

## 1. Bandwidth

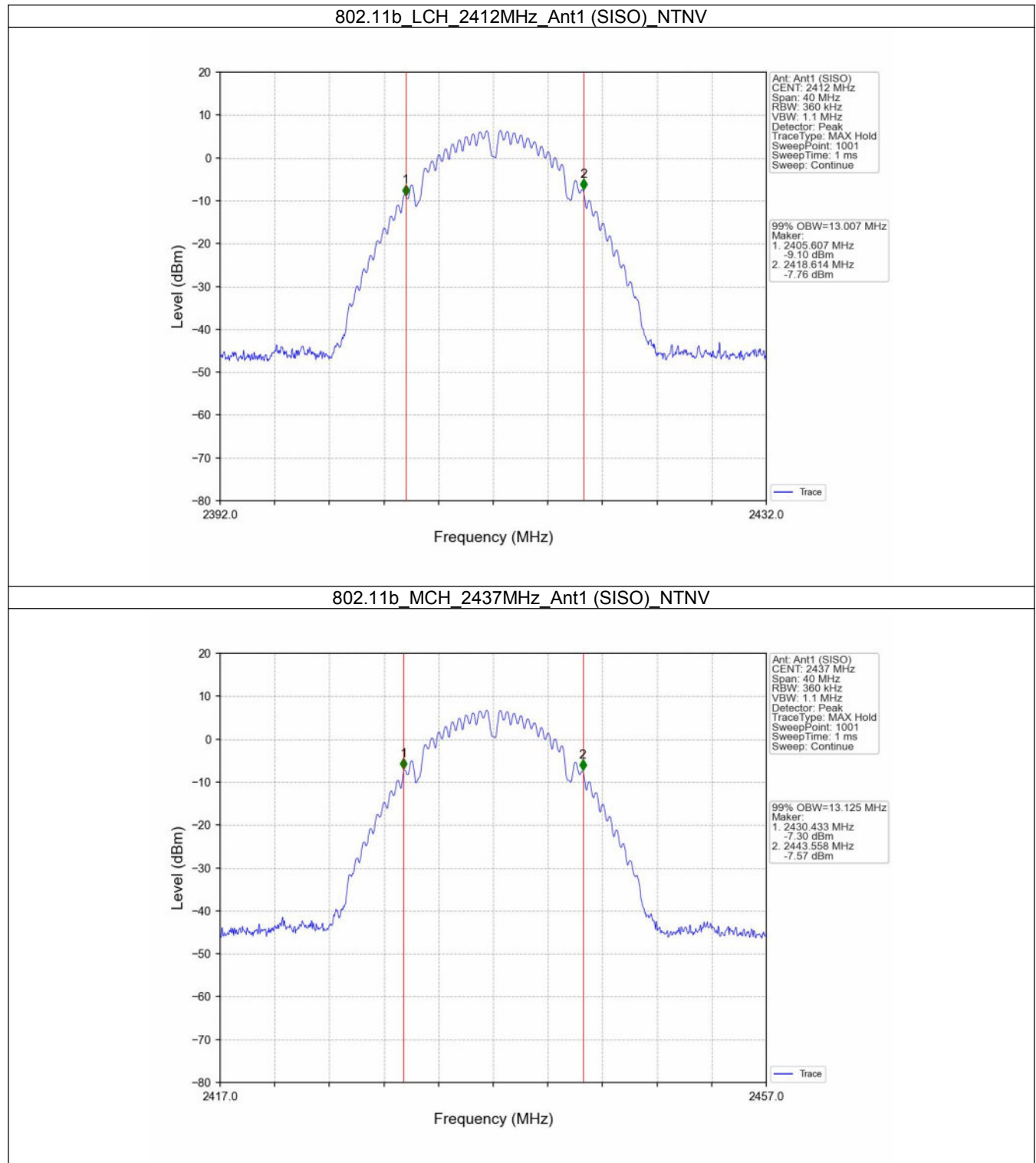
### 1.1 OBW

#### 1.1.1 Test Result

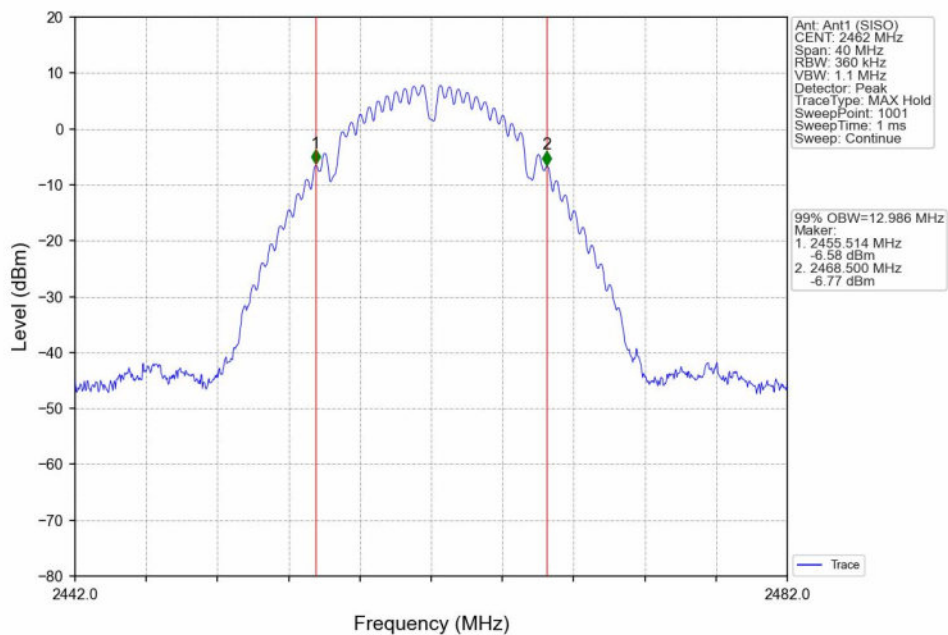
| Mode           | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) | Verdict |
|----------------|---------|-----------------|-----|------------------------------|---------|
|                |         |                 |     | Result                       |         |
| 802.11b        | SISO    | 2412            | 1   | 13.007                       | Pass    |
|                |         | 2437            | 1   | 13.125                       | Pass    |
|                |         | 2462            | 1   | 12.986                       | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 16.638                       | Pass    |
|                |         | 2437            | 1   | 16.695                       | Pass    |
|                |         | 2462            | 1   | 16.604                       | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 17.516                       | Pass    |
|                |         | 2437            | 1   | 17.592                       | Pass    |
|                |         | 2462            | 1   | 17.515                       | Pass    |
| 802.11n (HT40) | SISO    | 2422            | 1   | 35.878                       | Pass    |
|                |         | 2437            | 1   | 36.234                       | Pass    |
|                |         | 2452            | 1   | 36.031                       | Pass    |

| Mode           | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) | Verdict |
|----------------|---------|-----------------|-----|------------------------------|---------|
|                |         |                 |     | Result                       |         |
| 802.11b        | SISO    | 2412            | 2   | 13.035                       | Pass    |
|                |         | 2437            | 2   | 13.101                       | Pass    |
|                |         | 2462            | 2   | 12.969                       | Pass    |
| 802.11g        | SISO    | 2412            | 2   | 16.664                       | Pass    |
|                |         | 2437            | 2   | 16.675                       | Pass    |
|                |         | 2462            | 2   | 16.614                       | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 2   | 17.565                       | Pass    |
|                |         | 2437            | 2   | 17.547                       | Pass    |
|                |         | 2462            | 2   | 17.489                       | Pass    |
| 802.11n (HT40) | SISO    | 2422            | 2   | 35.876                       | Pass    |
|                |         | 2437            | 2   | 36.160                       | Pass    |
|                |         | 2452            | 2   | 36.087                       | Pass    |

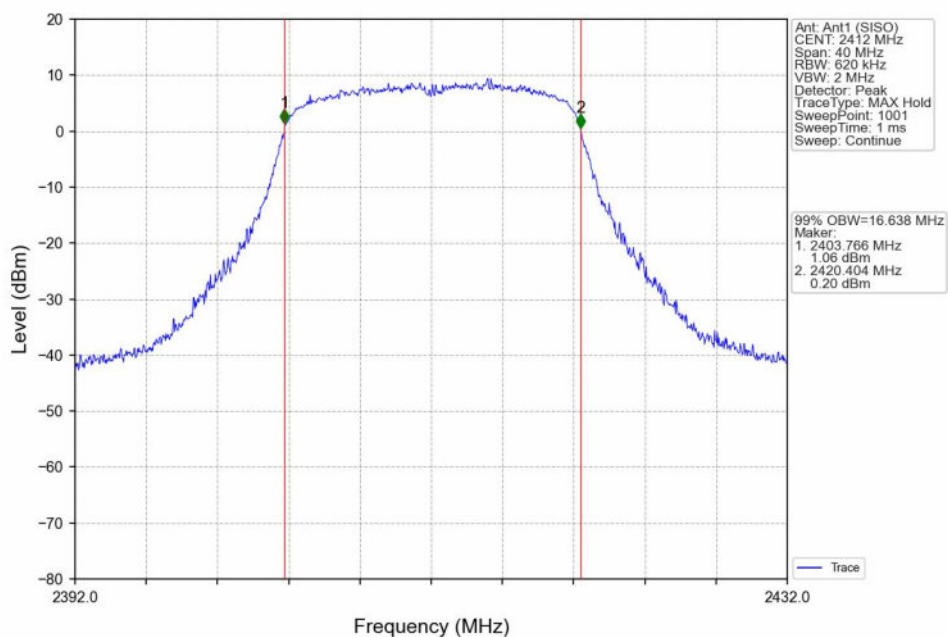
## 1.1.2 Test Graph



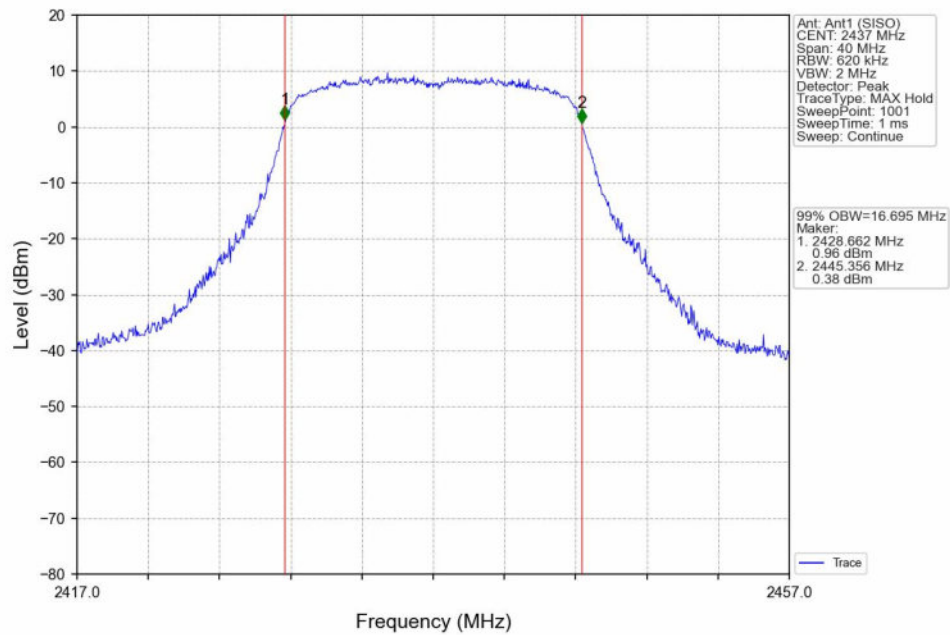
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



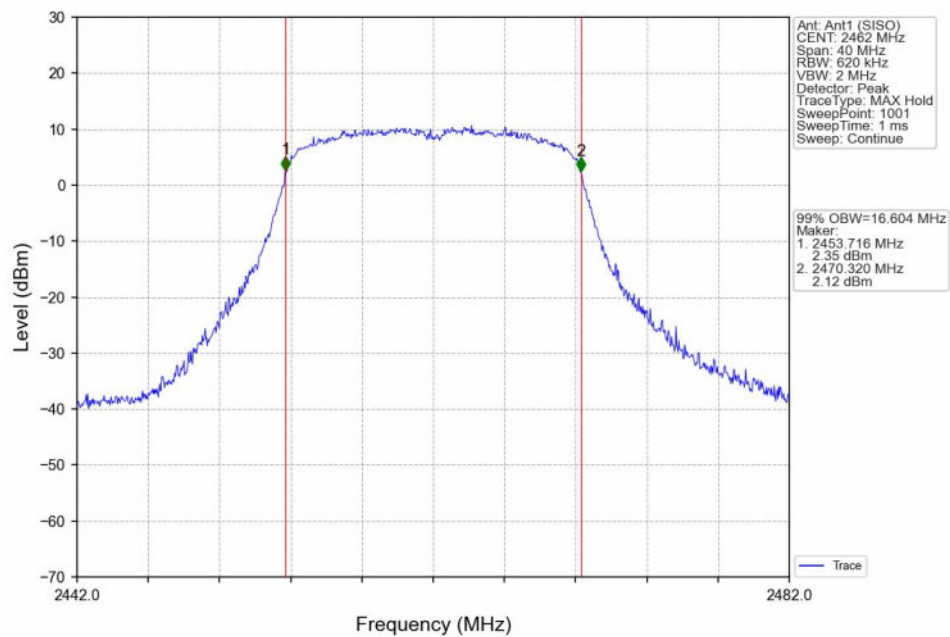
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



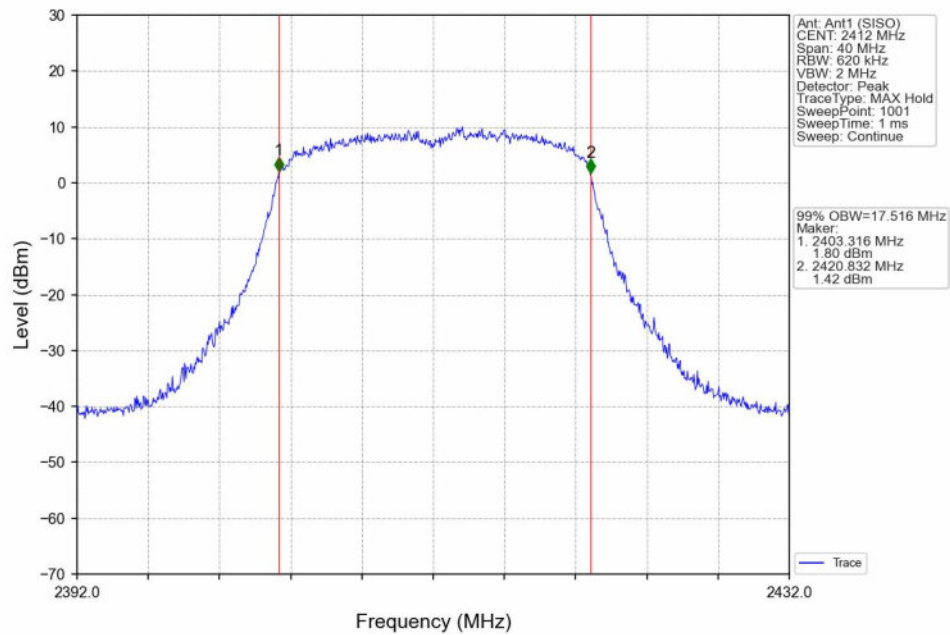
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



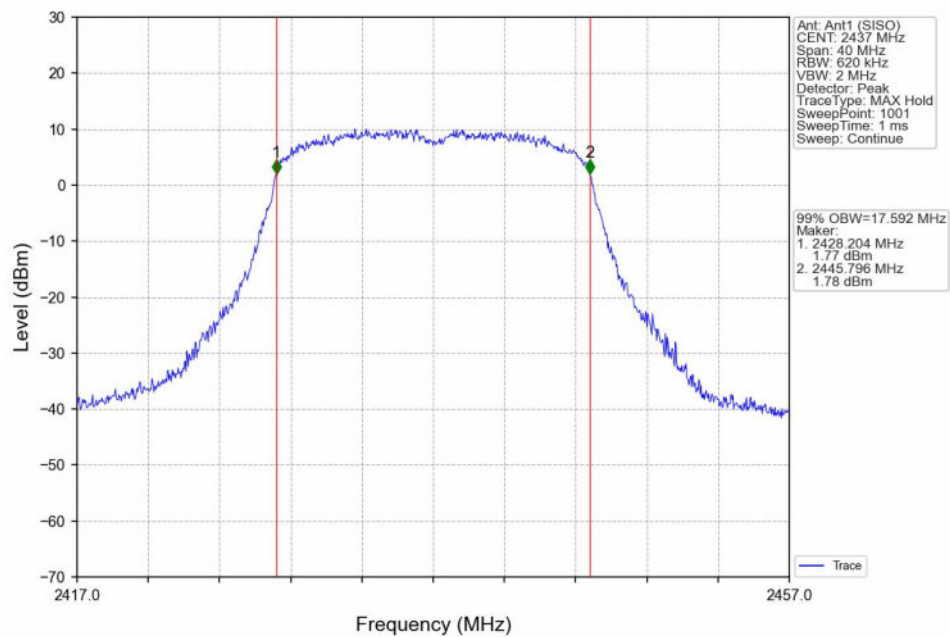
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



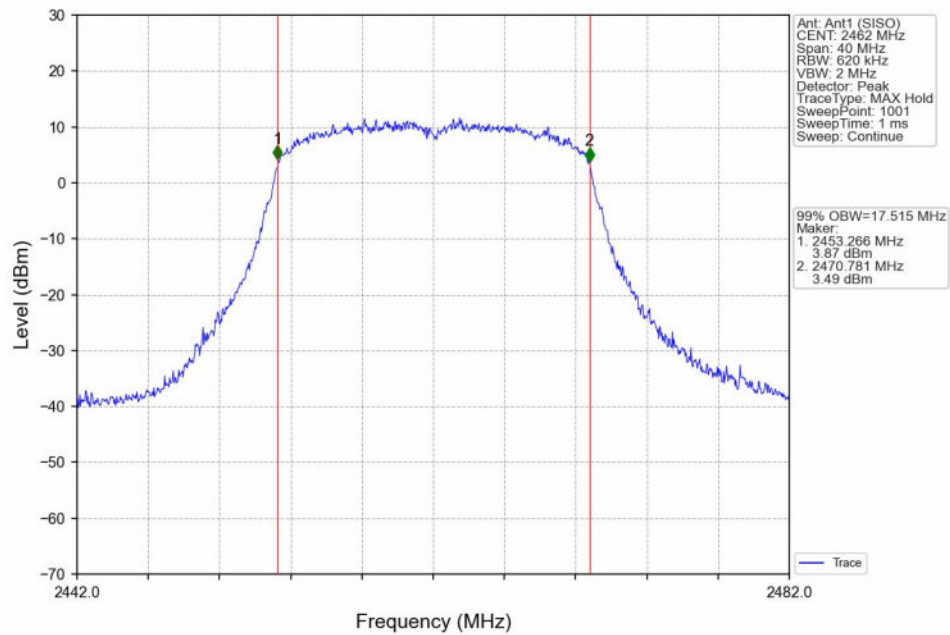
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



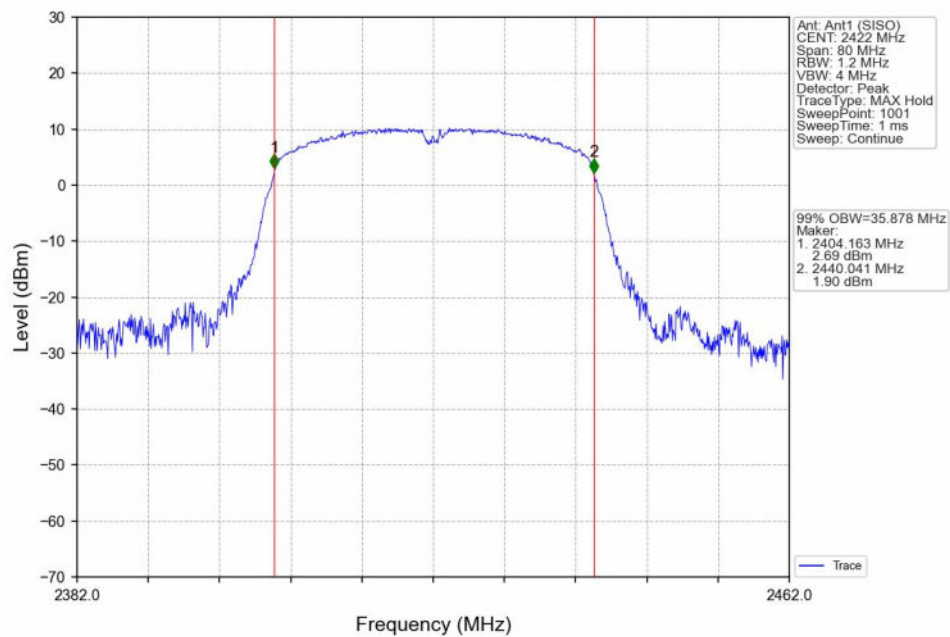
802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



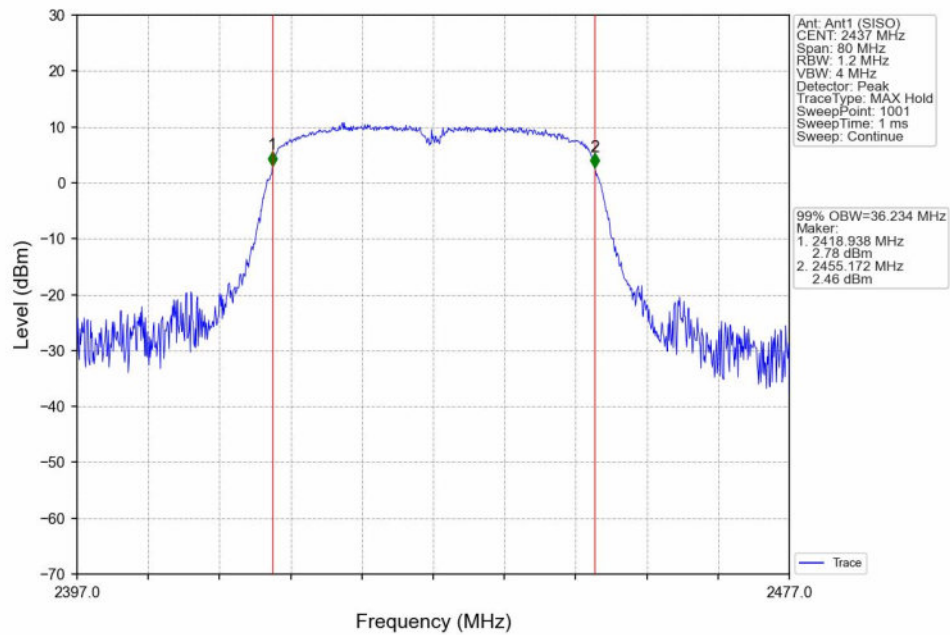
802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



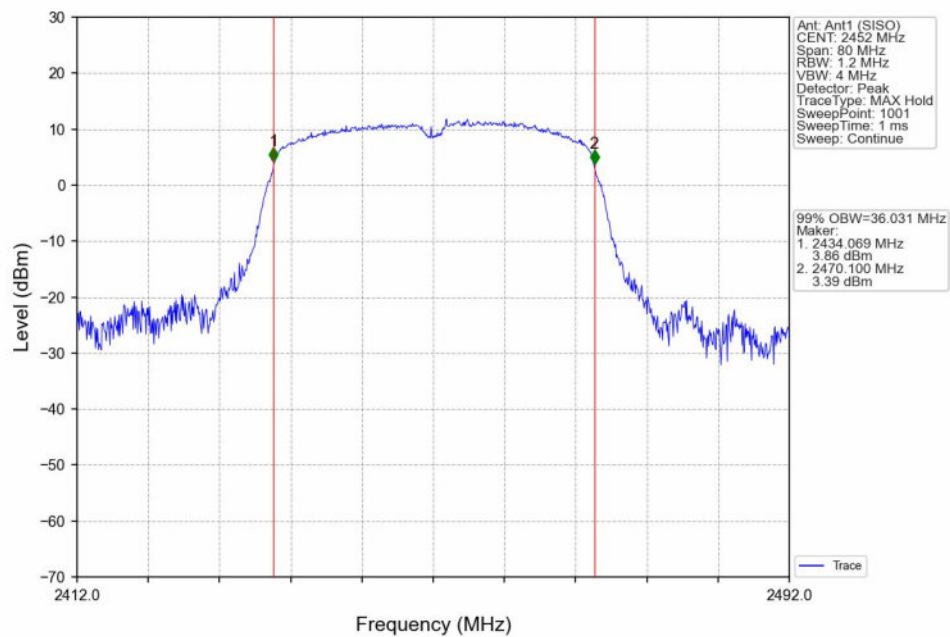
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



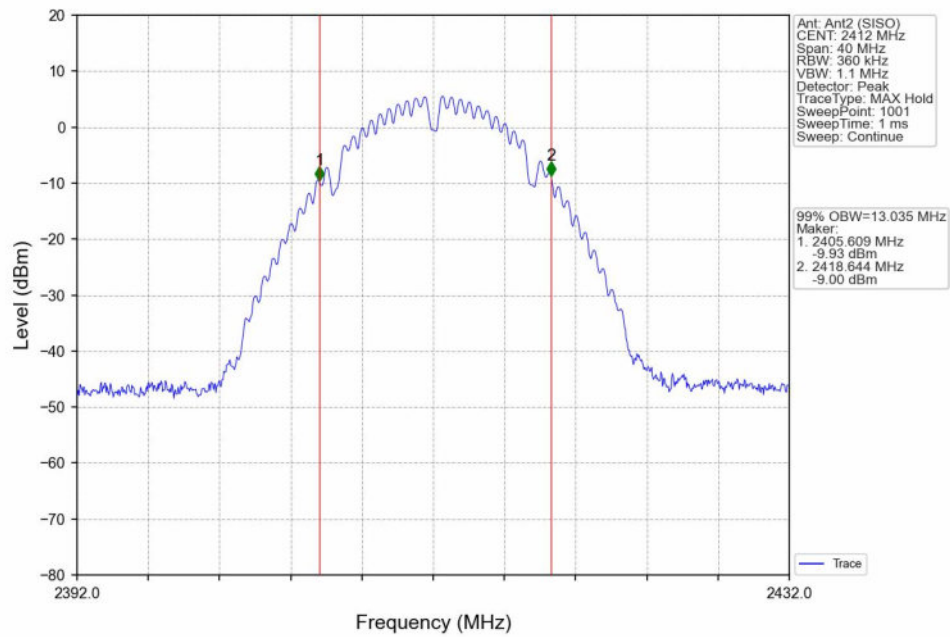
802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



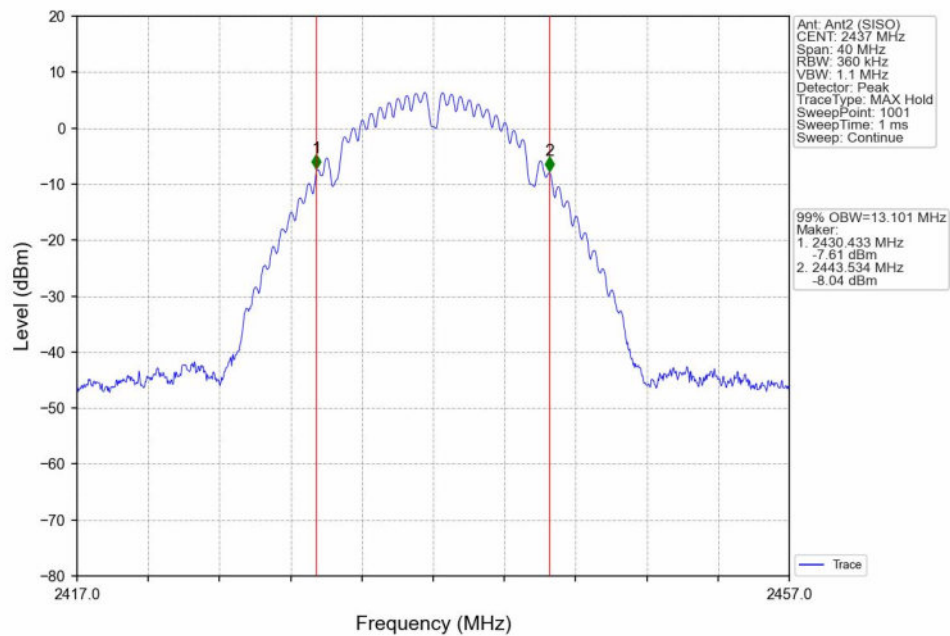
802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



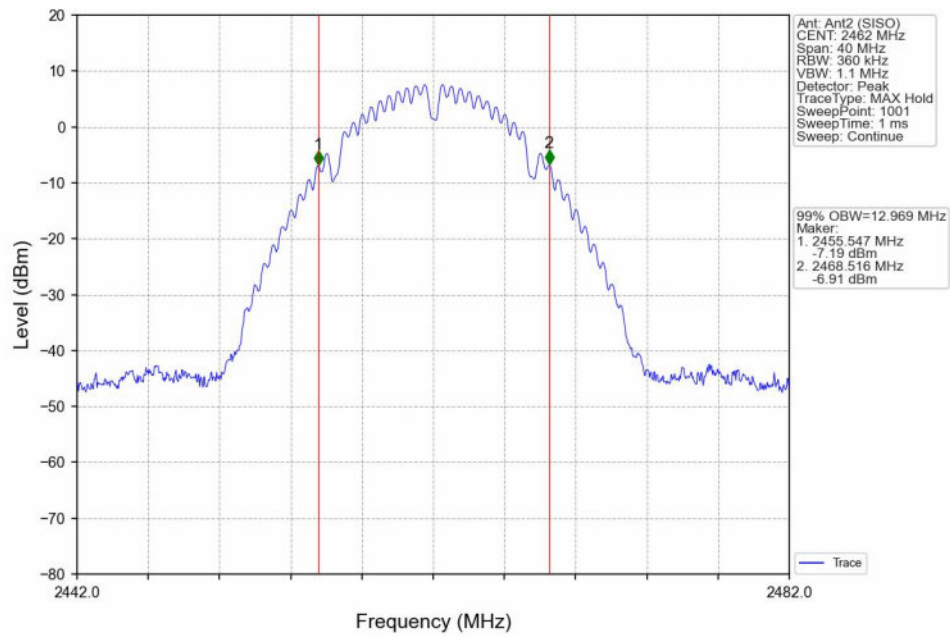
802.11b\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



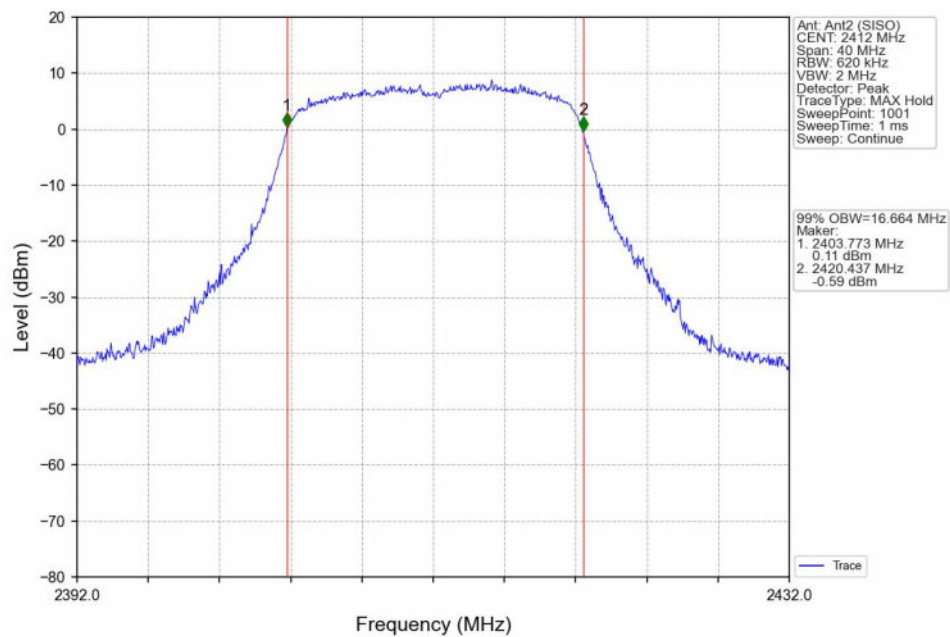
802.11b\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



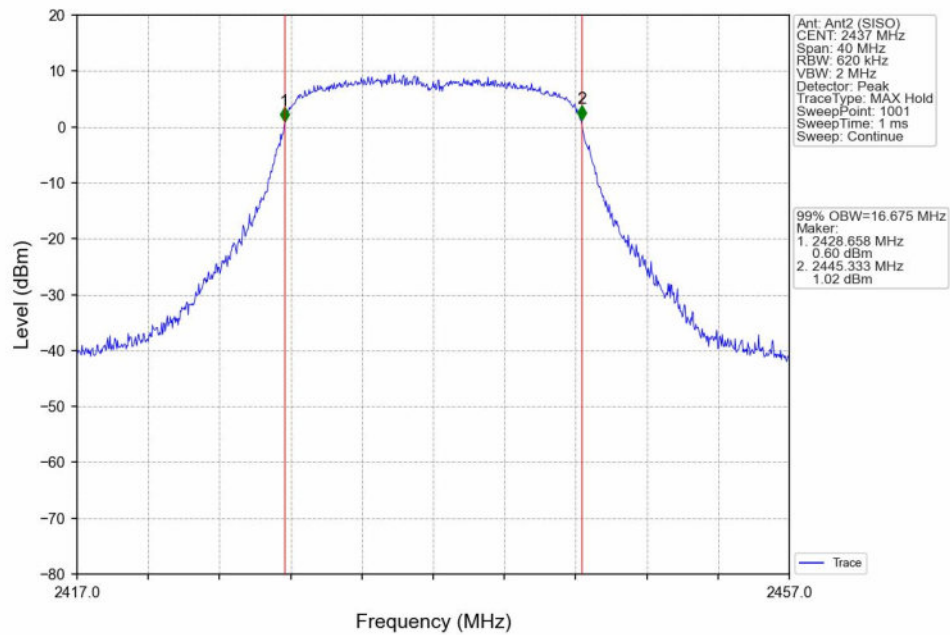
802.11b\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



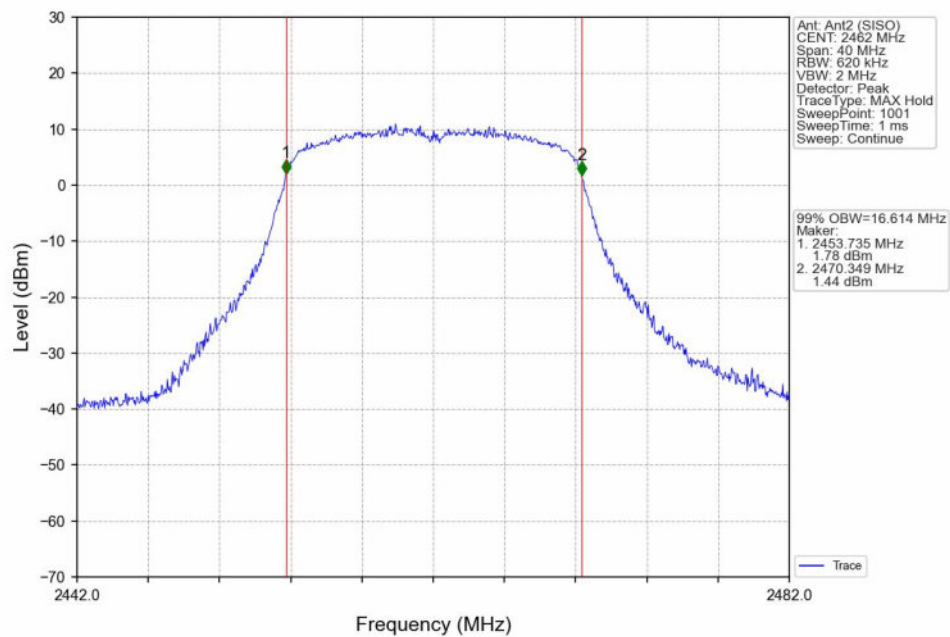
802.11g\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



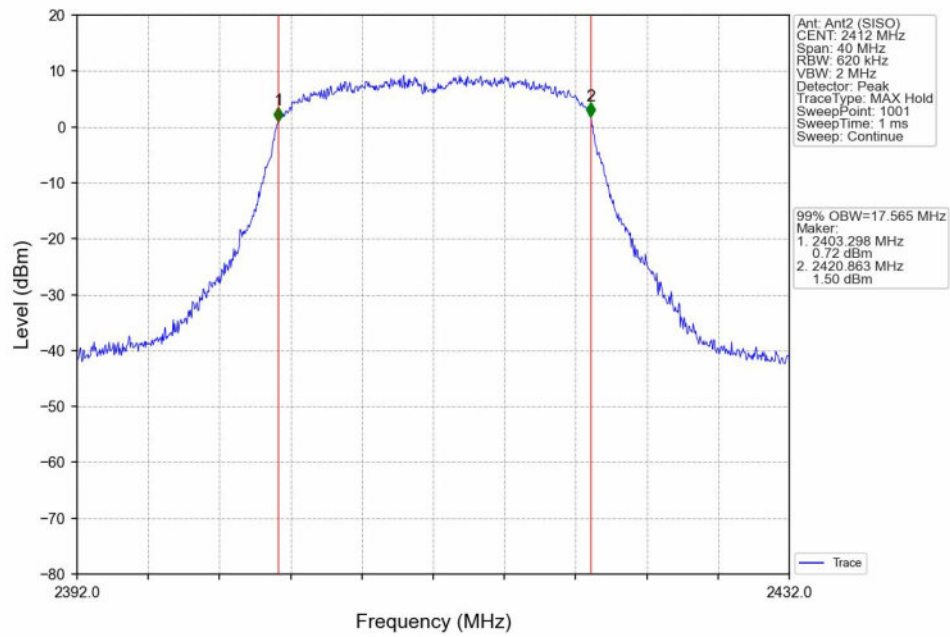
802.11g\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



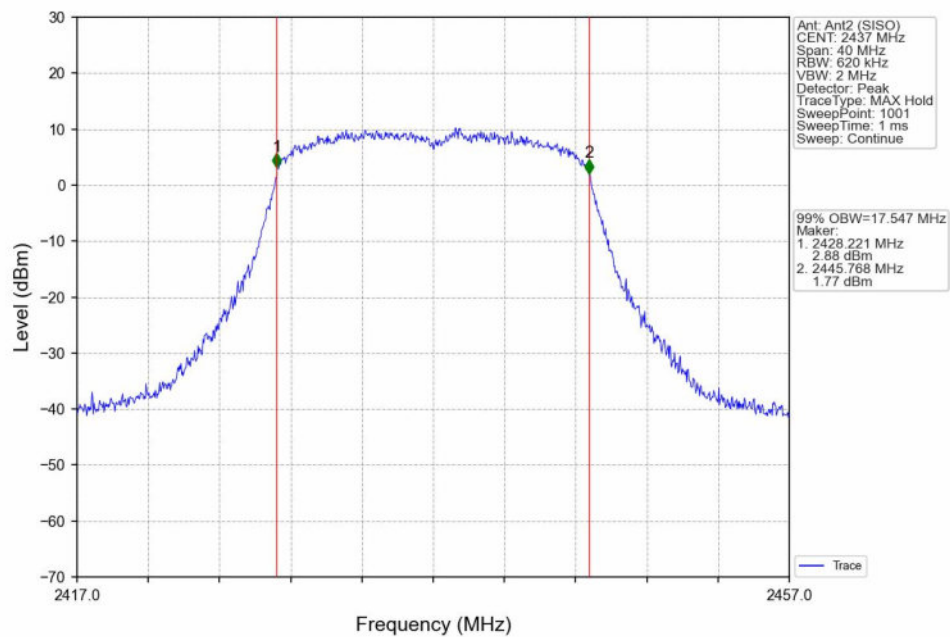
802.11g\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



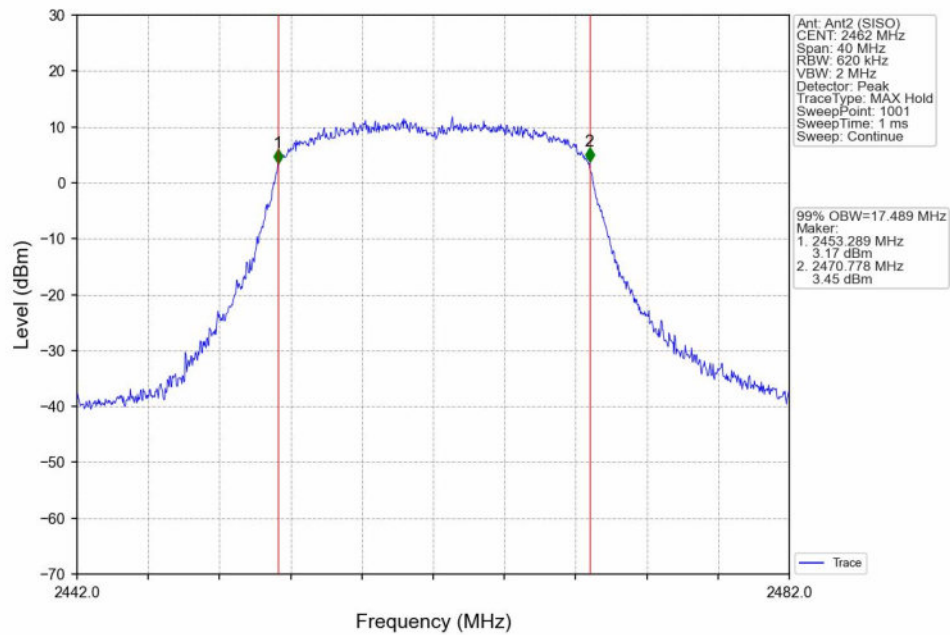
802.11n(HT20)\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



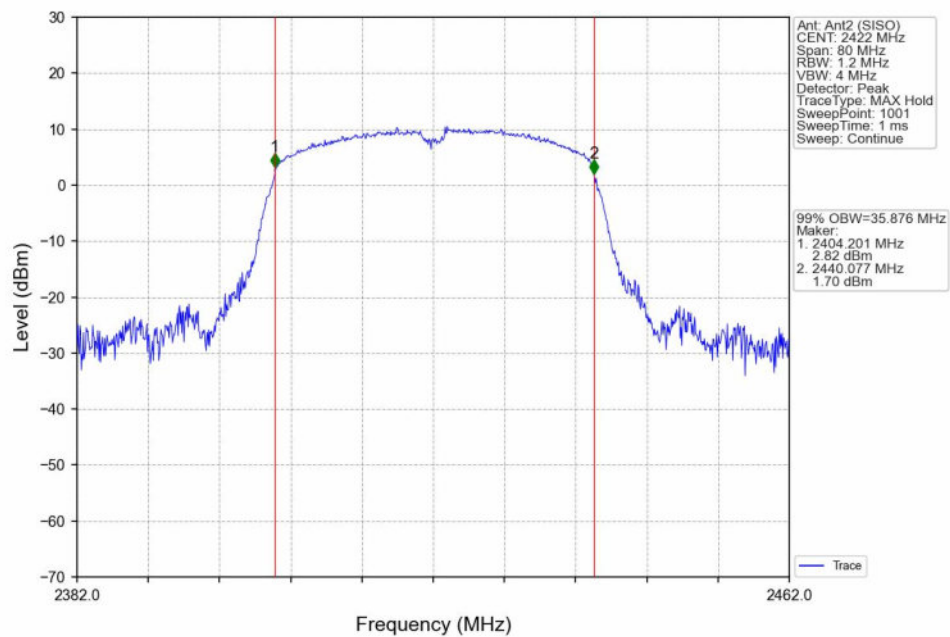
802.11n(HT20)\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



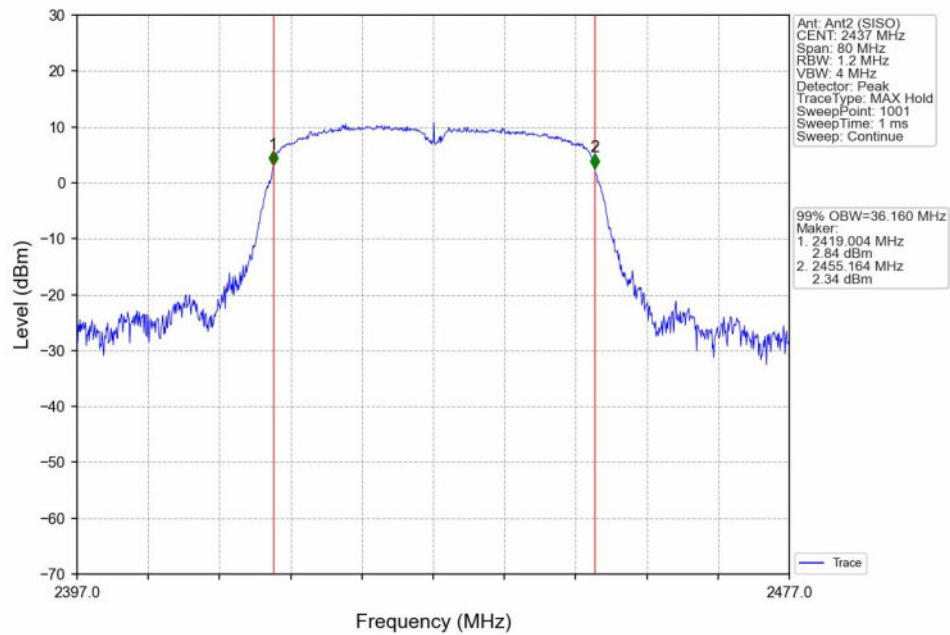
802.11n(HT20)\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



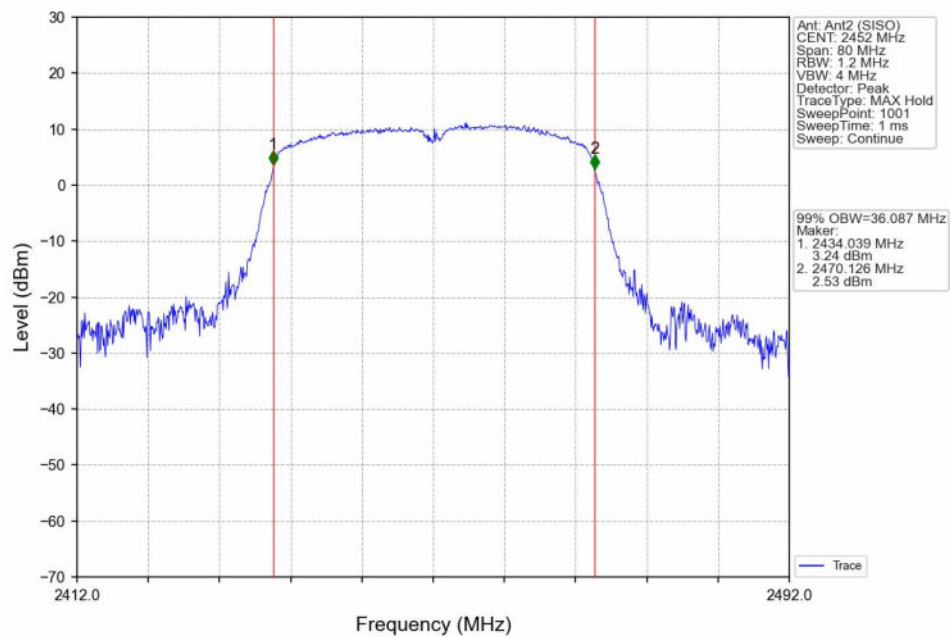
802.11n(HT40)\_LCH\_2422MHz\_Ant2 (SISO)\_NTNV



802.11n(HT40)\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



802.11n(HT40)\_HCH\_2452MHz\_Ant2 (SISO)\_NTNV



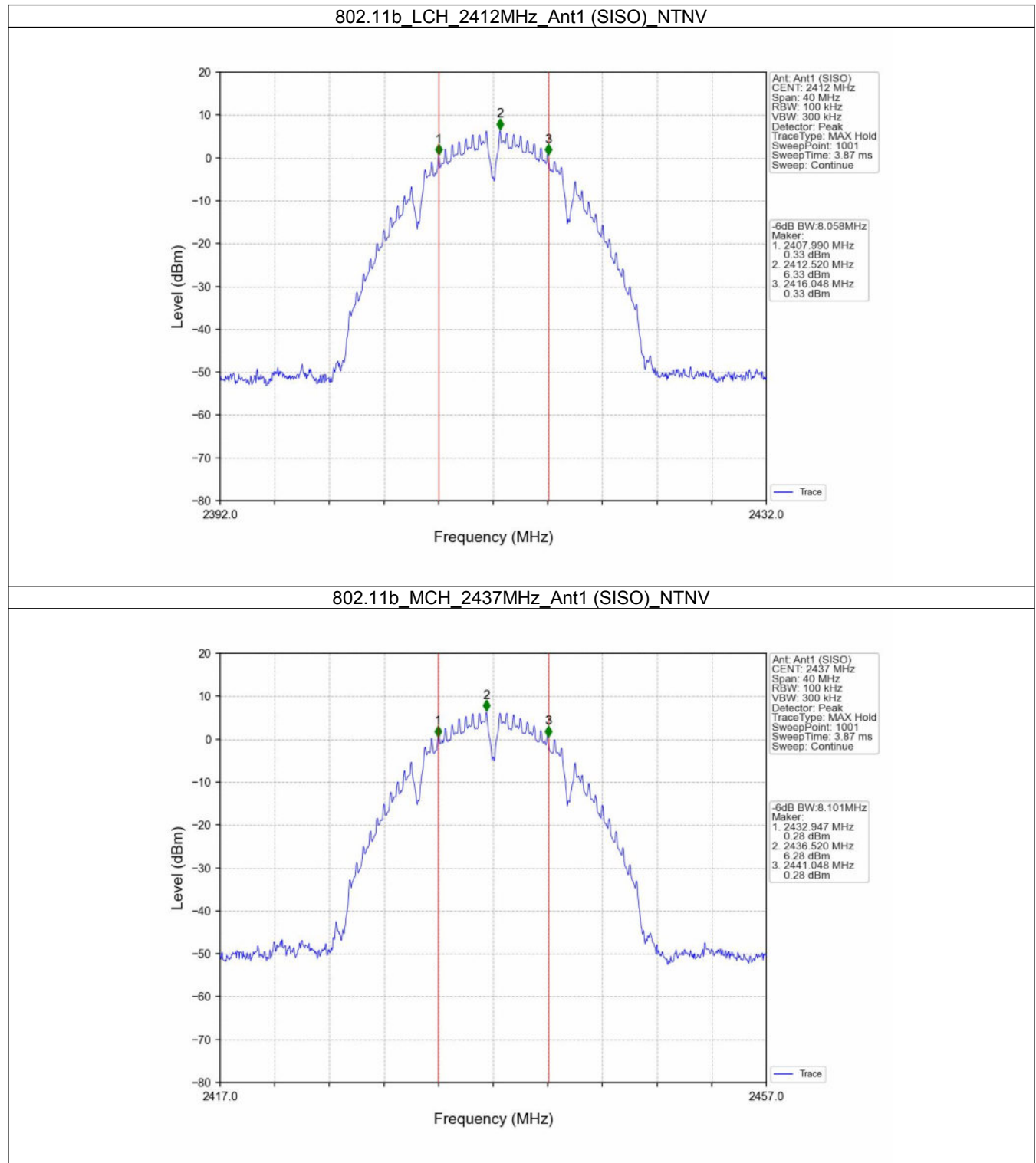
## 1.2 6dB BW

## 1.2.1 Test Result

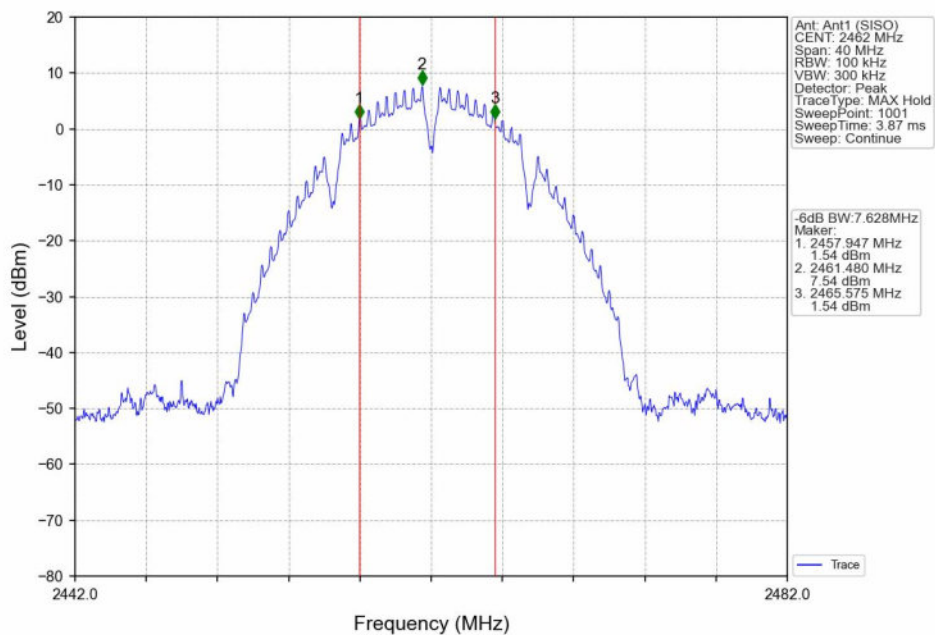
| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11b        | SISO    | 2412            | 1   | 8.058               | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 8.101               | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 7.628               | $\geq 0.5$ | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 15.341              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 15.180              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 15.170              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 1   | 15.350              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 15.518              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 15.188              | $\geq 0.5$ | Pass    |
| 802.11n (HT40) | SISO    | 2422            | 1   | 35.119              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 35.168              | $\geq 0.5$ | Pass    |
|                |         | 2452            | 1   | 35.144              | $\geq 0.5$ | Pass    |

| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11b        | SISO    | 2412            | 2   | 8.540               | $\geq 0.5$ | Pass    |
|                |         | 2437            | 2   | 8.071               | $\geq 0.5$ | Pass    |
|                |         | 2462            | 2   | 8.088               | $\geq 0.5$ | Pass    |
| 802.11g        | SISO    | 2412            | 2   | 15.160              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 2   | 15.179              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 2   | 15.170              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | SISO    | 2412            | 2   | 15.164              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 2   | 15.242              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 2   | 15.175              | $\geq 0.5$ | Pass    |
| 802.11n (HT40) | SISO    | 2422            | 2   | 35.108              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 2   | 35.159              | $\geq 0.5$ | Pass    |
|                |         | 2452            | 2   | 35.156              | $\geq 0.5$ | Pass    |

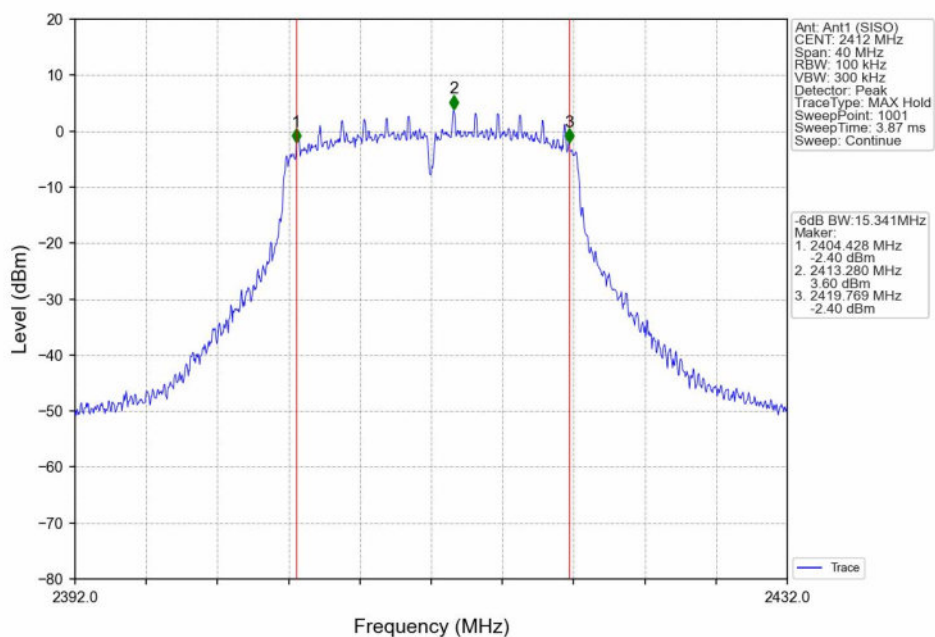
## 1.2.2 Test Graph



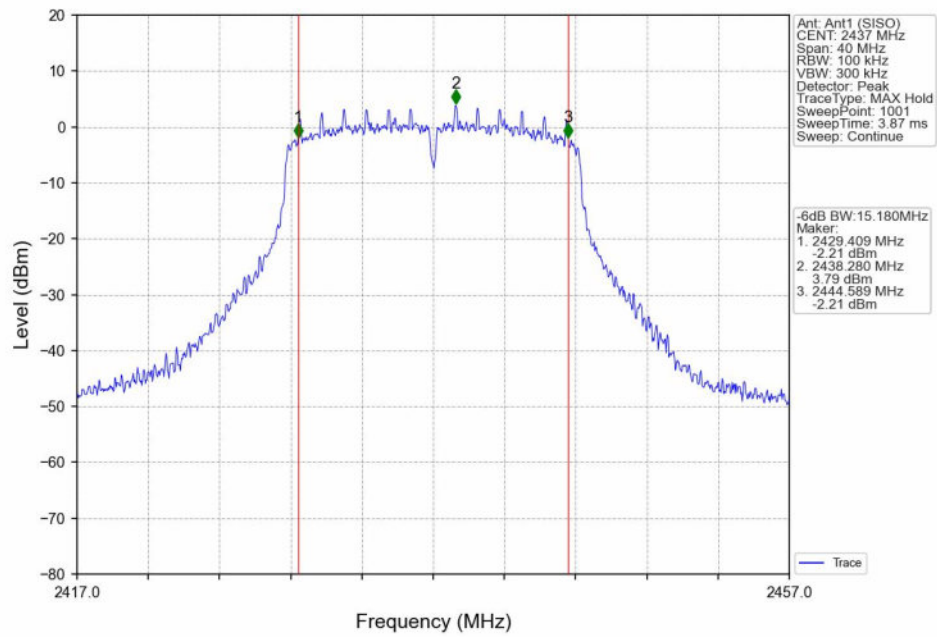
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



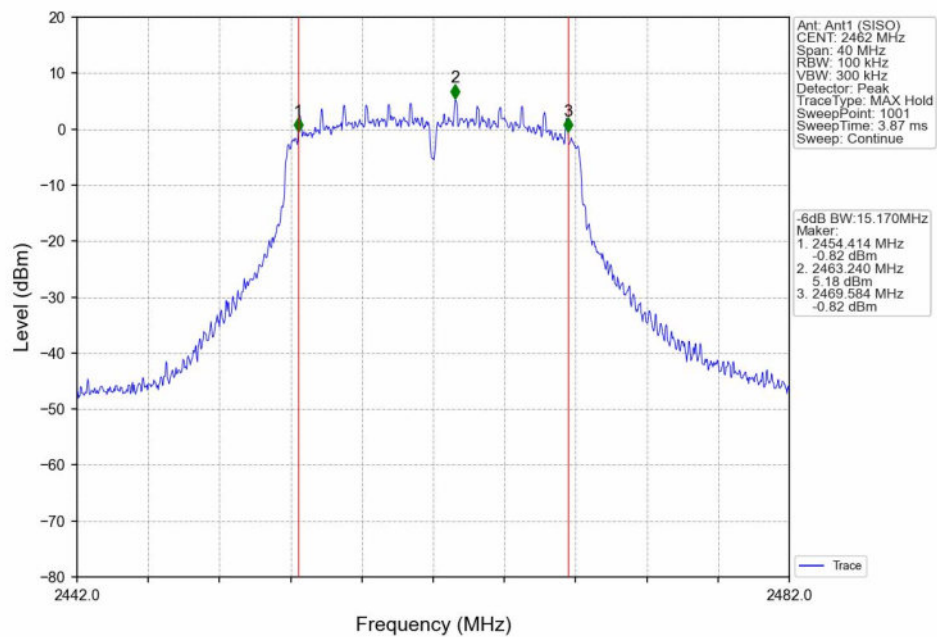
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



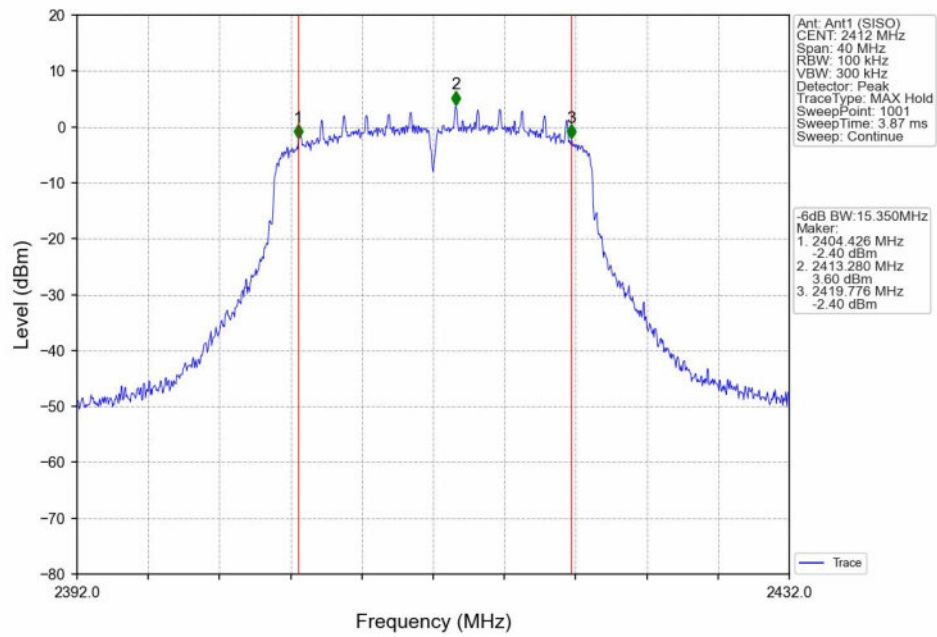
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



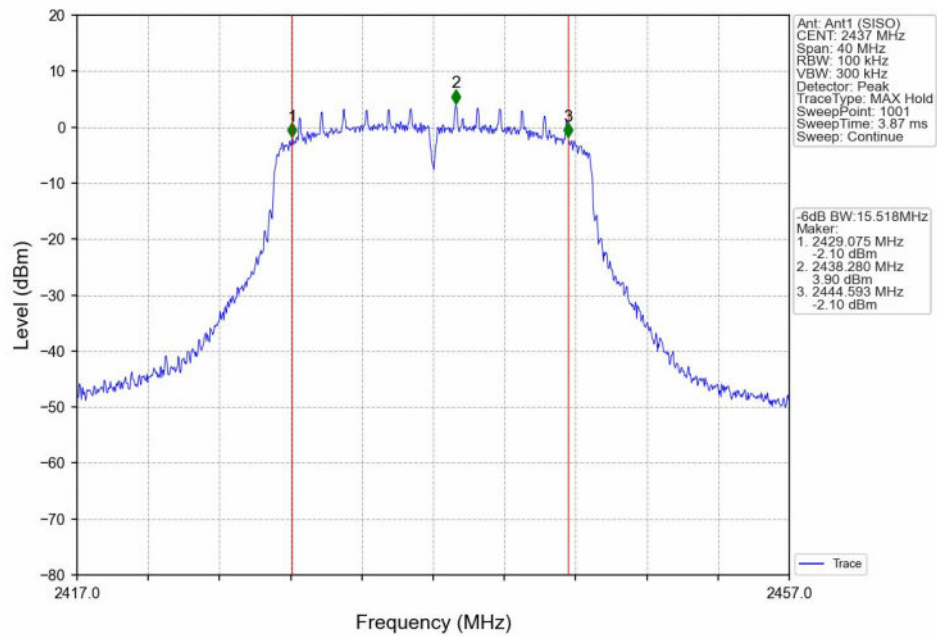
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



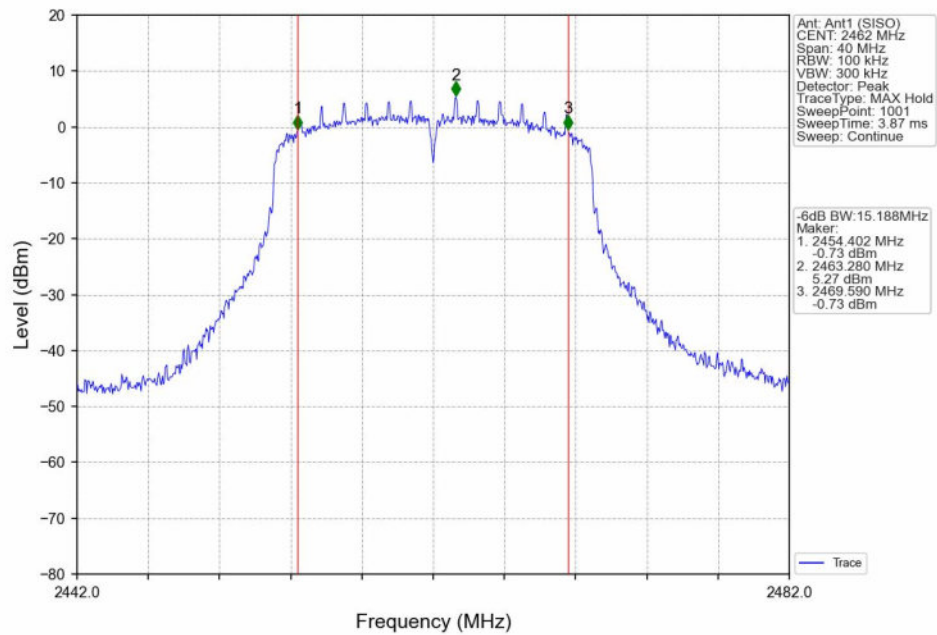
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



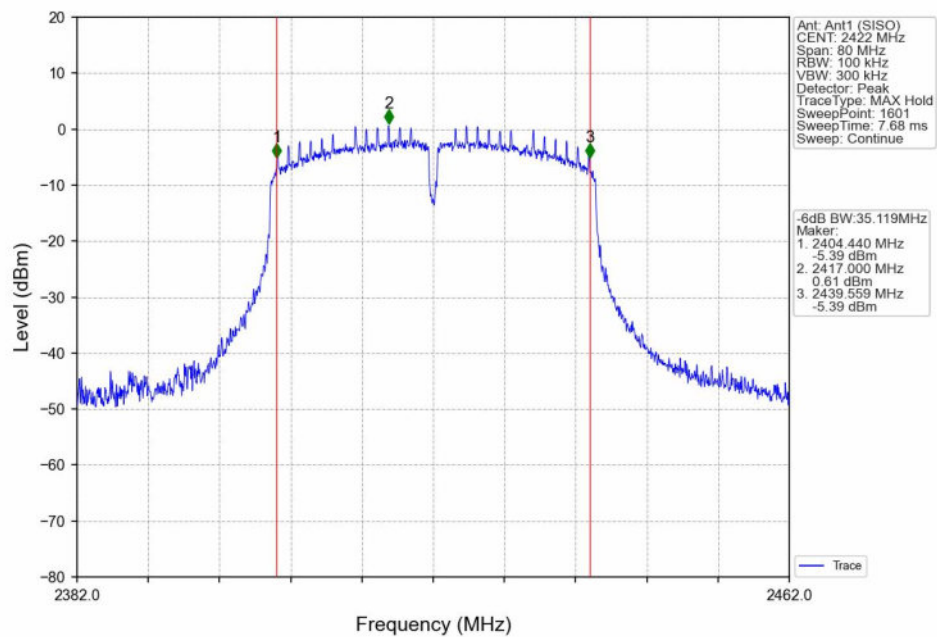
802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



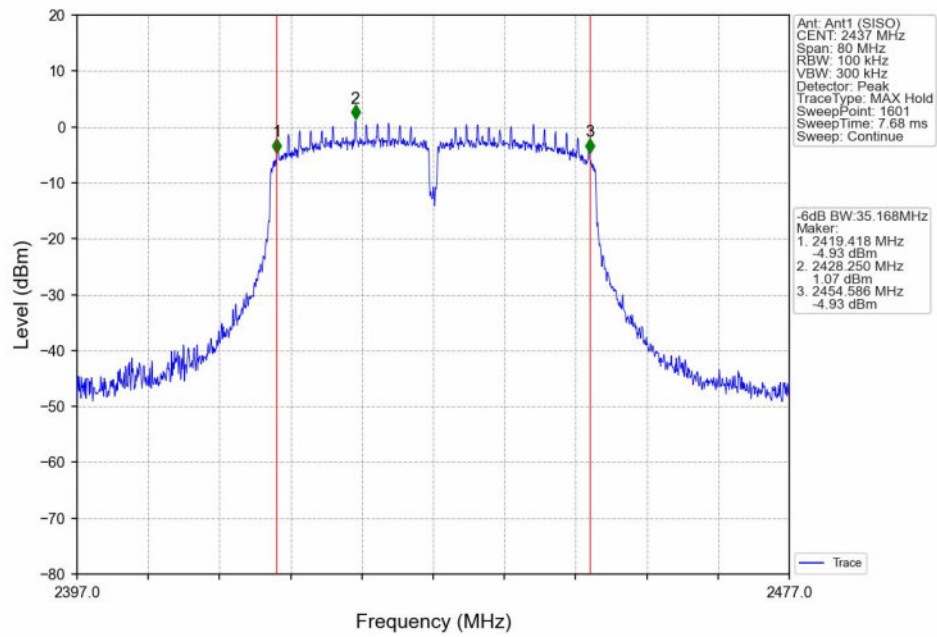
802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



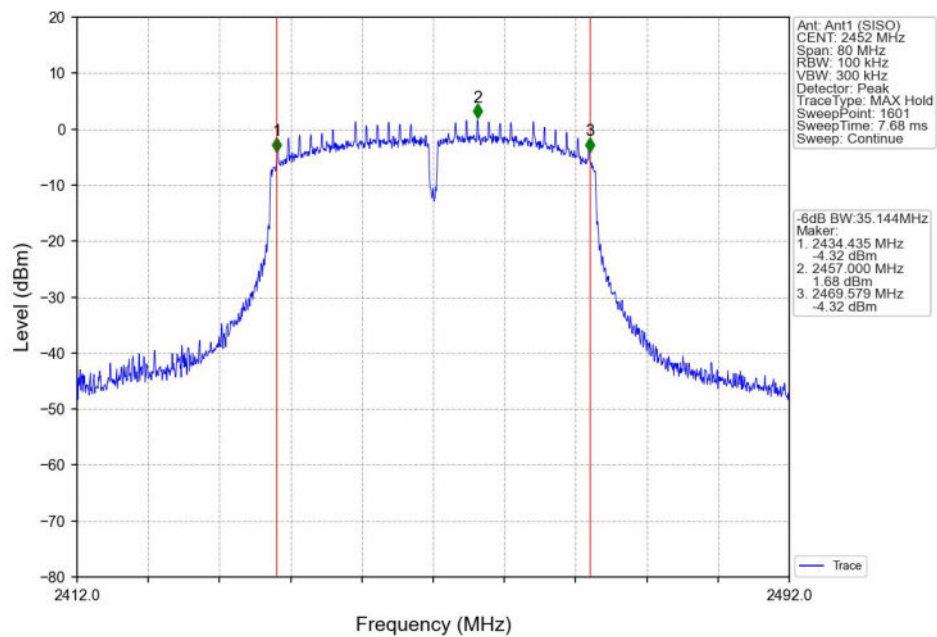
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



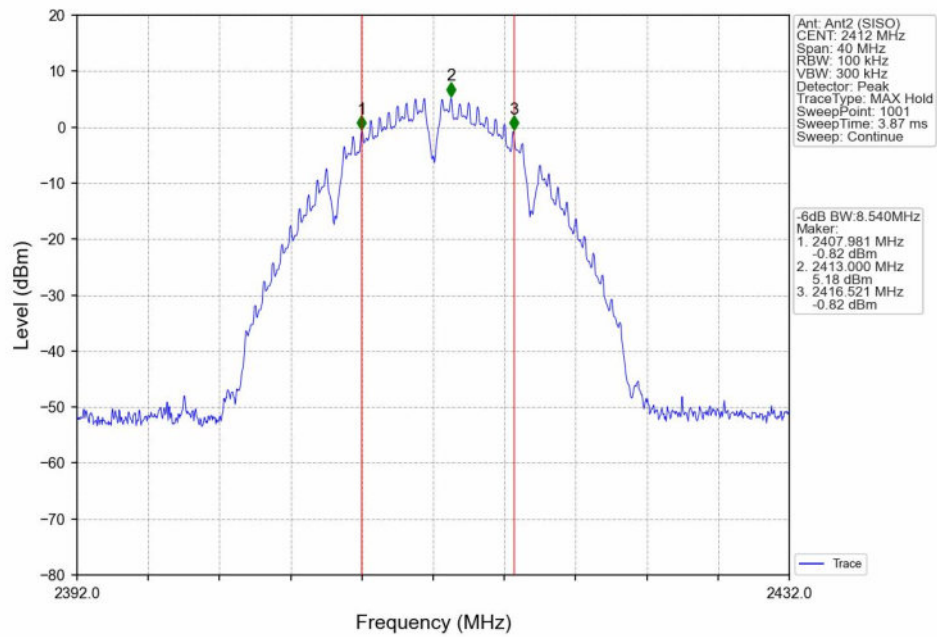
802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



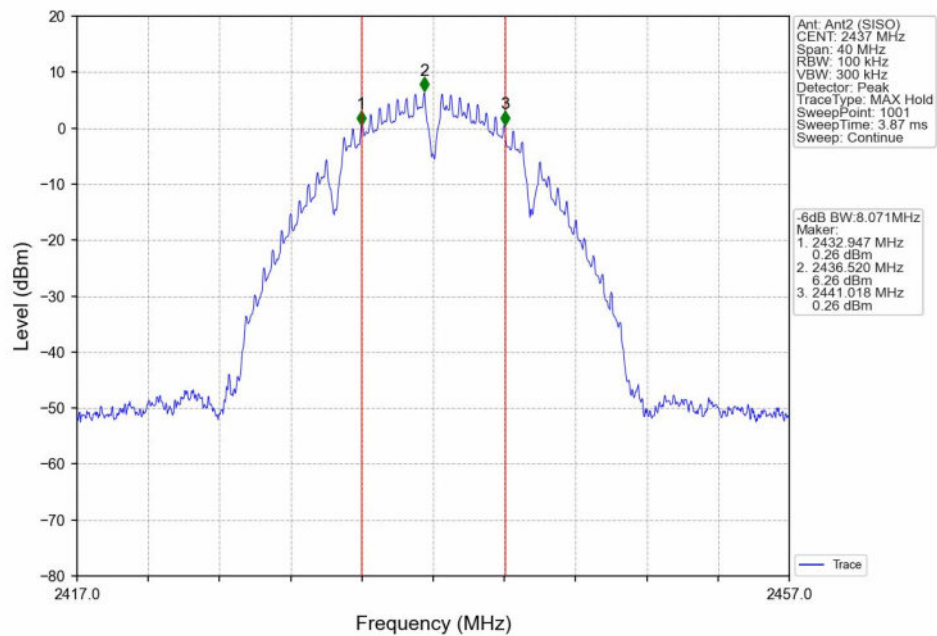
802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



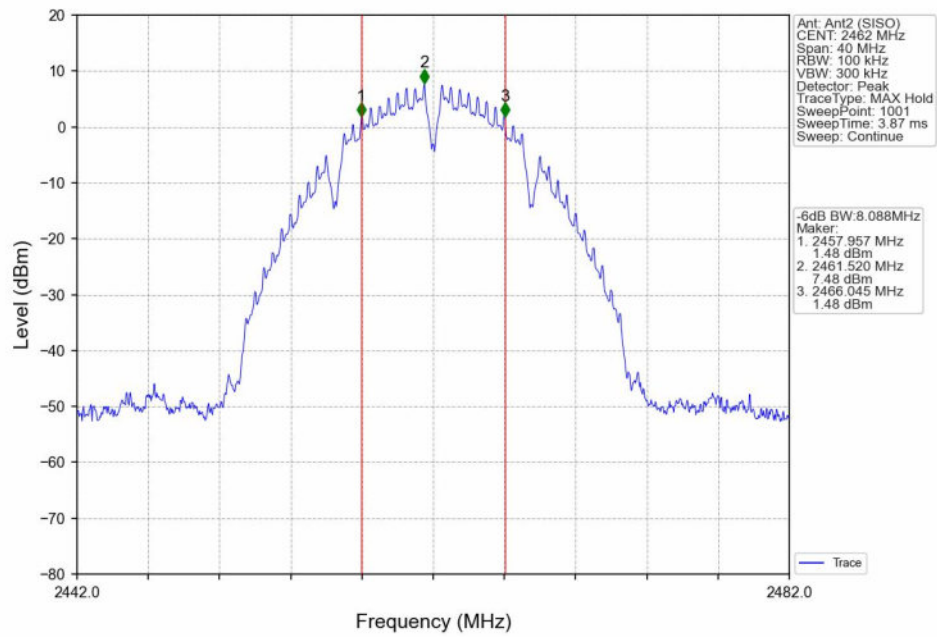
## 802.11b\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



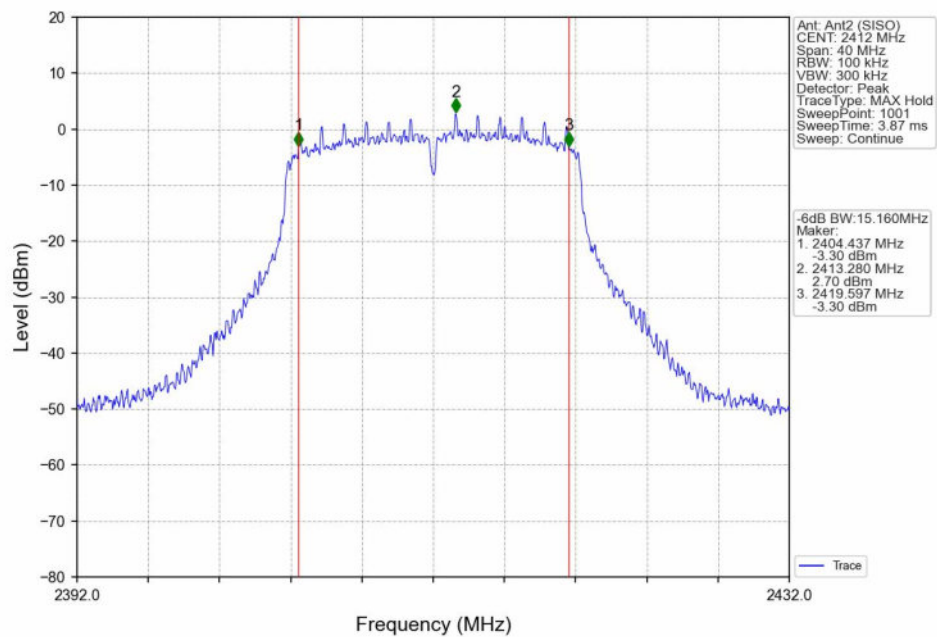
## 802.11b\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



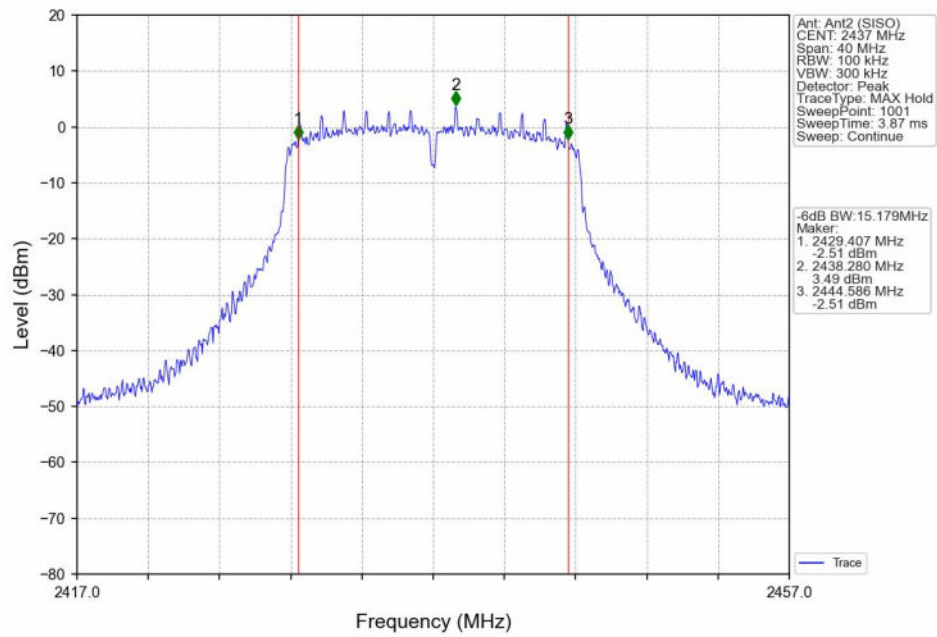
## 802.11b\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



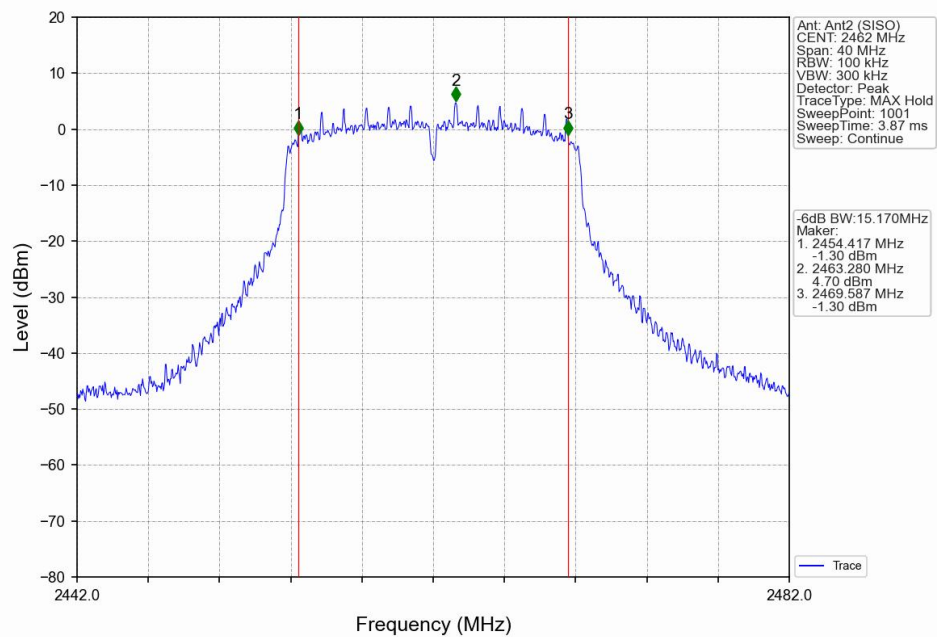
## 802.11g\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



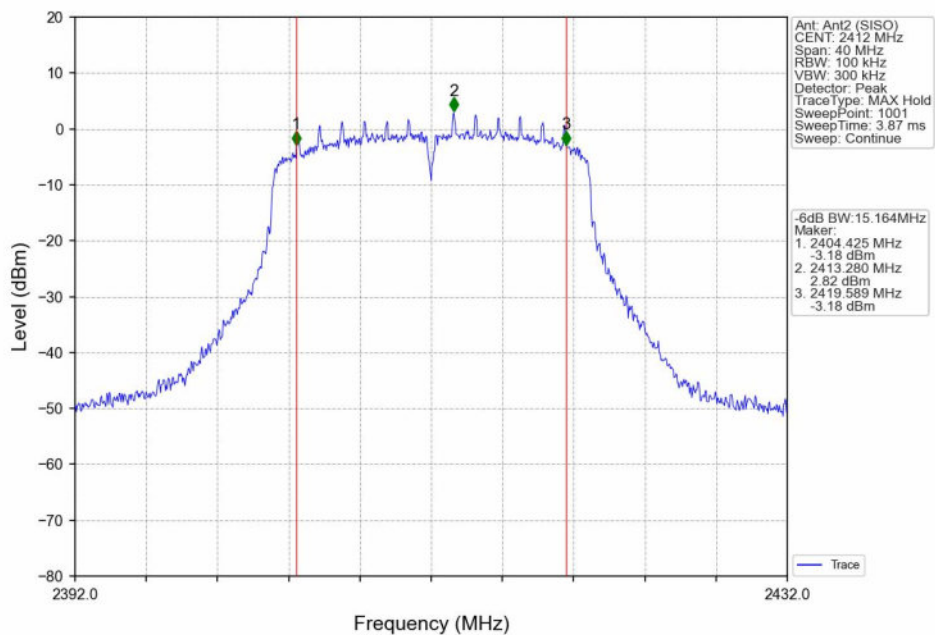
802.11g\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



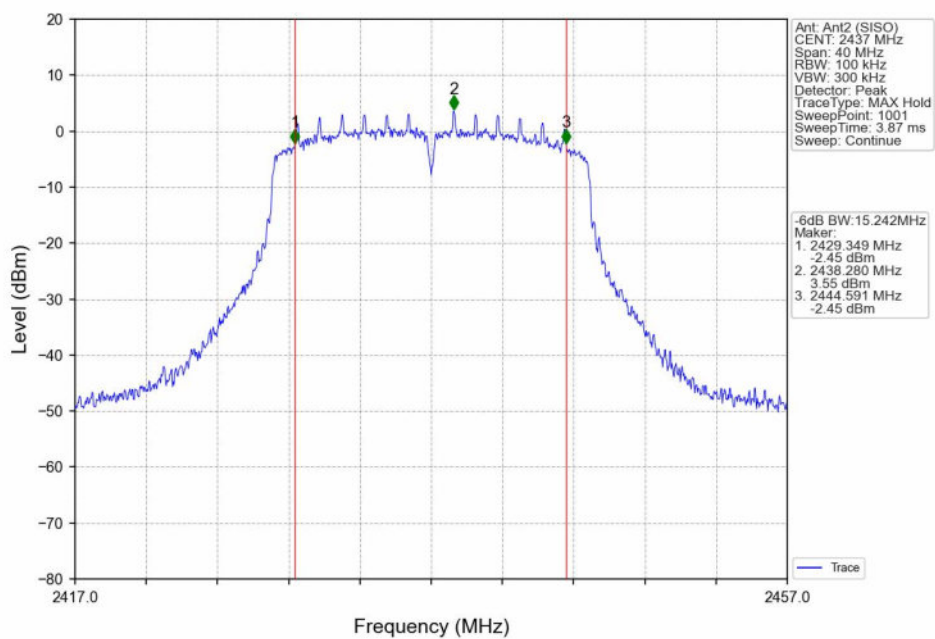
802.11g\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



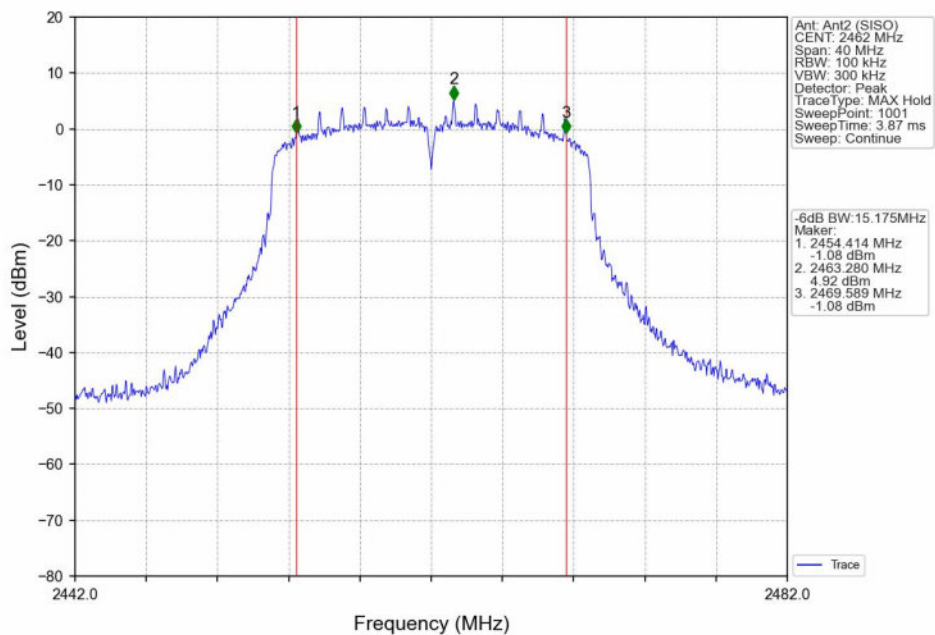
802.11n(HT20)\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



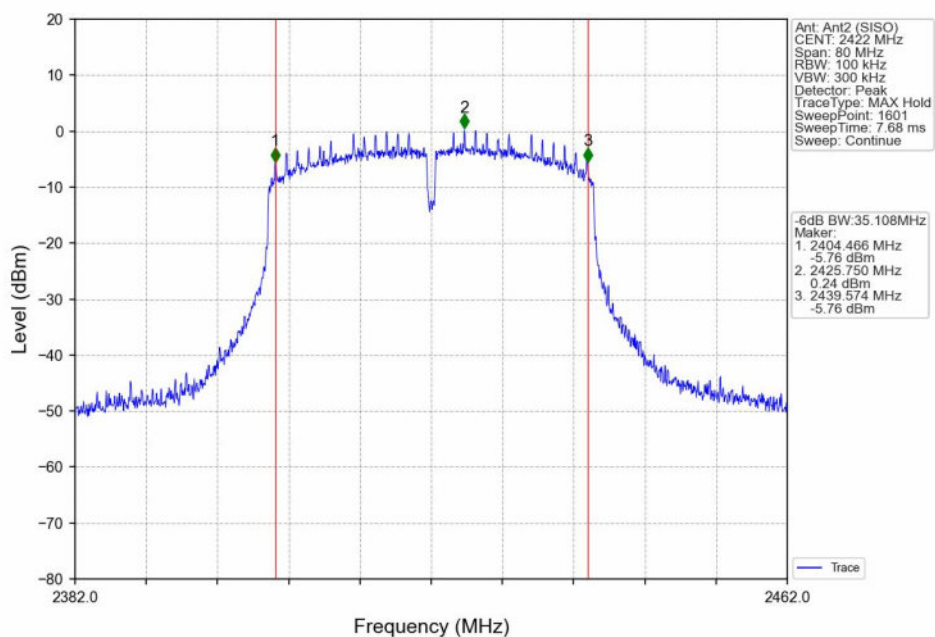
802.11n(HT20)\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



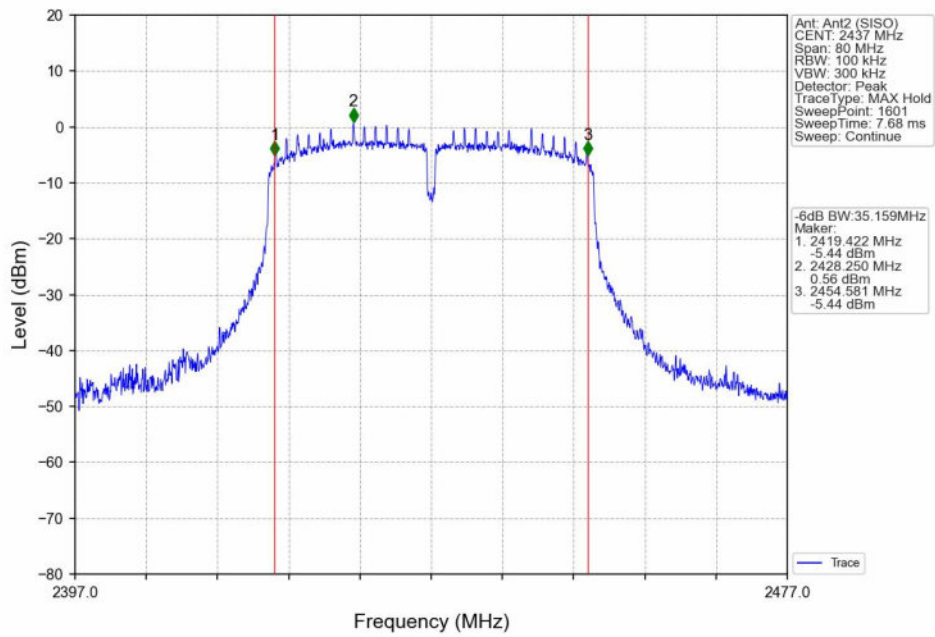
802.11n(HT20)\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



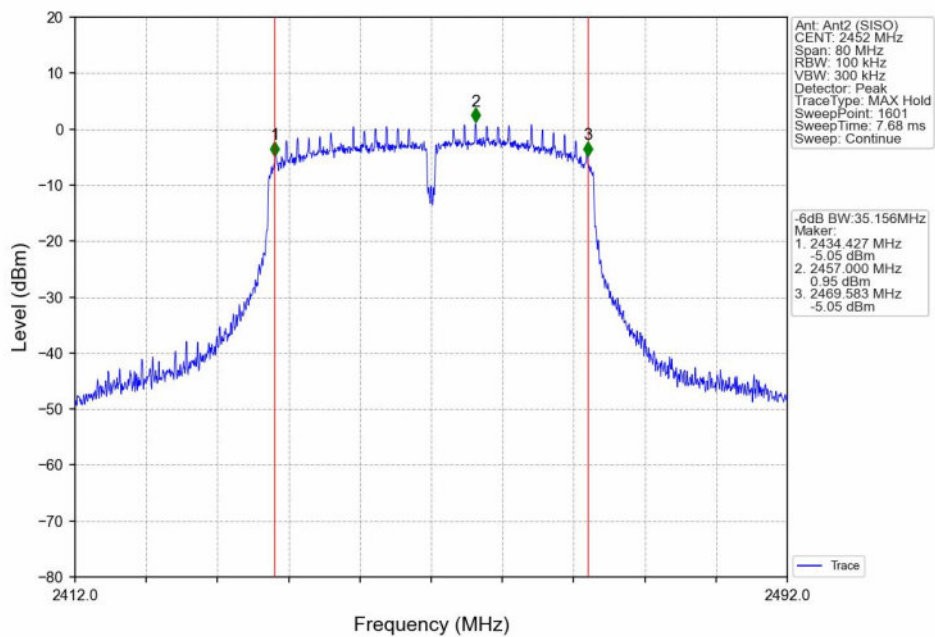
802.11n(HT40)\_LCH\_2422MHz\_Ant2 (SISO)\_NTNV



802.11n(HT40)\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV

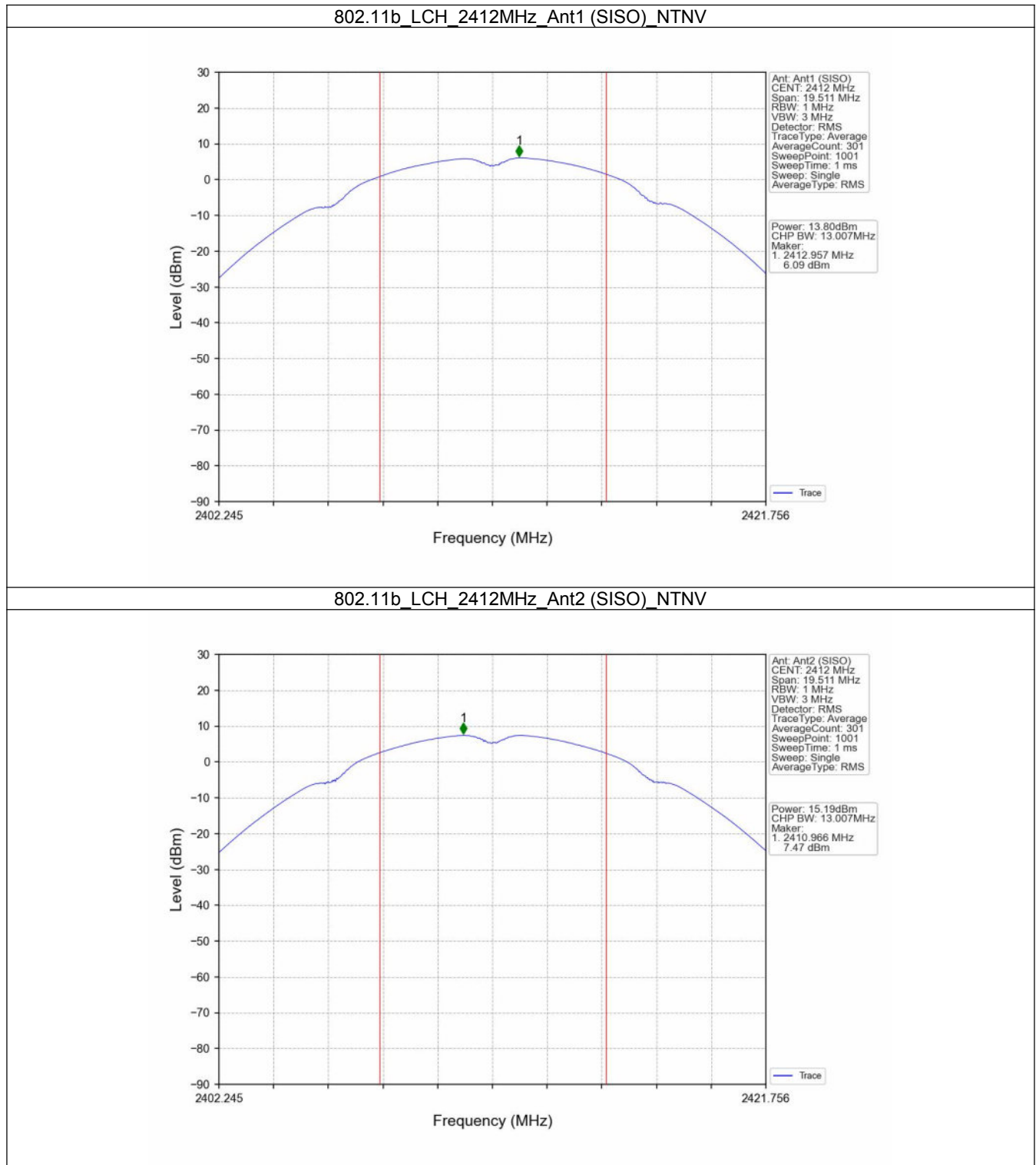


802.11n(HT40)\_HCH\_2452MHz\_Ant2 (SISO)\_NTNV

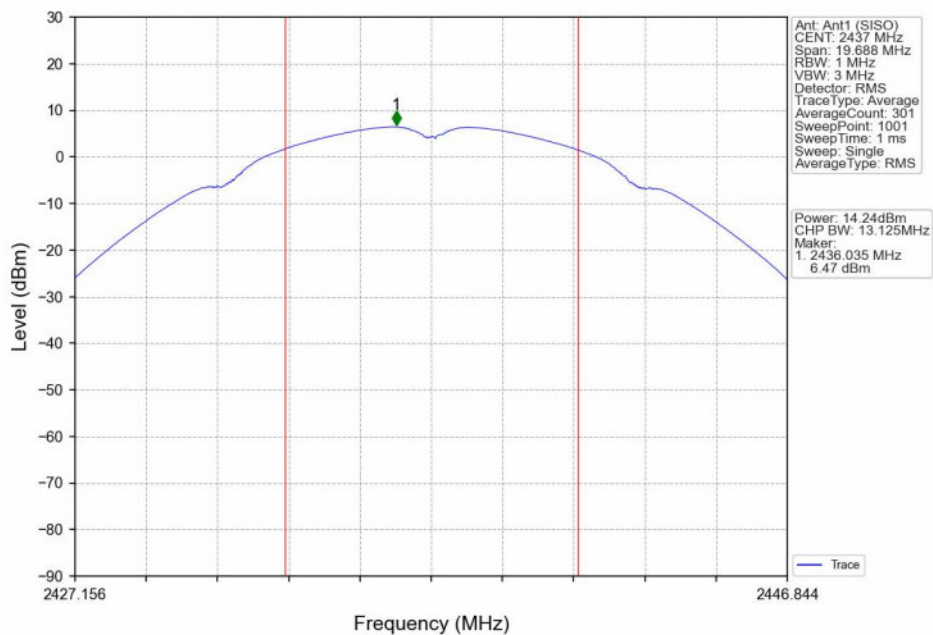


| Mode                                                | TX Type | Frequency (MHz) | Maximum Average Conducted Output Power (dBm) |       |       | Verdict |
|-----------------------------------------------------|---------|-----------------|----------------------------------------------|-------|-------|---------|
|                                                     |         |                 | ANT1                                         | ANT2  | Limit |         |
| 802.11b                                             | SISO    | 2412            | 13.80                                        | 15.19 | <=30  | Pass    |
|                                                     |         | 2437            | 14.24                                        | 14.83 | <=30  | Pass    |
|                                                     |         | 2462            | 15.29                                        | 14.73 | <=30  | Pass    |
| 802.11g                                             | SISO    | 2412            | 13.46                                        | 15.03 | <=30  | Pass    |
|                                                     |         | 2437            | 13.94                                        | 15.21 | <=30  | Pass    |
|                                                     |         | 2462            | 15.19                                        | 14.66 | <=30  | Pass    |
| 802.11n<br>(HT20)                                   | SISO    | 2412            | 13.23                                        | 14.83 | <=30  | Pass    |
|                                                     |         | 2437            | 13.78                                        | 14.99 | <=30  | Pass    |
|                                                     |         | 2462            | 14.99                                        | 14.43 | <=30  | Pass    |
| 802.11n<br>(HT40)                                   | SISO    | 2422            | 13.72                                        | 15.01 | <=30  | Pass    |
|                                                     |         | 2437            | 14.34                                        | 15.13 | <=30  | Pass    |
|                                                     |         | 2452            | 14.92                                        | 14.98 | <=30  | Pass    |
| Note1: Antenna Gain: Ant1: 2.11dBi; Ant2: -0.74dBi; |         |                 |                                              |       |       |         |

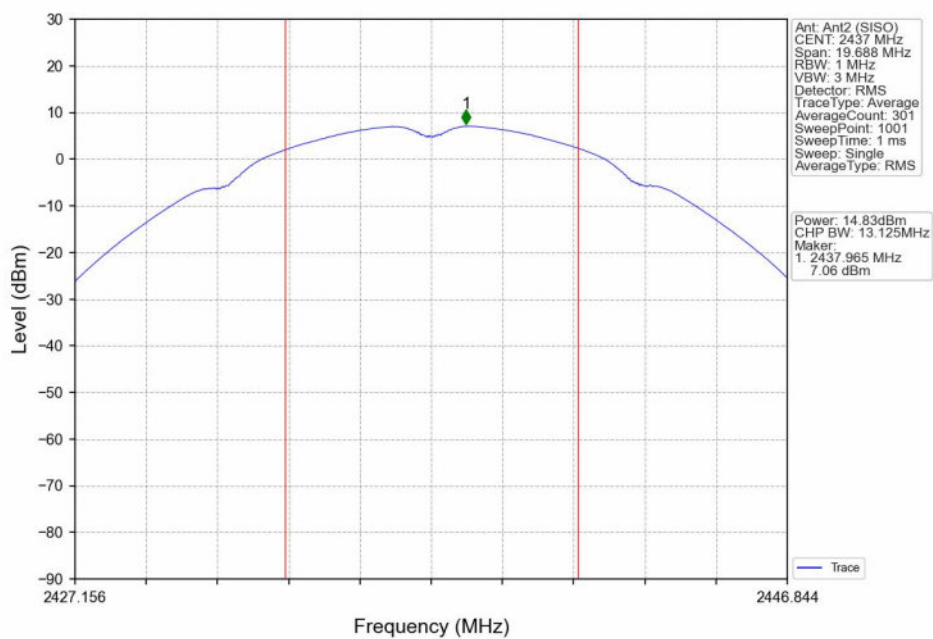
## 2.1.2 Test Graph



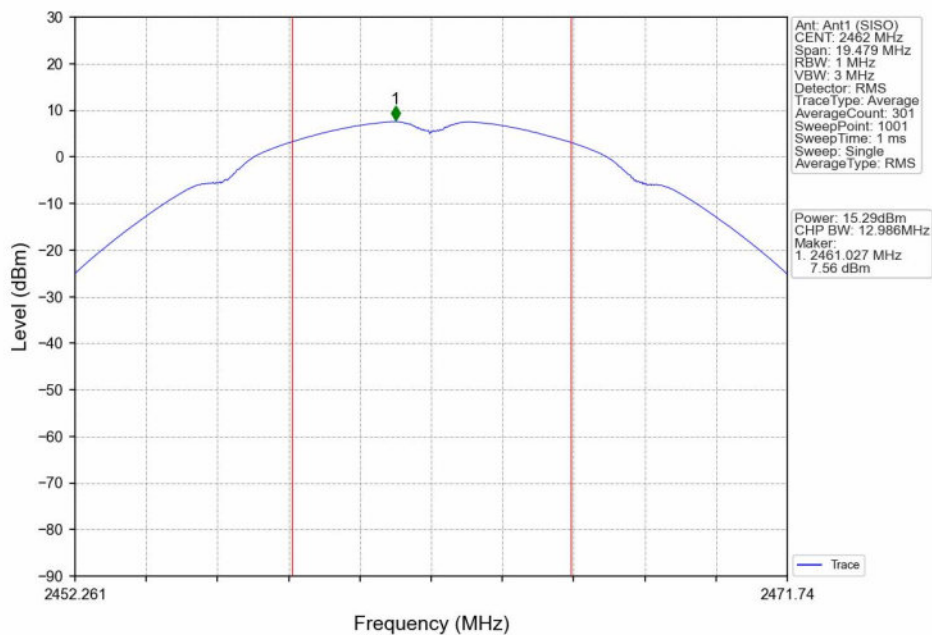
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



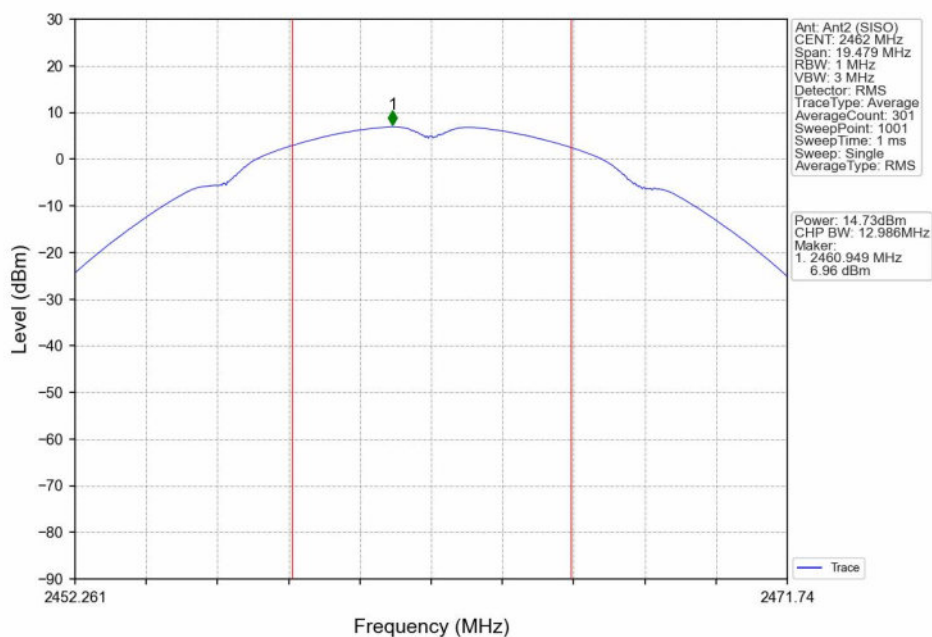
802.11b\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



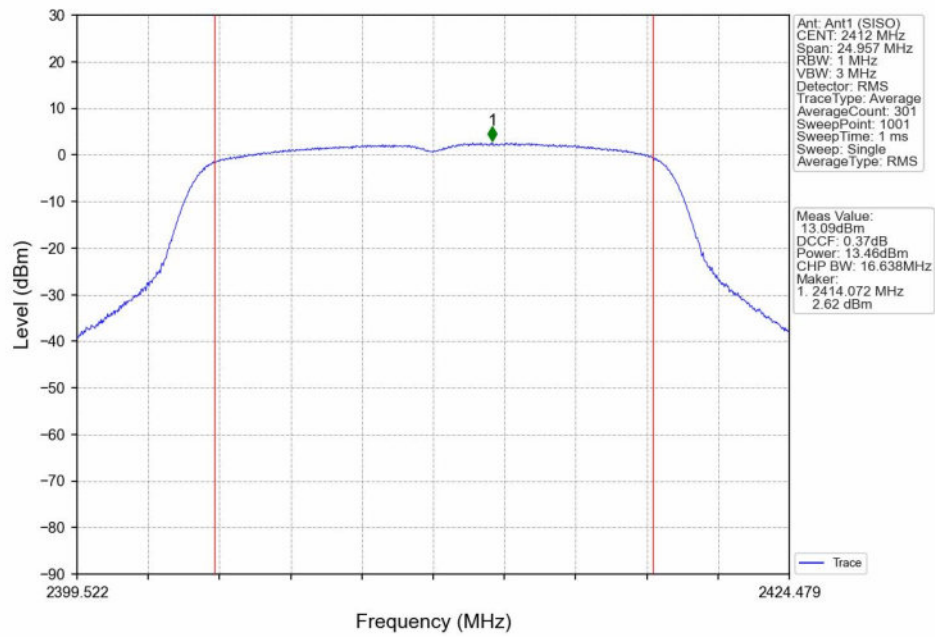
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



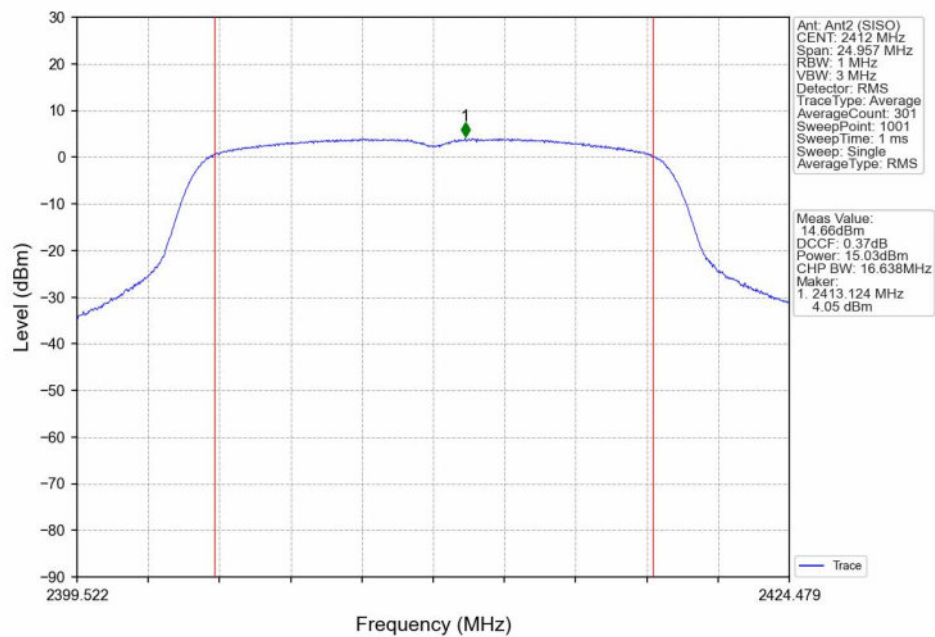
802.11b\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



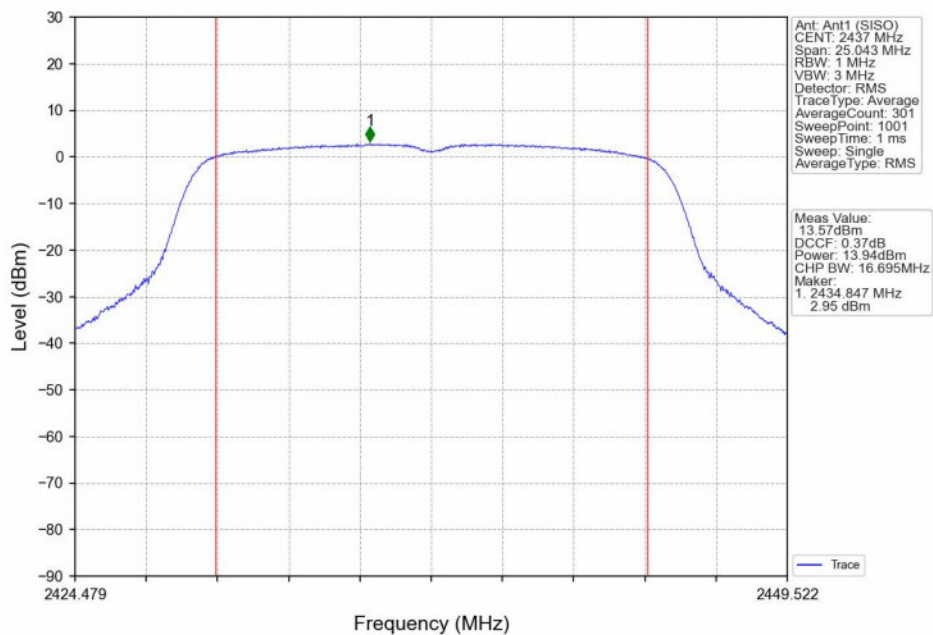
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



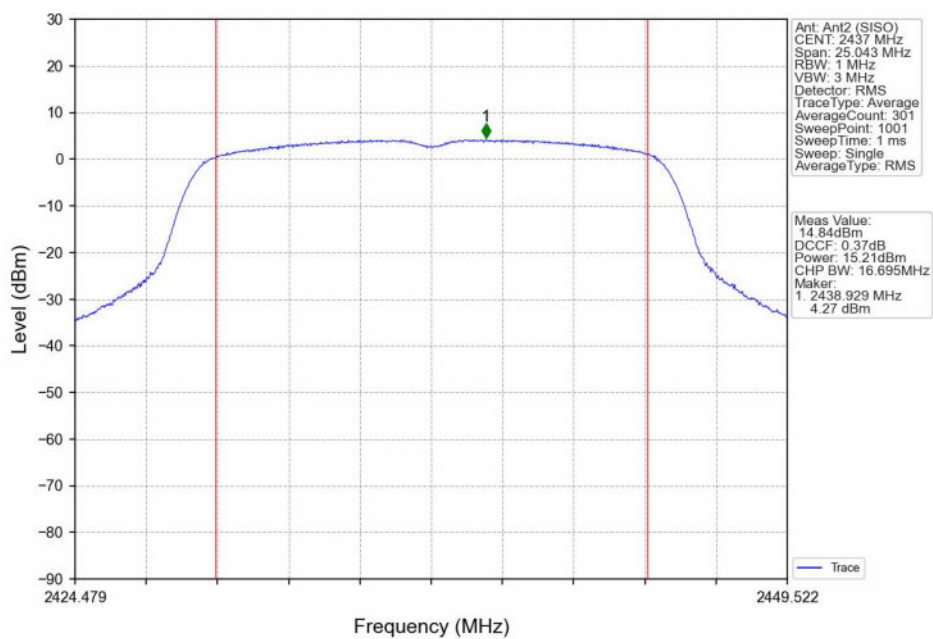
802.11g\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



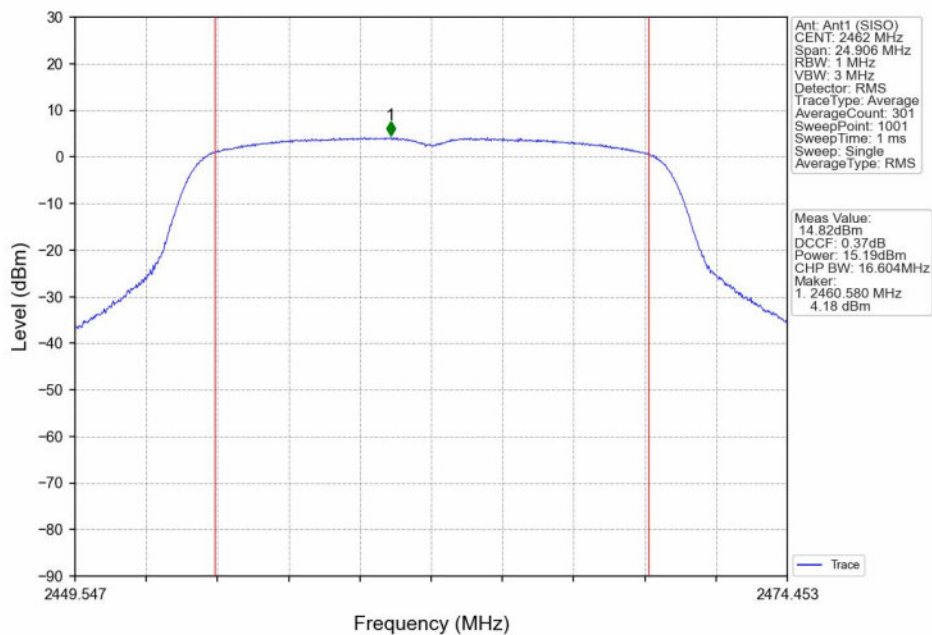
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



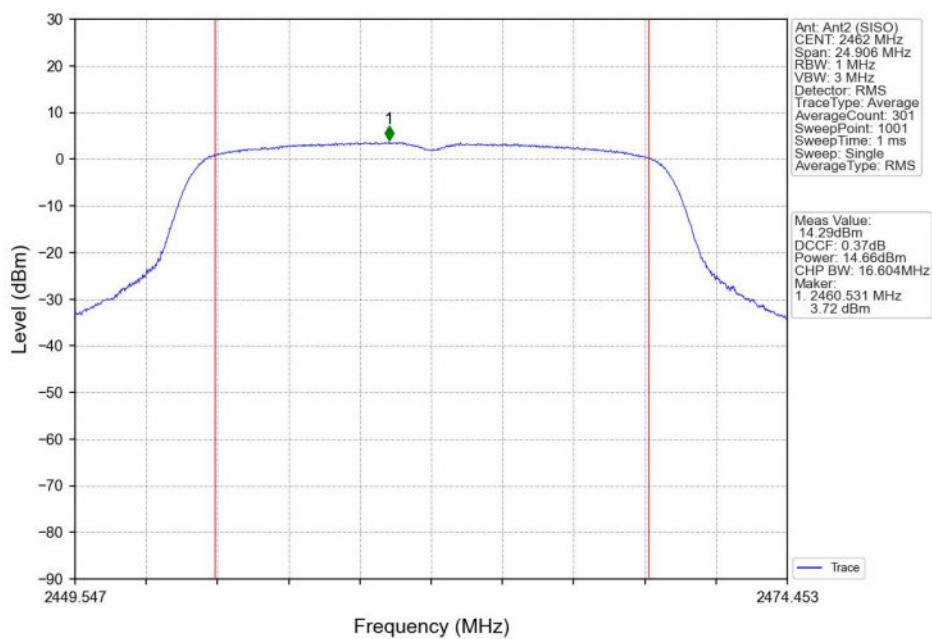
802.11g\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



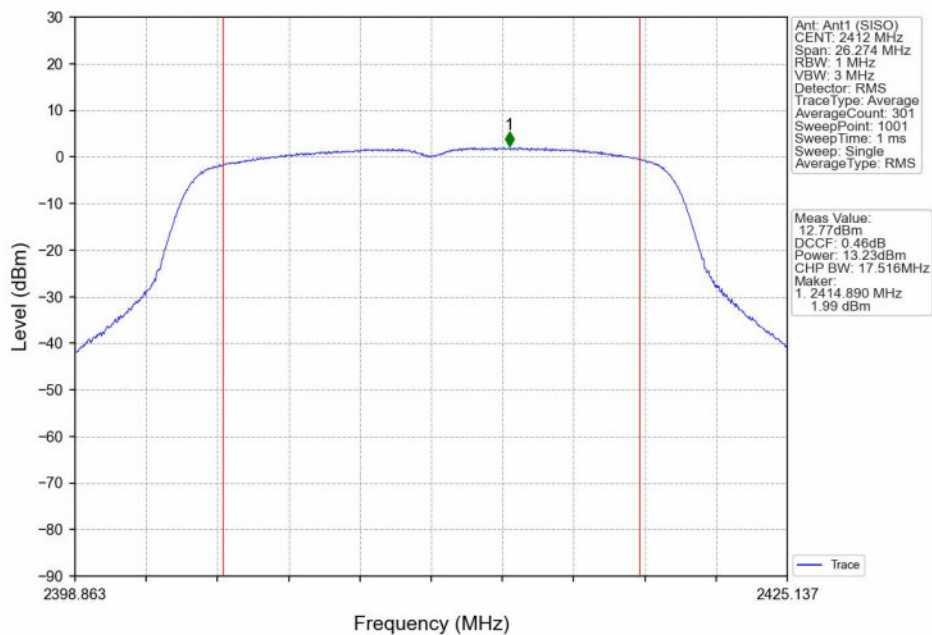
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



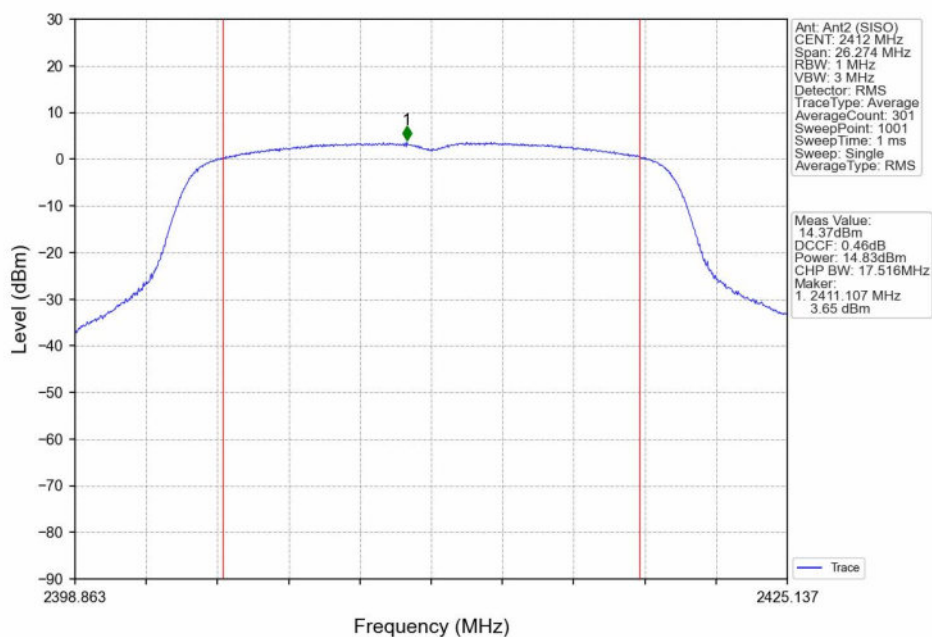
802.11g\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



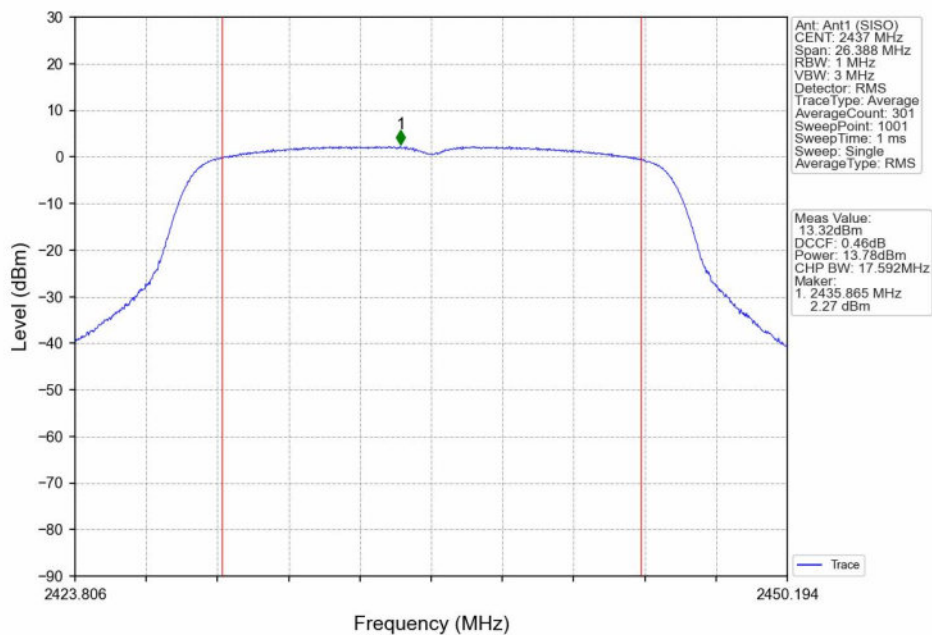
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



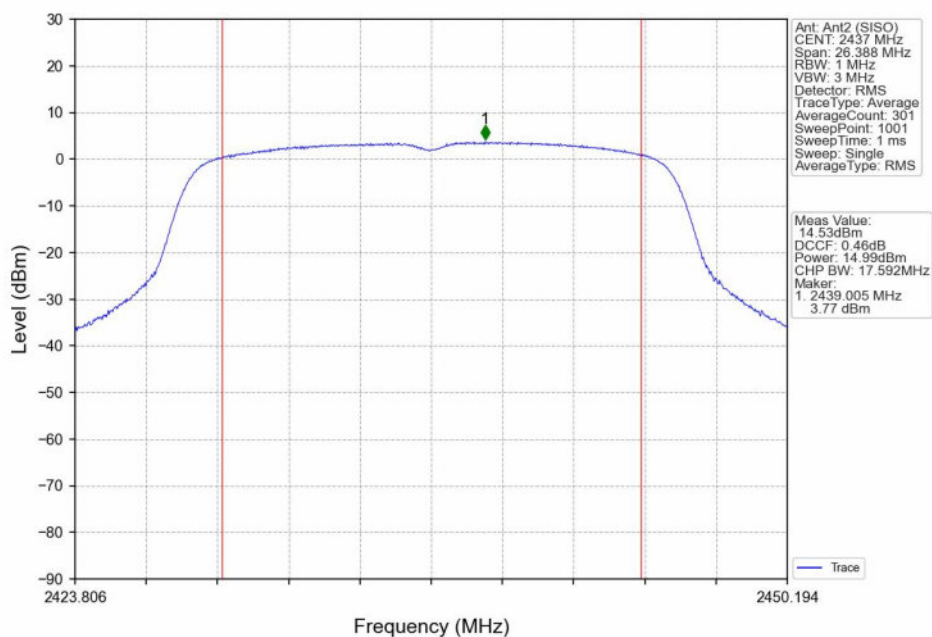
802.11n(HT20)\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



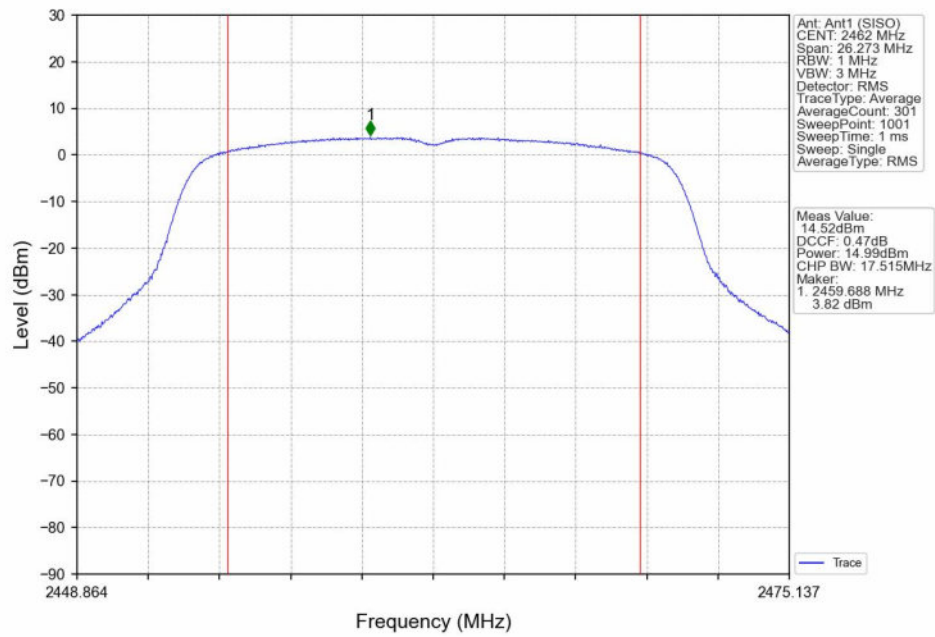
802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



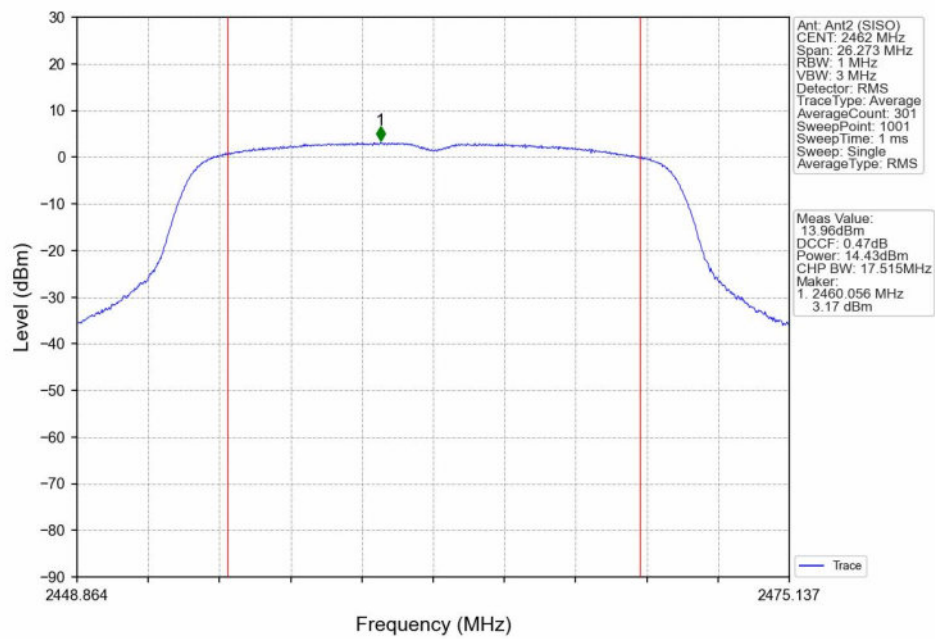
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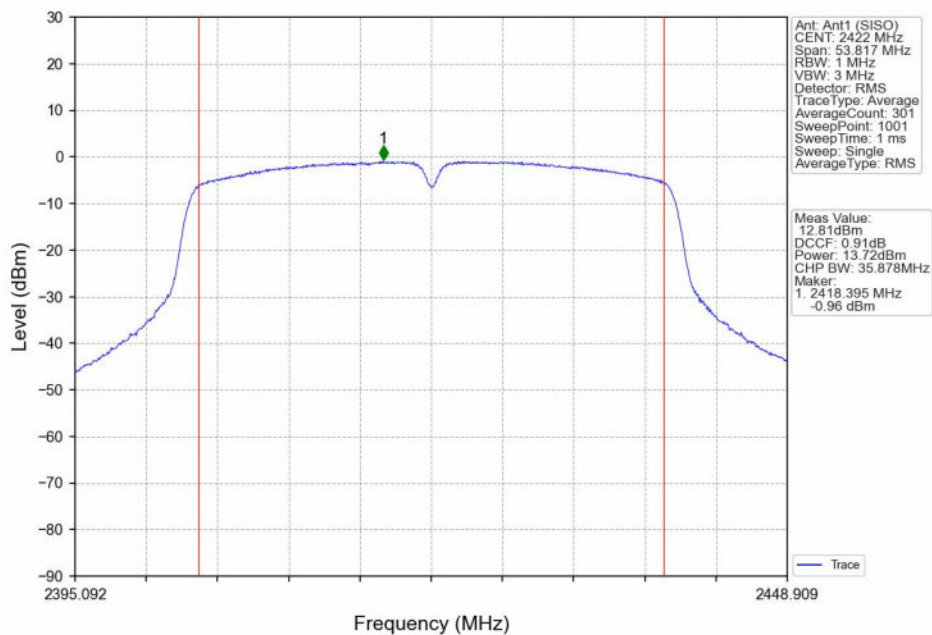
802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



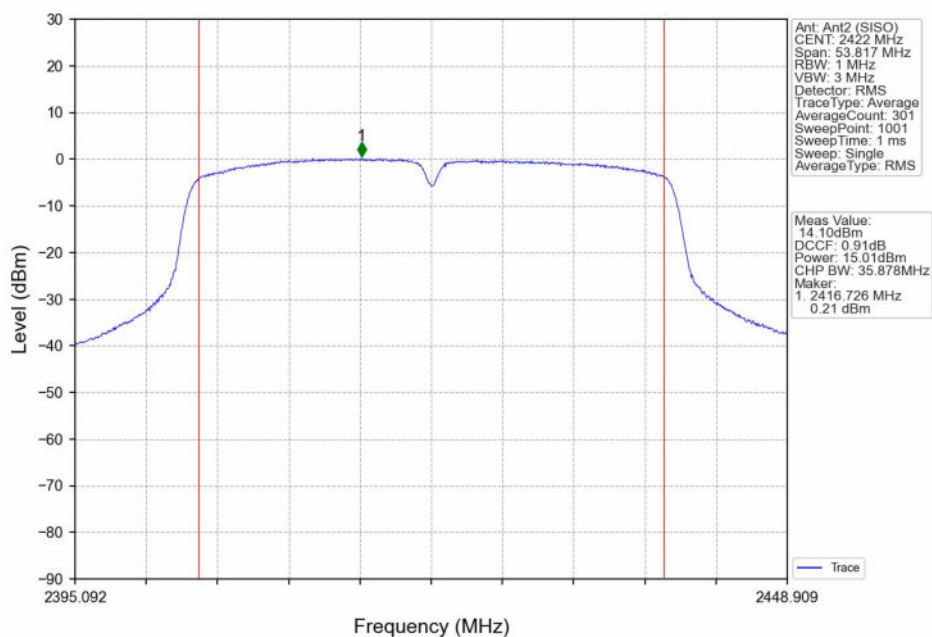
802.11n(HT20)\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



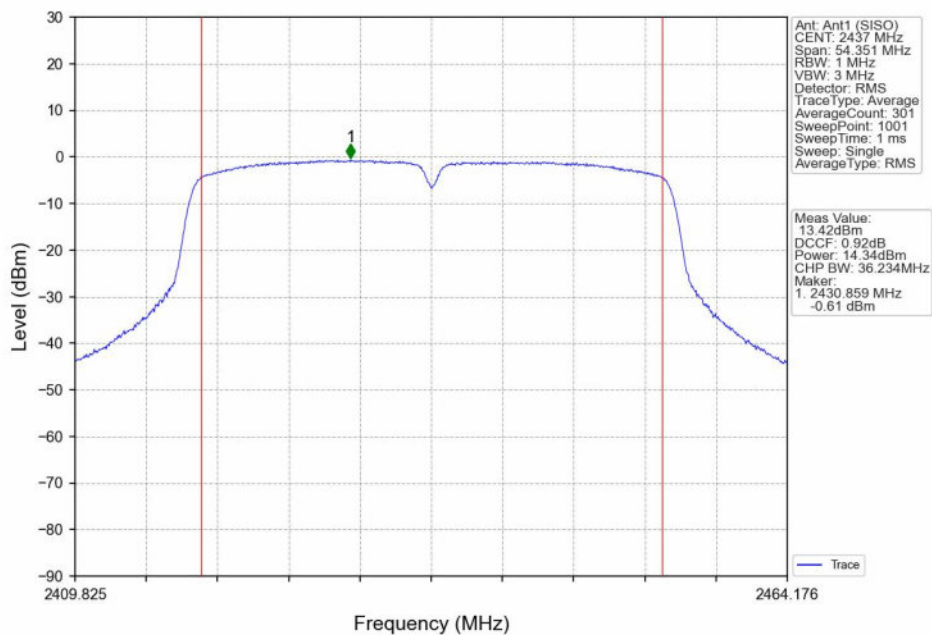
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



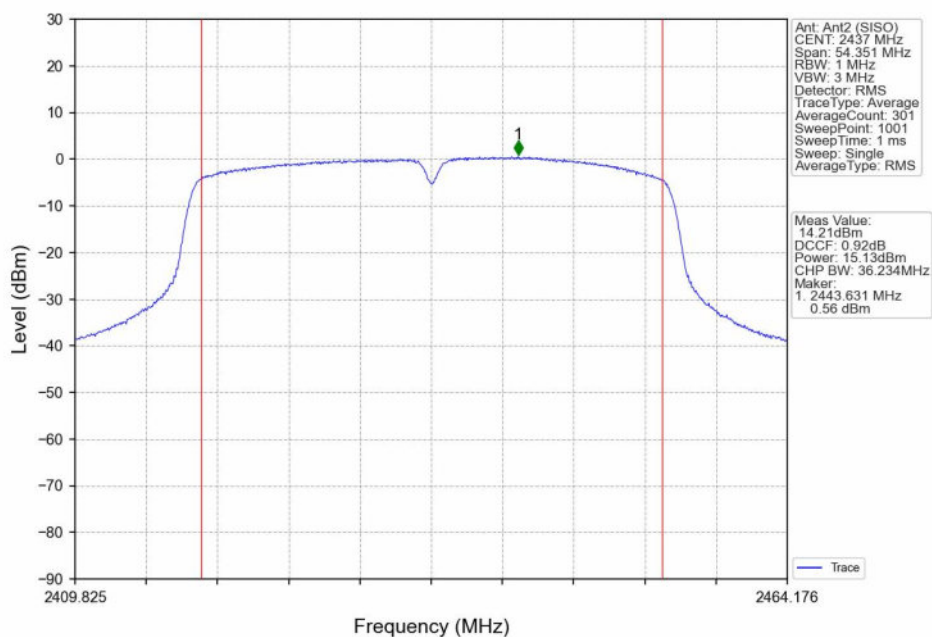
802.11n(HT40)\_LCH\_2422MHz\_Ant2 (SISO)\_NTNV



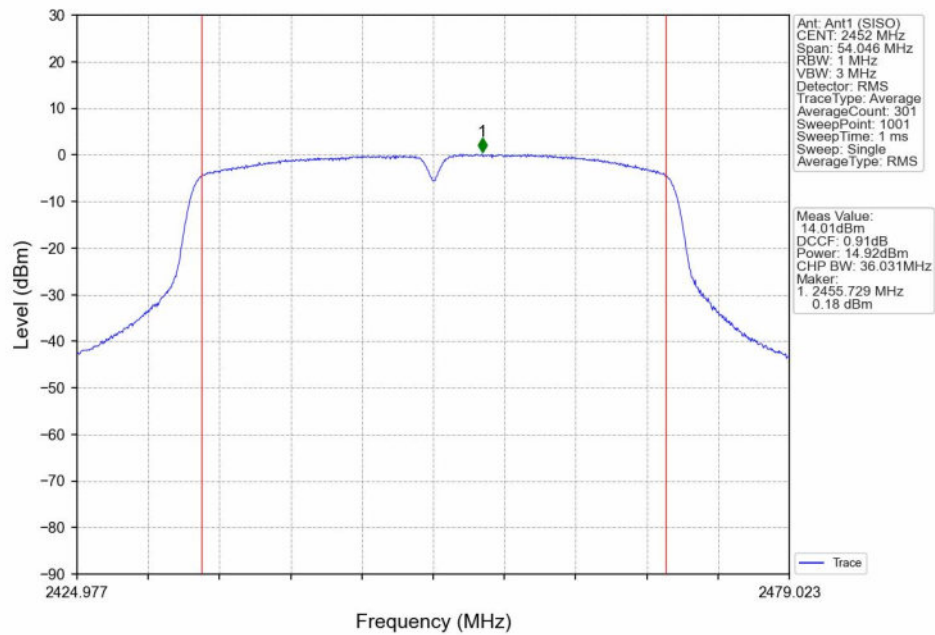
802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



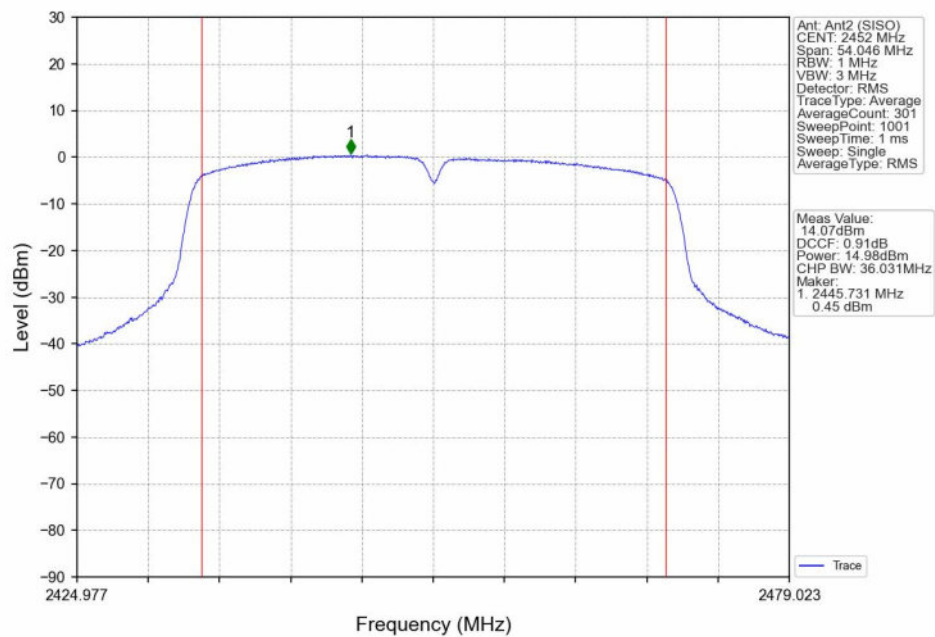
802.11n(HT40)\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



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

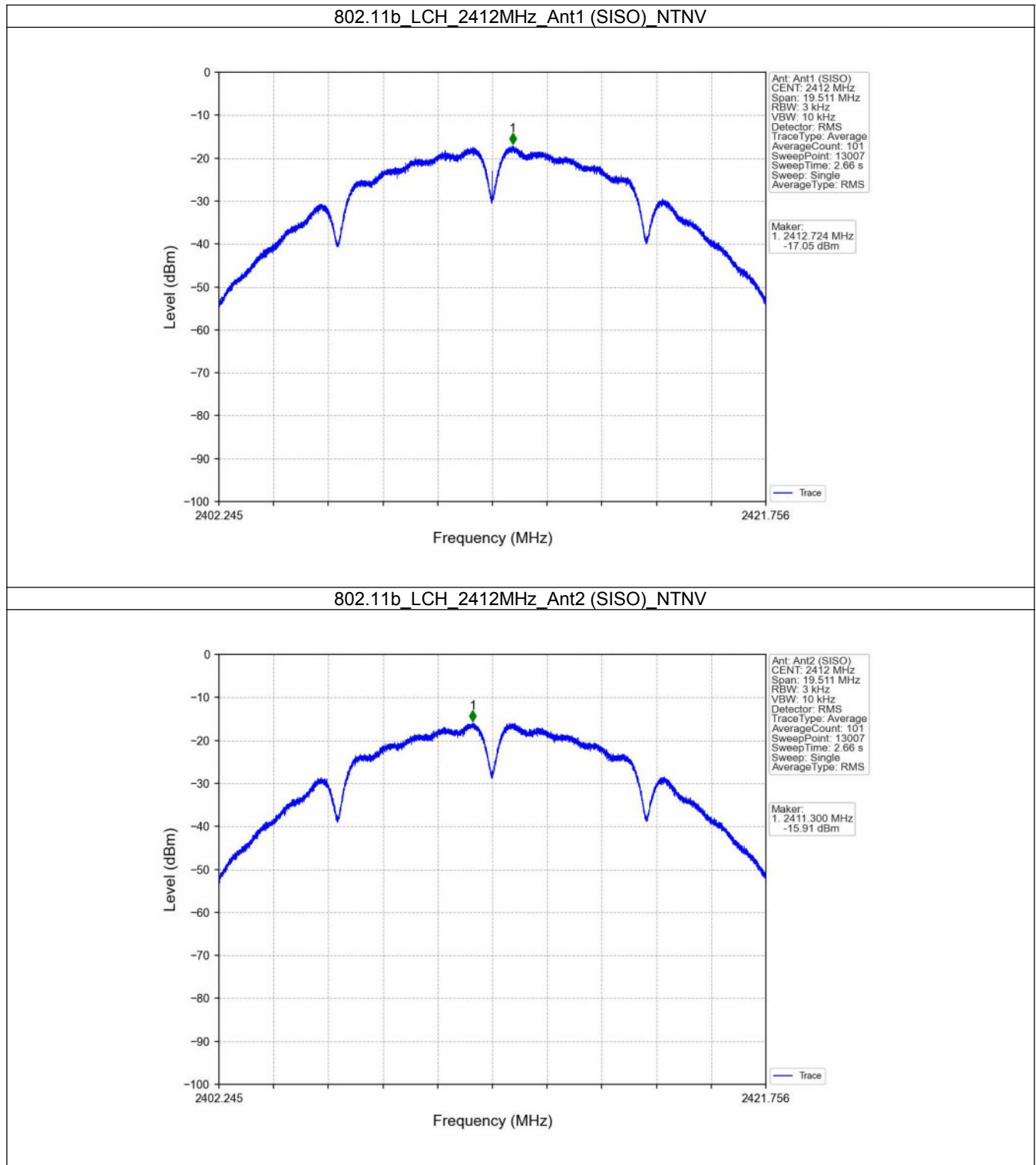


802.11n(HT40)\_HCH\_2452MHz\_Ant2 (SISO)\_NTNV

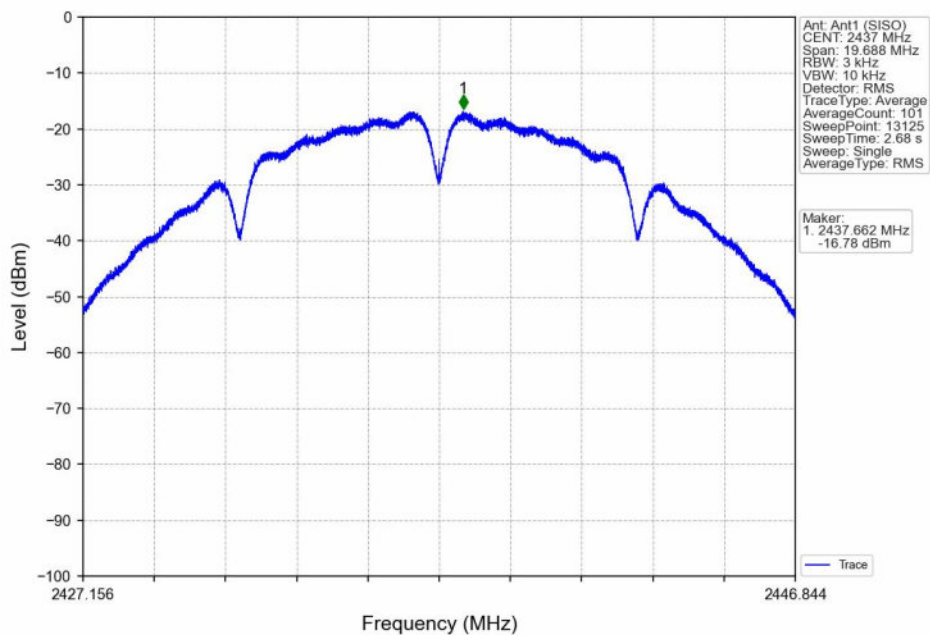


| Mode                                                | TX Type | Frequency (MHz) | Maximum PSD (dBm/3kHz) |        |       | Verdict |
|-----------------------------------------------------|---------|-----------------|------------------------|--------|-------|---------|
|                                                     |         |                 | ANT1                   | ANT2   | Limit |         |
| 802.11b                                             | SISO    | 2412            | -17.05                 | -15.91 | <=8   | Pass    |
|                                                     |         | 2437            | -16.78                 | -15.85 | <=8   | Pass    |
|                                                     |         | 2462            | -15.58                 | -16.41 | <=8   | Pass    |
| 802.11g                                             | SISO    | 2412            | -19.99                 | -18.54 | <=8   | Pass    |
|                                                     |         | 2437            | -19.43                 | -18.34 | <=8   | Pass    |
|                                                     |         | 2462            | -18.46                 | -19.29 | <=8   | Pass    |
| 802.11n (HT20)                                      | SISO    | 2412            | -20.78                 | -19.41 | <=8   | Pass    |
|                                                     |         | 2437            | -20.52                 | -19.26 | <=8   | Pass    |
|                                                     |         | 2462            | -19.24                 | -19.87 | <=8   | Pass    |
| 802.11n (HT40)                                      | SISO    | 2422            | -21.70                 | -21.22 | <=8   | Pass    |
|                                                     |         | 2437            | -22.07                 | -20.71 | <=8   | Pass    |
|                                                     |         | 2452            | -20.74                 | -20.74 | <=8   | Pass    |
| Note1: Antenna Gain: Ant1: 2.11dBi; Ant2: -0.74dBi; |         |                 |                        |        |       |         |

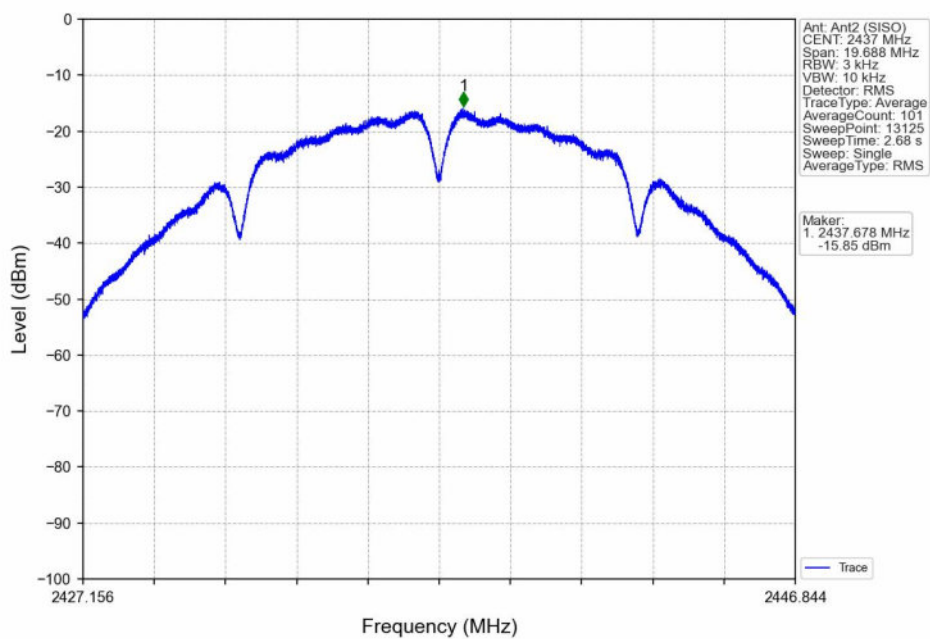
## 3.1.2 Test Graph



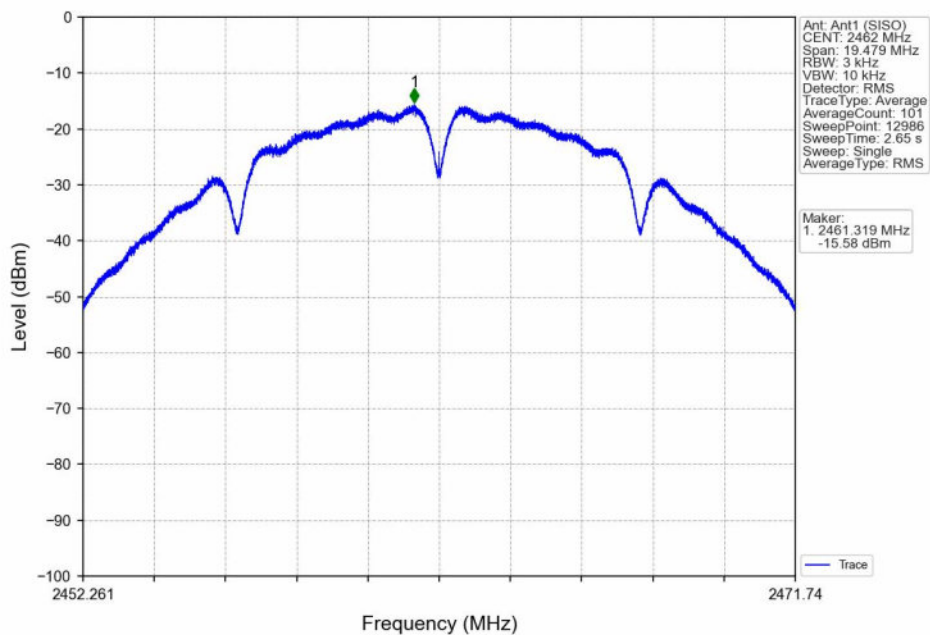
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



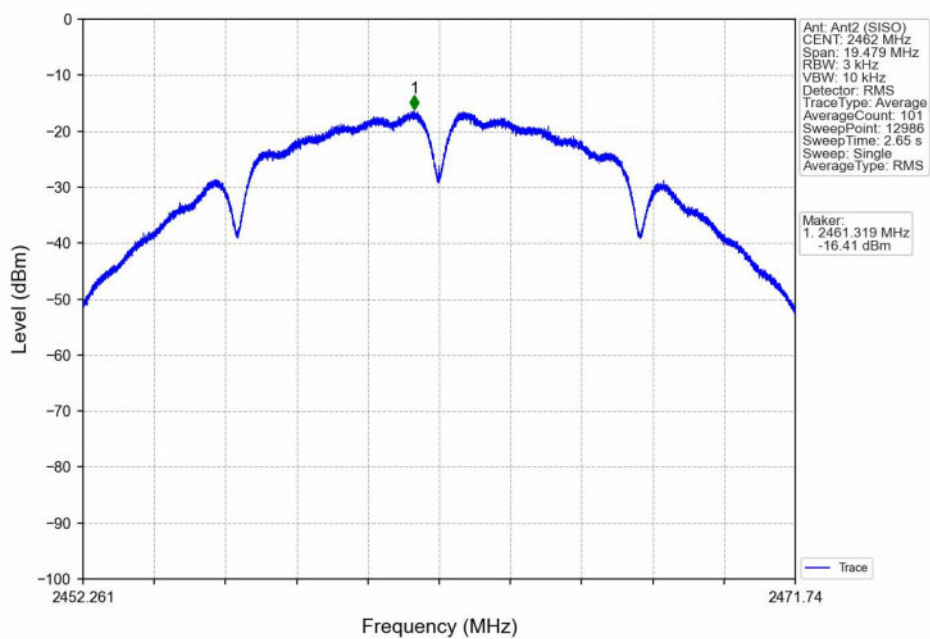
802.11b\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



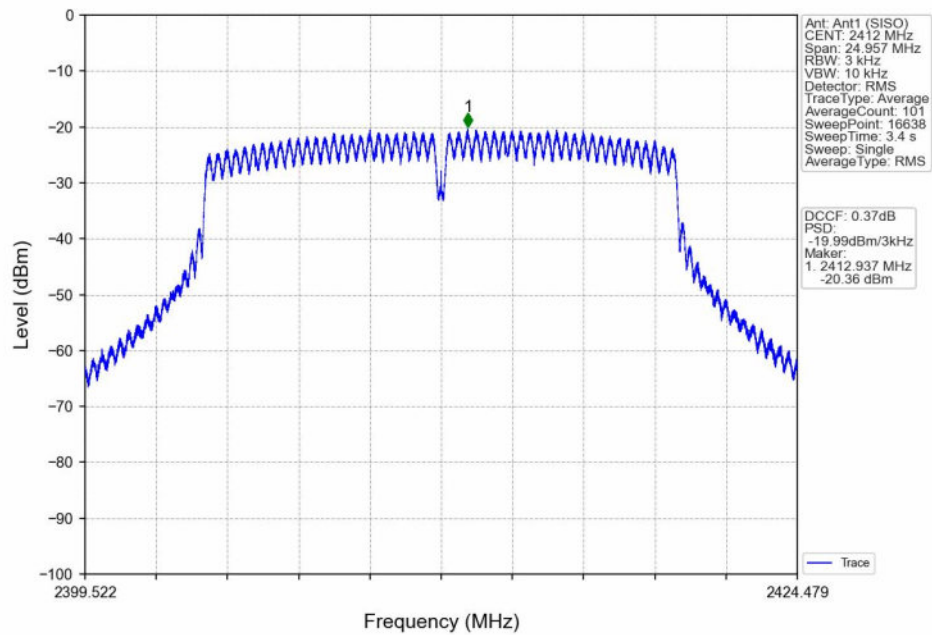
802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



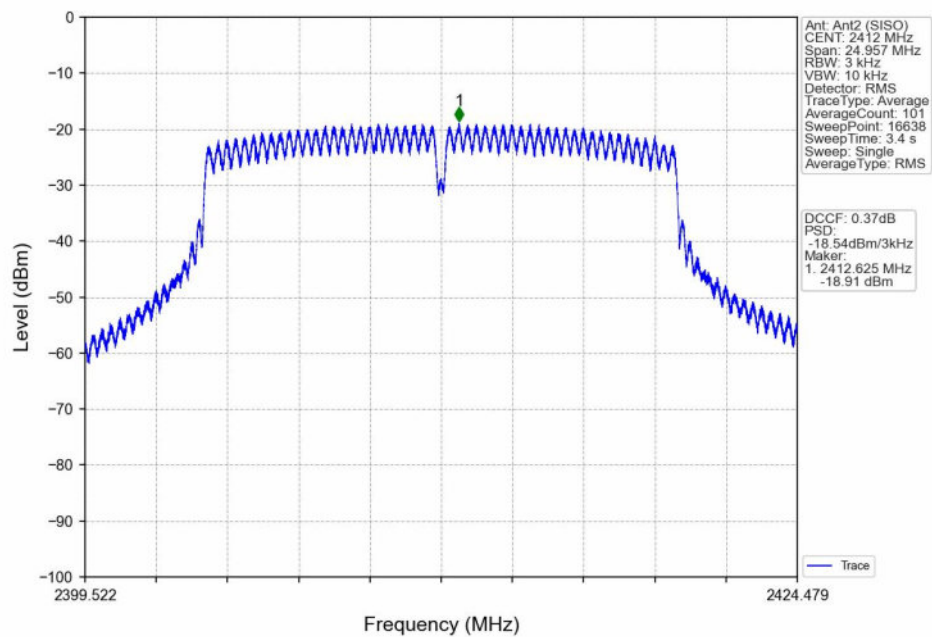
802.11b\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



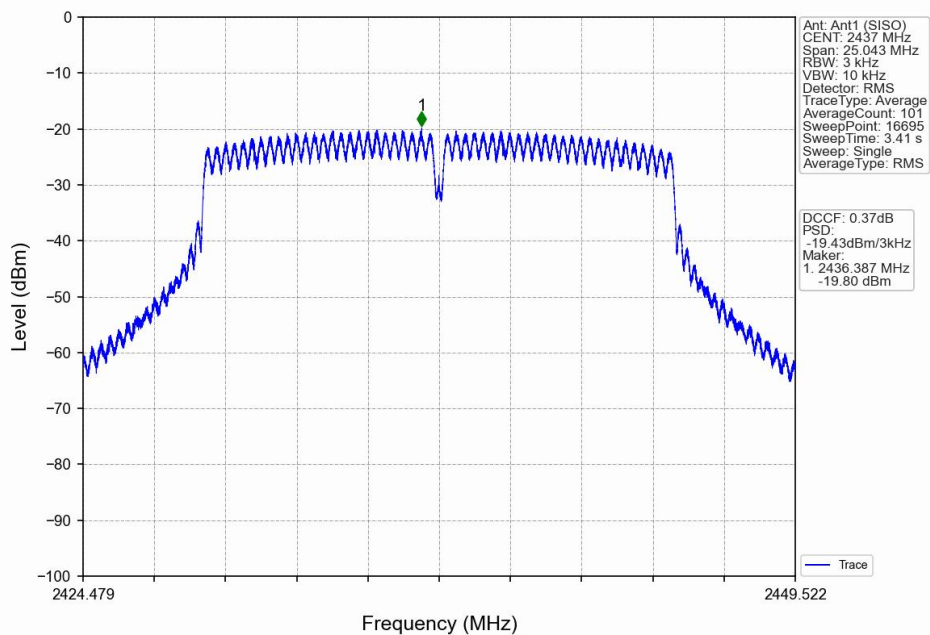
802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



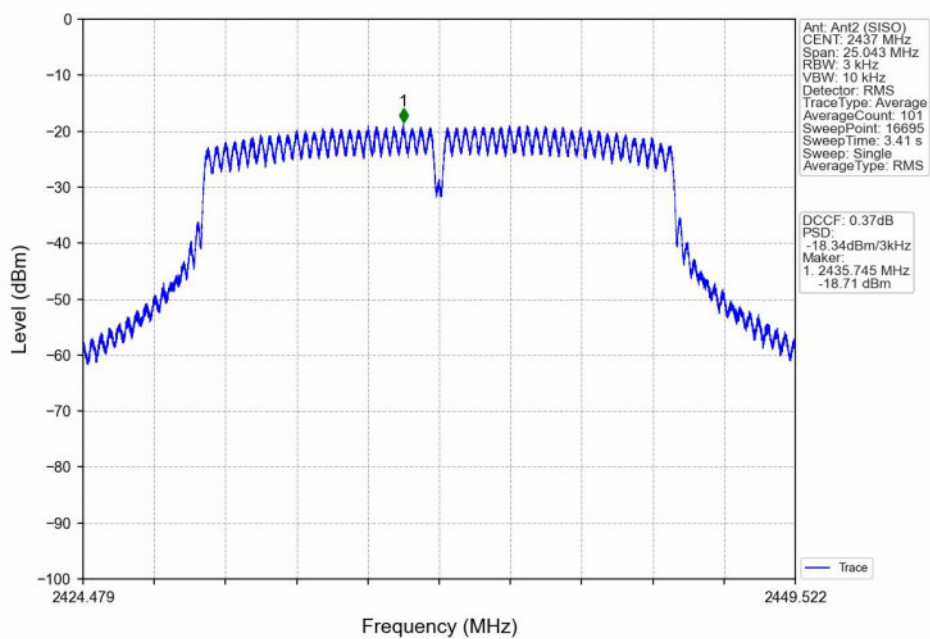
802.11g\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



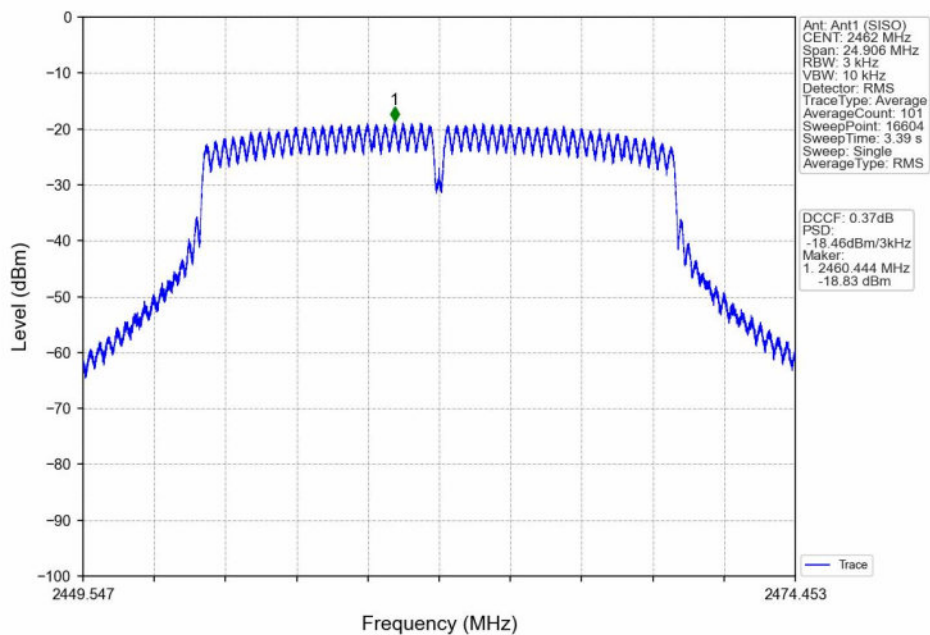
802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



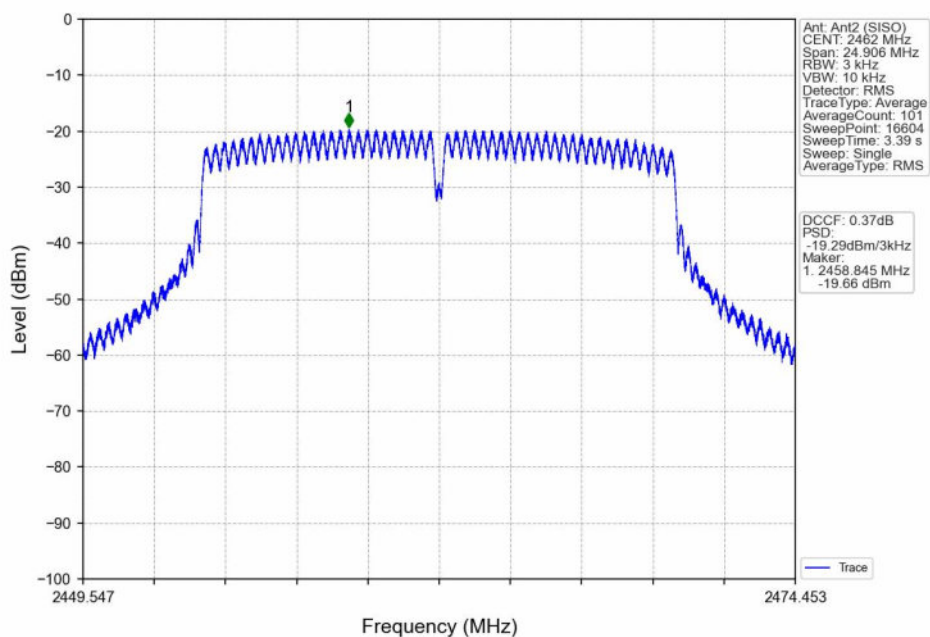
802.11g\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



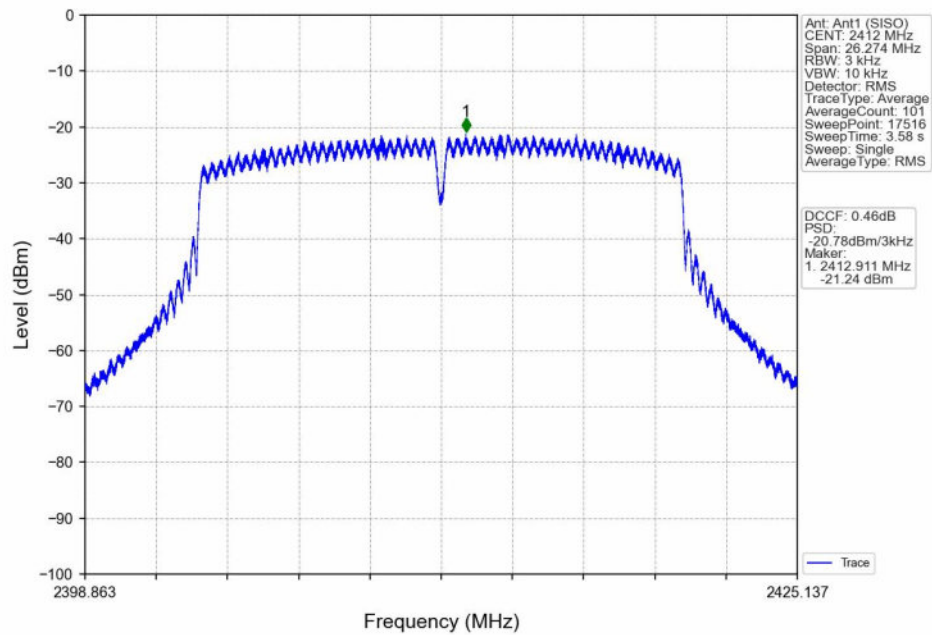
802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



802.11g\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



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



802.11n(HT20)\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV

