

## 1. Duty Cycle

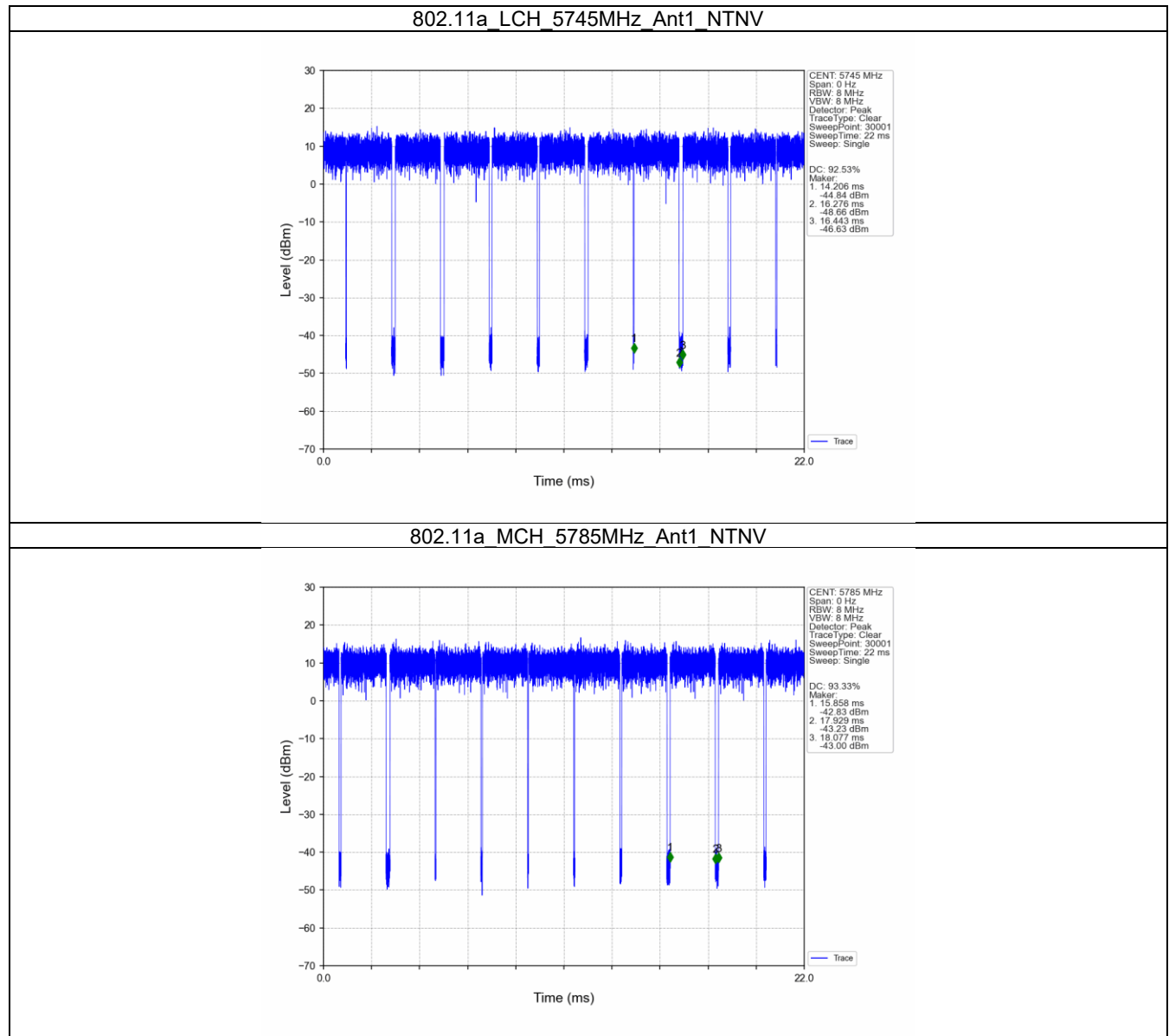
### 1.1 Test Result

#### 1.1.1 Ant1

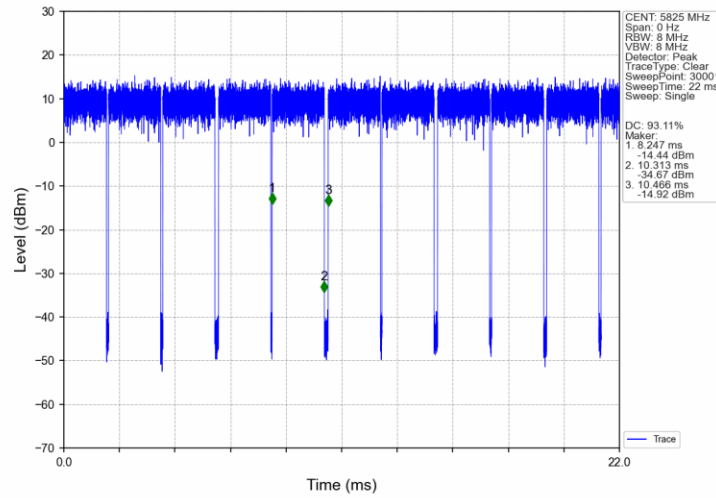
| Ant1             |         |                 |                      |             |                |                                   |                       |
|------------------|---------|-----------------|----------------------|-------------|----------------|-----------------------------------|-----------------------|
| Mode             | TX Type | Frequency (MHz) | T <sub>on</sub> (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11a          | SISO    | 5745            | 2.070                | 2.237       | 92.53          | 0.34                              | 5.94                  |
|                  |         | 5785            | 2.071                | 2.219       | 93.33          | 0.30                              | 5.21                  |
|                  |         | 5825            | 2.066                | 2.219       | 93.11          | 0.31                              | 4.35                  |
| 802.11n (HT20)   | SISO    | 5745            | 1.922                | 2.084       | 92.23          | 0.35                              | 5.94                  |
|                  |         | 5785            | 1.921                | 2.065       | 93.03          | 0.31                              | 4.25                  |
|                  |         | 5825            | 1.922                | 2.093       | 91.83          | 0.37                              | 5.42                  |
| 802.11n (HT40)   | SISO    | 5755            | 0.945                | 1.117       | 84.60          | 0.73                              | 9.05                  |
|                  |         | 5795            | 0.951                | 1.118       | 85.06          | 0.70                              | 11.73                 |
| 802.11ac (VHT20) | SISO    | 5745            | 1.921                | 2.075       | 92.58          | 0.33                              | 5.08                  |
|                  |         | 5785            | 1.921                | 2.056       | 93.43          | 0.29                              | 4.74                  |
|                  |         | 5825            | 1.921                | 2.084       | 92.18          | 0.35                              | 5.04                  |
| 802.11ac (VHT40) | SISO    | 5755            | 0.946                | 1.117       | 84.69          | 0.72                              | 10.75                 |
|                  |         | 5795            | 0.951                | 1.199       | 79.32          | 1.01                              | 17.57                 |
| 802.11ac (VHT80) | SISO    | 5775            | 1.921                | 2.084       | 92.18          | 0.35                              | 4.21                  |

## 1.2 Test Graph

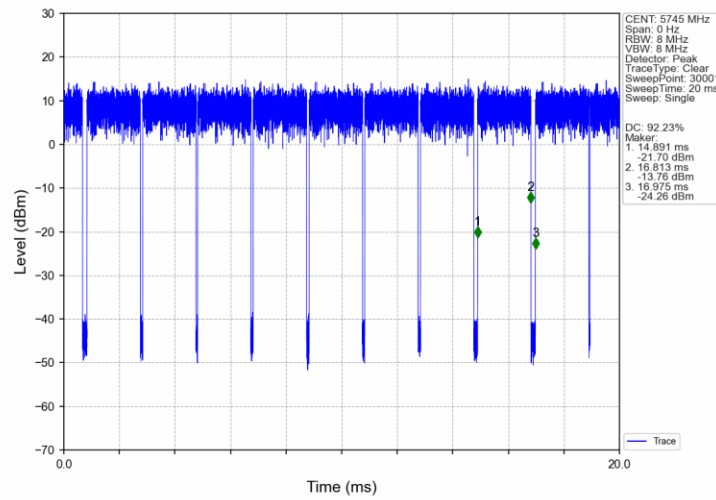
### 1.2.1 Ant1



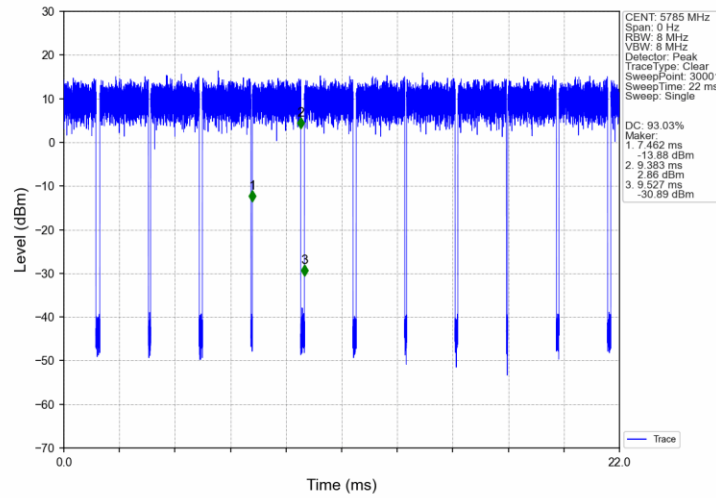
## 802.11a\_HCH\_5825MHz\_Ant1\_NTNV



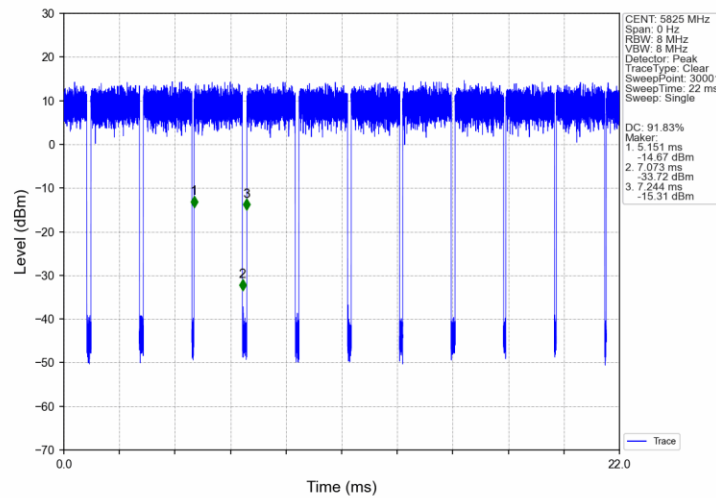
## 802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



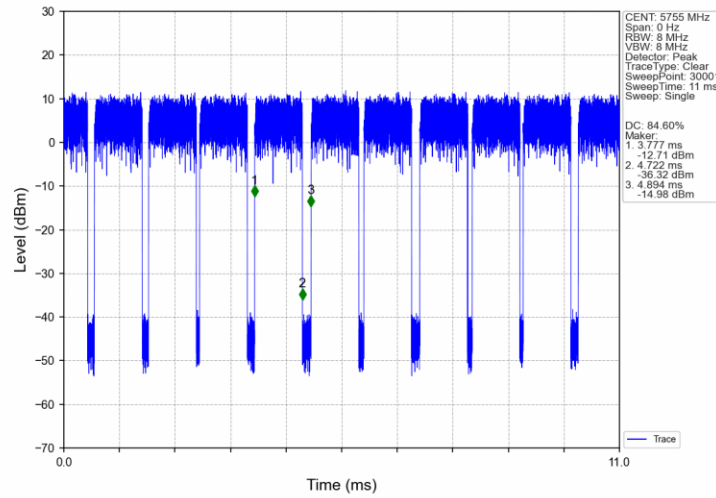
## 802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



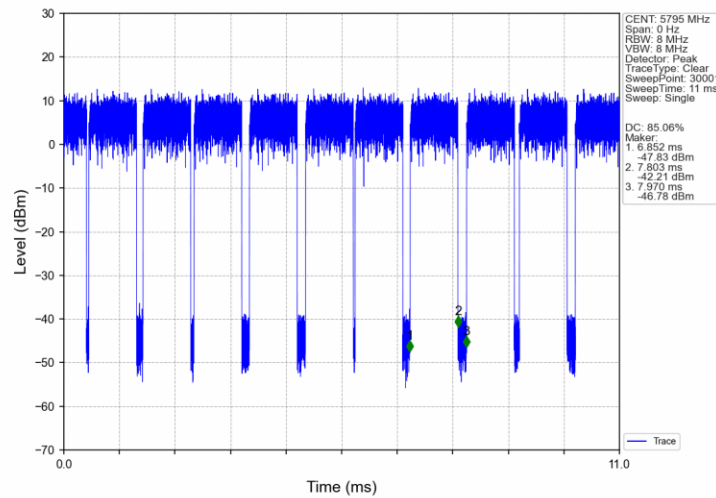
## 802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



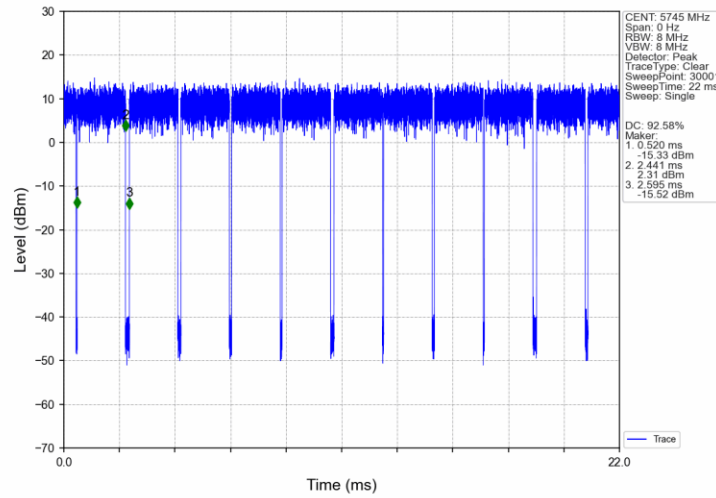
## 802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



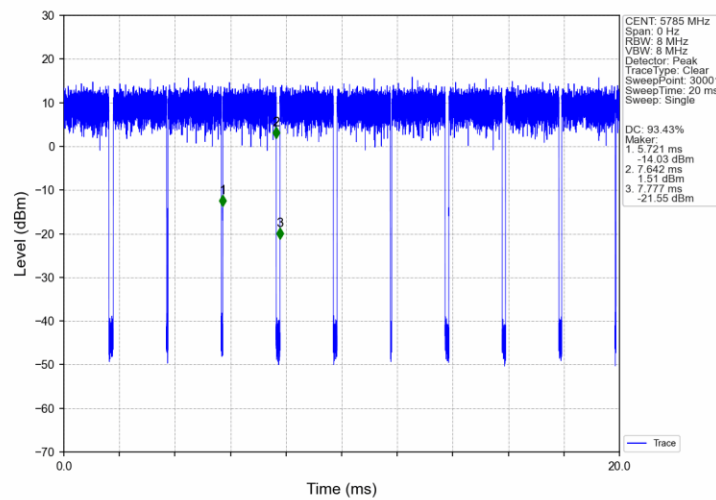
## 802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



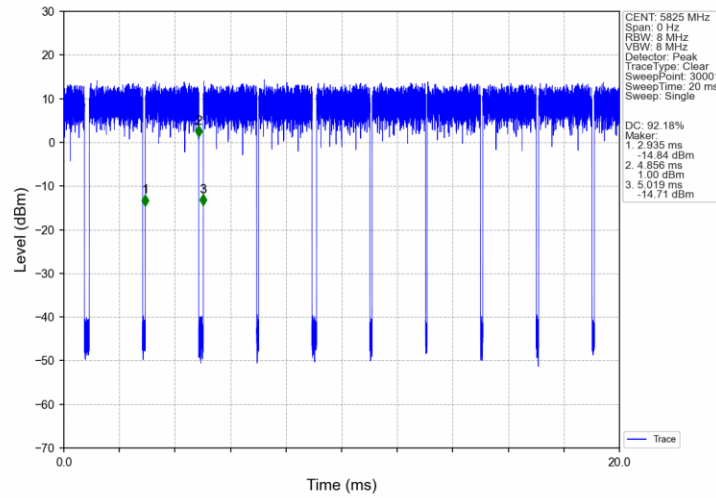
## 802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



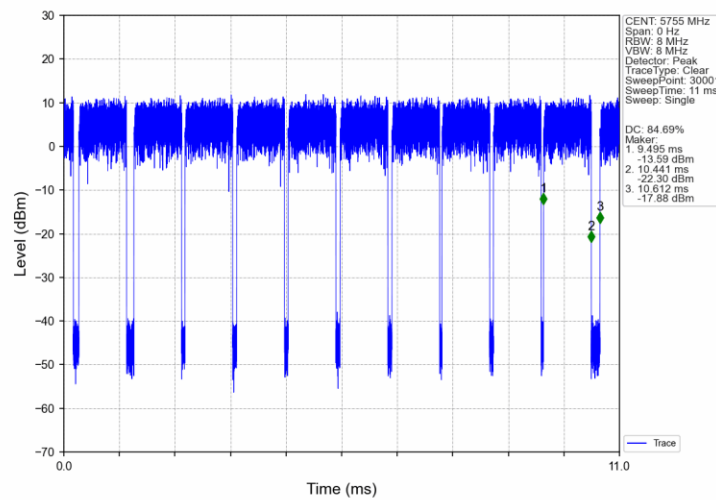
## 802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



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

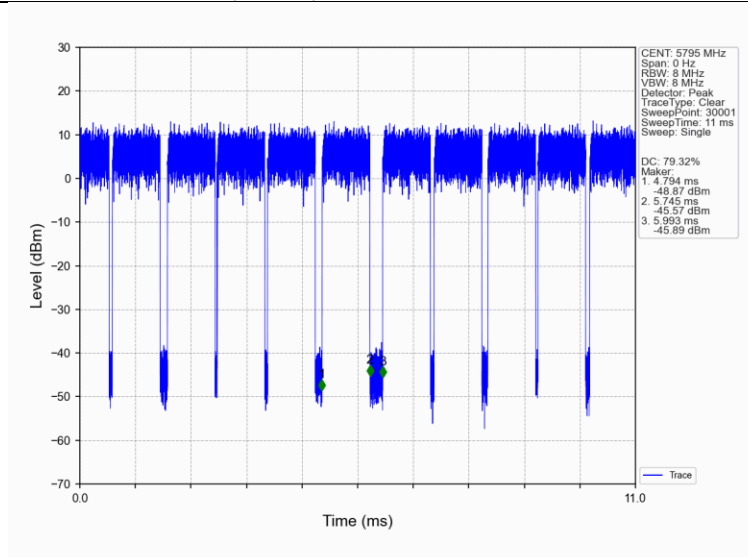


## 802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV

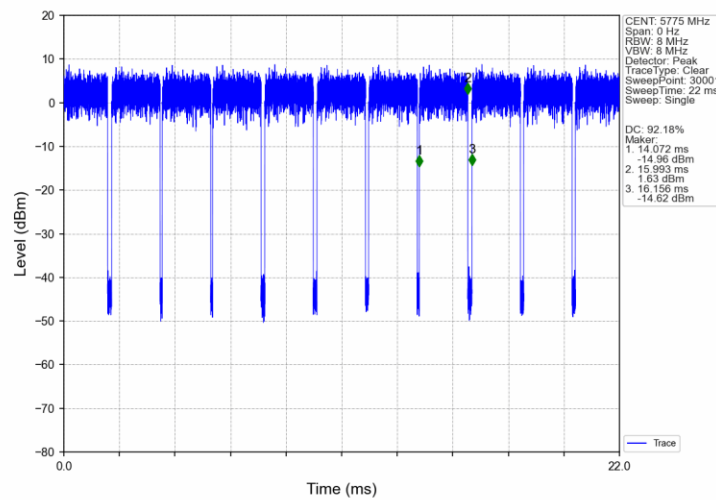




802.11ac(VHT40)\_HCH\_5795MHz\_Ant1\_NTNV



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



## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

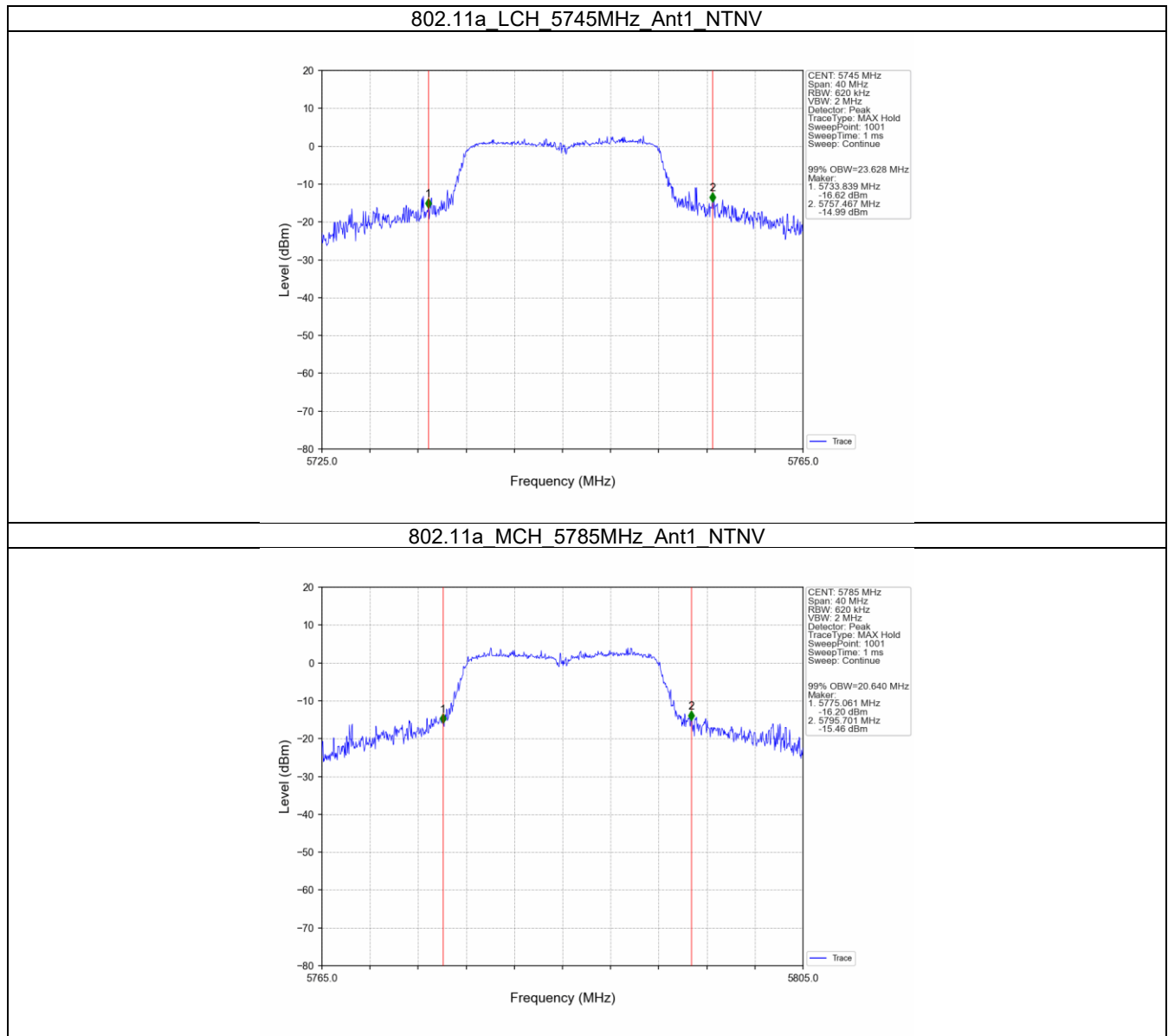
| Mode             | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------------------|---------|-----------------|-----|------------------------------|-------|---------|
|                  |         |                 |     | Result                       | Limit |         |
| 802.11a          | SISO    | 5745            | 1   | 23.628                       | /     | Pass    |
|                  |         | 5785            | 1   | 20.640                       | /     | Pass    |
|                  |         | 5825            | 1   | 18.740                       | /     | Pass    |
| 802.11n (HT20)   | SISO    | 5745            | 1   | 22.700                       | /     | Pass    |
|                  |         | 5785            | 1   | 20.496                       | /     | Pass    |
|                  |         | 5825            | 1   | 19.426                       | /     | Pass    |
| 802.11n (HT40)   | SISO    | 5755            | 1   | 43.607                       | /     | Pass    |
|                  |         | 5795            | 1   | 38.855                       | /     | Pass    |
| 802.11ac (VHT20) | SISO    | 5745            | 1   | 22.724                       | /     | Pass    |
|                  |         | 5785            | 1   | 20.155                       | /     | Pass    |
|                  |         | 5825            | 1   | 19.334                       | /     | Pass    |
| 802.11ac (VHT40) | SISO    | 5755            | 1   | 40.739                       | /     | Pass    |
|                  |         | 5795            | 1   | 38.588                       | /     | Pass    |
| 802.11ac (VHT80) | SISO    | 5775            | 1   | 91.638                       | /     | Pass    |

#### 2.1.2 6dB BW

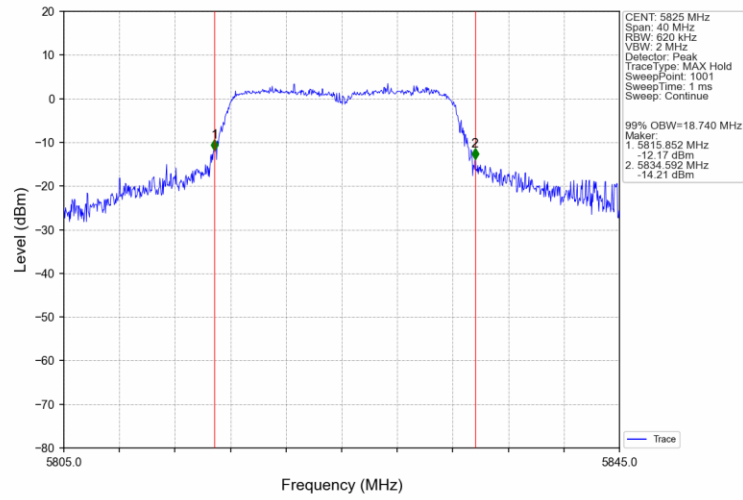
| Mode             | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|------------------|---------|-----------------|-----|---------------------|------------|---------|
|                  |         |                 |     | Result              | Limit      |         |
| 802.11a          | SISO    | 5745            | 1   | 16.080              | $\geq 0.5$ | Pass    |
|                  |         | 5785            | 1   | 16.377              | $\geq 0.5$ | Pass    |
|                  |         | 5825            | 1   | 16.342              | $\geq 0.5$ | Pass    |
| 802.11n (HT20)   | SISO    | 5745            | 1   | 17.531              | $\geq 0.5$ | Pass    |
|                  |         | 5785            | 1   | 16.324              | $\geq 0.5$ | Pass    |
|                  |         | 5825            | 1   | 16.084              | $\geq 0.5$ | Pass    |
| 802.11n (HT40)   | SISO    | 5755            | 1   | 33.858              | $\geq 0.5$ | Pass    |
|                  |         | 5795            | 1   | 35.374              | $\geq 0.5$ | Pass    |
| 802.11ac (VHT20) | SISO    | 5745            | 1   | 17.151              | $\geq 0.5$ | Pass    |
|                  |         | 5785            | 1   | 16.898              | $\geq 0.5$ | Pass    |
|                  |         | 5825            | 1   | 16.874              | $\geq 0.5$ | Pass    |
| 802.11ac (VHT40) | SISO    | 5755            | 1   | 35.162              | $\geq 0.5$ | Pass    |
|                  |         | 5795            | 1   | 35.116              | $\geq 0.5$ | Pass    |
| 802.11ac (VHT80) | SISO    | 5775            | 1   | 73.809              | $\geq 0.5$ | Pass    |

## 2.2 Test Graph

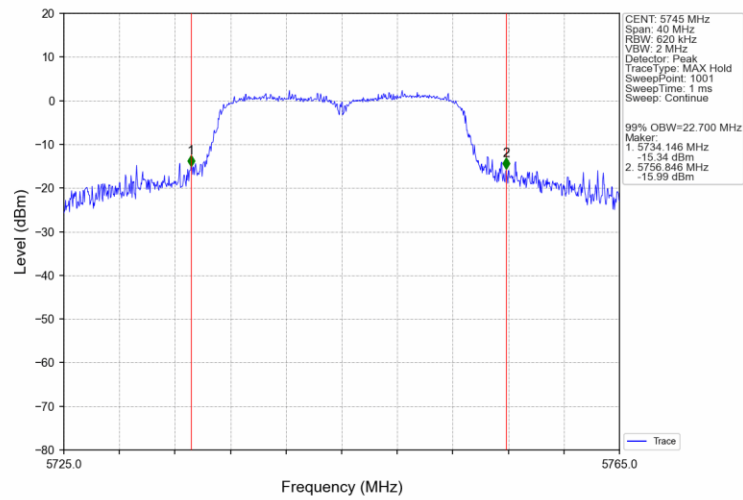
### 2.2.1 OBW



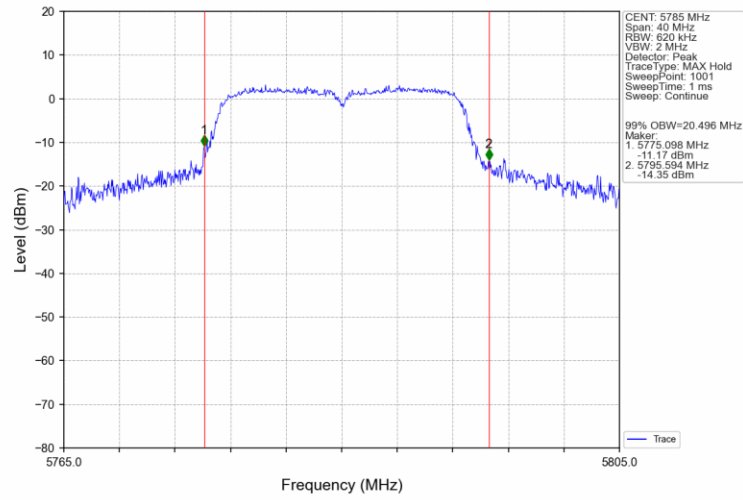
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



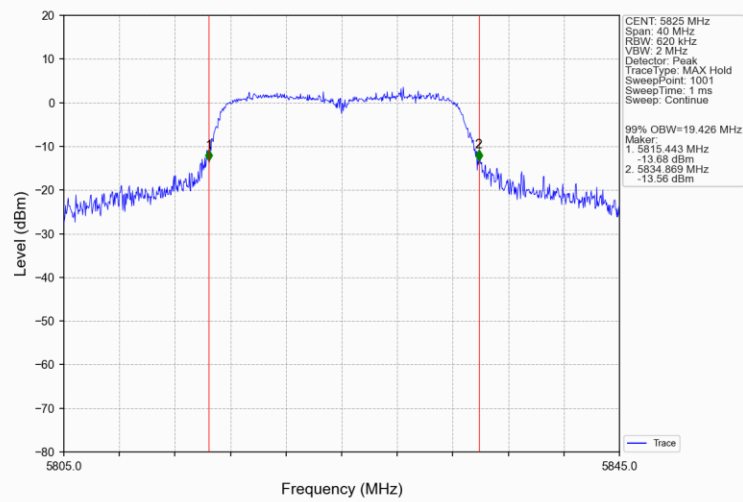
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



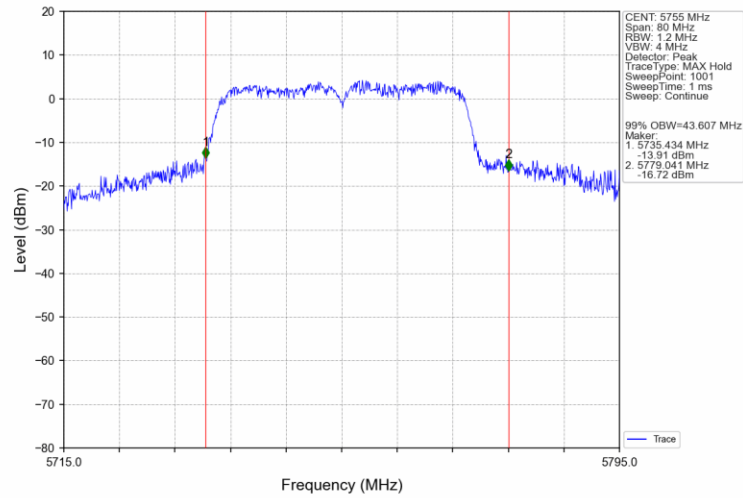
802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



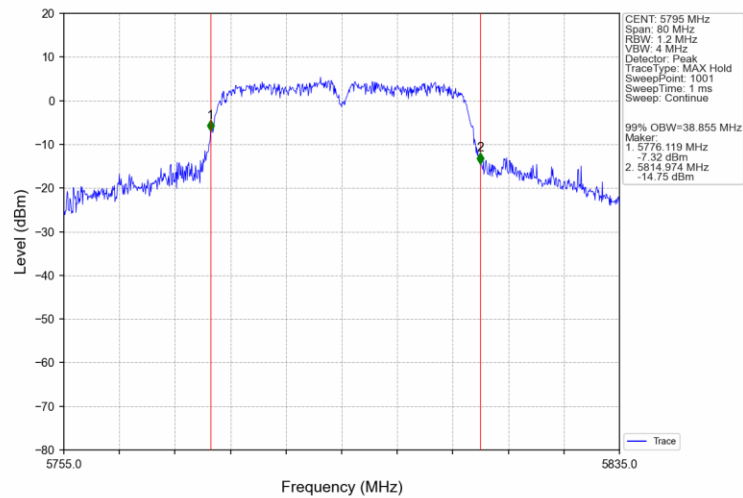
802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



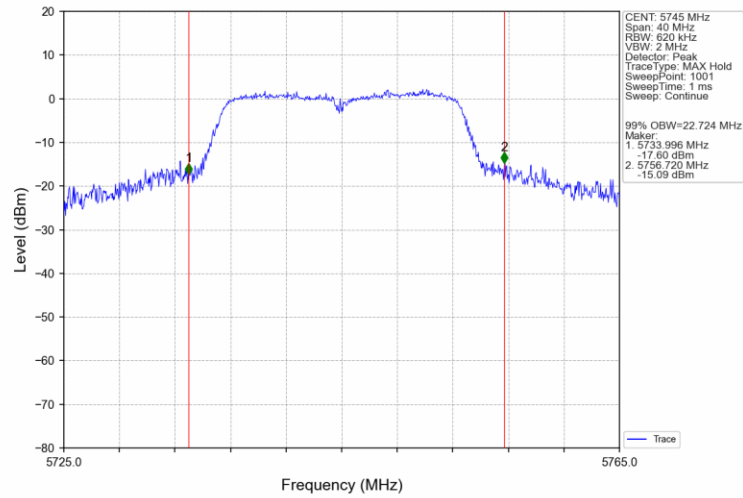
802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



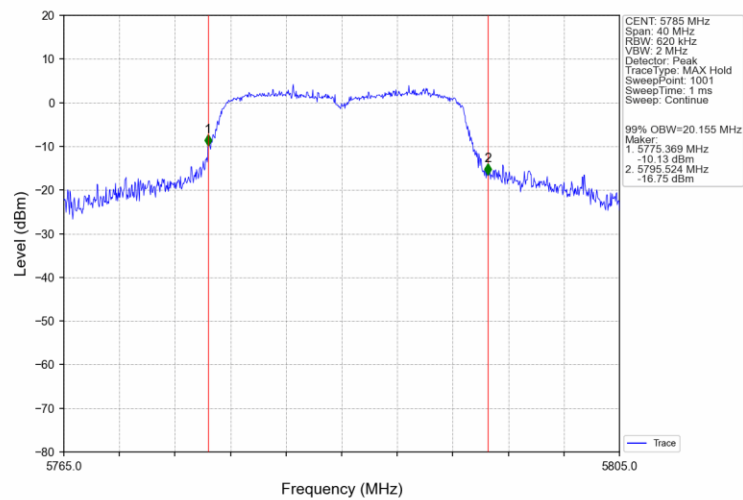
802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



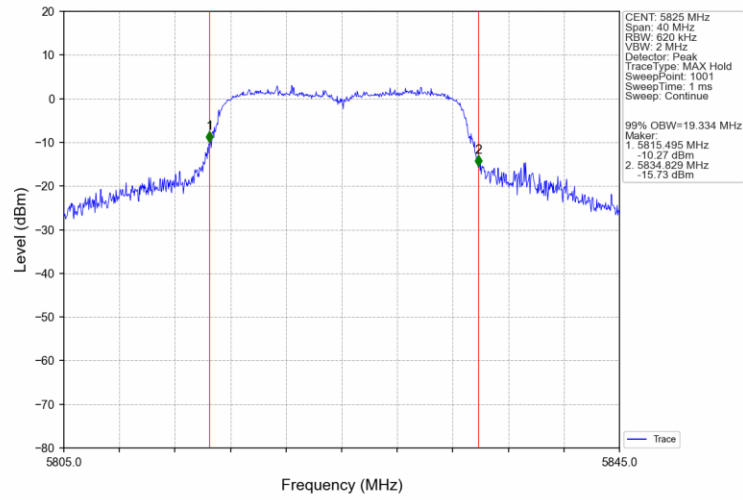
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



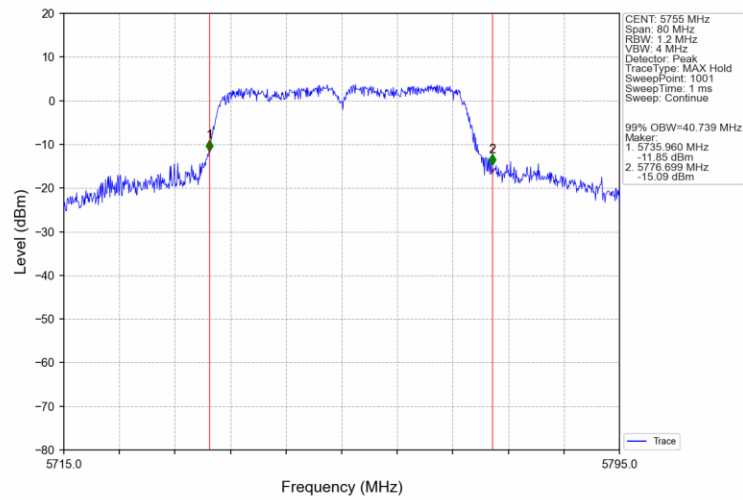
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



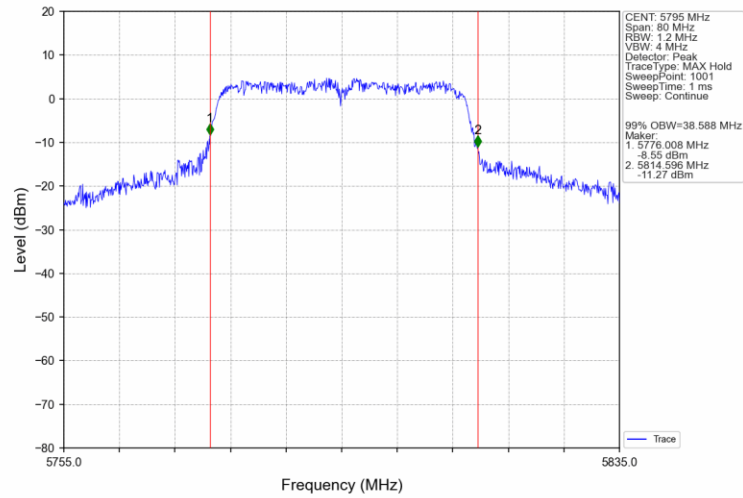
## 802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



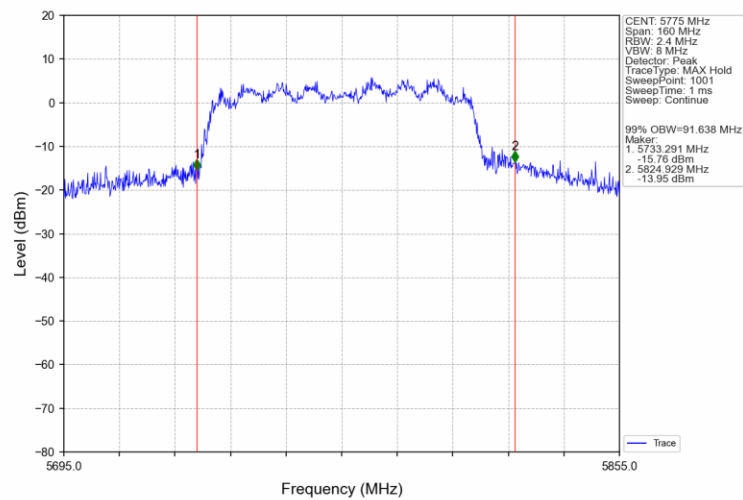
## 802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



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

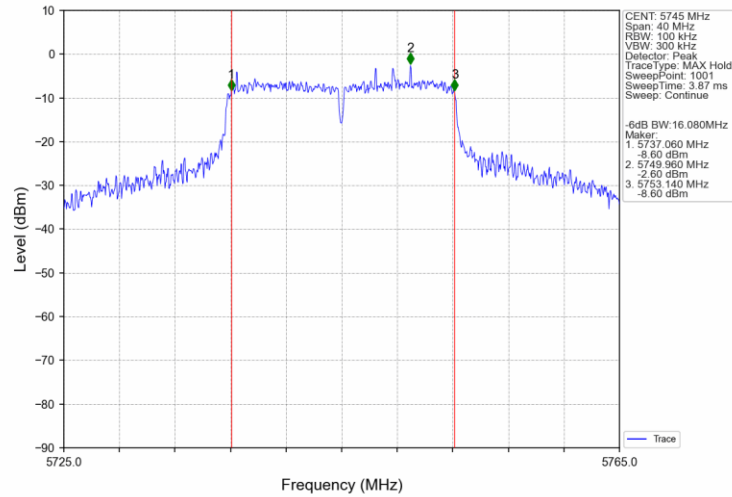


## 802.11ac(VHT80)\_MCH\_5775MHz\_Ant1\_NTNV

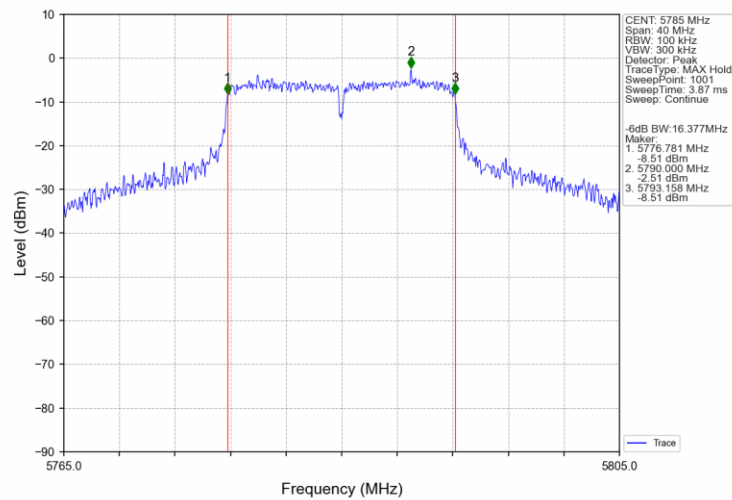


## 2.2.2 6dB BW

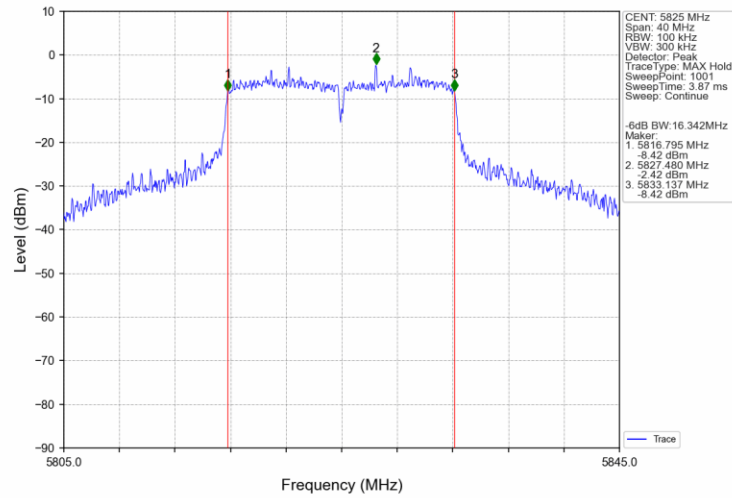
802.11a\_LCH\_5745MHz\_Ant1\_NTNV



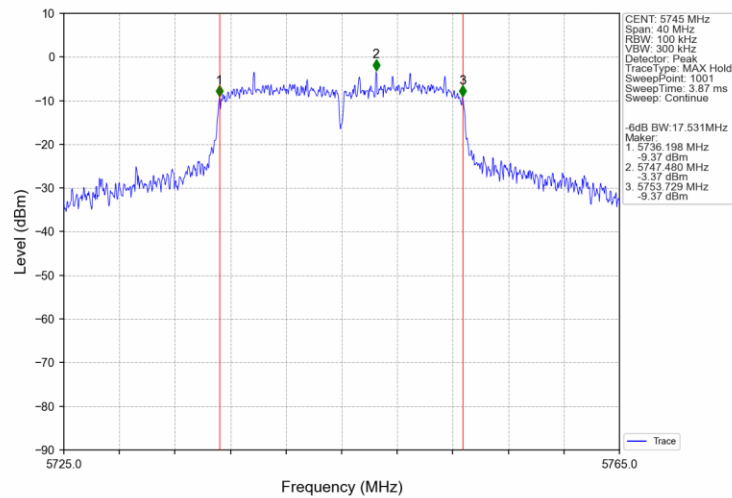
802.11a\_MCH\_5785MHz\_Ant1\_NTNV



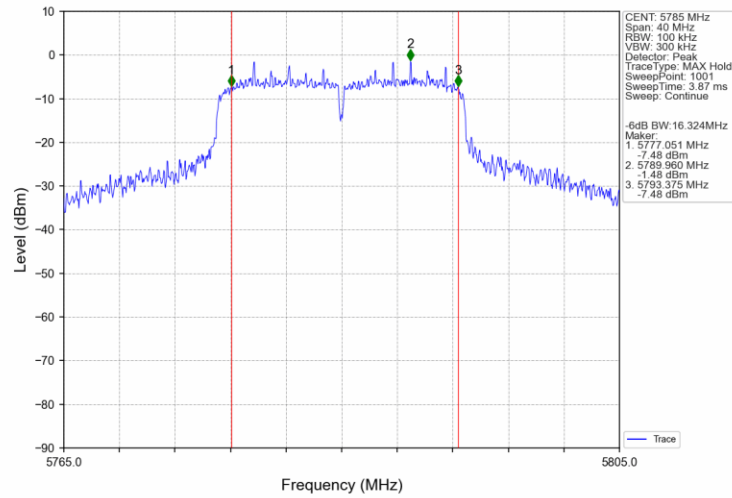
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



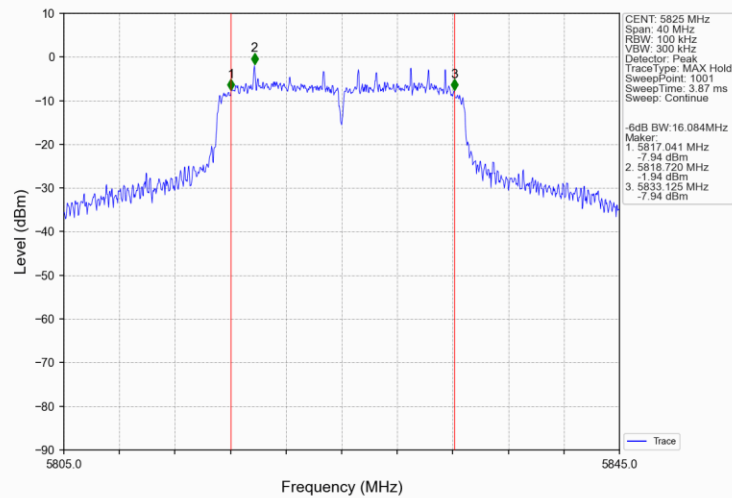
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



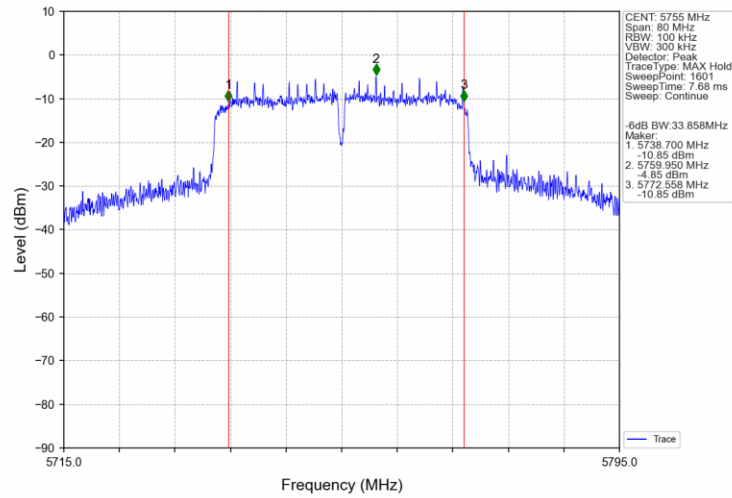
## 802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



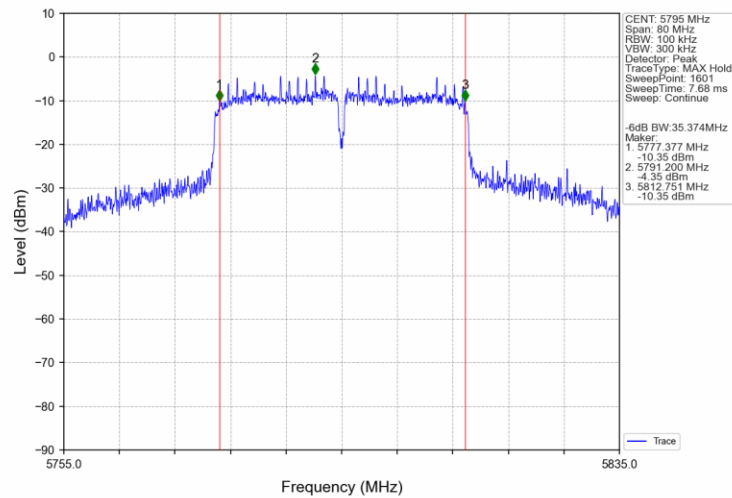
## 802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



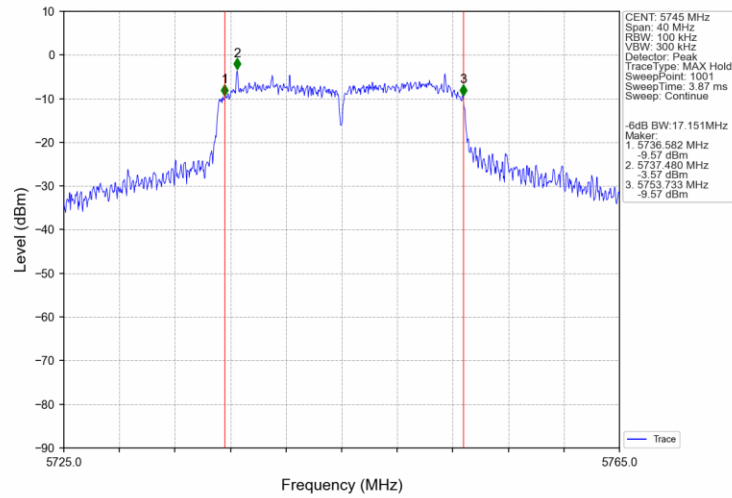
## 802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



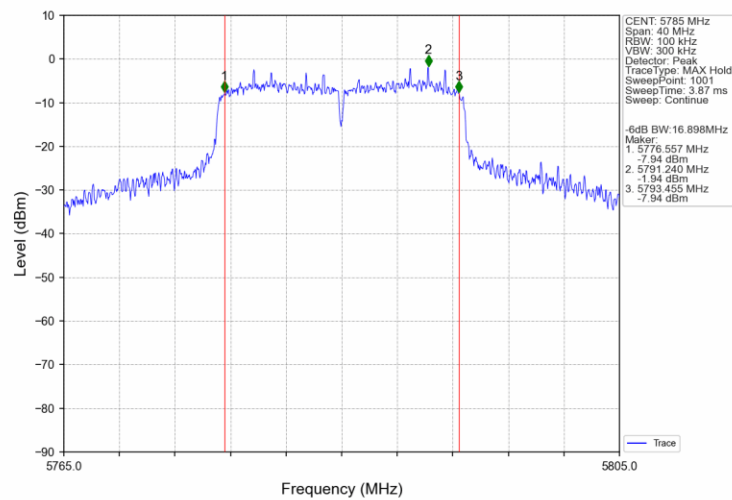
## 802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



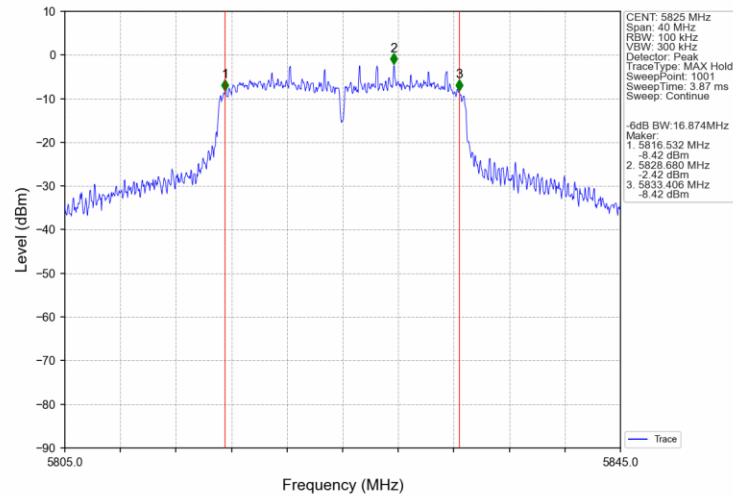
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



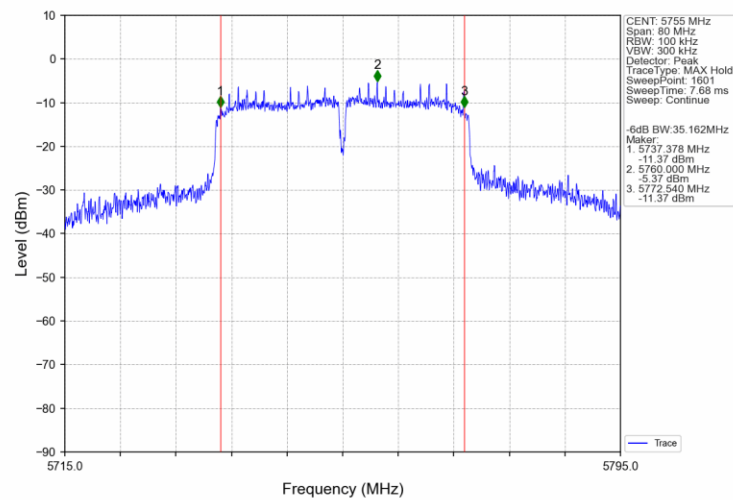
802.11ac(VHT20) MCH 5785MHz\_Ant1\_NTNV



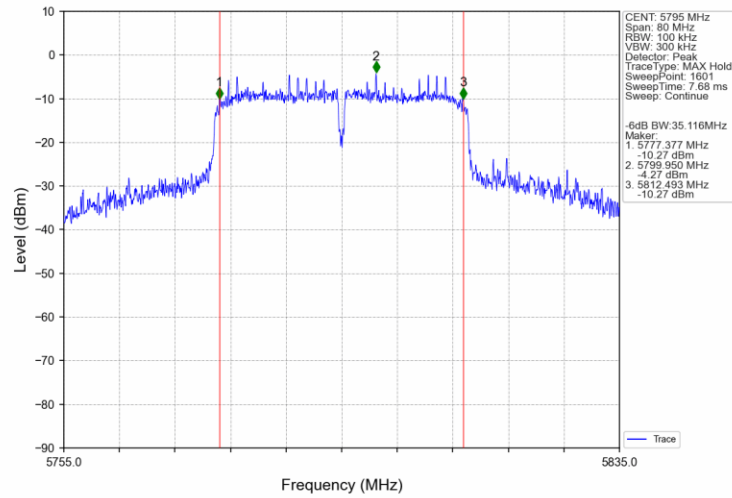
## 802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



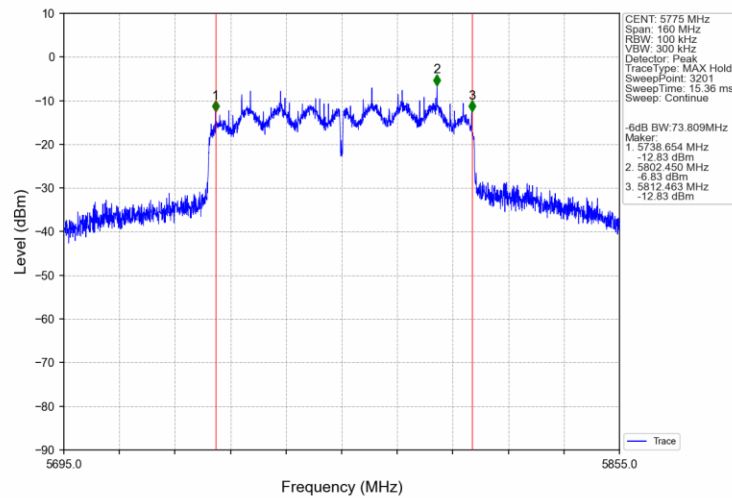
## 802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



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



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



### 3. Maximum Conducted Output Power

#### 3.1 Test Result

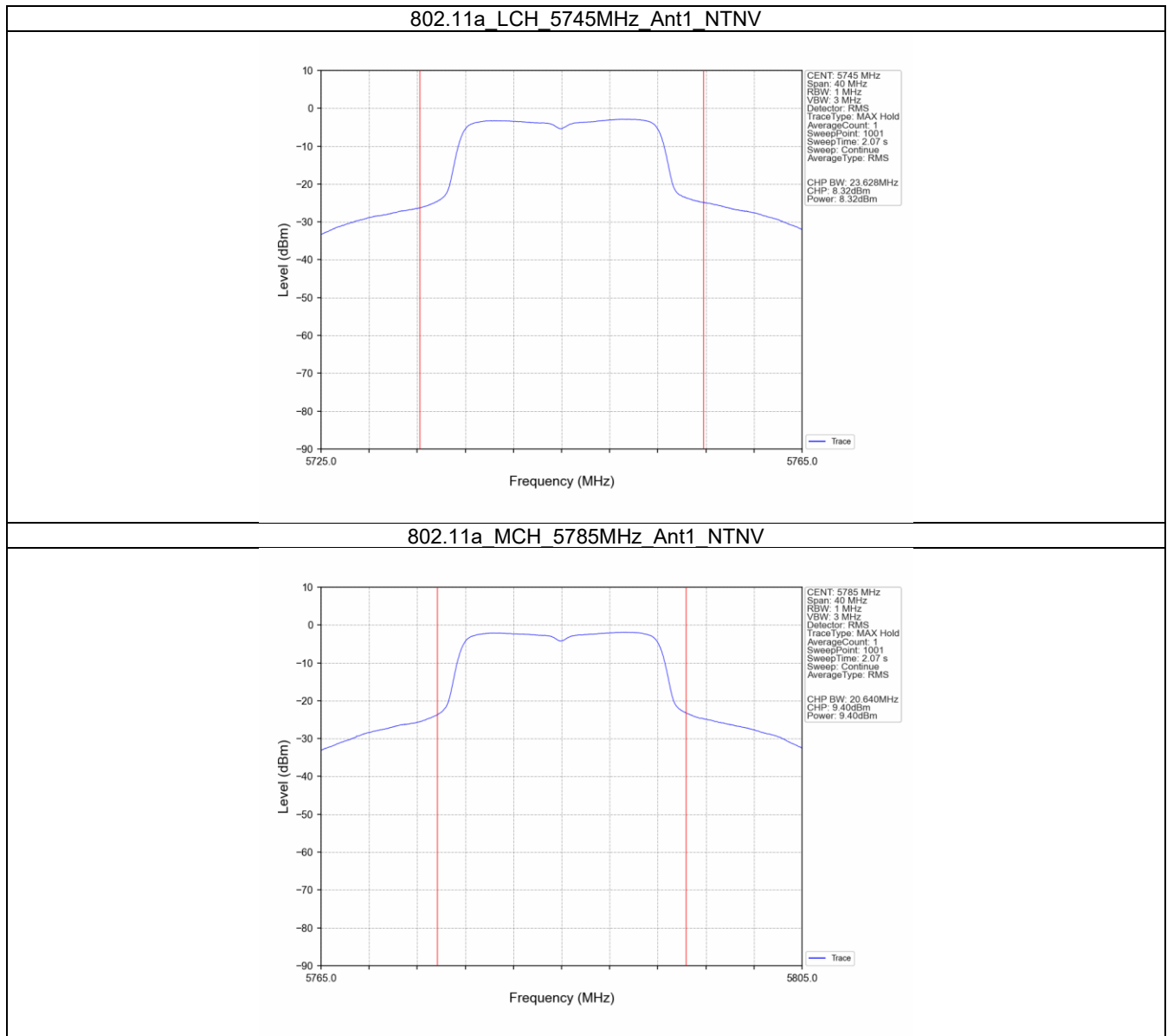
##### 3.1.1 Power

| Mode             | TX Type | Frequency (MHz) | Maximum Average Conducted Output Power (dBm) |       | Verdict |
|------------------|---------|-----------------|----------------------------------------------|-------|---------|
|                  |         |                 | ANT1                                         | Limit |         |
| 802.11a          | SISO    | 5745            | 8.32                                         | <=30  | Pass    |
|                  |         | 5785            | 9.40                                         | <=30  | Pass    |
|                  |         | 5825            | 8.81                                         | <=30  | Pass    |
| 802.11n (HT20)   | SISO    | 5745            | 8.23                                         | <=30  | Pass    |
|                  |         | 5785            | 9.29                                         | <=30  | Pass    |
|                  |         | 5825            | 8.72                                         | <=30  | Pass    |
| 802.11n (HT40)   | SISO    | 5755            | 8.71                                         | <=30  | Pass    |
|                  |         | 5795            | 9.47                                         | <=30  | Pass    |
| 802.11ac (VHT20) | SISO    | 5745            | 8.21                                         | <=30  | Pass    |
|                  |         | 5785            | 9.30                                         | <=30  | Pass    |
|                  |         | 5825            | 8.68                                         | <=30  | Pass    |
| 802.11ac (VHT40) | SISO    | 5755            | 8.67                                         | <=30  | Pass    |
|                  |         | 5795            | 9.43                                         | <=30  | Pass    |
| 802.11ac (VHT80) | SISO    | 5775            | 8.71                                         | <=30  | Pass    |

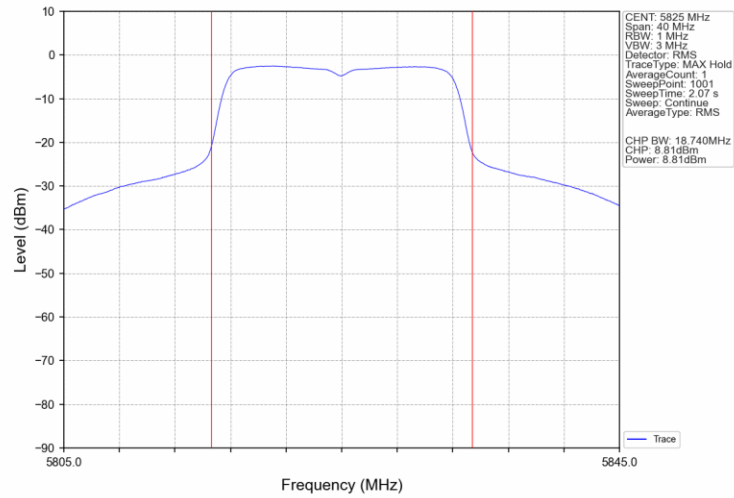
Note1: Antenna Gain: Ant1: 3.88dBi;

## 3.2 Test Graph

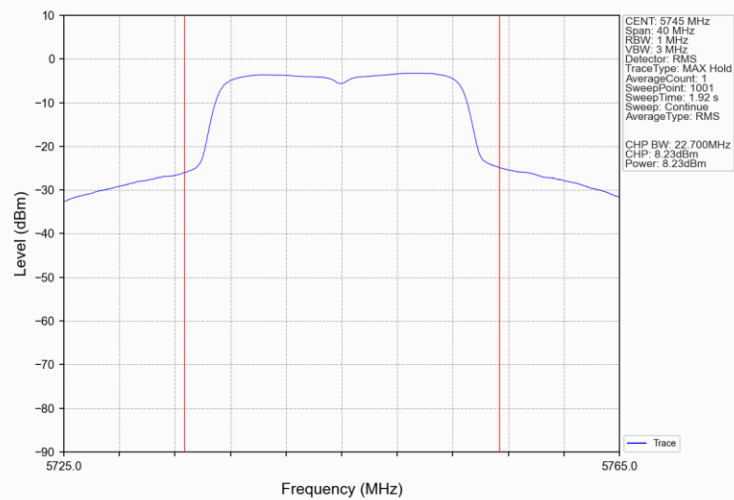
### 3.2.1 Power



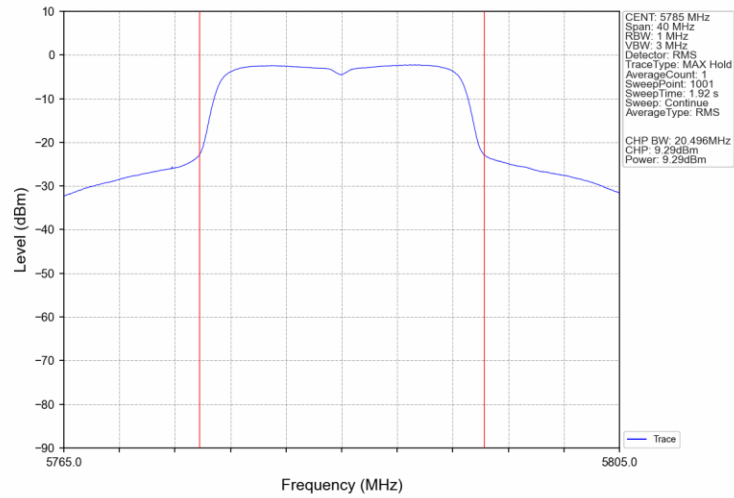
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



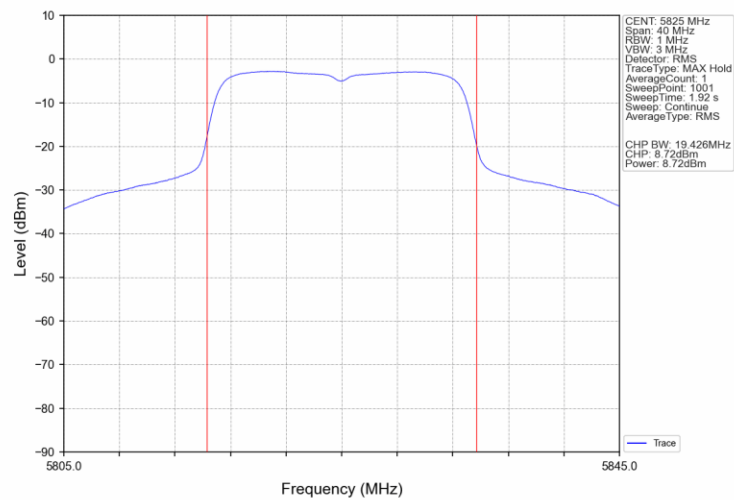
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



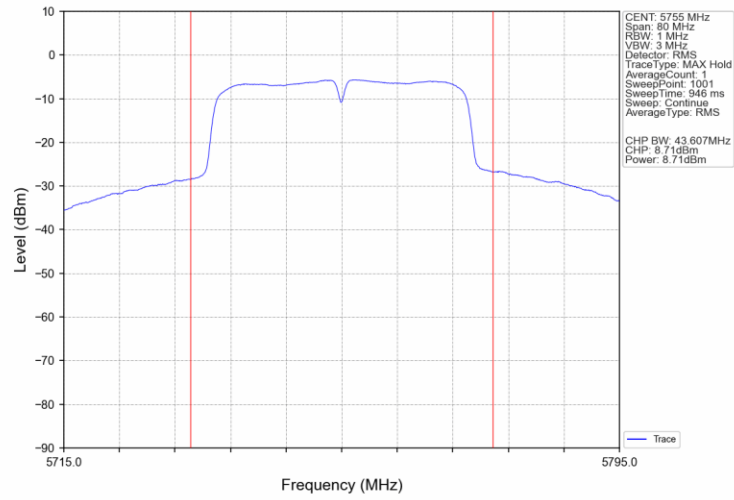
## 802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



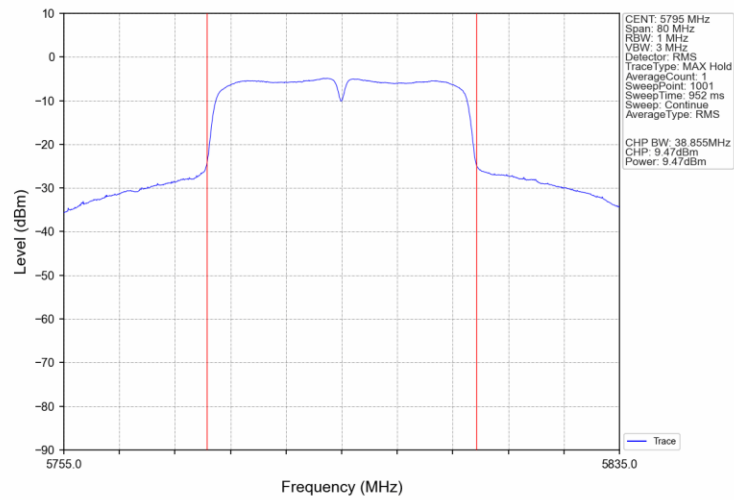
## 802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



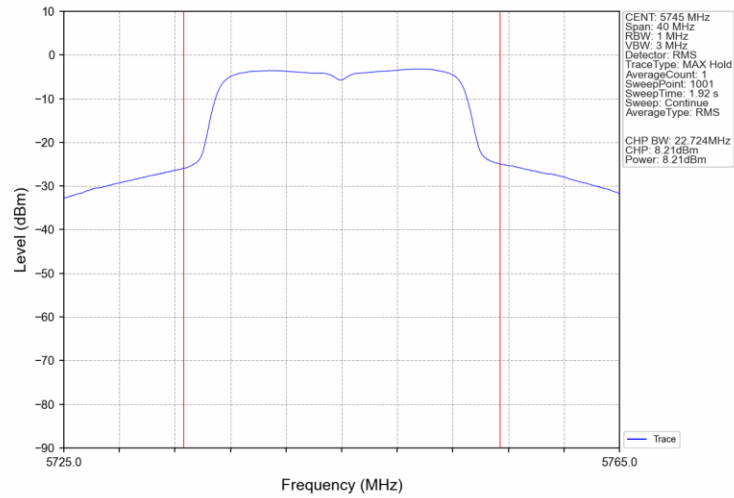
## 802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



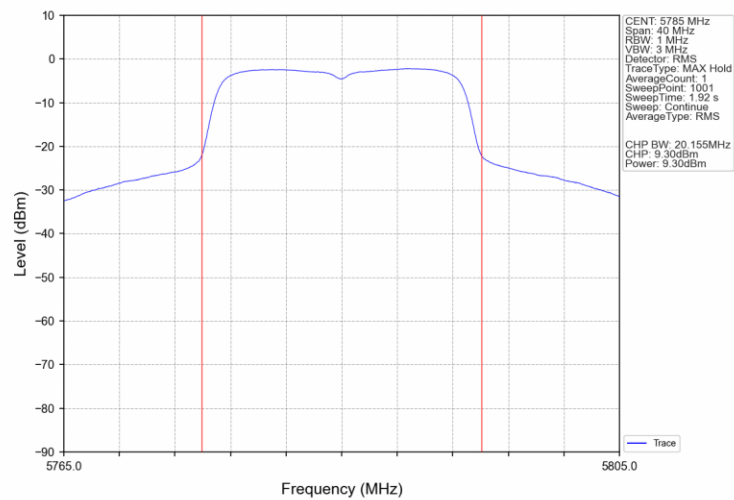
## 802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



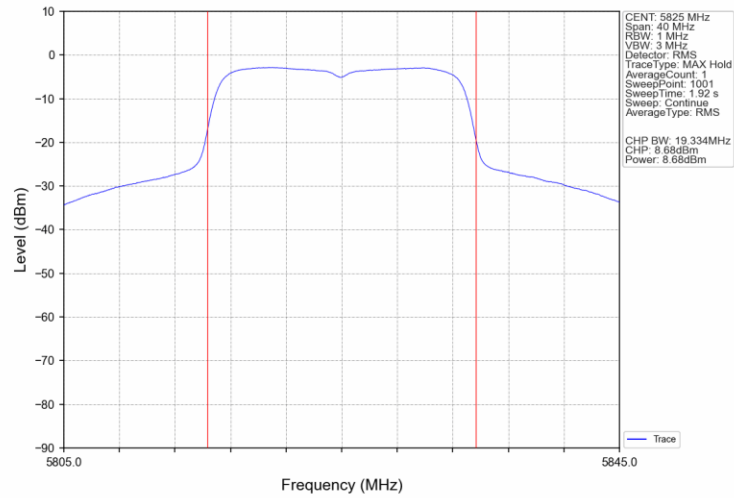
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



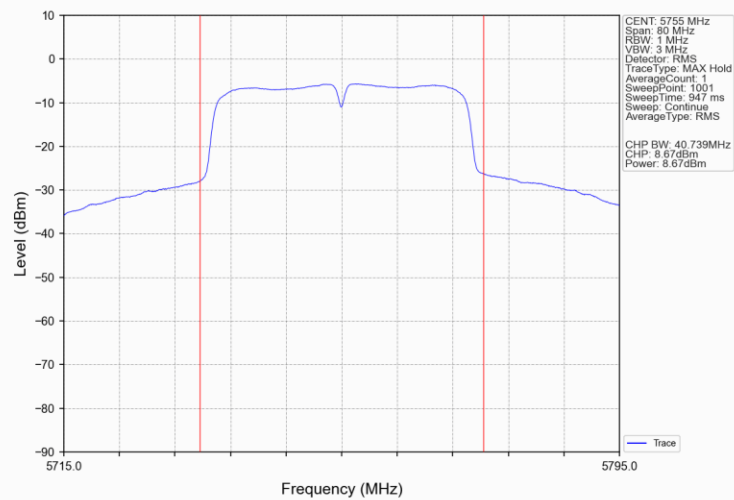
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



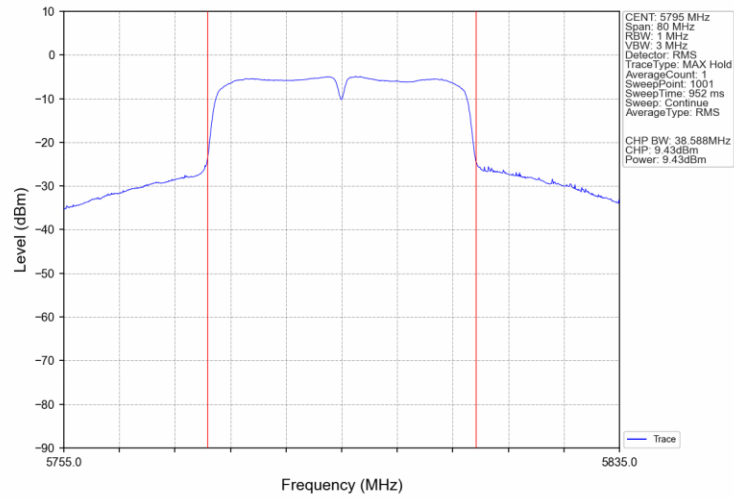
802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



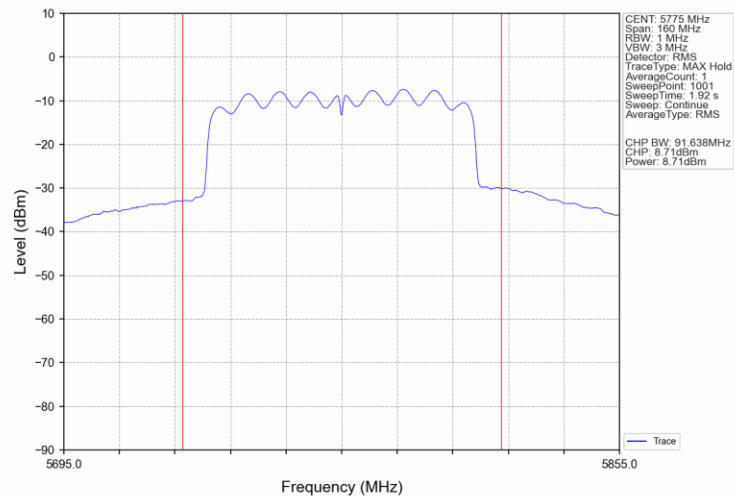
802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



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



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



## 4. Maximum Power Spectral Density

### 4.1 Test Result

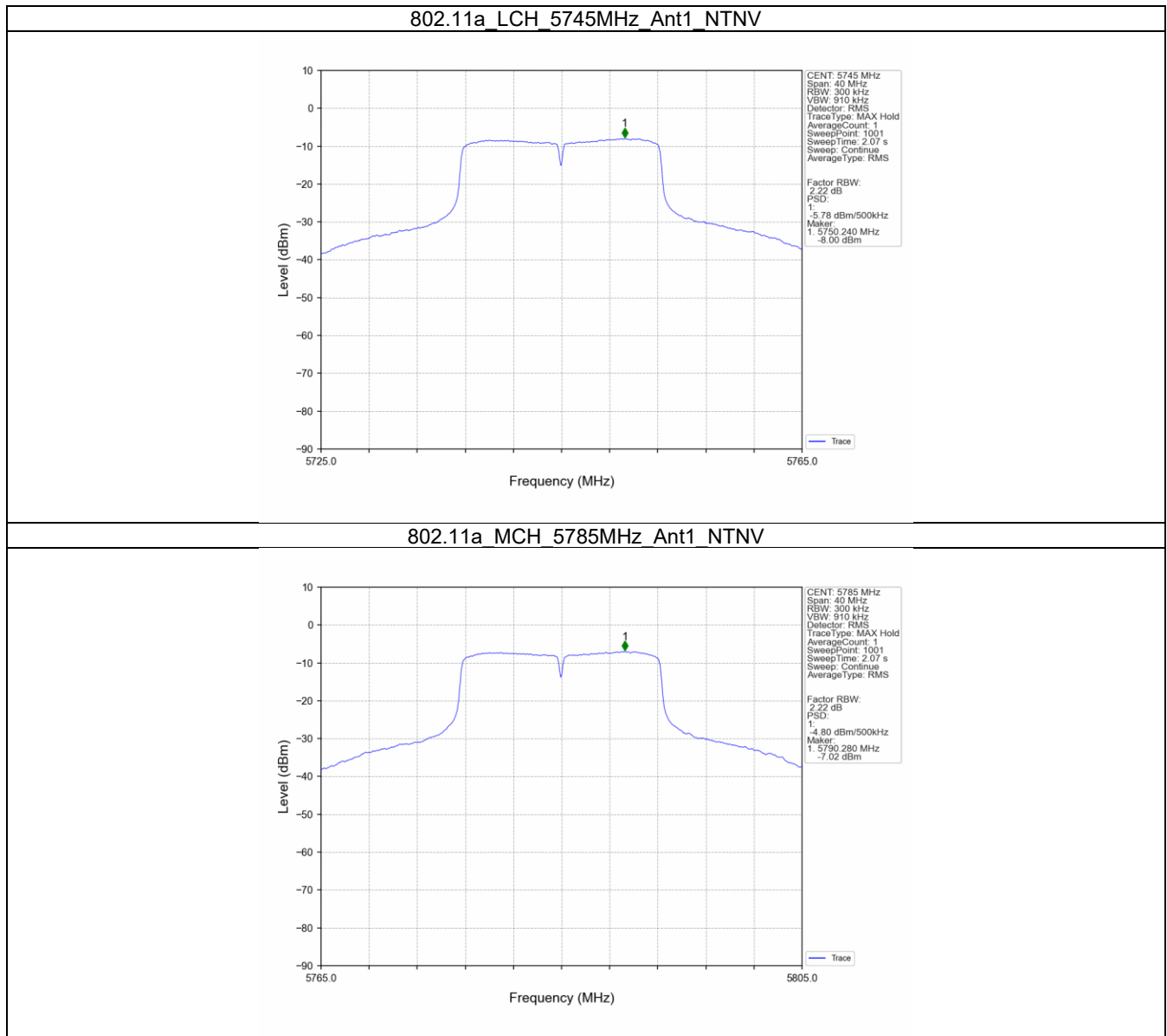
#### 4.1.1 PSD-Band3

| Mode             | TX Type | Frequency (MHz) | Maximum PSD (dBm/500kHz) |       | Verdict |
|------------------|---------|-----------------|--------------------------|-------|---------|
|                  |         |                 | ANT1                     | Limit |         |
| 802.11a          | SISO    | 5745            | -5.78                    | <=30  | Pass    |
|                  |         | 5785            | -4.80                    | <=30  | Pass    |
|                  |         | 5825            | -5.45                    | <=30  | Pass    |
| 802.11n (HT20)   | SISO    | 5745            | -6.17                    | <=30  | Pass    |
|                  |         | 5785            | -5.15                    | <=30  | Pass    |
|                  |         | 5825            | -5.73                    | <=30  | Pass    |
| 802.11n (HT40)   | SISO    | 5755            | -8.55                    | <=30  | Pass    |
|                  |         | 5795            | -7.73                    | <=30  | Pass    |
| 802.11ac (VHT20) | SISO    | 5745            | -6.02                    | <=30  | Pass    |
|                  |         | 5785            | -5.14                    | <=30  | Pass    |
|                  |         | 5825            | -5.70                    | <=30  | Pass    |
| 802.11ac (VHT40) | SISO    | 5755            | -8.42                    | <=30  | Pass    |
|                  |         | 5795            | -7.80                    | <=30  | Pass    |
| 802.11ac (VHT80) | SISO    | 5775            | -10.29                   | <=30  | Pass    |

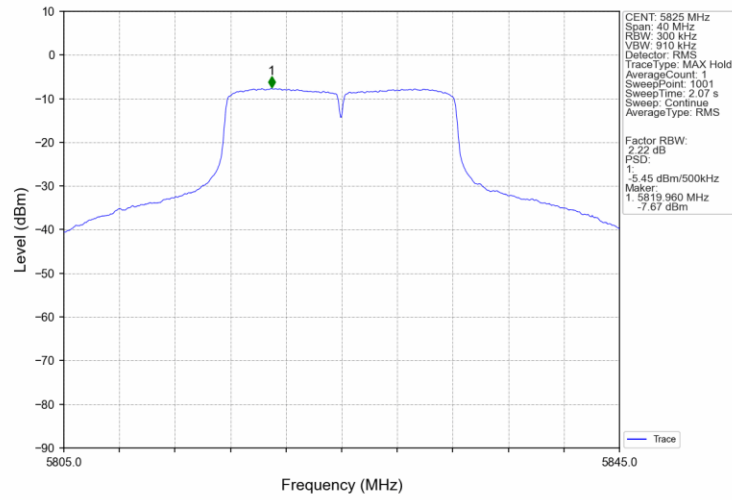
Note1: Antenna Gain: Ant1: 3.88dBi;

## 4.2 Test Graph

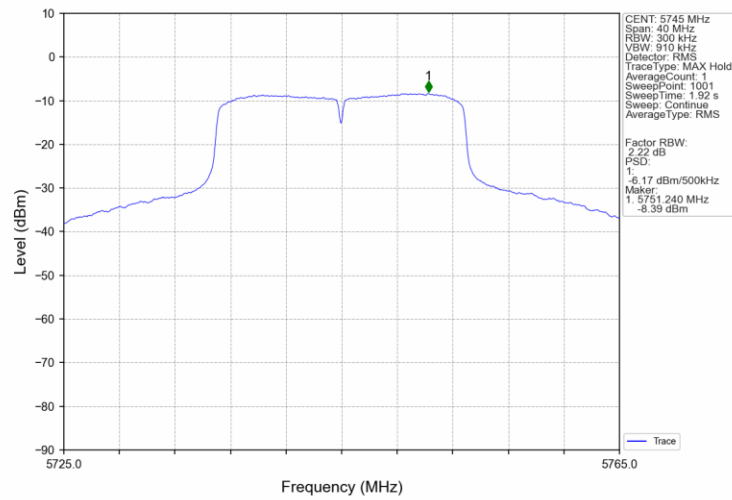
### 4.2.1 PSD-Band3



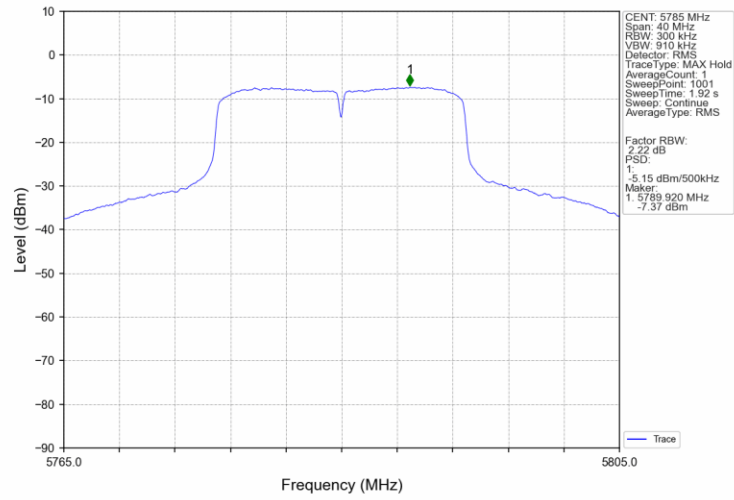
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



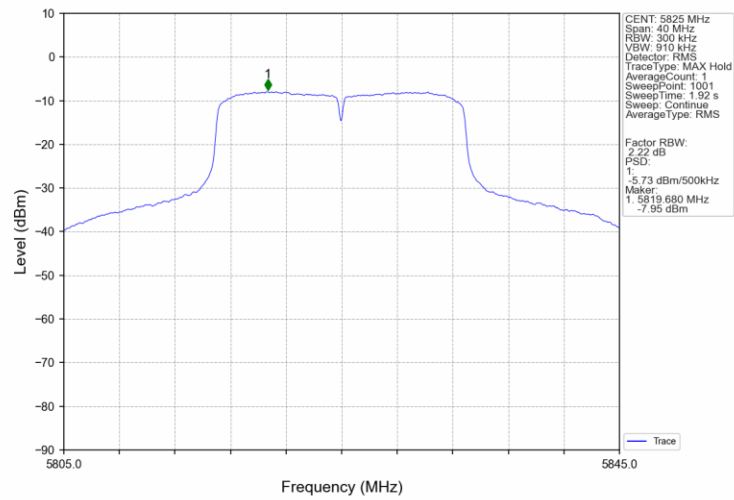
802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



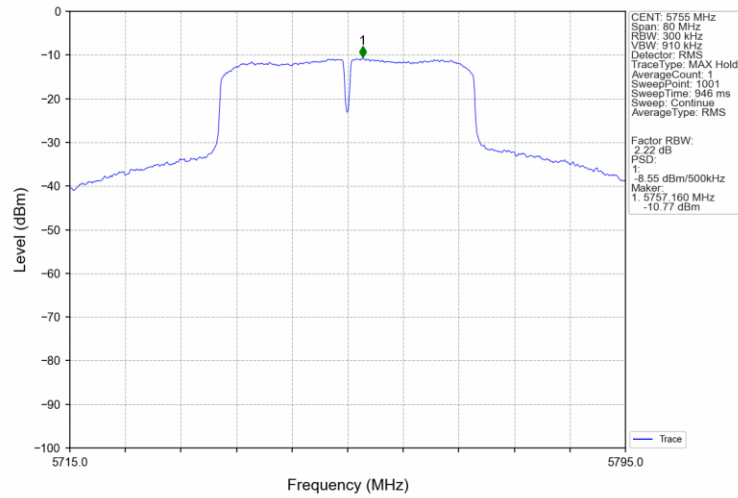
## 802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV



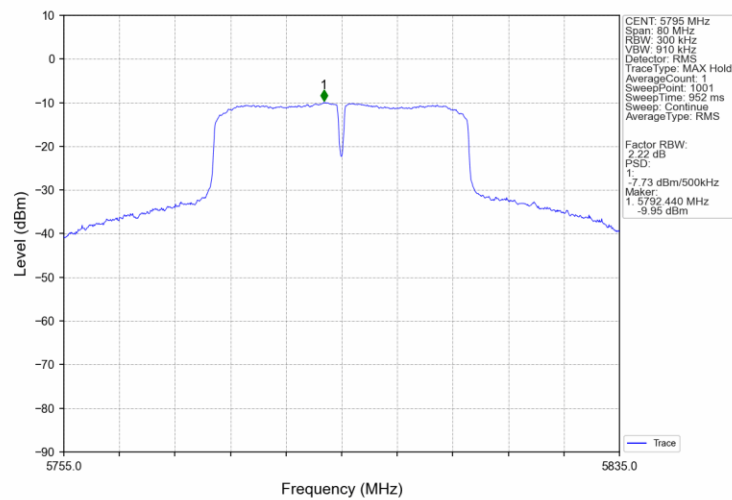
## 802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



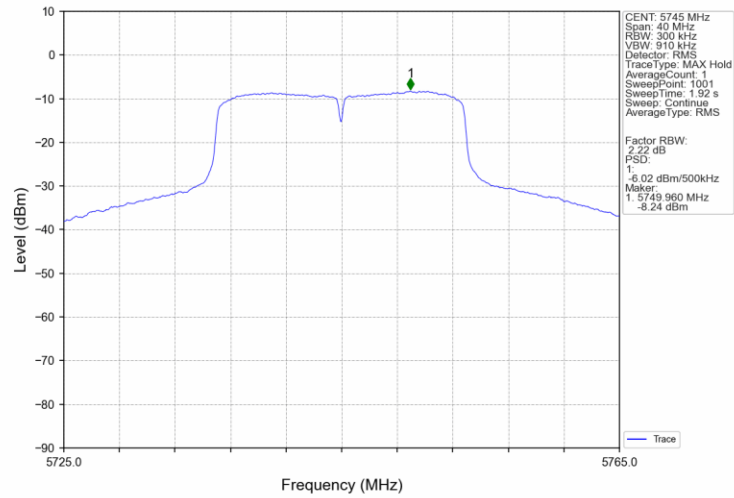
## 802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



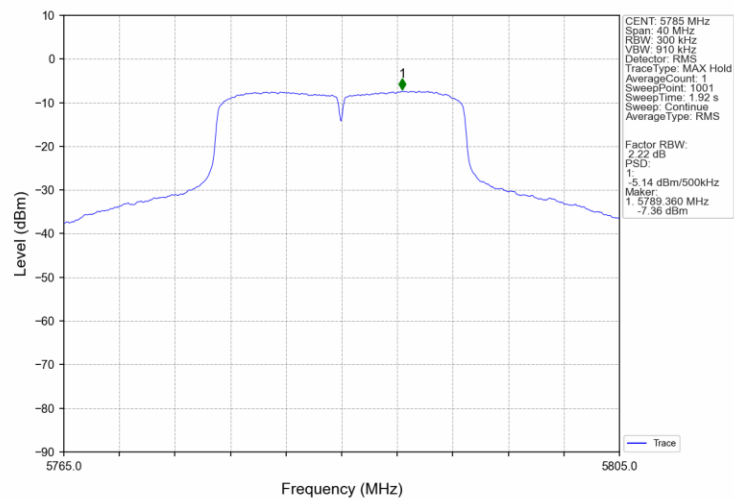
## 802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



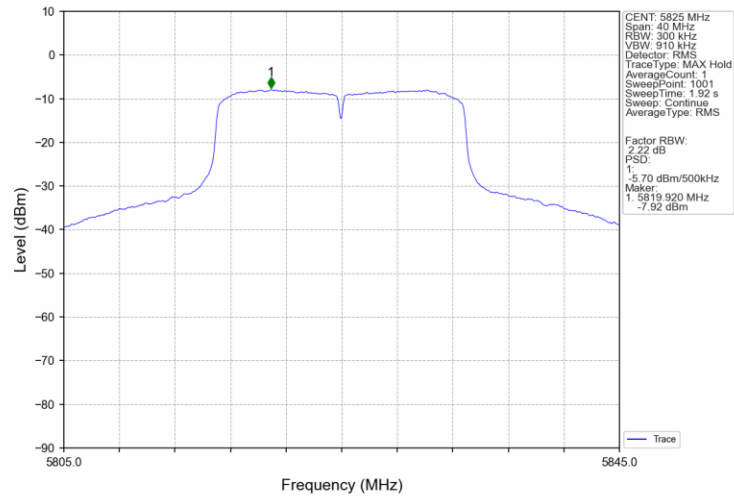
802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV



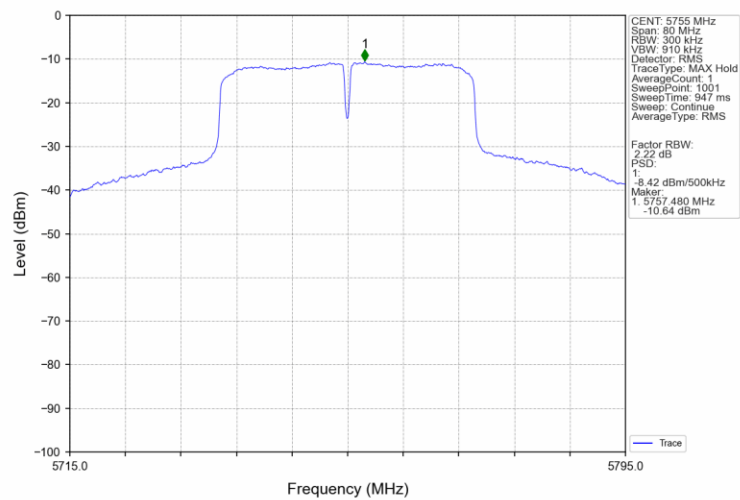
802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV



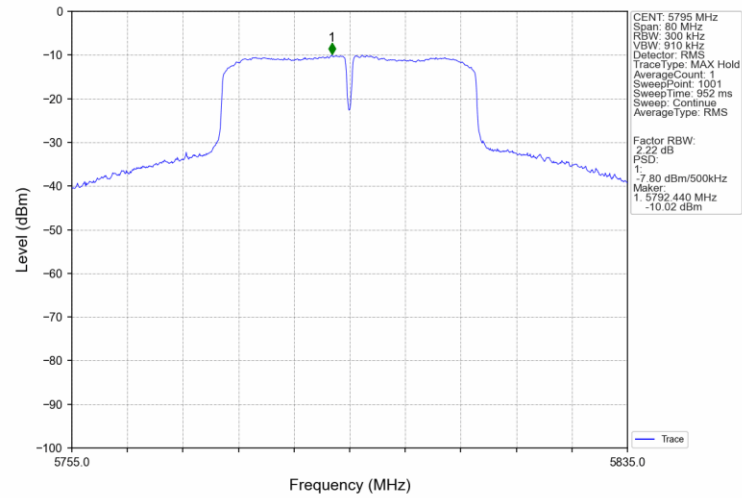
## 802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



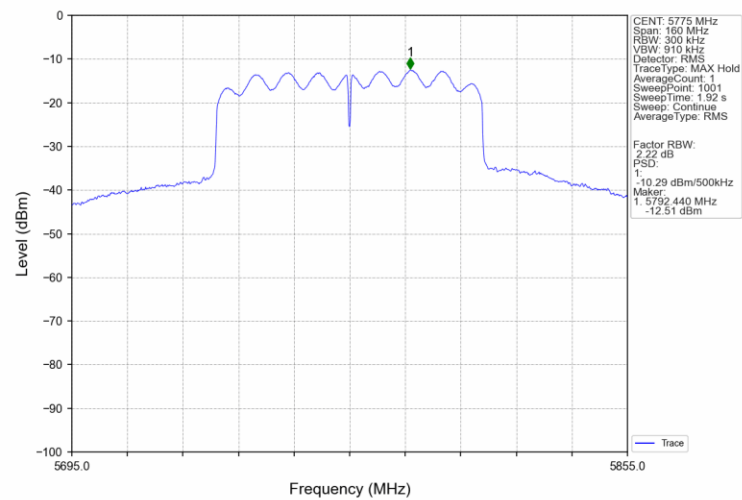
## 802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



## 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 |
| Carrier Wave | SISO    | 5745            | 20               | 102           | 5744.989                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 120           | 5744.989                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 138           | 5744.989                 | 5725 to 5850 | Pass    |
|              |         |                 | -30              | 120           | 5744.989                 | 5725 to 5850 | Pass    |
|              |         |                 | -20              | 120           | 5744.989                 | 5725 to 5850 | Pass    |
|              |         |                 | -10              | 120           | 5744.988                 | 5725 to 5850 | Pass    |
|              |         |                 | 0                | 120           | 5744.988                 | 5725 to 5850 | Pass    |
|              |         |                 | 10               | 120           | 5744.988                 | 5725 to 5850 | Pass    |
|              |         |                 | 30               | 120           | 5744.988                 | 5725 to 5850 | Pass    |
|              |         |                 | 40               | 120           | 5744.988                 | 5725 to 5850 | Pass    |
|              |         |                 | 50               | 120           | 5744.988                 | 5725 to 5850 | Pass    |
|              |         | 5785            | 20               | 102           | 5784.988                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 138           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | -30              | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | -20              | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | -10              | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | 0                | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | 10               | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | 30               | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | 40               | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         |                 | 50               | 120           | 5784.987                 | 5725 to 5850 | Pass    |
|              |         | 5825            | 20               | 102           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 138           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | -30              | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | -20              | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | -10              | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | 0                | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | 10               | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | 30               | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | 40               | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         |                 | 50               | 120           | 5824.984                 | 5725 to 5850 | Pass    |
|              |         | 5755            | 20               | 102           | 5754.993                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 120           | 5754.993                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 138           | 5754.993                 | 5725 to 5850 | Pass    |
|              |         |                 | -30              | 120           | 5754.992                 | 5725 to 5850 | Pass    |
|              |         |                 | -20              | 120           | 5754.992                 | 5725 to 5850 | Pass    |
|              |         |                 | -10              | 120           | 5754.992                 | 5725 to 5850 | Pass    |
|              |         |                 | 0                | 120           | 5754.992                 | 5725 to 5850 | Pass    |
|              |         |                 | 10               | 120           | 5754.992                 | 5725 to 5850 | Pass    |
|              |         |                 | 30               | 120           | 5754.991                 | 5725 to 5850 | Pass    |
|              |         |                 | 40               | 120           | 5754.991                 | 5725 to 5850 | Pass    |
|              |         |                 | 50               | 120           | 5754.991                 | 5725 to 5850 | Pass    |
|              |         | 5795            | 20               | 102           | 5794.991                 | 5725 to 5850 | Pass    |
|              |         |                 |                  | 120           | 5794.990                 | 5725 to 5850 | Pass    |

|  |  |      |     |     |          |              |      |
|--|--|------|-----|-----|----------|--------------|------|
|  |  |      |     | 138 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | -30 | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | -20 | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | -10 | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | 0   | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | 10  | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | 30  | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | 40  | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  |      | 50  | 120 | 5794.990 | 5725 to 5850 | Pass |
|  |  | 5775 | 20  | 102 | 5774.986 | 5725 to 5850 | Pass |
|  |  |      |     | 120 | 5774.986 | 5725 to 5850 | Pass |
|  |  |      |     | 138 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | -30 | 120 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | -20 | 120 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | -10 | 120 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | 0   | 120 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | 10  | 120 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | 30  | 120 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | 40  | 120 | 5774.985 | 5725 to 5850 | Pass |
|  |  |      | 50  | 120 | 5774.985 | 5725 to 5850 | Pass |

## 6. Form731

### 6.1 Test Result

#### 6.1.1 Form731

| Lower Freq (MHz) | High Freq (MHz) | MAX Power (W) | MAX Power (dBm) |
|------------------|-----------------|---------------|-----------------|
| 5745             | 5825            | 0.0087        | 9.40            |
| 5755             | 5795            | 0.0089        | 9.47            |
| 5775             | 5775            | 0.0074        | 8.71            |