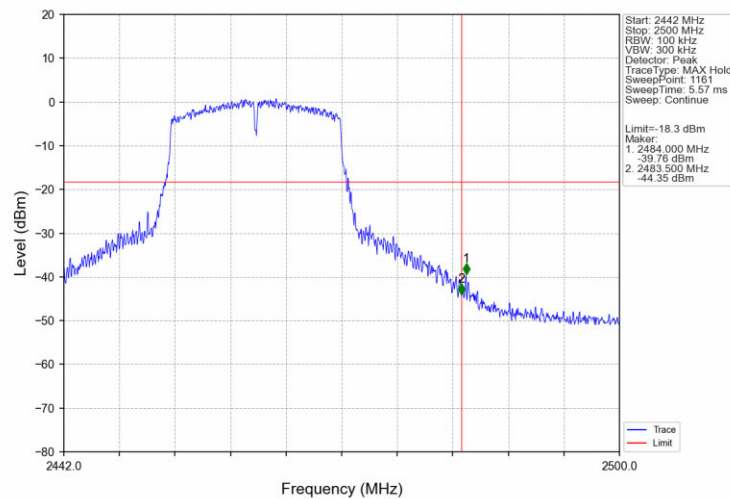
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



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

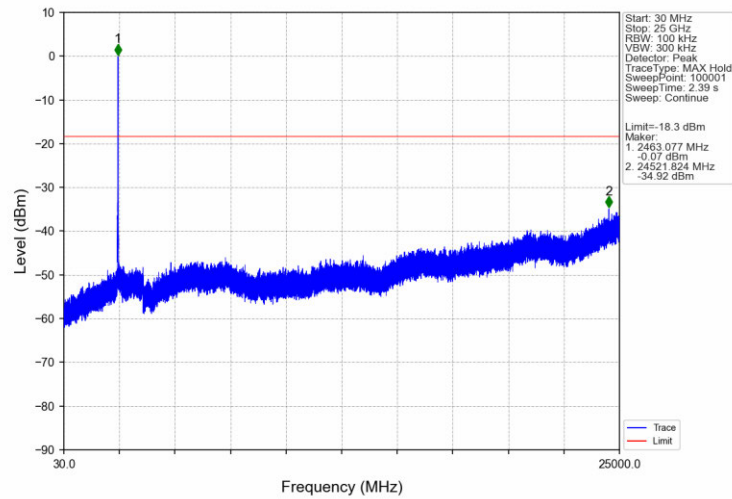


## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

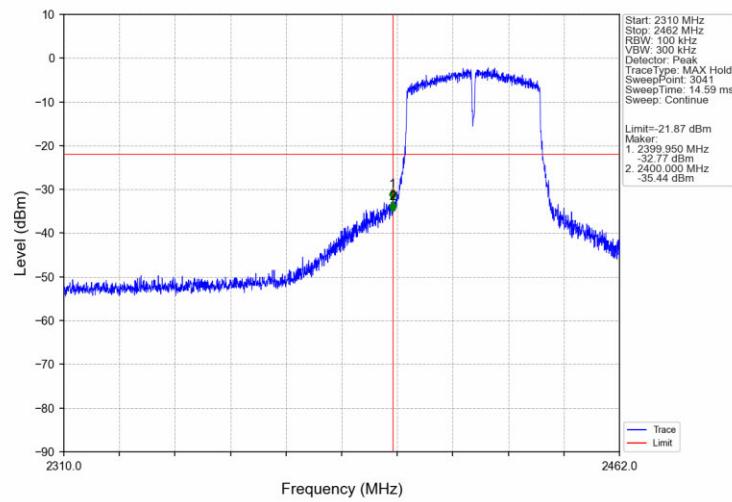




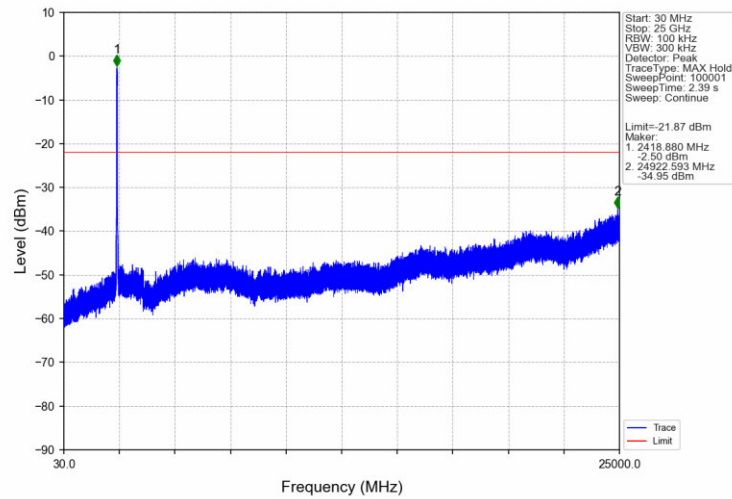
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



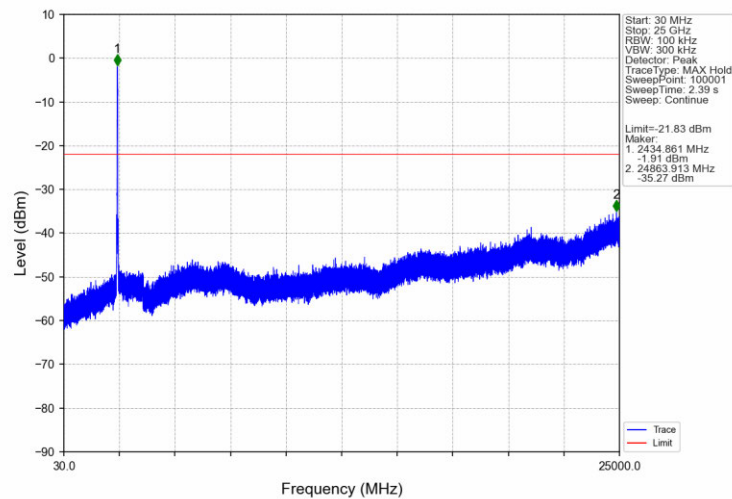
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



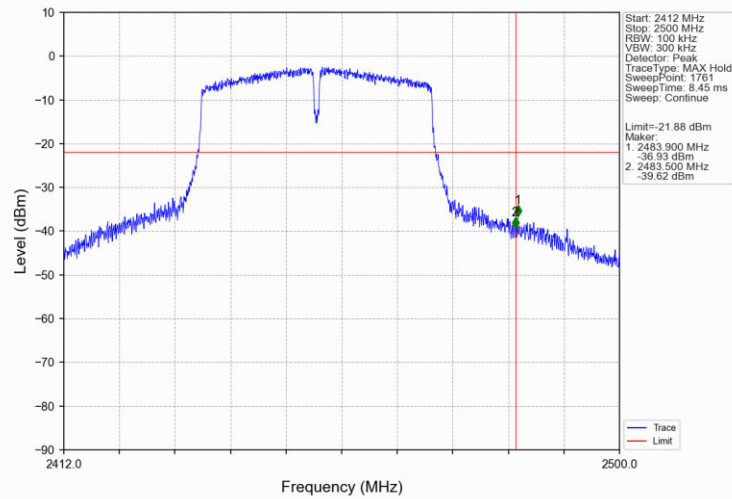
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



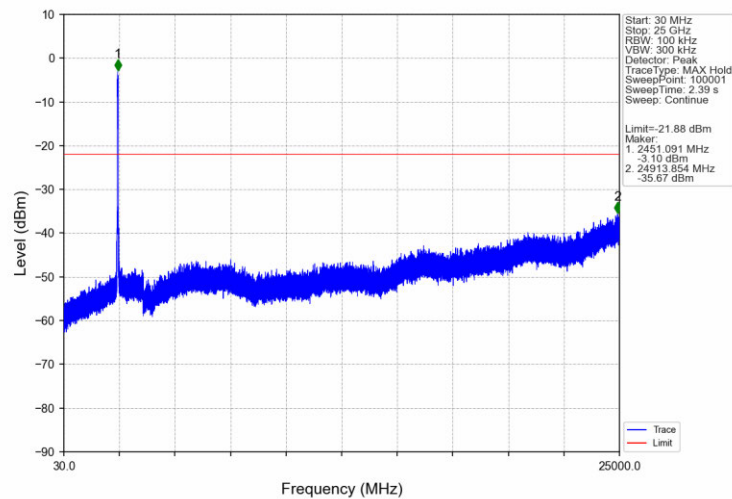
## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



## 6. Form731

### 6.1 Test Result

#### 6.1.1 Form731

| Lower Freq (MHz) | High Freq (MHz) | MAX Power (W) | MAX Power (dBm) |
|------------------|-----------------|---------------|-----------------|
| 2412             | 2462            | 0.1897        | 22.78           |
| 2422             | 2452            | 0.1633        | 22.13           |