

## 1. Effective (Isotropic) Radiated Power Output Data

### 1.1 GSM850\_ERP(ANT31)

#### 1.1.1 Test Result

| Band: GSM850 |         |            |                 |                       |            |           |         |         |
|--------------|---------|------------|-----------------|-----------------------|------------|-----------|---------|---------|
| ENV          | Mode    |            | Frequency (MHz) | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |
|              | Network | Subset     |                 |                       |            | Result    | Limit   |         |
| NTNV         | GSM     | GSM        | 824.2           | 32.62                 | -6.10      | 24.37     | <=38.45 | Pass    |
|              |         |            | 836.6           | 32.67                 | -6.10      | 24.42     | <=38.45 | Pass    |
|              |         |            | 848.8           | 33.27                 | -6.10      | 25.02     | <=38.45 | Pass    |
|              | GPRS    | 1 TX Slot  | 824.2           | 33.14                 | -6.10      | 24.89     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 824.2           | 30.92                 | -6.10      | 22.67     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 824.2           | 29.25                 | -6.10      | 21.00     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 824.2           | 26.66                 | -6.10      | 18.41     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 836.6           | 33.24                 | -6.10      | 24.99     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 836.6           | 30.98                 | -6.10      | 22.73     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 836.6           | 29.19                 | -6.10      | 20.94     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 836.6           | 26.64                 | -6.10      | 18.39     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 848.8           | 33.18                 | -6.10      | 24.93     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 848.8           | 30.80                 | -6.10      | 22.55     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 848.8           | 28.99                 | -6.10      | 20.74     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 848.8           | 27.02                 | -6.10      | 18.77     | <=38.45 | Pass    |
|              | EGPRS   | 1 TX Slot  | 824.2           | 27.09                 | -6.10      | 18.84     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 824.2           | 26.16                 | -6.10      | 17.91     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 824.2           | 25.10                 | -6.10      | 16.85     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 824.2           | 21.68                 | -6.10      | 13.43     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 836.6           | 27.25                 | -6.10      | 19.00     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 836.6           | 25.41                 | -6.10      | 17.16     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 836.6           | 24.99                 | -6.10      | 16.74     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 836.6           | 21.71                 | -6.10      | 13.46     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 848.8           | 27.45                 | -6.10      | 19.20     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 848.8           | 25.22                 | -6.10      | 16.97     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 848.8           | 23.46                 | -6.10      | 15.21     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 848.8           | 23.59                 | -6.10      | 15.34     | <=38.45 | Pass    |

Note1: ERP=Conducted Power+Antenna Gain-2.15

## 2. Frequency Stability

### 2.1 GSM850

#### 2.1.1 Test Result

| Band: GSM850 |                 |            |               |                  |                       |             |         |
|--------------|-----------------|------------|---------------|------------------|-----------------------|-------------|---------|
| Network      | Frequency (MHz) | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|              |                 |            |               |                  | Result                | Limit       |         |
| GSM          | 824.2           | 20         | 3.6           | 14.049           | 0.0170                | -2.5 to 2.5 | Pass    |
|              |                 |            | 3.86          | 17.234           | 0.0209                | -2.5 to 2.5 | Pass    |
|              |                 |            | 4.3           | 19.262           | 0.0234                | -2.5 to 2.5 | Pass    |
|              |                 | -30        | 3.86          | 18.255           | 0.0221                | -2.5 to 2.5 | Pass    |
|              |                 | -20        | 3.86          | 20.747           | 0.0252                | -2.5 to 2.5 | Pass    |
|              |                 | -10        | 3.86          | 21.550           | 0.0261                | -2.5 to 2.5 | Pass    |
|              |                 | 0          | 3.86          | 18.759           | 0.0228                | -2.5 to 2.5 | Pass    |
|              |                 | 10         | 3.86          | 17.346           | 0.0210                | -2.5 to 2.5 | Pass    |

|       |       |     |      |        |        |             |      |
|-------|-------|-----|------|--------|--------|-------------|------|
|       |       | 30  | 3.86 | 20.687 | 0.0251 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.86 | 24.296 | 0.0295 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.86 | 19.458 | 0.0236 | -2.5 to 2.5 | Pass |
|       | 836.6 | 20  | 3.6  | 19.618 | 0.0234 | -2.5 to 2.5 | Pass |
|       |       |     | 3.86 | 23.631 | 0.0282 | -2.5 to 2.5 | Pass |
|       |       |     | 4.3  | 17.005 | 0.0203 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.86 | 26.601 | 0.0318 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.86 | 22.127 | 0.0264 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.86 | 18.258 | 0.0218 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.86 | 17.277 | 0.0207 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.86 | 18.730 | 0.0224 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.86 | 20.613 | 0.0246 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.86 | 18.219 | 0.0218 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.86 | 21.337 | 0.0255 | -2.5 to 2.5 | Pass |
|       | 848.8 | 20  | 3.6  | 23.961 | 0.0282 | -2.5 to 2.5 | Pass |
|       |       |     | 3.86 | 20.435 | 0.0241 | -2.5 to 2.5 | Pass |
|       |       |     | 4.3  | 17.952 | 0.0211 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.86 | 20.459 | 0.0241 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.86 | 16.404 | 0.0193 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.86 | 19.045 | 0.0224 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.86 | 17.750 | 0.0209 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.86 | 15.747 | 0.0186 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.86 | 18.863 | 0.0222 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.86 | 20.099 | 0.0237 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.86 | 23.144 | 0.0273 | -2.5 to 2.5 | Pass |
| GPRS  | 824.2 | 20  | 3.6  | 31.545 | 0.0383 | -2.5 to 2.5 | Pass |
|       |       |     | 3.86 | 31.515 | 0.0382 | -2.5 to 2.5 | Pass |
|       |       |     | 4.3  | 29.691 | 0.0360 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.86 | 30.062 | 0.0365 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.86 | 32.360 | 0.0393 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.86 | 30.825 | 0.0374 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.86 | 32.866 | 0.0399 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.86 | 33.827 | 0.0410 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.86 | 34.911 | 0.0424 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.86 | 31.620 | 0.0384 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.86 | 33.783 | 0.0410 | -2.5 to 2.5 | Pass |
|       | 836.6 | 20  | 3.6  | 31.750 | 0.0380 | -2.5 to 2.5 | Pass |
|       |       |     | 3.86 | 33.546 | 0.0401 | -2.5 to 2.5 | Pass |
|       |       |     | 4.3  | 33.081 | 0.0395 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.86 | 33.800 | 0.0404 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.86 | 35.138 | 0.0420 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.86 | 34.275 | 0.0410 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.86 | 32.665 | 0.0390 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.86 | 32.696 | 0.0391 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.86 | 33.034 | 0.0395 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.86 | 32.314 | 0.0386 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.86 | 32.090 | 0.0384 | -2.5 to 2.5 | Pass |
|       | 848.8 | 20  | 3.6  | 32.344 | 0.0381 | -2.5 to 2.5 | Pass |
|       |       |     | 3.86 | 31.813 | 0.0375 | -2.5 to 2.5 | Pass |
|       |       |     | 4.3  | 30.868 | 0.0364 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.86 | 34.707 | 0.0409 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.86 | 33.524 | 0.0395 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.86 | 33.550 | 0.0395 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.86 | 33.034 | 0.0389 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.86 | 31.412 | 0.0370 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.86 | 32.312 | 0.0381 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.86 | 33.104 | 0.0390 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.86 | 34.402 | 0.0405 | -2.5 to 2.5 | Pass |
| EGPRS | 824.2 | 20  | 3.6  | 24.255 | 0.0294 | -2.5 to 2.5 | Pass |

|  |       |     |      |        |        |             |      |
|--|-------|-----|------|--------|--------|-------------|------|
|  |       |     | 3.86 | 24.605 | 0.0299 | -2.5 to 2.5 | Pass |
|  |       |     | 4.3  | 24.024 | 0.0291 | -2.5 to 2.5 | Pass |
|  |       | -30 | 3.86 | 26.213 | 0.0318 | -2.5 to 2.5 | Pass |
|  |       | -20 | 3.86 | 25.455 | 0.0309 | -2.5 to 2.5 | Pass |
|  |       | -10 | 3.86 | 26.729 | 0.0324 | -2.5 to 2.5 | Pass |
|  |       | 0   | 3.86 | 28.427 | 0.0345 | -2.5 to 2.5 | Pass |
|  |       | 10  | 3.86 | 28.104 | 0.0341 | -2.5 to 2.5 | Pass |
|  |       | 30  | 3.86 | 27.708 | 0.0336 | -2.5 to 2.5 | Pass |
|  |       | 40  | 3.86 | 27.632 | 0.0335 | -2.5 to 2.5 | Pass |
|  |       | 50  | 3.86 | 27.308 | 0.0331 | -2.5 to 2.5 | Pass |
|  | 836.6 | 20  | 3.6  | 28.927 | 0.0346 | -2.5 to 2.5 | Pass |
|  |       |     | 3.86 | 27.861 | 0.0333 | -2.5 to 2.5 | Pass |
|  |       |     | 4.3  | 27.727 | 0.0331 | -2.5 to 2.5 | Pass |
|  |       | -30 | 3.86 | 28.612 | 0.0342 | -2.5 to 2.5 | Pass |
|  |       | -20 | 3.86 | 28.374 | 0.0339 | -2.5 to 2.5 | Pass |
|  |       | -10 | 3.86 | 29.482 | 0.0352 | -2.5 to 2.5 | Pass |
|  |       | 0   | 3.86 | 28.600 | 0.0342 | -2.5 to 2.5 | Pass |
|  |       | 10  | 3.86 | 28.244 | 0.0338 | -2.5 to 2.5 | Pass |
|  |       | 30  | 3.86 | 28.942 | 0.0346 | -2.5 to 2.5 | Pass |
|  |       | 40  | 3.86 | 28.350 | 0.0339 | -2.5 to 2.5 | Pass |
|  |       | 50  | 3.86 | 26.834 | 0.0321 | -2.5 to 2.5 | Pass |
|  | 848.8 | 20  | 3.6  | 30.052 | 0.0354 | -2.5 to 2.5 | Pass |
|  |       |     | 3.86 | 28.748 | 0.0339 | -2.5 to 2.5 | Pass |
|  |       |     | 4.3  | 27.139 | 0.0320 | -2.5 to 2.5 | Pass |
|  |       | -30 | 3.86 | 26.840 | 0.0316 | -2.5 to 2.5 | Pass |
|  |       | -20 | 3.86 | 27.214 | 0.0321 | -2.5 to 2.5 | Pass |
|  |       | -10 | 3.86 | 27.765 | 0.0327 | -2.5 to 2.5 | Pass |
|  |       | 0   | 3.86 | 27.018 | 0.0318 | -2.5 to 2.5 | Pass |
|  |       | 10  | 3.86 | 27.380 | 0.0323 | -2.5 to 2.5 | Pass |
|  |       | 30  | 3.86 | 27.627 | 0.0325 | -2.5 to 2.5 | Pass |
|  |       | 40  | 3.86 | 27.601 | 0.0325 | -2.5 to 2.5 | Pass |
|  |       | 50  | 3.86 | 25.655 | 0.0302 | -2.5 to 2.5 | Pass |

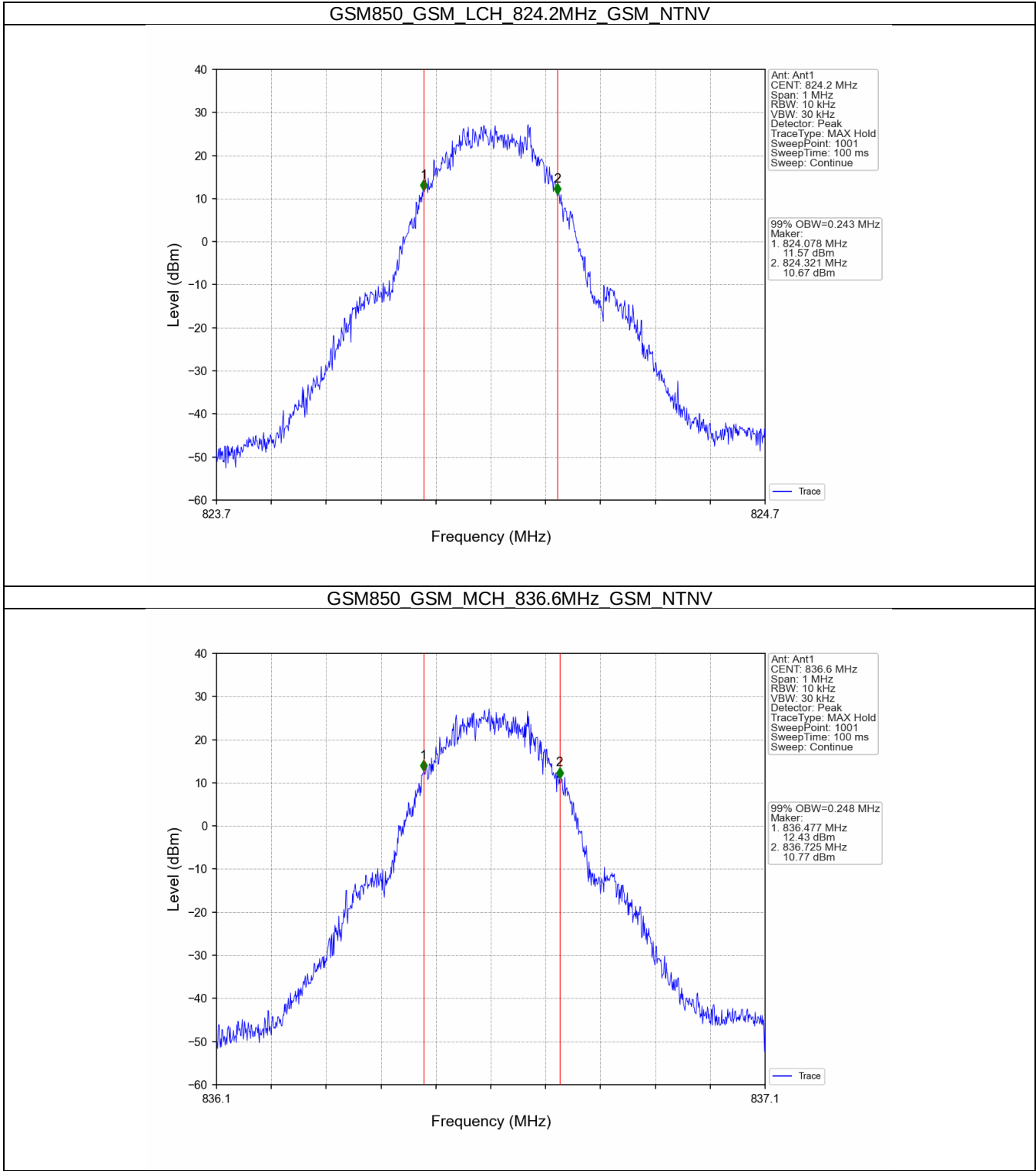
### 3. 99% & 26dB Bandwidth

#### 3.1 GSM850\_OBW

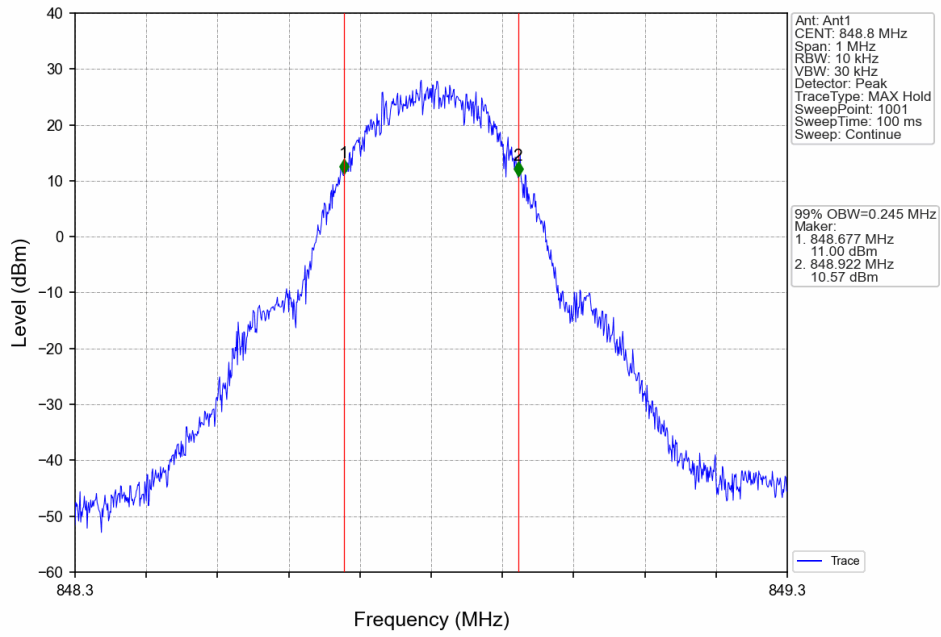
##### 3.1.1 Test Result

| Band: GSM850 |         |           |                 |                              |       |         |
|--------------|---------|-----------|-----------------|------------------------------|-------|---------|
| ENV          | Mode    |           | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |       | Verdict |
|              | Network | Subset    |                 | Result                       | Limit |         |
| NTNV         | GSM     | GSM       | 824.2           | 0.243                        | /     | Pass    |
|              |         |           | 836.6           | 0.248                        | /     | Pass    |
|              |         |           | 848.8           | 0.245                        | /     | Pass    |
|              | GPRS    | 1 TX Slot | 824.2           | 0.247                        | /     | Pass    |
|              |         |           | 836.6           | 0.246                        | /     | Pass    |
|              |         |           | 848.8           | 0.243                        | /     | Pass    |
|              | EGPRS   | 1 TX Slot | 824.2           | 0.247                        | /     | Pass    |
|              |         |           | 836.6           | 0.240                        | /     | Pass    |
|              |         |           | 848.8           | 0.240                        | /     | Pass    |

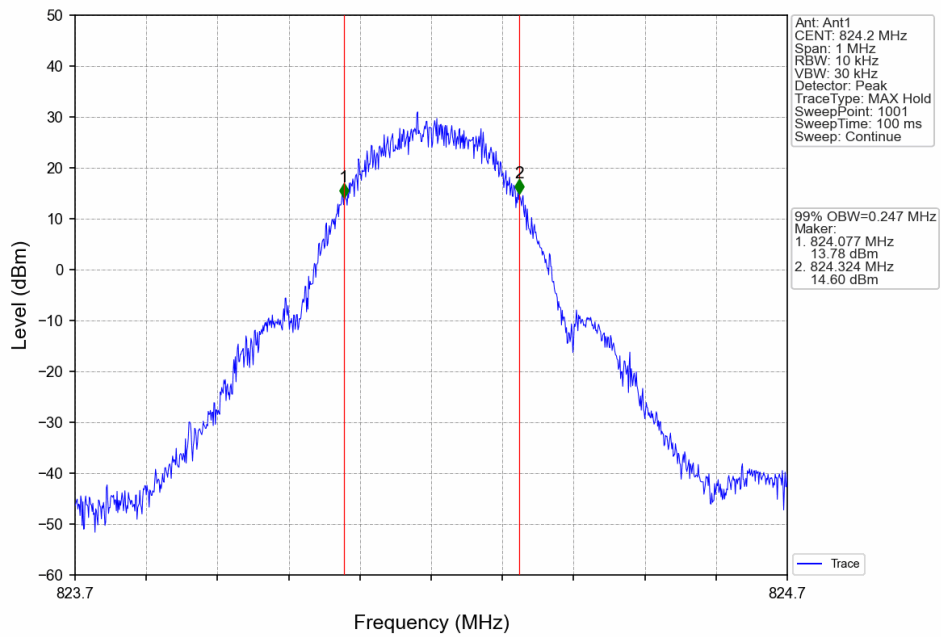
3.1.2 Test Graph



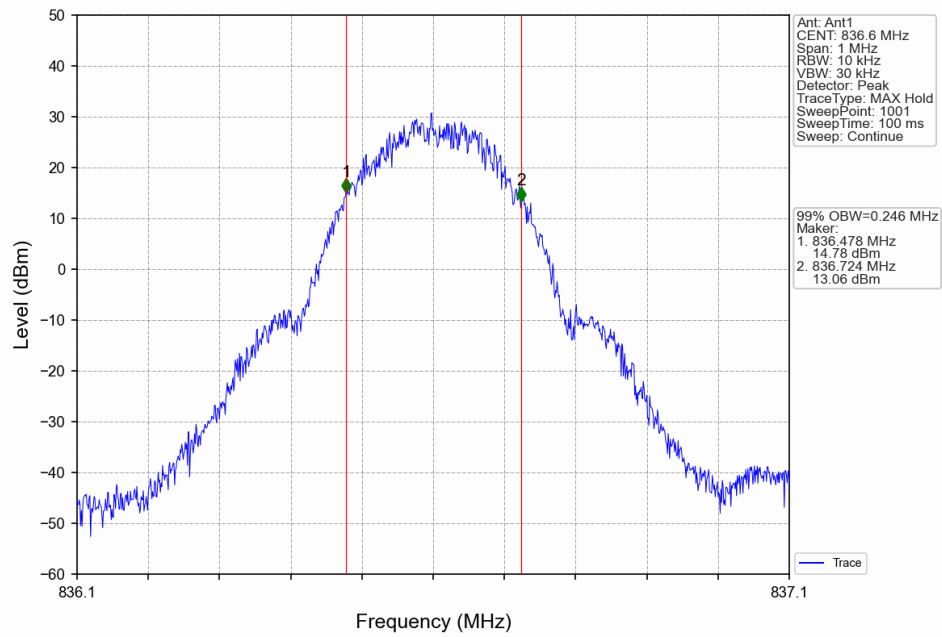
# GSM850 GSM HCH 848.8MHz GSM NTNV



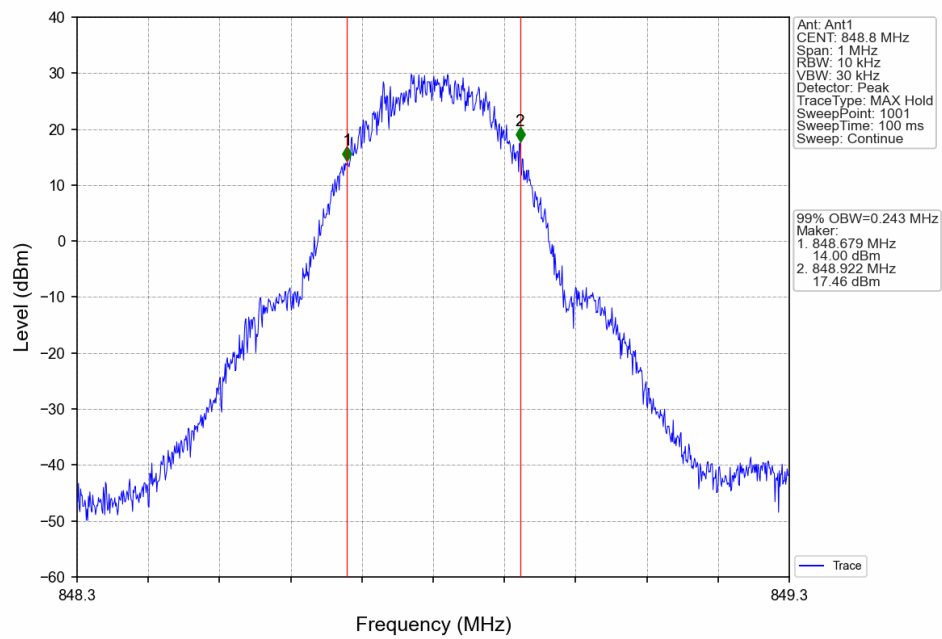
# GSM850\_GPRS\_LCH\_824.2MHz\_1 TX Slot\_NTNV



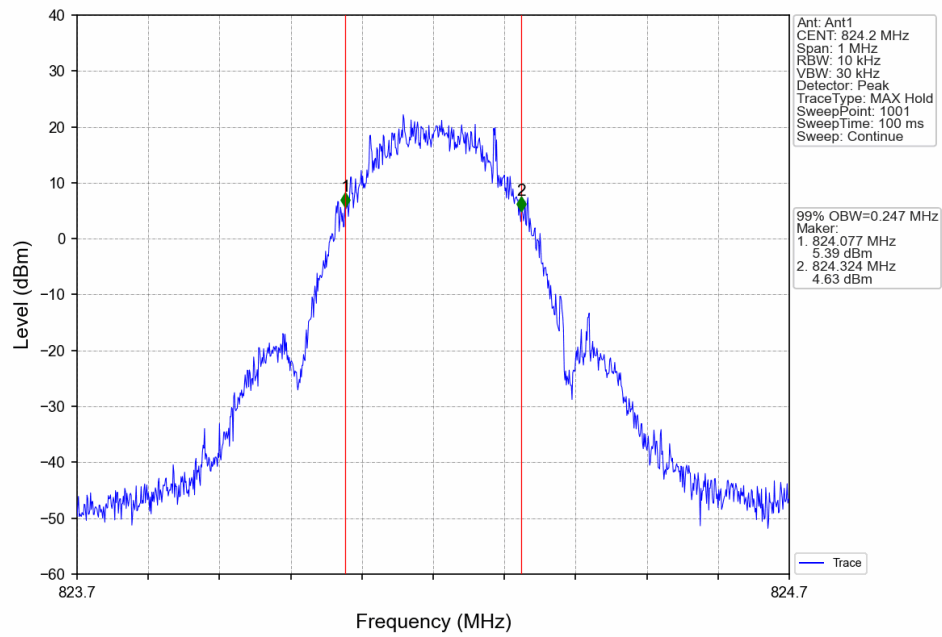
# GSM850\_GPRS\_MCH\_836.6MHz\_1 TX Slot\_NTNV



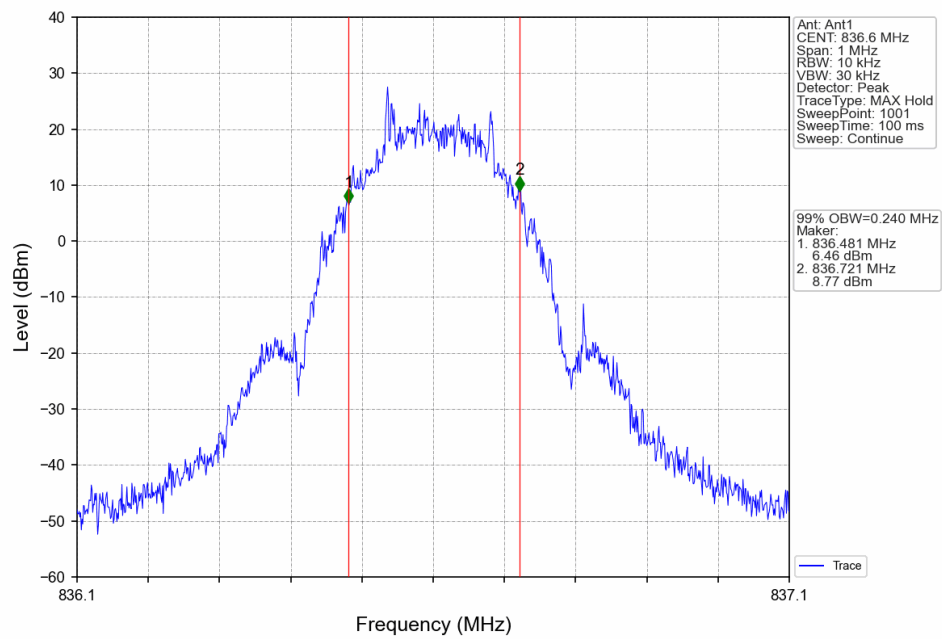
# GSM850\_GPRS\_HCH\_848.8MHz\_1 TX Slot\_NTNV



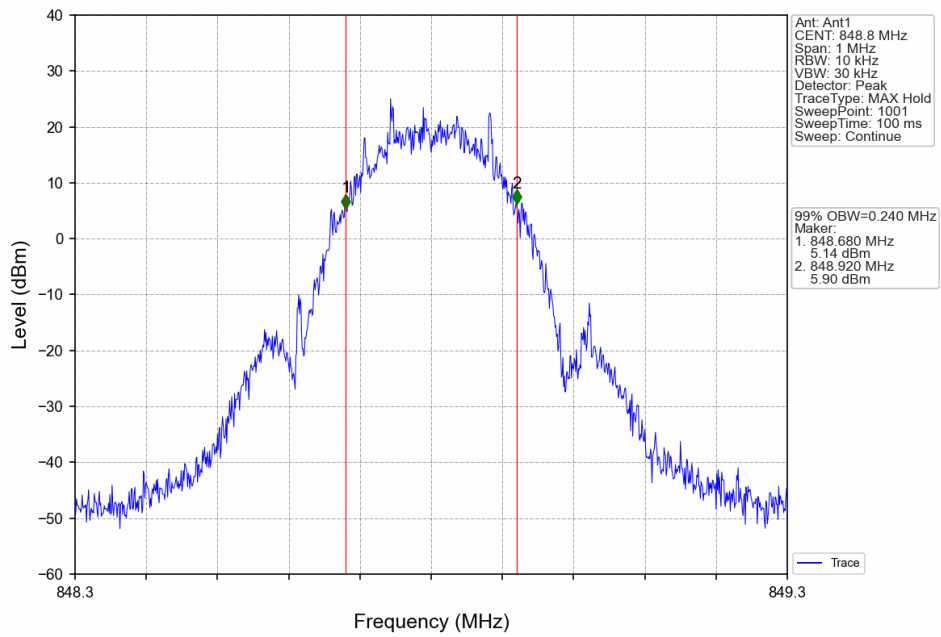
# GSM850 EGPRS LCH 824.2MHz 1 TX Slot NTNV



# GSM850 EGPRS MCH 836.6MHz 1 TX Slot NTNV



GSM850 EGPRS HCH 848.8MHz 1 TX Slot NTNV

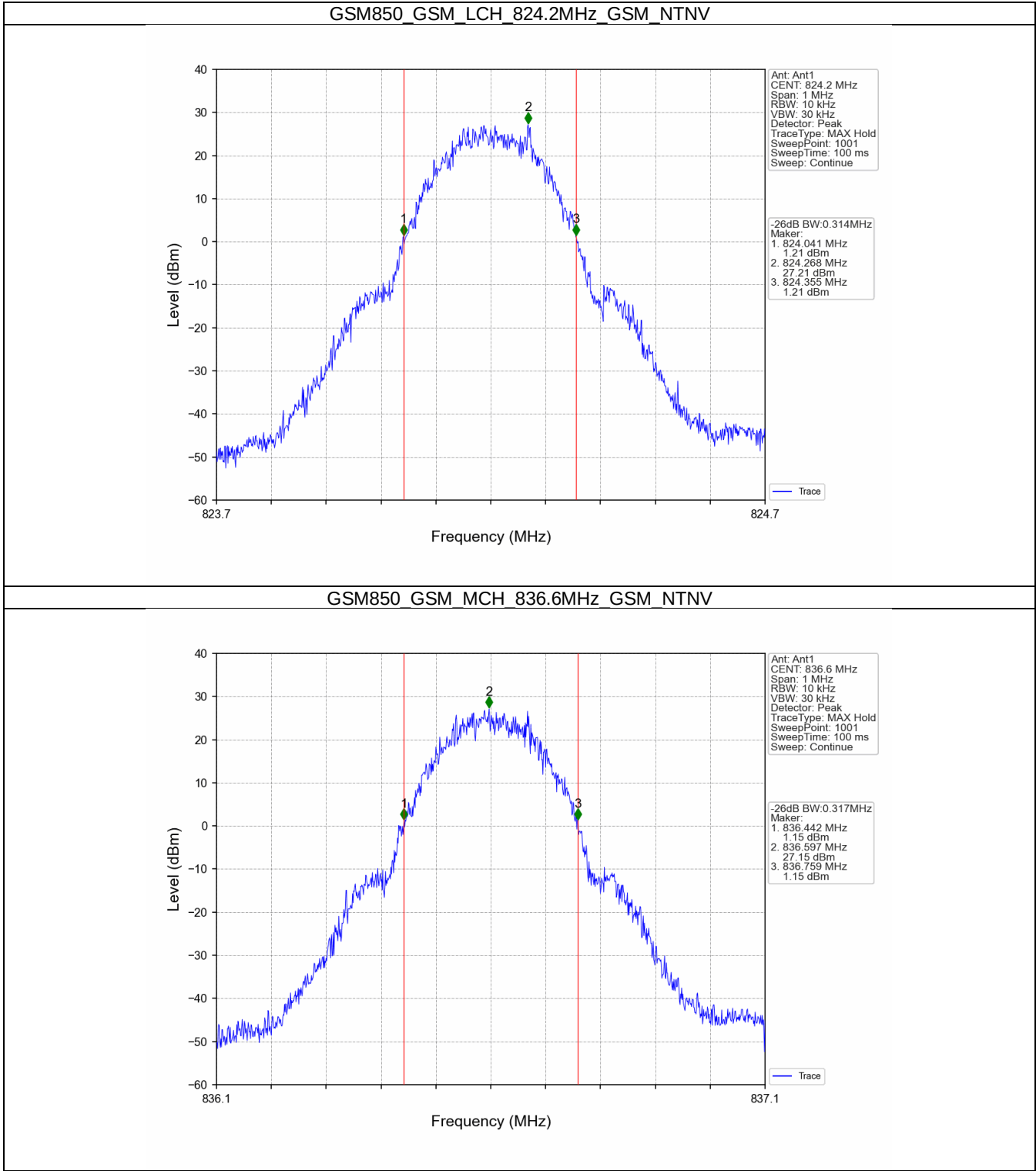


3.2 GSM850\_XDB

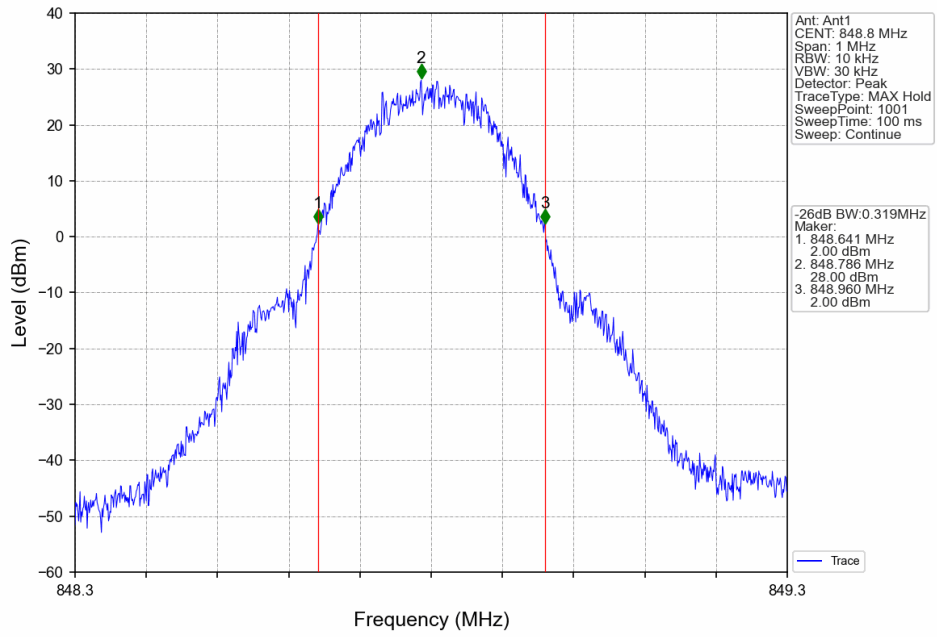
3.2.1 Test Result

| Band: GSM850 |         |           |                 |                      |       |         |
|--------------|---------|-----------|-----------------|----------------------|-------|---------|
| ENV          | Mode    |           | Frequency (MHz) | 26dB Bandwidth (MHz) |       | Verdict |
|              | Network | Subset    |                 | Result               | Limit |         |
| NTNV         | GSM     | GSM       | 824.2           | 0.314                | /     | Pass    |
|              |         |           | 836.6           | 0.317                | /     | Pass    |
|              |         |           | 848.8           | 0.319                | /     | Pass    |
|              | GPRS    | 1 TX Slot | 824.2           | 0.310                | /     | Pass    |
|              |         |           | 836.6           | 0.306                | /     | Pass    |
|              |         |           | 848.8           | 0.318                | /     | Pass    |
|              | EGPRS   | 1 TX Slot | 824.2           | 0.304                | /     | Pass    |
|              |         |           | 836.6           | 0.300                | /     | Pass    |
|              |         |           | 848.8           | 0.290                | /     | Pass    |

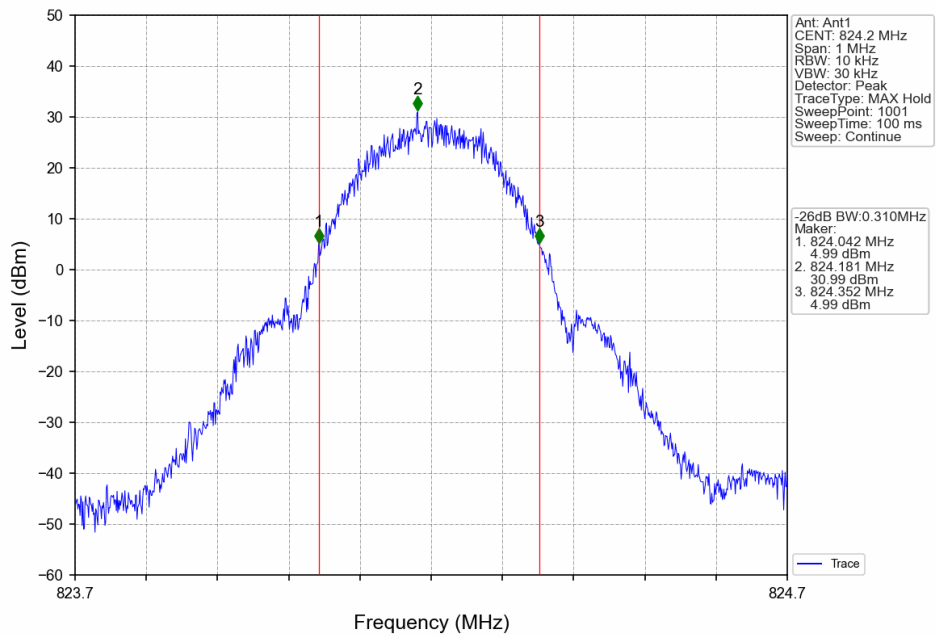
3.2.2 Test Graph



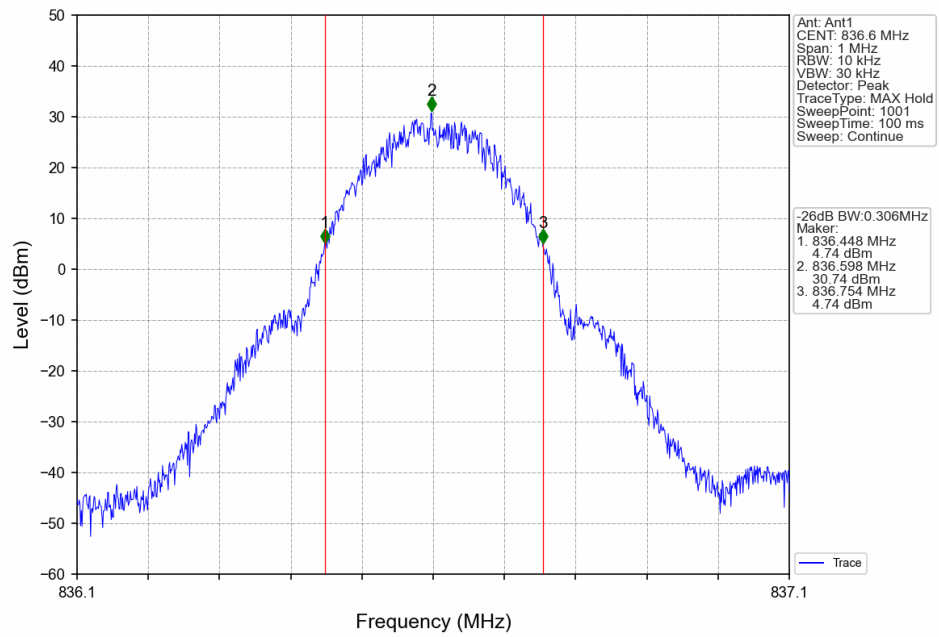
# GSM850 GSM HCH 848.8MHz GSM NTNV



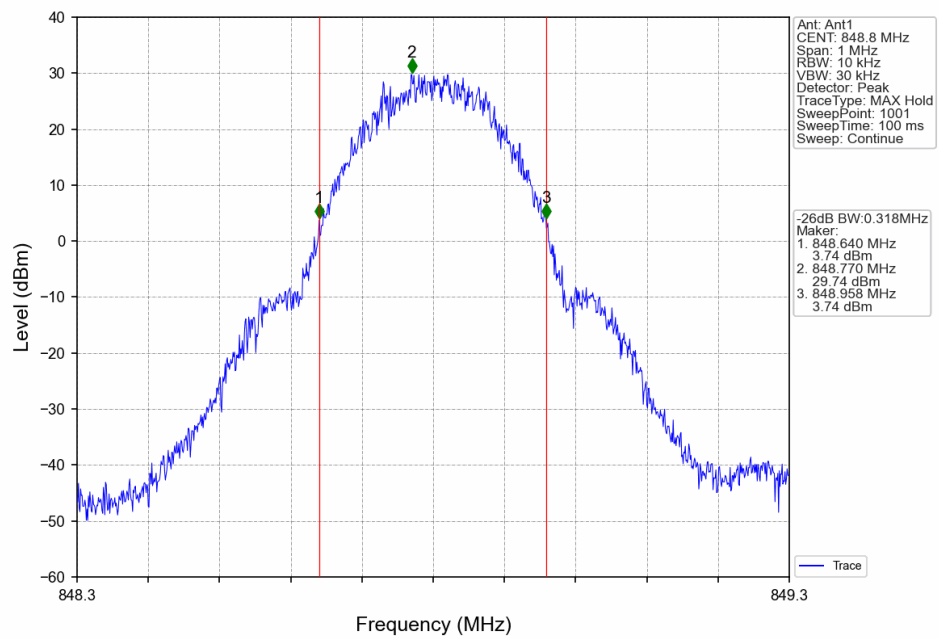
# GSM850\_GPRS\_LCH\_824.2MHz\_1 TX Slot\_NTNV



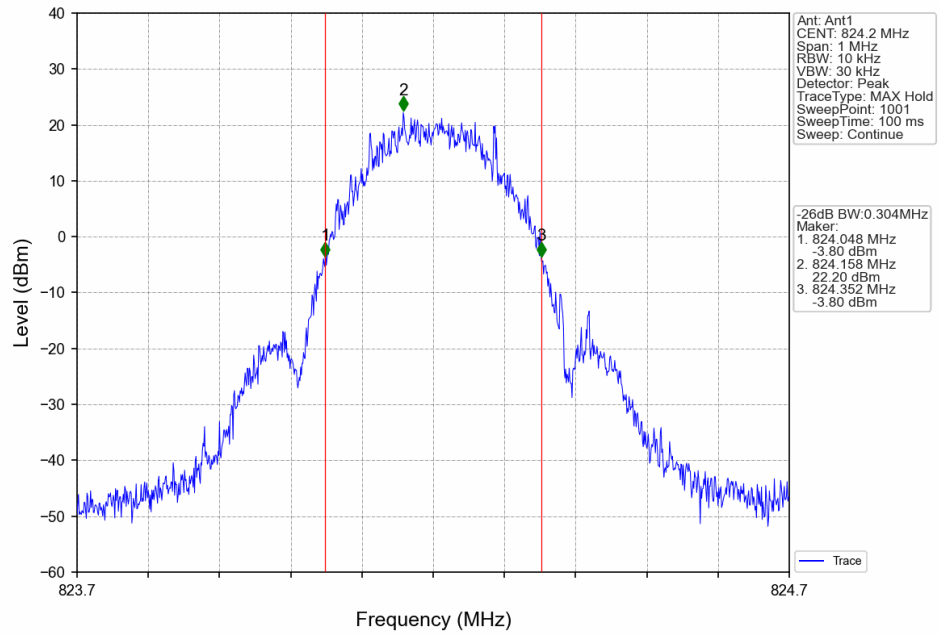
# GSM850\_GPRS\_MCH\_836.6MHz\_1 TX Slot\_NTNV



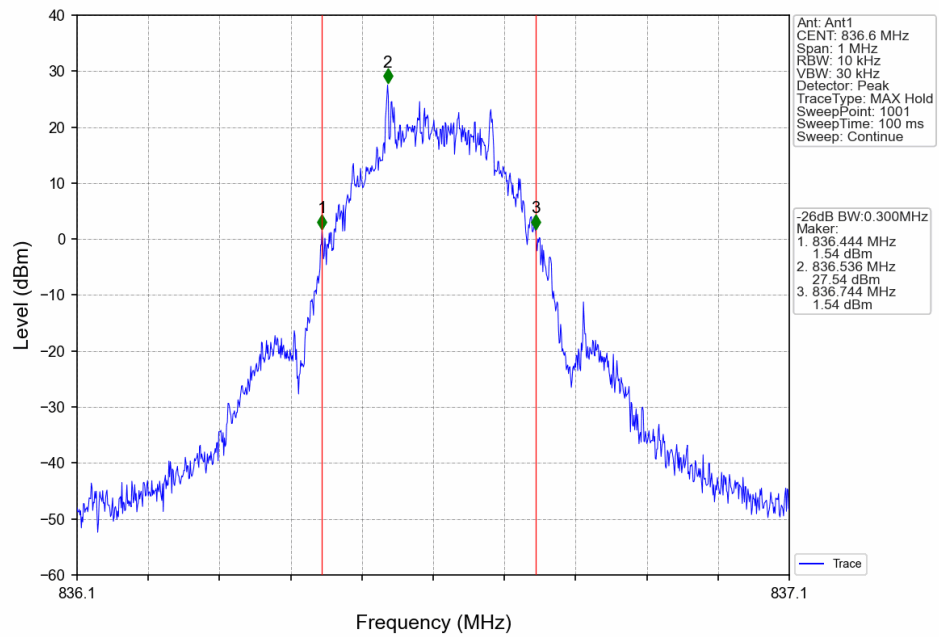
# GSM850\_GPRS\_HCH\_848.8MHz\_1 TX Slot\_NTNV



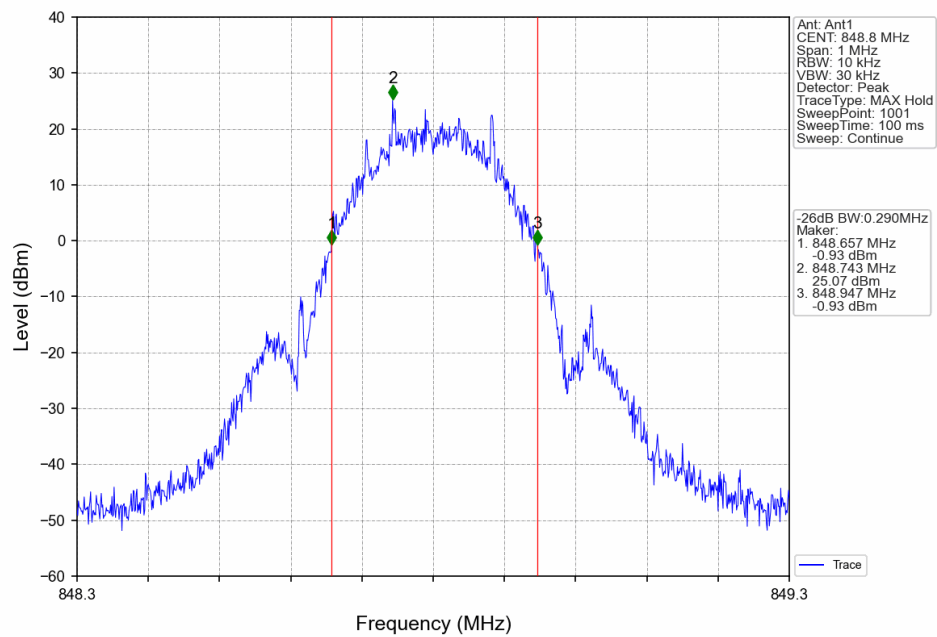
# GSM850 EGPRS LCH 824.2MHz 1 TX Slot NTNV



# GSM850 EGPRS MCH 836.6MHz 1 TX Slot NTNV



GSM850 EGPRS HCH 848.8MHz 1 TX Slot NTNV



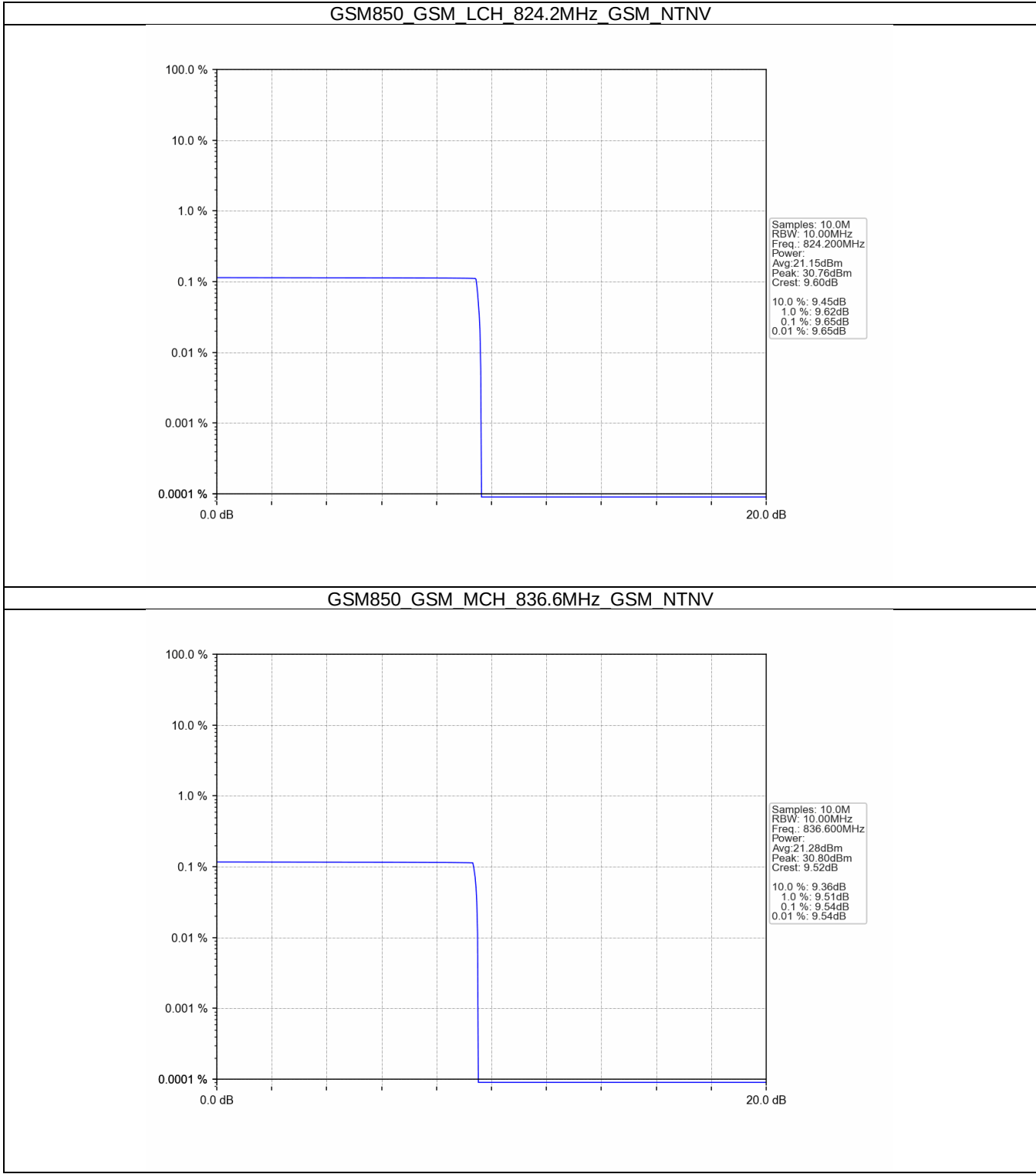
4. Peak-Average Ratio

4.1 GSM850

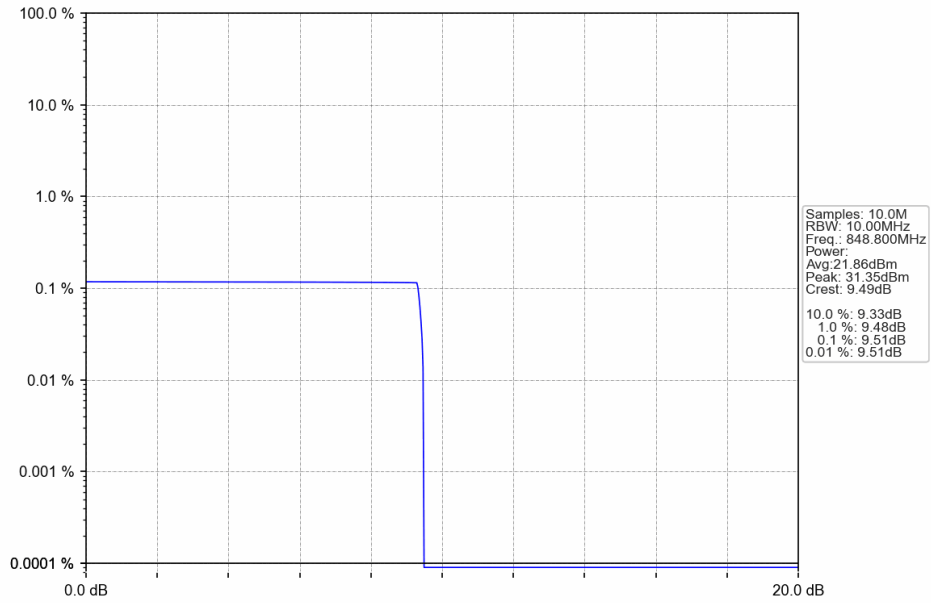
4.1.1 Test Result

| Band: GSM850 |         |            |                 |                         |       |         |
|--------------|---------|------------|-----------------|-------------------------|-------|---------|
| ENV          | Mode    |            | Frequency (MHz) | Peak-Average Ratio (dB) |       | Verdict |
|              | Network | Subset     |                 | Result                  | Limit |         |
| NTNV         | GSM     | GSM        | 824.2           | 9.65                    | <=13  | Pass    |
|              |         |            | 836.6           | 9.54                    | <=13  | Pass    |
|              |         |            | 848.8           | 9.51                    | <=13  | Pass    |
|              | GPRS    | 4 TX Slots | 824.2           | 3.80                    | <=13  | Pass    |
|              |         |            | 836.6           | 3.94                    | <=13  | Pass    |
|              |         |            | 848.8           | 4.00                    | <=13  | Pass    |
|              | EGPRS   | 4 TX Slots | 824.2           | 6.84                    | <=13  | Pass    |
|              |         |            | 836.6           | 6.67                    | <=13  | Pass    |
|              |         |            | 848.8           | 6.78                    | <=13  | Pass    |

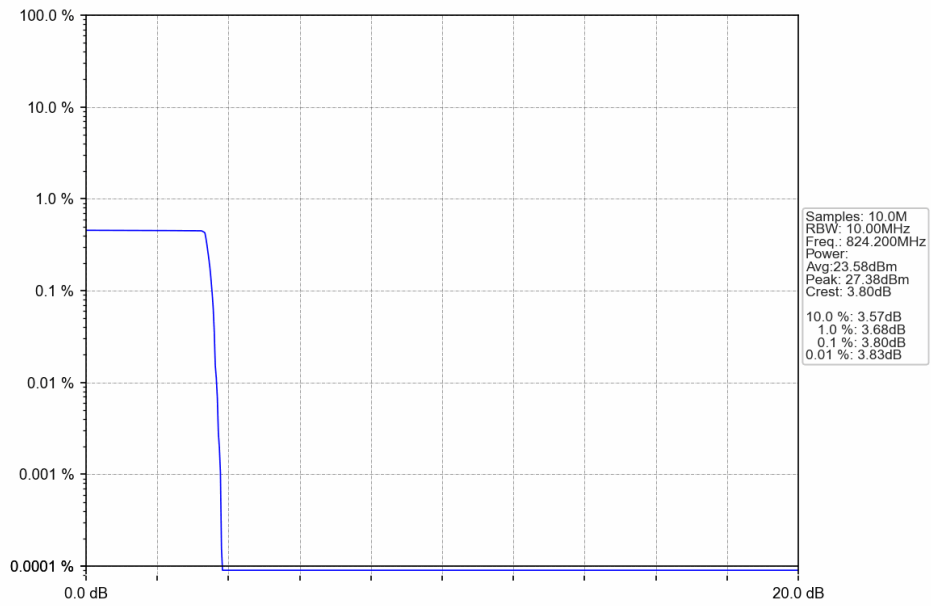
4.1.2 Test Graph



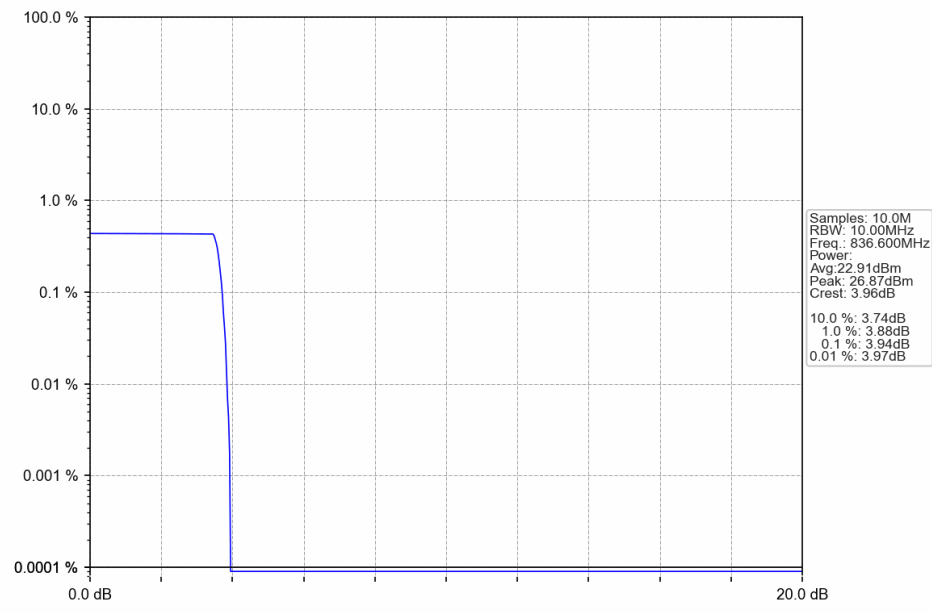
# GSM850 GSM HCH 848.8MHz GSM NTN



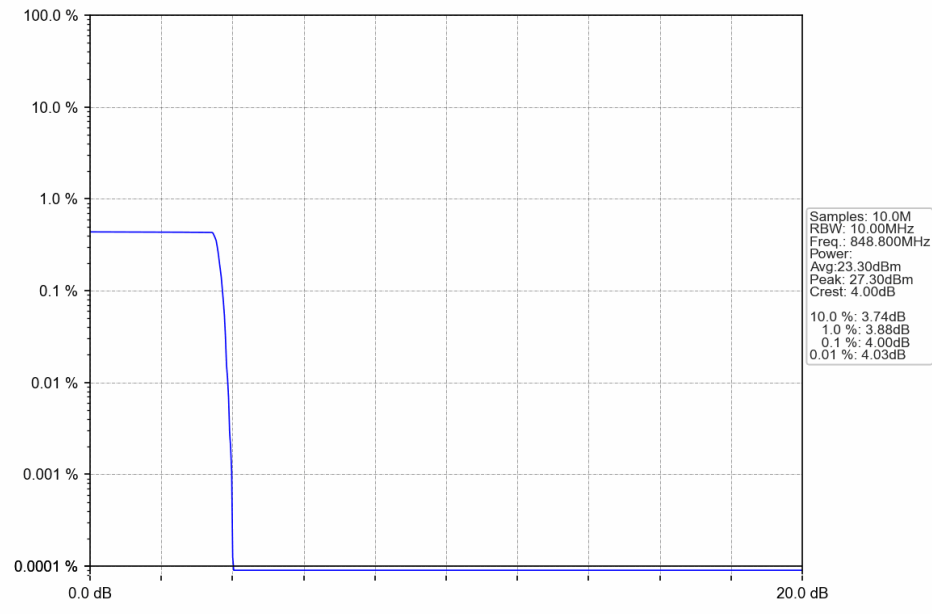
# GSM850 GPRS LCH 824.2MHz 4 TX Slots NTN



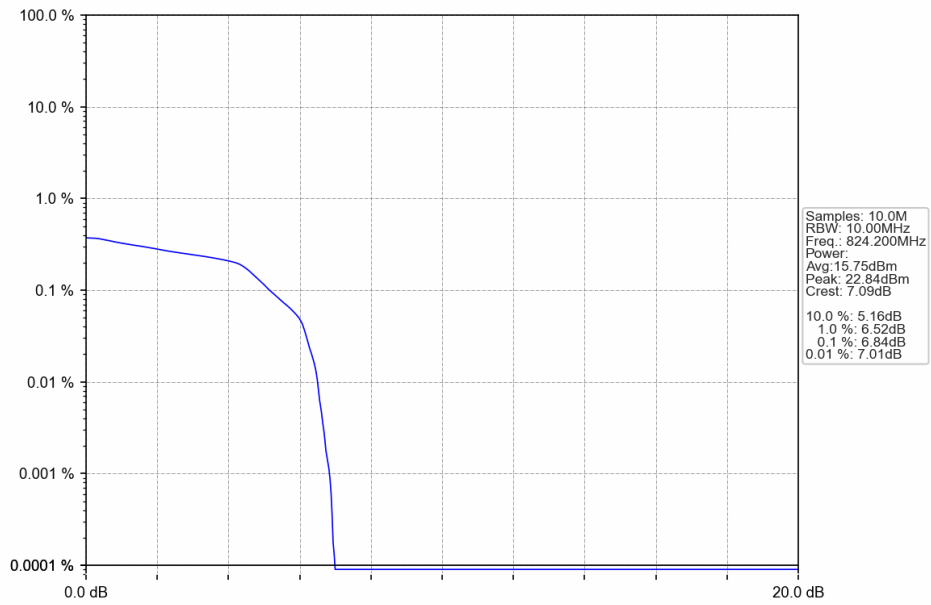
GSM850 GPRS MCH 836.6MHz 4 TX Slots NTNV



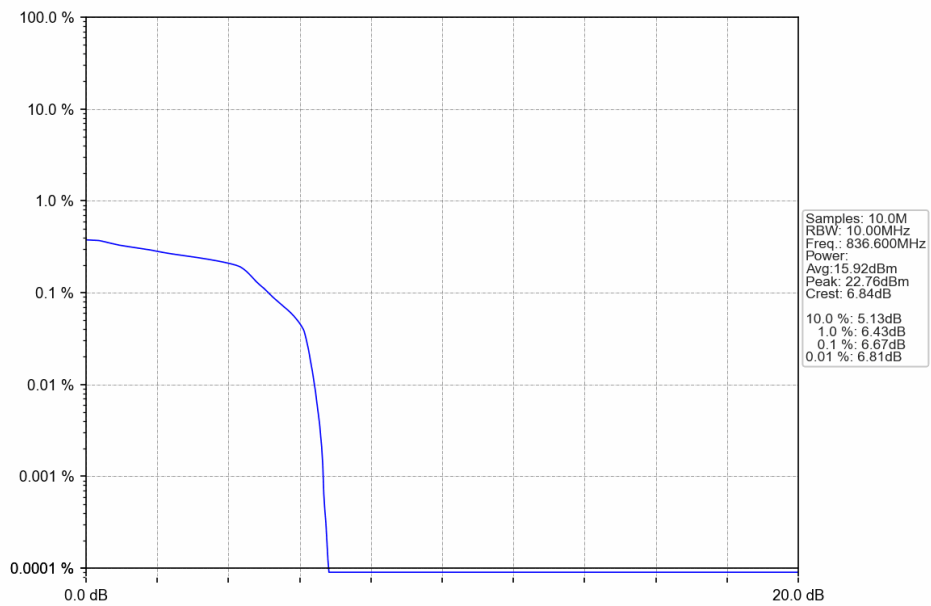
GSM850 GPRS HCH 848.8MHz 4 TX Slots NTNV



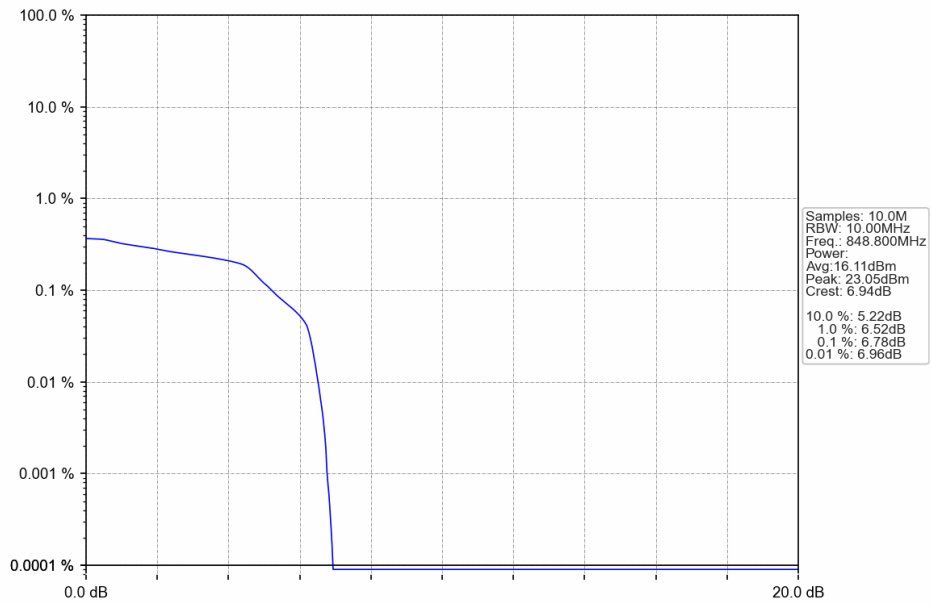
# GSM850 EGPRS LCH 824.2MHz 4 TX Slots NTN



# GSM850 EGPRS MCH 836.6MHz 4 TX Slots NTN



# GSM850 EGPRS HCH 848.8MHz 4 TX Slots NTNV



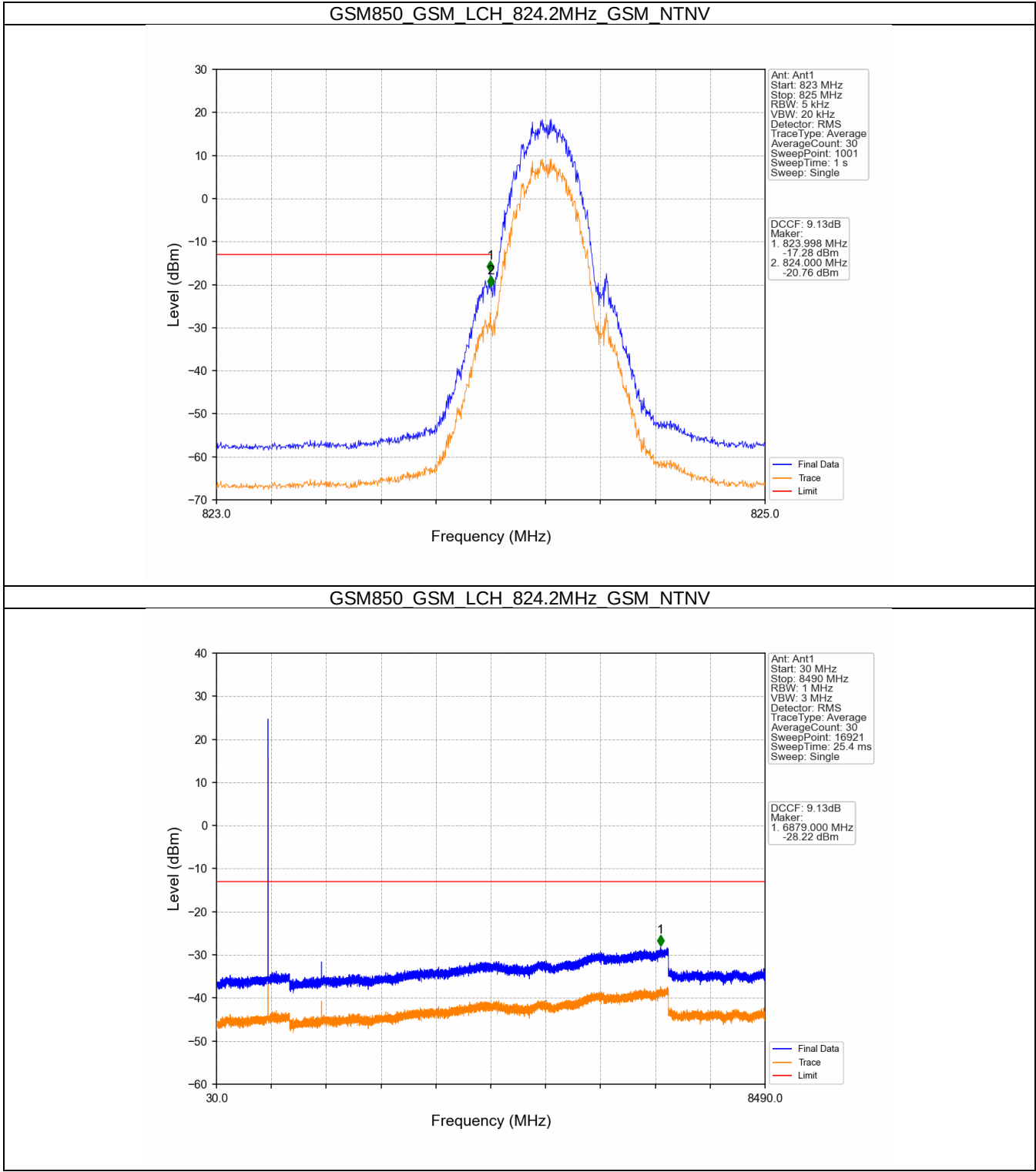
5. Spurious Emission & Band Edges

5.1 GSM850

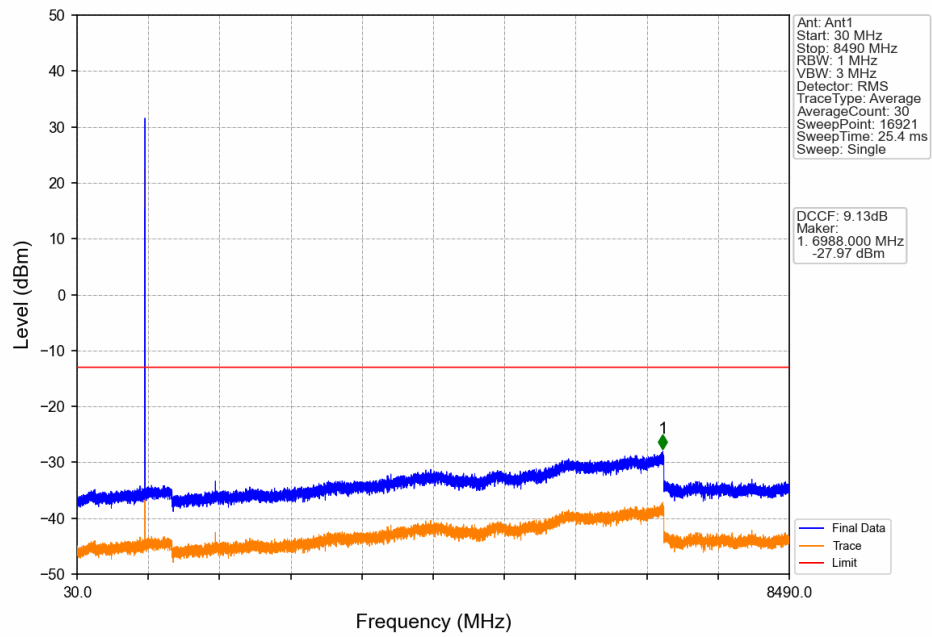
5.1.1 Test Result

| Band: GSM850 |         |           |                    |                     |       |         |
|--------------|---------|-----------|--------------------|---------------------|-------|---------|
| ENV          | Mode    |           | Frequency<br>(MHz) | Spurious Emission   |       | Verdict |
|              | Network | Subset    |                    | Result              | Limit |         |
| NTNV         | GSM     | GSM       | 824.2              | Refer To Test Graph | Pass  |         |
|              |         |           | 836.6              | Refer To Test Graph | Pass  |         |
|              |         |           | 848.8              | Refer To Test Graph | Pass  |         |
|              | GPRS    | 1 TX Slot | 824.2              | Refer To Test Graph | Pass  |         |
|              |         |           | 836.6              | Refer To Test Graph | Pass  |         |
|              |         |           | 848.8              | Refer To Test Graph | Pass  |         |
|              | EGPRS   | 1 TX Slot | 824.2              | Refer To Test Graph | Pass  |         |
|              |         |           | 836.6              | Refer To Test Graph | Pass  |         |
|              |         |           | 848.8              | Refer To Test Graph | Pass  |         |

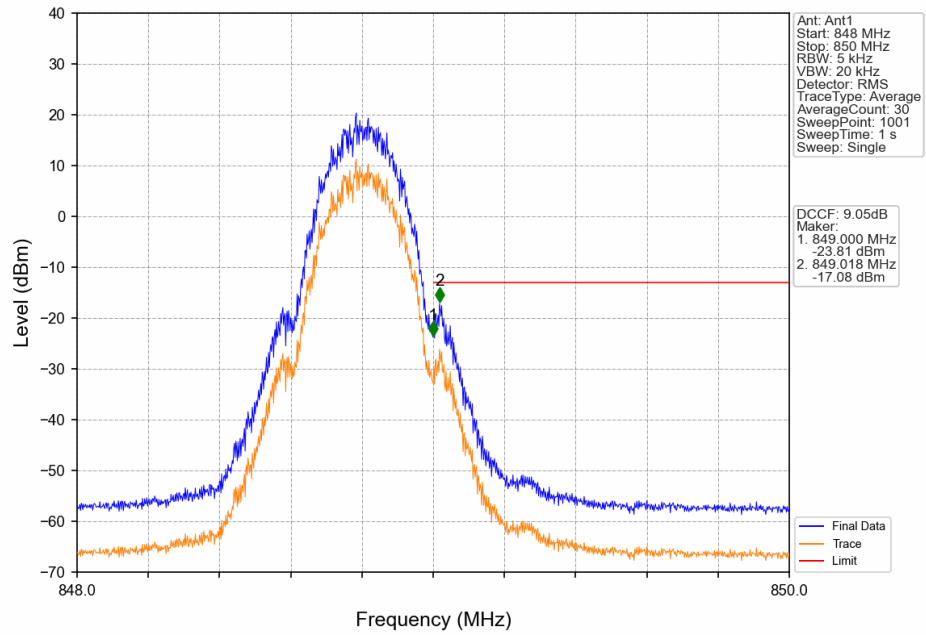
5.1.2 Test Graph



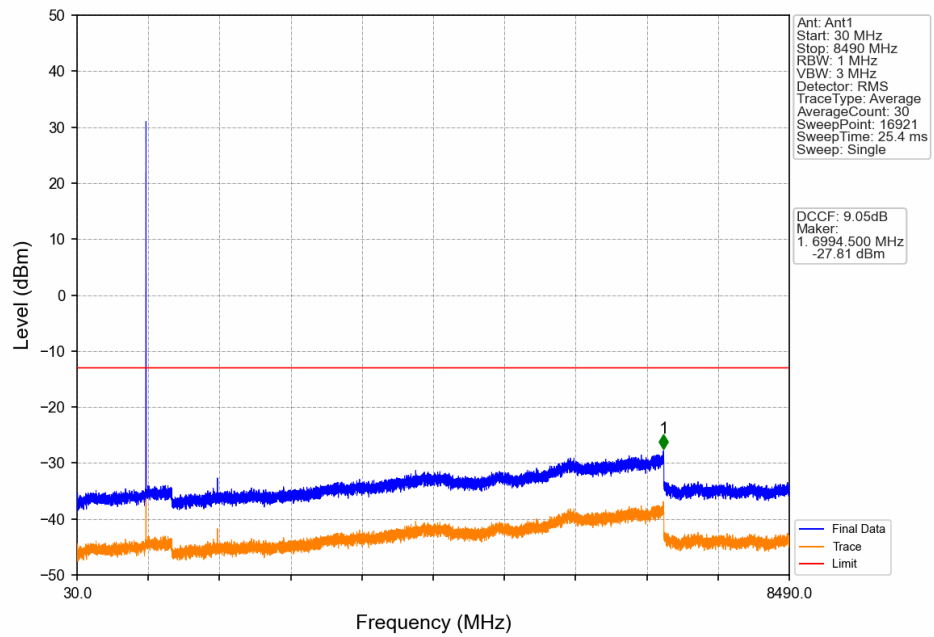
GSM850 GSM MCH 836.6MHz GSM NTNV



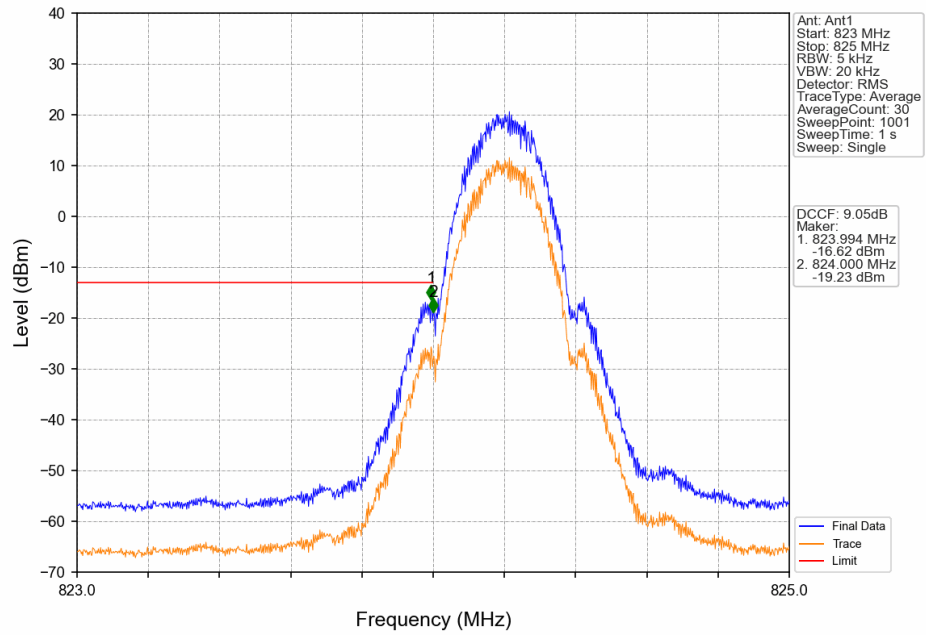
# GSM850 GSM HCH 848.8MHz GSM NTNV



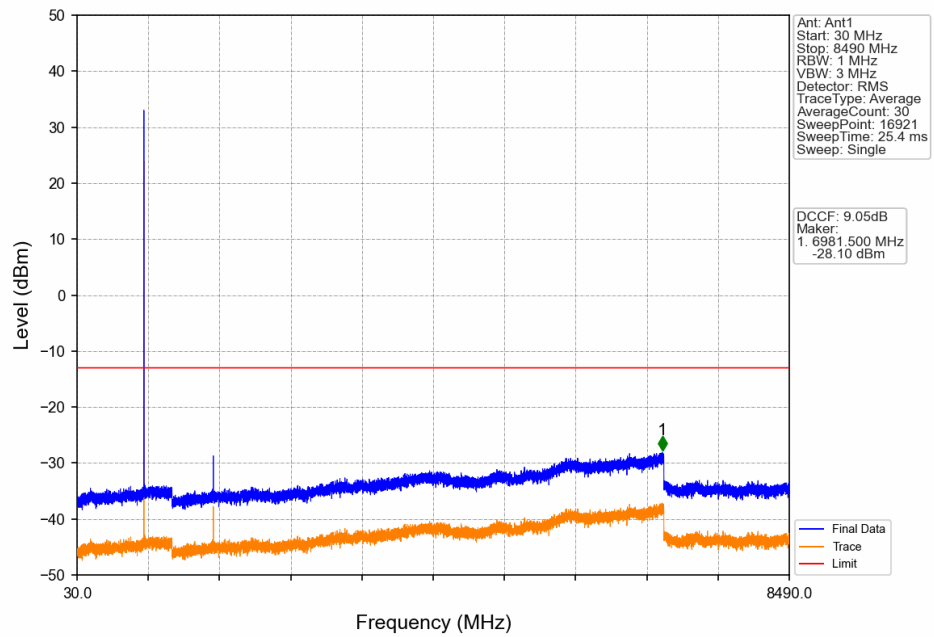
# GSM850 GSM HCH 848.8MHz GSM NTNV



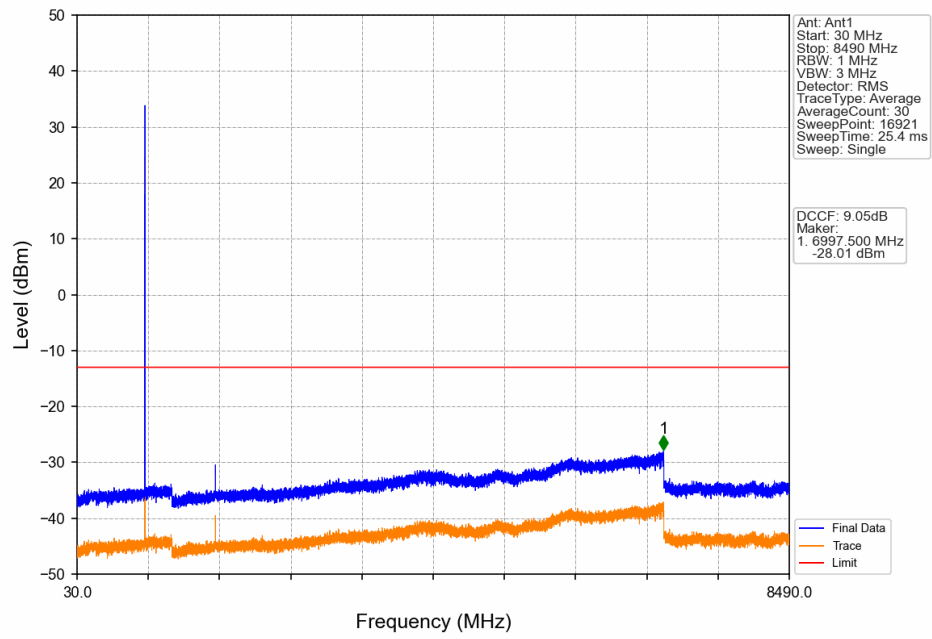
# GSM850 GPRS LCH 824.2MHz 1 TX Slot NTN



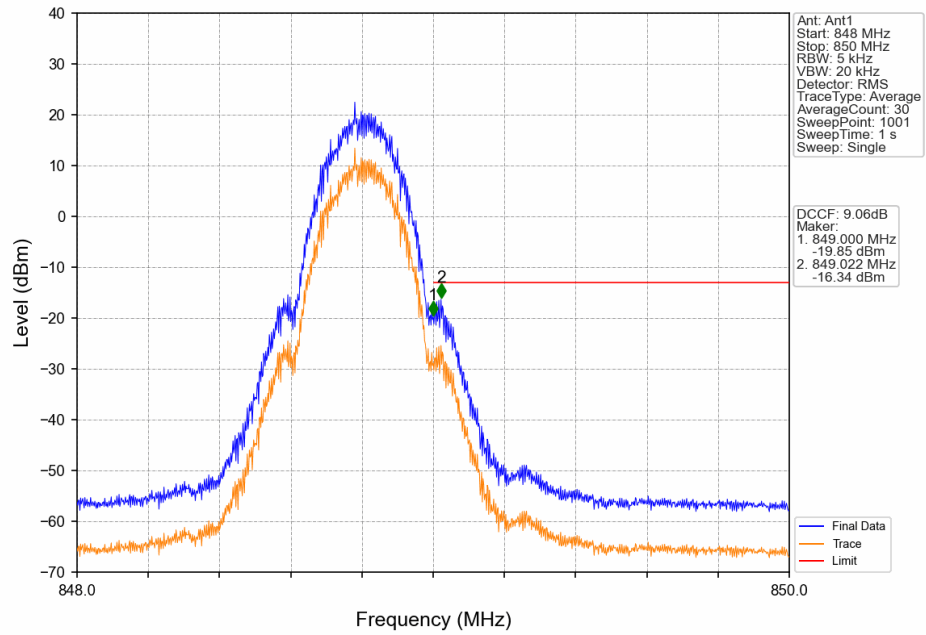
# GSM850 GPRS LCH 824.2MHz 1 TX Slot NTN



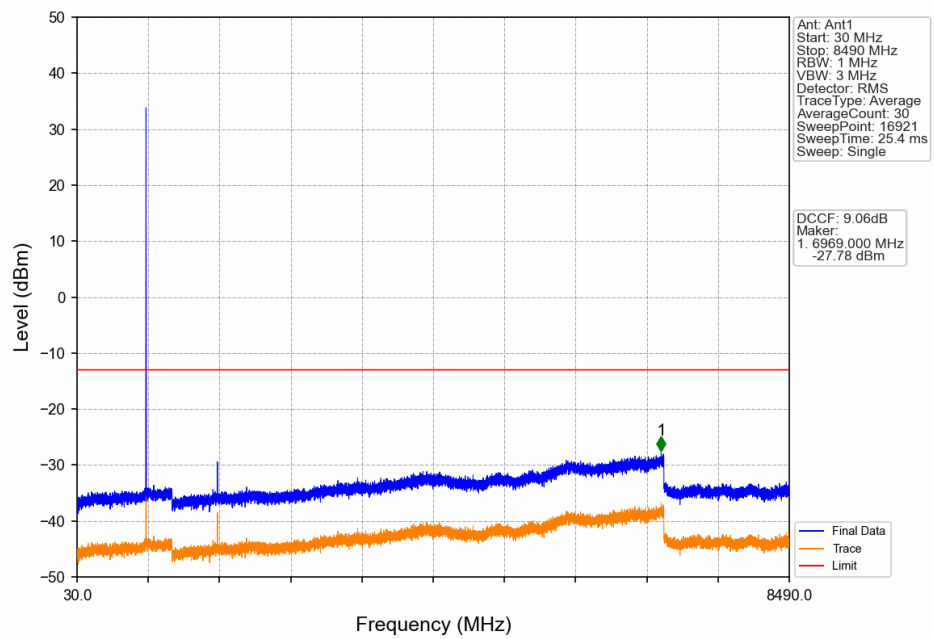
GSM850 GPRS MCH 836.6MHz 1 TX Slot NTNV



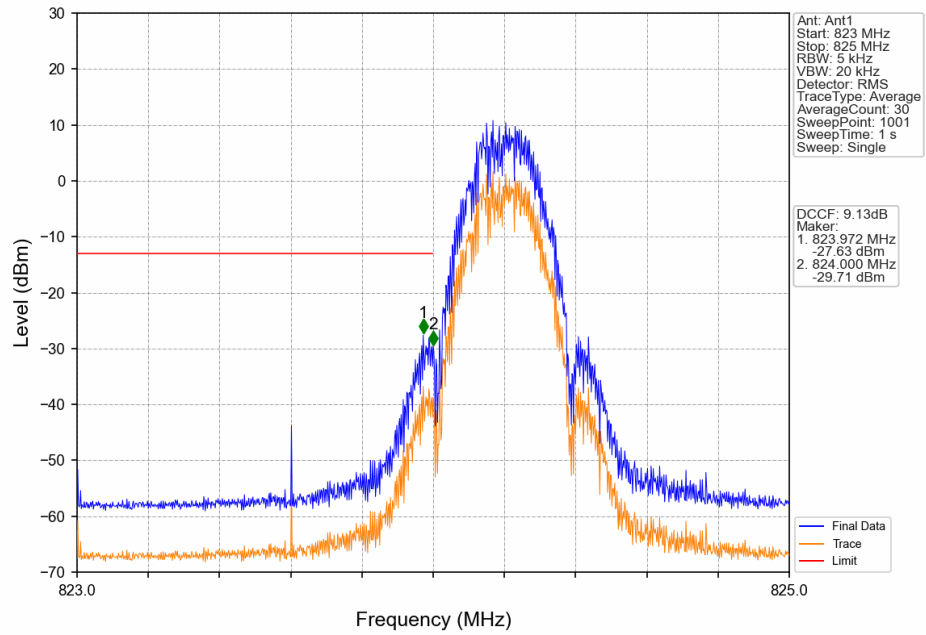
# GSM850\_GPRS\_HCH\_848.8MHz\_1\_TX\_Slot\_NTNV



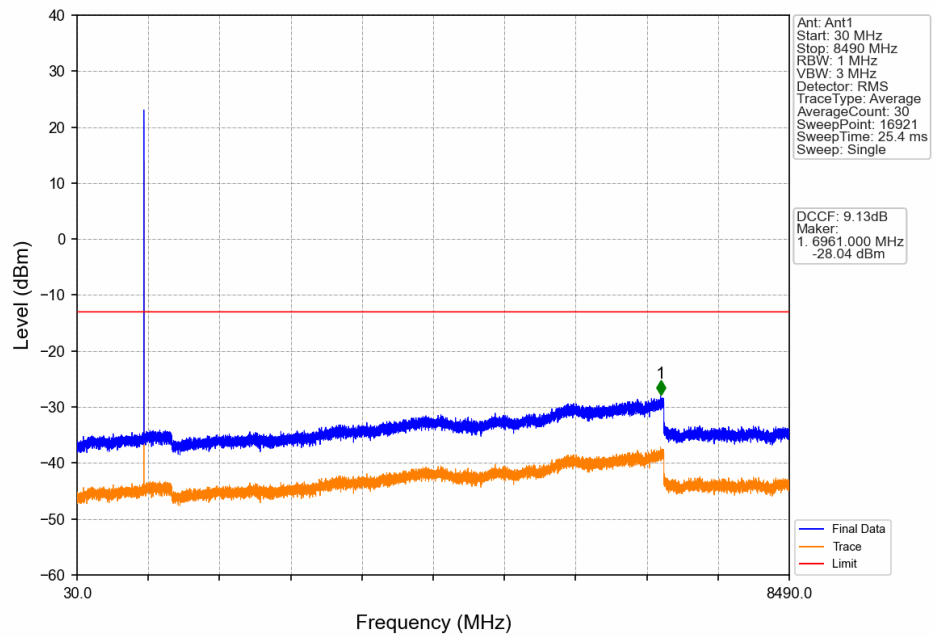
# GSM850\_GPRS\_HCH\_848.8MHz\_1\_TX\_Slot\_NTNV



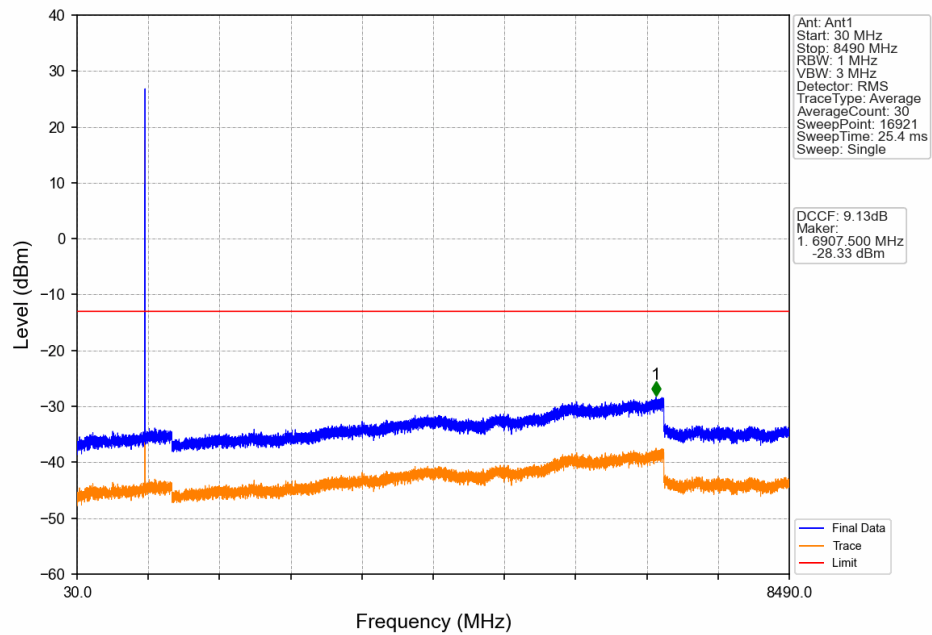
# GSM850 EGPRS LCH 824.2MHz 1 TX Slot NTNV



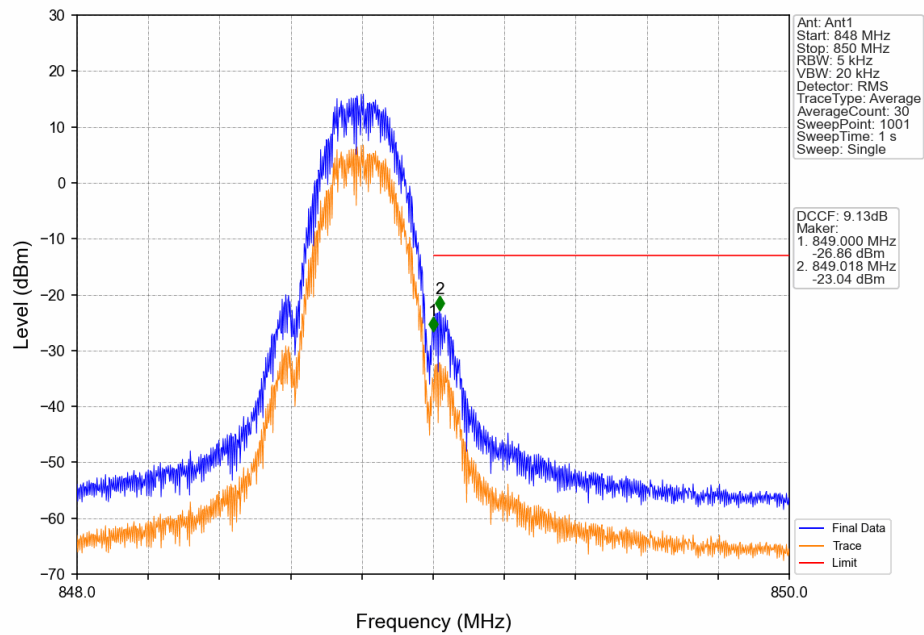
# GSM850 EGPRS LCH 824.2MHz 1 TX Slot NTNV



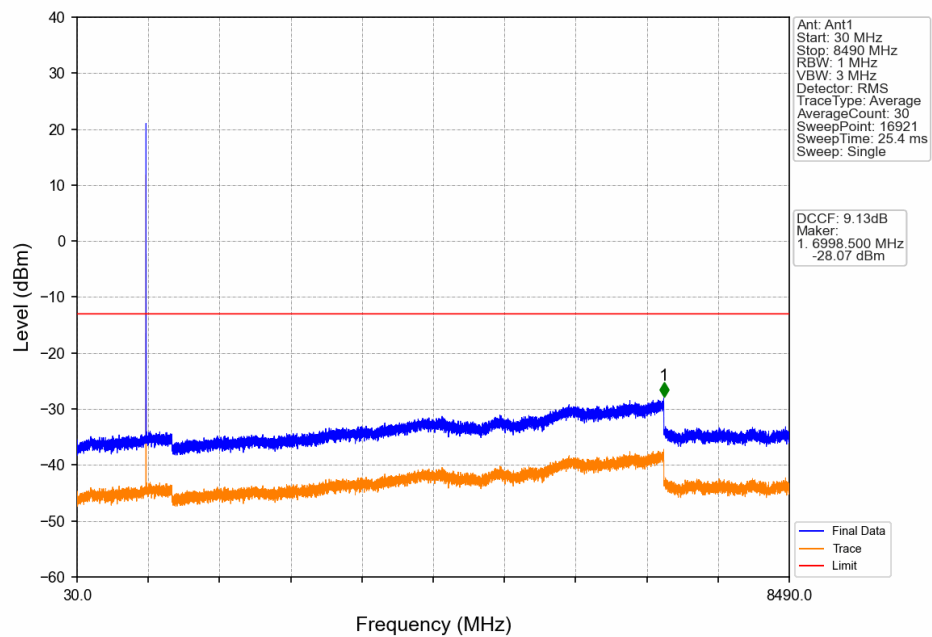
GSM850 EGPRS MCH 836.6MHz 1 TX Slot NTNV



GSM850 EGPRS HCH 848.8MHz 1 TX Slot NTNV



GSM850 EGPRS HCH 848.8MHz 1 TX Slot NTNV



## 6. Field Strength of Spurious Radiation

| GSM850 ANT31-Low channel |            |             |                 |                  |                 |                    |                    |        |
|--------------------------|------------|-------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)          | EIRP (dBm) | Limit (dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable Loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1652.8                   | -71.04     | -13         | -58.04          | -73.91           | 2.62            | 5.49               | Horizontal         | Pass   |
| 2479.2                   | -58.36     | -13         | -45.36          | -61.06           | 3.07            | 5.77               | Horizontal         | Pass   |
| 3305.6                   | -66.76     | -13         | -53.76          | -71.14           | 3.3             | 7.68               | Horizontal         | Pass   |
| 1652.8                   | -70.31     | -13         | -57.31          | -73.18           | 2.62            | 5.49               | Vertical           | Pass   |
| 2479.2                   | -54.65     | -13         | -41.65          | -57.35           | 3.07            | 5.77               | Vertical           | Pass   |
| 3305.6                   | -67.63     | -13         | -54.63          | -72.01           | 3.3             | 7.68               | Vertical           | Pass   |

| GSM850 ANT31-Middle channel |            |             |                 |                  |                 |                    |                    |        |
|-----------------------------|------------|-------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)             | EIRP (dBm) | Limit (dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable Loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1672.8                      | -61.12     | -13         | -48.12          | -63.93           | 2.63            | 5.44               | Horizontal         | Pass   |
| 2509.2                      | -53.97     | -13         | -40.97          | -56.73           | 3.08            | 5.84               | Horizontal         | Pass   |
| 3345.6                      | -67.12     | -13         | -54.12          | -71.58           | 3.32            | 7.78               | Horizontal         | Pass   |
| 1672.8                      | -62.62     | -13         | -49.62          | -65.43           | 2.63            | 5.44               | Vertical           | Pass   |
| 2509.2                      | -53.13     | -13         | -40.13          | -55.89           | 3.08            | 5.84               | Vertical           | Pass   |
| 3345.6                      | -66.97     | -13         | -53.97          | -71.43           | 3.32            | 7.78               | Vertical           | Pass   |

| GSM850 ANT31-High channel |            |             |                 |                  |                 |                    |                    |        |
|---------------------------|------------|-------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)           | EIRP (dBm) | Limit (dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable Loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1697.6                    | -55.57     | -13         | -42.57          | -58.31           | 2.64            | 5.38               | Horizontal         | Pass   |
| 2546.4                    | -51.12     | -13         | -38.12          | -53.95           | 3.09            | 5.92               | Horizontal         | Pass   |
| 3395.2                    | -65.51     | -13         | -52.51          | -70.07           | 3.35            | 7.91               | Horizontal         | Pass   |
| 1697.6                    | -58.28     | -13         | -45.28          | -61.02           | 2.64            | 5.38               | Vertical           | Pass   |
| 2546.4                    | -55.54     | -13         | -42.54          | -58.37           | 3.09            | 5.92               | Vertical           | Pass   |
| 3395.2                    | -66.81     | -13         | -53.81          | -71.37           | 3.35            | 7.91               | Vertical           | Pass   |

1) All antennas of RSE are tested, and only the worst data is presented.

---End of Attachment---