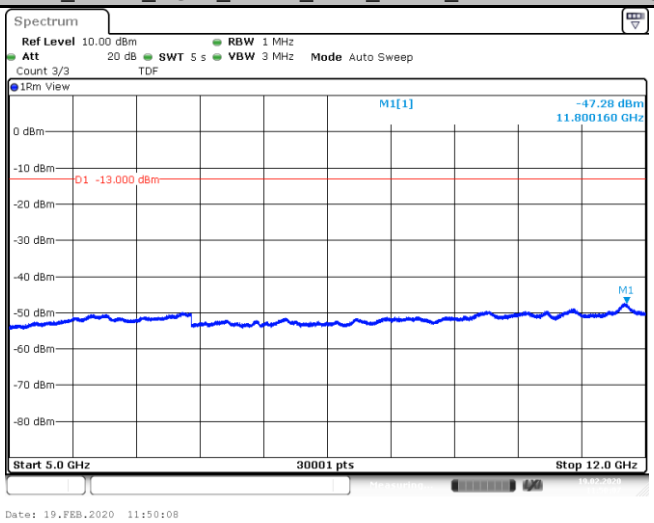
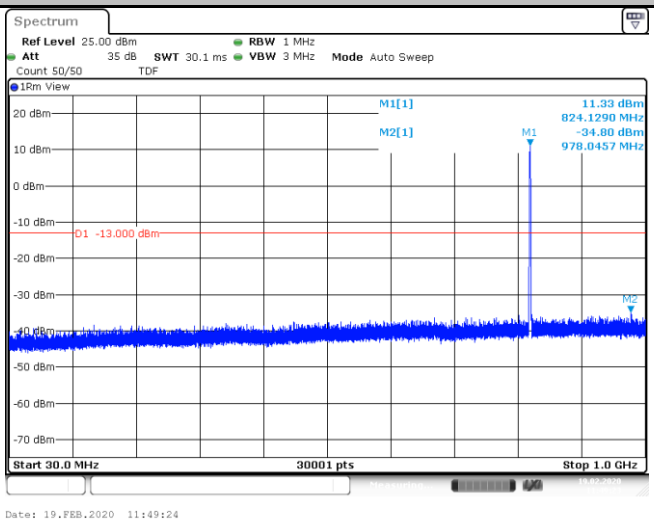
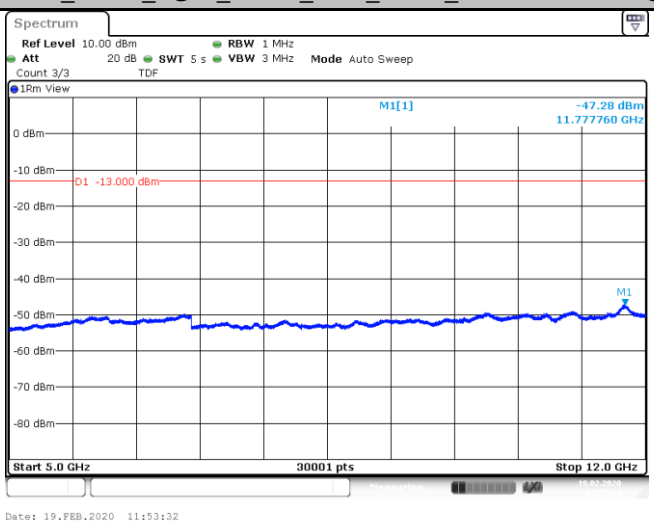
Band5_Stand-Alone_NaN_BPSK_20401_1@11_15kHz_5000_12000_5000~12000MHz@-47.28dBm_-13_PASS__



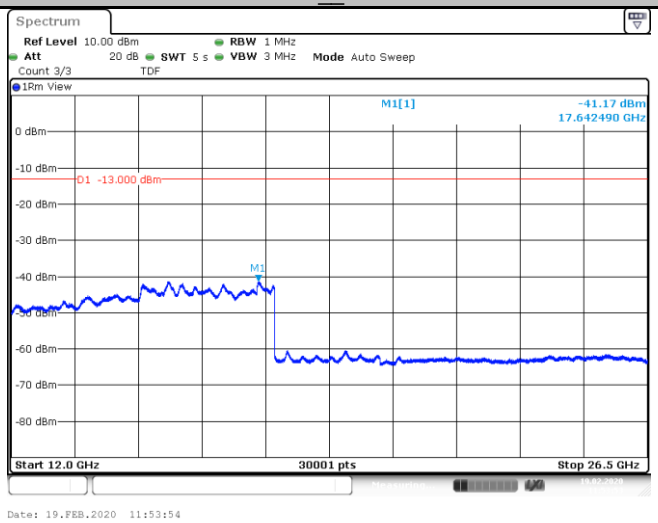

Band5_Stand-Alone_NaN_BPSK_20401_1@11_15kHz_30_1000_30~1000MHz@-34.8dBm_-13_PASS__



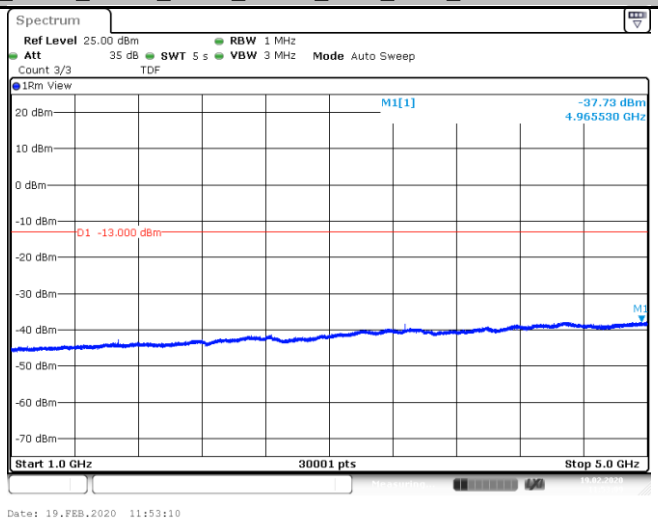

Band5_Stand-Alone_NaN_BPSK_20525_1@11_15kHz_5000_12000_5000~12000MHz@-47.28dBm_-13_PASS__



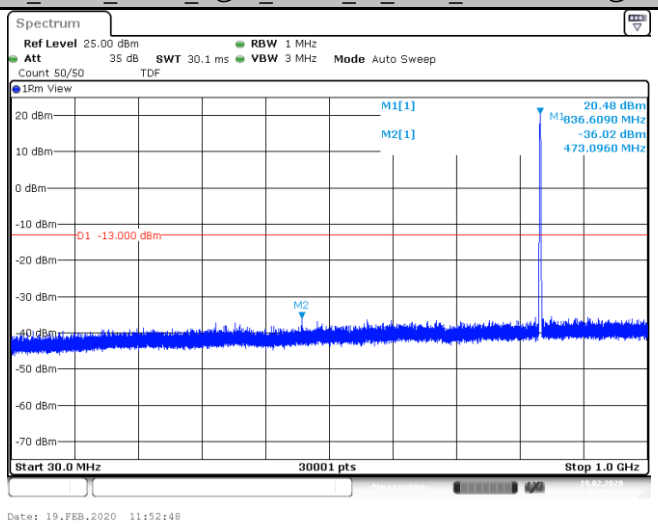
Band5_Stand-Alone_NaN_BPSK_20525_1@11_15kHz_12000_26500_12000~26500MHz@-41.17dBm_-13_PASS__



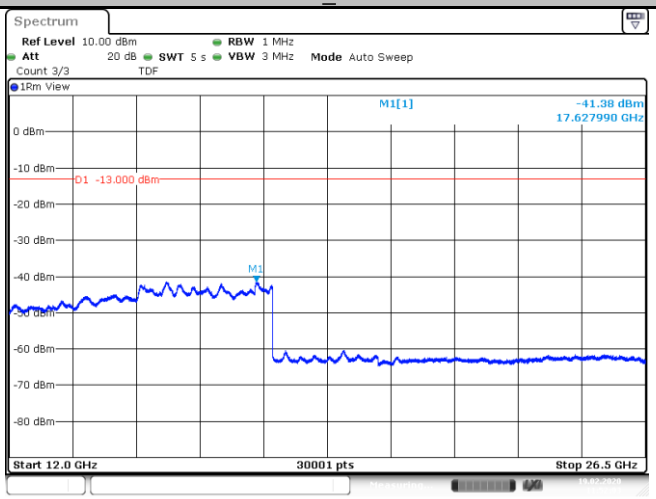

Band5_Stand-Alone_NaN_BPSK_20525_1@11_15kHz_1000_5000_1000~5000MHz@-37.73dBm_-13_PASS__



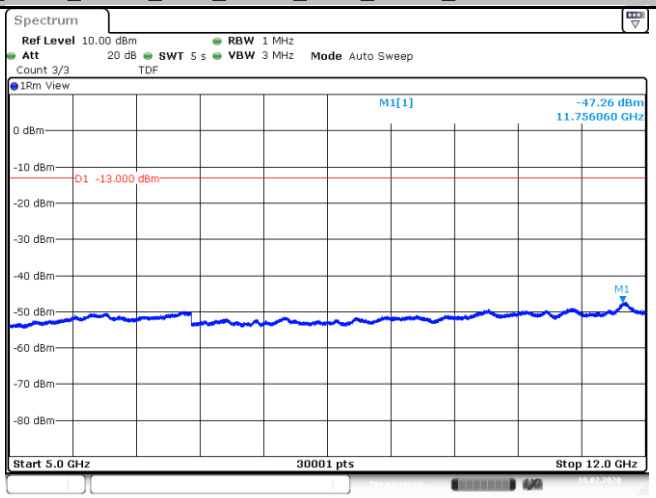

Band5_Stand-Alone_NaN_BPSK_20525_1@11_15kHz_30_1000_30~1000MHz@-36.02dBm_-13_PASS__



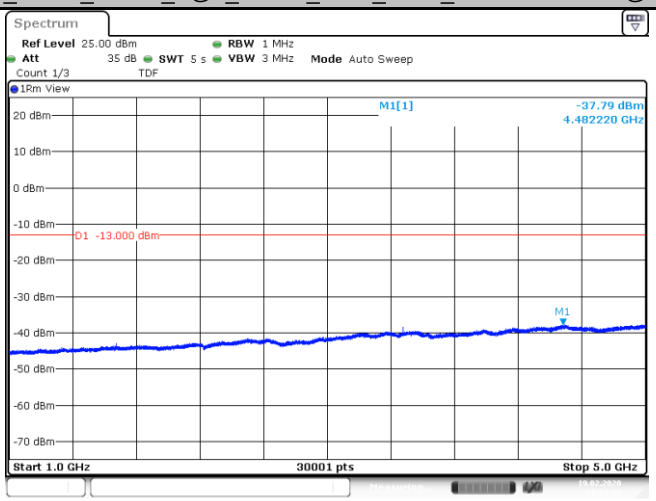
Band5_Stand-Alone_NaN_BPSK_20525_1@0_15kHz_12000_26500_12000~26500MHz@-41.38dBm_-13_PASS_



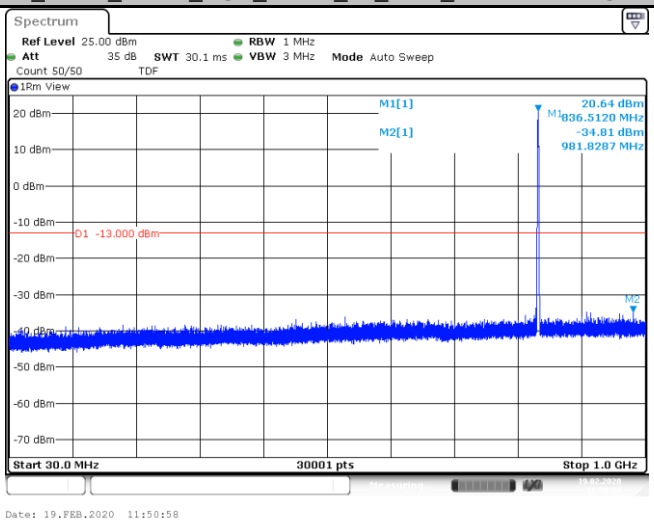

Band5_Stand-Alone_NaN_BPSK_20525_1@0_15kHz_5000_12000_5000~12000MHz@-47.26dBm_-13_PASS__



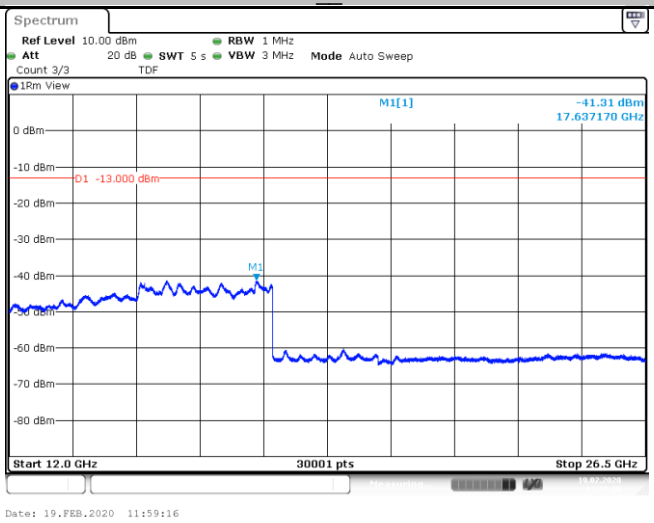

Band5_Stand-Alone_NaN_BPSK_20525_1@0_15kHz_1000_5000_1000~5000MHz@-37.79dBm_-13_PASS__



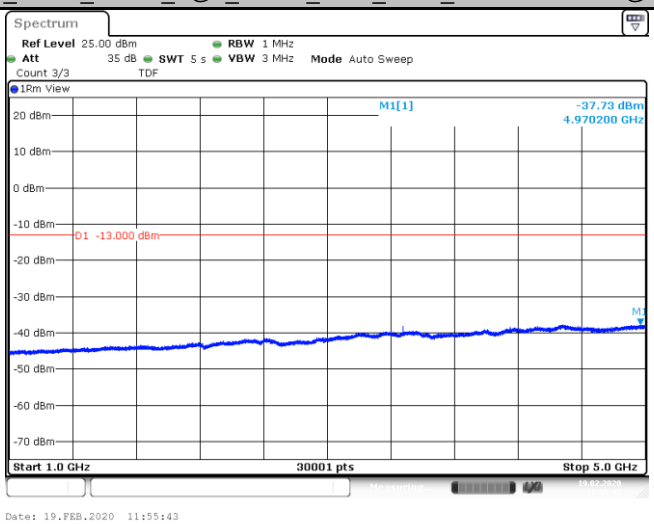
Band5_Stand-Alone_NaN_BPSK_20525_1@0_15kHz_30_1000_30~1000MHz@-34.81dBm_-13_PASS__



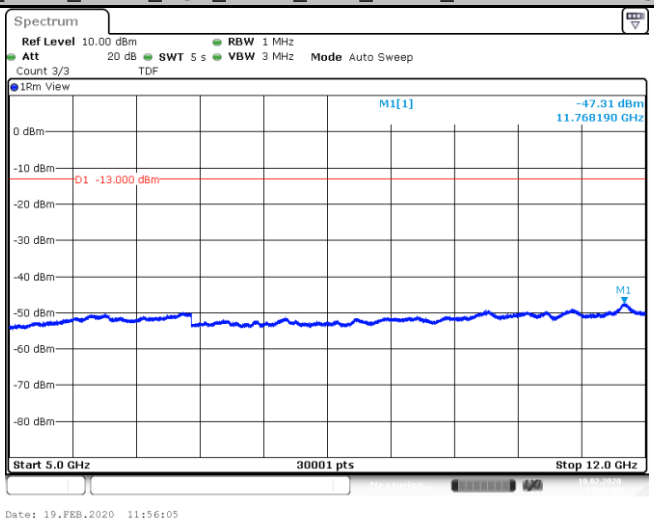

Band5_Stand-Alone_NaN_BPSK_20649_1@11_15kHz_12000_26500_12000~26500MHz@-41.31dBm_-13_PASS__



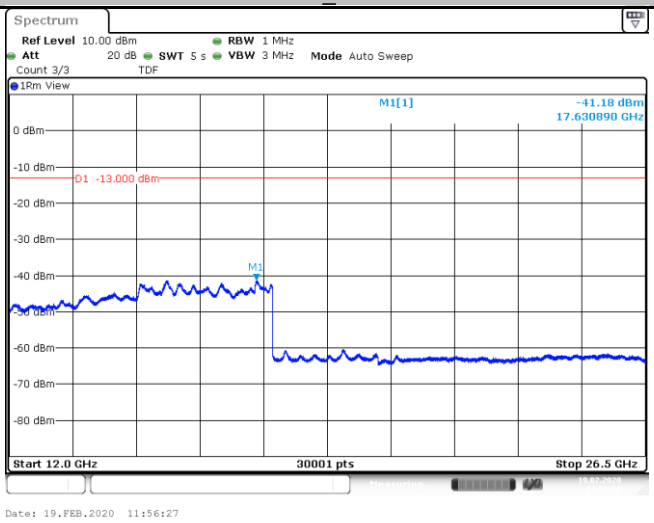

Band5_Stand-Alone_NaN_BPSK_20649_1@0_15kHz_1000_5000_1000~5000MHz@-37.73dBm_-13_PASS__



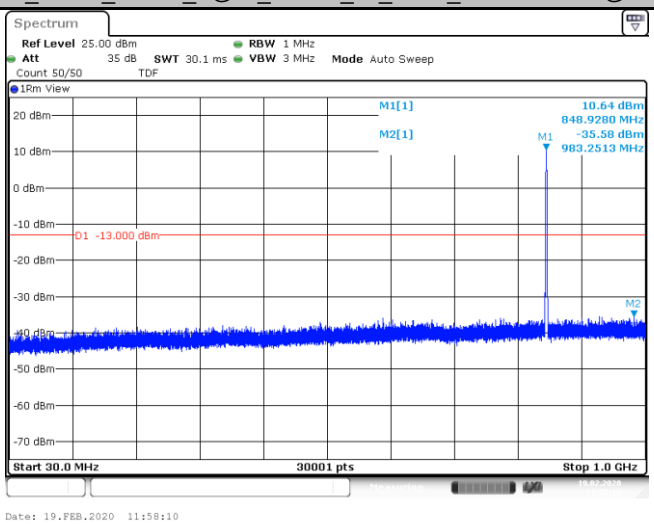
Band5_Stand-Alone_NaN_BPSK_20649_1@0_15kHz_5000_12000_5000~12000MHz@-47.31dBm_-13_PASS__



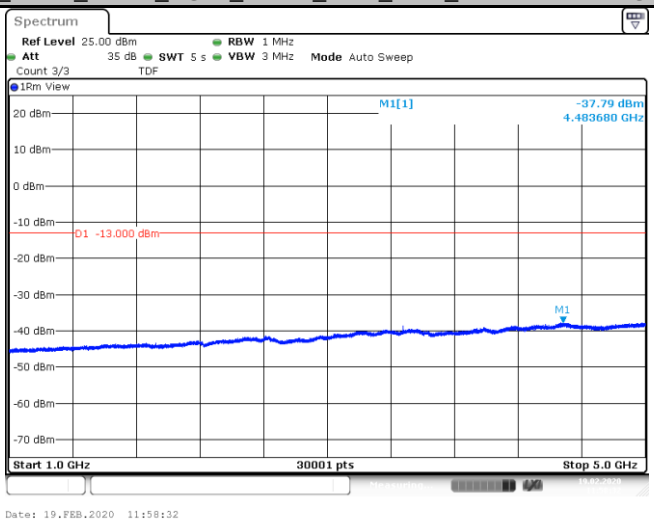

Band5_Stand-Alone_NaN_BPSK_20649_1@0_15kHz_12000_26500_12000~26500MHz@-41.18dBm_-13_PASS_
_



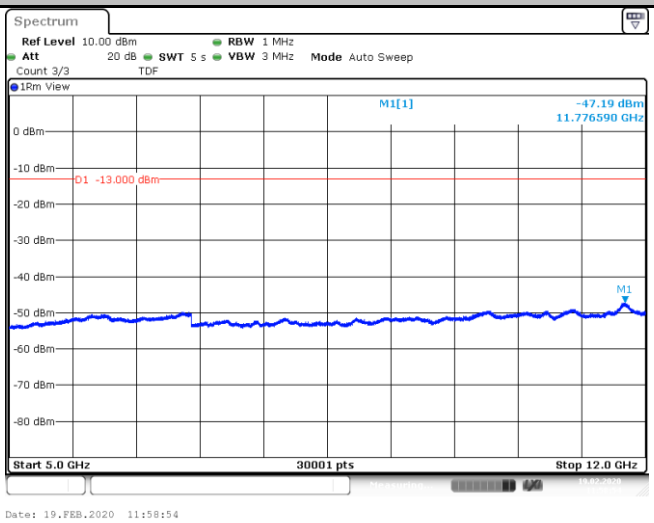

Band5_Stand-Alone_NaN_BPSK_20649_1@11_15kHz_30_1000_30~1000MHz@-35.58dBm_-13_PASS__



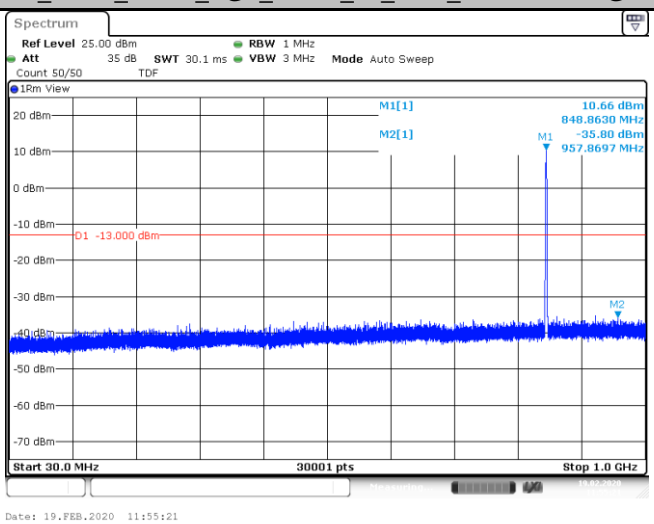
Band5_Stand-Alone_NaN_BPSK_20649_1@11_15kHz_1000_5000_1000~5000MHz@-37.79dBm_-13_PASS__



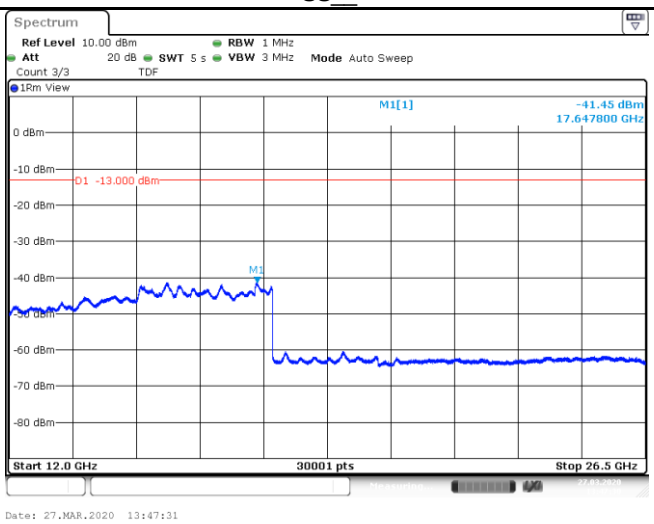

Band5_Stand-Alone_NaN_BPSK_20649_1@11_15kHz_5000_12000_5000~12000MHz@-47.19dBm_-13_PASS__



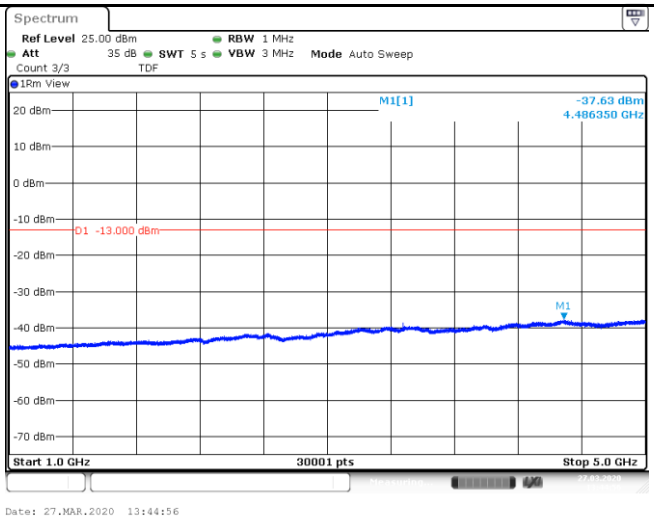

Band5_Stand-Alone_NaN_BPSK_20649_1@0_15kHz_30_1000_30~1000MHz@-35.8dBm_-13_PASS__



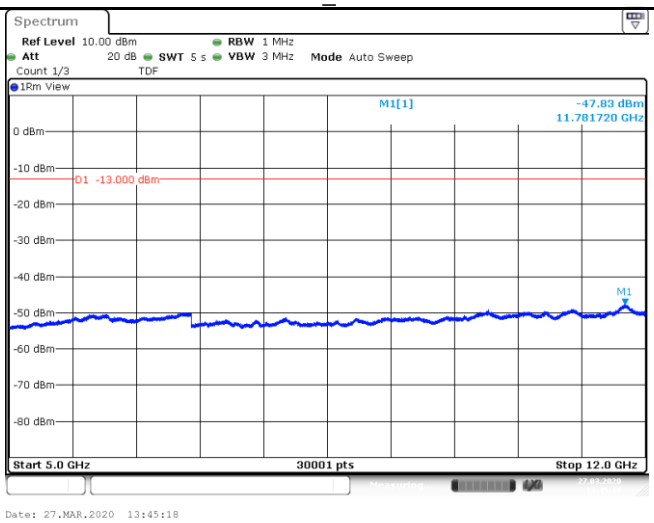
Band5_Stand-Alone_NaN_QPSK_20401_1@47_3.75kHz_12000_26500_12000~26500MHz@-41.45dBm_-13_PASS__



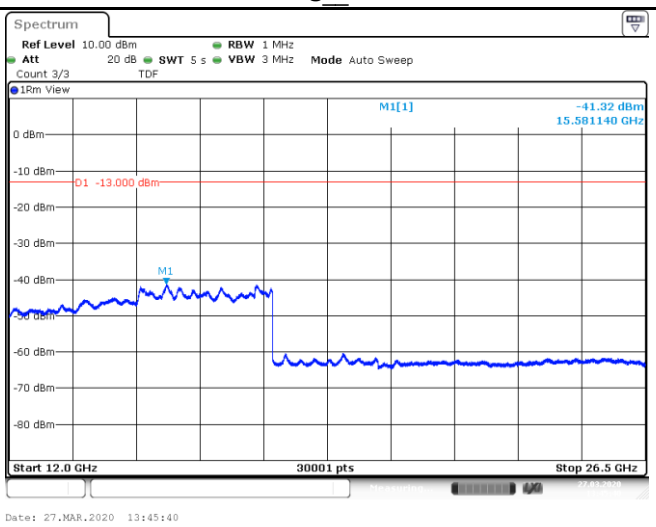

Band5_Stand-Alone_NaN_QPSK_20401_1@0_3.75kHz_1000_5000_1000~5000MHz@-37.63dBm_-13_PASS__



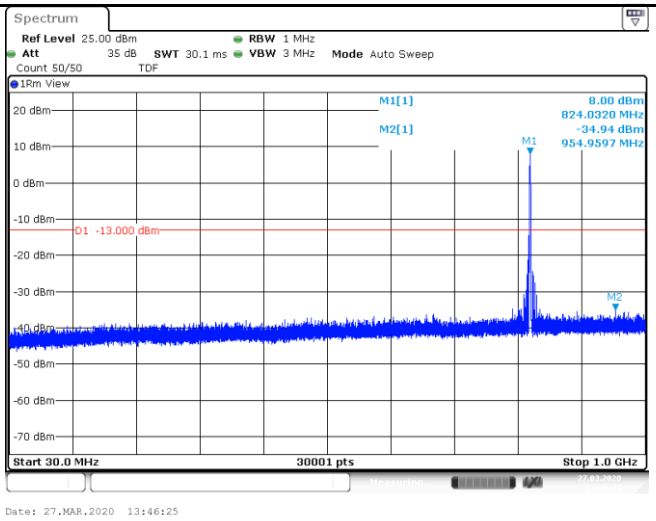

Band5_Stand-Alone_NaN_QPSK_20401_1@0_3.75kHz_5000_12000_5000~12000MHz@-47.83dBm_-13_PASS__



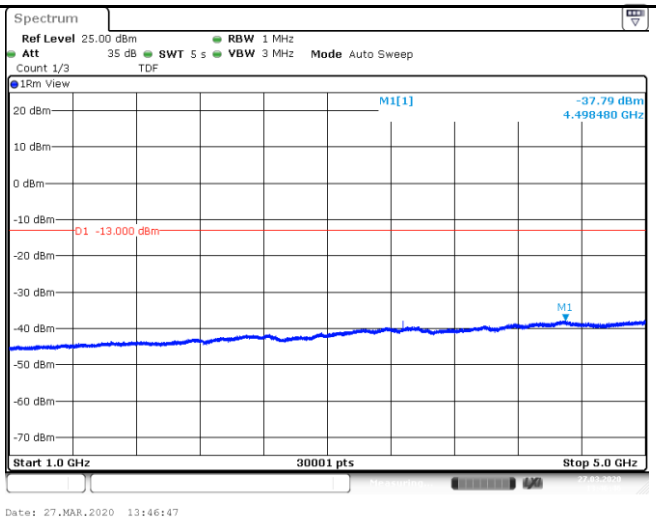
Band5_Stand-Alone_NaN_QPSK_20401_1@0_3.75kHz_12000_26500_12000~26500MHz@-41.32dBm_-13_PASS__



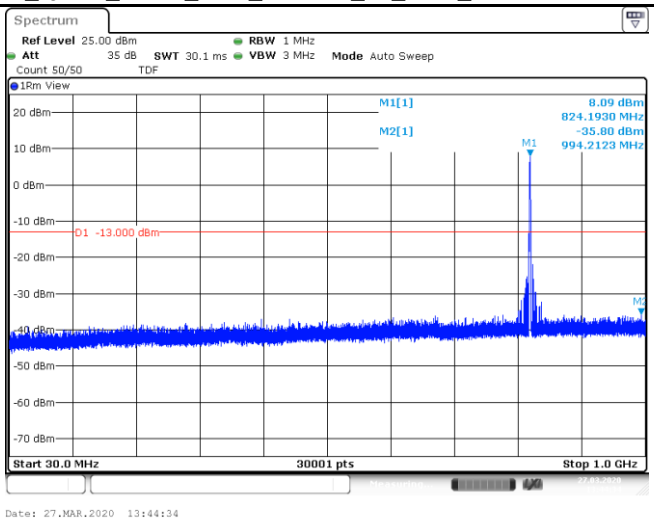

Band5_Stand-Alone_NaN_QPSK_20401_1@47_3.75kHz_30_1000_30~1000MHz@-34.94dBm_-13_PASS__



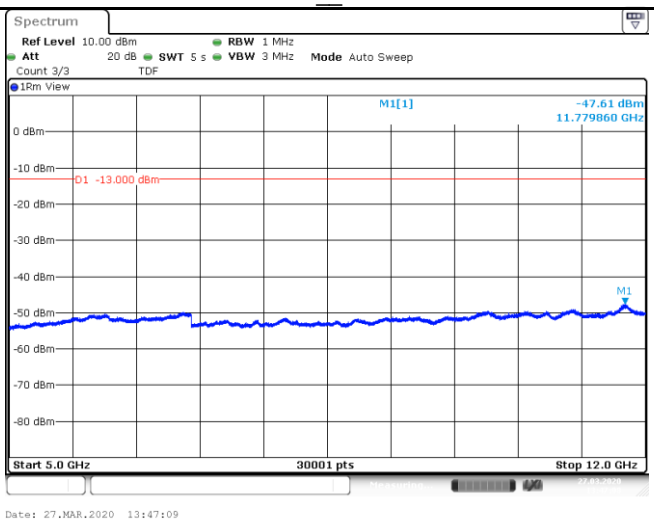

Band5_Stand-Alone_NaN_QPSK_20401_1@47_3.75kHz_1000_5000_1000~5000MHz@-37.79dBm_-13_PASS__



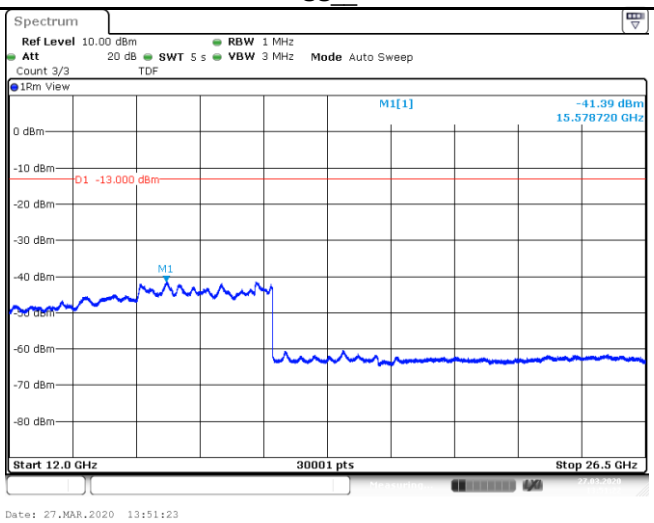
Band5_Stand-Alone_NaN_QPSK_20401_1@0_3.75kHz_30_1000_30~1000MHz@-35.8dBm_-13_PASS__



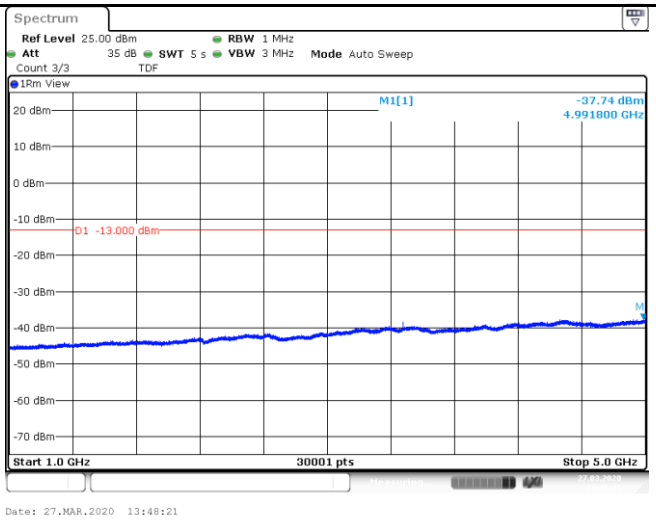

Band5_Stand-Alone_NaN_QPSK_20401_1@47_3.75kHz_5000_12000_5000~12000MHz@-47.61dBm_-13_PASS__



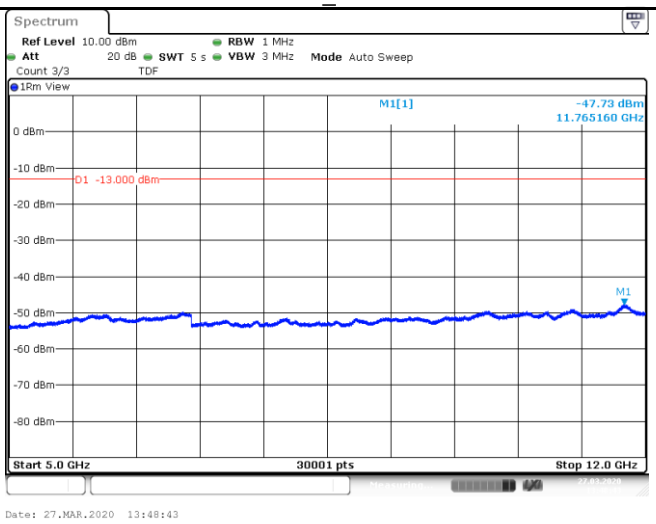

Band5_Stand-Alone_NaN_QPSK_20649_1@47_3.75kHz_12000_26500_12000~26500MHz@-41.39dBm_-13_PASS__



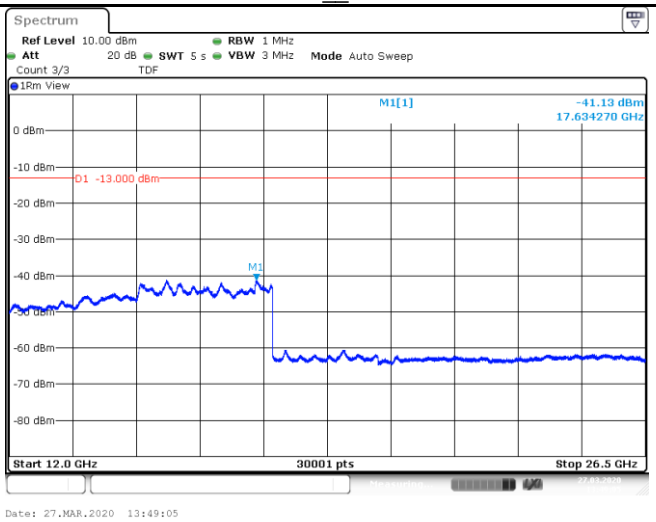
Band5_Stand-Alone_NaN_QPSK_20649_1@0_3.75kHz_1000_5000_1000~5000MHz@-37.74dBm_-13_PASS__



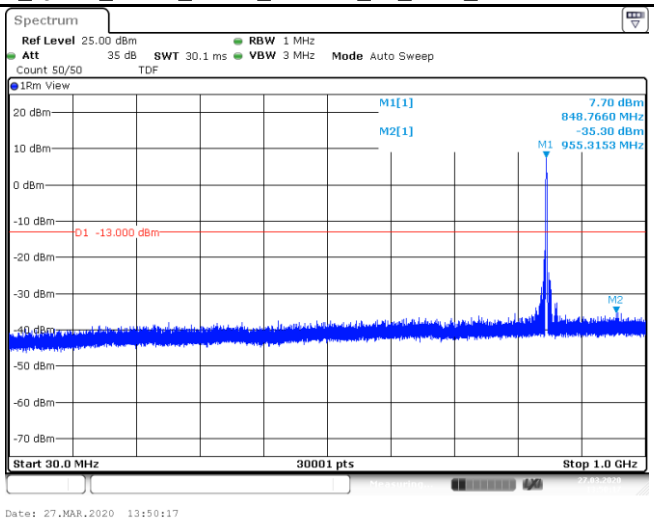

Band5_Stand-Alone_NaN_QPSK_20649_1@0_3.75kHz_5000_12000_5000~12000MHz@-47.73dBm_-13_PASS_
_



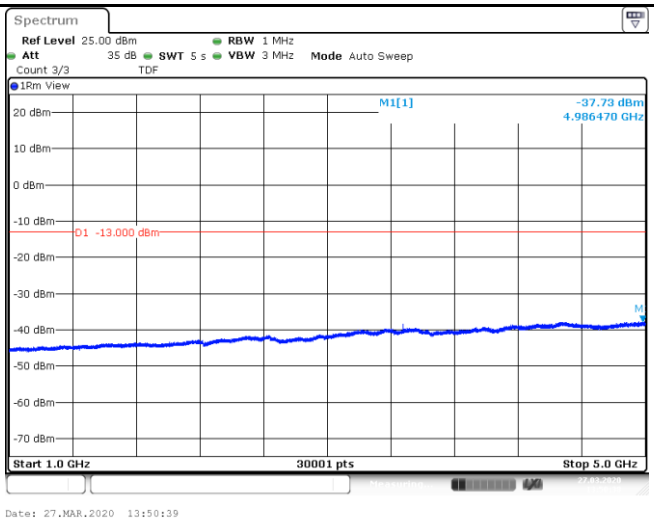

Band5_Stand-Alone_NaN_QPSK_20649_1@0_3.75kHz_12000_26500_12000~26500MHz@-41.13dBm_-13_PAS
S__



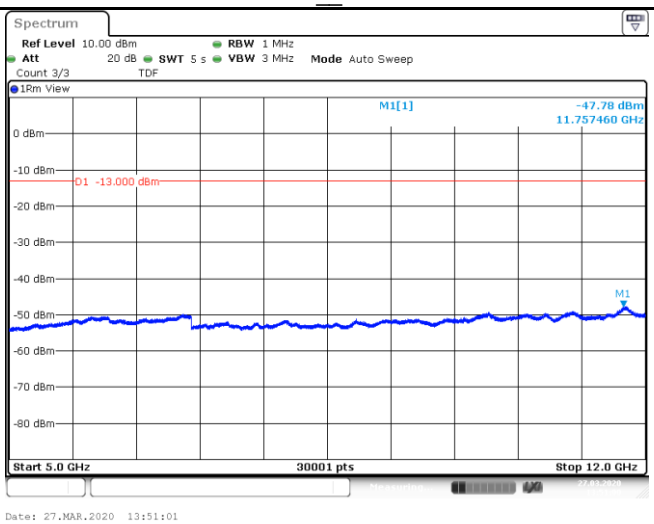
Band5_Stand-Alone_NaN_QPSK_20649_1@47_3.75kHz_30_1000_30~1000MHz@-35.3dBm_-13_PASS__



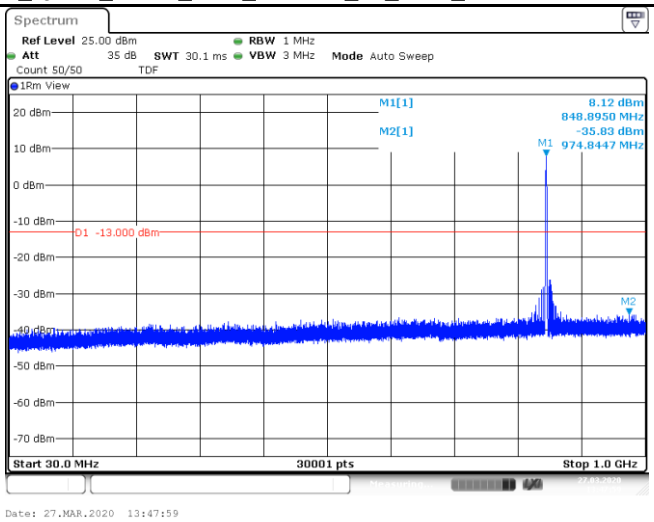

Band5_Stand-Alone_NaN_QPSK_20649_1@47_3.75kHz_1000_5000_1000~5000MHz@-37.73dBm_-13_PASS__



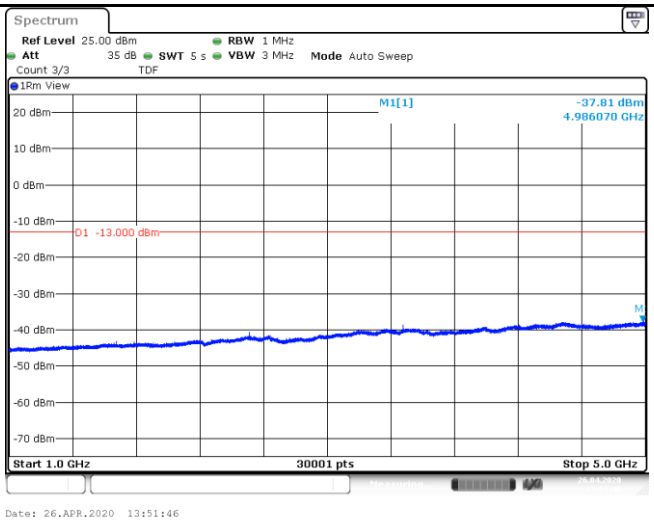

Band5_Stand-Alone_NaN_QPSK_20649_1@47_3.75kHz_5000_12000_5000~12000MHz@-47.78dBm_-13_PASS__



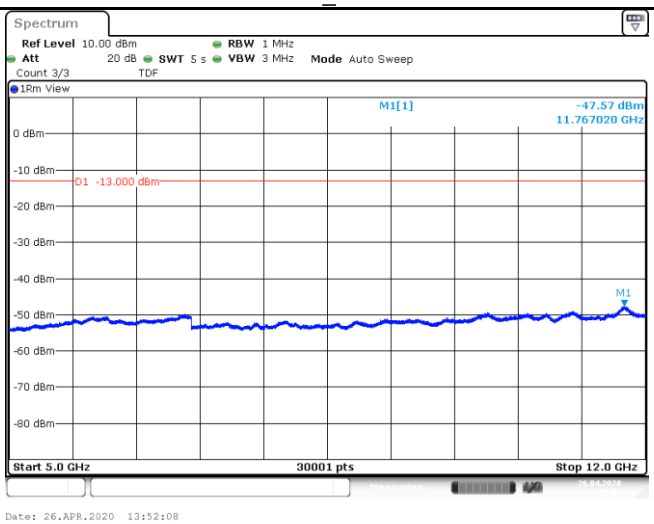
Band5_Stand-Alone_NaN_QPSK_20649_1@0_3.75kHz_30_1000_30~1000MHz@-35.83dBm_-13_PASS__



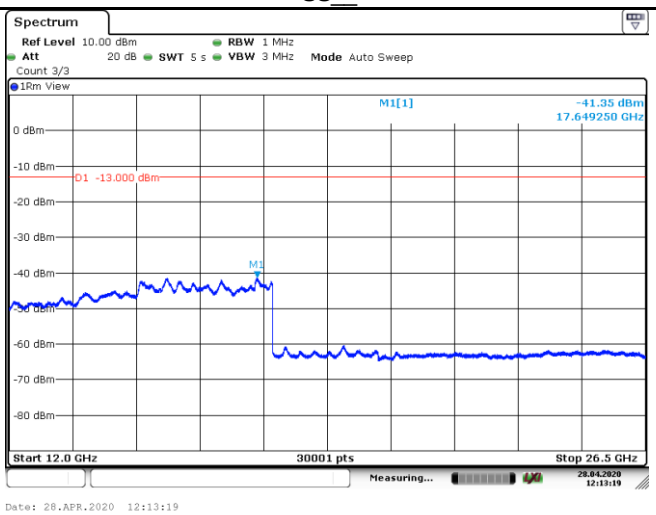

Band5_Stand-Alone_NaN_QPSK_20525_1@0_3.75kHz_1000_5000_1000~5000MHz@-37.81dBm_-13_PASS__



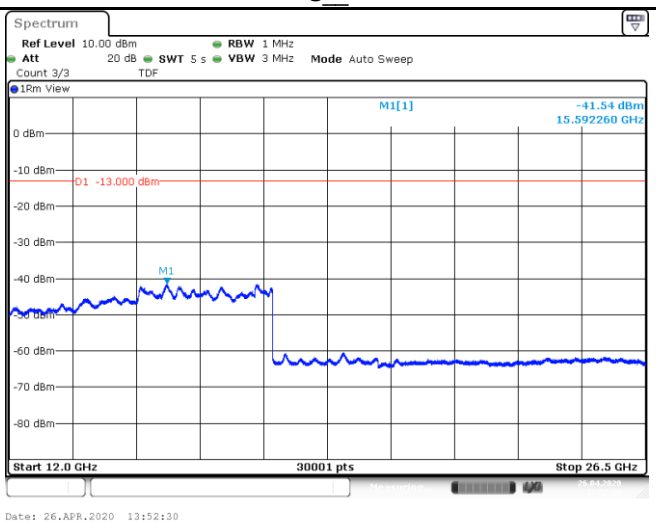

Band5_Stand-Alone_NaN_QPSK_20525_1@0_3.75kHz_5000_12000_5000~12000MHz@-47.57dBm_-13_PASS_
_



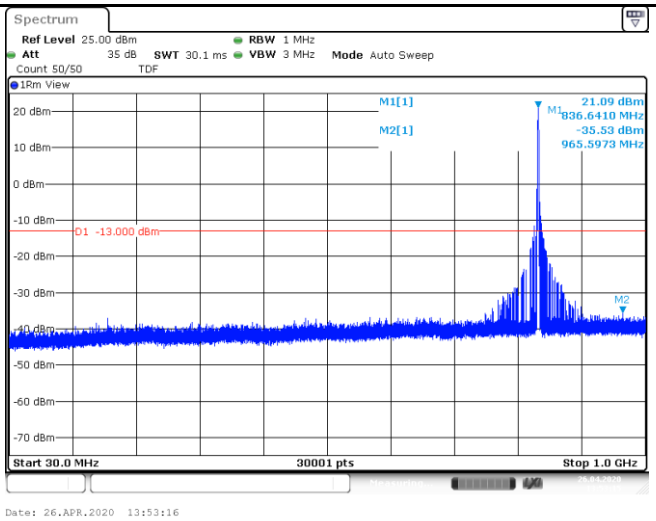
Band5_Stand-Alone_NaN_QPSK_20525_1@47_3.75kHz_12000_26500_12000~26500MHz@-41.35dBm_-13_PASS__



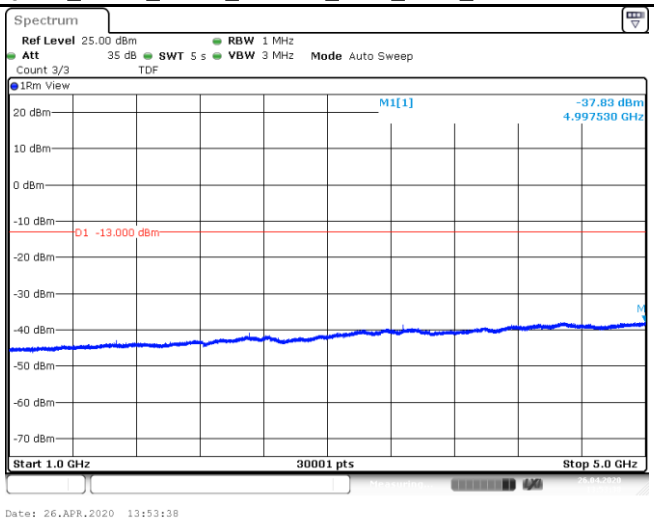

Band5_Stand-Alone_NaN_QPSK_20525_1@0_3.75kHz_12000_26500_12000~26500MHz@-41.54dBm_-13_PASS__



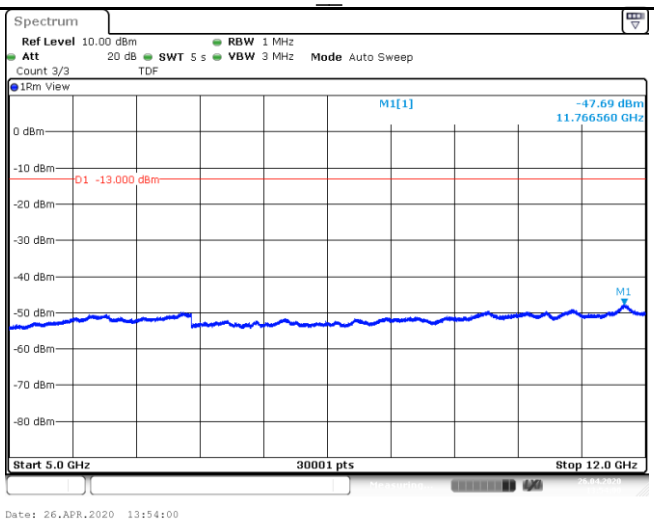

Band5_Stand-Alone_NaN_QPSK_20525_1@47_3.75kHz_30_1000_30~1000MHz@-35.53dBm_-13_PASS__



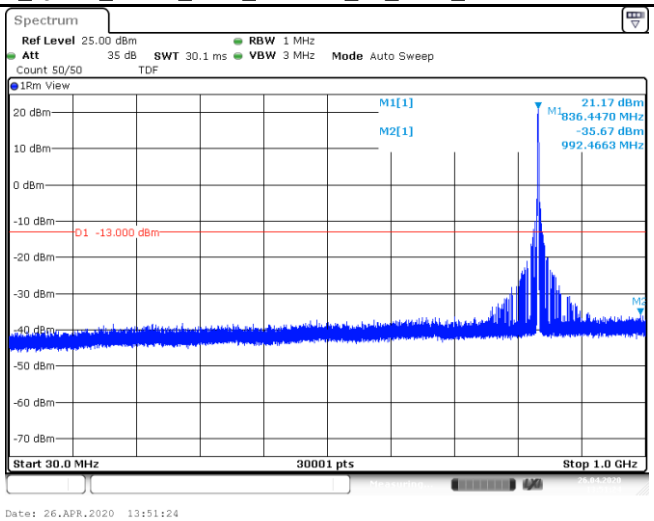
Band5_Stand-Alone_NaN_QPSK_20525_1@47_3.75kHz_1000_5000_1000~5000MHz@-37.83dBm_-13_PASS__




Band5_Stand-Alone_NaN_QPSK_20525_1@47_3.75kHz_5000_12000_5000~12000MHz@-47.69dBm_-13_PASS__




Band5_Stand-Alone_NaN_QPSK_20525_1@0_3.75kHz_30_1000_30~1000MHz@-35.67dBm_-13_PASS__



# Appendix C.6: Frequency Stability for NB

## Test Result

| Voltage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band | OpMode | Bandwidth | Modulation | Channel | Tones | SCS | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | HV | NT | -17.72 | -0.021184 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | LV | NT | -20.51 | -0.024519 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | NT | -16.48 | -0.019701 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | HV | NT | -16.51 | -0.019737 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | LV | NT | -17.44 | -0.020849 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | NT | -25.29 | -0.030233 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | HV | NT | -7.80 | -0.009325 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | LV | NT | -8.04 | -0.009611 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | NT | -8.14 | -0.009731 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | HV | NT | -8.38 | -0.010018 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | LV | NT | -8.37 | -0.010006 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | NT | -10.43 | -0.012469 | ±2.5 | PASS |

| Temperature | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band | OpMode | Bandwidth | Modulation | Channel | Tones | SCS | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | -40 | -14.02 | -0.016760 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | -30 | -14.73 | -0.017609 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | -20 | -17.04 | -0.020371 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | -10 | -16.08 | -0.019223 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 0 | -17.17 | -0.020526 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 10 | -13.62 | -0.016282 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 20 | -25.05 | -0.029946 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 30 | -15.35 | -0.018350 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 40 | -12.52 | -0.014967 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 50 | -14.22 | -0.016999 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 60 | -15.16 | -0.018123 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 70 | -14.68 | -0.017549 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | -40 | -16.85 | -0.020143 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 85 | -18.15 | -0.021698 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 85 | -12.66 | -0.015134 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | -30 | -15.34 | -0.018338 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | -20 | -19.05 | -0.022773 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | -10 | -14.93 | -0.017848 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 0 | -17.82 | -0.021303 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 10 | -15.35 | -0.018350 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 20 | -14.88 | -0.017788 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 30 | -14.78 | -0.017669 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 40 | -15.95 | -0.019068 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 50 | -13.45 | -0.016079 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 60 | -14.61 | -0.017466 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 70 | -14.46 | -0.017286 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@11 | 15kHz | NV | 80 | -13.42 | -0.016043 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 15kHz | NV | 80 | -15.61 | -0.018661 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | -40 | -5.28 | -0.006312 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | -30 | -8.75 | -0.010460 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | -20 | -8.17 | -0.009767 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | -10 | -6.94 | -0.008296 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 0 | -7.14 | -0.008536 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 10 | -7.70 | -0.009205 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 20 | -6.54 | -0.007818 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 30 | -6.94 | -0.008296 | ±2.5 | PASS |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 40 | -6.51 | -0.007782 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 50 | -7.18 | -0.008583 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 60 | -5.82 | -0.006958 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 70 | -7.55 | -0.009026 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | -40 | -7.67 | -0.009169 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 85 | -6.37 | -0.007615 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 85 | -6.11 | -0.007304 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | -30 | -9.21 | -0.011010 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | -20 | -5.35 | -0.006396 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | -10 | -7.02 | -0.008392 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 0 | -6.41 | -0.007663 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 10 | -7.52 | -0.008990 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 20 | -5.56 | -0.006647 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 30 | -8.21 | -0.009815 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 40 | -7.18 | -0.008583 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 50 | -6.54 | -0.007818 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 60 | -7.20 | -0.008607 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 70 | -6.81 | -0.008141 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@47 | 3.75kHz | NV | 80 | -5.84 | -0.006981 | ±2.5 | PASS |
| Band5 | Stand-Alone | NaN | QPSK | 20525 | 1@0 | 3.75kHz | NV | 80 | -4.96 | -0.005929 | ±2.5 | PASS |

# Appendix D: Test Results of Band 12 for NB-IoT operation

APPENDIX D.1: RF POWER OUTPUT AND EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA FOR NB ..... 2
Test Result ..... 2
APPENDIX D.2: PEAK-TO-AVERAGE RATIO (CCDF) FOR NB ..... 3
Test Result ..... 3
Test Graphs ..... 3
APPENDIX D.3: 26DB EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH FOR NB ..... 7
Test Result ..... 7
Test Graphs ..... 7
APPENDIX D.4: BAND EDGE FOR NB ..... 13
Test Result ..... 13
Test Graphs ..... 13
APPENDIX D.5: CONDUCTED SPURIOUS EMISSION FOR NB ..... 20
Test Result ..... 20
Test Graphs ..... 21
APPENDIX D.6: FREQUENCY STABILITY FOR NB ..... 42
Test Result ..... 42

# Appendix D.1: RF Power Output and Effective (Isotropic) Radiated Power Output Data for NB

## Test Result

| Band | OpMode | Bandwidth | Modulation | Channel | Tones | SCS | Result | ERP | | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | dBm | dBm | Watts | | |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 15kHz | 8.06 | 8.05 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@11 | 15kHz | 7.97 | 7.96 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 3@3 | 15kHz | 7.96 | 7.95 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23012 | 1@0 | 15kHz | 21.75 | 21.74 | 0.149 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23012 | 3@3 | 15kHz | 24.67 | 24.66 | 0.292 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23012 | 1@11 | 15kHz | 21.70 | 21.69 | 0.148 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@11 | 15kHz | 23.14 | 23.13 | 0.206 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 15kHz | 23.21 | 23.2 | 0.209 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 3@3 | 15kHz | 23.16 | 23.15 | 0.207 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23178 | 1@0 | 15kHz | 21.37 | 21.36 | 0.137 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23178 | 1@11 | 15kHz | 21.28 | 21.27 | 0.134 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23178 | 3@3 | 15kHz | 24.52 | 24.51 | 0.282 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@11 | 15kHz | 7.82 | 7.81 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 3@3 | 15kHz | 7.79 | 7.78 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 15kHz | 7.86 | 7.85 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@11 | 15kHz | 7.86 | 7.85 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 3@3 | 15kHz | 7.97 | 7.96 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 15kHz | 7.89 | 7.88 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23012 | 1@11 | 15kHz | 21.65 | 21.64 | 0.146 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23012 | 1@0 | 15kHz | 21.68 | 21.67 | 0.147 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23012 | 3@3 | 15kHz | 21.94 | 21.93 | 0.156 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@11 | 15kHz | 21.32 | 21.31 | 0.135 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 15kHz | 23.07 | 23.06 | 0.202 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 3@3 | 15kHz | 23.16 | 23.15 | 0.207 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23178 | 1@11 | 15kHz | 21.34 | 21.33 | 0.136 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23178 | 1@0 | 15kHz | 21.32 | 21.31 | 0.135 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23178 | 3@3 | 15kHz | 21.69 | 21.68 | 0.147 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@11 | 15kHz | 7.66 | 7.65 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 3@3 | 15kHz | 7.80 | 7.79 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 15kHz | 7.71 | 7.7 | 0.006 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@47 | 3.75kHz | 6.88 | 6.87 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 3.75kHz | 6.97 | 6.96 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23012 | 1@0 | 3.75kHz | 24.88 | 24.87 | 0.307 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23012 | 1@47 | 3.75kHz | 24.83 | 24.82 | 0.303 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23178 | 1@47 | 3.75kHz | 24.69 | 24.68 | 0.294 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23178 | 1@0 | 3.75kHz | 24.73 | 24.72 | 0.296 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@47 | 3.75kHz | 6.84 | 6.83 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 3.75kHz | 6.86 | 6.85 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@47 | 3.75kHz | 6.82 | 6.81 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 3.75kHz | 6.81 | 6.8 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23012 | 1@0 | 3.75kHz | 24.83 | 24.82 | 0.303 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23012 | 1@47 | 3.75kHz | 24.78 | 24.77 | 0.300 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23178 | 1@47 | 3.75kHz | 24.66 | 24.65 | 0.292 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23178 | 1@0 | 3.75kHz | 24.63 | 24.62 | 0.290 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@47 | 3.75kHz | 6.73 | 6.72 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 3.75kHz | 6.75 | 6.74 | 0.005 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 3.75kHz | 24.82 | 24.81 | 0.303 | 3 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@47 | 3.75kHz | 24.80 | 24.79 | 0.301 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@47 | 3.75kHz | 24.70 | 24.69 | 0.294 | 3 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 3.75kHz | 24.70 | 24.69 | 0.294 | 3 | PASS |

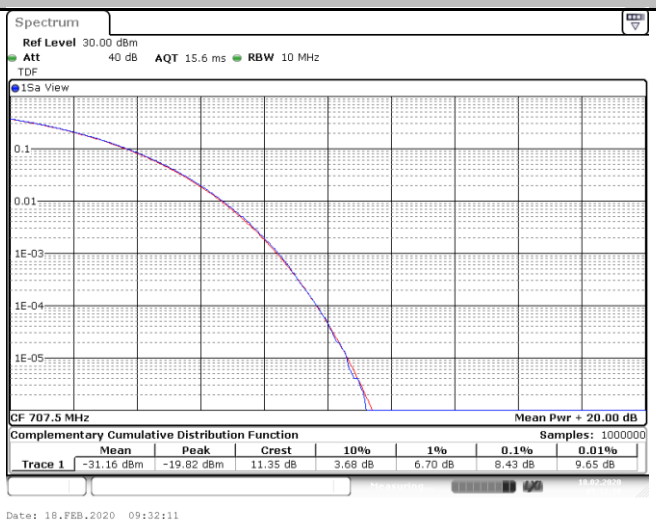
# Appendix D.2: Peak-to-Average Ratio (CCDF) for NB

## Test Result

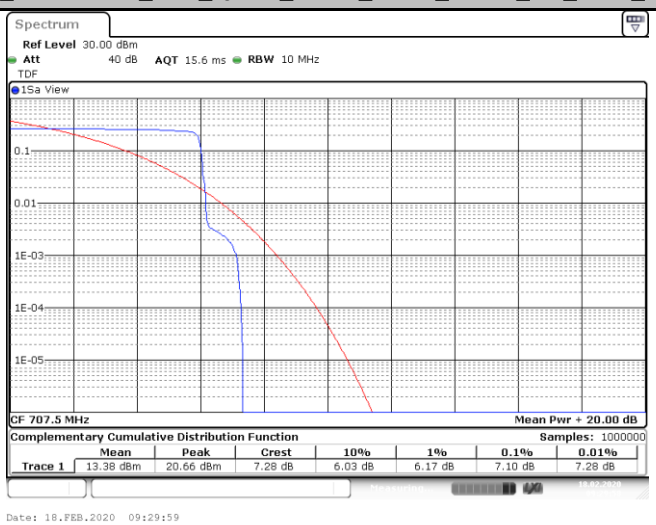
| Band | OpMode | Bandwidth | Modulation | Channel | Tones | SCS | Result (dB) | Limit (dB) | Verdict |
|---|---|---|---|---|---|---|---|---|---|
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 3@3 | 15kHz | 8.43 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@11 | 15kHz | 7.1 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 15kHz | 4.35 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 3@3 | 15kHz | 9.45 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@11 | 15kHz | 10.09 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 15kHz | 8.35 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@47 | 3.75kHz | 1.57 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 3.75kHz | 1.8 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@47 | 3.75kHz | 6.78 | <=13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 3.75kHz | 1.88 | <=13 | PASS |

## Test Graphs

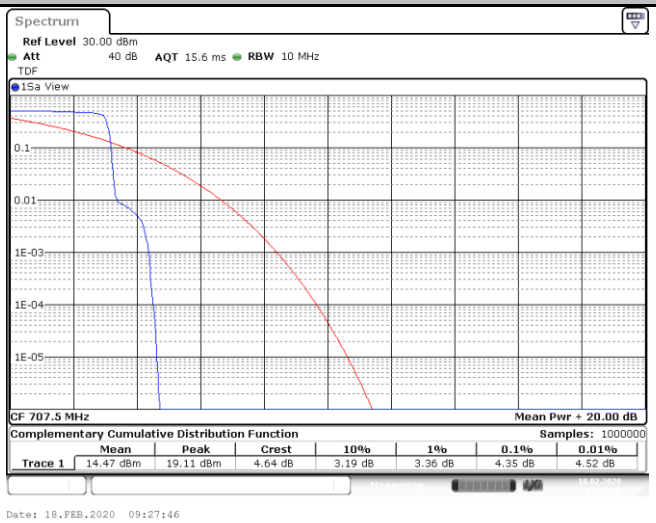
Band12_Stand-Alone_NaN_QPSK_23095_3@3_15kHz_8.43_<=13_PASS__



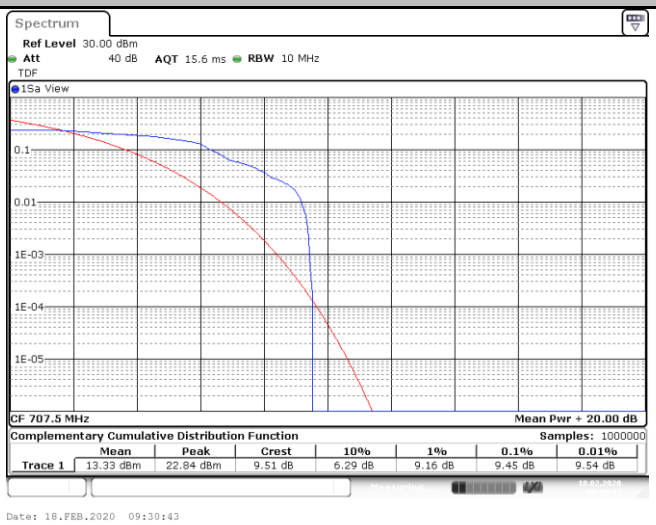

Band12_Stand-Alone_NaN_QPSK_23095_1@11_15kHz_7.1_<=13_PASS__



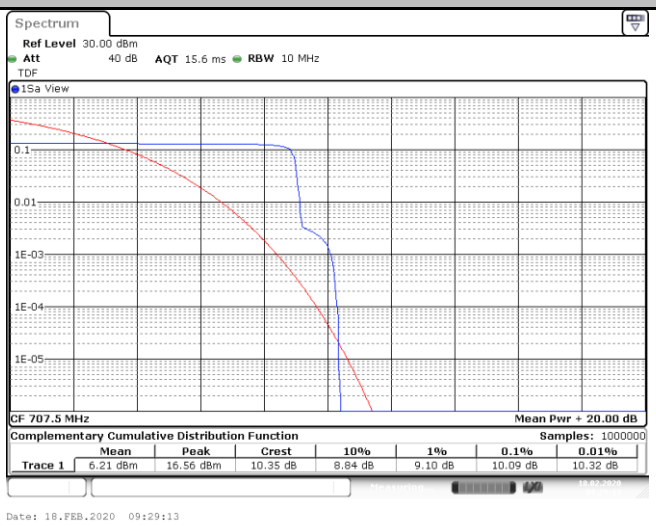
Band12_Stand-Alone_NaN_QPSK_23095_1@0_15kHz_4.35_<=13_PASS__



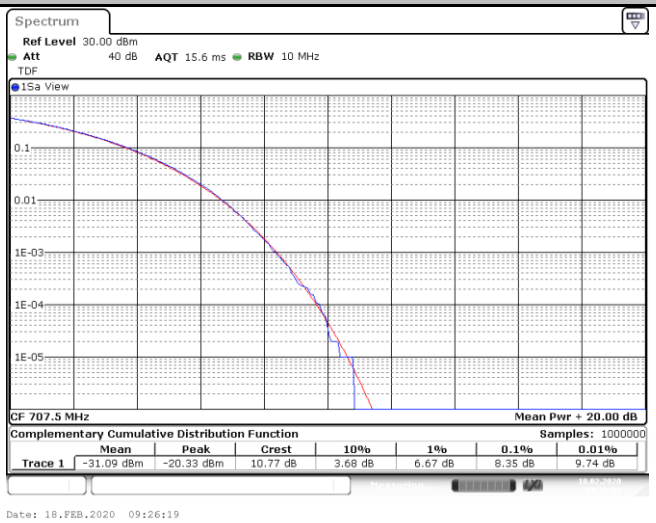

Band12_Stand-Alone_NaN_BPSK_23095_3@3_15kHz_9.45_<=13_PASS__



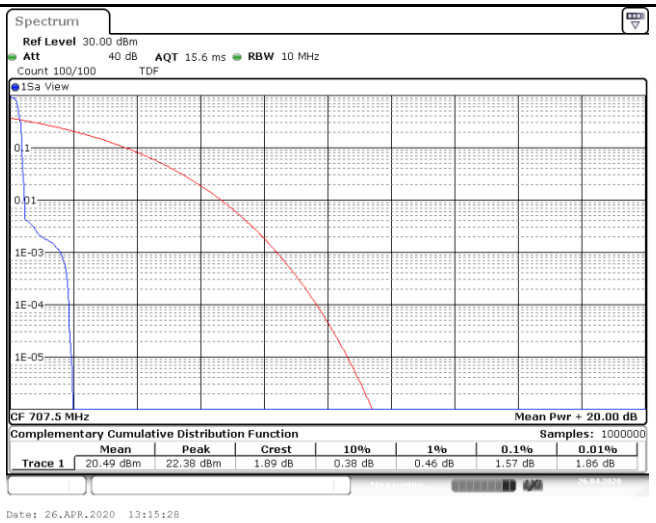

Band12_Stand-Alone_NaN_BPSK_23095_1@11_15kHz_10.09_<=13_PASS__



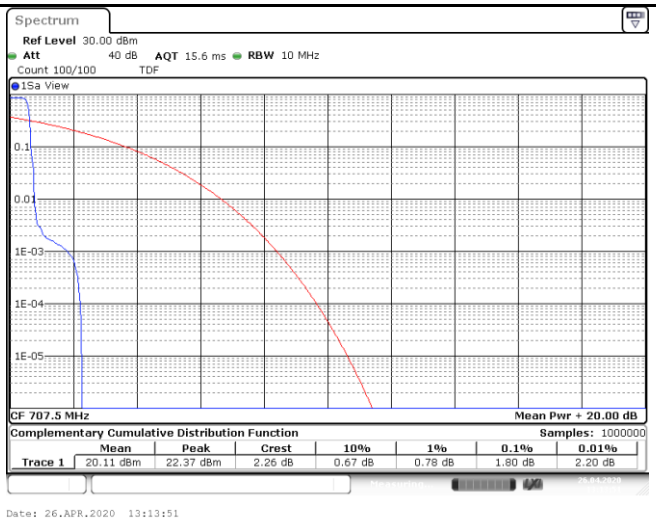
Band12_Stand-Alone_NaN_BPSK_23095_1@0_15kHz_8.35_<=13_PASS__



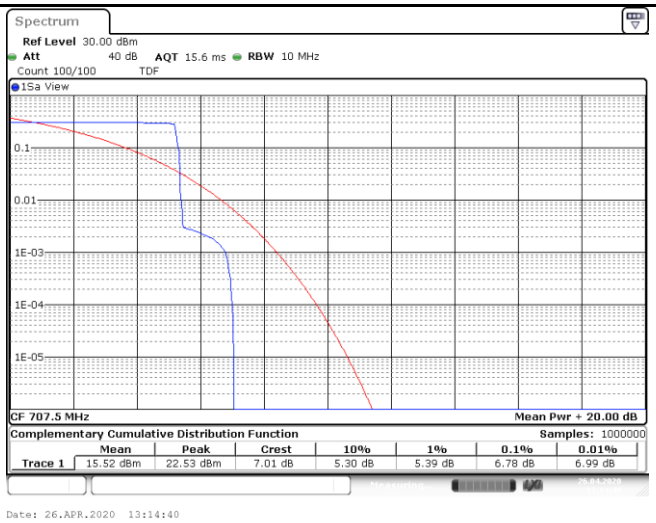

Band12_Stand-Alone_NaN_QPSK_23095_1@47_3.75kHz_1.57_<=13_PASS__



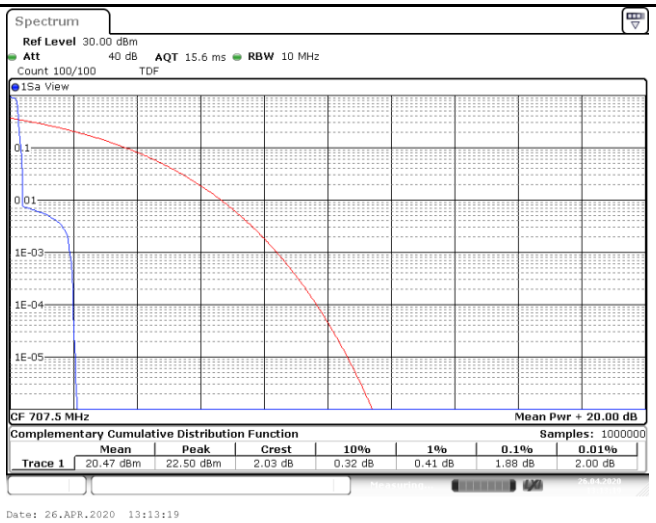

Band12_Stand-Alone_NaN_QPSK_23095_1@0_3.75kHz_1.8_<=13_PASS__



Band12_Stand-Alone_NaN_BPSK_23095_1@47_3.75kHz_6.78_<=13_PASS__




Band12_Stand-Alone_NaN_BPSK_23095_1@0_3.75kHz_1.88_<=13_PASS__



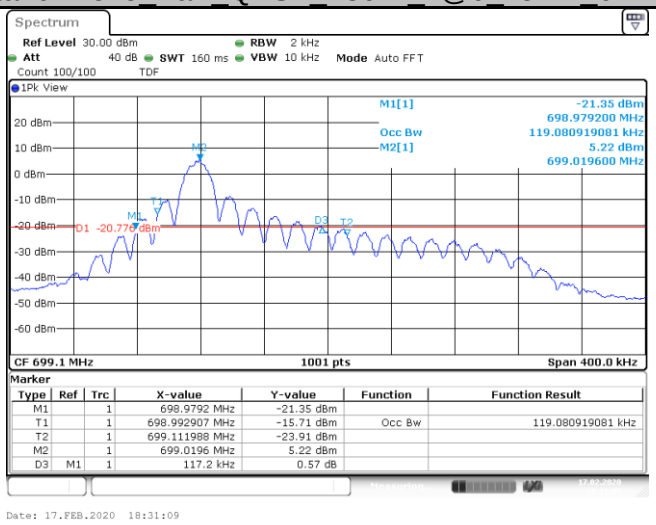
# Appendix D.3: 26dB Emission Bandwidth and Occupied Bandwidth for NB

## Test Result

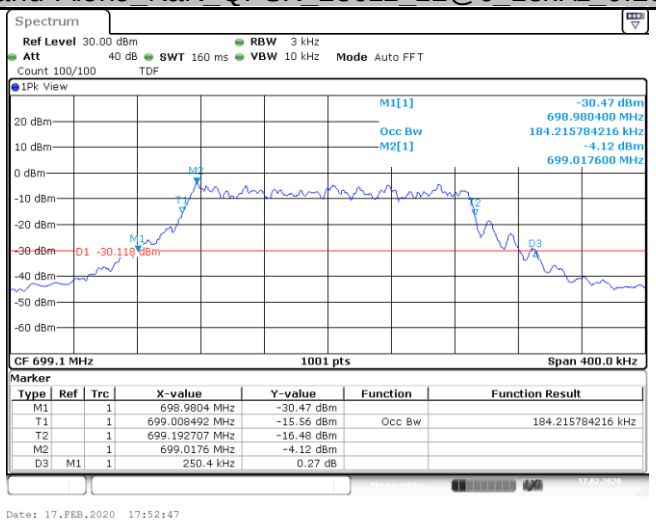
| Band | OpMode | Bandwidth | Modulation | Channel | Tones | SCS | 26dB Bandwidth (MHz) | Occupied Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|---|---|---|---|
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 15kHz | 0.117 | 0.119 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 12@0 | 15kHz | 0.250 | 0.184 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 15kHz | 0.118 | 0.119 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 12@0 | 15kHz | 0.251 | 0.184 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 15kHz | 0.118 | 0.120 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 12@0 | 15kHz | 0.250 | 0.184 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 15kHz | 0.106 | 0.127 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 15kHz | 0.106 | 0.125 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 15kHz | 0.106 | 0.128 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 3.75kHz | 0.038 | 0.052 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 3.75kHz | 0.038 | 0.052 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 3.75kHz | 0.034 | 0.055 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 3.75kHz | 0.034 | 0.055 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 3.75kHz | 0.038 | 0.050 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 3.75kHz | 0.032 | 0.054 | PASS |

## Test Graphs

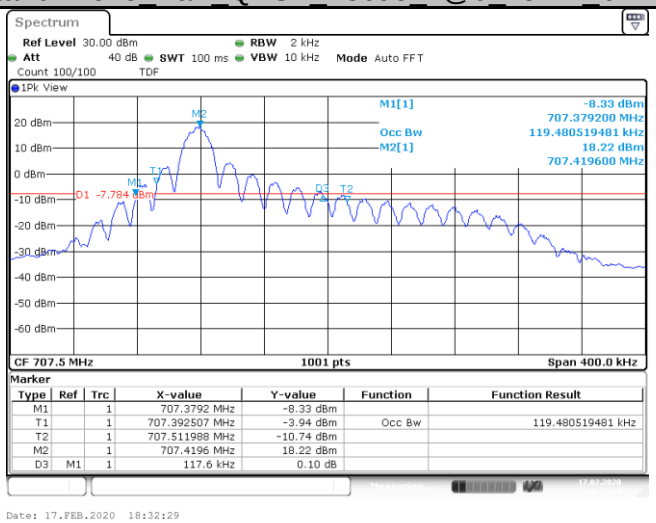
Band12_Stand-Alone_NaN_QPSK_23011_1@0_15kHz_0.117_PASS



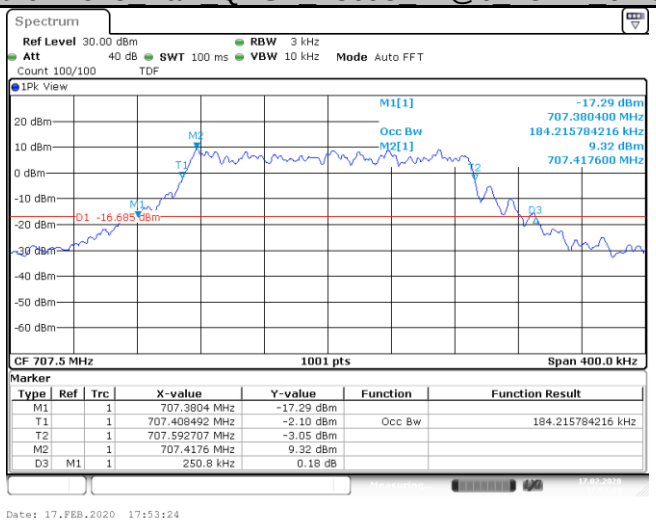
## Band12_Stand-Alone_NaN_QPSK_23011_12@0_15kHz_0.250_PASS__



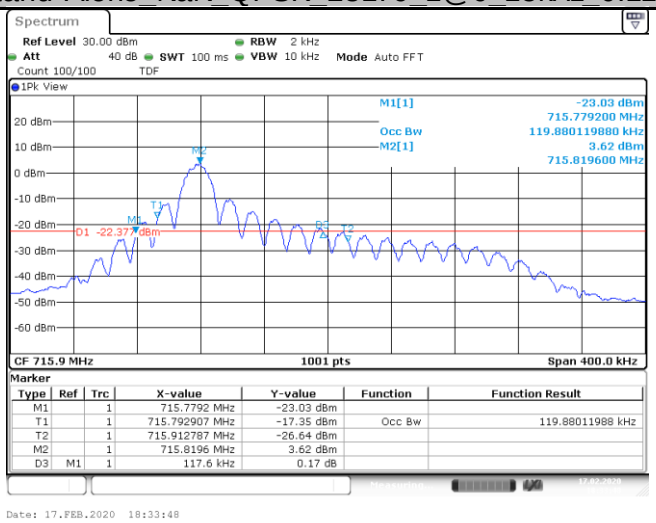

## Band12_Stand-Alone_NaN_QPSK_23095_1@0_15kHz_0.118_PASS__



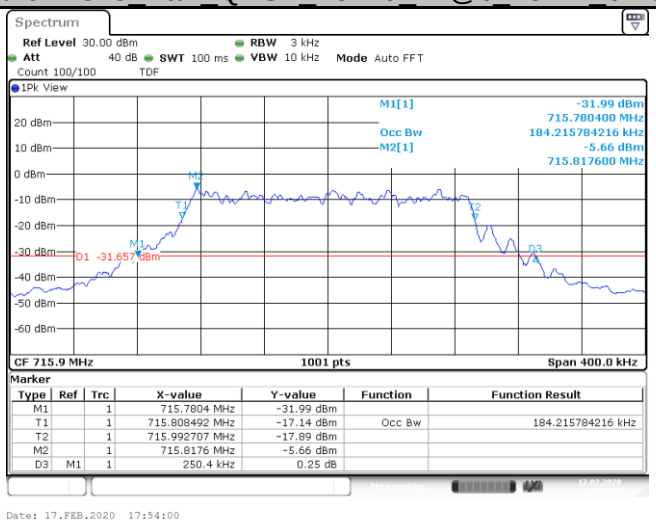

## Band12_Stand-Alone_NaN_QPSK_23095_12@0_15kHz_0.251_PASS__



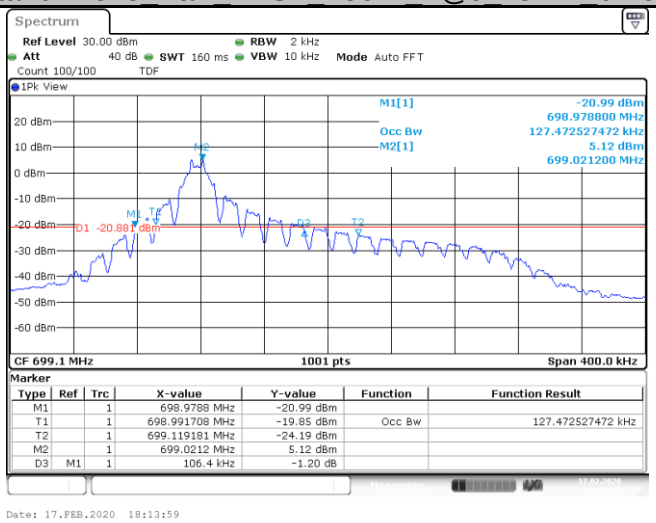
## Band12_Stand-Alone_NaN_QPSK_23179_1@0_15kHz_0.118_PASS__



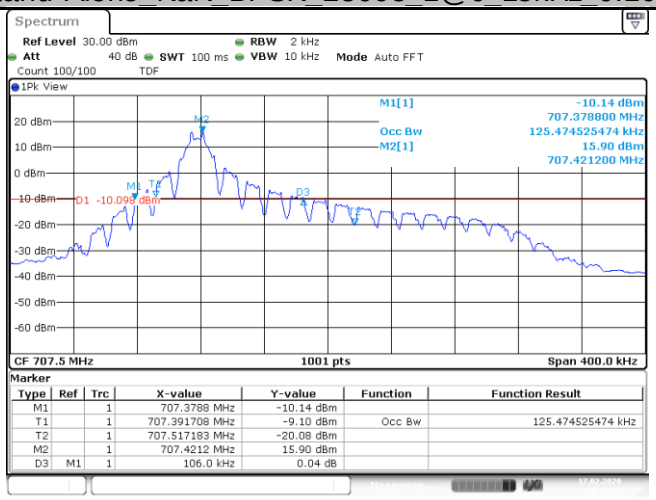

## Band12_Stand-Alone_NaN_QPSK_23179_12@0_15kHz_0.250_PASS__



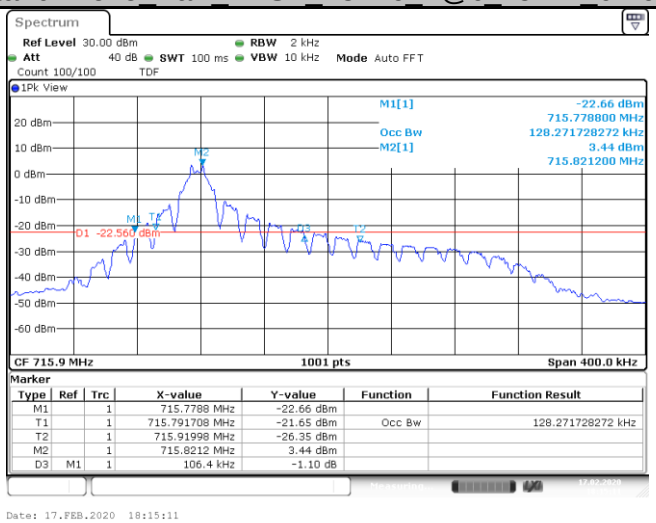

## Band12_Stand-Alone_NaN_BPSK_23011_1@0_15kHz_0.106_PASS__



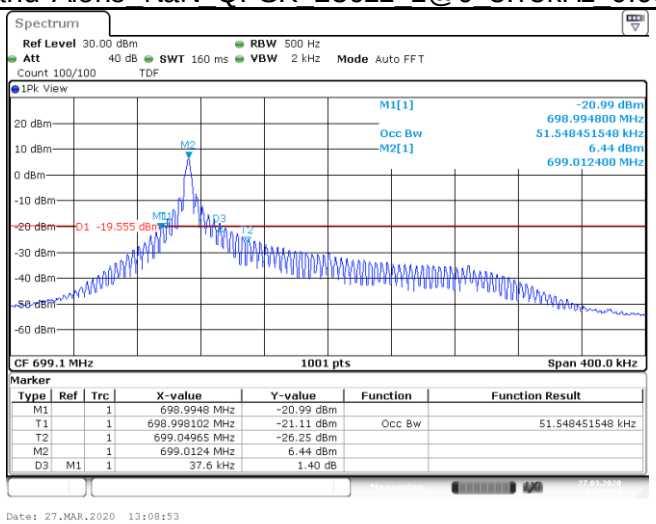
## Band12_Stand-Alone_NaN_BPSK_23095_1@0_15kHz_0.106_PASS__



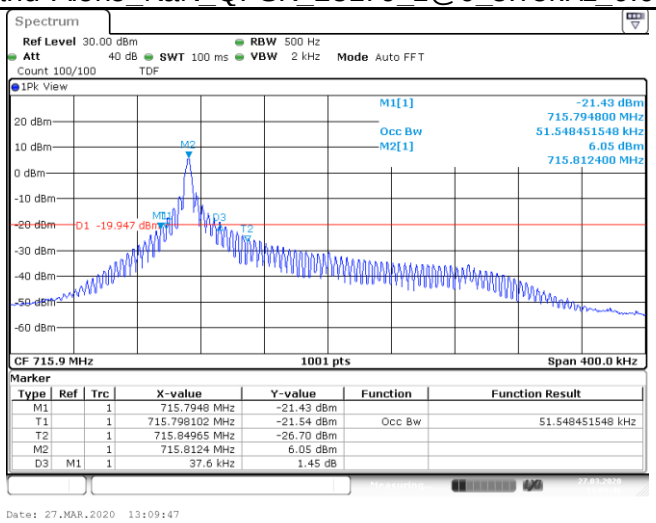

## Band12_Stand-Alone_NaN_BPSK_23179_1@0_15kHz_0.106_PASS__



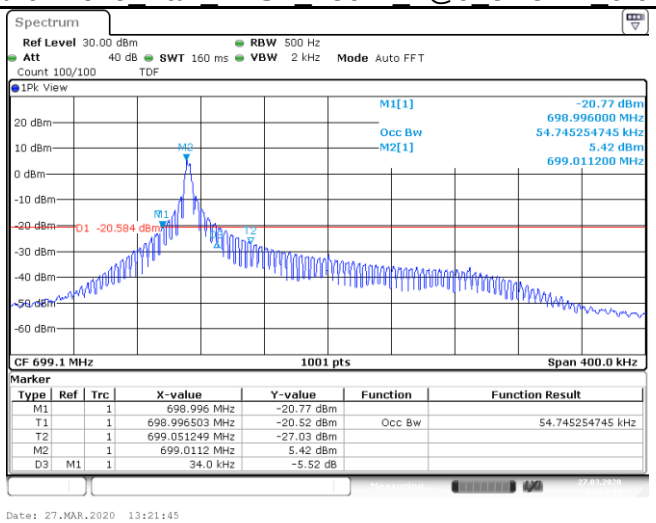

## Band12_Stand-Alone_NaN_QPSK_23011_1@0_3.75kHz_0.038_PASS__



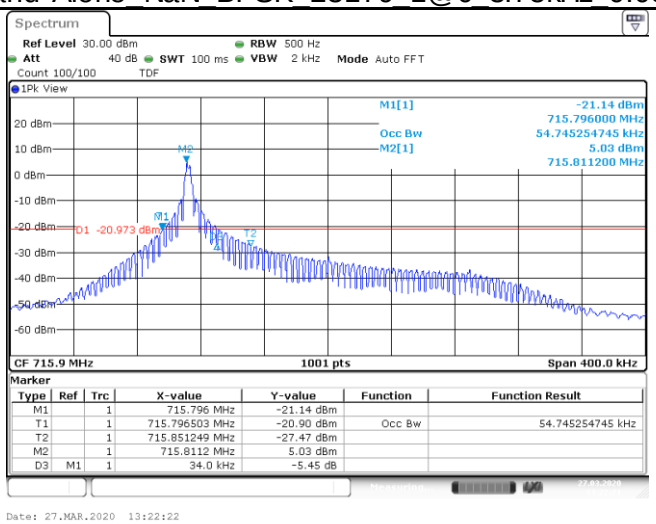
Band12_Stand-Alone_NaN_QPSK_23179_1@0_3.75kHz_0.038_PASS__



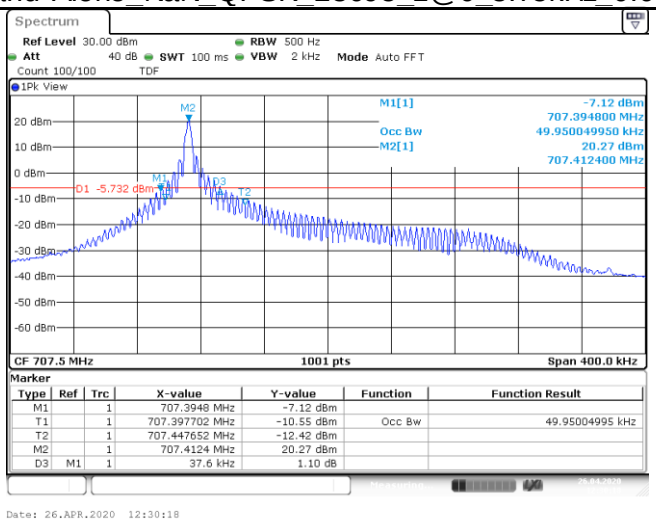

Band12_Stand-Alone_NaN_BPSK_23011_1@0_3.75kHz_0.034_PASS__



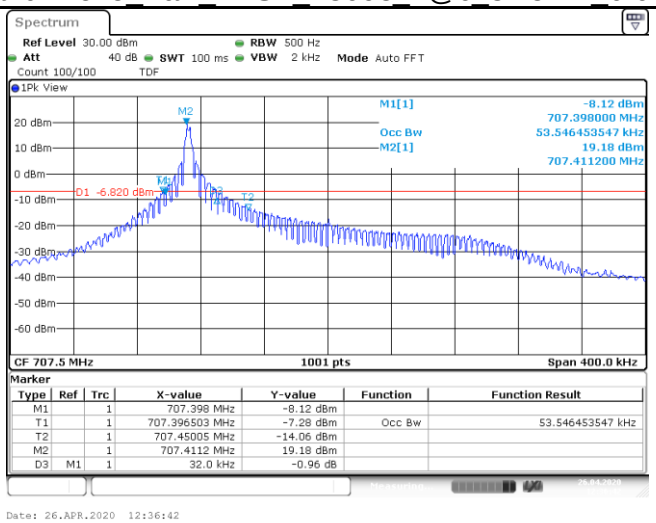

Band12_Stand-Alone_NaN_BPSK_23179_1@0_3.75kHz_0.034_PASS__



Band12_Stand-Alone_NaN_QPSK_23095_1@0_3.75kHz_0.038_PASS__




Band12_Stand-Alone_NaN_BPSK_23095_1@0_3.75kHz_0.032_PASS__



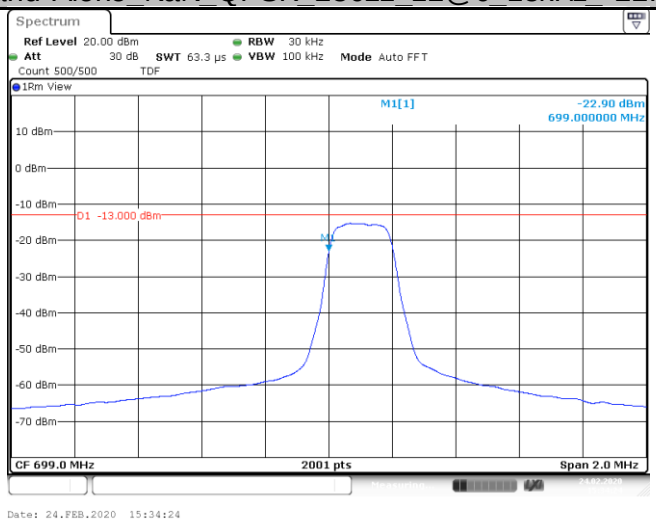
# Appendix D.4: Band Edge for NB

## Test Result

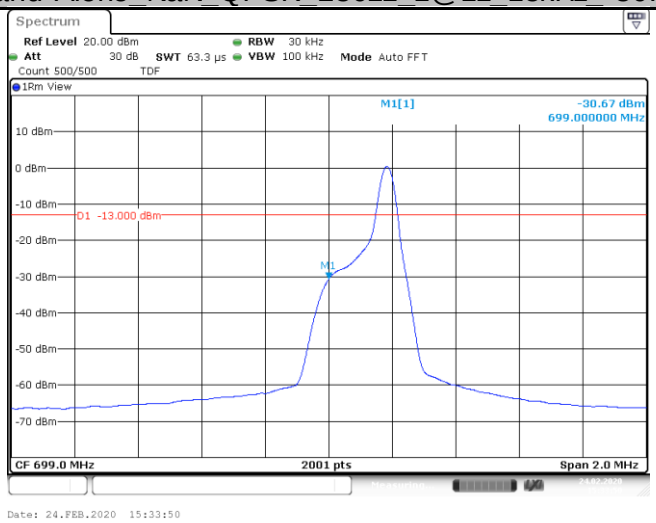
| Band | OpMode | Bandwidth | Modulation | Channel | Tones | SCS | Result (dBm) | Verdict |
|---|---|---|---|---|---|---|---|---|
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 12@0 | 15kHz | -22.90 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@11 | 15kHz | -30.67 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 15kHz | -15.85 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 12@0 | 15kHz | -23.49 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@11 | 15kHz | -16.10 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 15kHz | -31.71 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@11 | 15kHz | -28.78 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 15kHz | -14.11 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@11 | 15kHz | -14.46 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 15kHz | -29.88 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@47 | 3.75kHz | -33.09 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 3.75kHz | -17.16 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@47 | 3.75kHz | -17.22 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 3.75kHz | -32.57 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@47 | 3.75kHz | -30.66 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 3.75kHz | -15.90 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@47 | 3.75kHz | -16.17 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 3.75kHz | -31.24 | PASS |

## Test Graphs

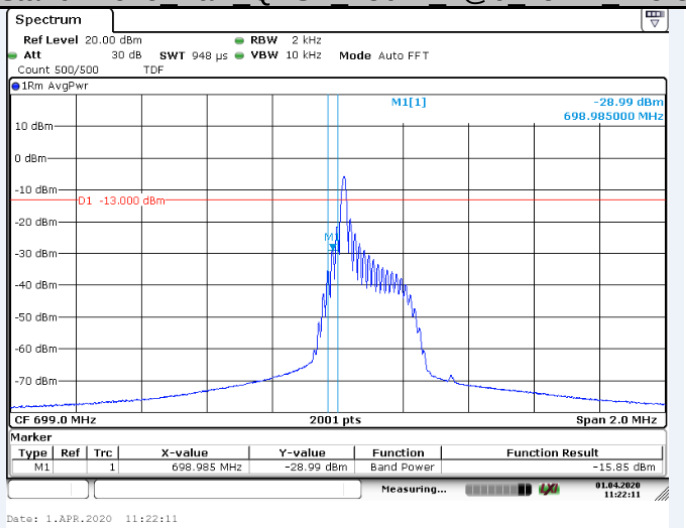
Band12_Stand-Alone_NaN_QPSK_23011_12@0_15kHz_-22.90_PASS__



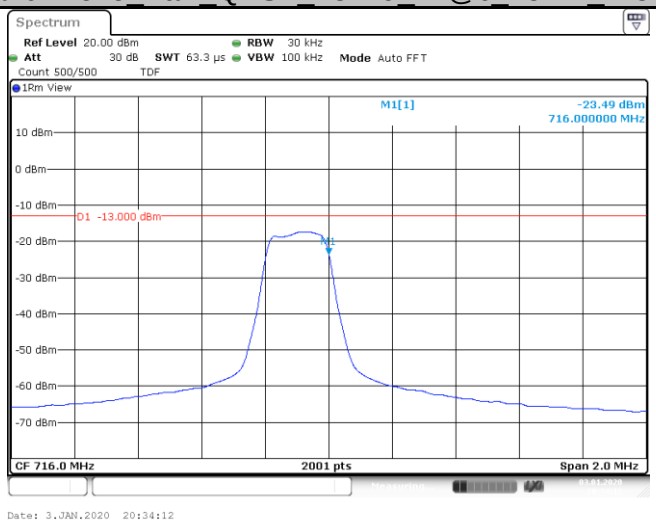
Band12_Stand-Alone_NaN_QPSK_23011_1@11_15kHz_-30.67_PASS



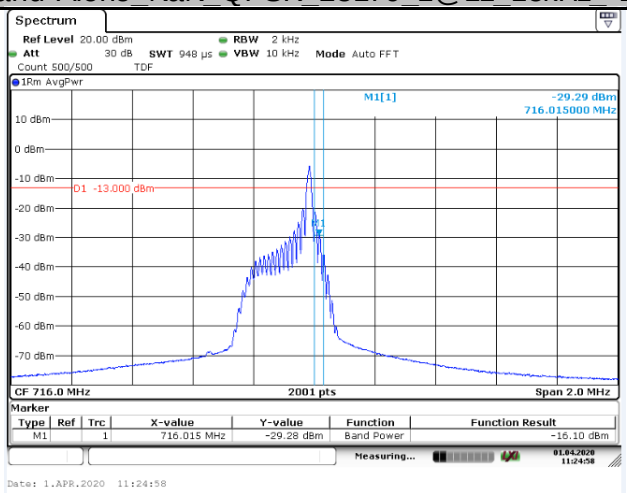

Band12_Stand-Alone_NaN_QPSK_23011_1@0_15kHz_-15.85_PASS



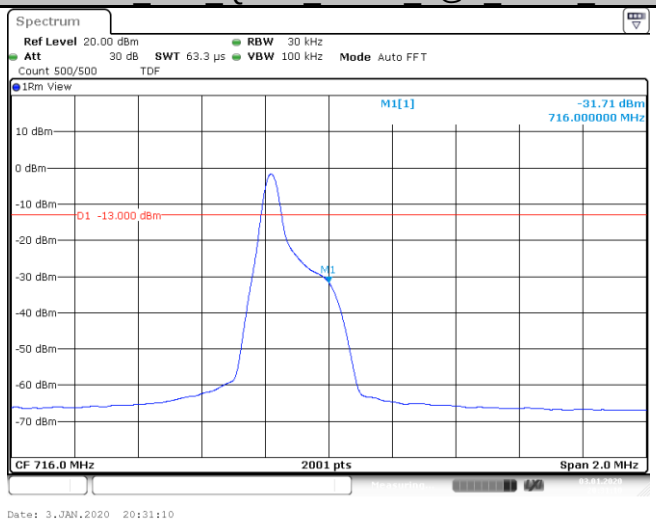

Band12_Stand-Alone_NaN_QPSK_23179_12@0_15kHz_-23.49_PASS



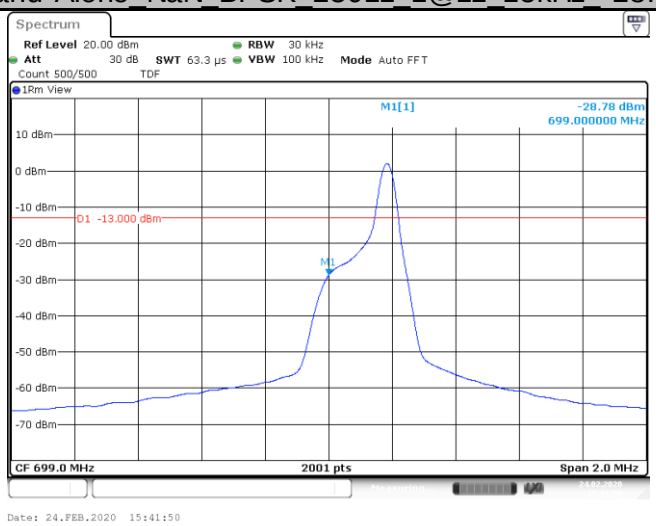
Band12_Stand-Alone_NaN_QPSK_23179_1@11_15kHz_-16.10_PASS



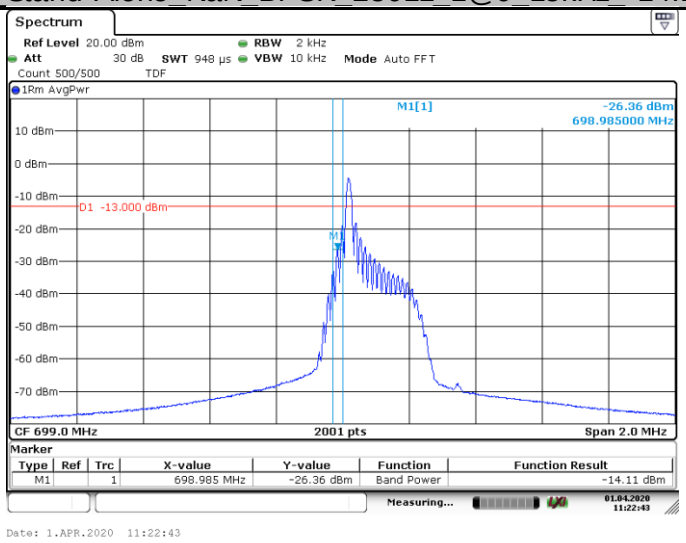

Band12_Stand-Alone_NaN_QPSK_23179_1@0_15kHz_-31.71_PASS




Band12_Stand-Alone_NaN_BPSK_23011_1@11_15kHz_-28.78_PASS

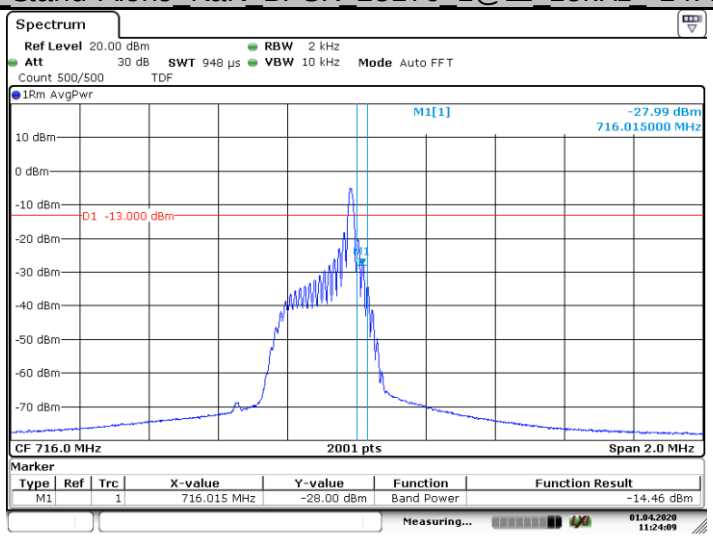


## Band12_Stand-Alone_NaN_BPSK_23011_1@0_15kHz_-14.11_PASS



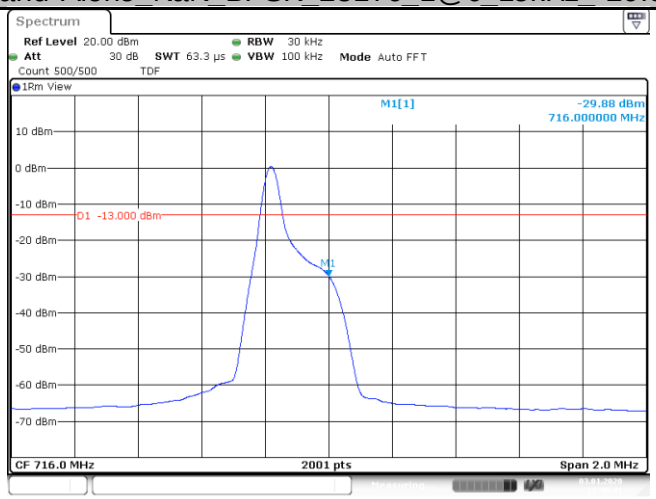

Date: 1.APR.2020 11:22:43

## Band12_Stand-Alone_NaN_BPSK_23179_1@11_15kHz_-14.46_PASS



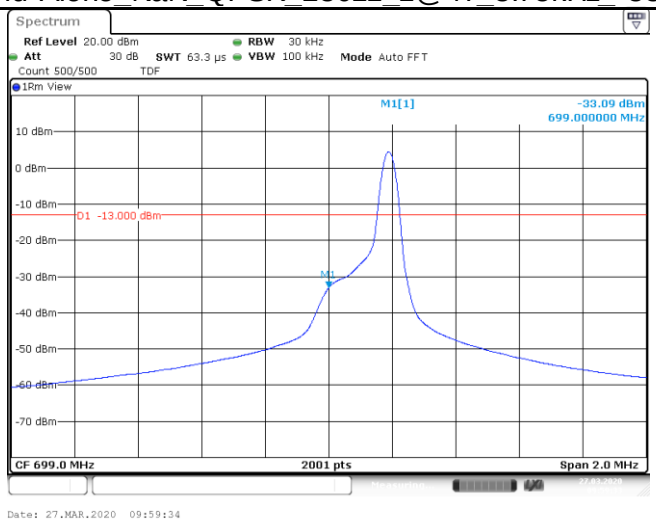

Date: 1.APR.2020 11:24:10

## Band12_Stand-Alone_NaN_BPSK_23179_1@0_15kHz_-29.88_PASS

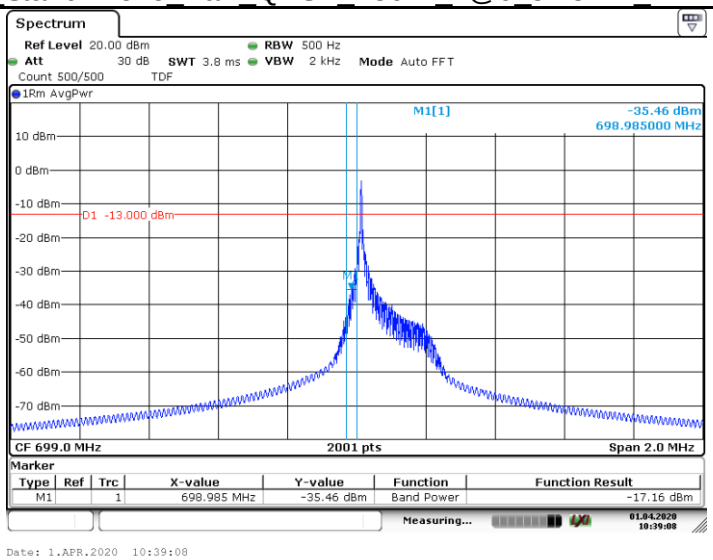



Date: 3.JAN.2020 21:49:41

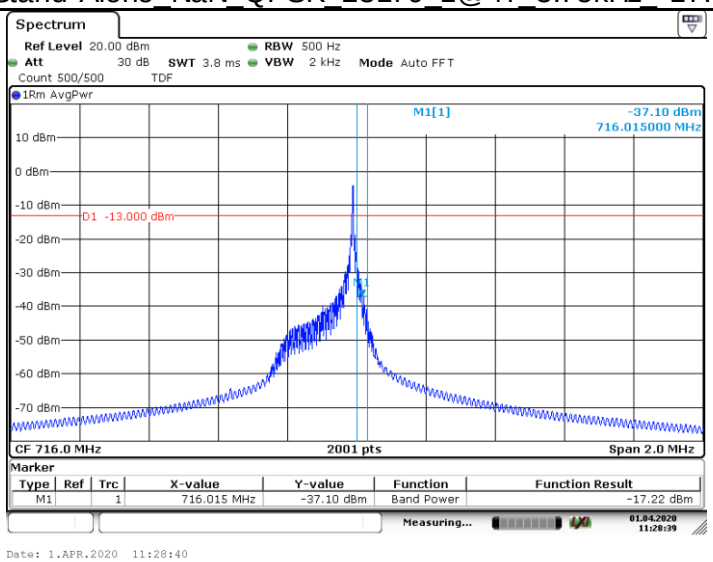
Band12_Stand-Alone_NaN_QPSK_23011_1@47_3.75kHz_-33.09_PASS__



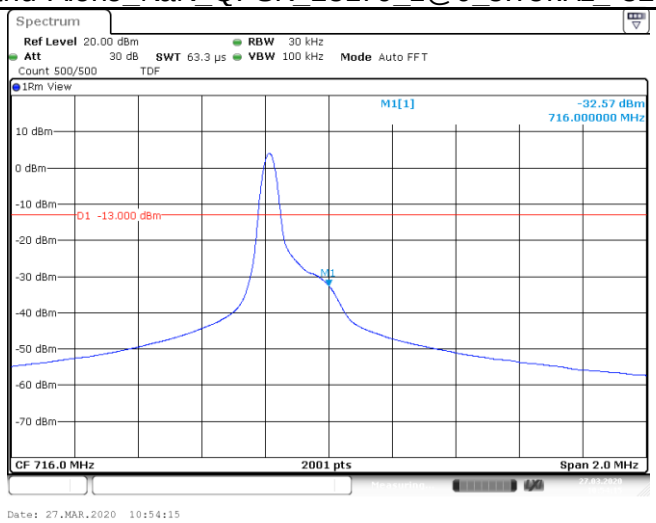

Band12_Stand-Alone_NaN_QPSK_23011_1@0_3.75kHz_-17.16_PASS



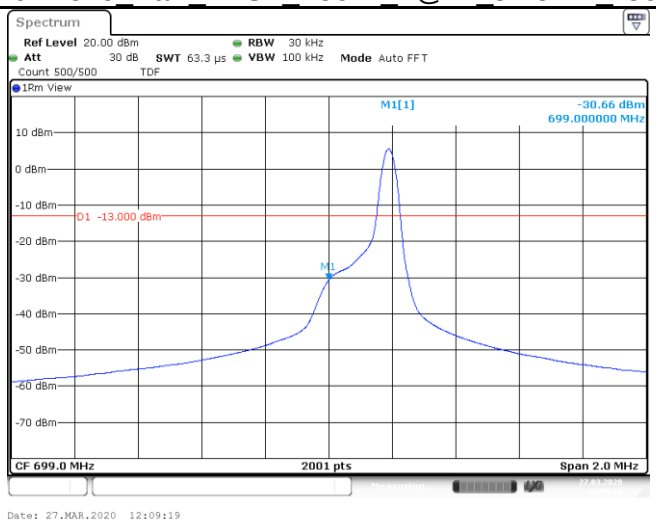

Band12_Stand-Alone_NaN_QPSK_23179_1@47_3.75kHz_-17.22_PASS



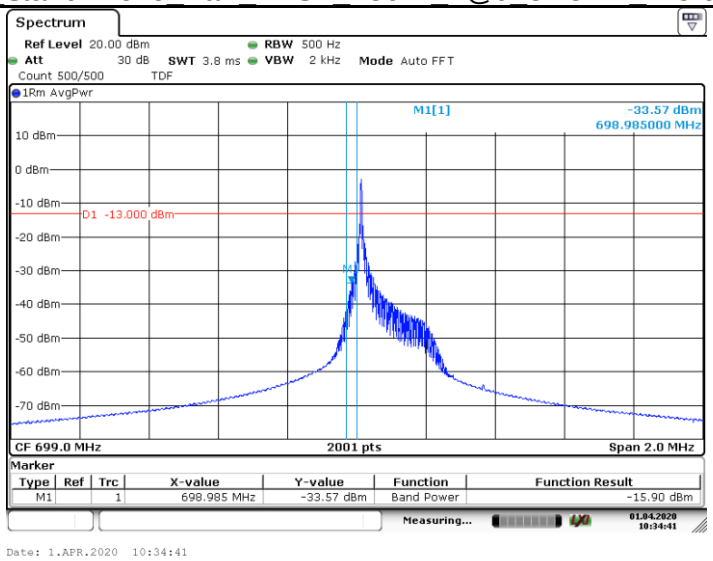
Band12_Stand-Alone_NaN_QPSK_23179_1@0_3.75kHz_-32.57_PASS__



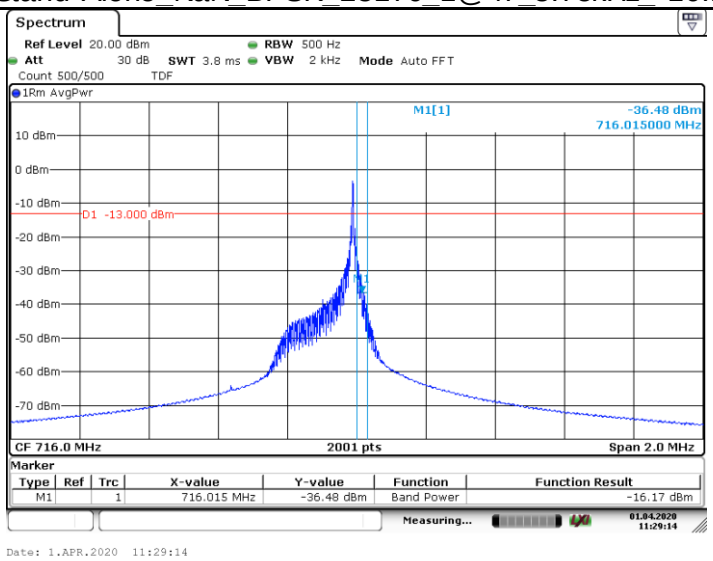

Band12_Stand-Alone_NaN_BPSK_23011_1@47_3.75kHz_-30.66_PASS__



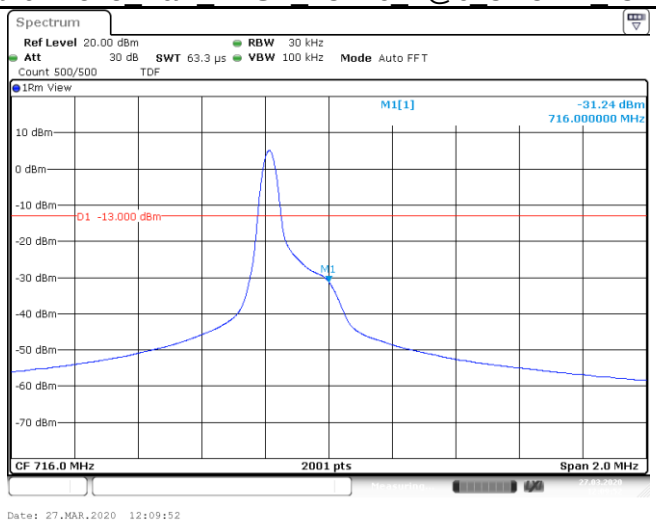

Band12_Stand-Alone_NaN_BPSK_23011_1@0_3.75kHz_-15.90_PASS



Band12_Stand-Alone_NaN_BPSK_23179_1@47_3.75kHz_-16.17_PASS




Band12_Stand-Alone_NaN_BPSK_23179_1@0_3.75kHz_-31.24_PASS



# Appendix D.5: Conducted Spurious Emission for NB

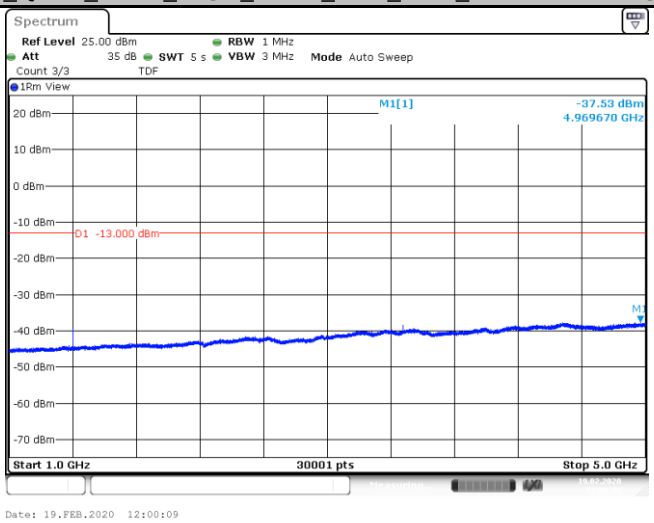
## Test Result

| Band | OpMode | Bandwidth | Modulation | Channel | Tones | SCS | StartFreq (MHz) | StopFreq (MHz) | Result (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 12@0 | 15kHz | 1000 | 5000 | 1000~5000MHz@-37.53dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 12@0 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.43dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 12@0 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.18dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 12@0 | 15kHz | 30 | 1000 | 30~1000MHz@-35.52dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 12@0 | 15kHz | 30 | 1000 | 30~1000MHz@-35.21dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 12@0 | 15kHz | 1000 | 5000 | 1000~5000MHz@-24.19dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 12@0 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.34dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 12@0 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.36dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 12@0 | 15kHz | 30 | 1000 | 30~1000MHz@-35.83dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 12@0 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.36dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 12@0 | 15kHz | 1000 | 5000 | 1000~5000MHz@-37.74dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 12@0 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.18dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@11 | 15kHz | 1000 | 5000 | 1000~5000MHz@-37.18dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 15kHz | 30 | 1000 | 30~1000MHz@-35.58dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 15kHz | 1000 | 5000 | 1000~5000MHz@-36.86dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.28dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@0 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.3dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@11 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.2dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@11 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.22dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23011 | 1@11 | 15kHz | 30 | 1000 | 30~1000MHz@-35.44dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@11 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.39dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@11 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.33dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@11 | 15kHz | 1000 | 5000 | 1000~5000MHz@-28.01dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@11 | 15kHz | 30 | 1000 | 30~1000MHz@-35.52dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 15kHz | 12000 | 26500 | 12000~26500MHz@-40.95dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.26dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 15kHz | 1000 | 5000 | 1000~5000MHz@-27.74dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23095 | 1@0 | 15kHz | 30 | 1000 | 30~1000MHz@-35.67dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@11 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.24dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 15kHz | 1000 | 5000 | 1000~5000MHz@-37.79dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.39dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 15kHz | 12000 | 26500 | 12000~26500MHz@-41.31dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@11 | 15kHz | 30 | 1000 | 30~1000MHz@-35.7dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@11 | 15kHz | 1000 | 5000 | 1000~5000MHz@-37.62dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@11 | 15kHz | 5000 | 12000 | 5000~12000MHz@-47.37dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | BPSK | 23179 | 1@0 | 15kHz | 30 | 1000 | 30~1000MHz@-35.83dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@47 | 3.75kHz | 12000 | 26500 | 12000~26500MHz@-41.37dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 3.75kHz | 1000 | 5000 | 1000~5000MHz@-37.63dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 3.75kHz | 5000 | 12000 | 5000~12000MHz@-47.78dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 3.75kHz | 12000 | 26500 | 12000~26500MHz@-41.35dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@47 | 3.75kHz | 30 | 1000 | 30~1000MHz@-35.12dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@47 | 3.75kHz | 1000 | 5000 | 1000~5000MHz@-37.66dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@0 | 3.75kHz | 30 | 1000 | 30~1000MHz@-35.21dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23011 | 1@47 | 3.75kHz | 5000 | 12000 | 5000~12000MHz@-47.88dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@47 | 3.75kHz | 12000 | 26500 | 12000~26500MHz@-41.31dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 3.75kHz | 1000 | 5000 | 1000~5000MHz@-37.69dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 3.75kHz | 5000 | 12000 | 5000~12000MHz@-47.67dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 3.75kHz | 12000 | 26500 | 12000~26500MHz@-41.42dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@47 | 3.75kHz | 30 | 1000 | 30~1000MHz@-35.51dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@47 | 3.75kHz | 1000 | 5000 | 1000~5000MHz@-37.64dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@47 | 3.75kHz | 5000 | 12000 | 5000~12000MHz@-47.77dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23179 | 1@0 | 3.75kHz | 30 | 1000 | 30~1000MHz@-35.64dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 3.75kHz | 1000 | 5000 | 1000~5000MHz@-37.68dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 3.75kHz | 5000 | 12000 | 5000~12000MHz@-47.77dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@47 | 3.75kHz | 12000 | 26500 | 12000~26500MHz@-41.46dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 3.75kHz | 12000 | 26500 | 12000~26500MHz@-41.44dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@47 | 3.75kHz | 30 | 1000 | 30~1000MHz@-35.67dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@47 | 3.75kHz | 1000 | 5000 | 1000~5000MHz@-37.79dBm | -13 | PASS |

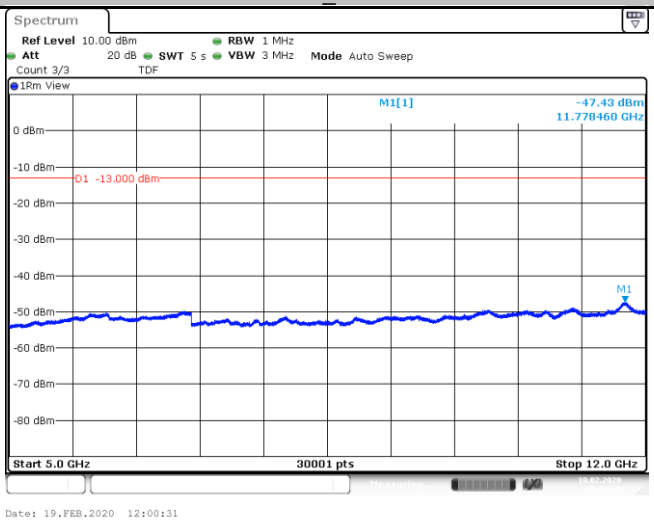
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@47 | 3.75kHz | 5000 | 12000 | 5000~12000MHz@-47.85dBm | -13 | PASS |
| Band12 | Stand-Alone | NaN | QPSK | 23095 | 1@0 | 3.75kHz | 30 | 1000 | 30~1000MHz@-35.02dBm | -13 | PASS |

## Test Graphs

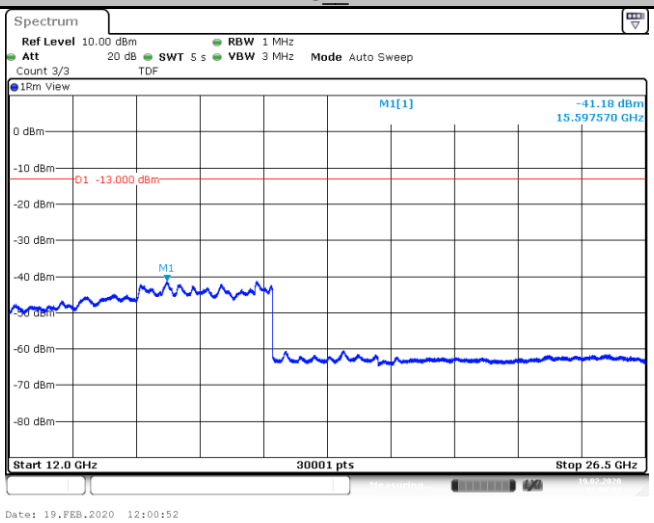
Band12_Stand-Alone_NaN_QPSK_23011_12@0_15kHz_1000_5000_1000~5000MHz@-37.53dBm_-13_PASS__



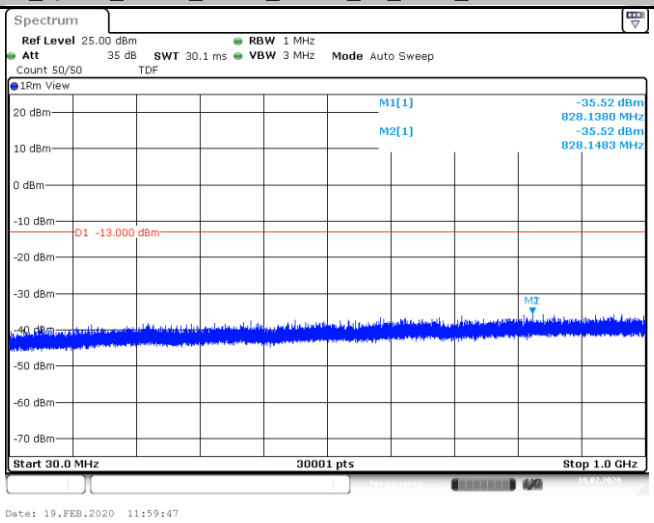

Band12_Stand-Alone_NaN_QPSK_23011_12@0_15kHz_5000_12000_5000~12000MHz@-47.43dBm_-13_PASS_



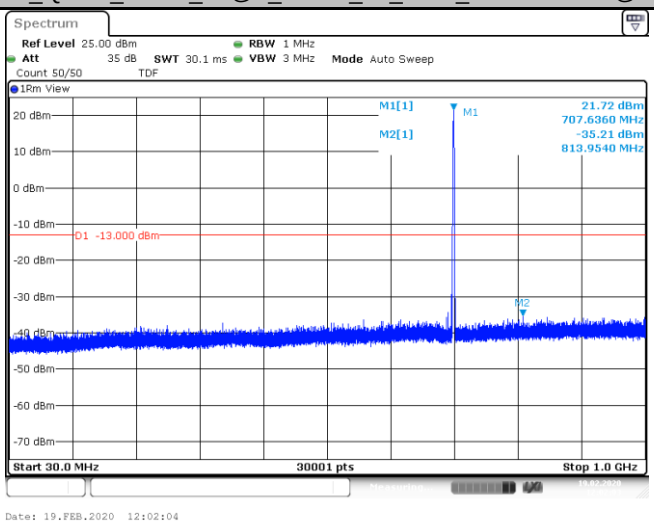
Band12_Stand-Alone_NaN_QPSK_23011_12@0_15kHz_12000_26500_12000~26500MHz@-41.18dBm_-13_PASS__



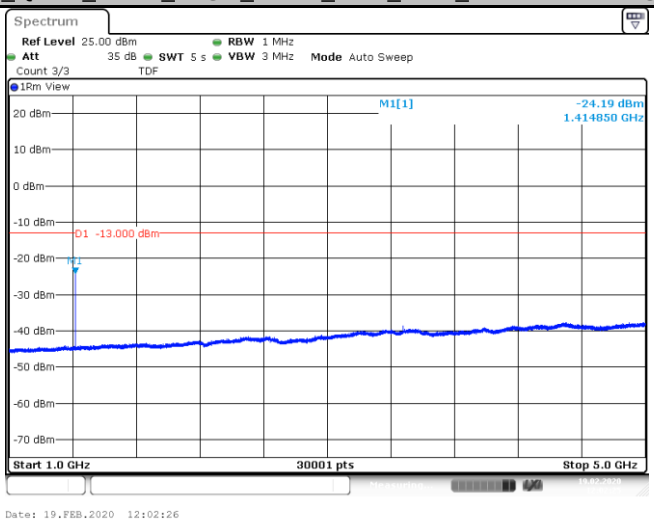

Band12_Stand-Alone_NaN_QPSK_23011_12@0_15kHz_30_1000_30~1000MHz@-35.52dBm_-13_PASS__



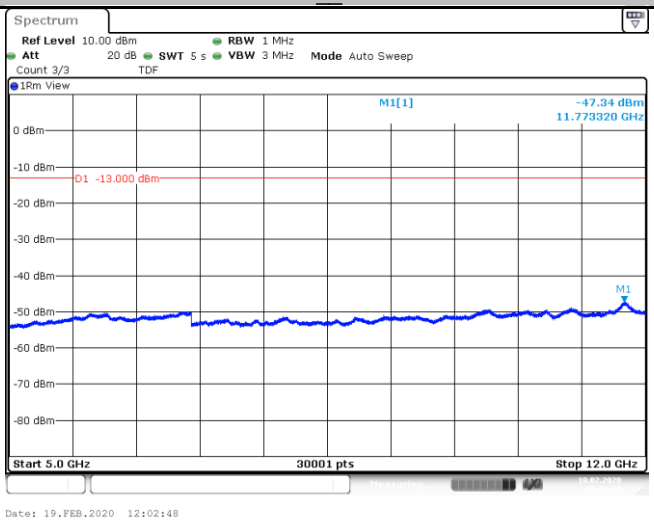

Band12_Stand-Alone_NaN_QPSK_23095_12@0_15kHz_30_1000_30~1000MHz@-35.21dBm_-13_PASS__



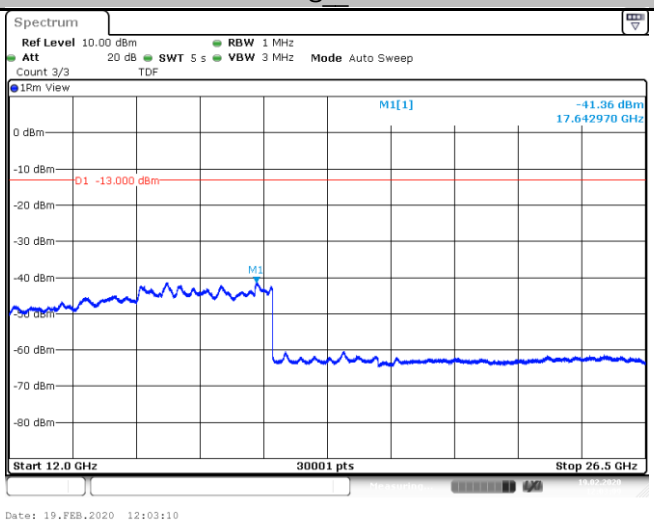
Band12_Stand-Alone_NaN_QPSK_23095_12@0_15kHz_1000_5000_1000~5000MHz@-24.19dBm_-13_PASS__



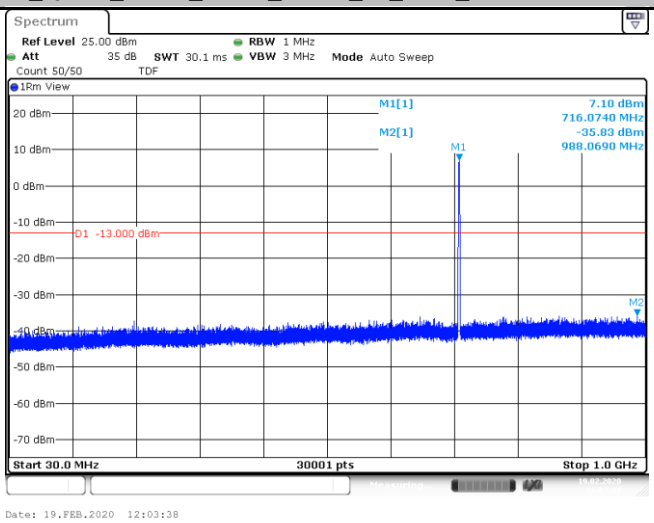

Band12_Stand-Alone_NaN_QPSK_23095_12@0_15kHz_5000_12000_5000~12000MHz@-47.34dBm_-13_PASS__



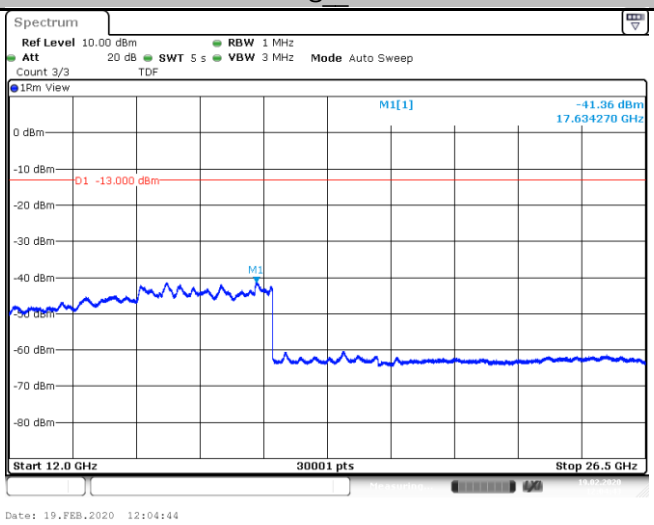

Band12_Stand-Alone_NaN_QPSK_23095_12@0_15kHz_12000_26500_12000~26500MHz@-41.36dBm_-13_PASS__



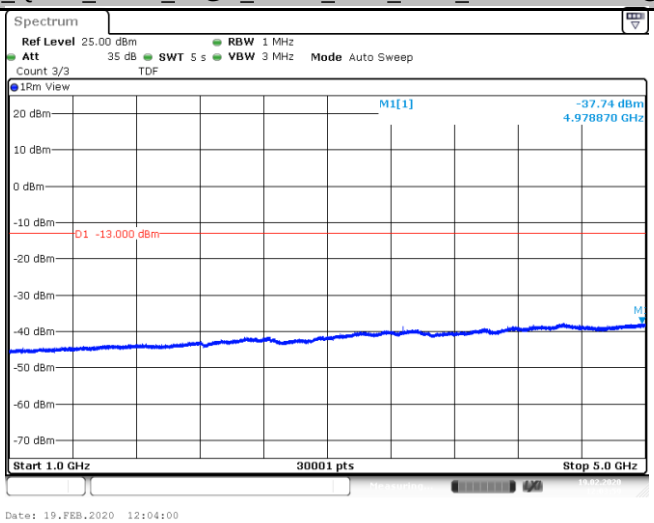
Band12_Stand-Alone_NaN_QPSK_23179_12@0_15kHz_30_1000_30~1000MHz@-35.83dBm_-13_PASS__



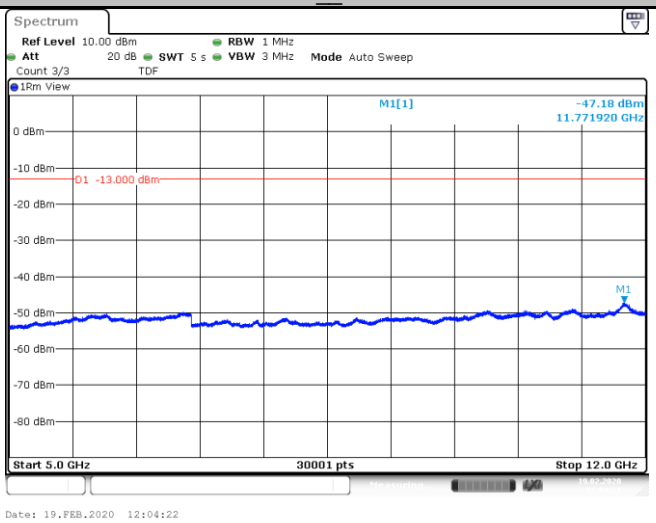

Band12_Stand-Alone_NaN_QPSK_23179_12@0_15kHz_12000_26500_12000~26500MHz@-41.36dBm_-13_PASS__



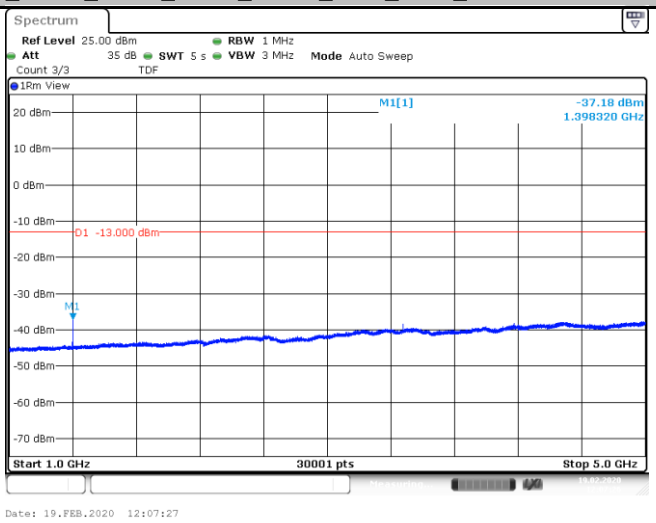

Band12_Stand-Alone_NaN_QPSK_23179_12@0_15kHz_1000_5000_1000~5000MHz@-37.74dBm_-13_PASS__



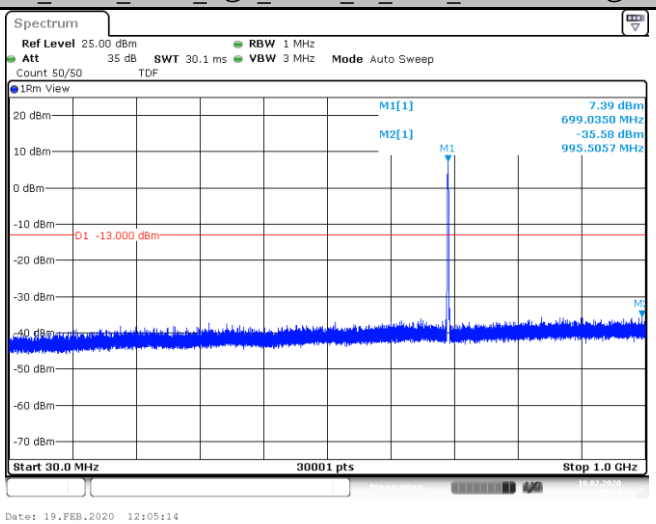
Band12_Stand-Alone_NaN_QPSK_23179_12@0_15kHz_5000_12000_5000~12000MHz@-47.18dBm_-13_PASS__



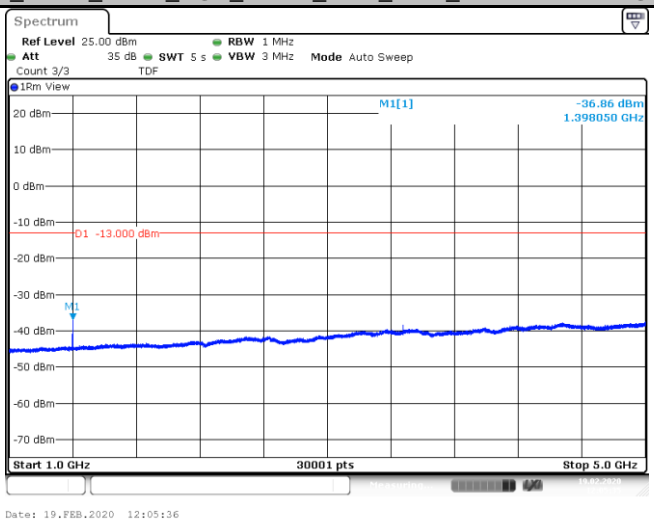

Band12_Stand-Alone_NaN_BPSK_23011_1@11_15kHz_1000_5000_1000~5000MHz@-37.18dBm_-13_PASS__



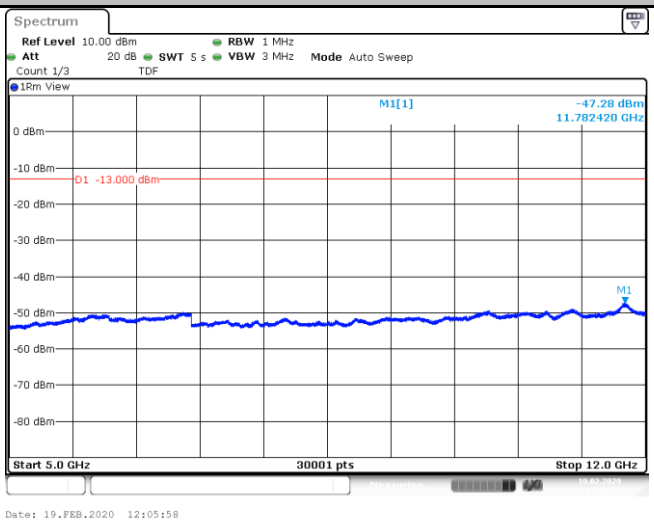

Band12_Stand-Alone_NaN_BPSK_23011_1@0_15kHz_30_1000_30~1000MHz@-35.58dBm_-13_PASS__



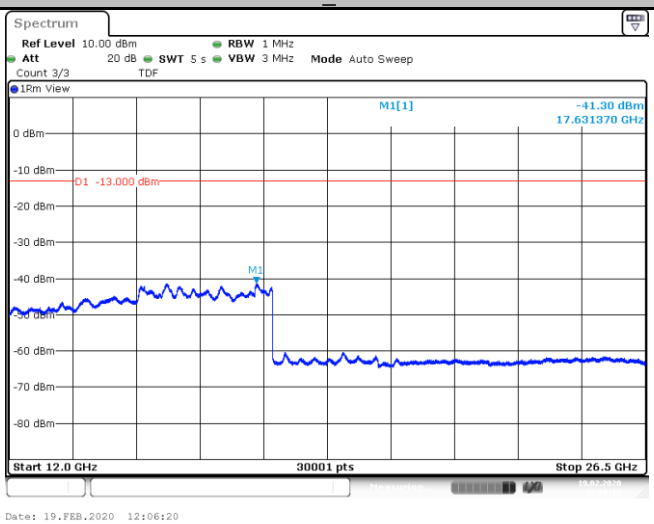
Band12_Stand-Alone_NaN_BPSK_23011_1@0_15kHz_1000_5000_1000~5000MHz@-36.86dBm_-13_PASS__



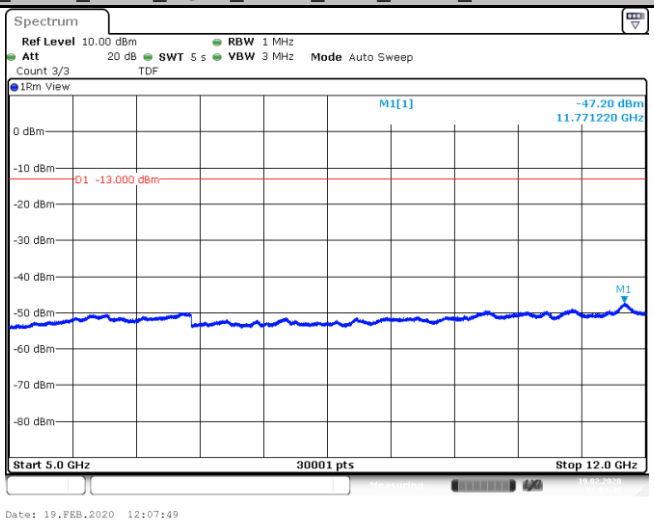

Band12_Stand-Alone_NaN_BPSK_23011_1@0_15kHz_5000_12000_5000~12000MHz@-47.28dBm_-13_PASS__



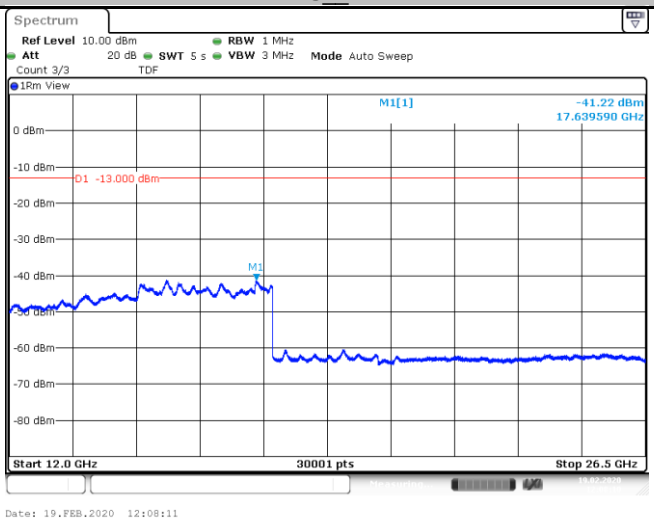

Band12_Stand-Alone_NaN_BPSK_23011_1@0_15kHz_12000_26500_12000~26500MHz@-41.3dBm_-13_PASS_
_



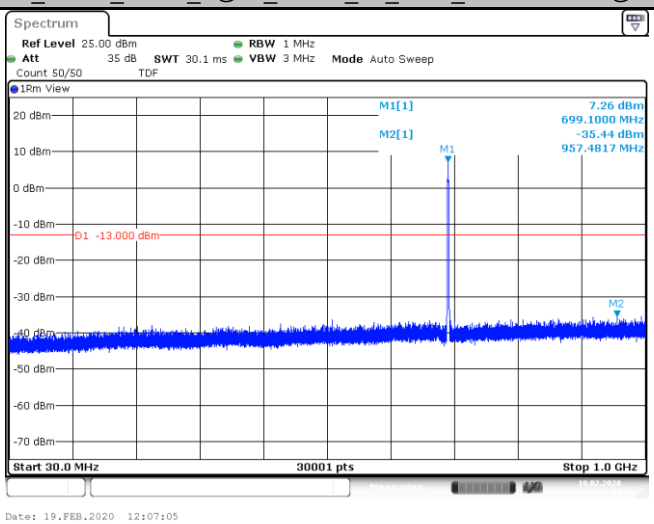
Band12_Stand-Alone_NaN_BPSK_23011_1@11_15kHz_5000_12000_5000~12000MHz@-47.2dBm_-13_PASS__



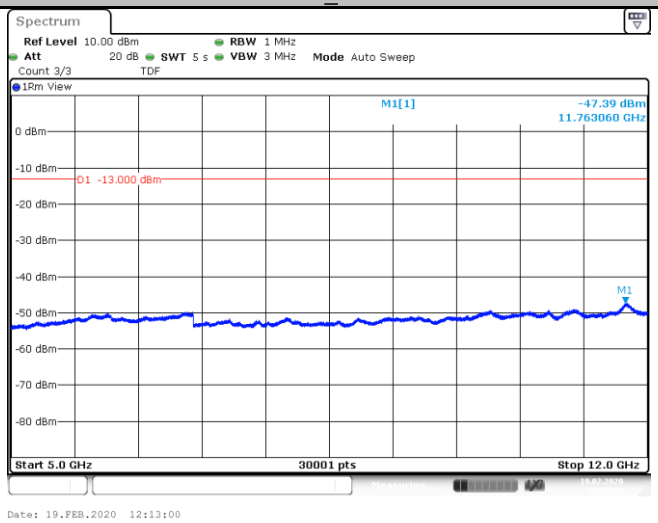

Band12_Stand-Alone_NaN_BPSK_23011_1@11_15kHz_12000_26500_12000~26500MHz@-41.22dBm_-13_PASS__



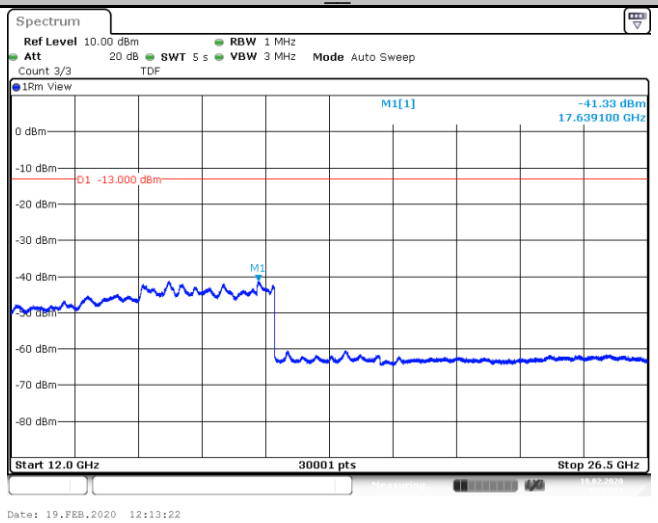

Band12_Stand-Alone_NaN_BPSK_23011_1@11_15kHz_30_1000_30~1000MHz@-35.44dBm_-13_PASS__



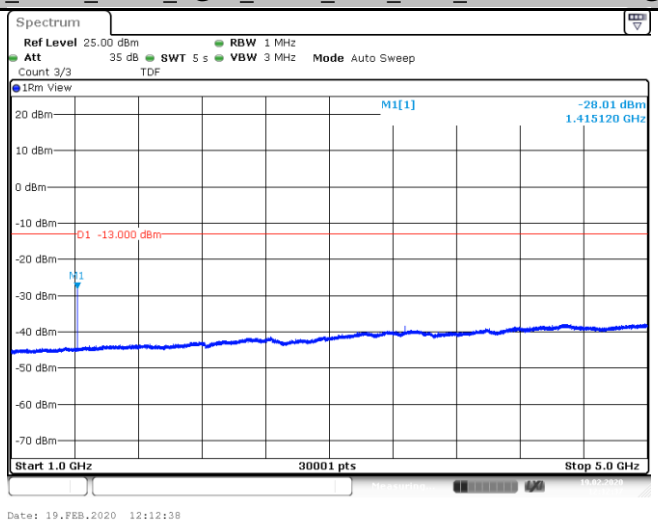
Band12_Stand-Alone_NaN_BPSK_23095_1@11_15kHz_5000_12000_5000~12000MHz@-47.39dBm_-13_PASS_



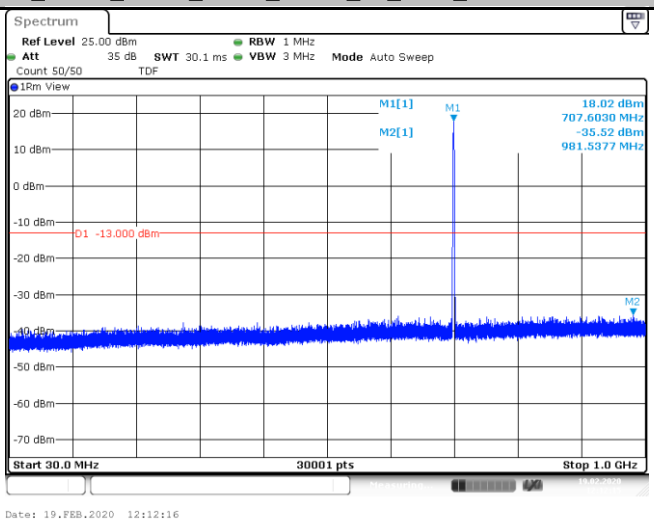

Band12_Stand-Alone_NaN_BPSK_23095_1@11_15kHz_12000_26500_12000~26500MHz@-41.33dBm_-13_PASS__



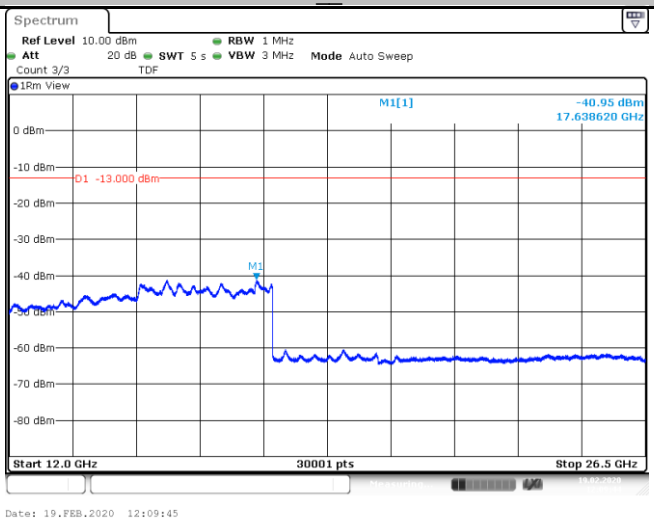

Band12_Stand-Alone_NaN_BPSK_23095_1@11_15kHz_1000_5000_1000~5000MHz@-28.01dBm_-13_PASS__

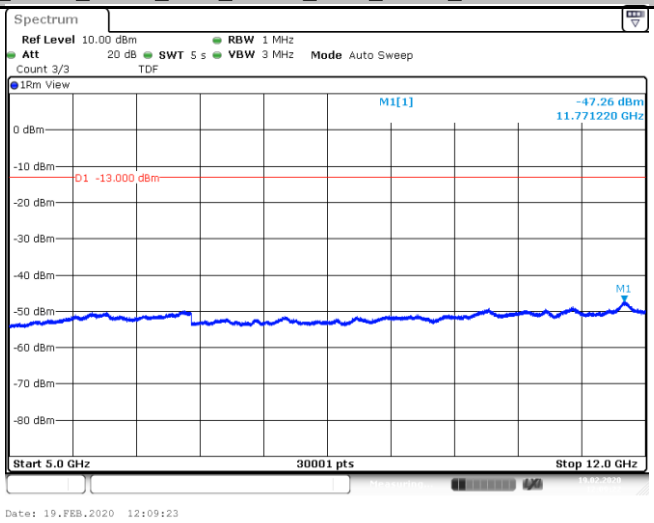


Band12_Stand-Alone_NaN_BPSK_23095_1@11_15kHz_30_1000_30~1000MHz@-35.52dBm_-13_PASS__




Band12_Stand-Alone_NaN_BPSK_23095_1@0_15kHz_12000_26500_12000~26500MHz@-40.95dBm_-13_PASS__




Band12_Stand-Alone_NaN_BPSK_23095_1@0_15kHz_5000_12000_5000~12000MHz@-47.26dBm_-13_PASS__