



**SGS-CSTC Standards Technical Services Co., Ltd.**  
**Shenzhen Branch**

Report No.: SZCR240400116001

Rev.: 01

Page: 1 of 40

# Appendix B.1

## GSM 850



SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch  
Wireless Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 [www.ssgsgroup.com.cn](http://www.ssgsgroup.com.cn)  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 2 of 40

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

Ant11

### 1.1 GSM850\_ERP

#### 1.1.1 Test Result

| Band: GSM850 |         |            |                    |                          |               |           |         |         |
|--------------|---------|------------|--------------------|--------------------------|---------------|-----------|---------|---------|
| ENV          | Mode    |            | Frequency<br>(MHz) | Conducted Power<br>(dBm) | Gain<br>(dBi) | ERP (dBm) |         | Verdict |
|              | Network | Subset     |                    |                          |               | Result    | Limit   |         |
| NTNV         | GSM     | GSM        | 824.2              | 32.52                    | -5.61         | 24.76     | <=38.45 | Pass    |
|              |         |            | 836.6              | 32.55                    | -5.61         | 24.79     | <=38.45 | Pass    |
|              |         |            | 848.8              | 32.50                    | -5.61         | 24.74     | <=38.45 | Pass    |
|              | GPRS    | 1 TX Slot  | 824.2              | 32.50                    | -5.61         | 24.74     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 824.2              | 30.51                    | -5.61         | 22.75     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 824.2              | 27.63                    | -5.61         | 19.87     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 824.2              | 27.06                    | -5.61         | 19.30     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 836.6              | 32.53                    | -5.61         | 24.77     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 836.6              | 30.34                    | -5.61         | 22.58     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 836.6              | 27.34                    | -5.61         | 19.58     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 836.6              | 26.93                    | -5.61         | 19.17     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 848.8              | 32.57                    | -5.61         | 24.81     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 848.8              | 30.96                    | -5.61         | 23.20     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 848.8              | 28.28                    | -5.61         | 20.52     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 848.8              | 27.02                    | -5.61         | 19.26     | <=38.45 | Pass    |
|              | EGPRS   | 1 TX Slot  | 824.2              | 25.85                    | -5.61         | 18.09     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 824.2              | 24.79                    | -5.61         | 17.03     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 824.2              | 22.76                    | -5.61         | 15.00     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 824.2              | 21.48                    | -5.61         | 13.72     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 836.6              | 25.81                    | -5.61         | 18.05     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 836.6              | 25.07                    | -5.61         | 17.31     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 836.6              | 22.81                    | -5.61         | 15.05     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 836.6              | 21.29                    | -5.61         | 13.53     | <=38.45 | Pass    |
|              |         | 1 TX Slot  | 848.8              | 25.59                    | -5.61         | 17.83     | <=38.45 | Pass    |
|              |         | 2 TX Slots | 848.8              | 24.72                    | -5.61         | 16.96     | <=38.45 | Pass    |
|              |         | 3 TX Slots | 848.8              | 23.21                    | -5.61         | 15.45     | <=38.45 | Pass    |
|              |         | 4 TX Slots | 848.8              | 21.17                    | -5.61         | 13.41     | <=38.45 | Pass    |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 3 of 40

## 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         | 3.7           | 13.563           | 0.0165                | -2.5 to 2.5 | Pass    |
|              |                 |            | 3.91          | 12.275           | 0.0149                | -2.5 to 2.5 | Pass    |
|              |                 |            | 4.4           | 5.936            | 0.0072                | -2.5 to 2.5 | Pass    |
|              |                 | -30        | 3.91          | 7.905            | 0.0096                | -2.5 to 2.5 | Pass    |
|              |                 | -20        | 3.91          | 11.242           | 0.0136                | -2.5 to 2.5 | Pass    |
|              |                 | -10        | 3.91          | 14.791           | 0.0179                | -2.5 to 2.5 | Pass    |
|              |                 | 0          | 3.91          | 11.805           | 0.0143                | -2.5 to 2.5 | Pass    |
|              |                 | 10         | 3.91          | 12.993           | 0.0158                | -2.5 to 2.5 | Pass    |
|              |                 | 30         | 3.91          | 9.401            | 0.0114                | -2.5 to 2.5 | Pass    |
|              |                 | 40         | 3.91          | 12.253           | 0.0149                | -2.5 to 2.5 | Pass    |
|              |                 | 50         | 3.91          | 11.495           | 0.0139                | -2.5 to 2.5 | Pass    |
|              | 836.6           | 20         | 3.7           | 12.854           | 0.0154                | -2.5 to 2.5 | Pass    |
|              |                 |            | 3.91          | 13.075           | 0.0156                | -2.5 to 2.5 | Pass    |
|              |                 |            | 4.4           | 14.748           | 0.0176                | -2.5 to 2.5 | Pass    |
|              |                 | -30        | 3.91          | 10.538           | 0.0126                | -2.5 to 2.5 | Pass    |
|              |                 | -20        | 3.91          | 12.695           | 0.0152                | -2.5 to 2.5 | Pass    |
|              |                 | -10        | 3.91          | 7.072            | 0.0085                | -2.5 to 2.5 | Pass    |
|              |                 | 0          | 3.91          | 13.539           | 0.0162                | -2.5 to 2.5 | Pass    |
|              |                 | 10         | 3.91          | 11.107           | 0.0133                | -2.5 to 2.5 | Pass    |
|              |                 | 30         | 3.91          | 12.864           | 0.0154                | -2.5 to 2.5 | Pass    |
|              |                 | 40         | 3.91          | 10.446           | 0.0125                | -2.5 to 2.5 | Pass    |
|              |                 | 50         | 3.91          | 12.414           | 0.0148                | -2.5 to 2.5 | Pass    |
|              | 848.8           | 20         | 3.7           | 10.943           | 0.0129                | -2.5 to 2.5 | Pass    |
|              |                 |            | 3.91          | 11.714           | 0.0138                | -2.5 to 2.5 | Pass    |
|              |                 |            | 4.4           | 10.982           | 0.0129                | -2.5 to 2.5 | Pass    |
|              |                 | -30        | 3.91          | 10.906           | 0.0128                | -2.5 to 2.5 | Pass    |
|              |                 | -20        | 3.91          | 10.510           | 0.0124                | -2.5 to 2.5 | Pass    |
|              |                 | -10        | 3.91          | 12.474           | 0.0147                | -2.5 to 2.5 | Pass    |
|              |                 | 0          | 3.91          | 13.782           | 0.0162                | -2.5 to 2.5 | Pass    |
|              |                 | 10         | 3.91          | 11.872           | 0.0140                | -2.5 to 2.5 | Pass    |
|              |                 | 30         | 3.91          | 11.789           | 0.0139                | -2.5 to 2.5 | Pass    |
|              |                 | 40         | 3.91          | 14.712           | 0.0173                | -2.5 to 2.5 | Pass    |
|              |                 | 50         | 3.91          | 14.201           | 0.0167                | -2.5 to 2.5 | Pass    |
| GPRS         | 824.2           | 20         | 3.7           | 16.280           | 0.0198                | -2.5 to 2.5 | Pass    |
|              |                 |            | 3.91          | 15.975           | 0.0194                | -2.5 to 2.5 | Pass    |
|              |                 |            | 4.4           | 15.127           | 0.0184                | -2.5 to 2.5 | Pass    |
|              |                 | -30        | 3.91          | 15.765           | 0.0191                | -2.5 to 2.5 | Pass    |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 4 of 40

|       |       |     |      |        |        |             |      |
|-------|-------|-----|------|--------|--------|-------------|------|
|       |       | -20 | 3.91 | 16.779 | 0.0204 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.91 | 15.969 | 0.0194 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.91 | 16.160 | 0.0196 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.91 | 16.200 | 0.0197 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.91 | 16.444 | 0.0200 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.91 | 17.109 | 0.0208 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.91 | 15.335 | 0.0186 | -2.5 to 2.5 | Pass |
|       | 836.6 | 20  | 3.7  | 13.710 | 0.0164 | -2.5 to 2.5 | Pass |
|       |       |     | 3.91 | 17.131 | 0.0205 | -2.5 to 2.5 | Pass |
|       |       |     | 4.4  | 18.300 | 0.0219 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.91 | 17.875 | 0.0214 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.91 | 19.662 | 0.0235 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.91 | 19.181 | 0.0229 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.91 | 18.327 | 0.0219 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.91 | 16.716 | 0.0200 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.91 | 16.678 | 0.0199 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.91 | 16.734 | 0.0200 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.91 | 18.389 | 0.0220 | -2.5 to 2.5 | Pass |
|       | 848.8 | 20  | 3.7  | 19.213 | 0.0226 | -2.5 to 2.5 | Pass |
|       |       |     | 3.91 | 16.617 | 0.0196 | -2.5 to 2.5 | Pass |
|       |       |     | 4.4  | 16.102 | 0.0190 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.91 | 15.929 | 0.0188 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.91 | 16.513 | 0.0195 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.91 | 15.823 | 0.0186 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.91 | 14.474 | 0.0171 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.91 | 15.272 | 0.0180 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.91 | 15.327 | 0.0181 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.91 | 14.696 | 0.0173 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.91 | 15.345 | 0.0181 | -2.5 to 2.5 | Pass |
| EGPRS | 824.2 | 20  | 3.7  | 12.558 | 0.0152 | -2.5 to 2.5 | Pass |
|       |       |     | 3.91 | 15.429 | 0.0187 | -2.5 to 2.5 | Pass |
|       |       |     | 4.4  | 16.418 | 0.0199 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.91 | 17.241 | 0.0209 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.91 | 20.166 | 0.0245 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.91 | 20.303 | 0.0246 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.91 | 21.029 | 0.0255 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.91 | 23.490 | 0.0285 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.91 | 22.148 | 0.0269 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.91 | 21.912 | 0.0266 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.91 | 21.032 | 0.0255 | -2.5 to 2.5 | Pass |
|       | 836.6 | 20  | 3.7  | 23.521 | 0.0281 | -2.5 to 2.5 | Pass |
|       |       |     | 3.91 | 22.827 | 0.0273 | -2.5 to 2.5 | Pass |
|       |       |     | 4.4  | 21.959 | 0.0262 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.91 | 21.667 | 0.0259 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.91 | 20.826 | 0.0249 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.91 | 20.772 | 0.0248 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.91 | 22.802 | 0.0273 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.91 | 21.975 | 0.0263 | -2.5 to 2.5 | Pass |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 5 of 40

|  |       |     |      |        |        |             |      |
|--|-------|-----|------|--------|--------|-------------|------|
|  |       | 30  | 3.91 | 22.376 | 0.0267 | -2.5 to 2.5 | Pass |
|  |       | 40  | 3.91 | 23.506 | 0.0281 | -2.5 to 2.5 | Pass |
|  |       | 50  | 3.91 | 23.243 | 0.0278 | -2.5 to 2.5 | Pass |
|  | 848.8 | 20  | 3.7  | 25.612 | 0.0302 | -2.5 to 2.5 | Pass |
|  |       |     | 3.91 | 20.379 | 0.0240 | -2.5 to 2.5 | Pass |
|  |       |     | 4.4  | 20.130 | 0.0237 | -2.5 to 2.5 | Pass |
|  |       | -30 | 3.91 | 19.270 | 0.0227 | -2.5 to 2.5 | Pass |
|  |       | -20 | 3.91 | 20.717 | 0.0244 | -2.5 to 2.5 | Pass |
|  |       | -10 | 3.91 | 19.695 | 0.0232 | -2.5 to 2.5 | Pass |
|  |       | 0   | 3.91 | 19.562 | 0.0230 | -2.5 to 2.5 | Pass |
|  |       | 10  | 3.91 | 20.437 | 0.0241 | -2.5 to 2.5 | Pass |
|  |       | 30  | 3.91 | 19.421 | 0.0229 | -2.5 to 2.5 | Pass |
|  |       | 40  | 3.91 | 19.940 | 0.0235 | -2.5 to 2.5 | Pass |
|  |       | 50  | 3.91 | 19.422 | 0.0229 | -2.5 to 2.5 | Pass |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 6 of 40

## 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           | 0.245                        | /     | Pass    |
|              |         |           | 836.6           | 0.247                        | /     | Pass    |
|              |         |           | 848.8           | 0.244                        | /     | Pass    |
|              | GPRS    | 1 TX Slot | 824.2           | 0.251                        | /     | Pass    |
|              |         |           | 836.6           | 0.244                        | /     | Pass    |
|              |         |           | 848.8           | 0.243                        | /     | Pass    |
|              | EGPRS   | 1 TX Slot | 824.2           | 0.229                        | /     | Pass    |
|              |         |           | 836.6           | 0.240                        | /     | Pass    |
|              |         |           | 848.8           | 0.238                        | /     | Pass    |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services  
Shenzhen Branch Wireless Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



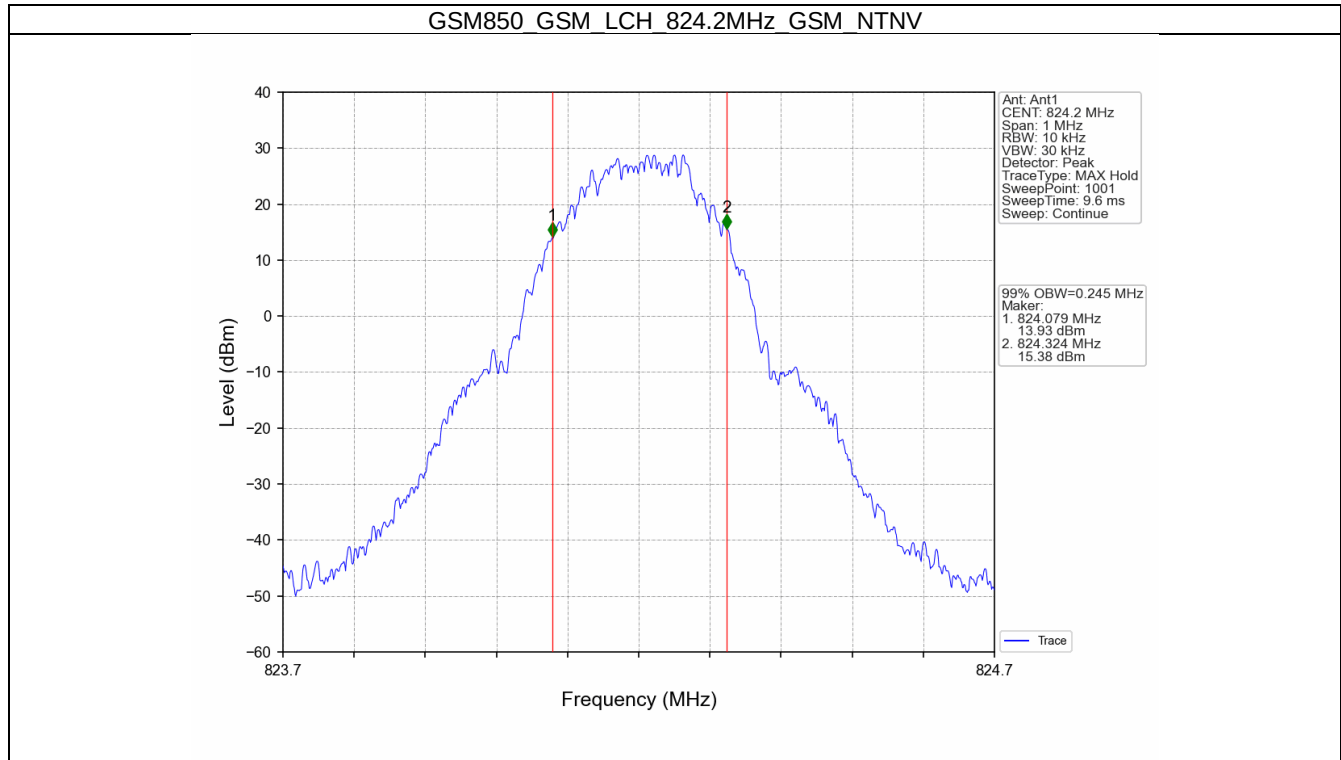
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 7 of 40

## 3.1.2 Test Graph



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

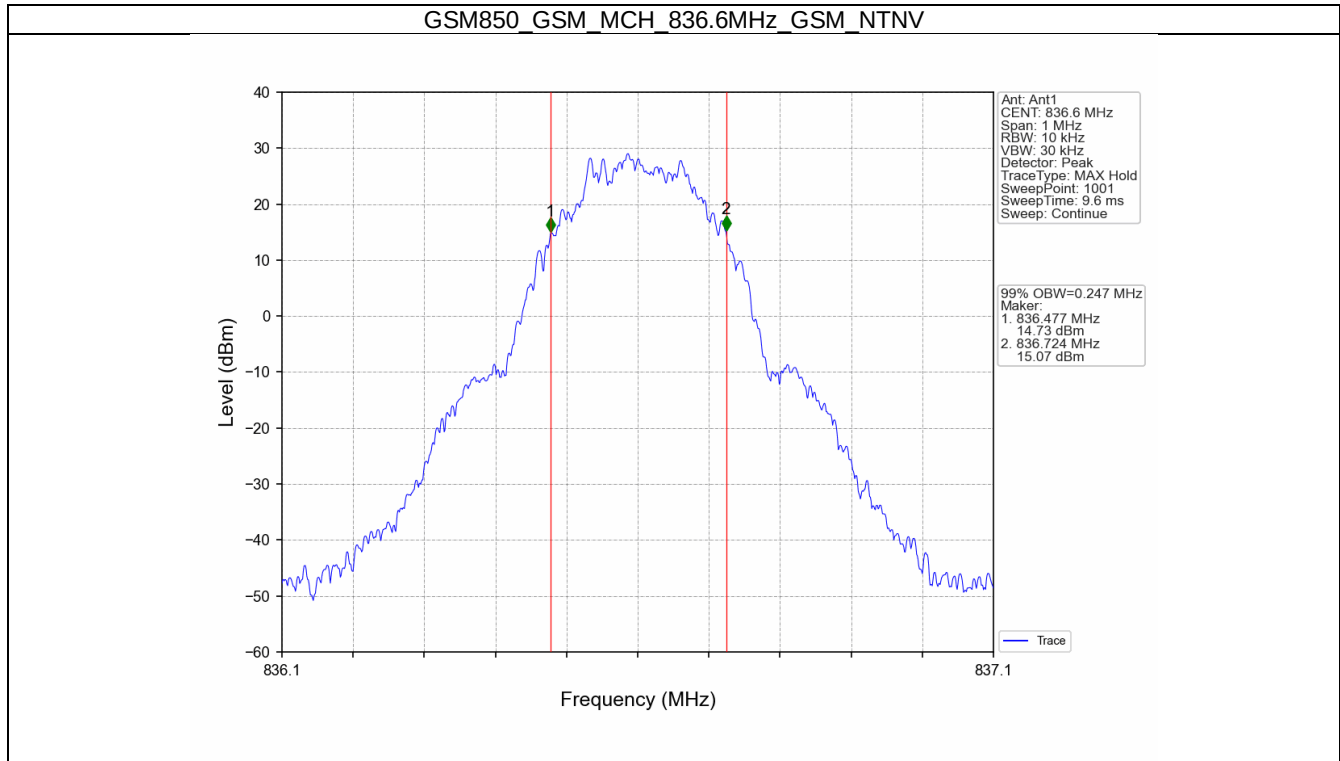


# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 8 of 40



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



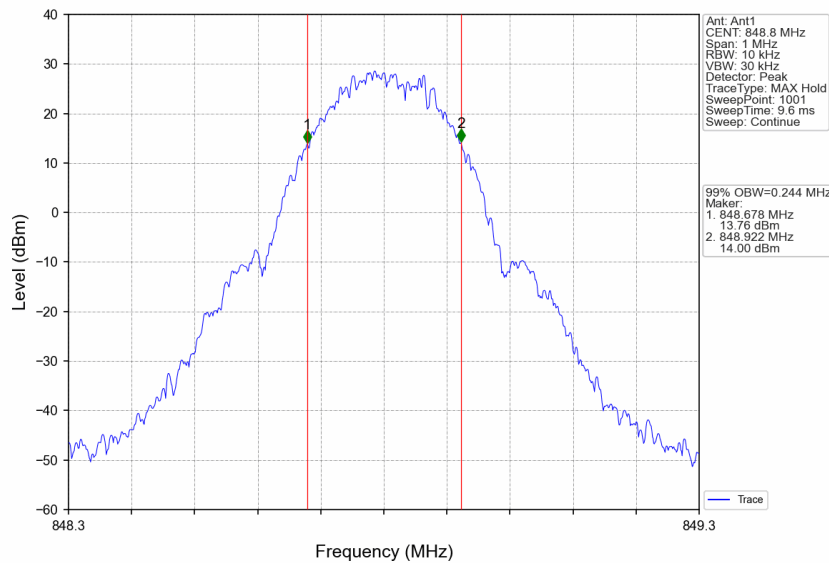
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

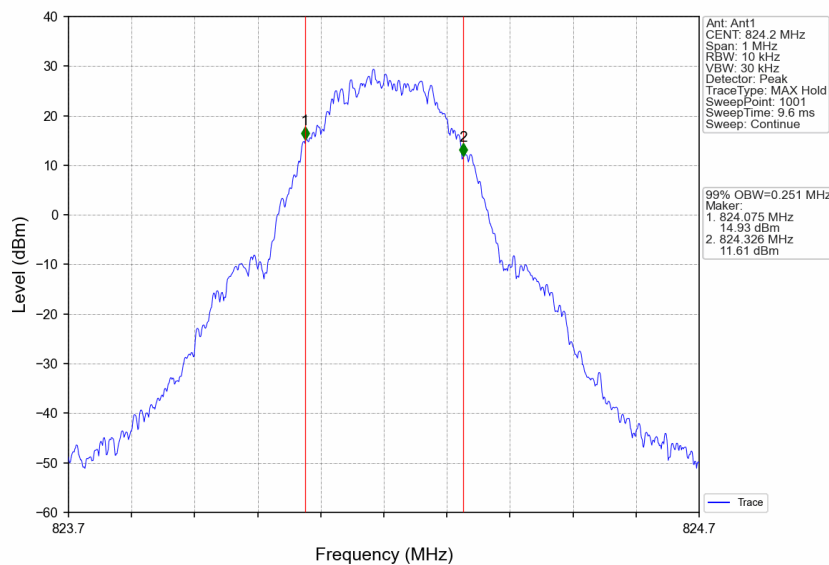
Rev.: 01

Page: 9 of 40

GSM850\_GSM\_HCH\_848.8MHz\_GSM\_NTNV



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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



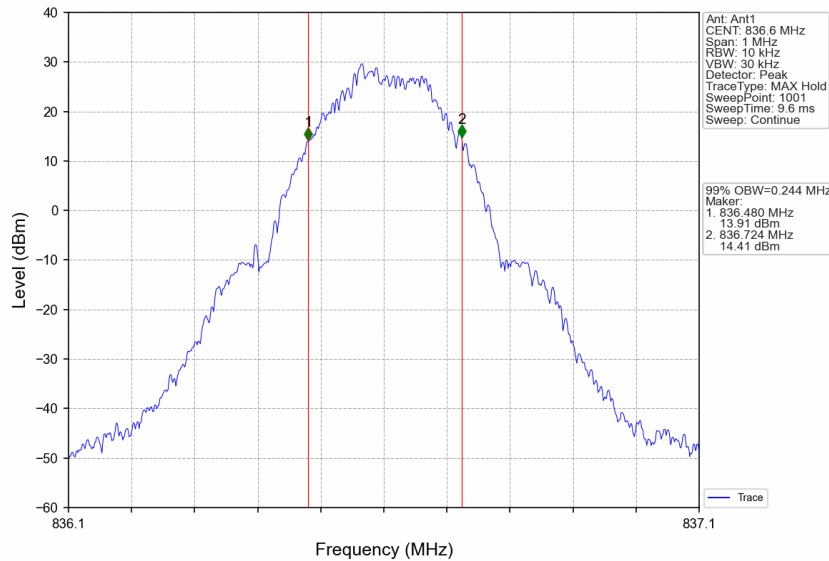
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

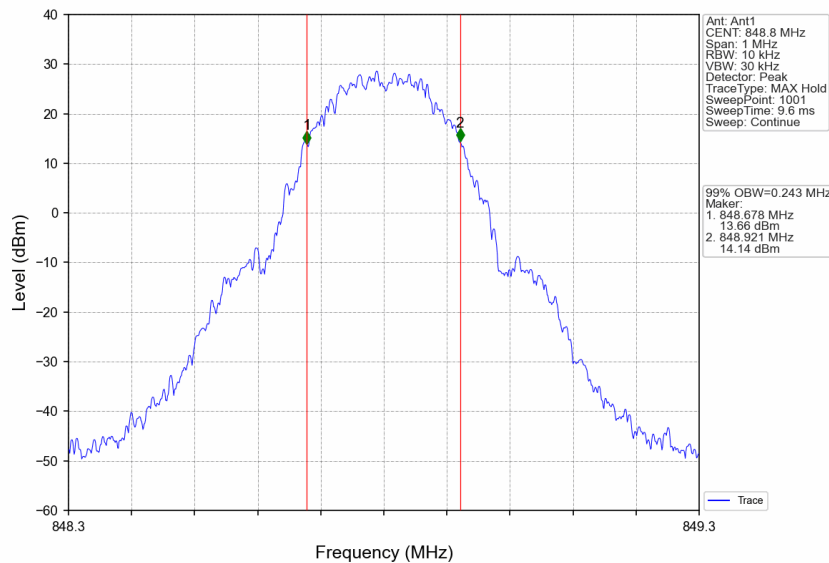
Rev.: 01

Page: 10 of 40

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



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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



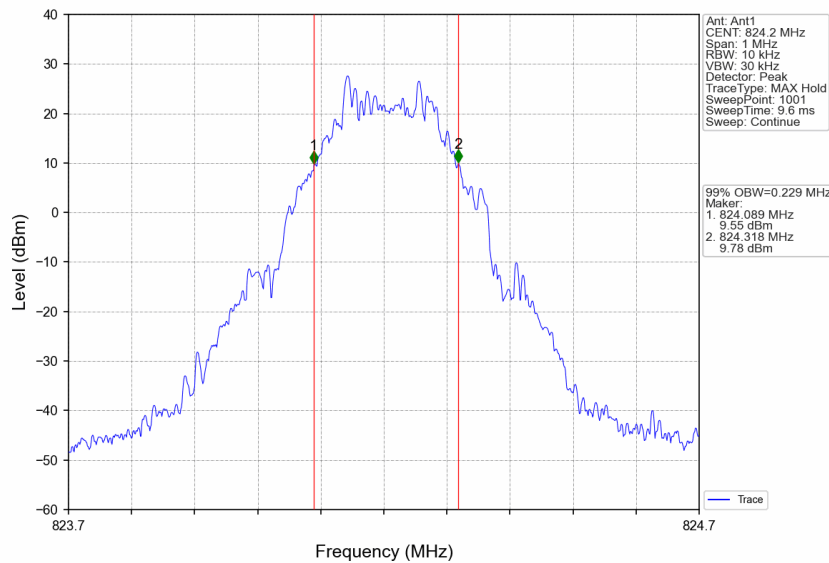
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

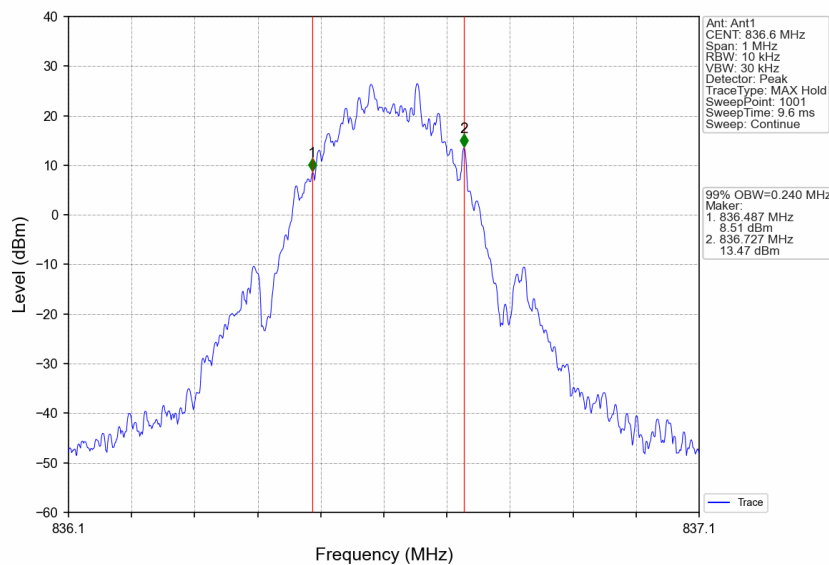
Rev.: 01

Page: 11 of 40

GSM850\_EGPRS\_LCH\_824.2MHz\_1 TX Slot\_NTNV



GSM850\_EGPRS\_MCH\_836.6MHz\_1 TX Slot\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



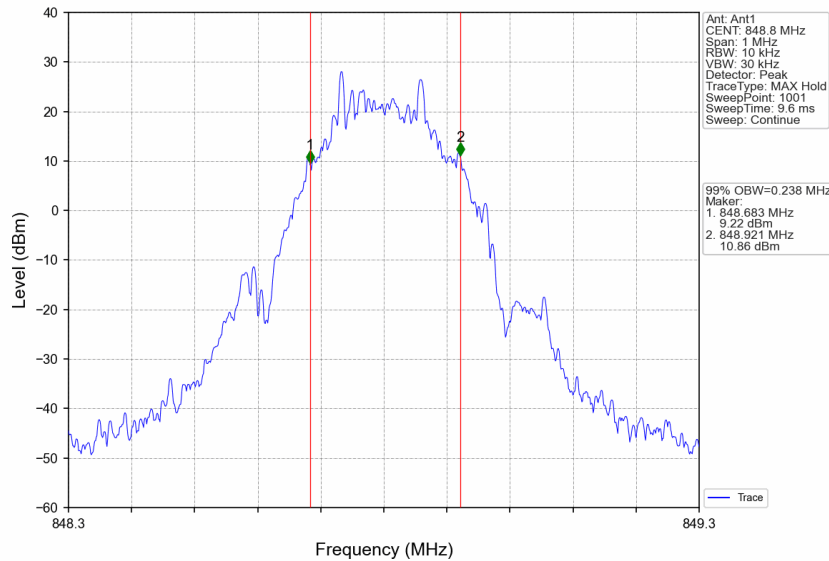
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 12 of 40

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 13 of 40

## 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           | 0.320                | /     | Pass    |
|              |         |           | 836.6           | 0.316                | /     | Pass    |
|              |         |           | 848.8           | 0.321                | /     | Pass    |
|              | GPRS    | 1 TX Slot | 824.2           | 0.312                | /     | Pass    |
|              |         |           | 836.6           | 0.310                | /     | Pass    |
|              |         |           | 848.8           | 0.318                | /     | Pass    |
|              | EGPRS   | 1 TX Slot | 824.2           | 0.302                | /     | Pass    |
|              |         |           | 836.6           | 0.298                | /     | Pass    |
|              |         |           | 848.8           | 0.280                | /     | Pass    |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



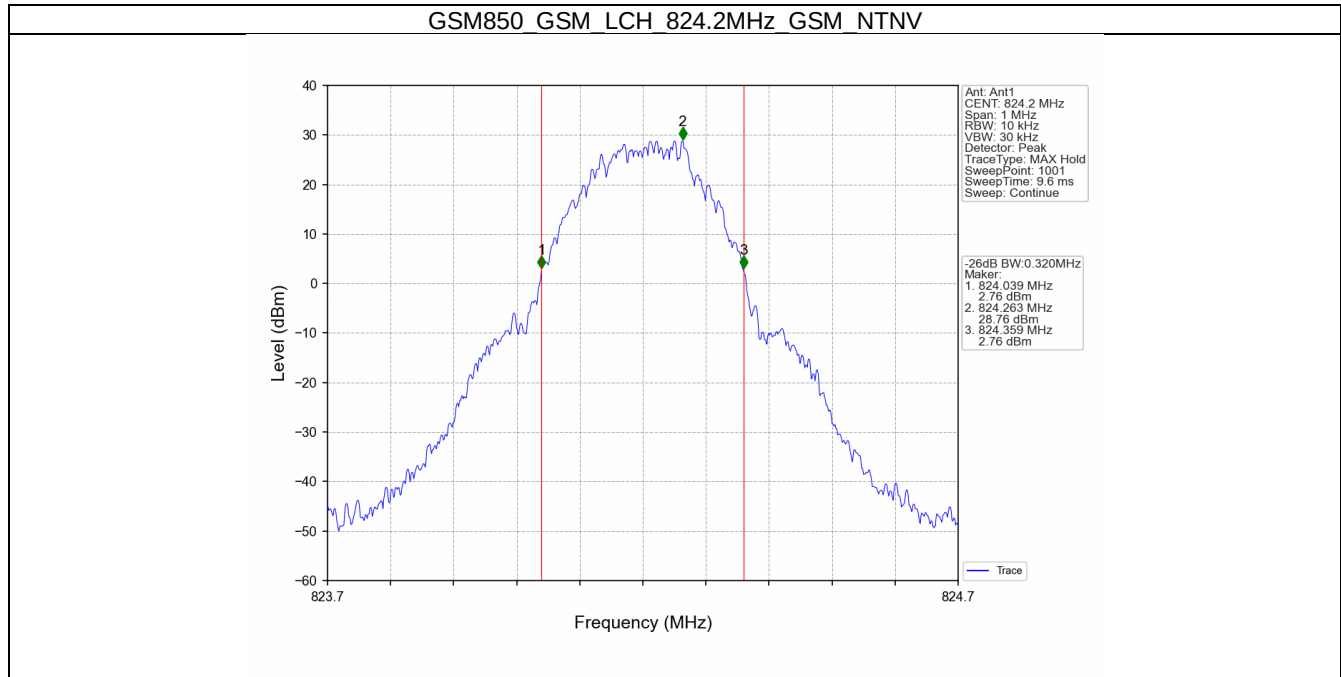
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 14 of 40

## 3.2.2 Test Graph



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



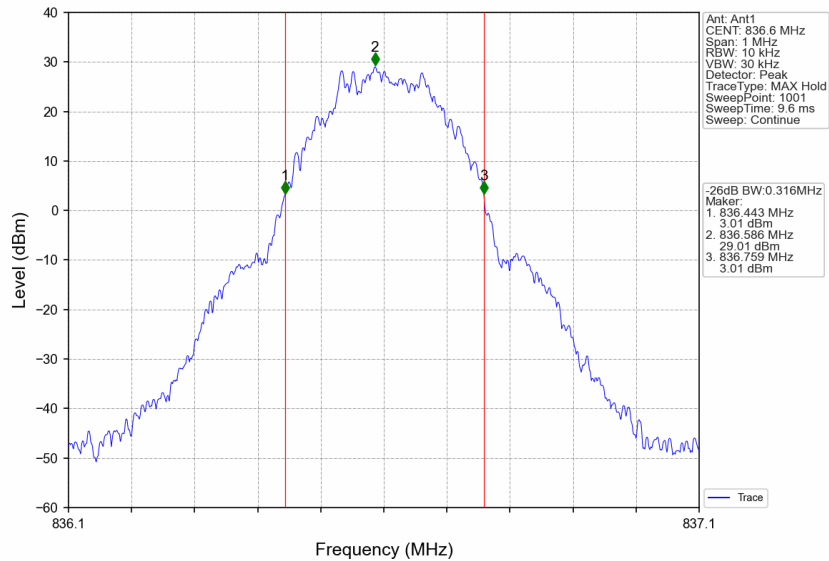
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 15 of 40

## GSM850\_GSM\_MCH\_836.6MHz\_GSM\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



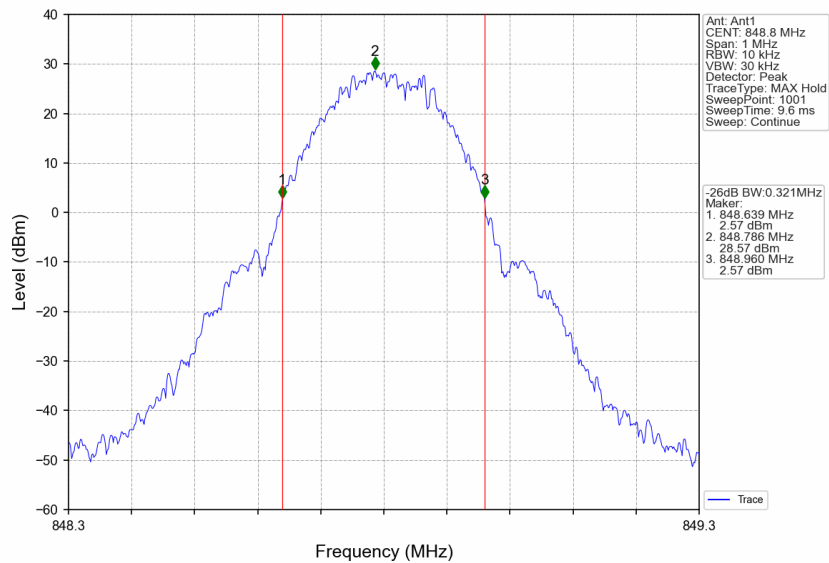
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

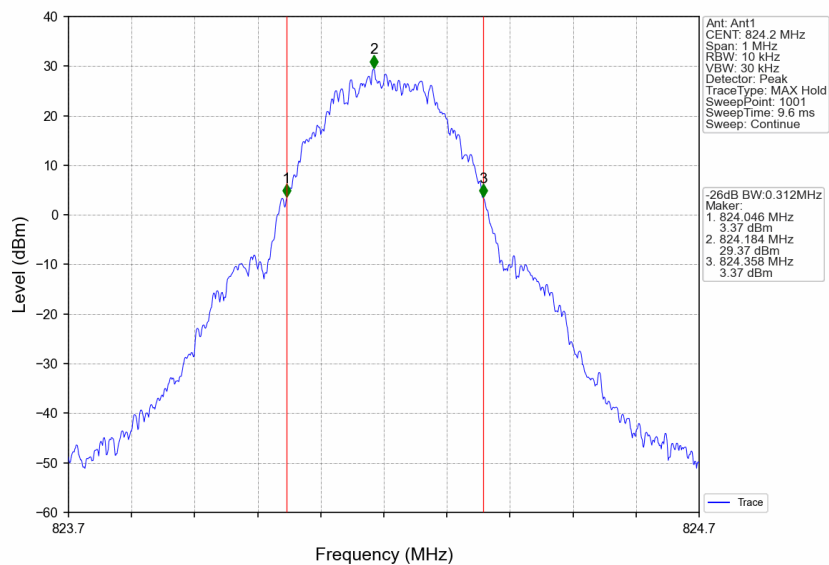
Rev.: 01

Page: 16 of 40

GSM850\_GSM\_HCH\_848.8MHz\_GSM\_NTNV



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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



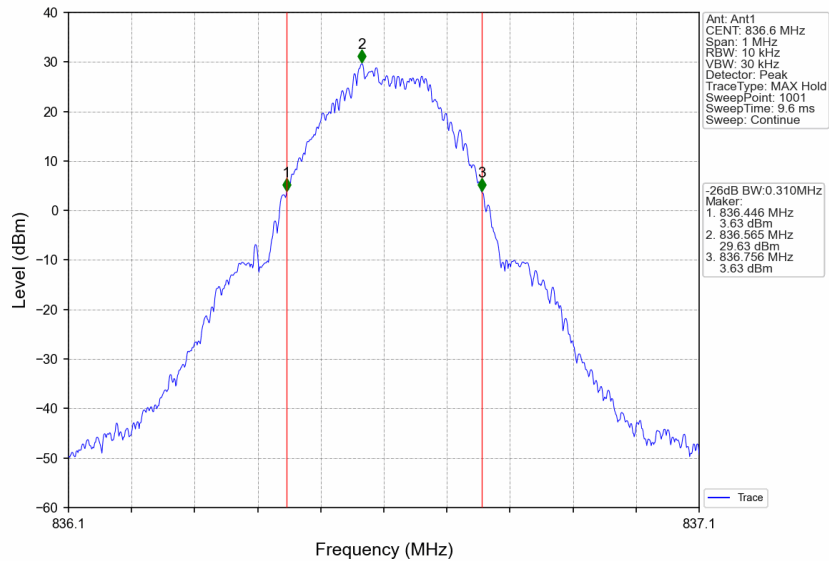
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

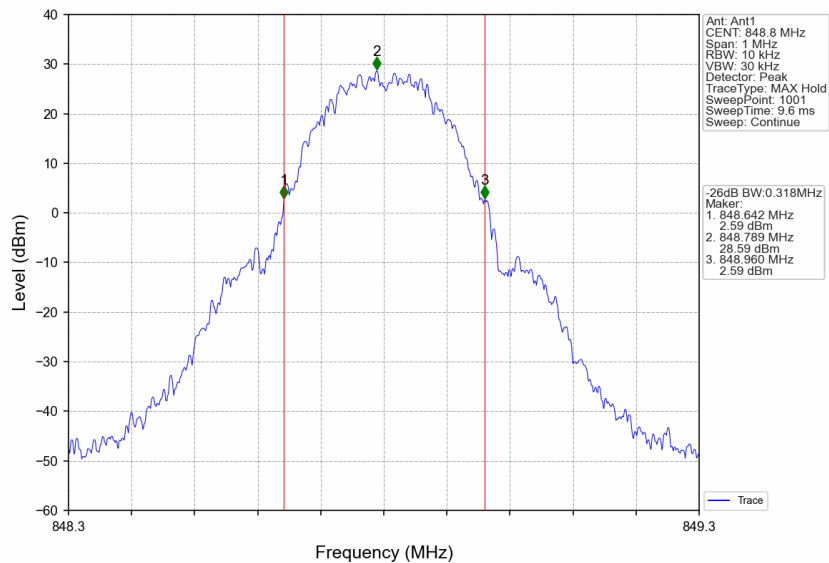
Rev.: 01

Page: 17 of 40

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



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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



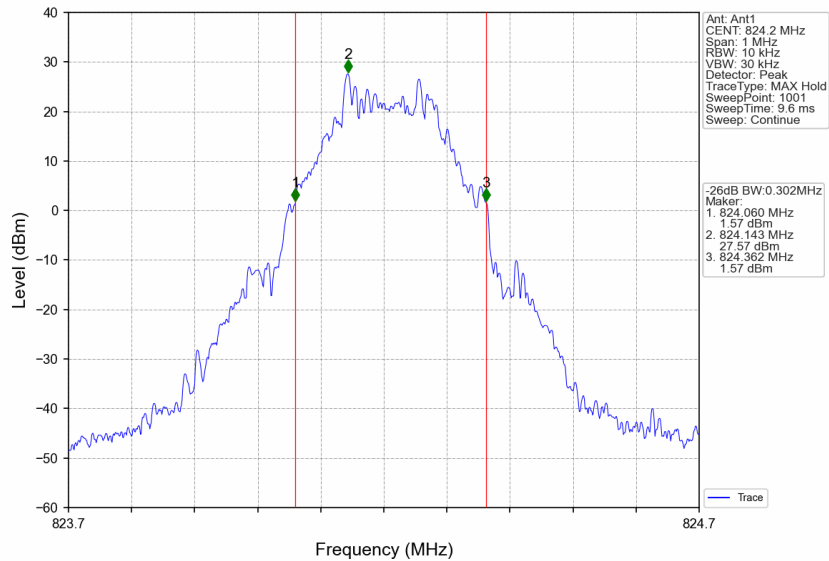
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

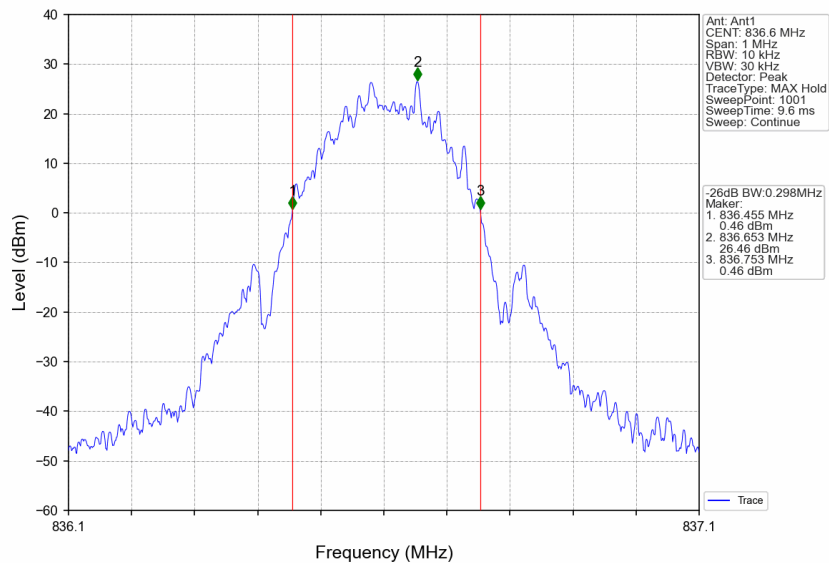
Rev.: 01

Page: 18 of 40

GSM850\_EGPRS\_LCH\_824.2MHz\_1 TX Slot\_NTNV



GSM850\_EGPRS\_MCH\_836.6MHz\_1 TX Slot\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



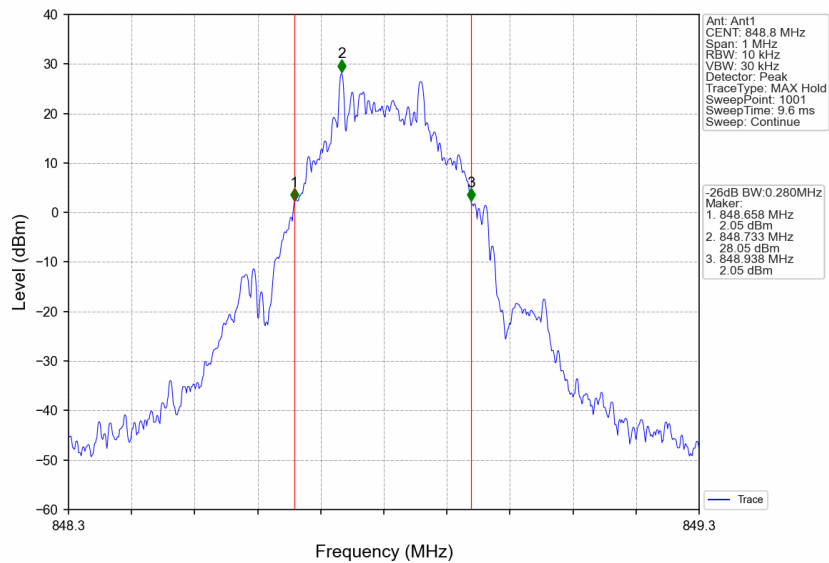
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 19 of 40

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 20 of 40

## 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           | 9.67                    | <=13  | Pass    |
|              |         |            | 836.6           | 9.60                    | <=13  | Pass    |
|              |         |            | 848.8           | 9.48                    | <=13  | Pass    |
|              | GPRS    | 4 TX Slots | 824.2           | 3.61                    | <=13  | Pass    |
|              |         |            | 836.6           | 3.75                    | <=13  | Pass    |
|              |         |            | 848.8           | 3.59                    | <=13  | Pass    |
|              | EGPRS   | 4 TX Slots | 824.2           | 8.93                    | <=13  | Pass    |
|              |         |            | 836.6           | 8.82                    | <=13  | Pass    |
|              |         |            | 848.8           | 9.16                    | <=13  | Pass    |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



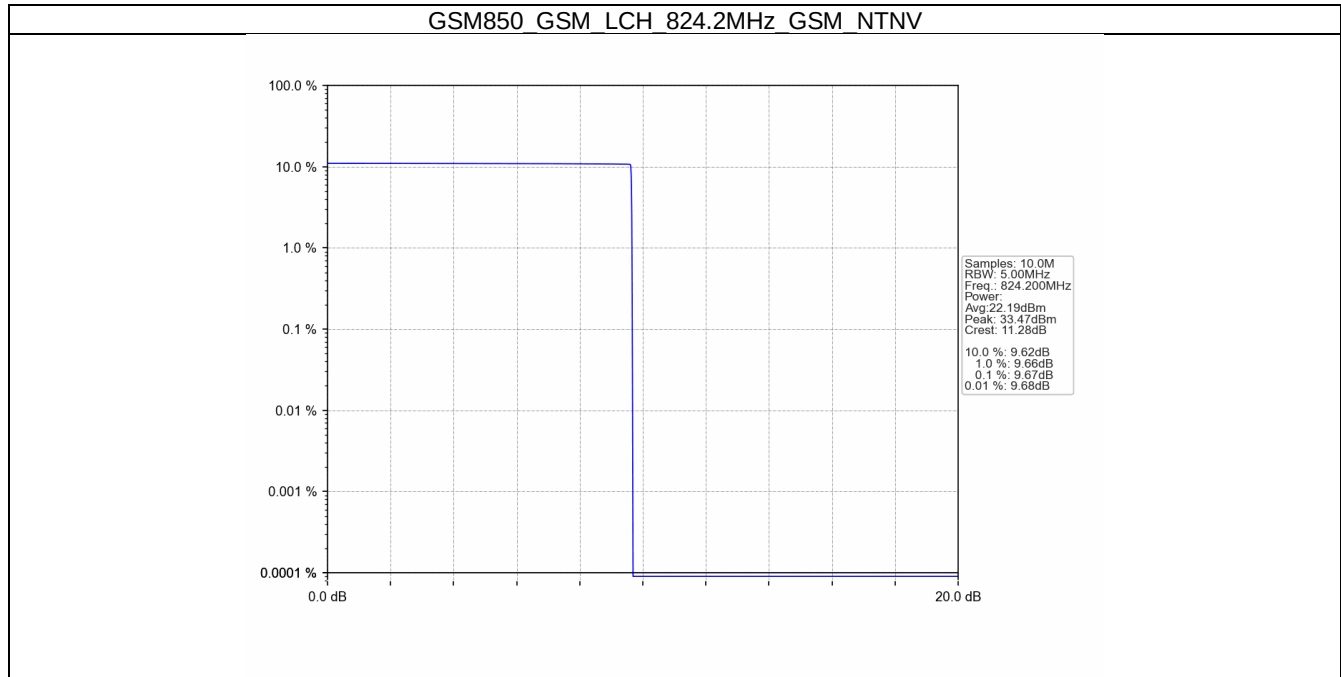
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 21 of 40

## 4.1.2 Test Graph



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



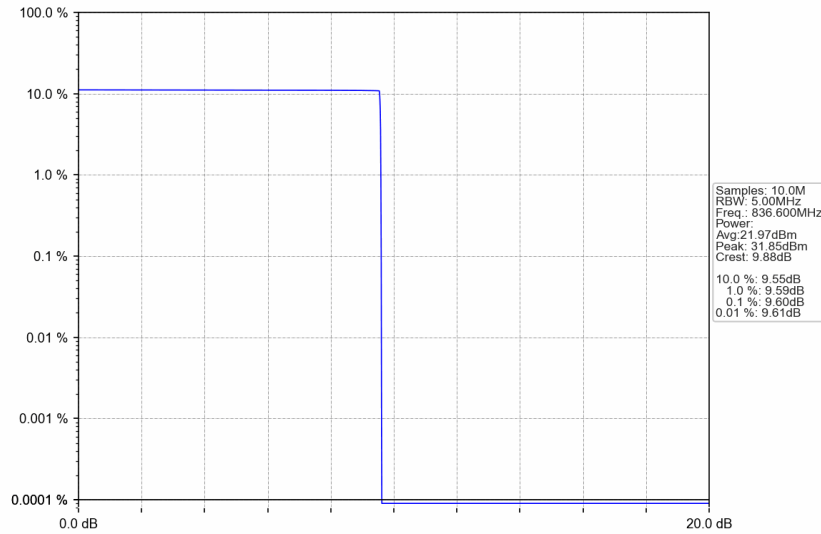
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 22 of 40

GSM850\_GSM\_MCH\_836.6MHz\_GSM\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
 中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



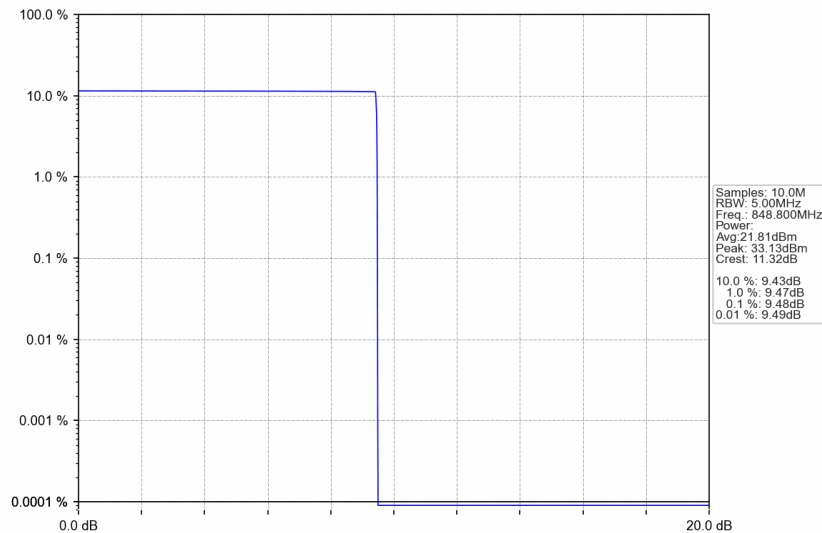
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

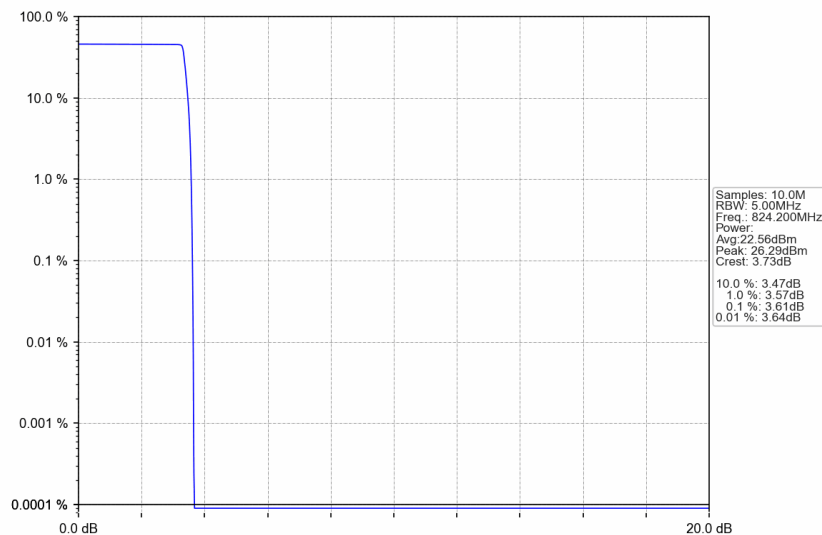
Rev.: 01

Page: 23 of 40

GSM850\_GSM\_HCH\_848.8MHz\_GSM\_NTNV



GSM850\_GPRS\_LCH\_824.2MHz\_4 TX Slots\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



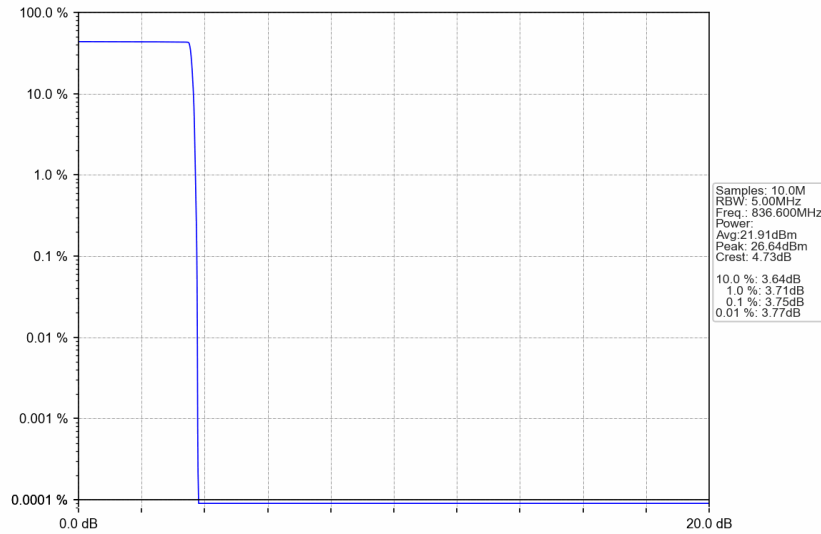
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

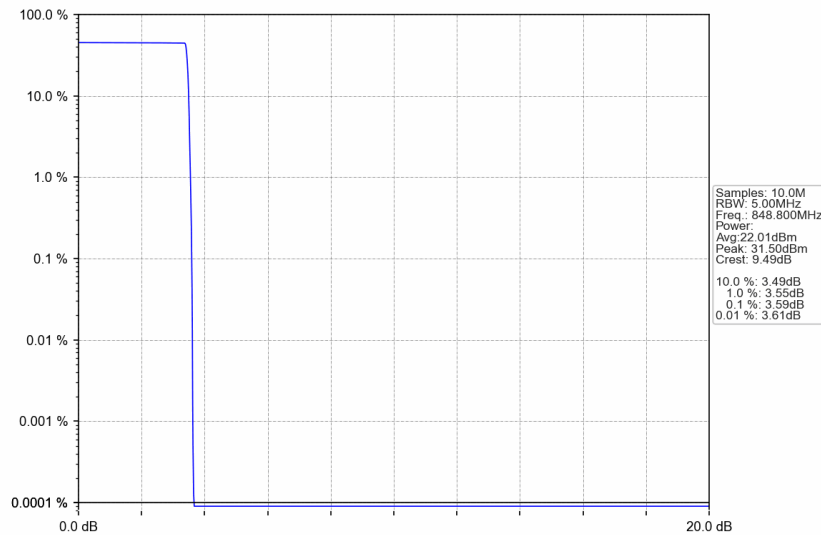
Rev.: 01

Page: 24 of 40

GSM850\_GPRS\_MCH\_836.6MHz\_4 TX Slots\_NTNV



GSM850\_GPRS\_HCH\_848.8MHz\_4 TX Slots\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services  
Shenzhen Branch Wireless Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



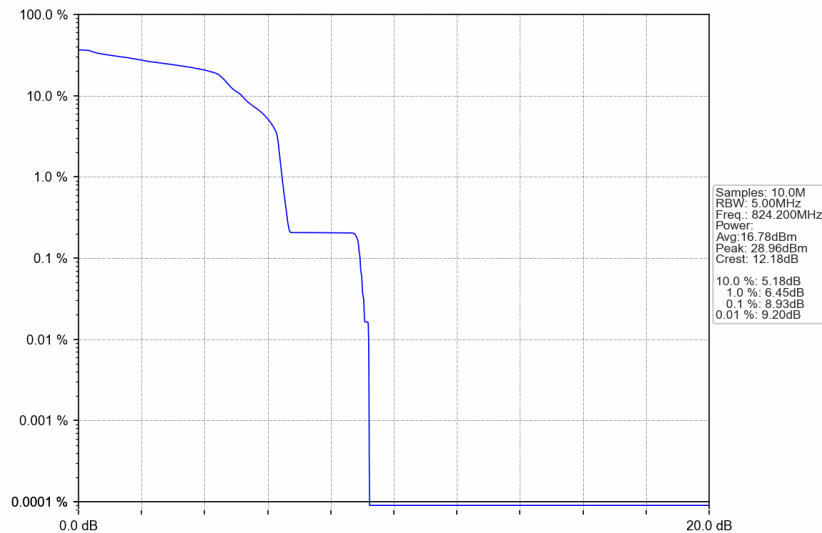
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

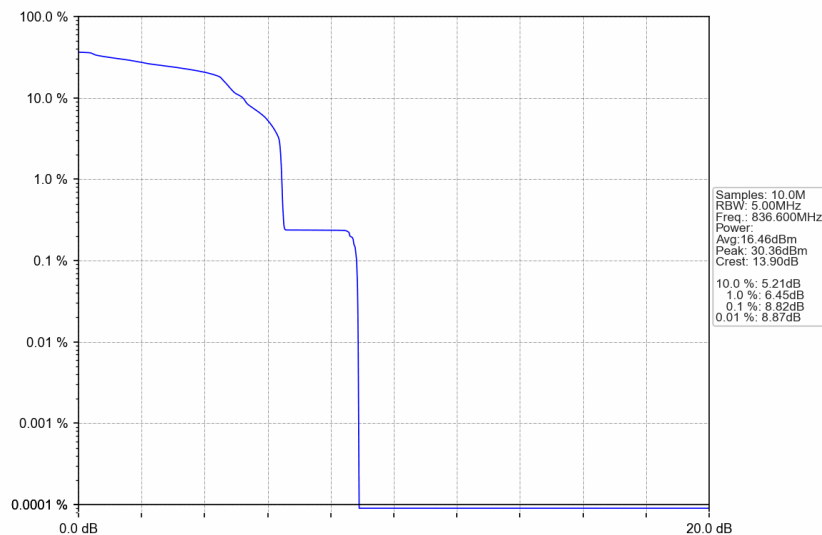
Rev.: 01

Page: 25 of 40

GSM850\_EGPRS\_LCH\_824.2MHz\_4 TX Slots\_NTNV



GSM850\_EGPRS\_MCH\_836.6MHz\_4 TX Slots\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



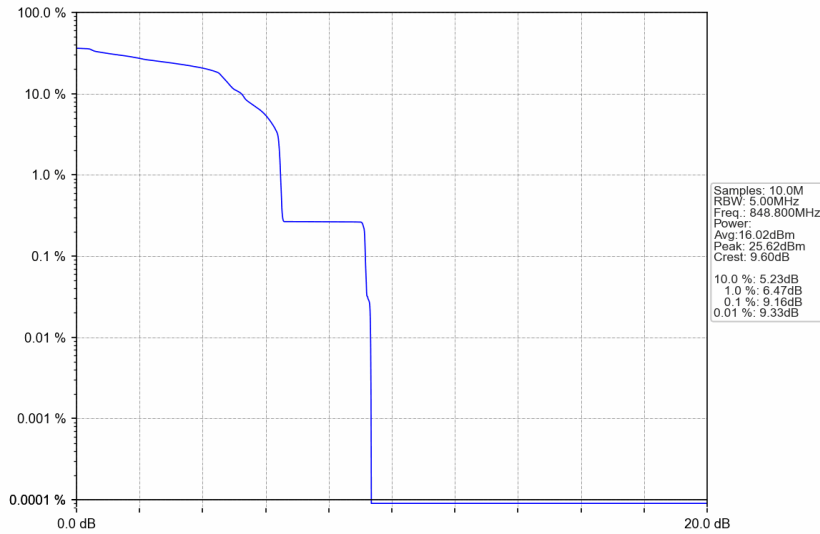
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 26 of 40

GSM850\_EGPRS\_HCH\_848.8MHz\_4 TX Slots\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 27 of 40

## 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  |         |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services  
Shenzhen Branch Wireless Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



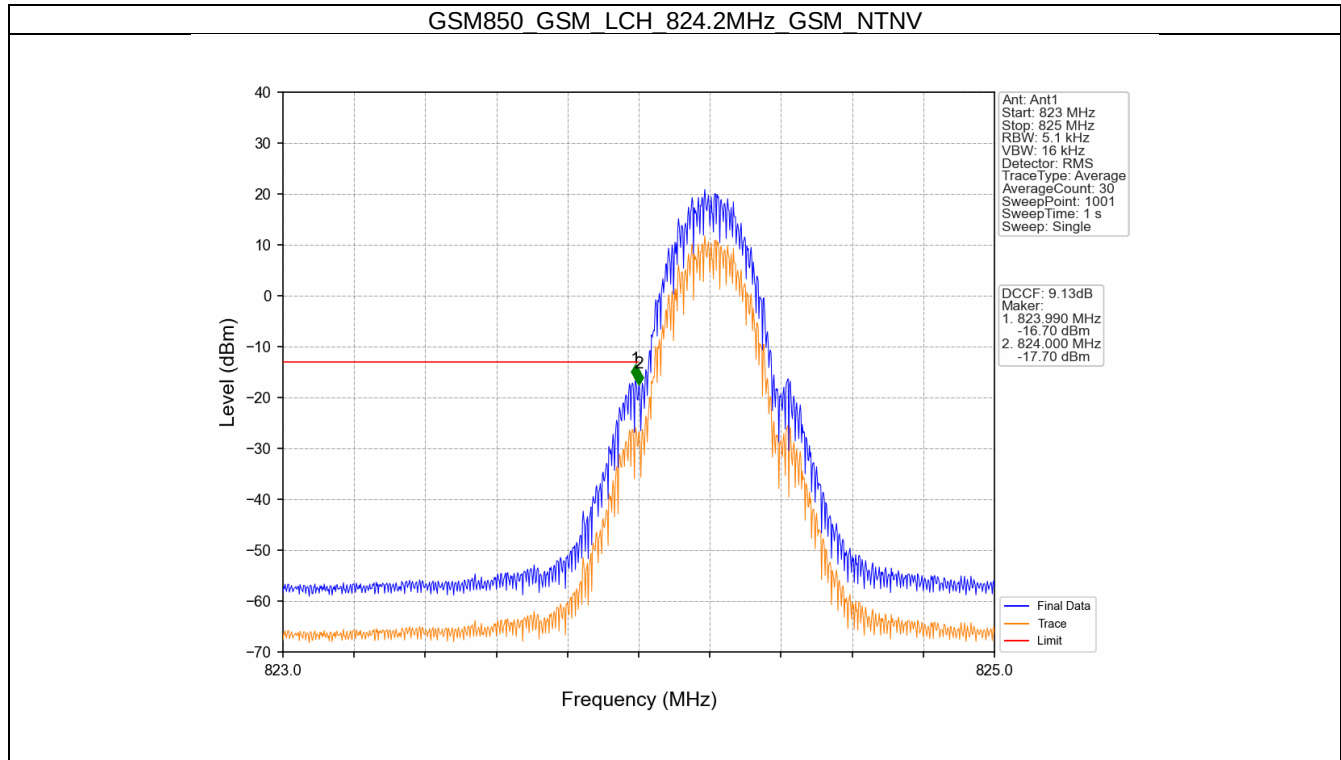
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 28 of 40

## 5.1.2 Test Graph



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



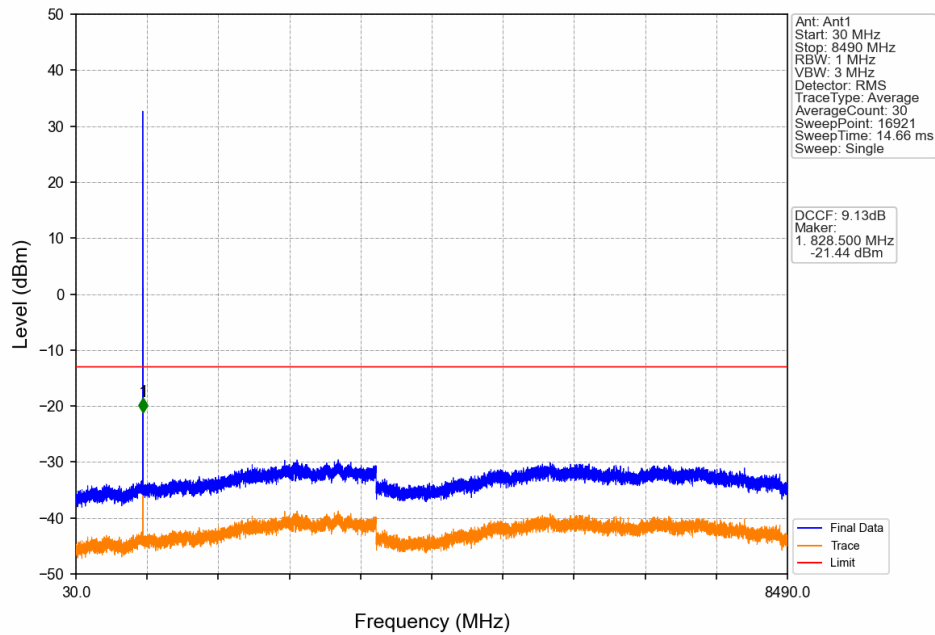
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 29 of 40

## GSM850\_GSM\_LCH\_824.2MHz\_GSM\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



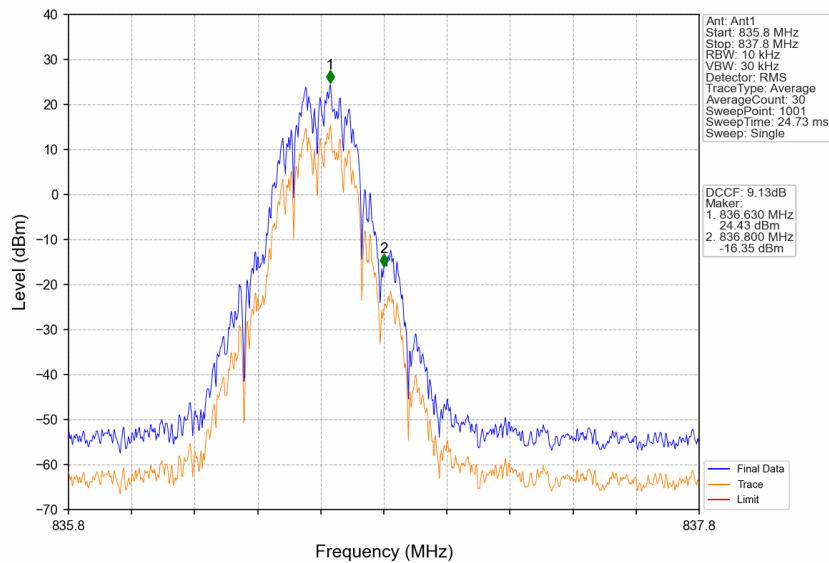
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

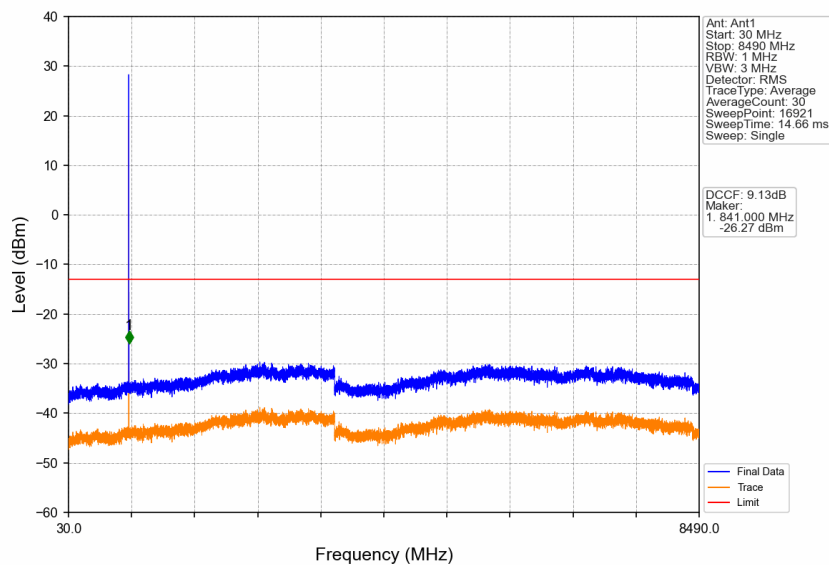
Rev.: 01

Page: 30 of 40

GSM850\_GSM\_MCH\_836.6MHz\_GSM\_NTNV



GSM850\_GSM\_MCH\_836.6MHz\_GSM\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



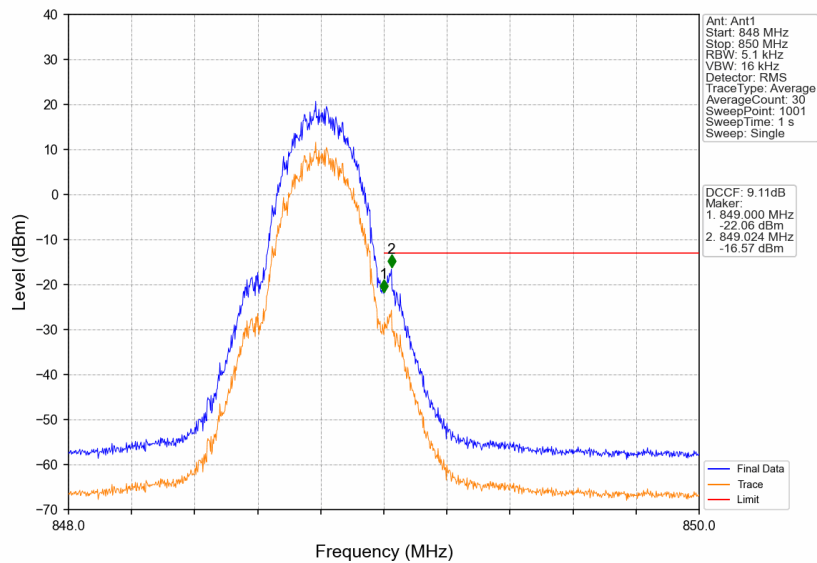
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

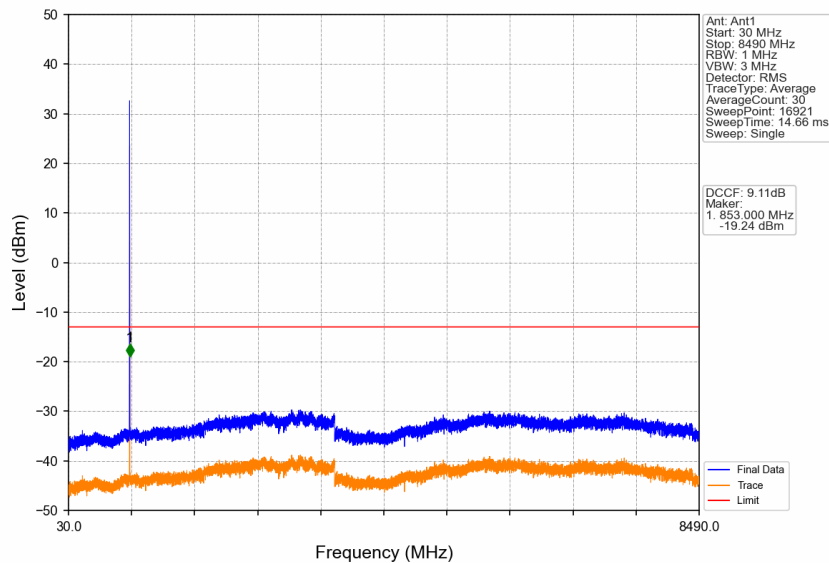
Rev.: 01

Page: 31 of 40

GSM850\_GSM\_HCH\_848.8MHz\_GSM\_NTNV



GSM850\_GSM\_HCH\_848.8MHz\_GSM\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



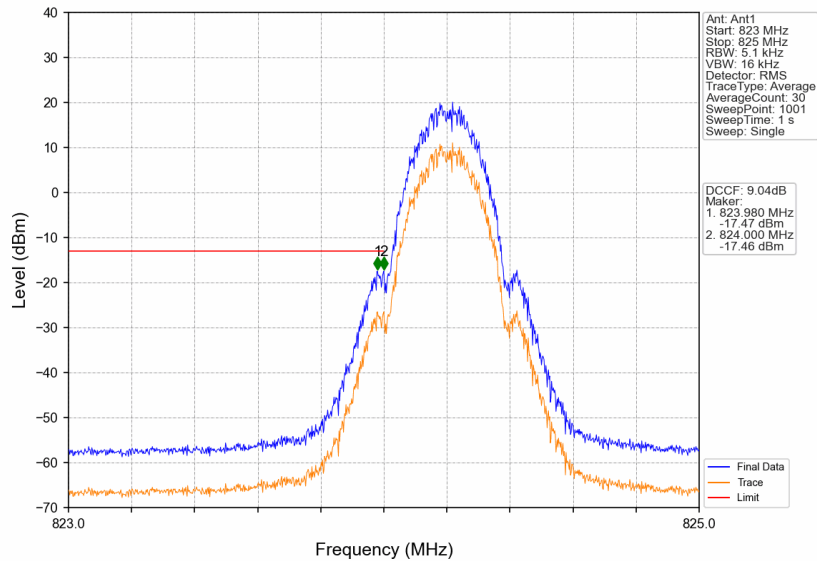
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

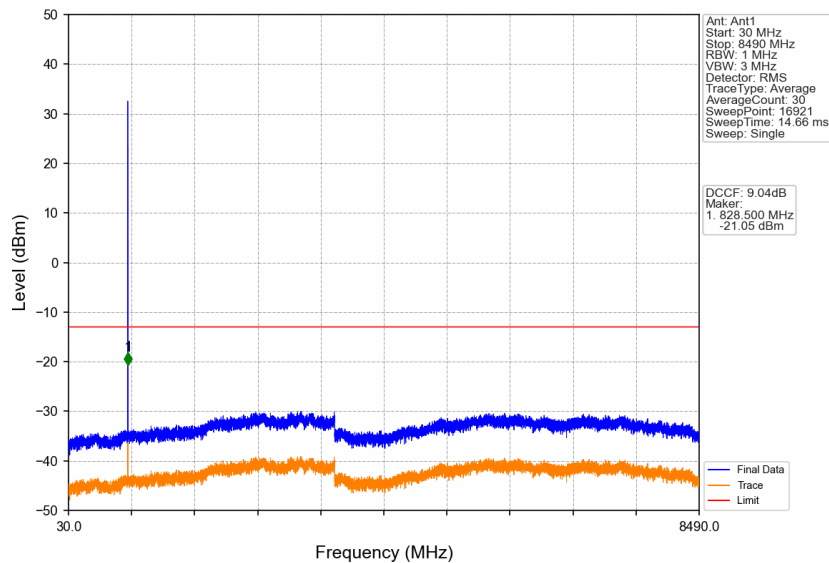
Rev.: 01

Page: 32 of 40

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



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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



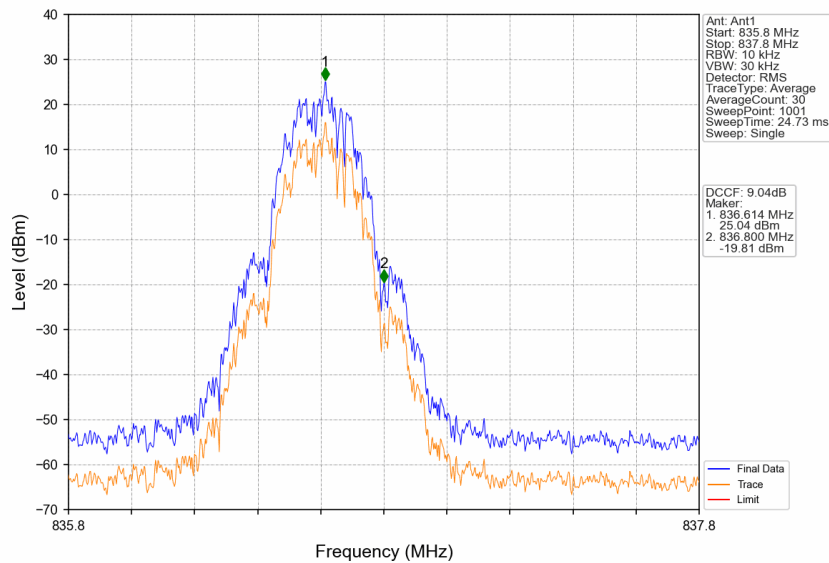
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

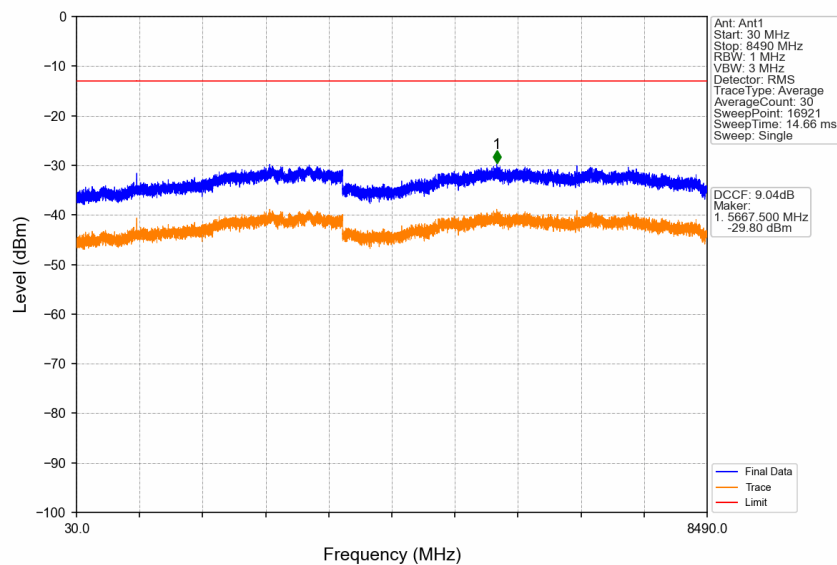
Rev.: 01

Page: 33 of 40

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



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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



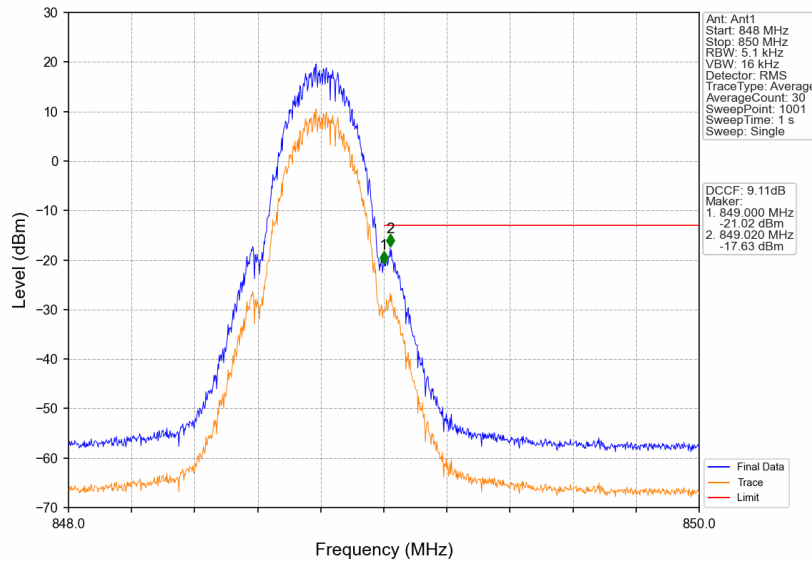
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

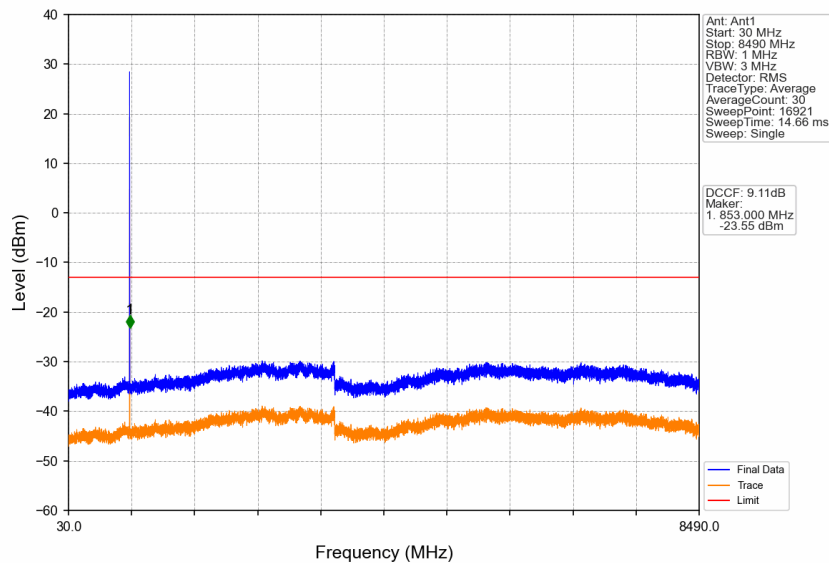
Rev.: 01

Page: 34 of 40

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



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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



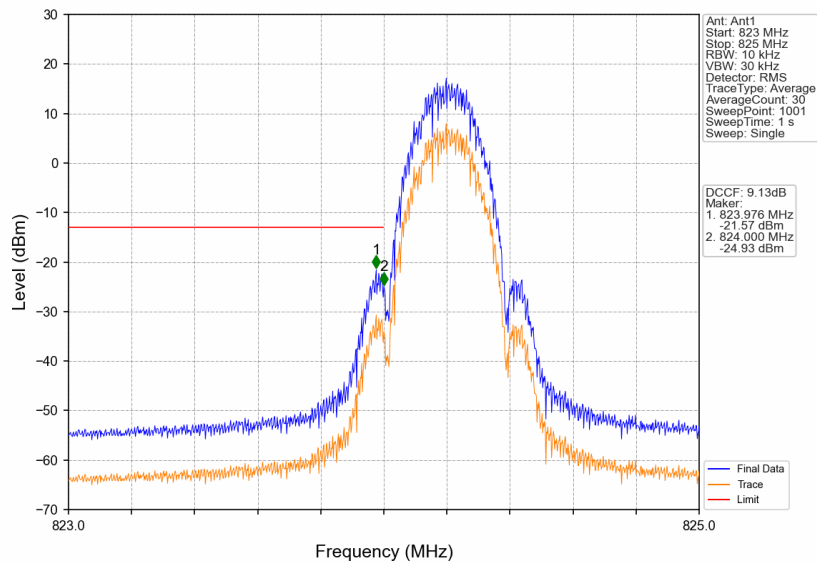
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

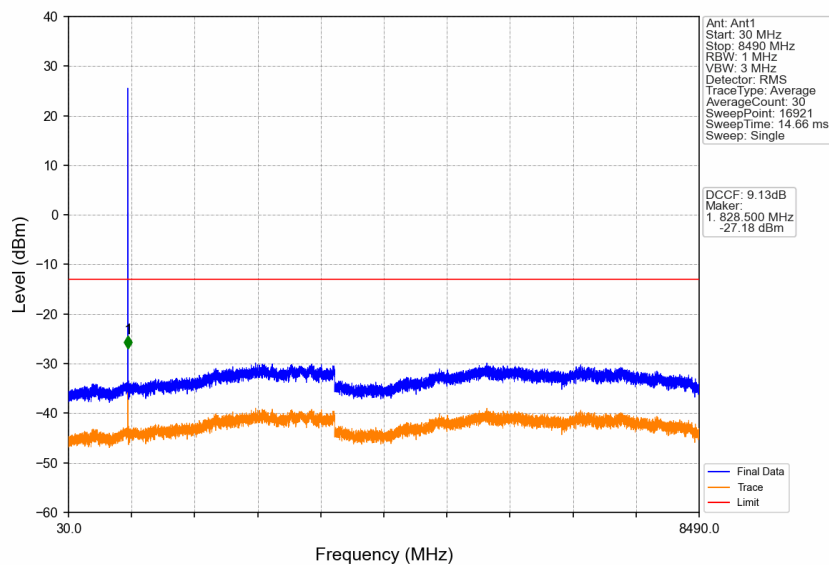
Rev.: 01

Page: 35 of 40

GSM850\_EGPRS\_LCH\_824.2MHz\_1 TX Slot\_NTNV



GSM850\_EGPRS\_LCH\_824.2MHz\_1 TX Slot\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



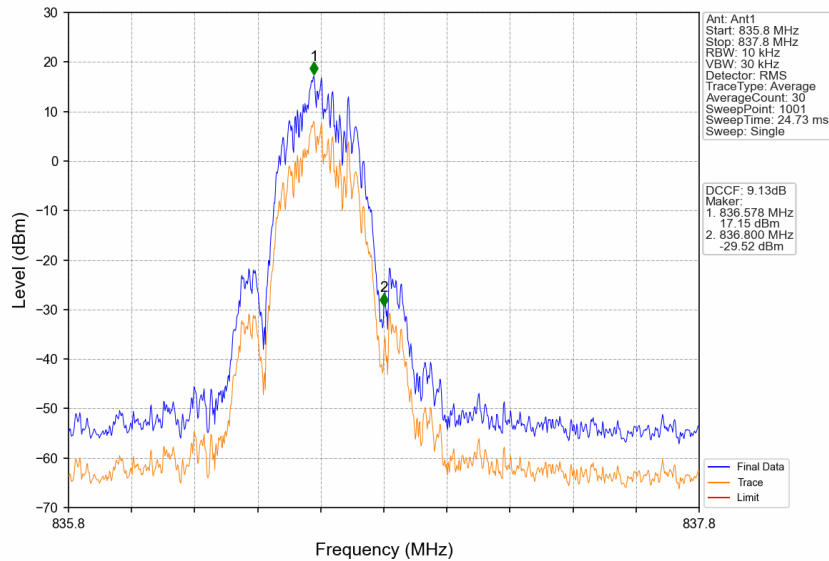
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

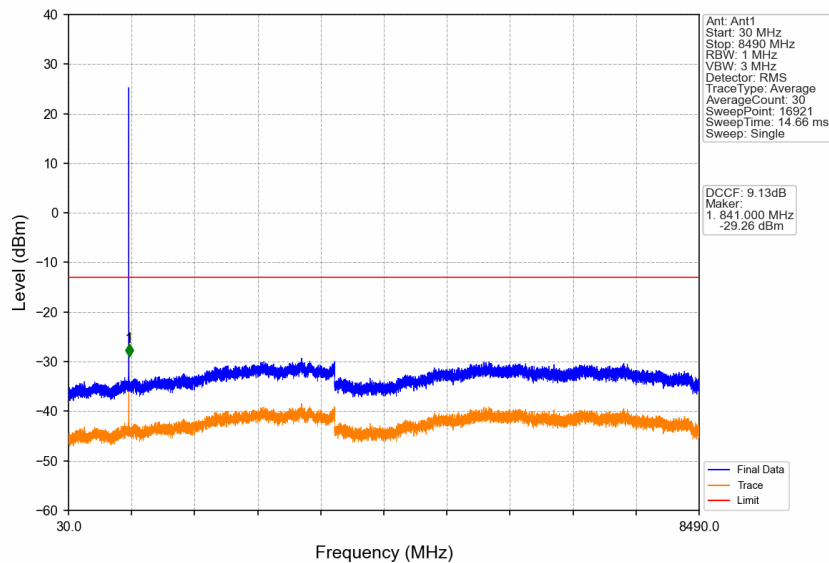
Rev.: 01

Page: 36 of 40

GSM850\_EGPRS\_MCH\_836.6MHz\_1 TX Slot\_NTNV



GSM850\_EGPRS\_MCH\_836.6MHz\_1 TX Slot\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



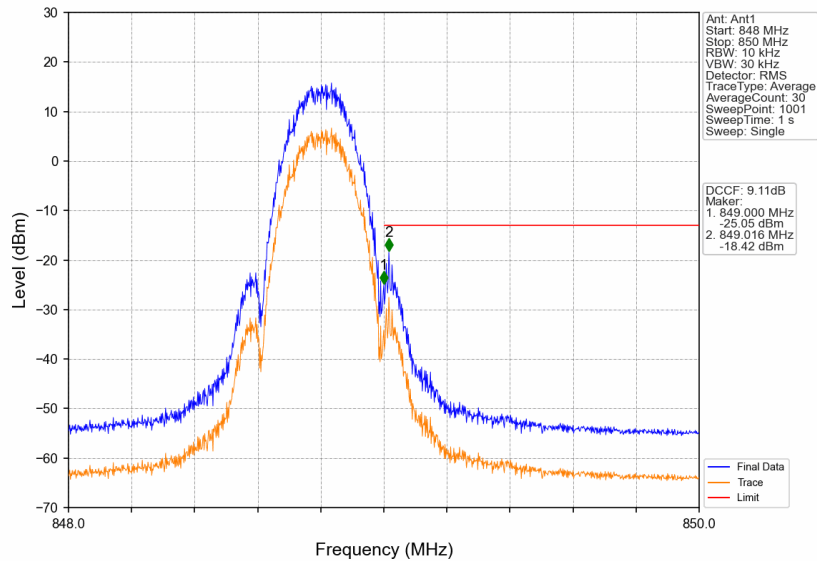
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

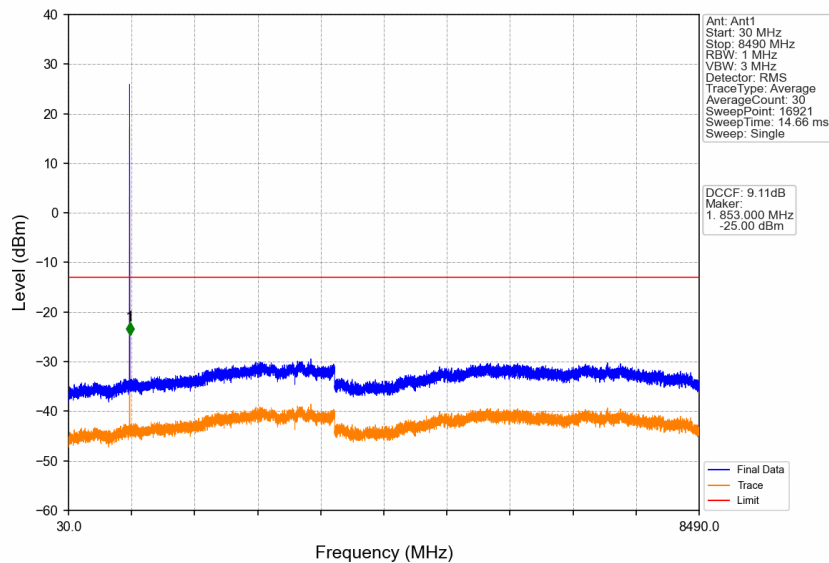
Rev.: 01

Page: 37 of 40

GSM850\_EGPRS\_HCH\_848.8MHz\_1 TX Slot\_NTNV



GSM850\_EGPRS\_HCH\_848.8MHz\_1 TX Slot\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.ssgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 38 of 40

## 6. Field Strength of Spurious Radiation

Test Band = GSM850 ANT11\_ TM1

Test Channel = low

| Final Data List |                 |                |           |             |             |             |             |            |
|-----------------|-----------------|----------------|-----------|-------------|-------------|-------------|-------------|------------|
| NO              | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity   |
| 1               | 1648.0125       | 59.25          | 24.90     | -48.85      | -59.96      | -13.00      | 46.96       | Horizontal |
| 2               | 2472.6000       | 45.08          | 27.33     | -47.89      | -70.74      | -13.00      | 57.74       | Horizontal |
| 3               | 3296.8000       | 45.41          | 28.66     | -47.16      | -68.35      | -13.00      | 55.35       | Horizontal |
| 4               | 4121.0000       | 45.06          | 29.67     | -47.51      | -68.04      | -13.00      | 55.04       | Horizontal |
| 5               | 4945.2000       | 45.39          | 31.27     | -46.98      | -65.58      | -13.00      | 52.58       | Horizontal |
| 6               | 5769.4000       | 45.54          | 32.49     | -46.96      | -64.19      | -13.00      | 51.19       | Horizontal |

| Final Data List |                 |                |           |             |             |             |             |          |
|-----------------|-----------------|----------------|-----------|-------------|-------------|-------------|-------------|----------|
| NO              | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity |
| 1               | 1648.0125       | 55.25          | 24.90     | -48.85      | -63.96      | -13.00      | 50.96       | Vertical |
| 2               | 2472.6000       | 45.11          | 27.33     | -47.89      | -70.71      | -13.00      | 57.71       | Vertical |
| 3               | 3296.8000       | 45.11          | 28.66     | -47.16      | -68.65      | -13.00      | 55.65       | Vertical |
| 4               | 4121.0000       | 45.55          | 29.67     | -47.51      | -67.55      | -13.00      | 54.55       | Vertical |
| 5               | 4945.2000       | 45.45          | 31.27     | -46.98      | -65.52      | -13.00      | 52.52       | Vertical |
| 6               | 5769.4000       | 45.61          | 32.49     | -46.96      | -64.12      | -13.00      | 51.12       | Vertical |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 39 of 40

**Test Band = GSM850 ANT11\_ TM1**  
**Test Channel = mid**

| Final Data List |                 |                |           |             |             |             |             |            |
|-----------------|-----------------|----------------|-----------|-------------|-------------|-------------|-------------|------------|
| NO              | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity   |
| 1               | 1673.2000       | 62.38          | 24.95     | -48.81      | -56.74      | -13.00      | 43.74       | Horizontal |
| 2               | 2509.8000       | 54.49          | 27.42     | -47.79      | -61.14      | -13.00      | 48.14       | Horizontal |
| 3               | 3346.4000       | 45.46          | 28.67     | -47.25      | -68.38      | -13.00      | 55.38       | Horizontal |
| 4               | 4183.0000       | 45.57          | 29.76     | -47.20      | -67.13      | -13.00      | 54.13       | Horizontal |
| 5               | 5019.6000       | 45.34          | 31.45     | -46.97      | -65.44      | -13.00      | 52.44       | Horizontal |
| 6               | 5856.2000       | 44.98          | 32.46     | -46.53      | -64.35      | -13.00      | 51.35       | Horizontal |

| Final Data List |                 |                |           |             |             |             |             |          |
|-----------------|-----------------|----------------|-----------|-------------|-------------|-------------|-------------|----------|
| NO              | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity |
| 1               | 1673.2000       | 64.69          | 24.95     | -48.81      | -54.43      | -13.00      | 41.43       | Vertical |
| 2               | 2509.8000       | 50.75          | 27.42     | -47.79      | -64.88      | -13.00      | 51.88       | Vertical |
| 3               | 3346.4000       | 45.42          | 28.67     | -47.25      | -68.42      | -13.00      | 55.42       | Vertical |
| 4               | 4183.0000       | 45.54          | 29.76     | -47.20      | -67.16      | -13.00      | 54.16       | Vertical |
| 5               | 5019.6000       | 45.35          | 31.45     | -46.97      | -65.43      | -13.00      | 52.43       | Vertical |
| 6               | 5856.2000       | 45.41          | 32.46     | -46.53      | -63.92      | -13.00      | 50.92       | Vertical |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 [www.ssgroup.com.cn](http://www.ssgroup.com.cn)  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR240400116001

Rev.: 01

Page: 40 of 40

**Test Band = GSM850 ANT11\_ TM1**  
**Test Channel = high**

| Final Data List |                 |                |           |             |             |             |             |            |
|-----------------|-----------------|----------------|-----------|-------------|-------------|-------------|-------------|------------|
| NO              | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity   |
| 1               | 1697.6000       | 59.28          | 25.00     | -48.77      | -59.75      | -13.00      | 46.75       | Horizontal |
| 2               | 2546.4000       | 53.88          | 27.51     | -47.90      | -61.77      | -13.00      | 48.77       | Horizontal |
| 3               | 3395.2000       | 45.37          | 28.68     | -47.35      | -68.56      | -13.00      | 55.56       | Horizontal |
| 4               | 4244.0000       | 45.55          | 29.84     | -47.10      | -66.97      | -13.00      | 53.97       | Horizontal |
| 5               | 5092.8000       | 45.02          | 31.62     | -47.07      | -65.69      | -13.00      | 52.69       | Horizontal |
| 6               | 5941.6000       | 46.25          | 32.42     | -46.51      | -63.10      | -13.00      | 50.10       | Horizontal |

| Final Data List |                 |                |           |             |             |             |             |          |
|-----------------|-----------------|----------------|-----------|-------------|-------------|-------------|-------------|----------|
| NO              | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBm] | Limit [dBm] | Margin [dB] | Polarity |
| 1               | 1697.3625       | 57.00          | 24.99     | -48.77      | -62.04      | -13.00      | 49.04       | Vertical |
| 2               | 2546.4000       | 48.45          | 27.51     | -47.90      | -67.20      | -13.00      | 54.20       | Vertical |
| 3               | 3395.2000       | 44.88          | 28.68     | -47.35      | -69.05      | -13.00      | 56.05       | Vertical |
| 4               | 4244.0000       | 45.37          | 29.84     | -47.10      | -67.15      | -13.00      | 54.15       | Vertical |
| 5               | 5092.8000       | 45.06          | 31.62     | -47.07      | -65.65      | -13.00      | 52.65       | Vertical |
| 6               | 5941.6000       | 45.69          | 32.42     | -46.51      | -63.66      | -13.00      | 50.66       | Vertical |

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & AMP. The basic equation with a sample calculation is as follows:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level

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

---End of Attachment---



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com