



Appendix B

E-UTRA Band 5



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 (Xi'an) Co., Ltd.
Wireless Laboratory

11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



CONTENT

1 EFFECTIVE (ISOTROPIC) RADIATED POWER.....	4
1.1. TEST RESULT.....	4
2. PEAK-TO-AVERAGE RATIO (CCDF).....	12
2.1. TEST RESULT.....	12
2.2. TEST PLOTS.....	13
3. MODULATION CHARACTERISTICS.....	18
3.1. TEST MODE = LTE /TM1 10MHZ.....	18
3.1.1. TEST CHANNEL = MCH.....	18
3.2. TEST MODE = LTE /TM2 10MHZ.....	19
3.2.1. TEST CHANNEL = MCH.....	19
3.3. TEST MODE = LTE /TM3 10MHZ.....	20
3.3.1. TEST CHANNEL = MCH.....	20
4. 26DB BANDWIDTH AND OCCUPIED BANDWIDTH.....	21
4.1. TEST RESULT.....	21
4.2. TEST PLOTS.....	22
5. BAND EDGE COMPLIANCE.....	41
5.1. TEST PLOTS.....	41
6. SPURIOUS EMISSION AT ANTENNA TERMINAL.....	66
6.1. TEST PLOTS.....	66
7. FIELD STRENGTH OF SPURIOUS RADIATION.....	76
7.1. Test Band = LTE_Band=5 BW=10MHz _TM1.....	76
7.1.1. Test Channel = 20450.....	76
7.2. Test Band = LTE_Band=5 BW=10MHz _TM1.....	77
7.2.1. Test Channel = 20450.....	77
7.3. Test Band = LTE_Band=5 BW=10MHz _TM1.....	78
7.3.1. Test Channel = 20525.....	78
7.4. Test Band = LTE_Band=5 BW=10MHz _TM1.....	79
7.4.1. Test Channel = 20525.....	79
7.5. Test Band = LTE_Band=5 BW=10MHz _TM1.....	80
7.5.1. Test Channel = 20600.....	80



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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com
t (86-29) 6282 7885 sgs.china@sgs.com



7.6. Test Band = LTE_Band=5 BW=10MHz _TM1.....	81
7.6.1. Test Channel = 20600.....	81

8. FREQUENCY STABILITY.....82

8.1. FREQUENCY VS VOLTAGE.....	82
--------------------------------	----

8.2. FREQUENCY VS TEMPERATURE.....	83
------------------------------------	----



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 (Xi'an) Co., Ltd.
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth h	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	24.82	17.67	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	25.01	17.86	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	24.86	17.71	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	24.99	17.84	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	25.05	17.9	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	24.96	17.81	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	24.07	16.92	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	24.87	17.72	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	24.88	17.73	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	25.04	17.89	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	25.01	17.86	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	25.07	17.92	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	24.99	17.84	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	24.07	16.92	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	24.89	17.74	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	24.87	17.72	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	25.06	17.91	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	25.03	17.88	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	25.11	17.96	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	25.03	17.88	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	24.10	16.95	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#0	22.18	15.03	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#2	22.40	15.25	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#5	22.41	15.26	38.45	PASS
Band5	1.4MHz	64QAM	20407	3RB#0	22.21	15.06	38.45	PASS
Band5	1.4MHz	64QAM	20407	3RB#1	22.26	15.11	38.45	PASS
Band5	1.4MHz	64QAM	20407	3RB#3	22.24	15.09	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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	1.4MHz	64QAM	20407	6RB#0	21.05	13.9	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#0	22.20	15.05	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#5	22.18	15.03	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#2	22.41	15.26	38.45	PASS
Band5	1.4MHz	64QAM	20525	3RB#0	22.25	15.1	38.45	PASS
Band5	1.4MHz	64QAM	20525	3RB#1	22.15	15	38.45	PASS
Band5	1.4MHz	64QAM	20525	3RB#3	22.19	15.04	38.45	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	21.09	13.94	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#5	22.05	14.9	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#0	22.39	15.24	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#2	22.19	15.04	38.45	PASS
Band5	1.4MHz	64QAM	20643	3RB#0	22.07	14.92	38.45	PASS
Band5	1.4MHz	64QAM	20643	3RB#1	22.17	15.02	38.45	PASS
Band5	1.4MHz	64QAM	20643	3RB#3	22.30	15.15	38.45	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	21.20	14.05	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	24.02	16.87	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	24.18	17.03	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	23.99	16.84	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	24.09	16.94	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	24.05	16.9	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	23.98	16.83	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	23.08	15.93	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	24.10	16.95	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	24.30	17.15	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	24.10	16.95	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	24.09	16.94	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	24.09	16.94	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	24.15	17	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	23.09	15.94	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	24.11	16.96	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	23.93	16.78	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	23.94	16.79	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	24.06	16.91	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

11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	1.4MHz	16QAM	20643	3RB#1	24.11	16.96	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	24.01	16.86	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	23.07	15.92	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	24.92	17.77	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	24.92	17.77	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	24.89	17.74	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	24.03	16.88	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	24.06	16.91	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	23.99	16.84	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	24.03	16.88	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.92	16.77	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	24.92	17.77	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	24.92	17.77	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	24.02	16.87	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	24.05	16.9	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	24.06	16.91	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	24.06	16.91	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	24.89	17.74	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	24.87	17.72	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	24.92	17.77	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	24.02	16.87	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	24.01	16.86	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	24.07	16.92	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	24.06	16.91	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#8	22.15	15	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#14	22.26	15.11	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#0	22.34	15.19	38.45	PASS
Band5	3MHz	64QAM	20415	8RB#0	21.31	14.16	38.45	PASS
Band5	3MHz	64QAM	20415	8RB#4	21.17	14.02	38.45	PASS
Band5	3MHz	64QAM	20415	8RB#7	21.44	14.29	38.45	PASS
Band5	3MHz	64QAM	20415	15RB#0	21.16	14.01	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#0	22.10	14.95	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#14	22.20	15.05	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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	3MHz	64QAM	20525	1RB#8	22.19	15.04	38.45	PASS
Band5	3MHz	64QAM	20525	8RB#7	21.34	14.19	38.45	PASS
Band5	3MHz	64QAM	20525	8RB#0	21.51	14.36	38.45	PASS
Band5	3MHz	64QAM	20525	8RB#4	21.18	14.03	38.45	PASS
Band5	3MHz	64QAM	20525	15RB#0	21.33	14.18	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#8	22.40	15.25	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#0	22.35	15.2	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#14	22.33	15.18	38.45	PASS
Band5	3MHz	64QAM	20635	8RB#0	21.47	14.32	38.45	PASS
Band5	3MHz	64QAM	20635	8RB#7	21.41	14.26	38.45	PASS
Band5	3MHz	64QAM	20635	8RB#4	21.43	14.28	38.45	PASS
Band5	3MHz	64QAM	20635	15RB#0	20.99	13.84	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	24.17	17.02	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	24.14	16.99	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	24.09	16.94	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	23.01	15.86	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	23.02	15.87	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	23.03	15.88	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	22.95	15.8	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	24.06	16.91	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	24.07	16.92	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	24.11	16.96	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	23.04	15.89	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	23.07	15.92	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	23.04	15.89	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	23.00	15.85	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	24.03	16.88	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	24.02	16.87	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	24.03	16.88	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	23.00	15.85	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#4	23.05	15.9	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	23.02	15.87	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	22.97	15.82	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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	5MHz	QPSK	20425	1RB#0	24.81	17.66	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	25.14	17.99	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	24.85	17.7	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	24.03	16.88	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	24.10	16.95	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	24.03	16.88	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	24.06	16.91	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	24.84	17.69	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	24.80	17.65	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	25.11	17.96	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	24.07	16.92	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	24.10	16.95	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	24.01	16.86	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	24.06	16.91	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	24.80	17.65	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	24.81	17.66	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	25.12	17.97	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	24.04	16.89	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	24.09	16.94	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	24.01	16.86	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	24.05	16.9	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#0	22.26	15.11	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#12	22.25	15.1	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#24	22.21	15.06	38.45	PASS
Band5	5MHz	64QAM	20425	12RB#0	21.48	14.33	38.45	PASS
Band5	5MHz	64QAM	20425	12RB#6	21.09	13.94	38.45	PASS
Band5	5MHz	64QAM	20425	12RB#13	21.45	14.3	38.45	PASS
Band5	5MHz	64QAM	20425	25RB#0	21.46	14.31	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#0	22.20	15.05	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#24	22.20	15.05	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#12	22.19	15.04	38.45	PASS
Band5	5MHz	64QAM	20525	12RB#0	21.22	14.07	38.45	PASS
Band5	5MHz	64QAM	20525	12RB#6	21.33	14.18	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-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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	5MHz	64QAM	20525	12RB#13	21.34	14.19	38.45	PASS
Band5	5MHz	64QAM	20525	25RB#0	21.43	14.28	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#24	22.31	15.16	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#0	22.10	14.95	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#12	22.31	15.16	38.45	PASS
Band5	5MHz	64QAM	20625	12RB#0	21.28	14.13	38.45	PASS
Band5	5MHz	64QAM	20625	12RB#6	21.45	14.3	38.45	PASS
Band5	5MHz	64QAM	20625	12RB#13	20.98	13.83	38.45	PASS
Band5	5MHz	64QAM	20625	25RB#0	21.33	14.18	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	23.93	16.78	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	24.34	17.19	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	24.00	16.85	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	23.07	15.92	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	22.98	15.83	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	23.02	15.87	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	23.01	15.86	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	24.10	16.95	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	24.25	17.1	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	24.06	16.91	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	22.98	15.83	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	23.03	15.88	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	23.09	15.94	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	23.01	15.86	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	24.30	17.15	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	23.94	16.79	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	23.98	16.83	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	23.00	15.85	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	23.05	15.9	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	22.95	15.8	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	22.98	15.83	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	24.92	17.77	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	25.09	17.94	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	24.95	17.8	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-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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	10MHz	QPSK	20450	25RB#0	24.17	17.02	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	24.14	16.99	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	24.11	16.96	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	24.14	16.99	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	24.94	17.79	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	24.91	17.76	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	25.08	17.93	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	24.11	16.96	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	24.17	17.02	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	24.14	16.99	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	24.14	16.99	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	25.06	17.91	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	24.93	17.78	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	24.91	17.76	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	24.13	16.98	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	24.08	16.93	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	24.13	16.98	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	24.12	16.97	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	22.44	15.29	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	22.26	15.11	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	22.41	15.26	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	21.24	14.09	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	21.27	14.12	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	21.48	14.33	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	21.29	14.14	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	22.14	14.99	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.37	15.22	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	22.22	15.07	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.34	14.19	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	21.39	14.24	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	21.43	14.28	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	21.50	14.35	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.28	15.13	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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	10MHz	QPSK	20600	1RB#0	22.44	15.29	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	22.24	15.09	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	21.37	14.22	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	21.27	14.12	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	21.19	14.04	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	21.58	14.43	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	24.26	17.11	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	24.02	16.87	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	24.27	17.12	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	23.07	15.92	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	23.08	15.93	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	23.13	15.98	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	23.11	15.96	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	24.16	17.01	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	24.13	16.98	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	24.32	17.17	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	23.08	15.93	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	23.12	15.97	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	23.13	15.98	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	23.08	15.93	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	24.27	17.12	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	24.19	17.04	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	23.99	16.84	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	23.07	15.92	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	23.08	15.93	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	23.00	15.85	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	23.04	15.89	38.45	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 [dBd]

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



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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	4.93	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.01	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.99	13	PASS
Band5	10MHz	64QAM	20450	50RB#0	6.23	13	PASS
Band5	10MHz	64QAM	20525	50RB#0	6.20	13	PASS
Band5	10MHz	64QAM	20600	50RB#0	6.17	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.74	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.74	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.68	13	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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

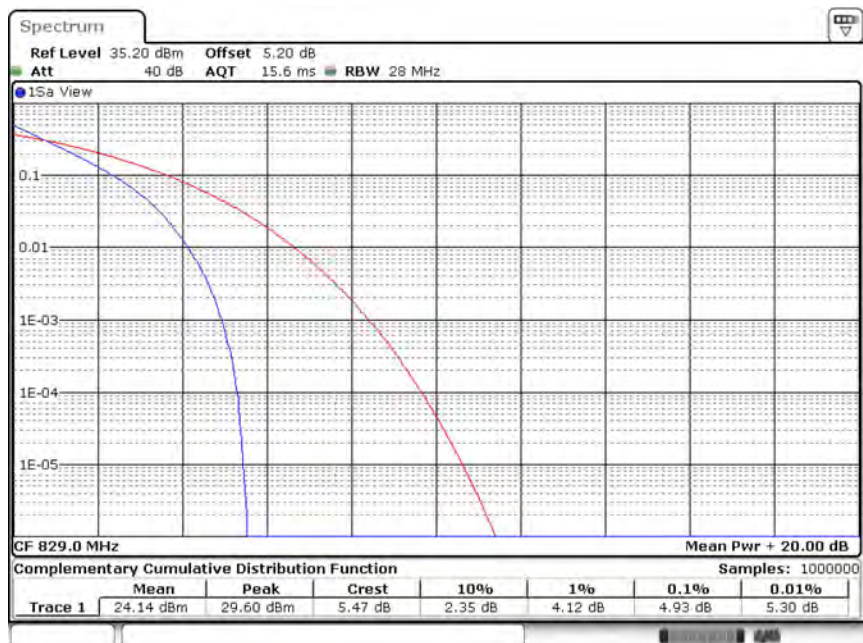
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



2.2. Test Plots

Band5-10MHz-QPSK-20450-50RB#0



Date: 23 JUN 2020 12:34 04

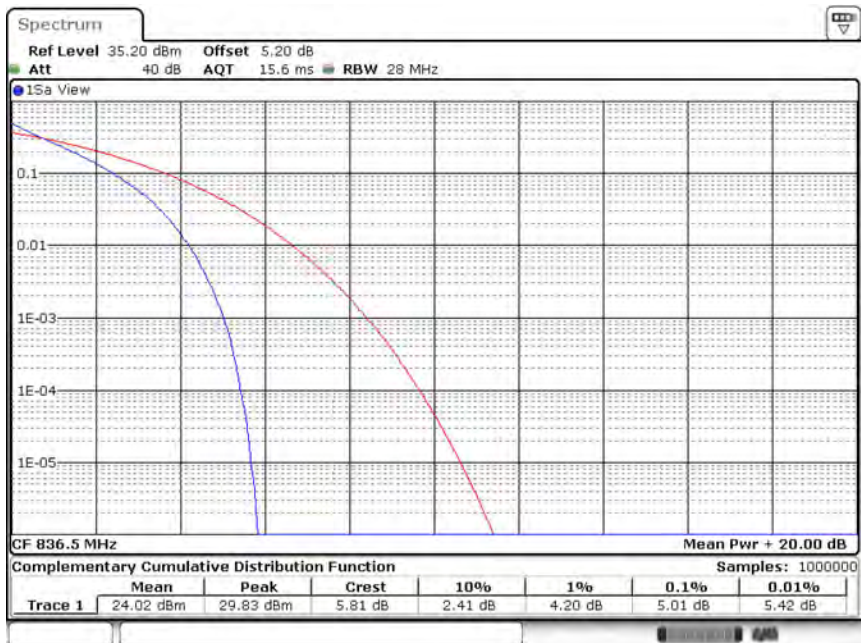


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

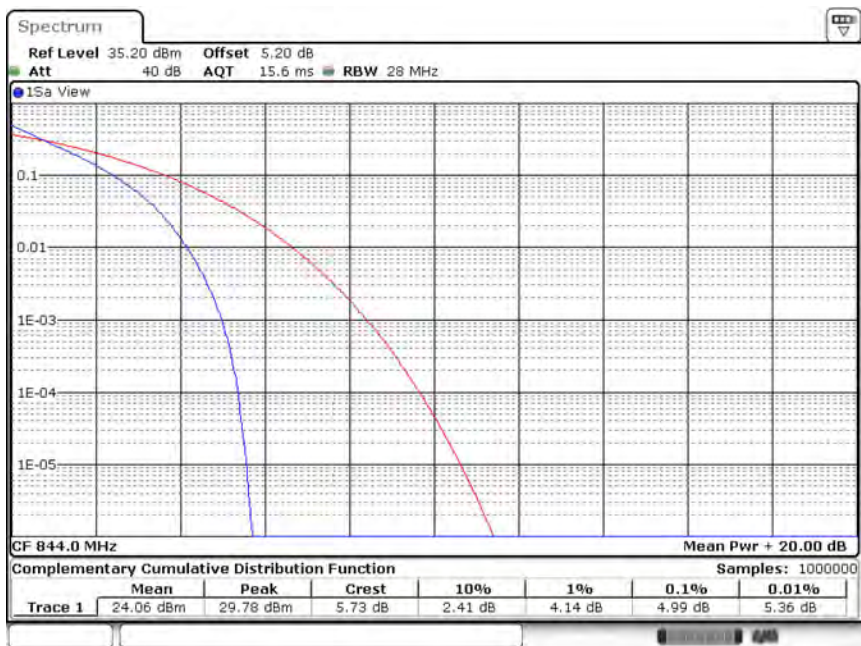
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

Band5-10MHz-QPSK-20525-50RB#0



Date: 23 JUN 2020 12:34:27

Band5-10MHz-QPSK-20600-50RB#0



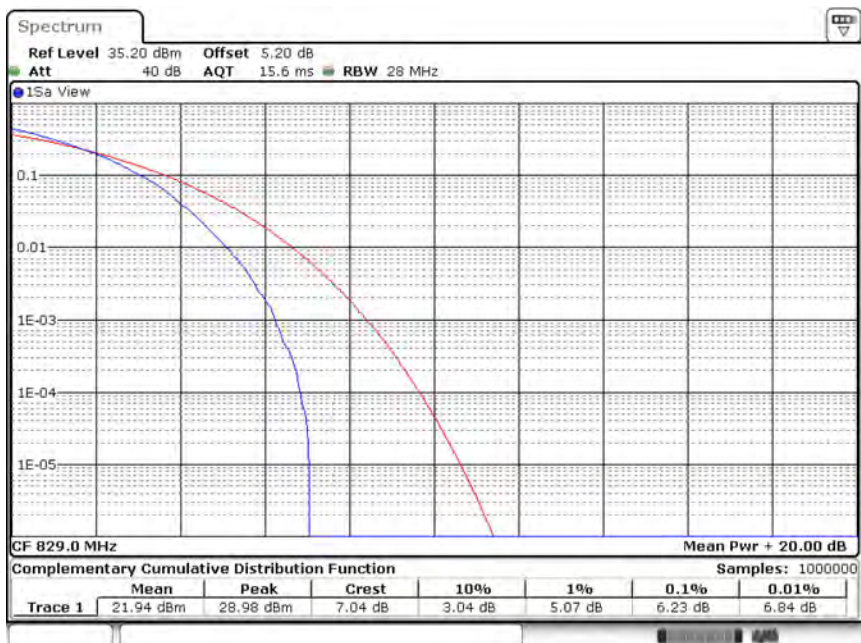
Date: 23 JUN 2020 12:34:49

Band5-10MHz-64QAM-20450-50RB#0



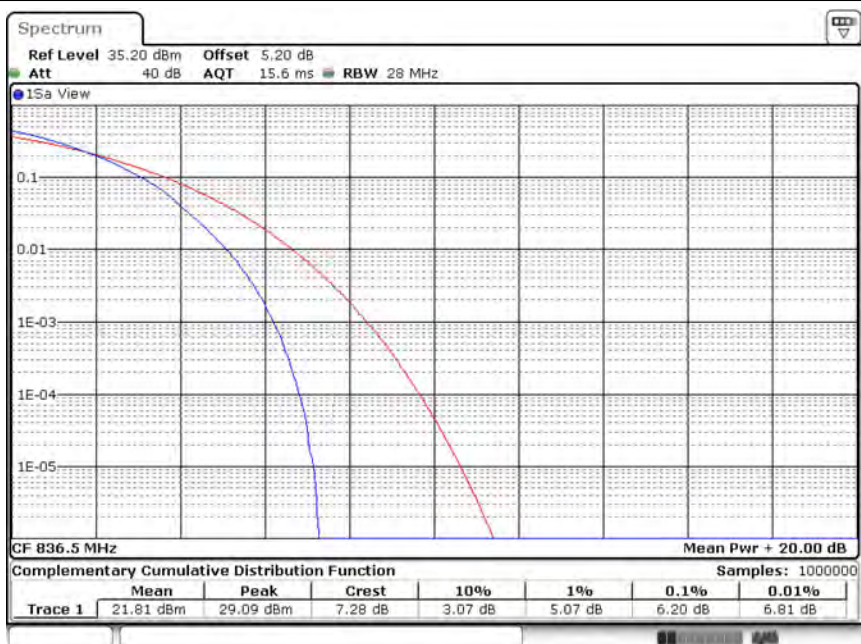
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No. 137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgs.com.cn
f (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN 2020 09:06:57

Band5-10MHz-64QAM-20525-50RB#0



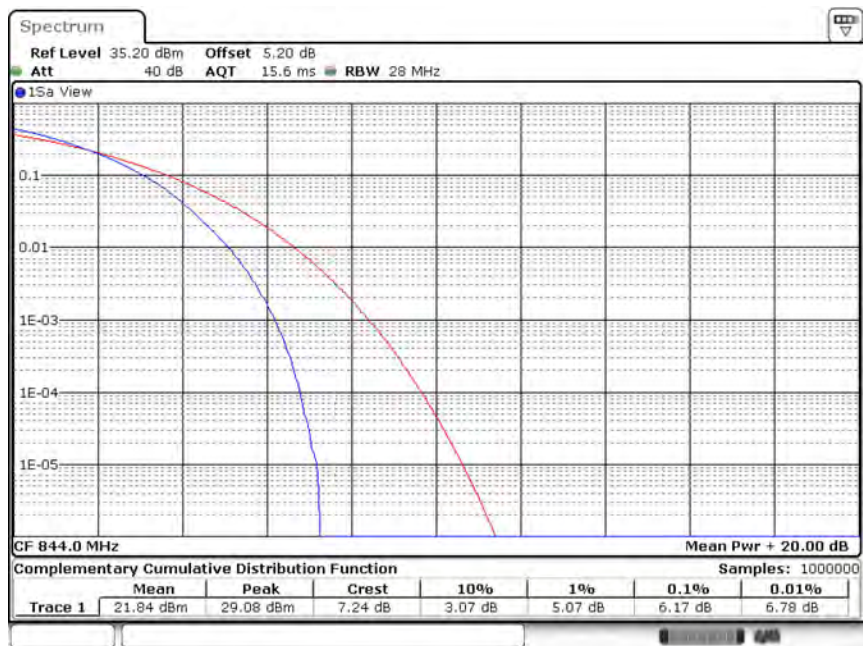
Date: 24 JUN 2020 09:07:09

Band5-10MHz-64QAM-20600-50RB#0



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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN 2020 09:07:20

Band5-10MHz-16QAM-20450-50RB#0



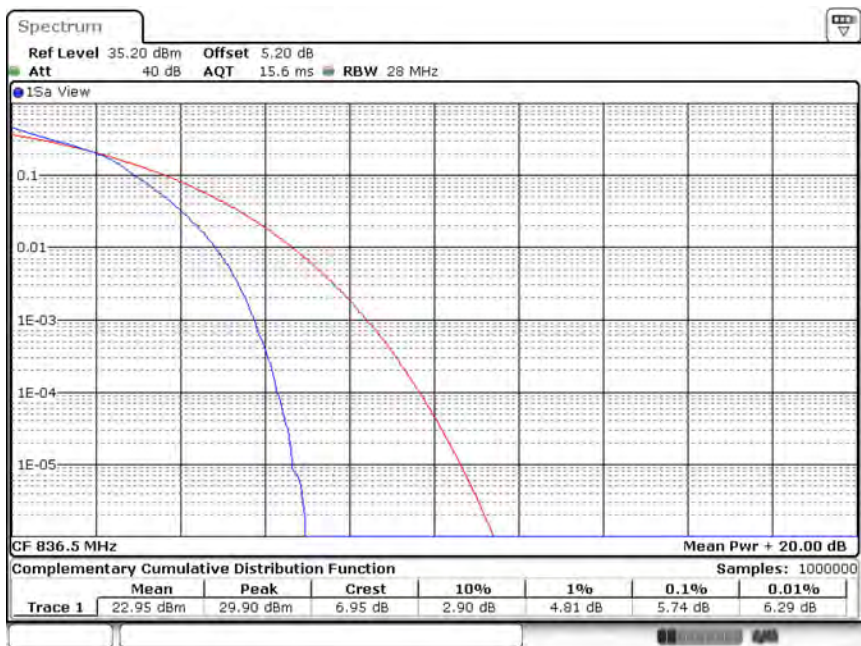
Date: 23 JUN 2020 12:34:15

Band5-10MHz-16QAM-20525-50RB#0



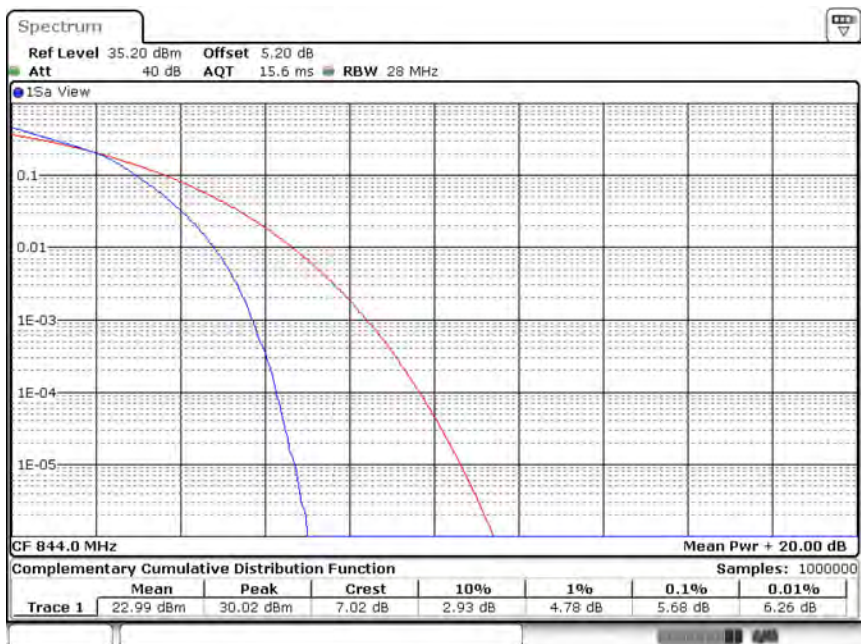
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN 2020 12:34:38

Band5-10MHz-16QAM-20600-50RB#0



Date: 23 JUN 2020 12:35:01



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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

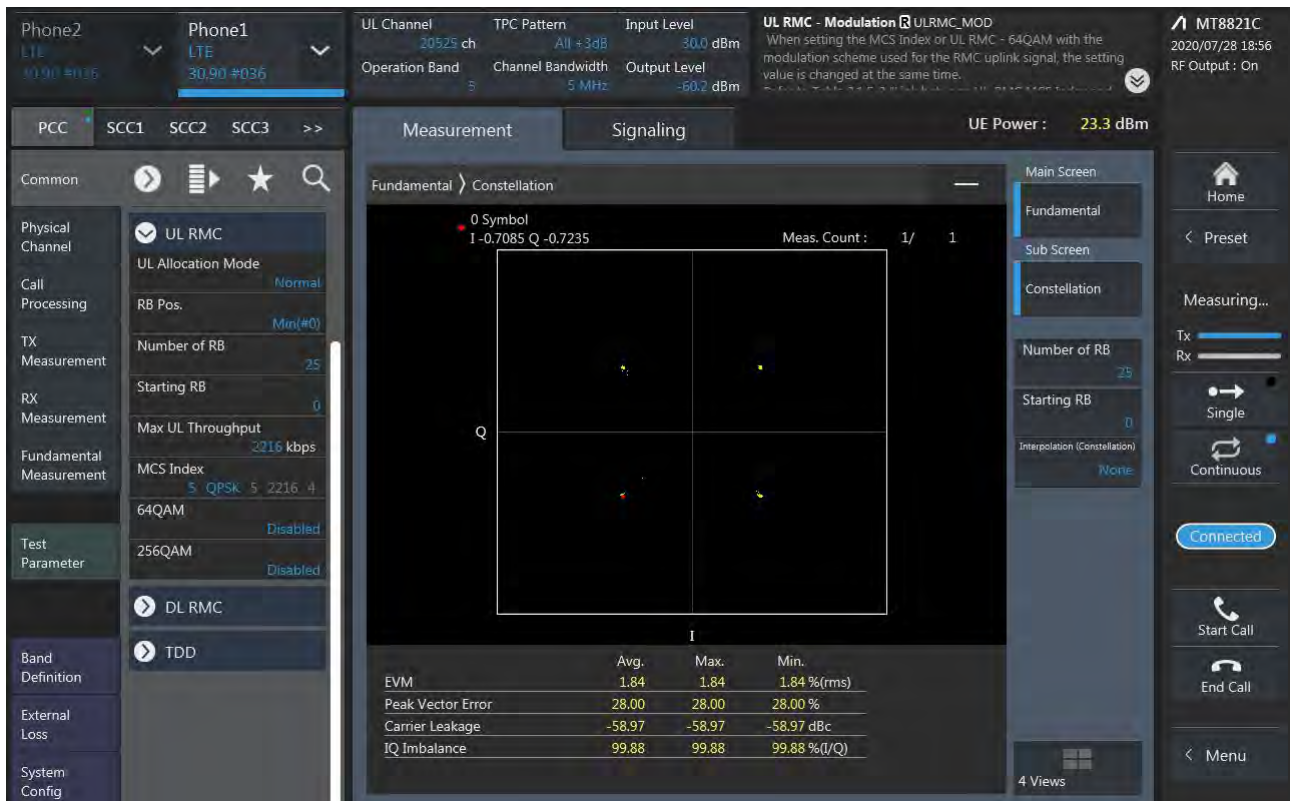
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 10MHz

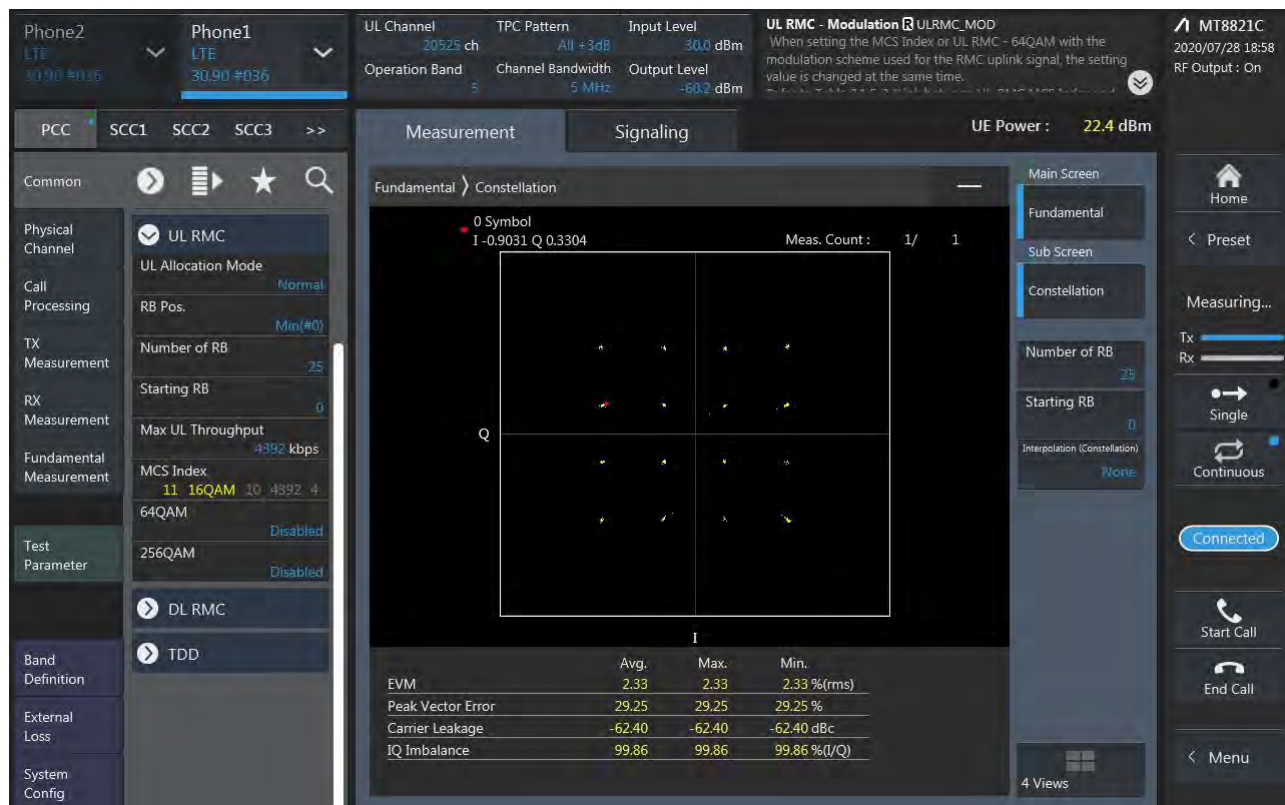
3.1.1. Test Channel = MCH





3.2. Test Mode = LTE /TM2 10MHz

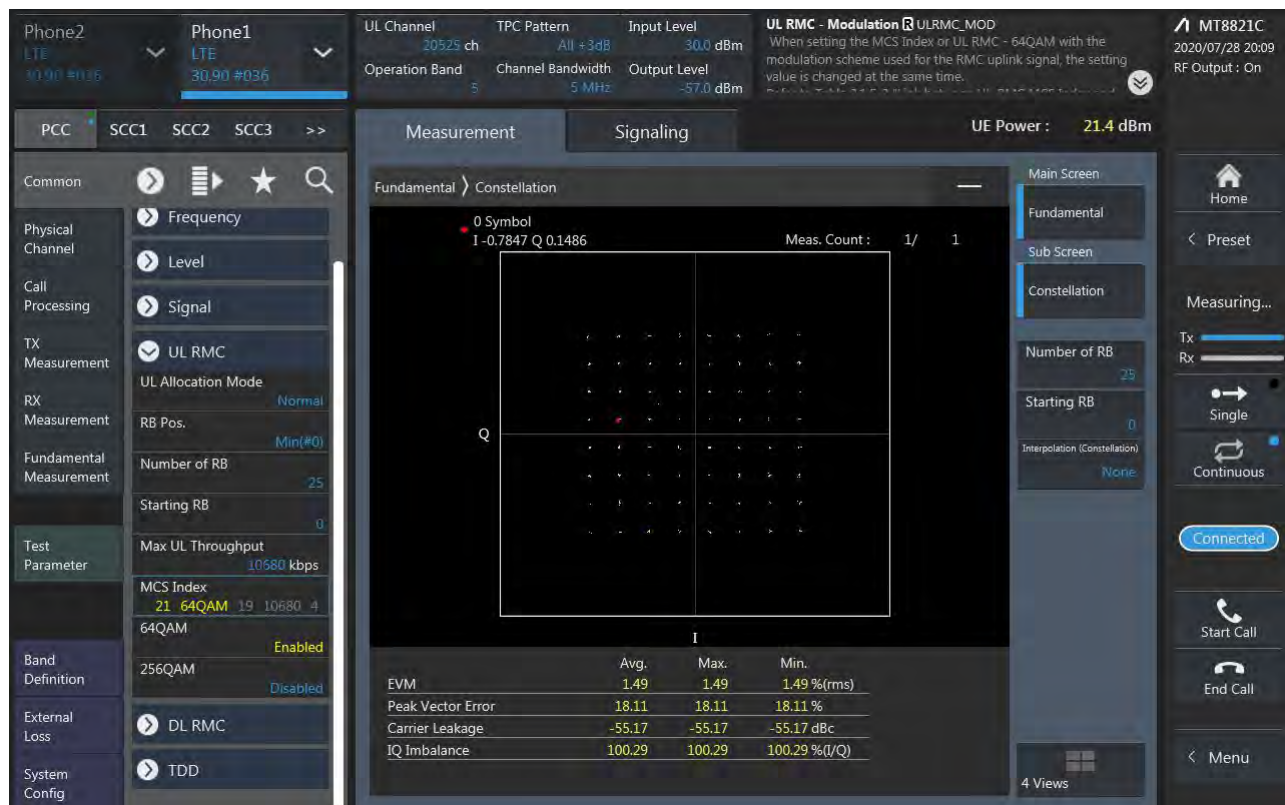
3.2.1. Test Channel = MCH





3.3. Test Mode = LTE /TM3 10MHz

3.3.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.091	1.302	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.091	1.290	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.091	1.287	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	1.094	1.284	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	1.094	1.287	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	1.094	1.287	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.091	1.293	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.091	1.287	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.091	1.293	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.691	2.922	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.685	2.916	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.691	2.922	PASS
Band5	3MHz	64QAM	20415	15RB#0	2.679	2.916	PASS
Band5	3MHz	64QAM	20525	15RB#0	2.679	2.904	PASS
Band5	3MHz	64QAM	20635	15RB#0	2.685	2.910	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.673	2.904	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.673	2.904	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.673	2.910	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.466	4.820	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.476	4.830	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.466	4.840	PASS
Band5	5MHz	64QAM	20425	25RB#0	4.466	4.820	PASS
Band5	5MHz	64QAM	20525	25RB#0	4.466	4.820	PASS
Band5	5MHz	64QAM	20625	25RB#0	4.476	4.830	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.476	4.820	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.486	4.860	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.850	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.951	9.620	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.931	9.580	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.951	9.640	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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

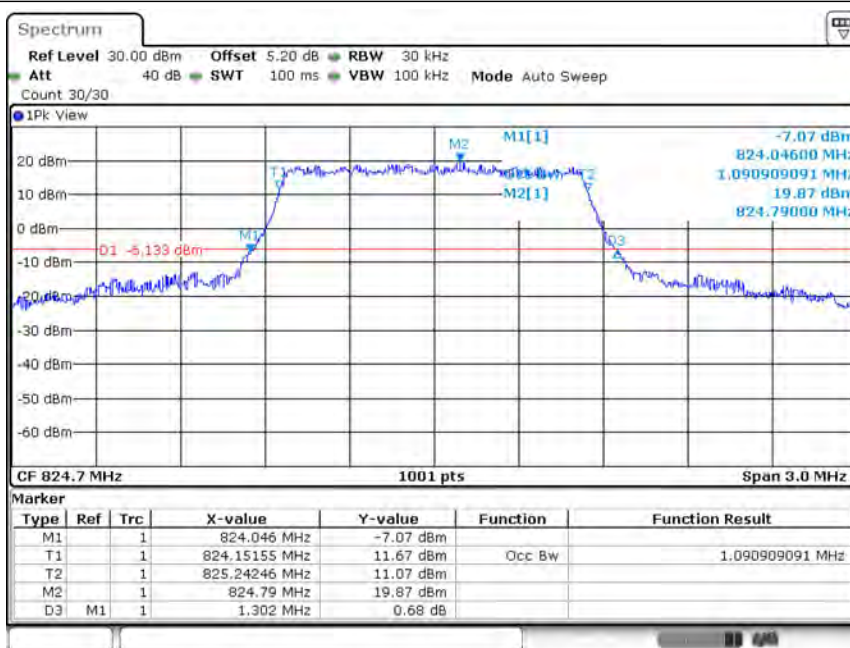
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	10MHz	64QAM	20450	50RB#0	8.931	9.620	PASS
Band5	10MHz	64QAM	20525	50RB#0	8.911	9.580	PASS
Band5	10MHz	64QAM	20600	50RB#0	8.931	9.580	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.951	10.260	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.931	9.640	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.931	9.560	PASS

4.2. Test Plots

Band5-1.4MHz-QPSK-20407-6RB#0-1.091



Date: 23 JUN 2020 12:07:37



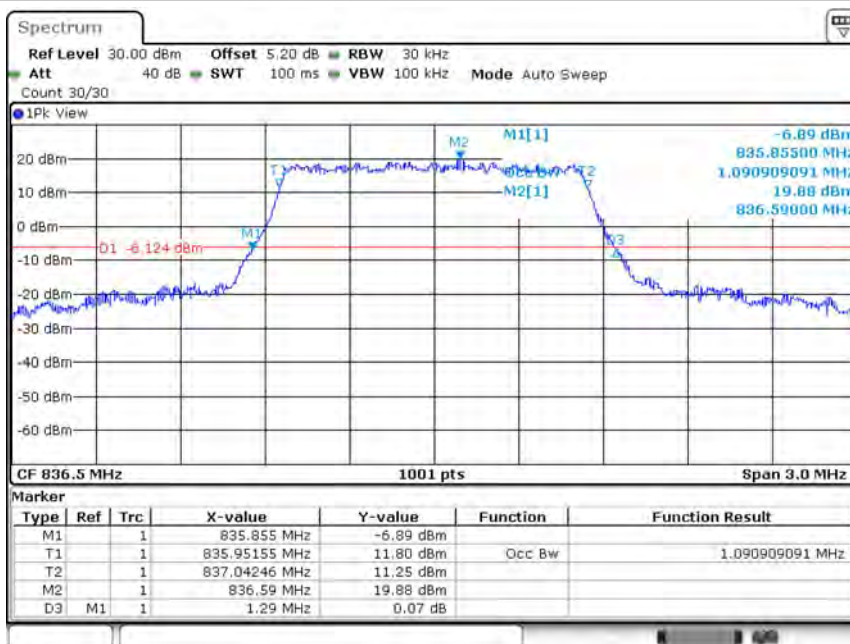
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

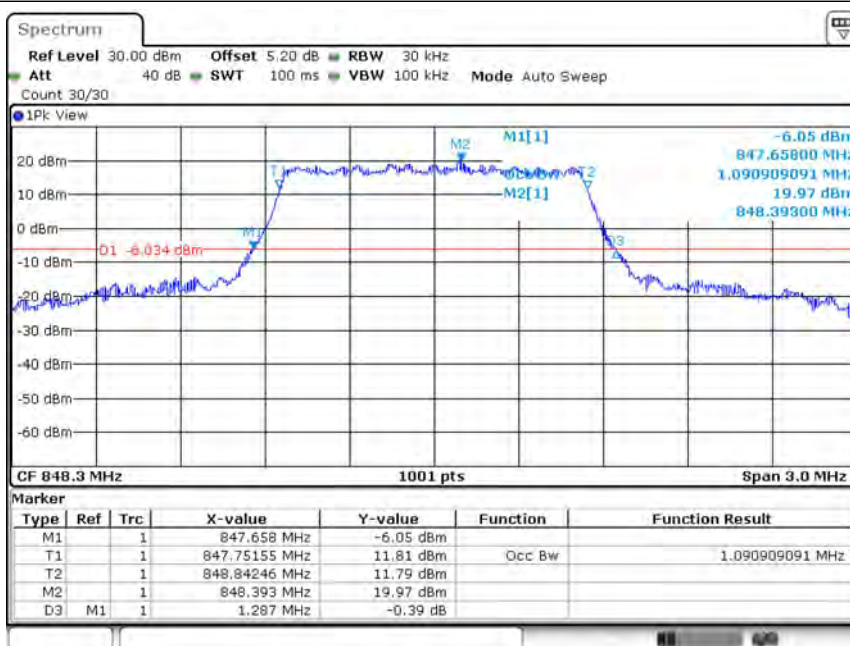
t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

Band5-1.4MHz-QPSK-20525-6RB#0-1.091



Date: 23 JUN 2020 12:08:03

Band5-1.4MHz-QPSK-20643-6RB#0-1.091



Date: 23 JUN 2020 12:08:28

Band5-1.4MHz-64QAM-20407-6RB#0-1.094

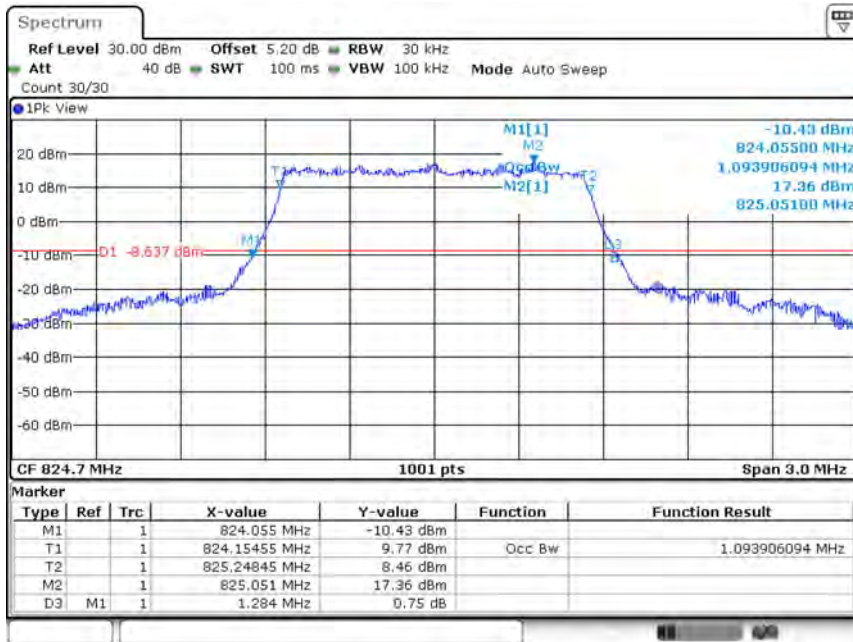


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

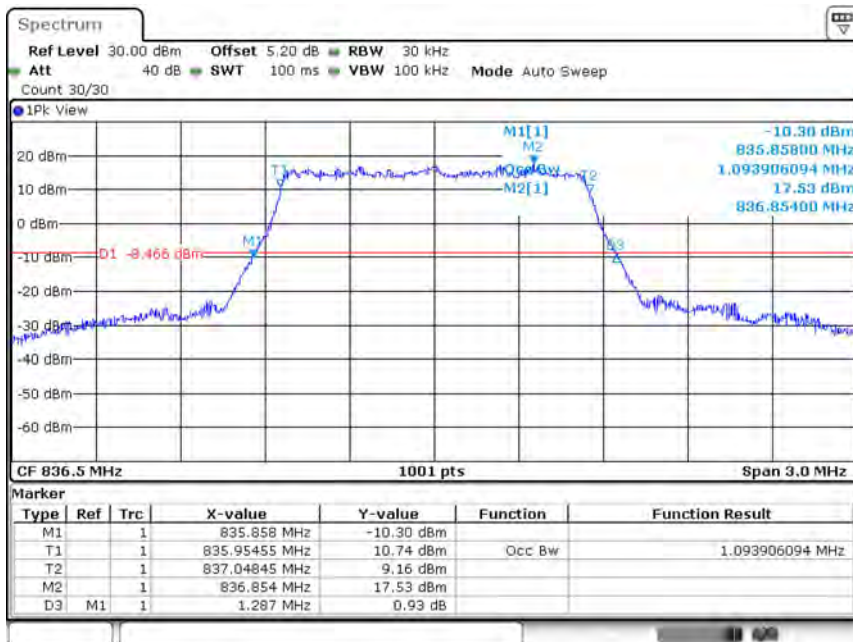
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN 2020 08:48:12

Band5-1.4MHz-64QAM-20525-6RB#0-1.094



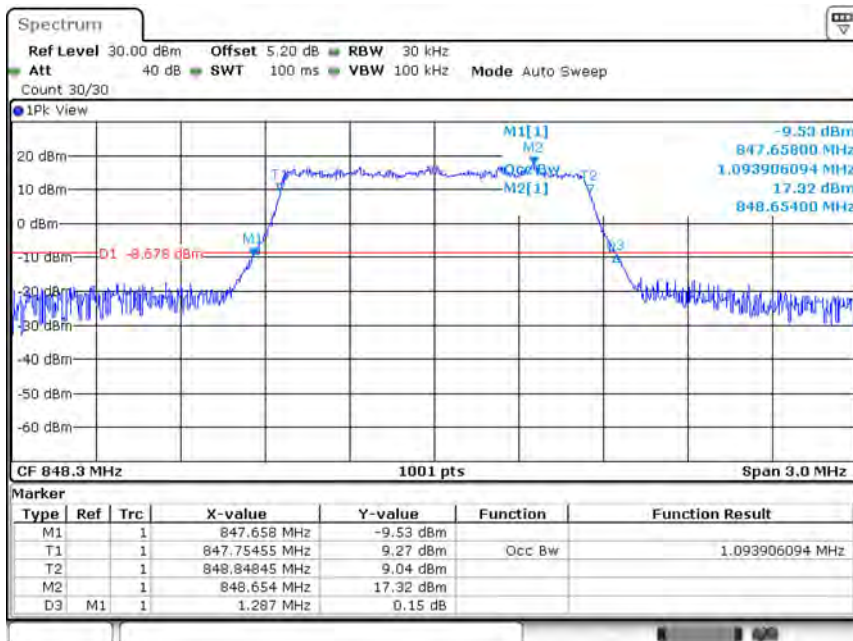
Date: 24 JUN 2020 08:48:25

Band5-1.4MHz-64QAM-20643-6RB#0-1.094



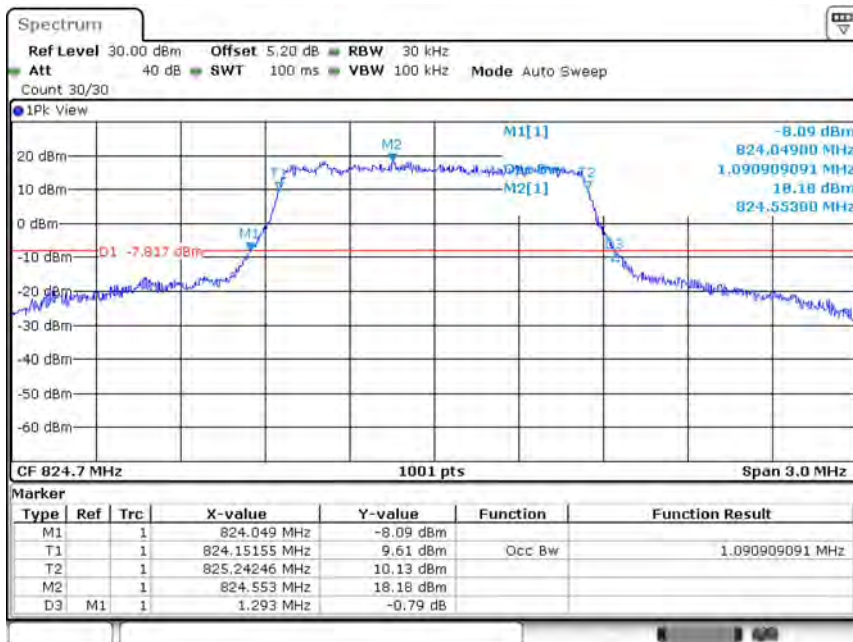
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN 2020 08:48:38

Band5-1.4MHz-16QAM-20407-6RB#0-1.091



Date: 23 JUN 2020 12:07:50

Band5-1.4MHz-16QAM-20525-6RB#0-1.091

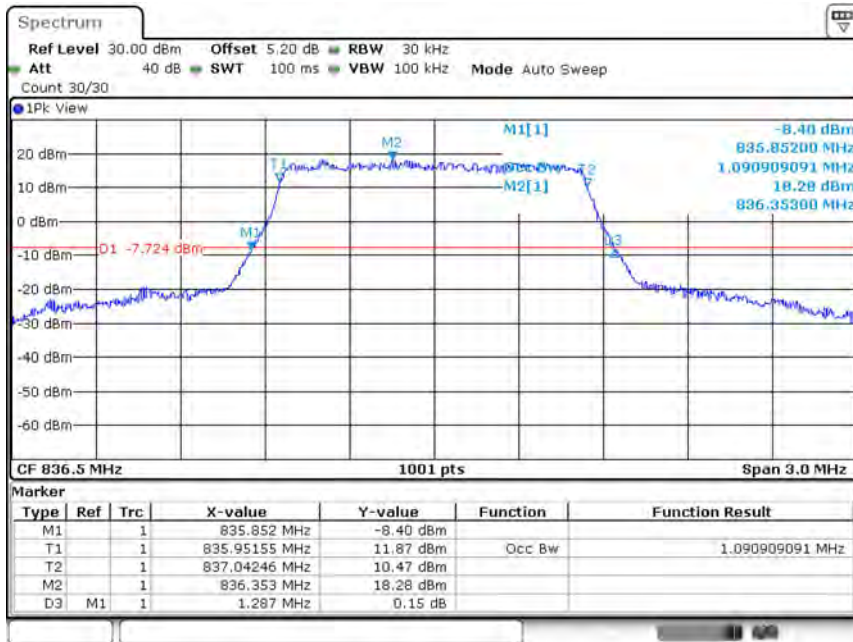


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

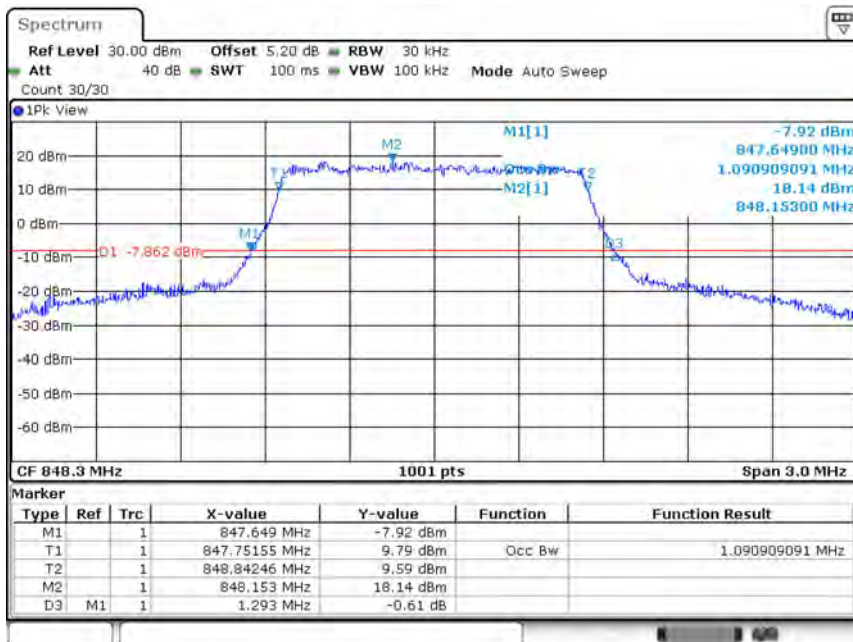
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date 23 JUN 2020 12:08:15

Band5-1.4MHz-16QAM-20643-6RB#0-1.091



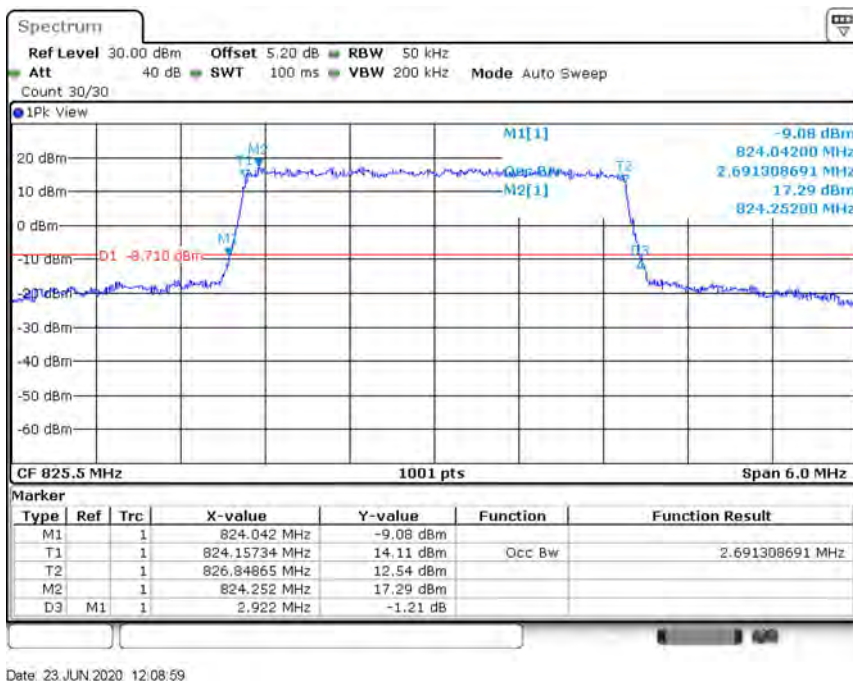
Date 23 JUN 2020 12:08:41

Band5-3MHz-QPSK-20415-15RB#0-2.691

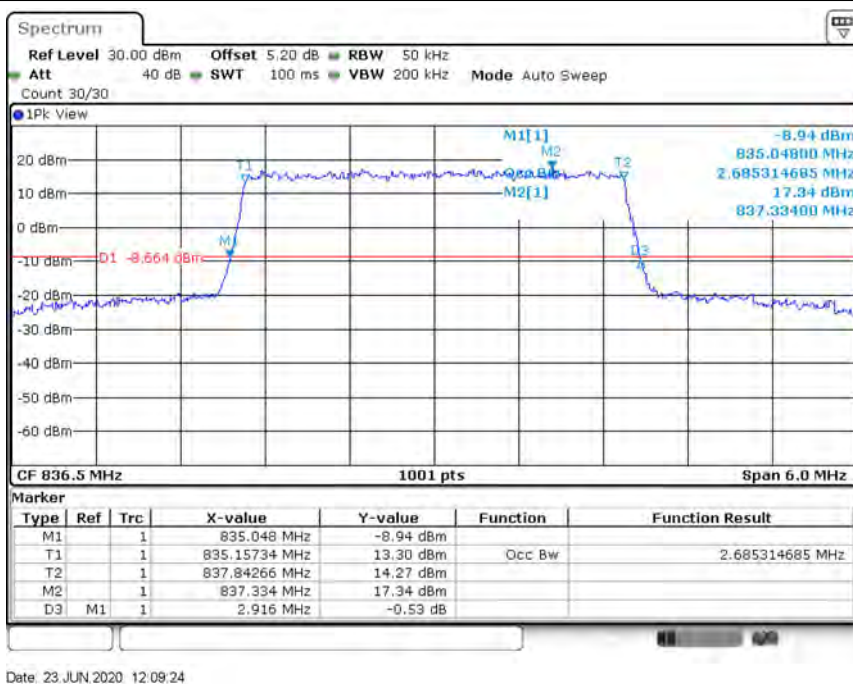


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
f (86-29) 6282 7885 sgs.china@sgs.com

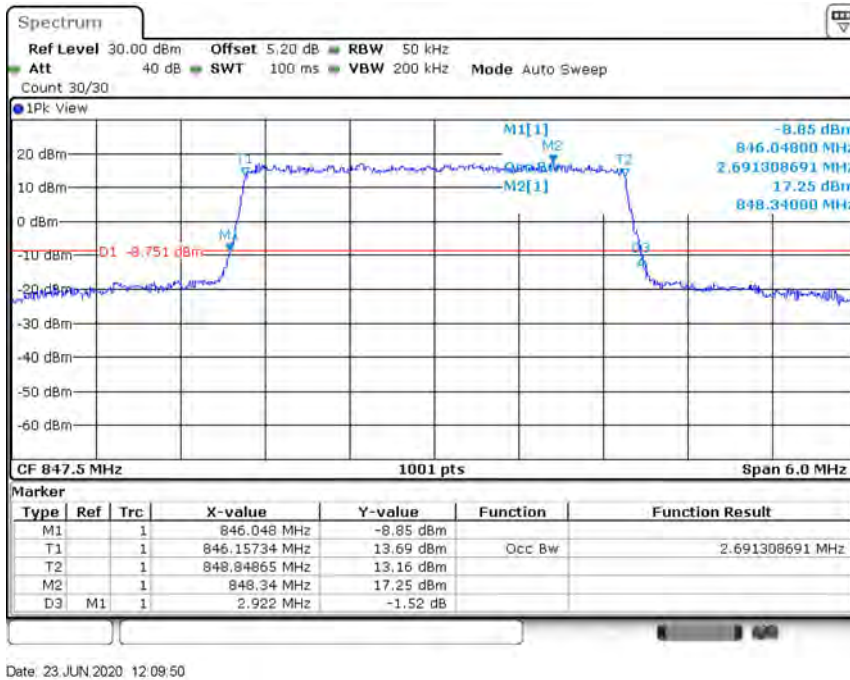


Band5-3MHz-QPSK-20525-15RB#0-2.685

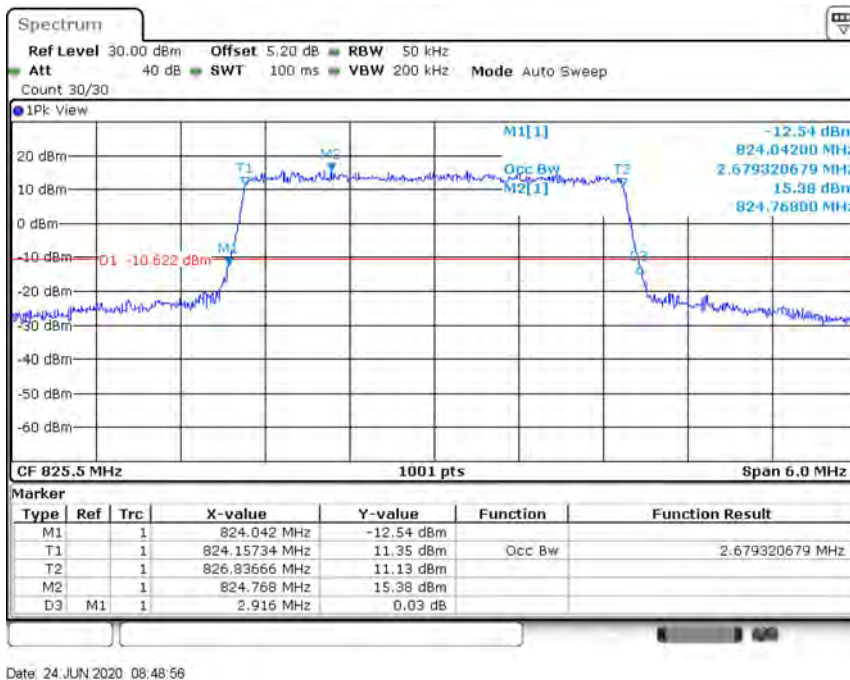


Band5-3MHz-QPSK-20635-15RB#0-2.691



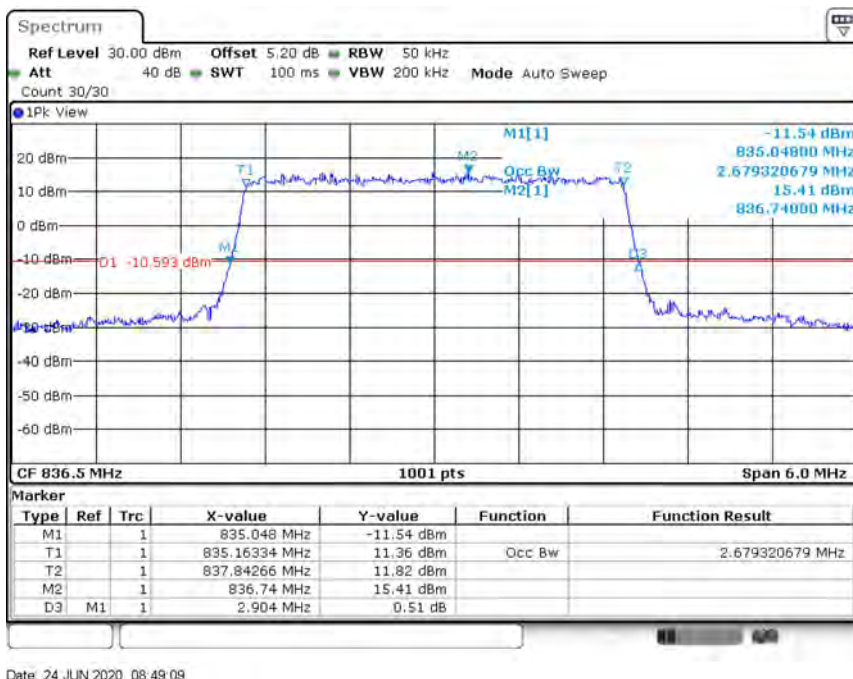


Band5-3MHz-64QAM-20415-15RB#0-2.679

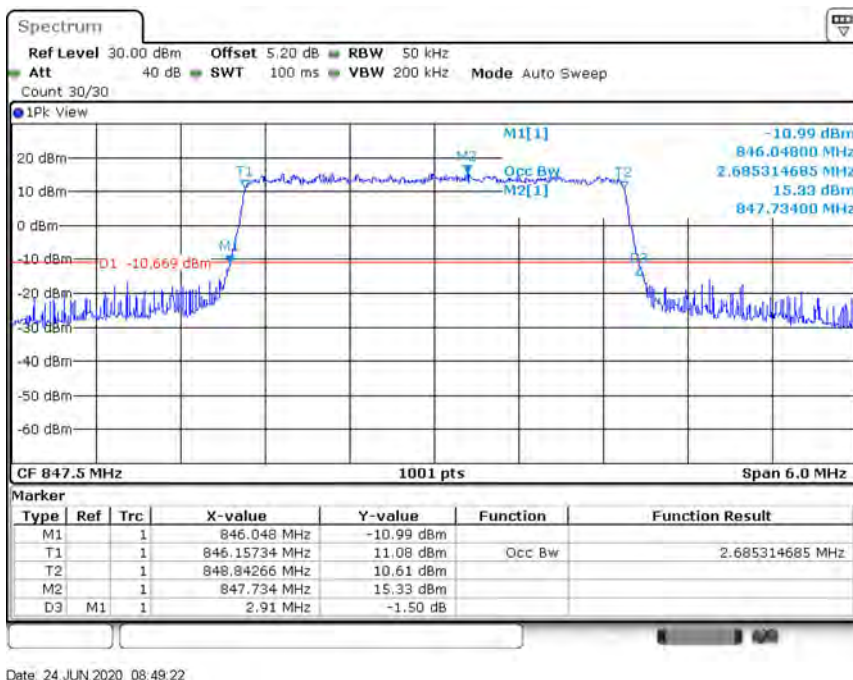


Band5-3MHz-64QAM-20525-15RB#0-2.679



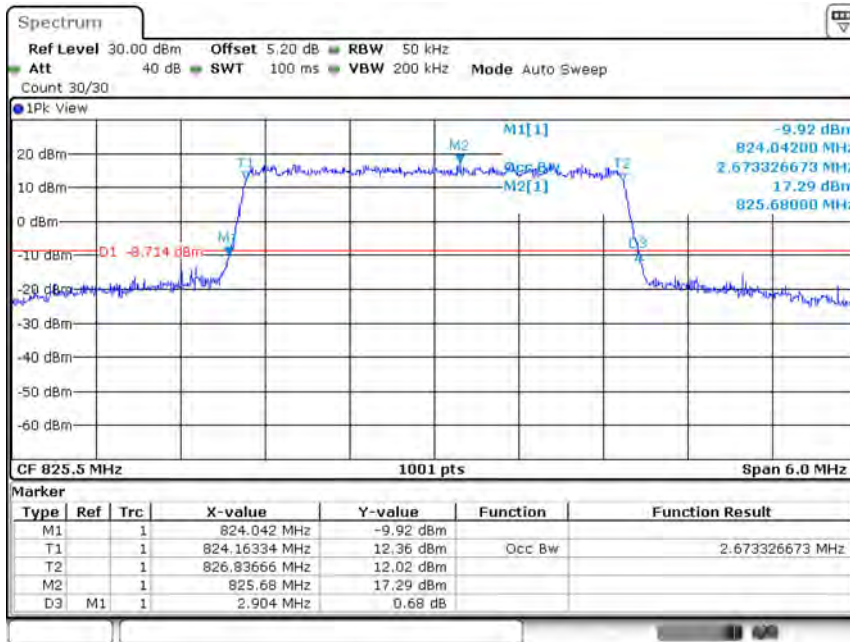


Band5-3MHz-64QAM-20635-15RB#0-2.685



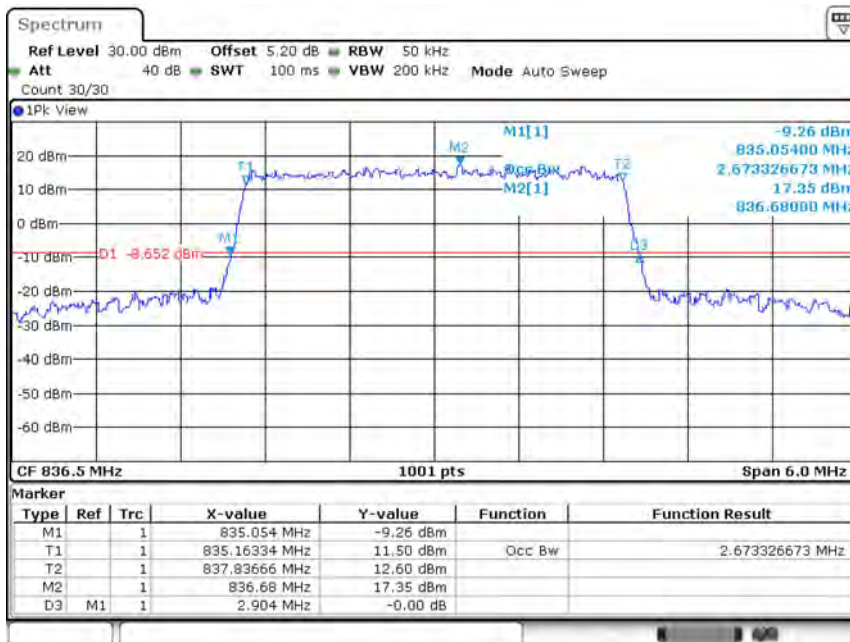
Band5-3MHz-16QAM-20415-15RB#0-2.673





Date 23 JUN 2020 12:09:11

Band5-3MHz-16QAM-20525-15RB#0-2.673



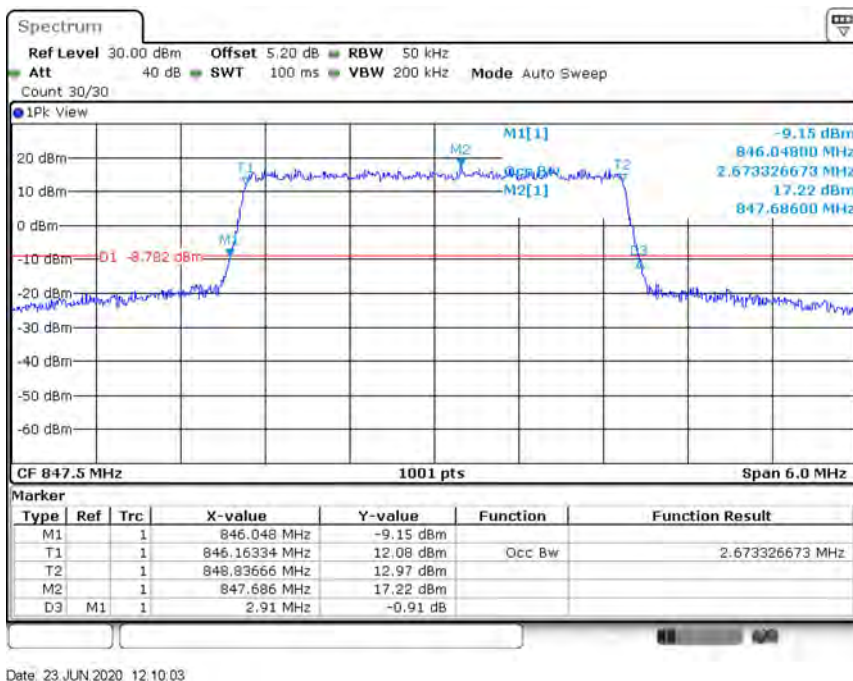
Date 23 JUN 2020 12:09:37

Band5-3MHz-16QAM-20635-15RB#0-2.673

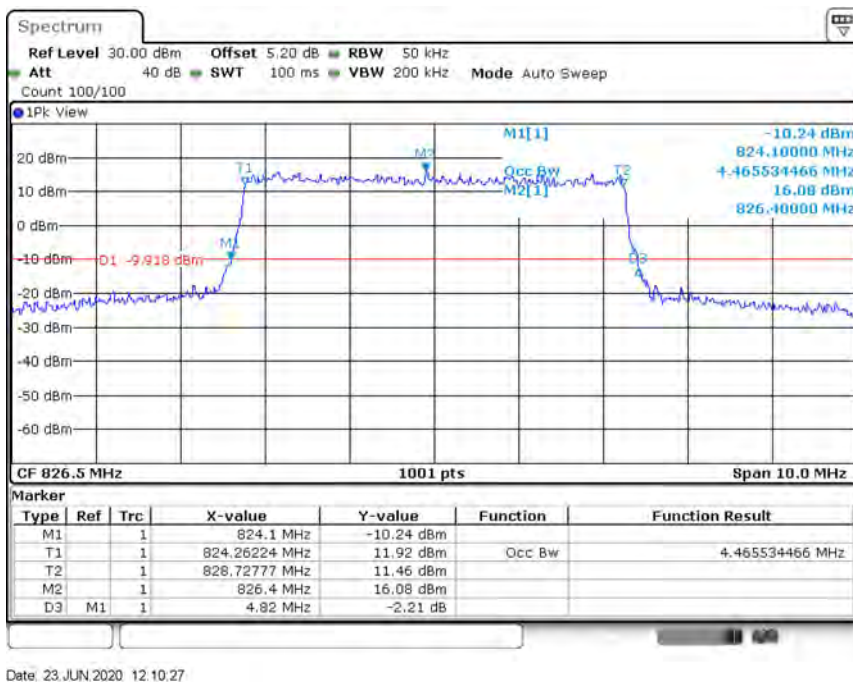


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

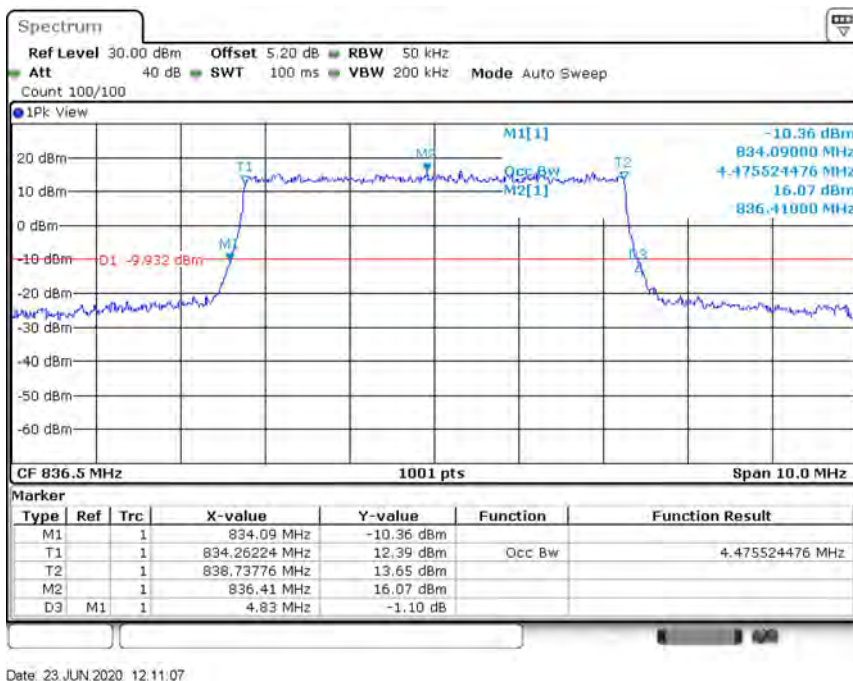


Band5-5MHz-QPSK-20425-25RB#0-4.466

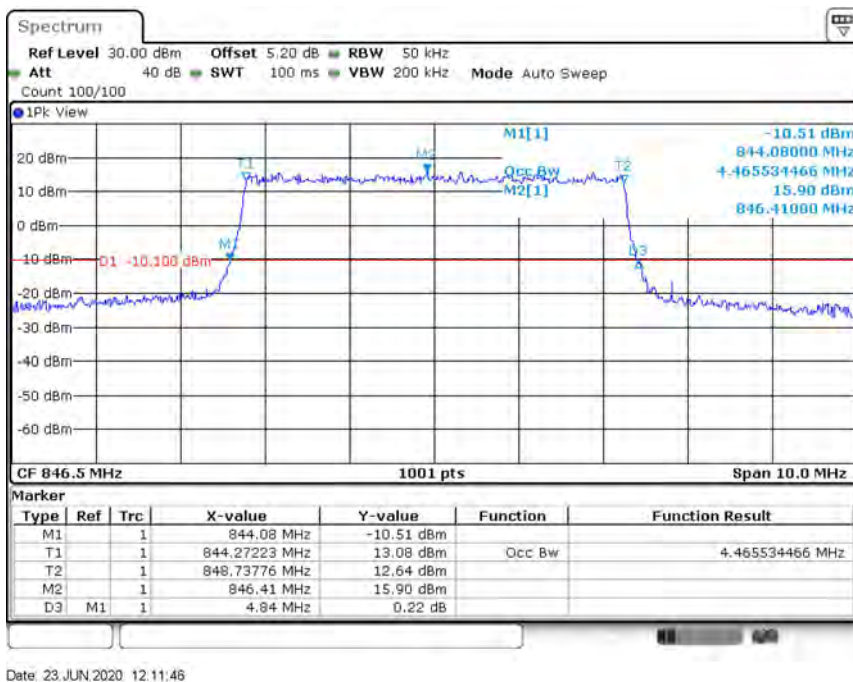


Band5-5MHz-QPSK-20525-25RB#0-4.476



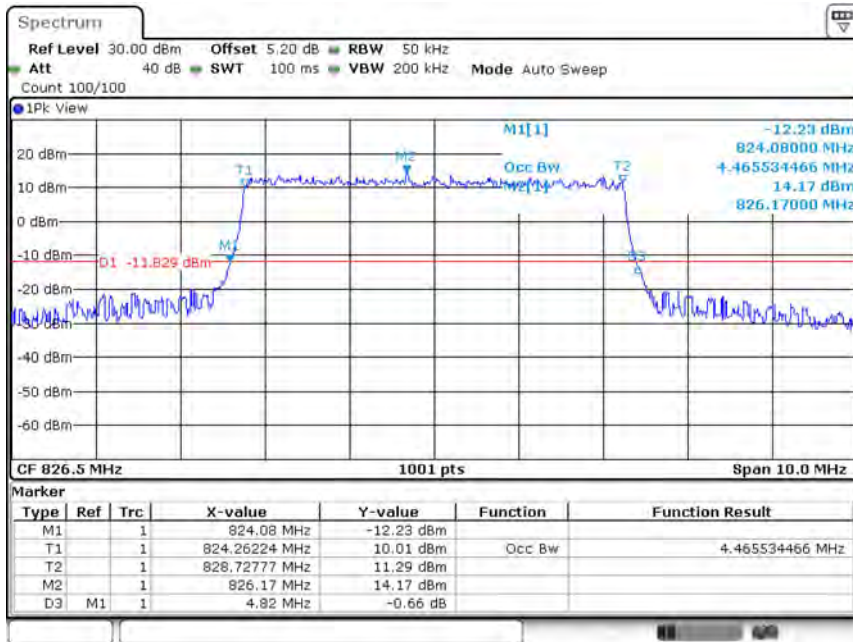


Band5-5MHz-QPSK-20625-25RB#0-4.466



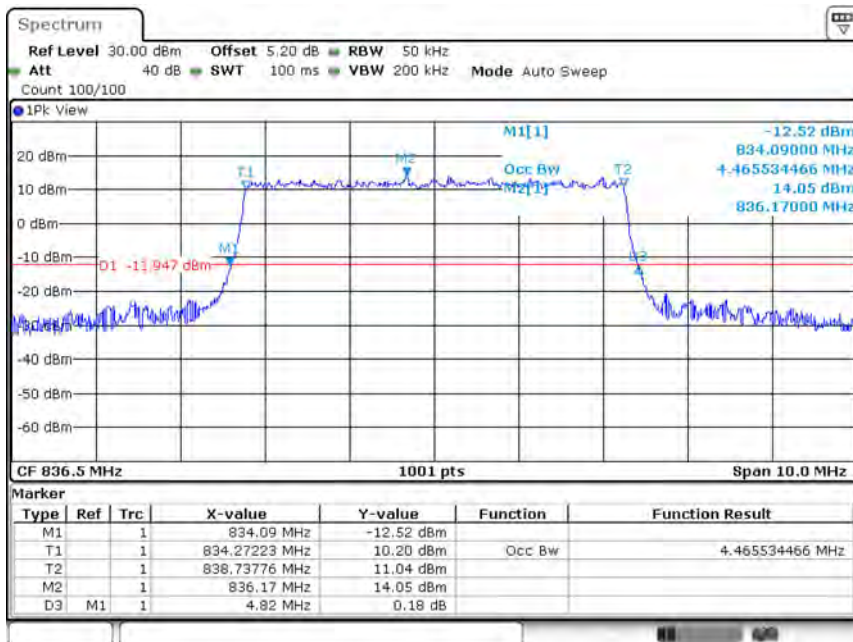
Band5-5MHz-64QAM-20425-25RB#0-4.466





Date: 24 JUN 2020 08:49:47

Band5-5MHz-64QAM-20525-25RB#0-4.466



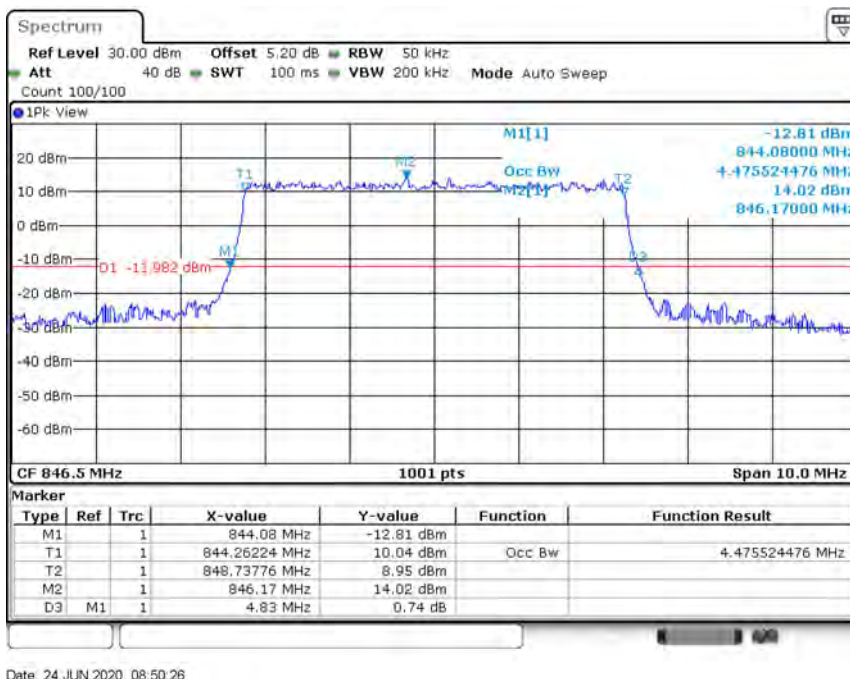
Date: 24 JUN 2020 08:50:07

Band5-5MHz-64QAM-20625-25RB#0-4.476

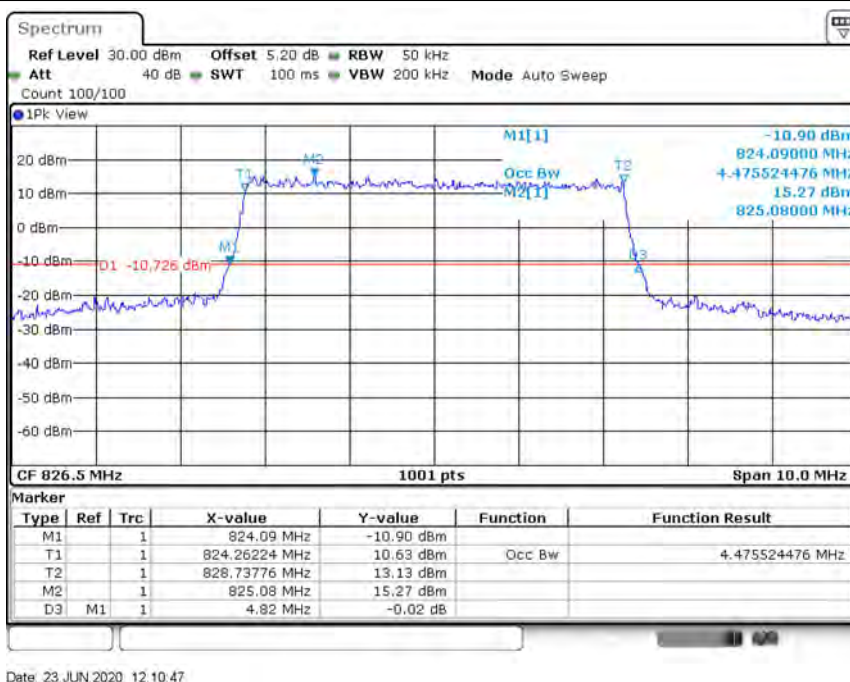


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgs.com.cn
f (86-29) 6282 7885 sgs.china@sgs.com

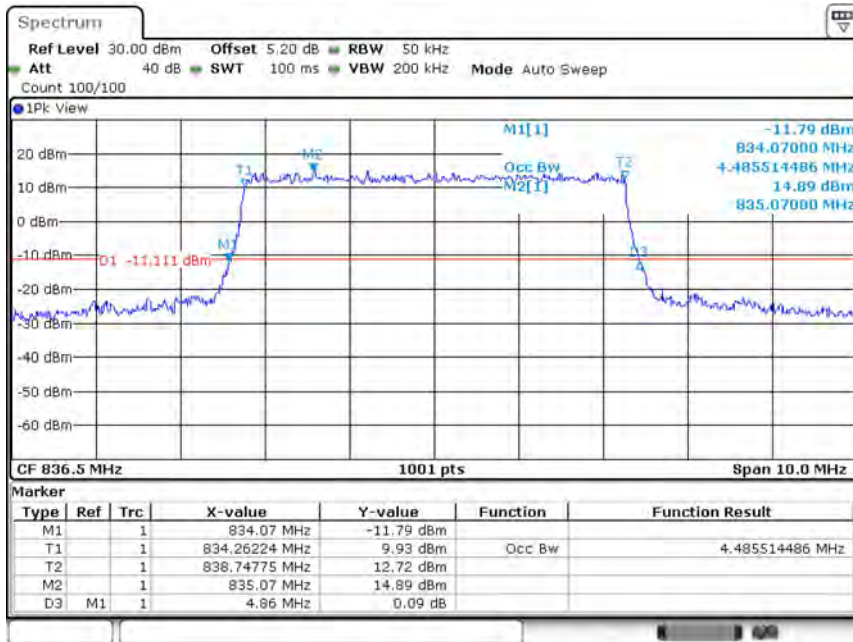


Band5-5MHz-16QAM-20425-25RB#0-4.476



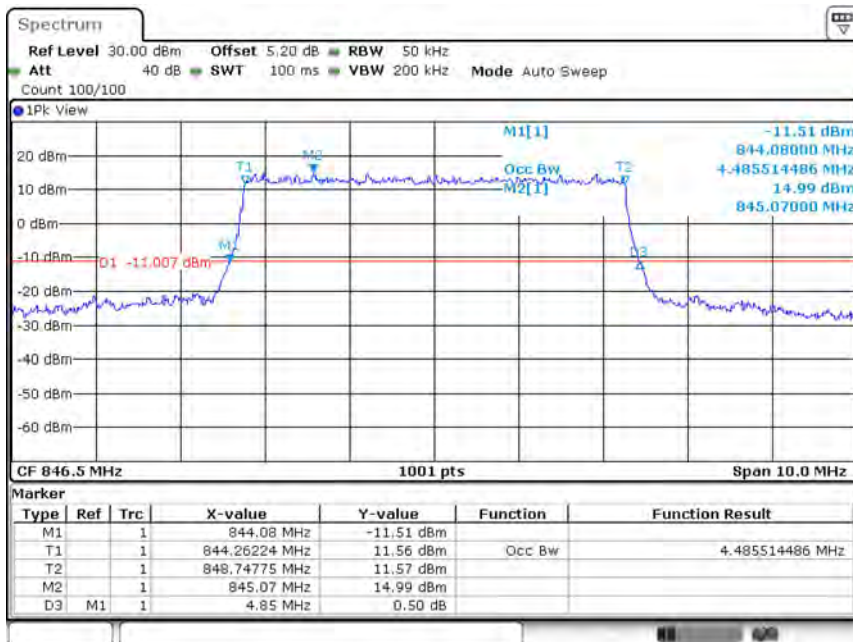
Band5-5MHz-16QAM-20525-25RB#0-4.486





Date 23 JUN 2020 12:11:26

Band5-5MHz-16QAM-20625-25RB#0-4.486



Date 23 JUN 2020 12:12:06

Band5-10MHz-QPSK-20450-50RB#0-8.951



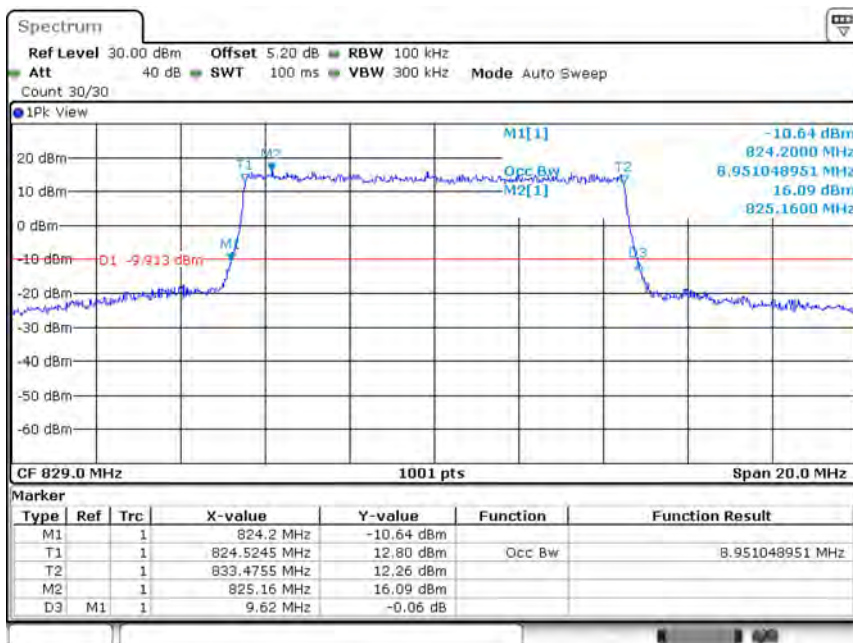
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

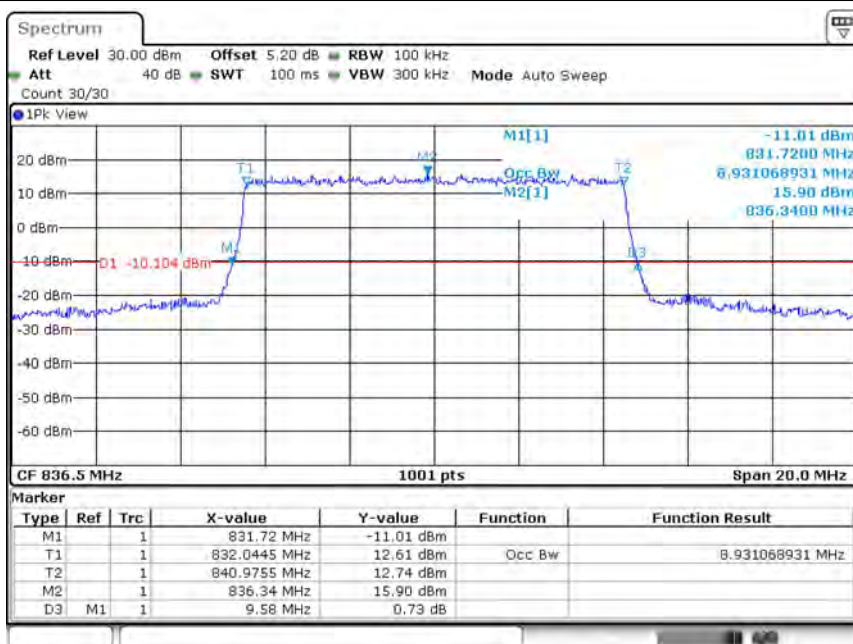
t (86-29) 6282 7885 www.sgsgroup.com.cn
f (86-29) 6282 7885 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Date 23 JUN 2020 12:12:24

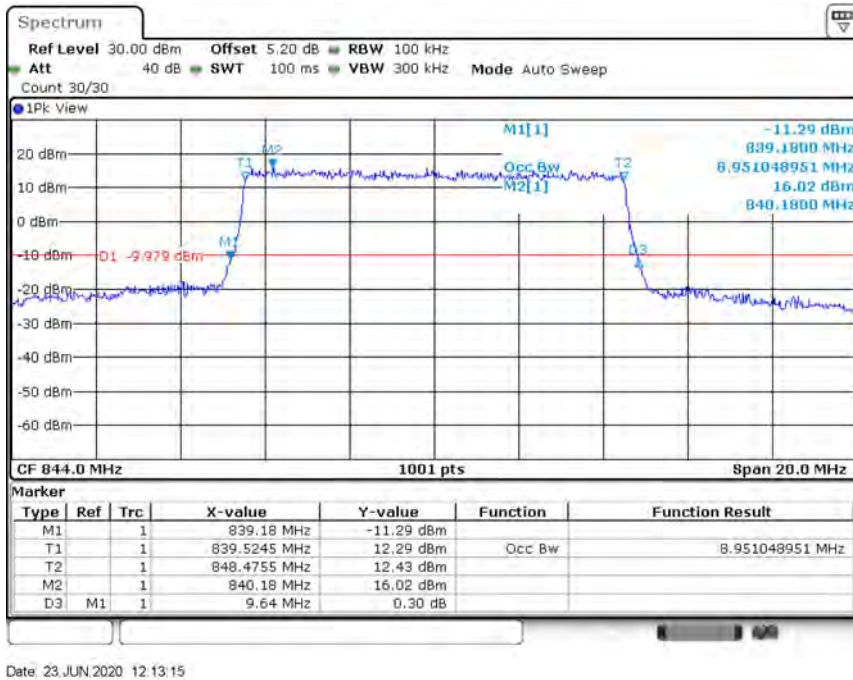
Band5-10MHz-QPSK-20525-50RB#0-8.931



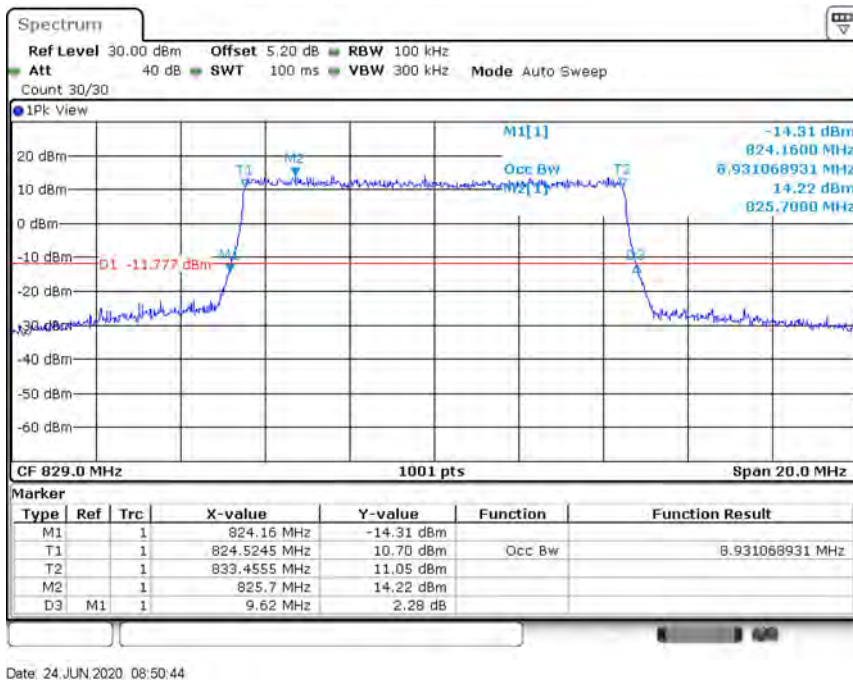
Date 23 JUN 2020 12:12:49

Band5-10MHz-QPSK-20600-50RB#0-8.951



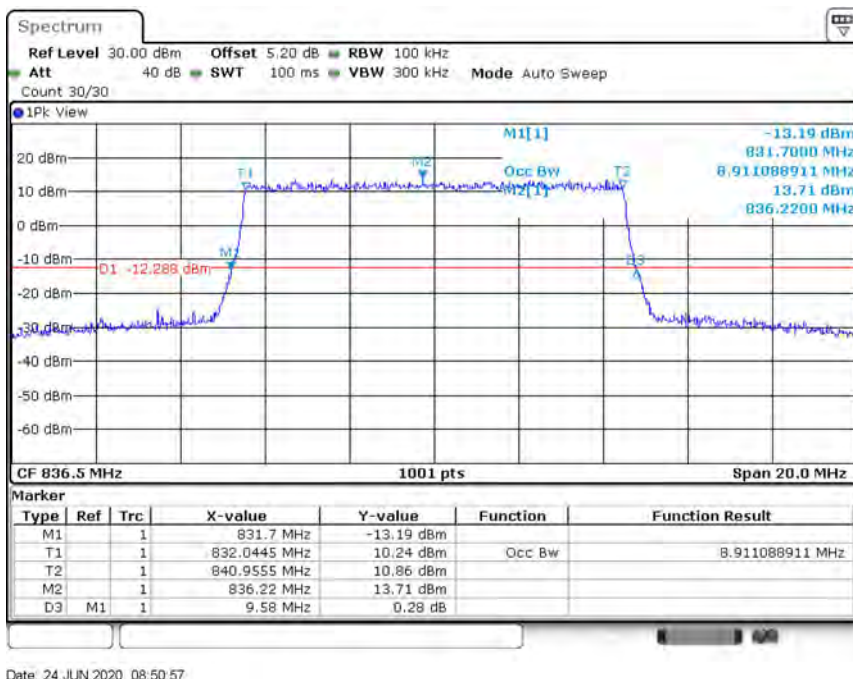


Band5-10MHz-64QAM-20450-50RB#0-8.931

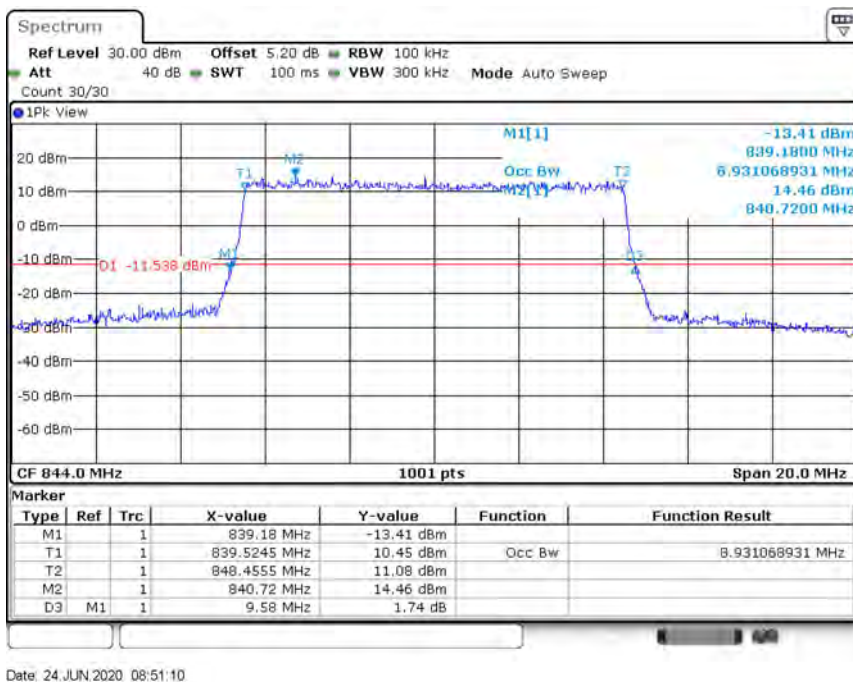


Band5-10MHz-64QAM-20525-50RB#0-8.911



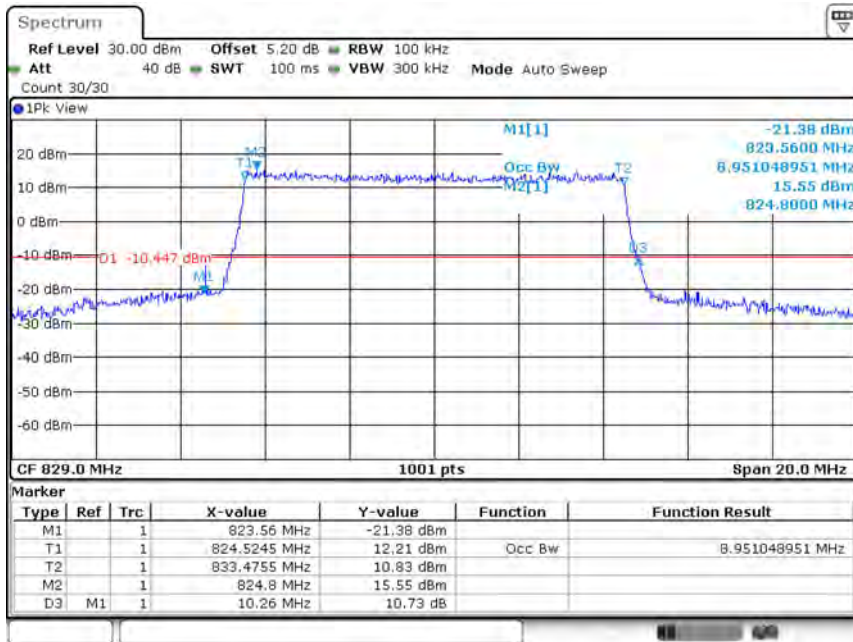


Band5-10MHz-64QAM-20600-50RB#0-8.931



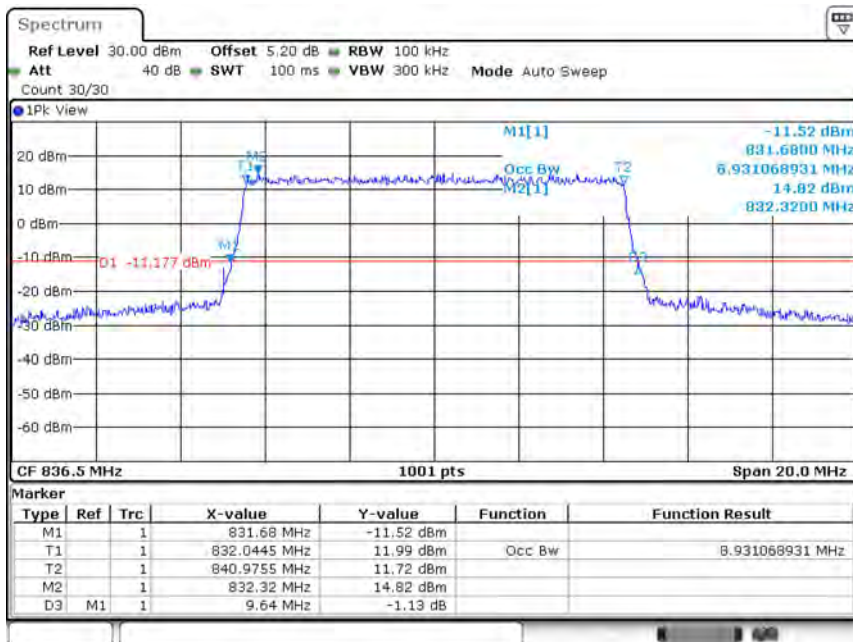
Band5-10MHz-16QAM-20450-50RB#0-8.951





Date: 23 JUN 2020 12:12:36

Band5-10MHz-16QAM-20525-50RB#0-8.931



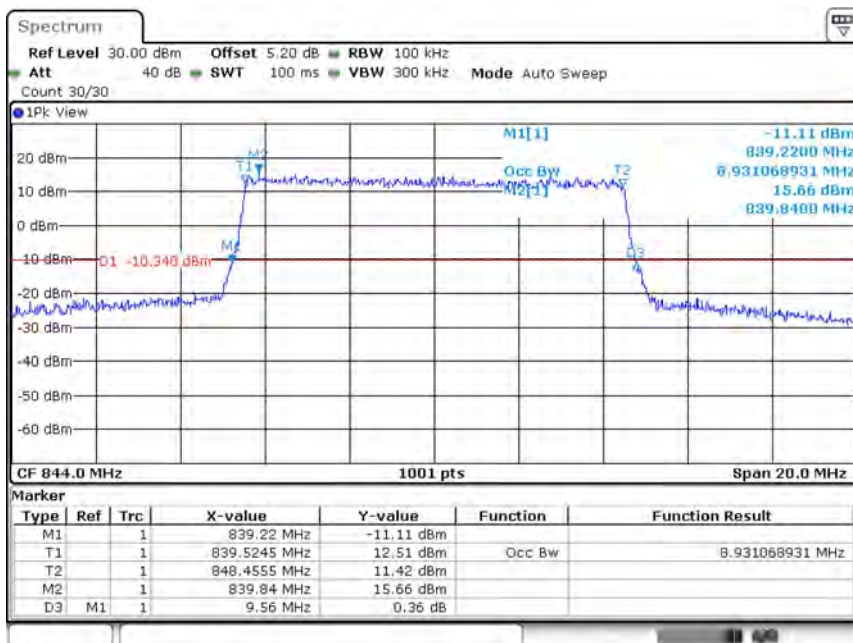
Date: 23 JUN 2020 12:13:02

Band5-10MHz-16QAM-20600-50RB#0-8.931



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
1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date 23 JUN 2020 12:13:27



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-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

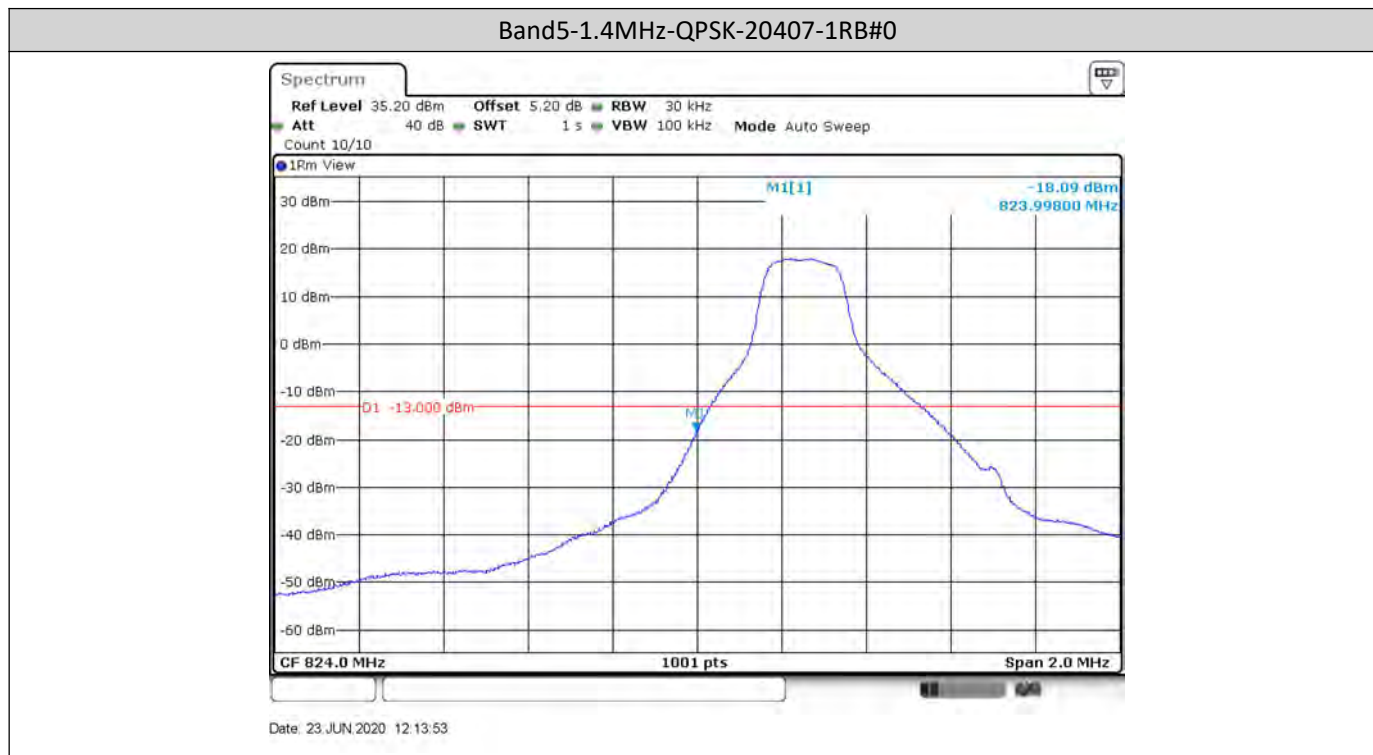
11/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



5. Band Edge Compliance

5.1. Test Plots



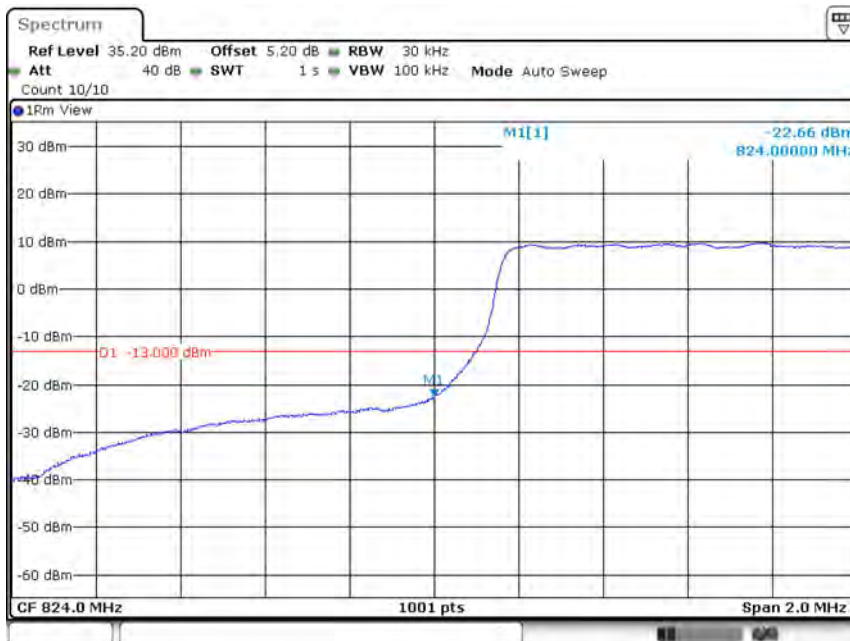
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

Band5-1.4MHz-QPSK-20407-6RB#0



Date: 23 JUN 2020 12:14:34

Band5-1.4MHz-QPSK-20643-1RB#5



Date: 23 JUN 2020 12:15:19

Band5-1.4MHz-QPSK-20643-6RB#0



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
 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
 t (86-29) 6282 7885 www.sgs.com.cn
 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:16:00

Band5-1.4MHz-64QAM-20407-1RB#0



Date: 24 JUN.2020 08:51:36

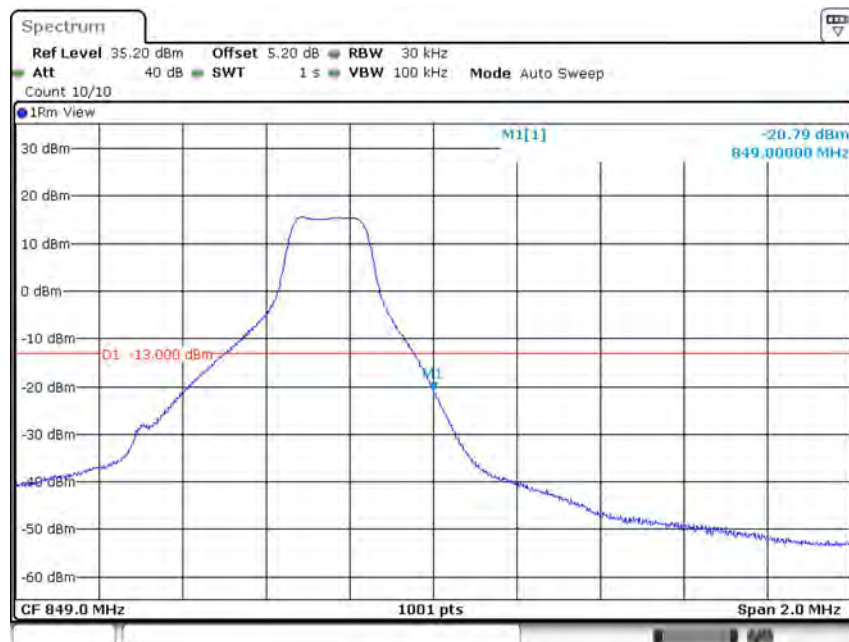
Band5-1.4MHz-64QAM-20407-6RB#0





Date: 24 JUN.2020 08:51:56

Band5-1.4MHz-64QAM-20643-1RB#5



Date: 24 JUN.2020 08:52:22

Band5-1.4MHz-64QAM-20643-6RB#0



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

11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Date: 24 JUN.2020 08:52:42

Band5-1.4MHz-16QAM-20407-1RB#0



Date: 23 JUN.2020 12:14:13

Band5-1.4MHz-16QAM-20407-6RB#0



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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:14:55

Band5-1.4MHz-16QAM-20643-1RB#5



Date: 23 JUN.2020 12:15:40

Band5-1.4MHz-16QAM-20643-6RB#0



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 (Xi'an) Co., Ltd. 11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:16:21

Band5-3MHz-QPSK-20415-1RB#0



Date: 23 JUN.2020 12:16:46

Band5-3MHz-QPSK-20415-15RB#0



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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:17:27

Band5-3MHz-QPSK-20635-1RB#14



Date: 23 JUN.2020 12:18:13

Band5-3MHz-QPSK-20635-15RB#0



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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:18:54

Band5-3MHz-64QAM-20415-1RB#0



Date: 24 JUN.2020 08:58:05

Band5-3MHz-64QAM-20415-15RB#0



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

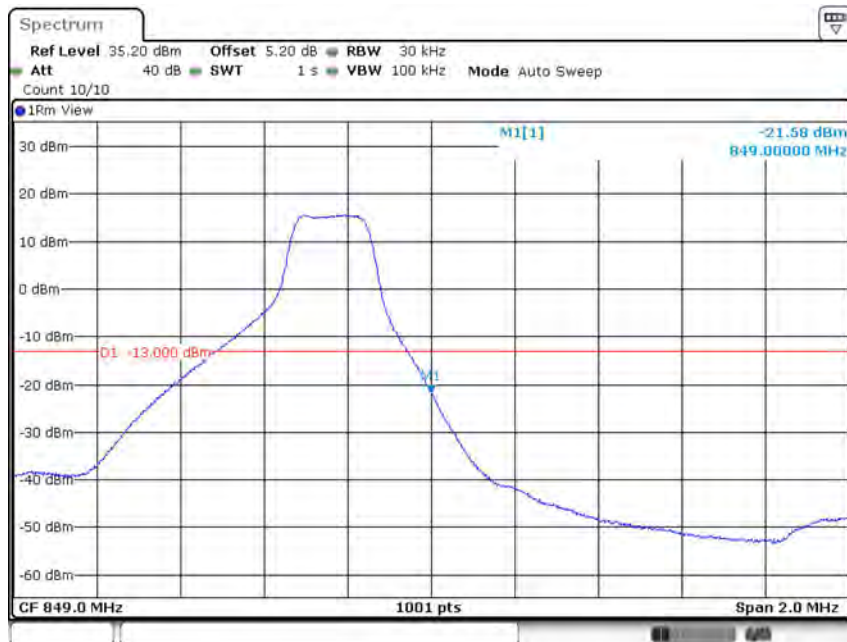
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 08:58:26

Band5-3MHz-64QAM-20635-1RB#14



Date: 24 JUN.2020 08:58:51

Band5-3MHz-64QAM-20635-15RB#0



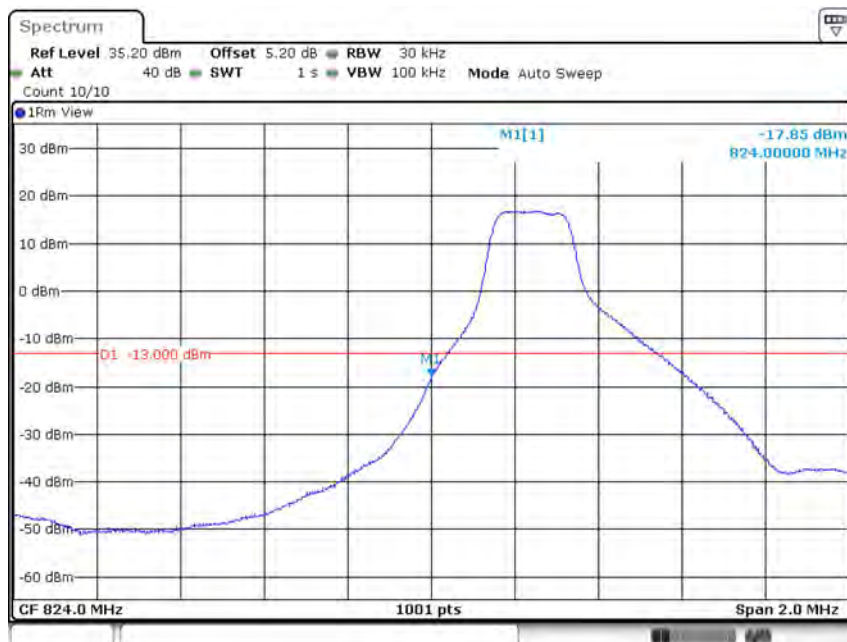
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
 1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
 t (86-29) 6282 7885 www.sgsgroup.com.cn
 f (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 08:59:11

Band5-3MHz-16QAM-20415-1RB#0



Date: 23 JUN.2020 12:17:07

Band5-3MHz-16QAM-20415-15RB#0



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 (Xi'an) Co., Ltd.
11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN 2020 12:17:48

Band5-3MHz-16QAM-20635-1RB#14



Date: 23 JUN 2020 12:18:33

Band5-3MHz-16QAM-20635-15RB#0



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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn

中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:19:14

Band5-5MHz-QPSK-20425-1RB#0



Date: 23 JUN.2020 12:19:39

Band5-5MHz-QPSK-20425-25RB#0



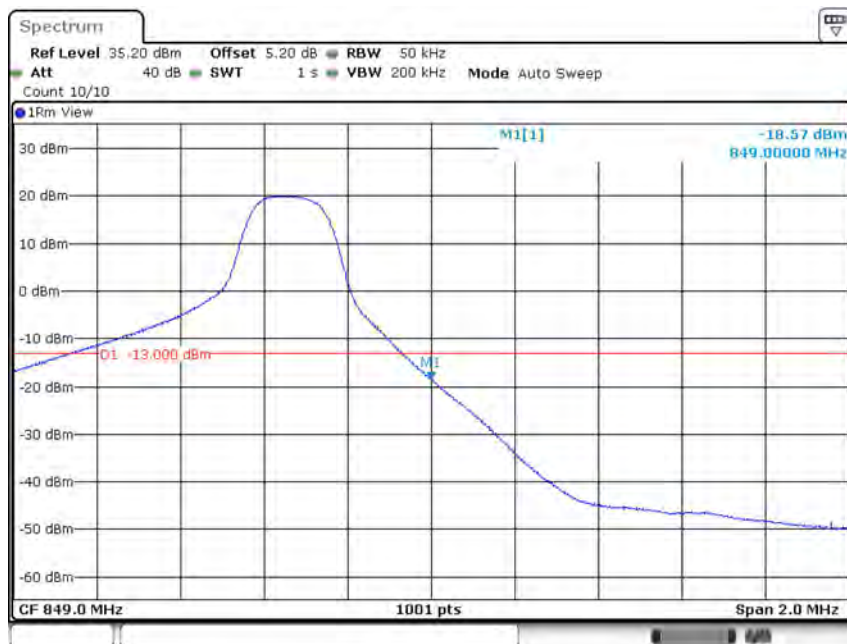
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:20:21

Band5-5MHz-QPSK-20625-1RB#24



Date: 23 JUN.2020 12:21:06

Band5-5MHz-QPSK-20625-25RB#0

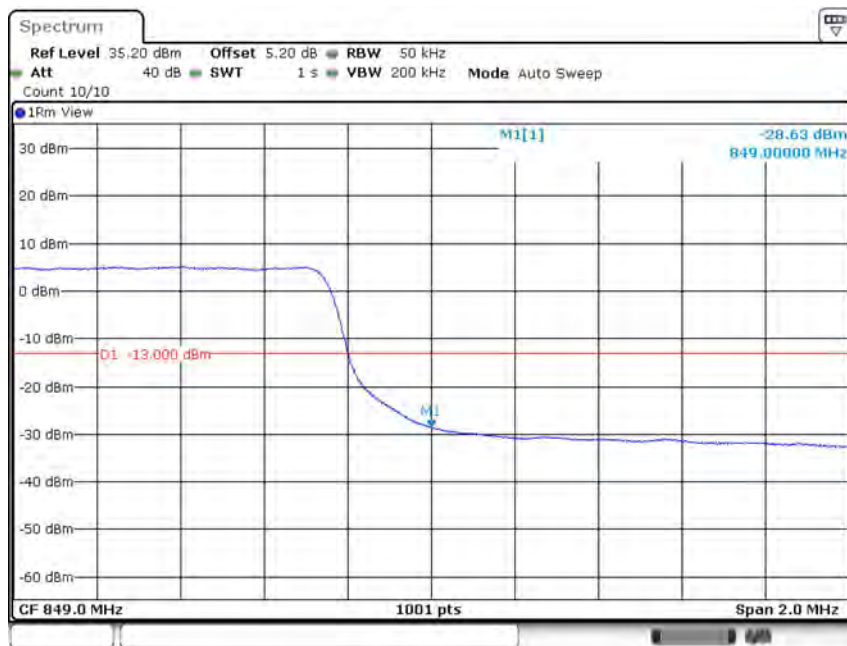


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN 2020 12:21:47

Band5-5MHz-64QAM-20425-1RB#0



Date: 24 JUN 2020 08:59:37

Band5-5MHz-64QAM-20425-25RB#0



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.

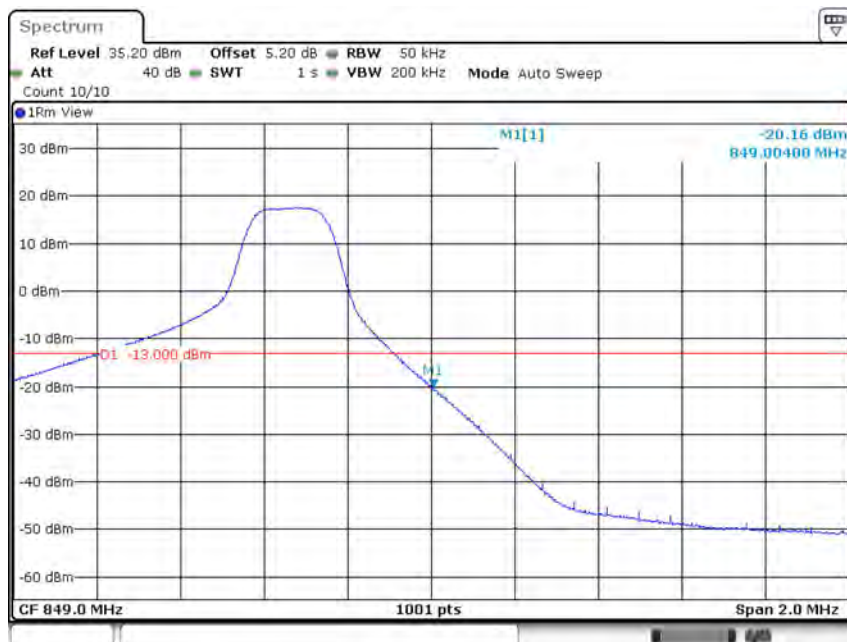
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 08:59:57

Band5-5MHz-64QAM-20625-1RB#24



Date: 24 JUN.2020 09:00:23

Band5-5MHz-64QAM-20625-25RB#0

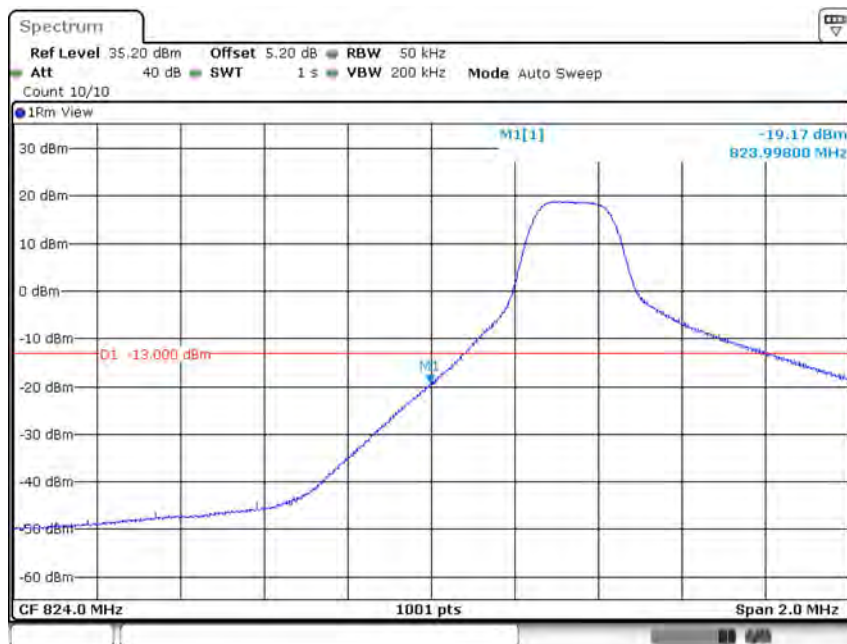


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 09:00:43

Band5-5MHz-16QAM-20425-1RB#0



Date: 23 JUN.2020 12:20:00

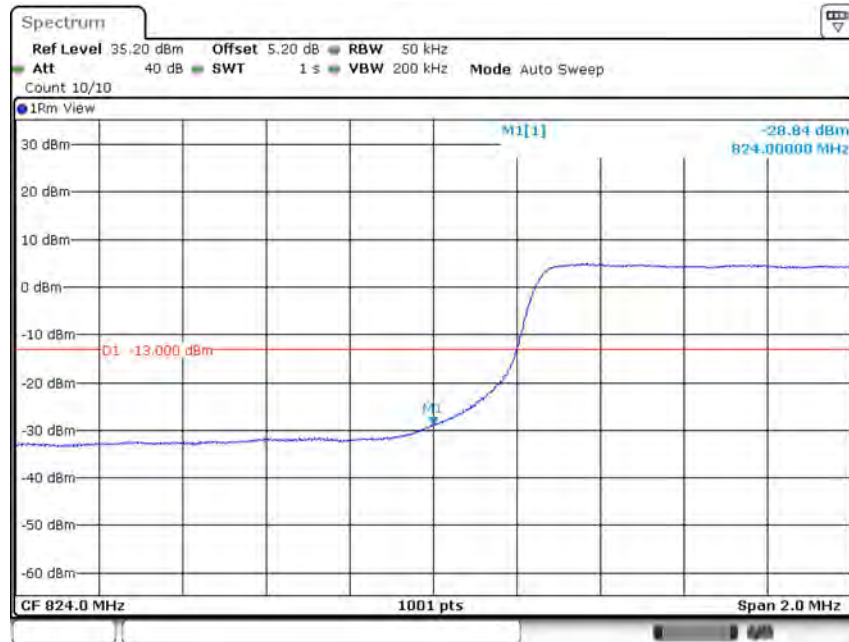
Band5-5MHz-16QAM-20425-25RB#0



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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN 2020 12:20:41

Band5-5MHz-16QAM-20625-1RB#24



Date: 23 JUN 2020 12:21:27

Band5-5MHz-16QAM-20625-25RB#0



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

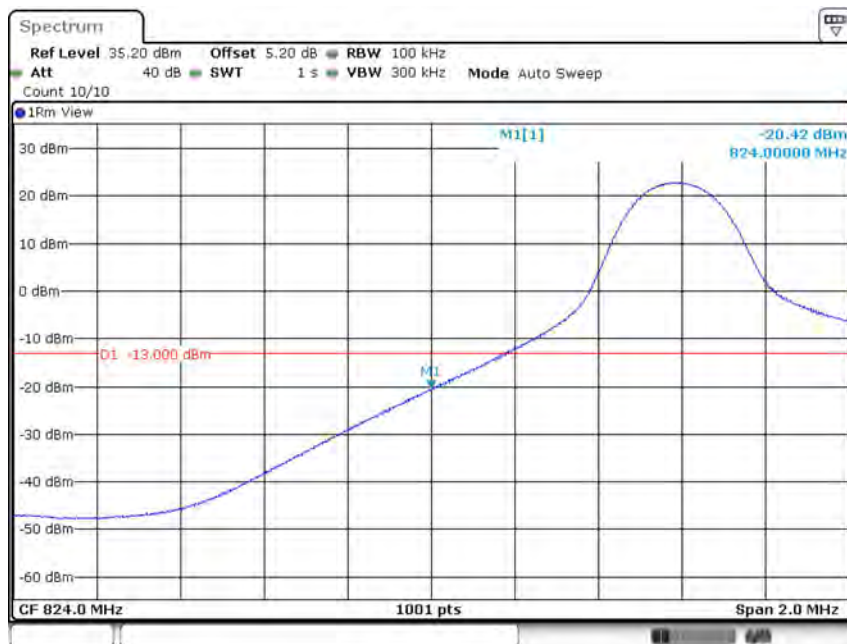
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN 2020 12:22:08

Band5-10MHz-QPSK-20450-1RB#0



Date: 23 JUN 2020 12:22:33

Band5-10MHz-QPSK-20450-50RB#0

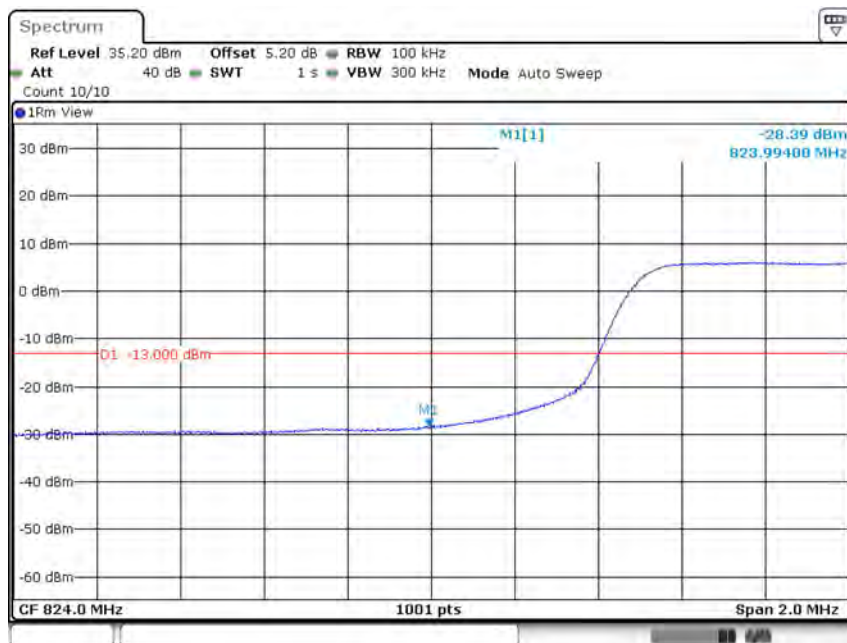


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:23:15

Band5-10MHz-QPSK-20600-1RB#49



Date: 23 JUN.2020 12:24:00

Band5-10MHz-QPSK-20600-50RB#0

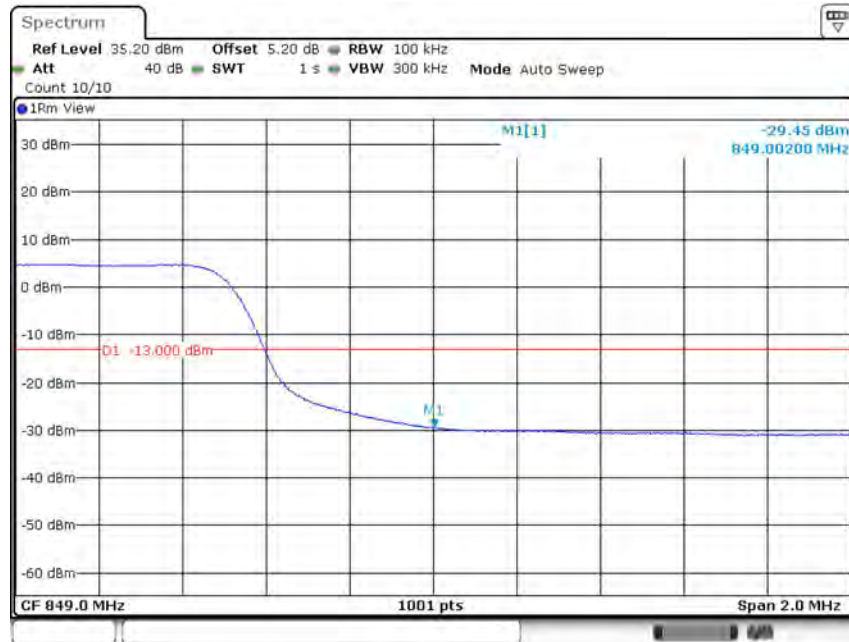


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

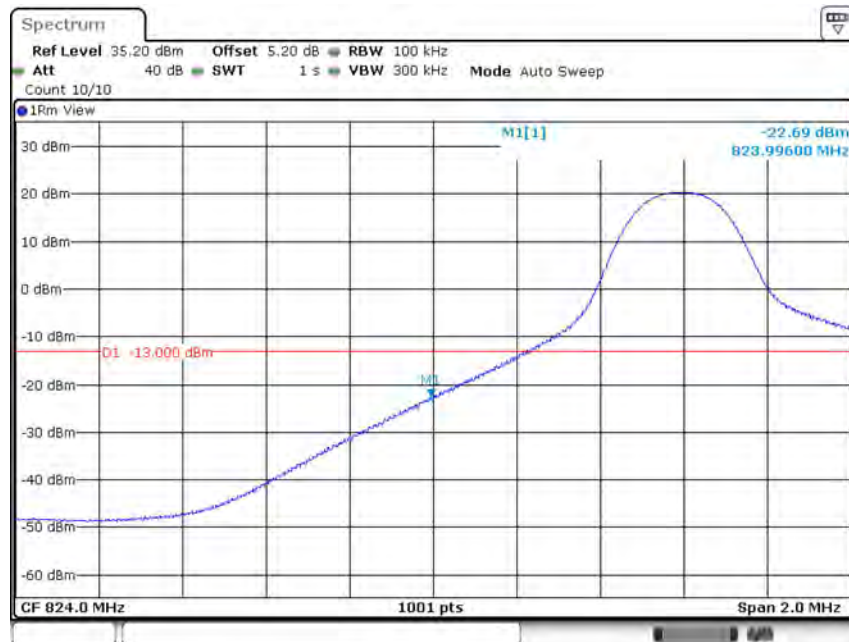
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:24.41

Band5-10MHz-64QAM-20450-1RB#0



Date: 24 JUN.2020 09:01:09

Band5-10MHz-64QAM-20450-50RB#0



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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn

中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN 2020 09:01:29

Band5-10MHz-64QAM-20600-1RB#49



Date: 24 JUN 2020 09:01:55

Band5-10MHz-64QAM-20600-50RB#0



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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 09:02:15

Band5-10MHz-16QAM-20450-1RB#0



Date: 23 JUN.2020 12:22:54

Band5-10MHz-16QAM-20450-50RB#0

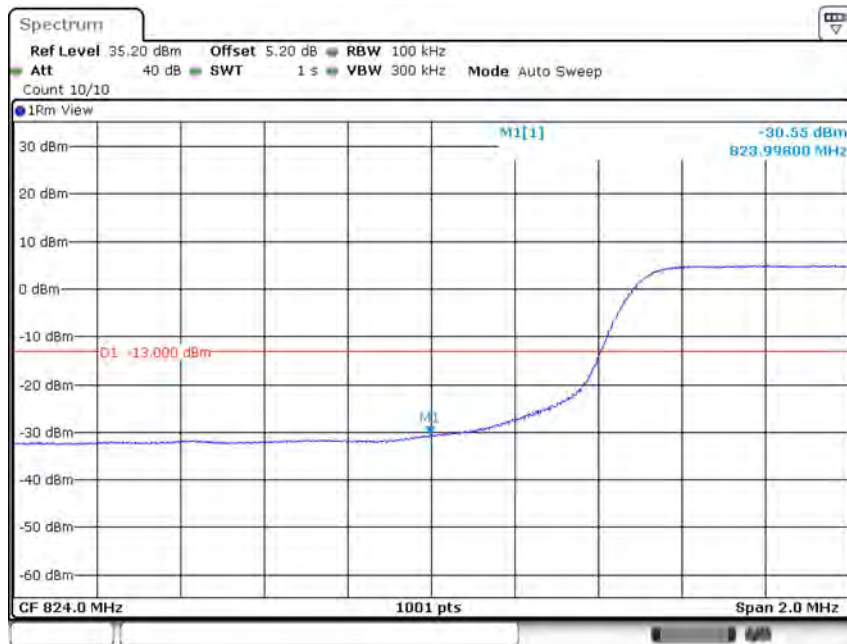


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:23:35

Band5-10MHz-16QAM-20600-1RB#49



Date: 23 JUN.2020 12:24:21

Band5-10MHz-16QAM-20600-50RB#0

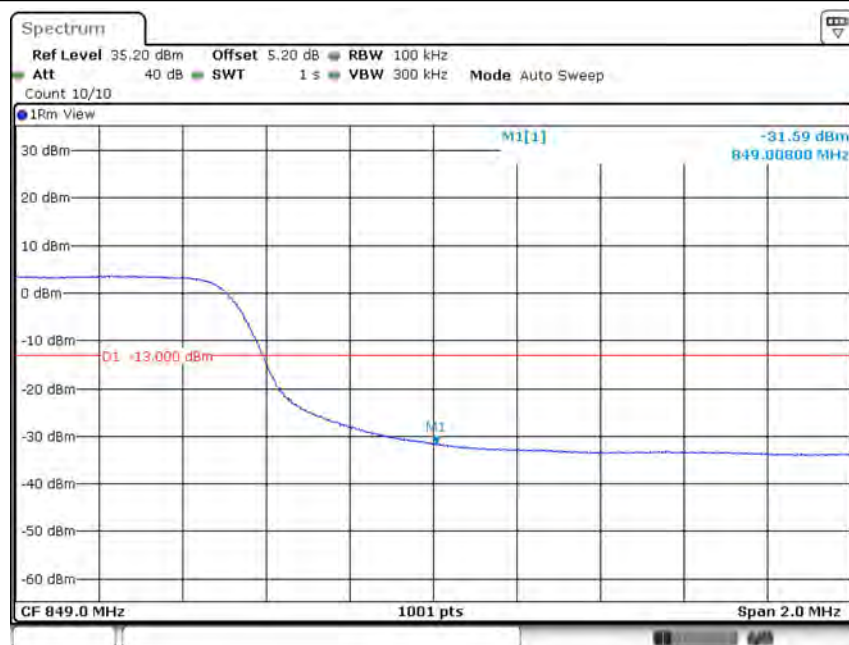


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:25:02



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

11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

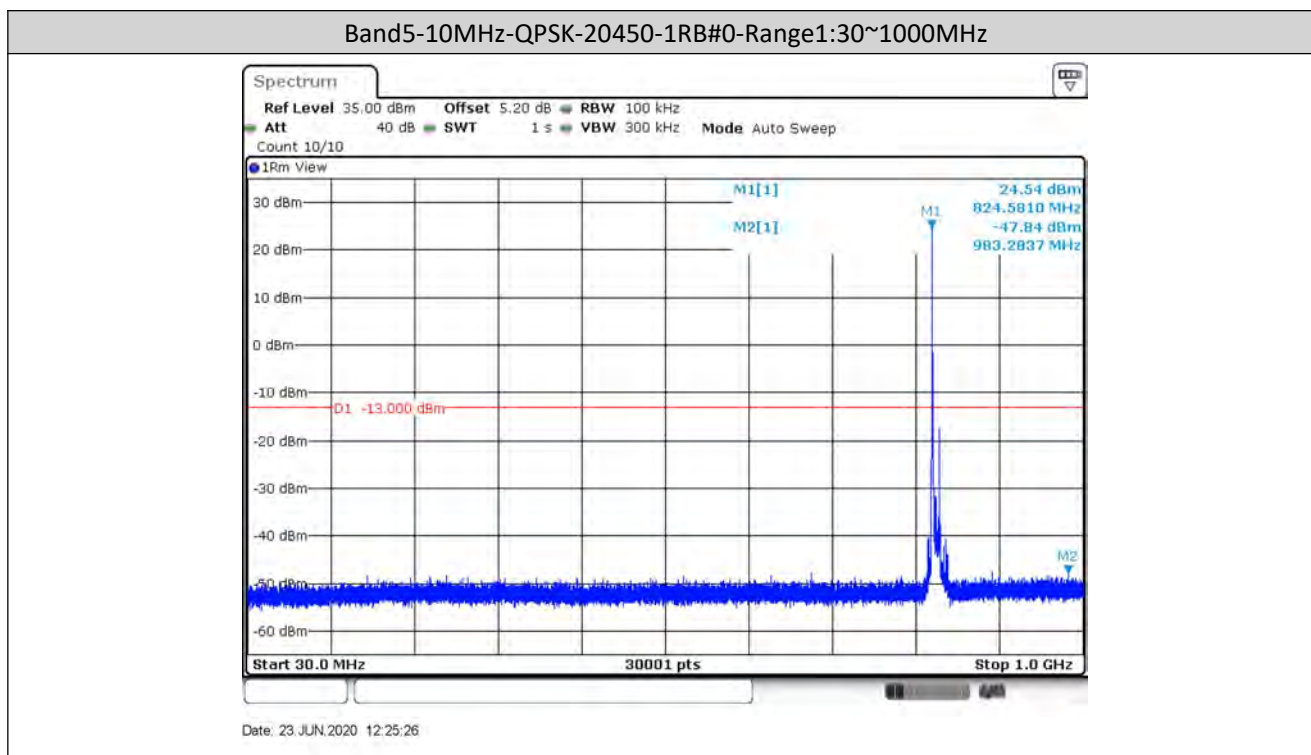
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

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 = $k * (Span / RBW)$ " 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



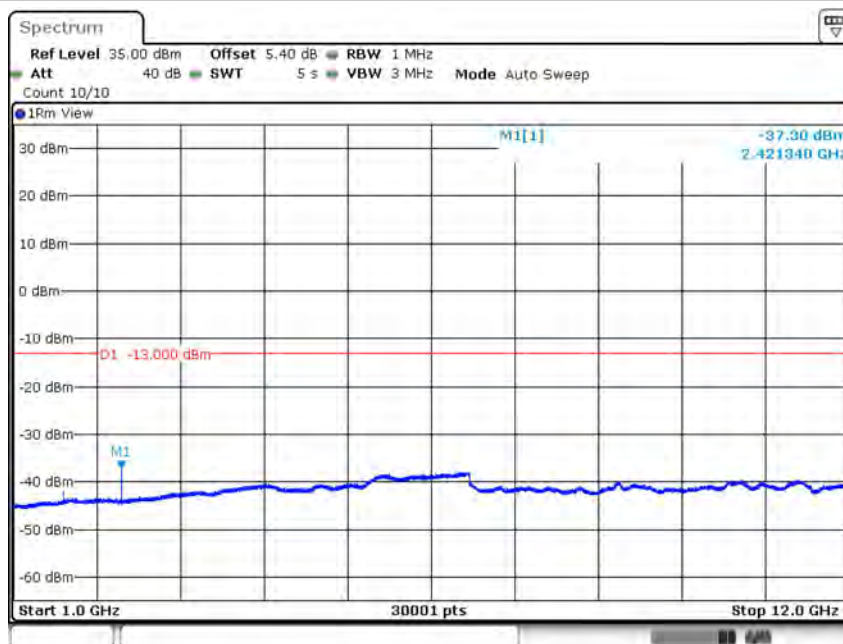
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

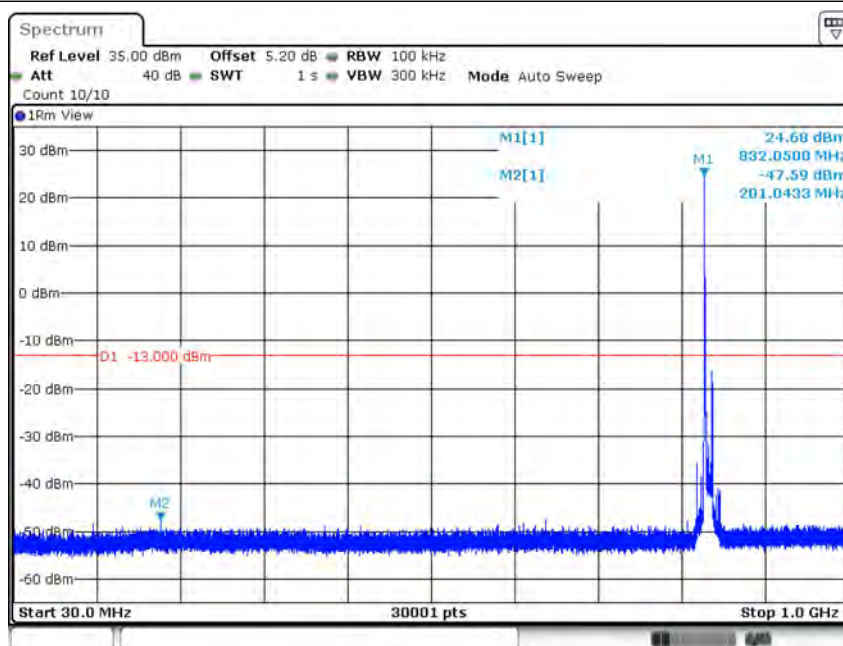
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

Band5-10MHz-QPSK-20450-1RB#0-Range2:1000~12000MHz



Date: 23 JUN 2020 12:28:33

Band5-10MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



Date: 23 JUN 2020 12:28:20

Band5-10MHz-QPSK-20525-1RB#0-Range2:1000~12000MHz

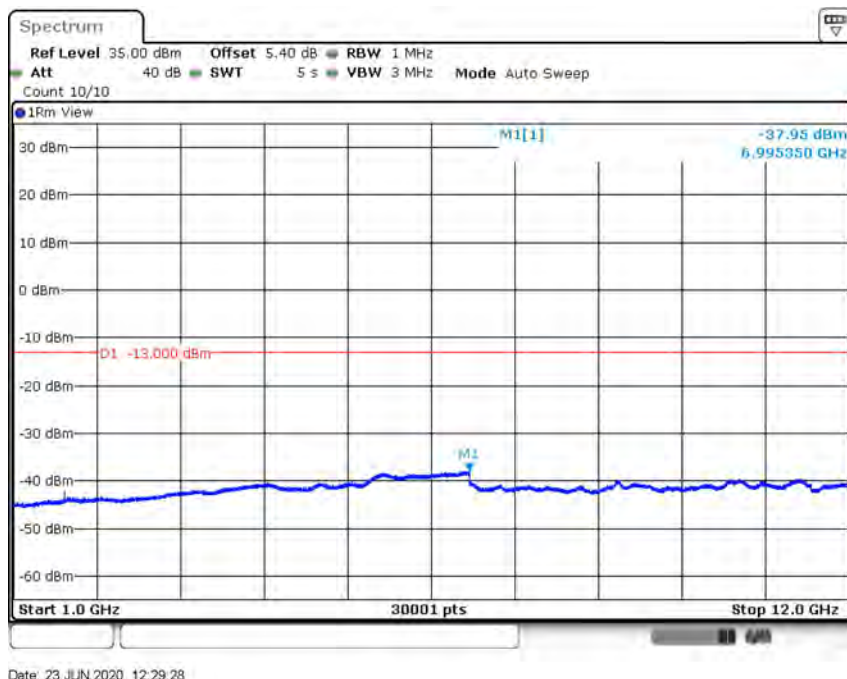


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

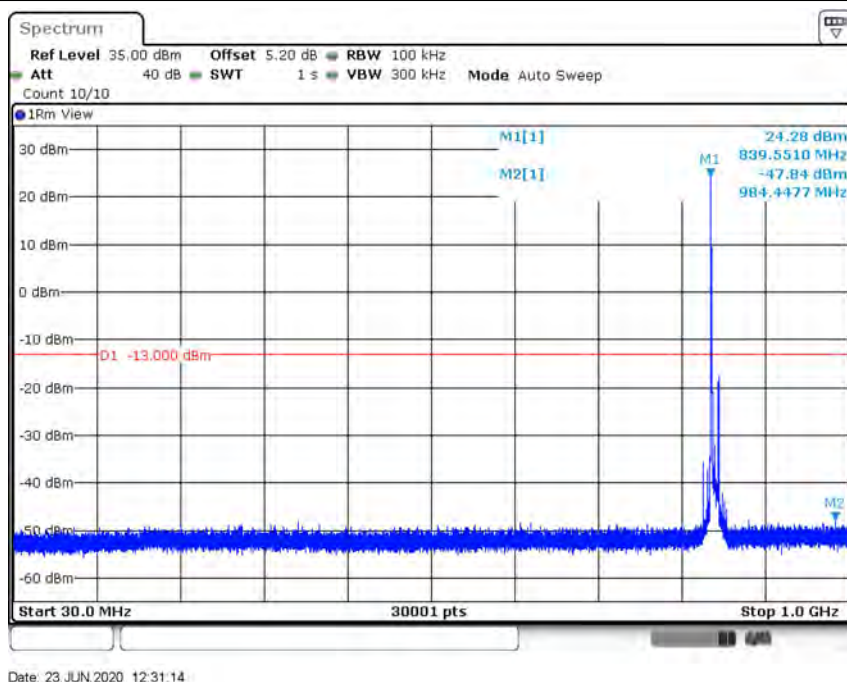
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
1/F, Unit D, Building 1, Kanghong Orange Science Park, No. 137, Keyuan 3rd Road, Fenglong New Town, Xian, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

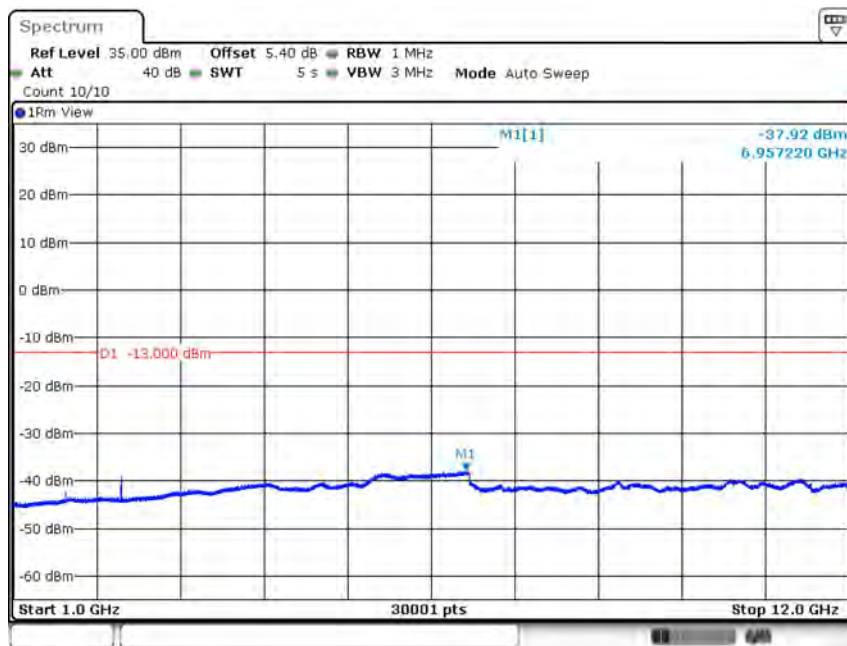


Band5-10MHz-QPSK-20600-1RB#0-Range1:30~1000MHz

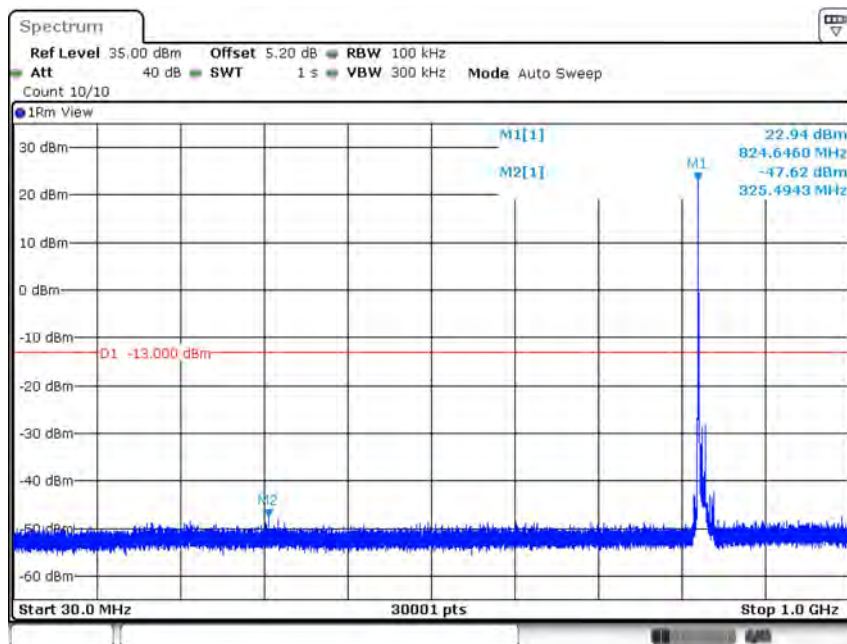


Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~12000MHz





Band5-10MHz-64QAM-20450-1RB#0-Range1:30~1000MHz

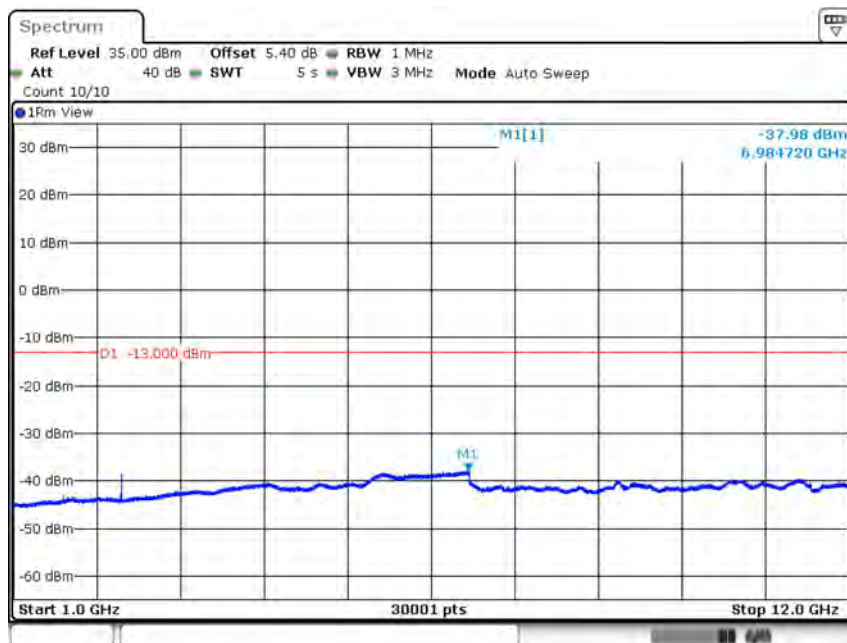


Band5-10MHz-64QAM-20450-1RB#0-Range2:1000~12000MHz



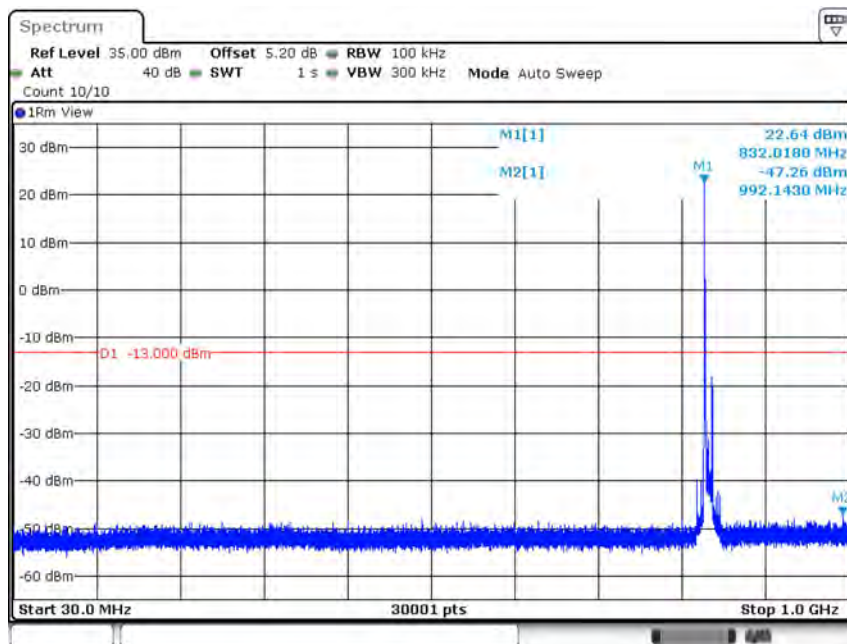
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 09:03:47

Band5-10MHz-64QAM-20525-1RB#0-Range1:30~1000MHz



Date: 24 JUN.2020 09:04:07

Band5-10MHz-64QAM-20525-1RB#0-Range2:1000~12000MHz

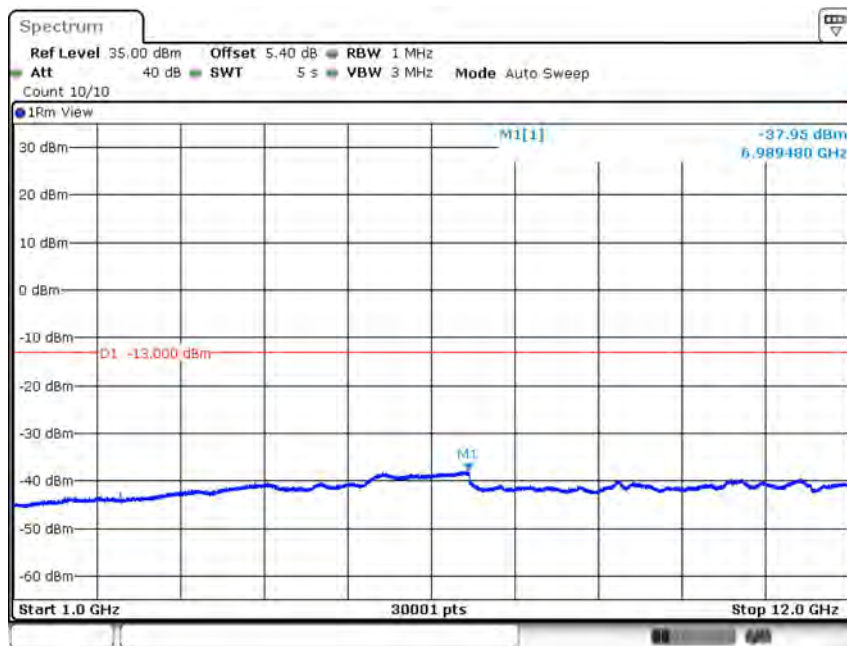


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

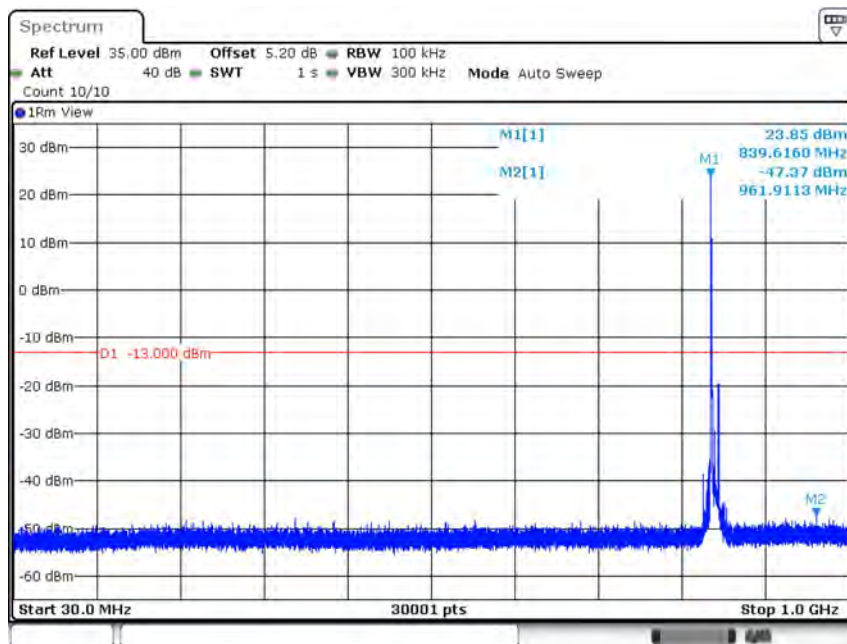
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 09:05:14

Band5-10MHz-64QAM-20600-1RB#0-Range1:30~1000MHz



Date: 24 JUN.2020 09:05:34

Band5-10MHz-64QAM-20600-1RB#0-Range2:1000~12000MHz

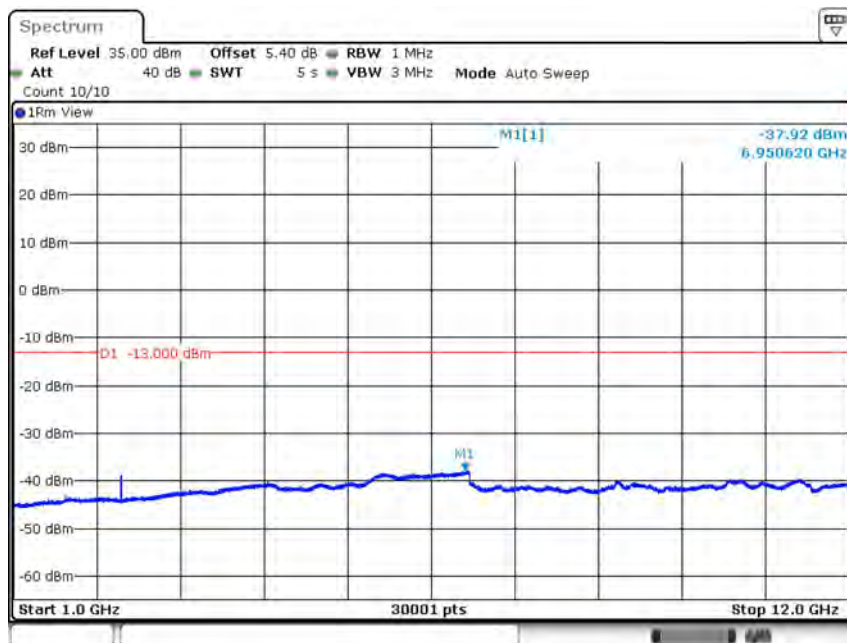


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

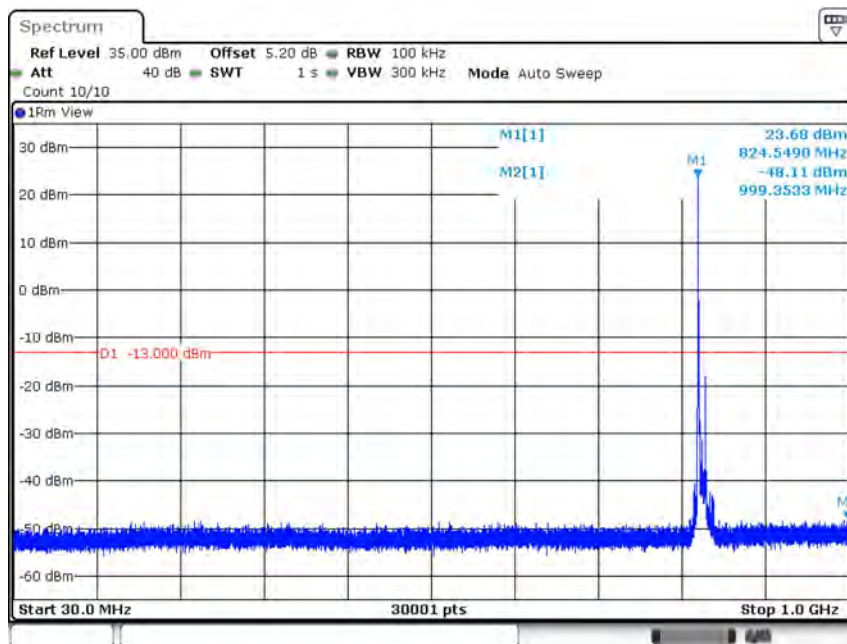
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 24 JUN.2020 09:06:41

Band5-10MHz-16QAM-20450-1RB#0-Range1:30~1000MHz

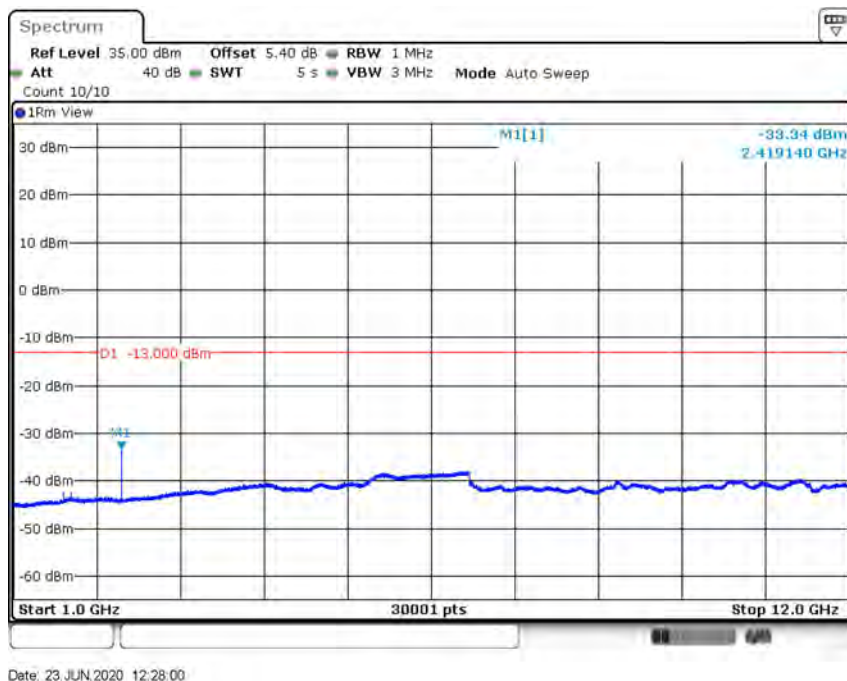


Date: 23 JUN.2020 12:26:53

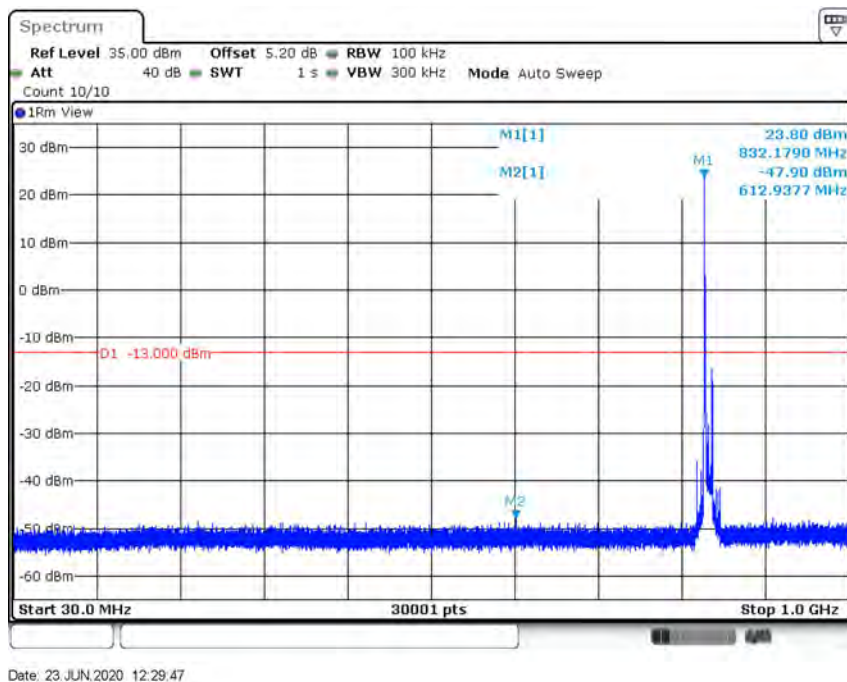
Band5-10MHz-16QAM-20450-1RB#0-Range2:1000~12000MHz



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
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Band5-10MHz-16QAM-20525-1RB#0-Range1:30~1000MHz



Band5-10MHz-16QAM-20525-1RB#0-Range2:1000~12000MHz

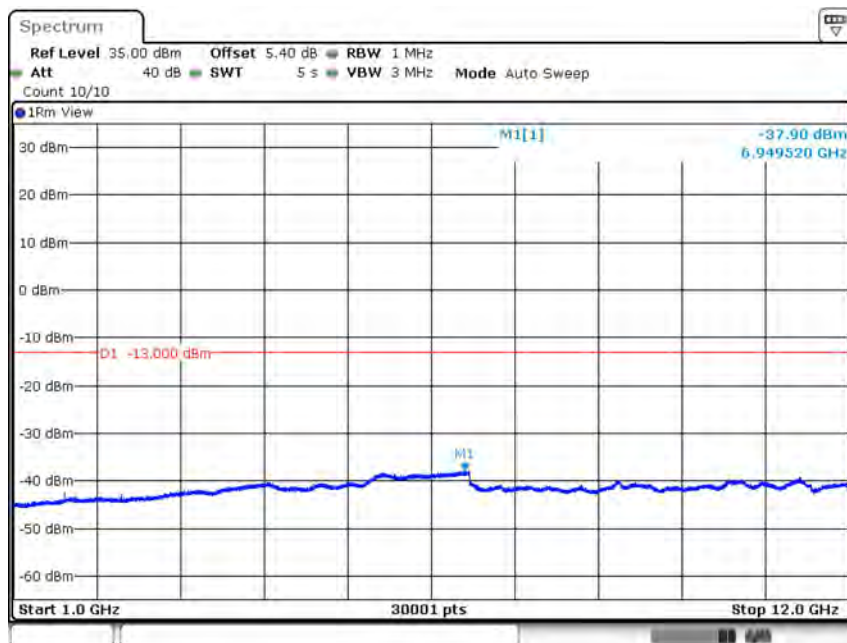


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

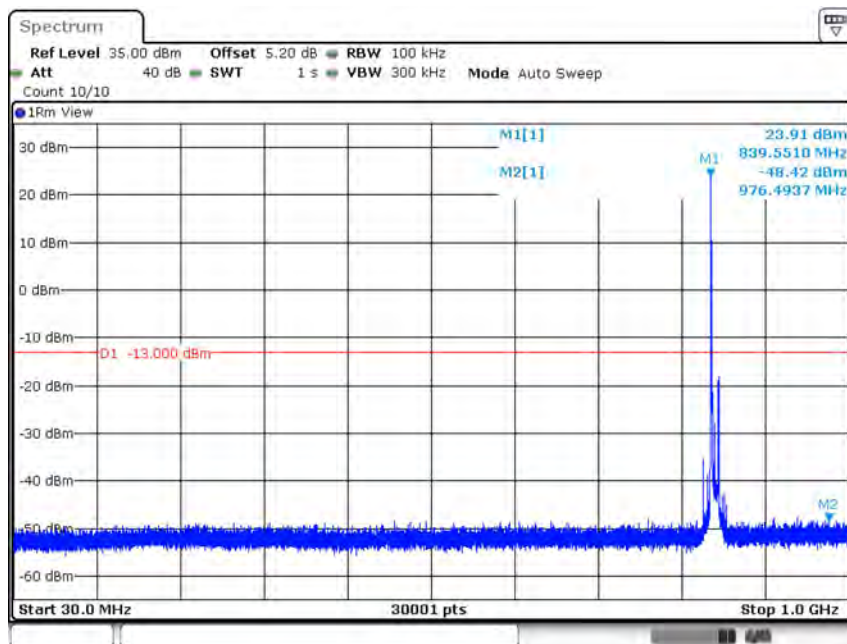
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:30:54

Band5-10MHz-16QAM-20600-1RB#0-Range1:30~1000MHz

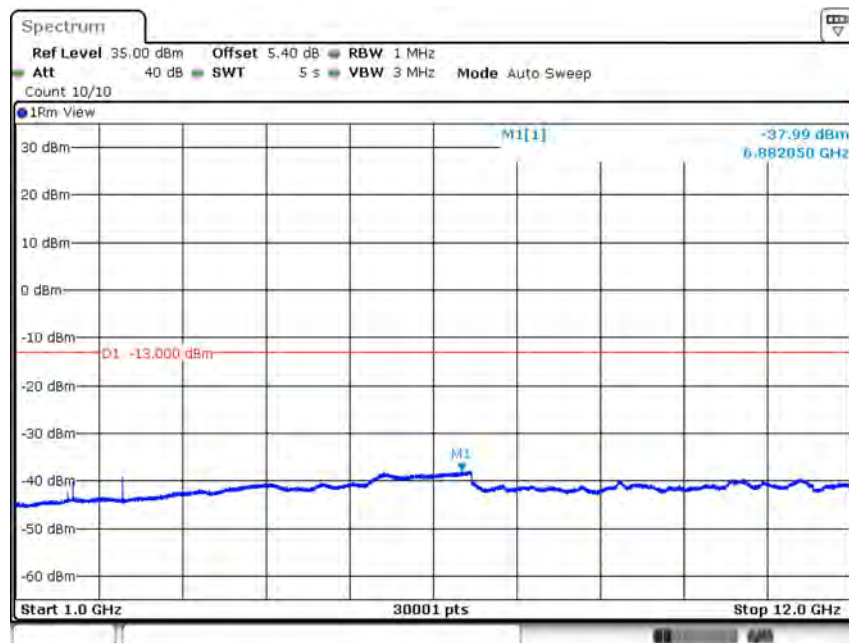


Date: 23 JUN.2020 12:32:41

Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~12000MHz



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
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



Date: 23 JUN.2020 12:33:49



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-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

11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



7. Field Strength of Spurious Radiation

7.1. Test Band = LTE_Band=5 BW=10MHz _TM1

7.1.1. Test Channel = 20450

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	44.5992	-70.05	-63.05	-13.00	50.05	178	162	Horizontal
2	241.4221	-68.01	-65.25	-13.00	52.25	185	225	Horizontal
3	531.9031	-68.41	-62.43	-13.00	49.43	196	99	Horizontal
4	1648.9298	-67.87	-63.82	-13.00	50.82	321	133	Horizontal
5	2473.8948	-66.27	-55.44	-13.00	42.44	255	6	Horizontal
6	8766.5922	-57.87	-54.63	-13.00	41.63	264	289	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 (Xi'an) Co., Ltd.
Wireless Laboratory

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



7.2. Test Band = LTE_Band=5 BW=10MHz _TM1

7.2.1. Test Channel = 20450

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	112.7451	-68.87	-62.70	-13.00	49.70	214	194	Vertical
2	562.3141	-68.83	-63.05	-13.00	50.05	159	226	Vertical
3	1648.9298	-68.60	-63.92	-13.00	50.92	196	133	Vertical
4	2425.8852	-65.78	-56.64	-13.00	43.64	213	305	Vertical
5	7443.3481	-56.21	-55.86	-13.00	42.86	262	352	Vertical
6	8823.5941	-57.55	-54.28	-13.00	41.28	284	99	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



7.3. Test Band = LTE_Band=5 BW=10MHz _TM1

7.3.1. Test Channel = 20525

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	44.3082	-69.79	-62.81	-13.00	49.81	158	360	Horizontal
2	228.6659	-67.65	-65.06	-13.00	52.06	174	333	Horizontal
3	544.4652	-68.79	-62.53	-13.00	49.53	196	360	Horizontal
4	1664.1328	-67.41	-63.51	-13.00	50.51	213	138	Horizontal
5	2496.2993	-65.95	-54.64	-13.00	41.64	254	3	Horizontal
6	8793.7931	-58.21	-54.86	-13.00	41.86	156	270	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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



7.4. Test Band = LTE_Band=5 BW=10MHz _TM1

7.4.1. Test Channel = 20525

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	116.5283	-67.96	-62.12	-13.00	49.12	258	289	Vertical
2	500.2310	-68.88	-64.26	-13.00	51.26	174	352	Vertical
3	1664.1328	-69.45	-64.72	-13.00	51.72	196	81	Vertical
4	2496.2993	-67.70	-58.17	-13.00	45.17	231	275	Vertical
5	7368.1456	-56.22	-55.69	-13.00	42.69	262	99	Vertical
6	8786.3929	-57.49	-54.05	-13.00	41.05	215	67	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



7.5. Test Band = LTE_Band=5 BW=10MHz_TM1

7.5.1. Test Channel = 20600

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	43.9687	-69.52	-62.55	-13.00	49.55	174	322	Horizontal
2	237.8814	-68.61	-65.81	-13.00	52.81	185	36	Horizontal
3	1679.3359	-68.47	-64.72	-13.00	51.72	213	138	Horizontal
4	2519.1038	-66.63	-55.48	-13.00	42.48	262	1	Horizontal
5	7369.7457	-56.28	-56.42	-13.00	43.42	291	355	Horizontal
6	8786.5929	-58.07	-54.75	-13.00	41.75	154	227	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

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



7.6. Test Band = LTE_Band=5 BW=10MHz _TM1

7.6.1. Test Channel = 20600

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	105.8093	-67.97	-62.54	-13.00	49.54	258	227	Vertical
2	561.8291	-68.99	-63.24	-13.00	50.24	219	355	Vertical
3	1679.3359	-68.55	-63.77	-13.00	50.77	159	128	Vertical
4	2519.1038	-67.18	-57.58	-13.00	44.58	196	278	Vertical
5	7346.7449	-56.26	-55.75	-13.00	42.75	321	132	Vertical
6	8788.5930	-57.50	-54.05	-13.00	41.05	261	4	Vertical

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 below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.
- 3 all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.



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

11F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth h	Modulation	Channel l	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-9.20	-0.011098	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-9.00	-0.010856	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-10.10	-0.012183	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-3.40	-0.004065	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-6.30	-0.007531	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-10.40	-0.012433	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-10.80	-0.012796	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-1.00	-0.001185	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-7.00	-0.008294	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-4.40	-0.005308	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-3.90	-0.004704	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-4.80	-0.005790	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-4.70	-0.005619	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-5.80	-0.006934	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-7.10	-0.008488	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-2.70	-0.003199	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-1.00	-0.001185	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-7.50	-0.008886	±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 (Xi'an) Co., Ltd. 11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com



8.2. Frequency Vs Temperature

Band	Bandwidth h	Modulation	Channel l	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-8.40	-0.010133	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	-8.60	-0.010374	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	0.00	0.000000	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-10.00	-0.012063	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-10.90	-0.013148	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-8.10	-0.009771	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-9.00	-0.010856	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-7.80	-0.009409	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-7.00	-0.008368	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-3.30	-0.003945	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-3.40	-0.004065	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-9.80	-0.011715	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-10.00	-0.011955	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-12.00	-0.014345	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-9.50	-0.011357	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-6.90	-0.008249	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-0.80	-0.000948	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-1.10	-0.001303	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-6.20	-0.007346	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	0.30	0.000355	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	1.20	0.001422	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-5.80	-0.006872	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-5.60	-0.006635	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	2.80	0.003318	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-10.80	-0.013028	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	-7.80	-0.009409	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-3.30	-0.003981	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-2.60	-0.003136	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-10.40	-0.012545	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-4.80	-0.005790	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-2.50	-0.003016	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-6.60	-0.007961	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	-5.50	-0.006575	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-7.30	-0.008727	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-2.20	-0.002630	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-3.20	-0.003825	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-9.60	-0.011476	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-7.60	-0.009085	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-3.70	-0.004423	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-3.80	-0.004543	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-10.10	-0.011967	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-1.60	-0.001896	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-3.40	-0.004028	±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

1/F, Unit D2, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fenglong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com



Band5	10MHz	16QAM	20600	50RB#0	NV	10	2.20	0.002607	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-3.40	-0.004028	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	1.60	0.001896	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-2.00	-0.002370	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-1.30	-0.001540	±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 (Xi'an) Co., Ltd.
Wireless Laboratory

11F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元11层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com