

## APPENDIX C: TEST RESULTS OF BAND 5 FOR CAT-M OPERATION

|                                                                                    |           |
|------------------------------------------------------------------------------------|-----------|
| <b>APPENDIX C: TEST RESULTS OF BAND 5 FOR CAT-M OPERATION.....</b>                 | <b>1</b>  |
| <b>APPENDIX C.1: EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA FOR M1 .....</b> | <b>2</b>  |
| Test Result.....                                                                   | 2         |
| <b>APPENDIX C.2: PEAK-TO-AVERAGE RATIO (CCDF) FOR M1 .....</b>                     | <b>3</b>  |
| Test Result.....                                                                   | 3         |
| Test Graphs .....                                                                  | 4         |
| <b>APPENDIX C.3: 26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR M1 .....</b>            | <b>8</b>  |
| Test Result.....                                                                   | 8         |
| Test Graphs .....                                                                  | 9         |
| <b>APPENDIX C.4: BAND EDGE FOR M1 .....</b>                                        | <b>13</b> |
| Test Result.....                                                                   | 13        |
| Test Graphs .....                                                                  | 13        |
| <b>APPENDIX C.5: CONDUCTED SPURIOUS EMISSION FOR M1 .....</b>                      | <b>18</b> |
| Test Result.....                                                                   | 18        |
| Test Graphs .....                                                                  | 19        |
| <b>APPENDIX C.6: FREQUENCY STABILITY FOR M1 .....</b>                              | <b>43</b> |
| Test Result.....                                                                   | 43        |

## APPENDIX C.1: EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA FOR M1

### Test Result

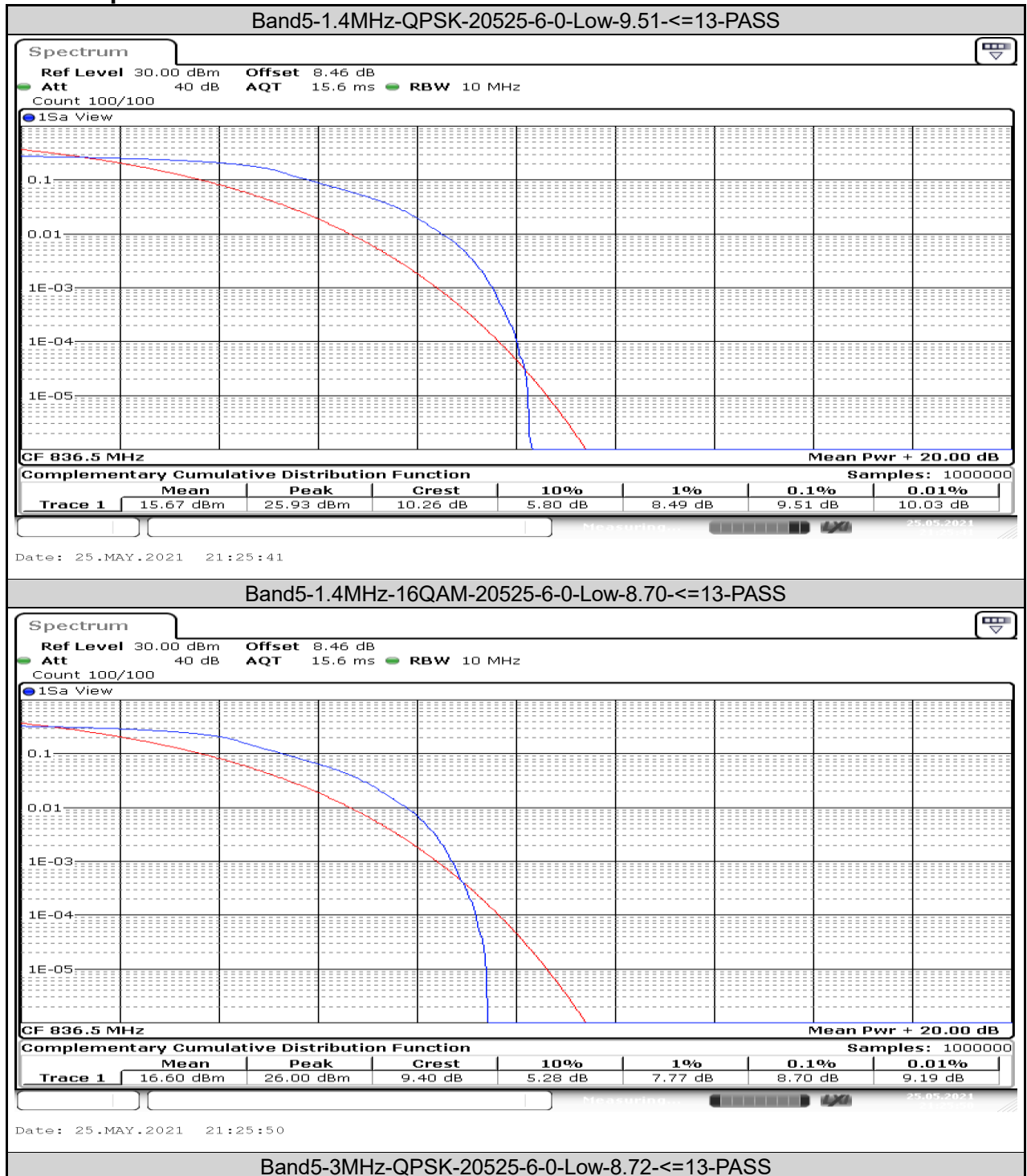
| Band  | Bandwidth | Channel | Modulation | RB Size | RB Start | NBIndex | Measure Result (dBm) | ERP   |       | Limit (watts) |      | Verdict |
|-------|-----------|---------|------------|---------|----------|---------|----------------------|-------|-------|---------------|------|---------|
|       |           |         |            |         |          |         |                      | dBm   | Watts | FCC           | ISED |         |
| Band5 | 1.4MHz    | 20407   | QPSK       | 1       | 0        | Low     | 23.43                | 23.42 | 0.220 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 6       | 0        | Low     | 21.02                | 21.01 | 0.126 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low     | 23.2                 | 23.19 | 0.208 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 6       | 0        | Low     | 21.15                | 21.14 | 0.130 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 1       | 5        | Low     | 23.04                | 23.03 | 0.201 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 6       | 0        | Low     | 21.26                | 21.25 | 0.133 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 1       | 0        | Low     | 22.22                | 22.21 | 0.166 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 6       | 0        | Low     | 21.01                | 21.00 | 0.126 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low     | 22.07                | 22.06 | 0.161 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 6       | 0        | Low     | 21.29                | 21.28 | 0.134 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 1       | 5        | Low     | 21.8                 | 21.79 | 0.151 | 7             | 11.5 | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 6       | 0        | Low     | 21.25                | 21.24 | 0.133 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20415   | QPSK       | 1       | 0        | Low     | 23.48                | 23.47 | 0.222 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20415   | QPSK       | 6       | 0        | Low     | 21.05                | 21.04 | 0.127 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20525   | QPSK       | 1       | 0        | Low     | 23.18                | 23.17 | 0.207 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20525   | QPSK       | 6       | 0        | Low     | 21.28                | 21.27 | 0.134 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20635   | QPSK       | 1       | 5        | High    | 23.1                 | 23.09 | 0.204 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20635   | QPSK       | 6       | 0        | High    | 21                   | 20.99 | 0.126 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20415   | 16QAM      | 1       | 0        | Low     | 22.24                | 22.23 | 0.167 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20415   | 16QAM      | 6       | 0        | Low     | 21.03                | 21.02 | 0.126 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20525   | 16QAM      | 1       | 0        | Low     | 22.04                | 22.03 | 0.160 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20525   | 16QAM      | 6       | 0        | Low     | 21.29                | 21.28 | 0.134 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20635   | 16QAM      | 1       | 5        | High    | 21.82                | 21.81 | 0.152 | 7             | 11.5 | PASS    |
| Band5 | 3MHz      | 20635   | 16QAM      | 6       | 0        | High    | 21.23                | 21.22 | 0.132 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20425   | QPSK       | 1       | 0        | Low     | 23.34                | 23.33 | 0.215 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20425   | QPSK       | 6       | 0        | Low     | 22.14                | 22.13 | 0.163 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20525   | QPSK       | 1       | 0        | Low     | 23.11                | 23.10 | 0.204 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20525   | QPSK       | 6       | 0        | Low     | 21.93                | 21.92 | 0.156 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20625   | QPSK       | 1       | 5        | High    | 23.22                | 23.21 | 0.209 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20625   | QPSK       | 3       | 3        | High    | 21.85                | 21.84 | 0.153 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20425   | 16QAM      | 1       | 0        | Low     | 23.51                | 23.50 | 0.224 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20425   | 16QAM      | 6       | 0        | Low     | 21.92                | 21.91 | 0.155 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20525   | 16QAM      | 1       | 0        | Low     | 23.36                | 23.35 | 0.216 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20525   | 16QAM      | 6       | 0        | Low     | 21.72                | 21.71 | 0.148 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20625   | 16QAM      | 1       | 5        | High    | 23.07                | 23.06 | 0.202 | 7             | 11.5 | PASS    |
| Band5 | 5MHz      | 20625   | 16QAM      | 3       | 3        | High    | 21.97                | 21.96 | 0.157 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20450   | QPSK       | 1       | 0        | Low     | 23.44                | 23.43 | 0.220 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20450   | QPSK       | 5       | 0        | Low     | 21.96                | 21.95 | 0.157 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20525   | QPSK       | 1       | 0        | Low     | 23.4                 | 23.39 | 0.218 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20525   | QPSK       | 5       | 0        | Low     | 21.99                | 21.98 | 0.158 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20600   | QPSK       | 1       | 5        | High    | 22.97                | 22.96 | 0.198 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20600   | QPSK       | 5       | 1        | High    | 21.79                | 21.78 | 0.151 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20450   | 16QAM      | 1       | 0        | Low     | 23.57                | 23.56 | 0.227 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20450   | 16QAM      | 5       | 0        | Low     | 22.05                | 22.04 | 0.160 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20525   | 16QAM      | 1       | 0        | Low     | 23.42                | 23.41 | 0.219 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20525   | 16QAM      | 5       | 0        | Low     | 21.89                | 21.88 | 0.154 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20600   | 16QAM      | 1       | 5        | High    | 23.23                | 23.22 | 0.210 | 7             | 11.5 | PASS    |
| Band5 | 10MHz     | 20600   | 16QAM      | 5       | 1        | High    | 21.85                | 21.84 | 0.153 | 7             | 11.5 | PASS    |

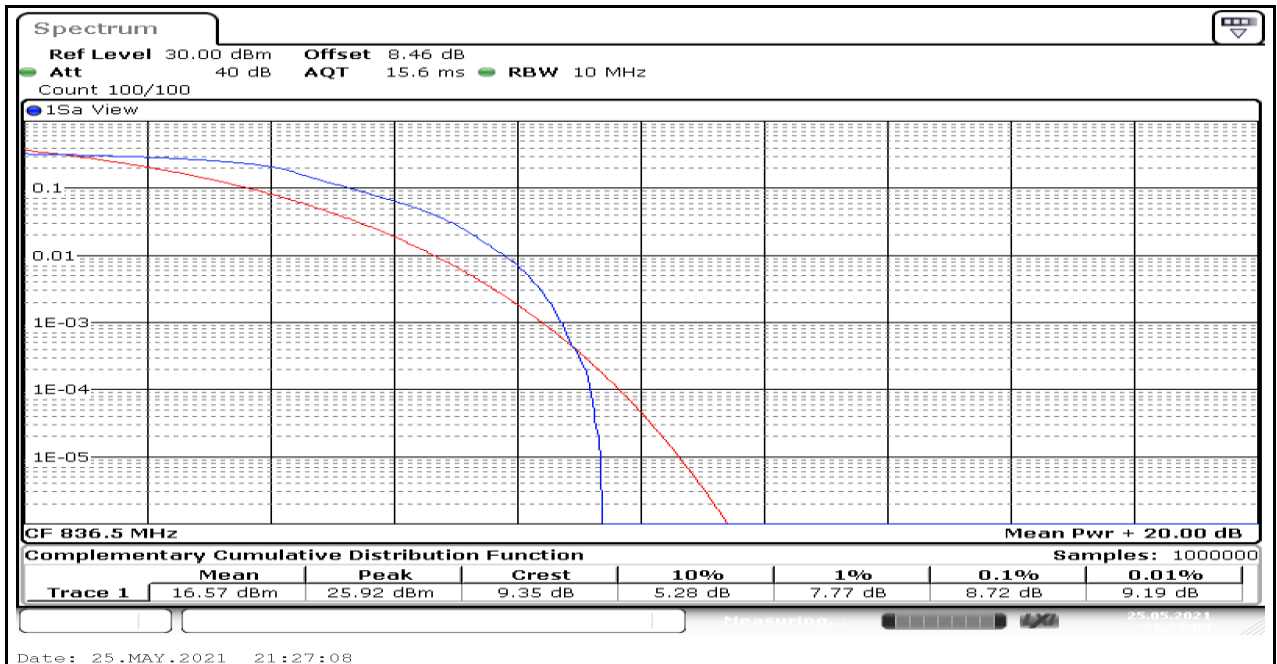
## APPENDIX C.2: PEAK-TO-AVERAGE RATIO (CCDF) FOR M1

### Test Result

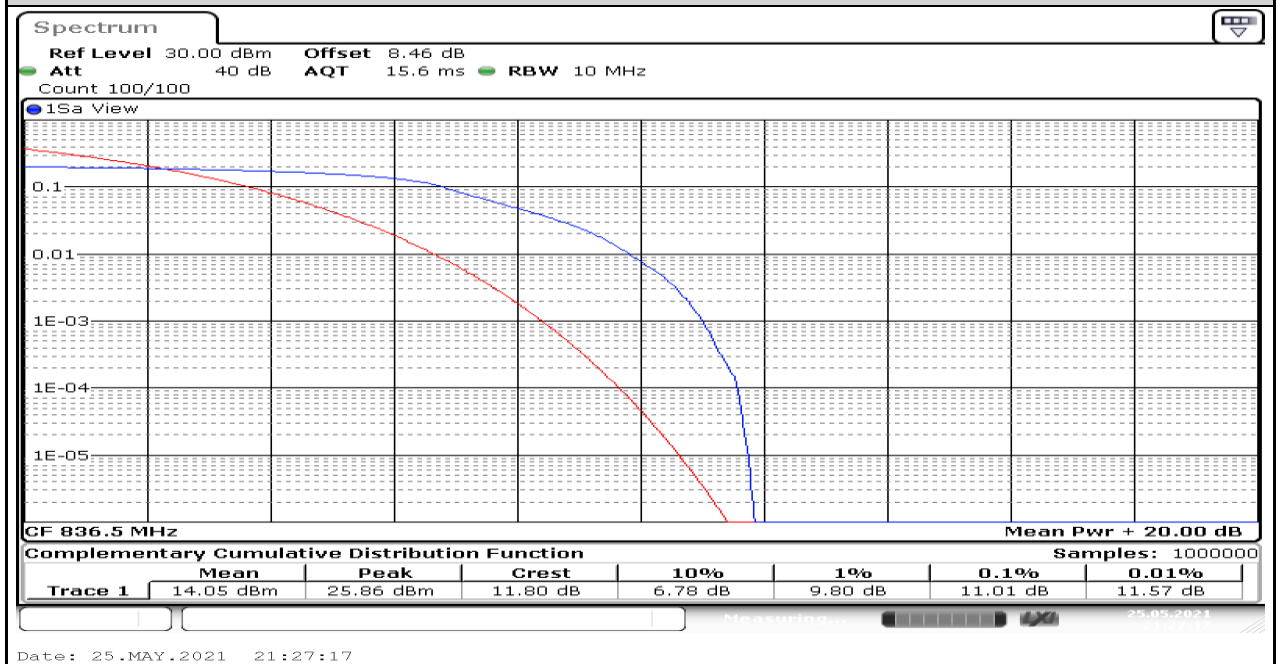
| Band  | Bandwidth | Channel | Modulation | RB Size | RB Start | Index | Result (dB) | Limit (dB) | Verdict |
|-------|-----------|---------|------------|---------|----------|-------|-------------|------------|---------|
| Band5 | 1.4MHz    | 20525   | QPSK       | 6       | 0        | Low   | 9.51        | <=13       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 6       | 0        | Low   | 8.70        | <=13       | PASS    |
| Band5 | 3MHz      | 20525   | QPSK       | 6       | 0        | Low   | 8.72        | <=13       | PASS    |
| Band5 | 3MHz      | 20525   | 16QAM      | 6       | 0        | Low   | 11.01       | <=13       | PASS    |
| Band5 | 5MHz      | 20525   | QPSK       | 6       | 0        | Low   | 8.75        | <=13       | PASS    |
| Band5 | 5MHz      | 20525   | 16QAM      | 6       | 0        | Low   | 9.28        | <=13       | PASS    |
| Band5 | 10MHz     | 20525   | QPSK       | 6       | 0        | Low   | 11.51       | <=13       | PASS    |
| Band5 | 10MHz     | 20525   | 16QAM      | 6       | 0        | Low   | 8.70        | <=13       | PASS    |

## Test Graphs

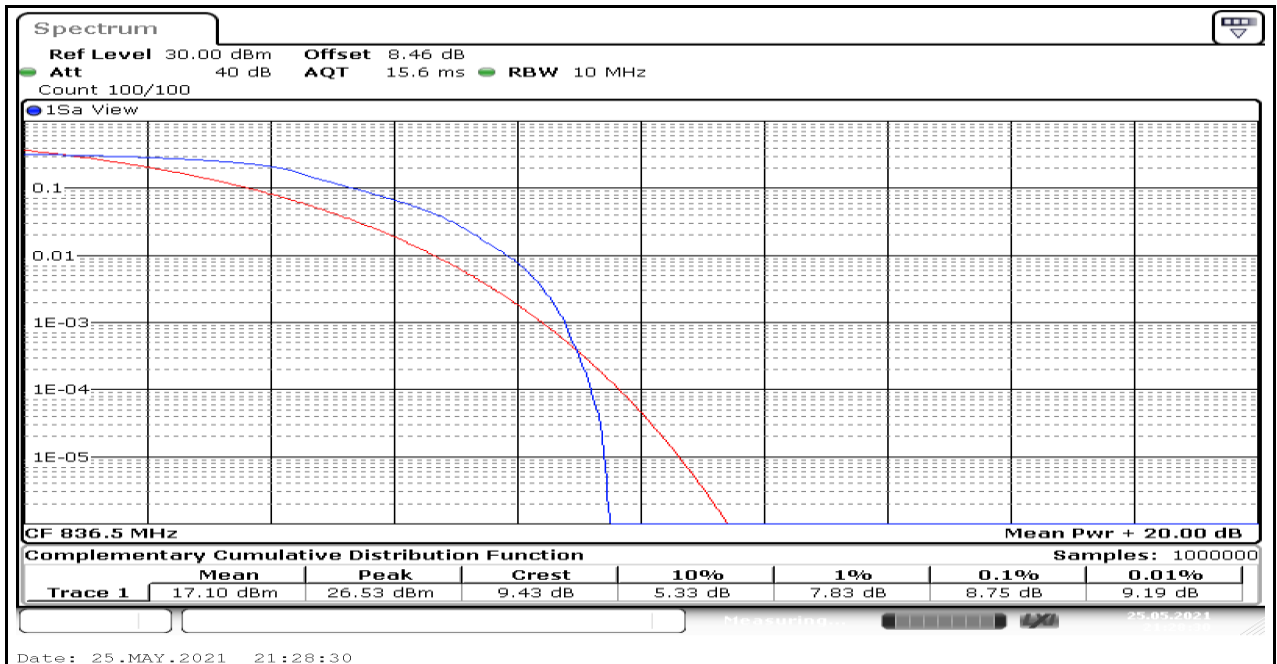




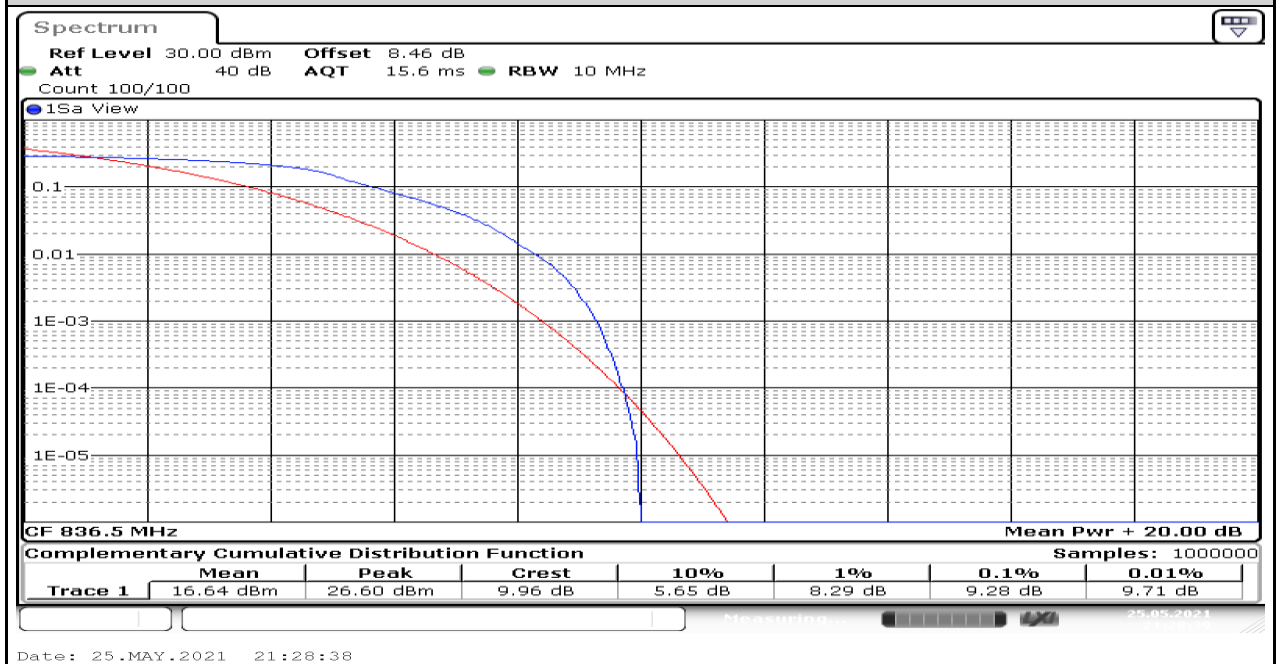
Band5-3MHz-16QAM-20525-6-0-Low-11.01-<=13-PASS



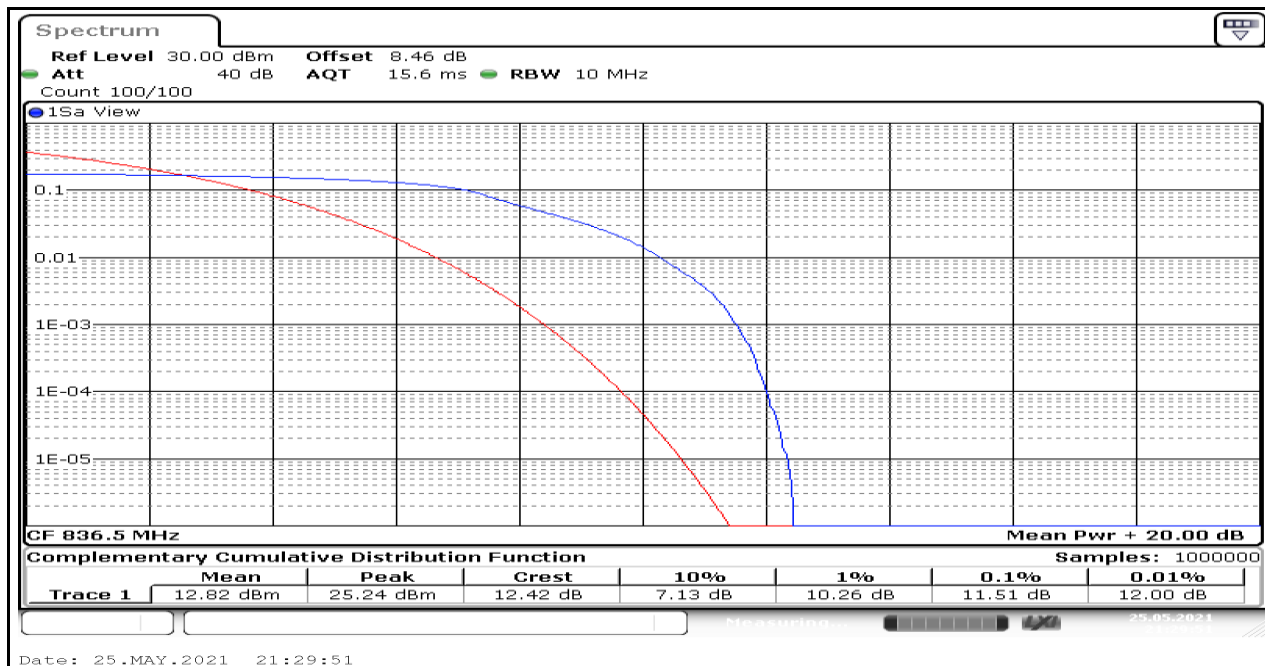
Band5-5MHz-QPSK-20525-6-0-Low-8.75-<=13-PASS



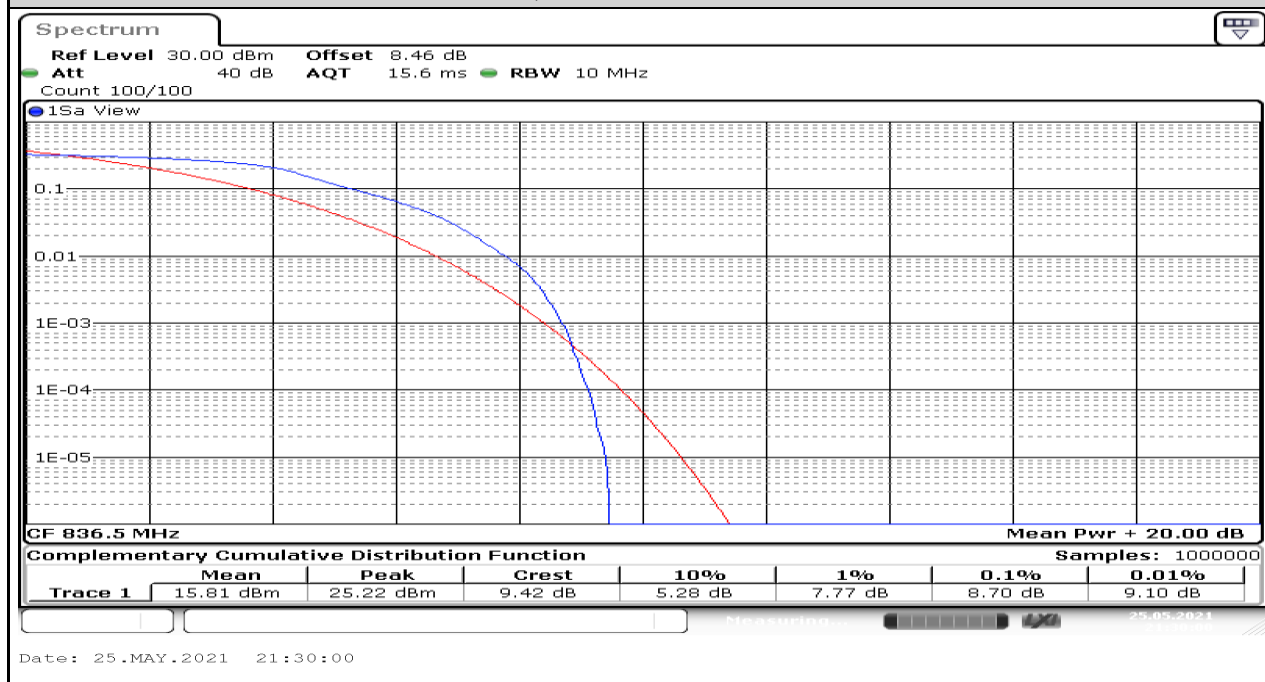
Band5-5MHz-16QAM-20525-6-0-Low-9.28-<=13-PASS



Band5-10MHz-QPSK-20525-6-0-Low-11.51-<=13-PASS



Band5-10MHz-16QAM-20525-6-0-Low-8.70-<=13-PASS

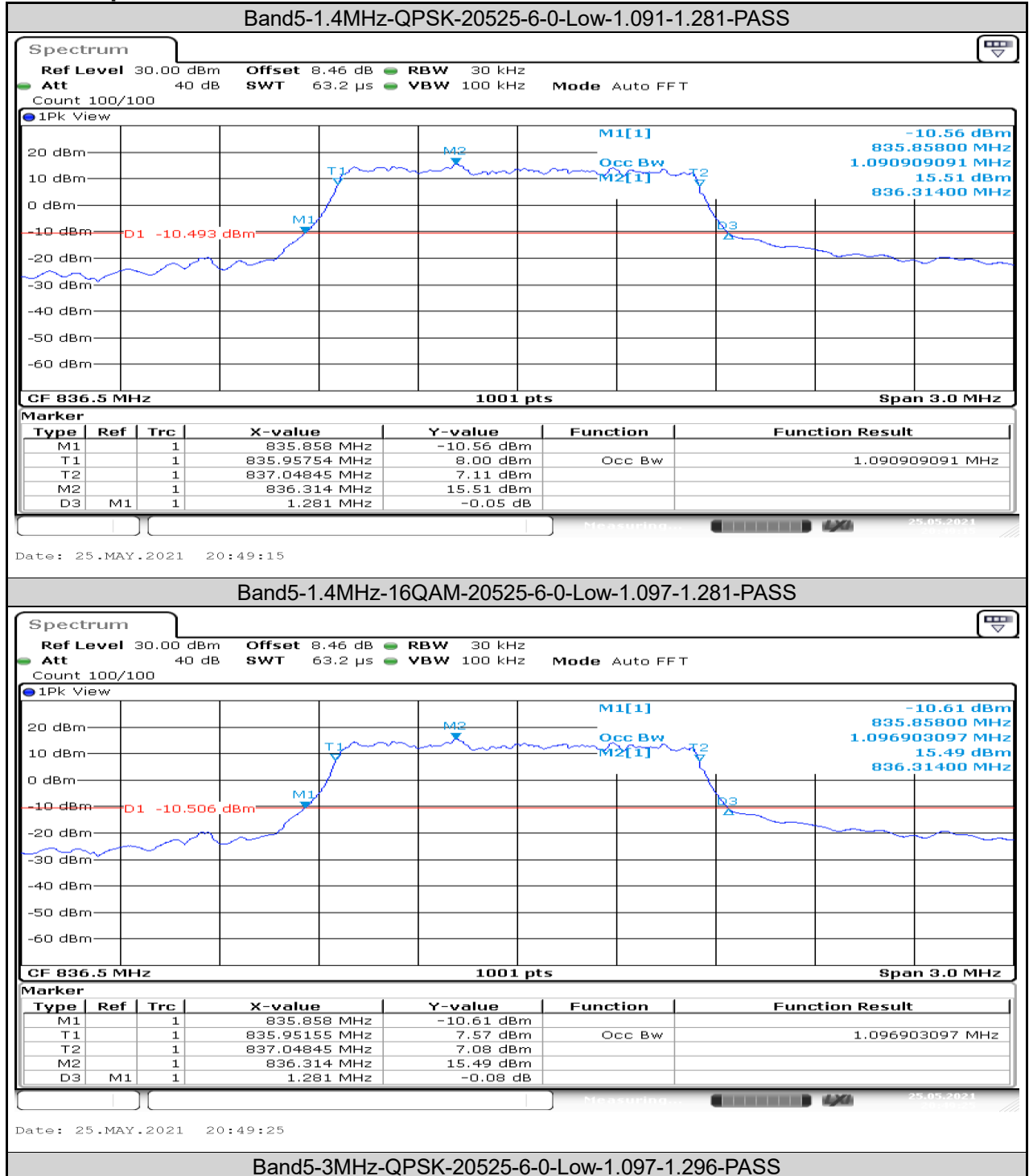


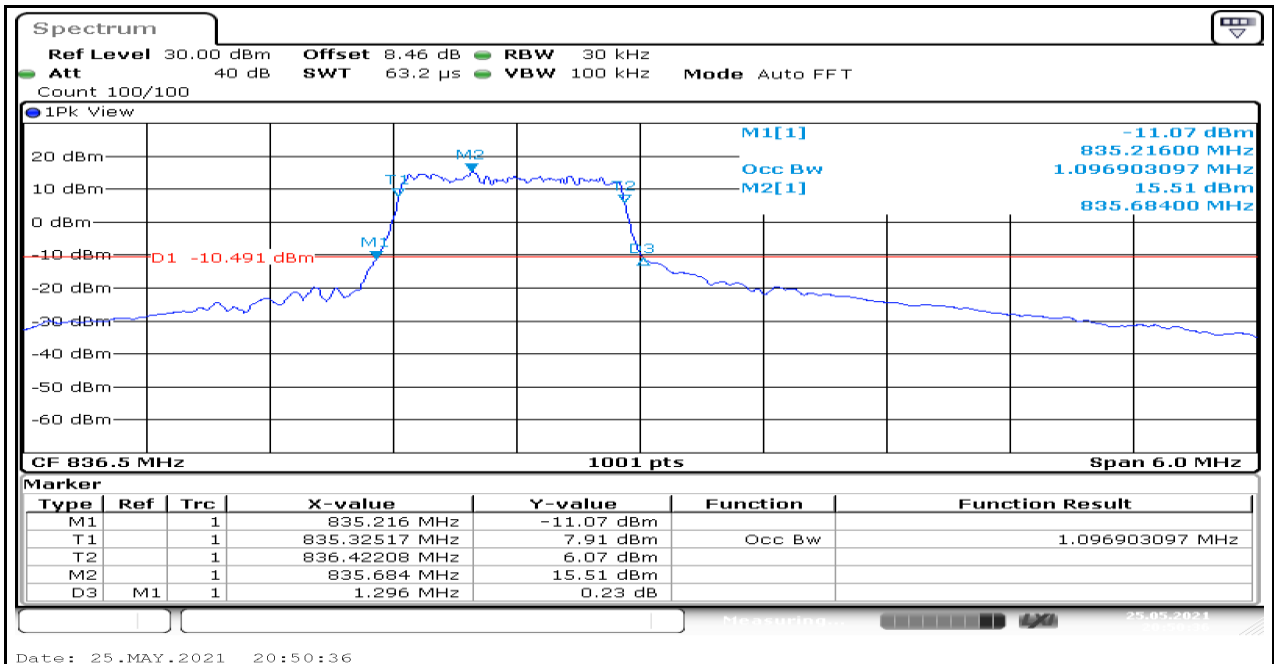
## APPENDIX C.3: 26dB BANDWIDTH AND OCCUPIED BANDWIDTH FOR M1

### Test Result

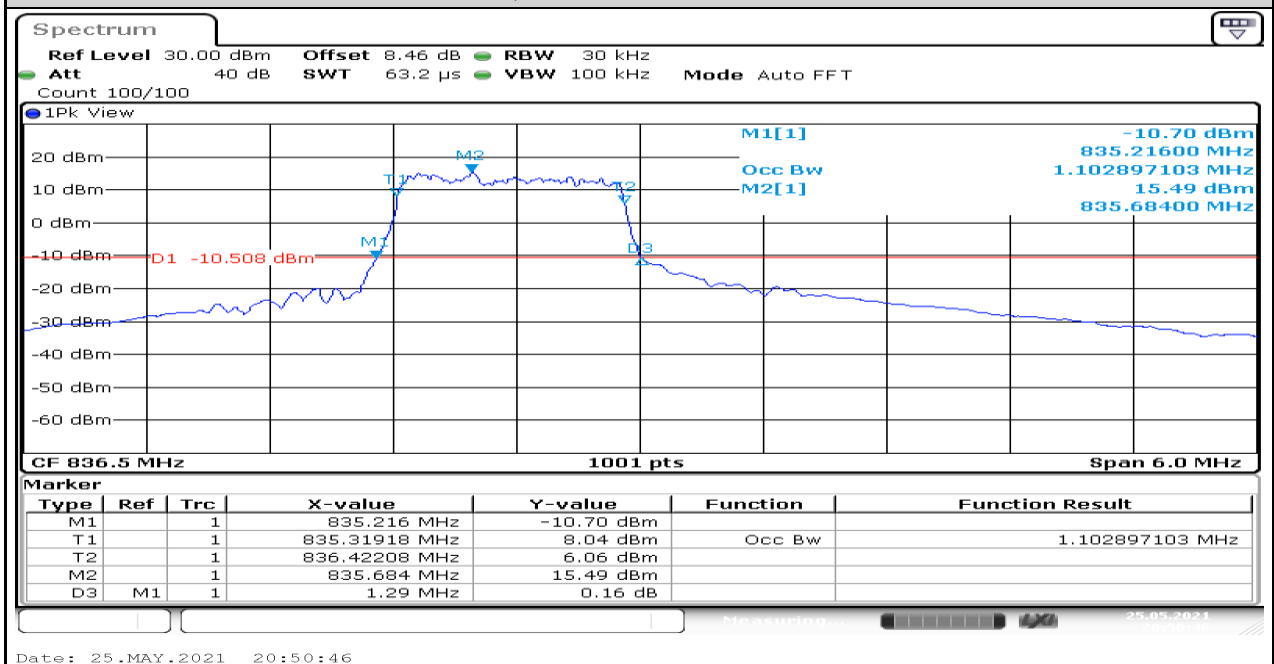
| Band  | Bandwidth | Channel | Modulation | RB Size | RB Start | Index | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|-------|-----------|---------|------------|---------|----------|-------|--------------------------|----------------------|---------|
| Band5 | 1.4MHz    | 20525   | QPSK       | 6       | 0        | Low   | 1.091                    | 1.281                | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 6       | 0        | Low   | 1.097                    | 1.281                | PASS    |
| Band5 | 3MHz      | 20525   | QPSK       | 6       | 0        | Low   | 1.097                    | 1.296                | PASS    |
| Band5 | 3MHz      | 20525   | 16QAM      | 6       | 0        | Low   | 1.103                    | 1.290                | PASS    |
| Band5 | 5MHz      | 20525   | QPSK       | 6       | 0        | Low   | 1.099                    | 1.310                | PASS    |
| Band5 | 5MHz      | 20525   | 16QAM      | 6       | 0        | Low   | 1.109                    | 1.330                | PASS    |
| Band5 | 10MHz     | 20525   | QPSK       | 6       | 0        | Low   | 1.099                    | 1.320                | PASS    |
| Band5 | 10MHz     | 20525   | 16QAM      | 6       | 0        | Low   | 1.099                    | 1.320                | PASS    |

## Test Graphs

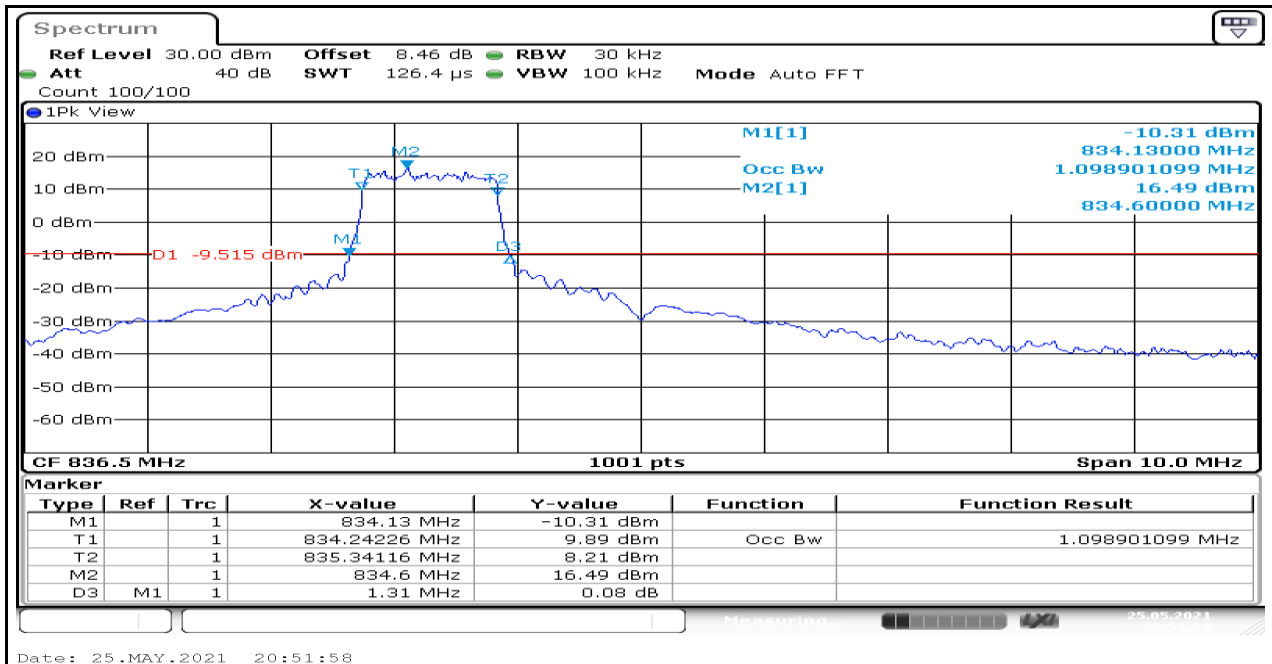




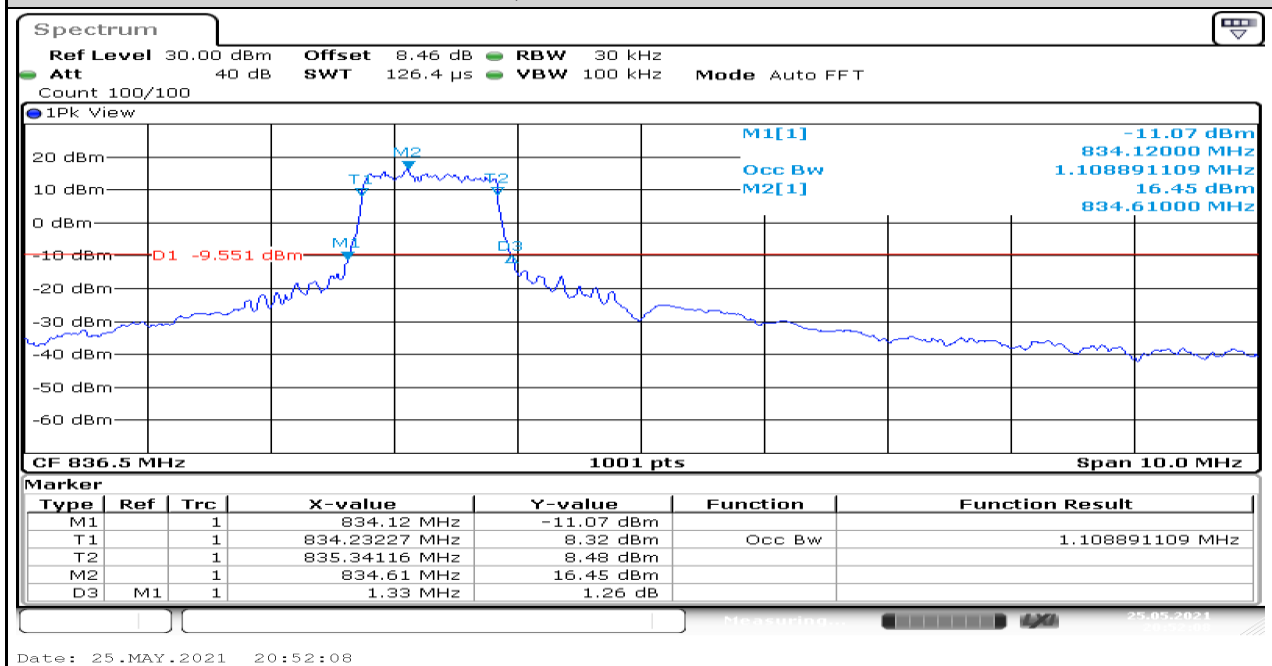
Band5-3MHz-16QAM-20525-6-0-Low-1.103-1.290-PASS



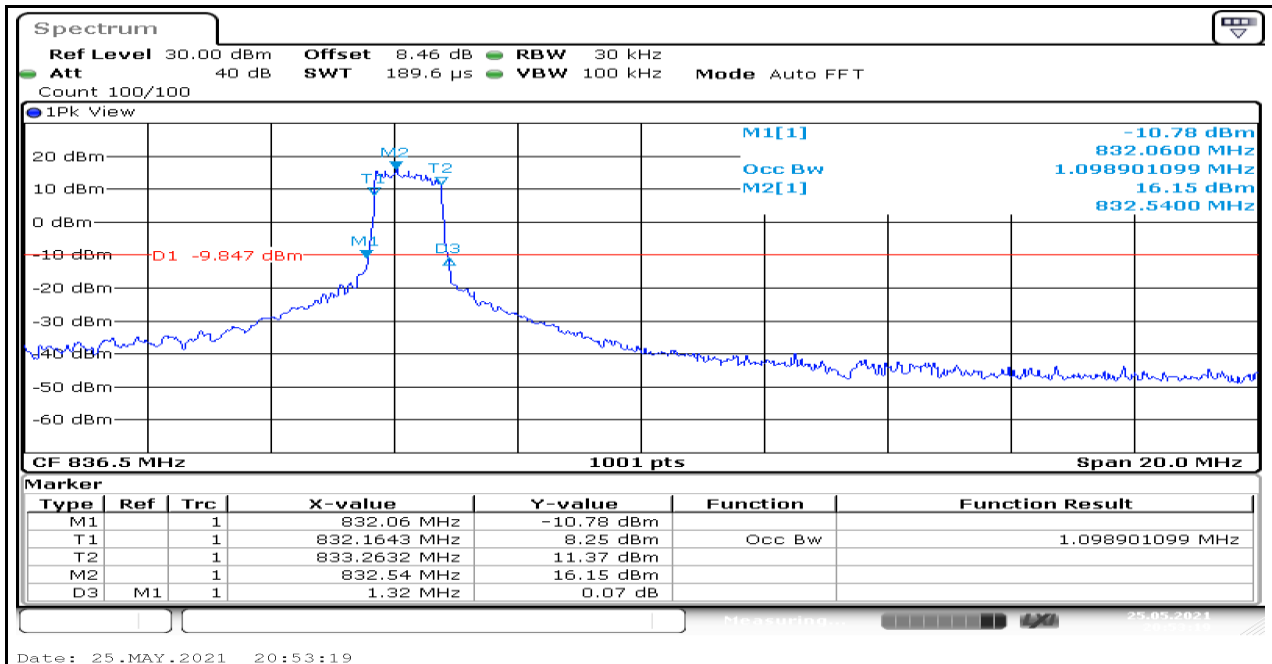
Band5-5MHz-QPSK-20525-6-0-Low-1.099-1.310-PASS



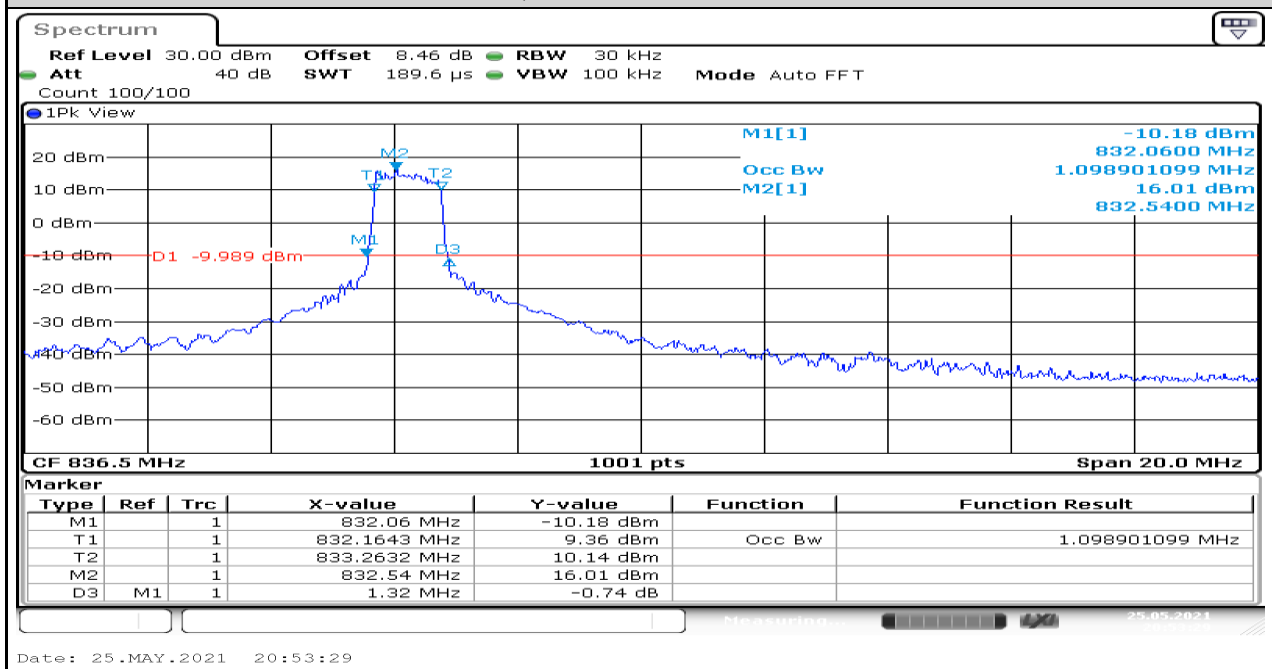
Band5-5MHz-16QAM-20525-6-0-Low-1.109-1.330-PASS



Band5-10MHz-QPSK-20525-6-0-Low-1.099-1.320-PASS



Band5-10MHz-16QAM-20525-6-0-Low-1.099-1.320-PASS

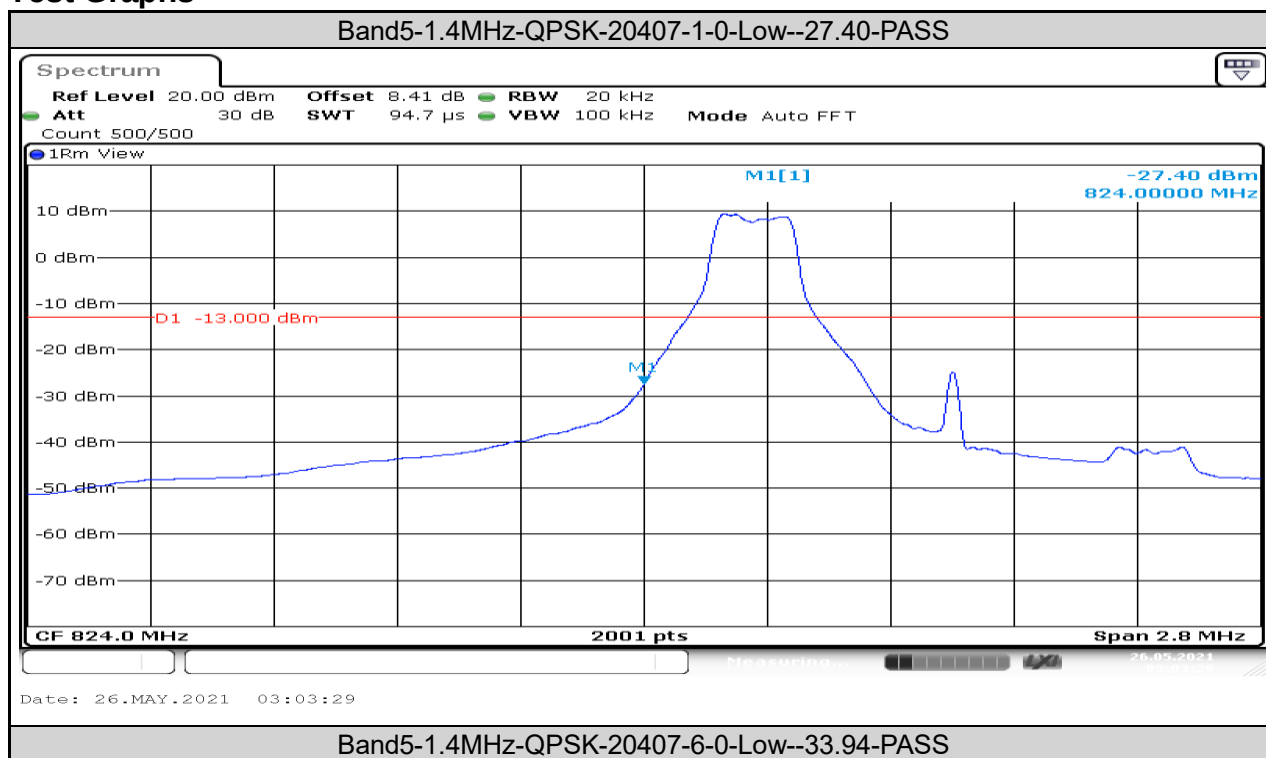


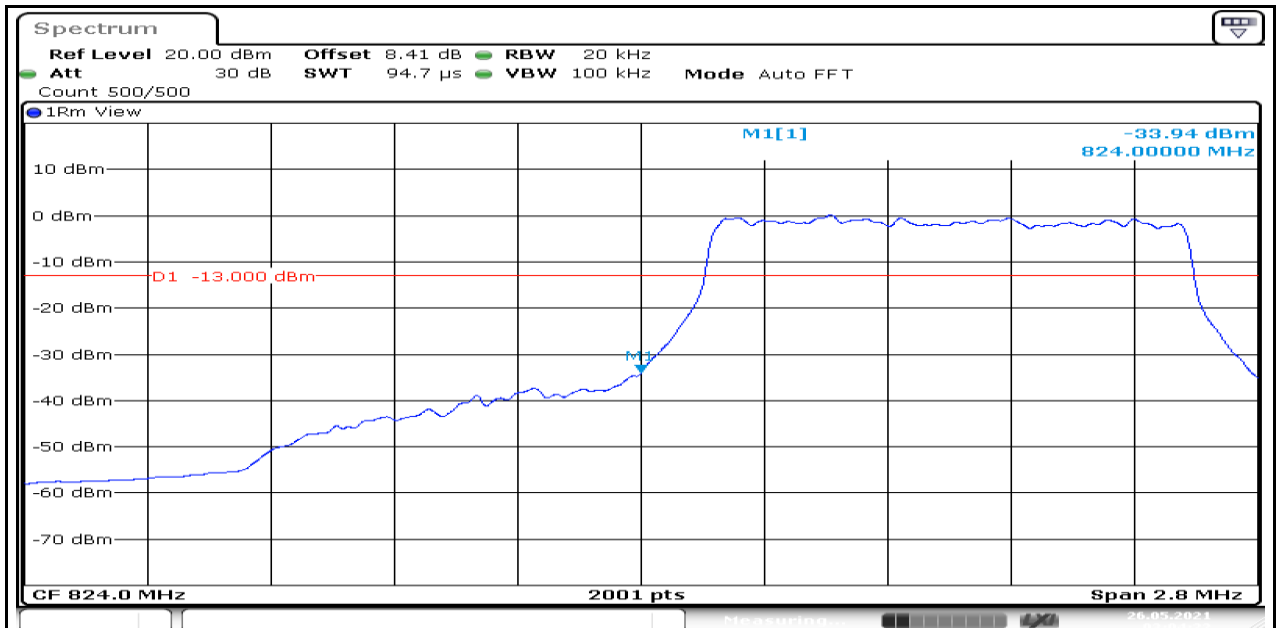
## APPENDIX C.4: BAND EDGE FOR M1

### Test Result

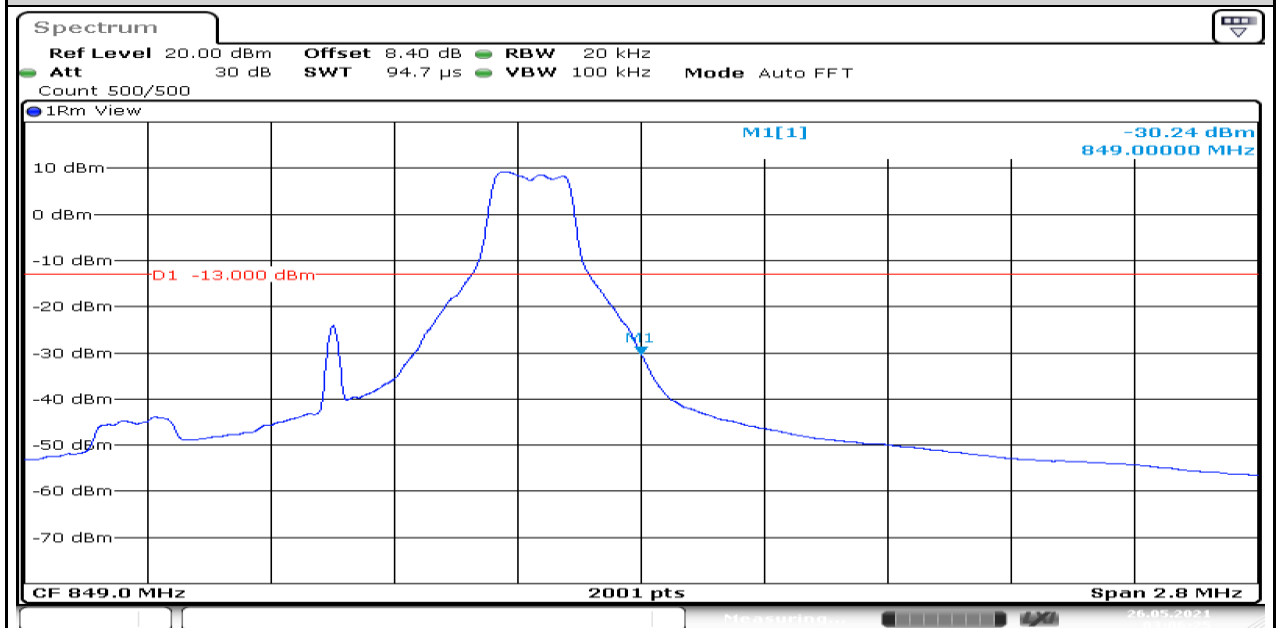
| Band  | Bandwidth | Channel | Modulation | RB Size | RB Start | NB Index | Result(dBm) | Verdict |
|-------|-----------|---------|------------|---------|----------|----------|-------------|---------|
| Band5 | 1.4MHz    | 20407   | QPSK       | 1       | 0        | Low      | -27.40      | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 6       | 0        | Low      | -33.94      | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 1       | 5        | Low      | -30.24      | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 6       | 0        | Low      | -35.26      | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 1       | 0        | Low      | -29.68      | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 6       | 0        | Low      | -34.04      | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 1       | 5        | Low      | -30.33      | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 6       | 0        | Low      | -34.42      | PASS    |

### Test Graphs

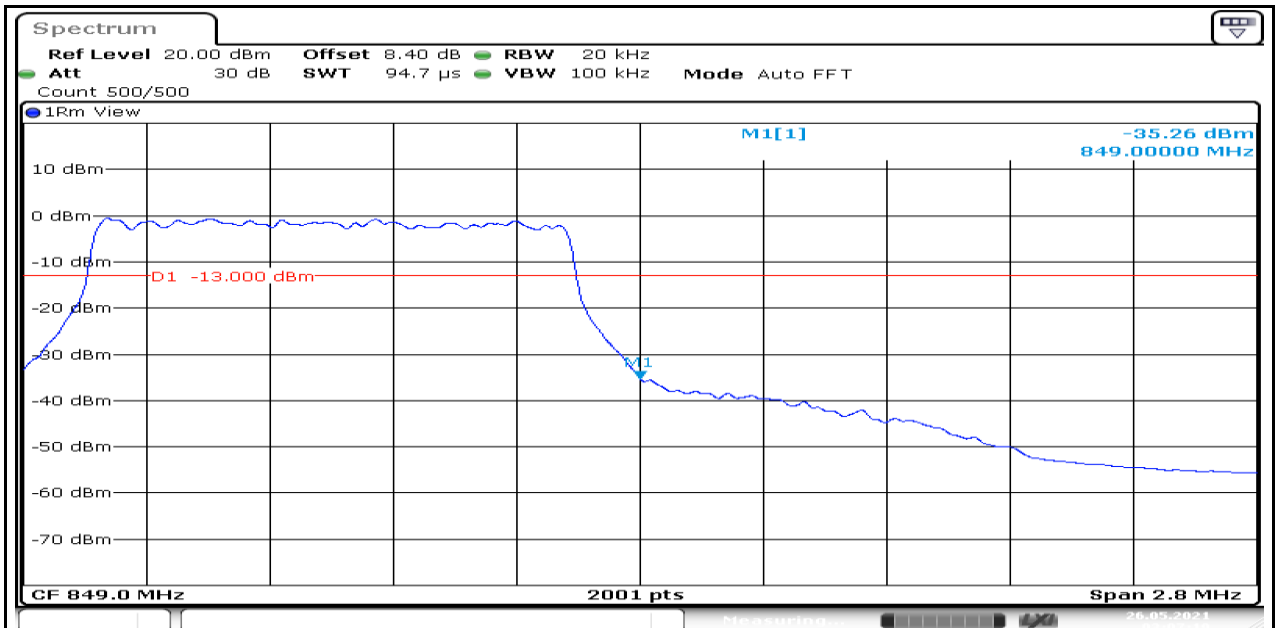




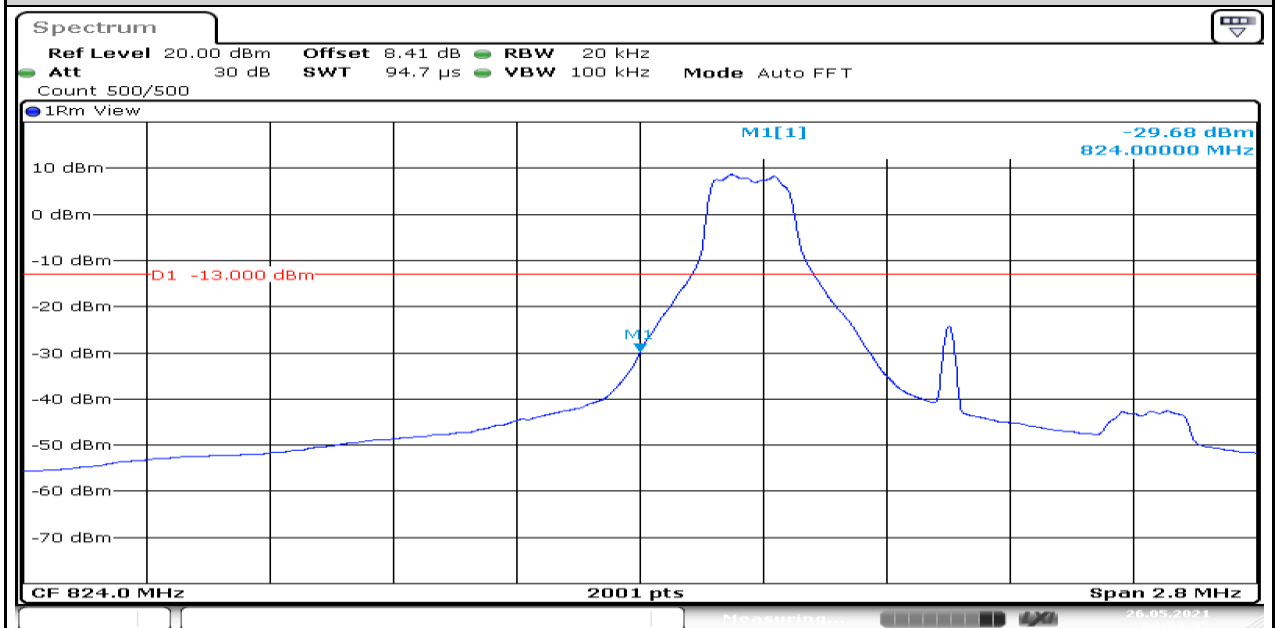
Band5-1.4MHz-QPSK-20643-1-5-Low--30.24-PASS



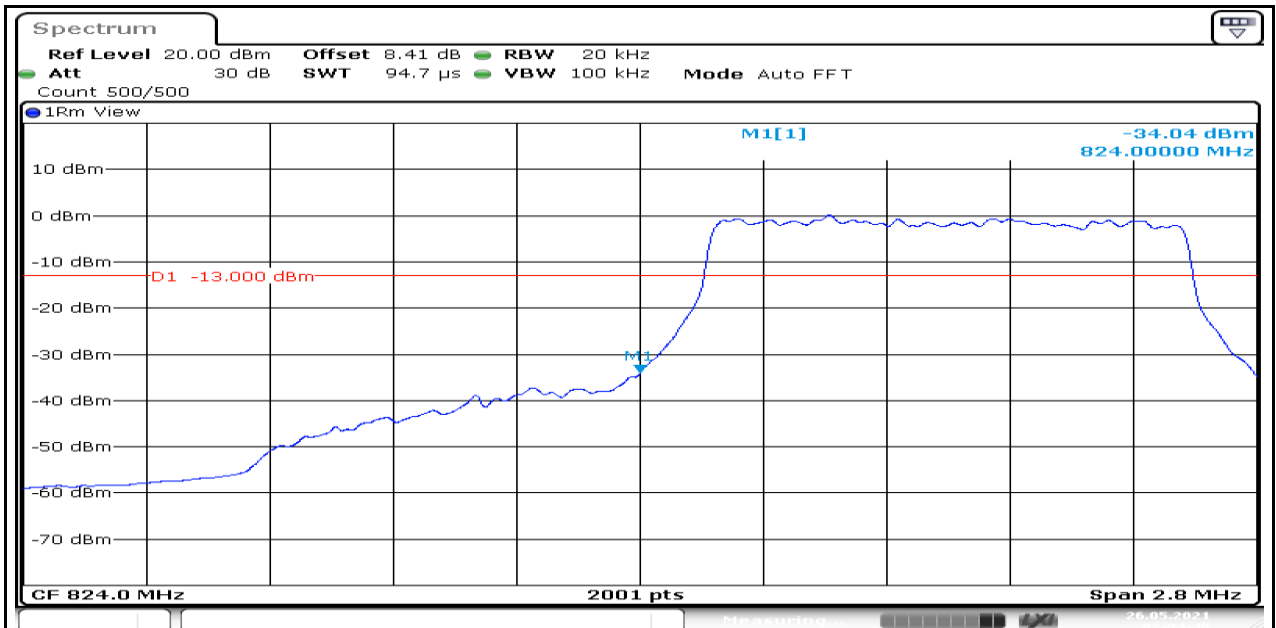
Band5-1.4MHz-QPSK-20643-6-0-Low--35.26-PASS



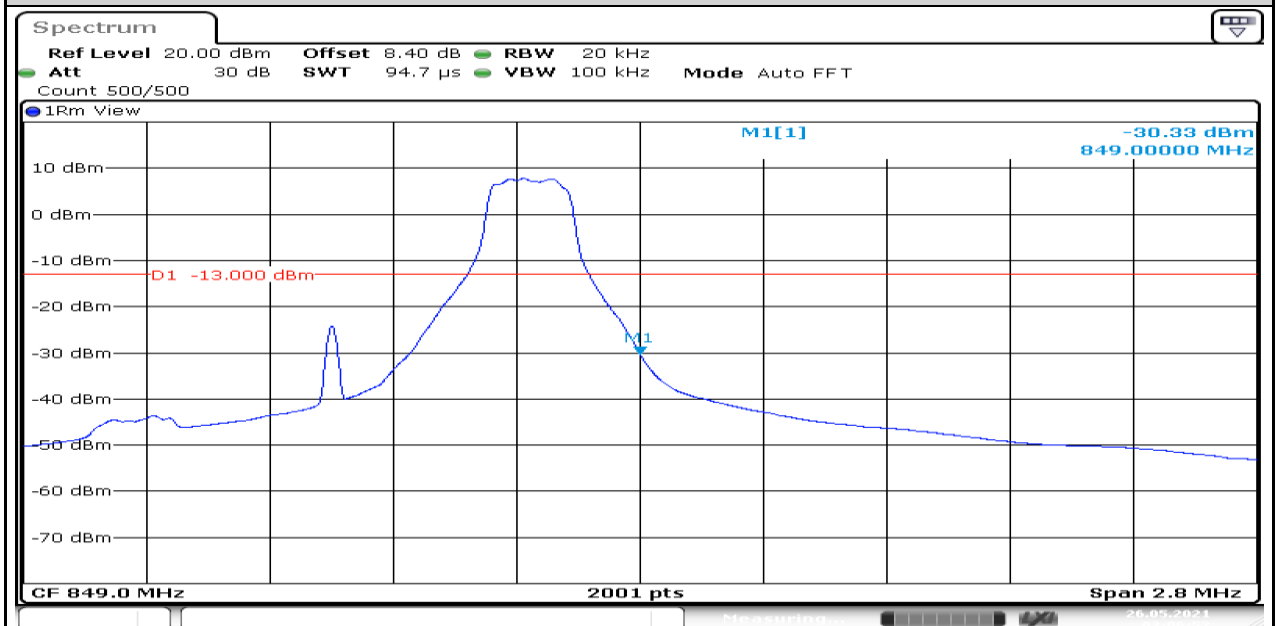
Band5-1.4MHz-16QAM-20407-1-0-Low--29.68-PASS



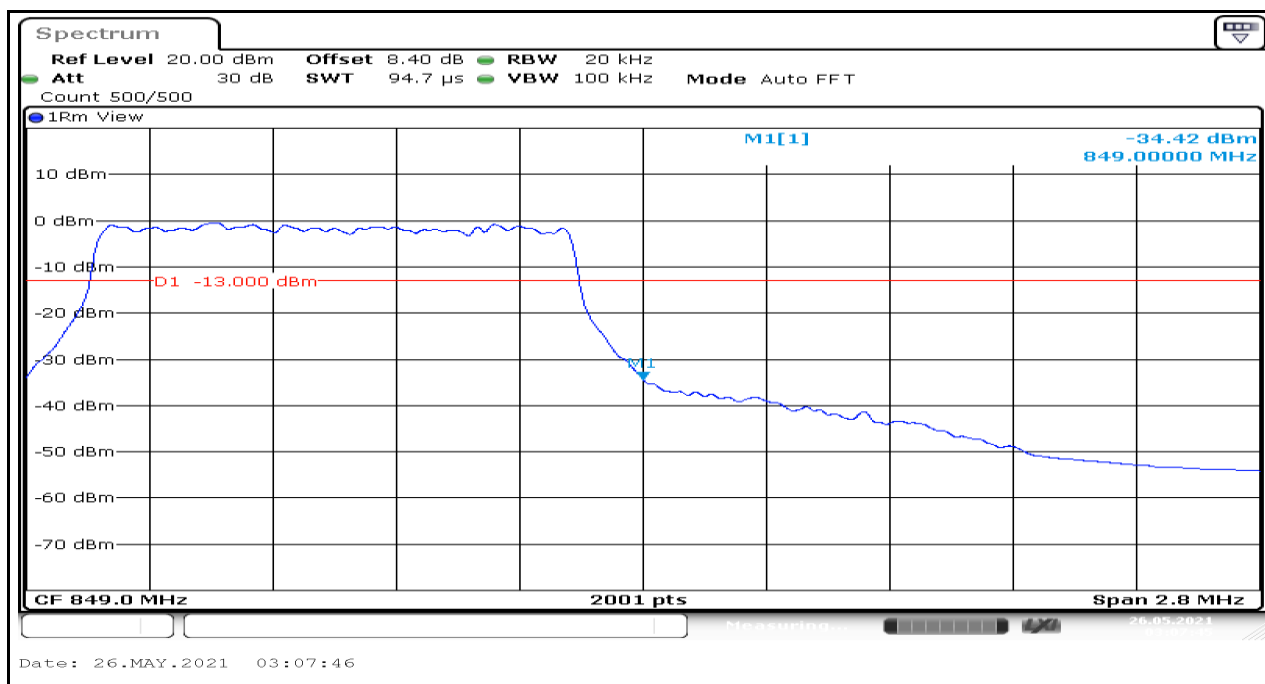
Band5-1.4MHz-16QAM-20407-6-0-Low--34.04-PASS



Band5-1.4MHz-16QAM-20643-1-5-Low--30.33-PASS



Band5-1.4MHz-16QAM-20643-6-0-Low--34.42-PASS



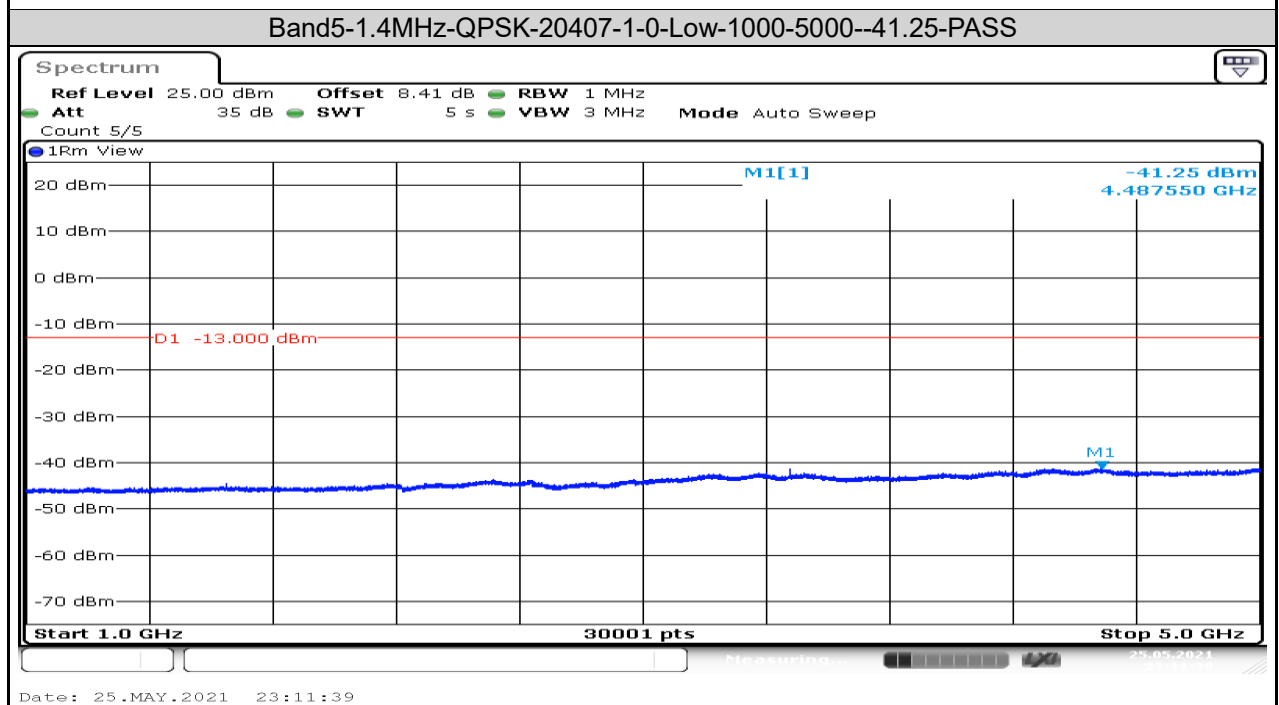
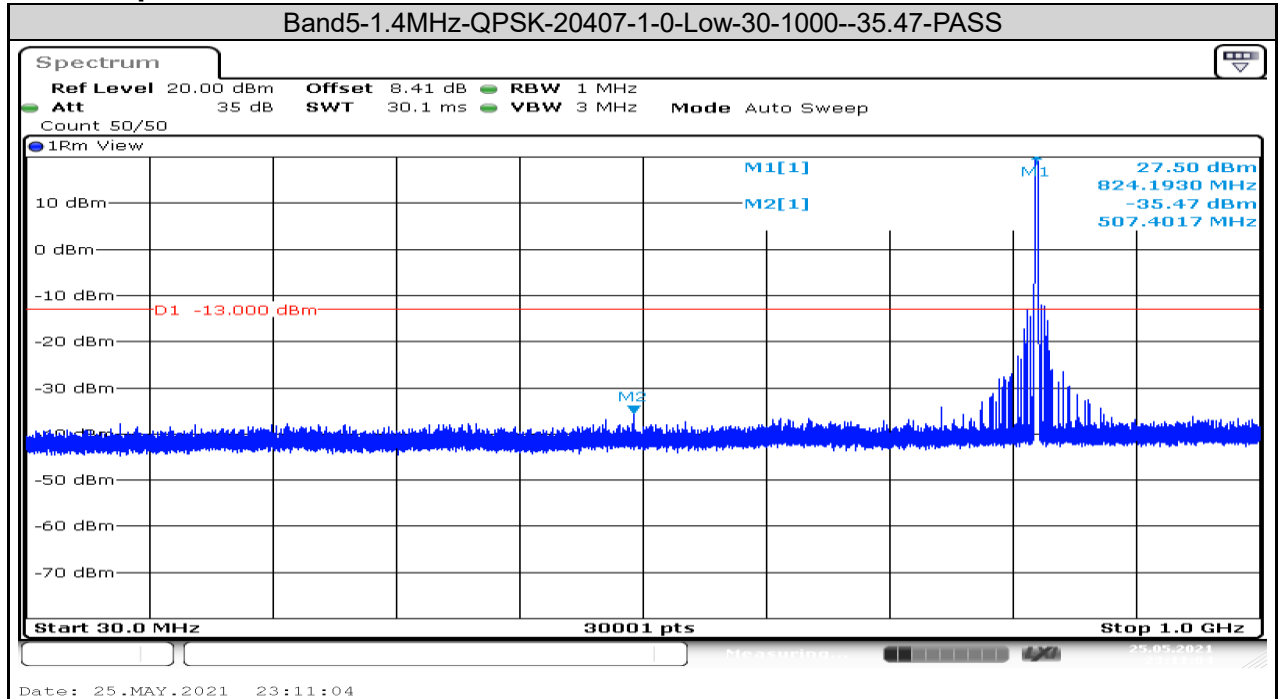
## APPENDIX C.5: CONDUCTED SPURIOUS EMISSION FOR M1

### Test Result

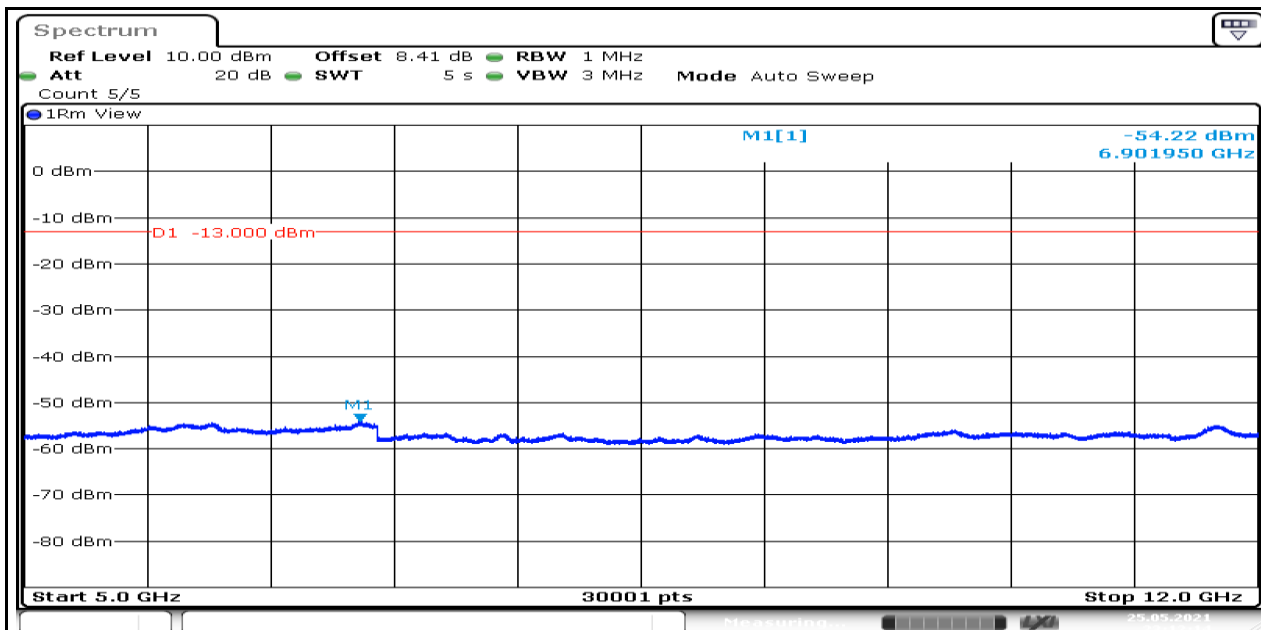
| Band  | Bandwidth | Channel | Modulation | RB Size | RB Start | Index | Start Freq | Stop Freq | Result (dBm) | Verdict |
|-------|-----------|---------|------------|---------|----------|-------|------------|-----------|--------------|---------|
| Band5 | 1.4MHz    | 20407   | QPSK       | 1       | 0        | Low   | 30         | 1000      | -35.47       | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 1       | 0        | Low   | 1000       | 5000      | -41.25       | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 1       | 0        | Low   | 5000       | 12000     | -54.22       | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 1       | 0        | Low   | 12000      | 26500     | -50.26       | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 6       | 0        | Low   | 30         | 1000      | -35.61       | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 6       | 0        | Low   | 1000       | 5000      | -40.97       | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 6       | 0        | Low   | 5000       | 12000     | -54.16       | PASS    |
| Band5 | 1.4MHz    | 20407   | QPSK       | 6       | 0        | Low   | 12000      | 26500     | -50.22       | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | 30         | 1000      | -35.87       | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | 1000       | 5000      | -41.14       | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | 5000       | 12000     | -54.19       | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | 12000      | 26500     | -50.3        | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 6       | 0        | Low   | 30         | 1000      | -35.96       | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 6       | 0        | Low   | 1000       | 5000      | -41.13       | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 6       | 0        | Low   | 5000       | 12000     | -54.33       | PASS    |
| Band5 | 1.4MHz    | 20525   | QPSK       | 6       | 0        | Low   | 12000      | 26500     | -50.22       | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 1       | 5        | Low   | 30         | 1000      | -36.44       | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 1       | 5        | Low   | 1000       | 5000      | -41.26       | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 1       | 5        | Low   | 5000       | 12000     | -54.34       | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 1       | 5        | Low   | 12000      | 26500     | -50.33       | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 6       | 0        | Low   | 30         | 1000      | -36.8        | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 6       | 0        | Low   | 1000       | 5000      | -41.35       | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 6       | 0        | Low   | 5000       | 12000     | -54.36       | PASS    |
| Band5 | 1.4MHz    | 20643   | QPSK       | 6       | 0        | Low   | 12000      | 26500     | -50.4        | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 1       | 0        | Low   | 30         | 1000      | -36.33       | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 1       | 0        | Low   | 1000       | 5000      | -41.17       | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 1       | 0        | Low   | 5000       | 12000     | -54.27       | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 1       | 0        | Low   | 12000      | 26500     | -50.36       | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 6       | 0        | Low   | 30         | 1000      | -35.43       | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 6       | 0        | Low   | 1000       | 5000      | -41.28       | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 6       | 0        | Low   | 5000       | 12000     | -54.3        | PASS    |
| Band5 | 1.4MHz    | 20407   | 16QAM      | 6       | 0        | Low   | 12000      | 26500     | -50.24       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | 30         | 1000      | -36.42       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | 1000       | 5000      | -41.02       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | 5000       | 12000     | -54.3        | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | 12000      | 26500     | -50.21       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 6       | 0        | Low   | 30         | 1000      | -35.88       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 6       | 0        | Low   | 1000       | 5000      | -41.27       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 6       | 0        | Low   | 5000       | 12000     | -54.35       | PASS    |
| Band5 | 1.4MHz    | 20525   | 16QAM      | 6       | 0        | Low   | 12000      | 26500     | -50.24       | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 1       | 5        | Low   | 30         | 1000      | -36.48       | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 1       | 5        | Low   | 1000       | 5000      | -41.19       | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 1       | 5        | Low   | 5000       | 12000     | -54.29       | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 1       | 5        | Low   | 12000      | 26500     | -50.46       | PASS    |
| Band5 | 1.4MHz    | 20643   | 16QAM      | 6       | 0        | Low   | 30         | 1000      | -36.83       | PASS    |

|       |        |       |       |   |   |     |       |       |        |      |
|-------|--------|-------|-------|---|---|-----|-------|-------|--------|------|
| Band5 | 1.4MHz | 20643 | 16QAM | 6 | 0 | Low | 1000  | 5000  | -41.35 | PASS |
| Band5 | 1.4MHz | 20643 | 16QAM | 6 | 0 | Low | 5000  | 12000 | -54.37 | PASS |
| Band5 | 1.4MHz | 20643 | 16QAM | 6 | 0 | Low | 12000 | 26500 | -50.44 | PASS |

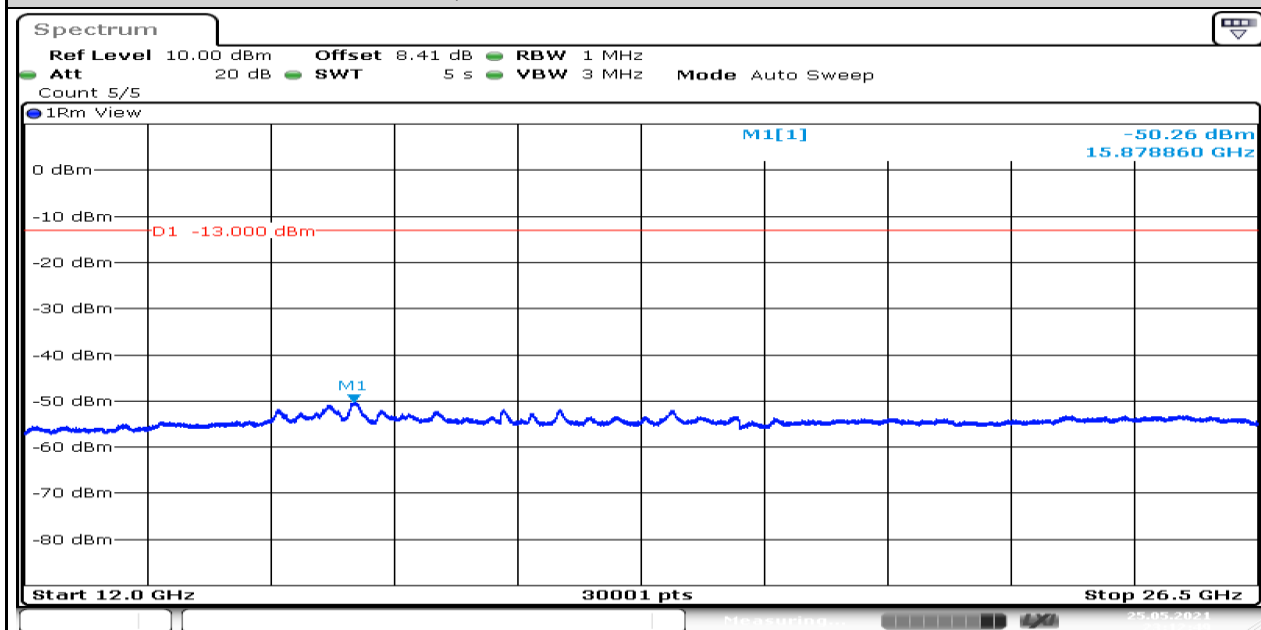
## Test Graphs



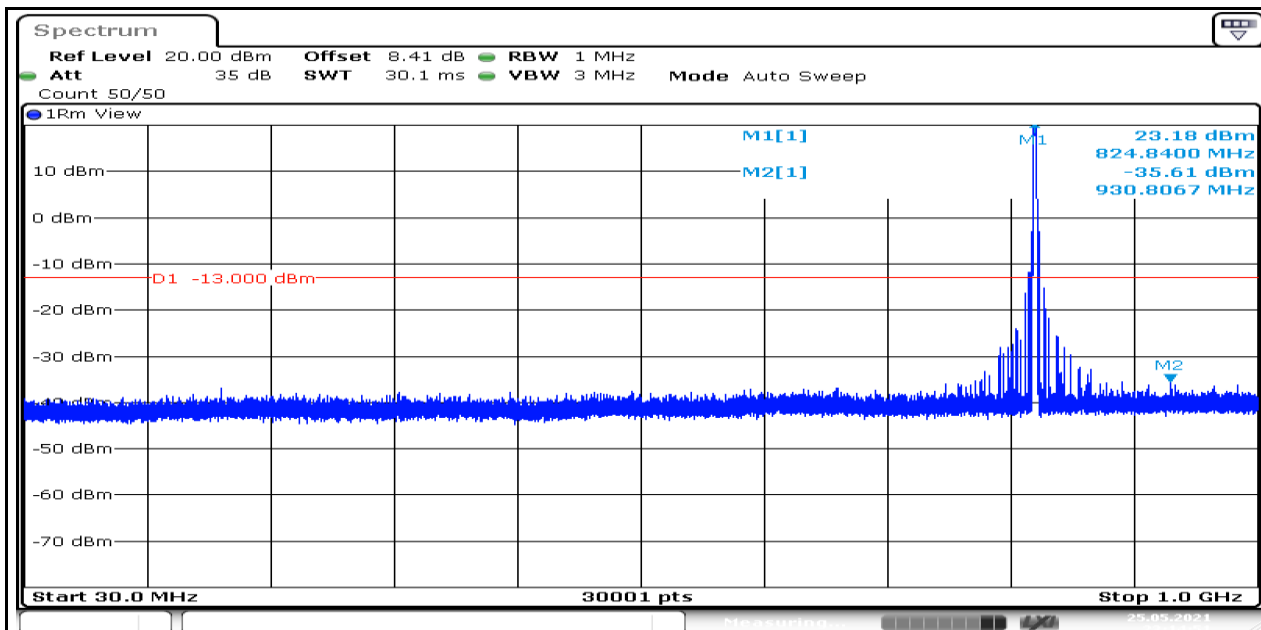
Band5-1.4MHz-QPSK-20407-1-0-Low-5000-12000--54.22-PASS



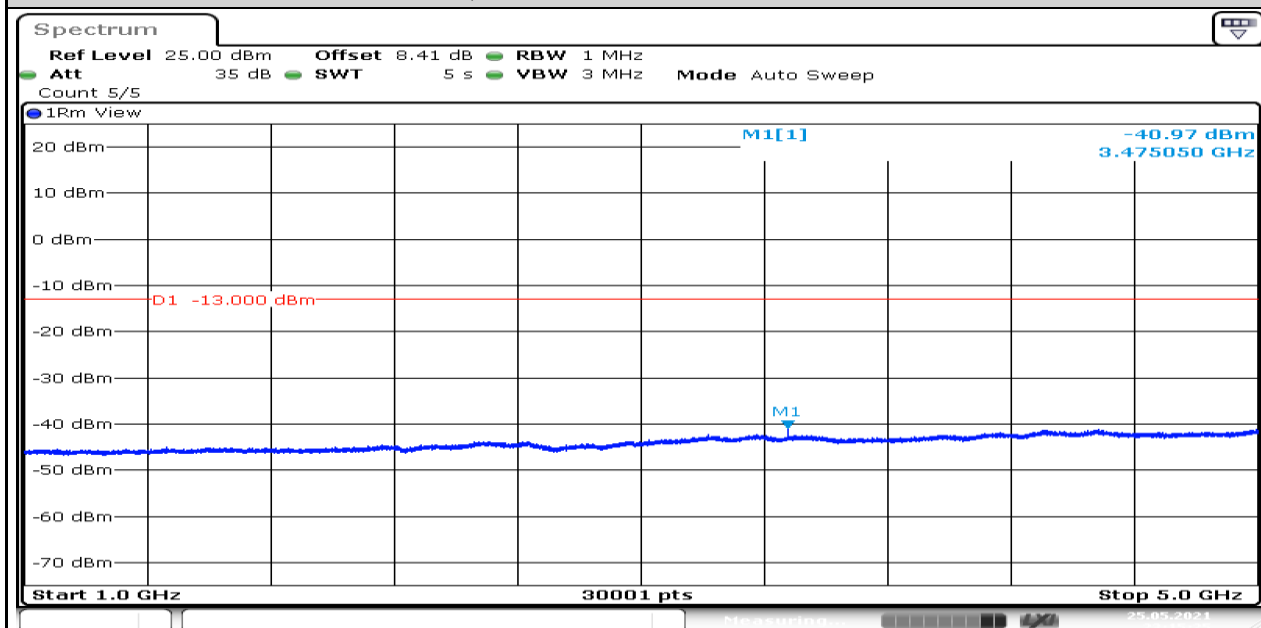
Band5-1.4MHz-QPSK-20407-1-0-Low-12000-26500--50.26-PASS



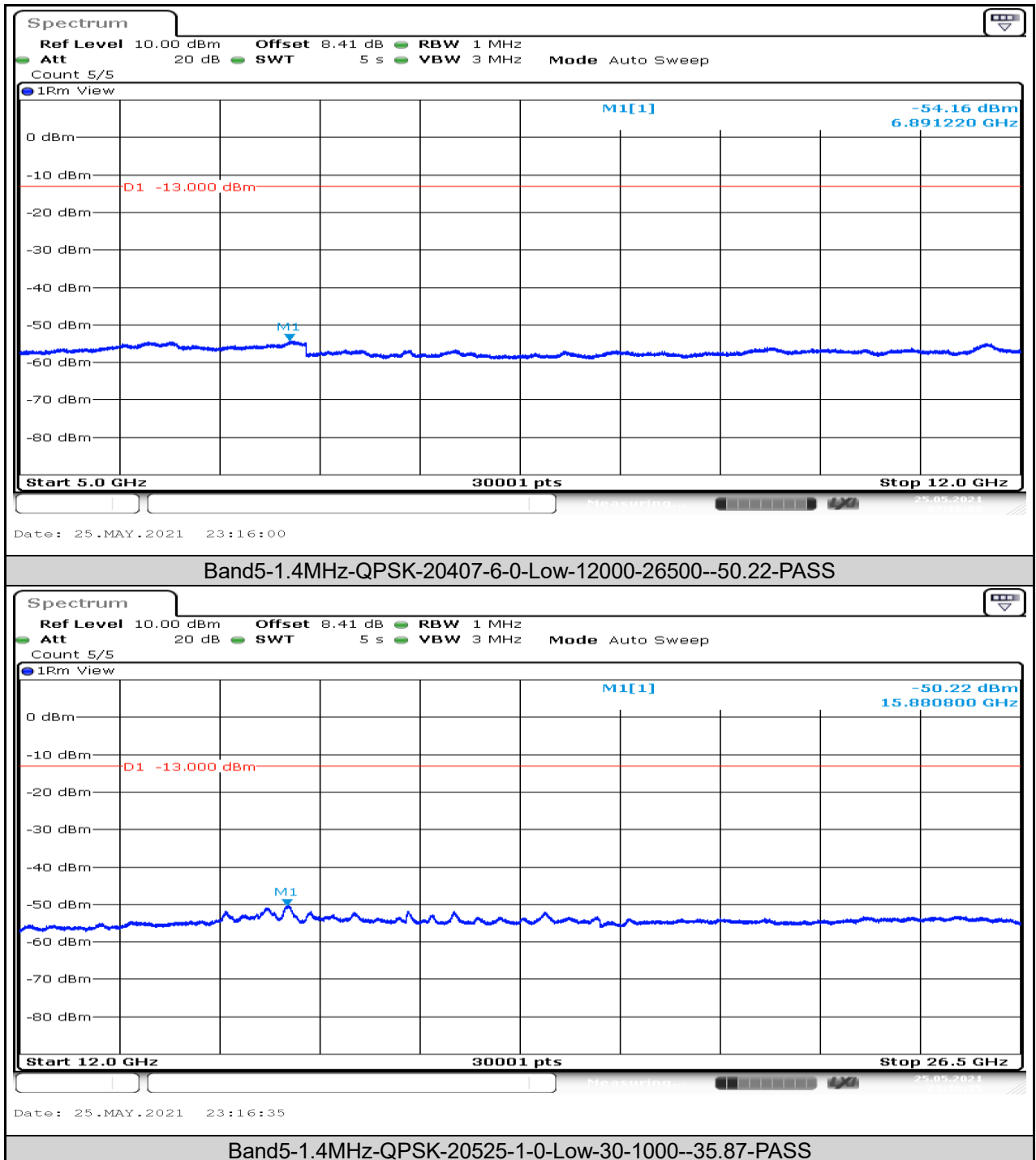
Band5-1.4MHz-QPSK-20407-6-0-Low-30-1000--35.61-PASS

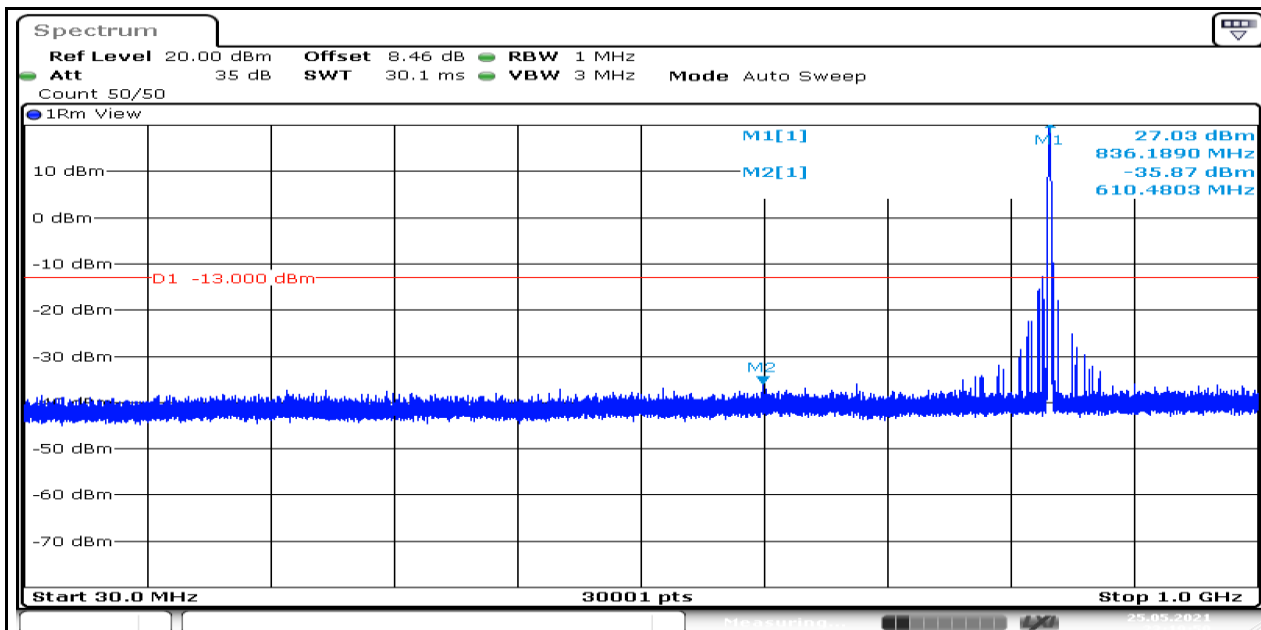


Band5-1.4MHz-QPSK-20407-6-0-Low-1000-5000--40.97-PASS

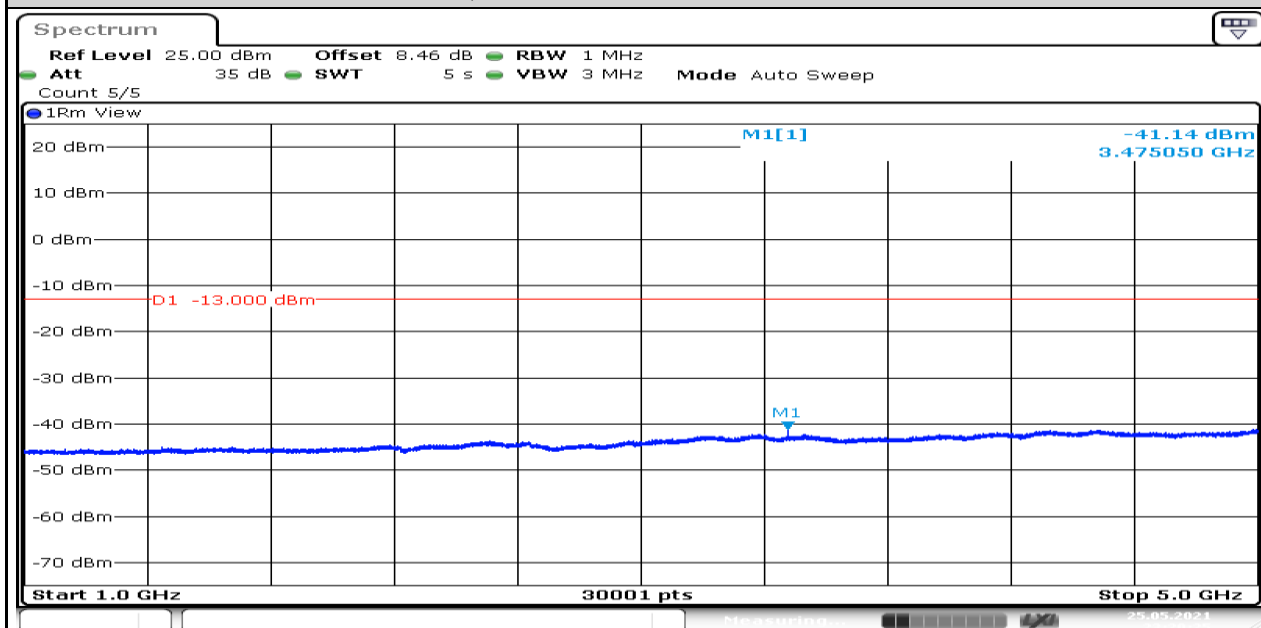


Band5-1.4MHz-QPSK-20407-6-0-Low-5000-12000--54.16-PASS

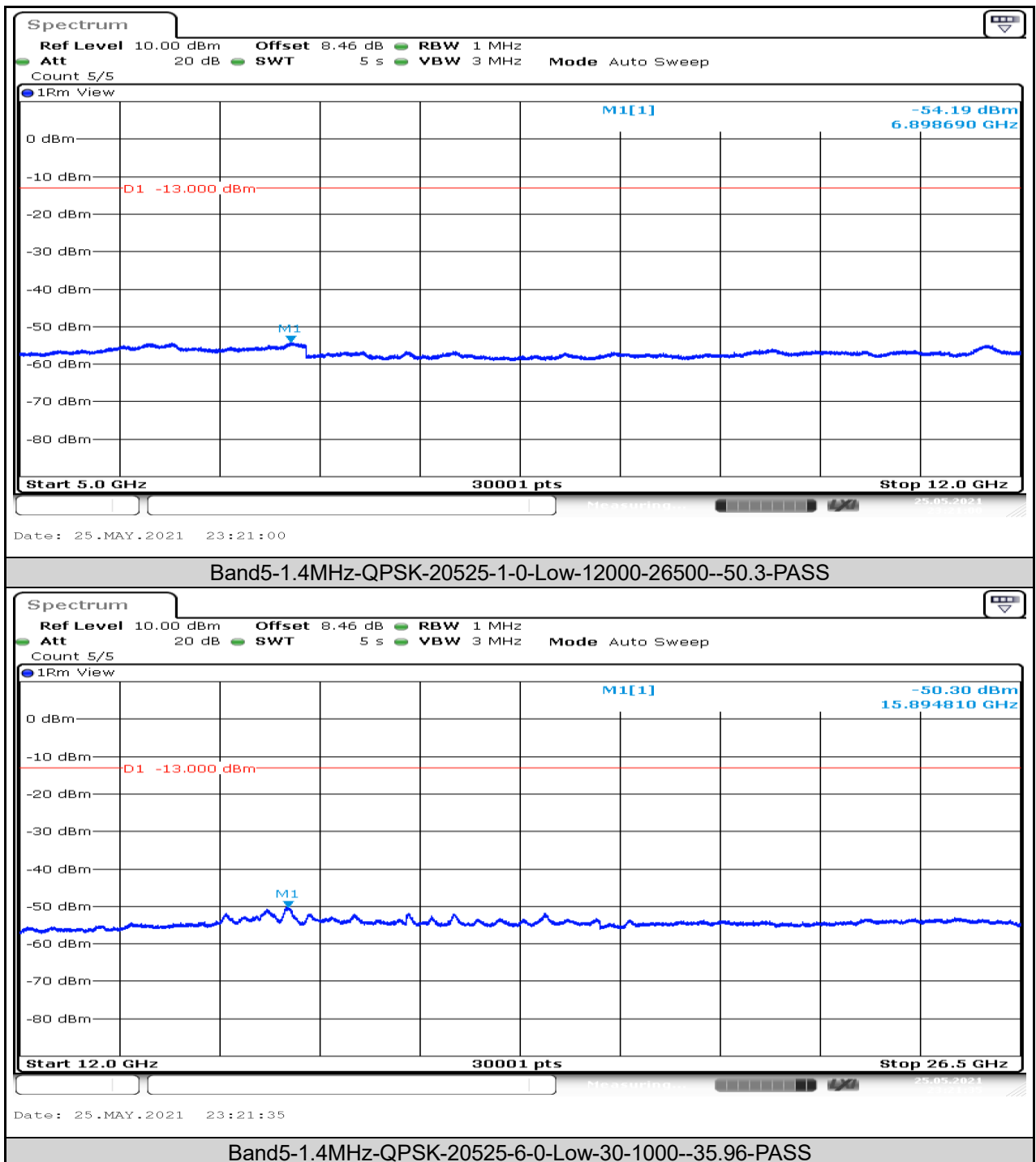


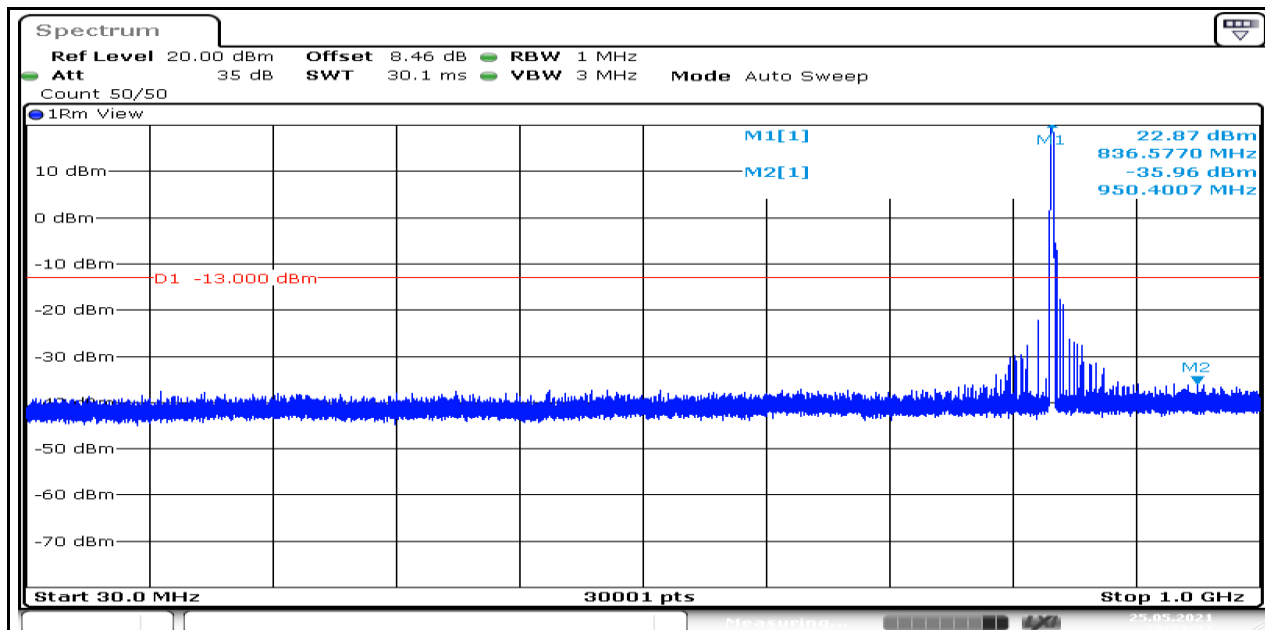


Band5-1.4MHz-QPSK-20525-1-0-Low-1000-5000--41.14-PASS

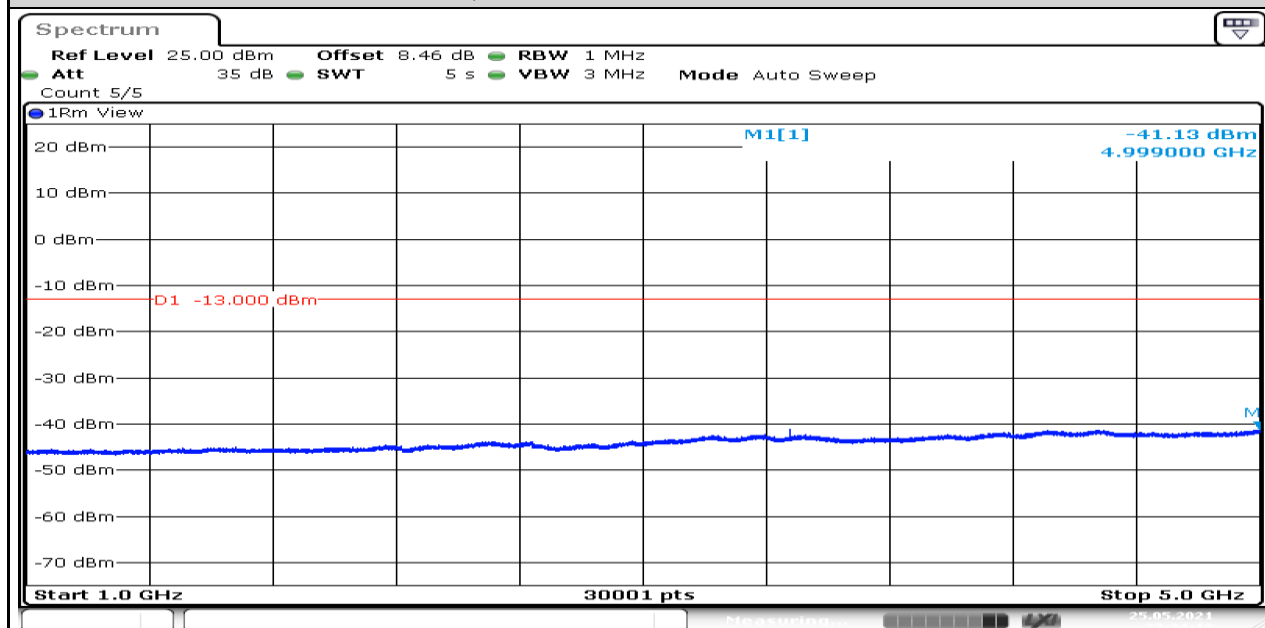


Band5-1.4MHz-QPSK-20525-1-0-Low-5000-12000--54.19-PASS

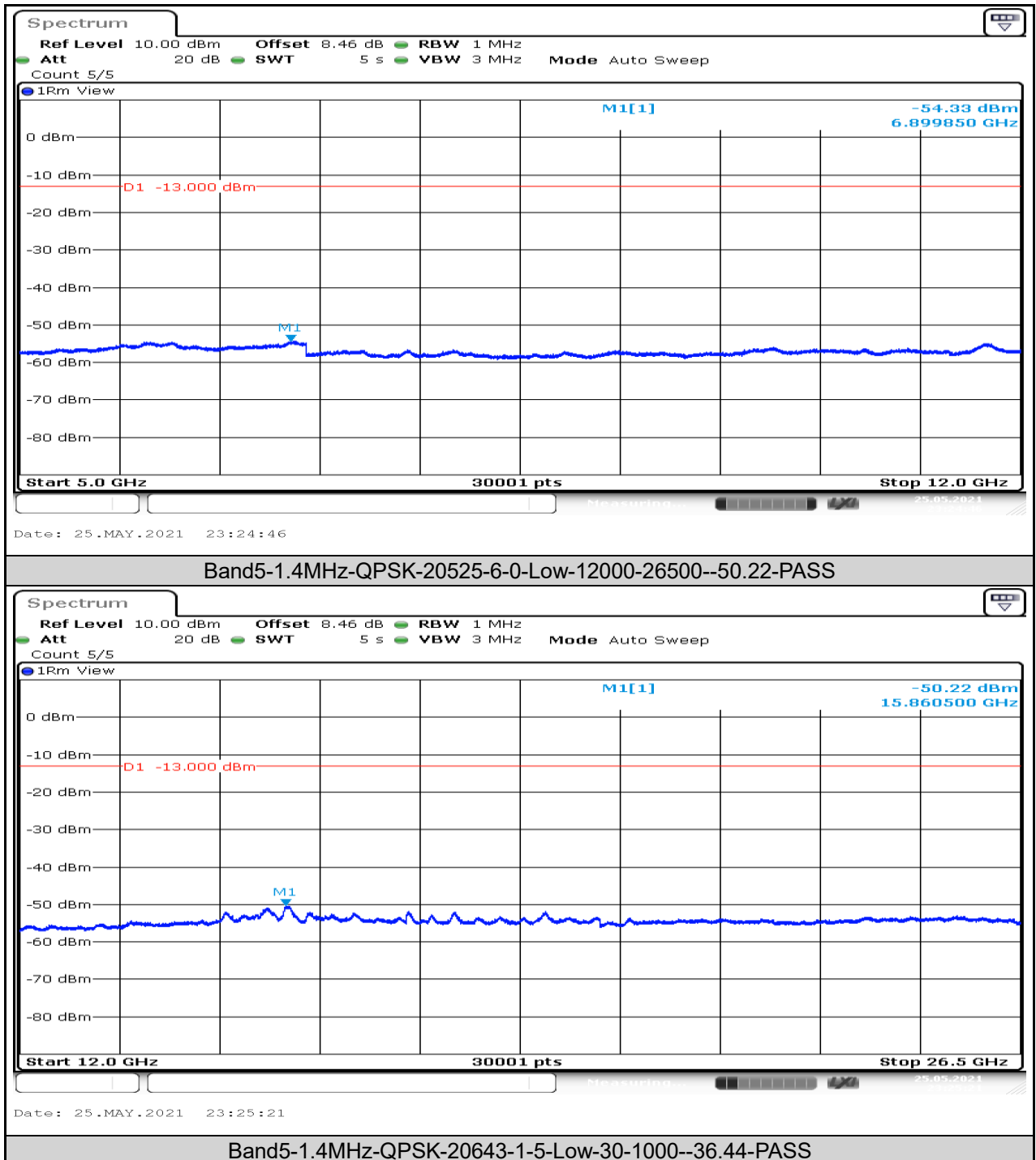


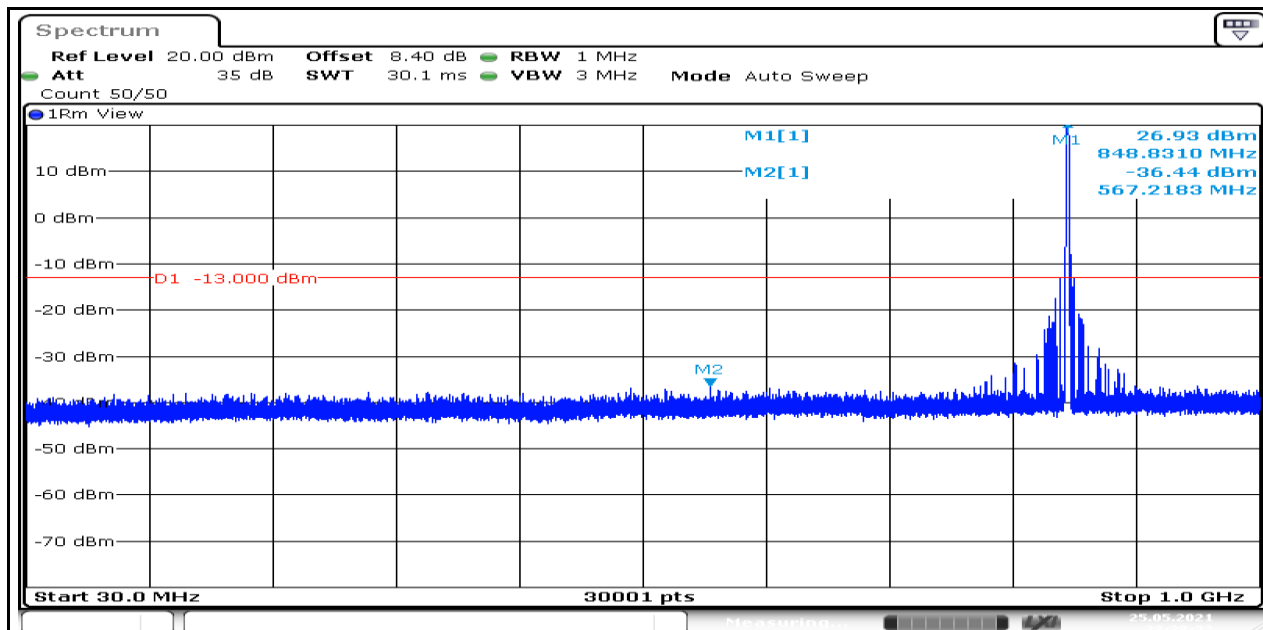


Band5-1.4MHz-QPSK-20525-6-0-Low-1000-5000--41.13-PASS

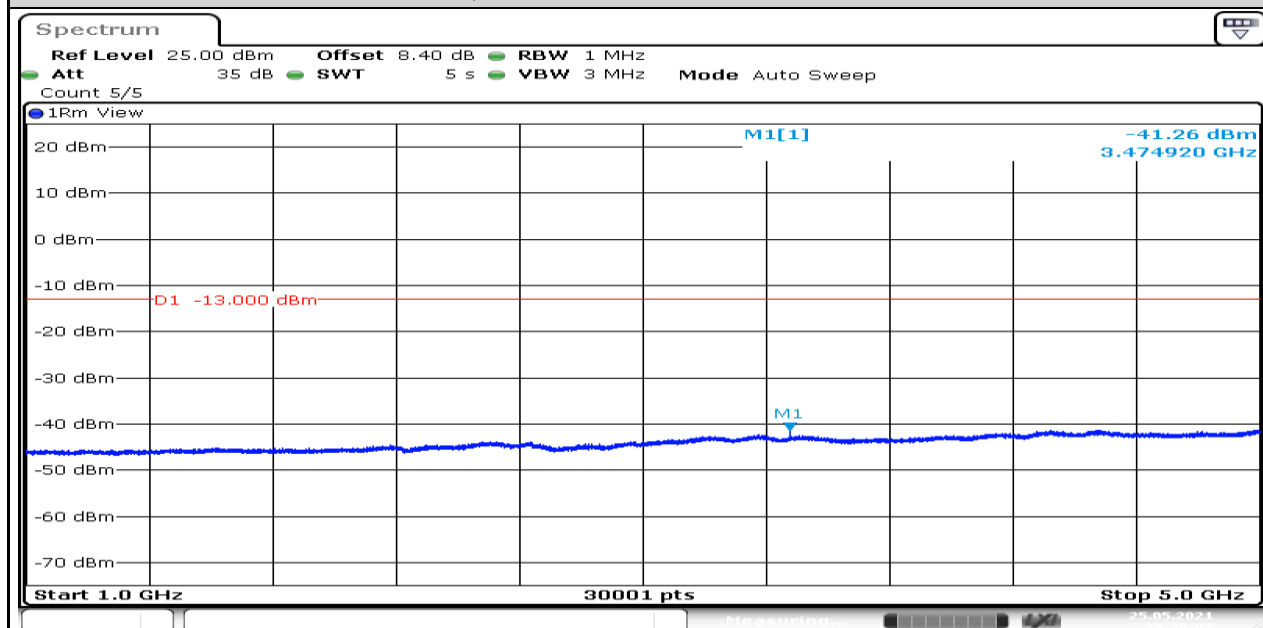


Band5-1.4MHz-QPSK-20525-6-0-Low-5000-12000--54.33-PASS

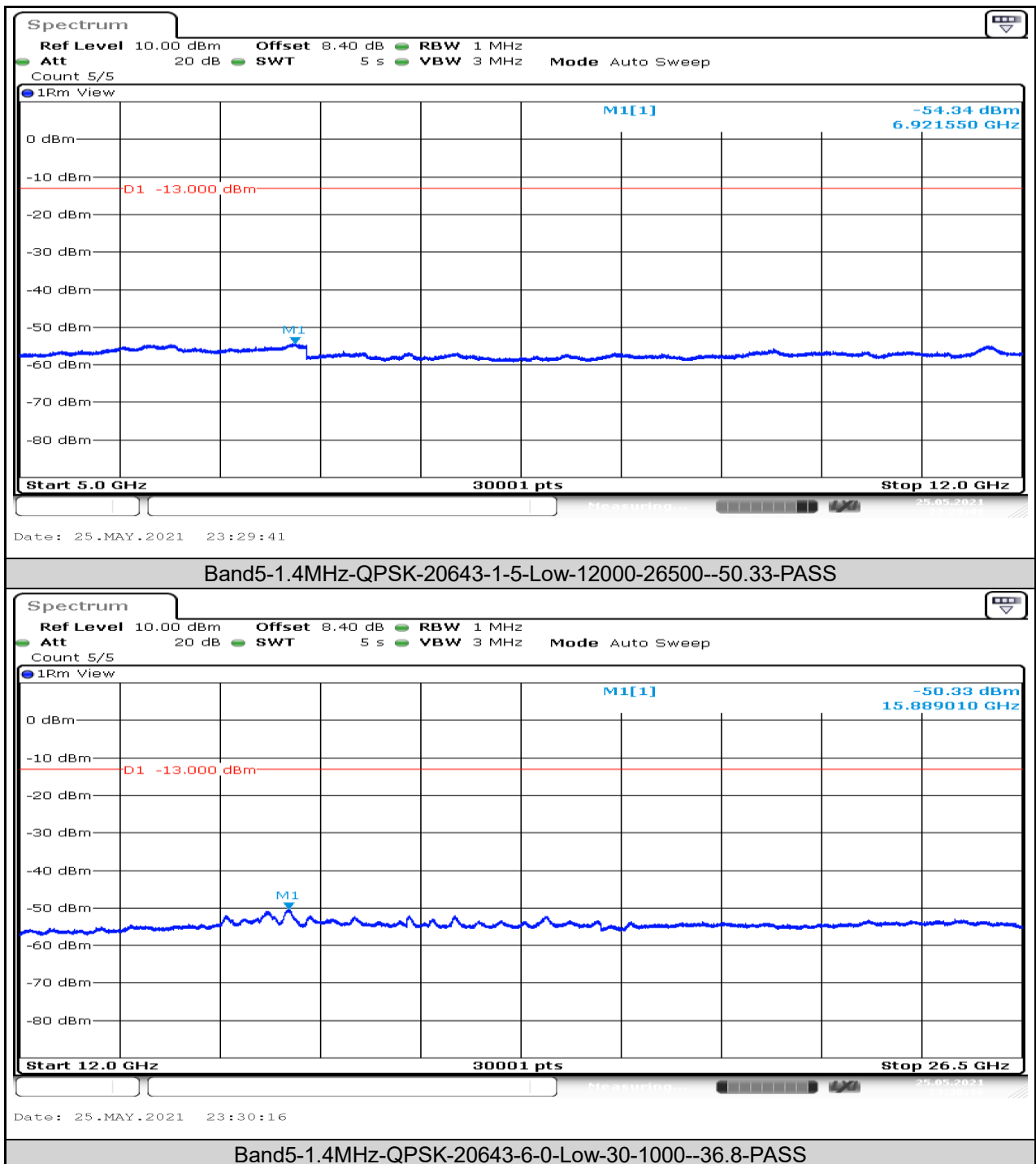


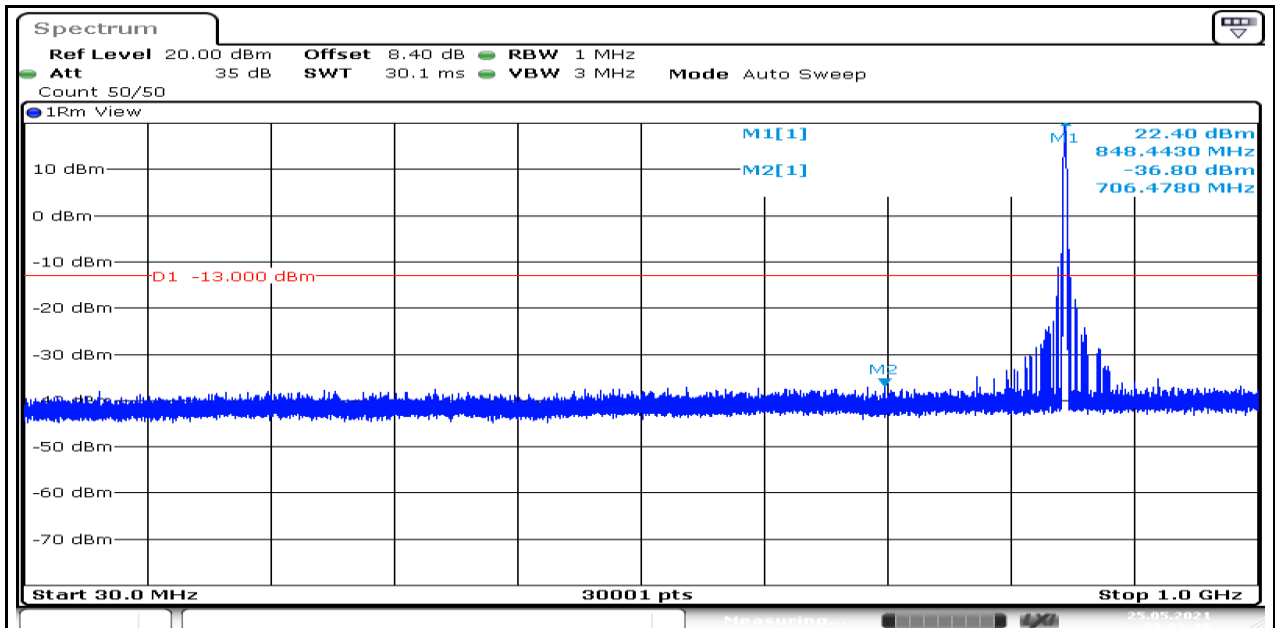


Band5-1.4MHz-QPSK-20643-1-5-Low-1000-5000--41.26-PASS

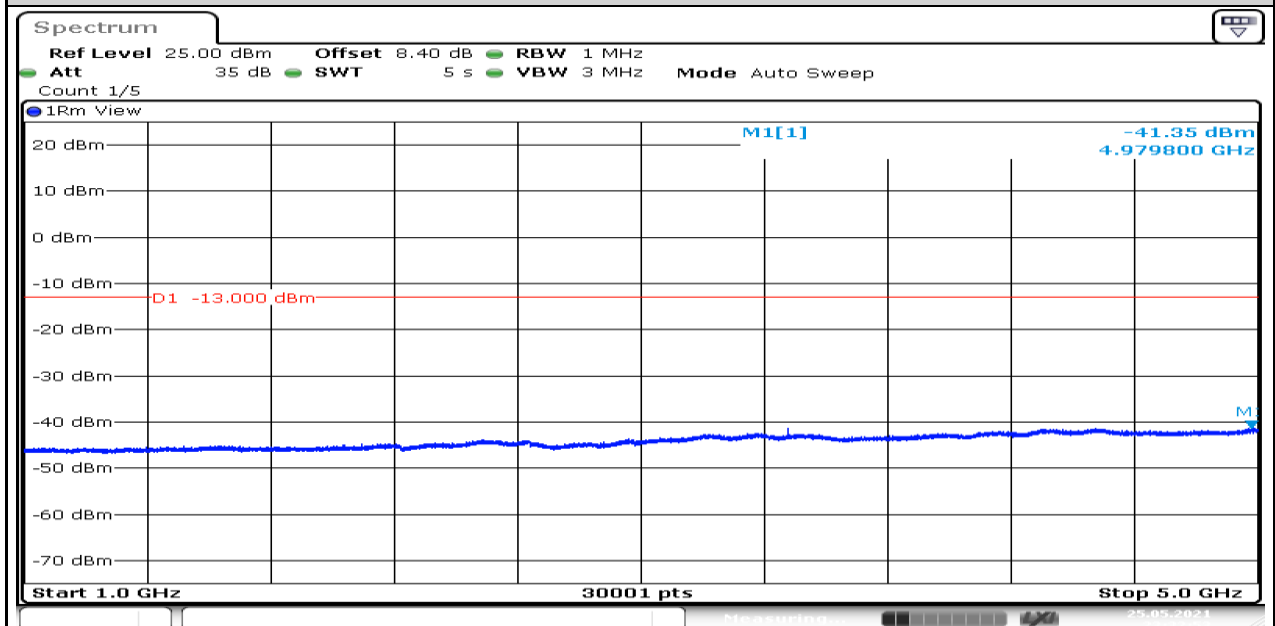


Band5-1.4MHz-QPSK-20643-1-5-Low-5000-12000--54.34-PASS

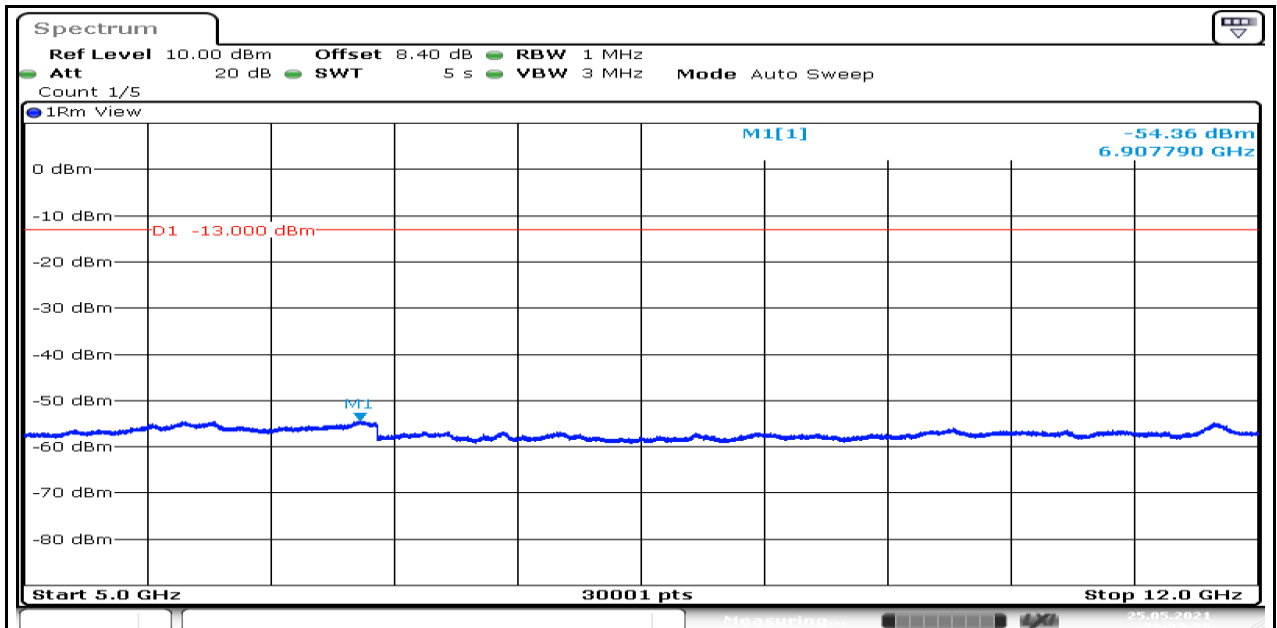




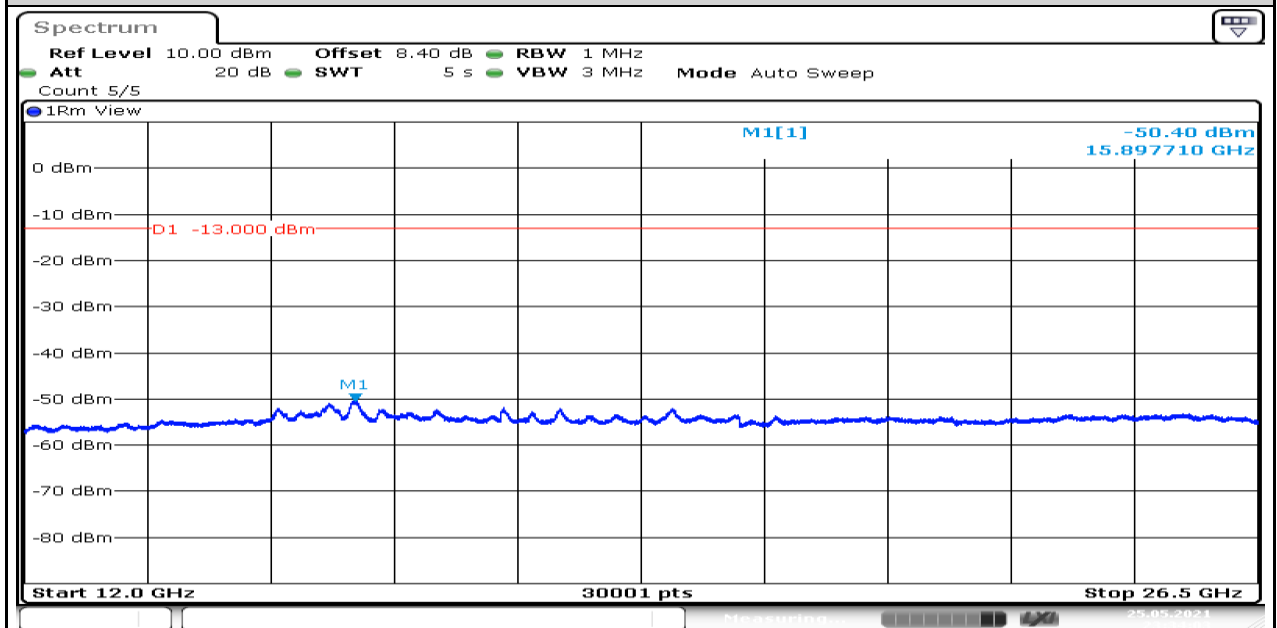
Band5-1.4MHz-QPSK-20643-6-0-Low-1000-5000--41.35-PASS



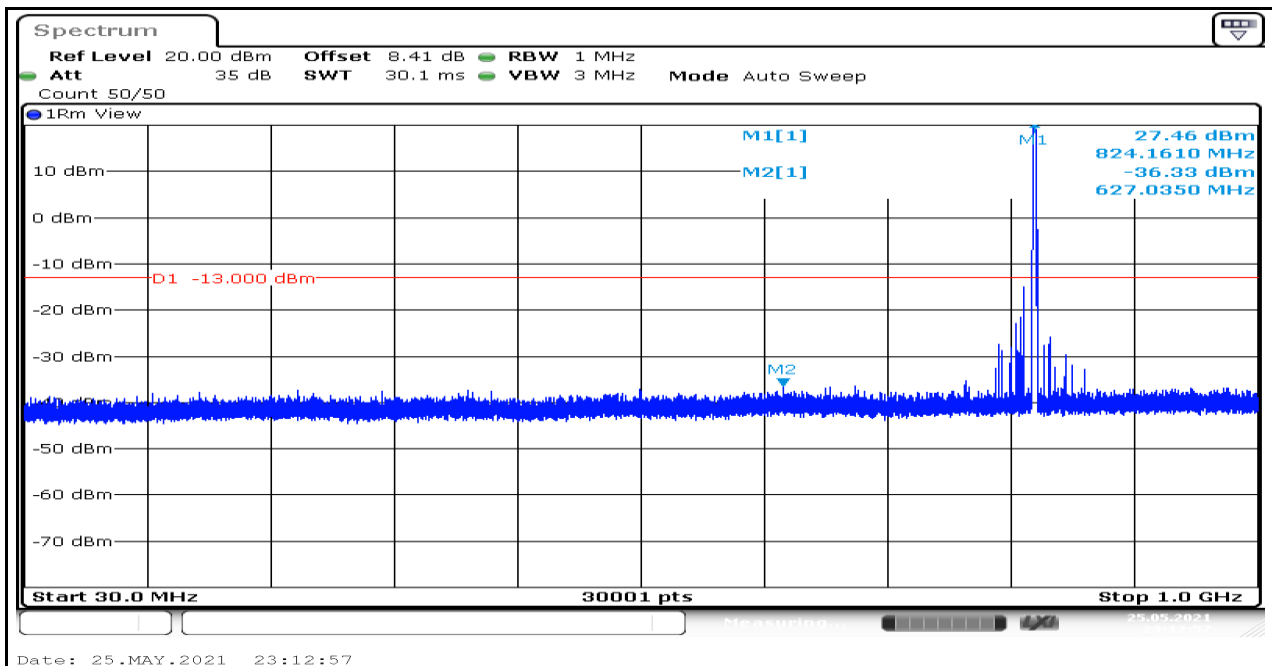
Band5-1.4MHz-QPSK-20643-6-0-Low-5000-12000--54.36-PASS



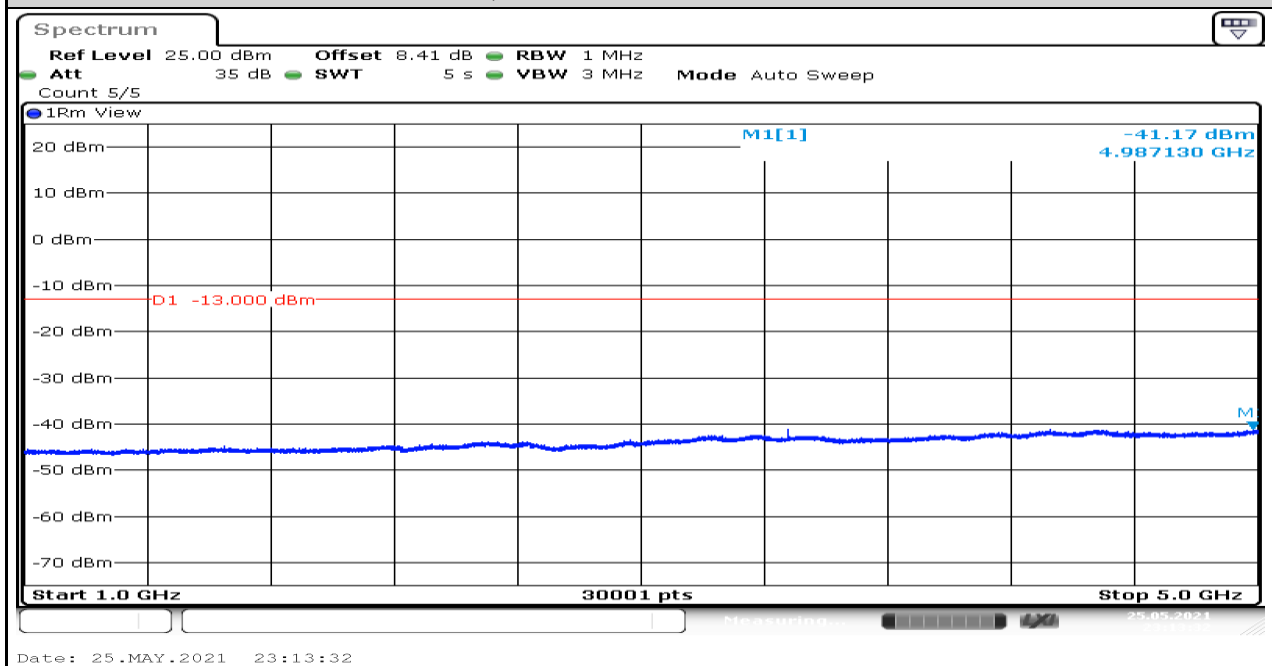
Band5-1.4MHz-QPSK-20643-6-0-Low-12000-26500--50.4-PASS



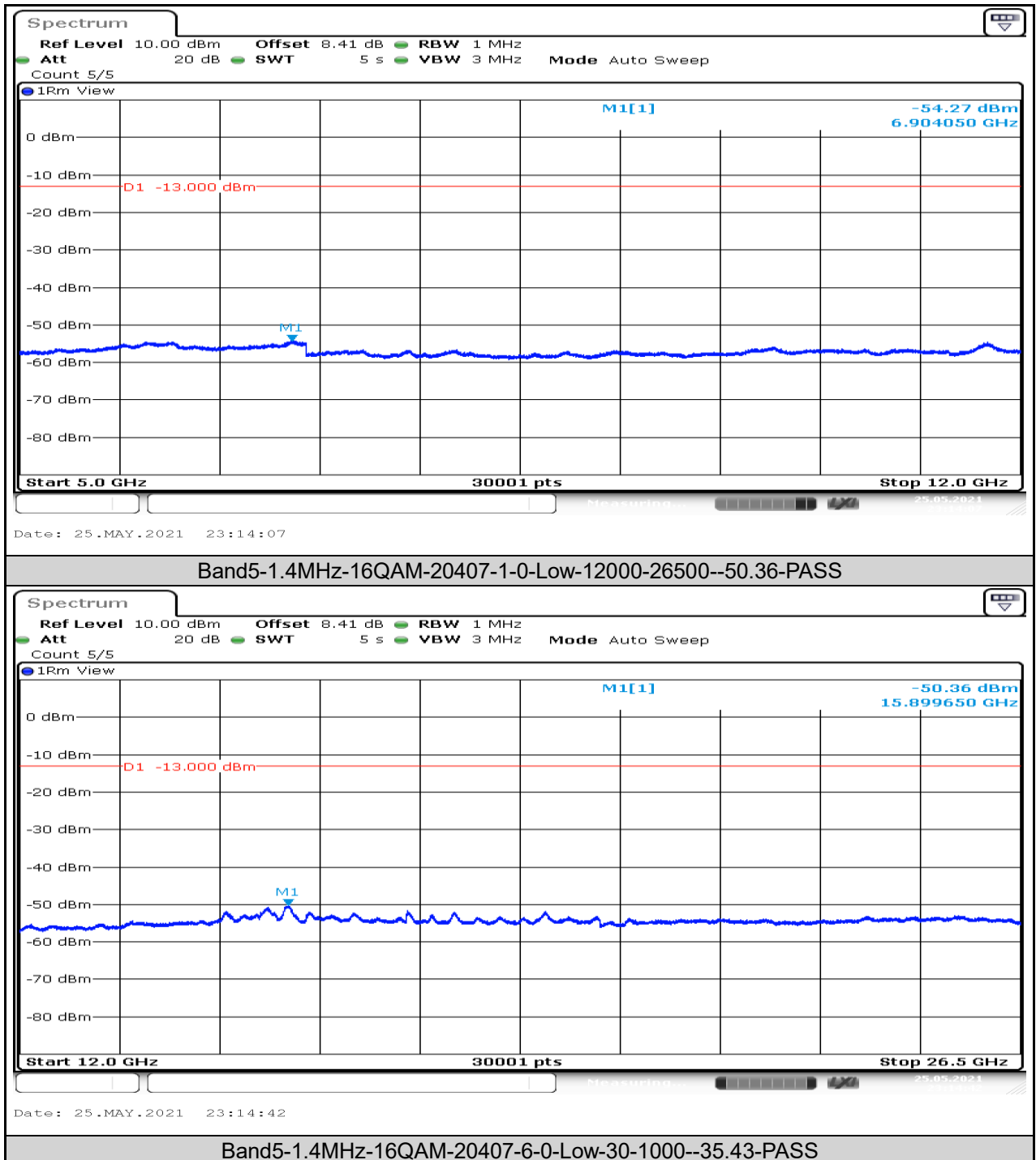
Band5-1.4MHz-16QAM-20407-1-0-Low-30-1000--36.33-PASS

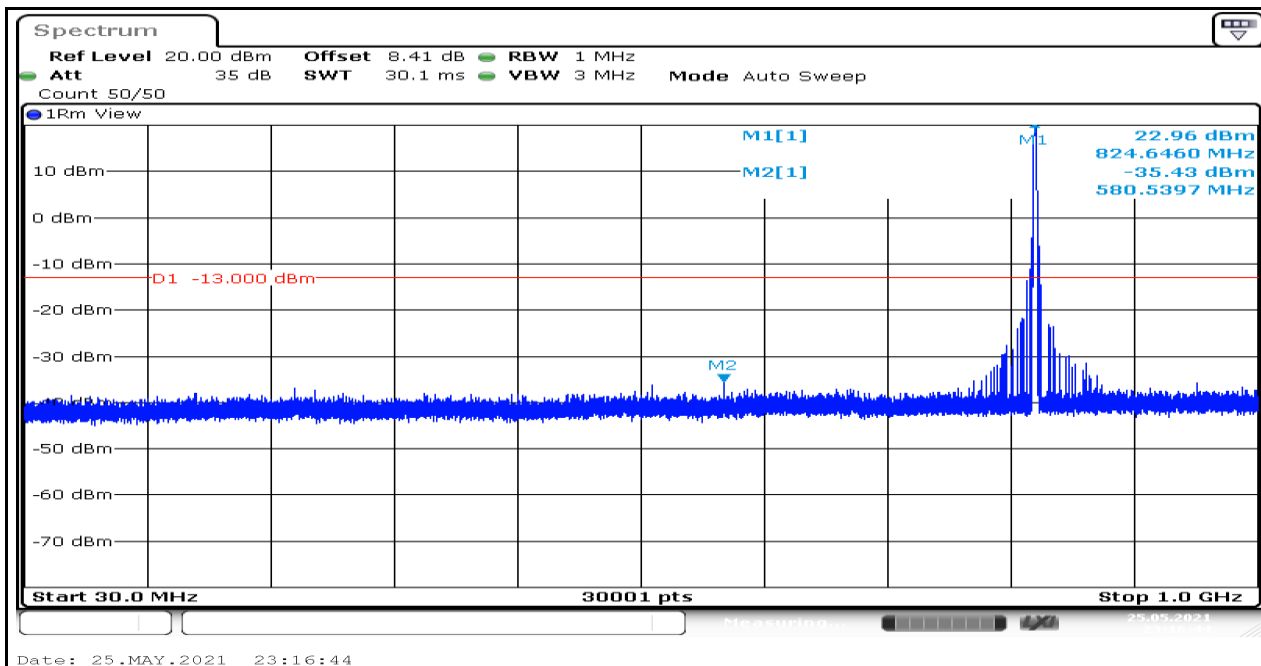


Band5-1.4MHz-16QAM-20407-1-0-Low-1000-5000--41.17-PASS

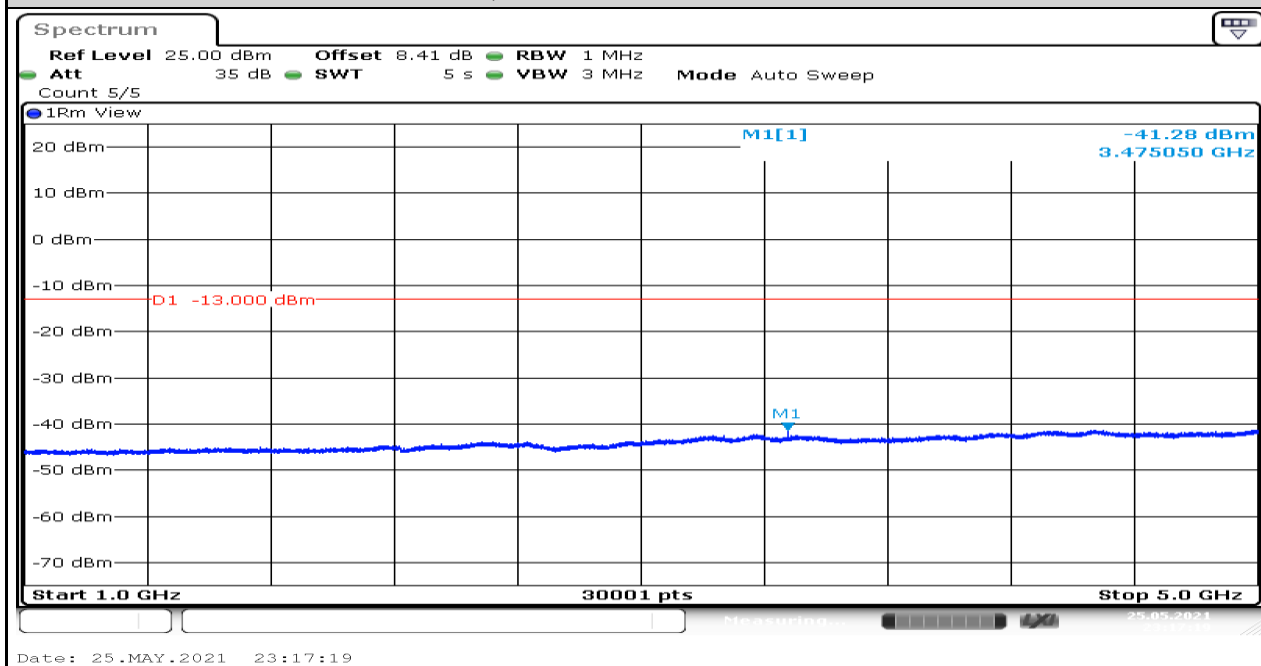


Band5-1.4MHz-16QAM-20407-1-0-Low-5000-12000--54.27-PASS

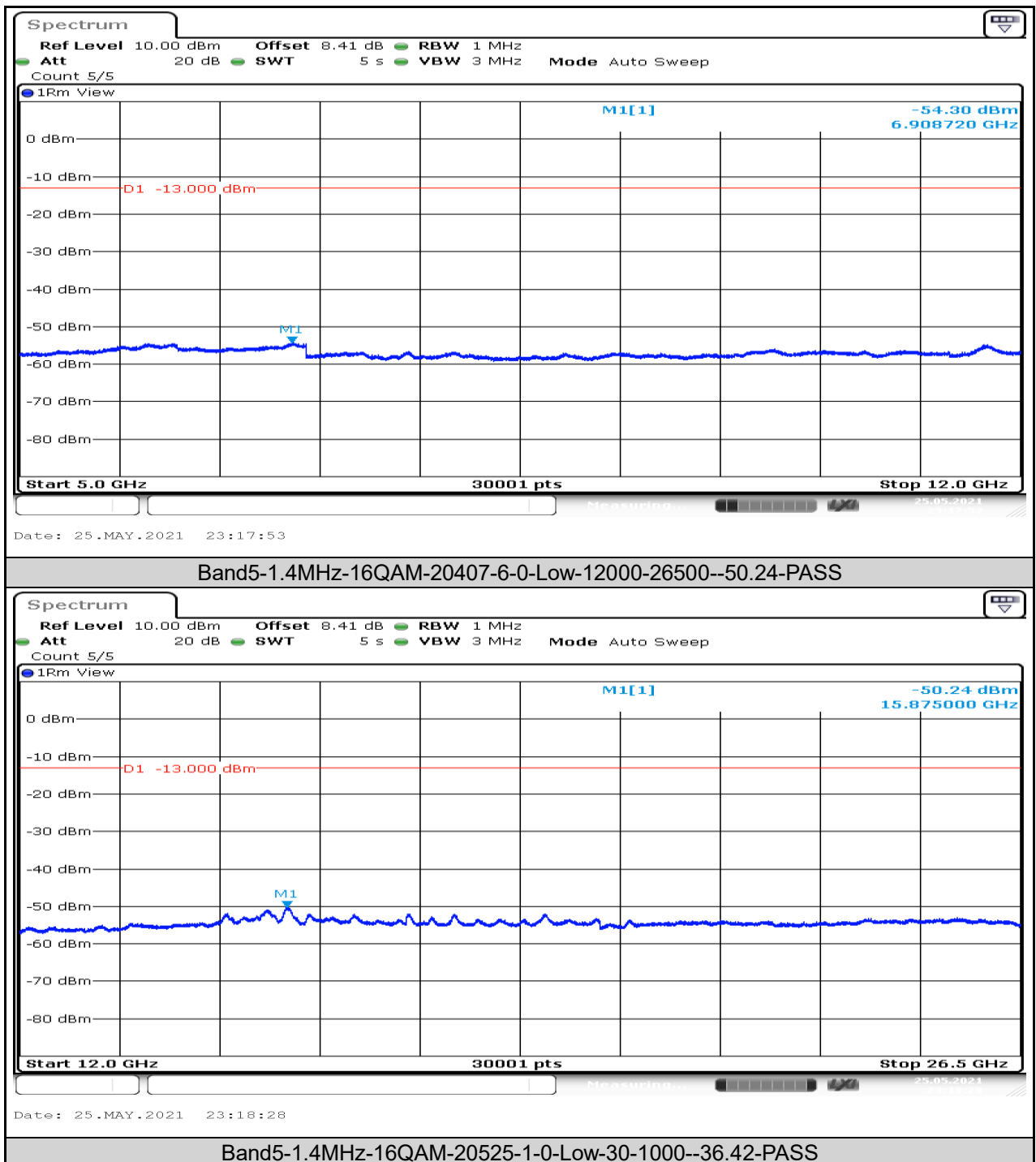


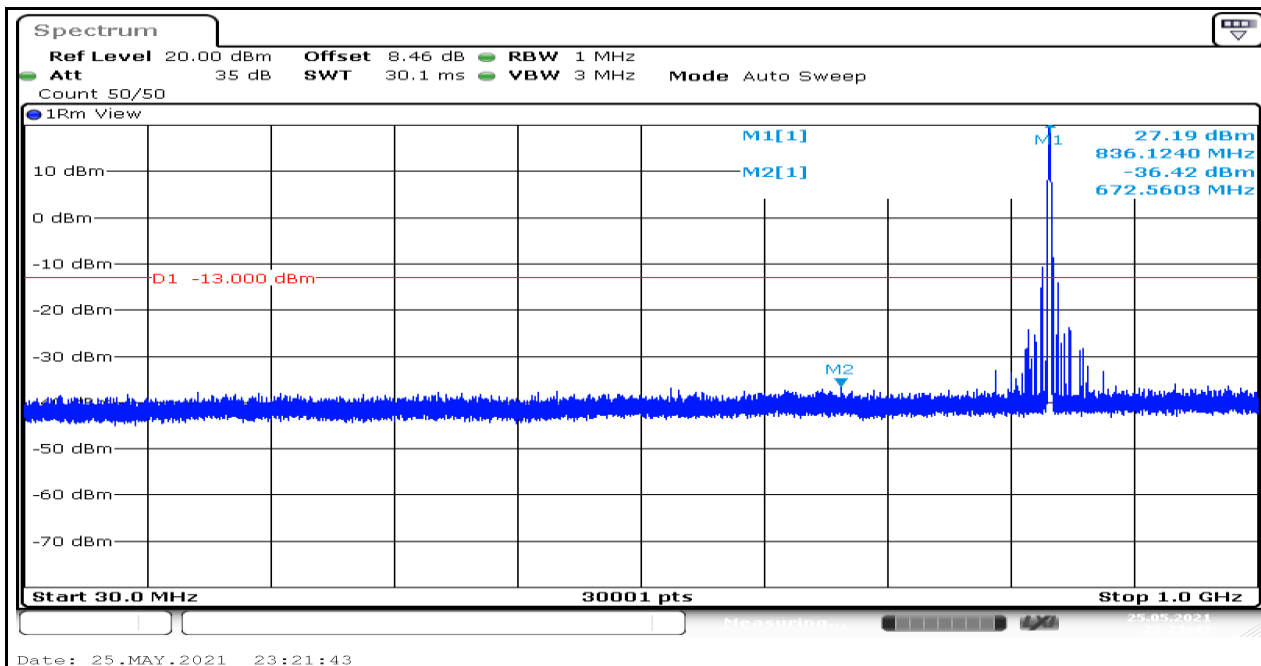


Band5-1.4MHz-16QAM-20407-6-0-Low-1000-5000--41.28-PASS

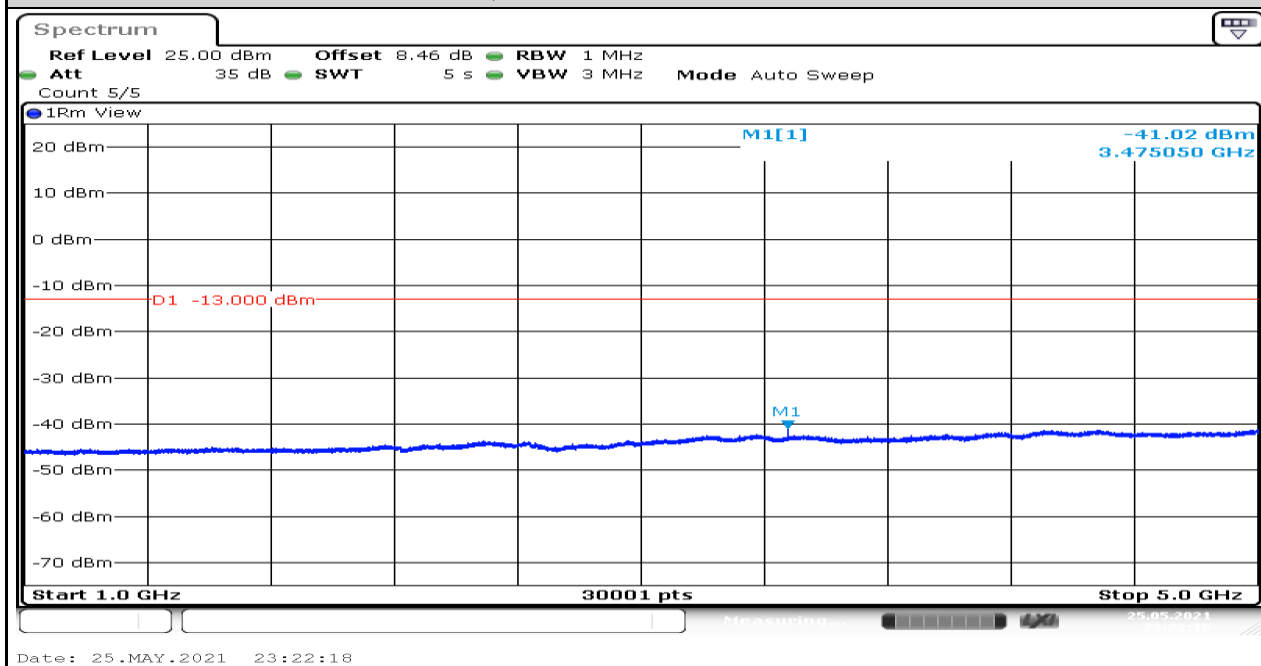


Band5-1.4MHz-16QAM-20407-6-0-Low-5000-12000--54.3-PASS

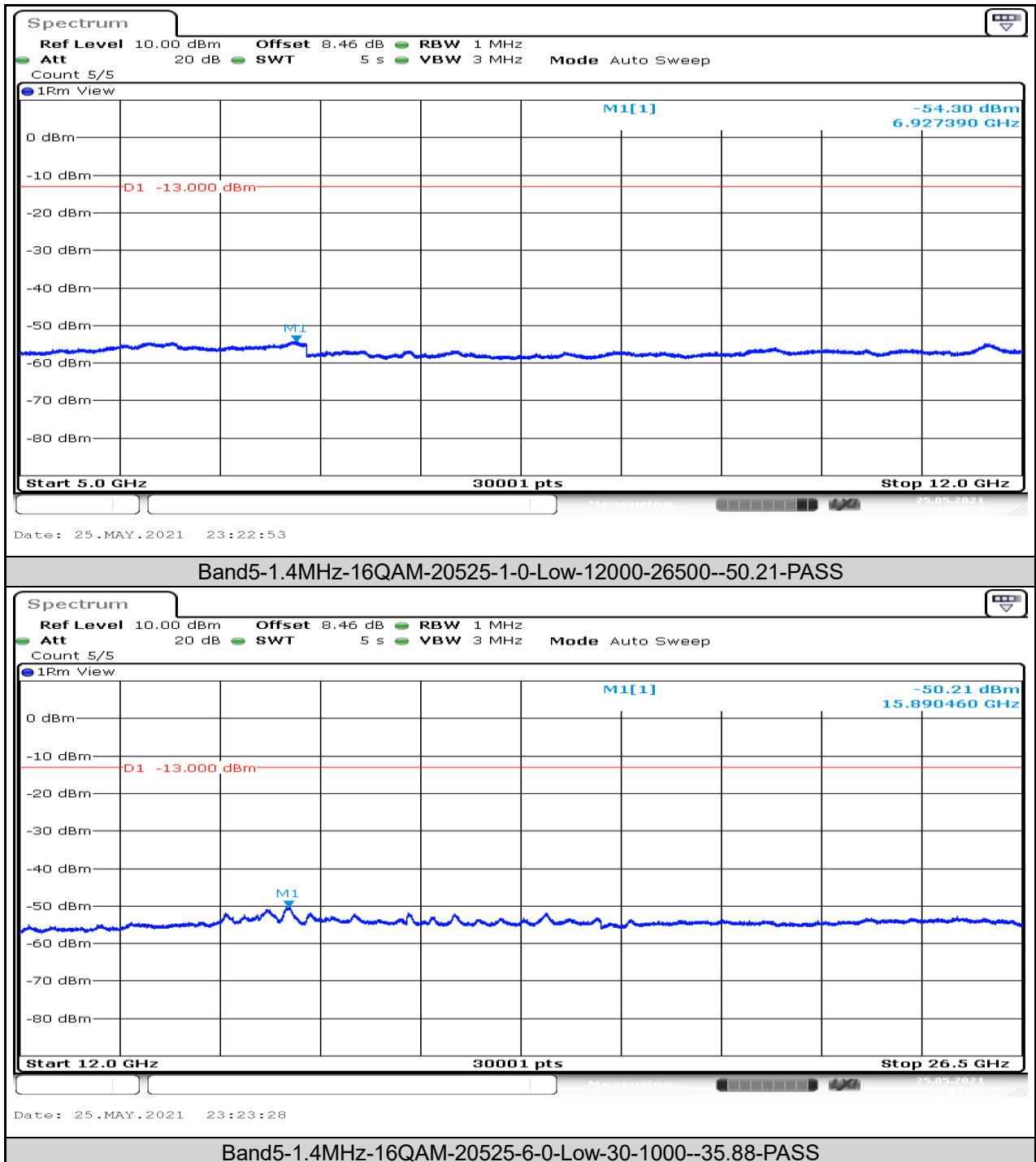


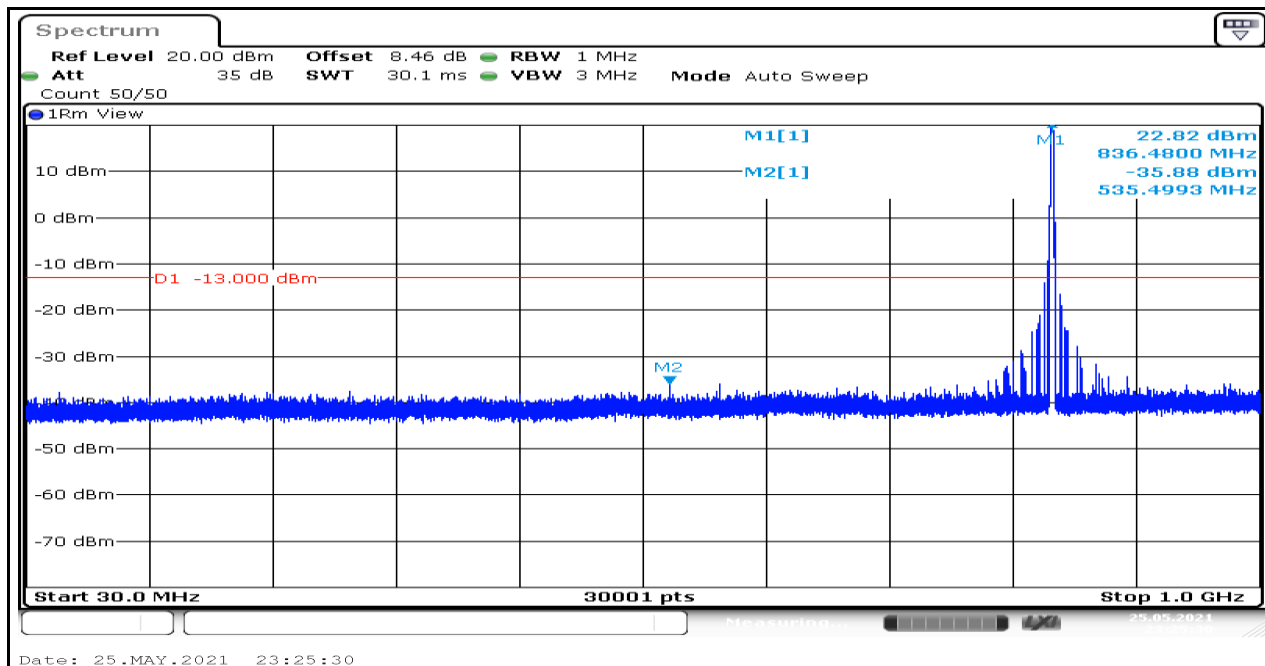


Band5-1.4MHz-16QAM-20525-1-0-Low-1000-5000--41.02-PASS

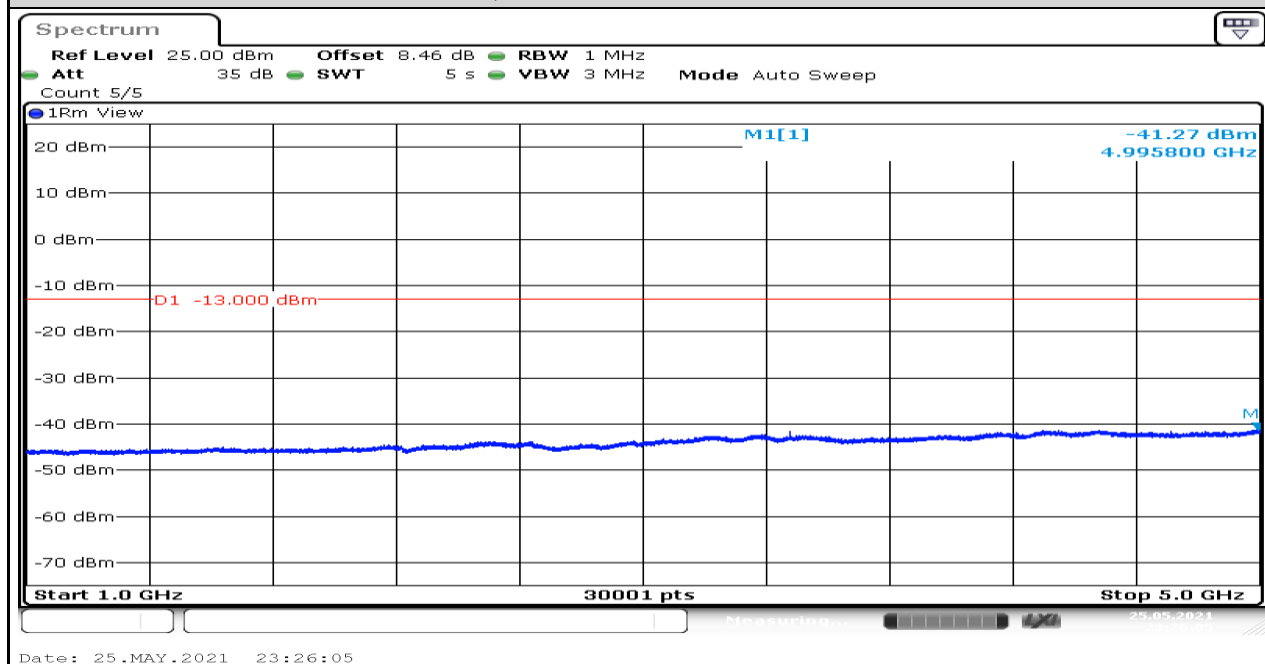


Band5-1.4MHz-16QAM-20525-1-0-Low-5000-12000--54.3-PASS

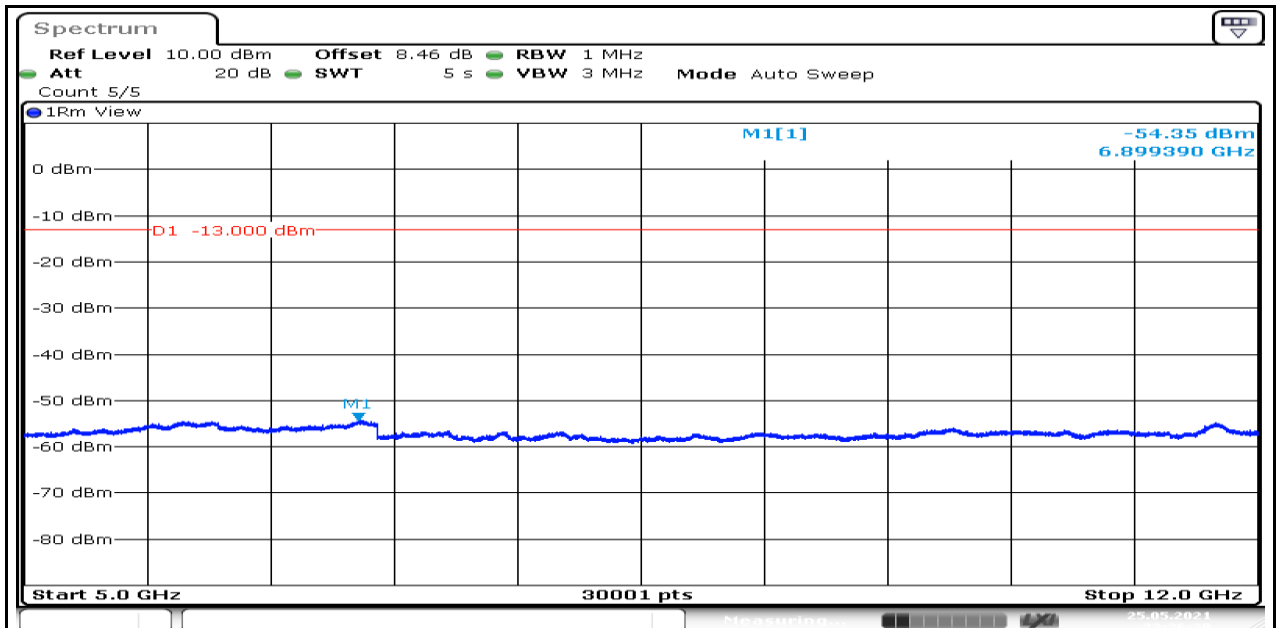




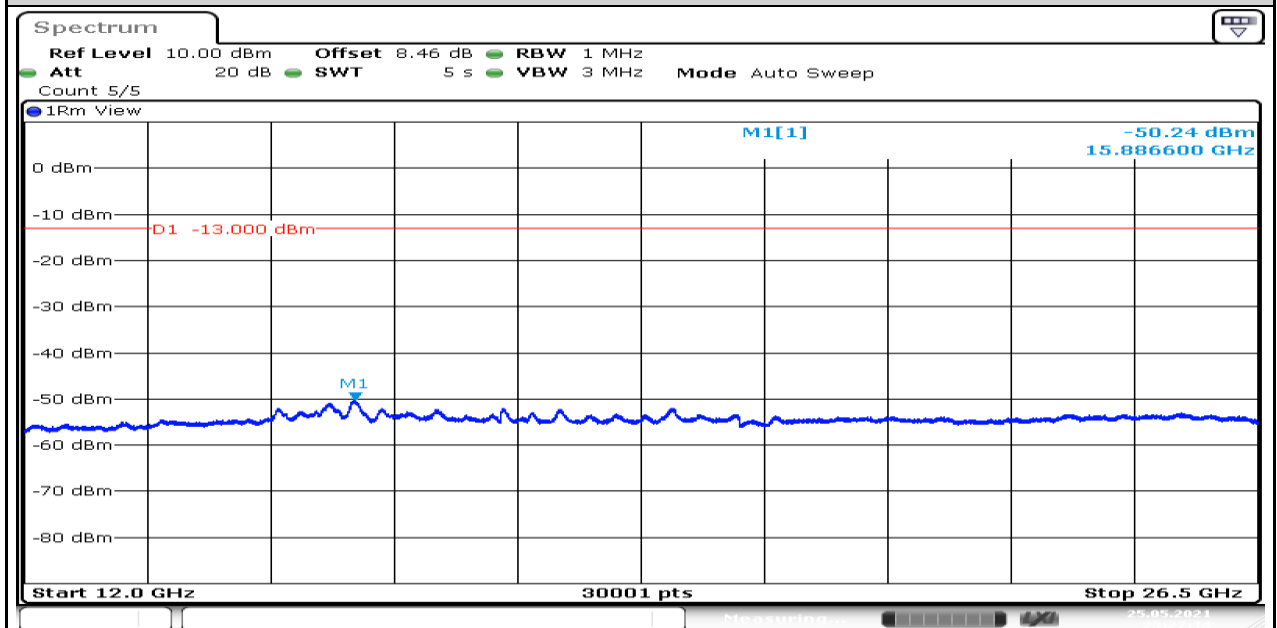
Band5-1.4MHz-16QAM-20525-6-0-Low-1000-5000--41.27-PASS



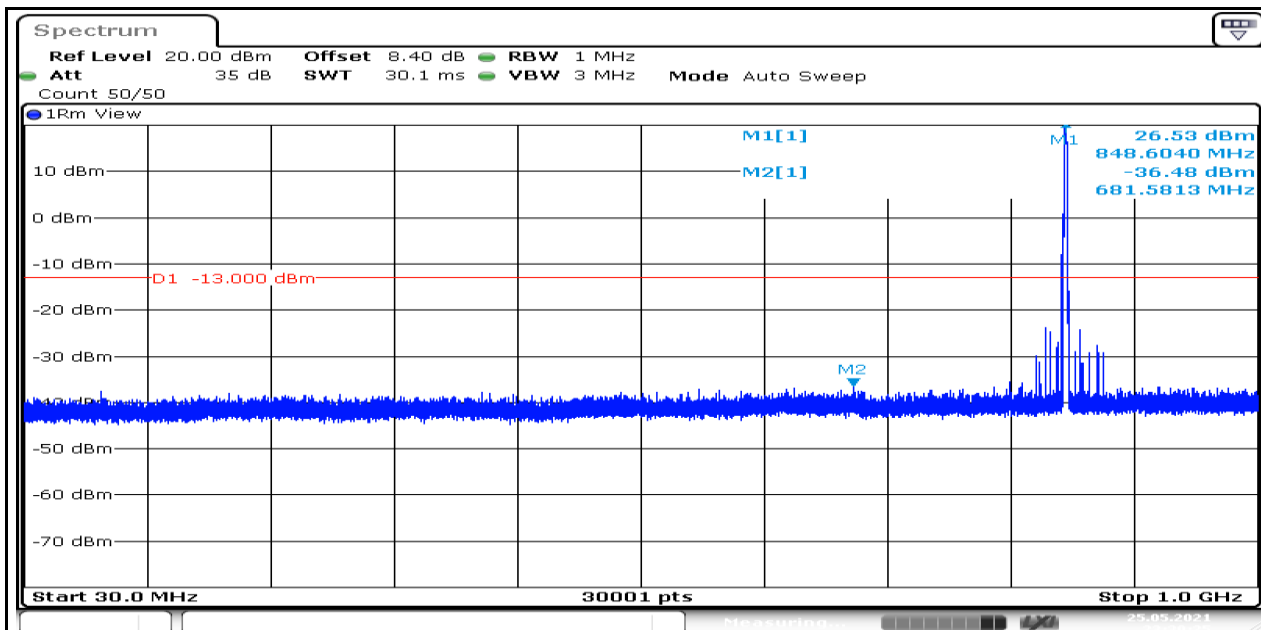
Band5-1.4MHz-16QAM-20525-6-0-Low-5000-12000--54.35-PASS



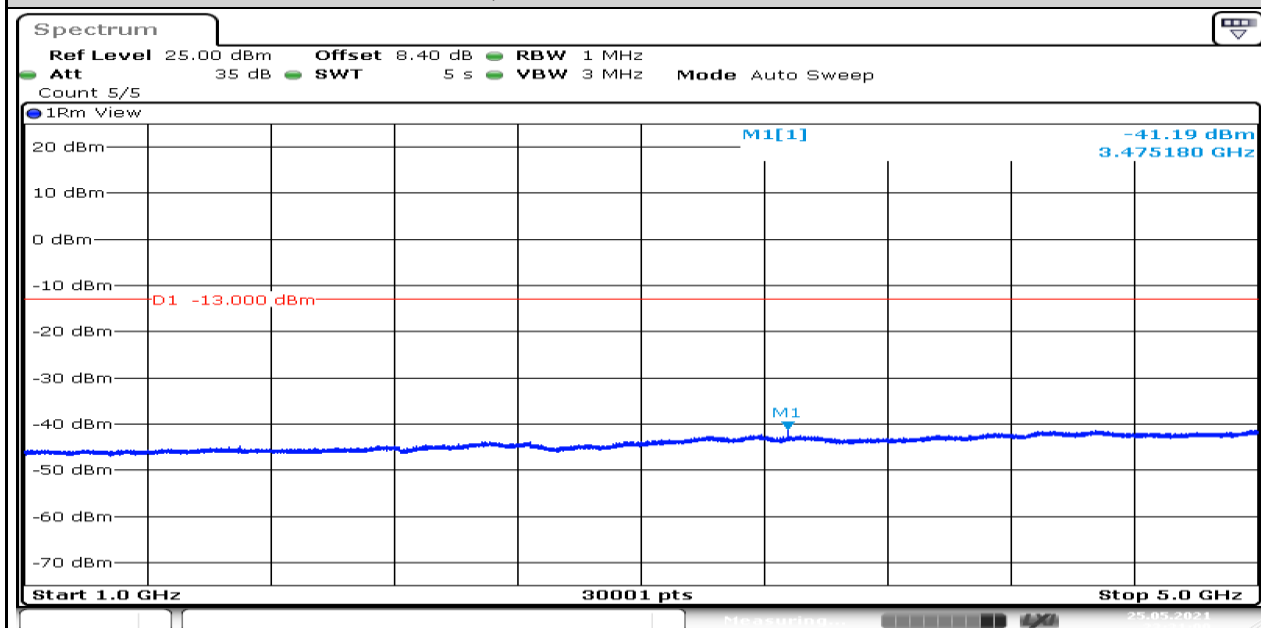
Band5-1.4MHz-16QAM-20525-6-0-Low-12000-26500--50.24-PASS



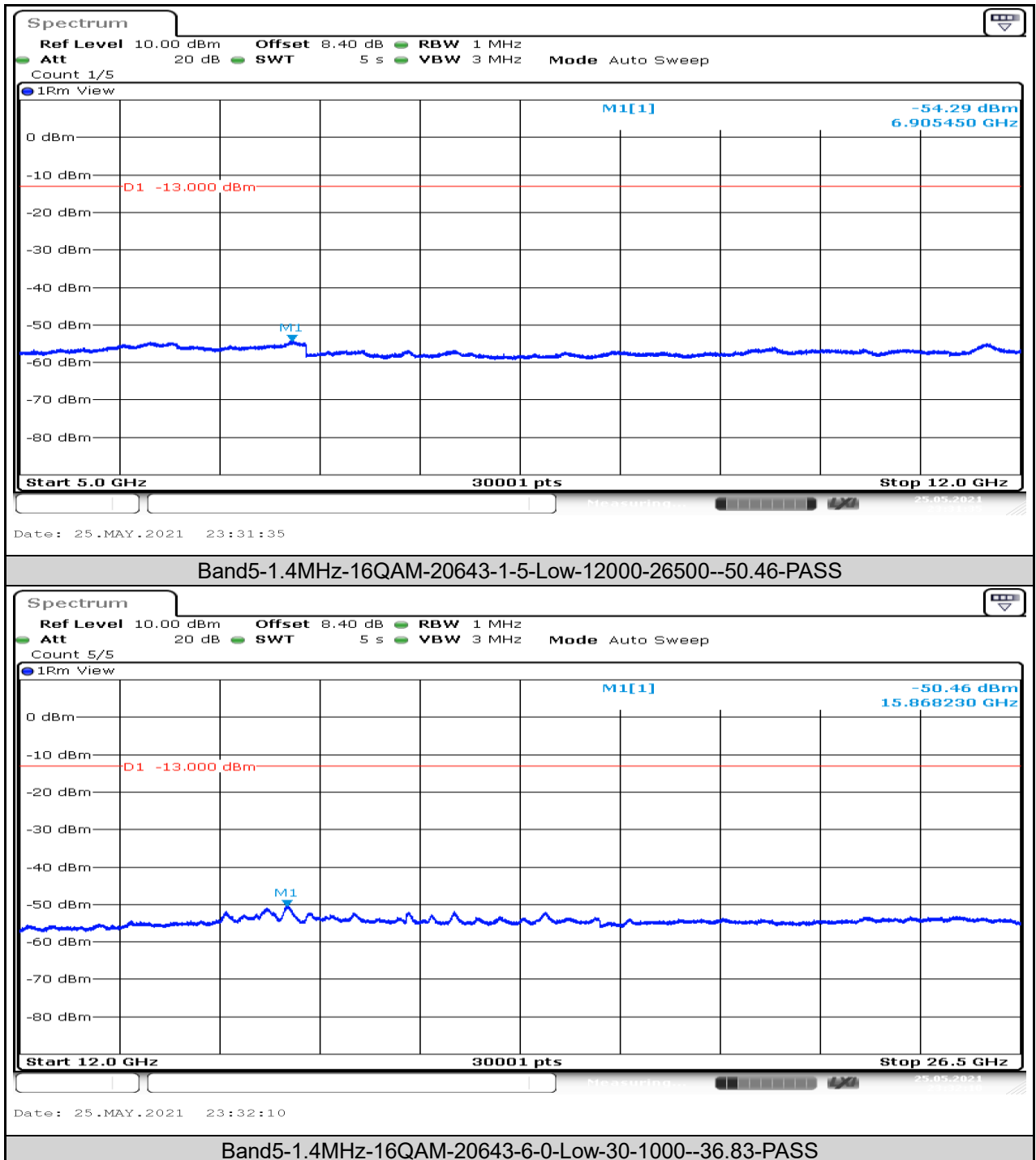
Band5-1.4MHz-16QAM-20643-1-5-Low-30-1000--36.48-PASS

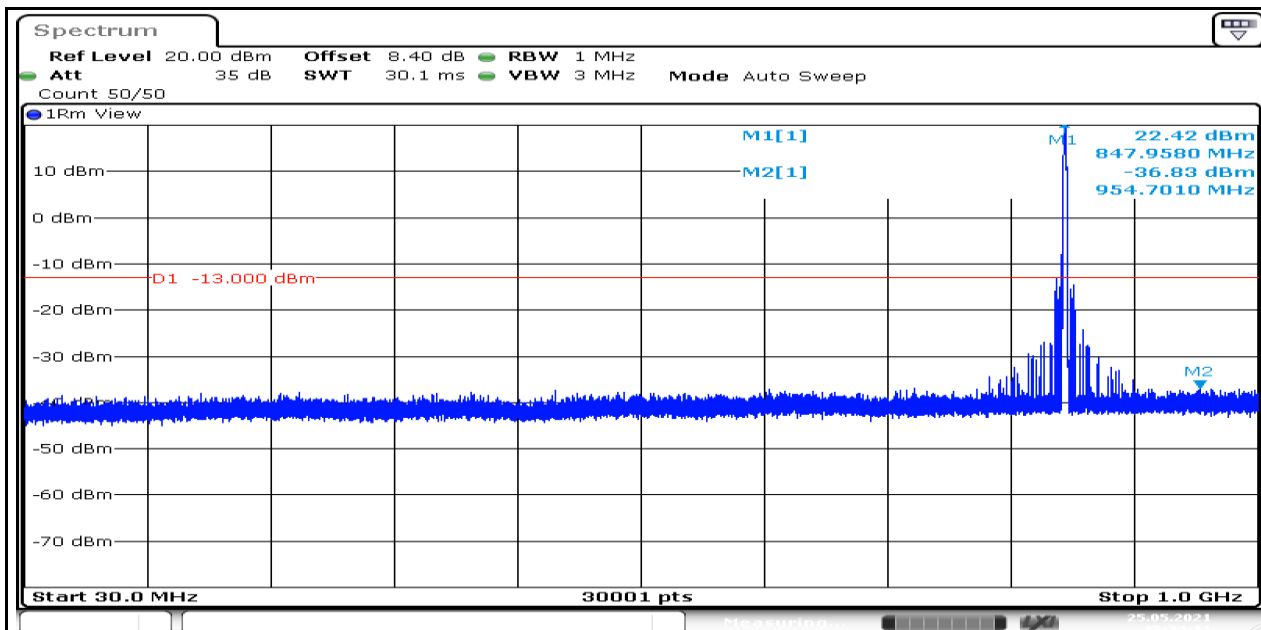


Band5-1.4MHz-16QAM-20643-1-5-Low-1000-5000--41.19-PASS

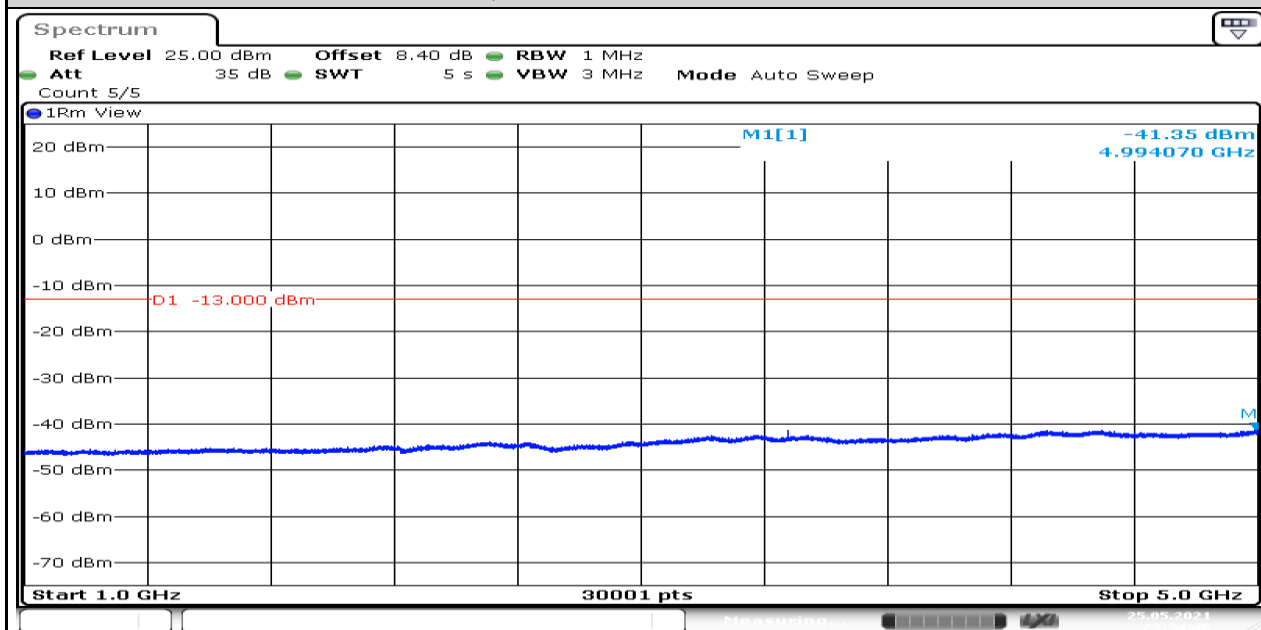


Band5-1.4MHz-16QAM-20643-1-5-Low-5000-12000--54.29-PASS

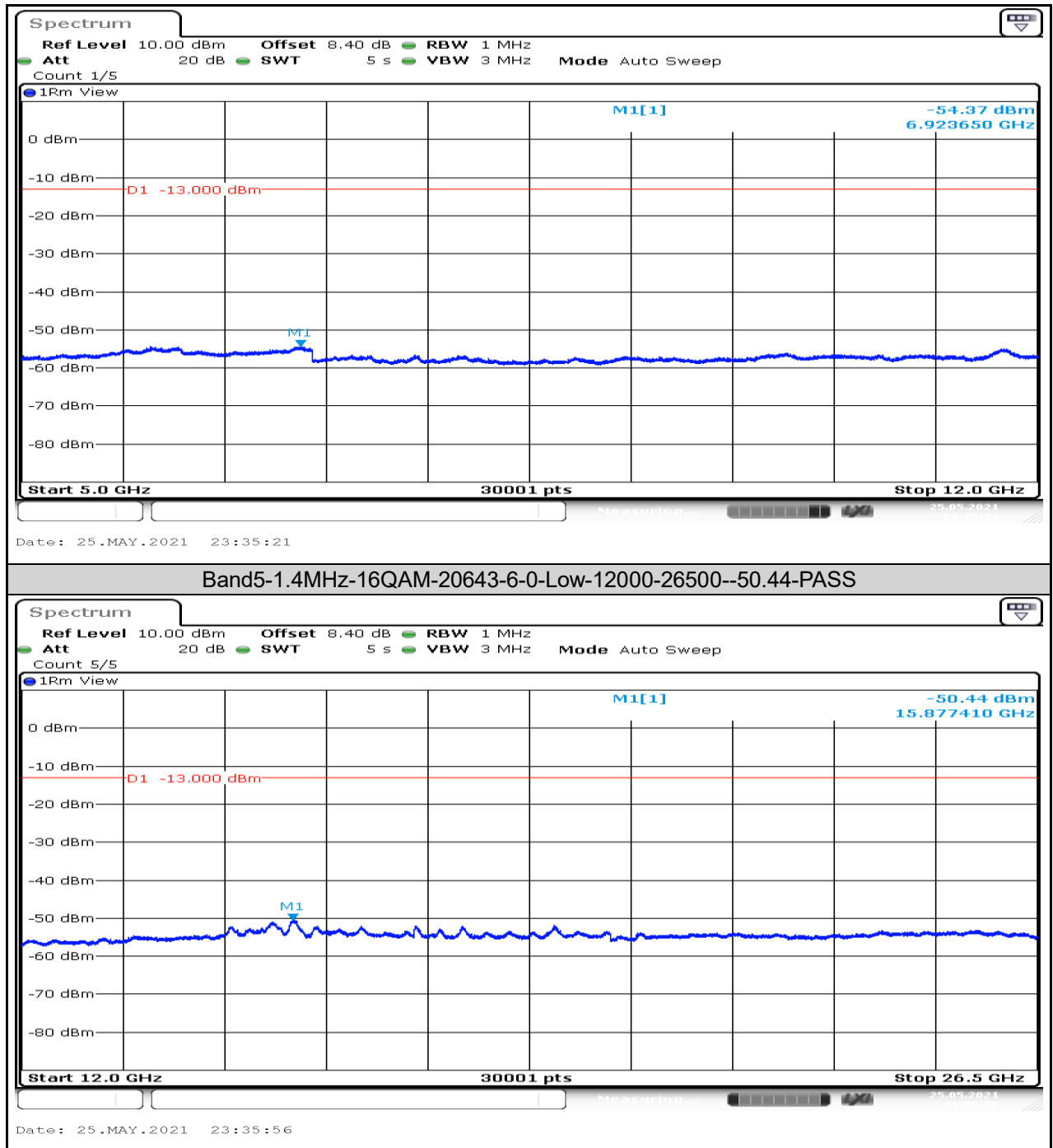




Band5-1.4MHz-16QAM-20643-6-0-Low-1000-5000--41.35-PASS



Band5-1.4MHz-16QAM-20643-6-0-Low-5000-12000--54.37-PASS



## APPENDIX C.6: FREQUENCY STABILITY FOR M1

### Test Result

| Voltage |           |         |            |         |          |       |               |                  |                |                 |             |         |
|---------|-----------|---------|------------|---------|----------|-------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band    | Bandwidth | Channel | Modulation | RB Size | RB Start | Index | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band5   | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | HV            | NT               | -8.83          | -0.010556       | ±2.5        | PASS    |
| Band5   | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | LV            | NT               | -7.72          | -0.009229       | ±2.5        | PASS    |
| Band5   | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | NT               | -8.61          | -0.010293       | ±2.5        | PASS    |
| Band5   | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | HV            | NT               | -8.84          | -0.010568       | ±2.5        | PASS    |
| Band5   | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | LV            | NT               | -9.61          | -0.011488       | ±2.5        | PASS    |
| Band5   | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | NT               | -9.00          | -0.010759       | ±2.5        | PASS    |

| Temperature |           |         |            |         |          |       |               |                  |                |                 |             |         |
|-------------|-----------|---------|------------|---------|----------|-------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band        | Bandwidth | Channel | Modulation | RB Size | RB Start | Index | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 85               | -10.31         | -0.012325       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | -30              | -10.23         | -0.012230       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | -20              | -9.13          | -0.010915       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | -10              | -10.57         | -0.012636       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 0                | -9.81          | -0.011727       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 10               | -10.91         | -0.013042       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 20               | -9.08          | -0.010855       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 30               | -8.51          | -0.010173       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 40               | -8.38          | -0.010018       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 50               | -8.91          | -0.010652       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 60               | -10.64         | -0.012720       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 70               | -9.26          | -0.011070       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | -40              | -8.65          | -0.010341       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | QPSK       | 1       | 0        | Low   | NV            | 80               | -9.03          | -0.010795       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 85               | -7.84          | -0.009372       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | -30              | -7.97          | -0.009528       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | -20              | -9.00          | -0.010759       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | -10              | -9.13          | -0.010915       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 0                | -10.46         | -0.012504       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 10               | -10.59         | -0.012660       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 20               | -10.27         | -0.012277       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 30               | -10.29         | -0.012301       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 40               | -10.64         | -0.012720       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 50               | -9.66          | -0.011548       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 60               | -9.40          | -0.011237       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 70               | -8.70          | -0.010400       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | 80               | -9.07          | -0.010843       | ±2.5        | PASS    |
| Band5       | 1.4MHz    | 20525   | 16QAM      | 1       | 0        | Low   | NV            | -40              | -9.77          | -0.011680       | ±2.5        | PASS    |