

## **Appendix RF test data for WIFI2.4G**

## 1. Duty Cycle

### 1.1 Test Result

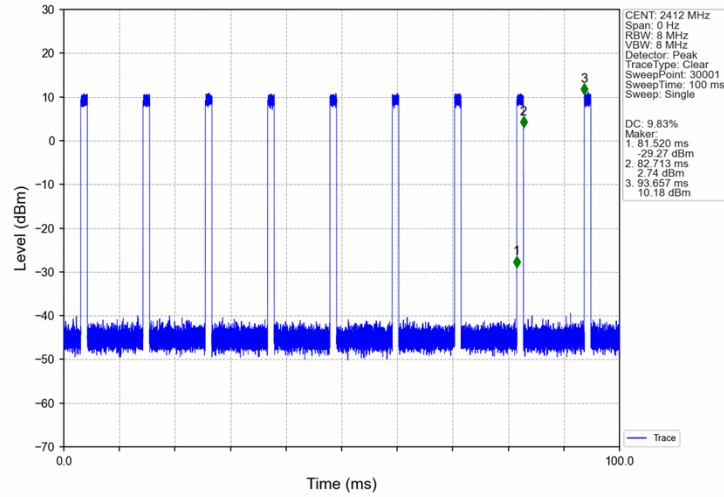
#### 1.1.1 Ant1

| Ant1             |         |                 |    |        |           |             |                |                                   |                       |
|------------------|---------|-----------------|----|--------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode             | Tx Type | Frequency (MHz) | RU | RU Pos | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11b          | SISO    | 2412            | /  | /      | 1.193     | 12.137      | 9.83           | 10.07                             | 0.81                  |
|                  |         | 2437            | /  | /      | 1.193     | 12.787      | 9.33           | 10.30                             | 1.31                  |
|                  |         | 2462            | /  | /      | 1.190     | 11.210      | 10.62          | 9.74                              | 0.03                  |
| 802.11g          | SISO    | 2412            | /  | /      | 0.247     | 10.277      | 2.40           | 16.19                             | 0.00                  |
|                  |         | 2437            | /  | /      | 0.244     | 10.270      | 2.38           | 16.24                             | 0.03                  |
|                  |         | 2462            | /  | /      | 0.247     | 12.137      | 2.04           | 16.91                             | 0.37                  |
| 802.11n (HT20)   | SISO    | 2412            | /  | /      | 0.227     | 13.347      | 1.70           | 17.69                             | 0.52                  |
|                  |         | 2437            | /  | /      | 0.227     | 12.357      | 1.84           | 17.36                             | 0.38                  |
|                  |         | 2462            | /  | /      | 0.223     | 10.257      | 2.17           | 16.63                             | 0.03                  |
| 802.11n (HT40)   | SISO    | 2422            | /  | /      | 0.934     | 10.964      | 8.52           | 10.70                             | 0.00                  |
|                  |         | 2437            | /  | /      | 0.933     | 10.963      | 8.51           | 10.70                             | 0.03                  |
|                  |         | 2452            | /  | /      | 0.934     | 10.967      | 8.52           | 10.70                             | 0.04                  |
| 802.11ax (HEW20) | SISO    | 2412            | SU | /      | 1.460     | 11.490      | 12.71          | 8.96                              | 0.03                  |
|                  |         | 2437            | SU | /      | 1.460     | 11.687      | 12.49          | 9.03                              | 0.24                  |
|                  |         | 2462            | SU | /      | 1.460     | 11.497      | 12.70          | 8.96                              | 0.03                  |
| 802.11ax (HEW40) | SISO    | 2422            | SU | /      | 0.760     | 10.793      | 7.04           | 11.52                             | 0.03                  |
|                  |         | 2437            | SU | /      | 0.764     | 10.800      | 7.07           | 11.50                             | 0.01                  |
|                  |         | 2452            | SU | /      | 0.763     | 10.900      | 7.00           | 11.55                             | 0.07                  |

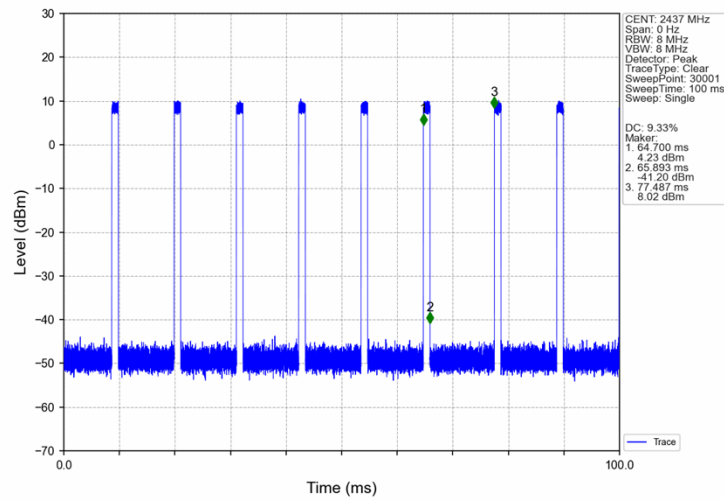
## 1.2 Test Graph

### 1.2.1 Ant1

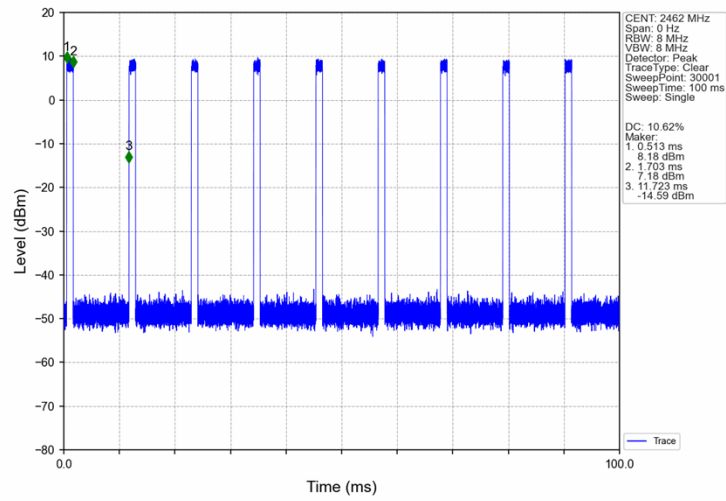
802.11b\_LCH\_2412MHz\_Ant1 (SISO) NTNV



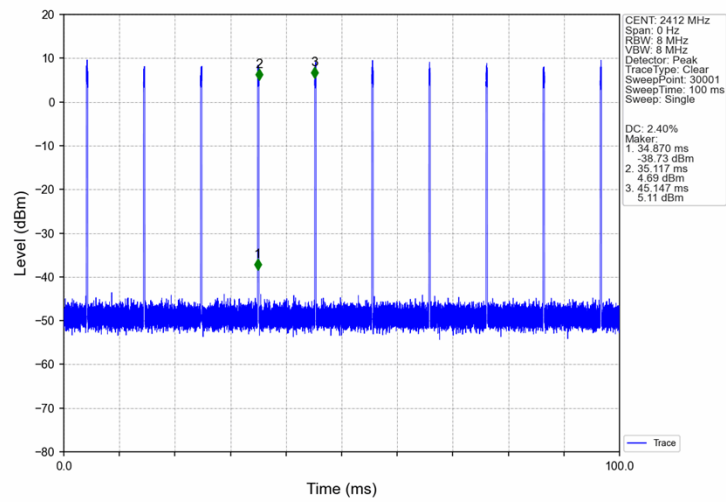
802.11b\_MCH\_2437MHz\_Ant1 (SISO) NTNV



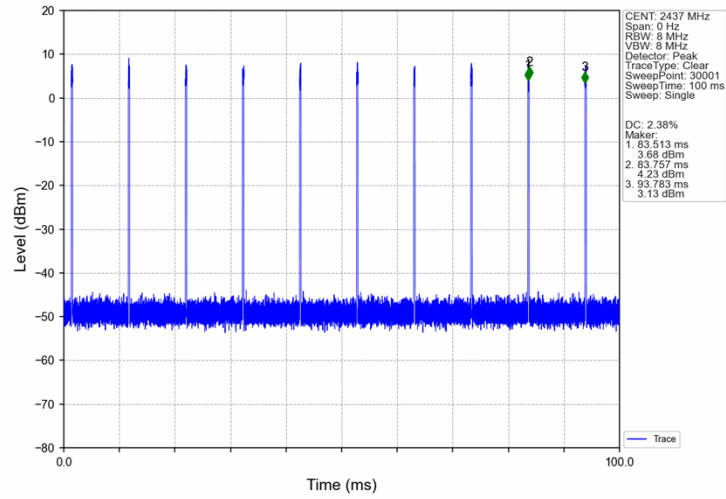
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



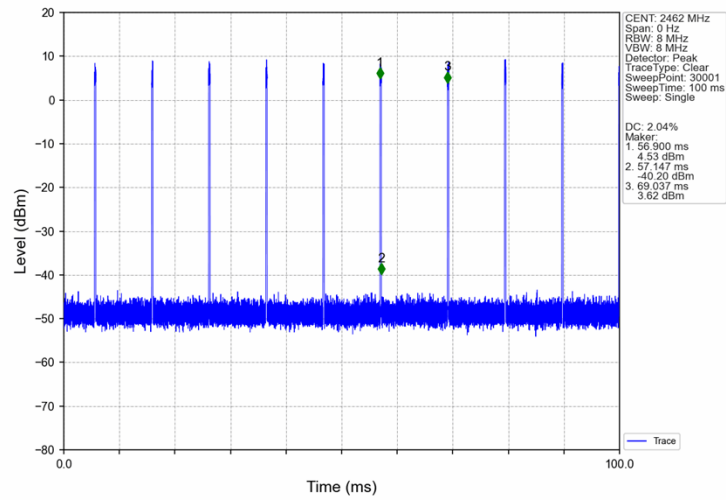
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



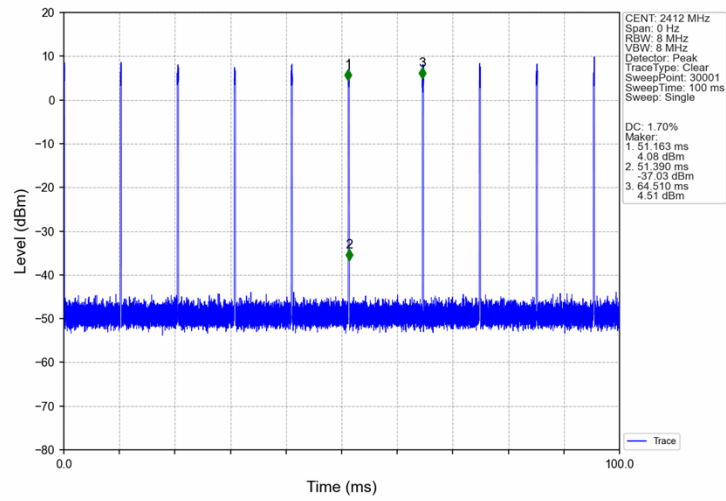
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



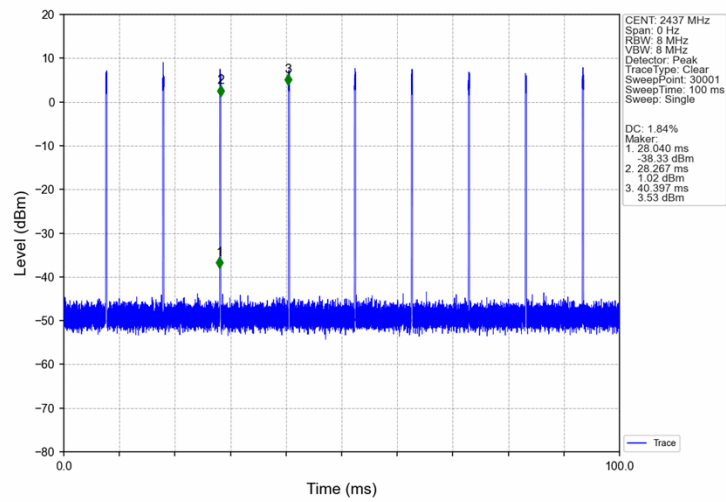
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



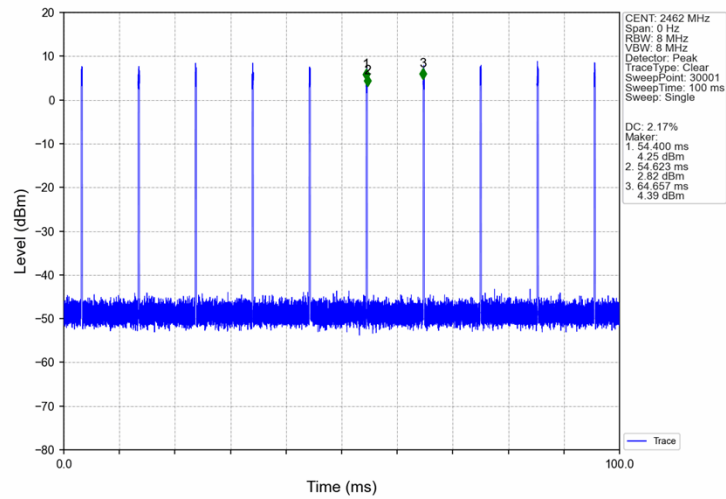
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



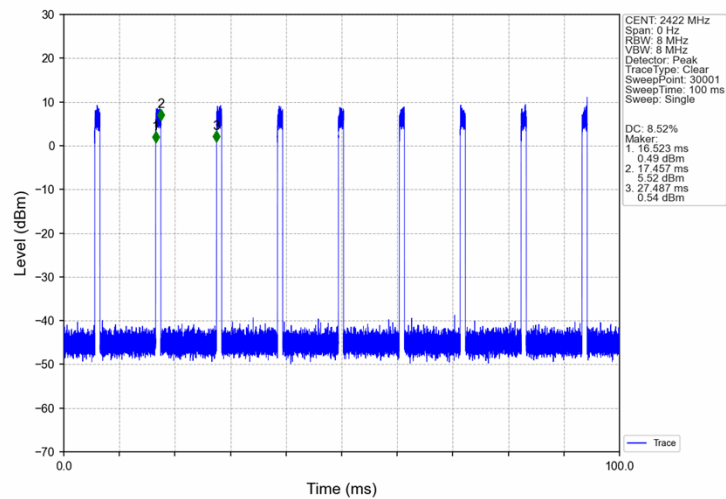
## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



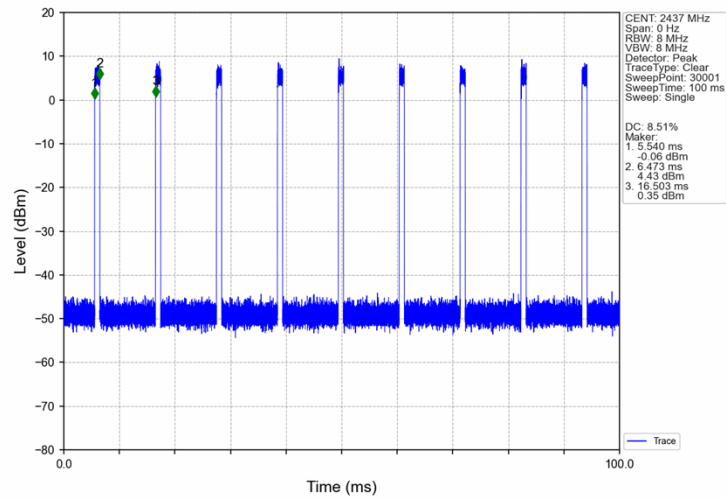
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



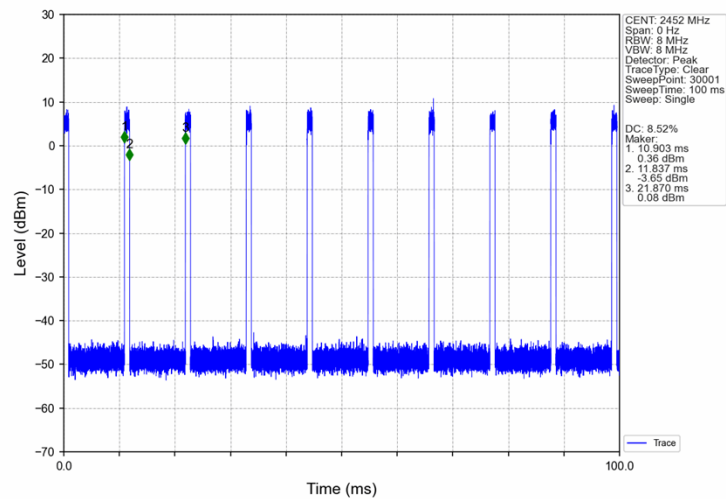
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



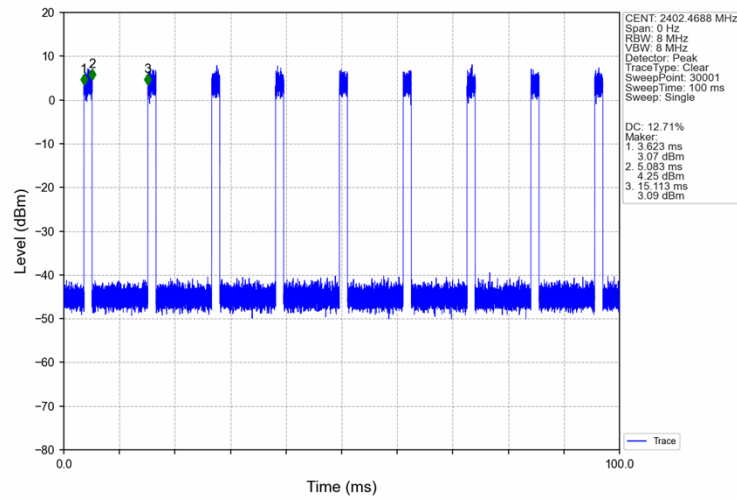
## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



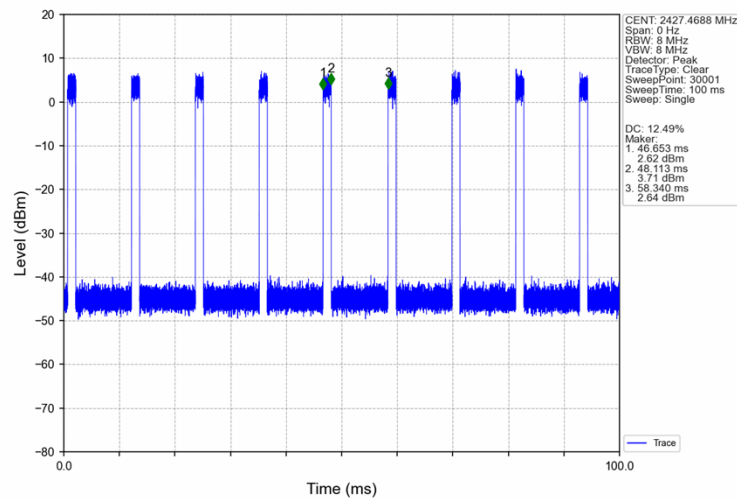
## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



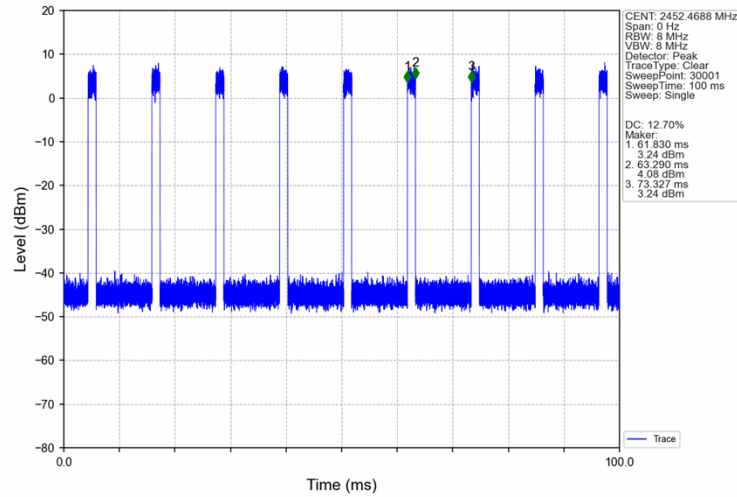
## 802.11ax(HEW20) LCH 2412MHz\_SU / \_Ant1 (SISO) NTN



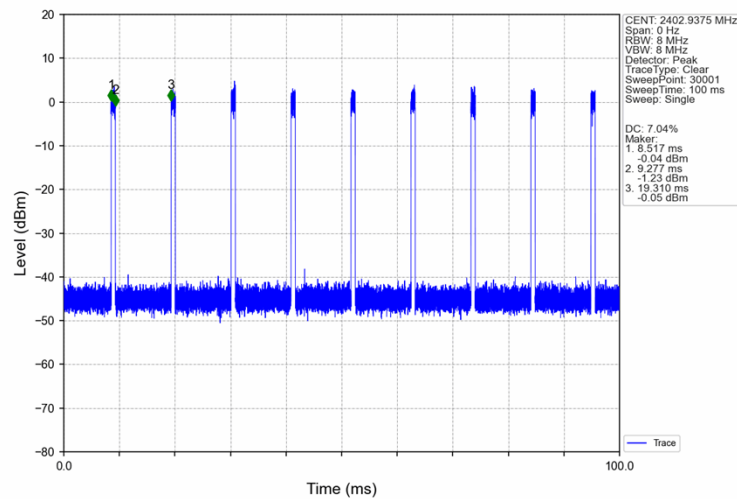
## 802.11ax(HEW20) MCH 2437MHz\_SU / \_Ant1 (SISO) NTN



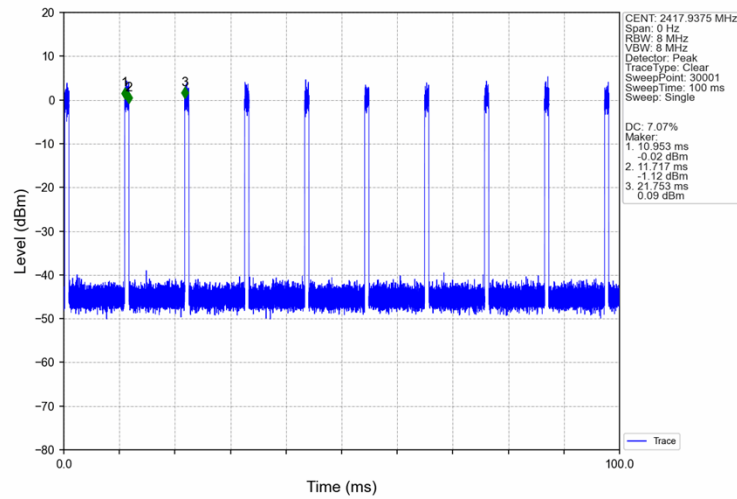
## 802.11ax(HEW20) HCH 2462MHz\_SU / \_Ant1 (SISO) NTNv



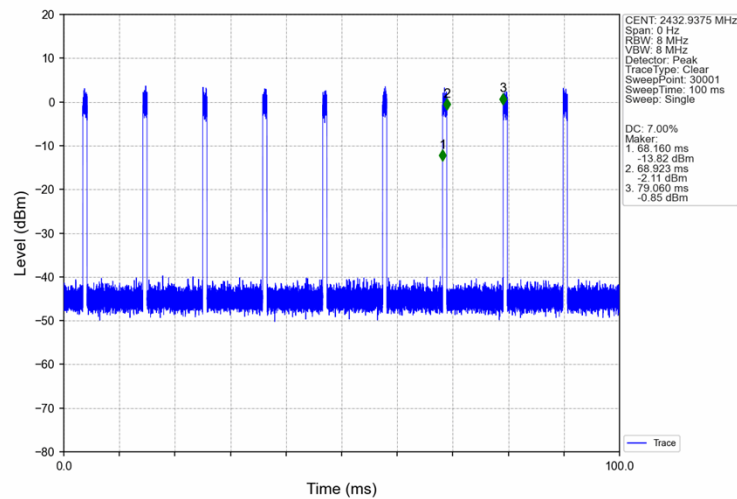
## 802.11ax(HEW40) LCH 2422MHz\_SU / \_Ant1 (SISO) NTNv



## 802.11ax(HEW40)\_MCH\_2437MHz\_SU\_/\_Ant1 (SISO)\_NTNV



## 802.11ax(HEW40)\_HCH\_2452MHz\_SU\_/\_Ant1 (SISO)\_NTNV



## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

| Mode             | TX Type | Frequency (MHz) | RU | RU Pos | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------------------|---------|-----------------|----|--------|-----|------------------------------|-------|---------|
|                  |         |                 |    |        |     | Result                       | Limit |         |
| 802.11b          | SISO    | 2412            | /  | /      | 1   | 12.890                       | /     | Pass    |
|                  |         | 2437            | /  | /      | 1   | 13.045                       | /     | Pass    |
|                  |         | 2462            | /  | /      | 1   | 13.033                       | /     | Pass    |
| 802.11g          | SISO    | 2412            | /  | /      | 1   | 16.516                       | /     | Pass    |
|                  |         | 2437            | /  | /      | 1   | 16.476                       | /     | Pass    |
|                  |         | 2462            | /  | /      | 1   | 16.493                       | /     | Pass    |
| 802.11n (HT20)   | SISO    | 2412            | /  | /      | 1   | 17.713                       | /     | Pass    |
|                  |         | 2437            | /  | /      | 1   | 17.758                       | /     | Pass    |
|                  |         | 2462            | /  | /      | 1   | 17.680                       | /     | Pass    |
| 802.11n (HT40)   | SISO    | 2422            | /  | /      | 1   | 36.948                       | /     | Pass    |
|                  |         | 2437            | /  | /      | 1   | 37.103                       | /     | Pass    |
|                  |         | 2452            | /  | /      | 1   | 36.773                       | /     | Pass    |
| 802.11ax (HEW20) | SISO    | 2412            | SU | /      | 1   | 18.957                       | /     | Pass    |
|                  |         | 2437            | SU | /      | 1   | 18.987                       | /     | Pass    |
|                  |         | 2462            | SU | /      | 1   | 19.007                       | /     | Pass    |
| 802.11ax (HEW40) | SISO    | 2422            | SU | /      | 1   | 38.143                       | /     | Pass    |
|                  |         | 2437            | SU | /      | 1   | 38.224                       | /     | Pass    |
|                  |         | 2452            | SU | /      | 1   | 38.096                       | /     | Pass    |

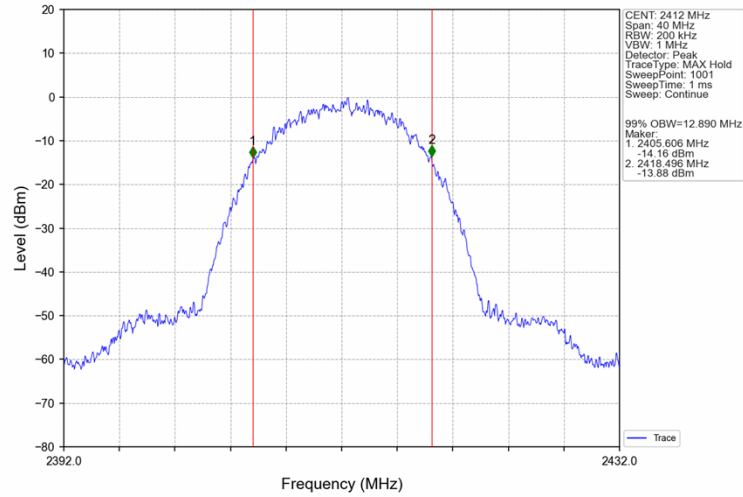
#### 2.1.2 6dB BW

| Mode             | TX Type | Frequency (MHz) | RU | RU Pos | ANT | 6dB Bandwidth (MHz) |       | Verdict |
|------------------|---------|-----------------|----|--------|-----|---------------------|-------|---------|
|                  |         |                 |    |        |     | Result              | Limit |         |
| 802.11b          | SISO    | 2412            | /  | /      | 1   | 8.719               | >=0.5 | Pass    |
|                  |         | 2437            | /  | /      | 1   | 9.540               | >=0.5 | Pass    |
|                  |         | 2462            | /  | /      | 1   | 8.178               | >=0.5 | Pass    |
| 802.11g          | SISO    | 2412            | /  | /      | 1   | 16.454              | >=0.5 | Pass    |
|                  |         | 2437            | /  | /      | 1   | 16.368              | >=0.5 | Pass    |
|                  |         | 2462            | /  | /      | 1   | 16.264              | >=0.5 | Pass    |
| 802.11n (HT20)   | SISO    | 2412            | /  | /      | 1   | 17.282              | >=0.5 | Pass    |
|                  |         | 2437            | /  | /      | 1   | 17.403              | >=0.5 | Pass    |
|                  |         | 2462            | /  | /      | 1   | 17.332              | >=0.5 | Pass    |
| 802.11n (HT40)   | SISO    | 2422            | /  | /      | 1   | 35.726              | >=0.5 | Pass    |
|                  |         | 2437            | /  | /      | 1   | 36.184              | >=0.5 | Pass    |
|                  |         | 2452            | /  | /      | 1   | 35.726              | >=0.5 | Pass    |
| 802.11ax (HEW20) | SISO    | 2412            | SU | /      | 1   | 18.055              | >=0.5 | Pass    |
|                  |         | 2437            | SU | /      | 1   | 18.024              | >=0.5 | Pass    |
|                  |         | 2462            | SU | /      | 1   | 18.728              | >=0.5 | Pass    |
| 802.11ax (HEW40) | SISO    | 2422            | SU | /      | 1   | 36.681              | >=0.5 | Pass    |
|                  |         | 2437            | SU | /      | 1   | 36.927              | >=0.5 | Pass    |
|                  |         | 2452            | SU | /      | 1   | 37.174              | >=0.5 | Pass    |

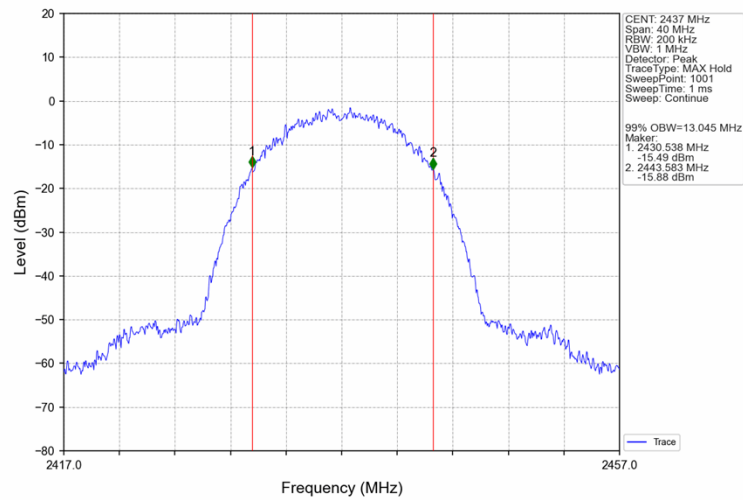
## 2.2 Test Graph

### 2.2.1 OBW

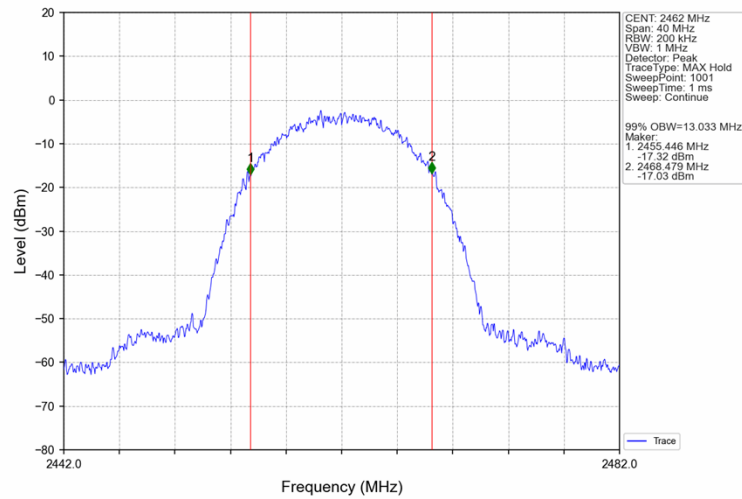
802.11b\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



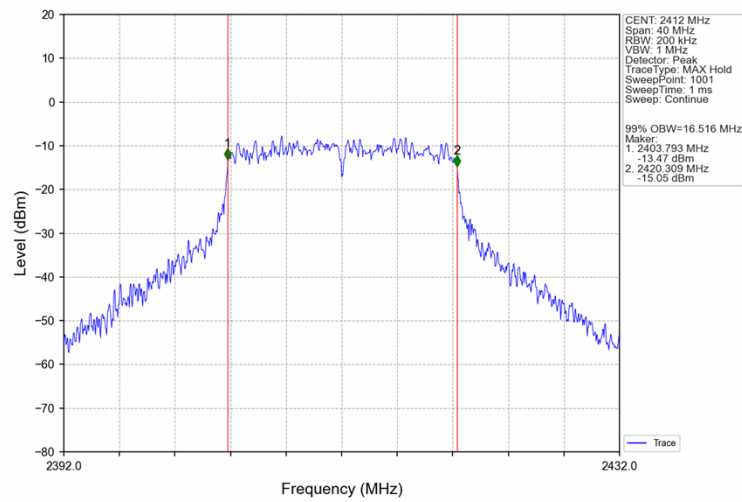
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



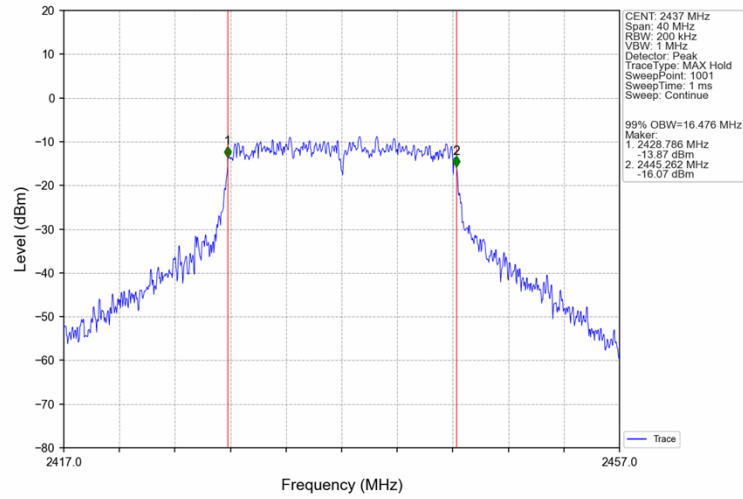
## 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



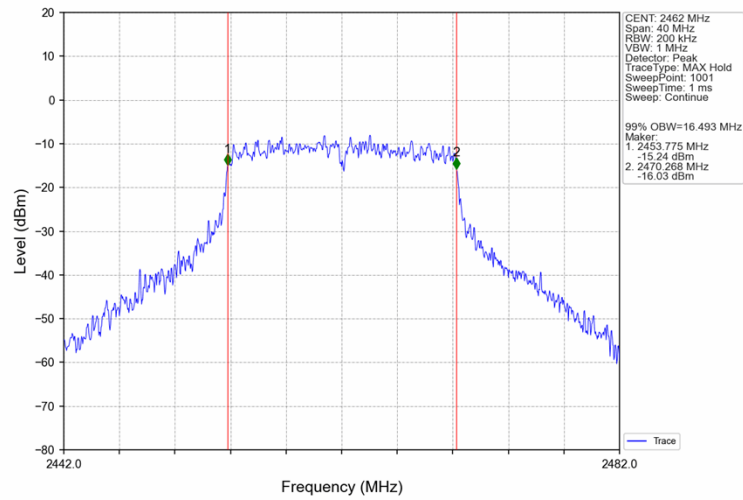
## 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



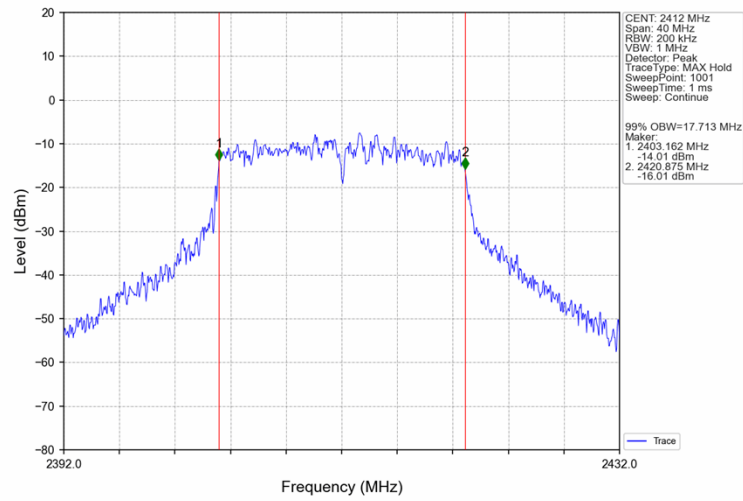
## 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



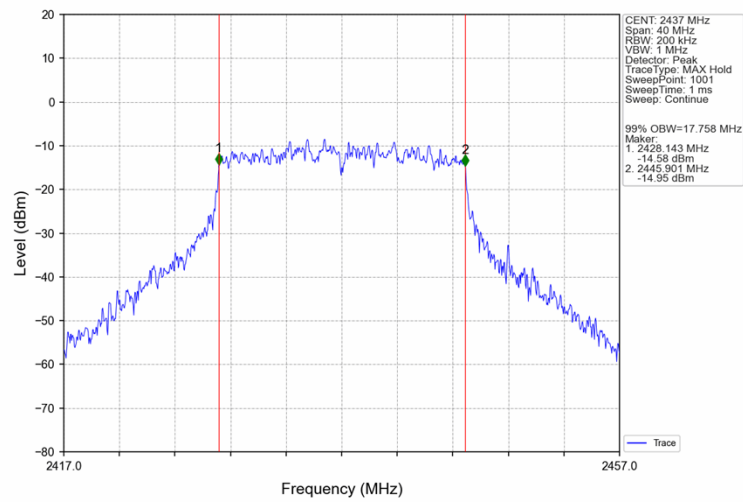
## 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



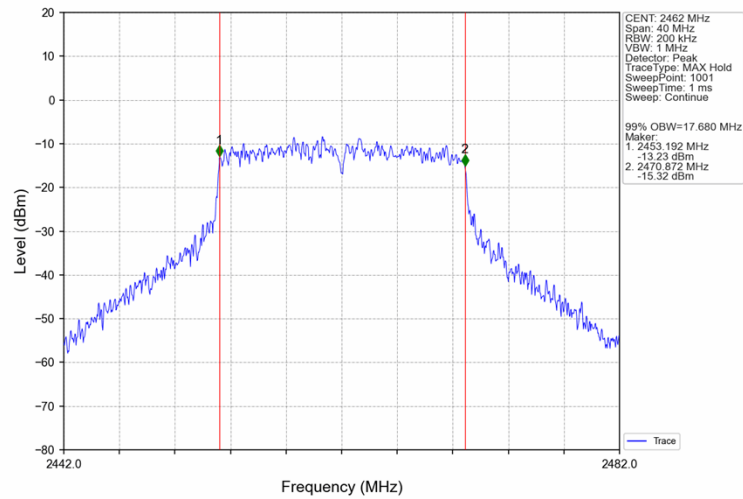
## 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



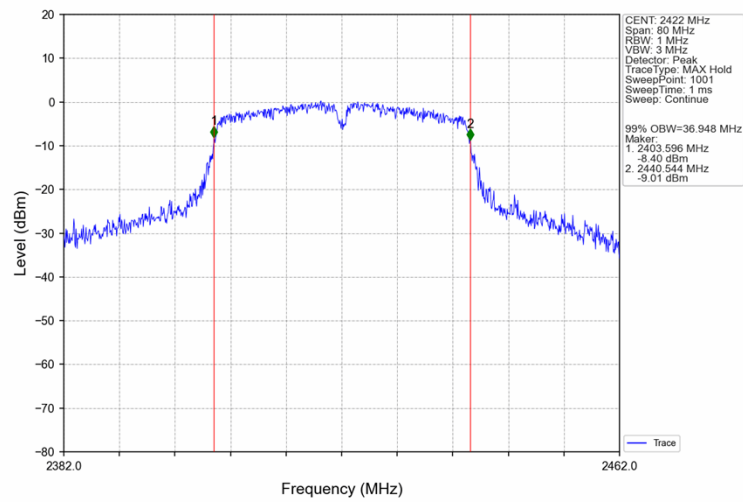
## 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



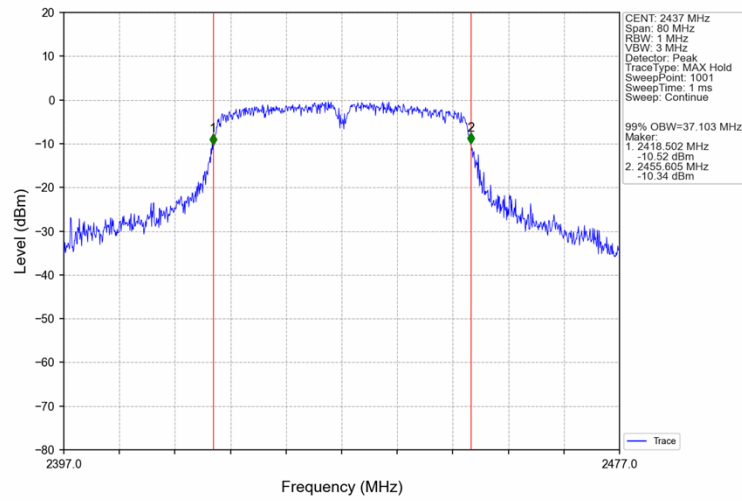
## 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



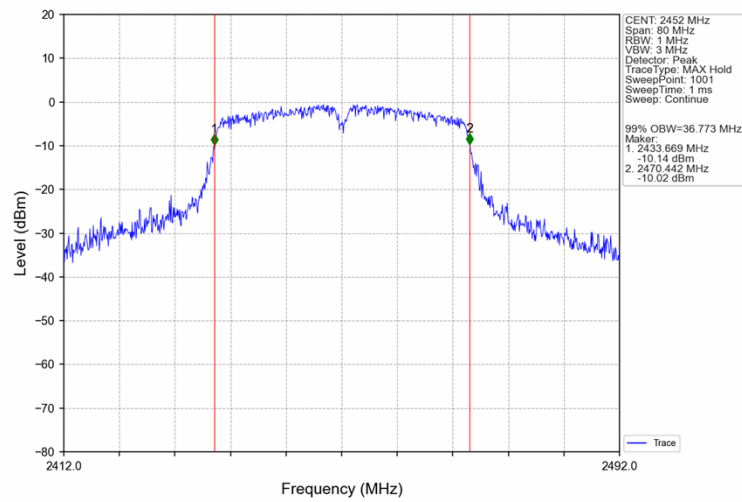
## 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



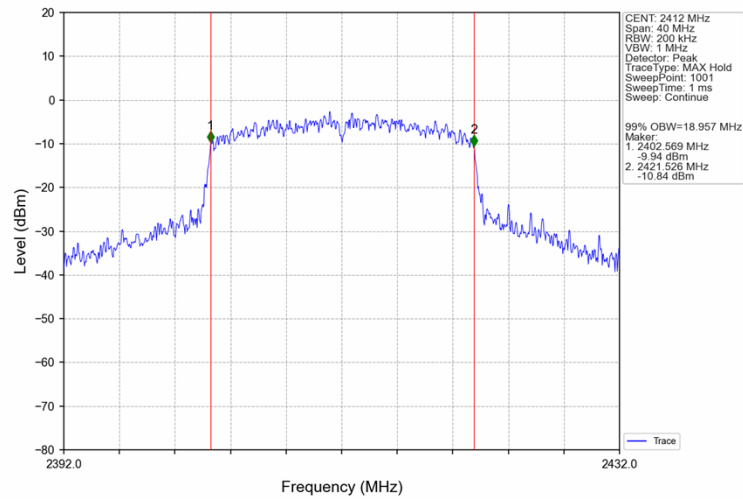
## 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



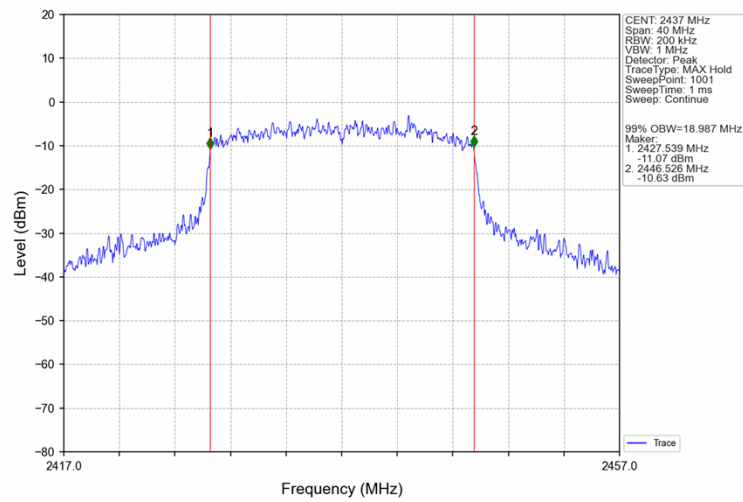
## 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



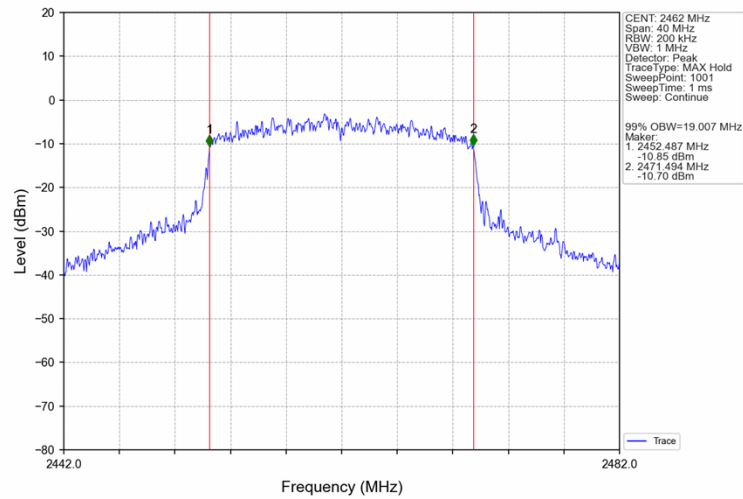
## 802.11ax(HEW20) LCH 2412MHz\_SU / \_Ant1 (SISO) NTNv



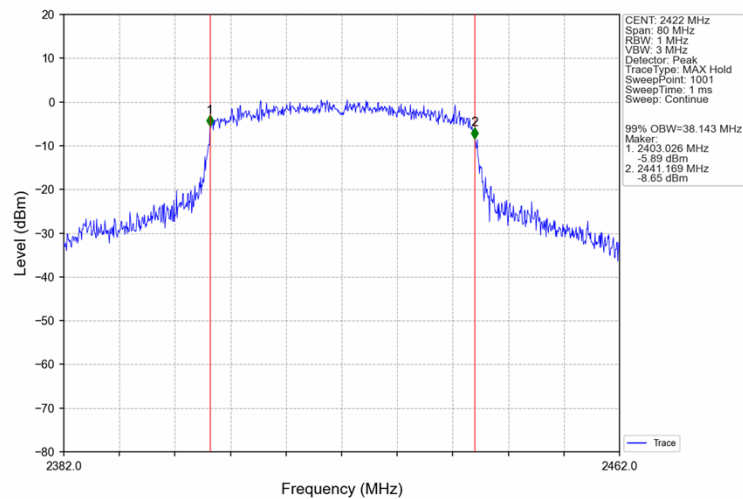
## 802.11ax(HEW20) MCH 2437MHz\_SU / \_Ant1 (SISO) NTNv



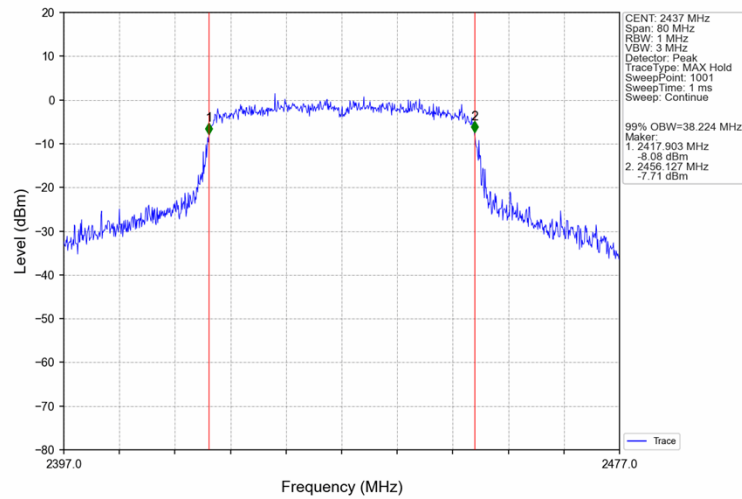
## 802.11ax(HEW20)\_HCH\_2462MHz\_SU\_/\_Ant1 (SISO)\_NTNV



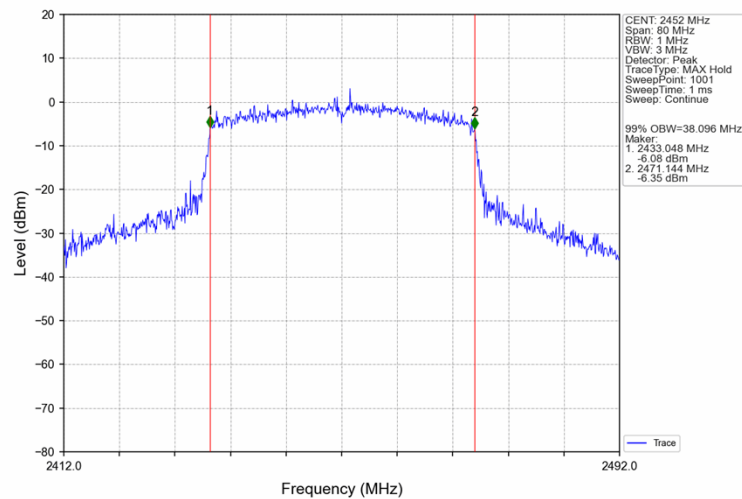
## 802.11ax(HEW40)\_LCH\_2422MHz\_SU\_/\_Ant1 (SISO)\_NTNV



## 802.11ax(HEW40)\_MCH\_2437MHz\_SU\_/\_Ant1 (SISO)\_NTNV

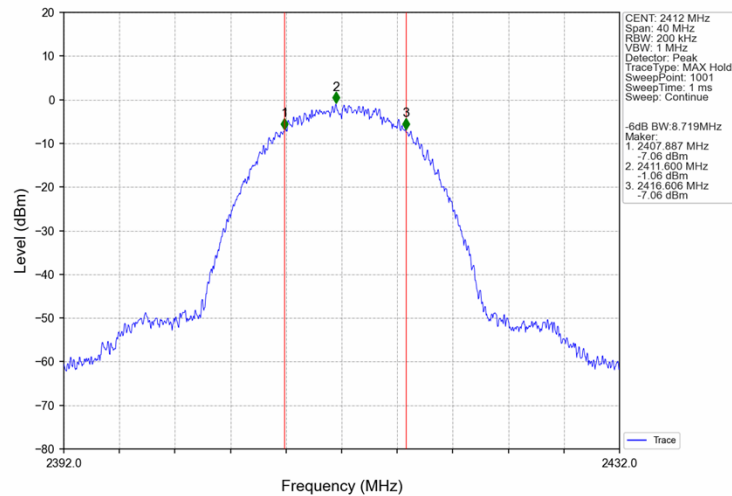


## 802.11ax(HEW40)\_HCH\_2452MHz\_SU\_/\_Ant1 (SISO)\_NTNV



## 2.2.2 6dB BW

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



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

