



Appendix B

GSM 850 & 1900



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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



CONTENT

	Page
1. EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	4
2. PEAK-TO-AVERAGE RATIO	6
2.1. Test Result	6
2.2. Part II - Test Plots	6
3. MODULATION CHARACTERISTICS	13
3.1. For GSM	13
3.1.1. Test Band = GSM 850	13
3.1.1.1. Test Mode = GSM/TM1	13
3.1.1.1.1. Test Channel = MCH	13
3.1.1.2. Test Mode = GSM/TM2	14
3.1.1.2.1. Test Channel = MCH	14
3.1.2. Test Band = GSM 1900	15
3.1.2.1. Test Mode = GSM/TM1	15
3.1.2.1.1. Test Channel = MCH	15
3.1.2.2. Test Mode = GSM/TM2	16
3.1.2.2.1. Test Channel = MCH	16
4. 26dB BANDWIDTH AND OCCUPIED BANDWIDTH	17
4.1. Test Result	17
4.2. Test Plots	17
5. BAND EDGE COMPLIANCE	24
5.1. Test Plots	24
6. SPURIOUS EMISSION AT ANTENNA TERMINAL	28
6.1. Test Plots	28
7. FIELD STRENGTH OF SPURIOUS RADIATION	40
7.1. Test Band = GSM 1900(Up Antenna)	40
7.1.1. Test Channel = LCH	40
7.1.2. Test Channel = MCH	40
7.1.3. Test Channel = HCH	41
7.2. Test Band = GSM 1900(Down Antenna)	42
7.2.1. Test Channel = LCH	42
7.2.2. Test Channel = MCH	42
7.2.3. Test Channel = HCH	43



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

7.3. Test Band = GSM 850(Up Antenna).....	44
7.3.1. Test Channel = LCH.....	44
7.3.2. Test Channel = MCH.....	44
7.3.3. Test Channel = HCH.....	45
7.4. Test Band = GSM 850(Down Antenna).....	46
7.4.1. Test Channel = LCH.....	46
7.4.2. Test Channel = MCH.....	46
7.4.3. Test Channel = HCH.....	47
FREQUENCY STABILITY	48
7.5. Frequency Error Vs Voltage	48
7.6. Frequency Error Vs Temperature.....	49



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



1. Effective (Isotropic) Radiated Power Output Data

Down Antenna:

Band	Channel	Slot	Power(dBm)	ERP (dBm)	Limit(dBm)	Verdict
GSM850	128	---	33.11	25.01	38.45	PASS
GSM850	190	---	33.06	24.96	38.45	PASS
GSM850	251	---	33.11	25.01	38.45	PASS
EGPRS850	128	1	33.16	25.06	38.45	PASS
EGPRS850	128	2	31.16	23.06	38.45	PASS
EGPRS850	128	3	29.08	20.98	38.45	PASS
EGPRS850	128	4	27.52	19.42	38.45	PASS
EGPRS850	190	1	33.12	25.02	38.45	PASS
EGPRS850	190	2	31.17	23.07	38.45	PASS
EGPRS850	190	3	28.93	20.83	38.45	PASS
EGPRS850	190	4	27.28	19.18	38.45	PASS
EGPRS850	251	1	33.13	25.03	38.45	PASS
EGPRS850	251	2	31.16	23.06	38.45	PASS
EGPRS850	251	3	28.88	20.78	38.45	PASS
EGPRS850	251	4	27.27	19.17	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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Up Antenna:

Band	Channel	Slot	Conducted Power (dBm)	EIRP (dBm)	Limit(dBm)	Verdict
GSM1900	512	---	29.54	27.02	33.00	PASS
GSM1900	661	---	29.93	27.41	33.00	PASS
GSM1900	810	---	29.92	27.40	33.00	PASS
EGPRS1900	512	1	29.53	27.01	33.00	PASS
EGPRS1900	512	2	27.73	25.21	33.00	PASS
EGPRS1900	512	3	26.00	23.48	33.00	PASS
EGPRS1900	512	4	24.11	21.59	33.00	PASS
EGPRS1900	661	1	29.91	27.39	33.00	PASS
EGPRS1900	661	2	27.57	25.05	33.00	PASS
EGPRS1900	661	3	25.52	23.00	33.00	PASS
EGPRS1900	661	4	24.02	21.50	33.00	PASS
EGPRS1900	810	1	29.89	27.37	33.00	PASS
EGPRS1900	810	2	27.66	25.14	33.00	PASS
EGPRS1900	810	3	25.51	22.99	33.00	PASS
EGPRS1900	810	4	24.01	21.49	33.00	PASS

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP [dBm] = Conducted Power [dBm] + Gain [dBi]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC 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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

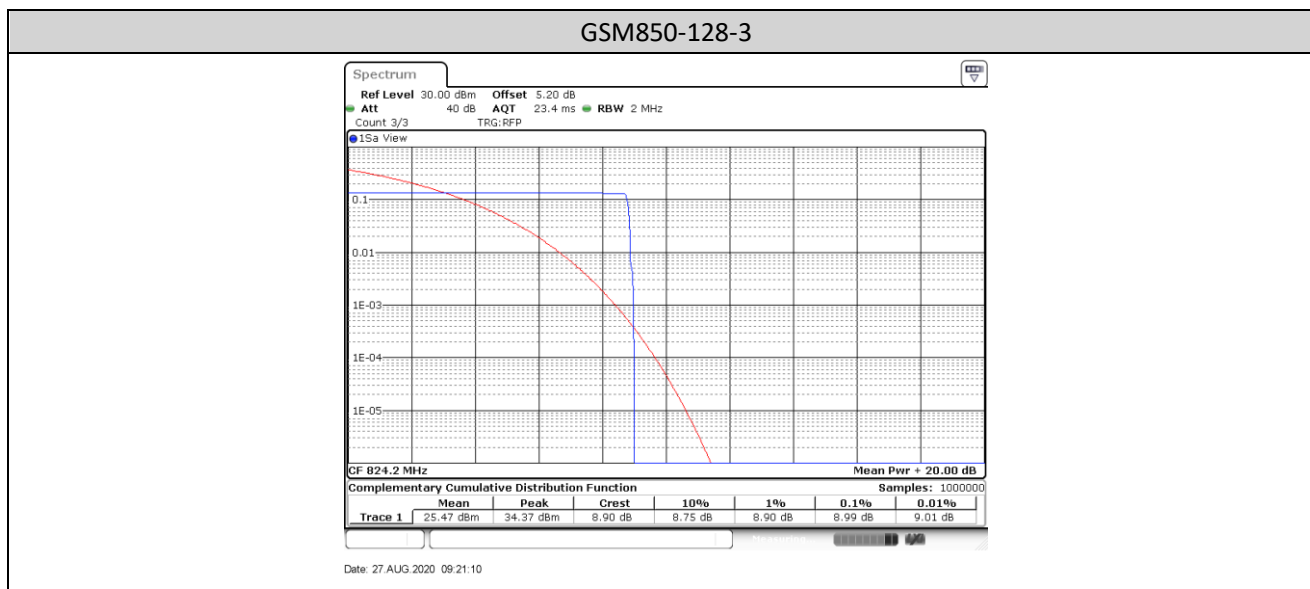


2. Peak-to-Average Ratio

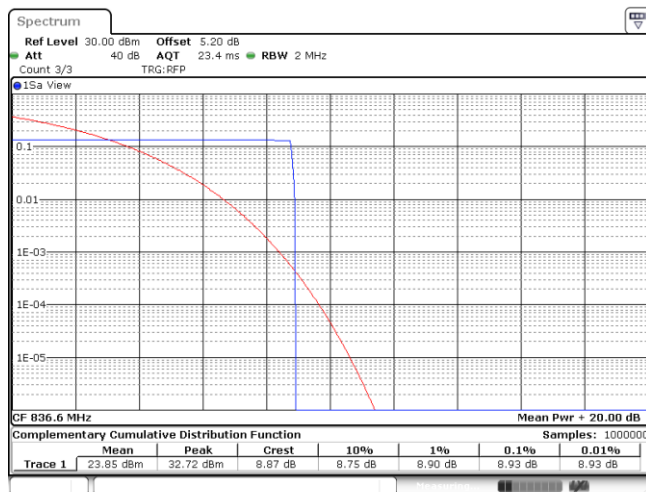
2.1. Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	128	3	8.99	13	PASS
GSM850	190	3	8.93	13	PASS
GSM850	251	3	9.8	13	PASS
EGPRS850	128	8	11.88	13	PASS
EGPRS850	190	8	12.38	13	PASS
EGPRS850	251	8	11.39	13	PASS
GSM1900	512	0	9.01	13	PASS
GSM1900	661	0	9.04	13	PASS
GSM1900	810	0	9.01	13	PASS
EGPRS1900	512	2	11.65	13	PASS
EGPRS1900	661	2	12.72	13	PASS
EGPRS1900	810	2	12.43	13	PASS

2.2. Part II - Test Plots

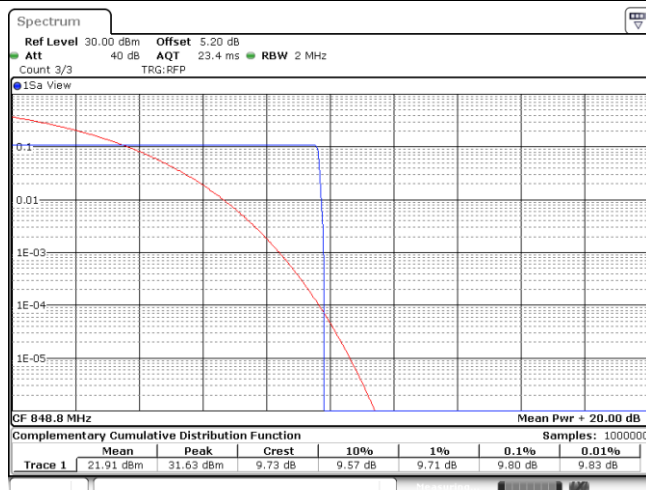


GSM850-190-3



Date: 27 AUG 2020 09:21:20

GSM850-251-3



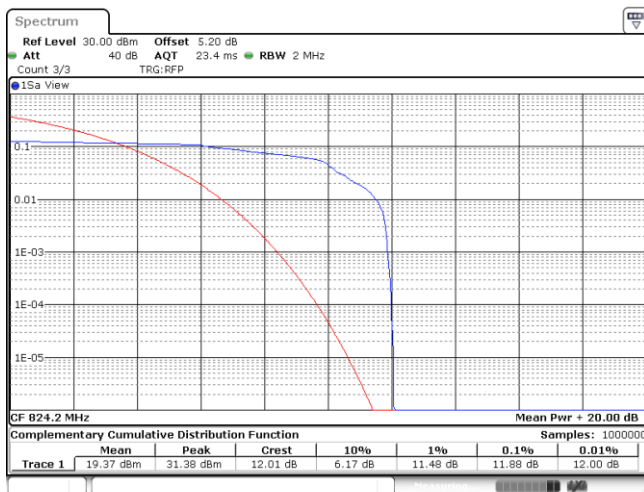
Date: 27 AUG 2020 09:21:30



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

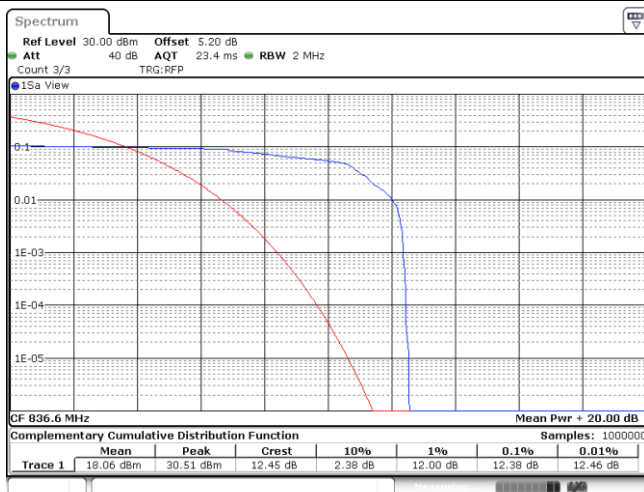
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS850-128-8



Date: 27 AUG.2020 08:58:14

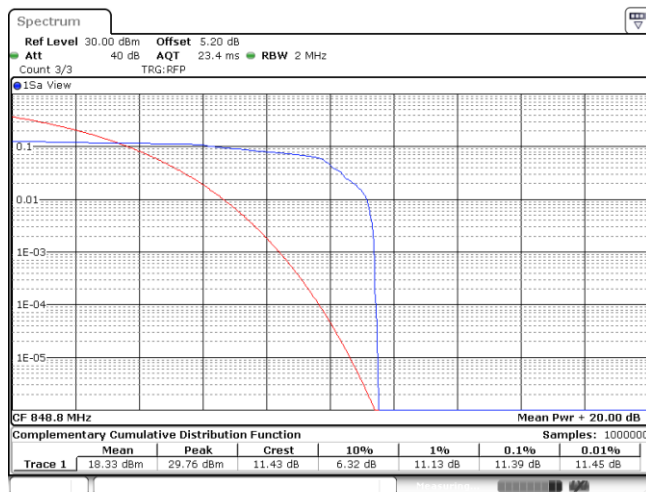
EGPRS850-190-8



Date: 27 AUG.2020 08:58:25

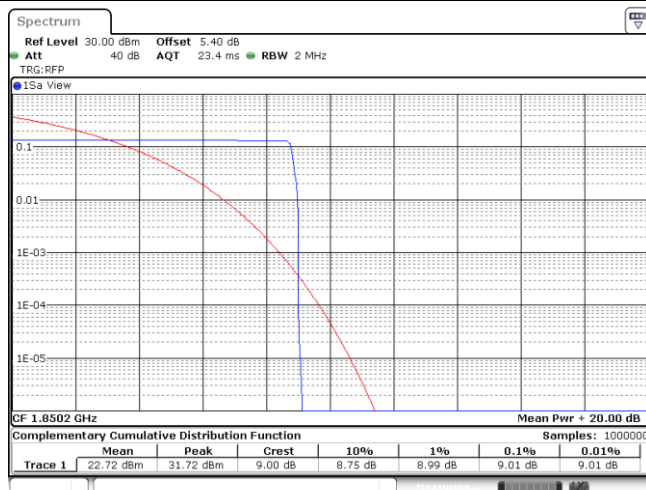


EGPRS850-251-8



Date: 27 AUG.2020 08:58:37

GSM1900-512-0



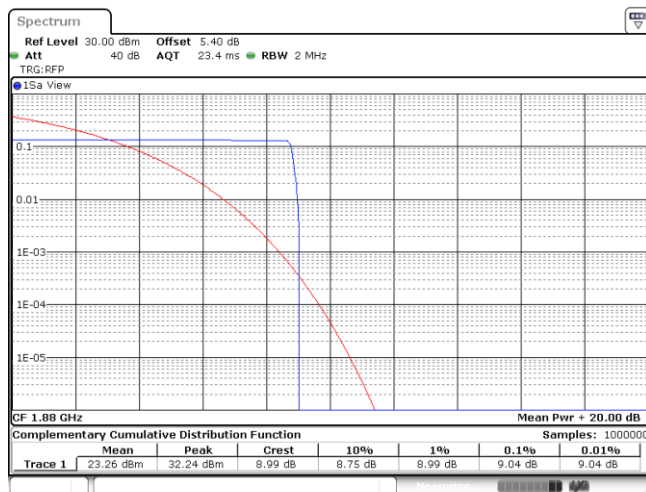
Date: 27 AUG.2020 08:53:44



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

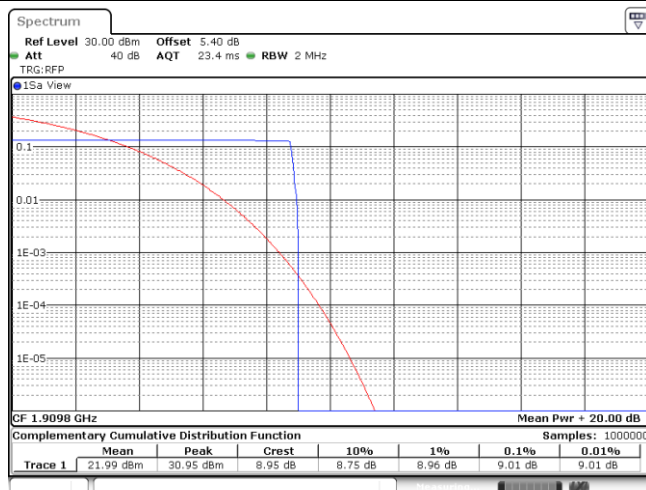
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM1900-661-0



Date: 27 AUG.2020 08:53:54

GSM1900-810-0



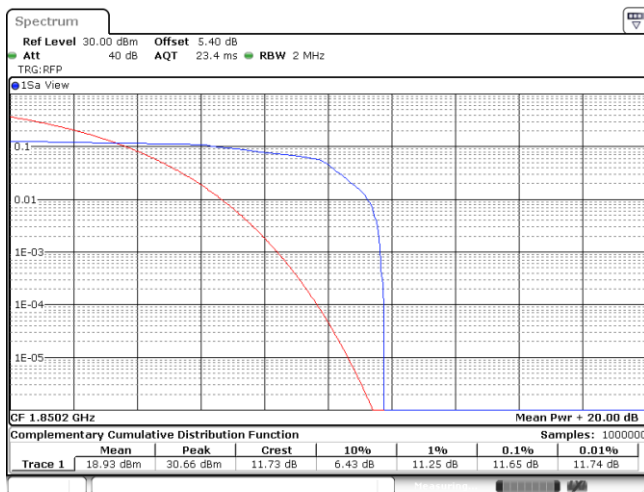
Date: 27 AUG.2020 08:54:04



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

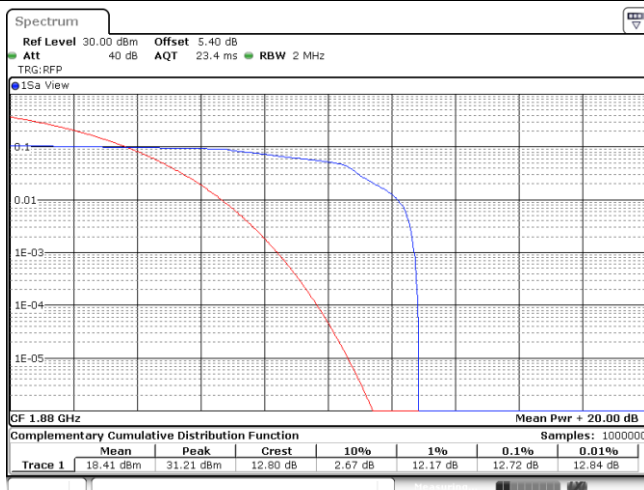
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS1900-512-2



Date: 27 AUG.2020 09:14:24

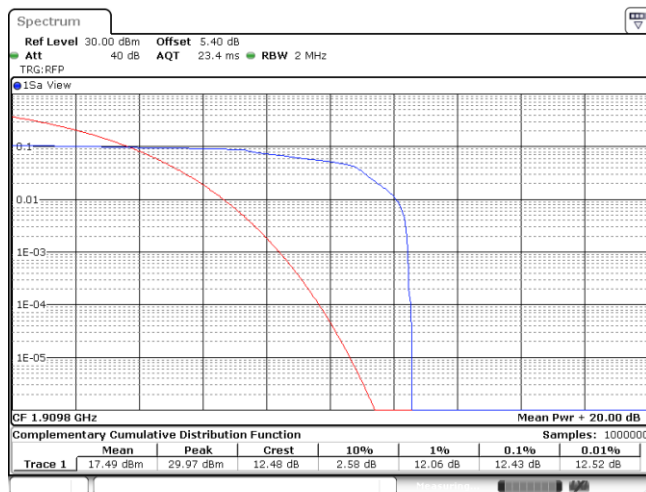
EGPRS1900-661-2



Date: 27 AUG.2020 09:14:36



EGPRS1900-810-2



Date: 27 AUG 2020 09:14:47



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC 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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



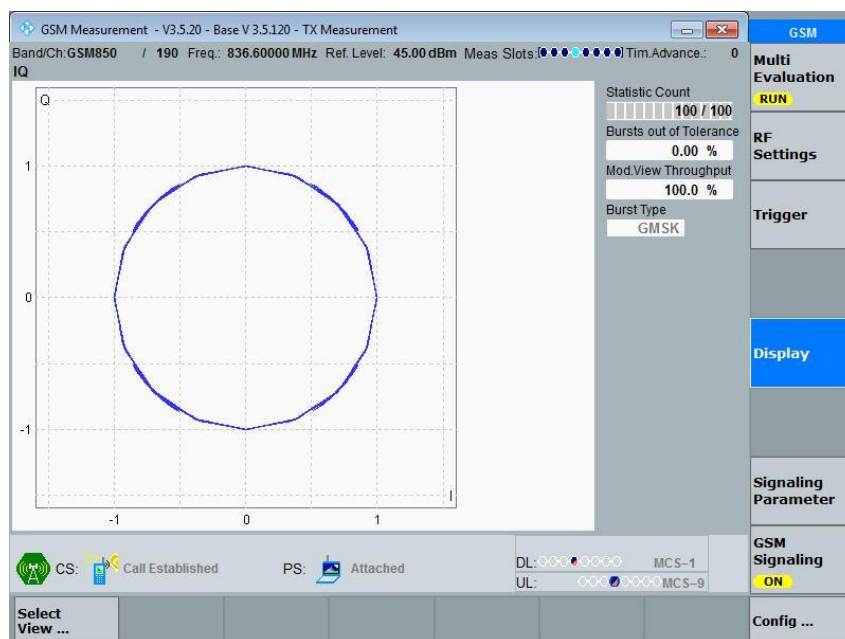
3. Modulation Characteristics

3.1. For GSM

3.1.1. Test Band = GSM 850

3.1.1.1. Test Mode = GSM/TM1

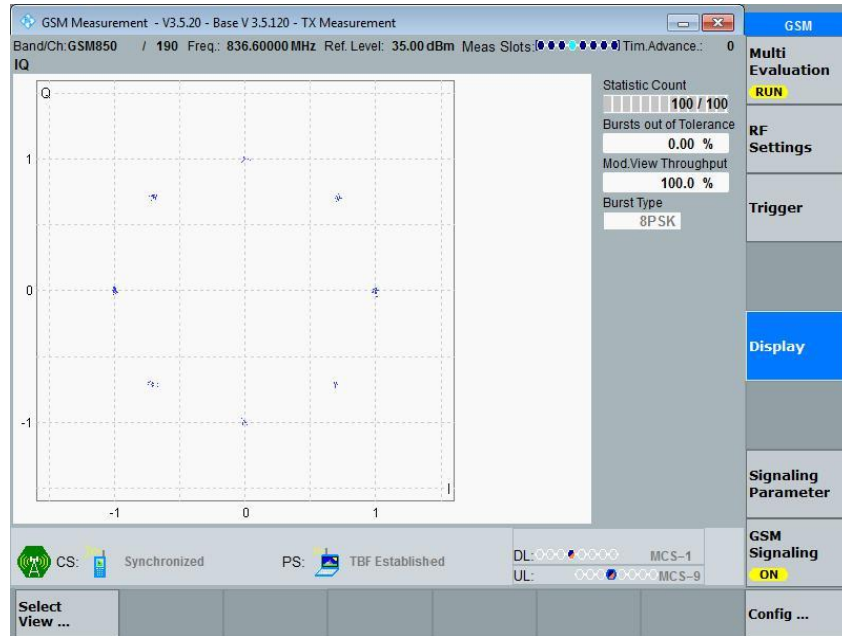
3.1.1.1.1. Test Channel = MCH





3.1.1.2. Test Mode = GSM/TM2

3.1.1.2.1. Test Channel = MCH

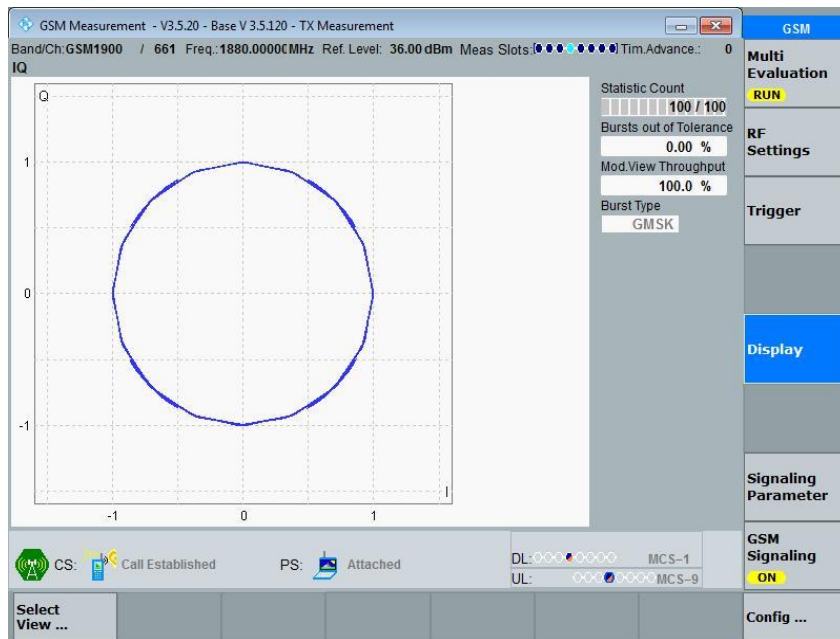




3.1.2. Test Band = GSM 1900

3.1.2.1. Test Mode = GSM/TM1

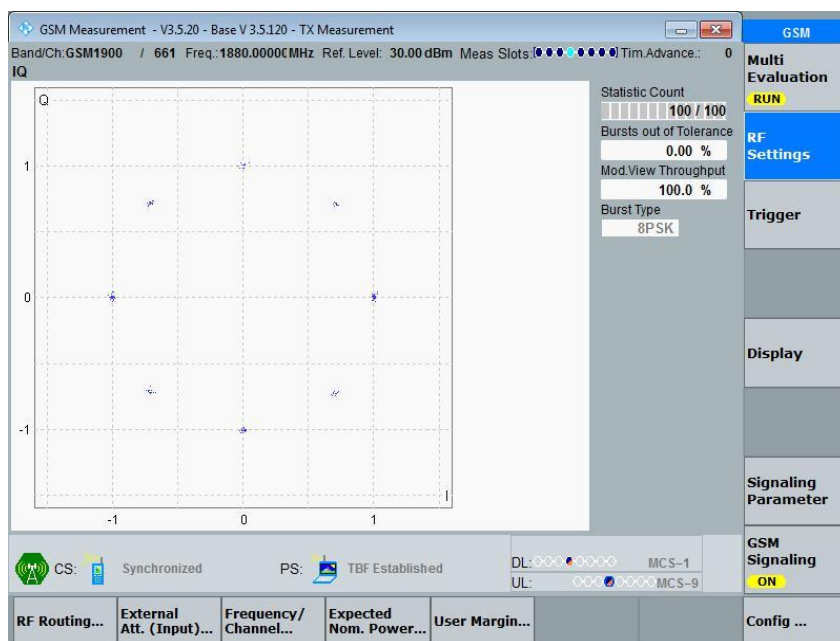
3.1.2.1.1. Test Channel = MCH





3.1.2.2. Test Mode = GSM/TM2

3.1.2.2.1. Test Channel = MCH



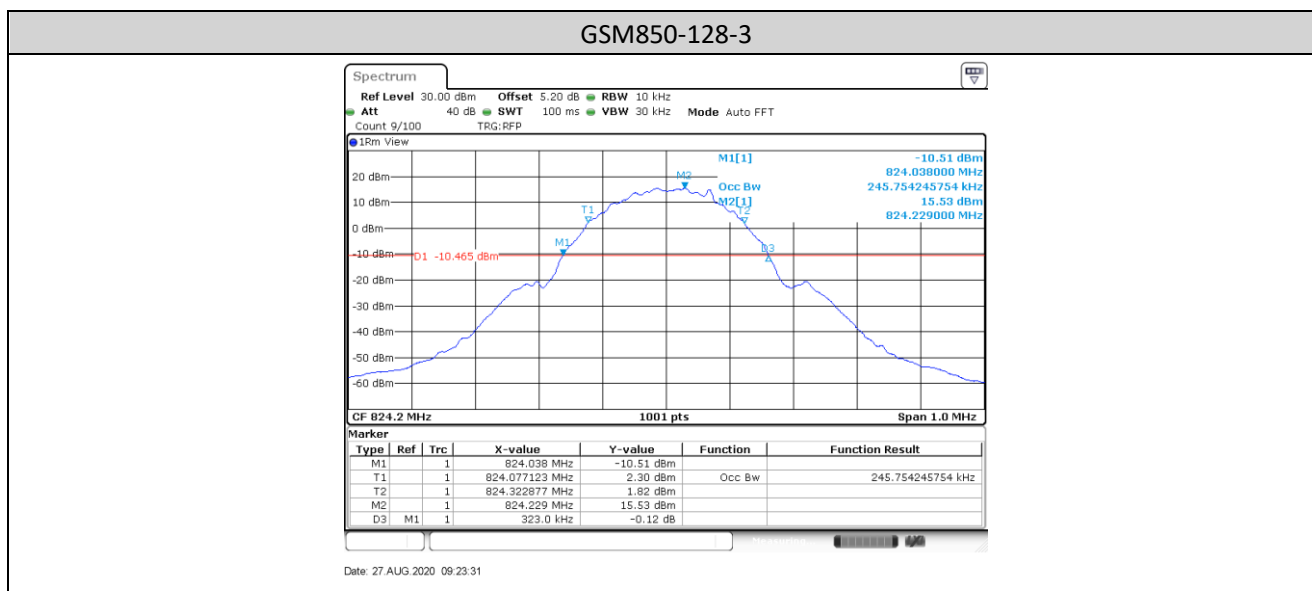


4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.246	0.323	---	PASS
GSM850	190	3	0.247	0.323	---	PASS
GSM850	251	3	0.247	0.323	---	PASS
EGPRS850	128	8	0.244	0.319	---	PASS
EGPRS850	190	8	0.246	0.319	---	PASS
EGPRS850	251	8	0.247	0.322	---	PASS
GSM1900	512	0	0.246	0.325	---	PASS
GSM1900	661	0	0.246	0.323	---	PASS
GSM1900	810	0	0.246	0.324	---	PASS
EGPRS1900	512	2	0.248	0.322	---	PASS
EGPRS1900	661	2	0.246	0.317	---	PASS
EGPRS1900	810	2	0.249	0.325	---	PASS

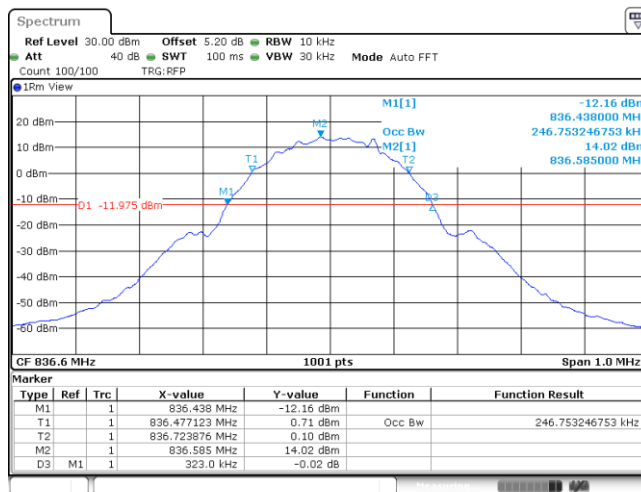
4.2. Test Plots



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. 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.

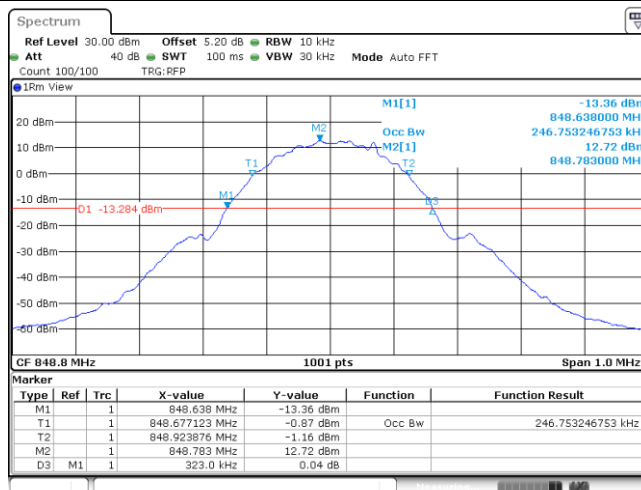
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM850-190-3



Date: 27.AUG.2020 09:23:49

GSM850-251-3



Date: 27.AUG.2020 09:24:08

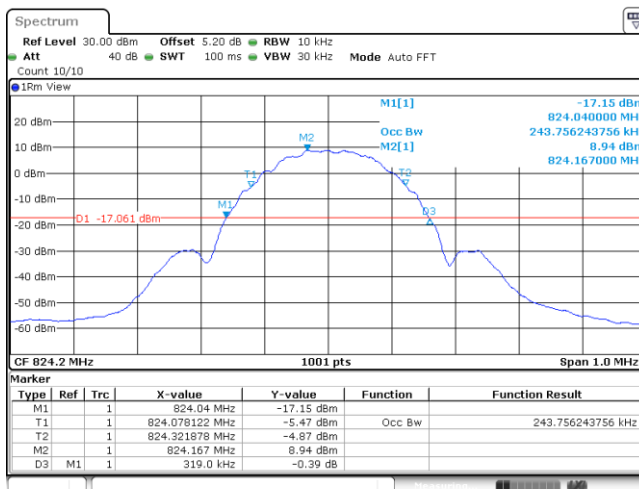


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

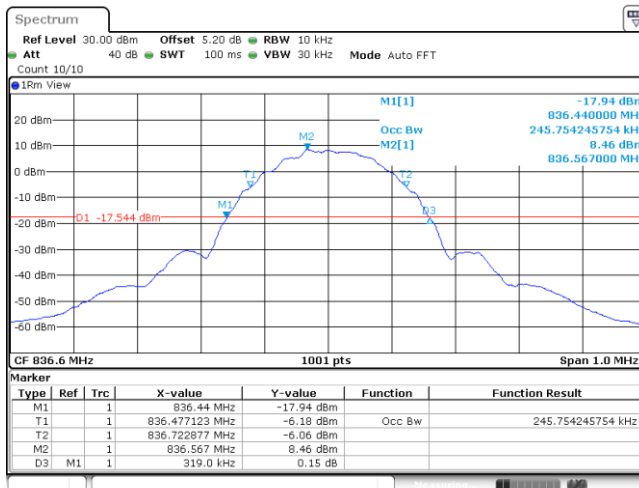
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS850-128-8



Date: 27.AUG.2020 09:07:02

EGPRS850-190-8



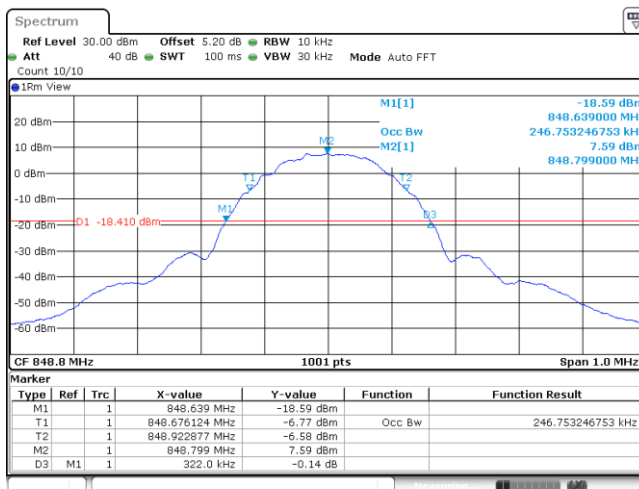
Date: 27.AUG.2020 09:07:15



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

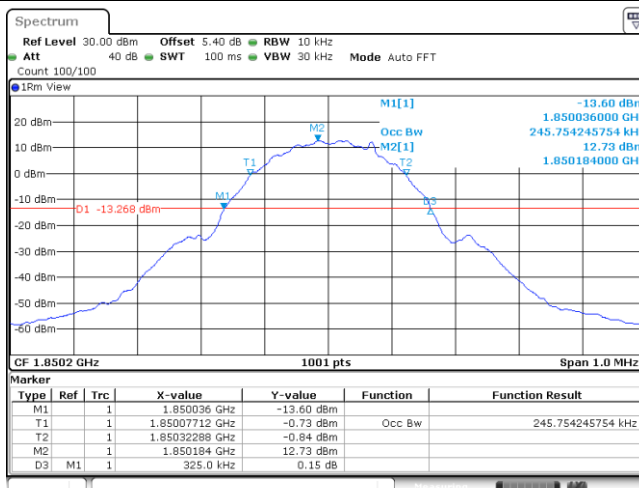
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS850-251-8



Date: 27 AUG 2020 09:07:27

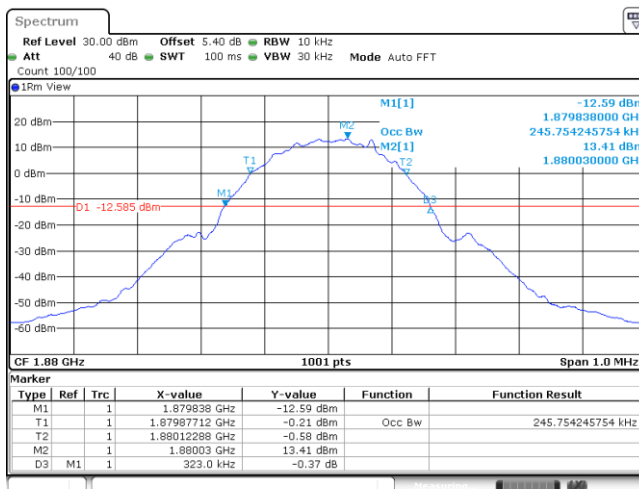
GSM1900-512-0



Date: 27 AUG 2020 09:02:56

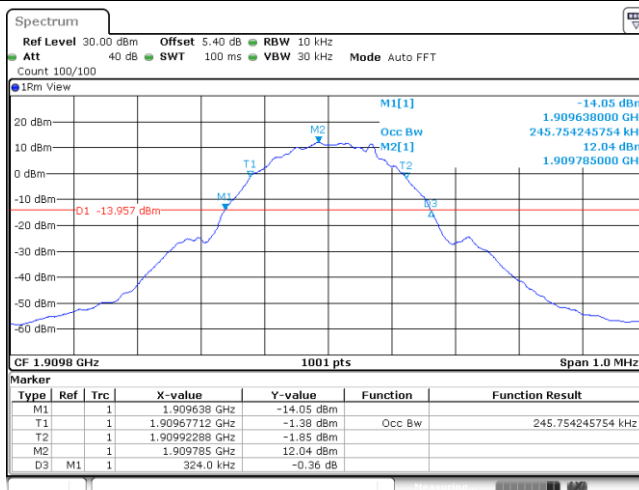


GSM1900-661-0



Date: 27.AUG.2020 09:04:10

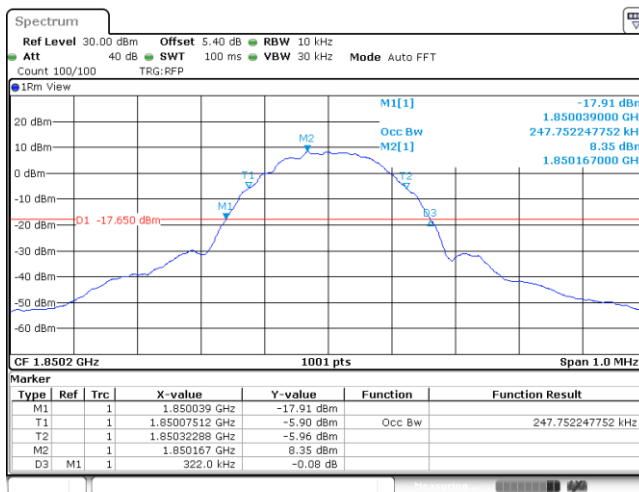
GSM1900-810-0



Date: 27.AUG.2020 09:04:28

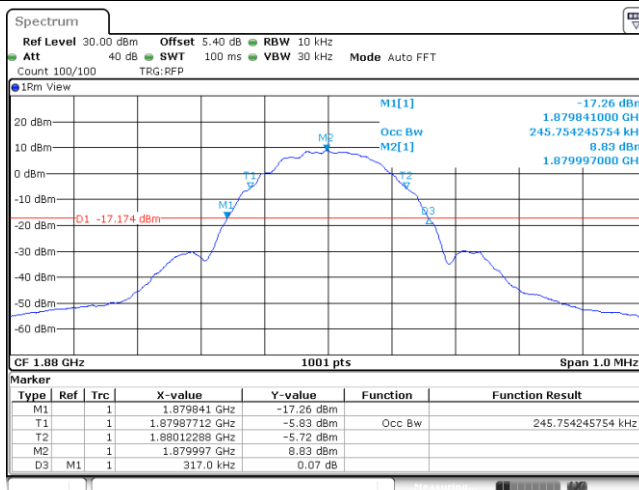


EGPRS1900-512-2



Date: 27.AUG.2020 09:16:56

EGPRS1900-661-2



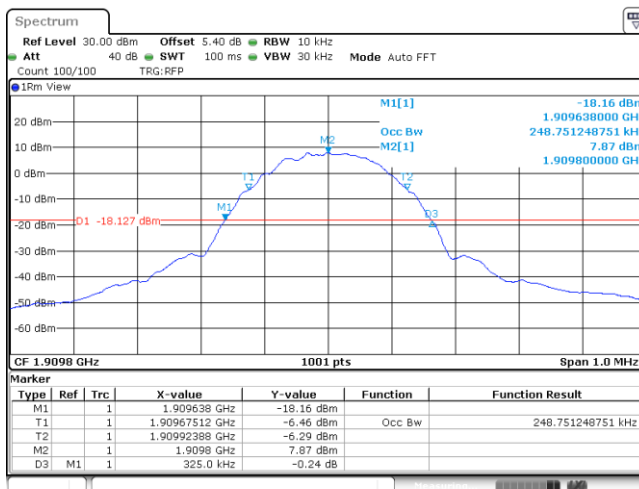
Date: 27.AUG.2020 09:17:16



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS1900-810-2



Date: 27 AUG 2020 09:17:35



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

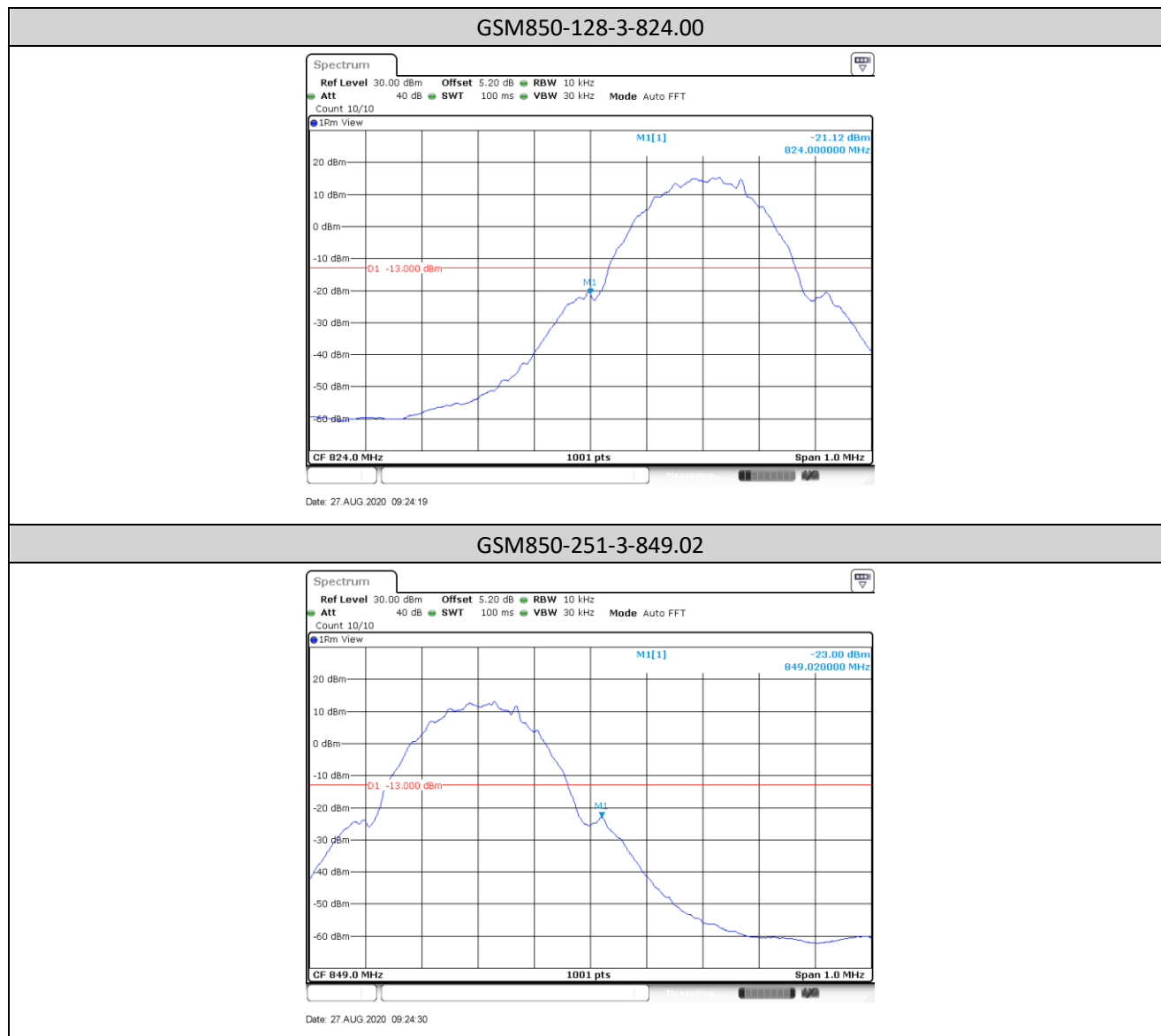
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

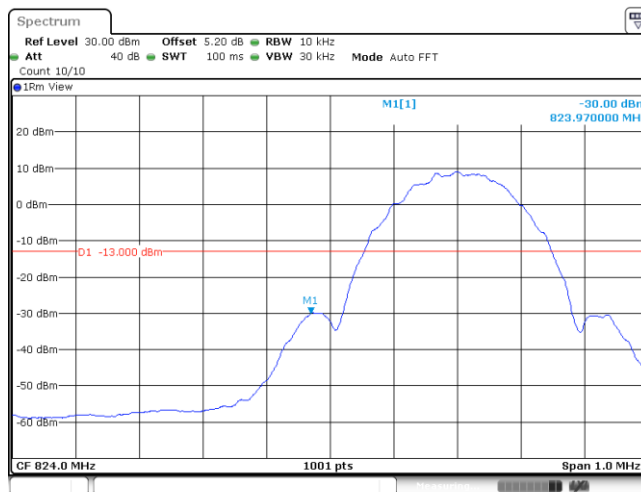


5. Band Edge Compliance

5.1. Test Plots



EGPRS850-128-8-823.97



Date: 27.AUG.2020 09:07:40

EGPRS850-251-8-849.02



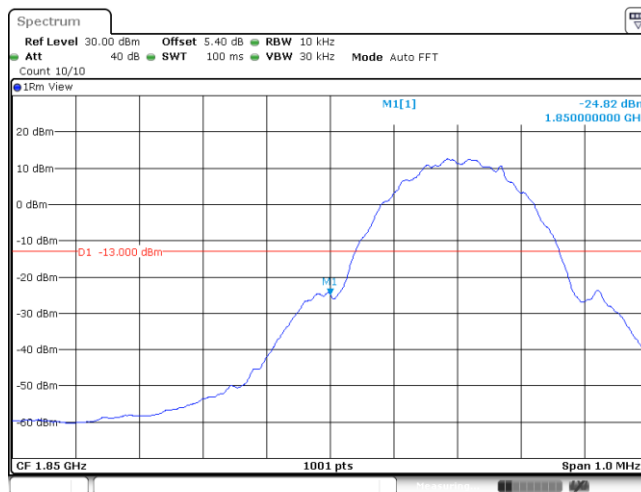
Date: 27.AUG.2020 09:07:51



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM1900-512-0-1850.00



Date: 27 AUG.2020 08:56:47

GSM1900-810-0-1910.02



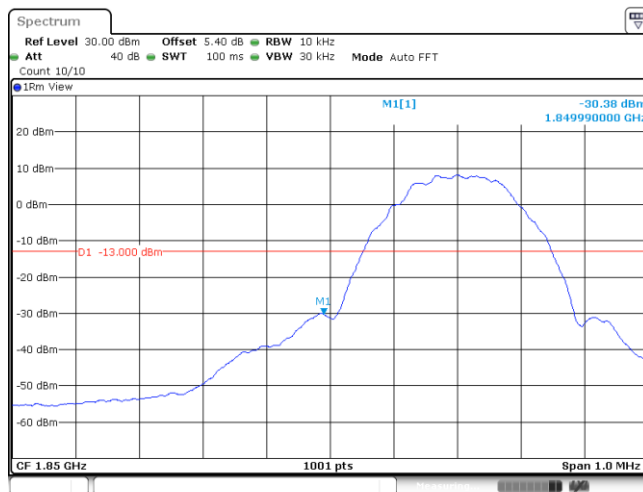
Date: 27 AUG.2020 08:56:57



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

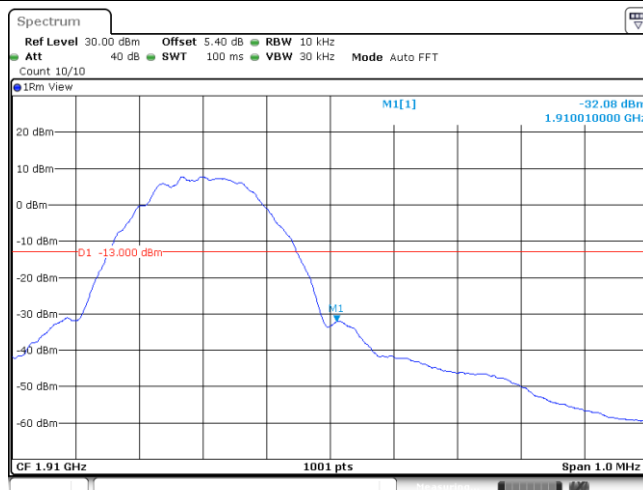
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS1900-512-2-1849.99



Date: 27 AUG.2020 09:17:47

EGPRS1900-810-2-1910.01



Date: 27 AUG.2020 09:17:58



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

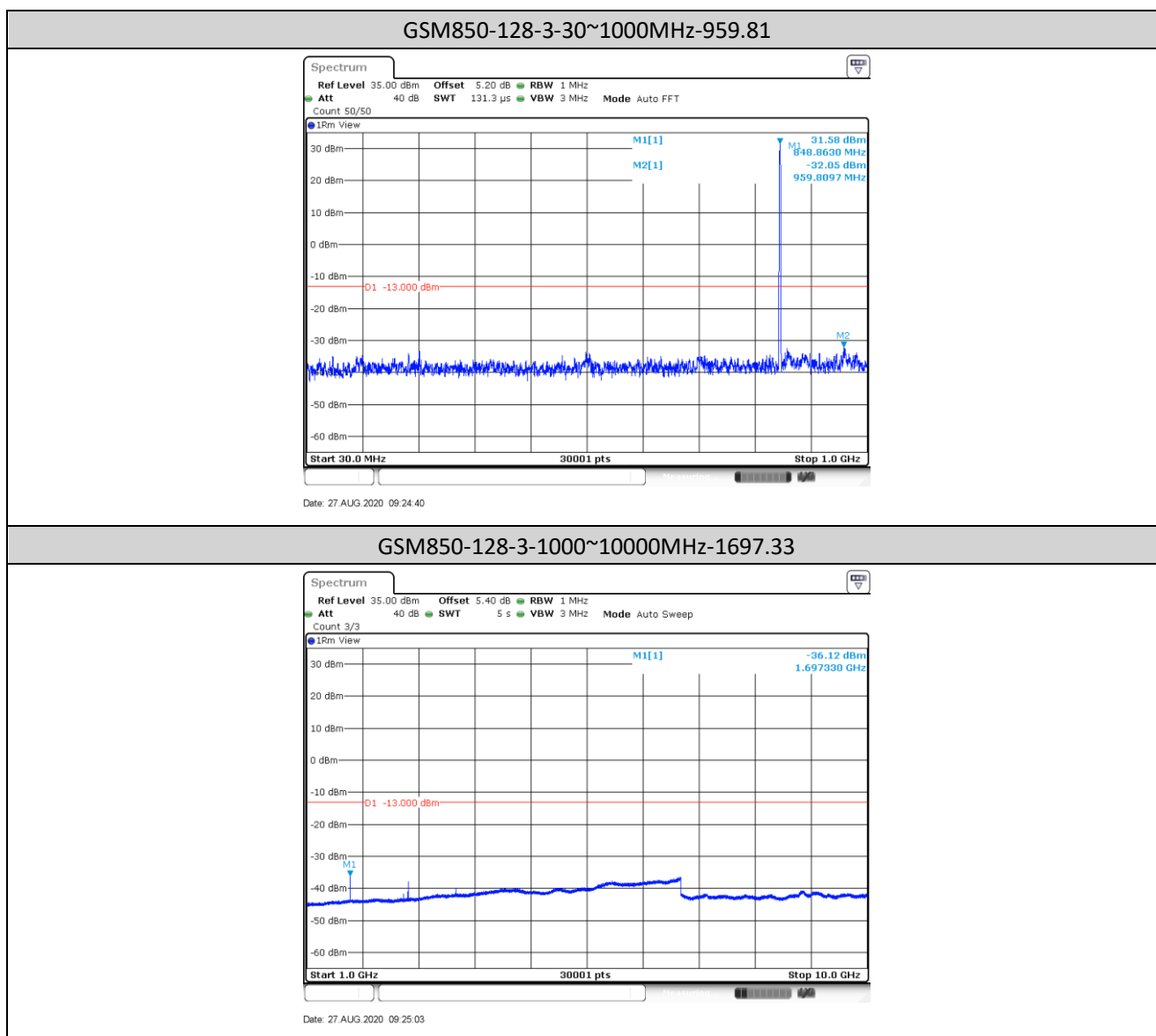


6. Spurious Emission at Antenna Terminal

Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

6.1. Test Plots



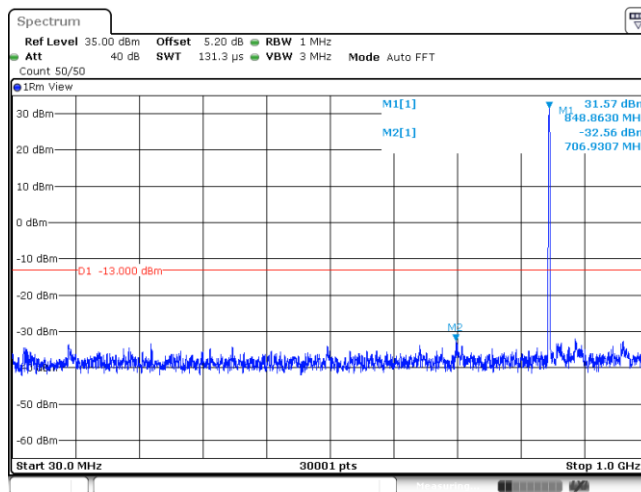
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

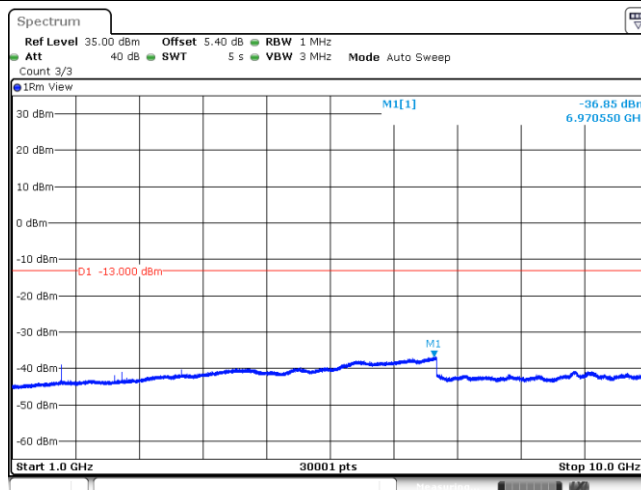
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM850-190-3-30~1000MHz-706.93



Date: 27 AUG. 2020 09:25:13

GSM850-190-3-1000~10000MHz-6970.55



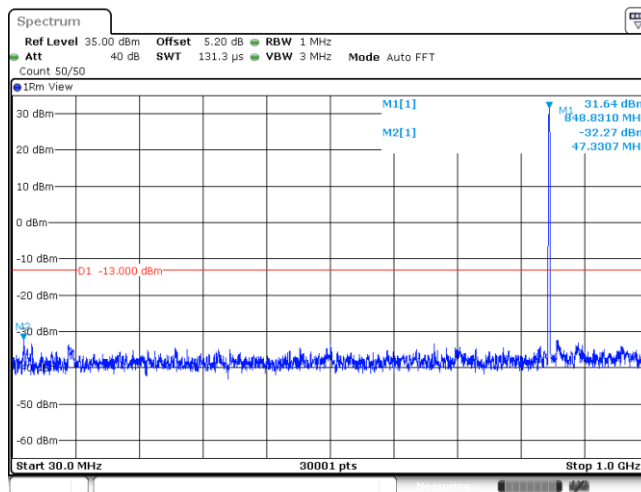
Date: 27 AUG. 2020 09:25:35



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

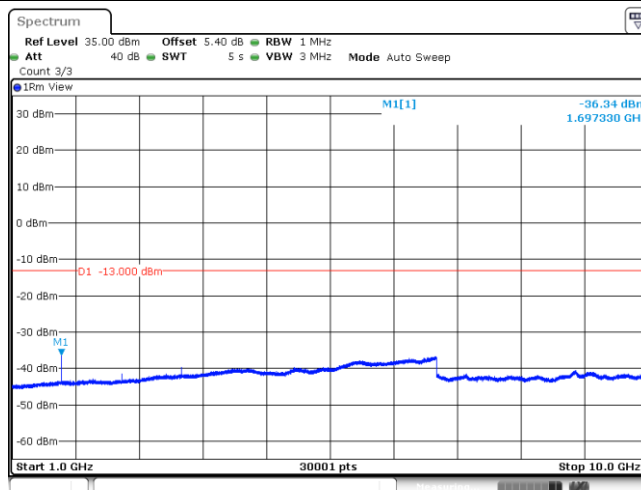
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM850-251-3-30~1000MHz-47.33



Date: 27 AUG.2020 09:25:45

GSM850-251-3-1000~10000MHz-1697.33



Date: 27 AUG.2020 09:26:08

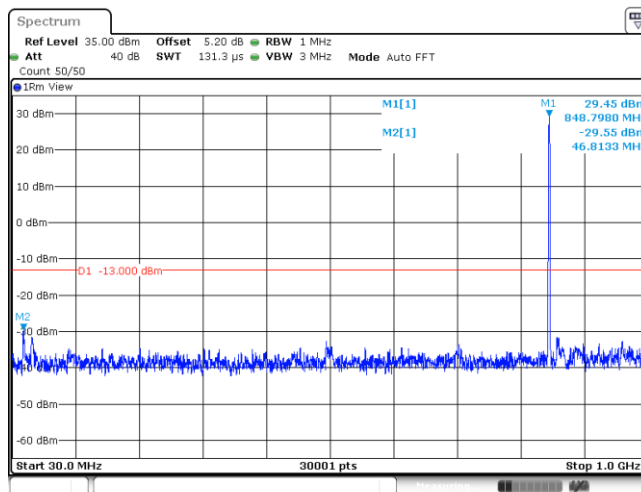


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

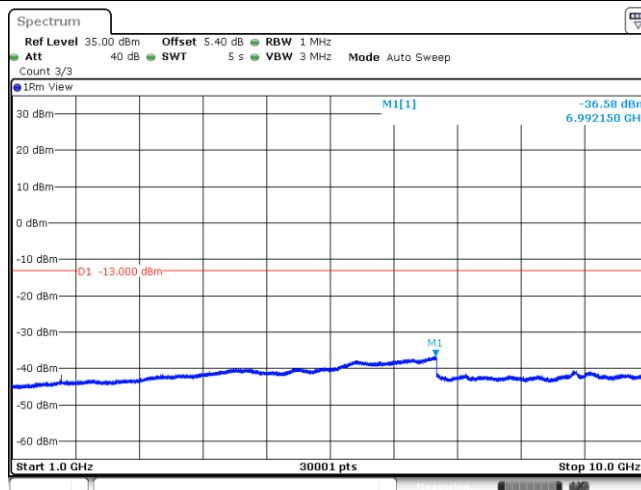
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS850-128-8-30~1000MHz-46.81



Date: 27 AUG.2020 09:08:03

EGPRS850-128-8-1000~10000MHz-6992.15



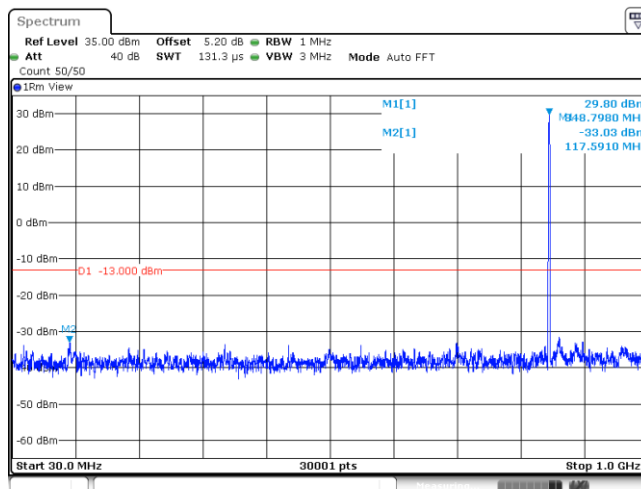
Date: 27 AUG.2020 09:08:25



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

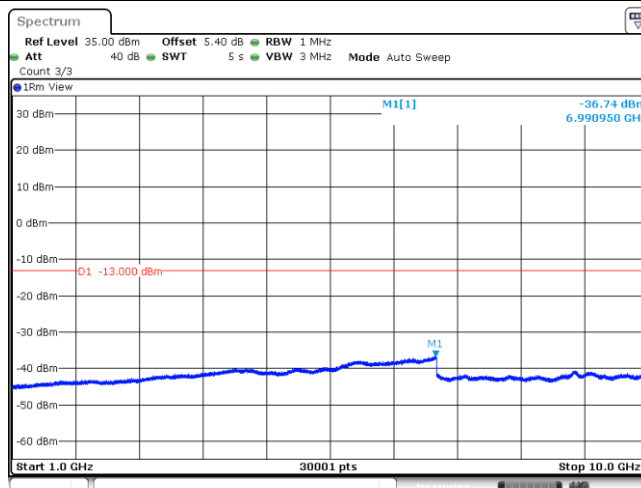
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS850-190-8-30~1000MHz-117.59



Date: 27 AUG.2020 09:08:36

EGPRS850-190-8-1000~10000MHz-6990.95



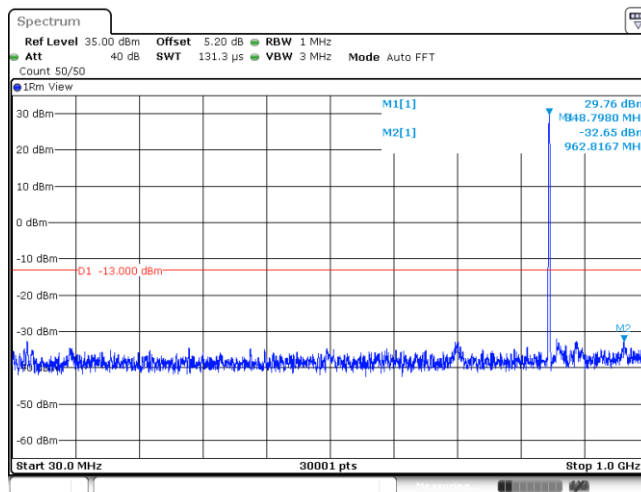
Date: 27 AUG.2020 09:08:59



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

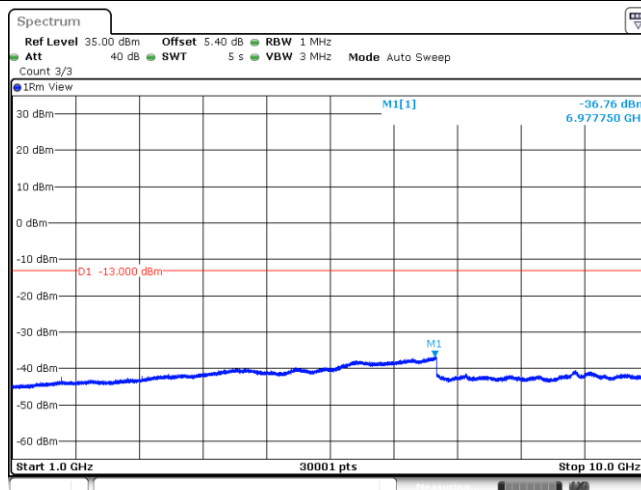
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS850-251-8-30~1000MHz-962.82



Date: 27 AUG 2020 09:09:10

EGPRS850-251-8-1000~10000MHz-6977.75



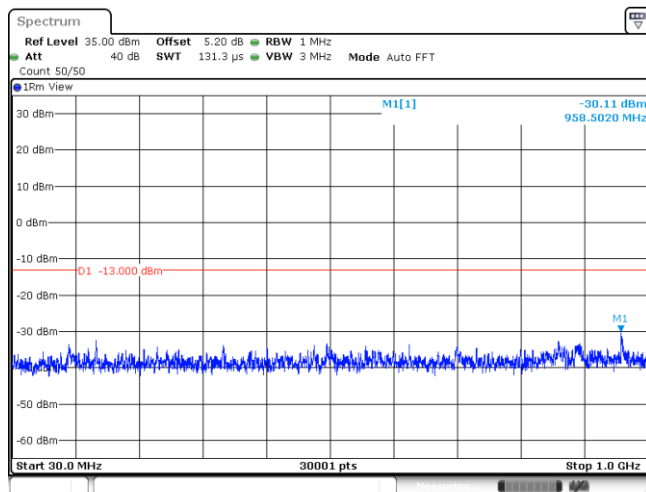
Date: 27 AUG 2020 09:09:33



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

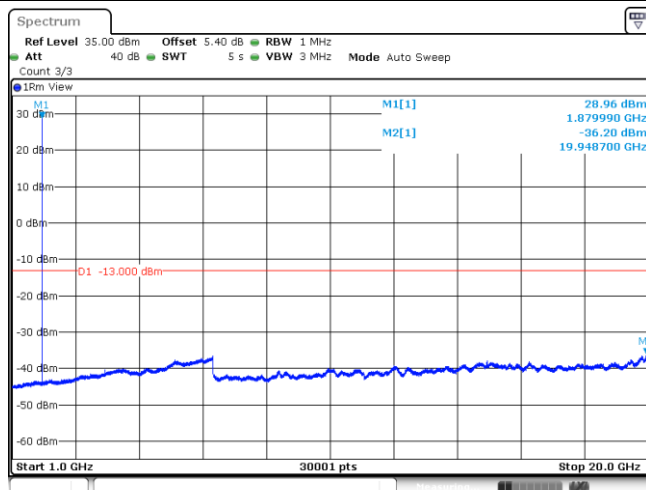
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM1900-512-0-30~1000MHz-958.5



Date: 27.AUG.2020 11:30:13

GSM1900-512-0-1000~20000MHz-19948.7



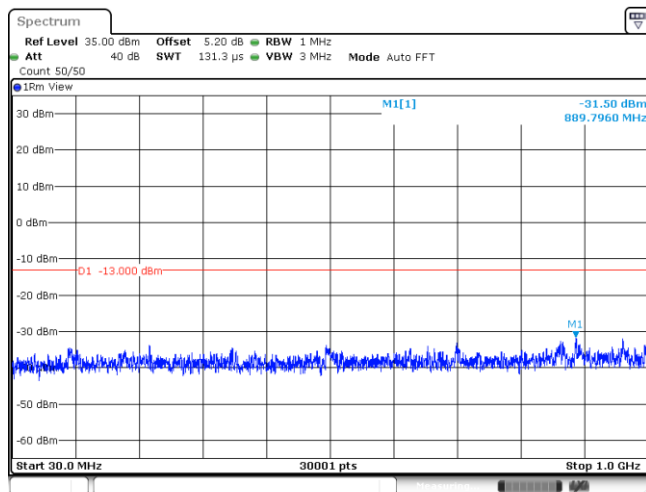
Date: 27.AUG.2020 11:30:37



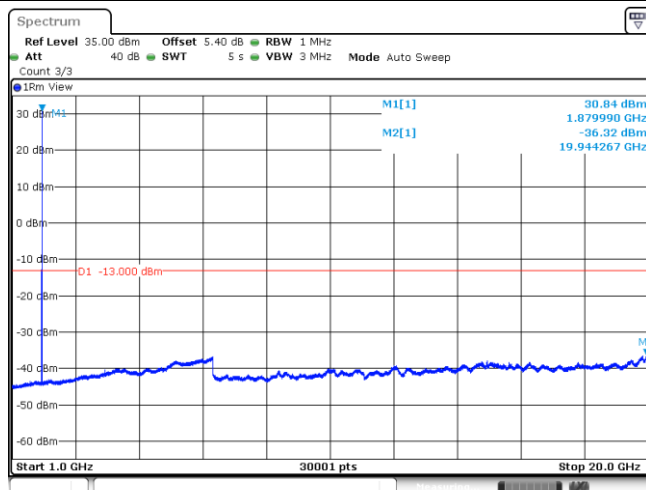
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM1900-661-0-30~1000MHz-889.8



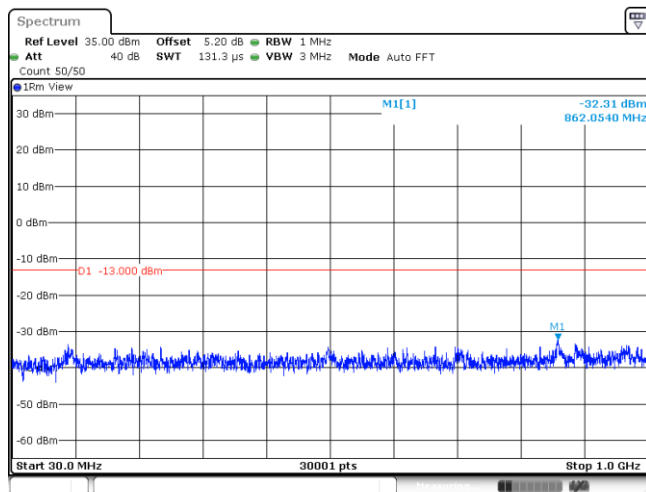
GSM1900-661-0-1000~20000MHz-19944.27



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

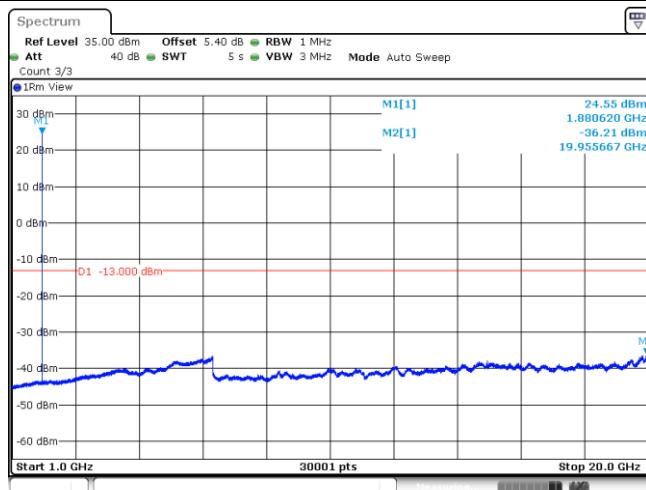
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

GSM1900-810-0-30~1000MHz-862.05



Date: 27.AUG.2020 11:31:18

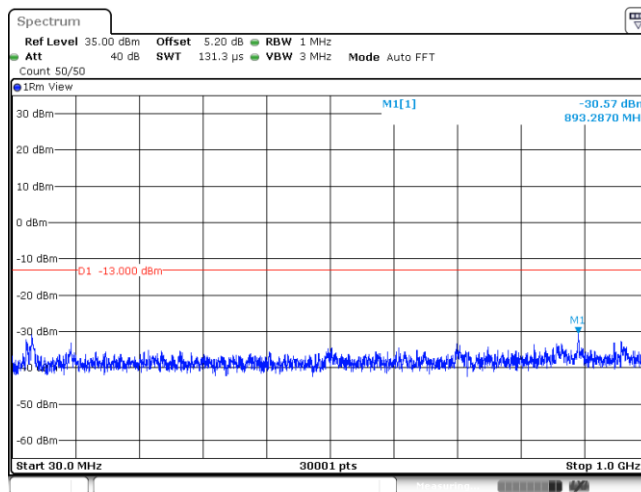
GSM1900-810-0-1000~20000MHz-19955.67



Date: 27.AUG.2020 11:31:42

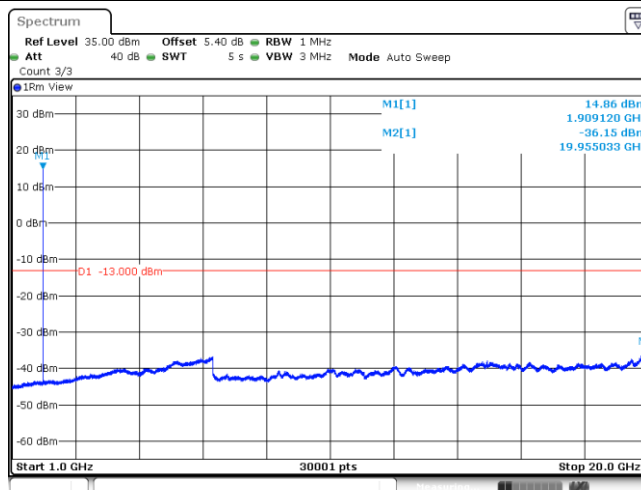


EGPRS1900-512-2-30~1000MHz-893.29



Date: 27 AUG.2020 09:18:09

EGPRS1900-512-2-1000~20000MHz-19955.03



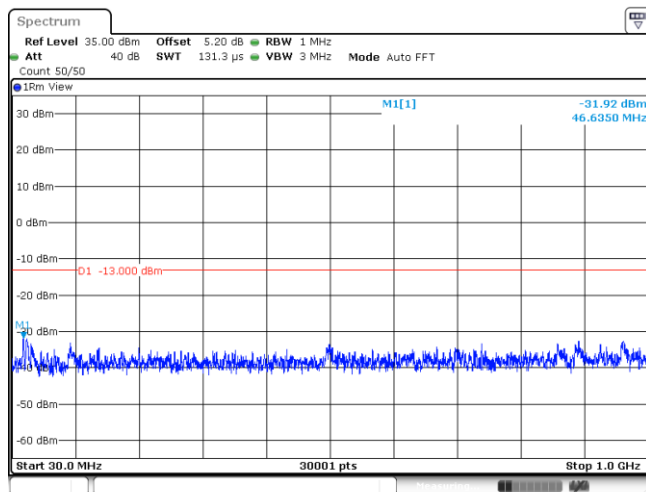
Date: 27 AUG.2020 09:18:32



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. 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.

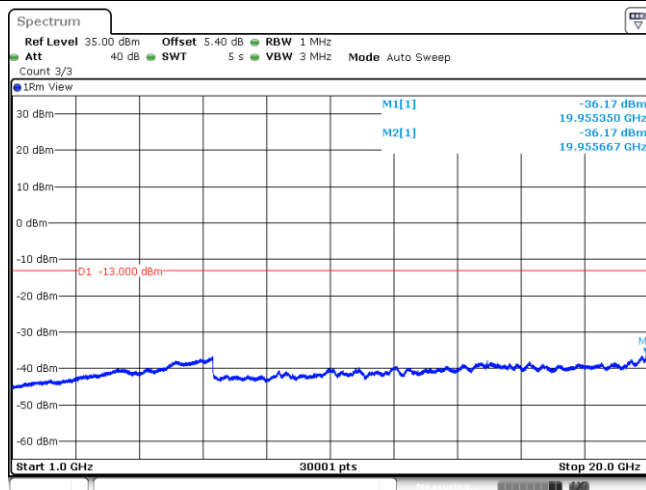
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS1900-661-2-30~1000MHz-46.64



Date: 27.AUG.2020 09:18:42

EGPRS1900-661-2-1000~20000MHz-19955.67



Date: 27.AUG.2020 09:19:06

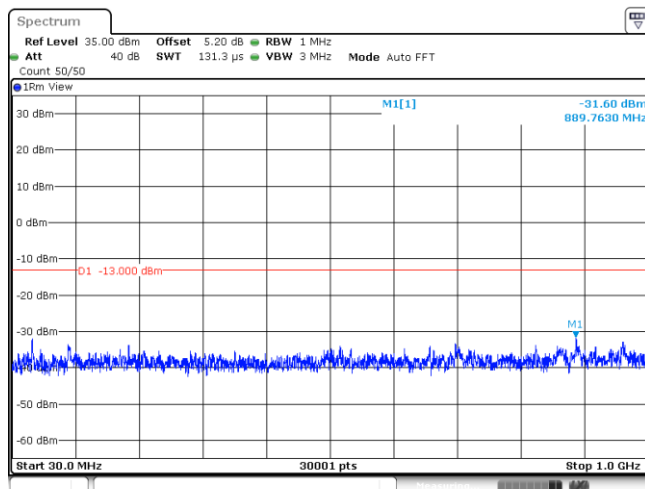


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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.

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

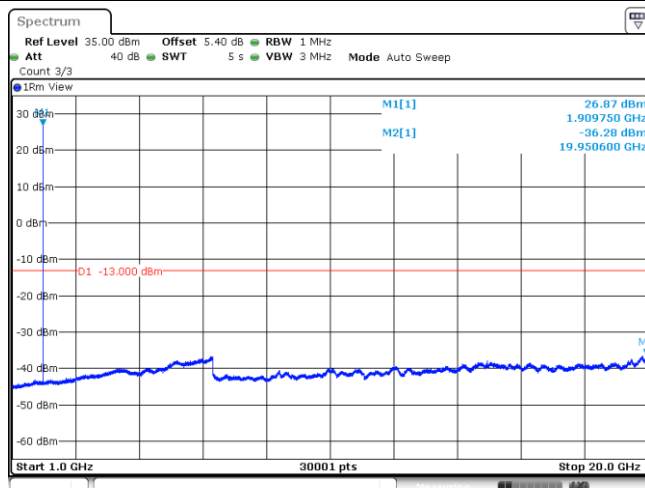
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

EGPRS1900-810-2-30~1000MHz-889.76



Date: 27.AUG.2020 09:19:19

EGPRS1900-810-2-1000~20000MHz-19950.6



Date: 27.AUG.2020 09:19:43



7. Field Strength of Spurious Radiation

7.1. Test Band = GSM 1900(Up Antenna)

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
47.5579	-69.55	-13.00	56.55	241	18	Vertical
111.4841	-64.69	-13.00	51.69	258	115	Vertical
610.0405	-63.77	-13.00	50.77	226	184	Vertical
2698.7397	-37.45	-13.00	24.45	287	195	Vertical
7351.1450	-55.47	-13.00	42.47	259	184	Vertical
17996.9999	-39.99	-13.00	26.99	271	18	Vertical
44.2112	-63.70	-13.00	50.70	184	160	Horizontal
234.2437	-67.13	-13.00	54.13	157	194	Horizontal
615.7638	-64.22	-13.00	51.22	163	244	Horizontal
2697.9396	-36.63	-13.00	23.63	194	159	Horizontal
7379.6460	-56.41	-13.00	43.41	195	280	Horizontal
16396.4465	-43.62	-13.00	30.62	171	14	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
49.2070	-70.20	-13.00	57.20	214	5	Vertical
109.9320	-64.84	-13.00	51.84	256	184	Vertical
669.6015	-63.47	-13.00	50.47	287	5	Vertical
2700.3401	-37.82	-13.00	24.82	214	358	Vertical
7339.1446	-55.57	-13.00	42.57	226	184	Vertical
17999.5000	-40.13	-13.00	27.13	281	354	Vertical
46.8303	-64.13	-13.00	51.13	198	127	Horizontal
235.0198	-68.31	-13.00	55.31	187	58	Horizontal
598.9334	-64.17	-13.00	51.17	165	91	Horizontal
2702.7405	-36.60	-13.00	23.60	174	52	Horizontal
7458.6486	-56.51	-13.00	43.51	185	240	Horizontal
16399.4466	-43.44	-13.00	30.44	192	276	Horizontal



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
48.1884	-70.27	-13.00	57.27	247	47	Vertical
109.5925	-64.95	-13.00	51.95	256	47	Vertical
593.3072	-64.19	-13.00	51.19	281	122	Vertical
2613.9228	-37.65	-13.00	24.65	226	360	Vertical
7380.6460	-56.31	-13.00	43.31	294	251	Vertical
17997.4999	-40.46	-13.00	27.46	258	122	Vertical
42.1741	-64.38	-13.00	51.38	198	20	Horizontal
234.1467	-67.60	-13.00	54.60	175	225	Horizontal
553.7777	-65.03	-13.00	52.03	162	291	Horizontal
2702.7405	-36.68	-13.00	23.68	184	142	Horizontal
7467.1489	-56.44	-13.00	43.44	184	225	Horizontal
16390.4463	-43.67	-13.00	30.67	169	259	Horizontal



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

7.2. Test Band = GSM 1900(Down Antenna)

7.2.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
49.0615	-72.27	-13.00	59.27	222	101	Vertical
111.3386	-64.85	-13.00	51.85	271	356	Vertical
435.8683	-66.95	-13.00	53.95	254	196	Vertical
3700.5234	-61.58	-13.00	48.58	284	6	Vertical
7415.1472	-55.93	-13.00	42.93	265	133	Vertical
17990.4997	-40.46	-13.00	27.46	217	325	Vertical
43.7262	-64.29	-13.00	51.29	187	70	Horizontal
247.8244	-67.52	-13.00	54.52	165	166	Horizontal
727.3679	-62.09	-13.00	49.09	187	39	Horizontal
3700.5234	-58.82	-13.00	45.82	195	229	Horizontal
7462.6488	-56.13	-13.00	43.13	184	356	Horizontal
16399.4466	-44.31	-13.00	31.31	199	325	Horizontal

7.2.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
50.7590	-71.78	-13.00	58.78	222	261	Vertical
115.7038	-65.19	-13.00	52.19	247	7	Vertical
421.6086	-68.04	-13.00	55.04	256	102	Vertical
3760.0253	-60.46	-13.00	47.46	281	261	Vertical
5640.0880	-60.00	-13.00	47.00	263	134	Vertical
17991.9997	-40.62	-13.00	27.62	284	324	Vertical
41.8346	-64.01	-13.00	51.01	187	293	Horizontal
233.2737	-68.64	-13.00	55.64	194	293	Horizontal
596.6053	-63.97	-13.00	50.97	175	261	Horizontal
3760.0253	-55.49	-13.00	42.49	163	324	Horizontal
7456.6486	-56.78	-13.00	43.78	187	134	Horizontal
16393.9465	-43.90	-13.00	30.90	195	166	Horizontal



7.2.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
50.1770	-71.89	-13.00	58.89	241	293	Vertical
115.8493	-64.88	-13.00	51.88	257	134	Vertical
445.7628	-66.98	-13.00	53.98	265	356	Vertical
3820.0273	-61.15	-13.00	48.15	284	71	Vertical
7352.1451	-56.18	-13.00	43.18	236	293	Vertical
17999.5000	-41.19	-13.00	28.19	247	7	Vertical
43.5322	-64.52	-13.00	51.52	198	325	Horizontal
98.4854	-75.84	-13.00	62.84	174	8	Horizontal
234.5347	-67.80	-13.00	54.80	195	71	Horizontal
3819.5273	-58.03	-13.00	45.03	184	134	Horizontal
7455.6485	-56.87	-13.00	43.87	167	166	Horizontal
16400.4467	-44.19	-13.00	31.19	182	262	Horizontal



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Centre EEC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

7.3. Test Band = GSM 850(Up Antenna)

7.3.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
49.3525	-69.69	-13.00	56.69	225	16	Vertical
112.7936	-64.44	-13.00	51.44	241	254	Vertical
1648.5297	-61.87	-13.00	48.87	220	117	Vertical
2994.7990	-55.99	-13.00	42.99	247	54	Vertical
3297.0432	-58.16	-13.00	45.16	236	254	Vertical
4120.9707	-59.73	-13.00	46.73	281	16	Vertical
46.4908	-63.87	-13.00	50.87	178	139	Horizontal
1648.5297	-51.80	-13.00	38.80	195	300	Horizontal
2472.6945	-52.67	-13.00	39.67	177	115	Horizontal
3296.8099	-41.71	-13.00	28.71	192	176	Horizontal
4121.2040	-54.15	-13.00	41.15	187	0	Horizontal
9295.3098	-52.55	-13.00	39.55	159	214	Horizontal

7.3.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
48.3339	-69.53	-13.00	56.53	224	0	Vertical
107.9919	-64.71	-13.00	51.71	257	0	Vertical
1673.3347	-59.28	-13.00	46.28	263	167	Vertical
3000.0000	-55.78	-13.00	42.78	284	187	Vertical
3346.7449	-59.65	-13.00	46.65	257	349	Vertical
9874.6958	-52.51	-13.00	39.51	214	205	Vertical
43.8717	-63.44	-13.00	50.44	187	58	Horizontal
232.0126	-66.28	-13.00	53.28	195	58	Horizontal
1672.9346	-54.22	-13.00	41.22	174	32	Horizontal
2509.9020	-52.10	-13.00	39.10	166	125	Horizontal
3345.8115	-46.67	-13.00	33.67	198	186	Horizontal
4182.8061	-58.66	-13.00	45.66	175	26	Horizontal



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

7.3.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
47.9944	-69.83	-13.00	56.83	187	0	Vertical
116.4798	-63.58	-13.00	50.58	157	103	Vertical
1697.7395	-58.66	-13.00	45.66	163	158	Vertical
2546.3093	-53.05	-13.00	40.05	184	158	Vertical
5999.8333	-61.21	-13.00	48.21	175	103	Vertical
9891.7297	-51.73	-13.00	38.73	162	0	Vertical
45.2783	-63.08	-13.00	50.08	198	53	Horizontal
1697.3395	-52.33	-13.00	39.33	224	10	Horizontal
2546.3093	-51.41	-13.00	38.41	257	16	Horizontal
3395.2798	-48.86	-13.00	35.86	263	164	Horizontal
4243.9415	-60.01	-13.00	47.01	224	21	Horizontal
9325.1775	-52.07	-13.00	39.07	218	94	Horizontal



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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



7.4. Test Band = GSM 850(Down Antenna)

7.4.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
49.2555	-71.94	-13.00	58.94	241	281	Vertical
108.0889	-64.23	-13.00	51.23	257	317	Vertical
291.7191	-68.30	-13.00	55.30	236	152	Vertical
1648.5297	-43.31	-13.00	30.31	241	111	Vertical
3296.8099	-57.81	-13.00	44.81	284	281	Vertical
9316.3105	-52.17	-13.00	39.17	248	22	Vertical
38.9729	-63.86	-13.00	50.86	187	323	Horizontal
107.7009	-74.62	-13.00	61.62	174	356	Horizontal
234.8257	-67.39	-13.00	54.39	162	1	Horizontal
1648.5297	-40.18	-13.00	27.18	184	136	Horizontal
3296.8099	-51.30	-13.00	38.30	172	290	Horizontal
9317.7106	-52.34	-13.00	39.34	159	1	Horizontal

7.4.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
113.1817	-65.08	-13.00	52.08	241	284	Vertical
598.2544	-62.82	-13.00	49.82	221	252	Vertical
1673.3347	-48.00	-13.00	35.00	258	21	Vertical
2510.7021	-50.31	-13.00	37.31	263	332	Vertical
3346.2782	-60.83	-13.00	47.83	274	18	Vertical
7993.0331	-55.95	-13.00	42.95	259	18	Vertical
40.0885	-64.34	-13.00	51.34	187	88	Horizontal
235.7958	-67.35	-13.00	54.35	195	120	Horizontal
1672.9346	-40.99	-13.00	27.99	174	115	Horizontal
2509.9020	-41.46	-13.00	28.46	165	175	Horizontal
3346.5116	-52.53	-13.00	39.53	188	324	Horizontal
9352.9451	-52.67	-13.00	39.67	198	257	Horizontal



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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

7.4.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
108.5254	-64.67	-13.00	51.67	241	321	Vertical
477.7744	-65.95	-13.00	52.95	257	285	Vertical
1697.7395	-53.54	-13.00	40.54	268	328	Vertical
2547.1094	-44.31	-13.00	31.31	247	118	Vertical
6991.2997	-58.42	-13.00	45.42	258	180	Vertical
9842.7281	-52.30	-13.00	39.30	236	9	Vertical
42.5136	-64.35	-13.00	51.35	187	156	Horizontal
251.1711	-67.98	-13.00	54.98	195	229	Horizontal
1697.3395	-42.81	-13.00	29.81	174	114	Horizontal
2546.7093	-43.73	-13.00	30.73	198	39	Horizontal
3395.5132	-57.71	-13.00	44.71	177	293	Horizontal
9327.5109	-52.98	-13.00	39.98	162	19	Horizontal

Remark:

- 1) According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2) The disturbance above 12.75GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.





Frequency Stability

7.5. Frequency Error Vs Voltage

Band	Channel	PCL	Voltage		Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)				
GSM850	128	3	VL	NT	0.23	0.000279	±2.5	PASS
GSM850	128	3	VN	NT	6.36	0.007717	±2.5	PASS
GSM850	128	3	VH	NT	5.78	0.007013	±2.5	PASS
GSM850	190	3	VL	NT	9.14	0.010925	±2.5	PASS
GSM850	190	3	VN	NT	7.01	0.008379	±2.5	PASS
GSM850	190	3	VH	NT	-0.48	-0.000574	±2.5	PASS
GSM850	251	3	VL	NT	-4.07	-0.004795	±2.5	PASS
GSM850	251	3	VN	NT	-0.39	-0.000459	±2.5	PASS
GSM850	251	3	VH	NT	2.74	0.003228	±2.5	PASS
EGPRS850	128	8	VL	NT	28.64	0.034749	±2.5	PASS
EGPRS850	128	8	VN	NT	29.22	0.035453	±2.5	PASS
EGPRS850	128	8	VH	NT	31.09	0.037721	±2.5	PASS
EGPRS850	190	8	VL	NT	30.70	0.036696	±2.5	PASS
EGPRS850	190	8	VN	NT	32.45	0.038788	±2.5	PASS
EGPRS850	190	8	VH	NT	32.71	0.039099	±2.5	PASS
EGPRS850	251	8	VL	NT	22.99	0.027085	±2.5	PASS
EGPRS850	251	8	VN	NT	27.38	0.032257	±2.5	PASS
EGPRS850	251	8	VH	NT	25.18	0.029665	±2.5	PASS
GSM1900	512	0	VL	NT	5.00	0.002702	±2.5	PASS
GSM1900	512	0	VN	NT	5.75	0.003108	±2.5	PASS
GSM1900	512	0	VH	NT	3.00	0.001621	±2.5	PASS
GSM1900	661	0	VL	NT	10.14	0.005394	±2.5	PASS
GSM1900	661	0	VN	NT	4.97	0.002644	±2.5	PASS
GSM1900	661	0	VH	NT	-2.29	-0.001218	±2.5	PASS
GSM1900	810	0	VL	NT	-0.10	-0.000052	±2.5	PASS
GSM1900	810	0	VN	NT	9.01	0.004718	±2.5	PASS
GSM1900	810	0	VH	NT	2.00	0.001047	±2.5	PASS
EGPRS1900	512	2	VL	NT	25.54	0.013804	±2.5	PASS
EGPRS1900	512	2	VN	NT	26.09	0.014101	±2.5	PASS
EGPRS1900	512	2	VH	NT	26.86	0.014517	±2.5	PASS
EGPRS1900	661	2	VL	NT	29.22	0.015543	±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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch Laboratory
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



EGPRS1900	661	2	VN	NT	25.47	0.013548	±2.5	PASS
EGPRS1900	661	2	VH	NT	23.79	0.012654	±2.5	PASS
EGPRS1900	810	2	VL	NT	27.51	0.014405	±2.5	PASS
EGPRS1900	810	2	VN	NT	25.70	0.013457	±2.5	PASS
EGPRS1900	810	2	VH	NT	23.86	0.012493	±2.5	PASS

7.6. Frequency Error Vs Temperature

Temperature								
Band	Channel	PCL	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	3	NV	-30	0.48	0.000582	±2.5	PASS
GSM850	128	3	NV	-20	1.29	0.001565	±2.5	PASS
GSM850	128	3	NV	-10	-5.39	-0.006540	±2.5	PASS
GSM850	128	3	NV	0	6.88	0.008347	±2.5	PASS
GSM850	128	3	NV	10	-3.84	-0.004659	±2.5	PASS
GSM850	128	3	NV	20	8.94	0.010847	±2.5	PASS
GSM850	128	3	NV	30	6.68	0.008105	±2.5	PASS
GSM850	128	3	NV	40	5.20	0.006309	±2.5	PASS
GSM850	128	3	NV	50	1.49	0.001808	±2.5	PASS
GSM850	190	3	NV	-30	13.01	0.015551	±2.5	PASS
GSM850	190	3	NV	-20	-0.58	-0.000693	±2.5	PASS
GSM850	190	3	NV	-10	14.40	0.017213	±2.5	PASS
GSM850	190	3	NV	0	4.49	0.005367	±2.5	PASS
GSM850	190	3	NV	10	4.91	0.005869	±2.5	PASS
GSM850	190	3	NV	20	15.14	0.018097	±2.5	PASS
GSM850	190	3	NV	30	5.49	0.006562	±2.5	PASS
GSM850	190	3	NV	40	9.30	0.011116	±2.5	PASS
GSM850	190	3	NV	50	8.78	0.010495	±2.5	PASS
GSM850	251	3	NV	-30	-2.94	-0.003464	±2.5	PASS
GSM850	251	3	NV	-20	-5.17	-0.006091	±2.5	PASS
GSM850	251	3	NV	-10	-1.71	-0.002015	±2.5	PASS
GSM850	251	3	NV	0	-2.84	-0.003346	±2.5	PASS
GSM850	251	3	NV	10	-2.45	-0.002886	±2.5	PASS
GSM850	251	3	NV	20	3.91	0.004607	±2.5	PASS
GSM850	251	3	NV	30	3.68	0.004336	±2.5	PASS
GSM850	251	3	NV	40	-0.45	-0.000530	±2.5	PASS
GSM850	251	3	NV	50	2.58	0.003040	±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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



EGPRS850	128	8	NV	-30	27.12	0.032905	±2.5	PASS
EGPRS850	128	8	NV	-20	19.53	0.023696	±2.5	PASS
EGPRS850	128	8	NV	-10	24.12	0.029265	±2.5	PASS
EGPRS850	128	8	NV	0	24.18	0.029338	±2.5	PASS
EGPRS850	128	8	NV	10	26.96	0.032711	±2.5	PASS
EGPRS850	128	8	NV	20	21.31	0.025855	±2.5	PASS
EGPRS850	128	8	NV	30	26.86	0.032589	±2.5	PASS
EGPRS850	128	8	NV	40	24.60	0.029847	±2.5	PASS
EGPRS850	128	8	NV	50	25.34	0.030745	±2.5	PASS
EGPRS850	190	8	NV	-30	35.06	0.041908	±2.5	PASS
EGPRS850	190	8	NV	-20	29.86	0.035692	±2.5	PASS
EGPRS850	190	8	NV	-10	30.19	0.036087	±2.5	PASS
EGPRS850	190	8	NV	0	34.68	0.041454	±2.5	PASS
EGPRS850	190	8	NV	10	29.64	0.035429	±2.5	PASS
EGPRS850	190	8	NV	20	28.51	0.034078	±2.5	PASS
EGPRS850	190	8	NV	30	30.41	0.036350	±2.5	PASS
EGPRS850	190	8	NV	40	26.64	0.031843	±2.5	PASS
EGPRS850	190	8	NV	50	30.70	0.036696	±2.5	PASS
EGPRS850	251	8	NV	-30	24.12	0.028417	±2.5	PASS
EGPRS850	251	8	NV	-20	24.41	0.028758	±2.5	PASS
EGPRS850	251	8	NV	-10	25.34	0.029854	±2.5	PASS
EGPRS850	251	8	NV	0	25.93	0.030549	±2.5	PASS
EGPRS850	251	8	NV	10	26.02	0.030655	±2.5	PASS
EGPRS850	251	8	NV	20	25.60	0.030160	±2.5	PASS
EGPRS850	251	8	NV	30	25.93	0.030549	±2.5	PASS
EGPRS850	251	8	NV	40	22.31	0.026284	±2.5	PASS
EGPRS850	251	8	NV	50	27.44	0.032328	±2.5	PASS
GSM1900	512	0	NV	-30	3.23	0.001746	±2.5	PASS
GSM1900	512	0	NV	-20	0.77	0.000416	±2.5	PASS
GSM1900	512	0	NV	-10	6.23	0.003367	±2.5	PASS
GSM1900	512	0	NV	0	2.39	0.001292	±2.5	PASS
GSM1900	512	0	NV	10	12.72	0.006875	±2.5	PASS
GSM1900	512	0	NV	20	7.49	0.004048	±2.5	PASS
GSM1900	512	0	NV	30	11.85	0.006405	±2.5	PASS
GSM1900	512	0	NV	40	5.59	0.003021	±2.5	PASS
GSM1900	512	0	NV	50	11.14	0.006021	±2.5	PASS
GSM1900	661	0	NV	-30	3.87	0.002059	±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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



GSM1900	661	0	NV	-20	4.20	0.002234	±2.5	PASS
GSM1900	661	0	NV	-10	-0.06	-0.000032	±2.5	PASS
GSM1900	661	0	NV	0	9.23	0.004910	±2.5	PASS
GSM1900	661	0	NV	10	2.58	0.001372	±2.5	PASS
GSM1900	661	0	NV	20	5.84	0.003106	±2.5	PASS
GSM1900	661	0	NV	30	6.30	0.003351	±2.5	PASS
GSM1900	661	0	NV	40	4.10	0.002181	±2.5	PASS
GSM1900	661	0	NV	50	8.75	0.004654	±2.5	PASS
GSM1900	810	0	NV	-30	-0.10	-0.000052	±2.5	PASS
GSM1900	810	0	NV	-20	0.58	0.000304	±2.5	PASS
GSM1900	810	0	NV	-10	3.55	0.001859	±2.5	PASS
GSM1900	810	0	NV	0	2.29	0.001199	±2.5	PASS
GSM1900	810	0	NV	10	1.87	0.000979	±2.5	PASS
GSM1900	810	0	NV	20	0.71	0.000372	±2.5	PASS
GSM1900	810	0	NV	30	2.39	0.001251	±2.5	PASS
GSM1900	810	0	NV	40	4.26	0.002231	±2.5	PASS
GSM1900	810	0	NV	50	6.07	0.003178	±2.5	PASS
EGPRS1900	512	2	NV	-30	26.64	0.014398	±2.5	PASS
EGPRS1900	512	2	NV	-20	26.28	0.014204	±2.5	PASS
EGPRS1900	512	2	NV	-10	27.93	0.015096	±2.5	PASS
EGPRS1900	512	2	NV	0	28.28	0.015285	±2.5	PASS
EGPRS1900	512	2	NV	10	28.77	0.015550	±2.5	PASS
EGPRS1900	512	2	NV	20	25.57	0.013820	±2.5	PASS
EGPRS1900	512	2	NV	30	24.15	0.013053	±2.5	PASS
EGPRS1900	512	2	NV	40	25.05	0.013539	±2.5	PASS
EGPRS1900	512	2	NV	50	28.15	0.015215	±2.5	PASS
EGPRS1900	661	2	NV	-30	21.28	0.011319	±2.5	PASS
EGPRS1900	661	2	NV	-20	31.67	0.016846	±2.5	PASS
EGPRS1900	661	2	NV	-10	31.38	0.016691	±2.5	PASS
EGPRS1900	661	2	NV	0	27.64	0.014702	±2.5	PASS
EGPRS1900	661	2	NV	10	29.44	0.015660	±2.5	PASS
EGPRS1900	661	2	NV	20	27.41	0.014580	±2.5	PASS
EGPRS1900	661	2	NV	30	31.64	0.016830	±2.5	PASS
EGPRS1900	661	2	NV	40	30.38	0.016160	±2.5	PASS
EGPRS1900	661	2	NV	50	29.15	0.015505	±2.5	PASS
EGPRS1900	810	2	NV	-30	23.60	0.012357	±2.5	PASS
EGPRS1900	810	2	NV	-20	25.05	0.013117	±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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. 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, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



EGPRS1900	810	2	NV	-10	27.15	0.014216	±2.5	PASS
EGPRS1900	810	2	NV	0	28.31	0.014824	±2.5	PASS
EGPRS1900	810	2	NV	10	25.80	0.013509	±2.5	PASS
EGPRS1900	810	2	NV	20	27.57	0.014436	±2.5	PASS
EGPRS1900	810	2	NV	30	22.70	0.011886	±2.5	PASS
EGPRS1900	810	2	NV	40	25.31	0.013253	±2.5	PASS
EGPRS1900	810	2	NV	50	26.25	0.013745	±2.5	PASS

The End

