

## **Appendix RF test data for WIFI5G**

## 1. Duty Cycle

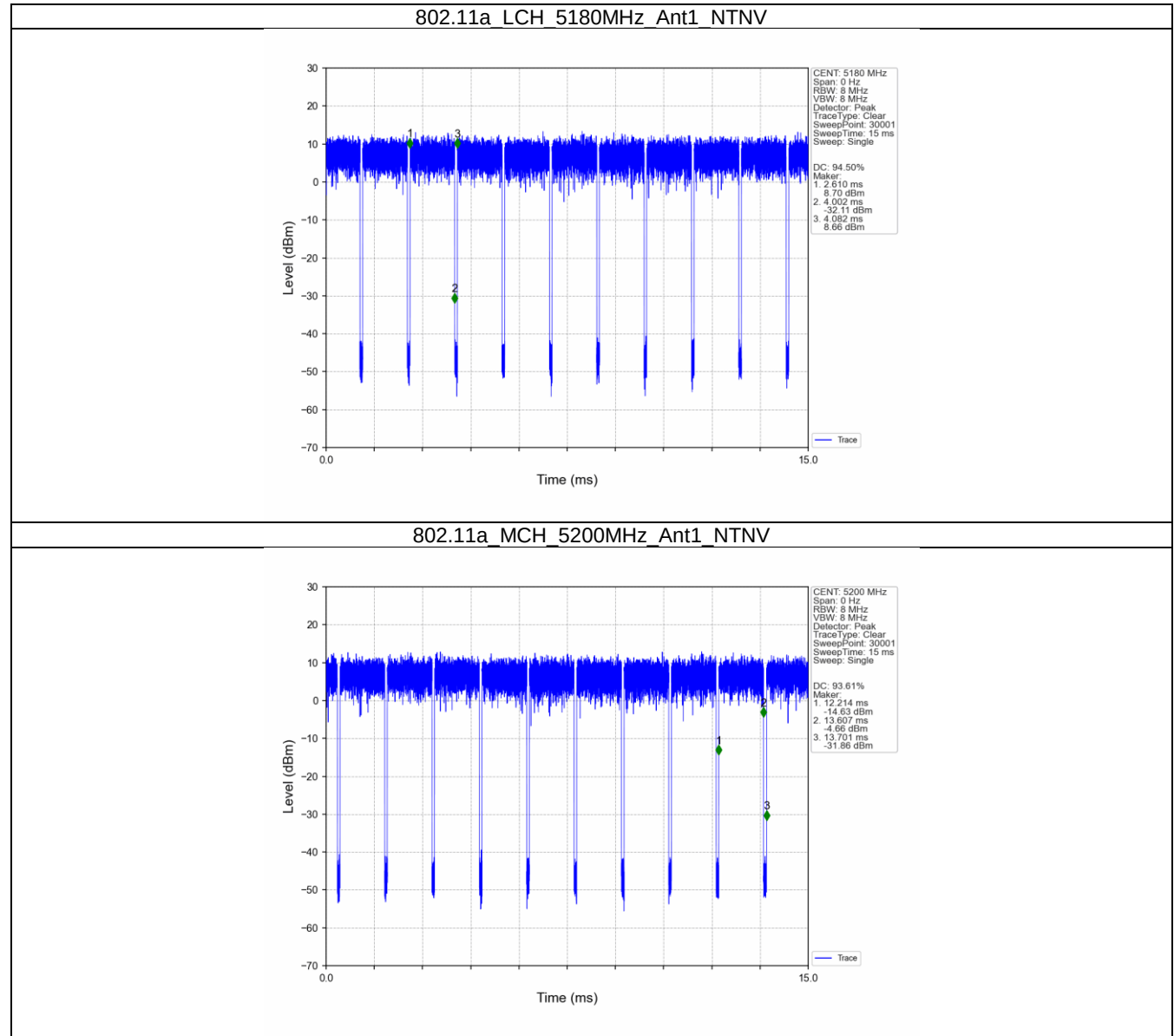
### 1.1 Test Result

#### 1.1.1 Ant1

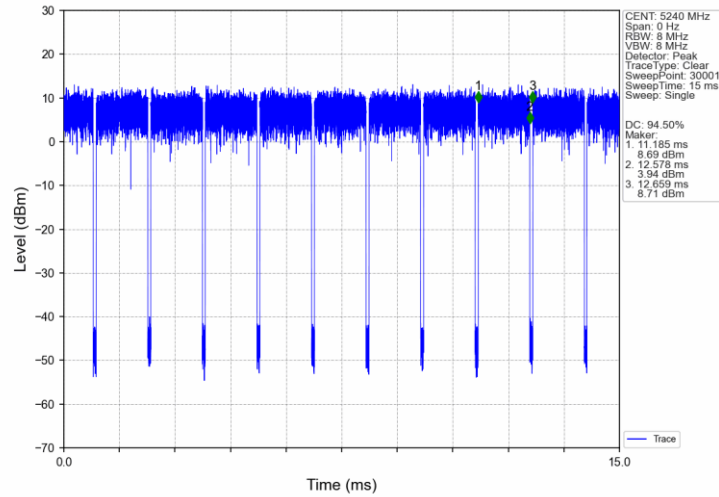
| Ant1             |         |                 |           |             |                |                                   |                       |
|------------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode             | Tx Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11a          | SISO    | 5180            | 1.392     | 1.473       | 94.50          | 0.25                              | 0.03                  |
|                  |         | 5200            | 1.392     | 1.487       | 93.61          | 0.29                              | 0.92                  |
|                  |         | 5240            | 1.392     | 1.473       | 94.50          | 0.25                              | 0.62                  |
|                  |         | 5745            | 1.393     | 1.491       | 93.43          | 0.30                              | 1.14                  |
|                  |         | 5785            | 1.392     | 1.473       | 94.50          | 0.25                              | 0.03                  |
|                  |         | 5825            | 1.392     | 1.473       | 94.50          | 0.25                              | 0.04                  |
| 802.11n (HT20)   | SISO    | 5180            | 1.178     | 1.258       | 93.64          | 0.29                              | 0.03                  |
|                  |         | 5200            | 1.177     | 1.276       | 92.24          | 0.35                              | 1.34                  |
|                  |         | 5240            | 1.177     | 1.258       | 93.56          | 0.29                              | 0.03                  |
|                  |         | 5745            | 1.178     | 1.276       | 92.32          | 0.35                              | 1.30                  |
|                  |         | 5785            | 1.178     | 1.276       | 92.32          | 0.35                              | 1.34                  |
|                  |         | 5825            | 1.178     | 1.276       | 92.32          | 0.35                              | 1.34                  |
| 802.11n (HT40)   | SISO    | 5190            | 0.587     | 0.667       | 88.01          | 0.55                              | 0.04                  |
|                  |         | 5230            | 0.587     | 0.667       | 88.01          | 0.55                              | 0.07                  |
|                  |         | 5755            | 0.588     | 0.676       | 86.98          | 0.61                              | 1.19                  |
|                  |         | 5795            | 0.588     | 0.667       | 88.16          | 0.55                              | 0.03                  |
| 802.11ac (VHT20) | SISO    | 5180            | 1.186     | 1.285       | 92.30          | 0.35                              | 1.33                  |
|                  |         | 5200            | 1.185     | 1.266       | 93.60          | 0.29                              | 0.03                  |
|                  |         | 5240            | 1.186     | 1.284       | 92.37          | 0.34                              | 1.33                  |
|                  |         | 5745            | 1.185     | 1.266       | 93.60          | 0.29                              | 0.03                  |
|                  |         | 5785            | 1.185     | 1.284       | 92.29          | 0.35                              | 1.33                  |
|                  |         | 5825            | 1.185     | 1.266       | 93.60          | 0.29                              | 0.03                  |
| 802.11ac (VHT40) | SISO    | 5190            | 0.591     | 0.671       | 88.08          | 0.55                              | 0.03                  |
|                  |         | 5230            | 0.591     | 0.671       | 88.08          | 0.55                              | 0.06                  |
|                  |         | 5755            | 0.591     | 0.689       | 85.78          | 0.67                              | 2.33                  |
|                  |         | 5795            | 0.591     | 0.671       | 88.08          | 0.55                              | 0.07                  |
| 802.11ac (VHT80) | SISO    | 5210            | 0.295     | 0.394       | 74.87          | 1.26                              | 3.63                  |
|                  |         | 5775            | 0.296     | 0.376       | 78.72          | 1.04                              | 0.03                  |

## 1.2 Test Graph

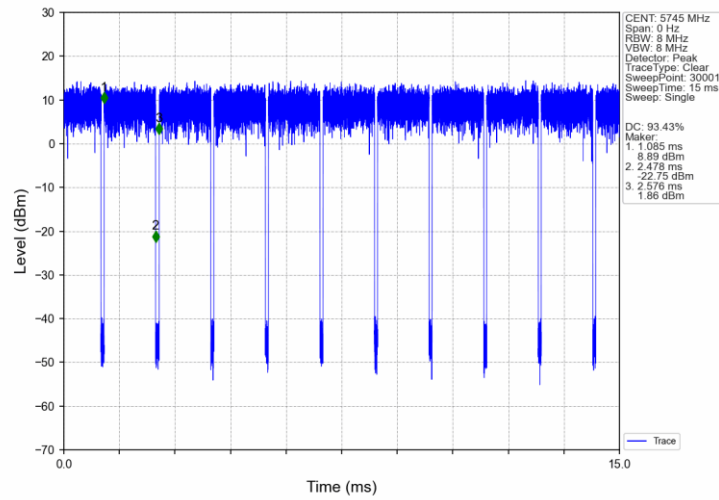
### 1.2.1 Ant1



## 802.11a\_HCH\_5240MHz\_Ant1\_NTNV

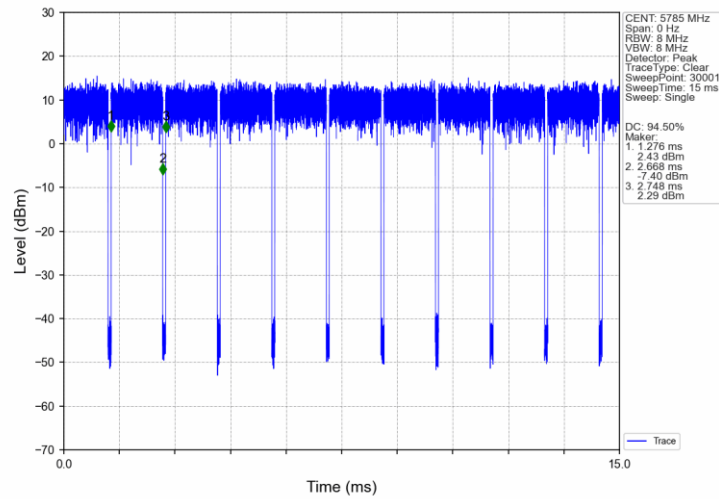


## 802.11a\_LCH\_5745MHz\_Ant1\_NTNV

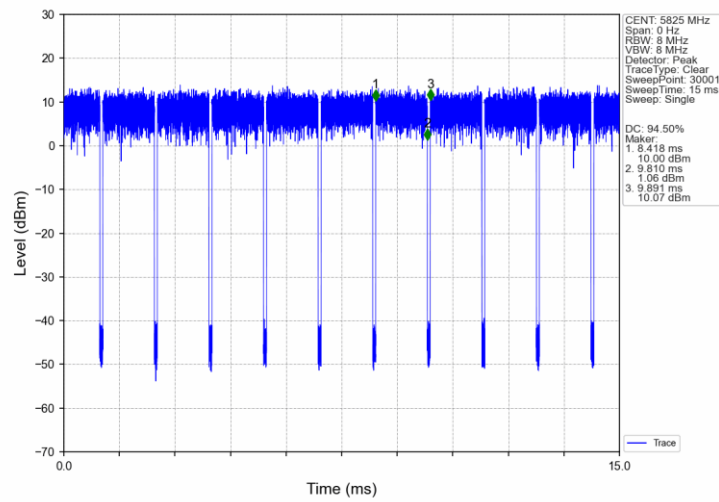




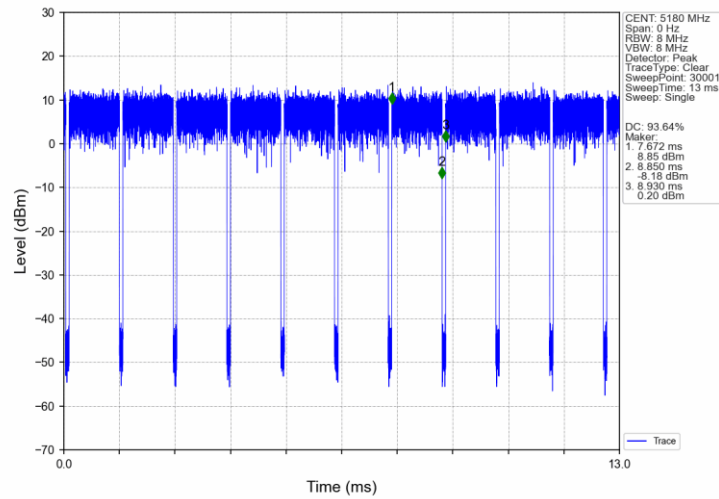
## 802.11a\_MCH\_5785MHz\_Ant1\_NTNV



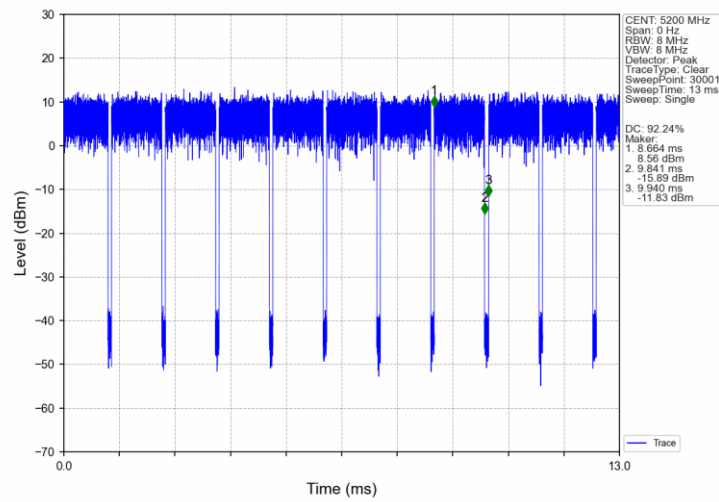
## 802.11a\_HCH\_5825MHz\_Ant1\_NTNV



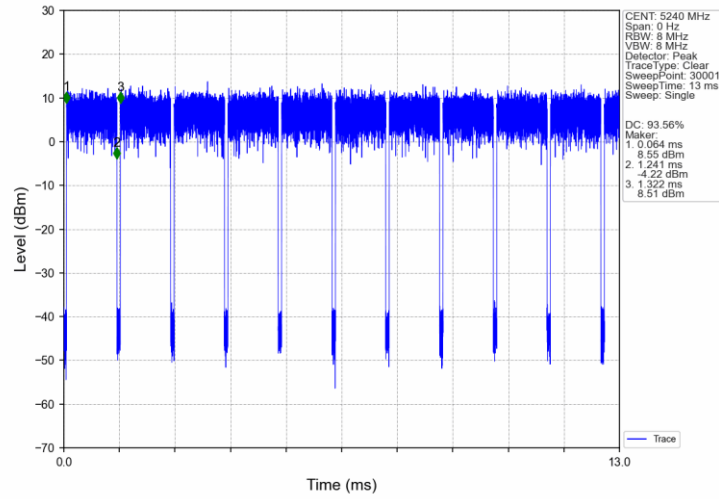
## 802.11n(HT20) LCH 5180MHz Ant1 NTN



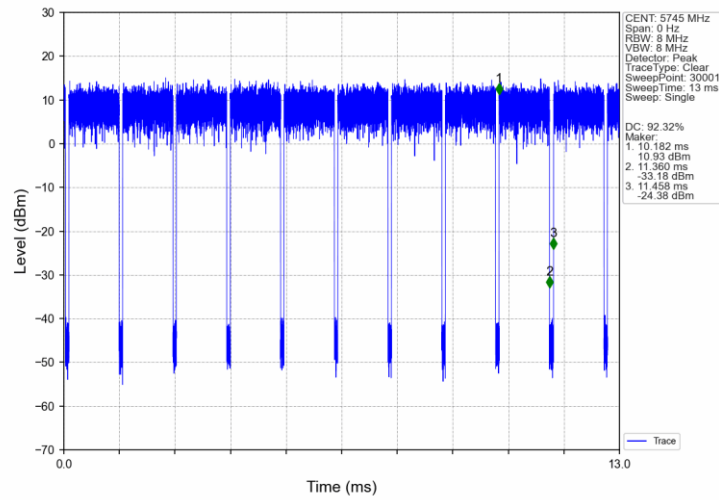
## 802.11n(HT20) MCH 5200MHz Ant1 NTN



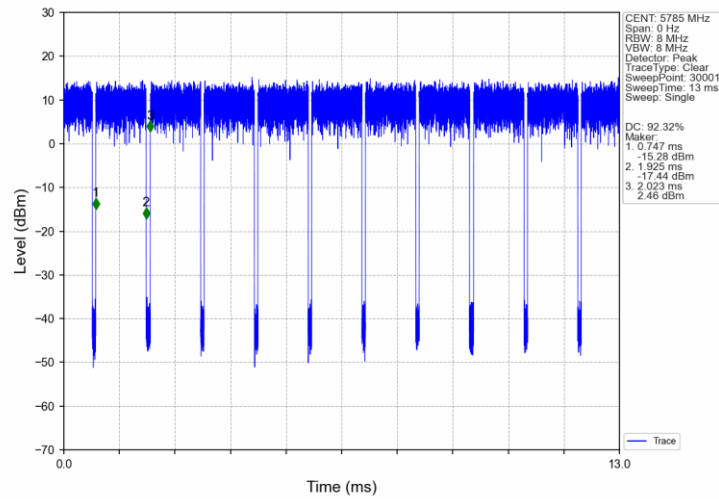
## 802.11n(HT20) HCH 5240MHz Ant1 NTN



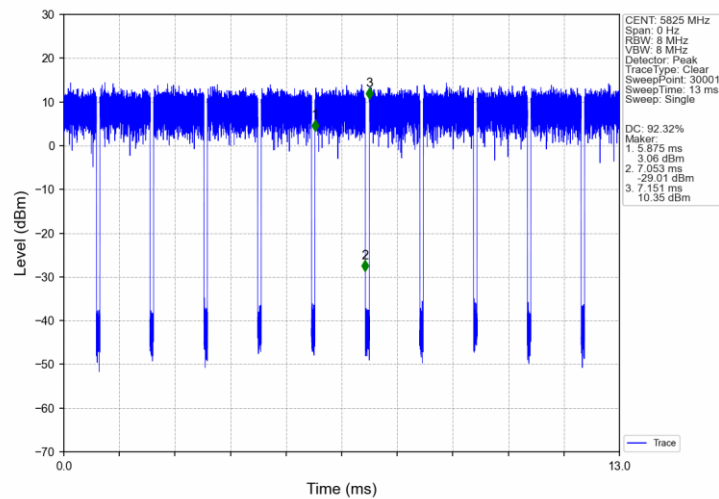
## 802.11n(HT20) LCH 5745MHz Ant1 NTN



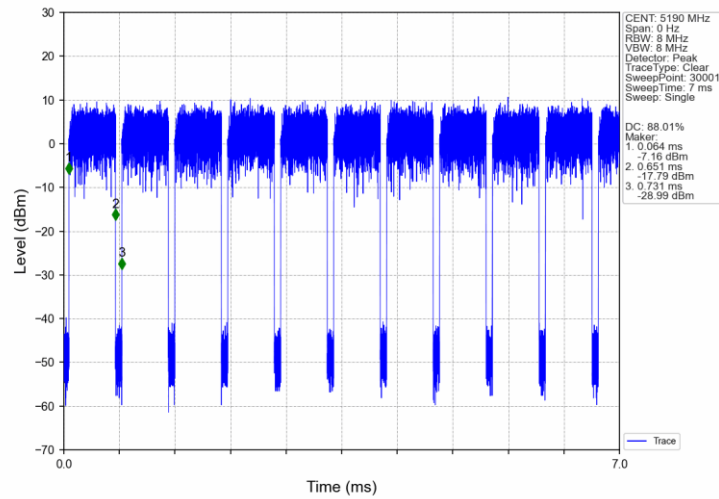
## 802.11n(HT20) MCH 5785MHz Ant1 NTV



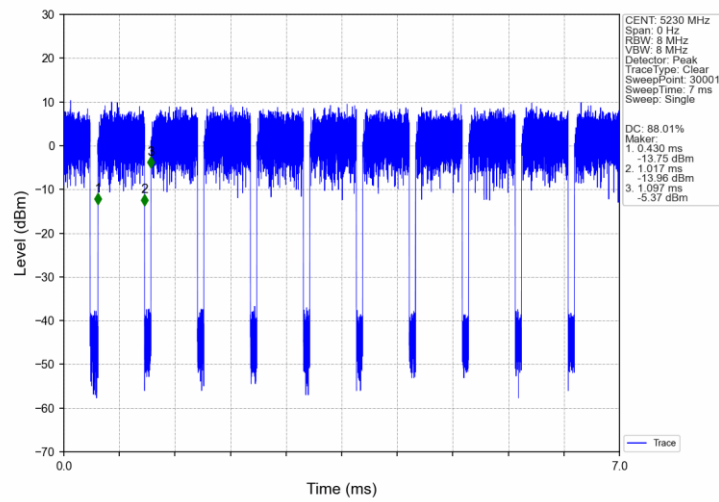
## 802.11n(HT20) HCH 5825MHz Ant1 NTV



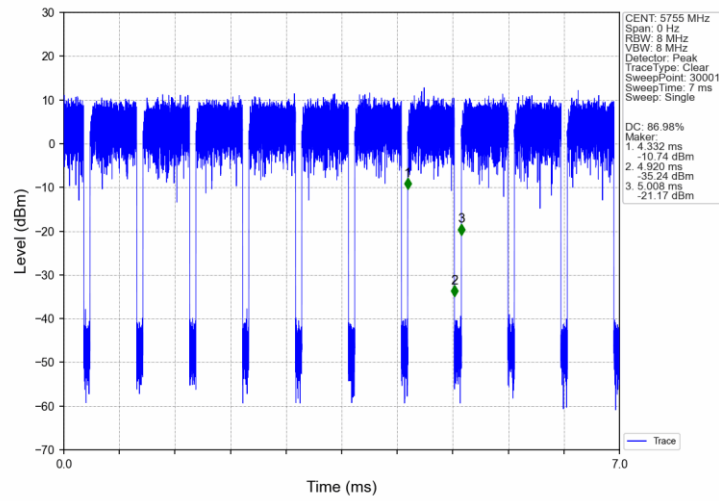
## 802.11n(HT40) LCH 5190MHz Ant1 NTN



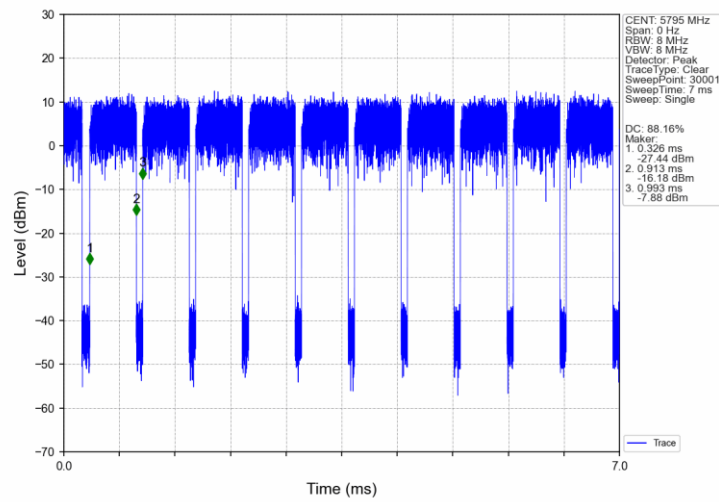
## 802.11n(HT40)\_HCH 5230MHz\_Ant1 NTN



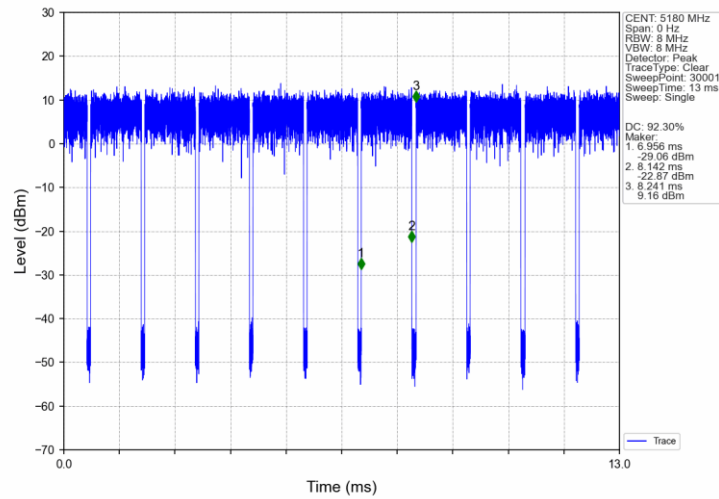
## 802.11n(HT40) LCH 5755MHz Ant1 NTN



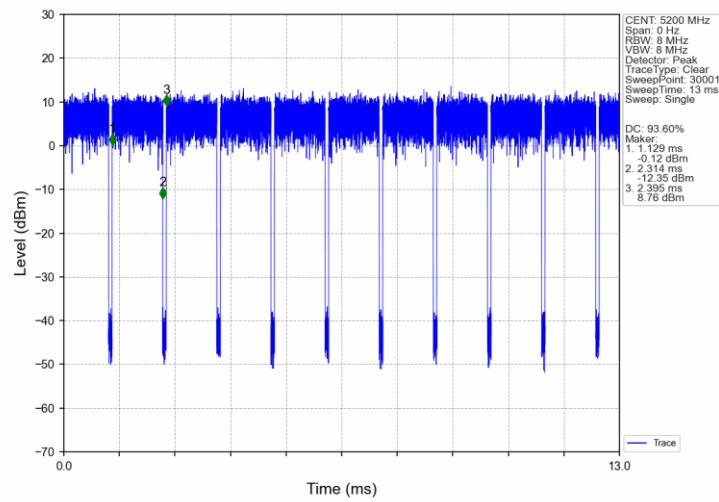
## 802.11n(HT40) HCH 5795MHz Ant1 NTN



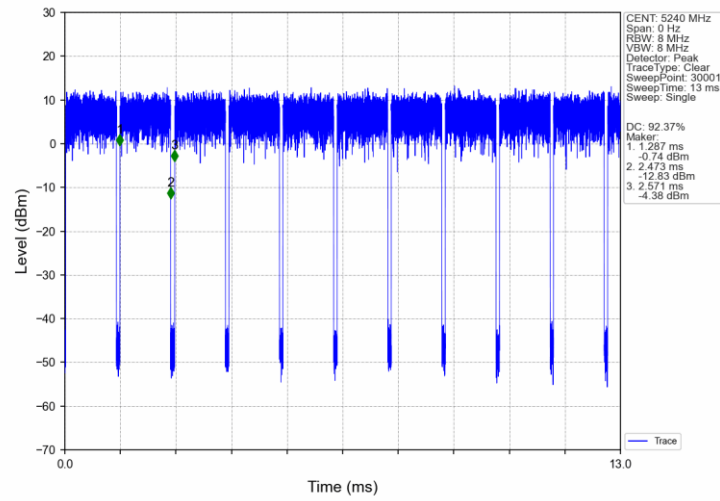
## 802.11ac(VHT20) LCH 5180MHz Ant1 NTN



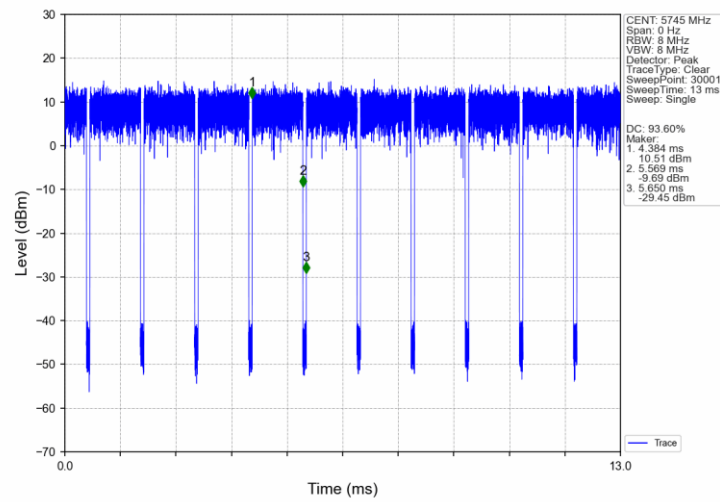
## 802.11ac(VHT20) MCH 5200MHz Ant1 NTN



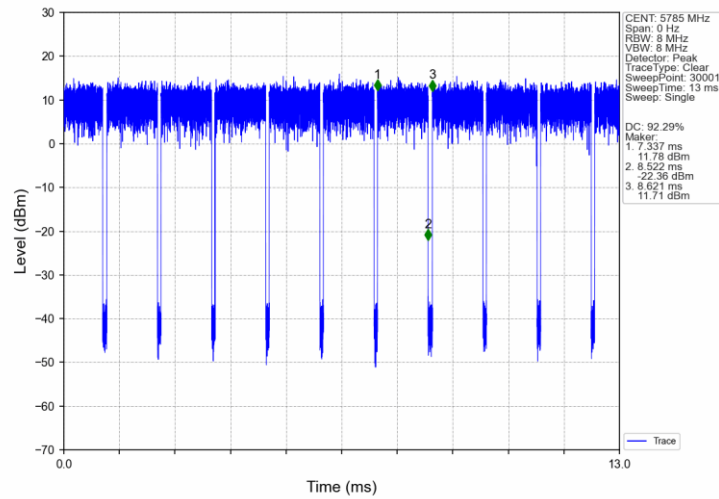
## 802.11ac(VHT20) HCH 5240MHz Ant1 NTN



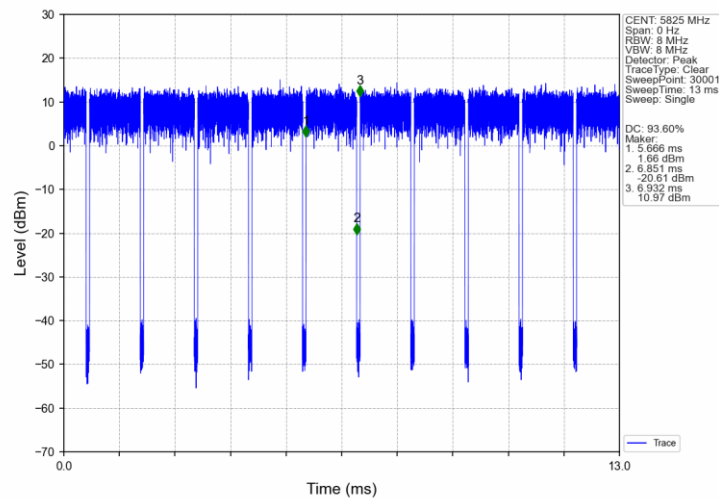
## 802.11ac(VHT20) LCH 5745MHz Ant1 NTN



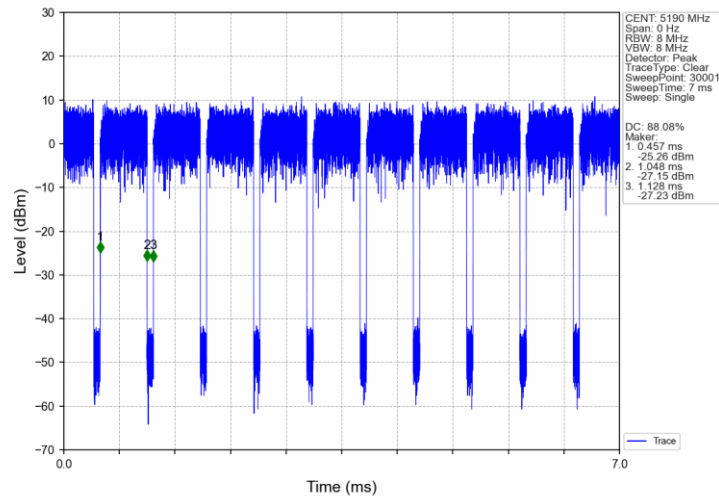
## 802.11ac(VHT20) MCH 5785MHz Ant1 NTN



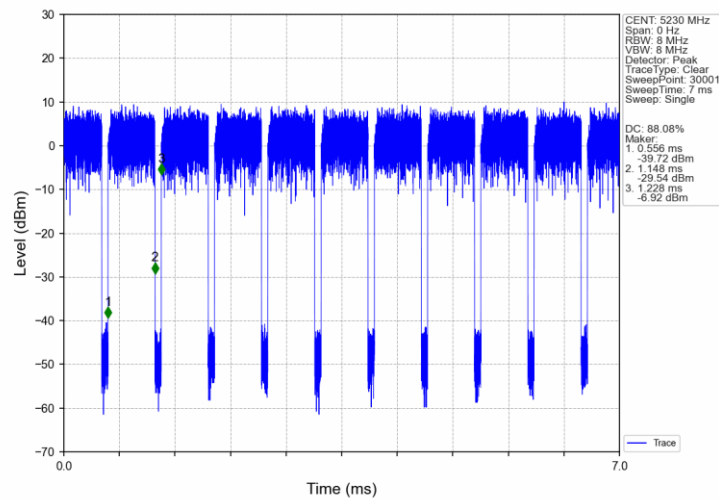
## 802.11ac(VHT20) HCH 5825MHz Ant1 NTN



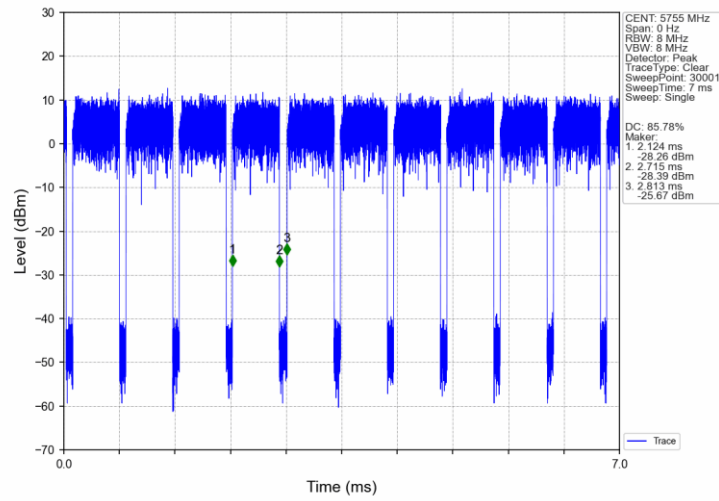
## 802.11ac(VHT40) LCH 5190MHz Ant1 NTN



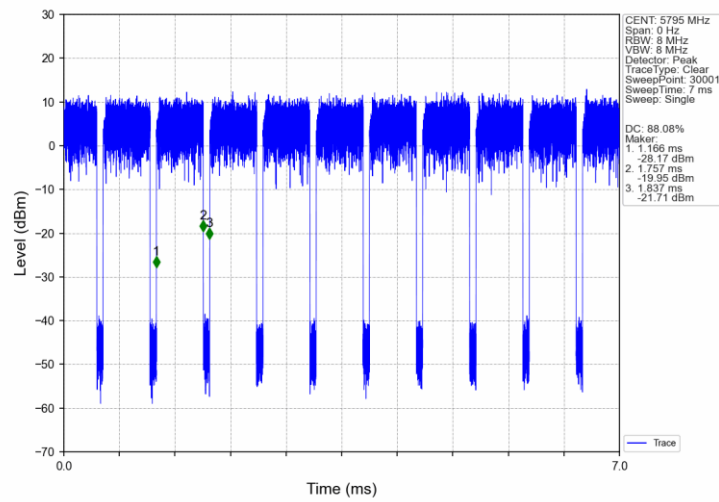
## 802.11ac(VHT40) HCH 5230MHz Ant1 NTN



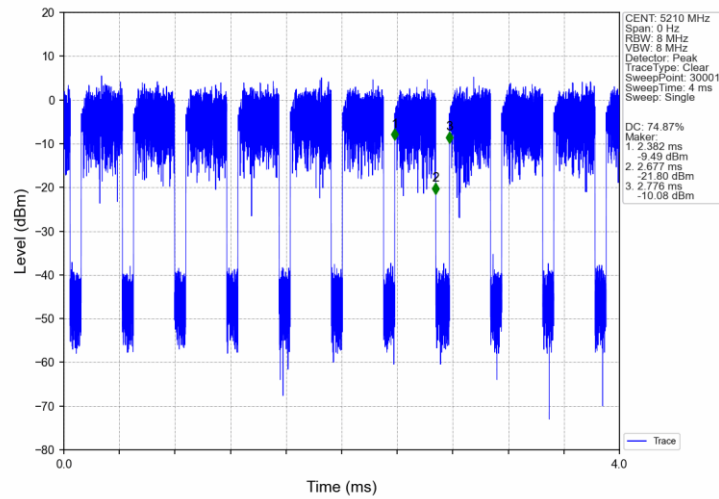
## 802.11ac(VHT40) LCH 5755MHz Ant1 NTN



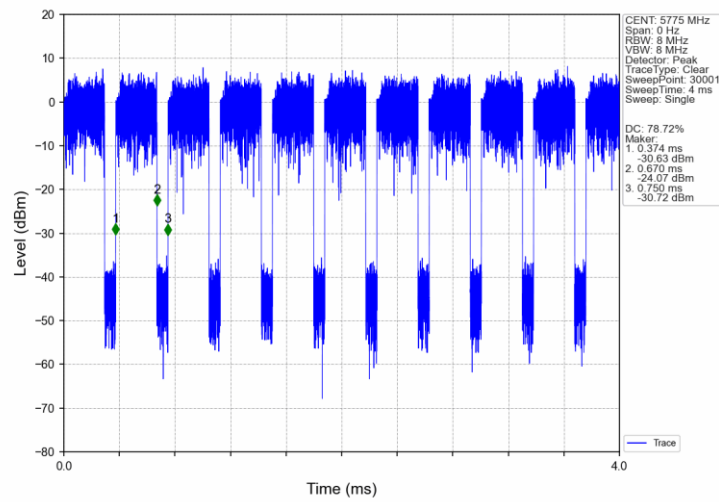
## 802.11ac(VHT40) HCH 5795MHz Ant1 NTN



## 802.11ac(VHT80) MCH 5210MHz Ant1 NTN



## 802.11ac(VHT80) MCH 5775MHz Ant1 NTN



## 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   | 16.605                       | /     | Pass    |
|                  |         | 5200            | 1   | 16.669                       | /     | Pass    |
|                  |         | 5240            | 1   | 16.621                       | /     | Pass    |
|                  |         | 5745            | 1   | 16.702                       | /     | Pass    |
|                  |         | 5785            | 1   | 16.693                       | /     | Pass    |
|                  |         | 5825            | 1   | 16.751                       | /     | Pass    |
| 802.11n (HT20)   | SISO    | 5180            | 1   | 17.697                       | /     | Pass    |
|                  |         | 5200            | 1   | 17.725                       | /     | Pass    |
|                  |         | 5240            | 1   | 17.681                       | /     | Pass    |
|                  |         | 5745            | 1   | 17.865                       | /     | Pass    |
|                  |         | 5785            | 1   | 17.841                       | /     | Pass    |
|                  |         | 5825            | 1   | 17.824                       | /     | Pass    |
| 802.11n (HT40)   | SISO    | 5190            | 1   | 36.447                       | /     | Pass    |
|                  |         | 5230            | 1   | 36.488                       | /     | Pass    |
|                  |         | 5755            | 1   | 36.451                       | /     | Pass    |
|                  |         | 5795            | 1   | 36.594                       | /     | Pass    |
| 802.11ac (VHT20) | SISO    | 5180            | 1   | 17.747                       | /     | Pass    |
|                  |         | 5200            | 1   | 17.742                       | /     | Pass    |
|                  |         | 5240            | 1   | 17.705                       | /     | Pass    |
|                  |         | 5745            | 1   | 17.790                       | /     | Pass    |
|                  |         | 5785            | 1   | 17.840                       | /     | Pass    |
|                  |         | 5825            | 1   | 17.843                       | /     | Pass    |
| 802.11ac (VHT40) | SISO    | 5190            | 1   | 36.549                       | /     | Pass    |
|                  |         | 5230            | 1   | 36.507                       | /     | Pass    |
|                  |         | 5755            | 1   | 36.596                       | /     | Pass    |
|                  |         | 5795            | 1   | 36.545                       | /     | Pass    |
| 802.11ac (VHT80) | SISO    | 5210            | 1   | 75.723                       | /     | Pass    |
|                  |         | 5775            | 1   | 75.666                       | /     | Pass    |

#### 2.1.2 26dB BW

| Mode             | TX Type | Frequency (MHz) | ANT | 26dB Bandwidth (MHz) |       | Verdict |
|------------------|---------|-----------------|-----|----------------------|-------|---------|
|                  |         |                 |     | Result               | Limit |         |
| 802.11a          | SISO    | 5180            | 1   | 23.924               | /     | Pass    |
|                  |         | 5200            | 1   | 27.310               | /     | Pass    |
|                  |         | 5240            | 1   | 28.532               | /     | Pass    |
| 802.11n (HT20)   | SISO    | 5180            | 1   | 28.427               | /     | Pass    |
|                  |         | 5200            | 1   | 28.467               | /     | Pass    |
|                  |         | 5240            | 1   | 29.395               | /     | Pass    |
| 802.11n (HT40)   | SISO    | 5190            | 1   | 52.064               | /     | Pass    |
|                  |         | 5230            | 1   | 53.007               | /     | Pass    |
| 802.11ac (VHT20) | SISO    | 5180            | 1   | 28.623               | /     | Pass    |
|                  |         | 5200            | 1   | 41.311               | /     | Pass    |
|                  |         | 5240            | 1   | 37.303               | /     | Pass    |
| 802.11ac (VHT40) | SISO    | 5190            | 1   | 62.440               | /     | Pass    |
|                  |         | 5230            | 1   | 60.904               | /     | Pass    |

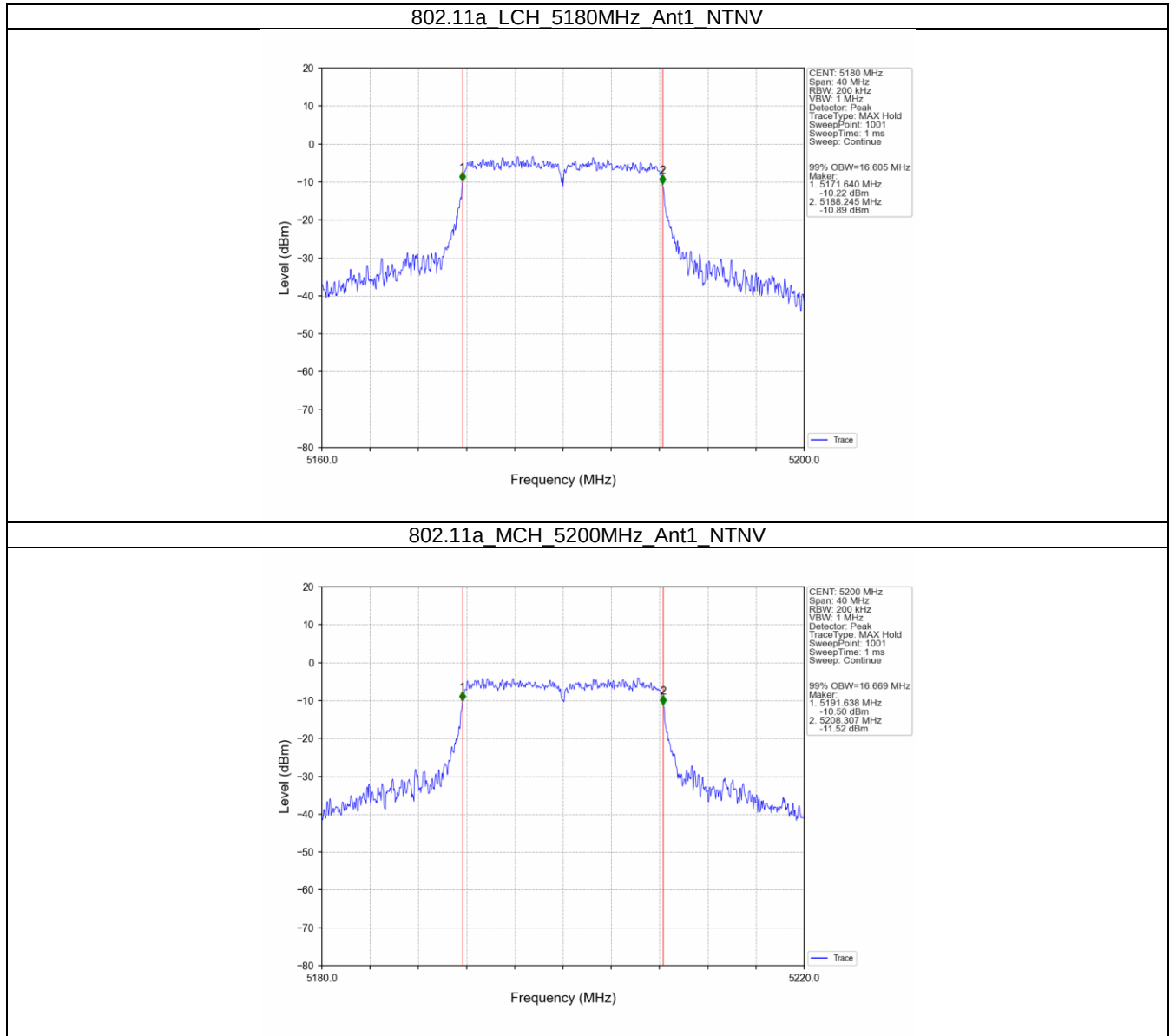
|                     |      |      |   |         |   |      |
|---------------------|------|------|---|---------|---|------|
| 802.11ac<br>(VHT80) | SISO | 5210 | 1 | 101.218 | / | Pass |
|---------------------|------|------|---|---------|---|------|

### 2.1.3 6dB BW

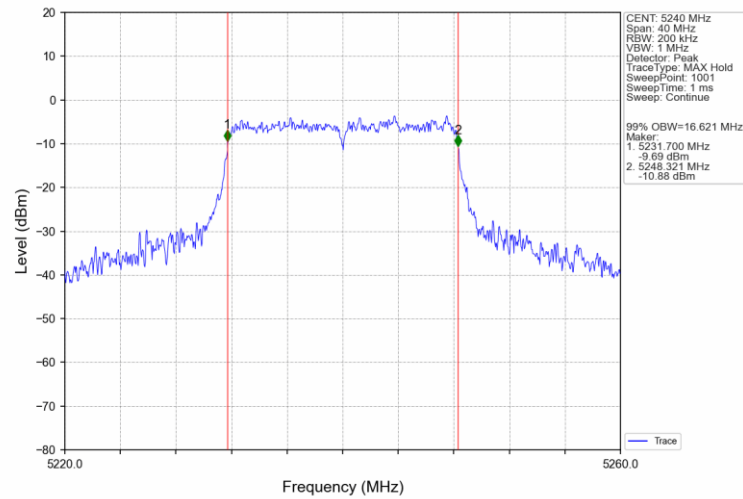
| Mode                | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|---------------------|---------|-----------------|-----|---------------------|------------|---------|
|                     |         |                 |     | Result              | Limit      |         |
| 802.11a             | SISO    | 5745            | 1   | 16.382              | $\geq 0.5$ | Pass    |
|                     |         | 5785            | 1   | 16.395              | $\geq 0.5$ | Pass    |
|                     |         | 5825            | 1   | 16.356              | $\geq 0.5$ | Pass    |
| 802.11n<br>(HT20)   | SISO    | 5745            | 1   | 17.249              | $\geq 0.5$ | Pass    |
|                     |         | 5785            | 1   | 17.267              | $\geq 0.5$ | Pass    |
|                     |         | 5825            | 1   | 17.290              | $\geq 0.5$ | Pass    |
| 802.11n<br>(HT40)   | SISO    | 5755            | 1   | 35.948              | $\geq 0.5$ | Pass    |
|                     |         | 5795            | 1   | 35.422              | $\geq 0.5$ | Pass    |
| 802.11ac<br>(VHT20) | SISO    | 5745            | 1   | 17.284              | $\geq 0.5$ | Pass    |
|                     |         | 5785            | 1   | 17.377              | $\geq 0.5$ | Pass    |
|                     |         | 5825            | 1   | 17.299              | $\geq 0.5$ | Pass    |
| 802.11ac<br>(VHT40) | SISO    | 5755            | 1   | 35.703              | $\geq 0.5$ | Pass    |
|                     |         | 5795            | 1   | 35.410              | $\geq 0.5$ | Pass    |
| 802.11ac<br>(VHT80) | SISO    | 5775            | 1   | 75.663              | $\geq 0.5$ | Pass    |

## 2.2 Test Graph

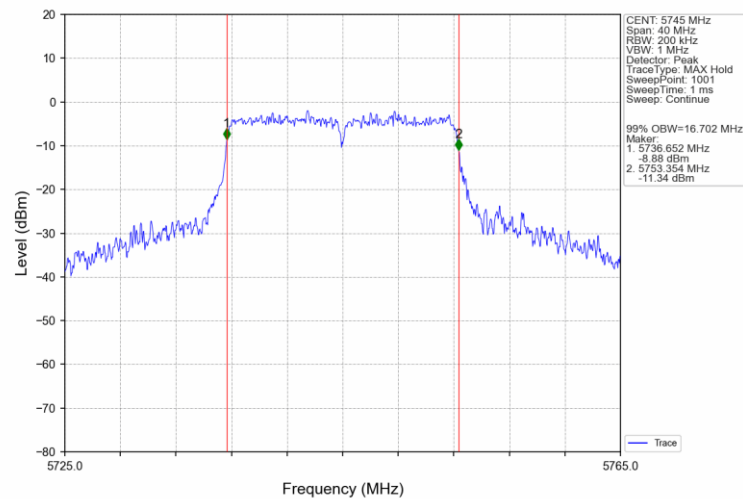
### 2.2.1 OBW



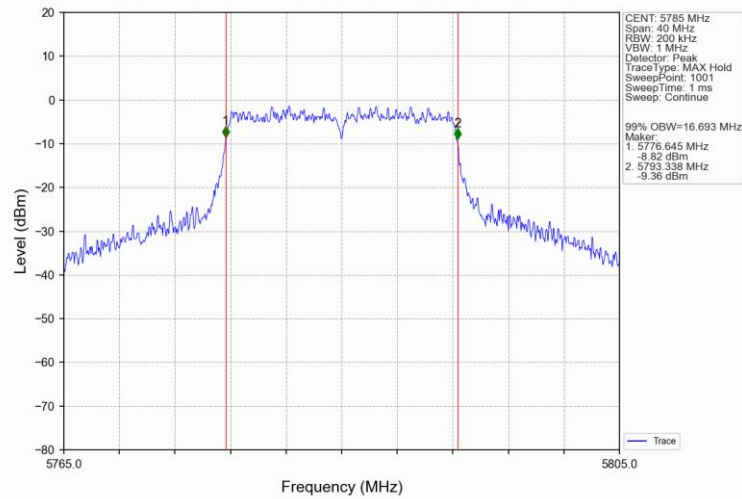
## 802.11a\_HCH\_5240MHz\_Ant1\_NTNV



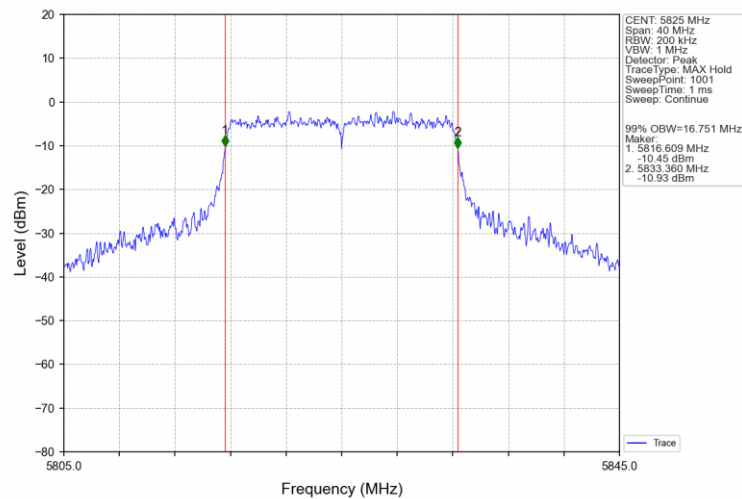
## 802.11a\_LCH\_5745MHz\_Ant1\_NTNV



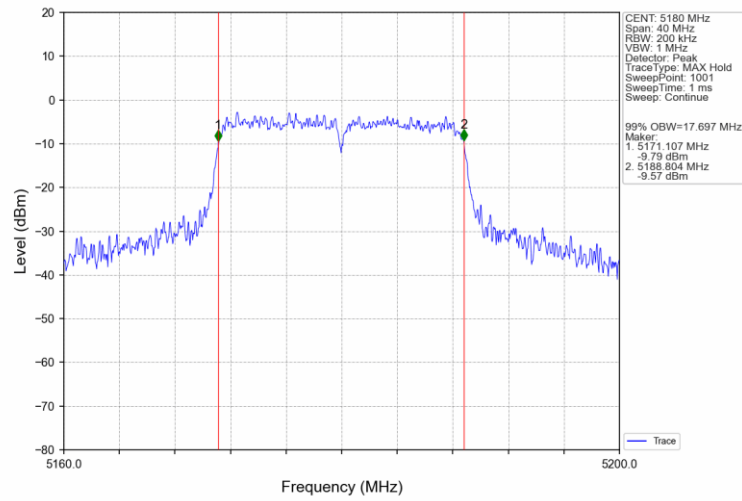
## 802.11a\_MCH\_5785MHz\_Ant1\_NTNV



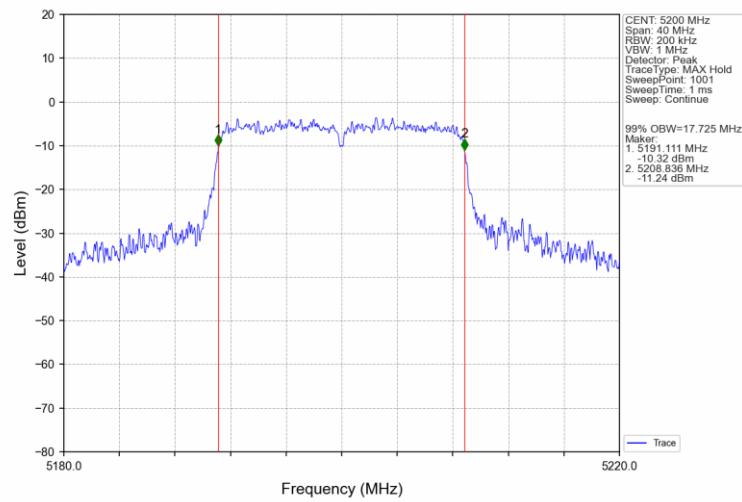
## 802.11a\_HCH\_5825MHz\_Ant1\_NTNV



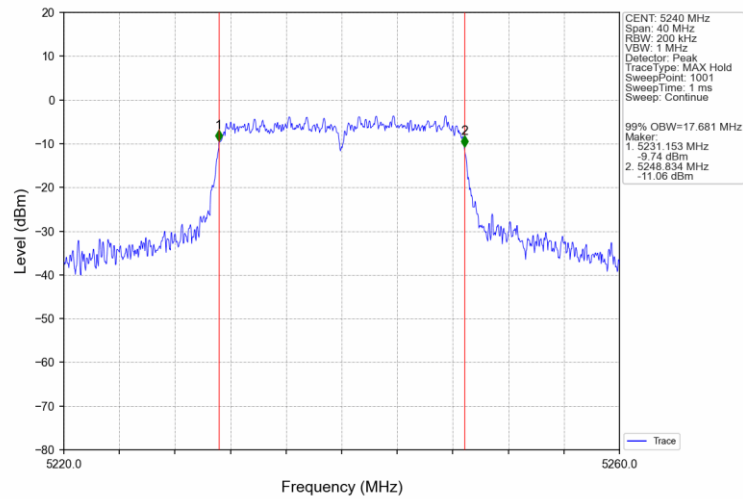
## 802.11n(HT20) LCH 5180MHz Ant1 NTN



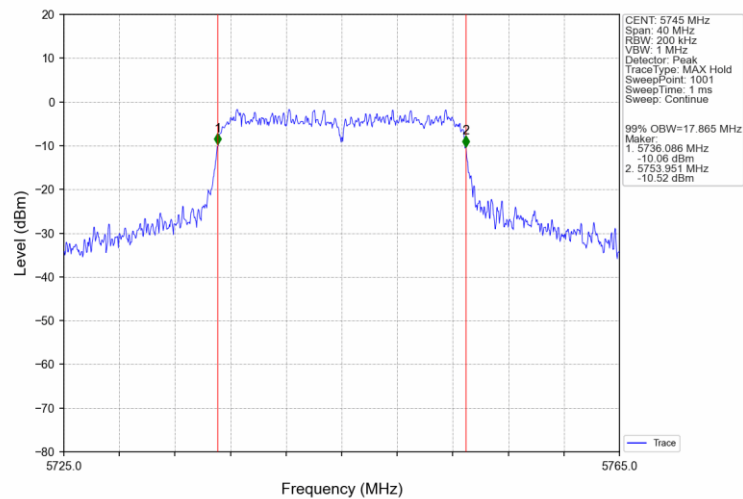
## 802.11n(HT20) MCH 5200MHz Ant1 NTN



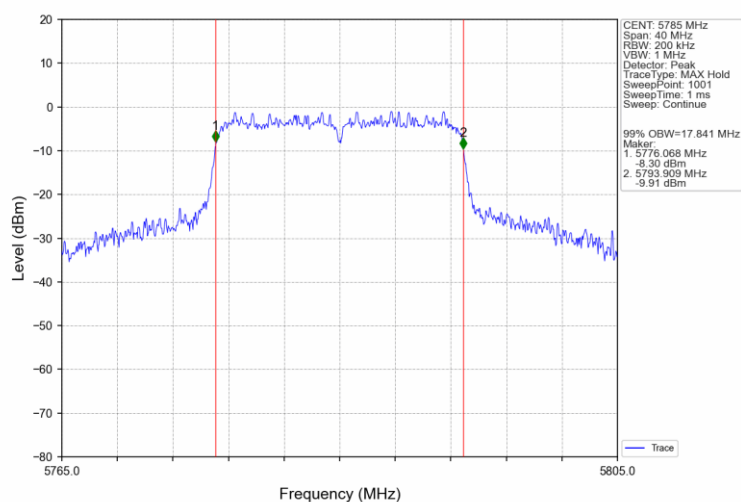
## 802.11n(HT20) HCH 5240MHz Ant1 NTN



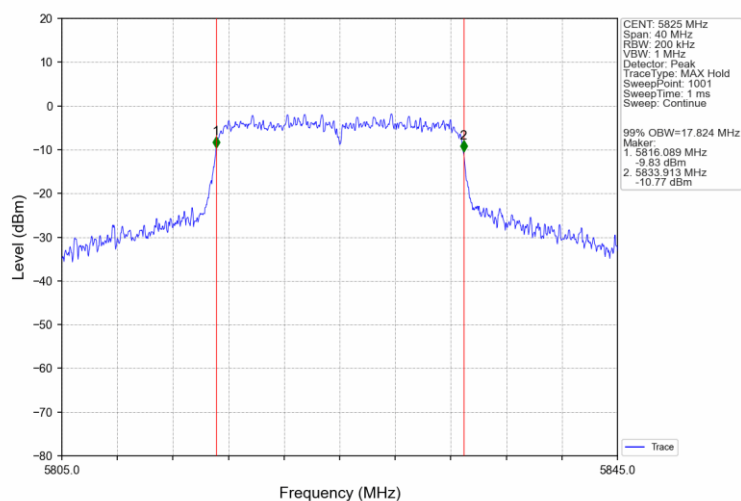
## 802.11n(HT20) LCH 5745MHz Ant1 NTN



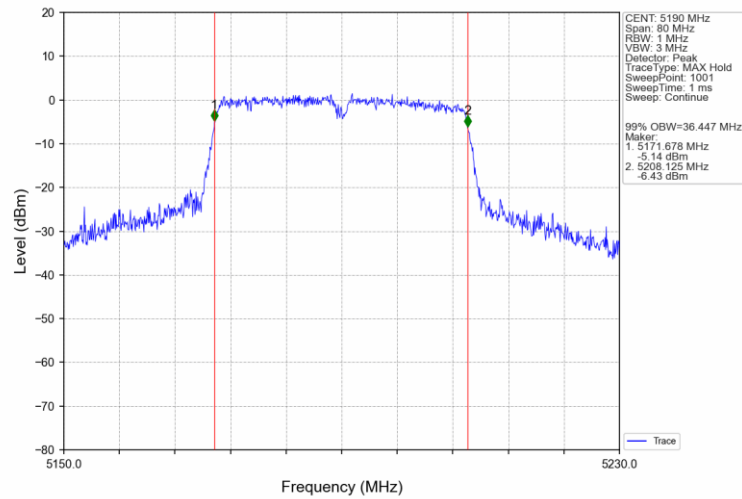
## 802.11n(HT20) MCH 5785MHz Ant1 NTN



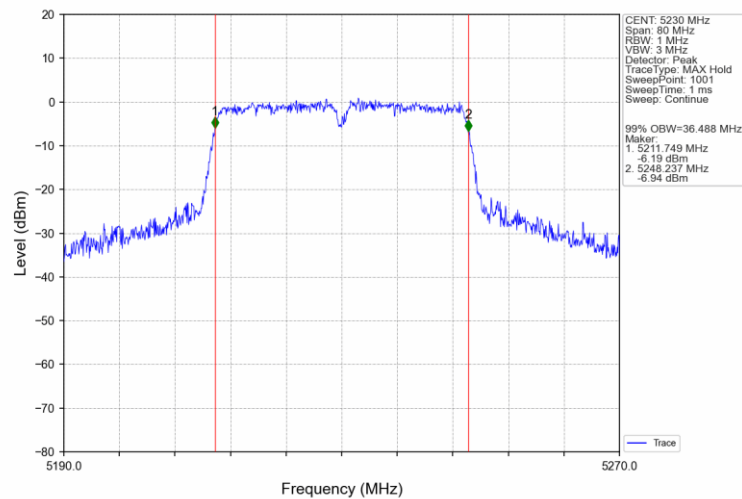
## 802.11n(HT20) HCH 5825MHz Ant1 NTN



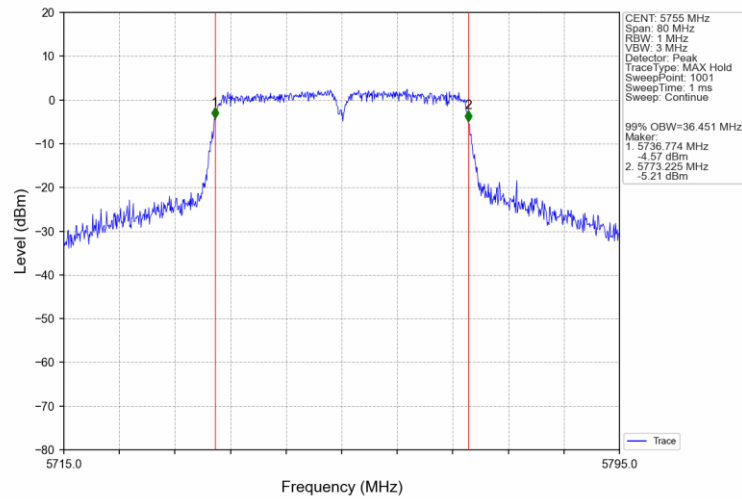
## 802.11n(HT40) LCH 5190MHz Ant1 NTN



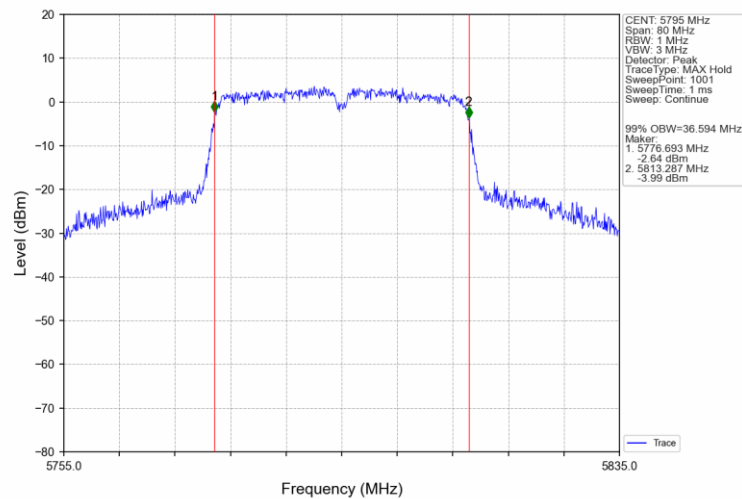
## 802.11n(HT40) HCH 5230MHz Ant1 NTN



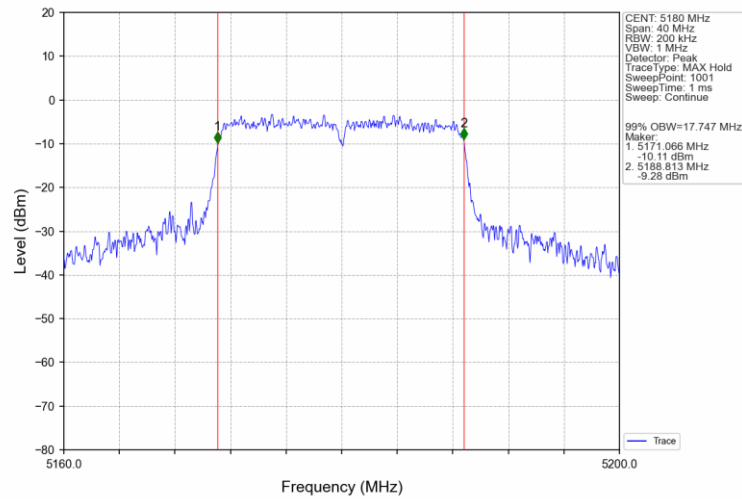
## 802.11n(HT40) LCH 5755MHz Ant1 NTN



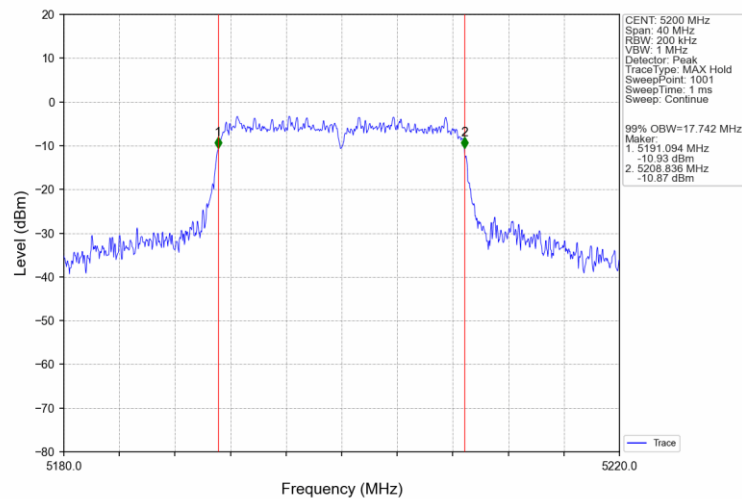
## 802.11n(HT40) HCH 5795MHz Ant1 NTN



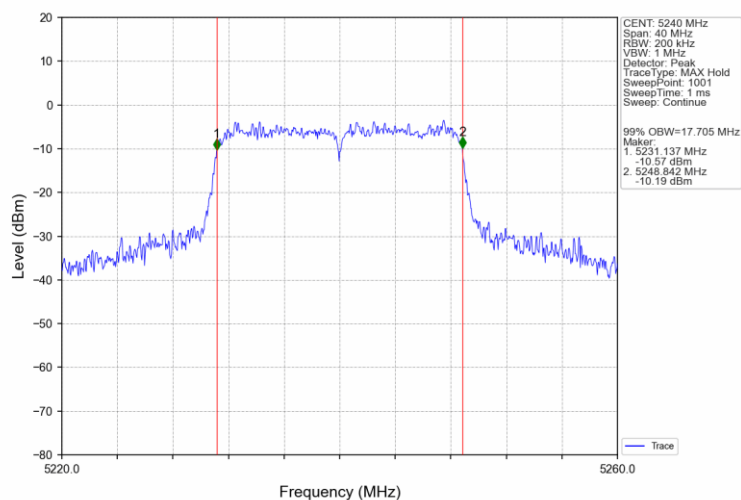
## 802.11ac(VHT20) LCH 5180MHz Ant1 NTN



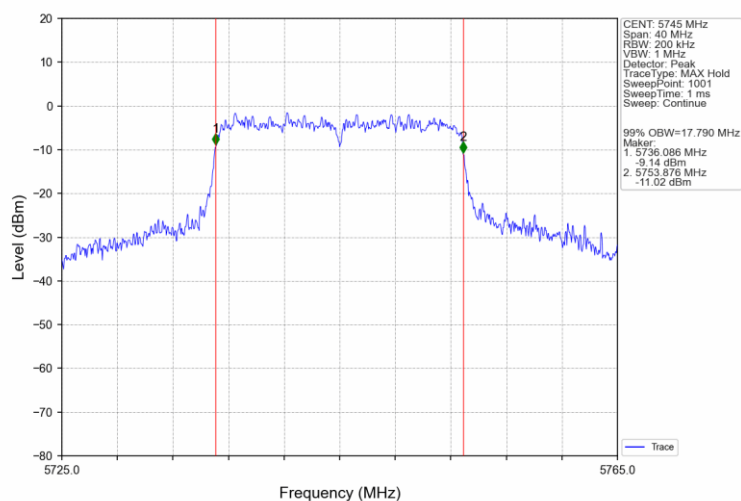
## 802.11ac(VHT20) MCH 5200MHz Ant1 NTN



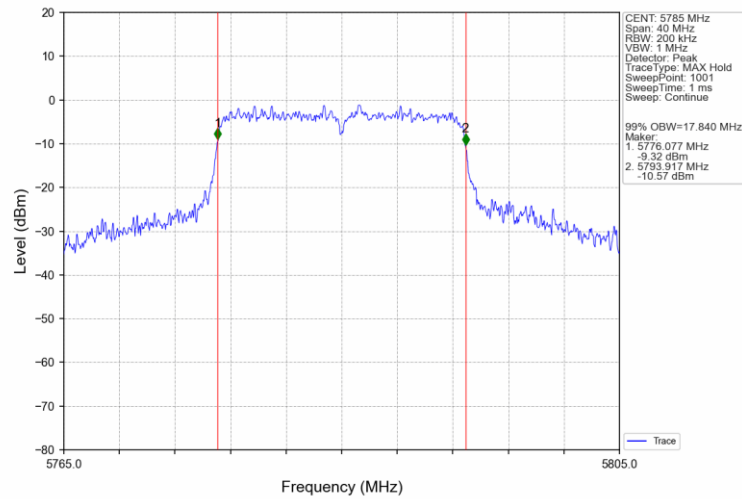
## 802.11ac(VHT20) HCH 5240MHz Ant1 NTN



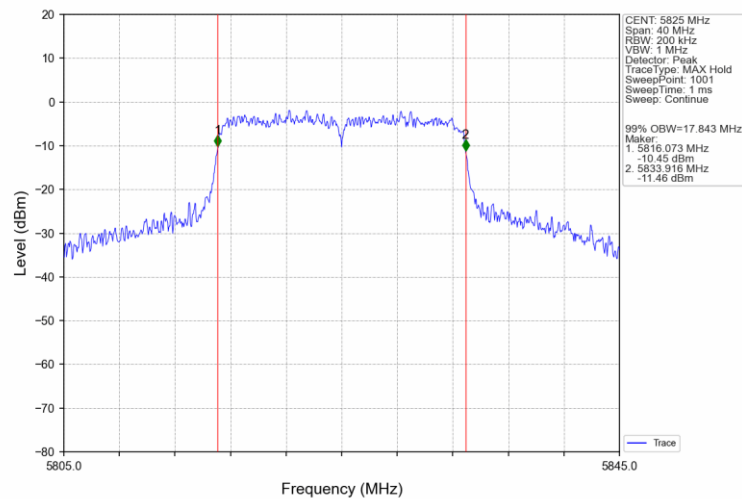
## 802.11ac(VHT20) LCH 5745MHz Ant1 NTN



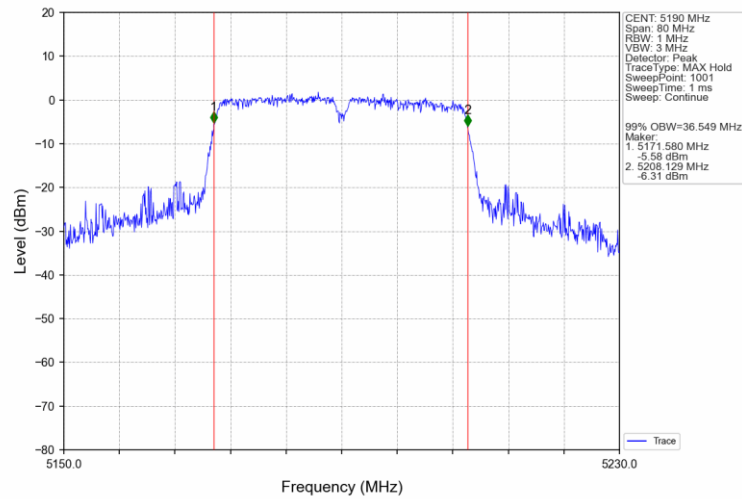
## 802.11ac(VHT20) MCH 5785MHz Ant1 NTN



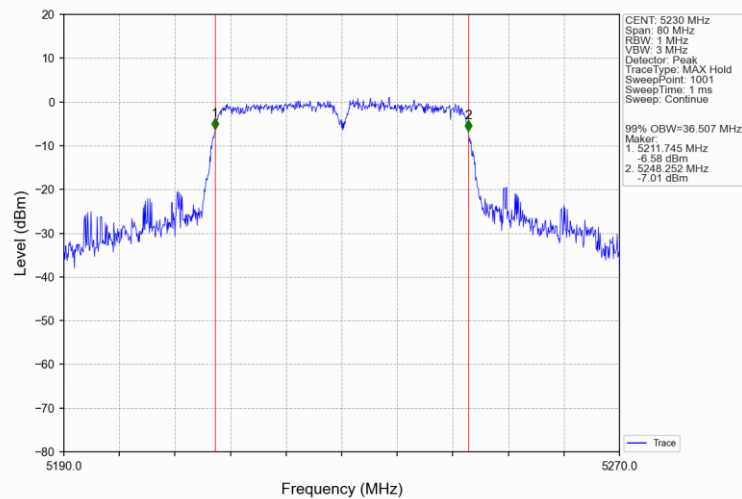
## 802.11ac(VHT20) HCH 5825MHz Ant1 NTN



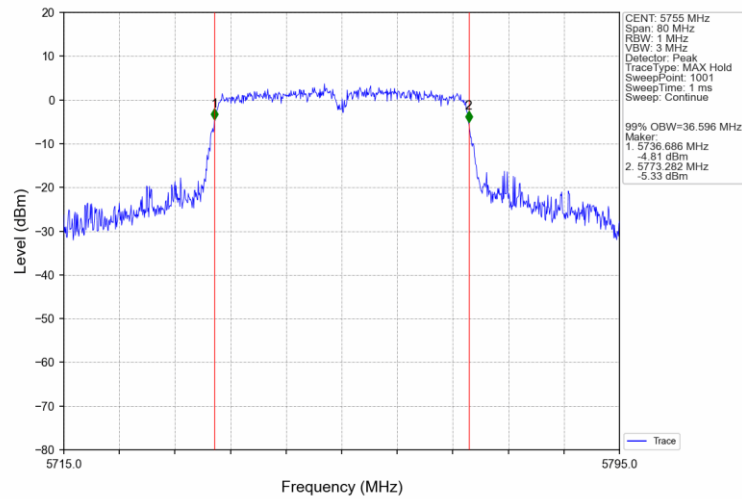
## 802.11ac(VHT40) LCH 5190MHz Ant1 NTN



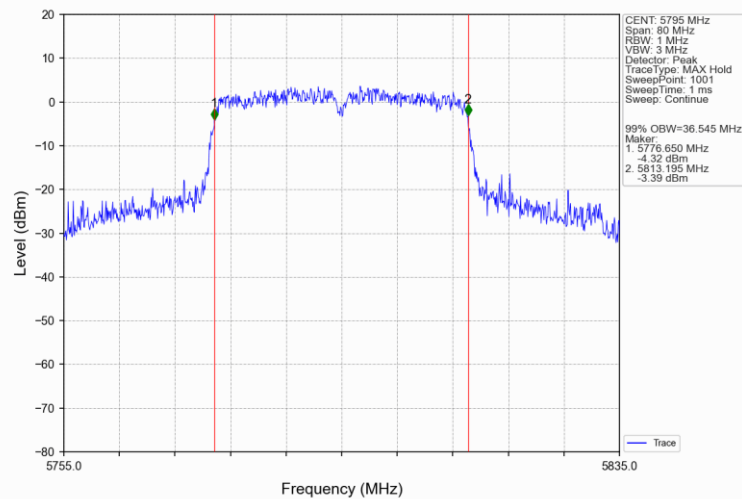
## 802.11ac(VHT40) HCH 5230MHz Ant1 NTN



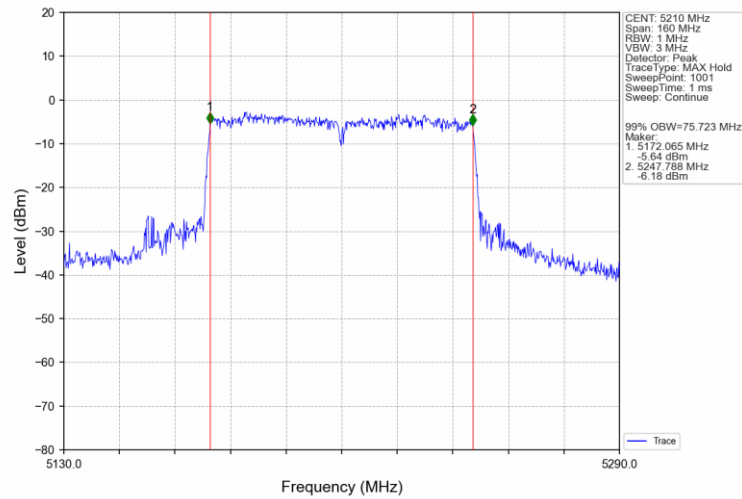
## 802.11ac(VHT40) LCH 5755MHz Ant1 NTN



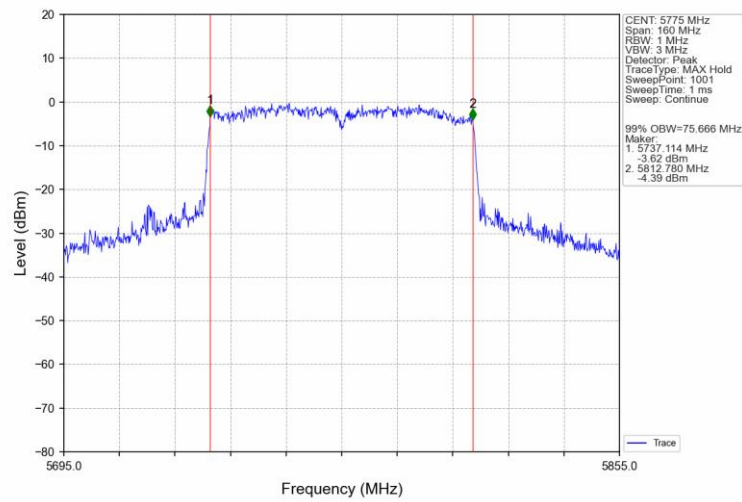
## 802.11ac(VHT40) HCH 5795MHz Ant1 NTN



## 802.11ac(VHT80) MCH 5210MHz Ant1 NTN

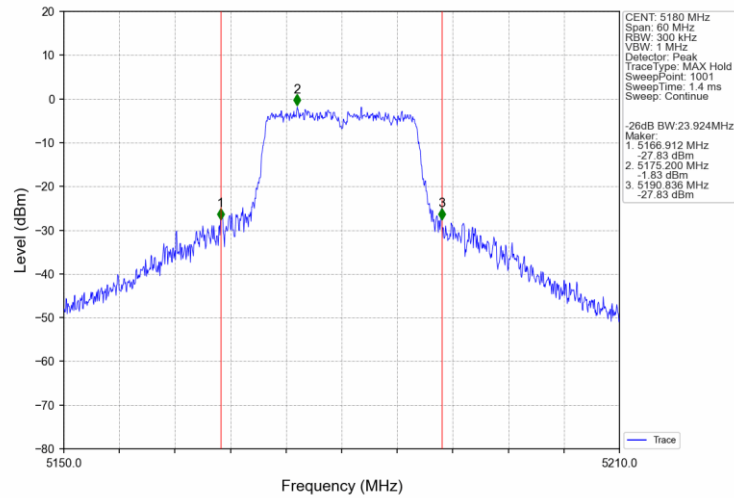


## 802.11ac(VHT80) MCH 5775MHz Ant1 NTN

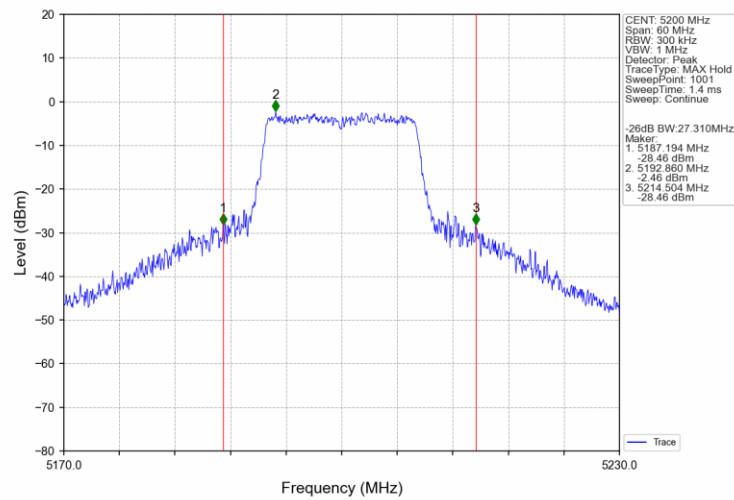


## 2.2.2 26dB BW

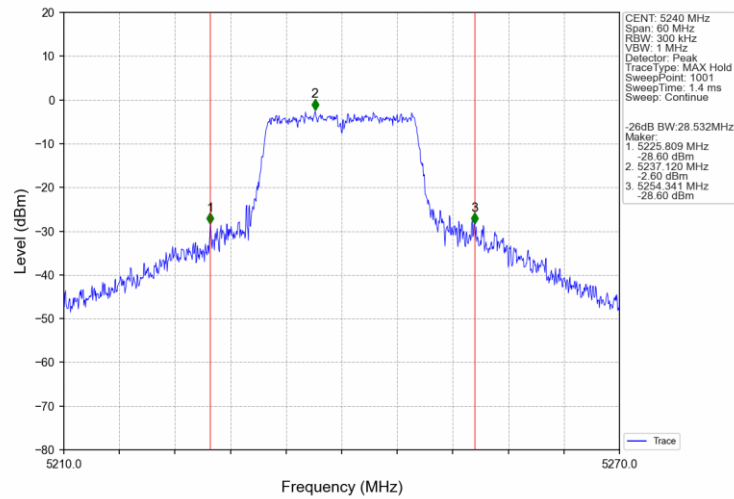
802.11a LCH 5180MHz Ant1 NTN



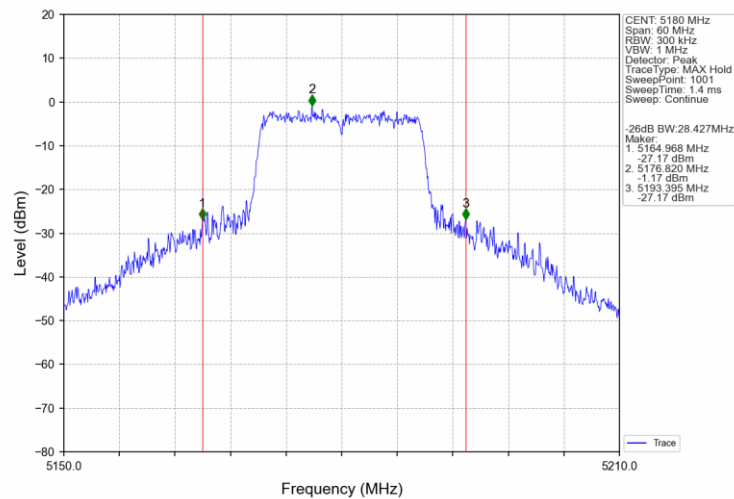
802.11a MCH 5200MHz Ant1 NTN



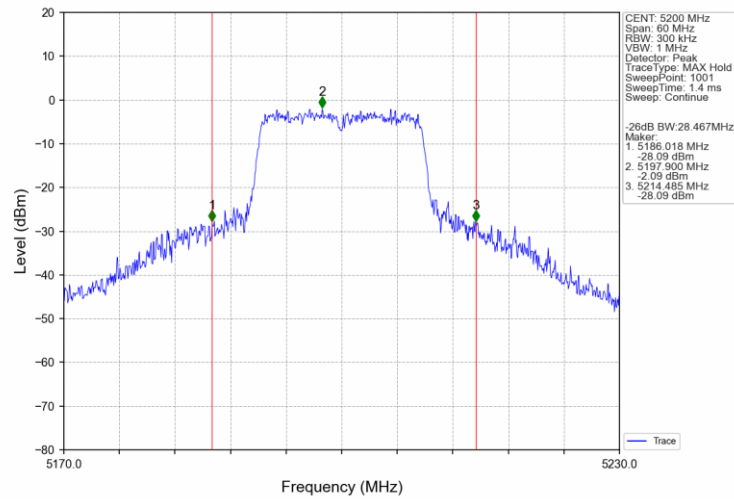
## 802.11a HCH 5240MHz Ant1 NTN



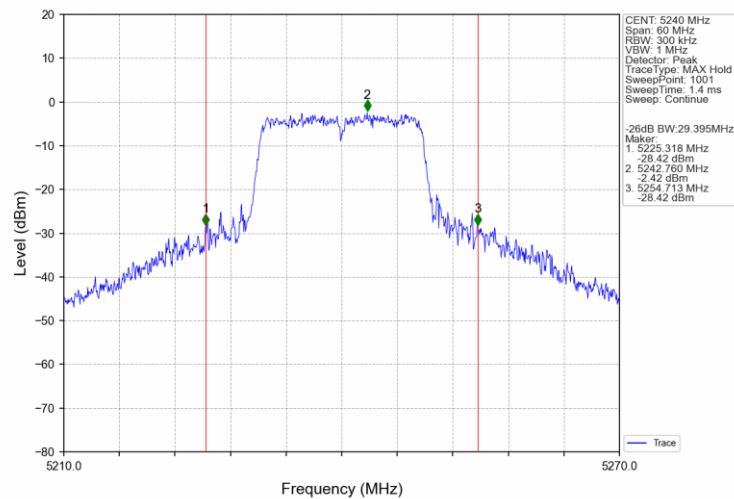
## 802.11n(HT20)\_LCH\_5180MHz\_Ant1 NTN



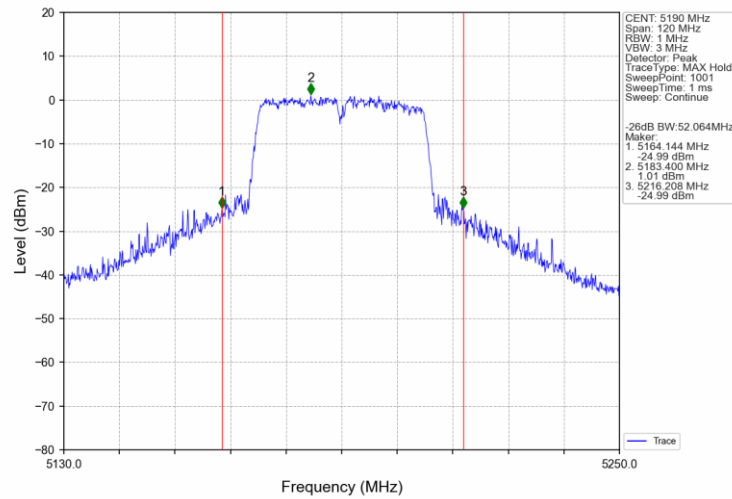
## 802.11n(HT20) MCH 5200MHz Ant1 NTN



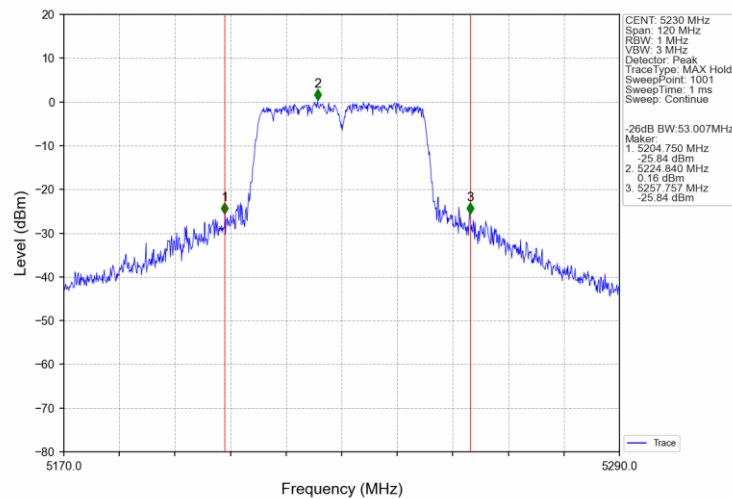
## 802.11n(HT20) HCH 5240MHz Ant1 NTN



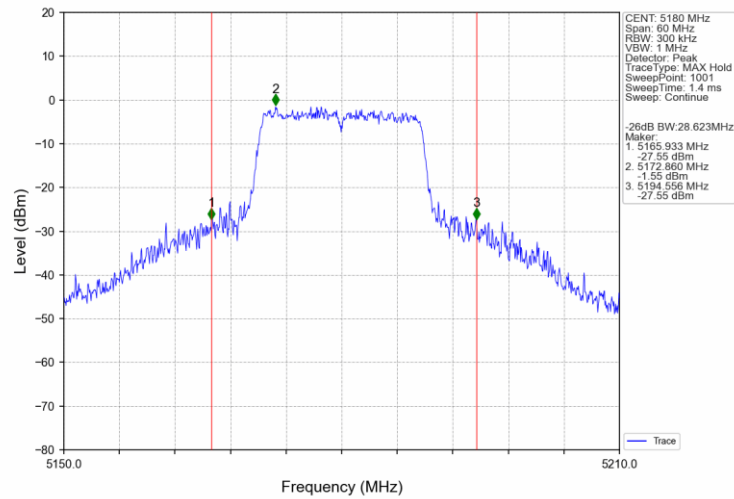
## 802.11n(HT40) LCH 5190MHz Ant1 NTN



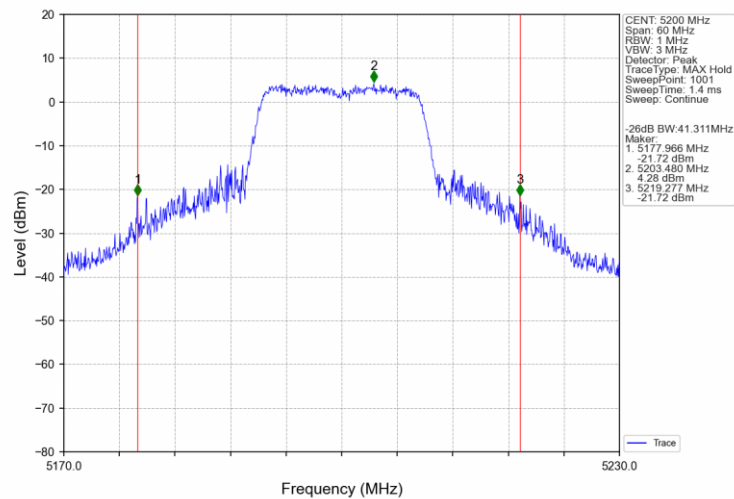
## 802.11n(HT40) HCH 5230MHz Ant1 NTN



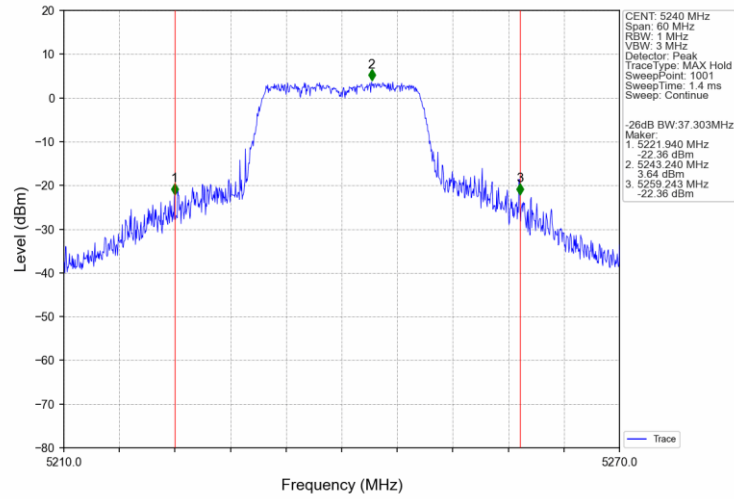
## 802.11ac(VHT20) LCH 5180MHz Ant1 NTN



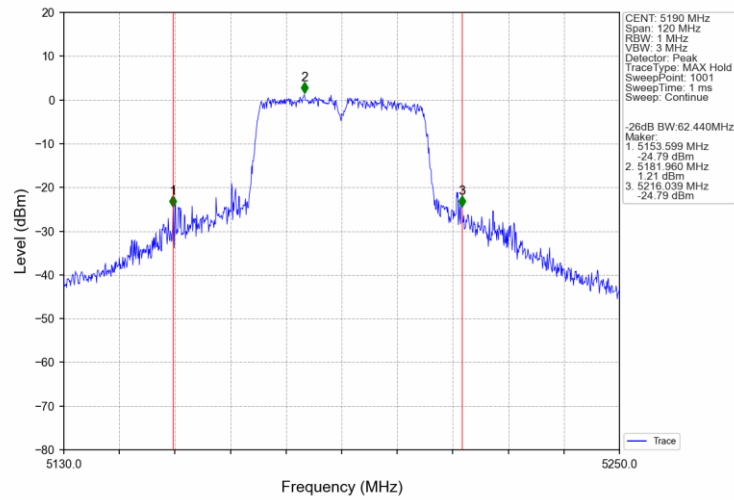
## 802.11ac(VHT20) MCH 5200MHz Ant1 NTN



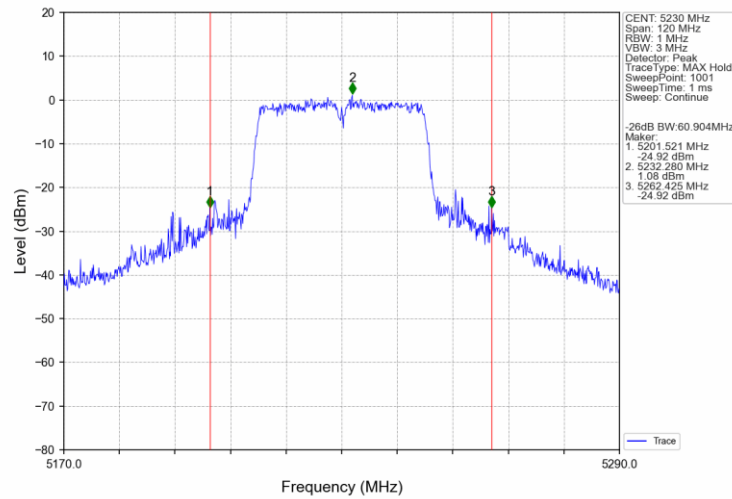
## 802.11ac(VHT20) HCH 5240MHz Ant1 NTN



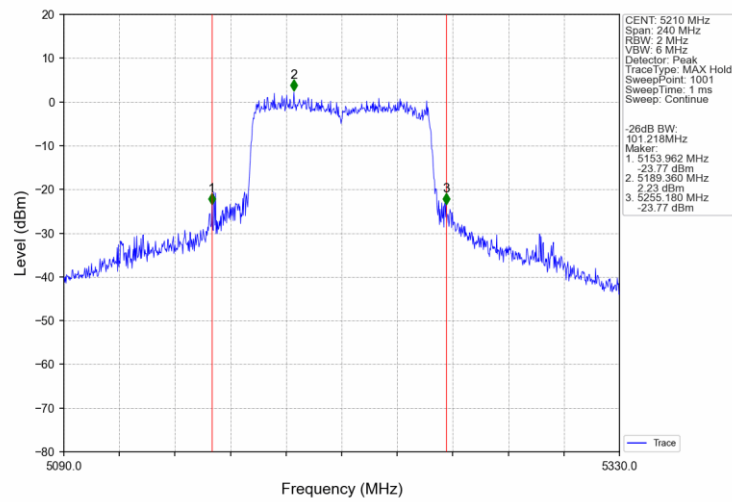
## 802.11ac(VHT40) LCH 5190MHz Ant1 NTN



## 802.11ac(VHT40) HCH 5230MHz Ant1 NTN

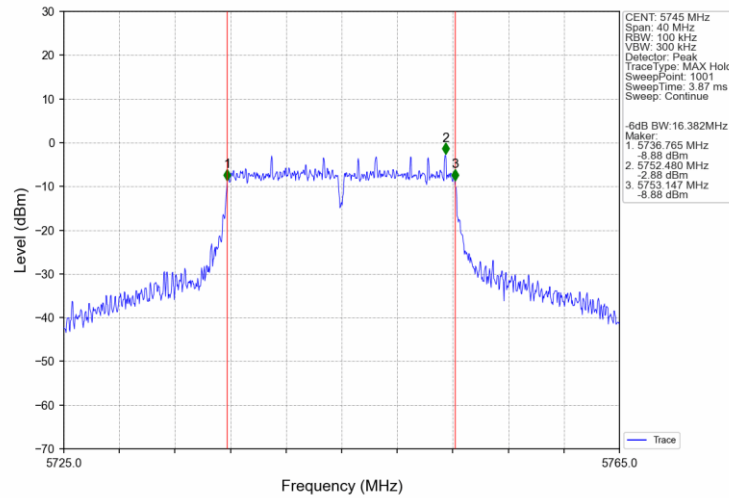


## 802.11ac(VHT80) MCH 5210MHz Ant1 NTN



### 2.2.3 6dB BW

802.11a\_LCH\_5745MHz\_Ant1\_NTNV



802.11a\_MCH\_5785MHz\_Ant1\_NTNV

