# Contents

# Appendix 1.Conducted output power

| Condition | Band | Channel | Frequency (MHz) | Power (dBm) | Gain (dBm) | ERP (dBm) | Verdict |
|---|---|---|---|---|---|---|---|
| NVNT | GSM850 | 128 | 824.2 | 33.47 | -1.75 | 29.57 | PASS |
| NVNT | GSM850 | 190 | 836.6 | 33.46 | -1.75 | 29.56 | PASS |
| NVNT | GSM850 | 251 | 848.8 | 33.80 | -1.75 | 29.9 | PASS |

| Condition | Band | Channel | Frequency (MHz) | Power (dBm) | Gain (dBm) | EIRP (dBm) | Verdict |
|---|---|---|---|---|---|---|---|
| NVNT | GSM1900 | 512 | 1850.2 | 30.32 | -0.1 | 30.22 | PASS |
| NVNT | GSM1900 | 661 | 1880 | 30.63 | -0.1 | 30.53 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | 30.48 | -0.1 | 30.38 | PASS |

# Appendix 2.Frequency stability

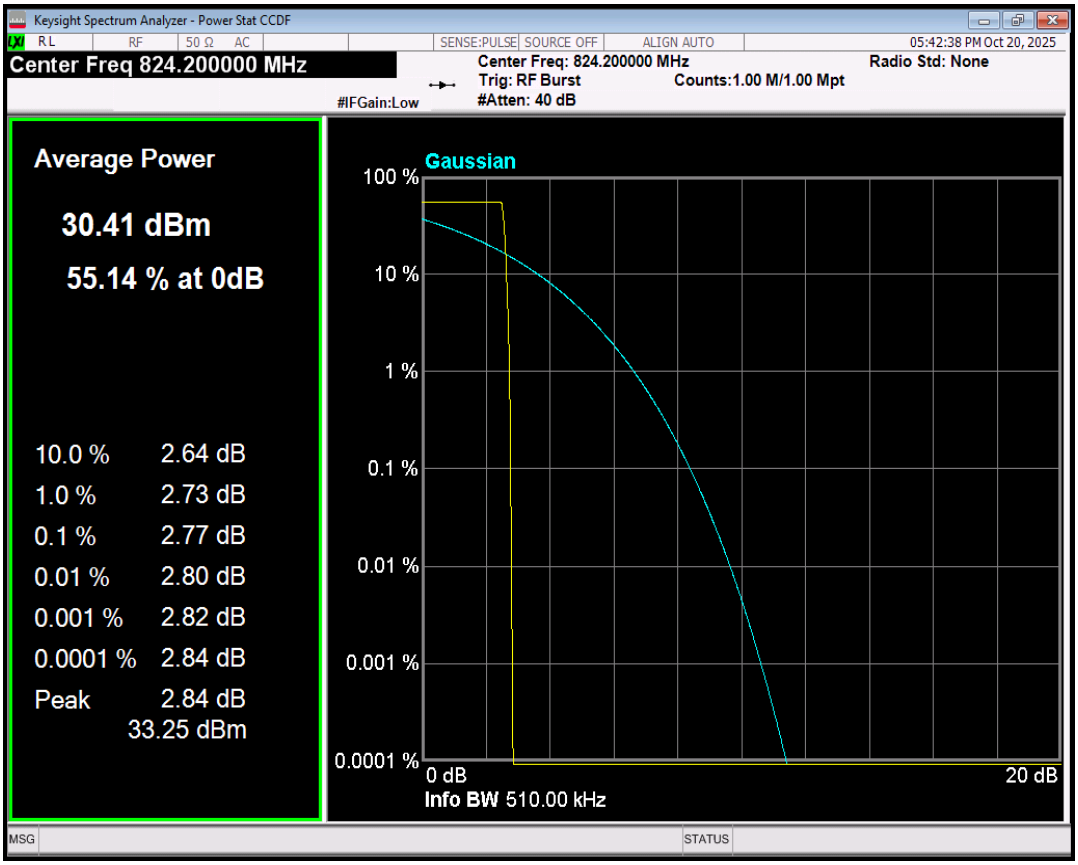
| Condition | Band | Channel | Frequency (MHz) | Voltage (Vdc) | Temperatue (C) | Result (Hz) | Result (ppm) | Low Limit (ppm) | high Limit (ppm) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| NVNT | GSM850 | 128 | 824.2 | LV | NT | -3.49 | -0.004 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | NT | 4.36 | 0.005 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | HV | NT | 2.97 | 0.004 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | LV | NT | 10.85 | 0.013 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | NT | 0.45 | 0.001 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | HV | NT | 11.11 | 0.013 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | LV | NT | 16.11 | 0.019 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | NT | 24.50 | 0.029 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | HV | NT | 16.56 | 0.020 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | LV | NT | 13.92 | 0.008 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | NT | -14.46 | -0.008 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | HV | NT | 4.20 | 0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | LV | NT | 14.88 | 0.008 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | NT | 13.79 | 0.007 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | HV | NT | 3.94 | 0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | LV | NT | 10.72 | 0.006 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | NT | 10.11 | 0.005 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | HV | NT | 8.78 | 0.005 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | -30 | 0.55 | 0.001 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | -20 | 1.74 | 0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | 0 | 2.52 | 0.003 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | 10 | 12.49 | 0.015 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | 20 | 6.33 | 0.008 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | 30 | 6.52 | 0.008 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | 40 | -3.20 | -0.004 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 128 | 824.2 | NV | 50 | -1.39 | -0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | -30 | 0.26 | 0.000 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | -20 | 4.68 | 0.006 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | 0 | -1.45 | -0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | 10 | 3.20 | 0.004 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | 20 | -8.30 | -0.010 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | 30 | 2.74 | 0.003 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | 40 | 4.75 | 0.006 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 190 | 836.6 | NV | 50 | 8.68 | 0.010 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | -30 | 1.71 | 0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | -20 | -3.97 | -0.005 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | 0 | 6.30 | 0.007 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | 10 | -0.03 | 0.000 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | 20 | 4.46 | 0.005 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | 30 | 3.62 | 0.004 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | 40 | 18.11 | 0.021 | -2.5 | 2.5 | PASS |
| NVNT | GSM850 | 251 | 848.8 | NV | 50 | 3.42 | 0.004 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | -30 | 2.36 | 0.001 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | -20 | 2.74 | 0.001 | -2.5 | 2.5 | PASS |

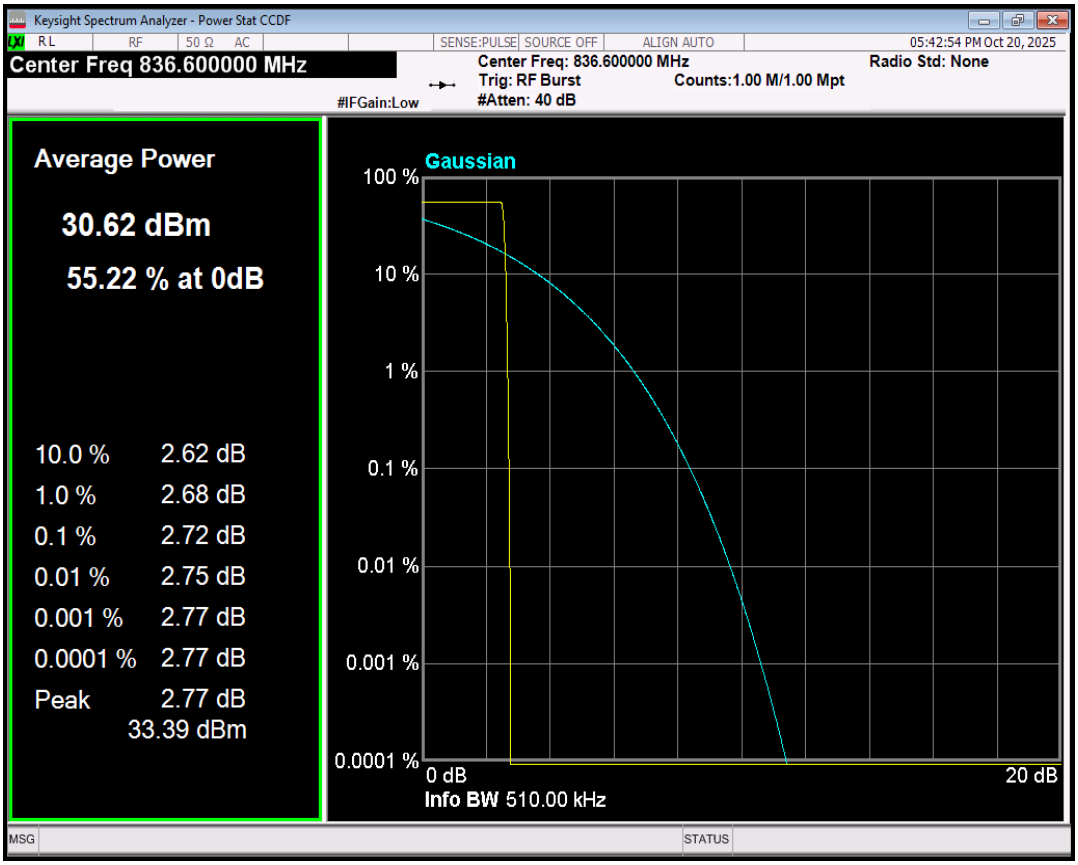
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| NVNT | GSM1900 | 512 | 1850.2 | NV | 0 | 11.33 | 0.006 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | 10 | 2.00 | 0.001 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | 20 | 16.47 | 0.009 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | 30 | 5.17 | 0.003 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | 40 | 11.33 | 0.006 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | NV | 50 | 11.01 | 0.006 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | -30 | 0.84 | 0.000 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | -20 | -7.81 | -0.004 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | 0 | -14.79 | -0.008 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | 10 | -14.08 | -0.007 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | 20 | -10.91 | -0.006 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | 30 | -2.42 | -0.001 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | 40 | -4.00 | -0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 661 | 1880 | NV | 50 | -12.98 | -0.007 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | -30 | 15.43 | 0.008 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | -20 | 2.03 | 0.001 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | 0 | 18.82 | 0.010 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | 10 | 3.16 | 0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | 20 | 4.10 | 0.002 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | 30 | 17.63 | 0.009 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | 40 | -0.29 | 0.000 | -2.5 | 2.5 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | NV | 50 | 5.84 | 0.003 | -2.5 | 2.5 | PASS |

# *Appendix 3.Peak-to-Average Ratio*

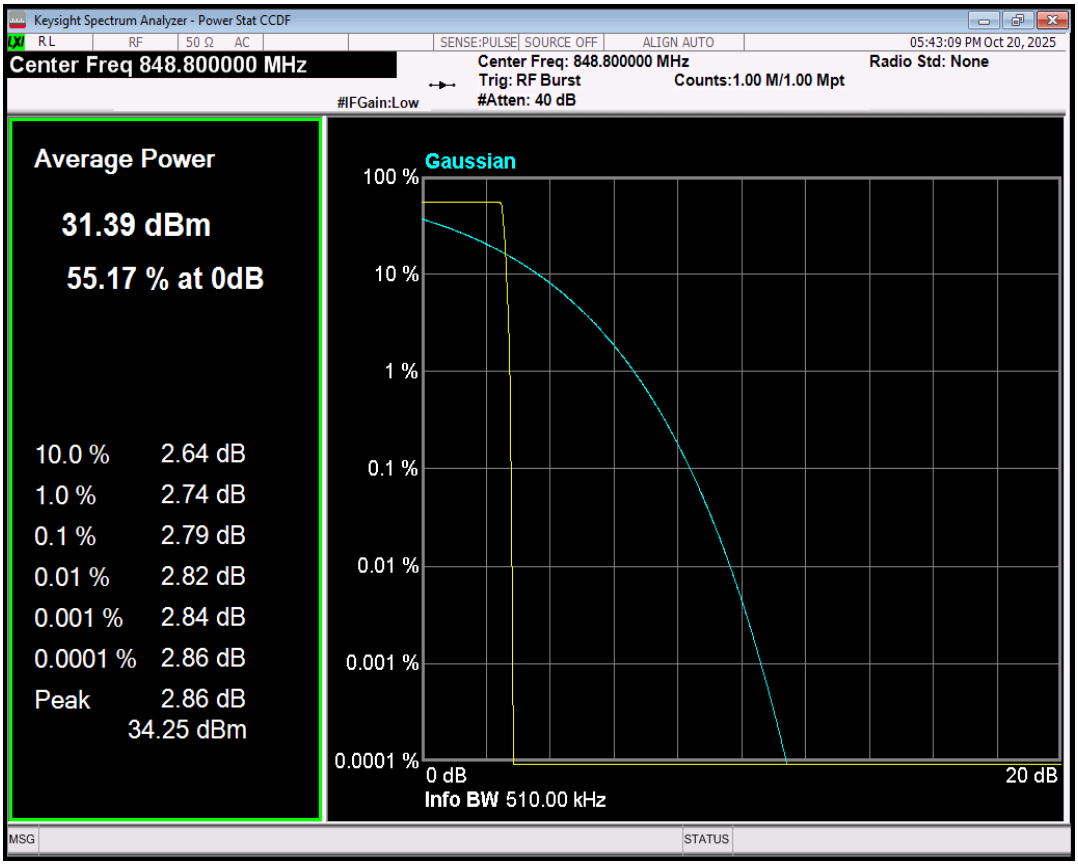
| *Condition* | *Band* | *Channel* | *Frequency (MHz)* | *Result (dB)* | *high Limit (dB)* | *Verdict* |
|---|---|---|---|---|---|---|
| NVNT | GSM850 | 128 | 824.2 | 2.77 | 13 | PASS |
| NVNT | GSM850 | 190 | 836.6 | 2.72 | 13 | PASS |
| NVNT | GSM850 | 251 | 848.8 | 2.79 | 13 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | 2.76 | 13 | PASS |
| NVNT | GSM1900 | 661 | 1880 | 2.80 | 13 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | 2.80 | 13 | PASS |



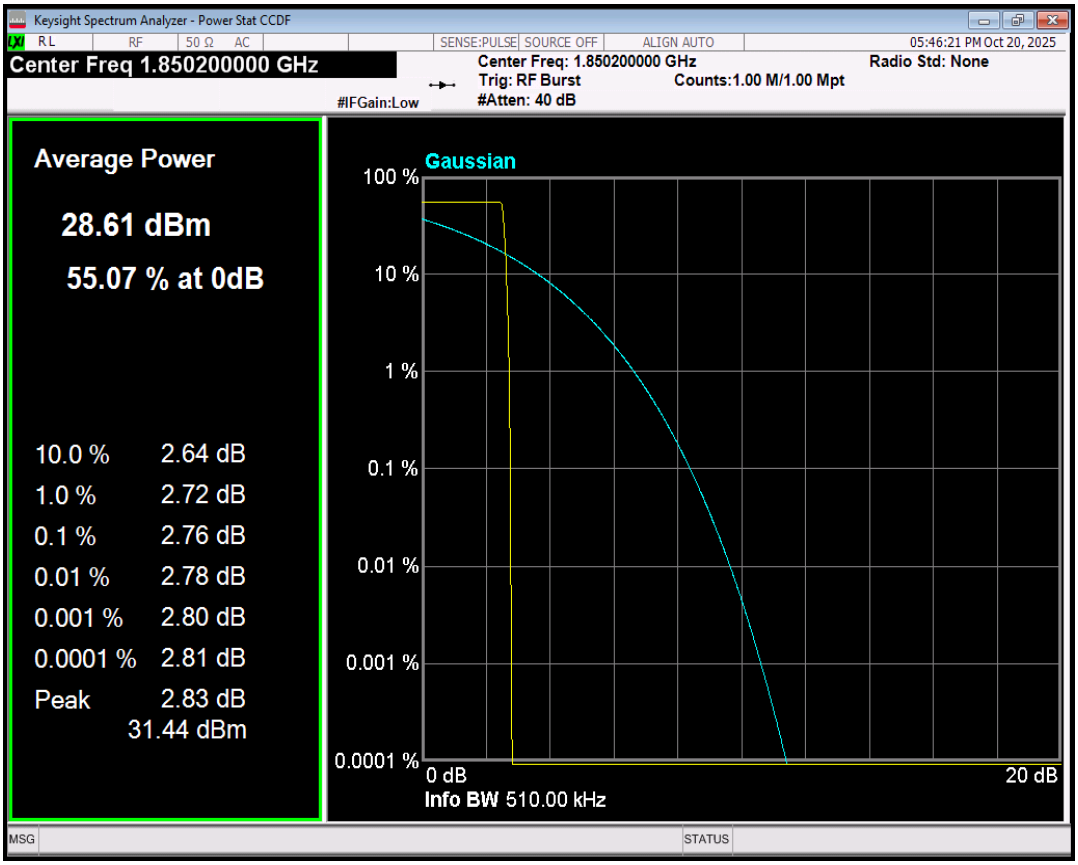

GSM850 Channel=128 NVNT



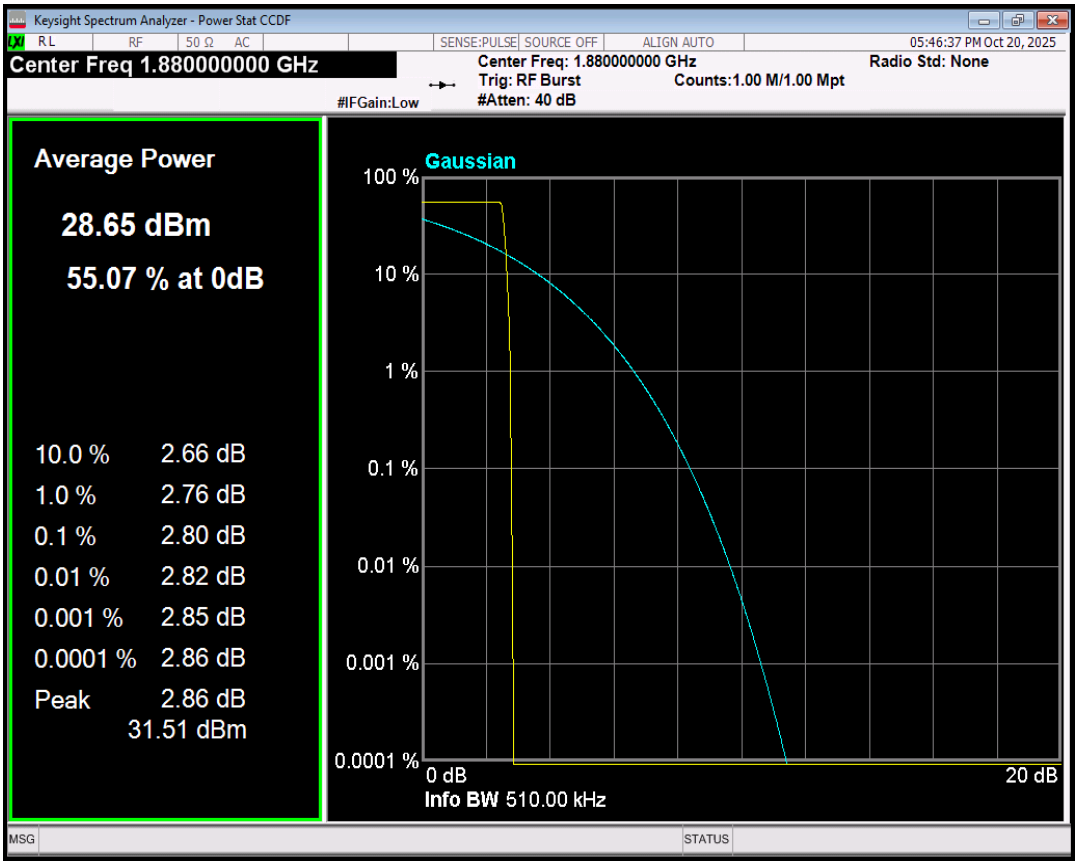

GSM850 Channel=190 NVNT



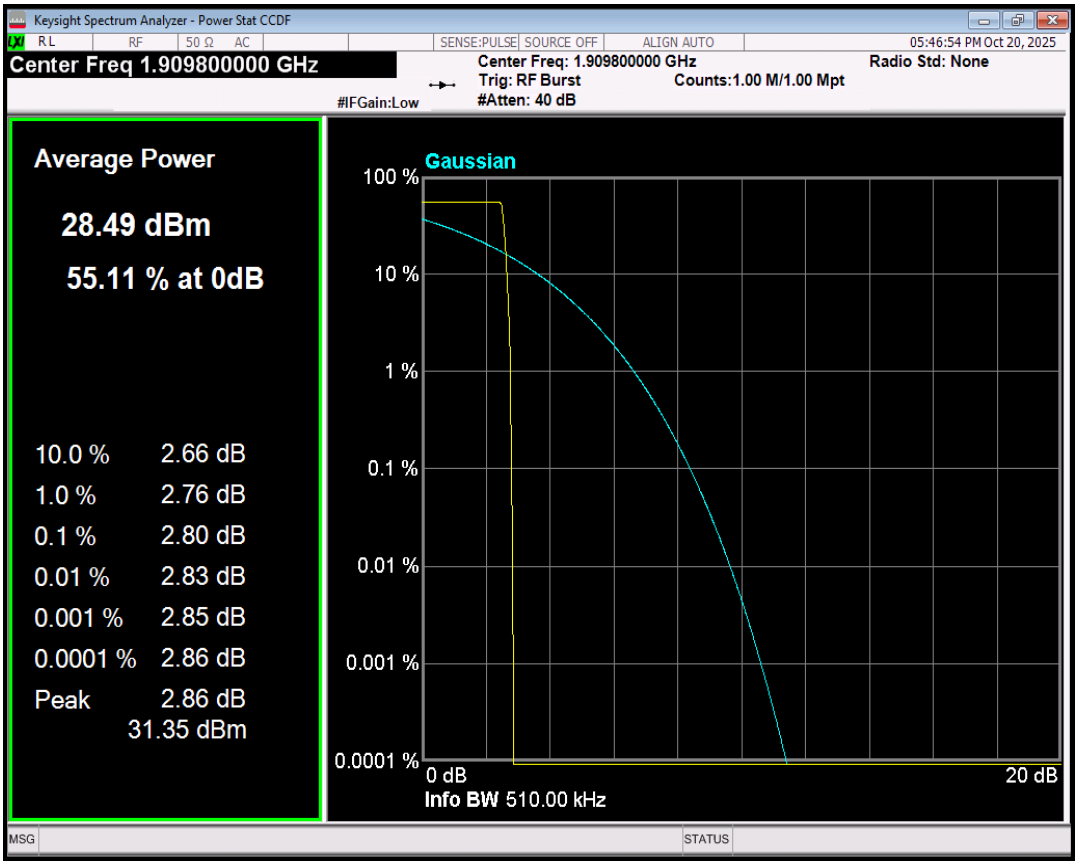

GSM850 Channel=251 NVNT




GSM1900 Channel=512 NVNT



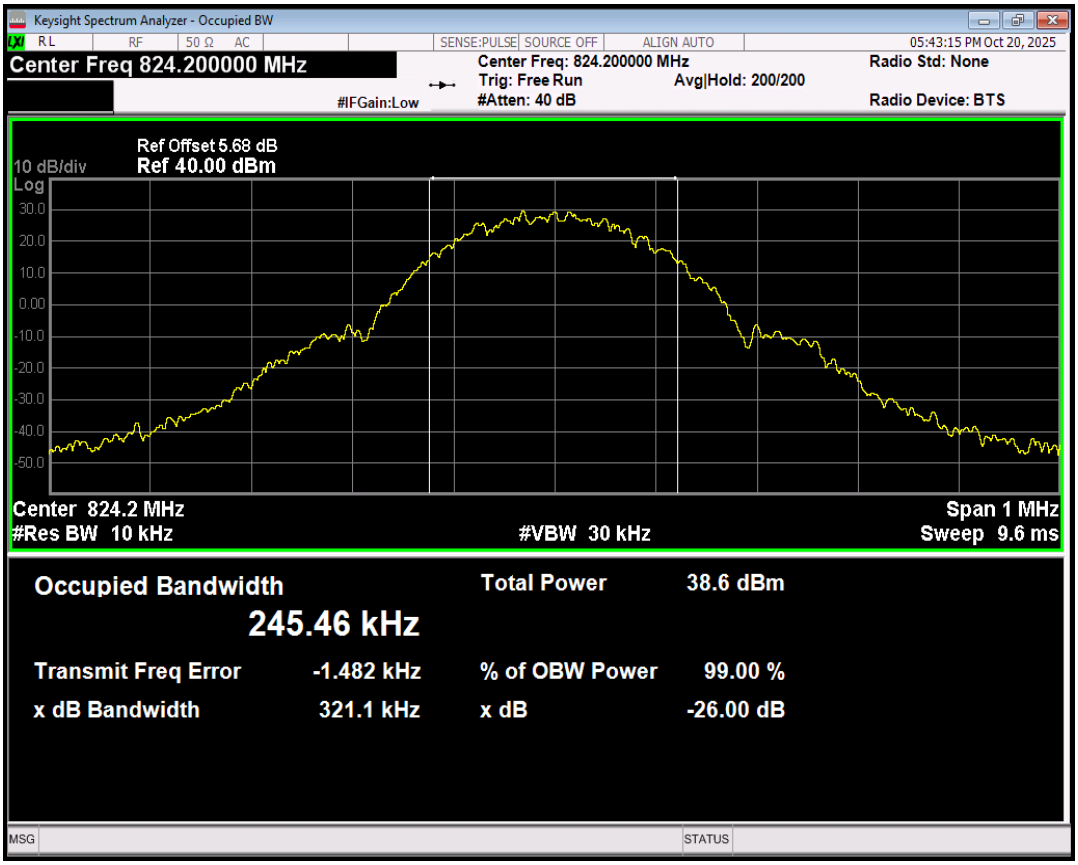

GSM1900 Channel=661 NVNT



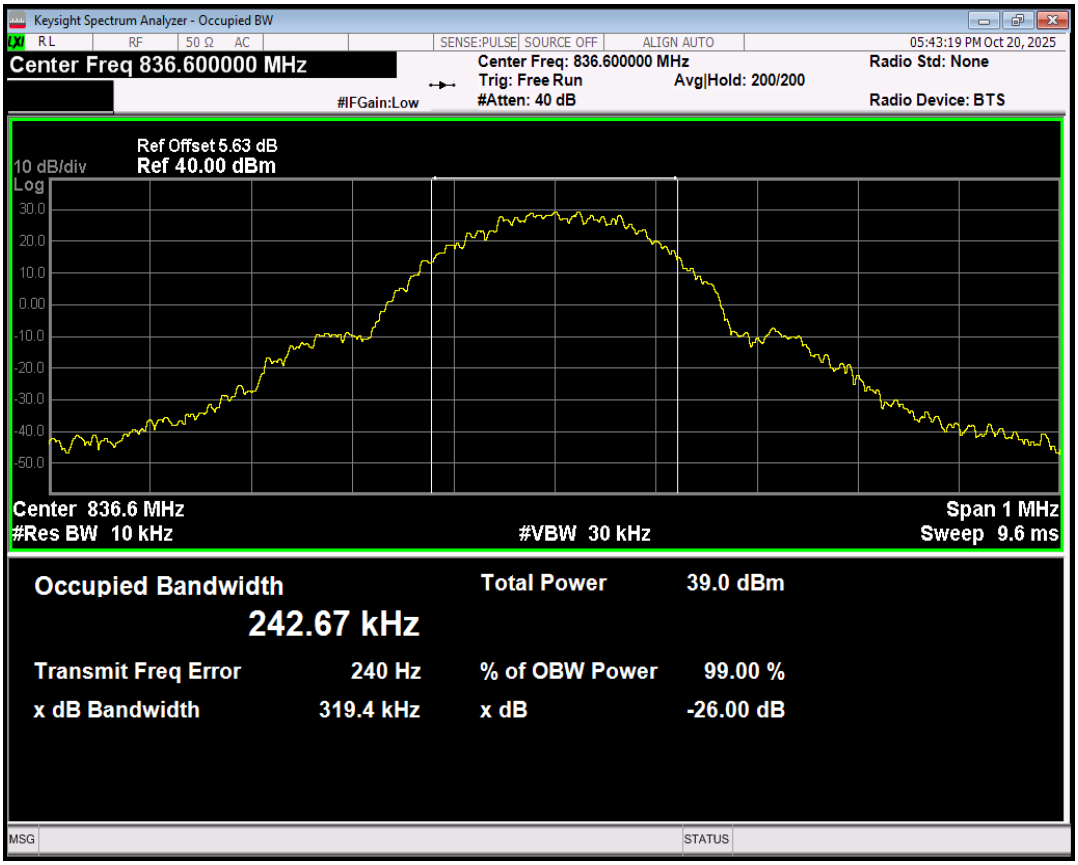

GSM1900 Channel=810 NVNT

# *Appendix 4.Occupied bandwidth*

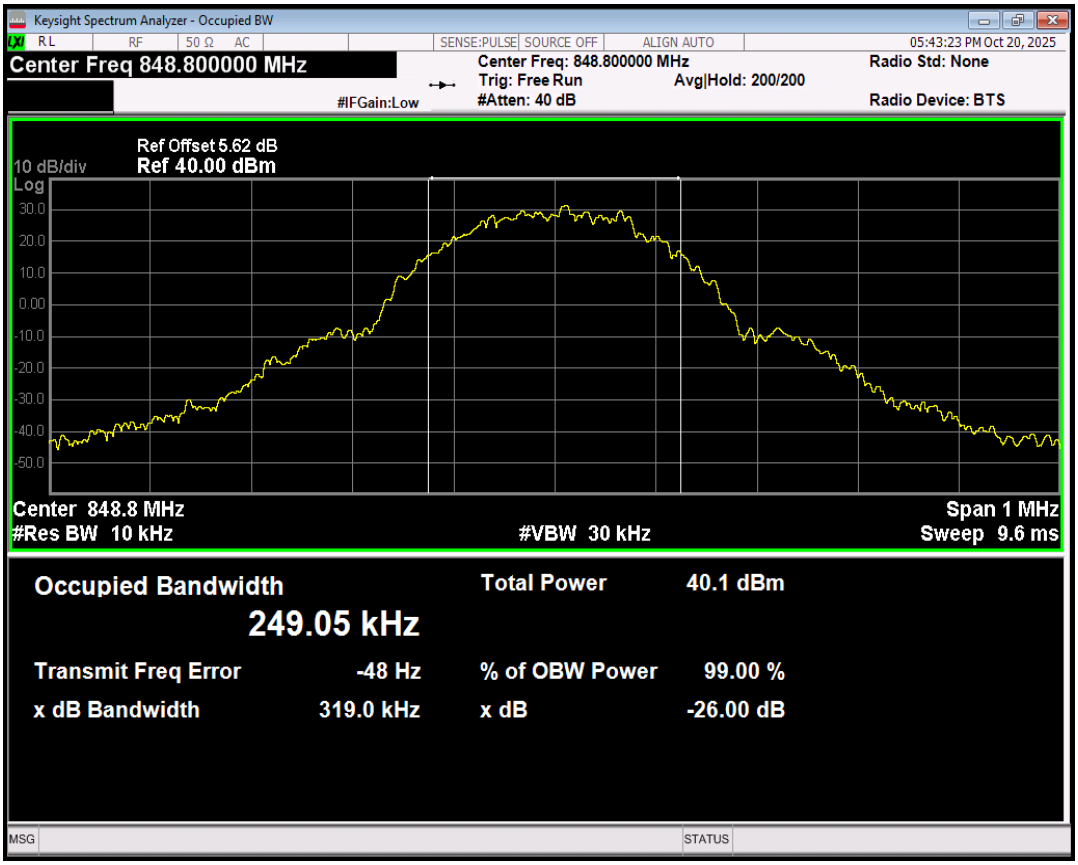
| *Condition* | *Band* | *Channel* | *Frequency (MHz)* | *99% OBW (kHz)* | *-26dB EBW (kHz)* | *Verdict* |
|---|---|---|---|---|---|---|
| NVNT | GSM850 | 128 | 824.2 | 245.459 | 321.117 | PASS |
| NVNT | GSM850 | 190 | 836.6 | 242.671 | 319.351 | PASS |
| NVNT | GSM850 | 251 | 848.8 | 249.053 | 318.994 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | 239.227 | 310.919 | PASS |
| NVNT | GSM1900 | 661 | 1880 | 239.192 | 316.089 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | 249.834 | 314.291 | PASS |



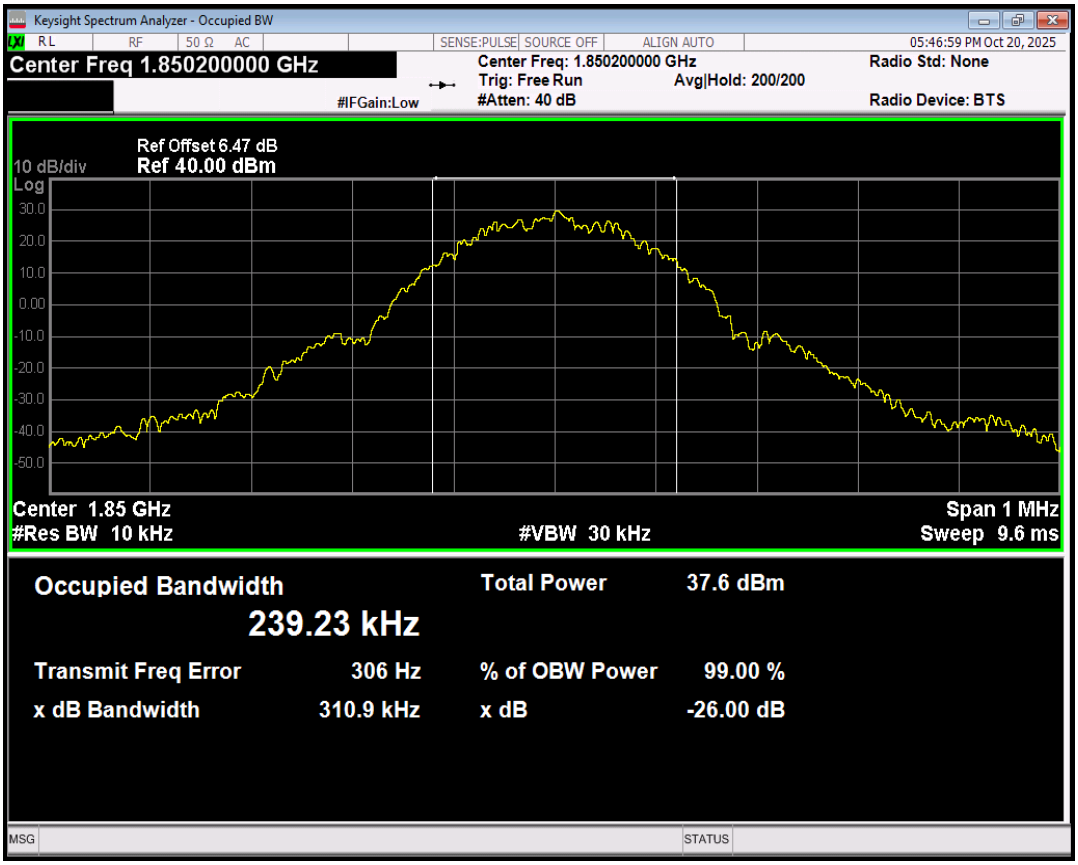

GSM850 Channel=128 NVNT



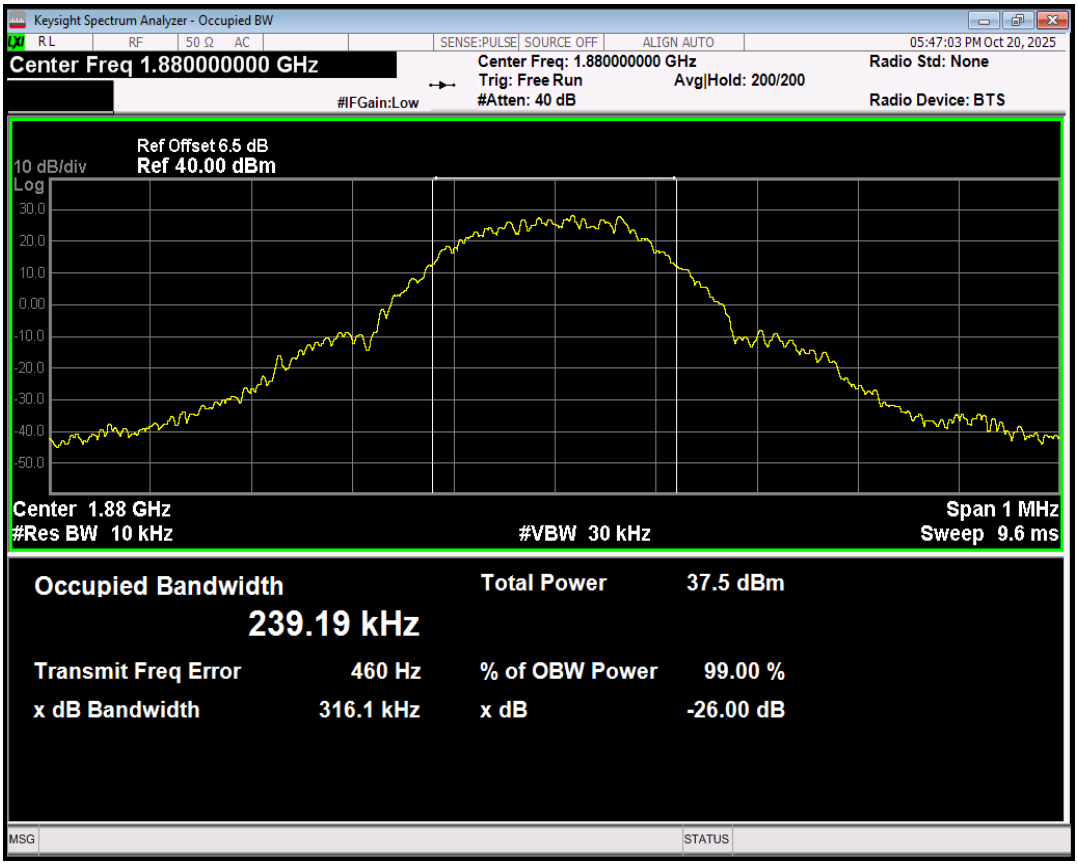

GSM850 Channel=190 NVNT



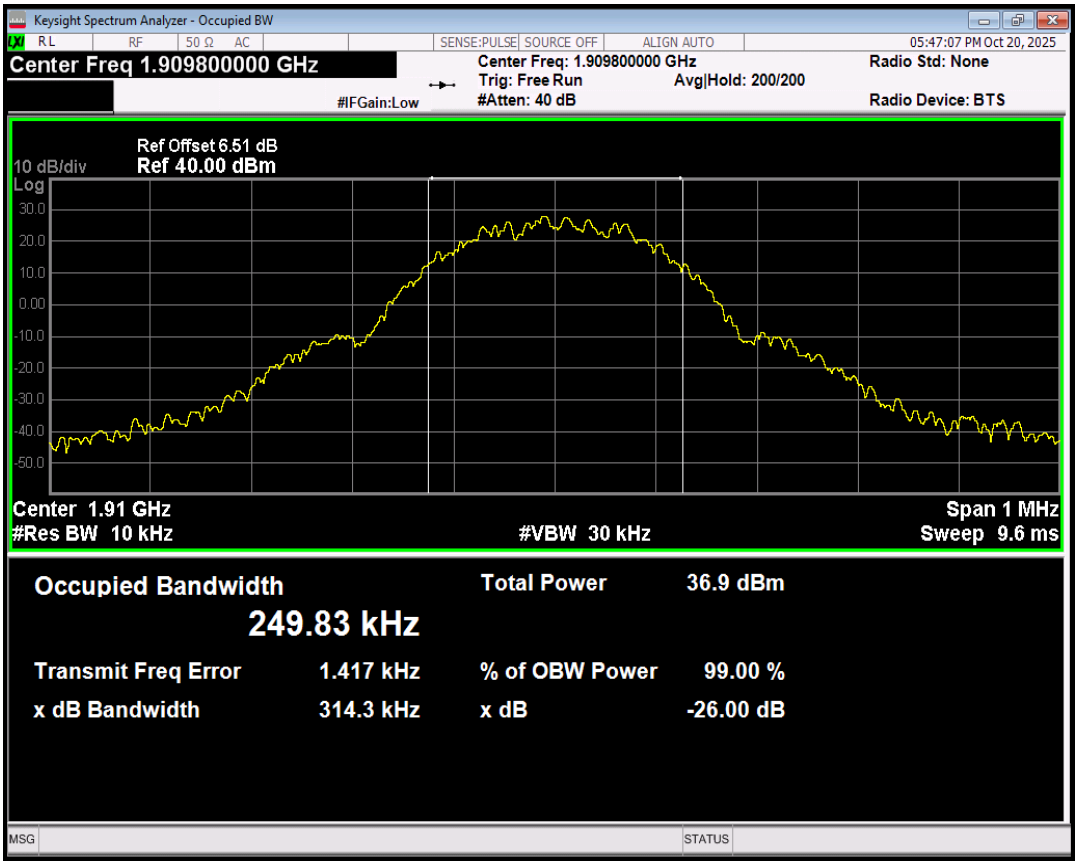

GSM850 Channel=251 NVNT




GSM1900 Channel=512 NVNT



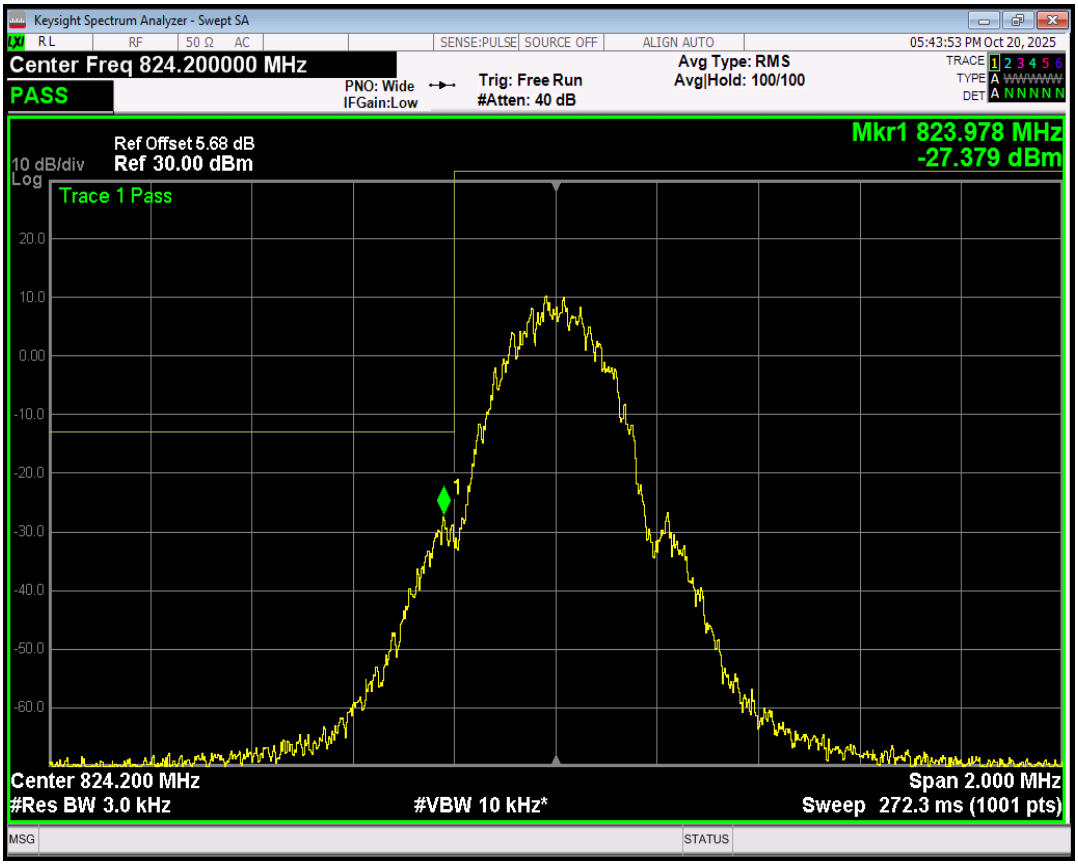

GSM1900 Channel=661 NVNT



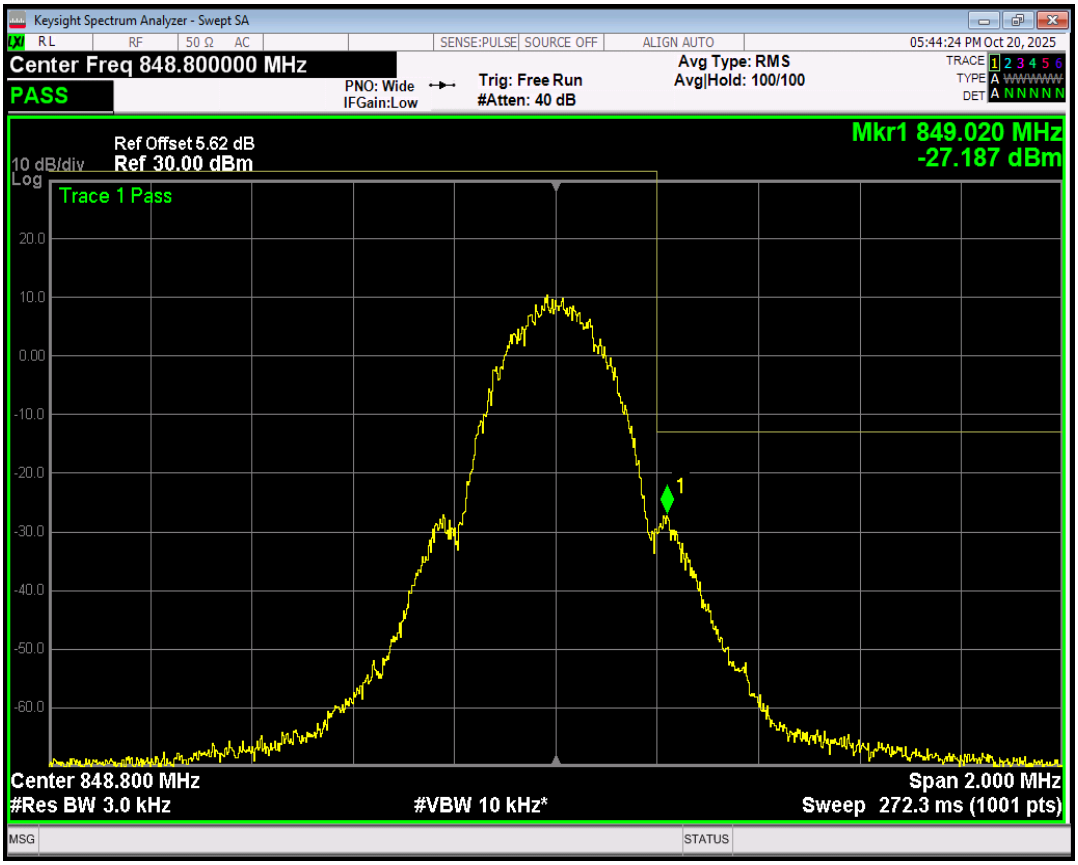

GSM1900 Channel=810 NVNT

# *Appendix 5.Band edge*

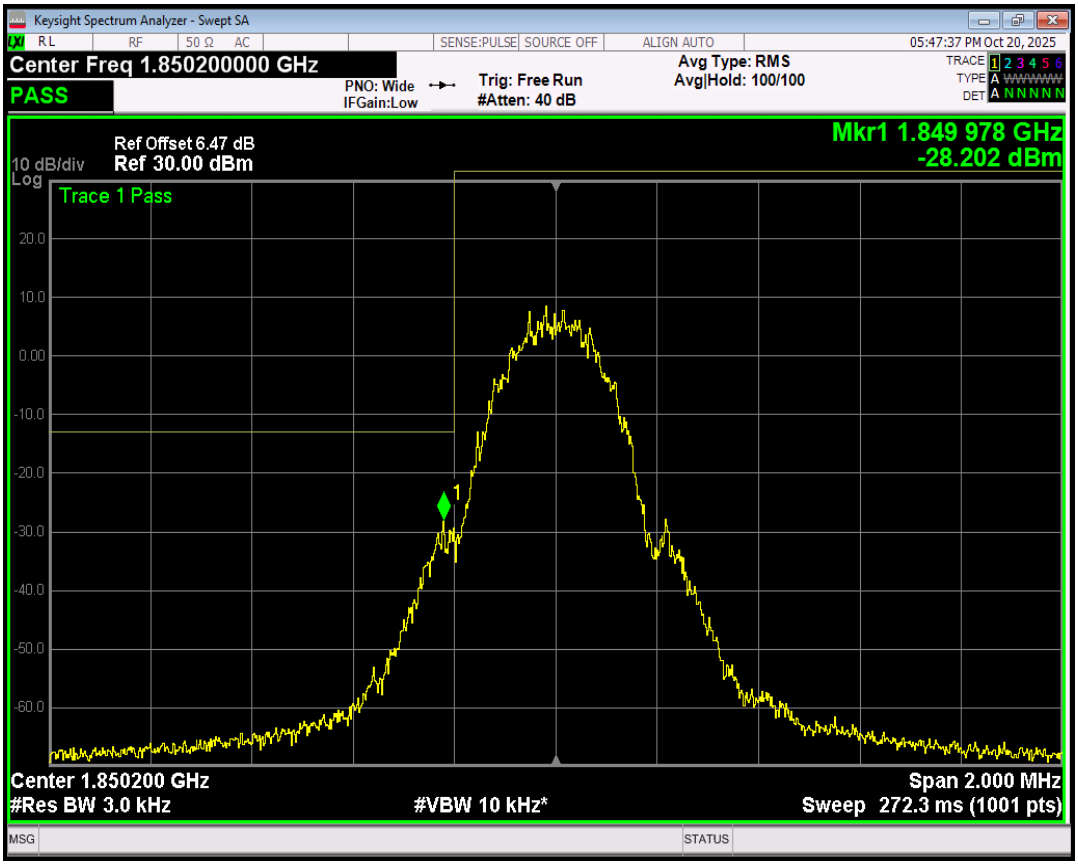
| *Condition* | *Band* | *Channel* | *Frequency (MHz)* | *Spur Freq (MHz)* | *Spur Level (dBm)* | *Limit (dBm)* | *Verdict* |
|---|---|---|---|---|---|---|---|
| NVNT | GSM850 | 128 | 824.2 | 823.98 | -27.37 | -13 | PASS |
| NVNT | GSM850 | 251 | 848.8 | 849.02 | -27.18 | -13 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | 1849.98 | -28.20 | -13 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | 1910.02 | -28.68 | -13 | PASS |



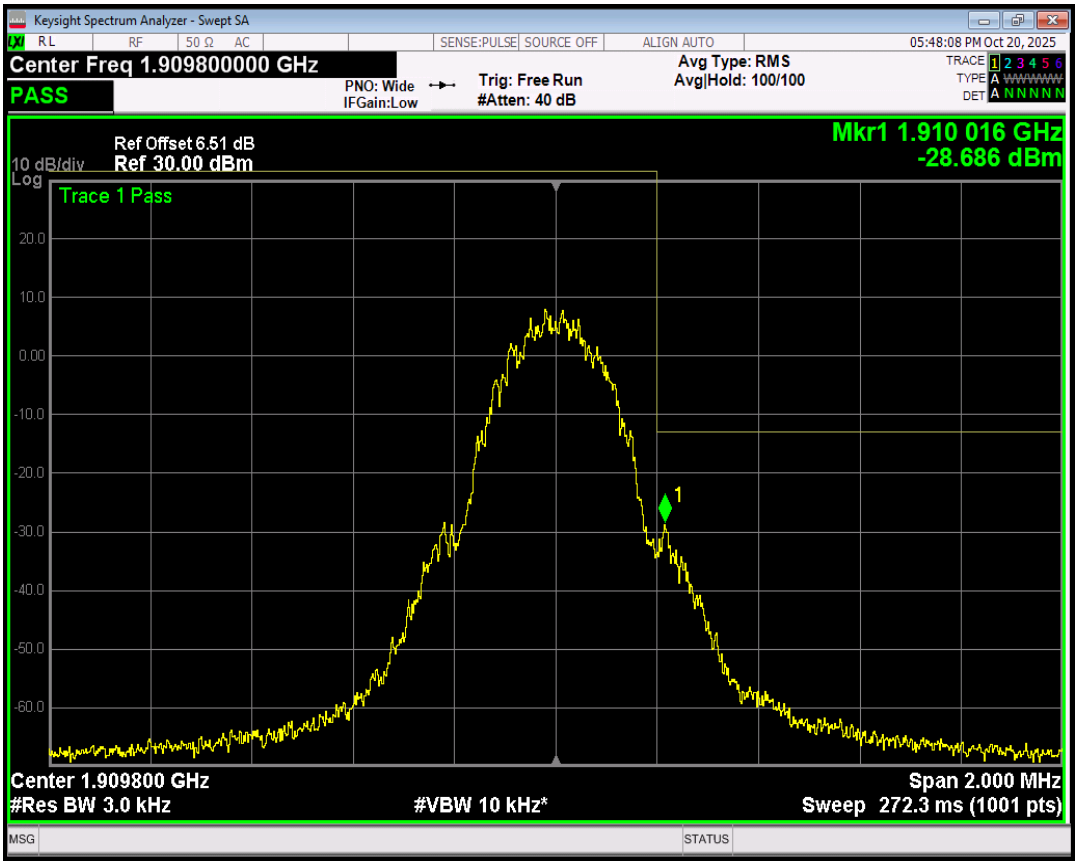

GSM850 Channel=128 NVNT




GSM850 Channel=251 NVNT



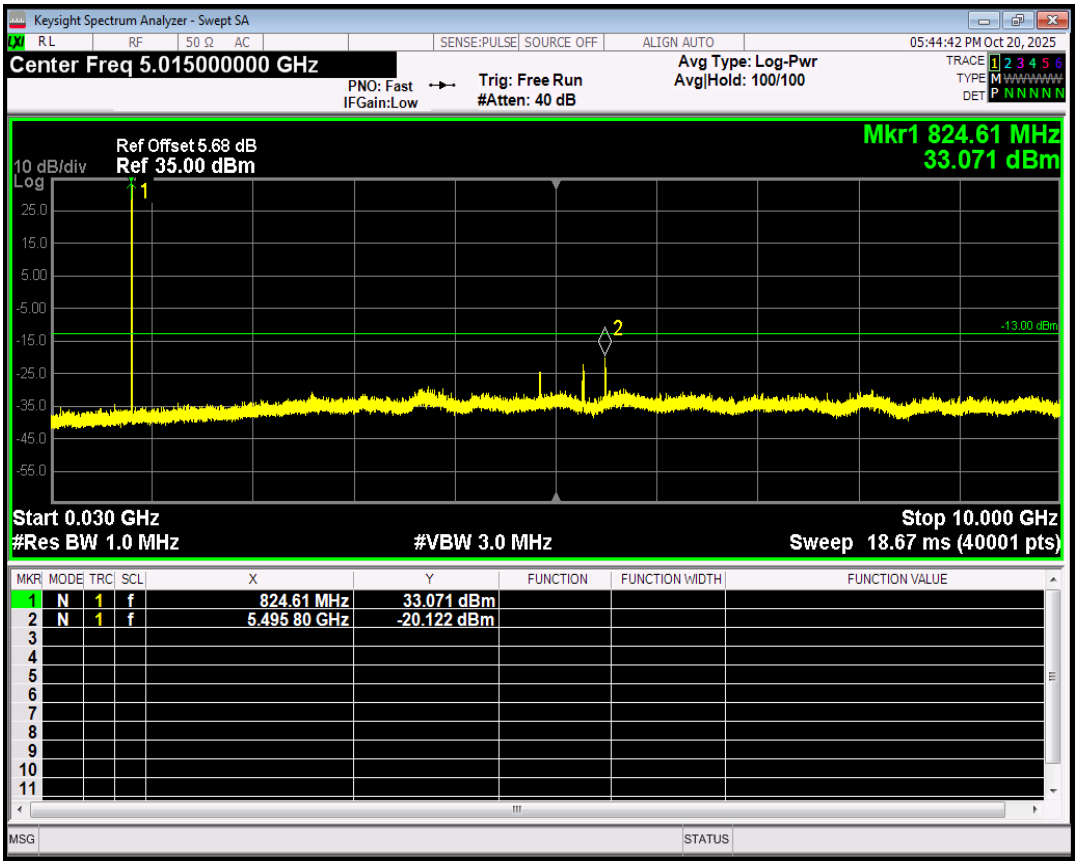

GSM1900 Channel=512 NVNT



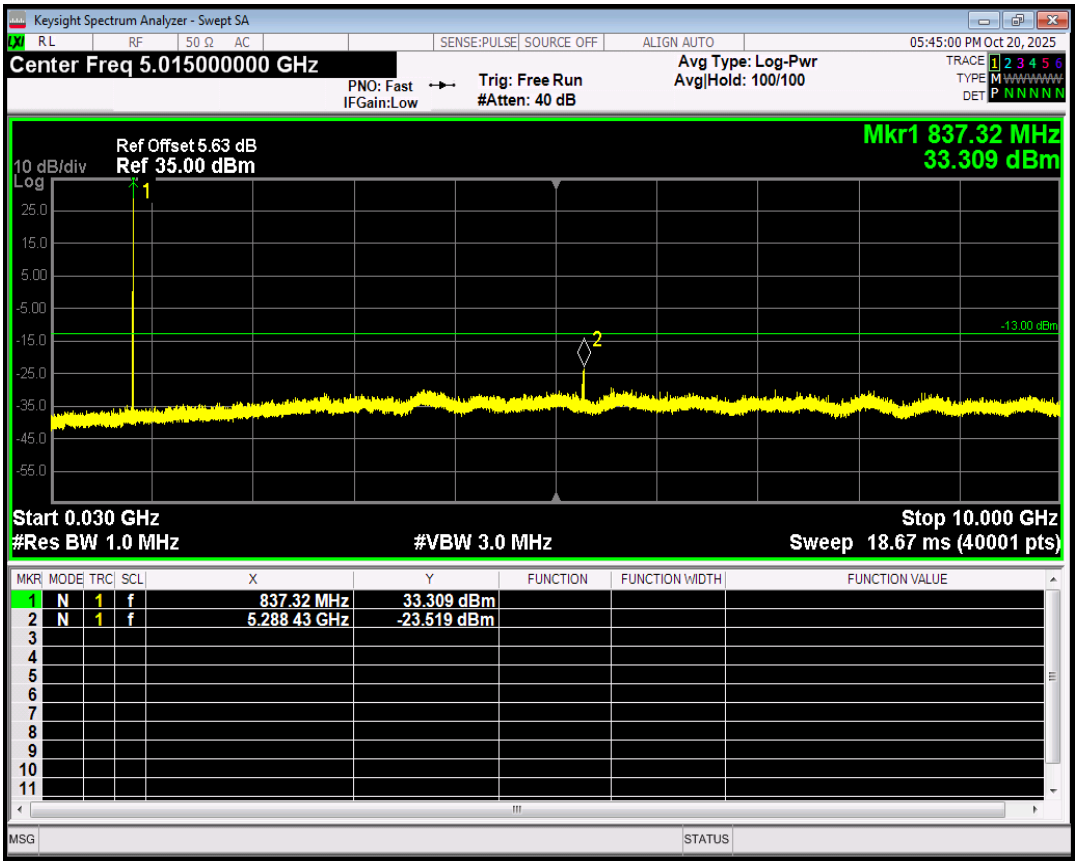

GSM1900 Channel=810 NVNT

# *Appendix 6.Out-of-band emissions*

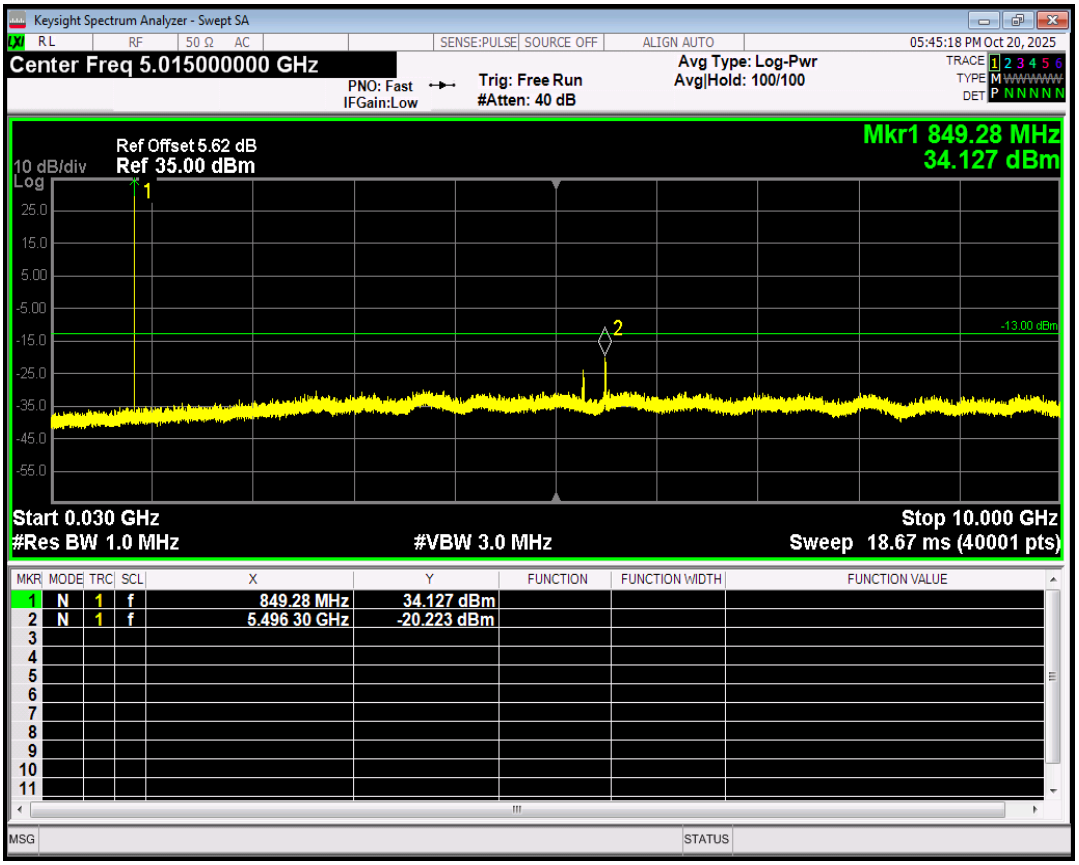
| *Condition* | *Band* | *Channel* | *Frequency (MHz)* | *Spur Freq (MHz)* | *Spur Level (dBm)* | *Limit (dBm)* | *Verdict* |
|---|---|---|---|---|---|---|---|
| NVNT | GSM850 | 128 | 824.2 | 5495.80 | -20.12 | -13 | PASS |
| NVNT | GSM850 | 190 | 836.6 | 5288.43 | -23.51 | -13 | PASS |
| NVNT | GSM850 | 251 | 848.8 | 5496.30 | -20.22 | -13 | PASS |
| NVNT | GSM1900 | 512 | 1850.2 | 4851.26 | -19.84 | -13 | PASS |
| NVNT | GSM1900 | 661 | 1880 | 5495.79 | -22.34 | -13 | PASS |
| NVNT | GSM1900 | 810 | 1909.8 | 17460.81 | -23.98 | -13 | PASS |



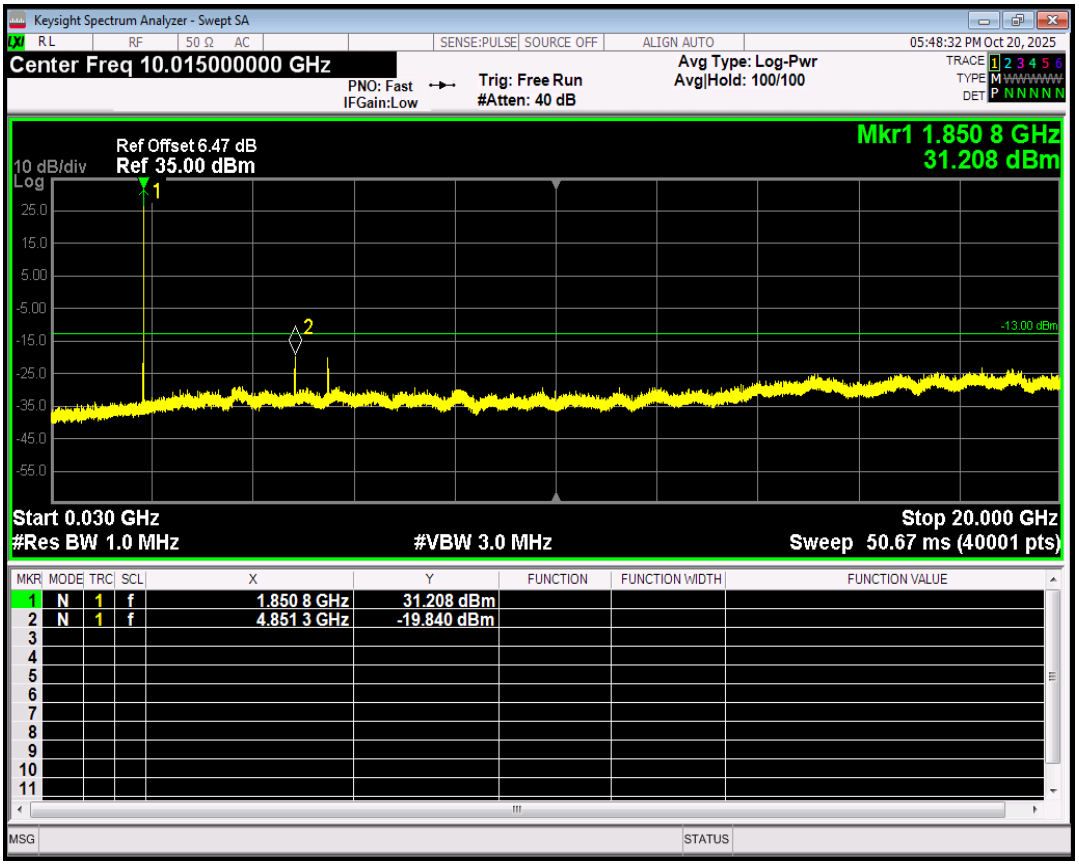

GSM850 Channel=128 NVNT



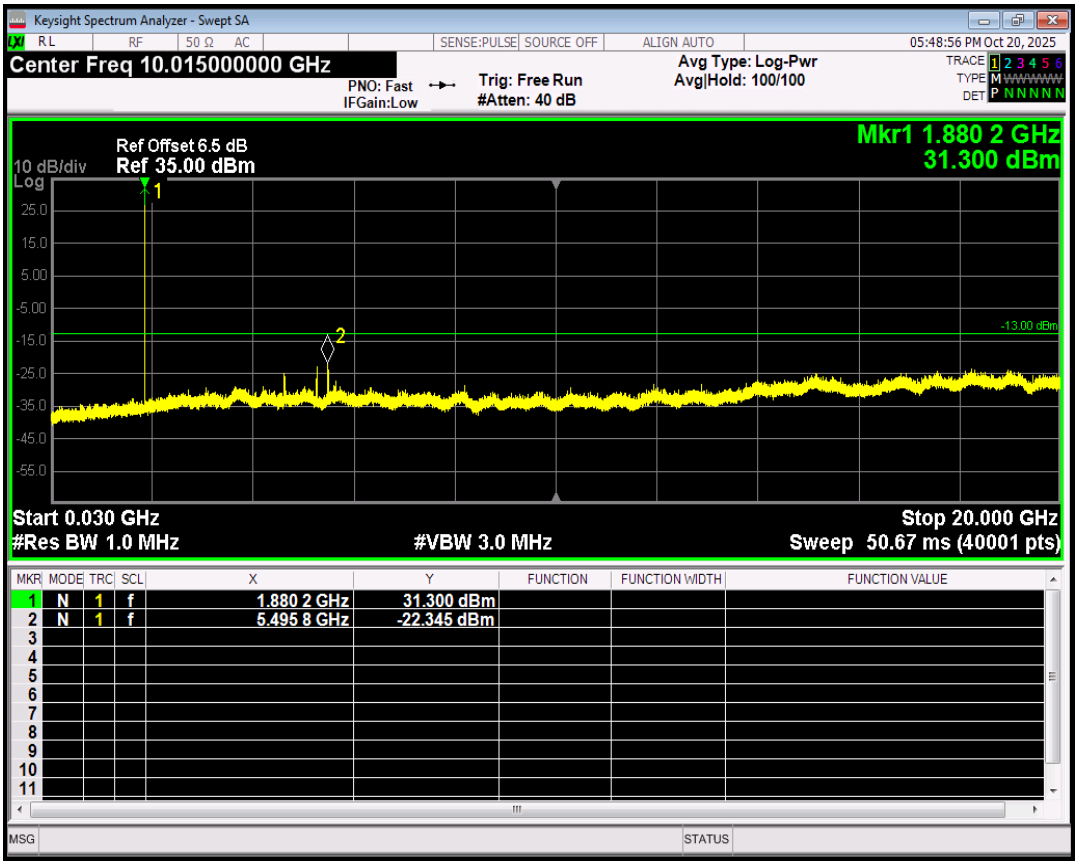

GSM850 Channel=190 NVNT



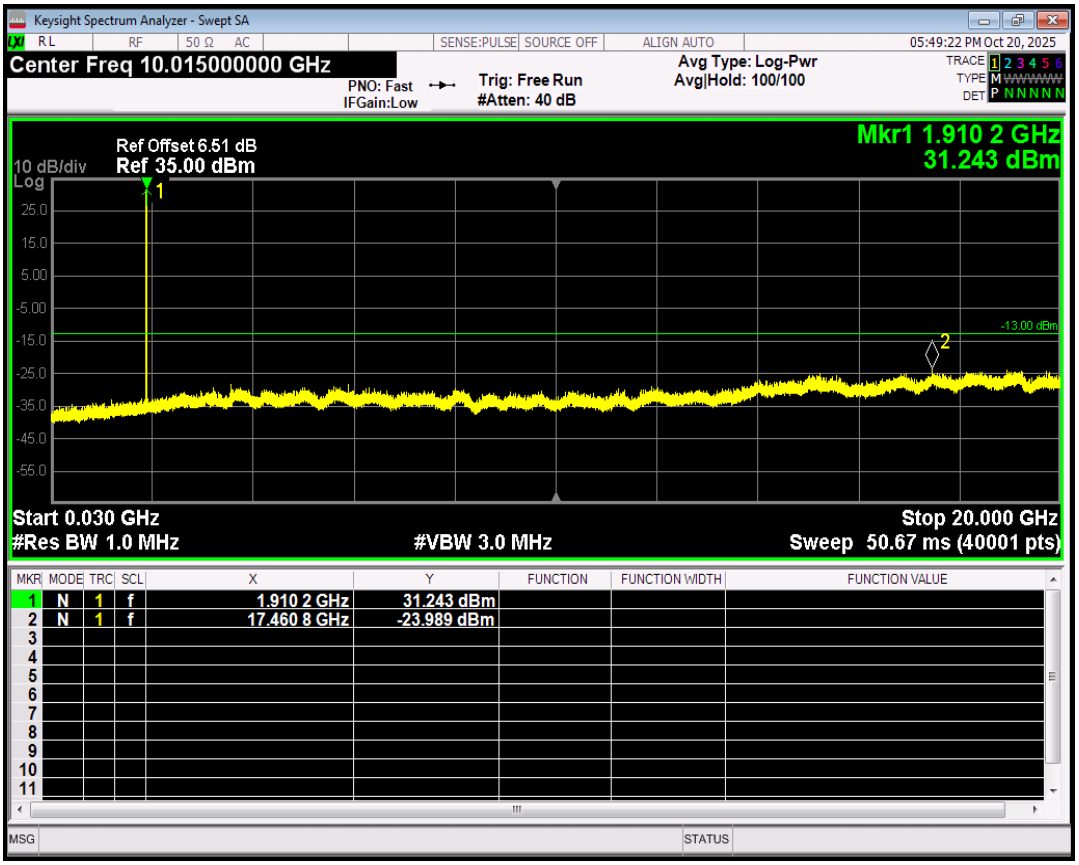

GSM850 Channel=251 NVNT




GSM1900 Channel=512 NVNT




GSM1900 Channel=661 NVNT




GSM1900 Channel=810 NVNT