# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 B7_5MHz_EIRP

| Band: 7 / Bandwidth: 5MHz / NTNV | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Conducted Power (dBm) | Gain (dBi) | EIRP (dBm) | | Verdict |
| | | Size | Offset | | | Result | Limit | |
| QPSK | 2502.5 | 1 | 0 | 21.18 | 1.76 | 22.94 | <=33.01 | Pass |
| | | | 13 | 21.28 | 1.76 | 23.04 | <=33.01 | Pass |
| | | | 24 | 21.21 | 1.76 | 22.97 | <=33.01 | Pass |
| | | 12 | 0 | 20.16 | 1.76 | 21.92 | <=33.01 | Pass |
| | | | 6 | 20.20 | 1.76 | 21.96 | <=33.01 | Pass |
| | | | 13 | 20.13 | 1.76 | 21.89 | <=33.01 | Pass |
| | | 25 | 0 | 20.11 | 1.76 | 21.87 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 21.00 | 1.76 | 22.76 | <=33.01 | Pass |
| | | | 13 | 20.94 | 1.76 | 22.70 | <=33.01 | Pass |
| | | | 24 | 20.97 | 1.76 | 22.73 | <=33.01 | Pass |
| | | 12 | 0 | 20.08 | 1.76 | 21.84 | <=33.01 | Pass |
| | | | 6 | 20.12 | 1.76 | 21.88 | <=33.01 | Pass |
| | | | 13 | 20.09 | 1.76 | 21.85 | <=33.01 | Pass |
| | | 25 | 0 | 20.07 | 1.76 | 21.83 | <=33.01 | Pass |
| | 2567.5 | 1 | 0 | 21.15 | 1.76 | 22.91 | <=33.01 | Pass |
| | | | 13 | 21.07 | 1.76 | 22.83 | <=33.01 | Pass |
| | | | 24 | 21.19 | 1.76 | 22.95 | <=33.01 | Pass |
| | | 12 | 0 | 20.23 | 1.76 | 21.99 | <=33.01 | Pass |
| | | | 6 | 20.26 | 1.76 | 22.02 | <=33.01 | Pass |
| | | | 13 | 20.21 | 1.76 | 21.97 | <=33.01 | Pass |
| | | 25 | 0 | 20.38 | 1.76 | 22.14 | <=33.01 | Pass |
| 16QAM | 2502.5 | 1 | 0 | 20.28 | 1.76 | 22.04 | <=33.01 | Pass |
| | | | 13 | 20.26 | 1.76 | 22.02 | <=33.01 | Pass |
| | | | 24 | 20.11 | 1.76 | 21.87 | <=33.01 | Pass |
| | | 12 | 0 | 19.18 | 1.76 | 20.94 | <=33.01 | Pass |
| | | | 6 | 19.14 | 1.76 | 20.90 | <=33.01 | Pass |
| | | | 13 | 19.05 | 1.76 | 20.81 | <=33.01 | Pass |
| | | 25 | 0 | 19.11 | 1.76 | 20.87 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 19.33 | 1.76 | 21.09 | <=33.01 | Pass |
| | | | 13 | 19.30 | 1.76 | 21.06 | <=33.01 | Pass |
| | | | 24 | 19.29 | 1.76 | 21.05 | <=33.01 | Pass |
| | | 12 | 0 | 19.18 | 1.76 | 20.94 | <=33.01 | Pass |
| | | | 6 | 19.33 | 1.76 | 21.09 | <=33.01 | Pass |
| | | | 13 | 19.30 | 1.76 | 21.06 | <=33.01 | Pass |
| | | 25 | 0 | 19.42 | 1.76 | 21.18 | <=33.01 | Pass |
| | 2567.5 | 1 | 0 | 20.42 | 1.76 | 22.18 | <=33.01 | Pass |
| | | | 13 | 20.47 | 1.76 | 22.23 | <=33.01 | Pass |
| | | | 24 | 20.52 | 1.76 | 22.28 | <=33.01 | Pass |
| | | 12 | 0 | 19.43 | 1.76 | 21.19 | <=33.01 | Pass |
| | | | 6 | 19.41 | 1.76 | 21.17 | <=33.01 | Pass |
| | | | 13 | 19.44 | 1.76 | 21.20 | <=33.01 | Pass |
| | | 25 | 0 | 19.54 | 1.76 | 21.30 | <=33.01 | Pass |
| Note1: EIRP=Conducted Power+Antenna Gain | | | | | | | | |

### 1.1.2 B7_10MHz_EIRP

| Band: 7 / Bandwidth: 10MHz / NTNV |
|---|

| Modulation | Frequency (MHz) | RB Allocation | | Conducted Power (dBm) | Gain (dBi) | EIRP (dBm) | | Verdict |
|---|---|---|---|---|---|---|---|---|
| | | Size | Offset | | | Result | Limit | |
| QPSK | 2505 | 1 | 0 | 21.09 | 1.76 | 22.85 | <=33.01 | Pass |
| | | | 25 | 20.98 | 1.76 | 22.74 | <=33.01 | Pass |
| | | | 49 | 21.06 | 1.76 | 22.82 | <=33.01 | Pass |
| | | 25 | 0 | 20.11 | 1.76 | 21.87 | <=33.01 | Pass |
| | | | 13 | 20.15 | 1.76 | 21.91 | <=33.01 | Pass |
| | | | 25 | 19.96 | 1.76 | 21.72 | <=33.01 | Pass |
| | | 50 | 0 | 20.13 | 1.76 | 21.89 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 21.25 | 1.76 | 23.01 | <=33.01 | Pass |
| | | | 25 | 21.16 | 1.76 | 22.92 | <=33.01 | Pass |
| | | | 49 | 21.04 | 1.76 | 22.80 | <=33.01 | Pass |
| | | 25 | 0 | 19.97 | 1.76 | 21.73 | <=33.01 | Pass |
| | | | 13 | 20.04 | 1.76 | 21.80 | <=33.01 | Pass |
| | | | 25 | 20.01 | 1.76 | 21.77 | <=33.01 | Pass |
| | | 50 | 0 | 20.11 | 1.76 | 21.87 | <=33.01 | Pass |
| | 2565 | 1 | 0 | 21.13 | 1.76 | 22.89 | <=33.01 | Pass |
| | | | 25 | 21.27 | 1.76 | 23.03 | <=33.01 | Pass |
| | | | 49 | 21.14 | 1.76 | 22.90 | <=33.01 | Pass |
| | | 25 | 0 | 20.05 | 1.76 | 21.81 | <=33.01 | Pass |
| | | | 13 | 20.15 | 1.76 | 21.91 | <=33.01 | Pass |
| | | | 25 | 20.21 | 1.76 | 21.97 | <=33.01 | Pass |
| | | 50 | 0 | 20.20 | 1.76 | 21.96 | <=33.01 | Pass |
| 16QAM | 2505 | 1 | 0 | 19.94 | 1.76 | 21.70 | <=33.01 | Pass |
| | | | 25 | 20.00 | 1.76 | 21.76 | <=33.01 | Pass |
| | | | 49 | 19.93 | 1.76 | 21.69 | <=33.01 | Pass |
| | | 25 | 0 | 19.30 | 1.76 | 21.06 | <=33.01 | Pass |
| | | | 13 | 19.43 | 1.76 | 21.19 | <=33.01 | Pass |
| | | | 25 | 19.37 | 1.76 | 21.13 | <=33.01 | Pass |
| | | 50 | 0 | 19.23 | 1.76 | 20.99 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 20.19 | 1.76 | 21.95 | <=33.01 | Pass |
| | | | 25 | 20.23 | 1.76 | 21.99 | <=33.01 | Pass |
| | | | 49 | 20.21 | 1.76 | 21.97 | <=33.01 | Pass |
| | | 25 | 0 | 19.20 | 1.76 | 20.96 | <=33.01 | Pass |
| | | | 13 | 19.30 | 1.76 | 21.06 | <=33.01 | Pass |
| | | | 25 | 19.30 | 1.76 | 21.06 | <=33.01 | Pass |
| | | 50 | 0 | 19.21 | 1.76 | 20.97 | <=33.01 | Pass |
| | 2565 | 1 | 0 | 20.17 | 1.76 | 21.93 | <=33.01 | Pass |
| | | | 25 | 20.33 | 1.76 | 22.09 | <=33.01 | Pass |
| | | | 49 | 20.38 | 1.76 | 22.14 | <=33.01 | Pass |
| | | 25 | 0 | 19.39 | 1.76 | 21.15 | <=33.01 | Pass |
| | | | 13 | 19.49 | 1.76 | 21.25 | <=33.01 | Pass |
| | | | 25 | 19.41 | 1.76 | 21.17 | <=33.01 | Pass |
| | | 50 | 0 | 19.61 | 1.76 | 21.37 | <=33.01 | Pass |
| Note1: EIRP=Conducted Power+Antenna Gain | | | | | | | | |

## 1.1.3 B7_15MHz_EIRP

| Band: 7 / Bandwidth: 15MHz / NTNV | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Conducted Power (dBm) | Gain (dBi) | EIRP (dBm) | | Verdict |
| | | Size | Offset | | | Result | Limit | |
| QPSK | 2507.5 | 1 | 0 | 20.98 | 1.76 | 22.74 | <=33.01 | Pass |
| | | | 38 | 20.65 | 1.76 | 22.41 | <=33.01 | Pass |
| | | | 74 | 20.66 | 1.76 | 22.42 | <=33.01 | Pass |
| | | 36 | 0 | 20.14 | 1.76 | 21.90 | <=33.01 | Pass |
| | | | 18 | 19.94 | 1.76 | 21.70 | <=33.01 | Pass |
| | | | 39 | 19.90 | 1.76 | 21.66 | <=33.01 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 75 | 0 | 19.92 | 1.76 | 21.68 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 20.70 | 1.76 | 22.46 | <=33.01 | Pass |
| | | | 38 | 21.03 | 1.76 | 22.79 | <=33.01 | Pass |
| | | | 74 | 20.95 | 1.76 | 22.71 | <=33.01 | Pass |
| | | 36 | 0 | 19.99 | 1.76 | 21.75 | <=33.01 | Pass |
| | | | 18 | 19.88 | 1.76 | 21.64 | <=33.01 | Pass |
| | | | 39 | 20.09 | 1.76 | 21.85 | <=33.01 | Pass |
| | | 75 | 0 | 20.01 | 1.76 | 21.77 | <=33.01 | Pass |
| | 2562.5 | 1 | 0 | 20.69 | 1.76 | 22.45 | <=33.01 | Pass |
| | | | 38 | 20.85 | 1.76 | 22.61 | <=33.01 | Pass |
| | | | 74 | 20.89 | 1.76 | 22.65 | <=33.01 | Pass |
| | | 36 | 0 | 20.07 | 1.76 | 21.83 | <=33.01 | Pass |
| | | | 18 | 19.99 | 1.76 | 21.75 | <=33.01 | Pass |
| | | | 39 | 20.10 | 1.76 | 21.86 | <=33.01 | Pass |
| | | 75 | 0 | 19.98 | 1.76 | 21.74 | <=33.01 | Pass |
| 16QAM | 2507.5 | 1 | 0 | 20.23 | 1.76 | 21.99 | <=33.01 | Pass |
| | | | 38 | 20.32 | 1.76 | 22.08 | <=33.01 | Pass |
| | | | 74 | 20.16 | 1.76 | 21.92 | <=33.01 | Pass |
| | | 36 | 0 | 18.95 | 1.76 | 20.71 | <=33.01 | Pass |
| | | | 18 | 18.95 | 1.76 | 20.71 | <=33.01 | Pass |
| | | | 39 | 19.13 | 1.76 | 20.89 | <=33.01 | Pass |
| | | 75 | 0 | 19.05 | 1.76 | 20.81 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 20.18 | 1.76 | 21.94 | <=33.01 | Pass |
| | | | 38 | 20.01 | 1.76 | 21.77 | <=33.01 | Pass |
| | | | 74 | 20.21 | 1.76 | 21.97 | <=33.01 | Pass |
| | | 36 | 0 | 19.25 | 1.76 | 21.01 | <=33.01 | Pass |
| | | | 18 | 19.26 | 1.76 | 21.02 | <=33.01 | Pass |
| | | | 39 | 19.31 | 1.76 | 21.07 | <=33.01 | Pass |
| | | 75 | 0 | 19.24 | 1.76 | 21.00 | <=33.01 | Pass |
| | 2562.5 | 1 | 0 | 20.06 | 1.76 | 21.82 | <=33.01 | Pass |
| | | | 38 | 20.36 | 1.76 | 22.12 | <=33.01 | Pass |
| | | | 74 | 20.39 | 1.76 | 22.15 | <=33.01 | Pass |
| | | 36 | 0 | 19.47 | 1.76 | 21.23 | <=33.01 | Pass |
| | | | 18 | 19.43 | 1.76 | 21.19 | <=33.01 | Pass |
| | | | 39 | 19.51 | 1.76 | 21.27 | <=33.01 | Pass |
| | | 75 | 0 | 19.45 | 1.76 | 21.21 | <=33.01 | Pass |
| Note1: EIRP=Conducted Power+Antenna Gain | | | | | | | | |

## 1.1.4 B7_20MHz_EIRP

| Band: 7 / Bandwidth: 20MHz / NTNV | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Conducted Power (dBm) | Gain (dBi) | EIRP (dBm) | | Verdict |
| | | Size | Offset | | | Result | Limit | |
| QPSK | 2510 | 1 | 0 | 20.97 | 1.76 | 22.73 | <=33.01 | Pass |
| | | | 50 | 20.83 | 1.76 | 22.59 | <=33.01 | Pass |
| | | | 99 | 20.77 | 1.76 | 22.53 | <=33.01 | Pass |
| | | 50 | 0 | 19.95 | 1.76 | 21.71 | <=33.01 | Pass |
| | | | 25 | 19.84 | 1.76 | 21.60 | <=33.01 | Pass |
| | | | 50 | 20.02 | 1.76 | 21.78 | <=33.01 | Pass |
| | | 100 | 0 | 20.04 | 1.76 | 21.80 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 20.87 | 1.76 | 22.63 | <=33.01 | Pass |
| | | | 50 | 21.00 | 1.76 | 22.76 | <=33.01 | Pass |
| | | | 99 | 21.02 | 1.76 | 22.78 | <=33.01 | Pass |
| | | 50 | 0 | 20.07 | 1.76 | 21.83 | <=33.01 | Pass |
| | | | 25 | 20.11 | 1.76 | 21.87 | <=33.01 | Pass |
| | | | 50 | 19.97 | 1.76 | 21.73 | <=33.01 | Pass |
| | | 100 | 0 | 20.02 | 1.76 | 21.78 | <=33.01 | Pass |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2560 | 1 | 0 | 21.08 | 1.76 | 22.84 | <=33.01 | Pass |
| | | | 50 | 21.12 | 1.76 | 22.88 | <=33.01 | Pass |
| | | | 99 | 21.27 | 1.76 | 23.03 | <=33.01 | Pass |
| | | 50 | 0 | 20.13 | 1.76 | 21.89 | <=33.01 | Pass |
| | | | 25 | 20.25 | 1.76 | 22.01 | <=33.01 | Pass |
| | | | 50 | 20.32 | 1.76 | 22.08 | <=33.01 | Pass |
| | | 100 | 0 | 20.12 | 1.76 | 21.88 | <=33.01 | Pass |
| 16QAM | 2510 | 1 | 0 | 20.67 | 1.76 | 22.43 | <=33.01 | Pass |
| | | | 50 | 20.86 | 1.76 | 22.62 | <=33.01 | Pass |
| | | | 99 | 20.82 | 1.76 | 22.58 | <=33.01 | Pass |
| | | 50 | 0 | 19.18 | 1.76 | 20.94 | <=33.01 | Pass |
| | | | 25 | 19.15 | 1.76 | 20.91 | <=33.01 | Pass |
| | | | 50 | 19.16 | 1.76 | 20.92 | <=33.01 | Pass |
| | | 100 | 0 | 19.19 | 1.76 | 20.95 | <=33.01 | Pass |
| | 2535 | 1 | 0 | 20.64 | 1.76 | 22.40 | <=33.01 | Pass |
| | | | 50 | 20.72 | 1.76 | 22.48 | <=33.01 | Pass |
| | | | 99 | 20.68 | 1.76 | 22.44 | <=33.01 | Pass |
| | | 50 | 0 | 19.34 | 1.76 | 21.10 | <=33.01 | Pass |
| | | | 25 | 19.32 | 1.76 | 21.08 | <=33.01 | Pass |
| | | | 50 | 19.43 | 1.76 | 21.19 | <=33.01 | Pass |
| | | 100 | 0 | 19.17 | 1.76 | 20.93 | <=33.01 | Pass |
| | 2560 | 1 | 0 | 19.77 | 1.76 | 21.53 | <=33.01 | Pass |
| | | | 50 | 19.89 | 1.76 | 21.65 | <=33.01 | Pass |
| | | | 99 | 20.04 | 1.76 | 21.80 | <=33.01 | Pass |
| | | 50 | 0 | 19.32 | 1.76 | 21.08 | <=33.01 | Pass |
| | | | 25 | 19.39 | 1.76 | 21.15 | <=33.01 | Pass |
| | | | 50 | 19.61 | 1.76 | 21.37 | <=33.01 | Pass |
| | | 100 | 0 | 19.35 | 1.76 | 21.11 | <=33.01 | Pass |
| Note1: EIRP=Conducted Power+Antenna Gain | | | | | | | | |

# 2. Frequency Stability

## 2.1 Test Result

### 2.1.1 B7_5MHz

| Band: 7 / Bandwidth: 5MHz | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | Size | Offset | | | | Result | Limit | |
| QPSK | 2502.5 | 25 | 0 | 20 | 3.27 | -29.426 | -0.0118 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -44.274 | -0.0177 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -5.651 | -0.0023 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -3.662 | -0.0015 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 18.125 | 0.0072 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 44.990 | 0.0180 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 36.764 | 0.0147 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 30.842 | 0.0123 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -5.422 | -0.0022 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 17.252 | 0.0069 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 12.975 | 0.0052 | -2.5 to 2.5 | Pass |
| | 2535 | 25 | 0 | 20 | 3.27 | -0.472 | -0.0002 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -49.424 | -0.0195 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -50.526 | -0.0199 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -43.144 | -0.0170 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -21.729 | -0.0086 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 5.608 | 0.0022 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 3.85 | 26.207 | 0.0103 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 15.178 | 0.0060 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -8.812 | -0.0035 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 23.389 | 0.0092 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 6.409 | 0.0025 | -2.5 to 2.5 | Pass |
| | 2567.5 | 25 | 0 | 20 | 3.27 | -23.704 | -0.0092 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -10.986 | -0.0043 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -9.198 | -0.0036 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -2.775 | -0.0011 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 11.673 | 0.0045 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 41.785 | 0.0163 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 6.008 | 0.0023 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 29.097 | 0.0113 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 42.844 | 0.0167 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 16.050 | 0.0063 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 35.291 | 0.0137 | -2.5 to 2.5 | Pass |
| 16QAM | 2502.5 | 25 | 0 | 20 | 3.27 | 2.131 | 0.0009 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 15.364 | 0.0061 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 29.655 | 0.0119 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 44.289 | 0.0177 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -8.483 | -0.0034 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -19.441 | -0.0078 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -0.873 | -0.0003 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -13.962 | -0.0056 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -15.092 | -0.0060 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -5.150 | -0.0021 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 4.606 | 0.0018 | -2.5 to 2.5 | Pass |
| | 2535 | 25 | 0 | 20 | 3.27 | 15.535 | 0.0061 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 18.597 | 0.0073 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 27.194 | 0.0107 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 36.364 | 0.0143 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 26.264 | 0.0104 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 25.363 | 0.0100 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 7.153 | 0.0028 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 12.145 | 0.0048 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 15.850 | 0.0063 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 25.120 | 0.0099 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 30.313 | 0.0120 | -2.5 to 2.5 | Pass |
| | 2567.5 | 25 | 0 | 20 | 3.27 | -2.418 | -0.0009 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 12.546 | 0.0049 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 33.946 | 0.0132 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 31.900 | 0.0124 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 14.734 | 0.0057 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 7.567 | 0.0029 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -6.881 | -0.0027 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -5.221 | -0.0020 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -27.208 | -0.0106 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -43.015 | -0.0168 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -45.033 | -0.0175 | -2.5 to 2.5 | Pass |

## 2.1.2 B7_10MHz

| Band: 7 / Bandwidth: 10MHz | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | Size | Offset | | | | Result | Limit | |
| QPSK | 2505 | 50 | 0 | 20 | 3.27 | 33.145 | 0.0132 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 43.888 | 0.0175 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4.43 | 30.026 | 0.0120 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 20.213 | 0.0081 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 35.133 | 0.0140 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 31.013 | 0.0124 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 23.417 | 0.0093 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 33.374 | 0.0133 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 25.835 | 0.0103 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 13.819 | 0.0055 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 22.187 | 0.0089 | -2.5 to 2.5 | Pass |
| | 2535 | 50 | 0 | 20 | 3.27 | -1.359 | -0.0005 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -39.768 | -0.0157 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -22.788 | -0.0090 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 31.571 | 0.0125 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 34.046 | 0.0134 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 35.305 | 0.0139 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 21.844 | 0.0086 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 39.883 | 0.0157 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 25.420 | 0.0100 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 32.744 | 0.0129 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 13.847 | 0.0055 | -2.5 to 2.5 | Pass |
| | 2565 | 50 | 0 | 20 | 3.27 | -24.805 | -0.0097 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -18.511 | -0.0072 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -30.627 | -0.0119 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -7.482 | -0.0029 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 9.084 | 0.0035 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 33.460 | 0.0130 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 19.383 | 0.0076 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 38.538 | 0.0150 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 29.025 | 0.0113 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 34.432 | 0.0134 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 31.643 | 0.0123 | -2.5 to 2.5 | Pass |
| 16QAM | 2505 | 50 | 0 | 20 | 3.27 | 23.603 | 0.0094 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 11.659 | 0.0047 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 32.444 | 0.0130 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 31.085 | 0.0124 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 30.298 | 0.0121 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 35.863 | 0.0143 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 11.101 | 0.0044 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 48.337 | 0.0193 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 11.945 | 0.0048 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 28.353 | 0.0113 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 14.319 | 0.0057 | -2.5 to 2.5 | Pass |
| | 2535 | 50 | 0 | 20 | 3.27 | 25.291 | 0.0100 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 2.675 | 0.0011 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 23.975 | 0.0095 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 26.851 | 0.0106 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 25.635 | 0.0101 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 10.242 | 0.0040 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 10.114 | 0.0040 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 2.418 | 0.0010 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 11.945 | 0.0047 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -14.620 | -0.0058 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 7.753 | 0.0031 | -2.5 to 2.5 | Pass |
| | 2565 | 50 | 0 | 20 | 3.27 | -14.334 | -0.0056 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -2.604 | -0.0010 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 7.367 | 0.0029 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -1.202 | -0.0005 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -11.716 | -0.0046 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -31.128 | -0.0121 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 3.85 | -24.219 | -0.0094 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -10.543 | -0.0041 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -9.055 | -0.0035 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -9.141 | -0.0036 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -11.687 | -0.0046 | -2.5 to 2.5 | Pass |

## 2.1.3 B7_15MHz

| Band: 7 / Bandwidth: 15MHz | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | Size | Offset | | | | Result | Limit | |
| QPSK | 2507.5 | 75 | 0 | 20 | 3.27 | 17.180 | 0.0069 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 24.419 | 0.0097 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 20.642 | 0.0082 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 29.225 | 0.0117 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 16.594 | 0.0066 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 20.299 | 0.0081 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 26.679 | 0.0106 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 27.423 | 0.0109 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 18.539 | 0.0074 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 27.494 | 0.0110 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 32.372 | 0.0129 | -2.5 to 2.5 | Pass |
| | 2535 | 75 | 0 | 20 | 3.27 | -23.289 | -0.0092 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 4.120 | 0.0016 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 37.737 | 0.0149 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 25.864 | 0.0102 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 23.718 | 0.0094 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 9.398 | 0.0037 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 27.237 | 0.0107 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 5.322 | 0.0021 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 7.224 | 0.0028 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 36.650 | 0.0145 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 16.408 | 0.0065 | -2.5 to 2.5 | Pass |
| | 2562.5 | 75 | 0 | 20 | 3.27 | -24.776 | -0.0097 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -36.235 | -0.0141 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -23.260 | -0.0091 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 26.951 | 0.0105 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 45.819 | 0.0179 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 24.776 | 0.0097 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 16.465 | 0.0064 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 10.386 | 0.0041 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 25.277 | 0.0099 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 32.215 | 0.0126 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 27.280 | 0.0106 | -2.5 to 2.5 | Pass |
| 16QAM | 2507.5 | 75 | 0 | 20 | 3.27 | 19.727 | 0.0079 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 20.156 | 0.0080 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 30.127 | 0.0120 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 41.471 | 0.0165 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 12.159 | 0.0048 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 35.076 | 0.0140 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 1.173 | 0.0005 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 28.367 | 0.0113 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 32.458 | 0.0129 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 13.561 | 0.0054 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 39.883 | 0.0159 | -2.5 to 2.5 | Pass |
| | 2535 | 75 | 0 | 20 | 3.27 | 28.911 | 0.0114 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 20.700 | 0.0082 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4.43 | 32.129 | 0.0127 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -5.951 | -0.0023 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 1.659 | 0.0007 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 18.554 | 0.0073 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 30.956 | 0.0122 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 31.786 | 0.0125 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 19.383 | 0.0076 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 7.553 | 0.0030 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 6.638 | 0.0026 | -2.5 to 2.5 | Pass |
| | 2562.5 | 75 | 0 | 20 | 3.27 | 37.694 | 0.0147 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -9.542 | -0.0037 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -19.984 | -0.0078 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -34.046 | -0.0133 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | -26.293 | -0.0103 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -11.044 | -0.0043 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -28.868 | -0.0113 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -33.588 | -0.0131 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -28.868 | -0.0113 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -25.978 | -0.0101 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -19.698 | -0.0077 | -2.5 to 2.5 | Pass |

## 2.1.4 B7_20MHz

| Band: 7 / Bandwidth: 20MHz | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | Size | Offset | | | | Result | Limit | |
| QPSK | 2510 | 100 | 0 | 20 | 3.27 | 7.982 | 0.0032 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 32.530 | 0.0130 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 32.458 | 0.0129 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 32.344 | 0.0129 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 19.083 | 0.0076 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 10.486 | 0.0042 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 29.340 | 0.0117 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 19.355 | 0.0077 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 40.383 | 0.0161 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 17.281 | 0.0069 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 20.399 | 0.0081 | -2.5 to 2.5 | Pass |
| | 2535 | 100 | 0 | 20 | 3.27 | -21.043 | -0.0083 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -15.779 | -0.0062 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 23.632 | 0.0093 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 9.384 | 0.0037 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 23.661 | 0.0093 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 18.897 | 0.0075 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 18.067 | 0.0071 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 35.791 | 0.0141 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -2.561 | -0.0010 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 20.814 | 0.0082 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 39.897 | 0.0157 | -2.5 to 2.5 | Pass |
| | 2560 | 100 | 0 | 20 | 3.27 | -30.069 | -0.0117 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | -53.144 | -0.0208 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -33.216 | -0.0130 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 6.680 | 0.0026 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 25.234 | 0.0099 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 13.533 | 0.0053 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 24.991 | 0.0098 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 29.869 | 0.0117 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 15.206 | 0.0059 | -2.5 to 2.5 | Pass |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 40 | 3.85 | 36.979 | 0.0144 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -11.859 | -0.0046 | -2.5 to 2.5 | Pass |
| 16QAM | 2510 | 100 | 0 | 20 | 3.27 | 18.439 | 0.0073 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 25.878 | 0.0103 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -1.903 | -0.0008 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 14.162 | 0.0056 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 35.234 | 0.0140 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 5.651 | 0.0023 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -3.548 | -0.0014 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 2.174 | 0.0009 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 25.506 | 0.0102 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 21.515 | 0.0086 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 0.029 | 0.0000 | -2.5 to 2.5 | Pass |
| | 2535 | 100 | 0 | 20 | 3.27 | 23.389 | 0.0092 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 13.676 | 0.0054 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | 30.684 | 0.0121 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | 21.186 | 0.0084 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 19.054 | 0.0075 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | 26.279 | 0.0104 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | 26.093 | 0.0103 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | 31.400 | 0.0124 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | 26.393 | 0.0104 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | 27.523 | 0.0109 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | 35.319 | 0.0139 | -2.5 to 2.5 | Pass |
| | 2560 | 100 | 0 | 20 | 3.27 | 11.315 | 0.0044 | -2.5 to 2.5 | Pass |
| | | | | | 3.85 | 9.141 | 0.0036 | -2.5 to 2.5 | Pass |
| | | | | | 4.43 | -7.610 | -0.0030 | -2.5 to 2.5 | Pass |
| | | | | -30 | 3.85 | -40.555 | -0.0158 | -2.5 to 2.5 | Pass |
| | | | | -20 | 3.85 | 6.452 | 0.0025 | -2.5 to 2.5 | Pass |
| | | | | -10 | 3.85 | -36.922 | -0.0144 | -2.5 to 2.5 | Pass |
| | | | | 0 | 3.85 | -28.253 | -0.0110 | -2.5 to 2.5 | Pass |
| | | | | 10 | 3.85 | -17.352 | -0.0068 | -2.5 to 2.5 | Pass |
| | | | | 30 | 3.85 | -26.007 | -0.0102 | -2.5 to 2.5 | Pass |
| | | | | 40 | 3.85 | -5.422 | -0.0021 | -2.5 to 2.5 | Pass |
| | | | | 50 | 3.85 | -9.885 | -0.0039 | -2.5 to 2.5 | Pass |

# 3. Modulation Characteristics

## 3.1 Test Result

### 3.1.1 B7_5MHz

| Band: 7 / Bandwidth: 5MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Modulation Characteristics | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2535 | 25 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2535 | 25 | 0 | Refer To Test Graph | | Pass |

### 3.1.2 B7_10MHz

| Band: 7 / Bandwidth: 10MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Modulation Characteristics | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2535 | 50 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2535 | 50 | 0 | Refer To Test Graph | | Pass |

### 3.1.3 B7_15MHz

| Band: 7 / Bandwidth: 15MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Modulation Characteristics | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2535 | 75 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2535 | 75 | 0 | Refer To Test Graph | | Pass |

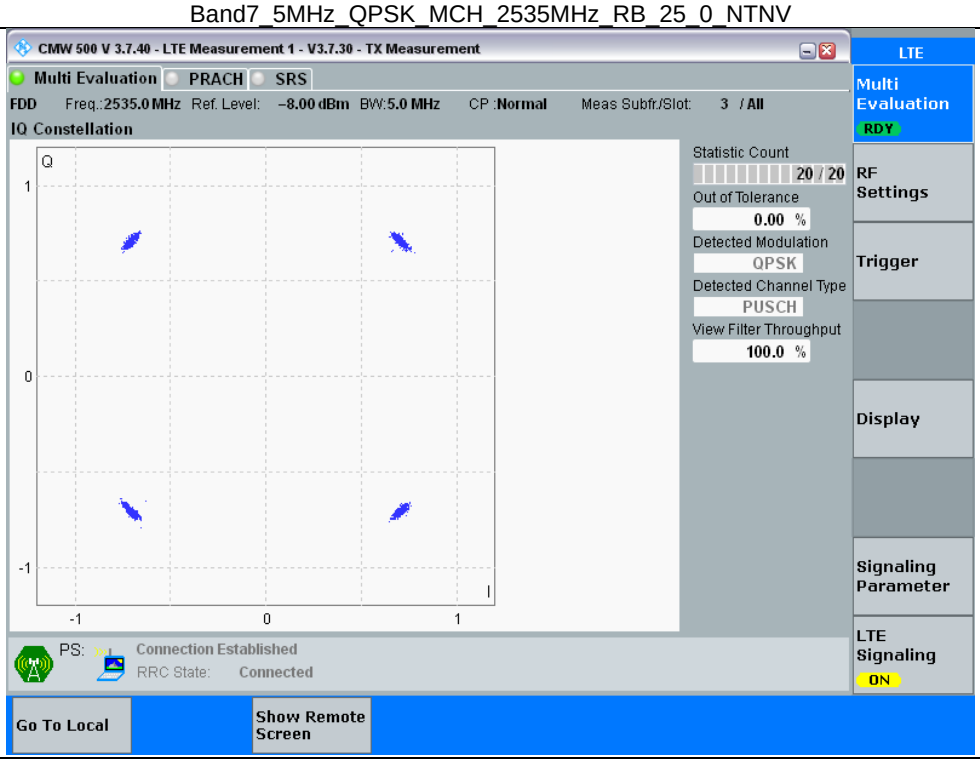
### 3.1.4 B7_20MHz

| Band: 7 / Bandwidth: 20MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Modulation Characteristics | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2535 | 100 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2535 | 100 | 0 | Refer To Test Graph | | Pass |

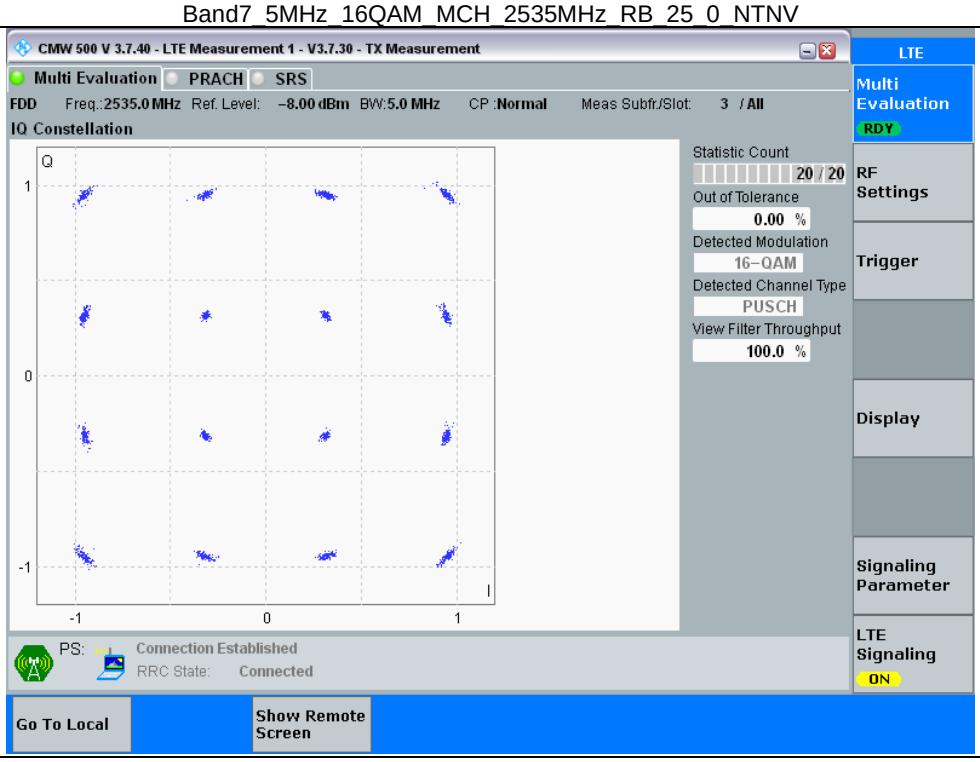
## 3.2 Test Graph

### 3.2.1 B7_5MHz

Band7_5MHz_QPSK_MCH_2535MHz_RB_25_0_NTNV

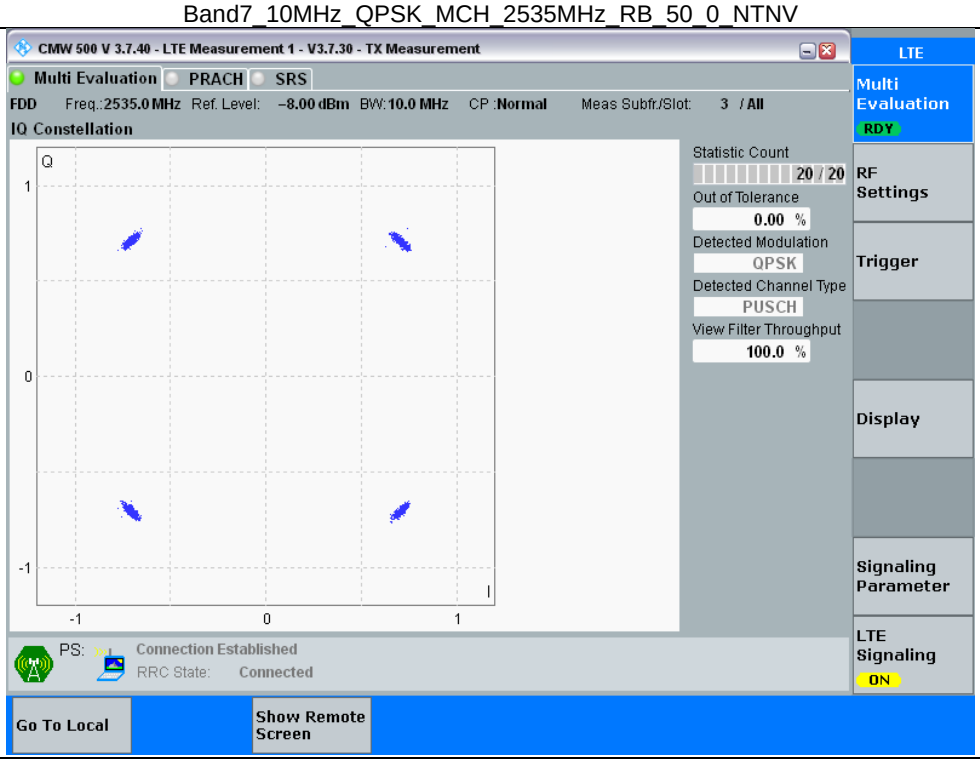



Band7_5MHz_16QAM_MCH_2535MHz_RB_25_0_NTNV

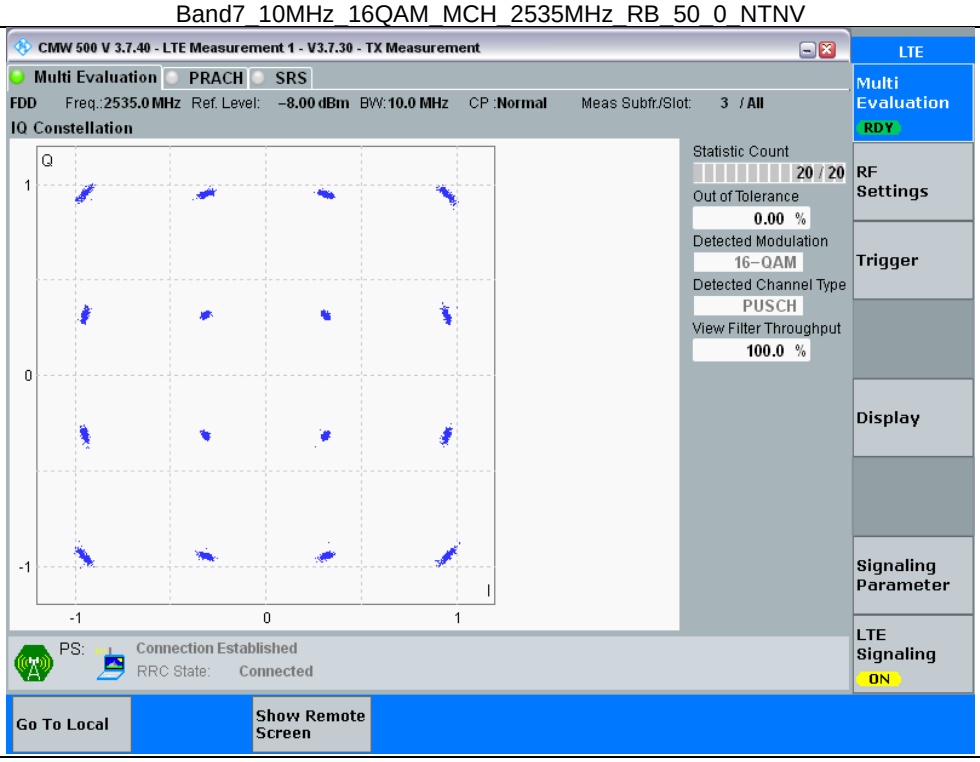


### 3.2.2 B7_10MHz

Band7_10MHz_QPSK_MCH_2535MHz_RB_50_0_NTNV

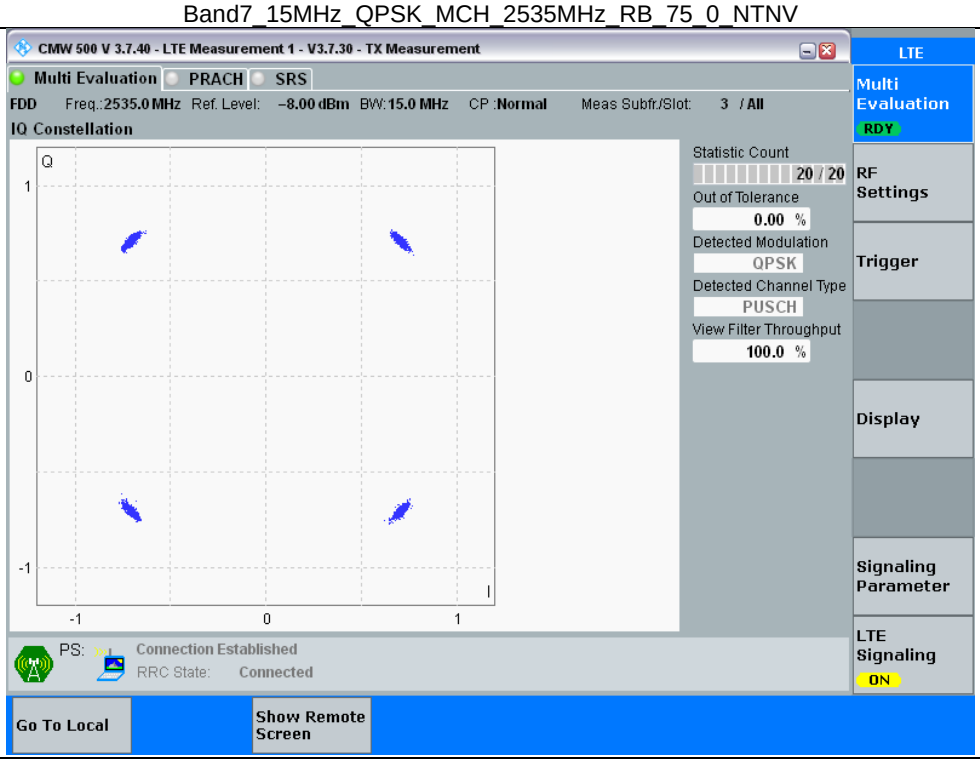



Band7_10MHz_16QAM_MCH_2535MHz_RB_50_0_NTNV

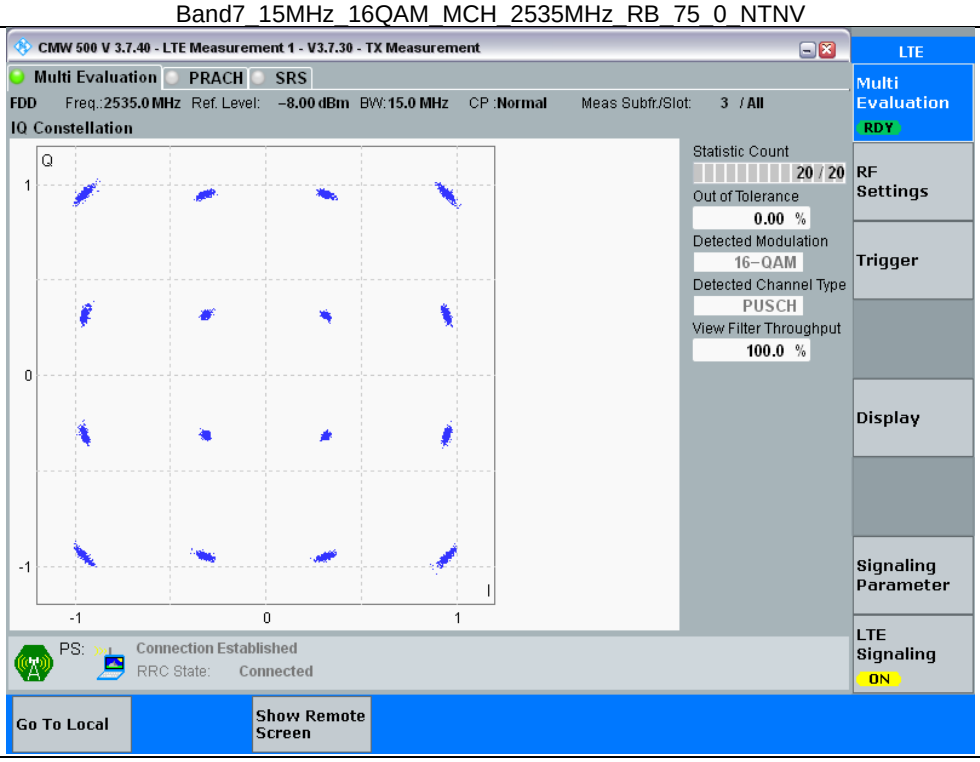


### 3.2.3 B7_15MHz

Band7_15MHz_QPSK_MCH_2535MHz_RB_75_0_NTNV

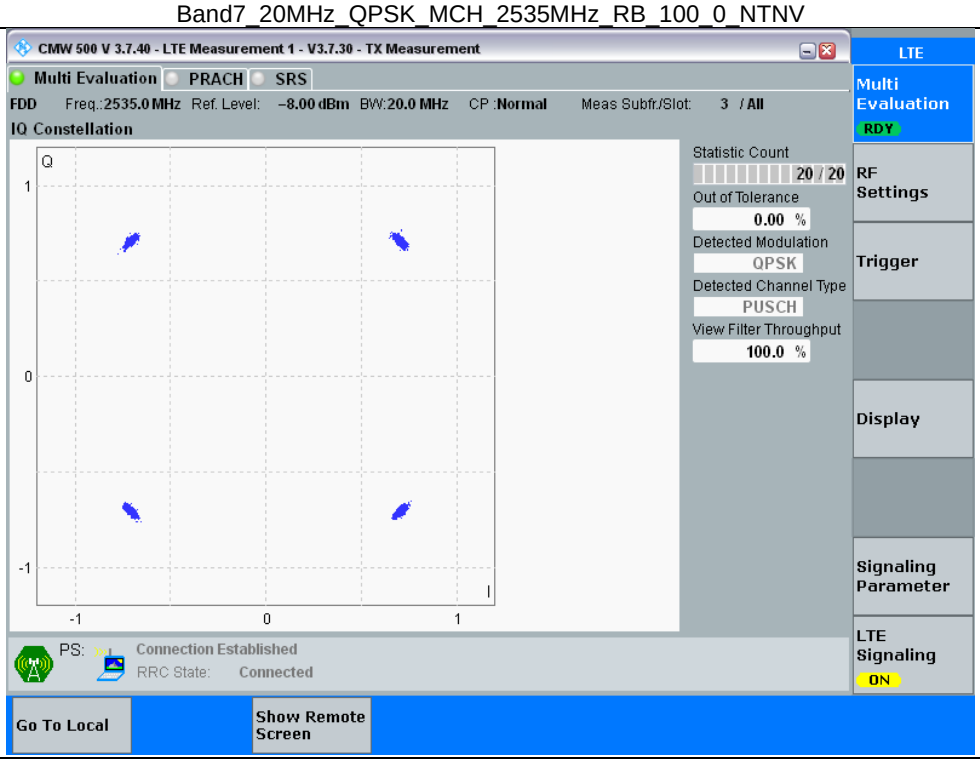



Band7_15MHz_16QAM_MCH_2535MHz_RB_75_0_NTNV

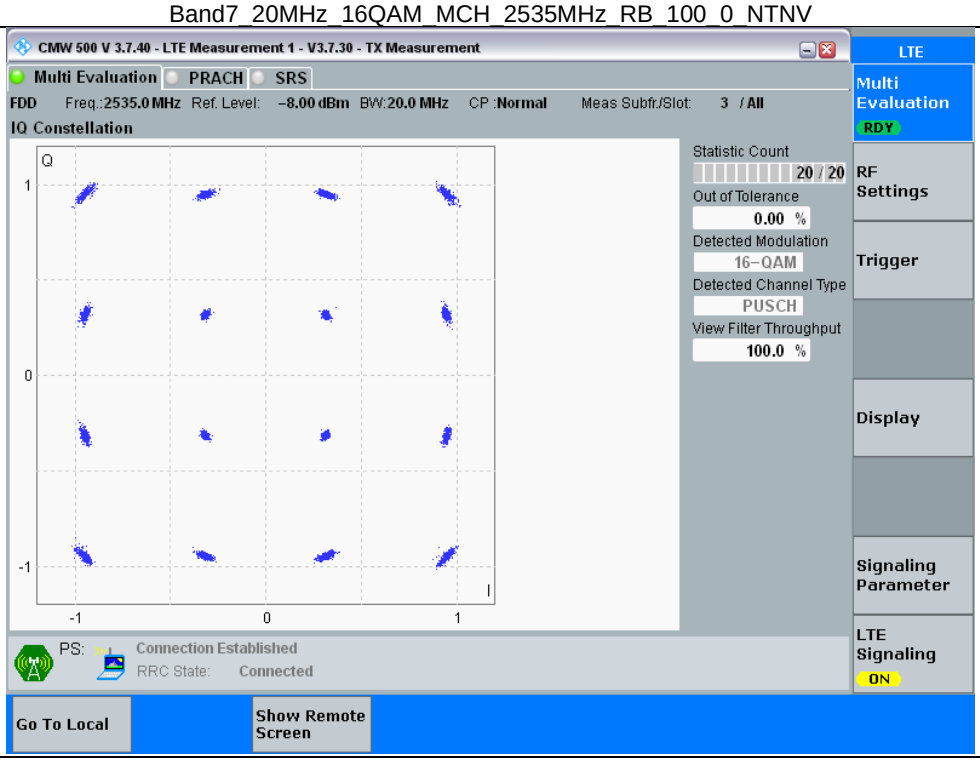


### 3.2.4 B7_20MHz

Band7_20MHz_QPSK_MCH_2535MHz_RB_100_0_NTNV




Band7_20MHz_16QAM_MCH_2535MHz_RB_100_0_NTNV



# 4. 99% & 26dB Bandwidth

## 4.1 Test Result

### 4.1.1 Band7_OBW

| Band: 7 / NTNV | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation | | 99% Occupied Bandwidth (MHz) | | Verdict |
| | | | Size | Offset | Result | Limit | |
| 5 | QPSK | 2502.5 | 25 | 0 | 4.545 | / | Pass |
| | | 2535 | 25 | 0 | 4.538 | / | Pass |
| | | 2567.5 | 25 | 0 | 4.556 | / | Pass |
| | 16QAM | 2502.5 | 25 | 0 | 4.580 | / | Pass |
| | | 2535 | 25 | 0 | 4.554 | / | Pass |
| | | 2567.5 | 25 | 0 | 4.542 | / | Pass |
| 10 | QPSK | 2505 | 50 | 0 | 9.079 | / | Pass |
| | | 2535 | 50 | 0 | 9.040 | / | Pass |
| | | 2565 | 50 | 0 | 9.080 | / | Pass |
| | 16QAM | 2505 | 50 | 0 | 9.072 | / | Pass |
| | | 2535 | 50 | 0 | 9.068 | / | Pass |
| | | 2565 | 50 | 0 | 9.058 | / | Pass |
| 15 | QPSK | 2507.5 | 75 | 0 | 13.626 | / | Pass |
| | | 2535 | 75 | 0 | 13.598 | / | Pass |
| | | 2562.5 | 75 | 0 | 13.591 | / | Pass |
| | 16QAM | 2507.5 | 75 | 0 | 13.619 | / | Pass |
| | | 2535 | 75 | 0 | 13.681 | / | Pass |
| | | 2562.5 | 75 | 0 | 13.590 | / | Pass |
| 20 | QPSK | 2510 | 100 | 0 | 18.196 | / | Pass |
| | | 2535 | 100 | 0 | 18.232 | / | Pass |
| | | 2560 | 100 | 0 | 18.148 | / | Pass |
| | 16QAM | 2510 | 100 | 0 | 18.177 | / | Pass |
| | | 2535 | 100 | 0 | 18.207 | / | Pass |
| | | 2560 | 100 | 0 | 18.161 | / | Pass |

### 4.1.2 Band7_XDB

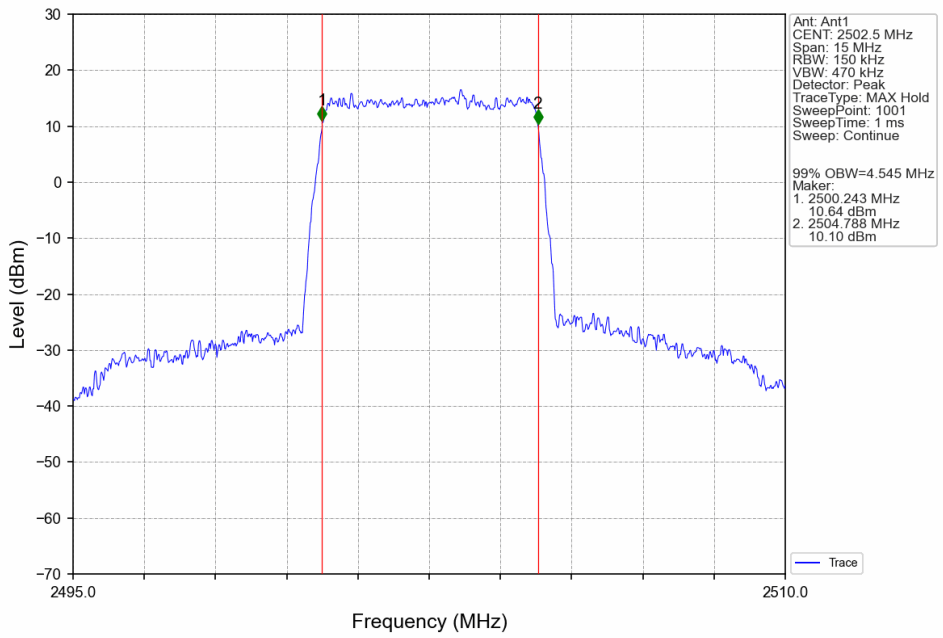
| Band: 7 / NTNV | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation | | 26dB Bandwidth (MHz) | | Verdict |
| | | | Size | Offset | Result | Limit | |
| 5 | QPSK | 2502.5 | 25 | 0 | 5.052 | / | Pass |
| | | 2535 | 25 | 0 | 5.070 | / | Pass |
| | | 2567.5 | 25 | 0 | 5.022 | / | Pass |
| | 16QAM | 2502.5 | 25 | 0 | 5.059 | / | Pass |
| | | 2535 | 25 | 0 | 5.072 | / | Pass |
| | | 2567.5 | 25 | 0 | 5.042 | / | Pass |
| 10 | QPSK | 2505 | 50 | 0 | 10.082 | / | Pass |
| | | 2535 | 50 | 0 | 10.034 | / | Pass |
| | | 2565 | 50 | 0 | 10.096 | / | Pass |
| | 16QAM | 2505 | 50 | 0 | 10.147 | / | Pass |
| | | 2535 | 50 | 0 | 10.053 | / | Pass |
| | | 2565 | 50 | 0 | 9.999 | / | Pass |
| 15 | QPSK | 2507.5 | 75 | 0 | 15.136 | / | Pass |
| | | 2535 | 75 | 0 | 15.127 | / | Pass |
| | | 2562.5 | 75 | 0 | 15.154 | / | Pass |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 16QAM | 2507.5 | 75 | 0 | 15.176 | / | Pass |
| | | 2535 | 75 | 0 | 15.234 | / | Pass |
| | | 2562.5 | 75 | 0 | 15.215 | / | Pass |
| 20 | QPSK | 2510 | 100 | 0 | 20.118 | / | Pass |
| | | 2535 | 100 | 0 | 20.076 | / | Pass |
| | | 2560 | 100 | 0 | 20.006 | / | Pass |
| | 16QAM | 2510 | 100 | 0 | 20.126 | / | Pass |
| | | 2535 | 100 | 0 | 20.073 | / | Pass |
| | | 2560 | 100 | 0 | 20.060 | / | Pass |

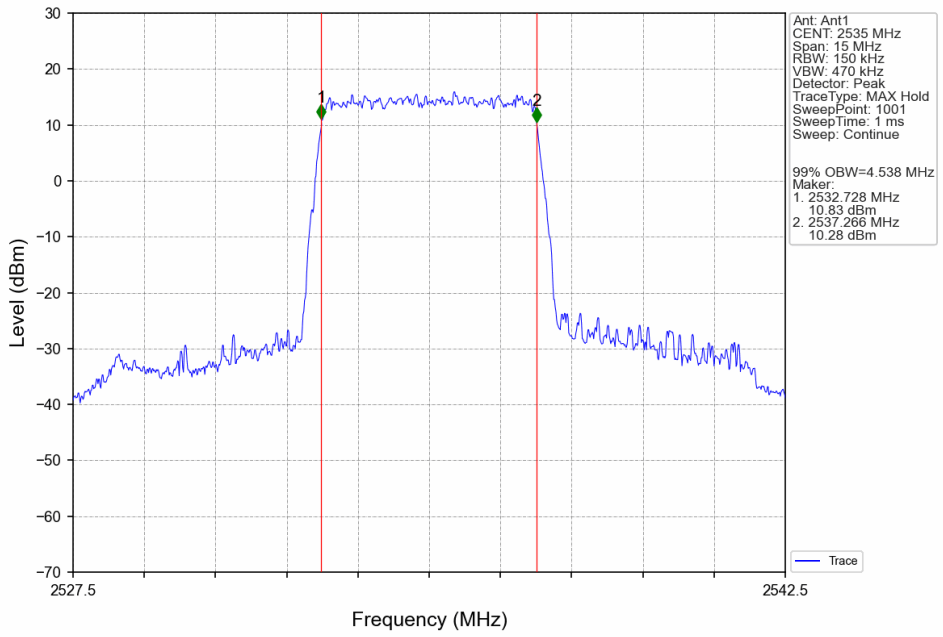
## 4.2 Test Graph

### 4.2.1 Band7_OBW

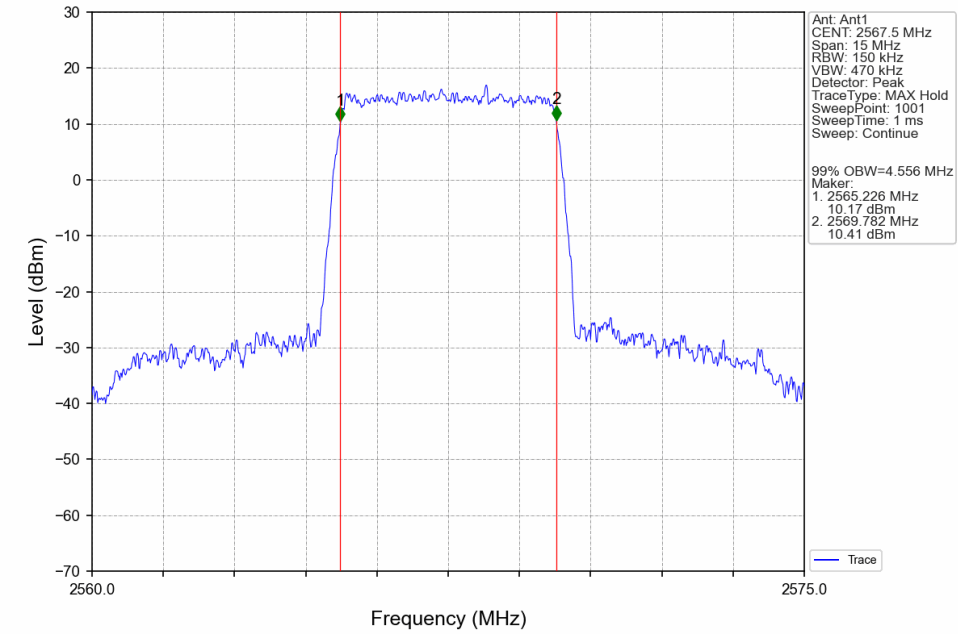
Band7_5MHz_QPSK_LCH_2502.5MHz_RB_25_0_NTNV



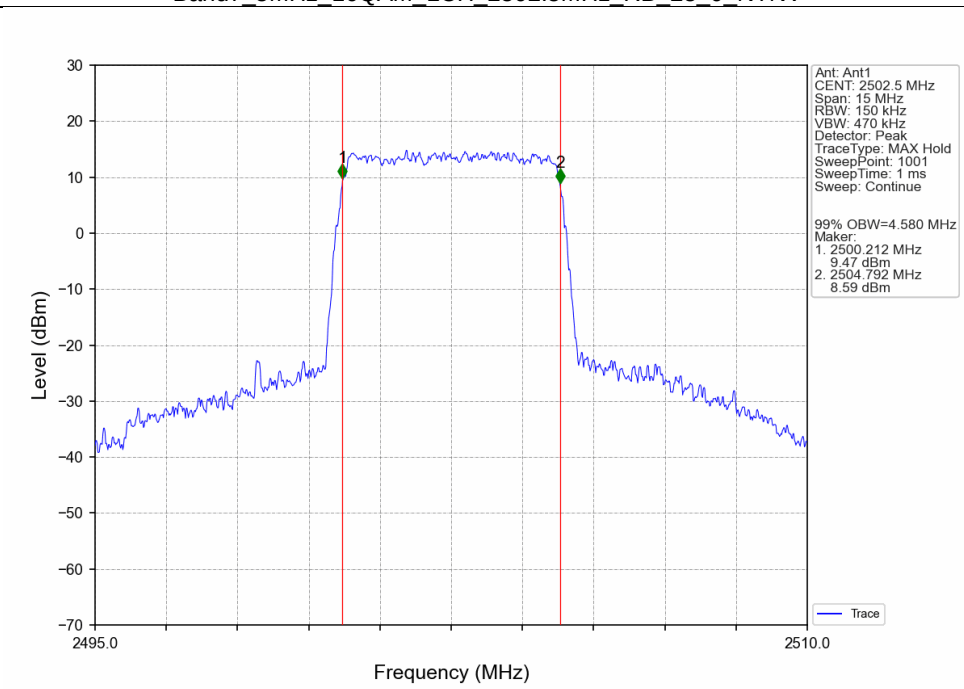

Band7_5MHz_QPSK_MCH_2535MHz_RB_25_0_NTNV



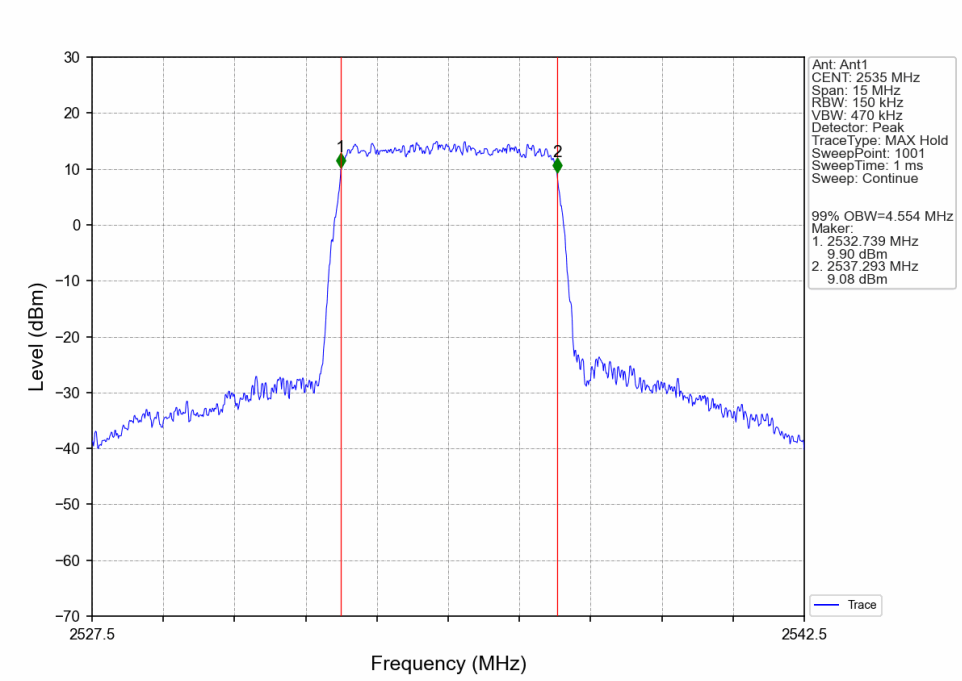
Band7_5MHz_QPSK_HCH_2567.5MHz_RB_25_0_NTNV



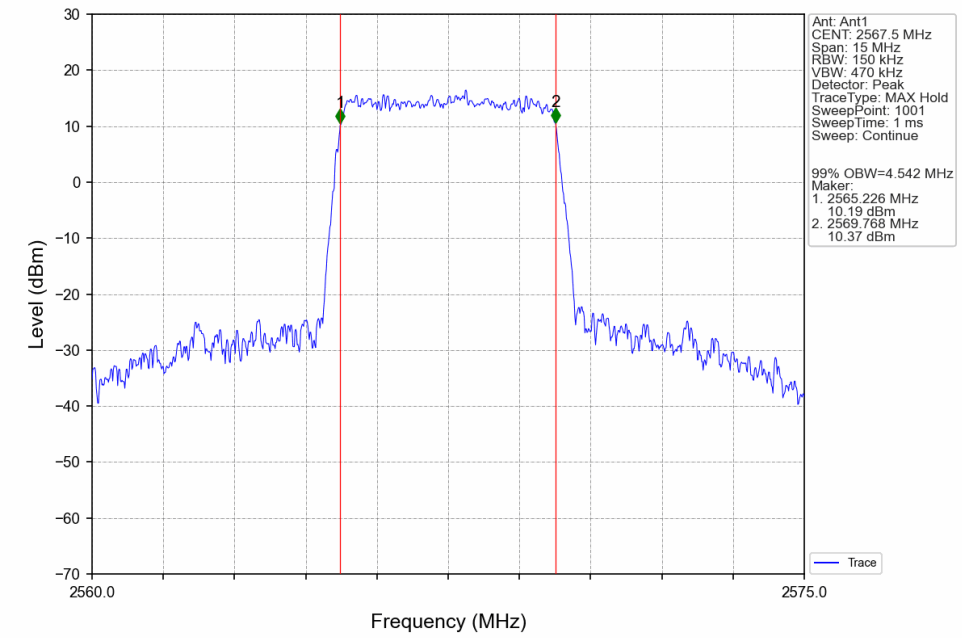

Band7_5MHz_16QAM_LCH_2502.5MHz_RB_25_0_NTNV



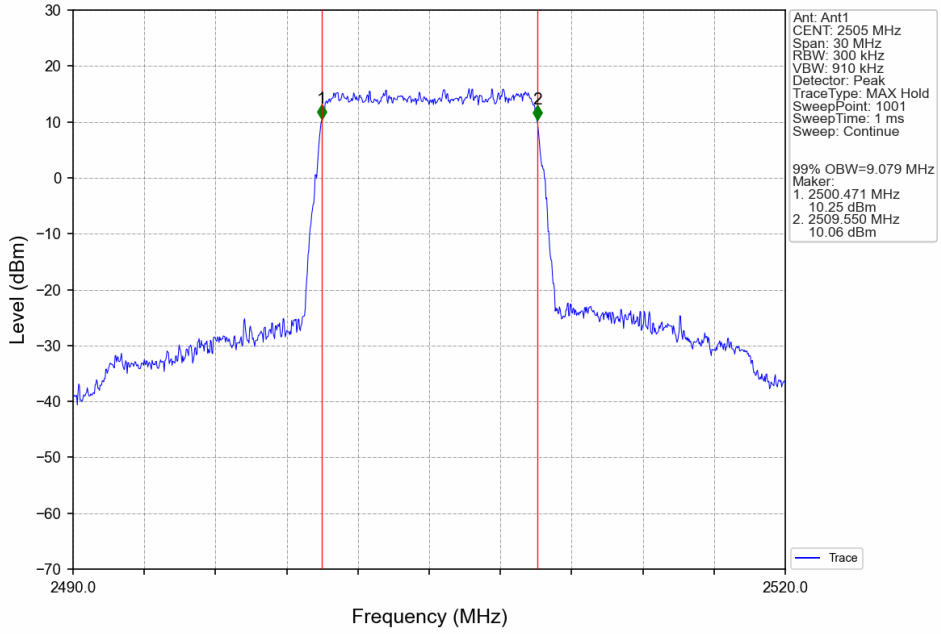
Band7_5MHz_16QAM_MCH_2535MHz_RB_25_0_NTNV



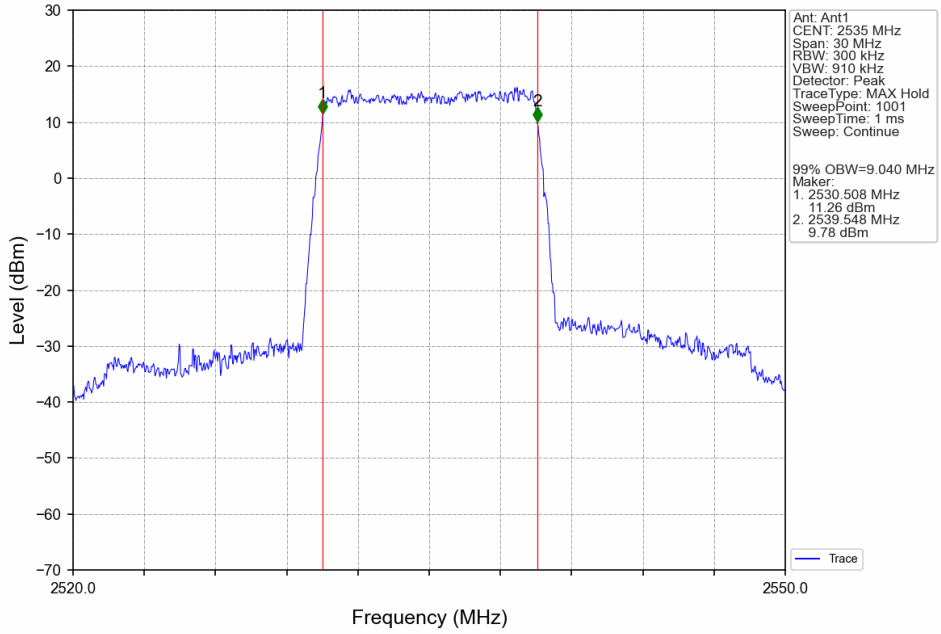

Band7_5MHz_16QAM_HCH_2567.5MHz_RB_25_0_NTNV



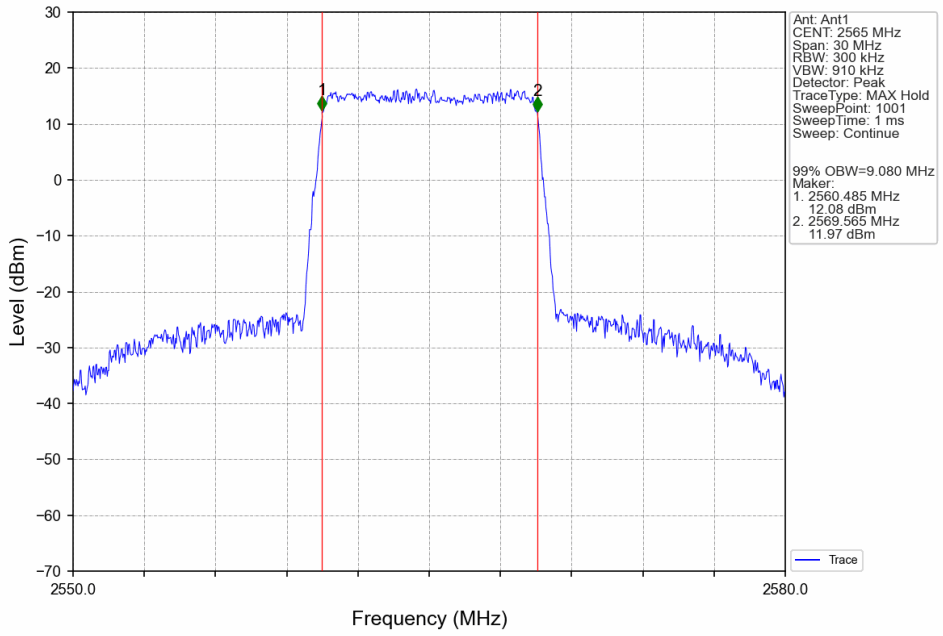
Band7_10MHz_QPSK_LCH_2505MHz_RB_50_0_NTNV



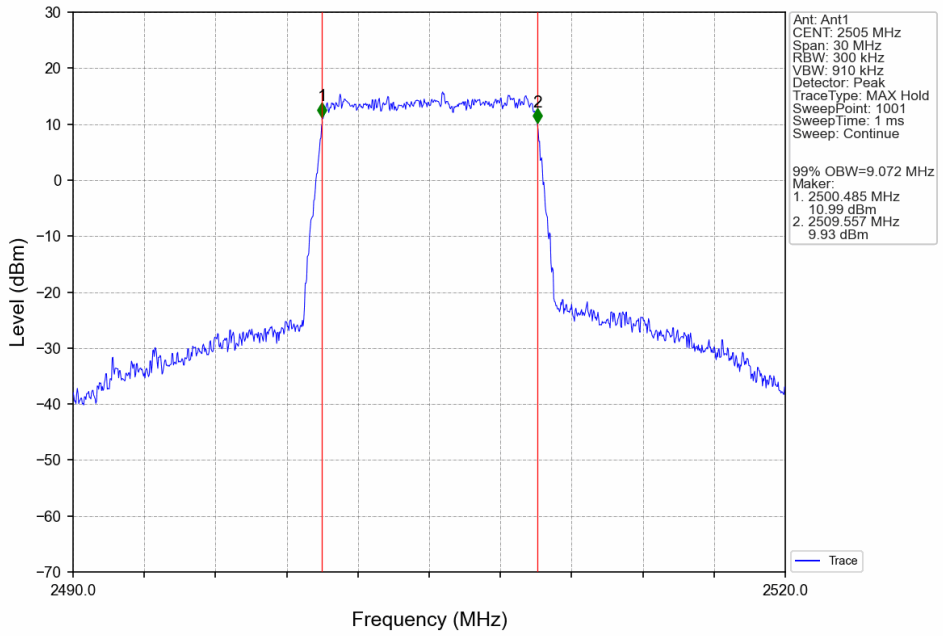

Band7_10MHz_QPSK_MCH_2535MHz_RB_50_0_NTNV



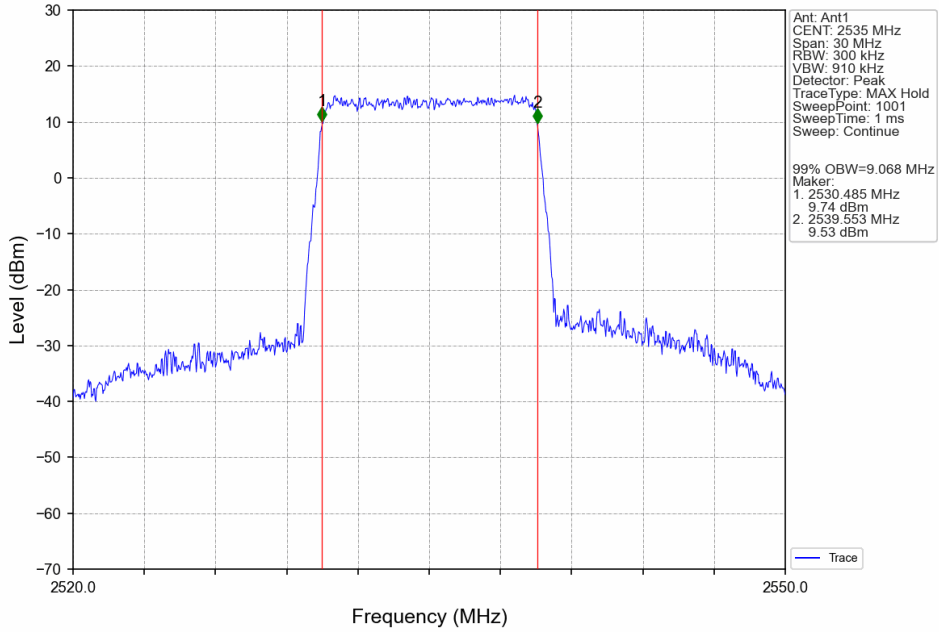
Band7_10MHz_QPSK_HCH_2565MHz_RB_50_0_NTNV



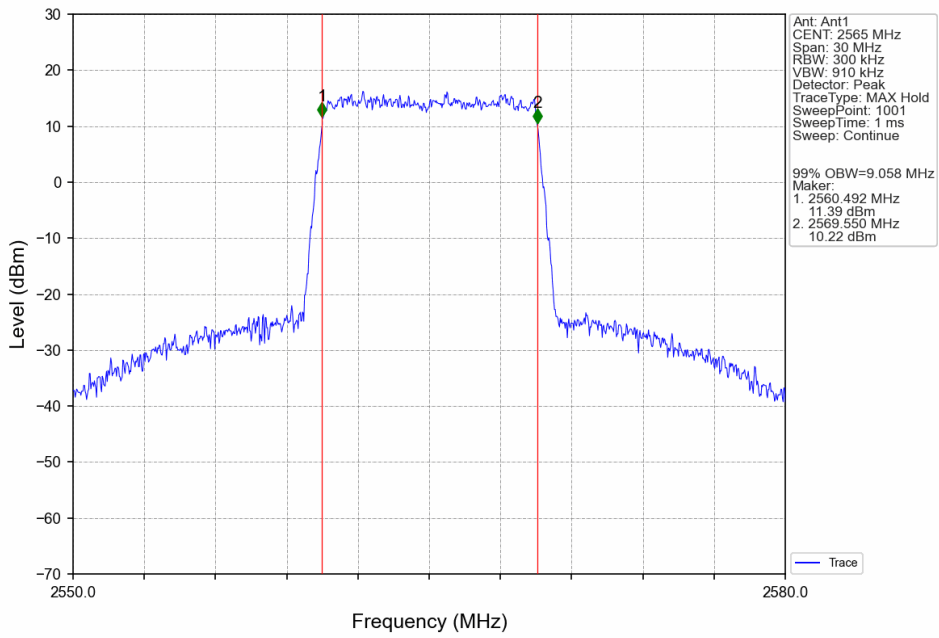

Band7_10MHz_16QAM_LCH_2505MHz_RB_50_0_NTNV



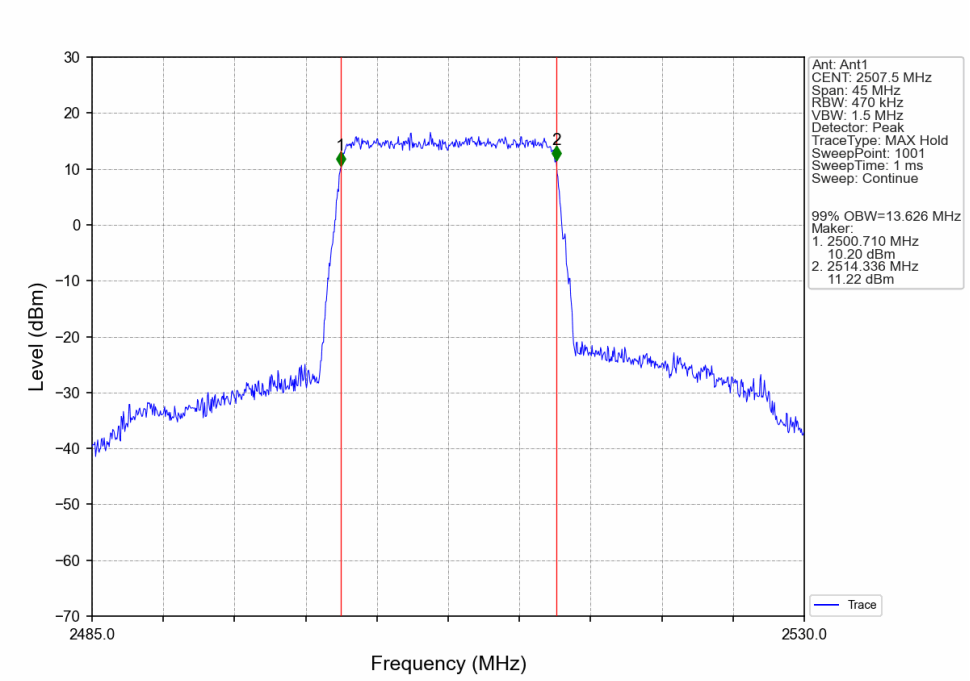
Band7_10MHz_16QAM_MCH_2535MHz_RB_50_0_NTNV



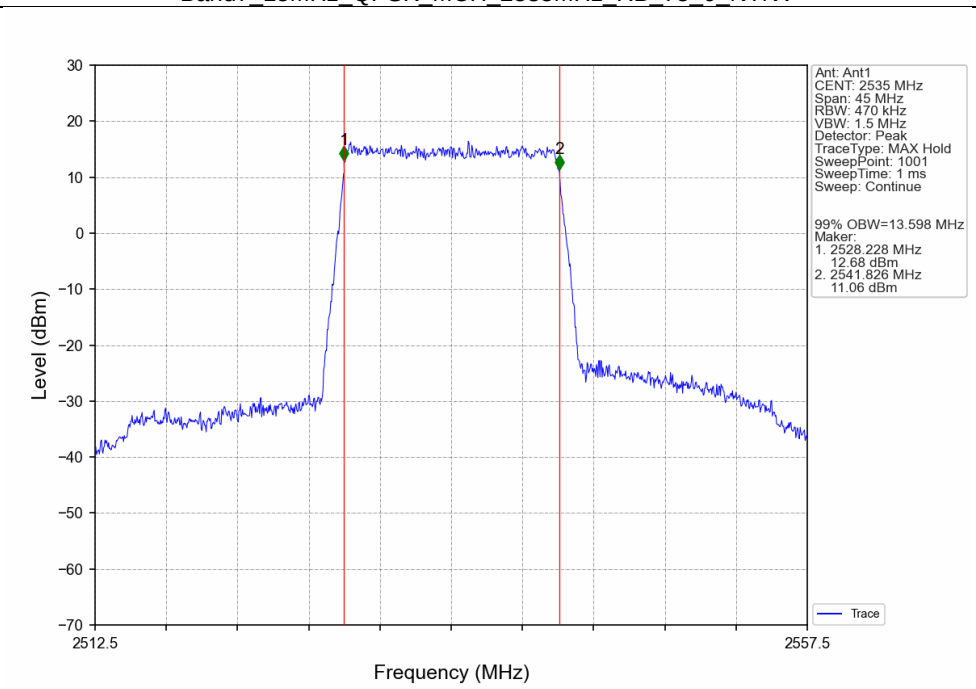

Band7_10MHz_16QAM_HCH_2565MHz_RB_50_0_NTNV



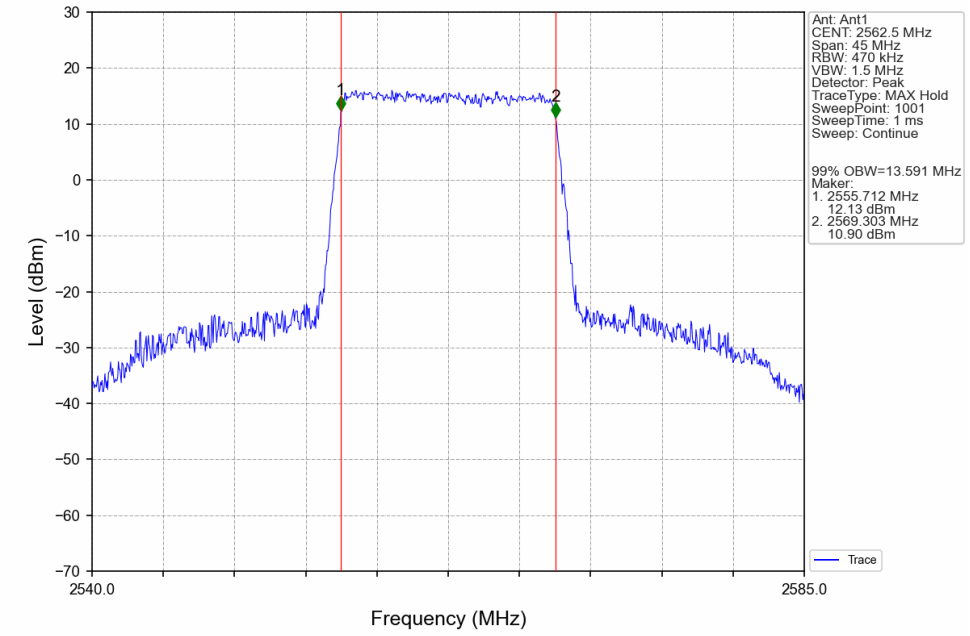
Band7_15MHz_QPSK_LCH_2507.5MHz_RB_75_0_NTNV



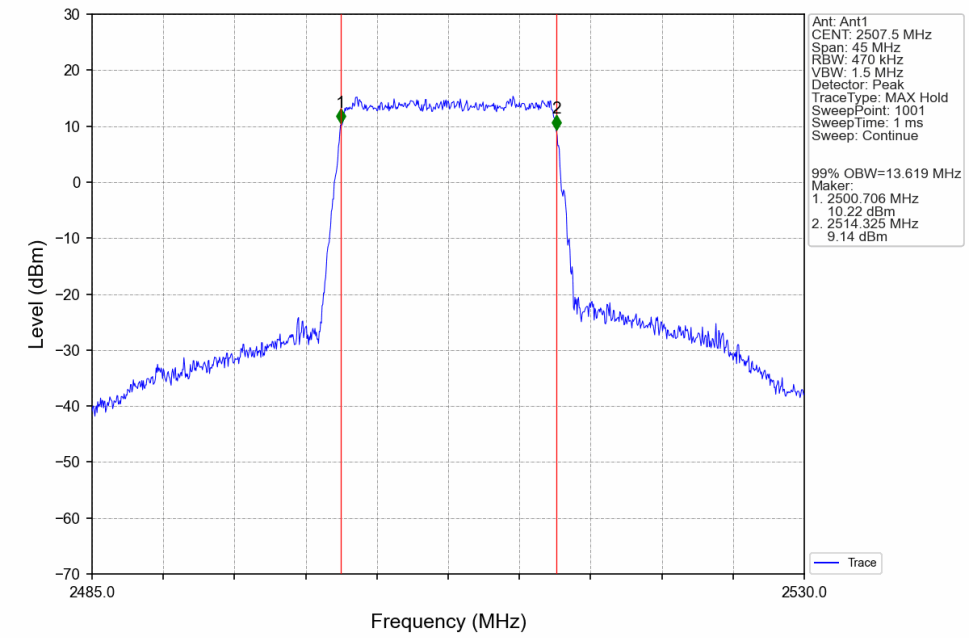

Band7_15MHz_QPSK_MCH_2535MHz_RB_75_0_NTNV



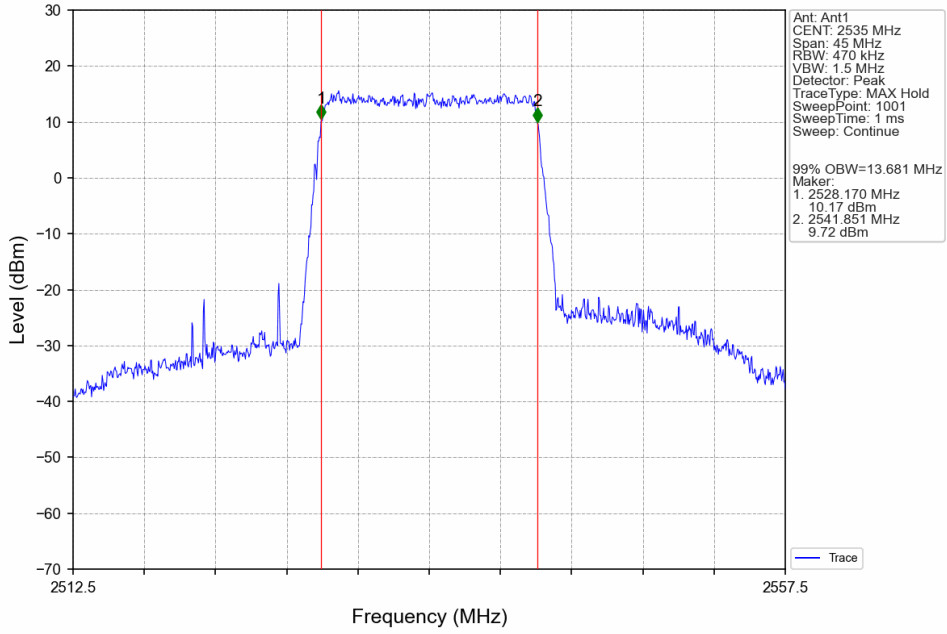
Band7_15MHz_QPSK_HCH_2562.5MHz_RB_75_0_NTNV



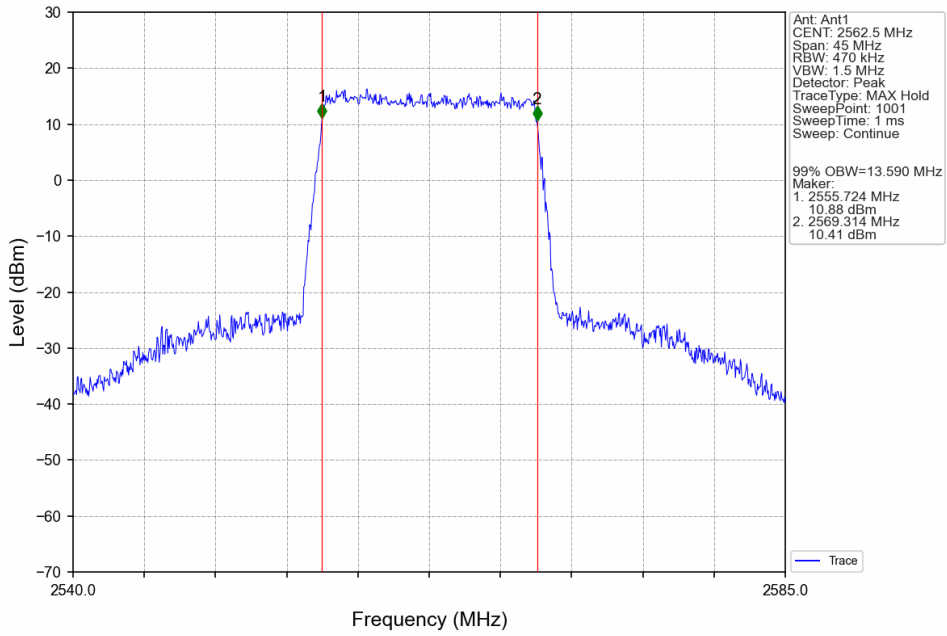

Band7_15MHz_16QAM_LCH_2507.5MHz_RB_75_0_NTNV



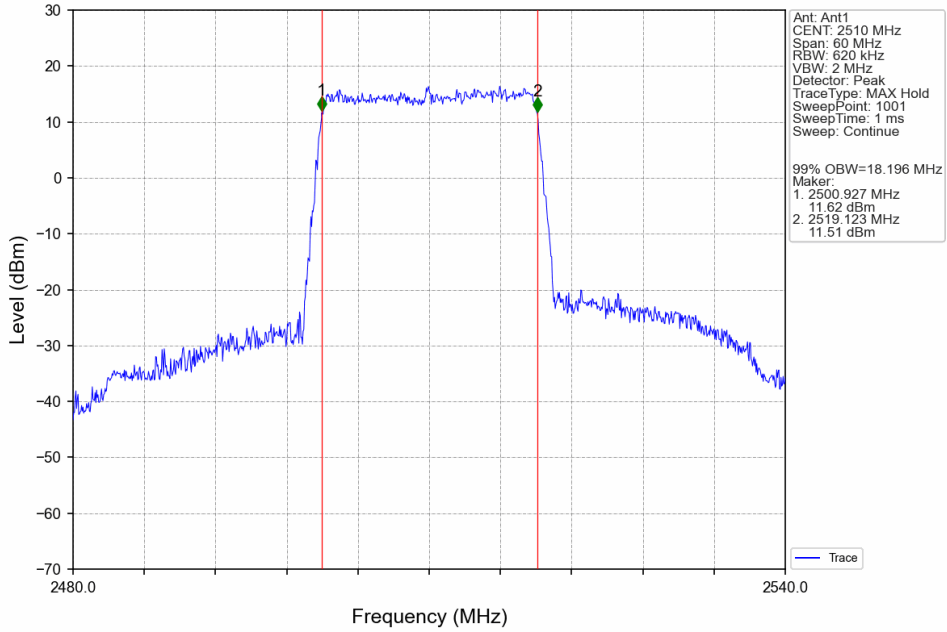
Band7_15MHz_16QAM_MCH_2535MHz_RB_75_0_NTNV



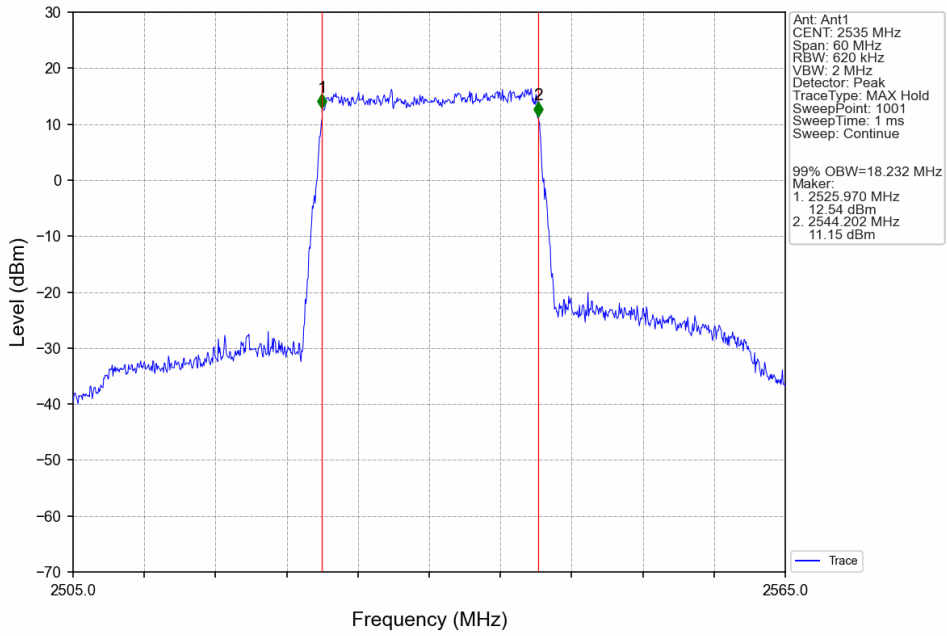

Band7_15MHz_16QAM_HCH_2562.5MHz_RB_75_0_NTNV



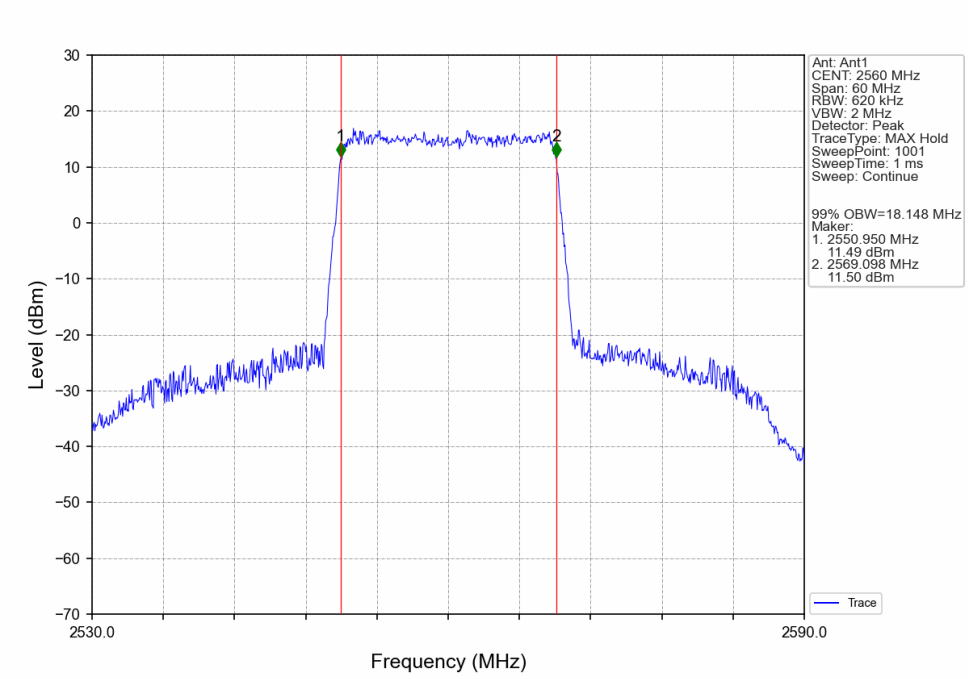
Band7_20MHz_QPSK_LCH_2510MHz_RB_100_0_NTNV



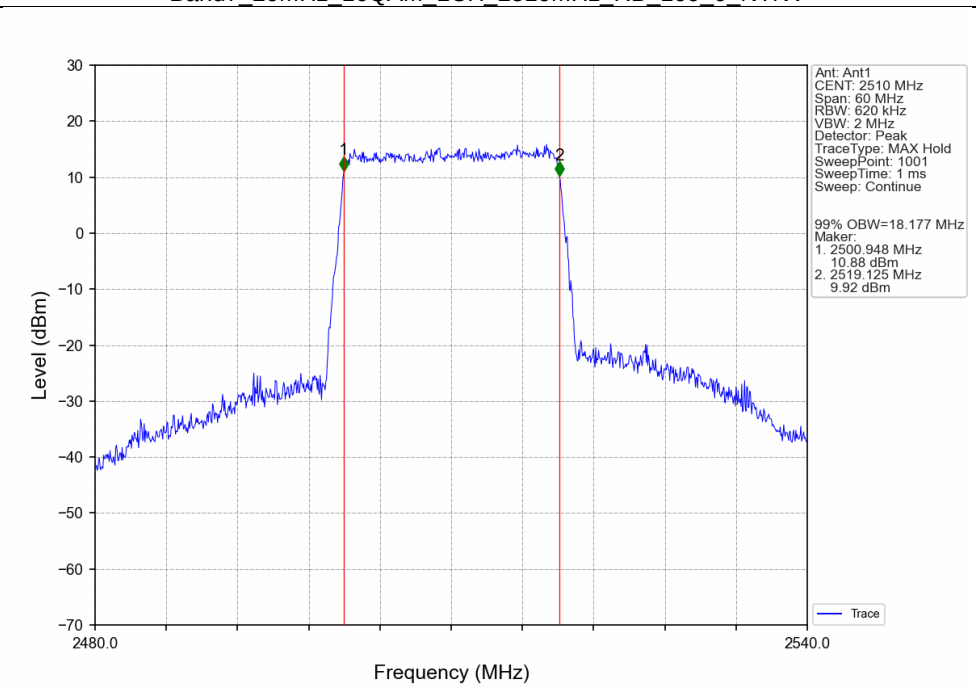

Band7_20MHz_QPSK_MCH_2535MHz_RB_100_0_NTNV



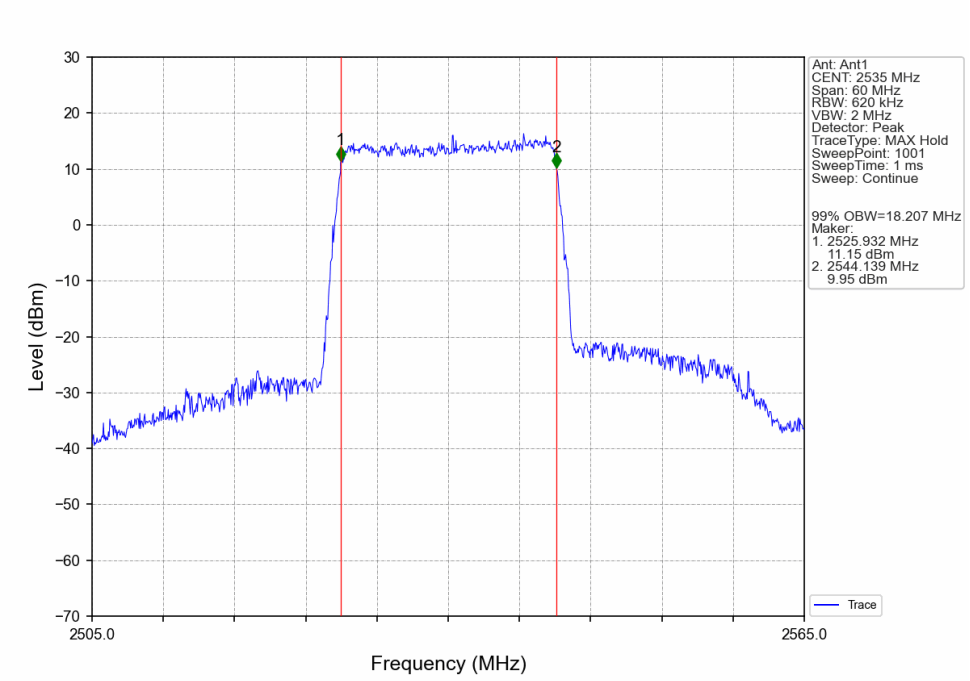
Band7_20MHz_QPSK_HCH_2560MHz_RB_100_0_NTNV



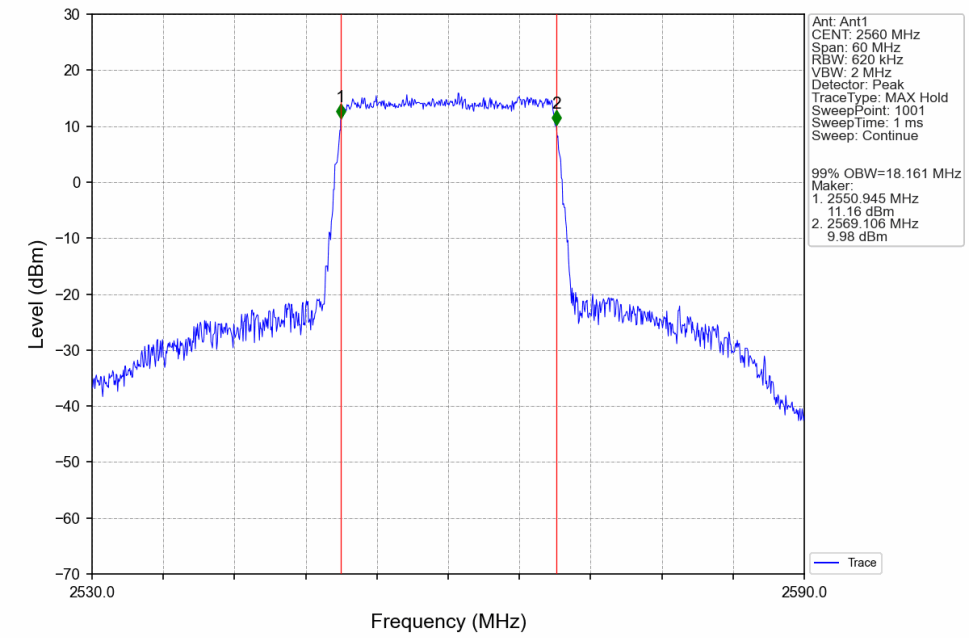

Band7_20MHz_16QAM_LCH_2510MHz_RB_100_0_NTNV



Band7_20MHz_16QAM_MCH_2535MHz_RB_100_0_NTNV

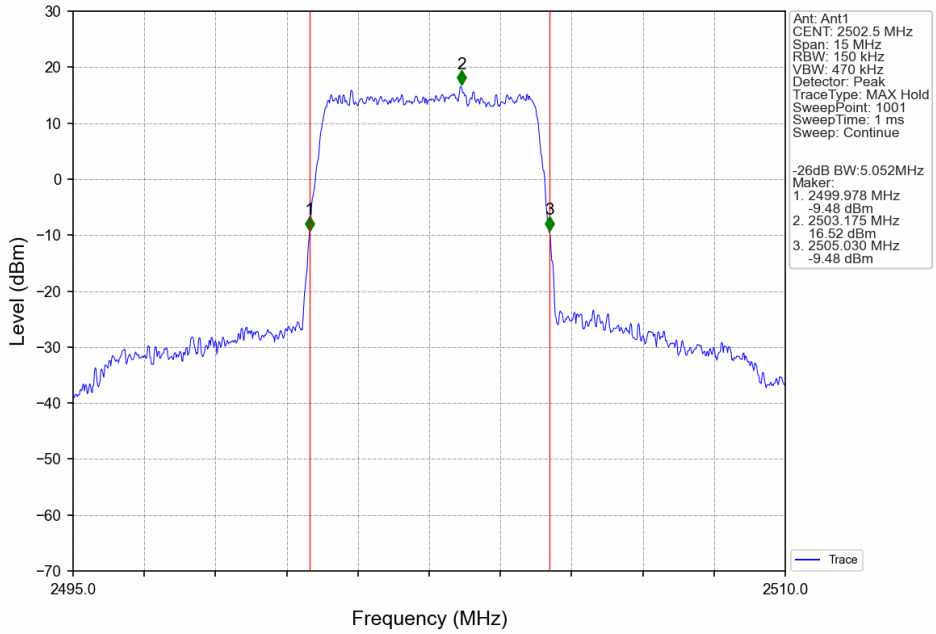



Band7_20MHz_16QAM_HCH_2560MHz_RB_100_0_NTNV

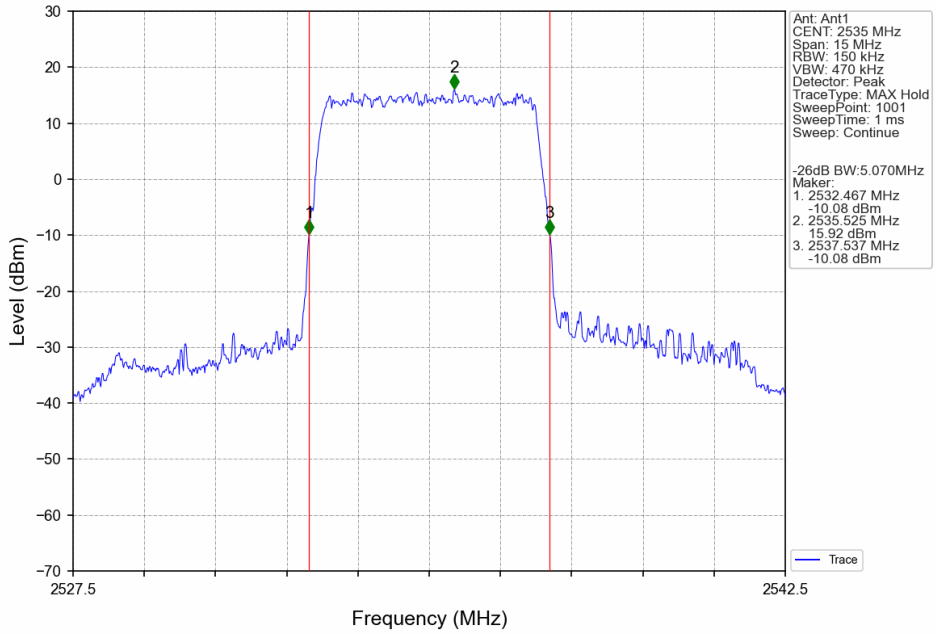


## 4.2.2 Band7_XDB

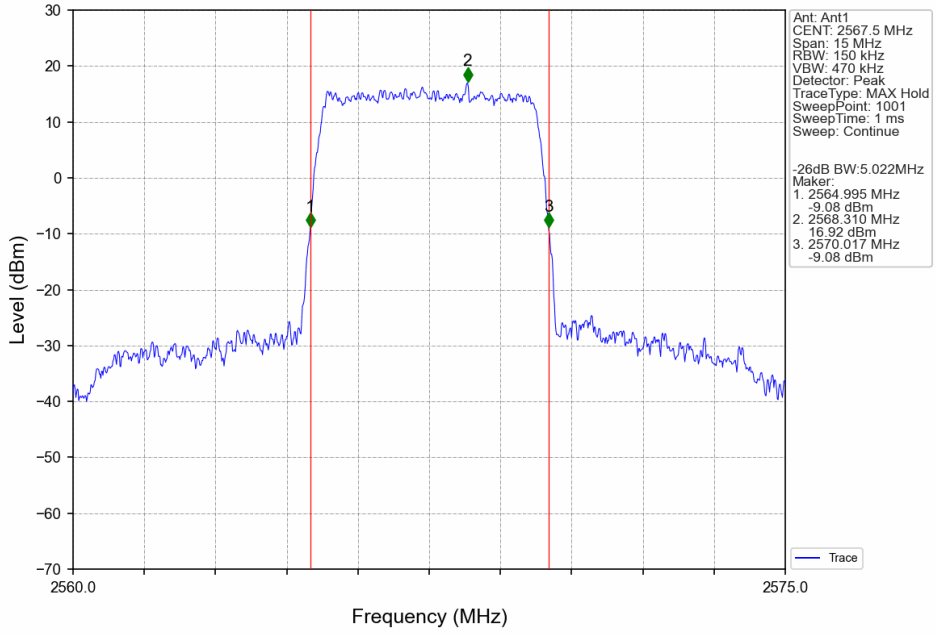
Band7_5MHz_QPSK_LCH_2502.5MHz_RB_25_0_NTNV



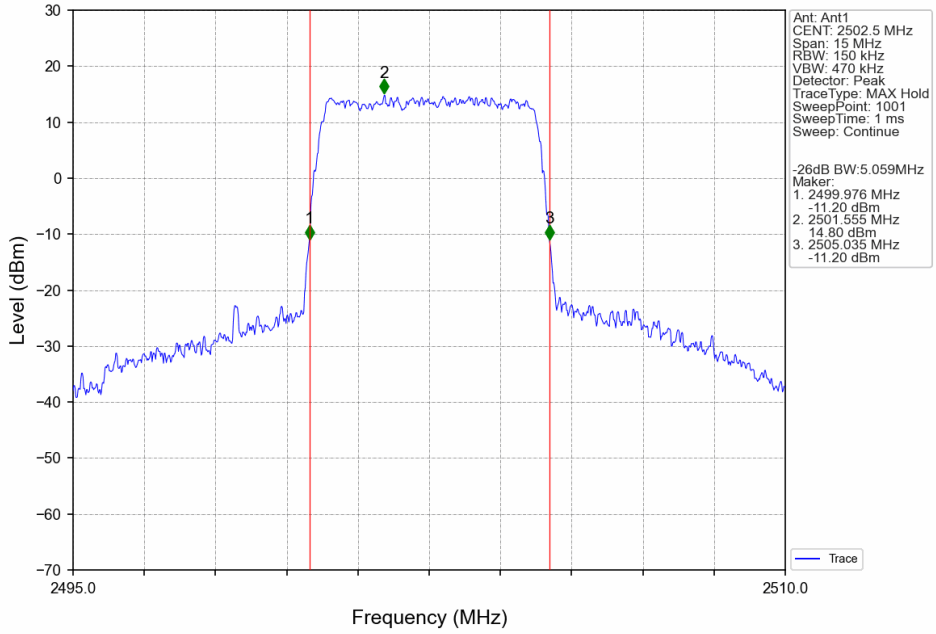

Band7_5MHz_QPSK_MCH_2535MHz_RB_25_0_NTNV



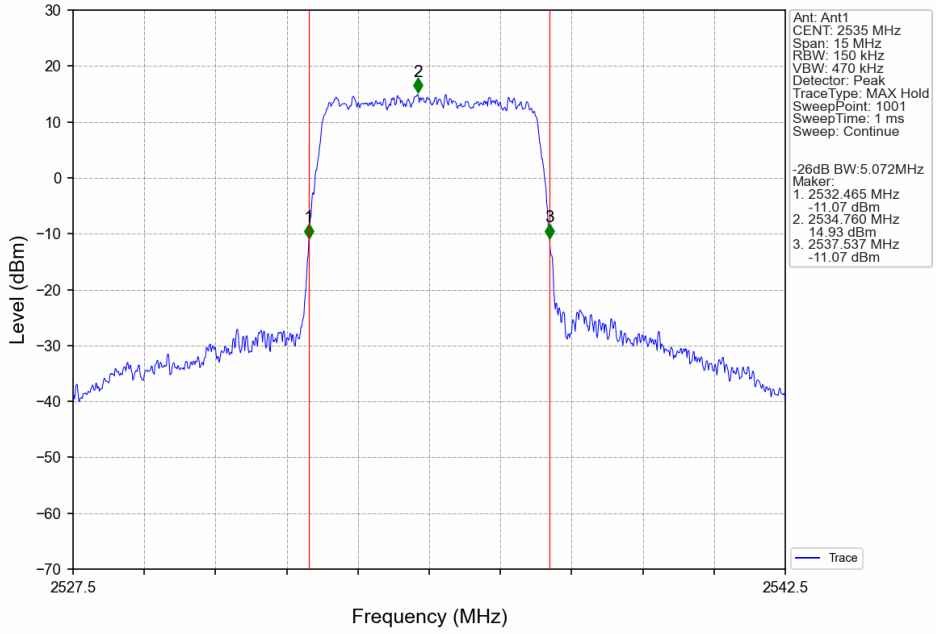
Band7_5MHz_QPSK_HCH_2567.5MHz_RB_25_0_NTNV



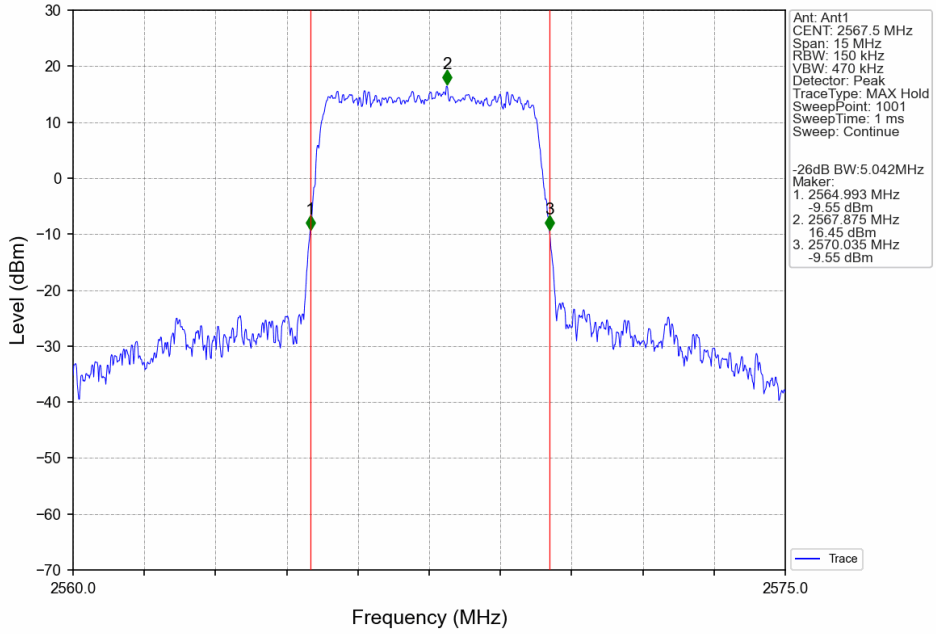

Band7_5MHz_16QAM_LCH_2502.5MHz_RB_25_0_NTNV



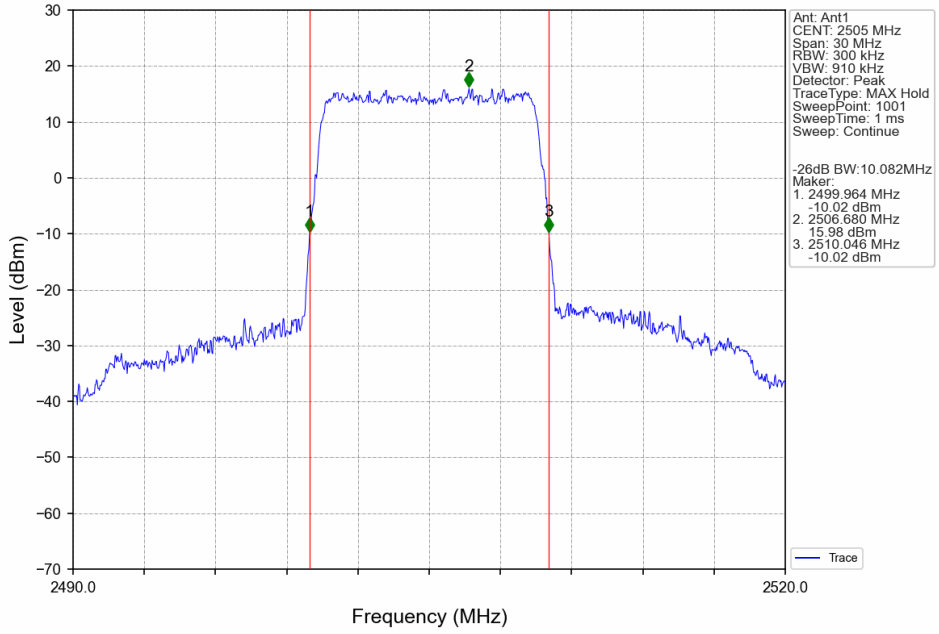
Band7_5MHz_16QAM_MCH_2535MHz_RB_25_0_NTNV



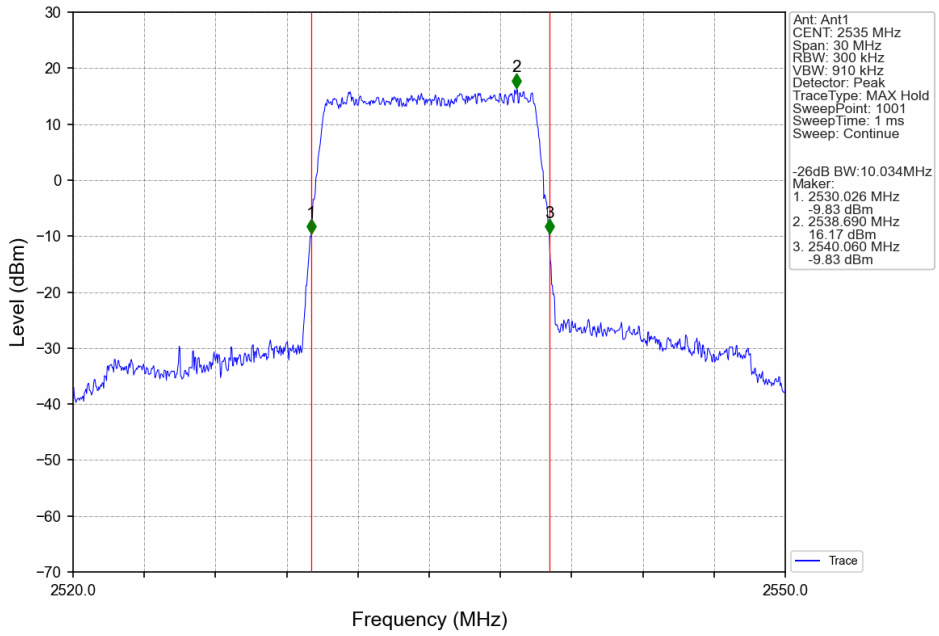

Band7_5MHz_16QAM_HCH_2567.5MHz_RB_25_0_NTNV



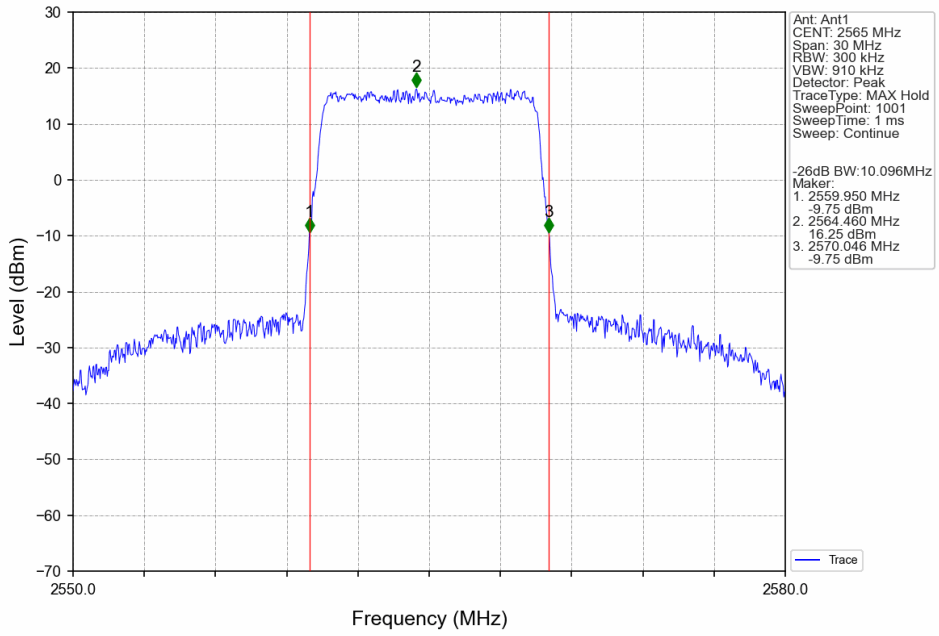
Band7_10MHz_QPSK_LCH_2505MHz_RB_50_0_NTNV



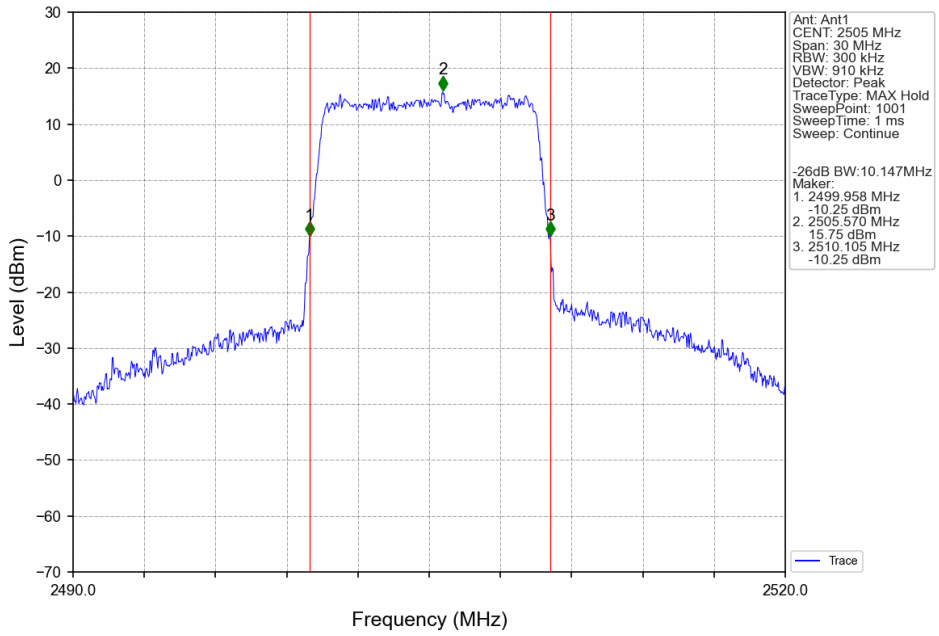

Band7_10MHz_QPSK_MCH_2535MHz_RB_50_0_NTNV



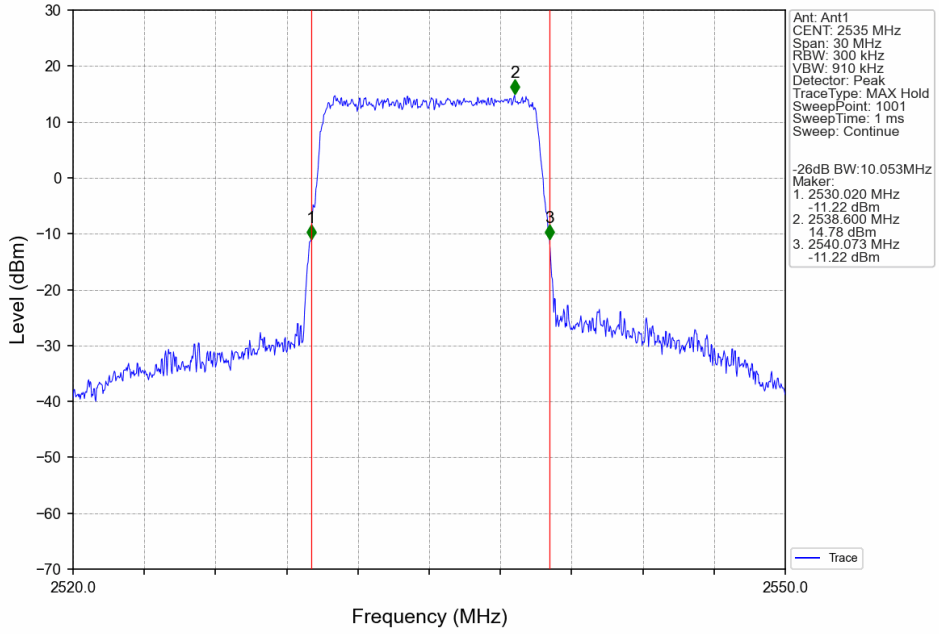
Band7_10MHz_QPSK_HCH_2565MHz_RB_50_0_NTNV



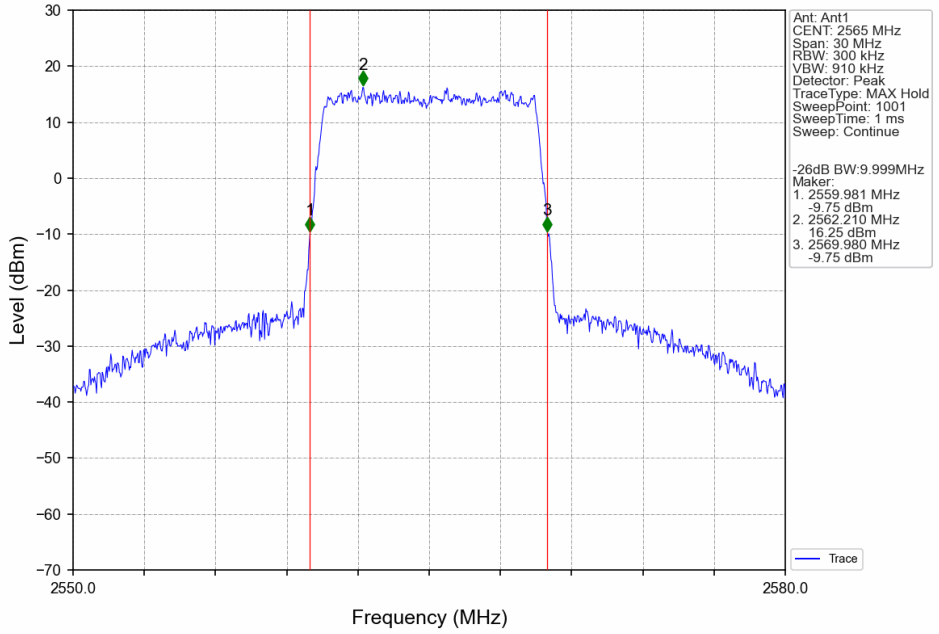

Band7_10MHz_16QAM_LCH_2505MHz_RB_50_0_NTNV



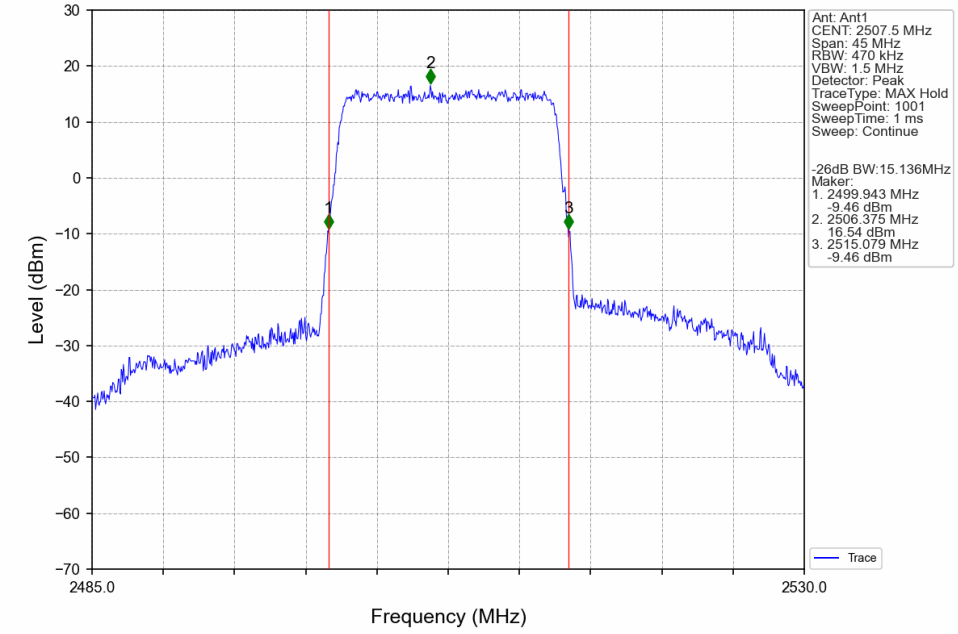
Band7_10MHz_16QAM_MCH_2535MHz_RB_50_0_NTNV



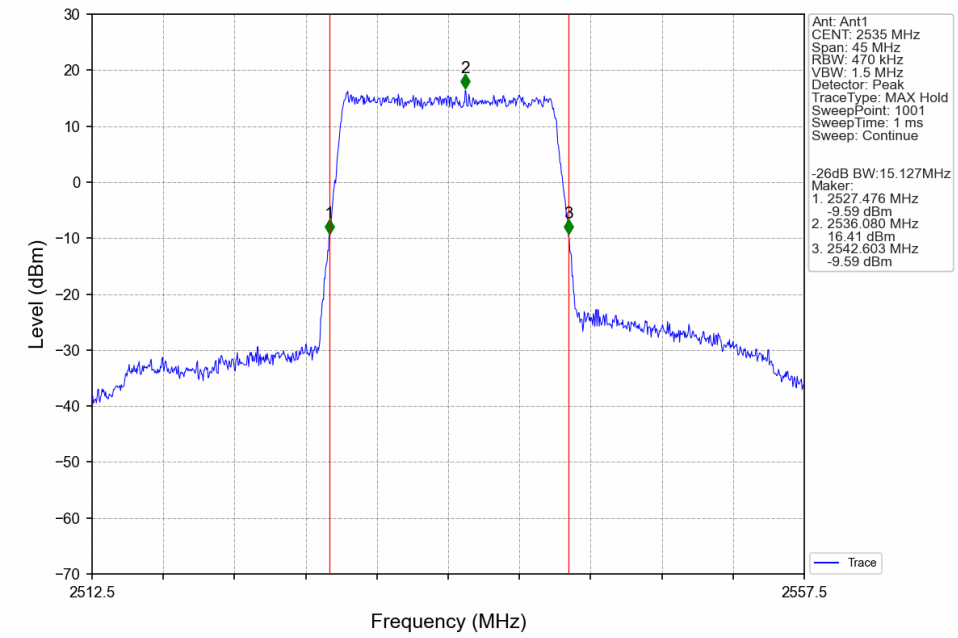

Band7_10MHz_16QAM_HCH_2565MHz_RB_50_0_NTNV



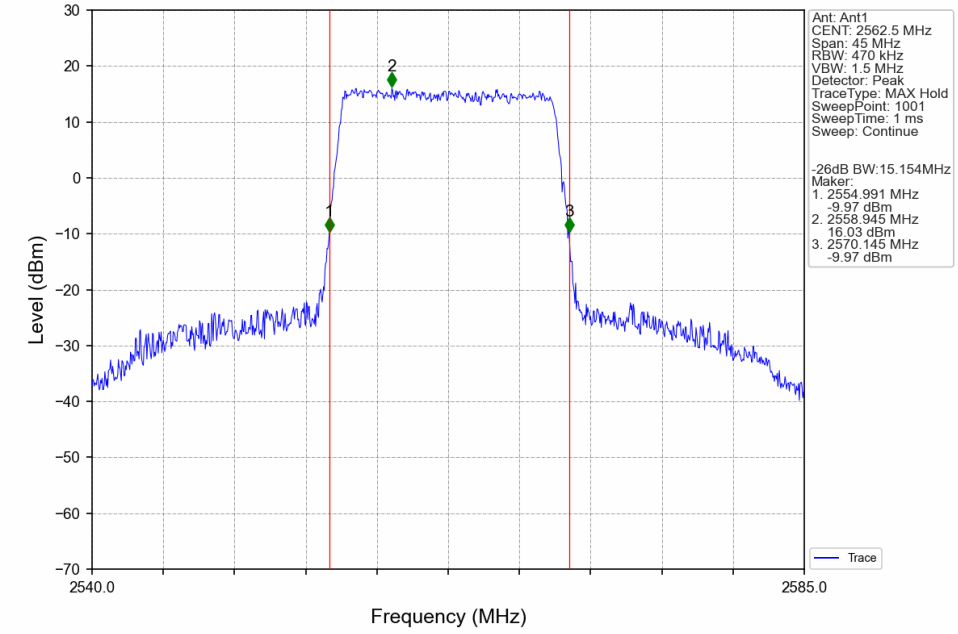
Band7_15MHz_QPSK_LCH_2507.5MHz_RB_75_0_NTNV



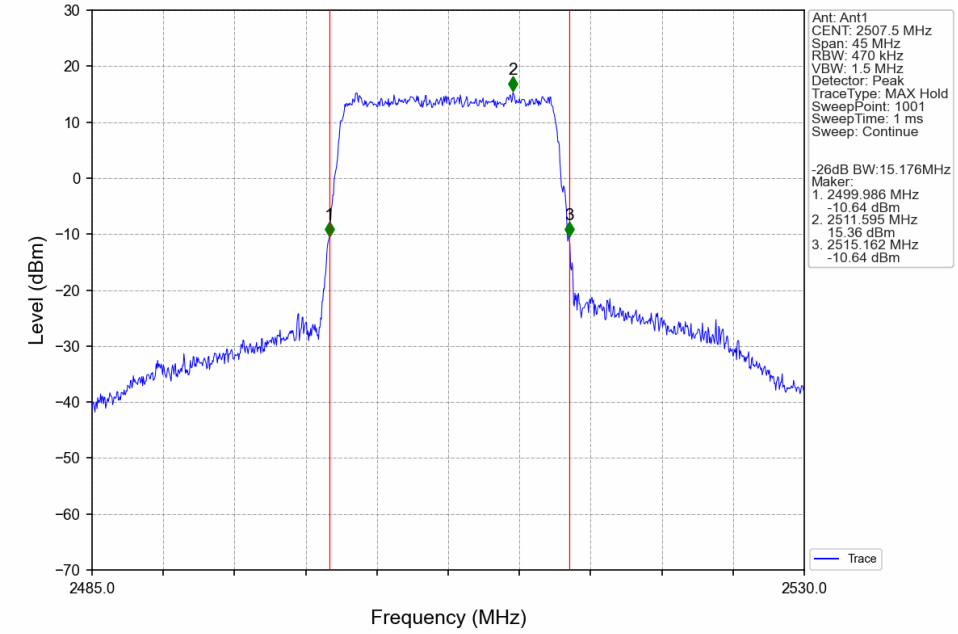

Band7_15MHz_QPSK_MCH_2535MHz_RB_75_0_NTNV



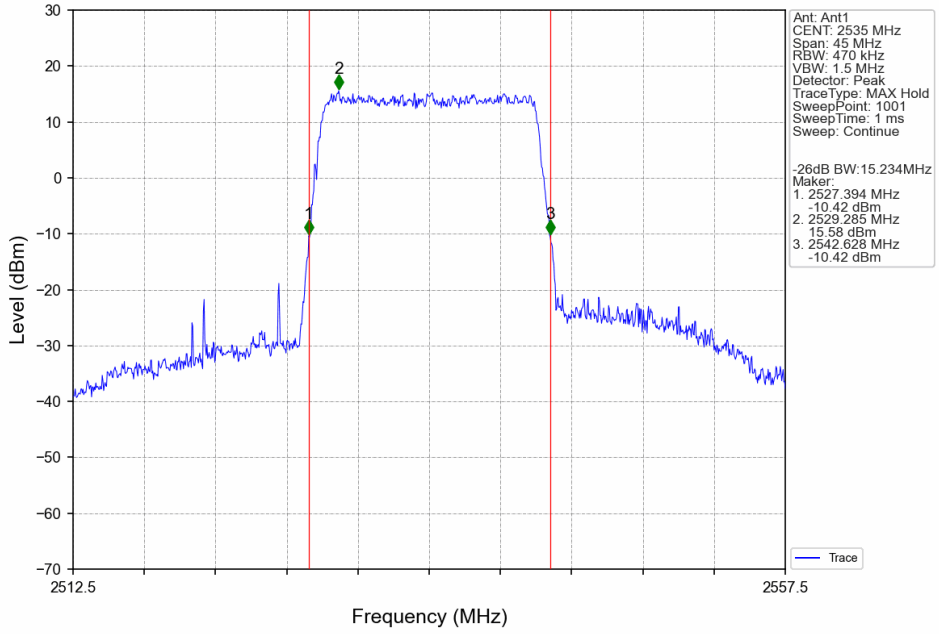
Band7_15MHz_QPSK_HCH_2562.5MHz_RB_75_0_NTNV



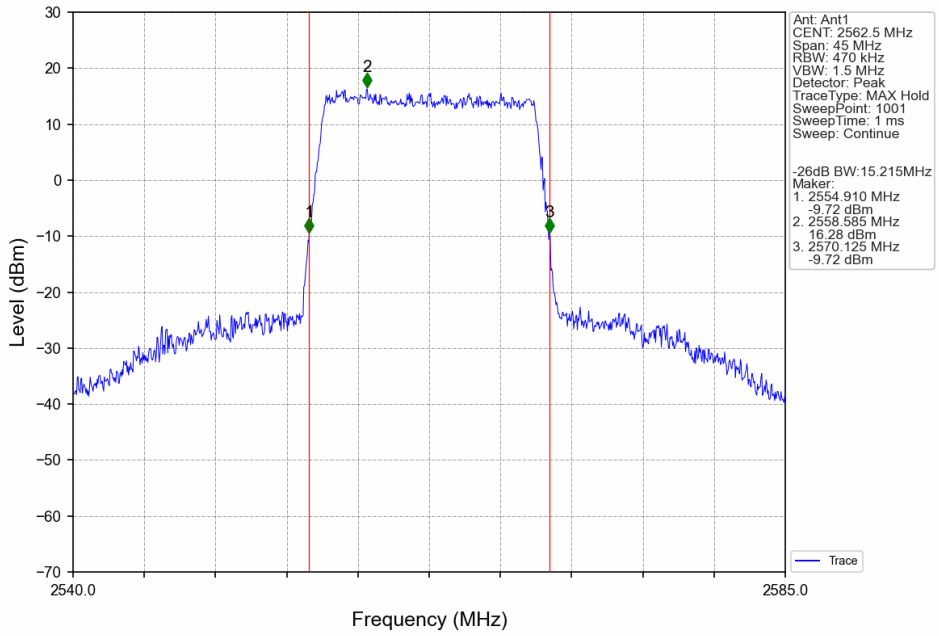

Band7_15MHz_16QAM_LCH_2507.5MHz_RB_75_0_NTNV



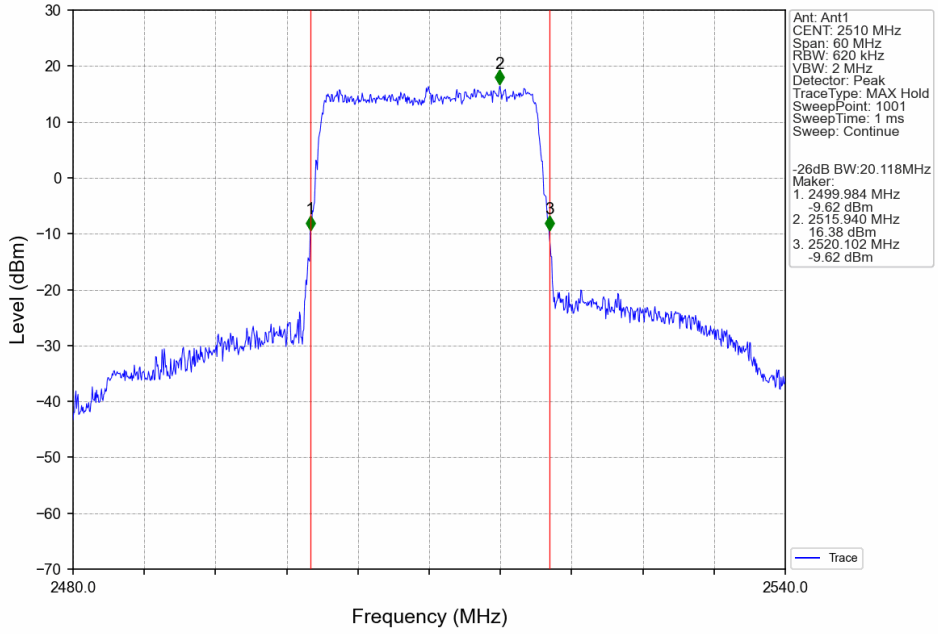
Band7_15MHz_16QAM_MCH_2535MHz_RB_75_0_NTNV



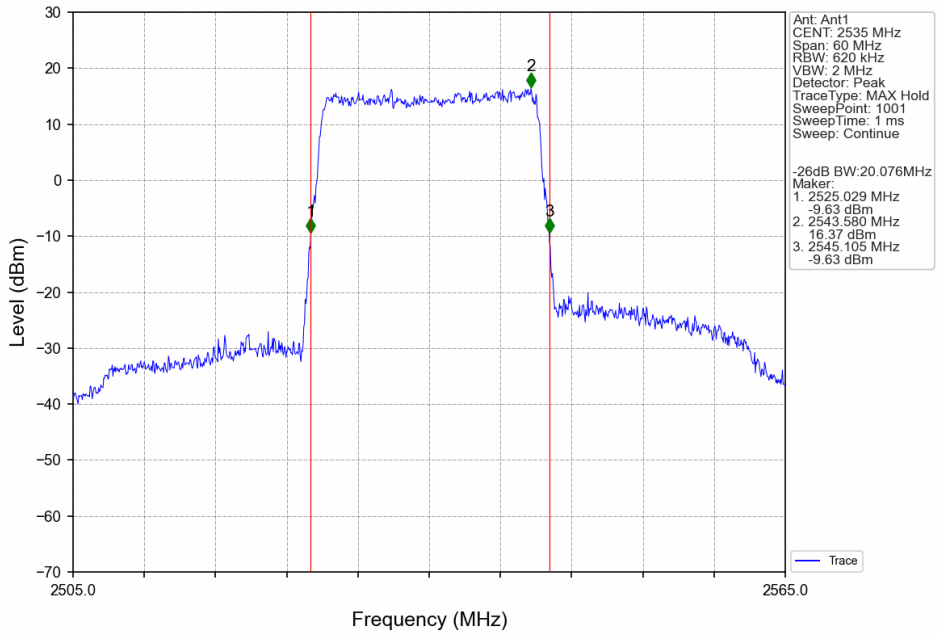

Band7_15MHz_16QAM_HCH_2562.5MHz_RB_75_0_NTNV



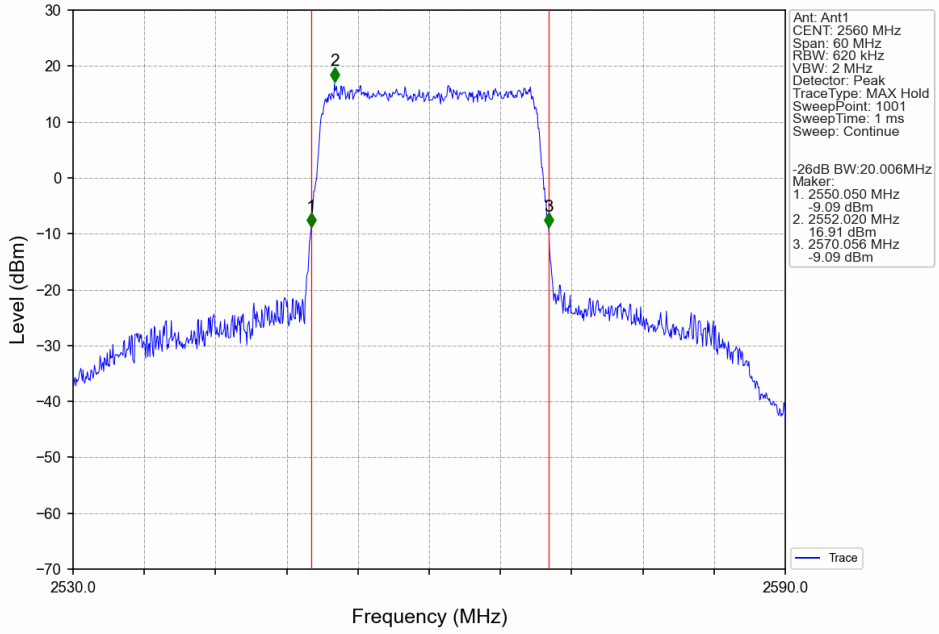
Band7_20MHz_QPSK_LCH_2510MHz_RB_100_0_NTNV



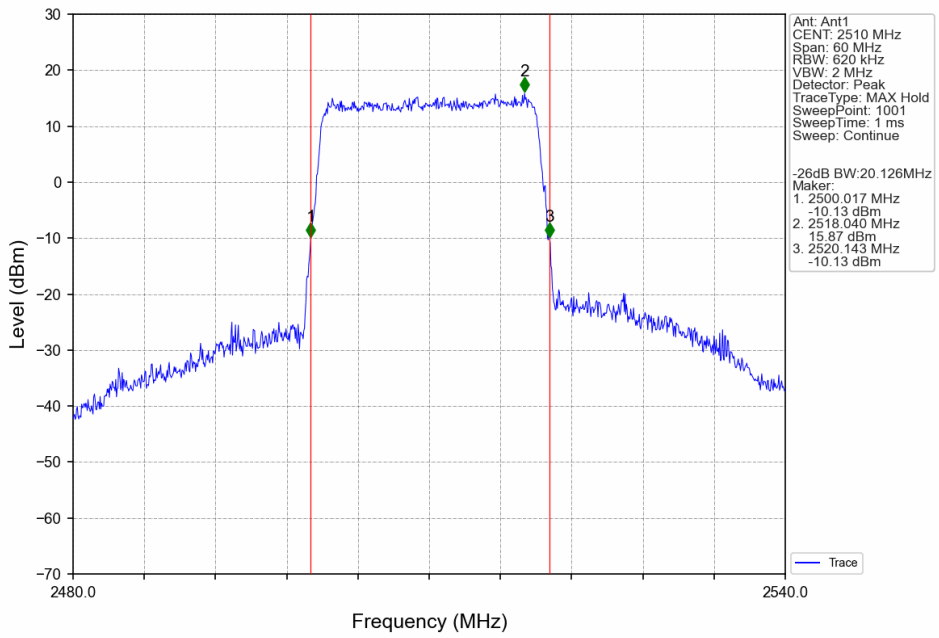

Band7_20MHz_QPSK_MCH_2535MHz_RB_100_0_NTNV



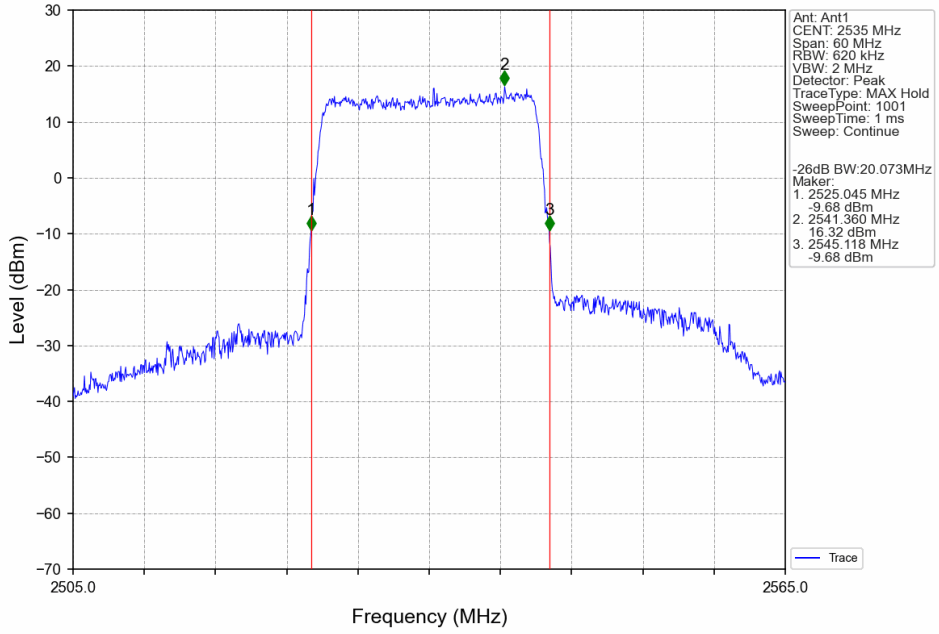
Band7_20MHz_QPSK_HCH_2560MHz_RB_100_0_NTNV



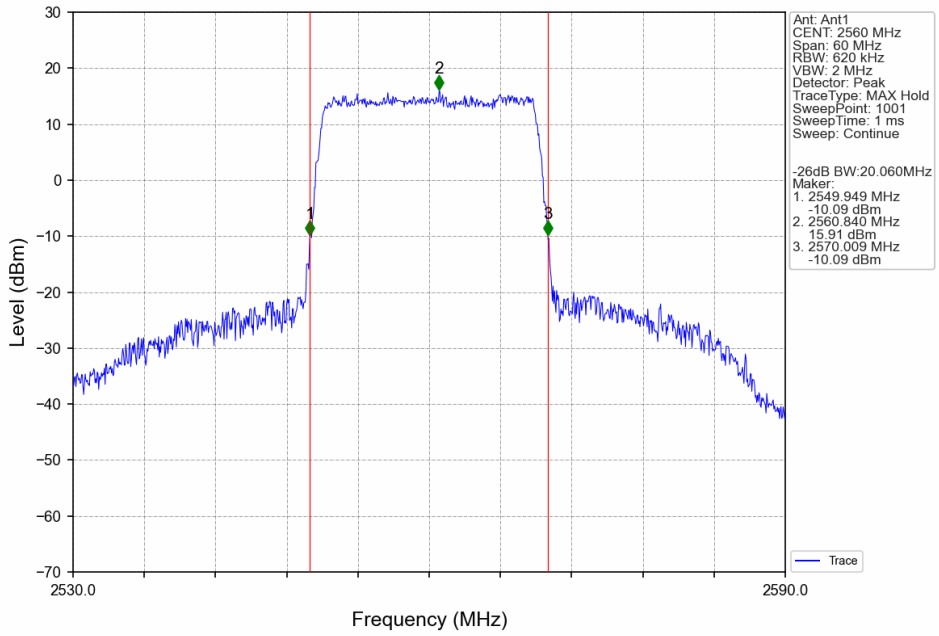

Band7_20MHz_16QAM_LCH_2510MHz_RB_100_0_NTNV



Band7_20MHz_16QAM_MCH_2535MHz_RB_100_0_NTNV




Band7_20MHz_16QAM_HCH_2560MHz_RB_100_0_NTNV



# 5. Peak-Average Ratio

## 5.1 Test Result

### 5.1.1 B7_5MHz

| Band: 7 / Bandwidth: 5MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2502.5 | 25 | 0 | 5.58 | <=13 | Pass |
| | 2535 | 25 | 0 | 5.69 | <=13 | Pass |
| | 2567.5 | 25 | 0 | 5.56 | <=13 | Pass |
| 16QAM | 2502.5 | 25 | 0 | 6.32 | <=13 | Pass |
| | 2535 | 25 | 0 | 6.37 | <=13 | Pass |
| | 2567.5 | 25 | 0 | 6.19 | <=13 | Pass |

### 5.1.2 B7_10MHz

| Band: 7 / Bandwidth: 10MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2505 | 50 | 0 | 5.65 | <=13 | Pass |
| | 2535 | 50 | 0 | 5.69 | <=13 | Pass |
| | 2565 | 50 | 0 | 5.58 | <=13 | Pass |
| 16QAM | 2505 | 50 | 0 | 6.33 | <=13 | Pass |
| | 2535 | 50 | 0 | 6.45 | <=13 | Pass |
| | 2565 | 50 | 0 | 6.21 | <=13 | Pass |

### 5.1.3 B7_15MHz

| Band: 7 / Bandwidth: 15MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2507.5 | 75 | 0 | 5.91 | <=13 | Pass |
| | 2535 | 75 | 0 | 5.96 | <=13 | Pass |
| | 2562.5 | 75 | 0 | 5.76 | <=13 | Pass |
| 16QAM | 2507.5 | 75 | 0 | 6.31 | <=13 | Pass |
| | 2535 | 75 | 0 | 6.43 | <=13 | Pass |
| | 2562.5 | 75 | 0 | 6.20 | <=13 | Pass |

### 5.1.4 B7_20MHz

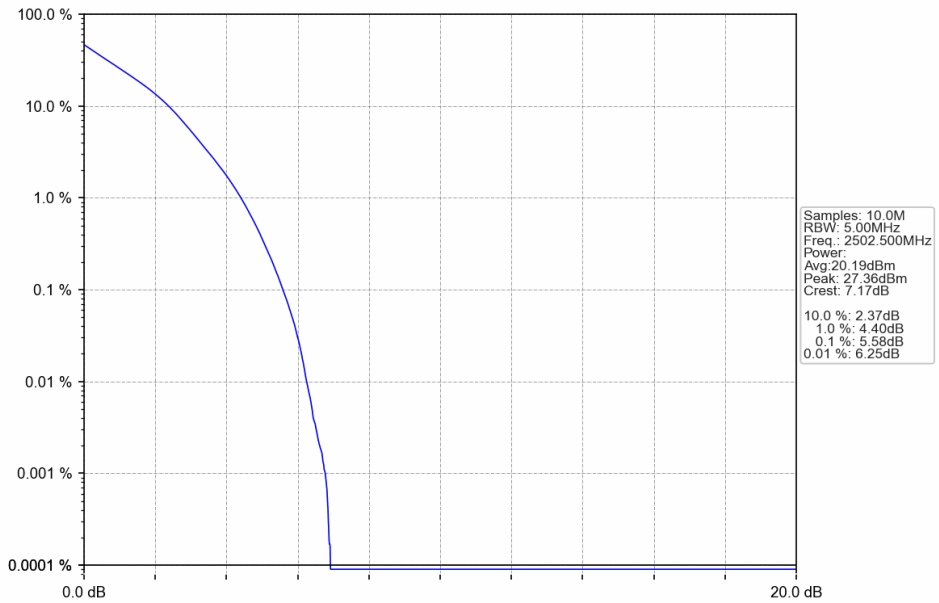
| Band: 7 / Bandwidth: 20MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Peak-Average Ratio (dB) | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2510 | 100 | 0 | 5.71 | <=13 | Pass |
| | 2535 | 100 | 0 | 5.73 | <=13 | Pass |
| | 2560 | 100 | 0 | 5.51 | <=13 | Pass |
| 16QAM | 2510 | 100 | 0 | 6.32 | <=13 | Pass |
| | 2535 | 100 | 0 | 6.40 | <=13 | Pass |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 2560 | 100 | 0 | 6.21 | <=13 | Pass |

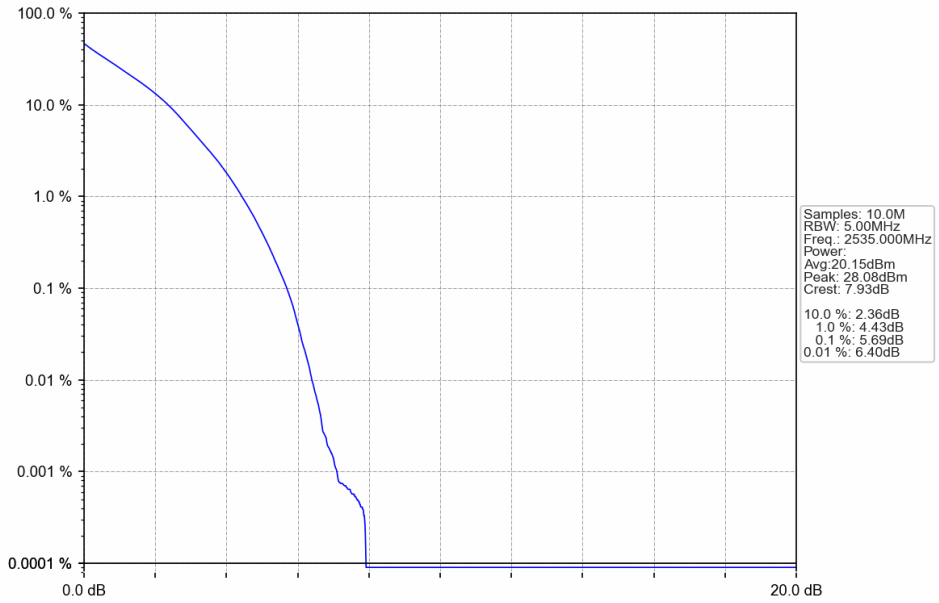
## 5.2 Test Graph

### 5.2.1 B7_5MHz

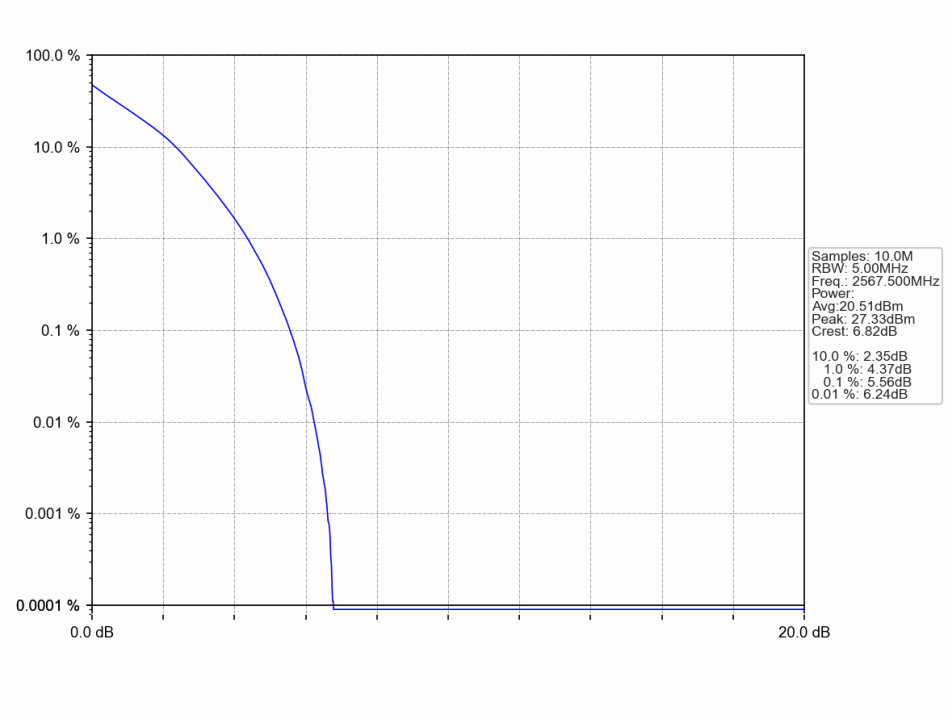
Band7_5MHz_QPSK_LCH_2502.5MHz_RB_25_0_NTNV



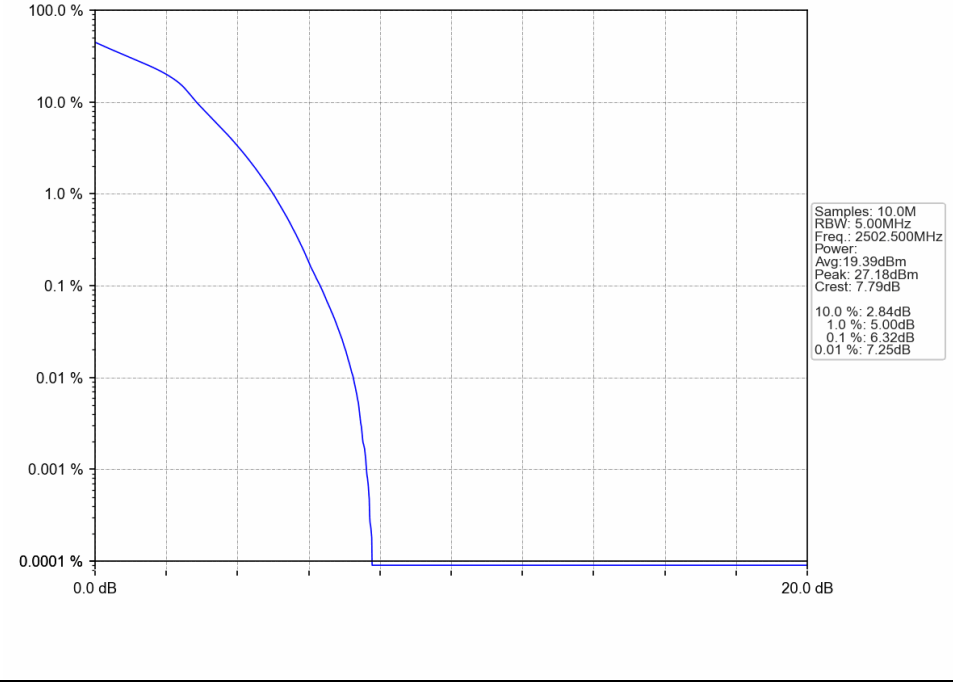

Band7_5MHz_QPSK_MCH_2535MHz_RB_25_0_NTNV



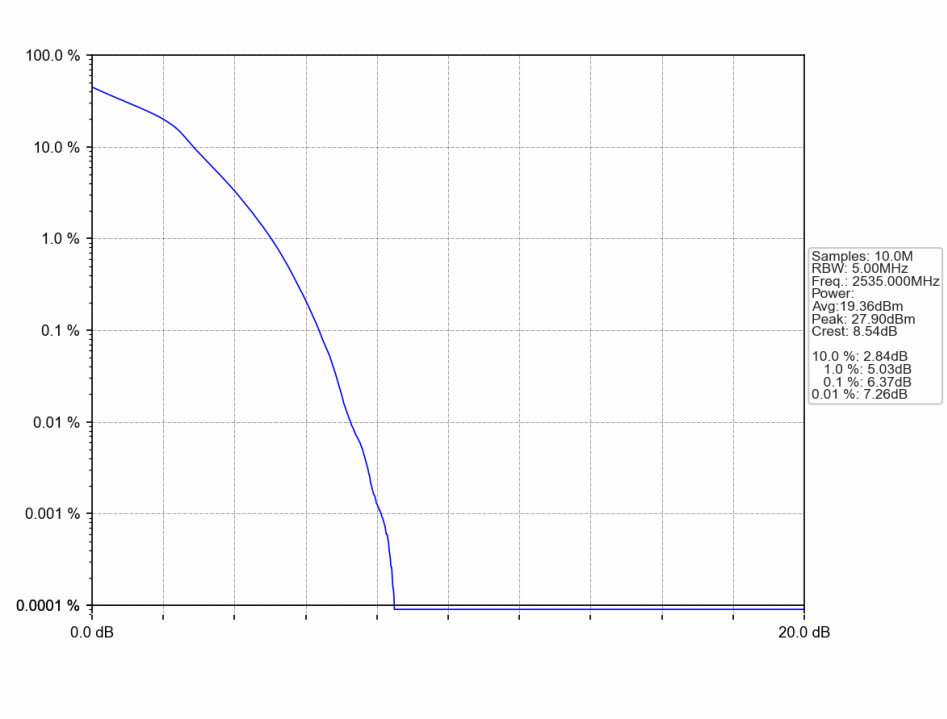
Band7_5MHz_QPSK_HCH_2567.5MHz_RB_25_0_NTNV



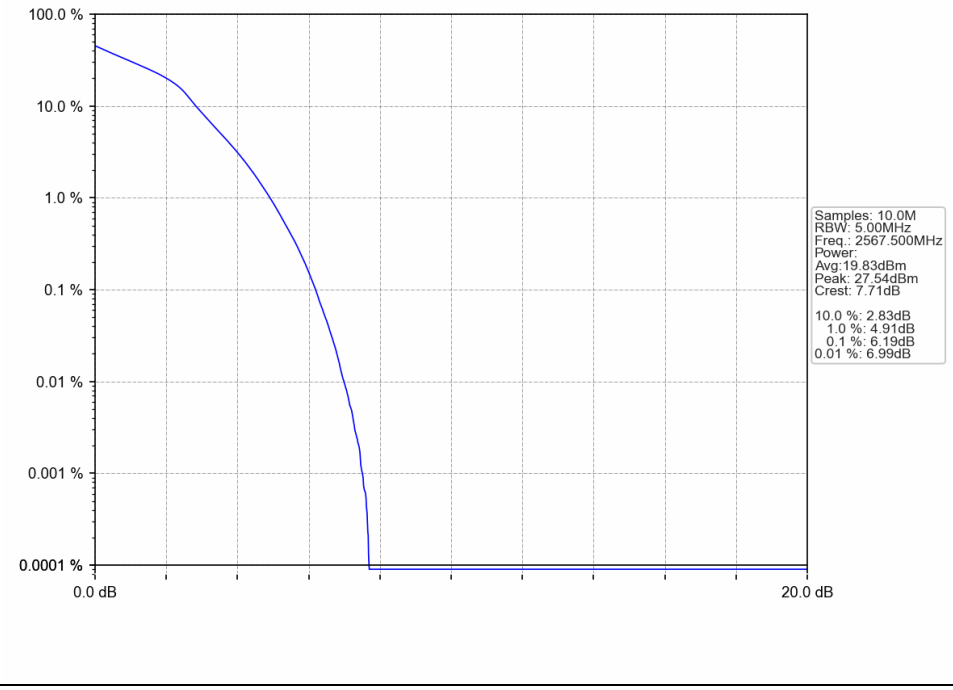

Band7_5MHz_16QAM_LCH_2502.5MHz_RB_25_0_NTNV



Band7_5MHz_16QAM_MCH_2535MHz_RB_25_0_NTNV

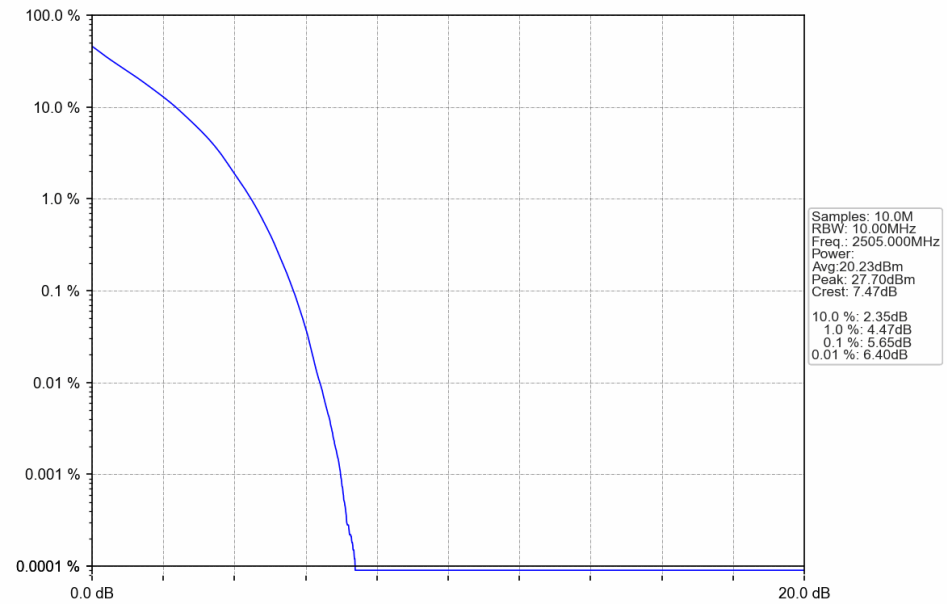



Band7_5MHz_16QAM_HCH_2567.5MHz_RB_25_0_NTNV

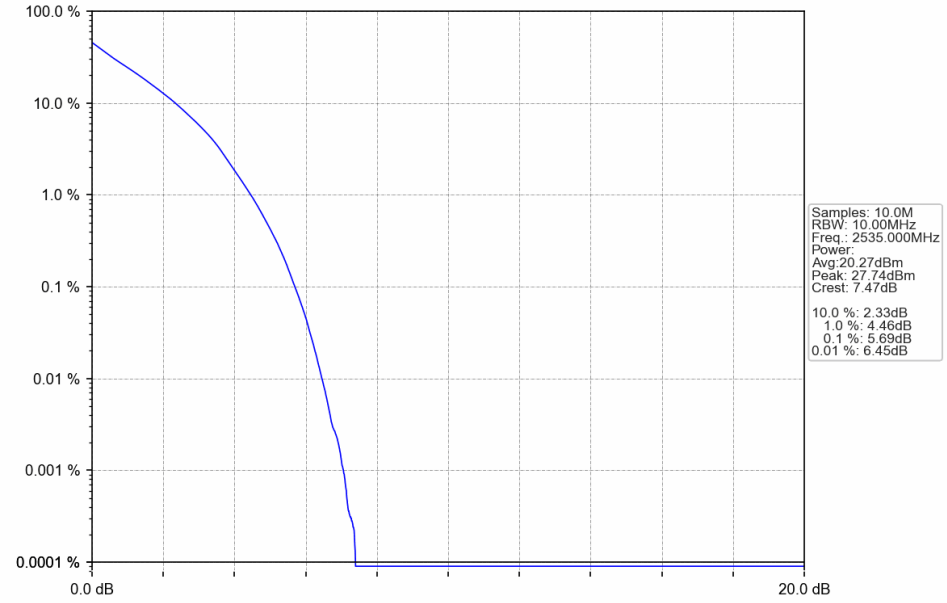


## 5.2.2 B7_10MHz

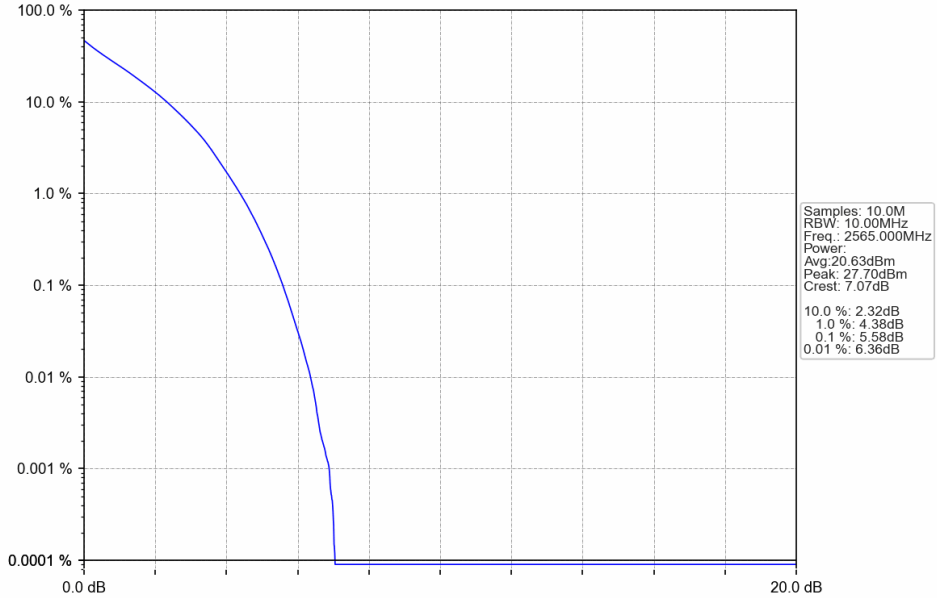
Band7_10MHz_QPSK_LCH_2505MHz_RB_50_0_NTNV



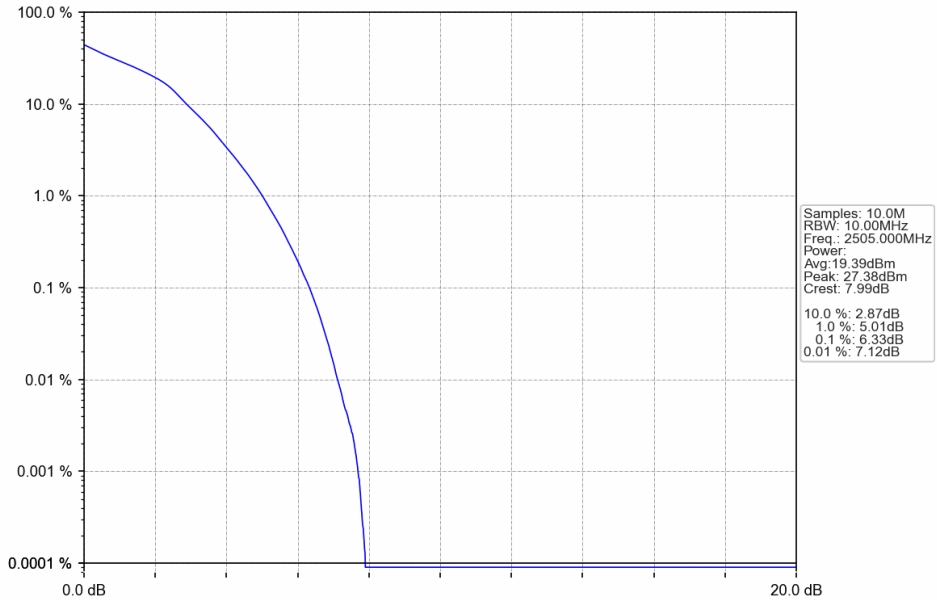

Band7_10MHz_QPSK_MCH_2535MHz_RB_50_0_NTNV



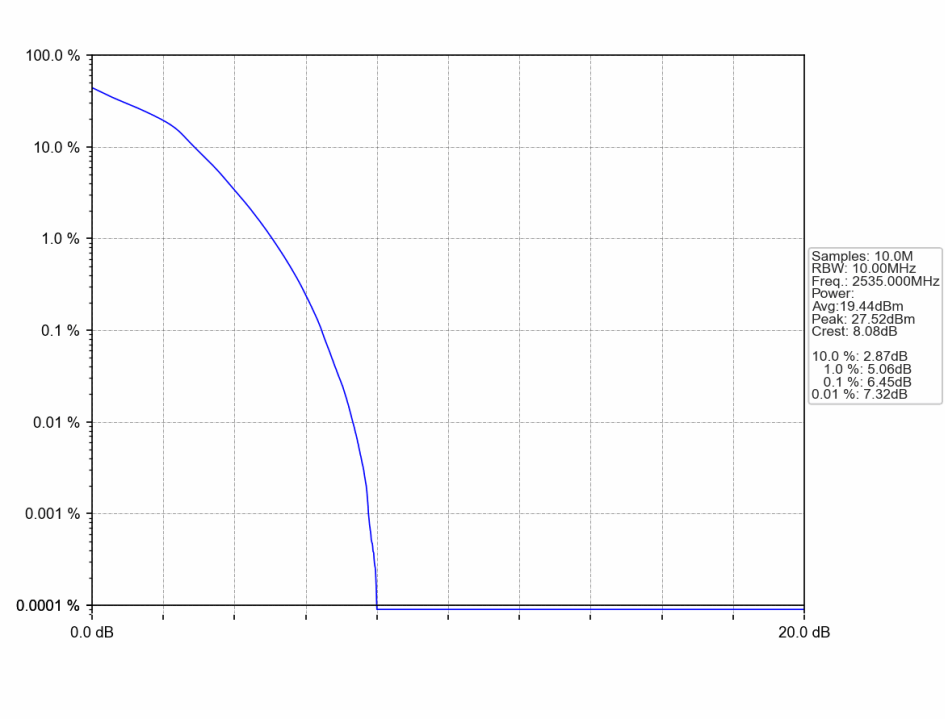
Band7_10MHz_QPSK_HCH_2565MHz_RB_50_0_NTNV



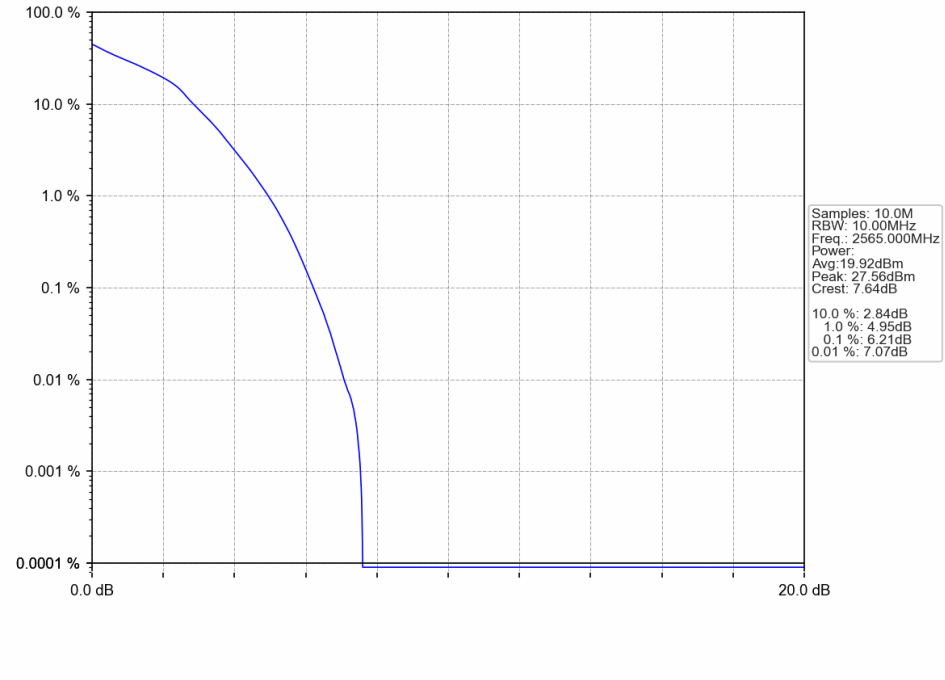

Band7_10MHz_16QAM_LCH_2505MHz_RB_50_0_NTNV



Band7_10MHz_16QAM_MCH_2535MHz_RB_50_0_NTNV

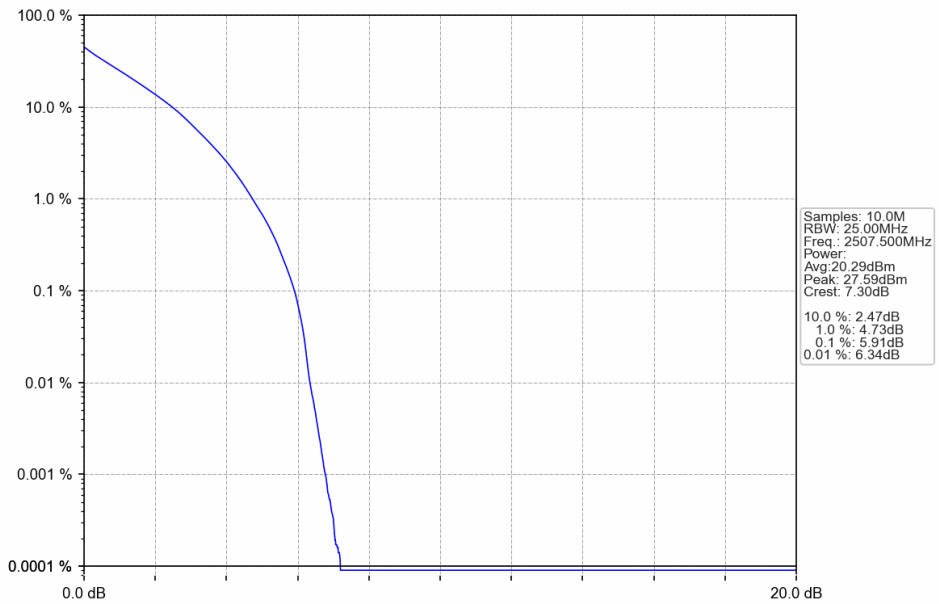



Band7_10MHz_16QAM_HCH_2565MHz_RB_50_0_NTNV

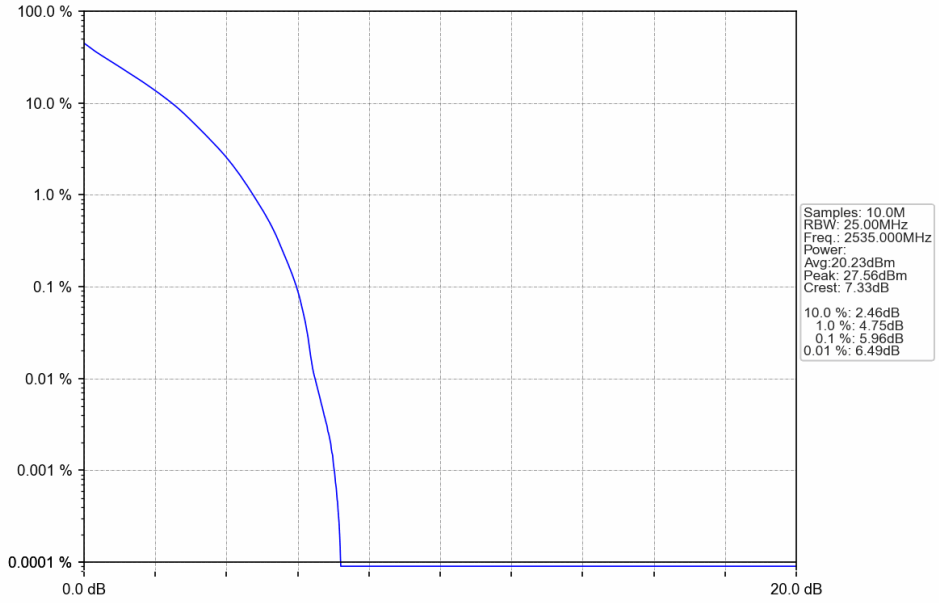


## 5.2.3 B7_15MHz

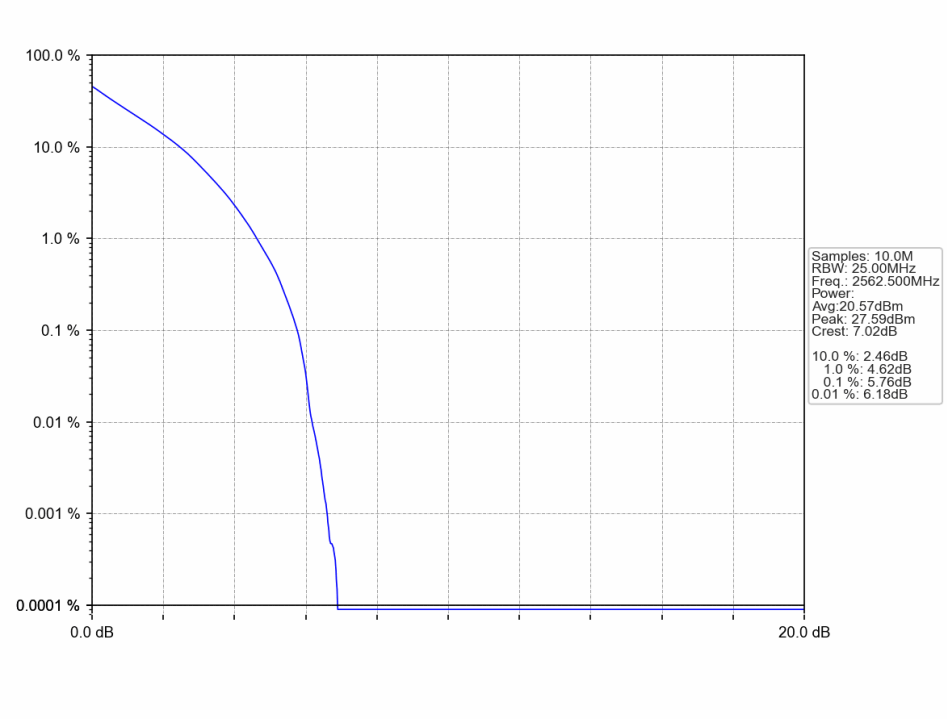
Band7_15MHz_QPSK_LCH_2507.5MHz_RB_75_0_NTNV



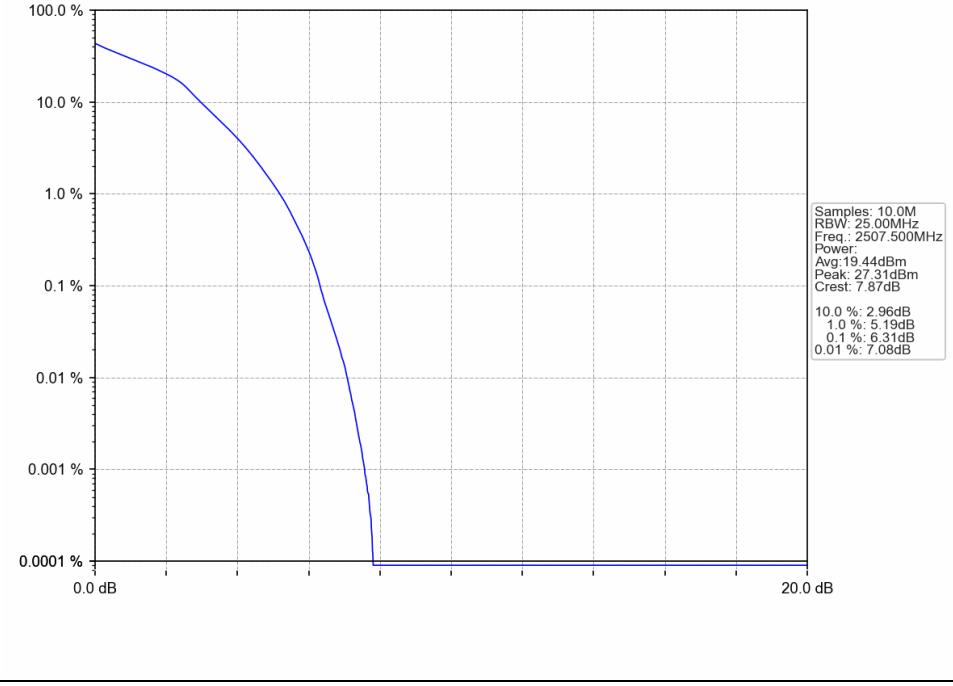

Band7_15MHz_QPSK_MCH_2535MHz_RB_75_0_NTNV



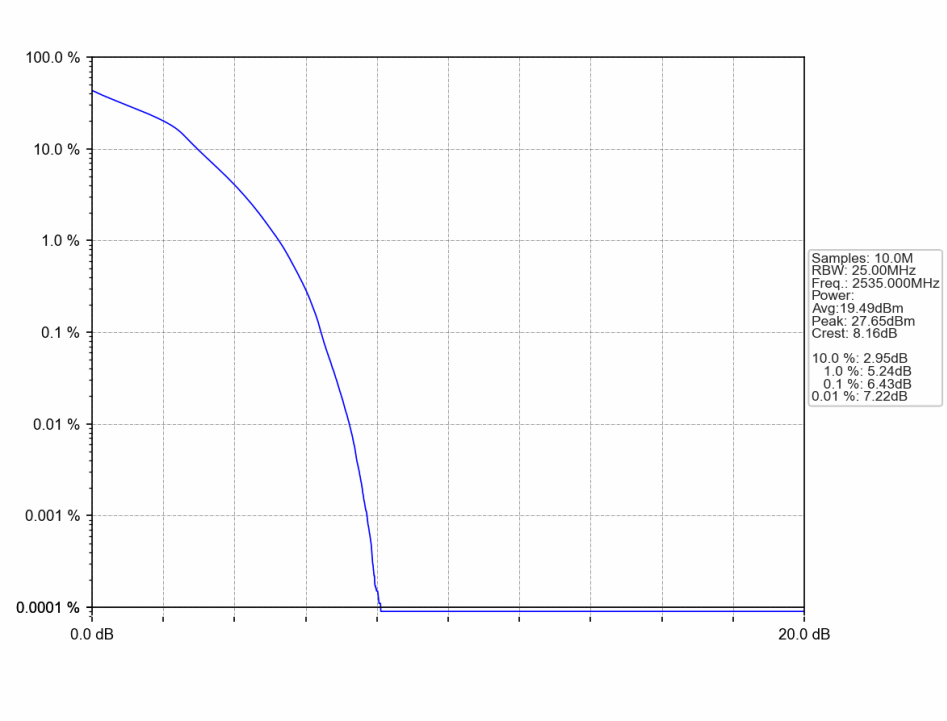
Band7_15MHz_QPSK_HCH_2562.5MHz_RB_75_0_NTNV



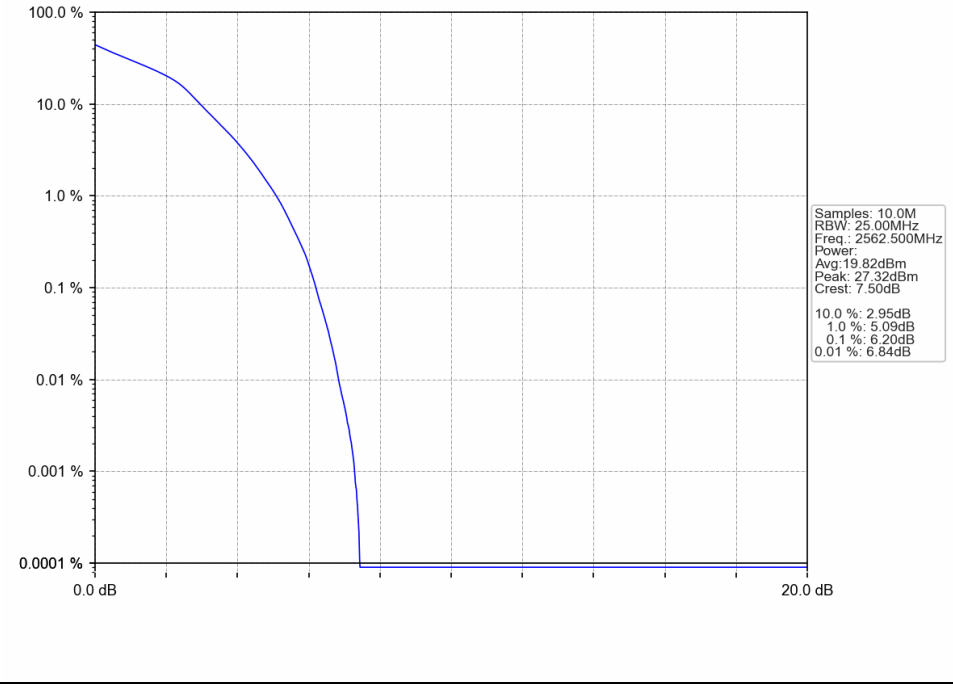

Band7_15MHz_16QAM_LCH_2507.5MHz_RB_75_0_NTNV



Band7_15MHz_16QAM_MCH_2535MHz_RB_75_0_NTNV

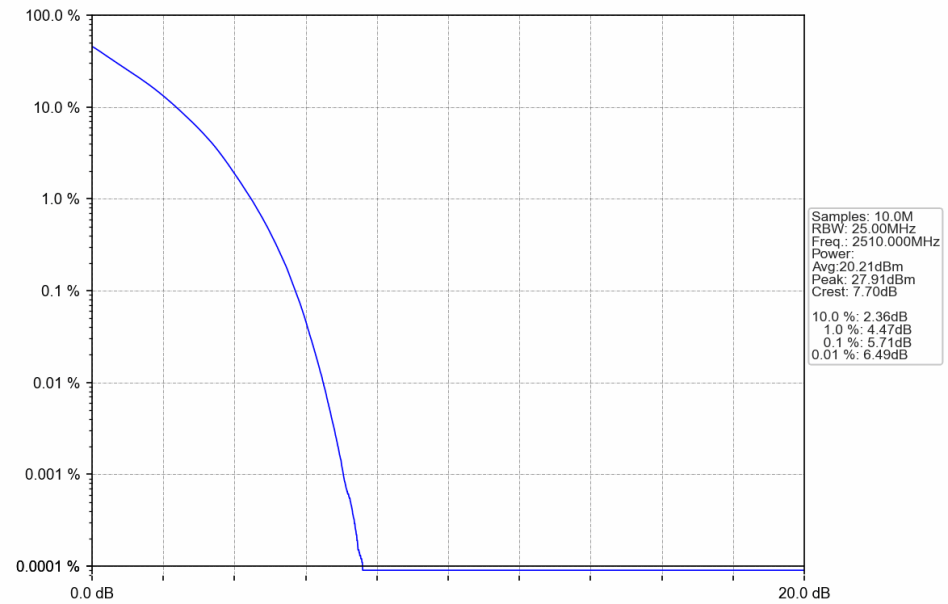



Band7_15MHz_16QAM_HCH_2562.5MHz_RB_75_0_NTNV

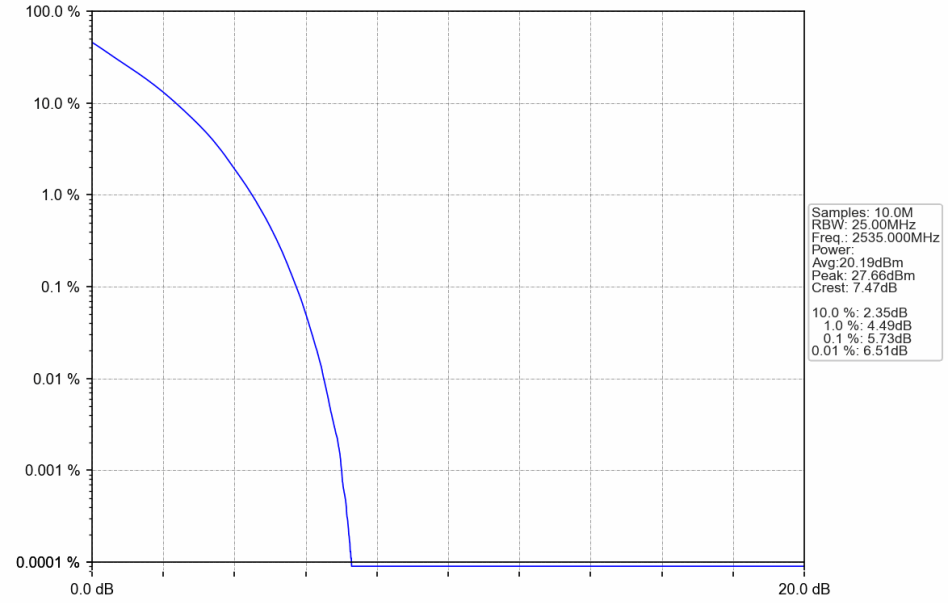


## 5.2.4 B7_20MHz

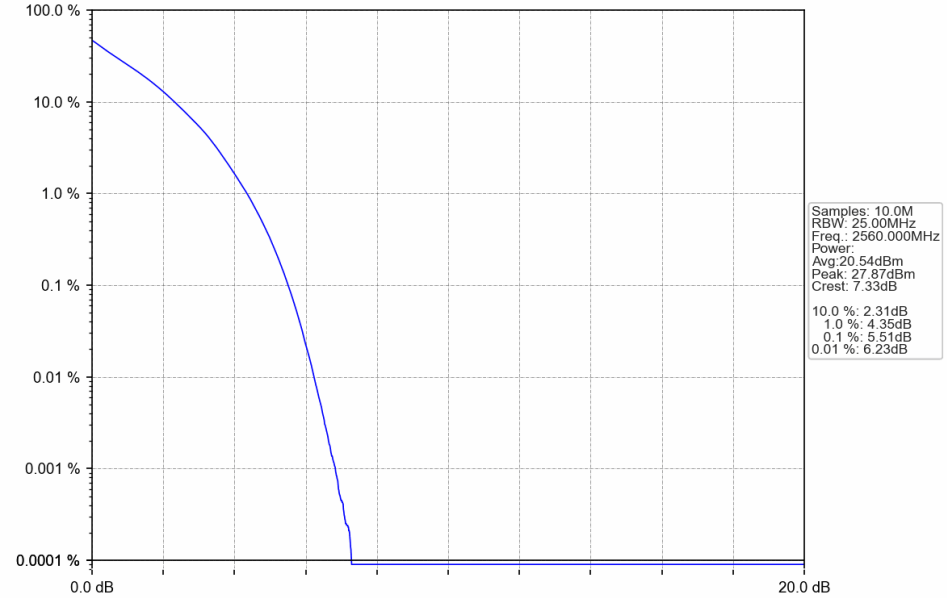
Band7_20MHz_QPSK_LCH_2510MHz_RB_100_0_NTNV



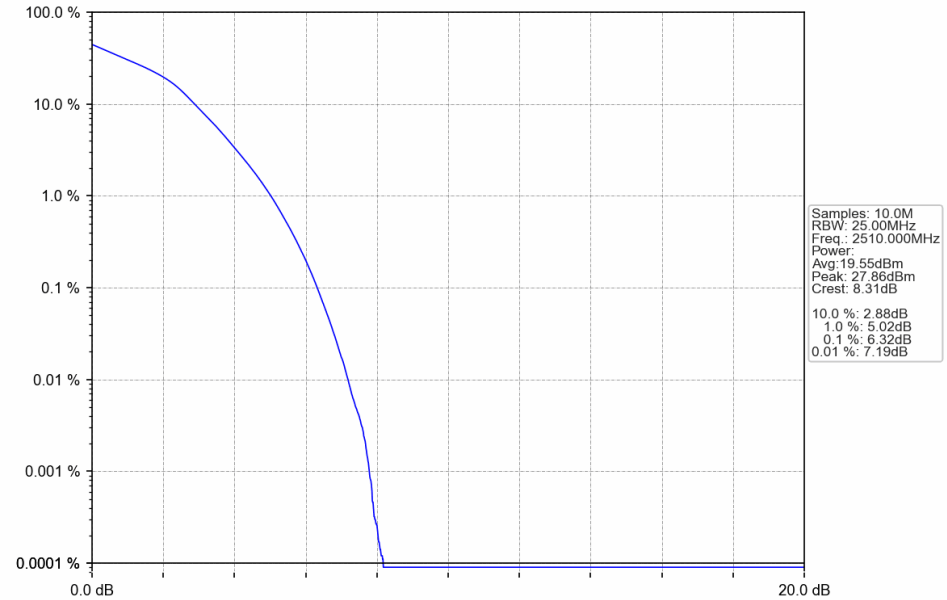

Band7_20MHz_QPSK_MCH_2535MHz_RB_100_0_NTNV



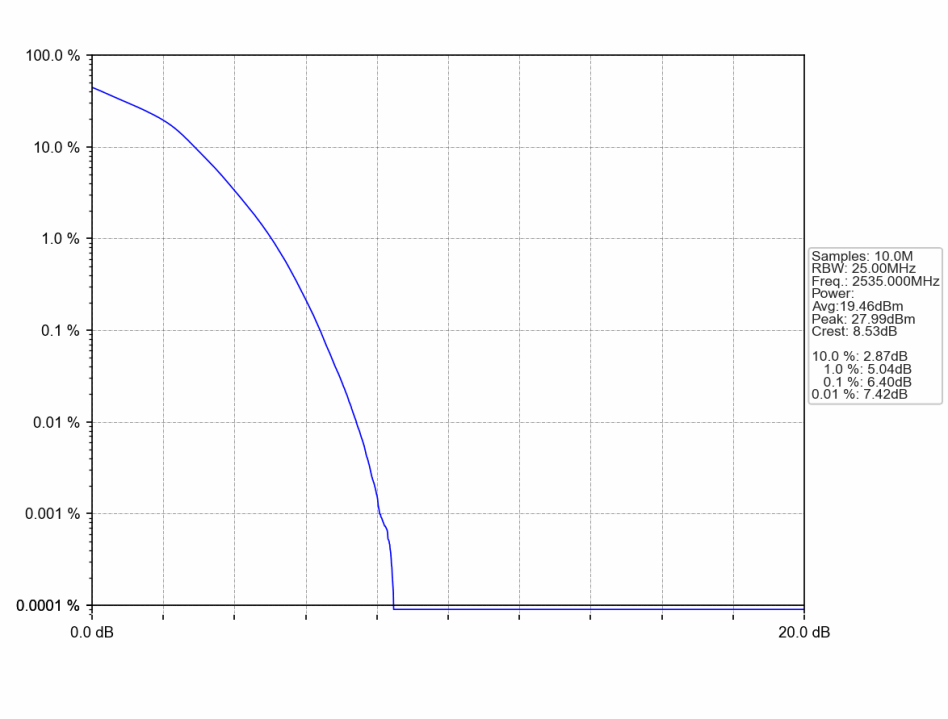
Band7_20MHz_QPSK_HCH_2560MHz_RB_100_0_NTNV



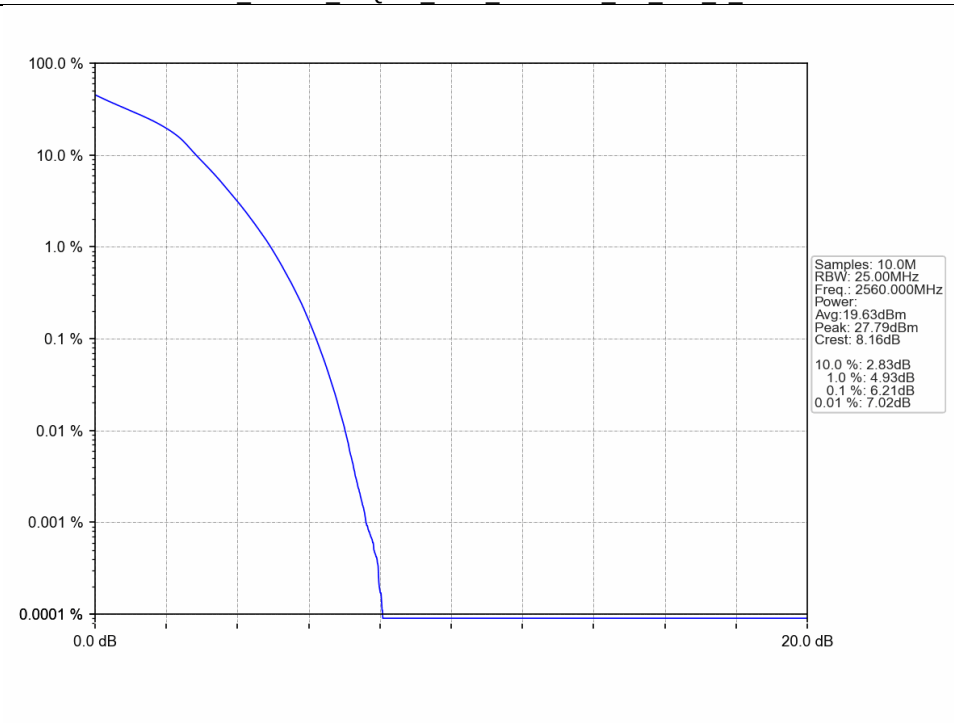

Band7_20MHz_16QAM_LCH_2510MHz_RB_100_0_NTNV



Band7_20MHz_16QAM_MCH_2535MHz_RB_100_0_NTNV




Band7_20MHz_16QAM_HCH_2560MHz_RB_100_0_NTNV



# 6. Spurious Emission

## 6.1 Test Result

### 6.1.1 B7_5MHz

| Band: 7 / Bandwidth: 5MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Spurious Emission | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2502.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | | 25 | 0 | Refer To Test Graph | | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | | Pass |
| | 2567.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 24 | Refer To Test Graph | | Pass |
| | | 25 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2502.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | | 25 | 0 | Refer To Test Graph | | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | | Pass |
| | 2567.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 24 | Refer To Test Graph | | Pass |
| | | 25 | 0 | Refer To Test Graph | | Pass |

### 6.1.2 B7_10MHz

| Band: 7 / Bandwidth: 10MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Spurious Emission | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2505 | 1 | 0 | Refer To Test Graph | | Pass |
| | | 50 | 0 | Refer To Test Graph | | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | | Pass |
| | 2565 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 49 | Refer To Test Graph | | Pass |
| | | 50 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2505 | 1 | 0 | Refer To Test Graph | | Pass |
| | | 50 | 0 | Refer To Test Graph | | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | | Pass |
| | 2565 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 49 | Refer To Test Graph | | Pass |
| | | 50 | 0 | Refer To Test Graph | | Pass |

### 6.1.3 B7_15MHz

| Band: 7 / Bandwidth: 15MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Spurious Emission | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2507.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | | 75 | 0 | Refer To Test Graph | | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | | Pass |
| | 2562.5 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 74 | Refer To Test Graph | | Pass |
| | | 75 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2507.5 | 1 | 0 | Refer To Test Graph | | Pass |

| | | | | | |
|---|---|---|---|---|---|
| | | 75 | 0 | Refer To Test Graph | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | Pass |
| | 2562.5 | 1 | 0 | Refer To Test Graph | Pass |
| | | | 74 | Refer To Test Graph | Pass |
| | | 75 | 0 | Refer To Test Graph | Pass |

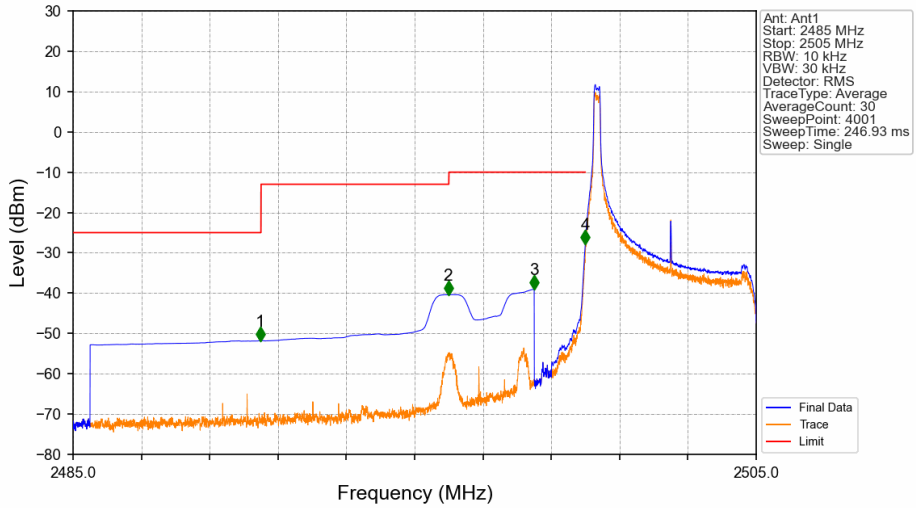
## 6.1.4 B7_20MHz

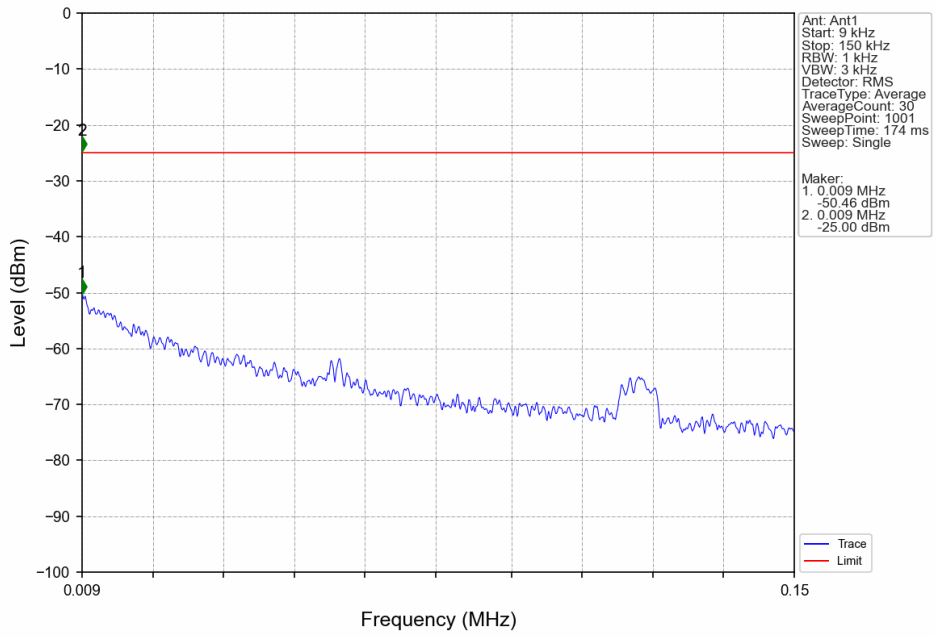
| Band: 7 / Bandwidth: 20MHz / NTNV | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Frequency (MHz) | RB Allocation | | Spurious Emission | | Verdict |
| | | Size | Offset | Result | Limit | |
| QPSK | 2510 | 1 | 0 | Refer To Test Graph | | Pass |
| | | 100 | 0 | Refer To Test Graph | | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | | Pass |
| | 2560 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 99 | Refer To Test Graph | | Pass |
| | | 100 | 0 | Refer To Test Graph | | Pass |
| 16QAM | 2510 | 1 | 0 | Refer To Test Graph | | Pass |
| | | 100 | 0 | Refer To Test Graph | | Pass |
| | 2535 | 1 | 0 | Refer To Test Graph | | Pass |
| | 2560 | 1 | 0 | Refer To Test Graph | | Pass |
| | | | 99 | Refer To Test Graph | | Pass |
| | | 100 | 0 | Refer To Test Graph | | Pass |

## 6.2 Test Graph

### 6.2.1 B7_5MHz

Band7_5MHz_QPSK_LCH_2502.5MHz_RB_1_0_NTNV




| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| 2485 | 2490.5 | 1 | CHP | 1 | 2490.480 | -51.80 | -25 | Pass |
| 2490.5 | 2496 | 1 | CHP | 2 | 2495.985 | -40.40 | -13 | Pass |
| 2496 | 2499 | 1 | CHP | 3 | 2498.500 | -39.03 | -10 | Pass |
| 2499 | 2500 | 0.02 | CHP | 4 | 2499.995 | -27.94 | -10 | Pass |
| 2500 | 2505 | 0.02 | CHP | / | / | / | / | / |

Band7_5MHz_QPSK_LCH_2502.5MHz_RB_1_0_NTNV