

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

### 1.1 B12\_1.4MHz\_ERP

#### 1.1.1 Test Result

| Band: 12 / Bandwidth: 1.4MHz / NTNV          |                 |               |        |                       |            |           |         |         |
|----------------------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                                   | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                              |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                                         | 699.7           | 1             | 0      | 21.73                 | 0.00       | 19.58     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 21.77                 | 0.00       | 19.62     | <=34.77 | Pass    |
|                                              |                 |               | 5      | 21.77                 | 0.00       | 19.62     | <=34.77 | Pass    |
|                                              |                 | 3             | 0      | 21.80                 | 0.00       | 19.65     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 21.89                 | 0.00       | 19.74     | <=34.77 | Pass    |
|                                              |                 |               | 3      | 21.83                 | 0.00       | 19.68     | <=34.77 | Pass    |
|                                              |                 | 6             | 0      | 20.65                 | 0.00       | 18.50     | <=34.77 | Pass    |
|                                              | 707.5           | 1             | 0      | 21.70                 | 0.00       | 19.55     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 21.87                 | 0.00       | 19.72     | <=34.77 | Pass    |
|                                              |                 |               | 5      | 21.95                 | 0.00       | 19.80     | <=34.77 | Pass    |
|                                              |                 | 3             | 0      | 21.75                 | 0.00       | 19.60     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 21.76                 | 0.00       | 19.61     | <=34.77 | Pass    |
|                                              |                 |               | 3      | 21.69                 | 0.00       | 19.54     | <=34.77 | Pass    |
|                                              |                 | 6             | 0      | 20.74                 | 0.00       | 18.59     | <=34.77 | Pass    |
|                                              | 715.3           | 1             | 0      | 21.70                 | 0.00       | 19.55     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 21.69                 | 0.00       | 19.54     | <=34.77 | Pass    |
|                                              |                 |               | 5      | 21.68                 | 0.00       | 19.53     | <=34.77 | Pass    |
|                                              |                 | 3             | 0      | 21.69                 | 0.00       | 19.54     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 21.71                 | 0.00       | 19.56     | <=34.77 | Pass    |
|                                              |                 |               | 3      | 21.70                 | 0.00       | 19.55     | <=34.77 | Pass    |
|                                              |                 | 6             | 0      | 20.58                 | 0.00       | 18.43     | <=34.77 | Pass    |
| 16QAM                                        | 699.7           | 1             | 0      | 20.78                 | 0.00       | 18.63     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 20.79                 | 0.00       | 18.64     | <=34.77 | Pass    |
|                                              |                 |               | 5      | 20.84                 | 0.00       | 18.69     | <=34.77 | Pass    |
|                                              |                 | 3             | 0      | 20.61                 | 0.00       | 18.46     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 20.72                 | 0.00       | 18.57     | <=34.77 | Pass    |
|                                              |                 |               | 3      | 20.60                 | 0.00       | 18.45     | <=34.77 | Pass    |
|                                              |                 | 6             | 0      | 20.00                 | 0.00       | 17.85     | <=34.77 | Pass    |
|                                              | 707.5           | 1             | 0      | 20.21                 | 0.00       | 18.06     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 20.24                 | 0.00       | 18.09     | <=34.77 | Pass    |
|                                              |                 |               | 5      | 20.20                 | 0.00       | 18.05     | <=34.77 | Pass    |
|                                              |                 | 3             | 0      | 20.49                 | 0.00       | 18.34     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 20.43                 | 0.00       | 18.28     | <=34.77 | Pass    |
|                                              |                 |               | 3      | 20.47                 | 0.00       | 18.32     | <=34.77 | Pass    |
|                                              |                 | 6             | 0      | 19.90                 | 0.00       | 17.75     | <=34.77 | Pass    |
|                                              | 715.3           | 1             | 0      | 20.79                 | 0.00       | 18.64     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 18.88                 | 0.00       | 16.73     | <=34.77 | Pass    |
|                                              |                 |               | 5      | 18.88                 | 0.00       | 16.73     | <=34.77 | Pass    |
|                                              |                 | 3             | 0      | 18.33                 | 0.00       | 16.18     | <=34.77 | Pass    |
|                                              |                 |               | 2      | 18.48                 | 0.00       | 16.33     | <=34.77 | Pass    |
|                                              |                 |               | 3      | 18.64                 | 0.00       | 16.49     | <=34.77 | Pass    |
|                                              |                 | 6             | 0      | 17.15                 | 0.00       | 15.00     | <=34.77 | Pass    |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 |                 |               |        |                       |            |           |         |         |

## 1.2 B12\_3MHz\_ERP

### 1.2.1 Test Result

| Band: 12 / Bandwidth: 3MHz / NTVN            |                 |               |        |                       |            |           |         |         |
|----------------------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                                   | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                              |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                                         | 700.5           | 1             | 0      | 19.86                 | 0.00       | 17.71     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 19.90                 | 0.00       | 17.75     | <=34.77 | Pass    |
|                                              |                 |               | 14     | 19.97                 | 0.00       | 17.82     | <=34.77 | Pass    |
|                                              |                 | 8             | 0      | 18.96                 | 0.00       | 16.81     | <=34.77 | Pass    |
|                                              |                 |               | 4      | 18.86                 | 0.00       | 16.71     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 18.76                 | 0.00       | 16.61     | <=34.77 | Pass    |
|                                              |                 | 15            | 0      | 18.95                 | 0.00       | 16.80     | <=34.77 | Pass    |
|                                              | 707.5           | 1             | 0      | 21.71                 | 0.00       | 19.56     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 21.85                 | 0.00       | 19.70     | <=34.77 | Pass    |
|                                              |                 |               | 14     | 21.82                 | 0.00       | 19.67     | <=34.77 | Pass    |
|                                              |                 | 8             | 0      | 20.68                 | 0.00       | 18.53     | <=34.77 | Pass    |
|                                              |                 |               | 4      | 20.68                 | 0.00       | 18.53     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 20.63                 | 0.00       | 18.48     | <=34.77 | Pass    |
|                                              |                 | 15            | 0      | 20.64                 | 0.00       | 18.49     | <=34.77 | Pass    |
|                                              | 714.5           | 1             | 0      | 21.79                 | 0.00       | 19.64     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 21.69                 | 0.00       | 19.54     | <=34.77 | Pass    |
|                                              |                 |               | 14     | 21.72                 | 0.00       | 19.57     | <=34.77 | Pass    |
|                                              |                 | 8             | 0      | 20.71                 | 0.00       | 18.56     | <=34.77 | Pass    |
|                                              |                 |               | 4      | 20.62                 | 0.00       | 18.47     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 20.61                 | 0.00       | 18.46     | <=34.77 | Pass    |
|                                              |                 | 15            | 0      | 20.73                 | 0.00       | 18.58     | <=34.77 | Pass    |
| 16QAM                                        | 700.5           | 1             | 0      | 21.14                 | 0.00       | 18.99     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 21.05                 | 0.00       | 18.90     | <=34.77 | Pass    |
|                                              |                 |               | 14     | 21.09                 | 0.00       | 18.94     | <=34.77 | Pass    |
|                                              |                 | 8             | 0      | 20.21                 | 0.00       | 18.06     | <=34.77 | Pass    |
|                                              |                 |               | 4      | 20.16                 | 0.00       | 18.01     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 20.19                 | 0.00       | 18.04     | <=34.77 | Pass    |
|                                              |                 | 15            | 0      | 19.96                 | 0.00       | 17.81     | <=34.77 | Pass    |
|                                              | 707.5           | 1             | 0      | 20.40                 | 0.00       | 18.25     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 20.37                 | 0.00       | 18.22     | <=34.77 | Pass    |
|                                              |                 |               | 14     | 20.31                 | 0.00       | 18.16     | <=34.77 | Pass    |
|                                              |                 | 8             | 0      | 19.84                 | 0.00       | 17.69     | <=34.77 | Pass    |
|                                              |                 |               | 4      | 19.88                 | 0.00       | 17.73     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 20.01                 | 0.00       | 17.86     | <=34.77 | Pass    |
|                                              |                 | 15            | 0      | 19.80                 | 0.00       | 17.65     | <=34.77 | Pass    |
|                                              | 714.5           | 1             | 0      | 21.63                 | 0.00       | 19.48     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 19.27                 | 0.00       | 17.12     | <=34.77 | Pass    |
|                                              |                 |               | 14     | 19.55                 | 0.00       | 17.40     | <=34.77 | Pass    |
|                                              |                 | 8             | 0      | 17.26                 | 0.00       | 15.11     | <=34.77 | Pass    |
|                                              |                 |               | 4      | 17.24                 | 0.00       | 15.09     | <=34.77 | Pass    |
|                                              |                 |               | 7      | 19.85                 | 0.00       | 17.70     | <=34.77 | Pass    |
|                                              |                 | 15            | 0      | 19.59                 | 0.00       | 17.44     | <=34.77 | Pass    |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 |                 |               |        |                       |            |           |         |         |

## 1.3 B12\_5MHz\_ERP

### 1.3.1 Test Result

| Band: 12 / Bandwidth: 5MHz / NTNV |                 |               |        |                       |            |           |         |         |
|-----------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                   |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                              | 701.5           | 1             | 0      | 20.81                 | 0.00       | 18.66     | <=34.77 | Pass    |

|                                              |       |       |       |       |       |         |         |         |      |
|----------------------------------------------|-------|-------|-------|-------|-------|---------|---------|---------|------|
|                                              |       |       | 13    | 20.75 | 0.00  | 18.60   | <=34.77 | Pass    |      |
|                                              |       |       | 24    | 20.80 | 0.00  | 18.65   | <=34.77 | Pass    |      |
|                                              |       |       | 12    | 0     | 20.75 | 0.00    | 18.60   | <=34.77 | Pass |
|                                              |       |       |       | 6     | 20.71 | 0.00    | 18.56   | <=34.77 | Pass |
|                                              |       |       |       | 13    | 20.81 | 0.00    | 18.66   | <=34.77 | Pass |
|                                              |       | 25    | 0     | 20.79 | 0.00  | 18.64   | <=34.77 | Pass    |      |
|                                              |       | 707.5 | 1     | 0     | 20.66 | 0.00    | 18.51   | <=34.77 | Pass |
|                                              | 13    |       |       | 20.62 | 0.00  | 18.47   | <=34.77 | Pass    |      |
|                                              | 24    |       |       | 20.68 | 0.00  | 18.53   | <=34.77 | Pass    |      |
|                                              | 12    |       | 0     | 20.66 | 0.00  | 18.51   | <=34.77 | Pass    |      |
|                                              |       |       | 6     | 20.64 | 0.00  | 18.49   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.63 | 0.00  | 18.48   | <=34.77 | Pass    |      |
|                                              | 25    |       | 0     | 20.61 | 0.00  | 18.46   | <=34.77 | Pass    |      |
|                                              | 713.5 | 1     | 0     | 20.62 | 0.00  | 18.47   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.58 | 0.00  | 18.43   | <=34.77 | Pass    |      |
|                                              |       |       | 24    | 20.80 | 0.00  | 18.65   | <=34.77 | Pass    |      |
|                                              |       | 12    | 0     | 20.78 | 0.00  | 18.63   | <=34.77 | Pass    |      |
|                                              |       |       | 6     | 20.76 | 0.00  | 18.61   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.75 | 0.00  | 18.60   | <=34.77 | Pass    |      |
|                                              |       | 25    | 0     | 20.74 | 0.00  | 18.59   | <=34.77 | Pass    |      |
| 16QAM                                        | 701.5 | 1     | 0     | 20.75 | 0.00  | 18.60   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.75 | 0.00  | 18.60   | <=34.77 | Pass    |      |
|                                              |       |       | 24    | 20.75 | 0.00  | 18.60   | <=34.77 | Pass    |      |
|                                              |       | 12    | 0     | 20.76 | 0.00  | 18.61   | <=34.77 | Pass    |      |
|                                              |       |       | 6     | 20.83 | 0.00  | 18.68   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.82 | 0.00  | 18.67   | <=34.77 | Pass    |      |
|                                              |       | 25    | 0     | 20.80 | 0.00  | 18.65   | <=34.77 | Pass    |      |
|                                              | 707.5 | 1     | 0     | 20.72 | 0.00  | 18.57   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.83 | 0.00  | 18.68   | <=34.77 | Pass    |      |
|                                              |       |       | 24    | 20.82 | 0.00  | 18.67   | <=34.77 | Pass    |      |
|                                              |       | 12    | 0     | 20.81 | 0.00  | 18.66   | <=34.77 | Pass    |      |
|                                              |       |       | 6     | 20.80 | 0.00  | 18.65   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.79 | 0.00  | 18.64   | <=34.77 | Pass    |      |
|                                              |       | 25    | 0     | 20.78 | 0.00  | 18.63   | <=34.77 | Pass    |      |
|                                              | 713.5 | 1     | 0     | 20.73 | 0.00  | 18.58   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.72 | 0.00  | 18.57   | <=34.77 | Pass    |      |
|                                              |       |       | 24    | 20.71 | 0.00  | 18.56   | <=34.77 | Pass    |      |
|                                              |       | 12    | 0     | 20.70 | 0.00  | 18.55   | <=34.77 | Pass    |      |
|                                              |       |       | 6     | 20.69 | 0.00  | 18.54   | <=34.77 | Pass    |      |
|                                              |       |       | 13    | 20.68 | 0.00  | 18.53   | <=34.77 | Pass    |      |
| 25                                           |       | 0     | 20.67 | 0.00  | 18.52 | <=34.77 | Pass    |         |      |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 |       |       |       |       |       |         |         |         |      |

## 1.4 B12\_10MHz\_ERP

### 1.4.1 Test Result

| Band: 12 / Bandwidth: 10MHz / NTN |                 |               |        |                       |            |           |         |         |
|-----------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                   |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                              | 704             | 1             | 0      | 21.62                 | 0.00       | 19.47     | <=34.77 | Pass    |
|                                   |                 |               | 25     | 21.64                 | 0.00       | 19.49     | <=34.77 | Pass    |
|                                   |                 |               | 49     | 21.70                 | 0.00       | 19.55     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 20.72                 | 0.00       | 18.57     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 20.75                 | 0.00       | 18.60     | <=34.77 | Pass    |
|                                   |                 |               | 25     | 20.73                 | 0.00       | 18.58     | <=34.77 | Pass    |
|                                   |                 | 50            | 0      | 20.69                 | 0.00       | 18.54     | <=34.77 | Pass    |
|                                   | 707.5           | 1             | 0      | 21.88                 | 0.00       | 19.73     | <=34.77 | Pass    |
|                                   |                 |               | 25     | 22.02                 | 0.00       | 19.87     | <=34.77 | Pass    |

|                                              |       |    |    |       |      |       |         |      |
|----------------------------------------------|-------|----|----|-------|------|-------|---------|------|
|                                              |       | 25 | 49 | 21.86 | 0.00 | 19.71 | <=34.77 | Pass |
|                                              |       |    | 0  | 20.80 | 0.00 | 18.65 | <=34.77 | Pass |
|                                              |       |    | 13 | 20.62 | 0.00 | 18.47 | <=34.77 | Pass |
|                                              |       |    | 25 | 20.92 | 0.00 | 18.77 | <=34.77 | Pass |
|                                              |       | 50 | 0  | 20.72 | 0.00 | 18.57 | <=34.77 | Pass |
|                                              | 711   | 1  | 0  | 21.63 | 0.00 | 19.48 | <=34.77 | Pass |
|                                              |       |    | 25 | 21.65 | 0.00 | 19.50 | <=34.77 | Pass |
|                                              |       |    | 49 | 21.69 | 0.00 | 19.54 | <=34.77 | Pass |
|                                              |       | 25 | 0  | 20.77 | 0.00 | 18.62 | <=34.77 | Pass |
|                                              |       |    | 13 | 20.91 | 0.00 | 18.76 | <=34.77 | Pass |
|                                              |       |    | 25 | 20.69 | 0.00 | 18.54 | <=34.77 | Pass |
|                                              |       | 50 | 0  | 20.84 | 0.00 | 18.69 | <=34.77 | Pass |
| 16QAM                                        | 704   | 1  | 0  | 21.12 | 0.00 | 18.97 | <=34.77 | Pass |
|                                              |       |    | 25 | 21.05 | 0.00 | 18.90 | <=34.77 | Pass |
|                                              |       |    | 49 | 20.99 | 0.00 | 18.84 | <=34.77 | Pass |
|                                              |       | 25 | 0  | 19.78 | 0.00 | 17.63 | <=34.77 | Pass |
|                                              |       |    | 13 | 19.66 | 0.00 | 17.51 | <=34.77 | Pass |
|                                              |       |    | 25 | 19.72 | 0.00 | 17.57 | <=34.77 | Pass |
|                                              |       | 50 | 0  | 19.68 | 0.00 | 17.53 | <=34.77 | Pass |
|                                              | 707.5 | 1  | 0  | 20.30 | 0.00 | 18.15 | <=34.77 | Pass |
|                                              |       |    | 25 | 20.23 | 0.00 | 18.08 | <=34.77 | Pass |
|                                              |       |    | 49 | 20.26 | 0.00 | 18.11 | <=34.77 | Pass |
|                                              |       | 25 | 0  | 19.93 | 0.00 | 17.78 | <=34.77 | Pass |
|                                              |       |    | 13 | 19.94 | 0.00 | 17.79 | <=34.77 | Pass |
|                                              |       |    | 25 | 19.97 | 0.00 | 17.82 | <=34.77 | Pass |
|                                              |       | 50 | 0  | 19.94 | 0.00 | 17.79 | <=34.77 | Pass |
|                                              | 711   | 1  | 0  | 20.99 | 0.00 | 18.84 | <=34.77 | Pass |
|                                              |       |    | 25 | 21.02 | 0.00 | 18.87 | <=34.77 | Pass |
|                                              |       |    | 49 | 21.05 | 0.00 | 18.90 | <=34.77 | Pass |
|                                              |       | 25 | 0  | 19.88 | 0.00 | 17.73 | <=34.77 | Pass |
|                                              |       |    | 13 | 19.94 | 0.00 | 17.79 | <=34.77 | Pass |
|                                              |       |    | 25 | 19.79 | 0.00 | 17.64 | <=34.77 | Pass |
|                                              |       | 50 | 0  | 19.97 | 0.00 | 17.82 | <=34.77 | Pass |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 |       |    |    |       |      |       |         |      |

## 2. Frequency Stability

### 2.1 B12\_1.4MHz

#### 2.1.1 Test Result

| Band: 12 / Bandwidth: 1.4MHz |                 |               |        |            |               |                  |                       |             |         |
|------------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                   | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                              |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                         | 699.7           | 6             | 0      | 20         | 3.27          | -7.482           | -0.0107               | -2.5 to 2.5 | Pass    |
|                              |                 |               |        |            | 3.85          | -2.460           | -0.0035               | -2.5 to 2.5 | Pass    |
|                              |                 |               |        |            | 4.43          | 0.443            | 0.0006                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | -30        | 3.85          | 2.761            | 0.0039                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | -20        | 3.85          | 4.635            | 0.0066                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | -10        | 3.85          | 6.652            | 0.0095                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | 0          | 3.85          | 8.111            | 0.0116                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | 10         | 3.85          | 10.028           | 0.0143                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | 30         | 3.85          | 11.072           | 0.0158                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | 40         | 3.85          | 12.031           | 0.0172                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        | 50         | 3.85          | 14.734           | 0.0211                | -2.5 to 2.5 | Pass    |
|                              | 707.5           | 6             | 0      | 20         | 3.27          | -19.212          | -0.0272               | -2.5 to 2.5 | Pass    |
|                              |                 |               |        |            | 3.85          | -17.867          | -0.0253               | -2.5 to 2.5 | Pass    |

|       |       |   |   |     |      |         |         |             |      |
|-------|-------|---|---|-----|------|---------|---------|-------------|------|
|       |       |   |   |     | 4.43 | -16.465 | -0.0233 | -2.5 to 2.5 | Pass |
|       |       |   |   | -30 | 3.85 | -14.992 | -0.0212 | -2.5 to 2.5 | Pass |
|       |       |   |   | -20 | 3.85 | -13.847 | -0.0196 | -2.5 to 2.5 | Pass |
|       |       |   |   | -10 | 3.85 | -13.018 | -0.0184 | -2.5 to 2.5 | Pass |
|       |       |   |   | 0   | 3.85 | -12.617 | -0.0178 | -2.5 to 2.5 | Pass |
|       |       |   |   | 10  | 3.85 | -12.374 | -0.0175 | -2.5 to 2.5 | Pass |
|       |       |   |   | 30  | 3.85 | -12.174 | -0.0172 | -2.5 to 2.5 | Pass |
|       |       |   |   | 40  | 3.85 | -12.188 | -0.0172 | -2.5 to 2.5 | Pass |
|       |       |   |   | 50  | 3.85 | -11.830 | -0.0167 | -2.5 to 2.5 | Pass |
|       | 715.3 | 6 | 0 | 20  | 3.27 | 26.107  | 0.0365  | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 3.85 | 25.063  | 0.0350  | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 4.43 | 23.704  | 0.0331  | -2.5 to 2.5 | Pass |
|       |       |   |   | -30 | 3.85 | 23.932  | 0.0335  | -2.5 to 2.5 | Pass |
|       |       |   |   | -20 | 3.85 | 25.091  | 0.0351  | -2.5 to 2.5 | Pass |
|       |       |   |   | -10 | 3.85 | 26.407  | 0.0369  | -2.5 to 2.5 | Pass |
|       |       |   |   | 0   | 3.85 | 28.181  | 0.0394  | -2.5 to 2.5 | Pass |
|       |       |   |   | 10  | 3.85 | 29.383  | 0.0411  | -2.5 to 2.5 | Pass |
|       |       |   |   | 30  | 3.85 | 30.327  | 0.0424  | -2.5 to 2.5 | Pass |
|       |       |   |   | 40  | 3.85 | 31.285  | 0.0437  | -2.5 to 2.5 | Pass |
|       |       |   |   | 50  | 3.85 | 30.999  | 0.0433  | -2.5 to 2.5 | Pass |
| 16QAM | 699.7 | 6 | 0 | 20  | 3.27 | 14.663  | 0.0210  | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 3.85 | 16.336  | 0.0233  | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 4.43 | 16.537  | 0.0236  | -2.5 to 2.5 | Pass |
|       |       |   |   | -30 | 3.85 | 17.924  | 0.0256  | -2.5 to 2.5 | Pass |
|       |       |   |   | -20 | 3.85 | 18.196  | 0.0260  | -2.5 to 2.5 | Pass |
|       |       |   |   | -10 | 3.85 | 19.083  | 0.0273  | -2.5 to 2.5 | Pass |
|       |       |   |   | 0   | 3.85 | 19.469  | 0.0278  | -2.5 to 2.5 | Pass |
|       |       |   |   | 10  | 3.85 | 19.941  | 0.0285  | -2.5 to 2.5 | Pass |
|       |       |   |   | 30  | 3.85 | 20.142  | 0.0288  | -2.5 to 2.5 | Pass |
|       |       |   |   | 40  | 3.85 | 20.828  | 0.0298  | -2.5 to 2.5 | Pass |
|       |       |   |   | 50  | 3.85 | 21.014  | 0.0300  | -2.5 to 2.5 | Pass |
|       | 707.5 | 6 | 0 | 20  | 3.27 | -11.501 | -0.0163 | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 3.85 | -11.144 | -0.0158 | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 4.43 | -10.829 | -0.0153 | -2.5 to 2.5 | Pass |
|       |       |   |   | -30 | 3.85 | -10.586 | -0.0150 | -2.5 to 2.5 | Pass |
|       |       |   |   | -20 | 3.85 | -10.386 | -0.0147 | -2.5 to 2.5 | Pass |
|       |       |   |   | -10 | 3.85 | -10.414 | -0.0147 | -2.5 to 2.5 | Pass |
|       |       |   |   | 0   | 3.85 | -10.457 | -0.0148 | -2.5 to 2.5 | Pass |
|       |       |   |   | 10  | 3.85 | -10.586 | -0.0150 | -2.5 to 2.5 | Pass |
|       |       |   |   | 30  | 3.85 | -10.686 | -0.0151 | -2.5 to 2.5 | Pass |
|       |       |   |   | 40  | 3.85 | -10.529 | -0.0149 | -2.5 to 2.5 | Pass |
|       |       |   |   | 50  | 3.85 | -11.044 | -0.0156 | -2.5 to 2.5 | Pass |
|       | 715.3 | 6 | 0 | 20  | 3.27 | 31.343  | 0.0438  | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 3.85 | 31.586  | 0.0442  | -2.5 to 2.5 | Pass |
|       |       |   |   |     | 4.43 | 31.471  | 0.0440  | -2.5 to 2.5 | Pass |
|       |       |   |   | -30 | 3.85 | 31.514  | 0.0441  | -2.5 to 2.5 | Pass |
|       |       |   |   | -20 | 3.85 | 31.872  | 0.0446  | -2.5 to 2.5 | Pass |
|       |       |   |   | -10 | 3.85 | 31.629  | 0.0442  | -2.5 to 2.5 | Pass |
|       |       |   |   | 0   | 3.85 | 31.185  | 0.0436  | -2.5 to 2.5 | Pass |
|       |       |   |   | 10  | 3.85 | 30.370  | 0.0425  | -2.5 to 2.5 | Pass |
|       |       |   |   | 30  | 3.85 | 29.655  | 0.0415  | -2.5 to 2.5 | Pass |
|       |       |   |   | 40  | 3.85 | 29.440  | 0.0412  | -2.5 to 2.5 | Pass |
|       |       |   |   | 50  | 3.85 | 28.582  | 0.0400  | -2.5 to 2.5 | Pass |

## 2.2 B12\_3MHz

### 2.2.1 Test Result

Band: 12 / Bandwidth: 3MHz

| Modulation | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
|            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK       | 700.5           | 15            | 0      | 20         | 3.27          | 1.373            | 0.0020                | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 3.85          | -0.143           | -0.0002               | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 4.43          | -0.629           | -0.0009               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -30        | 3.85          | 0.544            | 0.0008                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -20        | 3.85          | 1.874            | 0.0027                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -10        | 3.85          | 3.204            | 0.0046                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 0          | 3.85          | 4.549            | 0.0065                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 10         | 3.85          | 5.007            | 0.0071                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 30         | 3.85          | 5.336            | 0.0076                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 40         | 3.85          | 5.307            | 0.0076                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 50         | 3.85          | 4.892            | 0.0070                | -2.5 to 2.5 | Pass    |
|            | 707.5           | 15            | 0      | 20         | 3.27          | 1.888            | 0.0027                | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 3.85          | 0.143            | 0.0002                | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 4.43          | -3.033           | -0.0043               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -30        | 3.85          | -5.665           | -0.0080               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -20        | 3.85          | -7.553           | -0.0107               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -10        | 3.85          | -8.583           | -0.0121               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 0          | 3.85          | -10.328          | -0.0146               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 10         | 3.85          | -11.702          | -0.0165               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 30         | 3.85          | -12.774          | -0.0181               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 40         | 3.85          | -14.234          | -0.0201               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 50         | 3.85          | -15.607          | -0.0221               | -2.5 to 2.5 | Pass    |
|            | 714.5           | 15            | 0      | 20         | 3.27          | -1.202           | -0.0017               | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 3.85          | -3.662           | -0.0051               | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 4.43          | -7.854           | -0.0110               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -30        | 3.85          | -10.657          | -0.0149               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -20        | 3.85          | -13.275          | -0.0186               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -10        | 3.85          | -15.178          | -0.0212               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 0          | 3.85          | -16.851          | -0.0236               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 10         | 3.85          | -18.597          | -0.0260               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 30         | 3.85          | -20.671          | -0.0289               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 40         | 3.85          | -22.731          | -0.0318               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 50         | 3.85          | -24.834          | -0.0348               | -2.5 to 2.5 | Pass    |
| 16QAM      | 700.5           | 15            | 0      | 20         | 3.27          | 4.892            | 0.0070                | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 3.85          | 5.522            | 0.0079                | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 4.43          | 5.679            | 0.0081                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -30        | 3.85          | 5.436            | 0.0078                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -20        | 3.85          | 4.892            | 0.0070                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -10        | 3.85          | 4.606            | 0.0066                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 0          | 3.85          | 4.020            | 0.0057                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 10         | 3.85          | 3.090            | 0.0044                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 30         | 3.85          | 2.475            | 0.0035                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 40         | 3.85          | 2.060            | 0.0029                | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 50         | 3.85          | 0.858            | 0.0012                | -2.5 to 2.5 | Pass    |
|            | 707.5           | 15            | 0      | 20         | 3.27          | -17.366          | -0.0245               | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 3.85          | -18.010          | -0.0255               | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 4.43          | -18.611          | -0.0263               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -30        | 3.85          | -19.169          | -0.0271               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -20        | 3.85          | -20.399          | -0.0288               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | -10        | 3.85          | -21.300          | -0.0301               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 0          | 3.85          | -22.502          | -0.0318               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 10         | 3.85          | -23.503          | -0.0332               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 30         | 3.85          | -24.819          | -0.0351               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 40         | 3.85          | -25.878          | -0.0366               | -2.5 to 2.5 | Pass    |
|            |                 |               |        | 50         | 3.85          | -27.308          | -0.0386               | -2.5 to 2.5 | Pass    |
|            | 714.5           | 15            | 0      | 20         | 3.27          | -26.851          | -0.0376               | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 3.85          | -27.423          | -0.0384               | -2.5 to 2.5 | Pass    |
|            |                 |               |        |            | 4.43          | -28.110          | -0.0393               | -2.5 to 2.5 | Pass    |

|  |  |  |  |     |      |         |         |             |      |
|--|--|--|--|-----|------|---------|---------|-------------|------|
|  |  |  |  | -30 | 3.85 | -28.996 | -0.0406 | -2.5 to 2.5 | Pass |
|  |  |  |  | -20 | 3.85 | -30.084 | -0.0421 | -2.5 to 2.5 | Pass |
|  |  |  |  | -10 | 3.85 | -31.385 | -0.0439 | -2.5 to 2.5 | Pass |
|  |  |  |  | 0   | 3.85 | -32.673 | -0.0457 | -2.5 to 2.5 | Pass |
|  |  |  |  | 10  | 3.85 | -34.246 | -0.0479 | -2.5 to 2.5 | Pass |
|  |  |  |  | 30  | 3.85 | -36.678 | -0.0513 | -2.5 to 2.5 | Pass |
|  |  |  |  | 40  | 3.85 | -38.252 | -0.0535 | -2.5 to 2.5 | Pass |
|  |  |  |  | 50  | 3.85 | -40.312 | -0.0564 | -2.5 to 2.5 | Pass |

## 2.3 B12\_5MHz

### 2.3.1 Test Result

| Band: 12 / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 701.5           | 25            | 0      | 20         | 3.27          | 2.847            | 0.0041                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.85          | 4.263            | 0.0061                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.43          | 4.048            | 0.0058                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.85          | 4.506            | 0.0064                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.85          | 5.307            | 0.0076                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.85          | 5.879            | 0.0084                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.85          | 6.552            | 0.0093                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.85          | 6.609            | 0.0094                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.85          | 6.509            | 0.0093                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.85          | 6.609            | 0.0094                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.85          | 6.180            | 0.0088                | -2.5 to 2.5 | Pass    |
|                            | 707.5           | 25            | 0      | 20         | 3.27          | 0.229            | 0.0003                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.85          | -2.232           | -0.0032               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.43          | -5.722           | -0.0081               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.85          | -8.726           | -0.0123               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.85          | -10.901          | -0.0154               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.85          | -13.275          | -0.0188               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.85          | -15.292          | -0.0216               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.85          | -17.009          | -0.0240               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.85          | -18.940          | -0.0268               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.85          | -20.499          | -0.0290               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.85          | -22.316          | -0.0315               | -2.5 to 2.5 | Pass    |
|                            | 713.5           | 25            | 0      | 20         | 3.27          | 2.933            | 0.0041                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.85          | 0.300            | 0.0004                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.43          | -4.148           | -0.0058               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.85          | -7.668           | -0.0107               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.85          | -10.228          | -0.0143               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.85          | -12.646          | -0.0177               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.85          | -14.648          | -0.0205               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.85          | -16.923          | -0.0237               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.85          | -18.868          | -0.0264               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.85          | -21.400          | -0.0300               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.85          | -23.289          | -0.0326               | -2.5 to 2.5 | Pass    |
| 16QAM                      | 701.5           | 25            | 0      | 20         | 3.27          | 5.507            | 0.0079                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.85          | 5.937            | 0.0085                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.43          | 5.736            | 0.0082                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.85          | 5.736            | 0.0082                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.85          | 4.749            | 0.0068                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.85          | 3.991            | 0.0057                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.85          | 3.090            | 0.0044                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.85          | 2.346            | 0.0033                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.85          | 1.545            | 0.0022                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.85          | 0.587            | 0.0008                | -2.5 to 2.5 | Pass    |

|  |       |    |   |     |      |         |         |             |      |
|--|-------|----|---|-----|------|---------|---------|-------------|------|
|  | 707.5 | 25 | 0 | 50  | 3.85 | -0.715  | -0.0010 | -2.5 to 2.5 | Pass |
|  |       |    |   | 20  | 3.27 | -24.061 | -0.0340 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 3.85 | -24.920 | -0.0352 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 4.43 | -25.835 | -0.0365 | -2.5 to 2.5 | Pass |
|  |       |    |   | -30 | 3.85 | -26.836 | -0.0379 | -2.5 to 2.5 | Pass |
|  |       |    |   | -20 | 3.85 | -28.224 | -0.0399 | -2.5 to 2.5 | Pass |
|  |       |    |   | -10 | 3.85 | -29.554 | -0.0418 | -2.5 to 2.5 | Pass |
|  |       |    |   | 0   | 3.85 | -30.799 | -0.0435 | -2.5 to 2.5 | Pass |
|  |       |    |   | 10  | 3.85 | -31.943 | -0.0451 | -2.5 to 2.5 | Pass |
|  |       |    |   | 30  | 3.85 | -33.717 | -0.0477 | -2.5 to 2.5 | Pass |
|  | 713.5 | 25 | 0 | 40  | 3.85 | -35.291 | -0.0499 | -2.5 to 2.5 | Pass |
|  |       |    |   | 50  | 3.85 | -36.578 | -0.0517 | -2.5 to 2.5 | Pass |
|  |       |    |   | 20  | 3.27 | -25.635 | -0.0359 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 3.85 | -26.350 | -0.0369 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 4.43 | -26.593 | -0.0373 | -2.5 to 2.5 | Pass |
|  |       |    |   | -30 | 3.85 | -26.951 | -0.0378 | -2.5 to 2.5 | Pass |
|  |       |    |   | -20 | 3.85 | -28.195 | -0.0395 | -2.5 to 2.5 | Pass |
|  |       |    |   | -10 | 3.85 | -29.168 | -0.0409 | -2.5 to 2.5 | Pass |
|  |       |    |   | 0   | 3.85 | -30.627 | -0.0429 | -2.5 to 2.5 | Pass |
|  |       |    |   | 10  | 3.85 | -31.672 | -0.0444 | -2.5 to 2.5 | Pass |
|  |       |    |   | 30  | 3.85 | -32.887 | -0.0461 | -2.5 to 2.5 | Pass |
|  |       |    |   | 40  | 3.85 | -33.903 | -0.0475 | -2.5 to 2.5 | Pass |
|  |       |    |   | 50  | 3.85 | -34.733 | -0.0487 | -2.5 to 2.5 | Pass |

## 2.4 B12\_10MHz

### 2.4.1 Test Result

| Band: 12 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 704             | 50            | 0      | 20         | 3.27          | -7.167           | -0.0102               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.85          | -14.563          | -0.0207               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.43          | -19.927          | -0.0283               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.85          | -23.088          | -0.0328               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.85          | -26.193          | -0.0372               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.85          | -29.154          | -0.0414               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.85          | -32.301          | -0.0459               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.85          | -35.477          | -0.0504               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.85          | -38.195          | -0.0543               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.85          | -40.827          | -0.0580               | -2.5 to 2.5 | Pass    |
|                             | 707.5           | 50            | 0      | 50         | 3.85          | -43.488          | -0.0618               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 20         | 3.27          | 6.866            | 0.0097                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.85          | 1.903            | 0.0027                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.43          | -3.176           | -0.0045               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.85          | -5.922           | -0.0084               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.85          | -9.356           | -0.0132               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.85          | -11.601          | -0.0164               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.85          | -14.033          | -0.0198               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.85          | -16.494          | -0.0233               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.85          | -18.854          | -0.0266               | -2.5 to 2.5 | Pass    |
|                             | 711             | 50            | 0      | 40         | 3.85          | -20.857          | -0.0295               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.85          | -23.031          | -0.0326               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 20         | 3.27          | 4.807            | 0.0068                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.85          | -0.415           | -0.0006               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.43          | -4.864           | -0.0068               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.85          | -7.710           | -0.0108               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.85          | -10.600          | -0.0149               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.85          | -12.317          | -0.0173               | -2.5 to 2.5 | Pass    |

|       |       |    |   |     |      |         |         |             |      |
|-------|-------|----|---|-----|------|---------|---------|-------------|------|
| 16QAM |       |    |   | 0   | 3.85 | -14.749 | -0.0207 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | -17.252 | -0.0243 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | -19.197 | -0.0270 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -20.914 | -0.0294 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -22.874 | -0.0322 | -2.5 to 2.5 | Pass |
|       | 704   | 50 | 0 | 20  | 3.27 | -46.878 | -0.0666 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.85 | -47.321 | -0.0672 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.43 | -47.979 | -0.0682 | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.85 | -33.631 | -0.0478 | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.85 | 2.346   | 0.0033  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.85 | 1.016   | 0.0014  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.85 | -0.873  | -0.0012 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | -2.103  | -0.0030 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | -3.648  | -0.0052 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -5.178  | -0.0074 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -6.666  | -0.0095 | -2.5 to 2.5 | Pass |
|       | 707.5 | 50 | 0 | 20  | 3.27 | -25.120 | -0.0355 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.85 | -25.191 | -0.0356 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.43 | -26.135 | -0.0369 | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.85 | -27.266 | -0.0385 | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.85 | -28.367 | -0.0401 | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.85 | -29.511 | -0.0417 | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.85 | -30.427 | -0.0430 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | -31.514 | -0.0445 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | -32.945 | -0.0466 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -33.717 | -0.0477 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -35.234 | -0.0498 | -2.5 to 2.5 | Pass |
|       | 711   | 50 | 0 | 20  | 3.27 | -24.033 | -0.0338 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.85 | -23.174 | -0.0326 | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.43 | -23.332 | -0.0328 | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.85 | -23.475 | -0.0330 | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.85 | -23.818 | -0.0335 | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.85 | -24.877 | -0.0350 | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.85 | -25.592 | -0.0360 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.85 | -26.522 | -0.0373 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.85 | -27.380 | -0.0385 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.85 | -27.738 | -0.0390 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.85 | -28.682 | -0.0403 | -2.5 to 2.5 | Pass |

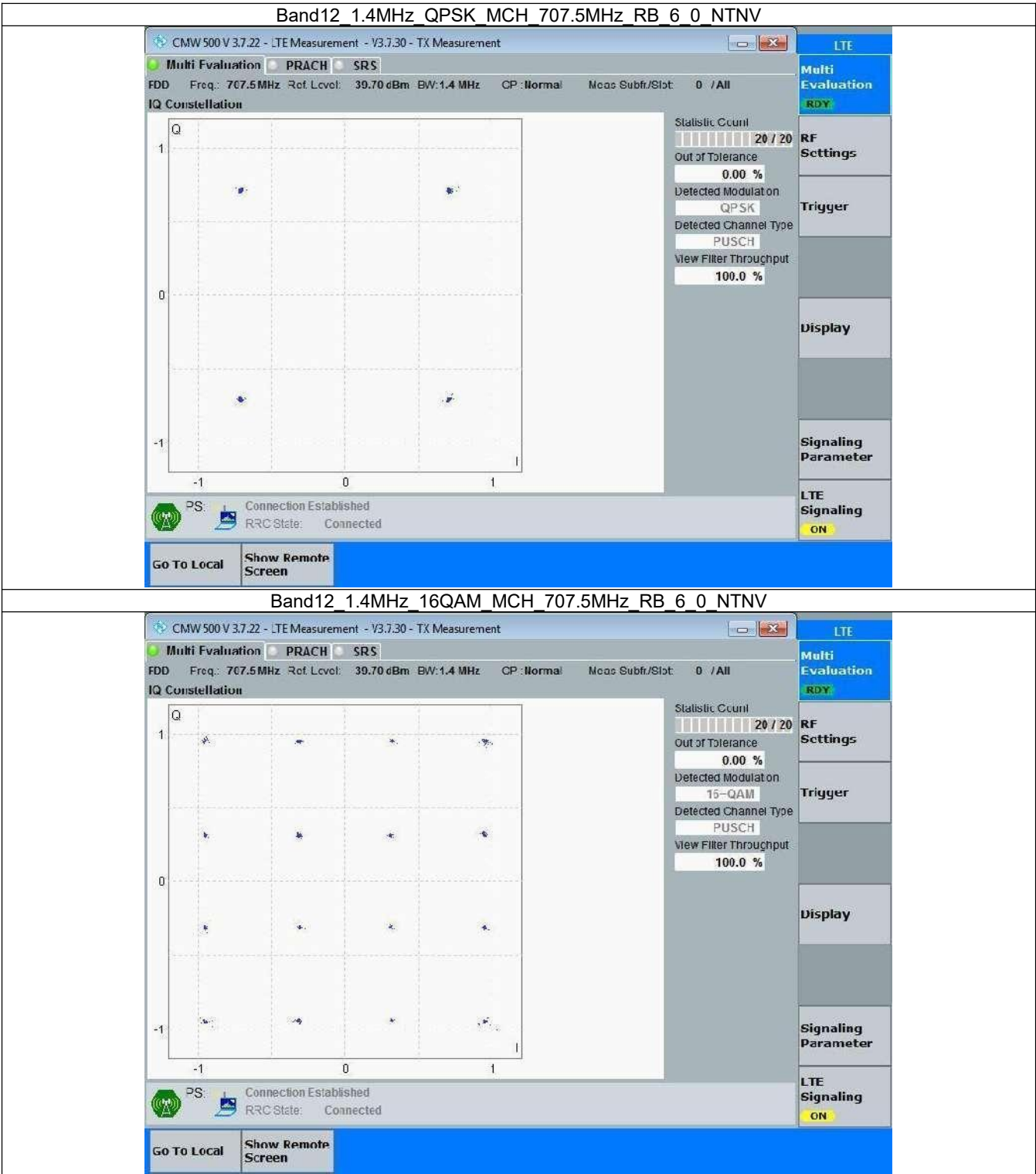
### 3. Modulation Characteristics

#### 3.1 B12\_1.4MHz

##### 3.1.1 Test Result

| Band: 12 / Bandwidth: 1.4MHz / NTNV |                 |               |        |                            |       |         |
|-------------------------------------|-----------------|---------------|--------|----------------------------|-------|---------|
| Modulation                          | Frequency (MHz) | RB Allocation |        | Modulation Characteristics |       | Verdict |
|                                     |                 | Size          | Offset | Result                     | Limit |         |
| QPSK                                | 707.5           | 6             | 0      | Refer To Test Graph        |       | Pass    |
| 16QAM                               | 707.5           | 6             | 0      | Refer To Test Graph        |       | Pass    |

3.1.2 Test Graph

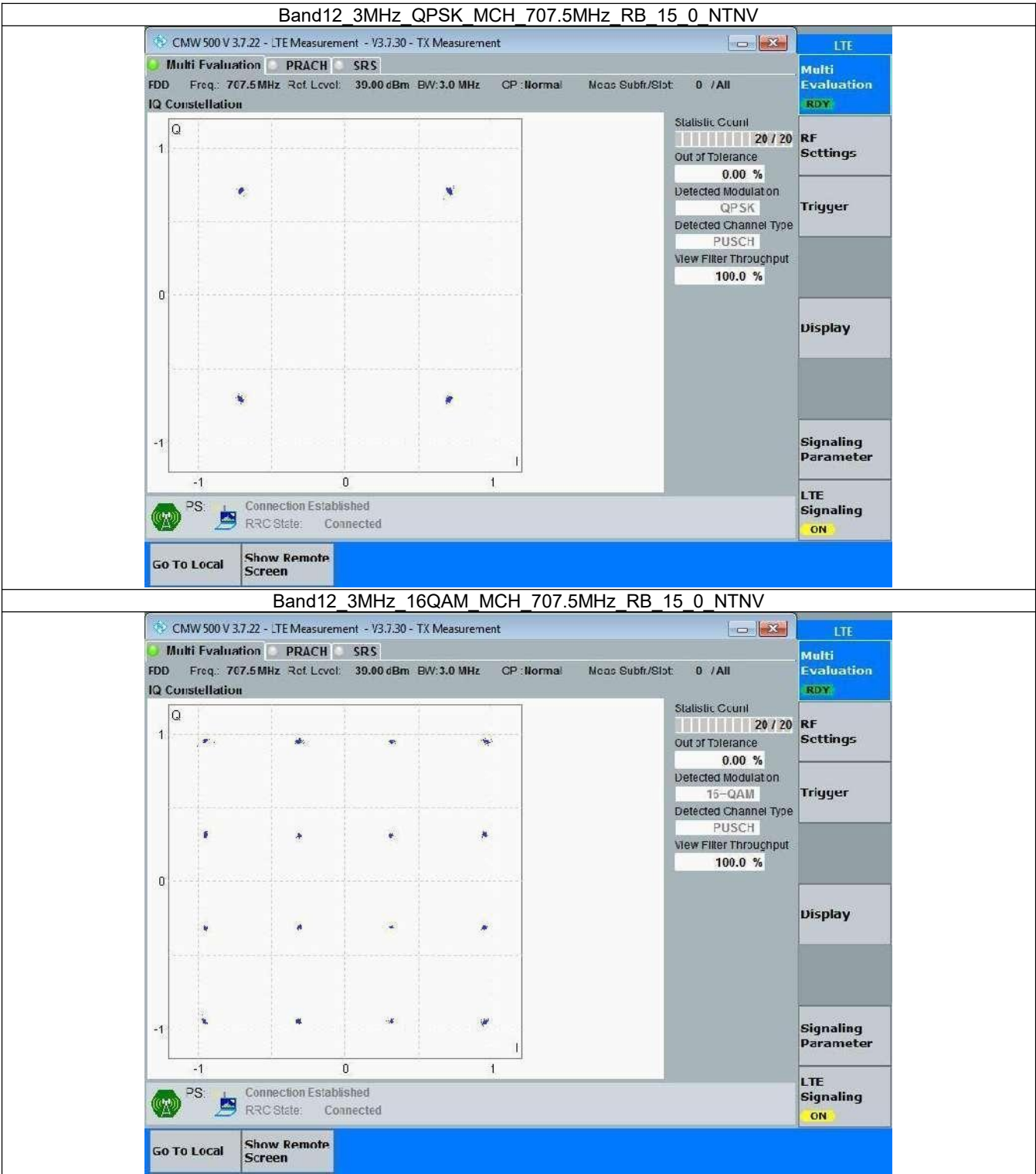


3.2 B12\_3MHz

3.2.1 Test Result

| Band: 12 / Bandwidth: 3MHz / NTN |                 |               |        |                            |       |         |
|----------------------------------|-----------------|---------------|--------|----------------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Modulation Characteristics |       | Verdict |
|                                  |                 | Size          | Offset | Result                     | Limit |         |
| QPSK                             | 707.5           | 15            | 0      | Refer To Test Graph        |       | Pass    |
| 16QAM                            | 707.5           | 15            | 0      | Refer To Test Graph        |       | Pass    |

3.2.2 Test Graph

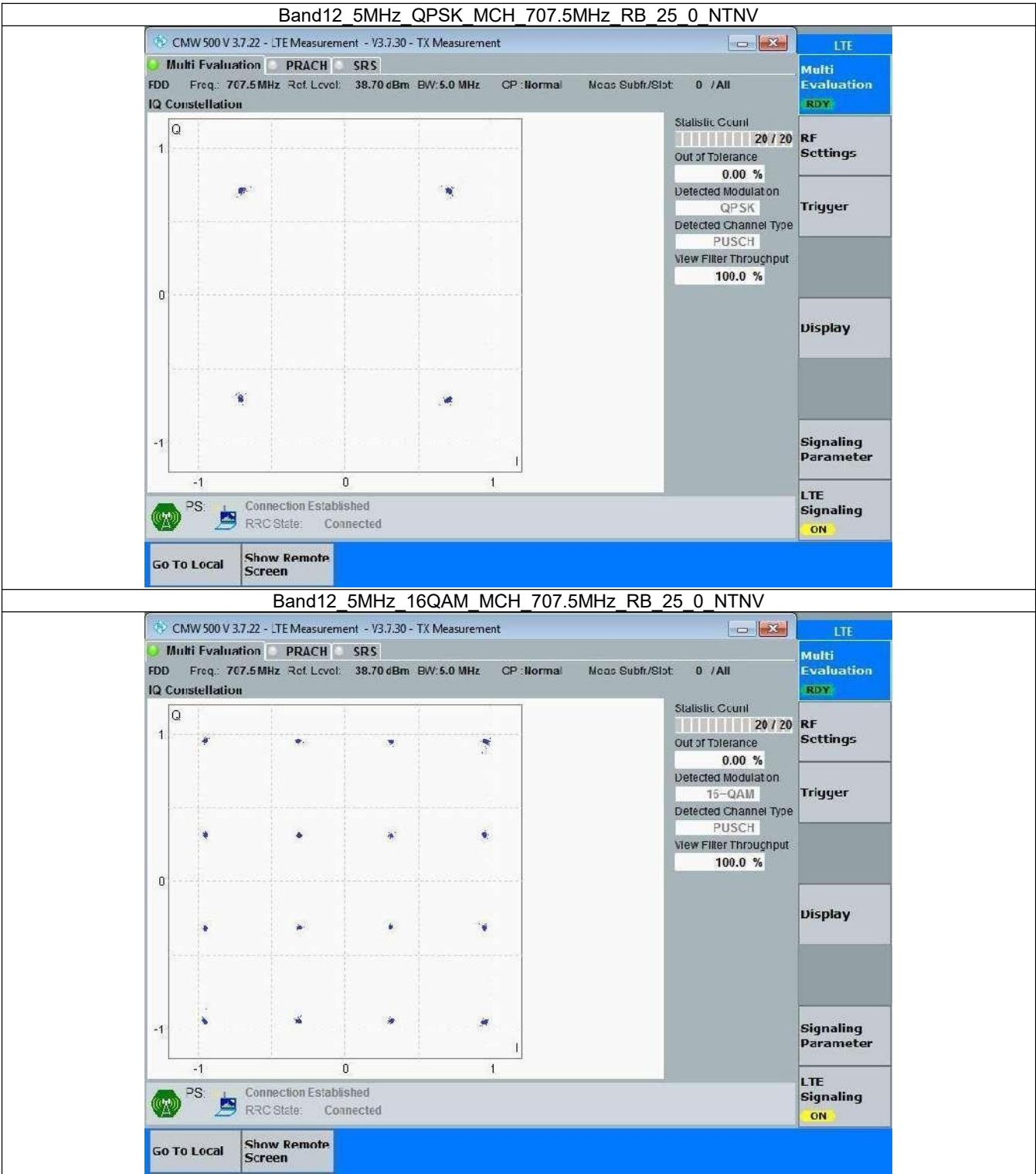


### 3.3 B12\_5MHz

#### 3.3.1 Test Result

| Band: 12 / Bandwidth: 5MHz / NTNV |                    |               |        |                            |       |         |
|-----------------------------------|--------------------|---------------|--------|----------------------------|-------|---------|
| Modulation                        | Frequency<br>(MHz) | RB Allocation |        | Modulation Characteristics |       | Verdict |
|                                   |                    | Size          | Offset | Result                     | Limit |         |
| QPSK                              | 707.5              | 25            | 0      | Refer To Test Graph        |       | Pass    |
| 16QAM                             | 707.5              | 25            | 0      | Refer To Test Graph        |       | Pass    |

3.3.2 Test Graph

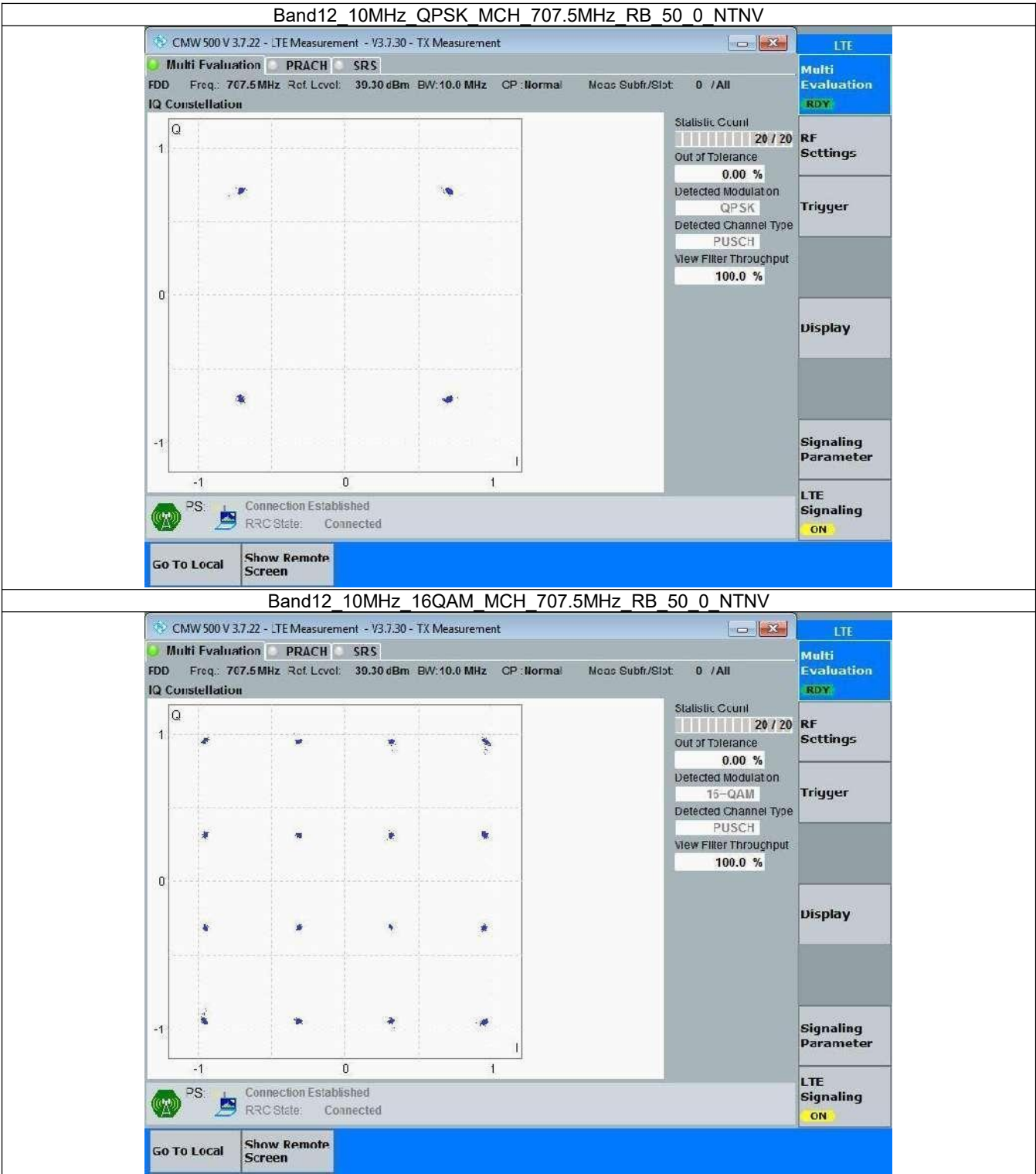


3.4 B12\_10MHz

3.4.1 Test Result

| Band: 12 / Bandwidth: 10MHz / NTNv |                 |               |        |                            |       |         |
|------------------------------------|-----------------|---------------|--------|----------------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Modulation Characteristics |       | Verdict |
|                                    |                 | Size          | Offset | Result                     | Limit |         |
| QPSK                               | 707.5           | 50            | 0      | Refer To Test Graph        |       | Pass    |
| 16QAM                              | 707.5           | 50            | 0      | Refer To Test Graph        |       | Pass    |

3.4.2 Test Graph



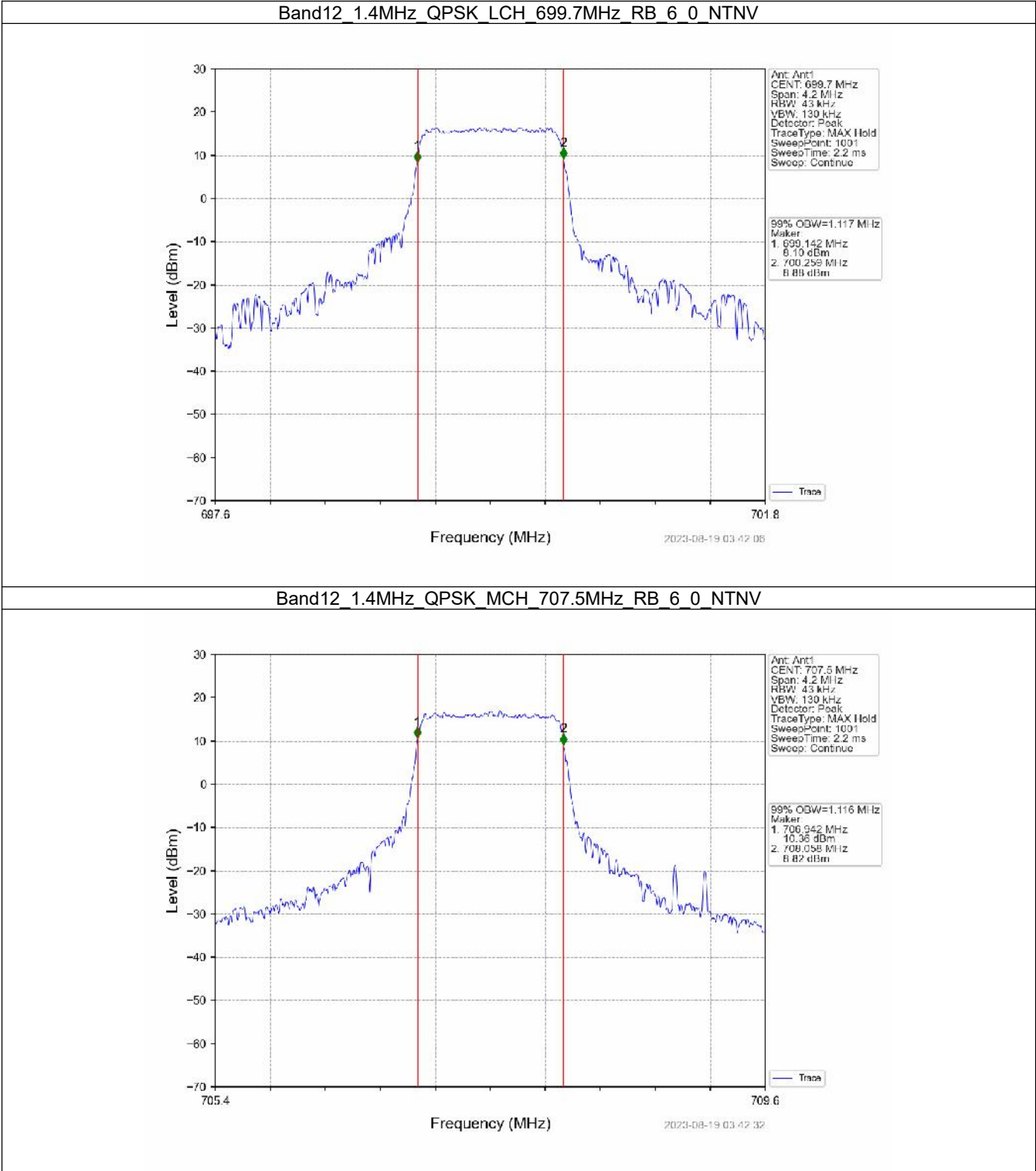
## 4. 99% & 26dB Bandwidth

### 4.1 Band12\_OBW

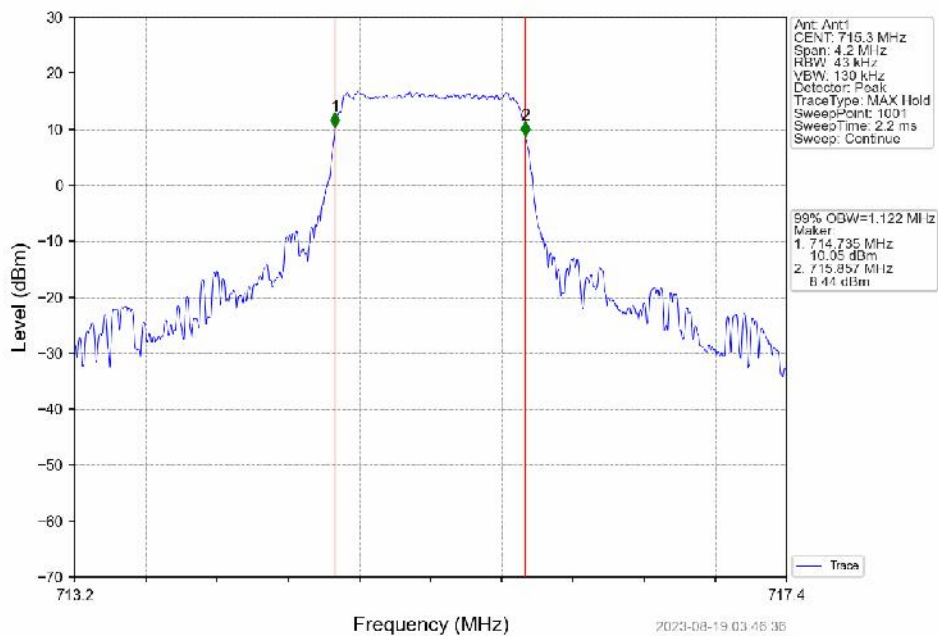
#### 4.1.1 Test Result

| Band: 12 / NTNV |            |                 |               |        |                              |         |
|-----------------|------------|-----------------|---------------|--------|------------------------------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 99% Occupied Bandwidth (MHz) | Verdict |
|                 |            |                 | Size          | Offset | Result                       |         |
| 1.4             | QPSK       | 699.7           | 6             | 0      | 1.117                        | Pass    |
|                 |            | 707.5           | 6             | 0      | 1.116                        | Pass    |
|                 |            | 715.3           | 6             | 0      | 1.122                        | Pass    |
|                 | 16QAM      | 699.7           | 6             | 0      | 1.126                        | Pass    |
|                 |            | 707.5           | 6             | 0      | 1.119                        | Pass    |
|                 |            | 715.3           | 6             | 0      | 1.131                        | Pass    |
| 3               | QPSK       | 700.5           | 15            | 0      | 2.775                        | Pass    |
|                 |            | 707.5           | 15            | 0      | 2.782                        | Pass    |
|                 |            | 714.5           | 15            | 0      | 2.777                        | Pass    |
|                 | 16QAM      | 700.5           | 15            | 0      | 2.787                        | Pass    |
|                 |            | 707.5           | 15            | 0      | 2.775                        | Pass    |
|                 |            | 714.5           | 15            | 0      | 2.788                        | Pass    |
| 5               | QPSK       | 701.5           | 25            | 0      | 4.592                        | Pass    |
|                 |            | 707.5           | 25            | 0      | 4.572                        | Pass    |
|                 |            | 713.5           | 25            | 0      | 4.566                        | Pass    |
|                 | 16QAM      | 701.5           | 25            | 0      | 4.592                        | Pass    |
|                 |            | 707.5           | 25            | 0      | 4.559                        | Pass    |
|                 |            | 713.5           | 25            | 0      | 4.561                        | Pass    |
| 10              | QPSK       | 704             | 50            | 0      | 9.073                        | Pass    |
|                 |            | 707.5           | 50            | 0      | 9.108                        | Pass    |
|                 |            | 711             | 50            | 0      | 9.053                        | Pass    |
|                 | 16QAM      | 704             | 50            | 0      | 9.080                        | Pass    |
|                 |            | 707.5           | 50            | 0      | 9.106                        | Pass    |
|                 |            | 711             | 50            | 0      | 9.082                        | Pass    |

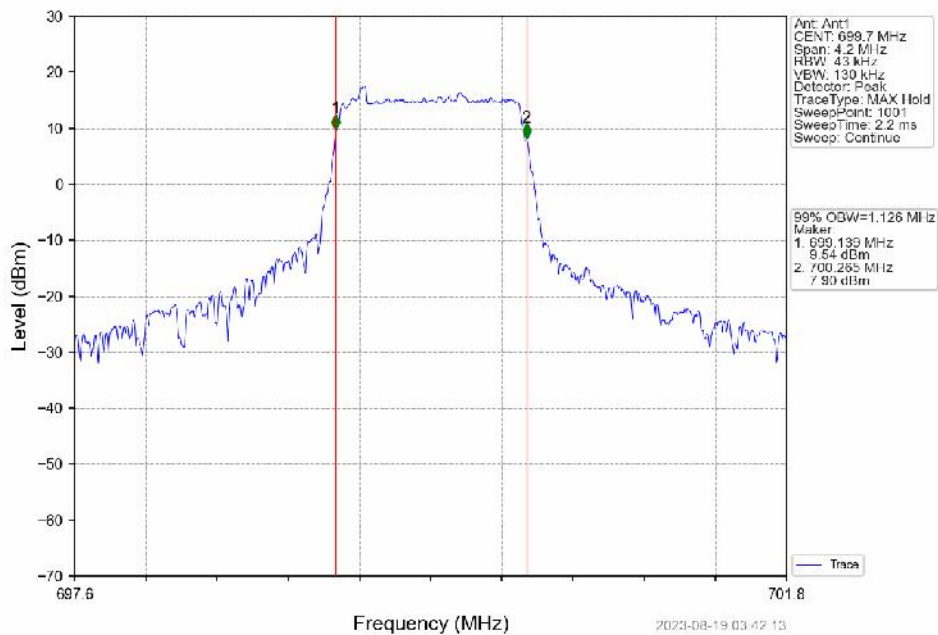
4.1.2 Test Graph



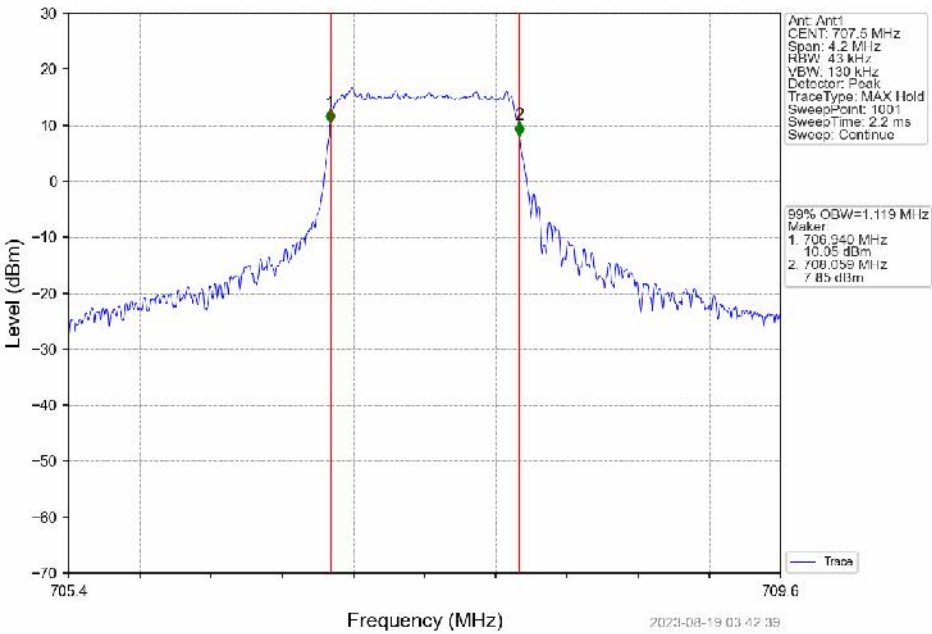
Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



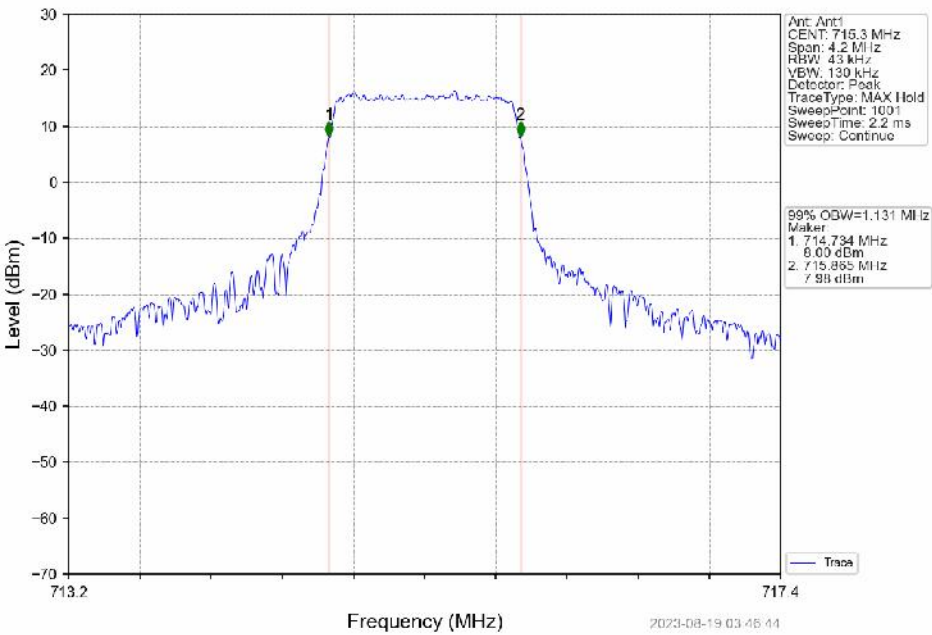
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_6\_0\_NTNV



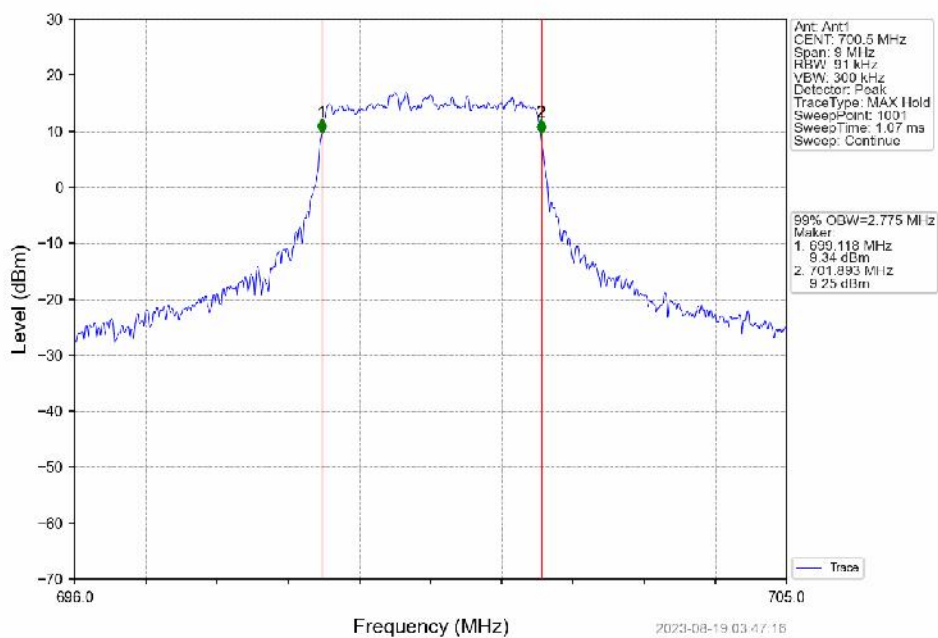
Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



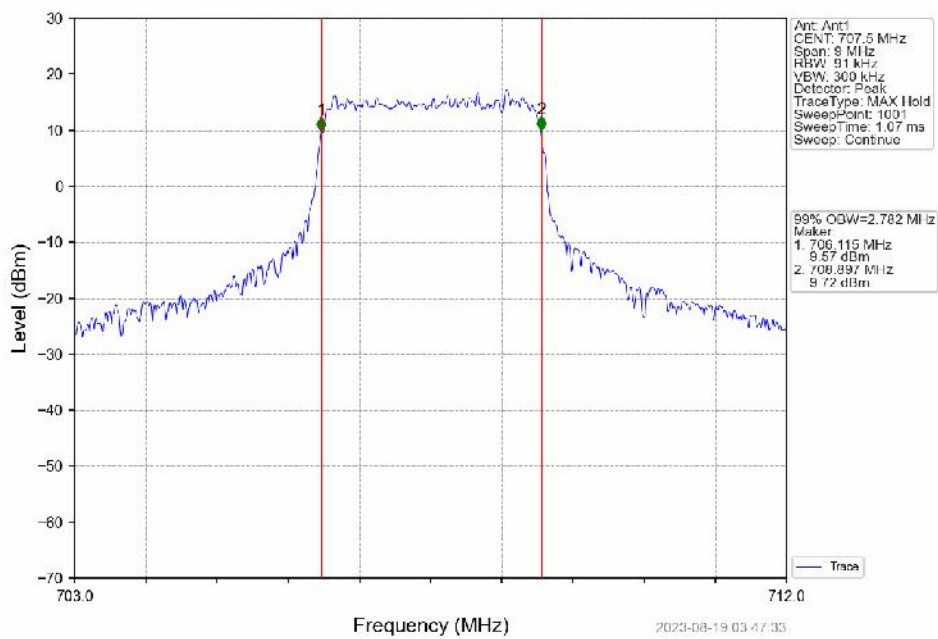
Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



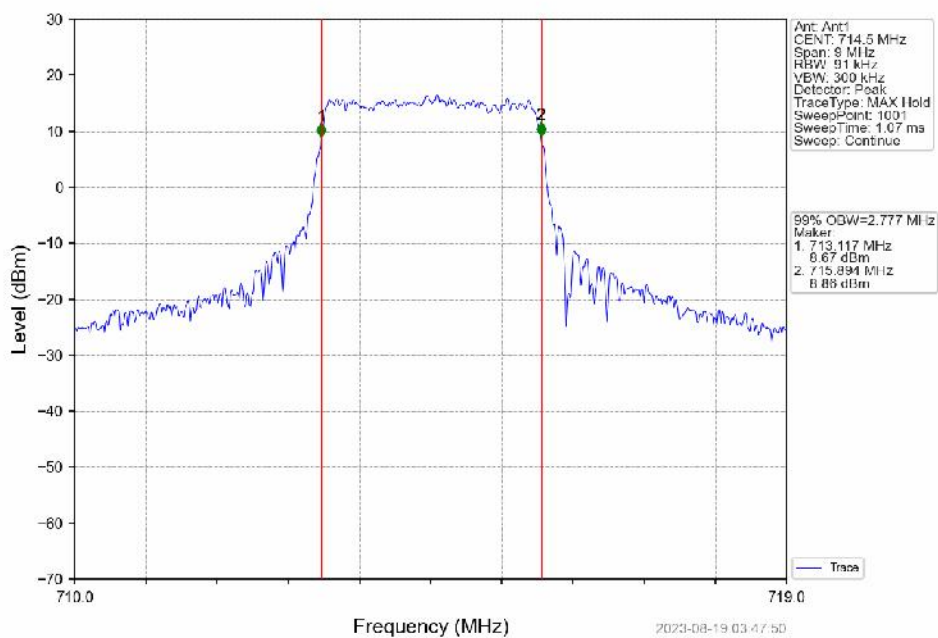
Band12\_3MHz\_QPSK\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



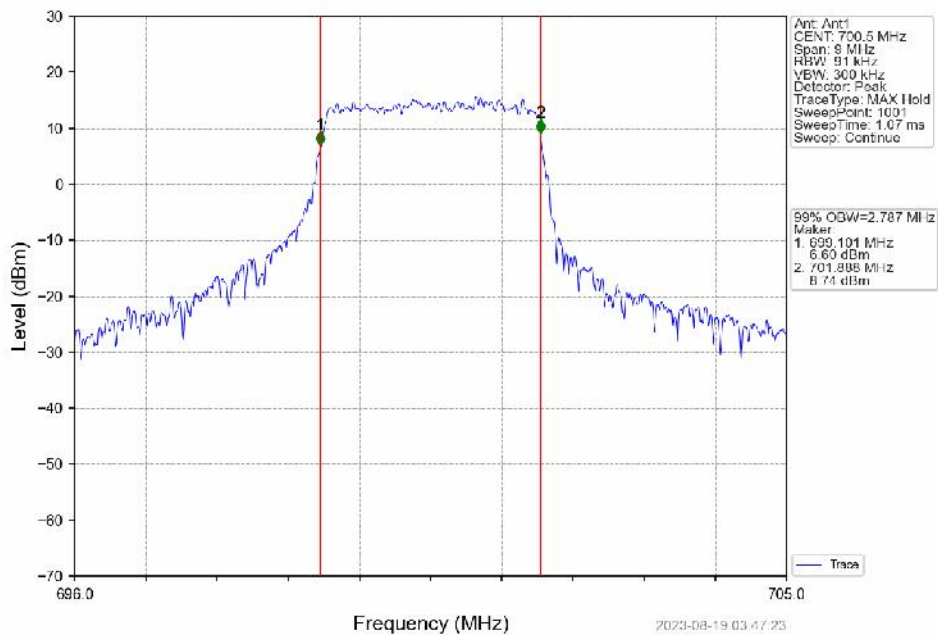
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_15\_0\_NTNV

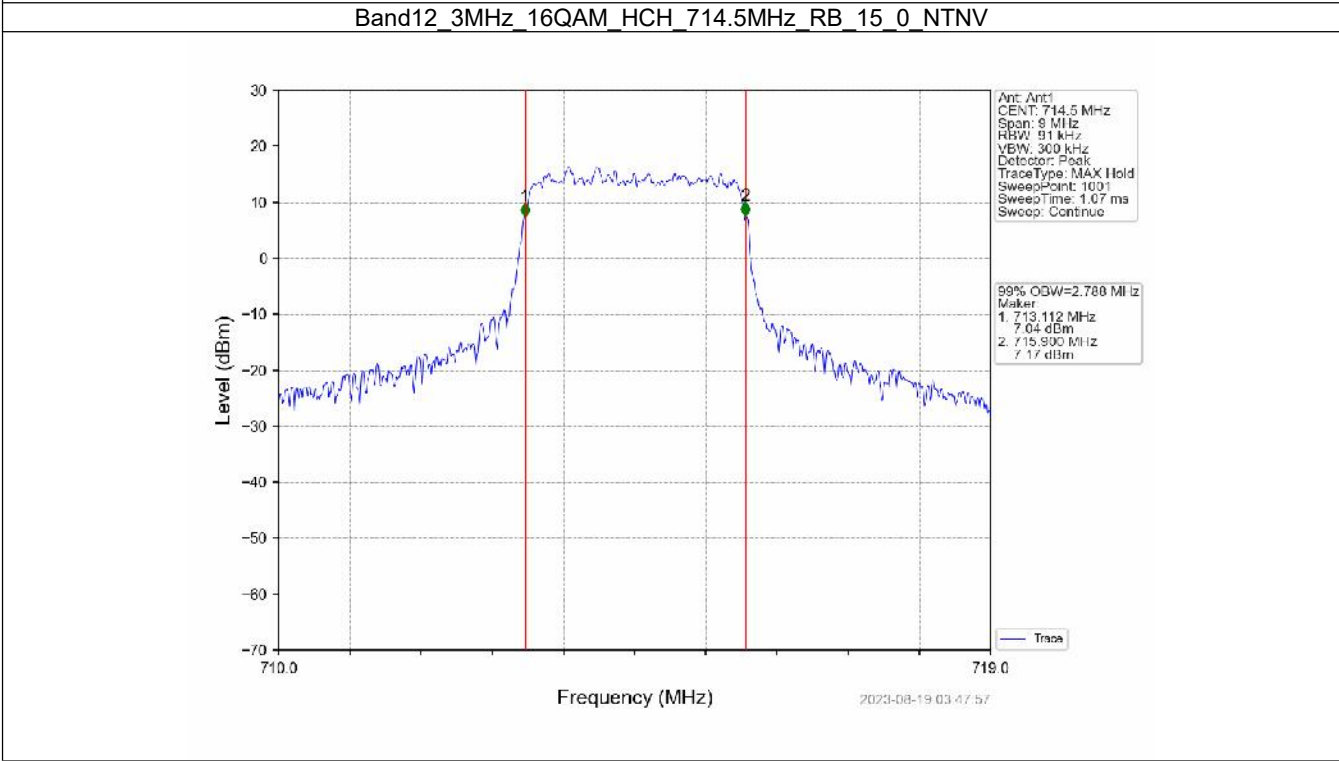
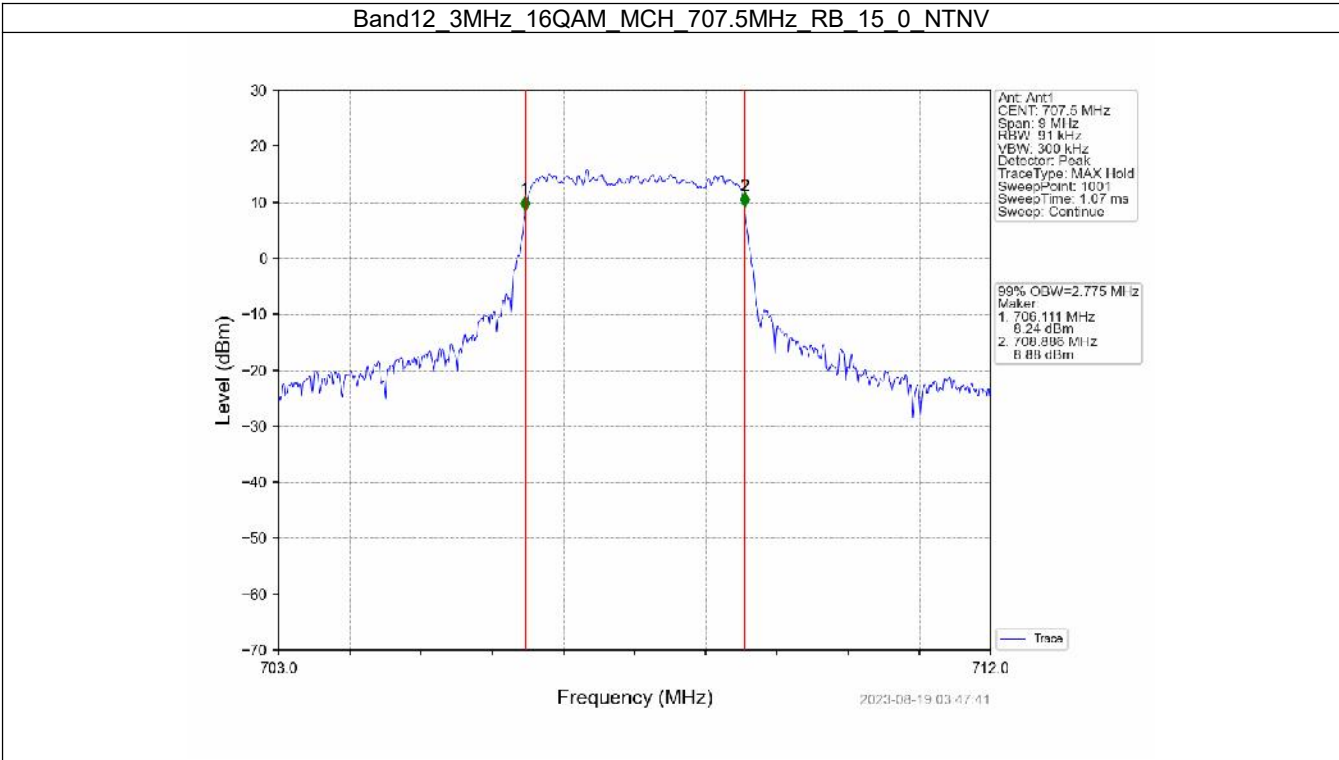


Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV

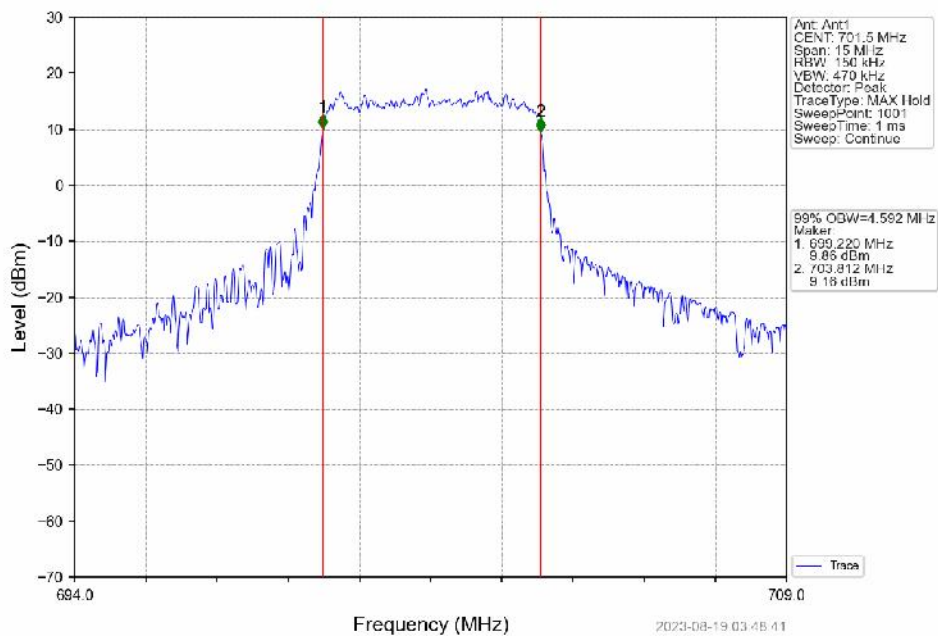


Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV

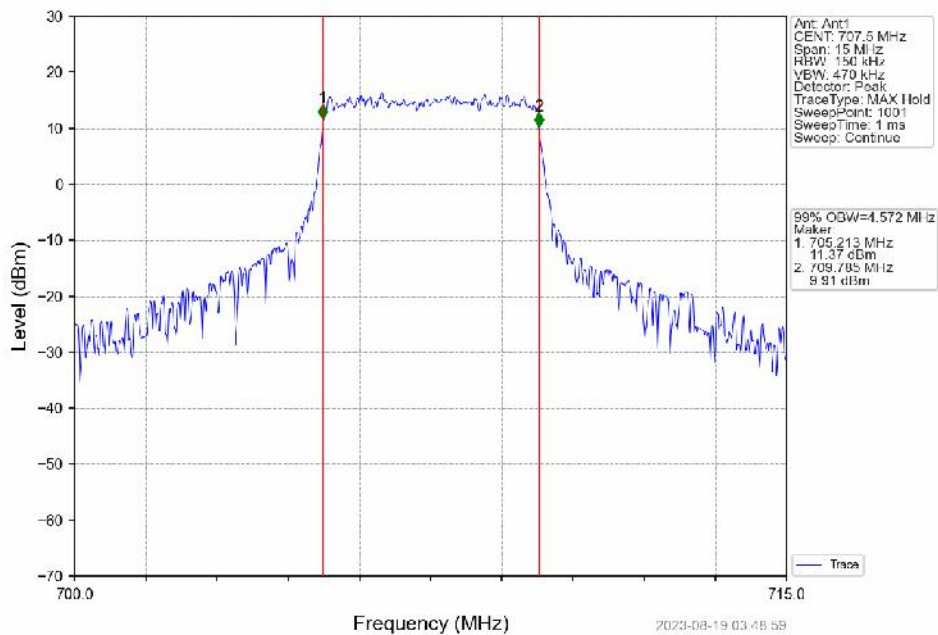




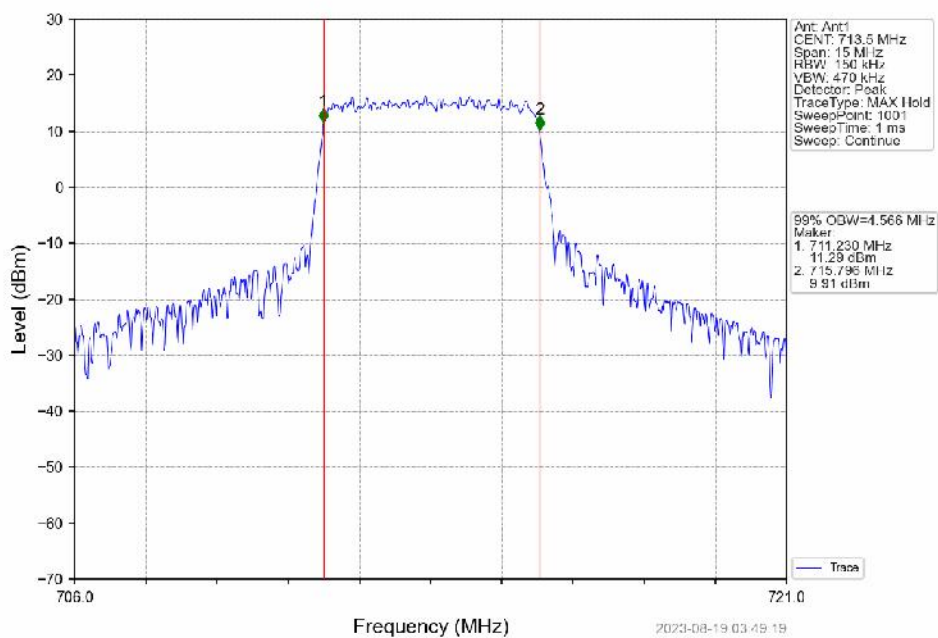
Band12\_5MHz\_QPSK\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



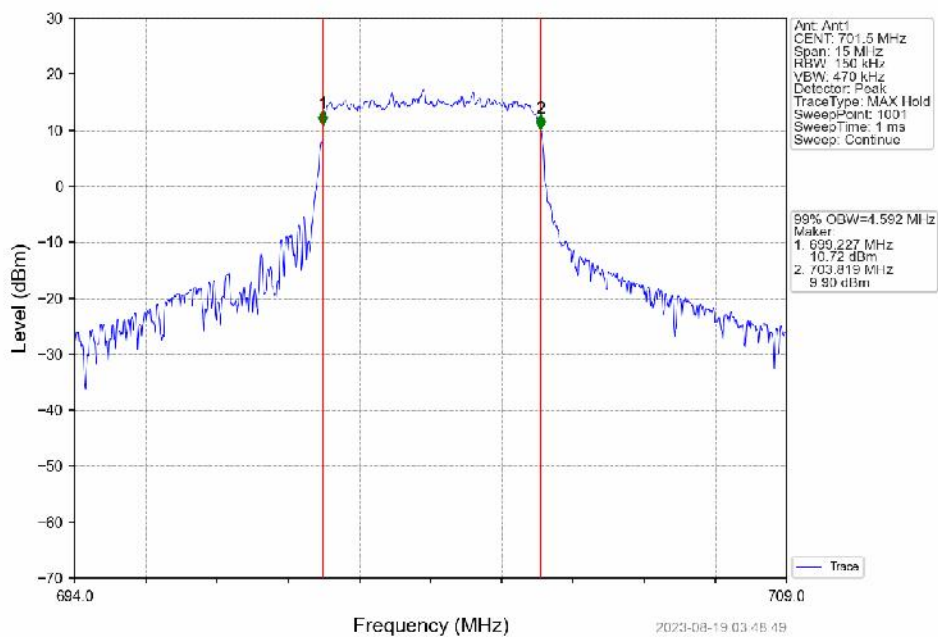
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_25\_0\_NTNV

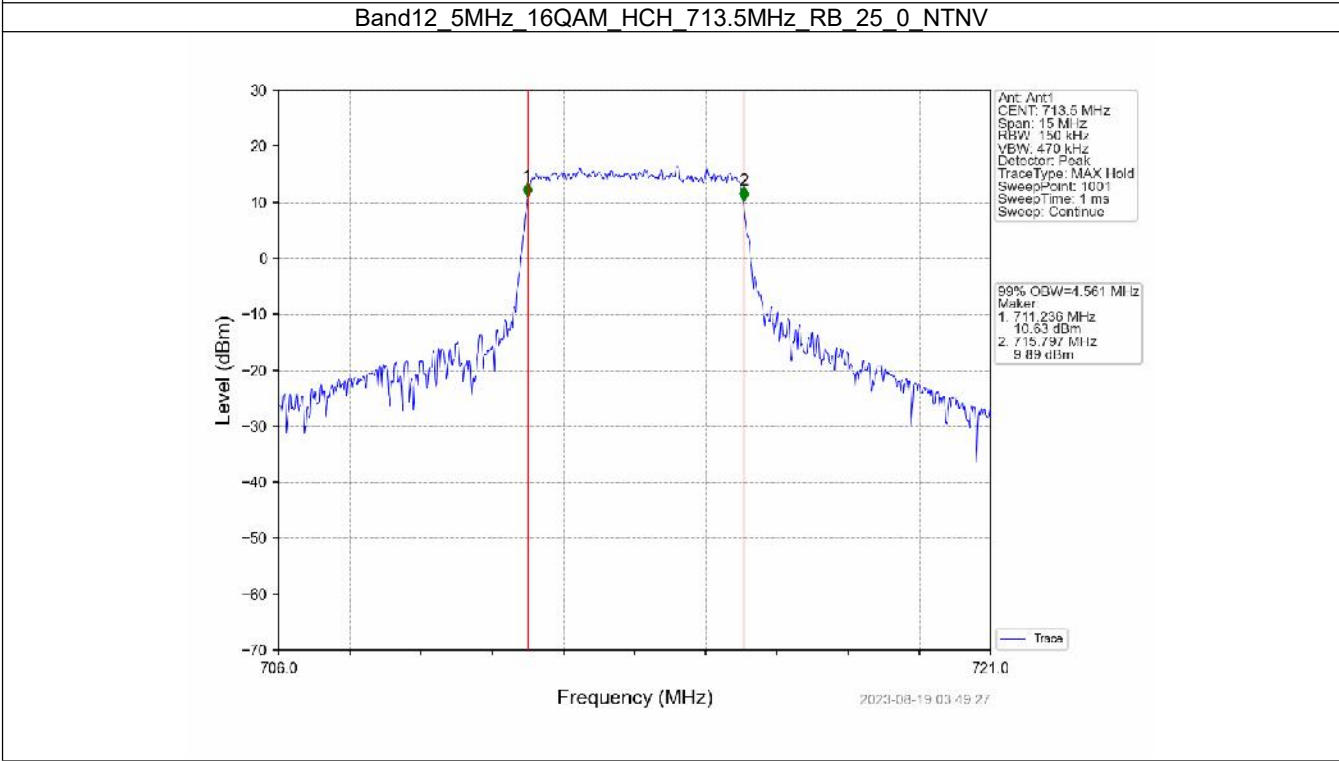
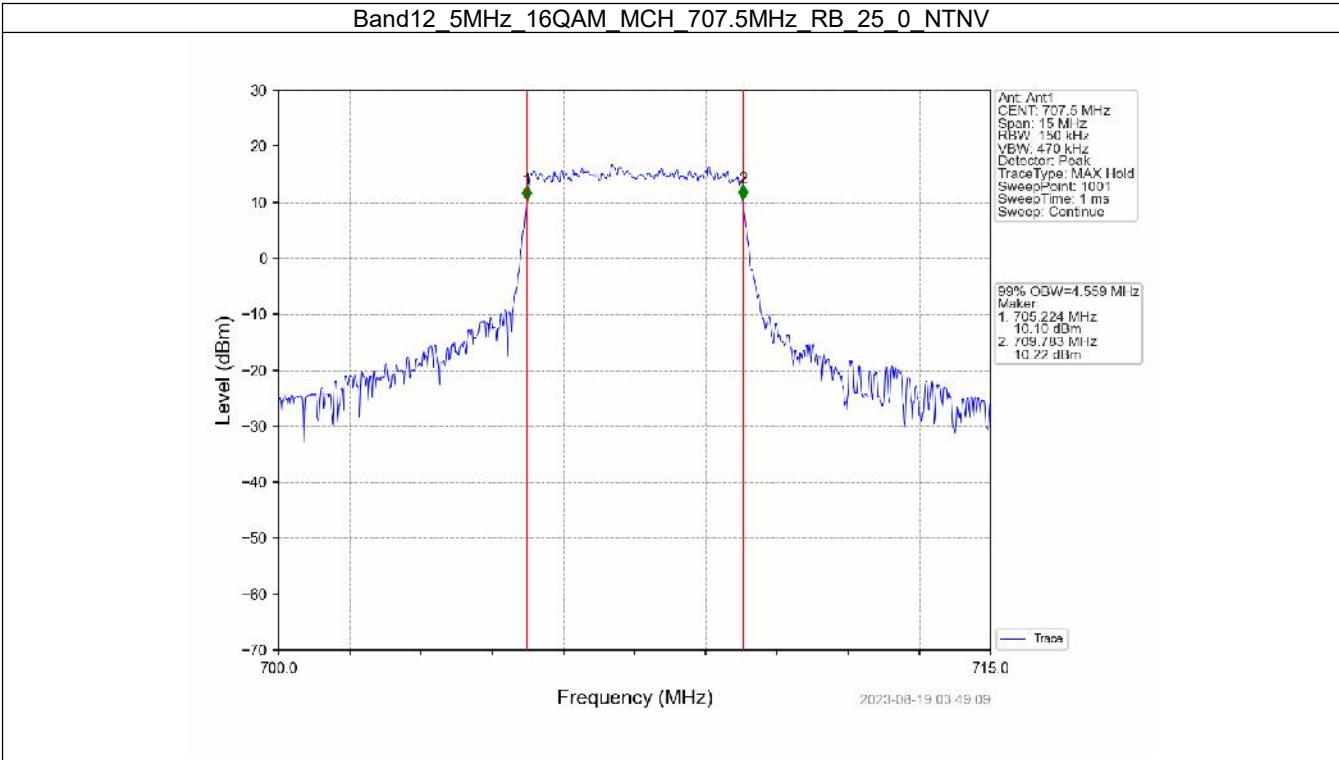


Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV

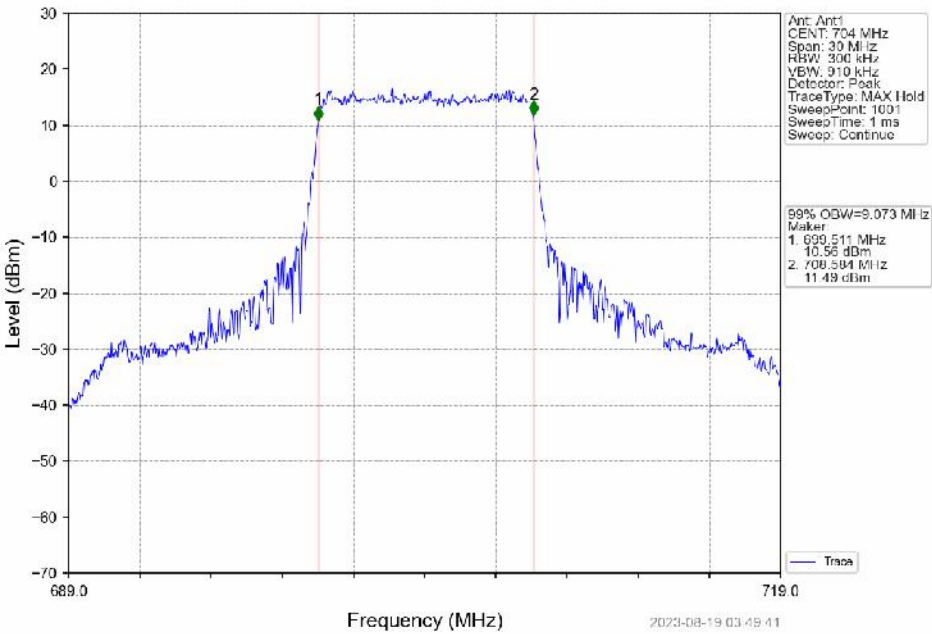


Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV

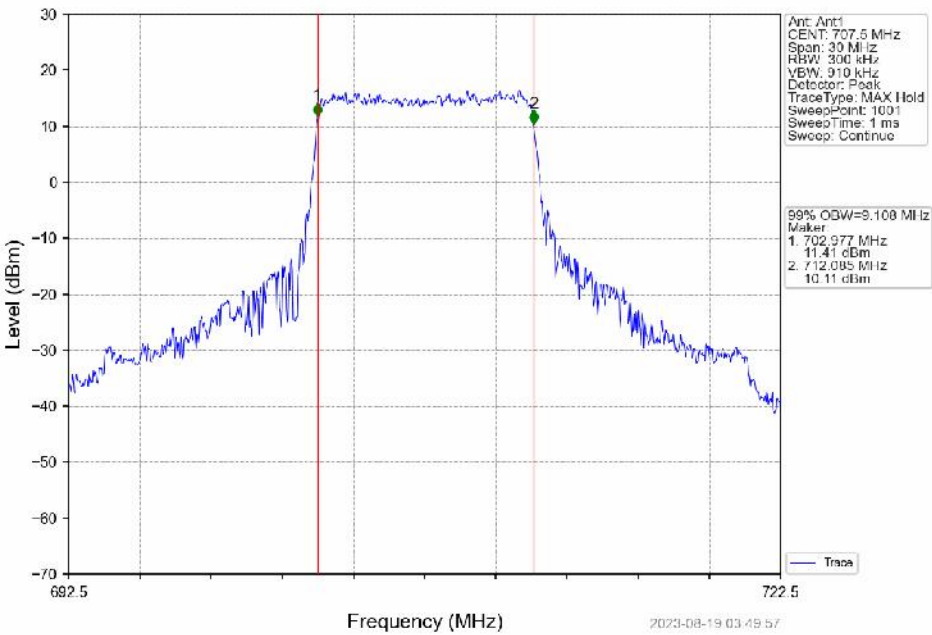




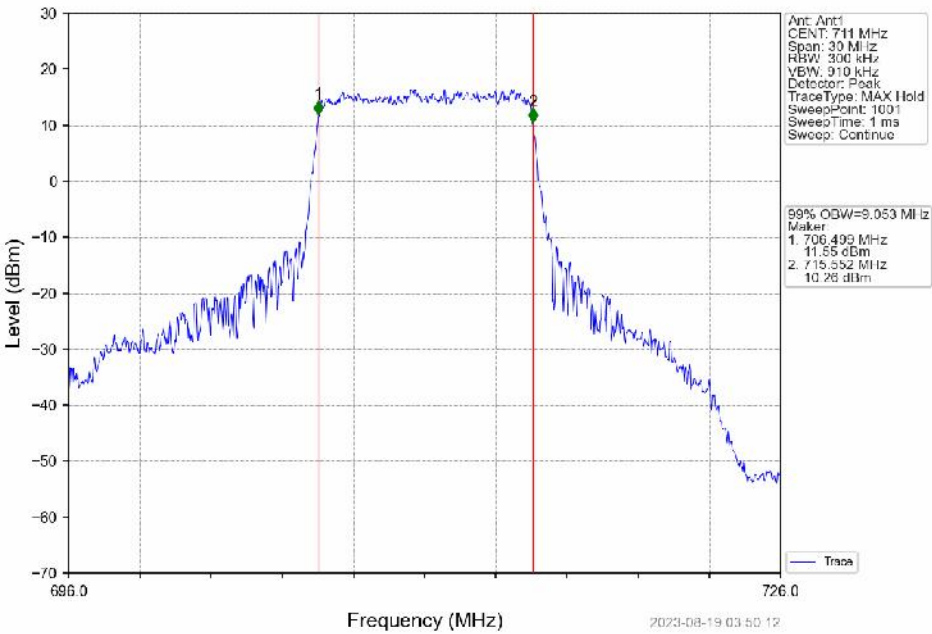
Band12\_10MHz\_QPSK\_LCH\_704MHz\_RB\_50\_0\_NTNV



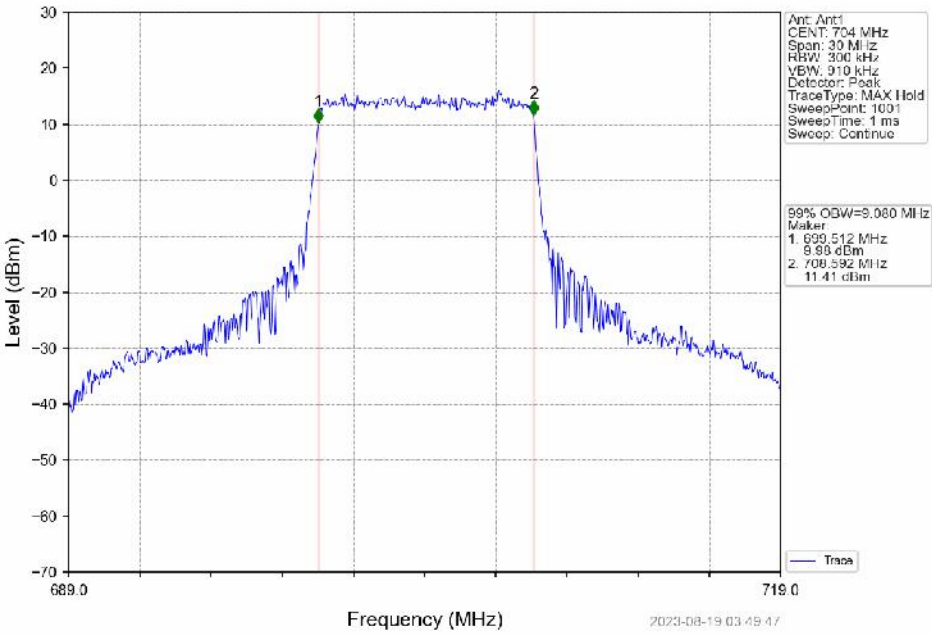
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



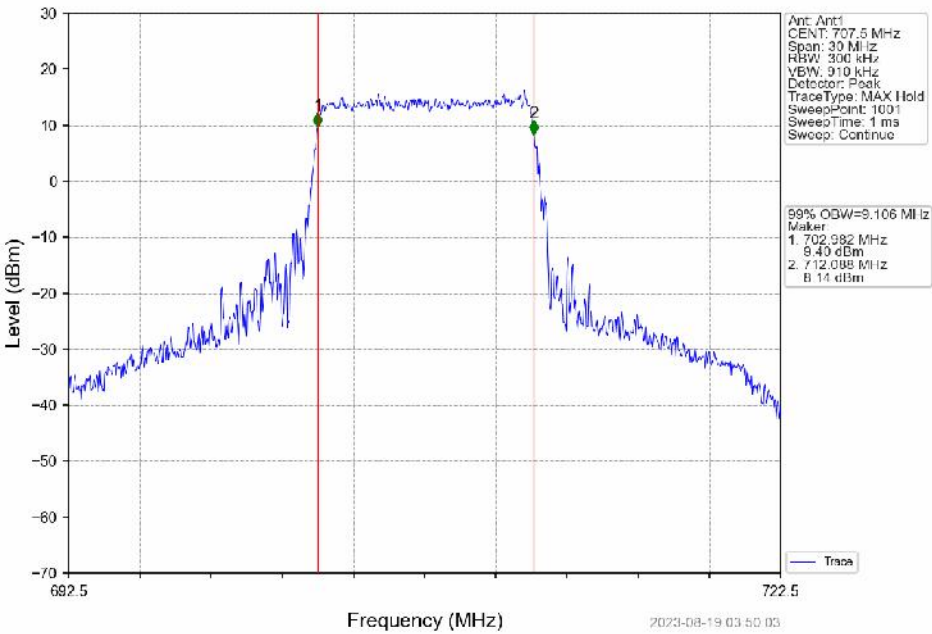
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



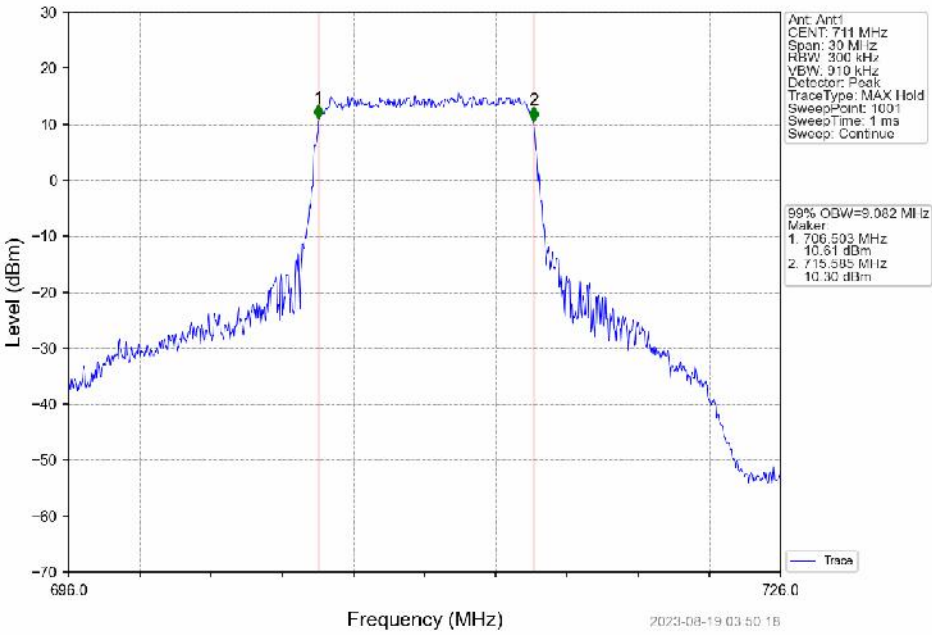
Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_50\_0\_NTNV

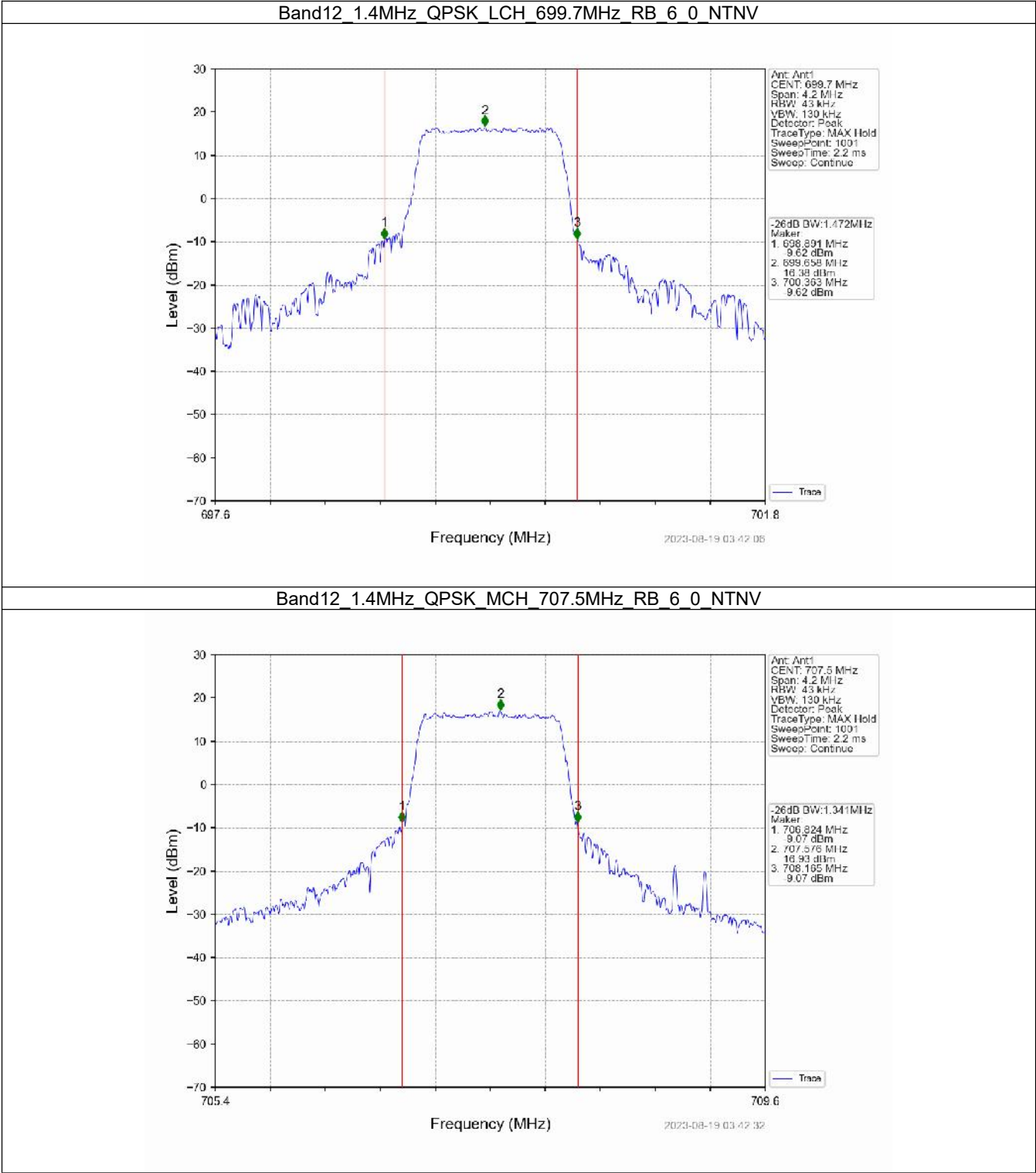


## 4.2 Band12\_XDB

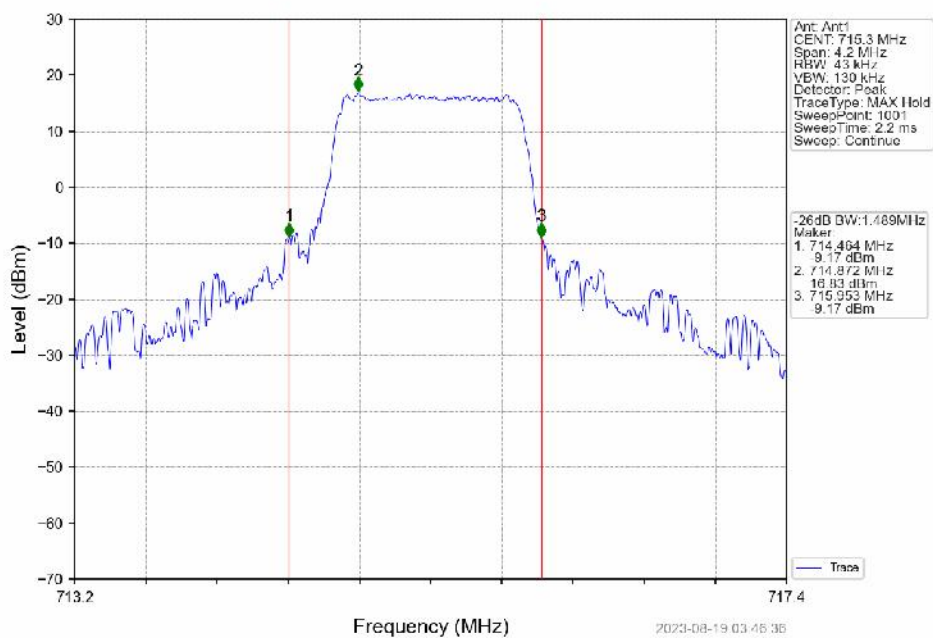
### 4.2.1 Test Result

| Band: 12 / NTNV |            |                 |               |        |                      |         |
|-----------------|------------|-----------------|---------------|--------|----------------------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 26dB Bandwidth (MHz) | Verdict |
|                 |            |                 | Size          | Offset | Result               |         |
| 1.4             | QPSK       | 699.7           | 6             | 0      | 1.472                | Pass    |
|                 |            | 707.5           | 6             | 0      | 1.341                | Pass    |
|                 |            | 715.3           | 6             | 0      | 1.489                | Pass    |
|                 | 16QAM      | 699.7           | 6             | 0      | 1.298                | Pass    |
|                 |            | 707.5           | 6             | 0      | 1.489                | Pass    |
|                 |            | 715.3           | 6             | 0      | 1.402                | Pass    |
| 3               | QPSK       | 700.5           | 15            | 0      | 3.466                | Pass    |
|                 |            | 707.5           | 15            | 0      | 3.297                | Pass    |
|                 |            | 714.5           | 15            | 0      | 3.376                | Pass    |
|                 | 16QAM      | 700.5           | 15            | 0      | 3.496                | Pass    |
|                 |            | 707.5           | 15            | 0      | 3.591                | Pass    |
|                 |            | 714.5           | 15            | 0      | 3.284                | Pass    |
| 5               | QPSK       | 701.5           | 25            | 0      | 5.615                | Pass    |
|                 |            | 707.5           | 25            | 0      | 5.594                | Pass    |
|                 |            | 713.5           | 25            | 0      | 5.370                | Pass    |
|                 | 16QAM      | 701.5           | 25            | 0      | 5.649                | Pass    |
|                 |            | 707.5           | 25            | 0      | 5.392                | Pass    |
|                 |            | 713.5           | 25            | 0      | 5.459                | Pass    |
| 10              | QPSK       | 704             | 50            | 0      | 10.253               | Pass    |
|                 |            | 707.5           | 50            | 0      | 10.500               | Pass    |
|                 |            | 711             | 50            | 0      | 10.249               | Pass    |
|                 | 16QAM      | 704             | 50            | 0      | 10.140               | Pass    |
|                 |            | 707.5           | 50            | 0      | 10.731               | Pass    |
|                 |            | 711             | 50            | 0      | 10.104               | Pass    |

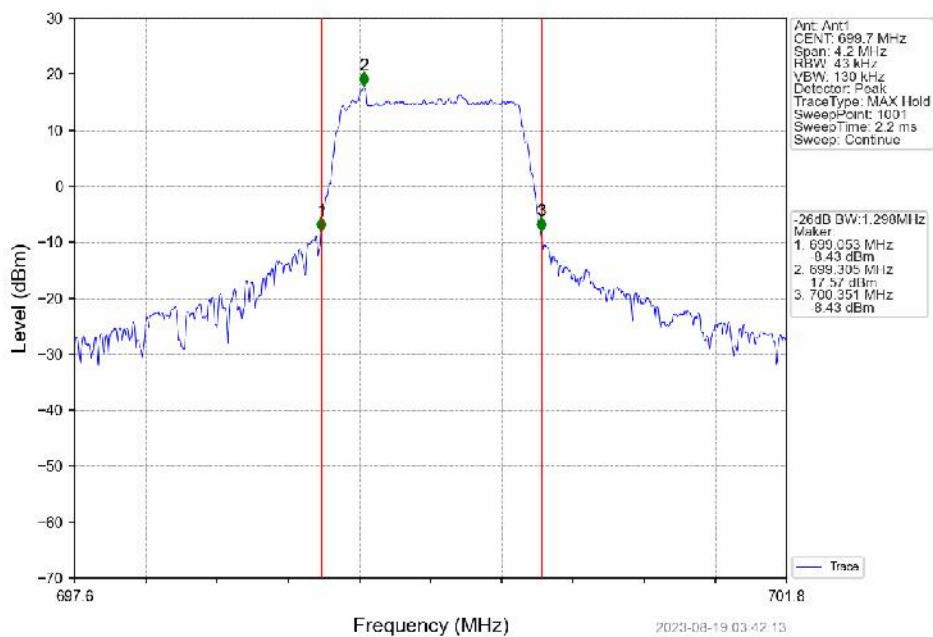
4.2.2 Test Graph



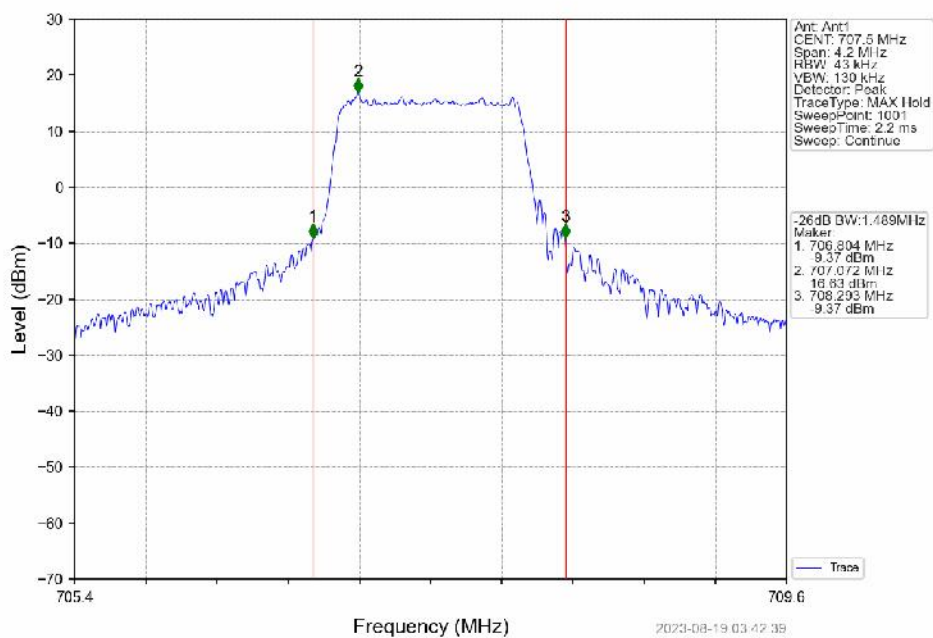
Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



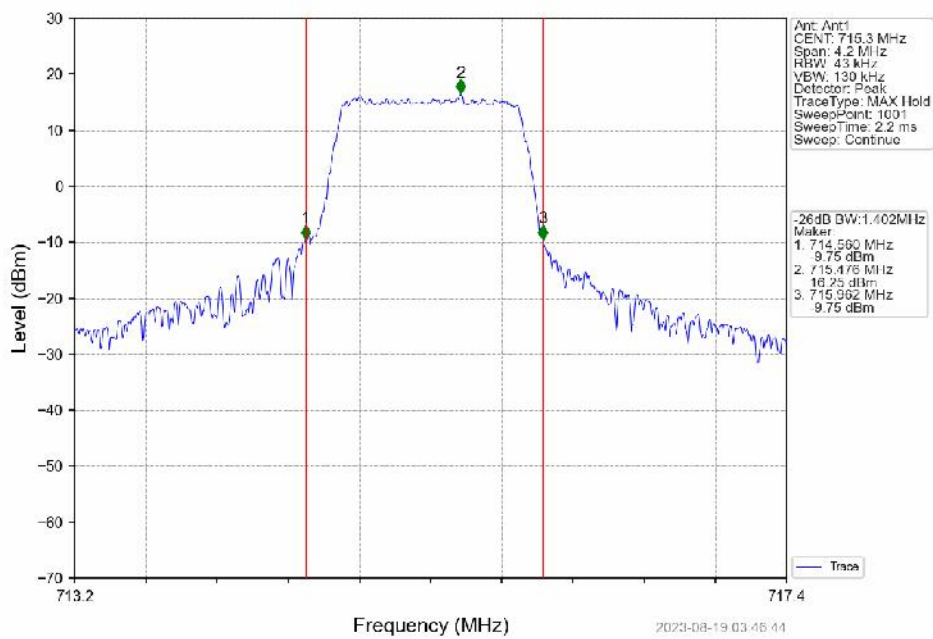
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_6\_0\_NTNV



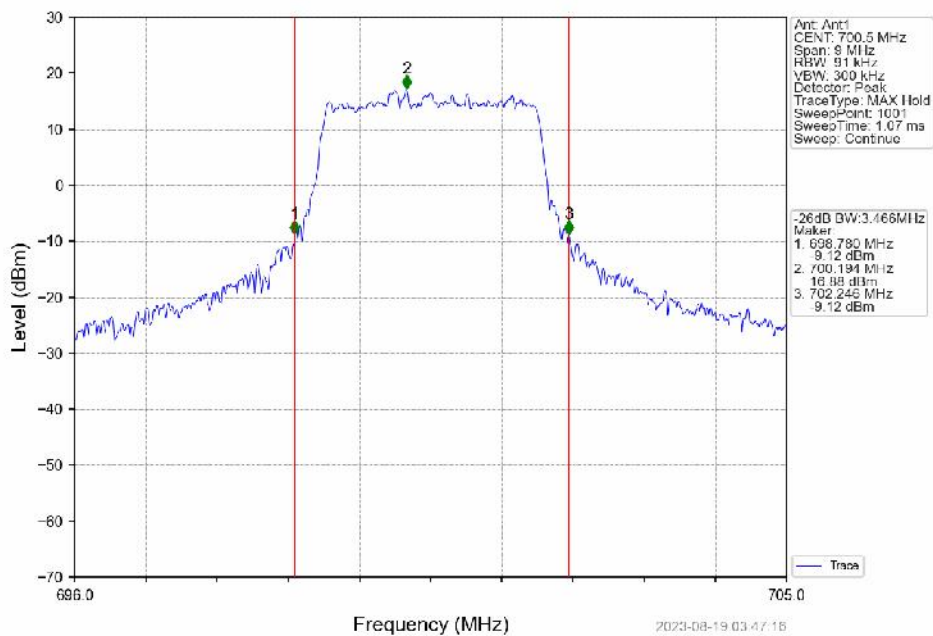
Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



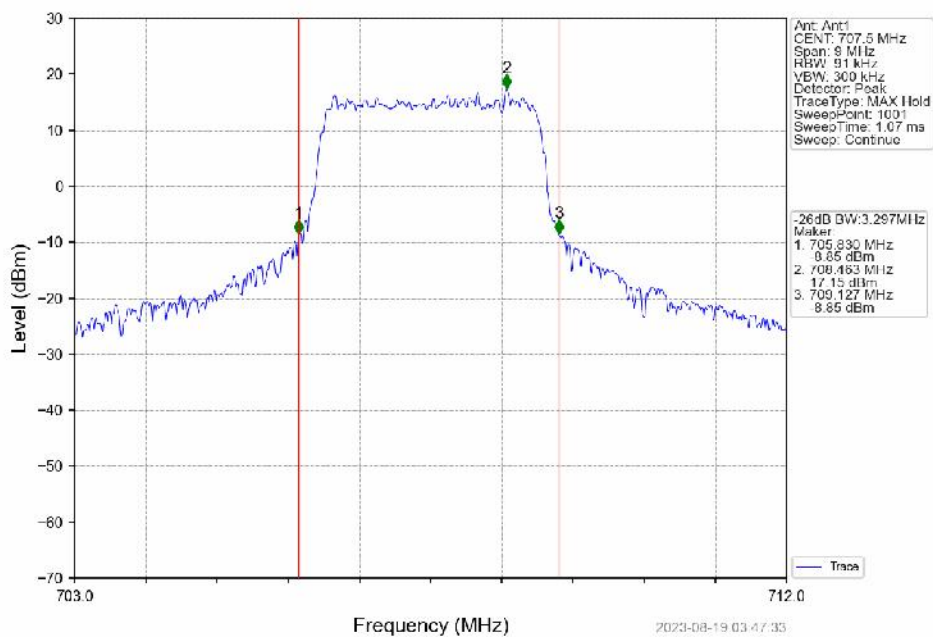
Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



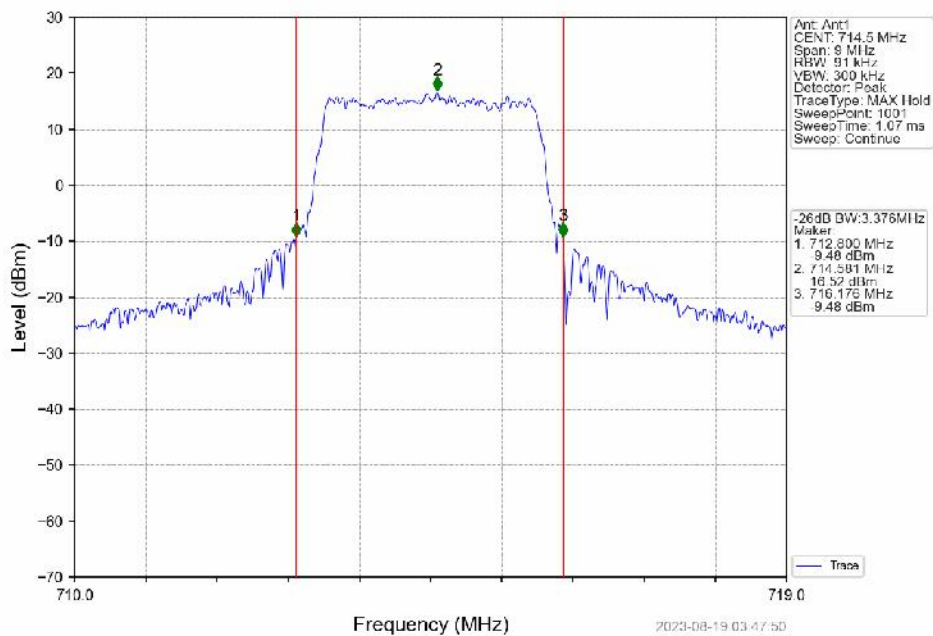
Band12\_3MHz\_QPSK\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



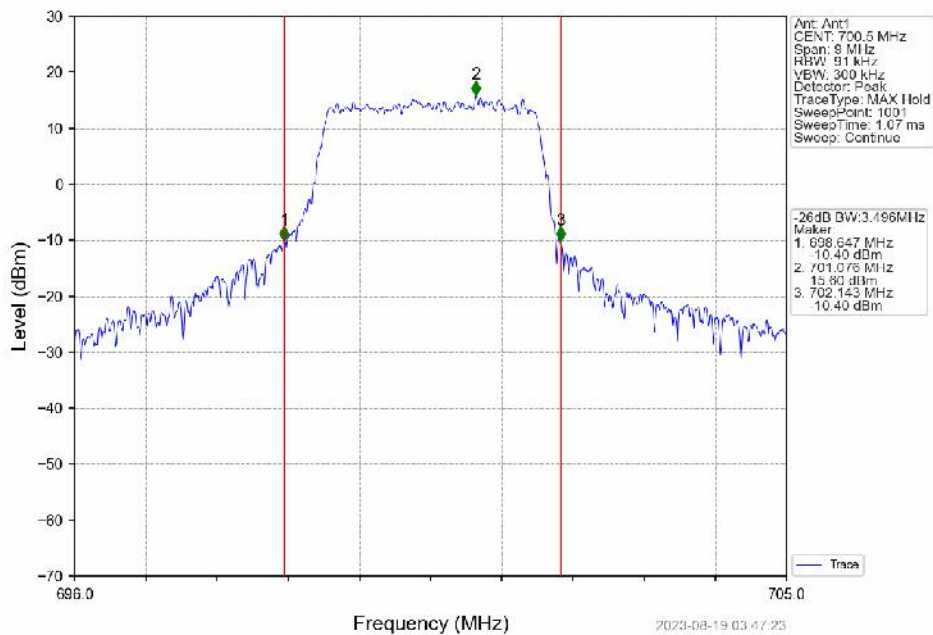
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



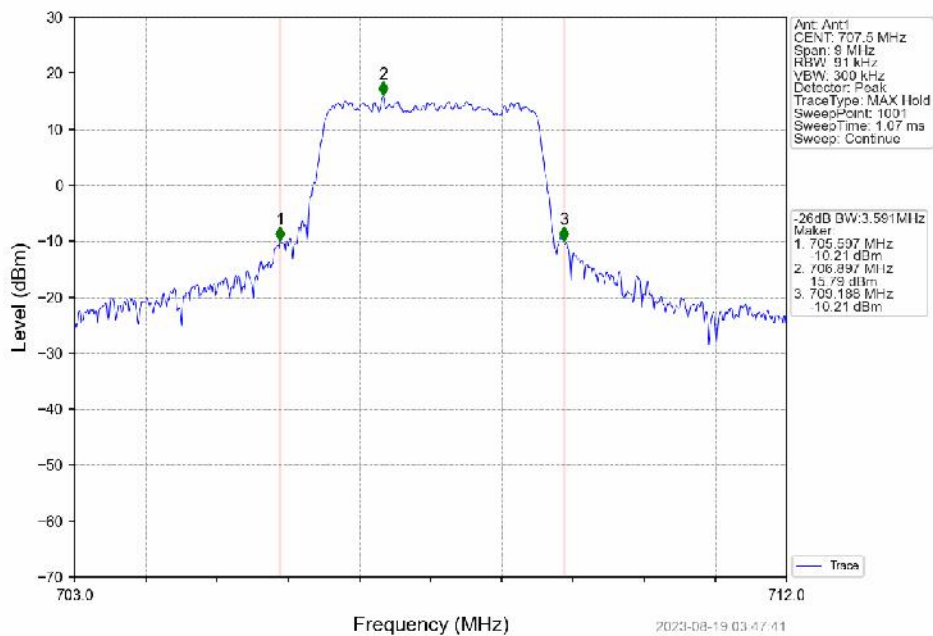
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



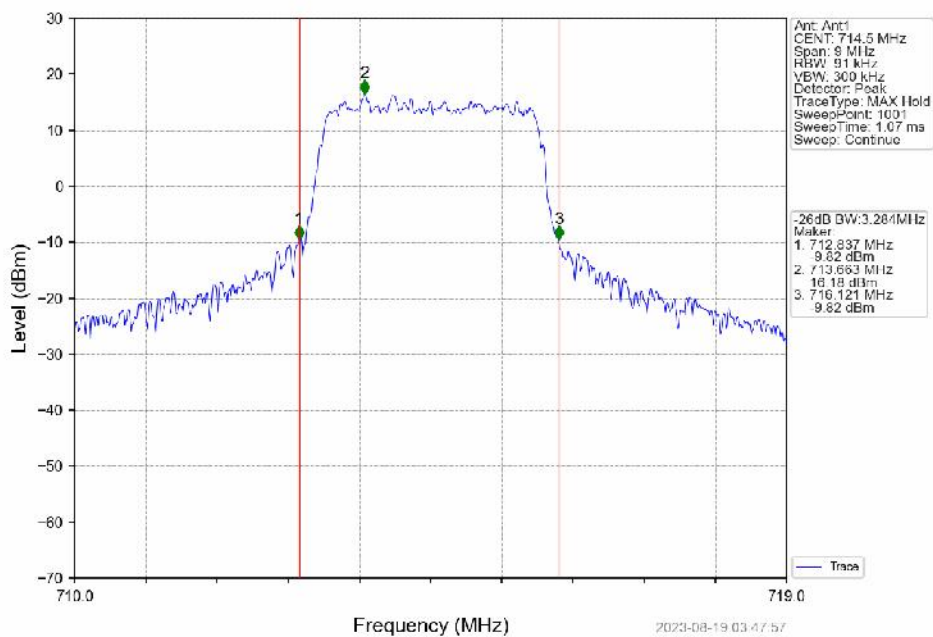
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



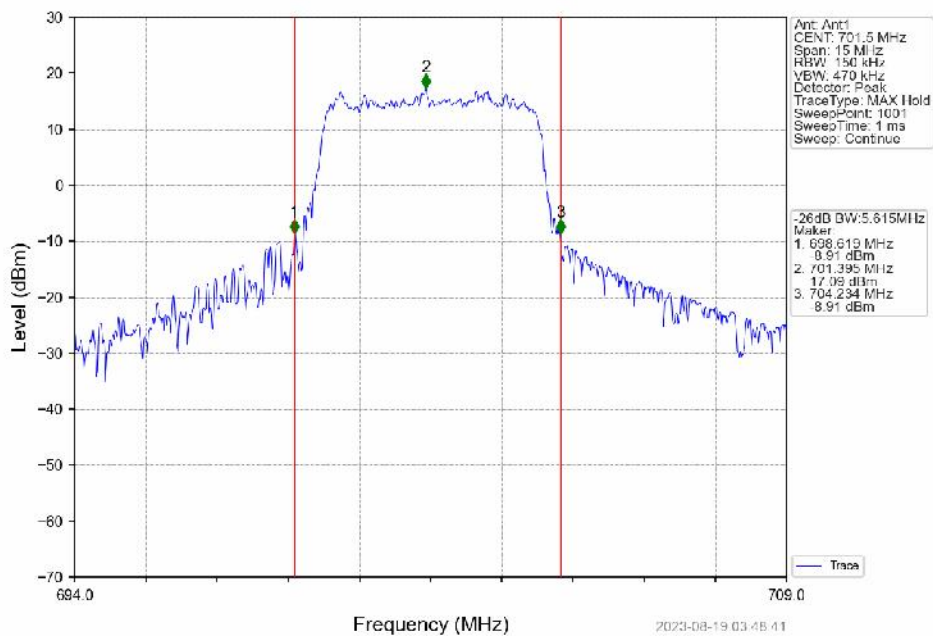
Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



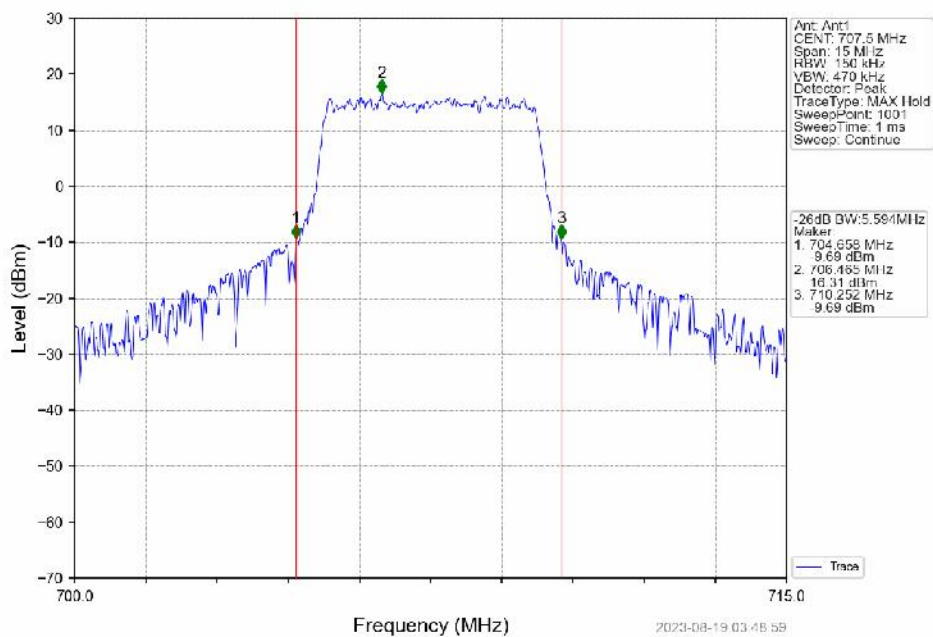
Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



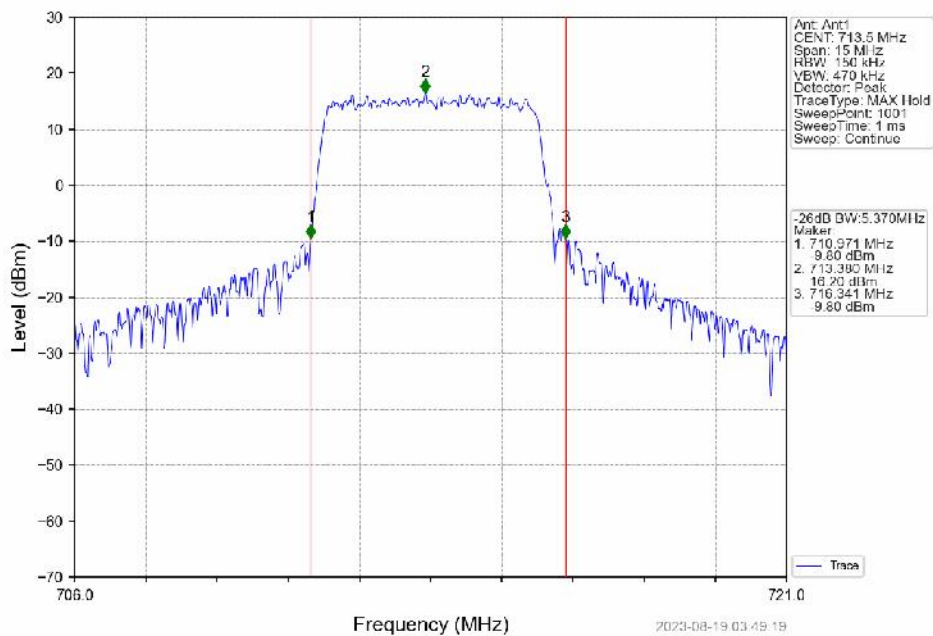
Band12\_5MHz\_QPSK\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



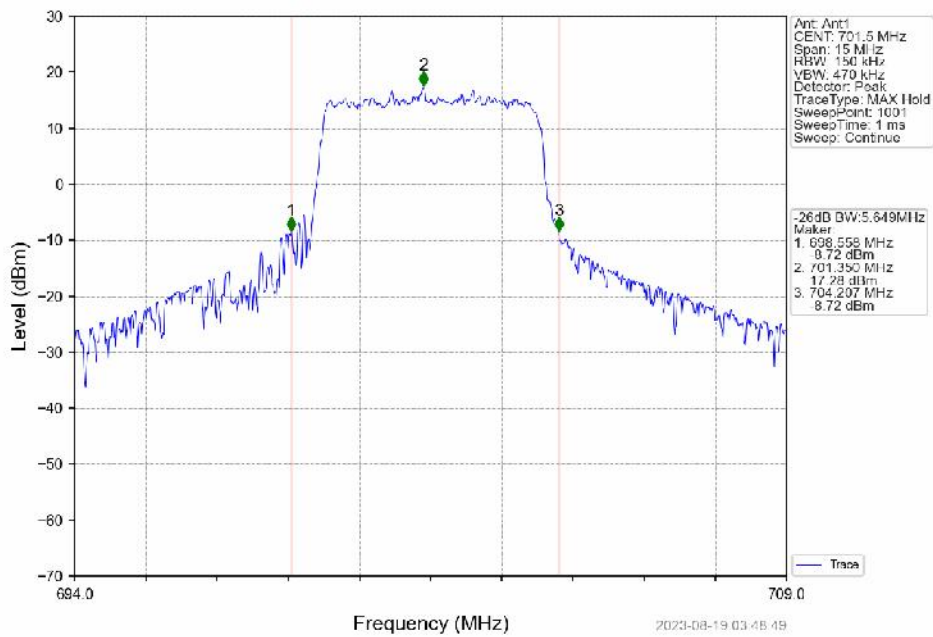
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



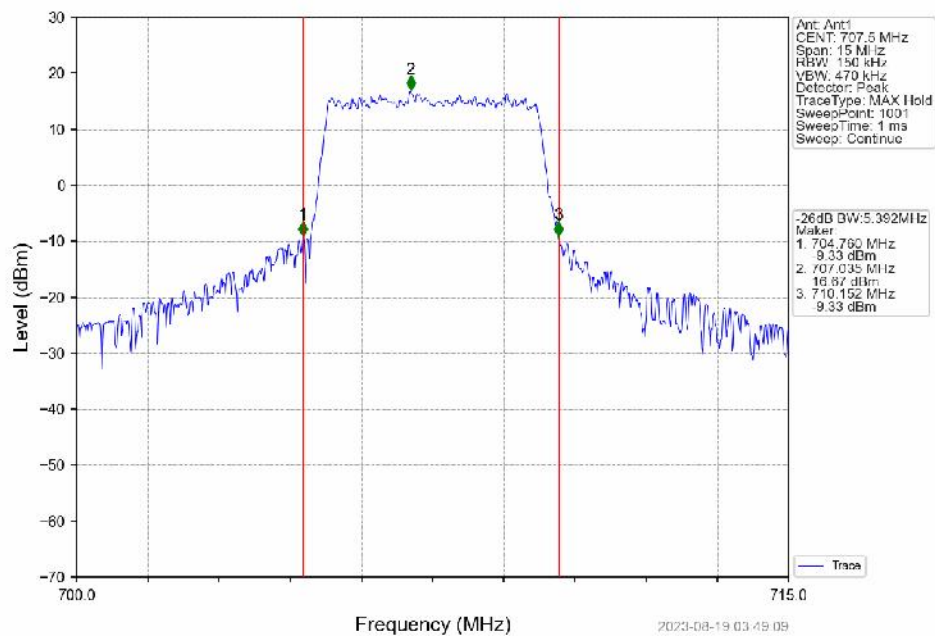
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



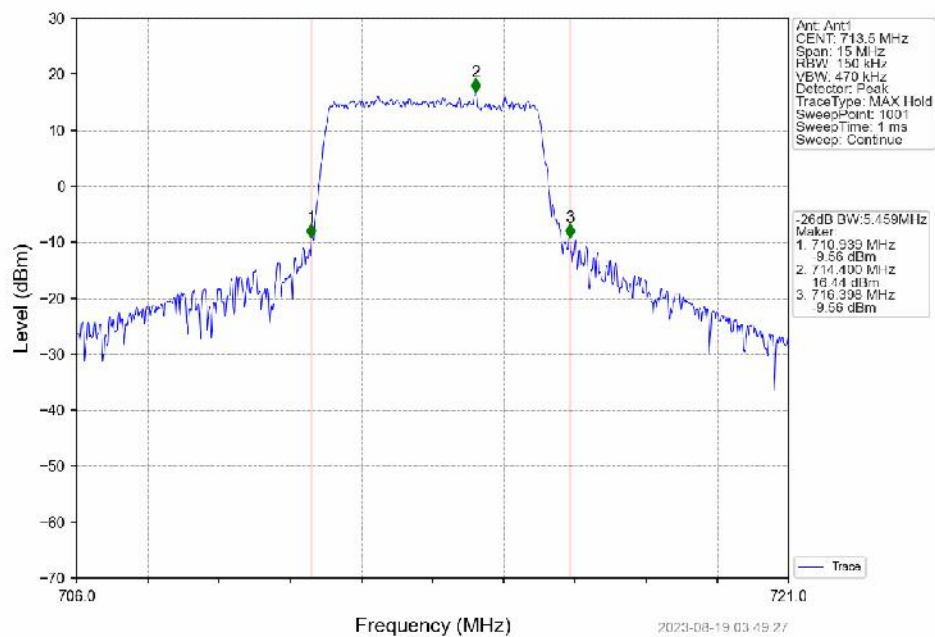
Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



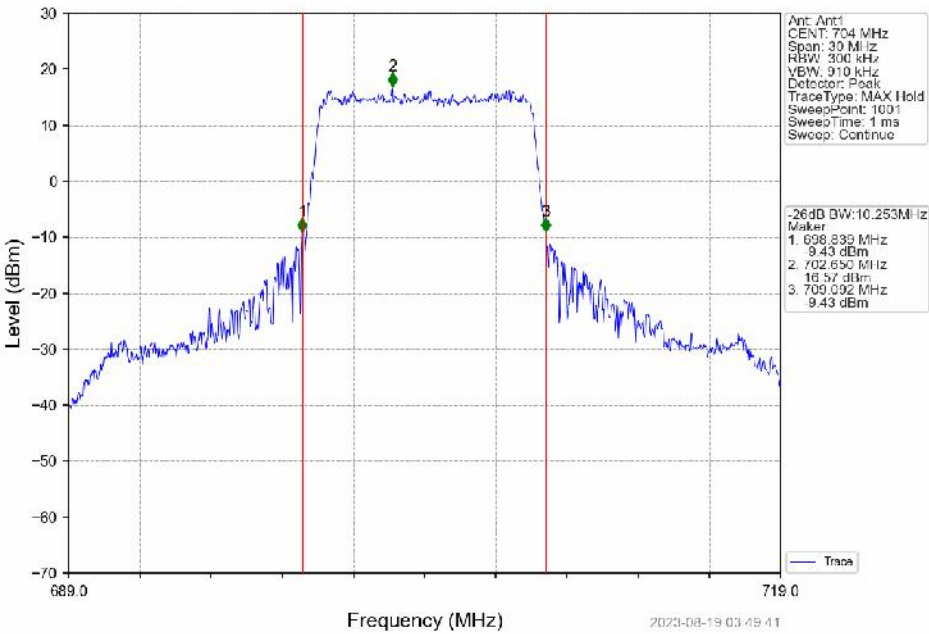
Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



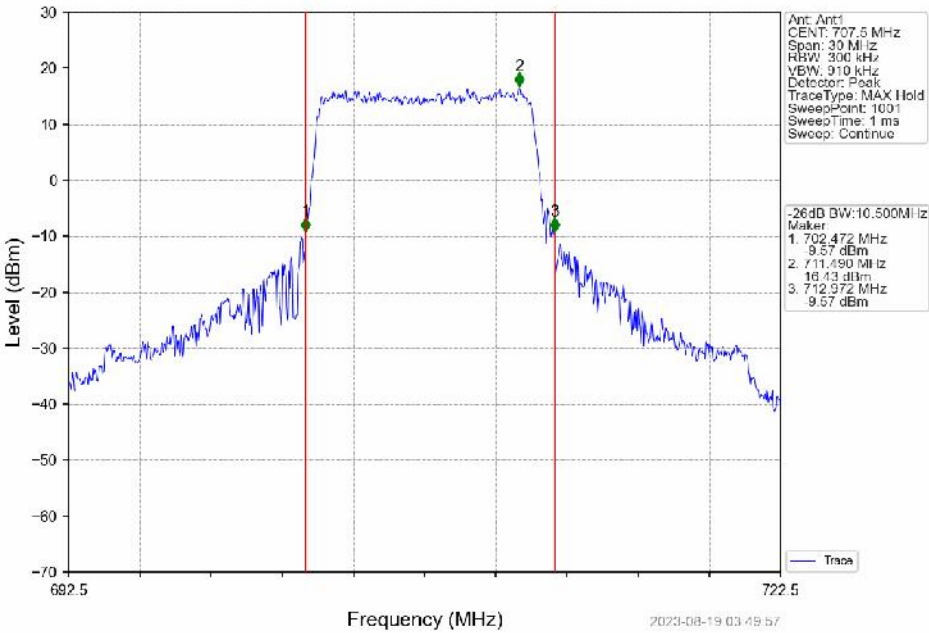
Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



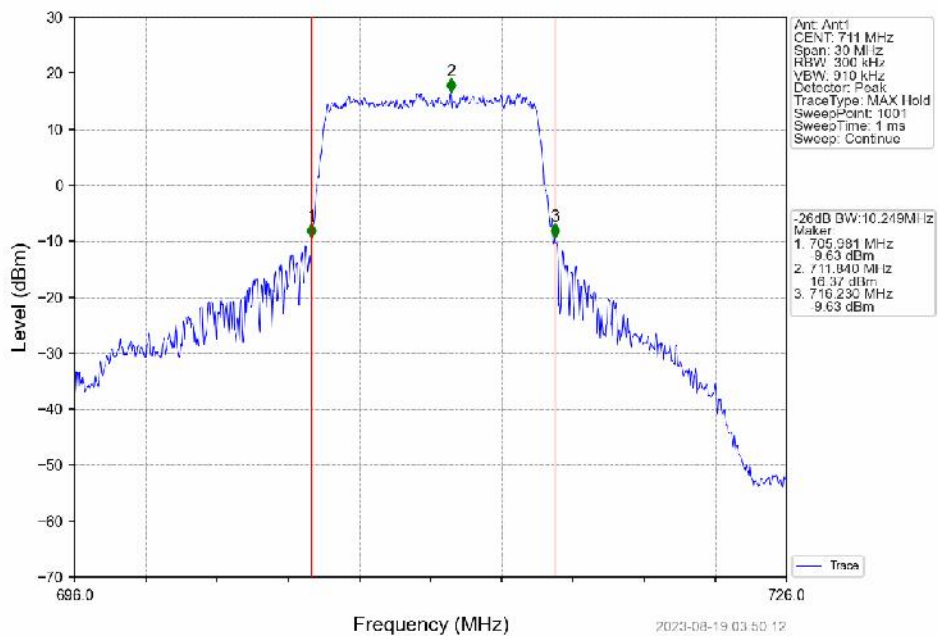
Band12\_10MHz\_QPSK\_LCH\_704MHz\_RB\_50\_0\_NTNV



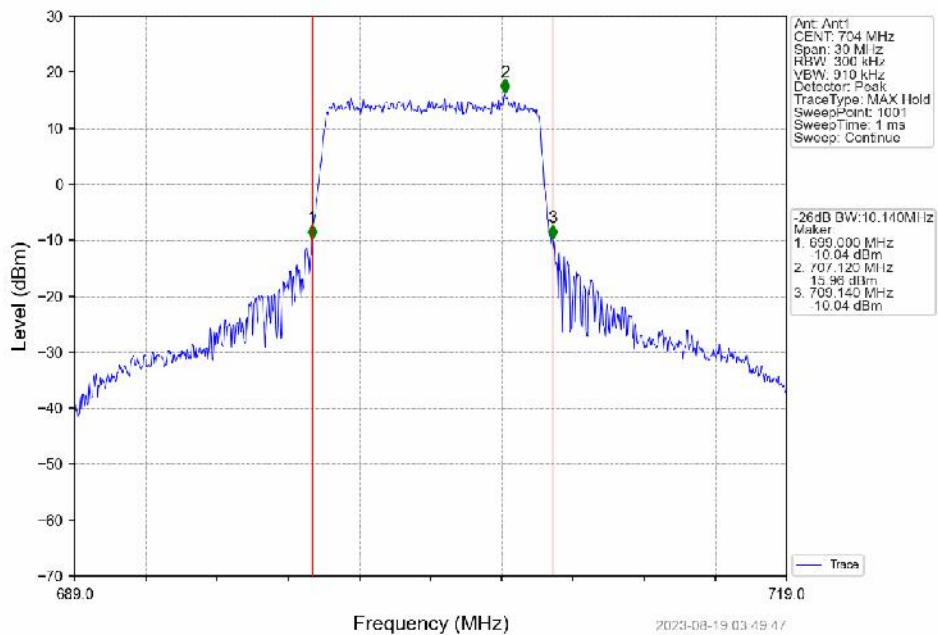
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



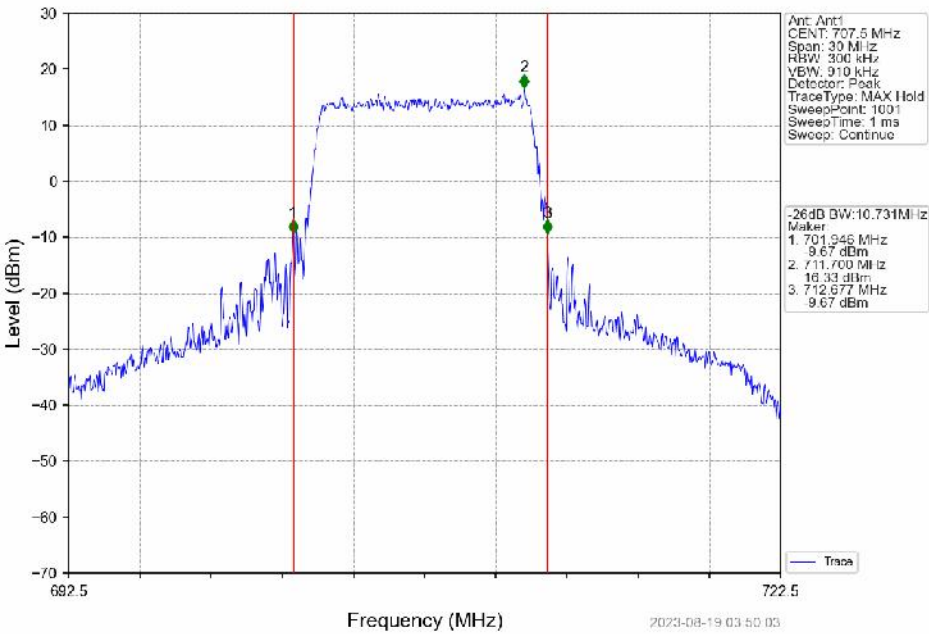
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



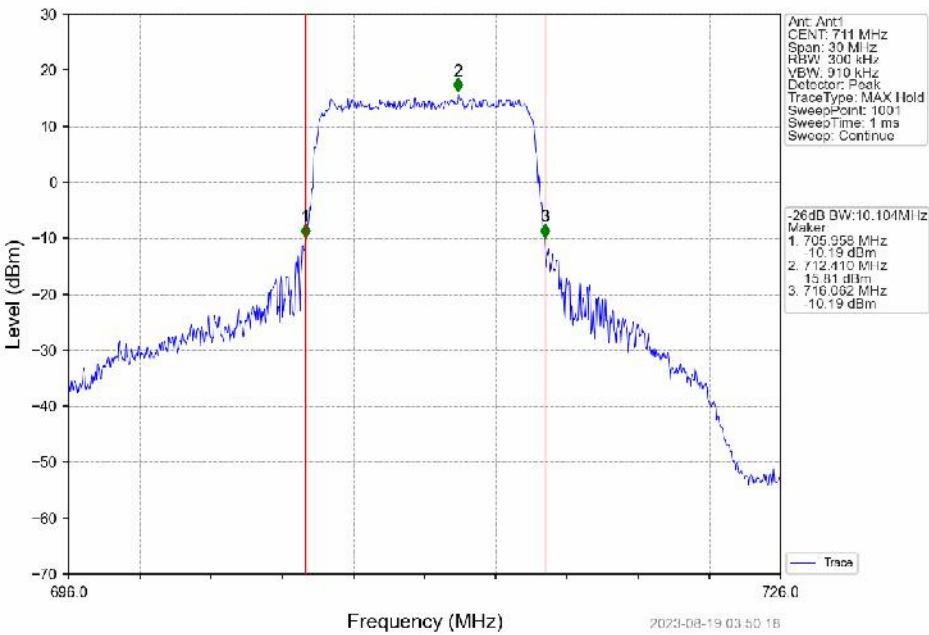
Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_50\_0\_NTNV



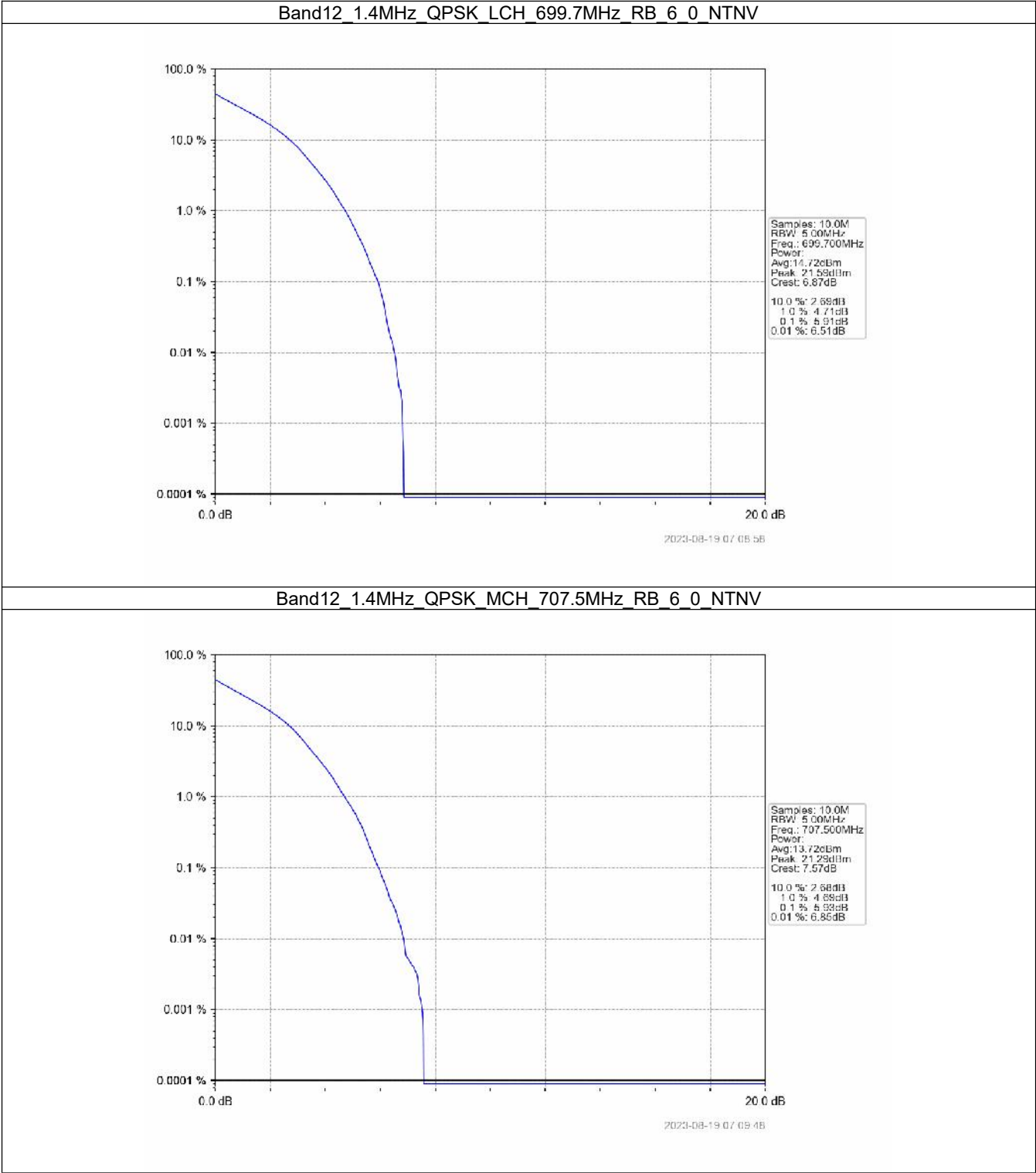
## 5. Peak-Average Ratio

### 5.1 B12\_1.4MHz

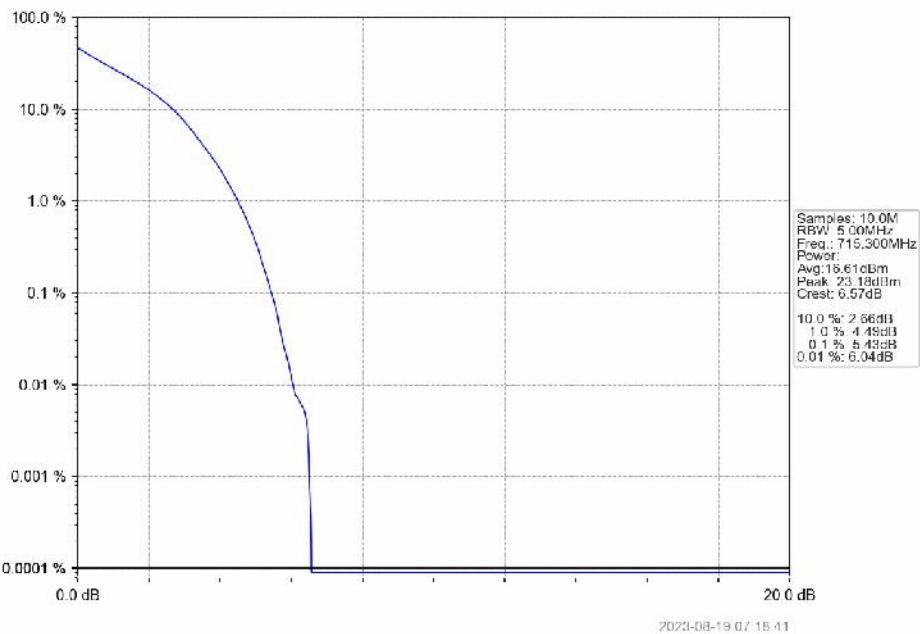
#### 5.1.1 Test Result

| Band: 12 / Bandwidth: 1.4MHz / NTNV |                 |               |        |                         |           |         |
|-------------------------------------|-----------------|---------------|--------|-------------------------|-----------|---------|
| Modulation                          | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |           | Verdict |
|                                     |                 | Size          | Offset | Result                  | Limit     |         |
| QPSK                                | 699.7           | 6             | 0      | 5.91                    | $\leq 13$ | Pass    |
|                                     | 707.5           | 6             | 0      | 5.93                    | $\leq 13$ | Pass    |
|                                     | 715.3           | 6             | 0      | 5.43                    | $\leq 13$ | Pass    |
| 16QAM                               | 699.7           | 6             | 0      | 6.62                    | $\leq 13$ | Pass    |
|                                     | 707.5           | 6             | 0      | 6.77                    | $\leq 13$ | Pass    |
|                                     | 715.3           | 6             | 0      | 6.21                    | $\leq 13$ | Pass    |

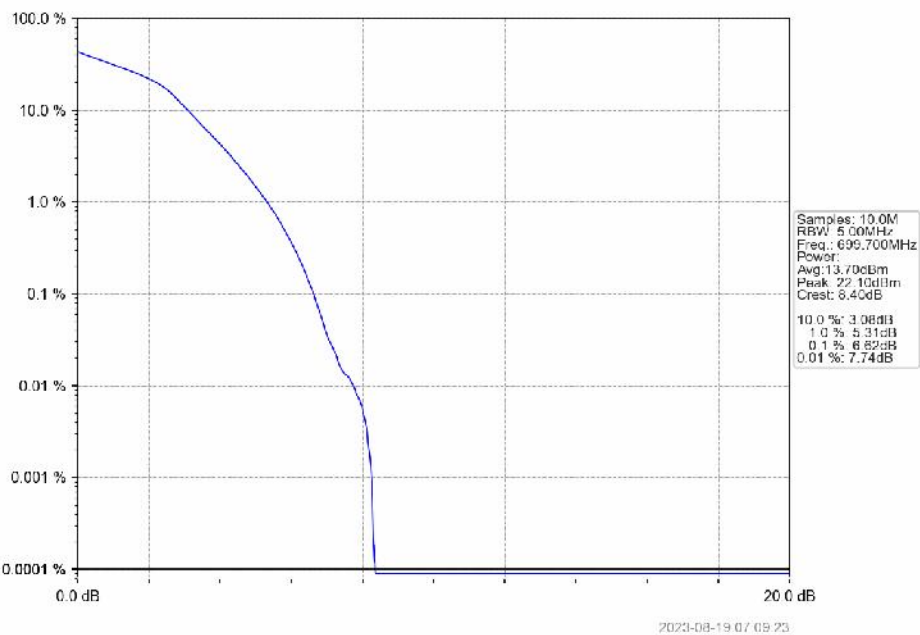
5.1.2 Test Graph



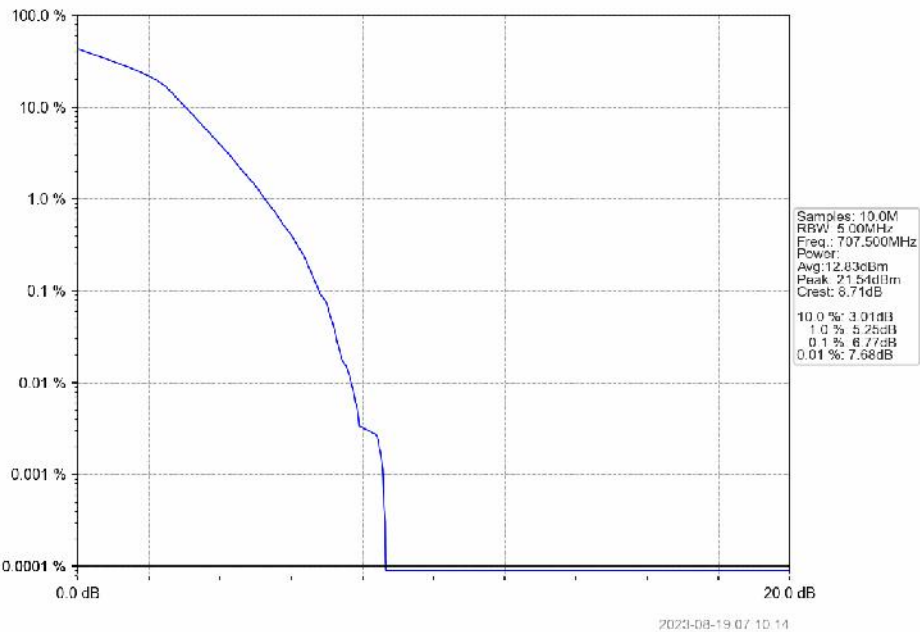
Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



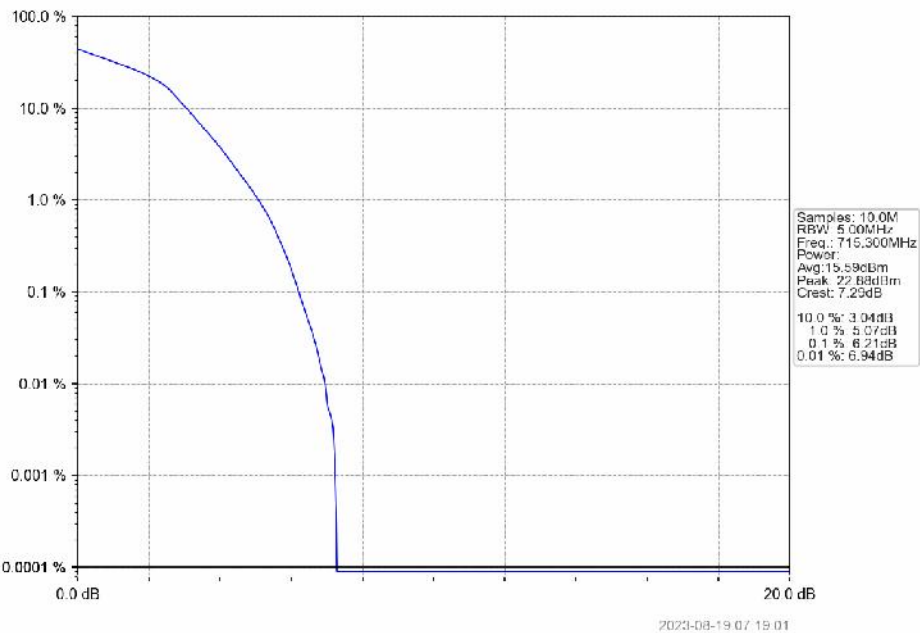
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_6\_0\_NTNV



Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV

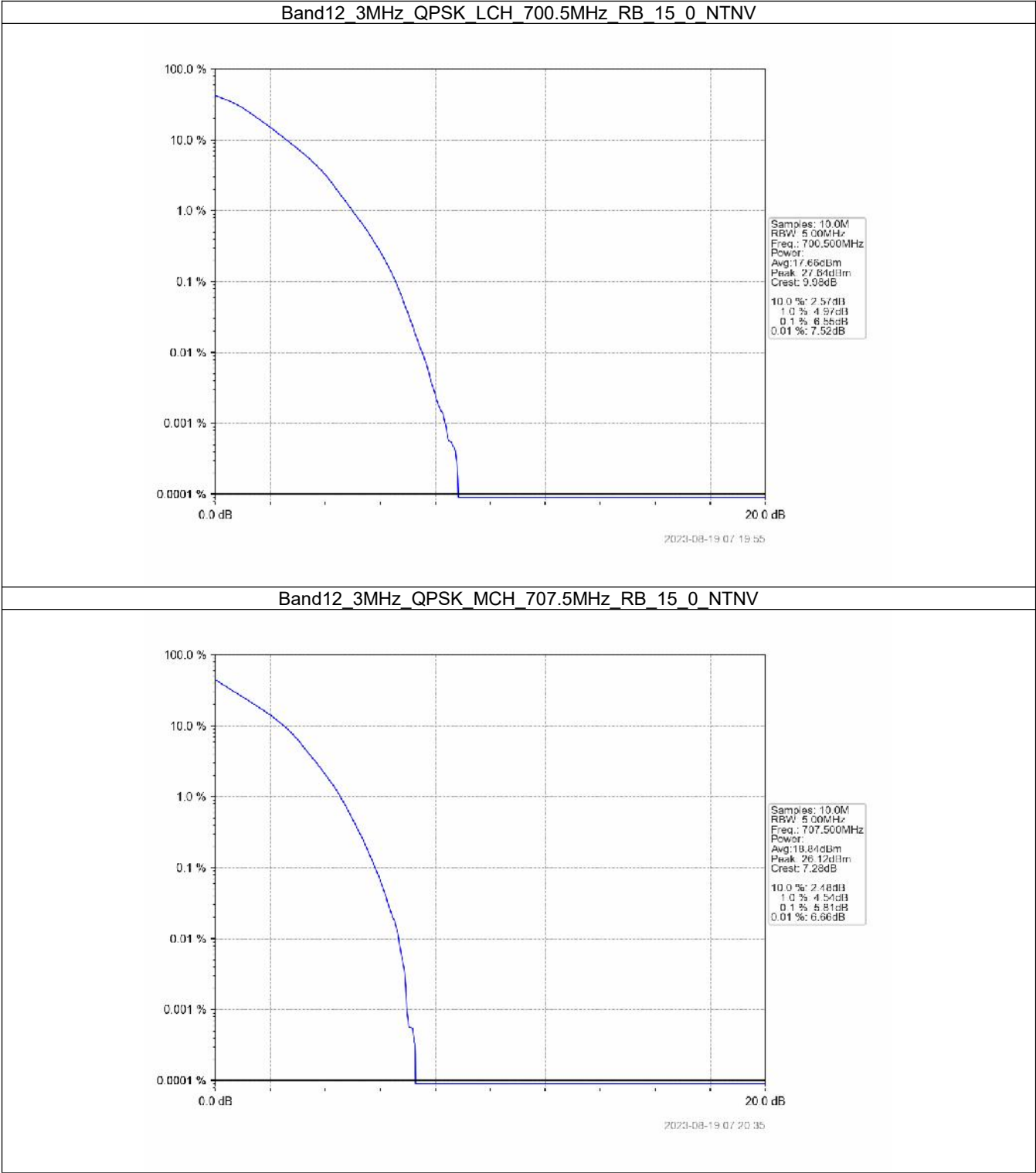


## 5.2 B12\_3MHz

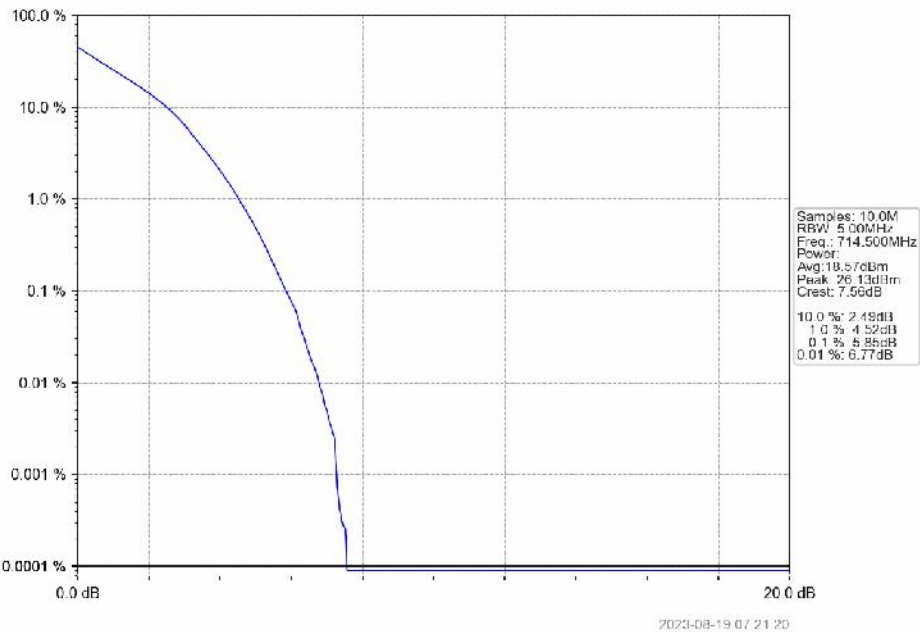
### 5.2.1 Test Result

| Band: 12 / Bandwidth: 3MHz / NTN |                 |               |        |                         |       |         |
|----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                  |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                             | 700.5           | 15            | 0      | 6.55                    | <=13  | Pass    |
|                                  | 707.5           | 15            | 0      | 5.81                    | <=13  | Pass    |
|                                  | 714.5           | 15            | 0      | 5.85                    | <=13  | Pass    |
| 16QAM                            | 700.5           | 15            | 0      | 5.71                    | <=13  | Pass    |
|                                  | 707.5           | 15            | 0      | 6.20                    | <=13  | Pass    |
|                                  | 714.5           | 15            | 0      | 5.53                    | <=13  | Pass    |

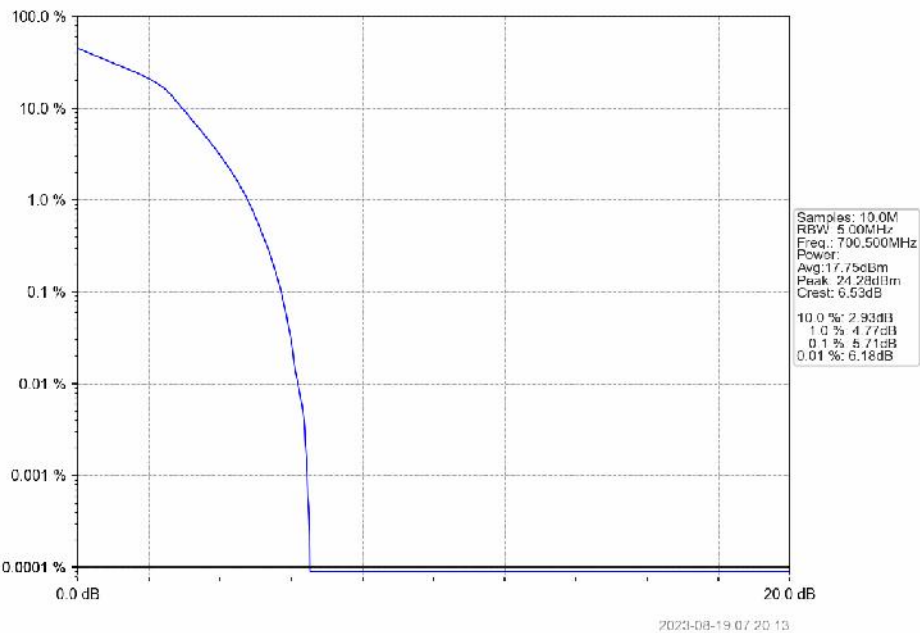
5.2.2 Test Graph



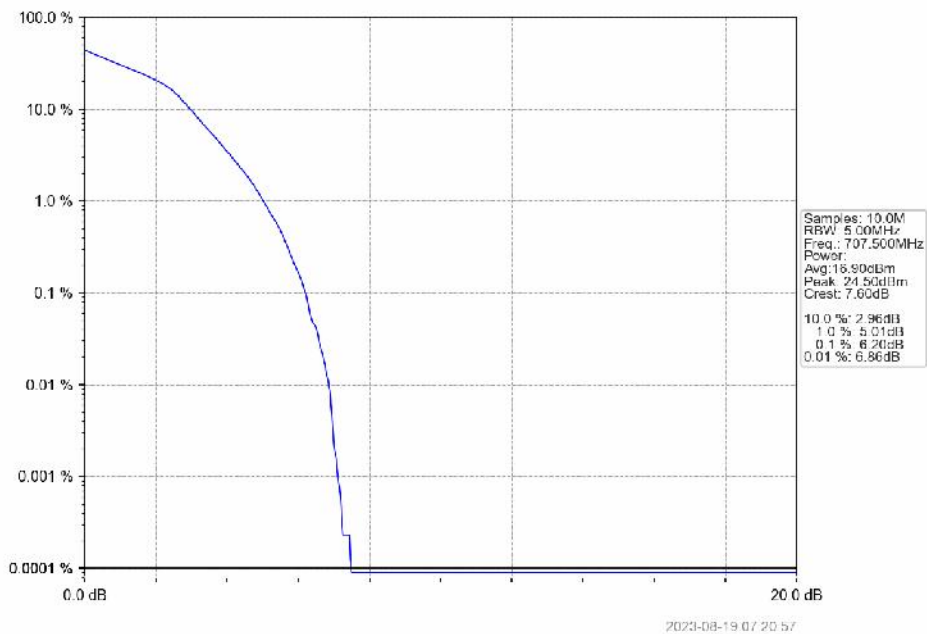
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



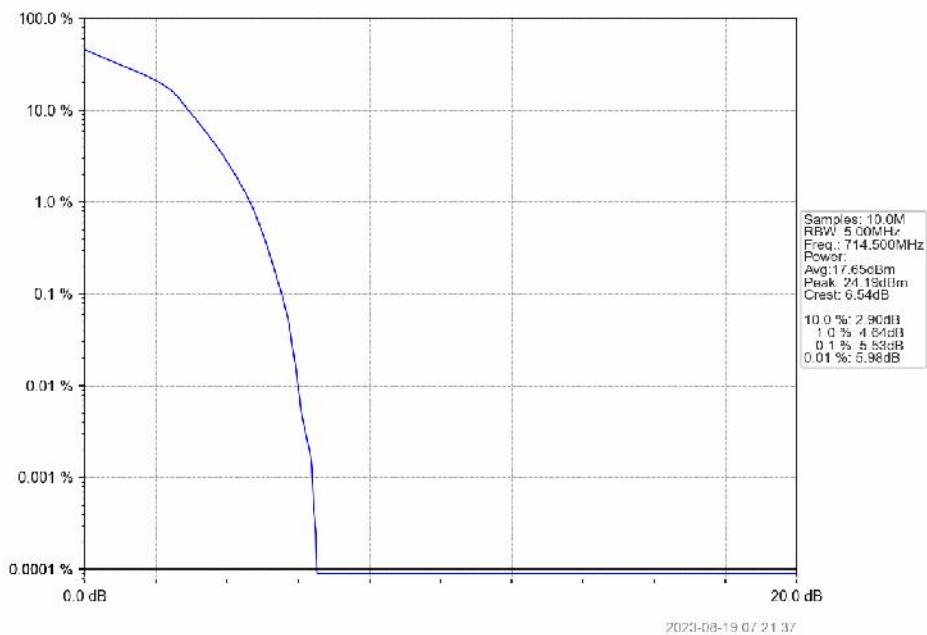
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_15\_0\_NTNV

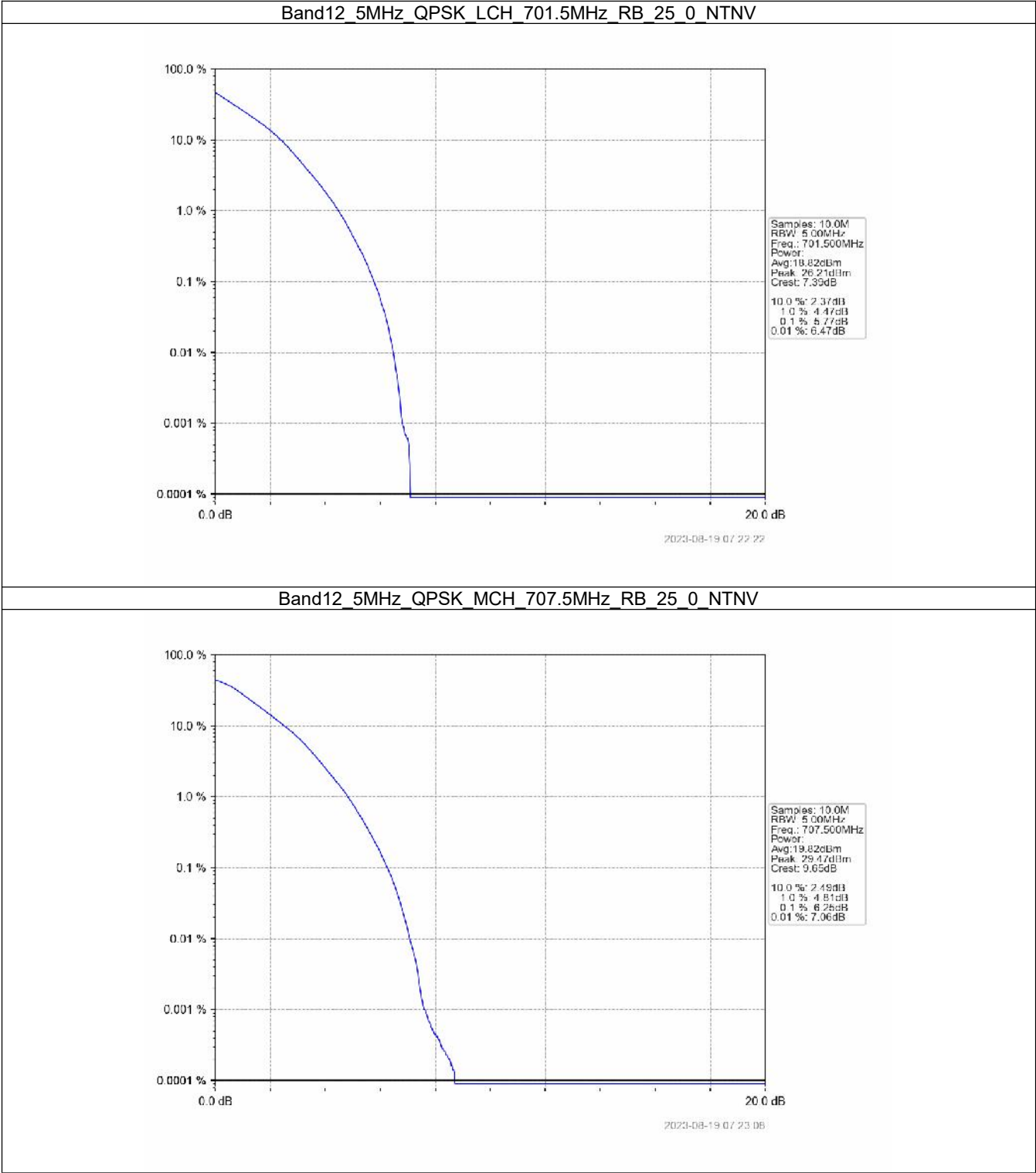


### 5.3 B12\_5MHz

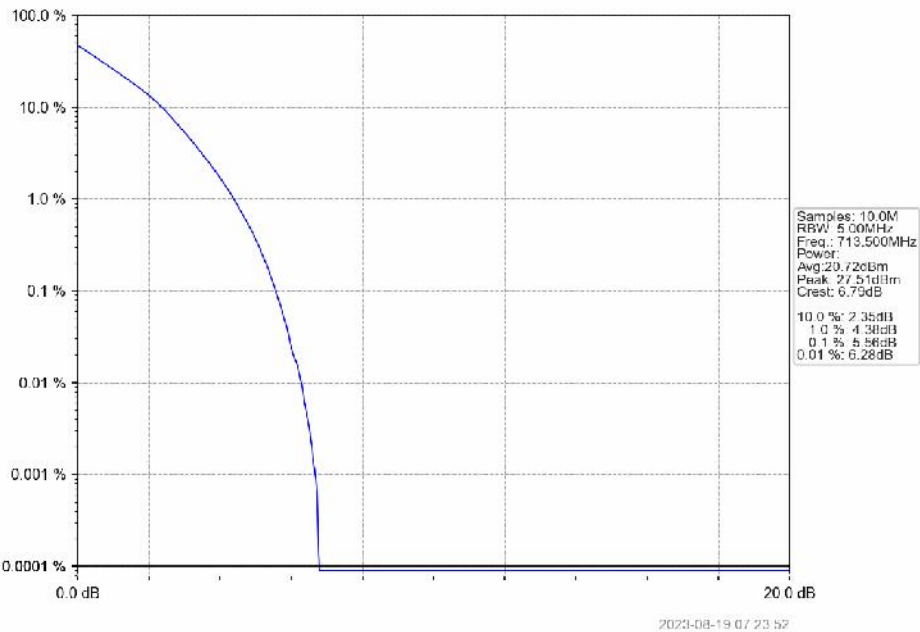
#### 5.3.1 Test Result

| Band: 12 / Bandwidth: 5MHz / NTN |                 |               |        |                         |       |         |
|----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                  |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                             | 701.5           | 25            | 0      | 5.77                    | <=13  | Pass    |
|                                  | 707.5           | 25            | 0      | 6.25                    | <=13  | Pass    |
|                                  | 713.5           | 25            | 0      | 5.56                    | <=13  | Pass    |
| 16QAM                            | 701.5           | 25            | 0      | 5.85                    | <=13  | Pass    |
|                                  | 707.5           | 25            | 0      | 6.44                    | <=13  | Pass    |
|                                  | 713.5           | 25            | 0      | 6.26                    | <=13  | Pass    |

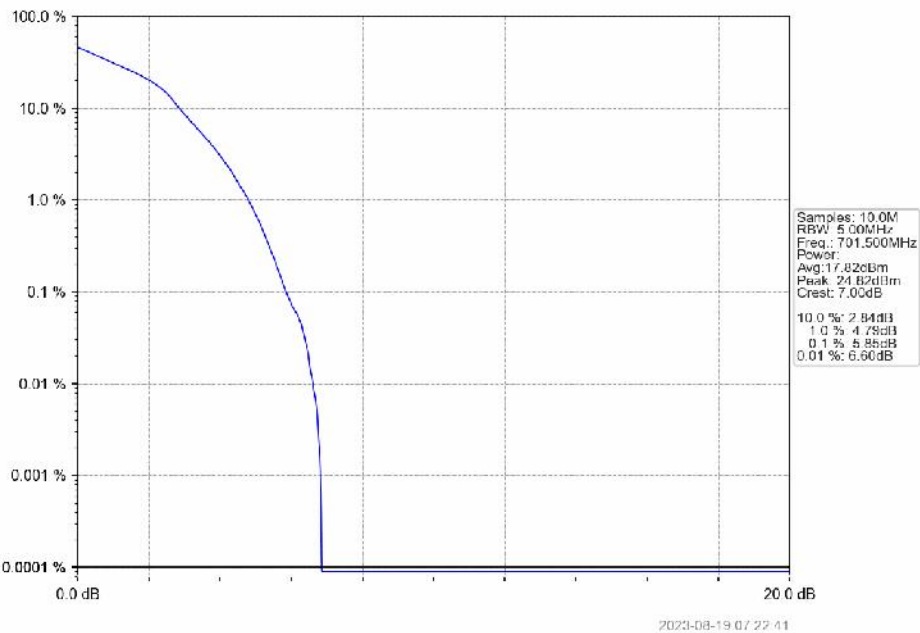
5.3.2 Test Graph



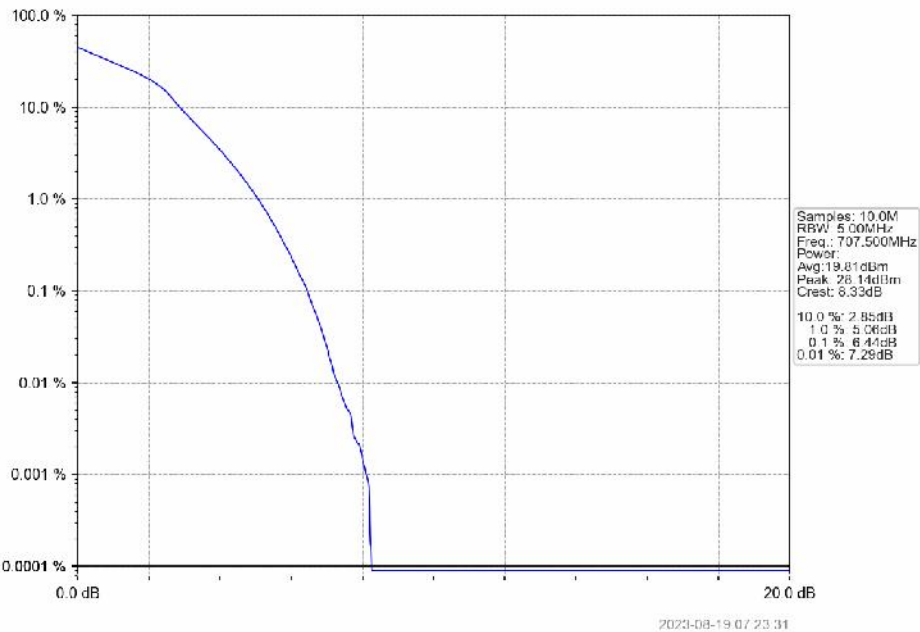
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



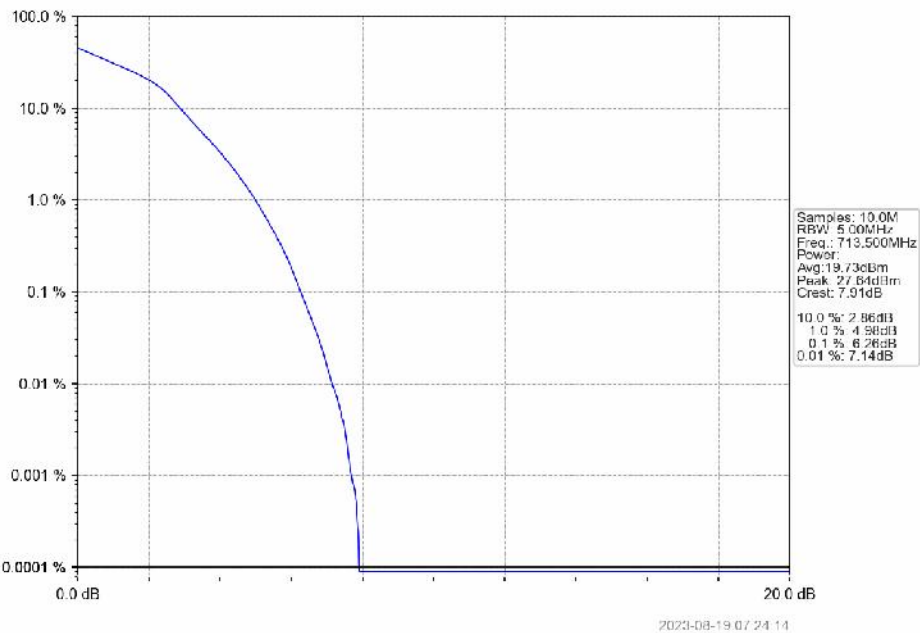
Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_25\_0\_NTNV

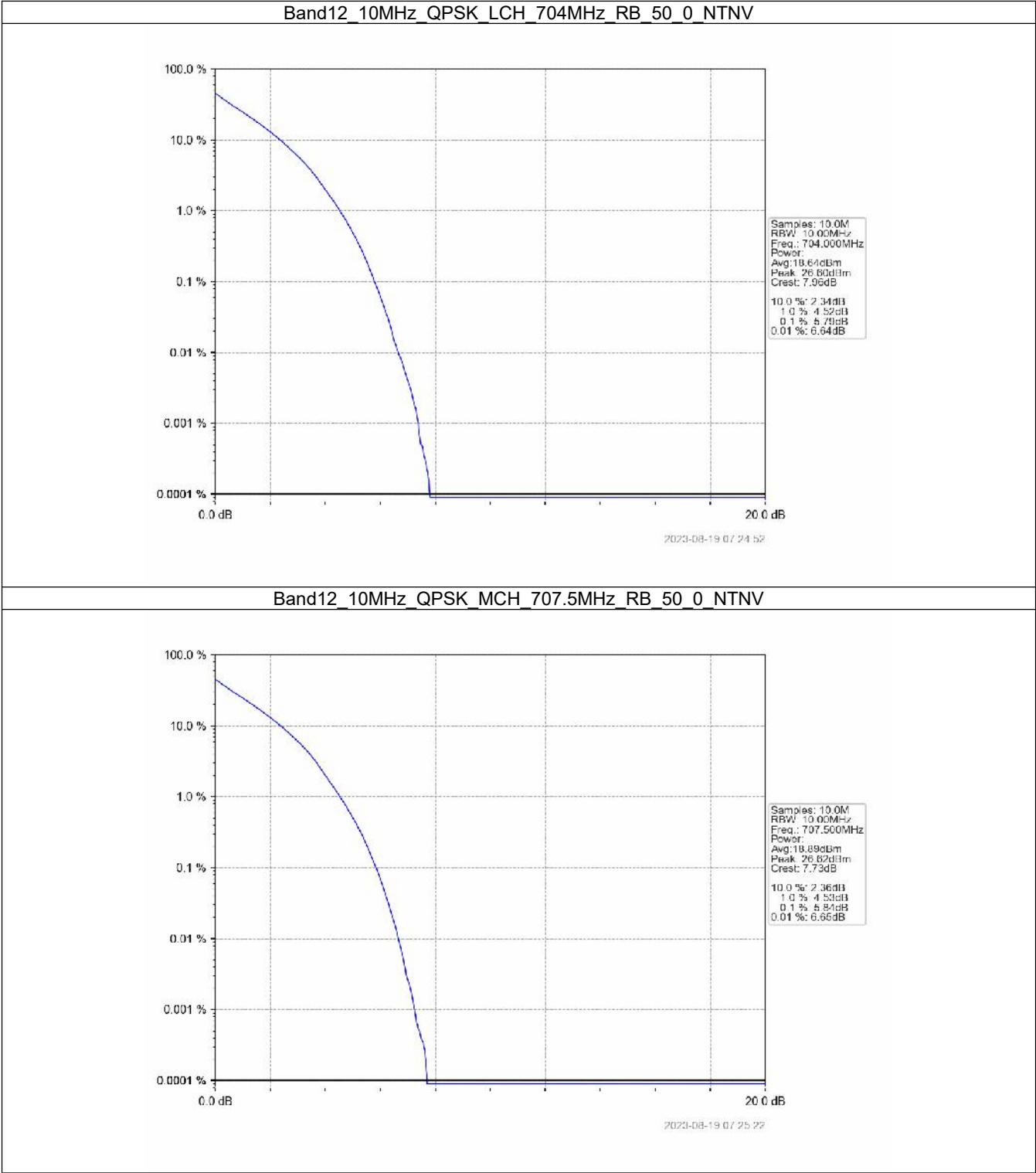


## 5.4 B12\_10MHz

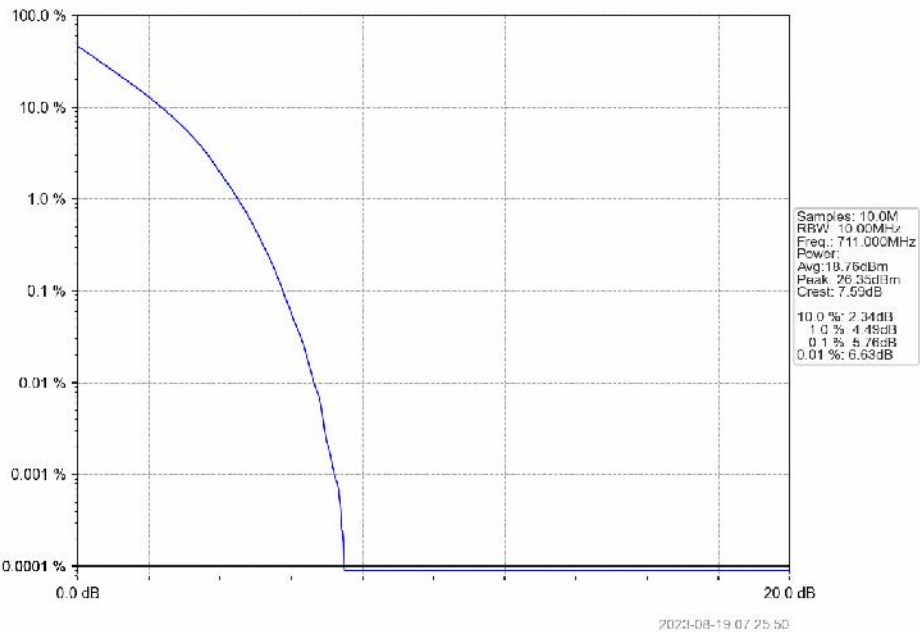
### 5.4.1 Test Result

| Band: 12 / Bandwidth: 10MHz / NTN |                 |               |        |                         |       |         |
|-----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                   |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                              | 704             | 50            | 0      | 5.79                    | <=13  | Pass    |
|                                   | 707.5           | 50            | 0      | 5.84                    | <=13  | Pass    |
|                                   | 711             | 50            | 0      | 5.76                    | <=13  | Pass    |
| 16QAM                             | 704             | 50            | 0      | 6.12                    | <=13  | Pass    |
|                                   | 707.5           | 50            | 0      | 6.18                    | <=13  | Pass    |
|                                   | 711             | 50            | 0      | 5.97                    | <=13  | Pass    |

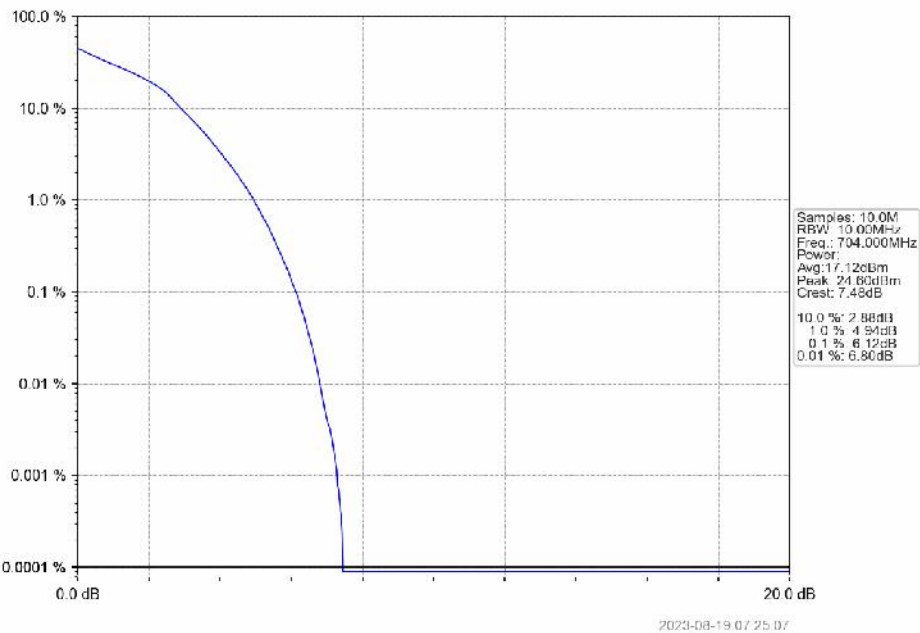
5.4.2 Test Graph



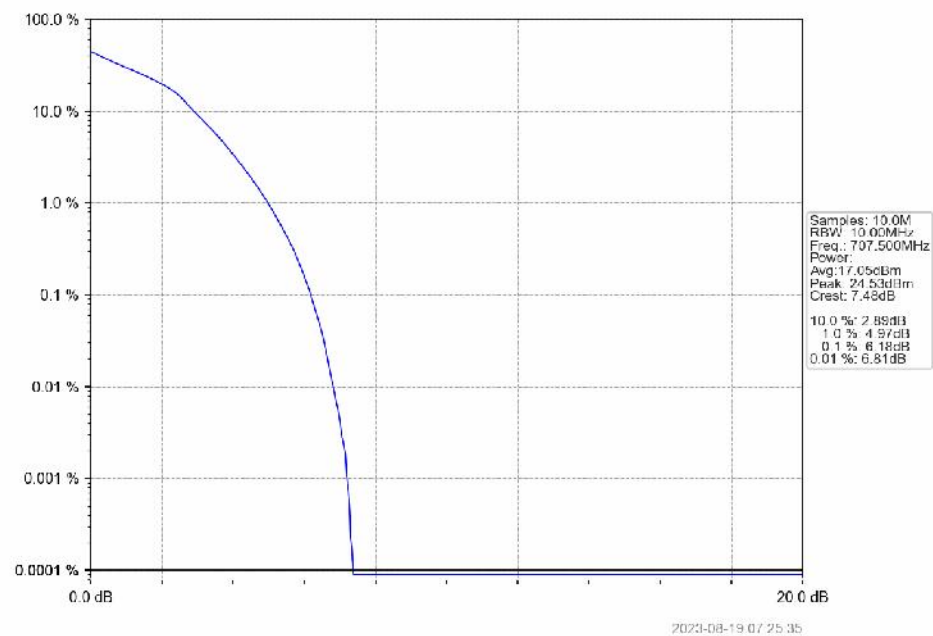
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



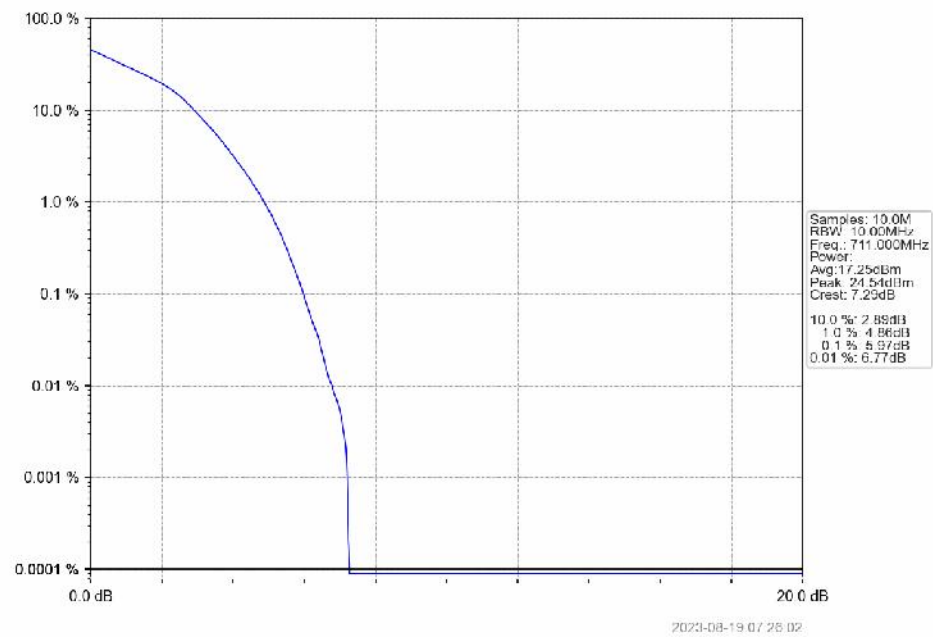
Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_50\_0\_NTNV



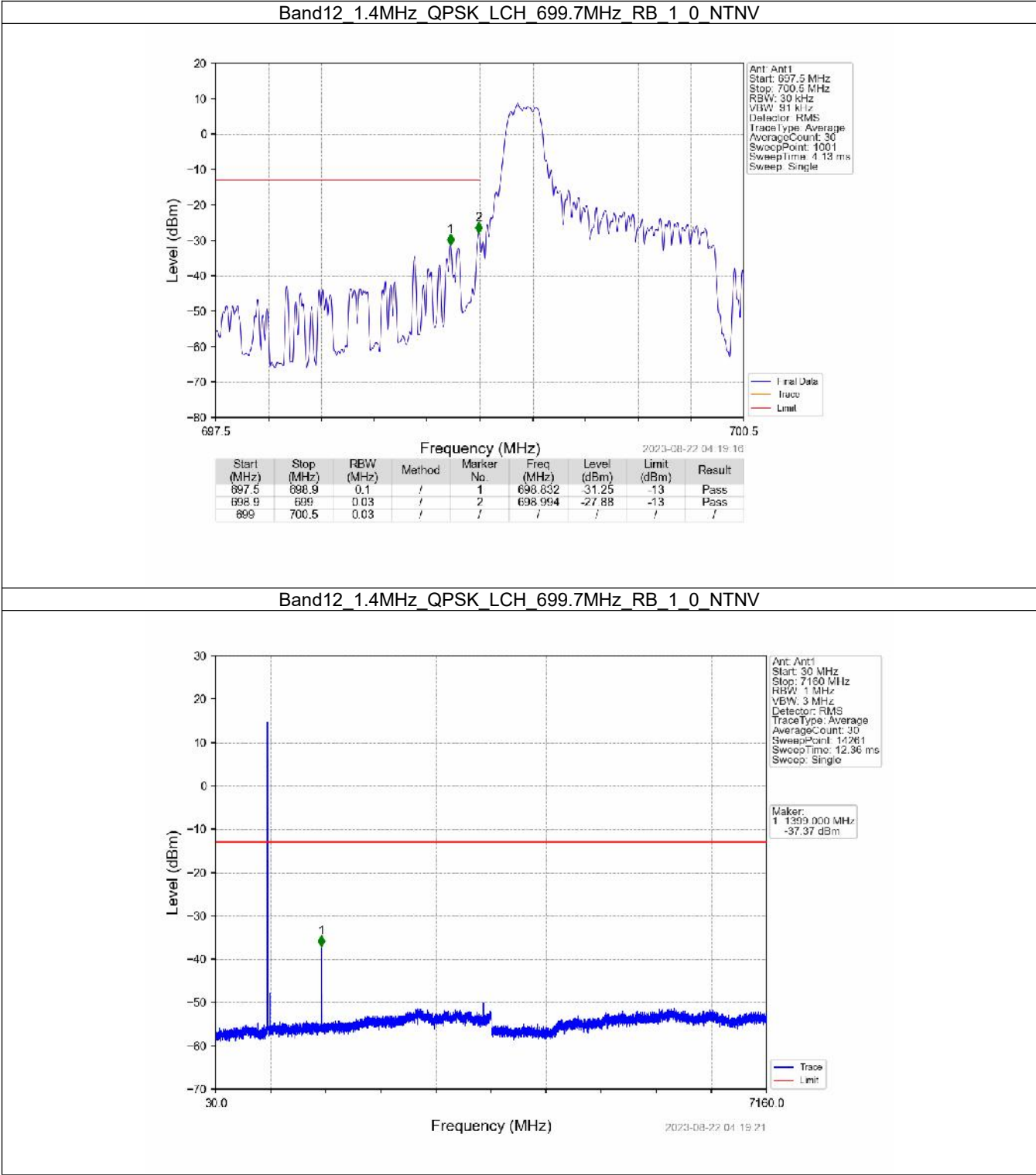
## 6. Spurious Emission

### 6.1 B12\_1.4MHz

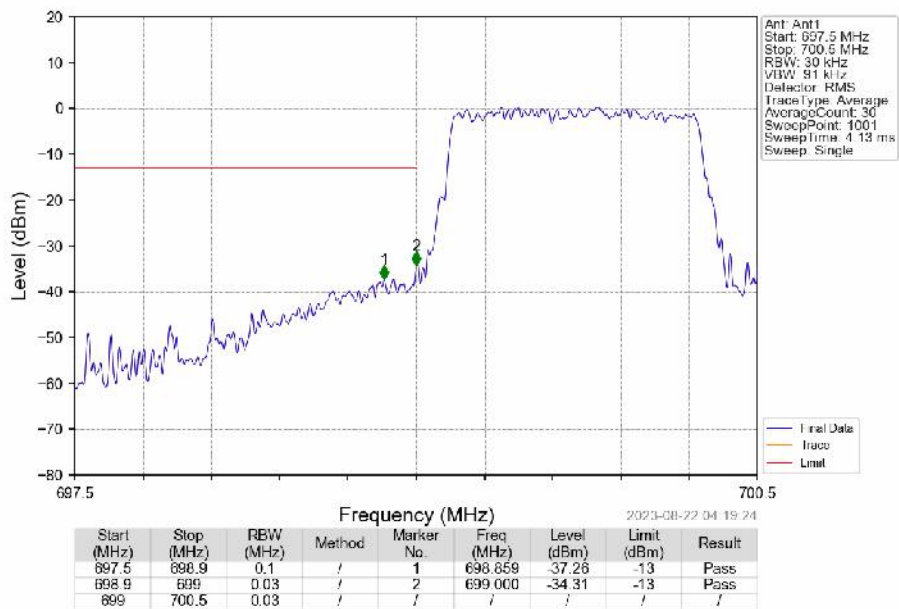
#### 6.1.1 Test Result

| Band: 12 / Bandwidth: 1.4MHz / NTNV |                 |               |        |                     |       |         |
|-------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                          | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                     |                 | Size          | Offset | Result              | Limit |         |
| QPSK                                | 699.7           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     |                 | 6             | 0      | Refer To Test Graph |       | Pass    |
|                                     | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     | 715.3           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     |                 |               | 5      | Refer To Test Graph |       | Pass    |
|                                     |                 | 6             | 0      | Refer To Test Graph |       | Pass    |
| 16QAM                               | 699.7           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     |                 | 6             | 0      | Refer To Test Graph |       | Pass    |
|                                     | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     | 715.3           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     |                 |               | 5      | Refer To Test Graph |       | Pass    |
|                                     |                 | 6             | 0      | Refer To Test Graph |       | Pass    |

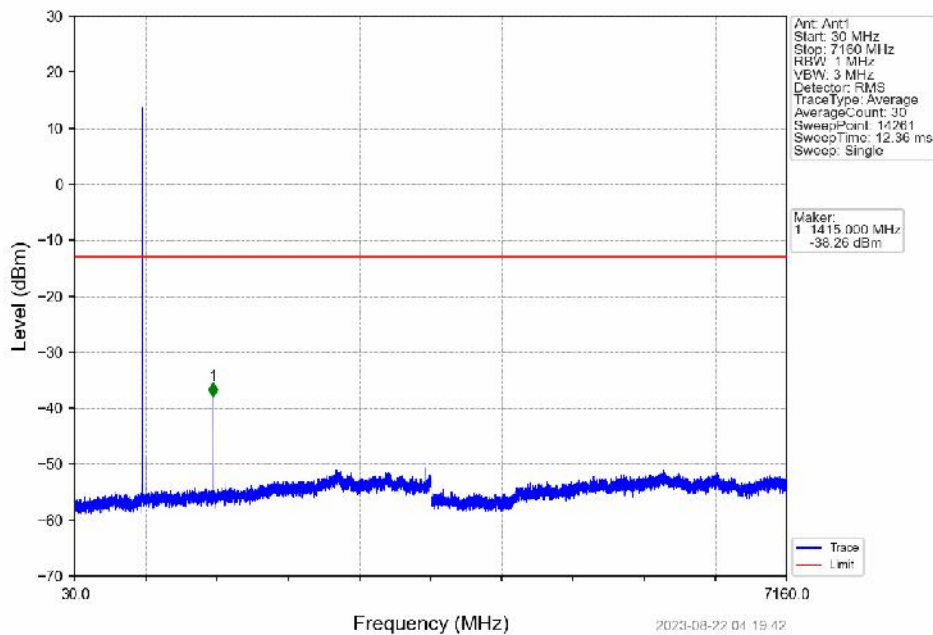
6.1.2 Test Graph

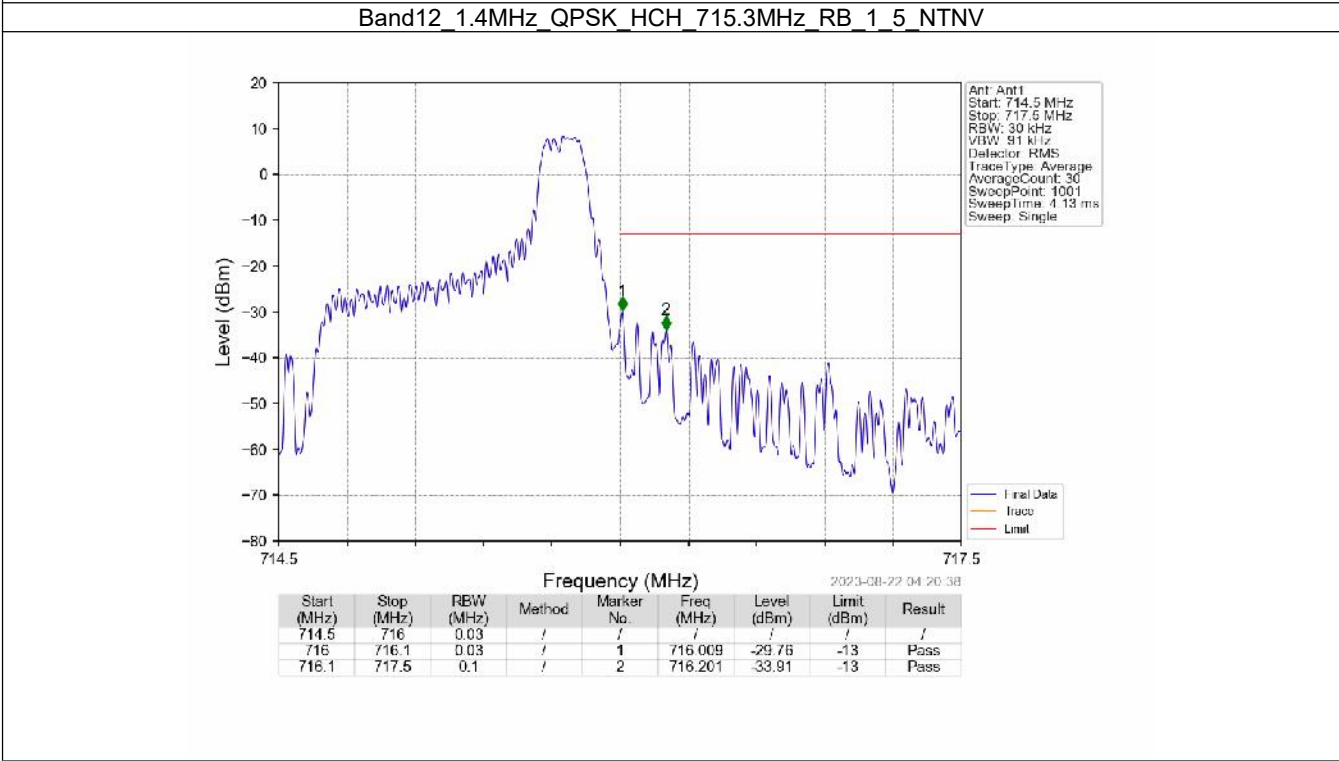
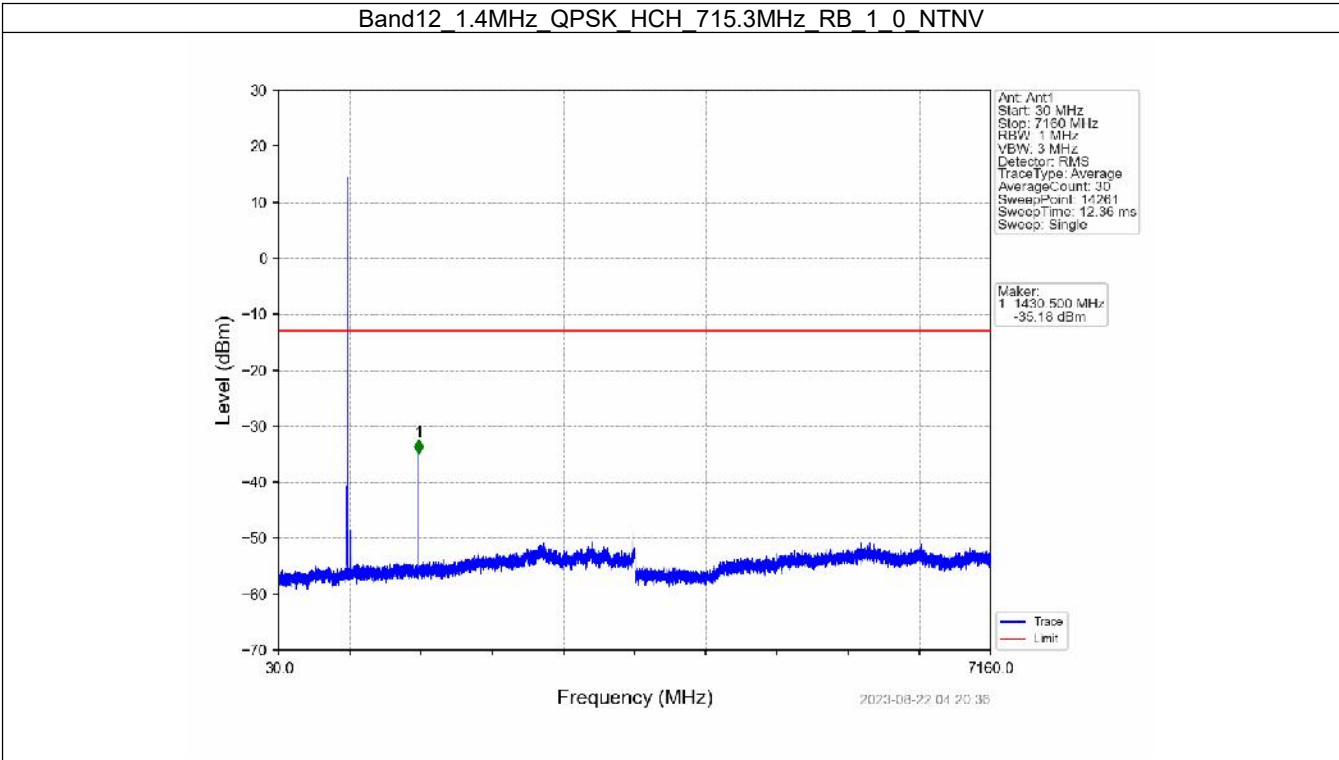


Band12\_1.4MHz\_QPSK\_LCH\_699.7MHz\_RB\_6\_0\_NTNV

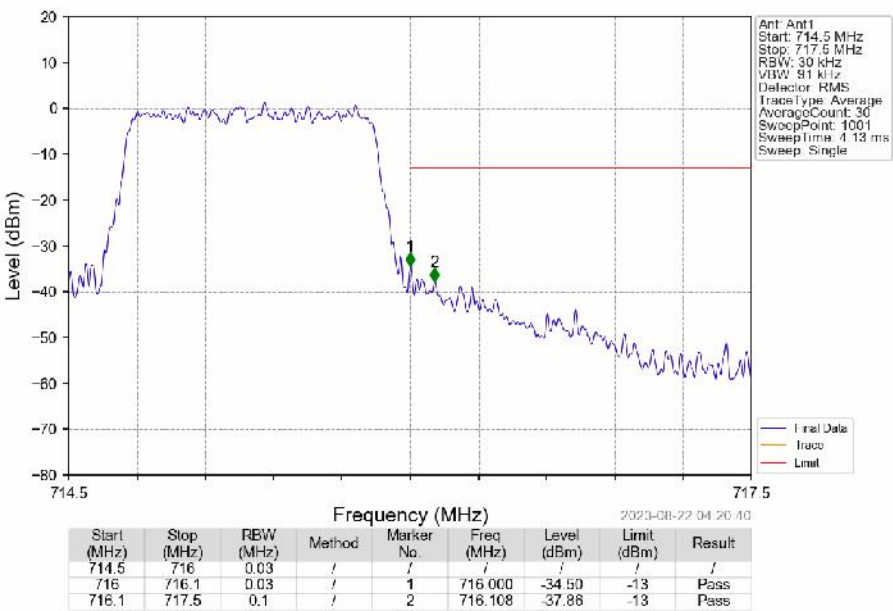


Band12\_1.4MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV

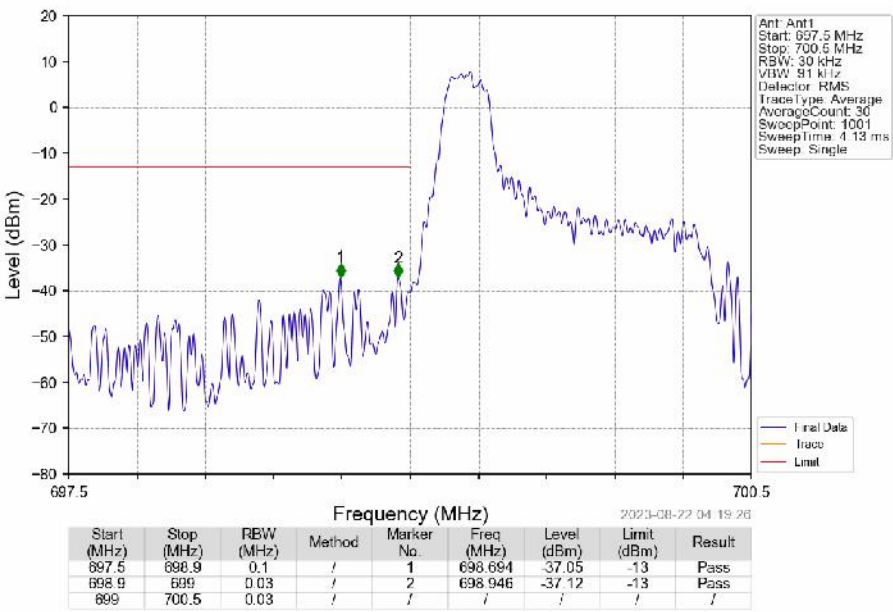




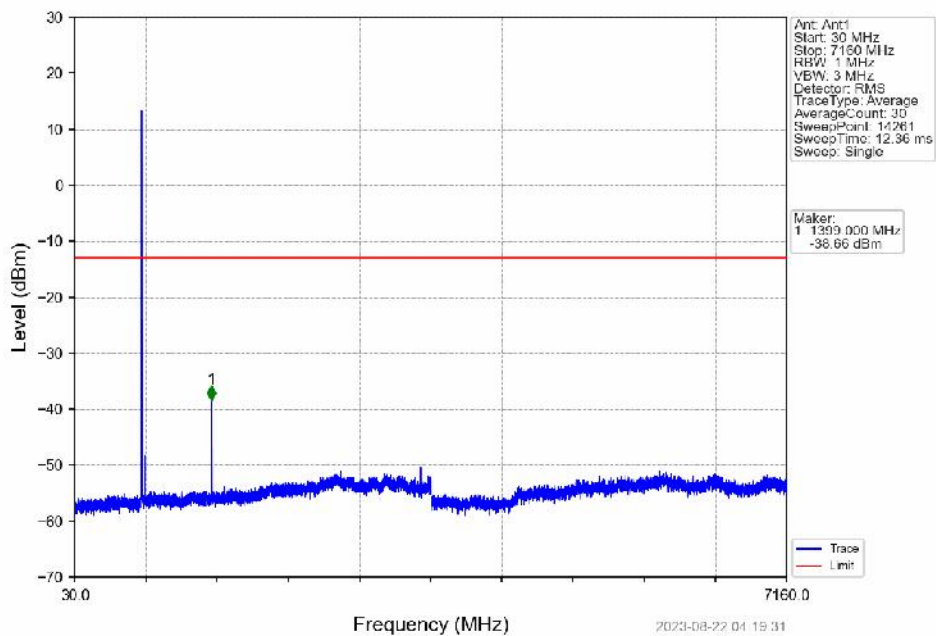
Band12 1.4MHz QPSK HCH 715.3MHz RB 6.0 NTNV



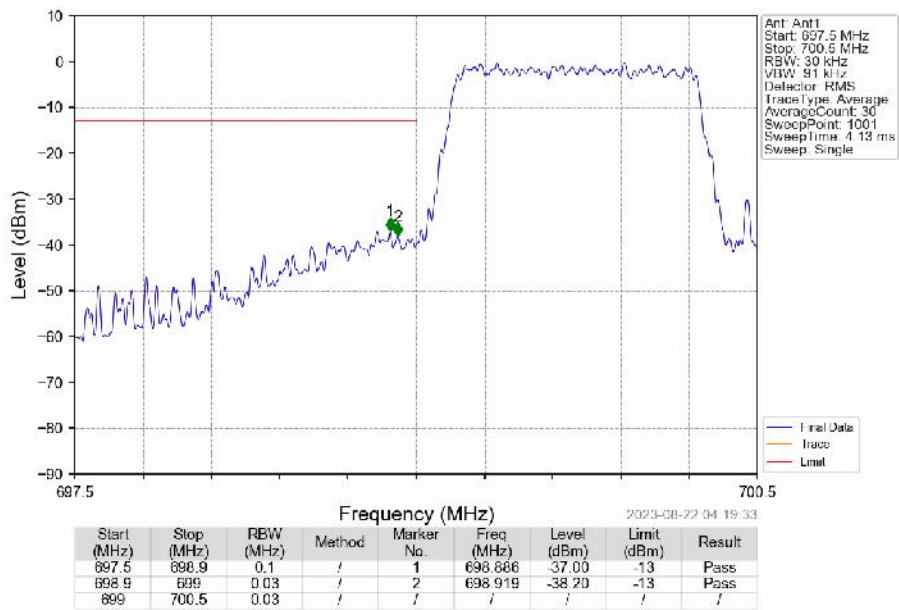
Band12 1.4MHz 16QAM LCH 699.7MHz RB 1.0 NTNV



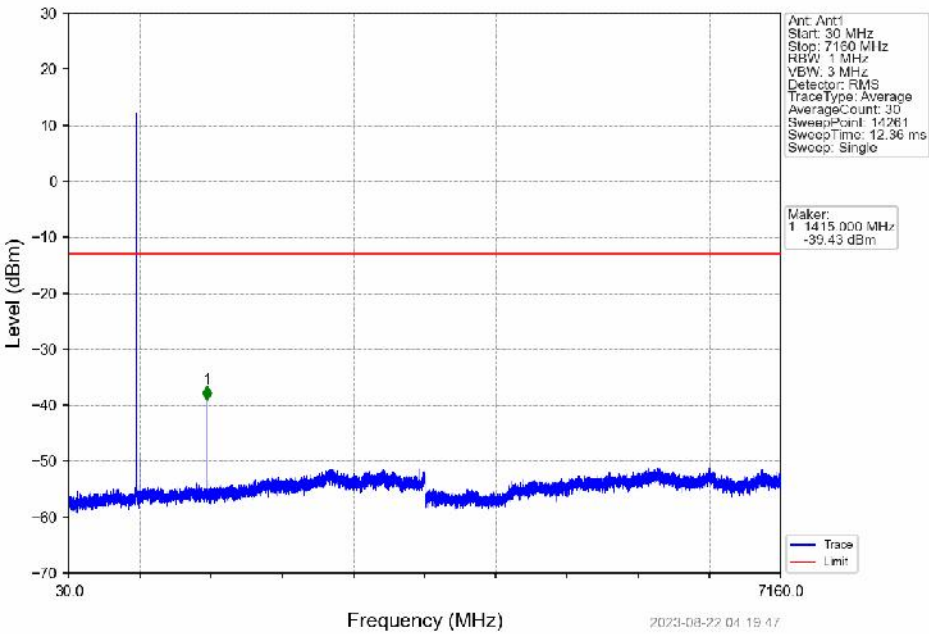
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_1\_0\_NTNV



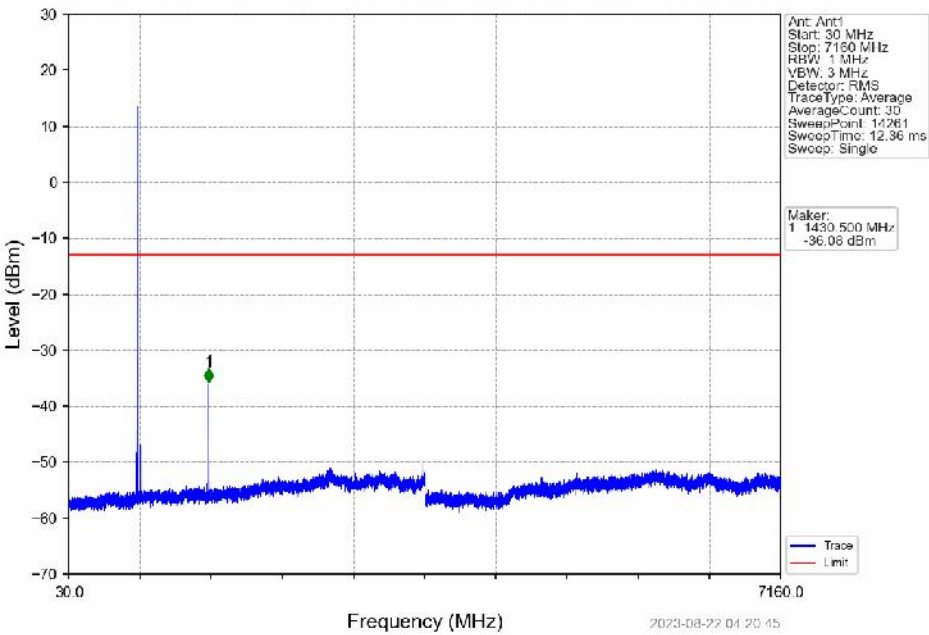
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_6\_0\_NTNV



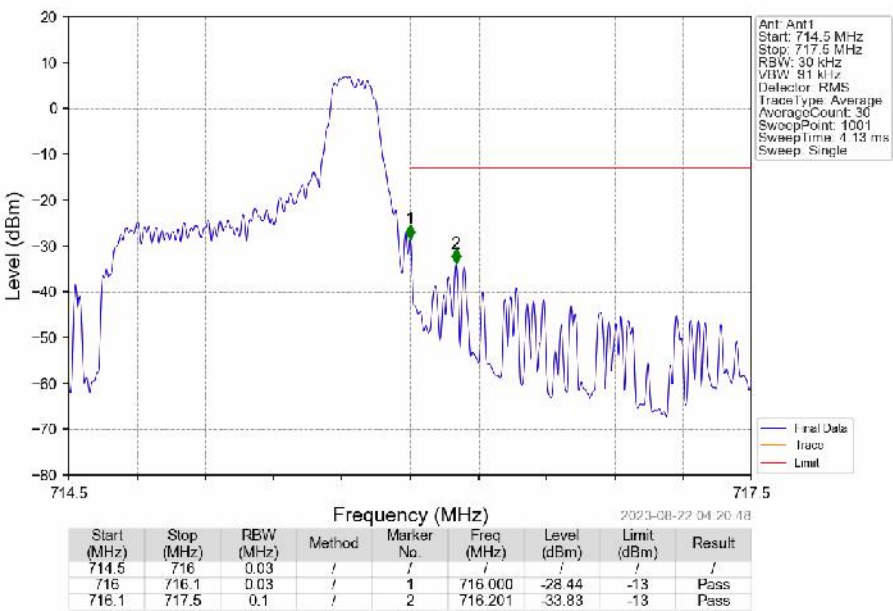
Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



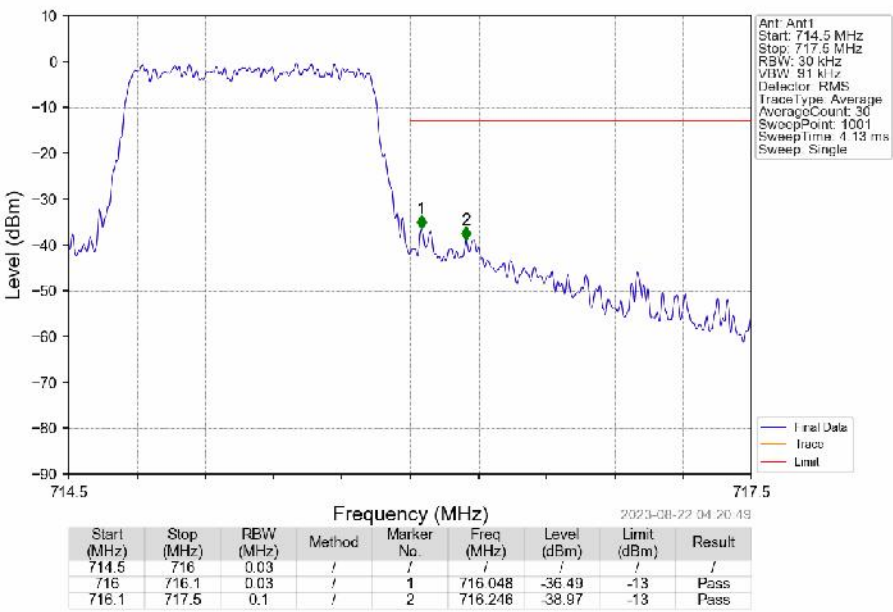
Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_1\_0\_NTNV



Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_1\_5\_NTNV



Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV

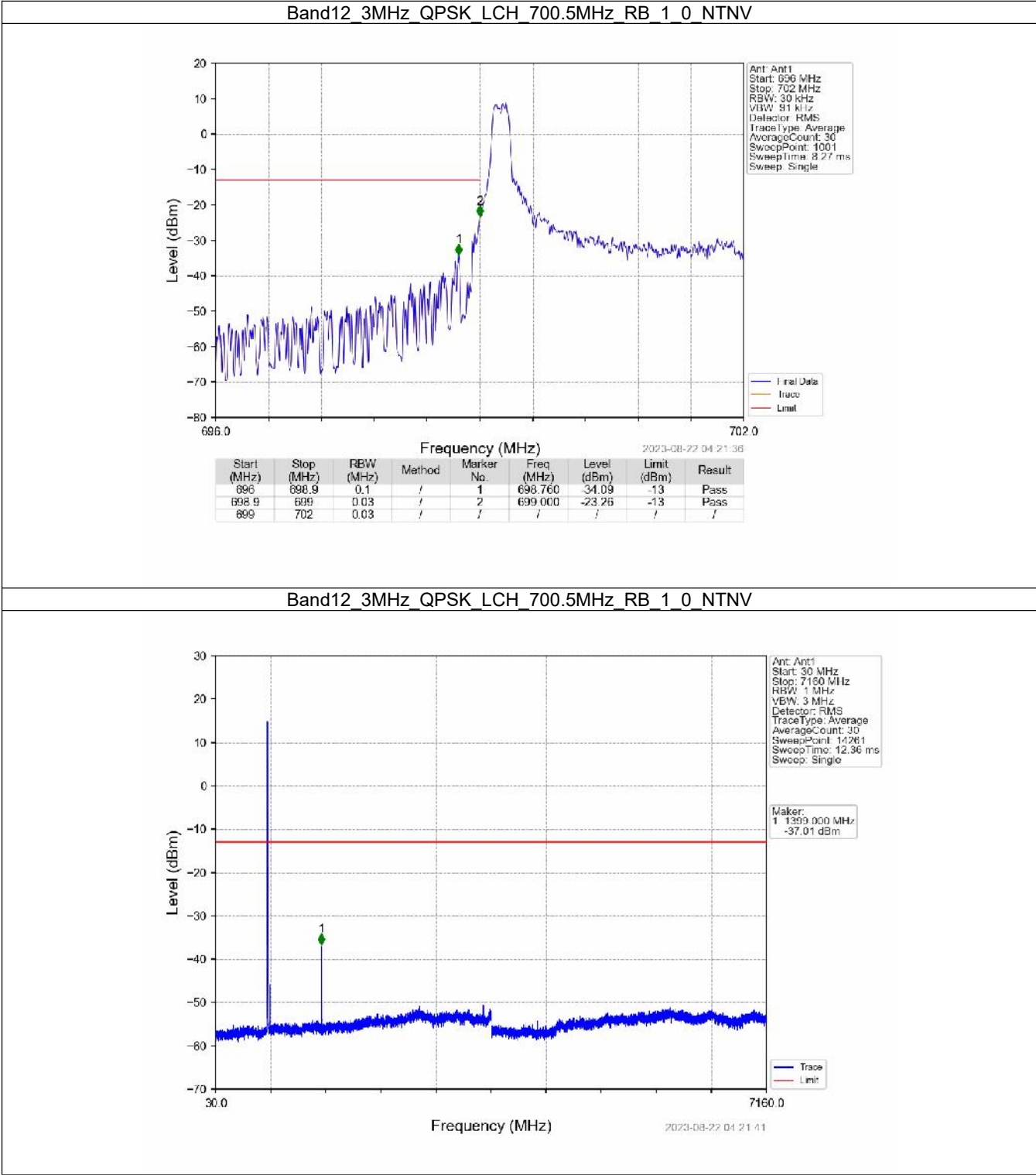


## 6.2 B12\_3MHz

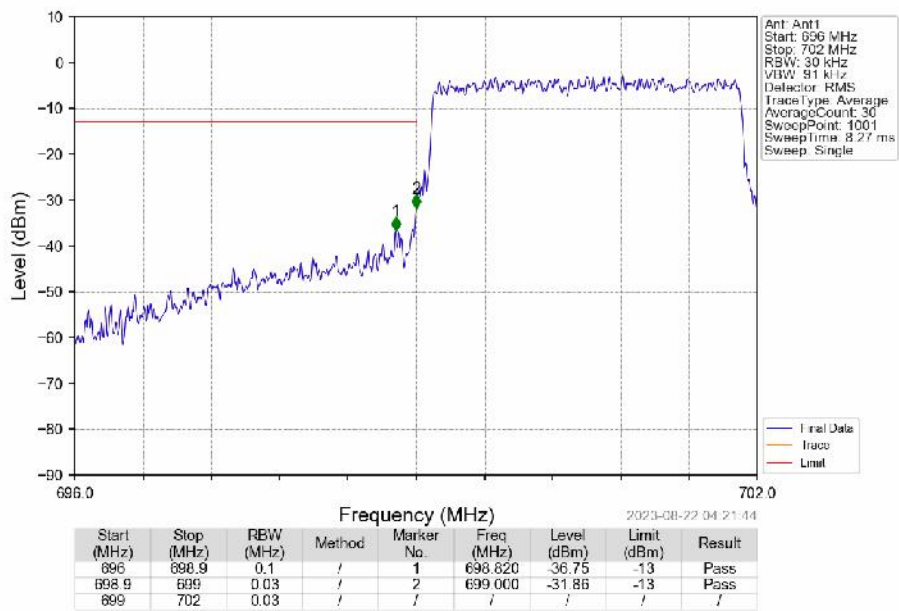
### 6.2.1 Test Result

| Band: 12 / Bandwidth: 3MHz / NTN |                 |               |        |                     |       |         |
|----------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                  |                 | Size          | Offset | Result              | Limit |         |
| QPSK                             | 700.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                  |                 | 15            | 0      | Refer To Test Graph |       | Pass    |
|                                  | 714.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                  |                 | 1             | 14     | Refer To Test Graph |       | Pass    |
|                                  |                 | 15            | 0      | Refer To Test Graph |       | Pass    |
| 16QAM                            | 700.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                  |                 | 15            | 0      | Refer To Test Graph |       | Pass    |
|                                  | 714.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                  |                 | 1             | 14     | Refer To Test Graph |       | Pass    |
|                                  |                 | 15            | 0      | Refer To Test Graph |       | Pass    |

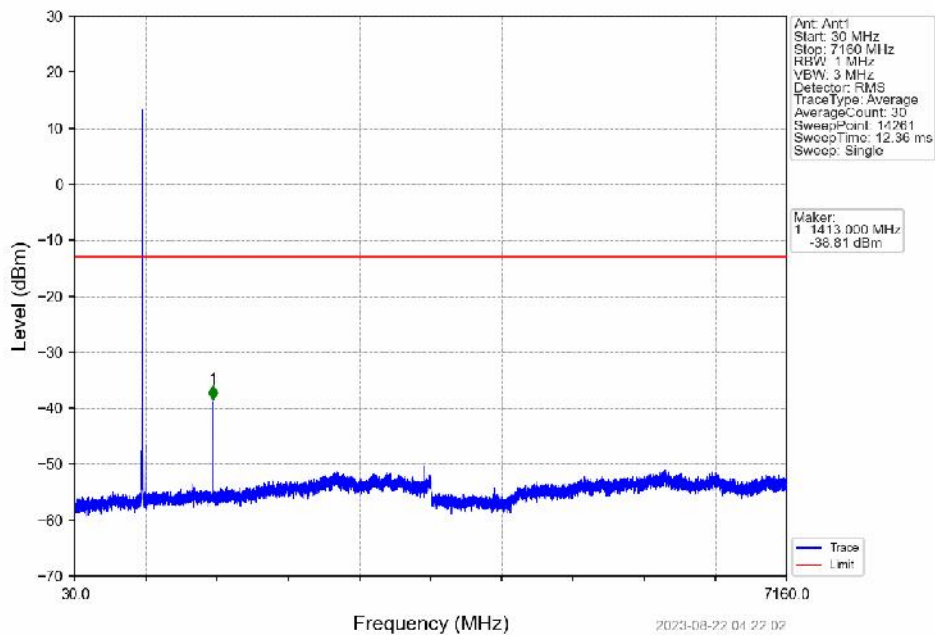
6.2.2 Test Graph



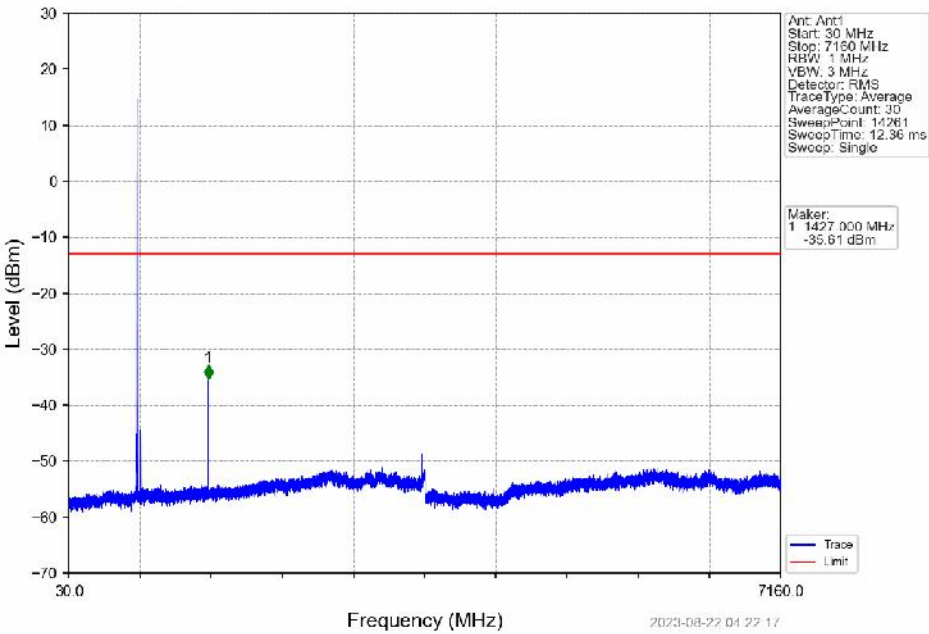
Band12\_3MHz\_QPSK\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



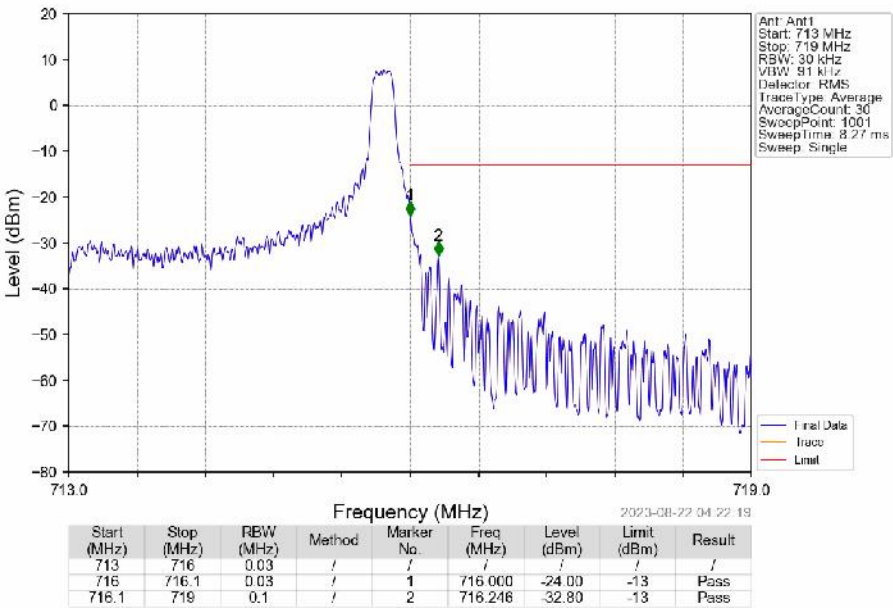
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



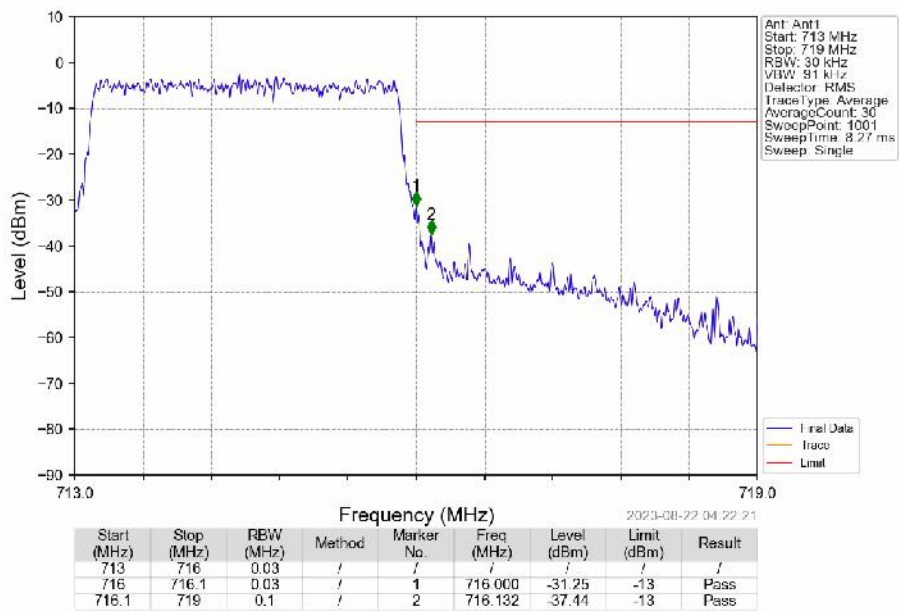
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_1\_0\_NTNV



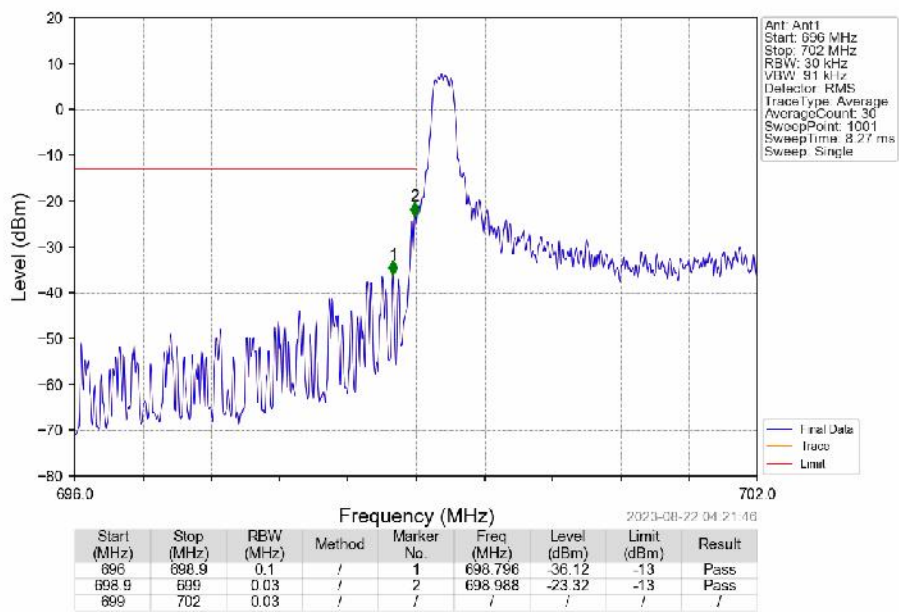
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_1\_14\_NTNV



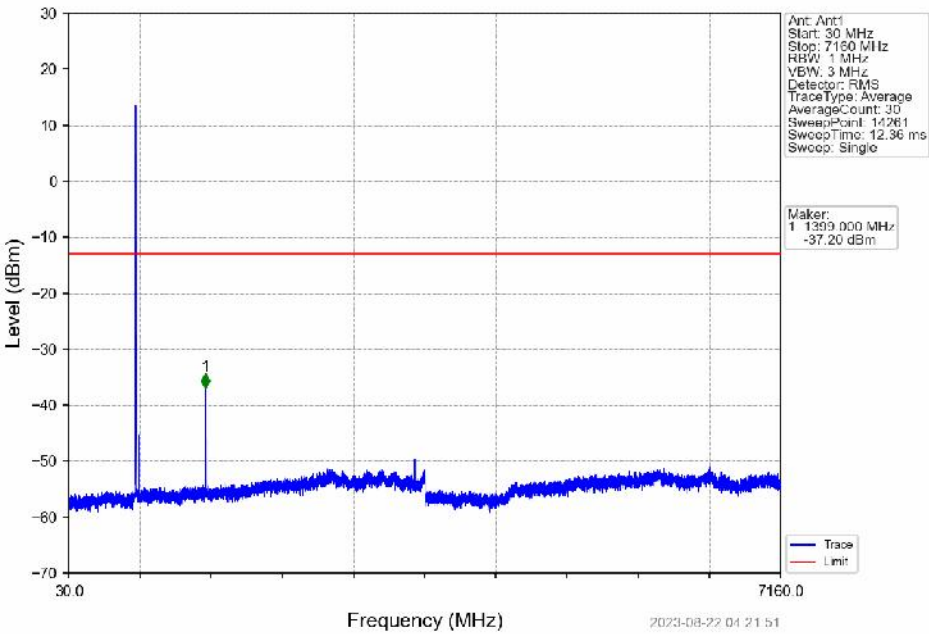
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



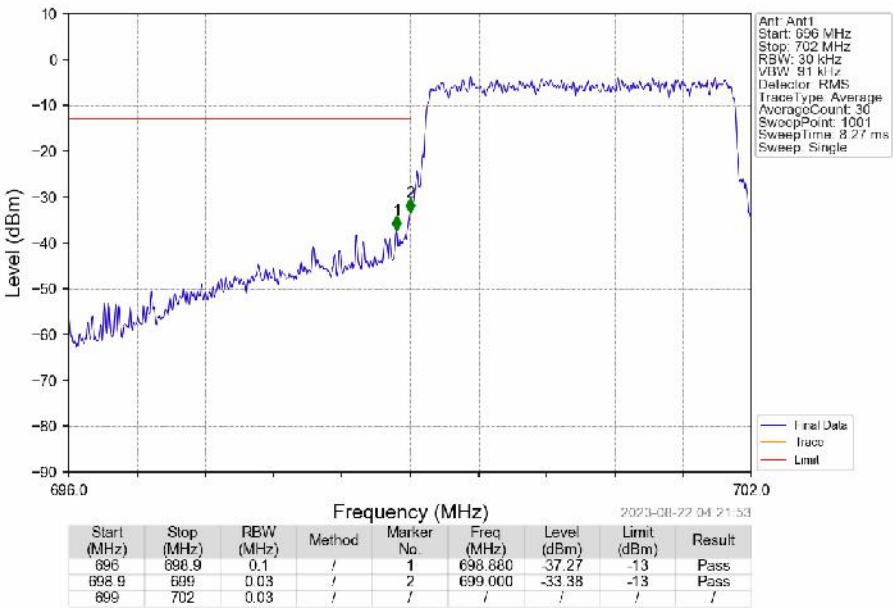
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_1\_0\_NTNV



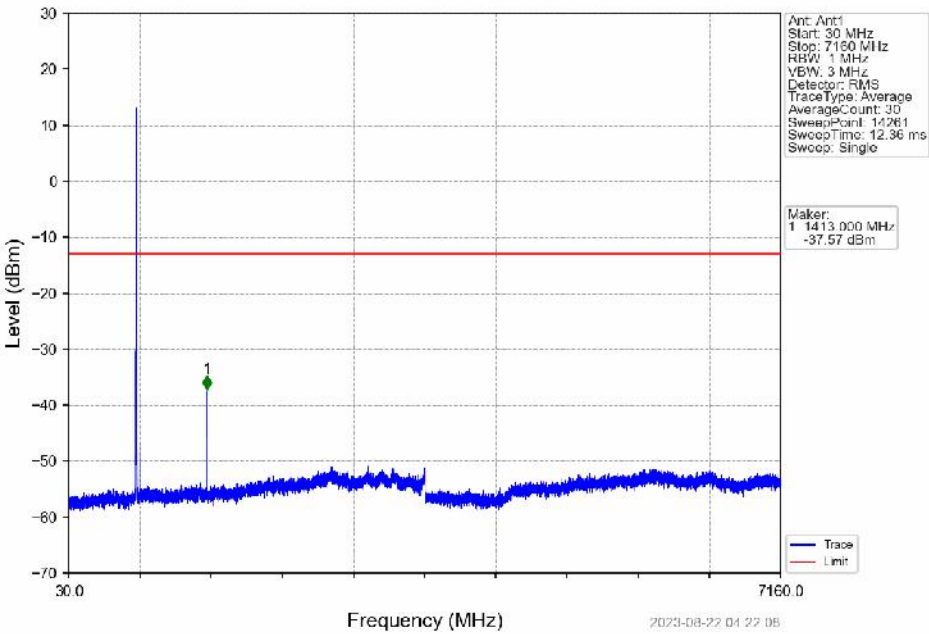
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_1\_0\_NTNV



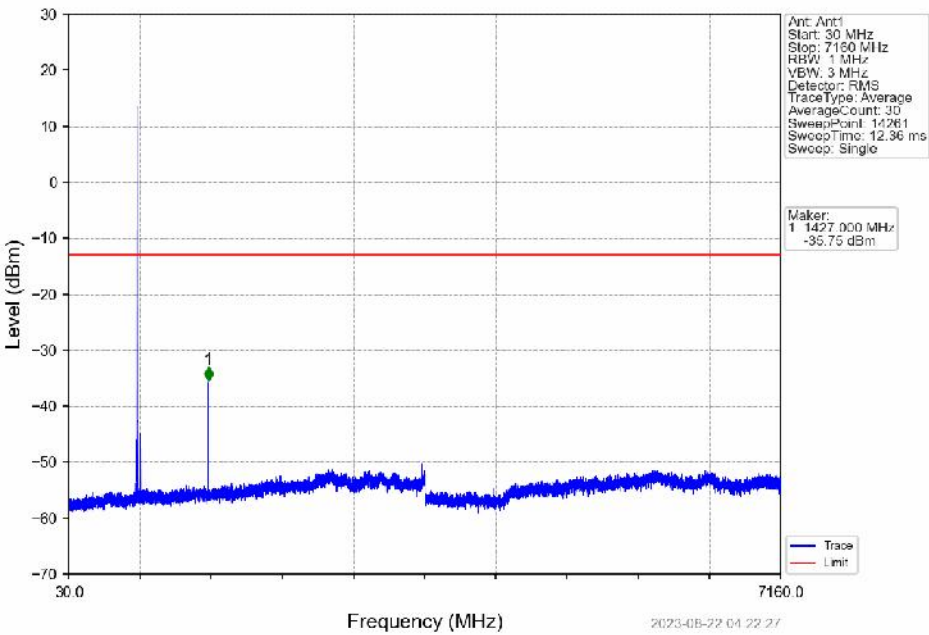
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



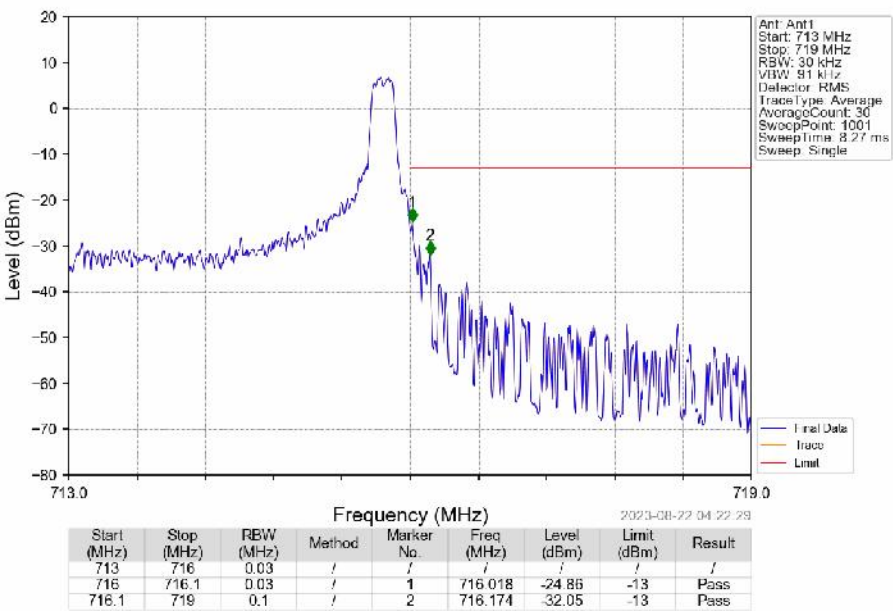
Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



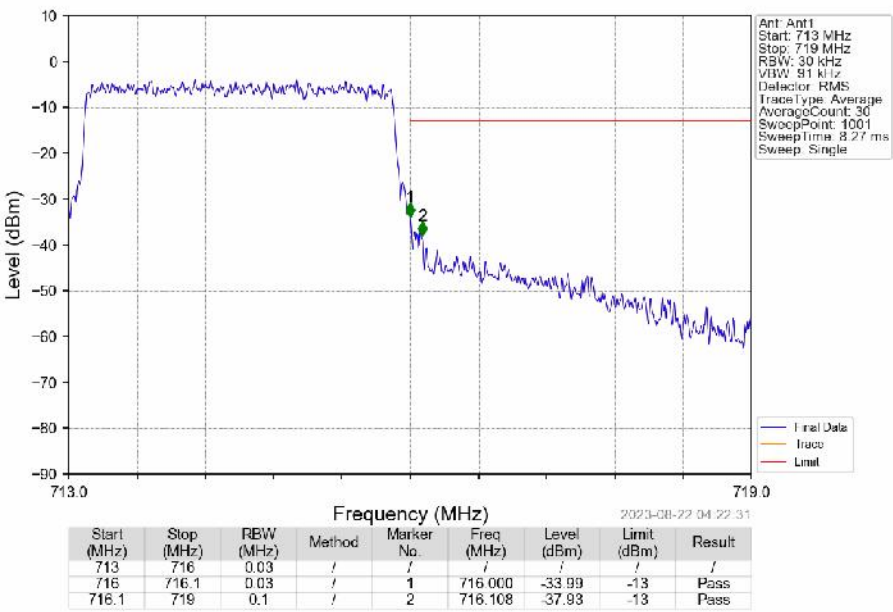
Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_1\_0\_NTNV



Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_1\_14\_NTNV



Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_15\_0\_NTNV

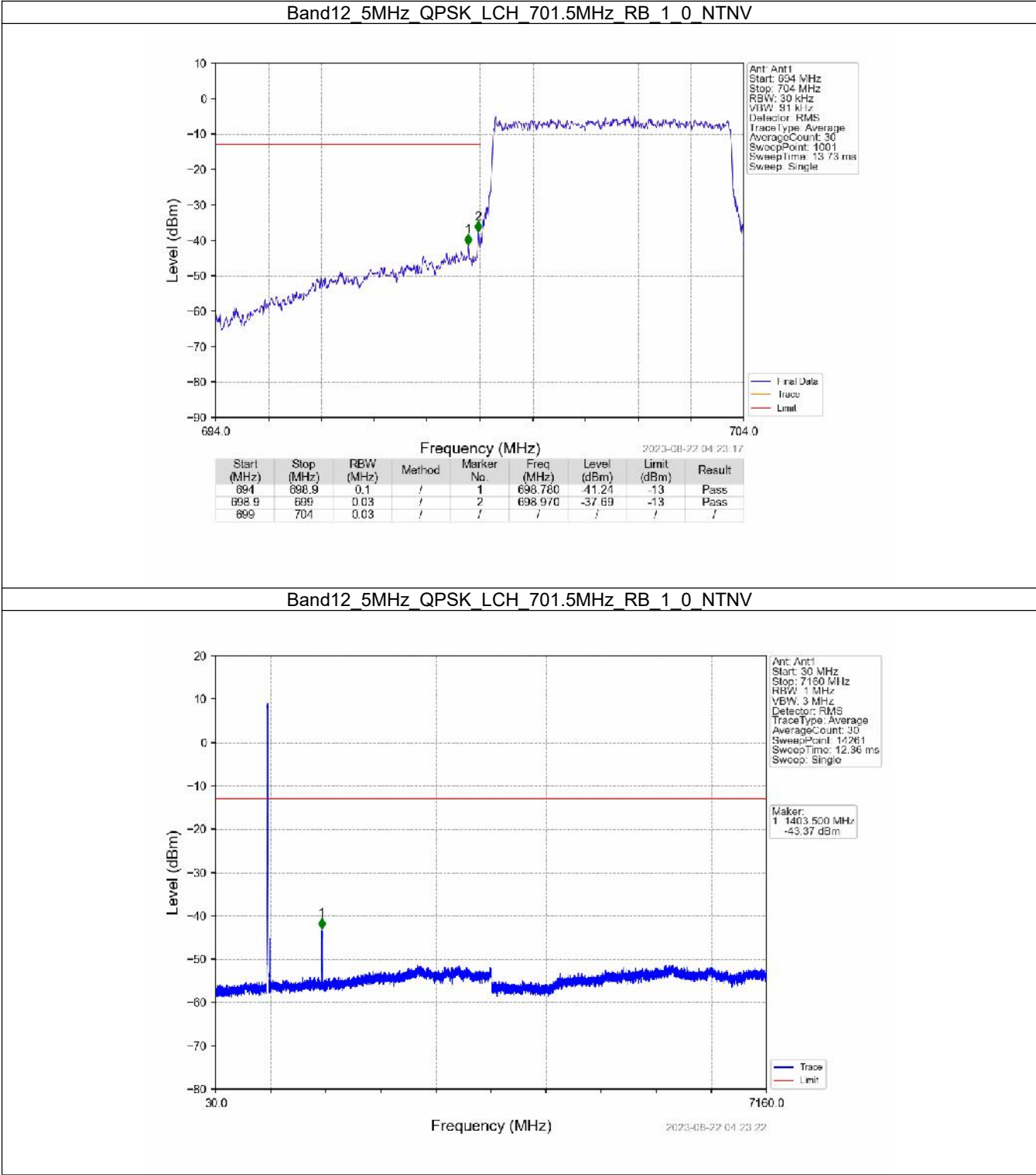


## 6.3 B12\_5MHz

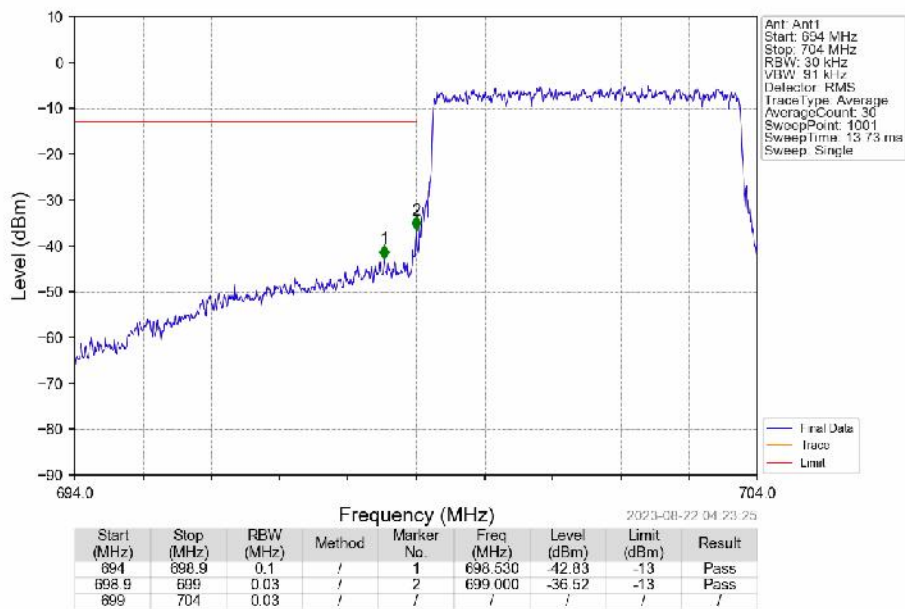
### 6.3.1 Test Result

| Band: 12 / Bandwidth: 5MHz / NTVN |                 |               |                     |                     |       |         |
|-----------------------------------|-----------------|---------------|---------------------|---------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |                     | Spurious Emission   |       | Verdict |
|                                   |                 | Size          | Offset              | Result              | Limit |         |
| QPSK                              | 701.5           | 1             | 0                   | Refer To Test Graph |       | Pass    |
|                                   |                 | 25            | 0                   | Refer To Test Graph |       | Pass    |
|                                   | 707.5           | 1             | 0                   | Refer To Test Graph |       | Pass    |
|                                   | 713.5           | 1             | 0                   | Refer To Test Graph |       | Pass    |
|                                   |                 |               | 24                  | Refer To Test Graph |       | Pass    |
|                                   | 25              | 0             | Refer To Test Graph |                     | Pass  |         |
| 16QAM                             | 701.5           | 1             | 0                   | Refer To Test Graph |       | Pass    |
|                                   |                 | 25            | 0                   | Refer To Test Graph |       | Pass    |
|                                   | 707.5           | 1             | 0                   | Refer To Test Graph |       | Pass    |
|                                   | 713.5           | 1             | 0                   | Refer To Test Graph |       | Pass    |
|                                   |                 |               | 24                  | Refer To Test Graph |       | Pass    |
|                                   | 25              | 0             | Refer To Test Graph |                     | Pass  |         |

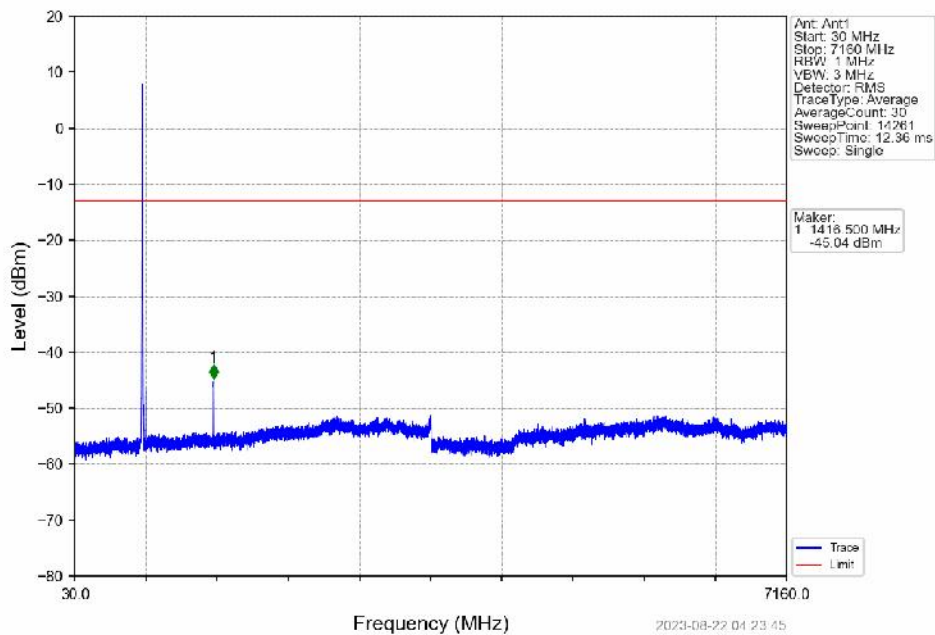
6.3.2 Test Graph



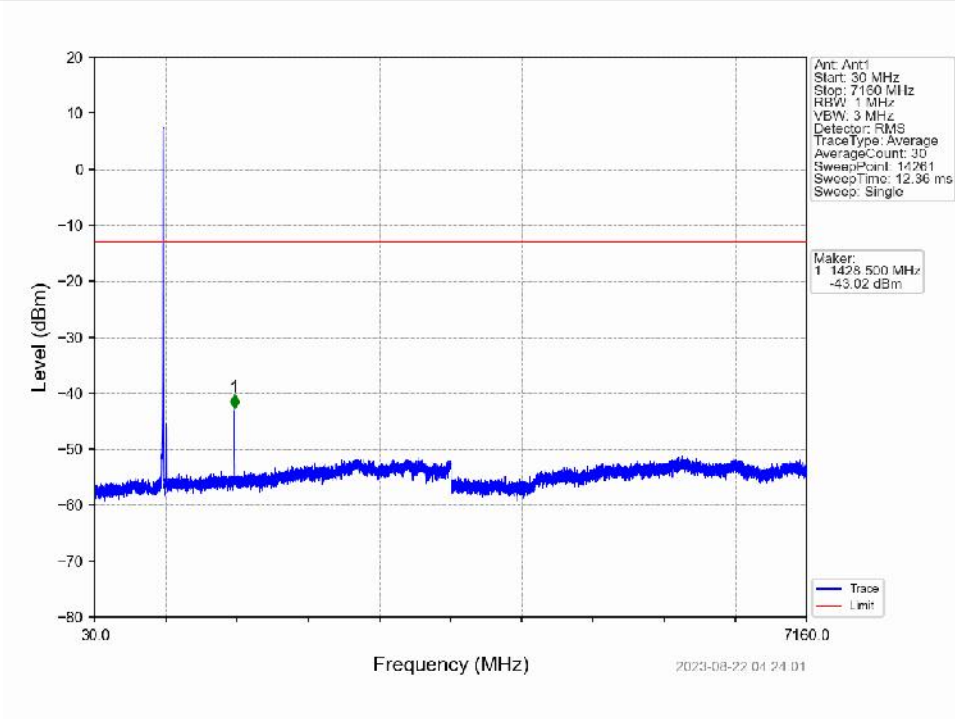
Band12\_5MHz\_QPSK\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



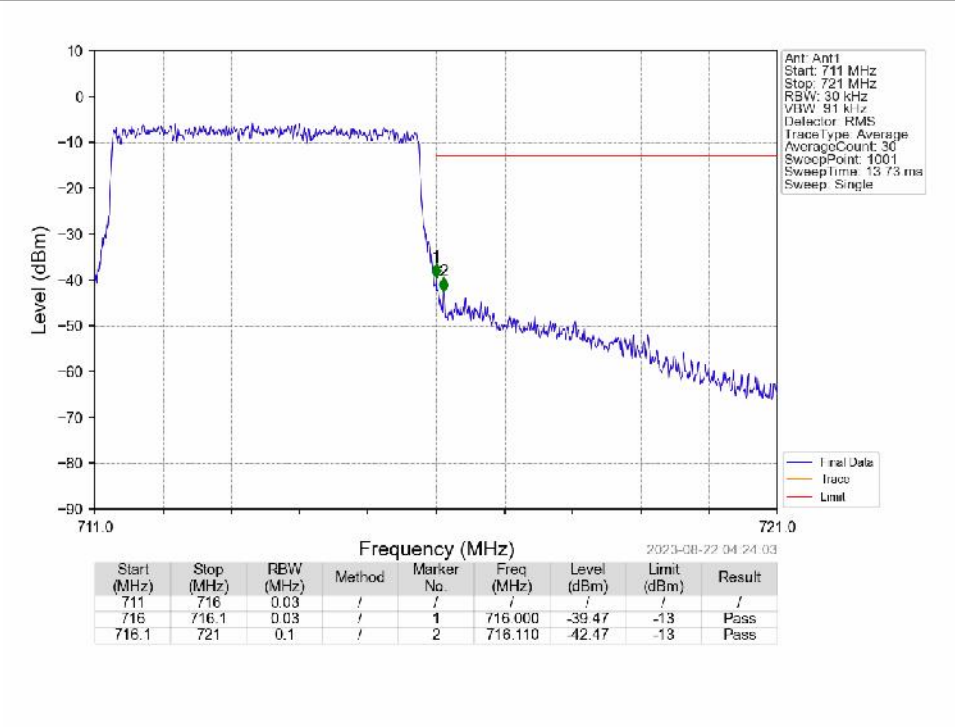
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



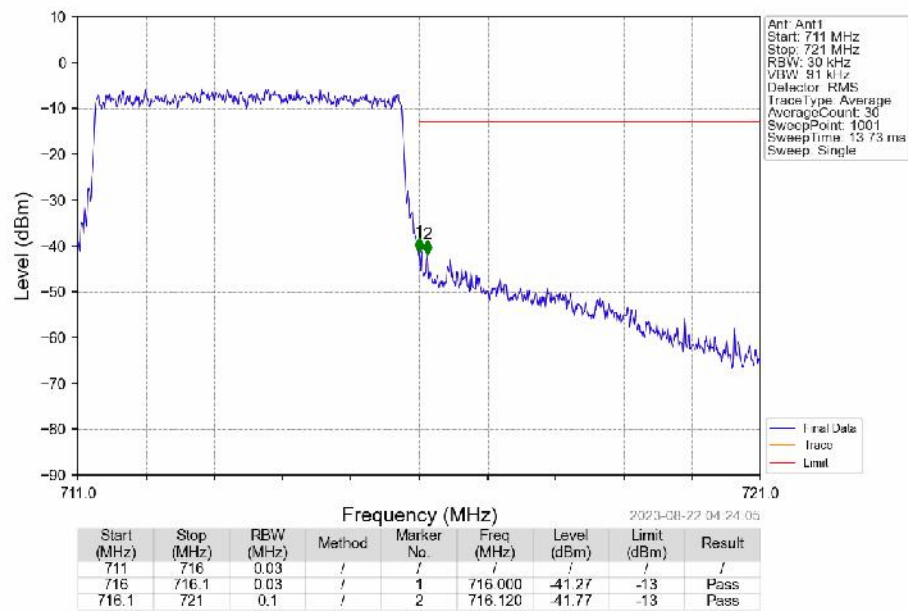
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_1\_0\_NTNV



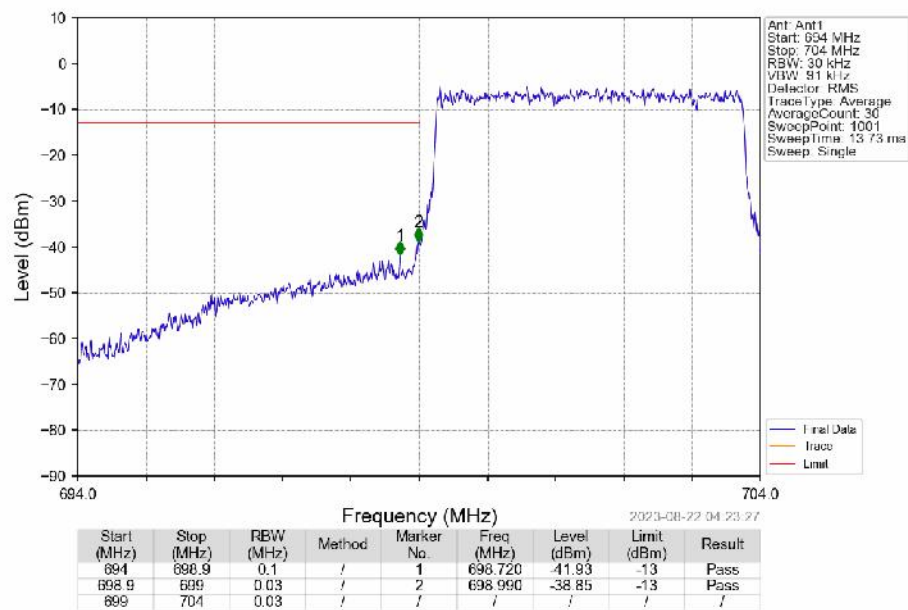
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_1\_24\_NTNV



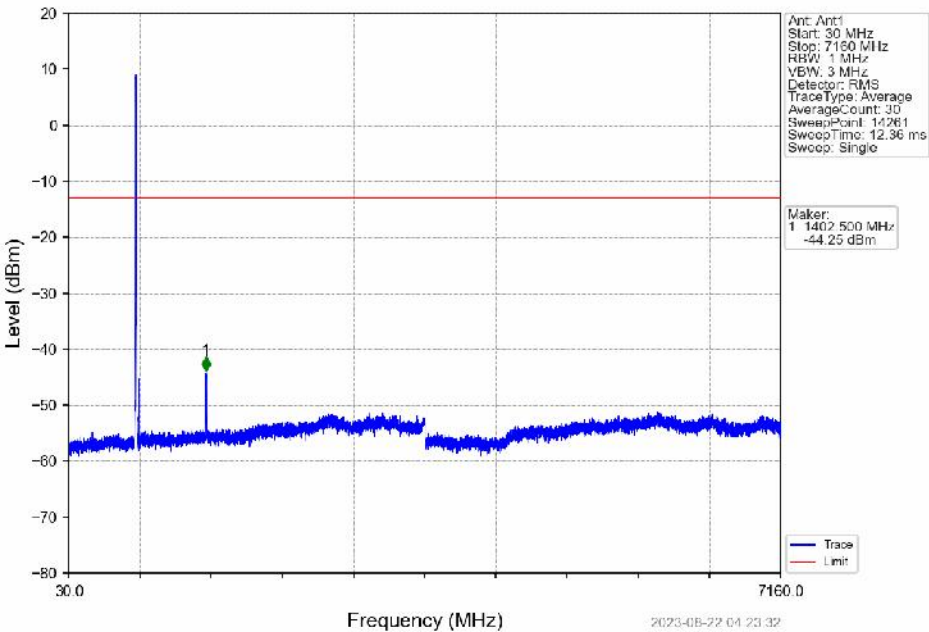
## Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



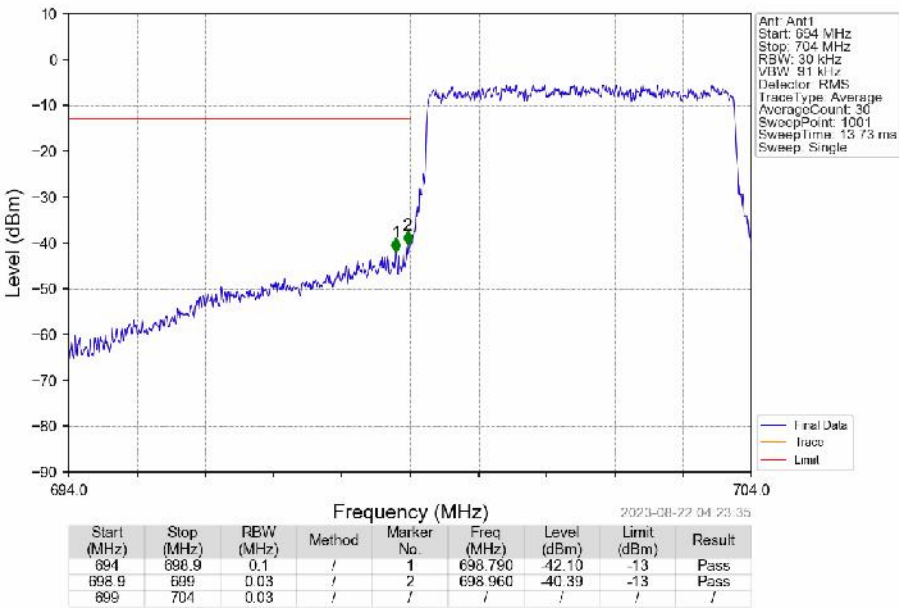
## Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_1\_0\_NTNV



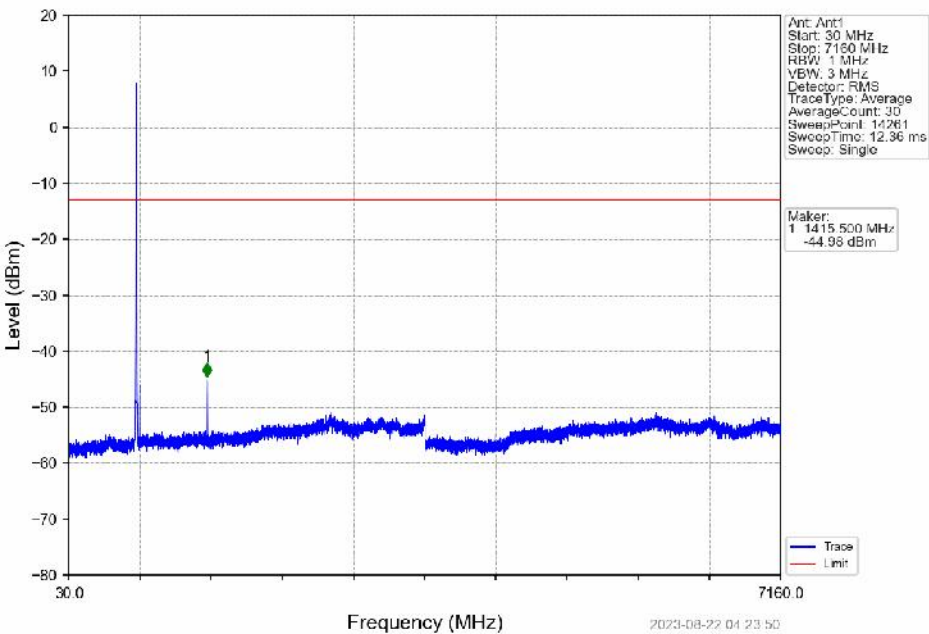
Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_1\_0\_NTNV



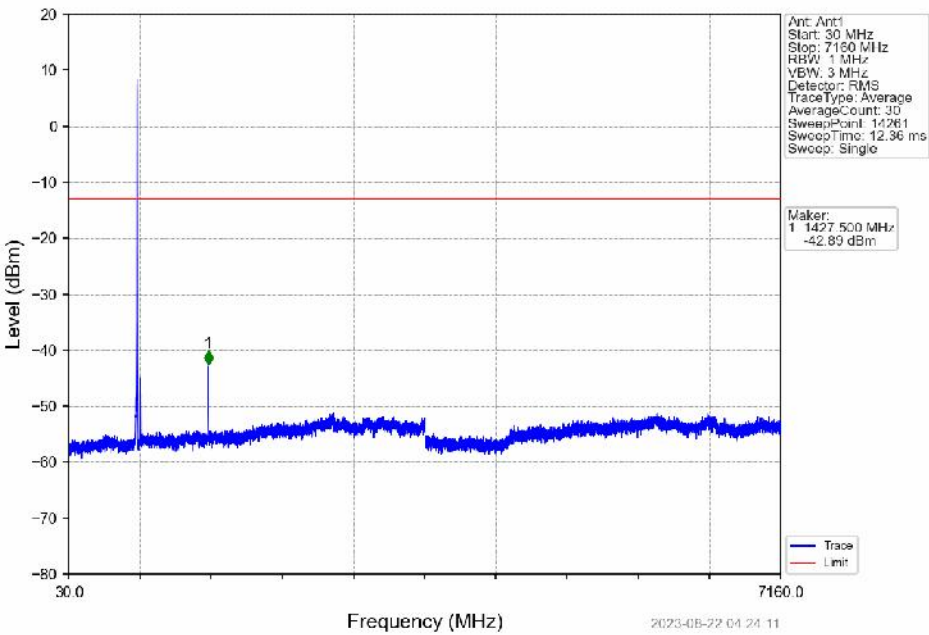
Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



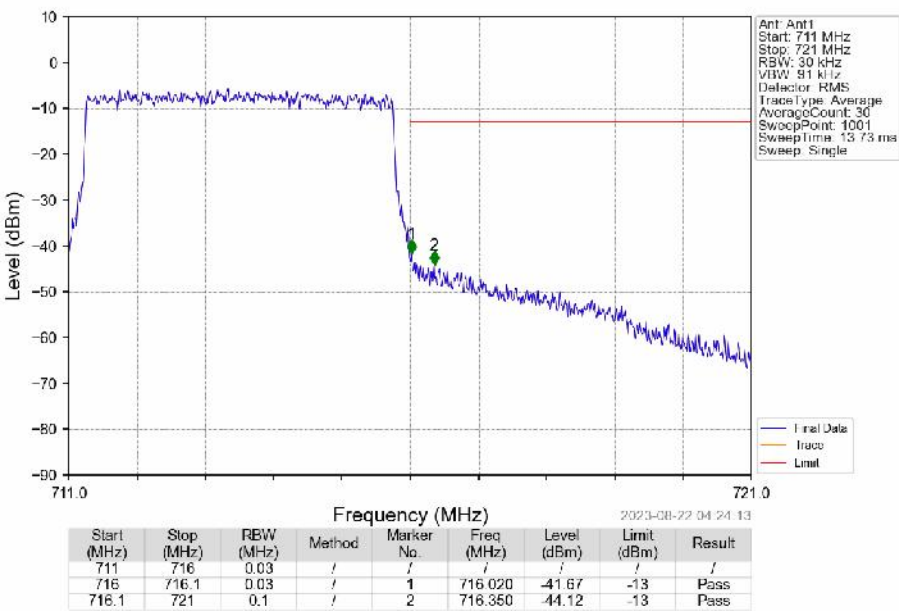
Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



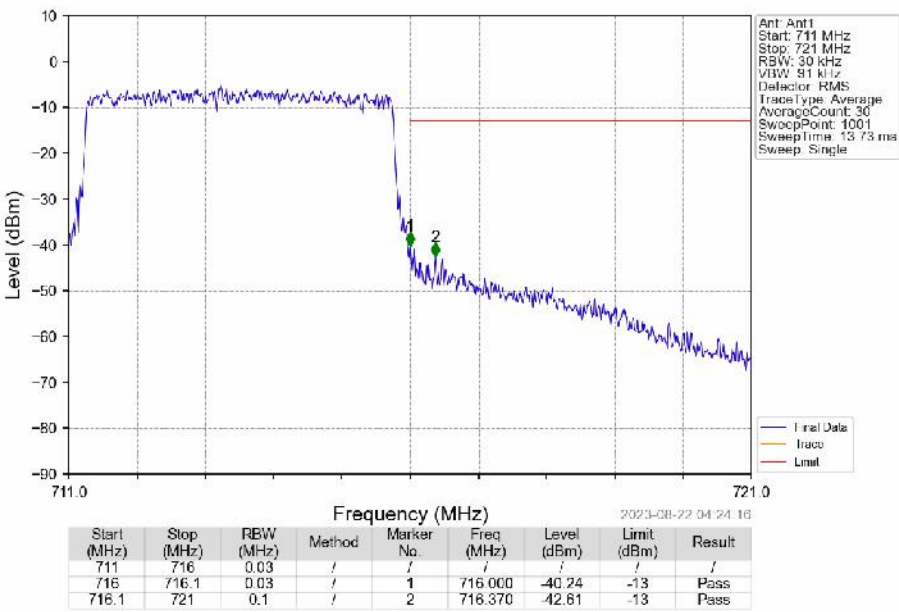
Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_1\_0\_NTNV



Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_1\_24\_NTNV



Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_25\_0\_NTNV

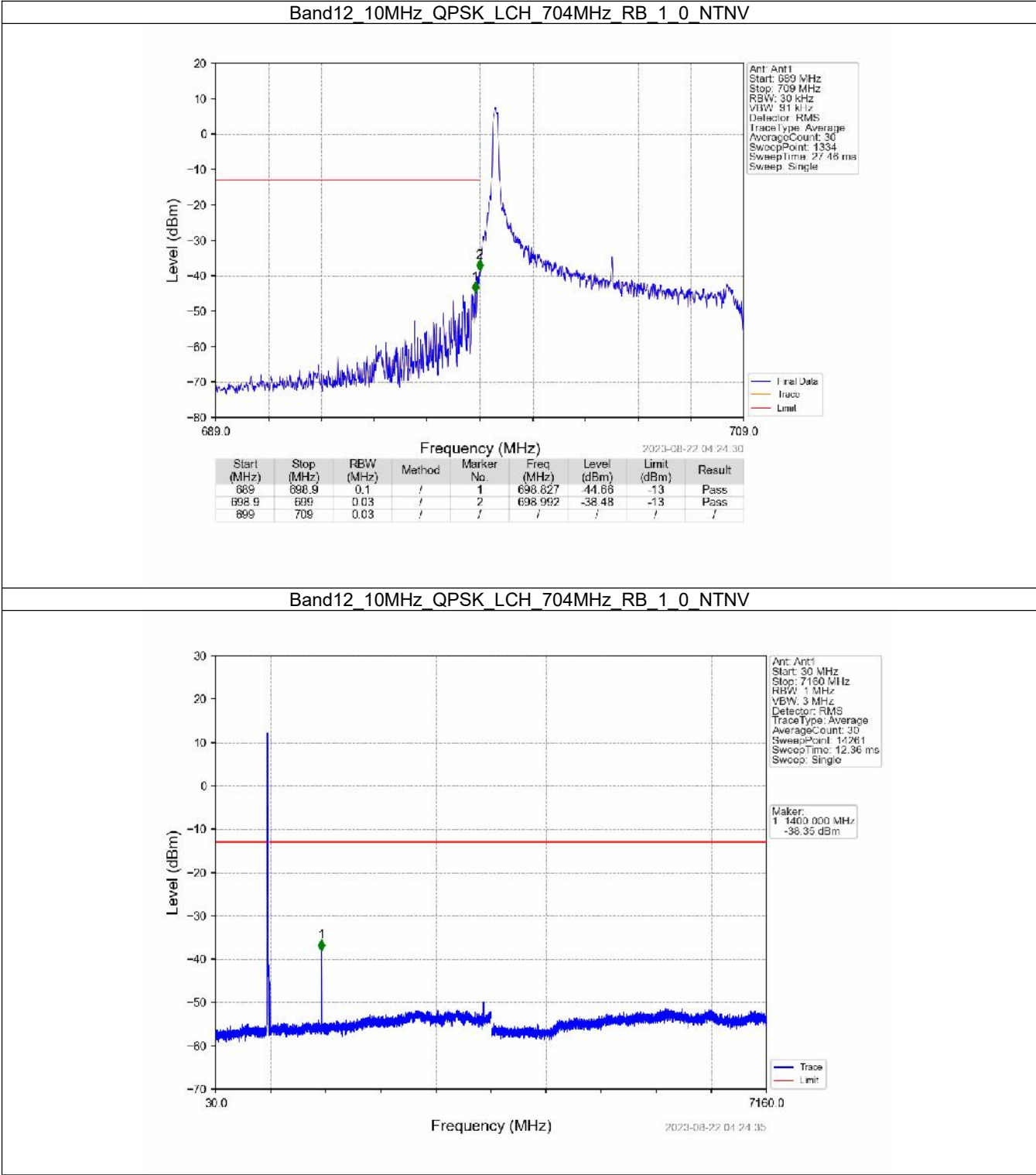


## 6.4 B12\_10MHz

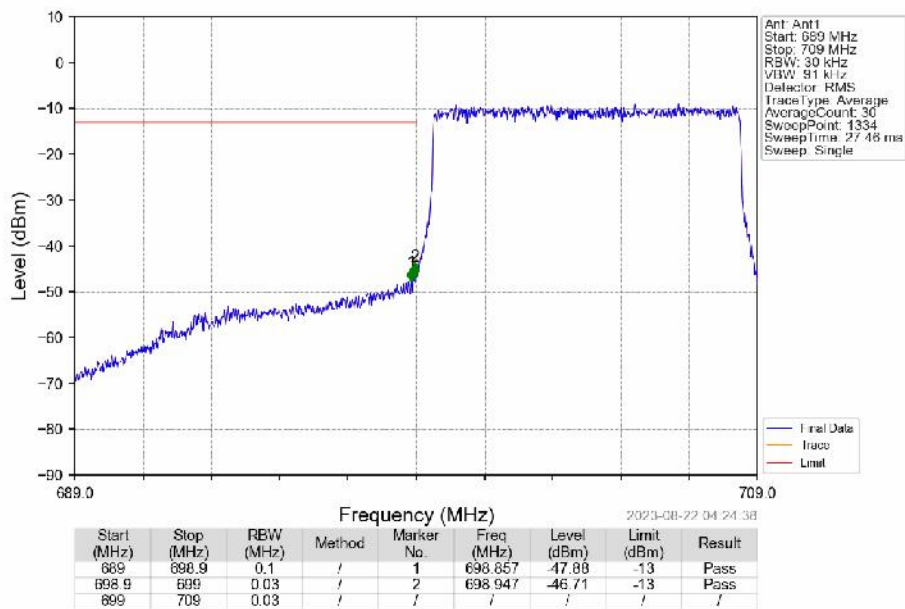
### 6.4.1 Test Result

| Band: 12 / Bandwidth: 10MHz / NTNV |                 |               |        |                     |       |         |
|------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                    |                 | Size          | Offset | Result              | Limit |         |
| QPSK                               | 704             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    | 711             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 |               | 49     | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
| 16QAM                              | 704             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    | 711             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 |               | 49     | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |

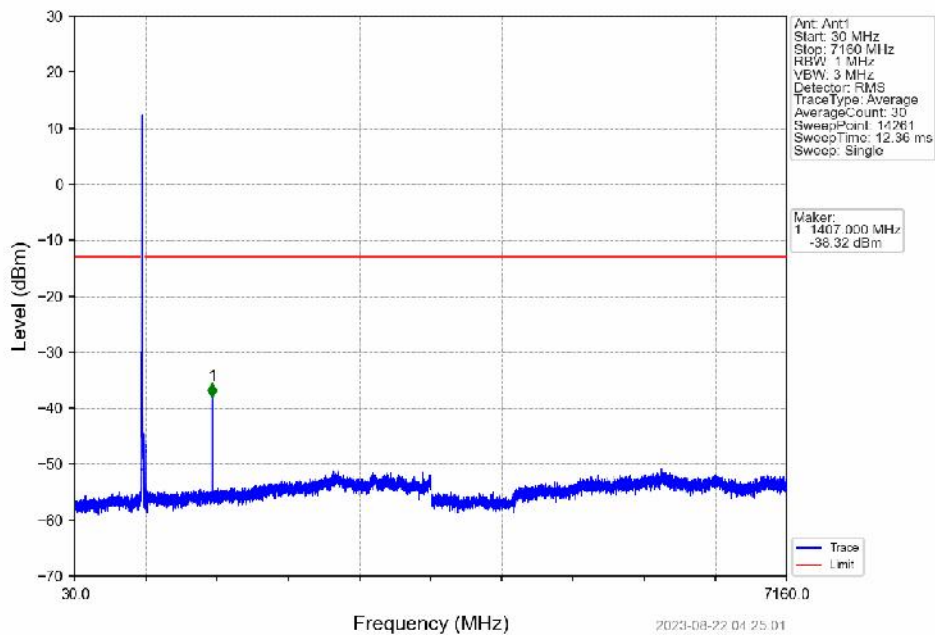
6.4.2 Test Graph



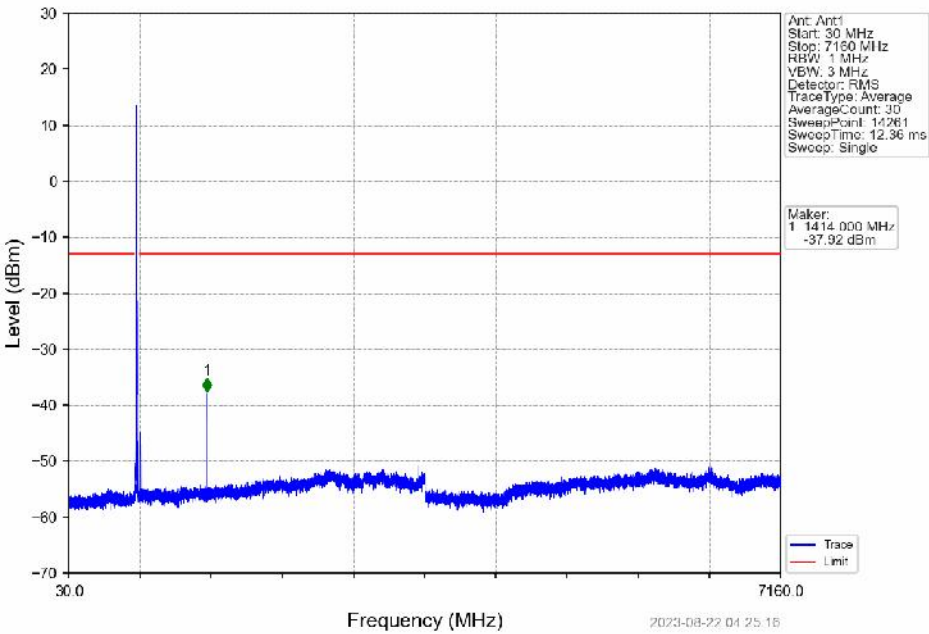
Band12\_10MHz\_QPSK\_LCH\_704MHz\_RB\_50\_0\_NTNV



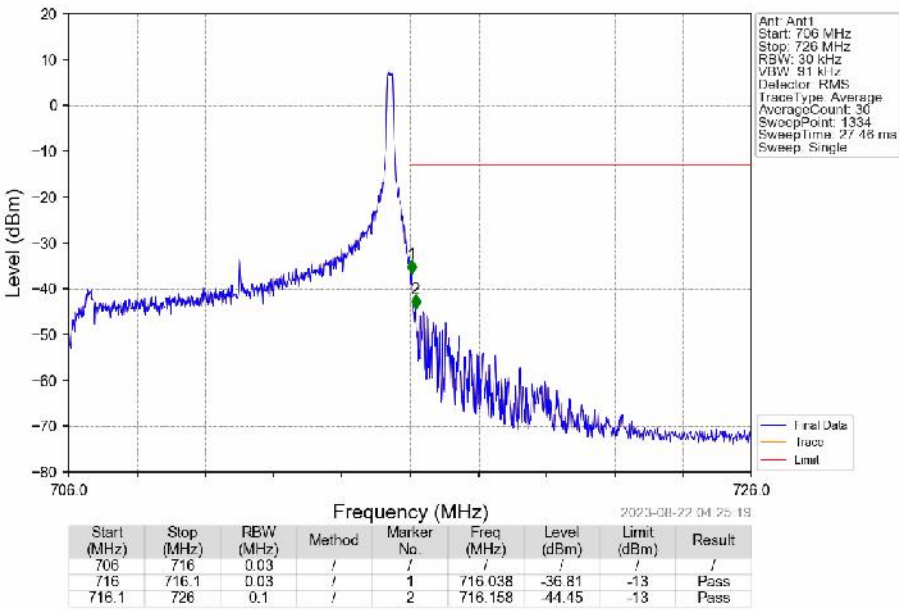
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



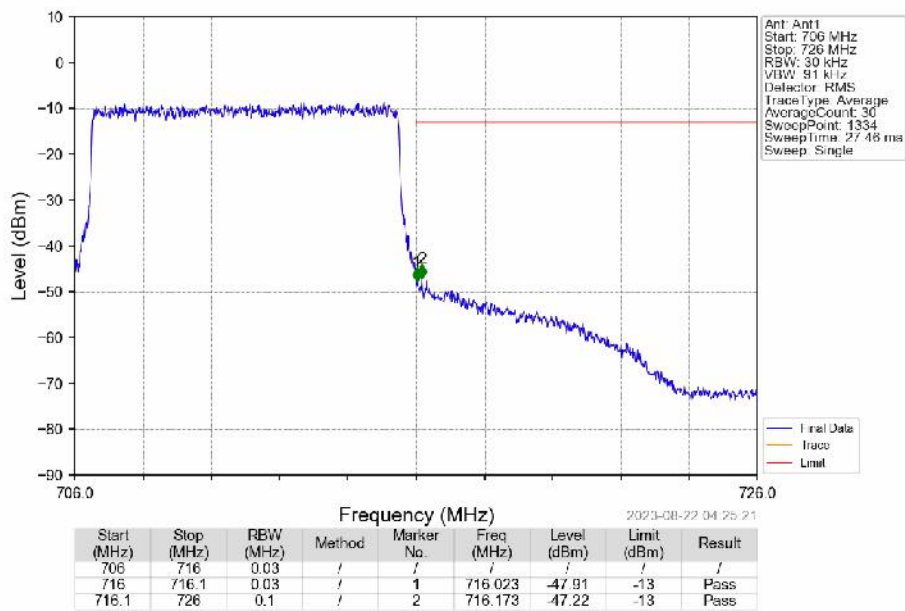
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_1\_0\_NTNV



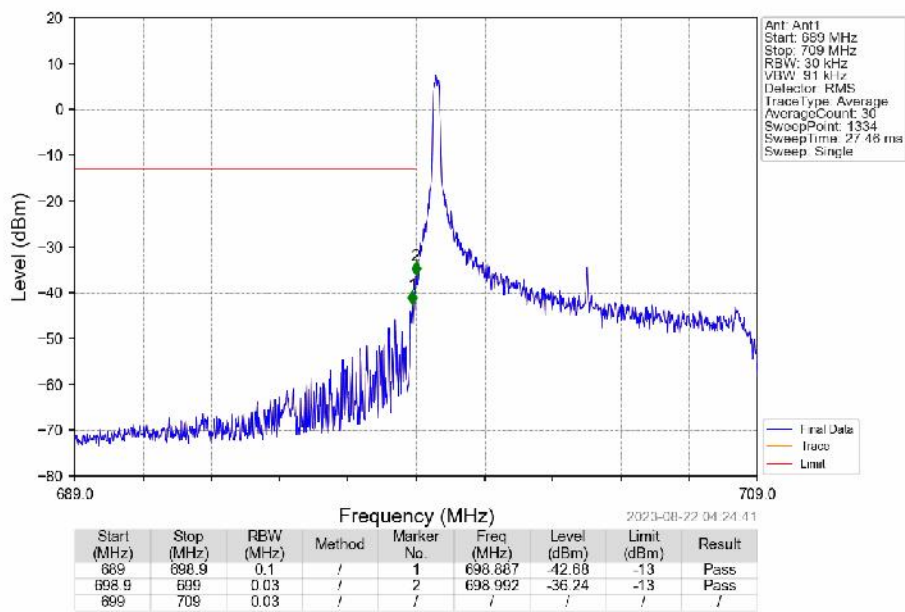
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_1\_49\_NTNV



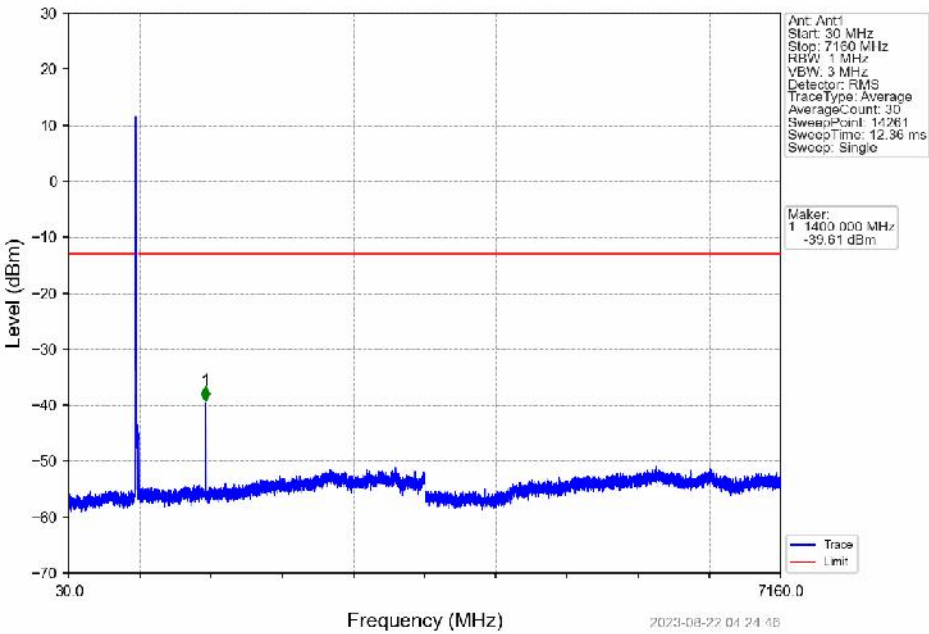
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



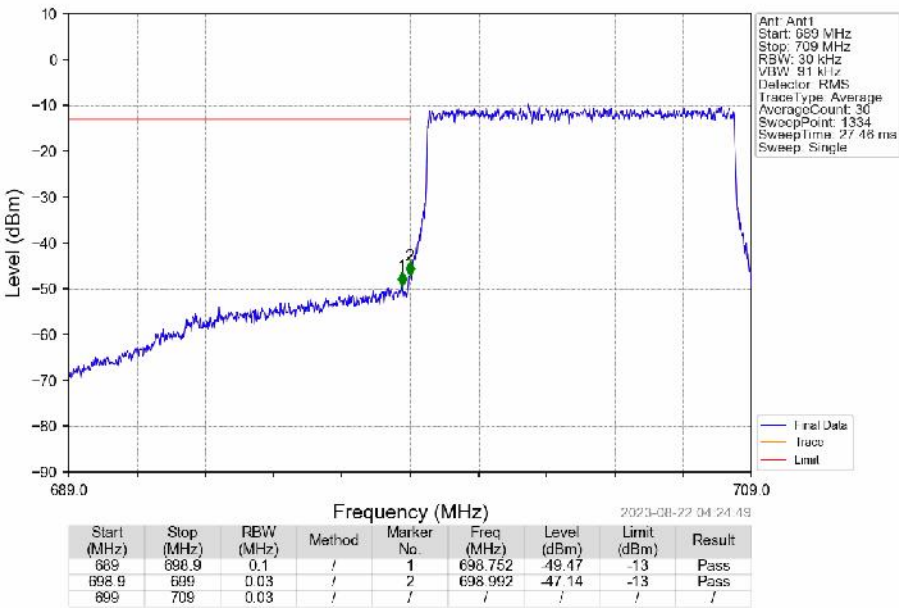
Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_1\_0\_NTNV

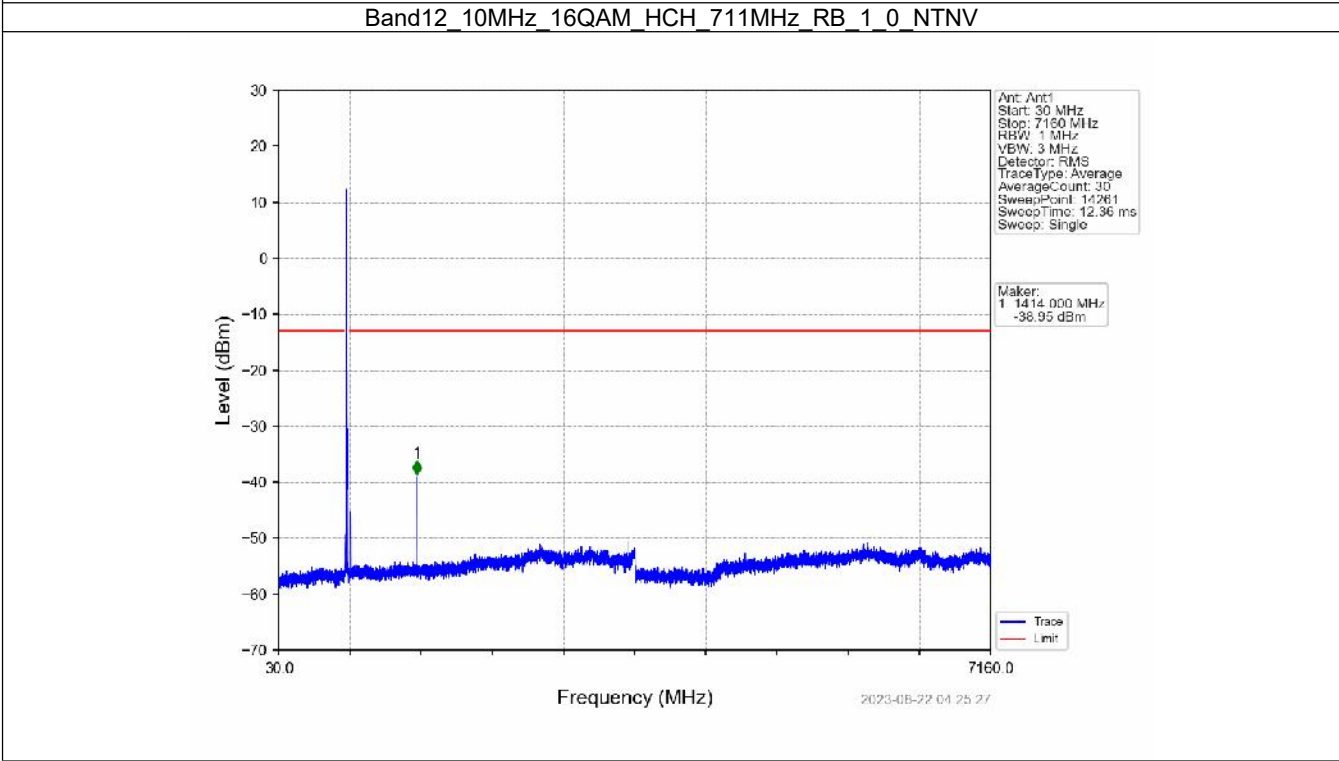
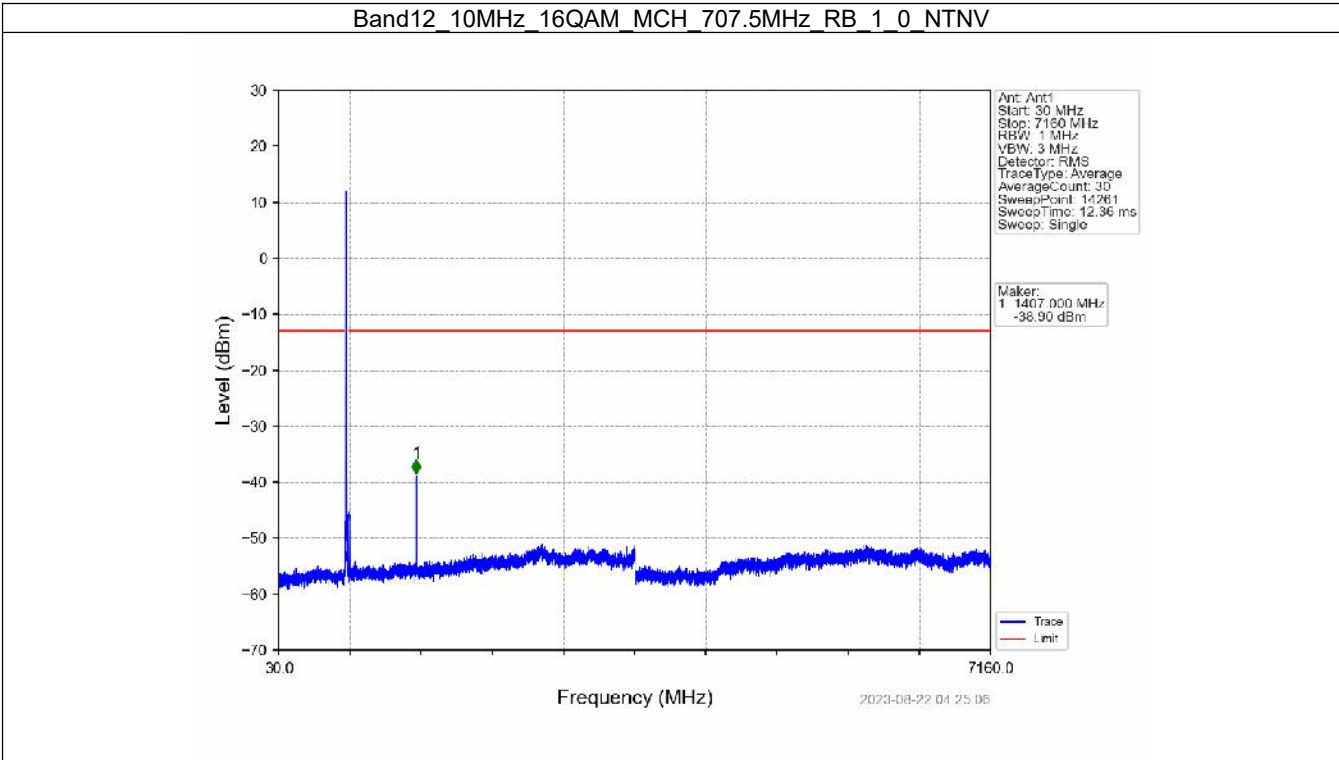


Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_1\_0\_NTNV

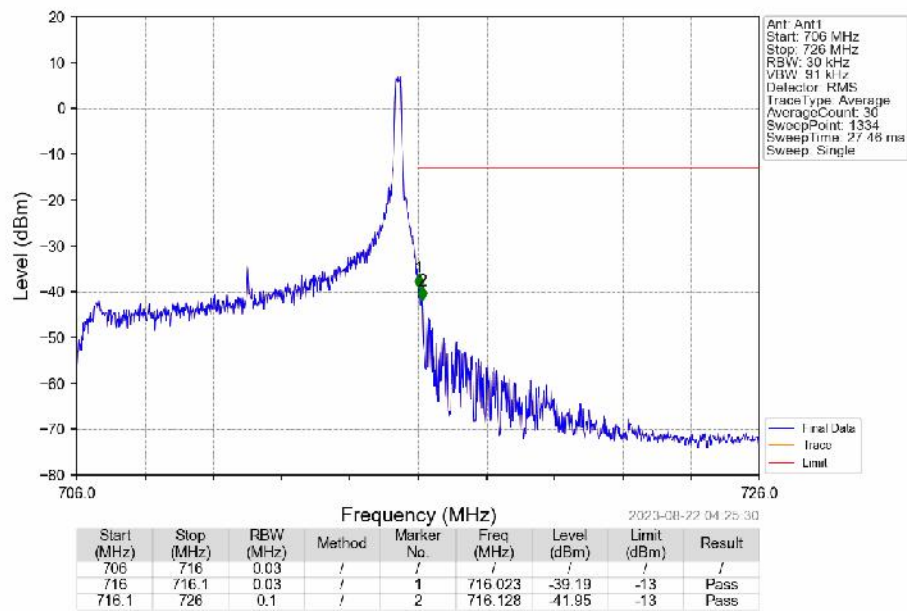


Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV

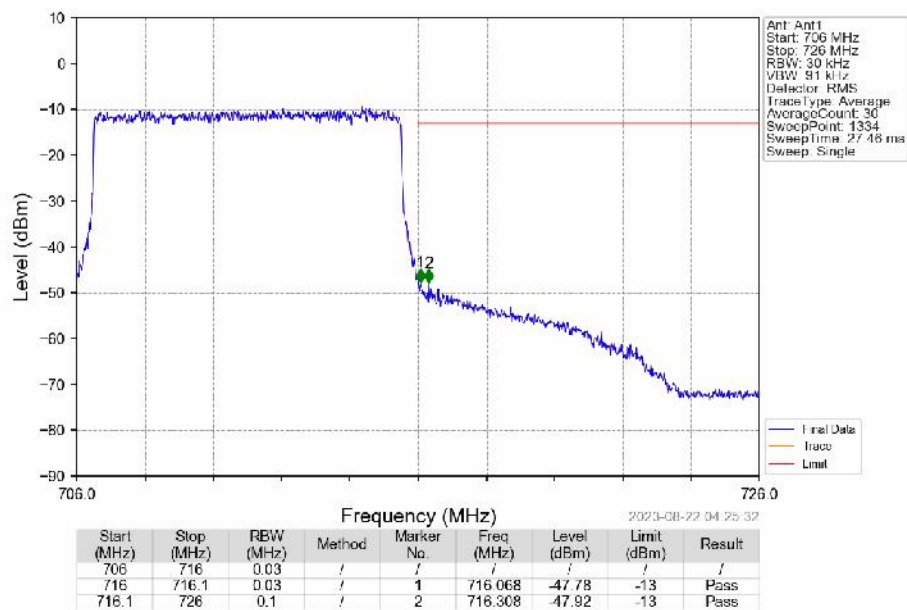




## Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_1\_49\_NTNV



## Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_50\_0\_NTNV



## 7. Form731

### 7.1 Form731\_Power

#### 7.1.1 Test Result

| Band | BW  | Lower Freq | High Freq | MAX Power (W) | Value  | Hz/ppm | Emission Designator | Rule Parts | MAX Power (dBm) |
|------|-----|------------|-----------|---------------|--------|--------|---------------------|------------|-----------------|
| 12   | 1.4 | 699.7      | 715.3     | 0.1567        | 0.0437 | ppm    | 1M12G7D             | 27H        | 21.95           |
| 12   | 1.4 | 699.7      | 715.3     | 0.1213        | 0.0446 | ppm    | 1M13W7D             | 27H        | 20.84           |
| 12   | 3   | 700.5      | 714.5     | 0.1531        | 0.0348 | ppm    | 2M78G7D             | 27H        | 21.85           |
| 12   | 3   | 700.5      | 714.5     | 0.1455        | 0.0564 | ppm    | 2M79W7D             | 27H        | 21.63           |
| 12   | 5   | 701.5      | 713.5     | 0.1205        | 0.0326 | ppm    | 4M59G7D             | 27H        | 20.81           |
| 12   | 5   | 701.5      | 713.5     | 0.1211        | 0.0517 | ppm    | 4M59W7D             | 27H        | 20.83           |
| 12   | 10  | 704        | 711       | 0.1592        | 0.0618 | ppm    | 9M11G7D             | 27H        | 22.02           |
| 12   | 10  | 704        | 711       | 0.1294        | 0.0682 | ppm    | 9M11W7D             | 27H        | 21.12           |

### 7.2 Form731\_ERP

#### 7.2.1 Test Result

| Band | BW  | Lower Freq | High Freq | MAX Power (W) | Value  | Hz/ppm | Emission Designator | Rule Parts | MAX Power (dBm) |
|------|-----|------------|-----------|---------------|--------|--------|---------------------|------------|-----------------|
| 12   | 1.4 | 699.7      | 715.3     | 0.0955        | 0.0437 | ppm    | 1M12G7D             | 27H        | 19.80           |
| 12   | 1.4 | 699.7      | 715.3     | 0.0740        | 0.0446 | ppm    | 1M13W7D             | 27H        | 18.69           |
| 12   | 3   | 700.5      | 714.5     | 0.0933        | 0.0348 | ppm    | 2M78G7D             | 27H        | 19.70           |
| 12   | 3   | 700.5      | 714.5     | 0.0887        | 0.0564 | ppm    | 2M79W7D             | 27H        | 19.48           |
| 12   | 5   | 701.5      | 713.5     | 0.0735        | 0.0326 | ppm    | 4M59G7D             | 27H        | 18.66           |
| 12   | 5   | 701.5      | 713.5     | 0.0738        | 0.0517 | ppm    | 4M59W7D             | 27H        | 18.68           |
| 12   | 10  | 704        | 711       | 0.0971        | 0.0618 | ppm    | 9M11G7D             | 27H        | 19.87           |
| 12   | 10  | 704        | 711       | 0.0789        | 0.0682 | ppm    | 9M11W7D             | 27H        | 18.97           |