

# Appendix A: Test Results of Band 787-788 MHz for NB-IoT operation

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

### Test Result

| Test Configuration |       | EARFCN                | Frequency (MHz) | EARFCN                | Frequency (MHz) | EARFCN                | Frequency (MHz) | EARFCN                | Frequency (MHz) |
|--------------------|-------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|
|                    |       | 134183                | 787.1           | 134184                | 787.2           | 134190                | 787.8           | 134191                | 787.9           |
| Modulation: BPSK   |       | Conducted Power (dBm) | E.R.P (dBm)     | Conducted Power (dBm) | E.R.P (dBm)     | Conducted Power (dBm) | E.R.P (dBm)     | Conducted Power (dBm) | E.R.P (dBm)     |
| 3.75kHz            | 1RB0  | 6.06                  | 6.05            | 20.79                 | 20.78           | 20.72                 | 20.71           | 6.06                  | 6.05            |
|                    | 1RB47 | 6.01                  | 6.00            | 20.71                 | 20.70           | 20.72                 | 20.71           | 6.00                  | 5.99            |
| 15kHz              | 1RB0  | 6.39                  | 6.38            | 20.66                 | 20.65           | 20.66                 | 20.65           | 6.42                  | 6.41            |
|                    | 1RB11 | 6.33                  | 6.32            | 20.63                 | 20.62           | 20.53                 | 20.52           | 6.36                  | 6.35            |
| Modulation: QPSK   |       | Conducted Power (dBm) | E.R.P (dBm)     | Conducted Power (dBm) | E.R.P (dBm)     | Conducted Power (dBm) | E.R.P (dBm)     | Conducted Power (dBm) | E.R.P (dBm)     |
| 3.75kHz            | 1RB0  | 6.07                  | 6.06            | 20.84                 | 20.83           | 20.61                 | 20.60           | 6.10                  | 6.09            |
|                    | 1RB47 | 6.01                  | 6.00            | 20.79                 | 20.78           | 20.79                 | 20.78           | 6.04                  | 6.03            |
| 15kHz              | 1RB0  | 6.40                  | 6.39            | 20.74                 | 20.73           | 20.68                 | 20.67           | 6.42                  | 6.41            |
|                    | 1RB11 | 6.33                  | 6.32            | 20.63                 | 20.62           | 20.64                 | 20.63           | 6.35                  | 6.34            |
|                    | 3RB3  | 6.52                  | 6.51            | 20.53                 | 20.52           | 20.54                 | 20.53           | 6.55                  | 6.54            |

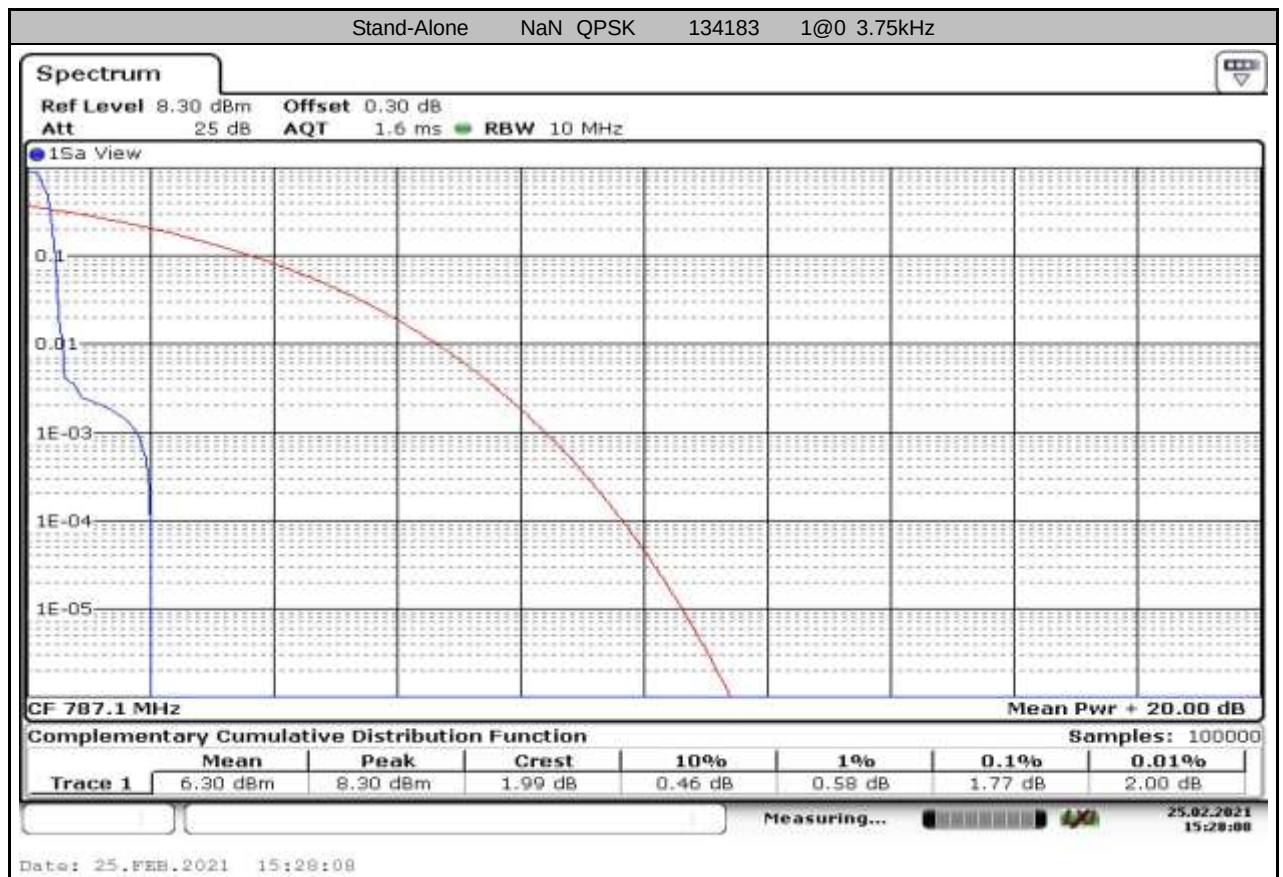
## Appendix A.2: Peak-to-Average Ratio (CCDF) for NB

### Test Result

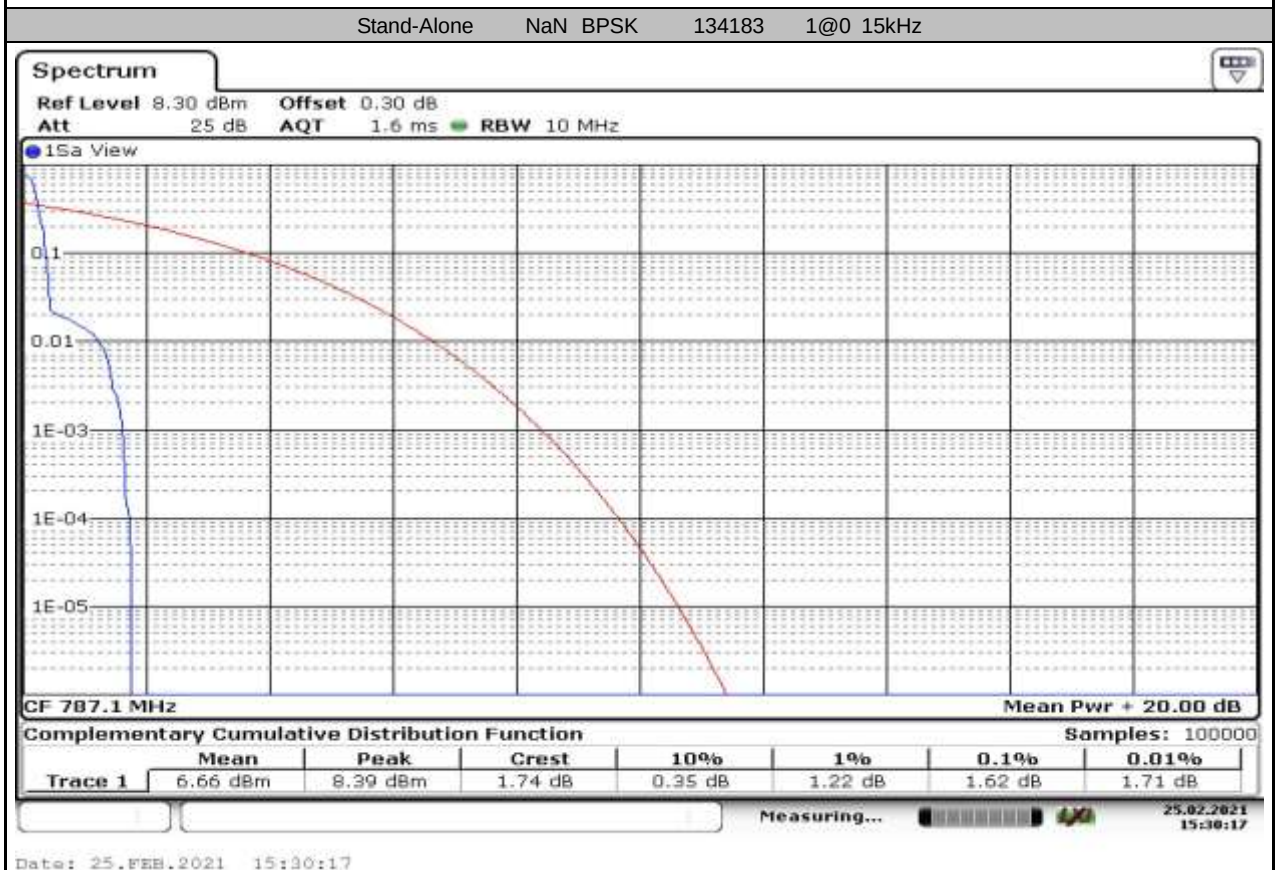
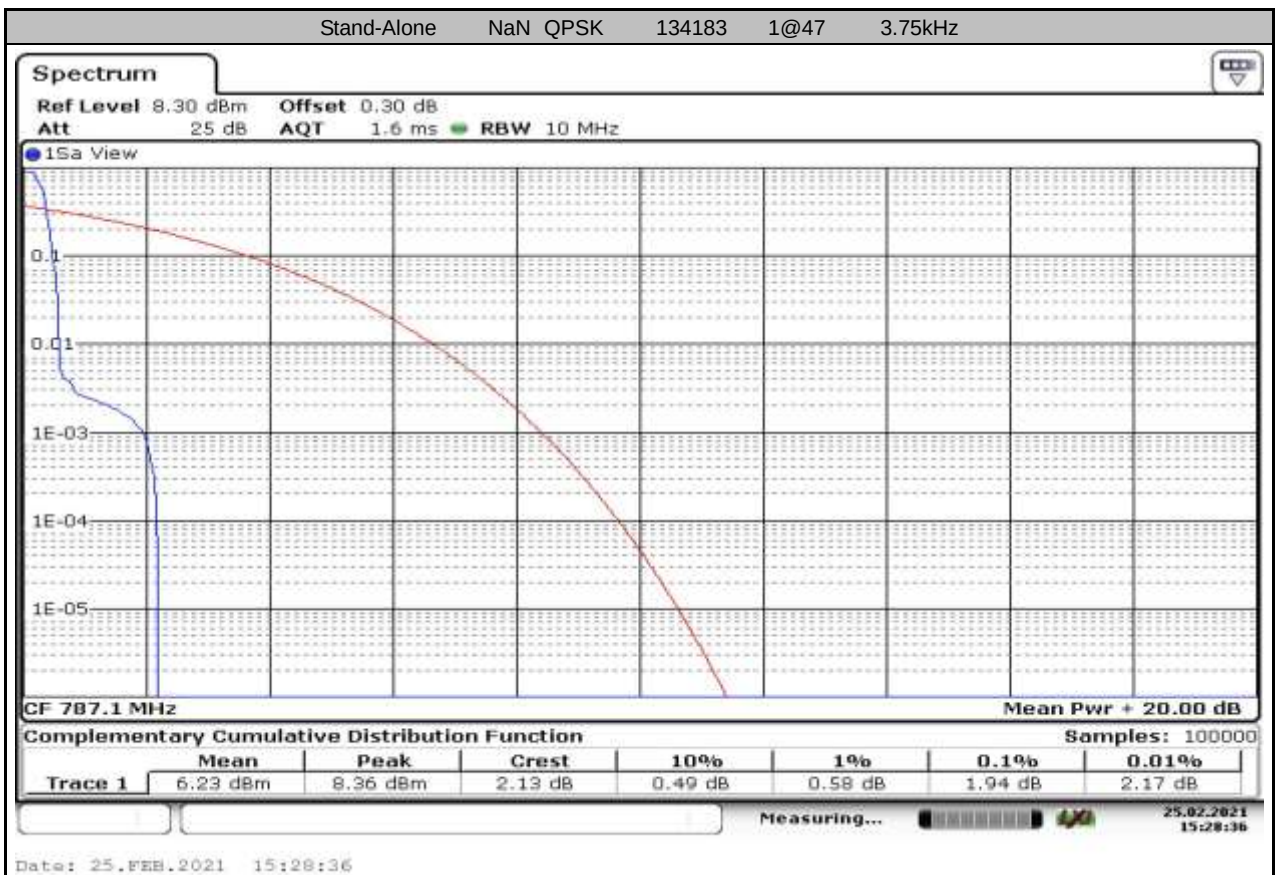
| Band     | OpMode      | Bandwidth | Modulation | Channel | Tones | SCS     | Result (dB) | Limit (dB) | Verdict |
|----------|-------------|-----------|------------|---------|-------|---------|-------------|------------|---------|
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 3.75kHz | 1.88        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | 1.77        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@47  | 3.75kHz | 1.77        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@47  | 3.75kHz | 1.94        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 15kHz   | 1.62        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | 1.62        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@11  | 15kHz   | 1.59        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@11  | 15kHz   | 1.62        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 3@3   | 15kHz   | 3.91        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 3.75kHz | 2.17        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | 1.68        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@47  | 3.75kHz | 2.03        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@47  | 3.75kHz | 1.48        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 15kHz   | 1.54        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 15kHz   | 1.62        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@11  | 15kHz   | 1.59        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@11  | 15kHz   | 1.68        | <=13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 3@3   | 15kHz   | 3.88        | <=13       | PASS    |

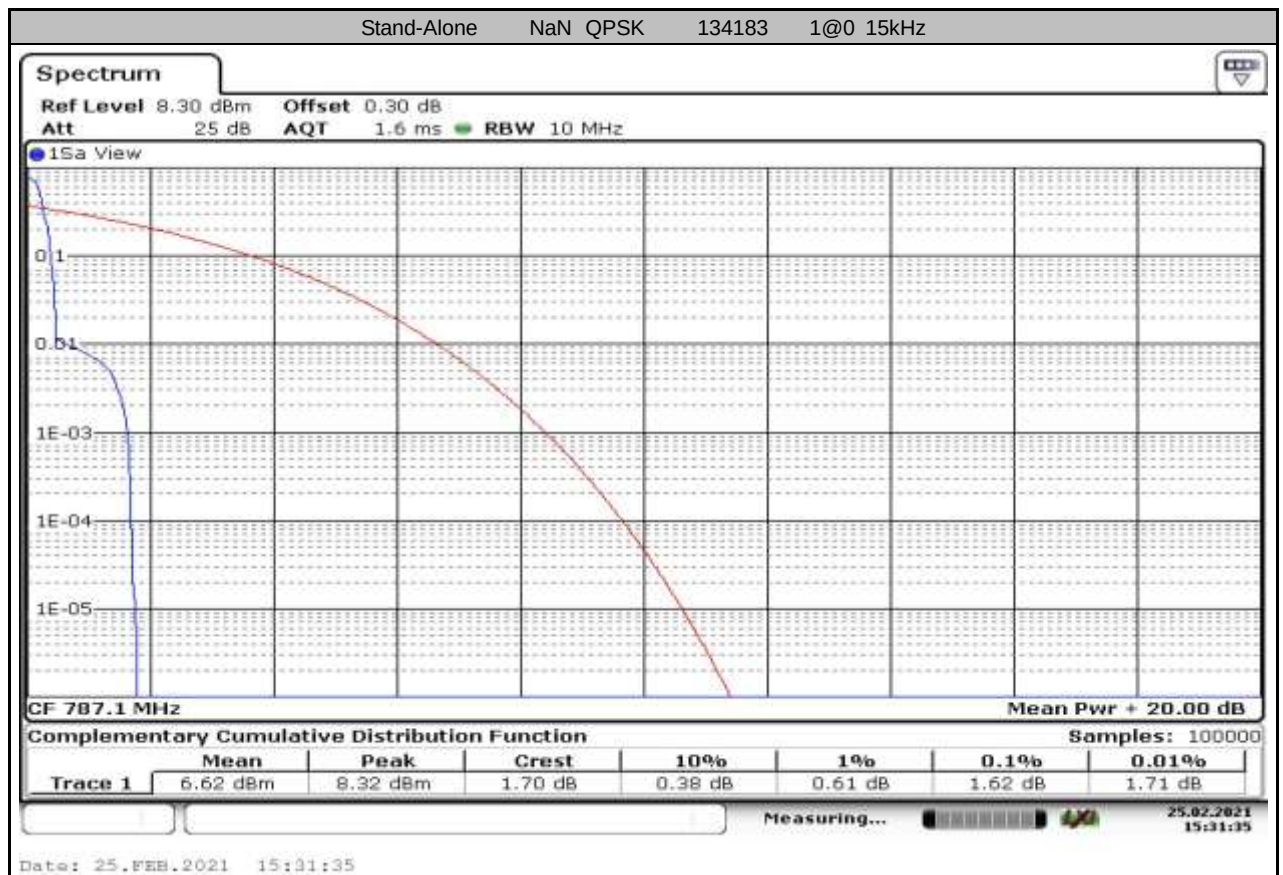
### Test Graphs



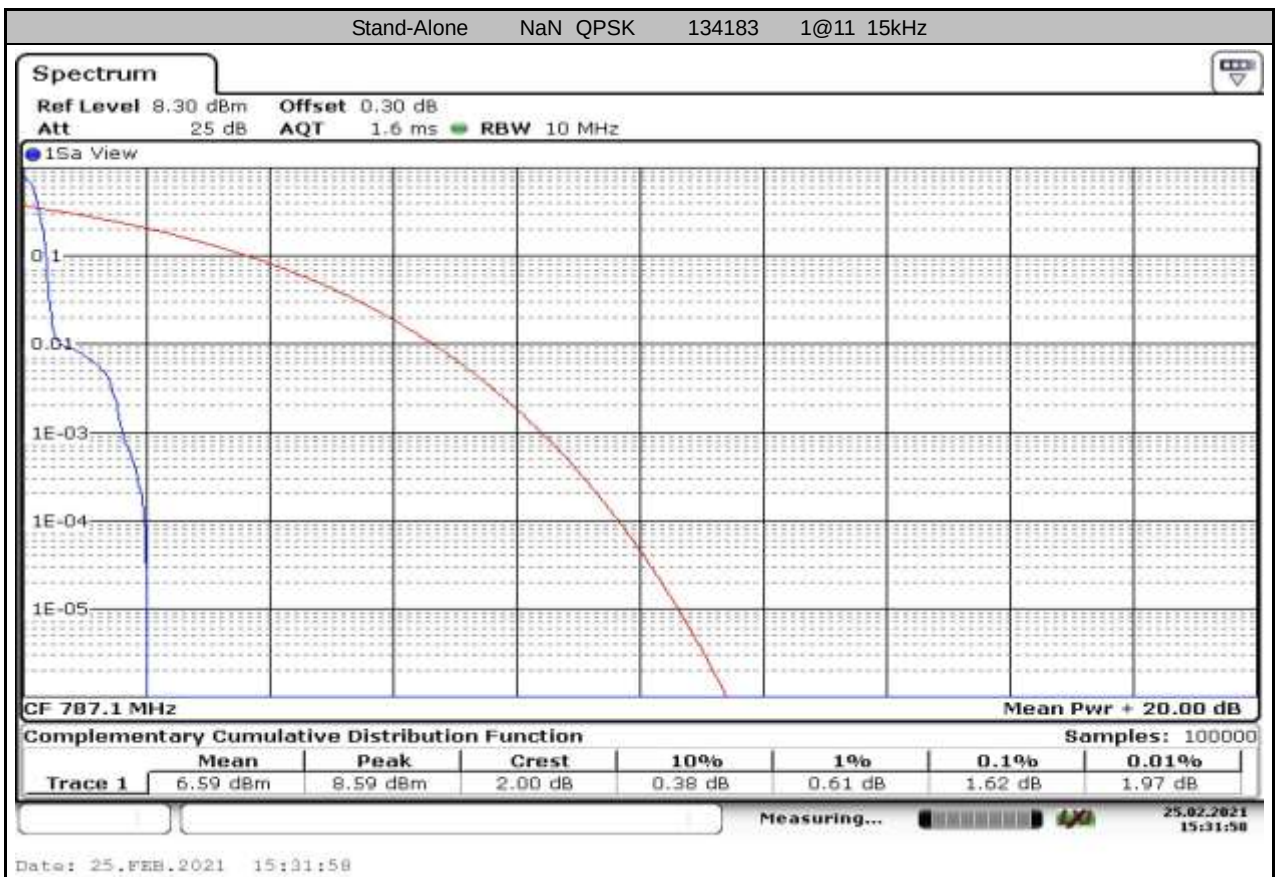


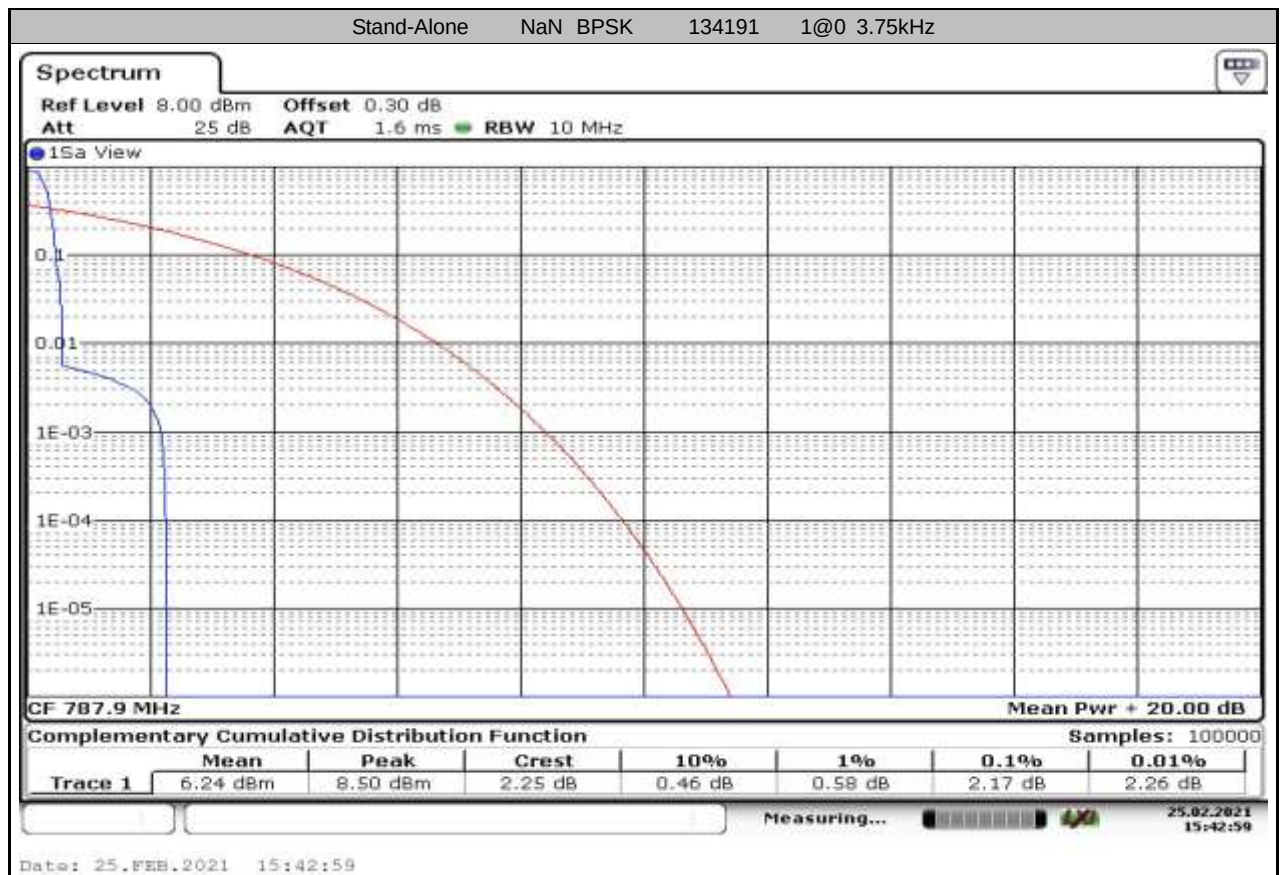




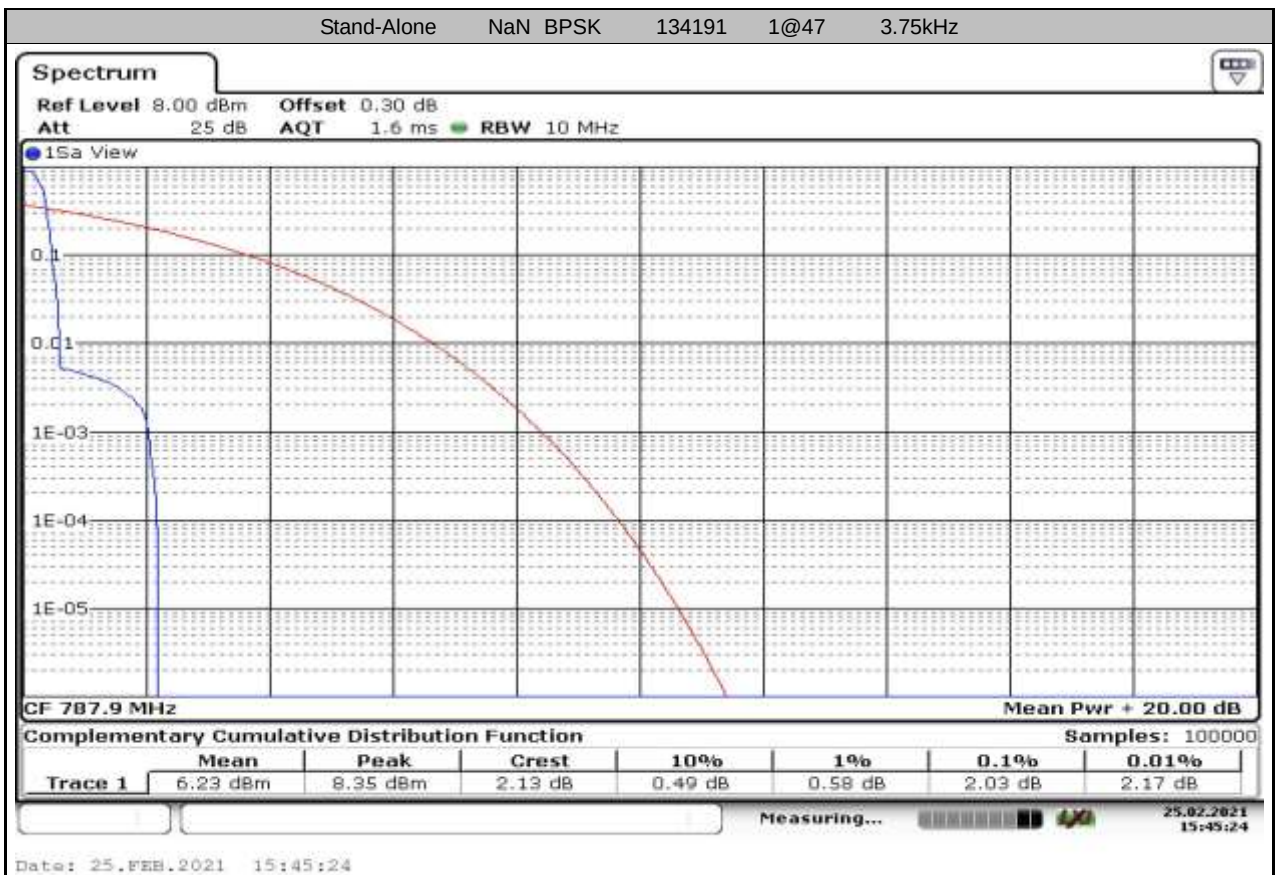


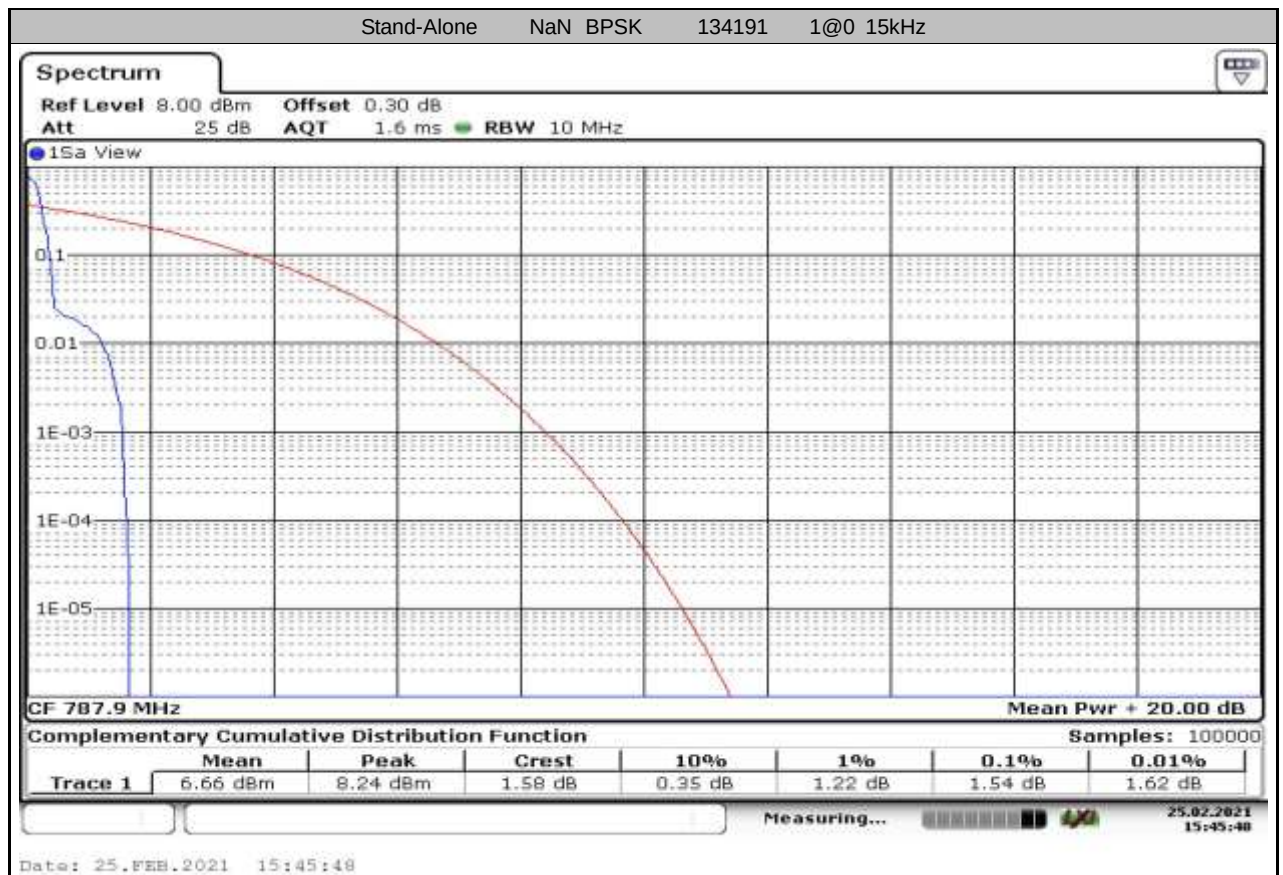




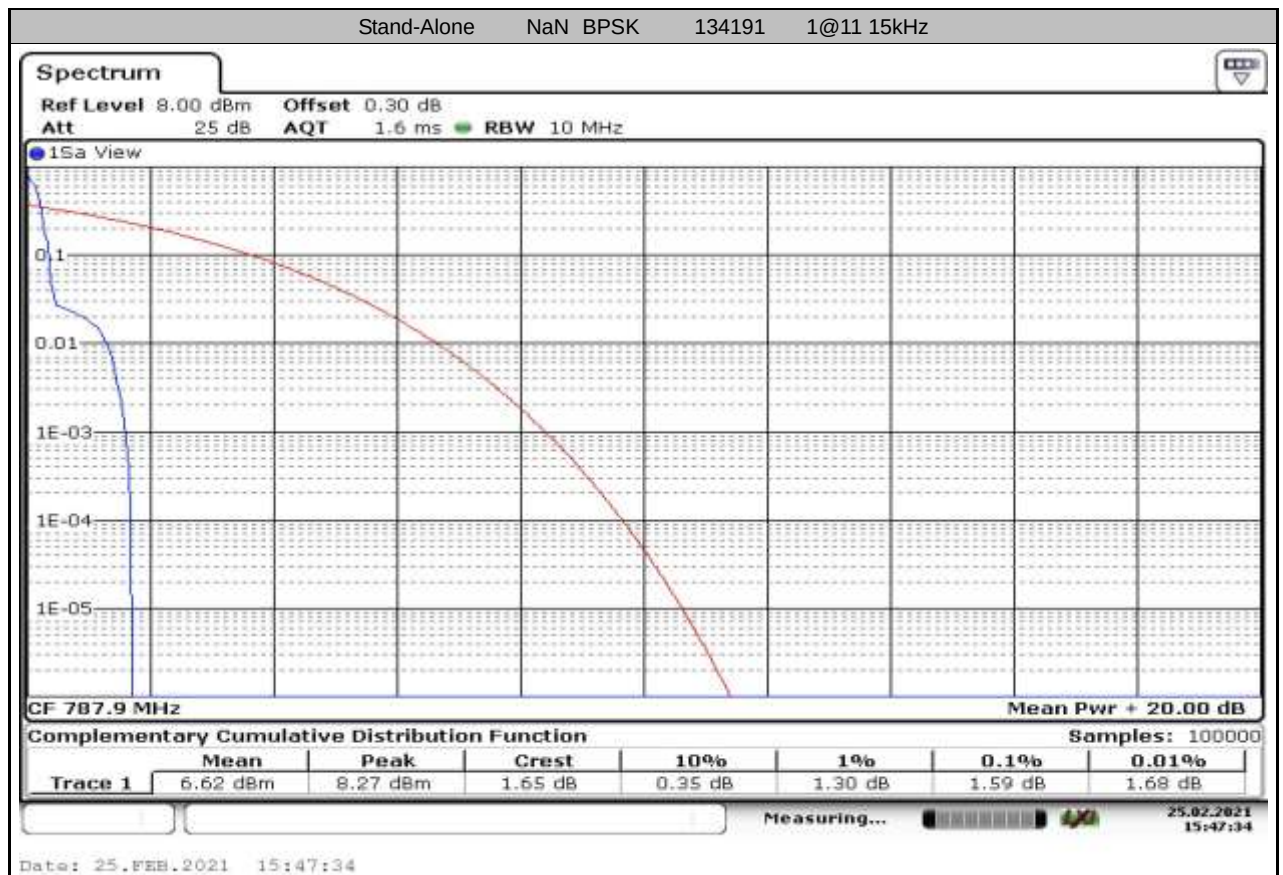














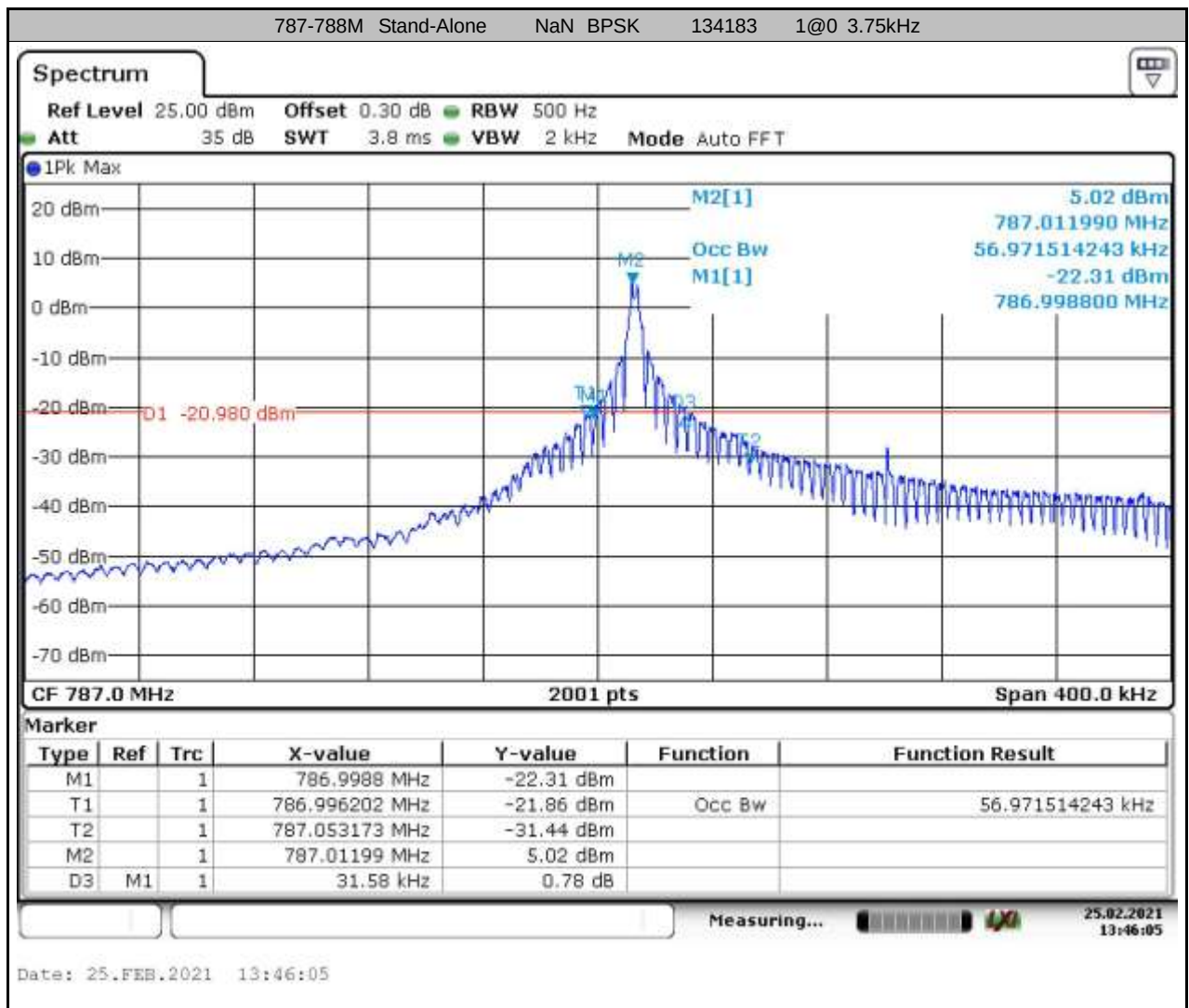


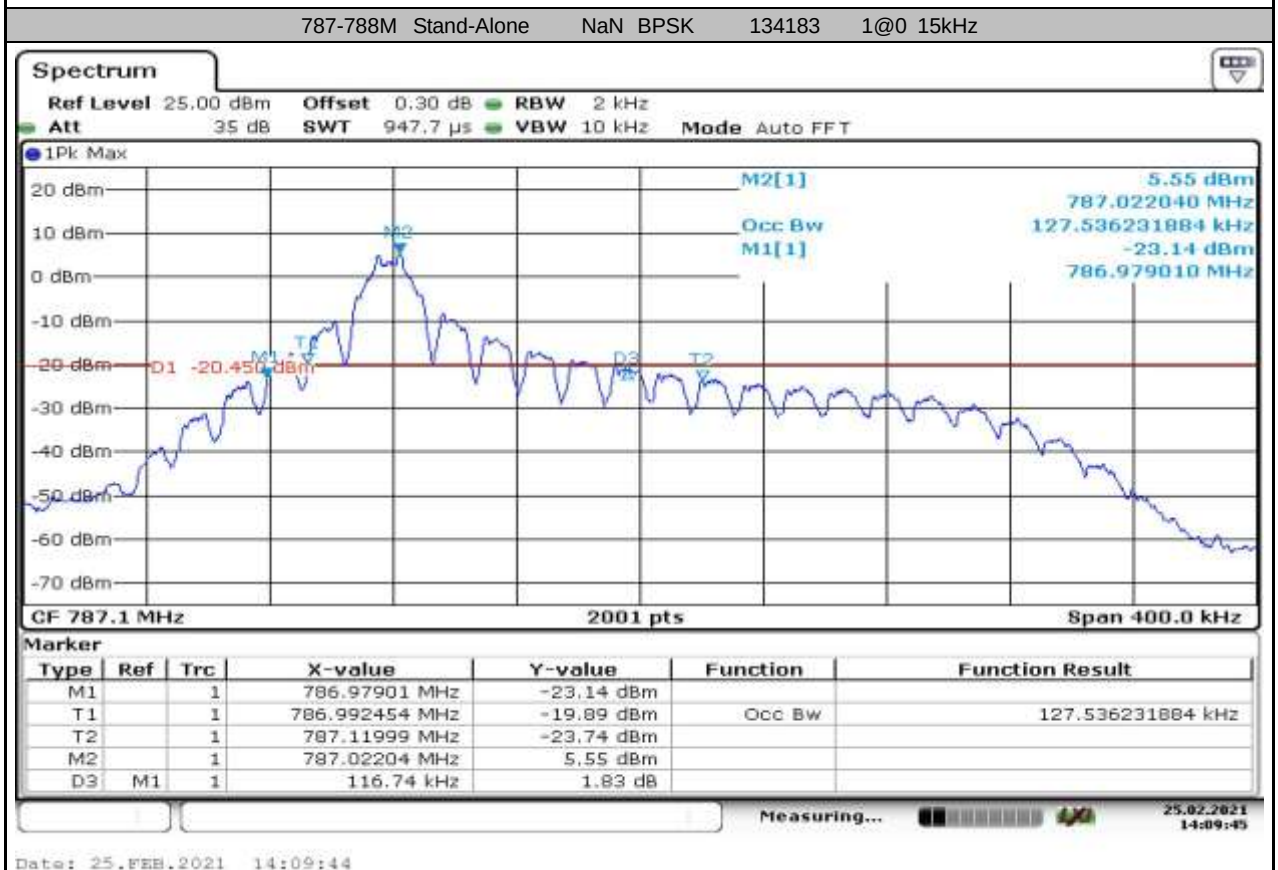
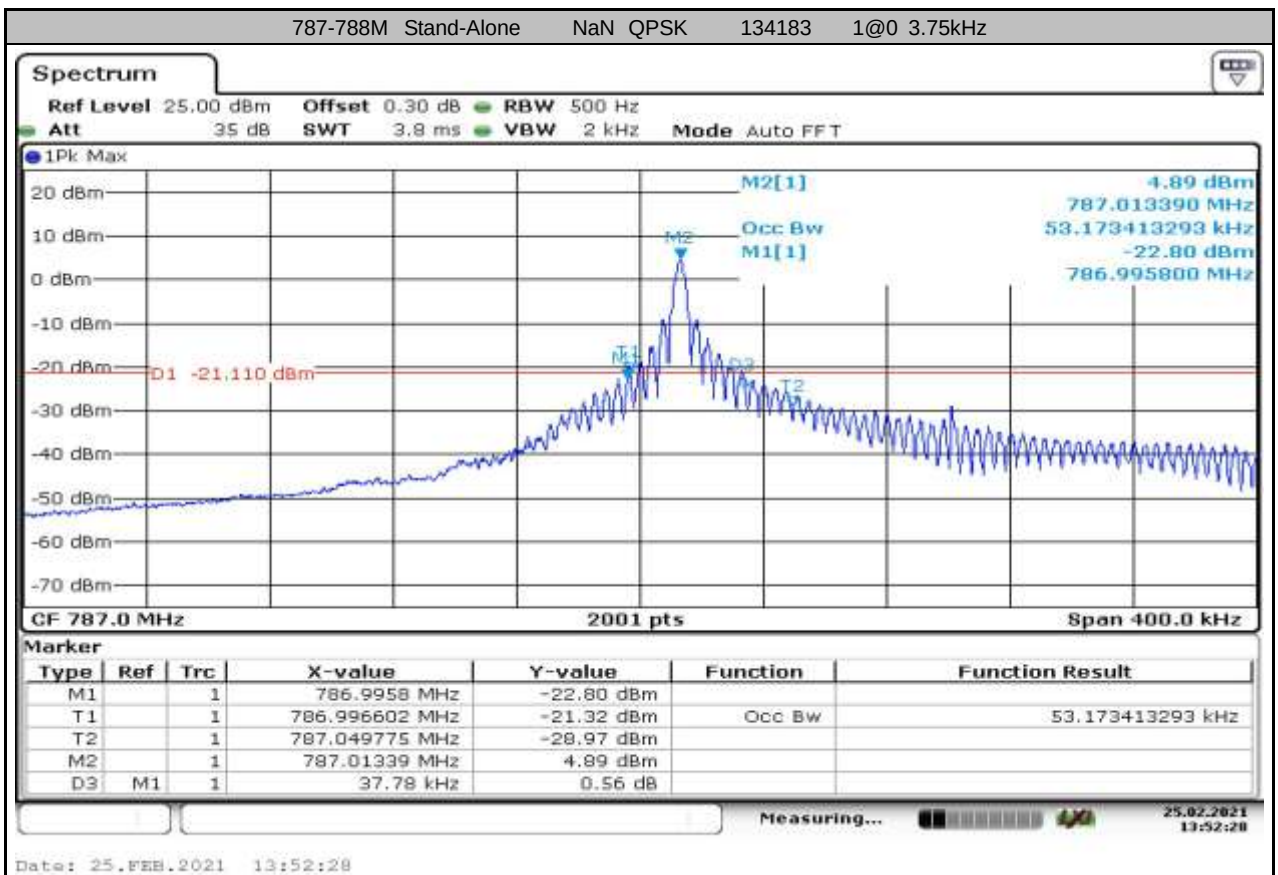
## Appendix A.3: 26dB Emission Bandwidth and Occupied Bandwidth for NB

### Test Result

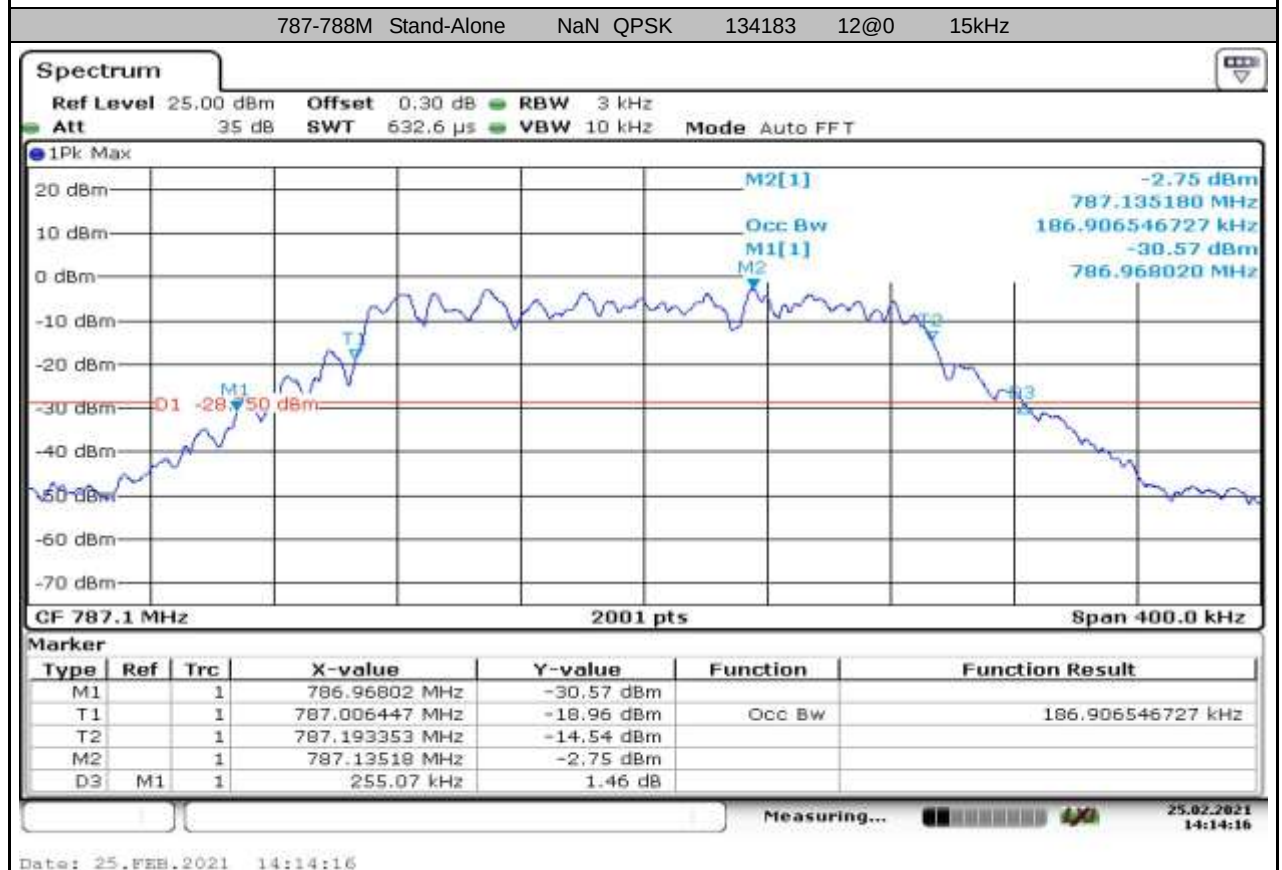
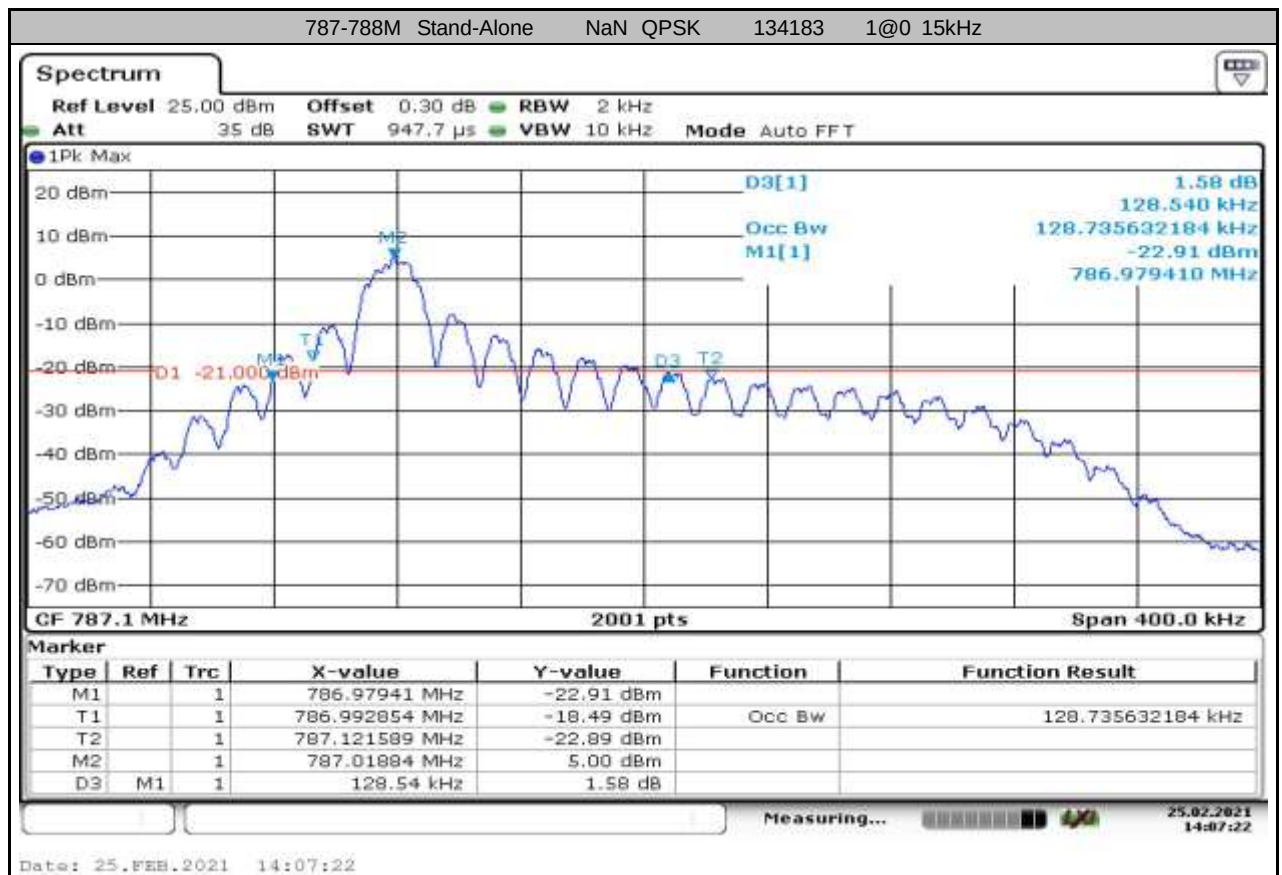
| Band     | OpMode      | Bandwidth | Modulation | Channel | Tones | SCS     | 26dB Bandwidth (MHz) | Occupied Bandwidth (MHz) | Verdict |
|----------|-------------|-----------|------------|---------|-------|---------|----------------------|--------------------------|---------|
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 3.75kHz | 0.03158              | 0.05697                  | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | 0.03778              | 0.05317                  | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 15kHz   | 0.11674              | 0.12754                  | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | 0.12854              | 0.12874                  | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 12@0  | 15kHz   | 0.25507              | 0.18691                  | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 3.75kHz | 0.03698              | 0.05677                  | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | 0.04118              | 0.05517                  | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 15kHz   | 0.11774              | 0.12794                  | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 15kHz   | 0.12853              | 0.12794                  | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 12@0  | 15kHz   | 0.24228              | 0.18391                  | PASS    |

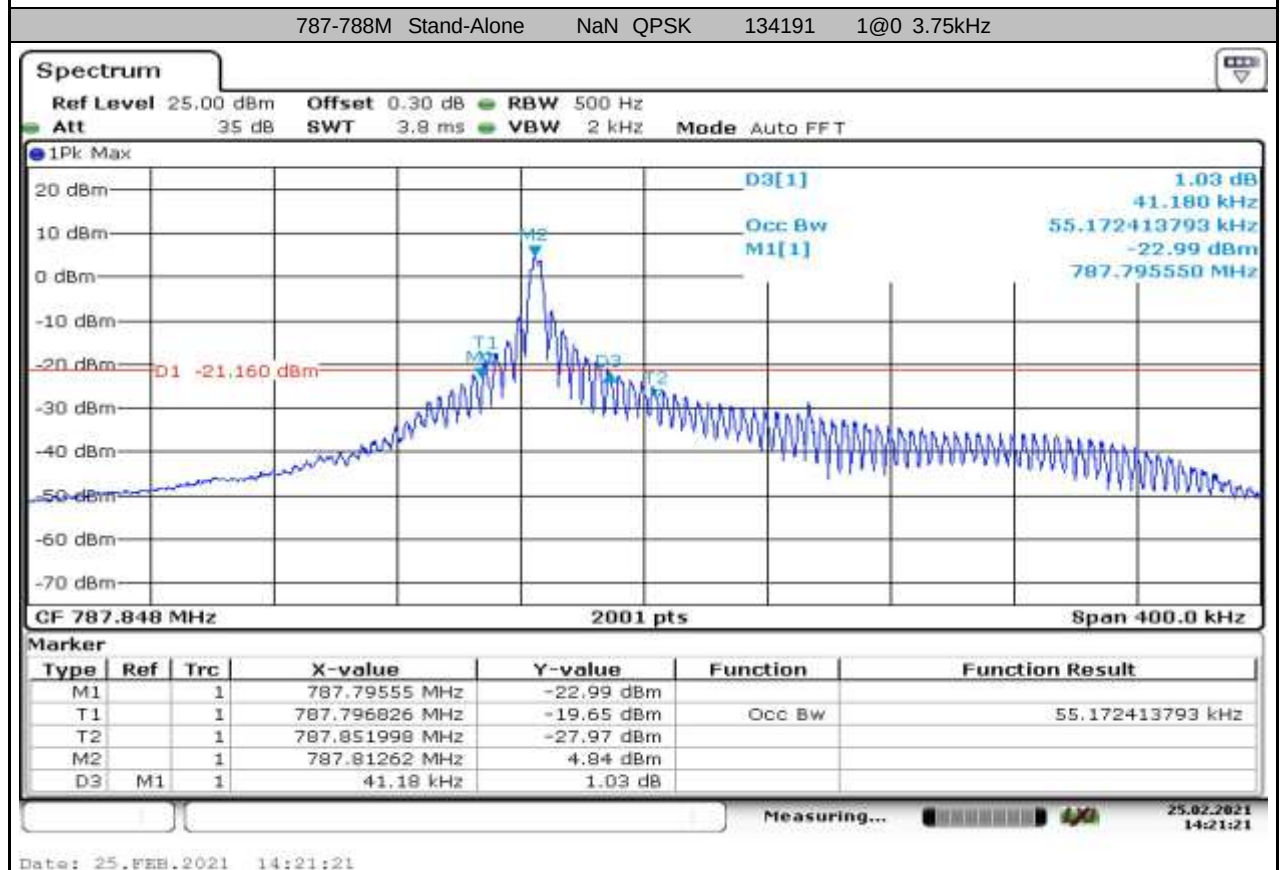
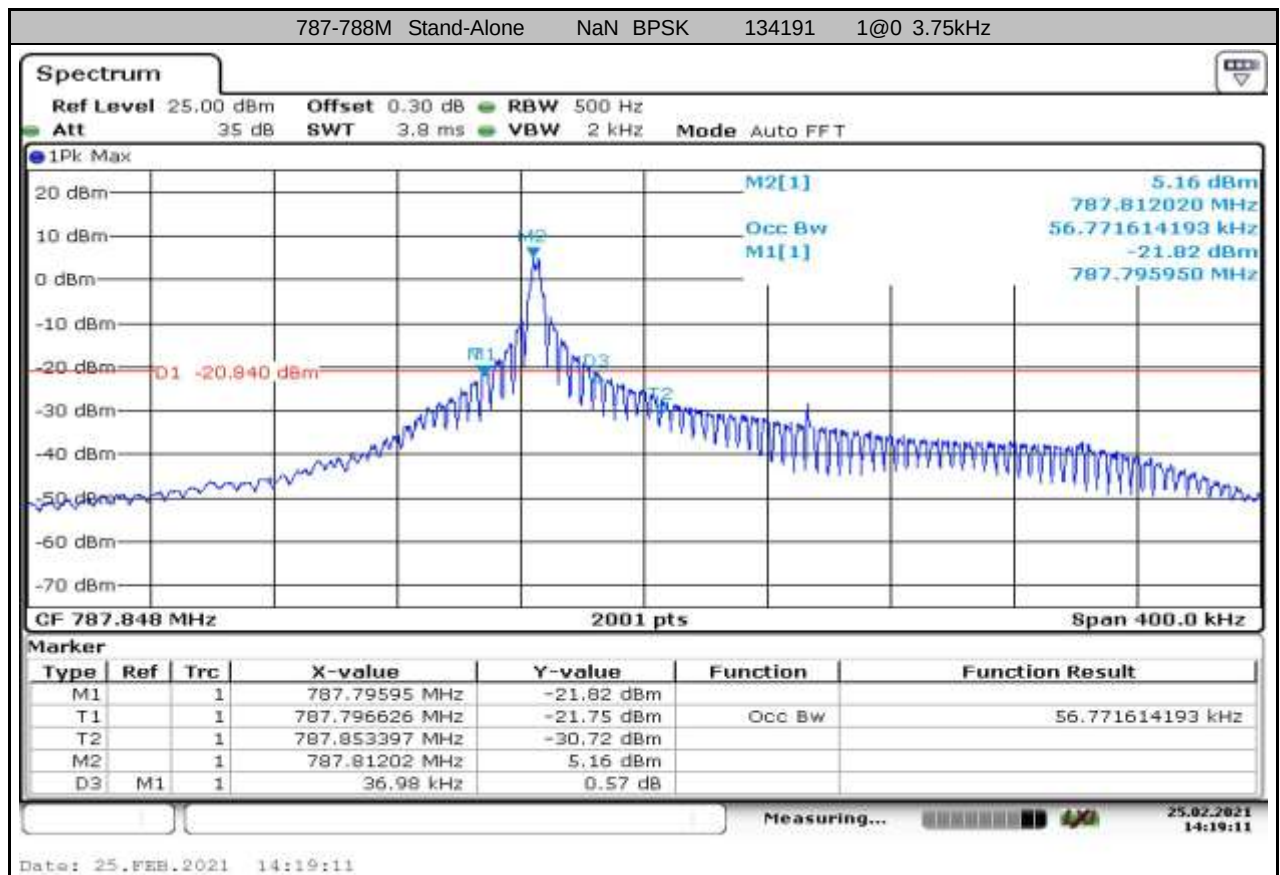
### Test Graphs

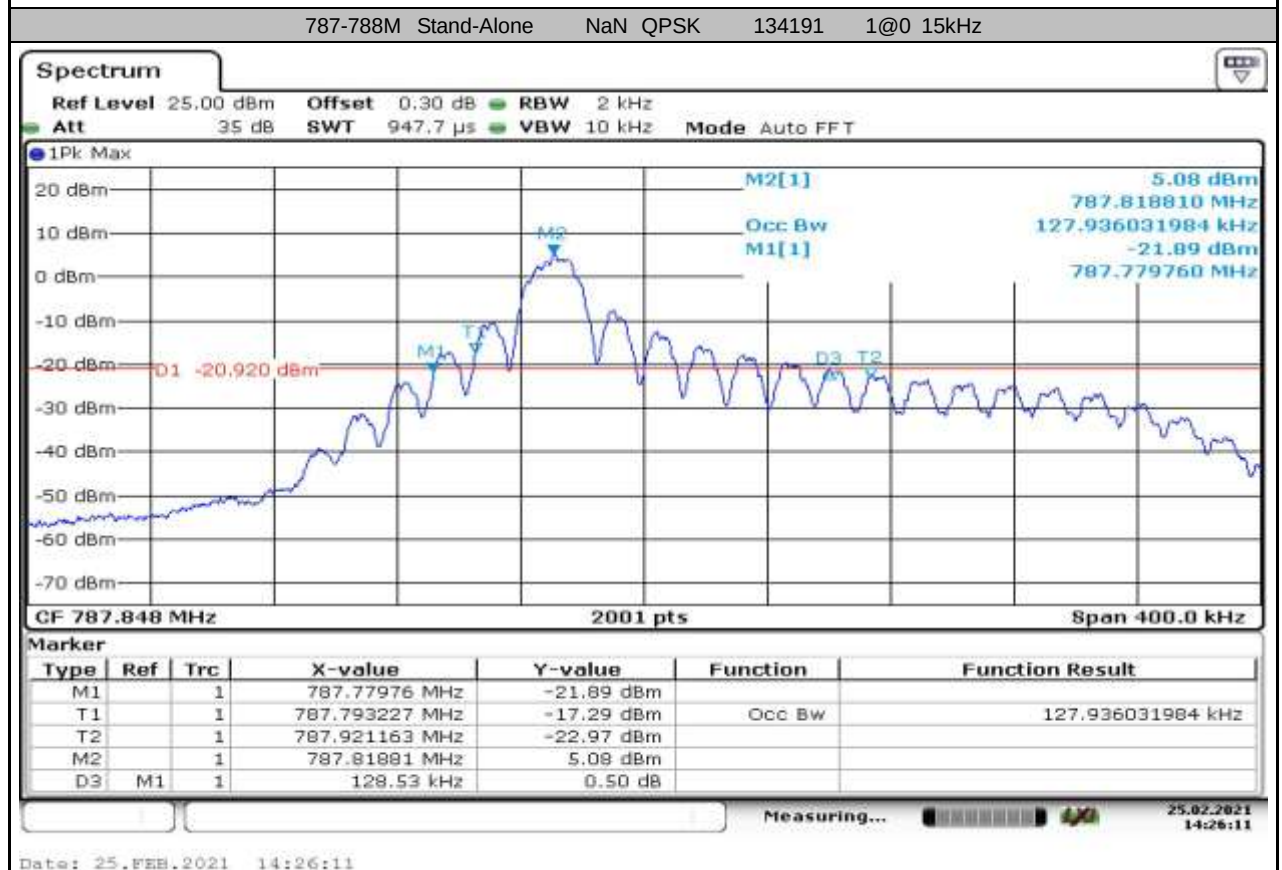
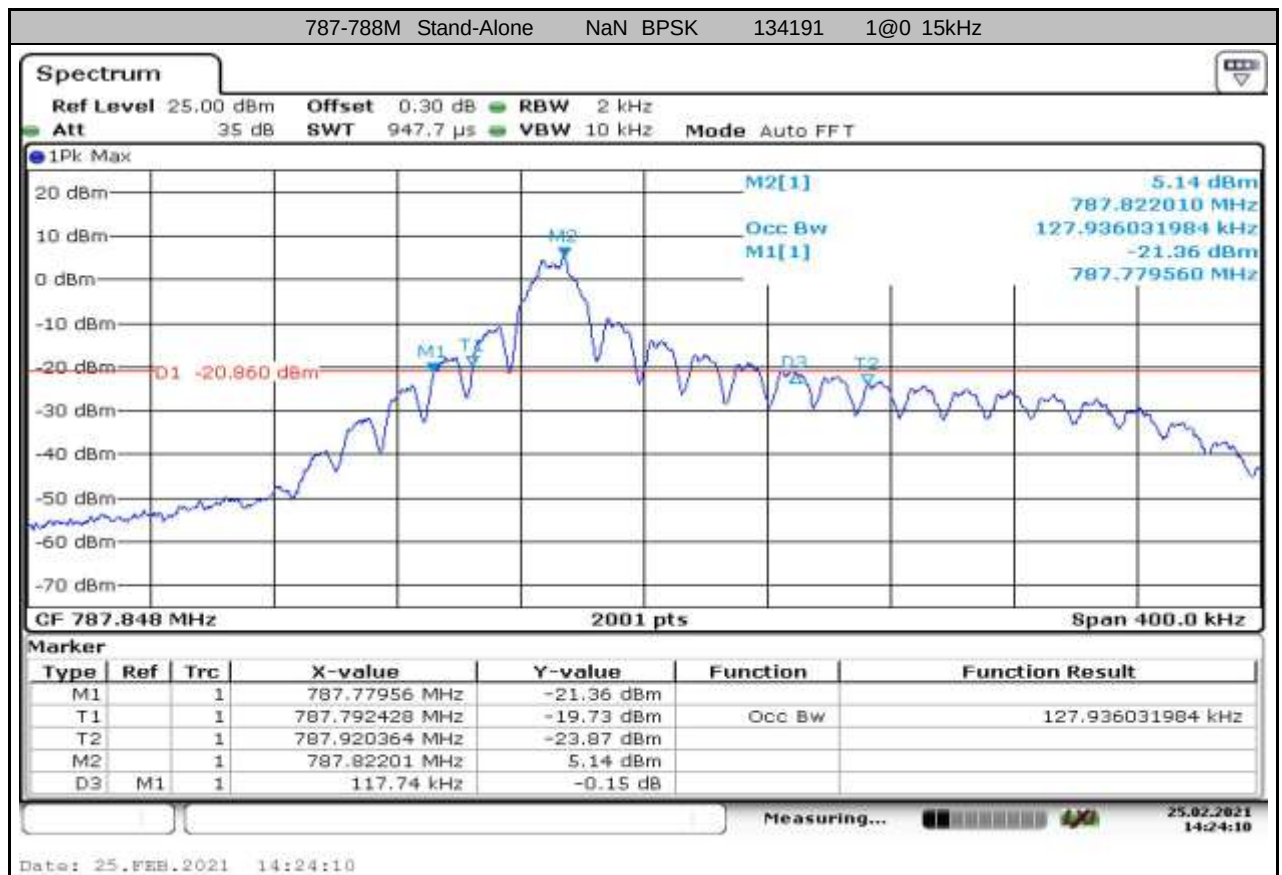




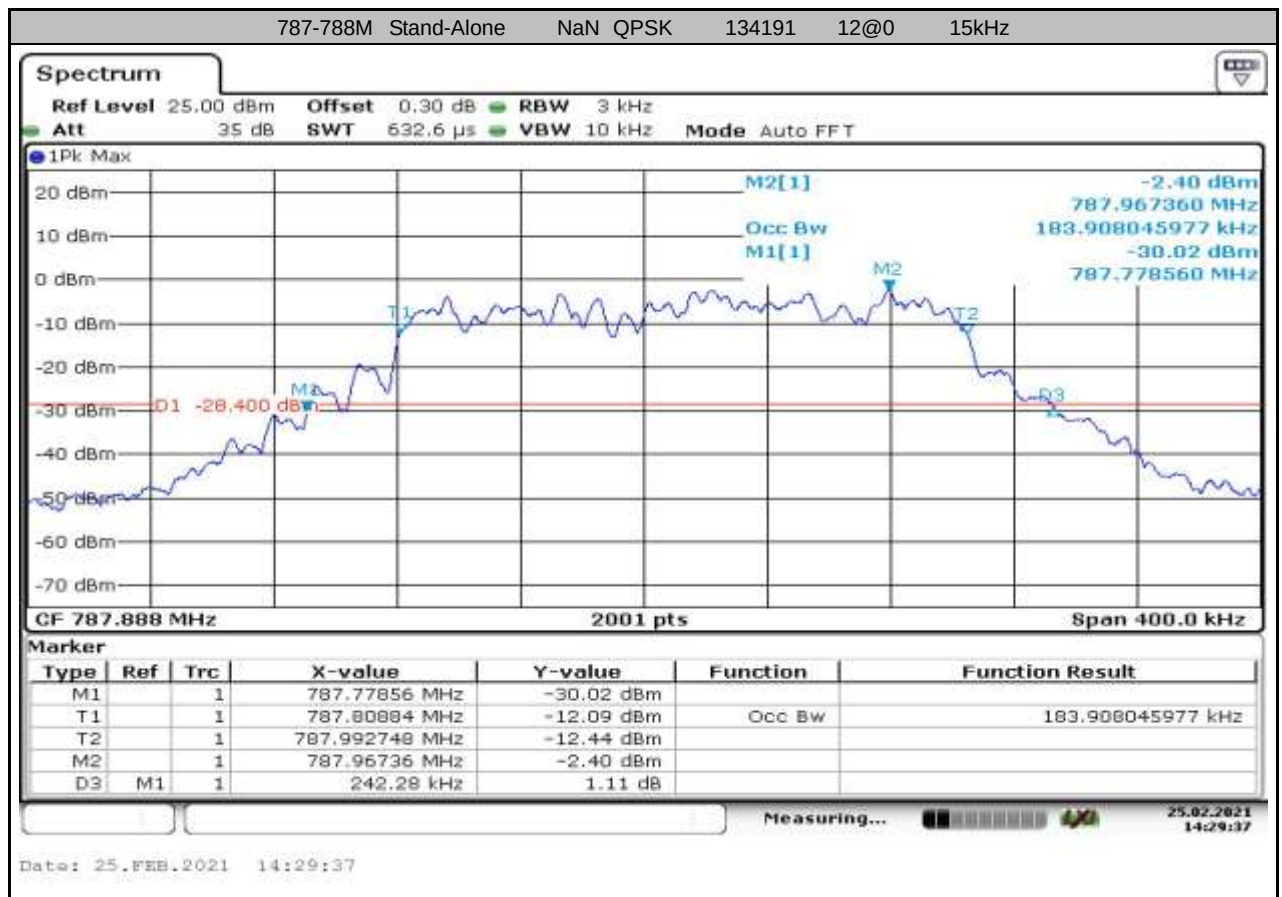








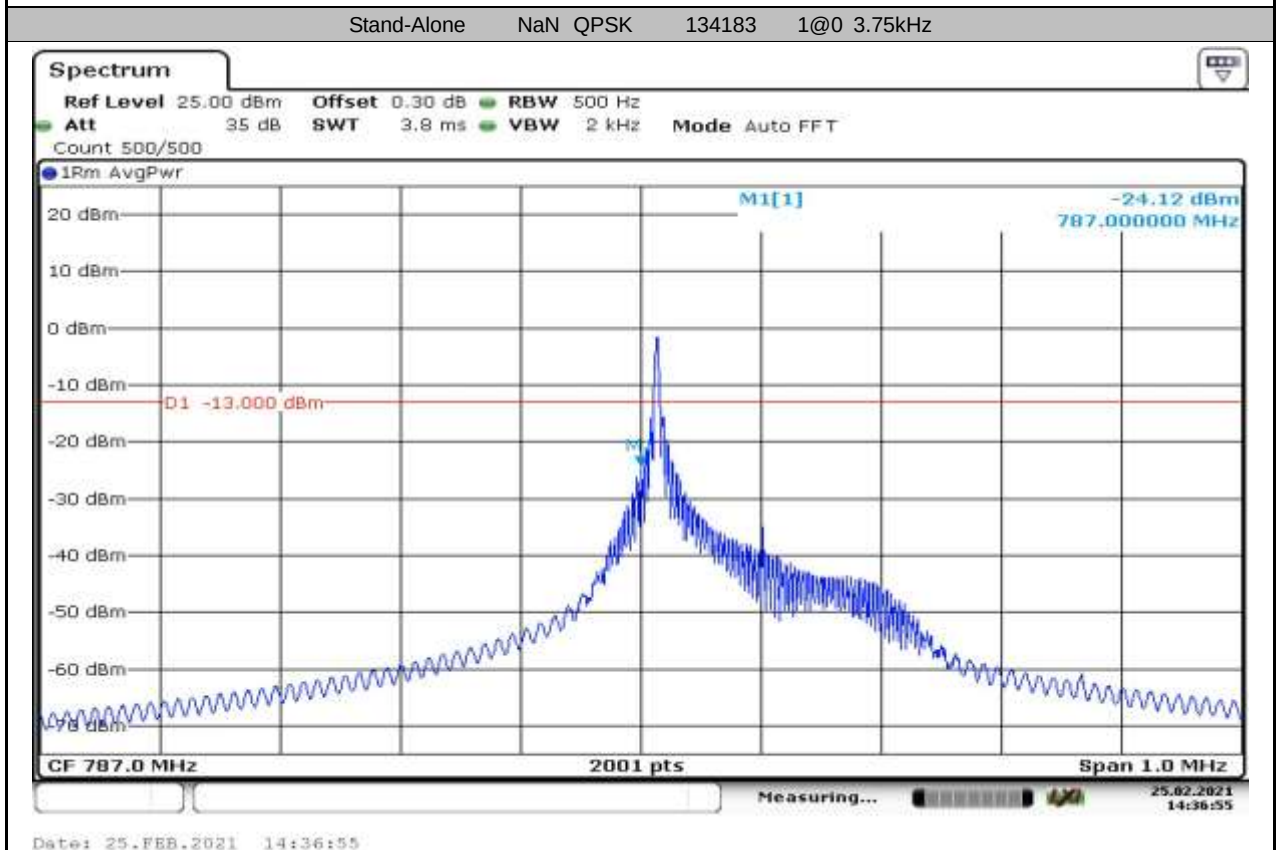
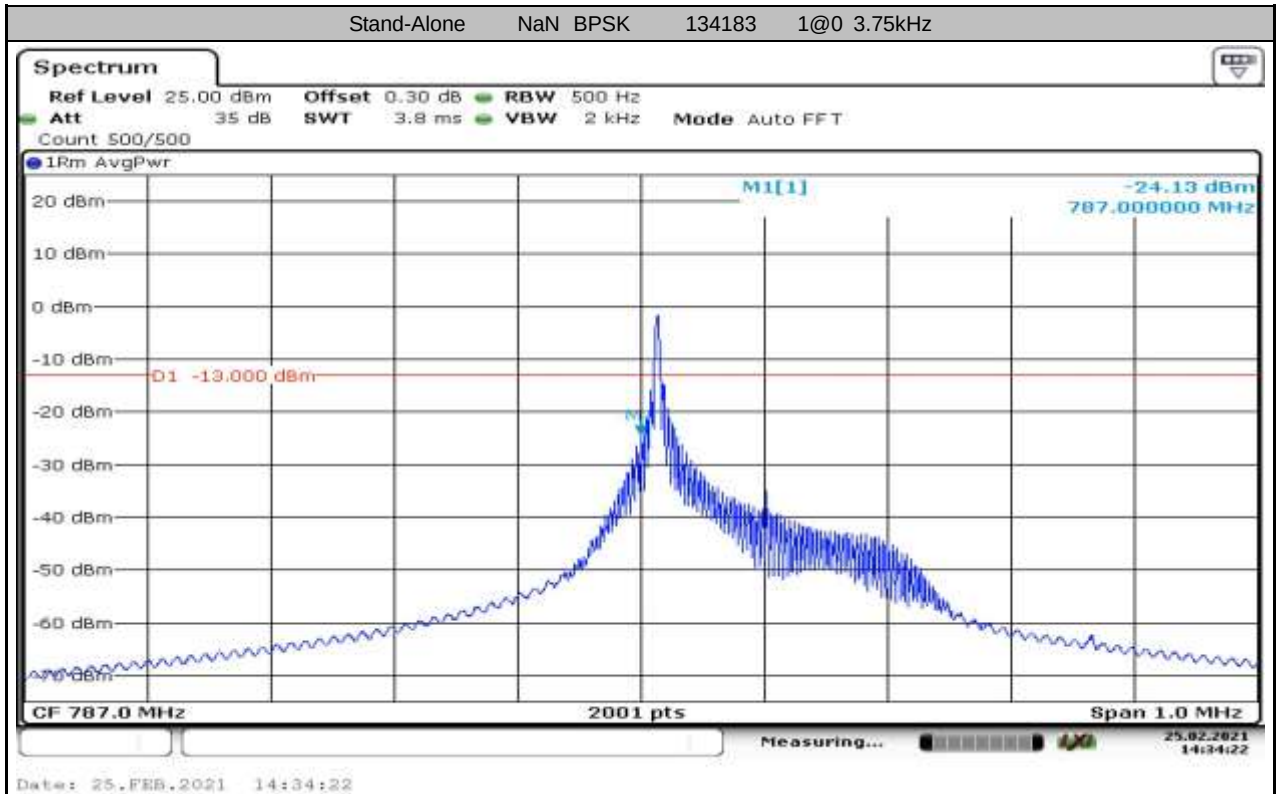




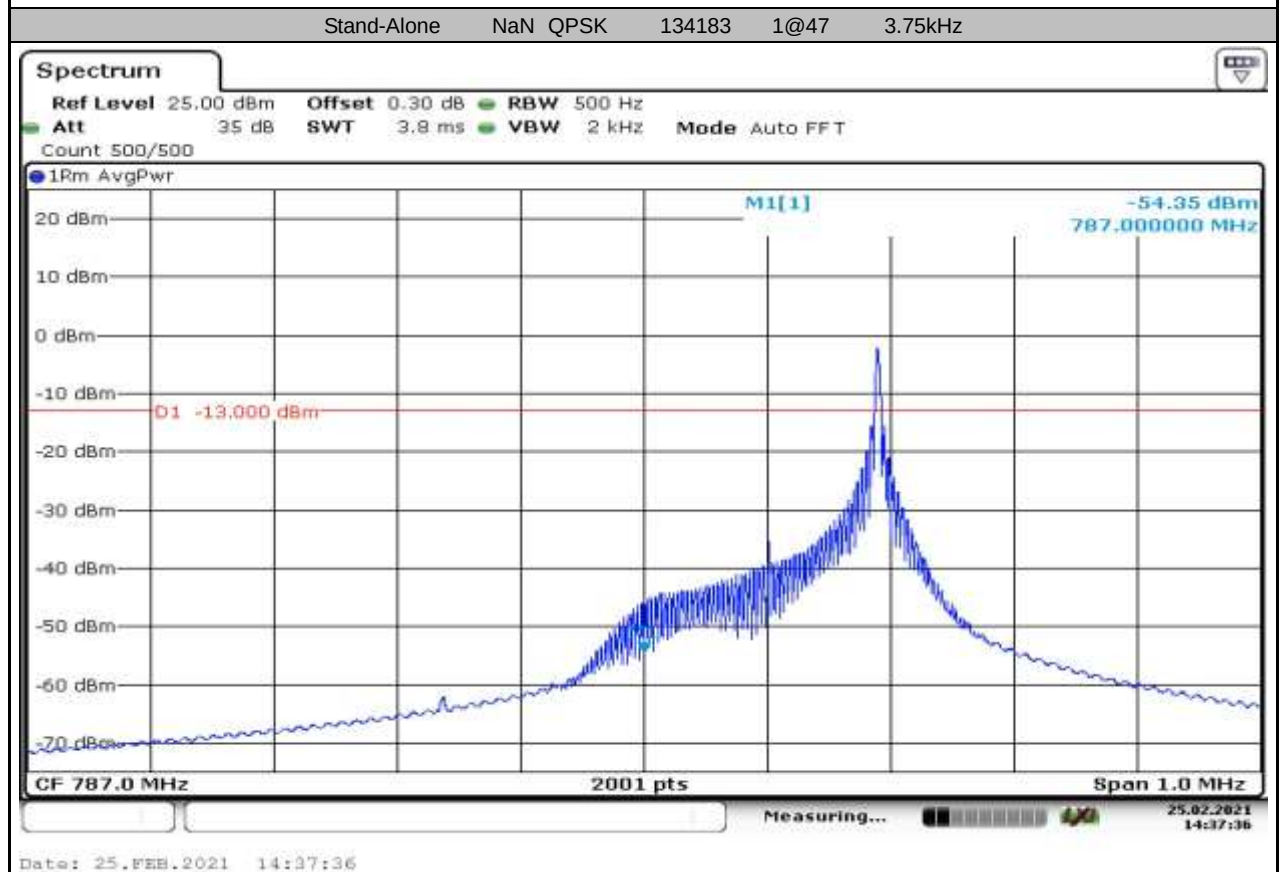
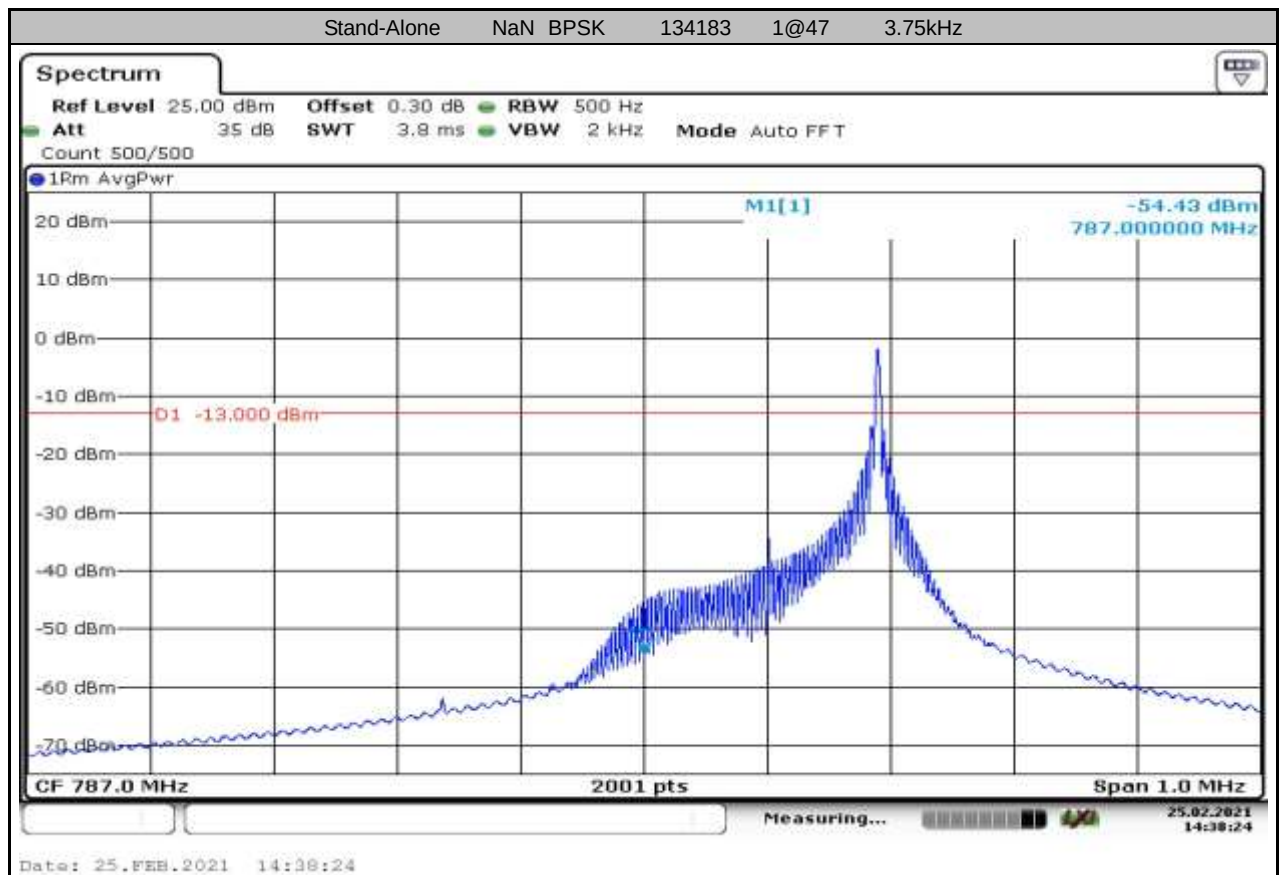
## Appendix A.4: Band Edge for NB Test Result

| Band     | OpMode      | Bandwidth | Modulation | Channel | Tones | SCS     | Result (dBm) | Verdict |
|----------|-------------|-----------|------------|---------|-------|---------|--------------|---------|
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 3.75kHz | -24.13       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | -24.12       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@47  | 3.75kHz | -54.43       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@47  | 3.75kHz | -54.35       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 15kHz   | -16.86       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | -17.49       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@11  | 15kHz   | -38.80       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@11  | 15kHz   | -38.14       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 12@0  | 15kHz   | -22.29       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@0   | 3.75kHz | -40.76       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@0   | 3.75kHz | -39.99       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@47  | 3.75kHz | -48.19       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@47  | 3.75kHz | -49.11       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@0   | 15kHz   | -48.00       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@0   | 15kHz   | -52.57       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@11  | 15kHz   | -56.68       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@11  | 15kHz   | -57.38       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 12@0  | 15kHz   | -41.90       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@0   | 3.75kHz | -48.42       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@0   | 3.75kHz | -48.29       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@47  | 3.75kHz | -40.14       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@47  | 3.75kHz | -41.09       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@0   | 15kHz   | -56.74       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@0   | 15kHz   | -56.64       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@11  | 15kHz   | -47.94       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@11  | 15kHz   | -52.52       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 12@0  | 15kHz   | -35.47       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 3.75kHz | -45.72       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | -45.82       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@47  | 3.75kHz | -30.51       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@47  | 3.75kHz | -29.87       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 15kHz   | -37.14       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 15kHz   | -39.30       | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@11  | 15kHz   | -19.95       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@11  | 15kHz   | -20.62       | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 12@0  | 15kHz   | -27.54       | PASS    |

## Test Graphs



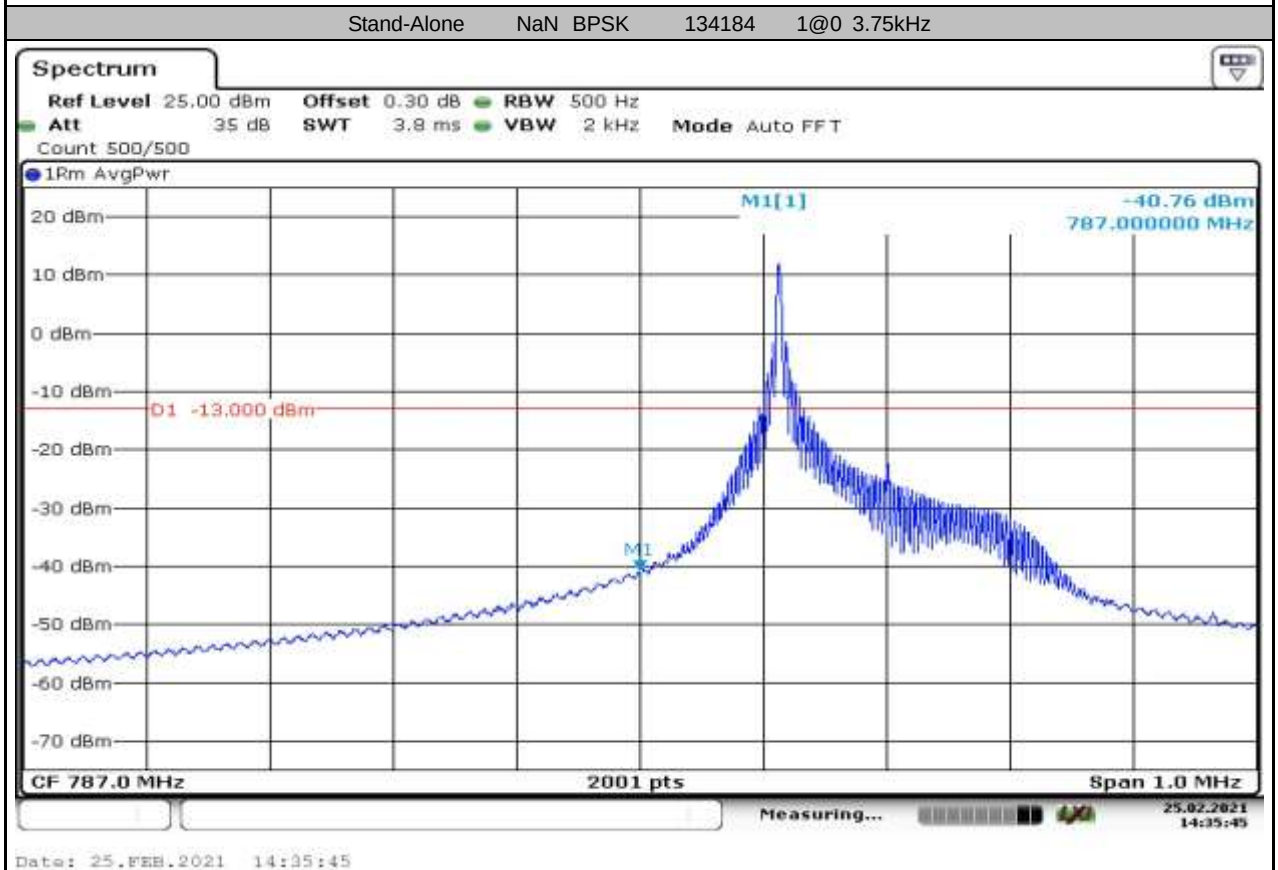
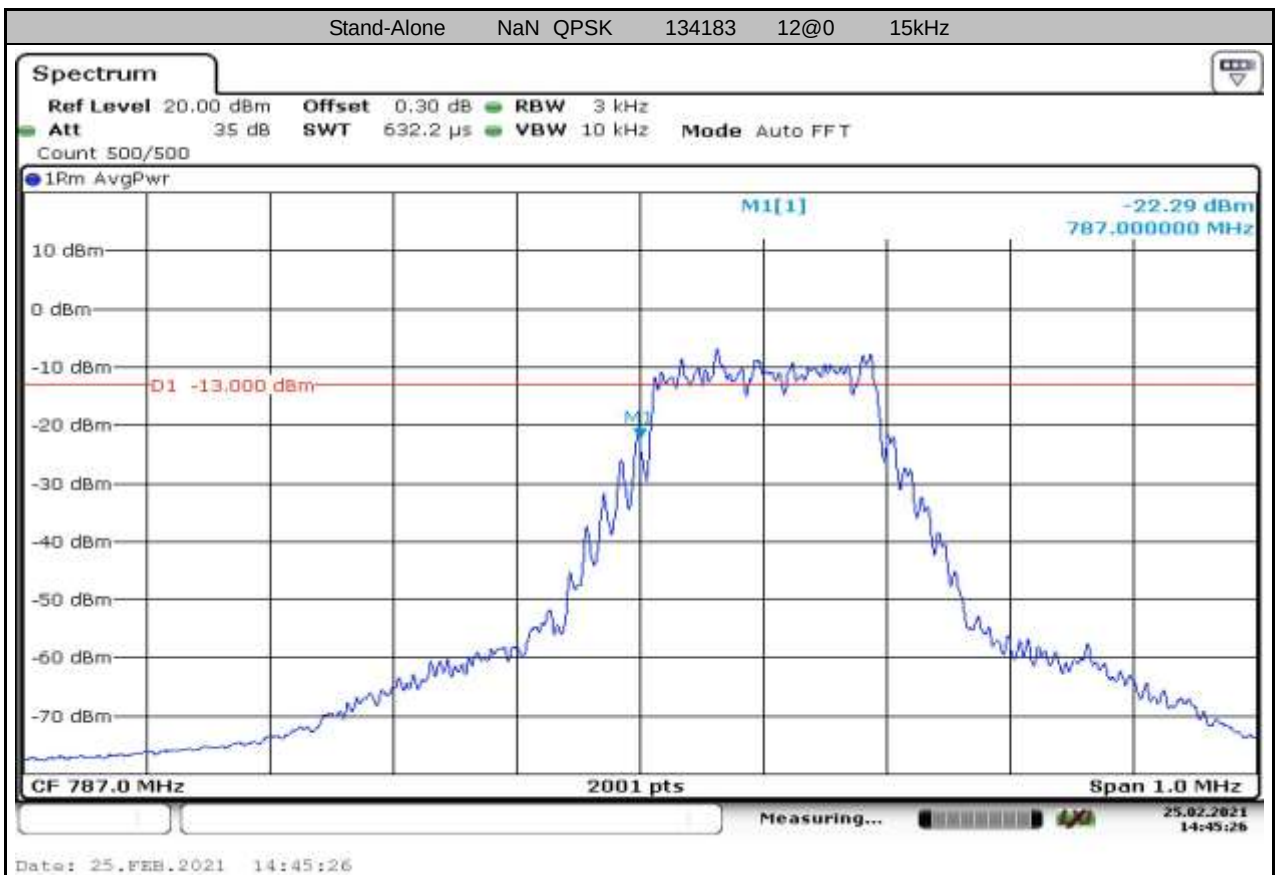


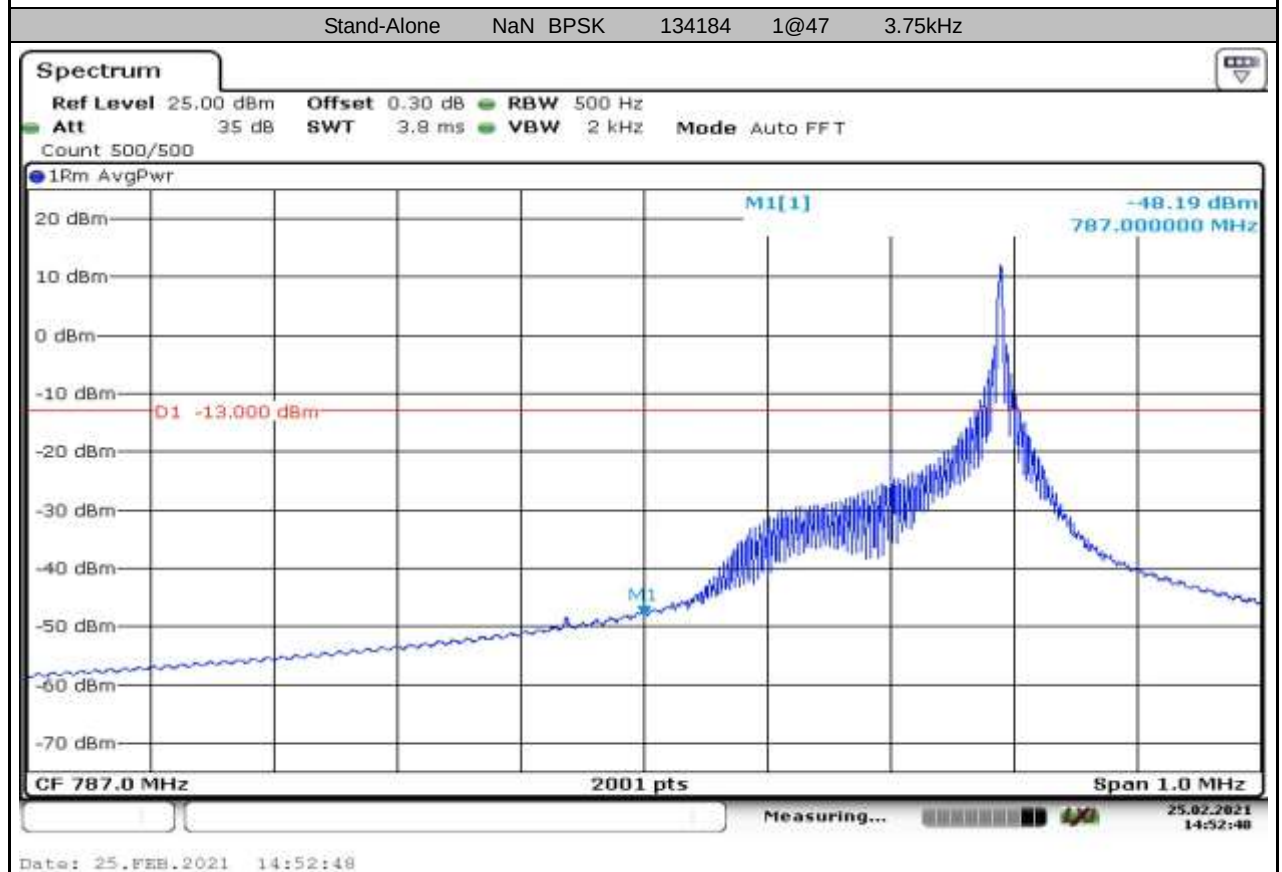
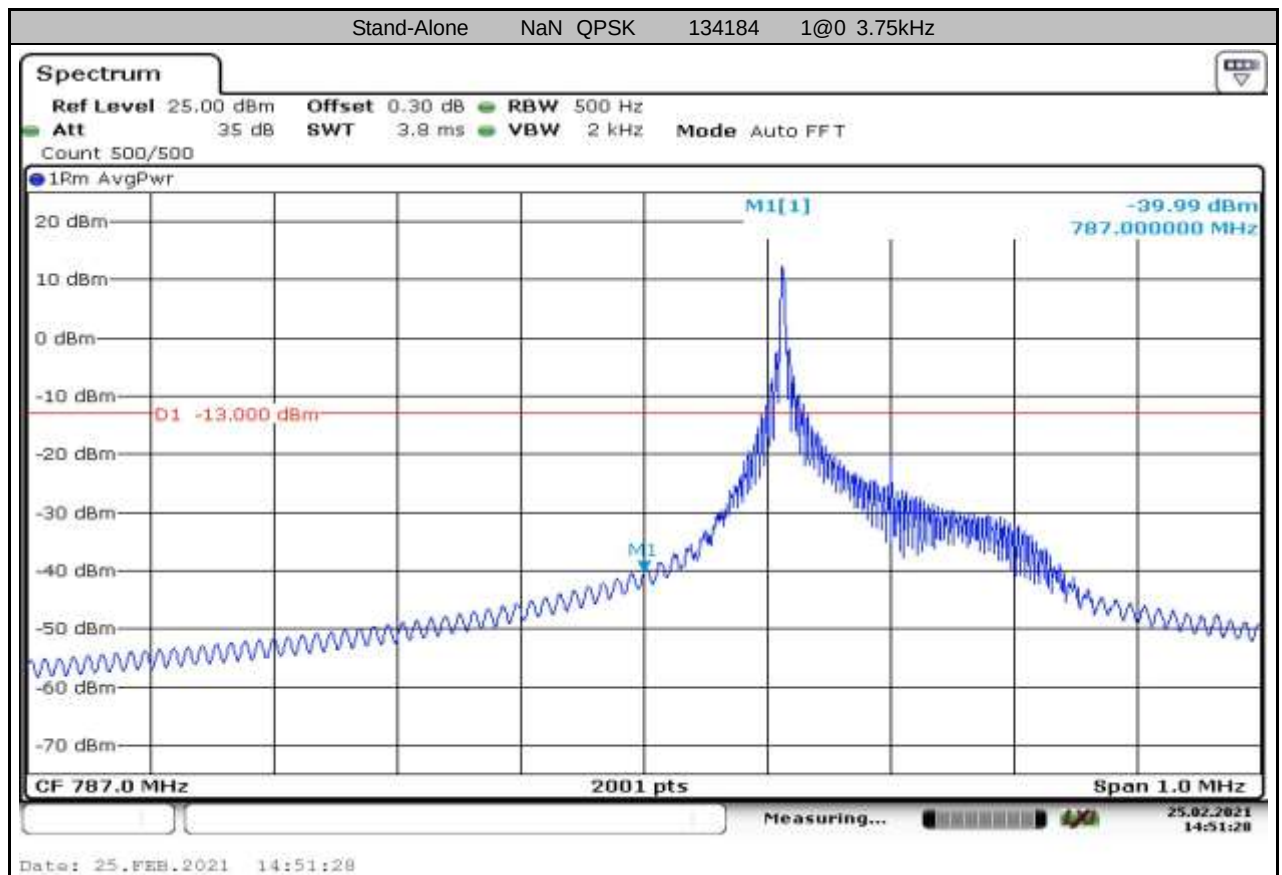


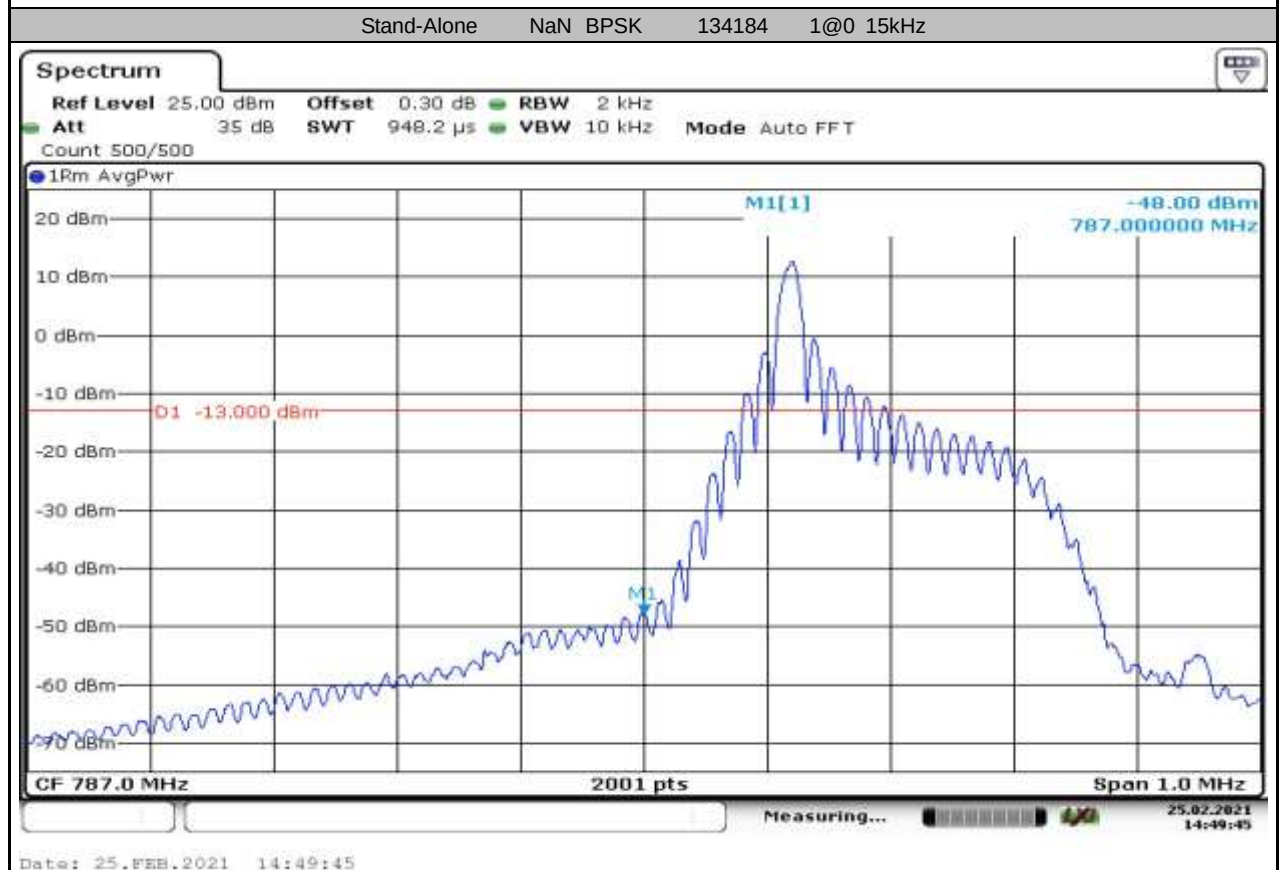
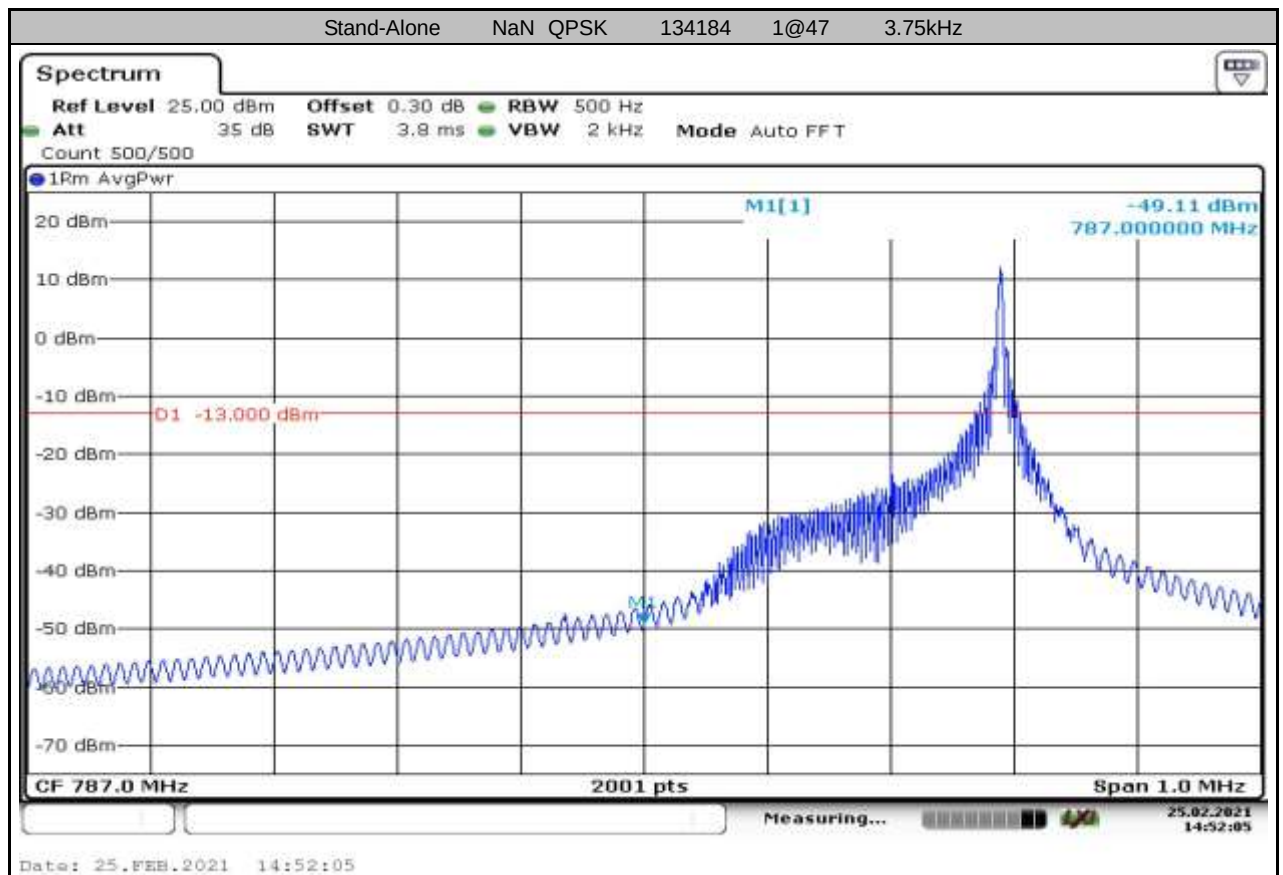




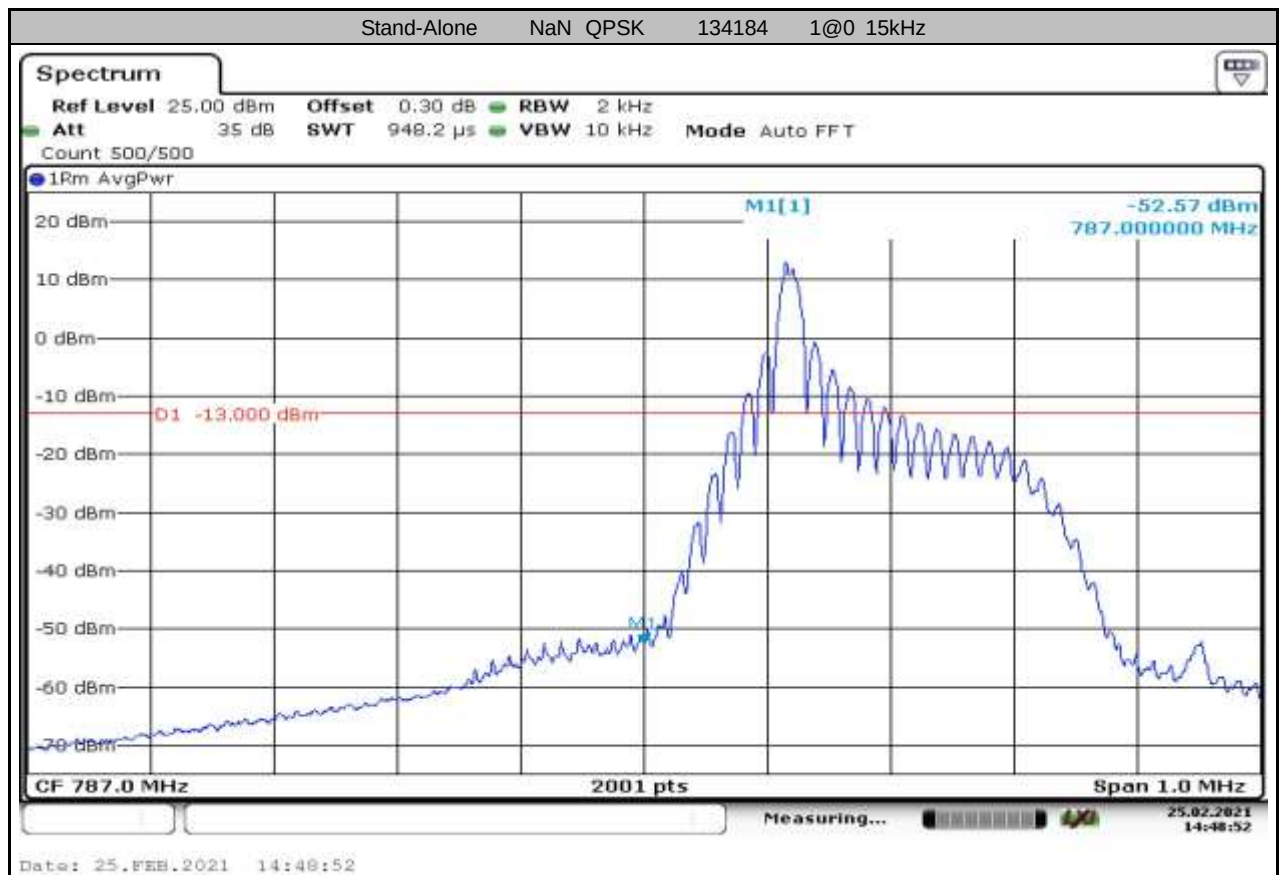


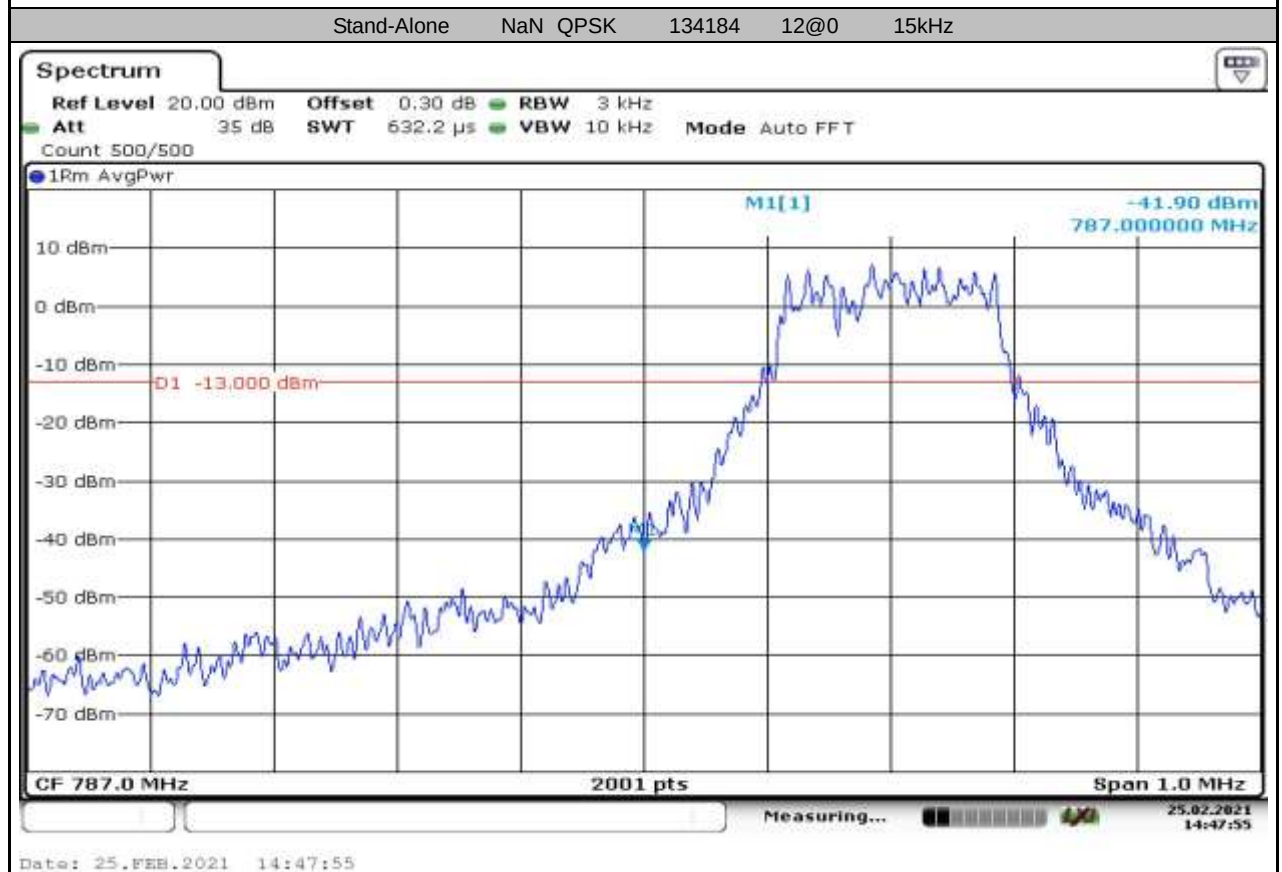


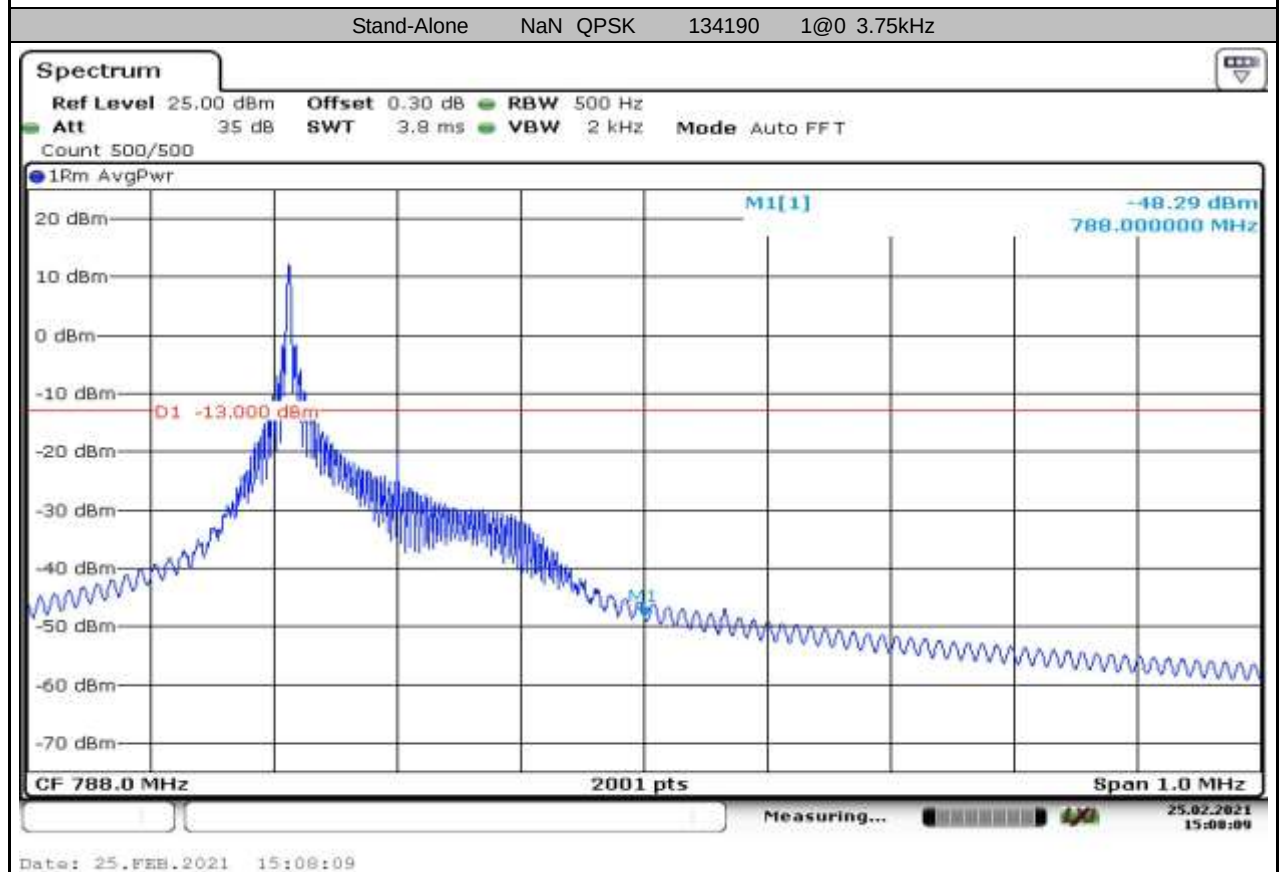
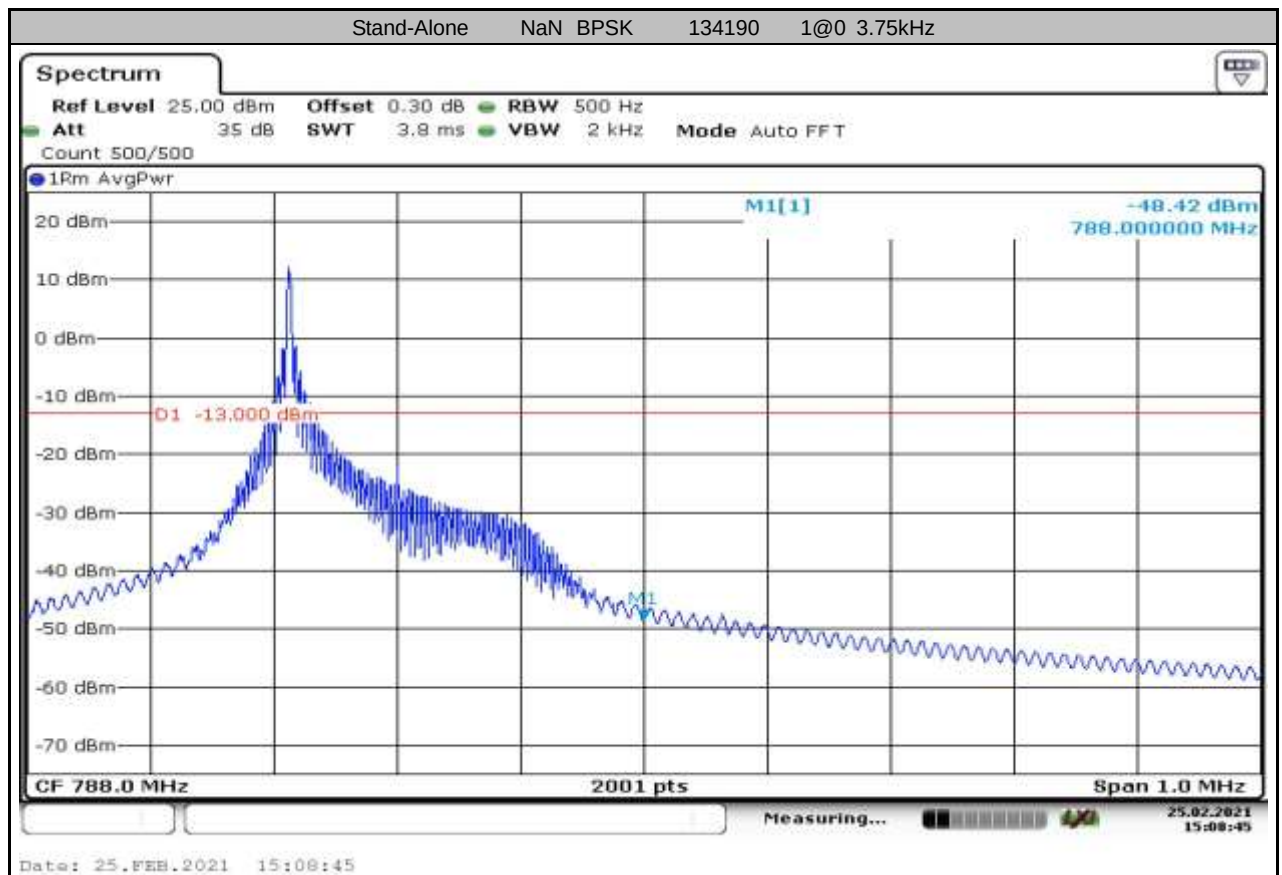




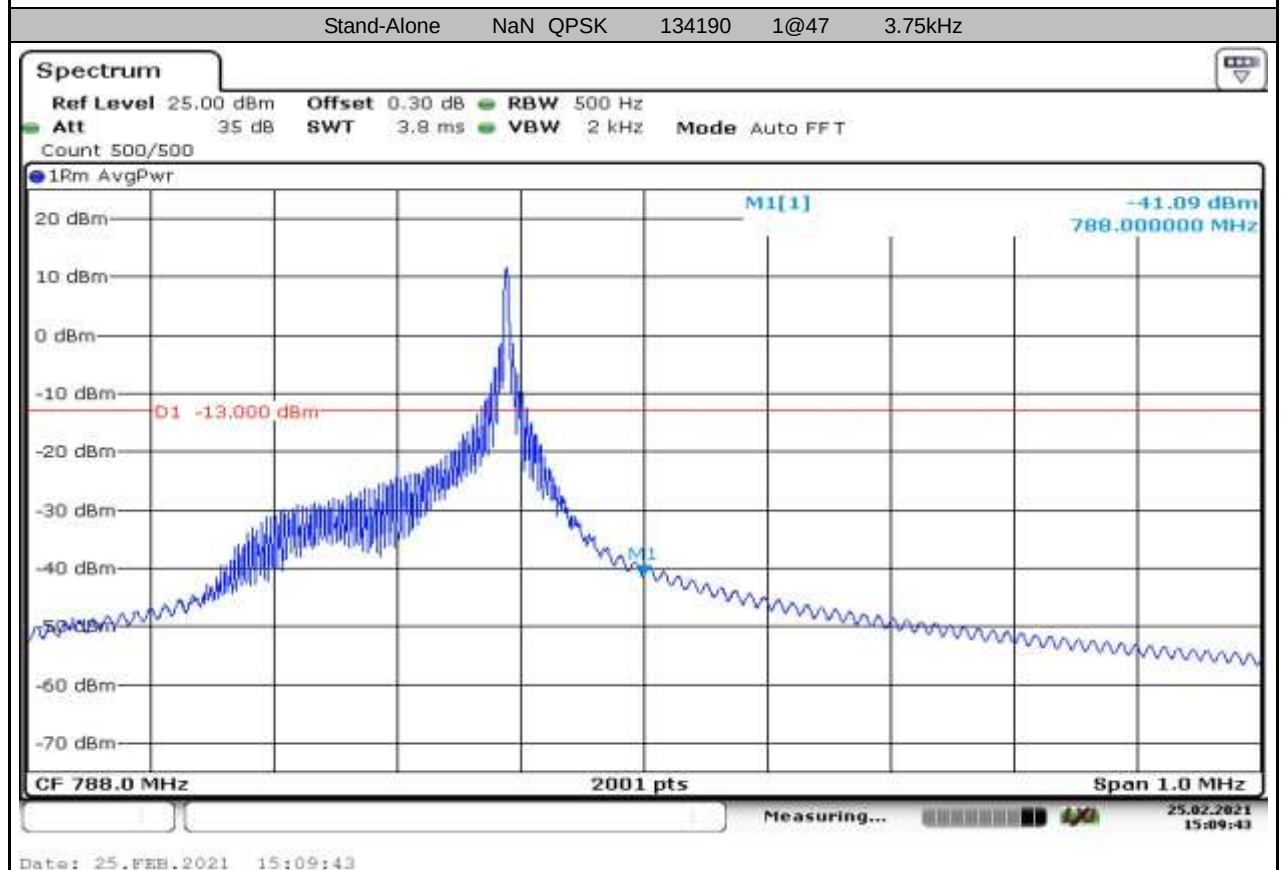
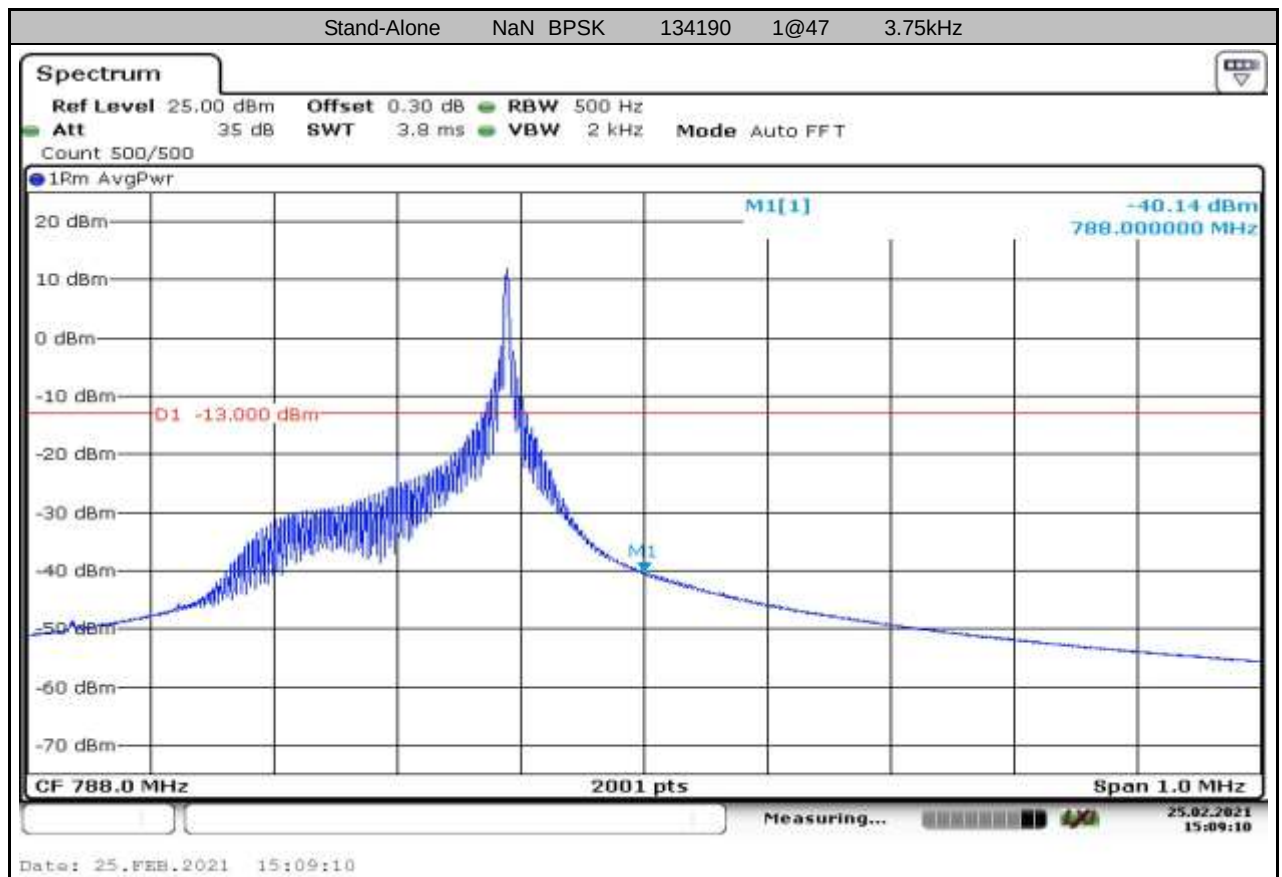


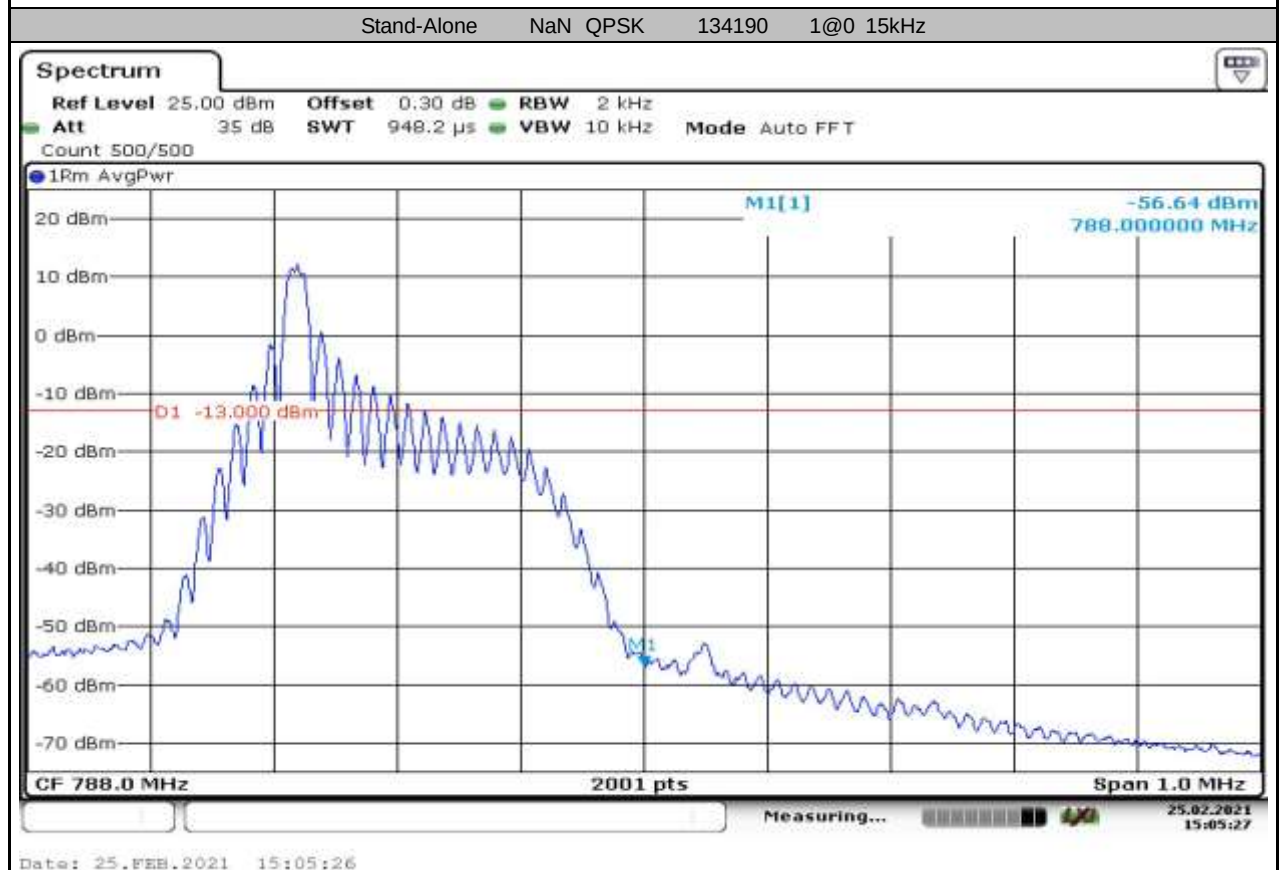


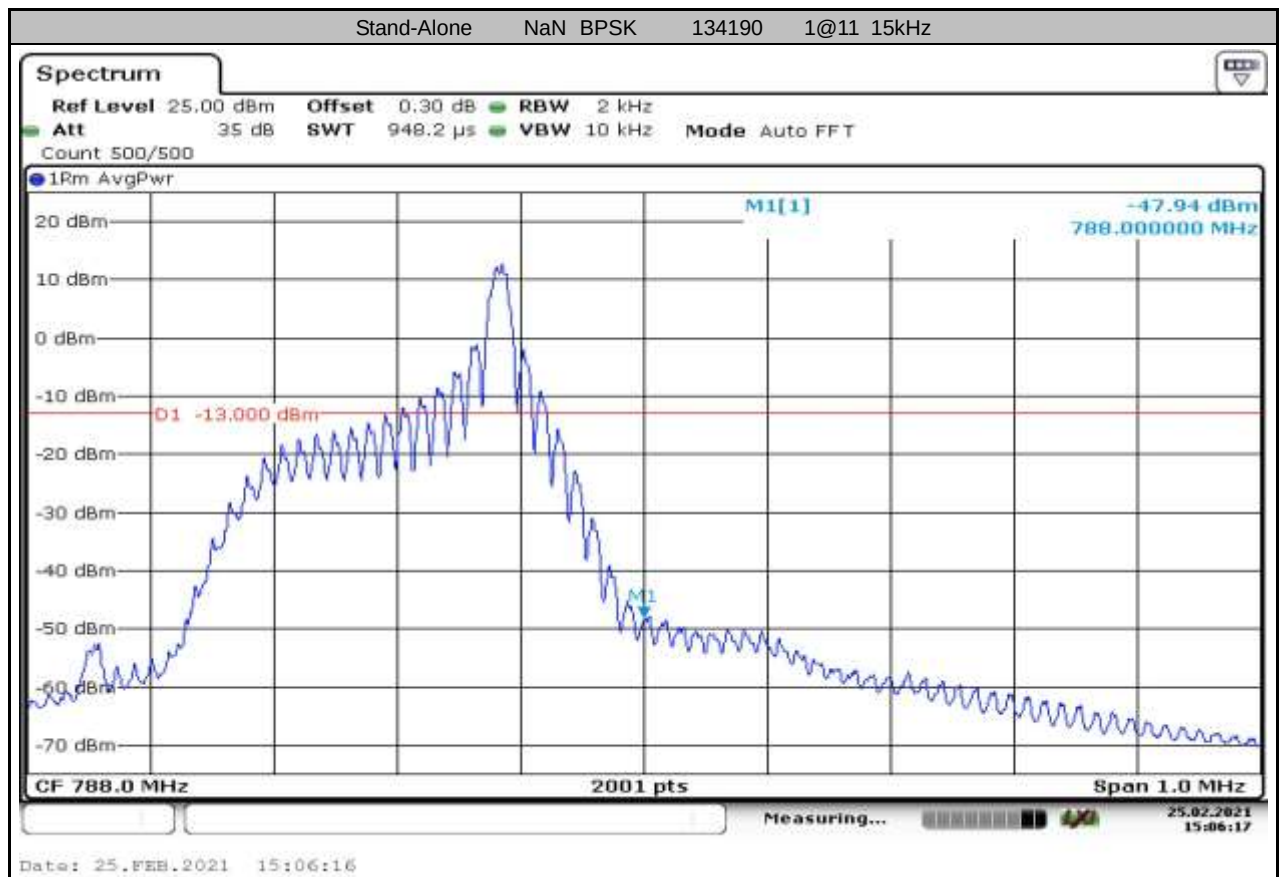




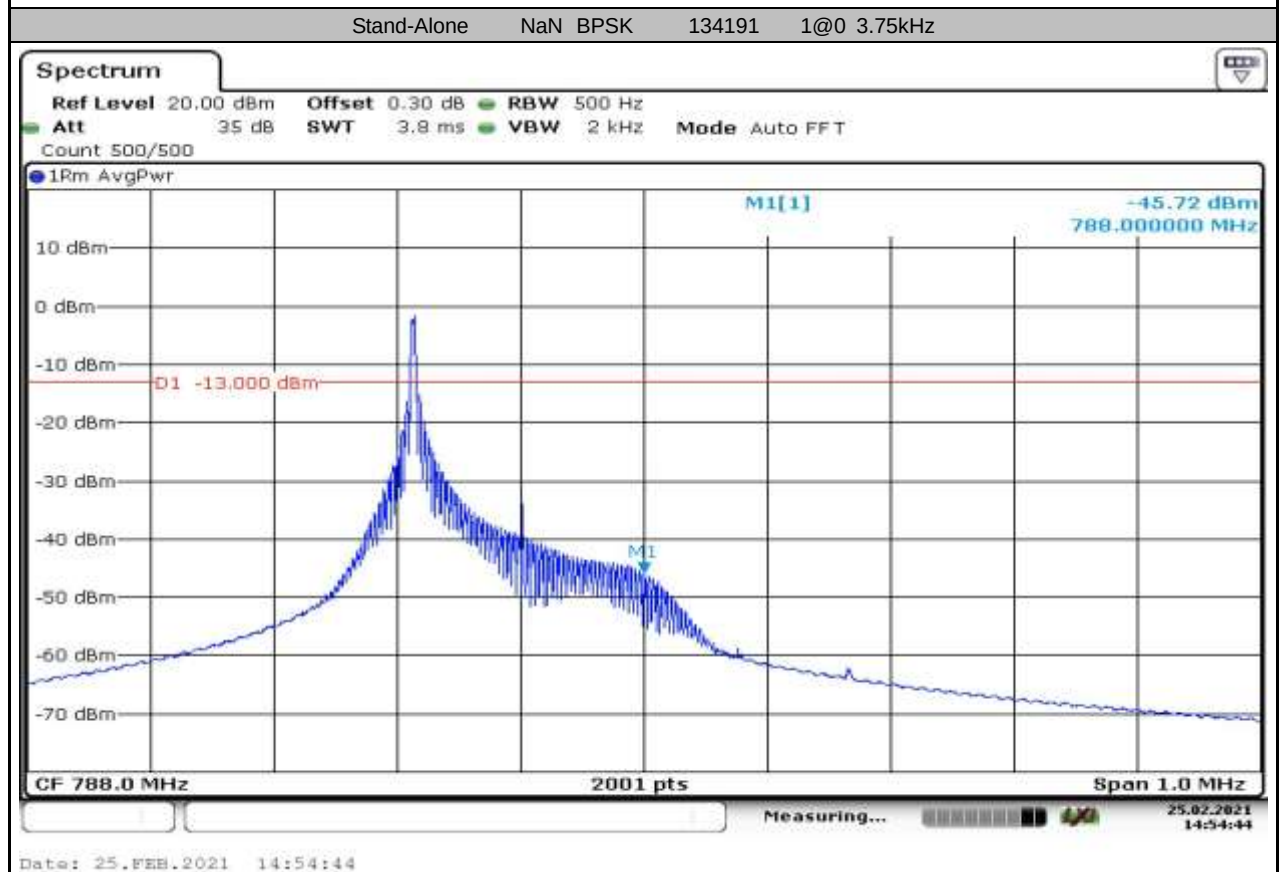


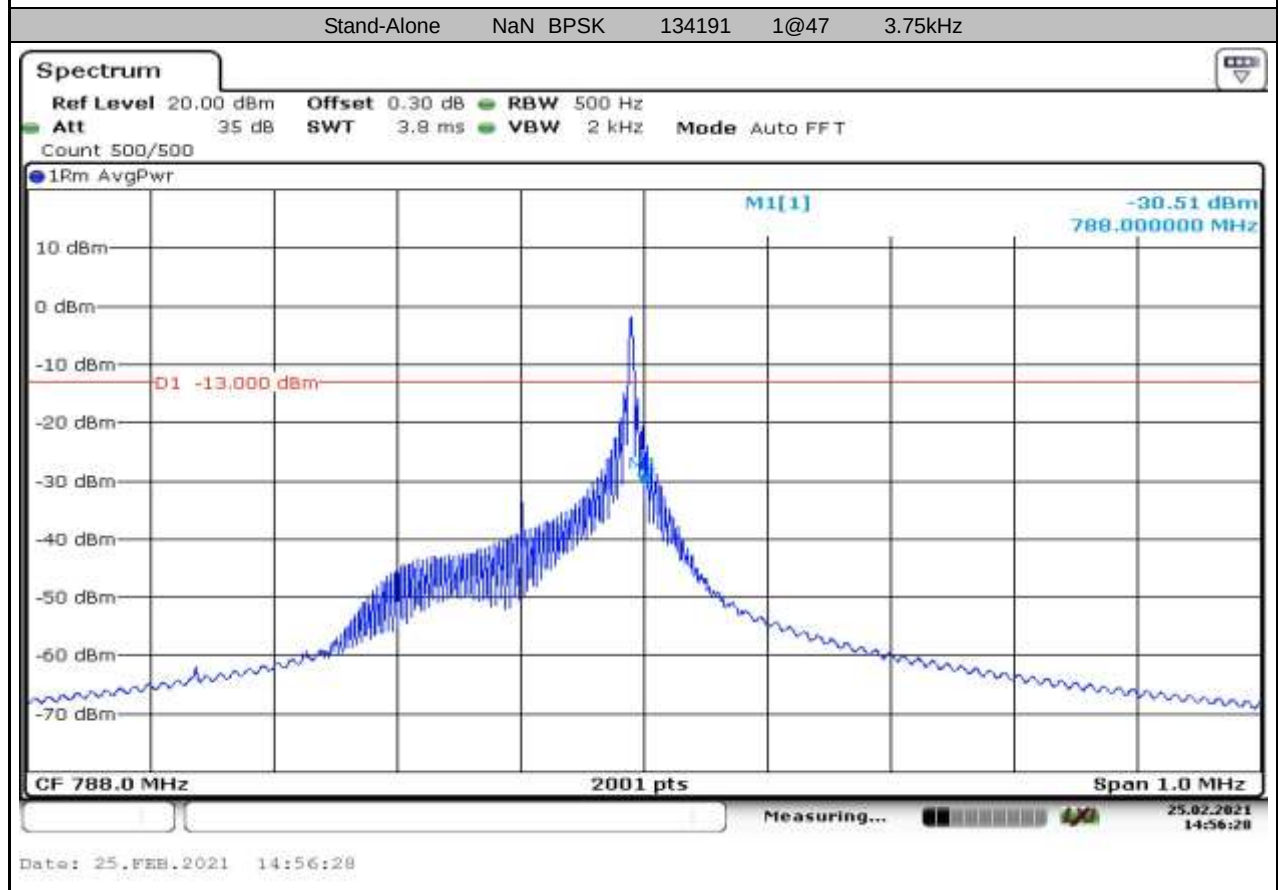
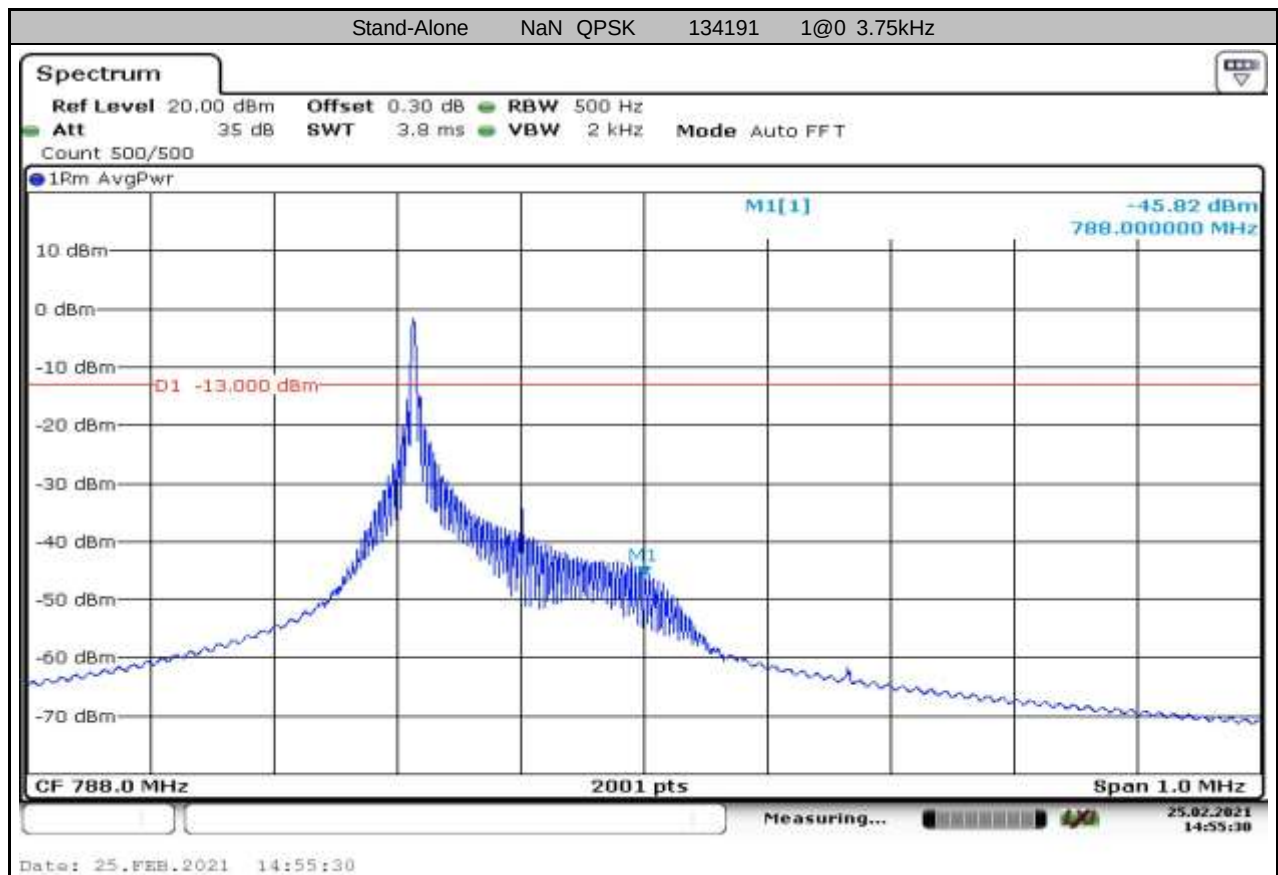


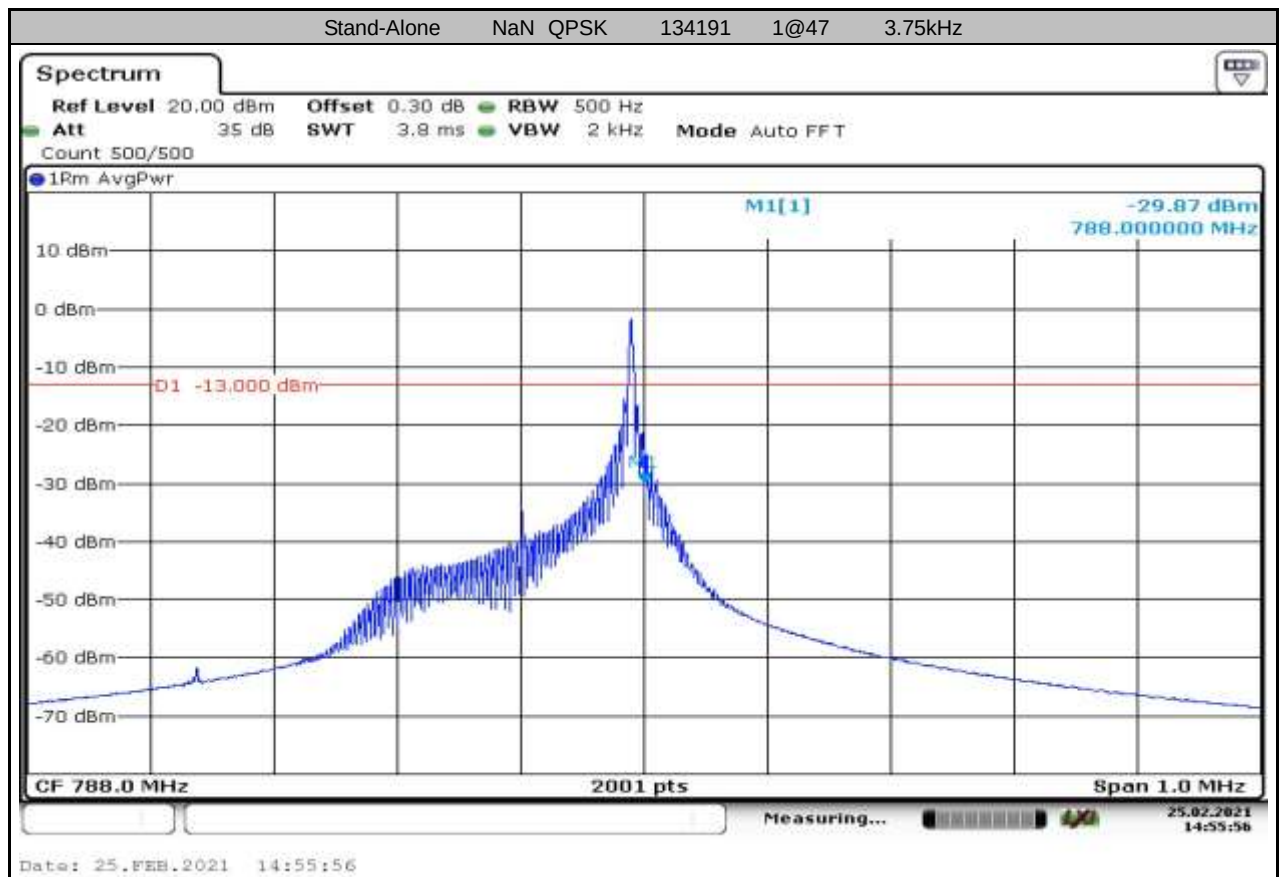






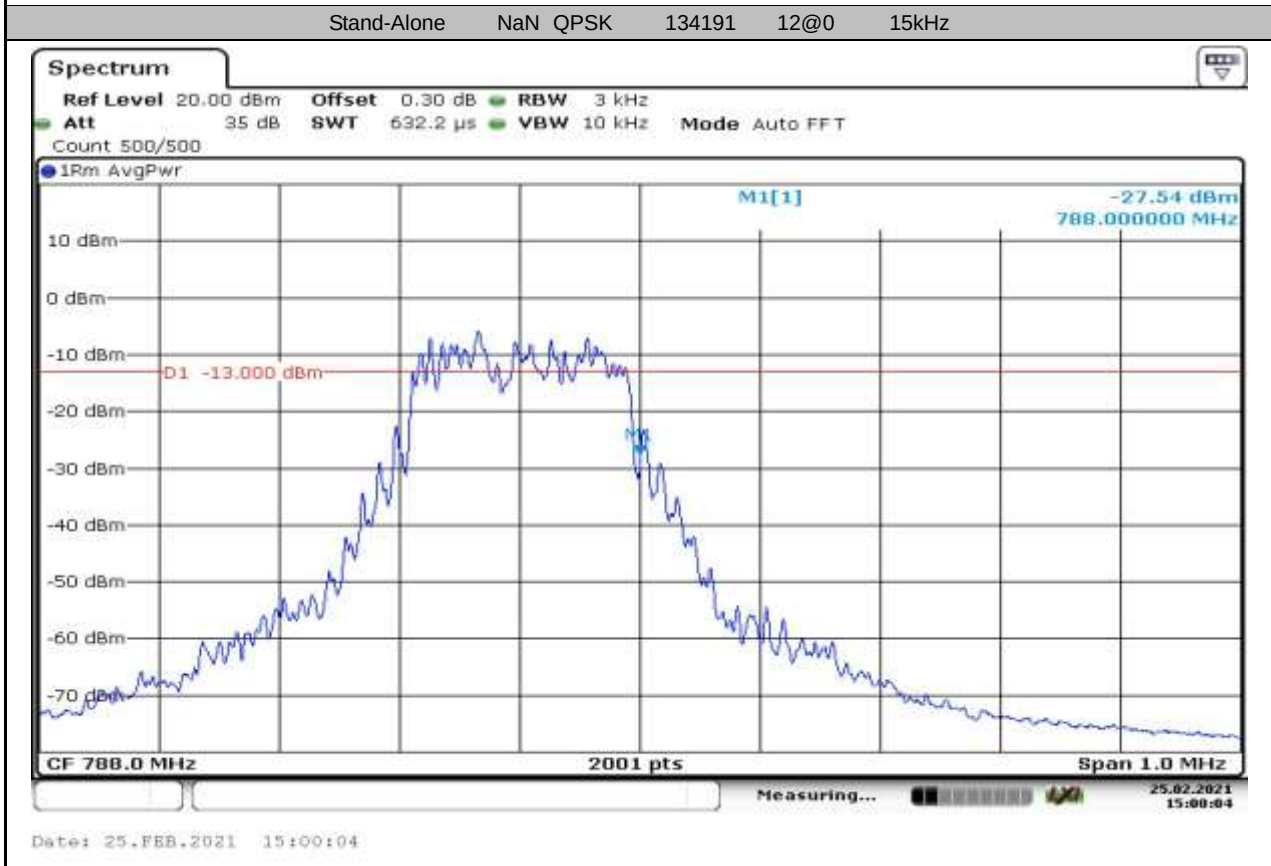








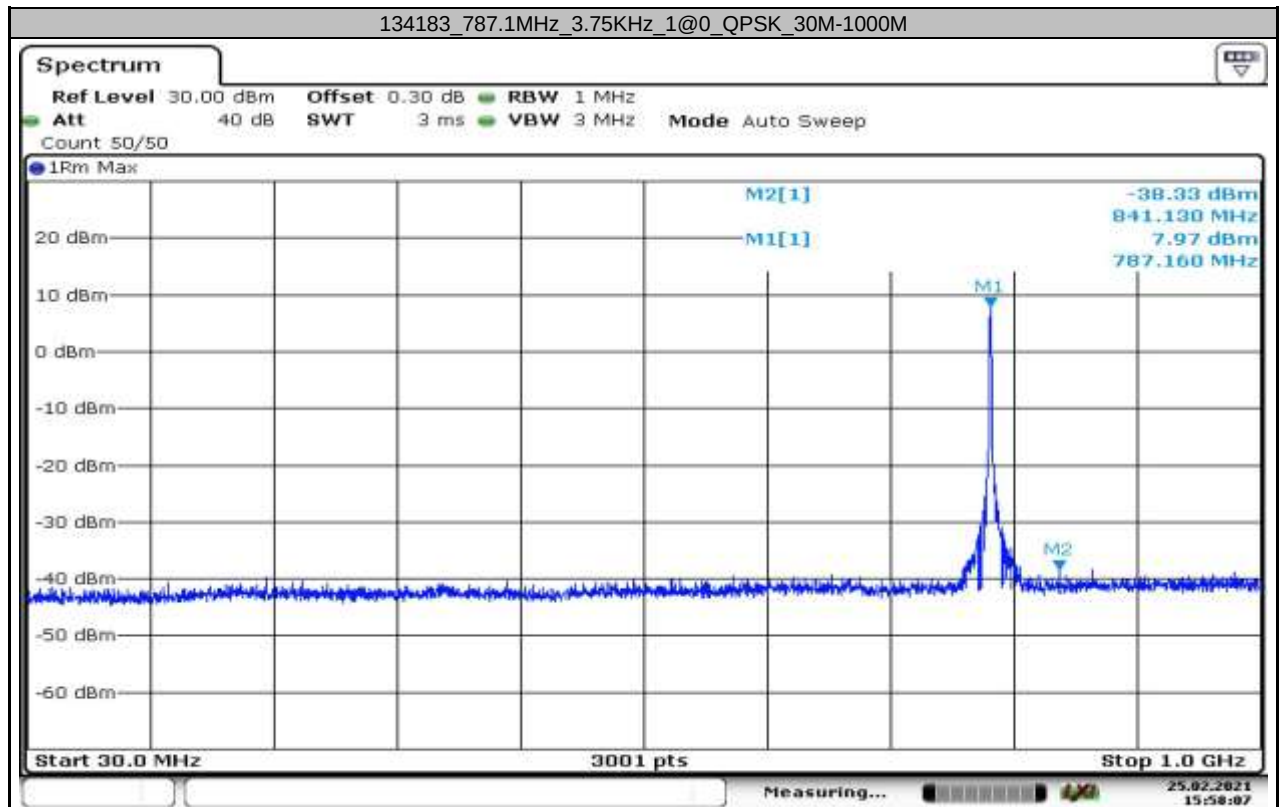




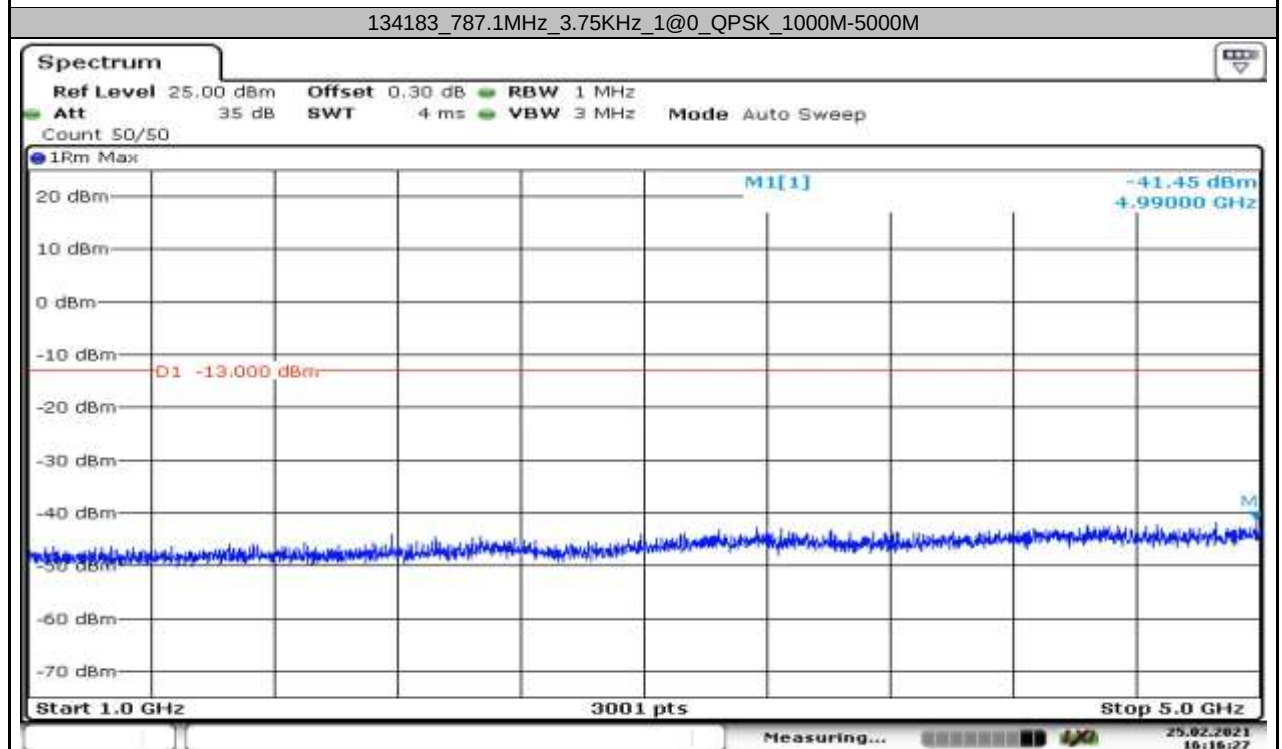
## Appendix A.5: Conducted Spurious Emission for NB Test Result

| Band     | OpMode      | Bandwidth | Modulation | Channel | Tones | SCS     | StartFreq (MHz) | StopFreq (MHz) | Result (dBm) | Limit (dBm) | Verdict |
|----------|-------------|-----------|------------|---------|-------|---------|-----------------|----------------|--------------|-------------|---------|
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | 30              | 1000           | -38.33       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | 1000            | 5000           | -41.45       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | 5000            | 12000          | -59.31       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | 12000           | 26500          | -57.78       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 15kHz   | 30              | 1000           | -40.47       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 15kHz   | 1000            | 5000           | -41.81       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 15kHz   | 5000            | 12000          | -60.18       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134183  | 1@0   | 15kHz   | 12000           | 26500          | -57.54       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 12@0  | 15kHz   | 30              | 1000           | -36.86       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 12@0  | 15kHz   | 1000            | 5000           | -41.87       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 12@0  | 15kHz   | 5000            | 12000          | -60.14       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 12@0  | 15kHz   | 12000           | 26500          | -57.29       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@0   | 3.75kHz | 30              | 1000           | -39.36       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@0   | 3.75kHz | 1000            | 5000           | -41.67       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@0   | 3.75kHz | 5000            | 12000          | -59.83       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 1@0   | 3.75kHz | 12000           | 26500          | -57.32       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@0   | 15kHz   | 30              | 1000           | -36.18       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@0   | 15kHz   | 1000            | 5000           | -41.87       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@0   | 15kHz   | 5000            | 12000          | -59.65       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134184  | 1@0   | 15kHz   | 12000           | 26500          | -57.08       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 12@0  | 15kHz   | 30              | 1000           | -36.76       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 12@0  | 15kHz   | 1000            | 5000           | -33.67       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 12@0  | 15kHz   | 5000            | 12000          | -55.15       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134184  | 12@0  | 15kHz   | 12000           | 26500          | -57.08       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@0   | 3.75kHz | 30              | 1000           | -39.64       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@0   | 3.75kHz | 1000            | 5000           | -41.67       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@0   | 3.75kHz | 5000            | 12000          | -59.76       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 1@0   | 3.75kHz | 12000           | 26500          | -57.13       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@0   | 15kHz   | 30              | 1000           | -35.36       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@0   | 15kHz   | 1000            | 5000           | -41.78       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@0   | 15kHz   | 5000            | 12000          | -63.48       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134190  | 1@0   | 15kHz   | 12000           | 26500          | -57.53       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 12@0  | 15kHz   | 30              | 1000           | -35.23       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 12@0  | 15kHz   | 1000            | 5000           | -36.84       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 12@0  | 15kHz   | 5000            | 12000          | -53.50       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134190  | 12@0  | 15kHz   | 12000           | 26500          | -57.09       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | 30              | 1000           | -41.41       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | 1000            | 5000           | -41.60       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | 5000            | 12000          | -59.76       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | 12000           | 26500          | -57.47       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 15kHz   | 30              | 1000           | -39.47       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 15kHz   | 1000            | 5000           | -41.71       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 15kHz   | 5000            | 12000          | -60.01       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | BPSK       | 134191  | 1@0   | 15kHz   | 12000           | 26500          | -57.27       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 12@0  | 15kHz   | 30              | 1000           | -41.71       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 12@0  | 15kHz   | 1000            | 5000           | -41.11       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 12@0  | 15kHz   | 5000            | 12000          | -59.77       | -13         | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 12@0  | 15kHz   | 12000           | 26500          | -57.44       | -13         | PASS    |

## Test Graphs

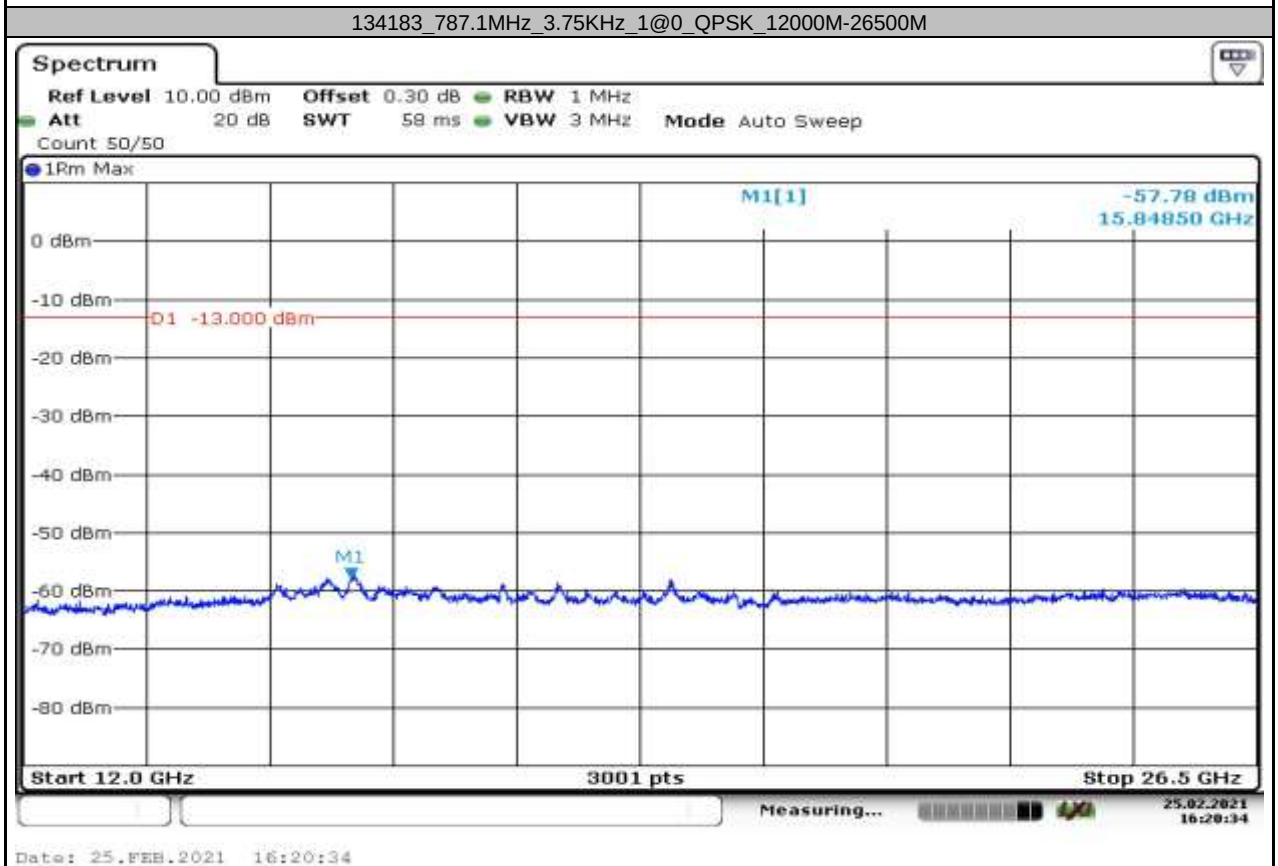
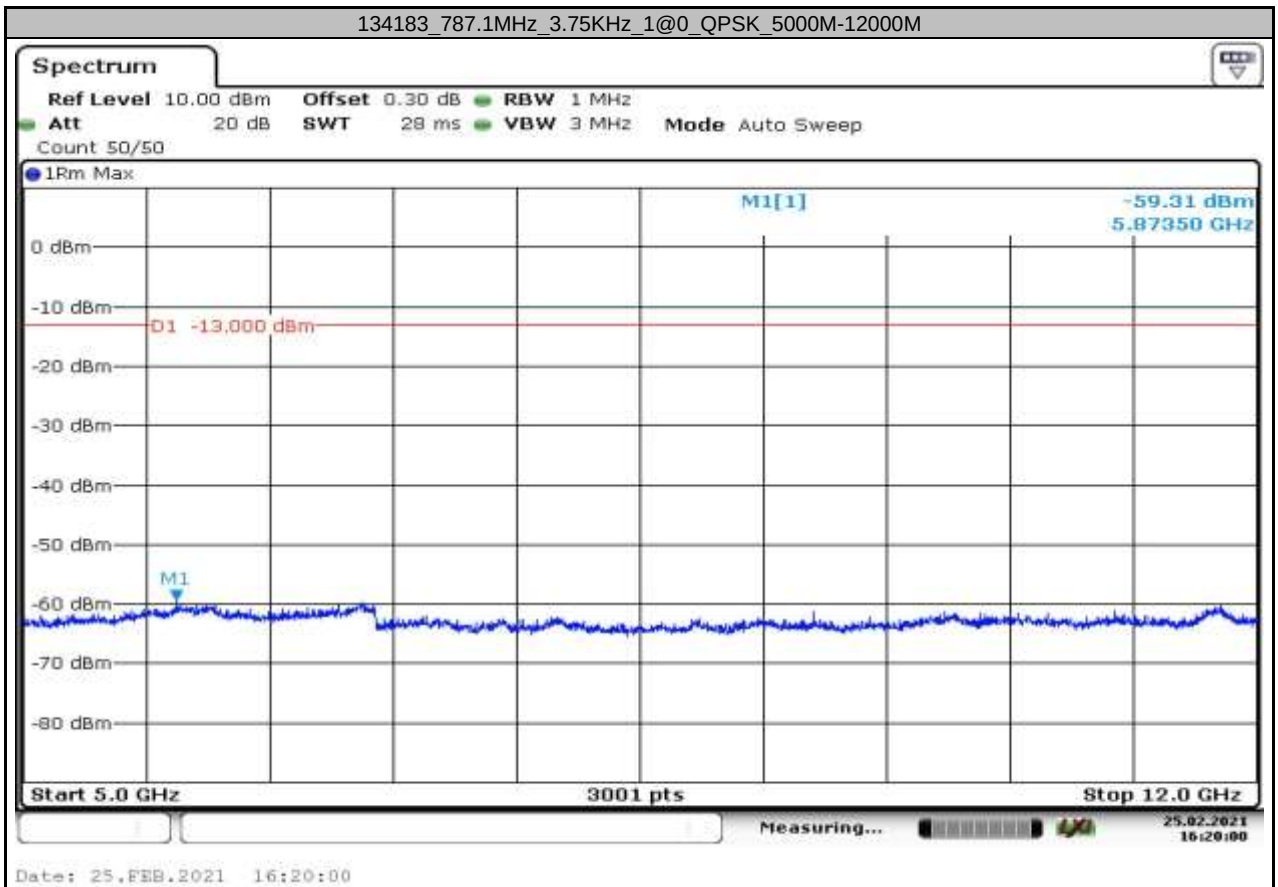


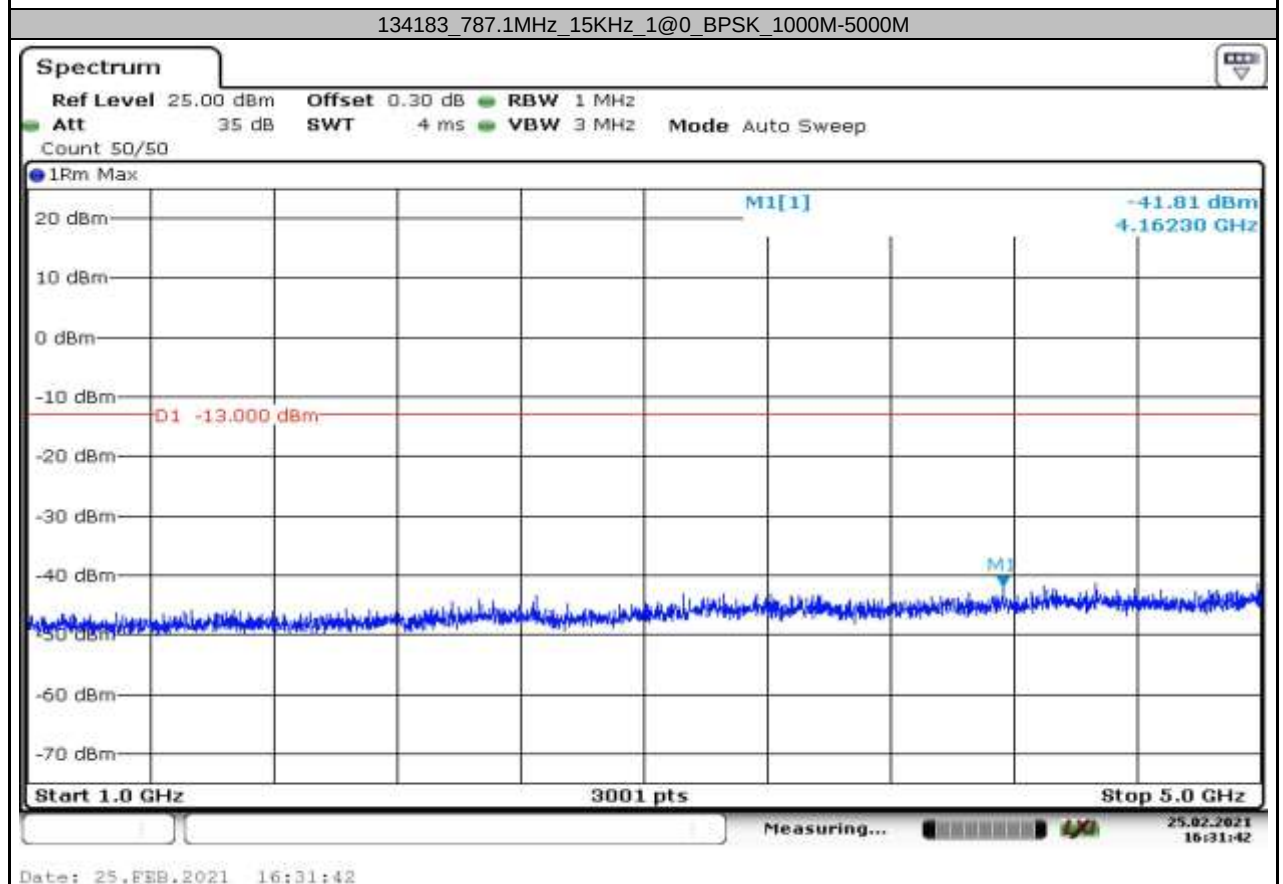
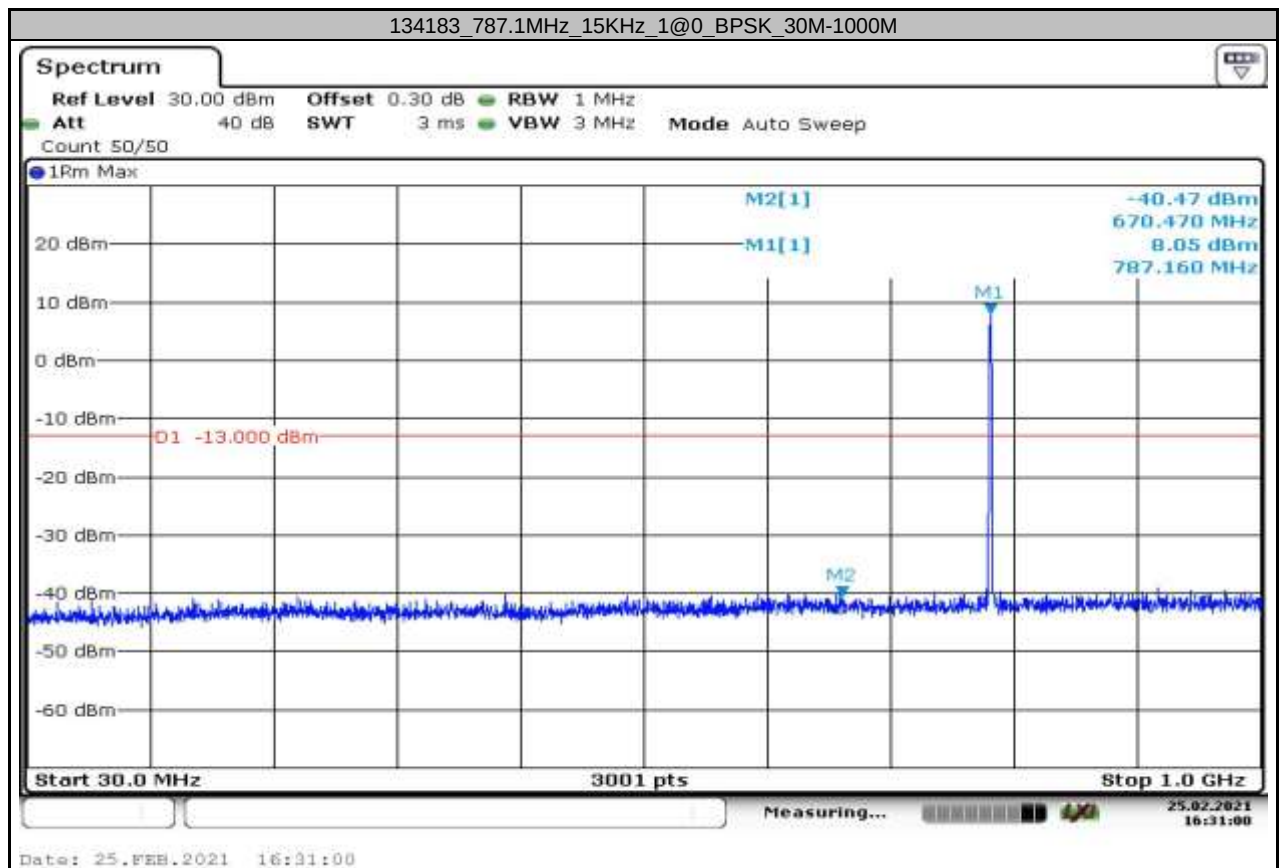
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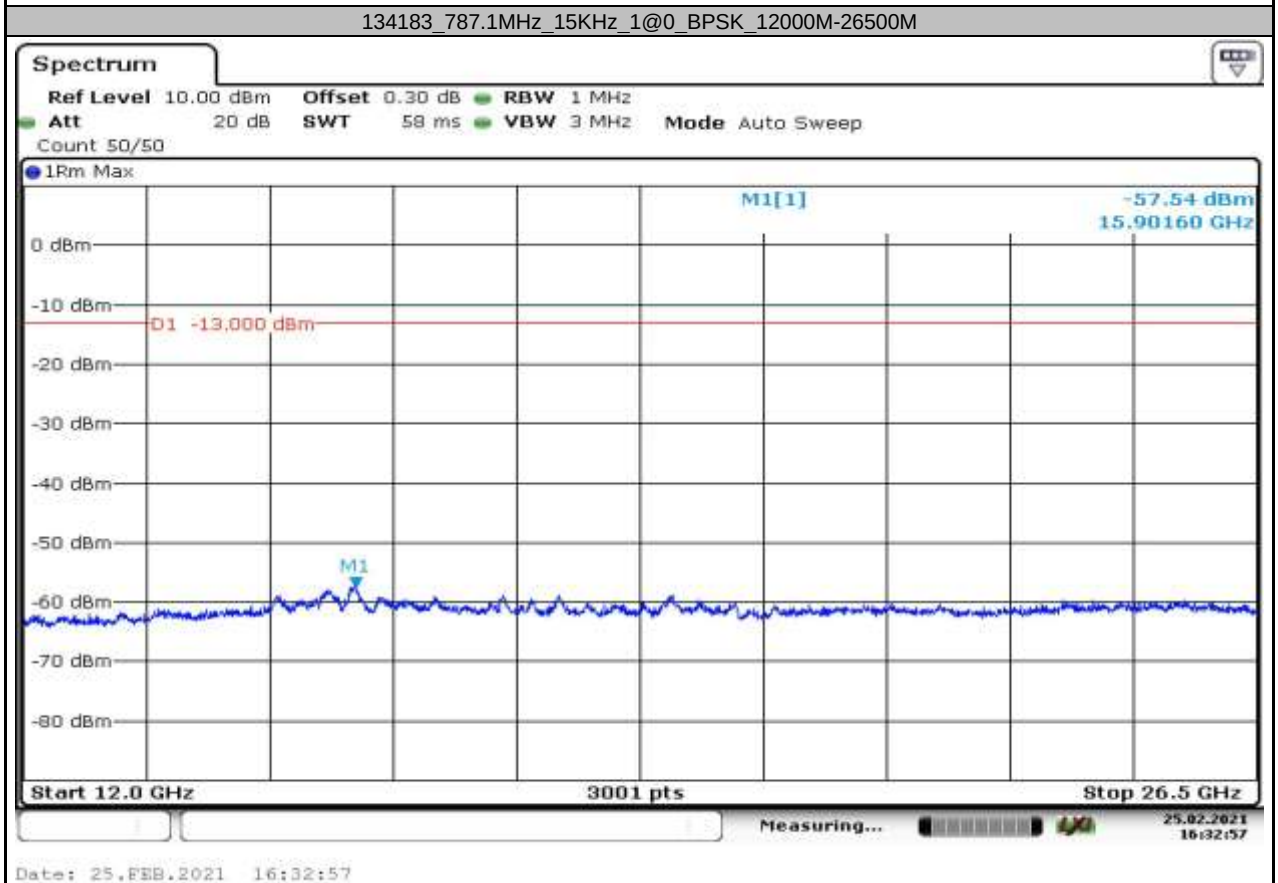
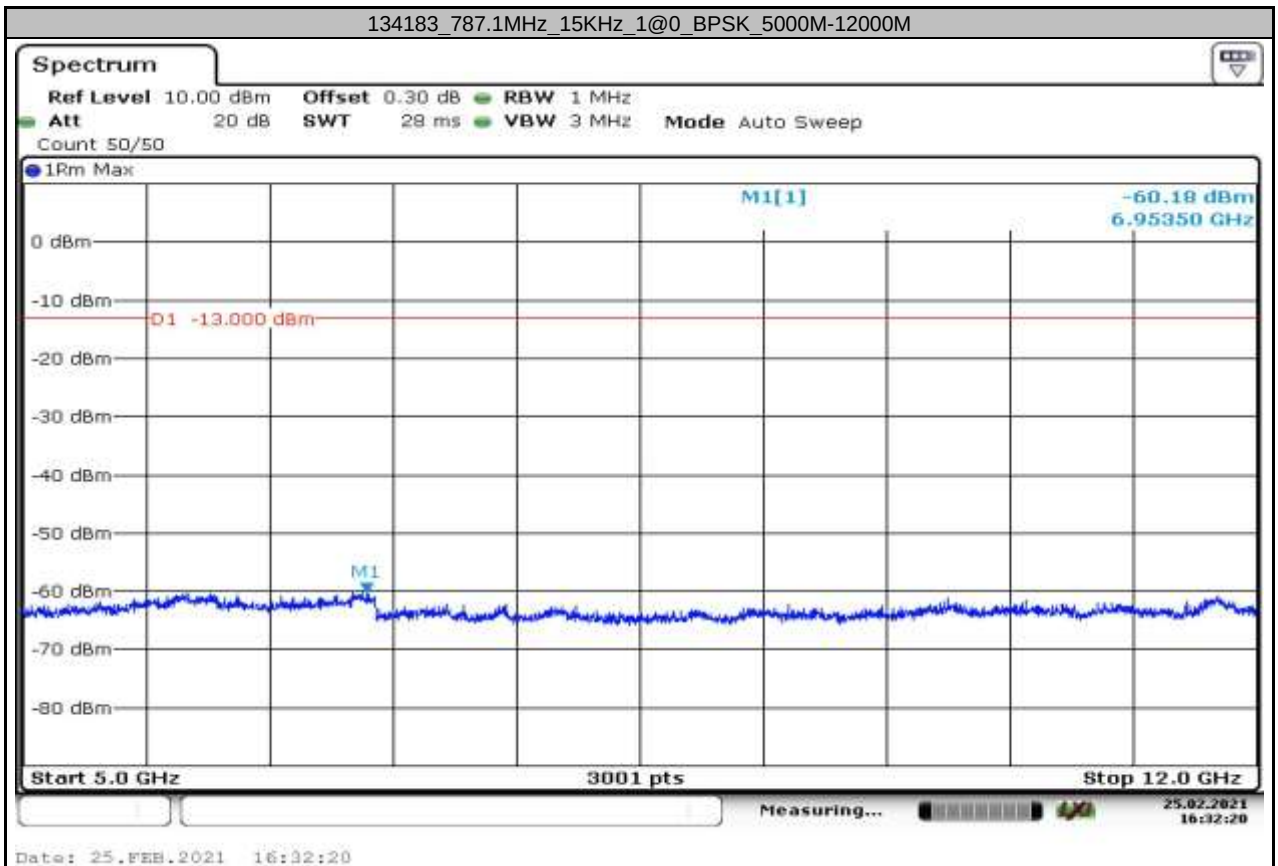


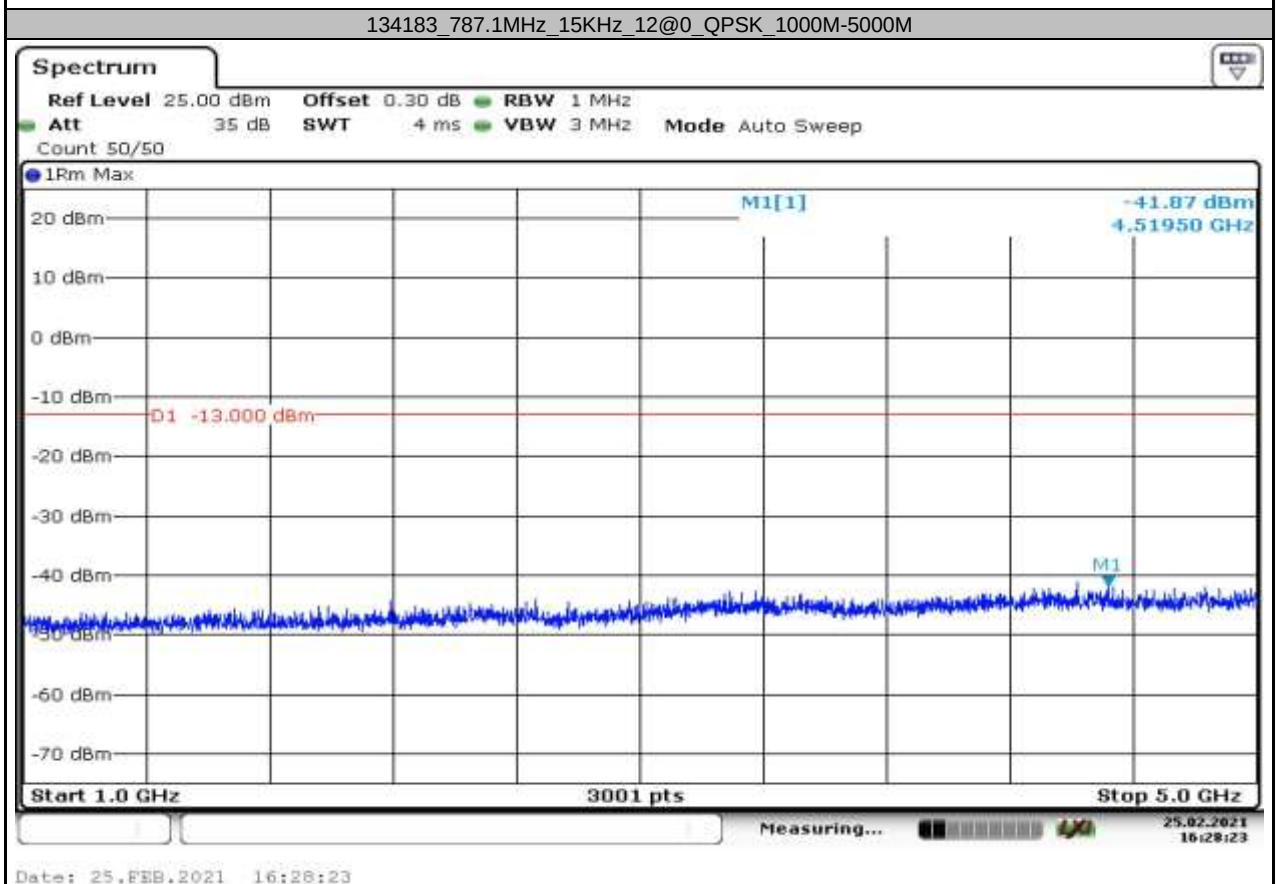
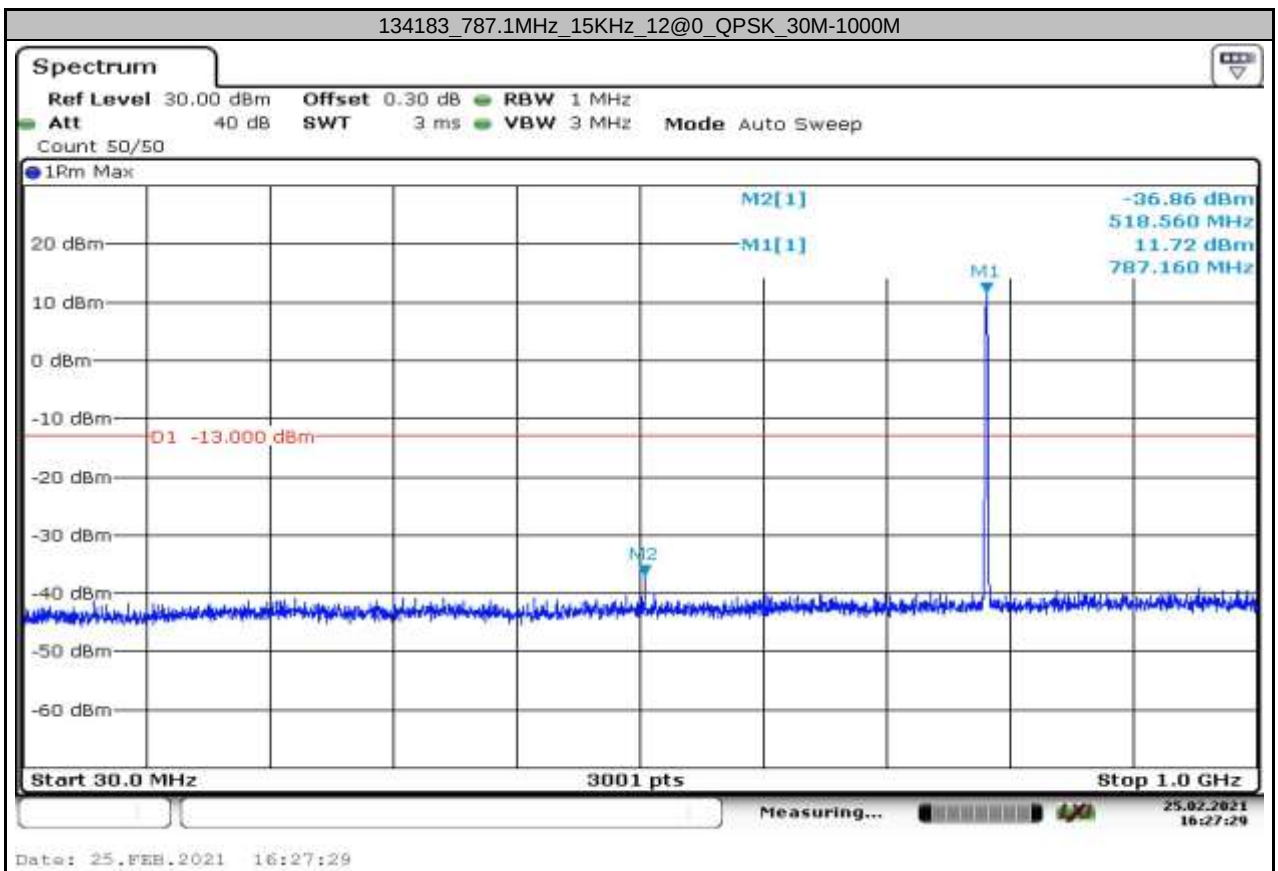
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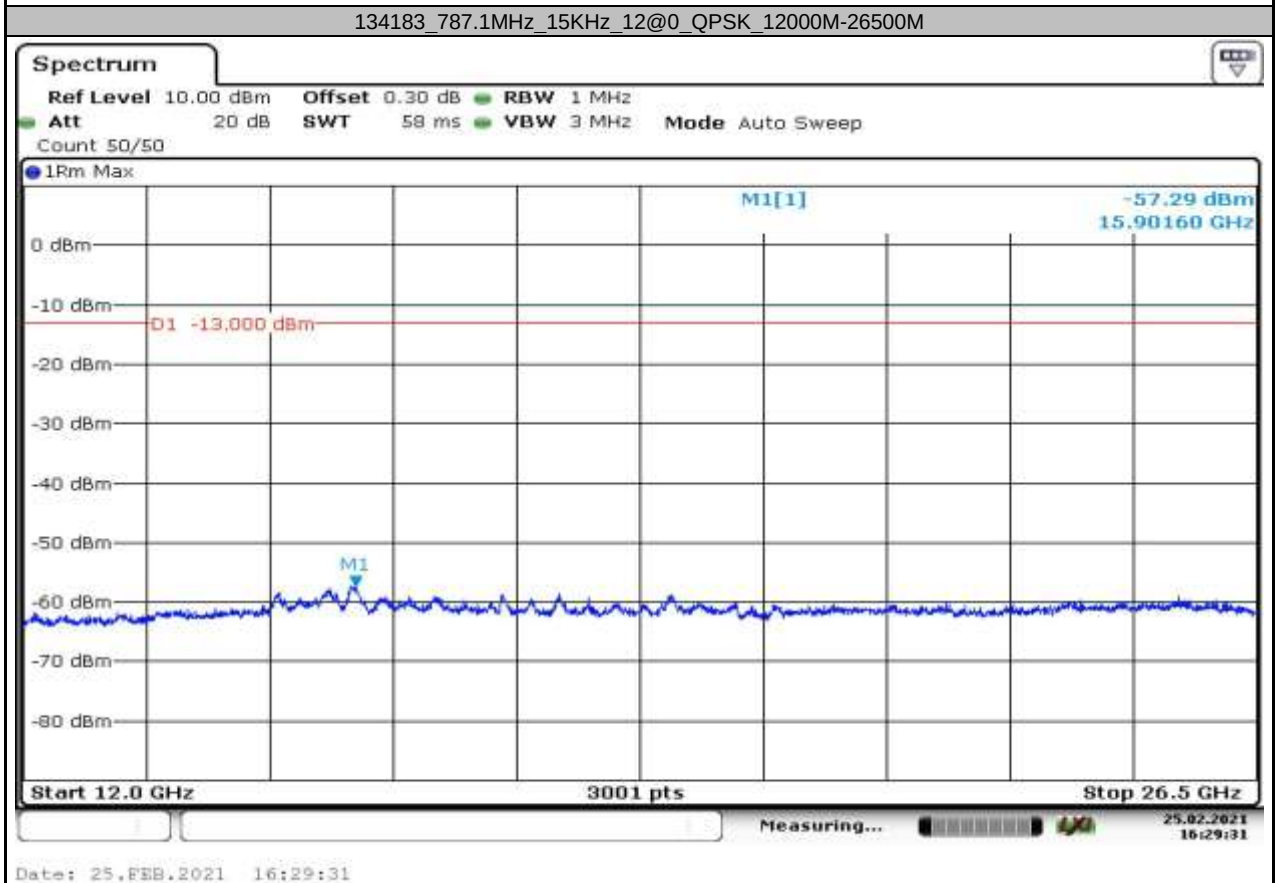
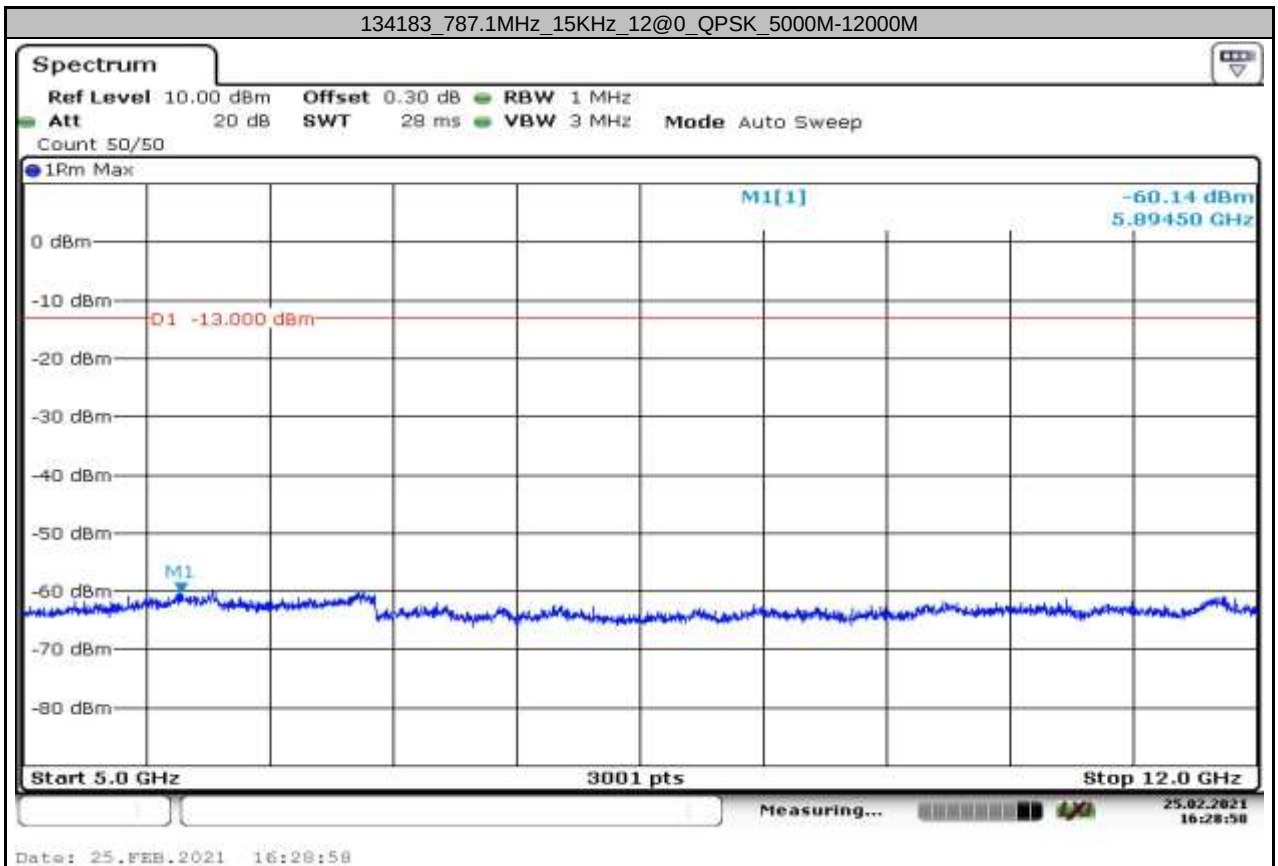


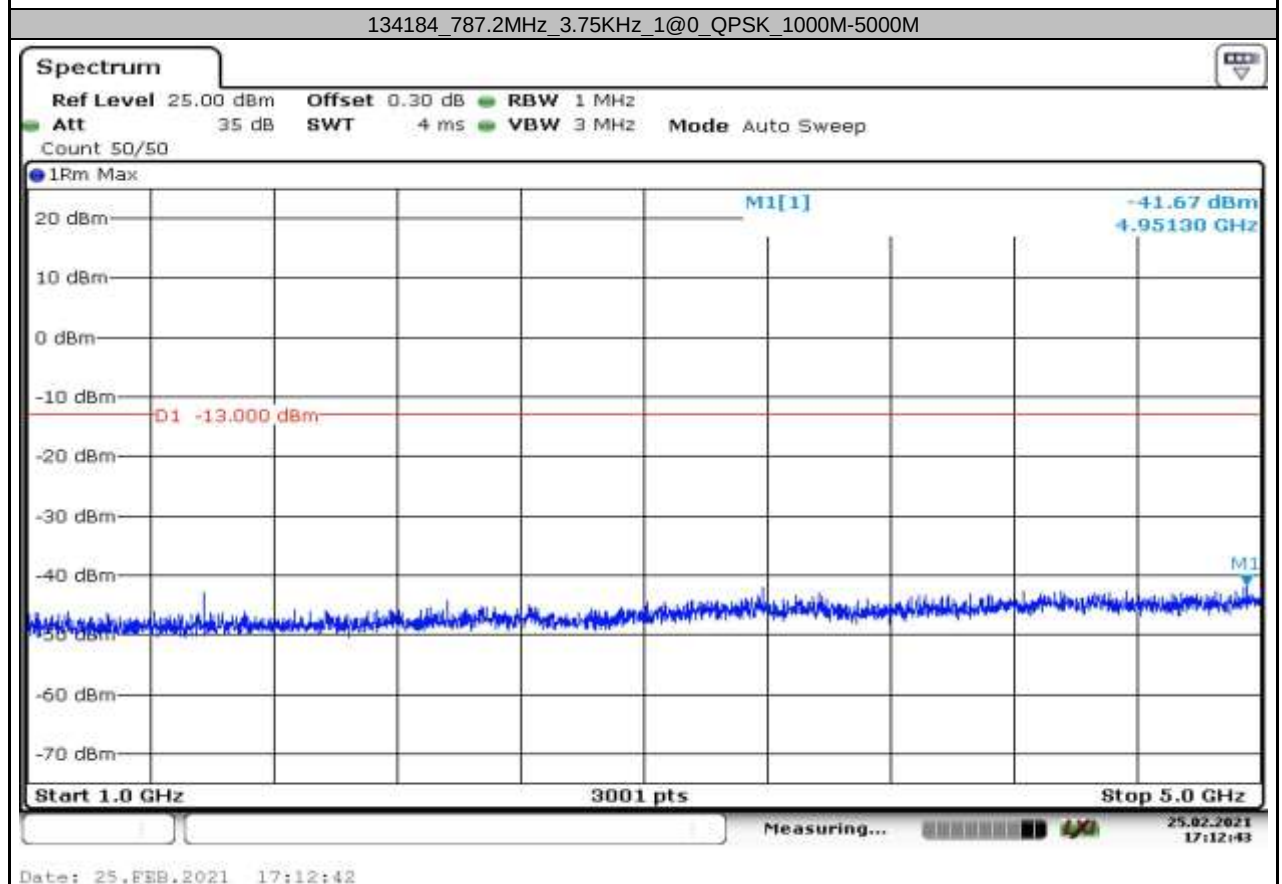
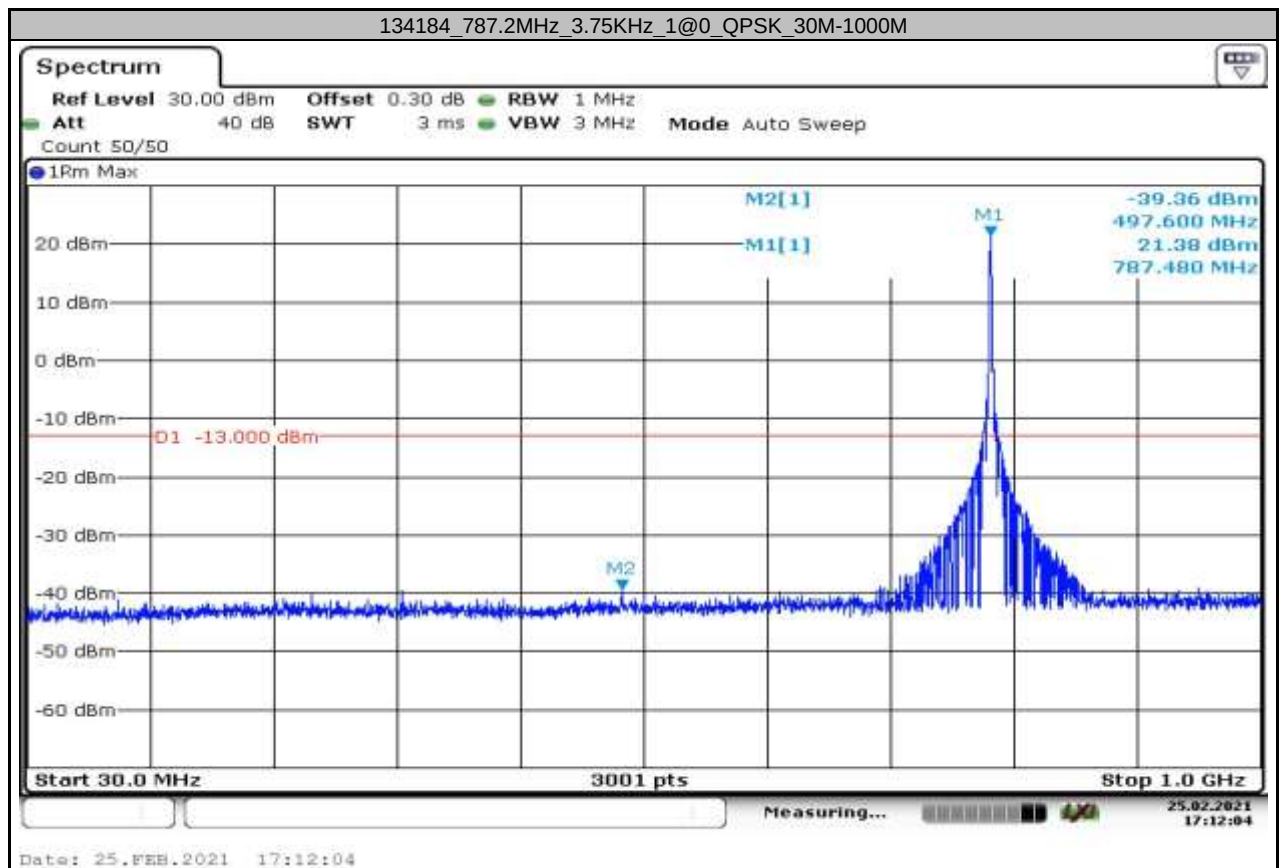


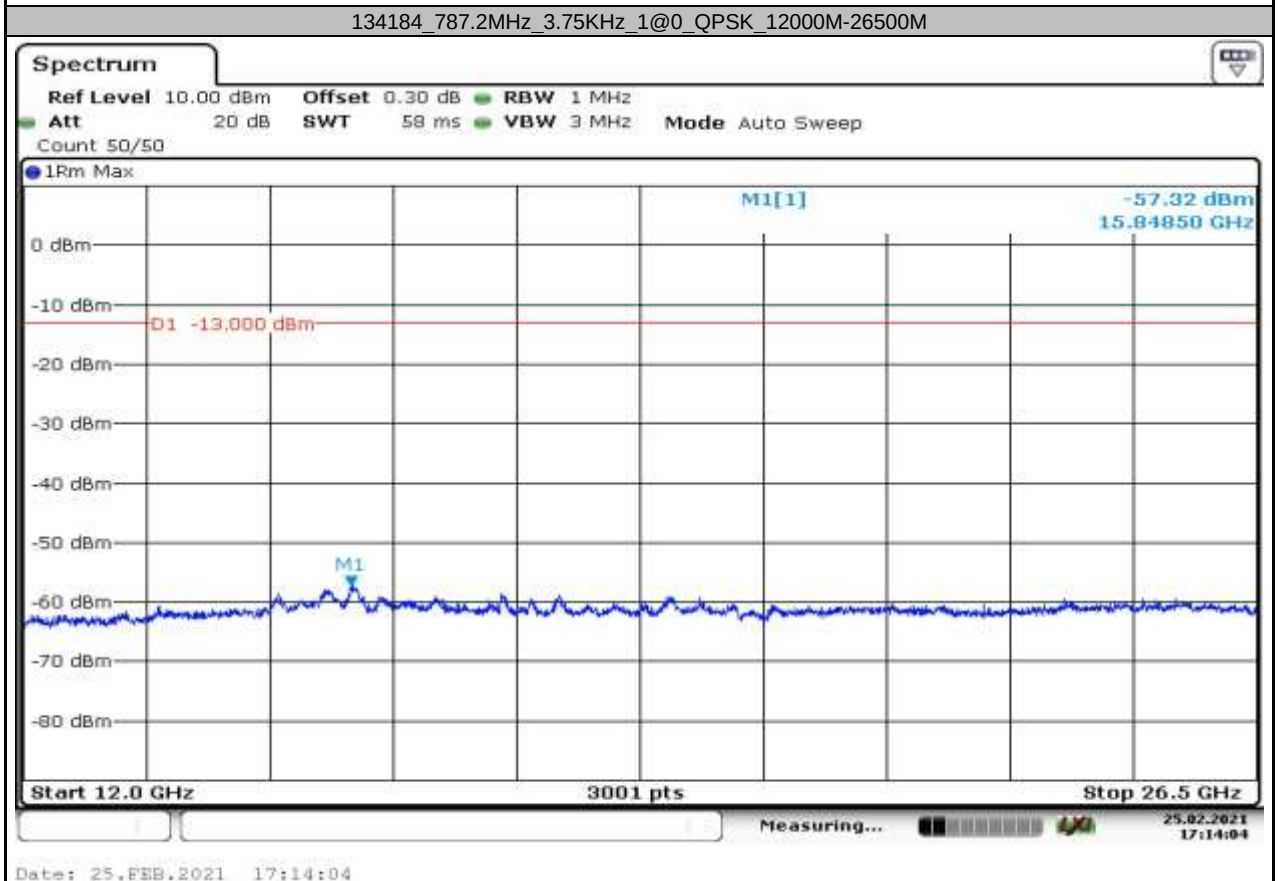
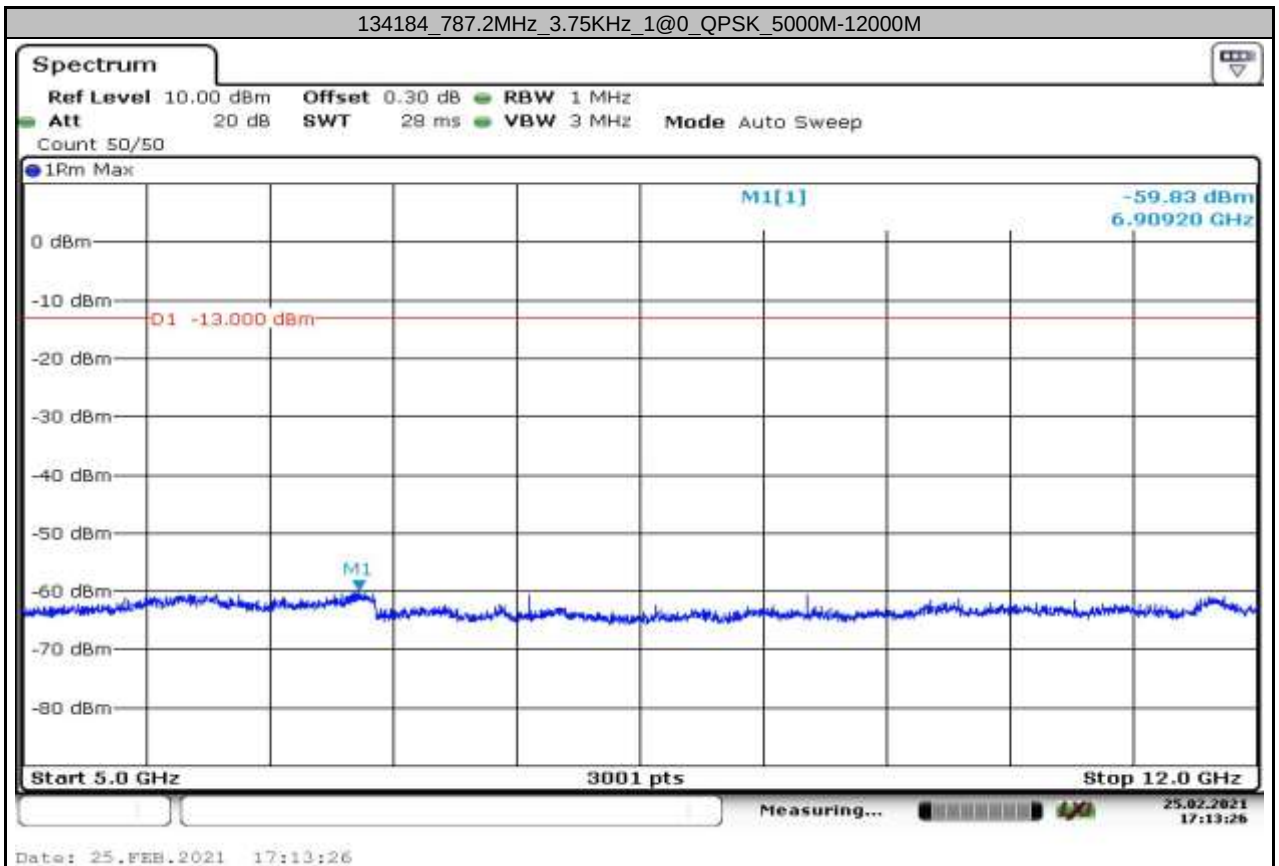


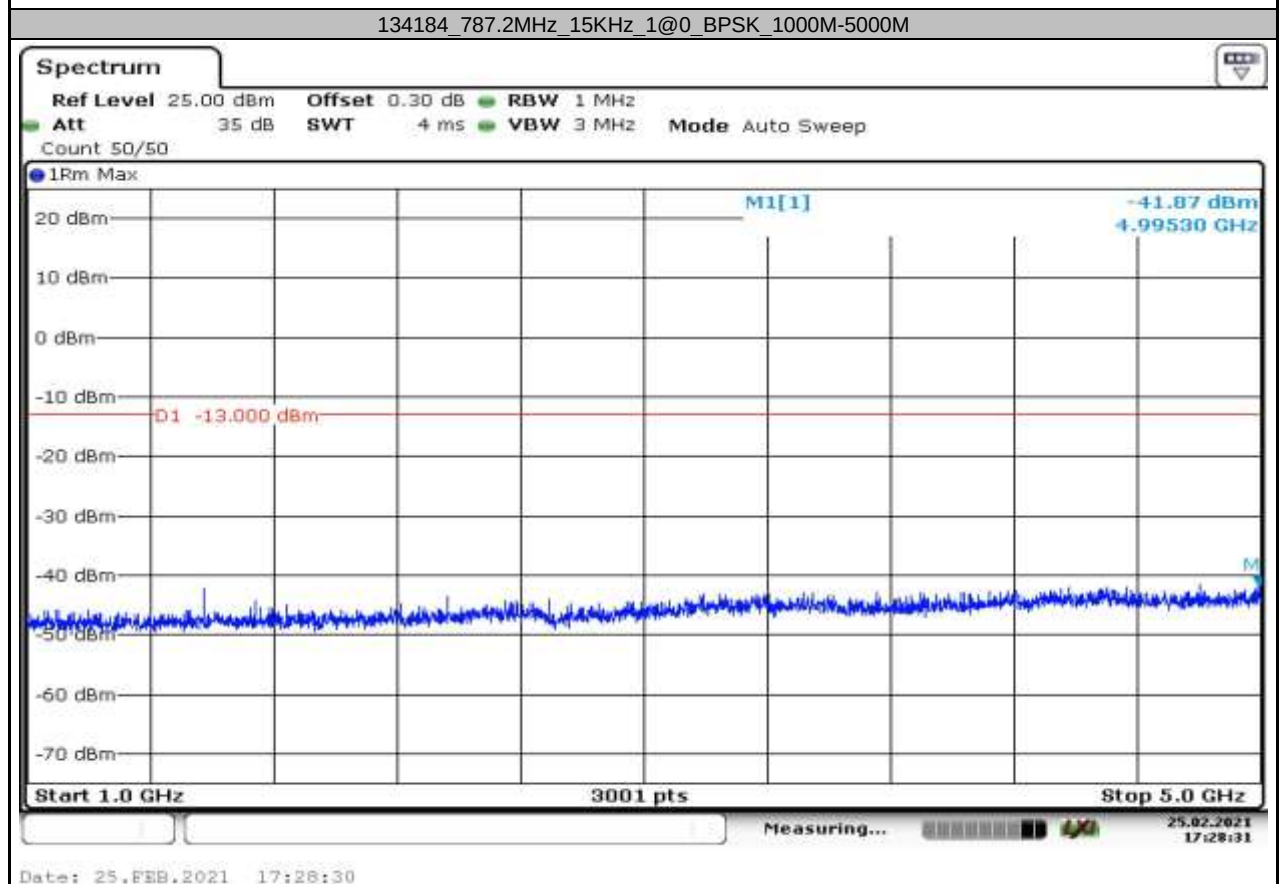
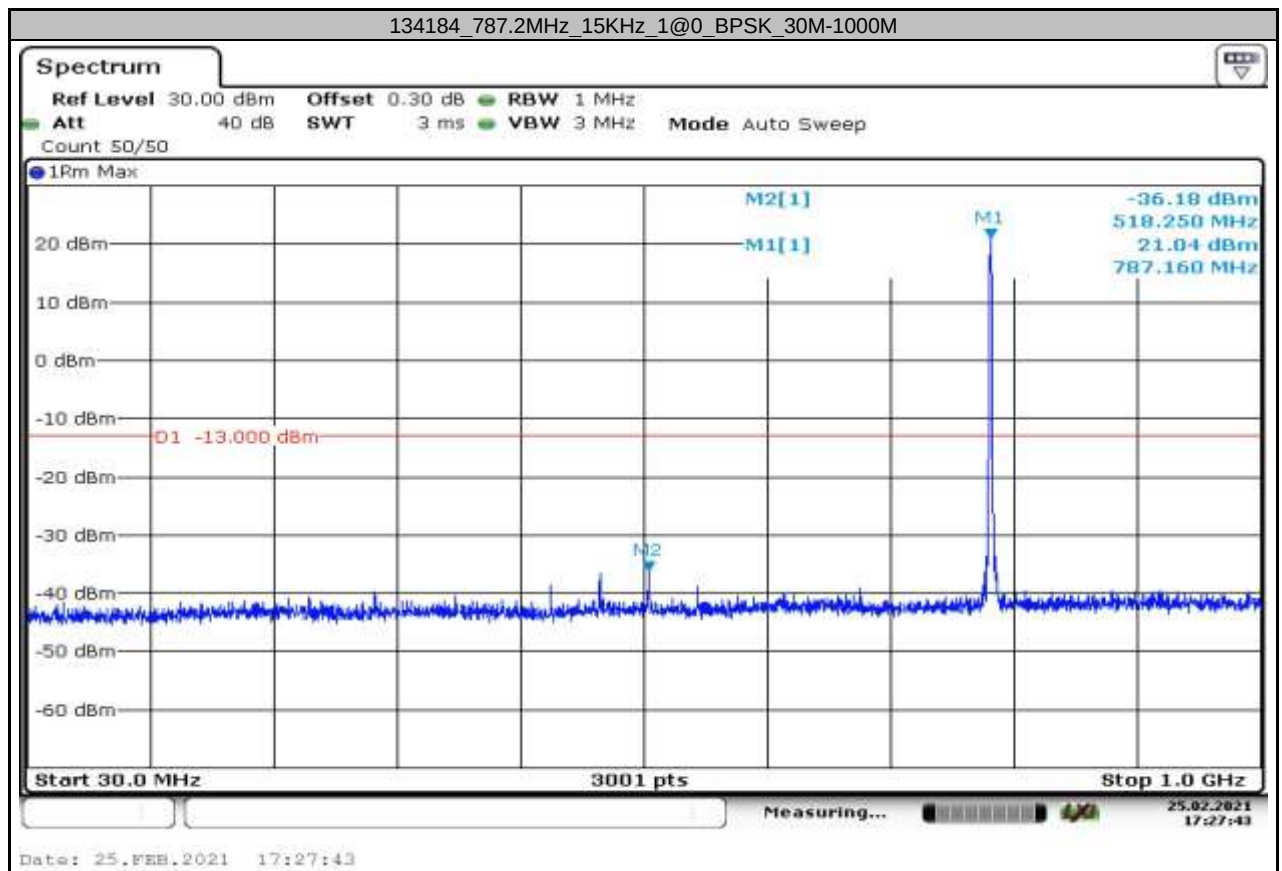




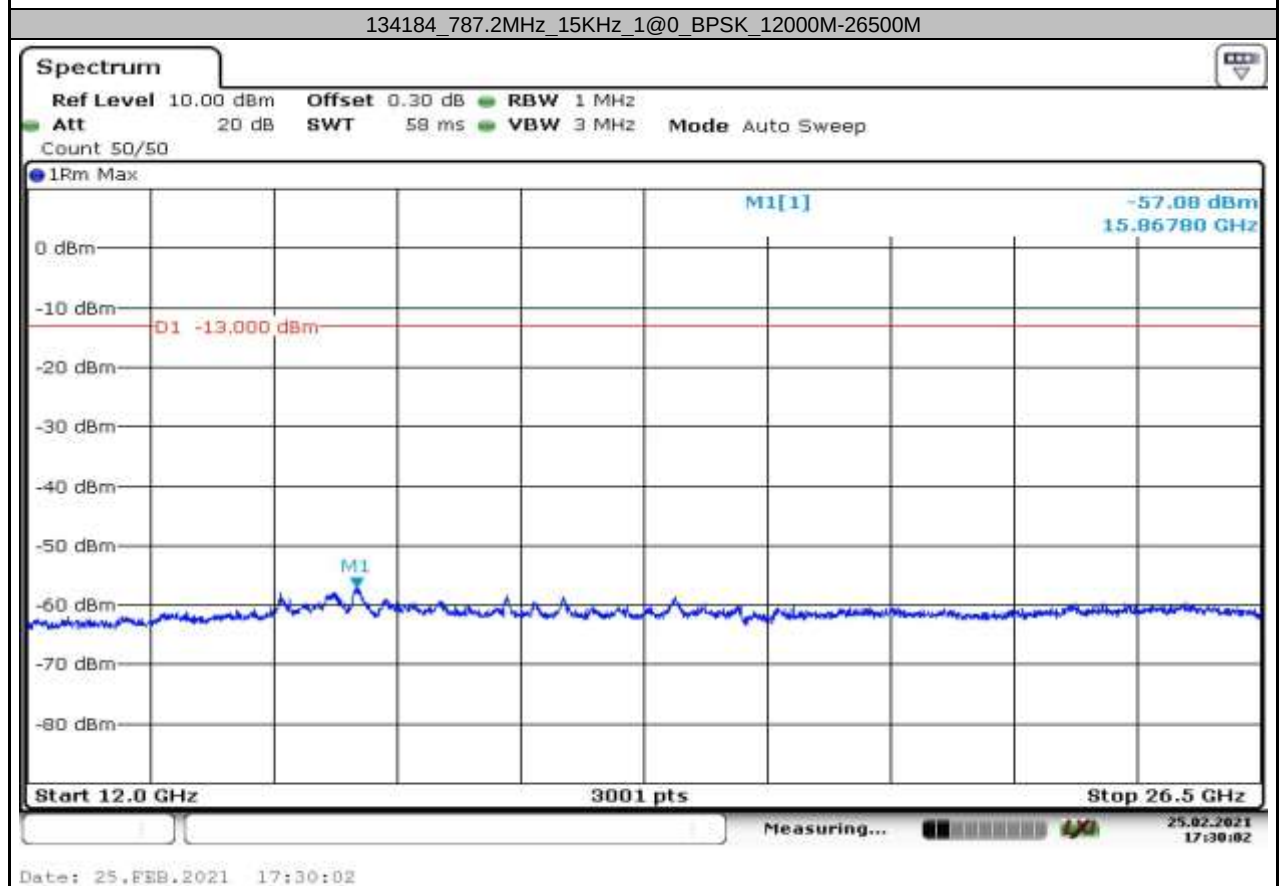
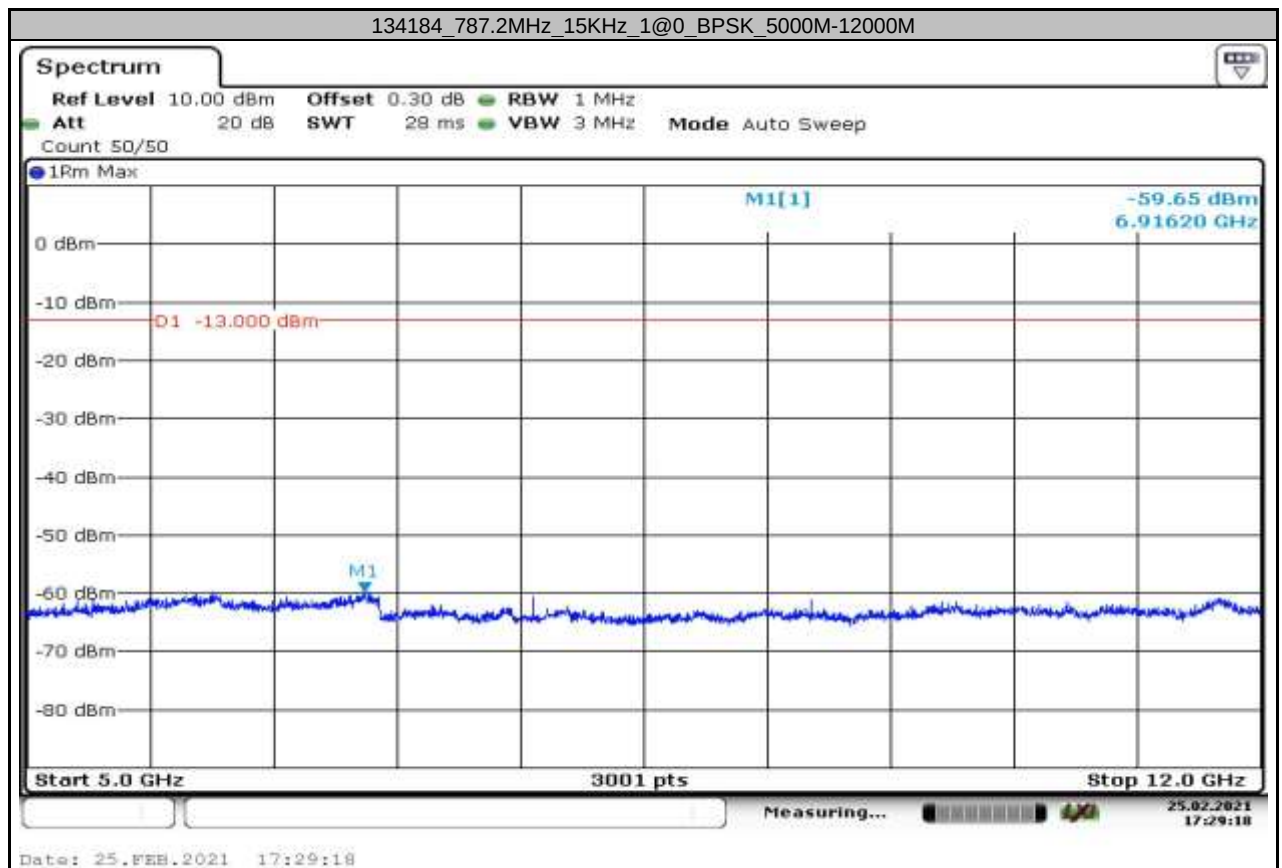


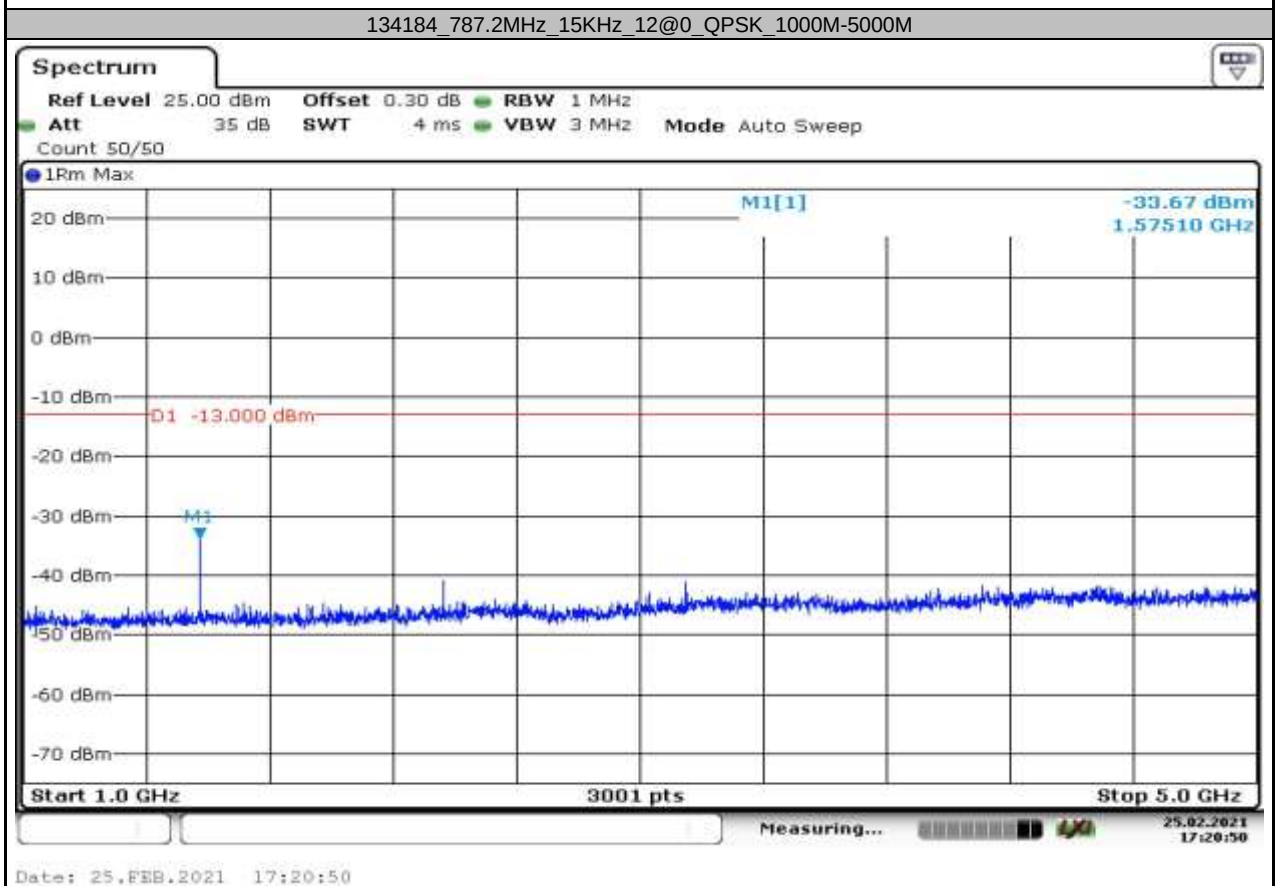
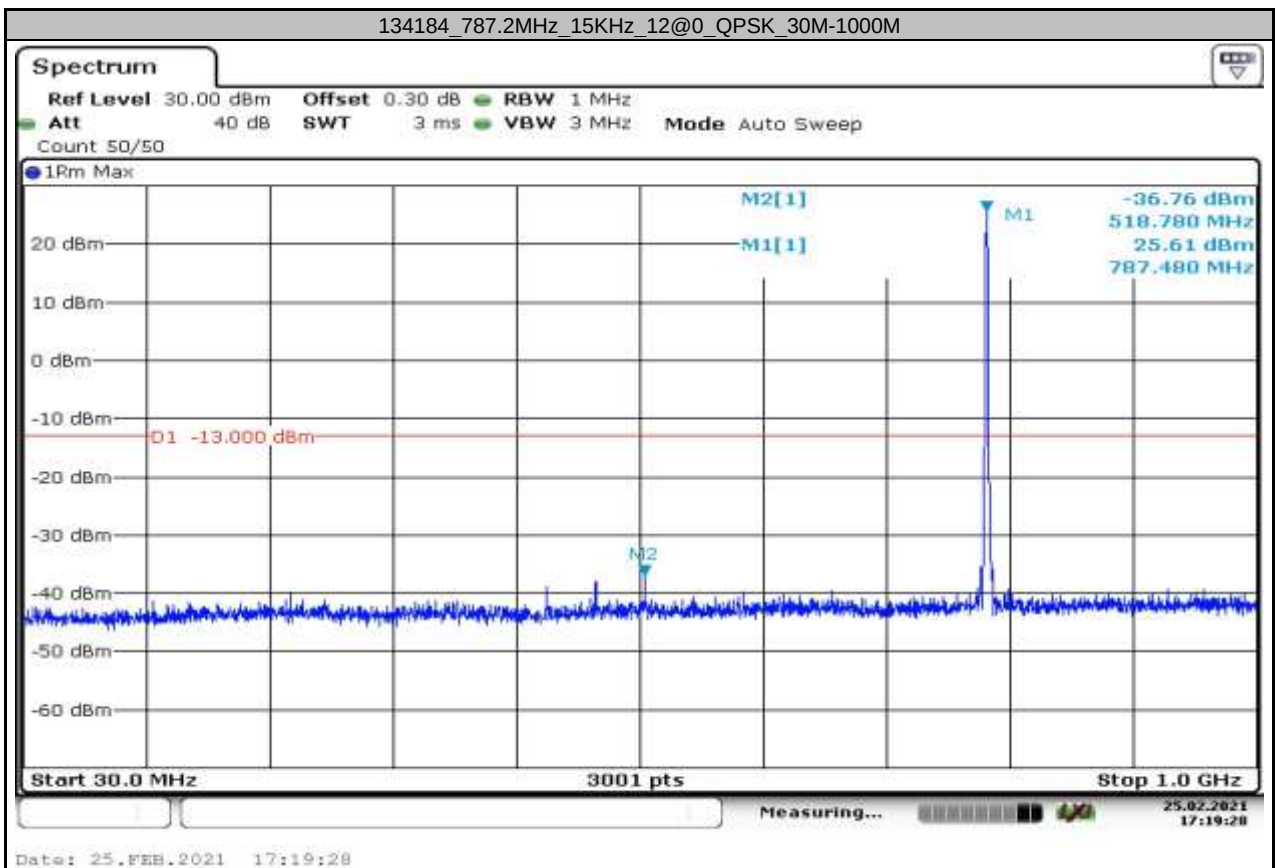


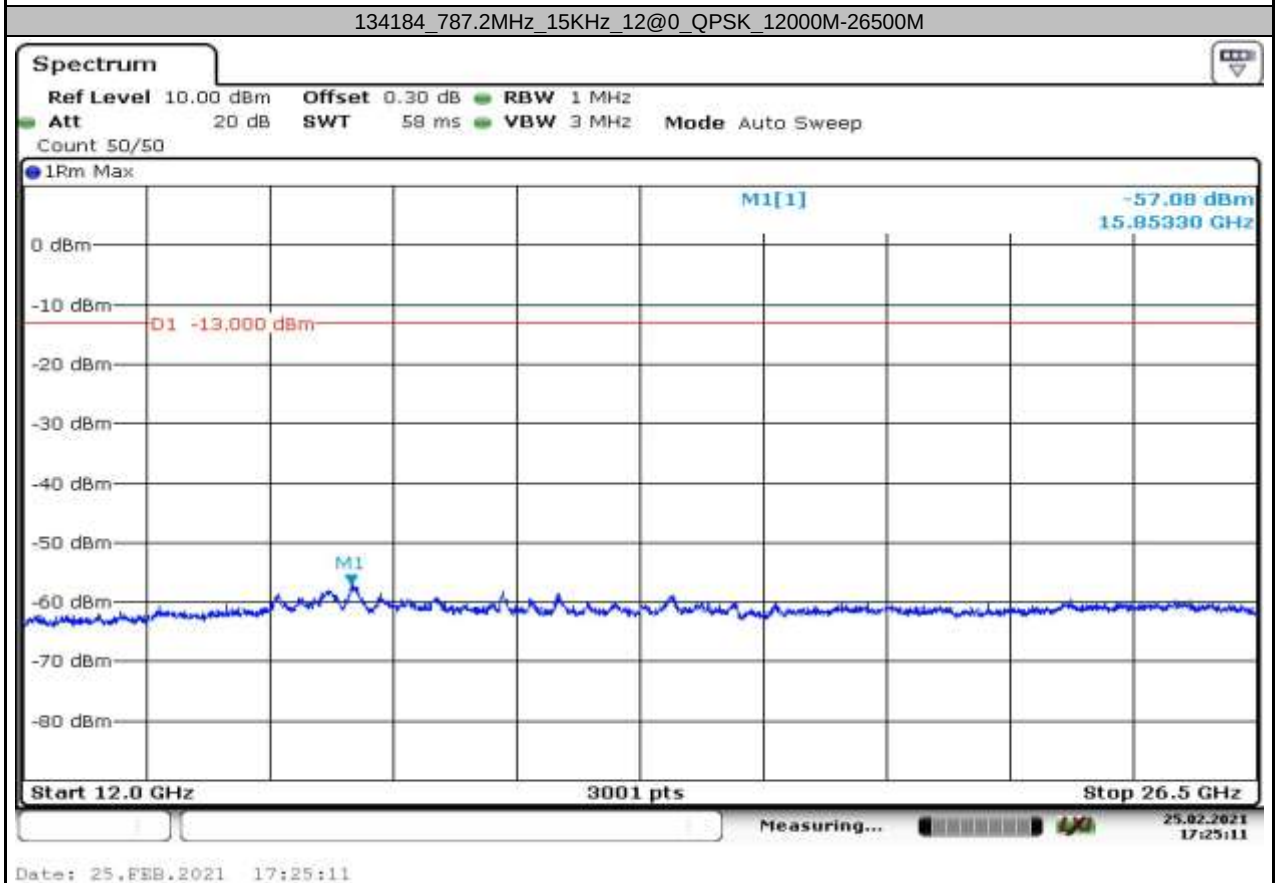
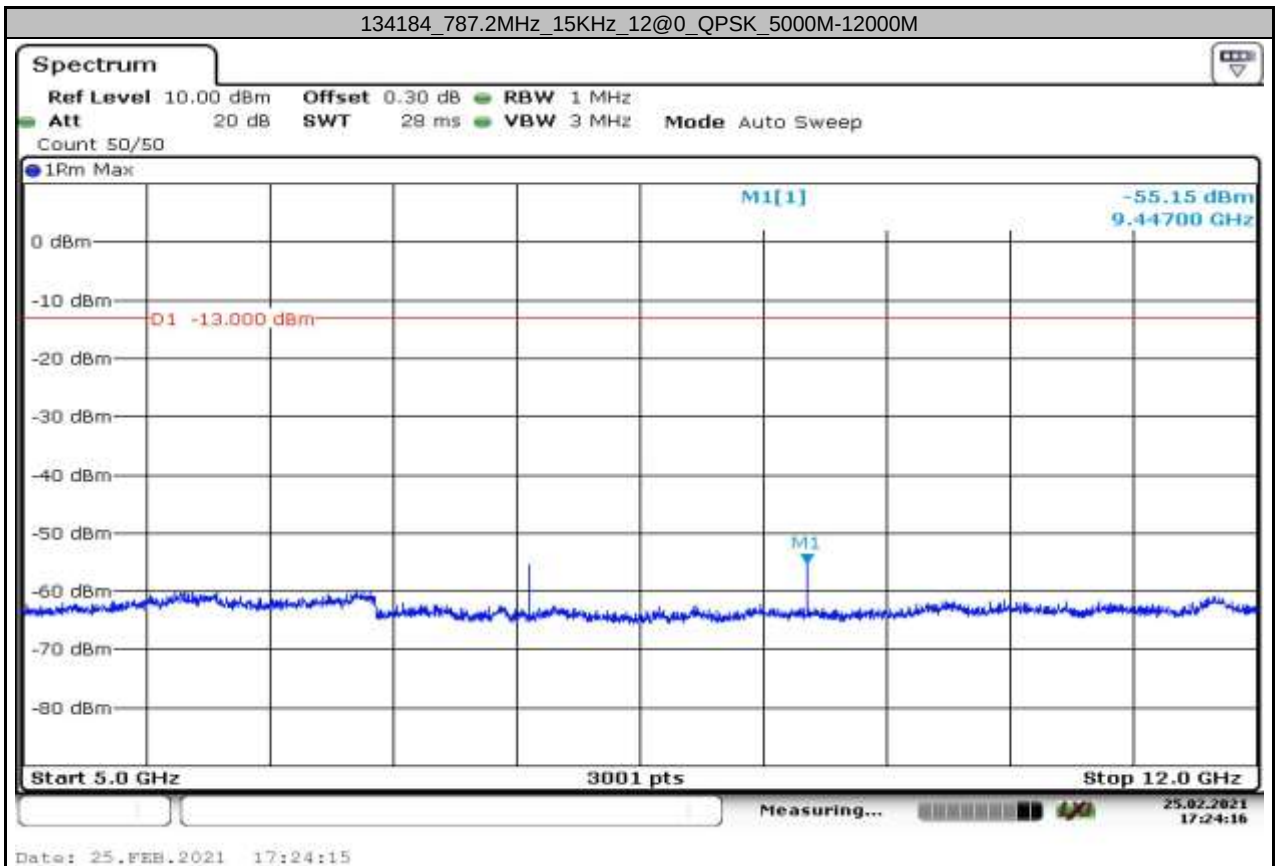


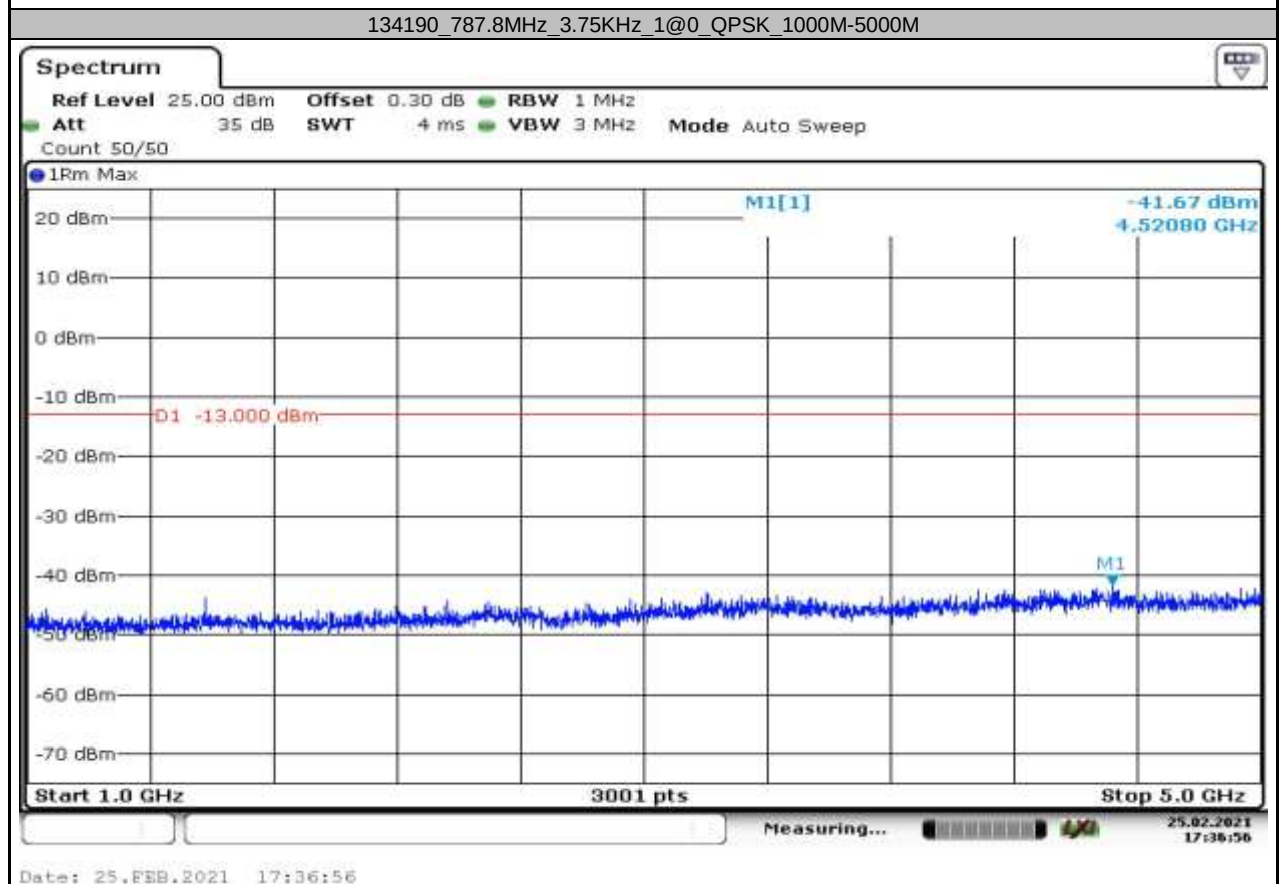
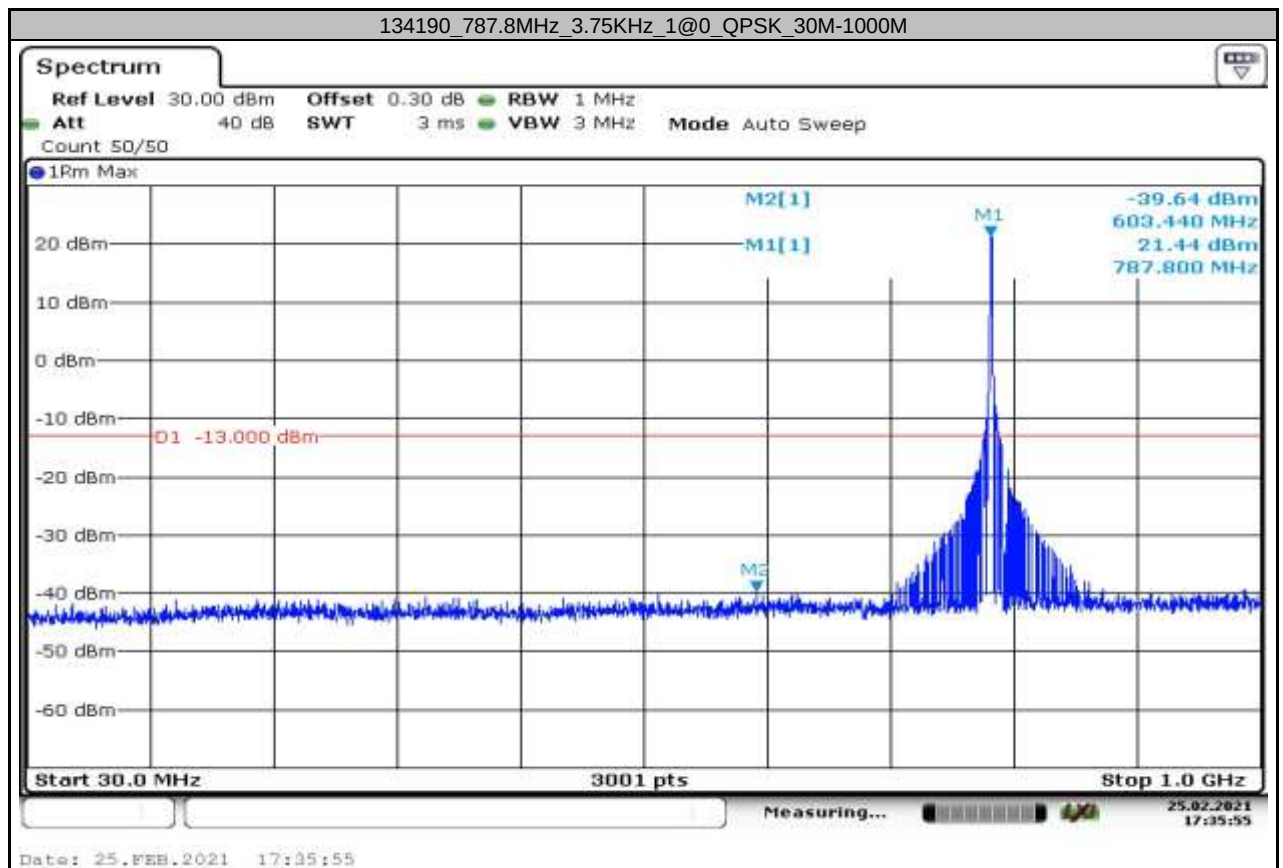




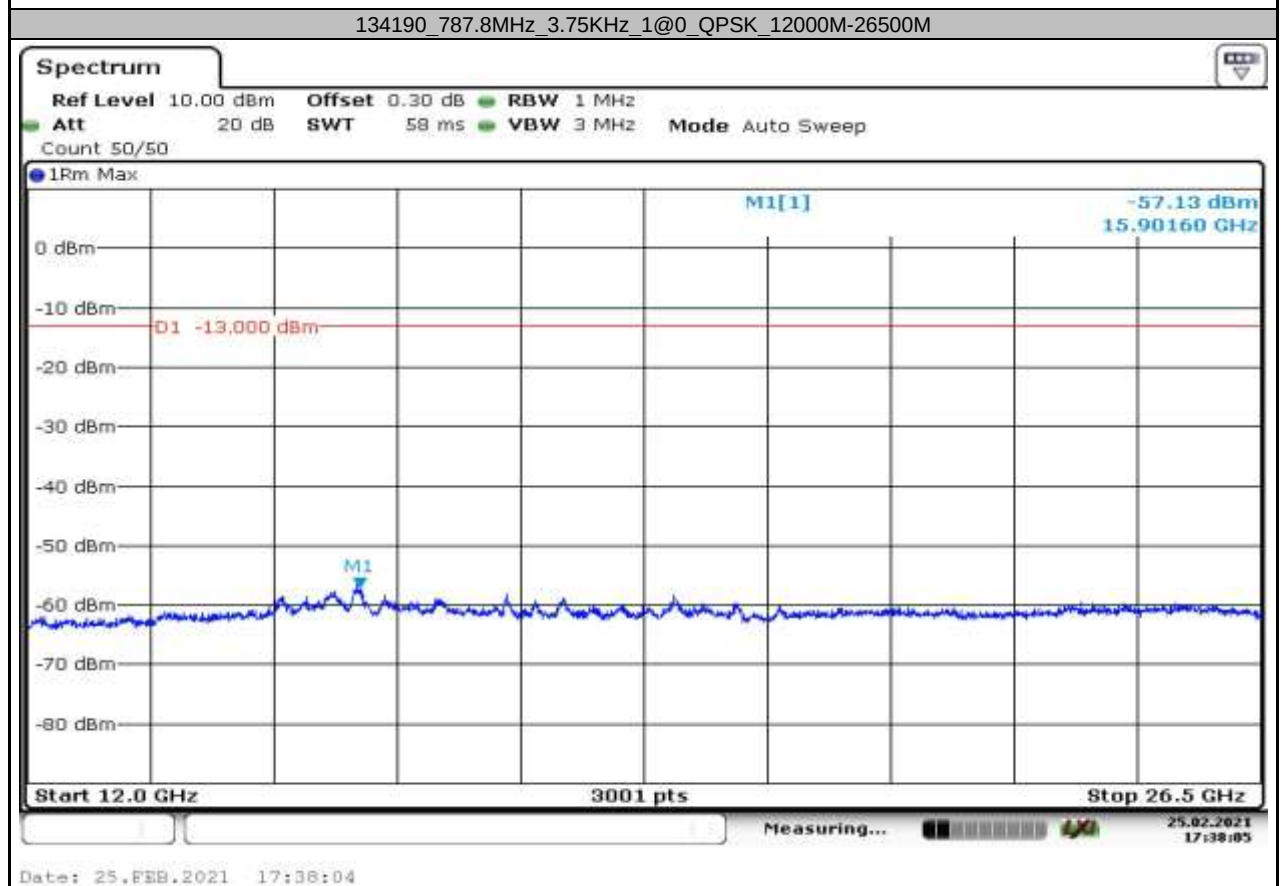
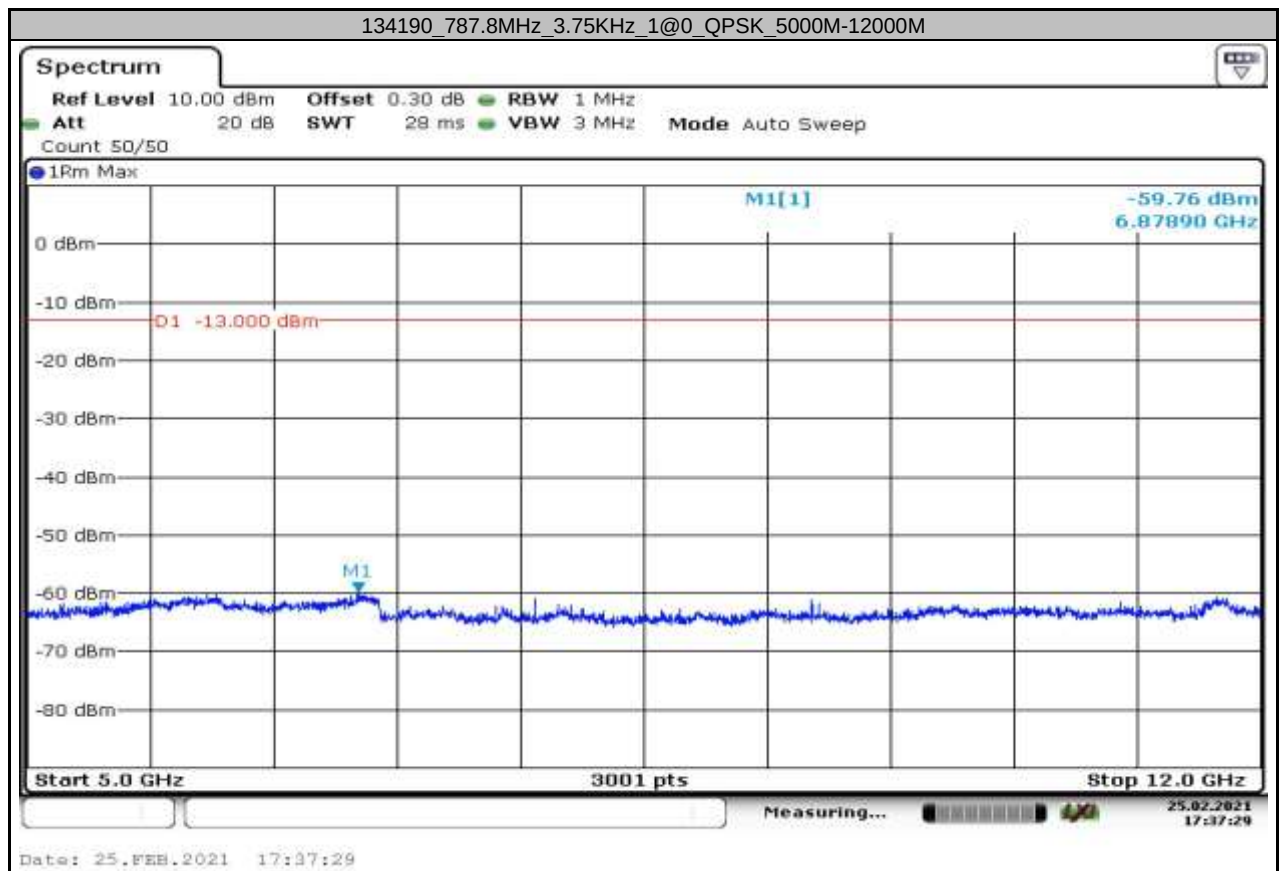


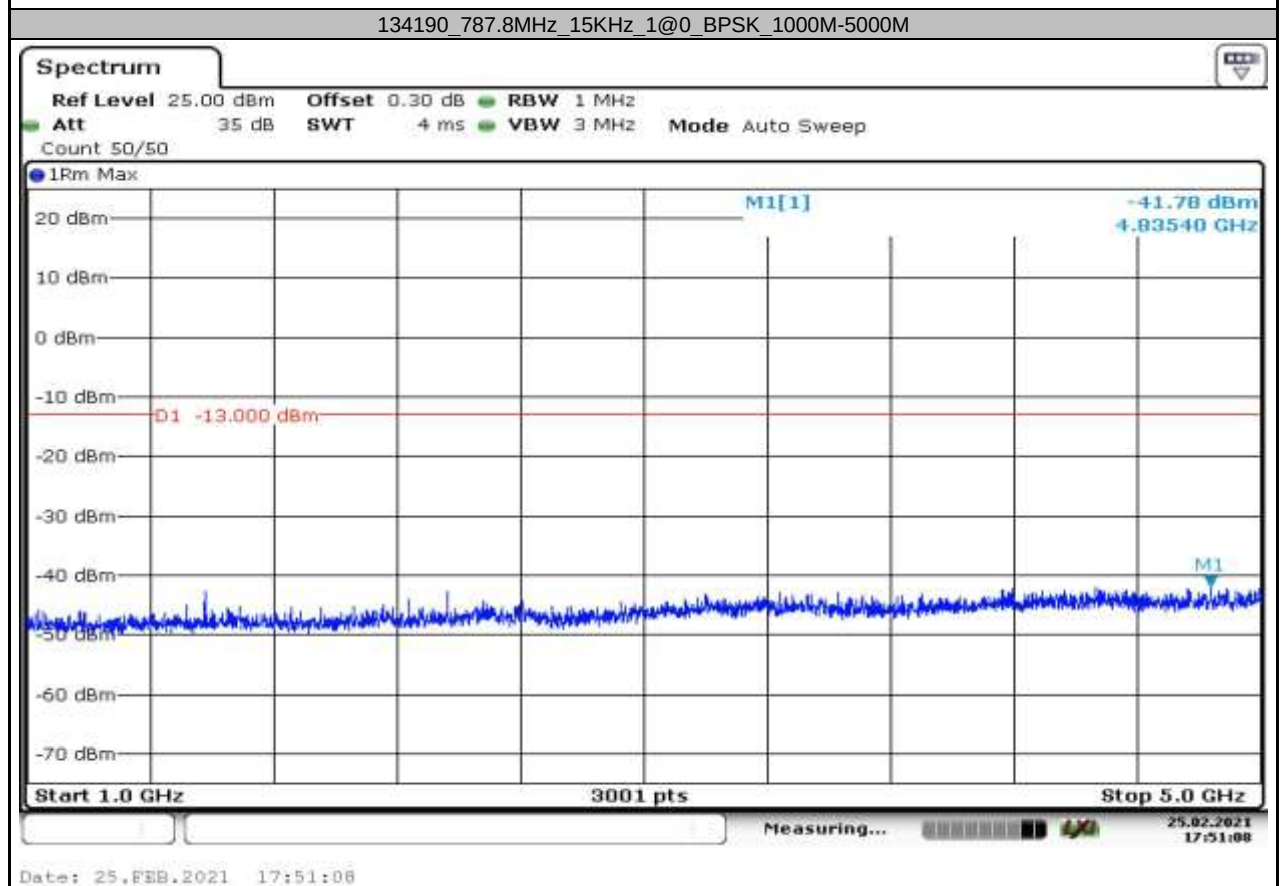
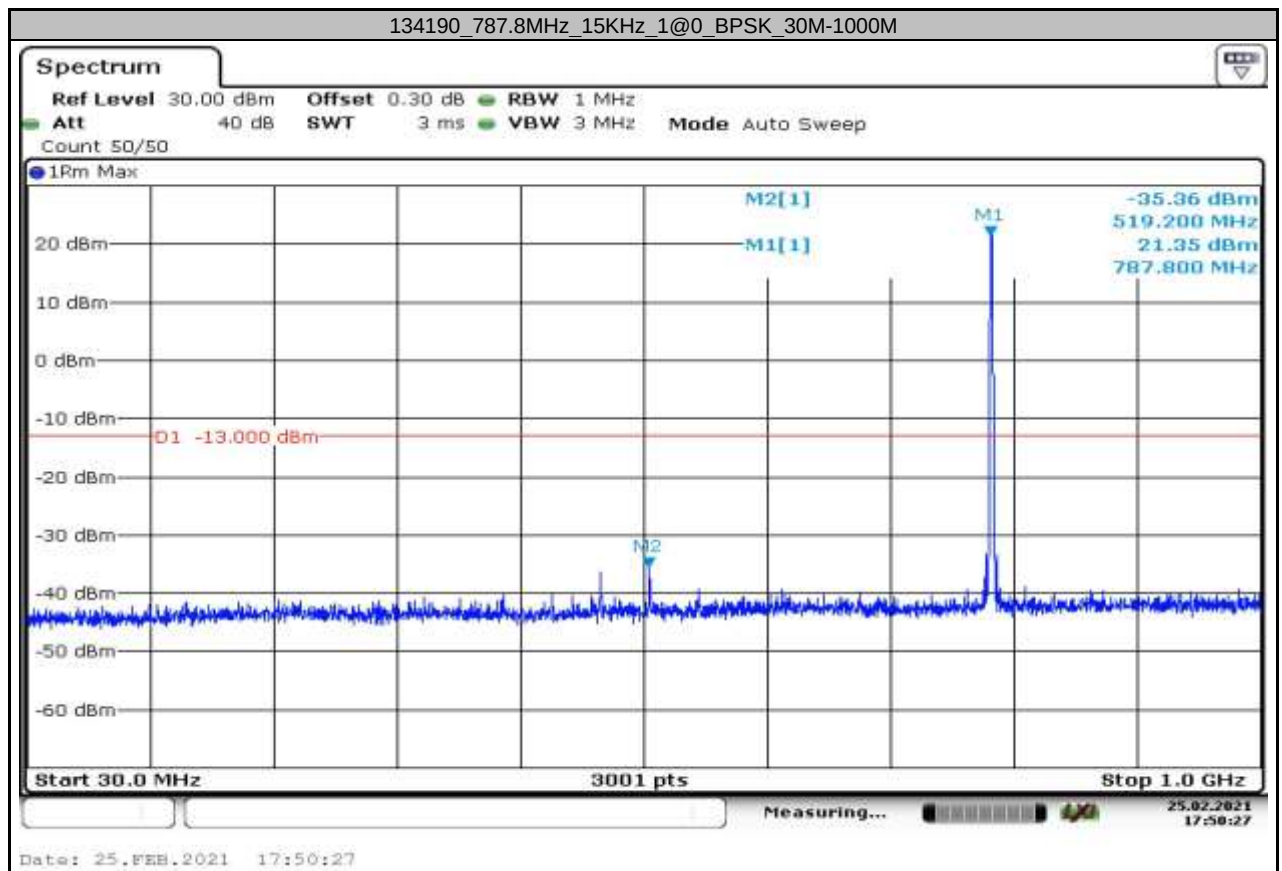


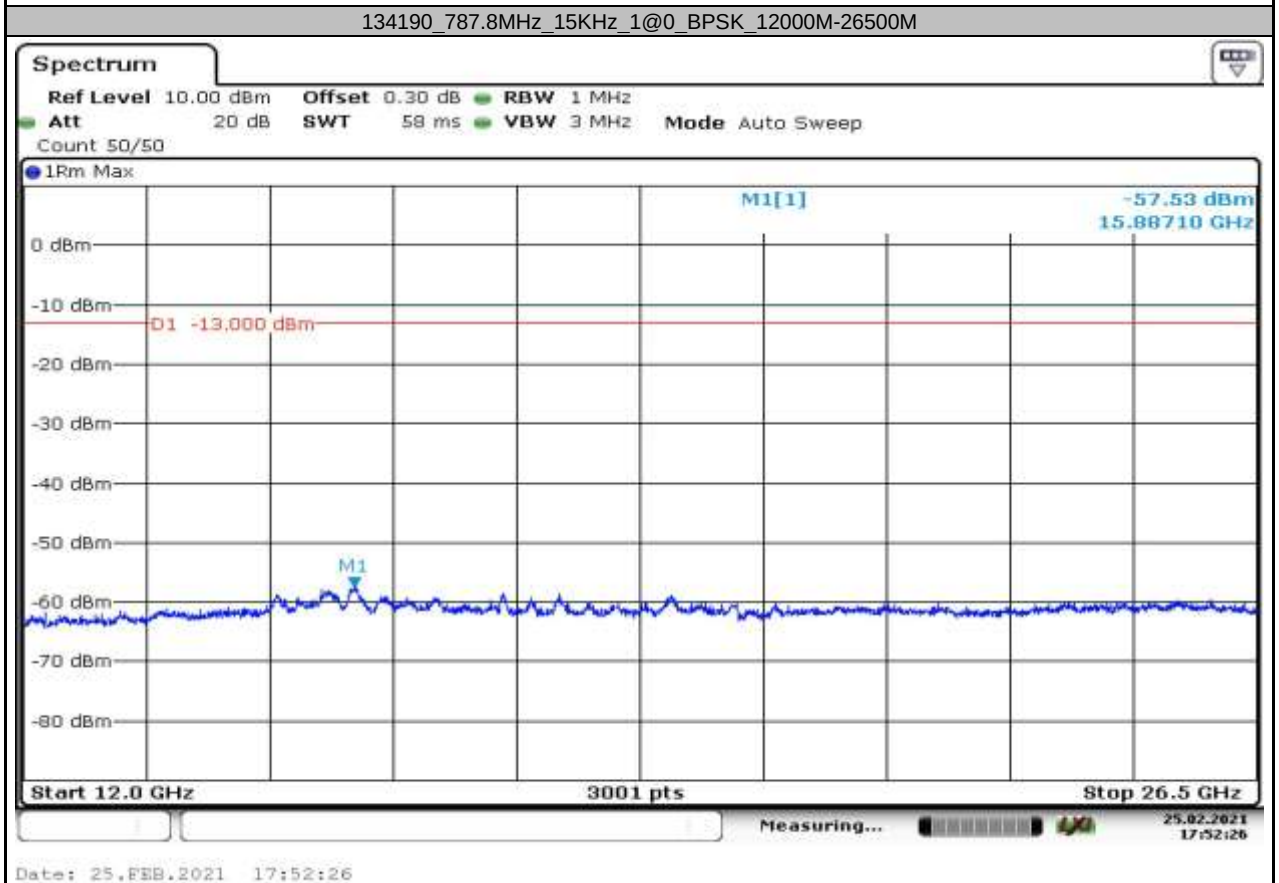
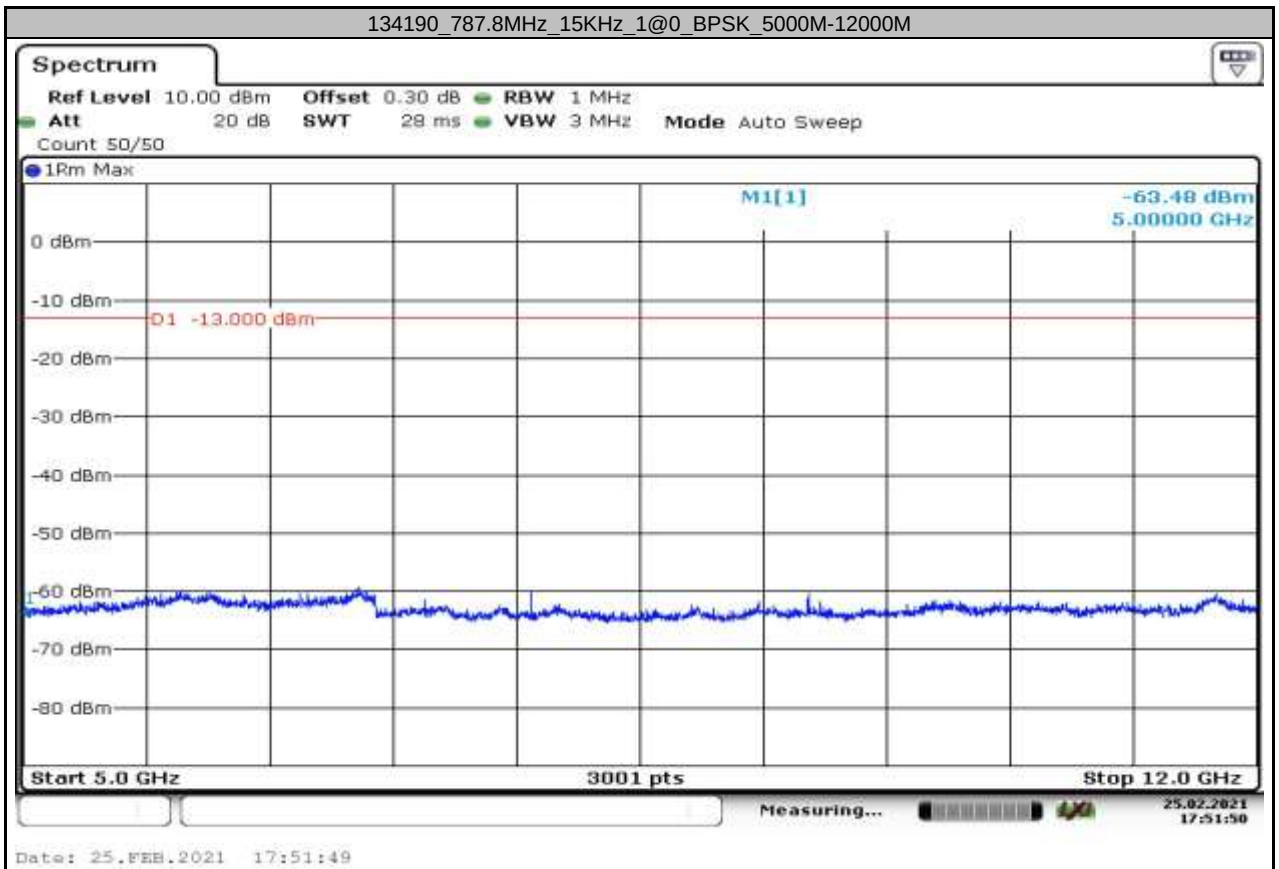


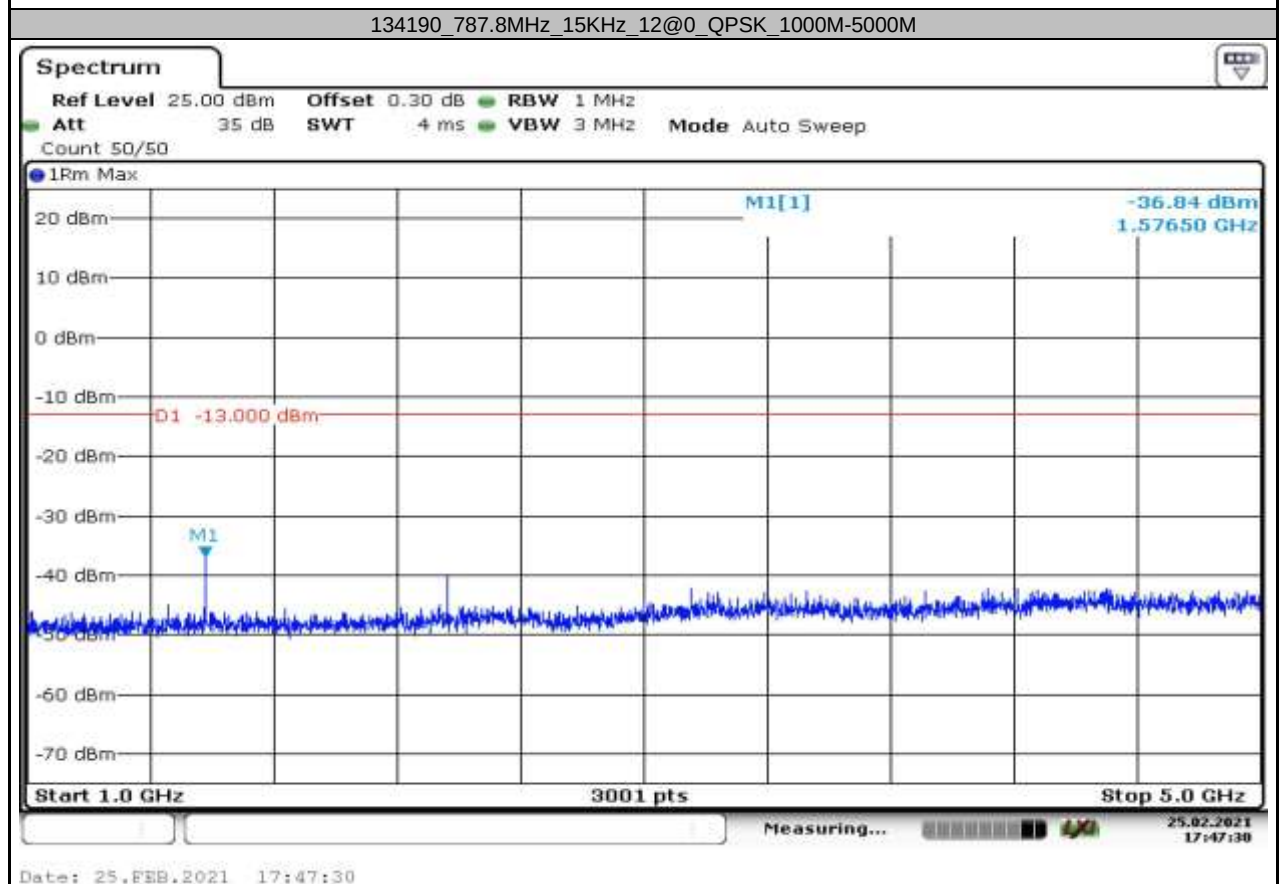
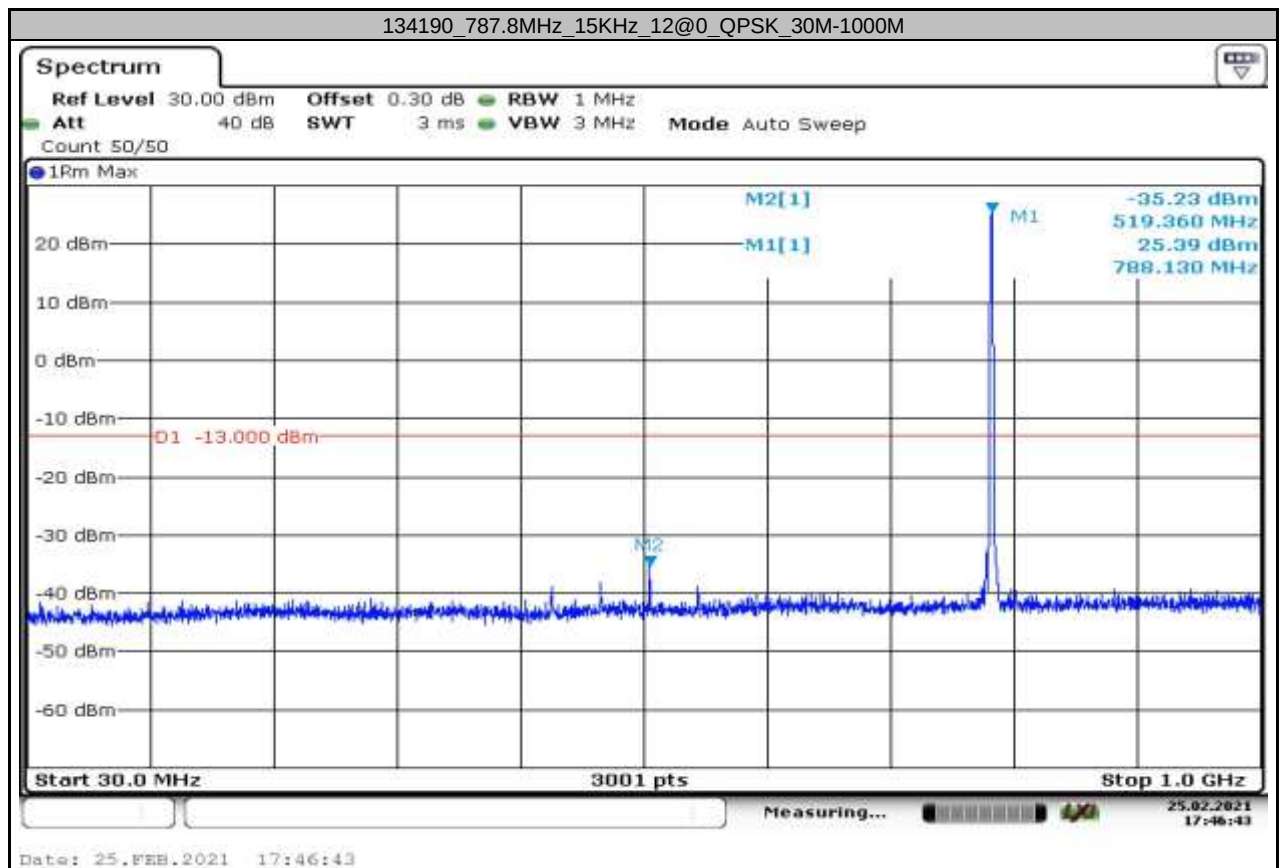




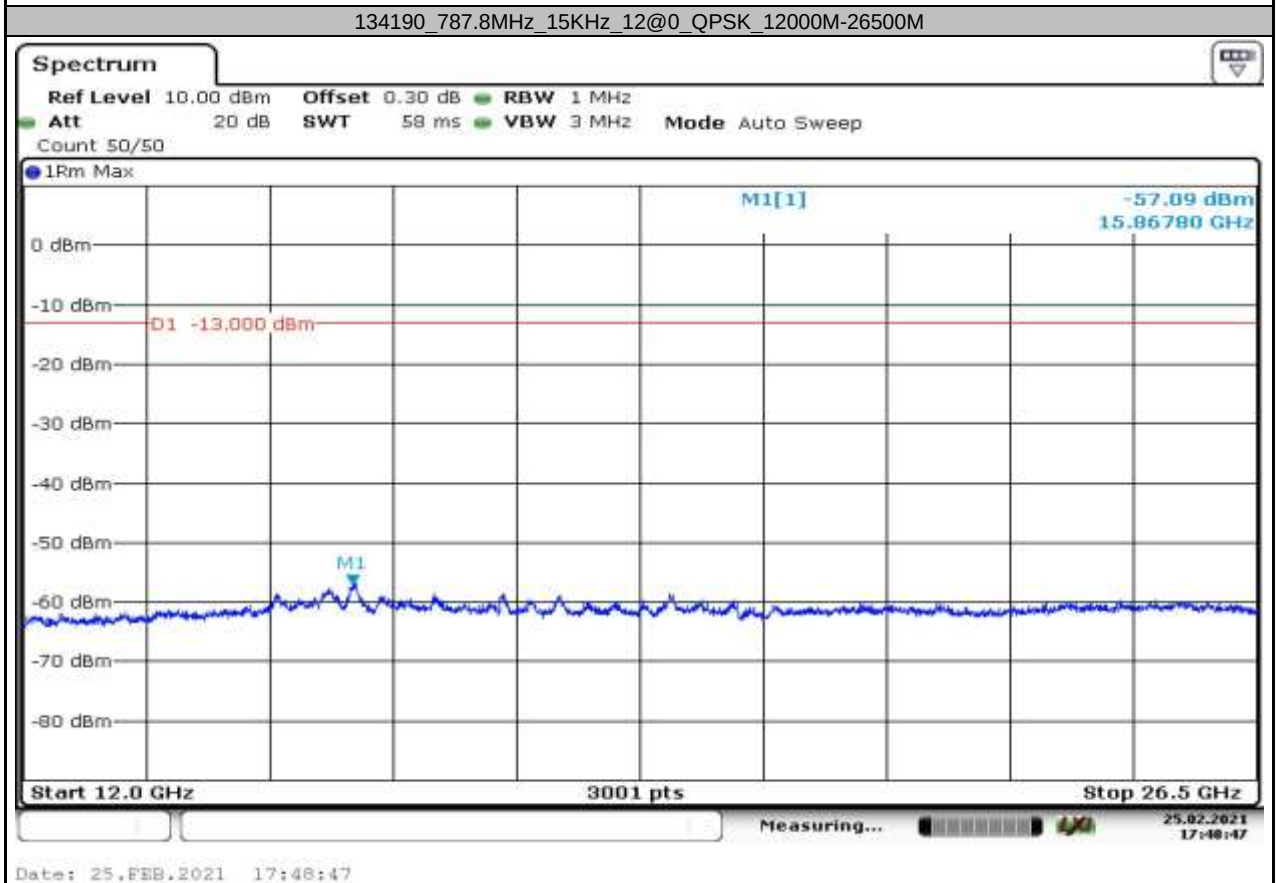
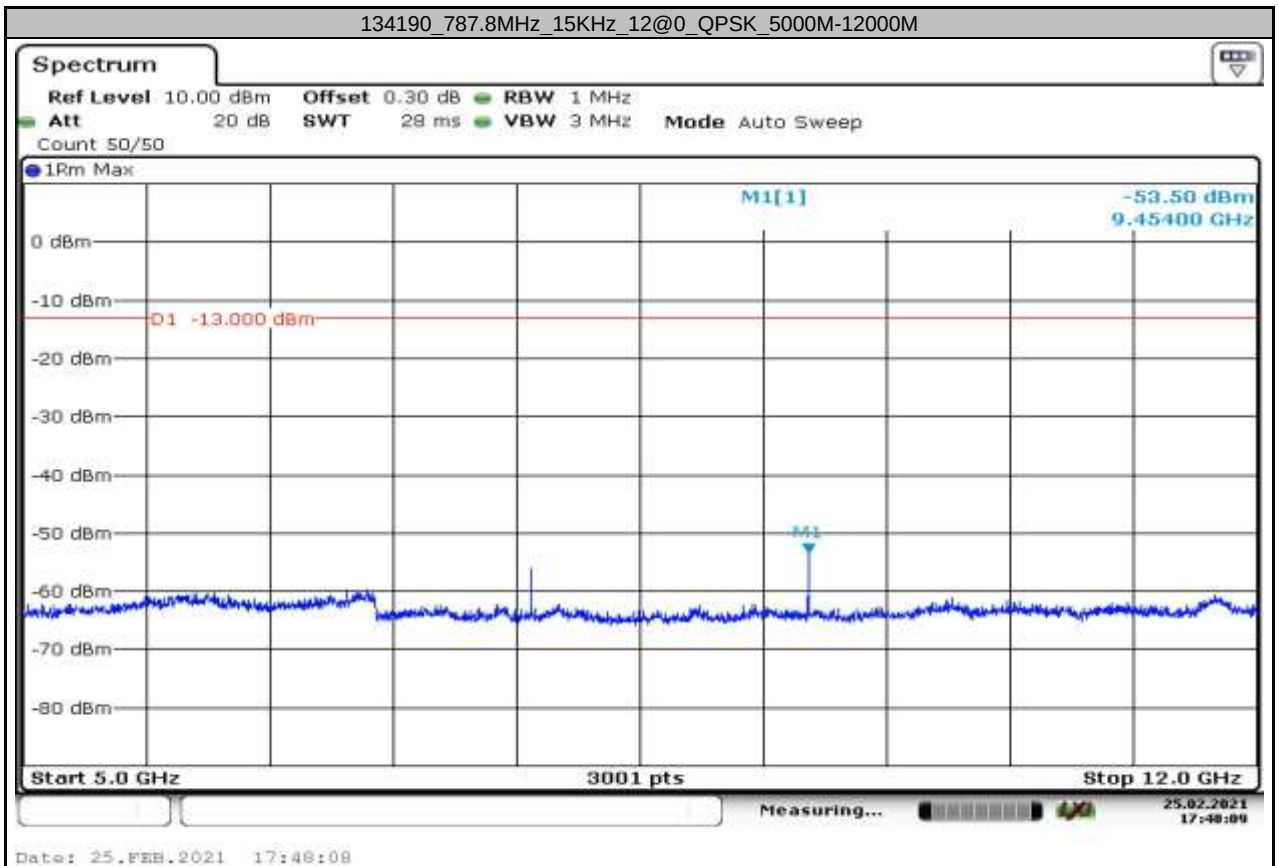


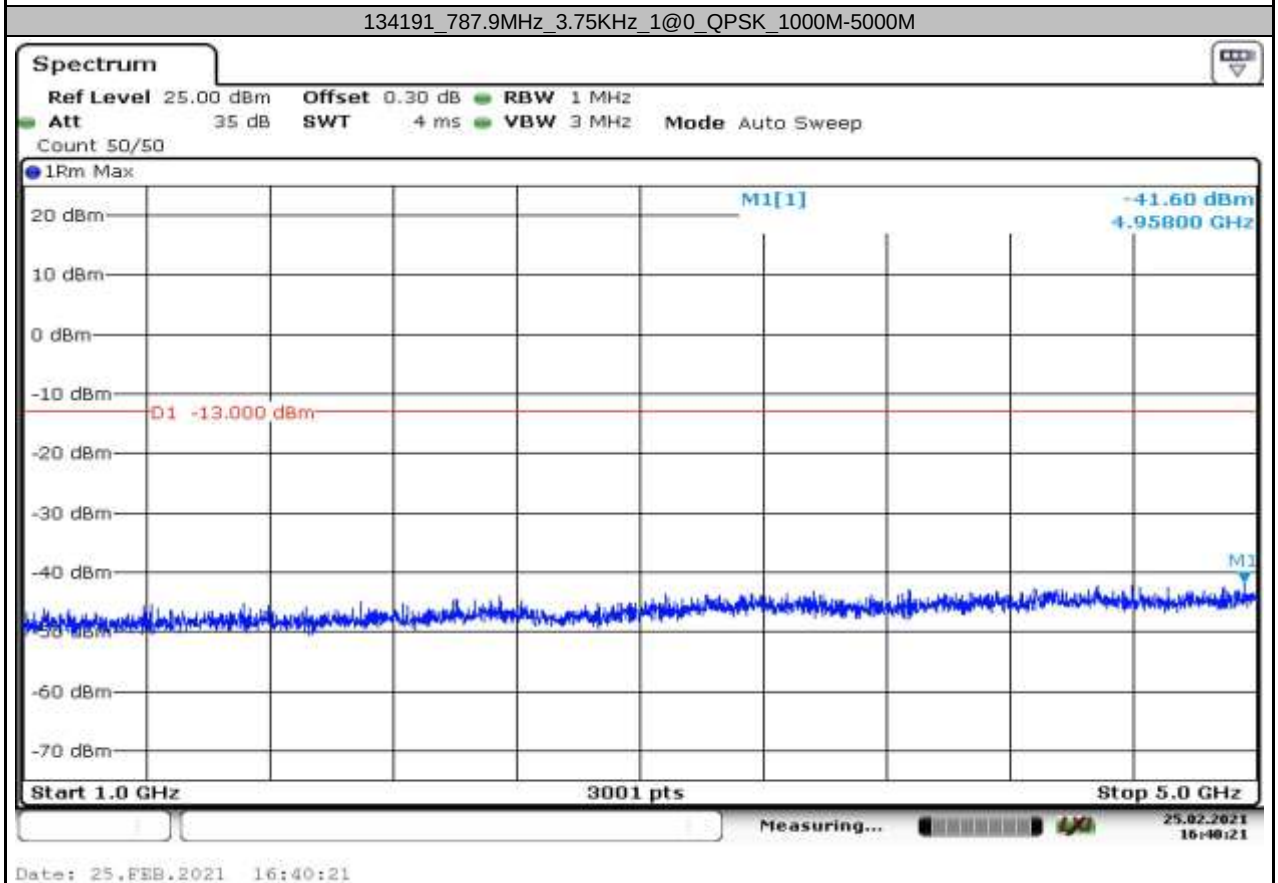
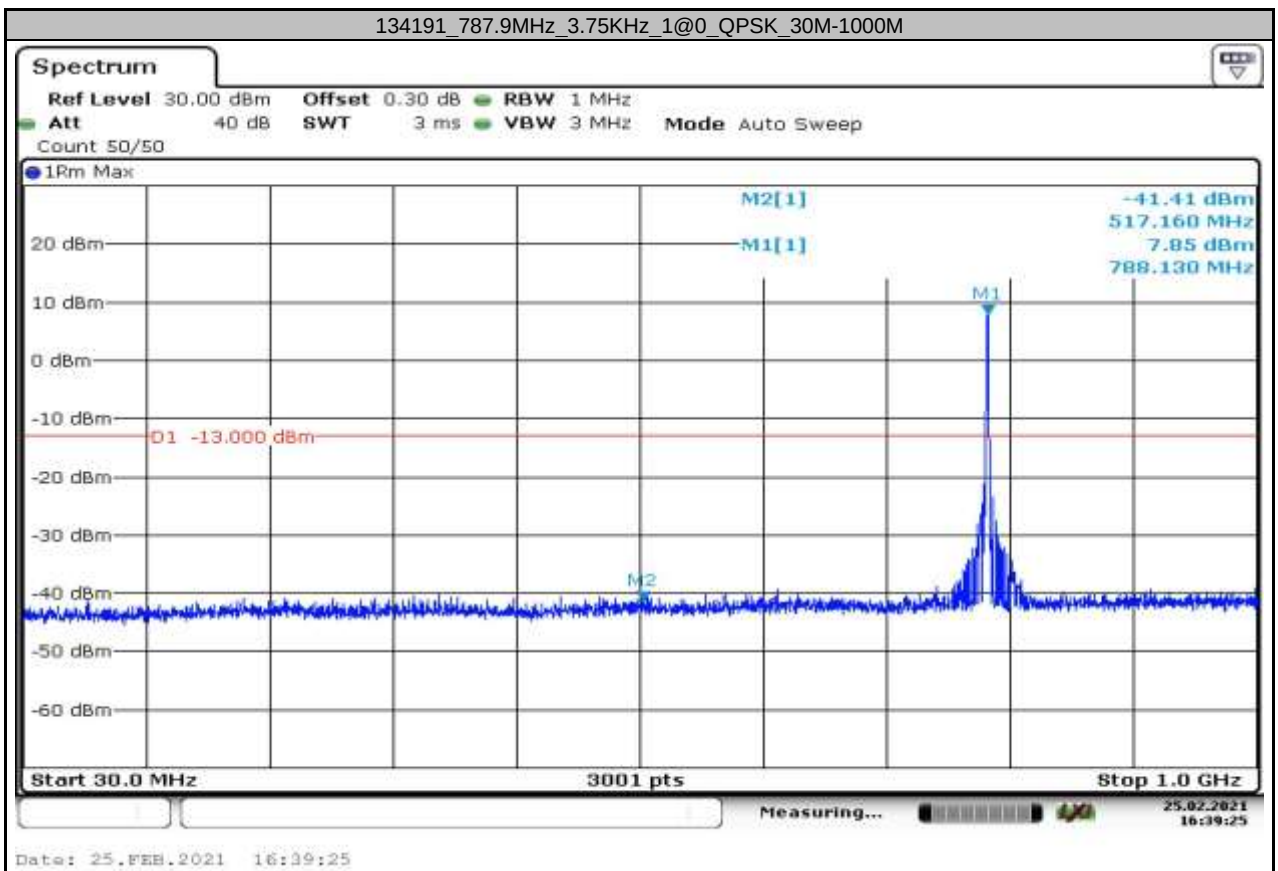


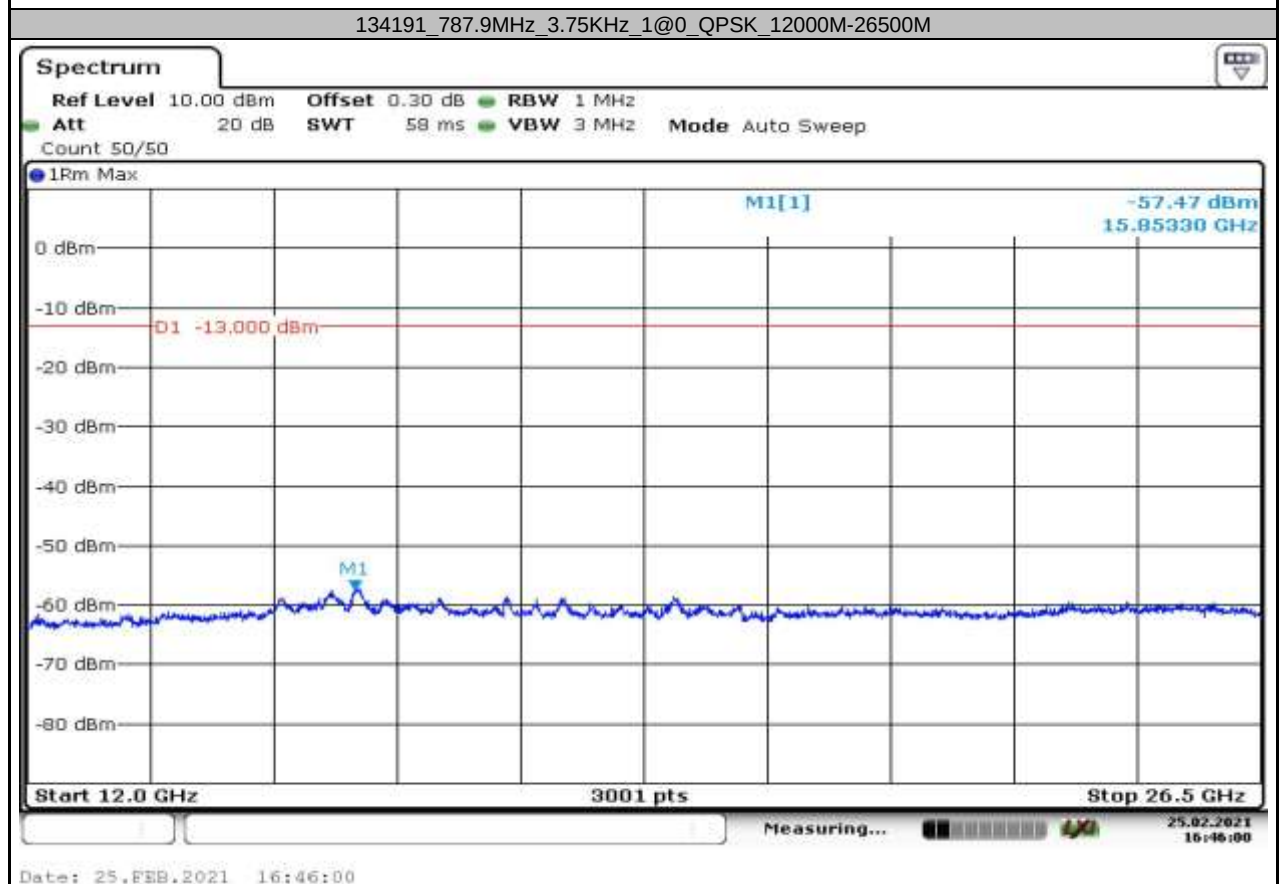
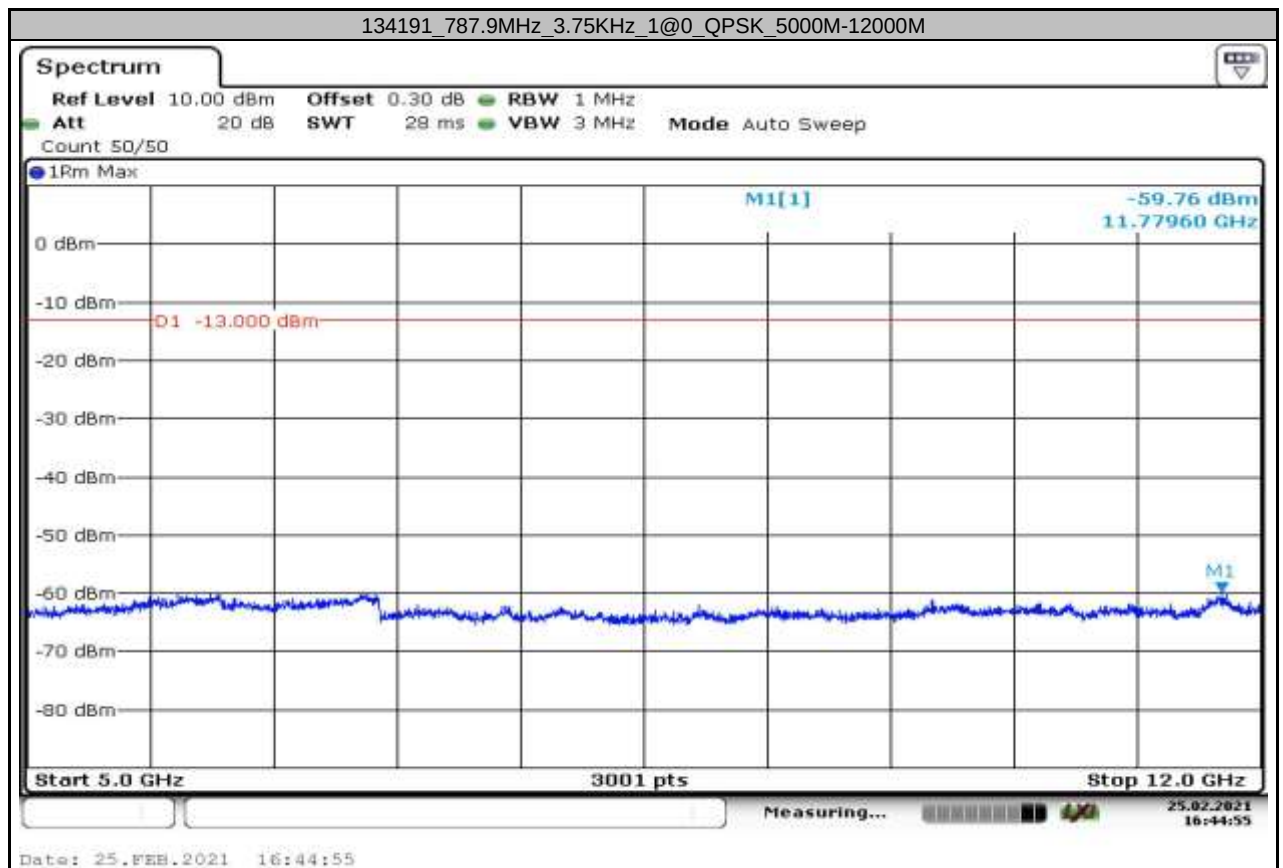


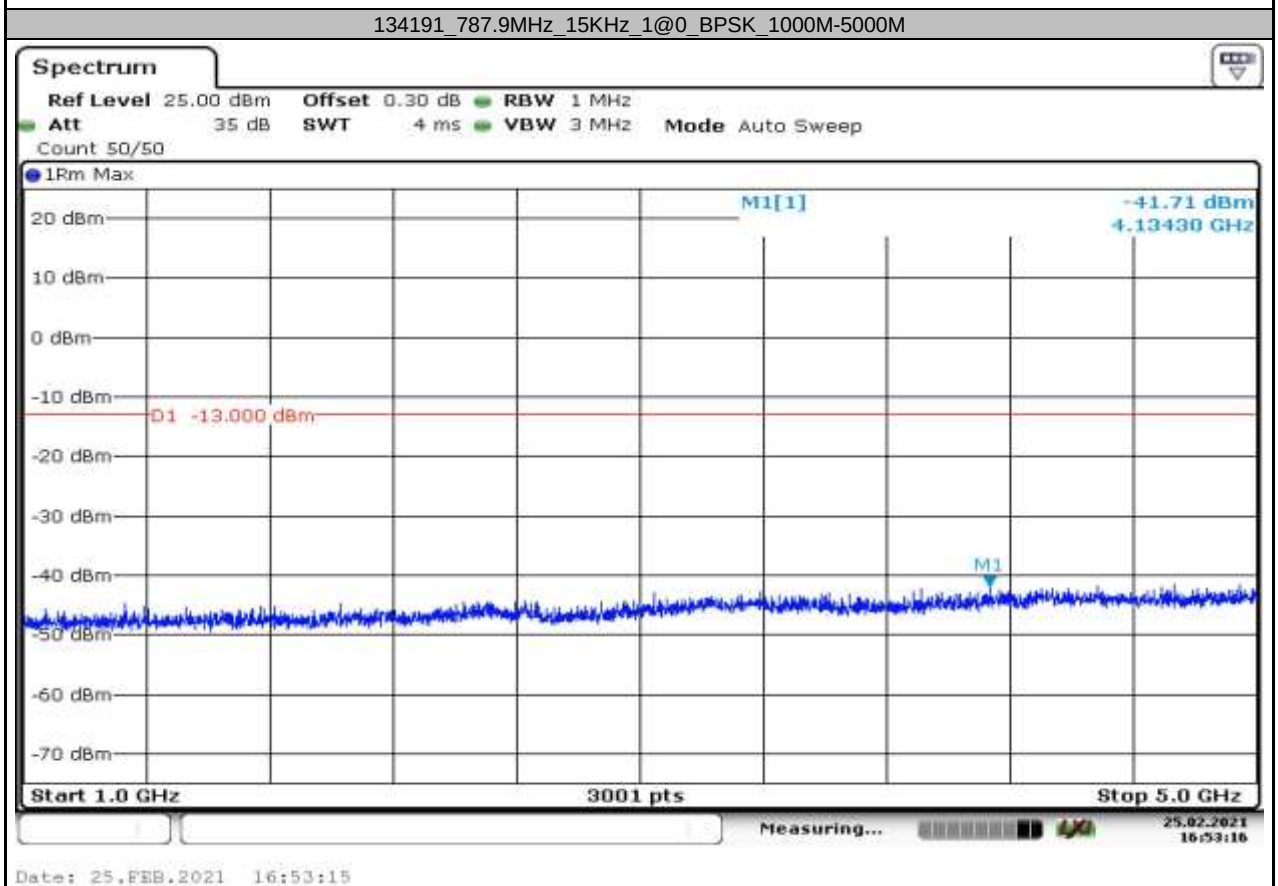
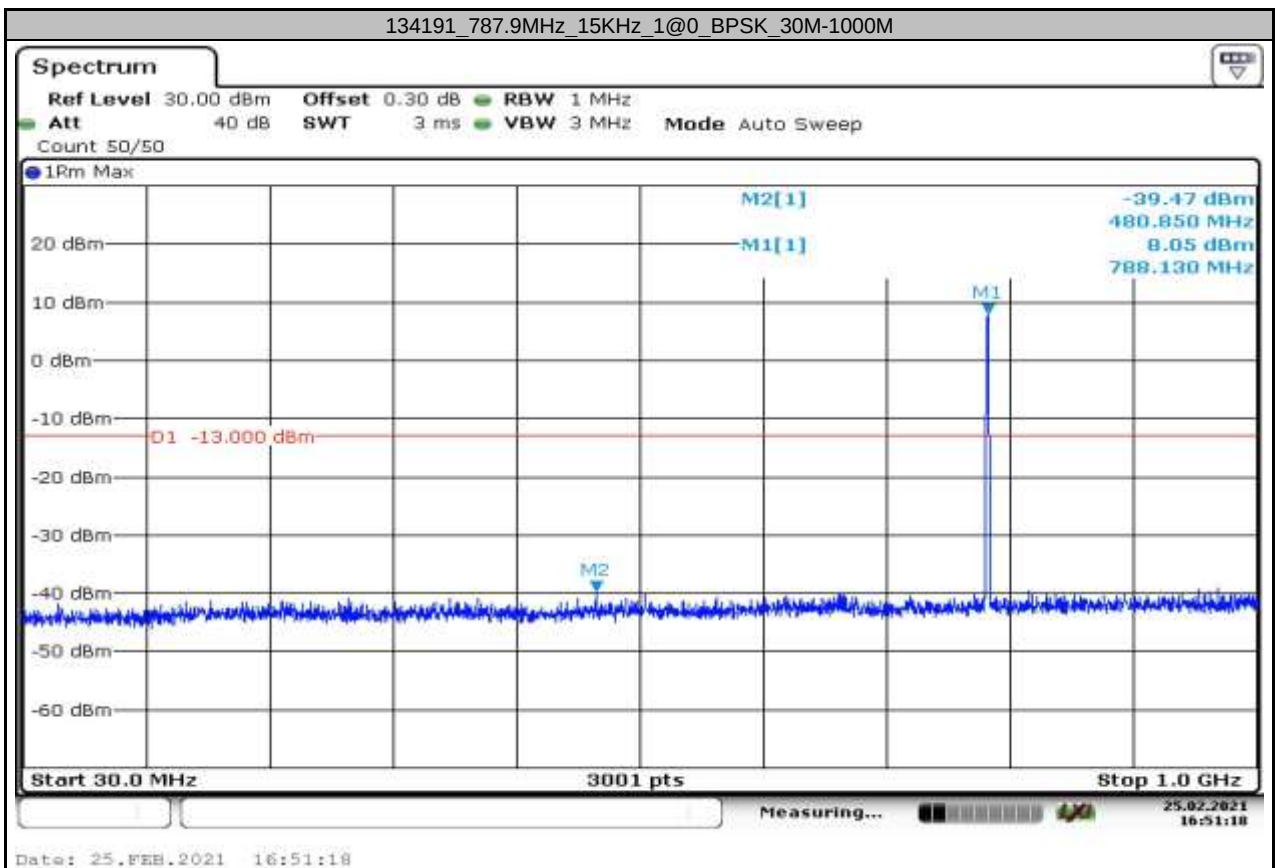




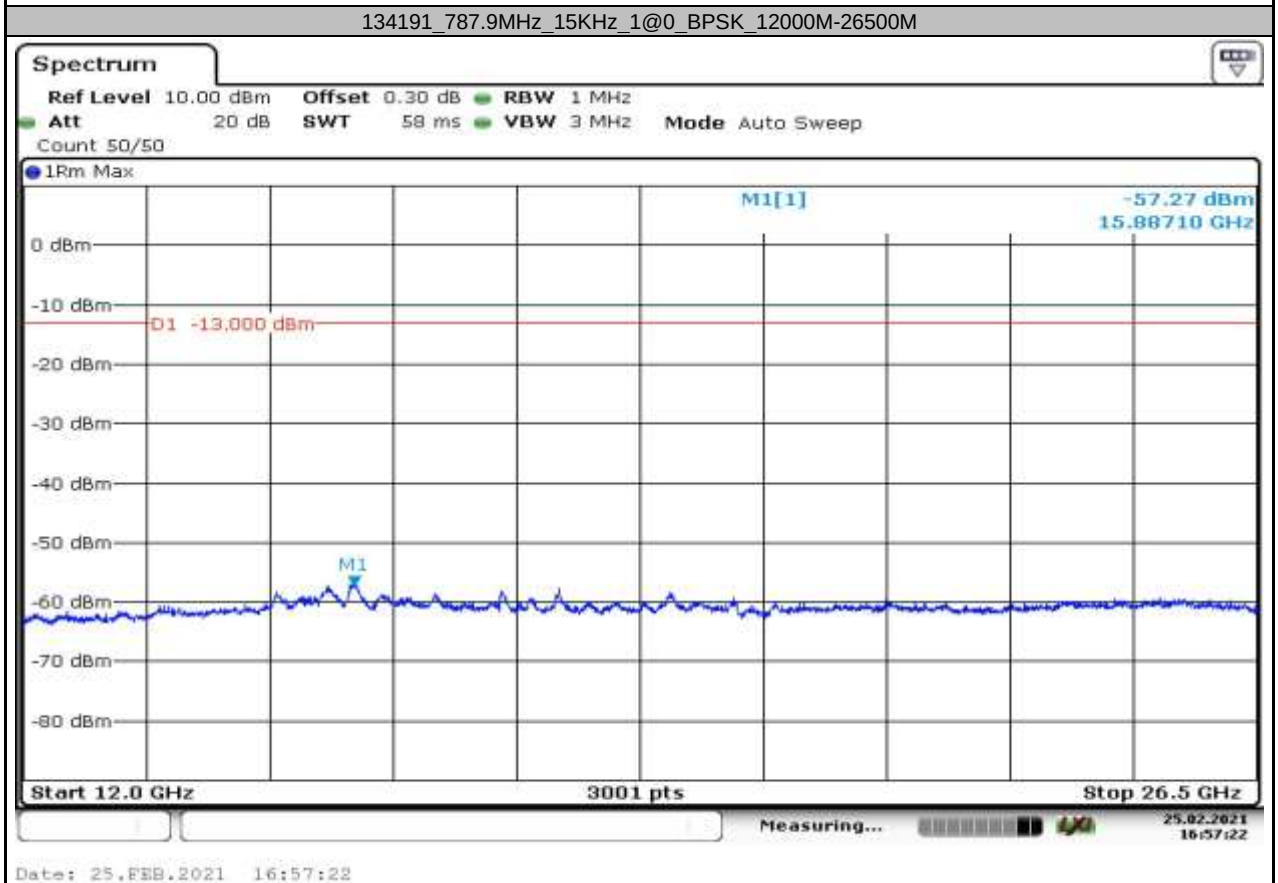
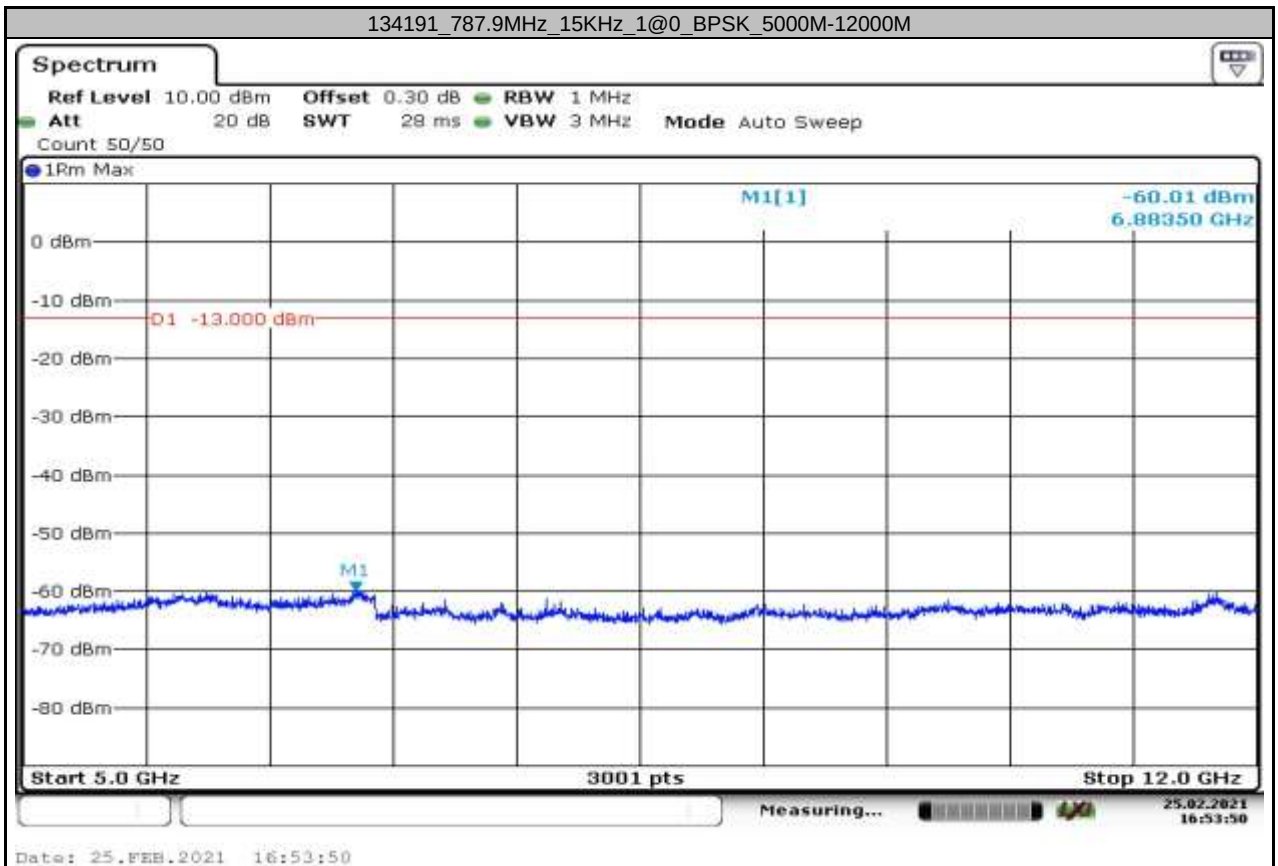


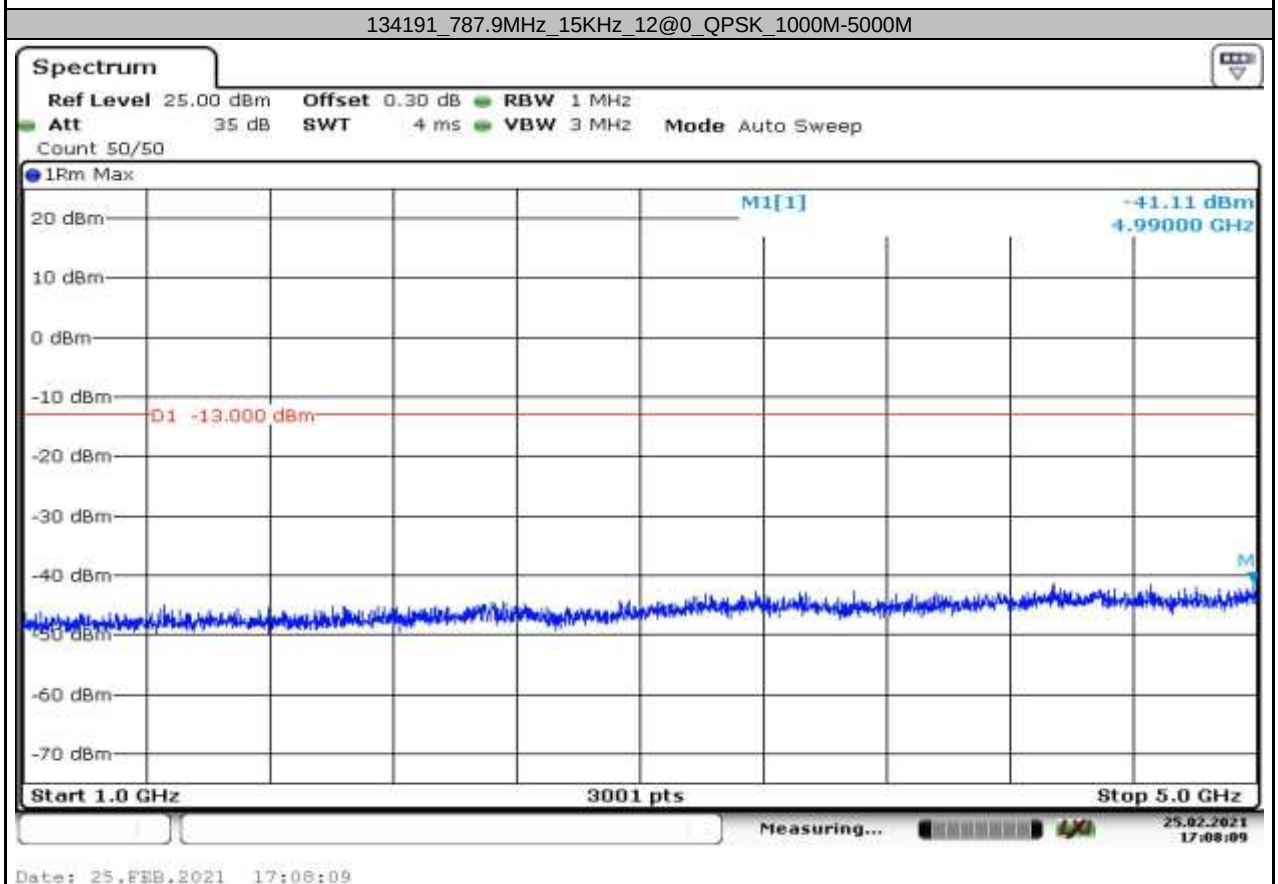
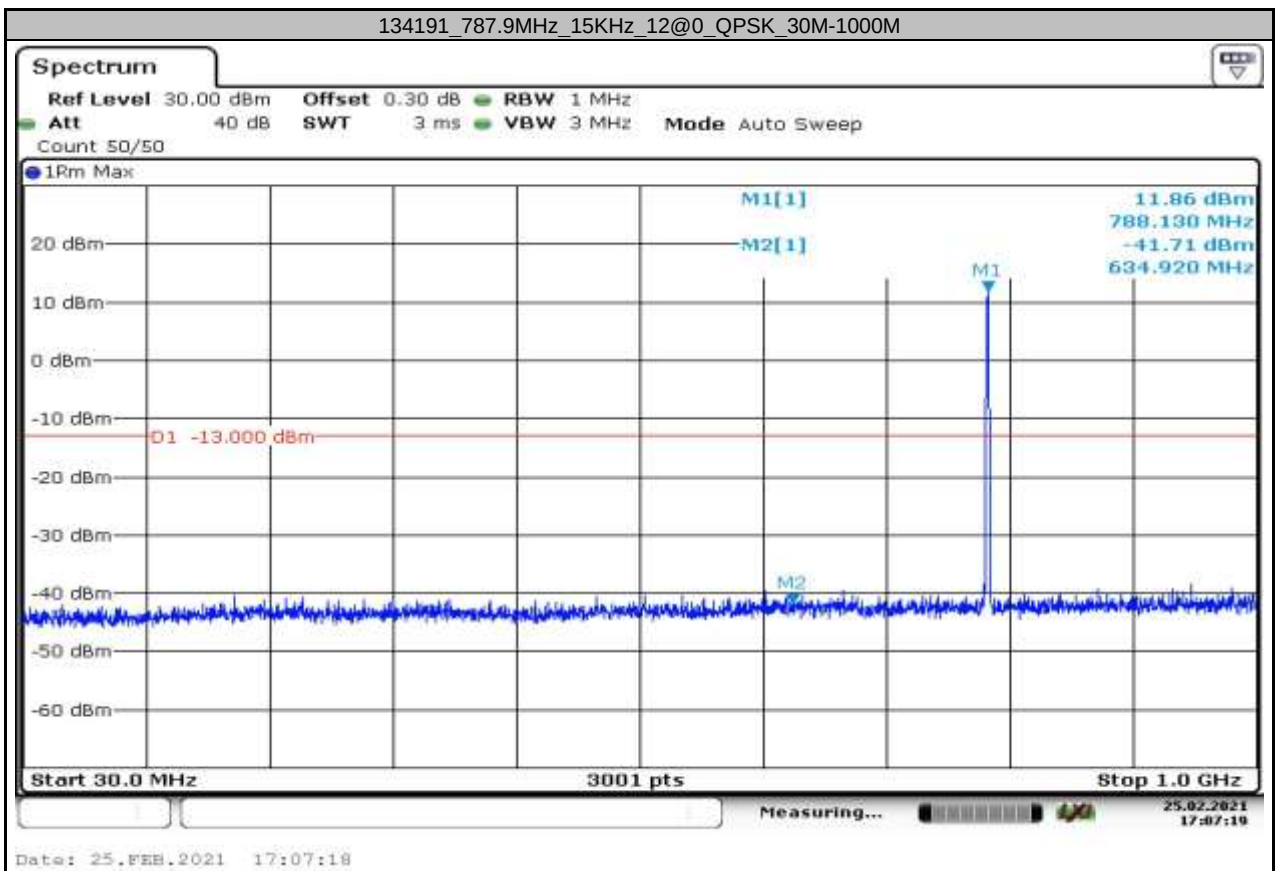


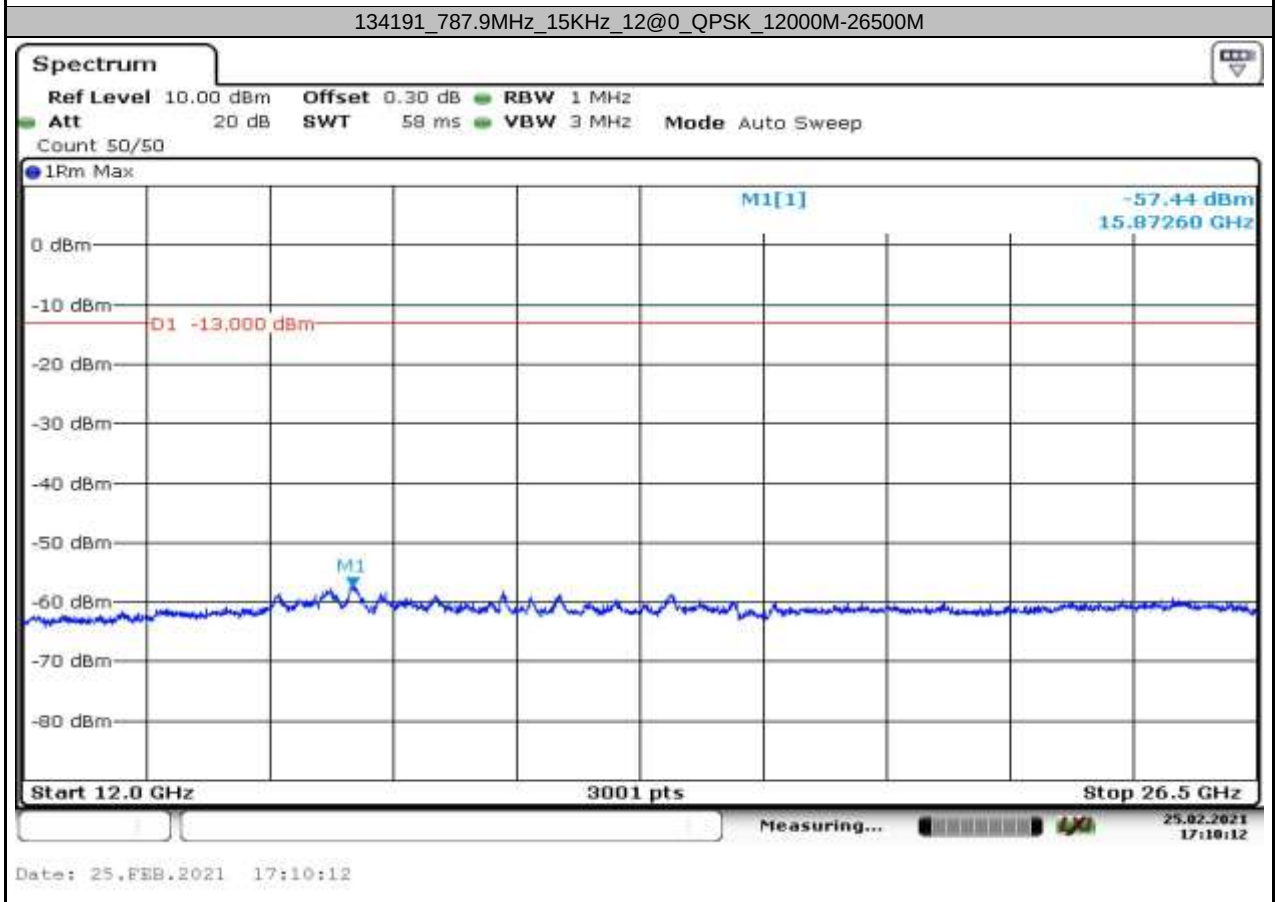
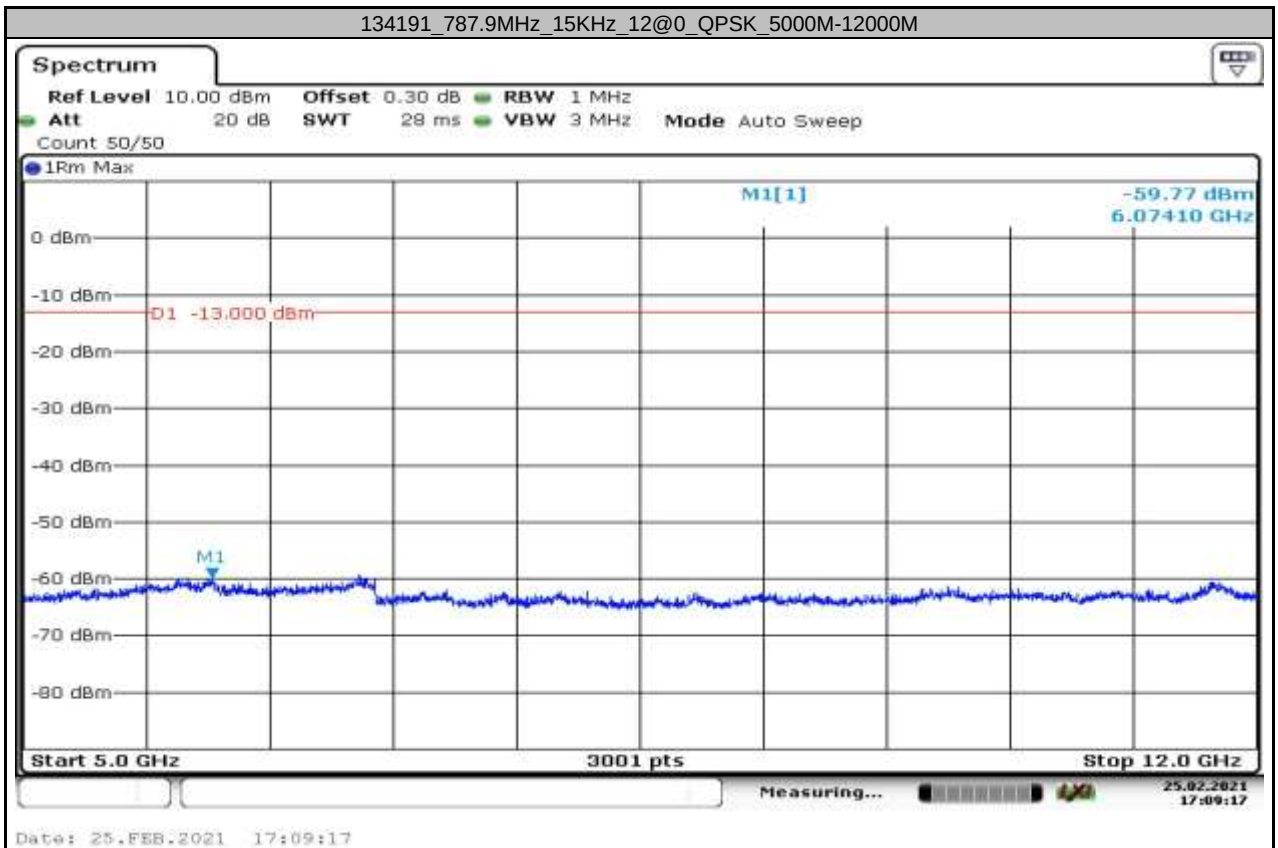












## Appendix A.6: Frequency Stability for NB Test Result

| Voltage  |             |           |            |         |       |         |               |                  |                |                 |             |         |
|----------|-------------|-----------|------------|---------|-------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band     | OpMode      | Bandwidth | Modulation | Channel | Tones | SCS     | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | LV            | NT               | 3.12           | 0.0039639       | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | NT               | 23.99          | 0.030479        | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 15kHz   | HV            | NT               | -1.60          | -0.0020307      | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 15kHz   | LV            | NT               | -28.11         | -0.0356771      | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 15kHz   | NV            | NT               | 5.75           | 0.0072979       | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | HV            | NT               | 38.07          | 0.0483674       | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | LV            | NT               | -10.61         | -0.0134799      | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | NT               | -14.85         | -0.0188667      | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | HV            | NT               | 18.07          | 0.0229344       | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | LV            | NT               | -8.21          | -0.0104201      | ±2.5        | PASS    |
| 787-788M | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | NT               | 36.62          | 0.046478        | ±2.5        | PASS    |

| Temperature |             |           |            |         |       |         |               |                  |                |                 |             |         |
|-------------|-------------|-----------|------------|---------|-------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band        | OpMode      | Bandwidth | Modulation | Channel | Tones | SCS     | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 85               | -38.72         | -0.0491932      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 80               | 8.4            | 0.0106721       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 70               | 8.87           | 0.0112692       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 60               | -6.57          | -0.0083471      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 50               | 42.59          | 0.05411         | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 40               | -14.91         | -0.018943       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 30               | 9.88           | 0.0125524       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 20               | -48.38         | -0.0614661      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 10               | -1.27          | -0.0016135      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | 0                | -34.6          | -0.0439588      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | -10              | 13.48          | 0.0171262       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | -20              | 4.92           | 0.0062508       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | -30              | -31.06         | -0.0394613      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 3.75kHz | NV            | -40              | 47.28          | 0.0600686       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 85               | 16.21          | 0.0205737       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 80               | -48.69         | -0.0617972      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 70               | 12.23          | 0.0155223       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 60               | -27.52         | -0.0349283      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 50               | 25.99          | 0.0329864       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 40               | 12.63          | 0.01603         | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 30               | 29.8           | 0.0378221       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 20               | -15.32         | -0.0194441      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 10               | 6.79           | 0.0086178       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | 0                | 37.62          | 0.0477472       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | -10              | -13.88         | -0.0176164      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | -20              | -30.43         | -0.0386217      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | -30              | -31.06         | -0.0394212      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134191  | 1@0   | 3.75kHz | NV            | -40              | -15.94         | -0.020231       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 85               | 29.73          | 0.0377716       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 80               | -30.08         | -0.0382162      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 70               | 8.03           | 0.010202        | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 60               | -27.88         | -0.0354212      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 50               | 6.72           | 0.0085377       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 40               | -43.76         | -0.0555965      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 30               | -45.35         | -0.0576166      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 20               | -28.68         | -0.0364376      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 10               | -33.67         | -0.0427773      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | 0                | 47.51          | 0.0603608       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | -10              | 49.58          | 0.0629907       | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | -20              | -45.12         | -0.0573244      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | -30              | -49.72         | -0.0631686      | ±2.5        | PASS    |
| 787-788M    | Stand-Alone | NaN       | QPSK       | 134183  | 1@0   | 15kHz   | NV            | -40              | 40.75          | 0.0517723       | ±2.5        | PASS    |



## Appendix A

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## Prüfbericht - Produkte

Test Report - Products

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|          |             |     |      |        |     |       |    |     |        |            |      |      |
|----------|-------------|-----|------|--------|-----|-------|----|-----|--------|------------|------|------|
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 85  | 41.67  | 0.0528874  | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 80  | 26.46  | 0.0335829  | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 70  | -43.90 | -0.0557177 | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 60  | -44.17 | -0.0560604 | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 50  | 8.77   | 0.0111309  | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 40  | -33.47 | -0.04248   | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 30  | 13.00  | 0.0164996  | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 20  | -0.40  | -0.0005077 | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 10  | -13.68 | -0.0173626 | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | 0   | -47.36 | -0.0601092 | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | -10 | 23.57  | 0.029915   | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | -20 | -35.09 | -0.0445361 | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | -30 | 4.46   | 0.0056606  | ±2.5 | PASS |
| 787-788M | Stand-Alone | NaN | QPSK | 134191 | 1@0 | 15kHz | NV | -40 | 38.54  | 0.0489148  | ±2.5 | PASS |