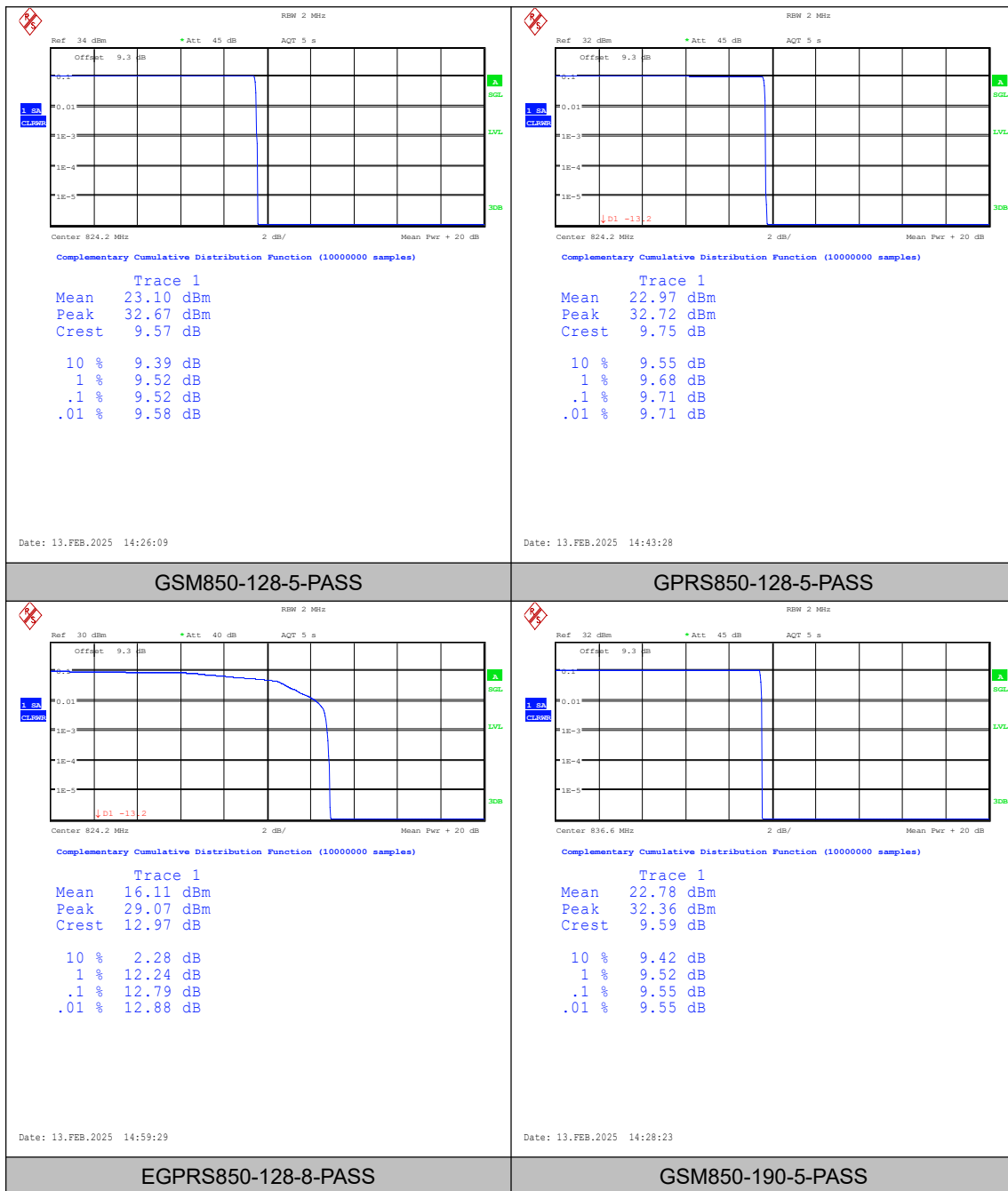


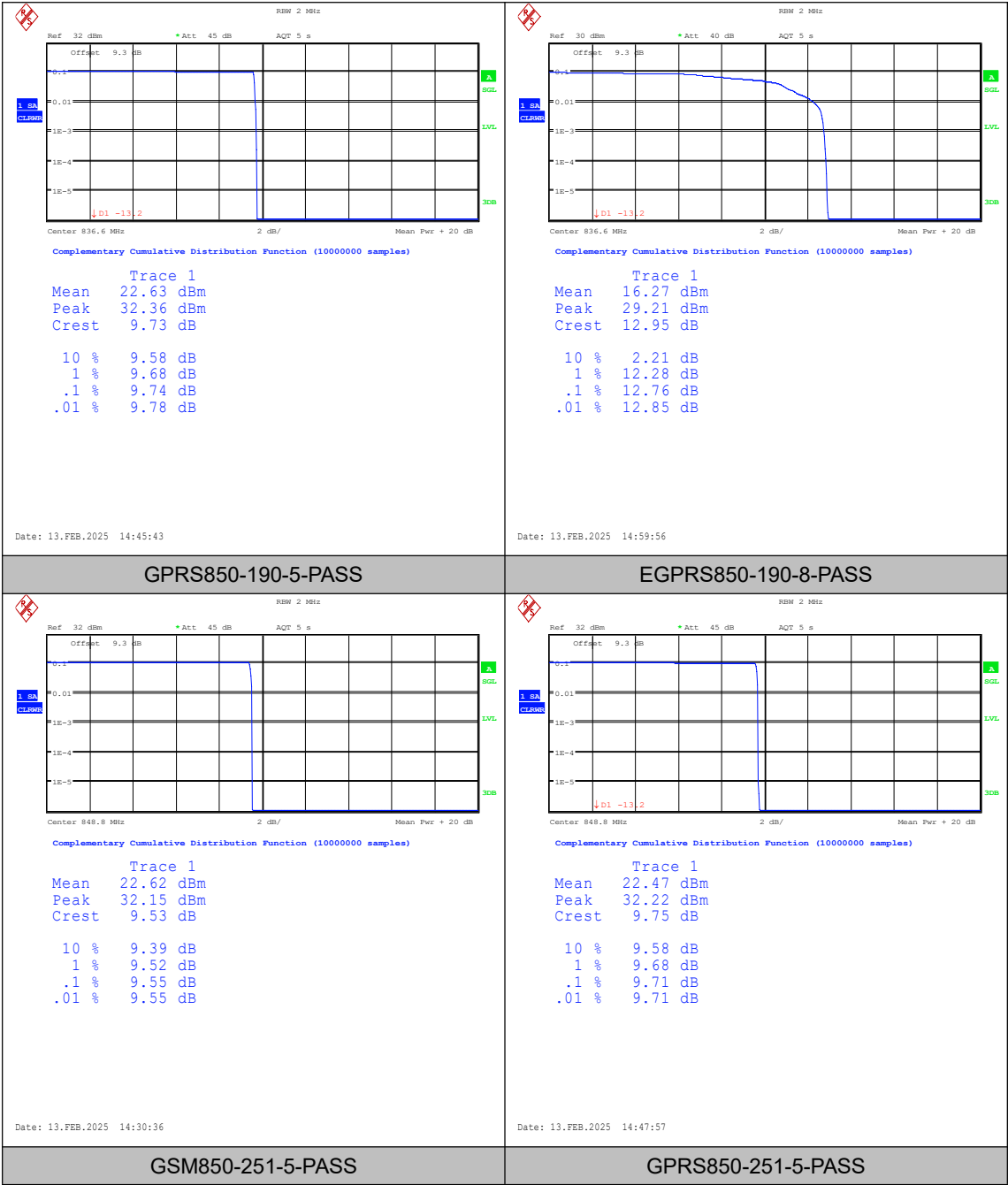
## Appendix A : Peak-to-Average Ratio(CCDF)

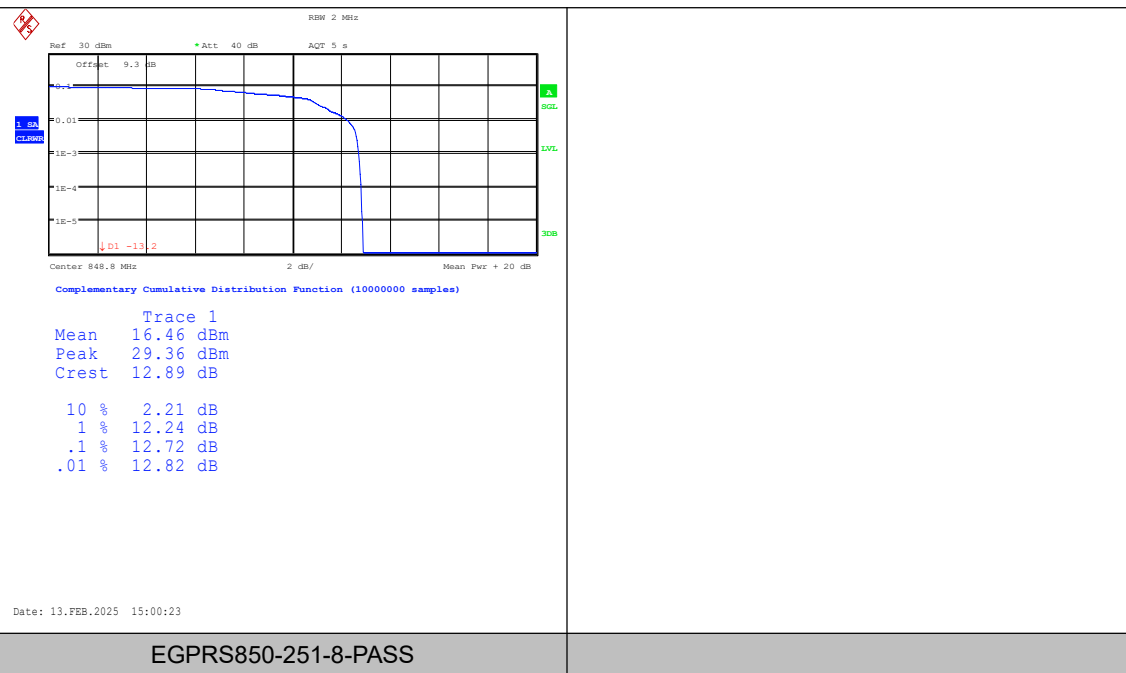
### Test Result

| Band     | Channel | Result(dB) | Limit(dB) | Verdict |
|----------|---------|------------|-----------|---------|
| GSM850   | 128     | 9.52       | 13        | PASS    |
| GPRS850  | 128     | 9.71       | 13        | PASS    |
| EGPRS850 | 128     | 12.79      | 13        | PASS    |
| GSM850   | 190     | 9.55       | 13        | PASS    |
| GPRS850  | 190     | 9.74       | 13        | PASS    |
| EGPRS850 | 190     | 12.76      | 13        | PASS    |
| GSM850   | 251     | 9.55       | 13        | PASS    |
| GPRS850  | 251     | 9.71       | 13        | PASS    |
| EGPRS850 | 251     | 12.72      | 13        | PASS    |

# Test Graphs





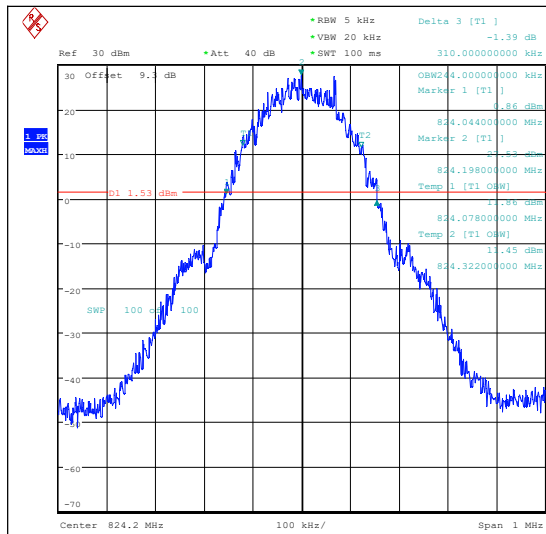


## Appendix B : 26dB Bandwidth and Occupied Bandwidth

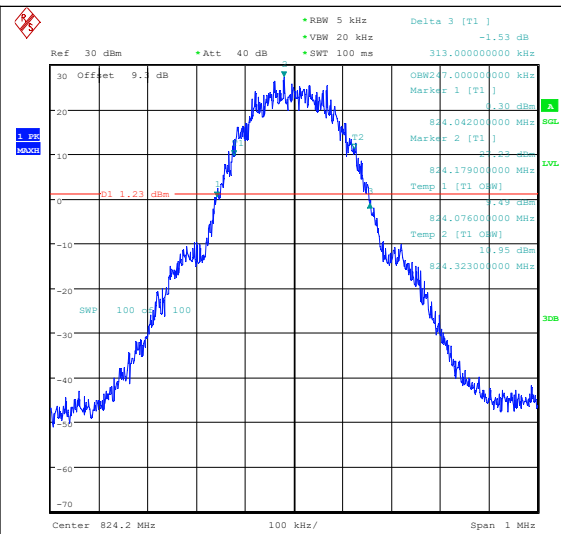
### Test Result

| Band     | Channel | Occupied<br>Bandwidth (MHz) | 26dB Bandwidth<br>(MHz) | Limit<br>(MHz) | Verdict |
|----------|---------|-----------------------------|-------------------------|----------------|---------|
| GSM850   | 128     | 0.244                       | 0.31                    | ---            | PASS    |
| GPRS850  | 128     | 0.247                       | 0.31                    | ---            | PASS    |
| EGPRS850 | 128     | 0.248                       | 0.30                    | ---            | PASS    |
| GSM850   | 190     | 0.246                       | 0.31                    | ---            | PASS    |
| GPRS850  | 190     | 0.246                       | 0.32                    | ---            | PASS    |
| EGPRS850 | 190     | 0.246                       | 0.30                    | ---            | PASS    |
| GSM850   | 251     | 0.245                       | 0.31                    | ---            | PASS    |
| GPRS850  | 251     | 0.243                       | 0.31                    | ---            | PASS    |
| EGPRS850 | 251     | 0.245                       | 0.32                    | ---            | PASS    |

## Test Graphs

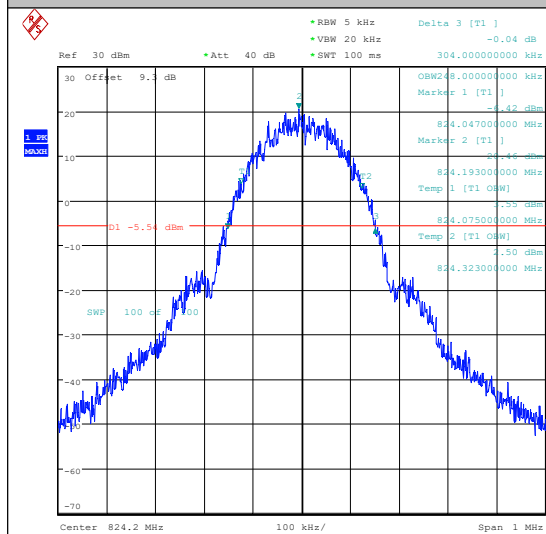


Date: 13.FEB.2025 14:33:12



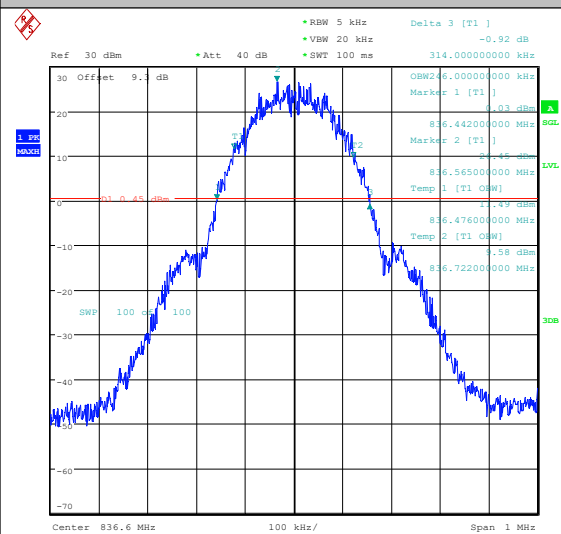
Date: 13.FEB.2025 14:50:38

## GSM850-128-5-PASS



Date: 13.FEB.2025 15:03:03

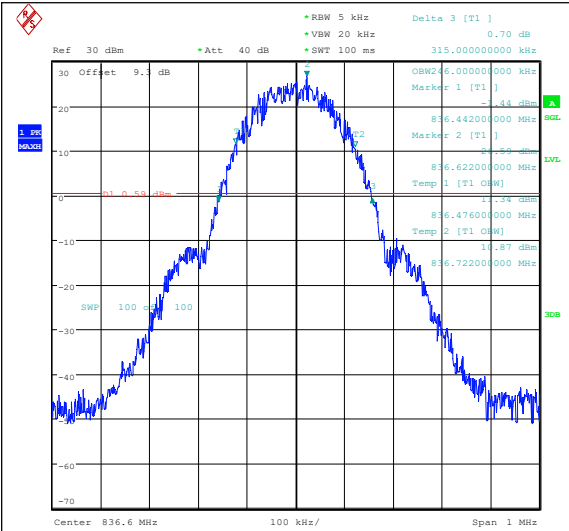
GPRS850-128-5-PASS



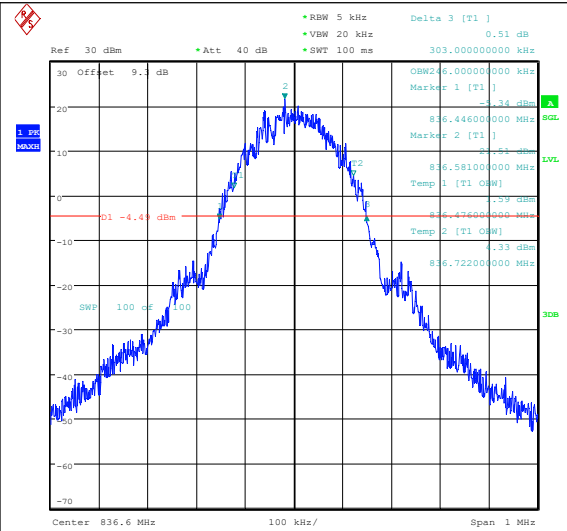
Date: 13.FEB.2025 14:33:31

## EGPRS850-128-8-PASS

GSM850-190-5-PASS

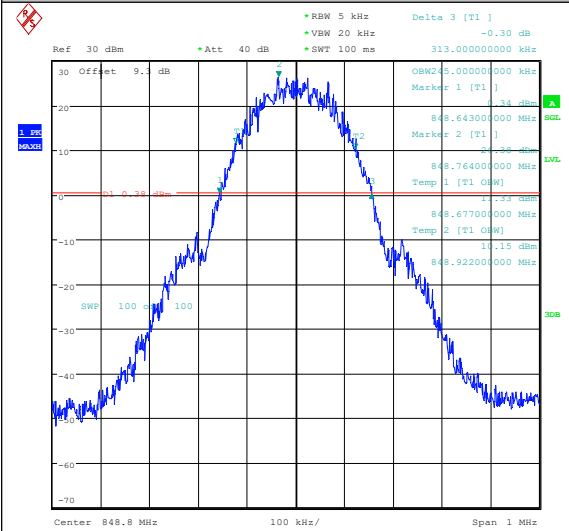


Date: 13.FEB.2025 14:50:58



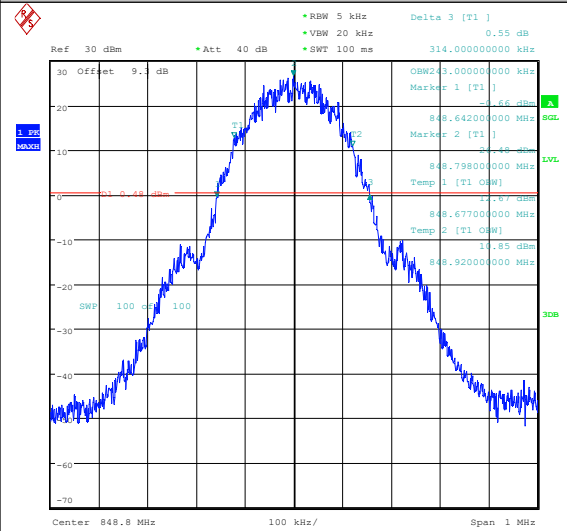
Date: 13.FEB.2025 15:03:23

### GPRS850-190-5-PASS



Date: 13.FEB.2025 14:33:49

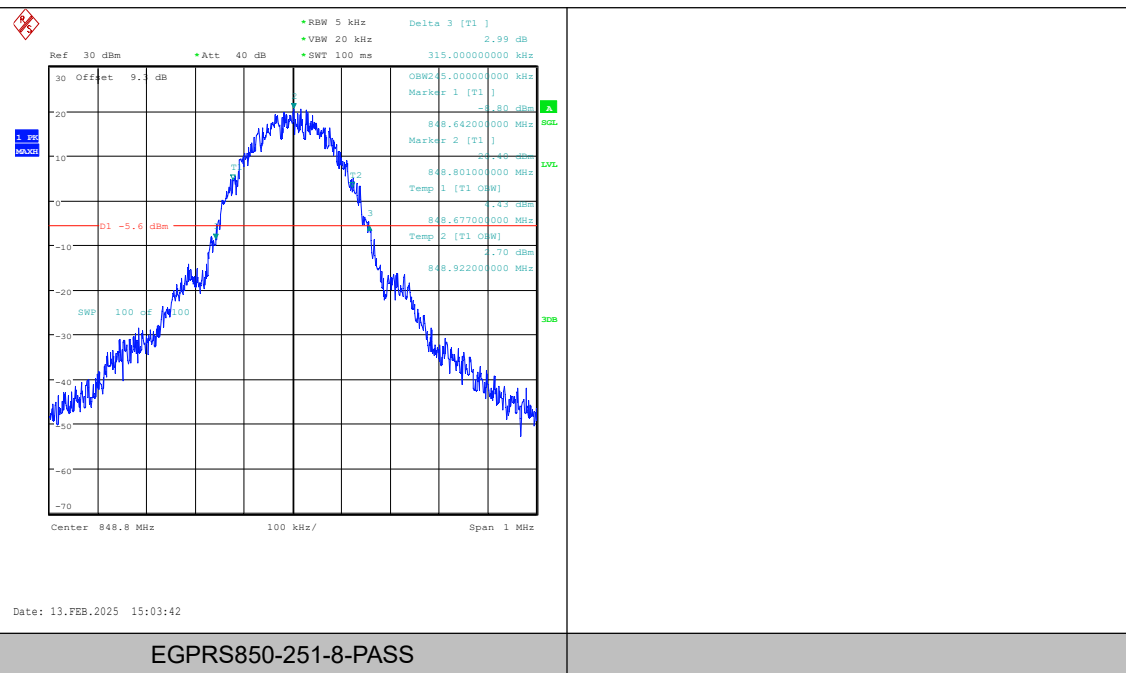
### EGPRS850-190-8-PASS



Date: 13.FEB.2025 14:51:17

### GSM850-251-5-PASS

### GPRS850-251-5-PASS





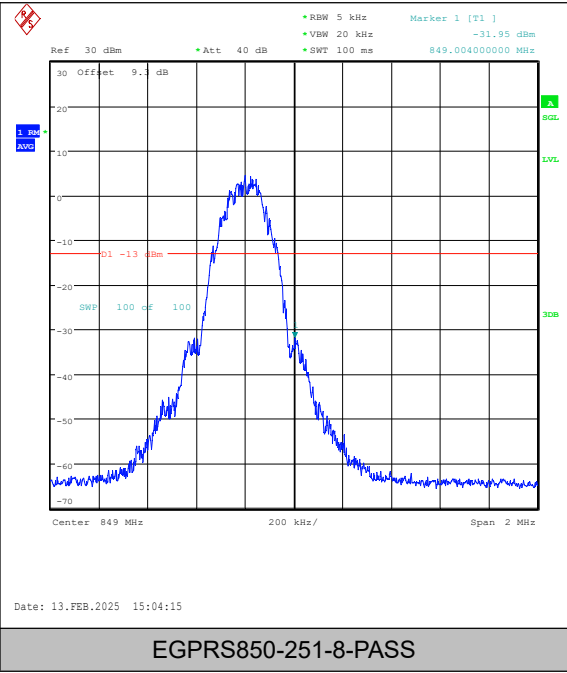
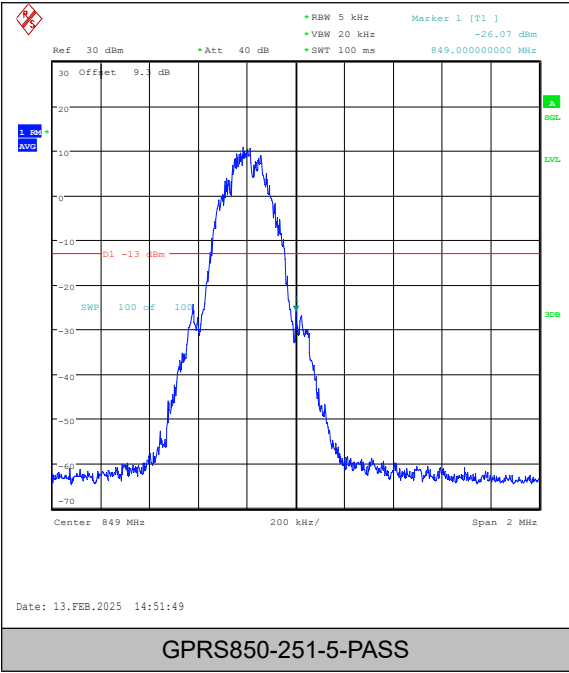
## Appendix C : Band Edge

### Test Result

| Band     | Channel | Freq (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|----------|---------|------------|--------------|------------|---------|
| GSM850   | 128     | 823.98     | -24.72       | -13        | PASS    |
| GPRS850  | 128     | 823.99     | -25.31       | -13        | PASS    |
| EGPRS850 | 128     | 823.99     | -32.35       | -13        | PASS    |
| GSM850   | 251     | 849.01     | -25.28       | -13        | PASS    |
| GPRS850  | 251     | 849.00     | -26.07       | -13        | PASS    |
| EGPRS850 | 251     | 849.00     | -31.95       | -13        | PASS    |

The figure displays four spectral plots arranged in a 2x2 grid, each showing a different signal profile. Each plot includes a blue signal trace, a red reference line at -13 dBm, and various parameters.

- Top Left Plot (GSM850-128-5-PASS):** The signal trace shows a peak at approximately 823.978 MHz. The parameters are: Ref 30 dBm, Att 40 dB, RBW 5 kHz, VBW 20 kHz, SWT 100 ms. The date and time are 13.FEB.2025 14:34:07.
- Top Right Plot (GPRS850-128-5-PASS):** The signal trace shows a peak at approximately 823.994 MHz. The parameters are: Ref 30 dBm, Att 40 dB, RBW 5 kHz, VBW 20 kHz, SWT 100 ms. The date and time are 13.FEB.2025 14:51:35.
- Bottom Left Plot (EGPRS850-128-8-PASS):** The signal trace shows a peak at approximately 823.992 MHz. The parameters are: Ref 30 dBm, Att 40 dB, RBW 5 kHz, VBW 20 kHz, SWT 100 ms. The date and time are 13.FEB.2025 15:04:00.
- Bottom Right Plot (GSM850-251-5-PASS):** The signal trace shows a peak at approximately 849.014 MHz. The parameters are: Ref 30 dBm, Att 40 dB, RBW 5 kHz, VBW 20 kHz, SWT 100 ms. The date and time are 13.FEB.2025 14:34:20.

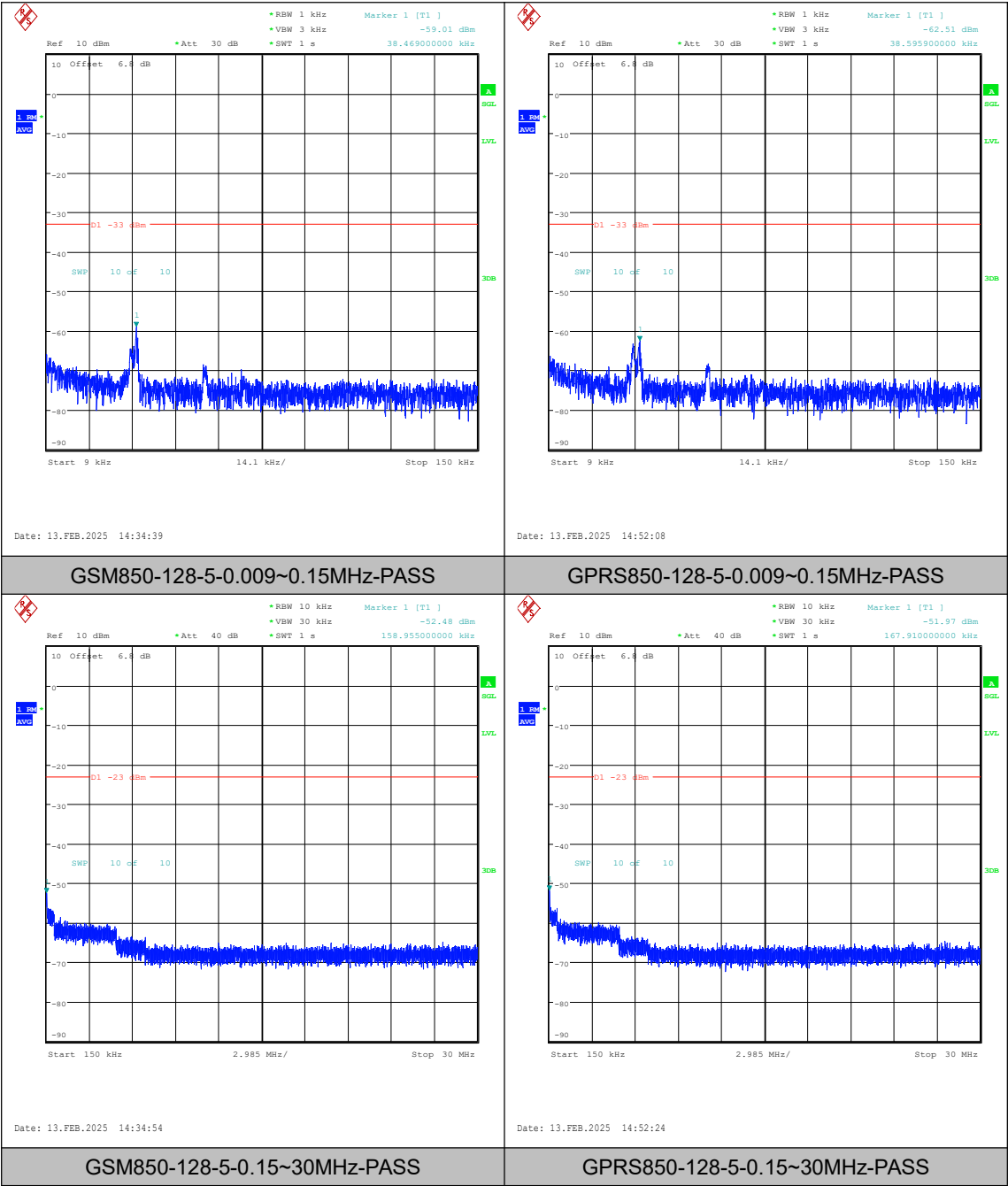


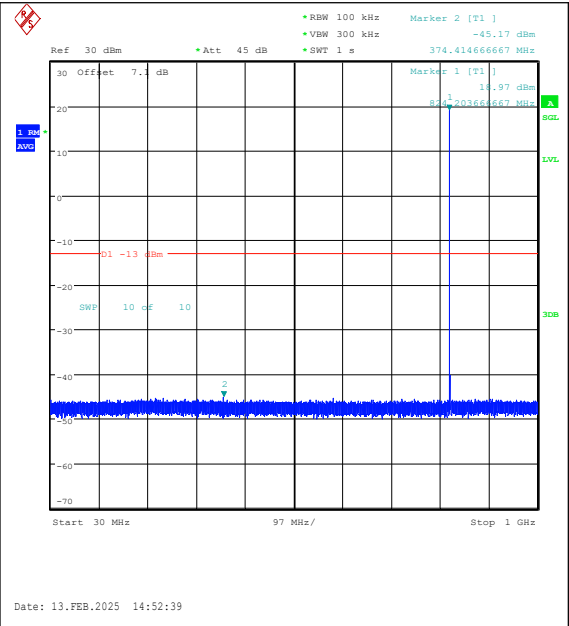
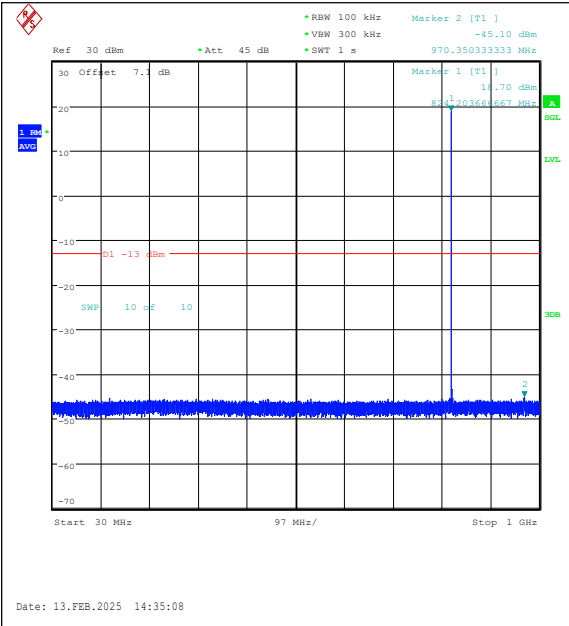
## Appendix D : Conducted Spurious Emission

### Test Result

| Band     | Channel | Frequency Range(MHz) | Max.Freq. (MHz) | Result (dBm) | Limit (dBm) | Verdict |
|----------|---------|----------------------|-----------------|--------------|-------------|---------|
| GSM850   | 128     | 0.009~0.15MHz        | 0.04            | -59.01       | -33         | PASS    |
| GPRS850  | 128     | 0.009~0.15MHz        | 0.04            | -62.51       | -33         | PASS    |
| GSM850   | 128     | 0.15~30MHz           | 0.16            | -52.48       | -23         | PASS    |
| GPRS850  | 128     | 0.15~30MHz           | 0.17            | -51.97       | -23         | PASS    |
| GSM850   | 128     | 30~1000MHz           | 970.35          | -45.1        | -13         | PASS    |
| GPRS850  | 128     | 30~1000MHz           | 374.41          | -45.17       | -13         | PASS    |
| GSM850   | 128     | 1000~10000MHz        | 1648.3          | -31.59       | -13         | PASS    |
| GPRS850  | 128     | 1000~10000MHz        | 1648.3          | -30.11       | -13         | PASS    |
| EGPRS850 | 128     | 0.009~0.15MHz        | 0.04            | -62.86       | -33         | PASS    |
| EGPRS850 | 128     | 0.15~30MHz           | 0.18            | -52.78       | -23         | PASS    |
| EGPRS850 | 128     | 30~1000MHz           | 961.01          | -45.31       | -13         | PASS    |
| EGPRS850 | 128     | 1000~10000MHz        | 3175            | -44.19       | -13         | PASS    |
| GSM850   | 190     | 0.009~0.15MHz        | 0.04            | -60.47       | -33         | PASS    |
| GPRS850  | 190     | 0.009~0.15MHz        | 0.04            | -60.2        | -33         | PASS    |
| GSM850   | 190     | 0.15~30MHz           | 0.18            | -53.06       | -23         | PASS    |
| GPRS850  | 190     | 0.15~30MHz           | 0.16            | -52.73       | -23         | PASS    |
| GSM850   | 190     | 30~1000MHz           | 184.84          | -45.16       | -13         | PASS    |
| GPRS850  | 190     | 30~1000MHz           | 561.79          | -45.3        | -13         | PASS    |
| GSM850   | 190     | 1000~10000MHz        | 1673.2          | -35.37       | -13         | PASS    |
| GPRS850  | 190     | 1000~10000MHz        | 2509.6          | -42.38       | -13         | PASS    |
| EGPRS850 | 190     | 0.009~0.15MHz        | 0.04            | -62.73       | -33         | PASS    |
| EGPRS850 | 190     | 0.15~30MHz           | 0.17            | -53.49       | -23         | PASS    |
| EGPRS850 | 190     | 30~1000MHz           | 949.88          | -45.42       | -13         | PASS    |
| EGPRS850 | 190     | 1000~10000MHz        | 3174.7          | -43.61       | -13         | PASS    |
| GSM850   | 251     | 0.009~0.15MHz        | 0.04            | -61.05       | -33         | PASS    |
| GPRS850  | 251     | 0.009~0.15MHz        | 0.04            | -63.71       | -33         | PASS    |
| GSM850   | 251     | 0.15~30MHz           | 0.19            | -52.82       | -23         | PASS    |
| GPRS850  | 251     | 0.15~30MHz           | 0.17            | -52.98       | -23         | PASS    |
| GSM850   | 251     | 30~1000MHz           | 271.63          | -45.3        | -13         | PASS    |
| GPRS850  | 251     | 30~1000MHz           | 247.09          | -45.39       | -13         | PASS    |
| GSM850   | 251     | 1000~10000MHz        | 1697.5          | -32.61       | -13         | PASS    |
| GPRS850  | 251     | 1000~10000MHz        | 1697.5          | -35.69       | -13         | PASS    |
| EGPRS850 | 251     | 0.009~0.15MHz        | 0.04            | -63.83       | -33         | PASS    |
| EGPRS850 | 251     | 0.15~30MHz           | 0.19            | -53.38       | -23         | PASS    |
| EGPRS850 | 251     | 30~1000MHz           | 493.27          | -45.16       | -13         | PASS    |
| EGPRS850 | 251     | 1000~10000MHz        | 3173.2          | -44.79       | -13         | PASS    |

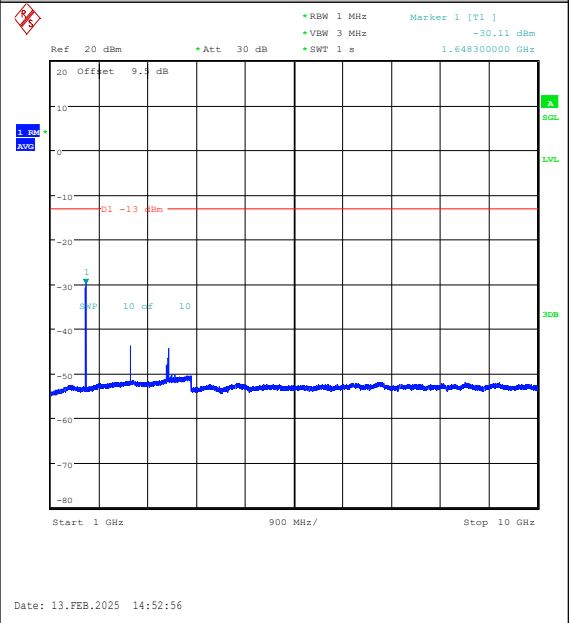
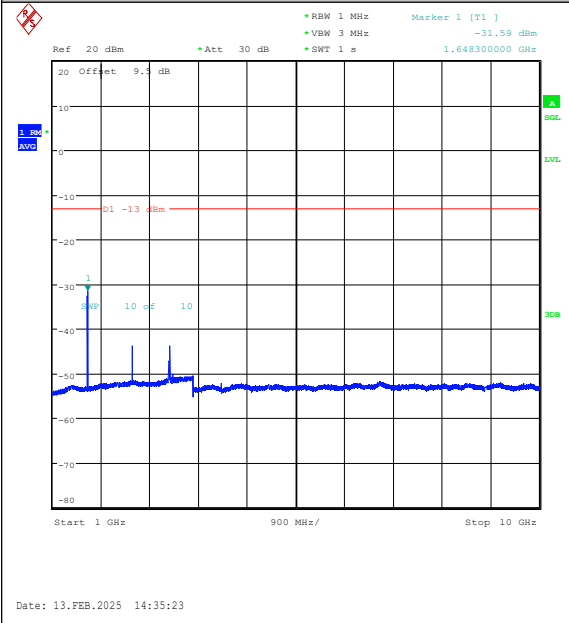
Test Graphs





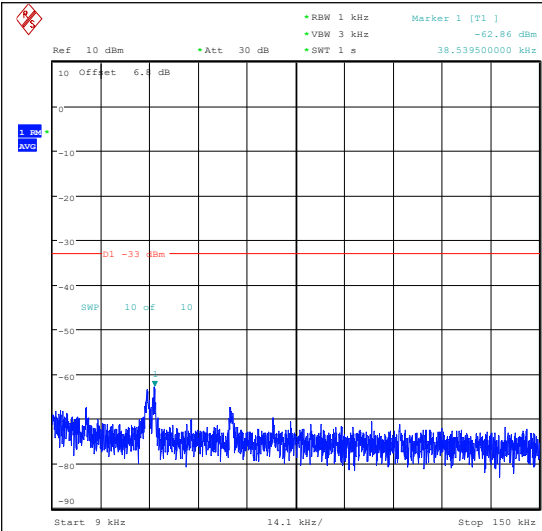
### GSM850-128-5-30~1000MHz-PASS

### GPRS850-128-5-30~1000MHz-PASS

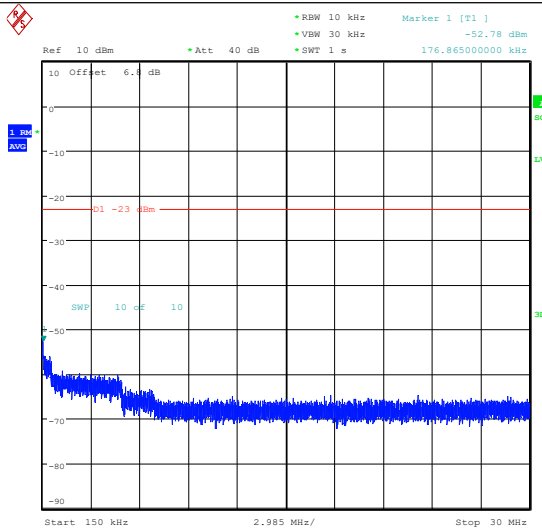


### GSM850-128-5-1000~10000MHz-PASS

### GPRS850-128-5-1000~10000MHz-PASS

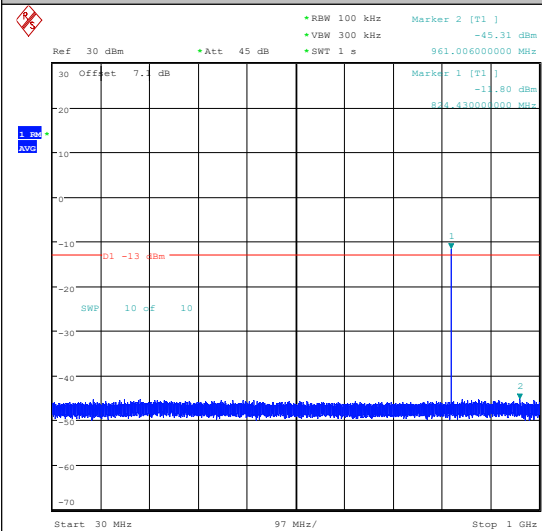


Date: 13.FEB.2025 15:04:35

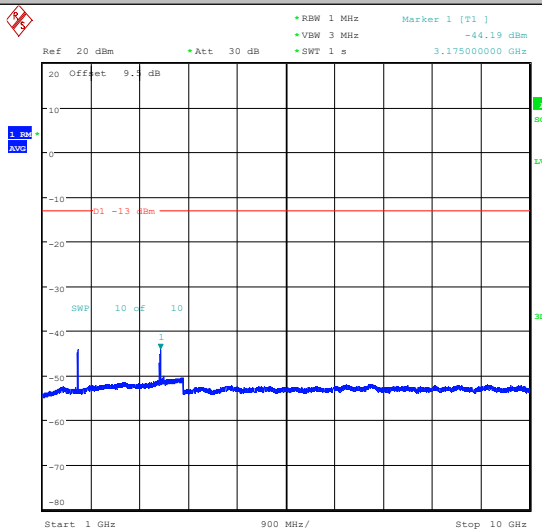


Date: 13.FEB.2025 15:04:50

EGPRS850-128-8-0.009~0.15MHz-PASS



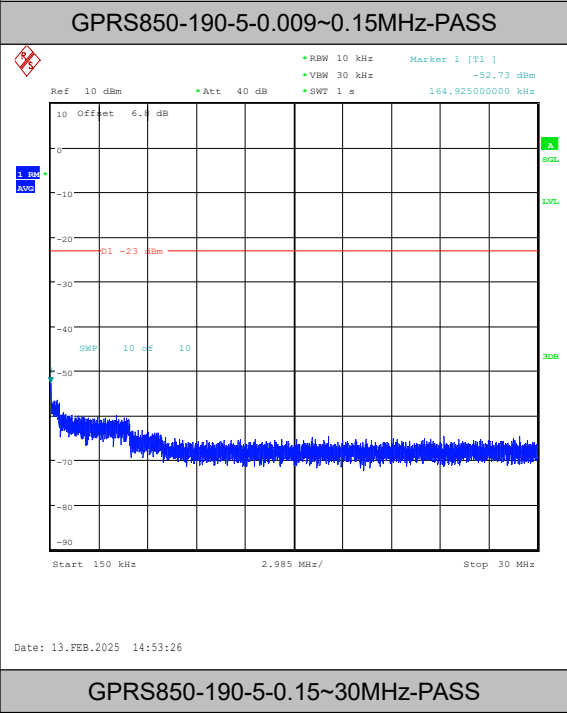
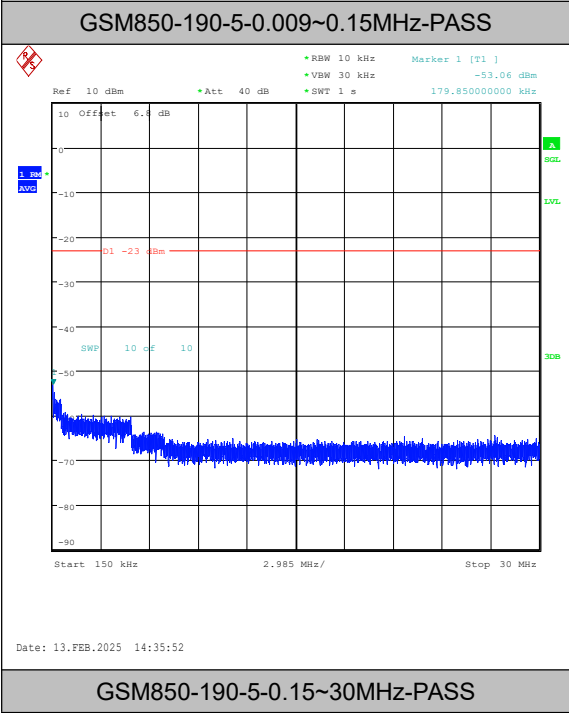
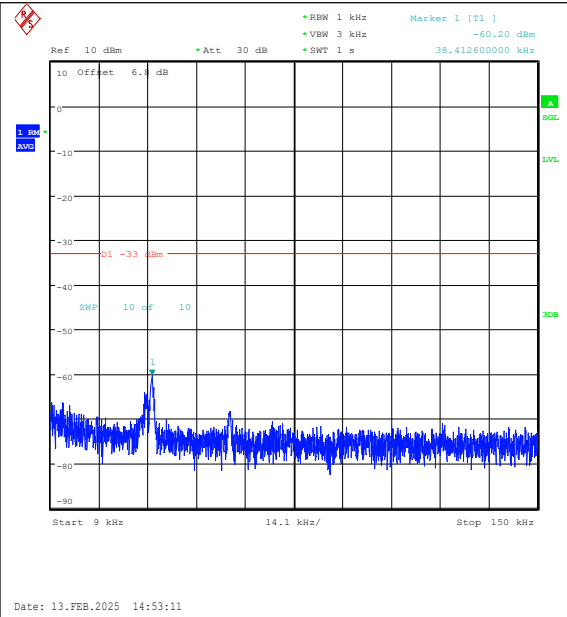
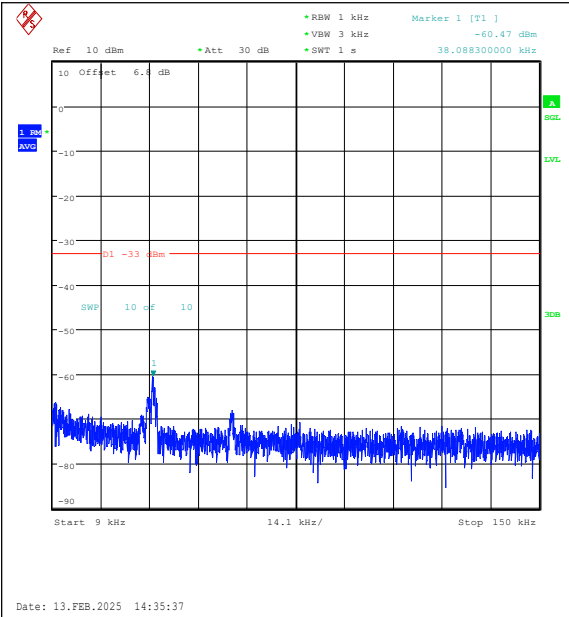
Date: 13.FEB.2025 15:05:04



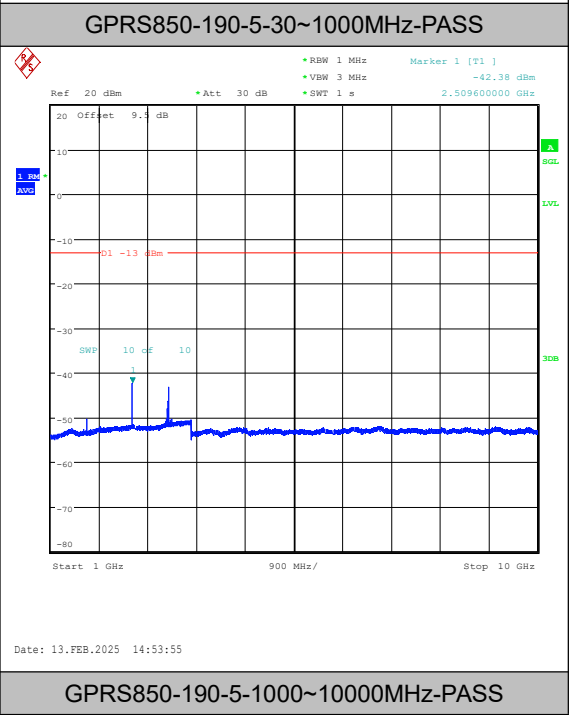
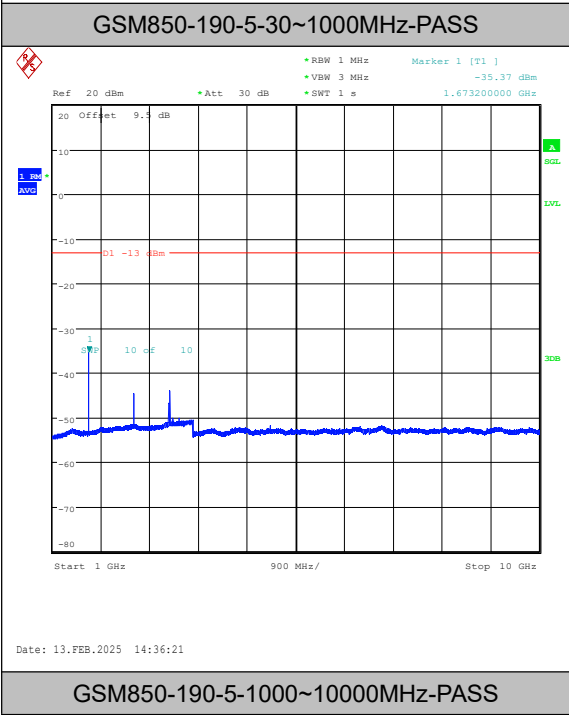
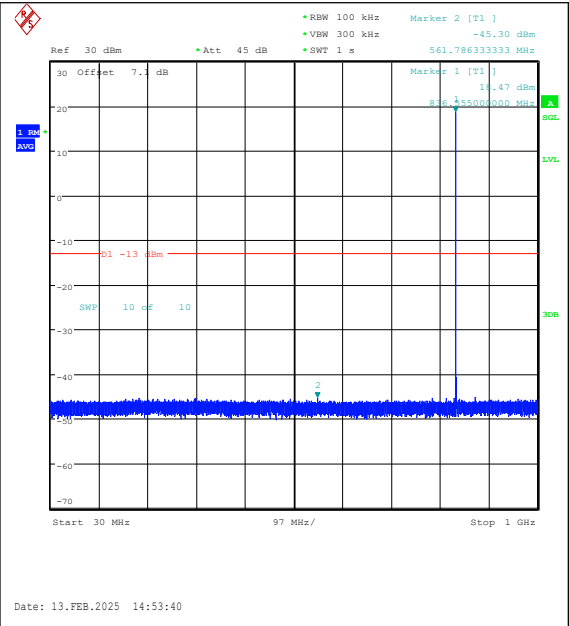
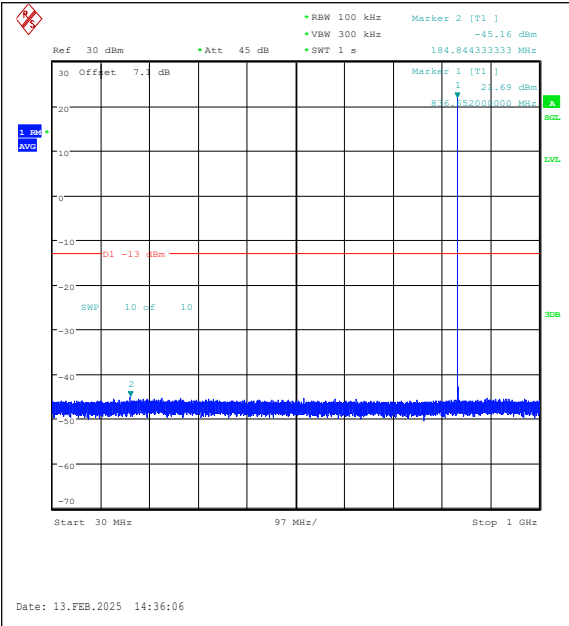
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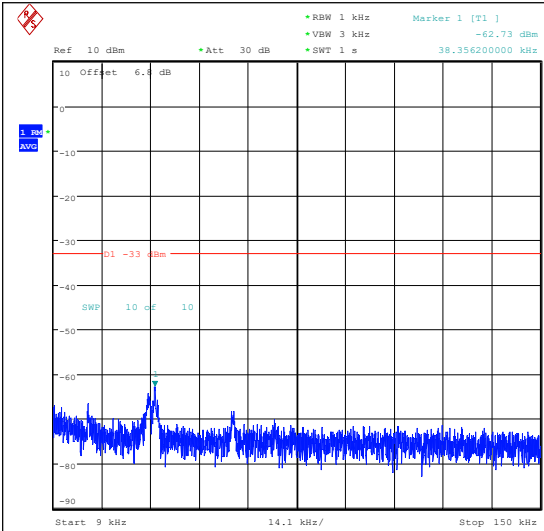
EGPRS850-128-8-30~1000MHz-PASS

EGPRS850-128-8-1000~10000MHz-PASS

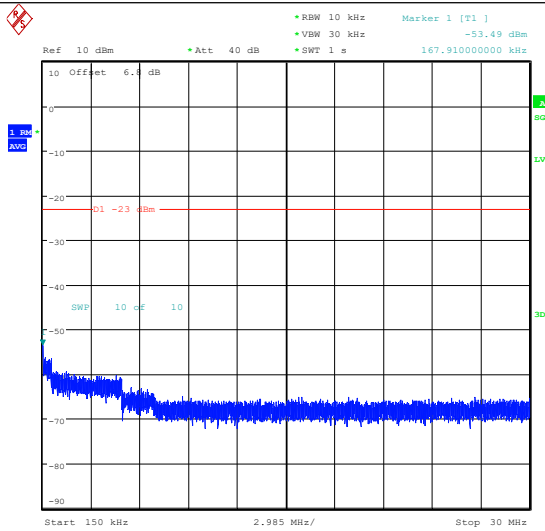






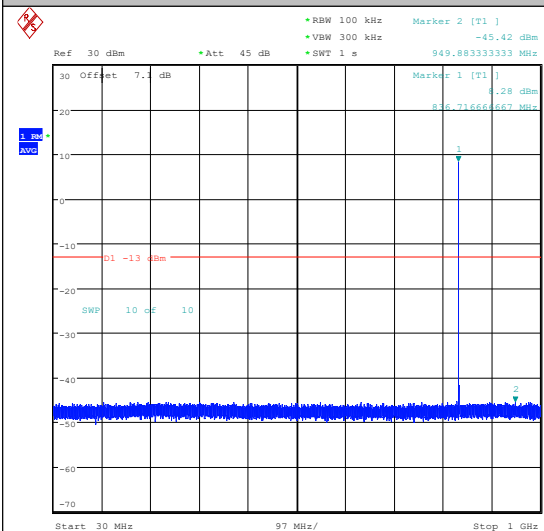


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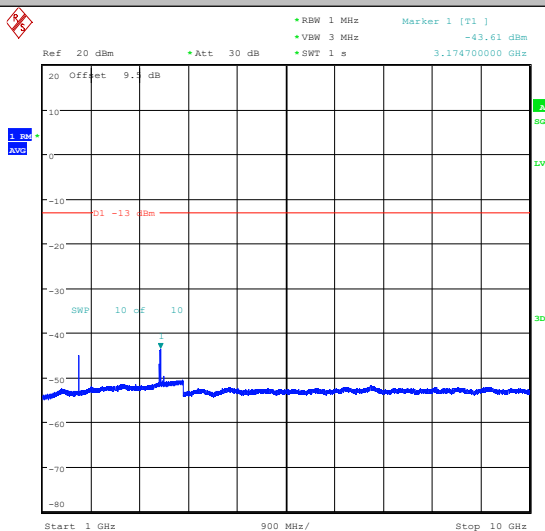


Date: 13.FEB.2025 15:05:49

EGPRS850-190-8-0.009~0.15MHz-PASS



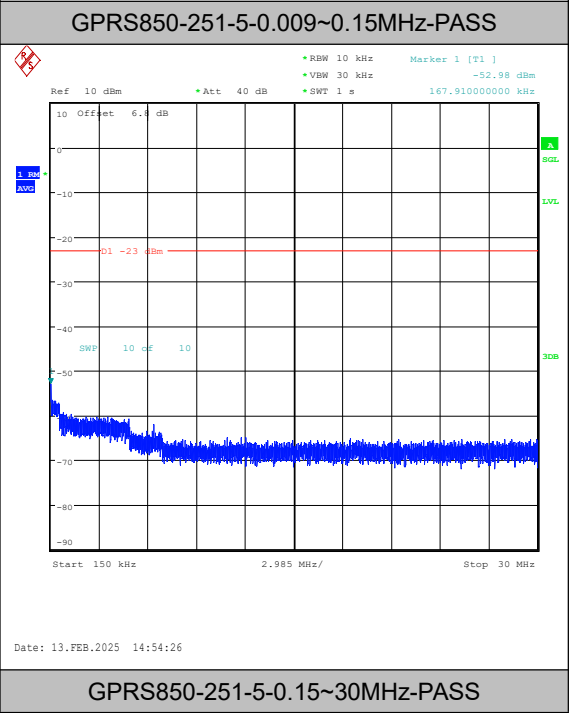
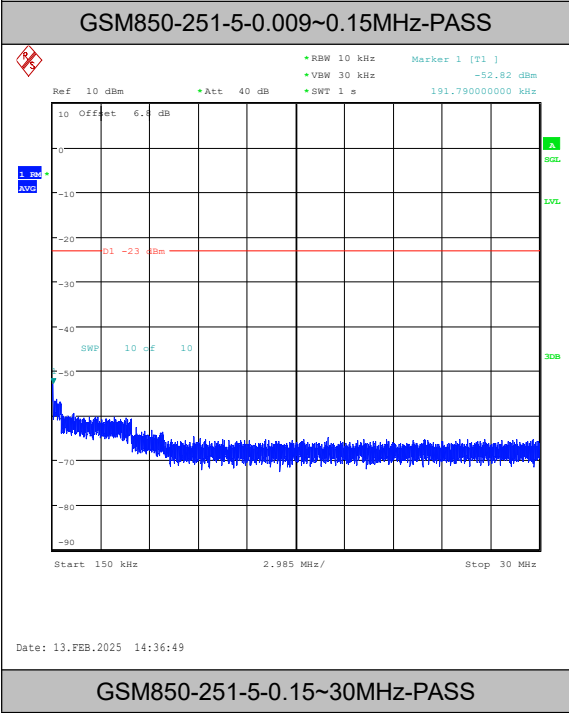
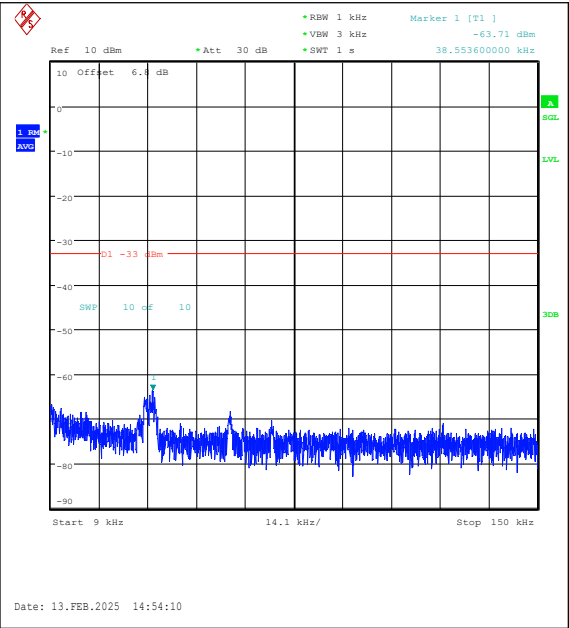
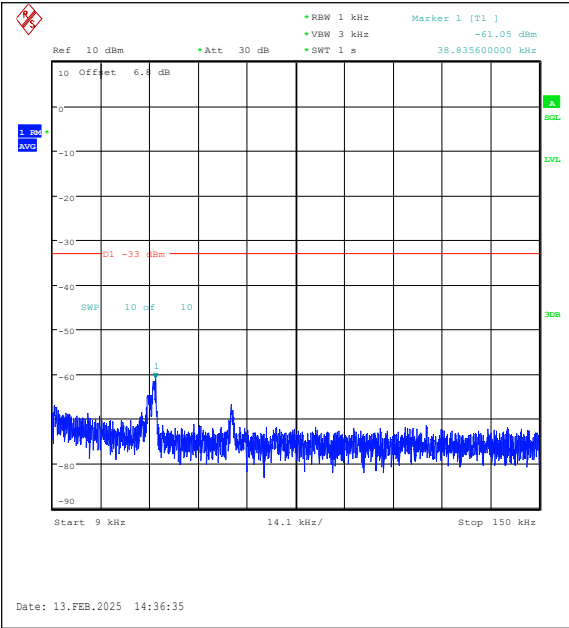
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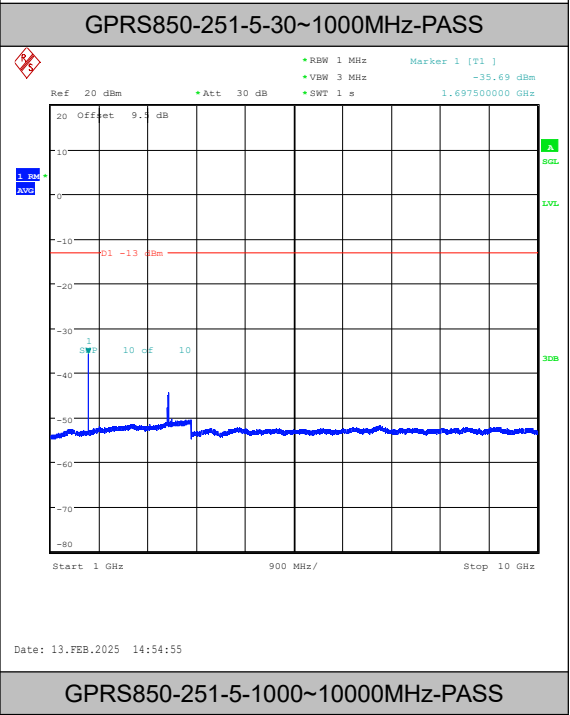
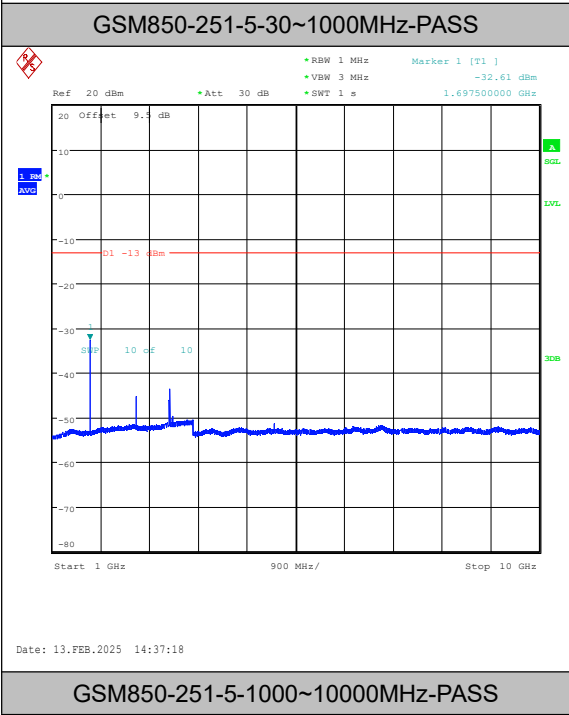
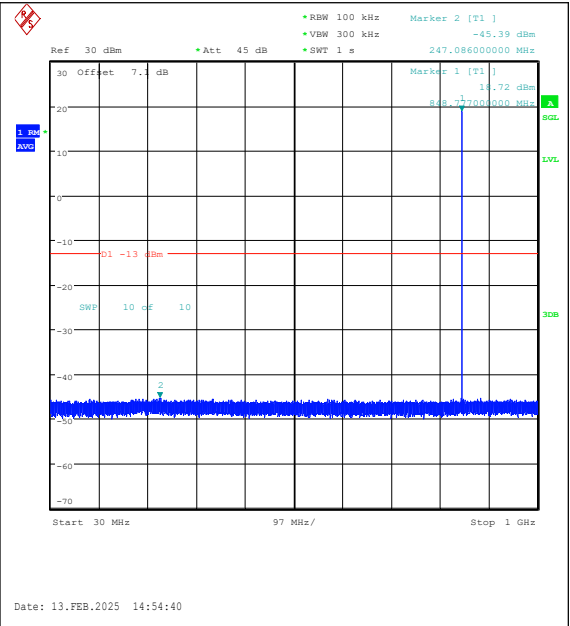
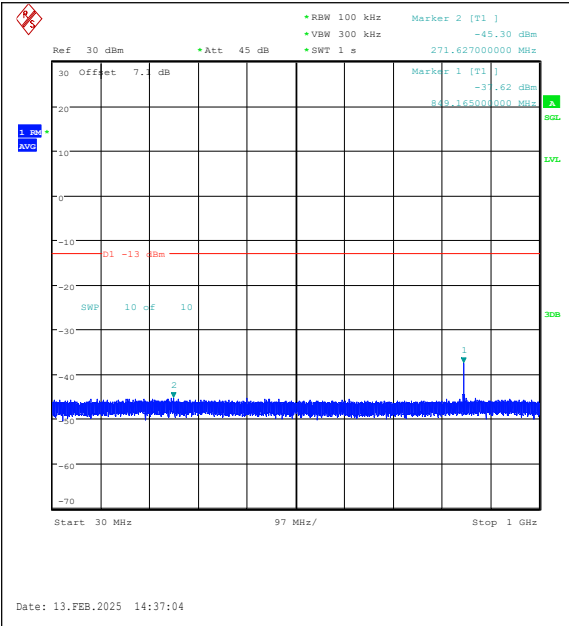


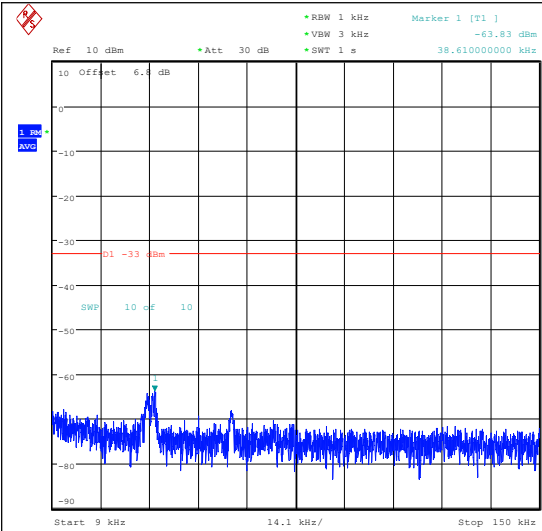
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EGPRS850-190-8-30~1000MHz-PASS

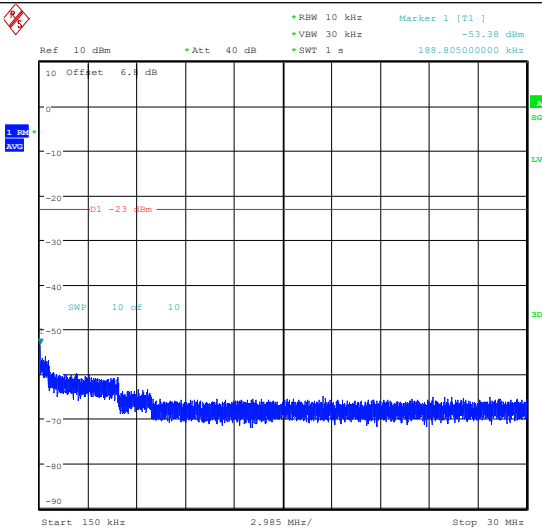
EGPRS850-190-8-1000~10000MHz-PASS





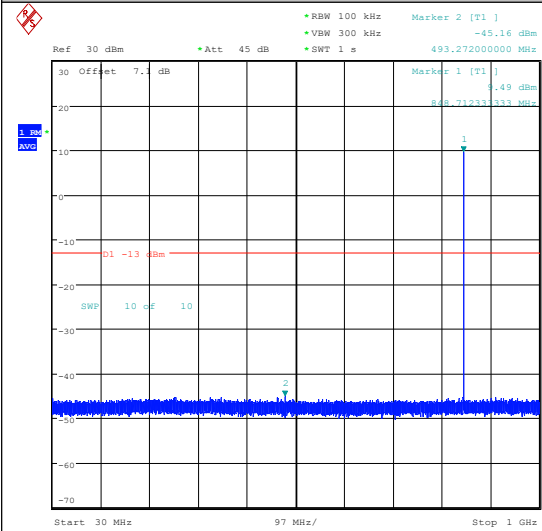


Date: 13.FEB.2025 15:06:33

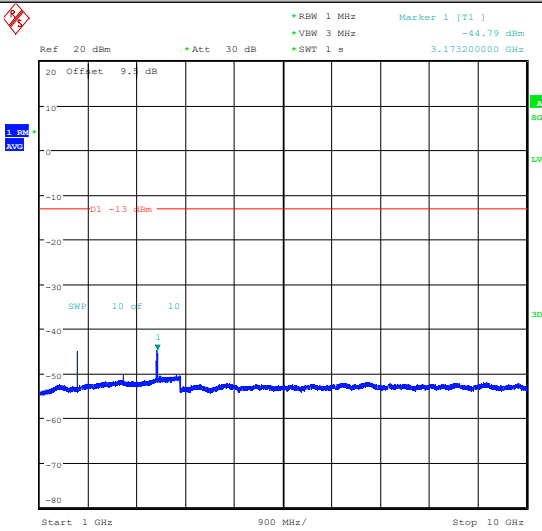


Date: 13.FEB.2025 15:06:48

EGPRS850-251-8-0.009~0.15MHz-PASS



Date: 13.FEB.2025 15:07:03



Date: 13.FEB.2025 15:07:18

EGPRS850-251-8-30~1000MHz-PASS

EGPRS850-251-8-1000~10000MHz-PASS

## Appendix E : Frequency Stability

### Test Result

| Voltage  |         |               |                  |                |                 |             |         |
|----------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band     | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| GSM850   | 128     | VN            | NT               | -16.24         | -0.019704       | ±2.5        | PASS    |
| GSM850   | 128     | VL            | NT               | -15.11         | -0.018333       | ±2.5        | PASS    |
| GSM850   | 128     | VH            | NT               | -14.82         | -0.017981       | ±2.5        | PASS    |
| GPRS850  | 128     | VN            | NT               | -15.11         | -0.018333       | ±2.5        | PASS    |
| GPRS850  | 128     | VL            | NT               | -18.69         | -0.022677       | ±2.5        | PASS    |
| GPRS850  | 128     | VH            | NT               | -18.05         | -0.021900       | ±2.5        | PASS    |
| EGPRS850 | 128     | VN            | NT               | -11.27         | -0.013674       | ±2.5        | PASS    |
| EGPRS850 | 128     | VL            | NT               | -6.81          | -0.008263       | ±2.5        | PASS    |
| EGPRS850 | 128     | VH            | NT               | -8.04          | -0.009755       | ±2.5        | PASS    |
| GSM850   | 190     | VN            | NT               | -20.66         | -0.024695       | ±2.5        | PASS    |
| GSM850   | 190     | VL            | NT               | -14.95         | -0.017870       | ±2.5        | PASS    |
| GSM850   | 190     | VH            | NT               | -13.69         | -0.016364       | ±2.5        | PASS    |
| GPRS850  | 190     | VN            | NT               | -14.75         | -0.017631       | ±2.5        | PASS    |
| GPRS850  | 190     | VL            | NT               | -16.82         | -0.020105       | ±2.5        | PASS    |
| GPRS850  | 190     | VH            | NT               | -15.27         | -0.018252       | ±2.5        | PASS    |
| EGPRS850 | 190     | VN            | NT               | -8.59          | -0.010268       | ±2.5        | PASS    |
| EGPRS850 | 190     | VL            | NT               | -7.20          | -0.008606       | ±2.5        | PASS    |
| EGPRS850 | 190     | VH            | NT               | -6.39          | -0.007638       | ±2.5        | PASS    |
| GSM850   | 251     | VN            | NT               | -15.43         | -0.018179       | ±2.5        | PASS    |
| GSM850   | 251     | VL            | NT               | -13.46         | -0.015858       | ±2.5        | PASS    |
| GSM850   | 251     | VH            | NT               | -16.21         | -0.019098       | ±2.5        | PASS    |
| GPRS850  | 251     | VN            | NT               | -16.82         | -0.019816       | ±2.5        | PASS    |
| GPRS850  | 251     | VL            | NT               | -16.30         | -0.019204       | ±2.5        | PASS    |
| GPRS850  | 251     | VH            | NT               | -15.40         | -0.018143       | ±2.5        | PASS    |
| EGPRS850 | 251     | VN            | NT               | -13.33         | -0.015705       | ±2.5        | PASS    |
| EGPRS850 | 251     | VL            | NT               | -12.20         | -0.014373       | ±2.5        | PASS    |
| EGPRS850 | 251     | VH            | NT               | -7.68          | -0.009048       | ±2.5        | PASS    |

| Temperature |         |               |                  |                |                 |             |         |
|-------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band        | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| GSM850      | 128     | NV            | -30              | -13.59         | -0.016489       | ±2.5        | PASS    |
| GSM850      | 128     | NV            | -20              | -14.98         | -0.018175       | ±2.5        | PASS    |
| GSM850      | 128     | NV            | -10              | -13.24         | -0.016064       | ±2.5        | PASS    |

|          |     |    |     |        |           |      |      |
|----------|-----|----|-----|--------|-----------|------|------|
| GSM850   | 128 | NV | 0   | -13.24 | -0.016064 | ±2.5 | PASS |
| GSM850   | 128 | NV | 10  | -13.82 | -0.016768 | ±2.5 | PASS |
| GSM850   | 128 | NV | 20  | -15.27 | -0.018527 | ±2.5 | PASS |
| GSM850   | 128 | NV | 30  | -13.98 | -0.016962 | ±2.5 | PASS |
| GSM850   | 128 | NV | 40  | -13.85 | -0.016804 | ±2.5 | PASS |
| GSM850   | 128 | NV | 50  | -14.37 | -0.017435 | ±2.5 | PASS |
| GPRS850  | 128 | NV | -30 | -15.82 | -0.019194 | ±2.5 | PASS |
| GPRS850  | 128 | NV | -20 | -14.79 | -0.017945 | ±2.5 | PASS |
| GPRS850  | 128 | NV | -10 | -14.40 | -0.017471 | ±2.5 | PASS |
| GPRS850  | 128 | NV | 0   | -12.24 | -0.014851 | ±2.5 | PASS |
| GPRS850  | 128 | NV | 10  | -16.01 | -0.019425 | ±2.5 | PASS |
| GPRS850  | 128 | NV | 20  | -12.72 | -0.015433 | ±2.5 | PASS |
| GPRS850  | 128 | NV | 30  | -13.46 | -0.016331 | ±2.5 | PASS |
| GPRS850  | 128 | NV | 40  | -14.95 | -0.018139 | ±2.5 | PASS |
| GPRS850  | 128 | NV | 50  | -17.95 | -0.021779 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | -30 | -9.40  | -0.011405 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | -20 | -8.75  | -0.010616 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | -10 | -12.40 | -0.015045 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | 0   | -8.88  | -0.010774 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | 10  | -11.69 | -0.014183 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | 20  | -9.52  | -0.011551 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | 30  | -7.85  | -0.009524 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | 40  | -5.84  | -0.007086 | ±2.5 | PASS |
| EGPRS850 | 128 | NV | 50  | -9.04  | -0.010968 | ±2.5 | PASS |
| GSM850   | 190 | NV | -30 | -12.62 | -0.015085 | ±2.5 | PASS |
| GSM850   | 190 | NV | -20 | -13.82 | -0.016519 | ±2.5 | PASS |
| GSM850   | 190 | NV | -10 | -14.30 | -0.017093 | ±2.5 | PASS |
| GSM850   | 190 | NV | 0   | -13.01 | -0.015551 | ±2.5 | PASS |
| GSM850   | 190 | NV | 10  | -12.62 | -0.015085 | ±2.5 | PASS |
| GSM850   | 190 | NV | 20  | -13.08 | -0.015635 | ±2.5 | PASS |
| GSM850   | 190 | NV | 30  | -13.56 | -0.016208 | ±2.5 | PASS |
| GSM850   | 190 | NV | 40  | -16.21 | -0.019376 | ±2.5 | PASS |
| GSM850   | 190 | NV | 50  | -15.92 | -0.019029 | ±2.5 | PASS |
| GPRS850  | 190 | NV | -30 | -15.34 | -0.018336 | ±2.5 | PASS |
| GPRS850  | 190 | NV | -20 | -11.20 | -0.013388 | ±2.5 | PASS |
| GPRS850  | 190 | NV | -10 | -14.72 | -0.017595 | ±2.5 | PASS |
| GPRS850  | 190 | NV | 0   | -14.17 | -0.016938 | ±2.5 | PASS |
| GPRS850  | 190 | NV | 10  | -12.88 | -0.015396 | ±2.5 | PASS |
| GPRS850  | 190 | NV | 20  | -13.79 | -0.016483 | ±2.5 | PASS |
| GPRS850  | 190 | NV | 30  | -12.04 | -0.014392 | ±2.5 | PASS |
| GPRS850  | 190 | NV | 40  | -18.56 | -0.022185 | ±2.5 | PASS |

|          |     |    |     |        |           |      |      |
|----------|-----|----|-----|--------|-----------|------|------|
| GPRS850  | 190 | NV | 50  | -16.05 | -0.019185 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | -30 | -8.75  | -0.010459 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | -20 | -7.68  | -0.009180 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | -10 | -5.10  | -0.006096 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | 0   | -5.10  | -0.006096 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | 10  | -5.49  | -0.006562 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | 20  | -10.04 | -0.012001 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | 30  | -9.69  | -0.011583 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | 40  | -10.88 | -0.013005 | ±2.5 | PASS |
| EGPRS850 | 190 | NV | 50  | -12.01 | -0.014356 | ±2.5 | PASS |
| GSM850   | 251 | NV | -30 | -15.08 | -0.017766 | ±2.5 | PASS |
| GSM850   | 251 | NV | -20 | -15.21 | -0.017919 | ±2.5 | PASS |
| GSM850   | 251 | NV | -10 | -17.14 | -0.020193 | ±2.5 | PASS |
| GSM850   | 251 | NV | 0   | -13.95 | -0.016435 | ±2.5 | PASS |
| GSM850   | 251 | NV | 10  | -14.53 | -0.017118 | ±2.5 | PASS |
| GSM850   | 251 | NV | 20  | -16.89 | -0.019899 | ±2.5 | PASS |
| GSM850   | 251 | NV | 30  | -9.72  | -0.011451 | ±2.5 | PASS |
| GSM850   | 251 | NV | 40  | -13.95 | -0.016435 | ±2.5 | PASS |
| GSM850   | 251 | NV | 50  | -12.82 | -0.015104 | ±2.5 | PASS |
| GPRS850  | 251 | NV | -30 | -18.56 | -0.021866 | ±2.5 | PASS |
| GPRS850  | 251 | NV | -20 | -14.43 | -0.017000 | ±2.5 | PASS |
| GPRS850  | 251 | NV | -10 | -18.85 | -0.022208 | ±2.5 | PASS |
| GPRS850  | 251 | NV | 0   | -13.59 | -0.016011 | ±2.5 | PASS |
| GPRS850  | 251 | NV | 10  | -16.34 | -0.019251 | ±2.5 | PASS |
| GPRS850  | 251 | NV | 20  | -16.34 | -0.019251 | ±2.5 | PASS |
| GPRS850  | 251 | NV | 30  | -16.30 | -0.019204 | ±2.5 | PASS |
| GPRS850  | 251 | NV | 40  | -19.27 | -0.022703 | ±2.5 | PASS |
| GPRS850  | 251 | NV | 50  | -18.76 | -0.022102 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | -30 | -13.85 | -0.016317 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | -20 | -9.01  | -0.010615 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | -10 | -10.53 | -0.012406 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | 0   | -9.81  | -0.011557 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | 10  | -9.62  | -0.011334 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | 20  | -7.65  | -0.009013 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | 30  | -7.39  | -0.008706 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | 40  | -10.17 | -0.011982 | ±2.5 | PASS |
| EGPRS850 | 251 | NV | 50  | -11.56 | -0.013619 | ±2.5 | PASS |