

## 1. Effective (Isotropic) Radiated Power Output Data

### 1.1 B13\_5MHz\_ERP

#### 1.1.1 Test Result

| Band: 13 / Bandwidth: 5MHz / NTNV |                 |               |        |                       |            |           |         |         |
|-----------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                   |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                              | 779.5           | 1             | 0      | 25.62                 | -0.76      | 22.71     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.36                 | -0.76      | 21.45     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 24.09                 | -0.76      | 21.18     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 24.88                 | -0.76      | 21.97     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 24.27                 | -0.76      | 21.36     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.88                 | -0.76      | 20.97     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 24.34                 | -0.76      | 21.43     | <=34.77 | Pass    |
|                                   | 782             | 1             | 0      | 23.71                 | -0.76      | 20.80     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.33                 | -0.76      | 21.42     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 25.75                 | -0.76      | 22.84     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 23.68                 | -0.76      | 20.77     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 24.13                 | -0.76      | 21.22     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 25.02                 | -0.76      | 22.11     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 24.38                 | -0.76      | 21.47     | <=34.77 | Pass    |
|                                   | 784.5           | 1             | 0      | 24.20                 | -0.76      | 21.29     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 26.18                 | -0.76      | 23.27     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 26.31                 | -0.76      | 23.40     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 25.14                 | -0.76      | 22.23     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 26.03                 | -0.76      | 23.12     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 26.44                 | -0.76      | 23.53     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 25.97                 | -0.76      | 23.06     | <=34.77 | Pass    |
| 16QAM                             | 779.5           | 1             | 0      | 25.27                 | -0.76      | 22.36     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.17                 | -0.76      | 21.26     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 24.04                 | -0.76      | 21.13     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 24.65                 | -0.76      | 21.74     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 24.12                 | -0.76      | 21.21     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.76                 | -0.76      | 20.85     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 24.28                 | -0.76      | 21.37     | <=34.77 | Pass    |
|                                   | 782             | 1             | 0      | 23.87                 | -0.76      | 20.96     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.54                 | -0.76      | 21.63     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 25.82                 | -0.76      | 22.91     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 23.70                 | -0.76      | 20.79     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 24.15                 | -0.76      | 21.24     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.98                 | -0.76      | 22.07     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 24.37                 | -0.76      | 21.46     | <=34.77 | Pass    |
|                                   | 784.5           | 1             | 0      | 24.06                 | -0.76      | 21.15     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 25.90                 | -0.76      | 22.99     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 26.04                 | -0.76      | 23.13     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 25.11                 | -0.76      | 22.20     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 25.88                 | -0.76      | 22.97     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 26.24                 | -0.76      | 23.33     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 25.88                 | -0.76      | 22.97     | <=34.77 | Pass    |

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.2 B13\_10MHz\_ERP

## 1.2.1 Test Result

| Band: 13 / Bandwidth: 10MHz / NTNV |                 |               |        |                       |            |           |         |         |
|------------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                    |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                               | 782             | 1             | 0      | 25.27                 | -0.76      | 22.36     | <=34.77 | Pass    |
|                                    |                 |               | 25     | 24.51                 | -0.76      | 21.60     | <=34.77 | Pass    |
|                                    |                 |               | 49     | 26.56                 | -0.76      | 23.65     | <=34.77 | Pass    |
|                                    |                 | 25            | 0      | 24.28                 | -0.76      | 21.37     | <=34.77 | Pass    |
|                                    |                 |               | 13     | 24.68                 | -0.76      | 21.77     | <=34.77 | Pass    |
|                                    |                 |               | 25     | 25.97                 | -0.76      | 23.06     | <=34.77 | Pass    |
|                                    |                 | 50            | 0      | 25.17                 | -0.76      | 22.26     | <=34.77 | Pass    |
|                                    |                 |               | 0      | 24.87                 | -0.76      | 21.96     | <=34.77 | Pass    |
|                                    |                 |               | 0      | 24.36                 | -0.76      | 21.45     | <=34.77 | Pass    |
| 16QAM                              | 782             | 1             | 25     | 24.36                 | -0.76      | 21.45     | <=34.77 | Pass    |
|                                    |                 |               | 49     | 26.23                 | -0.76      | 23.32     | <=34.77 | Pass    |
|                                    |                 |               | 0      | 24.25                 | -0.76      | 21.34     | <=34.77 | Pass    |
|                                    |                 | 25            | 13     | 24.70                 | -0.76      | 21.79     | <=34.77 | Pass    |
|                                    |                 |               | 25     | 25.86                 | -0.76      | 22.95     | <=34.77 | Pass    |
|                                    |                 |               | 0      | 25.08                 | -0.76      | 22.17     | <=34.77 | Pass    |
|                                    |                 | 50            | 0      | 25.08                 | -0.76      | 22.17     | <=34.77 | Pass    |
|                                    |                 |               | 0      | 25.08                 | -0.76      | 22.17     | <=34.77 | Pass    |
|                                    |                 |               | 0      | 25.08                 | -0.76      | 22.17     | <=34.77 | Pass    |

Note1: ERP=Conducted Power+Antenna Gain-2.15

## 2. Frequency Stability

### 2.1 B13\_5MHz

#### 2.1.1 Test Result

| Band: 13 / Bandwidth: 5MHz |                    |               |         |               |                  |                     |                       |             |         |         |
|----------------------------|--------------------|---------------|---------|---------------|------------------|---------------------|-----------------------|-------------|---------|---------|
| Modulation                 | Frequency<br>(MHz) | RB Allocation |         | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |             | Verdict |         |
|                            |                    | Size          | Offset  |               |                  |                     | Result                | Limit       |         |         |
| QPSK                       | 779.5              | 25            | 0       | 20            | 3.27             | -2.360              | -0.0030               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         |               | 3.85             | -1.059              | -0.0014               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         |               | 4.43             | -7.553              | -0.0097               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | -30           | 3.85             | -7.253              | -0.0093               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | -20           | 3.85             | -0.358              | -0.0005               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | -10           | 3.85             | -2.503              | -0.0032               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | 0             | 3.85             | -7.939              | -0.0102               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | 10            | 3.85             | -7.381              | -0.0095               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | 30            | 3.85             | -9.484              | -0.0122               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | 40            | 3.85             | -9.027              | -0.0116               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | 50            | 3.85             | -3.791              | -0.0049               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | 782           | 25               | 0                   | 20                    | 3.27        | -6.580  | -0.0084 |
|                            | 3.85               | -1.259        | -0.0016 |               |                  |                     |                       | -2.5 to 2.5 | Pass    |         |
|                            | 4.43               | 2.260         | 0.0029  |               |                  |                     |                       | -2.5 to 2.5 | Pass    |         |
|                            | -30                | 3.85          | -5.593  |               |                  |                     | -0.0072               | -2.5 to 2.5 | Pass    |         |
|                            | -20                | 3.85          | -3.791  |               |                  |                     | -0.0048               | -2.5 to 2.5 | Pass    |         |
|                            | -10                | 3.85          | 1.702   |               |                  |                     | 0.0022                | -2.5 to 2.5 | Pass    |         |
|                            | 0                  | 3.85          | 3.018   |               |                  |                     | 0.0039                | -2.5 to 2.5 | Pass    |         |
|                            | 10                 | 3.85          | -1.860  |               |                  |                     | -0.0024               | -2.5 to 2.5 | Pass    |         |
|                            | 30                 | 3.85          | -0.415  |               |                  |                     | -0.0005               | -2.5 to 2.5 | Pass    |         |
|                            | 40                 | 3.85          | 4.120   |               |                  |                     | 0.0053                | -2.5 to 2.5 | Pass    |         |
|                            | 50                 | 3.85          | -5.493  |               |                  |                     | -0.0070               | -2.5 to 2.5 | Pass    |         |
|                            | 784.5              | 25            | 0       |               |                  |                     | 20                    | 3.27        | -4.835  | -0.0062 |
|                            |                    |               |         | 3.85          | -4.492           | -0.0057             |                       | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | 4.43          | 3.862            | 0.0049              |                       | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         | -30           | 3.85             | -1.159              | -0.0015               | -2.5 to 2.5 | Pass    |         |
|                            |                    |               |         |               |                  |                     |                       |             |         |         |
|                            |                    |               |         |               |                  |                     |                       |             |         |         |

|       |       |    |   |     |      |        |         |             |      |
|-------|-------|----|---|-----|------|--------|---------|-------------|------|
| 16QAM | 779.5 | 25 | 0 | -20 | 3.85 | -4.449 | -0.0057 | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.85 | -4.878 | -0.0062 | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.85 | -2.446 | -0.0031 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | -5.322 | -0.0068 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | 1.659  | 0.0021  | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -3.519 | -0.0045 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -4.764 | -0.0061 | -2.5 to 2.5 | Pass |
|       | 782   | 25 | 0 | 20  | 3.27 | -4.978 | -0.0064 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.85 | -3.476 | -0.0045 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.43 | -2.775 | -0.0036 | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.85 | 0.715  | 0.0009  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.85 | -4.921 | -0.0063 | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.85 | -2.818 | -0.0036 | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.85 | -4.635 | -0.0059 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | 1.616  | 0.0021  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | -2.661 | -0.0034 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -4.320 | -0.0055 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -2.432 | -0.0031 | -2.5 to 2.5 | Pass |
|       |       |    |   | 20  | 3.27 | -4.377 | -0.0056 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.85 | -0.701 | -0.0009 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.43 | -0.958 | -0.0012 | -2.5 to 2.5 | Pass |
|       | 784.5 | 25 | 0 | -30 | 3.85 | -2.832 | -0.0036 | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.85 | 2.804  | 0.0036  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.85 | 2.303  | 0.0029  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.85 | 0.887  | 0.0011  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | -5.507 | -0.0070 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | -4.506 | -0.0058 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -2.904 | -0.0037 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -2.904 | -0.0037 | -2.5 to 2.5 | Pass |
|       |       |    |   | 20  | 3.27 | -3.419 | -0.0044 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.85 | -5.465 | -0.0070 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.43 | -1.373 | -0.0018 | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.85 | -0.215 | -0.0003 | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.85 | -4.363 | -0.0056 | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.85 | -4.878 | -0.0062 | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.85 | -5.651 | -0.0072 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | -6.595 | -0.0084 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | -5.264 | -0.0067 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -2.317 | -0.0030 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -2.418 | -0.0031 | -2.5 to 2.5 | Pass |

## 2.2 B13\_10MHz

### 2.2.1 Test Result

| Band: 13 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 782             | 50            | 0      | 20         | 3.27          | -0.515           | -0.0007               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.85          | -2.875           | -0.0037               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.43          | -2.775           | -0.0035               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.85          | -3.991           | -0.0051               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.85          | -1.402           | -0.0018               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.85          | -2.260           | -0.0029               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.85          | -0.687           | -0.0009               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.85          | -5.150           | -0.0066               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.85          | -3.476           | -0.0044               | -2.5 to 2.5 | Pass    |

|       |     |    |   |     |      |        |         |             |      |
|-------|-----|----|---|-----|------|--------|---------|-------------|------|
|       |     |    |   | 40  | 3.85 | -2.432 | -0.0031 | -2.5 to 2.5 | Pass |
|       |     |    |   | 50  | 3.85 | -3.362 | -0.0043 | -2.5 to 2.5 | Pass |
| 16QAM | 782 | 50 | 0 | 20  | 3.27 | -3.576 | -0.0046 | -2.5 to 2.5 | Pass |
|       |     |    |   |     | 3.85 | -3.934 | -0.0050 | -2.5 to 2.5 | Pass |
|       |     |    |   |     | 4.43 | -2.804 | -0.0036 | -2.5 to 2.5 | Pass |
|       |     |    |   | -30 | 3.85 | -1.817 | -0.0023 | -2.5 to 2.5 | Pass |
|       |     |    |   | -20 | 3.85 | -0.587 | -0.0008 | -2.5 to 2.5 | Pass |
|       |     |    |   | -10 | 3.85 | -0.973 | -0.0012 | -2.5 to 2.5 | Pass |
|       |     |    |   | 0   | 3.85 | -1.259 | -0.0016 | -2.5 to 2.5 | Pass |
|       |     |    |   | 10  | 3.85 | -2.060 | -0.0026 | -2.5 to 2.5 | Pass |
|       |     |    |   | 30  | 3.85 | -0.272 | -0.0003 | -2.5 to 2.5 | Pass |
|       |     |    |   | 40  | 3.85 | -3.805 | -0.0049 | -2.5 to 2.5 | Pass |
|       |     |    |   | 50  | 3.85 | -2.918 | -0.0037 | -2.5 to 2.5 | Pass |

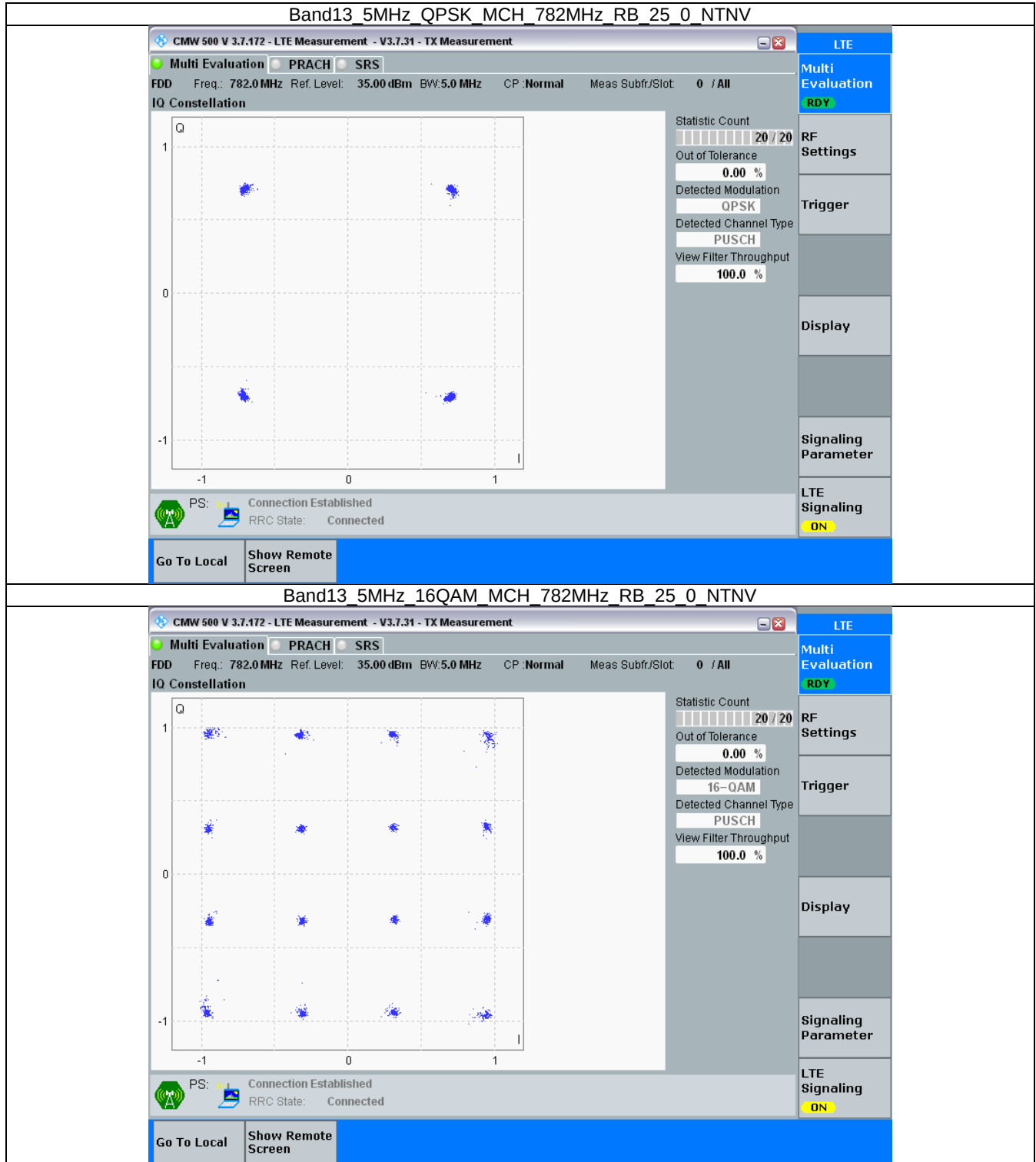
### 3. Modulation Characteristics

#### 3.1 B13\_5MHz

##### 3.1.1 Test Result

| Band: 13 / Bandwidth: 5MHz / NTN |                 |               |        |                            |       |         |
|----------------------------------|-----------------|---------------|--------|----------------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Modulation Characteristics |       | Verdict |
|                                  |                 | Size          | Offset | Result                     | Limit |         |
| QPSK                             | 782             | 25            | 0      | Refer To Test Graph        |       | Pass    |
| 16QAM                            | 782             | 25            | 0      | Refer To Test Graph        |       | Pass    |

### 3.1.2 Test Graph

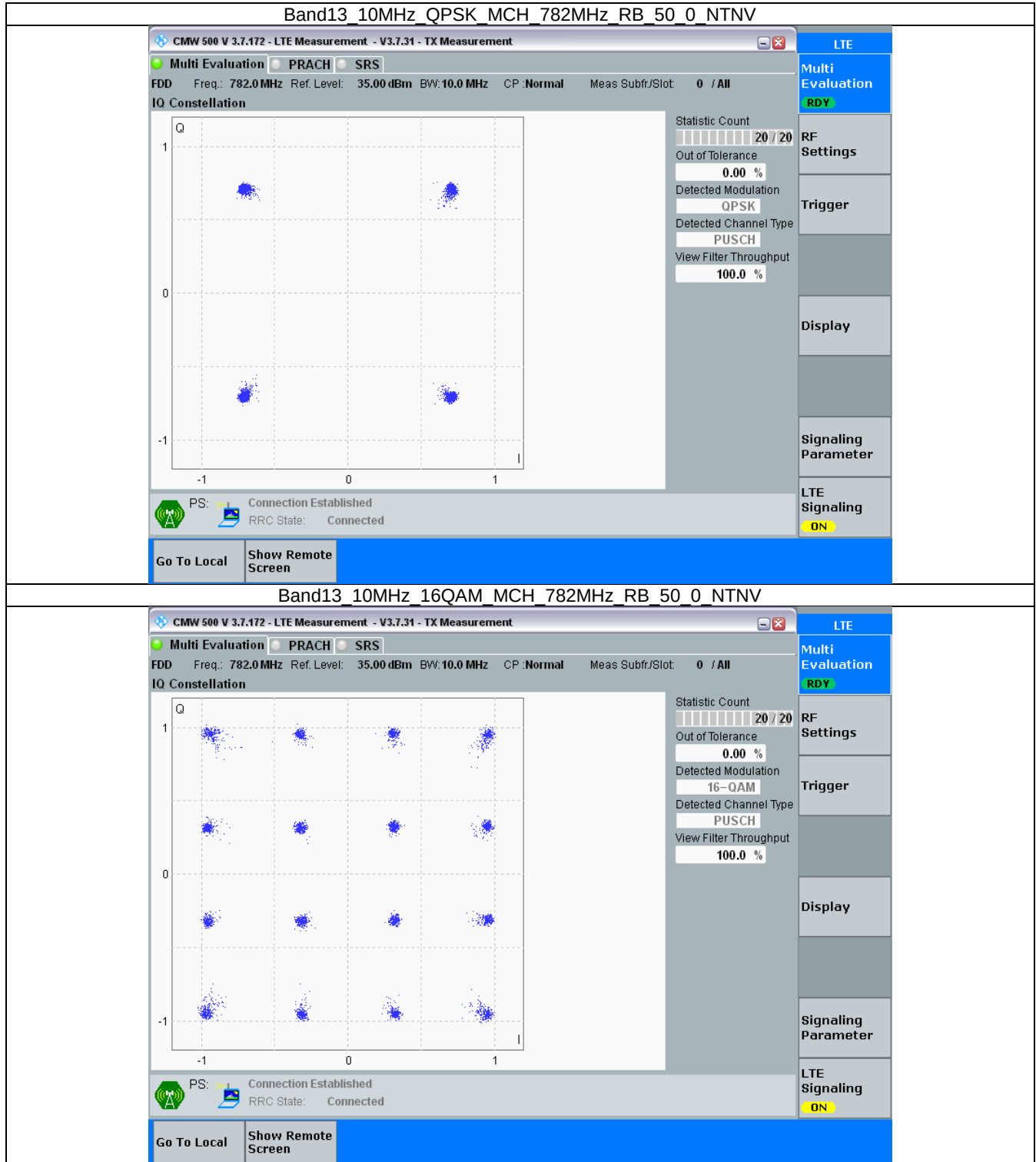


## 3.2 B13\_10MHz

### 3.2.1 Test Result

| Band: 13 / Bandwidth: 10MHz / NTNV |                 |               |        |                            |       |         |
|------------------------------------|-----------------|---------------|--------|----------------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Modulation Characteristics |       | Verdict |
|                                    |                 | Size          | Offset | Result                     | Limit |         |
| QPSK                               | 782             | 50            | 0      | Refer To Test Graph        |       | Pass    |
| 16QAM                              | 782             | 50            | 0      | Refer To Test Graph        |       | Pass    |

### 3.2.2 Test Graph



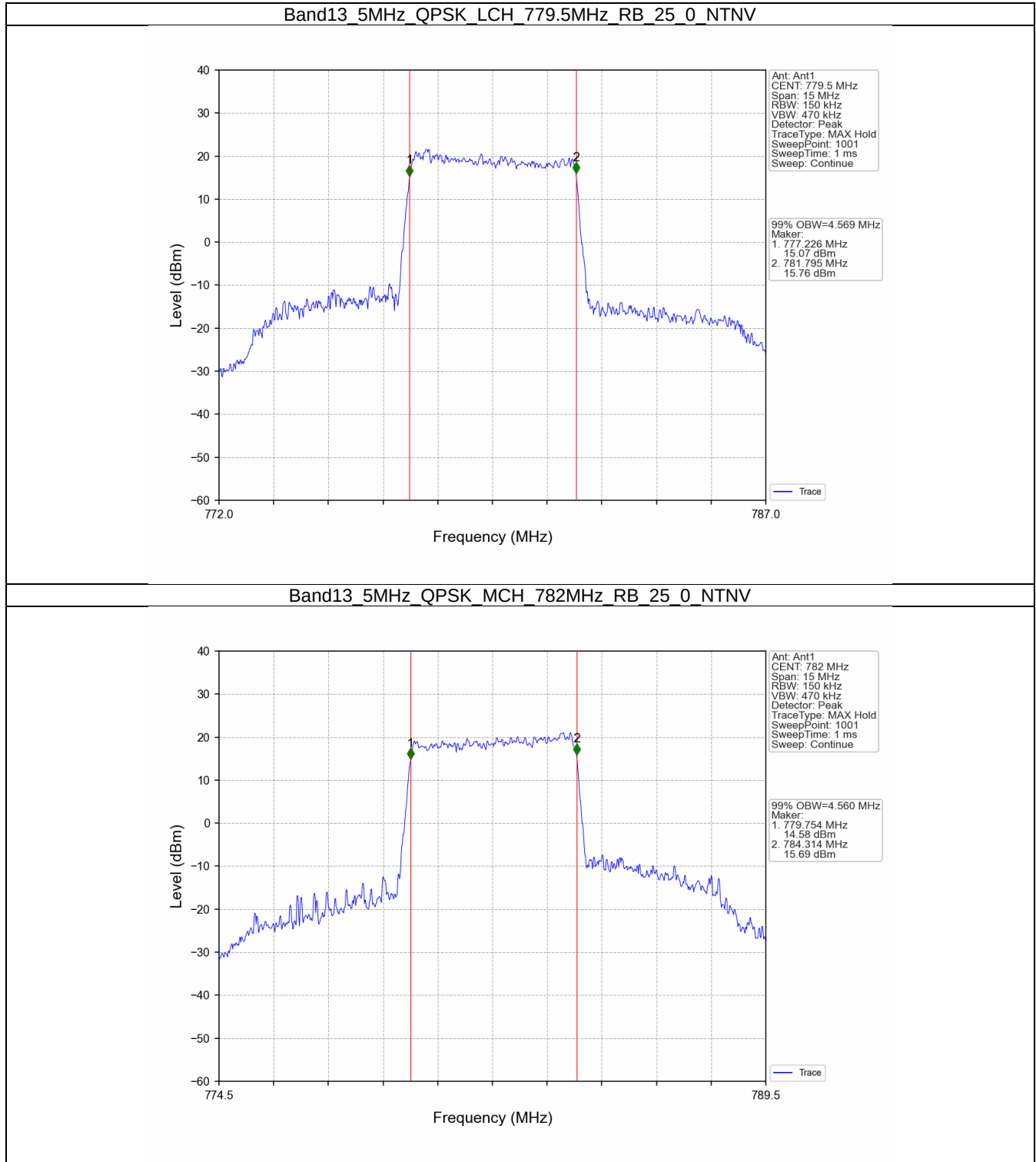
## 4. 99% & 26dB Bandwidth

### 4.1 Band13\_OBW

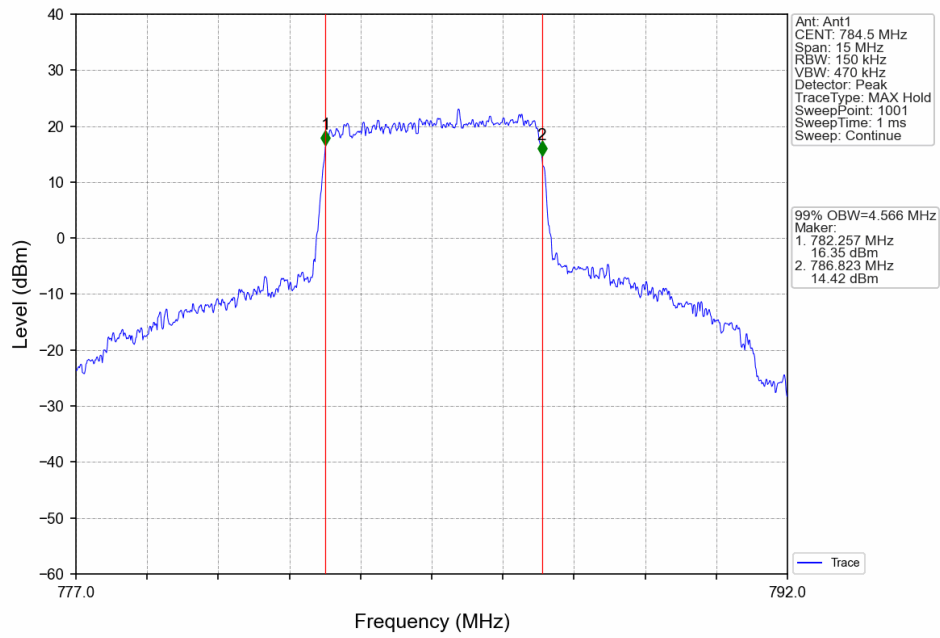
#### 4.1.1 Test Result

| Band: 13 / NTNV |            |                 |               |        |                              |       |         |
|-----------------|------------|-----------------|---------------|--------|------------------------------|-------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 99% Occupied Bandwidth (MHz) |       | Verdict |
|                 |            |                 | Size          | Offset | Result                       | Limit |         |
| 5               | QPSK       | 779.5           | 25            | 0      | 4.569                        | /     | Pass    |
|                 |            | 782             | 25            | 0      | 4.560                        | /     | Pass    |
|                 |            | 784.5           | 25            | 0      | 4.566                        | /     | Pass    |
|                 | 16QAM      | 779.5           | 25            | 0      | 4.593                        | /     | Pass    |
|                 |            | 782             | 25            | 0      | 4.588                        | /     | Pass    |
|                 |            | 784.5           | 25            | 0      | 4.564                        | /     | Pass    |
| 10              | QPSK       | 782             | 50            | 0      | 9.113                        | /     | Pass    |
|                 | 16QAM      | 782             | 50            | 0      | 9.142                        | /     | Pass    |

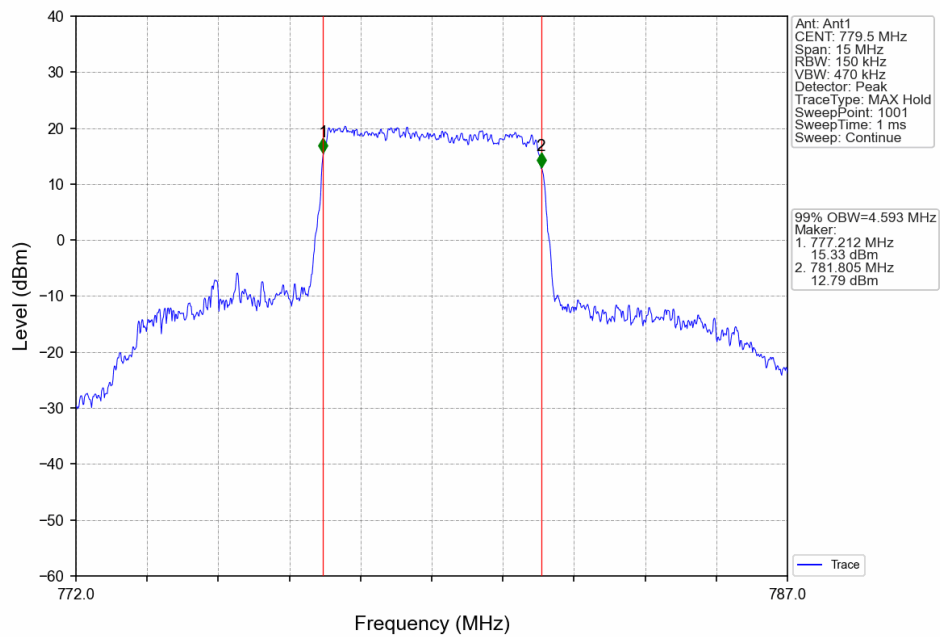
### 4.1.2 Test Graph



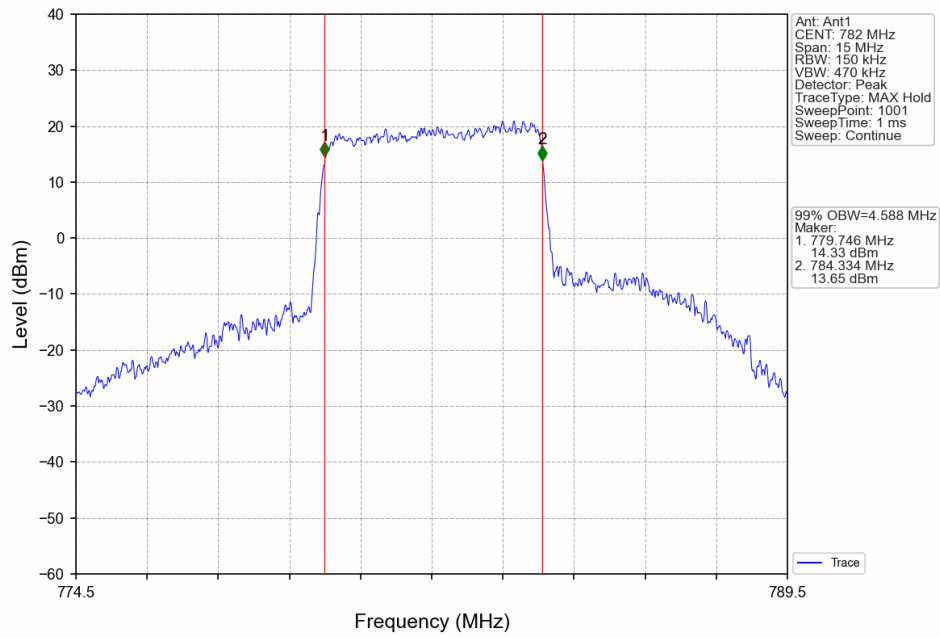
Band13\_5MHz\_QPSK\_HCH\_784.5MHz\_RB\_25\_0\_NTNV



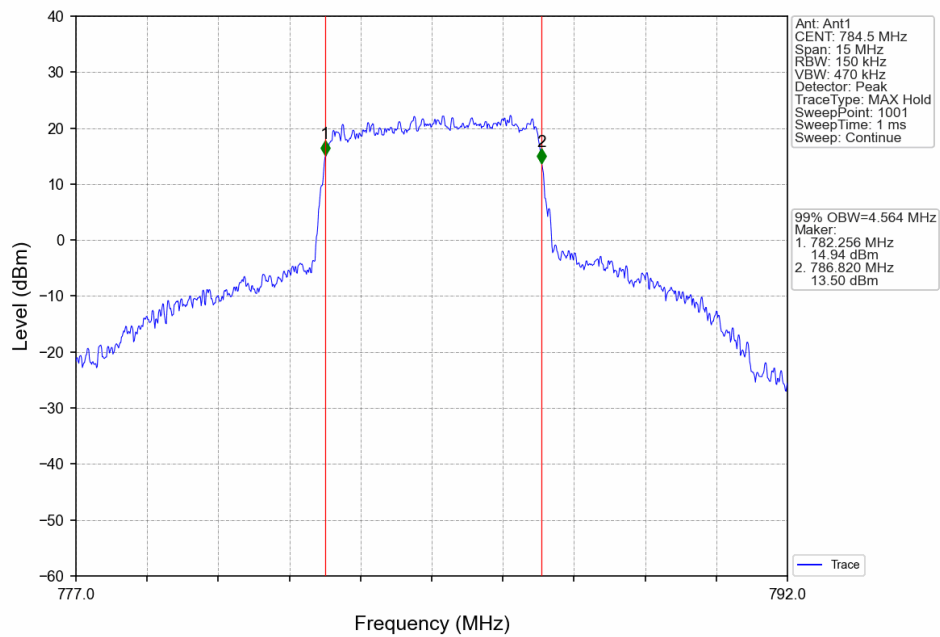
Band13\_5MHz\_16QAM\_LCH\_779.5MHz\_RB\_25\_0\_NTNV



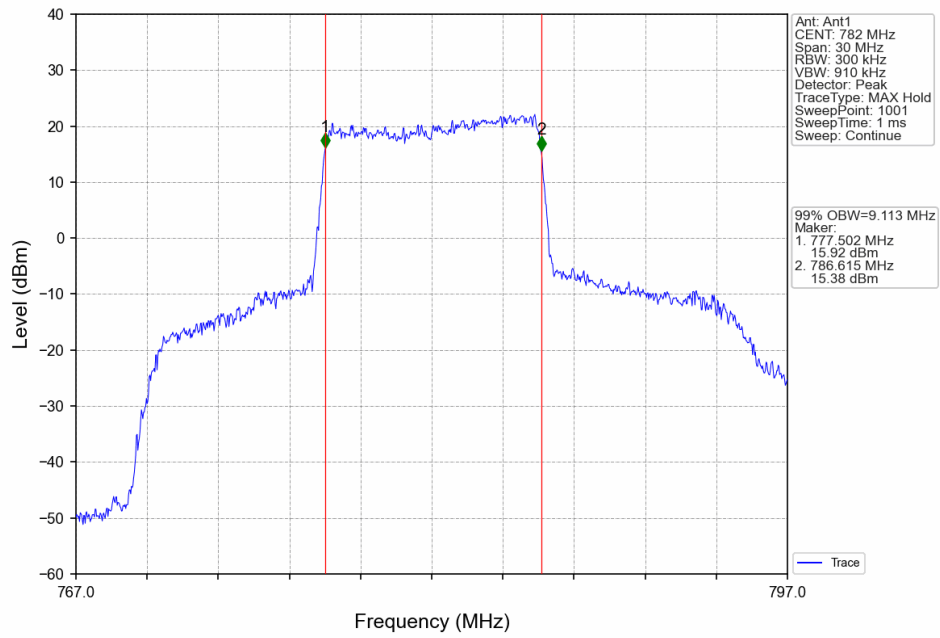
Band13\_5MHz\_16QAM\_MCH\_782MHz\_RB\_25\_0\_NTNV



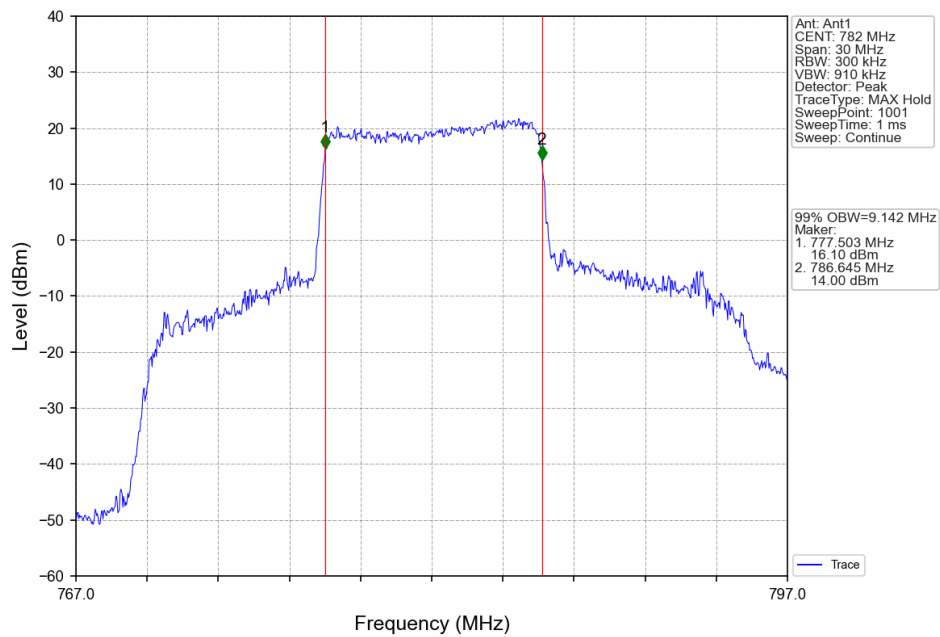
Band13\_5MHz\_16QAM\_HCH\_784.5MHz\_RB\_25\_0\_NTNV



Band13\_10MHz\_QPSK\_MCH\_782MHz\_RB\_50\_0\_NTNV



Band13\_10MHz\_16QAM\_MCH\_782MHz\_RB\_50\_0\_NTNV

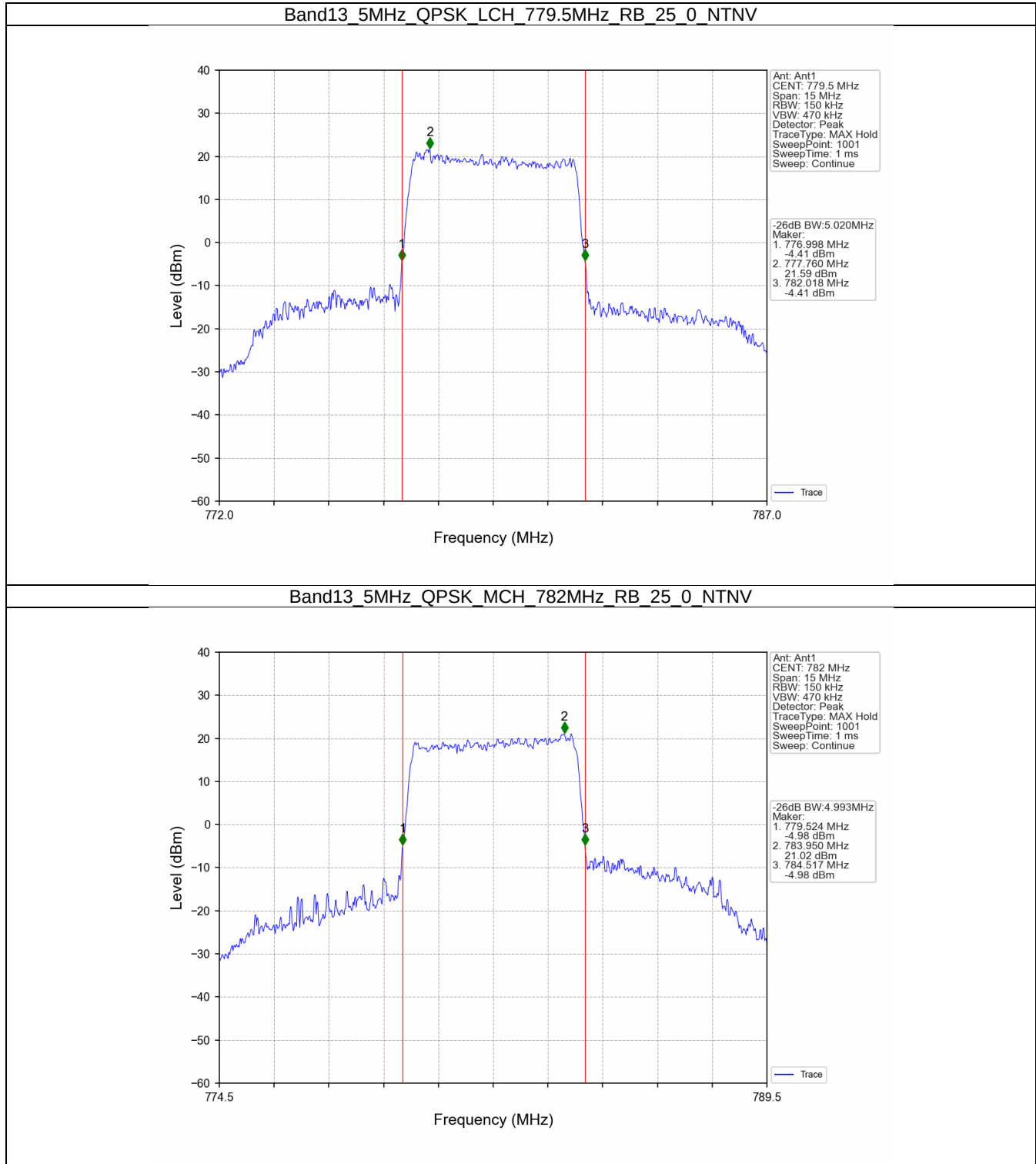


## 4.2 Band13\_XDB

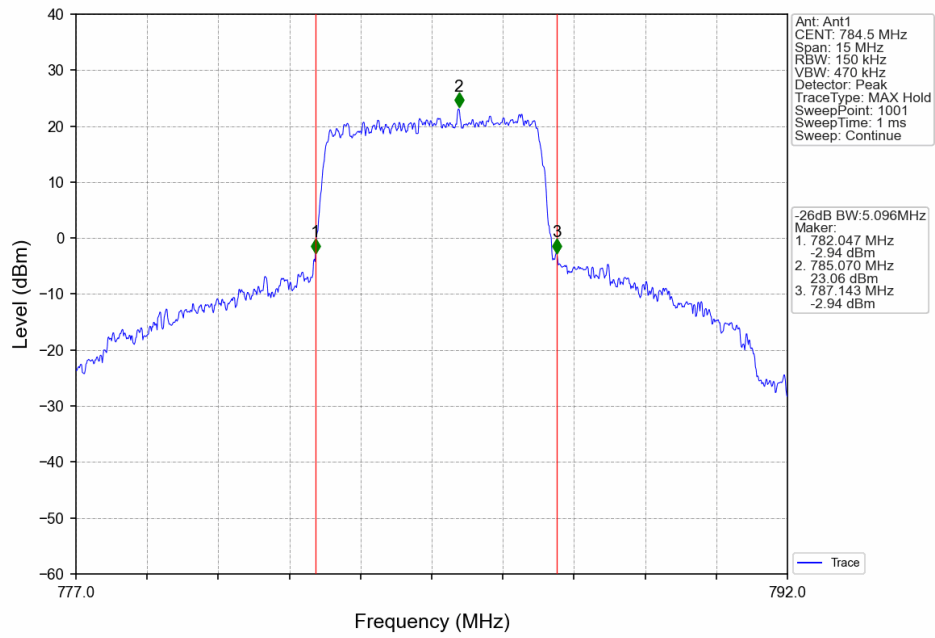
### 4.2.1 Test Result

| Band: 13 / NTNV |            |                 |               |        |                      |       |         |
|-----------------|------------|-----------------|---------------|--------|----------------------|-------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 26dB Bandwidth (MHz) |       | Verdict |
|                 |            |                 | Size          | Offset | Result               | Limit |         |
| 5               | QPSK       | 779.5           | 25            | 0      | 5.020                | /     | Pass    |
|                 |            | 782             | 25            | 0      | 4.993                | /     | Pass    |
|                 |            | 784.5           | 25            | 0      | 5.096                | /     | Pass    |
|                 | 16QAM      | 779.5           | 25            | 0      | 5.048                | /     | Pass    |
|                 |            | 782             | 25            | 0      | 5.194                | /     | Pass    |
|                 |            | 784.5           | 25            | 0      | 6.244                | /     | Pass    |
| 10              | QPSK       | 782             | 50            | 0      | 9.979                | /     | Pass    |
|                 | 16QAM      | 782             | 50            | 0      | 11.729               | /     | Pass    |

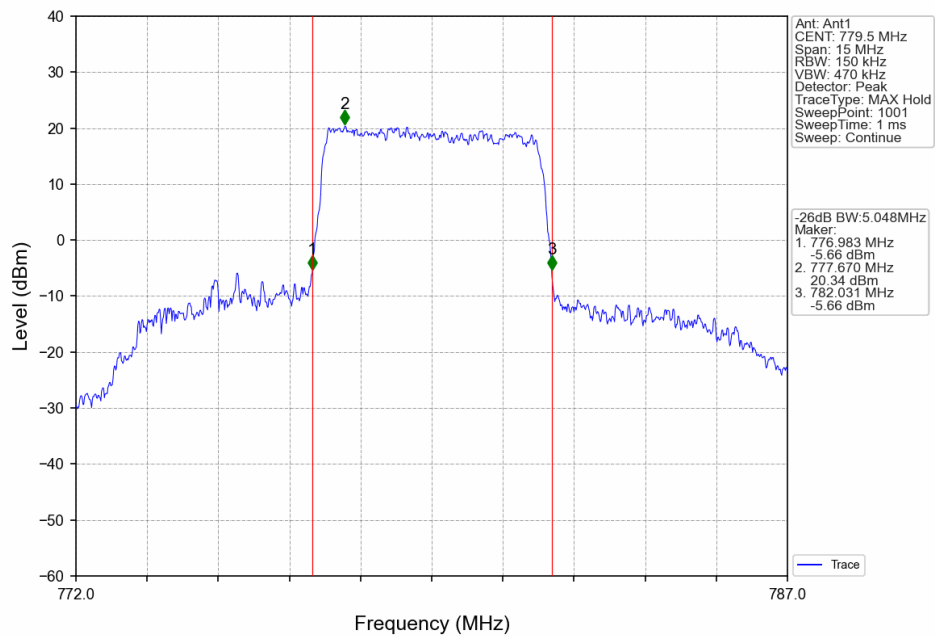
## 4.2.2 Test Graph



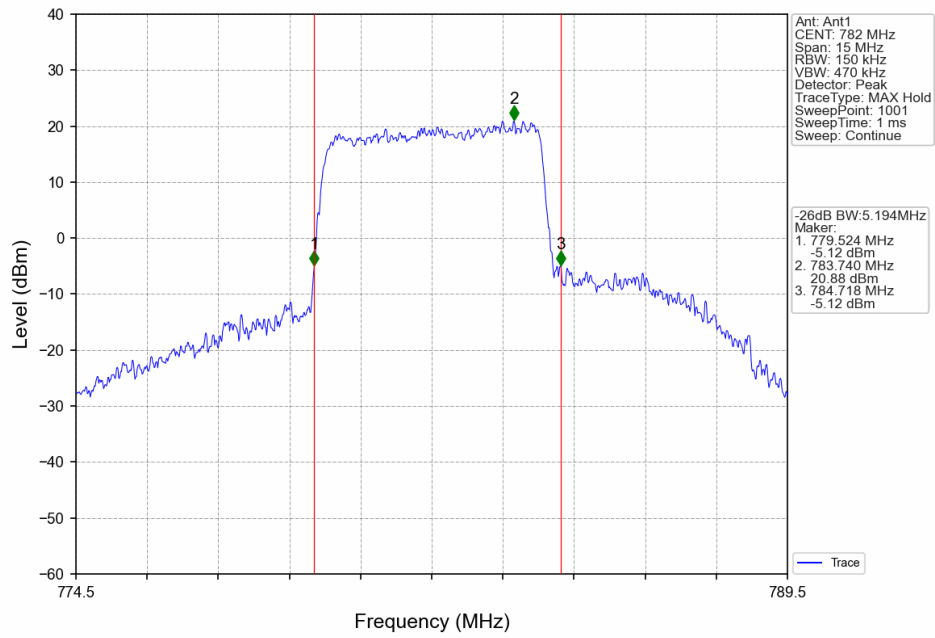
Band13\_5MHz\_QPSK\_HCH\_784.5MHz\_RB\_25\_0\_NTNV



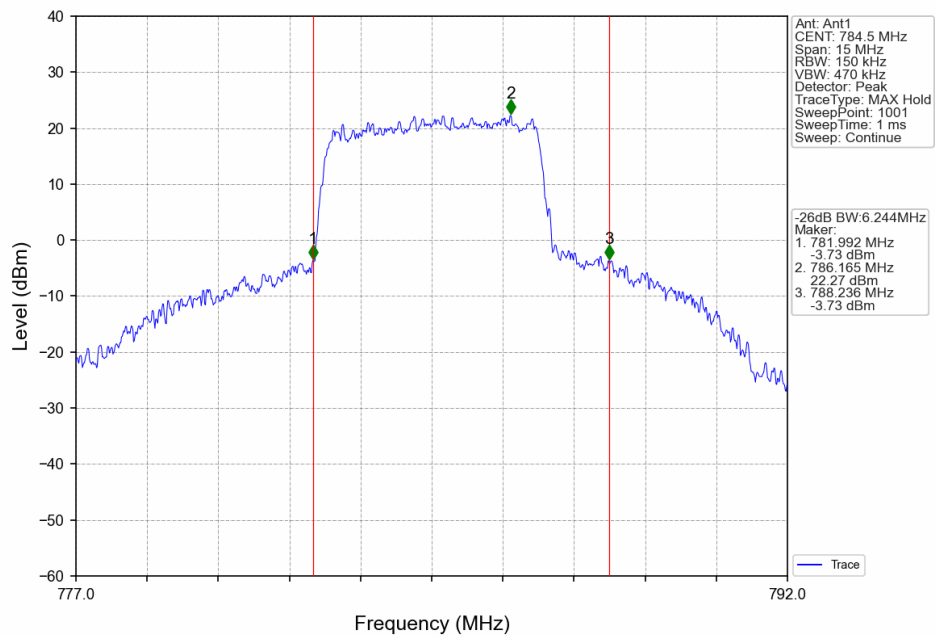
Band13\_5MHz\_16QAM\_LCH\_779.5MHz\_RB\_25\_0\_NTNV



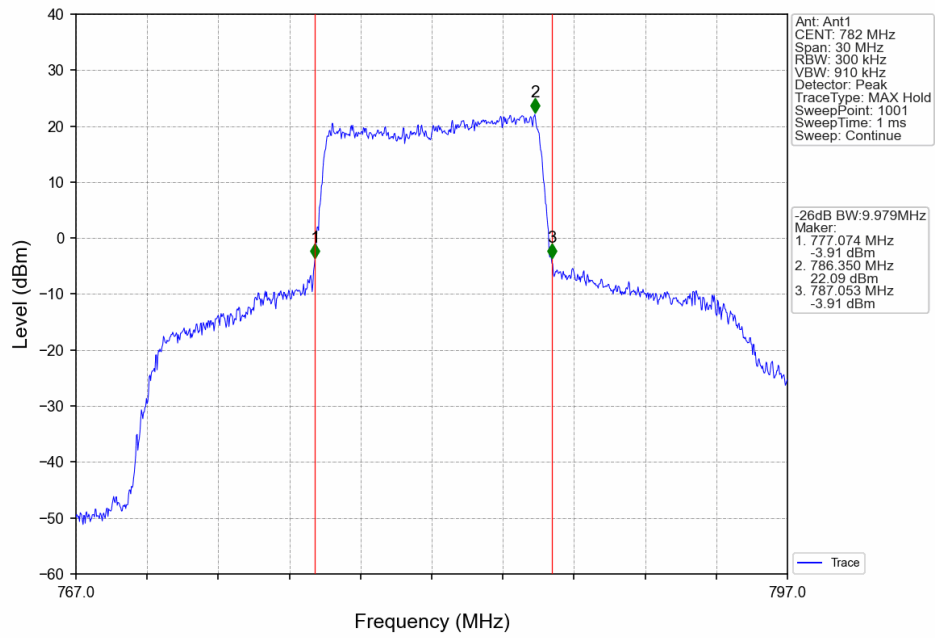
Band13\_5MHz\_16QAM\_MCH\_782MHz\_RB\_25\_0\_NTNV



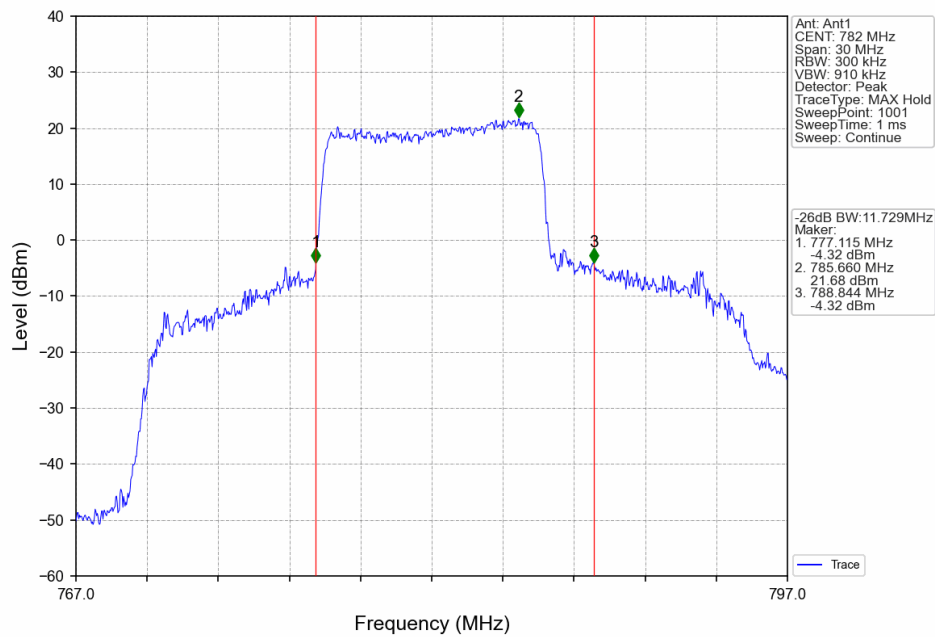
Band13\_5MHz\_16QAM\_HCH\_784.5MHz\_RB\_25\_0\_NTNV



Band13\_10MHz\_QPSK\_MCH\_782MHz\_RB\_50\_0\_NTNV



Band13\_10MHz\_16QAM\_MCH\_782MHz\_RB\_50\_0\_NTNV



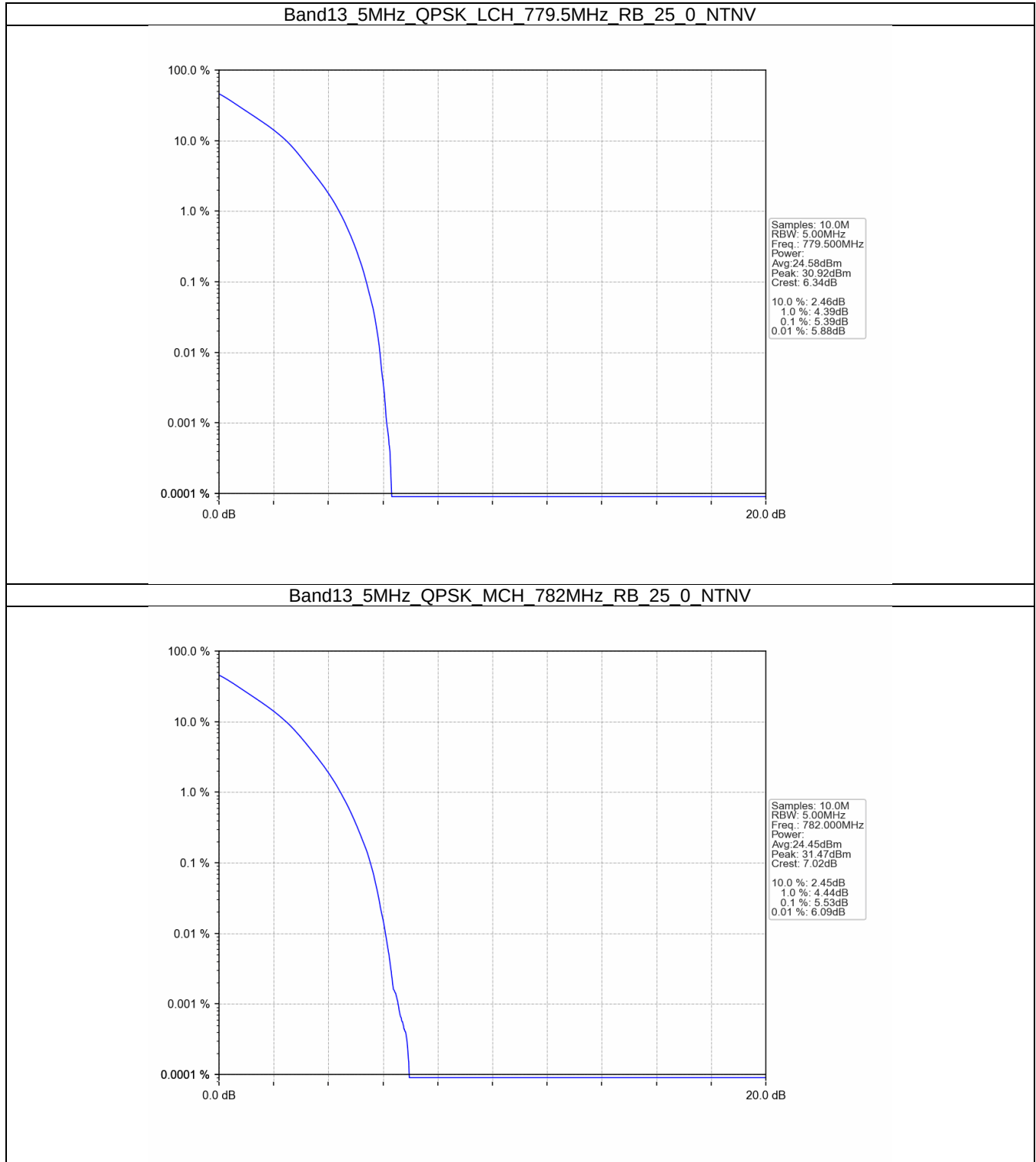
## 5. Peak-Average Ratio

### 5.1 B13\_5MHz

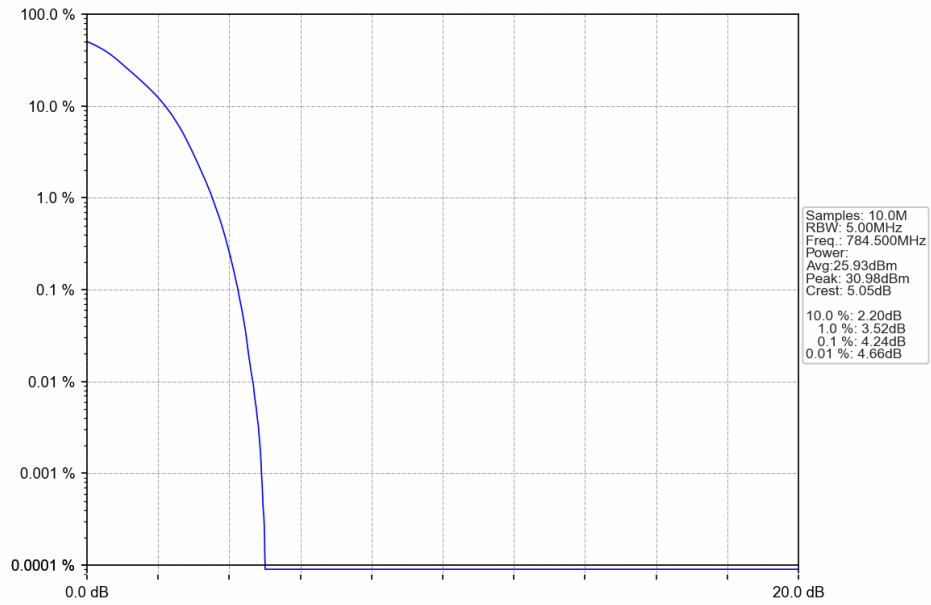
#### 5.1.1 Test Result

| Band: 13 / Bandwidth: 5MHz / NTNV |                 |               |        |                         |       |         |
|-----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                   |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                              | 779.5           | 25            | 0      | 5.39                    | <=13  | Pass    |
|                                   | 782             | 25            | 0      | 5.53                    | <=13  | Pass    |
|                                   | 784.5           | 25            | 0      | 4.24                    | <=13  | Pass    |
| 16QAM                             | 779.5           | 25            | 0      | 5.78                    | <=13  | Pass    |
|                                   | 782             | 25            | 0      | 5.88                    | <=13  | Pass    |
|                                   | 784.5           | 25            | 0      | 4.48                    | <=13  | Pass    |

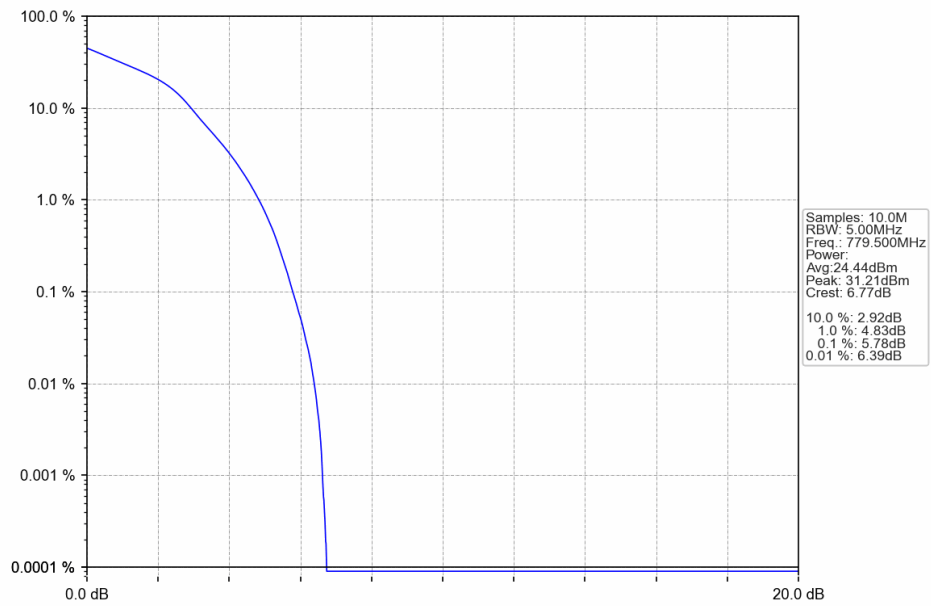
## 5.1.2 Test Graph



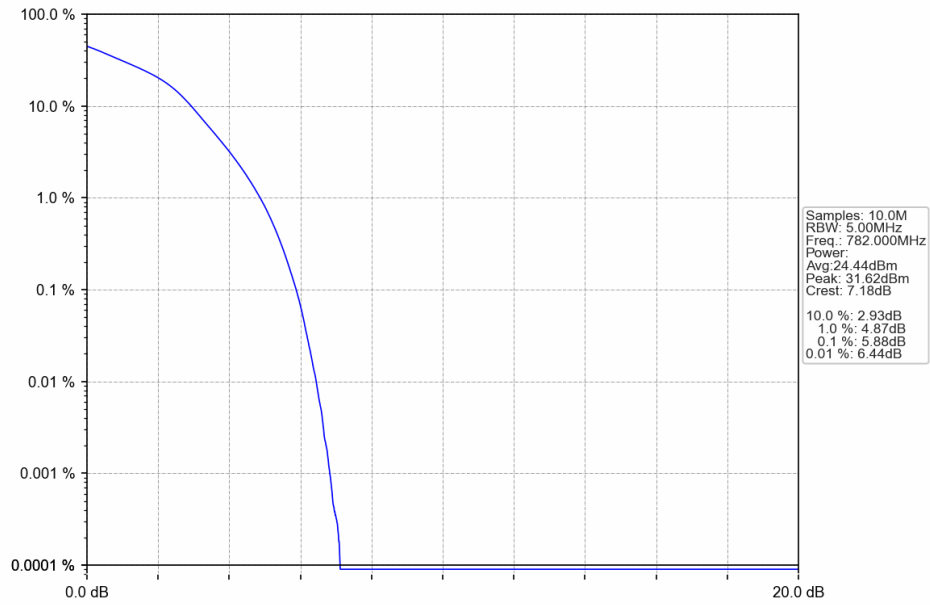
Band13\_5MHz\_QPSK\_HCH\_784.5MHz\_RB\_25\_0\_NTNV



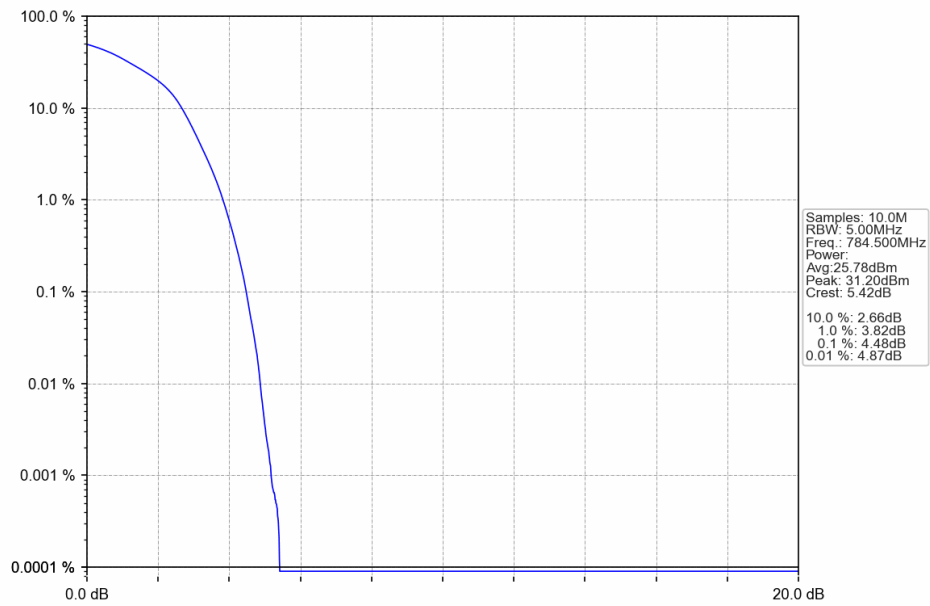
Band13\_5MHz\_16QAM\_LCH\_779.5MHz\_RB\_25\_0\_NTNV



Band13\_5MHz\_16QAM\_MCH\_782MHz\_RB\_25\_0\_NTNV



Band13\_5MHz\_16QAM\_HCH\_784.5MHz\_RB\_25\_0\_NTNV

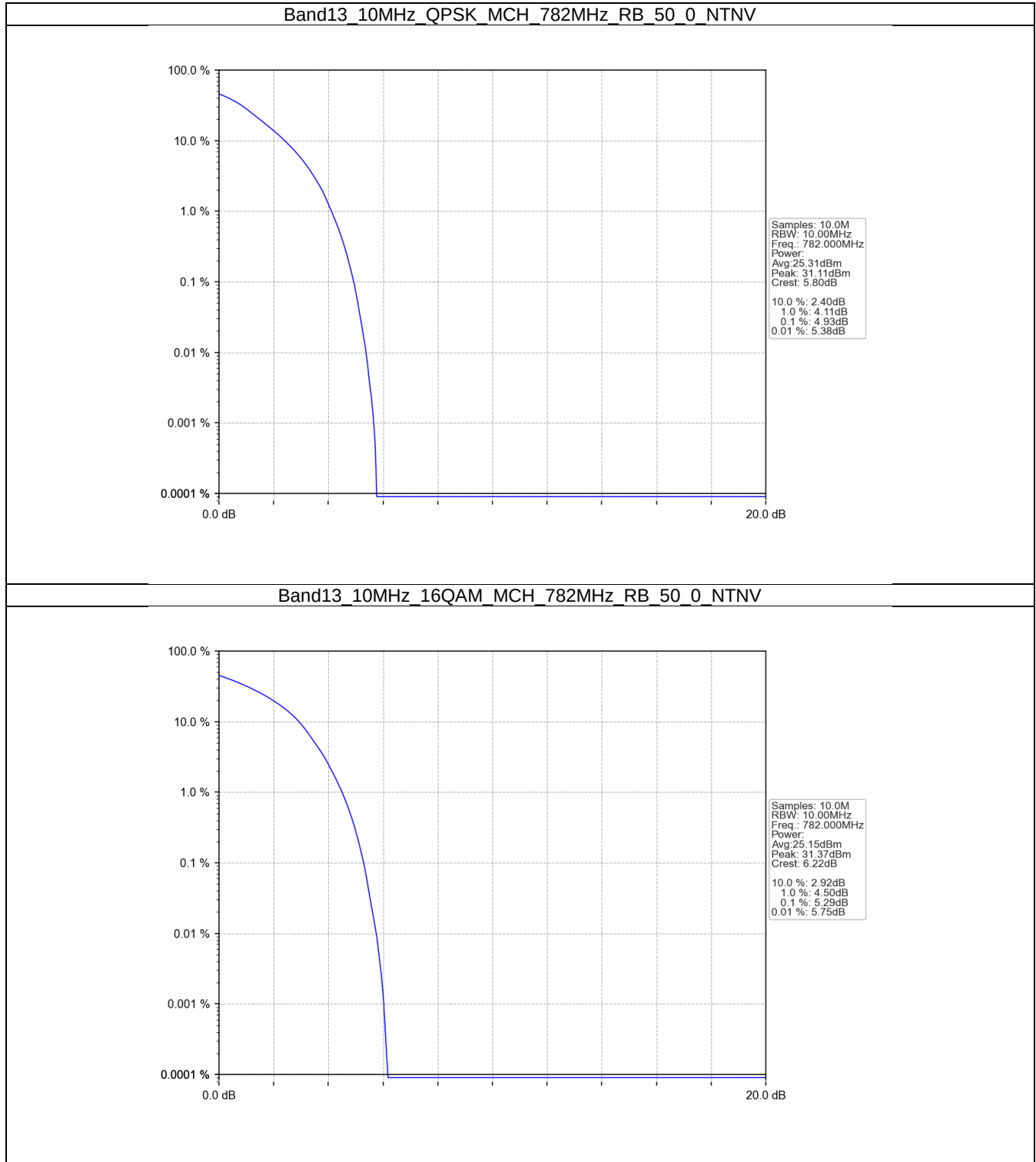


## 5.2 B13\_10MHz

### 5.2.1 Test Result

| Band: 13 / Bandwidth: 10MHz / NTNV |                 |               |        |                         |       |         |
|------------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                    |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                               | 782             | 50            | 0      | 4.93                    | <=13  | Pass    |
| 16QAM                              | 782             | 50            | 0      | 5.29                    | <=13  | Pass    |

## 5.2.2 Test Graph



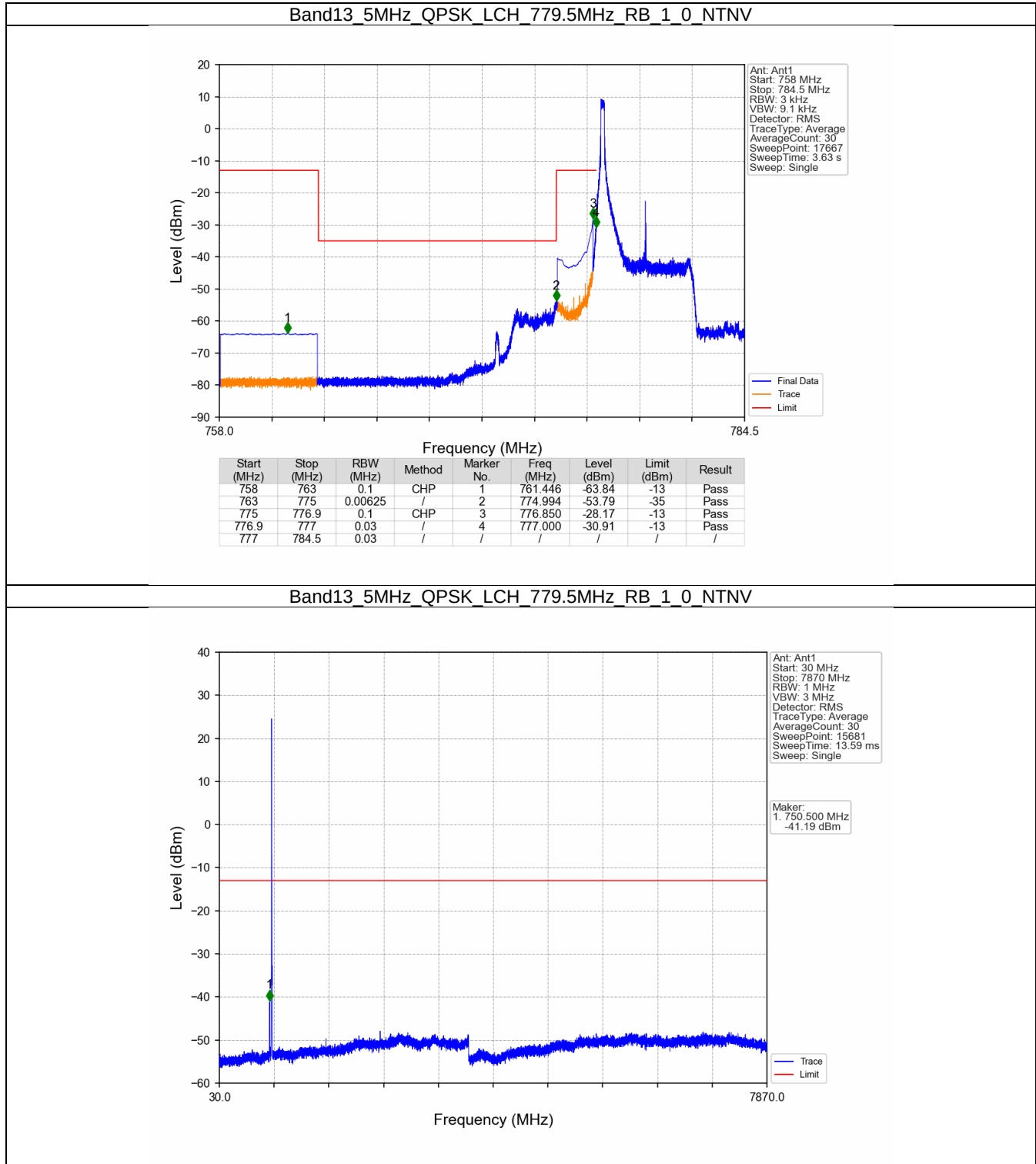
## 6. Spurious Emission

### 6.1 B13\_5MHz

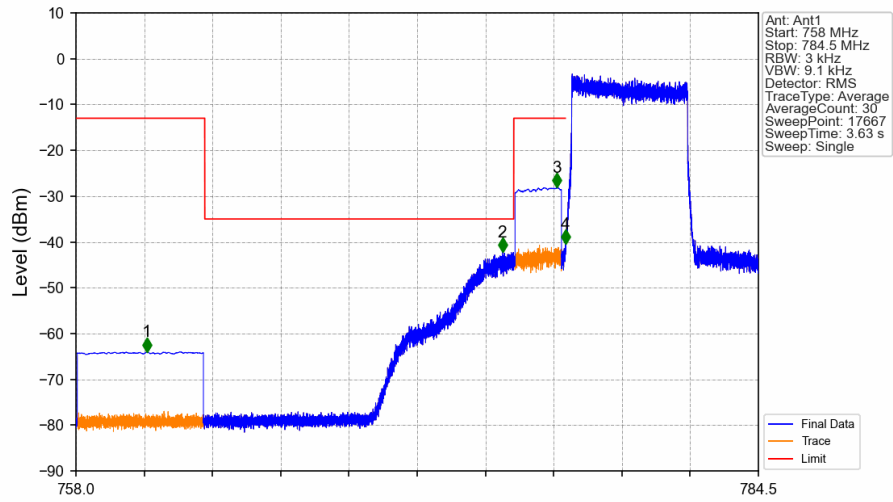
#### 6.1.1 Test Result

| Band: 13 / Bandwidth: 5MHz / NTNV |                 |               |        |                     |       |
|-----------------------------------|-----------------|---------------|--------|---------------------|-------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       |
|                                   |                 | Size          | Offset | Result              | Limit |
| QPSK                              | 779.5           | 1             | 0      | Refer To Test Graph | Pass  |
|                                   |                 | 25            | 0      | Refer To Test Graph | Pass  |
|                                   | 782             | 1             | 0      | Refer To Test Graph | Pass  |
|                                   | 784.5           | 1             | 0      | Refer To Test Graph | Pass  |
|                                   |                 |               | 24     | Refer To Test Graph | Pass  |
|                                   |                 | 25            | 0      | Refer To Test Graph | Pass  |
| 16QAM                             | 779.5           | 1             | 0      | Refer To Test Graph | Pass  |
|                                   |                 | 25            | 0      | Refer To Test Graph | Pass  |
|                                   | 782             | 1             | 0      | Refer To Test Graph | Pass  |
|                                   | 784.5           | 1             | 0      | Refer To Test Graph | Pass  |
|                                   |                 |               | 24     | Refer To Test Graph | Pass  |
|                                   |                 | 25            | 0      | Refer To Test Graph | Pass  |

## 6.1.2 Test Graph

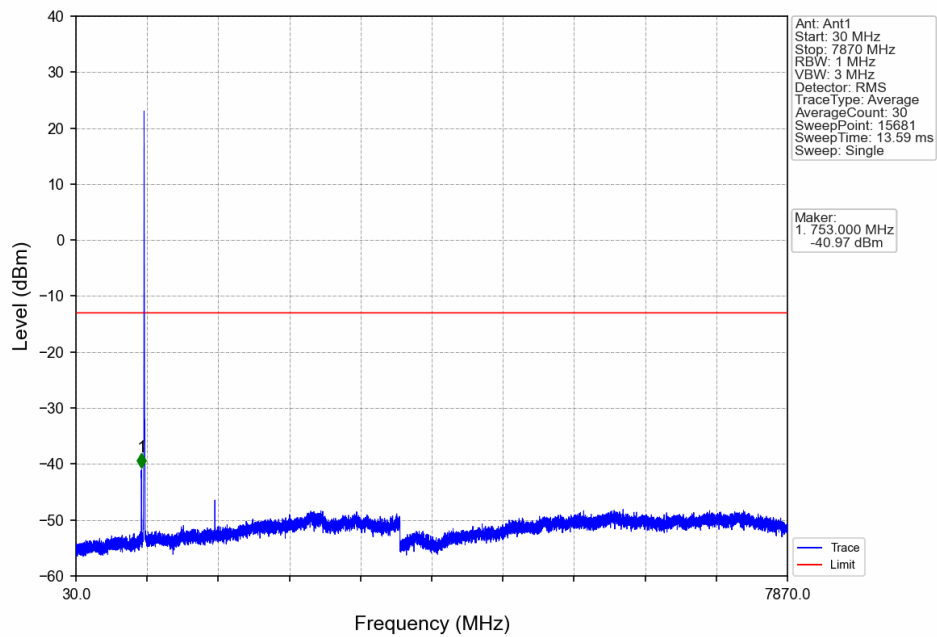


### Band13\_5MHz\_QPSK\_LCH\_779.5MHz\_RB\_25\_0\_NTNV

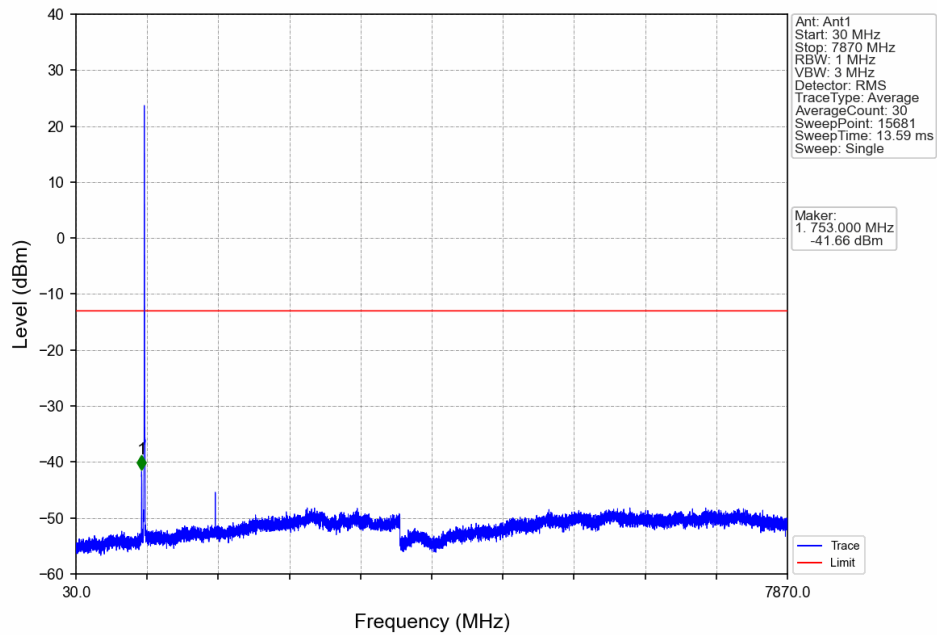


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 758         | 763        | 0.1       | CHP    | 1          | 760.745    | -63.98      | -13         | Pass   |
| 763         | 775        | 0.00625   | /      | 2          | 774.559    | -42.17      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 3          | 776.682    | -28.12      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 4          | 777.000    | -40.42      | -13         | Pass   |
| 777         | 784.5      | 0.03      | /      | /          | /          | /           | /           | /      |

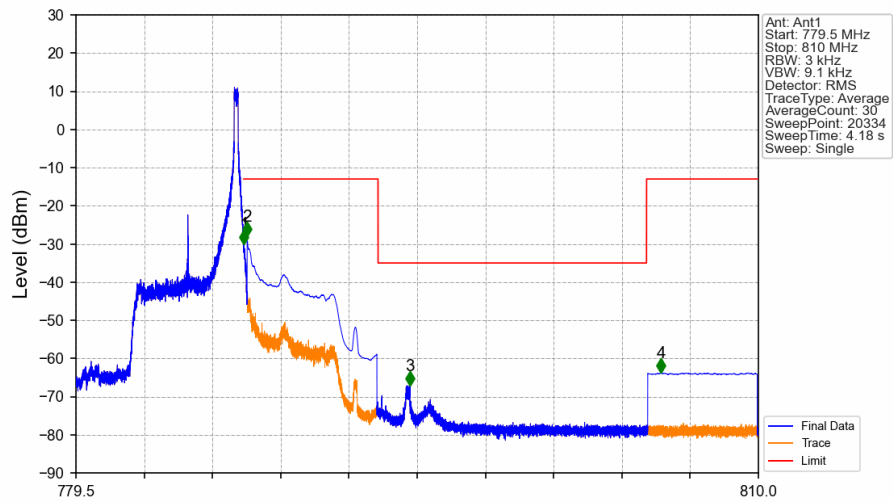
### Band13\_5MHz\_QPSK\_MCH\_782MHz\_RB\_1\_0\_NTNV



### Band13\_5MHz\_QPSK\_HCH\_784.5MHz\_RB\_1\_0\_NTNV

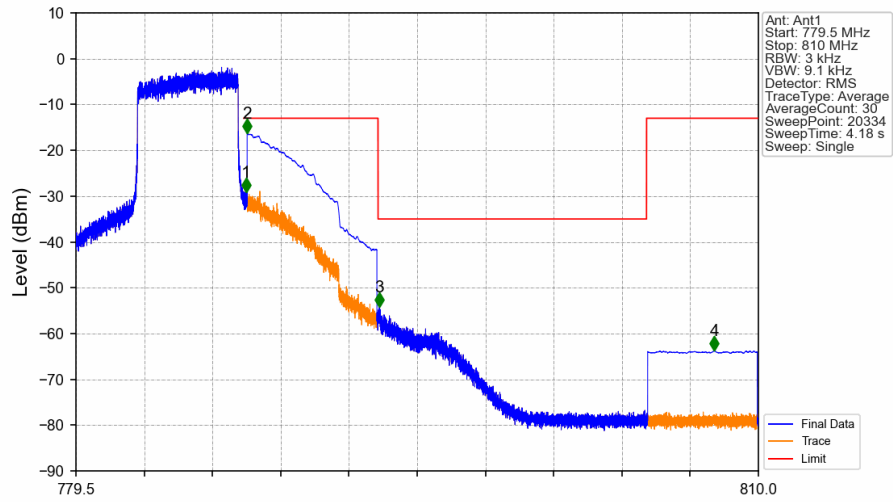


### Band13\_5MHz\_QPSK\_HCH\_784.5MHz\_RB\_1\_24\_NTNV



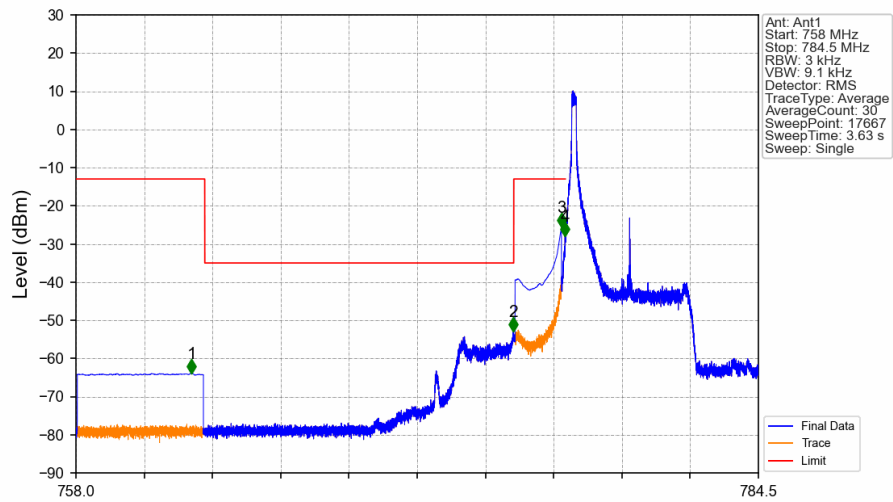
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 779.5       | 787        | 0.03      | /      | 1          | 787.014    | -30.03      | -13         | /      |
| 787         | 787.1      | 0.03      | /      | 2          | 787.150    | -27.97      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 3          | 794.409    | -67.08      | -35         | Pass   |
| 793         | 805        | 0.00625   | /      | 4          | 805.641    | -63.77      | -13         | Pass   |
| 805         | 810        | 0.1       | CHP    |            |            |             |             |        |

### Band13\_5MHz\_QPSK\_HCH\_784.5MHz\_RB\_25\_0\_NTNV



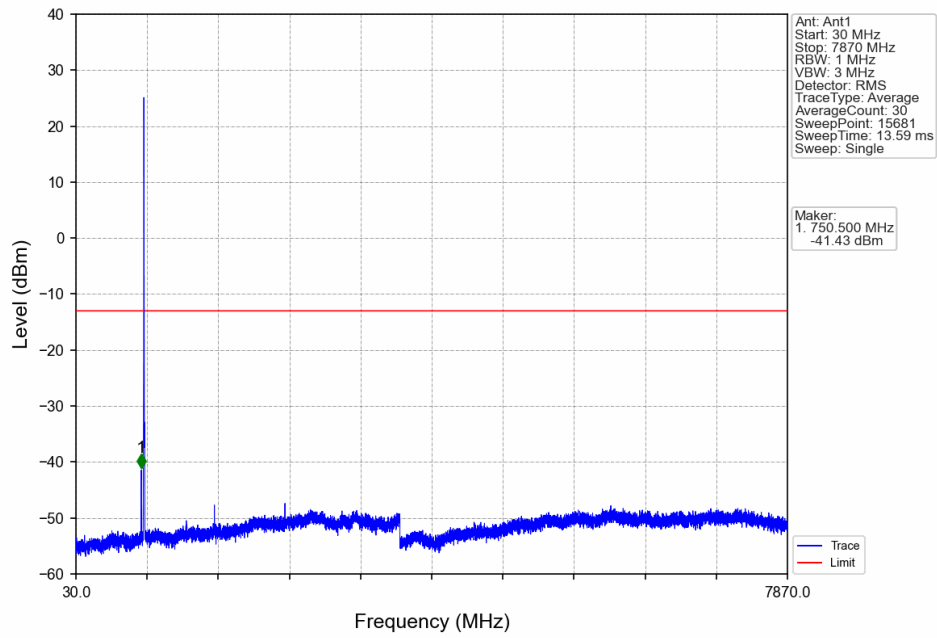
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 779.5       | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 1          | 787.093    | -29.10      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 2          | 787.150    | -16.31      | -13         | Pass   |
| 793         | 805        | 0.00625   | /      | 3          | 793.057    | -54.26      | -35         | Pass   |
| 805         | 810        | 0.1       | CHP    | 4          | 808.020    | -63.77      | -13         | Pass   |

### Band13\_5MHz\_16QAM\_LCH\_779.5MHz\_RB\_1\_0\_NTNV

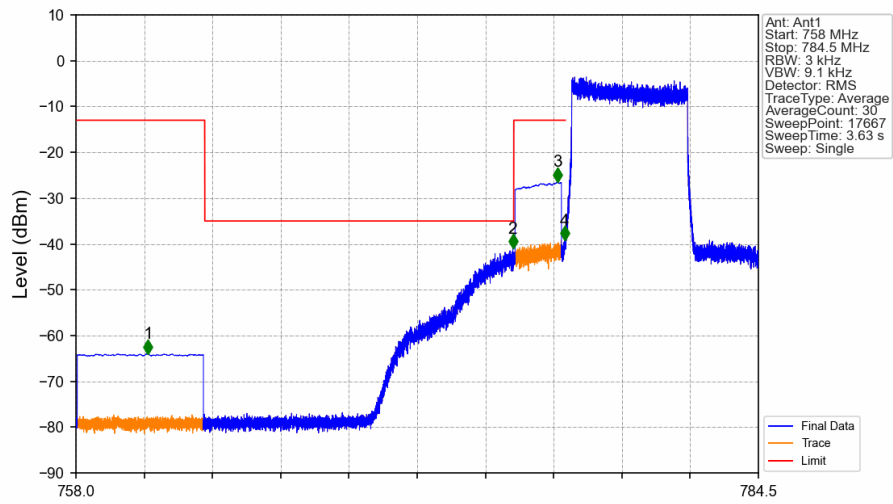


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 758         | 763        | 0.1       | CHP    | 1          | 762.485    | -63.90      | -13         | Pass   |
| 763         | 775        | 0.00625   | /      | 2          | 774.978    | -53.05      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 3          | 776.850    | -25.73      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 4          | 776.991    | -27.95      | -13         | Pass   |
| 777         | 784.5      | 0.03      | /      | /          | /          | /           | /           | /      |

### Band13\_5MHz\_16QAM\_LCH\_779.5MHz\_RB\_1\_0\_NTNV

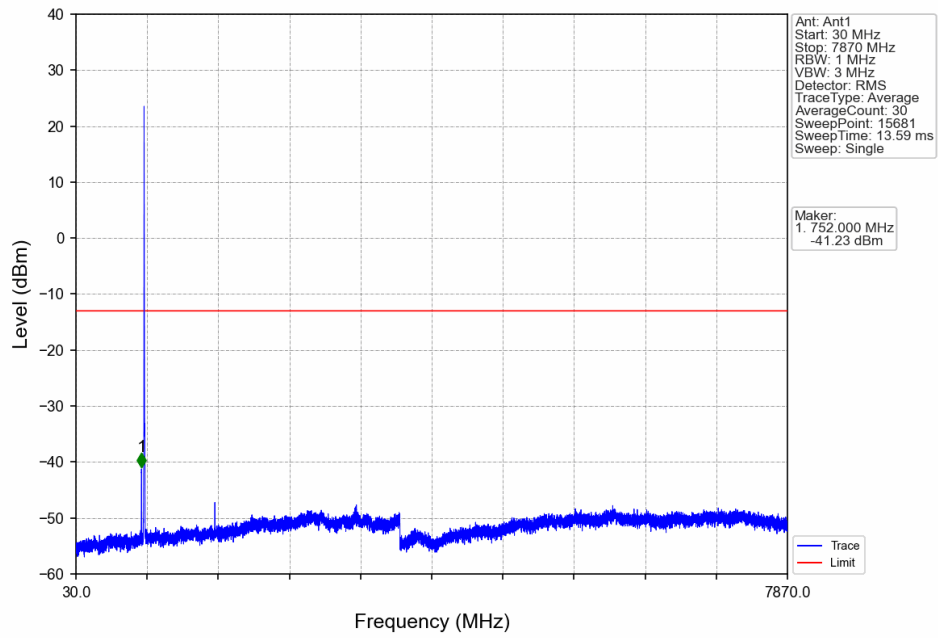


### Band13\_5MHz\_16QAM\_LCH\_779.5MHz\_RB\_25\_0\_NTNV

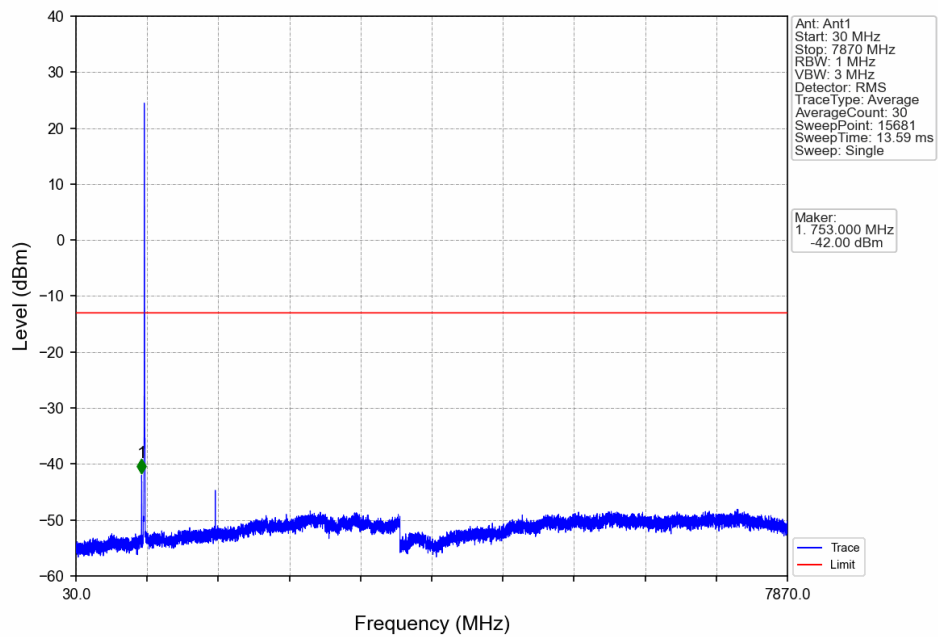


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 758         | 763        | 0.1       | CHP    | 1          | 760.796    | -63.99      | -13         | Pass   |
| 763         | 775        | 0.00625   | /      | 2          | 774.963    | -41.00      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 3          | 776.686    | -26.42      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 4          | 776.973    | -39.25      | -13         | Pass   |
| 777         | 784.5      | 0.03      | /      | /          | /          | /           | /           | /      |

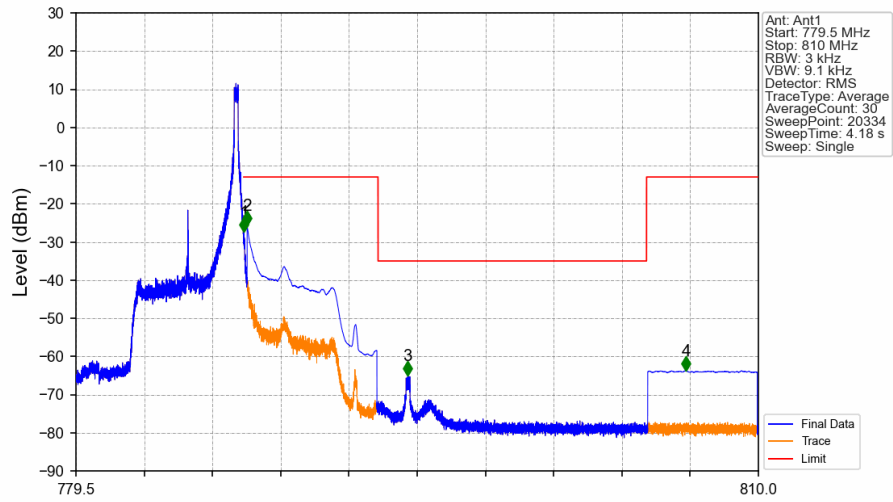
Band13\_5MHz\_16QAM\_MCH\_782MHz\_RB\_1\_0\_NTNV



Band13\_5MHz\_16QAM\_HCH\_784.5MHz\_RB\_1\_0\_NTNV

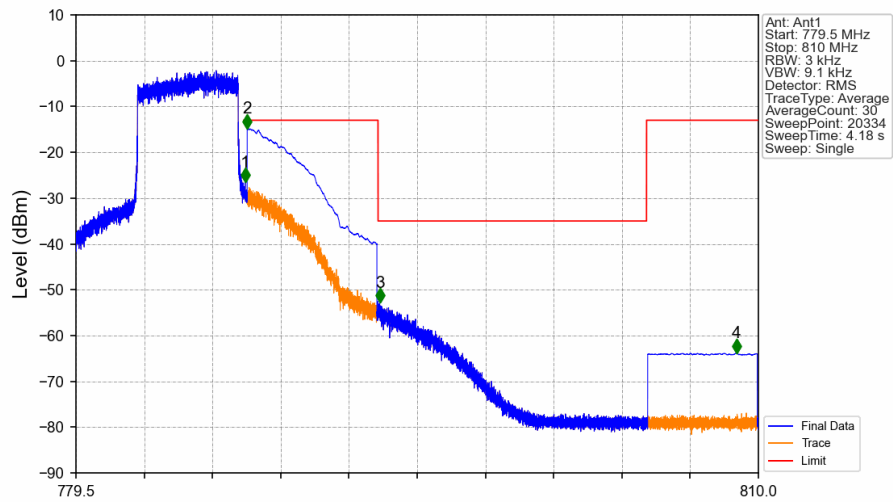


### Band13\_5MHz\_16QAM\_HCH\_784.5MHz\_RB\_1\_24\_NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 779.5       | 787        | 0.03      | /      | 1          | 787.002    | -27.37      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 2          | 787.150    | -25.71      | -13         | Pass   |
| 793         | 805        | 0.00625   | /      | 3          | 794.331    | -65.10      | -35         | Pass   |
| 805         | 810        | 0.1       | CHP    | 4          | 806.763    | -63.71      | -13         | Pass   |

### Band13\_5MHz\_16QAM\_HCH\_784.5MHz\_RB\_25\_0\_NTNV



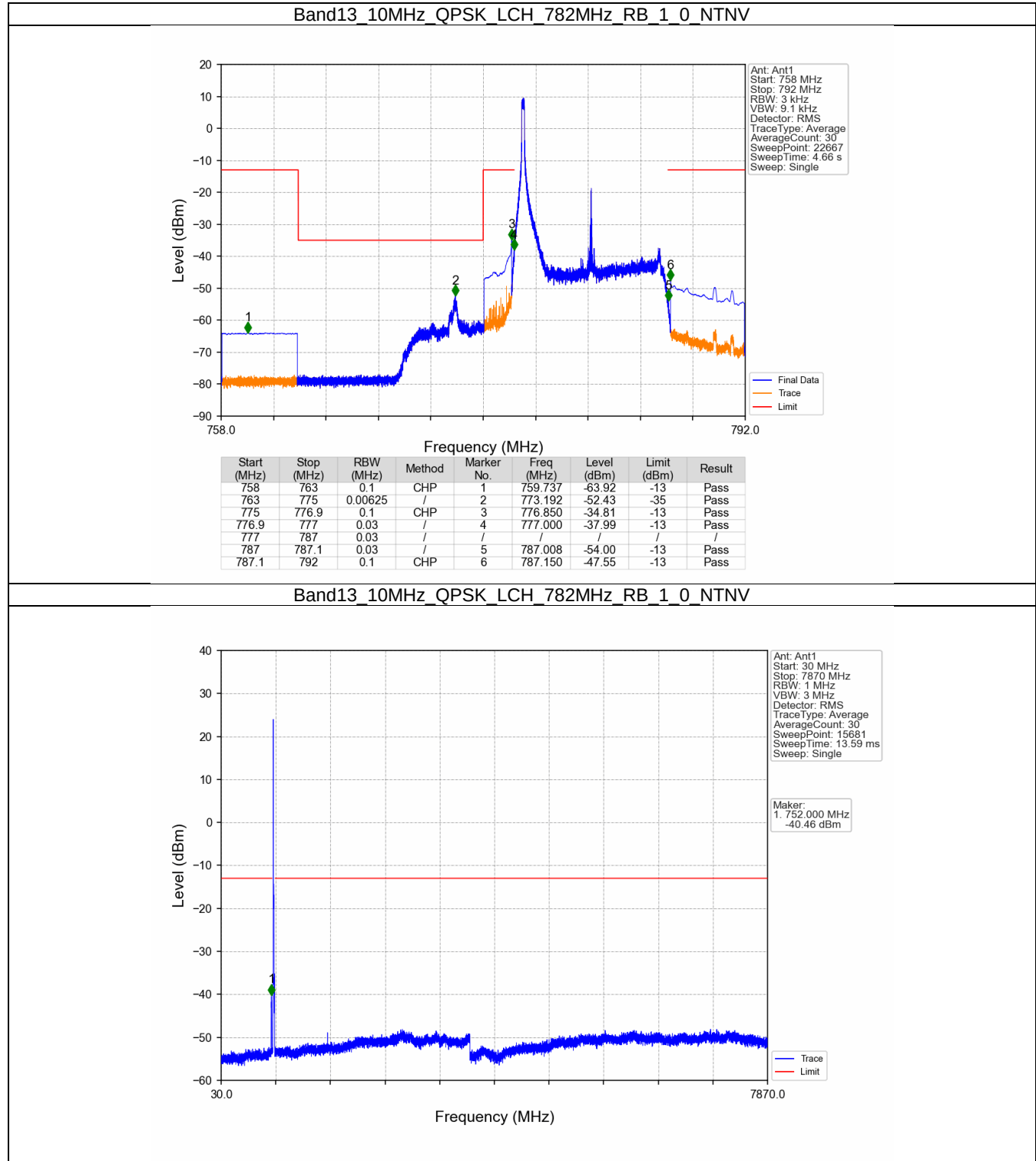
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 779.5       | 787        | 0.03      | /      | 1          | 787.062    | -26.57      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 2          | 787.159    | -14.79      | -13         | Pass   |
| 793         | 805        | 0.00625   | /      | 3          | 793.074    | -52.85      | -35         | Pass   |
| 805         | 810        | 0.1       | CHP    | 4          | 809.023    | -63.83      | -13         | Pass   |

## 6.2 B13\_10MHz

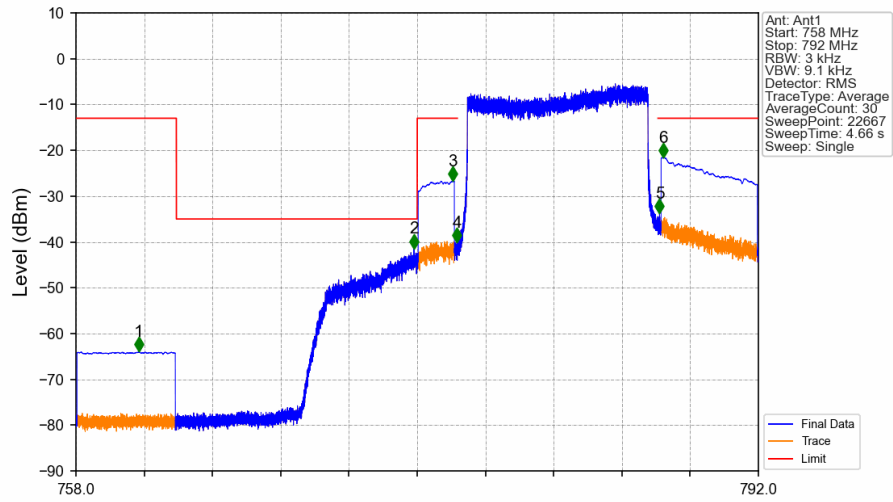
### 6.2.1 Test Result

| Band: 13 / Bandwidth: 10MHz / NTNV |                 |               |        |                     |       |         |
|------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                    |                 | Size          | Offset | Result              | Limit |         |
| QPSK                               | 782             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 782             | 1             | 49     | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
| 16QAM                              | 782             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 782             | 1             | 49     | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |

## 6.2.2 Test Graph

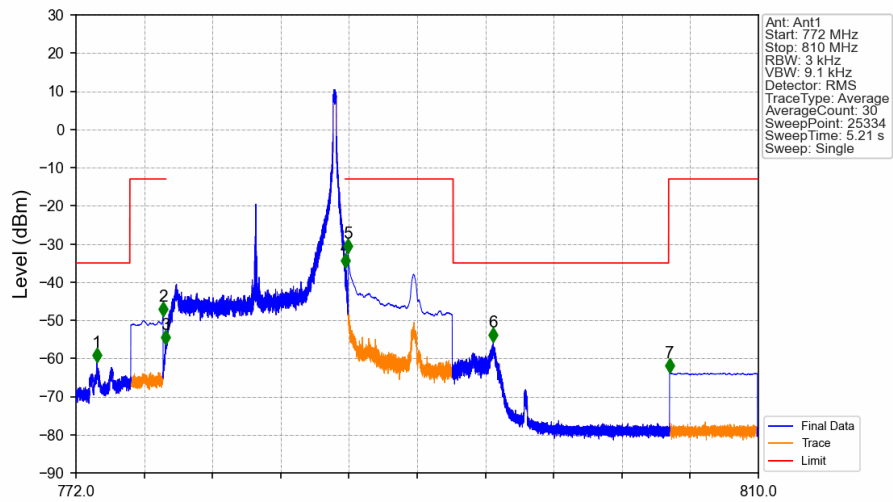


### Band13 10MHz QPSK LCH 782MHz RB 50 0 NTNV



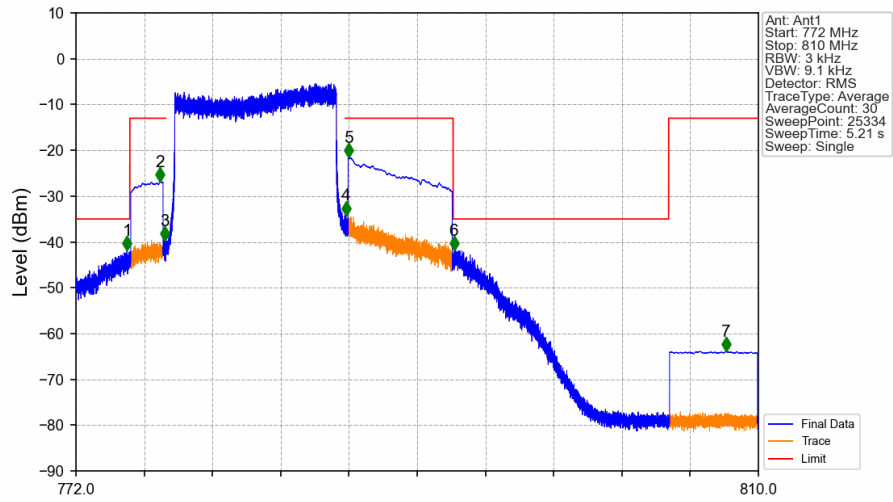
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 758         | 763        | 0.1       | CHP    | 1          | 761.125    | -63.96      | -13         | Pass   |
| 763         | 775        | 0.00625   | /      | 2          | 774.838    | -41.44      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 3          | 776.772    | -26.69      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 4          | 776.982    | -40.08      | -13         | Pass   |
| 777         | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 5          | 787.075    | -33.72      | -13         | Pass   |
| 787.1       | 792        | 0.1       | CHP    | 6          | 787.252    | -21.58      | -13         | Pass   |

### Band13 10MHz QPSK HCH 782MHz RB 1 49 NTNV



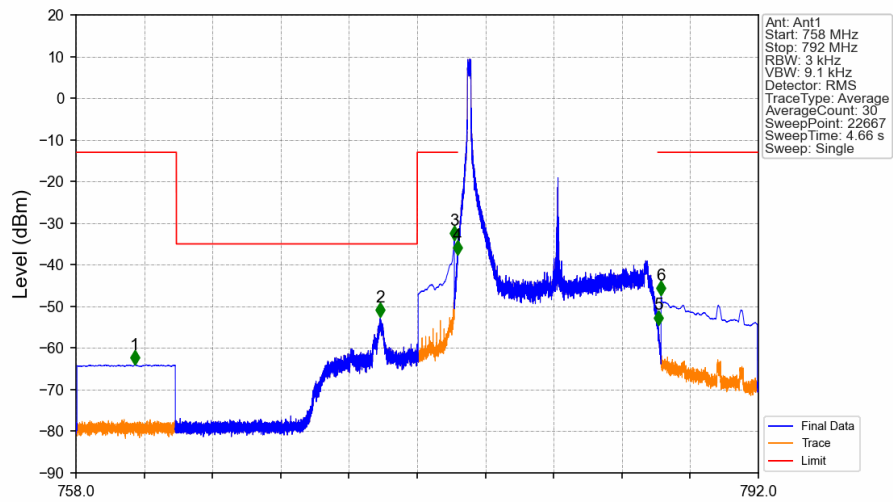
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 772         | 775        | 0.00625   | /      | 1          | 773.164    | -60.98      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 2          | 776.850    | -49.00      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 3          | 776.994    | -56.30      | -13         | Pass   |
| 777         | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 4          | 787.000    | -36.25      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 5          | 787.150    | -32.40      | -13         | Pass   |
| 793         | 805        | 0.00625   | /      | 6          | 795.238    | -55.69      | -35         | Pass   |
| 805         | 810        | 0.1       | CHP    | 7          | 805.066    | -63.77      | -13         | Pass   |

### Band13\_10MHz\_QPSK\_HCH\_782MHz\_RB\_50\_0\_NTNV



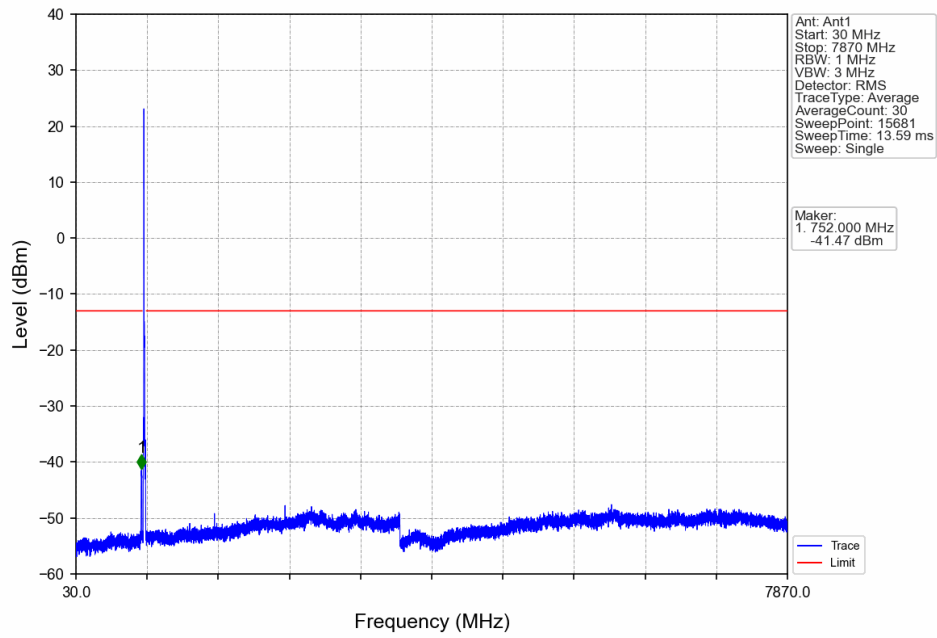
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 772         | 775        | 0.00625   | /      | 1          | 774.840    | -41.92      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 2          | 776.677    | -26.82      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 3          | 776.953    | -39.79      | -13         | Pass   |
| 777         | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 4          | 787.033    | -34.19      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 5          | 787.164    | -21.65      | -13         | Pass   |
| 793         | 805        | 0.00625   | /      | 6          | 793.045    | -41.84      | -35         | Pass   |
| 805         | 810        | 0.1       | CHP    | 7          | 808.194    | -63.90      | -13         | Pass   |

### Band13\_10MHz\_16QAM\_LCH\_782MHz\_RB\_1\_0\_NTNV

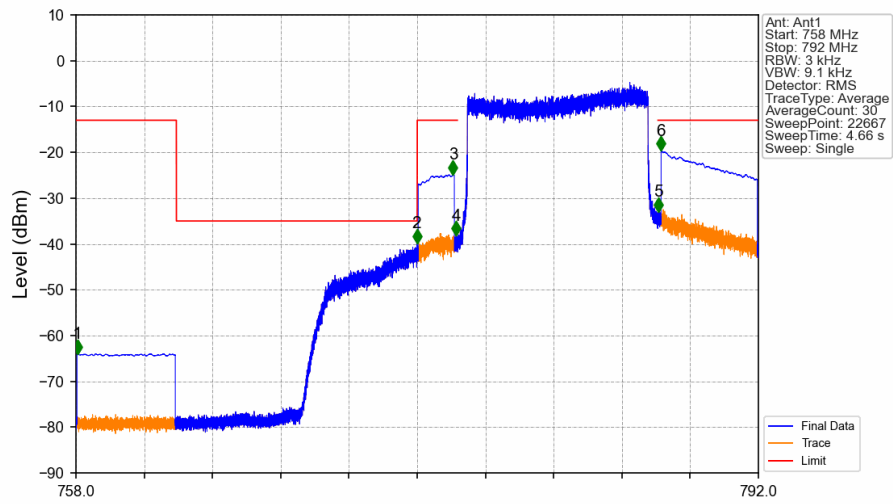


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 758         | 763        | 0.1       | CHP    | 1          | 760.934    | -64.00      | -13         | Pass   |
| 763         | 775        | 0.00625   | /      | 2          | 773.168    | -52.62      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 3          | 776.850    | -34.13      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 4          | 777.000    | -37.64      | -13         | Pass   |
| 777         | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 5          | 787.006    | -54.41      | -13         | Pass   |
| 787.1       | 792        | 0.1       | CHP    | 6          | 787.150    | -47.27      | -13         | Pass   |

### Band13\_10MHz\_16QAM\_LCH\_782MHz\_RB\_1\_0\_NTNV

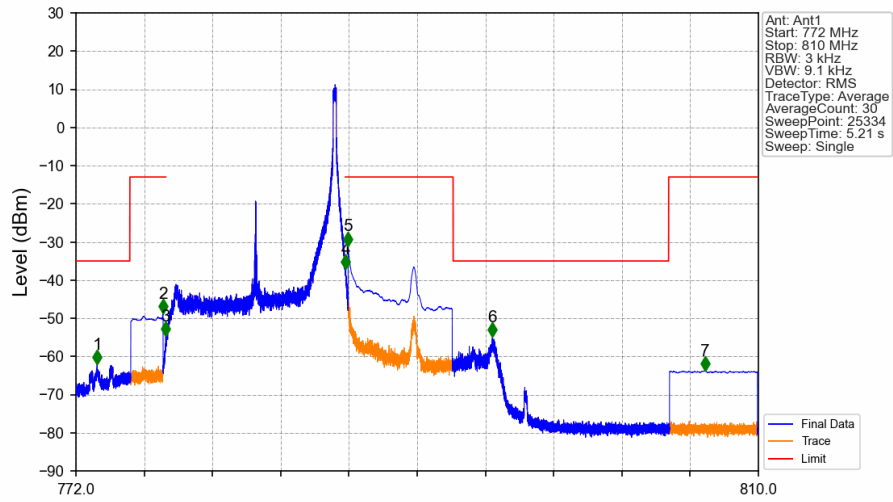


### Band13\_10MHz\_16QAM\_LCH\_782MHz\_RB\_50\_0\_NTNV



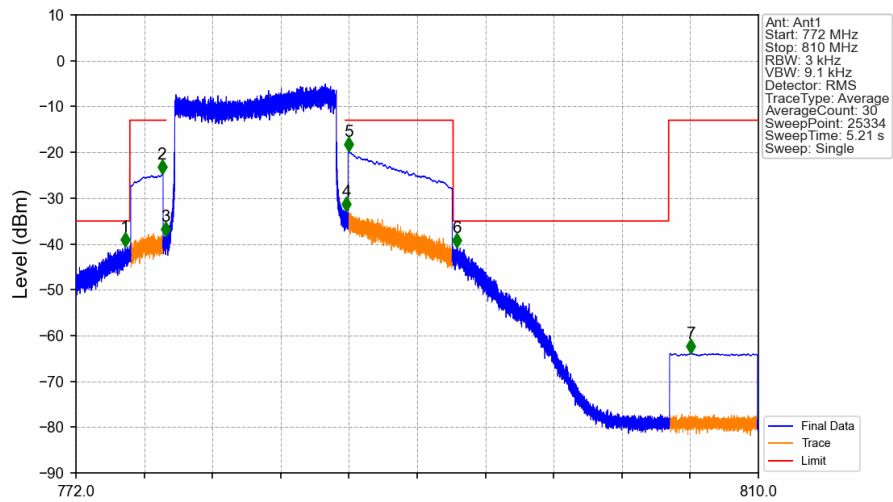
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 758         | 763        | 0.1       | CHP    | 1          | 758.071    | -63.98      | -13         | Pass   |
| 763         | 775        | 0.00625   | /      | 2          | 774.986    | -39.84      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 3          | 776.788    | -24.86      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 4          | 776.937    | -38.19      | -13         | Pass   |
| 777         | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 5          | 787.000    | -32.96      | -13         | Pass   |
| 787.1       | 792        | 0.1       | CHP    | 6          | 787.150    | -19.69      | -13         | Pass   |

### Band13\_10MHz\_16QAM\_HCH\_782MHz\_RB\_1\_49\_NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 772         | 775        | 0.00625   | /      | 1          | 773.178    | -62.15      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 2          | 776.850    | -48.69      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 3          | 776.998    | -54.64      | -13         | Pass   |
| 777         | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 4          | 787.011    | -37.08      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 5          | 787.150    | -31.09      | -13         | Pass   |
| 793         | 805        | 0.00625   | /      | 6          | 795.195    | -54.89      | -35         | Pass   |
| 805         | 810        | 0.1       | CHP    | 7          | 807.046    | -63.80      | -13         | Pass   |

### Band13\_10MHz\_16QAM\_HCH\_782MHz\_RB\_50\_0\_NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 772         | 775        | 0.00625   | /      | 1          | 774.718    | -40.61      | -35         | Pass   |
| 775         | 776.9      | 0.1       | CHP    | 2          | 776.787    | -24.78      | -13         | Pass   |
| 776.9       | 777        | 0.03      | /      | 3          | 776.979    | -38.31      | -13         | Pass   |
| 777         | 787        | 0.03      | /      | /          | /          | /           | /           | /      |
| 787         | 787.1      | 0.03      | /      | 4          | 787.059    | -32.81      | -13         | Pass   |
| 787.1       | 793        | 0.1       | CHP    | 5          | 787.182    | -19.83      | -13         | Pass   |
| 793         | 805        | 0.00625   | /      | 6          | 793.216    | -40.81      | -35         | Pass   |
| 805         | 810        | 0.1       | CHP    | 7          | 806.245    | -63.88      | -13         | Pass   |