# 850M Frequency Stability

## Measurement Results

### Measurement Results vs. Variation of Temperature

- **GPRS Mode, 3.3V DC Channel No.192(837.0MHz)**

Table 1 Measurement Results vs. Variation of Temperature—GPRS Mode

| Temperature | Power (dBm) | Nominal Frequency (MHz) | Measured Frequency Error(Hz) | Result |
|---|---|---|---|---|
| -30 ℃ | 33 | 837.0 | -30 | Pass |
| -20 ℃ | 33 | 837.0 | -25 | Pass |
| -10 ℃ | 33 | 837.0 | 24 | Pass |
| 0 ℃ | 33 | 837.0 | 23 | Pass |
| +10 ℃ | 33 | 837.0 | 25 | Pass |
| +20 ℃ | 33 | 837.0 | 11 | Pass |
| +30 ℃ | 33 | 837.0 | -3 | Pass |
| +40 ℃ | 33 | 837.0 | -10 | Pass |
| +50 ℃ | 33 | 837.0 | 3 | Pass |

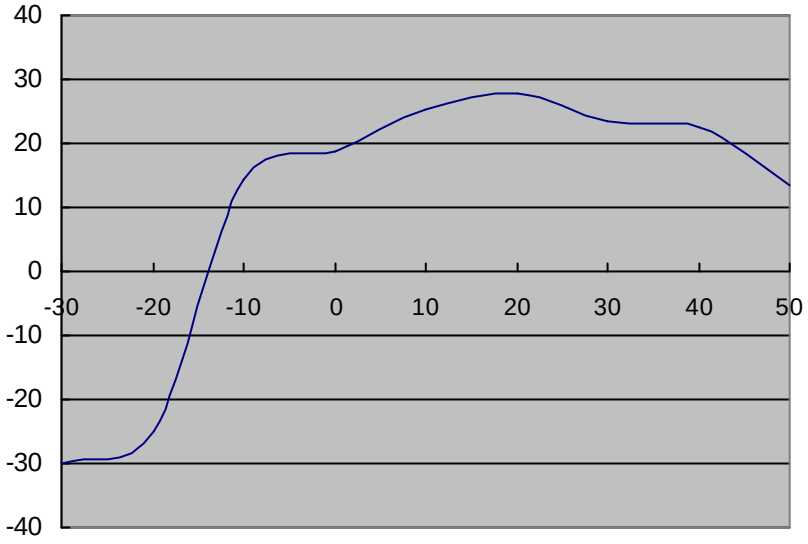


Figure 1.GPRS Mode Test Graph

- **GDGE Mode, 3.3V DC Channel No.192(837.0MHz)**

Table 2 Measurement Results vs. Variation of Temperature—EDGE Mode

| Temperature | Power (dBm) | Nominal Frequency (MHz) | Measured Frequency Error(Hz) | Result |
|---|---|---|---|---|
| -30 ℃ | 27 | 837.0 | 12 | Pass |
| -20 ℃ | 27 | 837.0 | -9 | Pass |
| -10 ℃ | 27 | 837.0 | 42 | Pass |
| 0 ℃ | 27 | 837.0 | 40 | Pass |
| +10 ℃ | 27 | 837.0 | 39 | Pass |
| +20 ℃ | 27 | 837.0 | -10 | Pass |
| +30 ℃ | 27 | 837.0 | -9 | Pass |
| +40 ℃ | 27 | 837.0 | 16 | Pass |
| +50 ℃ | 27 | 837.0 | 29 | Pass |

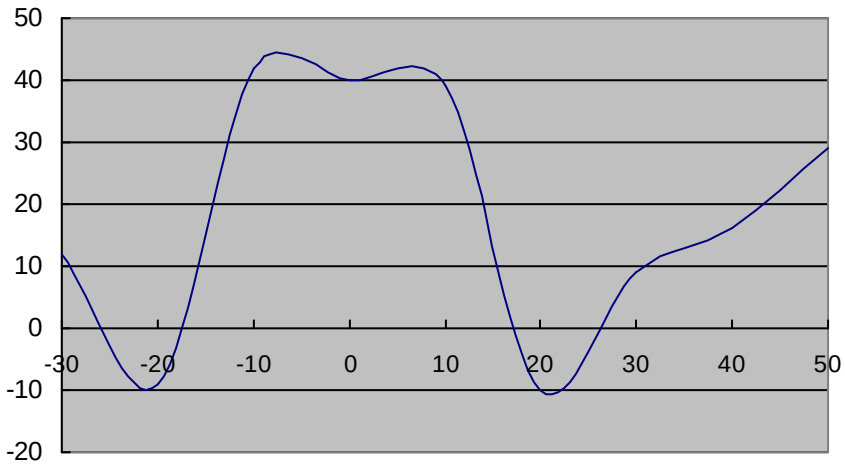


Figure 2. EDGE Mode Test Graph

- **UMTS Mode, 3.3V DC Channel No.4182(836.4MHz)**

Table 3 Measurement Results vs. Variation of Temperature－UMTS Mode

| Temperature | Power (dBm) | Nominal Frequency (MHz) | Measured Frequency Error(Hz) | Result |
|---|---|---|---|---|
| -30 ℃ | 24 | 836.4 | 6 | Pass |
| -20 ℃ | 24 | 836.4 | 4 | Pass |
| -10 ℃ | 24 | 836.4 | 6 | Pass |

| | | | | |
|---|---|---|---|---|
| 0 ℃ | 24 | 836.4 | 4 | Pass |
| +10 ℃ | 24 | 836.4 | 9 | Pass |
| +20 ℃ | 24 | 836.4 | 5 | Pass |
| +30 ℃ | 24 | 836.4 | 3 | Pass |
| +40 ℃ | 24 | 836.4 | 6 | Pass |
| +50 ℃ | 24 | 836.4 | 6 | Pass |