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**Appendix 1. Conducted output power**

| <i>Band</i> | <i>Channel</i> | <i>Frequency<br/>(MHz)</i> | <i>Power<br/>(dBm)</i> | <i>Gain<br/>(dBm)</i> | <i>ERP<br/>(dBm)</i> | <i>EIRP<br/>(dBm)</i> | <i>Verdict</i> |
|-------------|----------------|----------------------------|------------------------|-----------------------|----------------------|-----------------------|----------------|
| GSM850      | 128            | 824.2                      | 33.47                  | -2.33                 | 28.99                | /                     | PASS           |
| GSM850      | 190            | 836.6                      | 33.63                  | -2.33                 | 29.15                | /                     | PASS           |
| GSM850      | 251            | 848.8                      | 33.43                  | -2.33                 | 28.95                | /                     | PASS           |
| GSM1900     | 512            | 1850.2                     | 31.09                  | -1.57                 | /                    | 29.52                 | PASS           |
| GSM1900     | 661            | 1880                       | 31.05                  | -1.57                 | /                    | 29.48                 | PASS           |
| GSM1900     | 810            | 1909.8                     | 31.04                  | -1.57                 | /                    | 29.47                 | PASS           |

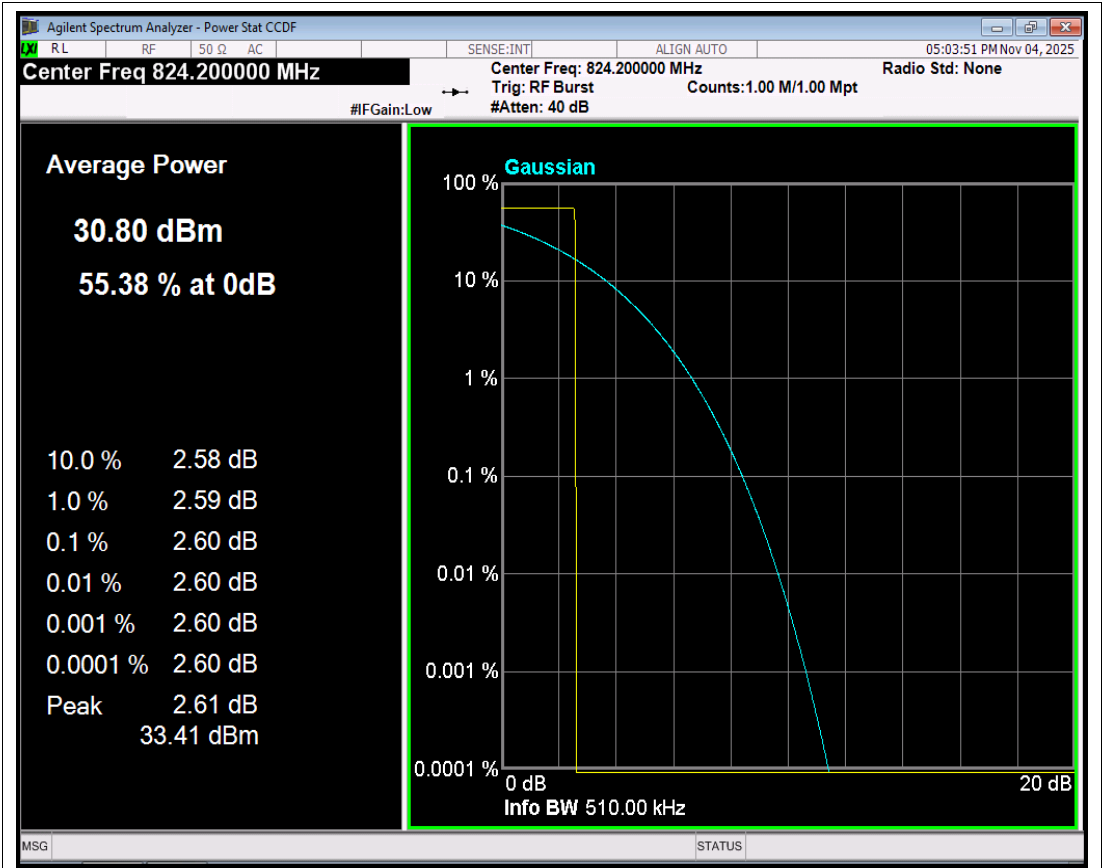
## Appendix 2.Frequency stability

| Band    | Channel | Frequency (MHz) | Voltage (Vdc) | Temperature (C) | Result (Hz) | Result (ppm) | Low Limit (ppm) | high Limit (ppm) | Verdict |
|---------|---------|-----------------|---------------|-----------------|-------------|--------------|-----------------|------------------|---------|
| GSM850  | 128     | 824.2           | LV            | NT              | 3.55        | 0.004        | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | NT              | -5.94       | -0.007       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | HV            | NT              | 1.26        | 0.002        | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | LV            | NT              | -0.16       | 0.000        | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | NT              | 3.00        | 0.004        | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | HV            | NT              | 4.49        | 0.005        | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | LV            | NT              | 5.39        | 0.006        | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | NV            | NT              | 4.42        | 0.005        | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | HV            | NT              | 1.81        | 0.002        | -2.5            | 2.5              | PASS    |
| GSM1900 | 512     | 1850.2          | LV            | NT              | 4.36        | 0.002        | -2.5            | 2.5              | PASS    |
| GSM1900 | 512     | 1850.2          | NV            | NT              | -2.58       | -0.001       | -2.5            | 2.5              | PASS    |
| GSM1900 | 512     | 1850.2          | HV            | NT              | 2.03        | 0.001        | -2.5            | 2.5              | PASS    |
| GSM1900 | 661     | 1880            | LV            | NT              | -3.49       | -0.002       | -2.5            | 2.5              | PASS    |
| GSM1900 | 661     | 1880            | NV            | NT              | -2.07       | -0.001       | -2.5            | 2.5              | PASS    |
| GSM1900 | 661     | 1880            | HV            | NT              | -14.95      | -0.008       | -2.5            | 2.5              | PASS    |
| GSM1900 | 810     | 1909.8          | LV            | NT              | 4.07        | 0.002        | -2.5            | 2.5              | PASS    |
| GSM1900 | 810     | 1909.8          | NV            | NT              | 4.55        | 0.002        | -2.5            | 2.5              | PASS    |
| GSM1900 | 810     | 1909.8          | HV            | NT              | 3.84        | 0.002        | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | -30             | -8.14       | -0.010       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | -20             | -15.08      | -0.018       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | 0               | -34.71      | -0.042       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | 10              | -13.69      | -0.017       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | 20              | -6.72       | -0.008       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | 30              | -11.53      | -0.014       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | 40              | -9.46       | -0.011       | -2.5            | 2.5              | PASS    |
| GSM850  | 128     | 824.2           | NV            | 50              | -7.49       | -0.009       | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | -30             | 2.45        | 0.003        | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | -20             | -6.23       | -0.007       | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | 0               | -4.36       | -0.005       | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | 10              | 0.45        | 0.001        | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | 20              | -6.78       | -0.008       | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | 30              | 0.87        | 0.001        | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | 40              | -4.04       | -0.005       | -2.5            | 2.5              | PASS    |
| GSM850  | 190     | 836.6           | NV            | 50              | -0.16       | 0.000        | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | NV            | -30             | -9.72       | -0.011       | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | NV            | -20             | -5.04       | -0.006       | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | NV            | 0               | -13.24      | -0.016       | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | NV            | 10              | -7.91       | -0.009       | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | NV            | 20              | -2.00       | -0.002       | -2.5            | 2.5              | PASS    |
| GSM850  | 251     | 848.8           | NV            | 30              | -5.04       | -0.006       | -2.5            | 2.5              | PASS    |

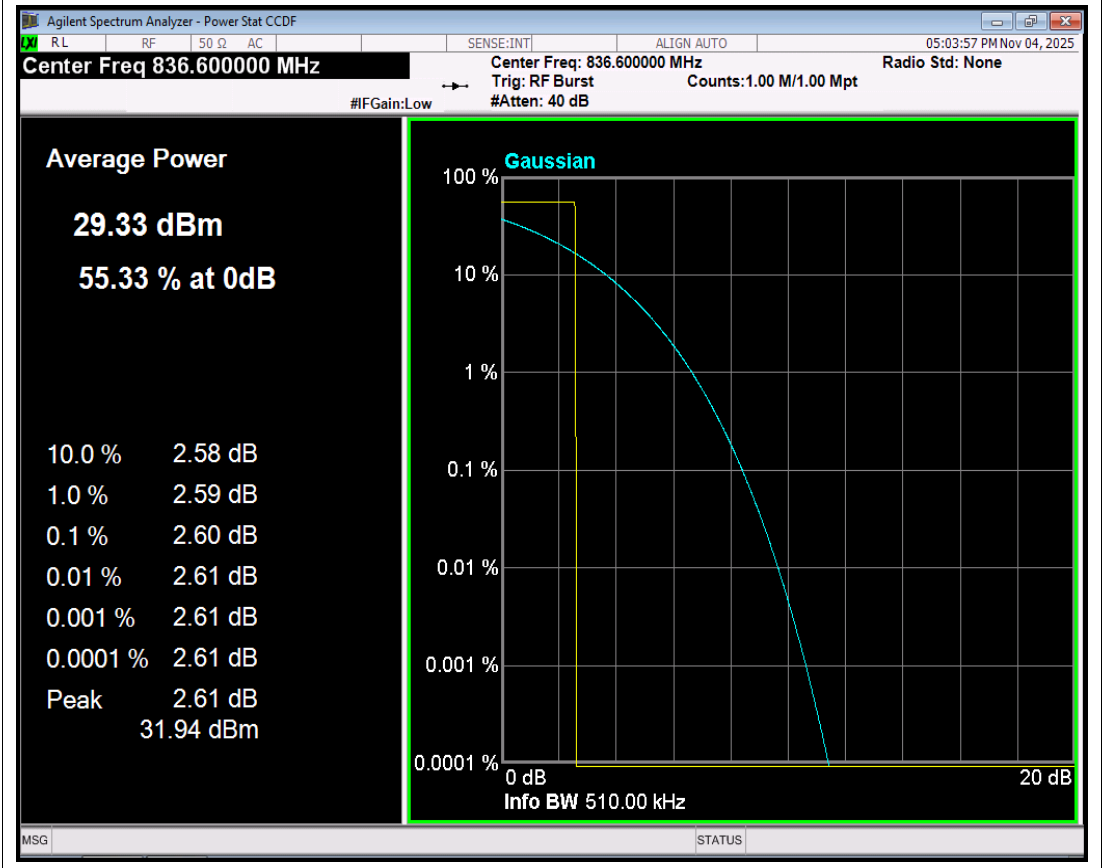
|         |     |        |    |     |        |        |      |     |      |
|---------|-----|--------|----|-----|--------|--------|------|-----|------|
| GSM850  | 251 | 848.8  | NV | 40  | -8.81  | -0.010 | -2.5 | 2.5 | PASS |
| GSM850  | 251 | 848.8  | NV | 50  | -11.56 | -0.014 | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | -30 | -8.94  | -0.005 | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | -20 | 0.58   | 0.000  | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | 0   | -22.70 | -0.012 | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | 10  | -8.98  | -0.005 | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | 20  | -3.52  | -0.002 | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | 30  | -20.60 | -0.011 | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | 40  | -13.37 | -0.007 | -2.5 | 2.5 | PASS |
| GSM1900 | 512 | 1850.2 | NV | 50  | -2.20  | -0.001 | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | -30 | -8.01  | -0.004 | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | -20 | 12.66  | 0.007  | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | 0   | -0.16  | 0.000  | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | 10  | 4.29   | 0.002  | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | 20  | 3.84   | 0.002  | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | 30  | -3.13  | -0.002 | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | 40  | -6.65  | -0.004 | -2.5 | 2.5 | PASS |
| GSM1900 | 661 | 1880   | NV | 50  | -9.36  | -0.005 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | -30 | -10.62 | -0.006 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | -20 | -16.82 | -0.009 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | 0   | -27.06 | -0.014 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | 10  | -12.53 | -0.007 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | 20  | -3.65  | -0.002 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | 30  | -14.40 | -0.008 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | 40  | -9.62  | -0.005 | -2.5 | 2.5 | PASS |
| GSM1900 | 810 | 1909.8 | NV | 50  | -10.94 | -0.006 | -2.5 | 2.5 | PASS |

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

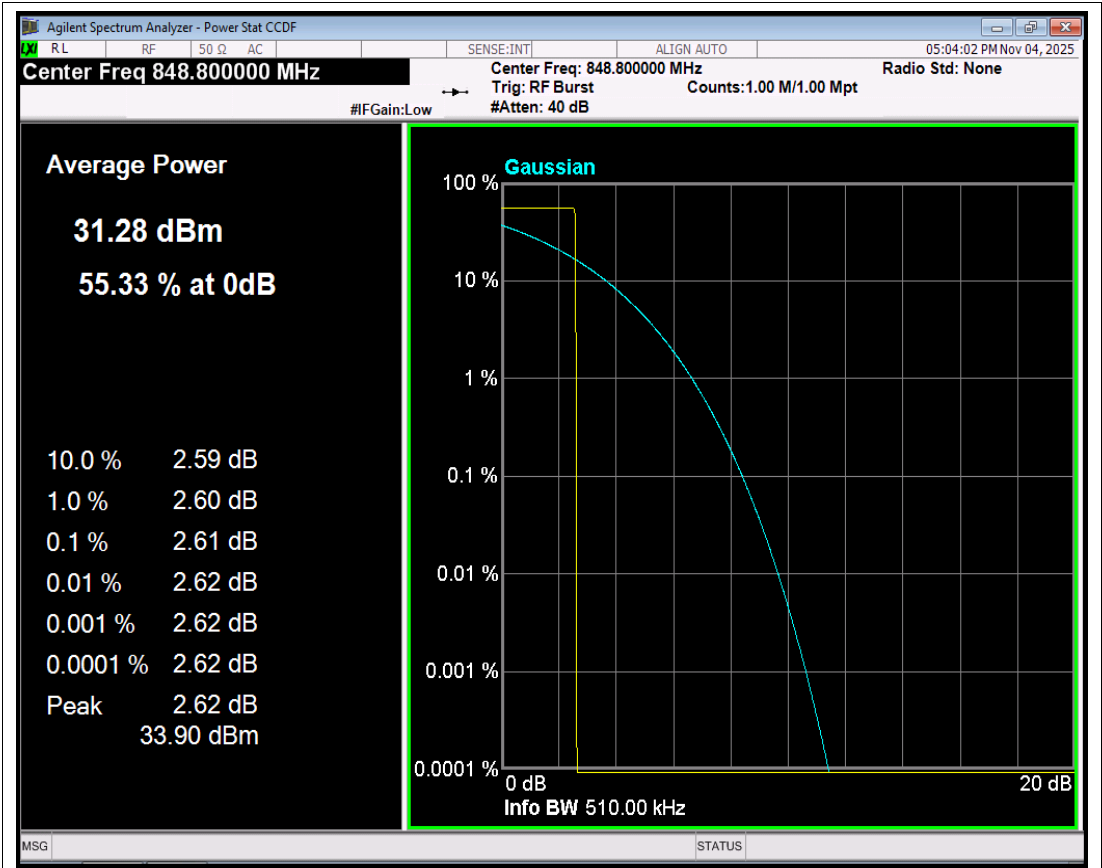
| <i>Band</i> | <i>Channel</i> | <i>Frequency (MHz)</i> | <i>Result (dB)</i> | <i>high Limit (dB)</i> | <i>Verdict</i> |
|-------------|----------------|------------------------|--------------------|------------------------|----------------|
| GSM850      | 128            | 824.2                  | 2.60               | 13                     | PASS           |
| GSM850      | 190            | 836.6                  | 2.60               | 13                     | PASS           |
| GSM850      | 251            | 848.8                  | 2.61               | 13                     | PASS           |
| GSM1900     | 512            | 1850.2                 | 2.72               | 13                     | PASS           |
| GSM1900     | 661            | 1880                   | 2.81               | 13                     | PASS           |
| GSM1900     | 810            | 1909.8                 | 2.81               | 13                     | PASS           |



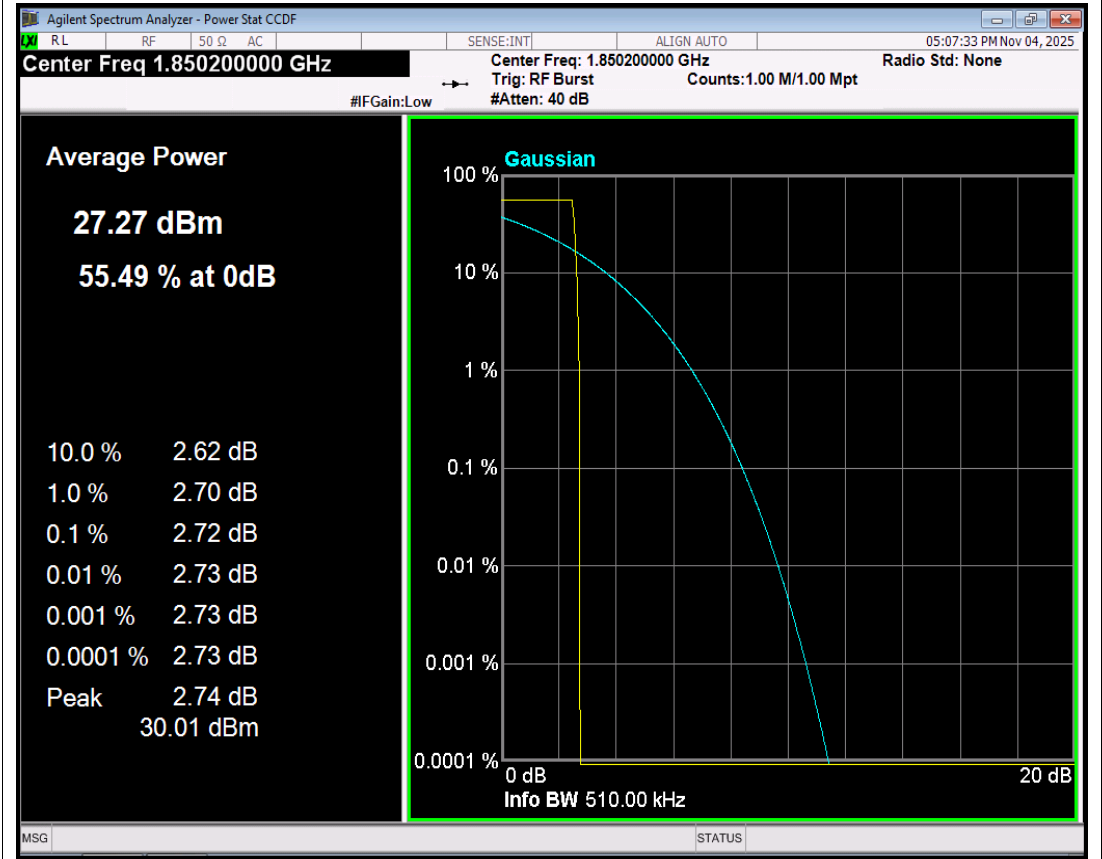
GSM850 Channel=128



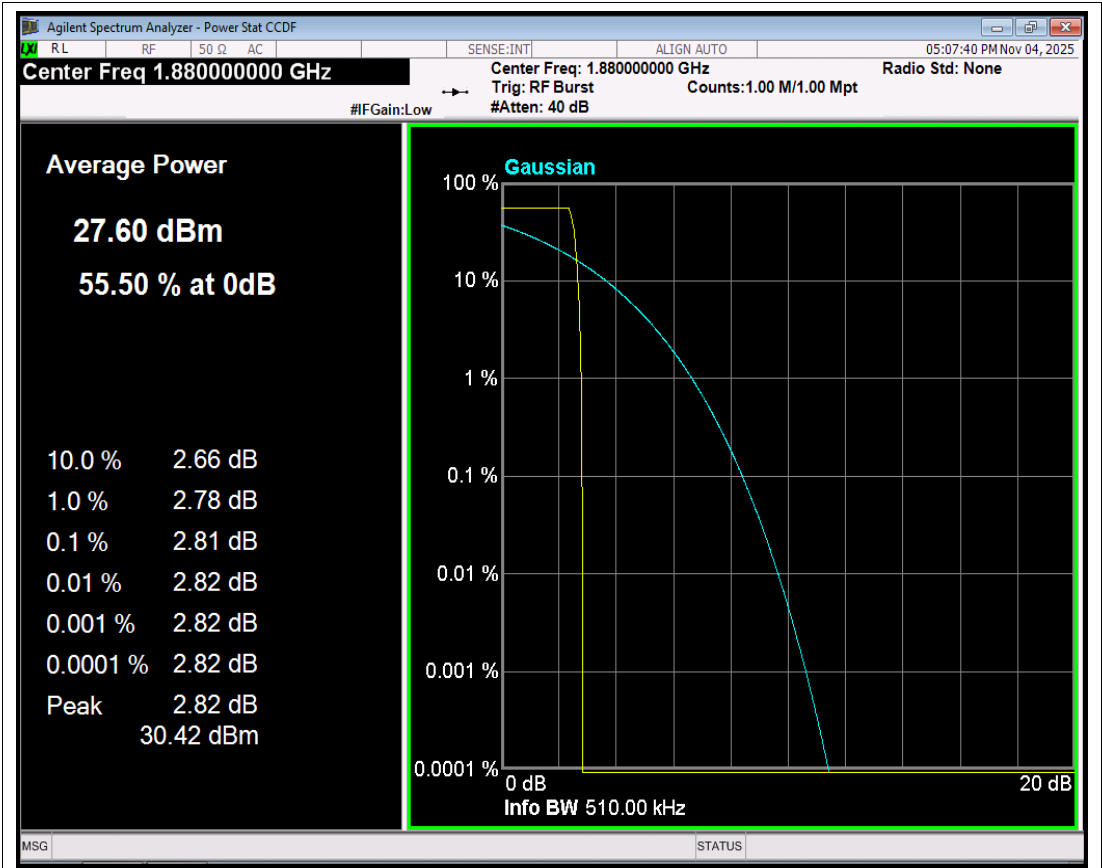
GSM850 Channel=190



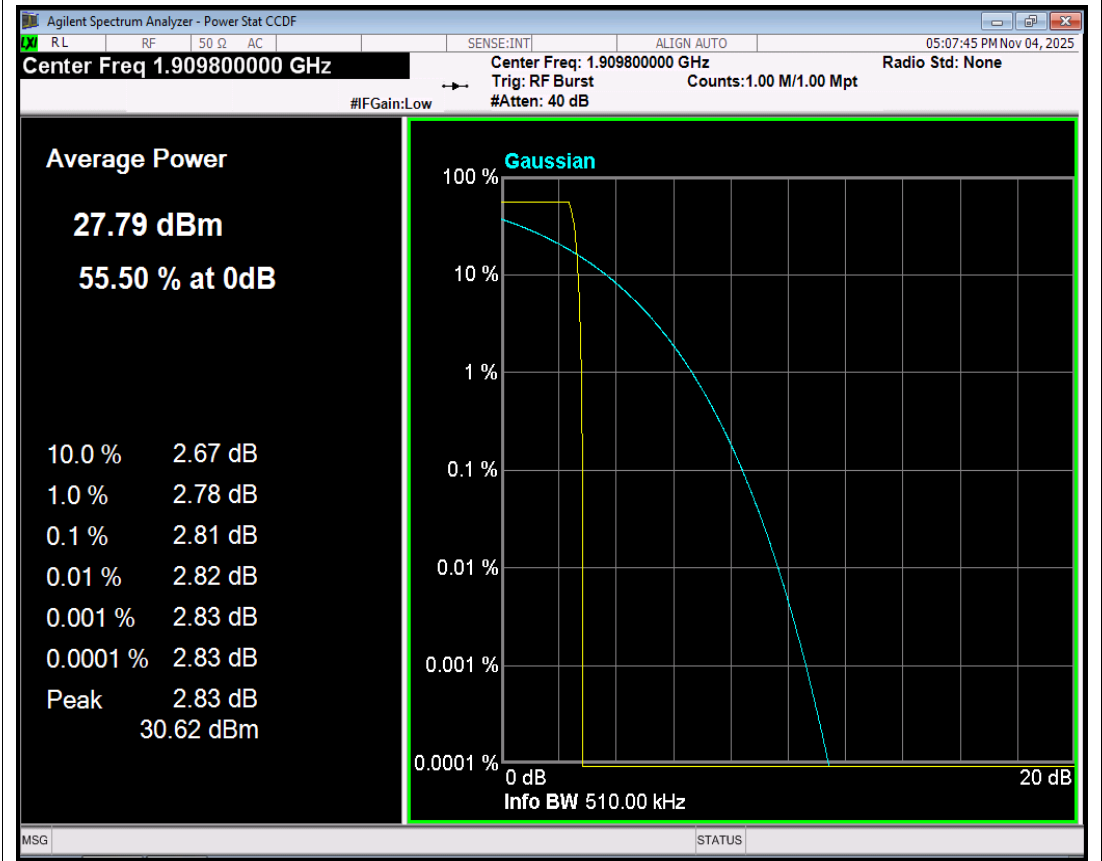
GSM850 Channel=251



GSM1900 Channel=512



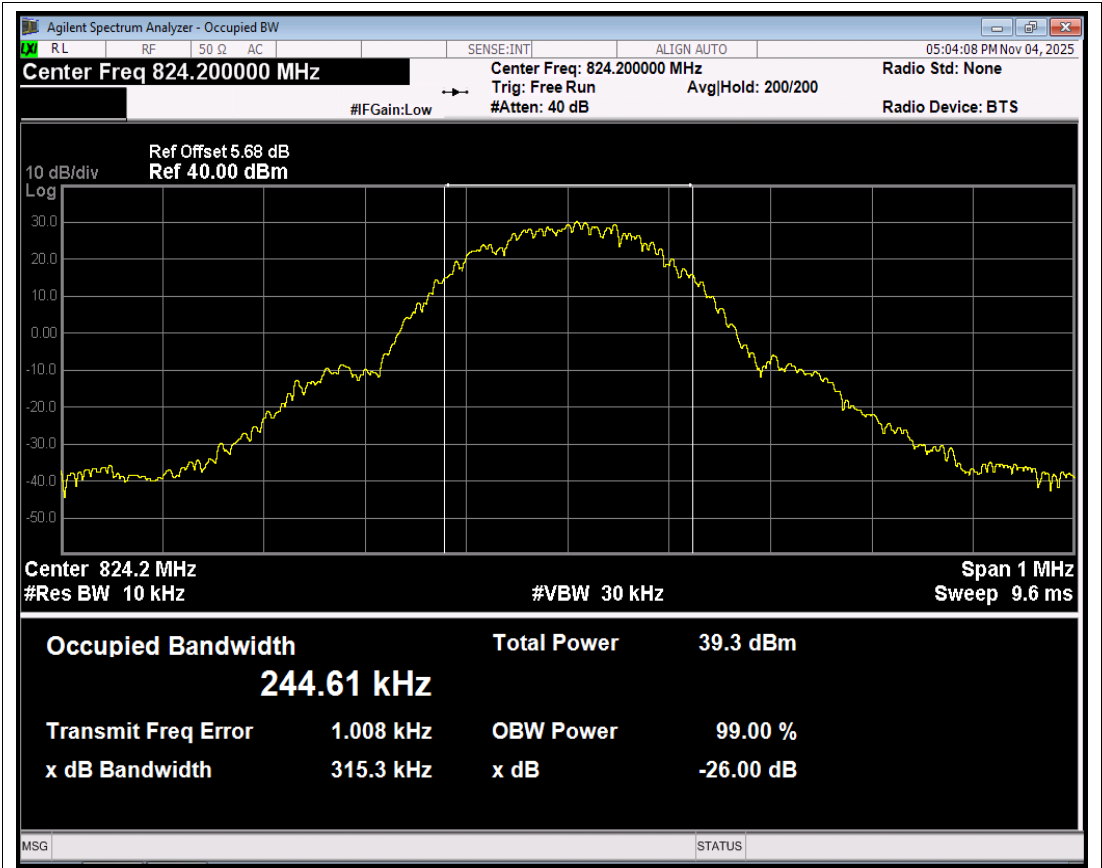
GSM1900 Channel=661



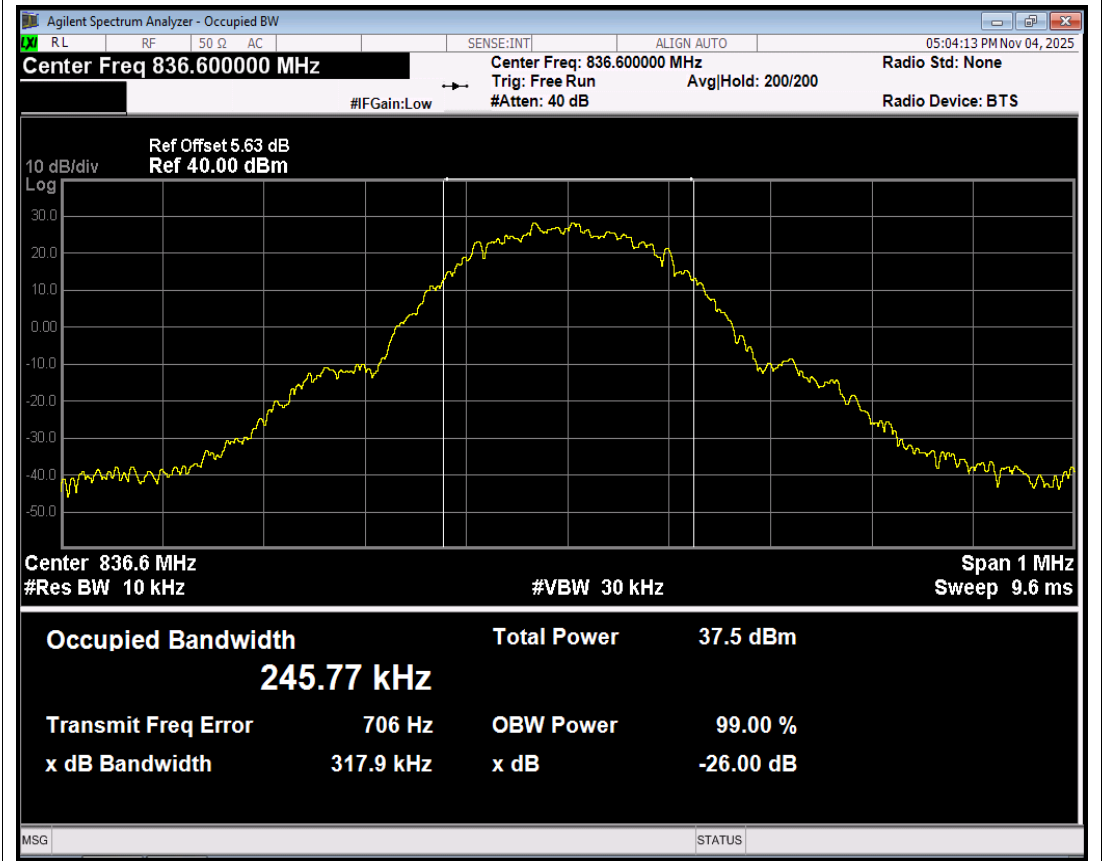
GSM1900 Channel=810

***Appendix 4.Occupied bandwidth***

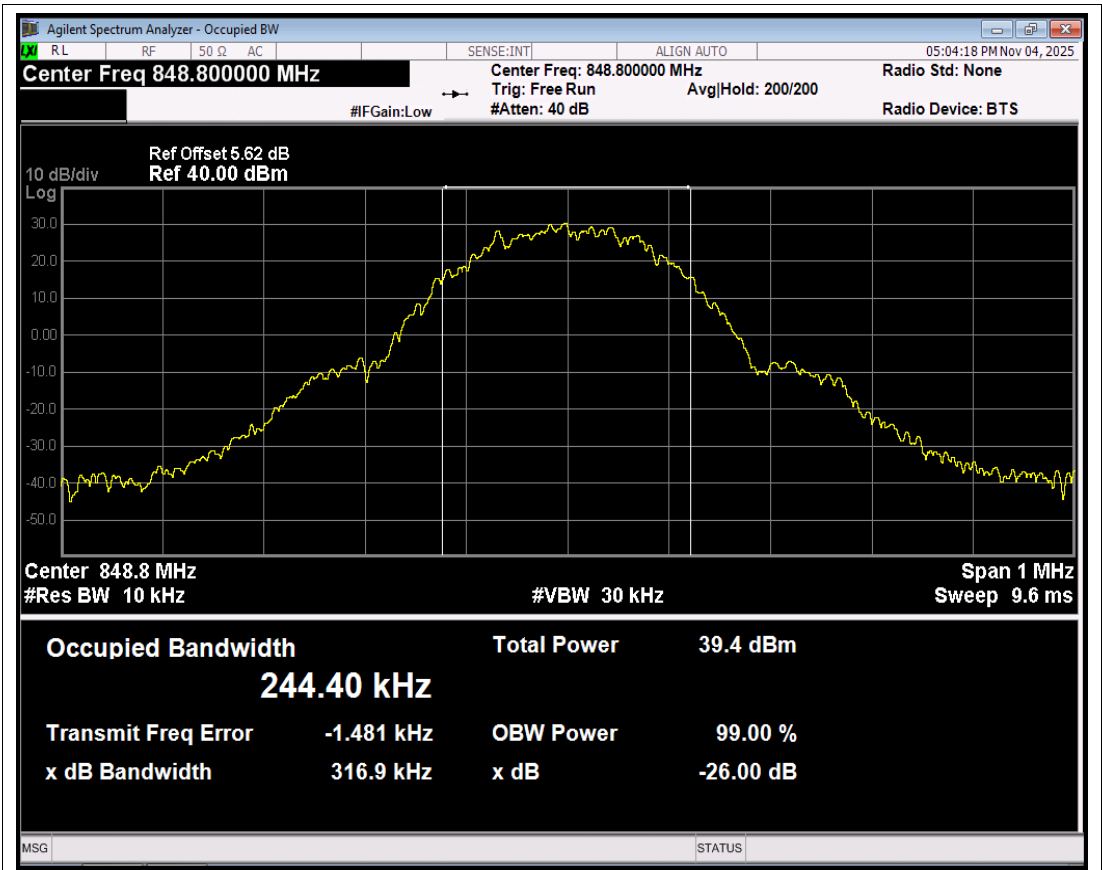
| <i>Band</i> | <i>Channel</i> | <i>Frequency (MHz)</i> | <i>99% OBW (kHz)</i> | <i>-26dB EBW (kHz)</i> | <i>Verdict</i> |
|-------------|----------------|------------------------|----------------------|------------------------|----------------|
| GSM850      | 128            | 824.2                  | 244.611              | 315.319                | PASS           |
| GSM850      | 190            | 836.6                  | 245.767              | 317.920                | PASS           |
| GSM850      | 251            | 848.8                  | 244.401              | 316.917                | PASS           |
| GSM1900     | 512            | 1850.2                 | 246.211              | 308.936                | PASS           |
| GSM1900     | 661            | 1880                   | 249.138              | 315.294                | PASS           |
| GSM1900     | 810            | 1909.8                 | 247.377              | 322.192                | PASS           |



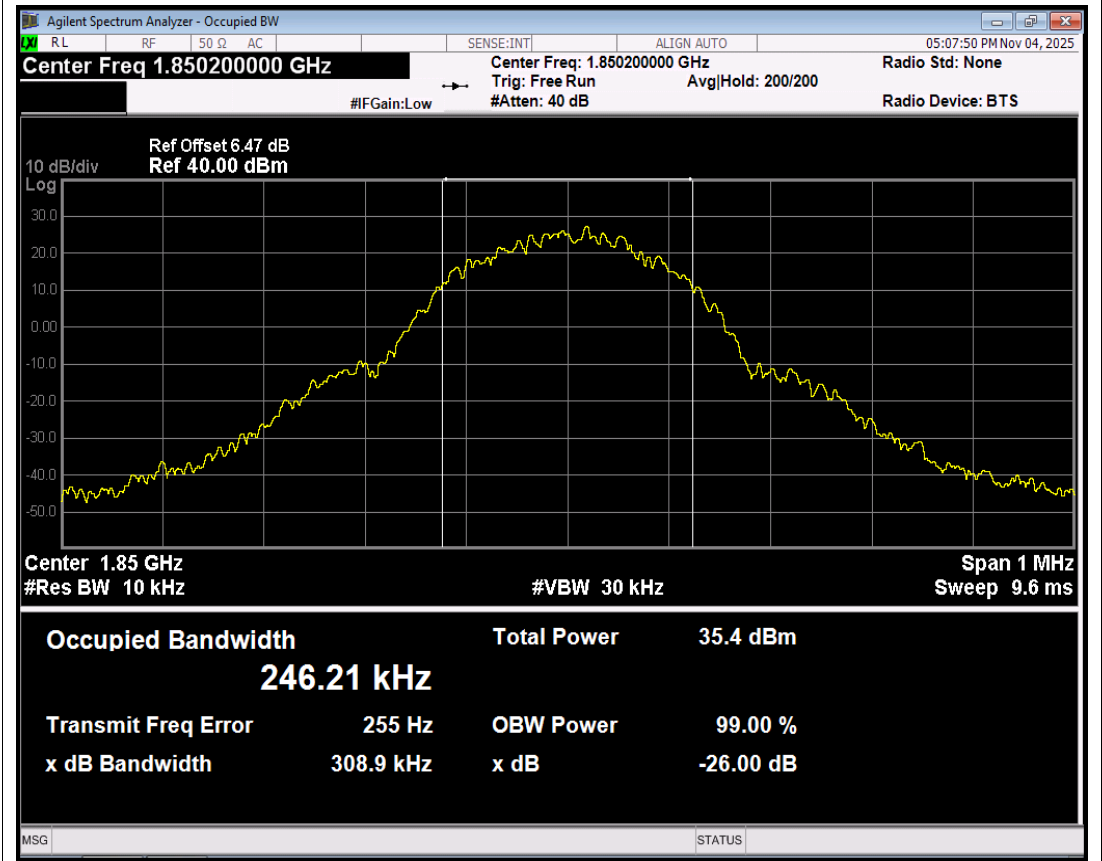
GSM850 Channel=128



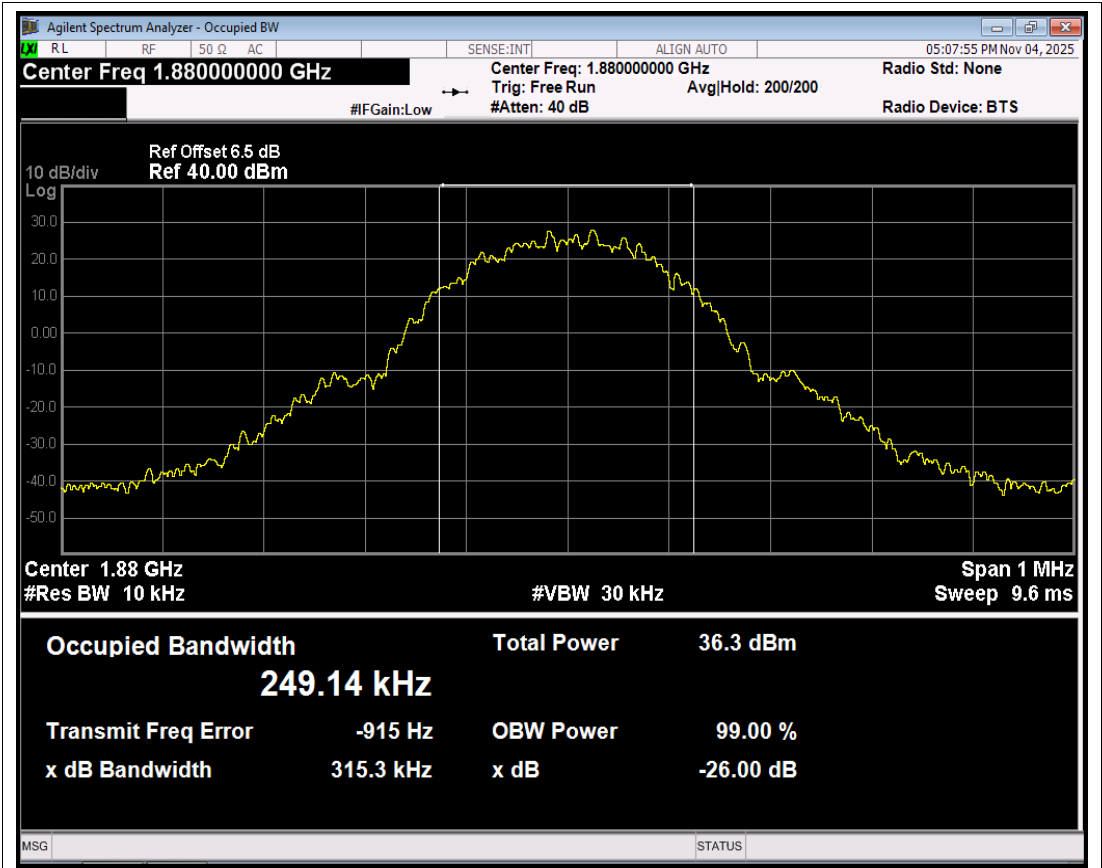
GSM850 Channel=190



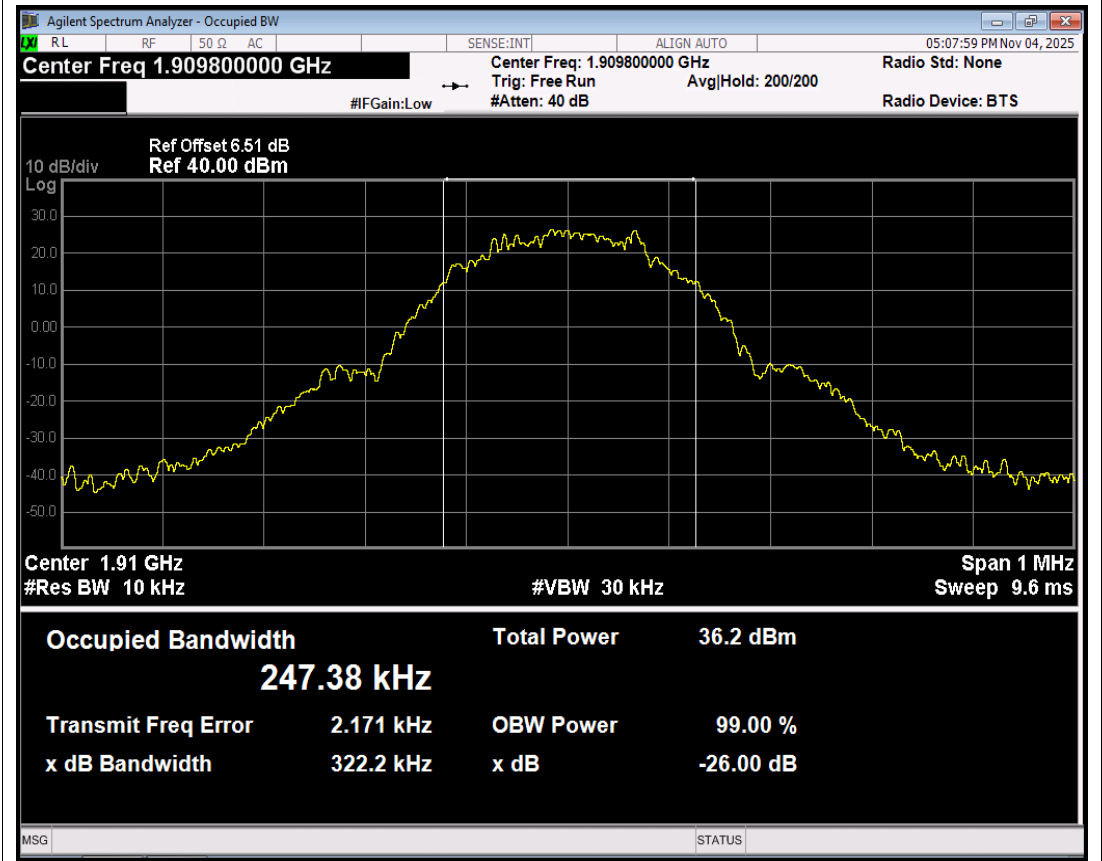
GSM850 Channel=251



GSM1900 Channel=512



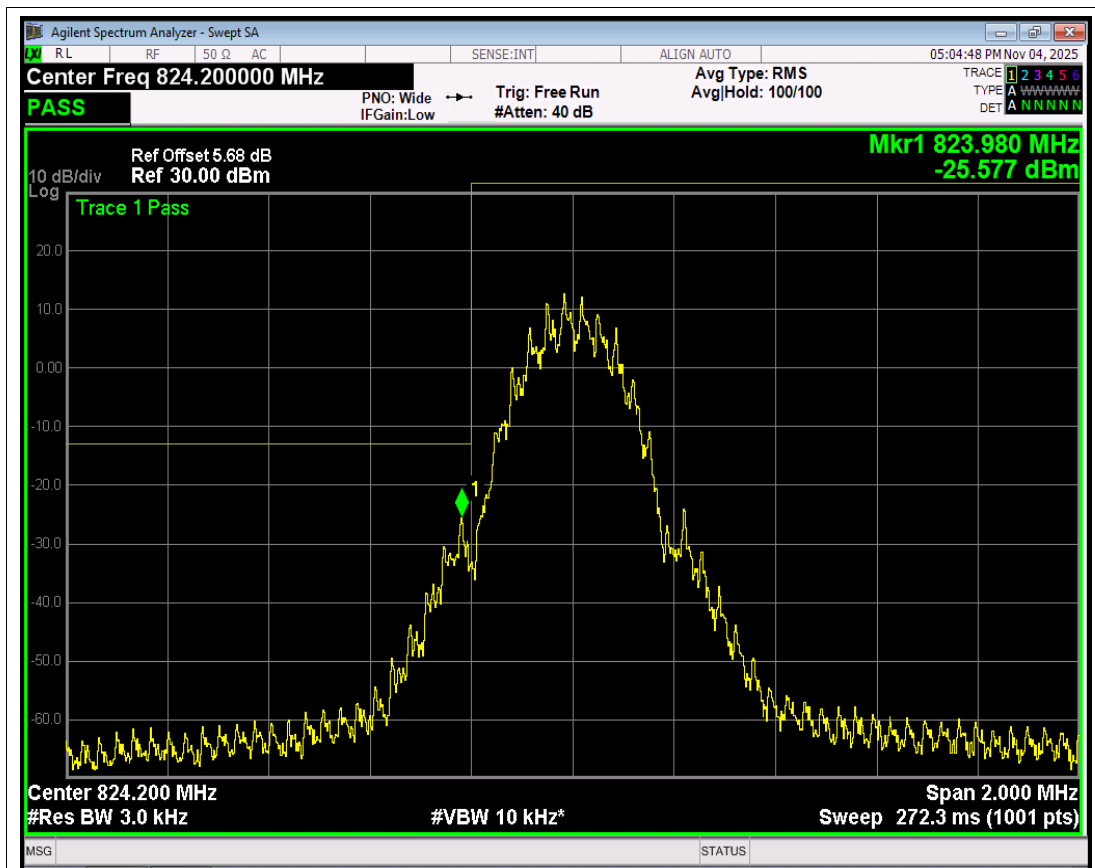
GSM1900 Channel=661



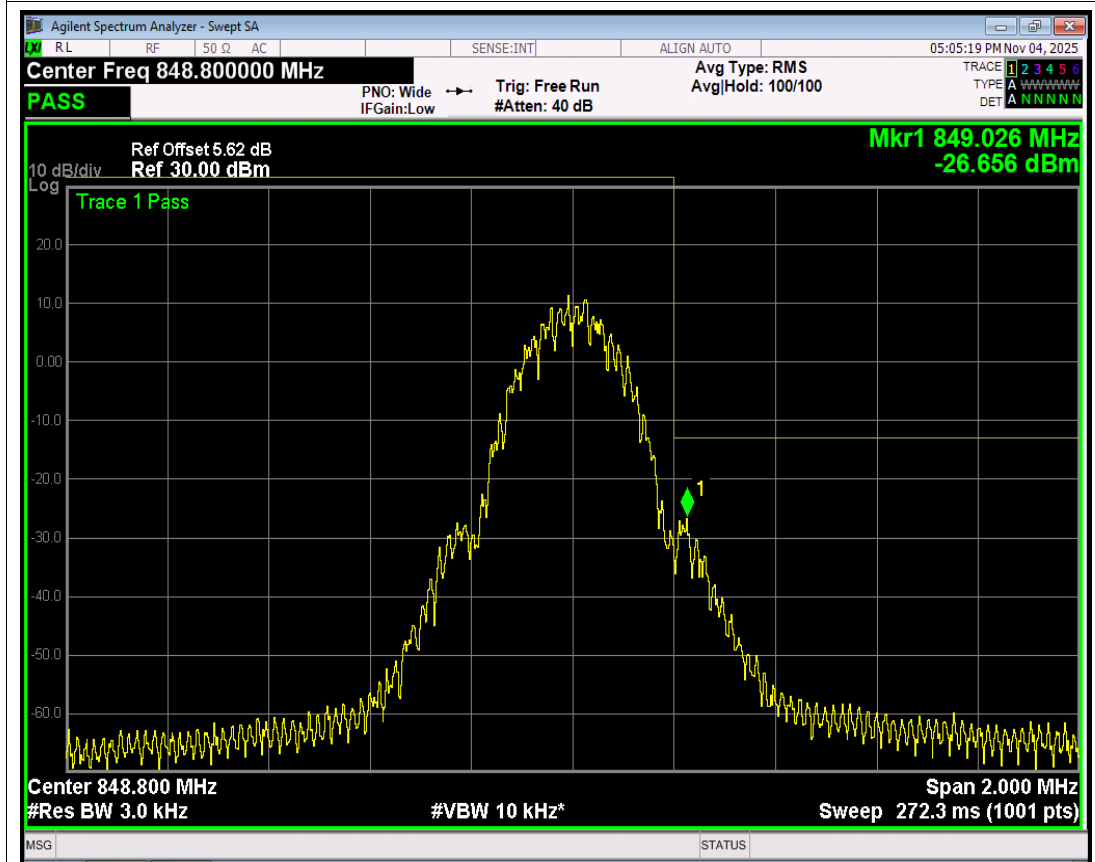
GSM1900 Channel=810

**Appendix 5.Band edge**

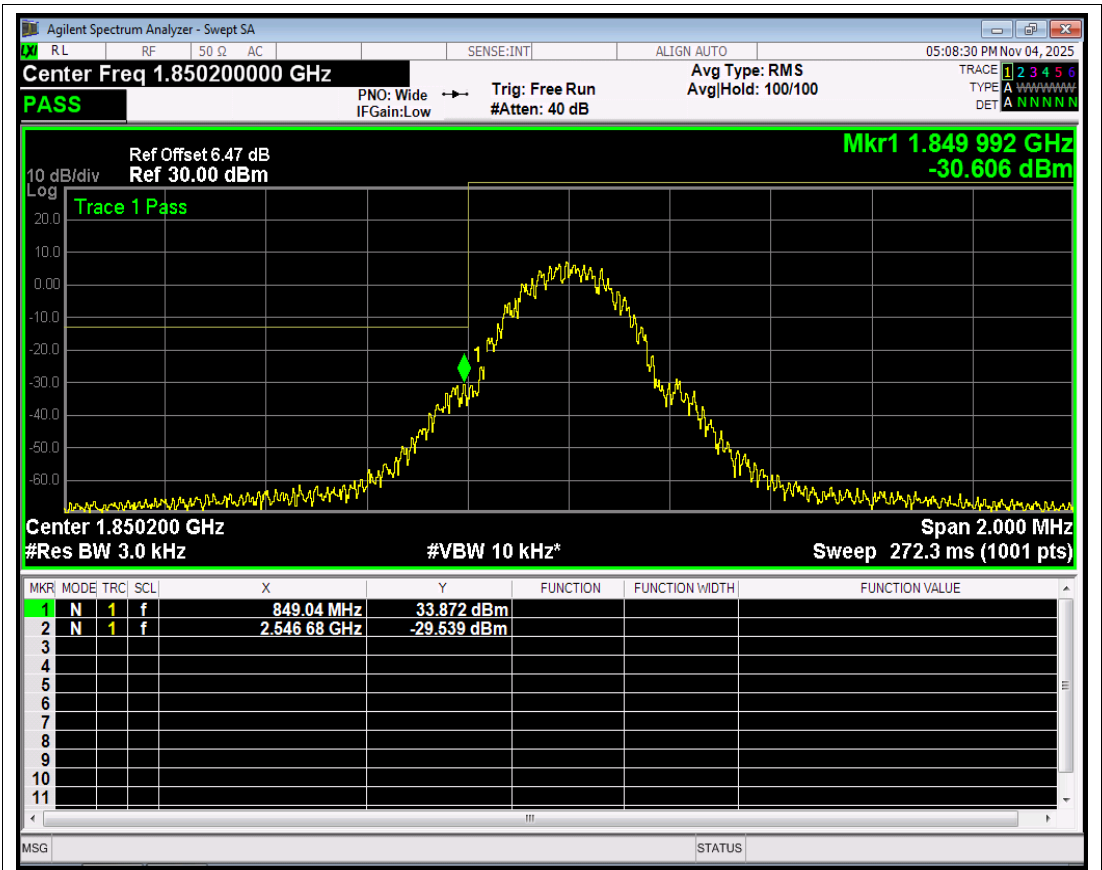
| <i>Band</i> | <i>Channel</i> | <i>Frequency (MHz)</i> | <i>Spur Freq (MHz)</i> | <i>Spur Level (dBm)</i> | <i>Limit (dBm)</i> | <i>Verdict</i> |
|-------------|----------------|------------------------|------------------------|-------------------------|--------------------|----------------|
| GSM850      | 128            | 824.2                  | 823.98                 | -25.57                  | -13                | PASS           |
| GSM850      | 251            | 848.8                  | 849.03                 | -26.65                  | -13                | PASS           |
| GSM1900     | 512            | 1850.2                 | 1849.99                | -30.60                  | -13                | PASS           |
| GSM1900     | 810            | 1909.8                 | 1910.02                | -27.73                  | -13                | PASS           |



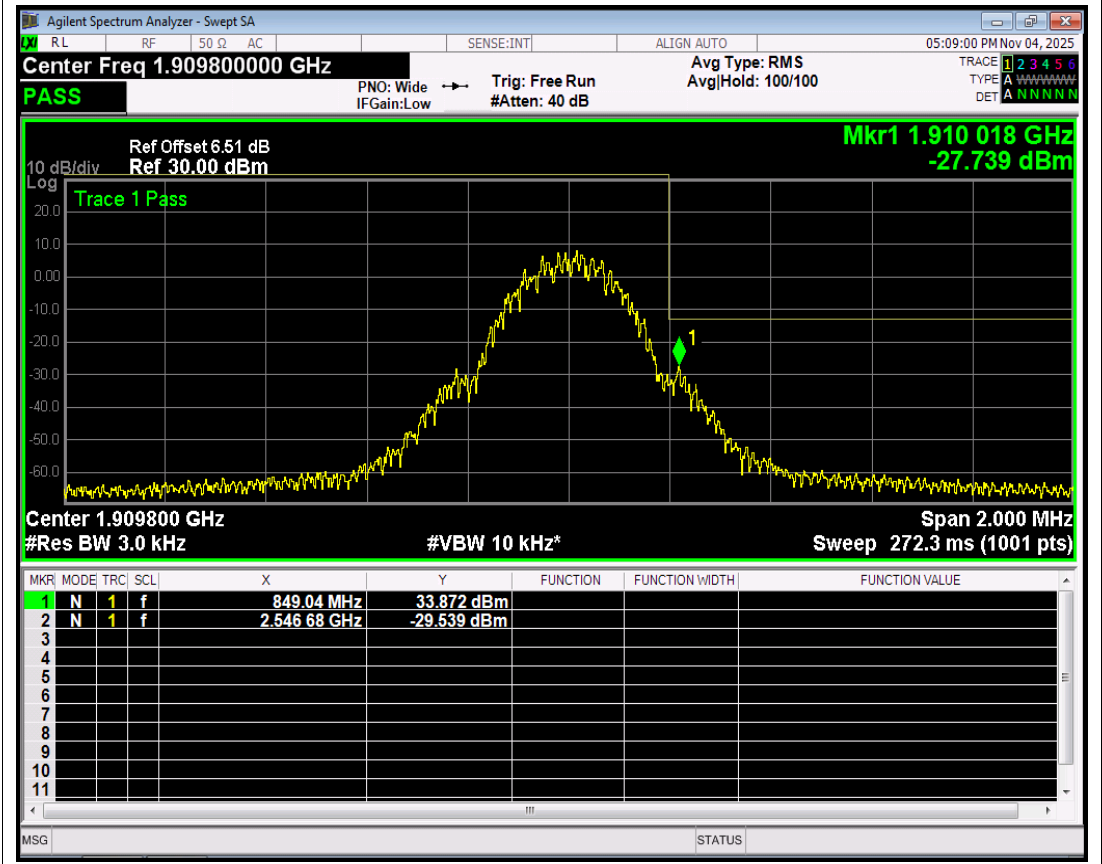
GSM850 Channel=128



GSM850 Channel=251



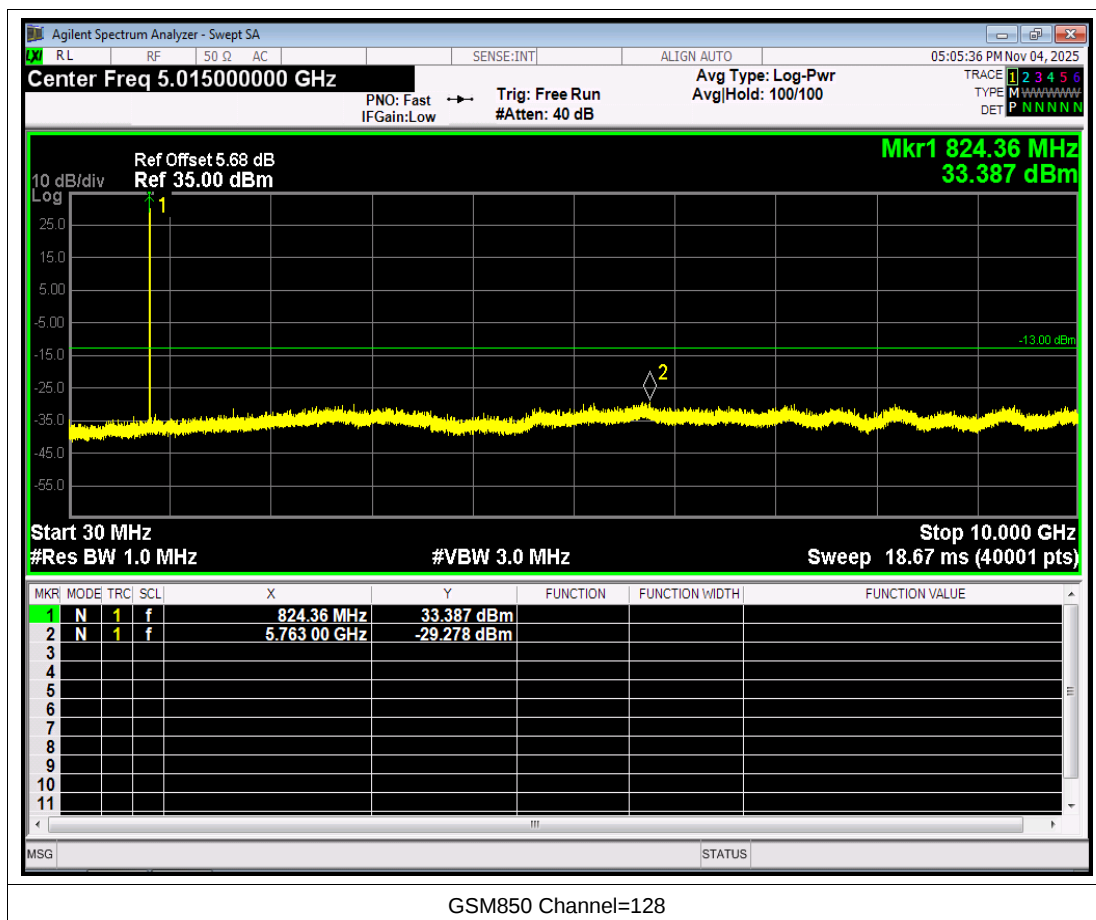
GSM1900 Channel=512

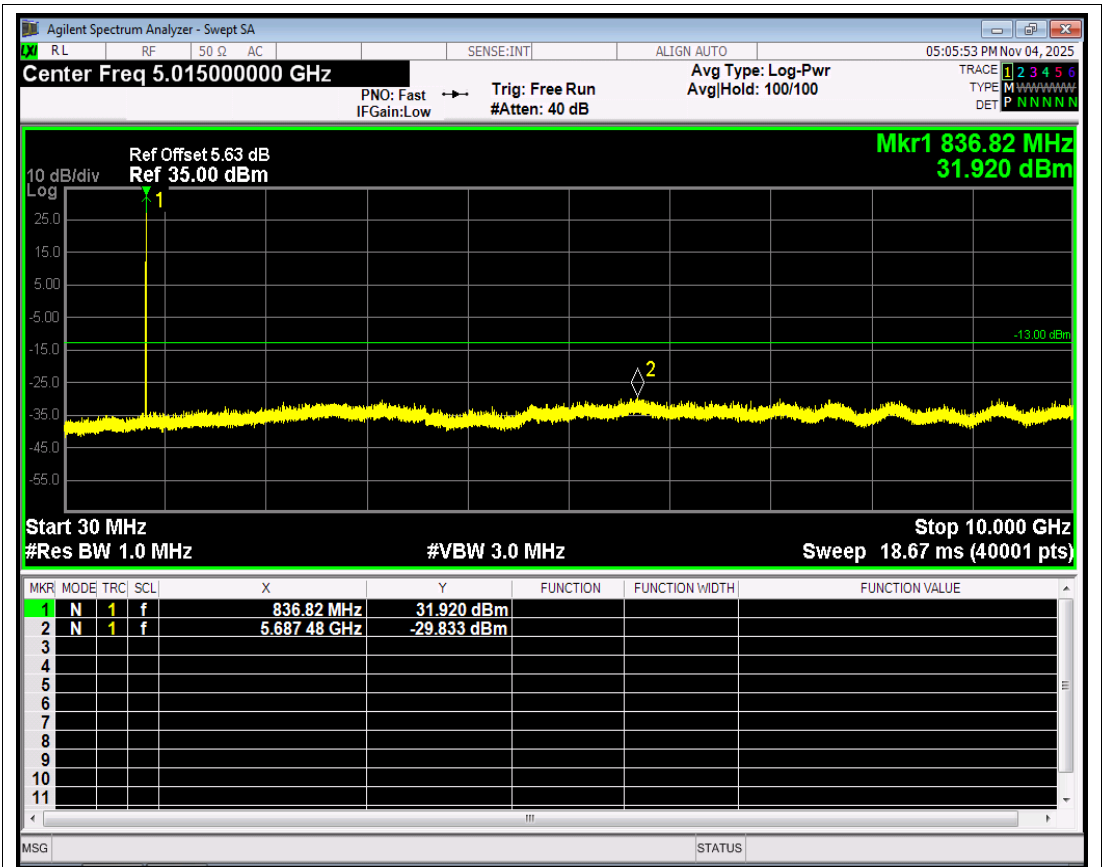


GSM1900 Channel=810

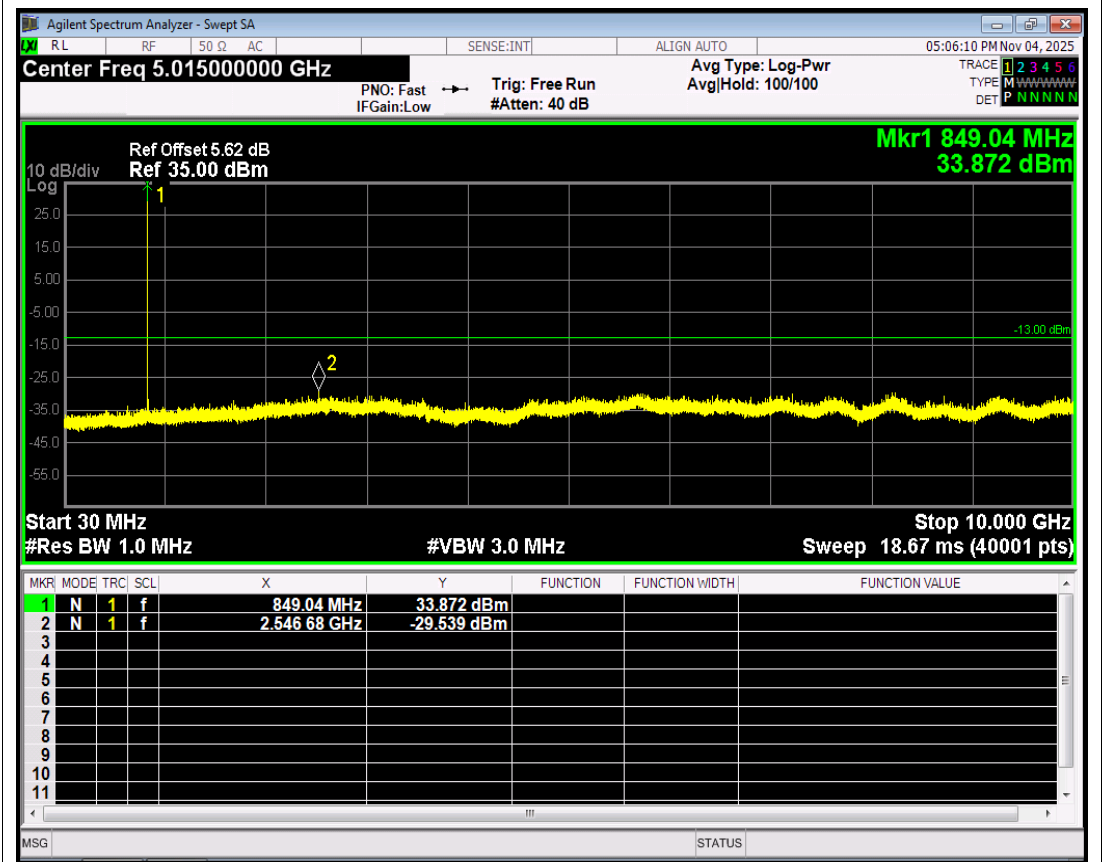
## Appendix 6.Out-of-band emissions

| Band    | Channel | Frequency (MHz) | Spur Freq (MHz) | Spur Level (dBm) | Limit (dBm) | Verdict |
|---------|---------|-----------------|-----------------|------------------|-------------|---------|
| GSM850  | 128     | 824.2           | 5763.00         | -29.27           | -13         | PASS    |
| GSM850  | 190     | 836.6           | 5687.48         | -29.83           | -13         | PASS    |
| GSM850  | 251     | 848.8           | 2546.68         | -29.53           | -13         | PASS    |
| GSM1900 | 512     | 1850.2          | 19322.52        | -23.79           | -13         | PASS    |
| GSM1900 | 661     | 1880            | 19346.98        | -23.17           | -13         | PASS    |
| GSM1900 | 810     | 1909.8          | 19358.46        | -24.27           | -13         | PASS    |

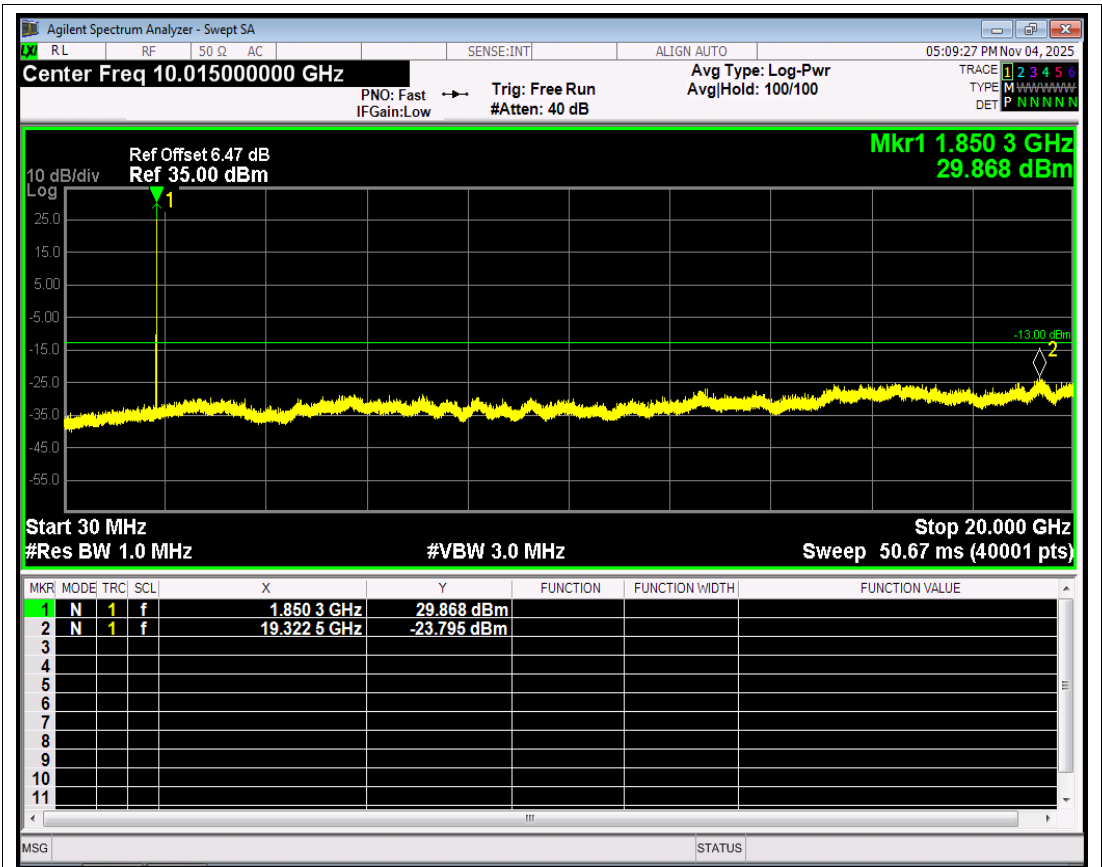




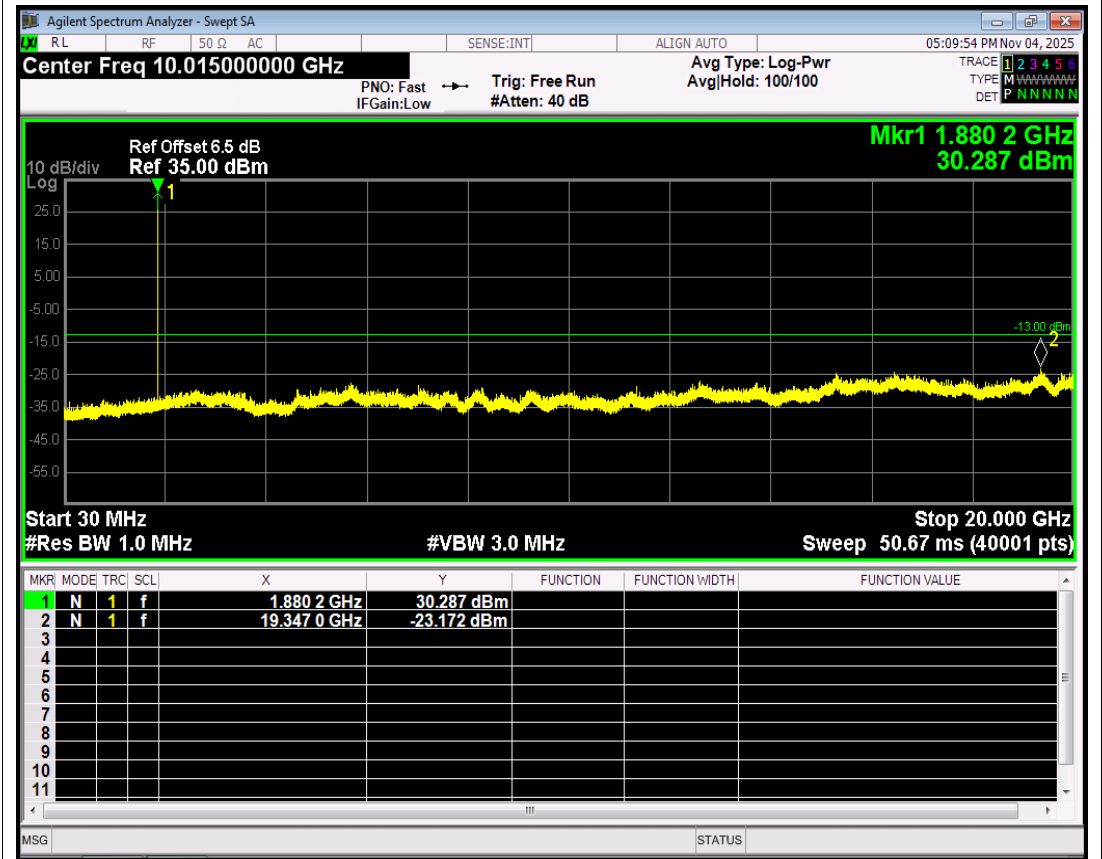
GSM850 Channel=190



GSM850 Channel=251



GSM1900 Channel=512



GSM1900 Channel=661

