# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 B12_1.4MHz_ERP

| Band: 12 / Bandwidth: 1.4MHz / NTNV | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) | | Verdict |
| | | Size | Offset | | | Result | Limit | |
| QPSK | 699.7 | 1 | 0 | 21.77 | -1.85 | 17.77 | <=34.77 | Pass |
| | | | 2 | 21.85 | -1.85 | 17.85 | <=34.77 | Pass |
| | | | 5 | 21.76 | -1.85 | 17.76 | <=34.77 | Pass |
| | | 3 | 0 | 21.77 | -1.85 | 17.77 | <=34.77 | Pass |
| | | | 2 | 21.78 | -1.85 | 17.78 | <=34.77 | Pass |
| | | | 3 | 21.80 | -1.85 | 17.80 | <=34.77 | Pass |
| | | 6 | 0 | 20.82 | -1.85 | 16.82 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 21.66 | -1.85 | 17.66 | <=34.77 | Pass |
| | | | 2 | 21.41 | -1.85 | 17.41 | <=34.77 | Pass |
| | | | 5 | 21.27 | -1.85 | 17.27 | <=34.77 | Pass |
| | | 3 | 0 | 21.31 | -1.85 | 17.31 | <=34.77 | Pass |
| | | | 2 | 21.34 | -1.85 | 17.34 | <=34.77 | Pass |
| | | | 3 | 21.32 | -1.85 | 17.32 | <=34.77 | Pass |
| | | 6 | 0 | 20.37 | -1.85 | 16.37 | <=34.77 | Pass |
| | 715.3 | 1 | 0 | 21.52 | -1.85 | 17.52 | <=34.77 | Pass |
| | | | 2 | 21.40 | -1.85 | 17.40 | <=34.77 | Pass |
| | | | 5 | 21.31 | -1.85 | 17.31 | <=34.77 | Pass |
| | | 3 | 0 | 21.41 | -1.85 | 17.41 | <=34.77 | Pass |
| | | | 2 | 21.42 | -1.85 | 17.42 | <=34.77 | Pass |
| | | | 3 | 21.38 | -1.85 | 17.38 | <=34.77 | Pass |
| | | 6 | 0 | 20.46 | -1.85 | 16.46 | <=34.77 | Pass |
| 16QAM | 699.7 | 1 | 0 | 20.73 | -1.85 | 16.73 | <=34.77 | Pass |
| | | | 2 | 20.84 | -1.85 | 16.84 | <=34.77 | Pass |
| | | | 5 | 20.80 | -1.85 | 16.80 | <=34.77 | Pass |
| | | 3 | 0 | 20.58 | -1.85 | 16.58 | <=34.77 | Pass |
| | | | 2 | 20.43 | -1.85 | 16.43 | <=34.77 | Pass |
| | | | 3 | 20.35 | -1.85 | 16.35 | <=34.77 | Pass |
| | | 6 | 0 | 19.32 | -1.85 | 15.32 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 20.44 | -1.85 | 16.44 | <=34.77 | Pass |
| | | | 2 | 20.57 | -1.85 | 16.57 | <=34.77 | Pass |
| | | | 5 | 20.44 | -1.85 | 16.44 | <=34.77 | Pass |
| | | 3 | 0 | 20.32 | -1.85 | 16.32 | <=34.77 | Pass |
| | | | 2 | 20.36 | -1.85 | 16.36 | <=34.77 | Pass |
| | | | 3 | 20.37 | -1.85 | 16.37 | <=34.77 | Pass |
| | | 6 | 0 | 19.40 | -1.85 | 15.40 | <=34.77 | Pass |
| | 715.3 | 1 | 0 | 20.35 | -1.85 | 16.35 | <=34.77 | Pass |
| | | | 2 | 20.45 | -1.85 | 16.45 | <=34.77 | Pass |
| | | | 5 | 20.35 | -1.85 | 16.35 | <=34.77 | Pass |
| | | 3 | 0 | 20.62 | -1.85 | 16.62 | <=34.77 | Pass |
| | | | 2 | 20.65 | -1.85 | 16.65 | <=34.77 | Pass |
| | | | 3 | 20.61 | -1.85 | 16.61 | <=34.77 | Pass |
| | | 6 | 0 | 19.47 | -1.85 | 15.47 | <=34.77 | Pass |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 | | | | | | | | |

### 1.1.2 B12_3MHz_ERP

| 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 | 21.90 | -1.85 | 17.90 | <=34.77 | Pass |
| | | | 7 | 22.03 | -1.85 | 18.03 | <=34.77 | Pass |
| | | | 14 | 21.89 | -1.85 | 17.89 | <=34.77 | Pass |
| | | 8 | 0 | 20.86 | -1.85 | 16.86 | <=34.77 | Pass |
| | | | 4 | 20.91 | -1.85 | 16.91 | <=34.77 | Pass |
| | | | 7 | 20.89 | -1.85 | 16.89 | <=34.77 | Pass |
| | | 15 | 0 | 20.85 | -1.85 | 16.85 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 21.88 | -1.85 | 17.88 | <=34.77 | Pass |
| | | | 7 | 21.94 | -1.85 | 17.94 | <=34.77 | Pass |
| | | | 14 | 21.72 | -1.85 | 17.72 | <=34.77 | Pass |
| | | 8 | 0 | 20.58 | -1.85 | 16.58 | <=34.77 | Pass |
| | | | 4 | 20.62 | -1.85 | 16.62 | <=34.77 | Pass |
| | | | 7 | 20.43 | -1.85 | 16.43 | <=34.77 | Pass |
| | | 15 | 0 | 20.48 | -1.85 | 16.48 | <=34.77 | Pass |
| | 714.5 | 1 | 0 | 21.92 | -1.85 | 17.92 | <=34.77 | Pass |
| | | | 7 | 21.82 | -1.85 | 17.82 | <=34.77 | Pass |
| | | | 14 | 21.44 | -1.85 | 17.44 | <=34.77 | Pass |
| | | 8 | 0 | 20.52 | -1.85 | 16.52 | <=34.77 | Pass |
| | | | 4 | 20.59 | -1.85 | 16.59 | <=34.77 | Pass |
| | | | 7 | 20.55 | -1.85 | 16.55 | <=34.77 | Pass |
| | | 15 | 0 | 20.59 | -1.85 | 16.59 | <=34.77 | Pass |
| 16QAM | 700.5 | 1 | 0 | 20.85 | -1.85 | 16.85 | <=34.77 | Pass |
| | | | 7 | 20.98 | -1.85 | 16.98 | <=34.77 | Pass |
| | | | 14 | 20.66 | -1.85 | 16.66 | <=34.77 | Pass |
| | | 8 | 0 | 19.85 | -1.85 | 15.85 | <=34.77 | Pass |
| | | | 4 | 19.75 | -1.85 | 15.75 | <=34.77 | Pass |
| | | | 7 | 19.88 | -1.85 | 15.88 | <=34.77 | Pass |
| | | 15 | 0 | 19.83 | -1.85 | 15.83 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 20.71 | -1.85 | 16.71 | <=34.77 | Pass |
| | | | 7 | 20.87 | -1.85 | 16.87 | <=34.77 | Pass |
| | | | 14 | 20.60 | -1.85 | 16.60 | <=34.77 | Pass |
| | | 8 | 0 | 19.49 | -1.85 | 15.49 | <=34.77 | Pass |
| | | | 4 | 19.65 | -1.85 | 15.65 | <=34.77 | Pass |
| | | | 7 | 19.59 | -1.85 | 15.59 | <=34.77 | Pass |
| | | 15 | 0 | 19.62 | -1.85 | 15.62 | <=34.77 | Pass |
| | 714.5 | 1 | 0 | 21.01 | -1.85 | 17.01 | <=34.77 | Pass |
| | | | 7 | 21.19 | -1.85 | 17.19 | <=34.77 | Pass |
| | | | 14 | 21.03 | -1.85 | 17.03 | <=34.77 | Pass |
| | | 8 | 0 | 19.65 | -1.85 | 15.65 | <=34.77 | Pass |
| | | | 4 | 19.78 | -1.85 | 15.78 | <=34.77 | Pass |
| | | | 7 | 19.85 | -1.85 | 15.85 | <=34.77 | Pass |
| | | 15 | 0 | 19.89 | -1.85 | 15.89 | <=34.77 | Pass |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 | | | | | | | | |

### 1.1.3 B12_5MHz_ERP

| 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 | 21.71 | -1.85 | 17.71 | <=34.77 | Pass |
| | | | 13 | 21.85 | -1.85 | 17.85 | <=34.77 | Pass |
| | | | 24 | 21.72 | -1.85 | 17.72 | <=34.77 | Pass |
| | | 12 | 0 | 20.68 | -1.85 | 16.68 | <=34.77 | Pass |
| | | | 6 | 20.87 | -1.85 | 16.87 | <=34.77 | Pass |
| | | | 13 | 20.82 | -1.85 | 16.82 | <=34.77 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 25 | 0 | 20.75 | -1.85 | 16.75 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 21.72 | -1.85 | 17.72 | <=34.77 | Pass |
| | | | 13 | 21.83 | -1.85 | 17.83 | <=34.77 | Pass |
| | | | 24 | 21.74 | -1.85 | 17.74 | <=34.77 | Pass |
| | | 12 | 0 | 20.85 | -1.85 | 16.85 | <=34.77 | Pass |
| | | | 6 | 20.88 | -1.85 | 16.88 | <=34.77 | Pass |
| | | | 13 | 20.81 | -1.85 | 16.81 | <=34.77 | Pass |
| | | 25 | 0 | 20.82 | -1.85 | 16.82 | <=34.77 | Pass |
| | 713.5 | 1 | 0 | 21.75 | -1.85 | 17.75 | <=34.77 | Pass |
| | | | 13 | 21.86 | -1.85 | 17.86 | <=34.77 | Pass |
| | | | 24 | 21.62 | -1.85 | 17.62 | <=34.77 | Pass |
| | | 12 | 0 | 20.52 | -1.85 | 16.52 | <=34.77 | Pass |
| | | | 6 | 20.77 | -1.85 | 16.77 | <=34.77 | Pass |
| | | | 13 | 20.67 | -1.85 | 16.67 | <=34.77 | Pass |
| | | 25 | 0 | 20.76 | -1.85 | 16.76 | <=34.77 | Pass |
| 16QAM | 701.5 | 1 | 0 | 20.78 | -1.85 | 16.78 | <=34.77 | Pass |
| | | | 13 | 20.96 | -1.85 | 16.96 | <=34.77 | Pass |
| | | | 24 | 20.85 | -1.85 | 16.85 | <=34.77 | Pass |
| | | 12 | 0 | 19.61 | -1.85 | 15.61 | <=34.77 | Pass |
| | | | 6 | 19.81 | -1.85 | 15.81 | <=34.77 | Pass |
| | | | 13 | 19.77 | -1.85 | 15.77 | <=34.77 | Pass |
| | | 25 | 0 | 19.75 | -1.85 | 15.75 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 20.96 | -1.85 | 16.96 | <=34.77 | Pass |
| | | | 13 | 21.07 | -1.85 | 17.07 | <=34.77 | Pass |
| | | | 24 | 20.85 | -1.85 | 16.85 | <=34.77 | Pass |
| | | 12 | 0 | 19.78 | -1.85 | 15.78 | <=34.77 | Pass |
| | | | 6 | 19.75 | -1.85 | 15.75 | <=34.77 | Pass |
| | | | 13 | 19.89 | -1.85 | 15.89 | <=34.77 | Pass |
| | | 25 | 0 | 19.82 | -1.85 | 15.82 | <=34.77 | Pass |
| | 713.5 | 1 | 0 | 20.53 | -1.85 | 16.53 | <=34.77 | Pass |
| | | | 13 | 20.71 | -1.85 | 16.71 | <=34.77 | Pass |
| | | | 24 | 20.46 | -1.85 | 16.46 | <=34.77 | Pass |
| | | 12 | 0 | 19.68 | -1.85 | 15.68 | <=34.77 | Pass |
| | | | 6 | 19.83 | -1.85 | 15.83 | <=34.77 | Pass |
| | | | 13 | 19.73 | -1.85 | 15.73 | <=34.77 | Pass |
| | | 25 | 0 | 19.91 | -1.85 | 15.91 | <=34.77 | Pass |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 | | | | | | | | |

## 1.1.4 B12_10MHz_ERP

| Band: 12 / Bandwidth: 10MHz / NTNV | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) | | Verdict |
| | | Size | Offset | | | Result | Limit | |
| QPSK | 704 | 1 | 0 | 21.75 | -1.85 | 17.75 | <=34.77 | Pass |
| | | | 25 | 22.03 | -1.85 | 18.03 | <=34.77 | Pass |
| | | | 49 | 21.84 | -1.85 | 17.84 | <=34.77 | Pass |
| | | 25 | 0 | 20.75 | -1.85 | 16.75 | <=34.77 | Pass |
| | | | 13 | 20.88 | -1.85 | 16.88 | <=34.77 | Pass |
| | | | 25 | 20.82 | -1.85 | 16.82 | <=34.77 | Pass |
| | | 50 | 0 | 20.79 | -1.85 | 16.79 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 21.68 | -1.85 | 17.68 | <=34.77 | Pass |
| | | | 25 | 22.01 | -1.85 | 18.01 | <=34.77 | Pass |
| | | | 49 | 21.83 | -1.85 | 17.83 | <=34.77 | Pass |
| | | 25 | 0 | 20.99 | -1.85 | 16.99 | <=34.77 | Pass |
| | | | 13 | 20.93 | -1.85 | 16.93 | <=34.77 | Pass |
| | | | 25 | 20.96 | -1.85 | 16.96 | <=34.77 | Pass |
| | | 50 | 0 | 20.96 | -1.85 | 16.96 | <=34.77 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 711 | 1 | 0 | 21.77 | -1.85 | 17.77 | <=34.77 | Pass |
| | | | 25 | 22.04 | -1.85 | 18.04 | <=34.77 | Pass |
| | | | 49 | 21.88 | -1.85 | 17.88 | <=34.77 | Pass |
| | | 25 | 0 | 20.87 | -1.85 | 16.87 | <=34.77 | Pass |
| | | | 13 | 20.95 | -1.85 | 16.95 | <=34.77 | Pass |
| | | | 25 | 20.89 | -1.85 | 16.89 | <=34.77 | Pass |
| | | 50 | 0 | 20.89 | -1.85 | 16.89 | <=34.77 | Pass |
| 16QAM | 704 | 1 | 0 | 20.72 | -1.85 | 16.72 | <=34.77 | Pass |
| | | | 25 | 21.03 | -1.85 | 17.03 | <=34.77 | Pass |
| | | | 49 | 20.84 | -1.85 | 16.84 | <=34.77 | Pass |
| | | 25 | 0 | 19.77 | -1.85 | 15.77 | <=34.77 | Pass |
| | | | 13 | 19.95 | -1.85 | 15.95 | <=34.77 | Pass |
| | | | 25 | 19.89 | -1.85 | 15.89 | <=34.77 | Pass |
| | | 50 | 0 | 19.79 | -1.85 | 15.79 | <=34.77 | Pass |
| | 707.5 | 1 | 0 | 20.88 | -1.85 | 16.88 | <=34.77 | Pass |
| | | | 25 | 21.21 | -1.85 | 17.21 | <=34.77 | Pass |
| | | | 49 | 21.03 | -1.85 | 17.03 | <=34.77 | Pass |
| | | 25 | 0 | 19.99 | -1.85 | 15.99 | <=34.77 | Pass |
| | | | 13 | 19.96 | -1.85 | 15.96 | <=34.77 | Pass |
| | | | 25 | 19.99 | -1.85 | 15.99 | <=34.77 | Pass |
| | | 50 | 0 | 19.94 | -1.85 | 15.94 | <=34.77 | Pass |
| | 711 | 1 | 0 | 21.30 | -1.85 | 17.30 | <=34.77 | Pass |
| | | | 25 | 21.43 | -1.85 | 17.43 | <=34.77 | Pass |
| | | | 49 | 21.13 | -1.85 | 17.13 | <=34.77 | Pass |
| | | 25 | 0 | 19.65 | -1.85 | 15.65 | <=34.77 | Pass |
| | | | 13 | 19.95 | -1.85 | 15.95 | <=34.77 | Pass |
| | | | 25 | 19.87 | -1.85 | 15.87 | <=34.77 | Pass |
| | | 50 | 0 | 19.87 | -1.85 | 15.87 | <=34.77 | Pass |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 | | | | | | | | |

# 2. Frequency Stability

## 2.1 Test Result

### 2.1.1 B12_1.4MHz

| Band: 12 / Bandwidth: 1.4MHz | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | Size | Offset | | | | Result | Limit | |
| QPSK | 699.7 | 6 | 0 | 20 | 3.27 | -3.963 | -0.0057 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -3.934 | -0.0056 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -5.121 | -0.0073 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -5.751 | -0.0082 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -5.450 | -0.0078 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -5.922 | -0.0085 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -4.406 | -0.0063 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -4.420 | -0.0063 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -9.112 | -0.0130 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -3.419 | -0.0049 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -1.373 | -0.0020 | -2.5 to 2.5 | Pass |
| | 707.5 | 6 | 0 | 20 | 3.27 | -5.364 | -0.0076 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -6.409 | -0.0091 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -6.580 | -0.0093 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -8.683 | -0.0123 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -5.136 | -0.0073 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -2.203 | -0.0031 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 3.85 | -6.022 | -0.0085 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -7.052 | -0.0100 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -6.323 | -0.0089 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -12.059 | -0.0170 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -3.448 | -0.0049 | -2.5 to 2.5 | Pass |
| | 715.3 | 6 | 0 | 20 | 3.27 | -4.992 | -0.0070 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -6.351 | -0.0089 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -6.680 | -0.0093 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -4.148 | -0.0058 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -9.212 | -0.0129 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -8.869 | -0.0124 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -11.401 | -0.0159 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -7.811 | -0.0109 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 1.230 | 0.0017 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -6.237 | -0.0087 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -1.931 | -0.0027 | -2.5 to 2.5 | Pass |
| 16QAM | 699.7 | 6 | 0 | 20 | 3.27 | -7.839 | -0.0112 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -4.621 | -0.0066 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -7.124 | -0.0102 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -4.892 | -0.0070 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -4.120 | -0.0059 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -4.835 | -0.0069 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -2.103 | -0.0030 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -7.424 | -0.0106 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -8.054 | -0.0115 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -3.877 | -0.0055 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -11.001 | -0.0157 | -2.5 to 2.5 | Pass |
| | 707.5 | 6 | 0 | 20 | 3.27 | -10.715 | -0.0151 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -4.349 | -0.0061 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -3.304 | -0.0047 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -7.410 | -0.0105 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -3.233 | -0.0046 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -1.073 | -0.0015 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -5.164 | -0.0073 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -1.931 | -0.0027 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -5.064 | -0.0072 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -4.077 | -0.0058 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -5.178 | -0.0073 | -2.5 to 2.5 | Pass |
| | 715.3 | 6 | 0 | 20 | 3.27 | -11.559 | -0.0162 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -8.283 | -0.0116 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -7.467 | -0.0104 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -7.567 | -0.0106 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -6.552 | -0.0092 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -13.905 | -0.0194 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -6.924 | -0.0097 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -9.556 | -0.0134 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -6.881 | -0.0096 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -3.490 | -0.0049 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -11.201 | -0.0157 | -2.5 to 2.5 | Pass |

## 2.1.2 B12_3MHz

| Band: 12 / Bandwidth: 3MHz | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | Size | Offset | | | | Result | Limit | |
| QPSK | 700.5 | 15 | 0 | 20 | 3.27 | -8.140 | -0.0116 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -6.766 | -0.0097 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4.43 | -6.166 | -0.0088 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -1.030 | -0.0015 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -5.565 | -0.0079 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -8.368 | -0.0119 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -4.849 | -0.0069 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -6.995 | -0.0100 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -7.081 | -0.0101 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -8.125 | -0.0116 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -15.464 | -0.0221 | -2.5 to 2.5 | Pass |
| | 707.5 | 15 | 0 | 20 | 3.27 | -2.632 | -0.0037 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -7.639 | -0.0108 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -7.138 | -0.0101 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -2.003 | -0.0028 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -7.482 | -0.0106 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -9.713 | -0.0137 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -6.795 | -0.0096 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -6.180 | -0.0087 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -5.264 | -0.0074 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -7.510 | -0.0106 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -7.753 | -0.0110 | -2.5 to 2.5 | Pass |
| | 714.5 | 15 | 0 | 20 | 3.27 | -3.476 | -0.0049 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -8.383 | -0.0117 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -5.436 | -0.0076 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -9.656 | -0.0135 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -6.824 | -0.0096 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -8.726 | -0.0122 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -9.284 | -0.0130 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -6.881 | -0.0096 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -8.869 | -0.0124 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -3.362 | -0.0047 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -10.943 | -0.0153 | -2.5 to 2.5 | Pass |
| 16QAM | 700.5 | 15 | 0 | 20 | 3.27 | -18.039 | -0.0258 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -11.745 | -0.0168 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 7.939 | 0.0113 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -10.386 | -0.0148 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -9.499 | -0.0136 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -8.583 | -0.0123 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -4.821 | -0.0069 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -8.054 | -0.0115 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -7.596 | -0.0108 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -6.795 | -0.0097 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 7.339 | 0.0105 | -2.5 to 2.5 | Pass |
| | 707.5 | 15 | 0 | 20 | 3.27 | -4.792 | -0.0068 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 0.329 | 0.0005 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -7.353 | -0.0104 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -7.625 | -0.0108 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -6.280 | -0.0089 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -3.619 | -0.0051 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -0.014 | 0.0000 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -7.882 | -0.0111 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -3.133 | -0.0044 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -8.898 | -0.0126 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -9.456 | -0.0134 | -2.5 to 2.5 | Pass |
| | 714.5 | 15 | 0 | 20 | 3.27 | -4.678 | -0.0065 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -7.997 | -0.0112 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -6.266 | -0.0088 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -5.236 | -0.0073 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -6.280 | -0.0088 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -1.659 | -0.0023 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 3.85 | -4.320 | -0.0060 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -9.670 | -0.0135 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -10.171 | -0.0142 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -8.154 | -0.0114 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -5.894 | -0.0082 | -2.5 to 2.5 | Pass |

## 2.1.3 B12_5MHz

| Band: 12 / Bandwidth: 5MHz | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | Size | Offset | | | | Result | Limit | |
| QPSK | 701.5 | 25 | 0 | 20 | 3.27 | -5.021 | -0.0072 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -4.992 | -0.0071 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -7.539 | -0.0107 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -5.865 | -0.0084 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -6.924 | -0.0099 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -4.120 | -0.0059 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -6.094 | -0.0087 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -3.376 | -0.0048 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -4.849 | -0.0069 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -5.307 | -0.0076 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -3.676 | -0.0052 | -2.5 to 2.5 | Pass |
| | 707.5 | 25 | 0 | 20 | 3.27 | -7.753 | -0.0110 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -4.549 | -0.0064 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -10.214 | -0.0144 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -6.495 | -0.0092 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 1.144 | 0.0016 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -7.939 | -0.0112 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -3.276 | -0.0046 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -2.832 | -0.0040 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -8.612 | -0.0122 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -4.935 | -0.0070 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -7.439 | -0.0105 | -2.5 to 2.5 | Pass |
| | 713.5 | 25 | 0 | 20 | 3.27 | -7.110 | -0.0100 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -5.121 | -0.0072 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -6.881 | -0.0096 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -6.208 | -0.0087 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -4.020 | -0.0056 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -2.704 | -0.0038 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -10.128 | -0.0142 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -9.427 | -0.0132 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -7.825 | -0.0110 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -9.871 | -0.0138 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -4.992 | -0.0070 | -2.5 to 2.5 | Pass |
| 16QAM | 701.5 | 25 | 0 | 20 | 3.27 | -5.679 | -0.0081 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -7.238 | -0.0103 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -7.753 | -0.0111 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -3.033 | -0.0043 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -3.862 | -0.0055 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -7.153 | -0.0102 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -4.621 | -0.0066 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -5.980 | -0.0085 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -5.064 | -0.0072 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -5.608 | -0.0080 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -8.798 | -0.0125 | -2.5 to 2.5 | Pass |
| | 707.5 | 25 | 0 | 20 | 3.27 | -4.864 | -0.0069 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -8.297 | -0.0117 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4.43 | -5.264 | -0.0074 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -2.861 | -0.0040 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -8.011 | -0.0113 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -8.569 | -0.0121 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -5.307 | -0.0075 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -1.030 | -0.0015 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -3.476 | -0.0049 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -7.625 | -0.0108 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -4.592 | -0.0065 | -2.5 to 2.5 | Pass |
| | 713.5 | 25 | 0 | 20 | 3.27 | -8.569 | -0.0120 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -9.341 | -0.0131 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -6.852 | -0.0096 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -4.549 | -0.0064 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -4.091 | -0.0057 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -7.052 | -0.0099 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -3.548 | -0.0050 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -4.005 | -0.0056 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -6.351 | -0.0089 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -2.832 | -0.0040 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -4.807 | -0.0067 | -2.5 to 2.5 | Pass |

## 2.1.4 B12_10MHz

| 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 | -9.770 | -0.0139 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -2.818 | -0.0040 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -5.765 | -0.0082 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -6.251 | -0.0089 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -5.107 | -0.0073 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -3.891 | -0.0055 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -4.721 | -0.0067 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -4.706 | -0.0067 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -9.584 | -0.0136 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -7.467 | -0.0106 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -3.619 | -0.0051 | -2.5 to 2.5 | Pass |
| | 707.5 | 50 | 0 | 20 | 3.27 | -7.195 | -0.0102 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -4.091 | -0.0058 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -6.495 | -0.0092 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -5.808 | -0.0082 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -7.796 | -0.0110 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -7.768 | -0.0110 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -2.832 | -0.0040 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -4.063 | -0.0057 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -8.869 | -0.0125 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -3.791 | -0.0054 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -4.492 | -0.0063 | -2.5 to 2.5 | Pass |
| | 711 | 50 | 0 | 20 | 3.27 | -9.813 | -0.0138 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -9.971 | -0.0140 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -6.623 | -0.0093 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -7.253 | -0.0102 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -7.167 | -0.0101 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -4.807 | -0.0068 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -5.293 | -0.0074 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -7.024 | -0.0099 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -11.845 | -0.0167 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 40 | 3.85 | -5.708 | -0.0080 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -7.482 | -0.0105 | -2.5 to 2.5 | Pass |
| 16QAM | 704 | 50 | 0 | 20 | 3.27 | -4.721 | -0.0067 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -6.895 | -0.0098 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -9.184 | -0.0130 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -3.805 | -0.0054 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -7.339 | -0.0104 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -7.567 | -0.0107 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -10.729 | -0.0152 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -3.862 | -0.0055 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -4.678 | -0.0066 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -6.566 | -0.0093 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -3.963 | -0.0056 | -2.5 to 2.5 | Pass |
| | 707.5 | 50 | 0 | 20 | 3.27 | -5.236 | -0.0074 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -3.591 | -0.0051 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -2.961 | -0.0042 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -2.174 | -0.0031 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -3.176 | -0.0045 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -8.311 | -0.0117 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -4.563 | -0.0064 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -6.680 | -0.0094 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -9.584 | -0.0135 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -7.052 | -0.0100 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -5.965 | -0.0084 | -2.5 to 2.5 | Pass |
| | 711 | 50 | 0 | 20 | 3.27 | -8.082 | -0.0114 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -7.210 | -0.0101 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -5.593 | -0.0079 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -3.805 | -0.0054 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -5.350 | -0.0075 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -5.336 | -0.0075 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -7.625 | -0.0107 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -4.721 | -0.0066 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -7.138 | -0.0100 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -3.619 | -0.0051 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -3.333 | -0.0047 | -2.5 to 2.5 | Pass |

# 3. Modulation Characteristics

## 3.1 Test Result

### 3.1.1 B12_1.4MHz

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

### 3.1.2 B12_3MHz

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

### 3.1.3 B12_5MHz

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

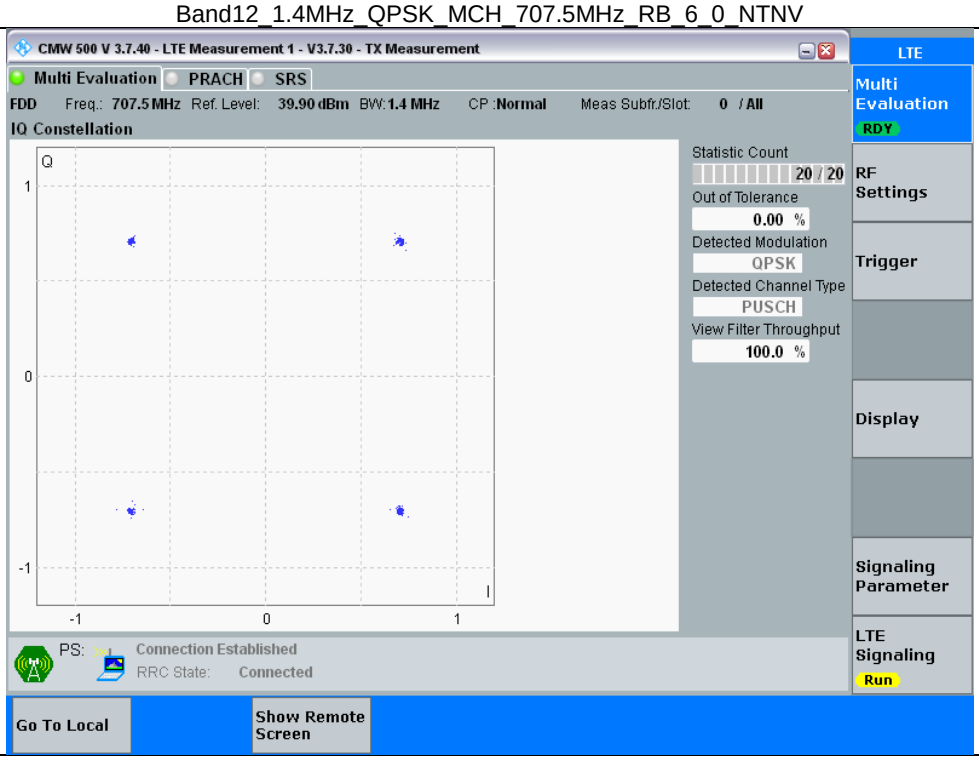
### 3.1.4 B12_10MHz

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

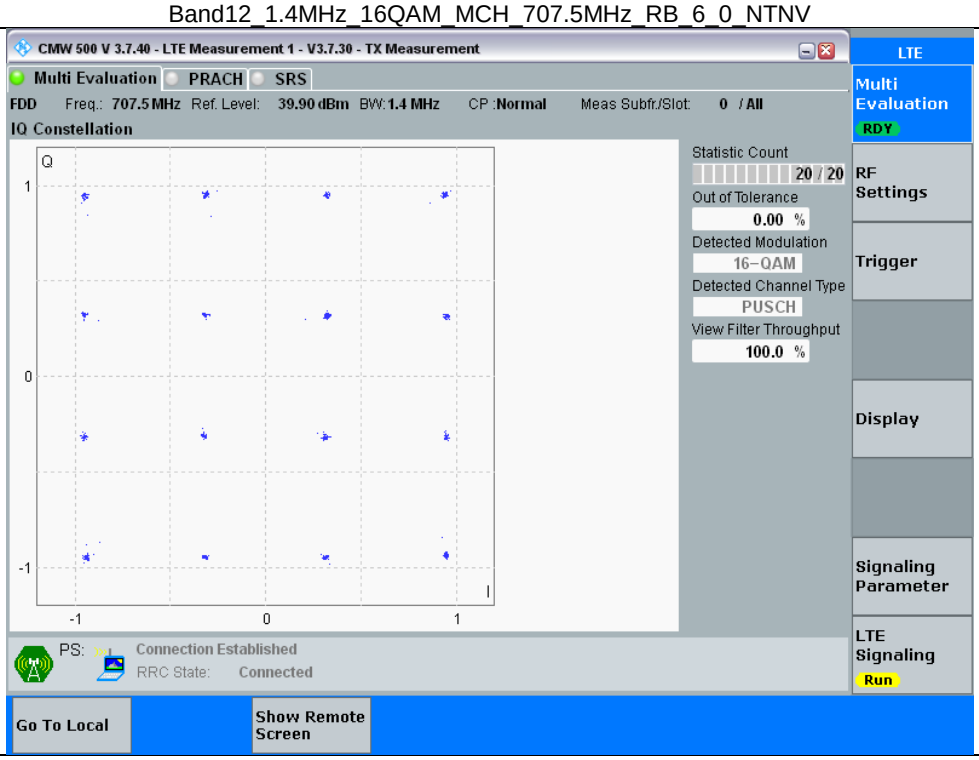
## 3.2 Test Graph

### 3.2.1 B12_1.4MHz

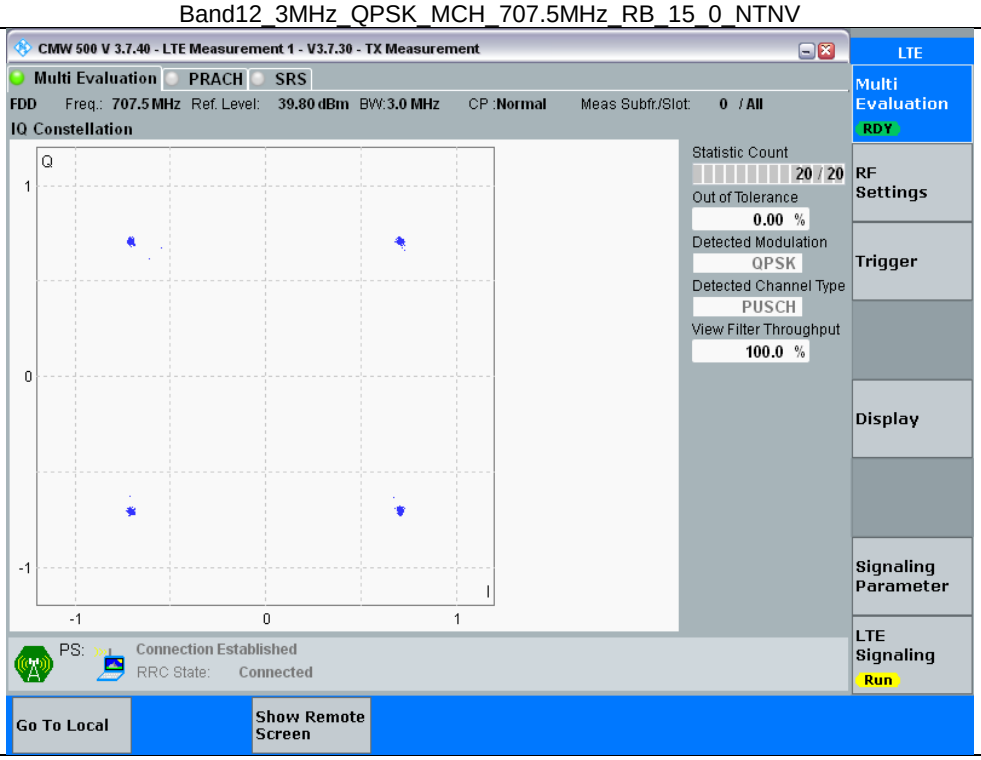
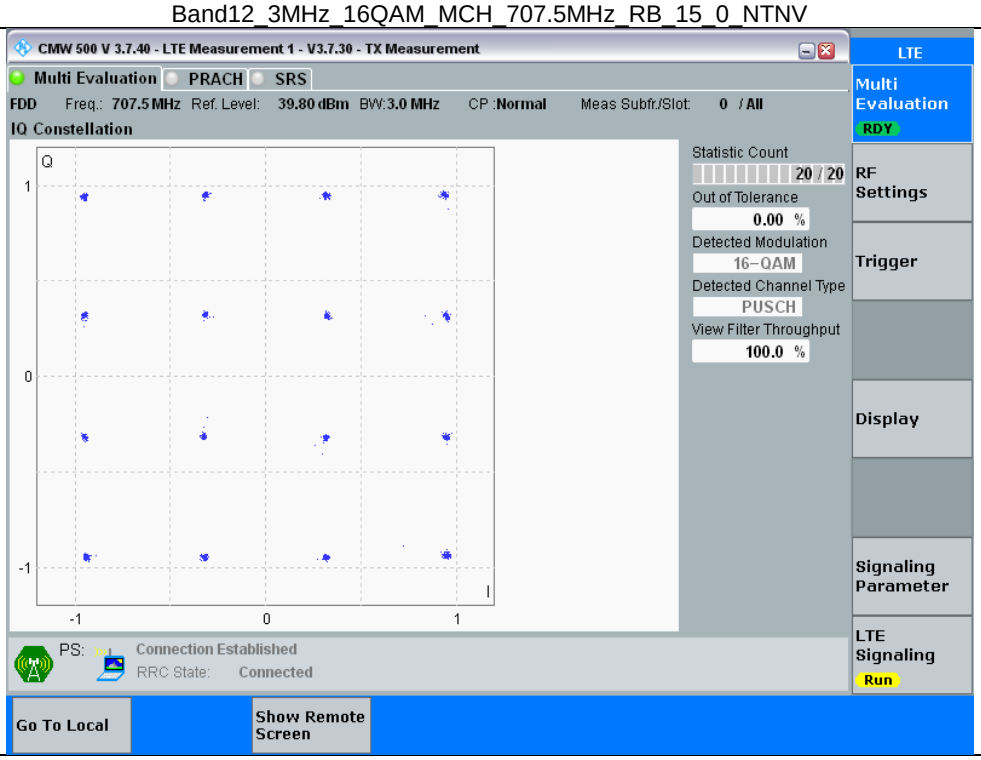
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



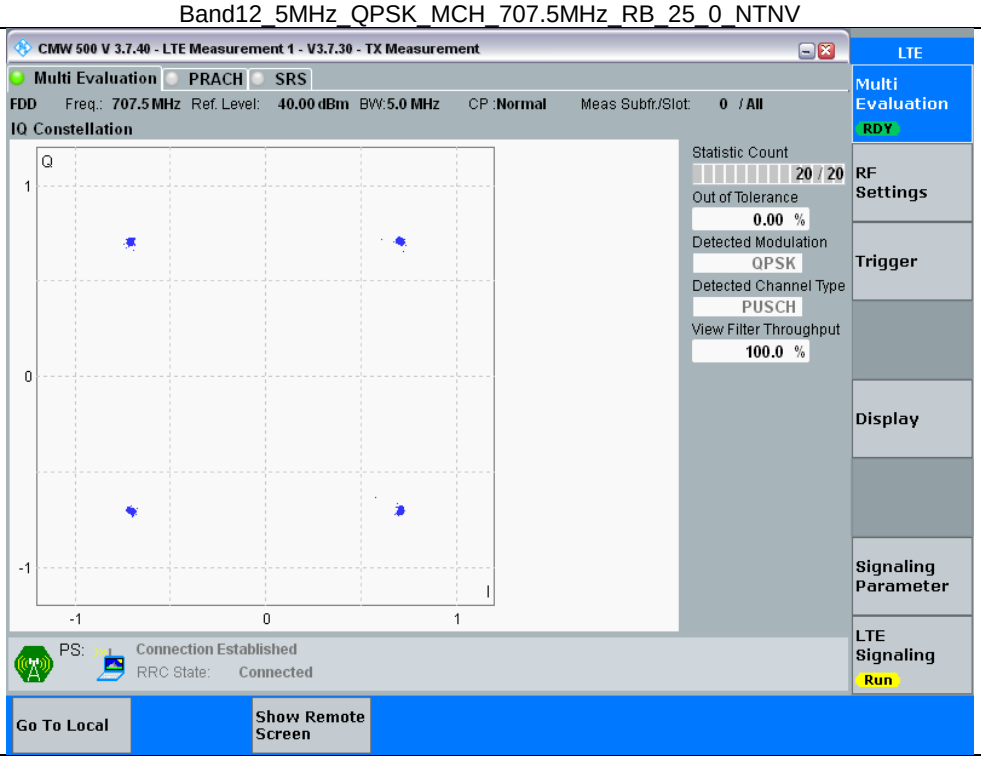
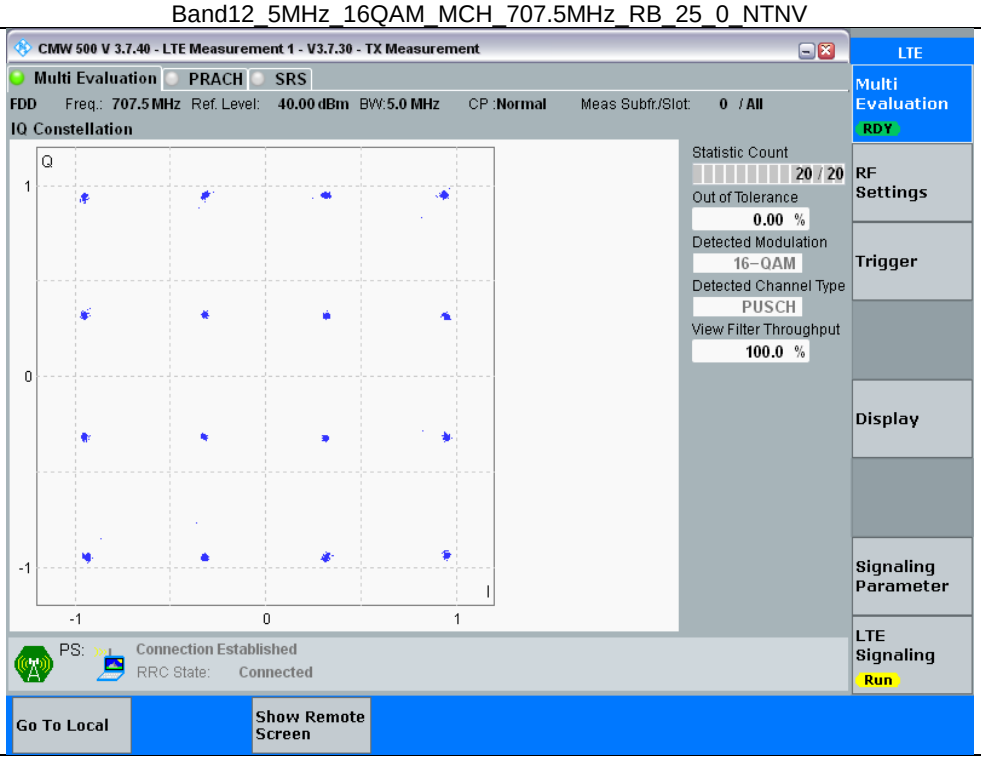

Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



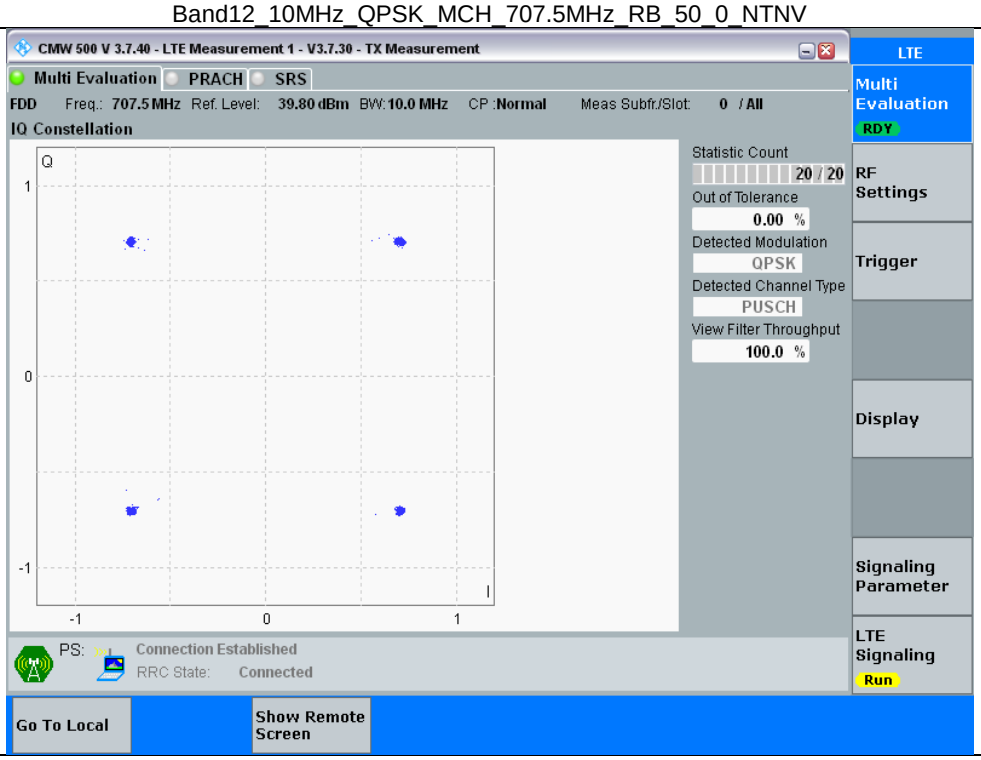
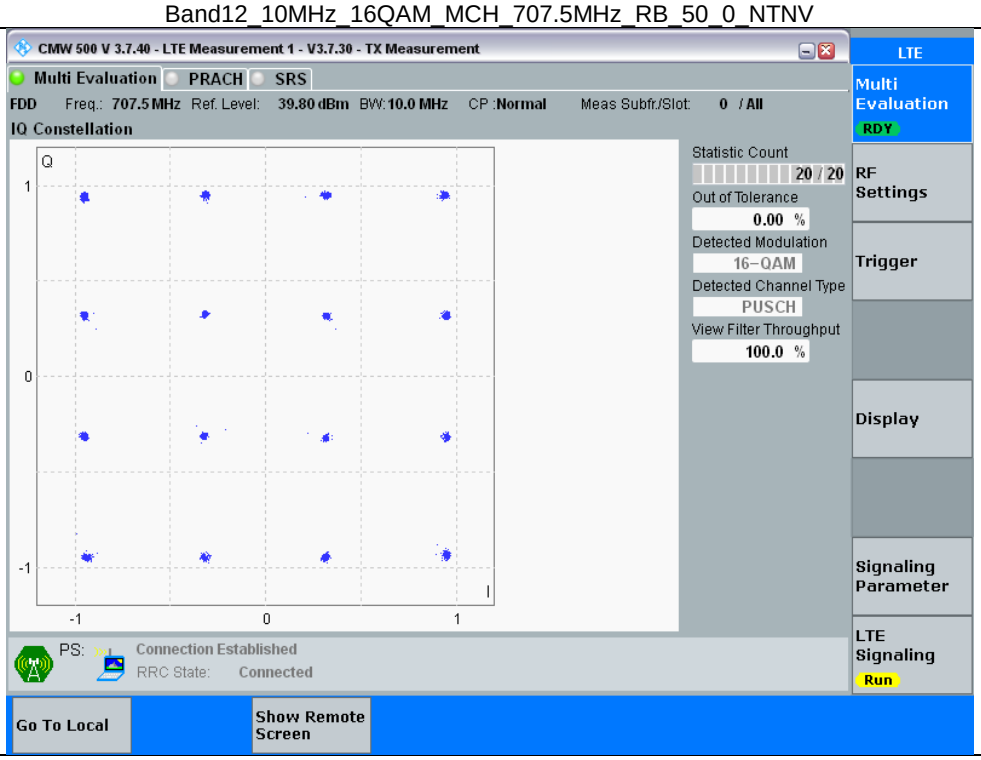
### 3.2.2 B12_3MHz

| Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV |
| --- |
|  |
| Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV |
|  |

### 3.2.3 B12_5MHz

| Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV |
| --- |
|  |
| Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV |
|  |

### 3.2.4 B12_10MHz

| Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV |
| --- |
|  |
| Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV |
|  |

# 4. 99% & 26dB Bandwidth

## 4.1 Test Result

### 4.1.1 Band12_OBW

| 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 | 1.119 | / | Pass |
| | | 707.5 | 6 | 0 | 1.111 | / | Pass |
| | | 715.3 | 6 | 0 | 1.109 | / | Pass |
| | 16QAM | 699.7 | 6 | 0 | 1.108 | / | Pass |
| | | 707.5 | 6 | 0 | 1.105 | / | Pass |
| | | 715.3 | 6 | 0 | 1.110 | / | Pass |
| 3 | QPSK | 700.5 | 15 | 0 | 2.730 | / | Pass |
| | | 707.5 | 15 | 0 | 2.734 | / | Pass |
| | | 714.5 | 15 | 0 | 2.724 | / | Pass |
| | 16QAM | 700.5 | 15 | 0 | 2.718 | / | Pass |
| | | 707.5 | 15 | 0 | 2.731 | / | Pass |
| | | 714.5 | 15 | 0 | 2.718 | / | Pass |
| 5 | QPSK | 701.5 | 25 | 0 | 4.559 | / | Pass |
| | | 707.5 | 25 | 0 | 4.567 | / | Pass |
| | | 713.5 | 25 | 0 | 4.568 | / | Pass |
| | 16QAM | 701.5 | 25 | 0 | 4.582 | / | Pass |
| | | 707.5 | 25 | 0 | 4.592 | / | Pass |
| | | 713.5 | 25 | 0 | 4.549 | / | Pass |
| 10 | QPSK | 704 | 50 | 0 | 9.089 | / | Pass |
| | | 707.5 | 50 | 0 | 9.076 | / | Pass |
| | | 711 | 50 | 0 | 9.081 | / | Pass |
| | 16QAM | 704 | 50 | 0 | 9.049 | / | Pass |
| | | 707.5 | 50 | 0 | 9.074 | / | Pass |
| | | 711 | 50 | 0 | 9.083 | / | Pass |

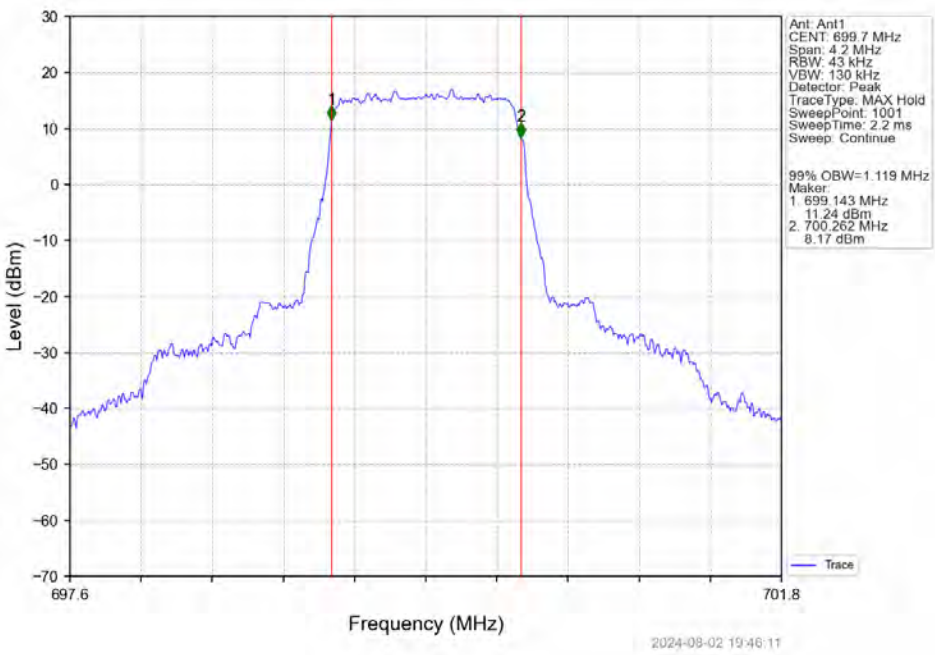
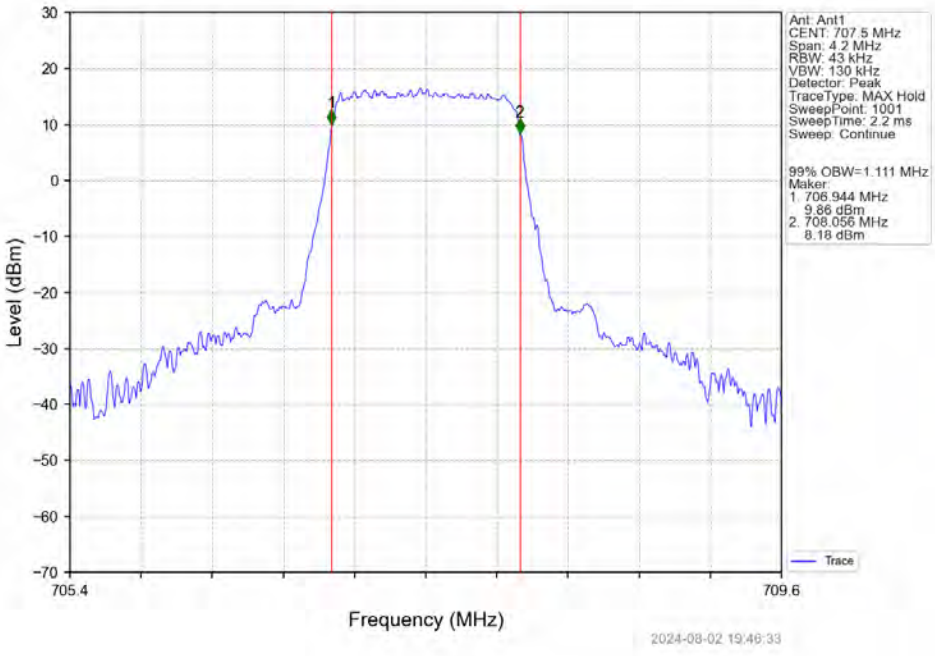
### 4.1.2 Band12_XDB

| 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 | 1.311 | / | Pass |
| | | 707.5 | 6 | 0 | 1.324 | / | Pass |
| | | 715.3 | 6 | 0 | 1.330 | / | Pass |
| | 16QAM | 699.7 | 6 | 0 | 1.313 | / | Pass |
| | | 707.5 | 6 | 0 | 1.303 | / | Pass |
| | | 715.3 | 6 | 0 | 1.309 | / | Pass |
| 3 | QPSK | 700.5 | 15 | 0 | 3.000 | / | Pass |
| | | 707.5 | 15 | 0 | 3.000 | / | Pass |
| | | 714.5 | 15 | 0 | 2.997 | / | Pass |
| | 16QAM | 700.5 | 15 | 0 | 2.998 | / | Pass |
| | | 707.5 | 15 | 0 | 2.989 | / | Pass |
| | | 714.5 | 15 | 0 | 2.979 | / | Pass |
| 5 | QPSK | 701.5 | 25 | 0 | 5.208 | / | Pass |
| | | 707.5 | 25 | 0 | 5.244 | / | Pass |
| | | 713.5 | 25 | 0 | 5.249 | / | Pass |

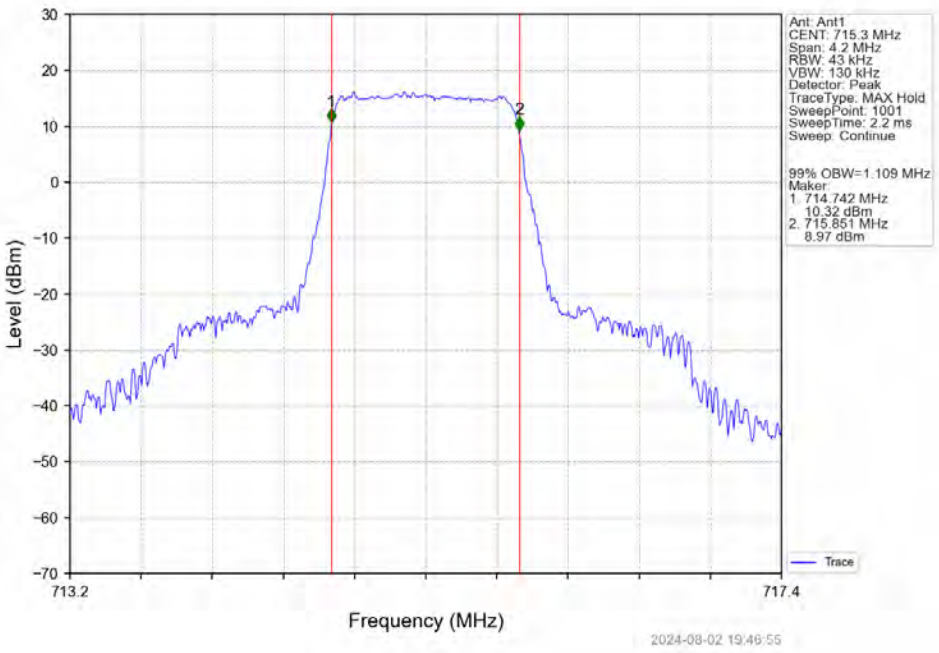
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 16QAM | 701.5 | 25 | 0 | 5.287 | / | Pass |
| | | 707.5 | 25 | 0 | 5.298 | / | Pass |
| | | 713.5 | 25 | 0 | 5.186 | / | Pass |
| 10 | QPSK | 704 | 50 | 0 | 10.357 | / | Pass |
| | | 707.5 | 50 | 0 | 10.255 | / | Pass |
| | | 711 | 50 | 0 | 10.307 | / | Pass |
| | 16QAM | 704 | 50 | 0 | 10.209 | / | Pass |
| | | 707.5 | 50 | 0 | 10.235 | / | Pass |
| | | 711 | 50 | 0 | 10.191 | / | Pass |

## 4.2 Test Graph

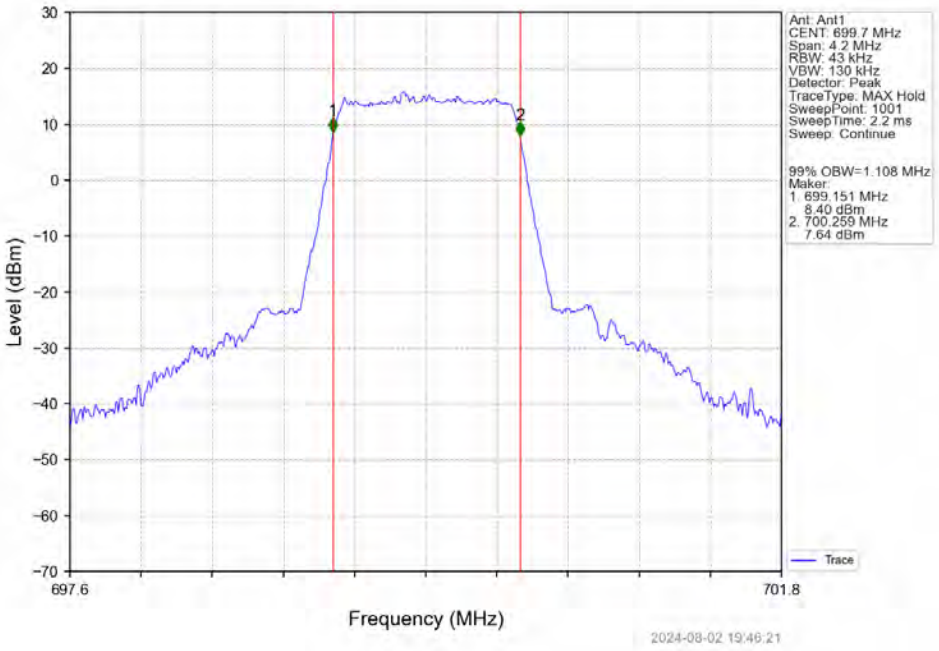
### 4.2.1 Band12_OBW

| Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV |
| --- |
|  |
| Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV |
|  |

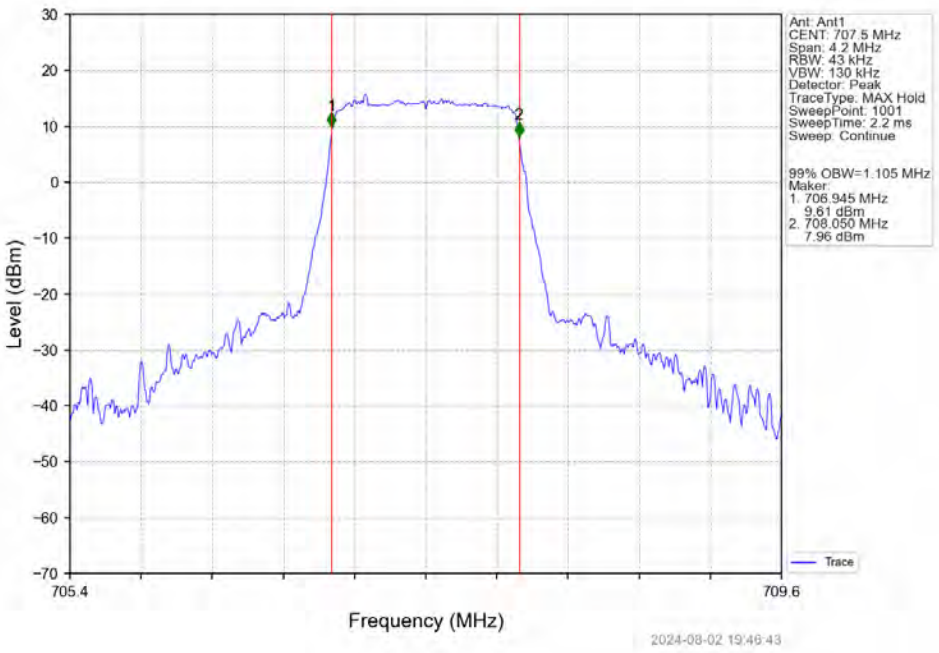
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



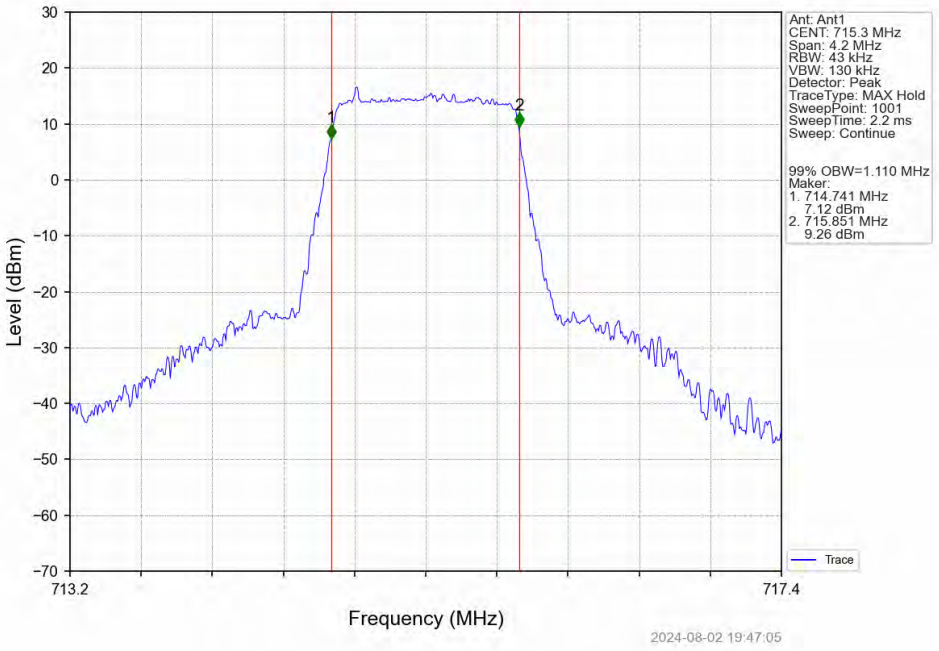

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



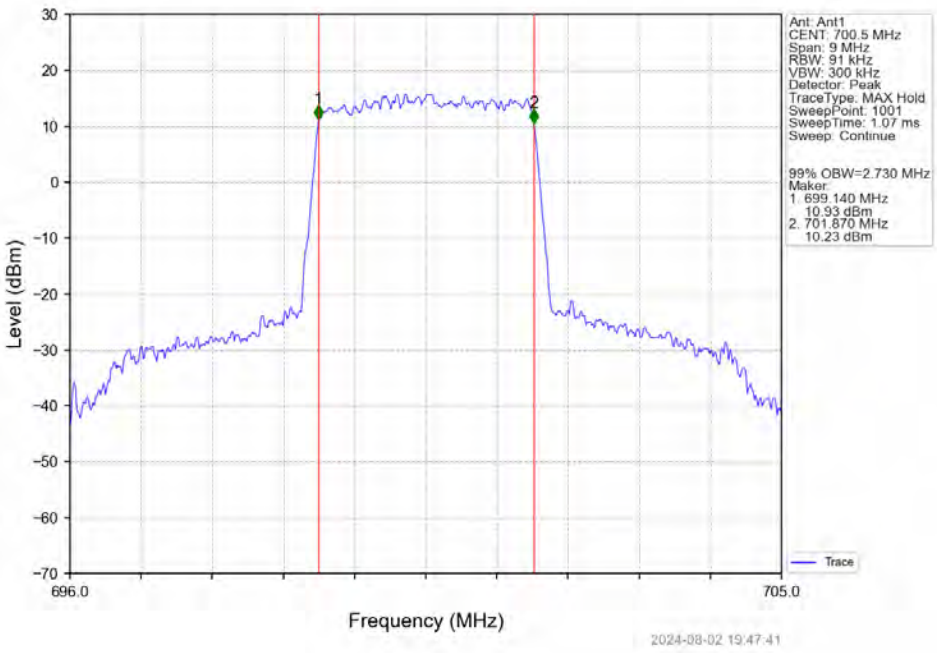
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



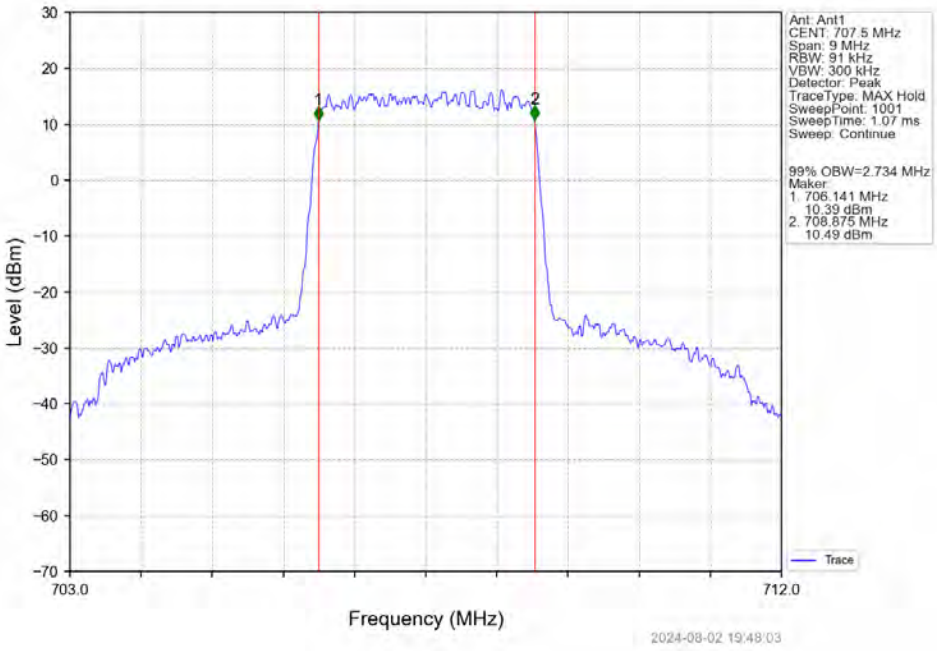

Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



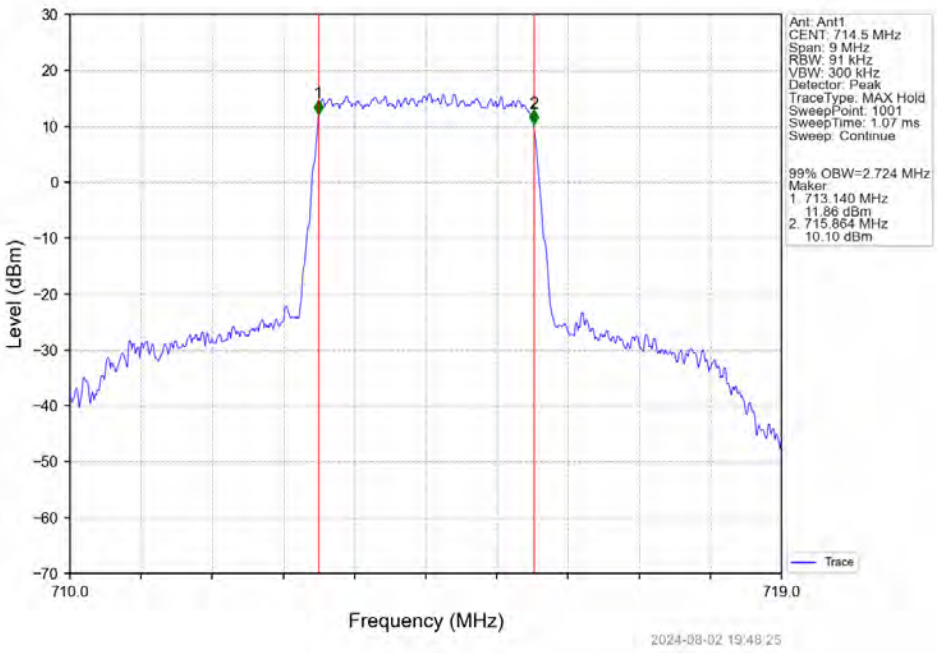
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



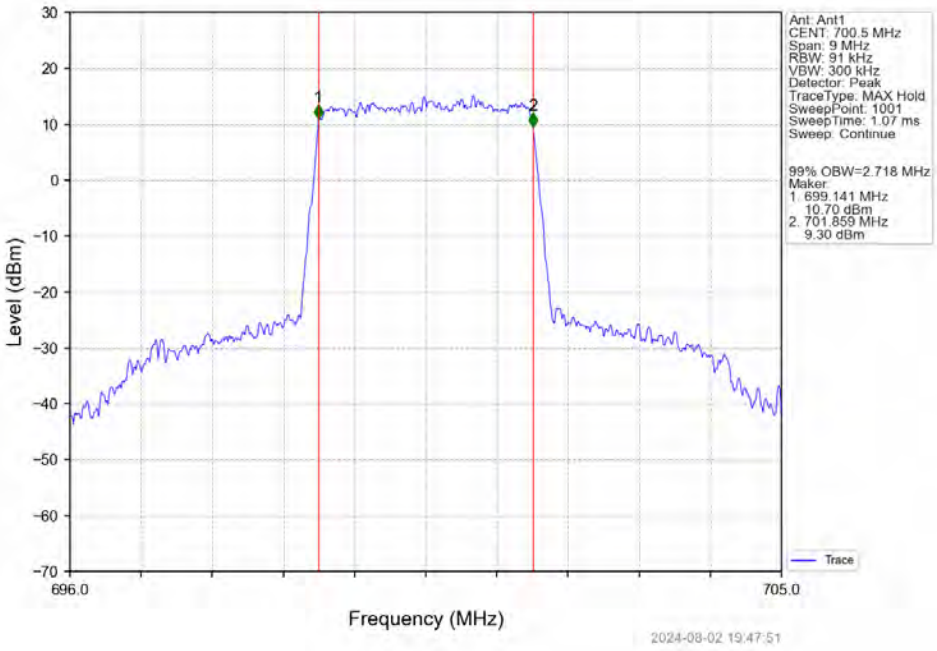

Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



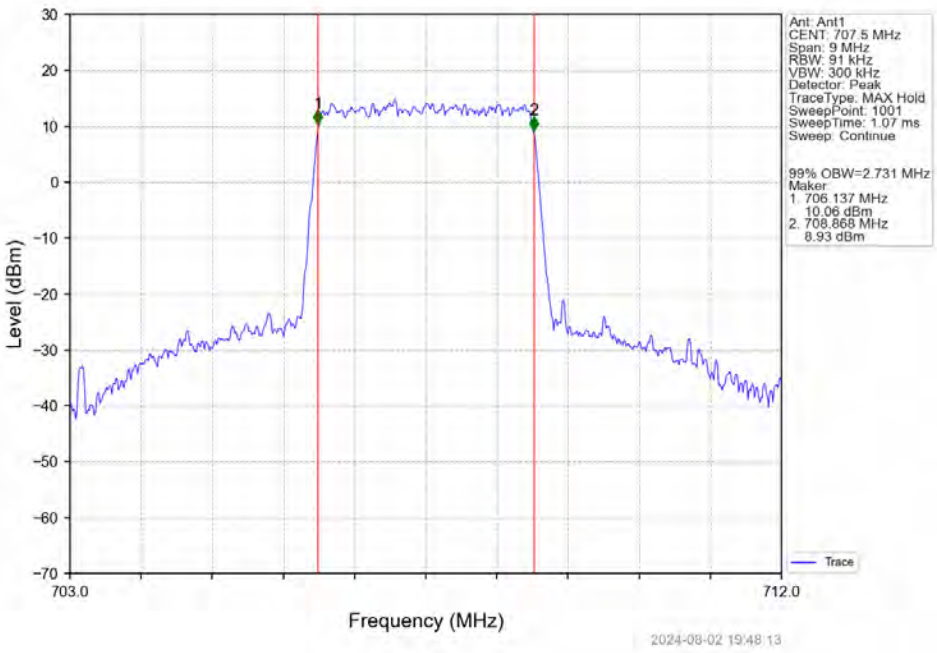
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



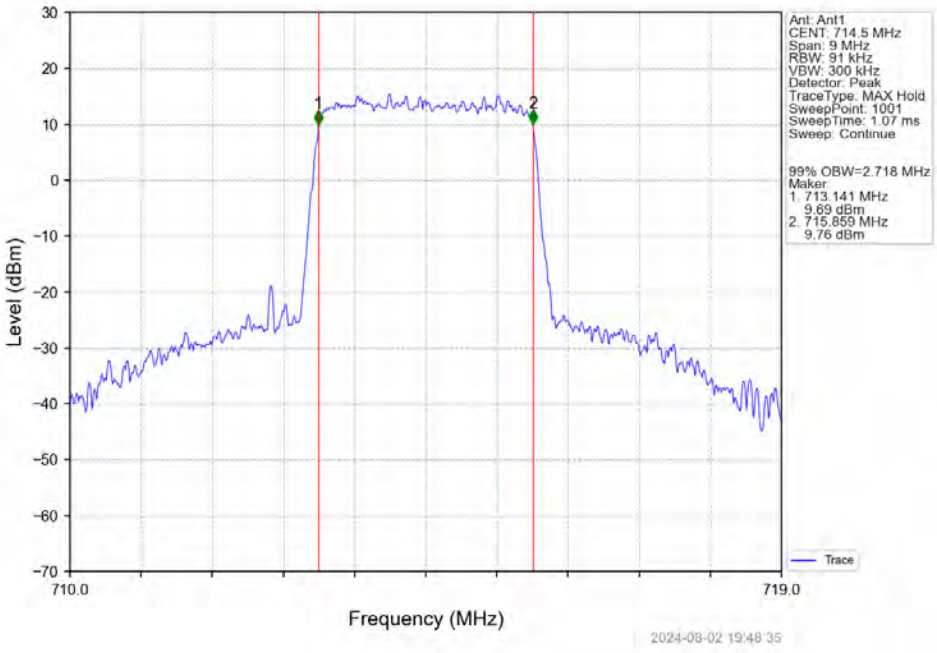

Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



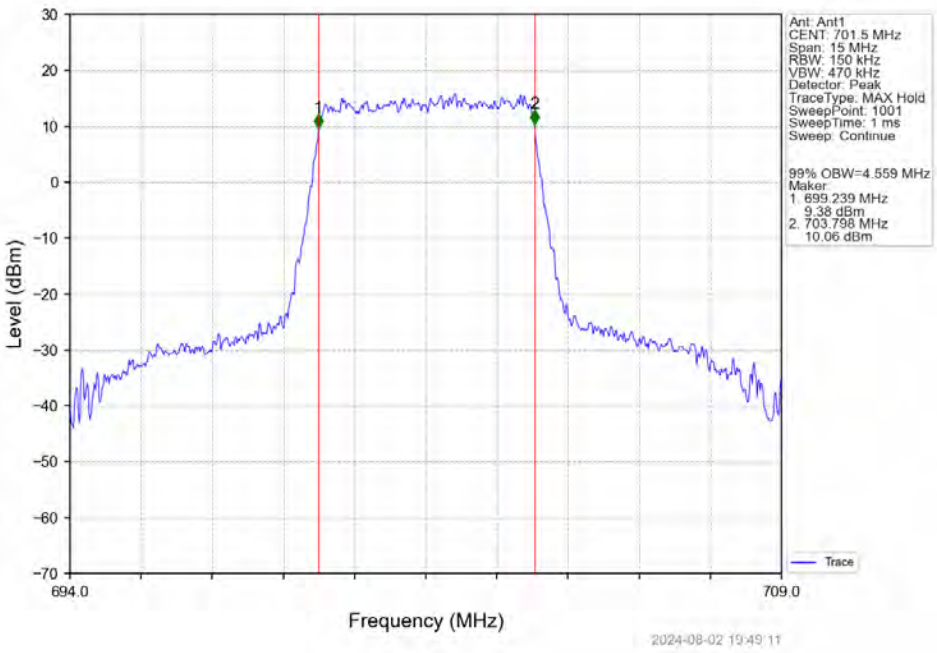
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



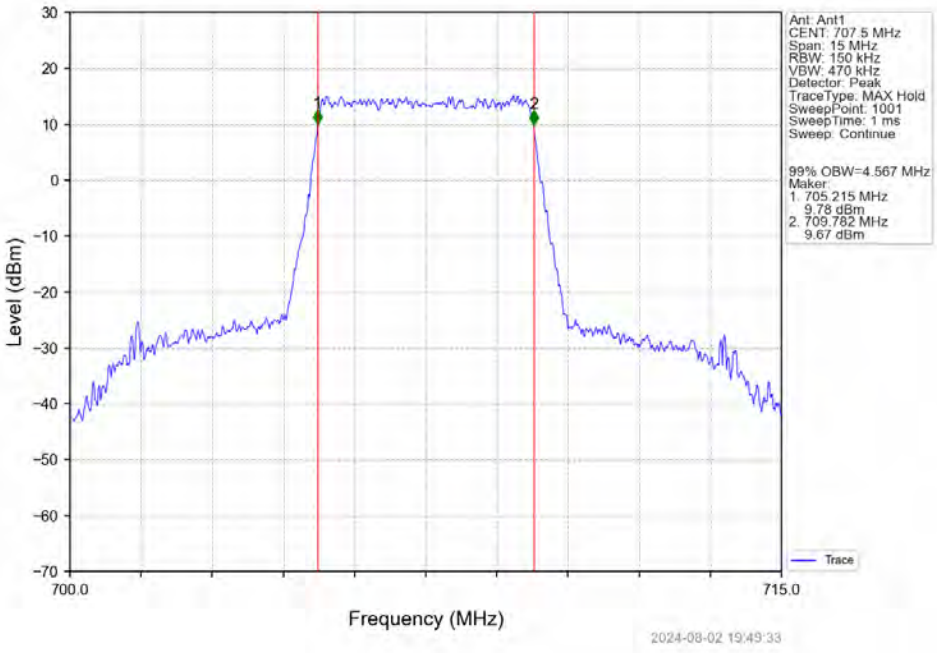

Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



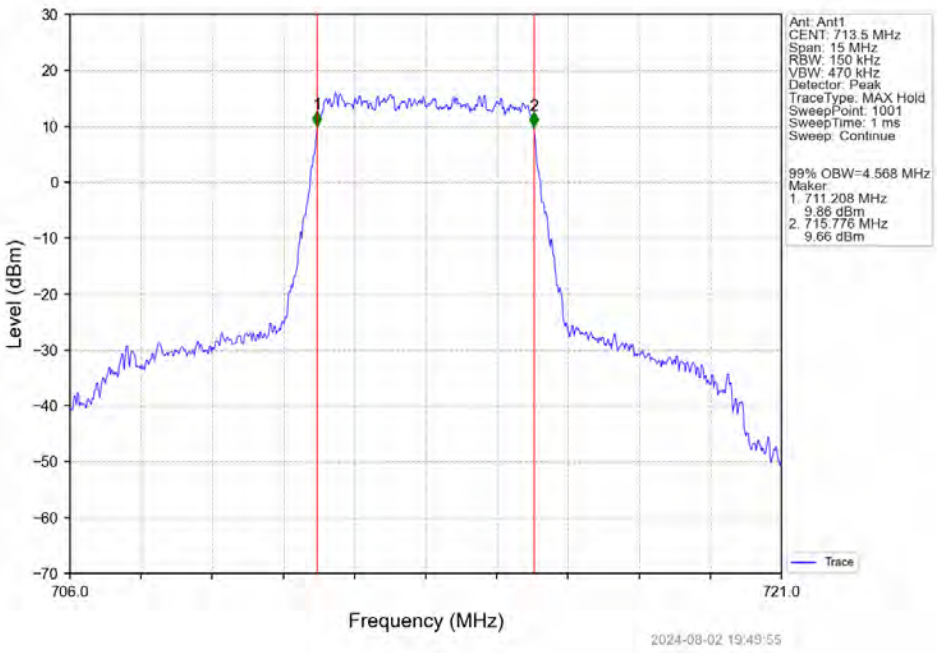
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



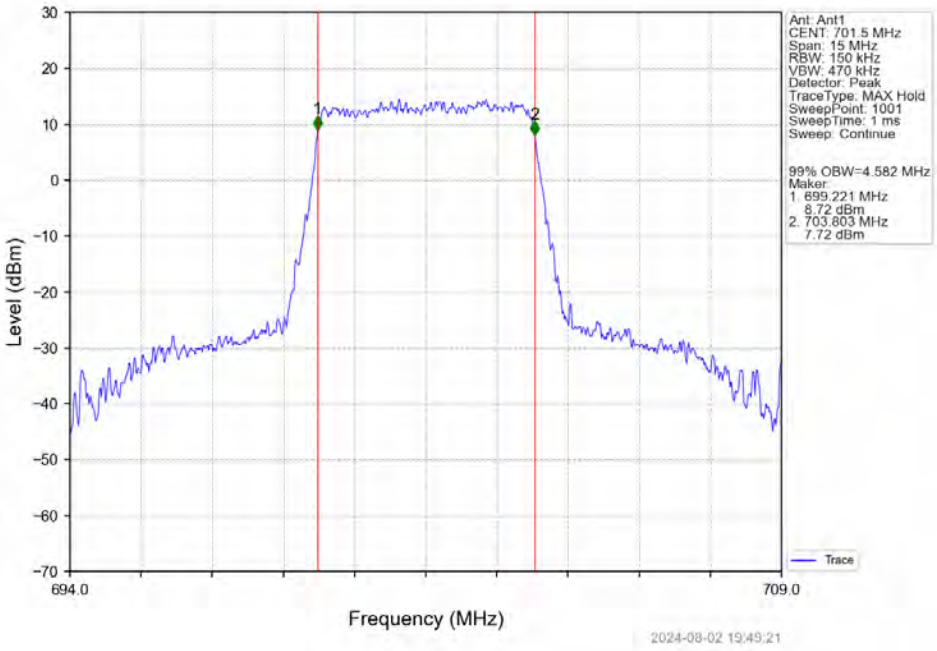

Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



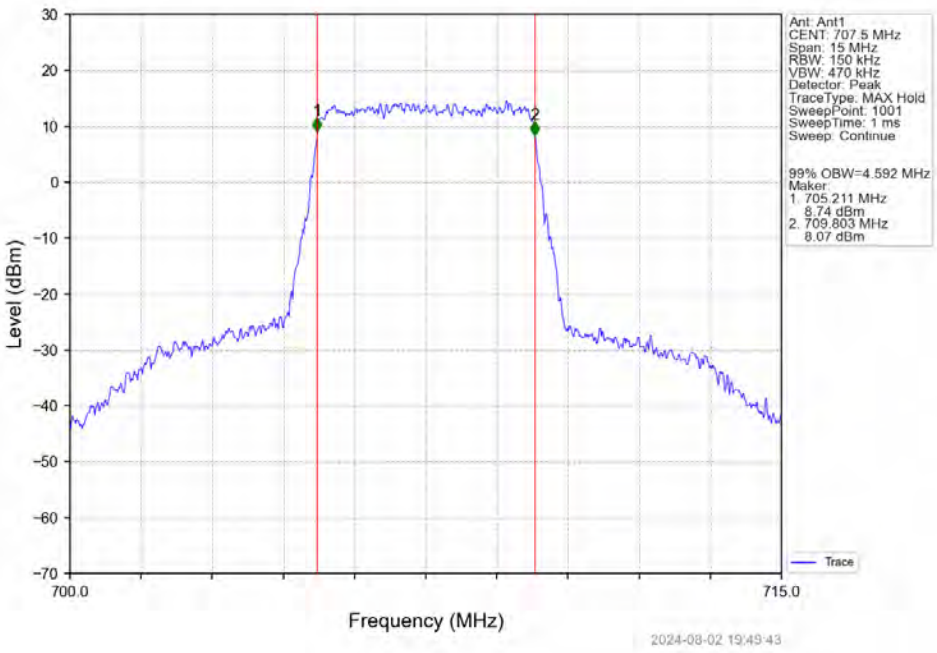
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



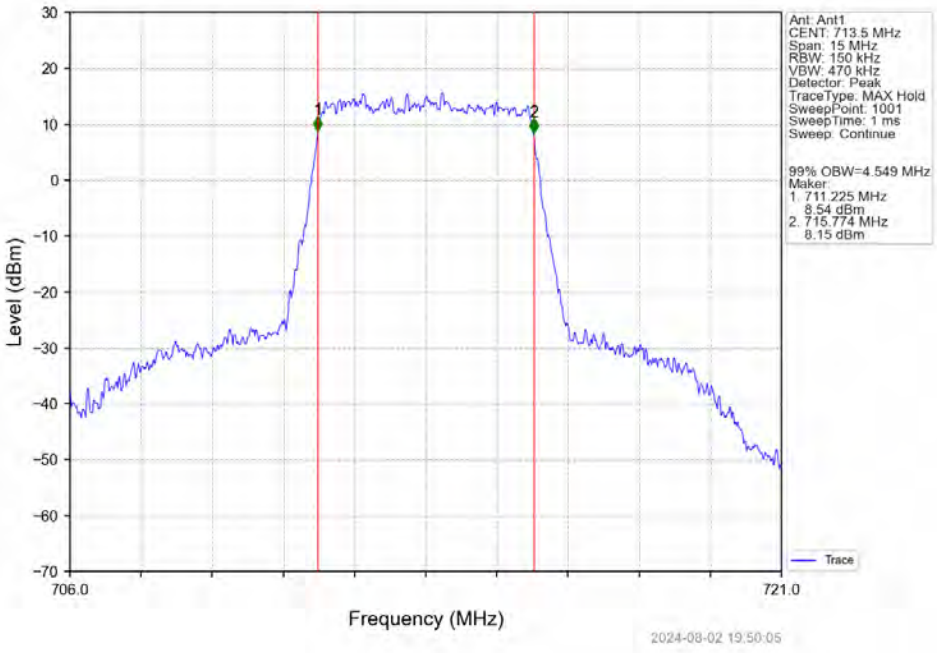

Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



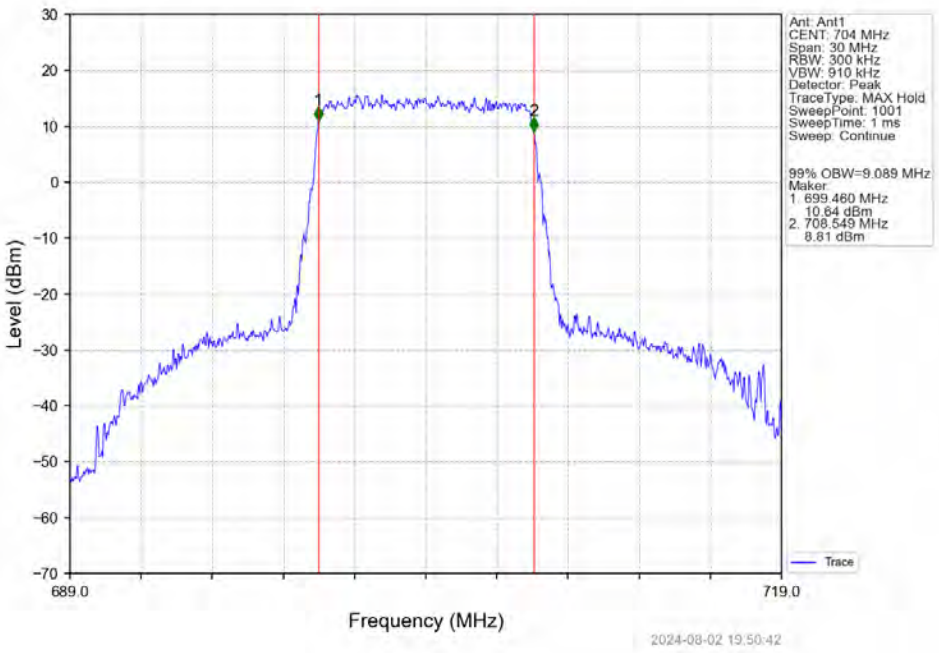
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



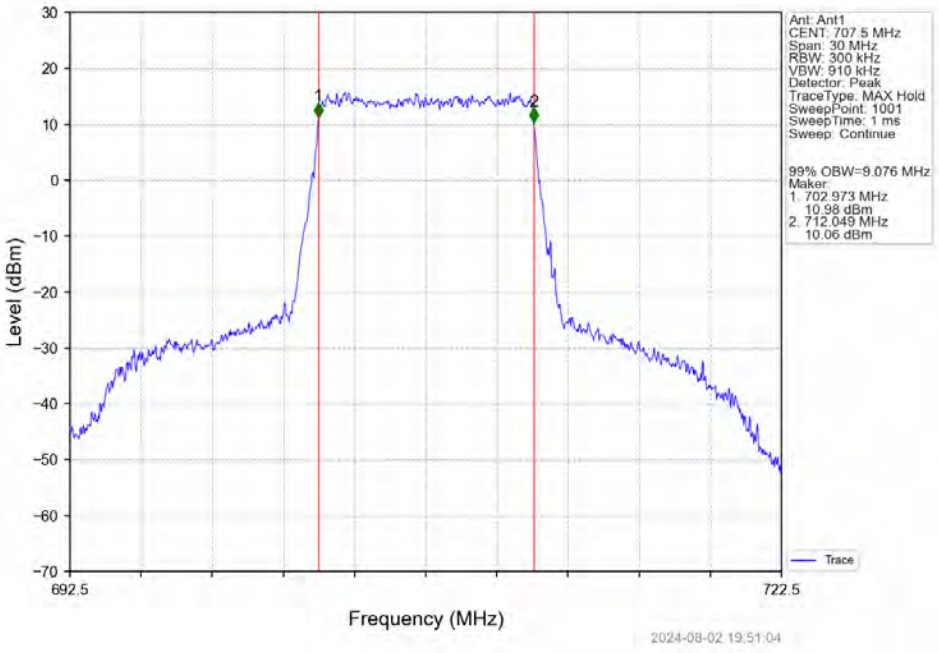

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



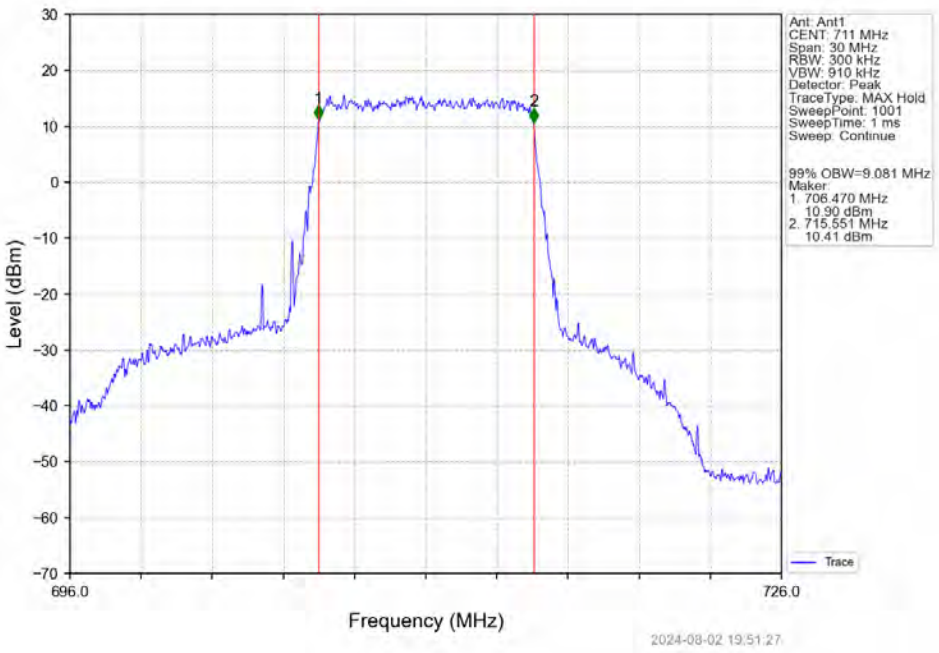
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



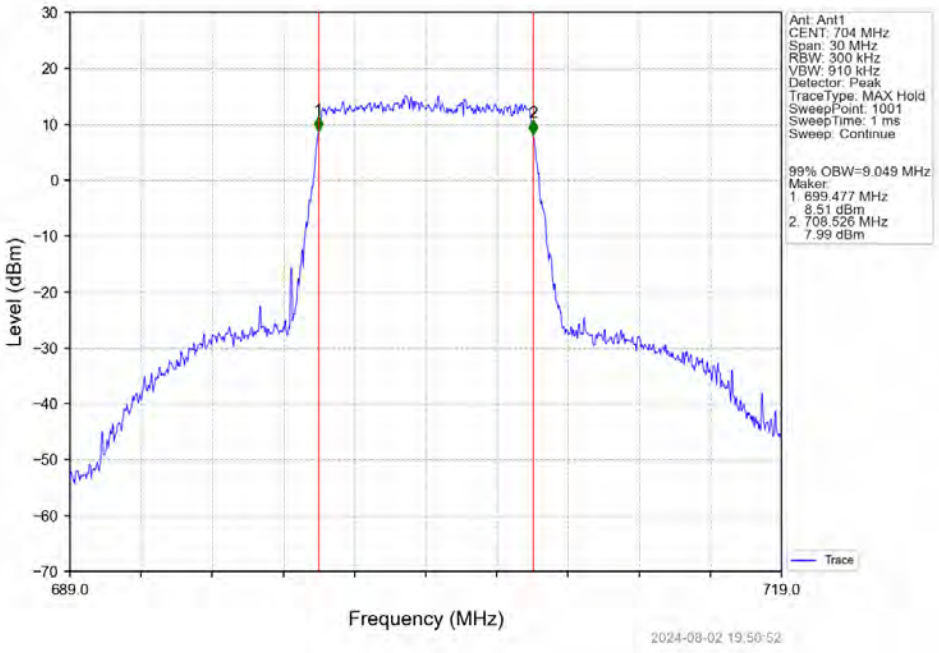

Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



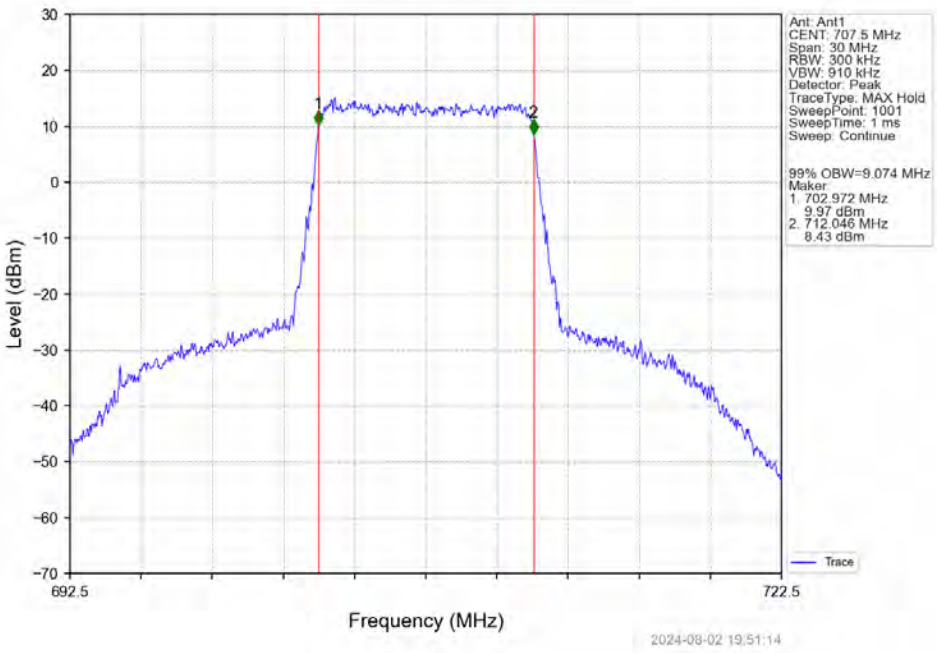
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



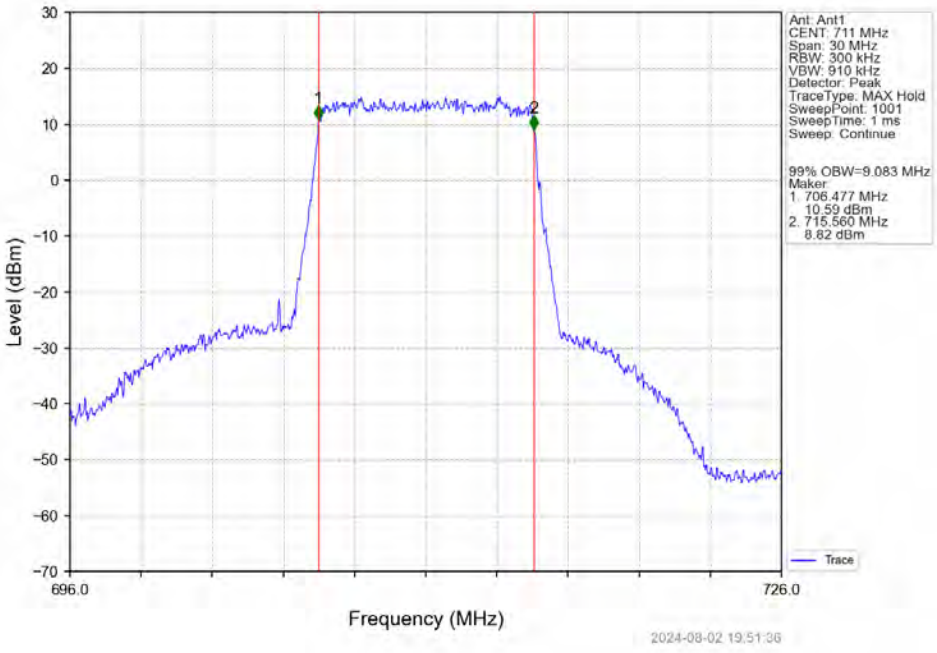

Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



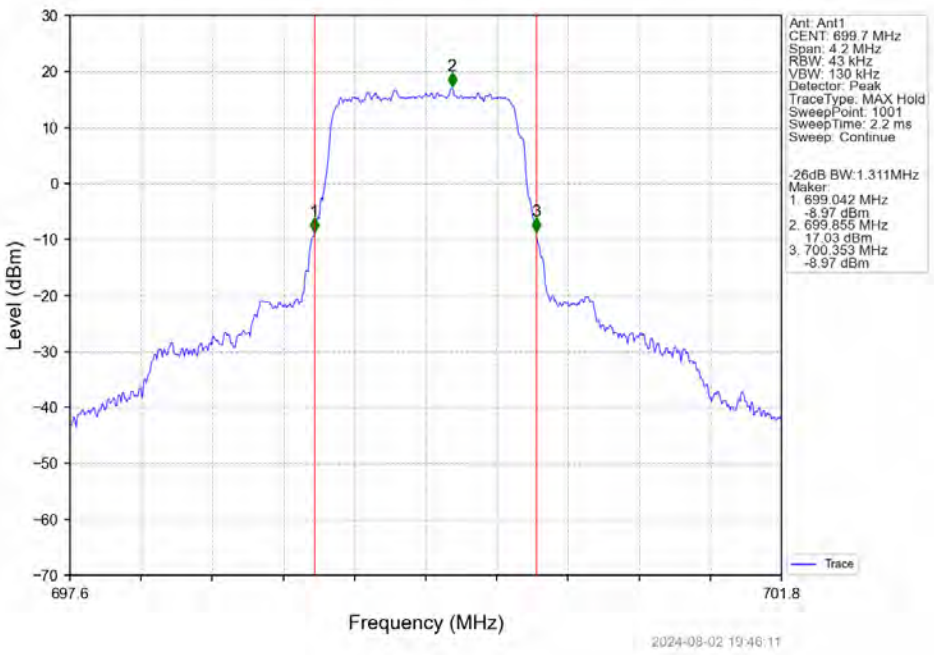
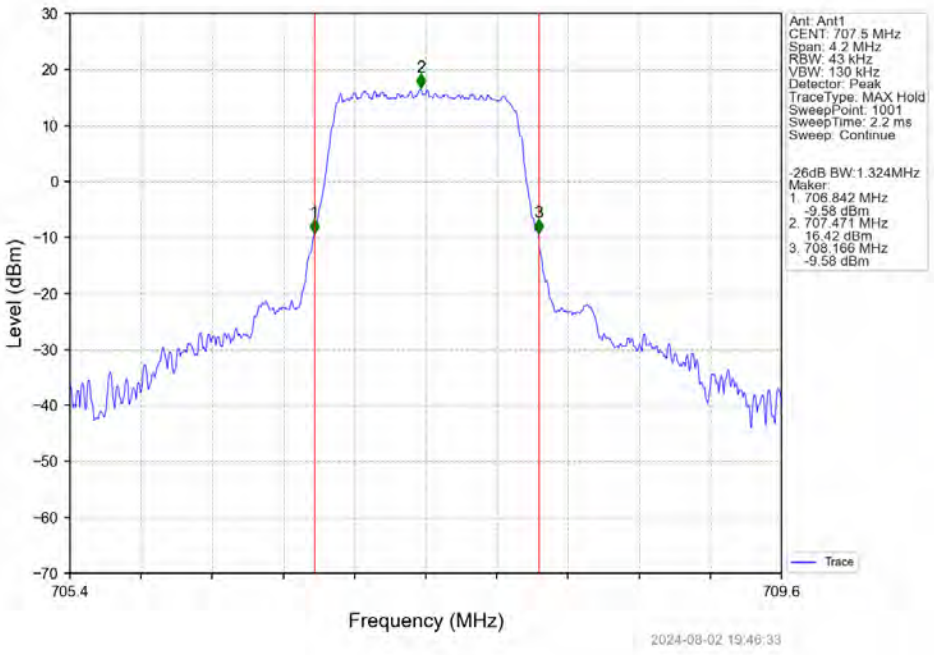
Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



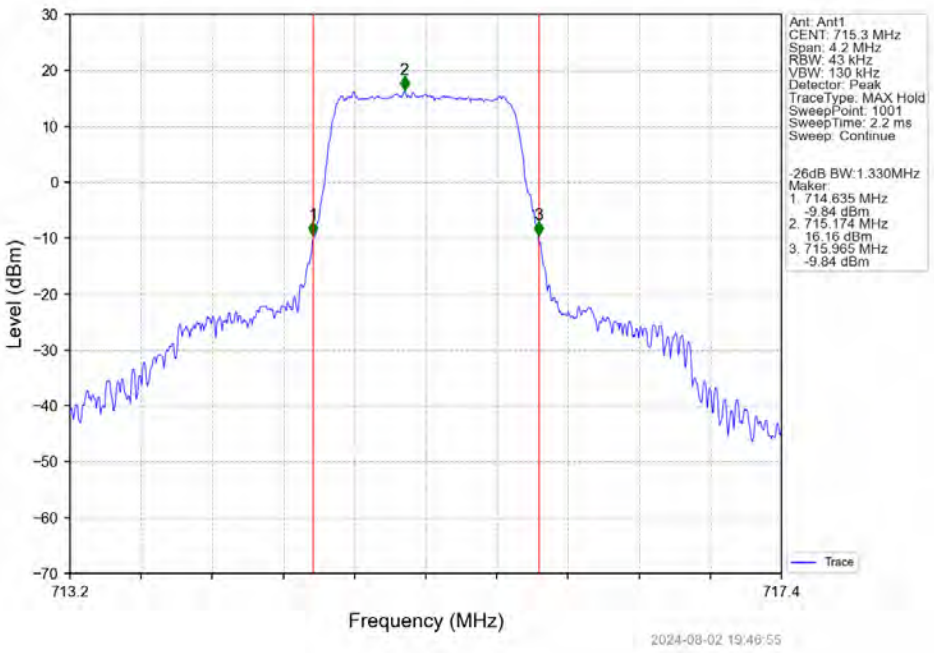

Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



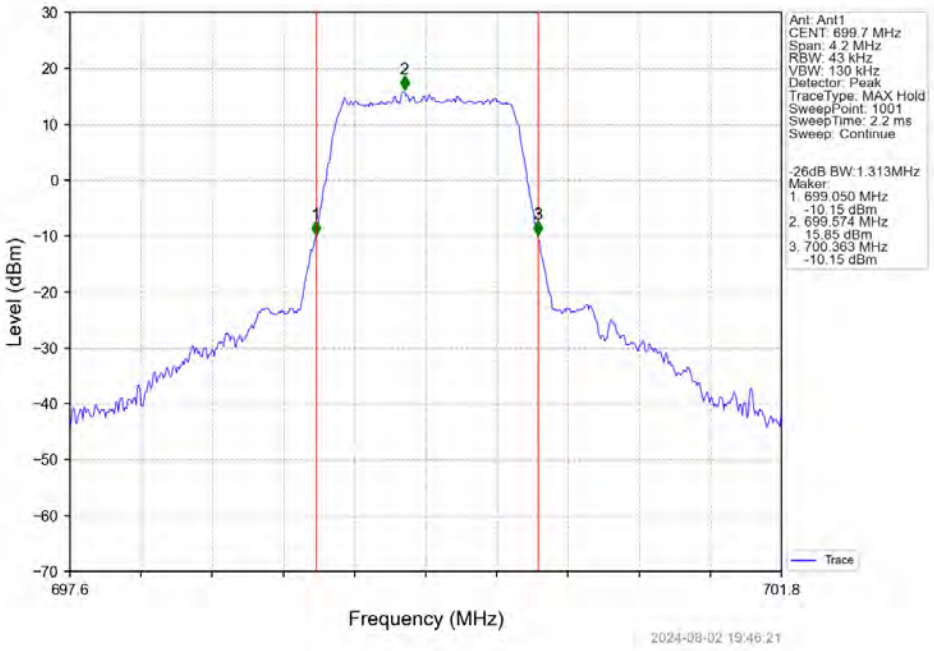
## 4.2.2 Band12_XDB

| Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV |
| --- |
|  |
| Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV |
|  |

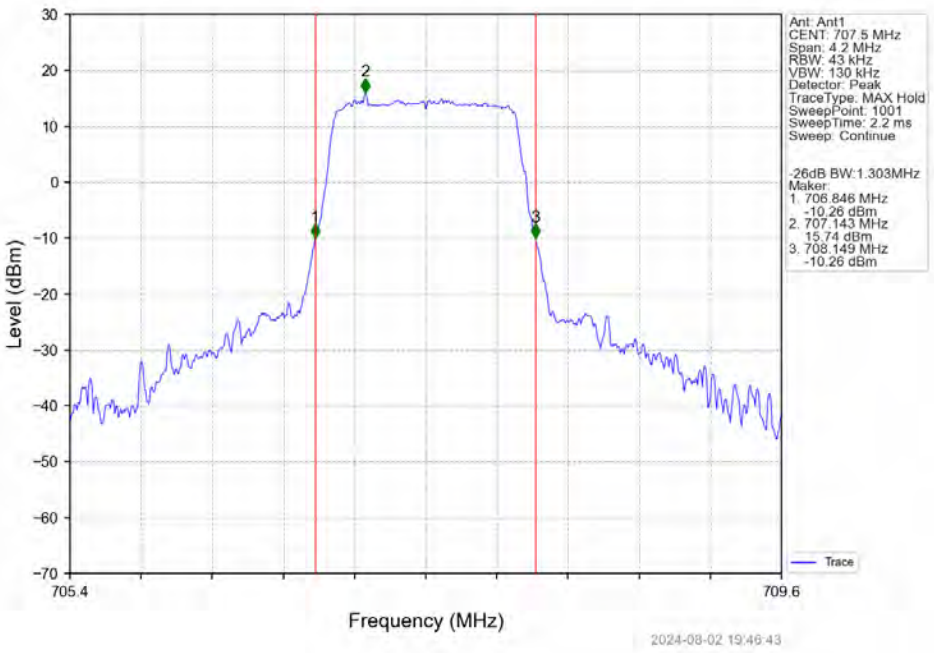
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



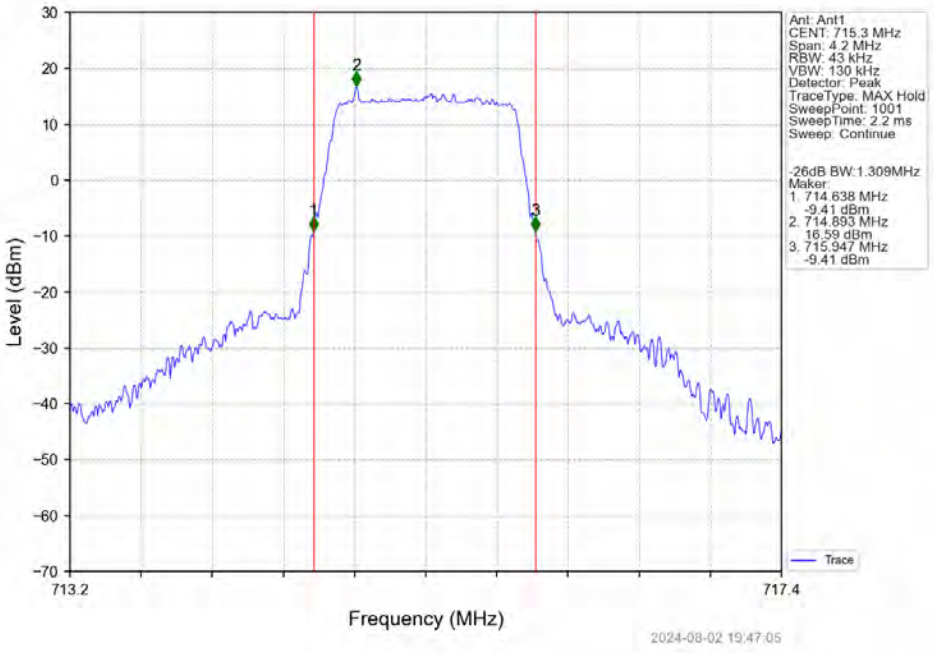

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



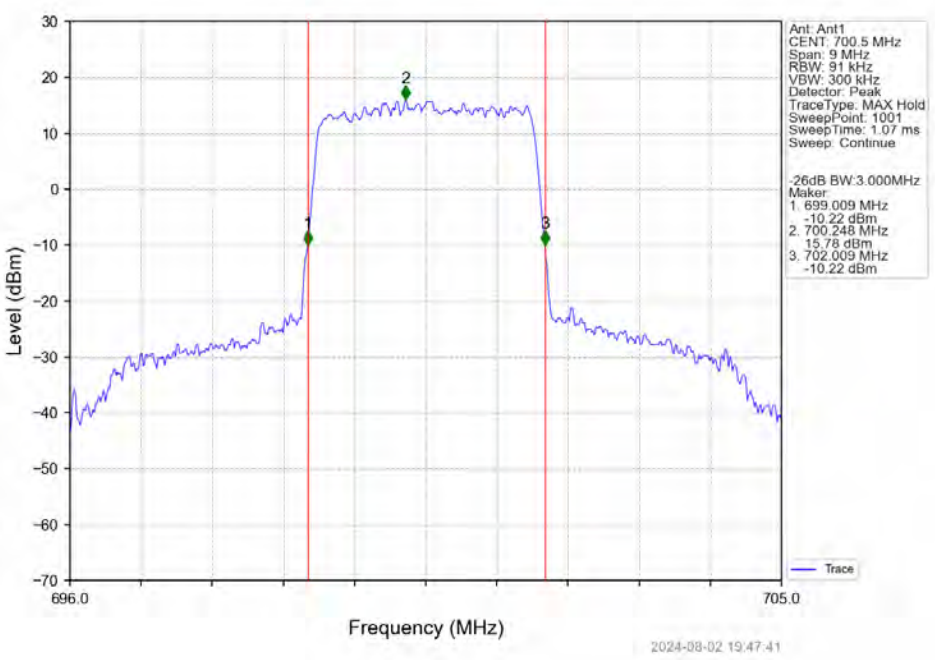
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



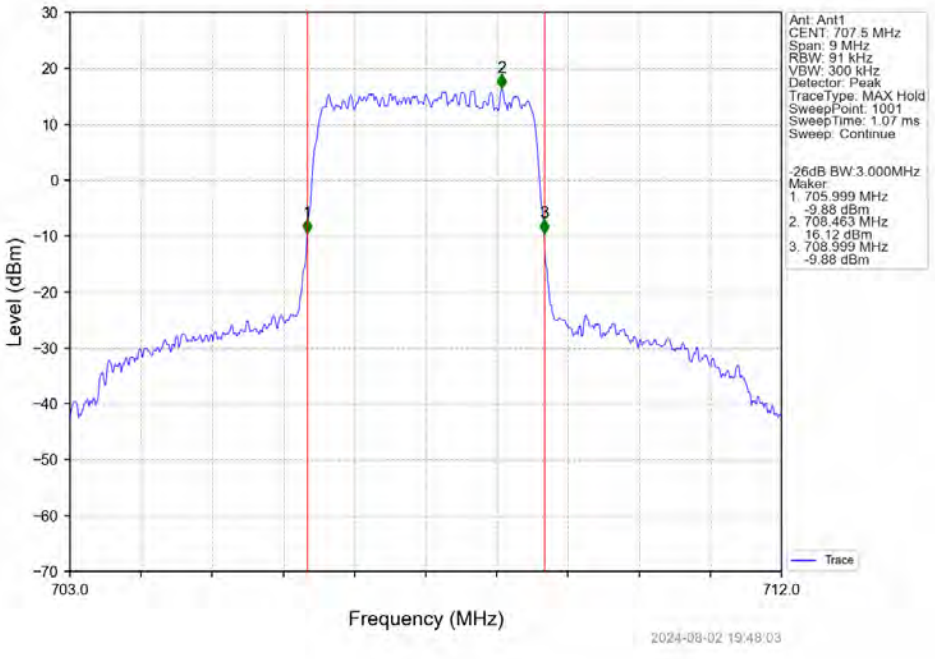

Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



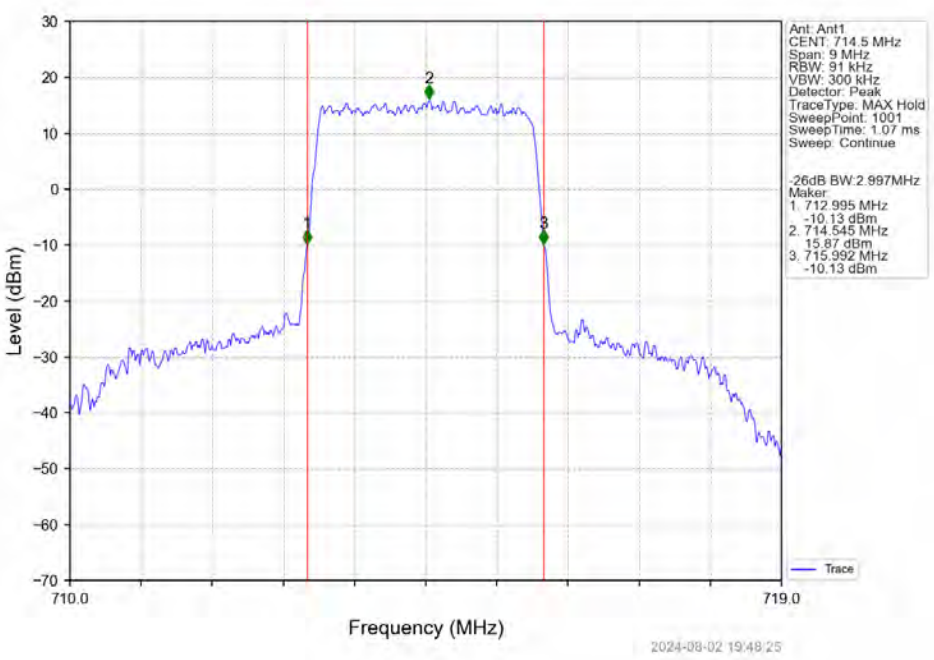
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



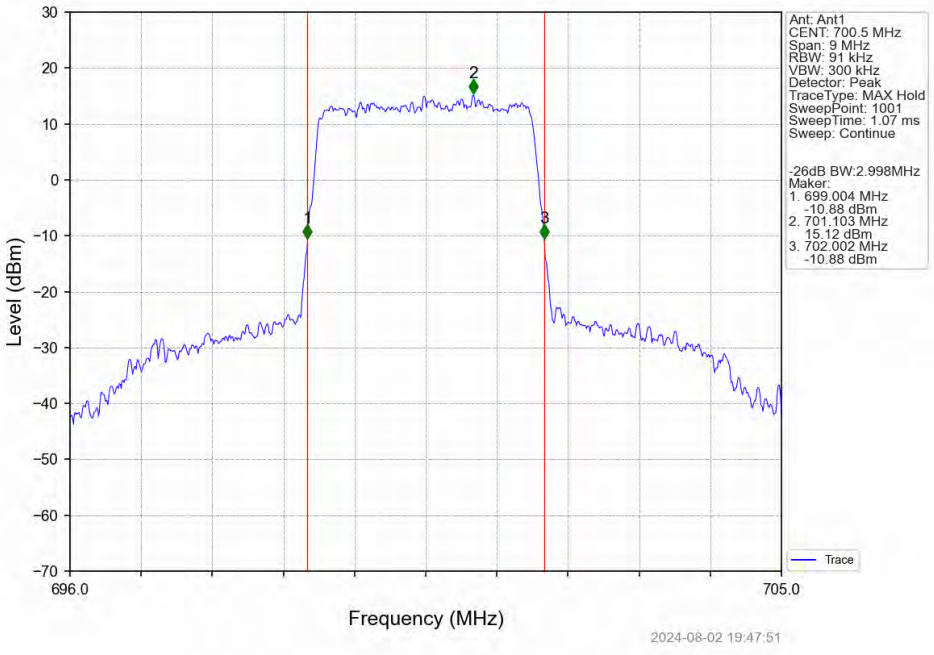

Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



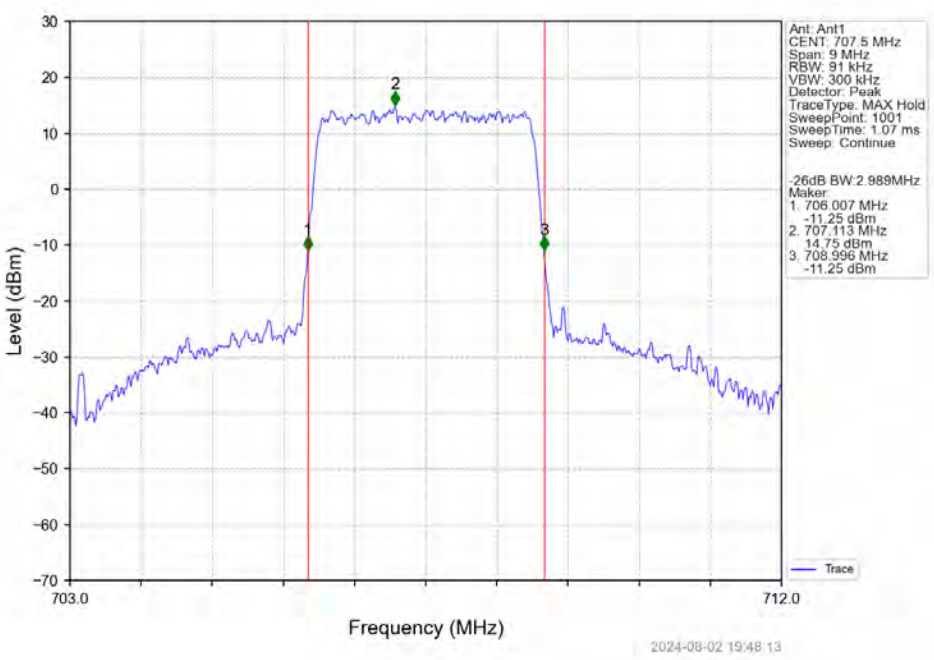
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



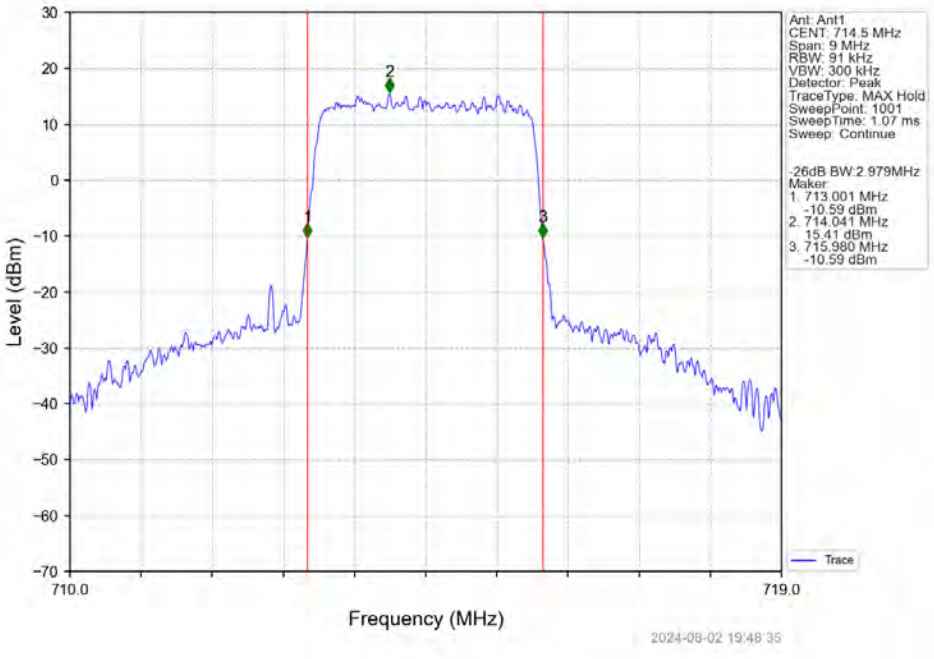

Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



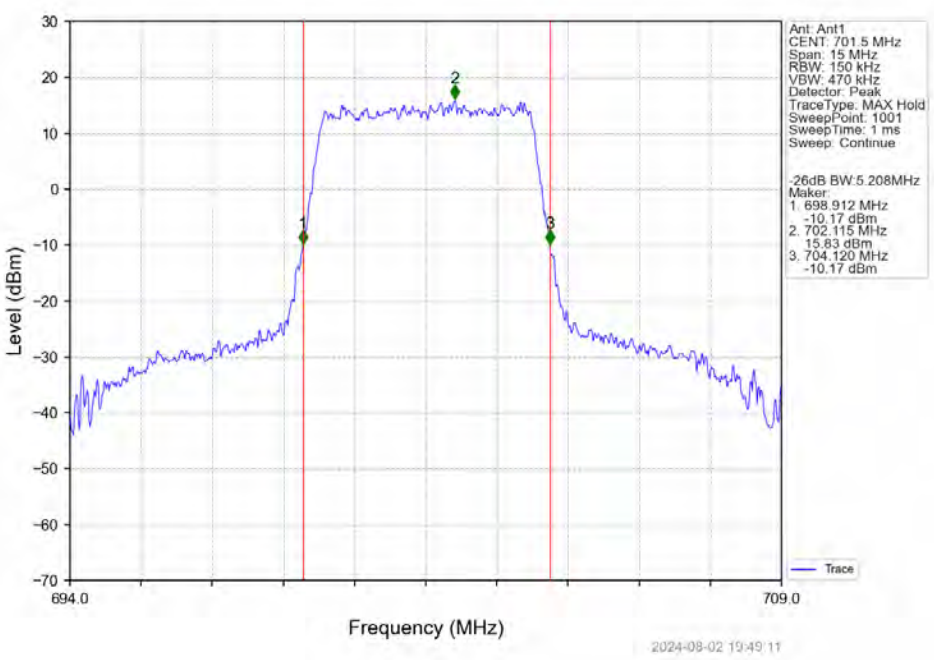
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



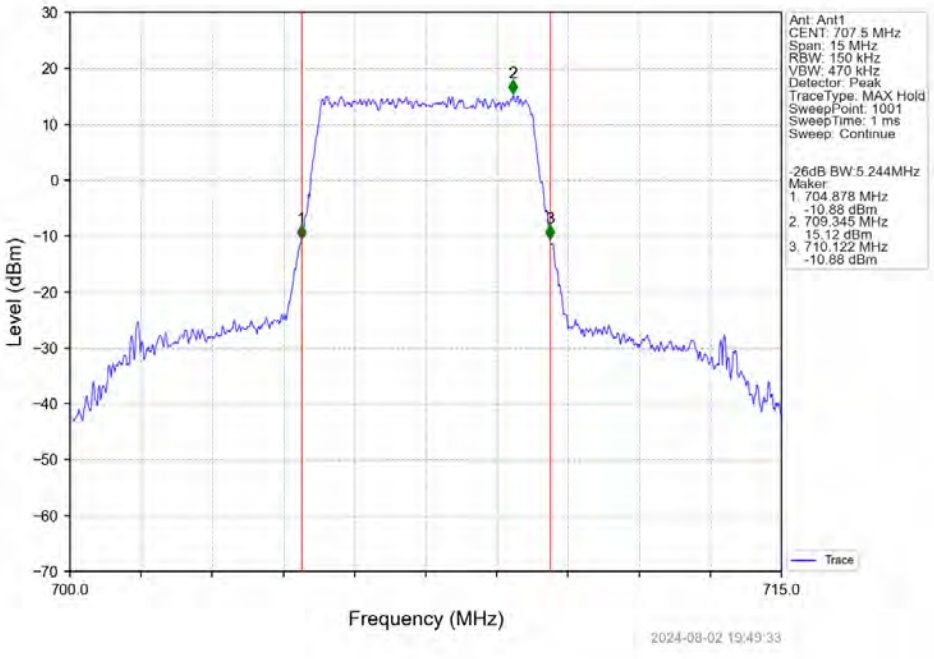

Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



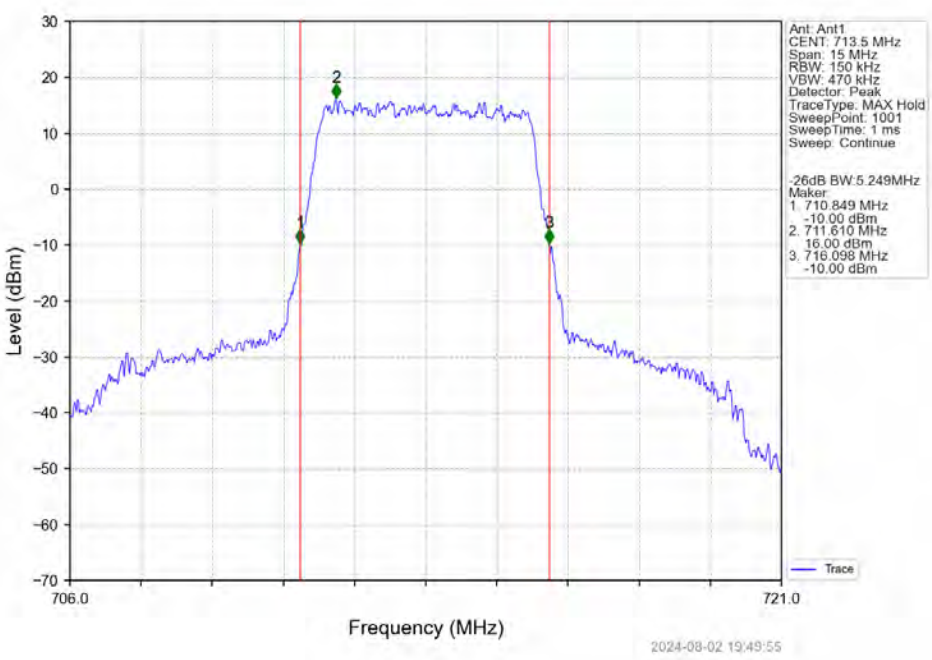
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



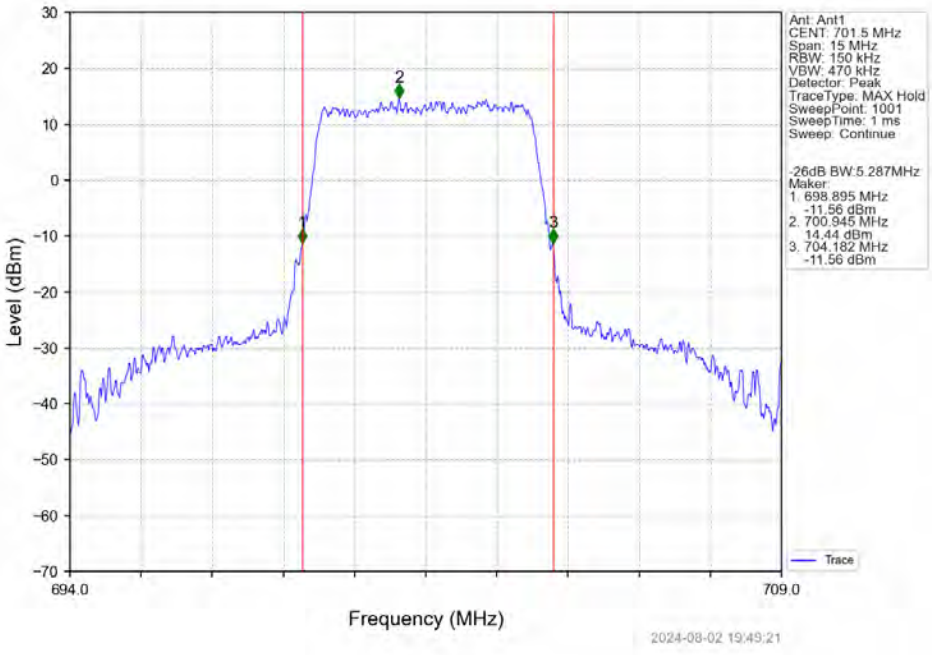

Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



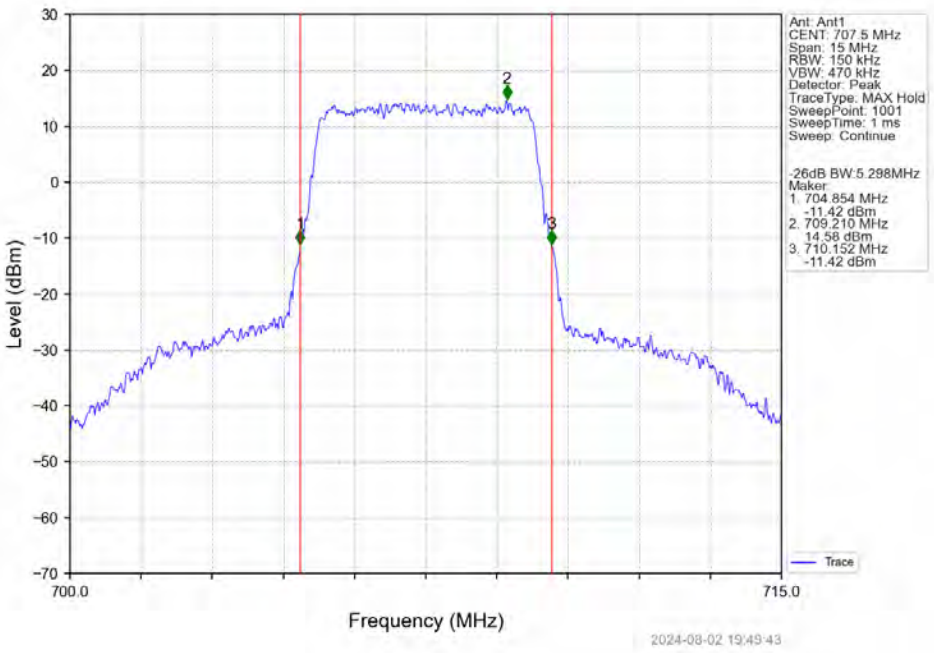
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



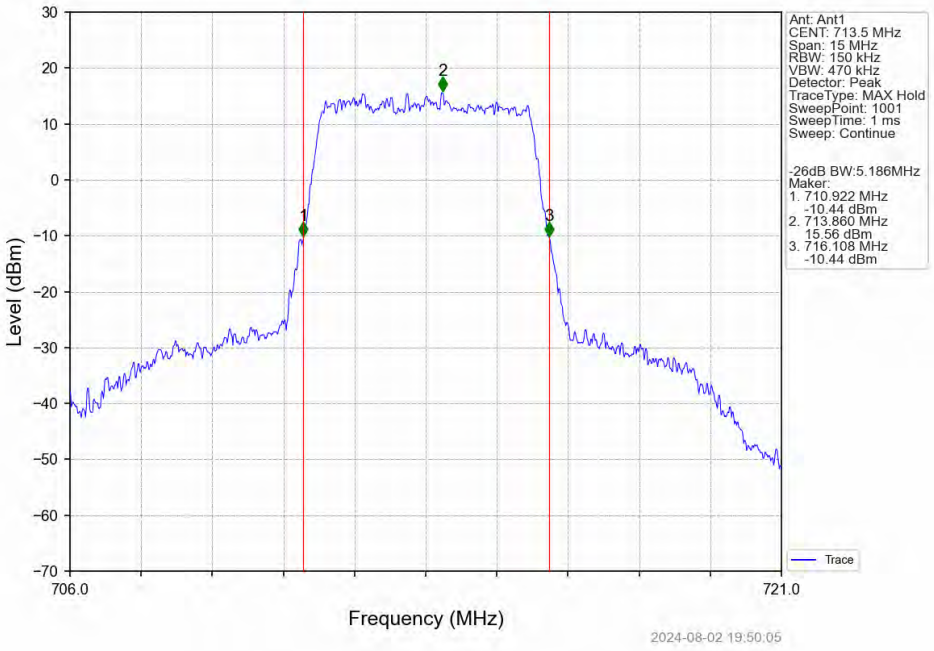

Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



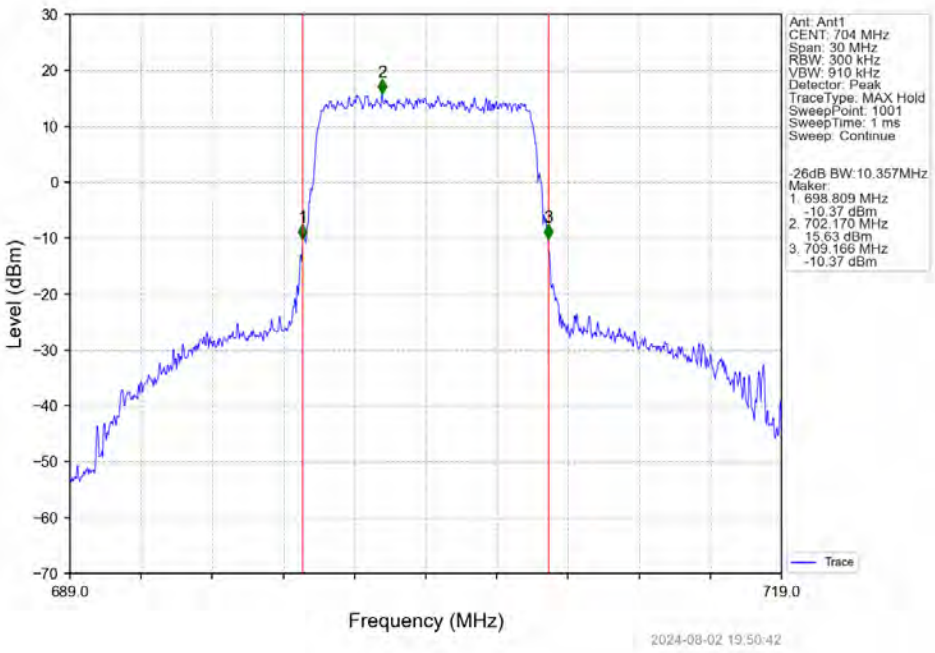
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



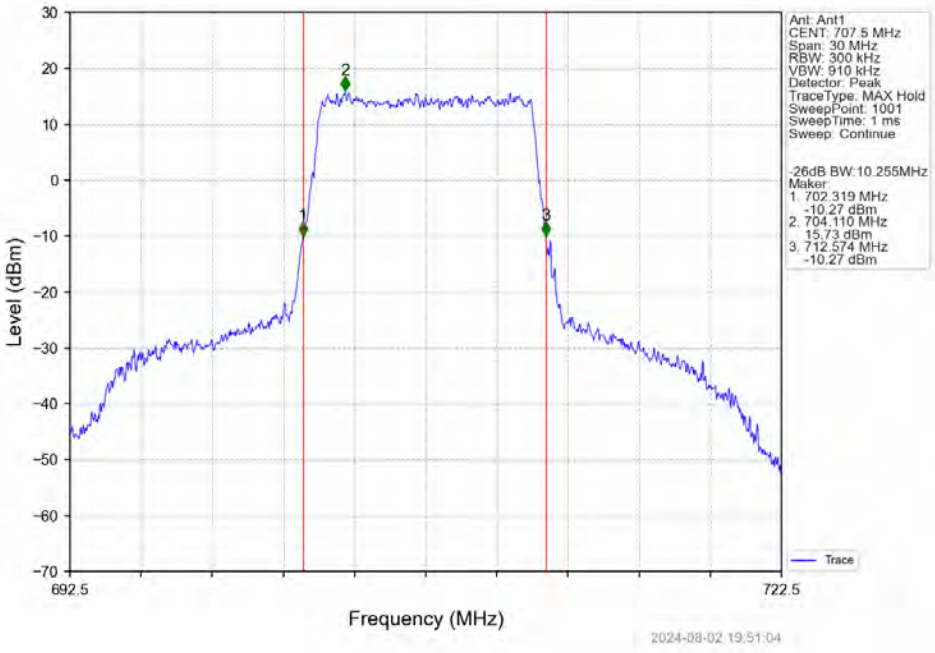

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



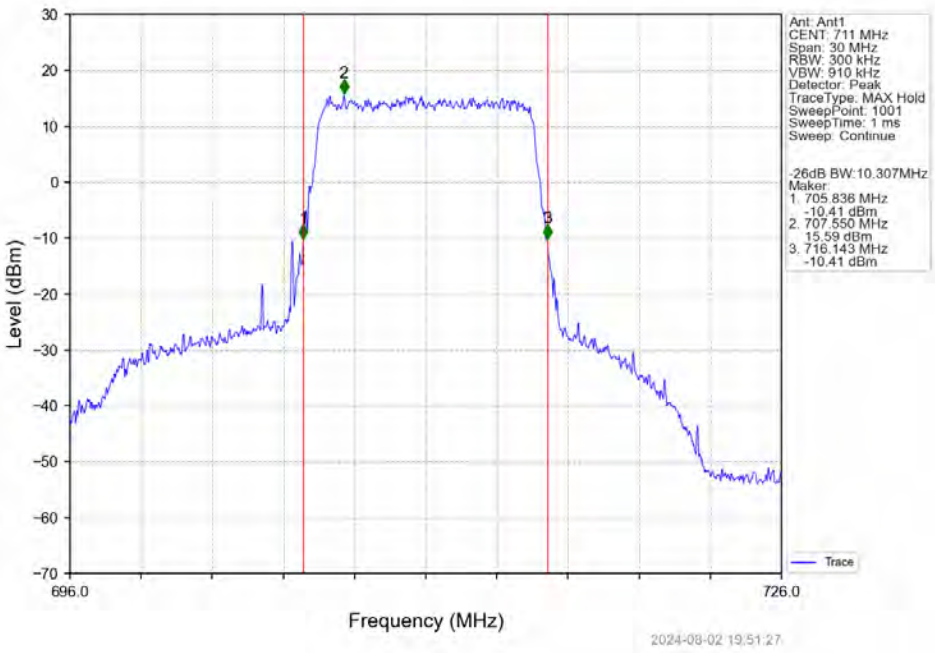
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



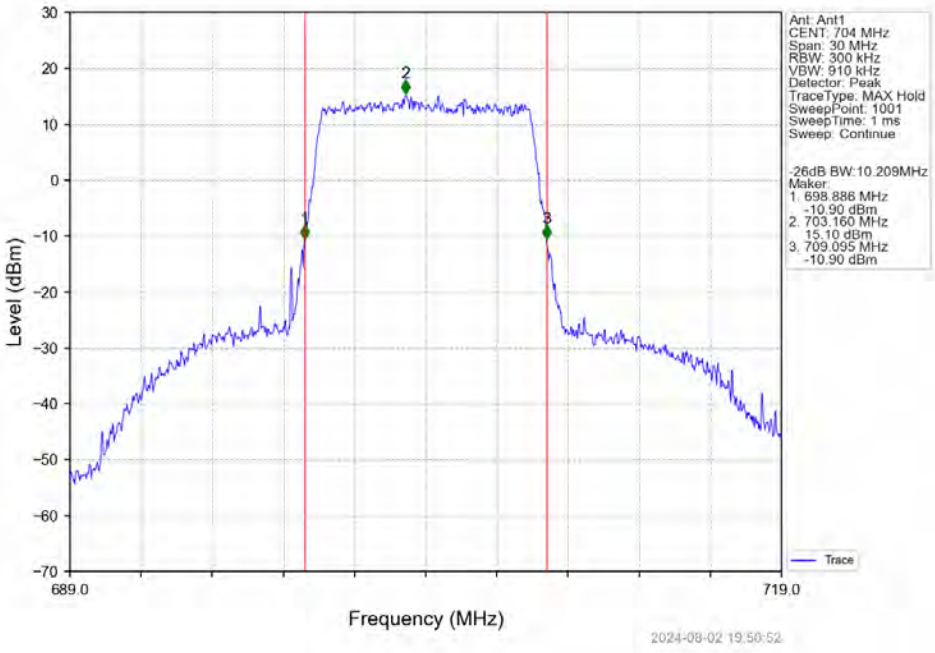

Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



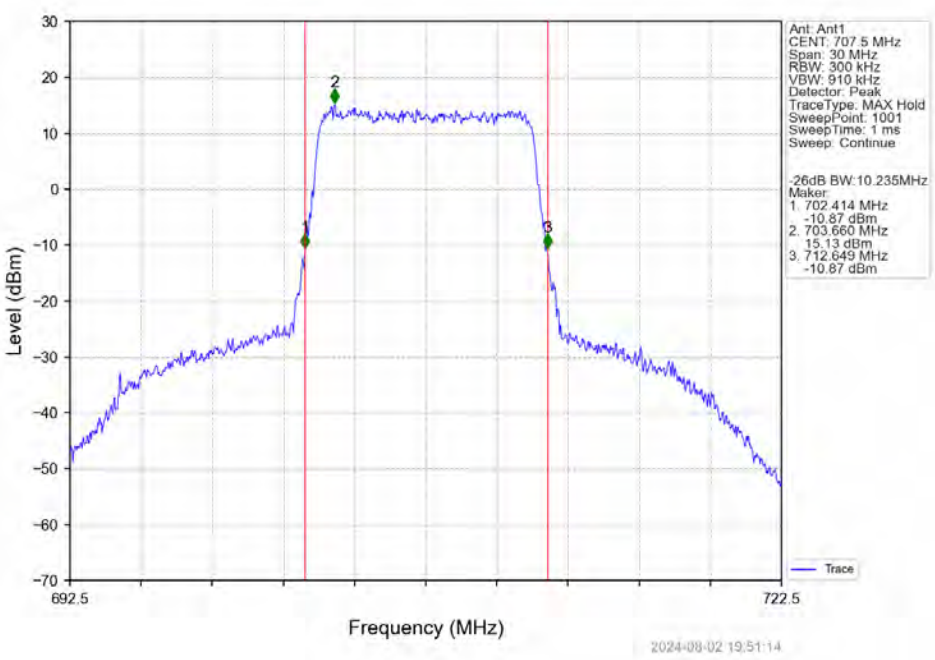
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



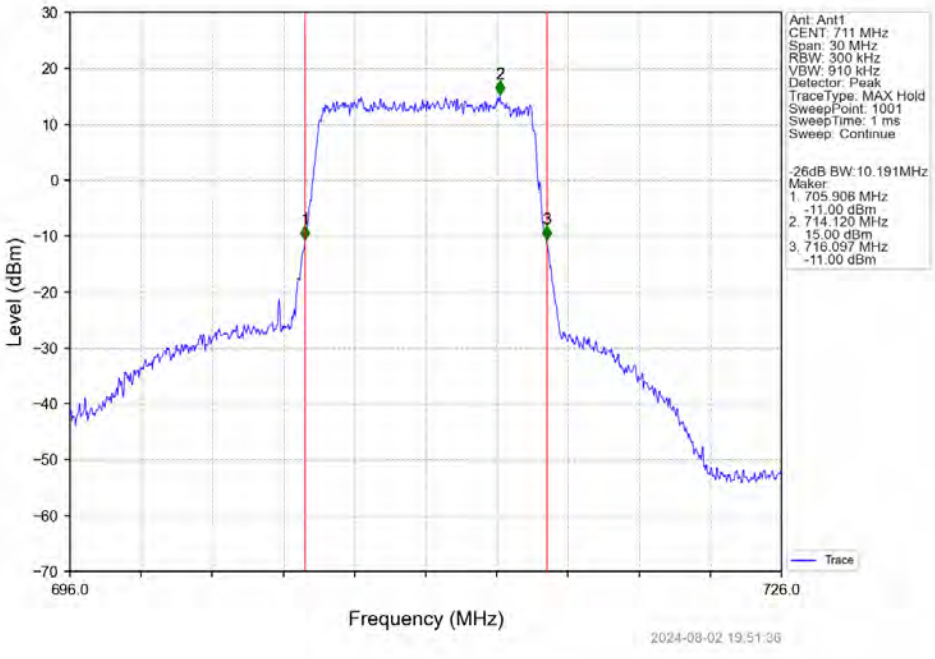

Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV




Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



# 5. Peak-Average Ratio

## 5.1 Test Result

### 5.1.1 B12_1.4MHz

| Band: 12 / Bandwidth: 1.4MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 699.7 | 6 | 0 | 5.56 | <=13 | Pass |
| | 707.5 | 6 | 0 | 5.40 | <=13 | Pass |
| | 715.3 | 6 | 0 | 5.26 | <=13 | Pass |
| 16QAM | 699.7 | 6 | 0 | 6.20 | <=13 | Pass |
| | 707.5 | 6 | 0 | 6.24 | <=13 | Pass |
| | 715.3 | 6 | 0 | 6.00 | <=13 | Pass |

### 5.1.2 B12_3MHz

| Band: 12 / Bandwidth: 3MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 700.5 | 15 | 0 | 5.46 | <=13 | Pass |
| | 707.5 | 15 | 0 | 5.44 | <=13 | Pass |
| | 714.5 | 15 | 0 | 5.36 | <=13 | Pass |
| 16QAM | 700.5 | 15 | 0 | 6.20 | <=13 | Pass |
| | 707.5 | 15 | 0 | 6.24 | <=13 | Pass |
| | 714.5 | 15 | 0 | 6.13 | <=13 | Pass |

### 5.1.3 B12_5MHz

| Band: 12 / Bandwidth: 5MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 701.5 | 25 | 0 | 5.58 | <=13 | Pass |
| | 707.5 | 25 | 0 | 5.66 | <=13 | Pass |
| | 713.5 | 25 | 0 | 5.53 | <=13 | Pass |
| 16QAM | 701.5 | 25 | 0 | 6.24 | <=13 | Pass |
| | 707.5 | 25 | 0 | 6.27 | <=13 | Pass |
| | 713.5 | 25 | 0 | 6.15 | <=13 | Pass |

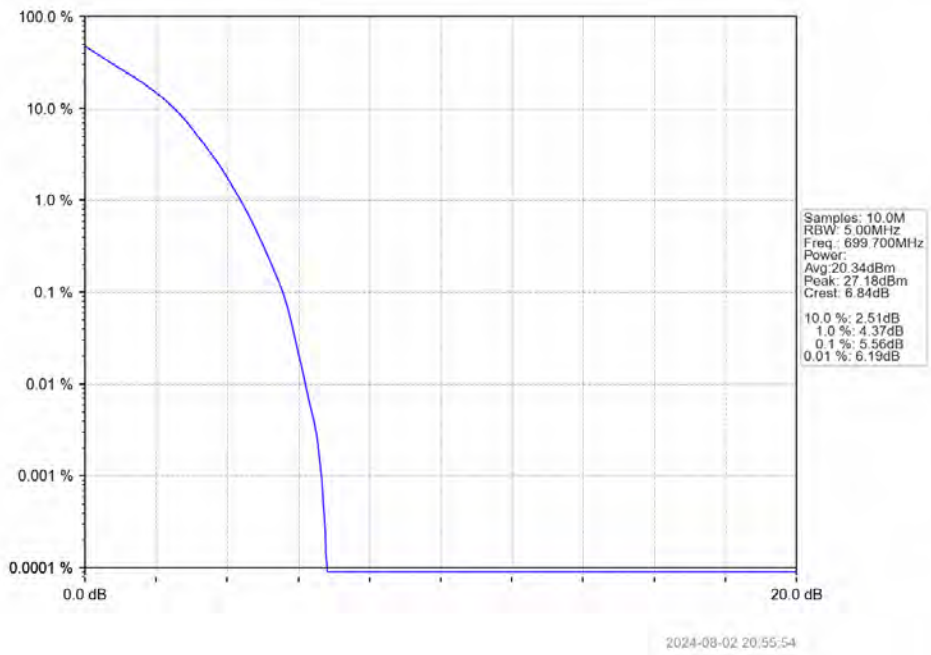
### 5.1.4 B12_10MHz

| Band: 12 / Bandwidth: 10MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 704 | 50 | 0 | 5.53 | <=13 | Pass |
| | 707.5 | 50 | 0 | 5.64 | <=13 | Pass |
| | 711 | 50 | 0 | 5.52 | <=13 | Pass |
| 16QAM | 704 | 50 | 0 | 6.21 | <=13 | Pass |
| | 707.5 | 50 | 0 | 6.33 | <=13 | Pass |
| | 711 | 50 | 0 | 6.26 | <=13 | Pass |

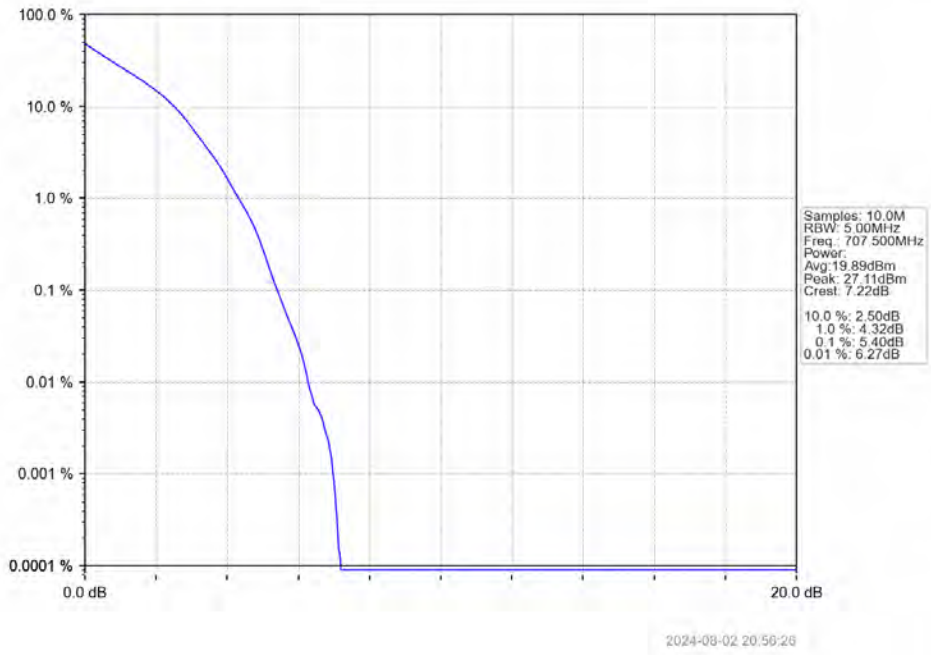
## 5.2 Test Graph

### 5.2.1 B12_1.4MHz

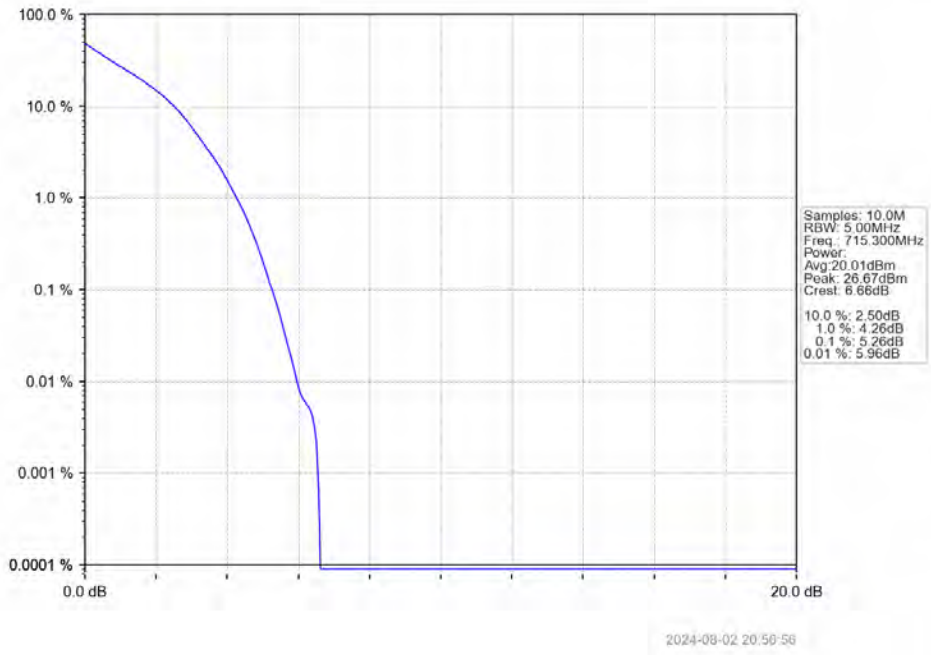
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



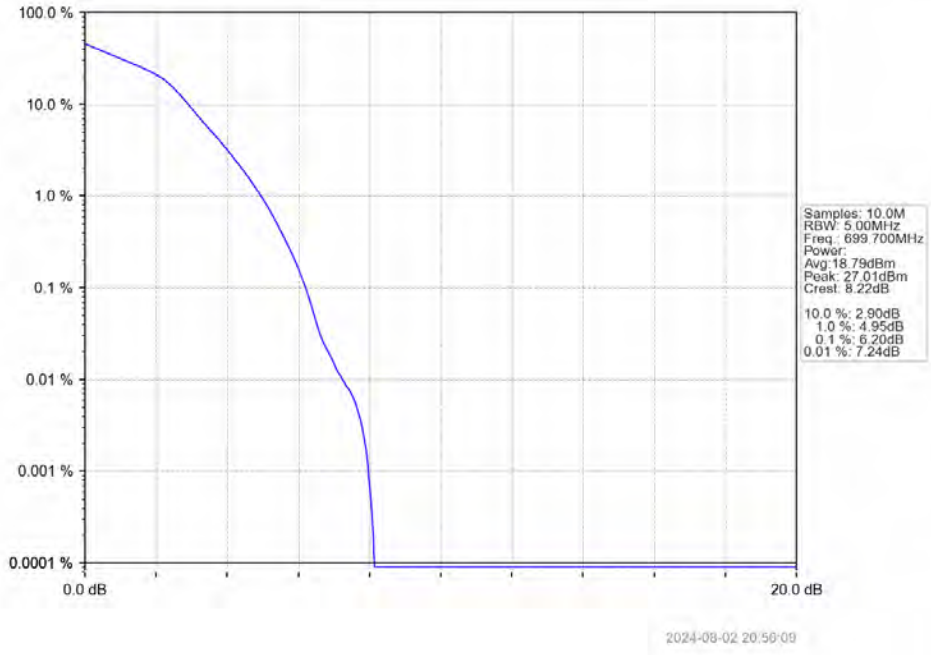

Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



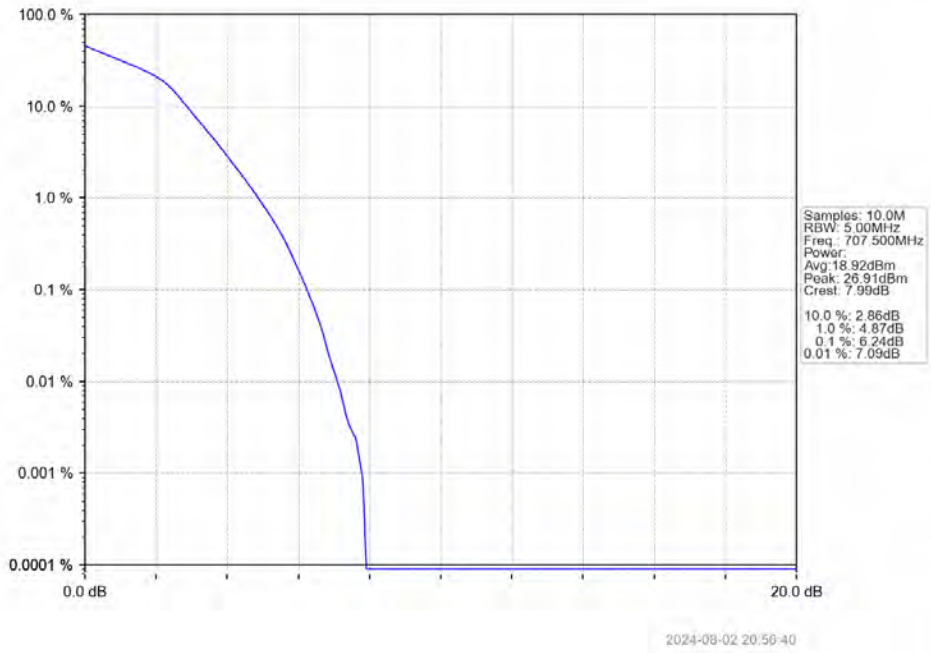
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



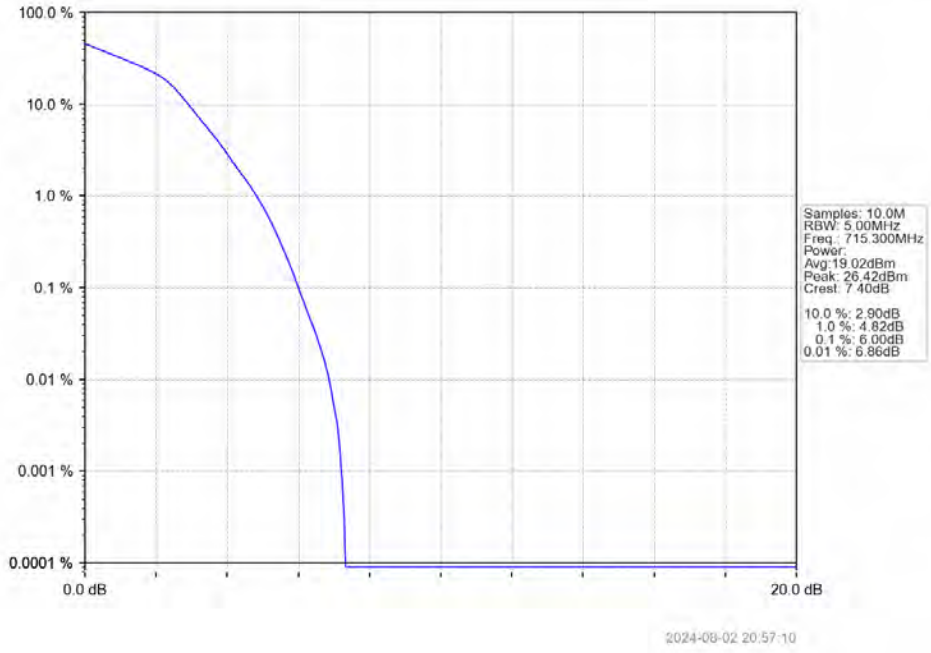

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



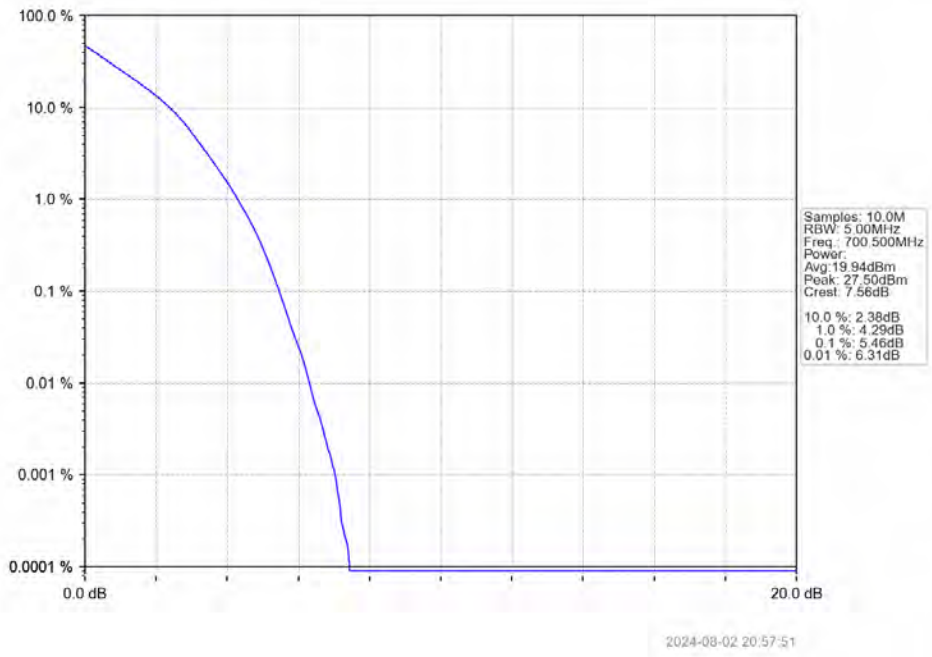
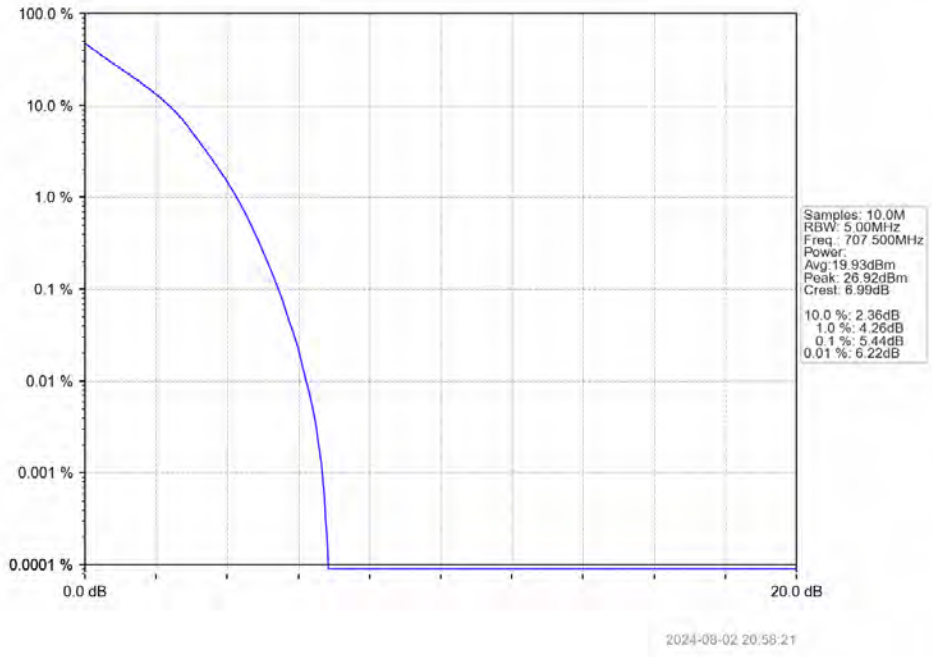
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



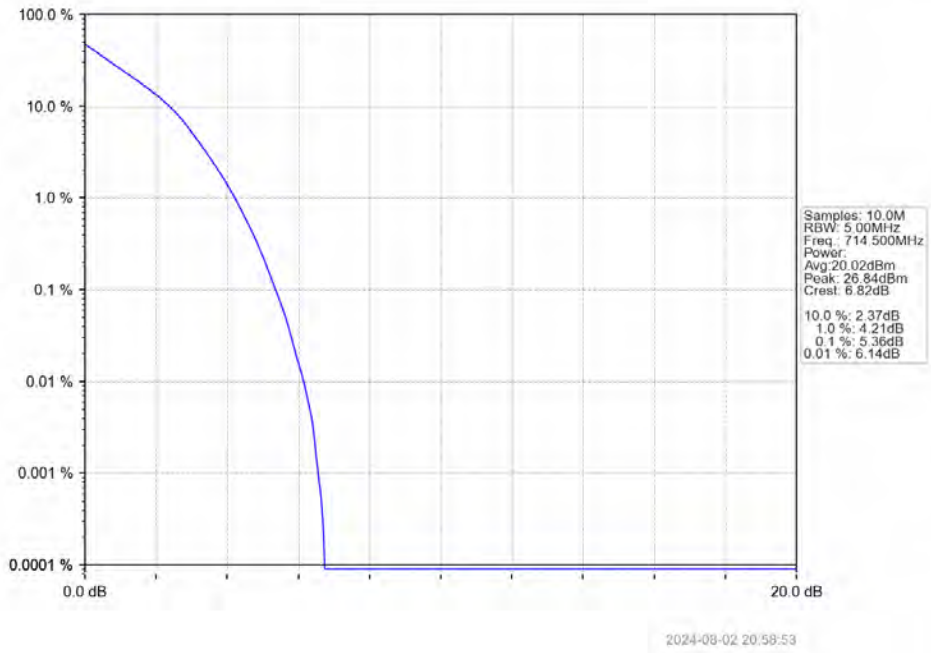

Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



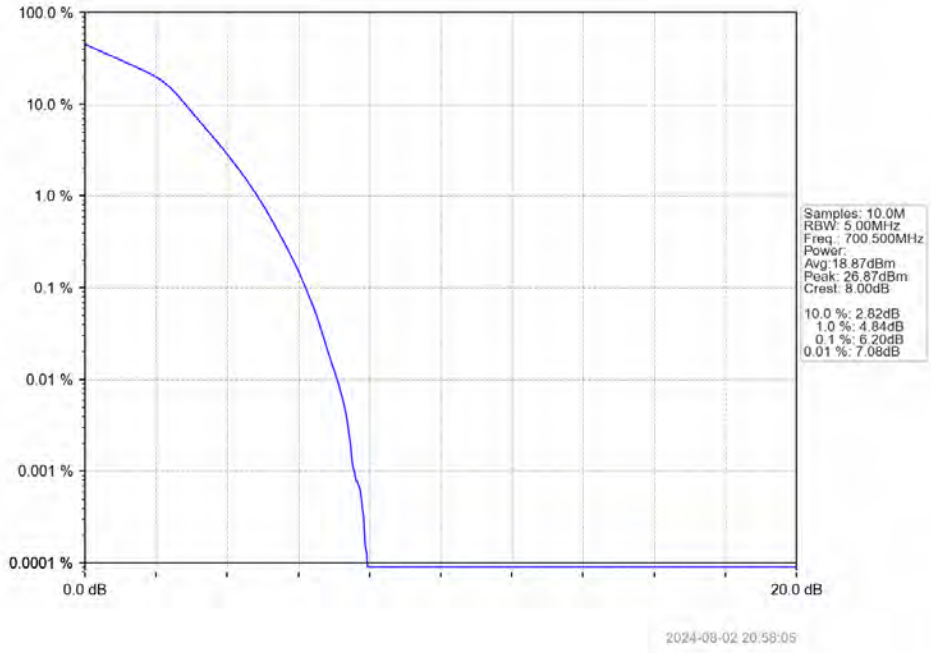
## 5.2.2 B12_3MHz

| Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV |
| --- |
|  |
| Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV |
|  |

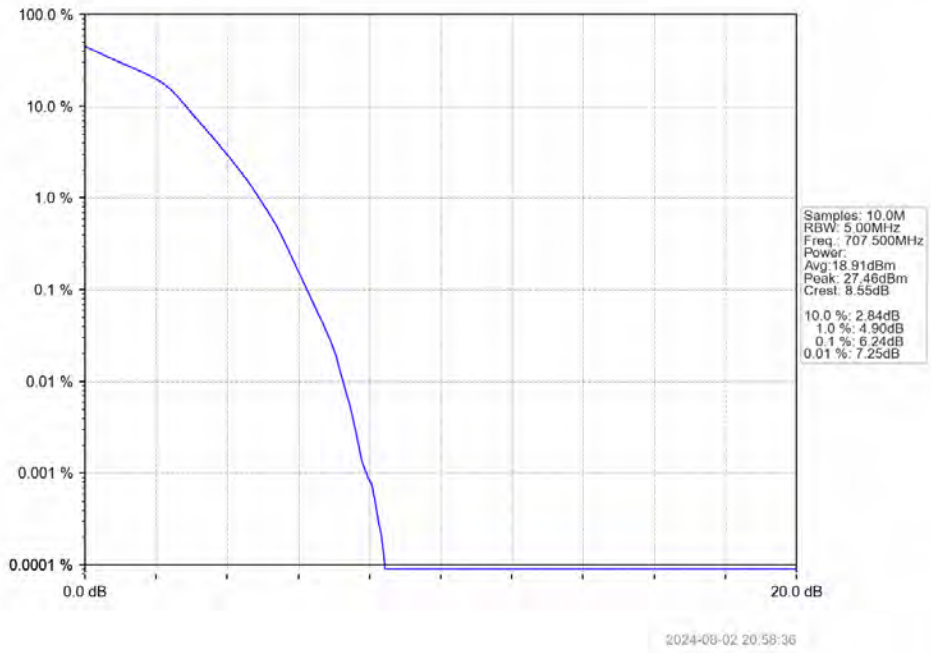
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



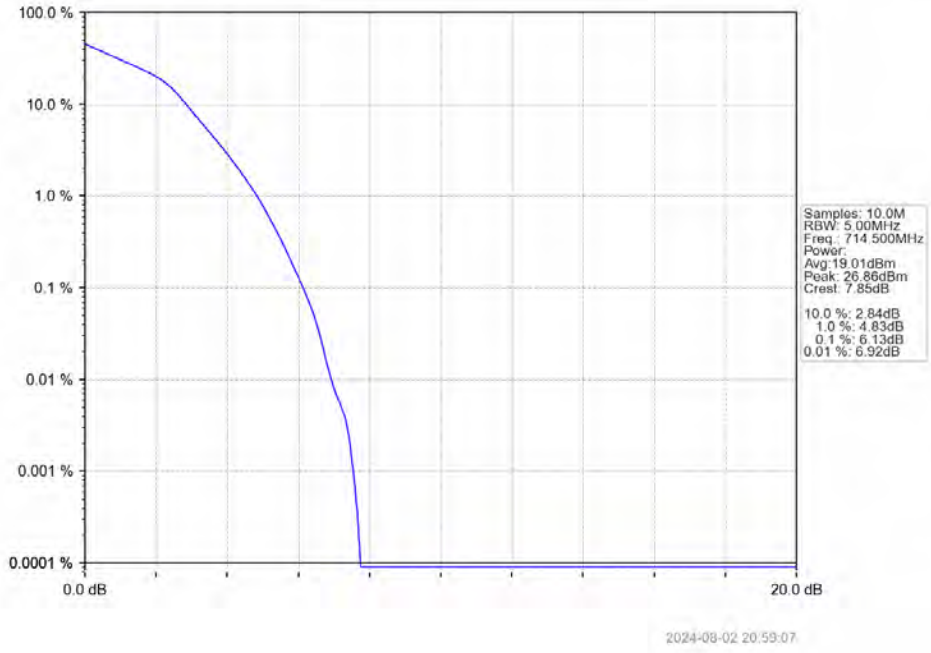

Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV

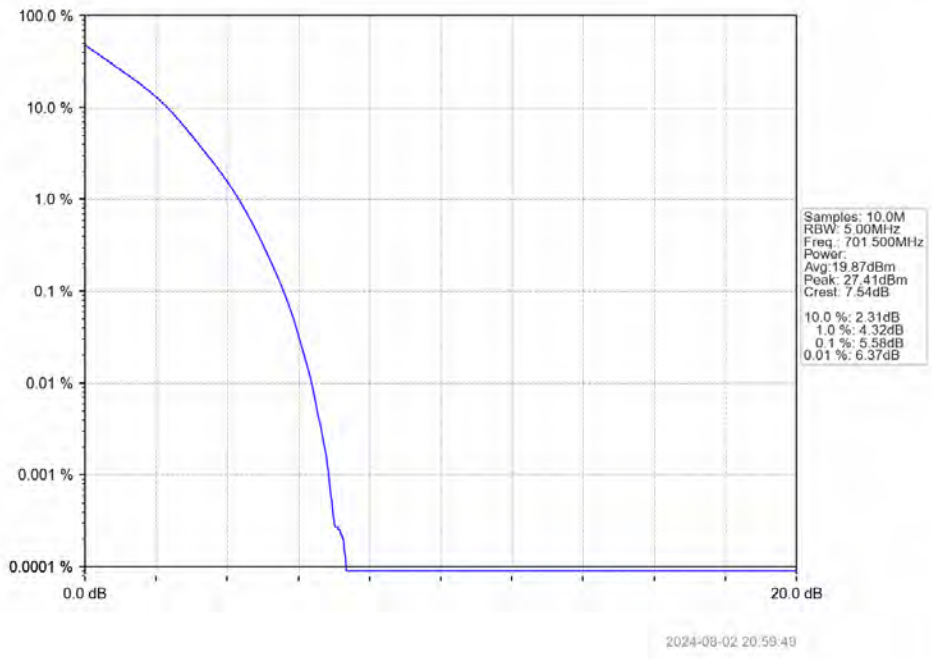



Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

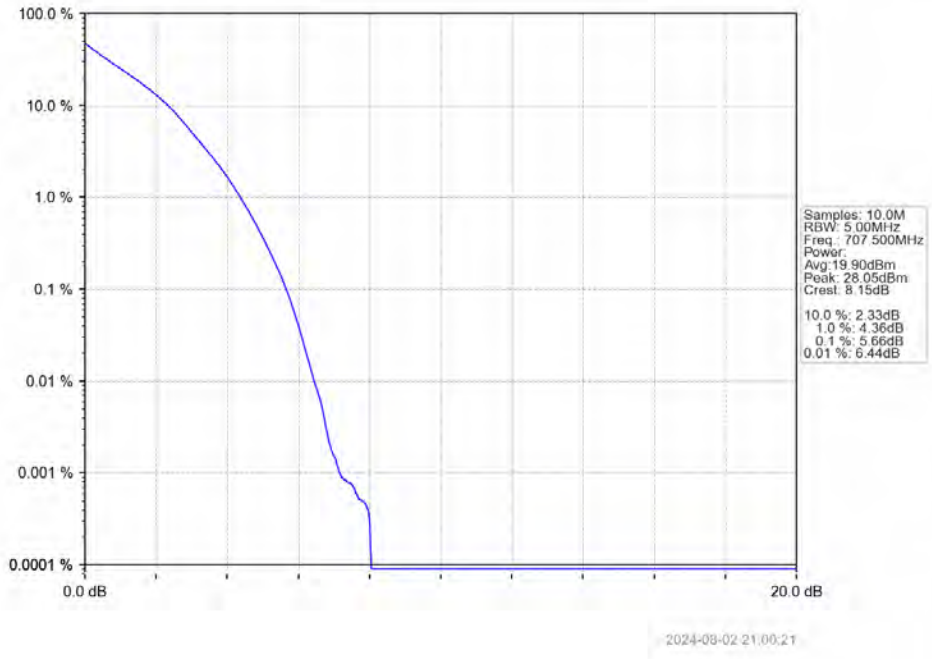


## 5.2.3 B12_5MHz

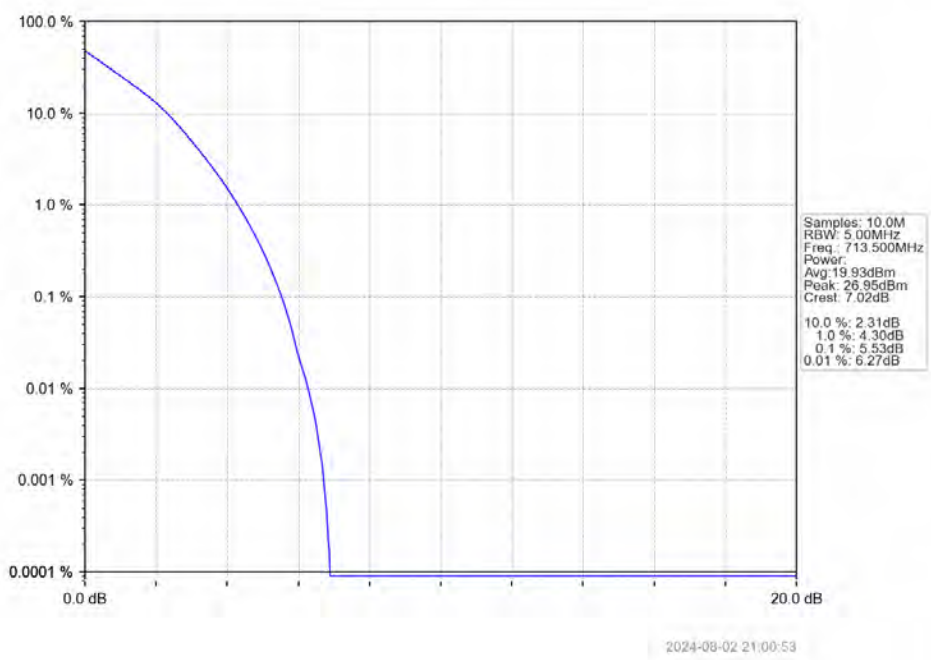
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



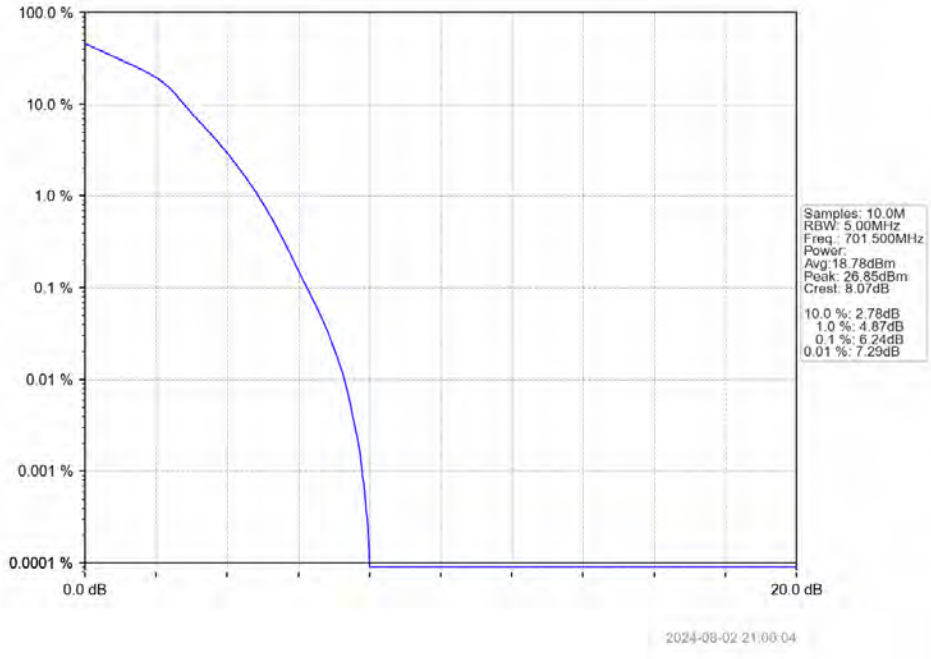

Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



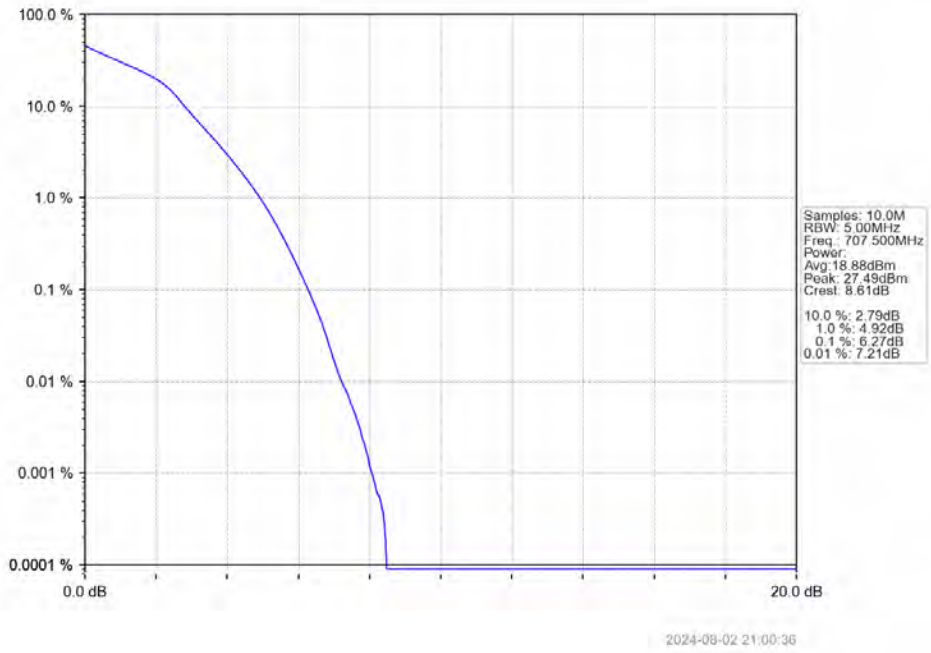
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



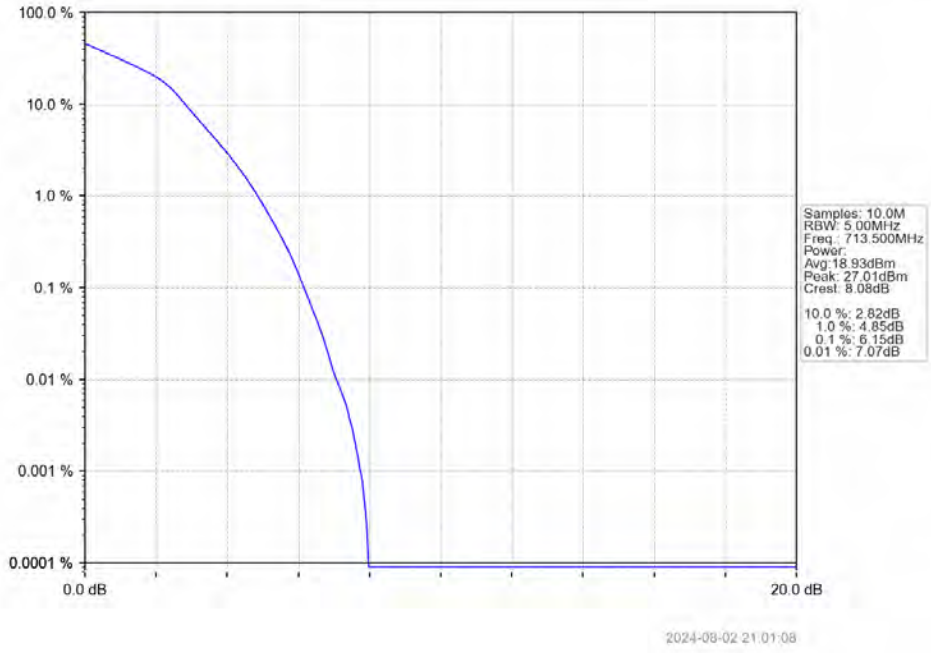

Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



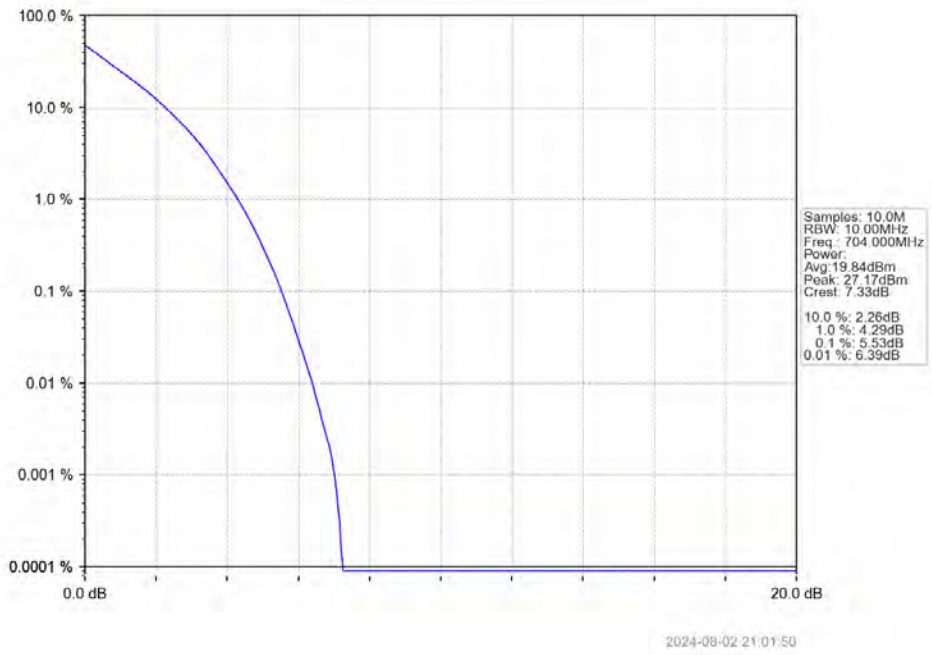
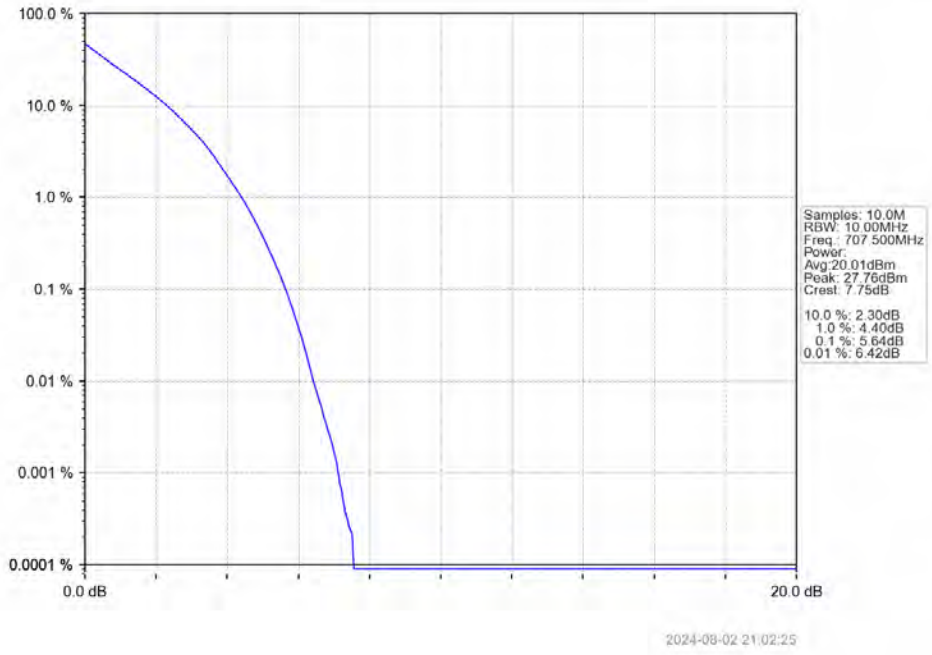
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



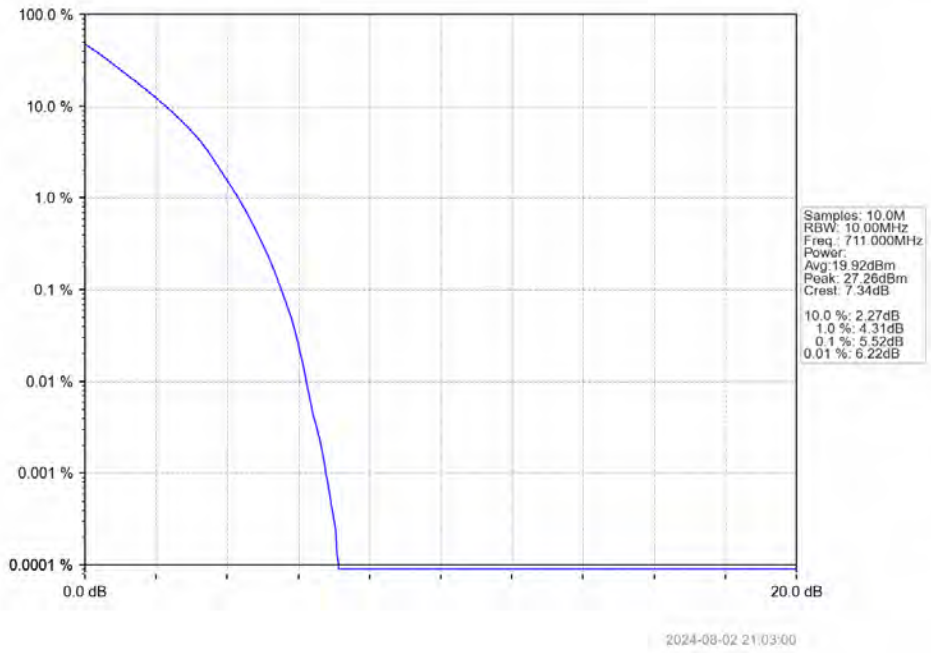

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



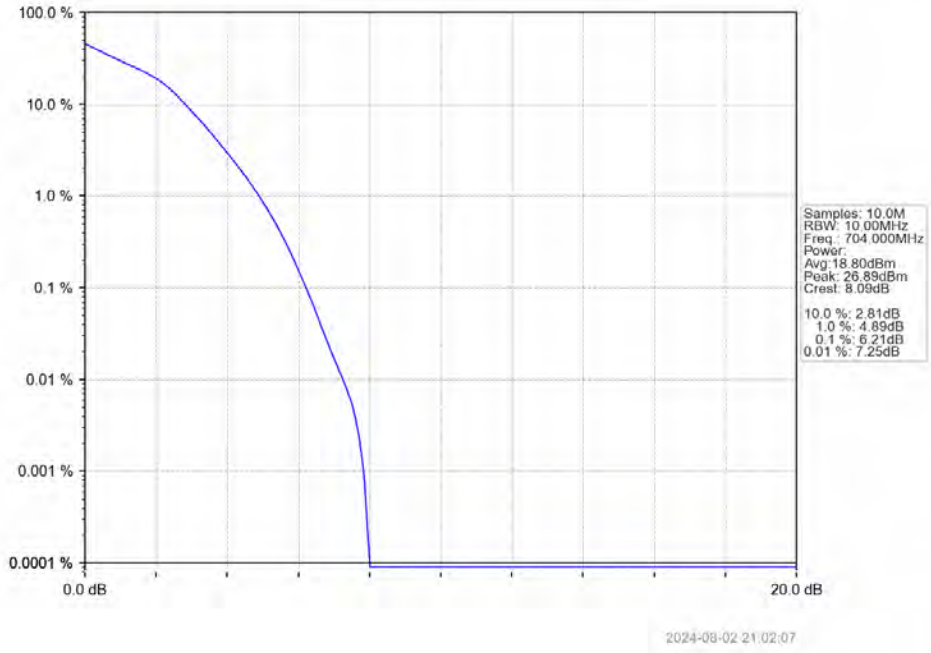
## 5.2.4 B12_10MHz

| Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV |
| --- |
|  |
| Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV |
|  |

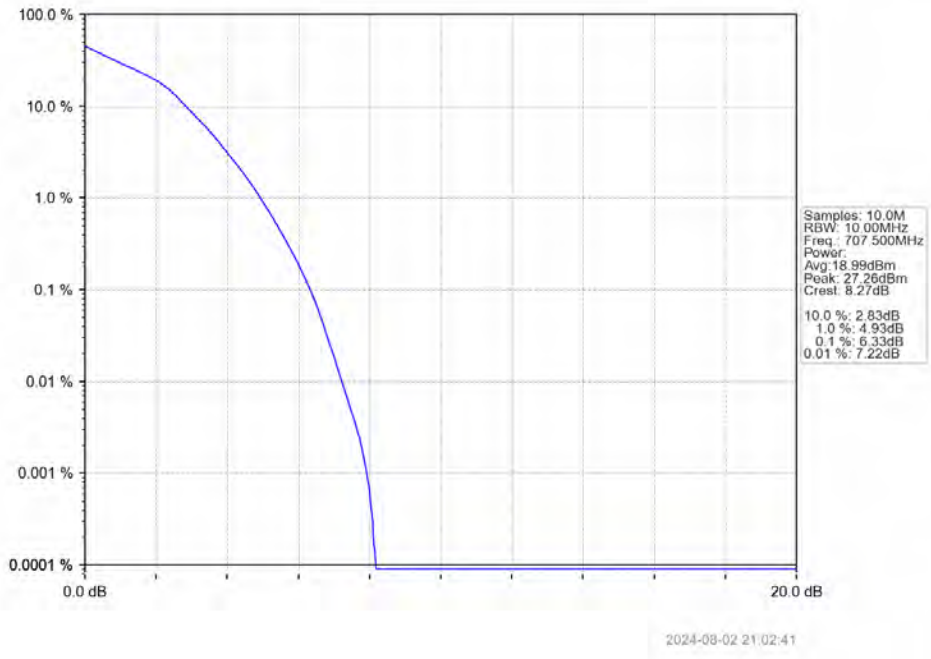
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



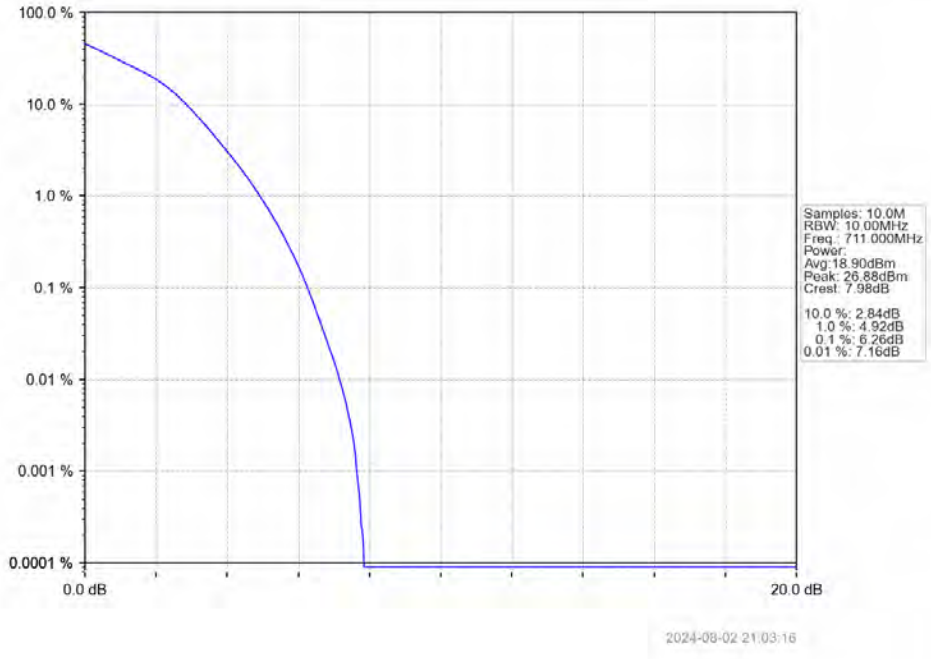

Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV




Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



# 6. Spurious Emission

## 6.1 Test Result

### 6.1.1 B12_1.4MHz

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

### 6.1.2 B12_3MHz

| 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 |
| 16QAM | 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 |

### 6.1.3 B12_5MHz

| 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 |
| 16QAM | 701.5 | 1 | 0 | Refer To Test Graph | | Pass |

| | | | | | |
|---|---|---|---|---|---|
| | | 25 | 0 | Refer To Test Graph | Pass |
| | 707.5 | 1 | 0 | Refer To Test Graph | Pass |
| | 713.5 | 1 | 0 | Refer To Test Graph | Pass |
| | | | 24 | Refer To Test Graph | Pass |
| | | 25 | 0 | Refer To Test Graph | Pass |

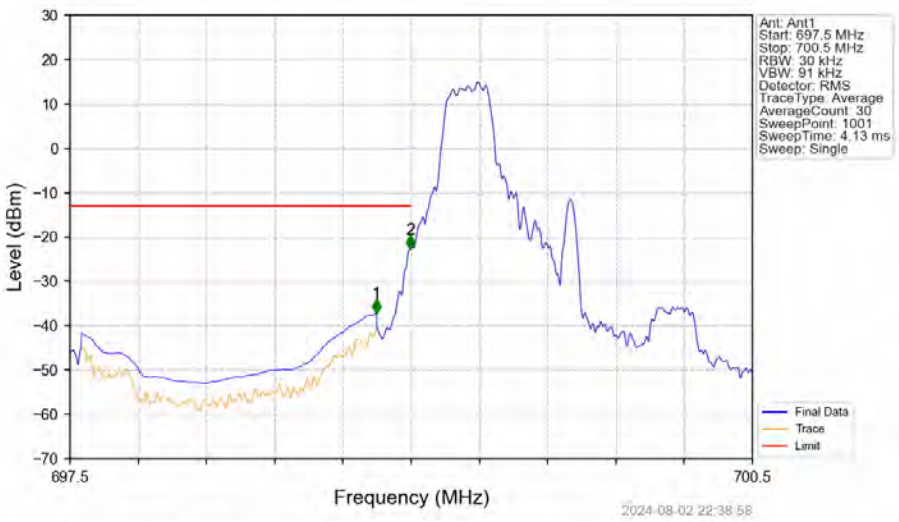
### 6.1.4 B12_10MHz

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

## 6.2 Test Graph

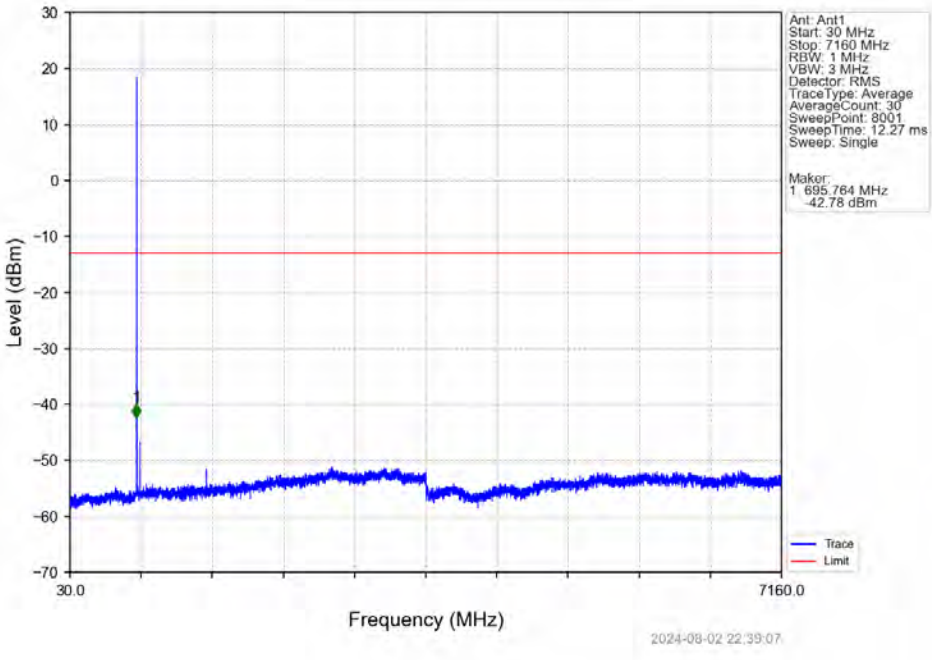
### 6.2.1 B12_1.4MHz

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

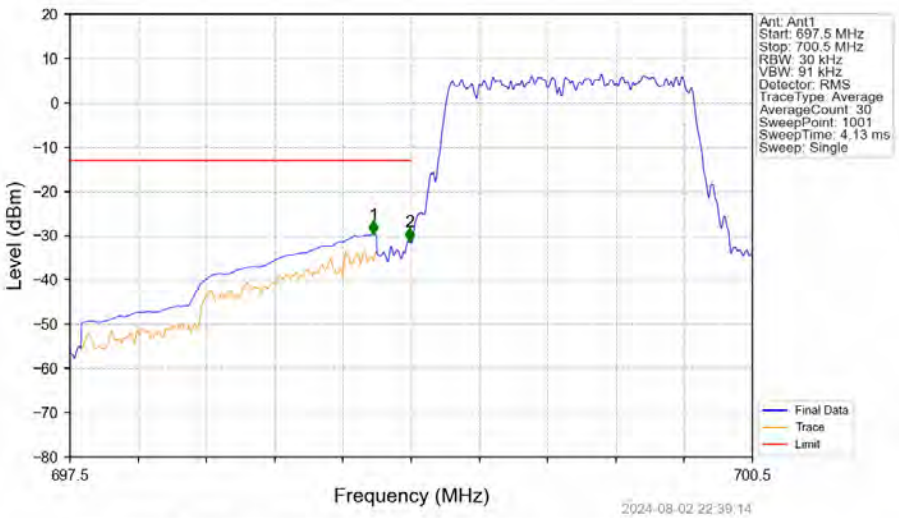



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 697.5 | 700.5 | 0.1 | CHP | 1 | 698.847 | -37.10 | -13 | Pass |
| 700.5 | 699 | 0.03 | / | 2 | 698.997 | -22.81 | -13 | Pass |
| 699 | 700.5 | 0.03 | / | / | / | / | / | / |

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

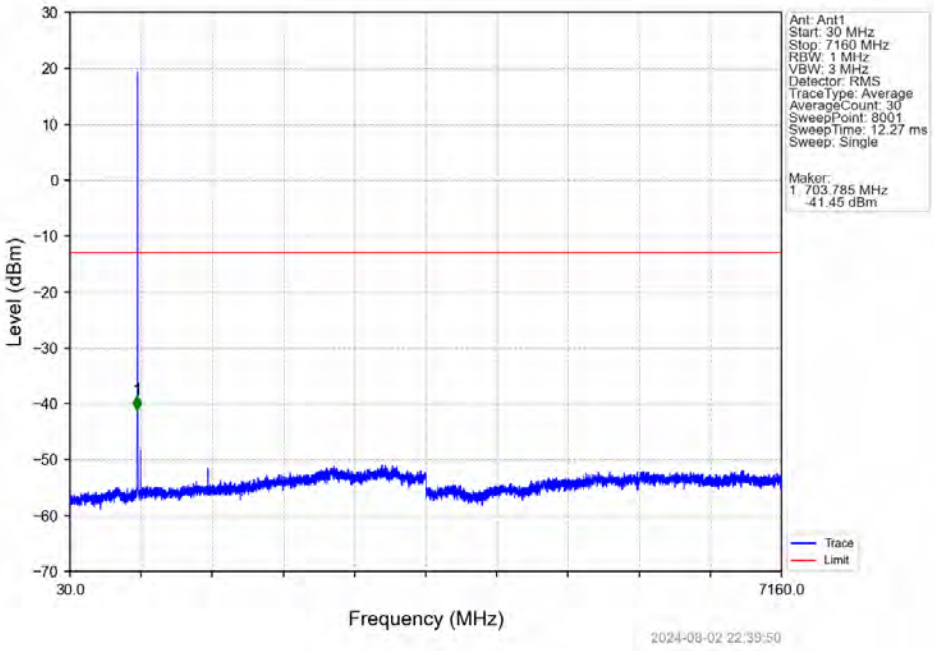


Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV

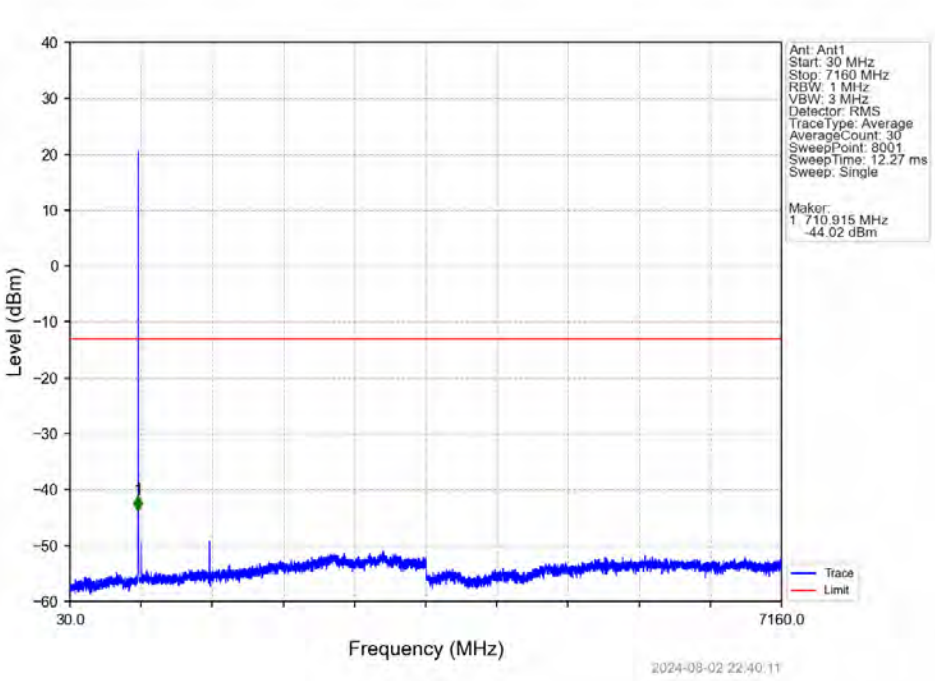



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 697.5 | 700.5 | 0.1 | CHP | 1 | 698.835 | -29.70 | -13 | Pass |
| 700.5 | 699 | 0.03 | / | 2 | 698.994 | -31.35 | -13 | Pass |
| 699 | 700.5 | 0.03 | / | / | / | / | / | / |

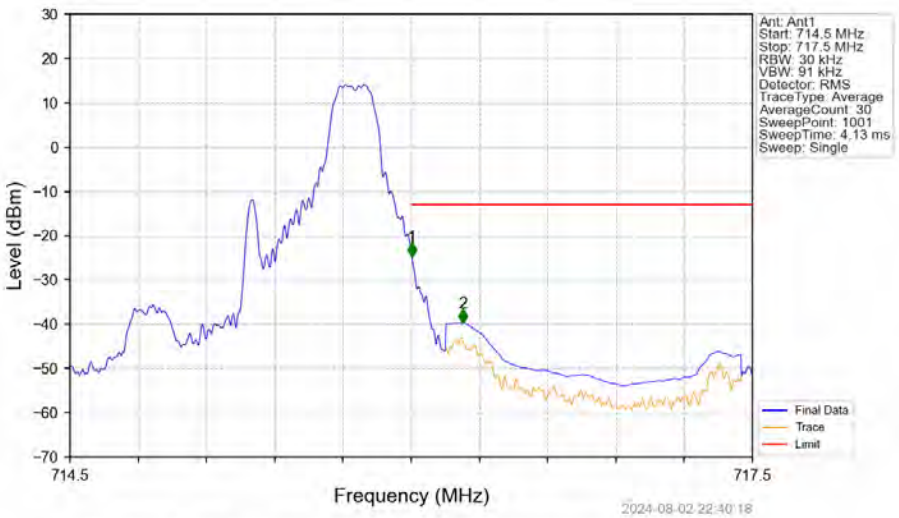
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV

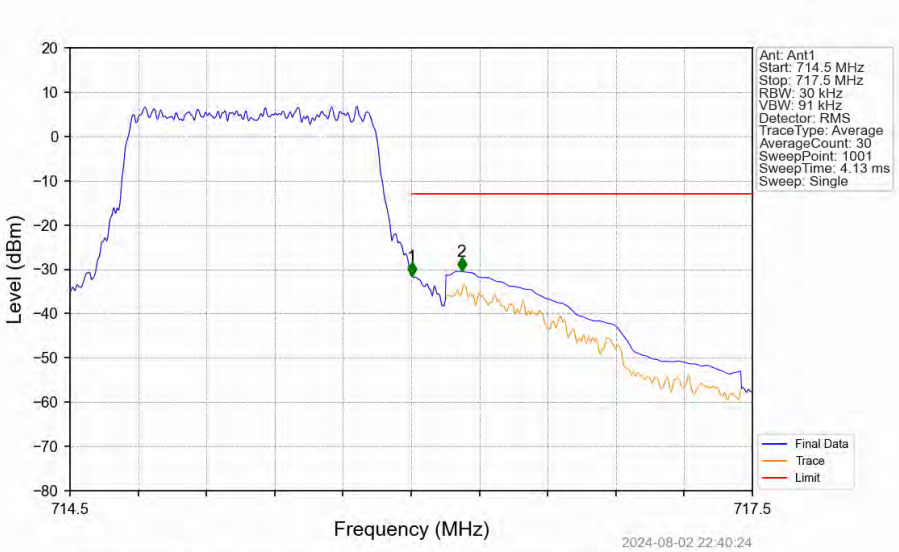



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV



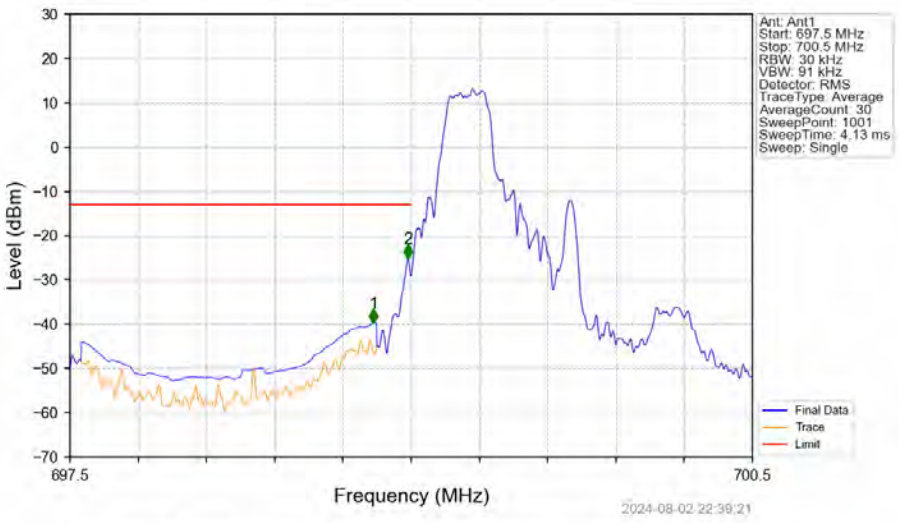

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 714.5 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.003 | -24.70 | -13 | Pass |
| 716.1 | 717.5 | 0.1 | CHP | 2 | 716.228 | -39.74 | -13 | Pass |

Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



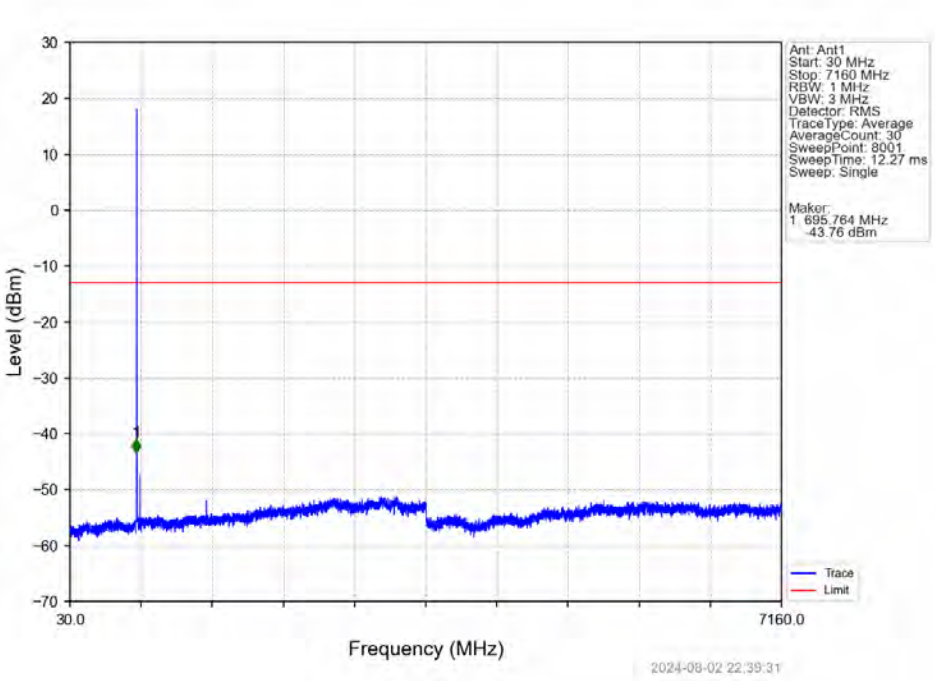

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 714.5 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.003 | -31.49 | -13 | Pass |
| 716.1 | 717.5 | 0.1 | CHP | 2 | 716.222 | -30.47 | -13 | Pass |

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

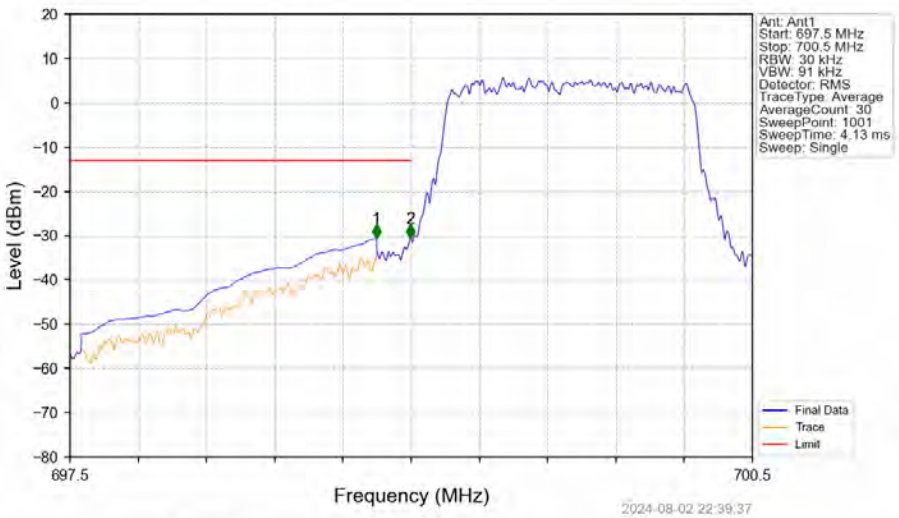



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 697.5 | 700.5 | 0.1 | CHP | 1 | 698.835 | -39.68 | -13 | Pass |
| 700.5 | 699 | 0.03 | / | 2 | 698.985 | -25.10 | -13 | Pass |
| 699 | 700.5 | 0.03 | / | / | / | / | / | / |

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

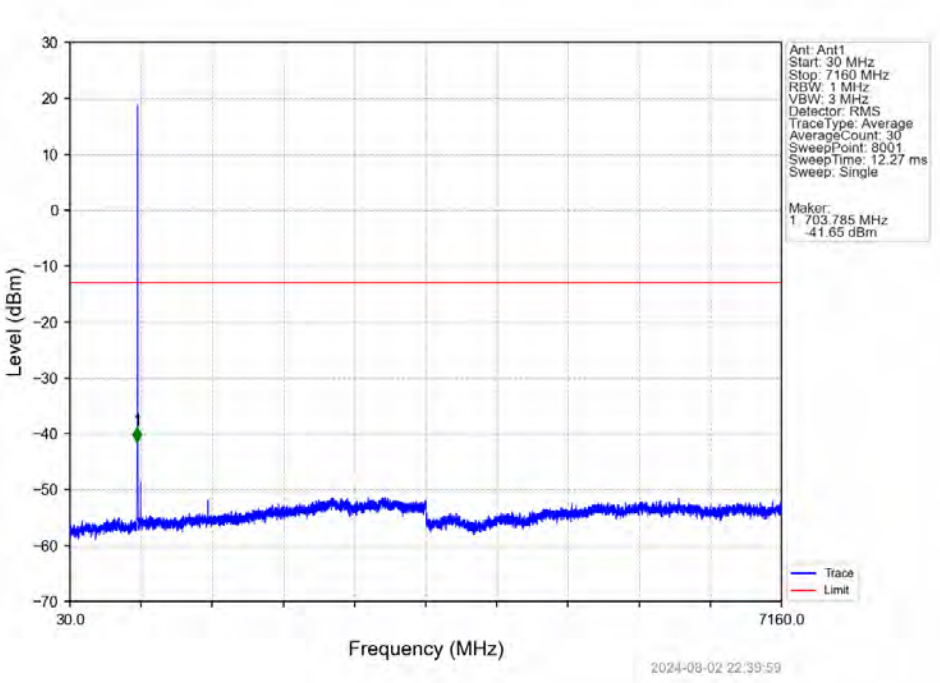



Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

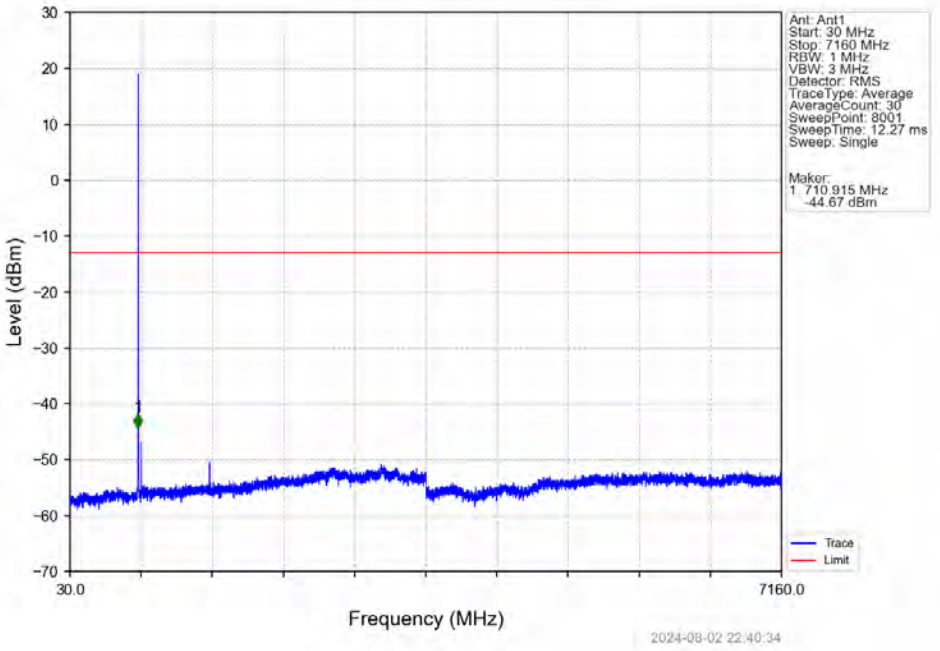



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 697.5 | 700.5 | 0.1 | CHP | 1 | 698.847 | -30.53 | -13 | Pass |
| 700.5 | 699 | 0.03 | / | 2 | 698.997 | -30.56 | -13 | Pass |
| 699 | 700.5 | 0.03 | / | / | / | / | / | / |

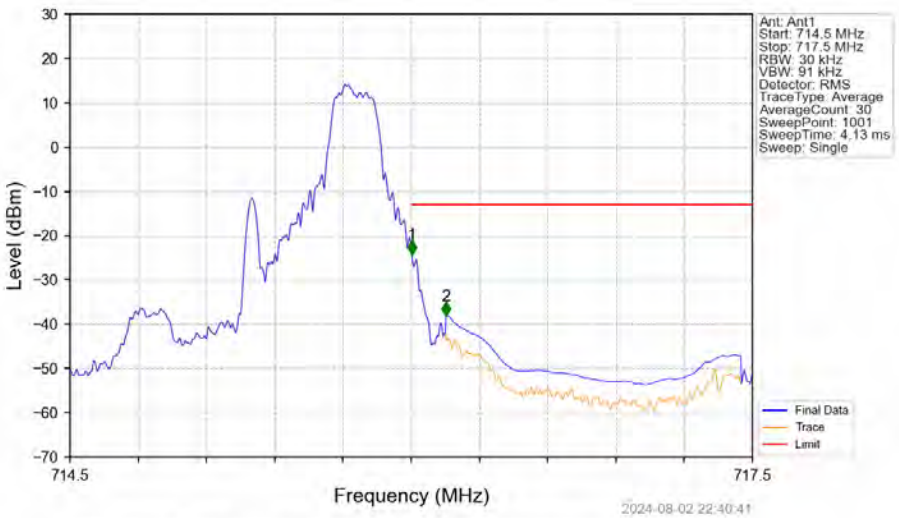
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV




Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_0_NTNV

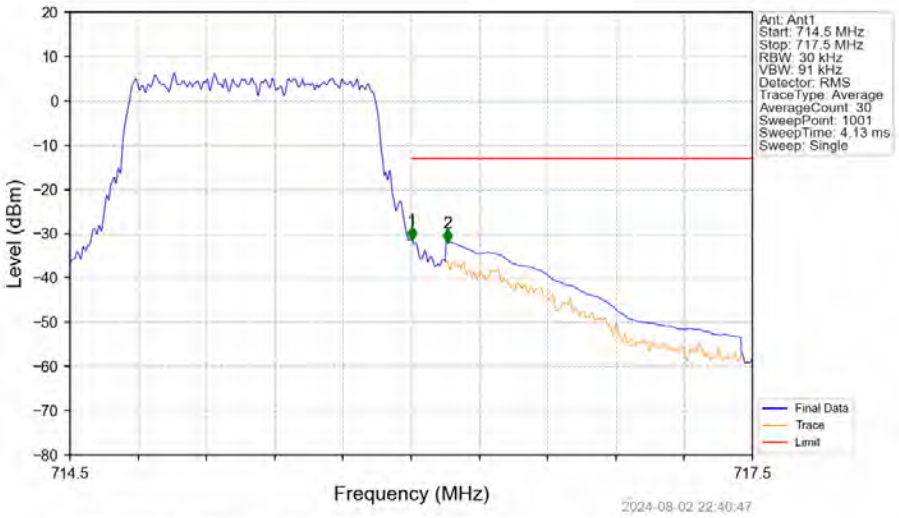


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_5_NTNV




| 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 | 716.003 | -24.27 | -13 | Pass |
| 716.1 | 717.5 | 0.1 | CHP | 2 | 716.153 | -38.04 | -13 | Pass |

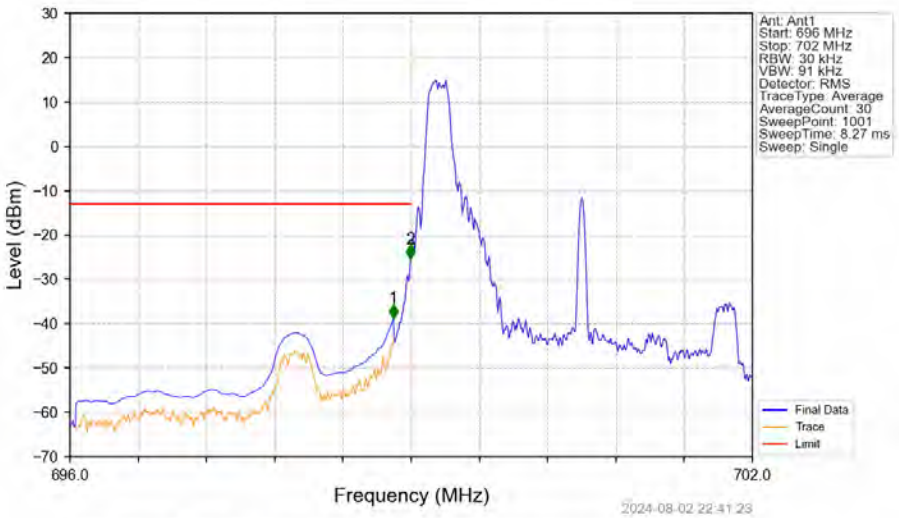
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV




| 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 | 716.003 | -31.53 | -13 | Pass |
| 716.1 | 717.5 | 0.1 | CHP | 2 | 716.159 | -31.99 | -13 | Pass |

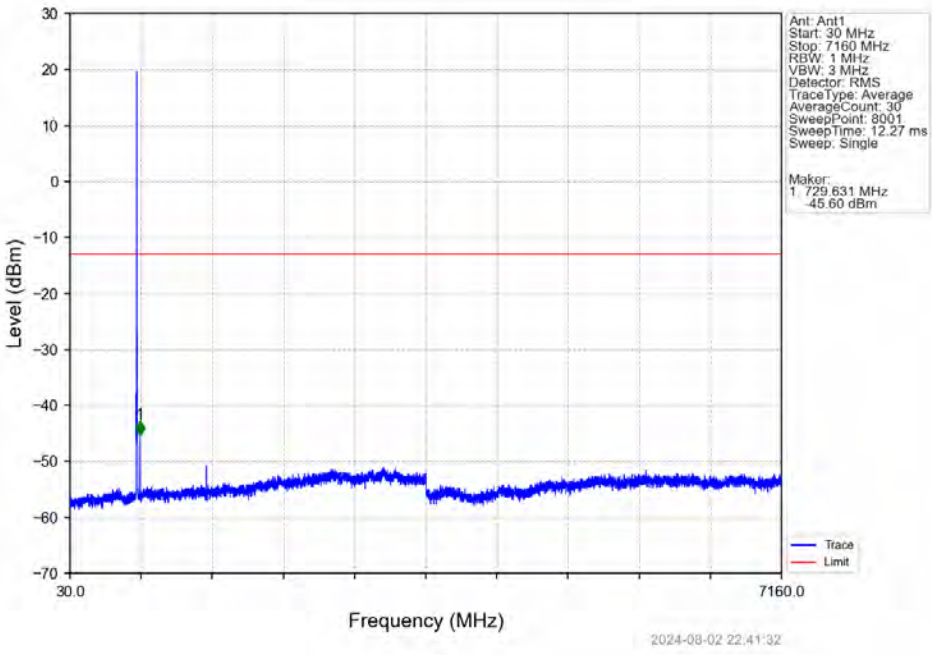
## 6.2.2 B12_3MHz

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

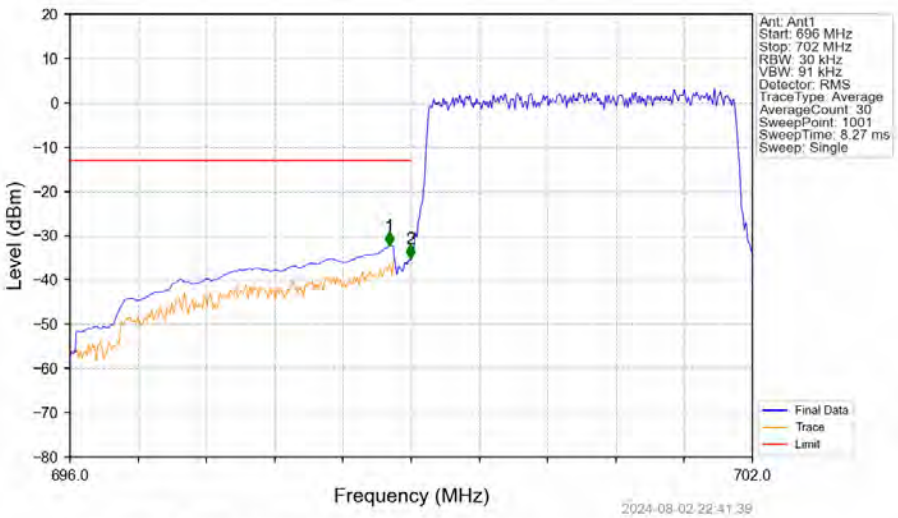



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 696 | 702 | 0.1 | CHP | 1 | 698.844 | -38.71 | -13 | Pass |
| 702 | 699 | 0.03 | / | 2 | 698.994 | -25.36 | -13 | Pass |
| 699 | 702 | 0.03 | / | / | / | / | / | / |

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

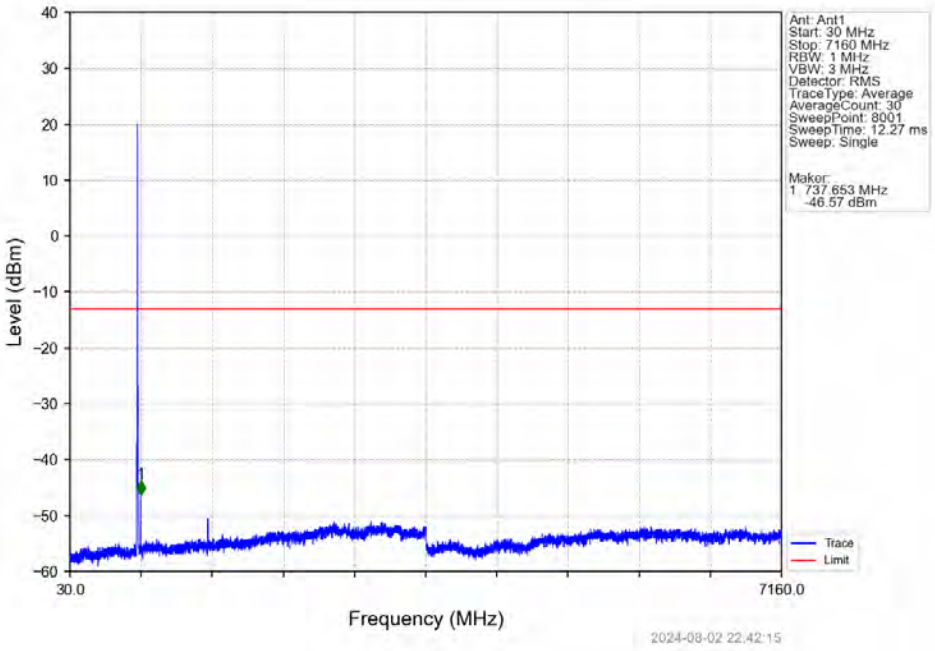


Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

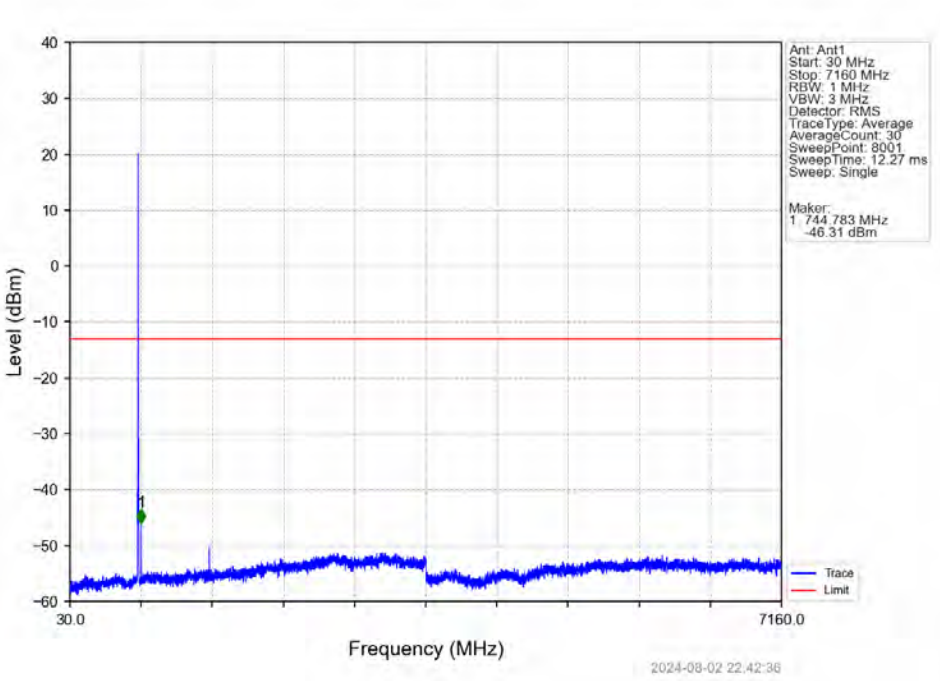



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 696 | 702 | 0.1 | CHP | 1 | 698.808 | -32.21 | -13 | Pass |
| 702 | 699 | 0.03 | / | 2 | 698.994 | -35.21 | -13 | Pass |
| 699 | 702 | 0.03 | / | / | / | / | / | / |

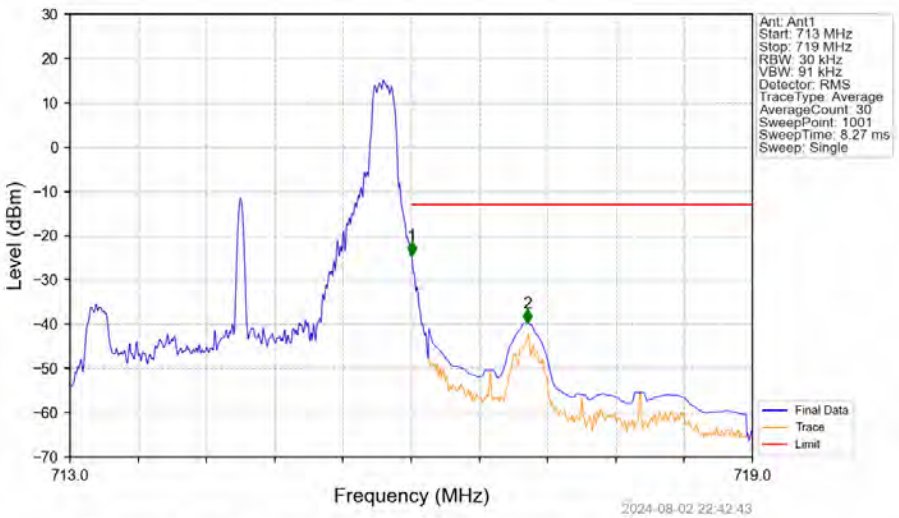
Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV

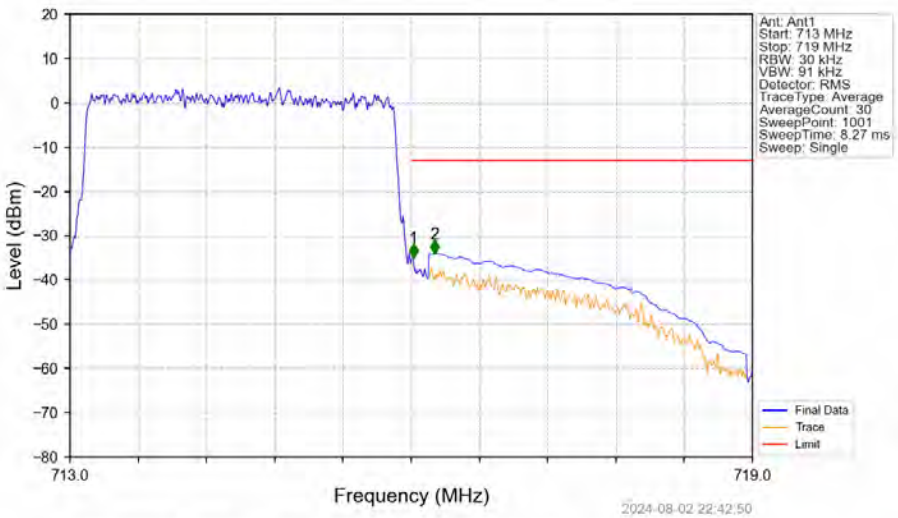



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV



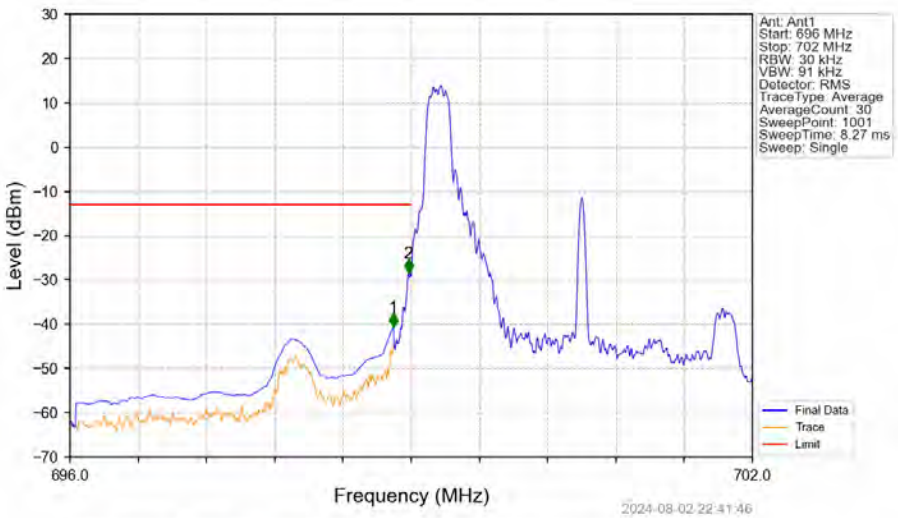

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 713 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.006 | -24.38 | -13 | Pass |
| 716.1 | 719 | 0.1 | CHP | 2 | 717.020 | -39.73 | -13 | Pass |

Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



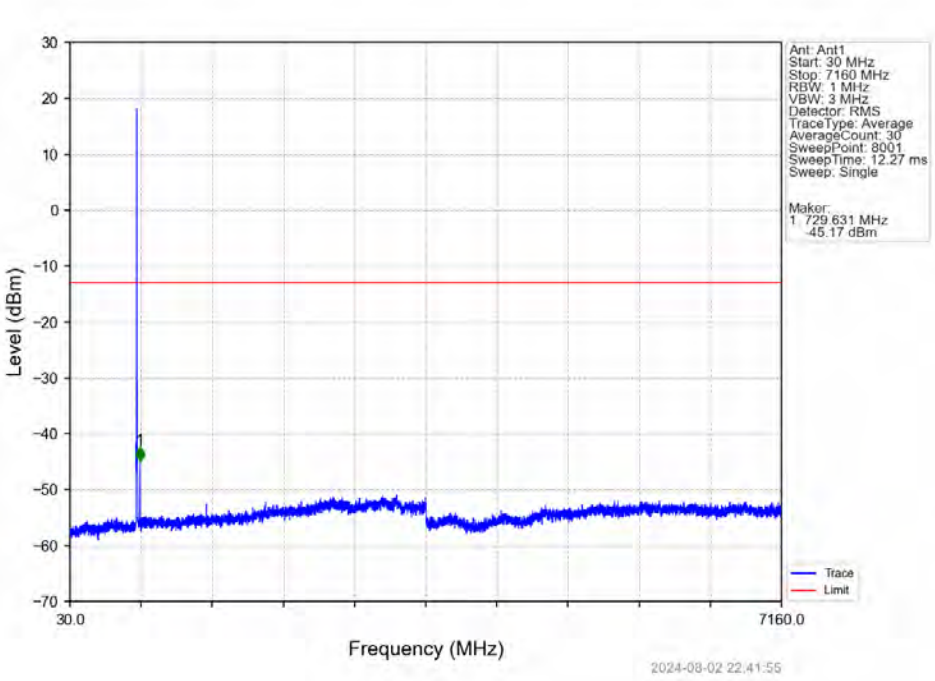

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 713 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.018 | -35.01 | -13 | Pass |
| 716.1 | 719 | 0.1 | CHP | 2 | 716.204 | -33.98 | -13 | Pass |

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

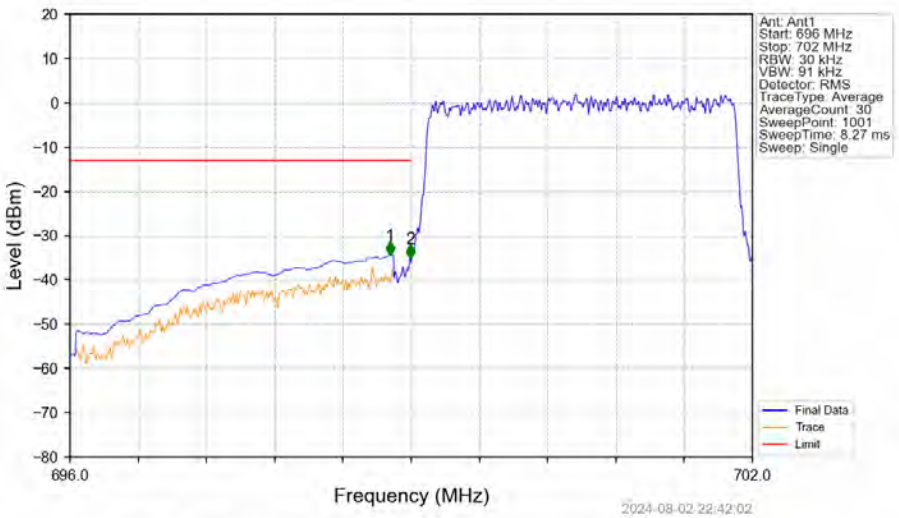



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 696 | 702 | 0.1 | CHP | 1 | 698.844 | -40.56 | -13 | Pass |
| 702 | 699 | 0.03 | / | 2 | 698.976 | -28.40 | -13 | Pass |
| 699 | 702 | 0.03 | / | / | / | / | / | / |

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

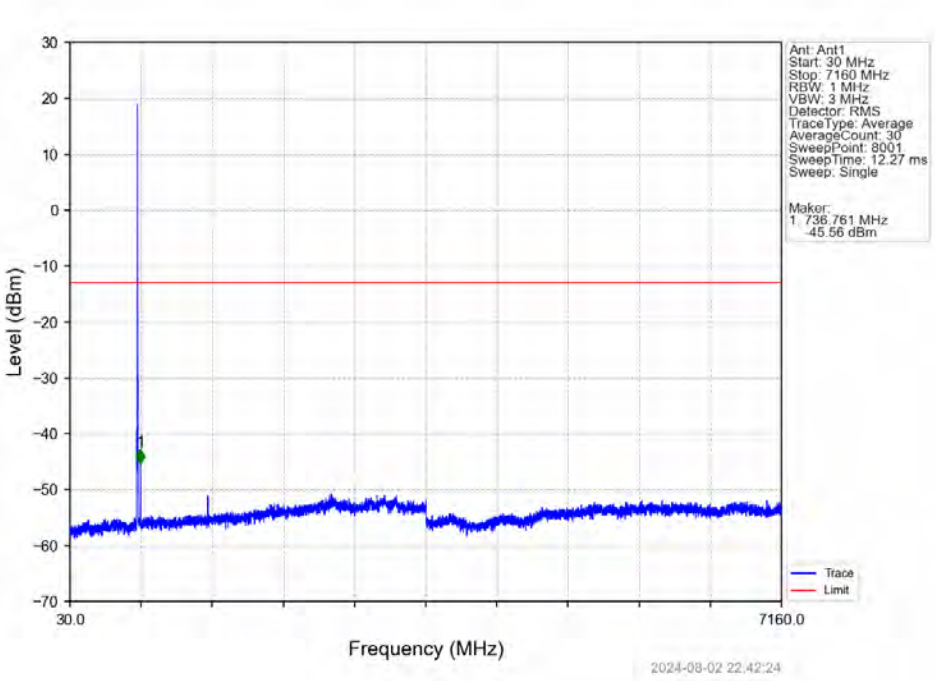



Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

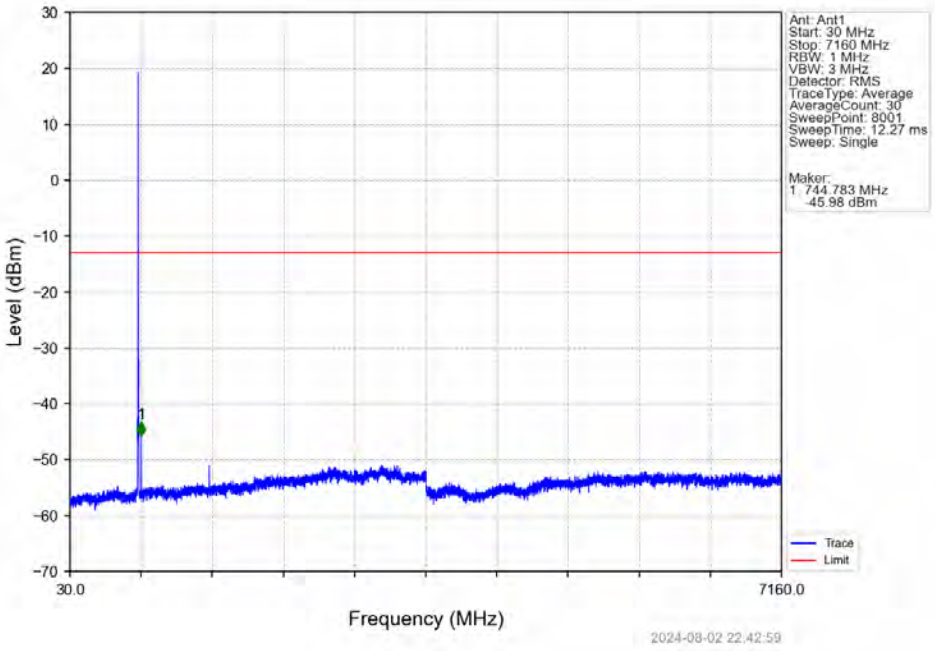



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 696 | 702 | 0.1 | CHP | 1 | 698.814 | -34.36 | -13 | Pass |
| 702 | 699 | 0.03 | / | 2 | 698.994 | -35.11 | -13 | Pass |
| 699 | 702 | 0.03 | / | / | / | / | / | / |

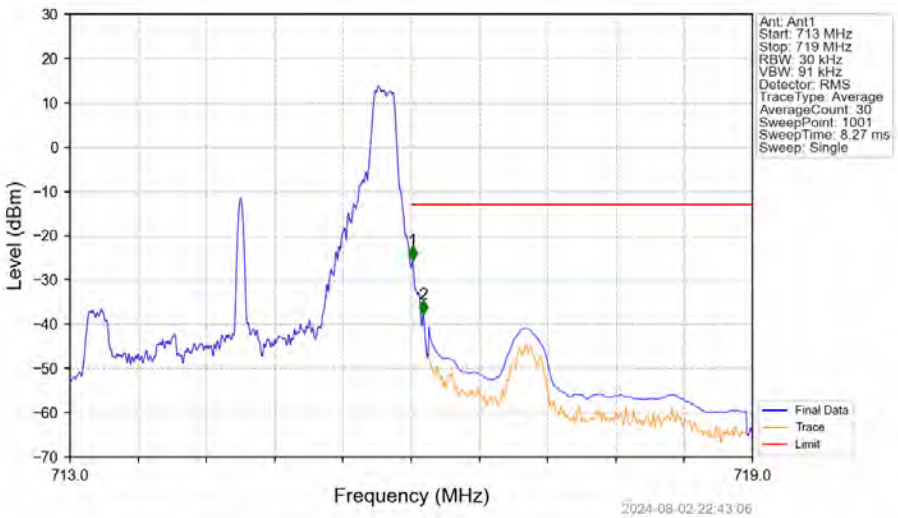
Band12_3MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV




Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_0_NTNV

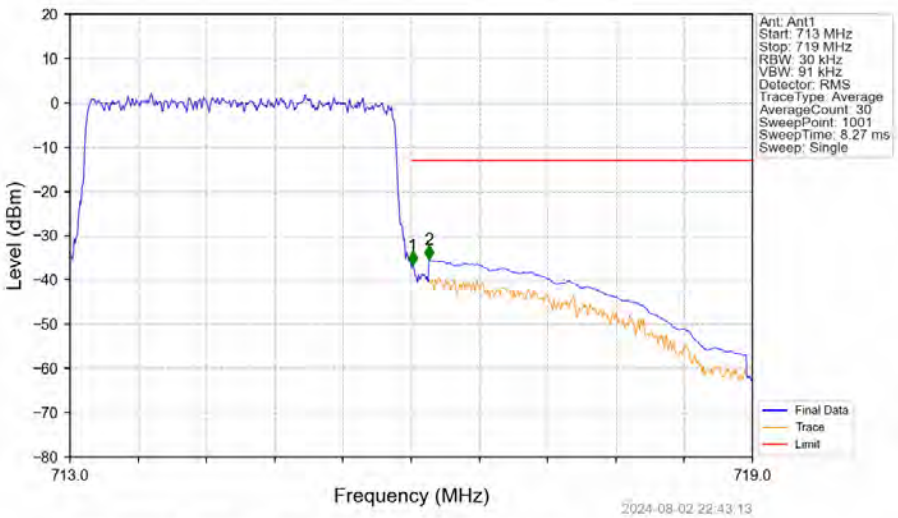


Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_14_NTNV




| 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 | 716.012 | -25.54 | -13 | Pass |
| 716.1 | 719 | 0.1 | CHP | 2 | 716.108 | -37.78 | -13 | Pass |

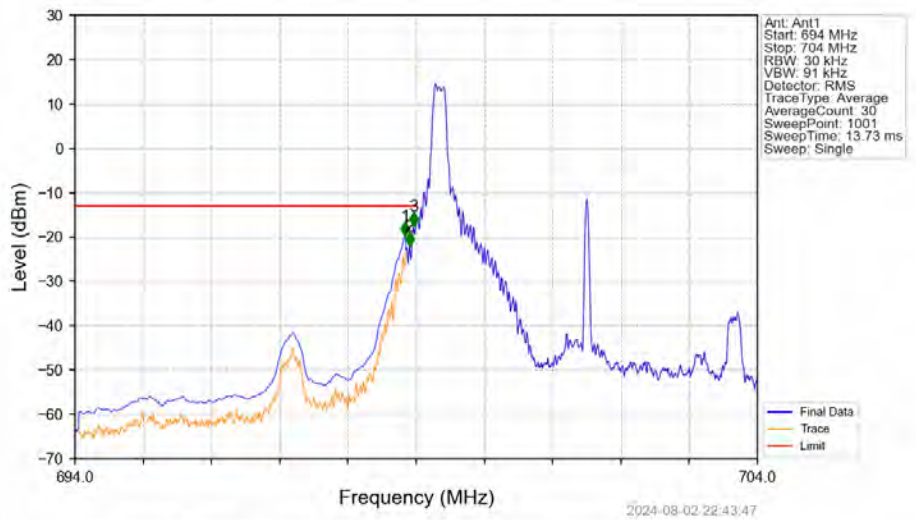
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV




| 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 | 716.012 | -36.64 | -13 | Pass |
| 716.1 | 719 | 0.1 | CHP | 2 | 716.156 | -35.38 | -13 | Pass |

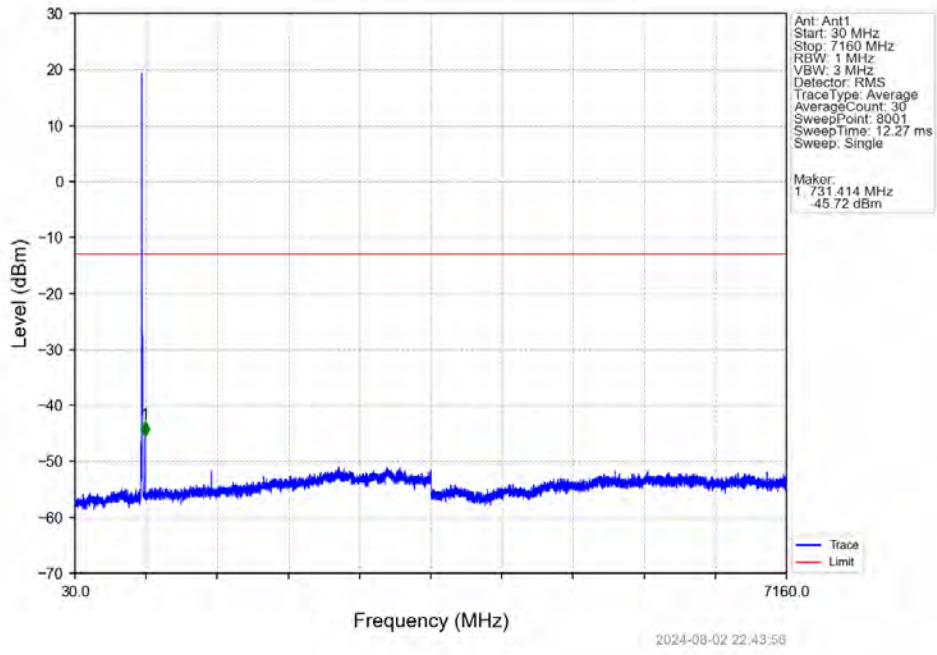
## 6.2.3 B12_5MHz

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

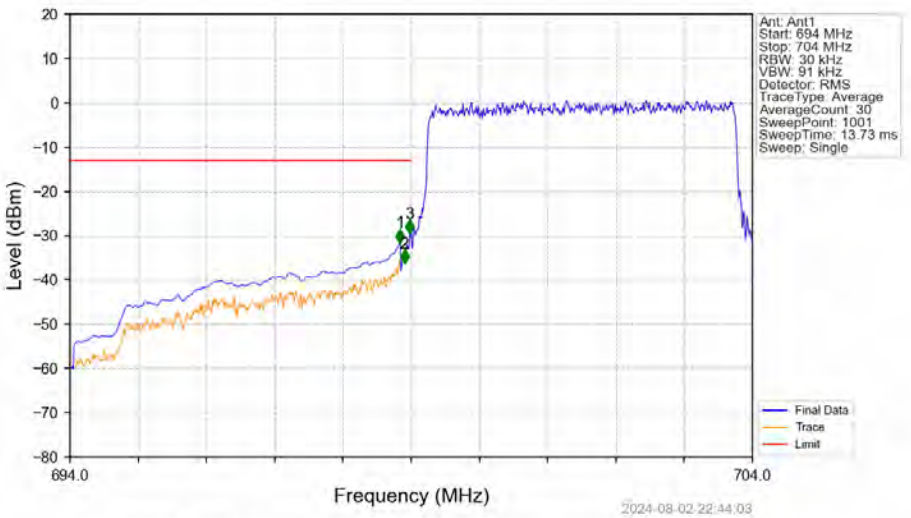



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 694 | 704 | 0.1 | CHP | 1 | 698.840 | -19.66 | -13 | Pass |
| 704 | 699 | 0.1 | CHP | 2 | 698.900 | -22.02 | -13 | Pass |
| 699 | 699 | 0.03 | / | 3 | 698.960 | -17.53 | -13 | Pass |
| 699 | 704 | 0.03 | / | / | / | / | / | / |

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

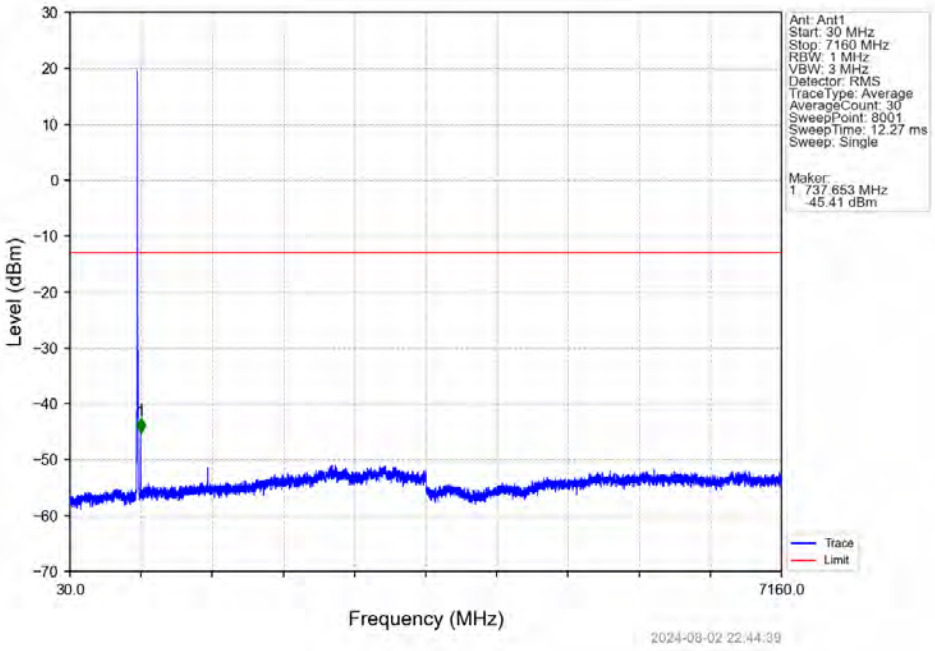


Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV

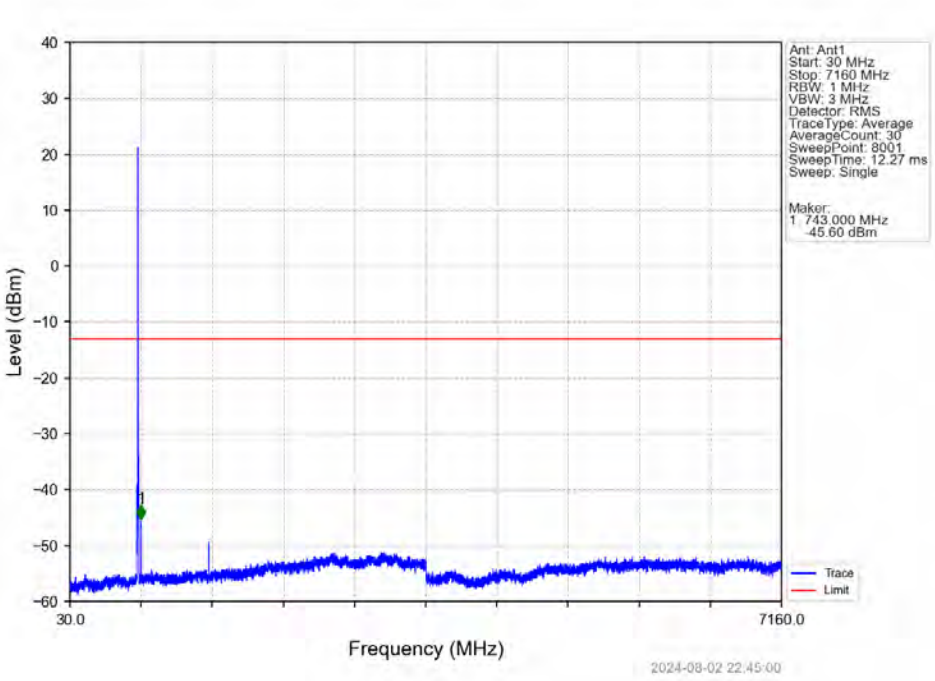



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 694 | 704 | 0.1 | CHP | 1 | 698.840 | -31.58 | -13 | Pass |
| 704 | 699 | 0.1 | CHP | 2 | 698.900 | -36.23 | -13 | Pass |
| 699 | 699 | 0.03 | / | 3 | 698.980 | -29.57 | -13 | Pass |
| 699 | 704 | 0.03 | / | / | / | / | / | / |

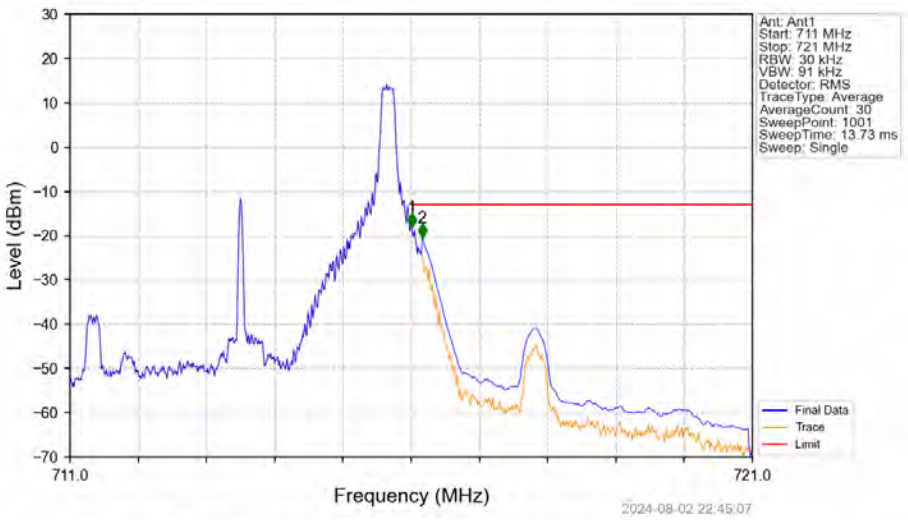
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

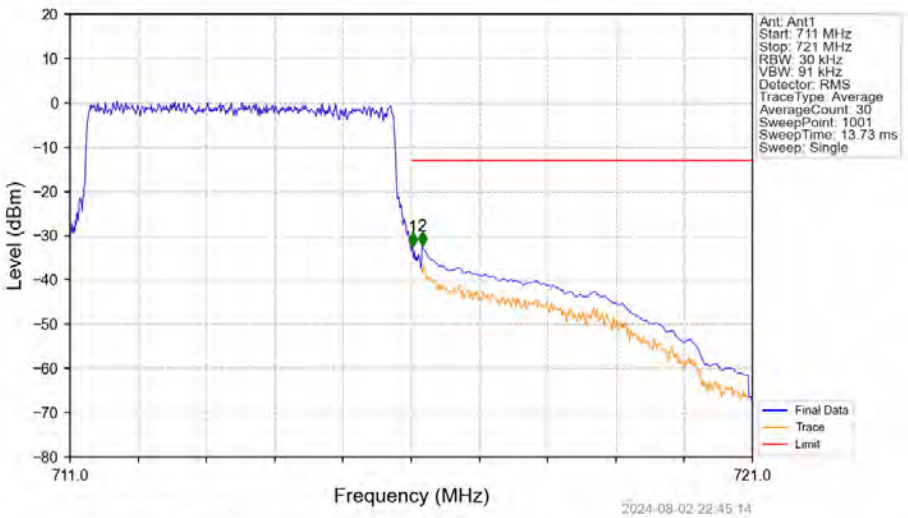



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



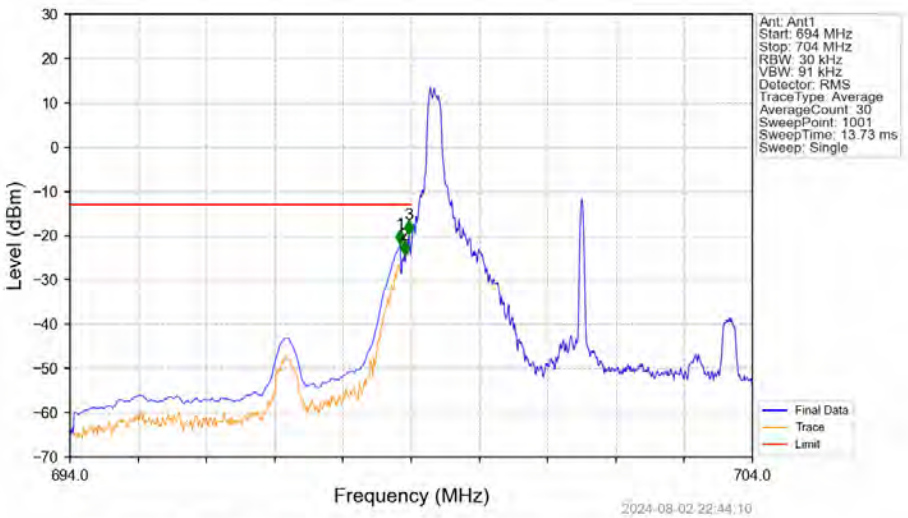

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 711 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.010 | -18.12 | -13 | Pass |
| 716.1 | 721 | 0.1 | CHP | 2 | 716.160 | -20.42 | -13 | Pass |

Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



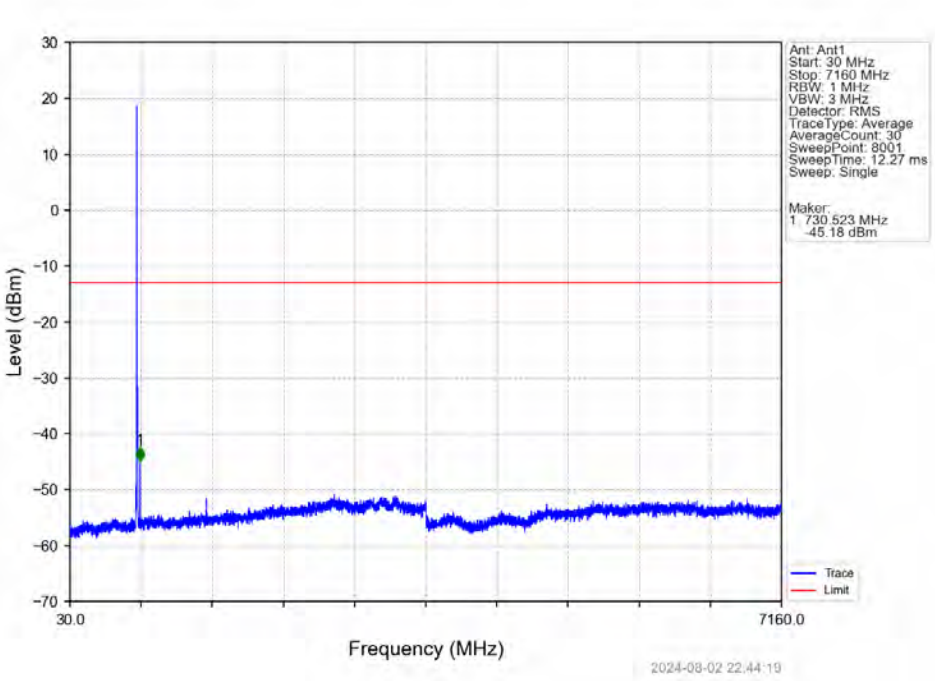

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 711 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.020 | -32.34 | -13 | Pass |
| 716.1 | 721 | 0.1 | CHP | 2 | 716.160 | -32.14 | -13 | Pass |

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

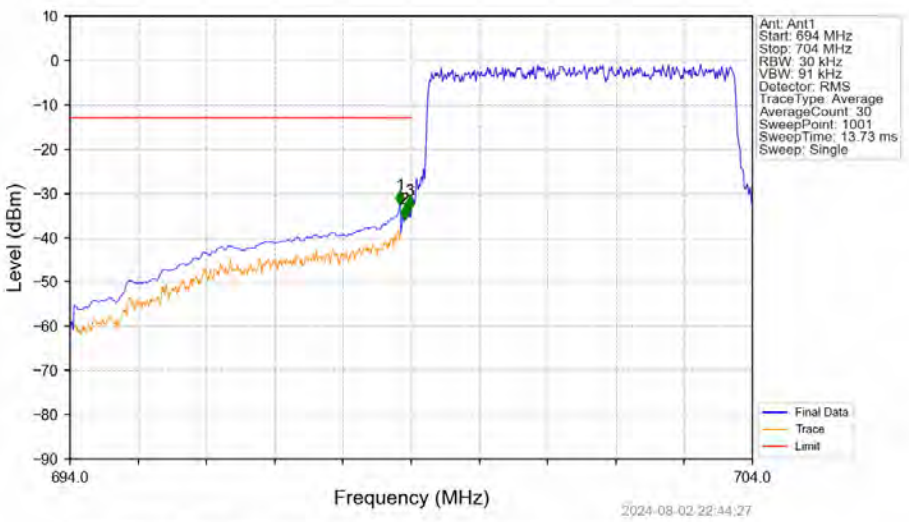



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 694 | 704 | 0.1 | CHP | 1 | 698.840 | -21.88 | -13 | Pass |
| 704 | 699 | 0.1 | CHP | 2 | 698.900 | -24.30 | -13 | Pass |
| 699 | 699 | 0.03 | / | 3 | 698.970 | -19.75 | -13 | Pass |
| 699 | 704 | 0.03 | / | / | / | / | / | / |

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

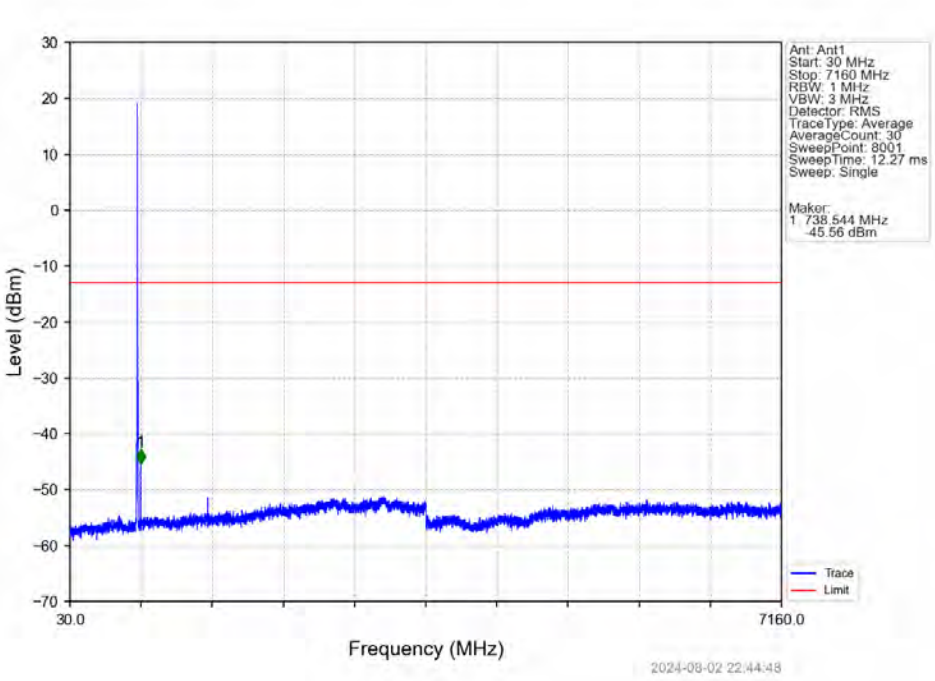



Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

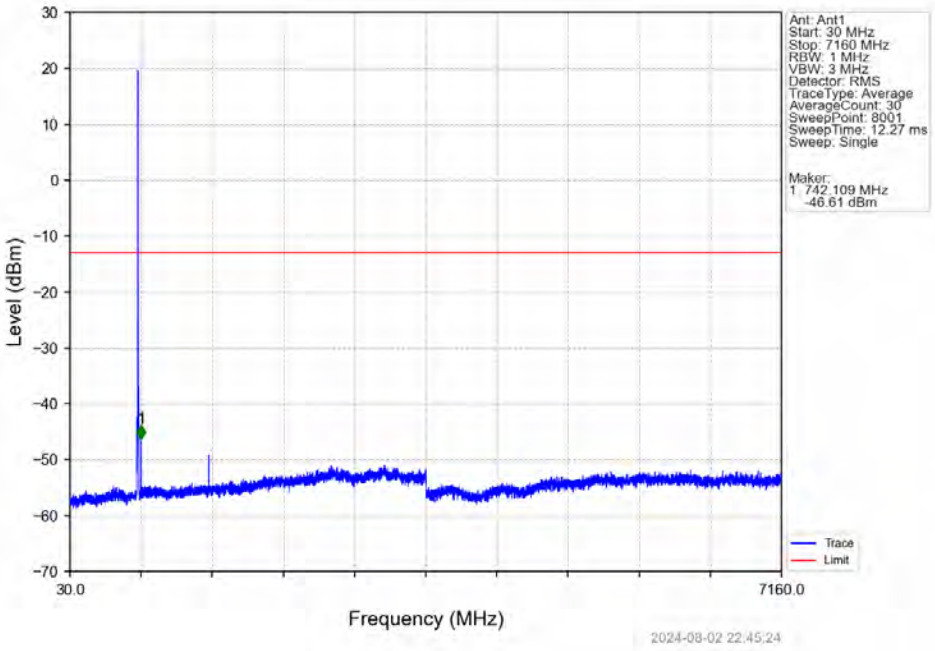



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 694 | 704 | 0.1 | CHP | 1 | 698.840 | -32.60 | -13 | Pass |
| 704 | 699 | 0.1 | CHP | 2 | 698.900 | -35.76 | -13 | Pass |
| 699 | 699 | 0.03 | / | 3 | 698.980 | -33.84 | -13 | Pass |
| 699 | 704 | 0.03 | / | / | / | / | / | / |

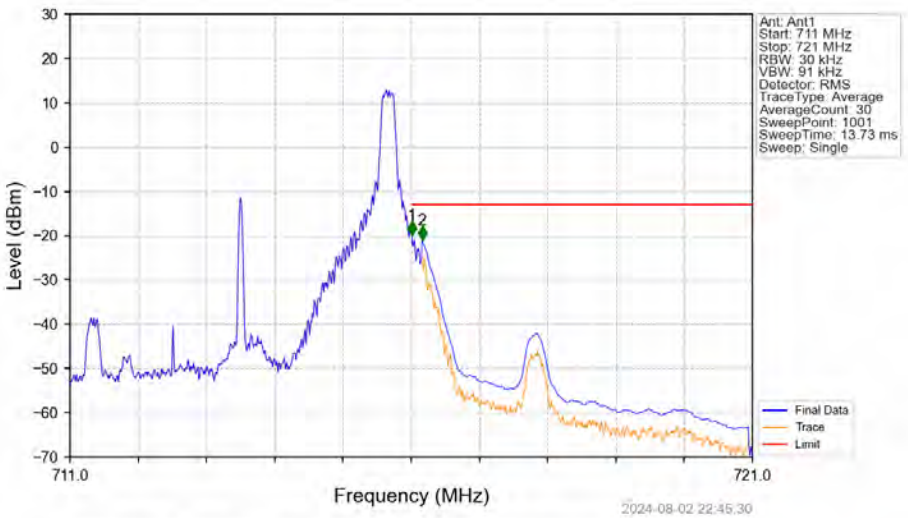
Band12_5MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV




Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_0_NTNV

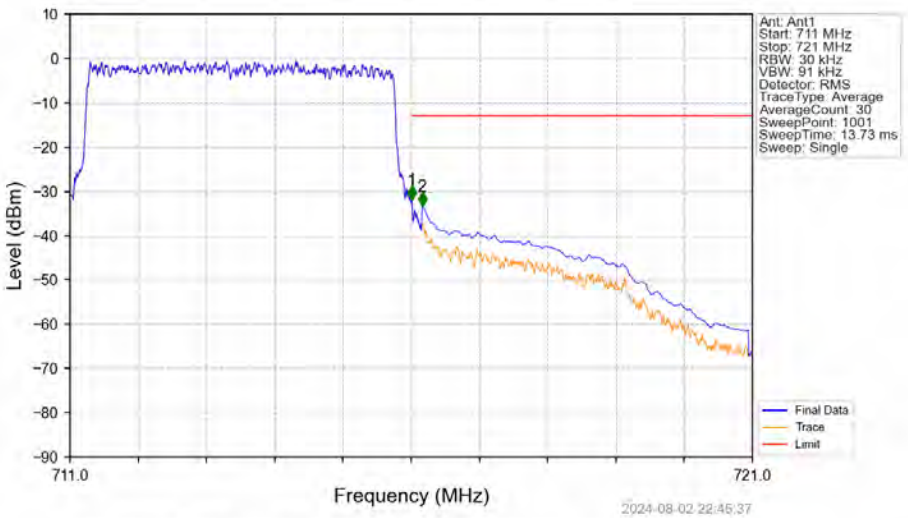


Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_24_NTNV




| 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 | -19.91 | -13 | Pass |
| 716.1 | 721 | 0.1 | CHP | 2 | 716.160 | -21.01 | -13 | Pass |

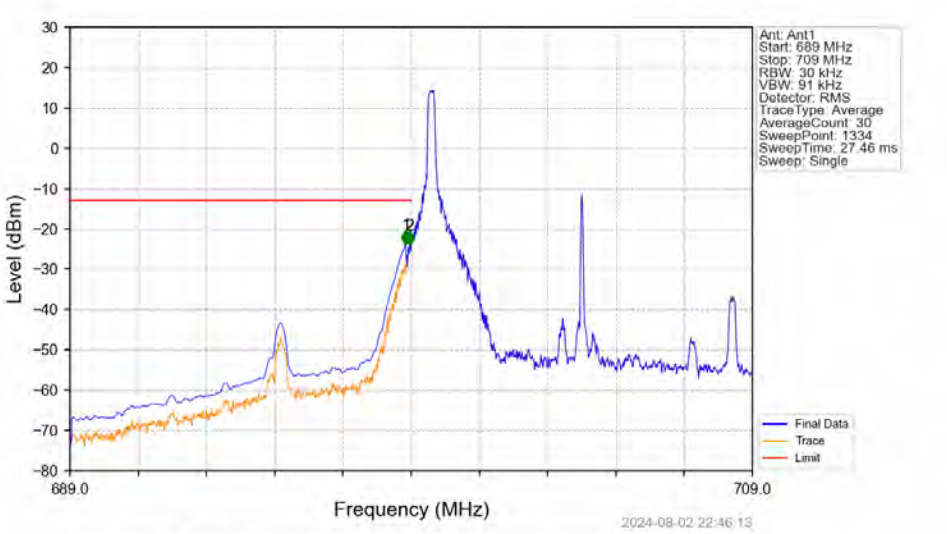
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV




| 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 | 716.010 | -31.85 | -13 | Pass |
| 716.1 | 721 | 0.1 | CHP | 2 | 716.160 | -33.36 | -13 | Pass |

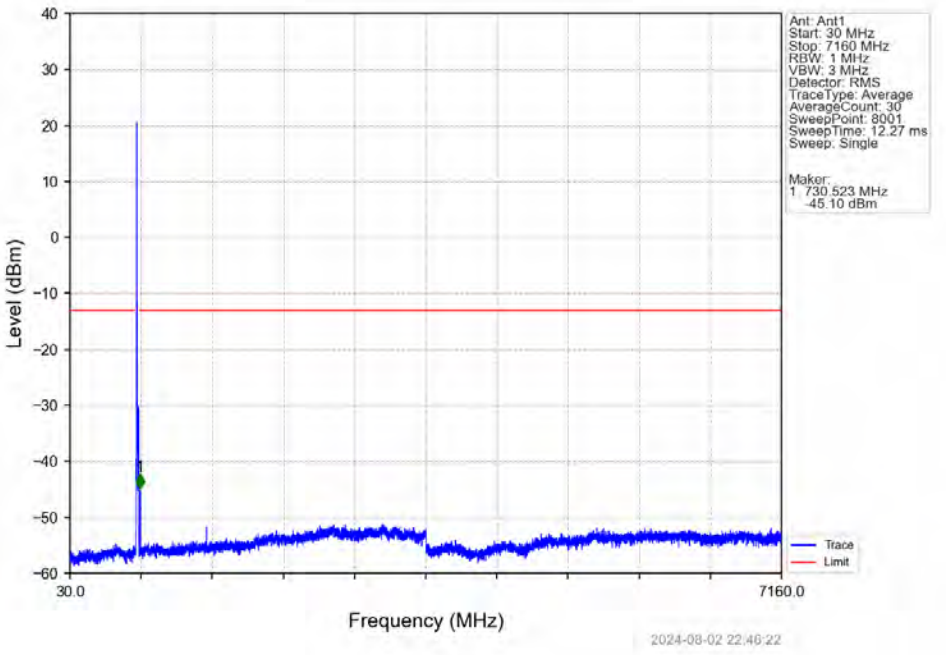
## 6.2.4 B12_10MHz

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

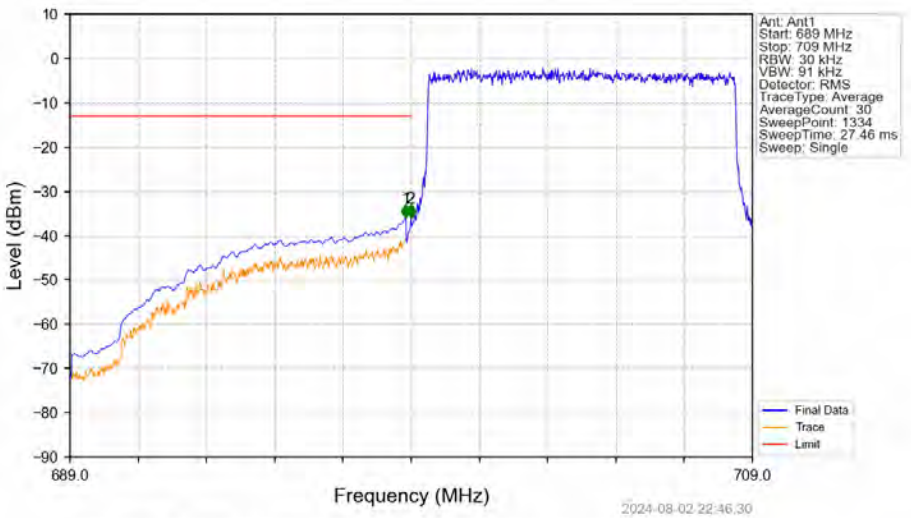



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 689 | 709 | 0.1 | CHP | 1 | 698.842 | -23.75 | -13 | Pass |
| 709 | 699 | 0.03 | / | 2 | 698.962 | -23.99 | -13 | Pass |
| 699 | 709 | 0.03 | / | / | / | / | / | / |

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

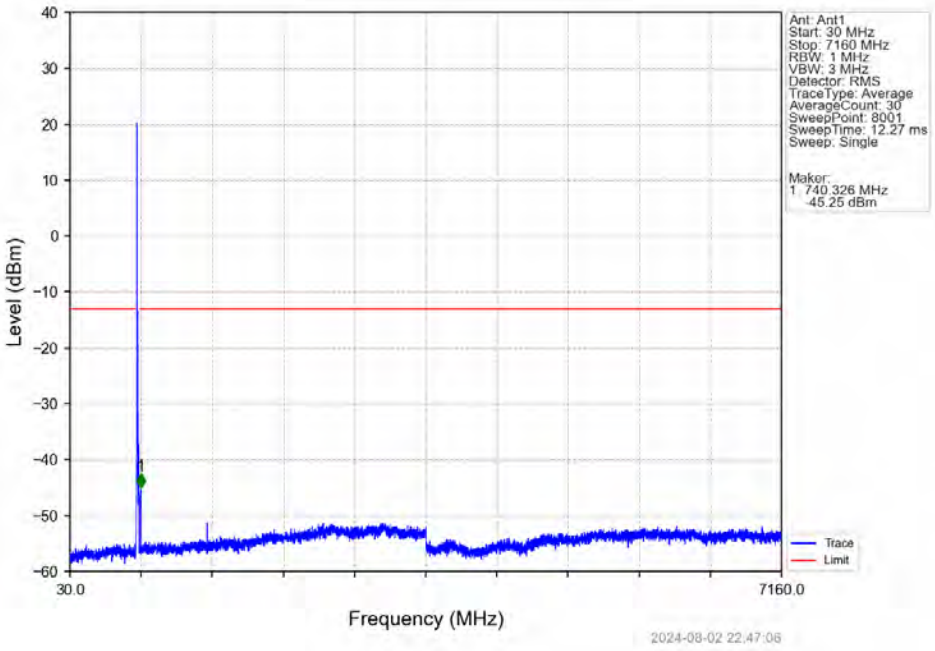


Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV

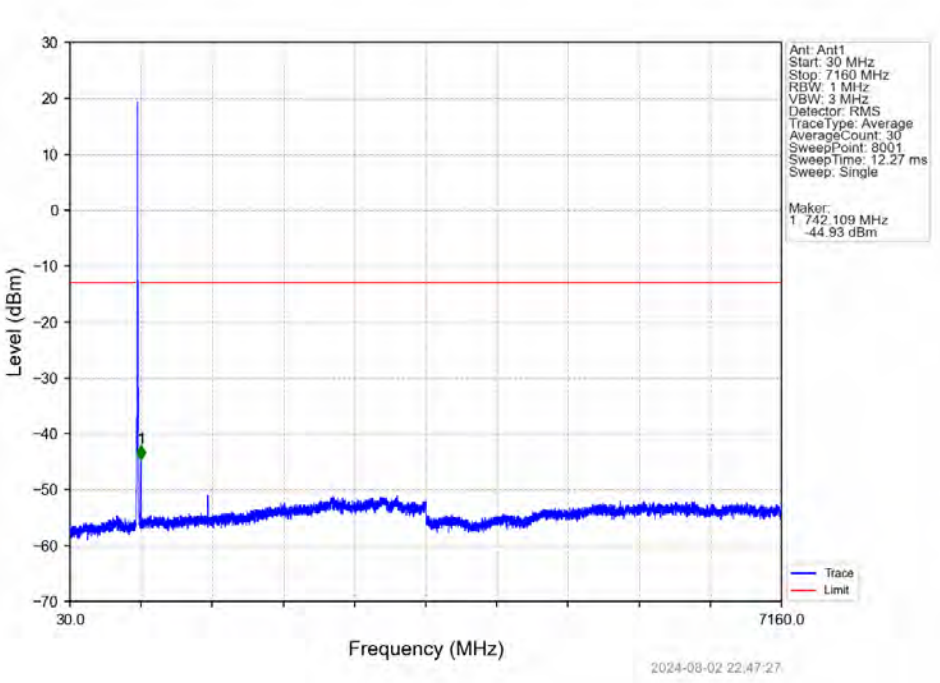



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 689 | 709 | 0.1 | CHP | 1 | 698.842 | -36.11 | -13 | Pass |
| 709 | 699 | 0.03 | / | 2 | 698.992 | -36.10 | -13 | Pass |
| 699 | 709 | 0.03 | / | / | / | / | / | / |

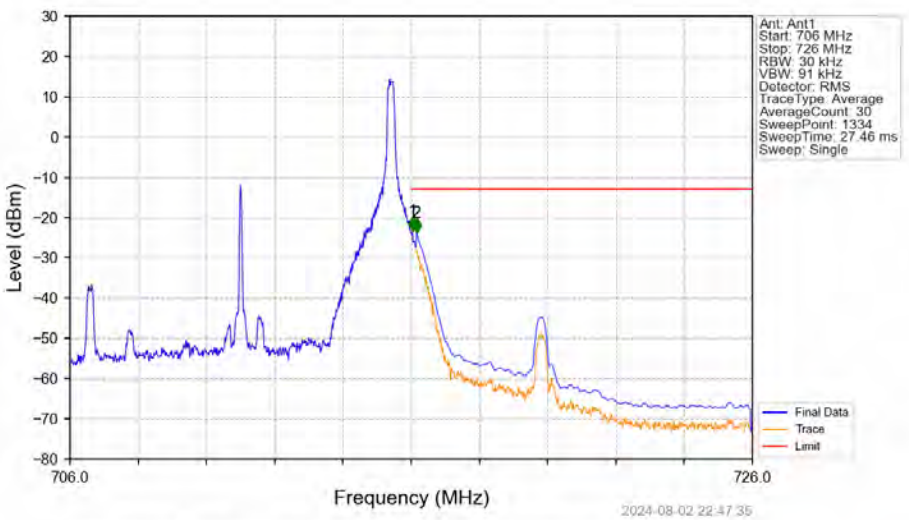
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

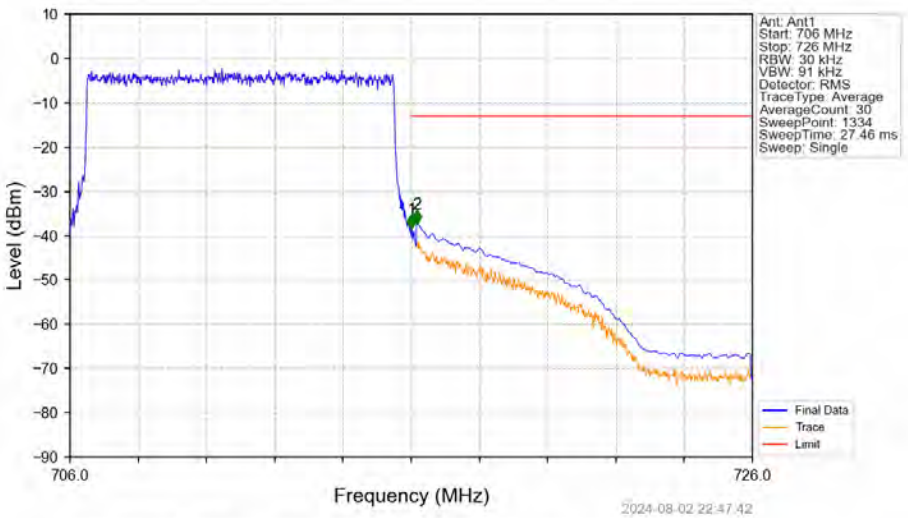



Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



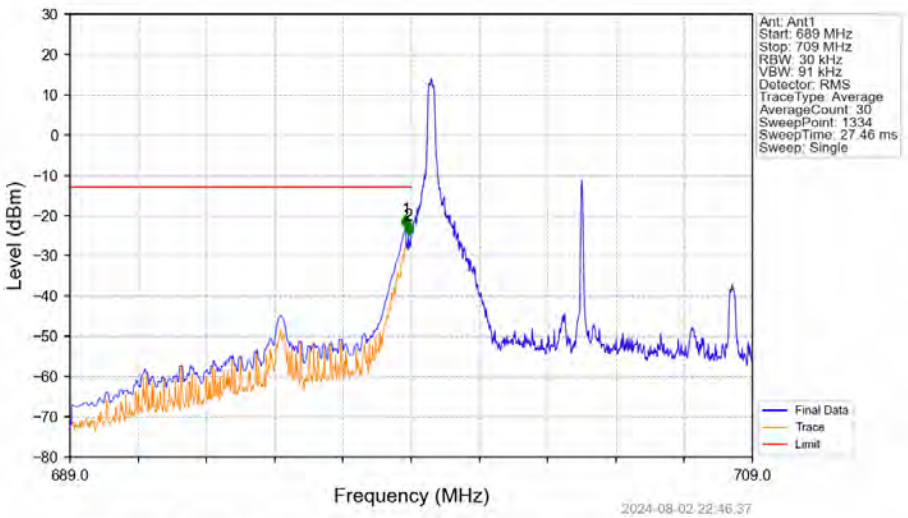

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 706 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.038 | -23.29 | -13 | Pass |
| 716.1 | 726 | 0.1 | CHP | 2 | 716.158 | -23.62 | -13 | Pass |

Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



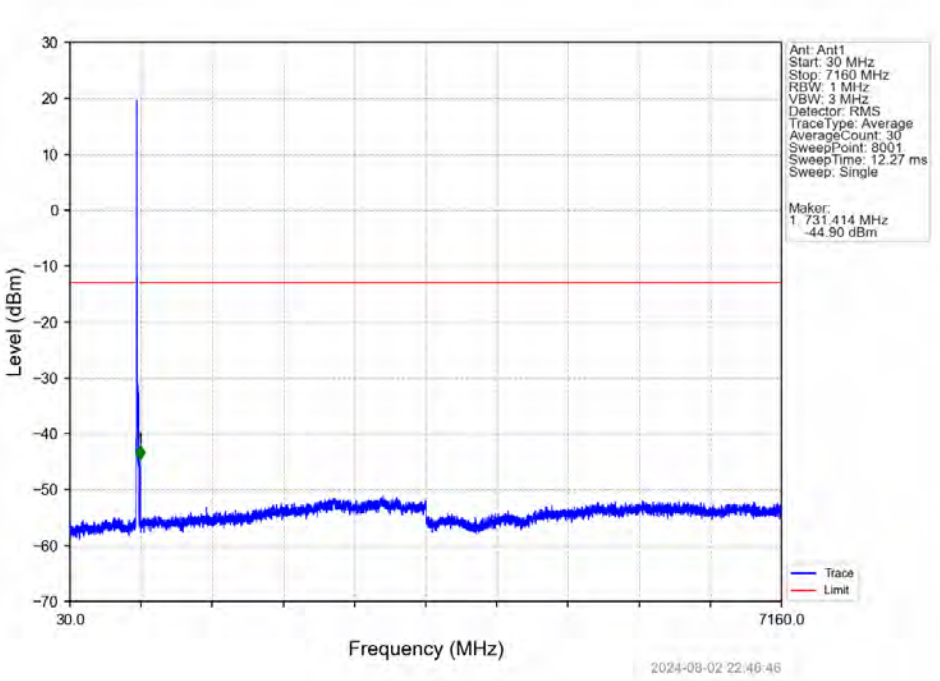

| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 706 | 716 | 0.03 | / | / | / | / | / | / |
| 716 | 716.1 | 0.03 | / | 1 | 716.008 | -38.34 | -13 | Pass |
| 716.1 | 726 | 0.1 | CHP | 2 | 716.173 | -37.35 | -13 | Pass |

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

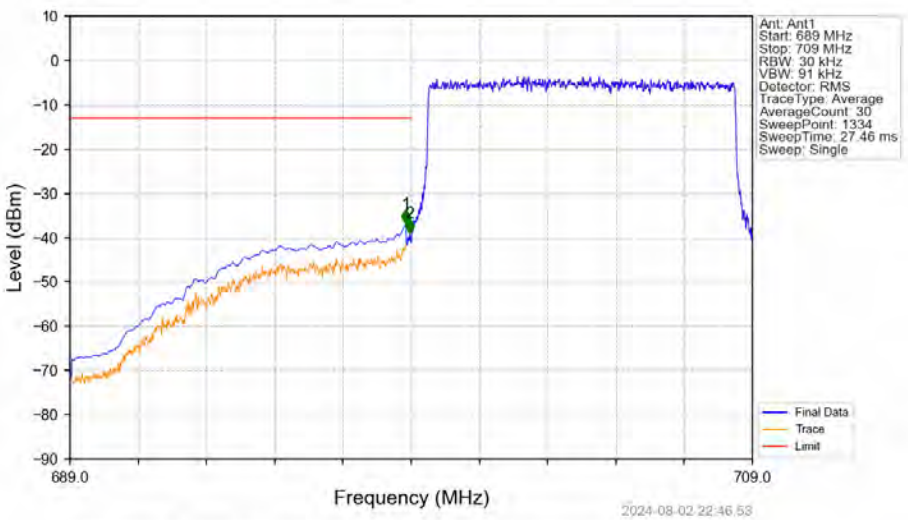



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 689 | 709 | 0.1 | CHP | 1 | 698.842 | -23.22 | -13 | Pass |
| 709 | 699 | 0.03 | / | 2 | 698.917 | -24.93 | -13 | Pass |
| 699 | 709 | 0.03 | / | / | / | / | / | / |

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

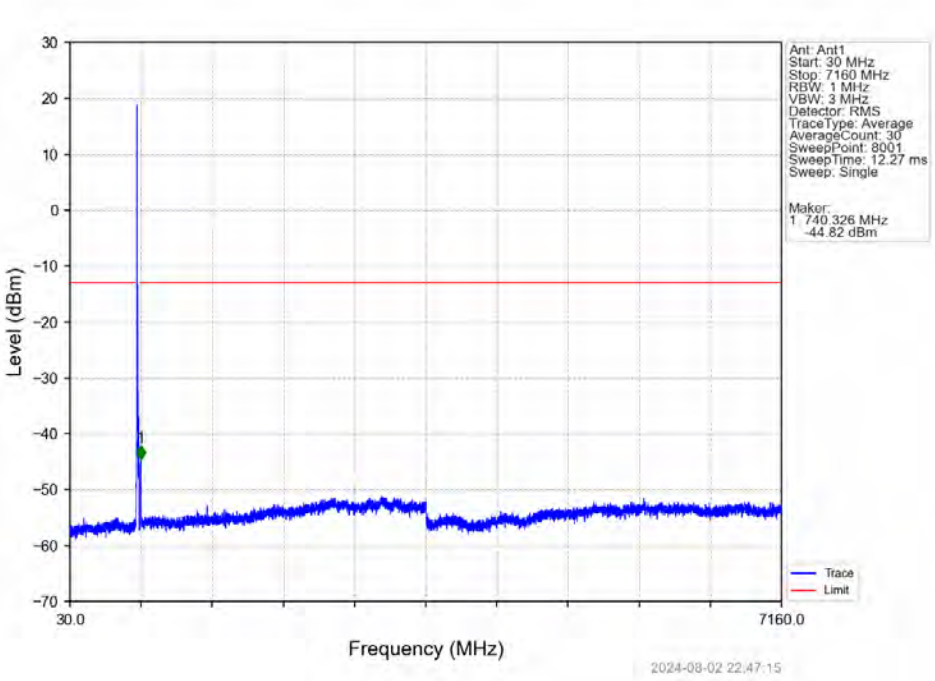



Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

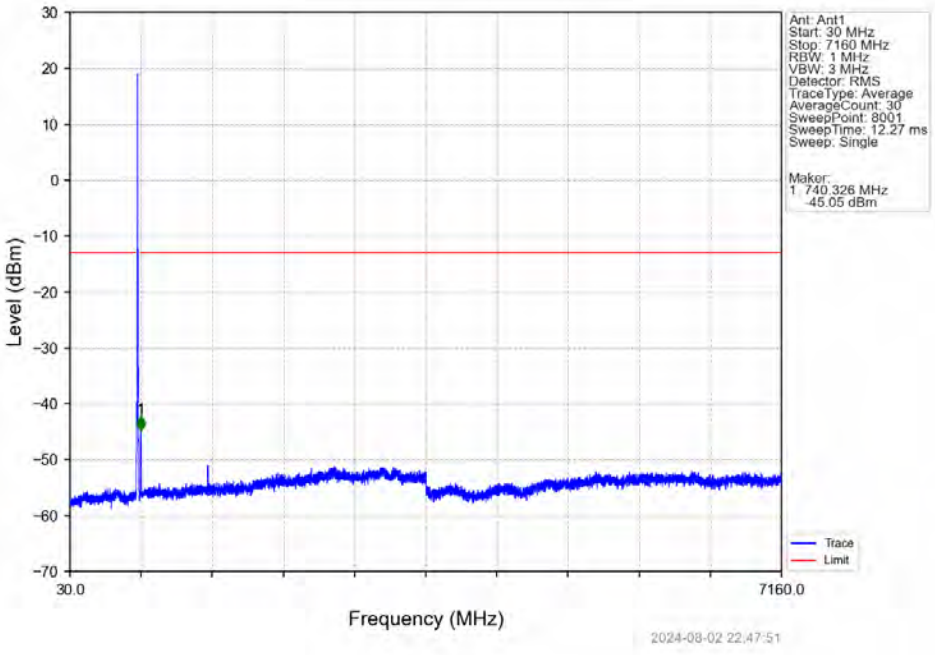



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 689 | 709 | 0.1 | CHP | 1 | 698.842 | -36.82 | -13 | Pass |
| 709 | 699 | 0.03 | / | 2 | 698.962 | -39.01 | -13 | Pass |
| 699 | 709 | 0.03 | / | / | / | / | / | / |

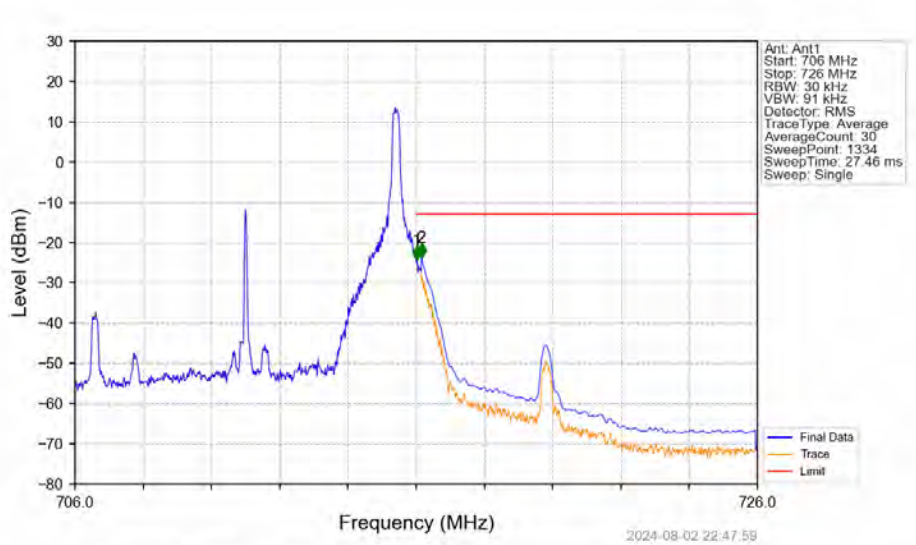
Band12_10MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV




Band12_10MHz_16QAM_HCH_711MHz_RB_1_0_NTNV

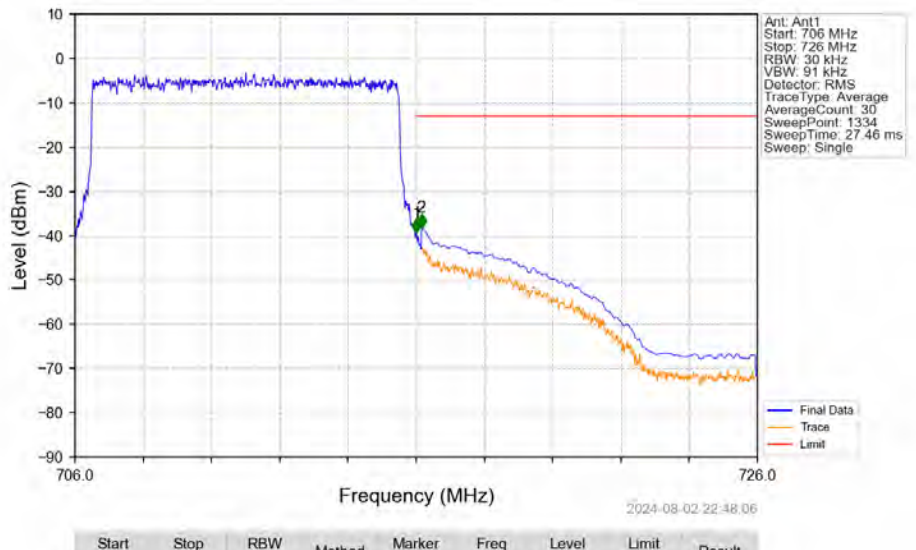


Band12_10MHz_16QAM_HCH_711MHz_RB_1_49_NTNV




| 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 | 716.023 | -24.27 | -13 | Pass |
| 716.1 | 726 | 0.1 | CHP | 2 | 716.158 | -23.73 | -13 | Pass |

Band12_10MHz_16QAM_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 | 716.008 | -39.29 | -13 | Pass |
| 716.1 | 726 | 0.1 | CHP | 2 | 716.158 | -38.12 | -13 | Pass |

# 7. Form731

## 7.1 Test Result

### 7.1.1 Form731_Power

| Band | BW | Lower Freq | High Freq | MAX Power (W) | Value | Hz/ppm | Emission Designator | Rule Parts | MAX Power (dBm) |
|---|---|---|---|---|---|---|---|---|---|
| 12 | 1.4 | 699.7 | 715.3 | 0.1531 | 0.0170 | ppm | 1M12G7D | 27H | 21.85 |
| 12 | 1.4 | 699.7 | 715.3 | 0.1213 | 0.0194 | ppm | 1M11W7D | 27H | 20.84 |
| 12 | 3 | 700.5 | 714.5 | 0.1596 | 0.0221 | ppm | 2M73G7D | 27H | 22.03 |
| 12 | 3 | 700.5 | 714.5 | 0.1315 | 0.0258 | ppm | 2M73W7D | 27H | 21.19 |
| 12 | 5 | 701.5 | 713.5 | 0.1535 | 0.0144 | ppm | 4M57G7D | 27H | 21.86 |
| 12 | 5 | 701.5 | 713.5 | 0.1279 | 0.0131 | ppm | 4M59W7D | 27H | 21.07 |
| 12 | 10 | 704 | 711 | 0.1600 | 0.0167 | ppm | 9M09G7D | 27H | 22.04 |
| 12 | 10 | 704 | 711 | 0.1390 | 0.0152 | ppm | 9M08W7D | 27H | 21.43 |

### 7.1.2 Form731_ERP

| Band | BW | Lower Freq | High Freq | MAX Power (W) | Value | Hz/ppm | Emission Designator | Rule Parts | MAX Power (dBm) |
|---|---|---|---|---|---|---|---|---|---|
| 12 | 1.4 | 699.7 | 715.3 | 0.0610 | 0.0170 | ppm | 1M12G7D | 27H | 17.85 |
| 12 | 1.4 | 699.7 | 715.3 | 0.0483 | 0.0194 | ppm | 1M11W7D | 27H | 16.84 |
| 12 | 3 | 700.5 | 714.5 | 0.0635 | 0.0221 | ppm | 2M73G7D | 27H | 18.03 |
| 12 | 3 | 700.5 | 714.5 | 0.0524 | 0.0258 | ppm | 2M73W7D | 27H | 17.19 |
| 12 | 5 | 701.5 | 713.5 | 0.0611 | 0.0144 | ppm | 4M57G7D | 27H | 17.86 |
| 12 | 5 | 701.5 | 713.5 | 0.0509 | 0.0131 | ppm | 4M59W7D | 27H | 17.07 |
| 12 | 10 | 704 | 711 | 0.0637 | 0.0167 | ppm | 9M09G7D | 27H | 18.04 |
| 12 | 10 | 704 | 711 | 0.0553 | 0.0152 | ppm | 9M08W7D | 27H | 17.43 |