# 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 | 23.59 | -0.5 | 20.94 | <=34.77 | Pass |
| | | | 2 | 23.63 | -0.5 | 20.98 | <=34.77 | Pass |
| | | | 5 | 23.6 | -0.5 | 20.95 | <=34.77 | Pass |
| | | 3 | 0 | 23.62 | -0.5 | 20.97 | <=34.77 | Pass |
| | | | 2 | 23.58 | -0.5 | 20.93 | <=34.77 | Pass |
| | | | 3 | 23.57 | -0.5 | 20.92 | <=34.77 | Pass |
| | | 6 | 0 | 22.58 | -0.5 | 19.93 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 23.61 | -0.5 | 20.96 | <=34.77 | Pass |
| | | | 2 | 23.61 | -0.5 | 20.96 | <=34.77 | Pass |
| | | | 5 | 23.63 | -0.5 | 20.98 | <=34.77 | Pass |
| | | 3 | 0 | 23.62 | -0.5 | 20.97 | <=34.77 | Pass |
| | | | 2 | 23.64 | -0.5 | 20.99 | <=34.77 | Pass |
| | | | 3 | 23.6 | -0.5 | 20.95 | <=34.77 | Pass |
| | | 6 | 0 | 22.58 | -0.5 | 19.93 | <=34.77 | Pass |
| | 715.3 | 1 | 0 | 23.53 | -0.5 | 20.88 | <=34.77 | Pass |
| | | | 2 | 23.55 | -0.5 | 20.9 | <=34.77 | Pass |
| | | | 5 | 23.47 | -0.5 | 20.82 | <=34.77 | Pass |
| | | 3 | 0 | 23.48 | -0.5 | 20.83 | <=34.77 | Pass |
| | | | 2 | 23.49 | -0.5 | 20.84 | <=34.77 | Pass |
| | | | 3 | 23.5 | -0.5 | 20.85 | <=34.77 | Pass |
| | | 6 | 0 | 22.54 | -0.5 | 19.89 | <=34.77 | Pass |
| 16QAM | 699.7 | 1 | 0 | 22.78 | -0.5 | 20.13 | <=34.77 | Pass |
| | | | 2 | 22.77 | -0.5 | 20.12 | <=34.77 | Pass |
| | | | 5 | 22.67 | -0.5 | 20.02 | <=34.77 | Pass |
| | | 3 | 0 | 22.61 | -0.5 | 19.96 | <=34.77 | Pass |
| | | | 2 | 22.64 | -0.5 | 19.99 | <=34.77 | Pass |
| | | | 3 | 22.57 | -0.5 | 19.92 | <=34.77 | Pass |
| | | 6 | 0 | 21.54 | -0.5 | 18.89 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 22.79 | -0.5 | 20.14 | <=34.77 | Pass |
| | | | 2 | 22.78 | -0.5 | 20.13 | <=34.77 | Pass |
| | | | 5 | 22.73 | -0.5 | 20.08 | <=34.77 | Pass |
| | | 3 | 0 | 22.65 | -0.5 | 20 | <=34.77 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2 | 22.7 | -0.5 | 20.05 | <=34.77 | Pass |
| | | | 3 | 22.7 | -0.5 | 20.05 | <=34.77 | Pass |
| | | 6 | 0 | 21.61 | -0.5 | 18.96 | <=34.77 | Pass |
| | 715.3 | 1 | 0 | 22.74 | -0.5 | 20.09 | <=34.77 | Pass |
| | | | 2 | 22.73 | -0.5 | 20.08 | <=34.77 | Pass |
| | | | 5 | 22.57 | -0.5 | 19.92 | <=34.77 | Pass |
| | | 3 | 0 | 22.61 | -0.5 | 19.96 | <=34.77 | Pass |
| | | | 2 | 22.6 | -0.5 | 19.95 | <=34.77 | Pass |
| | | | 3 | 22.59 | -0.5 | 19.94 | <=34.77 | Pass |
| | | 6 | 0 | 21.59 | -0.5 | 18.94 | <=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 / NTNV | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) | | Verdict |
| | | Size | Offset | | | Result | Limit | |
| QPSK | 700.5 | 1 | 0 | 23.52 | -0.5 | 20.87 | <=34.77 | Pass |
| | | | 7 | 23.58 | -0.5 | 20.93 | <=34.77 | Pass |
| | | | 14 | 23.51 | -0.5 | 20.86 | <=34.77 | Pass |
| | | 8 | 0 | 22.58 | -0.5 | 19.93 | <=34.77 | Pass |
| | | | 4 | 22.63 | -0.5 | 19.98 | <=34.77 | Pass |
| | | | 7 | 22.65 | -0.5 | 20 | <=34.77 | Pass |
| | | 15 | 0 | 22.66 | -0.5 | 20.01 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 23.58 | -0.5 | 20.93 | <=34.77 | Pass |
| | | | 7 | 23.69 | -0.5 | 21.04 | <=34.77 | Pass |
| | | | 14 | 23.59 | -0.5 | 20.94 | <=34.77 | Pass |
| | | 8 | 0 | 22.62 | -0.5 | 19.97 | <=34.77 | Pass |
| | | | 4 | 22.68 | -0.5 | 20.03 | <=34.77 | Pass |
| | | | 7 | 22.62 | -0.5 | 19.97 | <=34.77 | Pass |
| | | 15 | 0 | 22.59 | -0.5 | 19.94 | <=34.77 | Pass |
| | 714.5 | 1 | 0 | 23.54 | -0.5 | 20.89 | <=34.77 | Pass |
| | | | 7 | 23.58 | -0.5 | 20.93 | <=34.77 | Pass |
| | | | 14 | 23.48 | -0.5 | 20.83 | <=34.77 | Pass |
| | | 8 | 0 | 22.52 | -0.5 | 19.87 | <=34.77 | Pass |
| | | | 4 | 22.52 | -0.5 | 19.87 | <=34.77 | Pass |
| | | | 7 | 22.59 | -0.5 | 19.94 | <=34.77 | Pass |
| | | 15 | 0 | 22.5 | -0.5 | 19.85 | <=34.77 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16QAM | 700.5 | 1 | 0 | 22.67 | -0.5 | 20.02 | <=34.77 | Pass |
| | | | 7 | 22.76 | -0.5 | 20.11 | <=34.77 | Pass |
| | | | 14 | 22.76 | -0.5 | 20.11 | <=34.77 | Pass |
| | | 8 | 0 | 21.71 | -0.5 | 19.06 | <=34.77 | Pass |
| | | | 4 | 21.68 | -0.5 | 19.03 | <=34.77 | Pass |
| | | | 7 | 21.66 | -0.5 | 19.01 | <=34.77 | Pass |
| | | 15 | 0 | 21.67 | -0.5 | 19.02 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 22.78 | -0.5 | 20.13 | <=34.77 | Pass |
| | | | 7 | 22.88 | -0.5 | 20.23 | <=34.77 | Pass |
| | | | 14 | 22.69 | -0.5 | 20.04 | <=34.77 | Pass |
| | | 8 | 0 | 21.65 | -0.5 | 19 | <=34.77 | Pass |
| | | | 4 | 21.71 | -0.5 | 19.06 | <=34.77 | Pass |
| | | | 7 | 21.68 | -0.5 | 19.03 | <=34.77 | Pass |
| | | 15 | 0 | 21.6 | -0.5 | 18.95 | <=34.77 | Pass |
| | 714.5 | 1 | 0 | 22.67 | -0.5 | 20.02 | <=34.77 | Pass |
| | | | 7 | 22.74 | -0.5 | 20.09 | <=34.77 | Pass |
| | | | 14 | 22.65 | -0.5 | 20 | <=34.77 | Pass |
| | | 8 | 0 | 21.59 | -0.5 | 18.94 | <=34.77 | Pass |
| | | | 4 | 21.63 | -0.5 | 18.98 | <=34.77 | Pass |
| | | | 7 | 21.6 | -0.5 | 18.95 | <=34.77 | Pass |
| | | 15 | 0 | 21.55 | -0.5 | 18.9 | <=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 | 23.61 | -0.5 | 20.96 | <=34.77 | Pass |
| | | | 13 | 23.67 | -0.5 | 21.02 | <=34.77 | Pass |
| | | | 24 | 23.6 | -0.5 | 20.95 | <=34.77 | Pass |
| | | 12 | 0 | 22.59 | -0.5 | 19.94 | <=34.77 | Pass |
| | | | 6 | 22.67 | -0.5 | 20.02 | <=34.77 | Pass |
| | | | 13 | 22.65 | -0.5 | 20 | <=34.77 | Pass |
| | | 25 | 0 | 22.67 | -0.5 | 20.02 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 23.61 | -0.5 | 20.96 | <=34.77 | Pass |
| | | | 13 | 23.66 | -0.5 | 21.01 | <=34.77 | Pass |
| | | | 24 | 23.58 | -0.5 | 20.93 | <=34.77 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 12 | 0 | 22.64 | -0.5 | 19.99 | <=34.77 | Pass |
| | | | 6 | 22.64 | -0.5 | 19.99 | <=34.77 | Pass |
| | | | 13 | 22.65 | -0.5 | 20 | <=34.77 | Pass |
| | | 25 | 0 | 22.58 | -0.5 | 19.93 | <=34.77 | Pass |
| | 713.5 | 1 | 0 | 23.62 | -0.5 | 20.97 | <=34.77 | Pass |
| | | | 13 | 23.65 | -0.5 | 21 | <=34.77 | Pass |
| | | | 24 | 23.59 | -0.5 | 20.94 | <=34.77 | Pass |
| | | 12 | 0 | 22.58 | -0.5 | 19.93 | <=34.77 | Pass |
| | | | 6 | 22.59 | -0.5 | 19.94 | <=34.77 | Pass |
| | | | 13 | 22.56 | -0.5 | 19.91 | <=34.77 | Pass |
| | | 25 | 0 | 22.55 | -0.5 | 19.9 | <=34.77 | Pass |
| 16QAM | 701.5 | 1 | 0 | 22.72 | -0.5 | 20.07 | <=34.77 | Pass |
| | | | 13 | 22.75 | -0.5 | 20.1 | <=34.77 | Pass |
| | | | 24 | 22.72 | -0.5 | 20.07 | <=34.77 | Pass |
| | | 12 | 0 | 21.64 | -0.5 | 18.99 | <=34.77 | Pass |
| | | | 6 | 21.72 | -0.5 | 19.07 | <=34.77 | Pass |
| | | | 13 | 21.68 | -0.5 | 19.03 | <=34.77 | Pass |
| | | 25 | 0 | 21.69 | -0.5 | 19.04 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 22.76 | -0.5 | 20.11 | <=34.77 | Pass |
| | | | 13 | 22.8 | -0.5 | 20.15 | <=34.77 | Pass |
| | | | 24 | 22.77 | -0.5 | 20.12 | <=34.77 | Pass |
| | | 12 | 0 | 21.61 | -0.5 | 18.96 | <=34.77 | Pass |
| | | | 6 | 21.65 | -0.5 | 19 | <=34.77 | Pass |
| | | | 13 | 21.65 | -0.5 | 19 | <=34.77 | Pass |
| | | 25 | 0 | 21.6 | -0.5 | 18.95 | <=34.77 | Pass |
| | 713.5 | 1 | 0 | 22.83 | -0.5 | 20.18 | <=34.77 | Pass |
| | | | 13 | 22.77 | -0.5 | 20.12 | <=34.77 | Pass |
| | | | 24 | 22.7 | -0.5 | 20.05 | <=34.77 | Pass |
| | | 12 | 0 | 21.63 | -0.5 | 18.98 | <=34.77 | Pass |
| | | | 6 | 21.63 | -0.5 | 18.98 | <=34.77 | Pass |
| | | | 13 | 21.62 | -0.5 | 18.97 | <=34.77 | Pass |
| | | 25 | 0 | 21.55 | -0.5 | 18.9 | <=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 / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency | RB Allocation | Conducted Power | Gain | ERP (dBm) | Verdict |

| | (MHz) | Size | Offset | (dBm) | (dBi) | Result | Limit | |
|---|---|---|---|---|---|---|---|---|
| QPSK | 704 | 1 | 0 | 23.54 | -0.5 | 20.89 | <=34.77 | Pass |
| | | | 25 | 23.59 | -0.5 | 20.94 | <=34.77 | Pass |
| | | | 49 | 23.55 | -0.5 | 20.9 | <=34.77 | Pass |
| | | 25 | 0 | 22.61 | -0.5 | 19.96 | <=34.77 | Pass |
| | | | 13 | 22.71 | -0.5 | 20.06 | <=34.77 | Pass |
| | | | 25 | 22.65 | -0.5 | 20 | <=34.77 | Pass |
| | | 50 | 0 | 22.78 | -0.5 | 20.13 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 23.65 | -0.5 | 21 | <=34.77 | Pass |
| | | | 25 | 23.64 | -0.5 | 20.99 | <=34.77 | Pass |
| | | | 49 | 23.48 | -0.5 | 20.83 | <=34.77 | Pass |
| | | 25 | 0 | 22.64 | -0.5 | 19.99 | <=34.77 | Pass |
| | | | 13 | 22.63 | -0.5 | 19.98 | <=34.77 | Pass |
| | | | 25 | 22.64 | -0.5 | 19.99 | <=34.77 | Pass |
| | | 50 | 0 | 22.68 | -0.5 | 20.03 | <=34.77 | Pass |
| | 711 | 1 | 0 | 23.64 | -0.5 | 20.99 | <=34.77 | Pass |
| | | | 25 | 23.62 | -0.5 | 20.97 | <=34.77 | Pass |
| | | | 49 | 23.48 | -0.5 | 20.83 | <=34.77 | Pass |
| | | 25 | 0 | 22.61 | -0.5 | 19.96 | <=34.77 | Pass |
| | | | 13 | 22.67 | -0.5 | 20.02 | <=34.77 | Pass |
| | | | 25 | 22.59 | -0.5 | 19.94 | <=34.77 | Pass |
| | | 50 | 0 | 22.77 | -0.5 | 20.12 | <=34.77 | Pass |
| 16QAM | 704 | 1 | 0 | 22.79 | -0.5 | 20.14 | <=34.77 | Pass |
| | | | 25 | 22.81 | -0.5 | 20.16 | <=34.77 | Pass |
| | | | 49 | 22.73 | -0.5 | 20.08 | <=34.77 | Pass |
| | | 25 | 0 | 21.65 | -0.5 | 19 | <=34.77 | Pass |
| | | | 13 | 21.73 | -0.5 | 19.08 | <=34.77 | Pass |
| | | | 25 | 21.68 | -0.5 | 19.03 | <=34.77 | Pass |
| | | 50 | 0 | 21.77 | -0.5 | 19.12 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 22.81 | -0.5 | 20.16 | <=34.77 | Pass |
| | | | 25 | 22.81 | -0.5 | 20.16 | <=34.77 | Pass |
| | | | 49 | 22.73 | -0.5 | 20.08 | <=34.77 | Pass |
| | | 25 | 0 | 21.64 | -0.5 | 18.99 | <=34.77 | Pass |
| | | | 13 | 21.63 | -0.5 | 18.98 | <=34.77 | Pass |
| | | | 25 | 21.63 | -0.5 | 18.98 | <=34.77 | Pass |
| | | 50 | 0 | 21.68 | -0.5 | 19.03 | <=34.77 | Pass |
| | 711 | 1 | 0 | 22.78 | -0.5 | 20.13 | <=34.77 | Pass |
| | | | 25 | 22.74 | -0.5 | 20.09 | <=34.77 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 49 | 22.7 | -0.5 | 20.05 | <=34.77 | Pass |
| | | 25 | 0 | 21.66 | -0.5 | 19.01 | <=34.77 | Pass |
| | | | 13 | 21.71 | -0.5 | 19.06 | <=34.77 | Pass |
| | | | 25 | 21.6 | -0.5 | 18.95 | <=34.77 | Pass |
| | | 50 | 0 | 21.78 | -0.5 | 19.13 | <=34.77 | Pass |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 | | | | | | | | |

# 2. Frequency Stability

## 2.1 B12_10MHz

### 2.1.1 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 | 1.438 | 0.0020 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 0.888 | 0.0013 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 0.753 | 0.0011 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 0.873 | 0.0012 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 1.521 | 0.0022 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 0.843 | 0.0012 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 1.060 | 0.0015 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 0.881 | 0.0013 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 0.832 | 0.0012 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 0.074 | 0.0001 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 0.833 | 0.0012 | -2.5 to 2.5 | Pass |
| | 707.5 | 50 | 0 | 20 | 3.27 | -2.118 | -0.0030 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -1.461 | -0.0021 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -1.511 | -0.0021 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -1.532 | -0.0022 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -1.285 | -0.0018 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -1.187 | -0.0017 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -1.293 | -0.0018 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -2.161 | -0.0031 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -1.294 | -0.0018 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -1.557 | -0.0022 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -1.688 | -0.0024 | -2.5 to 2.5 | Pass |
| | 711 | 50 | 0 | 20 | 3.27 | -0.228 | -0.0003 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 0.247 | 0.0003 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -0.232 | -0.0003 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -0.066 | -0.0001 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 0.359 | 0.0005 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -1.053 | -0.0015 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -0.701 | -0.0010 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 0.341 | 0.0005 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 0.111 | 0.0002 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -0.330 | -0.0005 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -0.910 | -0.0013 | -2.5 to 2.5 | Pass |

# 3. 99% & 26dB Bandwidth

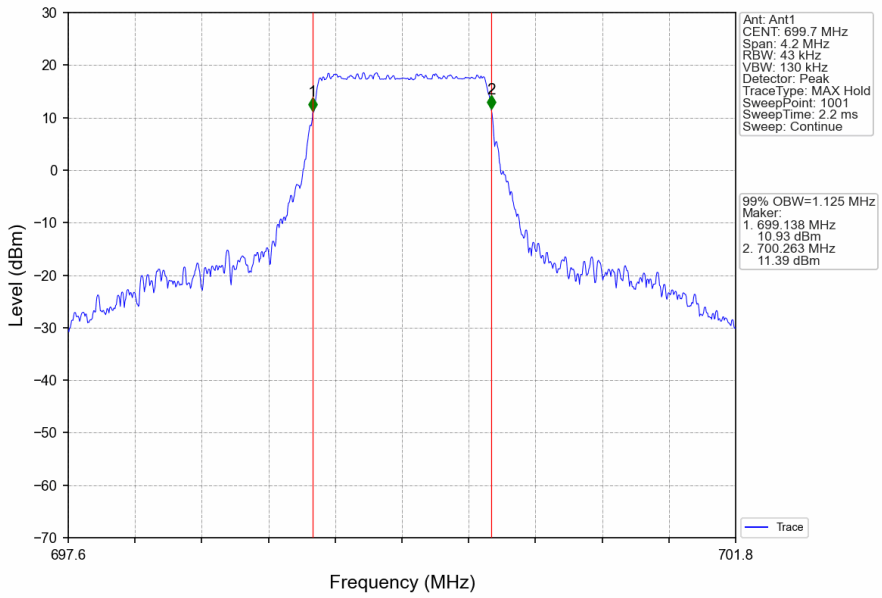
## 3.1 Band12_OBW

### 3.1.1 Test Result

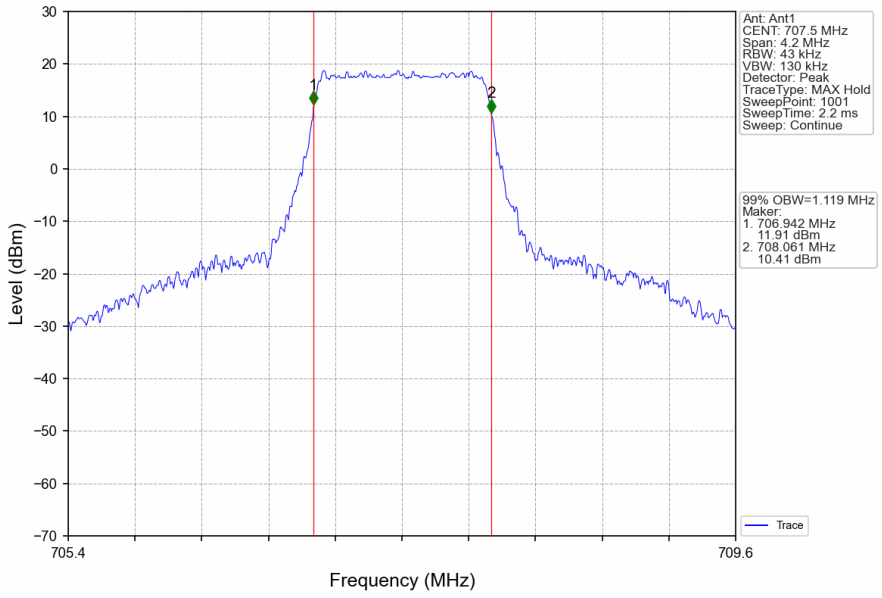
| Band: 12 / NTNV | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation | | 99% Occupied Bandwidth (MHz) | | Verdict |
| | | | Size | Offset | Result | Limit | |
| 1.4 | QPSK | 699.7 | 6 | 0 | 1.125 | / | Pass |
| | | 707.5 | 6 | 0 | 1.119 | / | Pass |
| | | 715.3 | 6 | 0 | 1.125 | / | Pass |
| | 16QAM | 699.7 | 6 | 0 | 1.129 | / | Pass |
| | | 707.5 | 6 | 0 | 1.129 | / | Pass |
| | | 715.3 | 6 | 0 | 1.125 | / | Pass |
| 3 | QPSK | 700.5 | 15 | 0 | 2.746 | / | Pass |
| | | 707.5 | 15 | 0 | 2.750 | / | Pass |
| | | 714.5 | 15 | 0 | 2.755 | / | Pass |
| | 16QAM | 700.5 | 15 | 0 | 2.746 | / | Pass |
| | | 707.5 | 15 | 0 | 2.757 | / | Pass |
| | | 714.5 | 15 | 0 | 2.760 | / | Pass |
| 5 | QPSK | 701.5 | 25 | 0 | 4.564 | / | Pass |
| | | 707.5 | 25 | 0 | 4.540 | / | Pass |
| | | 713.5 | 25 | 0 | 4.597 | / | Pass |
| | 16QAM | 701.5 | 25 | 0 | 4.586 | / | Pass |
| | | 707.5 | 25 | 0 | 4.571 | / | Pass |
| | | 713.5 | 25 | 0 | 4.578 | / | Pass |
| 10 | QPSK | 704 | 50 | 0 | 9.056 | / | Pass |
| | | 707.5 | 50 | 0 | 9.040 | / | Pass |
| | | 711 | 50 | 0 | 9.086 | / | Pass |
| | 16QAM | 704 | 50 | 0 | 9.084 | / | Pass |
| | | 707.5 | 50 | 0 | 9.054 | / | Pass |
| | | 711 | 50 | 0 | 9.049 | / | Pass |

## 3.1.2 Test Graph

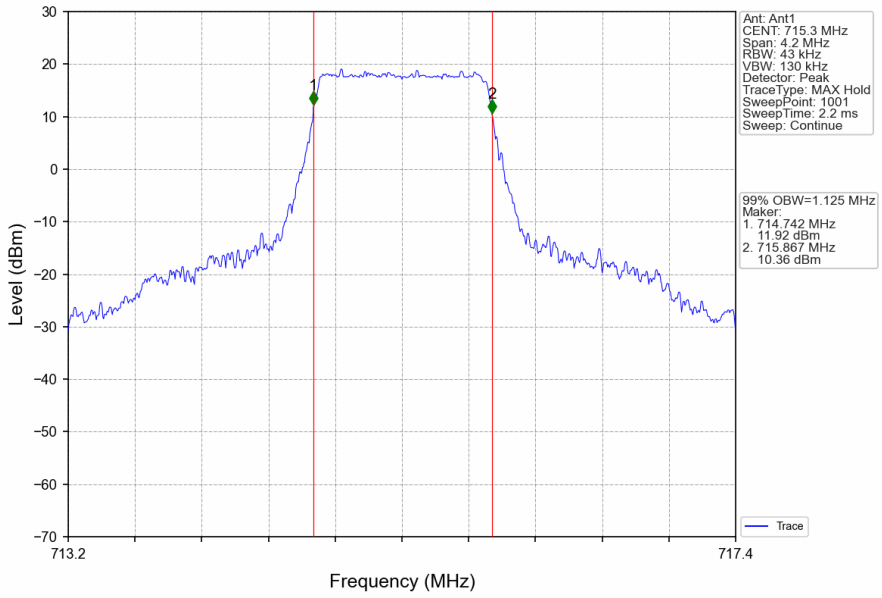
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



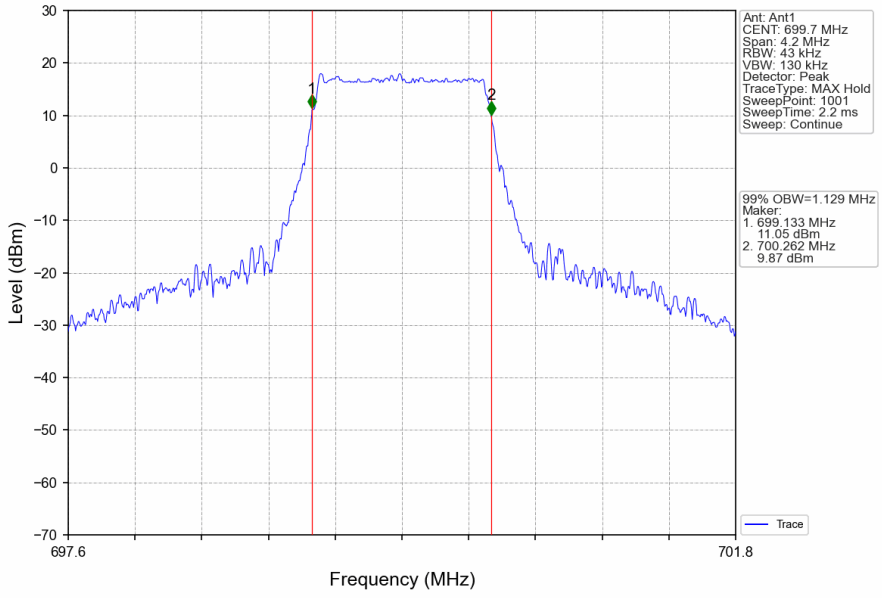

Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



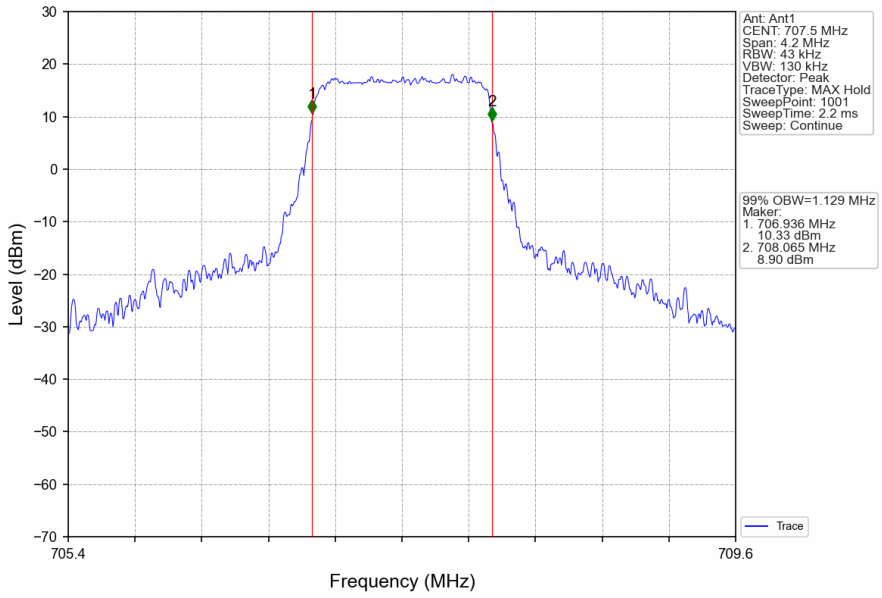
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



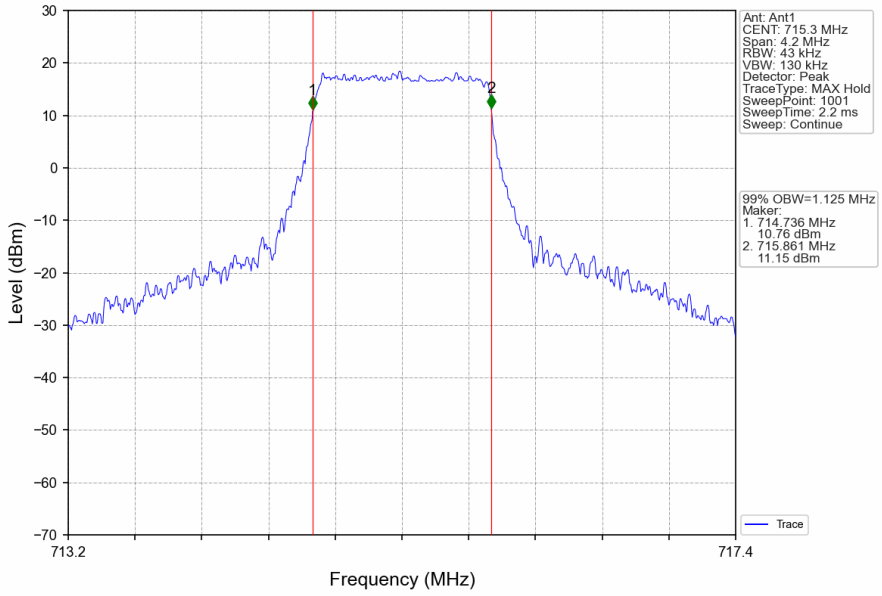

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



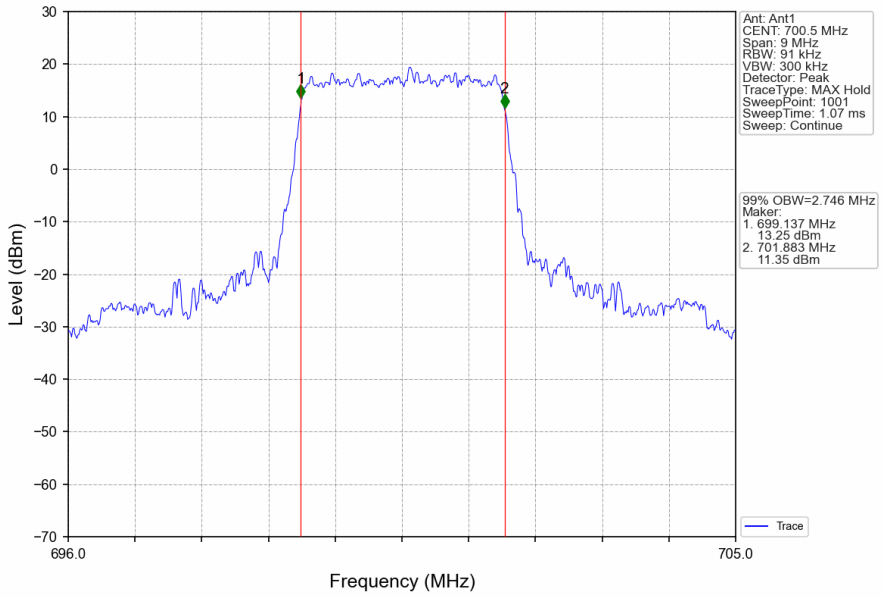
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



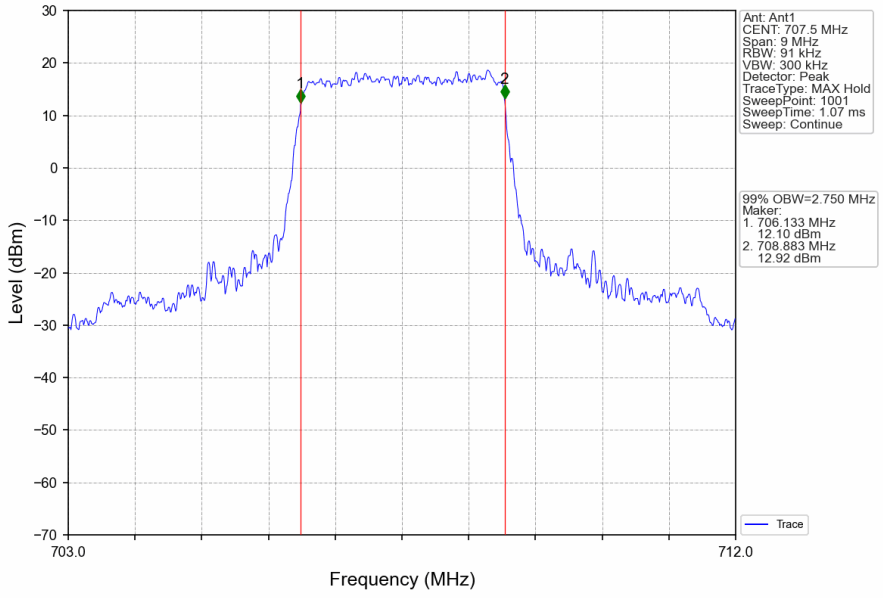

Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



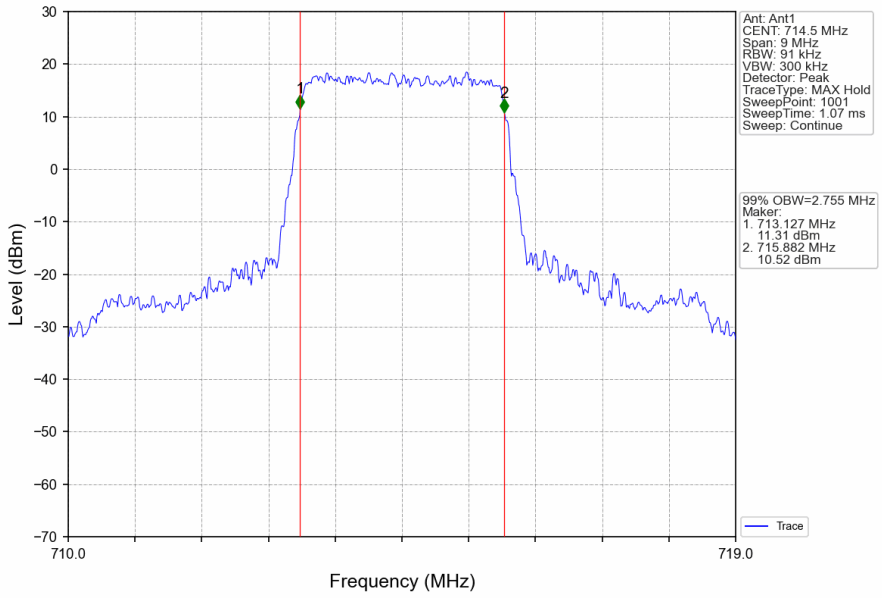
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



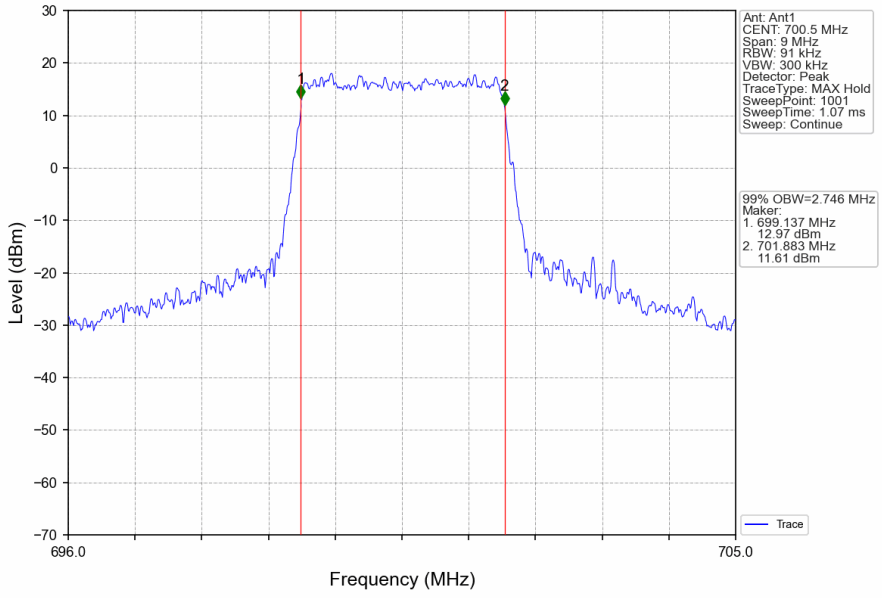

Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



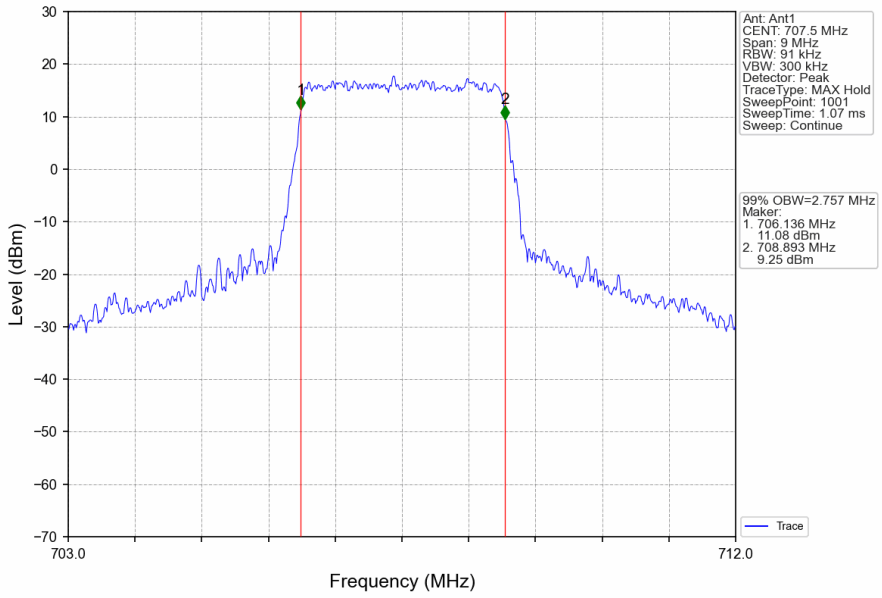
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



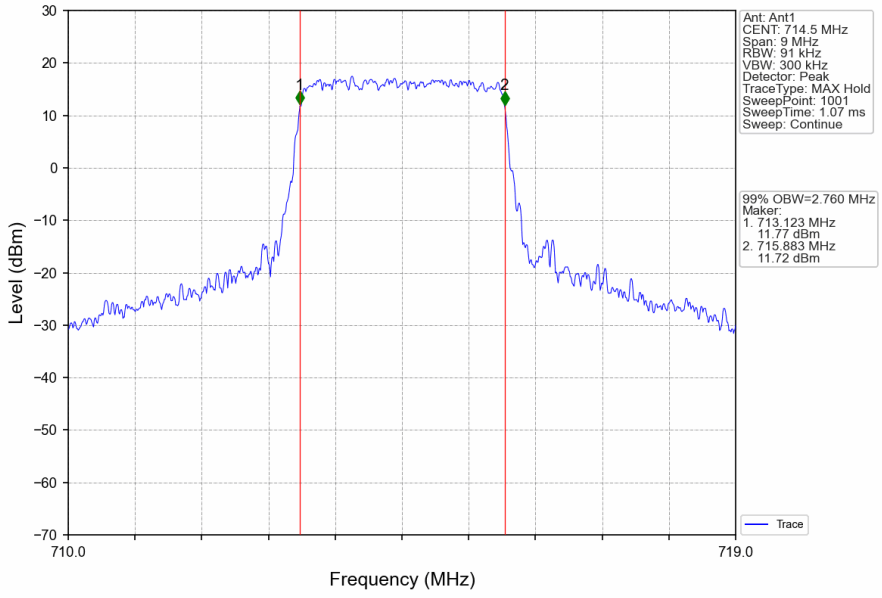

Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



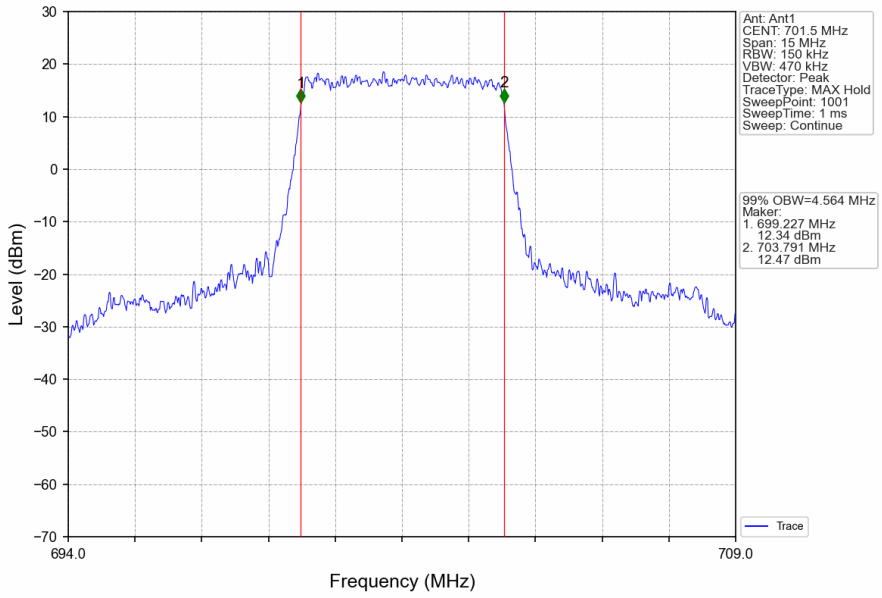
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



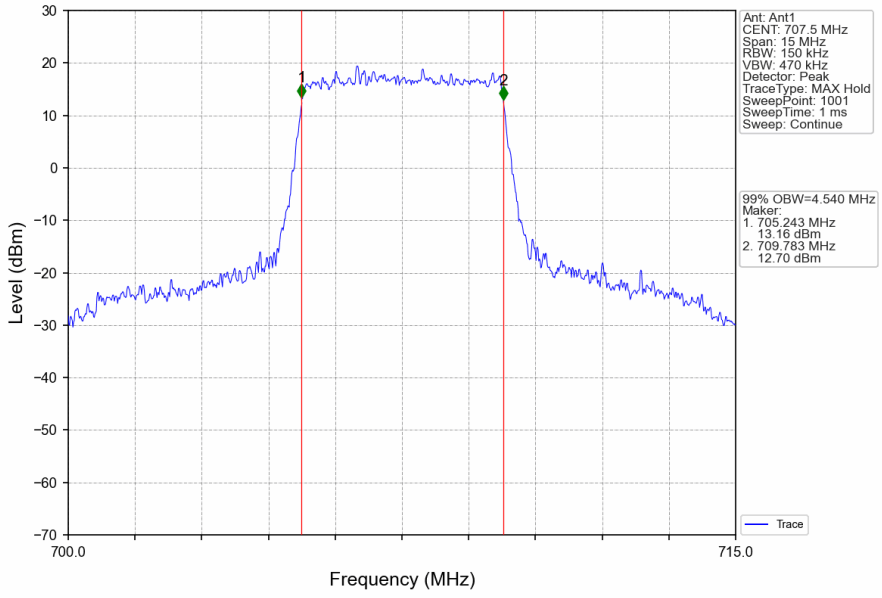

Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



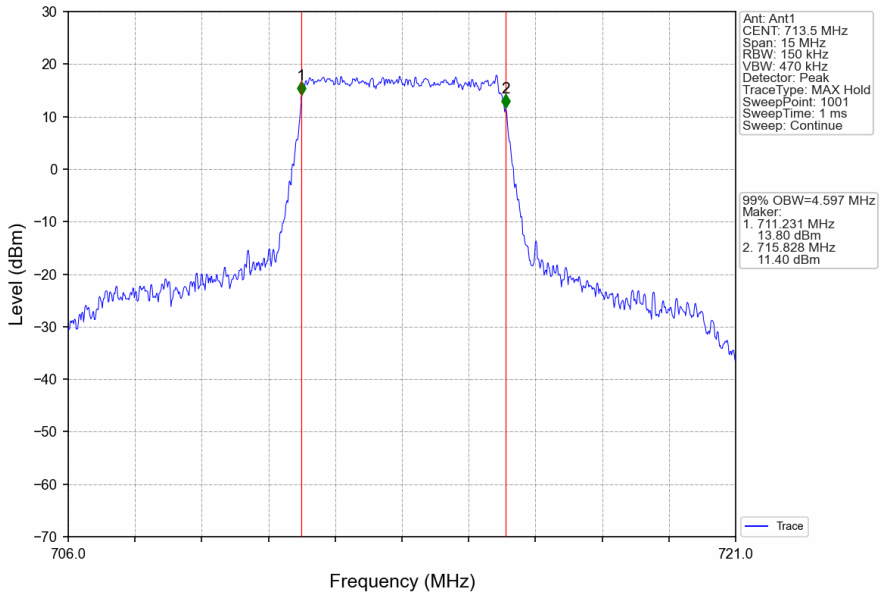
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



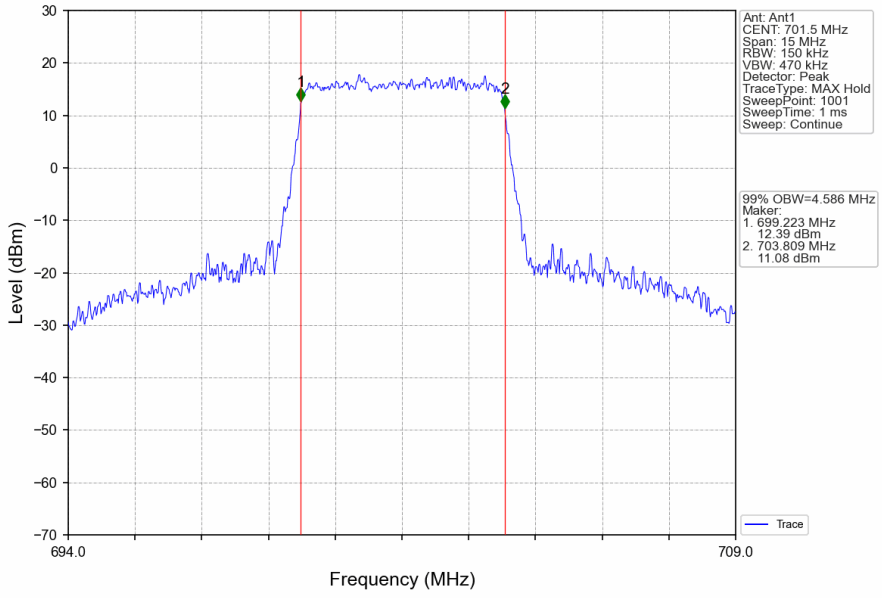

Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



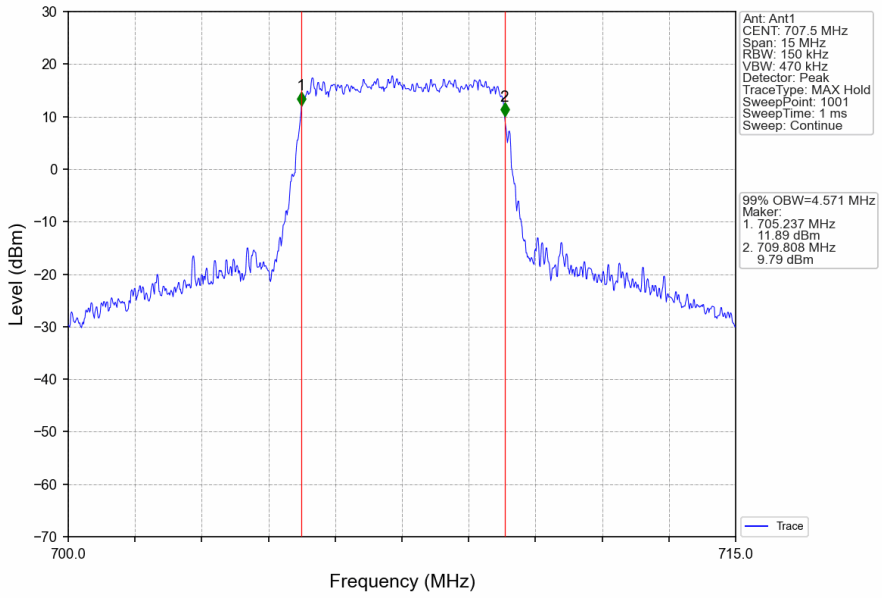
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



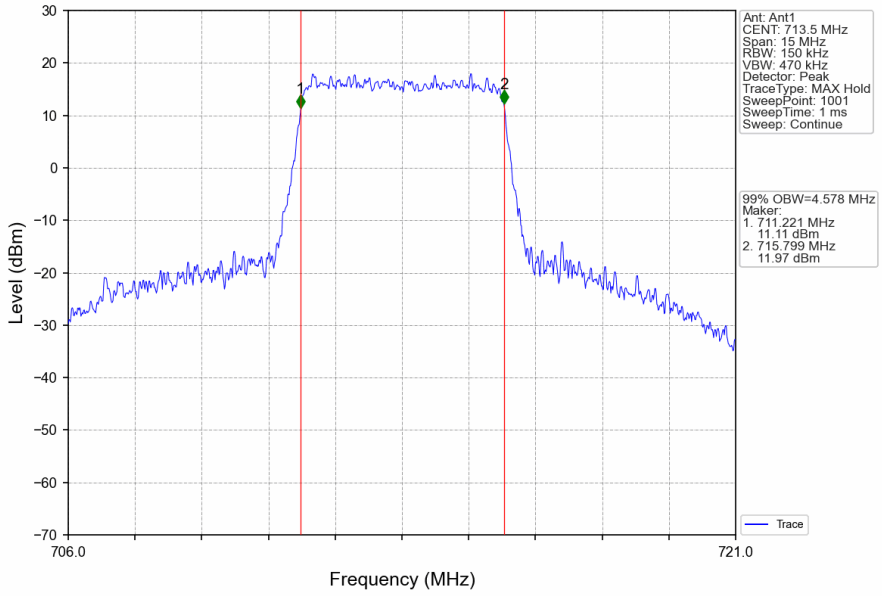

Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



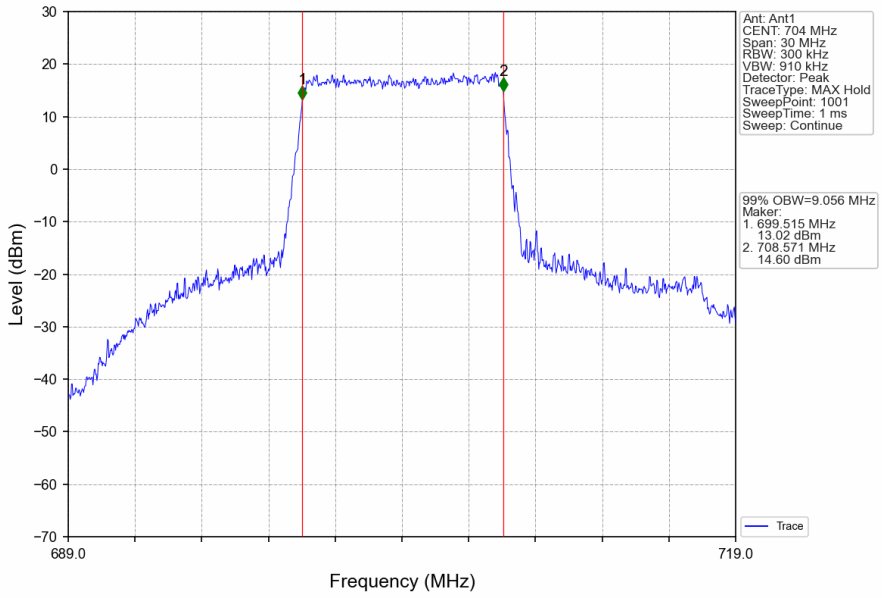
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



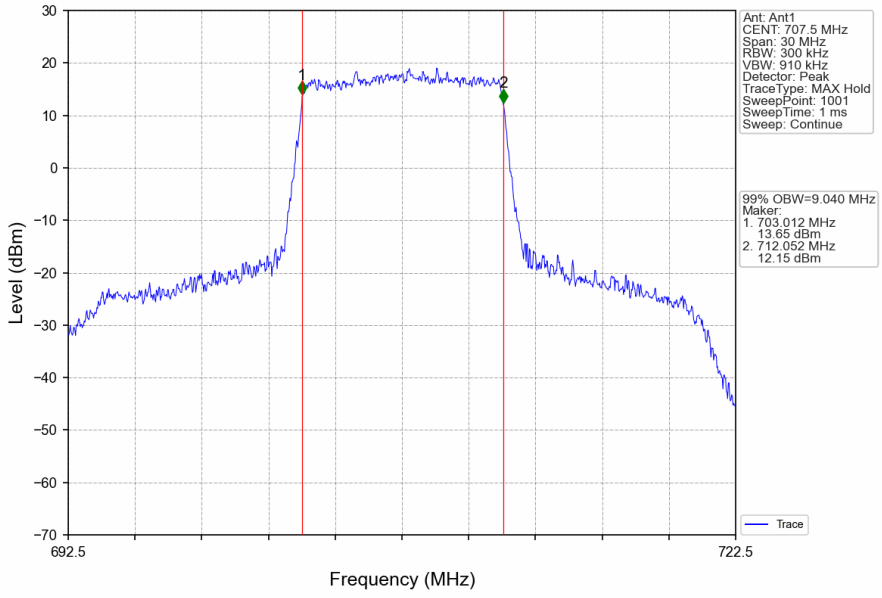

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



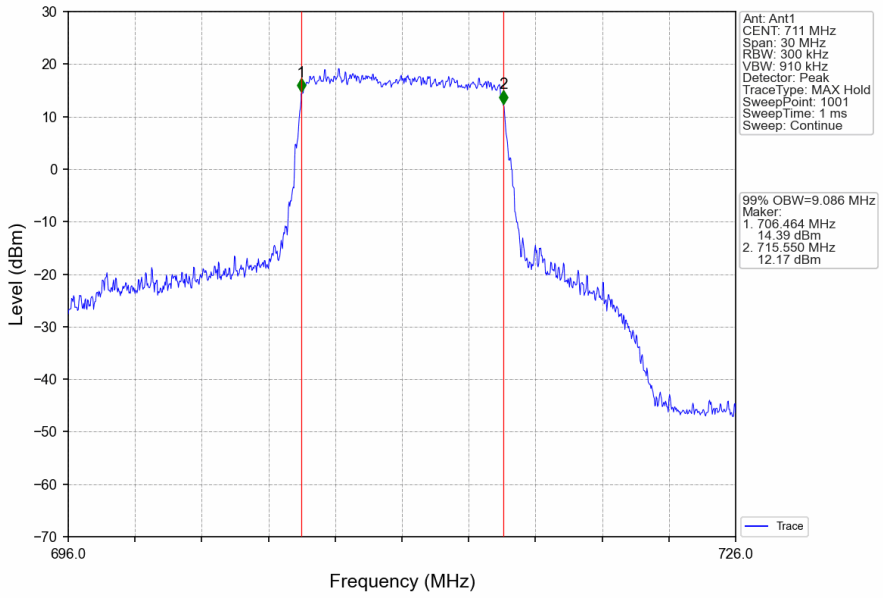
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



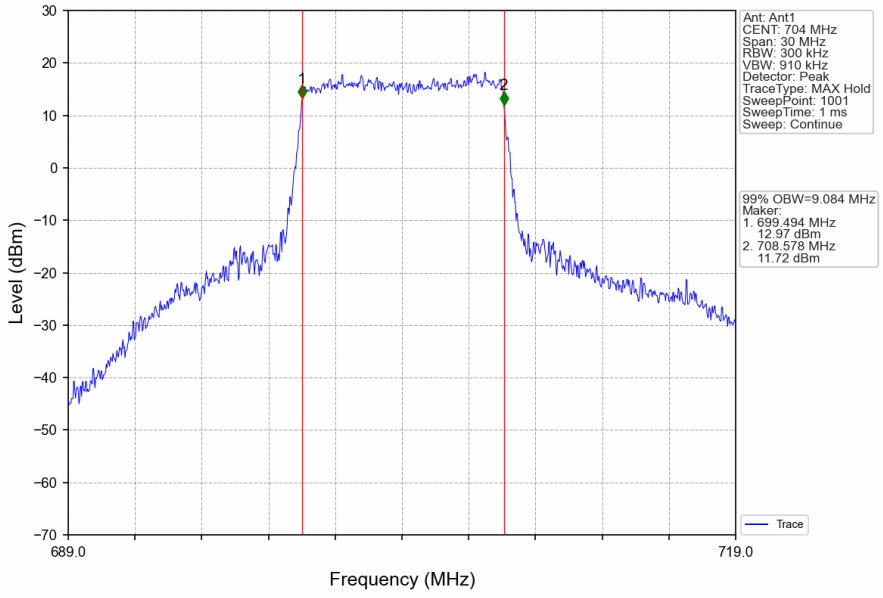

Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



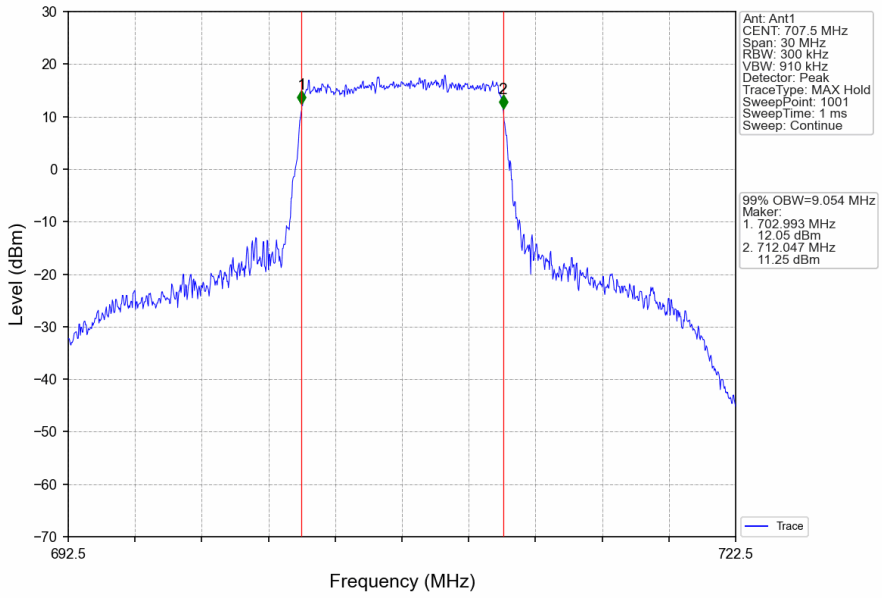
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



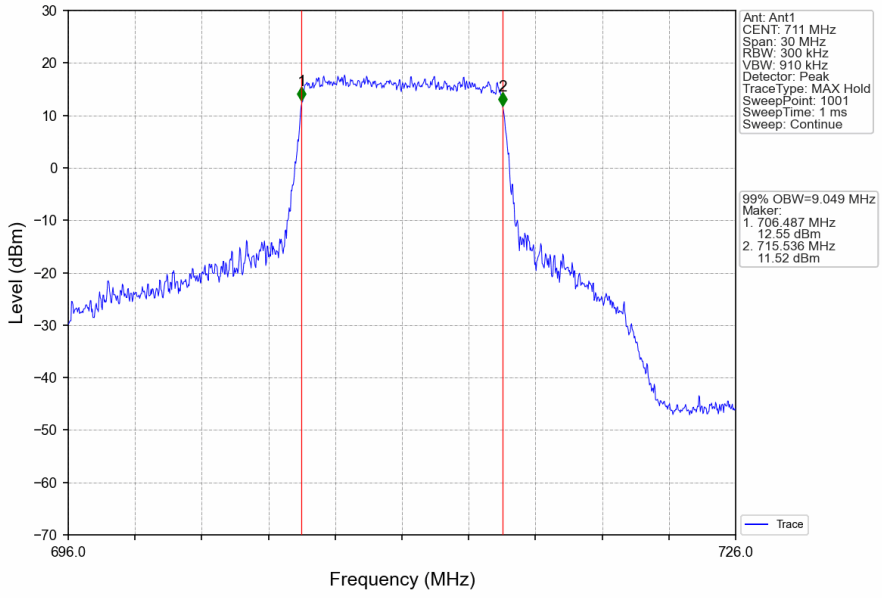

Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV




Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



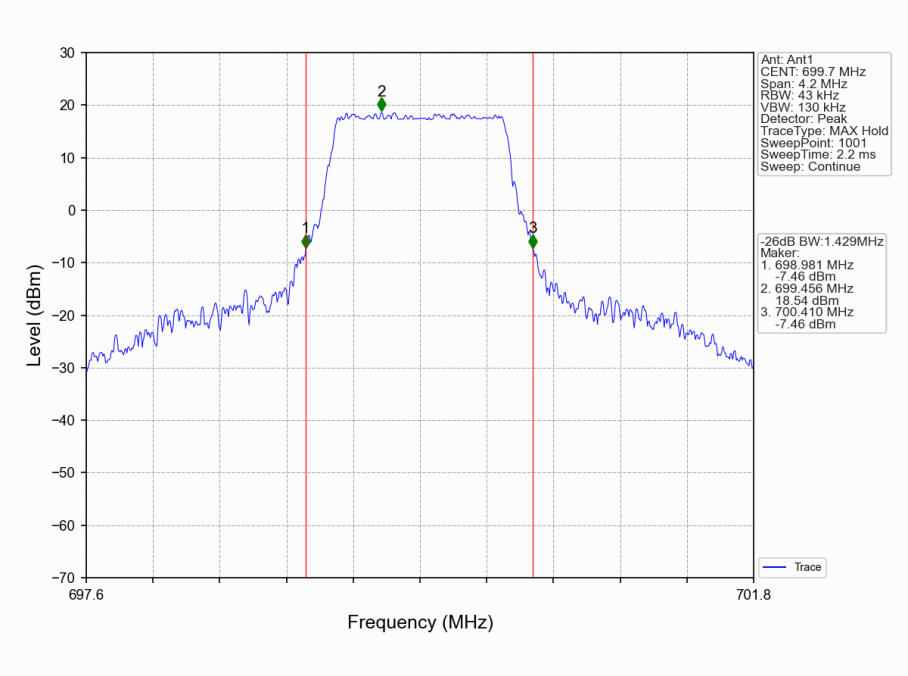
## 3.2 Band12_XDB

### 3.2.1 Test Result

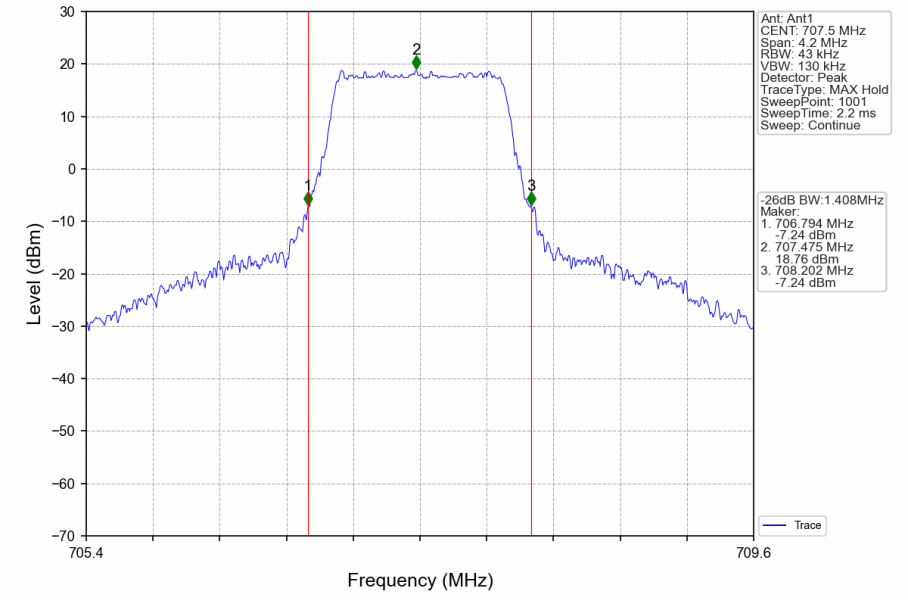
| Band: 12 / NTNV | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation | | 26dB Bandwidth (MHz) | | Verdict |
| | | | Size | Offset | Result | Limit | |
| 1.4 | QPSK | 699.7 | 6 | 0 | 1.429 | / | Pass |
| | | 707.5 | 6 | 0 | 1.408 | / | Pass |
| | | 715.3 | 6 | 0 | 1.418 | / | Pass |
| | 16QAM | 699.7 | 6 | 0 | 1.412 | / | Pass |
| | | 707.5 | 6 | 0 | 1.417 | / | Pass |
| | | 715.3 | 6 | 0 | 1.417 | / | Pass |
| 3 | QPSK | 700.5 | 15 | 0 | 3.091 | / | Pass |
| | | 707.5 | 15 | 0 | 3.121 | / | Pass |
| | | 714.5 | 15 | 0 | 3.162 | / | Pass |
| | 16QAM | 700.5 | 15 | 0 | 3.123 | / | Pass |
| | | 707.5 | 15 | 0 | 3.139 | / | Pass |
| | | 714.5 | 15 | 0 | 3.180 | / | Pass |
| 5 | QPSK | 701.5 | 25 | 0 | 5.229 | / | Pass |
| | | 707.5 | 25 | 0 | 5.126 | / | Pass |
| | | 713.5 | 25 | 0 | 5.275 | / | Pass |
| | 16QAM | 701.5 | 25 | 0 | 5.313 | / | Pass |
| | | 707.5 | 25 | 0 | 5.255 | / | Pass |
| | | 713.5 | 25 | 0 | 5.275 | / | Pass |
| 10 | QPSK | 704 | 50 | 0 | 10.290 | / | Pass |
| | | 707.5 | 50 | 0 | 10.109 | / | Pass |
| | | 711 | 50 | 0 | 10.156 | / | Pass |
| | 16QAM | 704 | 50 | 0 | 10.244 | / | Pass |
| | | 707.5 | 50 | 0 | 10.124 | / | Pass |
| | | 711 | 50 | 0 | 10.139 | / | Pass |

## 3.2.2 Test Graph

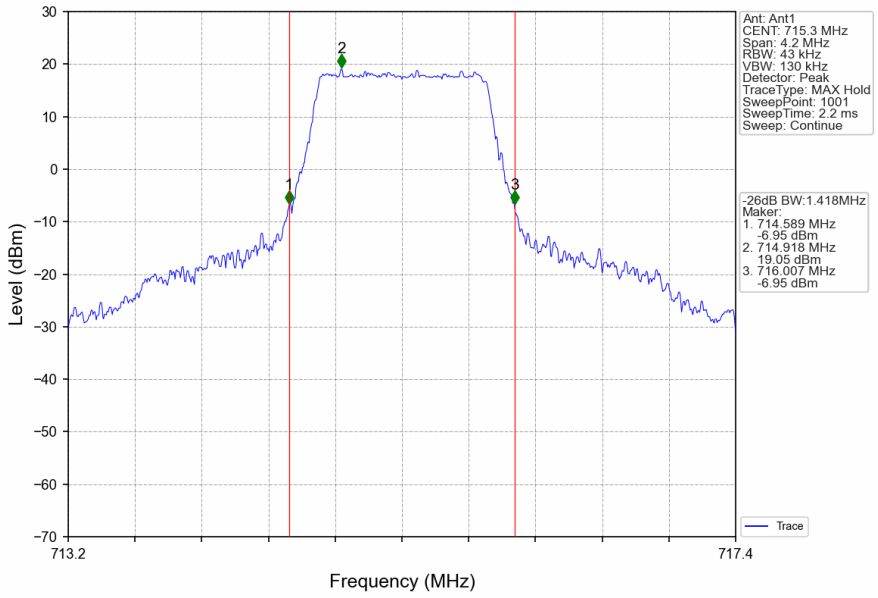
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



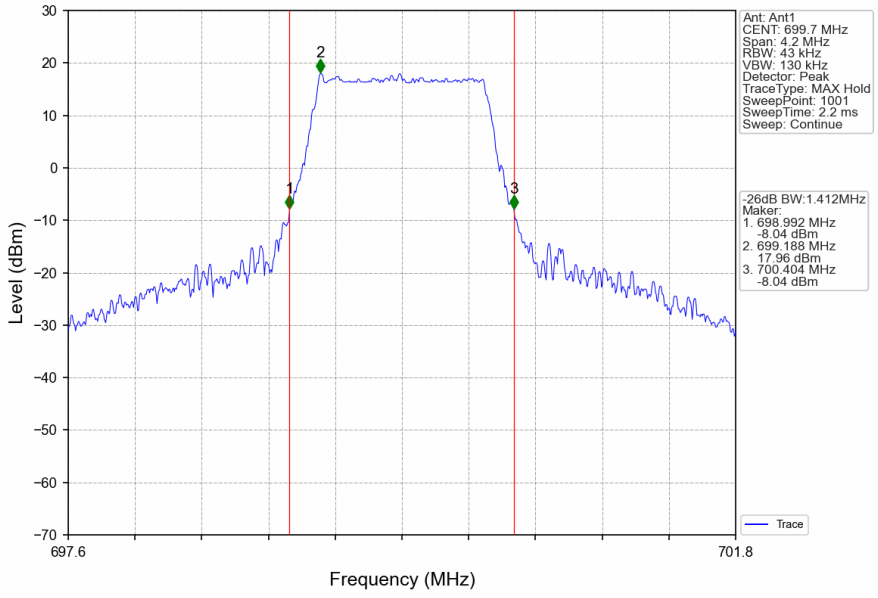

Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



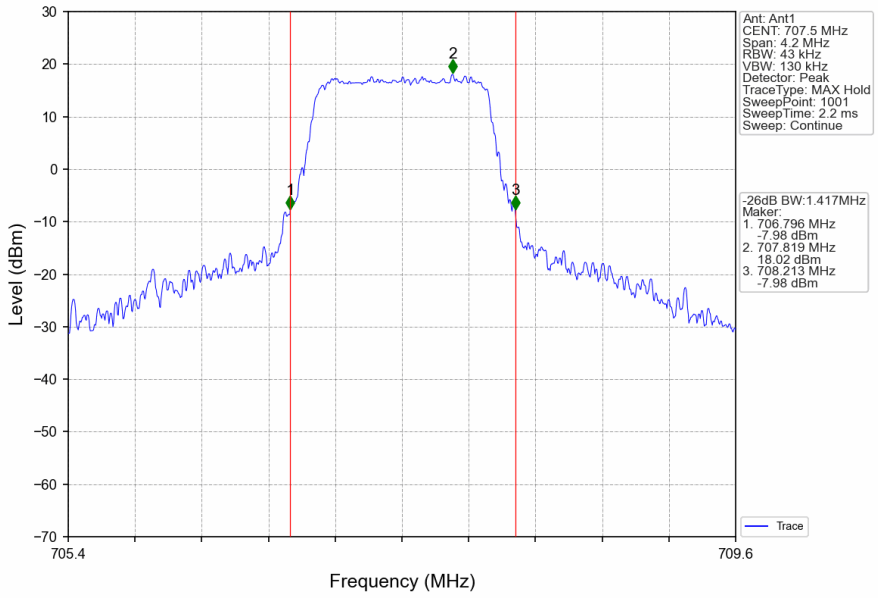
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



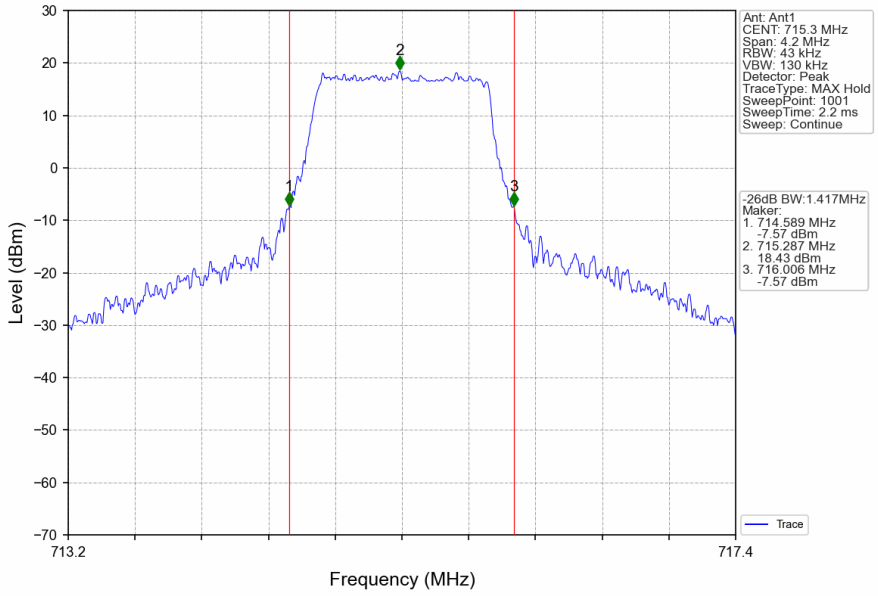

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



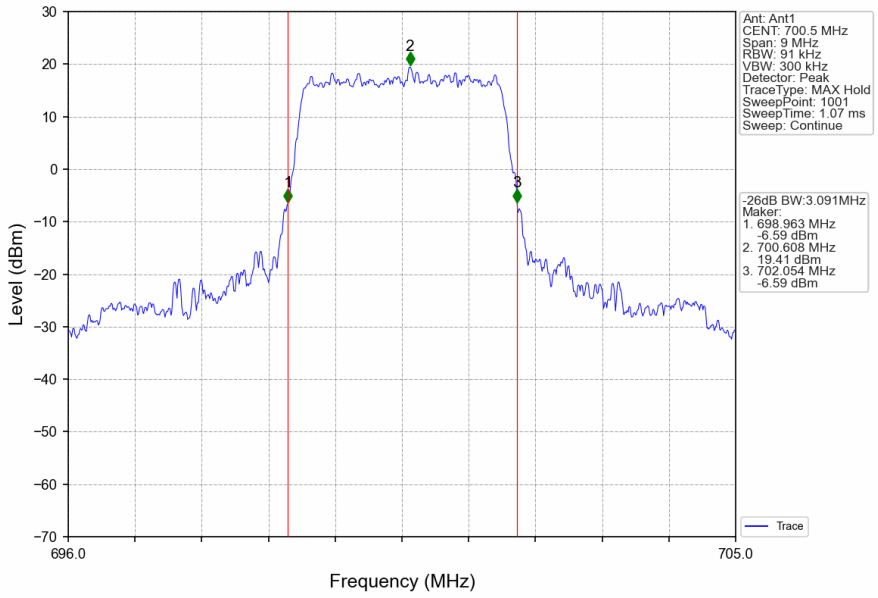
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



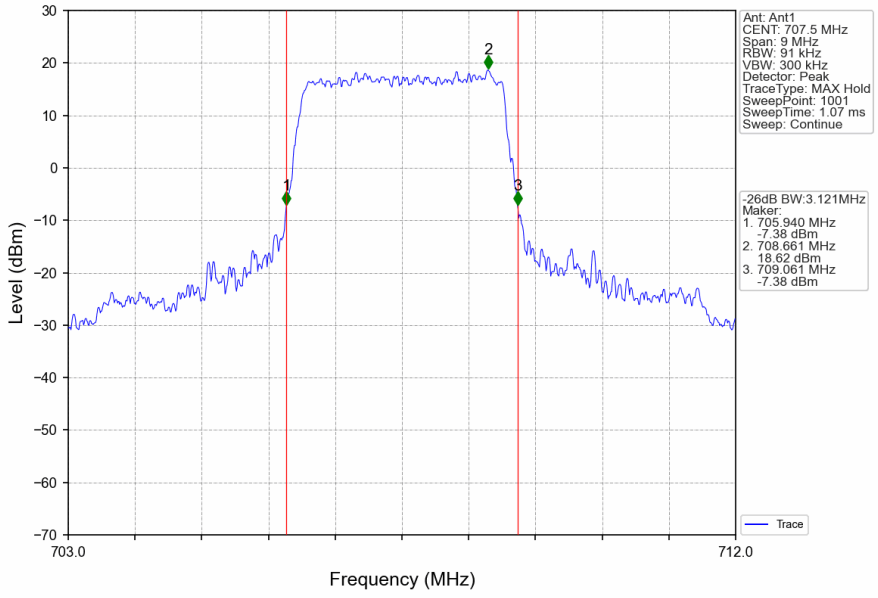

Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



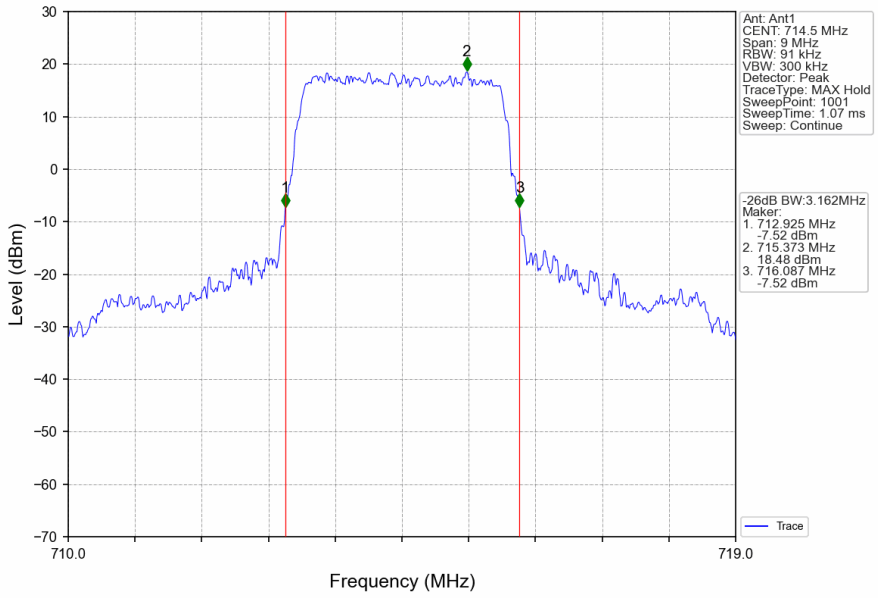
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



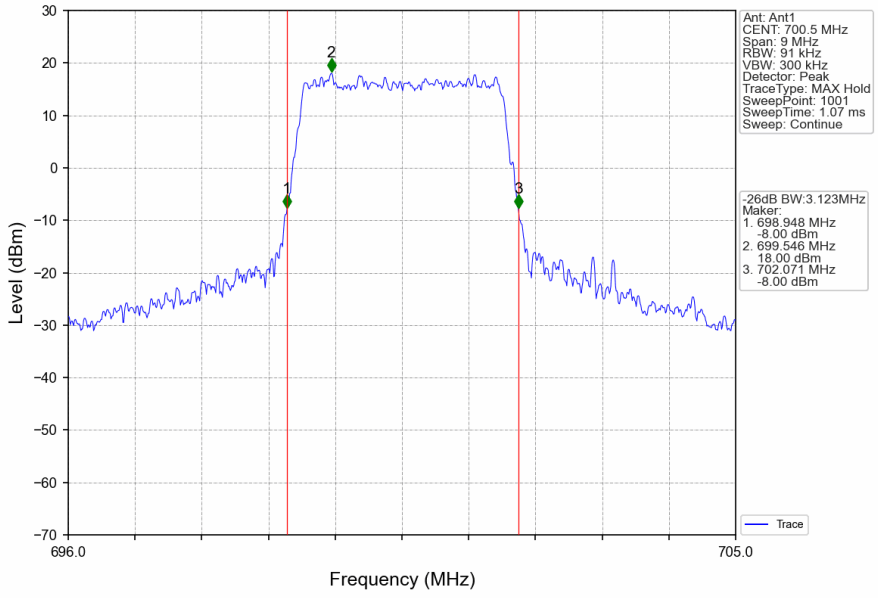

Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



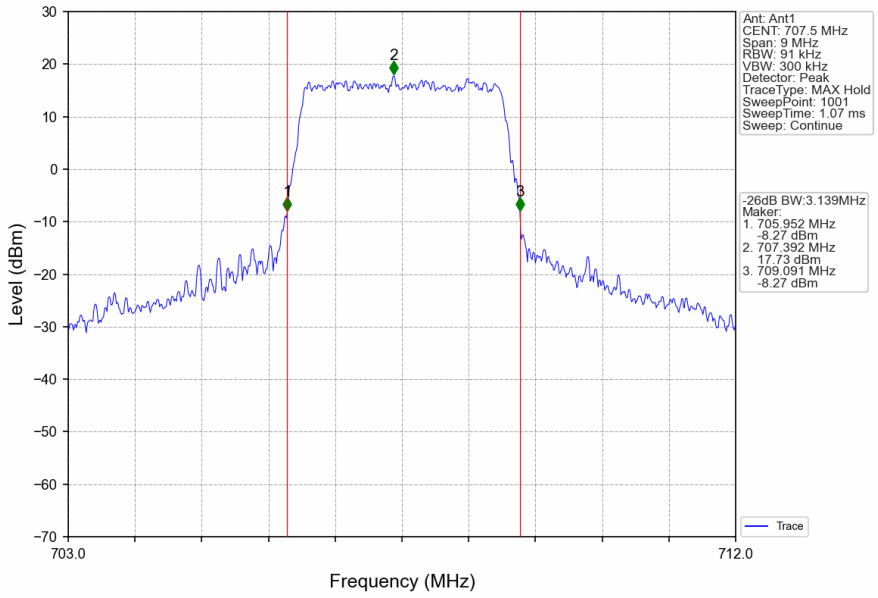
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



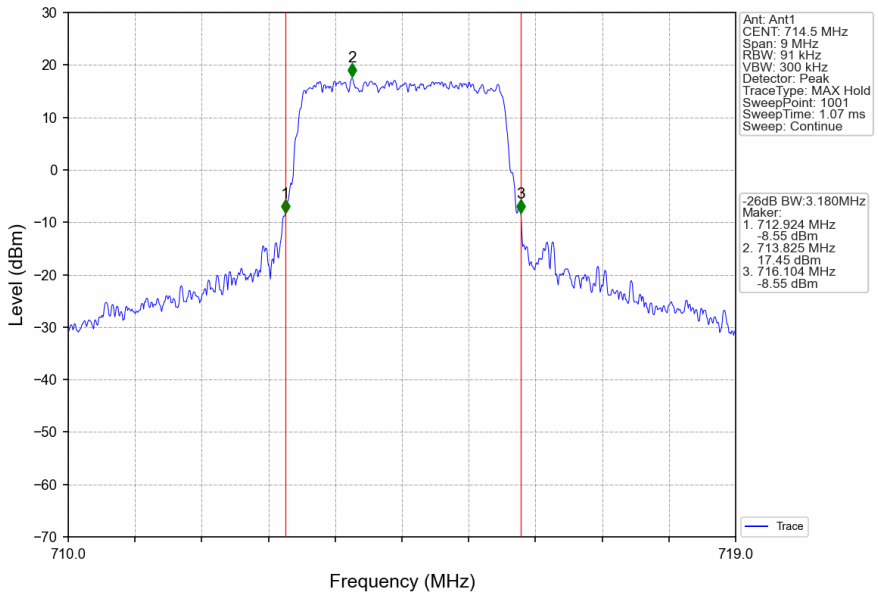

Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



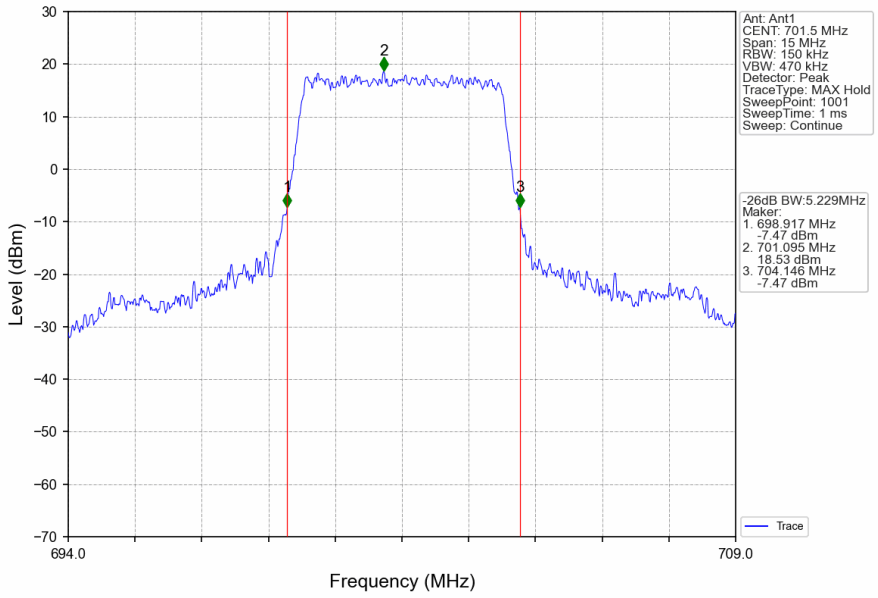
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



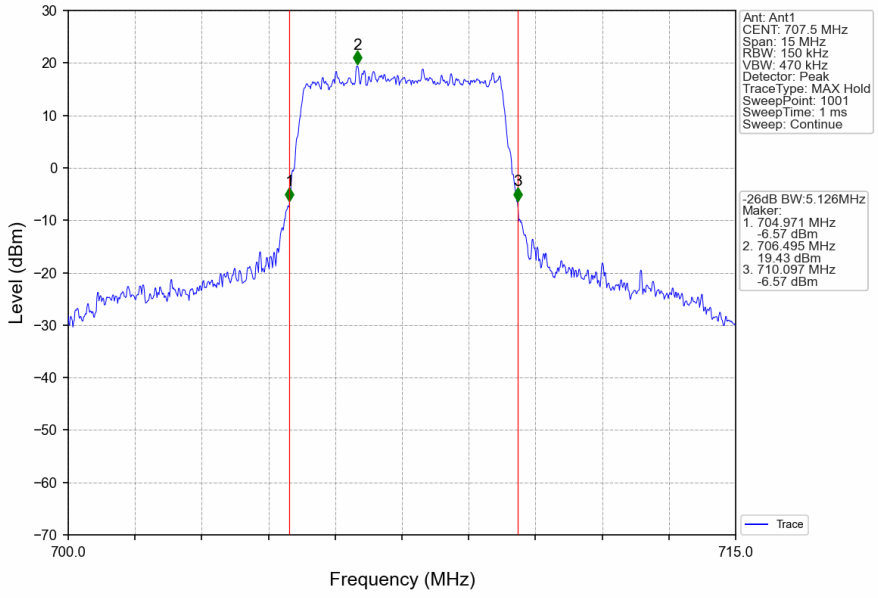

Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



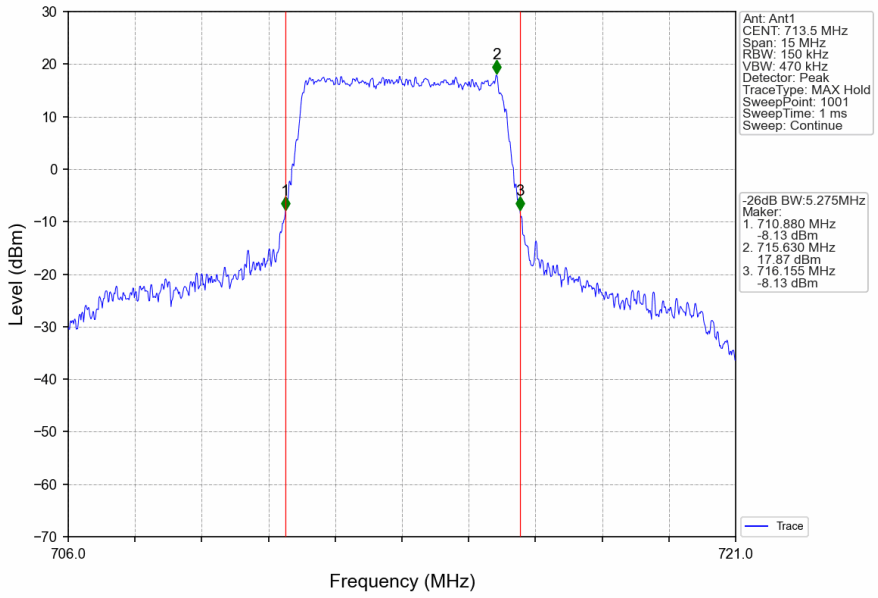
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



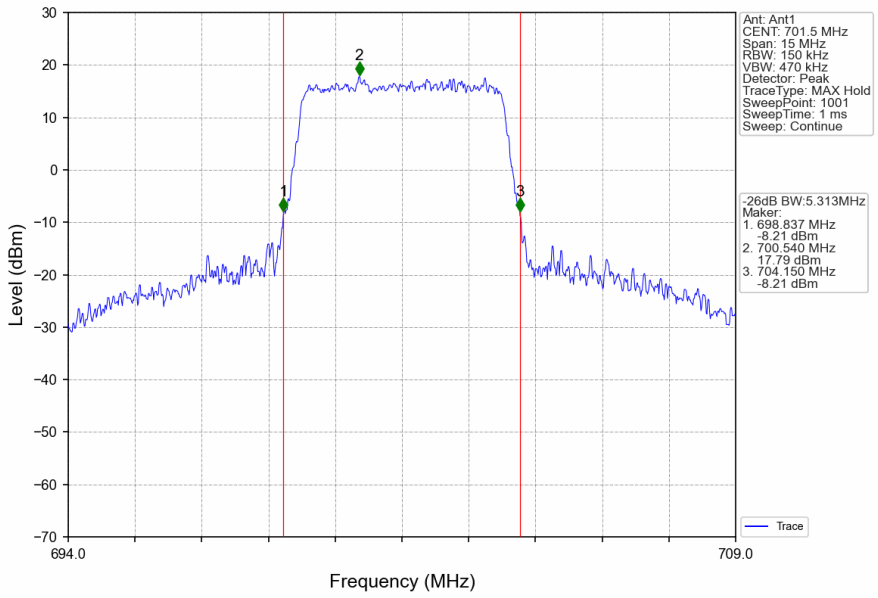

Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



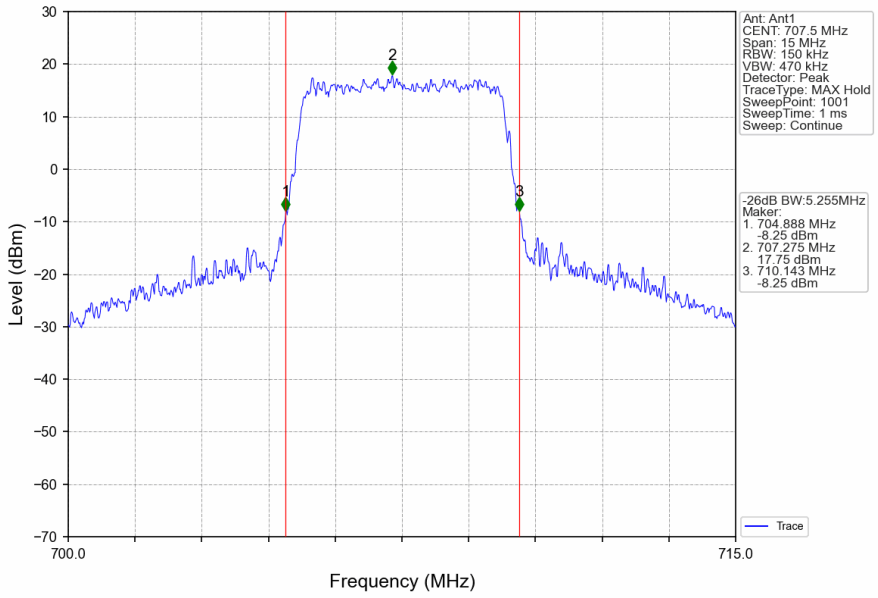
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



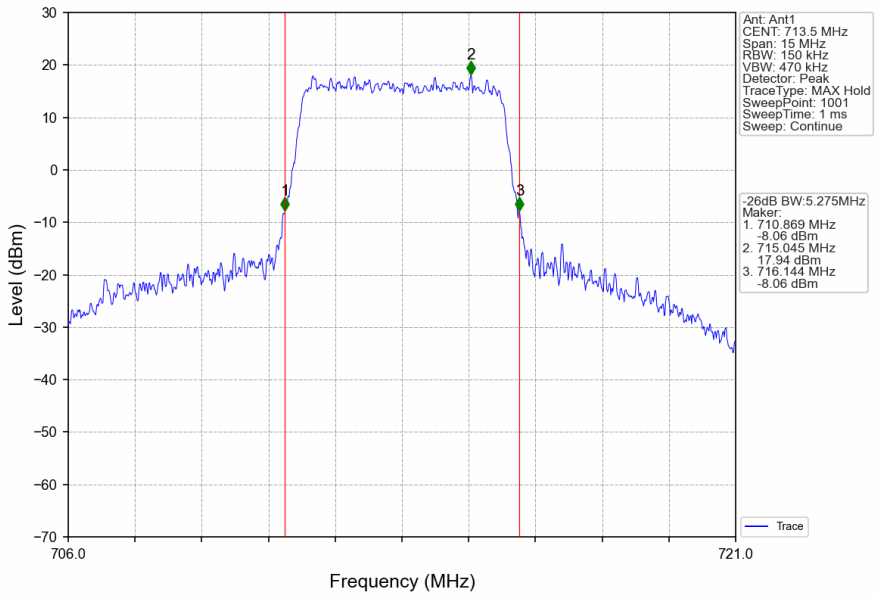

Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



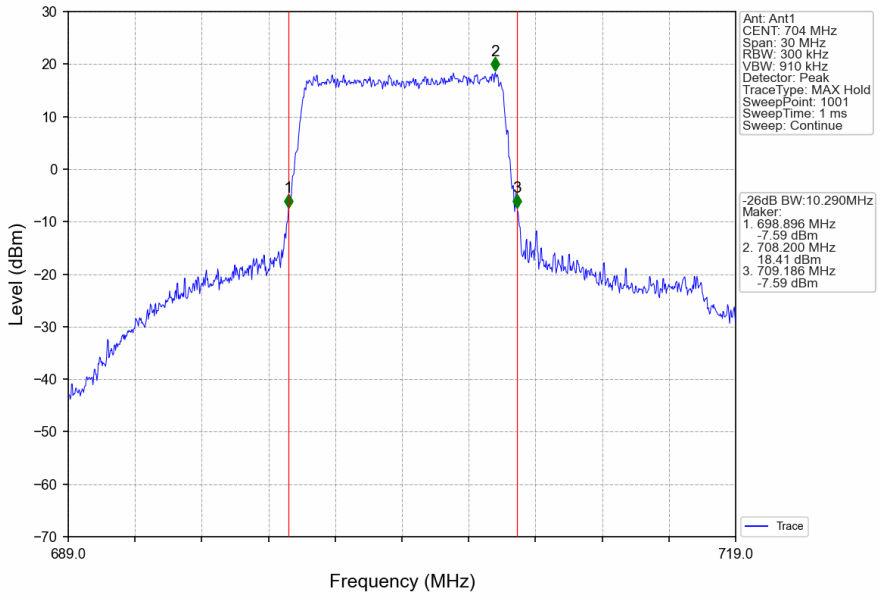
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



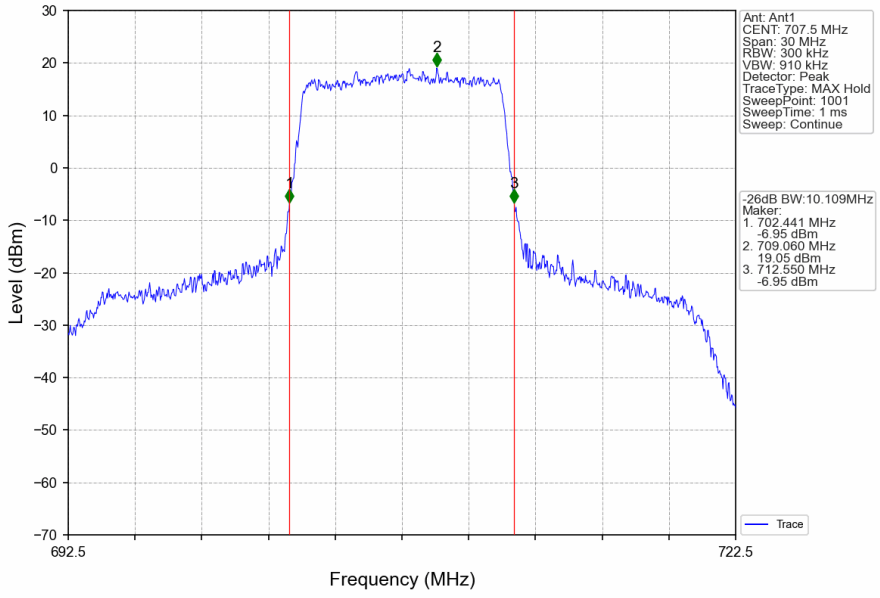

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



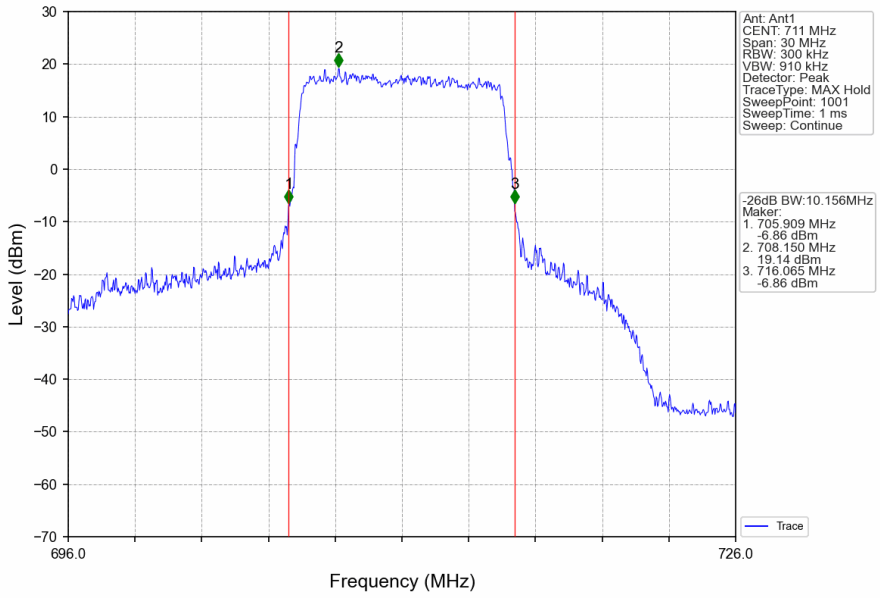
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



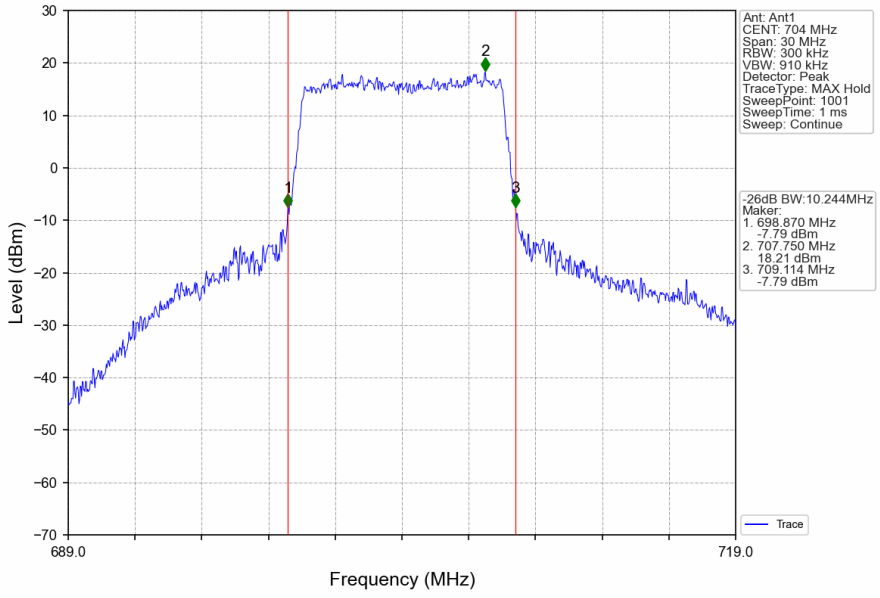

Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



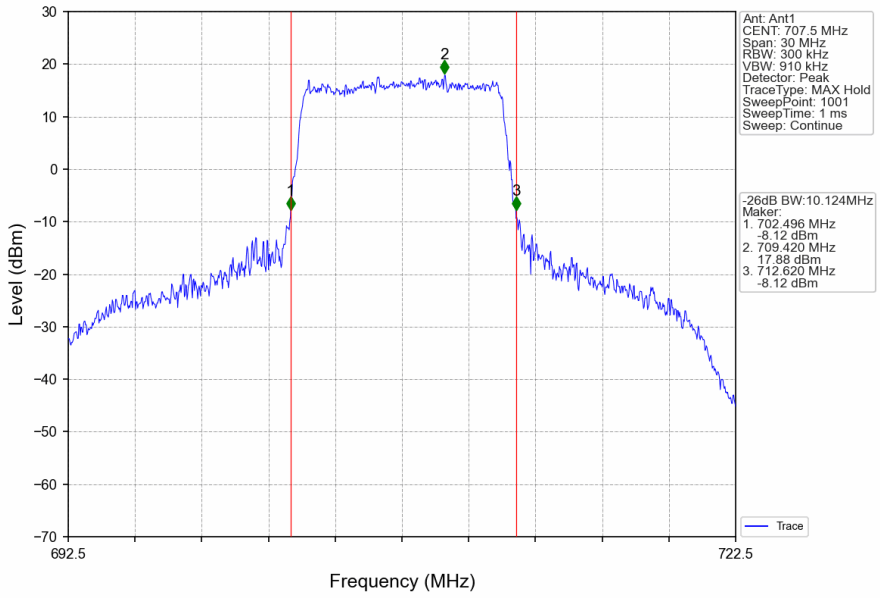
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



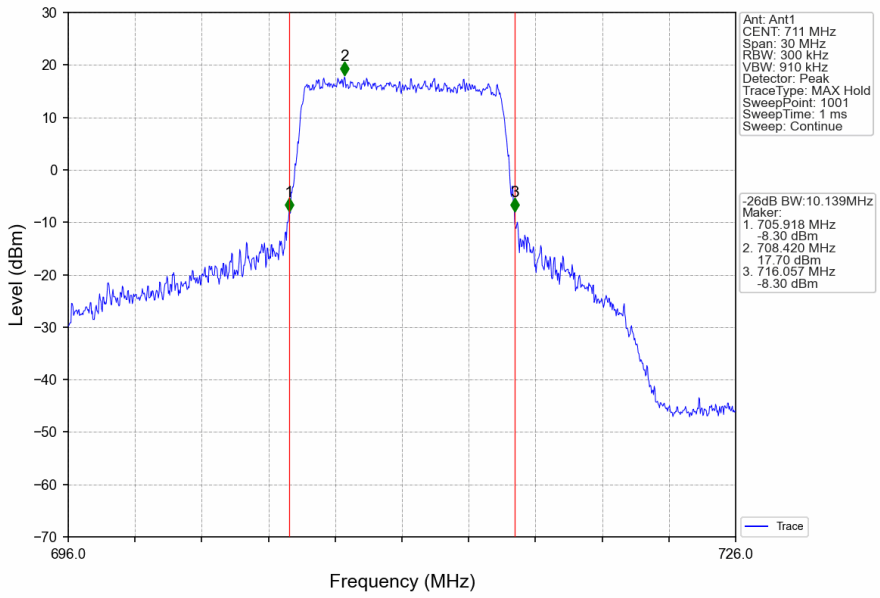

Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV




Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



# 4. Peak-Average Ratio

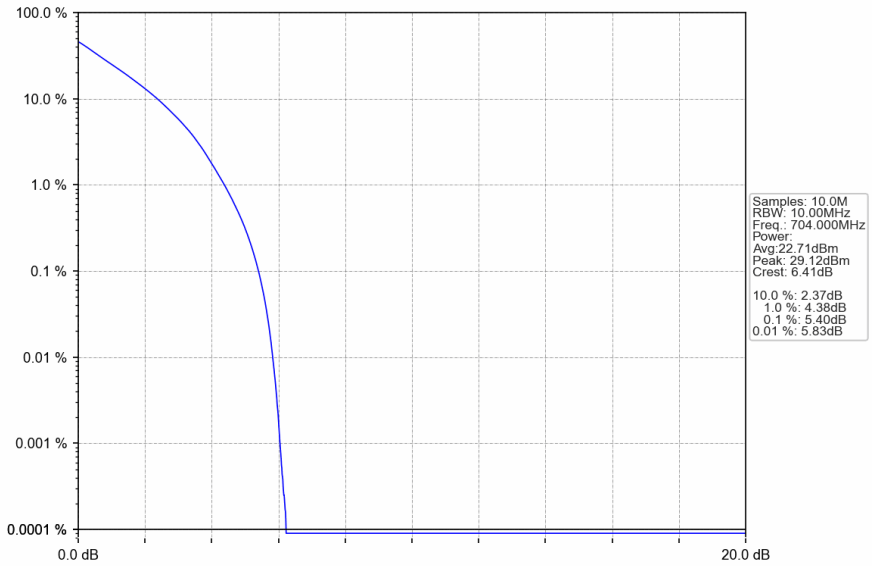
## 4.1 B12_10MHz

### 4.1.1 Test Result

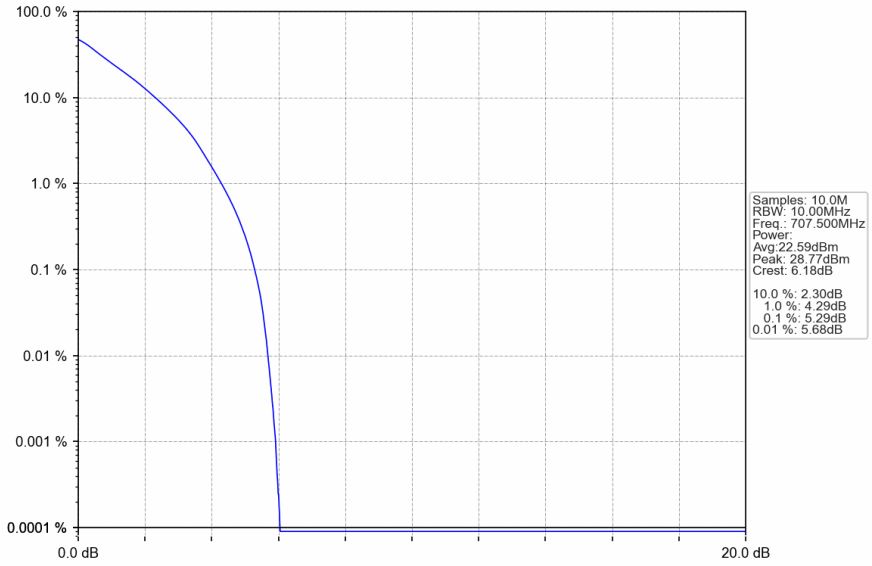
| Band: 12 / Bandwidth: 10MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 704 | 50 | 0 | 5.40 | <=13 | Pass |
| | 707.5 | 50 | 0 | 5.29 | <=13 | Pass |
| | 711 | 50 | 0 | 5.32 | <=13 | Pass |
| 16QAM | 704 | 50 | 0 | 6.16 | <=13 | Pass |
| | 707.5 | 50 | 0 | 6.07 | <=13 | Pass |
| | 711 | 50 | 0 | 6.11 | <=13 | Pass |

## 4.1.2 Test Graph

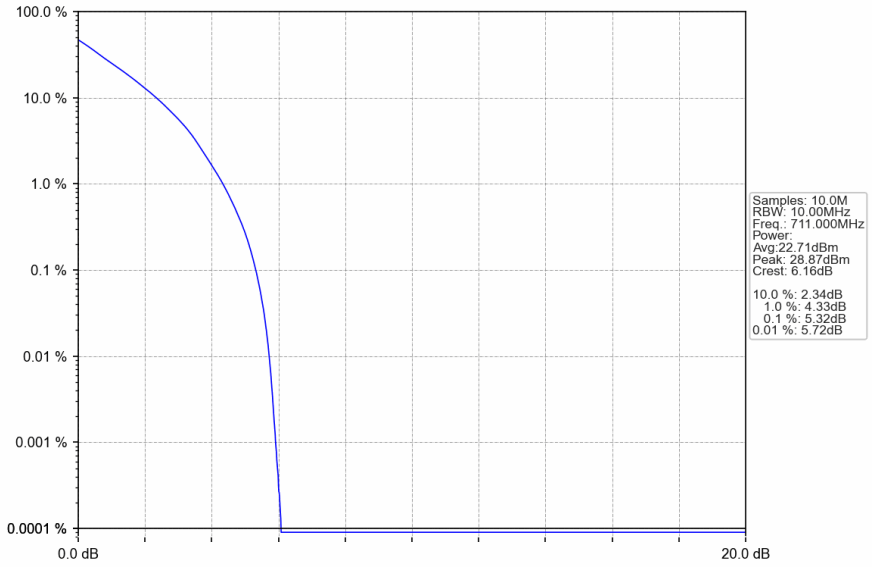
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



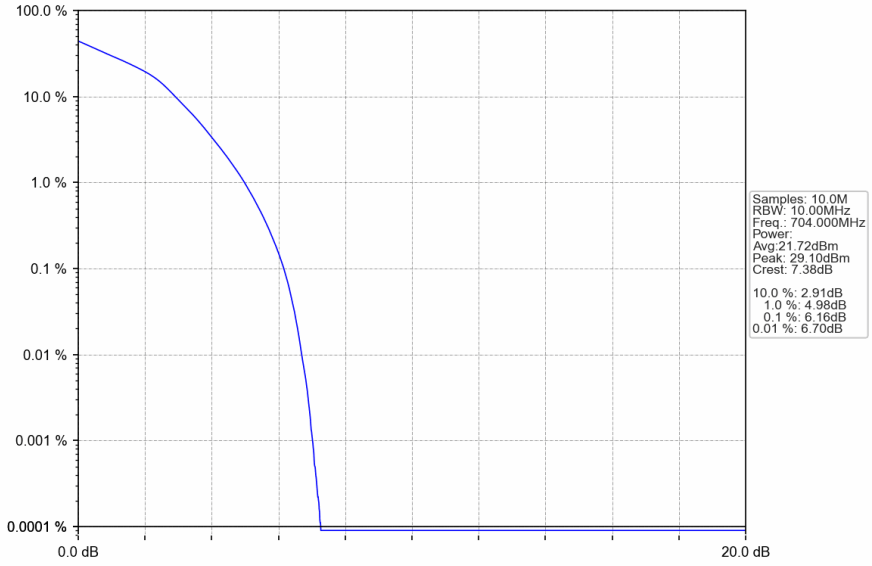

Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



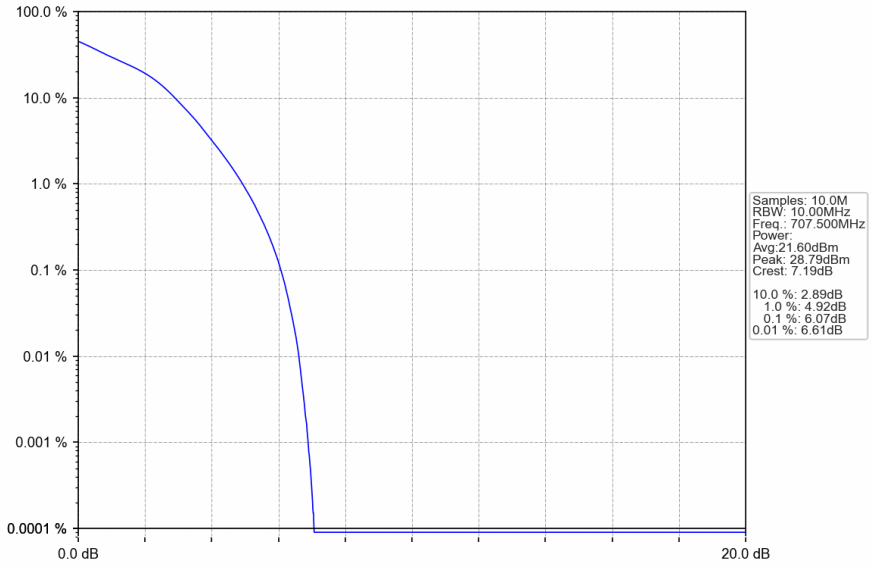
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



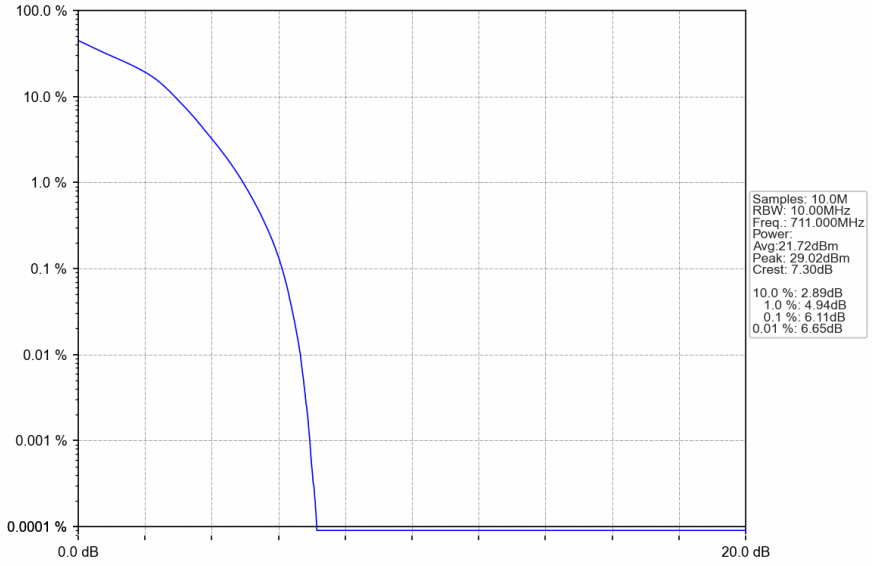

Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV




Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



# 5. Spurious Emission

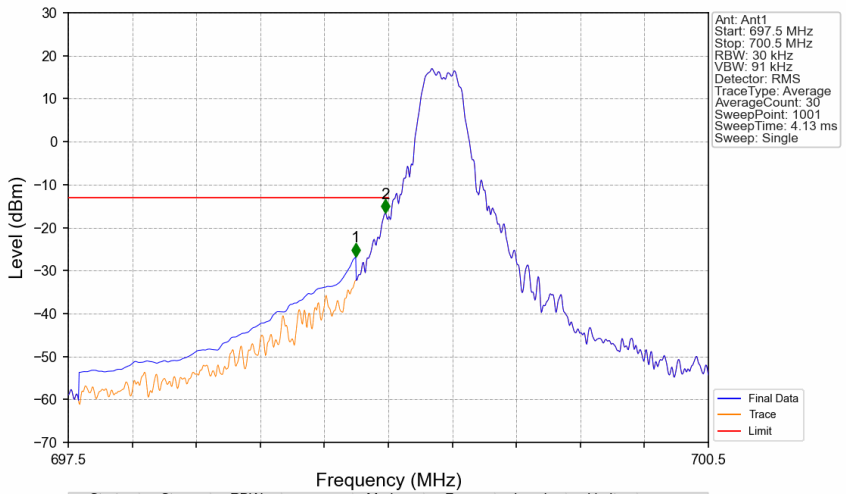
## 5.1 B12_1.4MHz

### 5.1.1 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 |

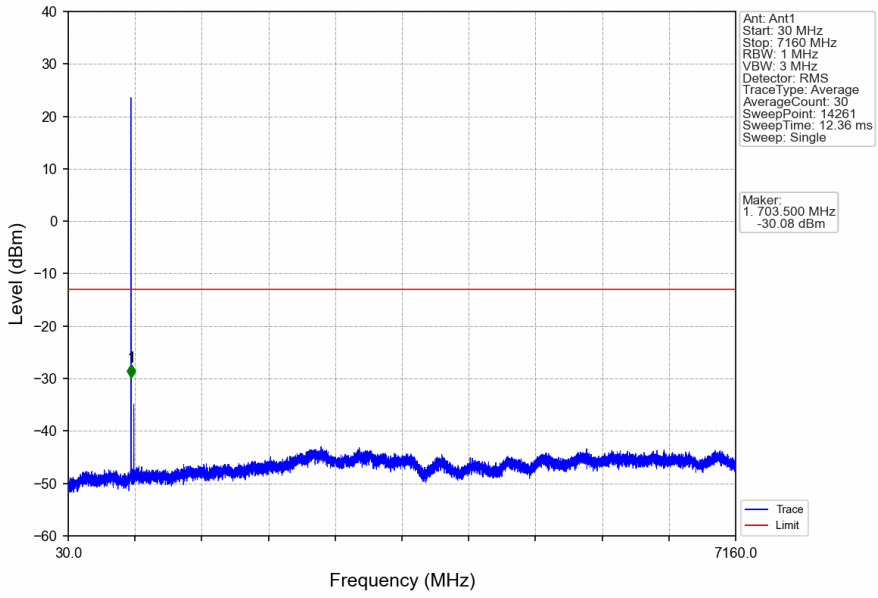
## 5.1.2 Test Graph

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

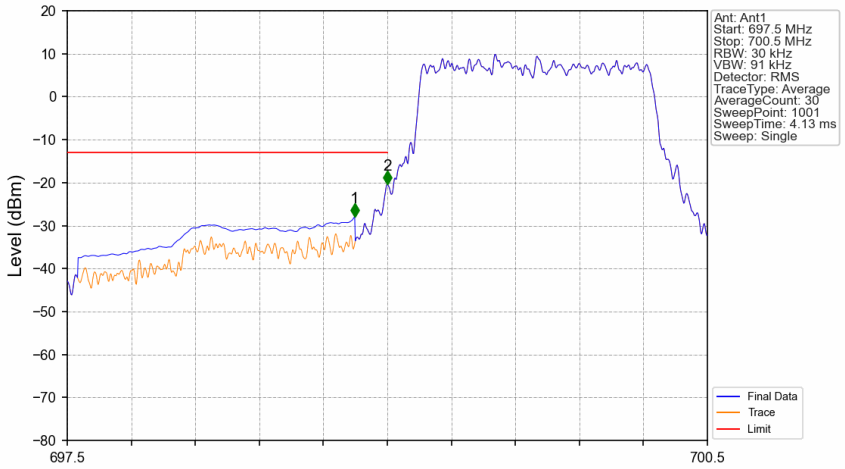



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 697.5 | 698.9 | 0.1 | CHP | 1 | 698.847 | -26.70 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 698.985 | -16.63 | -13 | Pass |
| 699 | 700.5 | 0.03 | / | / | / | / | / | / |

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

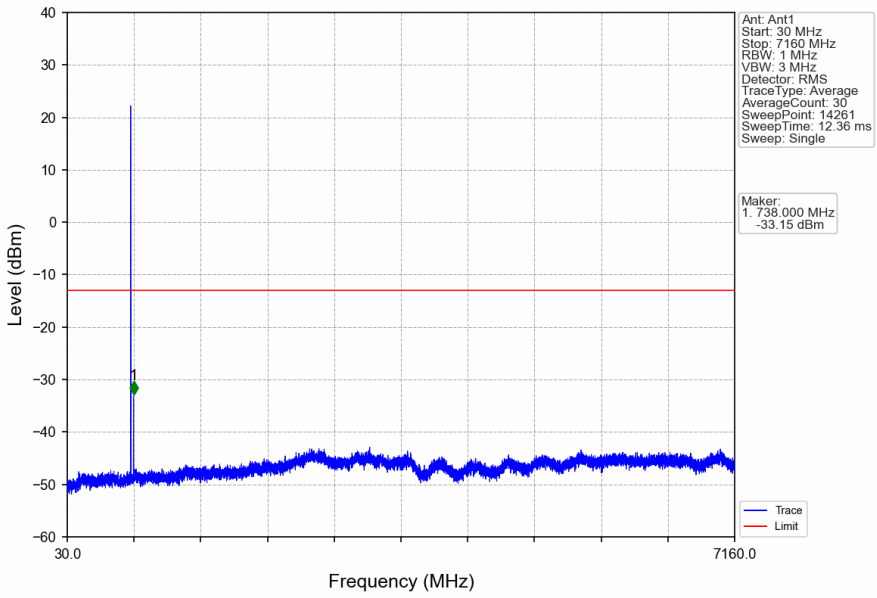


Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV

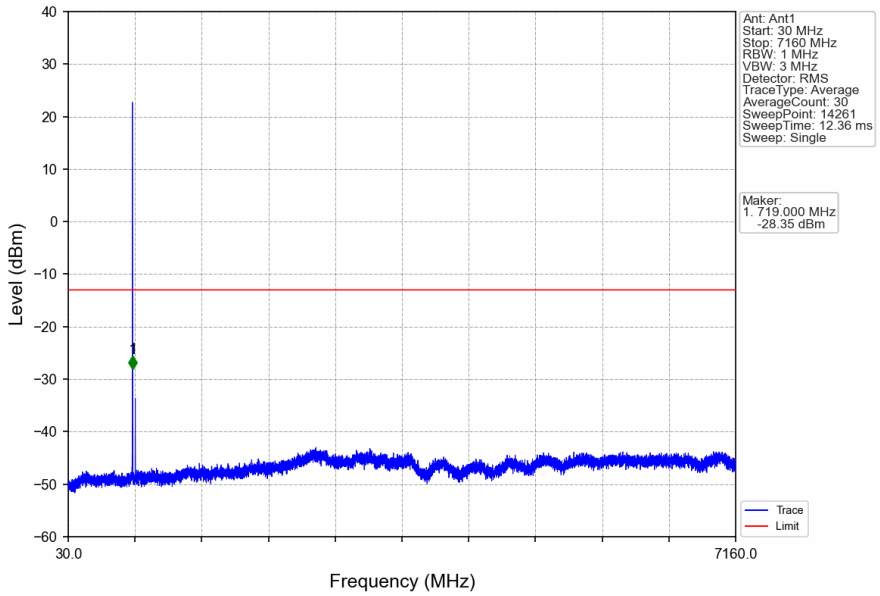



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 697.5 | 698.9 | 0.1 | CHP | 1 | 698.847 | -27.93 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 699.000 | -20.36 | -13 | Pass |
| 699 | 700.5 | 0.03 | / | / | / | / | / | / |

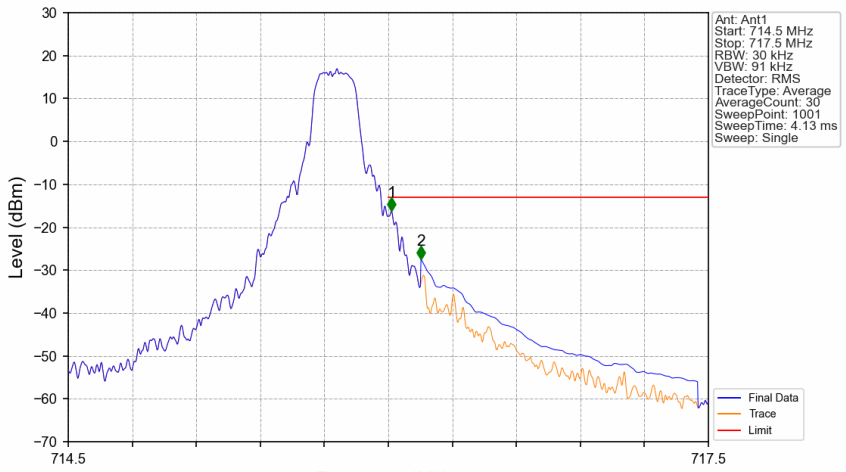
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV

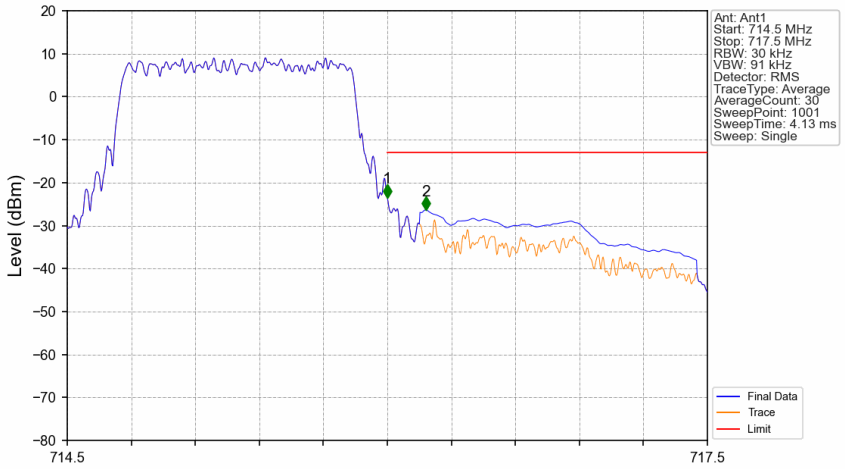



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV




| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 714.5 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.015 | -16.19 | -13 | Pass |
| 716.1 | 717.5 | 0.1 | CHP | 2 | 716.153 | -27.48 | -13 | Pass |

Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV




| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 714.5 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.000 | -23.50 | -13 | Pass |
| 716.1 | 717.5 | 0.1 | CHP | 2 | 716.180 | -26.36 | -13 | Pass |

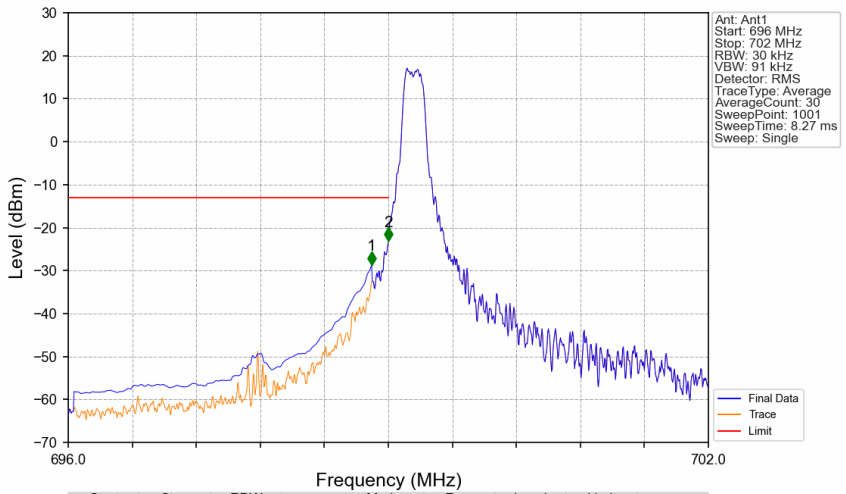
## 5.2 B12_3MHz

### 5.2.1 Test Result

| Band: 12 / Bandwidth: 3MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| 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 |
| | 707.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | 714.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 14 | Refer To Test Graph | | Pass |
| | | 15 | 0 | Refer To Test Graph | | Pass |

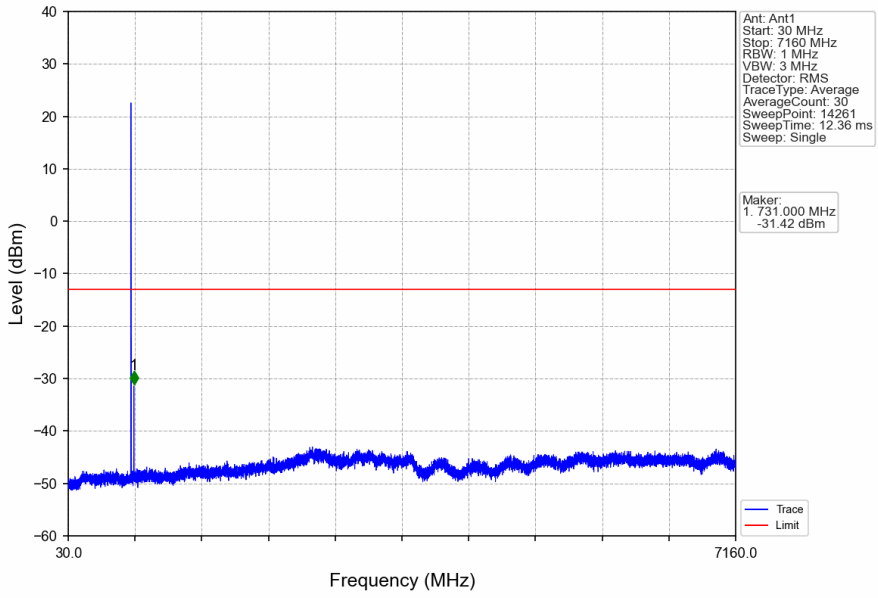
## 5.2.2 Test Graph

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

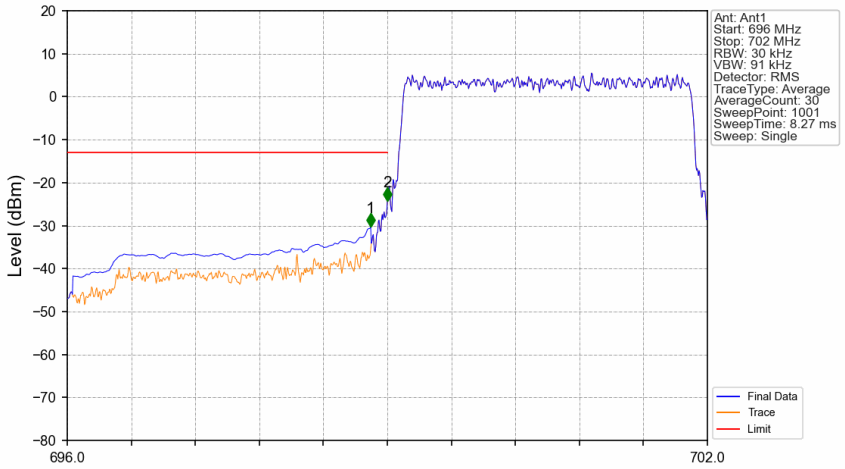



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 696 | 698.9 | 0.1 | CHP | 1 | 698.844 | -28.66 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 699.000 | -23.07 | -13 | Pass |
| 699 | 702 | 0.03 | / | / | / | / | / | / |

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

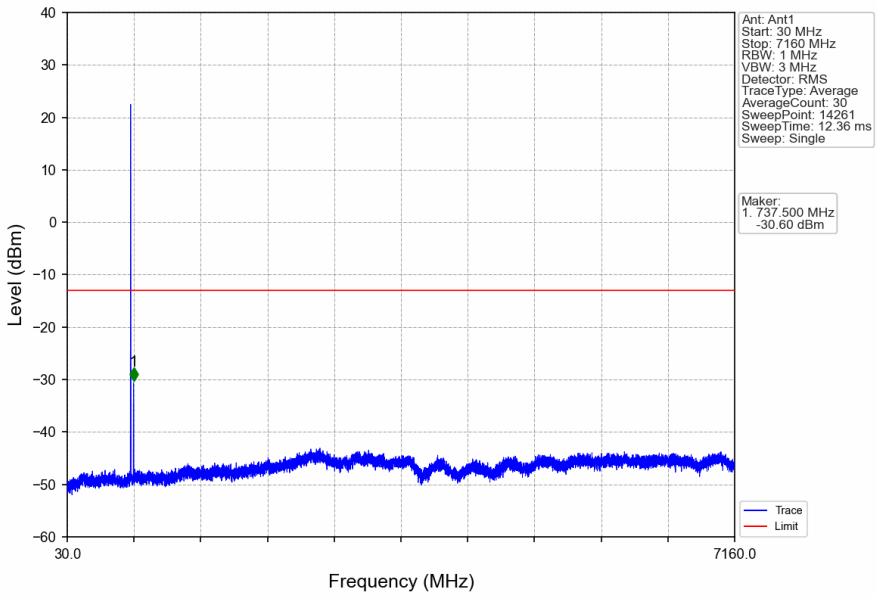


Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

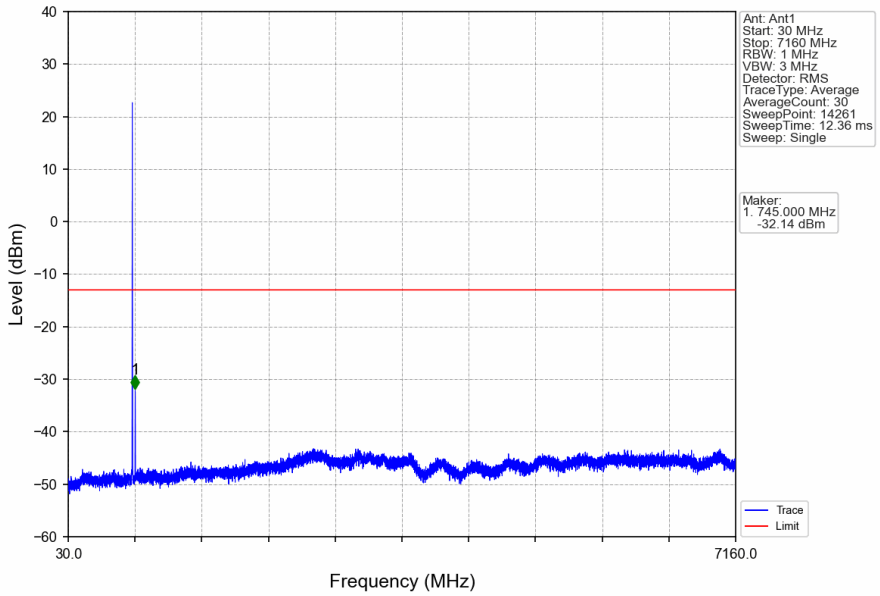



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 696 | 698.9 | 0.1 | CHP | 1 | 698.844 | -30.29 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 699.000 | -24.26 | -13 | Pass |
| 699 | 702 | 0.03 | / | / | / | / | / | / |

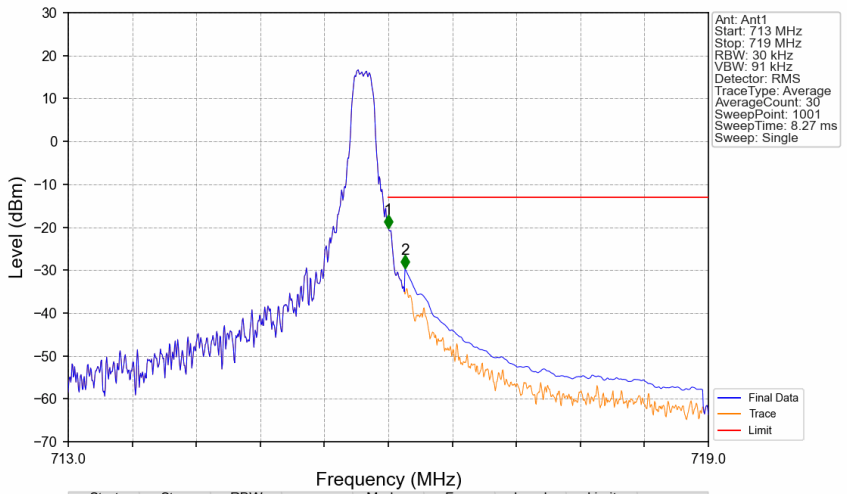
Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV

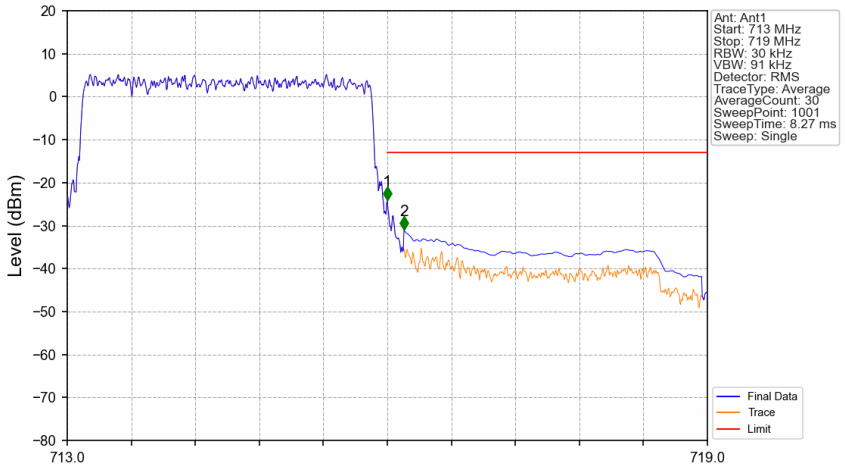



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV




| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 713 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.000 | -20.25 | -13 | Pass |
| 716.1 | 719 | 0.1 | CHP | 2 | 716.156 | -29.68 | -13 | Pass |

Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV




| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 713 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.000 | -24.14 | -13 | Pass |
| 716.1 | 719 | 0.1 | CHP | 2 | 716.156 | -31.01 | -13 | Pass |

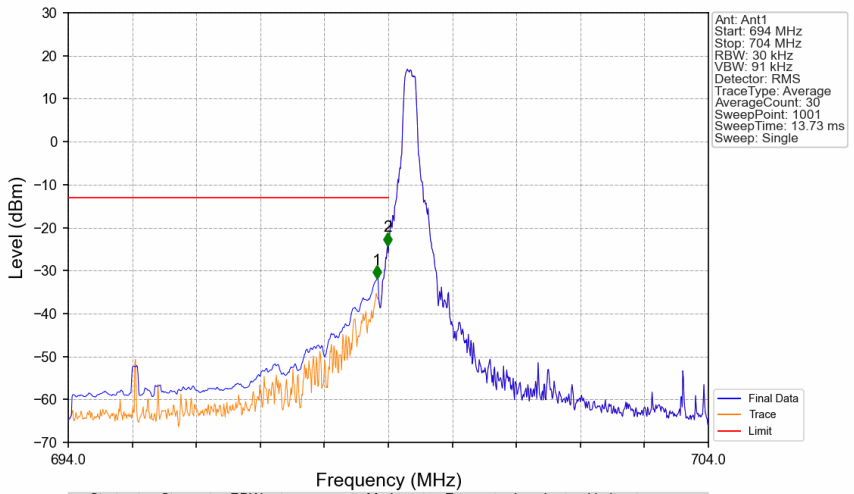
## 5.3 B12_5MHz

### 5.3.1 Test Result

| Band: 12 / Bandwidth: 5MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| 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 |

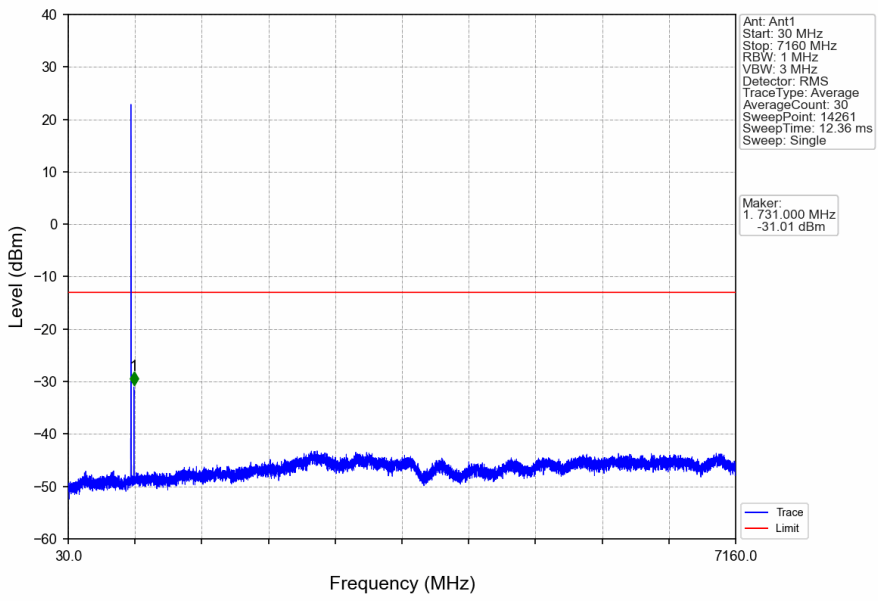
## 5.3.2 Test Graph

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

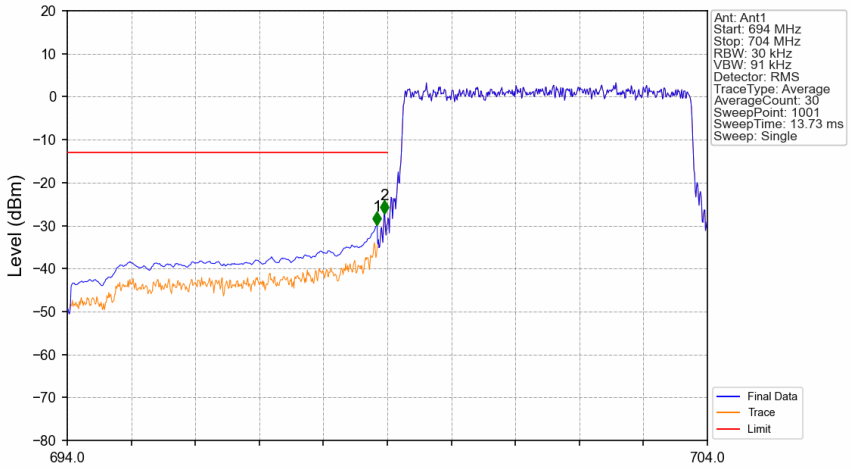



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 694 | 698.9 | 0.1 | CHP | 1 | 698.820 | -31.94 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 698.990 | -24.25 | -13 | Pass |
| 699 | 704 | 0.03 | / | / | / | / | / | / |

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

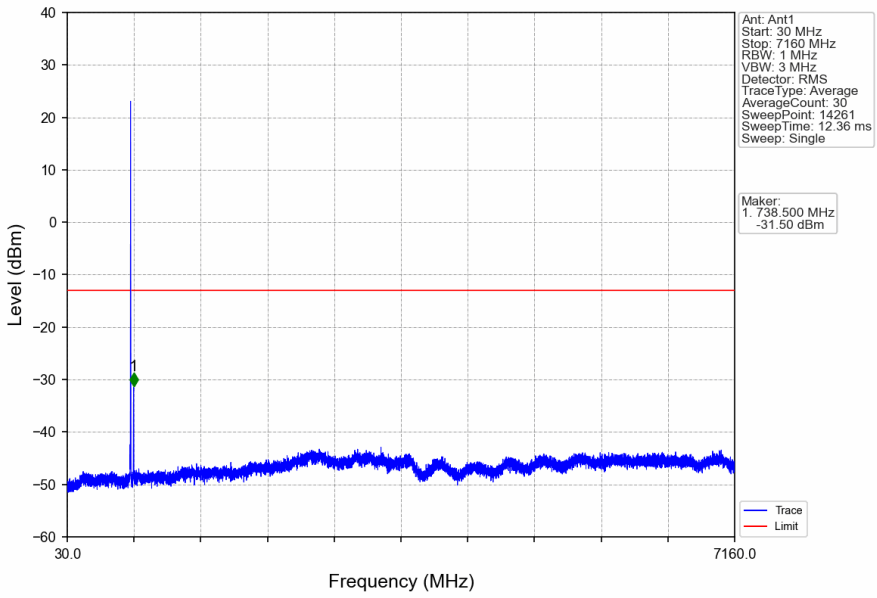


Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV

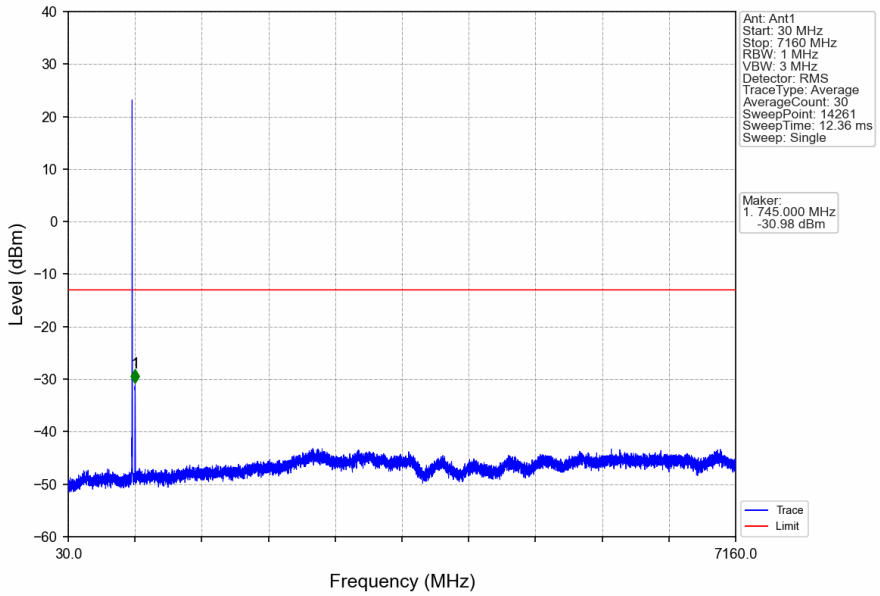



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 694 | 698.9 | 0.1 | CHP | 1 | 698.840 | -29.94 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 698.950 | -27.30 | -13 | Pass |
| 699 | 704 | 0.03 | / | / | / | / | / | / |

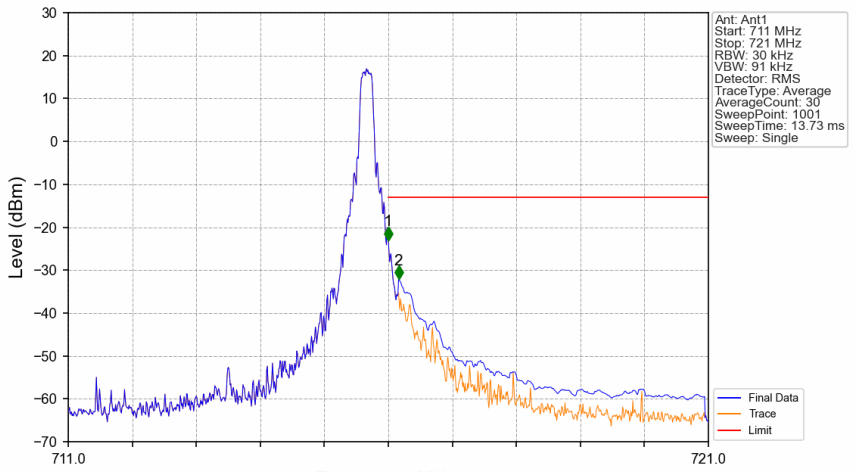
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

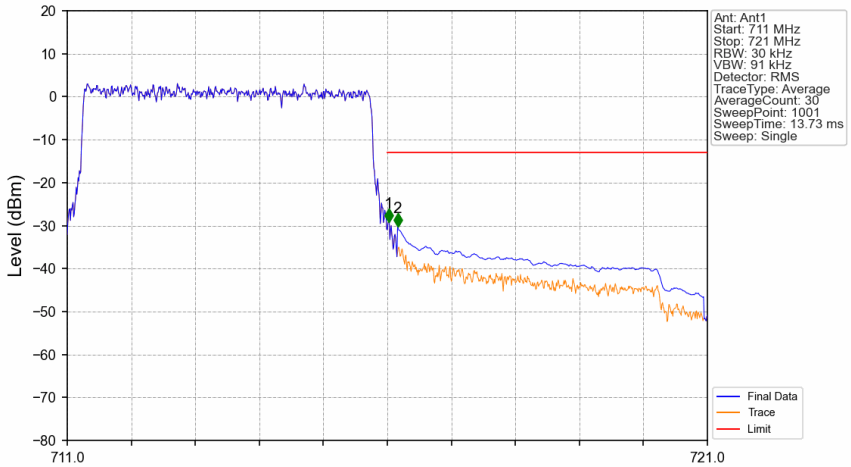



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV




| 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 | 716.000 | -23.00 | -13 | Pass |
| 716.1 | 721 | 0.1 | CHP | 2 | 716.160 | -32.11 | -13 | Pass |

Band12_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 | 716.020 | -29.15 | -13 | Pass |
| 716.1 | 721 | 0.1 | CHP | 2 | 716.160 | -30.23 | -13 | Pass |

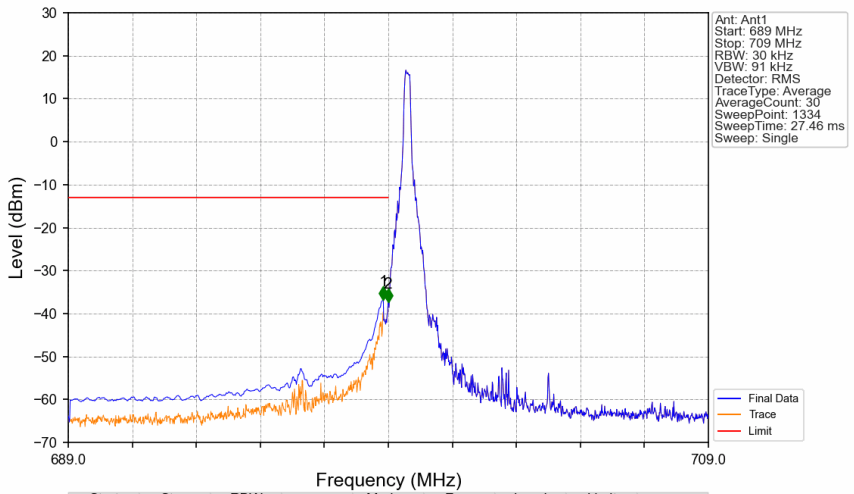
## 5.4 B12_10MHz

### 5.4.1 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 |

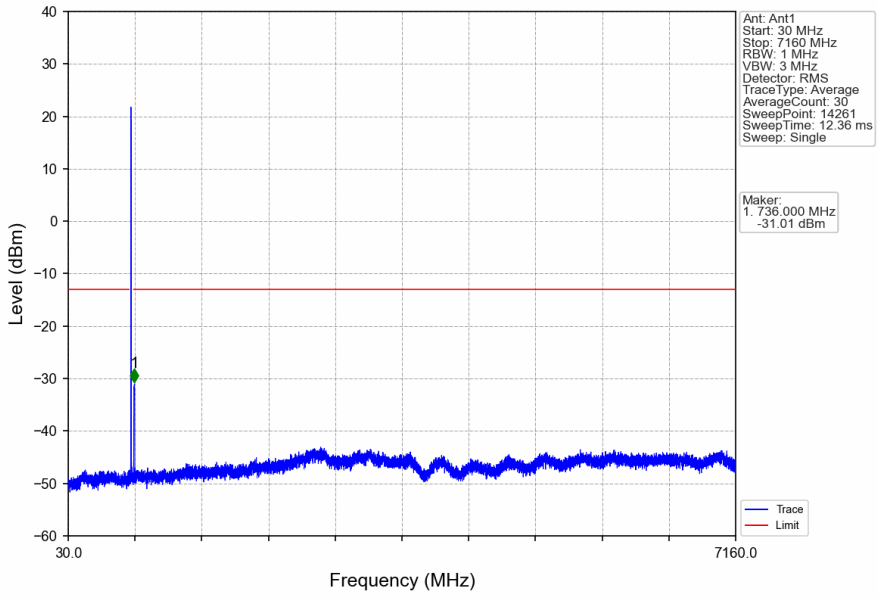
## 5.4.2 Test Graph

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

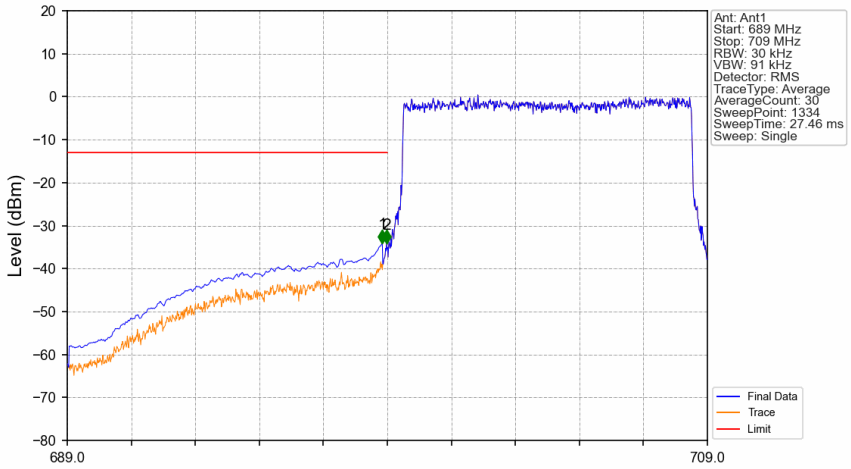



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 689 | 698.9 | 0.1 | CHP | 1 | 698.842 | -36.81 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 698.992 | -37.42 | -13 | Pass |
| 699 | 709 | 0.03 | / | / | / | / | / | / |

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

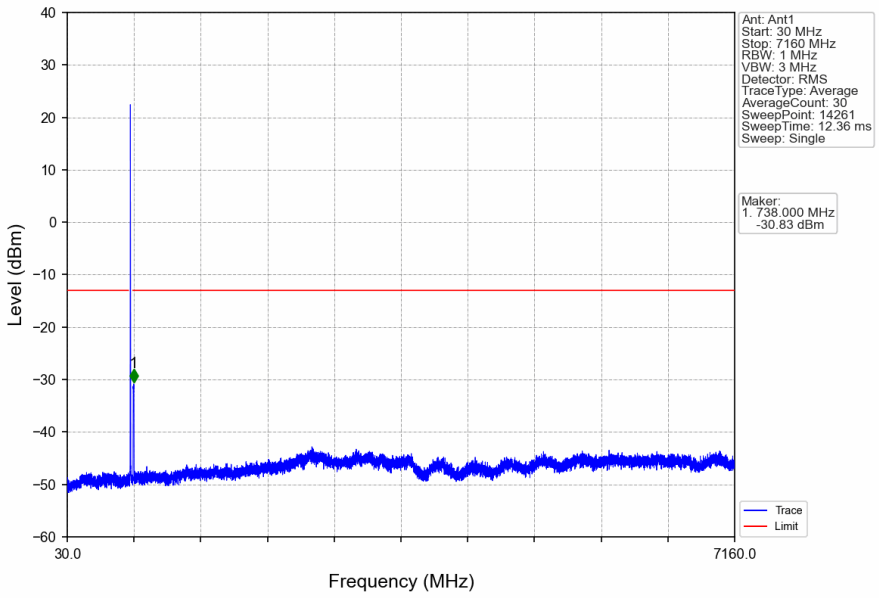


Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV

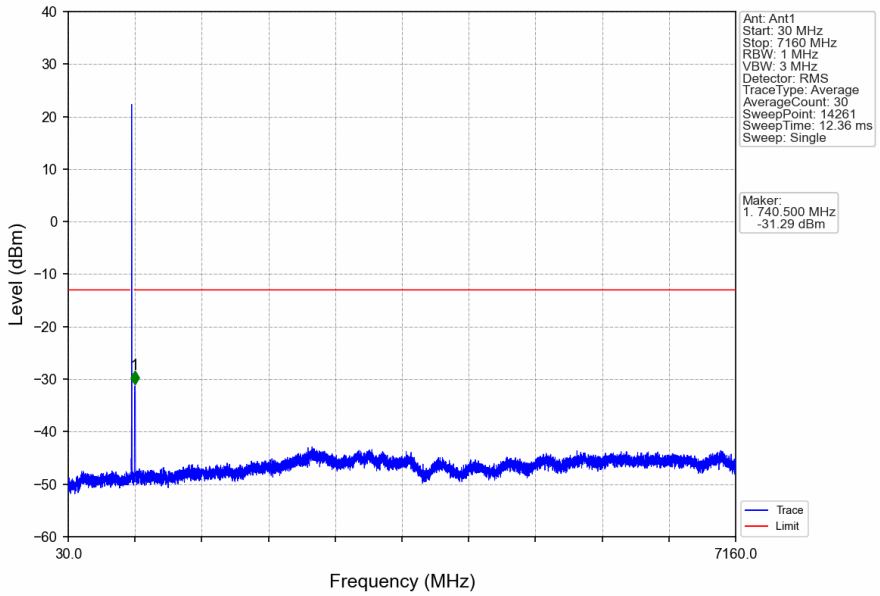



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 689 | 698.9 | 0.1 | CHP | 1 | 698.842 | -34.05 | -13 | Pass |
| 698.9 | 699 | 0.03 | / | 2 | 698.977 | -34.09 | -13 | Pass |
| 699 | 709 | 0.03 | / | / | / | / | / | / |

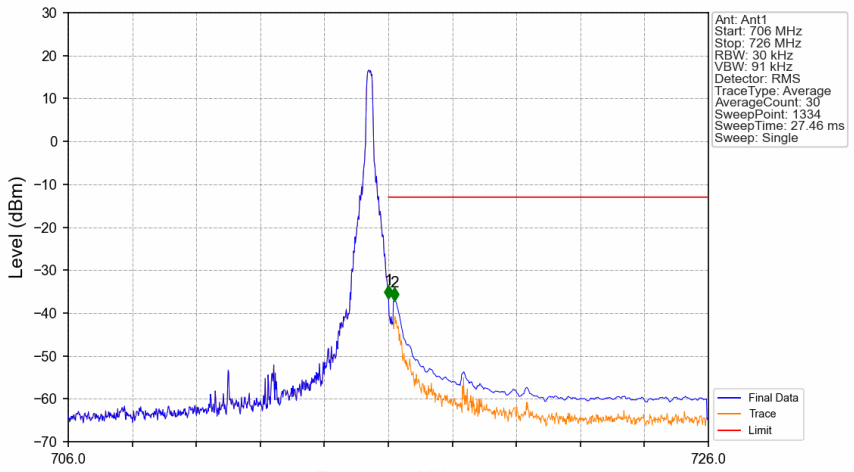
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

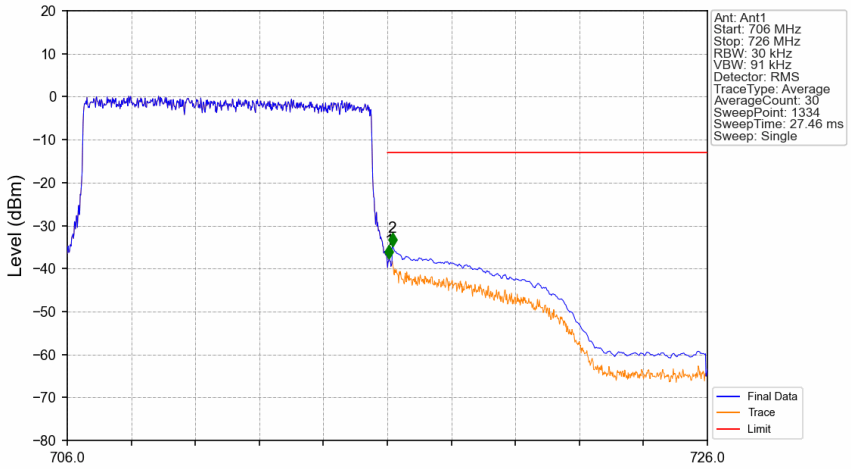



Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV




| 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 | -36.65 | -13 | Pass |
| 716.1 | 726 | 0.1 | CHP | 2 | 716.188 | -37.19 | -13 | Pass |

Band12_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 | 716.053 | -37.62 | -13 | Pass |
| 716.1 | 726 | 0.1 | CHP | 2 | 716.158 | -34.82 | -13 | Pass |