

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 B17\_5MHz\_ERP

| Band: 17 / Bandwidth: 5MHz / NTNV |                 |               |        |                       |            |           |         |         |
|-----------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                   |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                              | 706.5           | 1             | 0      | 24.57                 | -3.02      | 19.40     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.45                 | -3.02      | 19.28     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 24.60                 | -3.02      | 19.43     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 23.65                 | -3.02      | 18.48     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 22.20                 | -3.02      | 17.03     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.24                 | -3.02      | 18.07     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 23.65                 | -3.02      | 18.48     | <=34.77 | Pass    |
|                                   | 710             | 1             | 0      | 24.41                 | -3.02      | 19.24     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.42                 | -3.02      | 19.25     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 23.71                 | -3.02      | 18.54     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 23.76                 | -3.02      | 18.59     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 23.39                 | -3.02      | 18.22     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.59                 | -3.02      | 18.42     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 23.38                 | -3.02      | 18.21     | <=34.77 | Pass    |
|                                   | 713.5           | 1             | 0      | 24.71                 | -3.02      | 19.54     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 24.13                 | -3.02      | 18.96     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 24.68                 | -3.02      | 19.51     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 23.74                 | -3.02      | 18.57     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 22.44                 | -3.02      | 17.27     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.15                 | -3.02      | 17.98     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 23.54                 | -3.02      | 18.37     | <=34.77 | Pass    |
| 16QAM                             | 706.5           | 1             | 0      | 23.45                 | -3.02      | 18.28     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.52                 | -3.02      | 18.35     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 23.62                 | -3.02      | 18.45     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 22.48                 | -3.02      | 17.31     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 22.67                 | -3.02      | 17.50     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 22.39                 | -3.02      | 17.22     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 22.63                 | -3.02      | 17.46     | <=34.77 | Pass    |
|                                   | 710             | 1             | 0      | 23.15                 | -3.02      | 17.98     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.68                 | -3.02      | 18.51     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 23.61                 | -3.02      | 18.44     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 22.67                 | -3.02      | 17.50     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 22.14                 | -3.02      | 16.97     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 22.36                 | -3.02      | 17.19     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 22.63                 | -3.02      | 17.46     | <=34.77 | Pass    |
|                                   | 713.5           | 1             | 0      | 23.72                 | -3.02      | 18.55     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 23.85                 | -3.02      | 18.68     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 23.74                 | -3.02      | 18.57     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 22.70                 | -3.02      | 17.53     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 22.74                 | -3.02      | 17.57     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 22.75                 | -3.02      | 17.58     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 22.13                 | -3.02      | 16.96     | <=34.77 | Pass    |
| 64QAM                             | 706.5           | 1             | 0      | 22.35                 | -3.02      | 17.18     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 22.46                 | -3.02      | 17.29     | <=34.77 | Pass    |
|                                   |                 |               | 24     | 22.43                 | -3.02      | 17.26     | <=34.77 | Pass    |
|                                   |                 | 12            | 0      | 21.72                 | -3.02      | 16.55     | <=34.77 | Pass    |
|                                   |                 |               | 6      | 21.50                 | -3.02      | 16.33     | <=34.77 | Pass    |
|                                   |                 |               | 13     | 21.57                 | -3.02      | 16.40     | <=34.77 | Pass    |
|                                   |                 | 25            | 0      | 21.67                 | -3.02      | 16.50     | <=34.77 | Pass    |

|                                              |       |       |    |       |       |       |         |         |      |
|----------------------------------------------|-------|-------|----|-------|-------|-------|---------|---------|------|
|                                              | 710   | 1     | 0  | 22.30 | -3.02 | 17.13 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 21.67 | -3.02 | 16.50 | <=34.77 | Pass    |      |
|                                              |       |       | 24 | 22.17 | -3.02 | 17.00 | <=34.77 | Pass    |      |
|                                              |       | 12    | 0  | 21.70 | -3.02 | 16.53 | <=34.77 | Pass    |      |
|                                              |       |       | 6  | 21.84 | -3.02 | 16.67 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 21.58 | -3.02 | 16.41 | <=34.77 | Pass    |      |
|                                              |       | 25    | 0  | 21.54 | -3.02 | 16.37 | <=34.77 | Pass    |      |
|                                              |       | 713.5 | 1  | 0     | 22.33 | -3.02 | 17.16   | <=34.77 | Pass |
|                                              |       |       |    | 13    | 22.35 | -3.02 | 17.18   | <=34.77 | Pass |
|                                              | 24    |       |    | 22.24 | -3.02 | 17.07 | <=34.77 | Pass    |      |
|                                              | 12    |       | 0  | 21.68 | -3.02 | 16.51 | <=34.77 | Pass    |      |
|                                              |       |       | 6  | 21.75 | -3.02 | 16.58 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 21.64 | -3.02 | 16.47 | <=34.77 | Pass    |      |
|                                              | 25    |       | 0  | 21.76 | -3.02 | 16.59 | <=34.77 | Pass    |      |
| 256QAM                                       | 706.5 | 1     | 0  | 19.61 | -3.02 | 14.44 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 19.25 | -3.02 | 14.08 | <=34.77 | Pass    |      |
|                                              |       |       | 24 | 19.64 | -3.02 | 14.47 | <=34.77 | Pass    |      |
|                                              |       | 12    | 0  | 19.58 | -3.02 | 14.41 | <=34.77 | Pass    |      |
|                                              |       |       | 6  | 19.67 | -3.02 | 14.50 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 19.58 | -3.02 | 14.41 | <=34.77 | Pass    |      |
|                                              |       | 25    | 0  | 19.69 | -3.02 | 14.52 | <=34.77 | Pass    |      |
|                                              | 710   | 1     | 0  | 19.55 | -3.02 | 14.38 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 18.17 | -3.02 | 13.00 | <=34.77 | Pass    |      |
|                                              |       |       | 24 | 19.73 | -3.02 | 14.56 | <=34.77 | Pass    |      |
|                                              |       | 12    | 0  | 19.71 | -3.02 | 14.54 | <=34.77 | Pass    |      |
|                                              |       |       | 6  | 19.33 | -3.02 | 14.16 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 19.53 | -3.02 | 14.36 | <=34.77 | Pass    |      |
|                                              |       | 25    | 0  | 19.69 | -3.02 | 14.52 | <=34.77 | Pass    |      |
|                                              | 713.5 | 1     | 0  | 19.14 | -3.02 | 13.97 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 19.72 | -3.02 | 14.55 | <=34.77 | Pass    |      |
|                                              |       |       | 24 | 18.18 | -3.02 | 13.01 | <=34.77 | Pass    |      |
|                                              |       | 12    | 0  | 19.78 | -3.02 | 14.61 | <=34.77 | Pass    |      |
|                                              |       |       | 6  | 19.55 | -3.02 | 14.38 | <=34.77 | Pass    |      |
|                                              |       |       | 13 | 19.55 | -3.02 | 14.38 | <=34.77 | Pass    |      |
|                                              |       | 25    | 0  | 19.32 | -3.02 | 14.15 | <=34.77 | Pass    |      |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 |       |       |    |       |       |       |         |         |      |

### 1.1.2 B17\_10MHz\_ERP

| Band: 17 / Bandwidth: 10MHz / NTNV |                 |               |        |                       |            |           |         |         |
|------------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|                                    |                 | Size          | Offset |                       |            | Result    | Limit   |         |
| QPSK                               | 709             | 1             | 0      | 24.61                 | -3.02      | 19.44     | <=34.77 | Pass    |
|                                    |                 |               | 25     | 24.23                 | -3.02      | 19.06     | <=34.77 | Pass    |
|                                    |                 |               | 49     | 24.72                 | -3.02      | 19.55     | <=34.77 | Pass    |
|                                    |                 | 25            | 0      | 23.59                 | -3.02      | 18.42     | <=34.77 | Pass    |
|                                    |                 |               | 13     | 23.64                 | -3.02      | 18.47     | <=34.77 | Pass    |
|                                    |                 |               | 25     | 23.59                 | -3.02      | 18.42     | <=34.77 | Pass    |
|                                    |                 | 50            | 0      | 23.65                 | -3.02      | 18.48     | <=34.77 | Pass    |
|                                    | 710             | 1             | 0      | 24.78                 | -3.02      | 19.61     | <=34.77 | Pass    |
|                                    |                 |               | 25     | 24.43                 | -3.02      | 19.26     | <=34.77 | Pass    |
|                                    |                 |               | 49     | 24.13                 | -3.02      | 18.96     | <=34.77 | Pass    |
|                                    |                 | 25            | 0      | 23.26                 | -3.02      | 18.09     | <=34.77 | Pass    |
|                                    |                 |               | 13     | 23.63                 | -3.02      | 18.46     | <=34.77 | Pass    |
|                                    |                 |               | 25     | 23.66                 | -3.02      | 18.49     | <=34.77 | Pass    |
|                                    |                 | 50            | 0      | 23.60                 | -3.02      | 18.43     | <=34.77 | Pass    |
|                                    | 711             | 1             | 0      | 24.43                 | -3.02      | 19.26     | <=34.77 | Pass    |

|        |     |       |       |       |       |         |         |         |         |      |
|--------|-----|-------|-------|-------|-------|---------|---------|---------|---------|------|
|        |     |       | 25    | 24.45 | -3.02 | 19.28   | <=34.77 | Pass    |         |      |
|        |     |       | 49    | 24.62 | -3.02 | 19.45   | <=34.77 | Pass    |         |      |
|        |     |       | 0     | 23.45 | -3.02 | 18.28   | <=34.77 | Pass    |         |      |
|        |     | 25    | 13    | 23.31 | -3.02 | 18.14   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 23.51 | -3.02 | 18.34   | <=34.77 | Pass    |         |      |
|        |     |       | 50    | 0     | 23.54 | -3.02   | 18.37   | <=34.77 | Pass    |      |
| 16QAM  | 709 | 1     | 0     | 23.43 | -3.02 | 18.26   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 23.51 | -3.02 | 18.34   | <=34.77 | Pass    |         |      |
|        |     |       | 49    | 23.93 | -3.02 | 18.76   | <=34.77 | Pass    |         |      |
|        |     | 25    | 0     | 21.87 | -3.02 | 16.70   | <=34.77 | Pass    |         |      |
|        |     |       | 13    | 22.42 | -3.02 | 17.25   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 22.66 | -3.02 | 17.49   | <=34.77 | Pass    |         |      |
|        |     | 50    | 0     | 22.67 | -3.02 | 17.50   | <=34.77 | Pass    |         |      |
|        |     | 710   | 1     | 0     | 23.81 | -3.02   | 18.64   | <=34.77 | Pass    |      |
|        |     |       |       | 25    | 23.80 | -3.02   | 18.63   | <=34.77 | Pass    |      |
|        | 49  |       |       | 23.72 | -3.02 | 18.55   | <=34.77 | Pass    |         |      |
|        | 25  |       | 0     | 22.68 | -3.02 | 17.51   | <=34.77 | Pass    |         |      |
|        |     |       | 13    | 22.47 | -3.02 | 17.30   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 22.56 | -3.02 | 17.39   | <=34.77 | Pass    |         |      |
|        | 50  |       | 0     | 22.33 | -3.02 | 17.16   | <=34.77 | Pass    |         |      |
|        | 711 |       | 1     | 0     | 23.80 | -3.02   | 18.63   | <=34.77 | Pass    |      |
|        |     |       |       | 25    | 23.85 | -3.02   | 18.68   | <=34.77 | Pass    |      |
|        |     | 49    |       | 23.88 | -3.02 | 18.71   | <=34.77 | Pass    |         |      |
|        |     | 25    | 0     | 22.68 | -3.02 | 17.51   | <=34.77 | Pass    |         |      |
|        |     |       | 13    | 22.39 | -3.02 | 17.22   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 22.67 | -3.02 | 17.50   | <=34.77 | Pass    |         |      |
|        |     | 50    | 0     | 22.69 | -3.02 | 17.52   | <=34.77 | Pass    |         |      |
|        |     | 64QAM | 709   | 1     | 0     | 23.78   | -3.02   | 18.61   | <=34.77 | Pass |
|        |     |       |       |       | 25    | 23.58   | -3.02   | 18.41   | <=34.77 | Pass |
|        | 49  |       |       |       | 23.67 | -3.02   | 18.50   | <=34.77 | Pass    |      |
| 25     | 0   |       |       | 22.30 | -3.02 | 17.13   | <=34.77 | Pass    |         |      |
|        | 13  |       |       | 22.26 | -3.02 | 17.09   | <=34.77 | Pass    |         |      |
|        | 25  |       |       | 22.54 | -3.02 | 17.37   | <=34.77 | Pass    |         |      |
| 50     | 0   |       |       | 22.09 | -3.02 | 16.92   | <=34.77 | Pass    |         |      |
| 710    | 1   |       | 0     | 22.28 | -3.02 | 17.11   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 22.19 | -3.02 | 17.02   | <=34.77 | Pass    |         |      |
|        |     |       | 49    | 21.27 | -3.02 | 16.10   | <=34.77 | Pass    |         |      |
|        | 25  |       | 0     | 21.68 | -3.02 | 16.51   | <=34.77 | Pass    |         |      |
|        |     |       | 13    | 21.15 | -3.02 | 15.98   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 20.78 | -3.02 | 15.61   | <=34.77 | Pass    |         |      |
|        | 50  |       | 0     | 21.22 | -3.02 | 16.05   | <=34.77 | Pass    |         |      |
| 711    | 1   |       | 0     | 22.30 | -3.02 | 17.13   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 22.37 | -3.02 | 17.20   | <=34.77 | Pass    |         |      |
|        |     |       | 49    | 22.26 | -3.02 | 17.09   | <=34.77 | Pass    |         |      |
|        | 25  |       | 0     | 21.69 | -3.02 | 16.52   | <=34.77 | Pass    |         |      |
|        |     | 13    | 21.45 | -3.02 | 16.28 | <=34.77 | Pass    |         |         |      |
|        |     | 25    | 21.72 | -3.02 | 16.55 | <=34.77 | Pass    |         |         |      |
|        | 50  | 0     | 20.83 | -3.02 | 15.66 | <=34.77 | Pass    |         |         |      |
| 256QAM | 709 | 1     | 0     | 19.44 | -3.02 | 14.27   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 19.84 | -3.02 | 14.67   | <=34.77 | Pass    |         |      |
|        |     |       | 49    | 19.69 | -3.02 | 14.52   | <=34.77 | Pass    |         |      |
|        |     | 25    | 0     | 19.57 | -3.02 | 14.40   | <=34.77 | Pass    |         |      |
|        |     |       | 13    | 19.58 | -3.02 | 14.41   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 19.61 | -3.02 | 14.44   | <=34.77 | Pass    |         |      |
|        | 50  | 0     | 19.60 | -3.02 | 14.43 | <=34.77 | Pass    |         |         |      |
|        | 710 | 1     | 0     | 19.49 | -3.02 | 14.32   | <=34.77 | Pass    |         |      |
|        |     |       | 25    | 19.62 | -3.02 | 14.45   | <=34.77 | Pass    |         |      |
|        |     |       | 49    | 19.83 | -3.02 | 14.66   | <=34.77 | Pass    |         |      |
| 25     |     | 0     | 19.66 | -3.02 | 14.49 | <=34.77 | Pass    |         |         |      |

|                                              |     |    |    |       |       |       |         |      |
|----------------------------------------------|-----|----|----|-------|-------|-------|---------|------|
|                                              |     |    | 13 | 19.26 | -3.02 | 14.09 | <=34.77 | Pass |
|                                              |     |    | 25 | 19.38 | -3.02 | 14.21 | <=34.77 | Pass |
|                                              |     | 50 | 0  | 19.58 | -3.02 | 14.41 | <=34.77 | Pass |
|                                              | 711 | 1  | 0  | 19.75 | -3.02 | 14.58 | <=34.77 | Pass |
|                                              |     |    | 25 | 19.66 | -3.02 | 14.49 | <=34.77 | Pass |
|                                              |     |    | 49 | 19.83 | -3.02 | 14.66 | <=34.77 | Pass |
|                                              |     | 25 | 0  | 19.74 | -3.02 | 14.57 | <=34.77 | Pass |
|                                              |     |    | 13 | 19.38 | -3.02 | 14.21 | <=34.77 | Pass |
|                                              |     |    | 25 | 19.66 | -3.02 | 14.49 | <=34.77 | Pass |
|                                              |     | 50 | 0  | 19.74 | -3.02 | 14.57 | <=34.77 | Pass |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 |     |    |    |       |       |       |         |      |

## 2. Frequency Stability

### 2.1 Test Result

#### 2.1.1 B17\_10MHz

| Band: 17 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 710             | 50            | 0      | 20         | 3.27          | -2.500           | -0.0035               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.85          | 0.600            | 0.0008                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.43          | -1.300           | -0.0018               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.85          | -2.000           | -0.0028               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.85          | 0.800            | 0.0011                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.85          | -1.400           | -0.0020               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.85          | -3.400           | -0.0048               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.85          | -0.800           | -0.0011               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.85          | -1.200           | -0.0017               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.85          | -1.200           | -0.0017               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.85          | -1.500           | -0.0021               | -2.5 to 2.5 | Pass    |

## 3. 99% & 26dB Bandwidth

### 3.1 Test Result

#### 3.1.1 Band17\_OBW

| Band: 17 / NTNV |            |                 |               |        |                              |       |         |
|-----------------|------------|-----------------|---------------|--------|------------------------------|-------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 99% Occupied Bandwidth (MHz) |       | Verdict |
|                 |            |                 | Size          | Offset | Result                       | Limit |         |
| 5               | QPSK       | 710             | 25            | 0      | 4.536                        | /     | Pass    |
|                 | 16QAM      | 710             | 25            | 0      | 4.542                        | /     | Pass    |
| 10              | QPSK       | 710             | 50            | 0      | 9.053                        | /     | Pass    |
|                 | 16QAM      | 710             | 50            | 0      | 9.024                        | /     | Pass    |

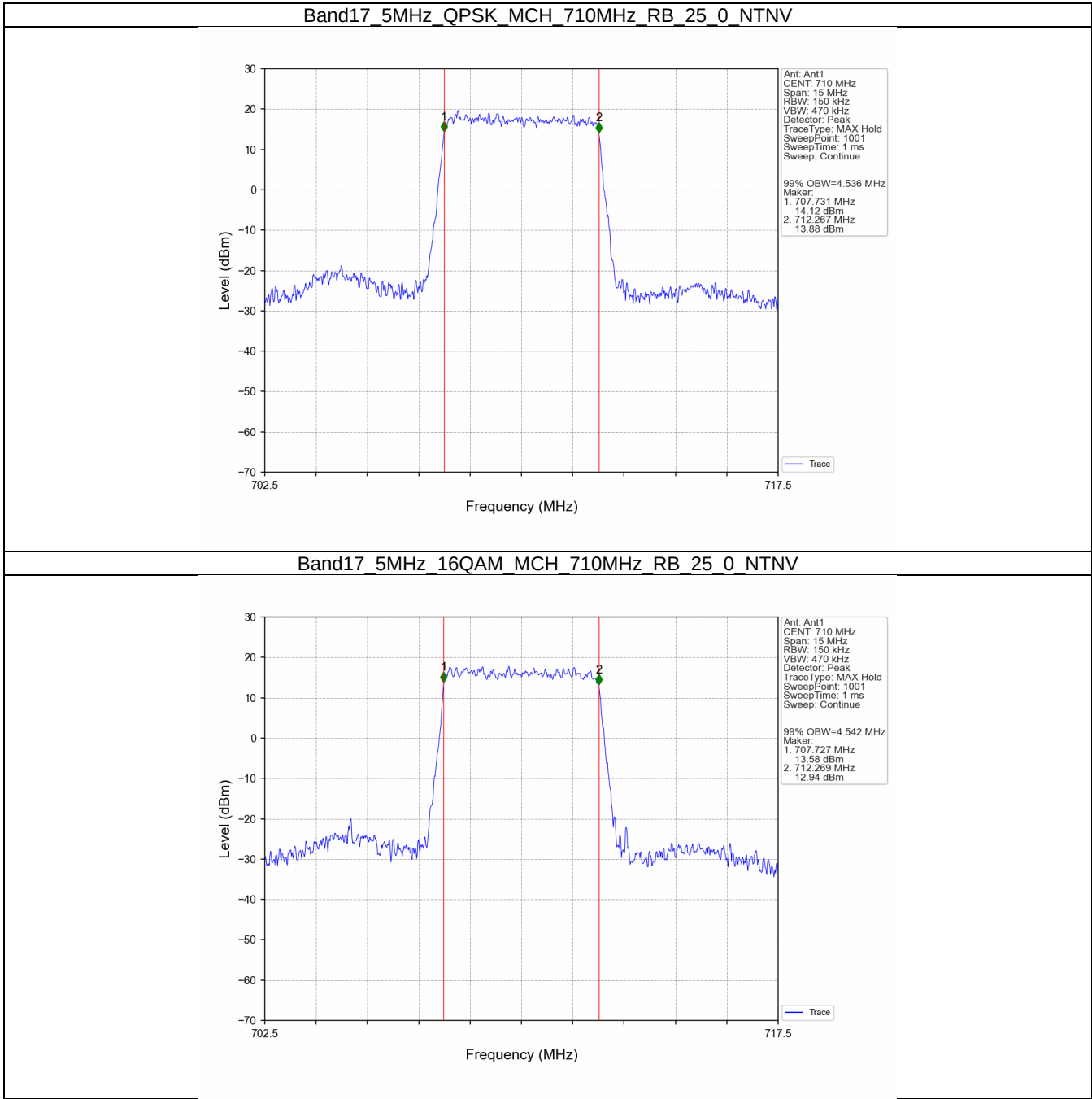
#### 3.1.2 Band17\_XDB

| Band: 17 / NTNV |            |                 |               |        |                      |       |         |
|-----------------|------------|-----------------|---------------|--------|----------------------|-------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 26dB Bandwidth (MHz) |       | Verdict |
|                 |            |                 | Size          | Offset | Result               | Limit |         |

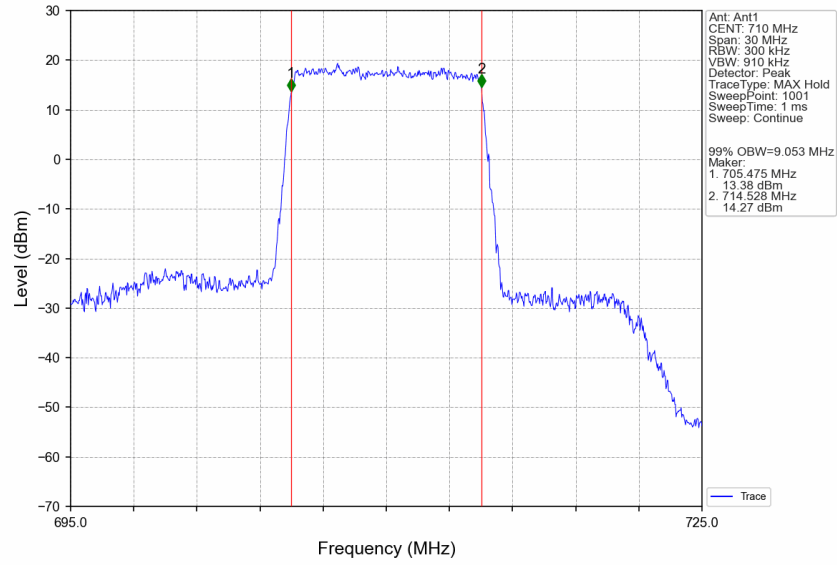
|    |       |     |    |   |       |   |      |
|----|-------|-----|----|---|-------|---|------|
| 5  | QPSK  | 710 | 25 | 0 | 5.029 | / | Pass |
|    | 16QAM | 710 | 25 | 0 | 5.042 | / | Pass |
| 10 | QPSK  | 710 | 50 | 0 | 9.980 | / | Pass |
|    | 16QAM | 710 | 50 | 0 | 9.939 | / | Pass |

# 3.2 Test Graph

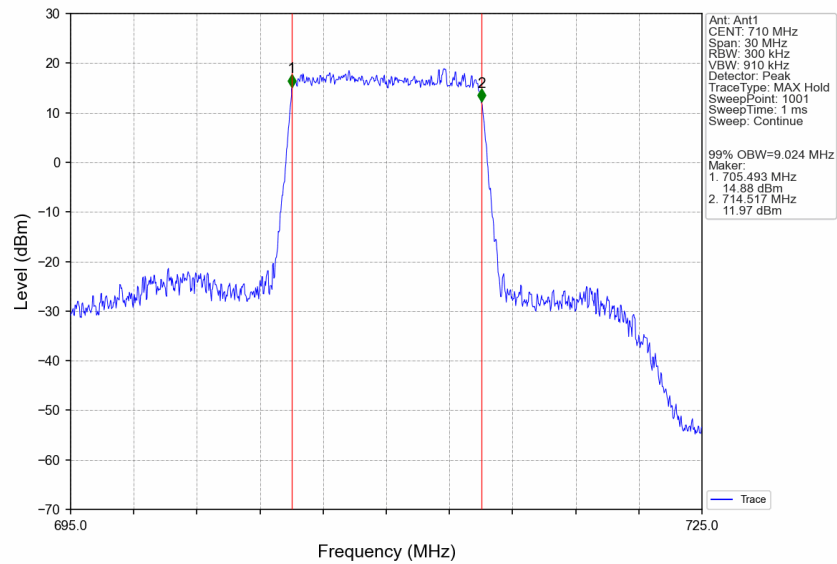
## 3.2.1 Band17\_OBW



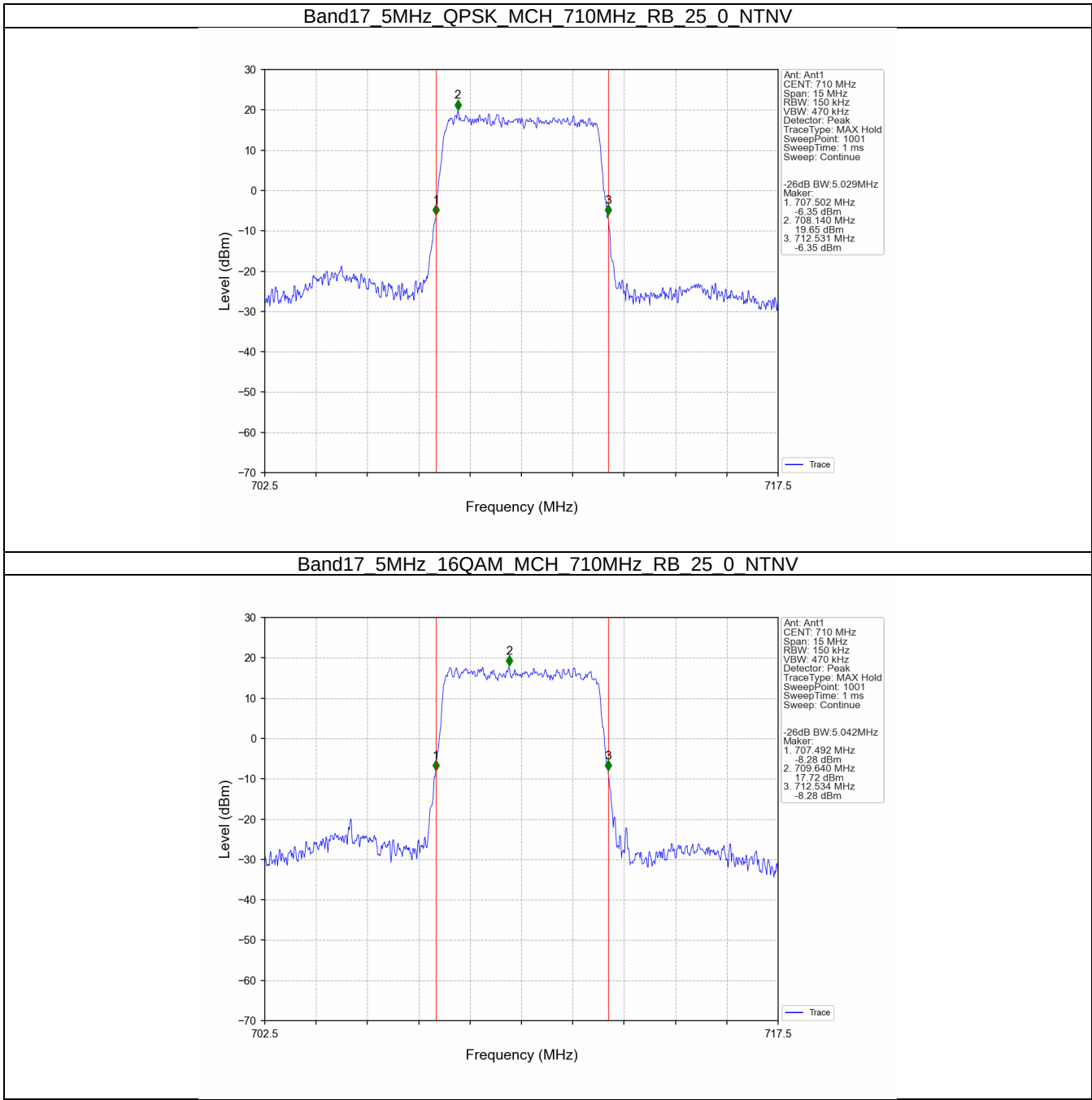
Band17\_10MHz\_QPSK\_MCH\_710MHz\_RB\_50\_0\_NTNV



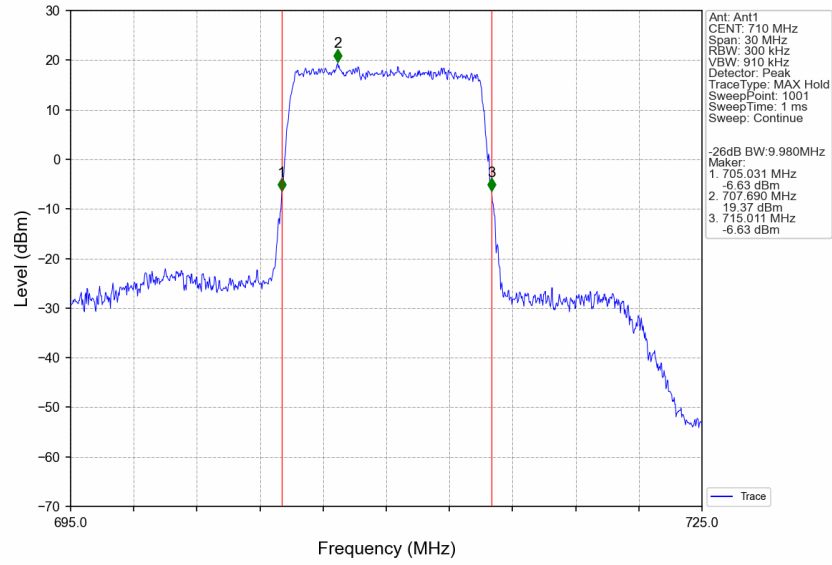
Band17\_10MHz\_16QAM\_MCH\_710MHz\_RB\_50\_0\_NTNV



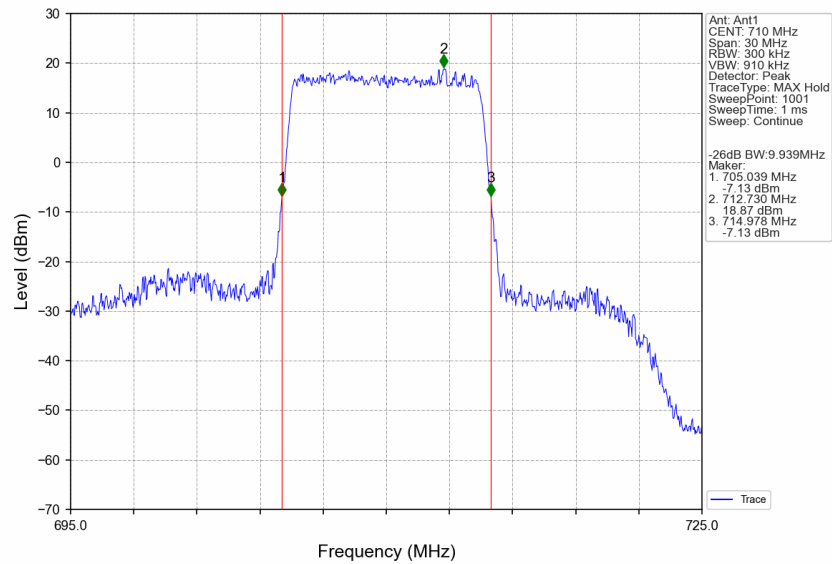
3.2.2 Band17\_XDB



Band17\_10MHz\_QPSK\_MCH\_710MHz\_RB\_50\_0\_NTNV



Band17\_10MHz\_16QAM\_MCH\_710MHz\_RB\_50\_0\_NTNV



## 4. Peak-Average Ratio

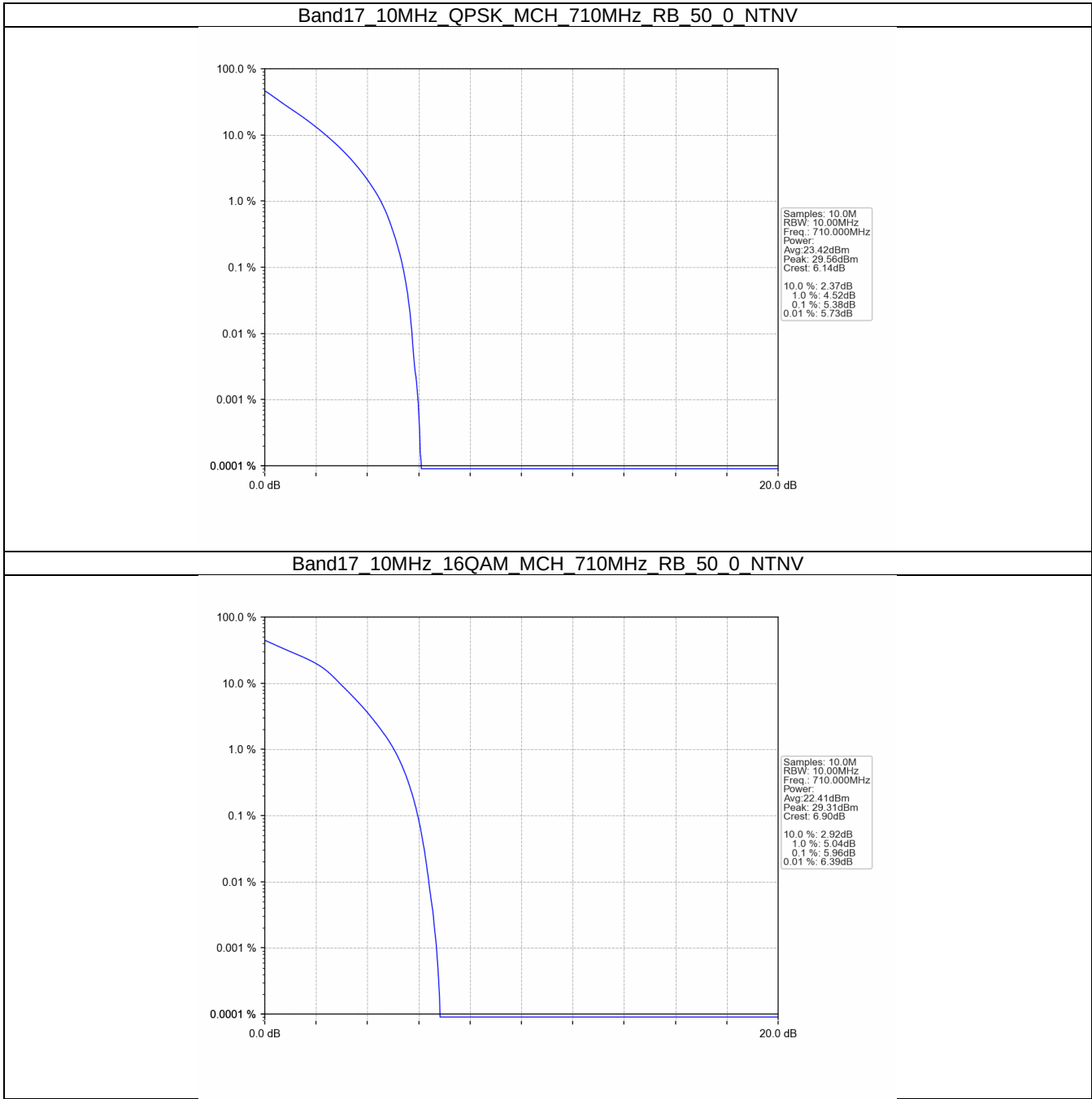
### 4.1 Test Result

#### 4.1.1 B17\_10MHz

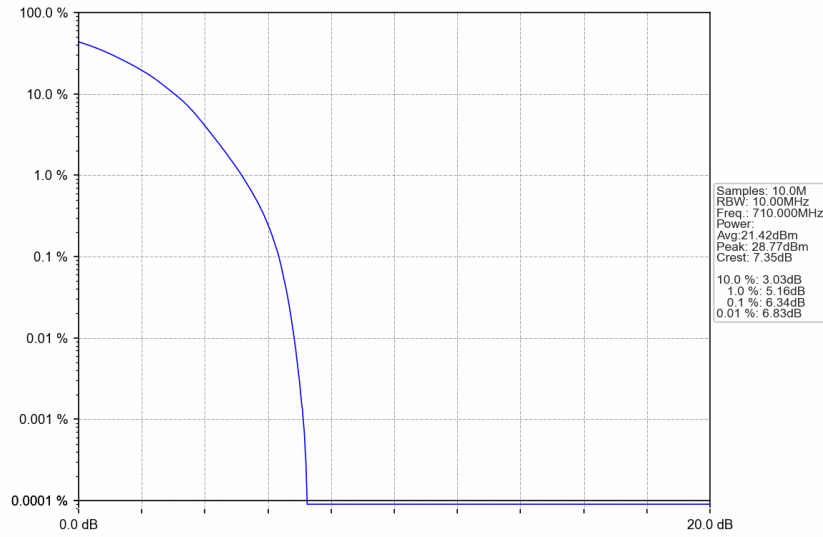
| Band: 17 / Bandwidth: 10MHz / NTNV |                    |               |        |                         |       |         |
|------------------------------------|--------------------|---------------|--------|-------------------------|-------|---------|
| Modulation                         | Frequency<br>(MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                    |                    | Size          | Offset | Result                  | Limit |         |
| QPSK                               | 710                | 50            | 0      | 5.38                    | <=13  | Pass    |
| 16QAM                              | 710                | 50            | 0      | 5.96                    | <=13  | Pass    |
| 64QAM                              | 710                | 50            | 0      | 6.34                    | <=13  | Pass    |
| 256QAM                             | 710                | 50            | 0      | 6.58                    | <=13  | Pass    |

4.2 Test Graph

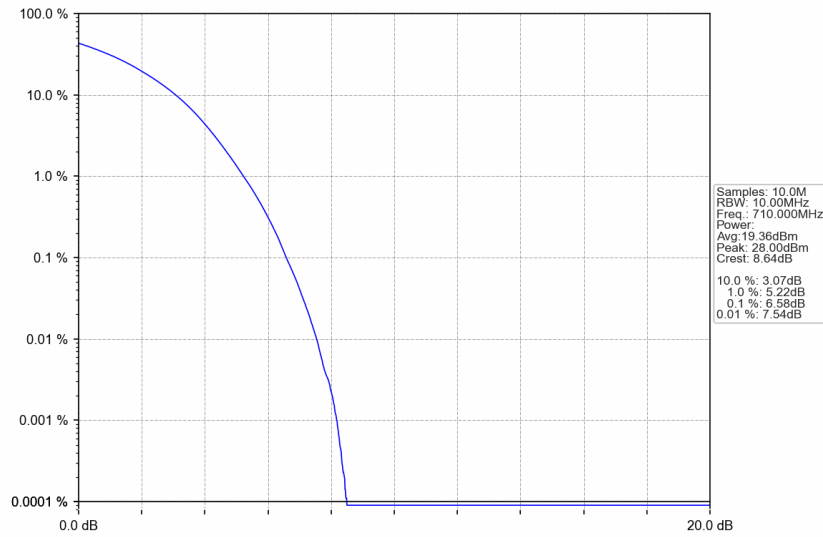
4.2.1 B17\_10MHz



Band17\_10MHz\_64QAM\_MCH\_710MHz\_RB\_50\_0\_NTNV



Band17\_10MHz\_256QAM\_MCH\_710MHz\_RB\_50\_0\_NTNV



## 5. Spurious Emission

### 5.1 Test Result

#### 5.1.1 B17\_5MHz

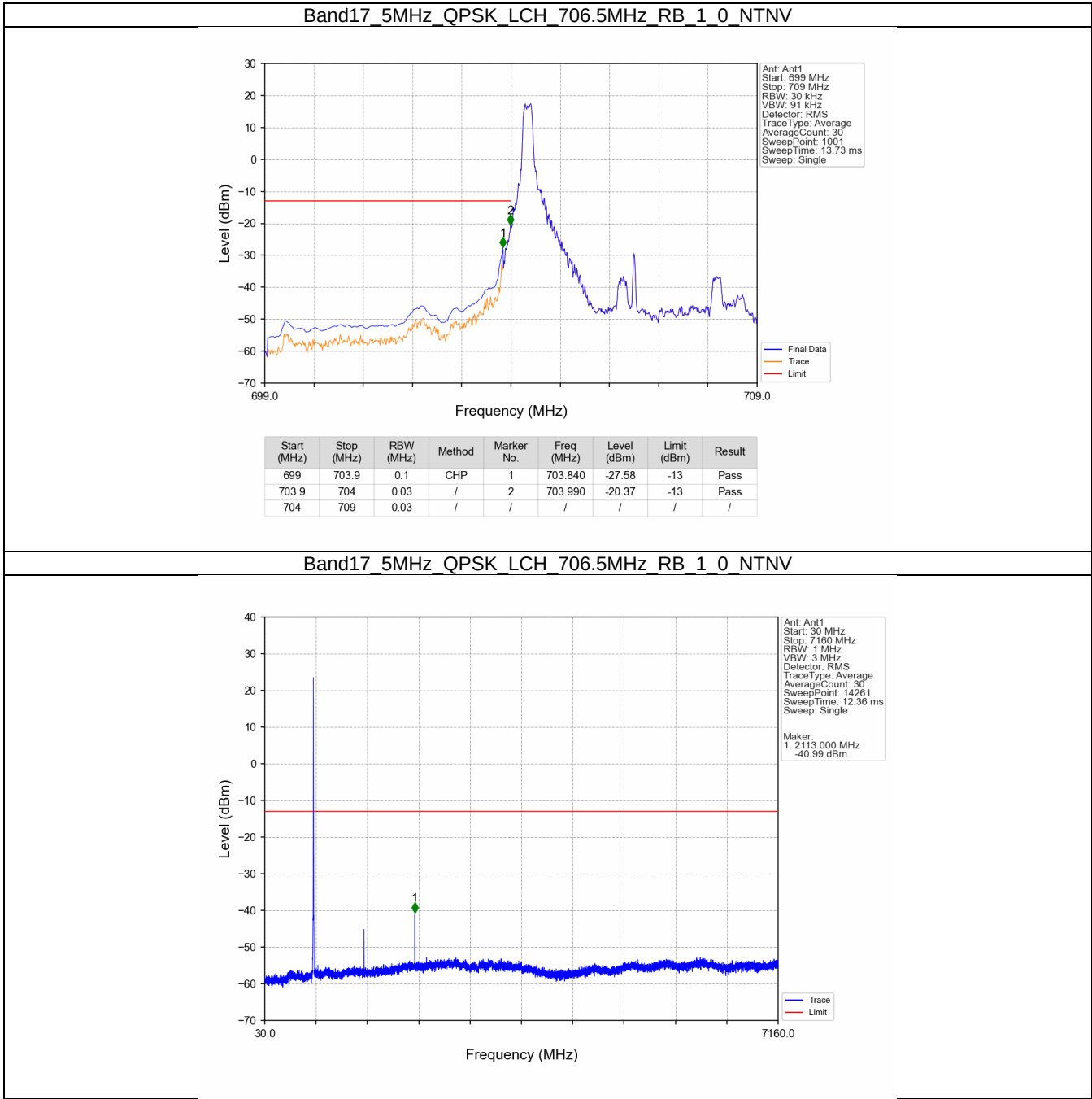
| Band: 17 / Bandwidth: 5MHz / NTV |                 |               |        |                     |       |         |
|----------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                  |                 | Size          | Offset | Result              | Limit |         |
| QPSK                             | 706.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                  |                 | 25            | 0      | Refer To Test Graph |       | Pass    |
|                                  | 710             | 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    |

#### 5.1.2 B17\_10MHz

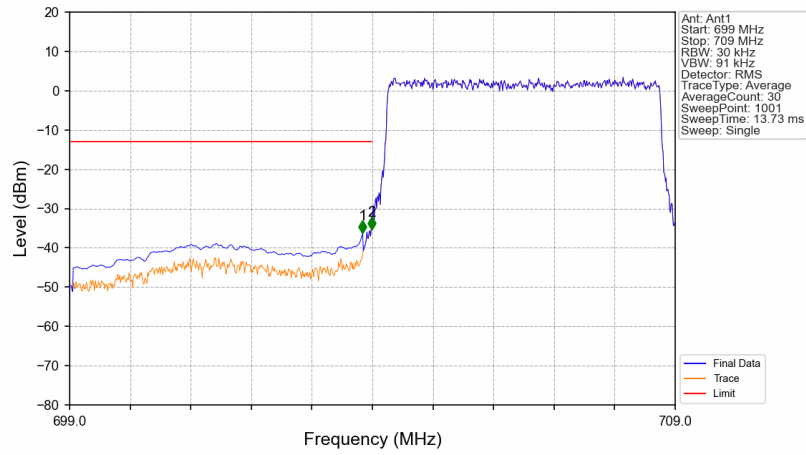
| Band: 17 / Bandwidth: 10MHz / NTVN |                 |               |        |                     |       |         |
|------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                    |                 | Size          | Offset | Result              | Limit |         |
| QPSK                               | 709             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 710             | 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    |

5.2 Test Graph

5.2.1 B17\_5MHz

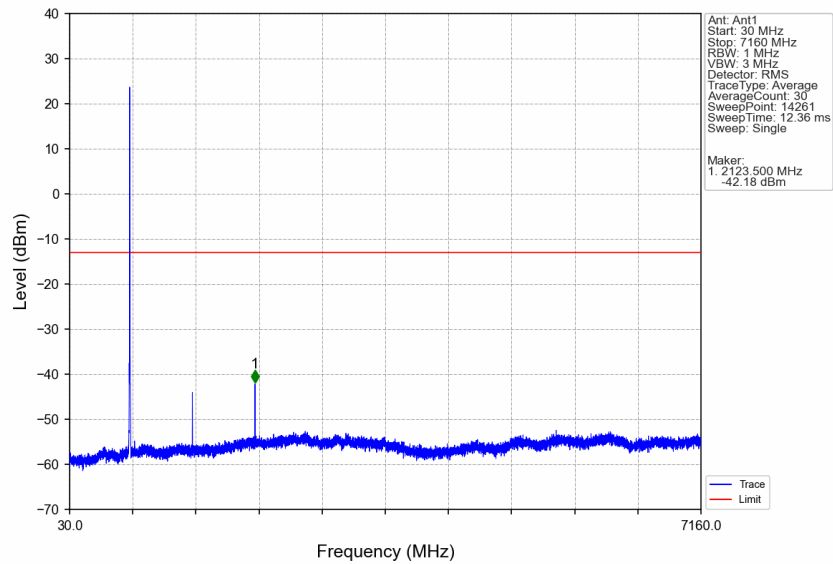


# Band17\_5MHz\_QPSK\_LCH\_706.5MHz\_RB\_25\_0\_NTNV

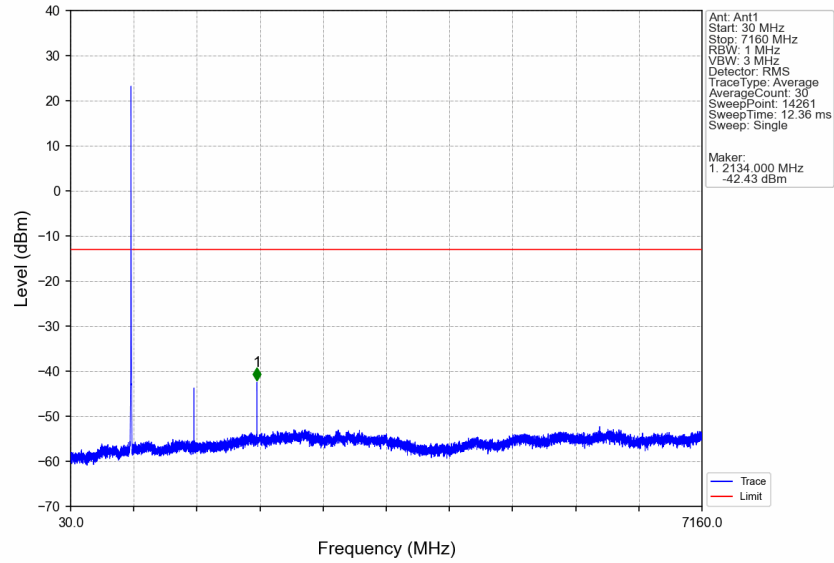


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 699         | 703.9      | 0.1       | CHP    | 1          | 703.840    | -36.29      | -13         | Pass   |
| 703.9       | 704        | 0.03      | /      | 2          | 703.990    | -35.28      | -13         | Pass   |
| 704         | 709        | 0.03      | /      | /          | /          | /           | /           | /      |

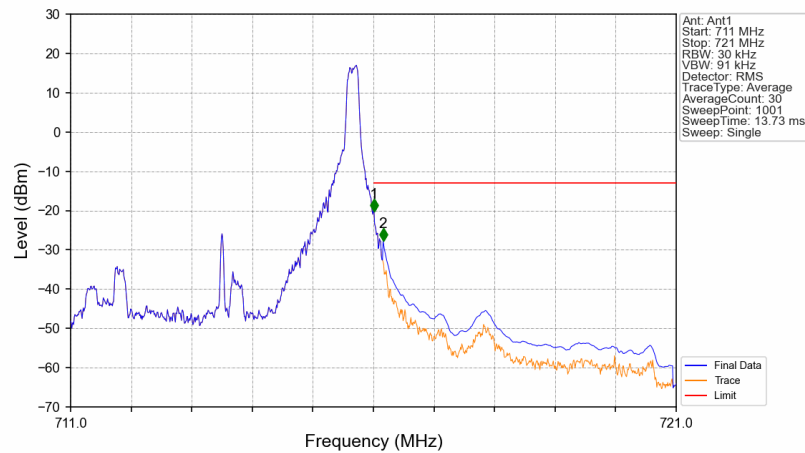
# Band17\_5MHz\_QPSK\_MCH\_710MHz\_RB\_1\_0\_NTNV



Band17\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_1\_0\_NTNV

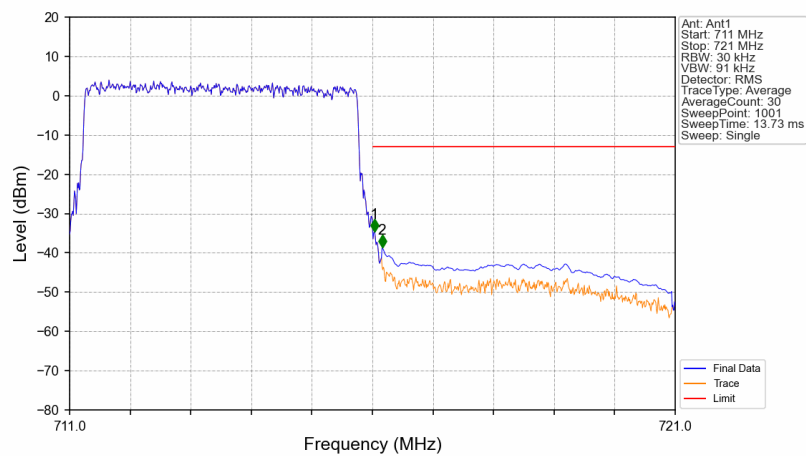


Band17\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_1\_24\_NTNV



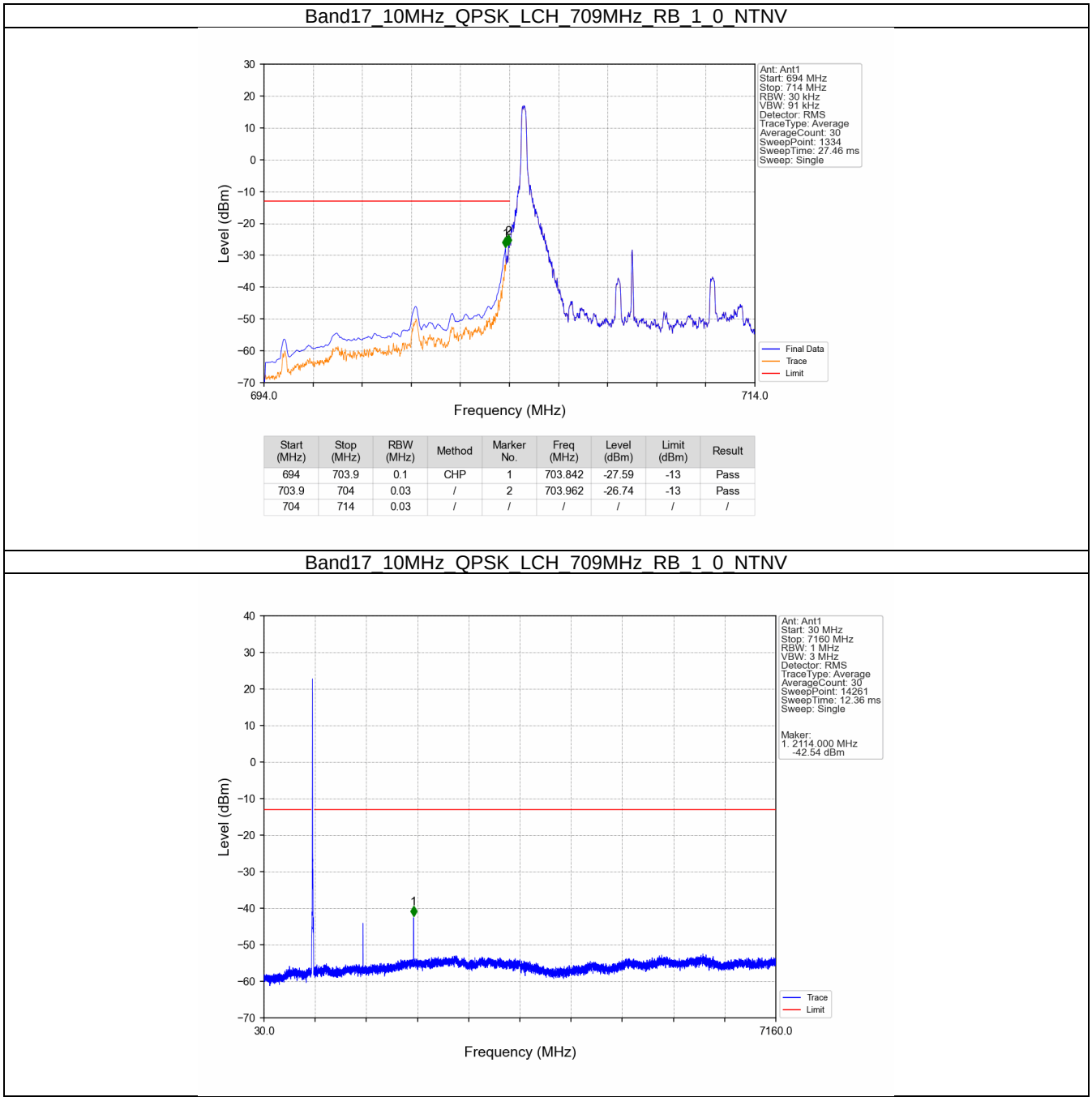
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 711         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.010    | -20.22      | -13         | Pass   |
| 716.1       | 721        | 0.1       | CHP    | 2          | 716.160    | -27.67      | -13         | Pass   |

Band17\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV

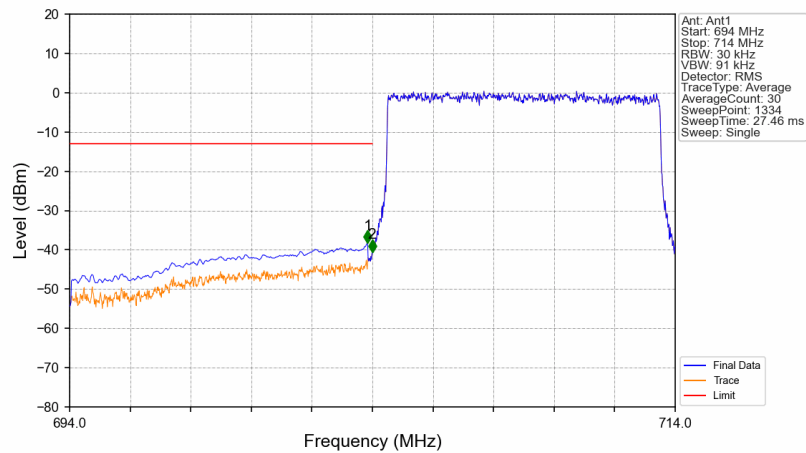


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 711         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.030    | -34.62      | -13         | Pass   |
| 716.1       | 721        | 0.1       | CHP    | 2          | 716.160    | -38.55      | -13         | Pass   |

5.2.2 B17\_10MHz

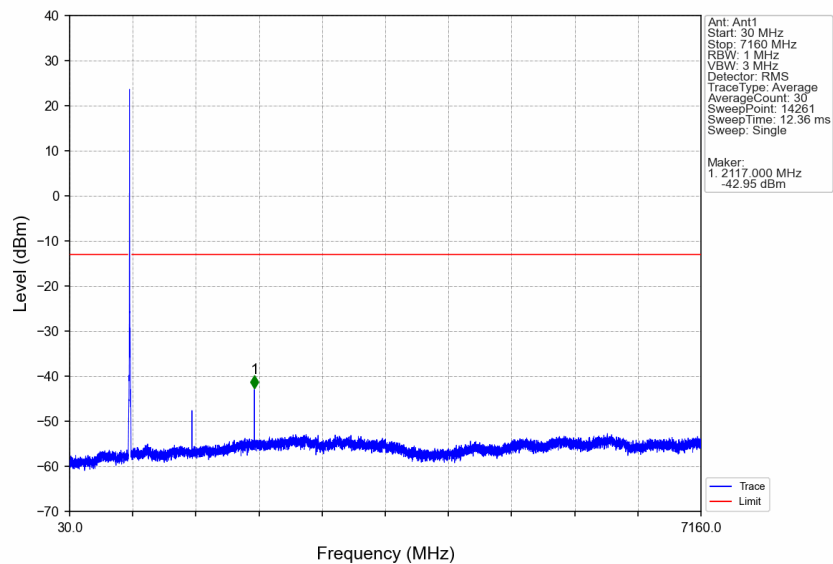


Band17\_10MHz\_QPSK\_LCH\_709MHz\_RB\_50\_0\_NTNV

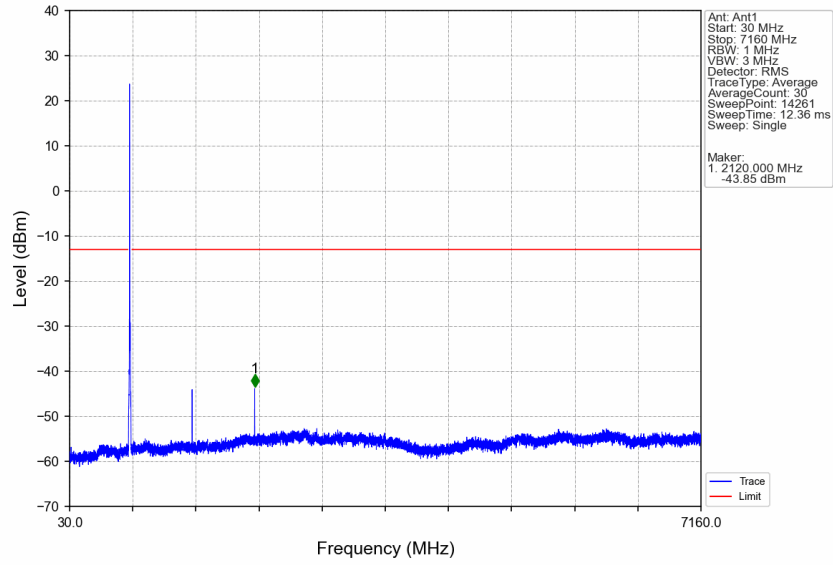


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 694         | 703.9      | 0.1       | CHP    | 1          | 703.842    | -38.16      | -13         | Pass   |
| 703.9       | 704        | 0.03      | /      | 2          | 703.992    | -40.51      | -13         | Pass   |
| 704         | 714        | 0.03      | /      | /          | /          | /           | /           | /      |

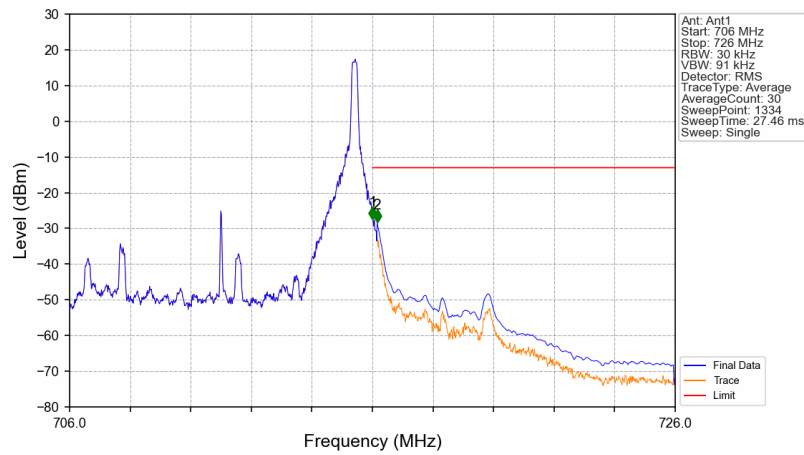
Band17\_10MHz\_QPSK\_MCH\_710MHz\_RB\_1\_0\_NTNV



# Band17\_10MHz\_QPSK\_HCH\_711MHz\_RB\_1\_0\_NTNV

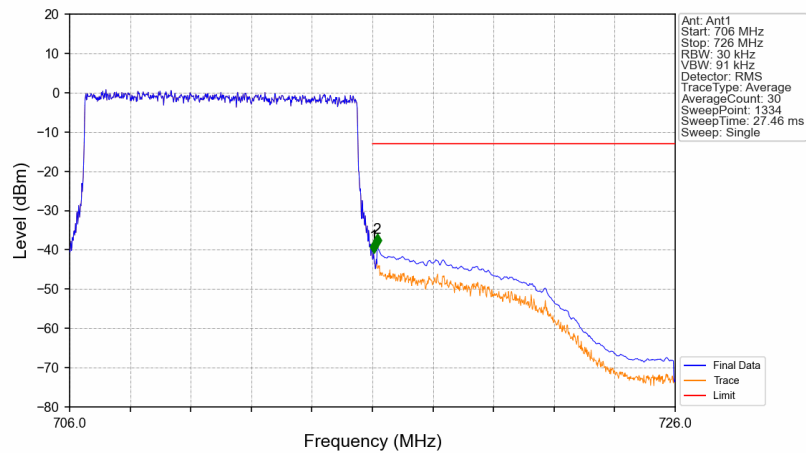


# Band17\_10MHz\_QPSK\_HCH\_711MHz\_RB\_1\_49\_NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 706         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.008    | -27.40      | -13         | Pass   |
| 716.1       | 726        | 0.1       | CHP    | 2          | 716.158    | -28.30      | -13         | Pass   |

Band17\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 706         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.038    | -40.84      | -13         | Pass   |
| 716.1       | 726        | 0.1       | CHP    | 2          | 716.158    | -39.18      | -13         | Pass   |

## 6. Field Strength of Spurious Radiation

**Test Band = LTE Band17\_ TM1**

**Test Channel = Low**

| Final Data List |                 |                |             |          |             |             |             |            |
|-----------------|-----------------|----------------|-------------|----------|-------------|-------------|-------------|------------|
| NO.             | Frequency [MHz] | Reading [dBμV] | Factor [dB] | AF[dB/m] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity   |
| 1               | 1409.1429       | 52.76          | -48.03      | 25.21    | -65.32      | -13.00      | 52.32       | Horizontal |
| 2               | 1941.1429       | 44.44          | -47.99      | 26.02    | -72.78      | -13.00      | 59.78       | Horizontal |
| 3               | 2113.7143       | 45.78          | -47.71      | 26.43    | -70.76      | -13.00      | 57.76       | Horizontal |
| 4               | 2818.2857       | 47.61          | -46.86      | 27.77    | -66.73      | -13.00      | 53.73       | Horizontal |
| 5               | 3360.5714       | 43.03          | -46.60      | 28.46    | -70.36      | -13.00      | 57.36       | Horizontal |
| 6               | 4405.7143       | 43.26          | -45.87      | 30.37    | -67.50      | -13.00      | 54.50       | Horizontal |

| Final Data List |                 |                |             |          |             |             |             |          |
|-----------------|-----------------|----------------|-------------|----------|-------------|-------------|-------------|----------|
| NO.             | Frequency [MHz] | Reading [dBμV] | Factor [dB] | AF[dB/m] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity |
| 1               | 1409.1429       | 51.22          | -48.03      | 25.21    | -66.86      | -13.00      | 53.86       | Vertical |
| 2               | 1979.4286       | 44.16          | -47.93      | 26.14    | -72.89      | -13.00      | 59.89       | Vertical |
| 3               | 2480            | 49.87          | -47.31      | 27.16    | -65.54      | -13.00      | 52.54       | Vertical |
| 4               | 2818.2857       | 44.60          | -46.86      | 27.77    | -69.74      | -13.00      | 56.74       | Vertical |
| 5               | 3462.2857       | 43.20          | -46.54      | 28.56    | -70.04      | -13.00      | 57.04       | Vertical |
| 6               | 4303.4286       | 42.79          | -45.78      | 30.13    | -68.13      | -13.00      | 55.13       | Vertical |

**Test Band = LTE Band17\_ TM1**  
**Test Channel = Mid**

| Final Data List |                 |                |             |          |             |             |             |            |
|-----------------|-----------------|----------------|-------------|----------|-------------|-------------|-------------|------------|
| NO.             | Frequency [MHz] | Reading [dBμV] | Factor [dB] | AF[dB/m] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity   |
| 1               | 1410.8571       | 52.78          | -48.03      | 25.21    | -65.30      | -13.00      | 52.30       | Horizontal |
| 2               | 1941.1429       | 44.68          | -47.99      | 26.02    | -72.54      | -13.00      | 59.54       | Horizontal |
| 3               | 2116.5714       | 45.81          | -47.71      | 26.43    | -70.72      | -13.00      | 57.72       | Horizontal |
| 4               | 2822.2857       | 47.93          | -46.84      | 27.78    | -66.39      | -13.00      | 53.39       | Horizontal |
| 5               | 3849.1429       | 43.23          | -46.19      | 29.16    | -69.07      | -13.00      | 56.07       | Horizontal |
| 6               | 4888.5714       | 42.34          | -45.59      | 31.22    | -67.29      | -13.00      | 54.29       | Horizontal |

| Final Data List |                 |                |             |          |             |             |             |          |
|-----------------|-----------------|----------------|-------------|----------|-------------|-------------|-------------|----------|
| NO.             | Frequency [MHz] | Reading [dBμV] | Factor [dB] | AF[dB/m] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity |
| 1               | 1411.4286       | 50.12          | -48.04      | 25.21    | -67.97      | -13.00      | 54.97       | Vertical |
| 2               | 2045.7143       | 43.96          | -47.81      | 26.29    | -72.82      | -13.00      | 59.82       | Vertical |
| 3               | 2563.4286       | 43.59          | -47.05      | 27.31    | -71.41      | -13.00      | 58.41       | Vertical |
| 4               | 3264.5714       | 43.48          | -46.54      | 28.36    | -69.96      | -13.00      | 56.96       | Vertical |
| 5               | 4717.7143       | 43.36          | -45.77      | 30.95    | -66.72      | -13.00      | 53.72       | Vertical |
| 6               | 6605.7143       | 41.46          | -44.47      | 34.29    | -63.98      | -13.00      | 50.98       | Vertical |

**Test Band = LTE Band17\_ TM1**  
**Test Channel = High**

**Final Data List**

| NO. | Frequency [MHz] | Reading [dBμV] | Factor [dB] | AF[dB/m] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity   |
|-----|-----------------|----------------|-------------|----------|-------------|-------------|-------------|------------|
| 1   | 1413.1429       | 53.08          | -48.04      | 25.21    | -65.01      | -13.00      | 52.01       | Horizontal |
| 2   | 2120            | 46.91          | -47.70      | 26.44    | -69.61      | -13.00      | 56.61       | Horizontal |
| 3   | 2826.2857       | 49.82          | -46.83      | 27.79    | -64.48      | -13.00      | 51.48       | Horizontal |
| 4   | 3847.4286       | 43.37          | -46.19      | 29.16    | -68.93      | -13.00      | 55.93       | Horizontal |
| 5   | 4567.4286       | 43.73          | -45.73      | 30.71    | -66.55      | -13.00      | 53.55       | Horizontal |
| 6   | 5781.7143       | 42.37          | -44.64      | 32.36    | -65.18      | -13.00      | 52.18       | Horizontal |

**Final Data List**

| NO. | Frequency [MHz] | Reading [dBμV] | Factor [dB] | AF[dB/m] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity |
|-----|-----------------|----------------|-------------|----------|-------------|-------------|-------------|----------|
| 1   | 1413.1429       | 49.84          | -48.04      | 25.21    | -68.25      | -13.00      | 55.25       | Vertical |
| 2   | 1838.2857       | 44.42          | -47.99      | 25.71    | -73.11      | -13.00      | 60.11       | Vertical |
| 3   | 2354.2857       | 43.78          | -47.47      | 26.91    | -72.04      | -13.00      | 59.04       | Vertical |
| 4   | 3012.5714       | 43.28          | -46.55      | 28.11    | -70.42      | -13.00      | 57.42       | Vertical |
| 5   | 4123.4286       | 42.64          | -45.91      | 29.70    | -68.84      | -13.00      | 55.84       | Vertical |
| 6   | 5487.4286       | 42.88          | -45.12      | 32.28    | -65.22      | -13.00      | 52.22       | Vertical |