

# GSM 850 Test Data

FCC ID: 2BQHT-TAB-T126-8

## Table of Contents

|                                          |    |
|------------------------------------------|----|
| 1. Conducted Output Power&&EIRP/ERP..... | 2  |
| 2. Occupied Bandwidth .....              | 3  |
| 3. Peak to Average Ratio.....            | 5  |
| 4. Unwanted Spurious Emission .....      | 7  |
| 5. Frequency Stability .....             | 10 |

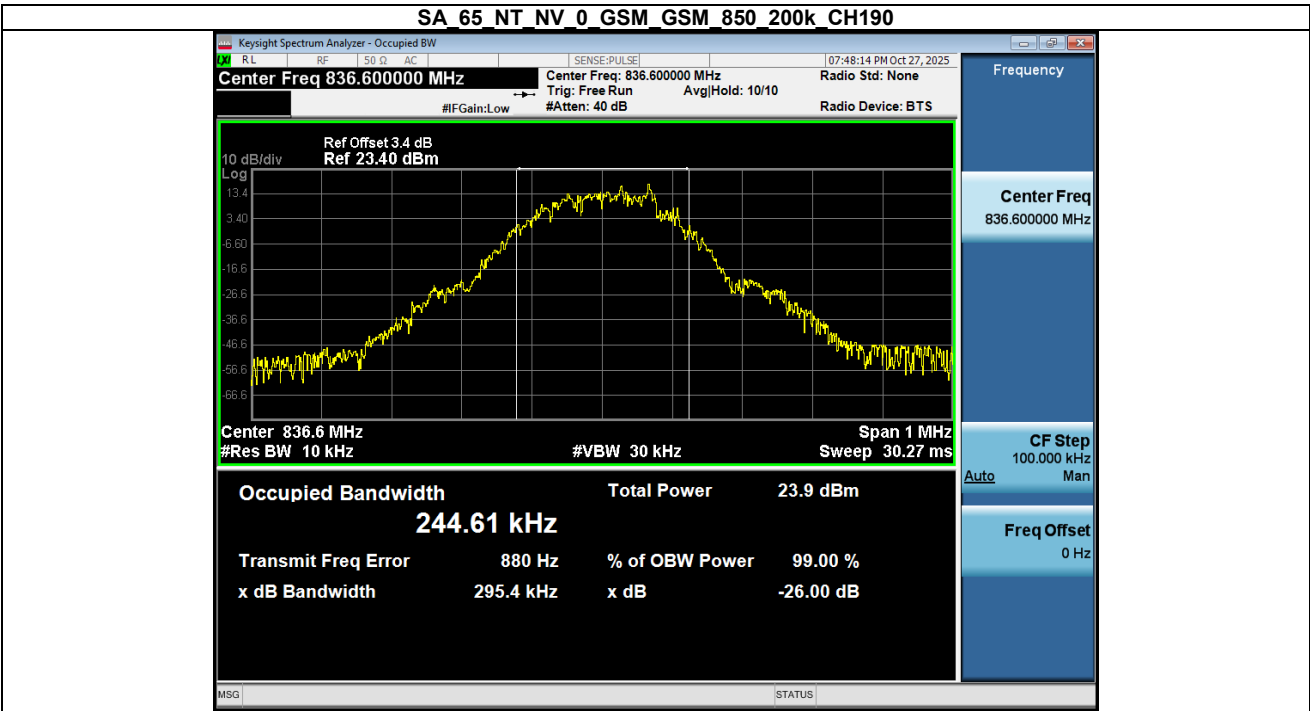
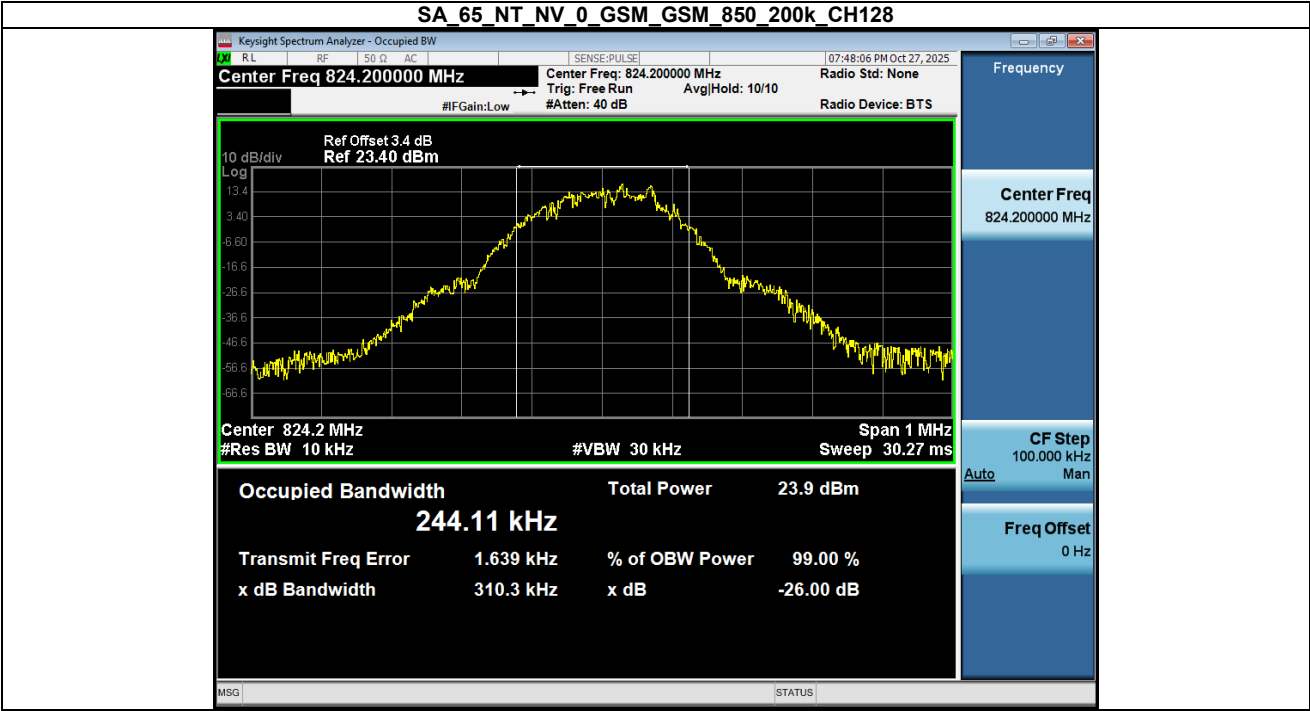
## 1. Conducted Output Power&&EIRP/ERP

| Condition | Band    | Modulation | Frequency(MHz) | Conducted Power(dBm) | ANT Gain(dBi) | ERP(dBm)     | limit(dBm) | Result |
|-----------|---------|------------|----------------|----------------------|---------------|--------------|------------|--------|
| NVNT      | GSM 850 | GMSK       | 824.2          | 29.52                | 2.08          | 29.45        | 38.45      | Pass   |
| NVNT      | GSM 850 | GMSK       | 836.6          | 30.76                | 2.08          | 30.69        | 38.45      | Pass   |
| NVNT      | GSM 850 | GMSK       | 848.8          | <b>31.16</b>         | <b>2.08</b>   | <b>31.09</b> | 38.45      | Pass   |

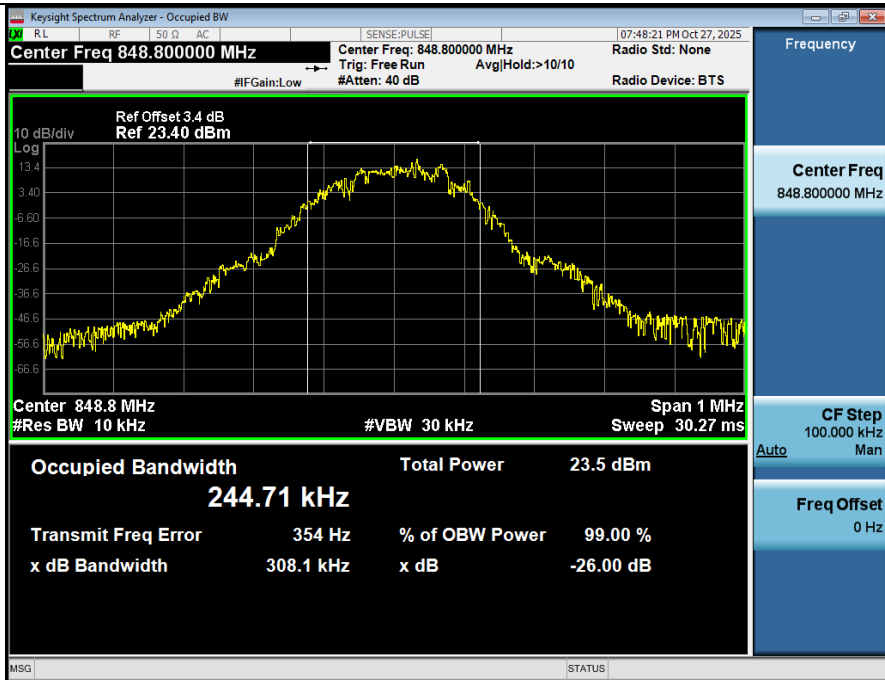
ERP = Conducted Power + ANT Gain - 2.15

2. Occupied Bandwidth

| Condition | Band    | Modulation | Frequency(MHz) | OBW(MHz) | -26EBW(MHz) |
|-----------|---------|------------|----------------|----------|-------------|
| NVNT      | GSM 850 | GMSK       | 824.2          | 0.2441   | 0.3103      |
| NVNT      | GSM 850 | GMSK       | 836.6          | 0.2446   | 0.2954      |
| NVNT      | GSM 850 | GMSK       | 848.8          | 0.2447   | 0.3081      |

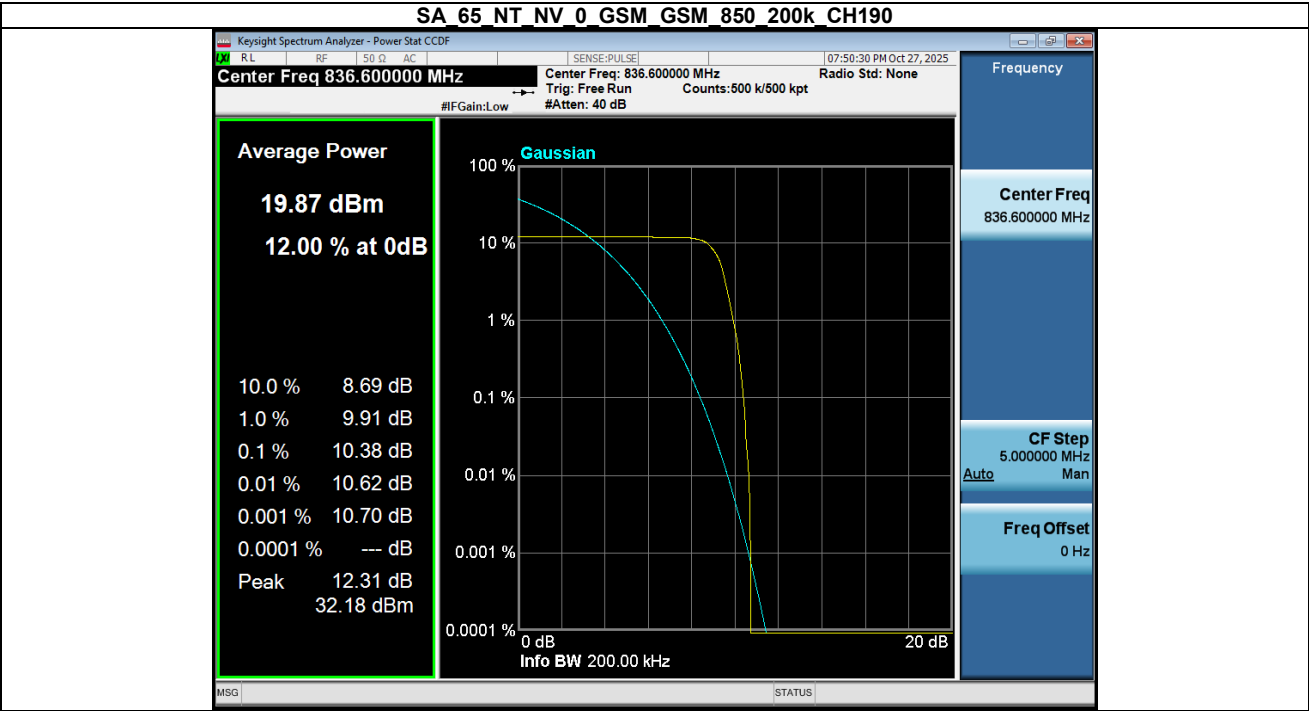
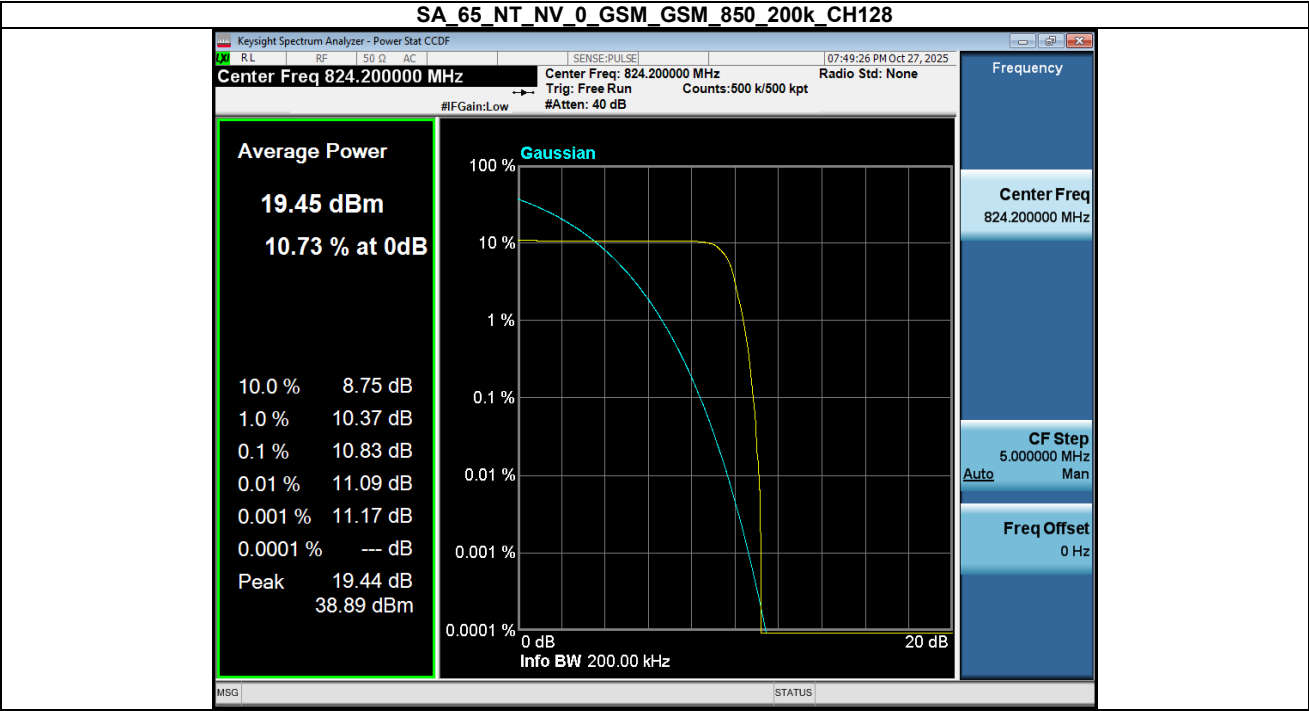


SA\_65\_NT\_NV\_0\_GSM\_GSM\_850\_200k\_CH251

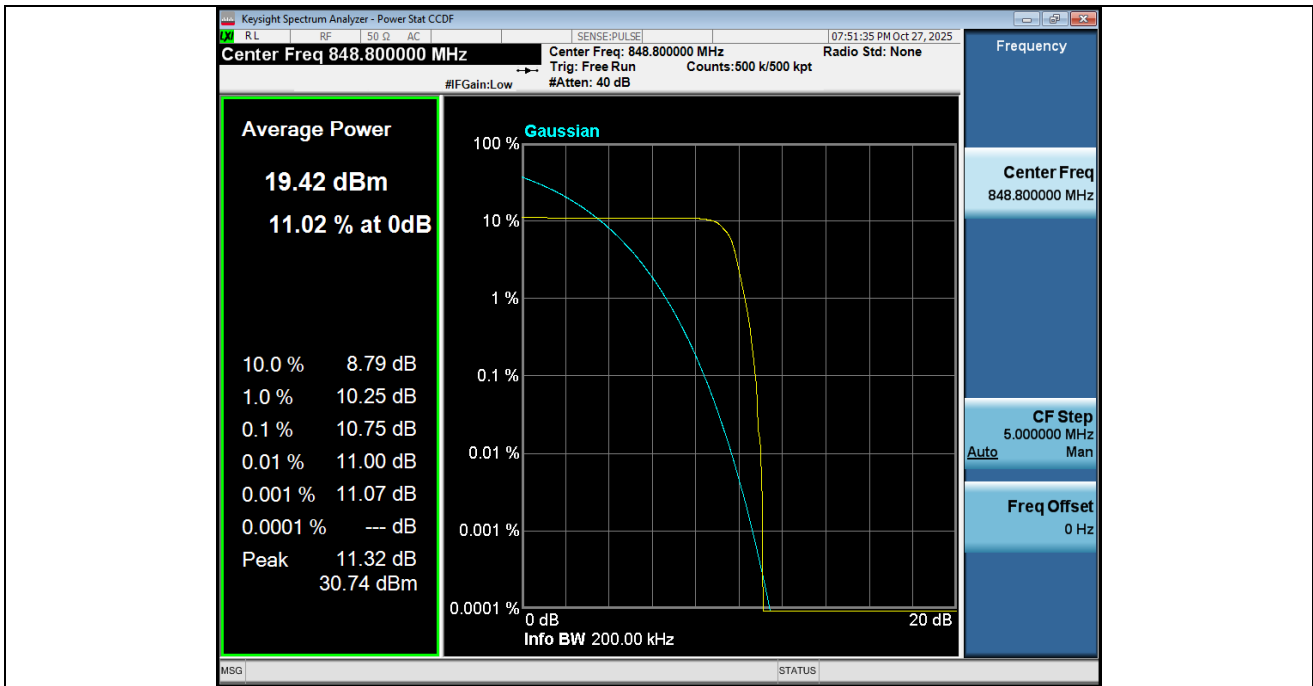


3. Peak to Average Ratio

| Condition | Band | Modulation | Frequency(MHz) | Peak to AVG Ratio-0.1%(dB) | Limit(dB) | Result |
|-----------|------|------------|----------------|----------------------------|-----------|--------|
| NVNT      | GSM  | GSM 850    | 824.2          | 10.83                      | 13.00     | Pass   |
| NVNT      | GSM  | GSM 850    | 836.6          | 10.38                      | 13.00     | Pass   |
| NVNT      | GSM  | GSM 850    | 848.8          | 10.75                      | 13.00     | Pass   |

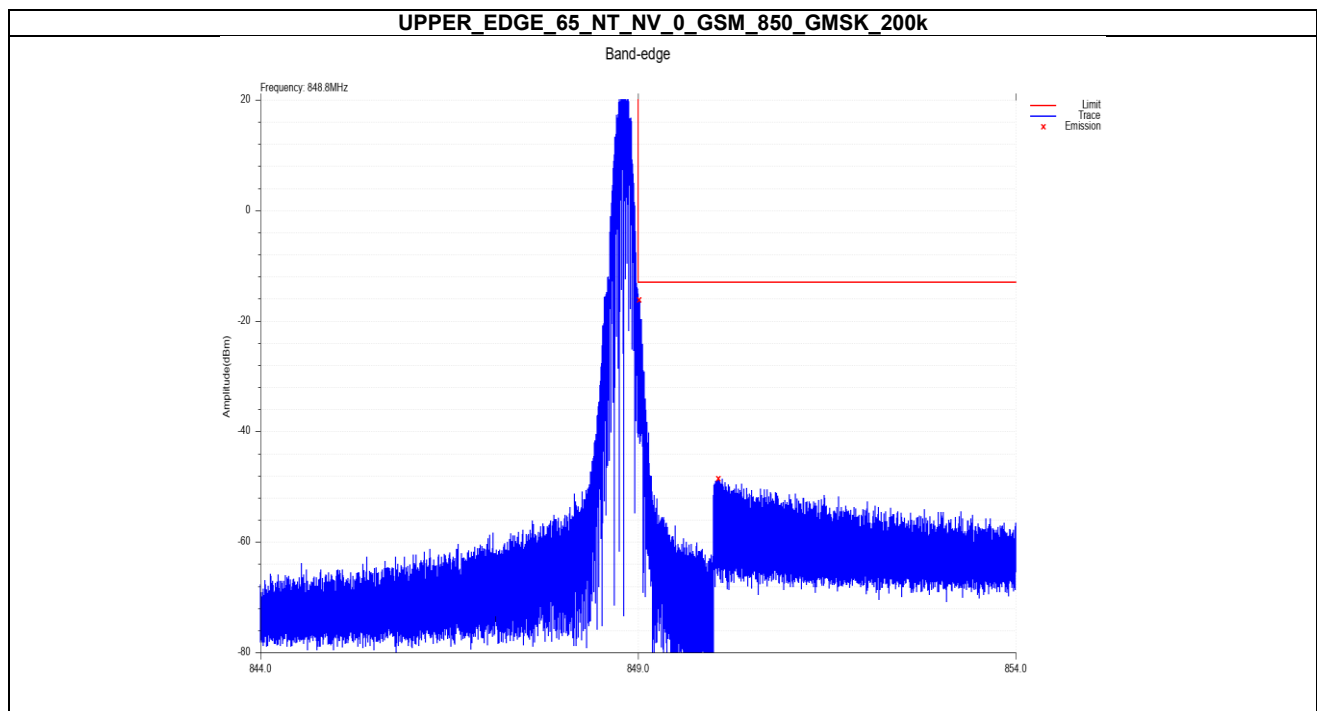
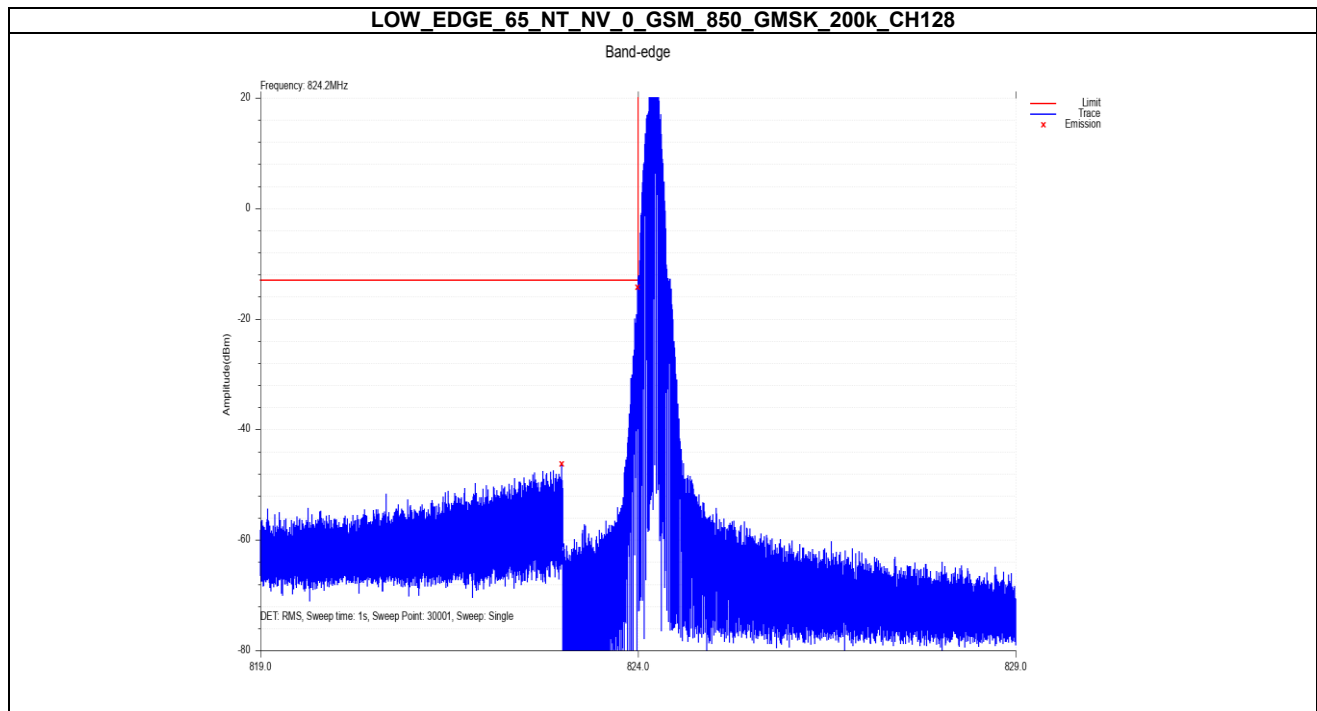


SA\_65\_NT\_NV\_0\_GSM\_GSM\_850\_200k\_CH251



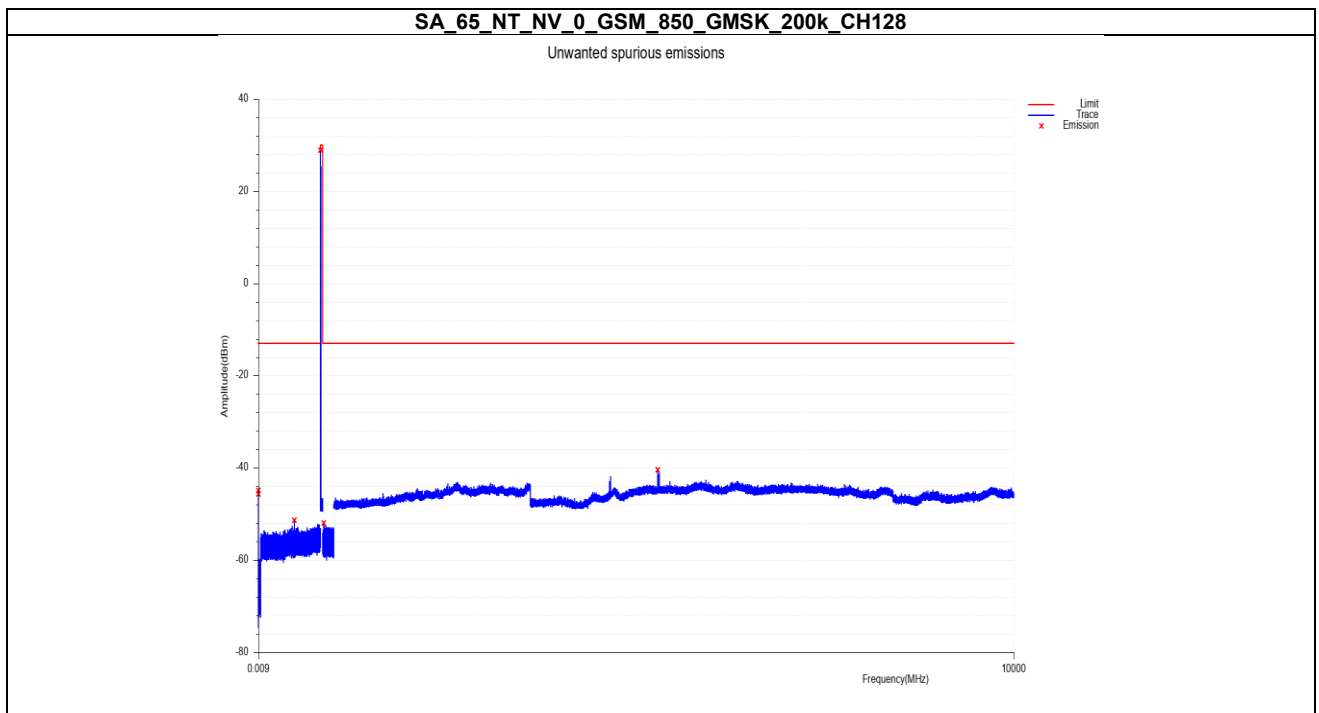
## 4. Unwanted Spurious Emission

| Condition | Mode    | Band | Frequency(MHz) | RBW(kHz) | Test Freq Range(MHz) | Spur Freq (MHz) | Spur Level(dBm) | Limit(dBm) | Result |
|-----------|---------|------|----------------|----------|----------------------|-----------------|-----------------|------------|--------|
| NVNT      | GSM 850 | GMSK | 824.20         | 1000     | 819.0~823.0          | 822.990         | -46.25          | -13        | Pass   |
| NVNT      | GSM 850 | GMSK | 824.20         | 3        | 823.0~824.0          | 823.996         | -14.22          | -13        | Pass   |
| NVNT      | GSM 850 | GMSK | 848.80         | 3        | 849.0~850.0          | 849.017         | -16.19          | -13        | Pass   |
| NVNT      | GSM 850 | GMSK | 848.80         | 1000     | 850.0~854.0          | 850.060         | -48.59          | -13        | Pass   |

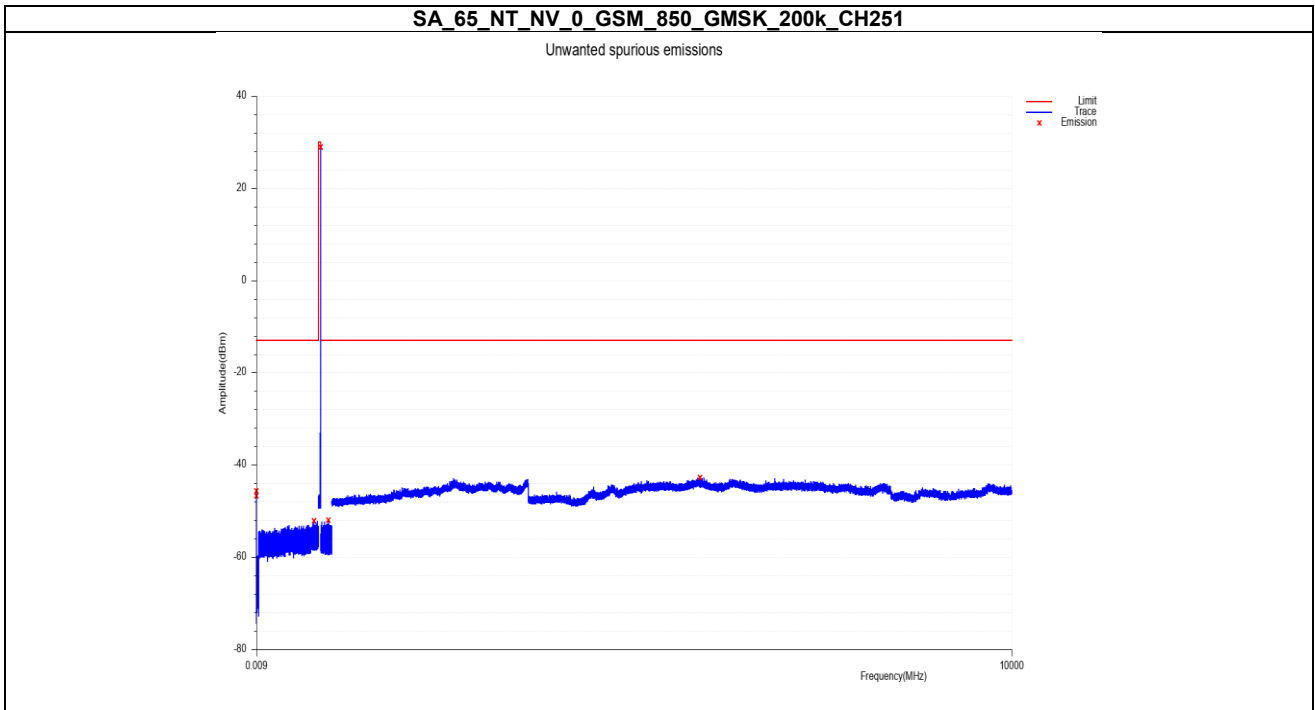
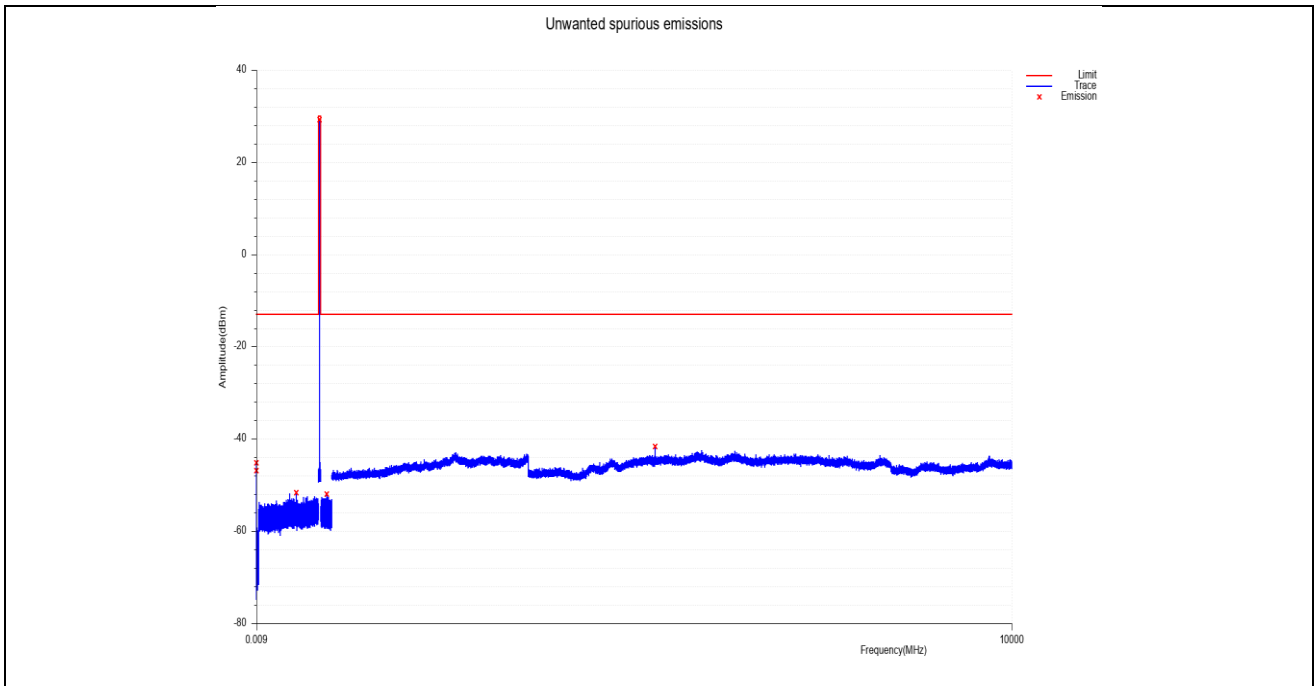


| Condition | Band | Modulation | Frequency(MHz) | RBW(kHz) | Test Freq Range(MHz) | Spur Freq (MHz) | Spur Level(dBm) | Limit(dBm) | Result |
|-----------|------|------------|----------------|----------|----------------------|-----------------|-----------------|------------|--------|
| NVNT      | GSM  | GMSK       | 824.20         | 1        | 0.009~0.150          | 0.011           | -44.88          | -13        | Pass   |

|      |         |      |        |      |                    |          |        |     |      |
|------|---------|------|--------|------|--------------------|----------|--------|-----|------|
|      | 850     |      |        |      |                    |          |        |     |      |
| NVNT | GSM 850 | GMSK | 824.20 | 10   | 0.150~30.000       | 0.150    | -45.65 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 824.20 | 100  | 30.000~819.000     | 475.127  | -51.41 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 824.20 | 100  | 854.000~1000.000   | 862.531  | -51.90 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 824.20 | 1000 | 1000.000~10000.000 | 5287.900 | -40.46 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 836.60 | 1    | 0.009~0.150        | 0.012    | -45.14 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 836.60 | 10   | 0.150~30.000       | 0.155    | -46.86 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 836.60 | 100  | 30.000~819.000     | 529.621  | -51.72 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 836.60 | 100  | 854.000~1000.000   | 928.815  | -52.00 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 836.60 | 1000 | 1000.000~10000.000 | 5275.900 | -41.64 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 848.80 | 1    | 0.009~0.150        | 0.011    | -45.58 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 848.80 | 10   | 0.150~30.000       | 0.158    | -46.77 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 848.80 | 100  | 30.000~819.000     | 760.667  | -52.08 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 848.80 | 100  | 854.000~1000.000   | 950.754  | -51.99 | -13 | Pass |
| NVNT | GSM 850 | GMSK | 848.80 | 1000 | 1000.000~10000.000 | 5874.700 | -42.79 | -13 | Pass |



**SA\_65\_NT\_NV\_0\_GSM\_850\_GMSK\_200k\_CH190**



## 5. Frequency Stability

| Temperature(C) | Voltage(V) | Band    | Modulation | Frequency(MHz) | Frequency Stabilization (ppm) | Limit_Low(ppm) | Limit_Up(ppm) | Result |
|----------------|------------|---------|------------|----------------|-------------------------------|----------------|---------------|--------|
| -30            | 3.47       | GSM 850 | GMSK       | 824.2          | -0.0040                       | -2.50          | 2.50          | Pass   |
| -30            | 3.47       | GSM 850 | GMSK       | 836.6          | 0.0007                        | -2.50          | 2.50          | Pass   |
| -30            | 3.47       | GSM 850 | GMSK       | 848.8          | 0.0039                        | -2.50          | 2.50          | Pass   |
| -30            | 3.85       | GSM 850 | GMSK       | 824.2          | 0.0066                        | -2.50          | 2.50          | Pass   |
| -30            | 3.85       | GSM 850 | GMSK       | 836.6          | 0.0067                        | -2.50          | 2.50          | Pass   |
| -30            | 3.85       | GSM 850 | GMSK       | 848.8          | 0.0138                        | -2.50          | 2.50          | Pass   |
| -30            | 4.24       | GSM 850 | GMSK       | 824.2          | 0.0091                        | -2.50          | 2.50          | Pass   |
| -30            | 4.24       | GSM 850 | GMSK       | 836.6          | 0.0048                        | -2.50          | 2.50          | Pass   |
| -30            | 4.24       | GSM 850 | GMSK       | 848.8          | 0.0090                        | -2.50          | 2.50          | Pass   |
| -20            | 3.47       | GSM 850 | GMSK       | 824.2          | -0.0036                       | -2.50          | 2.50          | Pass   |
| -20            | 3.47       | GSM 850 | GMSK       | 836.6          | -0.0028                       | -2.50          | 2.50          | Pass   |
| -20            | 3.47       | GSM 850 | GMSK       | 848.8          | 0.0092                        | -2.50          | 2.50          | Pass   |
| -20            | 3.85       | GSM 850 | GMSK       | 824.2          | 0.0020                        | -2.50          | 2.50          | Pass   |
| -20            | 3.85       | GSM 850 | GMSK       | 836.6          | 0.0105                        | -2.50          | 2.50          | Pass   |
| -20            | 3.85       | GSM 850 | GMSK       | 848.8          | -0.0027                       | -2.50          | 2.50          | Pass   |
| -20            | 4.24       | GSM 850 | GMSK       | 824.2          | 0.0018                        | -2.50          | 2.50          | Pass   |
| -20            | 4.24       | GSM 850 | GMSK       | 836.6          | 0.0072                        | -2.50          | 2.50          | Pass   |
| -20            | 4.24       | GSM 850 | GMSK       | 848.8          | 0.0037                        | -2.50          | 2.50          | Pass   |
| -10            | 3.47       | GSM 850 | GMSK       | 824.2          | 0.0034                        | -2.50          | 2.50          | Pass   |
| -10            | 3.47       | GSM 850 | GMSK       | 836.6          | 0.0072                        | -2.50          | 2.50          | Pass   |
| -10            | 3.47       | GSM 850 | GMSK       | 848.8          | 0.0036                        | -2.50          | 2.50          | Pass   |
| -10            | 3.85       | GSM 850 | GMSK       | 824.2          | 0.0030                        | -2.50          | 2.50          | Pass   |
| -10            | 3.85       | GSM 850 | GMSK       | 836.6          | 0.0018                        | -2.50          | 2.50          | Pass   |
| -10            | 3.85       | GSM 850 | GMSK       | 848.8          | 0.0033                        | -2.50          | 2.50          | Pass   |
| -10            | 4.24       | GSM 850 | GMSK       | 824.2          | 0.0049                        | -2.50          | 2.50          | Pass   |
| -10            | 4.24       | GSM 850 | GMSK       | 836.6          | 0.0056                        | -2.50          | 2.50          | Pass   |
| -10            | 4.24       | GSM 850 | GMSK       | 848.8          | 0.0003                        | -2.50          | 2.50          | Pass   |
| 0              | 3.47       | GSM 850 | GMSK       | 824.2          | -0.0040                       | -2.50          | 2.50          | Pass   |
| 0              | 3.47       | GSM 850 | GMSK       | 836.6          | 0.0061                        | -2.50          | 2.50          | Pass   |
| 0              | 3.47       | GSM 850 | GMSK       | 848.8          | -0.0006                       | -2.50          | 2.50          | Pass   |
| 0              | 3.85       | GSM 850 | GMSK       | 824.2          | 0.0024                        | -2.50          | 2.50          | Pass   |
| 0              | 3.85       | GSM 850 | GMSK       | 836.6          | 0.0003                        | -2.50          | 2.50          | Pass   |
| 0              | 3.85       | GSM 850 | GMSK       | 848.8          | 0.0161                        | -2.50          | 2.50          | Pass   |
| 0              | 4.24       | GSM     | GMSK       | 824.2          | 0.0030                        | -2.50          | 2.50          | Pass   |

|    |      |            |      |       |         |       |      |      |
|----|------|------------|------|-------|---------|-------|------|------|
|    |      | 850        |      |       |         |       |      |      |
| 0  | 4.24 | GSM<br>850 | GMSK | 836.6 | 0.0066  | -2.50 | 2.50 | Pass |
| 0  | 4.24 | GSM<br>850 | GMSK | 848.8 | 0.0035  | -2.50 | 2.50 | Pass |
| 10 | 3.47 | GSM<br>850 | GMSK | 824.2 | -0.0024 | -2.50 | 2.50 | Pass |
| 10 | 3.47 | GSM<br>850 | GMSK | 836.6 | 0.0118  | -2.50 | 2.50 | Pass |
| 10 | 3.47 | GSM<br>850 | GMSK | 848.8 | 0.0080  | -2.50 | 2.50 | Pass |
| 10 | 3.85 | GSM<br>850 | GMSK | 824.2 | 0.0047  | -2.50 | 2.50 | Pass |
| 10 | 3.85 | GSM<br>850 | GMSK | 836.6 | 0.0010  | -2.50 | 2.50 | Pass |
| 10 | 3.85 | GSM<br>850 | GMSK | 848.8 | 0.0072  | -2.50 | 2.50 | Pass |
| 10 | 4.24 | GSM<br>850 | GMSK | 824.2 | 0.0050  | -2.50 | 2.50 | Pass |
| 10 | 4.24 | GSM<br>850 | GMSK | 836.6 | -0.0038 | -2.50 | 2.50 | Pass |
| 10 | 4.24 | GSM<br>850 | GMSK | 848.8 | 0.0053  | -2.50 | 2.50 | Pass |
| 20 | 3.47 | GSM<br>850 | GMSK | 824.2 | 0.0053  | -2.50 | 2.50 | Pass |
| 20 | 3.47 | GSM<br>850 | GMSK | 836.6 | 0.0048  | -2.50 | 2.50 | Pass |
| 20 | 3.47 | GSM<br>850 | GMSK | 848.8 | 0.0127  | -2.50 | 2.50 | Pass |
| 20 | 3.85 | GSM<br>850 | GMSK | 824.2 | 0.0091  | -2.50 | 2.50 | Pass |
| 20 | 3.85 | GSM<br>850 | GMSK | 836.6 | 0.0051  | -2.50 | 2.50 | Pass |
| 20 | 3.85 | GSM<br>850 | GMSK | 848.8 | 0.0005  | -2.50 | 2.50 | Pass |
| 20 | 4.24 | GSM<br>850 | GMSK | 824.2 | 0.0097  | -2.50 | 2.50 | Pass |
| 20 | 4.24 | GSM<br>850 | GMSK | 836.6 | -0.0075 | -2.50 | 2.50 | Pass |
| 20 | 4.24 | GSM<br>850 | GMSK | 848.8 | 0.0013  | -2.50 | 2.50 | Pass |
| 30 | 3.47 | GSM<br>850 | GMSK | 824.2 | 0.0086  | -2.50 | 2.50 | Pass |
| 30 | 3.47 | GSM<br>850 | GMSK | 836.6 | 0.0122  | -2.50 | 2.50 | Pass |
| 30 | 3.47 | GSM<br>850 | GMSK | 848.8 | -0.0015 | -2.50 | 2.50 | Pass |
| 30 | 3.85 | GSM<br>850 | GMSK | 824.2 | 0.0035  | -2.50 | 2.50 | Pass |
| 30 | 3.85 | GSM<br>850 | GMSK | 836.6 | 0.0004  | -2.50 | 2.50 | Pass |
| 30 | 3.85 | GSM<br>850 | GMSK | 848.8 | -0.0005 | -2.50 | 2.50 | Pass |
| 30 | 4.24 | GSM<br>850 | GMSK | 824.2 | -0.0019 | -2.50 | 2.50 | Pass |
| 30 | 4.24 | GSM<br>850 | GMSK | 836.6 | 0.0076  | -2.50 | 2.50 | Pass |
| 30 | 4.24 | GSM<br>850 | GMSK | 848.8 | 0.0085  | -2.50 | 2.50 | Pass |
| 40 | 3.47 | GSM<br>850 | GMSK | 824.2 | 0.0026  | -2.50 | 2.50 | Pass |
| 40 | 3.47 | GSM<br>850 | GMSK | 836.6 | 0.0051  | -2.50 | 2.50 | Pass |
| 40 | 3.47 | GSM<br>850 | GMSK | 848.8 | -0.0013 | -2.50 | 2.50 | Pass |
| 40 | 3.85 | GSM<br>850 | GMSK | 824.2 | 0.0048  | -2.50 | 2.50 | Pass |
| 40 | 3.85 | GSM<br>850 | GMSK | 836.6 | 0.0122  | -2.50 | 2.50 | Pass |
| 40 | 3.85 | GSM<br>850 | GMSK | 848.8 | 0.0115  | -2.50 | 2.50 | Pass |
| 40 | 4.24 | GSM<br>850 | GMSK | 824.2 | 0.0085  | -2.50 | 2.50 | Pass |
| 40 | 4.24 | GSM<br>850 | GMSK | 836.6 | 0.0000  | -2.50 | 2.50 | Pass |
| 40 | 4.24 | GSM<br>850 | GMSK | 848.8 | 0.0060  | -2.50 | 2.50 | Pass |

|    |      |            |      |       |         |       |      |      |
|----|------|------------|------|-------|---------|-------|------|------|
| 50 | 3.47 | GSM<br>850 | GMSK | 824.2 | -0.0005 | -2.50 | 2.50 | Pass |
| 50 | 3.47 | GSM<br>850 | GMSK | 836.6 | -0.0068 | -2.50 | 2.50 | Pass |
| 50 | 3.47 | GSM<br>850 | GMSK | 848.8 | -0.0001 | -2.50 | 2.50 | Pass |
| 50 | 3.85 | GSM<br>850 | GMSK | 824.2 | -0.0020 | -2.50 | 2.50 | Pass |
| 50 | 3.85 | GSM<br>850 | GMSK | 836.6 | 0.0001  | -2.50 | 2.50 | Pass |
| 50 | 3.85 | GSM<br>850 | GMSK | 848.8 | 0.0055  | -2.50 | 2.50 | Pass |
| 50 | 4.24 | GSM<br>850 | GMSK | 824.2 | -0.0028 | -2.50 | 2.50 | Pass |
| 50 | 4.24 | GSM<br>850 | GMSK | 836.6 | 0.0036  | -2.50 | 2.50 | Pass |
| 50 | 4.24 | GSM<br>850 | GMSK | 848.8 | 0.0075  | -2.50 | 2.50 | Pass |