

# ANNEX G TEST DATA

## For

|                      |                  |
|----------------------|------------------|
| Project No.:         | 8235EU011403W    |
| Client:              | Solaborate Inc.  |
| Product Description: | RoomSign         |
| Model No.:           | HC2183T          |
| FCC ID:              | 2AW3M-HC2183T    |
| Technology:          | WiFi 5G          |
| Test Engineer:       | <i>Mikoy zhu</i> |
| Test Date:           | 2024-11-19       |

## Test Summary

| Item                                                 | Result |
|------------------------------------------------------|--------|
| Duty Cycle                                           | Pass   |
| Bandwidth                                            | Pass   |
| Maximum Conducted Output Power                       | Pass   |
| Maximum Power Spectral Density                       | Pass   |
| Unwanted Emissions In Non-restricted Frequency Bands | Pass   |
| Frequency Stability                                  | Pass   |

## 1. Duty Cycle

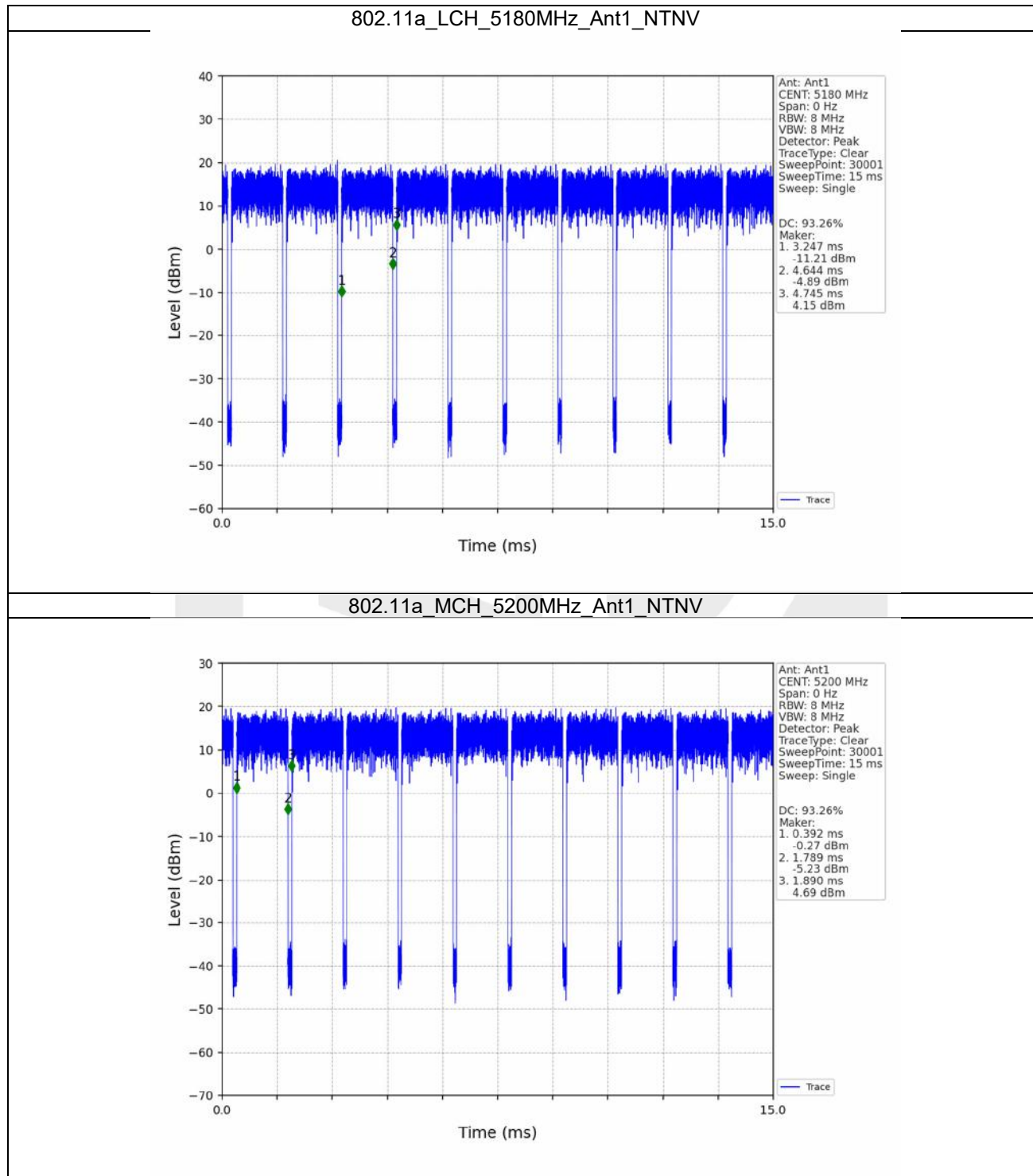
### 1.1 Test Result

#### 1.1.1 Ant1

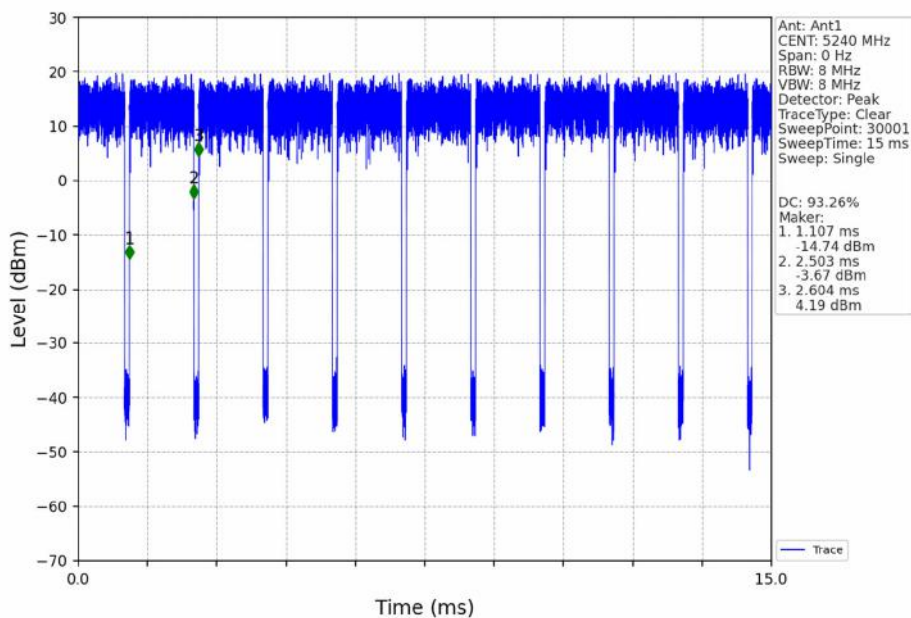
| Ant1             |         |                 |           |             |                |                                   |                       |
|------------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode             | Tx Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11a          | SISO    | 5180            | 1.397     | 1.498       | 93.26          | 0.30                              | 0.03                  |
|                  |         | 5200            | 1.397     | 1.498       | 93.26          | 0.30                              | 0.03                  |
|                  |         | 5240            | 1.398     | 1.499       | 93.26          | 0.30                              | 0.03                  |
|                  |         | 5745            | 1.397     | 1.498       | 93.26          | 0.30                              | 0.03                  |
|                  |         | 5785            | 1.397     | 1.497       | 93.32          | 0.30                              | 0.03                  |
|                  |         | 5825            | 1.398     | 1.499       | 93.26          | 0.30                              | 0.03                  |
| 802.11n (HT20)   | SISO    | 5180            | 1.309     | 1.410       | 92.84          | 0.32                              | 0.03                  |
|                  |         | 5200            | 1.309     | 1.410       | 92.84          | 0.32                              | 0.00                  |
|                  |         | 5240            | 1.309     | 1.410       | 92.84          | 0.32                              | 0.03                  |
|                  |         | 5745            | 1.309     | 1.410       | 92.84          | 0.32                              | 0.03                  |
|                  |         | 5785            | 1.309     | 1.410       | 92.84          | 0.32                              | 0.03                  |
|                  |         | 5825            | 1.309     | 1.410       | 92.84          | 0.32                              | 0.03                  |
| 802.11n (HT40)   | SISO    | 5190            | 0.651     | 0.690       | 94.35          | 0.25                              | 0.13                  |
|                  |         | 5230            | 0.652     | 0.690       | 94.49          | 0.25                              | 0.06                  |
|                  |         | 5755            | 0.652     | 0.690       | 94.49          | 0.25                              | 0.07                  |
|                  |         | 5795            | 0.651     | 0.689       | 94.48          | 0.25                              | 0.07                  |
| 802.11ac (VHT20) | SISO    | 5180            | 1.316     | 1.358       | 96.91          | 0.14                              | 0.03                  |
|                  |         | 5200            | 1.317     | 1.358       | 96.98          | 0.13                              | 0.03                  |
|                  |         | 5240            | 1.317     | 1.357       | 97.05          | 0.13                              | 0.00                  |
|                  |         | 5745            | 1.317     | 1.358       | 96.98          | 0.13                              | 0.03                  |
|                  |         | 5785            | 1.316     | 1.358       | 96.91          | 0.14                              | 0.10                  |
|                  |         | 5825            | 1.317     | 1.358       | 96.98          | 0.13                              | 0.03                  |
| 802.11ac (VHT40) | SISO    | 5190            | 0.658     | 0.697       | 94.40          | 0.25                              | 0.03                  |
|                  |         | 5230            | 0.660     | 0.697       | 94.69          | 0.24                              | 0.03                  |
|                  |         | 5755            | 0.660     | 0.698       | 94.56          | 0.24                              | 0.10                  |
|                  |         | 5795            | 0.659     | 0.698       | 94.41          | 0.25                              | 0.10                  |
| 802.11ac (VHT80) | SISO    | 5210            | 0.088     | 0.106       | 83.02          | 0.81                              | 0.35                  |
|                  |         | 5775            | 0.088     | 0.106       | 83.02          | 0.81                              | 0.26                  |

## 1.2 Test Graph

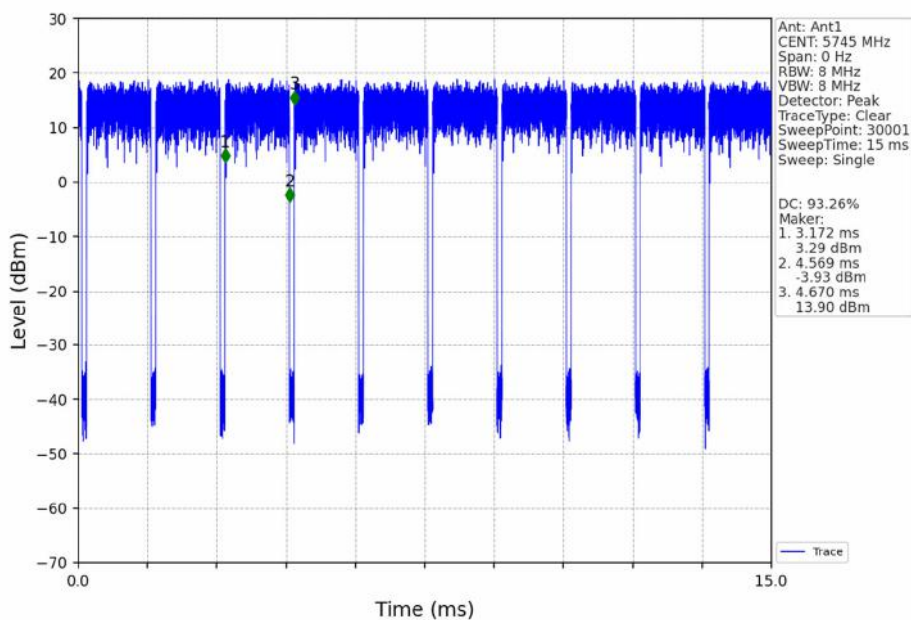
### 1.2.1 Ant1



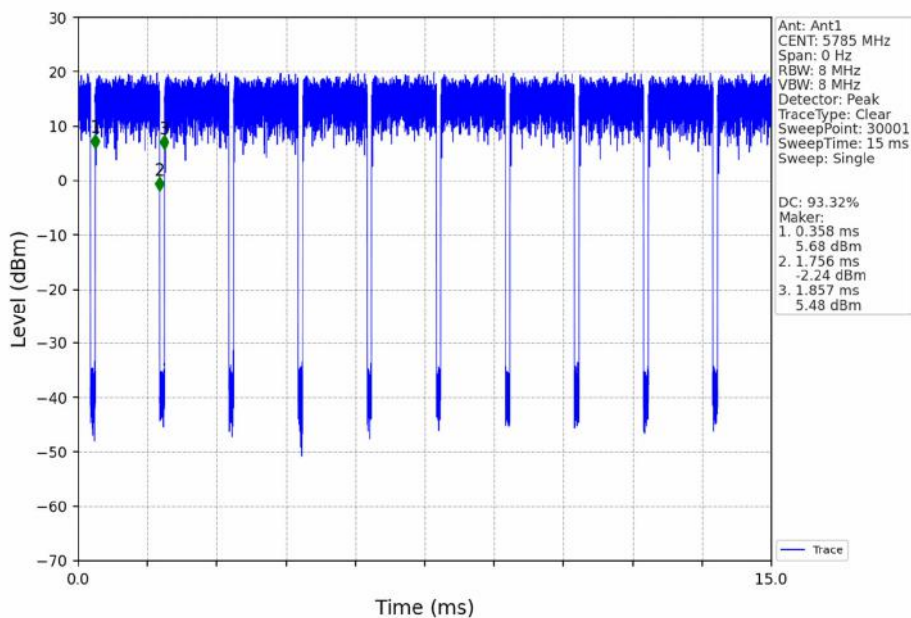
802.11a HCH\_5240MHz\_Ant1\_NTNV



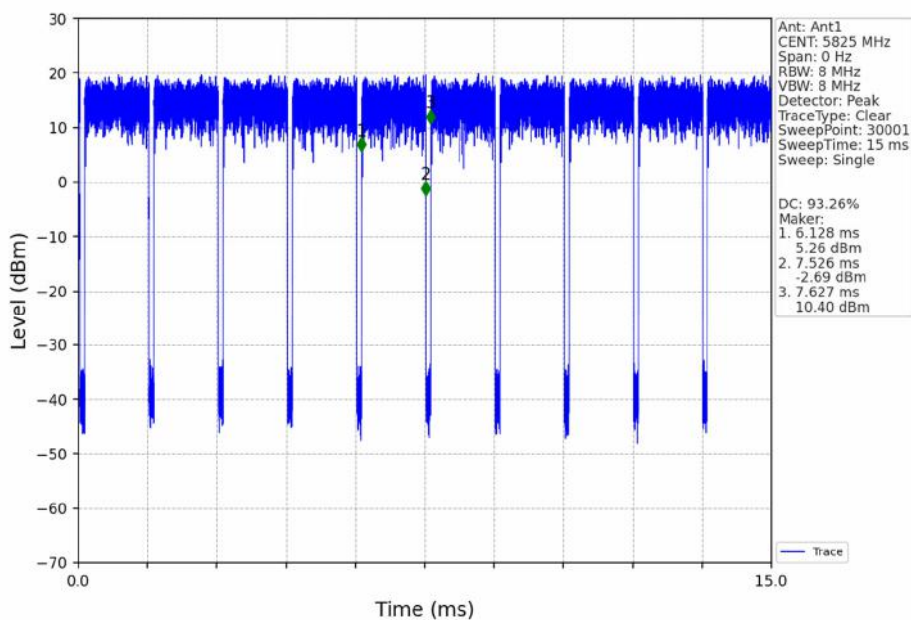
802.11a LCH\_5745MHz\_Ant1\_NTNV



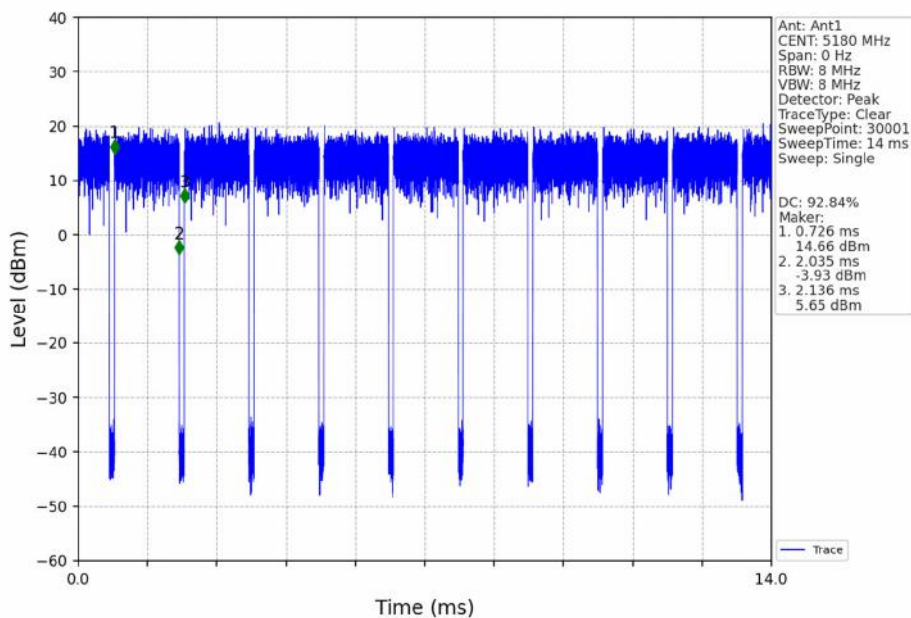
802.11a\_MCH\_5785MHz\_Ant1\_NTNV



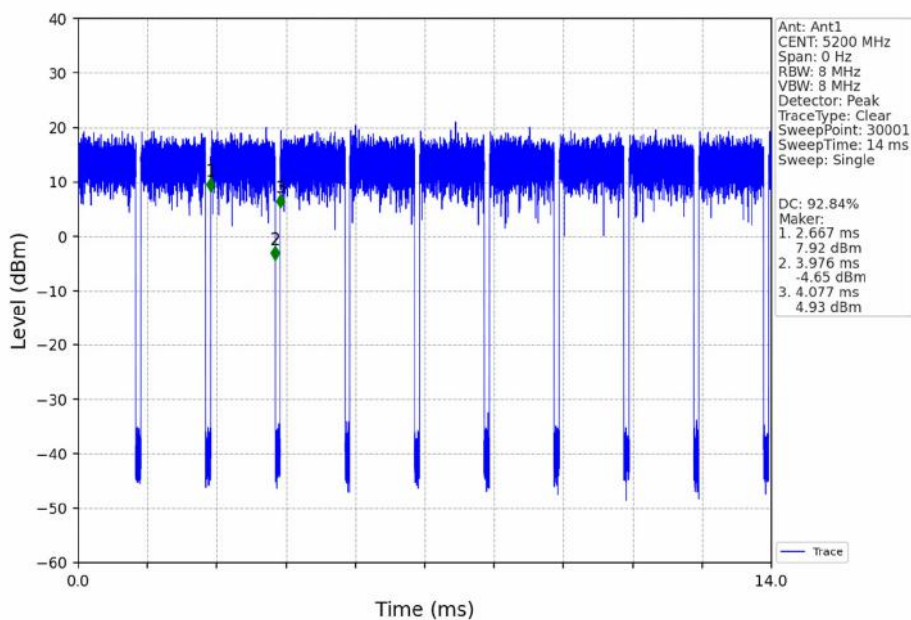
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



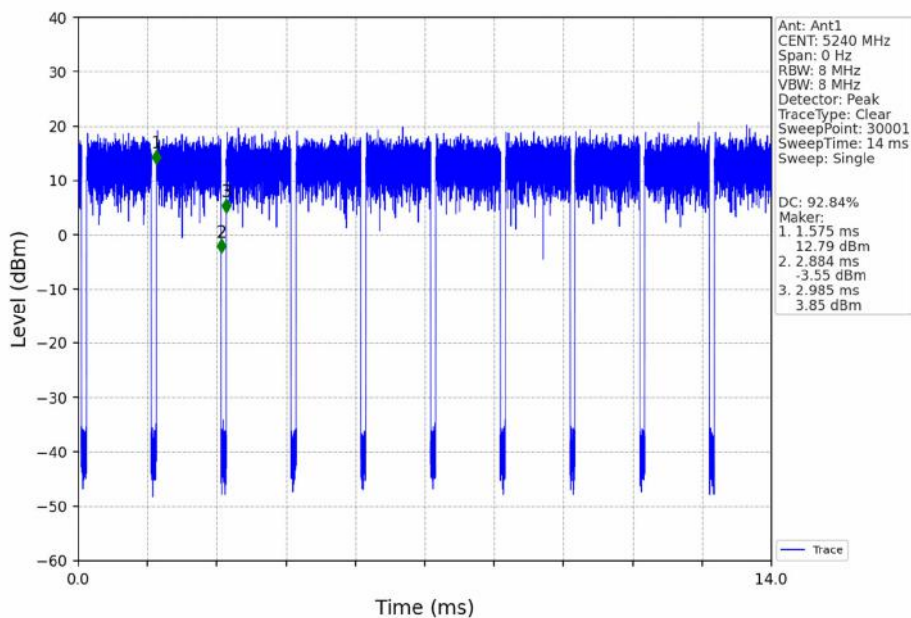
802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



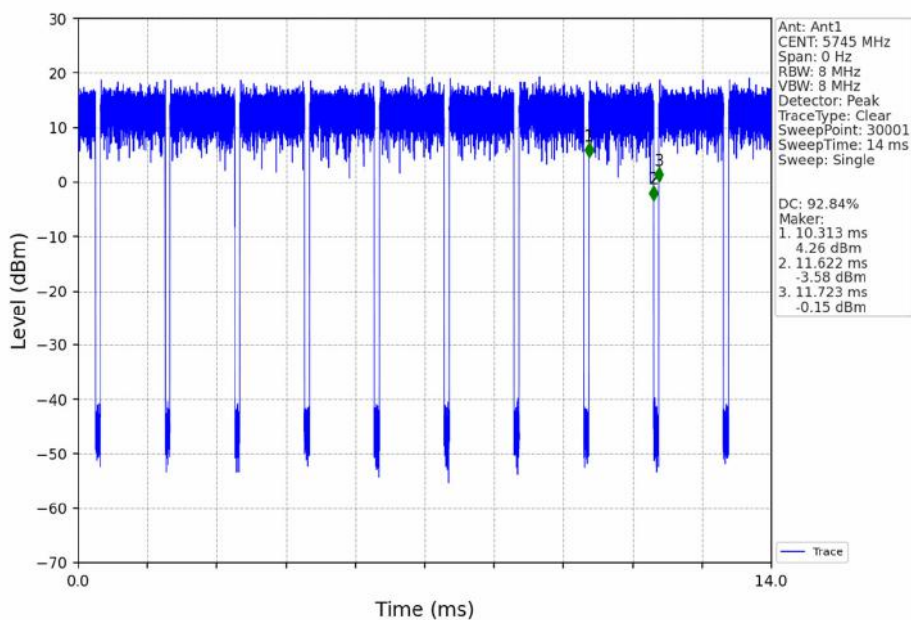
802.11n(HT20)\_MCH\_5200MHz\_Ant1\_NTNV



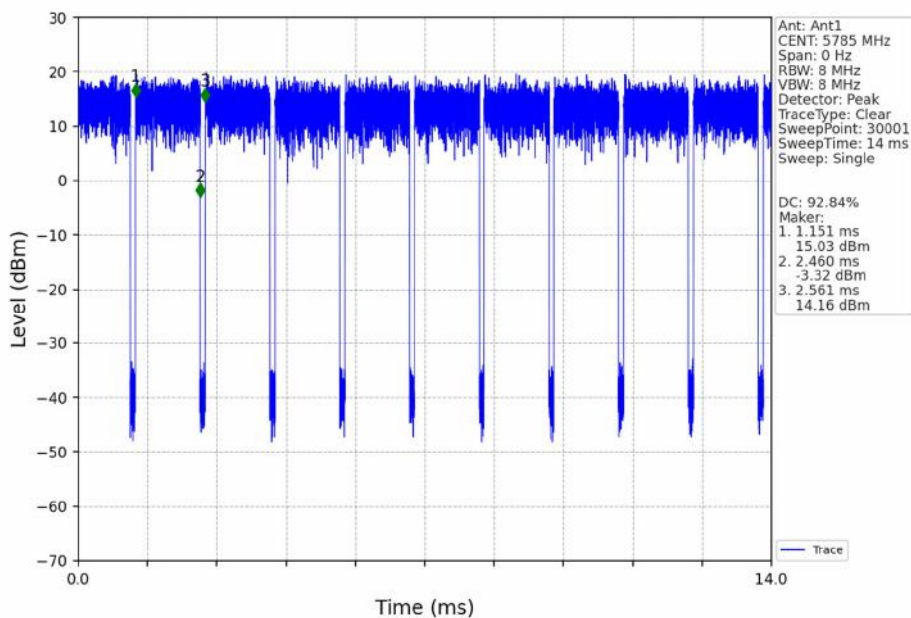
802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV



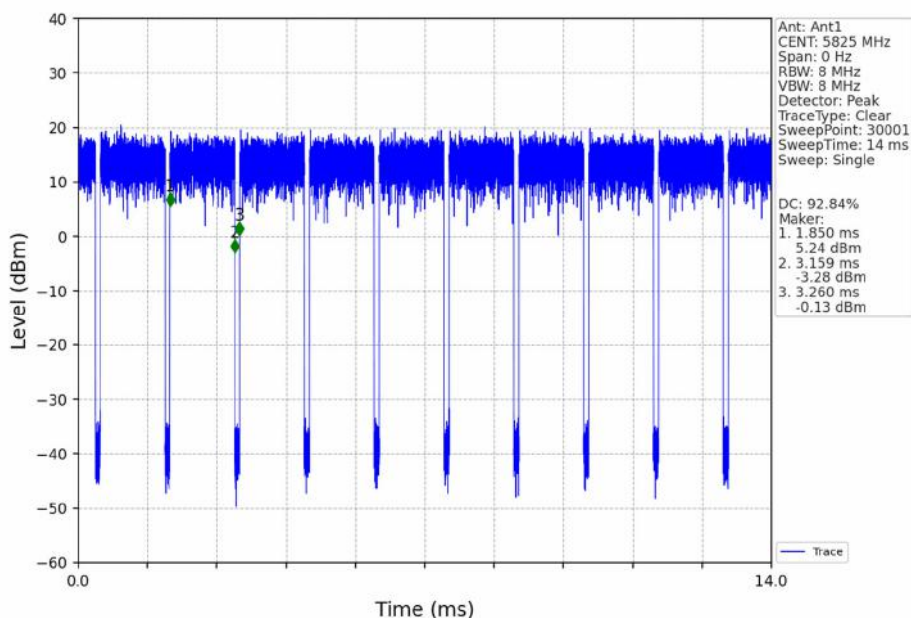
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



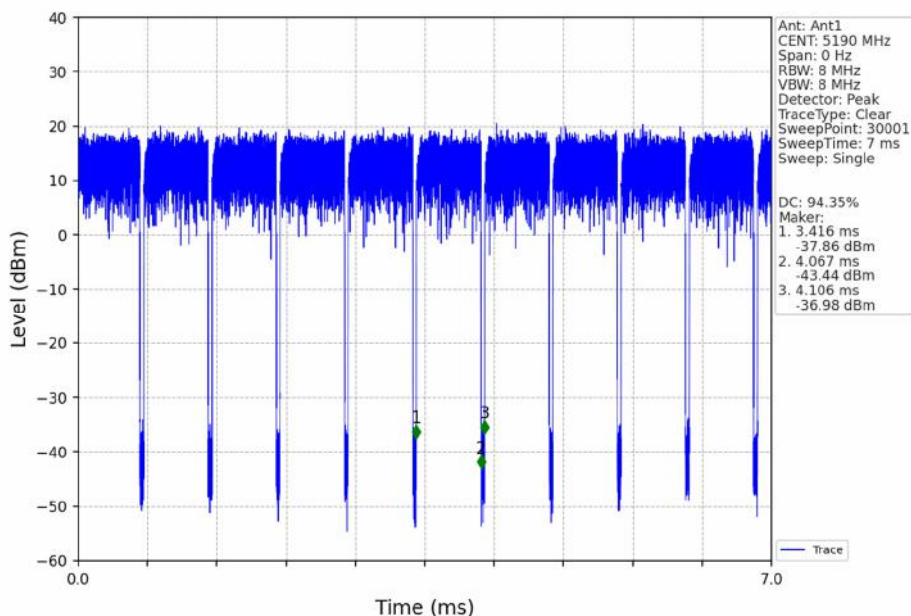
802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



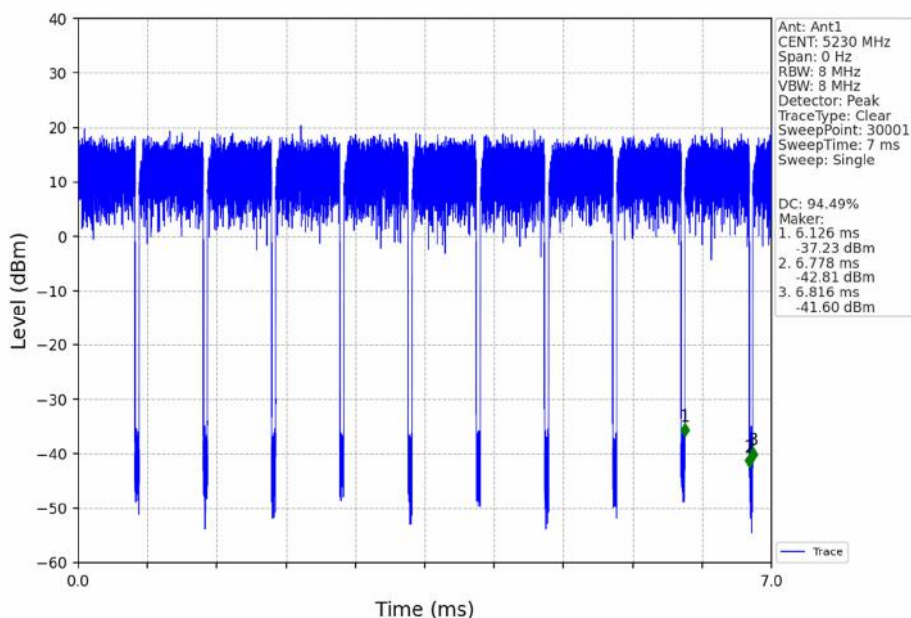
802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



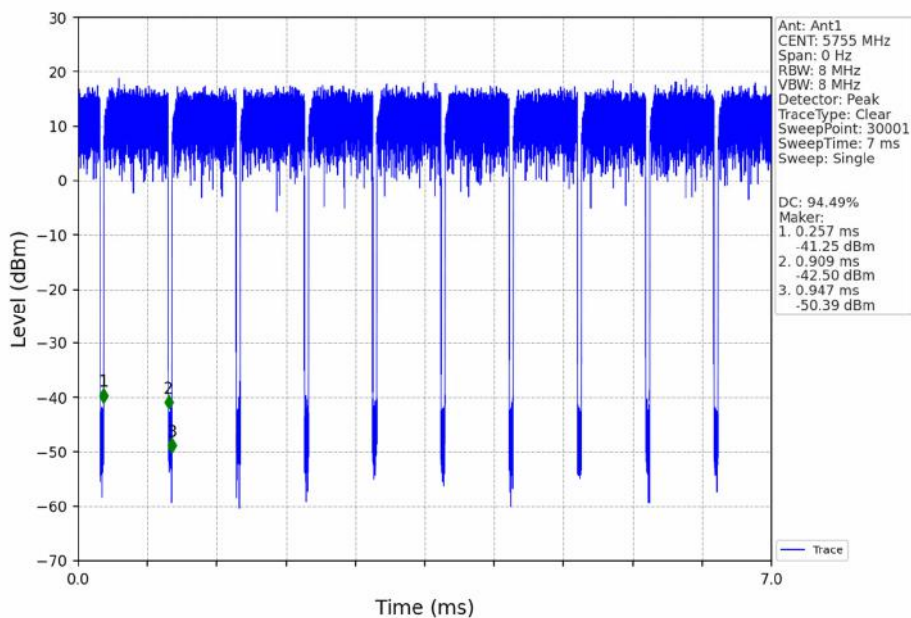
802.11n(HT40)\_LCH\_5190MHz\_Ant1\_NTNV



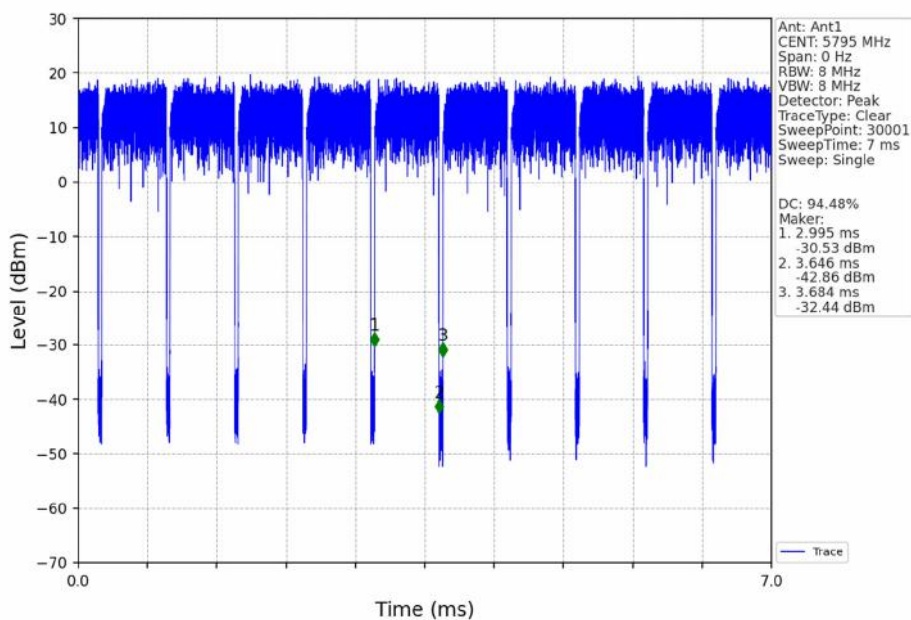
802.11n(HT40)\_HCH\_5230MHz\_Ant1\_NTNV



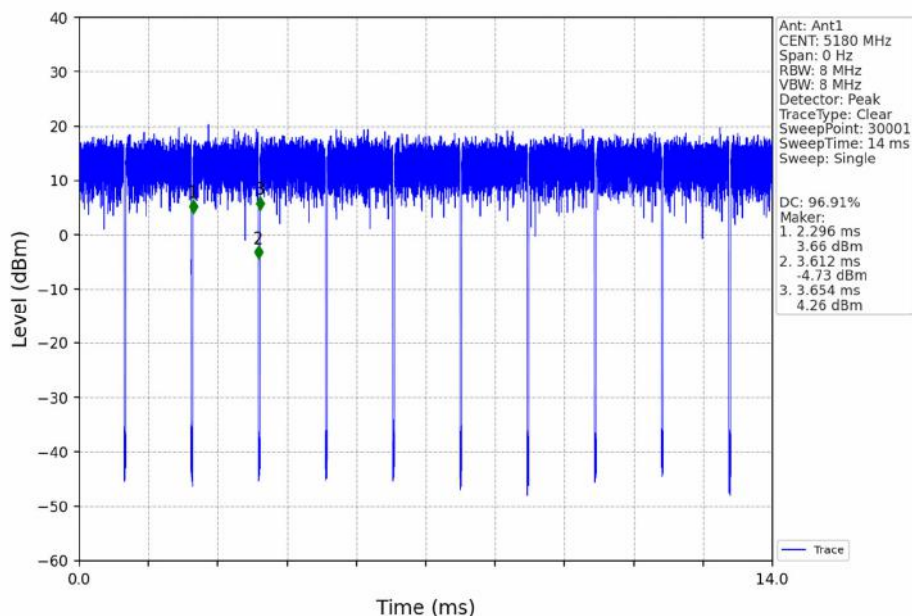
802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



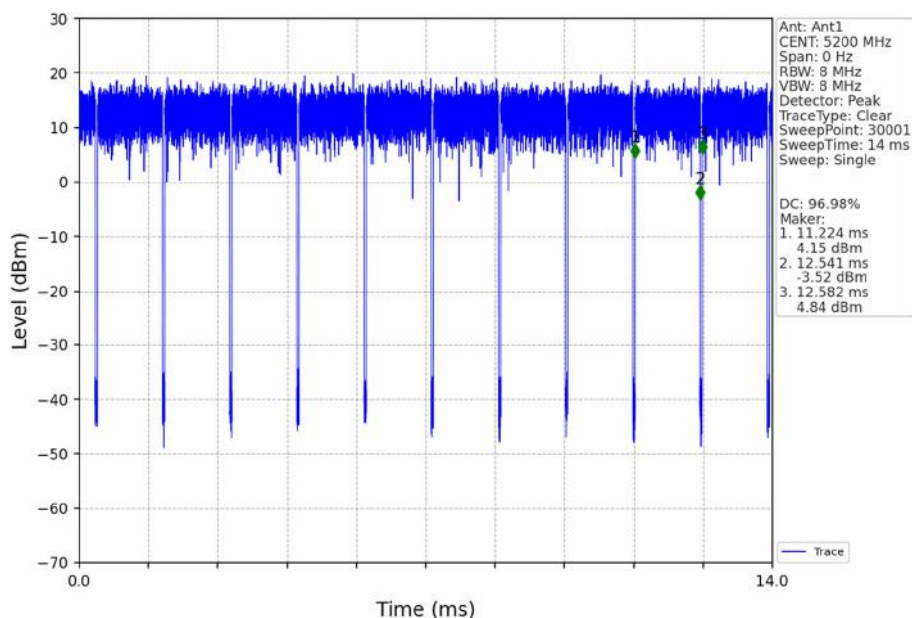
802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



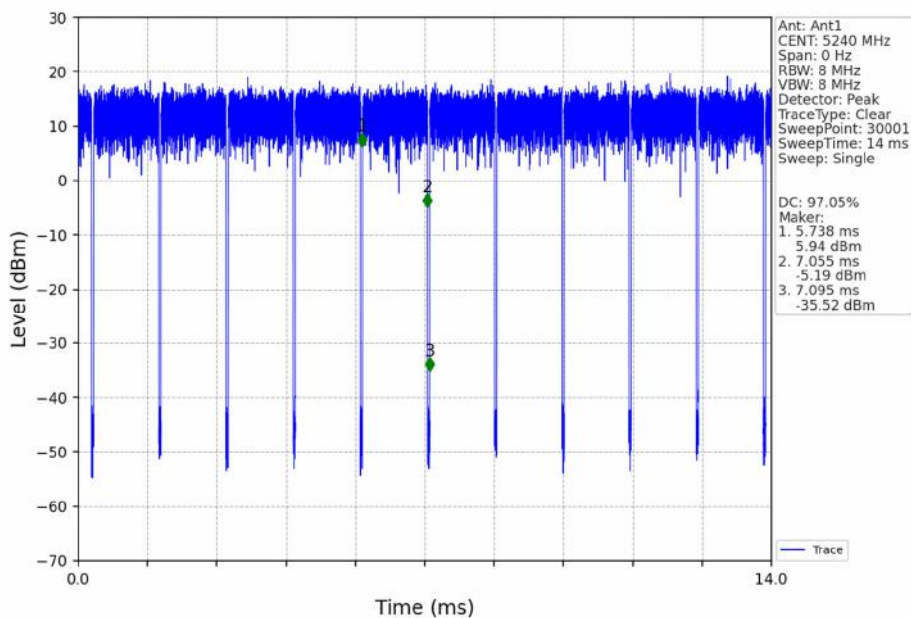
802.11ac(VHT20)\_LCH\_5180MHz\_Ant1\_NTNV



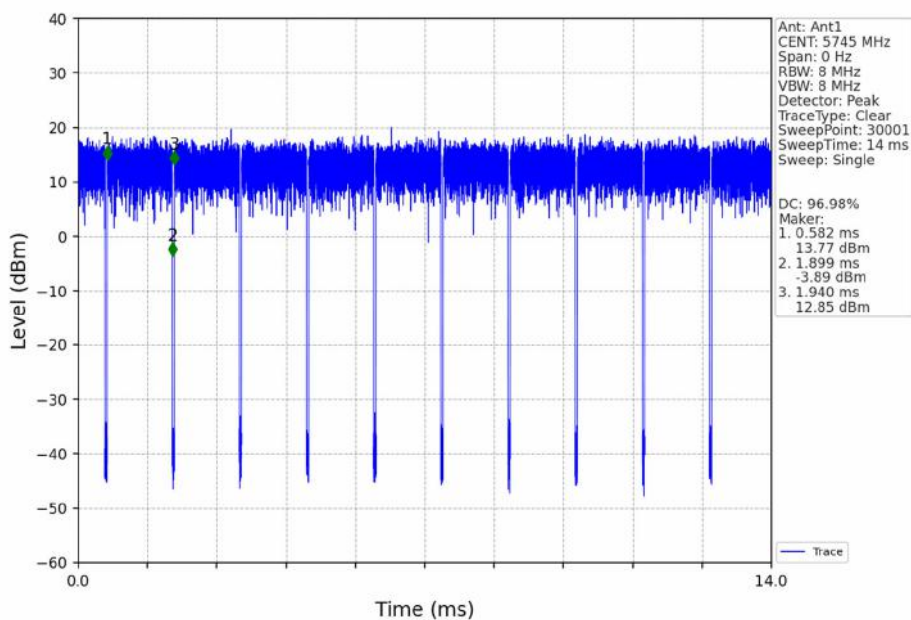
802.11ac(VHT20)\_MCH\_5200MHz\_Ant1\_NTNV



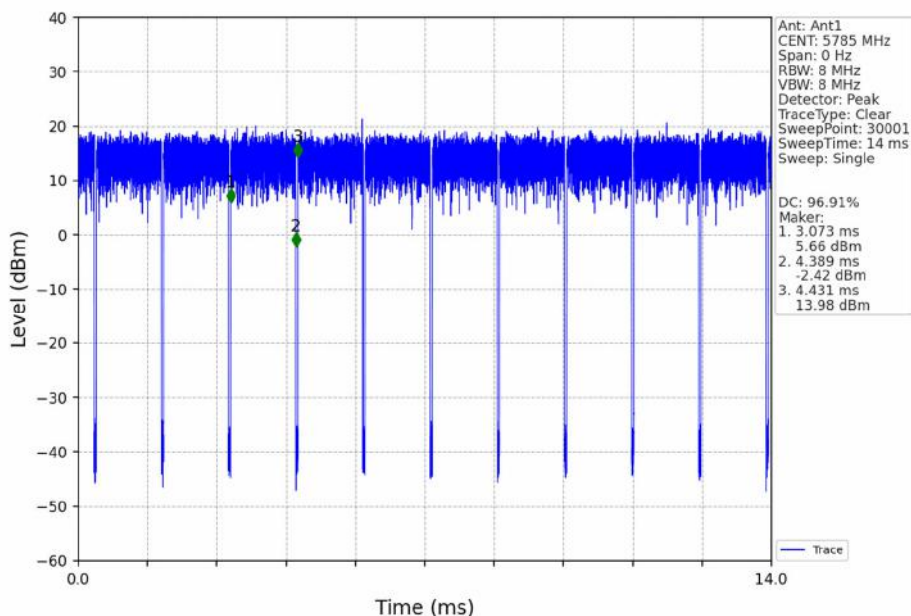
802.11ac(VHT20)\_HCH\_5240MHz\_Ant1\_NTNV



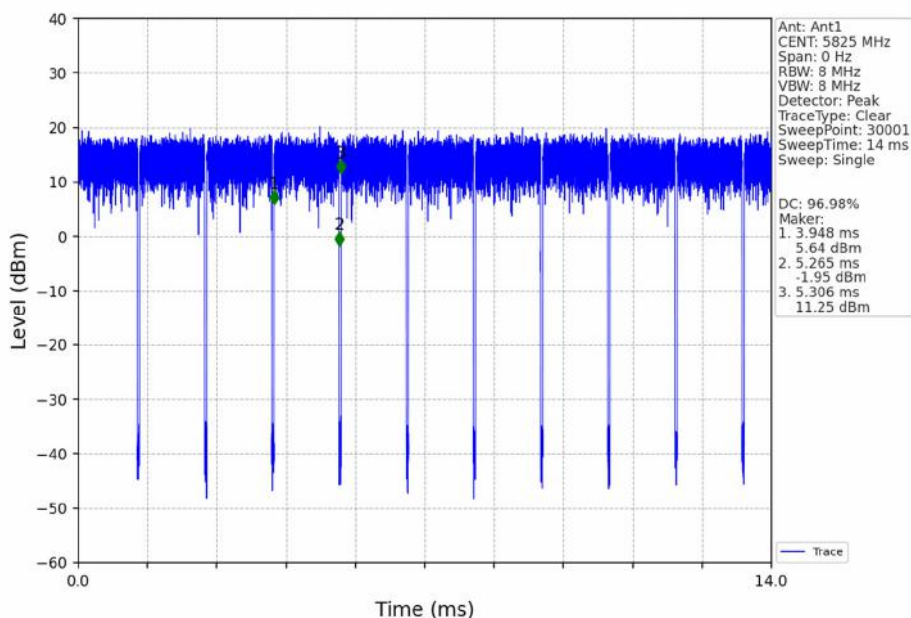
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



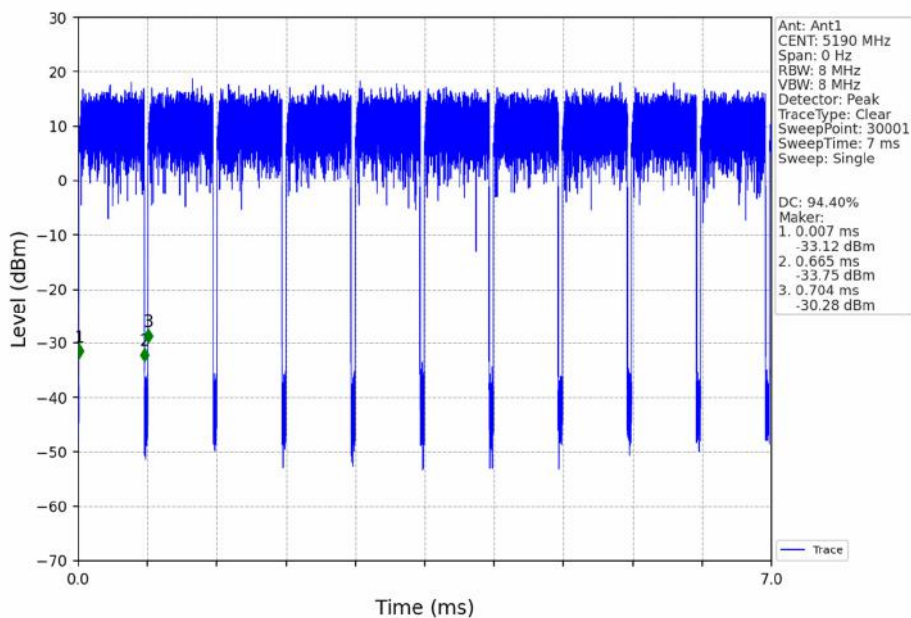
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



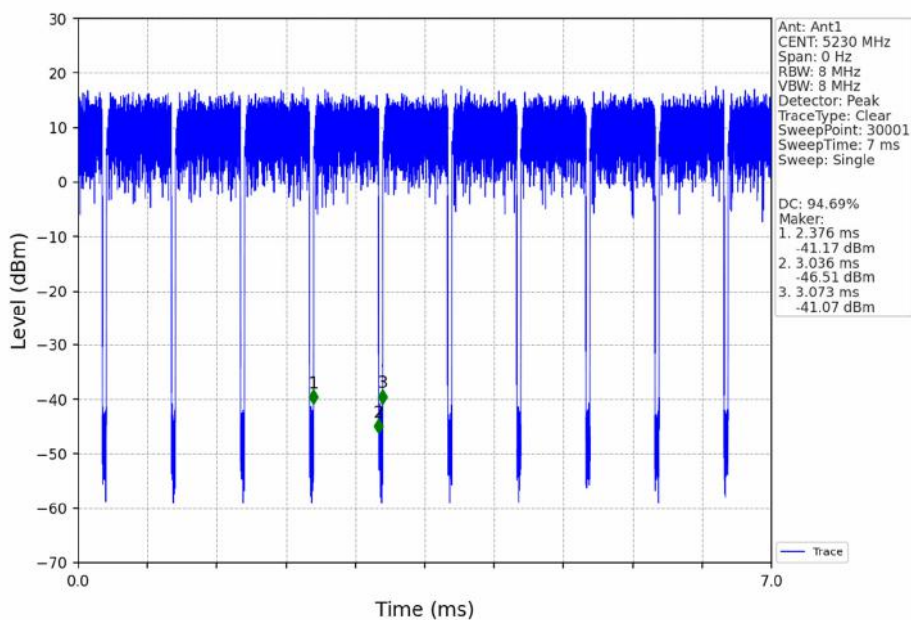
802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



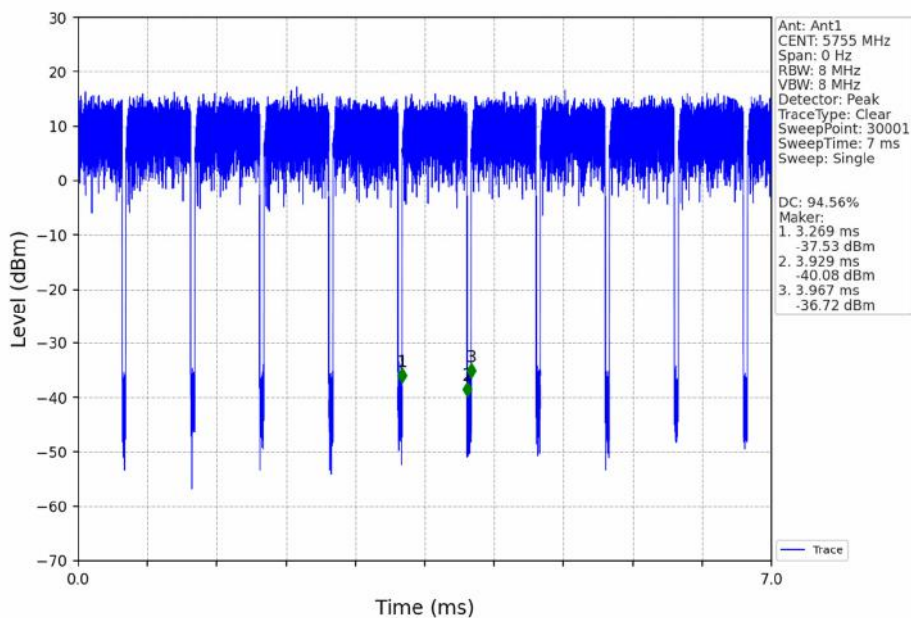
802.11ac(VHT40)\_LCH\_5190MHz\_Ant1\_NTNV



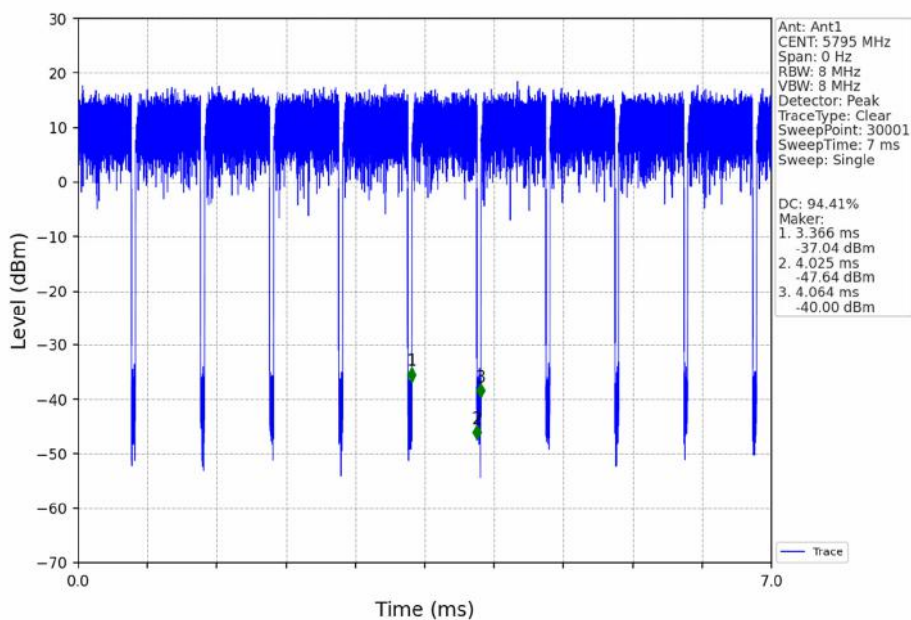
802.11ac(VHT40)\_HCH\_5230MHz\_Ant1\_NTNV



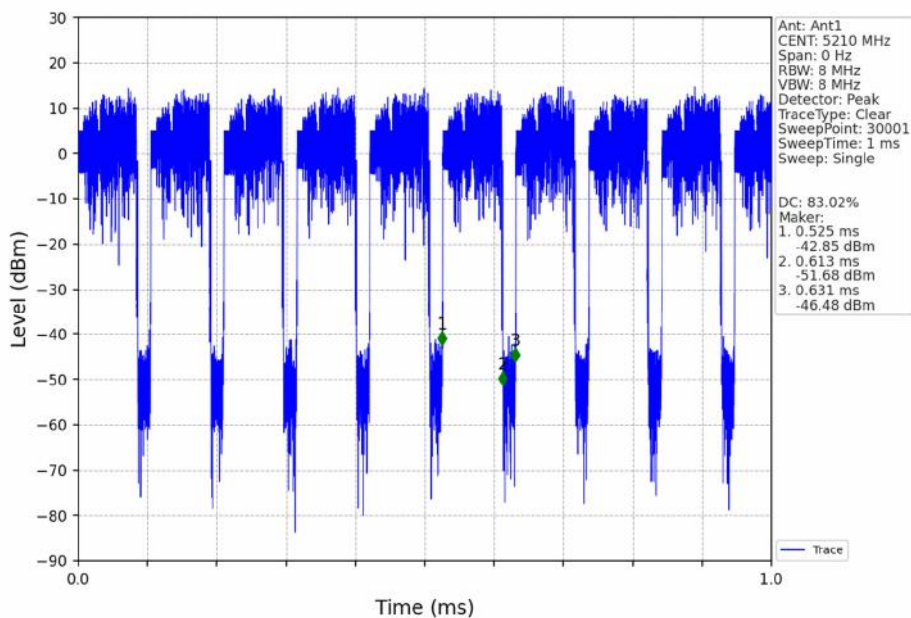
802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



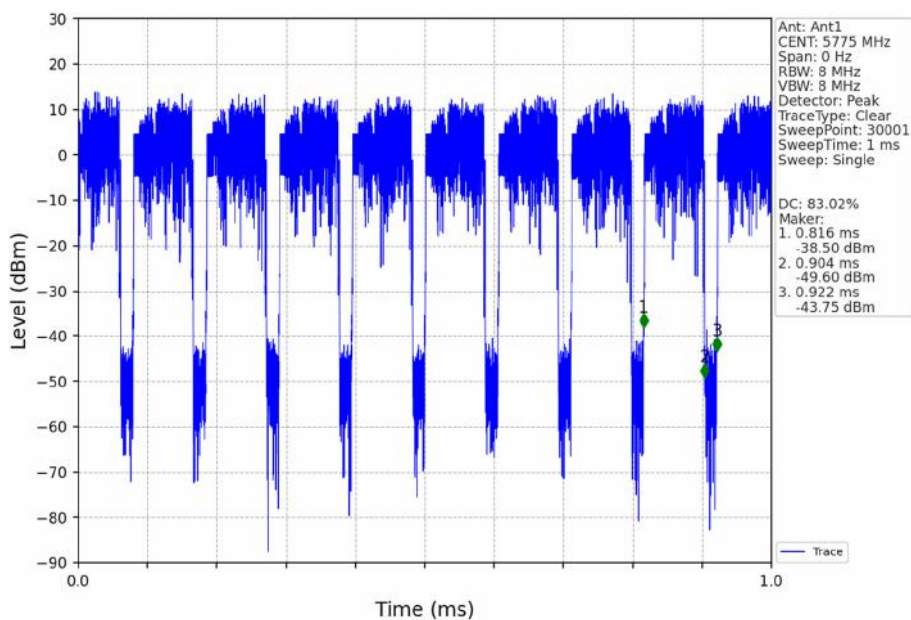
802.11ac(VHT40)\_HCH\_5795MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5210MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5775MHz\_Ant1\_NTNV



## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

| Mode             | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------------------|---------|-----------------|-----|------------------------------|-------|---------|
|                  |         |                 |     | Result                       | Limit |         |
| 802.11a          | SISO    | 5180            | 1   | 17.798                       | /     | Pass    |
|                  |         | 5200            | 1   | 17.807                       | /     | Pass    |
|                  |         | 5240            | 1   | 17.909                       | /     | Pass    |
|                  |         | 5745            | 1   | 18.024                       | /     | Pass    |
|                  |         | 5785            | 1   | 17.991                       | /     | Pass    |
|                  |         | 5825            | 1   | 18.009                       | /     | Pass    |
| 802.11n (HT20)   | SISO    | 5180            | 1   | 18.673                       | /     | Pass    |
|                  |         | 5200            | 1   | 18.714                       | /     | Pass    |
|                  |         | 5240            | 1   | 18.753                       | /     | Pass    |
|                  |         | 5745            | 1   | 18.941                       | /     | Pass    |
|                  |         | 5785            | 1   | 18.789                       | /     | Pass    |
|                  |         | 5825            | 1   | 18.827                       | /     | Pass    |
| 802.11n (HT40)   | SISO    | 5190            | 1   | 36.938                       | /     | Pass    |
|                  |         | 5230            | 1   | 37.117                       | /     | Pass    |
|                  |         | 5755            | 1   | 37.441                       | /     | Pass    |
|                  |         | 5795            | 1   | 37.182                       | /     | Pass    |
| 802.11ac (VHT20) | SISO    | 5180            | 1   | 18.669                       | /     | Pass    |
|                  |         | 5200            | 1   | 18.650                       | /     | Pass    |
|                  |         | 5240            | 1   | 18.693                       | /     | Pass    |
|                  |         | 5745            | 1   | 18.899                       | /     | Pass    |
|                  |         | 5785            | 1   | 18.828                       | /     | Pass    |
|                  |         | 5825            | 1   | 18.837                       | /     | Pass    |
| 802.11ac (VHT40) | SISO    | 5190            | 1   | 36.476                       | /     | Pass    |
|                  |         | 5230            | 1   | 36.538                       | /     | Pass    |
|                  |         | 5755            | 1   | 36.809                       | /     | Pass    |
|                  |         | 5795            | 1   | 36.581                       | /     | Pass    |
| 802.11ac (VHT80) | SISO    | 5210            | 1   | 76.118                       | /     | Pass    |
|                  |         | 5775            | 1   | 76.523                       | /     | Pass    |

#### 2.1.2 6dB BW

| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11a        | SISO    | 5745            | 1   | 15.844              | $\geq 0.5$ | Pass    |
|                |         | 5785            | 1   | 15.503              | $\geq 0.5$ | Pass    |
|                |         | 5825            | 1   | 15.816              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | SISO    | 5745            | 1   | 16.765              | $\geq 0.5$ | Pass    |
|                |         | 5785            | 1   | 15.236              | $\geq 0.5$ | Pass    |
|                |         | 5825            | 1   | 15.541              | $\geq 0.5$ | Pass    |
| 802.11n (HT40) | SISO    | 5755            | 1   | 35.241              | $\geq 0.5$ | Pass    |
|                |         | 5795            | 1   | 35.249              | $\geq 0.5$ | Pass    |
| 802.11ac       | SISO    | 5745            | 1   | 15.627              | $\geq 0.5$ | Pass    |

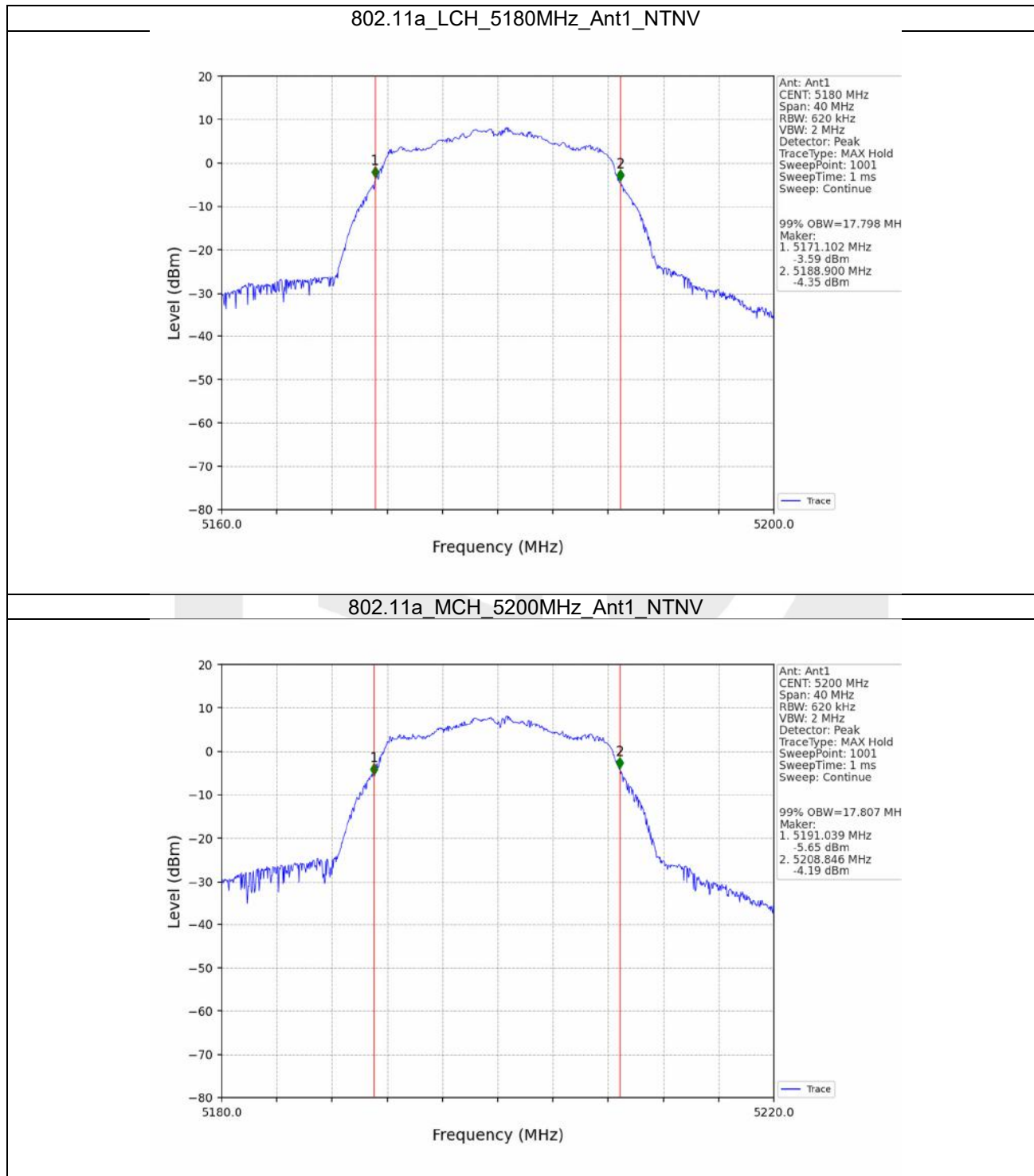
|                     |      |      |   |        |            |      |
|---------------------|------|------|---|--------|------------|------|
| (VHT20)             |      | 5785 | 1 | 16.400 | $\geq 0.5$ | Pass |
|                     |      | 5825 | 1 | 16.031 | $\geq 0.5$ | Pass |
| 802.11ac<br>(VHT40) | SISO | 5755 | 1 | 35.258 | $\geq 0.5$ | Pass |
|                     |      | 5795 | 1 | 35.247 | $\geq 0.5$ | Pass |
| 802.11ac<br>(VHT80) | SISO | 5775 | 1 | 75.233 | $\geq 0.5$ | Pass |

### 2.1.3 26dB BW

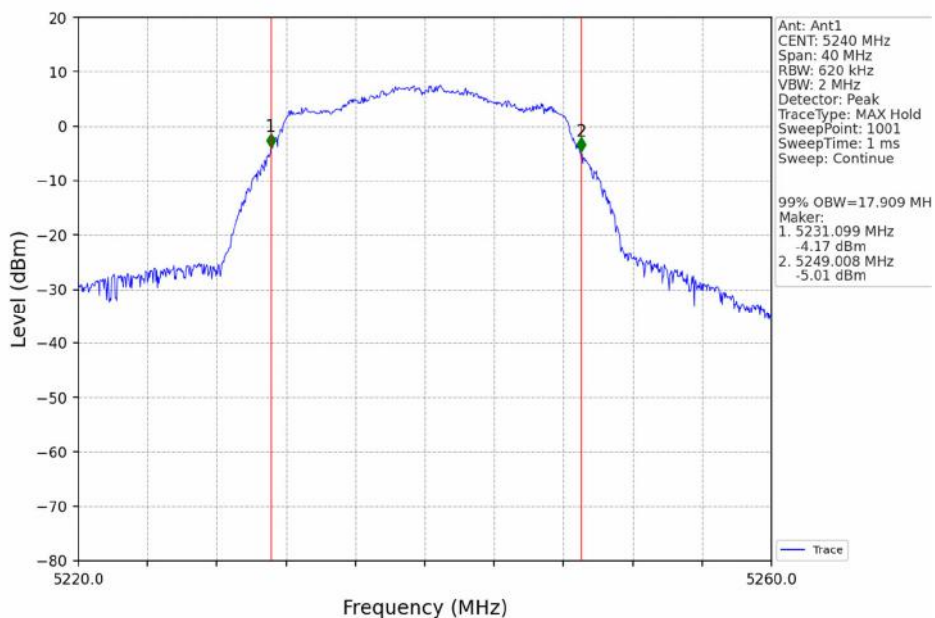
| Mode                | TX Type | Frequency (MHz) | ANT | 26dB Bandwidth (MHz) |       | Verdict |
|---------------------|---------|-----------------|-----|----------------------|-------|---------|
|                     |         |                 |     | Result               | Limit |         |
| 802.11a             | SISO    | 5180            | 1   | 20.919               | /     | Pass    |
|                     |         | 5200            | 1   | 21.064               | /     | Pass    |
|                     |         | 5240            | 1   | 21.086               | /     | Pass    |
| 802.11n<br>(HT20)   | SISO    | 5180            | 1   | 21.162               | /     | Pass    |
|                     |         | 5200            | 1   | 21.402               | /     | Pass    |
|                     |         | 5240            | 1   | 21.230               | /     | Pass    |
| 802.11n<br>(HT40)   | SISO    | 5190            | 1   | 50.796               | /     | Pass    |
|                     |         | 5230            | 1   | 49.082               | /     | Pass    |
| 802.11ac<br>(VHT20) | SISO    | 5180            | 1   | 21.303               | /     | Pass    |
|                     |         | 5200            | 1   | 21.164               | /     | Pass    |
|                     |         | 5240            | 1   | 21.235               | /     | Pass    |
| 802.11ac<br>(VHT40) | SISO    | 5190            | 1   | 39.581               | /     | Pass    |
|                     |         | 5230            | 1   | 39.615               | /     | Pass    |
| 802.11ac<br>(VHT80) | SISO    | 5210            | 1   | 80.958               | /     | Pass    |

## 2.2 Test Graph

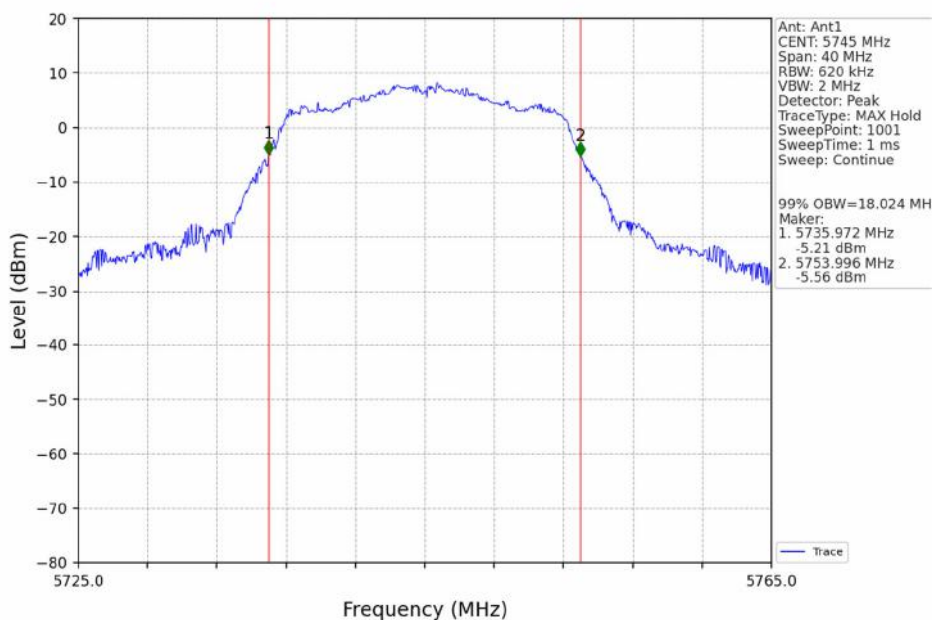
### 2.2.1 OBW



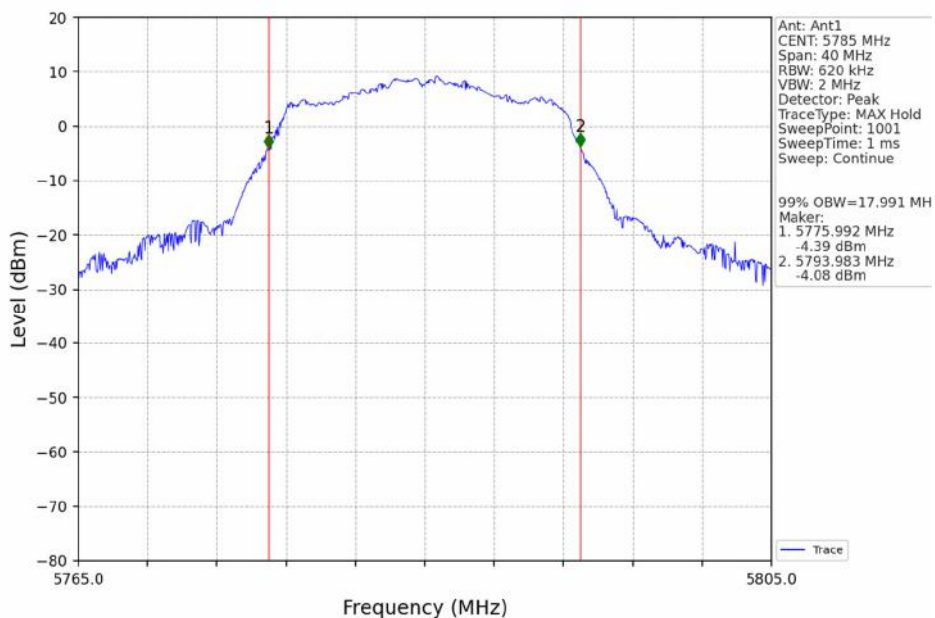
802.11a HCH\_5240MHz\_Ant1\_NTNV



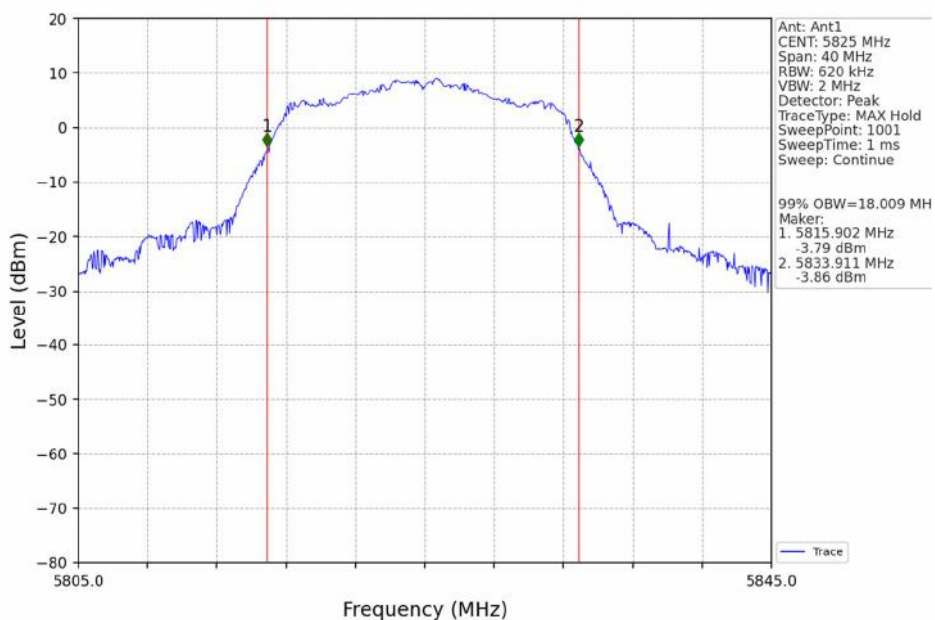
802.11a LCH\_5745MHz\_Ant1\_NTNV



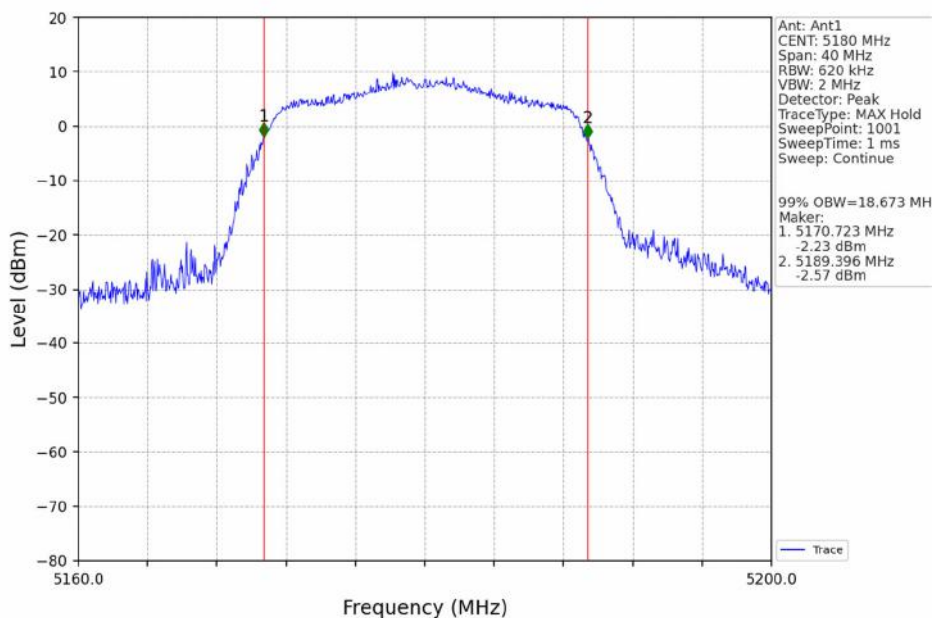
802.11a\_MCH\_5785MHz\_Ant1\_NTNV



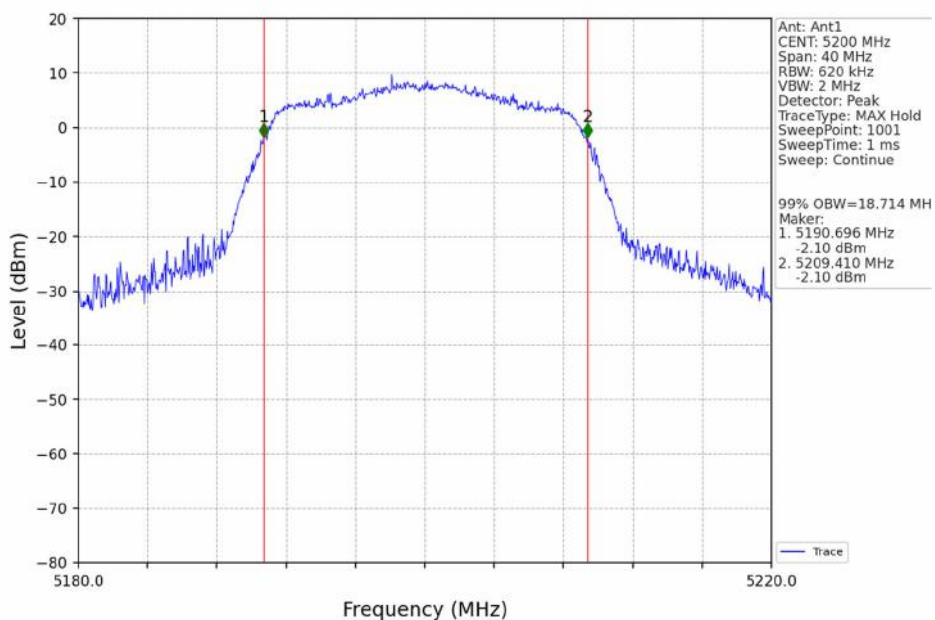
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



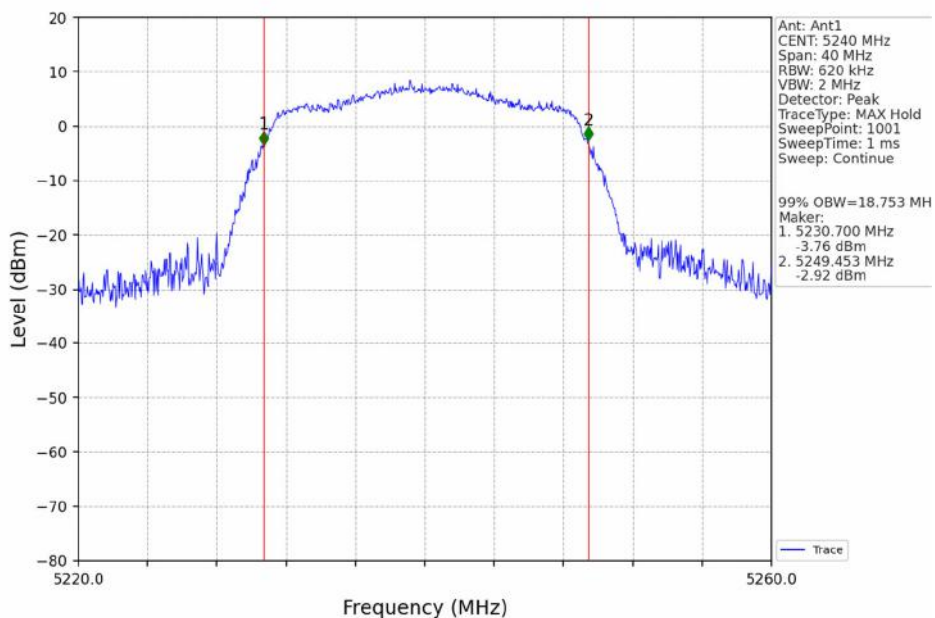
802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



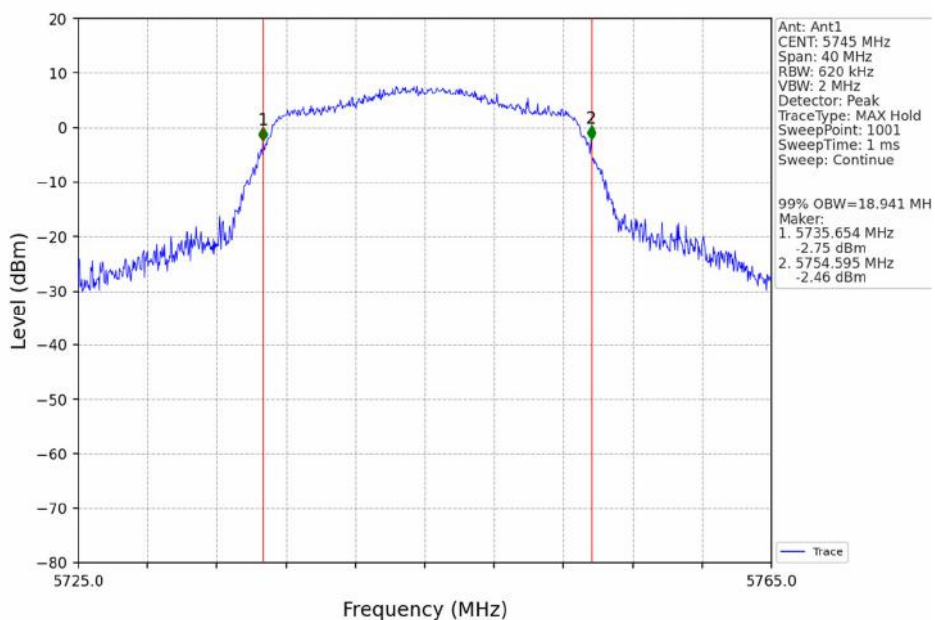
802.11n(HT20)\_MCH\_5200MHz\_Ant1\_NTNV



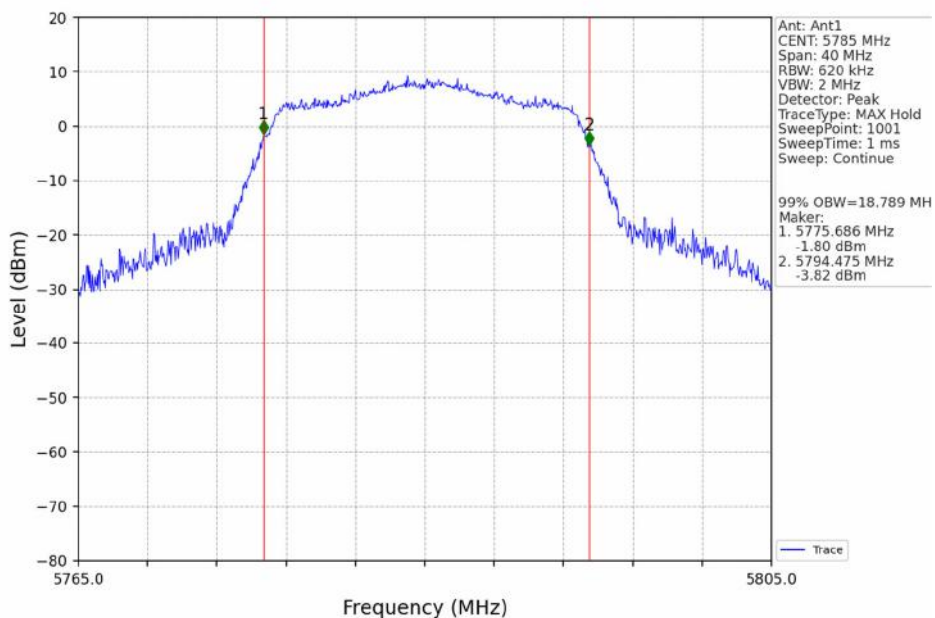
802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV



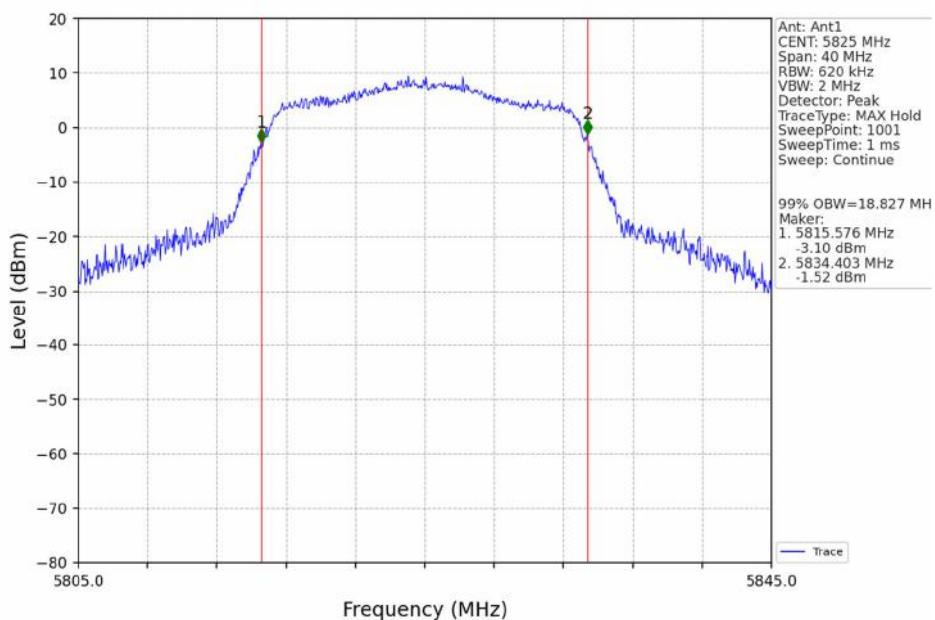
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



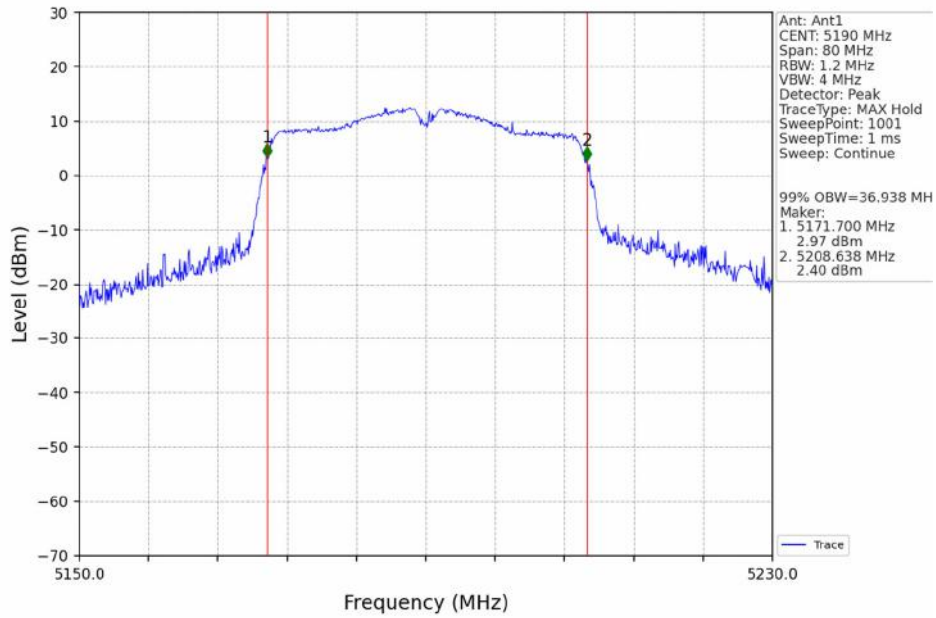
802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



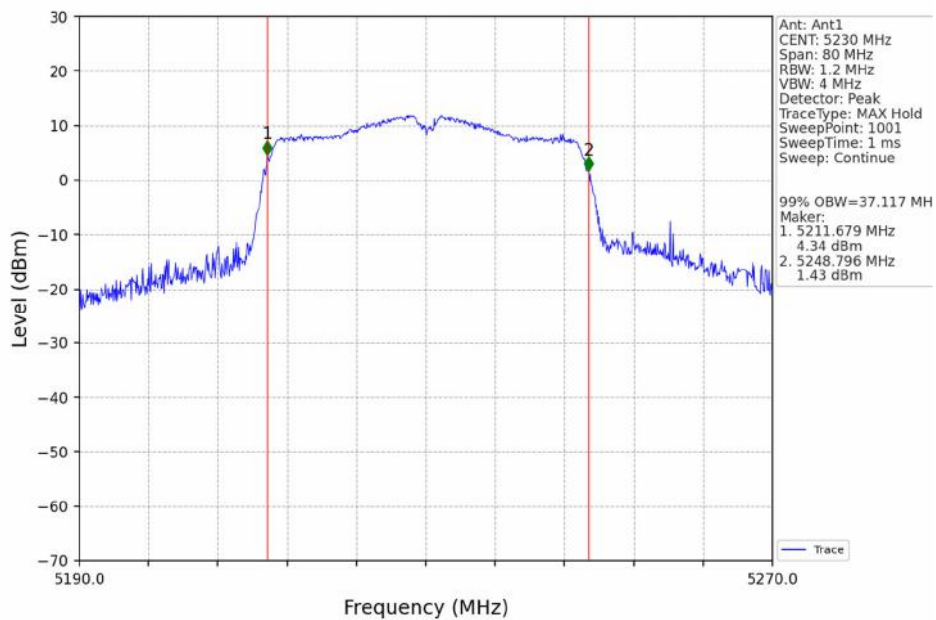
802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



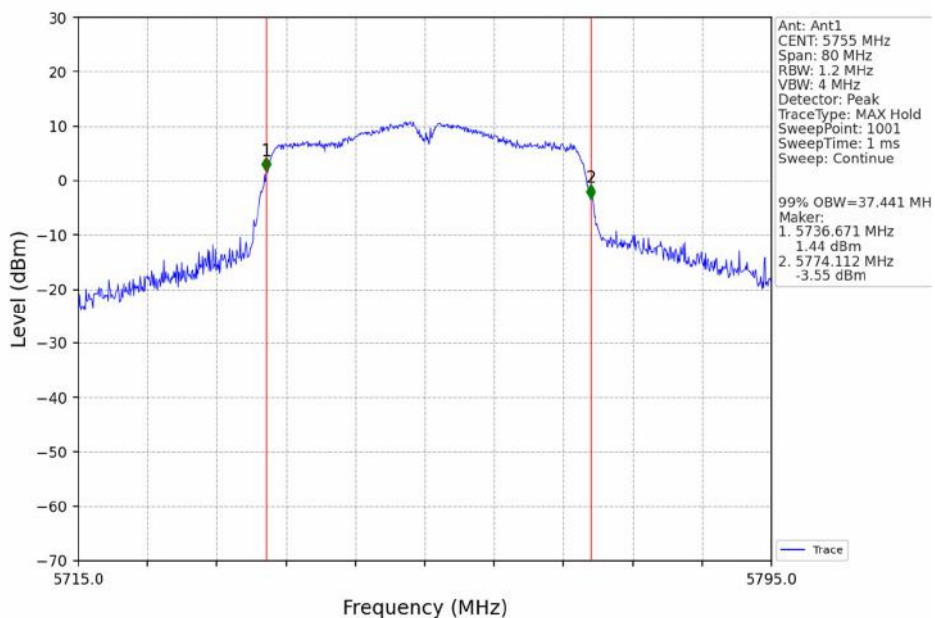
802.11n(HT40)\_LCH\_5190MHz\_Ant1\_NTNV



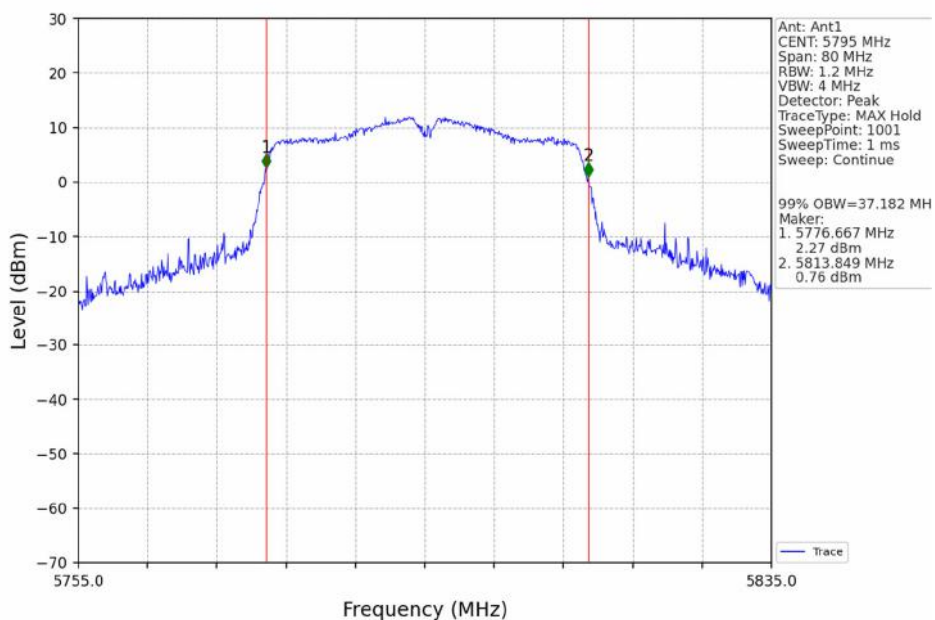
802.11n(HT40)\_HCH\_5230MHz\_Ant1\_NTNV



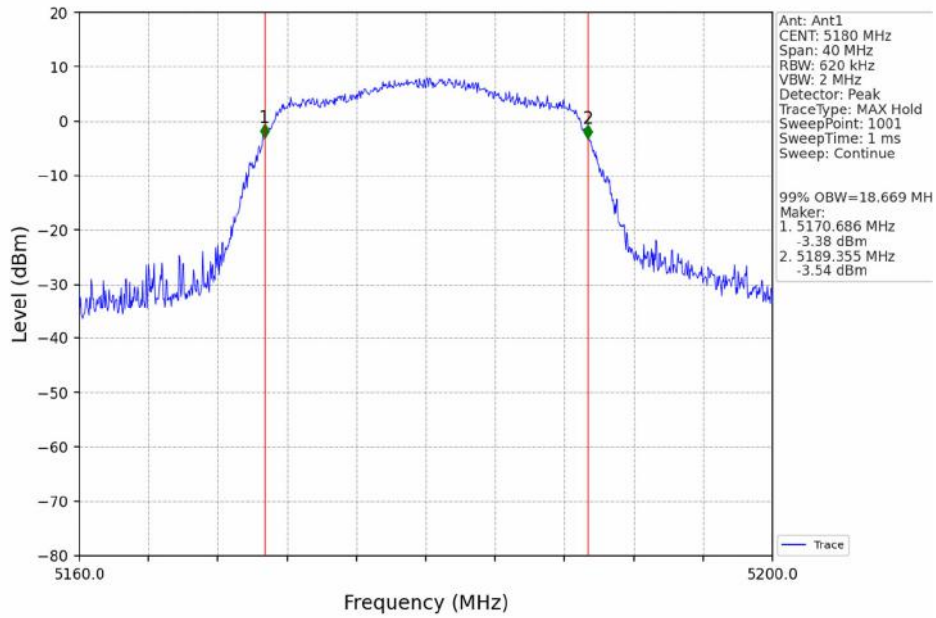
802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



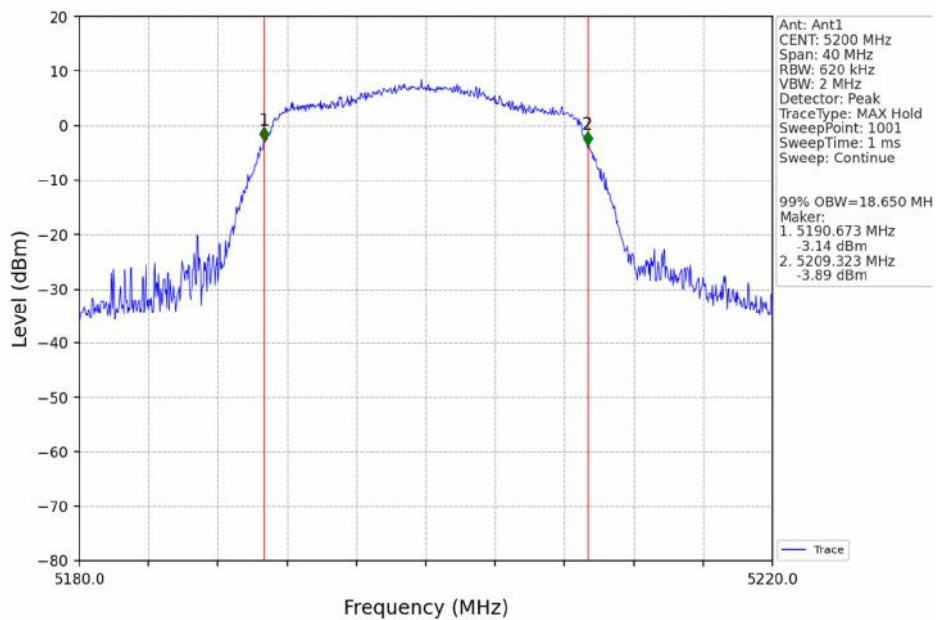
802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



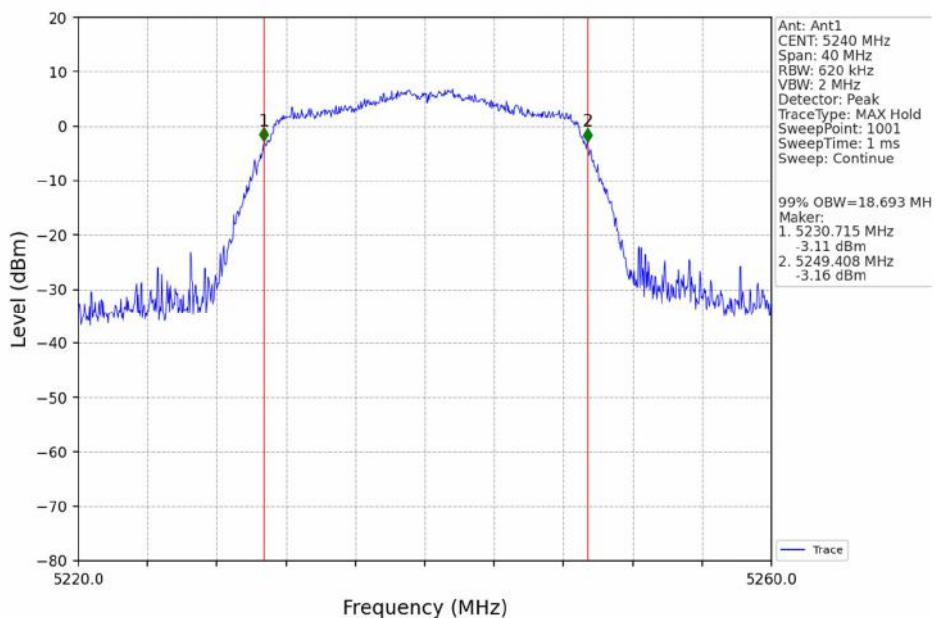
802.11ac(VHT20)\_LCH\_5180MHz\_Ant1\_NTNV



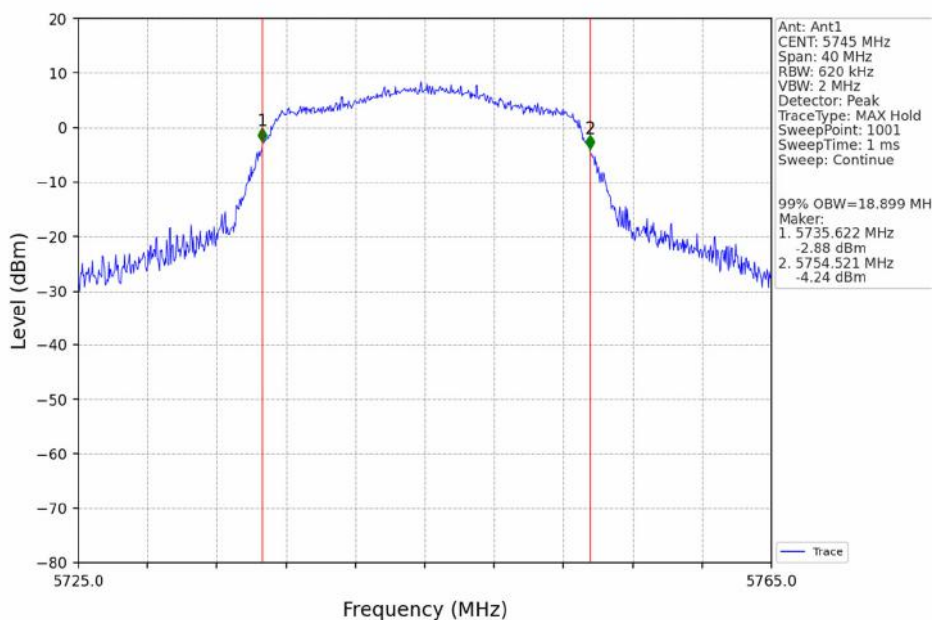
802.11ac(VHT20)\_MCH\_5200MHz\_Ant1\_NTNV



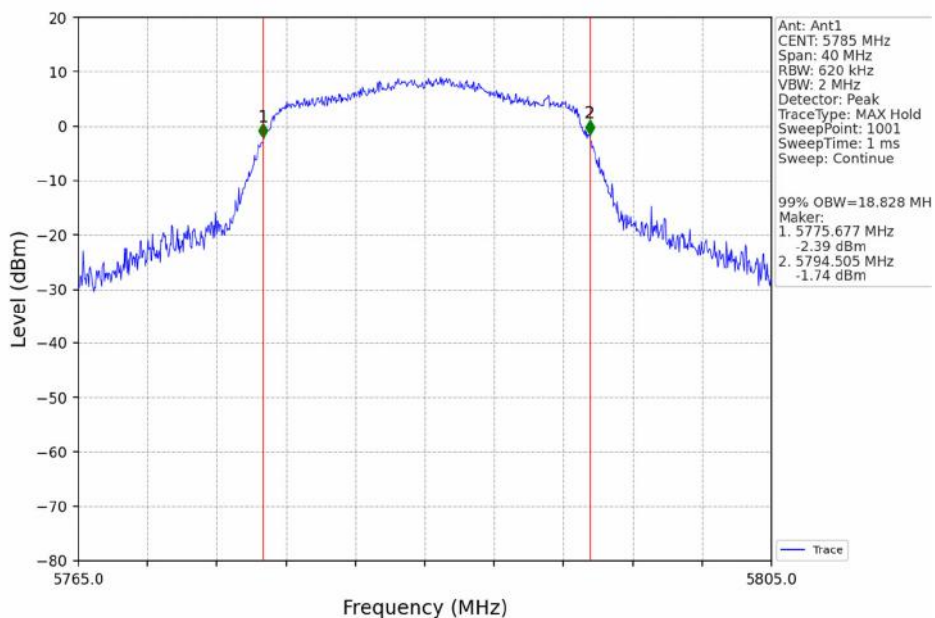
802.11ac(VHT20)\_HCH\_5240MHz\_Ant1\_NTNV



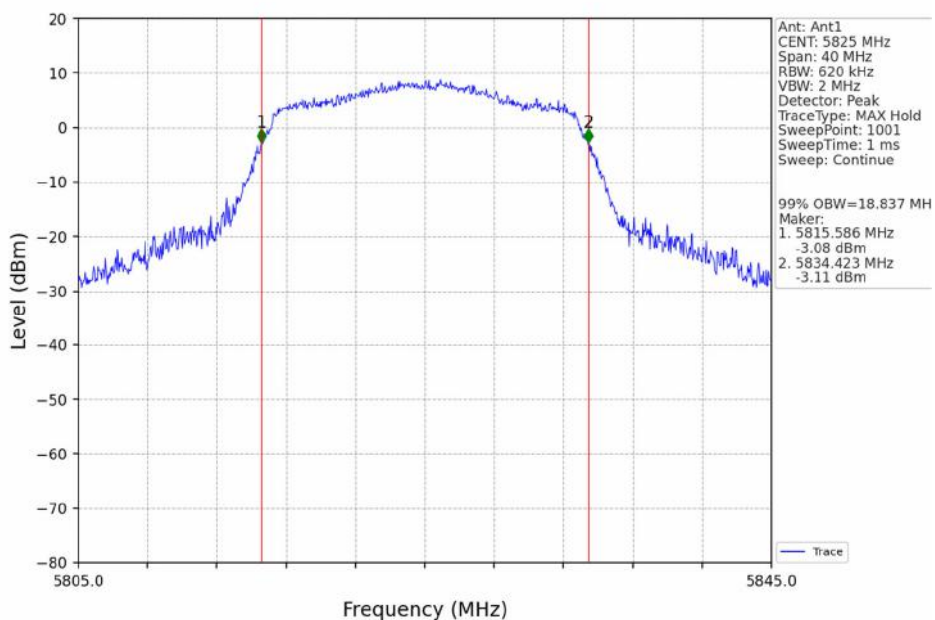
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



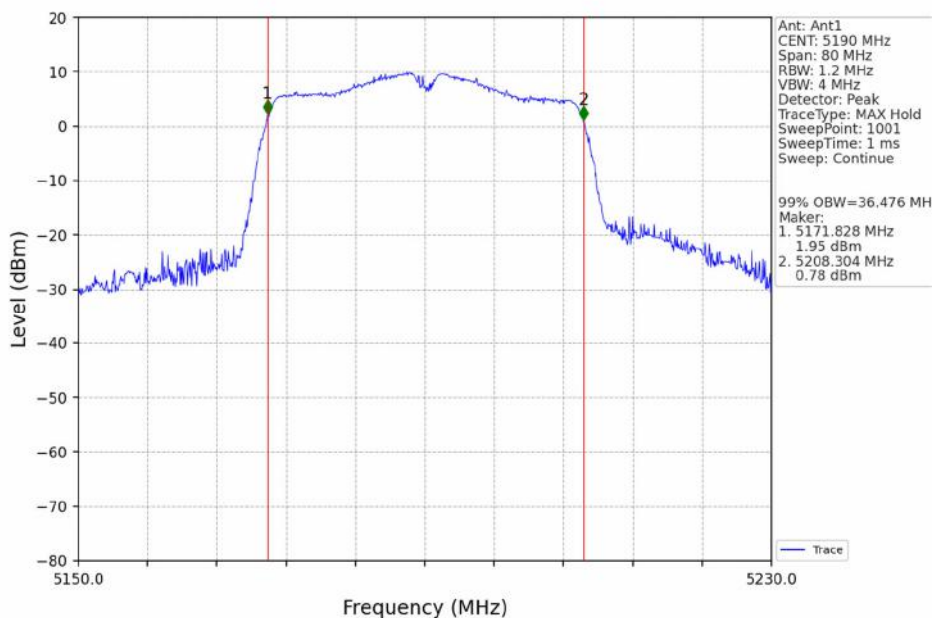
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



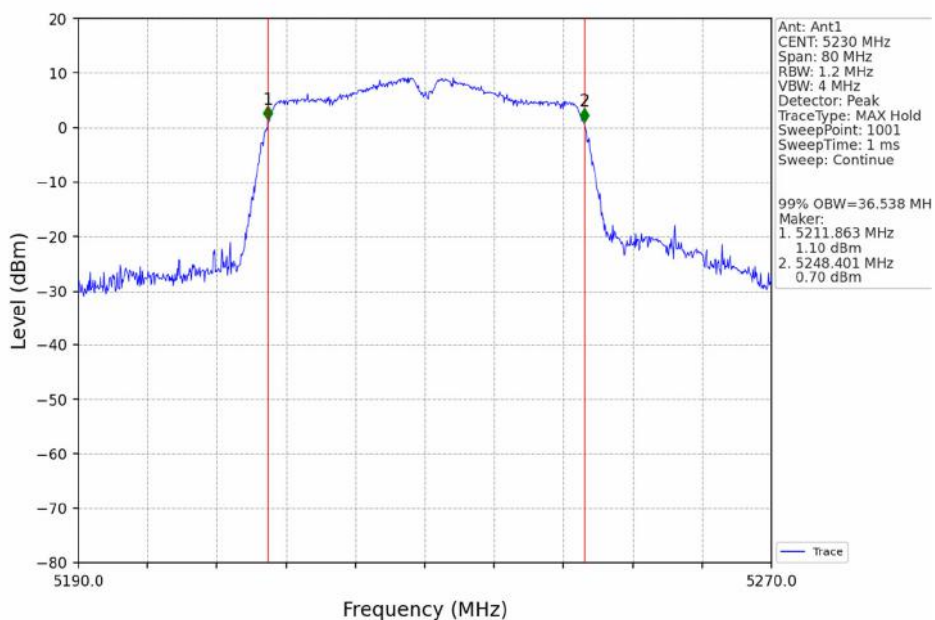
802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



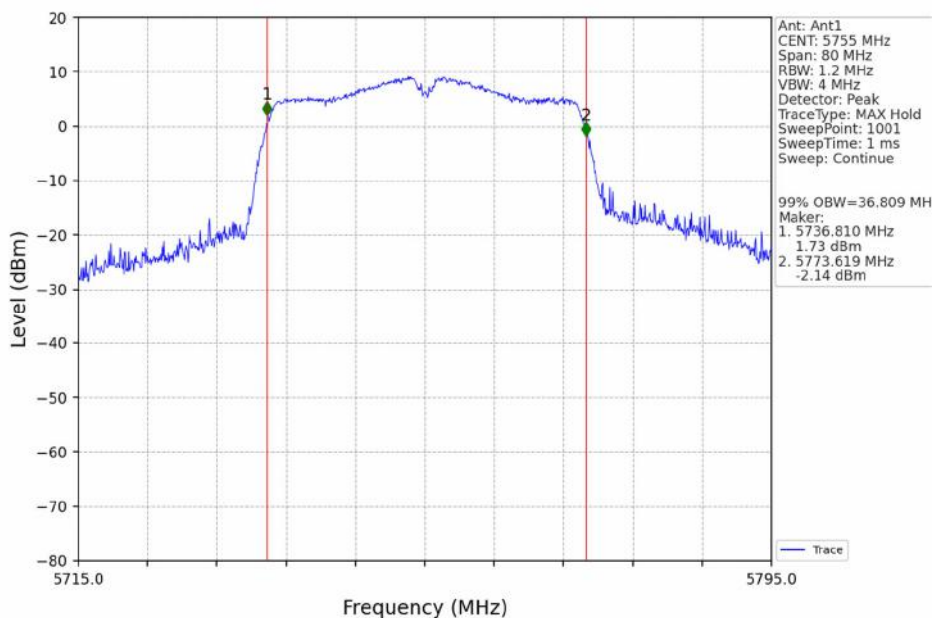
802.11ac(VHT40)\_LCH\_5190MHz\_Ant1\_NTNV



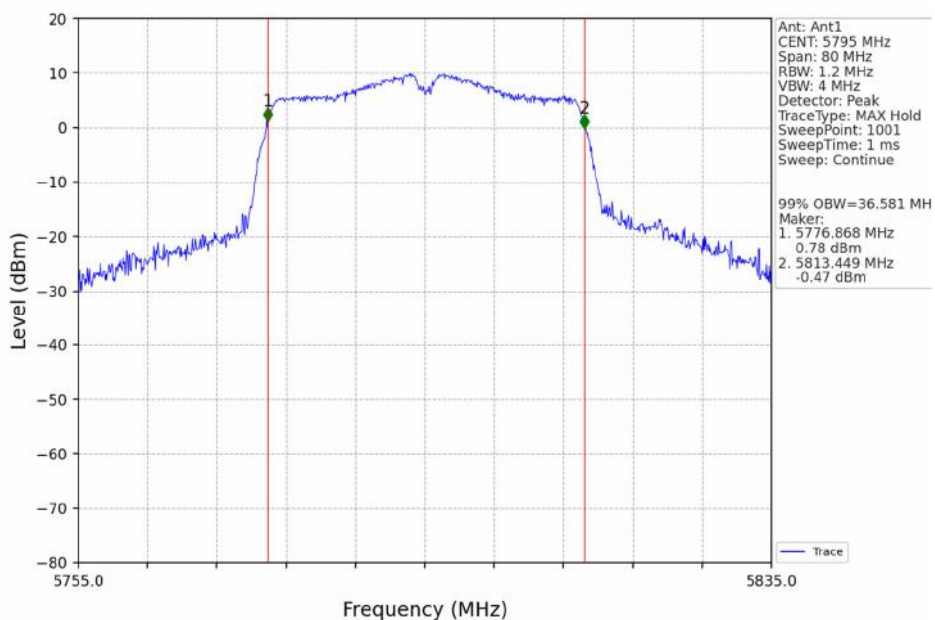
802.11ac(VHT40)\_HCH\_5230MHz\_Ant1\_NTNV



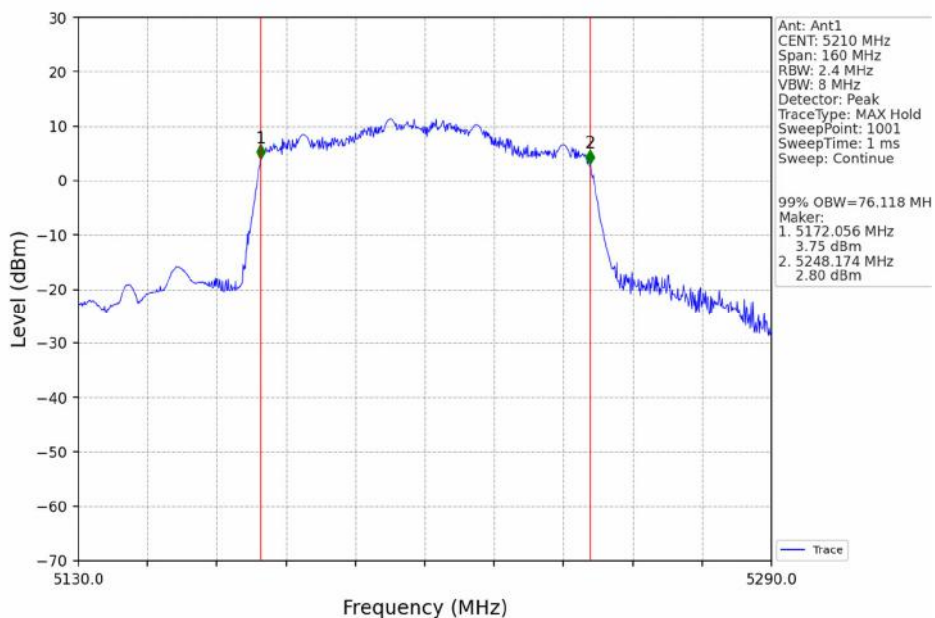
802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



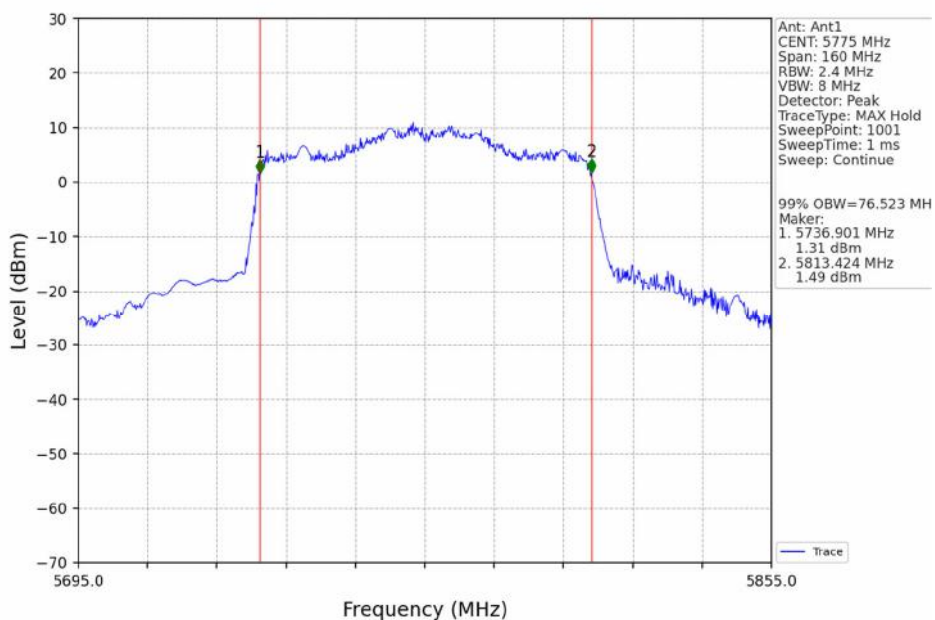
802.11ac(VHT40)\_HCH\_5795MHz\_Ant1\_NTNV



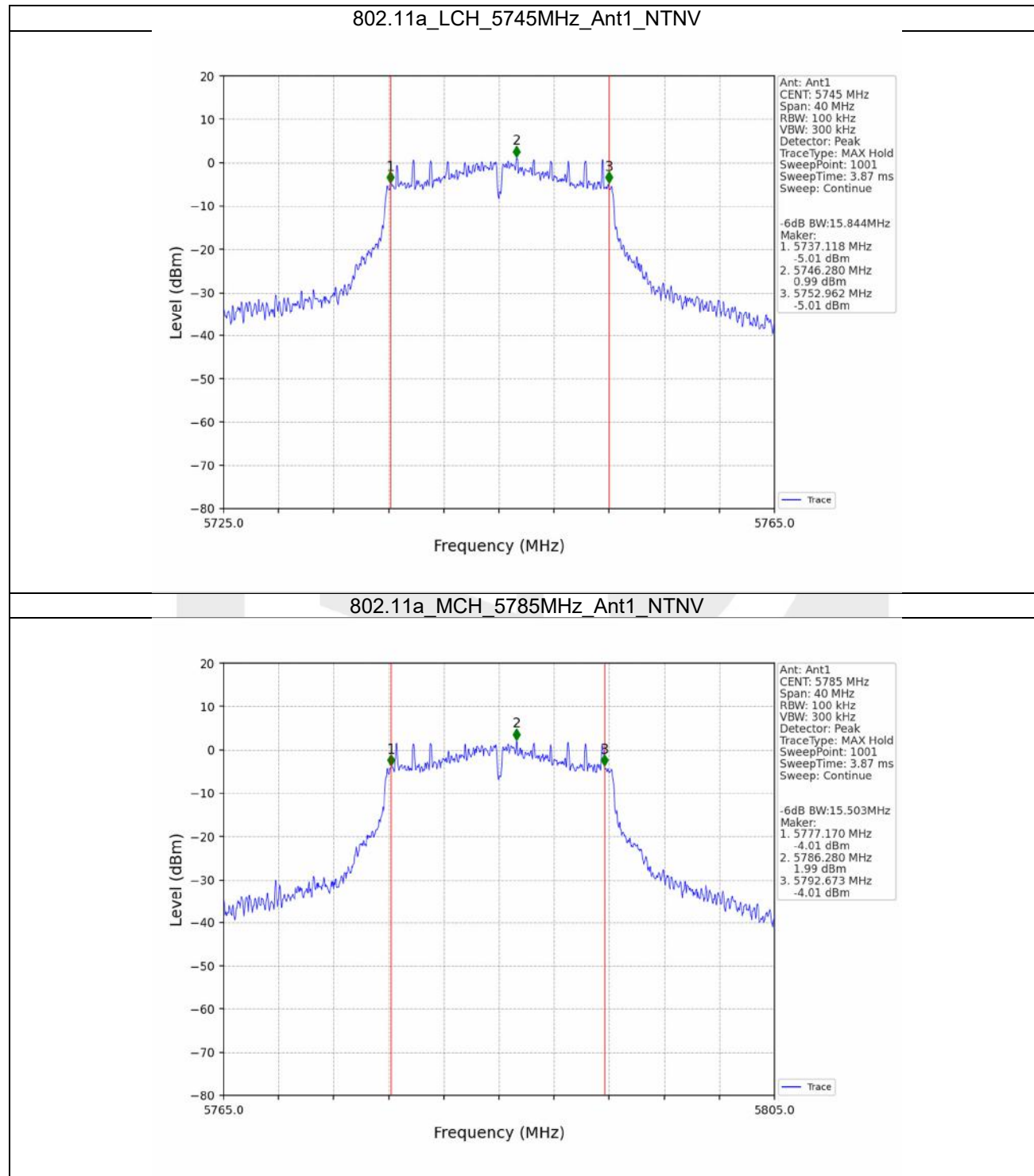
802.11ac(VHT80)\_MCH\_5210MHz\_Ant1\_NTNV



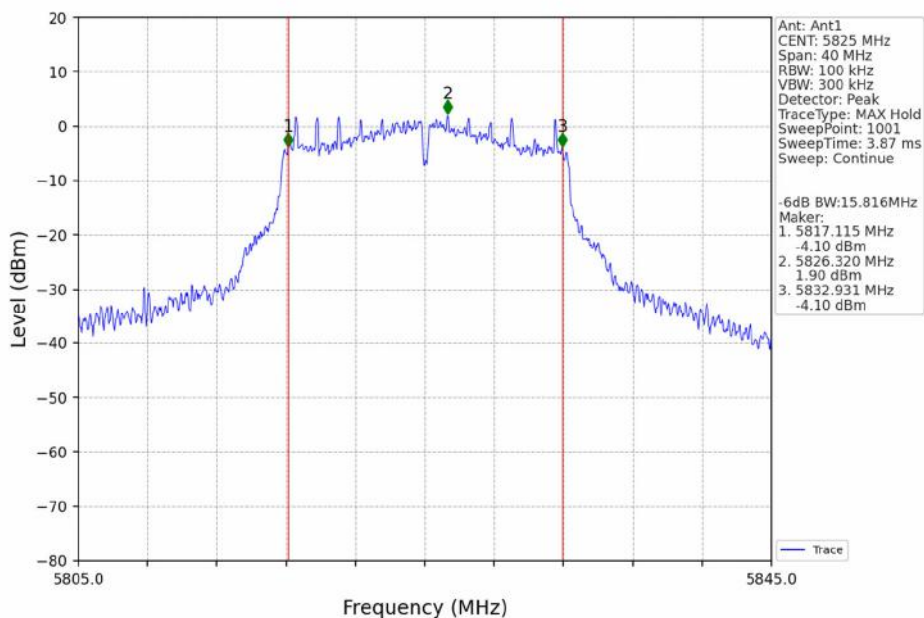
802.11ac(VHT80)\_MCH\_5775MHz\_Ant1\_NTNV



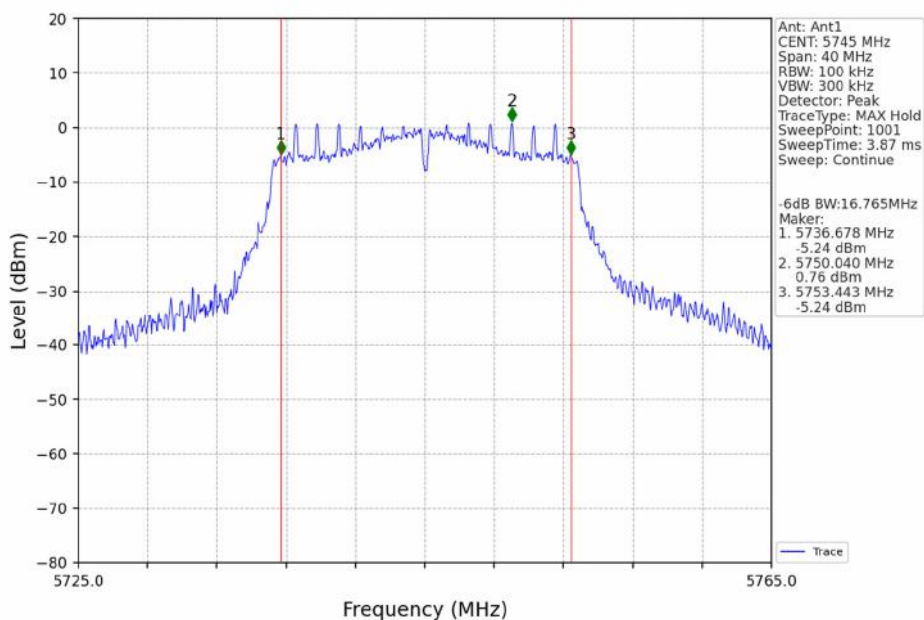
## 2.2.2 6dB BW



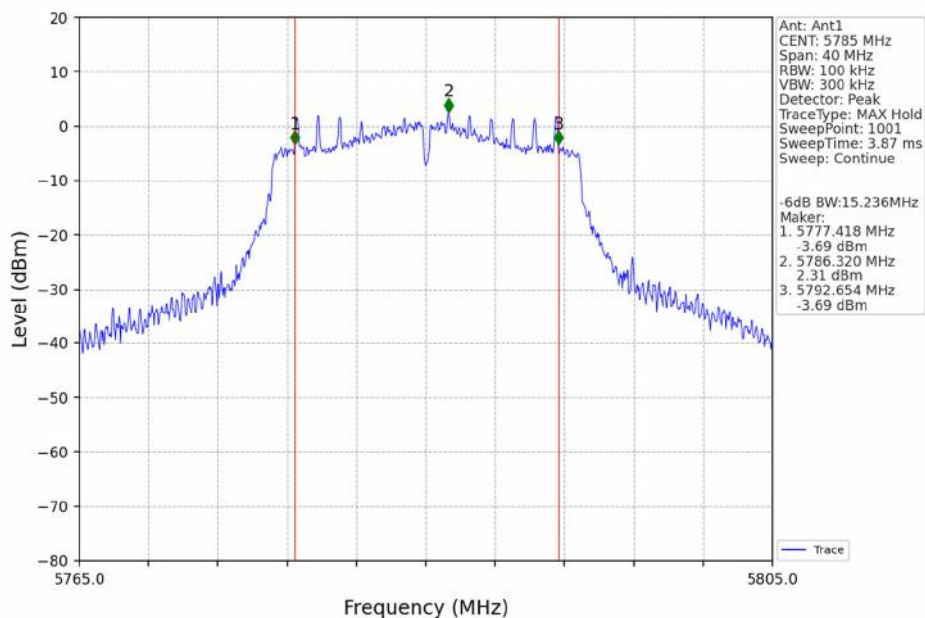
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



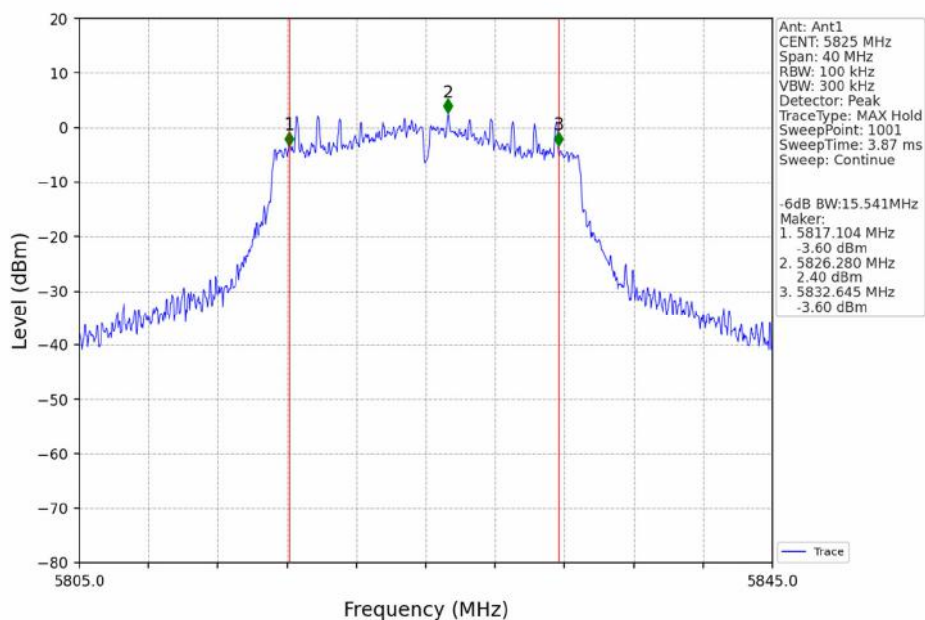
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



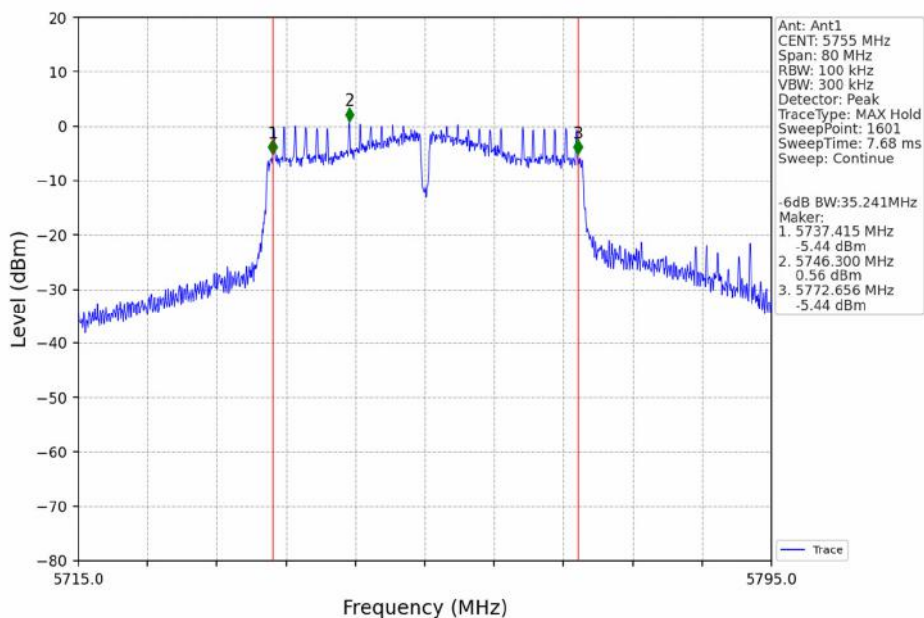
802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



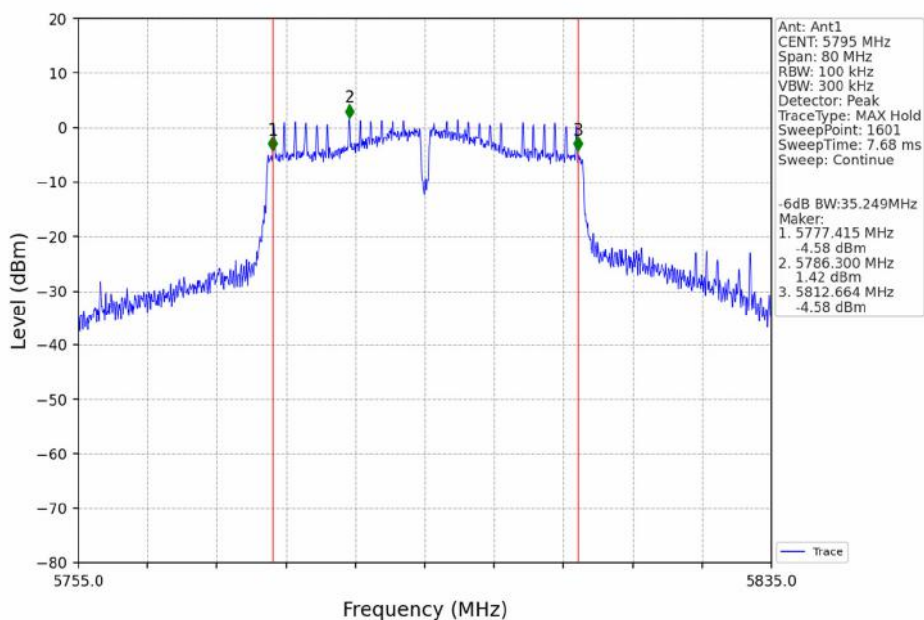
802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



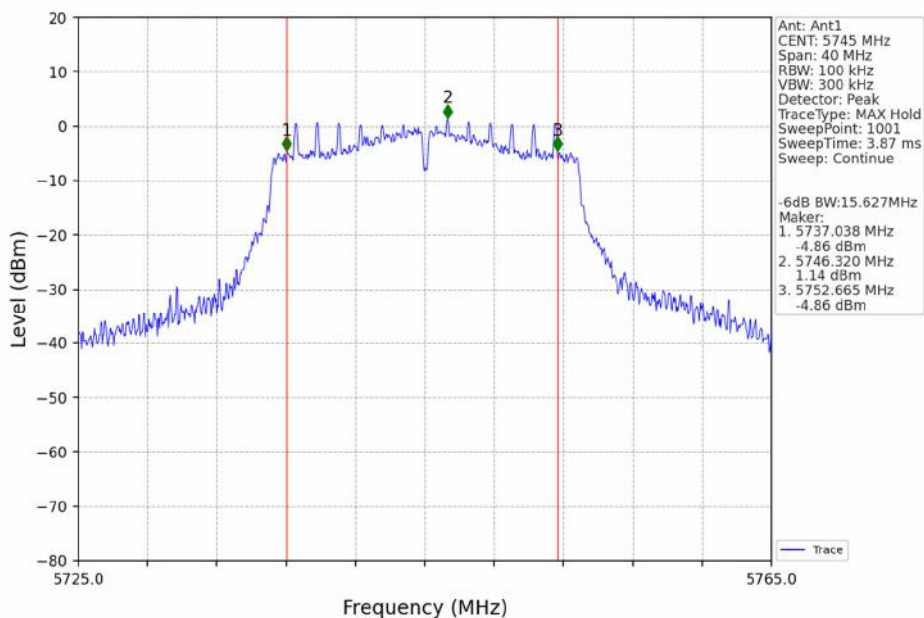
802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



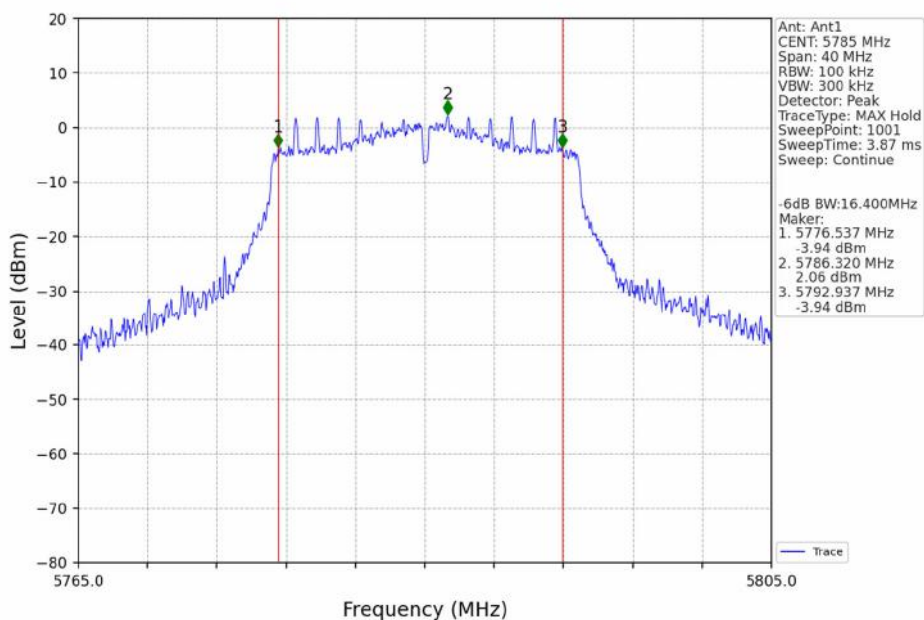
802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



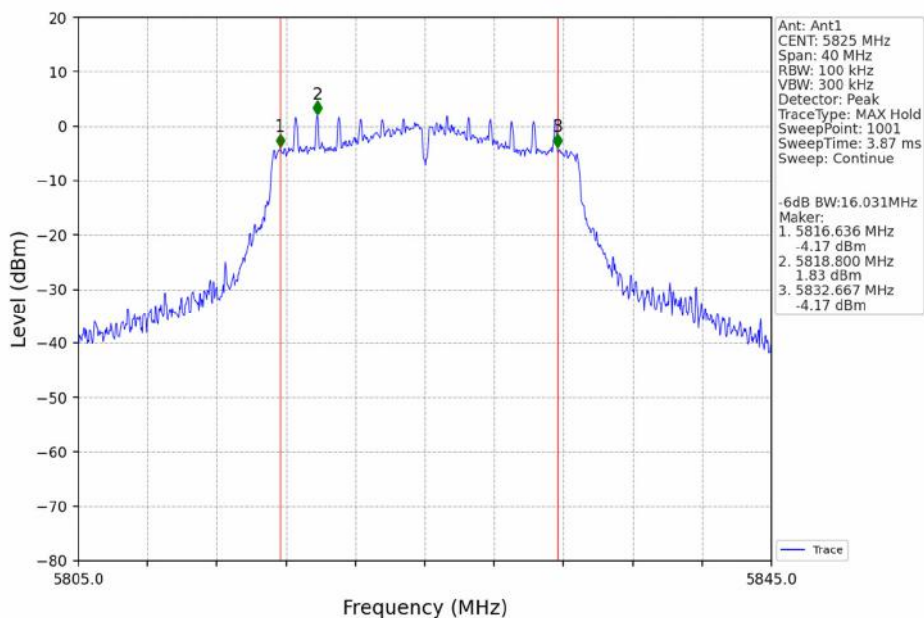
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



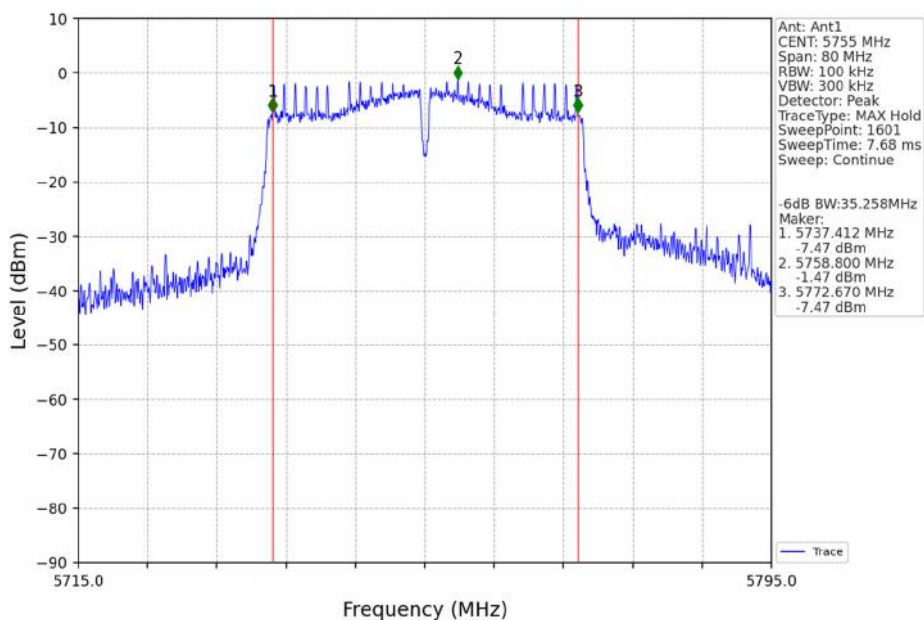
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



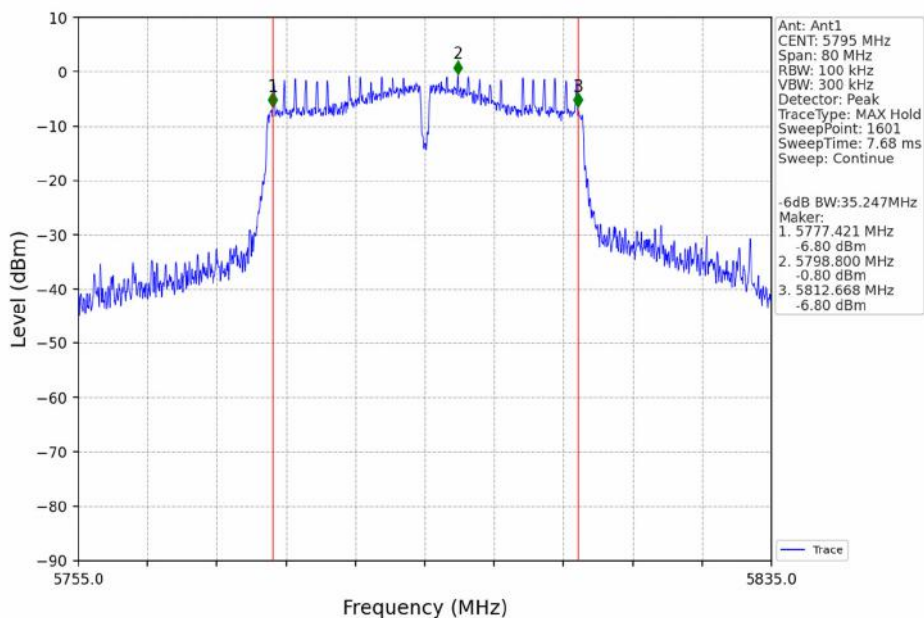
802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



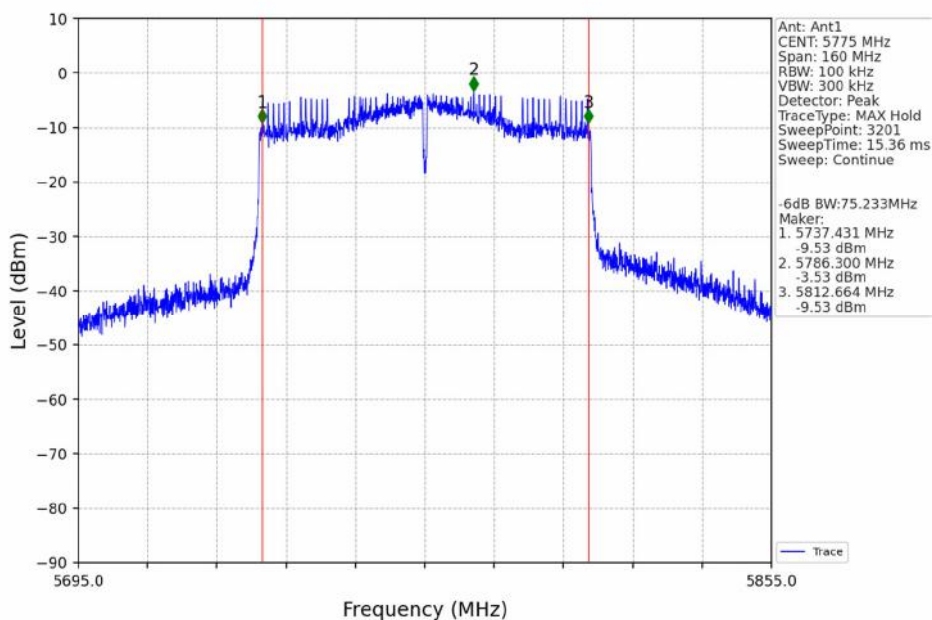
802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



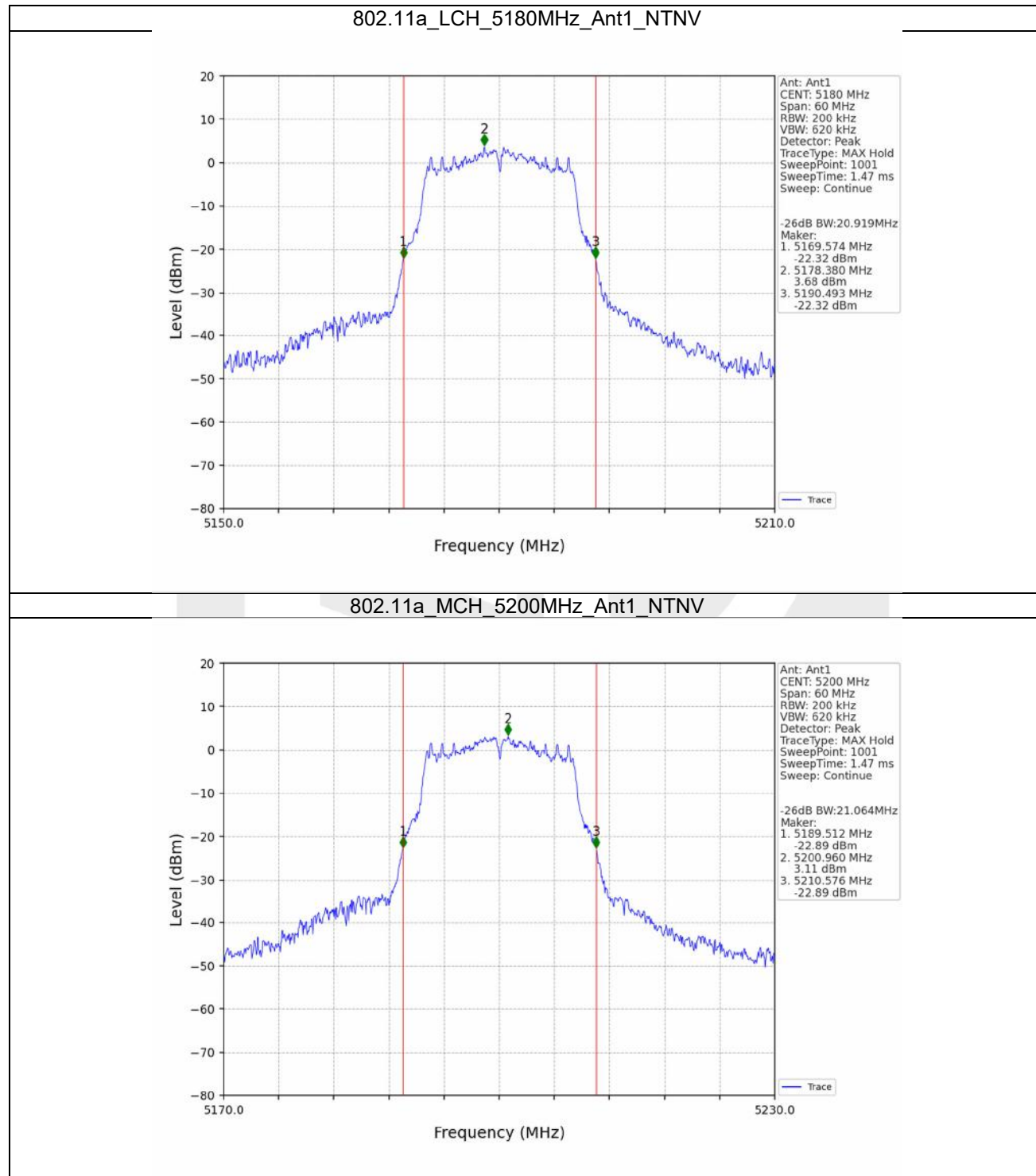
802.11ac(VHT40)\_HCH\_5795MHz\_Ant1\_NTNV



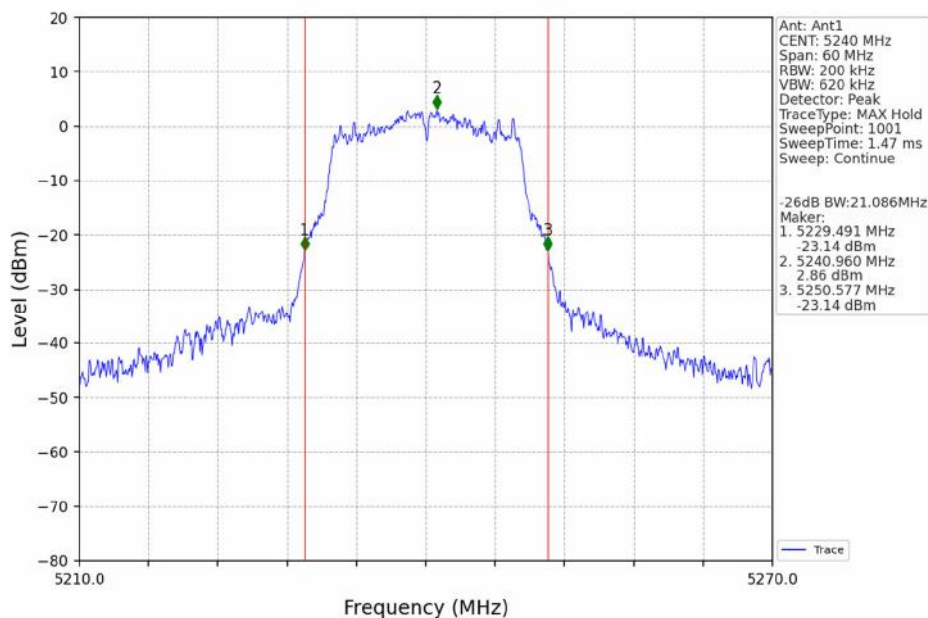
802.11ac(VHT80)\_MCH\_5775MHz\_Ant1\_NTNV



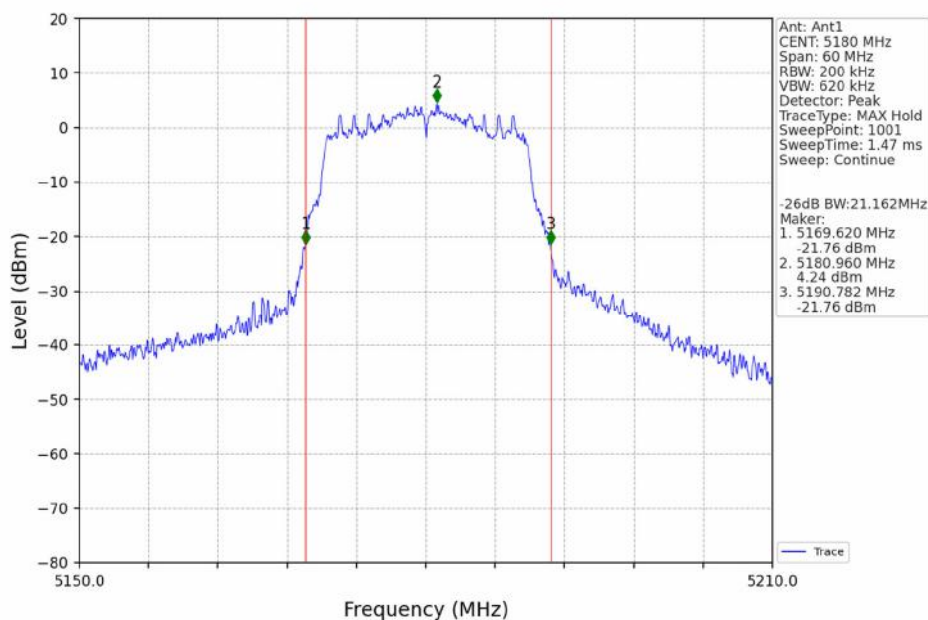
### 2.2.3 26dB BW



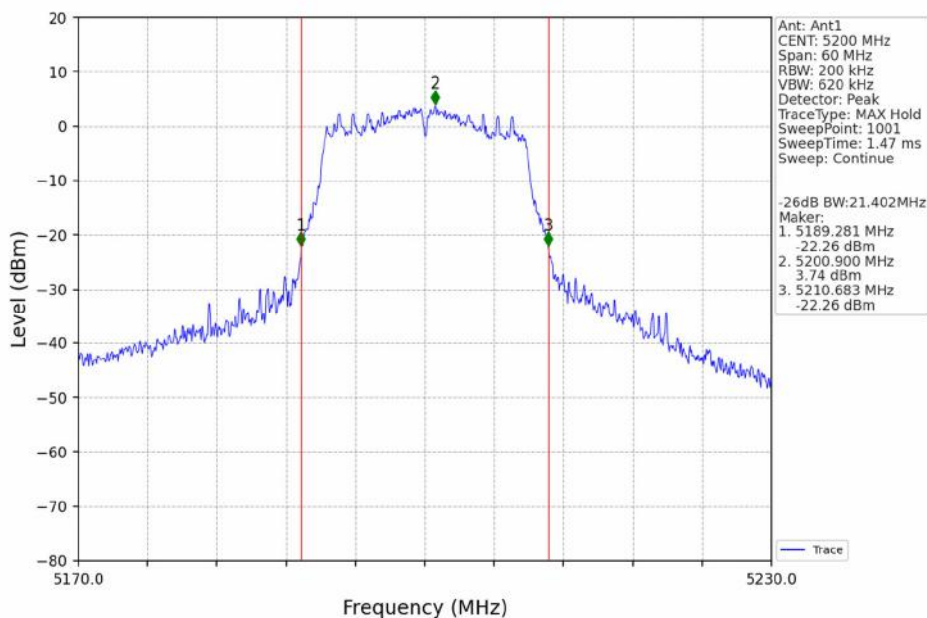
802.11a\_HCH\_5240MHz\_Ant1\_NTNV



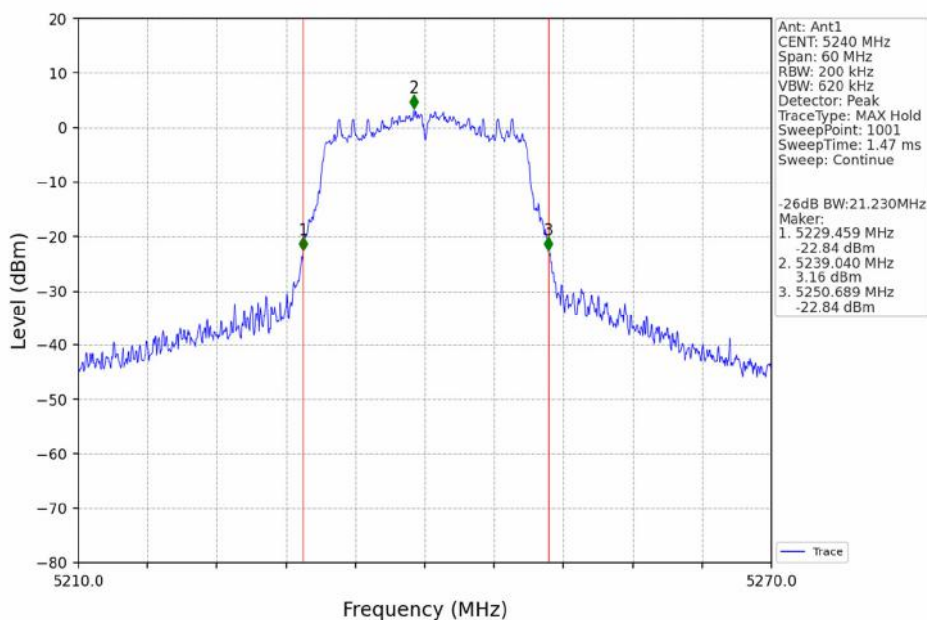
802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



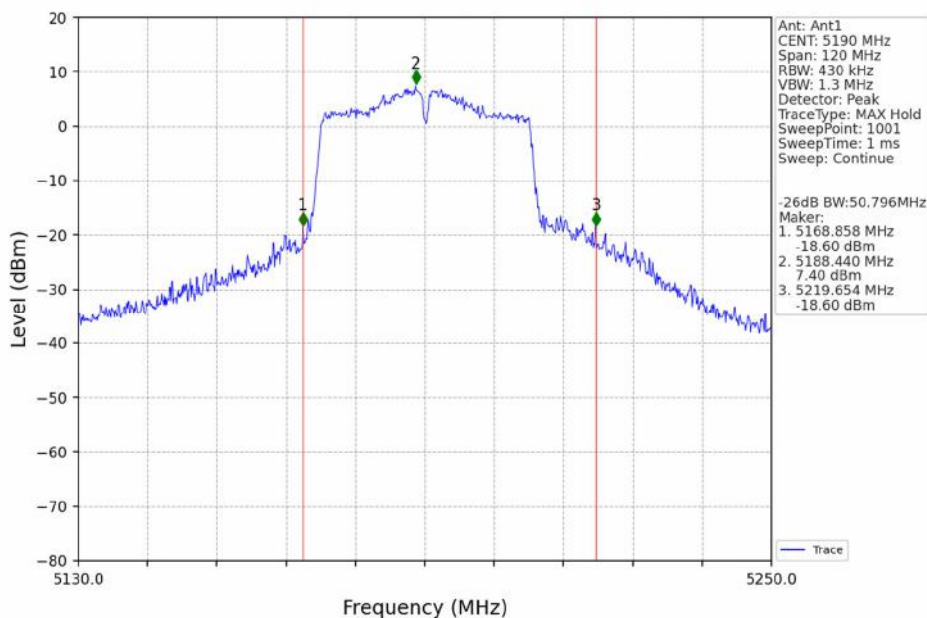
802.11n(HT20)\_MCH 5200MHz\_Ant1\_NTNV



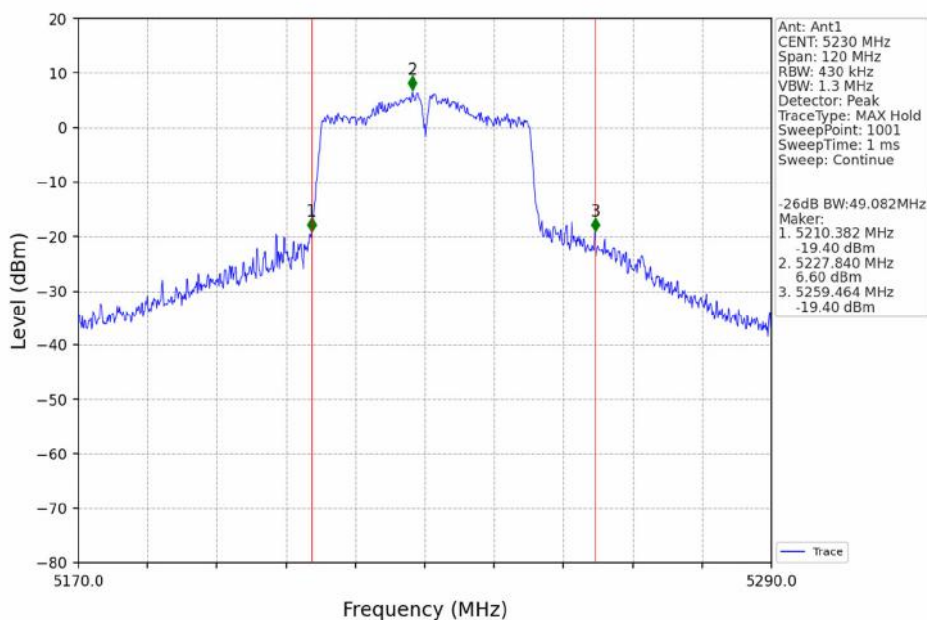
802.11n(HT20)\_HCH 5240MHz\_Ant1\_NTNV



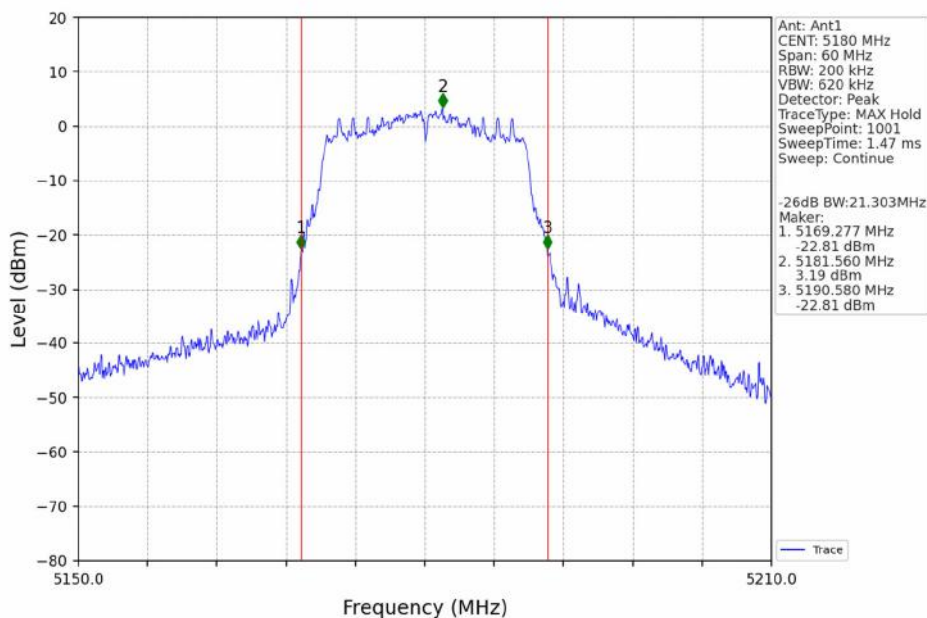
802.11n(HT40)\_LCH\_5190MHz\_Ant1\_NTNV



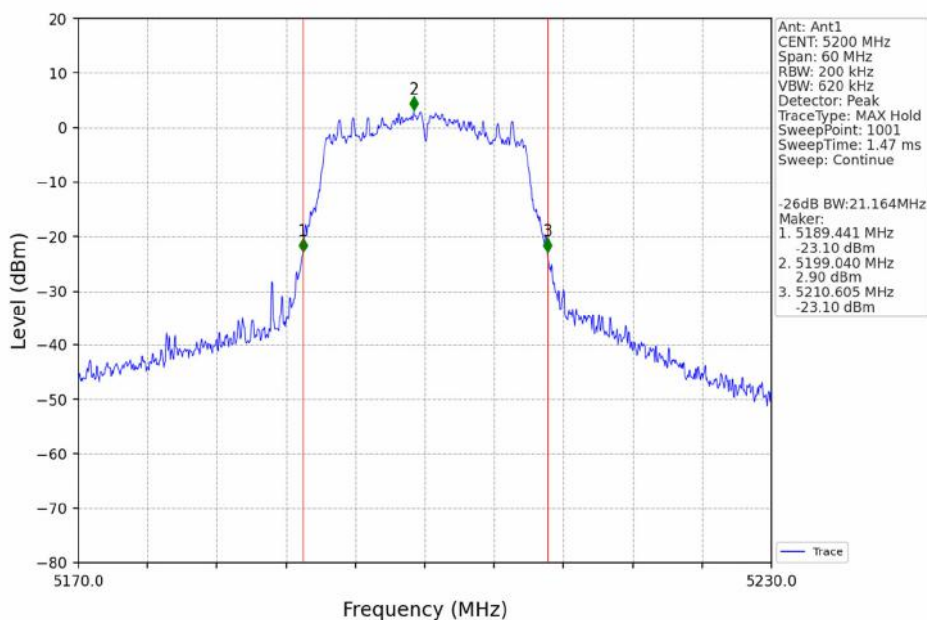
802.11n(HT40)\_HCH\_5230MHz\_Ant1\_NTNV



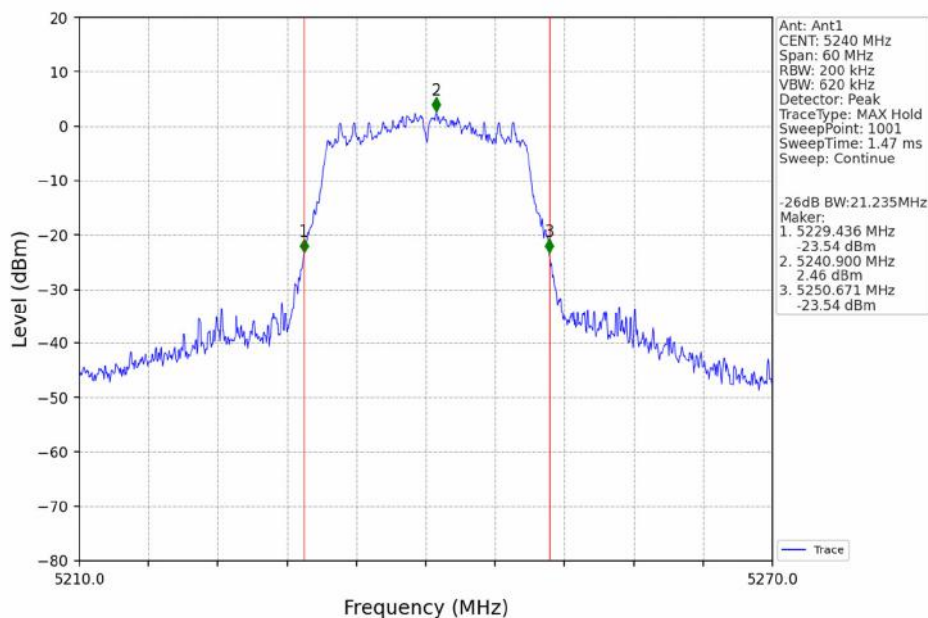
802.11ac(VHT20)\_LCH\_5180MHz\_Ant1\_NTNV



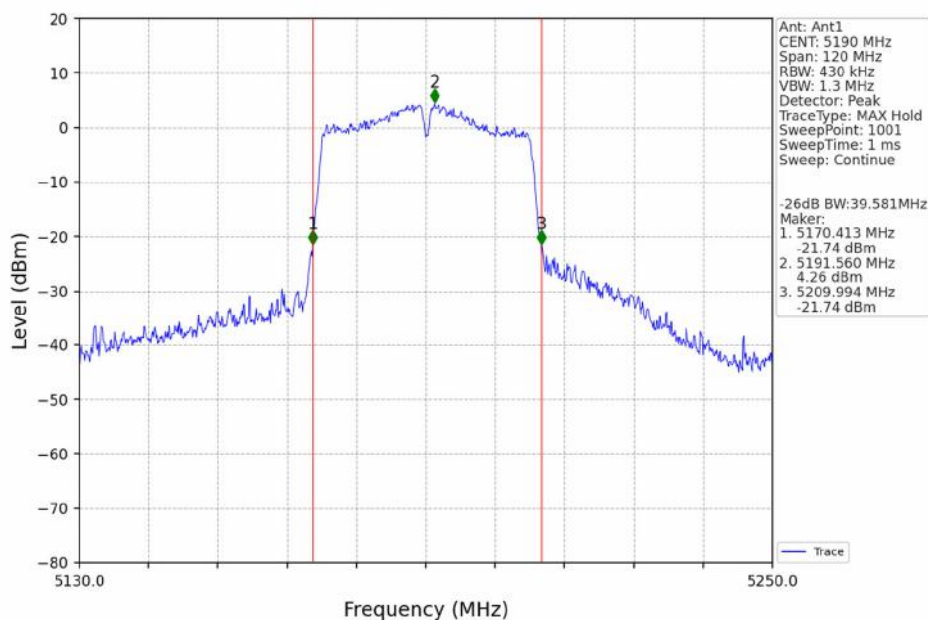
802.11ac(VHT20)\_MCH\_5200MHz\_Ant1\_NTNV



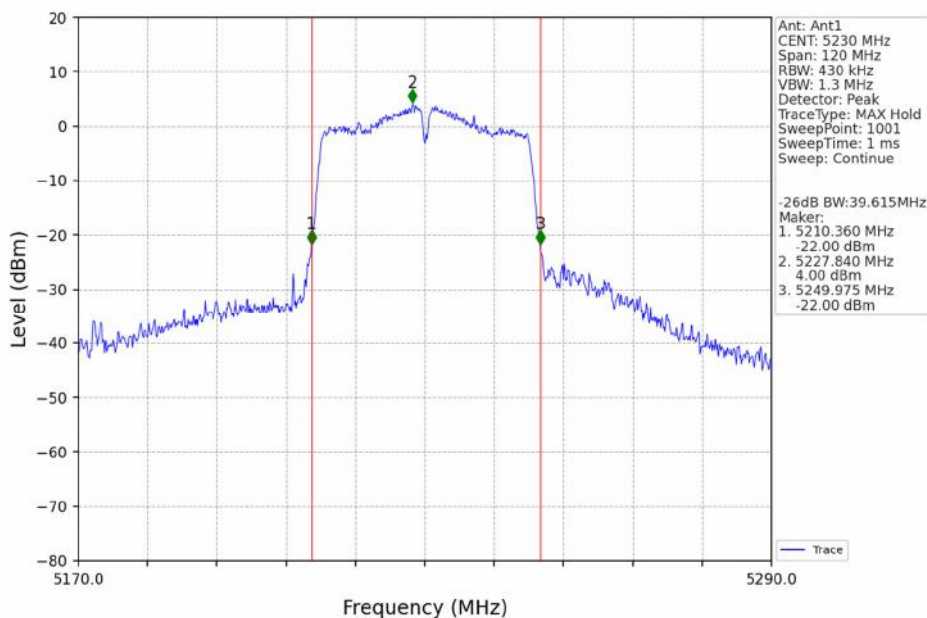
802.11ac(VHT20)\_HCH\_5240MHz\_Ant1\_NTNV



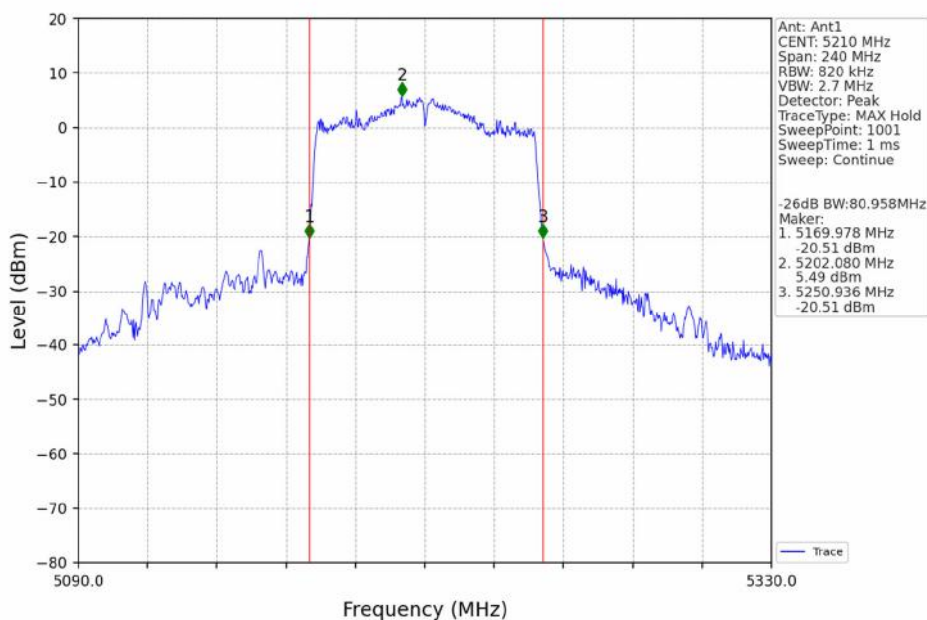
802.11ac(VHT40)\_LCH\_5190MHz\_Ant1\_NTNV



802.11ac(VHT40)\_HCH\_5230MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5210MHz\_Ant1\_NTNV



### 3. Maximum Conducted Output Power

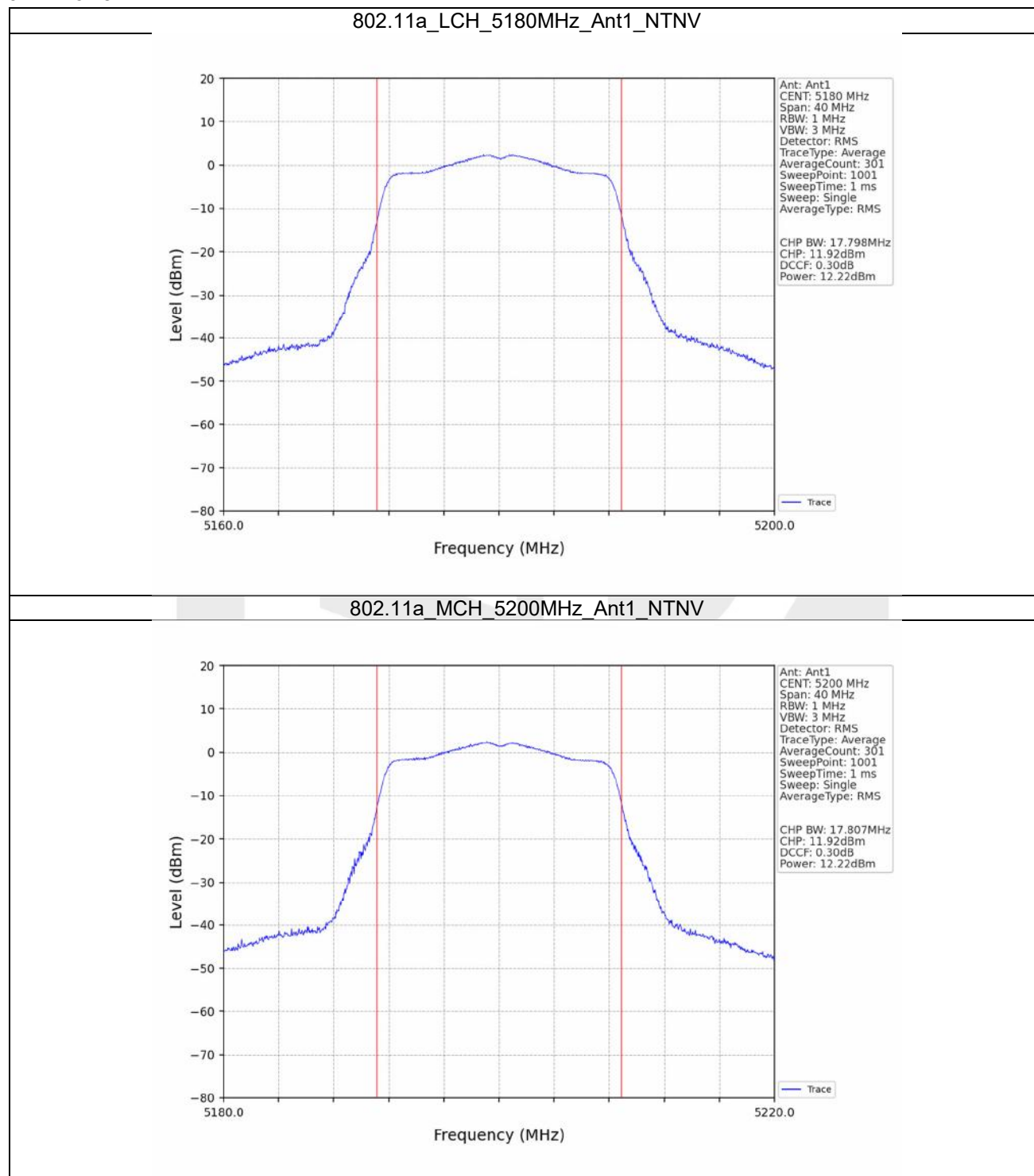
#### 3.1 Test Result

##### 3.1.1 Power

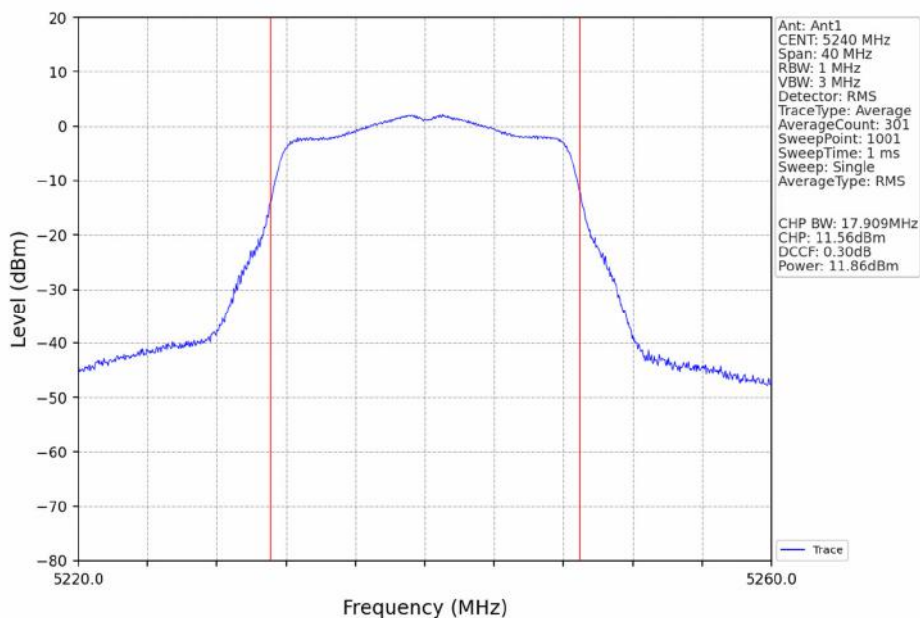
| Mode             | TX Type | Frequency (MHz) | Maximum Average Conducted Output Power (dBm) |              | Verdict |
|------------------|---------|-----------------|----------------------------------------------|--------------|---------|
|                  |         |                 | ANT1                                         | Limit        |         |
| 802.11a          | SISO    | 5180            | 12.22                                        | $\leq 23.98$ | Pass    |
|                  |         | 5200            | 12.22                                        | $\leq 23.98$ | Pass    |
|                  |         | 5240            | 11.86                                        | $\leq 23.98$ | Pass    |
|                  |         | 5745            | 12.32                                        | $\leq 30$    | Pass    |
|                  |         | 5785            | 13.31                                        | $\leq 30$    | Pass    |
|                  |         | 5825            | 13.11                                        | $\leq 30$    | Pass    |
| 802.11n (HT20)   | SISO    | 5180            | 12.86                                        | $\leq 23.98$ | Pass    |
|                  |         | 5200            | 12.62                                        | $\leq 23.98$ | Pass    |
|                  |         | 5240            | 11.94                                        | $\leq 23.98$ | Pass    |
|                  |         | 5745            | 11.91                                        | $\leq 30$    | Pass    |
|                  |         | 5785            | 12.83                                        | $\leq 30$    | Pass    |
|                  |         | 5825            | 12.78                                        | $\leq 30$    | Pass    |
| 802.11n (HT40)   | SISO    | 5190            | 15.58                                        | $\leq 23.98$ | Pass    |
|                  |         | 5230            | 15.05                                        | $\leq 23.98$ | Pass    |
|                  |         | 5755            | 14.03                                        | $\leq 30$    | Pass    |
|                  |         | 5795            | 15.14                                        | $\leq 30$    | Pass    |
| 802.11ac (VHT20) | SISO    | 5180            | 12.01                                        | $\leq 23.98$ | Pass    |
|                  |         | 5200            | 11.68                                        | $\leq 23.98$ | Pass    |
|                  |         | 5240            | 11.05                                        | $\leq 23.98$ | Pass    |
|                  |         | 5745            | 11.92                                        | $\leq 30$    | Pass    |
|                  |         | 5785            | 13.04                                        | $\leq 30$    | Pass    |
|                  |         | 5825            | 12.79                                        | $\leq 30$    | Pass    |
| 802.11ac (VHT40) | SISO    | 5190            | 12.88                                        | $\leq 23.98$ | Pass    |
|                  |         | 5230            | 12.31                                        | $\leq 23.98$ | Pass    |
|                  |         | 5755            | 12.11                                        | $\leq 30$    | Pass    |
|                  |         | 5795            | 13.05                                        | $\leq 30$    | Pass    |
| 802.11ac (VHT80) | SISO    | 5210            | 13.35                                        | $\leq 23.98$ | Pass    |
|                  |         | 5775            | 12.10                                        | $\leq 30$    | Pass    |

## 3.2 Test Graph

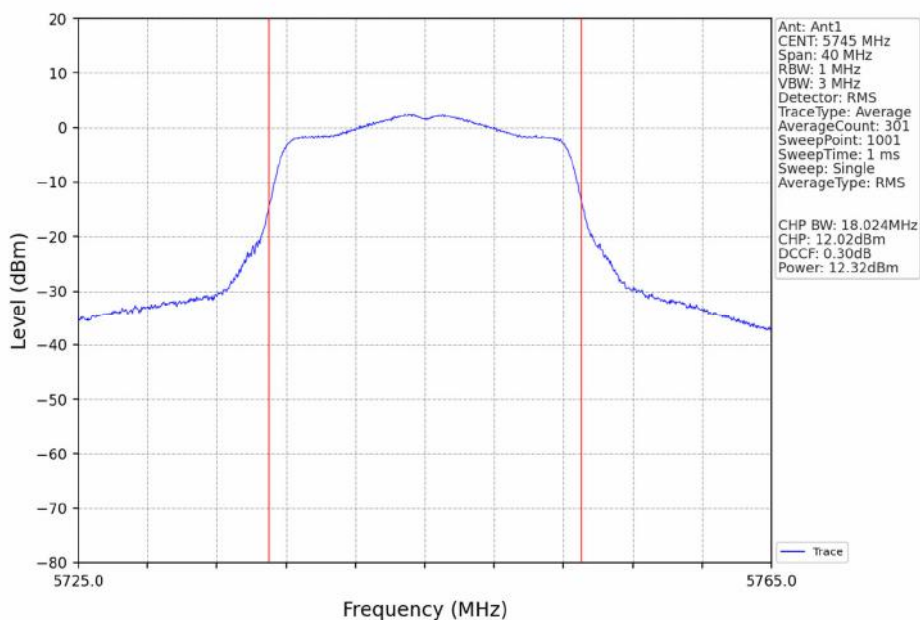
### 3.2.1 Power



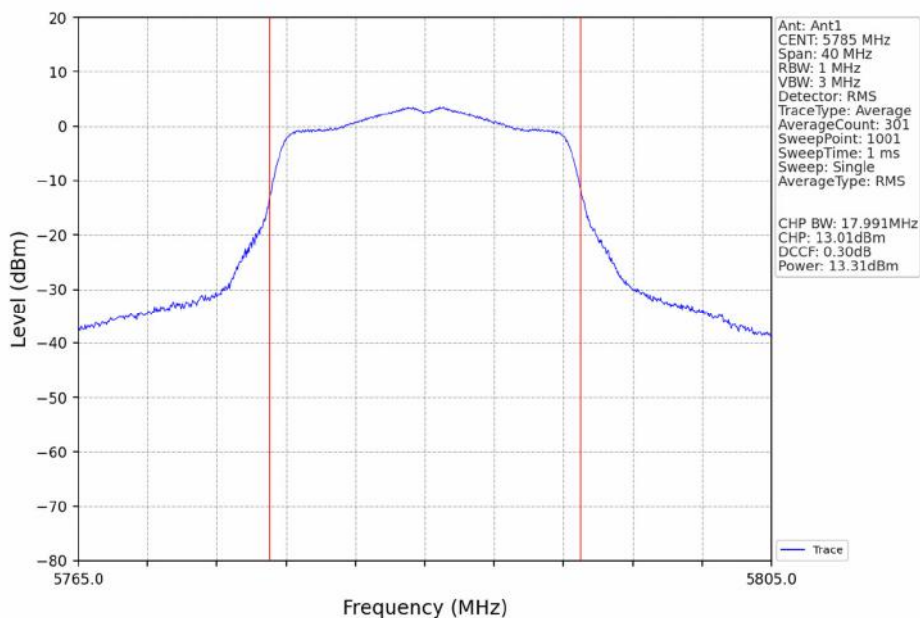
802.11a HCH 5240MHz Ant1\_NTNV



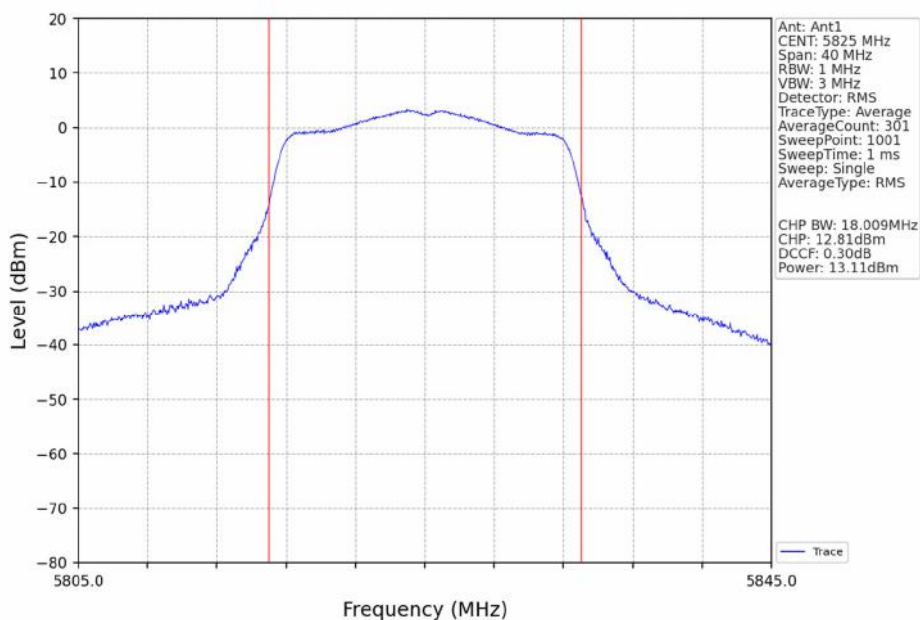
802.11a LCH 5745MHz Ant1\_NTNV



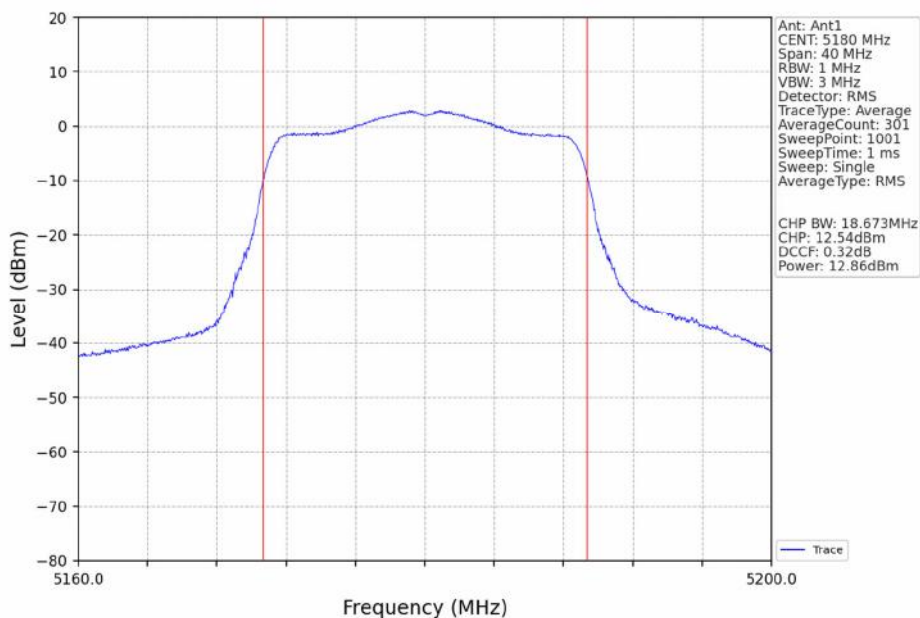
802.11a MCH\_5785MHz\_Ant1\_NTNV



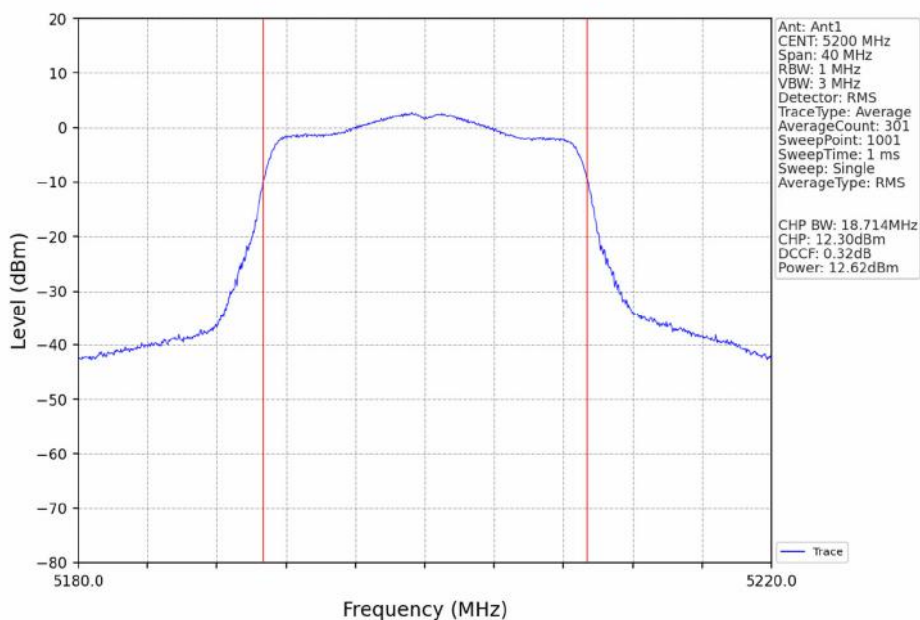
802.11a HCH\_5825MHz\_Ant1\_NTNV



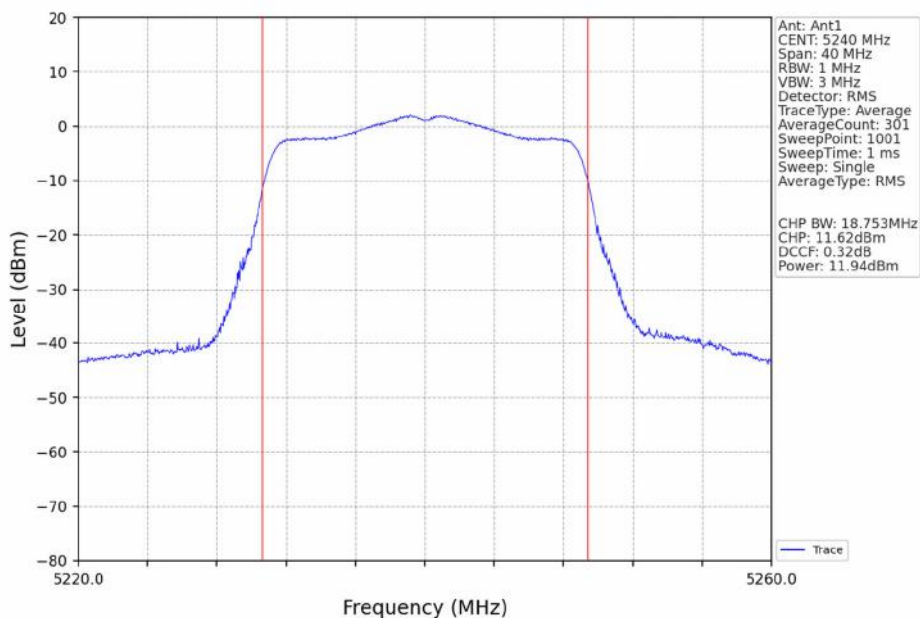
802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



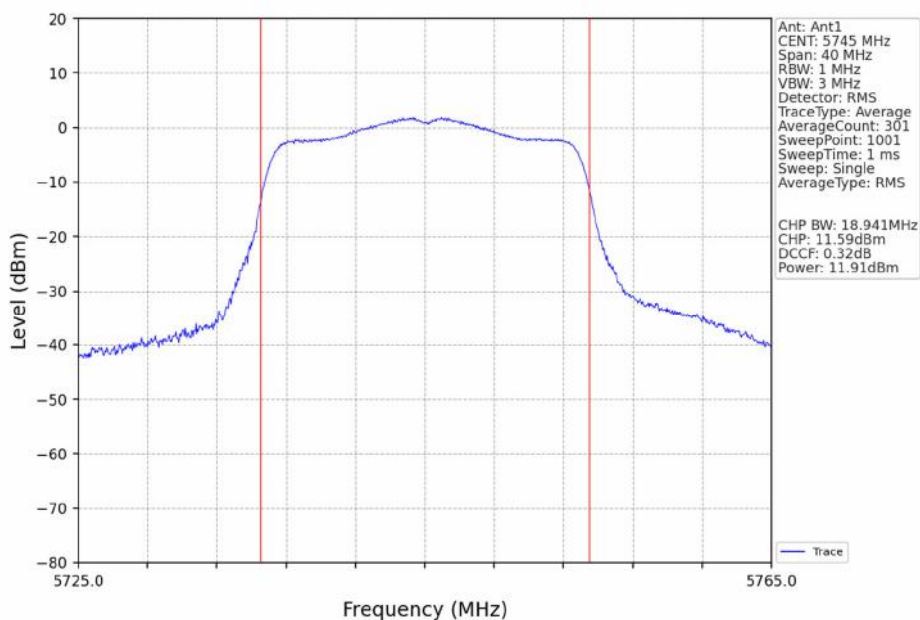
802.11n(HT20)\_MCH\_5200MHz\_Ant1\_NTNV



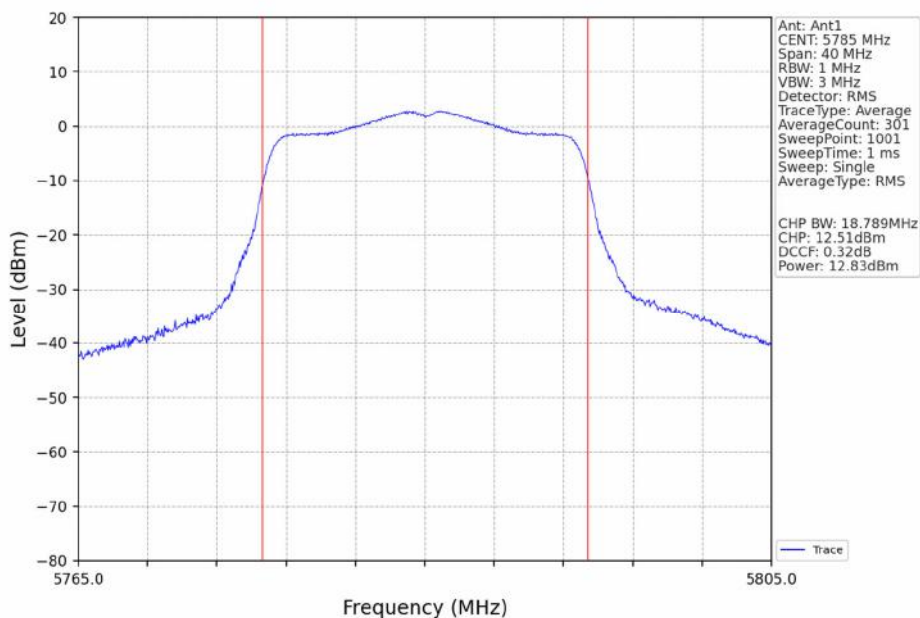
802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV



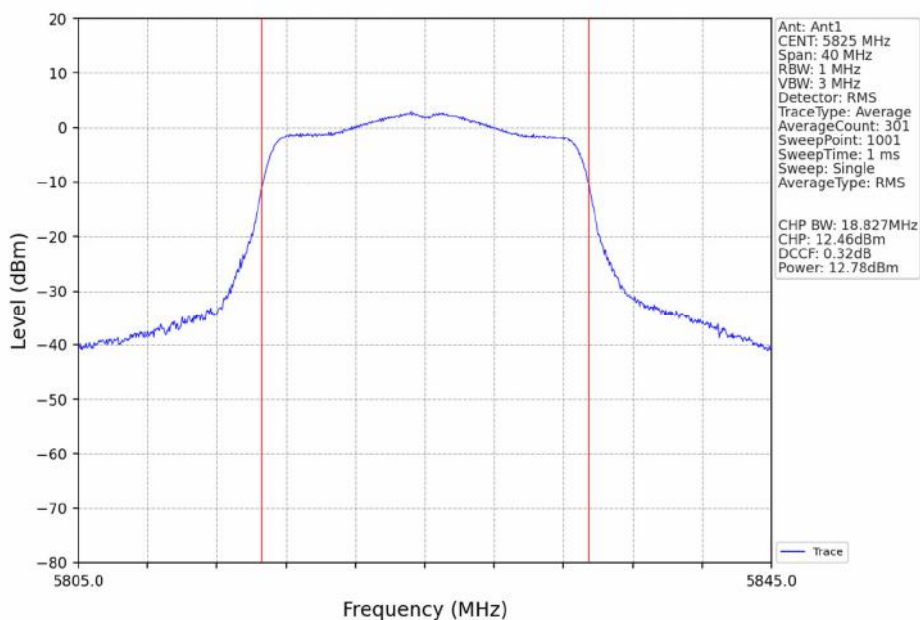
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



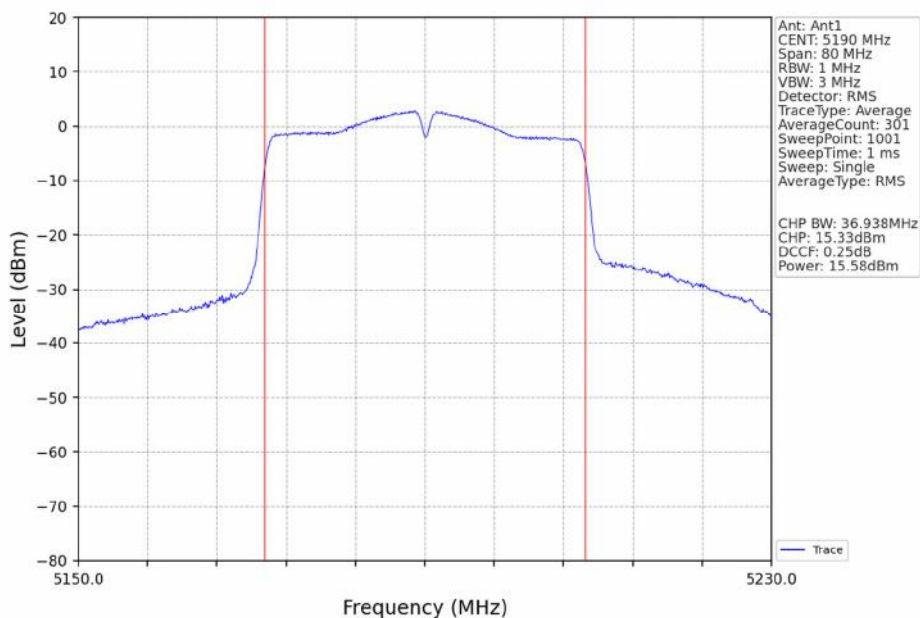
802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



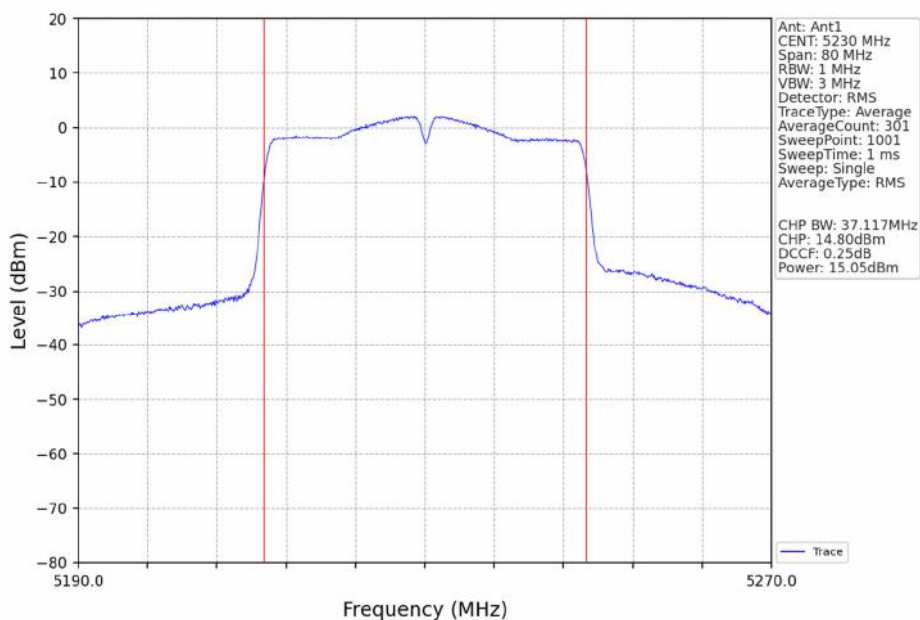
802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



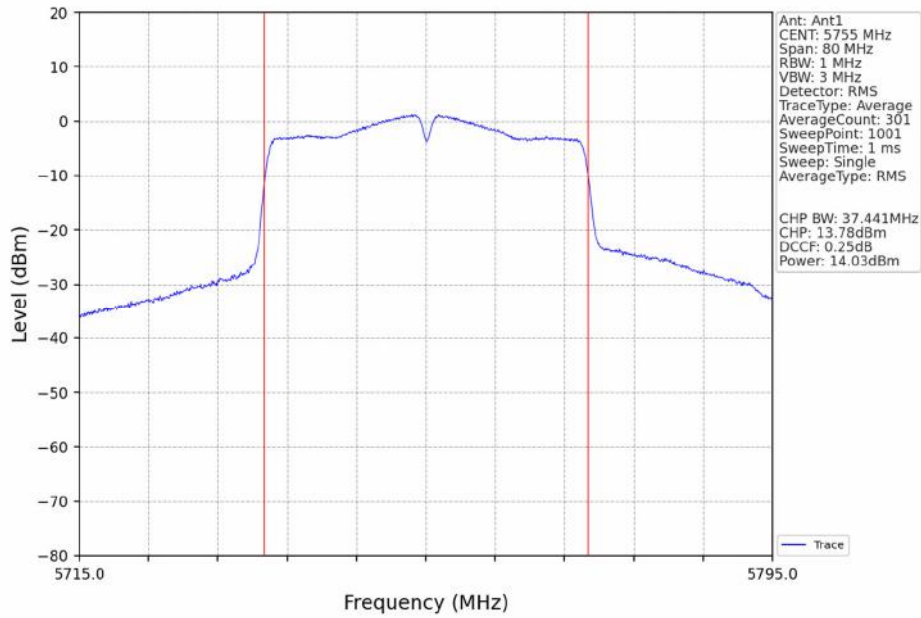
802.11n(HT40)\_LCH\_5190MHz\_Ant1\_NTNV



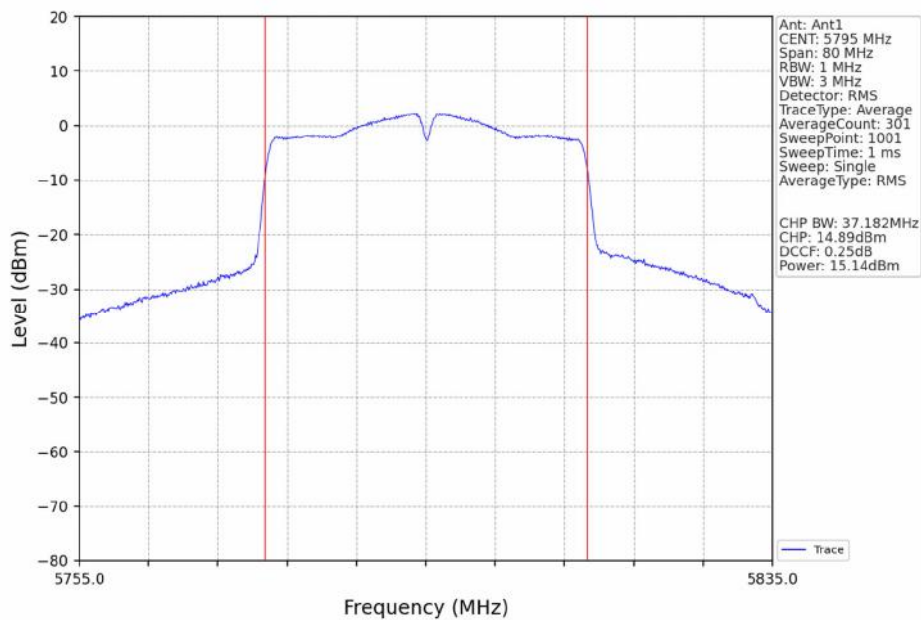
802.11n(HT40)\_HCH\_5230MHz\_Ant1\_NTNV



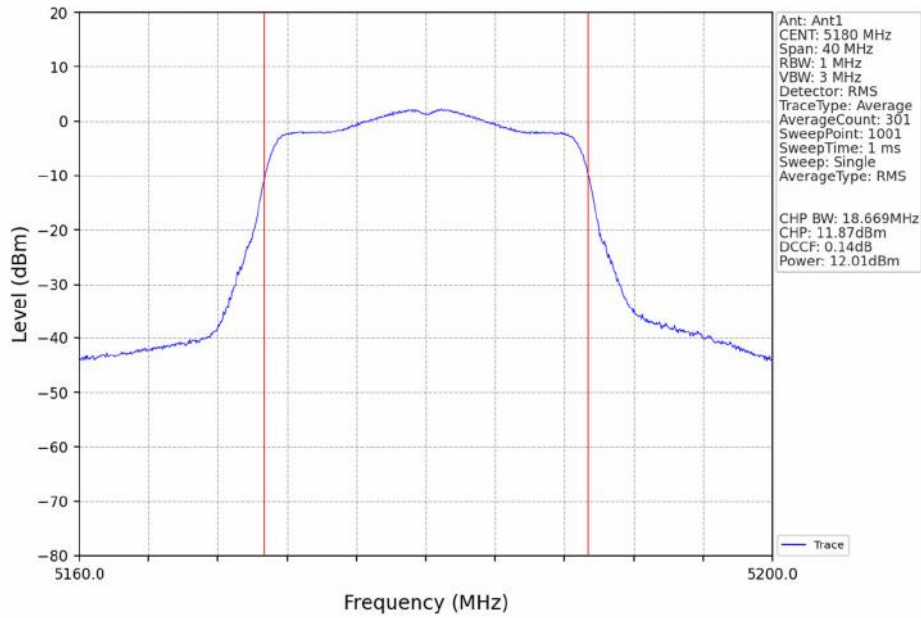
802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



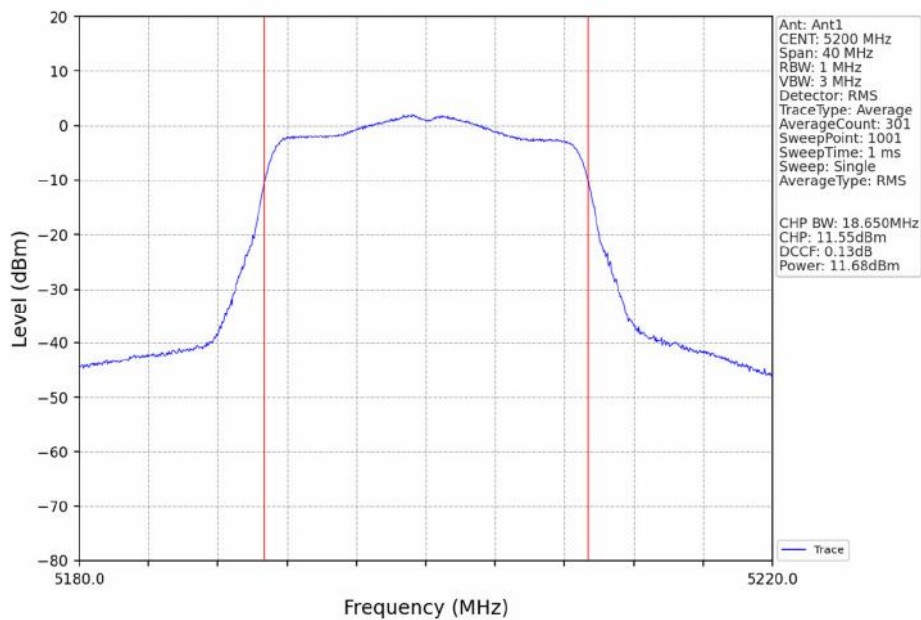
802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



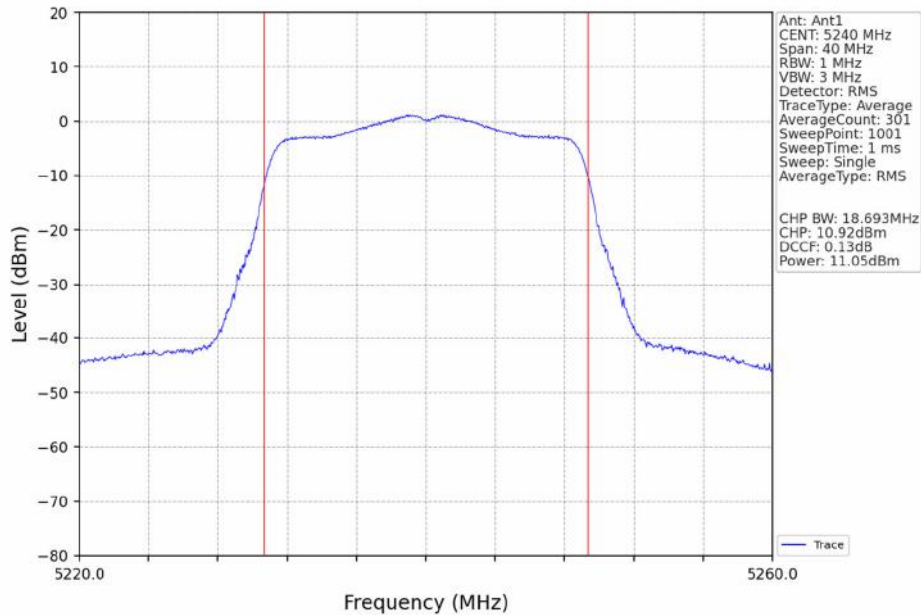
802.11ac(VHT20)\_LCH\_5180MHz\_Ant1\_NTNV



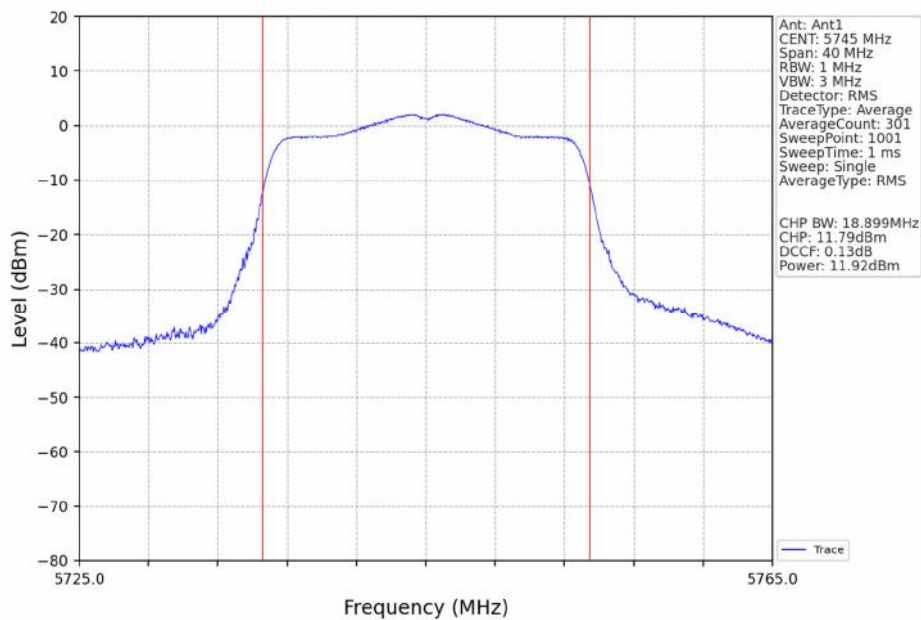
802.11ac(VHT20)\_MCH\_5200MHz\_Ant1\_NTNV



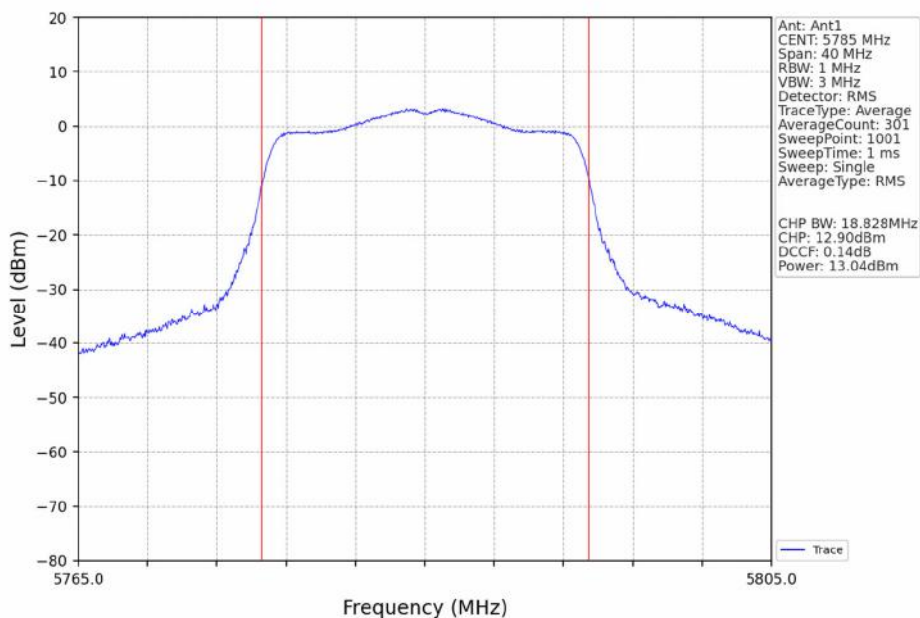
802.11ac(VHT20)\_HCH\_5240MHz\_Ant1\_NTNV



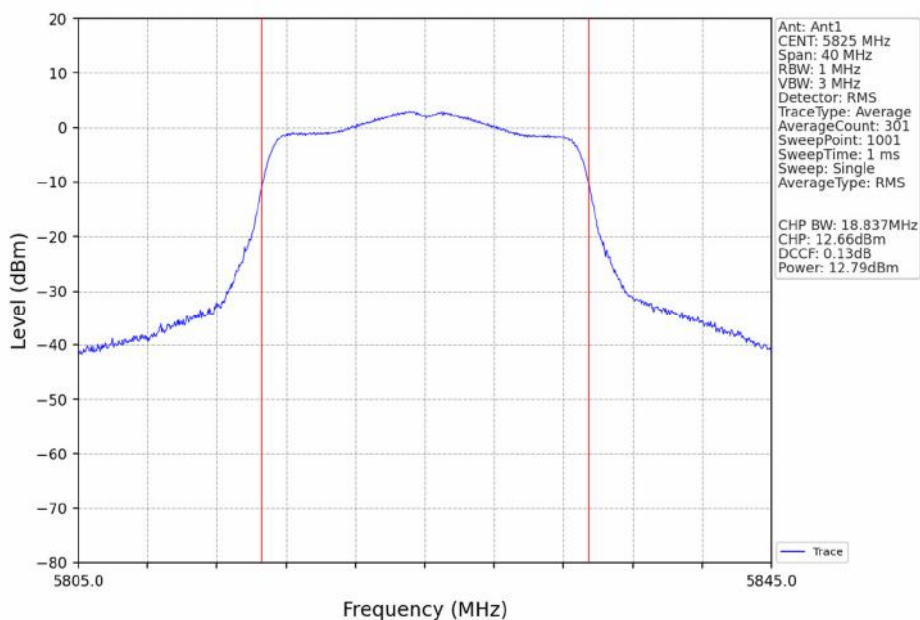
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



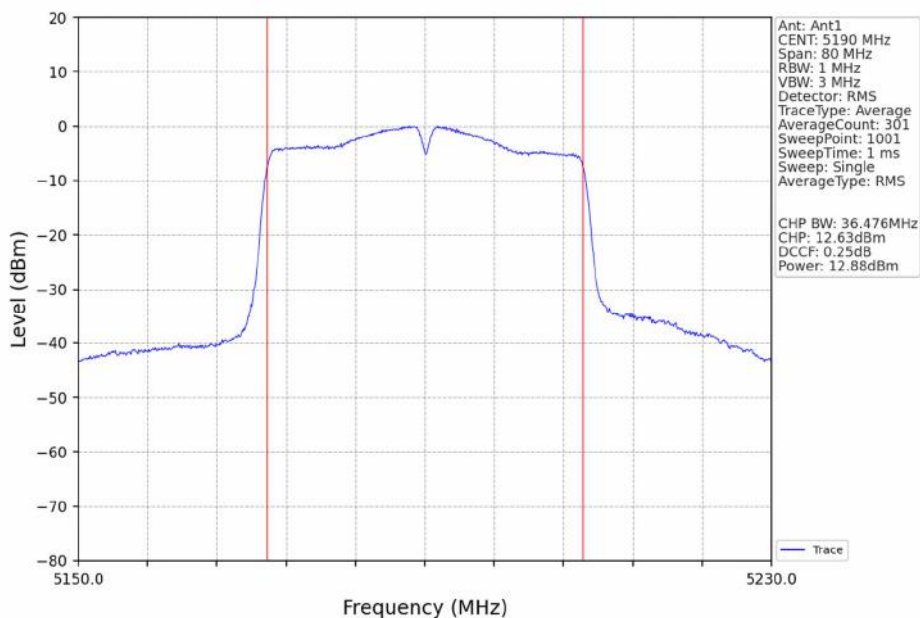
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



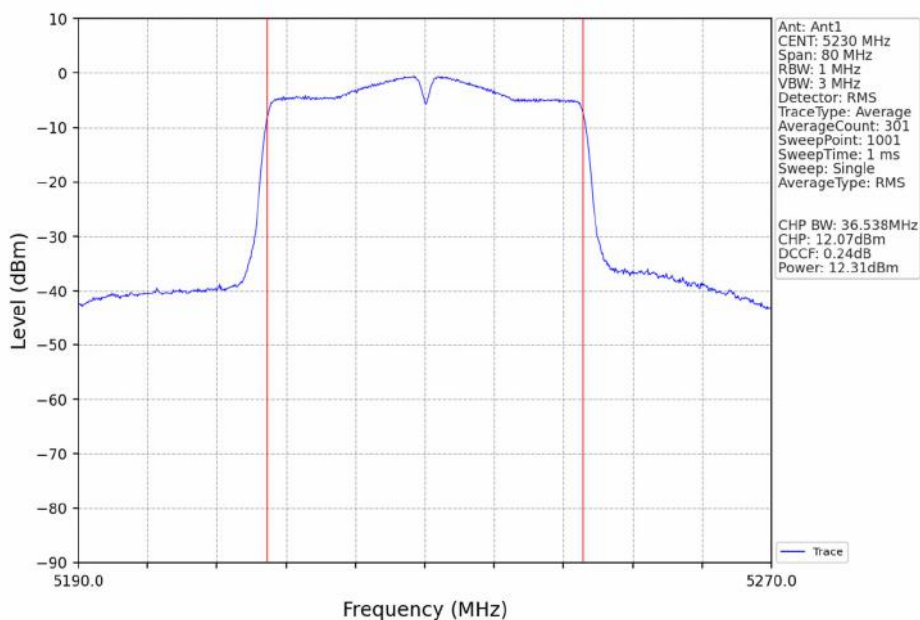
802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



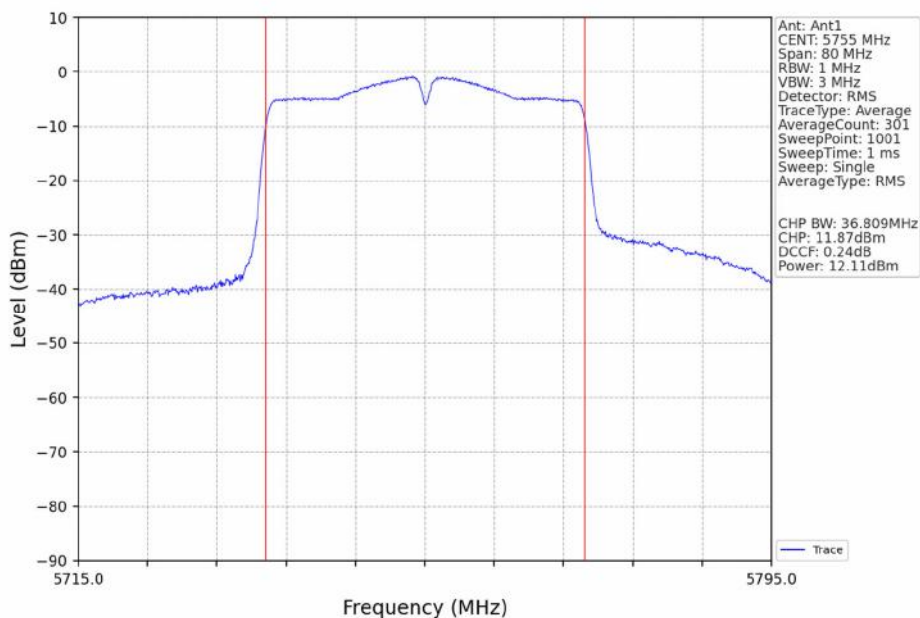
802.11ac(VHT40)\_LCH\_5190MHz\_Ant1\_NTNV



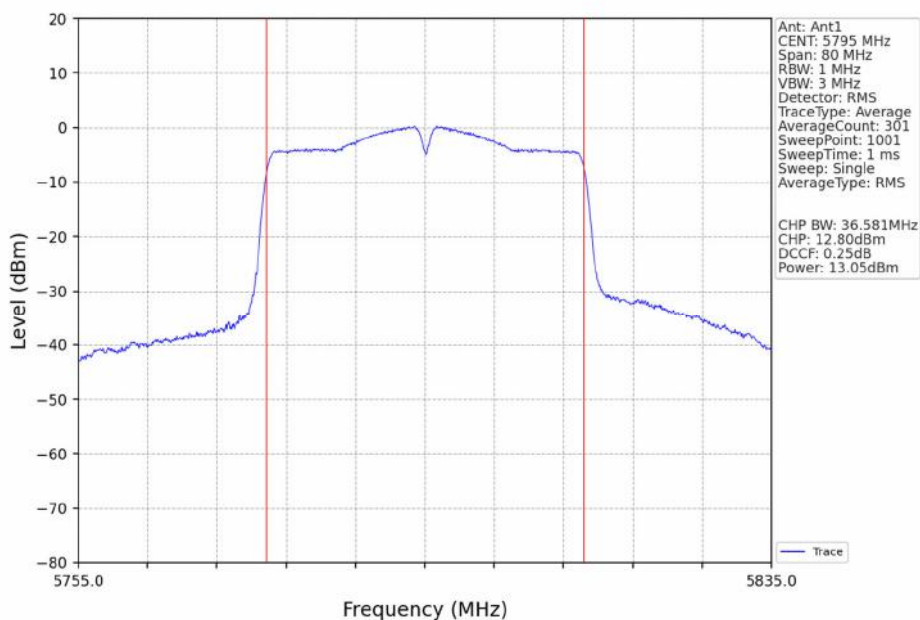
802.11ac(VHT40)\_HCH\_5230MHz\_Ant1\_NTNV



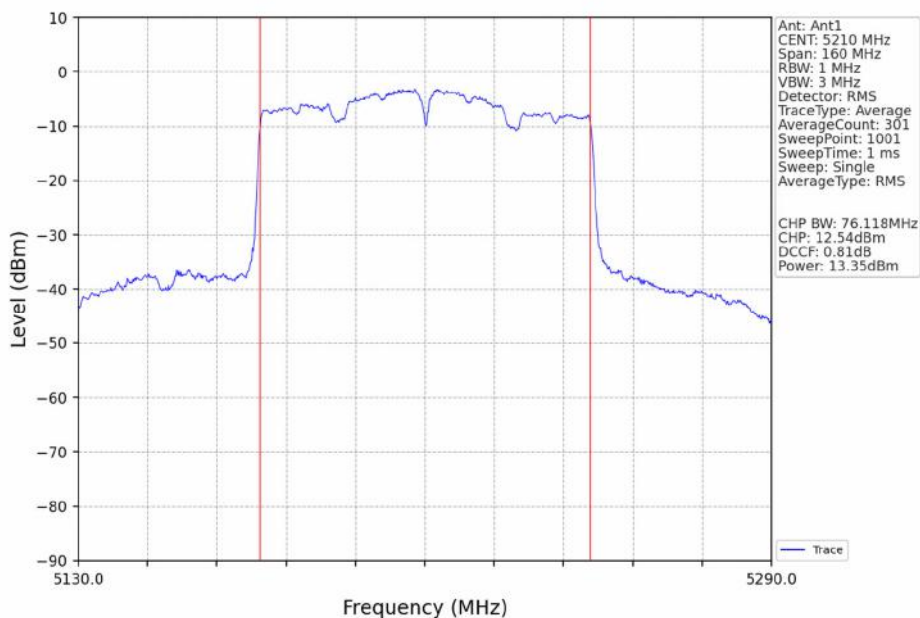
802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



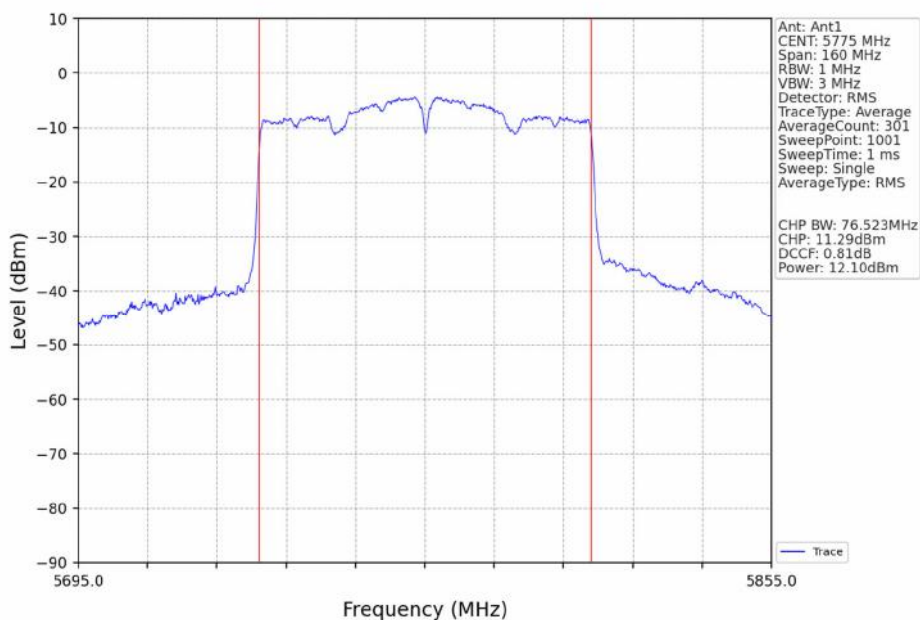
802.11ac(VHT40)\_HCH\_5795MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5210MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5775MHz\_Ant1\_NTNV



#### 4. Maximum Power Spectral Density

##### 4.1 Test Result

##### 4.1.1 PSD

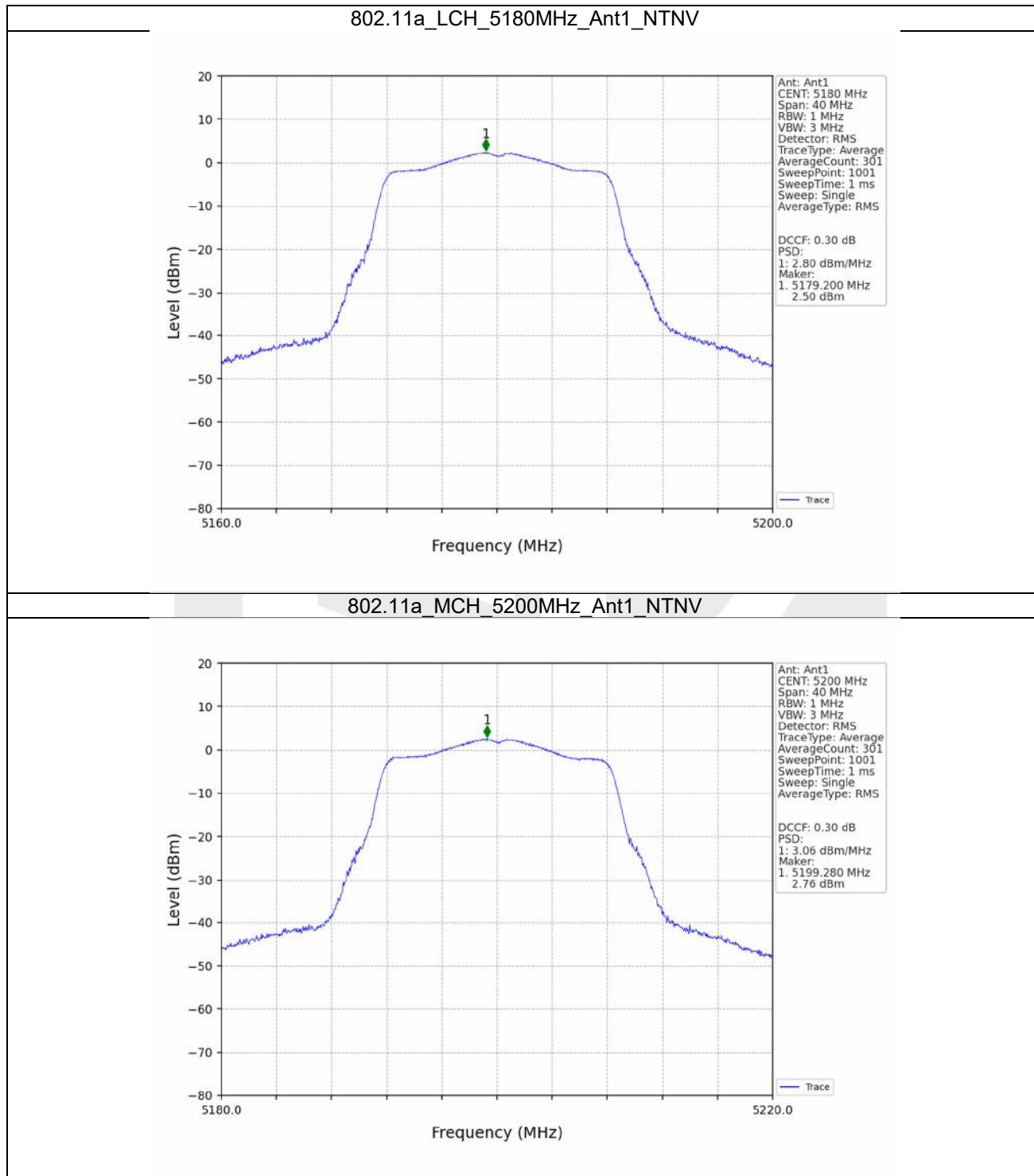
| Mode             | TX Type | Frequency (MHz) | Maximum PSD (dBm/MHz) |           | Verdict |
|------------------|---------|-----------------|-----------------------|-----------|---------|
|                  |         |                 | ANT1                  | Limit     |         |
| 802.11a          | SISO    | 5180            | 2.80                  | $\leq 11$ | Pass    |
|                  |         | 5200            | 3.06                  | $\leq 11$ | Pass    |
|                  |         | 5240            | 2.31                  | $\leq 11$ | Pass    |
| 802.11n (HT20)   | SISO    | 5180            | 3.36                  | $\leq 11$ | Pass    |
|                  |         | 5200            | 3.02                  | $\leq 11$ | Pass    |
|                  |         | 5240            | 2.31                  | $\leq 11$ | Pass    |
| 802.11n (HT40)   | SISO    | 5190            | 2.93                  | $\leq 11$ | Pass    |
|                  |         | 5230            | 2.41                  | $\leq 11$ | Pass    |
| 802.11ac (VHT20) | SISO    | 5180            | 2.33                  | $\leq 11$ | Pass    |
|                  |         | 5200            | 1.96                  | $\leq 11$ | Pass    |
|                  |         | 5240            | 1.45                  | $\leq 11$ | Pass    |
| 802.11ac (VHT40) | SISO    | 5190            | 0.25                  | $\leq 11$ | Pass    |
|                  |         | 5230            | -0.25                 | $\leq 11$ | Pass    |
| 802.11ac (VHT80) | SISO    | 5210            | -2.25                 | $\leq 11$ | Pass    |

##### 4.1.2 PSD-Band3

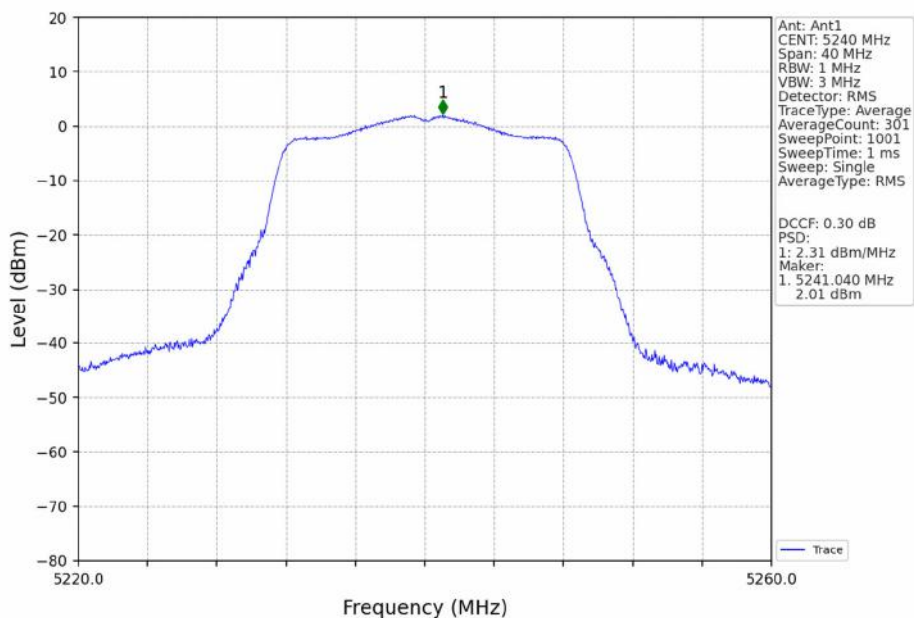
| Mode             | TX Type | Frequency (MHz) | Maximum PSD (dBm/500kHz) |           | Verdict |
|------------------|---------|-----------------|--------------------------|-----------|---------|
|                  |         |                 | ANT1                     | Limit     |         |
| 802.11a          | SISO    | 5745            | 0.24                     | $\leq 30$ | Pass    |
|                  |         | 5785            | 1.18                     | $\leq 30$ | Pass    |
|                  |         | 5825            | 1.12                     | $\leq 30$ | Pass    |
| 802.11n (HT20)   | SISO    | 5745            | -0.33                    | $\leq 30$ | Pass    |
|                  |         | 5785            | 0.49                     | $\leq 30$ | Pass    |
|                  |         | 5825            | 0.36                     | $\leq 30$ | Pass    |
| 802.11n (HT40)   | SISO    | 5755            | -1.43                    | $\leq 30$ | Pass    |
|                  |         | 5795            | -0.39                    | $\leq 30$ | Pass    |
| 802.11ac (VHT20) | SISO    | 5745            | -0.42                    | $\leq 30$ | Pass    |
|                  |         | 5785            | 0.56                     | $\leq 30$ | Pass    |
|                  |         | 5825            | 0.61                     | $\leq 30$ | Pass    |
| 802.11ac (VHT40) | SISO    | 5755            | -3.18                    | $\leq 30$ | Pass    |
|                  |         | 5795            | -2.32                    | $\leq 30$ | Pass    |
| 802.11ac (VHT80) | SISO    | 5775            | -5.40                    | $\leq 30$ | Pass    |

## 4.2 Test Graph

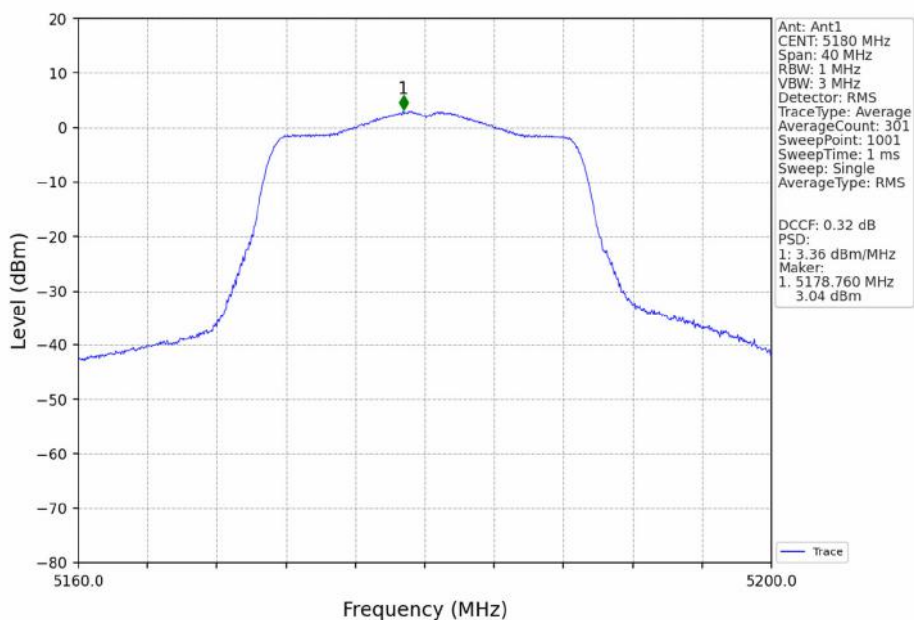
### 4.2.1 PSD



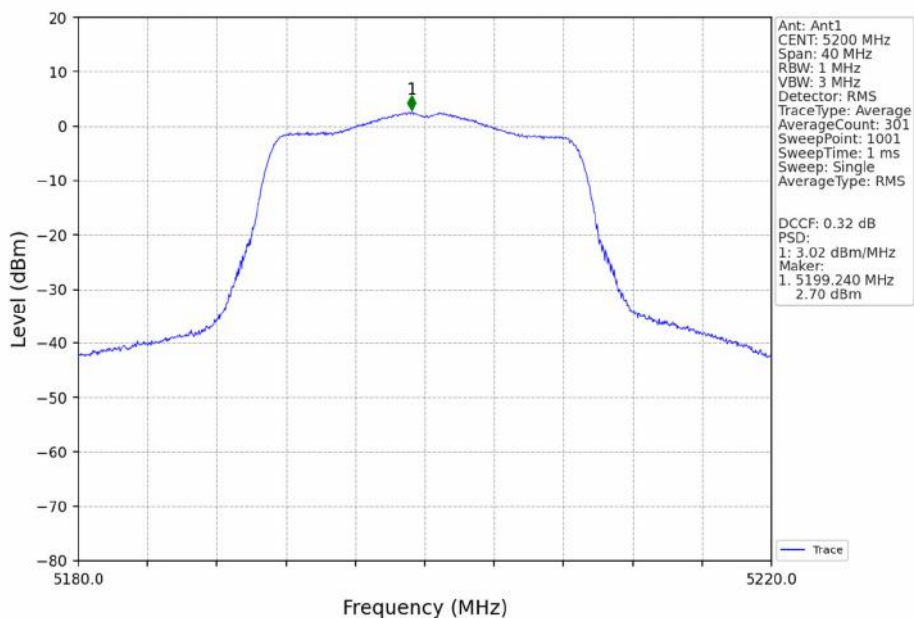
802.11a\_HCH\_5240MHz\_Ant1\_NTNV



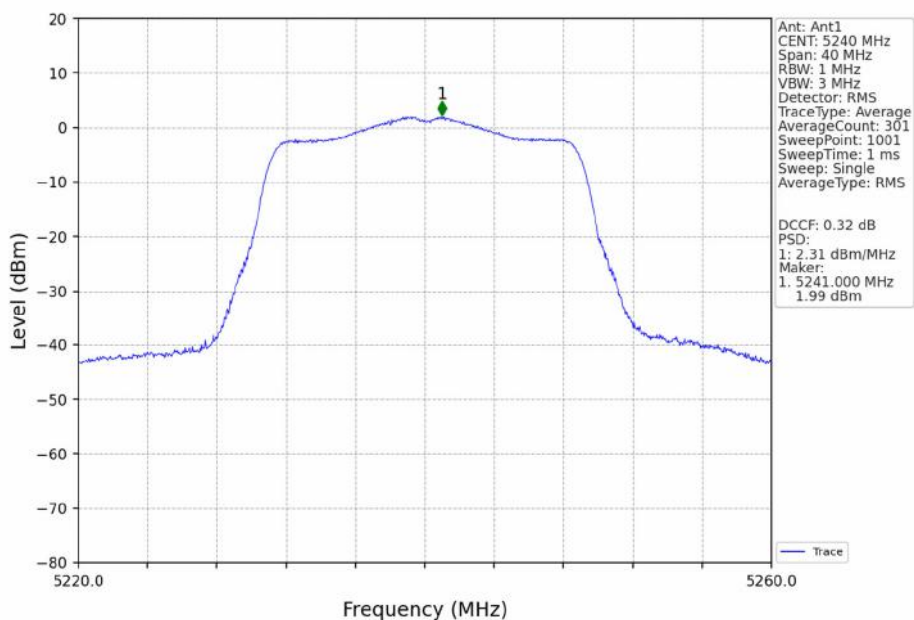
802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



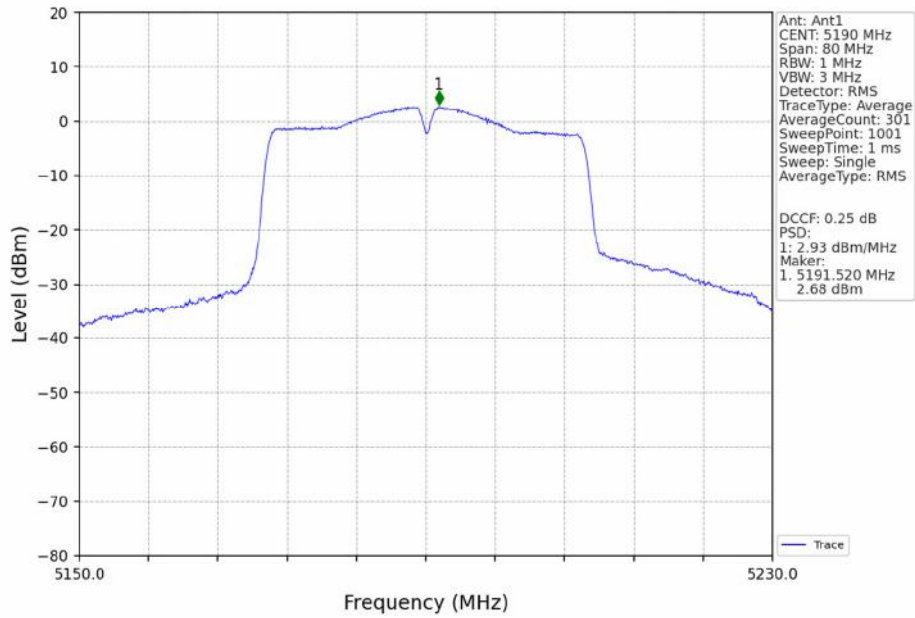
802.11n(HT20)\_MCH\_5200MHz\_Ant1\_NTNV



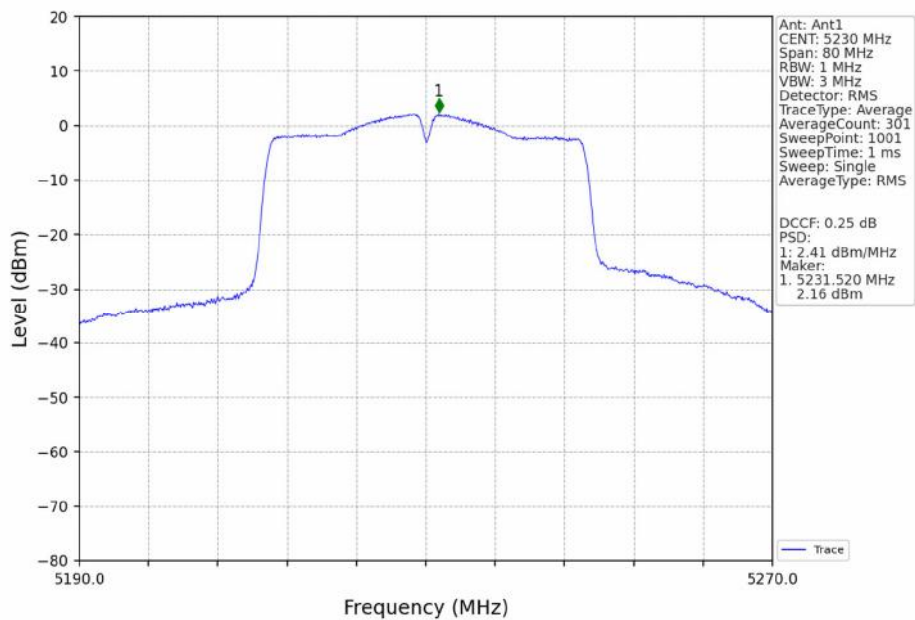
802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV



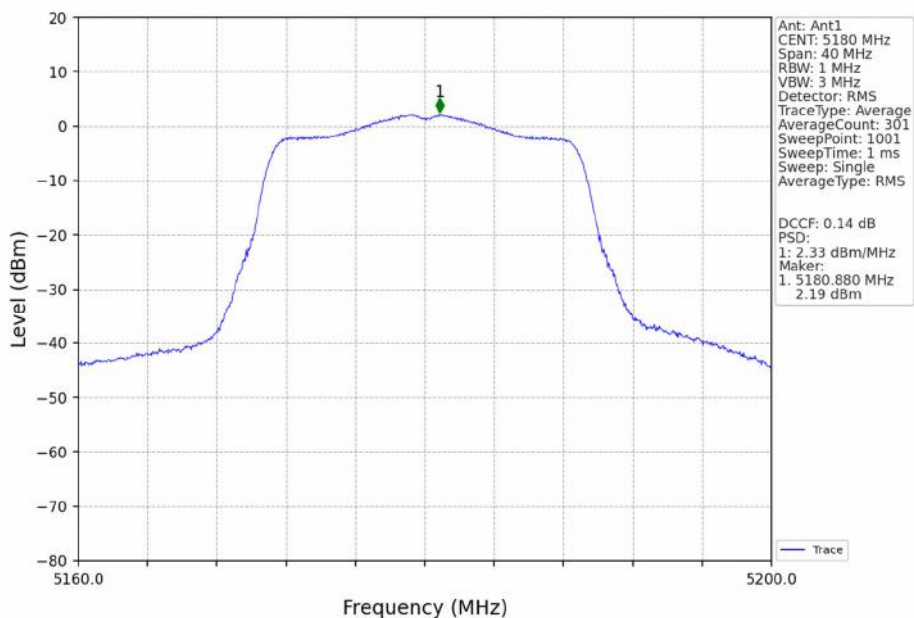
802.11n(HT40)\_LCH\_5190MHz\_Ant1\_NTNV



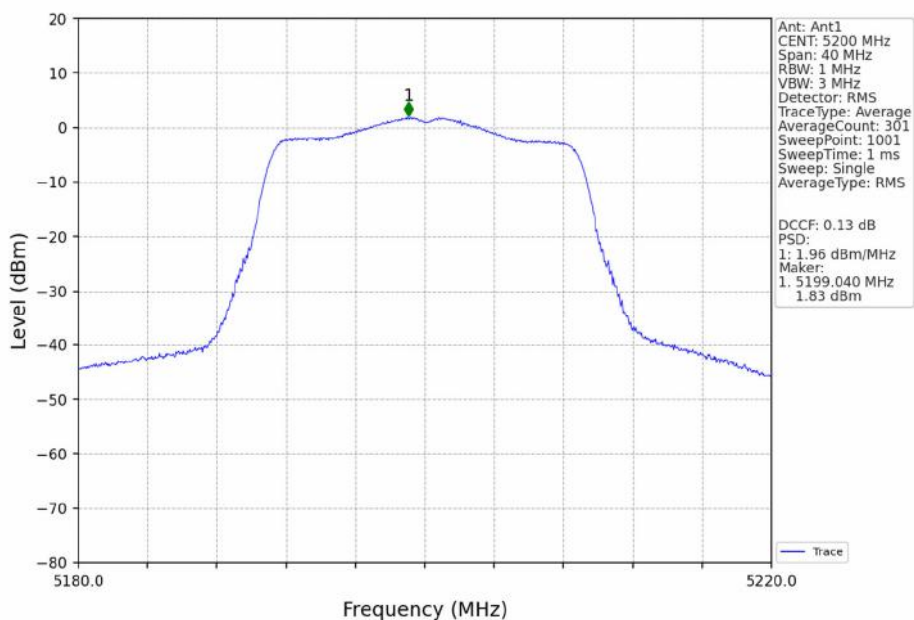
802.11n(HT40)\_HCH\_5230MHz\_Ant1\_NTNV



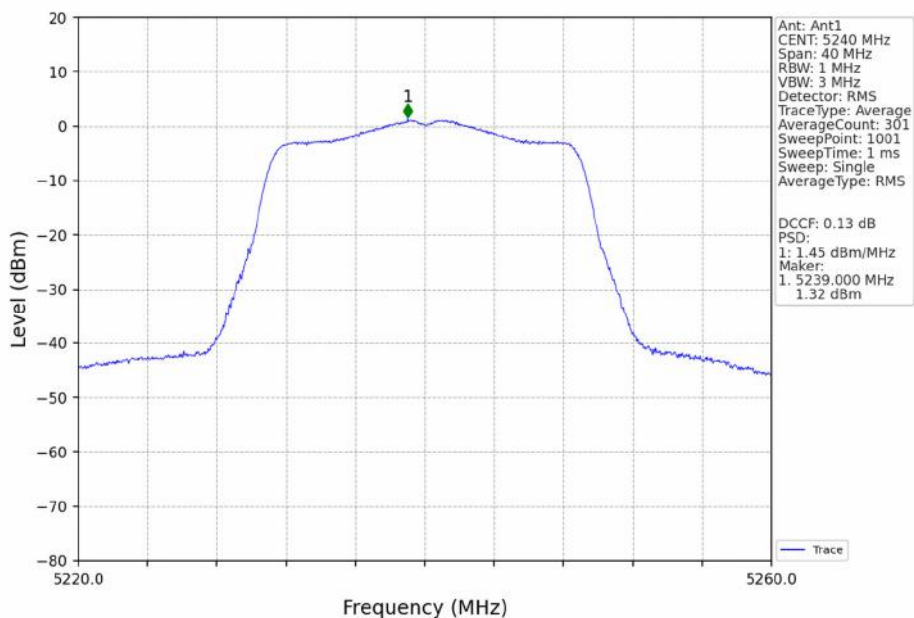
802.11ac(VHT20)\_LCH\_5180MHz\_Ant1\_NTNV



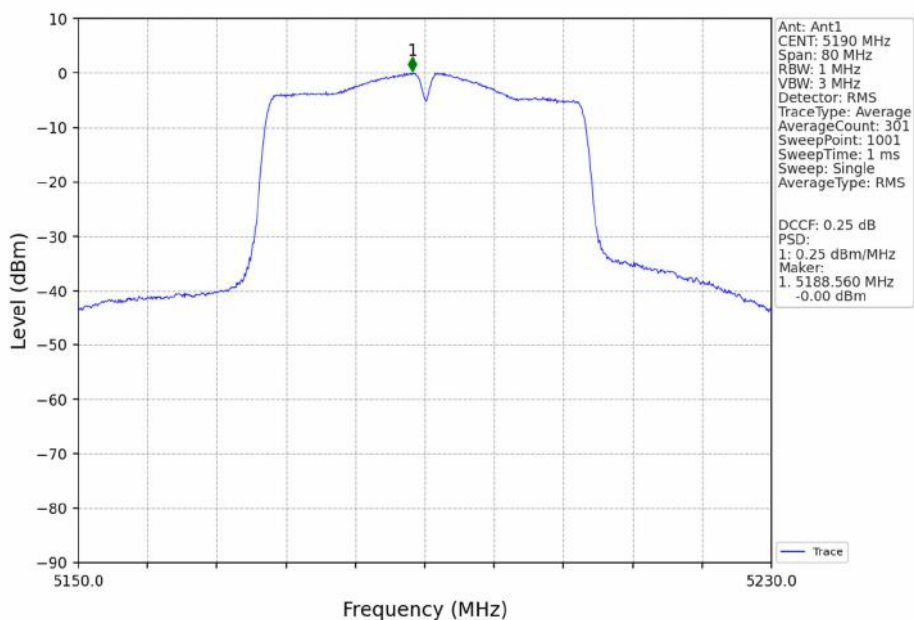
802.11ac(VHT20)\_MCH\_5200MHz\_Ant1\_NTNV



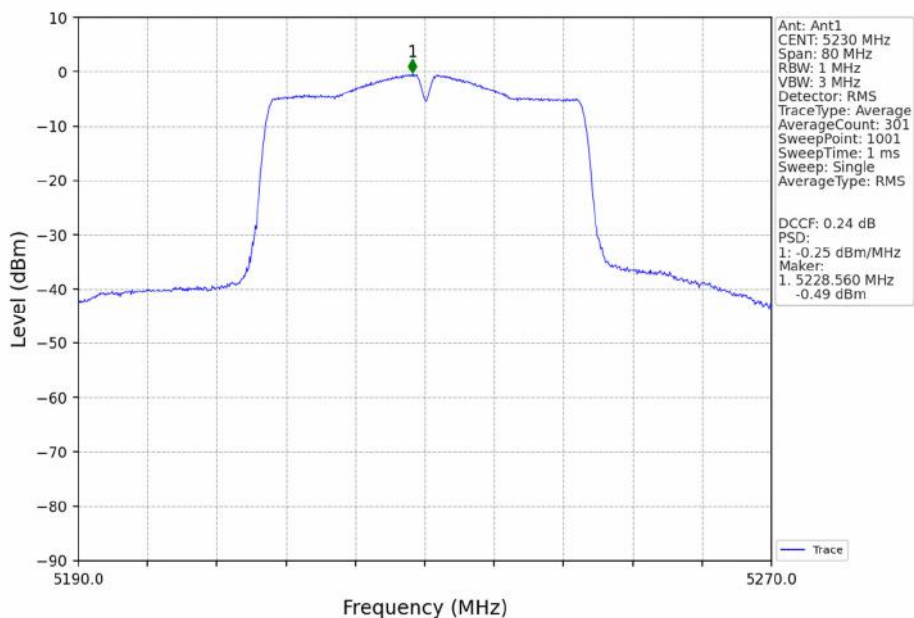
802.11ac(VHT20)\_HCH\_5240MHz\_Ant1\_NTNV



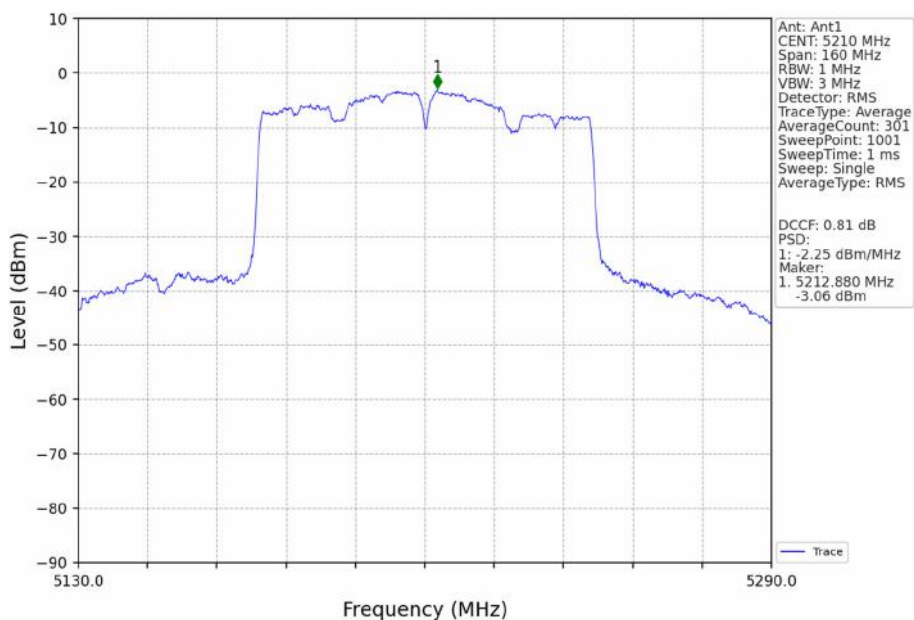
802.11ac(VHT40)\_LCH\_5190MHz\_Ant1\_NTNV



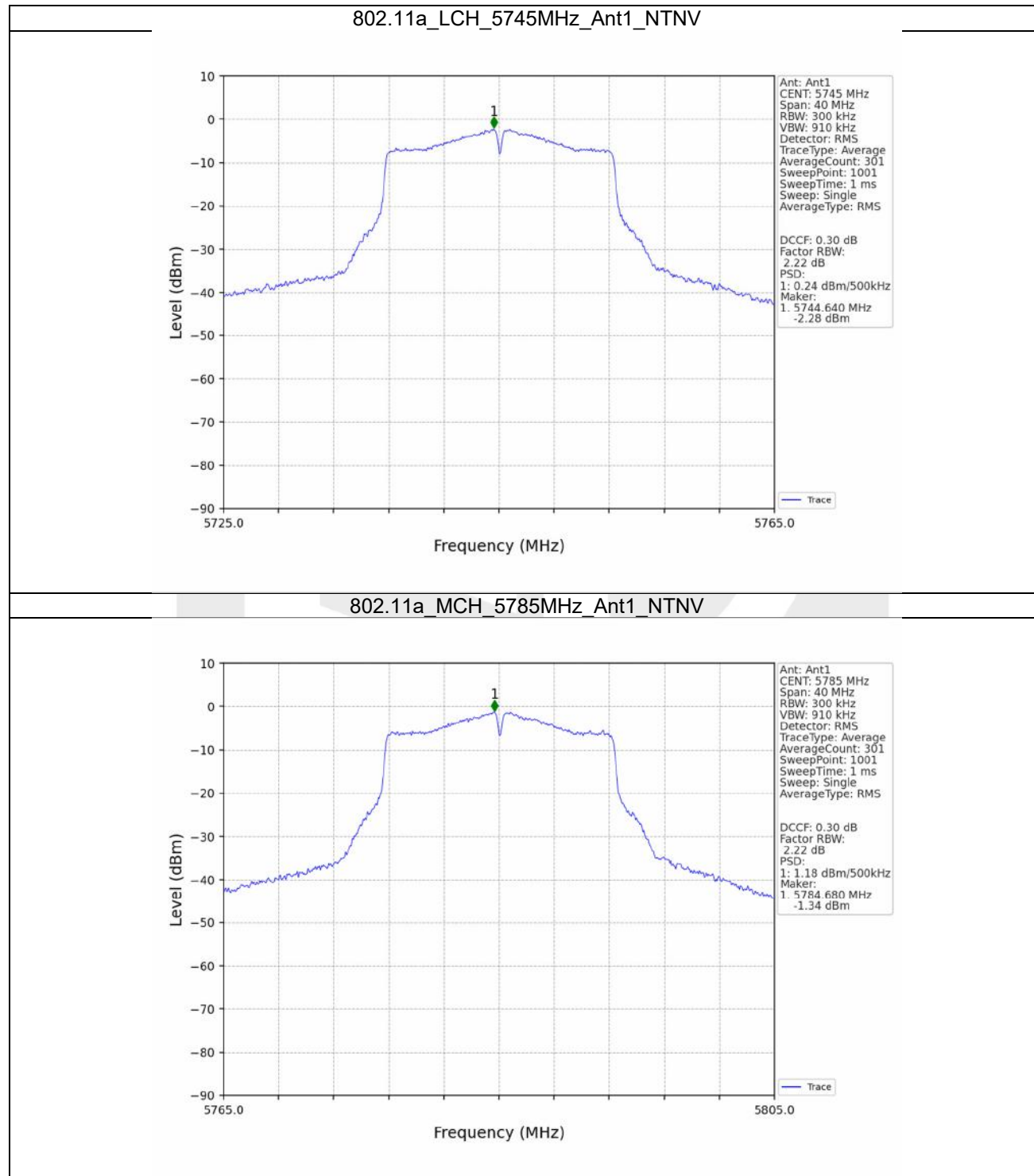
802.11ac(VHT40)\_HCH\_5230MHz\_Ant1\_NTNV



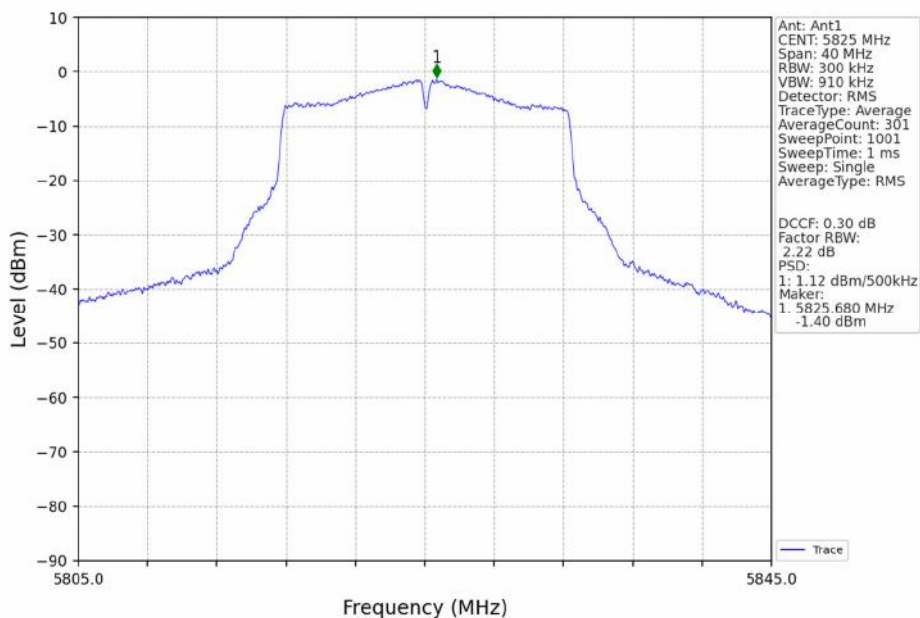
802.11ac(VHT80)\_MCH\_5210MHz\_Ant1\_NTNV



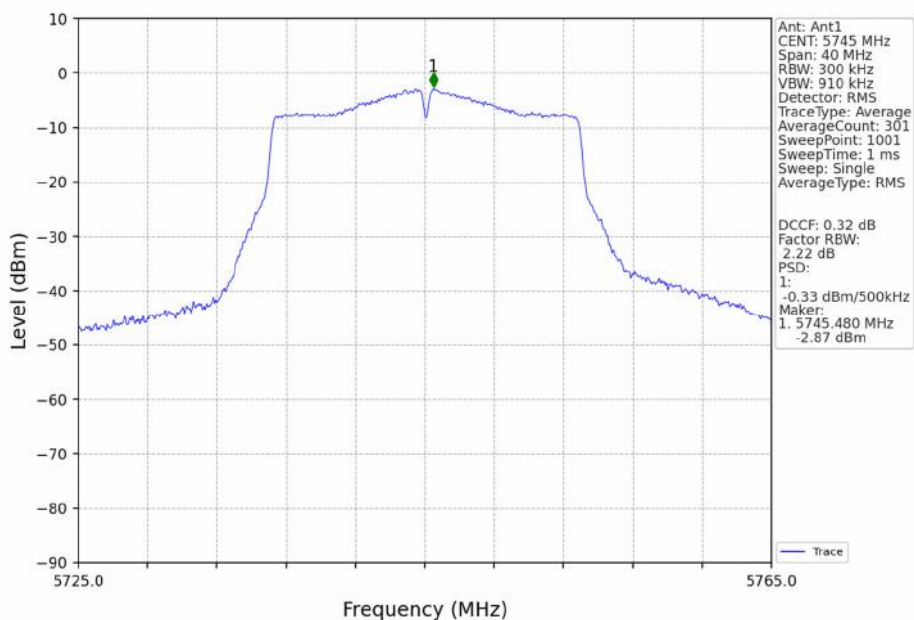
#### 4.2.2 PSD-Band3



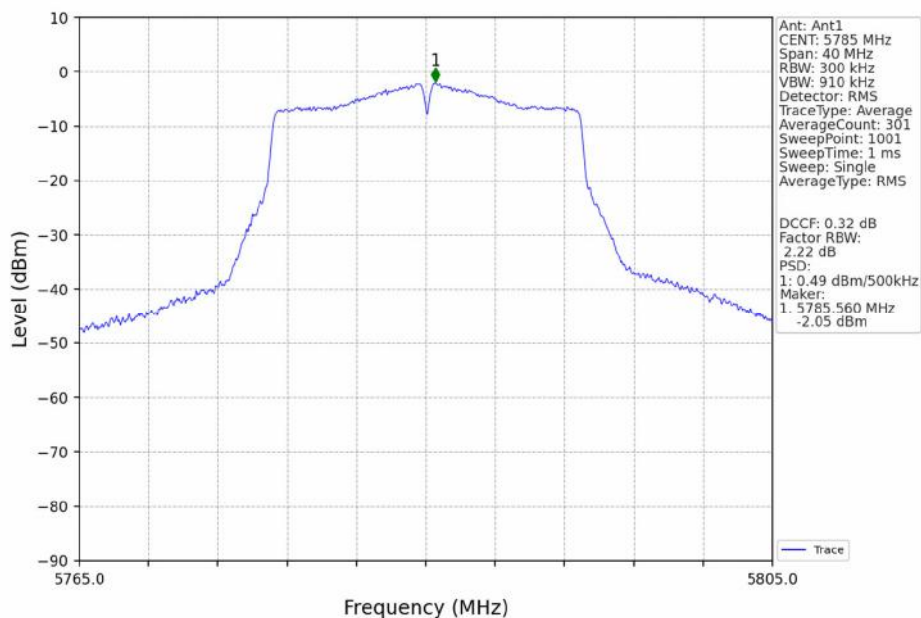
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



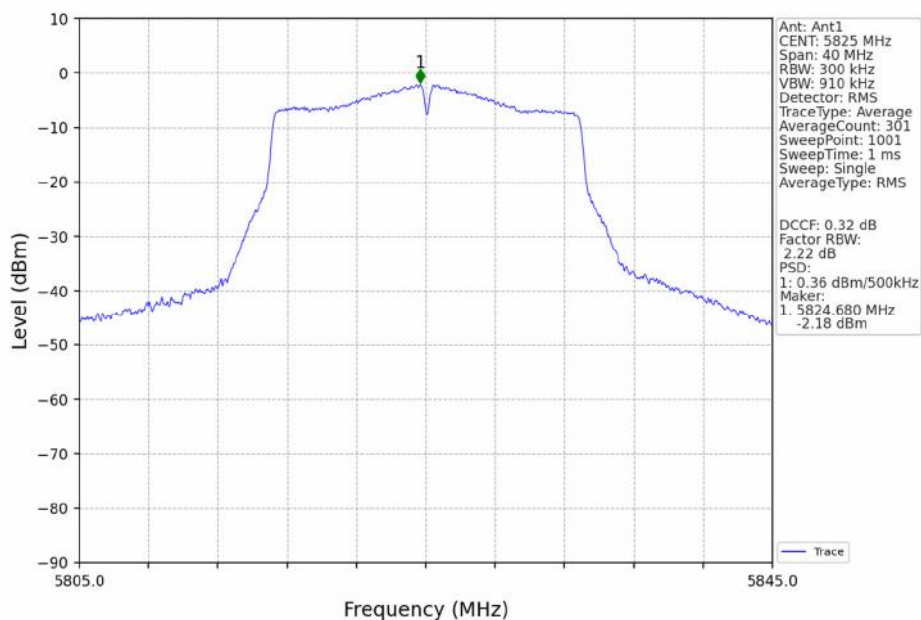
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



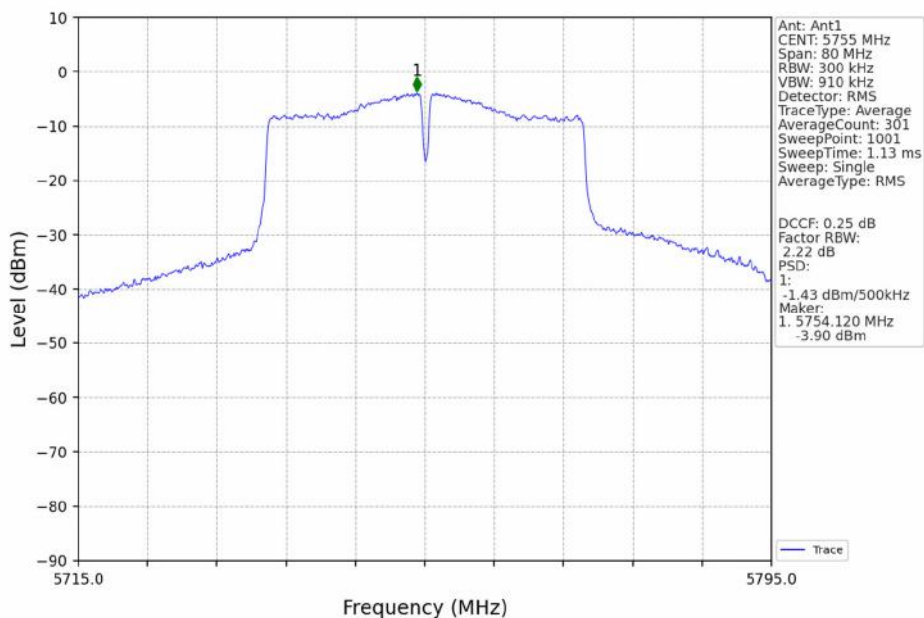
802.11n(HT20)\_MCH 5785MHz\_Ant1\_NTNV



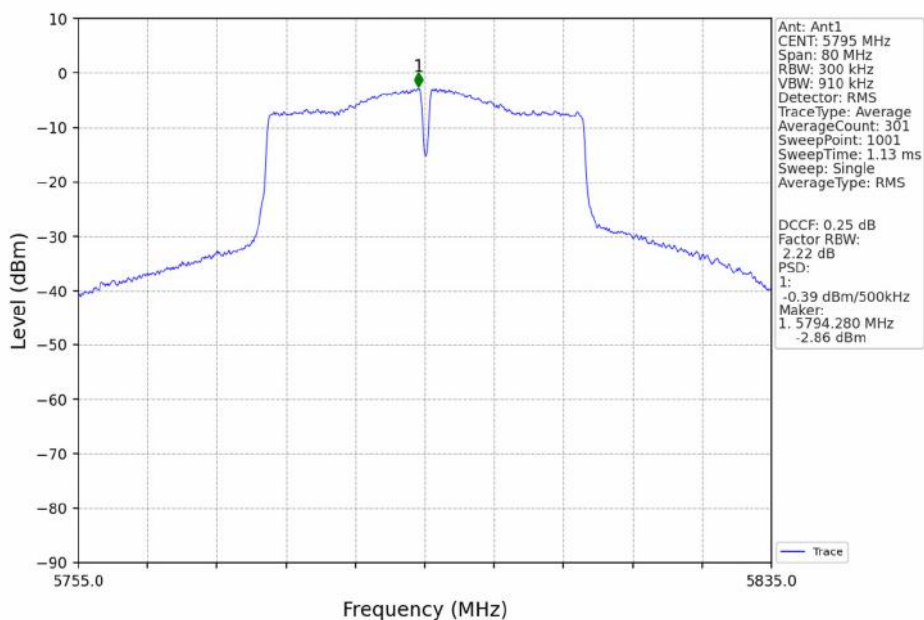
802.11n(HT20)\_HCH 5825MHz\_Ant1\_NTNV



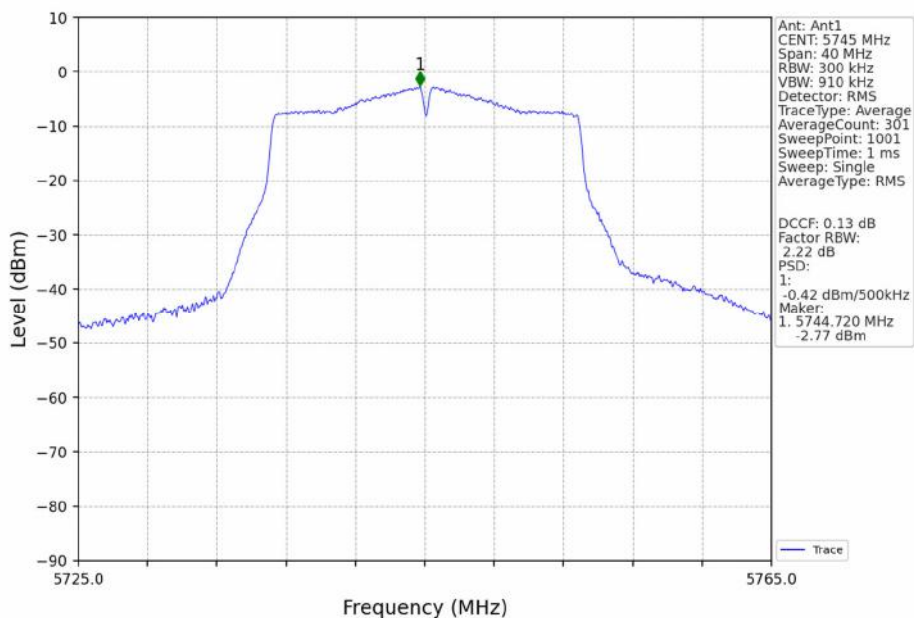
802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



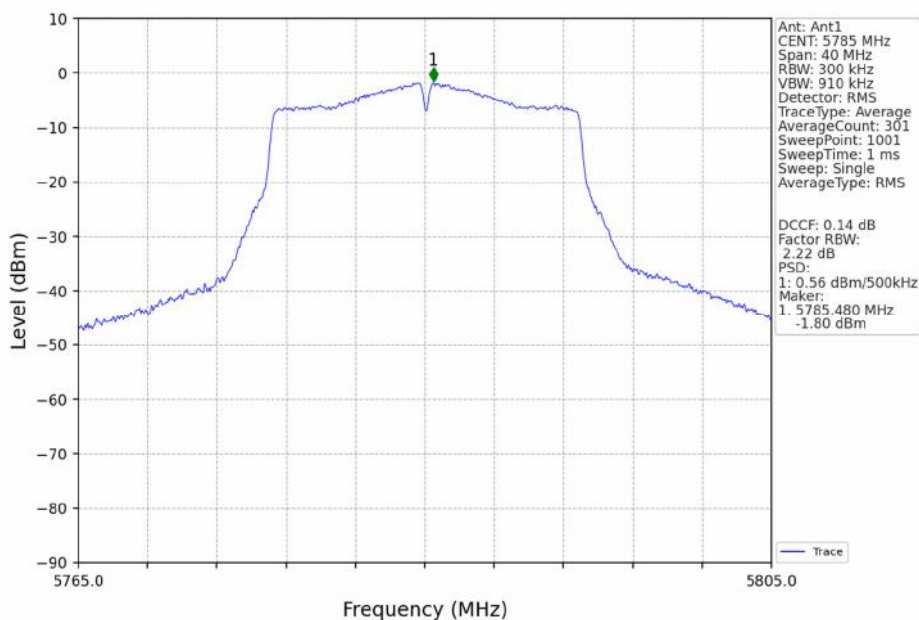
802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



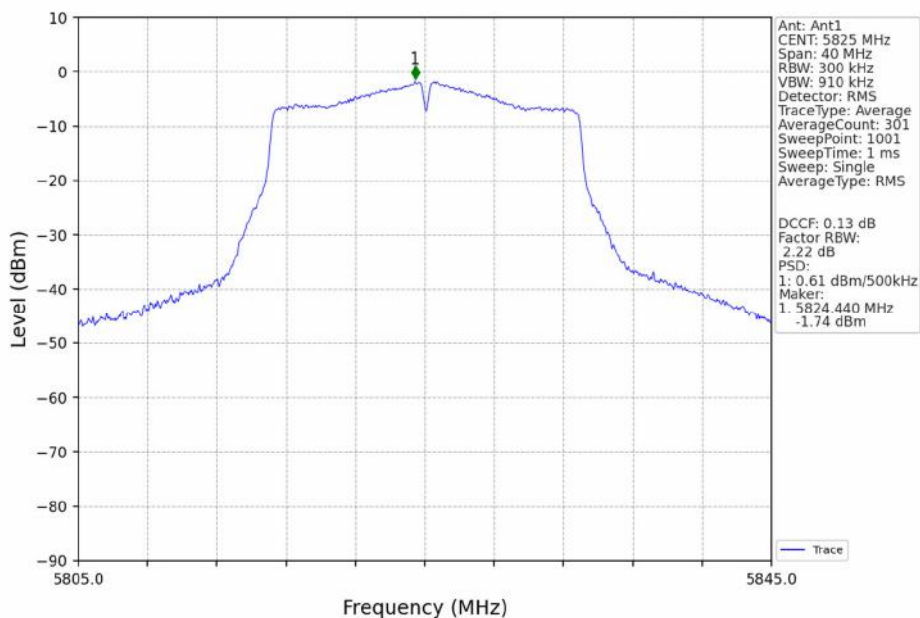
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



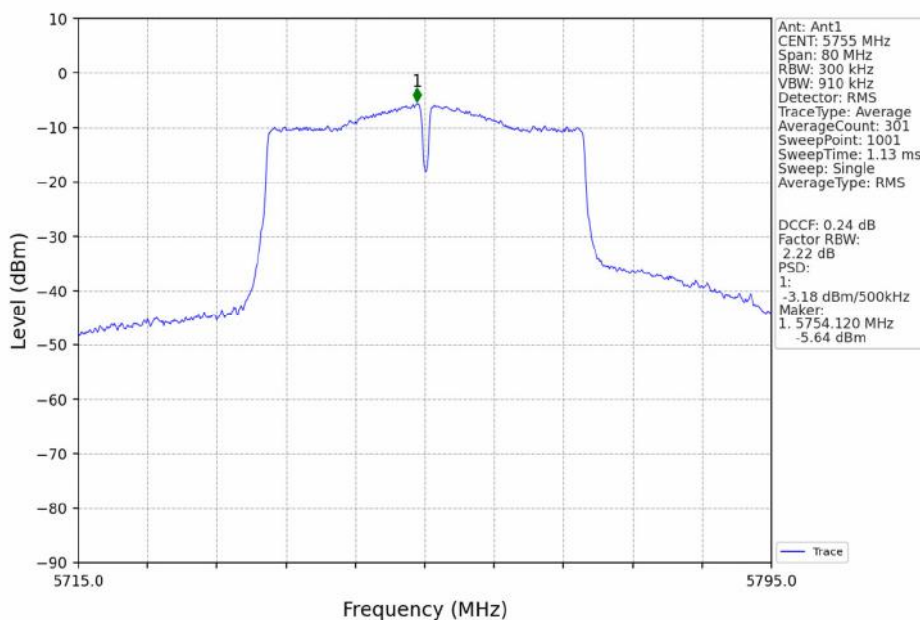
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



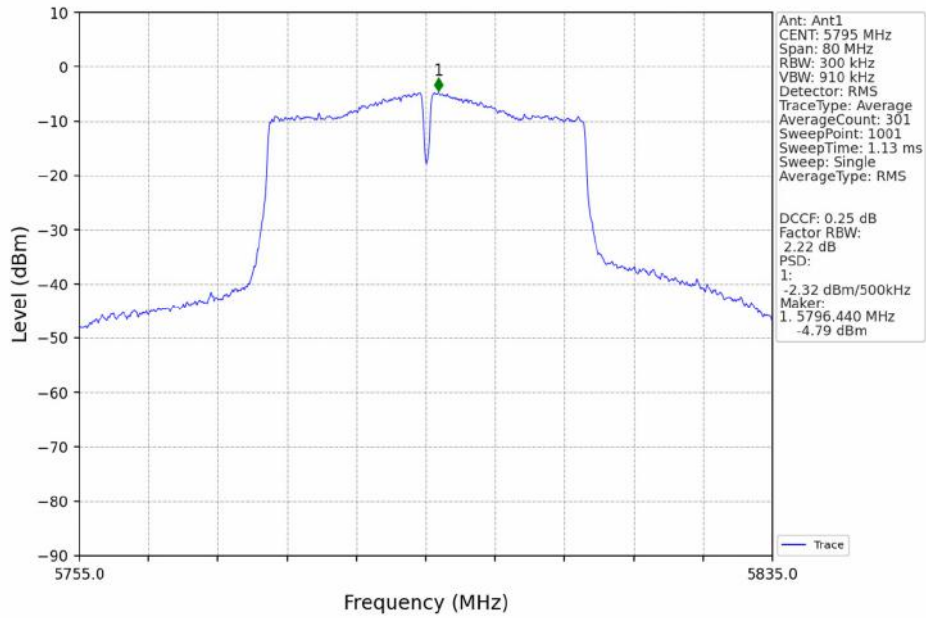
802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



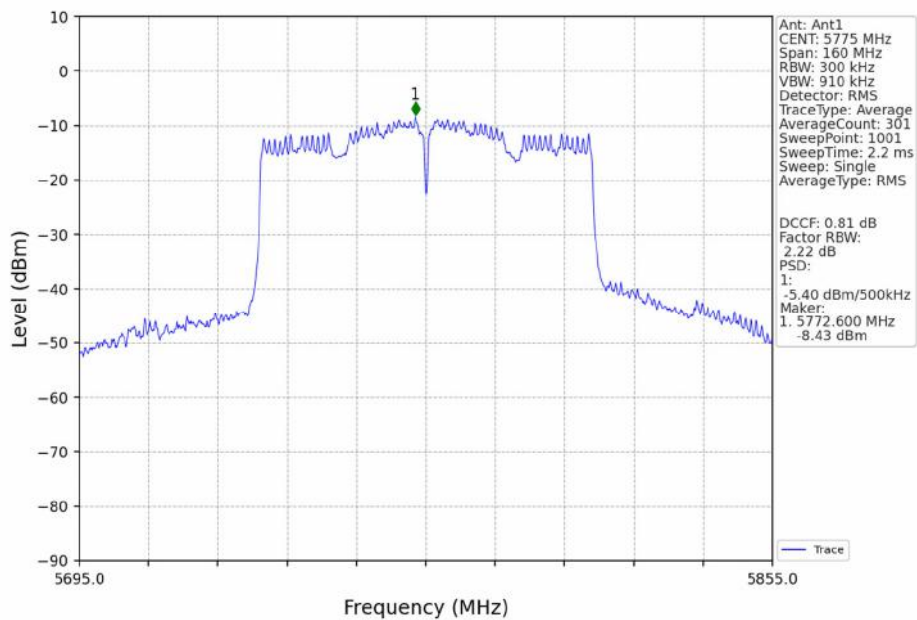
802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



802.11ac(VHT40)\_HCH\_5795MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5775MHz\_Ant1\_NTNV



## 5. Frequency Stability

### 5.1 Test Result

#### 5.1.1 Ant1

| Ant1    |         |                 |                  |               |                          |              |         |
|---------|---------|-----------------|------------------|---------------|--------------------------|--------------|---------|
| Mode    | Tx Type | Frequency (MHz) | Temperature (°C) | Voltage (VAC) | Measured Frequency (MHz) | Limit (MHz)  | Verdict |
| 802.11a | SISO    | 5180            | 20               | 102           | 5180.060                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 138           | 5180.000                 | 5150 to 5250 | Pass    |
|         |         |                 | -30              | 120           | 5180.060                 | 5150 to 5250 | Pass    |
|         |         |                 | -20              | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | -10              | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 0                | 120           | 5180.000                 | 5150 to 5250 | Pass    |
|         |         |                 | 10               | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 30               | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 40               | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 50               | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         | 5200            | 20               | 102           | 5200.060                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 120           | 5200.040                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 138           | 5200.040                 | 5150 to 5250 | Pass    |
|         |         |                 | -30              | 120           | 5200.060                 | 5150 to 5250 | Pass    |
|         |         |                 | -20              | 120           | 5200.040                 | 5150 to 5250 | Pass    |
|         |         |                 | -10              | 120           | 5200.080                 | 5150 to 5250 | Pass    |
|         |         |                 | 0                | 120           | 5200.020                 | 5150 to 5250 | Pass    |
|         |         |                 | 10               | 120           | 5199.980                 | 5150 to 5250 | Pass    |
|         |         |                 | 30               | 120           | 5200.060                 | 5150 to 5250 | Pass    |
|         |         |                 | 40               | 120           | 5200.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 50               | 120           | 5199.980                 | 5150 to 5250 | Pass    |
|         |         | 5240            | 20               | 102           | 5240.080                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 120           | 5240.100                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 138           | 5240.060                 | 5150 to 5250 | Pass    |
|         |         |                 | -30              | 120           | 5240.000                 | 5150 to 5250 | Pass    |
|         |         |                 | -20              | 120           | 5240.080                 | 5150 to 5250 | Pass    |
|         |         |                 | -10              | 120           | 5240.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 0                | 120           | 5240.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 10               | 120           | 5240.080                 | 5150 to 5250 | Pass    |
|         |         |                 | 30               | 120           | 5240.060                 | 5150 to 5250 | Pass    |
|         |         |                 | 40               | 120           | 5240.080                 | 5150 to 5250 | Pass    |
|         |         |                 | 50               | 120           | 5240.020                 | 5150 to 5250 | Pass    |
|         |         | 5745            | 20               | 102           | 5745.040                 | 5725 to 5850 | Pass    |
|         |         |                 |                  | 120           | 5745.000                 | 5725 to 5850 | Pass    |
|         |         |                 |                  | 138           | 5745.060                 | 5725 to 5850 | Pass    |
|         |         |                 | -30              | 120           | 5745.060                 | 5725 to 5850 | Pass    |
|         |         |                 | -20              | 120           | 5745.080                 | 5725 to 5850 | Pass    |
|         |         |                 | -10              | 120           | 5745.060                 | 5725 to 5850 | Pass    |
|         |         |                 | 0                | 120           | 5745.000                 | 5725 to 5850 | Pass    |
|         |         |                 | 10               | 120           | 5745.000                 | 5725 to 5850 | Pass    |

|                   |      |      |     |     |          |              |      |
|-------------------|------|------|-----|-----|----------|--------------|------|
|                   |      |      | 30  | 120 | 5745.000 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5745.040 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5745.000 | 5725 to 5850 | Pass |
|                   |      | 5785 | 20  | 102 | 5785.060 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5785.040 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5785.080 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5785.080 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5784.980 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5785.040 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5785.040 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5785.020 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5785.040 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5785.080 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5784.980 | 5725 to 5850 | Pass |
|                   |      | 5825 | 20  | 102 | 5825.040 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5825.080 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5825.000 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5824.960 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5825.040 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5825.040 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5824.980 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5825.000 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5825.000 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5825.060 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5825.060 | 5725 to 5850 | Pass |
| 802.11n<br>(HT20) | SISO | 5180 | 20  | 102 | 5180.060 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5179.960 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5180.080 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5180.060 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5179.960 | 5150 to 5250 | Pass |
|                   |      |      | -10 | 120 | 5180.100 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5180.040 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5179.980 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5180.060 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5180.060 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5180.120 | 5150 to 5250 | Pass |
|                   |      | 5200 | 20  | 102 | 5199.980 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5200.040 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5200.020 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5200.040 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5199.980 | 5150 to 5250 | Pass |
|                   |      |      | -10 | 120 | 5200.000 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5199.960 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5200.020 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5200.060 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5199.980 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5200.040 | 5150 to 5250 | Pass |
|                   |      | 5240 | 20  | 102 | 5240.040 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5240.140 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5240.060 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5240.040 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5240.000 | 5150 to 5250 | Pass |

|                   |      |      |     |     |          |              |      |
|-------------------|------|------|-----|-----|----------|--------------|------|
|                   |      |      | -10 | 120 | 5240.060 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5240.100 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5240.080 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5240.040 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5240.140 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5240.120 | 5150 to 5250 | Pass |
|                   |      | 5745 | 20  | 102 | 5745.040 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5745.080 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5745.080 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5745.000 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5745.060 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5745.040 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5745.020 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5745.080 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5745.060 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5745.060 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5745.020 | 5725 to 5850 | Pass |
|                   |      | 5785 | 20  | 102 | 5785.060 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5785.020 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5785.000 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5785.080 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5785.060 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5785.060 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5785.060 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5785.040 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5785.020 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5785.080 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5785.060 | 5725 to 5850 | Pass |
|                   |      | 5825 | 20  | 102 | 5825.040 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5825.080 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5825.080 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5825.000 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5825.020 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5825.100 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5825.060 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5825.020 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5825.020 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5824.980 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5825.020 | 5725 to 5850 | Pass |
| 802.11n<br>(HT40) | SISO | 5190 | 20  | 102 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5190.040 | 5150 to 5250 | Pass |
|                   |      |      | -10 | 120 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5190.120 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5190.120 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5190.120 | 5150 to 5250 | Pass |
|                   |      | 5230 | 20  | 102 | 5230.120 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5230.080 | 5150 to 5250 | Pass |

|                     |      |      |     |     |          |              |      |
|---------------------|------|------|-----|-----|----------|--------------|------|
| 802.11ac<br>(VHT20) | SISO |      |     | 138 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | -30 | 120 | 5230.120 | 5150 to 5250 | Pass |
|                     |      |      | -20 | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | -10 | 120 | 5230.120 | 5150 to 5250 | Pass |
|                     |      |      | 0   | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | 10  | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | 30  | 120 | 5230.000 | 5150 to 5250 | Pass |
|                     |      |      | 40  | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | 50  | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      | 5755 | 20  | 102 | 5755.120 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5755.080 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5755.080 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5755.120 | 5725 to 5850 | Pass |
|                     |      |      | -20 | 120 | 5755.080 | 5725 to 5850 | Pass |
|                     |      |      | -10 | 120 | 5755.160 | 5725 to 5850 | Pass |
|                     |      |      | 0   | 120 | 5755.120 | 5725 to 5850 | Pass |
|                     |      |      | 10  | 120 | 5755.160 | 5725 to 5850 | Pass |
|                     |      |      | 30  | 120 | 5755.120 | 5725 to 5850 | Pass |
|                     |      |      | 40  | 120 | 5755.080 | 5725 to 5850 | Pass |
|                     |      |      | 50  | 120 | 5755.200 | 5725 to 5850 | Pass |
|                     |      | 5795 | 20  | 102 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      | -20 | 120 | 5795.160 | 5725 to 5850 | Pass |
|                     |      |      | -10 | 120 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      | 0   | 120 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      | 10  | 120 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      | 30  | 120 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      | 40  | 120 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      | 50  | 120 | 5795.160 | 5725 to 5850 | Pass |
|                     |      | 5180 | 20  | 102 | 5180.040 | 5150 to 5250 | Pass |
|                     |      |      |     | 120 | 5180.060 | 5150 to 5250 | Pass |
|                     |      |      |     | 138 | 5180.080 | 5150 to 5250 | Pass |
|                     |      |      | -30 | 120 | 5180.000 | 5150 to 5250 | Pass |
|                     |      |      | -20 | 120 | 5180.040 | 5150 to 5250 | Pass |
|                     |      |      | -10 | 120 | 5180.060 | 5150 to 5250 | Pass |
|                     |      |      | 0   | 120 | 5180.000 | 5150 to 5250 | Pass |
|                     |      |      | 10  | 120 | 5180.060 | 5150 to 5250 | Pass |
|                     |      |      | 30  | 120 | 5180.080 | 5150 to 5250 | Pass |
|                     |      |      | 40  | 120 | 5180.100 | 5150 to 5250 | Pass |
|                     |      |      | 50  | 120 | 5180.060 | 5150 to 5250 | Pass |
|                     |      | 5200 | 20  | 102 | 5199.980 | 5150 to 5250 | Pass |
|                     |      |      |     | 120 | 5199.980 | 5150 to 5250 | Pass |
|                     |      |      |     | 138 | 5199.960 | 5150 to 5250 | Pass |
|                     |      |      | -30 | 120 | 5200.040 | 5150 to 5250 | Pass |
|                     |      |      | -20 | 120 | 5200.000 | 5150 to 5250 | Pass |
|                     |      |      | -10 | 120 | 5200.000 | 5150 to 5250 | Pass |
|                     |      |      | 0   | 120 | 5200.040 | 5150 to 5250 | Pass |
|                     |      |      | 10  | 120 | 5200.020 | 5150 to 5250 | Pass |
|                     |      |      | 30  | 120 | 5200.000 | 5150 to 5250 | Pass |
|                     |      |      | 40  | 120 | 5200.020 | 5150 to 5250 | Pass |

|                     |      |      |     |     |          |              |      |
|---------------------|------|------|-----|-----|----------|--------------|------|
|                     |      |      | 50  | 120 | 5200.040 | 5150 to 5250 | Pass |
|                     |      |      | 20  | 102 | 5240.060 | 5150 to 5250 | Pass |
|                     |      |      |     | 120 | 5240.040 | 5150 to 5250 | Pass |
|                     |      |      |     | 138 | 5240.080 | 5150 to 5250 | Pass |
|                     |      |      |     | 120 | 5240.080 | 5150 to 5250 | Pass |
|                     |      |      | -30 | 120 | 5240.080 | 5150 to 5250 | Pass |
|                     |      |      | -20 | 120 | 5240.060 | 5150 to 5250 | Pass |
|                     |      |      | -10 | 120 | 5240.040 | 5150 to 5250 | Pass |
|                     |      |      | 0   | 120 | 5240.080 | 5150 to 5250 | Pass |
|                     |      |      | 10  | 120 | 5240.080 | 5150 to 5250 | Pass |
|                     |      |      | 30  | 120 | 5240.040 | 5150 to 5250 | Pass |
|                     |      |      | 40  | 120 | 5240.060 | 5150 to 5250 | Pass |
|                     |      |      | 50  | 120 | 5240.080 | 5150 to 5250 | Pass |
|                     |      | 5745 | 20  | 102 | 5745.100 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5745.040 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5745.080 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5745.060 | 5725 to 5850 | Pass |
|                     |      |      | -20 | 120 | 5745.080 | 5725 to 5850 | Pass |
|                     |      |      | -10 | 120 | 5745.040 | 5725 to 5850 | Pass |
|                     |      |      | 0   | 120 | 5745.120 | 5725 to 5850 | Pass |
|                     |      |      | 10  | 120 | 5745.060 | 5725 to 5850 | Pass |
|                     |      |      | 30  | 120 | 5745.080 | 5725 to 5850 | Pass |
|                     |      |      | 40  | 120 | 5745.080 | 5725 to 5850 | Pass |
|                     |      |      | 50  | 120 | 5745.060 | 5725 to 5850 | Pass |
|                     |      | 5785 | 20  | 102 | 5785.060 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5785.080 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5785.060 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5785.060 | 5725 to 5850 | Pass |
|                     |      |      | -20 | 120 | 5785.060 | 5725 to 5850 | Pass |
|                     |      |      | -10 | 120 | 5785.080 | 5725 to 5850 | Pass |
|                     |      |      | 0   | 120 | 5785.020 | 5725 to 5850 | Pass |
|                     |      |      | 10  | 120 | 5785.040 | 5725 to 5850 | Pass |
|                     |      |      | 30  | 120 | 5784.980 | 5725 to 5850 | Pass |
|                     |      |      | 40  | 120 | 5785.060 | 5725 to 5850 | Pass |
|                     |      |      | 50  | 120 | 5785.060 | 5725 to 5850 | Pass |
|                     |      | 5825 | 20  | 102 | 5825.060 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5825.040 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5824.980 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5825.040 | 5725 to 5850 | Pass |
|                     |      |      | -20 | 120 | 5825.040 | 5725 to 5850 | Pass |
|                     |      |      | -10 | 120 | 5825.060 | 5725 to 5850 | Pass |
|                     |      |      | 0   | 120 | 5825.060 | 5725 to 5850 | Pass |
|                     |      |      | 10  | 120 | 5825.060 | 5725 to 5850 | Pass |
|                     |      |      | 30  | 120 | 5825.020 | 5725 to 5850 | Pass |
|                     |      |      | 40  | 120 | 5825.020 | 5725 to 5850 | Pass |
|                     |      |      | 50  | 120 | 5825.020 | 5725 to 5850 | Pass |
| 802.11ac<br>(VHT40) | SISO | 5190 | 20  | 102 | 5190.120 | 5150 to 5250 | Pass |
|                     |      |      |     | 120 | 5190.080 | 5150 to 5250 | Pass |
|                     |      |      |     | 138 | 5190.040 | 5150 to 5250 | Pass |
|                     |      |      | -30 | 120 | 5190.080 | 5150 to 5250 | Pass |
|                     |      |      | -20 | 120 | 5190.120 | 5150 to 5250 | Pass |
|                     |      |      | -10 | 120 | 5190.120 | 5150 to 5250 | Pass |
|                     |      |      | 0   | 120 | 5190.080 | 5150 to 5250 | Pass |

|                     |      |      |     |     |          |              |      |
|---------------------|------|------|-----|-----|----------|--------------|------|
|                     |      |      | 10  | 120 | 5190.080 | 5150 to 5250 | Pass |
|                     |      |      | 30  | 120 | 5190.040 | 5150 to 5250 | Pass |
|                     |      |      | 40  | 120 | 5190.080 | 5150 to 5250 | Pass |
|                     |      |      | 50  | 120 | 5190.080 | 5150 to 5250 | Pass |
|                     |      | 5230 | 20  | 102 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      |     | 120 | 5230.040 | 5150 to 5250 | Pass |
|                     |      |      |     | 138 | 5230.120 | 5150 to 5250 | Pass |
|                     |      |      | -30 | 120 | 5230.120 | 5150 to 5250 | Pass |
|                     |      |      | -20 | 120 | 5230.120 | 5150 to 5250 | Pass |
|                     |      |      | -10 | 120 | 5230.120 | 5150 to 5250 | Pass |
|                     |      |      | 0   | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | 10  | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | 30  | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | 40  | 120 | 5230.080 | 5150 to 5250 | Pass |
|                     |      |      | 50  | 120 | 5230.120 | 5150 to 5250 | Pass |
|                     |      | 5755 | 20  | 102 | 5755.040 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5755.160 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5755.080 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5755.080 | 5725 to 5850 | Pass |
|                     |      |      | -20 | 120 | 5755.120 | 5725 to 5850 | Pass |
|                     |      |      | -10 | 120 | 5755.160 | 5725 to 5850 | Pass |
|                     |      |      | 0   | 120 | 5755.120 | 5725 to 5850 | Pass |
|                     |      |      | 10  | 120 | 5755.160 | 5725 to 5850 | Pass |
|                     |      |      | 30  | 120 | 5755.200 | 5725 to 5850 | Pass |
|                     |      |      | 40  | 120 | 5755.080 | 5725 to 5850 | Pass |
|                     |      |      | 50  | 120 | 5755.080 | 5725 to 5850 | Pass |
|                     |      | 5795 | 20  | 102 | 5795.160 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5795.160 | 5725 to 5850 | Pass |
|                     |      |      | -20 | 120 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      | -10 | 120 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      | 0   | 120 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      | 10  | 120 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      | 30  | 120 | 5795.080 | 5725 to 5850 | Pass |
|                     |      |      | 40  | 120 | 5795.120 | 5725 to 5850 | Pass |
|                     |      |      | 50  | 120 | 5795.080 | 5725 to 5850 | Pass |
| 802.11ac<br>(VHT80) | SISO | 5210 | 20  | 102 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      |     | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      |     | 138 | 5210.150 | 5150 to 5250 | Pass |
|                     |      |      | -30 | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      | -20 | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      | -10 | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      | 0   | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      | 10  | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      | 30  | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      | 40  | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      |      | 50  | 120 | 5210.075 | 5150 to 5250 | Pass |
|                     |      | 5775 | 20  | 102 | 5775.075 | 5725 to 5850 | Pass |
|                     |      |      |     | 120 | 5775.075 | 5725 to 5850 | Pass |
|                     |      |      |     | 138 | 5775.075 | 5725 to 5850 | Pass |
|                     |      |      | -30 | 120 | 5775.075 | 5725 to 5850 | Pass |

|  |  |  |     |     |          |              |      |
|--|--|--|-----|-----|----------|--------------|------|
|  |  |  | -20 | 120 | 5775.150 | 5725 to 5850 | Pass |
|  |  |  | -10 | 120 | 5775.075 | 5725 to 5850 | Pass |
|  |  |  | 0   | 120 | 5775.150 | 5725 to 5850 | Pass |
|  |  |  | 10  | 120 | 5775.075 | 5725 to 5850 | Pass |
|  |  |  | 30  | 120 | 5775.150 | 5725 to 5850 | Pass |
|  |  |  | 40  | 120 | 5775.150 | 5725 to 5850 | Pass |
|  |  |  | 50  | 120 | 5775.150 | 5725 to 5850 | Pass |

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