

# Appendix RF Test Data for WIFI 5G

**Company:** : Shenzhen Speediance Living Technology Co., Ltd  
**EUT** : Interactive Multi-Media DigitalFitness Equipment  
**FCC ID** : X2A4WP-GMBP2100A1  
**Model Number** : GMBP2100A1  
**Report No.** : HTT202503876F03  
**Reviewed By** : Heber He

## 1. Duty Cycle

## 1.1 Test Result

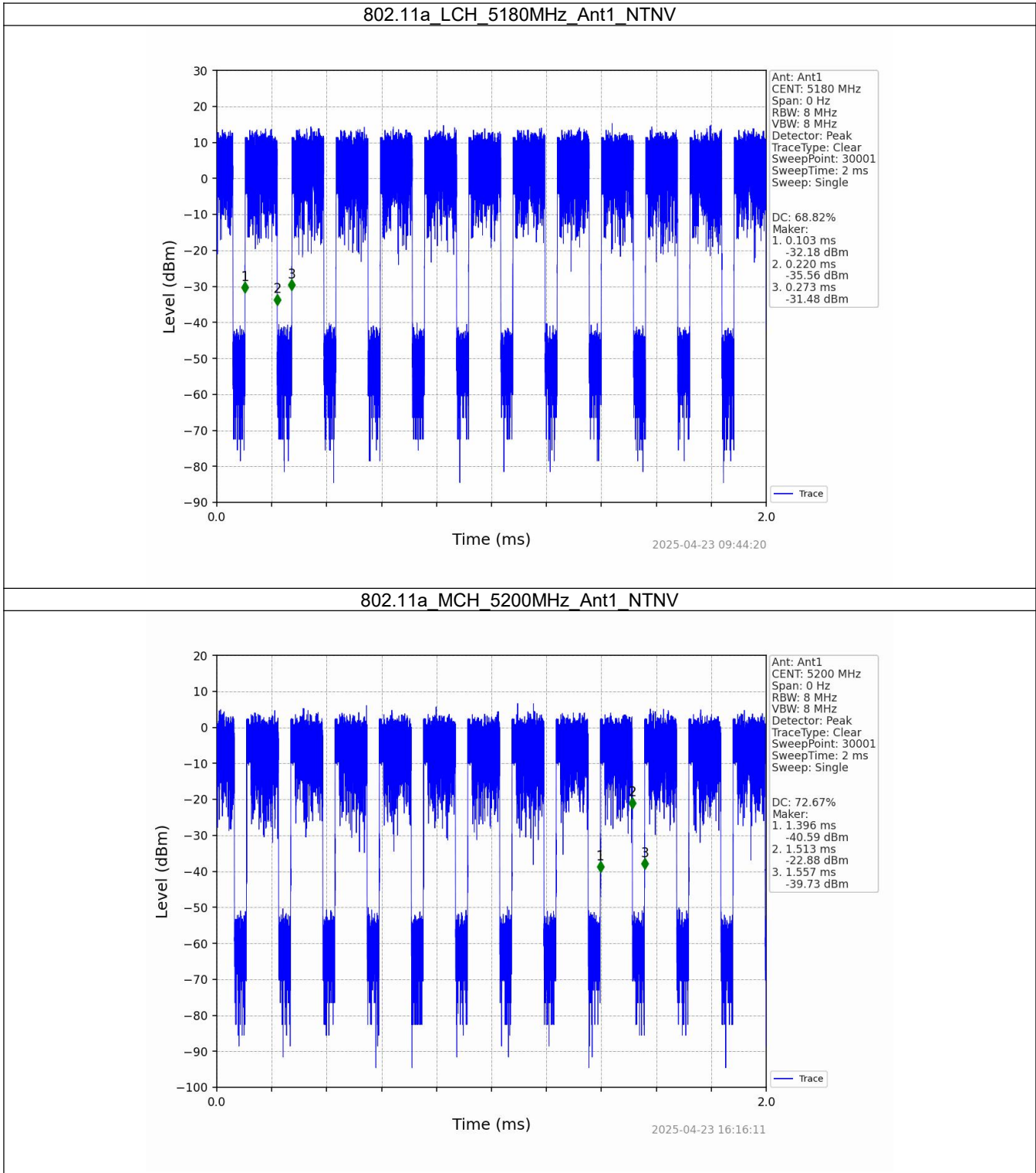
## 1.1.1 Ant1

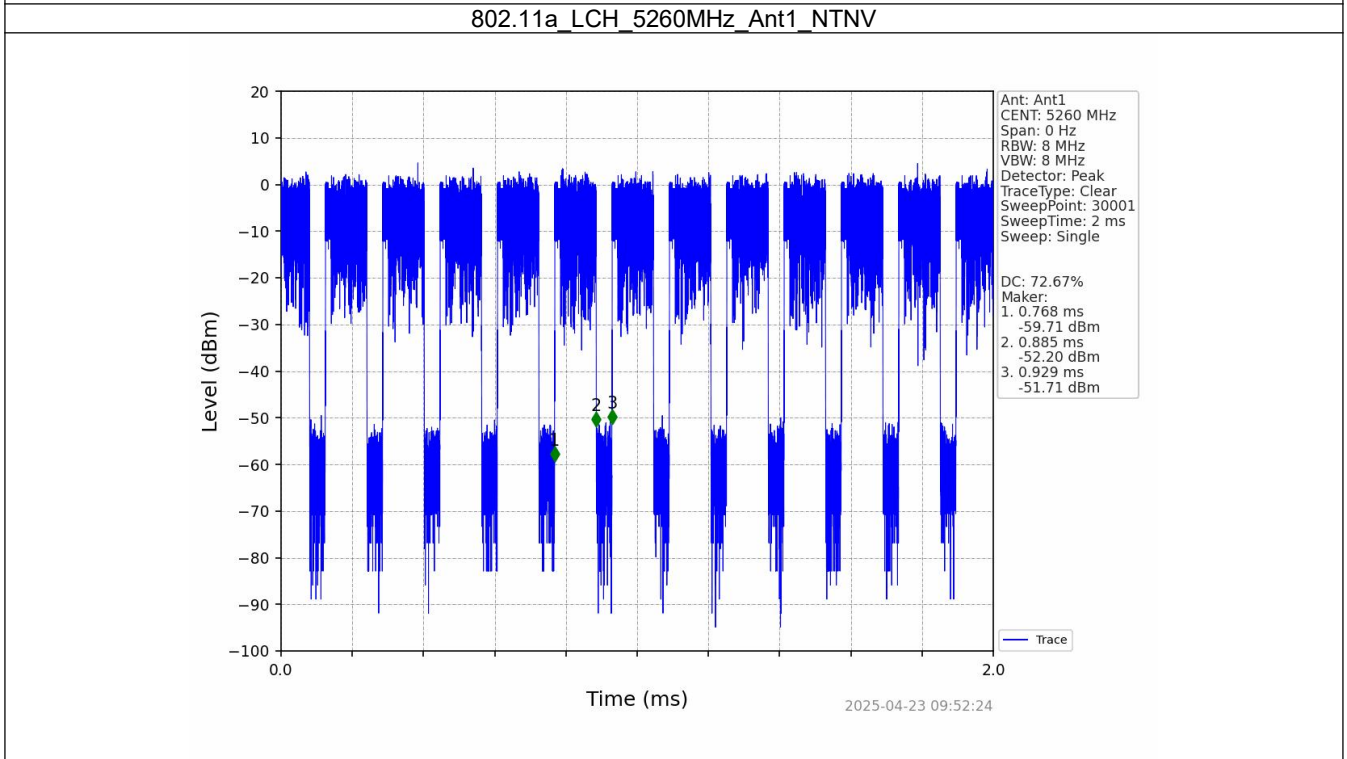
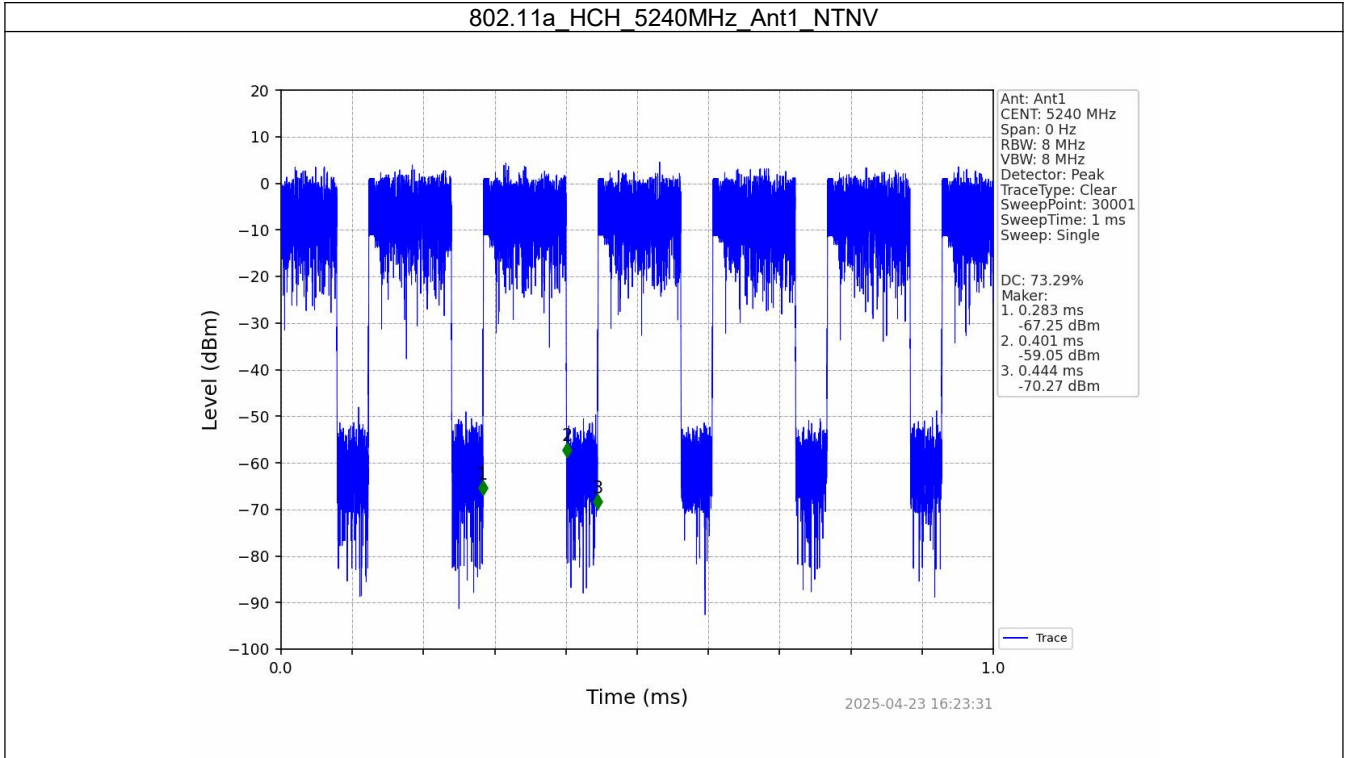
| Ant1             |         |                 |           |             |                |                                   |                       |
|------------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode             | Tx Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11a          | SISO    | 5180            | 0.117     | 0.170       | 68.82          | 1.62                              | 3.94                  |
|                  |         | 5200            | 0.117     | 0.161       | 72.67          | 1.39                              | 0.14                  |
|                  |         | 5240            | 0.118     | 0.161       | 73.29          | 1.35                              | 0.14                  |
|                  |         | 5260            | 0.117     | 0.161       | 72.67          | 1.39                              | 0.08                  |
|                  |         | 5300            | 0.118     | 0.179       | 65.92          | 1.81                              | 7.54                  |
|                  |         | 5320            | 0.116     | 0.161       | 72.05          | 1.42                              | 0.08                  |
|                  |         | 5500            | 0.118     | 0.179       | 65.92          | 1.81                              | 7.48                  |
|                  |         | 5580            | 0.117     | 0.188       | 62.23          | 2.06                              | 10.49                 |
|                  |         | 5700            | 0.117     | 0.224       | 52.23          | 2.82                              | 20.52                 |
|                  |         | 5745            | 0.117     | 0.170       | 68.82          | 1.62                              | 3.98                  |
|                  |         | 5785            | 0.117     | 0.161       | 72.67          | 1.39                              | 0.08                  |
|                  |         | 5825            | 0.119     | 0.179       | 66.48          | 1.77                              | 7.50                  |
| 802.11n (HT20)   | MIMO    | 5180            | 0.081     | 0.125       | 64.80          | 1.88                              | 0.15                  |
|                  |         | 5200            | 0.081     | 0.125       | 64.80          | 1.88                              | 0.21                  |
|                  |         | 5240            | 0.080     | 0.125       | 64.00          | 1.94                              | 0.07                  |
|                  |         | 5260            | 0.080     | 0.125       | 64.00          | 1.94                              | 0.08                  |
|                  |         | 5300            | 0.080     | 0.125       | 64.00          | 1.94                              | 0.08                  |
|                  |         | 5320            | 0.081     | 0.125       | 64.80          | 1.88                              | 0.14                  |
|                  |         | 5500            | 0.081     | 0.125       | 64.80          | 1.88                              | 0.08                  |
|                  |         | 5580            | 0.081     | 0.125       | 64.80          | 1.88                              | 0.10                  |
|                  |         | 5700            | 0.080     | 0.125       | 64.00          | 1.94                              | 0.04                  |
|                  |         | 5745            | 0.081     | 0.125       | 64.80          | 1.88                              | 0.11                  |
|                  |         | 5785            | 0.081     | 0.125       | 64.80          | 1.88                              | 0.15                  |
|                  |         | 5825            | 0.080     | 0.125       | 64.00          | 1.94                              | 0.08                  |
| 802.11n (HT40)   | MIMO    | 5190            | 0.062     | 0.106       | 58.49          | 2.33                              | 0.20                  |
|                  |         | 5230            | 0.062     | 0.106       | 58.49          | 2.33                              | 0.19                  |
|                  |         | 5270            | 0.063     | 0.106       | 59.43          | 2.26                              | 0.16                  |
|                  |         | 5310            | 0.062     | 0.106       | 58.49          | 2.33                              | 0.11                  |
|                  |         | 5510            | 0.076     | 0.120       | 63.33          | 1.98                              | 0.11                  |
|                  |         | 5550            | 0.062     | 0.106       | 58.49          | 2.33                              | 0.16                  |
|                  |         | 5670            | 0.062     | 0.106       | 58.49          | 2.33                              | 0.19                  |
|                  |         | 5755            | 0.063     | 0.106       | 59.43          | 2.26                              | 0.09                  |
|                  |         | 5795            | 0.062     | 0.106       | 58.49          | 2.33                              | 0.19                  |
| 802.11ac (VHT20) | MIMO    | 5180            | 0.088     | 0.186       | 47.31          | 3.25                              | 19.31                 |
|                  |         | 5200            | 0.088     | 0.132       | 66.67          | 1.76                              | 0.15                  |
|                  |         | 5240            | 0.089     | 0.132       | 67.42          | 1.71                              | 0.13                  |
|                  |         | 5260            | 0.089     | 0.132       | 67.42          | 1.71                              | 0.09                  |
|                  |         | 5300            | 0.088     | 0.132       | 66.67          | 1.76                              | 0.08                  |
|                  |         | 5320            | 0.087     | 0.132       | 65.91          | 1.81                              | 0.06                  |
|                  |         | 5500            | 0.089     | 0.132       | 67.42          | 1.71                              | 0.09                  |
|                  |         | 5580            | 0.089     | 0.186       | 47.85          | 3.20                              | 19.51                 |
|                  |         | 5700            | 0.090     | 0.132       | 68.18          | 1.66                              | 0.05                  |
|                  |         | 5745            | 0.088     | 0.132       | 66.67          | 1.76                              | 0.05                  |
|                  |         | 5785            | 0.089     | 0.132       | 67.42          | 1.71                              | 0.18                  |
|                  |         | 5825            | 0.088     | 0.132       | 66.67          | 1.76                              | 0.13                  |
| 802.11ac (VHT40) | MIMO    | 5190            | 0.066     | 0.110       | 60.00          | 2.22                              | 0.13                  |
|                  |         | 5230            | 0.066     | 0.110       | 60.00          | 2.22                              | 0.13                  |
|                  |         | 5270            | 0.067     | 0.110       | 60.91          | 2.15                              | 0.13                  |
|                  |         | 5310            | 0.067     | 0.110       | 60.91          | 2.15                              | 0.12                  |

|                     |      |      |       |       |       |      |       |
|---------------------|------|------|-------|-------|-------|------|-------|
|                     |      | 5510 | 0.066 | 0.110 | 60.00 | 2.22 | 0.15  |
|                     |      | 5550 | 0.066 | 0.110 | 60.00 | 2.22 | 0.19  |
|                     |      | 5670 | 0.066 | 0.110 | 60.00 | 2.22 | 0.18  |
|                     |      | 5755 | 0.066 | 0.110 | 60.00 | 2.22 | 0.11  |
|                     |      | 5795 | 0.067 | 0.110 | 60.91 | 2.15 | 0.17  |
| 802.11ac<br>(VHT80) | MIMO | 5210 | 0.055 | 0.099 | 55.56 | 2.55 | 0.15  |
|                     |      | 5290 | 0.056 | 0.162 | 34.57 | 4.61 | 21.88 |
|                     |      | 5530 | 0.056 | 0.099 | 56.57 | 2.47 | 0.03  |
|                     |      | 5610 | 0.056 | 0.099 | 56.57 | 2.47 | 0.12  |
|                     |      | 5775 | 0.056 | 0.099 | 56.57 | 2.47 | 0.19  |

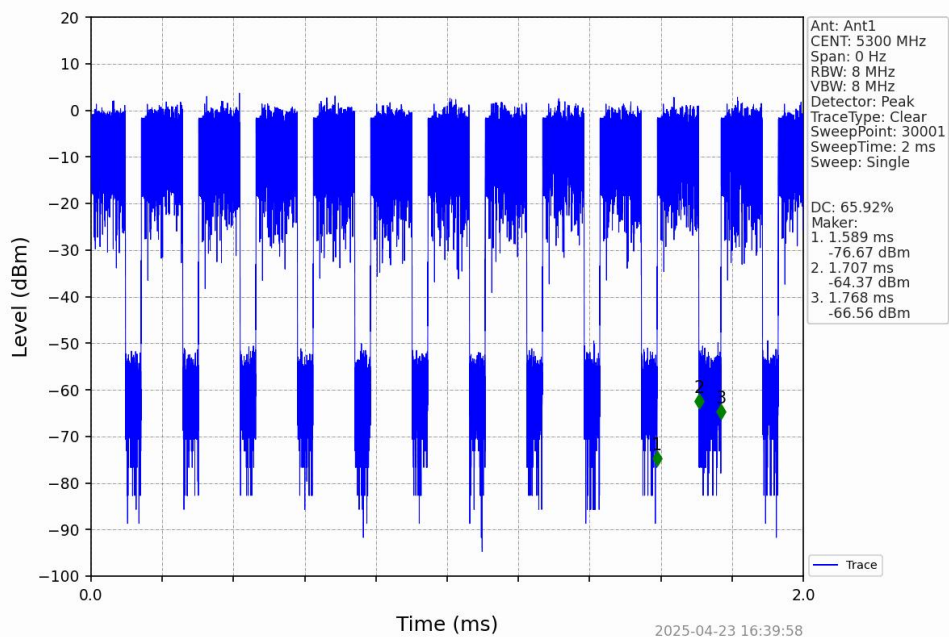
1.2 Test Graph

1.2.1 Ant1

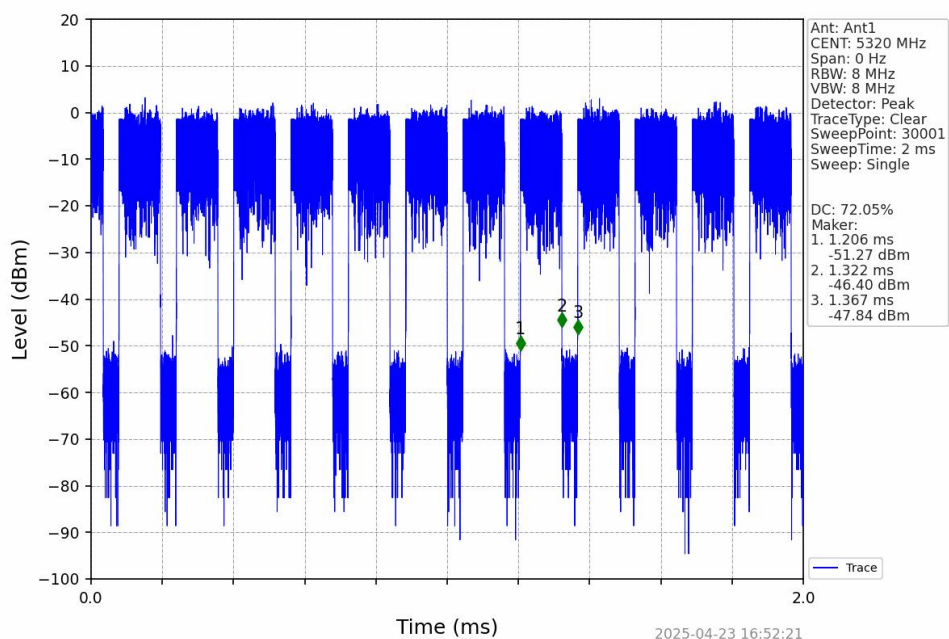




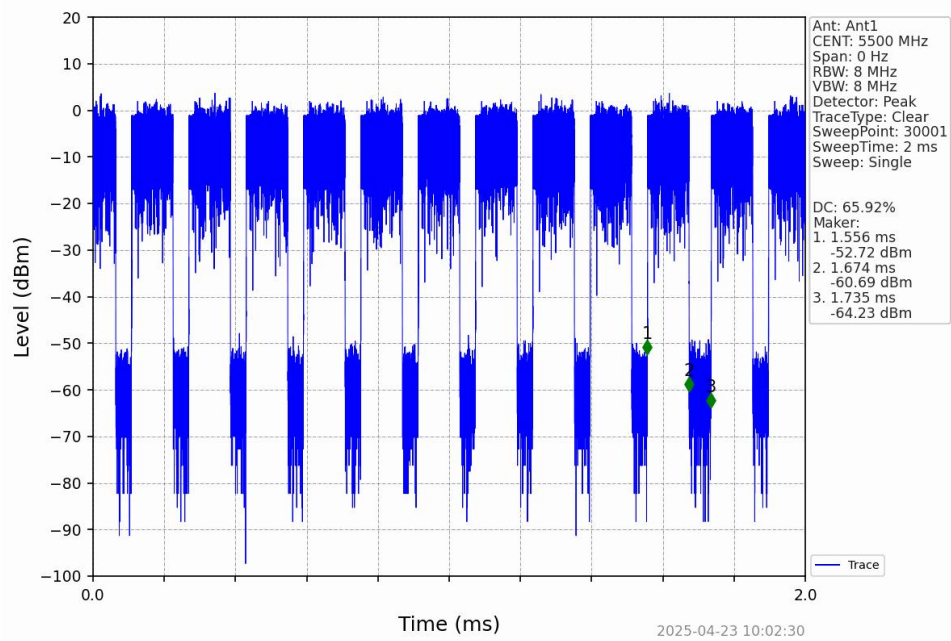
802.11a\_MCH\_5300MHz\_Ant1\_NTNV



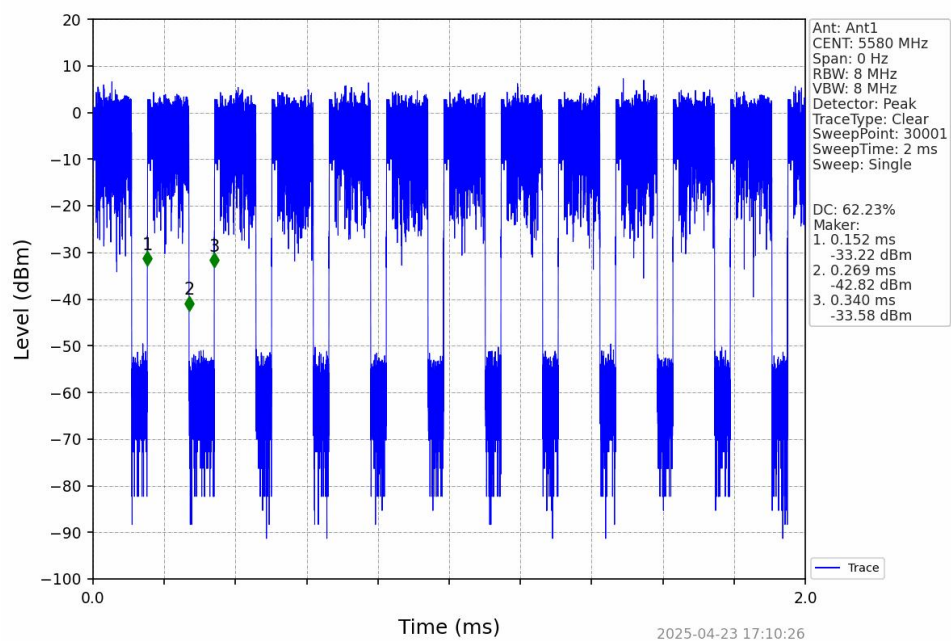
802.11a\_HCH\_5320MHz\_Ant1\_NTNV

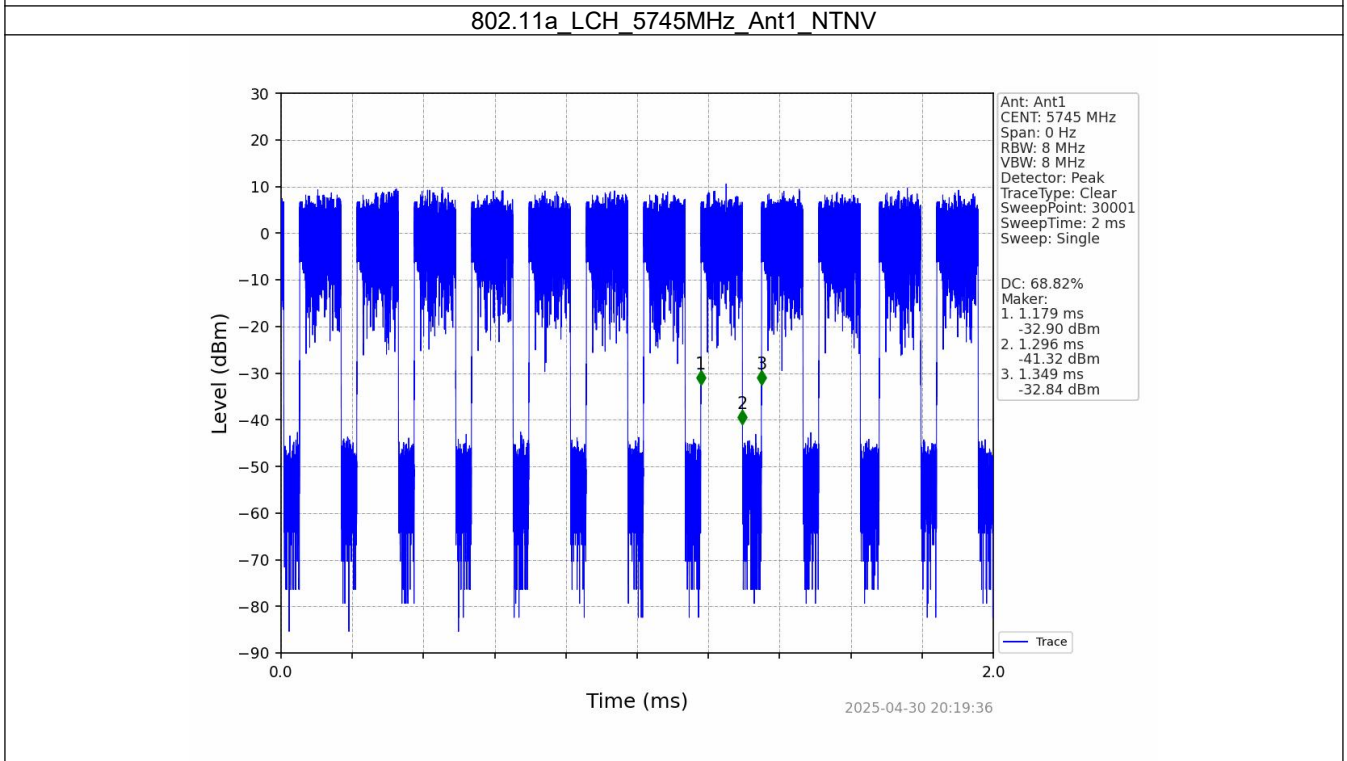
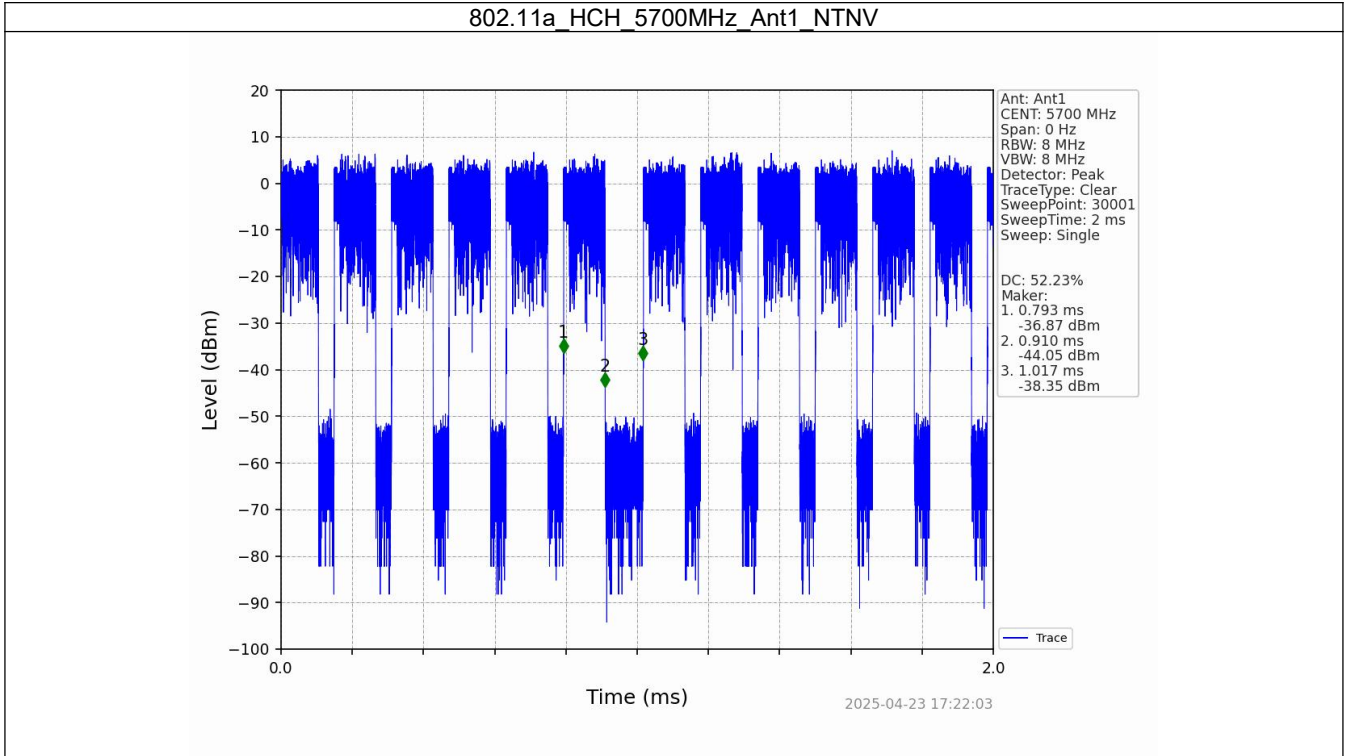


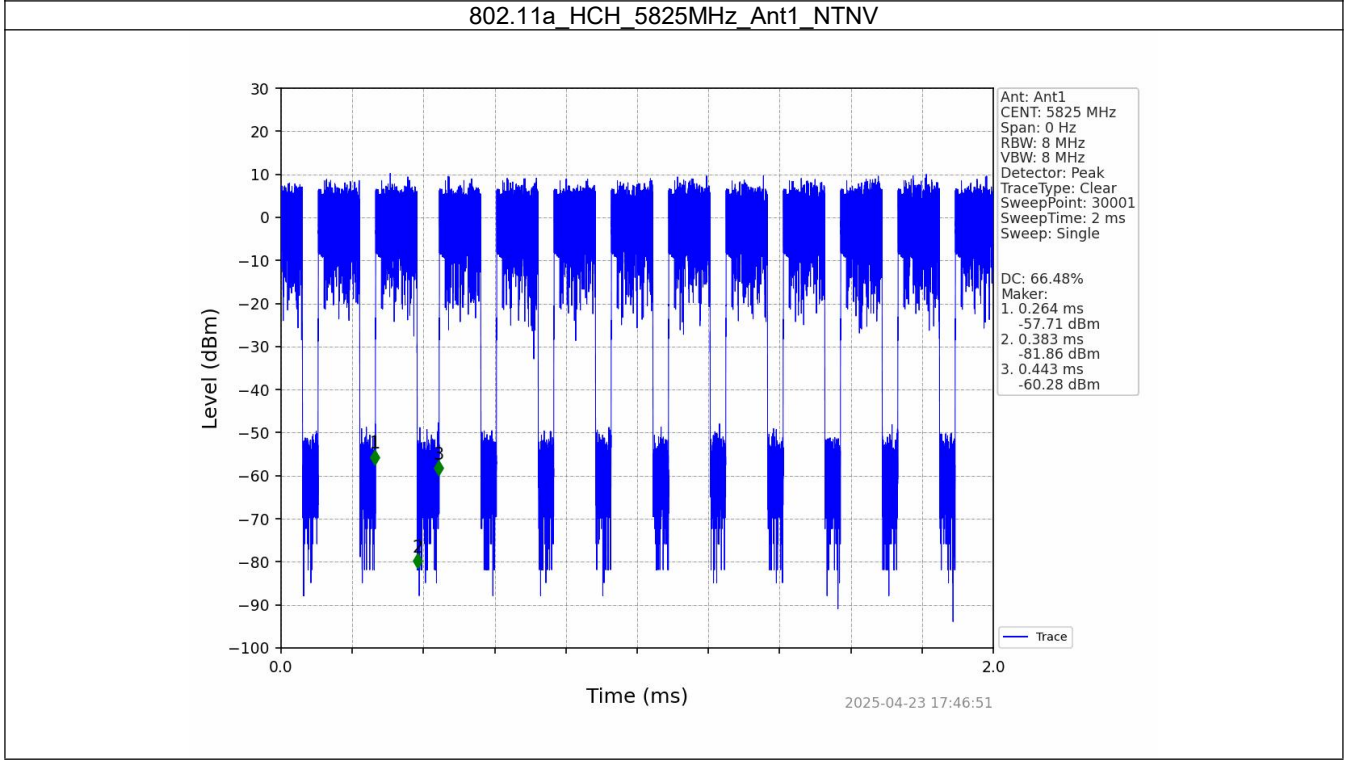
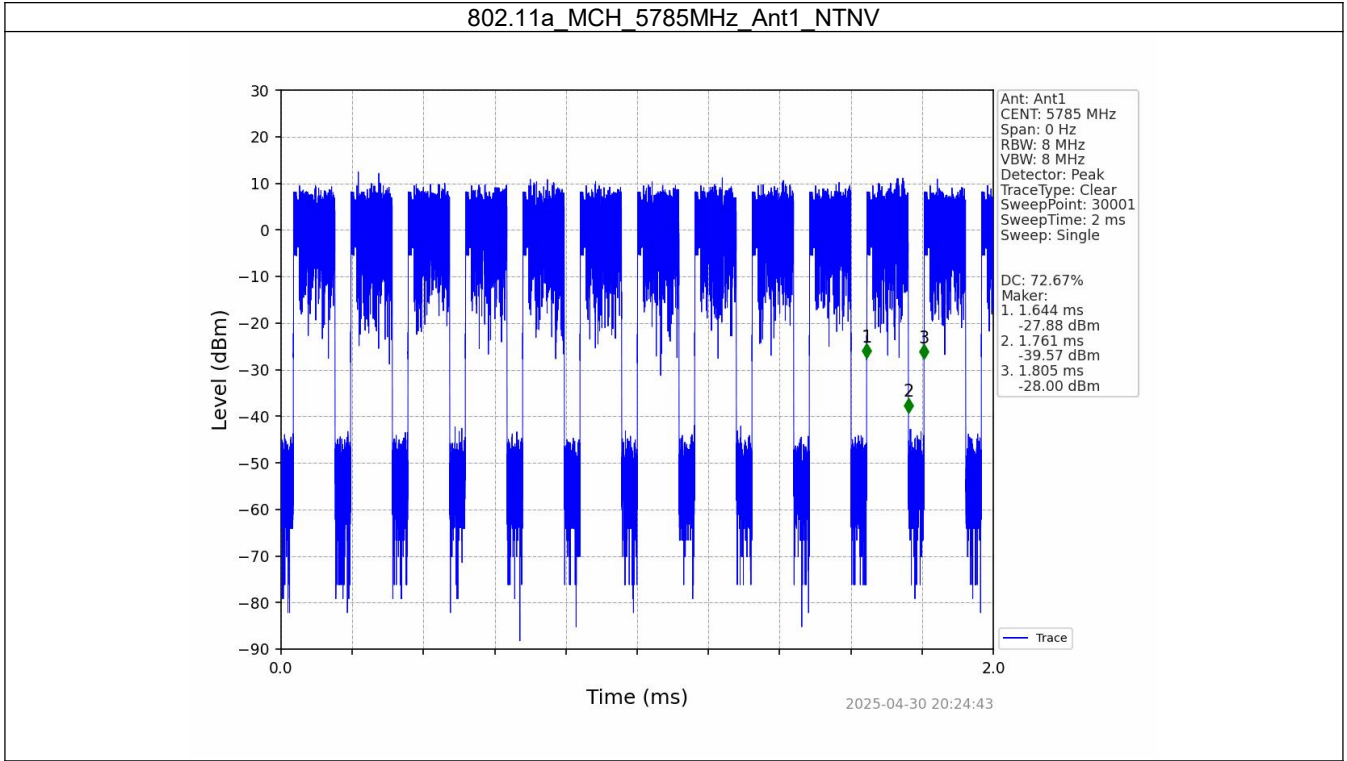
802.11a\_LCH\_5500MHz\_Ant1\_NTNV

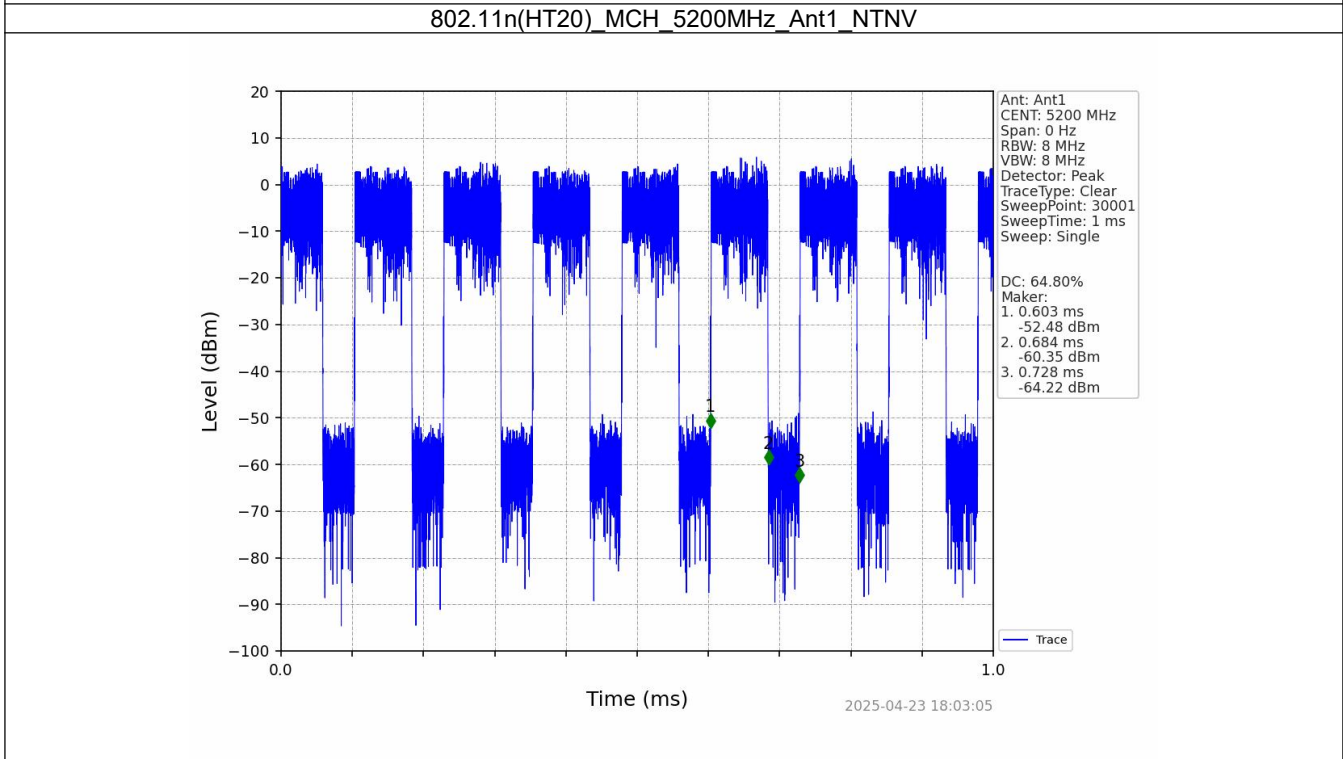
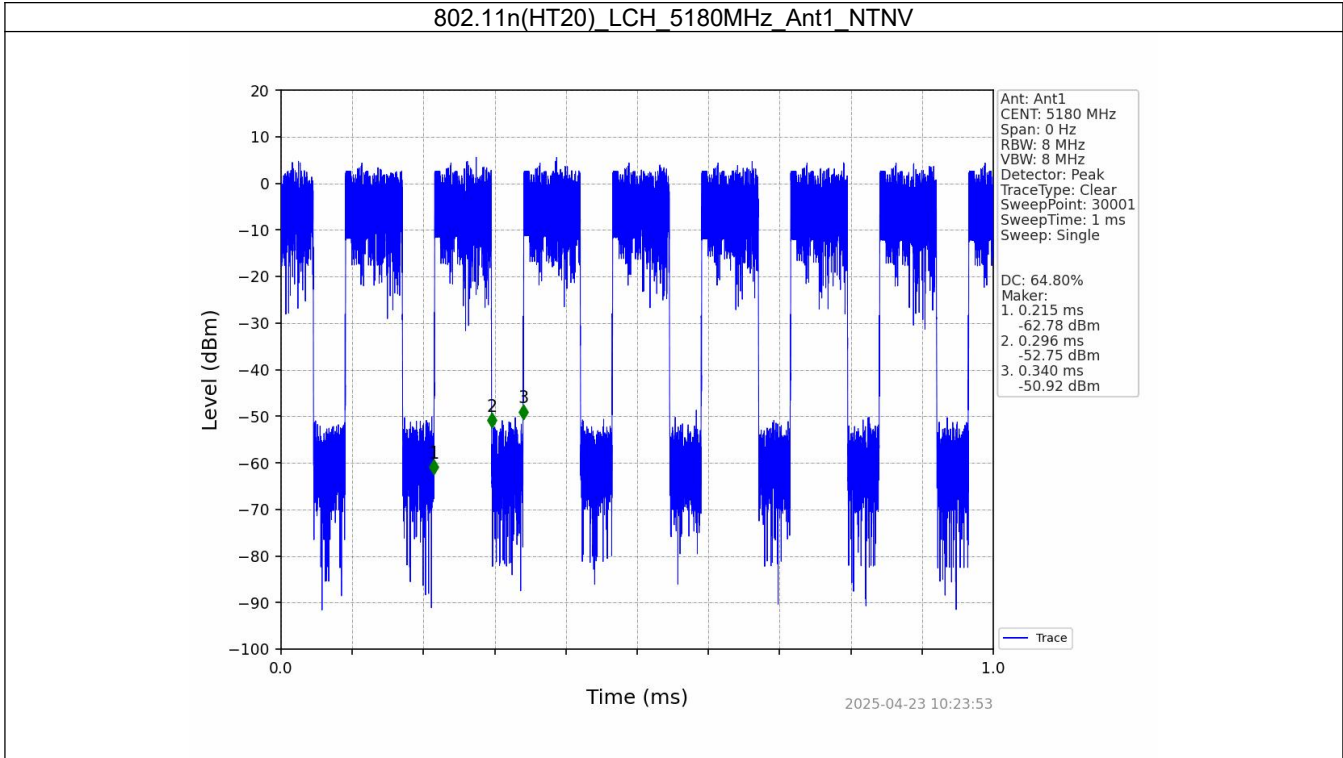


802.11a\_MCH\_5580MHz\_Ant1\_NTNV

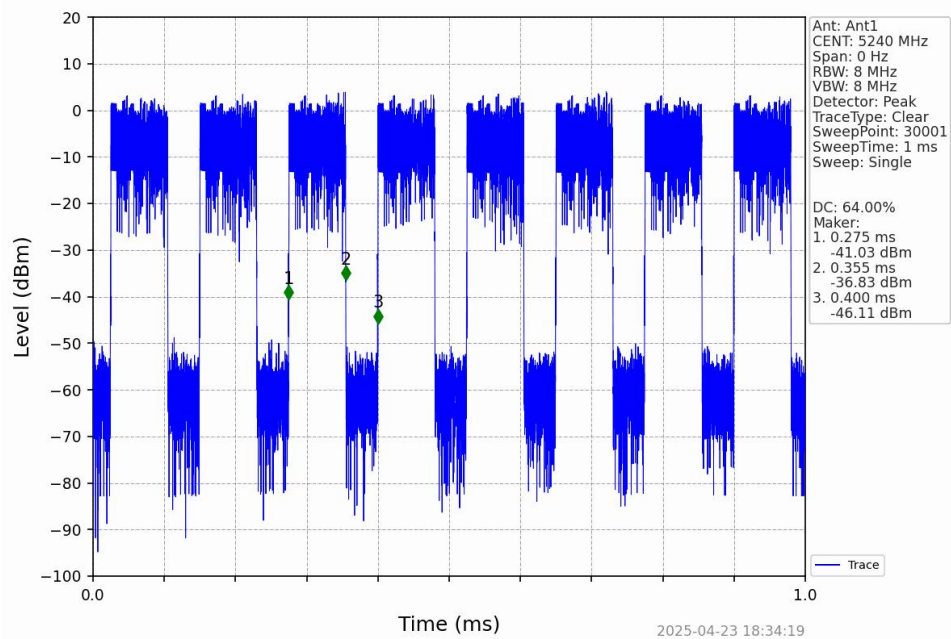




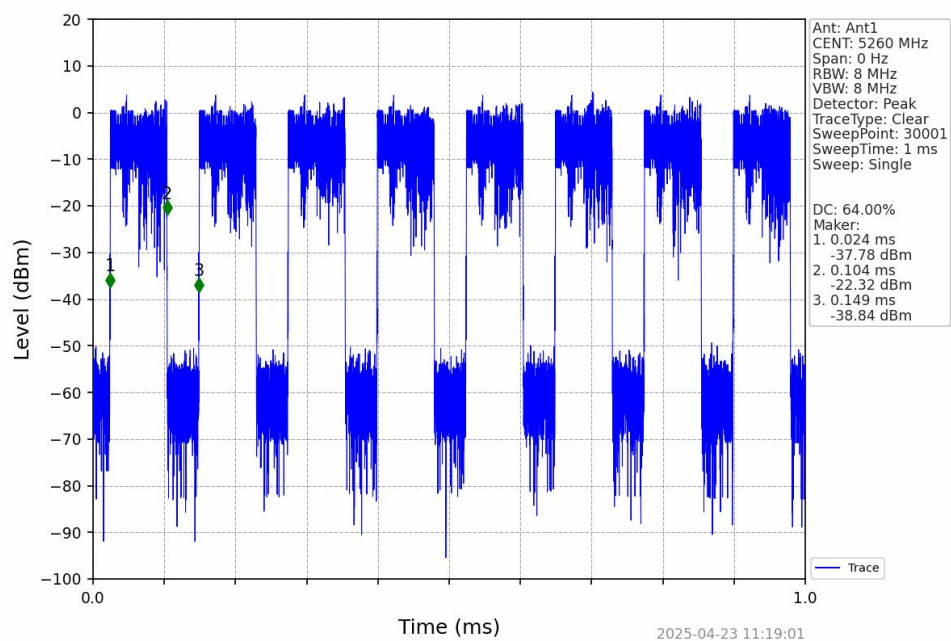


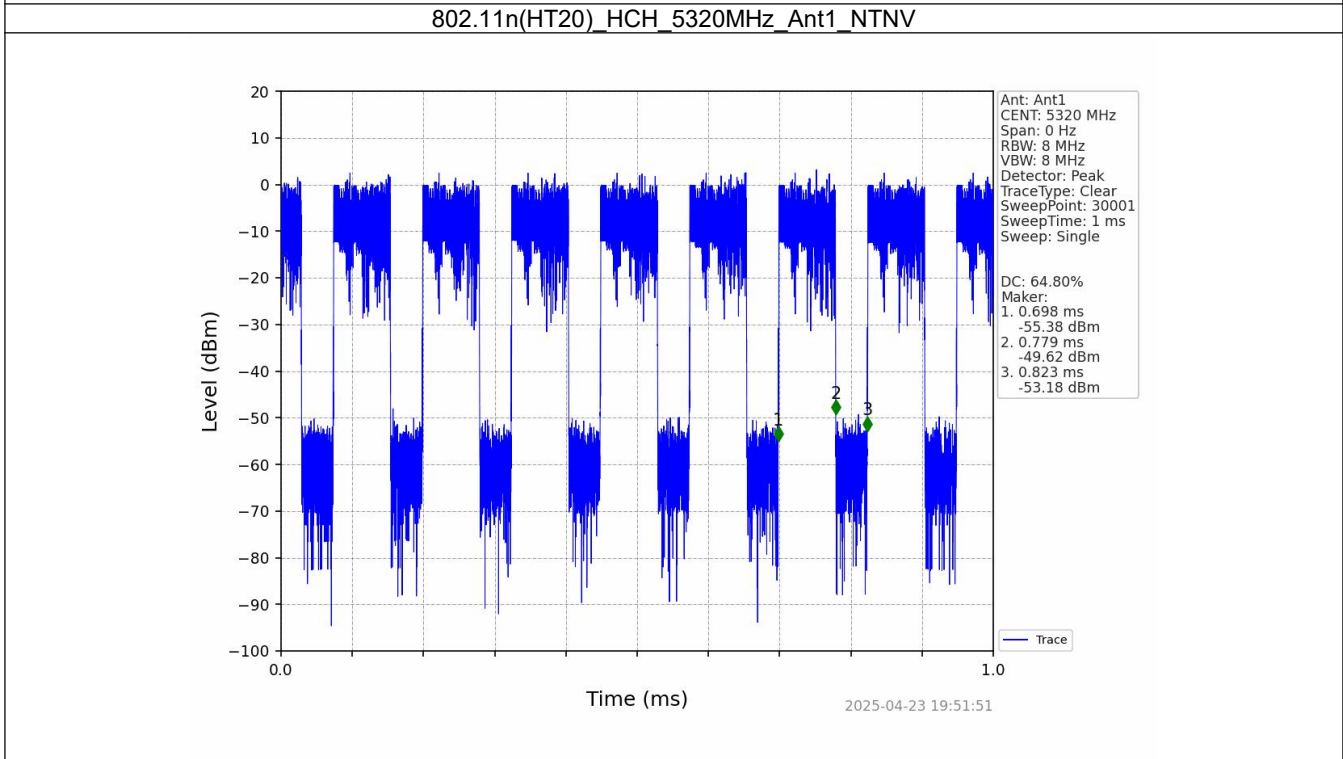
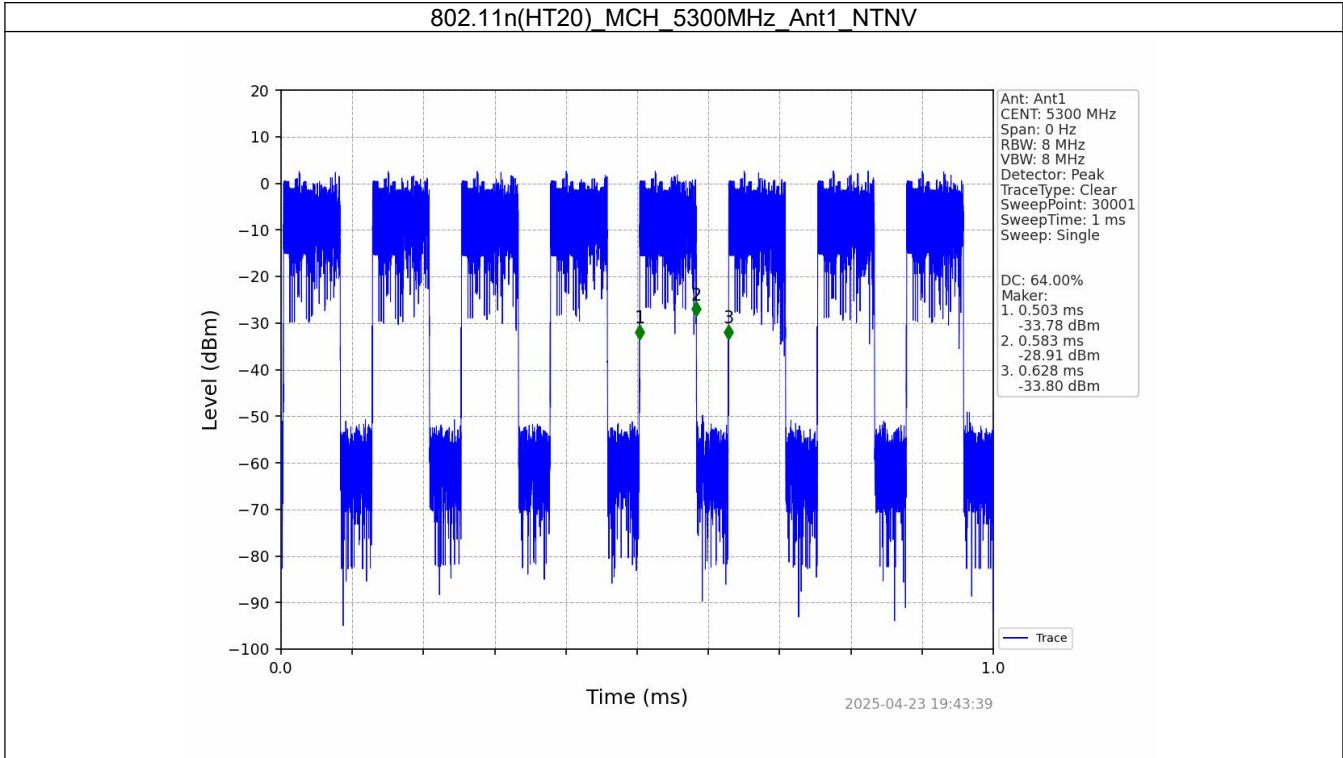


802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV

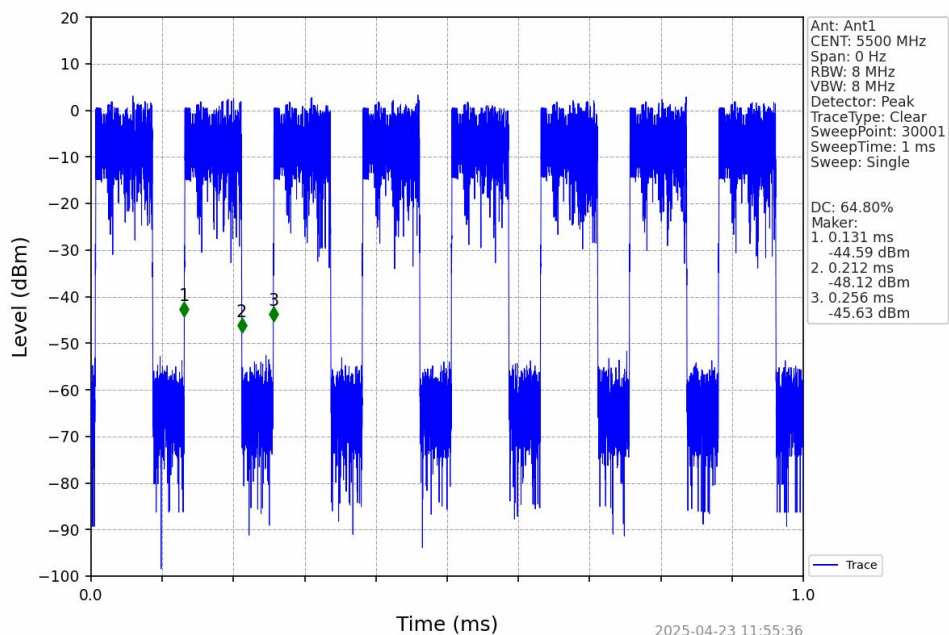


802.11n(HT20)\_LCH\_5260MHz\_Ant1\_NTNV

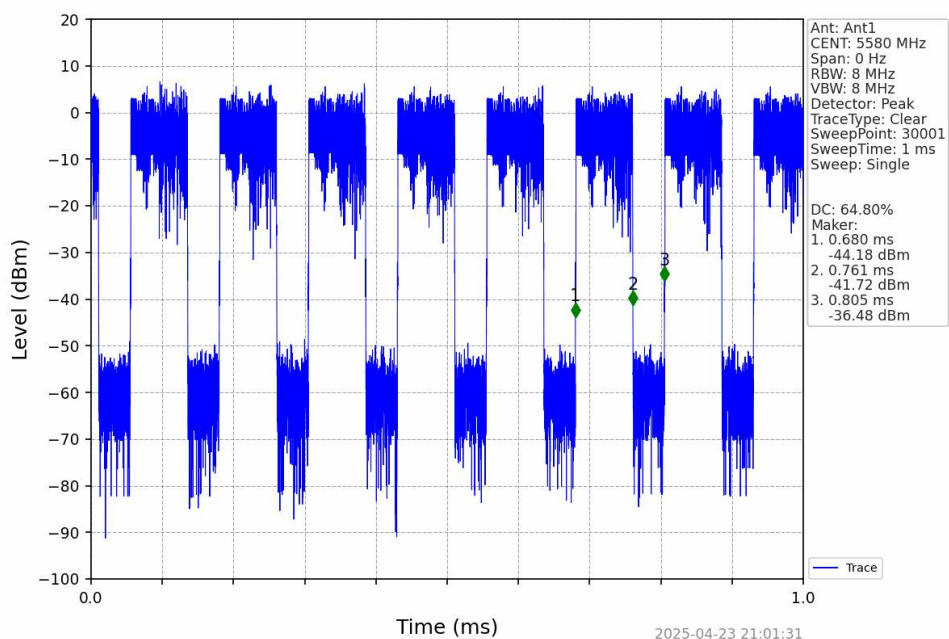


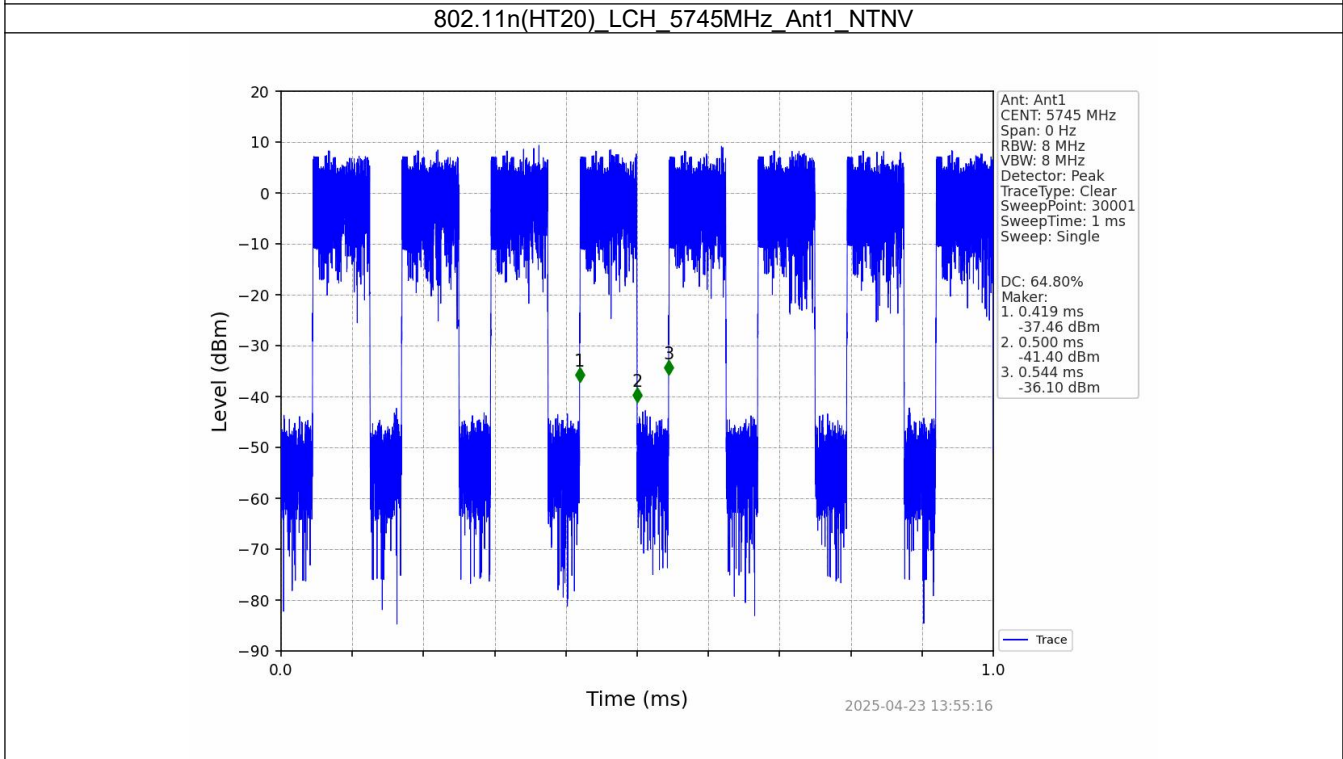
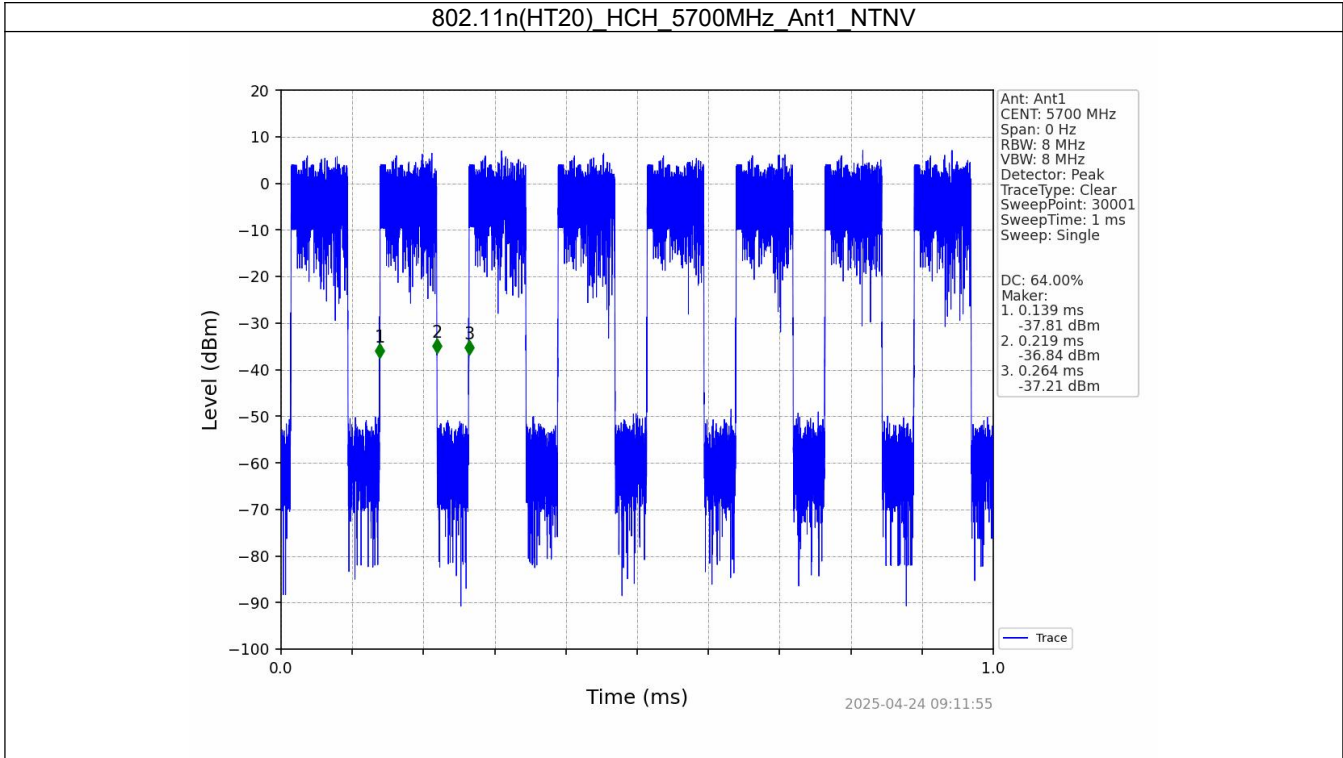


802.11n(HT20)\_LCH\_5500MHz\_Ant1\_NTNV

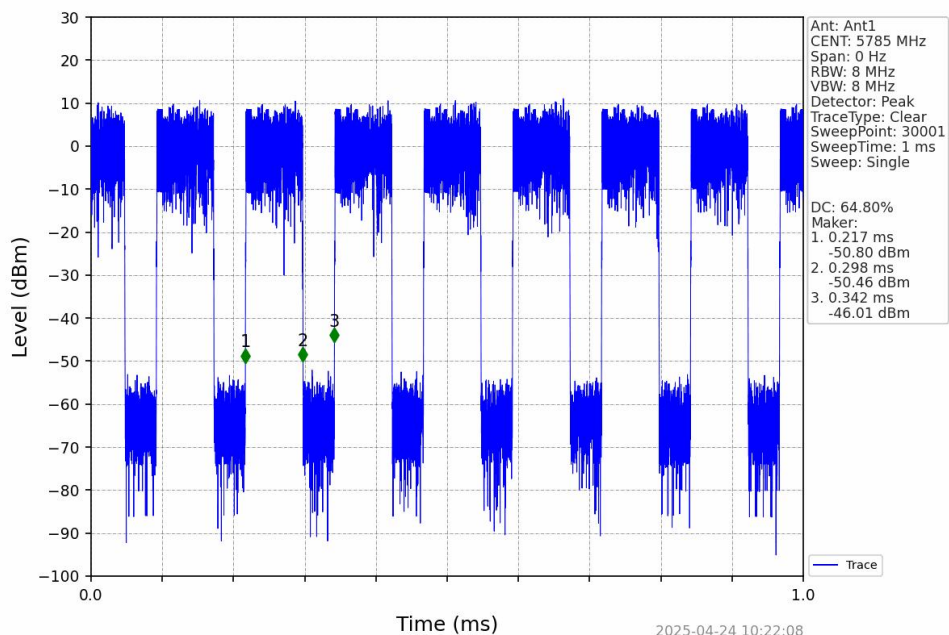


802.11n(HT20)\_MCH\_5580MHz\_Ant1\_NTNV

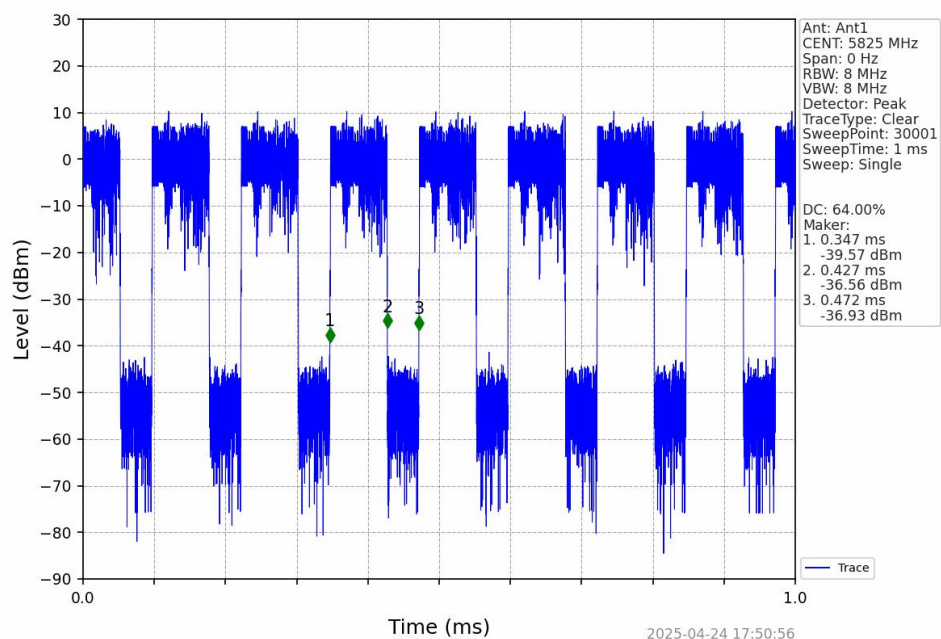


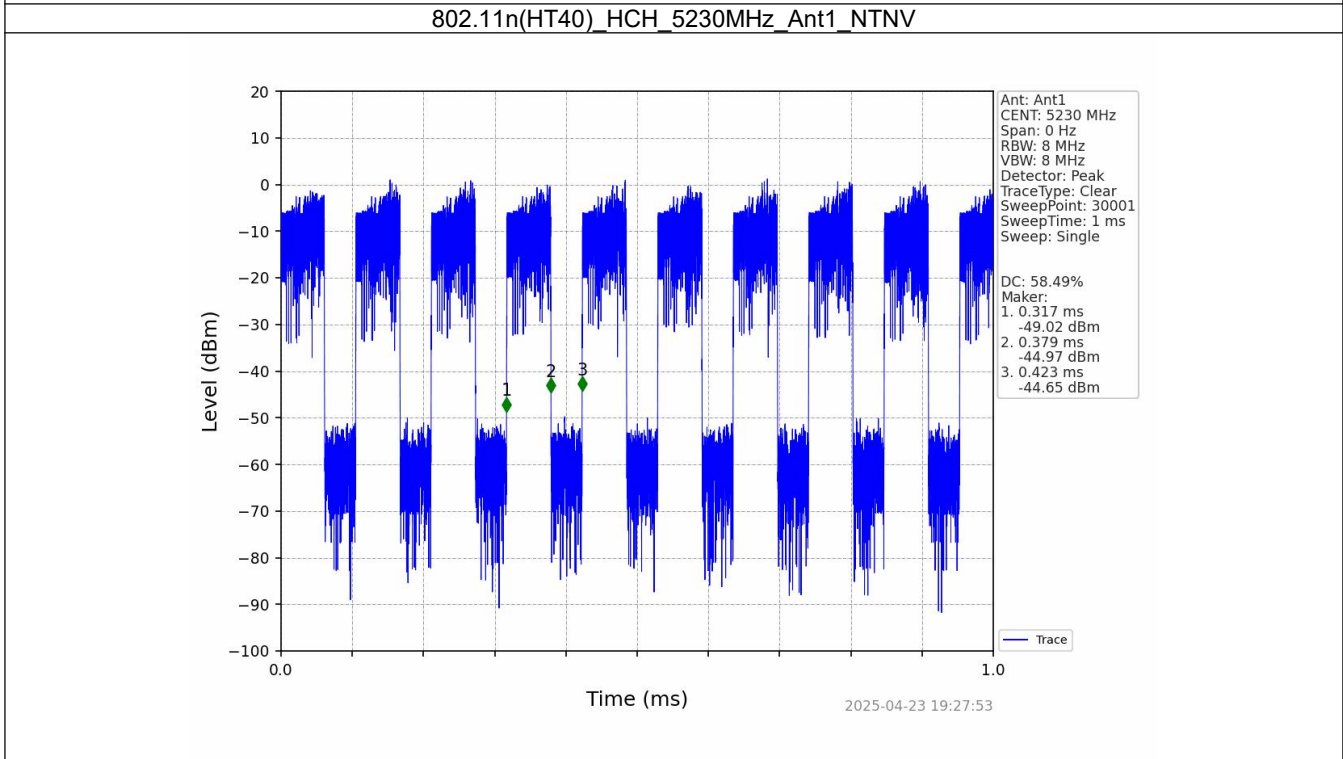
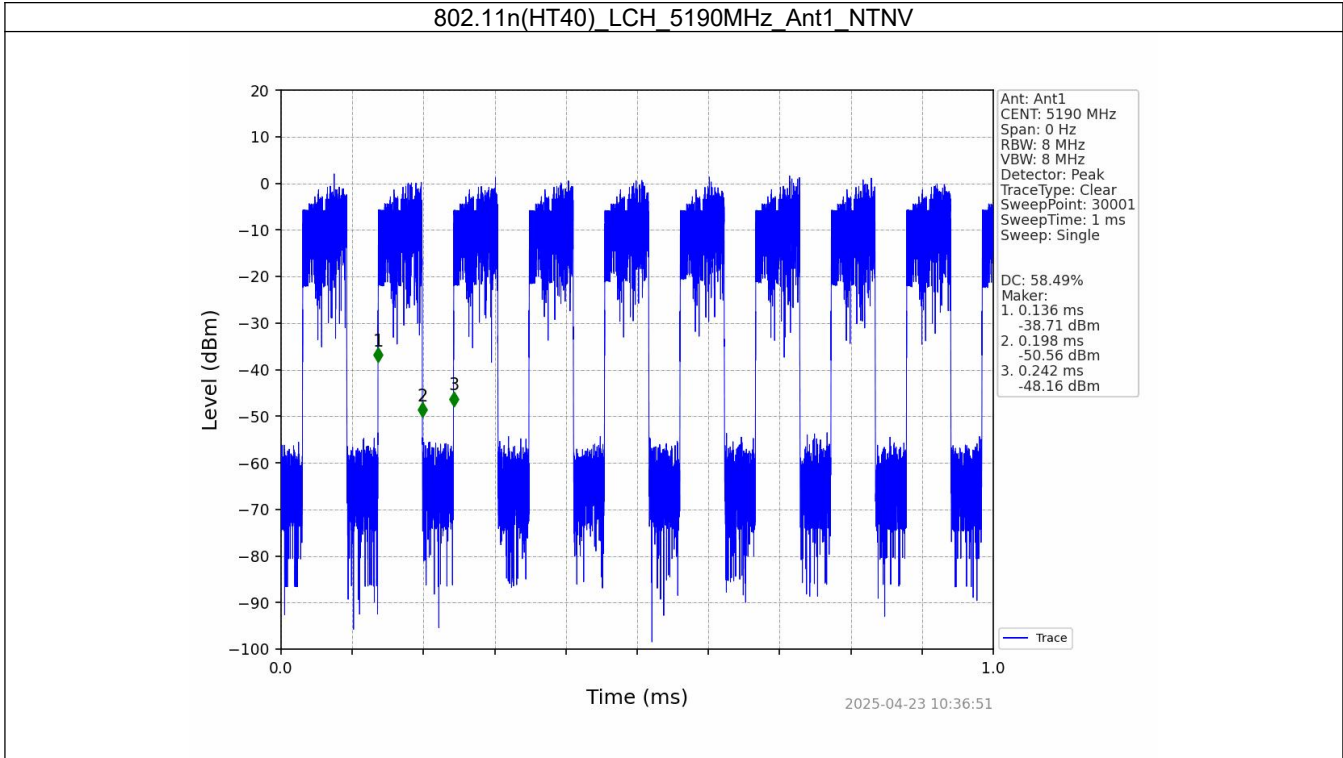


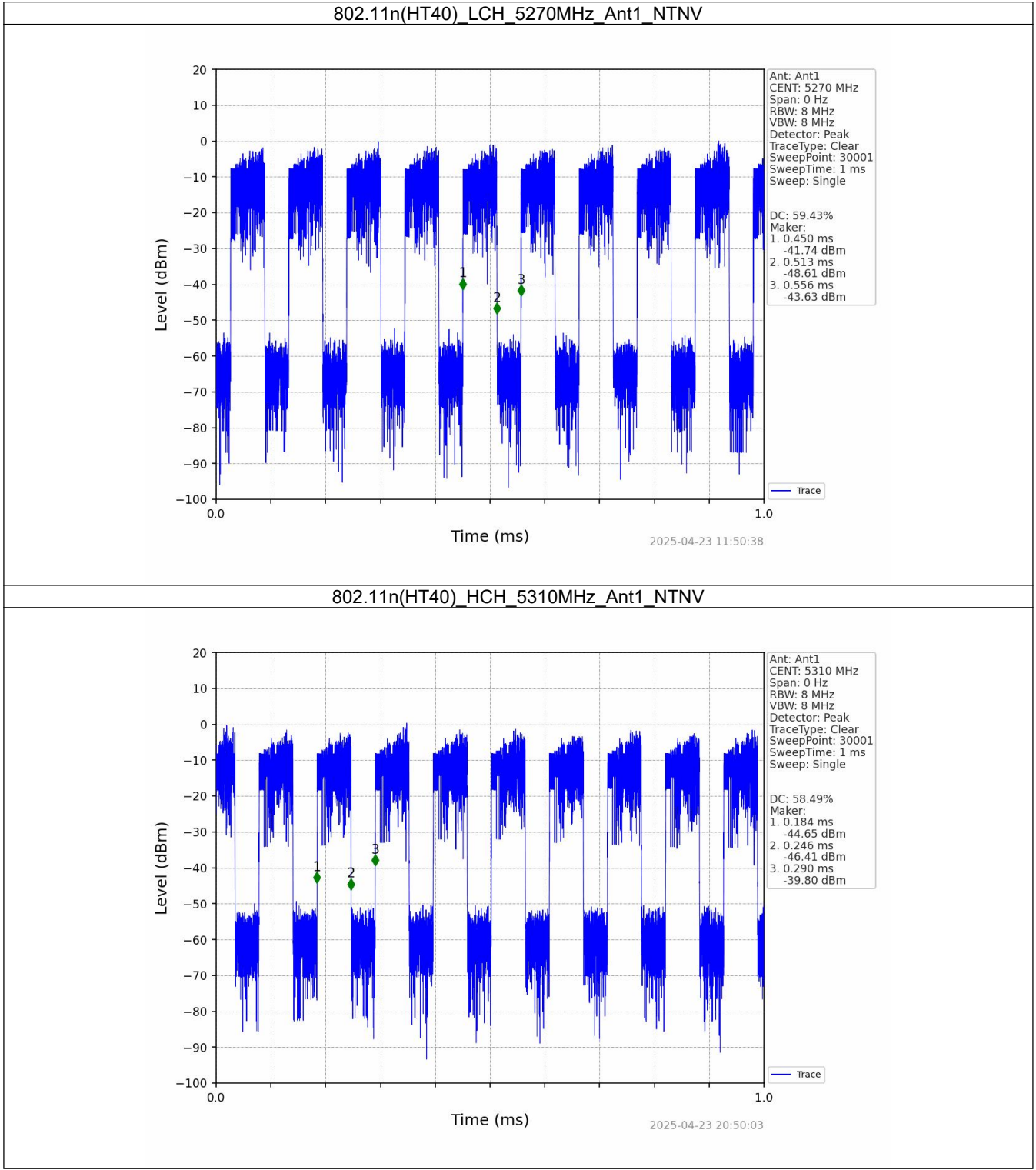
802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV

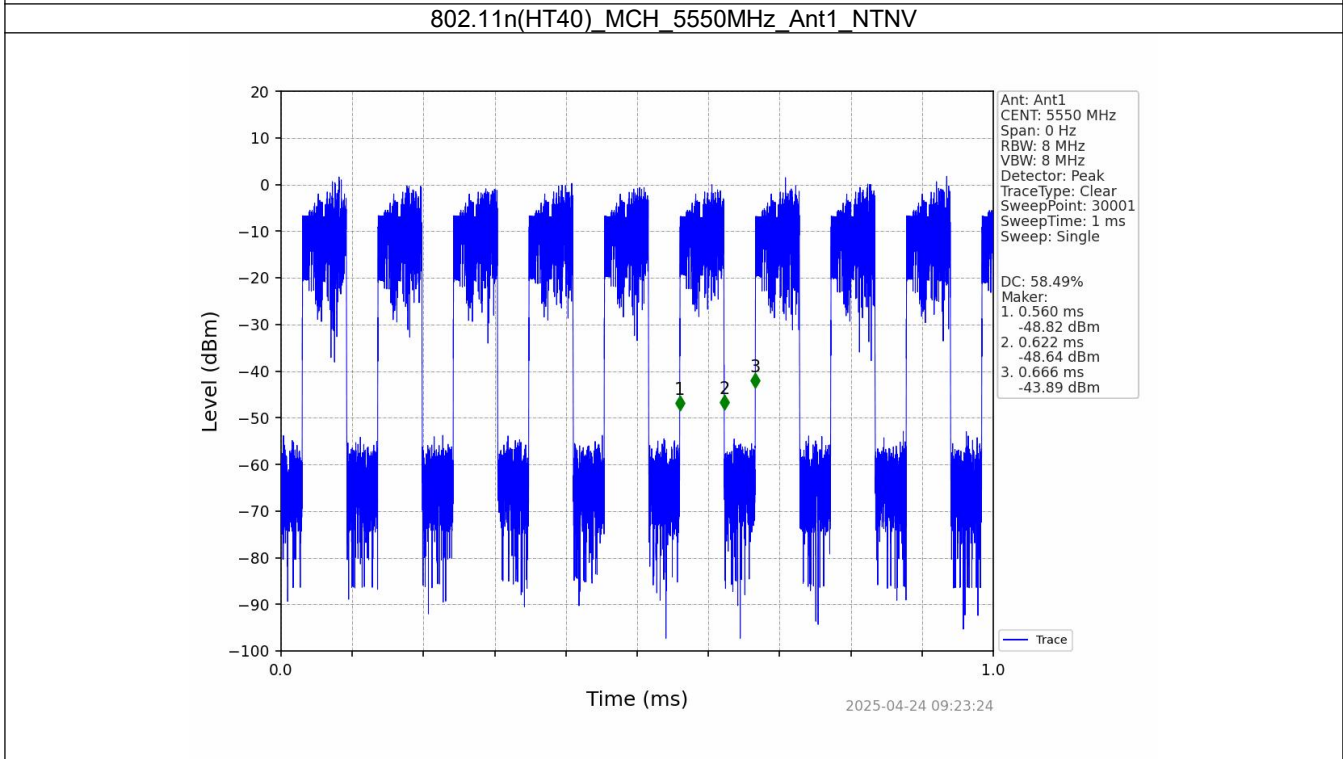
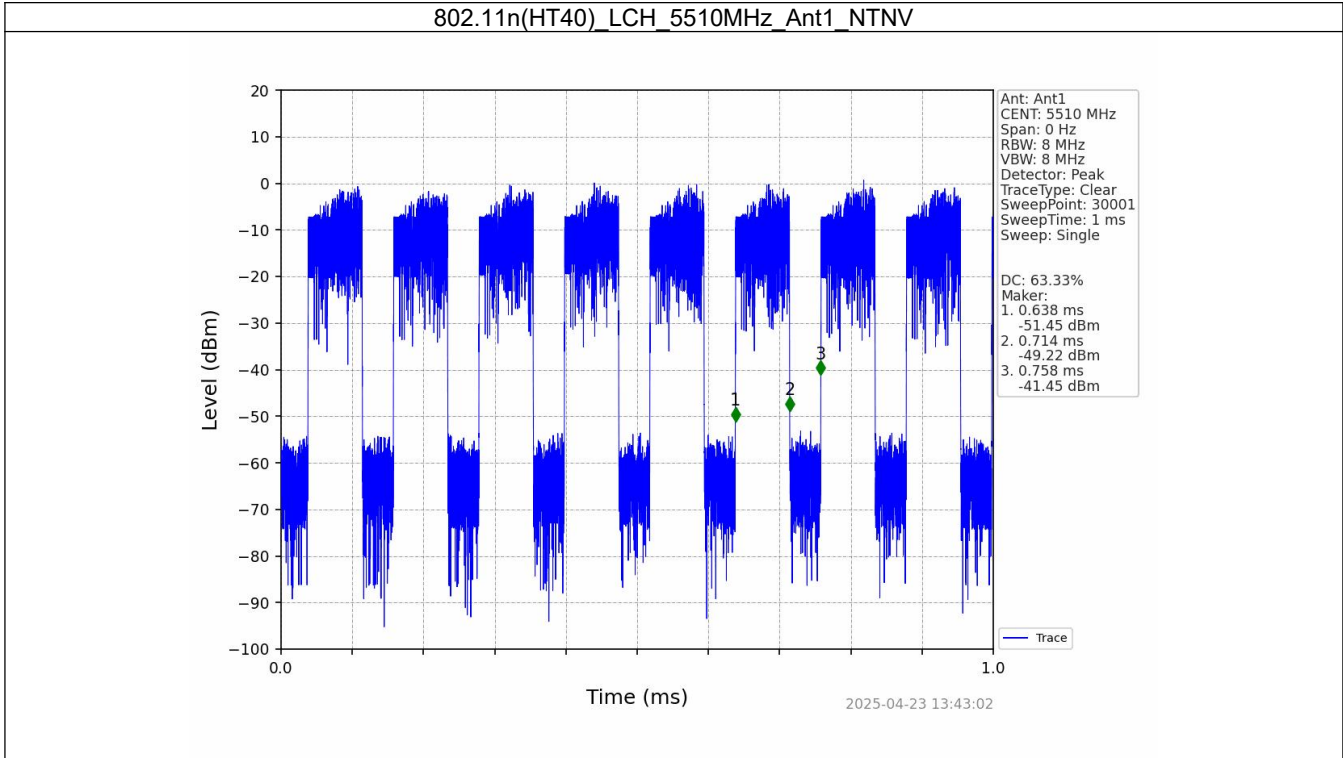


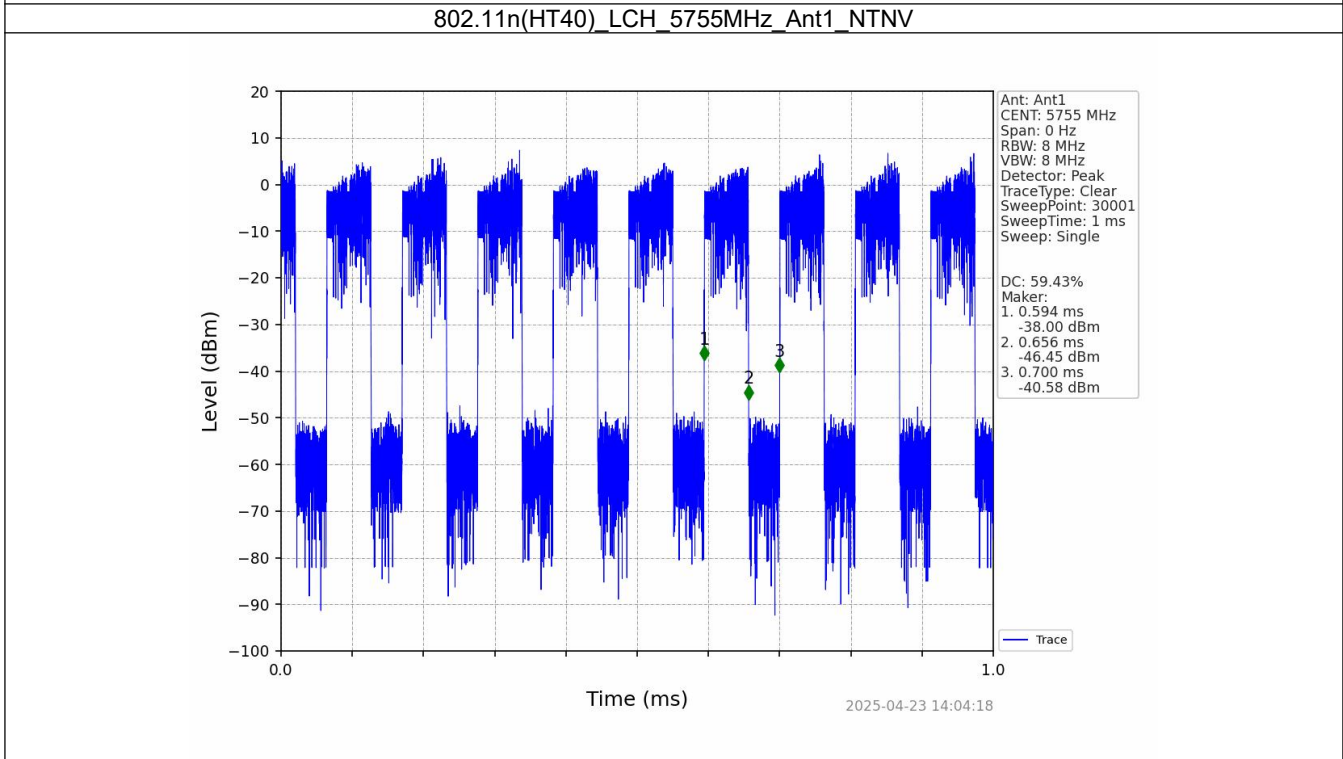
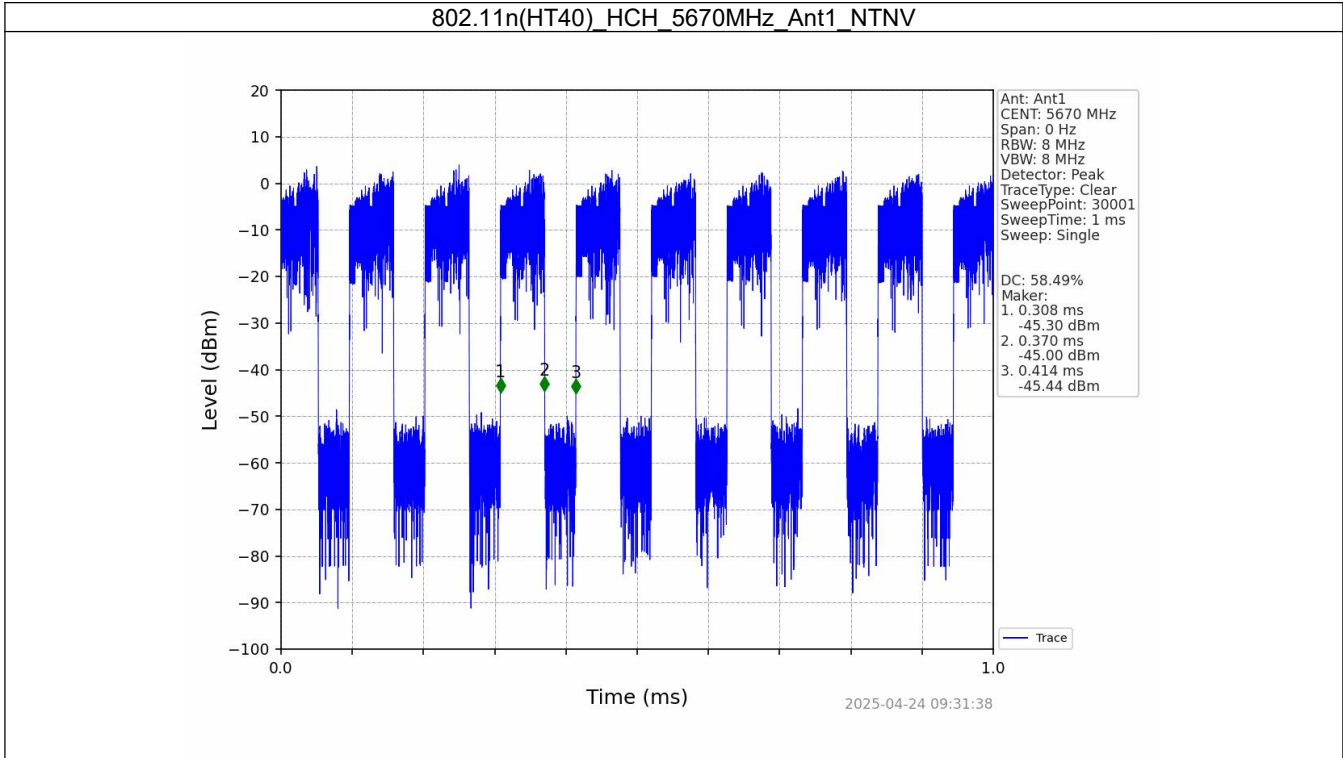
802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



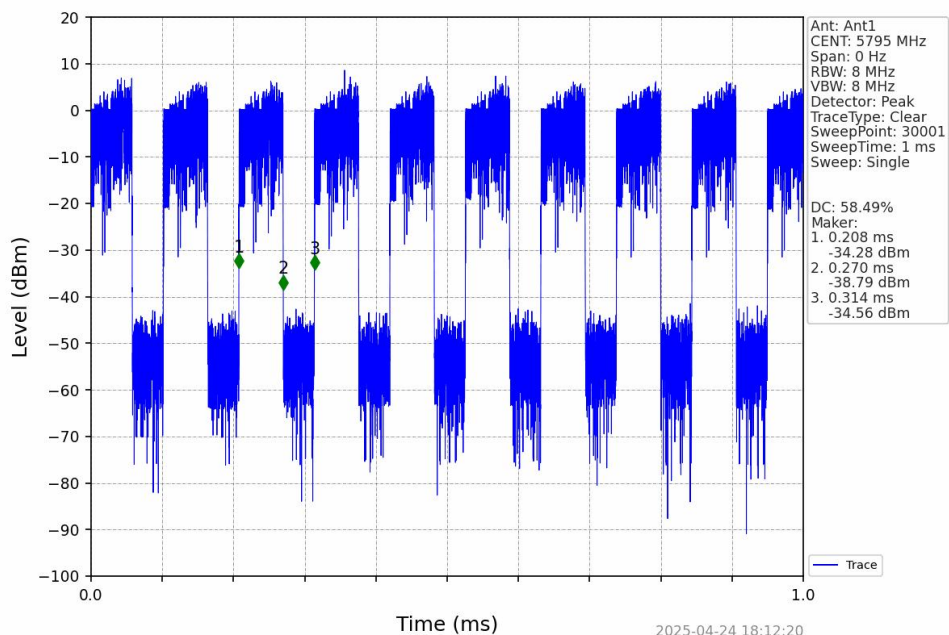








## 802.11n(HT40) HCH 5795MHz\_Ant1\_NTNV



## 802.11ac(VHT20) LCH 5180MHz\_Ant1\_NTNV

