



Appendix B

E-UTRA Band 12



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



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=12 BW=10MHZ _ TM1... 76
7.1.1. Test Channel = 23060... 76
7.2. Test Band = LTE_Band=12 BW=10MHZ _ TM1... 77
7.2.1. Test Channel = 23060... 77
7.3. Test Band = LTE_Band=12 BW=10MHZ _ TM1... 78
7.3.1. Test Channel = 23095... 78
7.4. Test Band = LTE_Band=12 BW=10MHZ _ TM1... 79
7.4.1. Test Channel = 23095... 79
7.5. Test Band = LTE_Band=12 BW=10MHZ _ TM1... 80
7.5.1. Test Channel = 23130... 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)83071443, or email: CN.Doccheck@sgs.com



7.6. Test Band = LTE_Band=12 BW=10MHz _TM1..... 81

7.6.1. Test Channel = 23130..... 81

8. FREQUENCY STABILITY.....82

8.1. FREQUENCY VS VOLTAGE..... 82

8.2. FREQUENCY VS TEMPERATURE.....82



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 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

1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth h	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	24.67	19.72	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	24.65	19.70	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	24.78	19.83	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	24.83	19.88	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	24.75	19.80	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	24.78	19.83	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	23.78	18.83	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	24.60	19.65	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	24.74	19.79	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	24.62	19.67	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	24.73	19.78	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	24.73	19.78	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	24.80	19.85	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	23.74	18.79	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	24.59	19.64	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	24.73	19.78	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	24.56	19.61	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	24.67	19.72	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	24.73	19.78	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	24.67	19.72	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	23.70	18.75	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#2	22.86	17.91	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#0	22.75	17.80	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#5	22.72	17.77	34.77	PASS
Band12	1.4MHz	64QAM	23017	3RB#0	22.79	17.84	34.77	PASS
Band12	1.4MHz	64QAM	23017	3RB#1	22.87	17.92	34.77	PASS
Band12	1.4MHz	64QAM	23017	3RB#3	22.78	17.83	34.77	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)83071443, or email: CN.Doccheck@sgs.com

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengong 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

Band12	1.4MHz	64QAM	23017	6RB#0	21.73	16.78	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#0	22.69	17.74	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#2	22.85	17.90	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#5	22.71	17.76	34.77	PASS
Band12	1.4MHz	64QAM	23095	3RB#1	22.84	17.89	34.77	PASS
Band12	1.4MHz	64QAM	23095	3RB#3	22.75	17.80	34.77	PASS
Band12	1.4MHz	64QAM	23095	3RB#0	22.76	17.81	34.77	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	21.71	16.76	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#0	22.71	17.76	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#2	22.78	17.83	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#5	22.63	17.68	34.77	PASS
Band12	1.4MHz	64QAM	23173	3RB#1	22.75	17.80	34.77	PASS
Band12	1.4MHz	64QAM	23173	3RB#3	22.72	17.77	34.77	PASS
Band12	1.4MHz	64QAM	23173	3RB#0	22.70	17.75	34.77	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	21.62	16.67	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	23.89	18.94	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	23.88	18.93	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	24.06	19.11	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	23.76	18.81	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	23.82	18.87	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	23.80	18.85	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	22.82	17.87	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	23.75	18.80	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	23.86	18.91	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	24.00	19.05	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	23.76	18.81	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	23.84	18.89	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	23.80	18.85	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	22.78	17.83	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	23.73	18.78	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	23.91	18.96	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	23.81	18.86	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	23.74	18.79	34.77	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. | 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.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

Band12	1.4MHz	16QAM	23173	3RB#3	23.73	18.78	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	23.76	18.81	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	22.75	17.80	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	24.75	19.80	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	24.75	19.80	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	24.78	19.83	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	23.78	18.83	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	23.75	18.80	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	23.76	18.81	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	23.75	18.80	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	24.70	19.75	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	24.72	19.77	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	24.68	19.73	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	23.74	18.79	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	23.74	18.79	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	23.72	18.77	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	23.72	18.77	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	24.64	19.69	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	24.65	19.70	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	24.68	19.73	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	23.71	18.76	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	23.71	18.76	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#7	23.65	18.70	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	23.69	18.74	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#0	22.84	17.89	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#14	22.81	17.86	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#8	22.80	17.85	34.77	PASS
Band12	3MHz	64QAM	23025	8RB#7	21.73	16.78	34.77	PASS
Band12	3MHz	64QAM	23025	8RB#4	21.74	16.79	34.77	PASS
Band12	3MHz	64QAM	23025	8RB#0	21.75	16.80	34.77	PASS
Band12	3MHz	64QAM	23025	15RB#0	21.72	16.77	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#14	22.75	17.80	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#8	22.78	17.83	34.77	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

Band12	3MHz	64QAM	23095	1RB#0	22.74	17.79	34.77	PASS
Band12	3MHz	64QAM	23095	8RB#7	21.70	16.75	34.77	PASS
Band12	3MHz	64QAM	23095	8RB#4	21.72	16.77	34.77	PASS
Band12	3MHz	64QAM	23095	8RB#0	21.72	16.77	34.77	PASS
Band12	3MHz	64QAM	23095	15RB#0	21.67	16.72	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#8	22.73	17.78	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#0	22.76	17.81	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#14	22.72	17.77	34.77	PASS
Band12	3MHz	64QAM	23165	8RB#4	21.67	16.72	34.77	PASS
Band12	3MHz	64QAM	23165	8RB#0	21.69	16.74	34.77	PASS
Band12	3MHz	64QAM	23165	8RB#7	21.63	16.68	34.77	PASS
Band12	3MHz	64QAM	23165	15RB#0	21.64	16.69	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	24.02	19.07	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	23.91	18.96	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	23.94	18.99	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	22.85	17.90	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#0	22.80	17.85	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	22.80	17.85	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	22.72	17.77	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	23.88	18.93	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	23.97	19.02	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	23.81	18.86	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	22.80	17.85	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	22.77	17.82	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	22.77	17.82	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	22.68	17.73	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	23.76	18.81	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	23.85	18.90	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	23.91	18.96	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	22.76	17.81	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	22.75	17.80	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	22.69	17.74	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	22.66	17.71	34.77	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

Band12	5MHz	QPSK	23035	1RB#24	24.59	19.64	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	24.66	19.71	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	24.91	19.96	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	23.78	18.83	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	23.79	18.84	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	23.73	18.78	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	23.78	18.83	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	24.58	19.63	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	24.61	19.66	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	24.85	19.90	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	23.67	18.72	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	23.73	18.78	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	23.75	18.80	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	23.73	18.78	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	24.55	19.60	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	24.51	19.56	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	24.81	19.86	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	23.60	18.65	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	23.72	18.77	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	23.76	18.81	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	23.67	18.72	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#12	23.00	18.05	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#0	22.68	17.73	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#24	22.66	17.71	34.77	PASS
Band12	5MHz	64QAM	23035	12RB#13	21.74	16.79	34.77	PASS
Band12	5MHz	64QAM	23035	12RB#6	21.75	16.80	34.77	PASS
Band12	5MHz	64QAM	23035	12RB#0	21.67	16.72	34.77	PASS
Band12	5MHz	64QAM	23035	25RB#0	21.75	16.80	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#0	22.70	17.75	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#12	22.90	17.95	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#24	22.61	17.66	34.77	PASS
Band12	5MHz	64QAM	23095	12RB#0	21.70	16.75	34.77	PASS
Band12	5MHz	64QAM	23095	12RB#6	21.72	16.77	34.77	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

Band12	5MHz	64QAM	23095	12RB#13	21.63	16.68	34.77	PASS
Band12	5MHz	64QAM	23095	25RB#0	21.68	16.73	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#24	22.62	17.67	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#0	22.63	17.68	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#12	22.88	17.93	34.77	PASS
Band12	5MHz	64QAM	23155	12RB#0	21.64	16.69	34.77	PASS
Band12	5MHz	64QAM	23155	12RB#6	21.70	16.75	34.77	PASS
Band12	5MHz	64QAM	23155	12RB#13	21.58	16.63	34.77	PASS
Band12	5MHz	64QAM	23155	25RB#0	21.64	16.69	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	24.08	19.13	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	23.72	18.77	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	23.84	18.89	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#0	22.72	17.77	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	22.78	17.83	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	22.79	17.84	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	22.80	17.85	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	23.87	18.92	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	24.10	19.15	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	23.75	18.80	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	22.73	17.78	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	22.76	17.81	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	22.68	17.73	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	22.71	17.76	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	23.69	18.74	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	24.00	19.05	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	23.83	18.88	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	22.67	17.72	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	22.61	17.66	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	22.76	17.81	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	22.66	17.71	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	24.73	19.78	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	24.65	19.70	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	24.82	19.87	34.77	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. | 1/F, 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1层 | 邮编: 710086 | t (86-29) 6282 7885 | sgs.china@sgs.com

Band12	10MHz	QPSK	23060	25RB#0	23.79	18.84	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	23.79	18.84	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	23.72	18.77	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	23.78	18.83	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	24.79	19.84	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	24.63	19.68	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	24.71	19.76	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	23.82	18.87	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	23.76	18.81	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	23.74	18.79	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	23.81	18.86	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	24.68	19.73	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	24.75	19.80	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	24.58	19.63	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	23.83	18.88	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	23.75	18.80	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	23.71	18.76	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	23.81	18.86	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#49	22.72	17.77	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#0	22.78	17.83	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#24	22.85	17.90	34.77	PASS
Band12	10MHz	64QAM	23060	25RB#25	21.70	16.75	34.77	PASS
Band12	10MHz	64QAM	23060	25RB#12	21.74	16.79	34.77	PASS
Band12	10MHz	64QAM	23060	25RB#0	21.74	16.79	34.77	PASS
Band12	10MHz	64QAM	23060	50RB#0	21.71	16.76	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#0	22.74	17.79	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#24	22.86	17.91	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#49	22.72	17.77	34.77	PASS
Band12	10MHz	64QAM	23095	25RB#12	21.73	16.78	34.77	PASS
Band12	10MHz	64QAM	23095	25RB#25	21.71	16.76	34.77	PASS
Band12	10MHz	64QAM	23095	25RB#0	21.78	16.83	34.77	PASS
Band12	10MHz	64QAM	23095	50RB#0	21.74	16.79	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#0	22.75	17.80	34.77	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)83071443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. | 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengong 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

Band12	10MHz	64QAM	23130	1RB#24	22.83	17.88	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#49	22.64	17.69	34.77	PASS
Band12	10MHz	64QAM	23130	25RB#0	21.81	16.86	34.77	PASS
Band12	10MHz	64QAM	23130	25RB#12	21.72	16.77	34.77	PASS
Band12	10MHz	64QAM	23130	25RB#25	21.68	16.73	34.77	PASS
Band12	10MHz	64QAM	23130	50RB#0	21.77	16.82	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	23.96	19.01	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	24.05	19.10	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	23.85	18.90	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	22.75	17.80	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	22.79	17.84	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	22.71	17.76	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	22.75	17.80	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	23.95	19.00	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	24.02	19.07	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	23.86	18.91	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	22.83	17.88	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#12	22.75	17.80	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	22.72	17.77	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	22.79	17.84	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	23.86	18.91	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	24.05	19.10	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	23.87	18.92	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	22.82	17.87	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	22.74	17.79	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	22.70	17.75	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	22.79	17.84	34.77	PASS

Remark:

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

$$ERP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBd]}$$

$$EIRP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBi]}$$



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)83071443, 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 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



2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

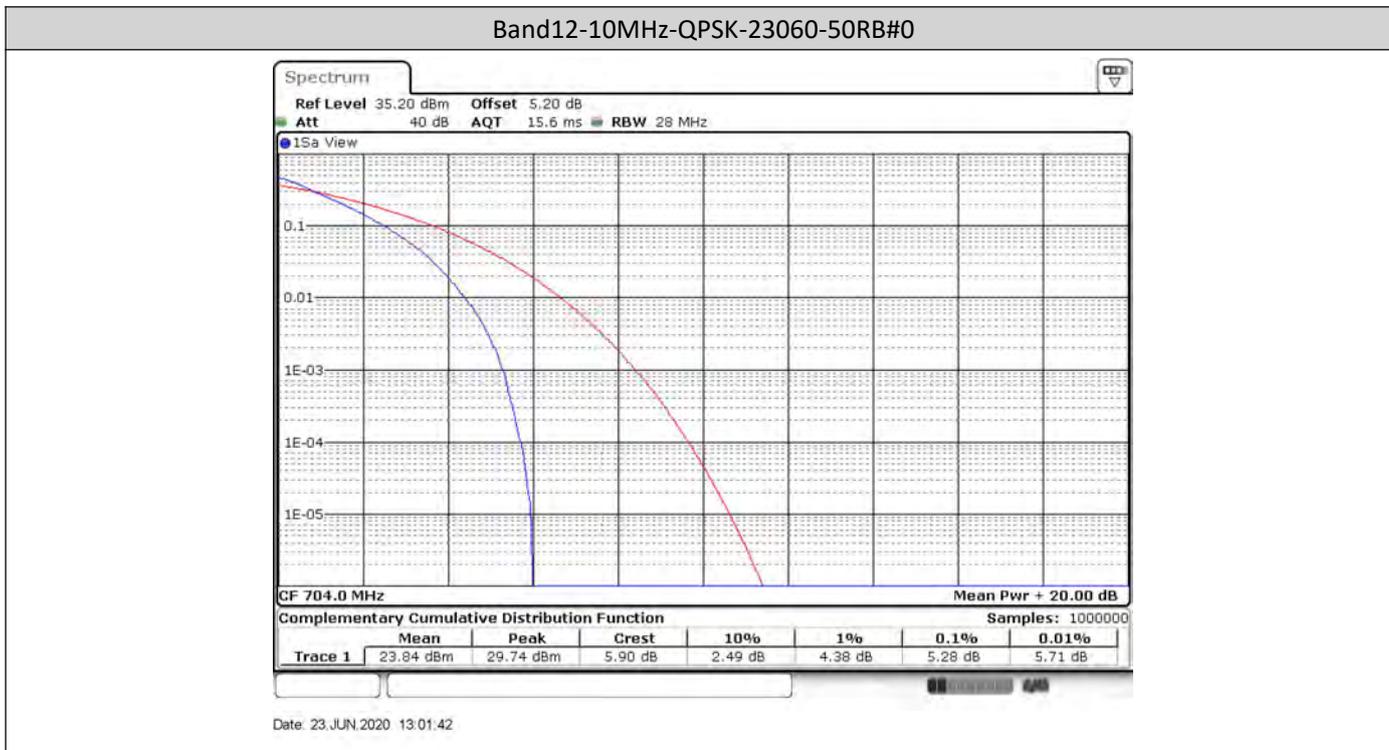
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	5.28	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.42	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.45	13	PASS
Band12	10MHz	64QAM	23060	50RB#0	6.43	13	PASS
Band12	10MHz	64QAM	23095	50RB#0	6.46	13	PASS
Band12	10MHz	64QAM	23130	50RB#0	6.58	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.97	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.06	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.14	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

2.2. Test Plots



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

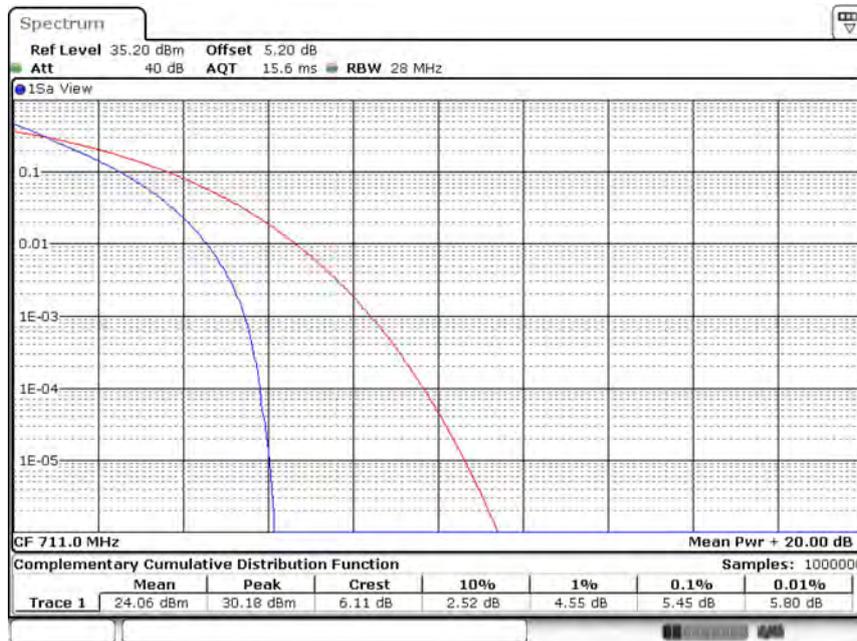
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Band12-10MHz-QPSK-23095-50RB#0



Date: 23 JUN 2020 13:02:04

Band12-10MHz-QPSK-23130-50RB#0



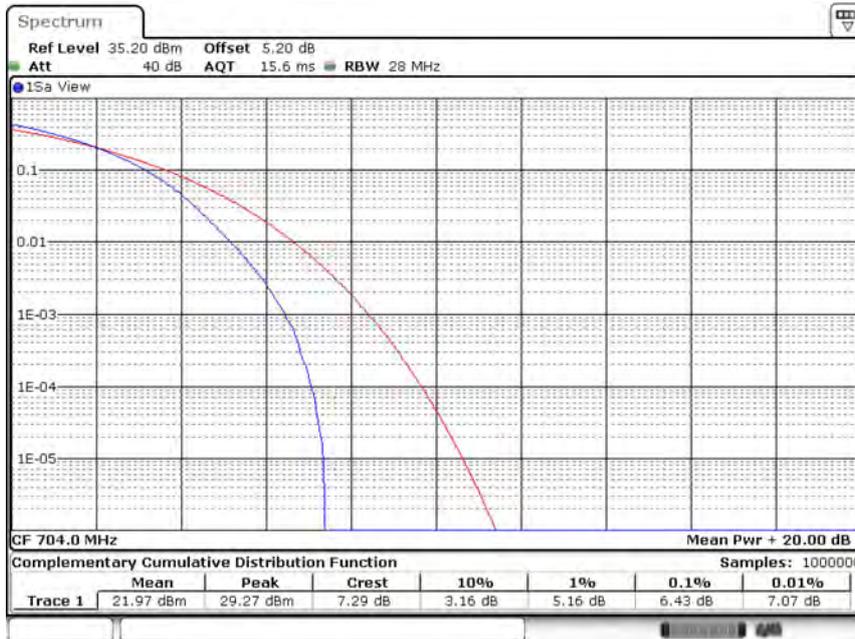
Date: 23 JUN 2020 13:02:27

Band12-10MHz-64QAM-23060-50RB#0



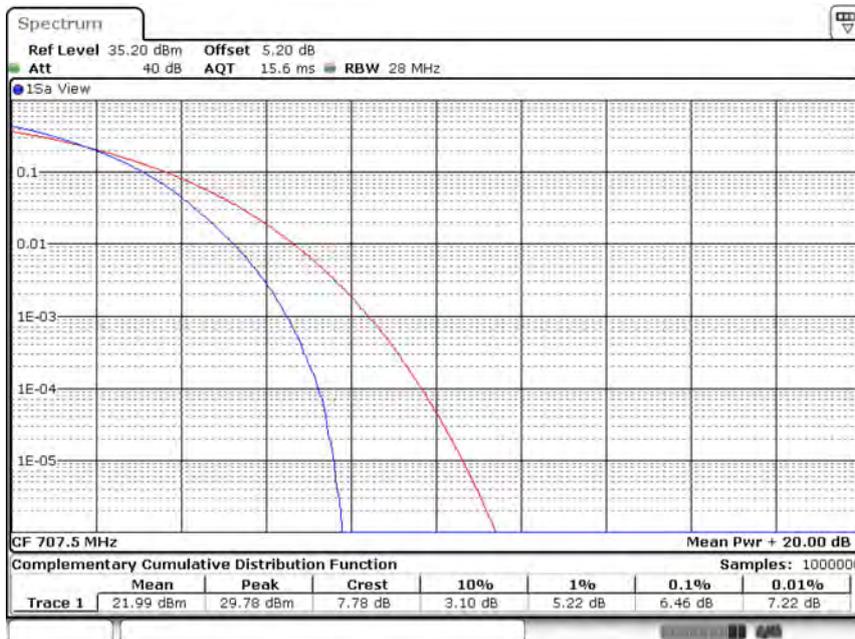
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 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 09:39:31

Band12-10MHz-64QAM-23095-50RB#0



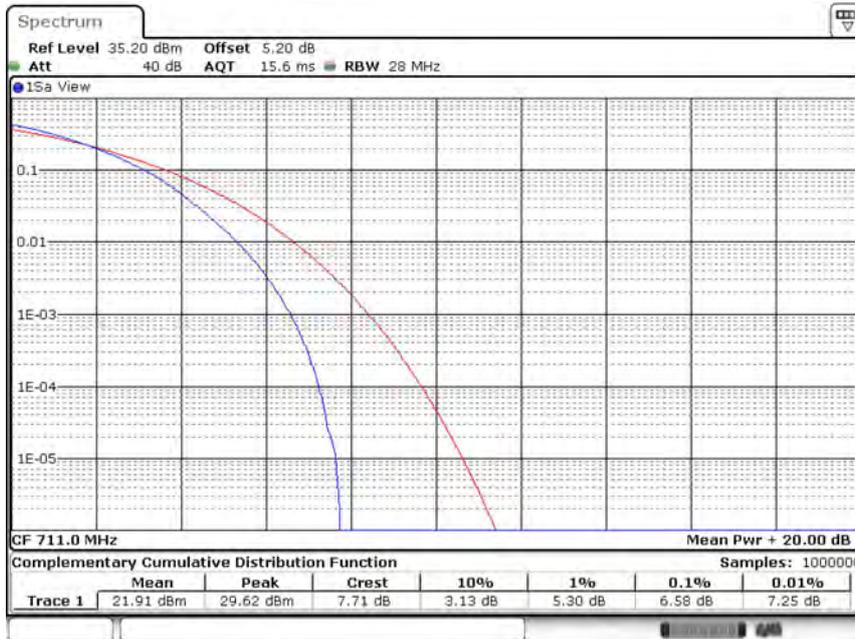
Date: 24 JUN 2020 09:39:42

Band12-10MHz-64QAM-23130-50RB#0



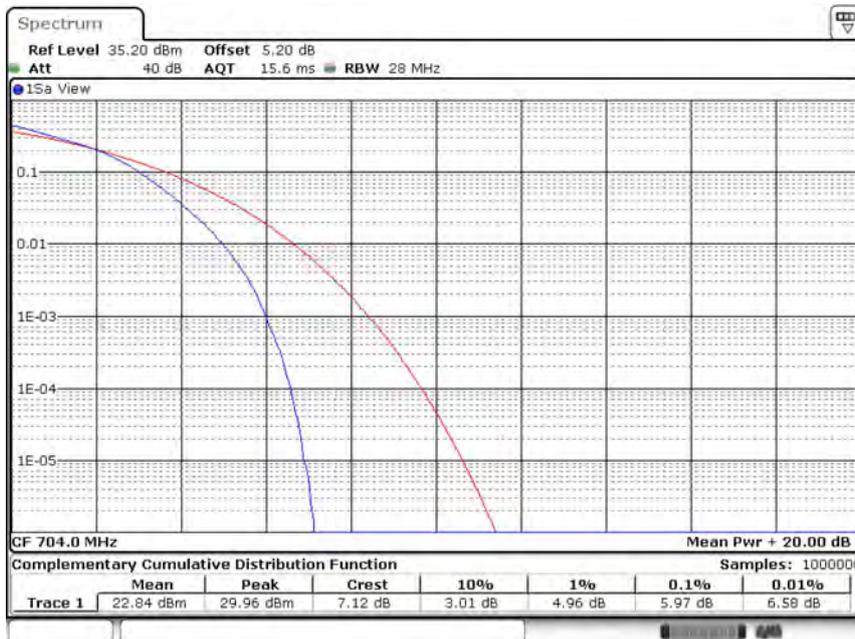
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 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 09:39:54

Band12-10MHz-16QAM-23060-50RB#0

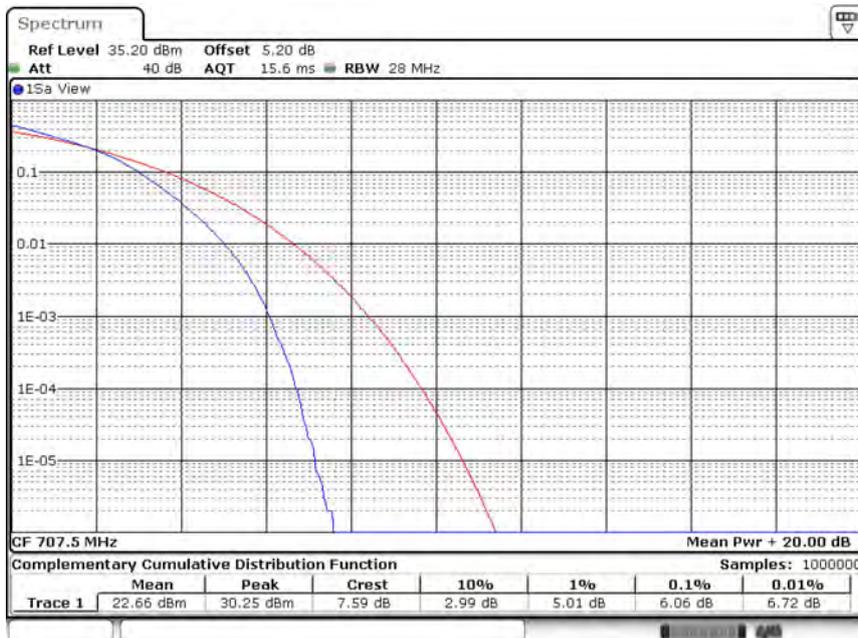


Date: 23 JUN 2020 13:01:53

Band12-10MHz-16QAM-23095-50RB#0

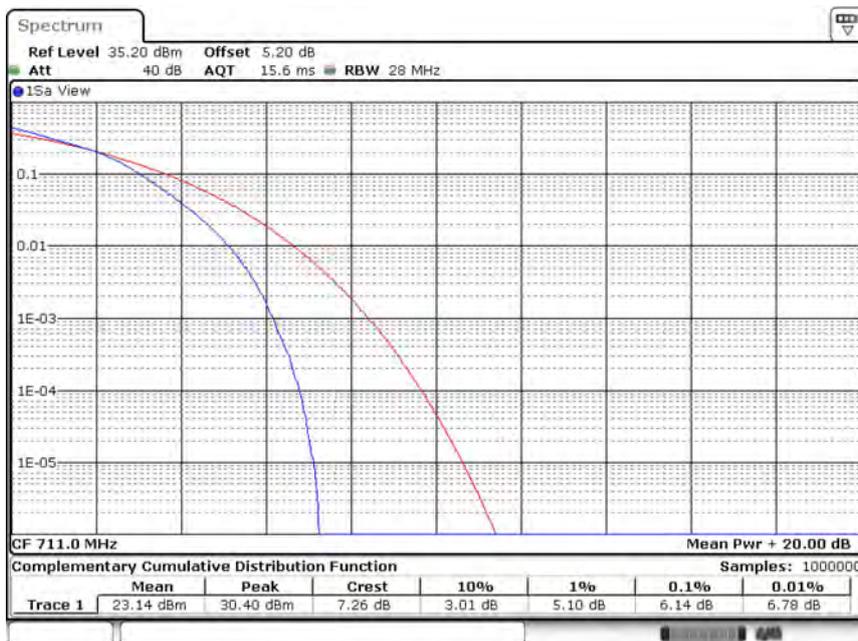


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 23 JUN 2020 13:02:16

Band12-10MHz-16QAM-23130-50RB#0



Date: 23 JUN 2020 13:02:38



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.

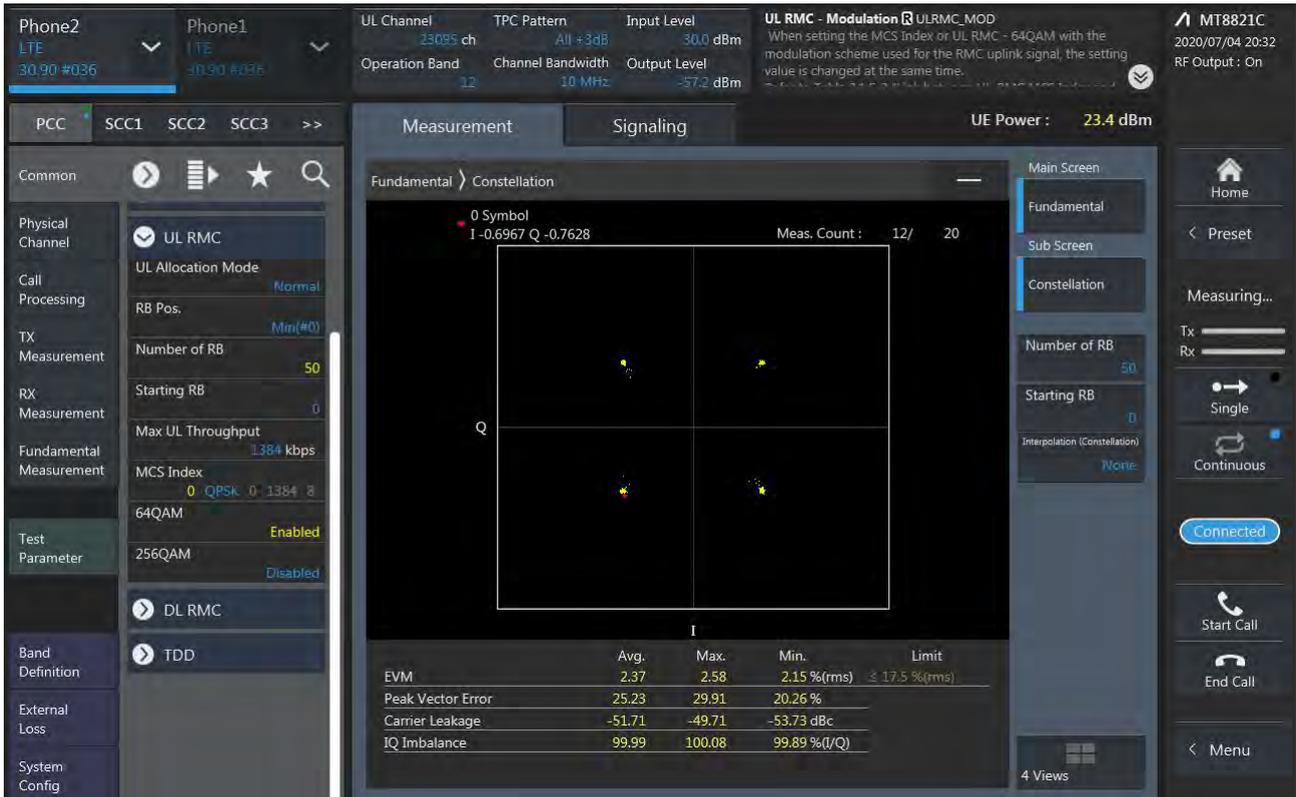
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 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



3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 10MHz

3.1.1. Test Channel = MCH



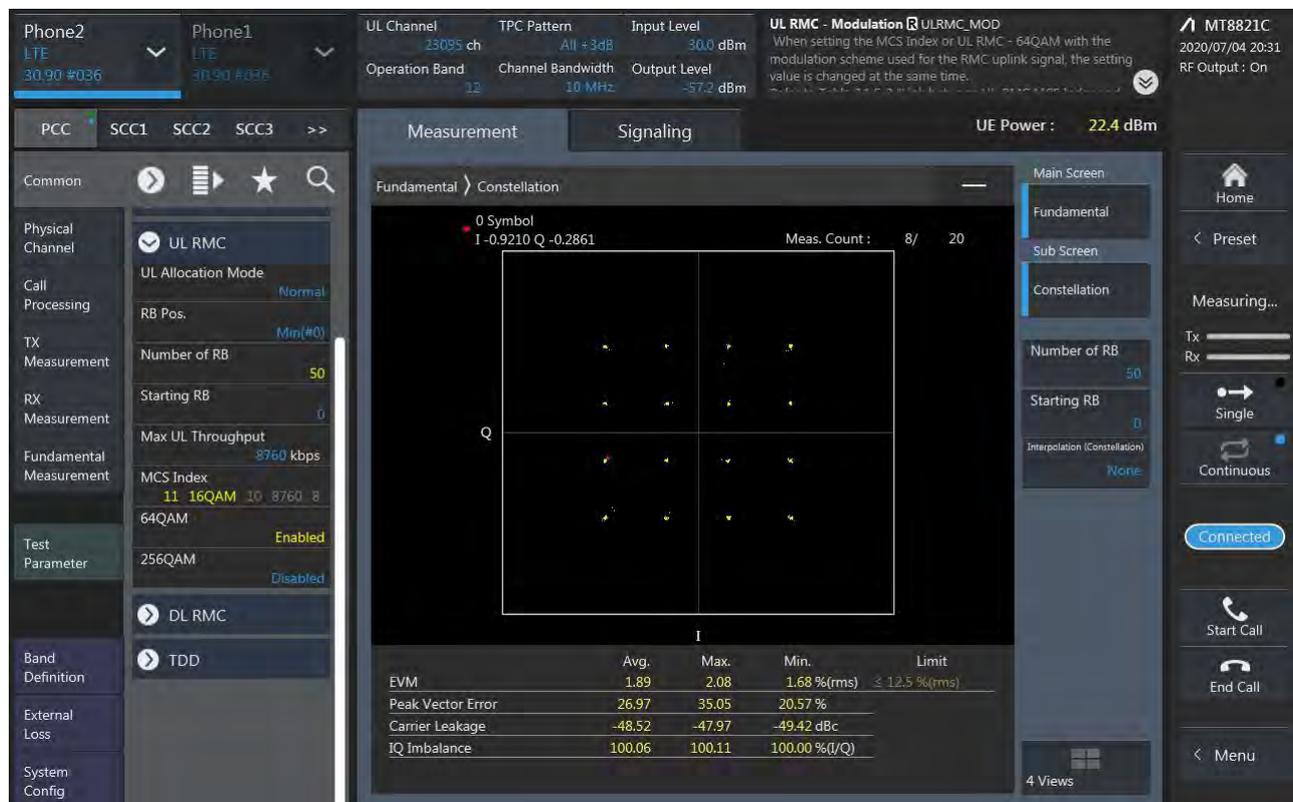
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



3.2. Test Mode = LTE /TM2 10MHz

3.2.1. Test Channel = MCH



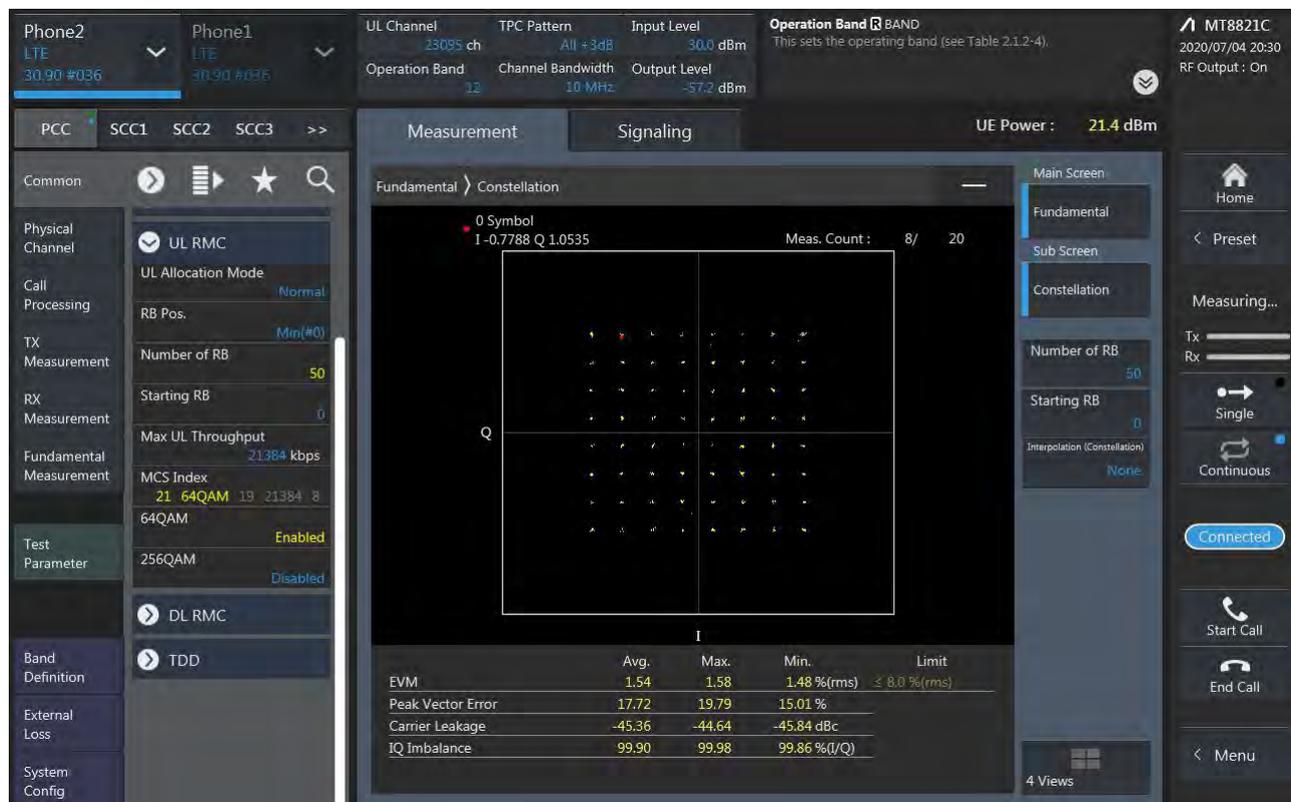
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



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
Band12	1.4MHz	QPSK	23017	6RB#0	1.091	1.293	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.091	1.296	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.091	1.284	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	1.097	1.284	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	1.094	1.284	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	1.094	1.284	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.088	1.290	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.088	1.290	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.085	1.284	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.691	2.916	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.685	2.922	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.685	2.904	PASS
Band12	3MHz	64QAM	23025	15RB#0	2.685	2.916	PASS
Band12	3MHz	64QAM	23095	15RB#0	2.679	2.904	PASS
Band12	3MHz	64QAM	23165	15RB#0	2.679	2.904	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.679	2.946	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.673	2.910	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.679	2.898	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.476	5.050	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.486	5.060	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.476	5.050	PASS
Band12	5MHz	64QAM	23035	25RB#0	4.486	5.040	PASS
Band12	5MHz	64QAM	23095	25RB#0	4.476	5.010	PASS
Band12	5MHz	64QAM	23155	25RB#0	4.476	5.020	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.496	5.090	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.486	5.040	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.486	5.060	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.931	9.820	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.951	9.860	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.951	9.960	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.

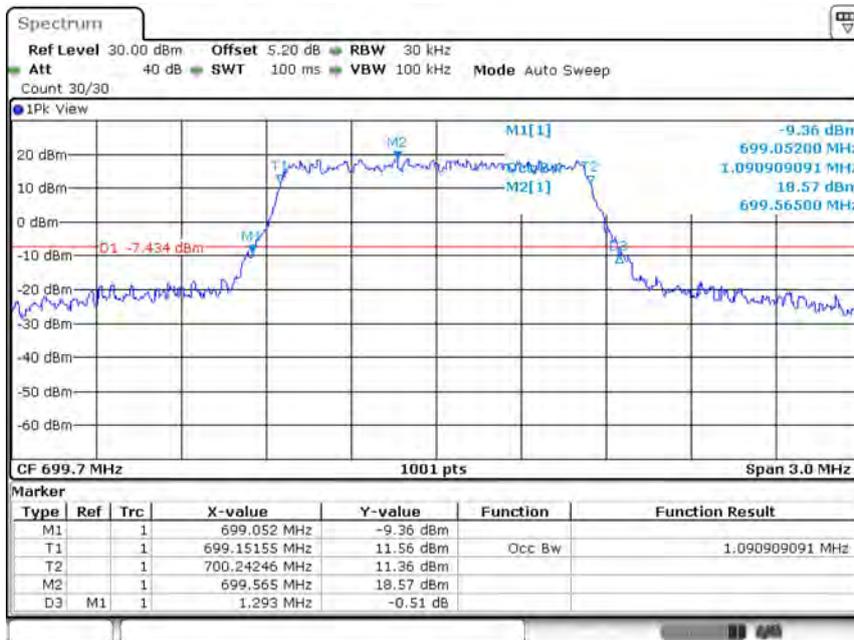
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755)8307 1443, or email: CN.Doccheck@sgs.com

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, 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

Band12	10MHz	64QAM	23060	50RB#0	8.931	9.760	PASS
Band12	10MHz	64QAM	23095	50RB#0	8.931	9.760	PASS
Band12	10MHz	64QAM	23130	50RB#0	8.971	9.880	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.931	9.800	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.931	9.880	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.951	9.920	PASS

4.2. Test Plots

Band12-1.4MHz-QPSK-23017-6RB#0-1.091



Date: 23 JUN 2020 12:35:18

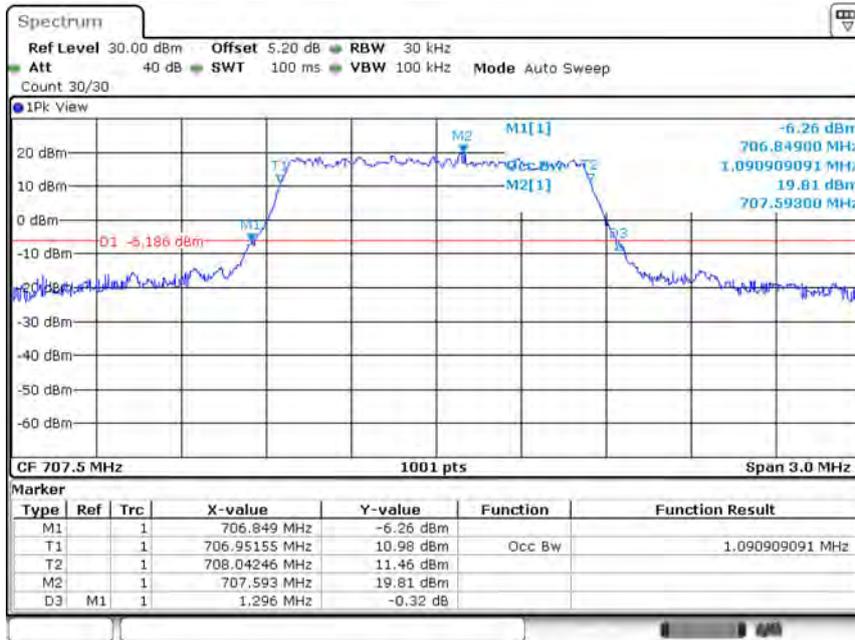


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

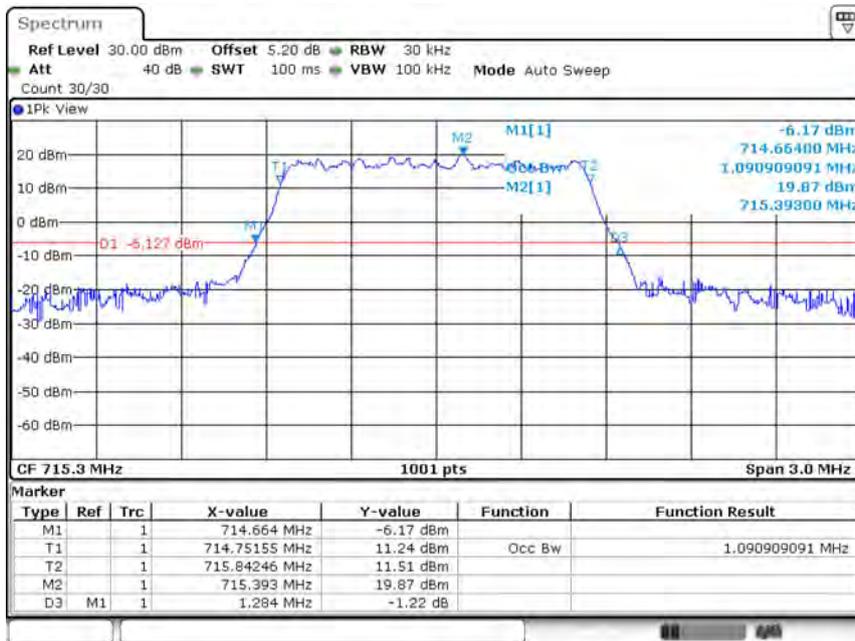


Band12-1.4MHz-QPSK-23095-6RB#0-1.091



Date: 23 JUN 2020 12:35:44

Band12-1.4MHz-QPSK-23173-6RB#0-1.091



Date: 23 JUN 2020 12:36:08

Band12-1.4MHz-64QAM-23017-6RB#0-1.097

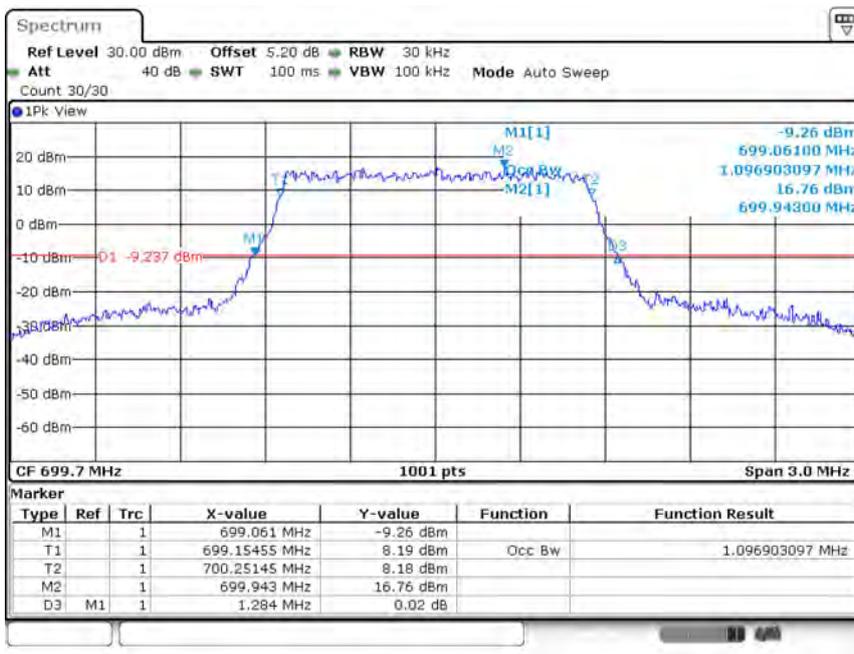


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

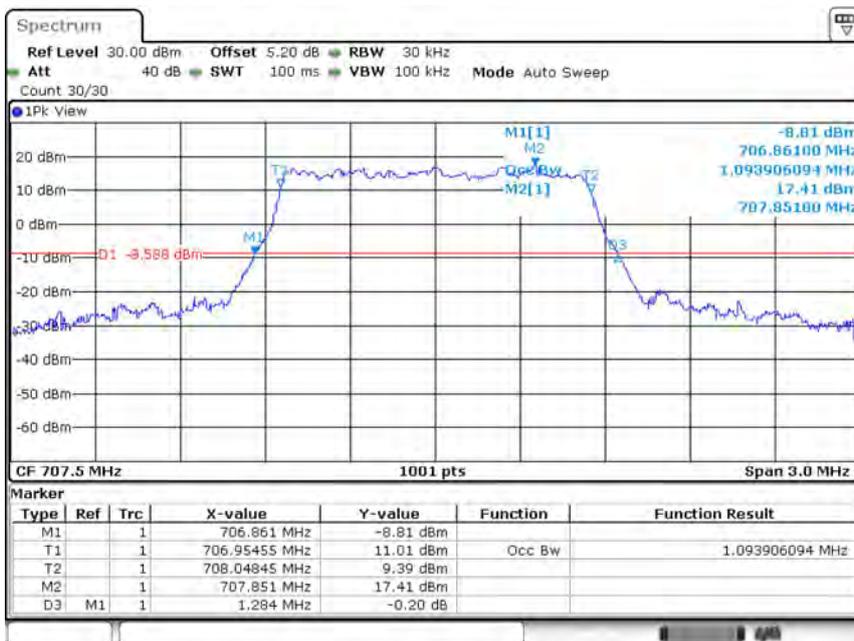
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·洋东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

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



Date: 24 JUN 2020 09:25:44

Band12-1.4MHz-64QAM-23095-6RB#0-1.094



Date: 24 JUN 2020 09:25:57

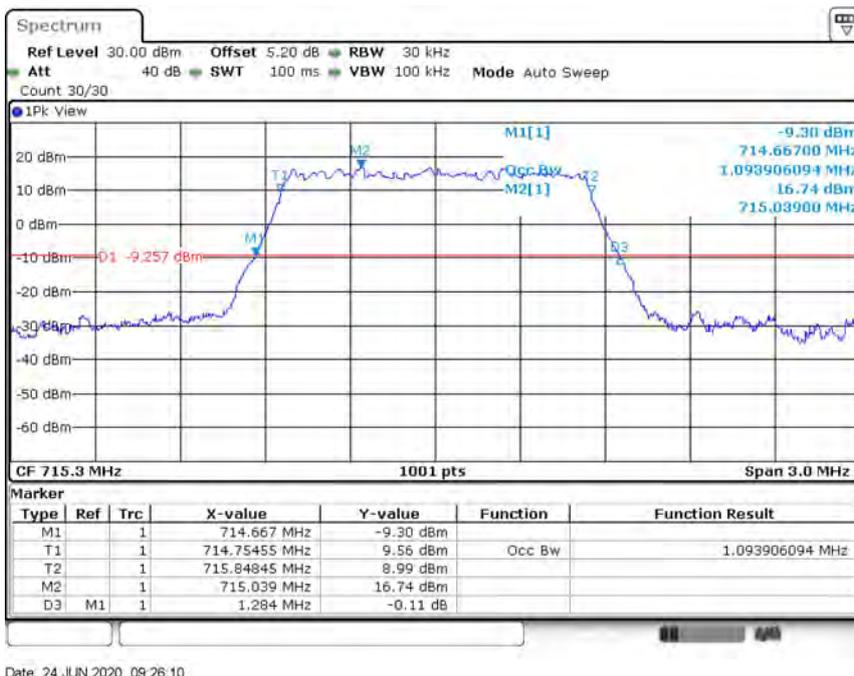
Band12-1.4MHz-64QAM-23173-6RB#0-1.094



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.

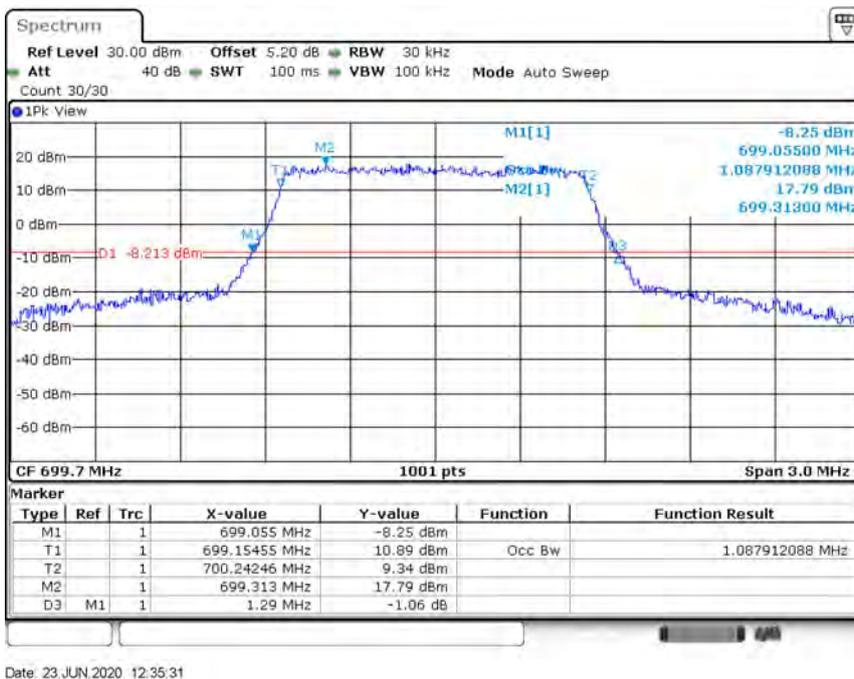
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755)8307 1443, or email: CN.Doccheck@sgs.com

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.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



Date: 24 JUN.2020 09:26:10

Band12-1.4MHz-16QAM-23017-6RB#0-1.088



Date: 23 JUN 2020 12:35:31

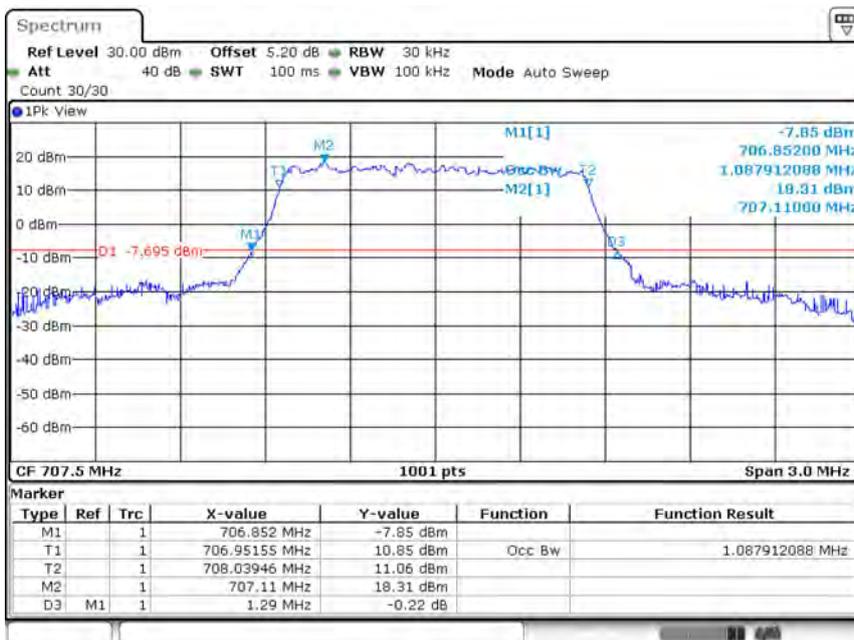
Band12-1.4MHz-16QAM-23095-6RB#0-1.088



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

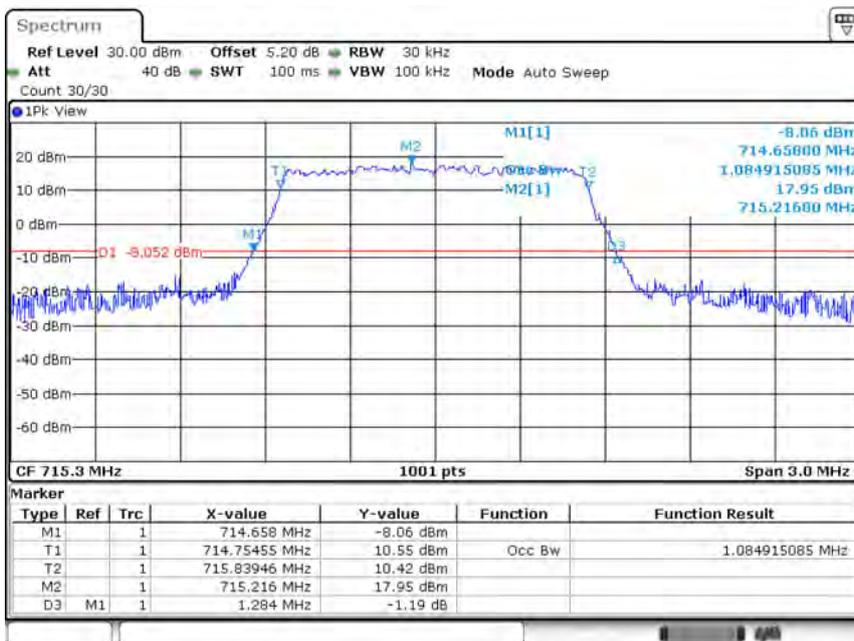
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 23 JUN 2020 12:35:56

Band12-1.4MHz-16QAM-23173-6RB#0-1.085



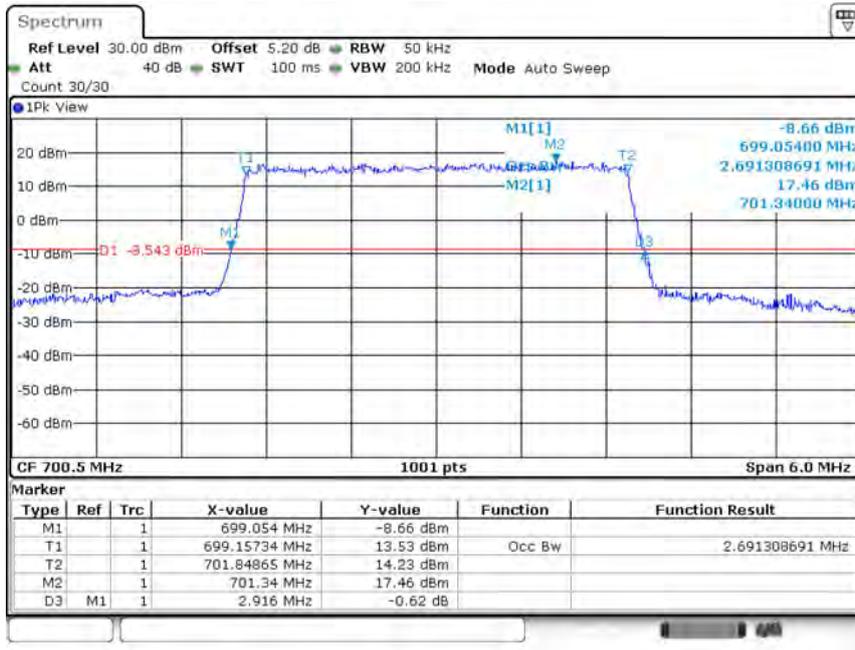
Date: 23 JUN 2020 12:36:22

Band12-3MHz-QPSK-23025-15RB#0-2.691



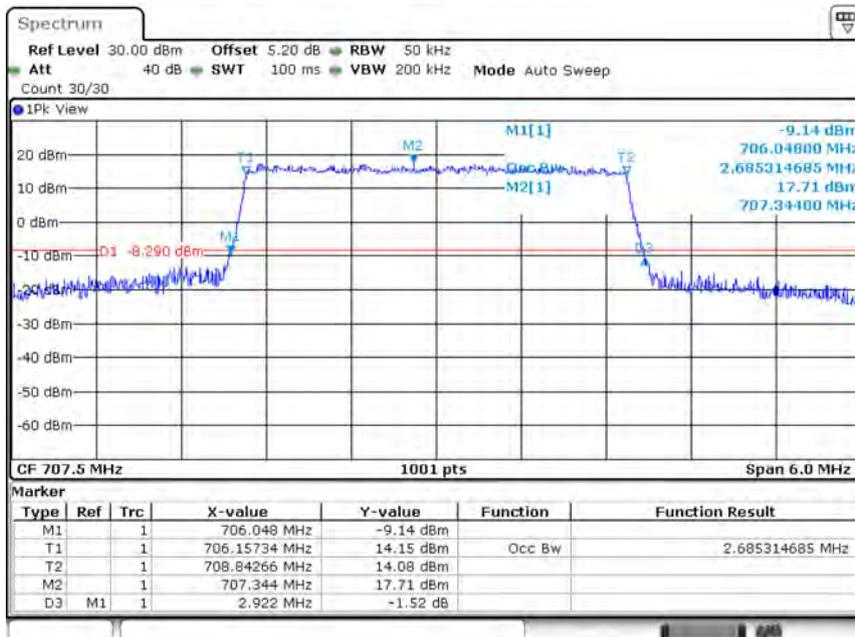
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date 23 JUN 2020 12:36:40

Band12-3MHz-QPSK-23095-15RB#0-2.685



Date 23 JUN 2020 12:37:05

Band12-3MHz-QPSK-23165-15RB#0-2.685

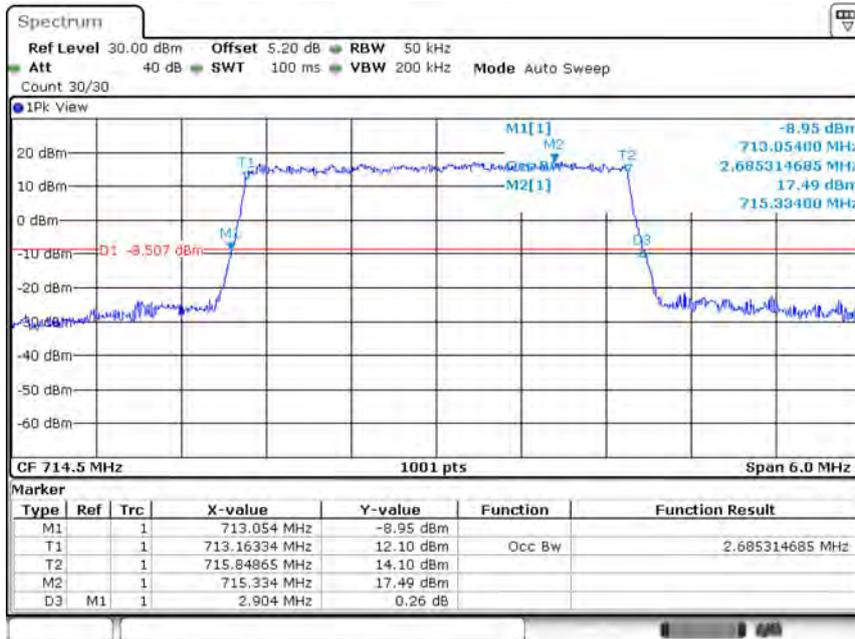


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

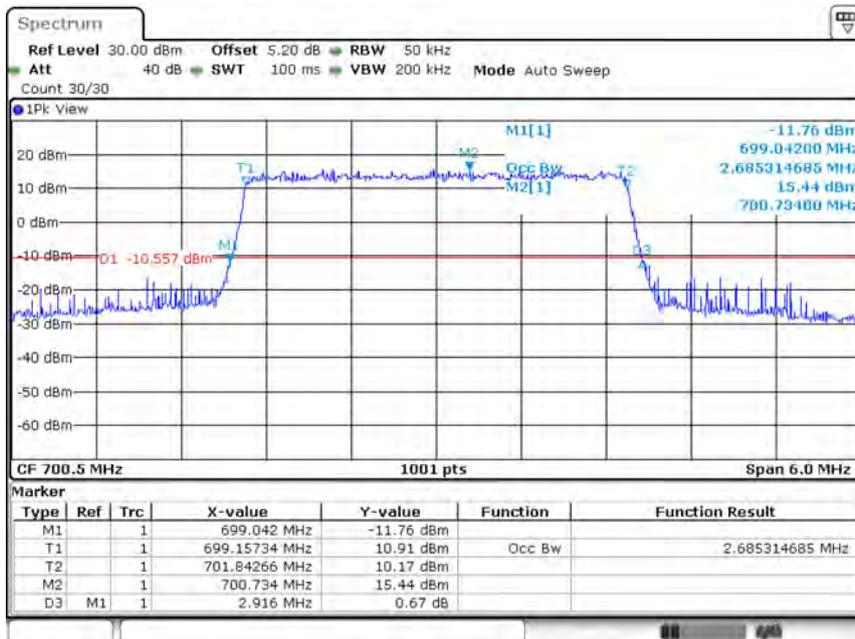
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路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 12:37:31

Band12-3MHz-64QAM-23025-15RB#0-2.685



Date: 24 JUN 2020 09:26:27

Band12-3MHz-64QAM-23095-15RB#0-2.679

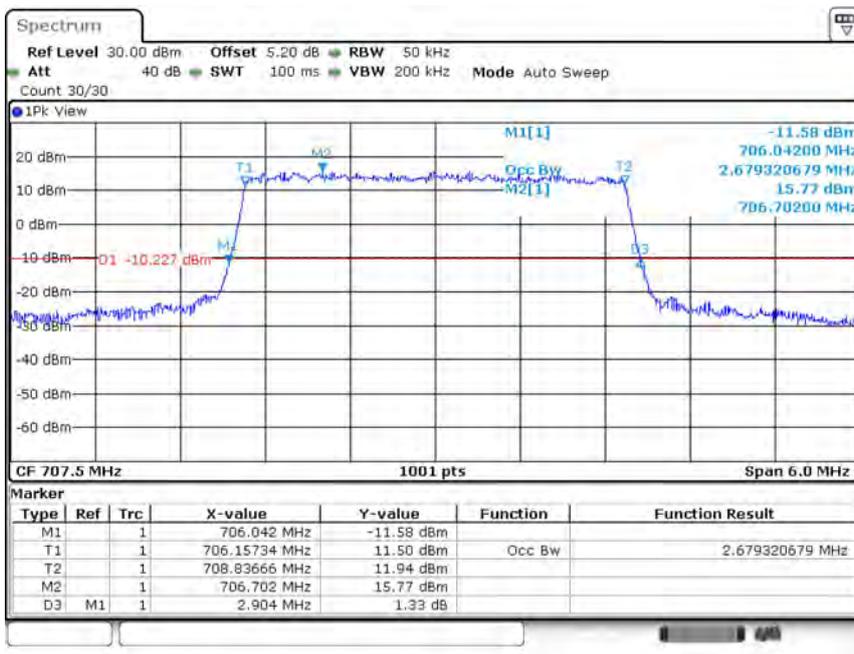


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

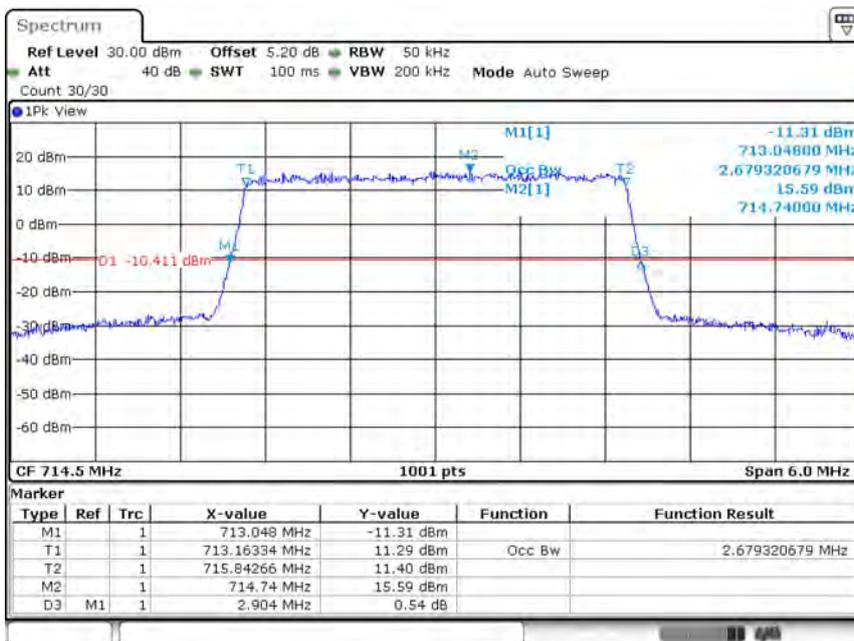
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

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



Date: 24 JUN 2020 09:26:40

Band12-3MHz-64QAM-23165-15RB#0-2.679

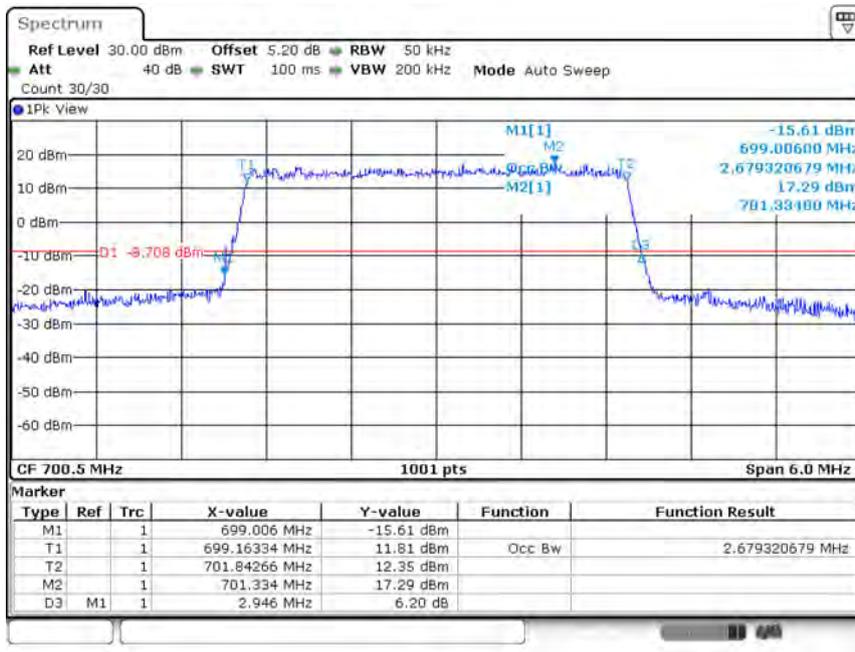


Date: 24 JUN 2020 09:26:53

Band12-3MHz-16QAM-23025-15RB#0-2.679

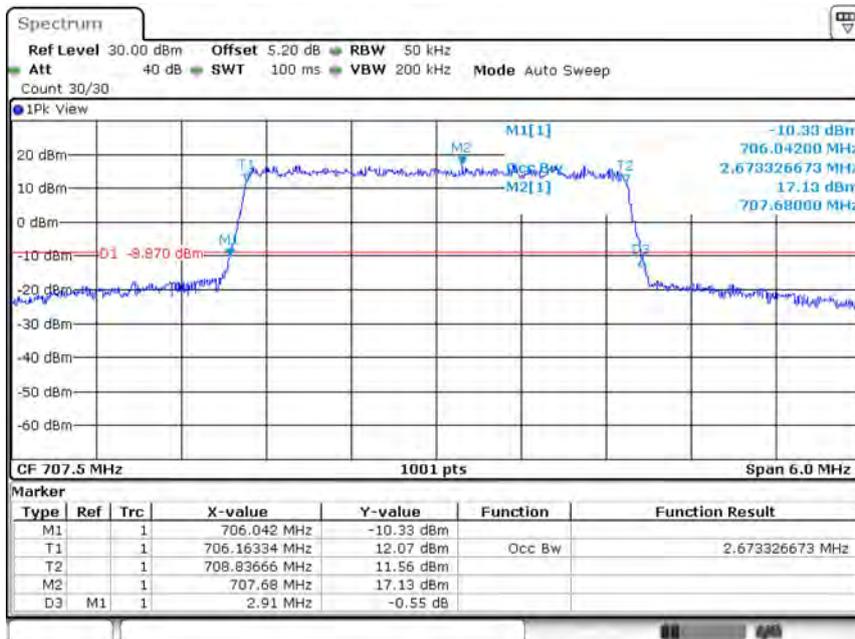


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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: 23 JUN 2020 12:38:52

Band12-3MHz-16QAM-23095-15RB#0-2.673



Date: 23 JUN 2020 12:37:18

Band12-3MHz-16QAM-23165-15RB#0-2.679

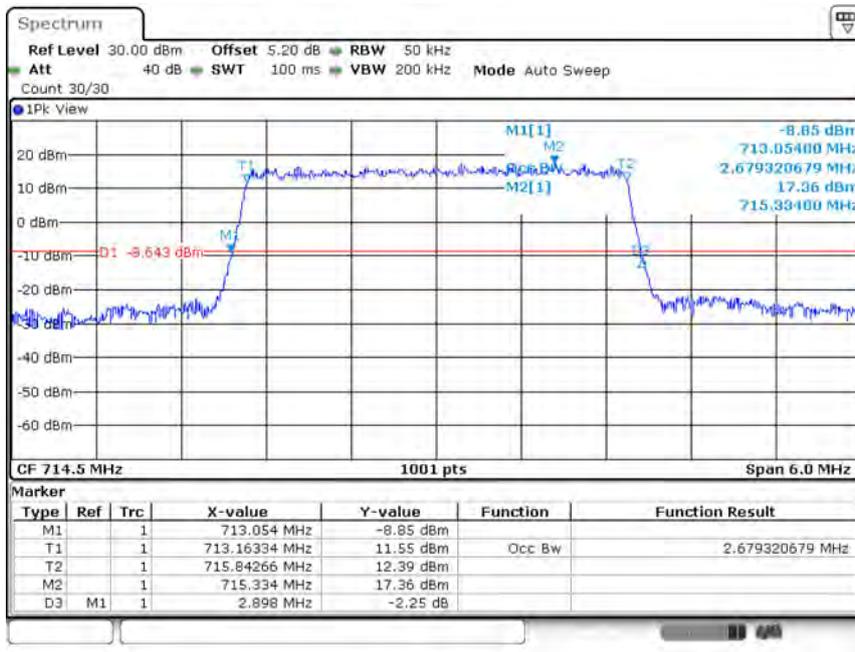


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

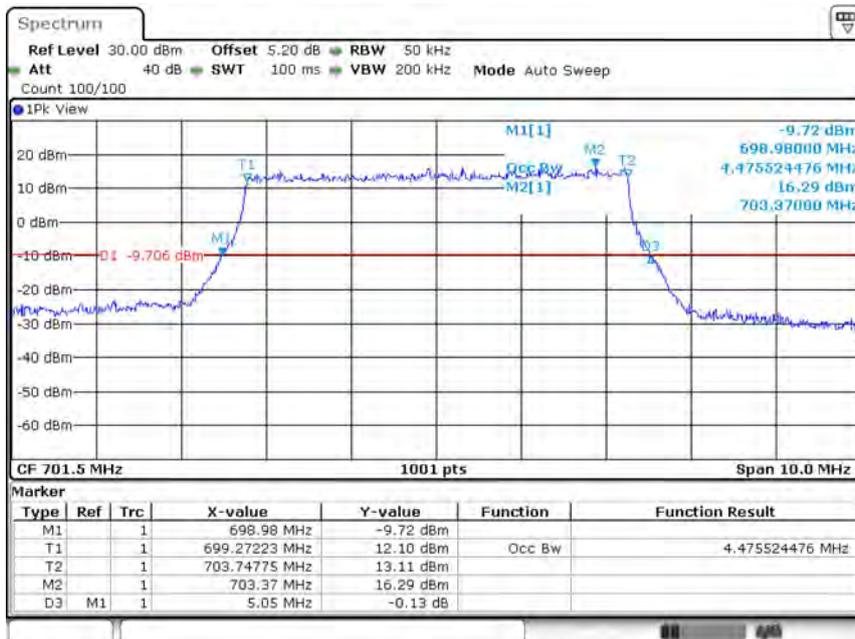
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路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



Date: 23 JUN 2020 12:37:43

Band12-5MHz-QPSK-23035-25RB#0-4.476

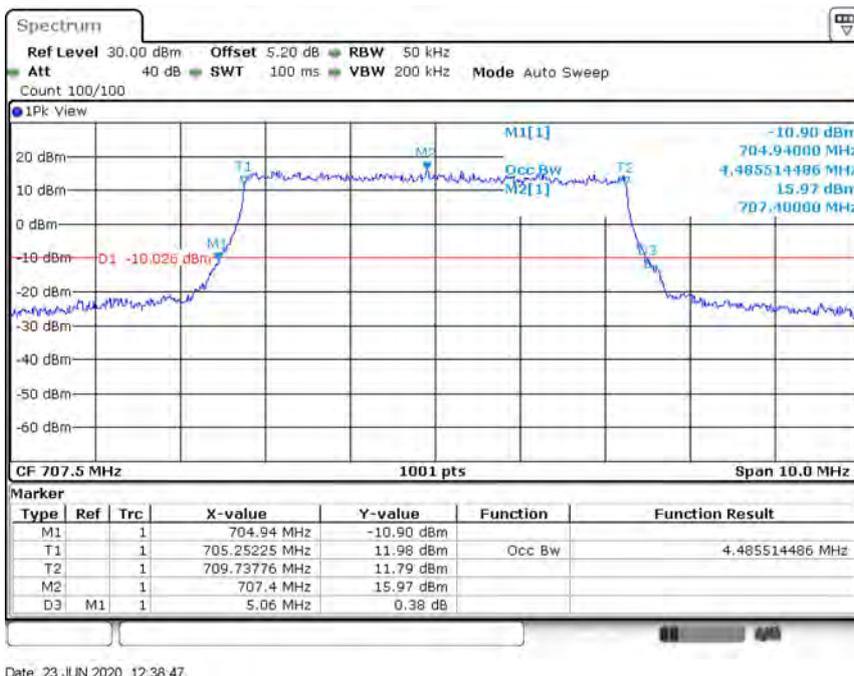


Date: 23 JUN 2020 12:38:08

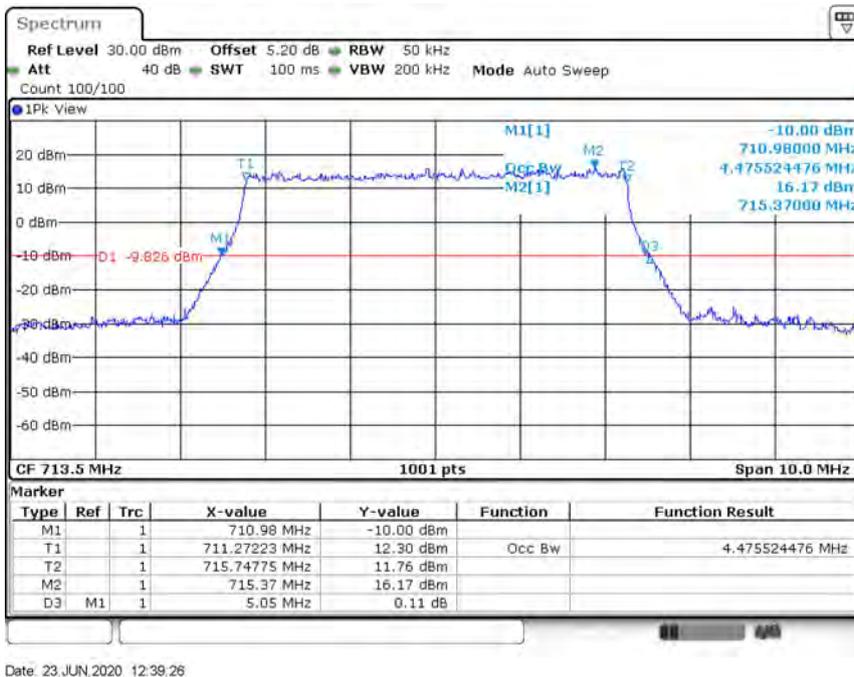
Band12-5MHz-QPSK-23095-25RB#0-4.486



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 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

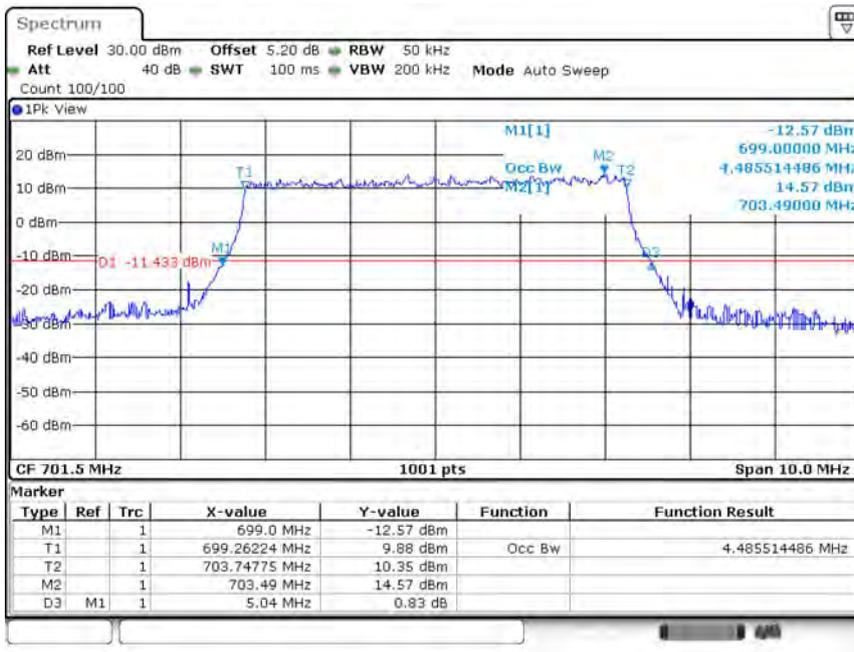


Band12-5MHz-QPSK-23155-25RB#0-4.476



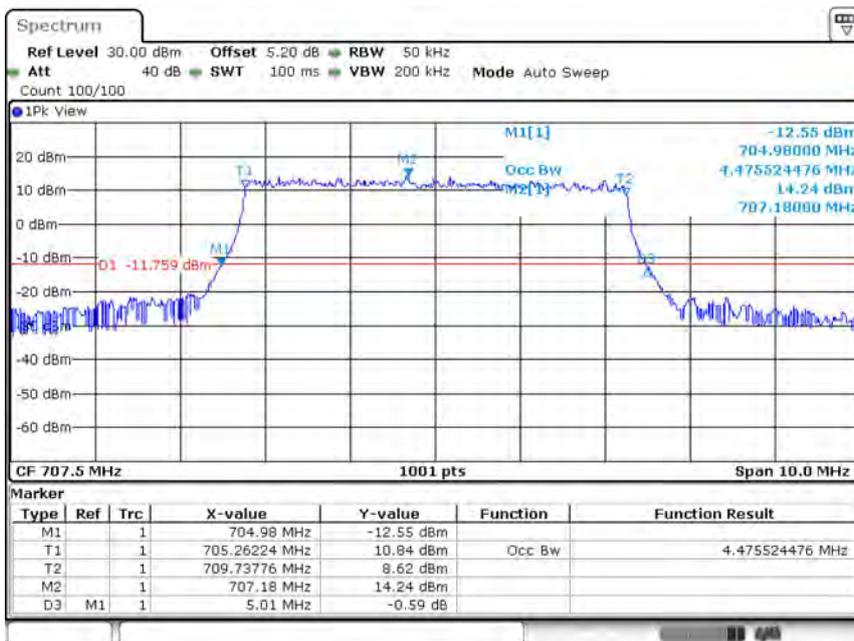
Band12-5MHz-64QAM-23035-25RB#0-4.486





Date: 24 JUN 2020 09:27:18

Band12-5MHz-64QAM-23095-25RB#0-4.476

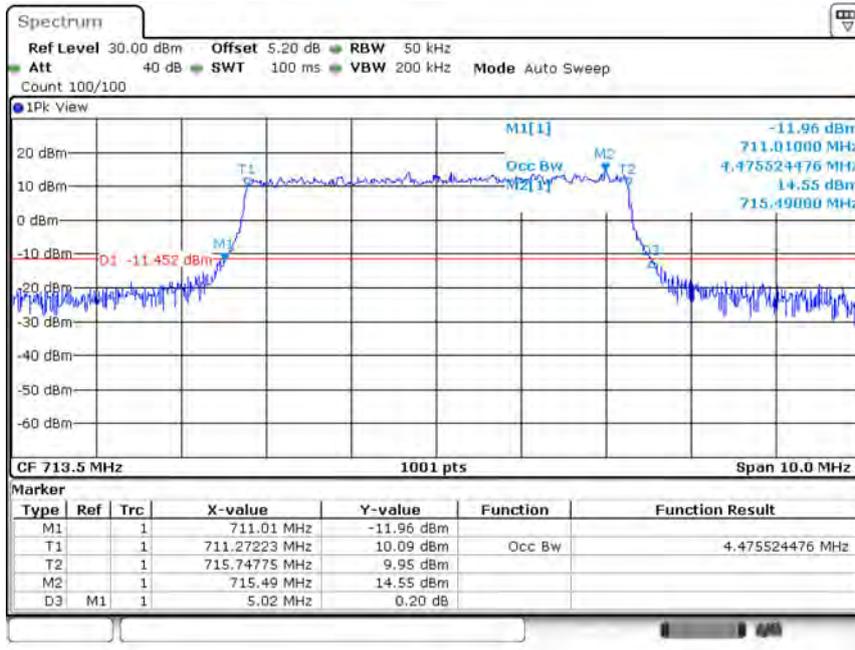


Date: 24 JUN 2020 09:27:38

Band12-5MHz-64QAM-23155-25RB#0-4.476

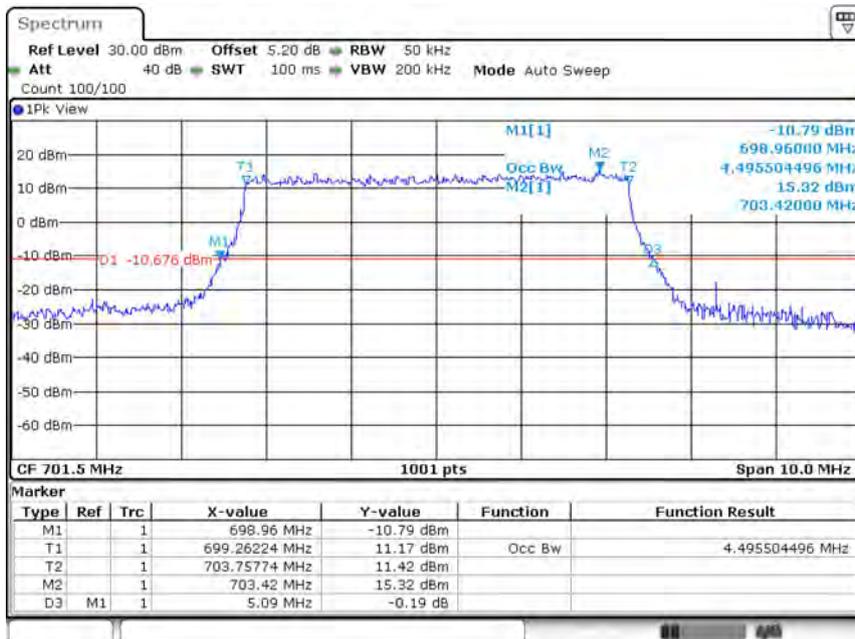


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 24 JUN 2020 09:27:58

Band12-5MHz-16QAM-23035-25RB#0-4.496

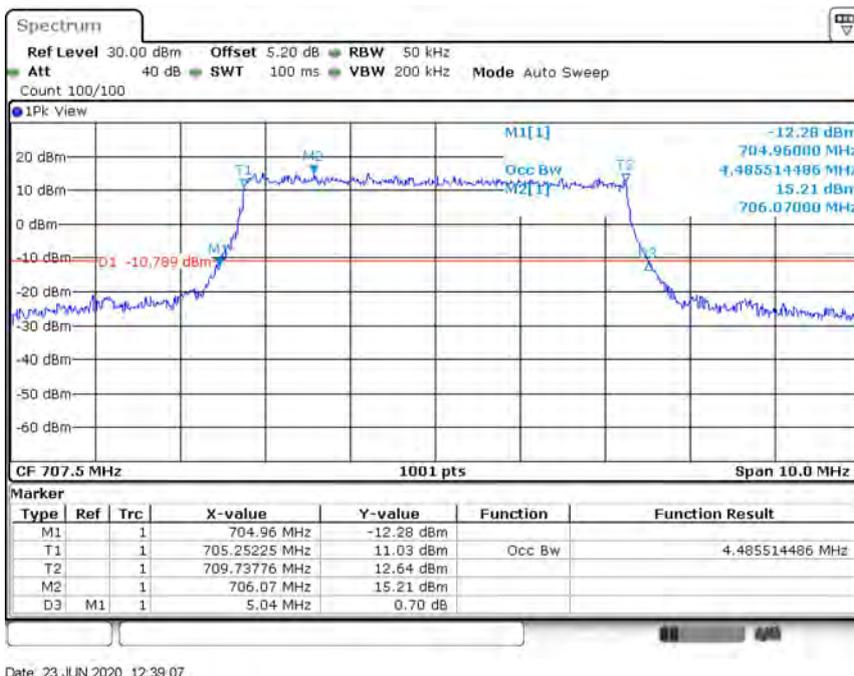


Date: 23 JUN 2020 12:38:27

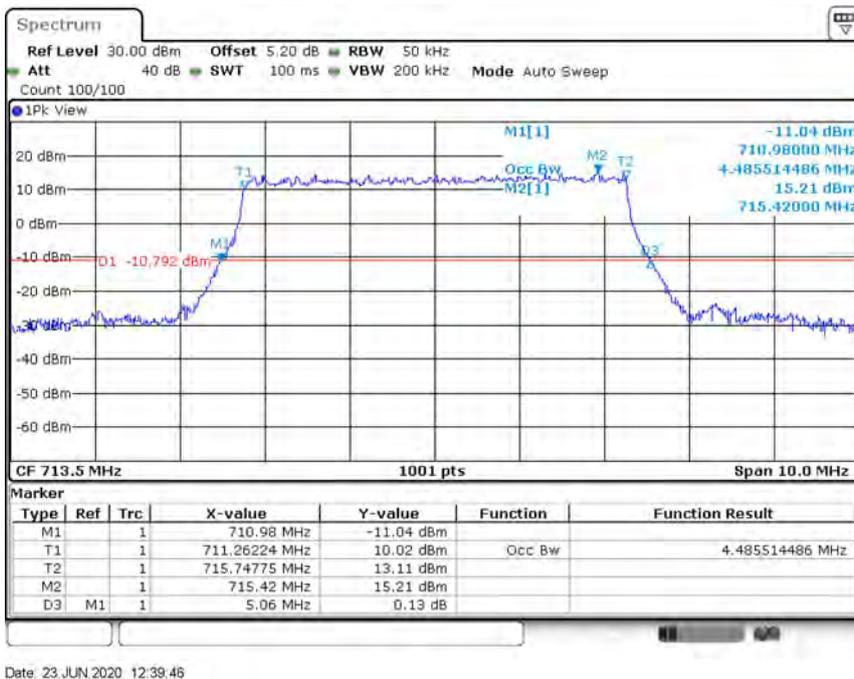
Band12-5MHz-16QAM-23095-25RB#0-4.486



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 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



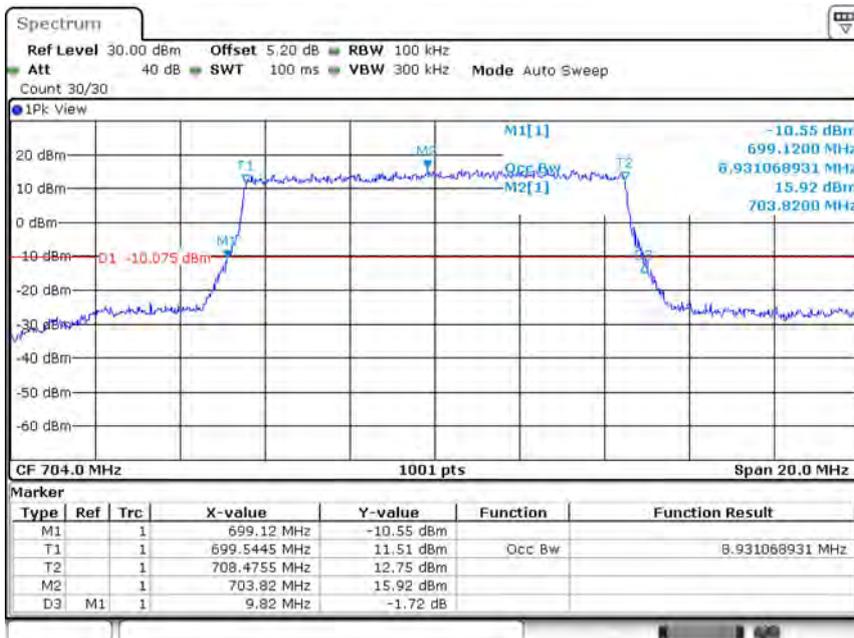
Band12-5MHz-16QAM-23155-25RB#0-4.486



Band12-10MHz-QPSK-23060-50RB#0-8.931

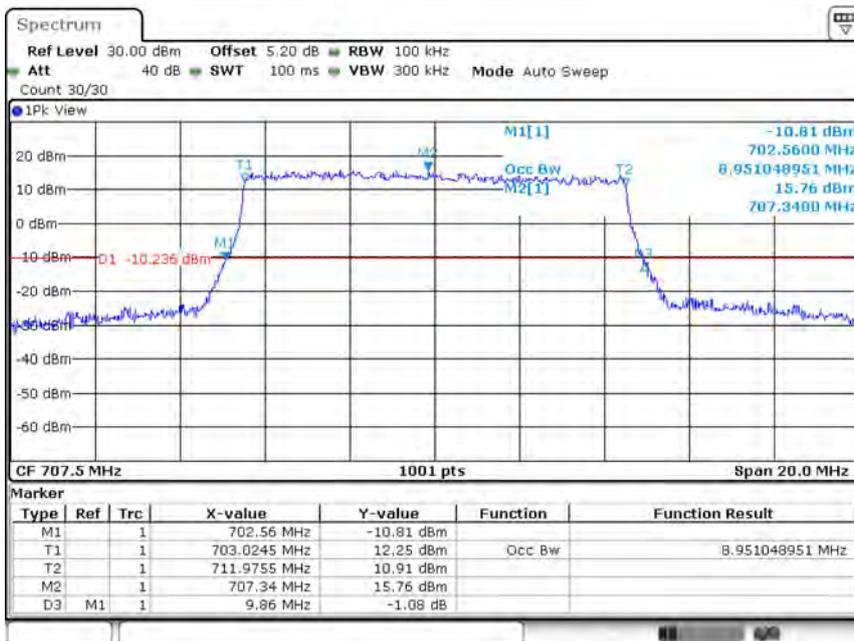


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 23 JUN 2020 12:40:04

Band12-10MHz-QPSK-23095-50RB#0-8.951



Date: 23 JUN 2020 12:40:29

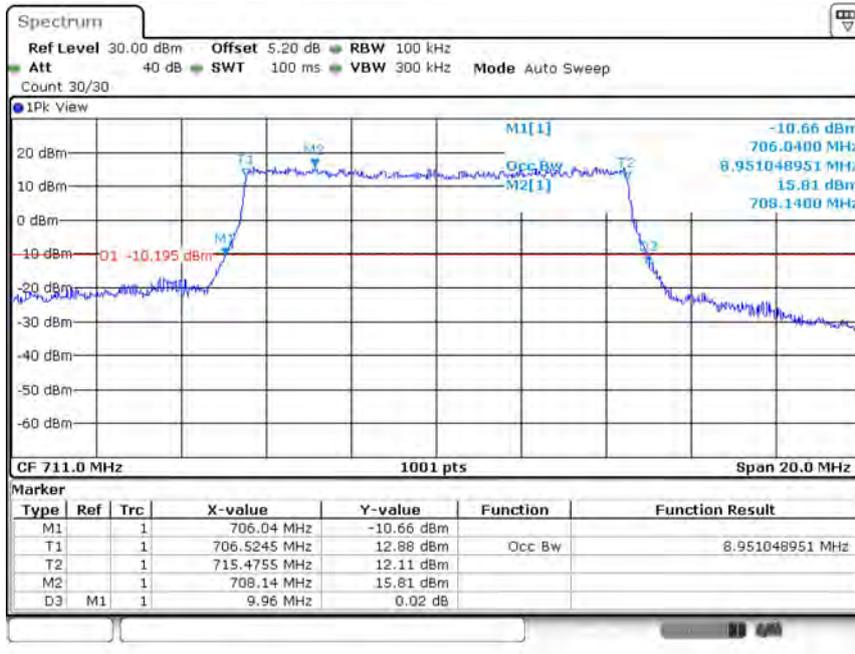
Band12-10MHz-QPSK-23130-50RB#0-8.951



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

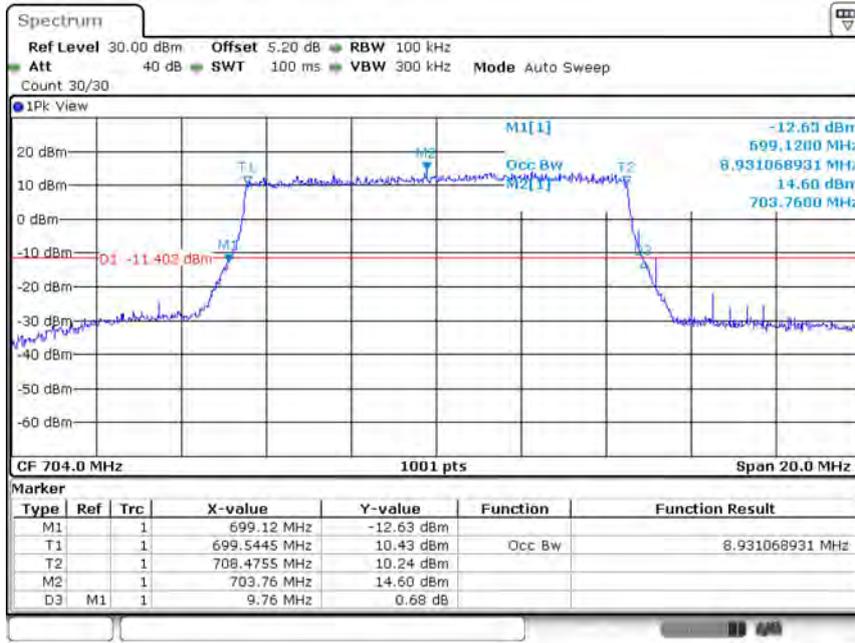
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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)83071443, 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.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



Date: 23 JUN 2020 12:40:54

Band12-10MHz-64QAM-23060-50RB#0-8.931

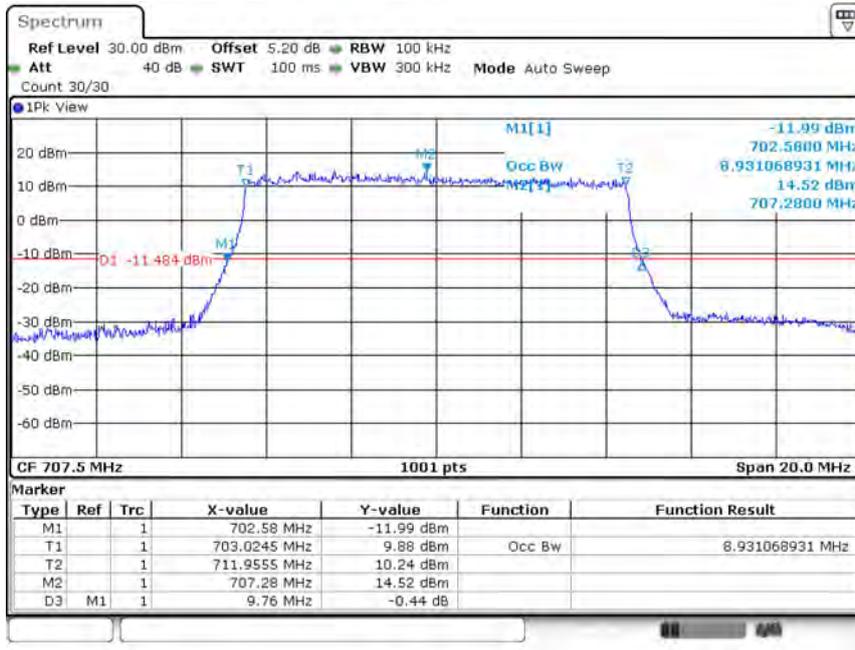


Date: 24 JUN 2020 09:28:16

Band12-10MHz-64QAM-23095-50RB#0-8.931

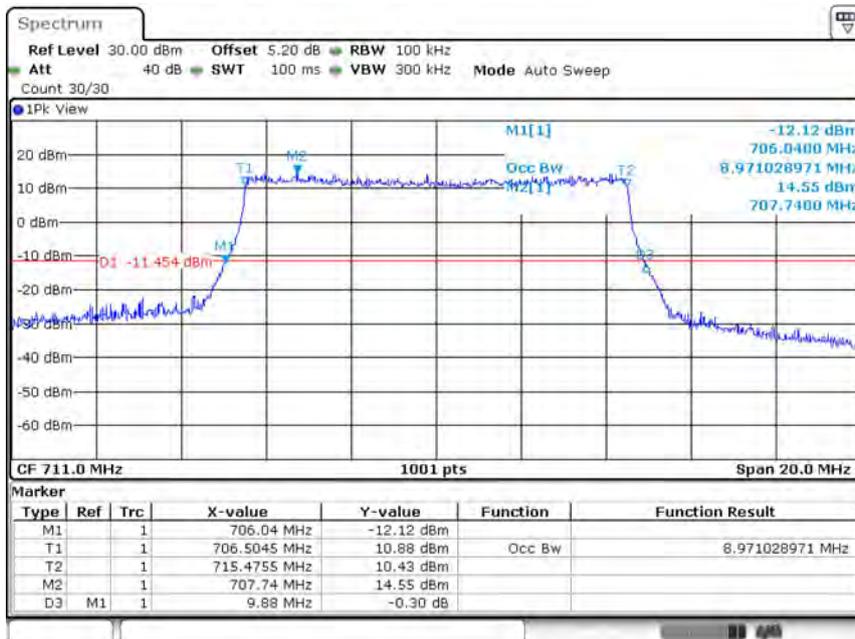


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 24 JUN 2020 09:28:28

Band12-10MHz-64QAM-23130-50RB#0-8.971

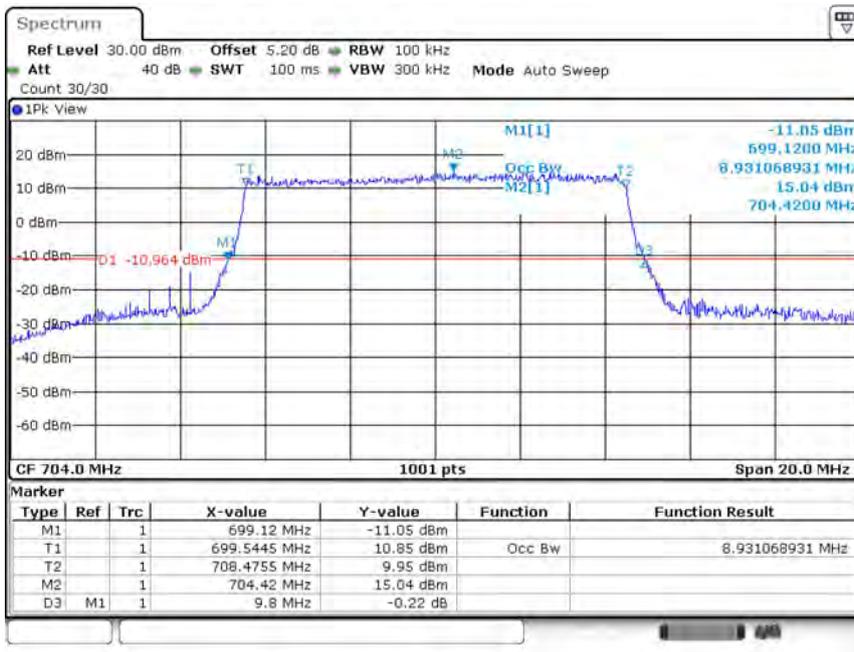


Date: 24 JUN 2020 09:28:41

Band12-10MHz-16QAM-23060-50RB#0-8.931

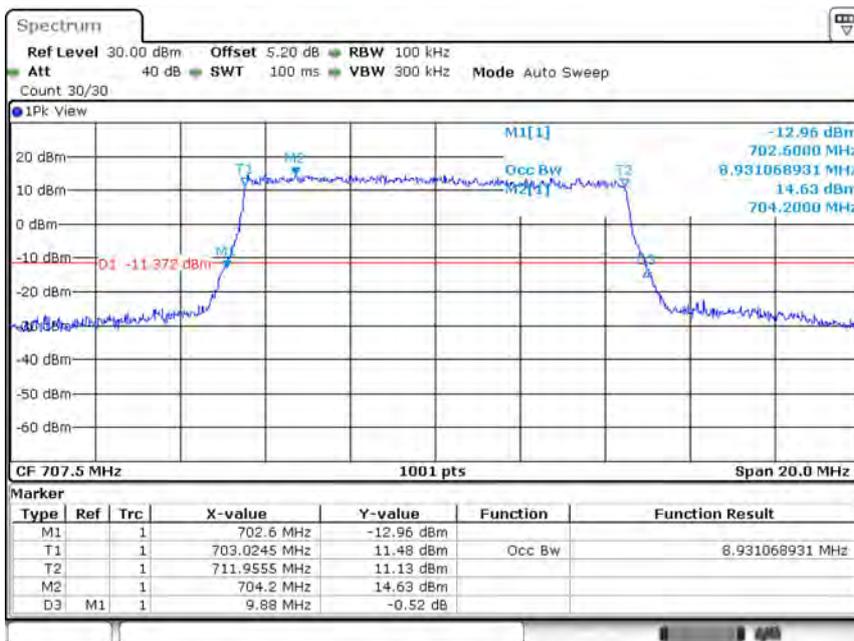


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 23 JUN 2020 12:40:16

Band12-10MHz-16QAM-23095-50RB#0-8.931



Date: 23 JUN 2020 12:40:42

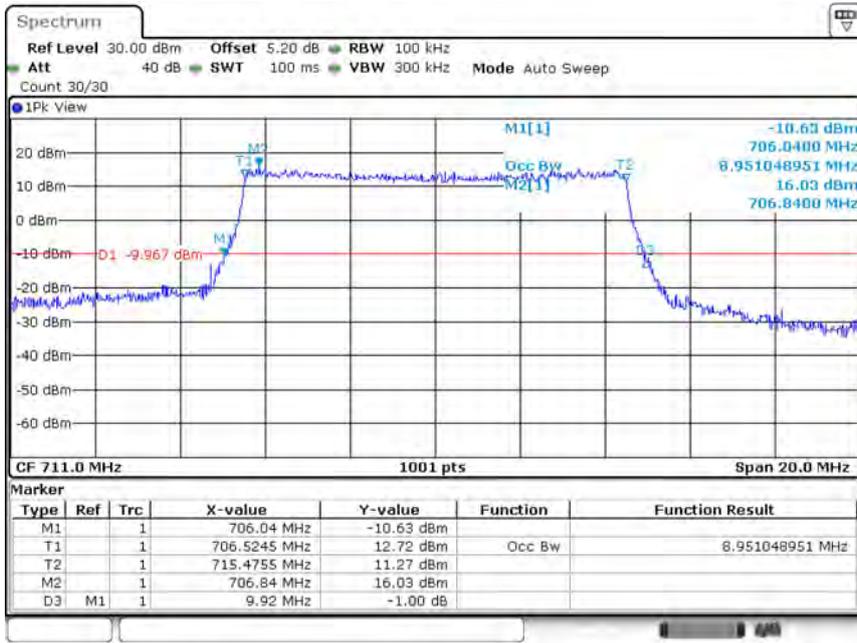
Band12-10MHz-16QAM-23130-50RB#0-8.951



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

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



Date: 23 JUN 2020 12:41:07



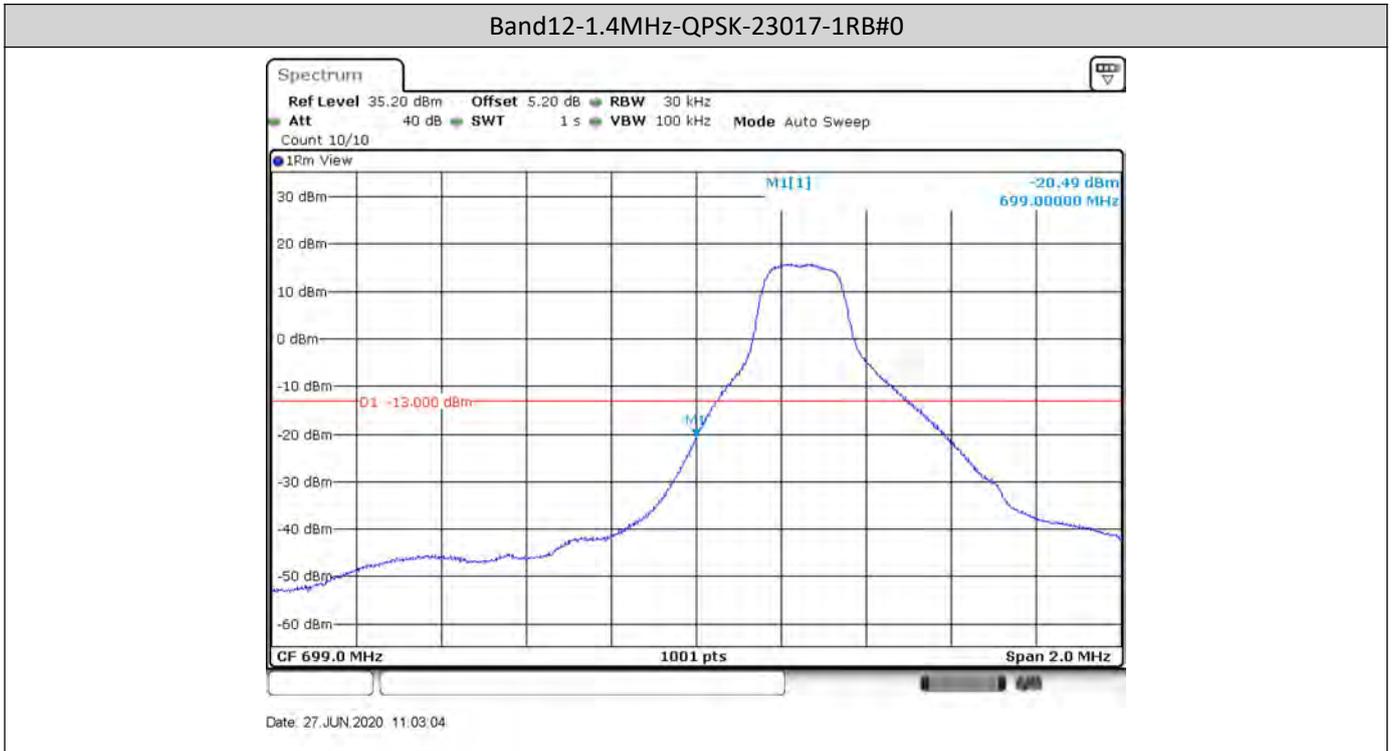
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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.

Band12-1.4MHz-QPSK-23017-6RB#0



Date: 27 JUN 2020 11:03:45

Band12-1.4MHz-QPSK-23173-1RB#5



Date: 27 JUN 2020 11:04:31

Band12-1.4MHz-QPSK-23173-6RB#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 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: 27 JUN 2020 11:05:12

Band12-1.4MHz-64QAM-23017-1RB#0



Date: 24 JUN 2020 09:29:07

Band12-1.4MHz-64QAM-23017-6RB#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.



Date: 24 JUN 2020 09:29:28

Band12-1.4MHz-64QAM-23173-1RB#5



Date: 24 JUN 2020 09:29:53

Band12-1.4MHz-64QAM-23173-6RB#0



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
 Inspection & Testing Services
 Wireless Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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 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 09:30:13

Band12-1.4MHz-16QAM-23017-1RB#0



Date: 27 JUN 2020 11:03:25

Band12-1.4MHz-16QAM-23017-6RB#0





Date: 27 JUN 2020 11:04:06

Band12-1.4MHz-16QAM-23173-1RB#5



Date: 27 JUN 2020 11:04:51

Band12-1.4MHz-16QAM-23173-6RB#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 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: 27 JUN 2020 11:05:32

Band12-3MHz-QPSK-23025-1RB#0



Date: 27 JUN 2020 11:05:58

Band12-3MHz-QPSK-23025-15RB#0



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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 t (86-29) 6282 7885 www.sgs.com.cn
中国·西安·洋东新城科源三路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: 27 JUN 2020 11:06:39

Band12-3MHz-QPSK-23165-1RB#14



Date: 27 JUN 2020 11:07:24

Band12-3MHz-QPSK-23165-15RB#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.



Date: 27 JUN 2020 11:08:05

Band12-3MHz-64QAM-23025-1RB#0



Date: 24 JUN 2020 09:30:39

Band12-3MHz-64QAM-23025-15RB#0



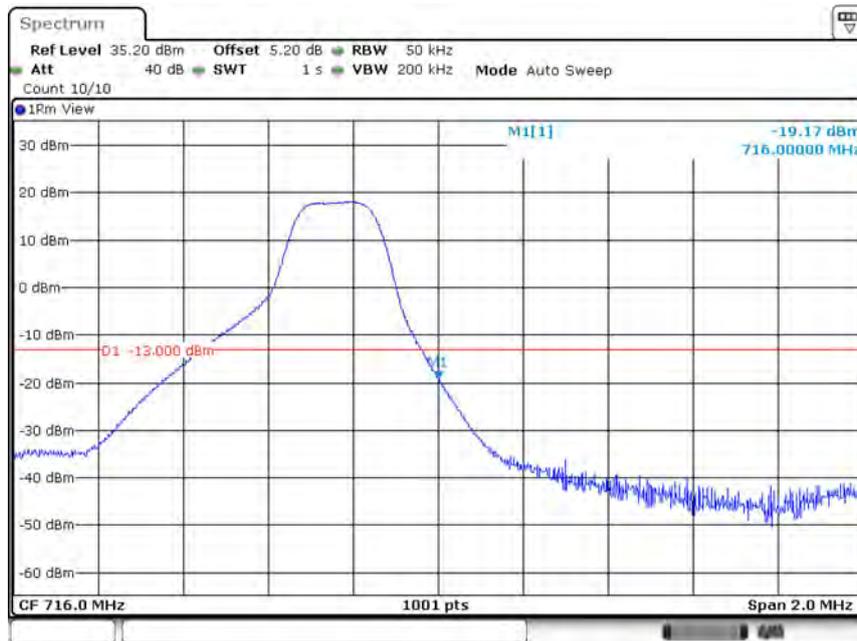
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 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 09:31:00

Band12-3MHz-64QAM-23165-1RB#14



Date: 24 JUN.2020 09:31:25

Band12-3MHz-64QAM-23165-15RB#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.



Date: 24 JUN 2020 09:31:46

Band12-3MHz-16QAM-23025-1RB#0



Date: 27 JUN 2020 11:06:18

Band12-3MHz-16QAM-23025-15RB#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 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: 27 JUN.2020 11:06:59

Band12-3MHz-16QAM-23165-1RB#14



Date: 27 JUN.2020 11:07:45

Band12-3MHz-16QAM-23165-15RB#0



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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 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: 27 JUN 2020 11:08:26

Band12-5MHz-QPSK-23035-1RB#0



Date: 27 JUN 2020 11:08:51

Band12-5MHz-QPSK-23035-25RB#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.



Date: 27 JUN 2020 11:09:33

Band12-5MHz-QPSK-23155-1RB#24



Date: 26 JUL 2020 10:47:51

Band12-5MHz-QPSK-23155-25RB#0

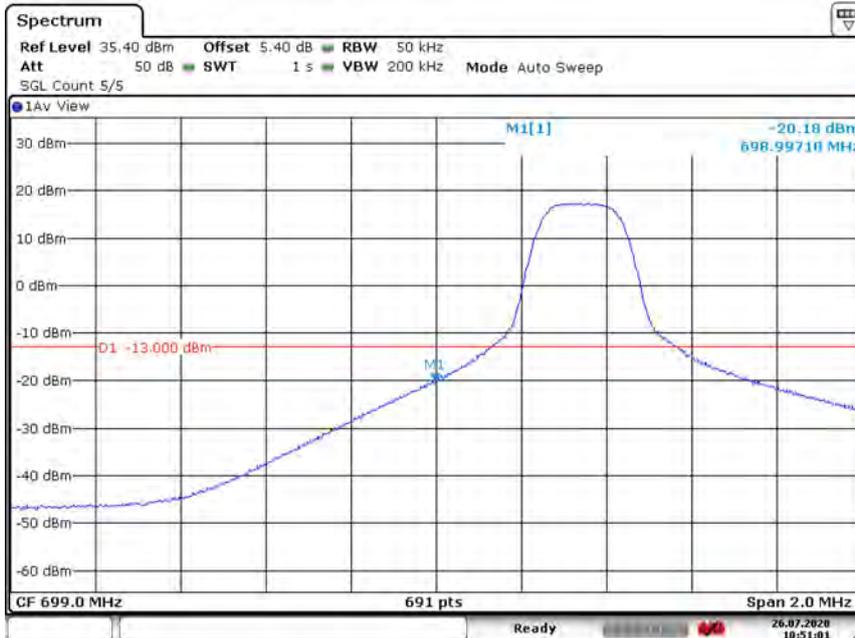


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 27 JUN.2020 11:14:42

Band12-5MHz-64QAM-23035-1RB#0



Date: 26 JUL.2020 10:51:01

Band12-5MHz-64QAM-23035-25RB#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.



Date: 24 JUN 2020 09:32:32

Band12-5MHz-64QAM-23155-1RB#24



Date: 26 JUL 2020 10:50:02

Band12-5MHz-64QAM-23155-25RB#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.



Date: 24 JUN 2020 09:33:17

Band12-5MHz-16QAM-23035-1RB#0



Date: 27 JUN 2020 11:09:12

Band12-5MHz-16QAM-23035-25RB#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 t (86-29) 6282 7885 www.sgs.com.cn
 中国·西安·洋东新城科源三路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: 27 JUN 2020 11:09:53

Band12-5MHz-16QAM-23155-1RB#24



Date: 26 JUL 2020 10:49:04

Band12-5MHz-16QAM-23155-25RB#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.



Date: 27 JUN.2020 11:15:02

Band12-10MHz-QPSK-23060-1RB#0



Date: 27 JUN.2020 11:15:28

Band12-10MHz-QPSK-23060-50RB#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.



Date: 27 JUN.2020 11:16:09

Band12-10MHz-QPSK-23130-1RB#49



Date: 27 JUN.2020 11:16:54

Band12-10MHz-QPSK-23130-50RB#0



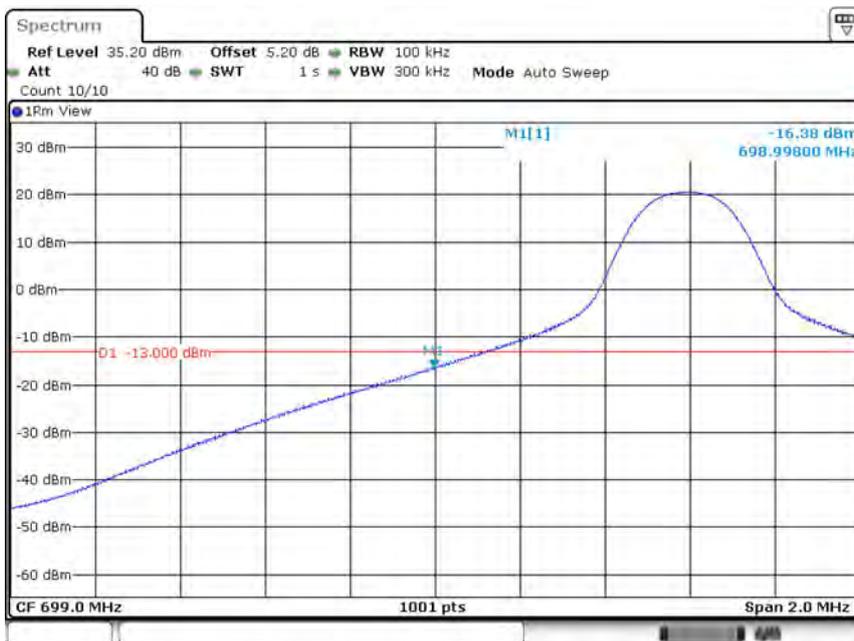
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 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: 27 JUN 2020 11:17:36

Band12-10MHz-64QAM-23060-1RB#0



Date: 24 JUN 2020 09:33:43

Band12-10MHz-64QAM-23060-50RB#0





Date: 24 JUN 2020 09:34:03

Band12-10MHz-64QAM-23130-1RB#49



Date: 24 JUN 2020 09:34:29

Band12-10MHz-64QAM-23130-50RB#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 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 09:34:49

Band12-10MHz-16QAM-23060-1RB#0



Date: 27 JUN 2020 11:15:48

Band12-10MHz-16QAM-23060-50RB#0





Date: 27 JUN 2020 11:16:28

Band12-10MHz-16QAM-23130-1RB#49



Date: 27 JUN 2020 11:17:15

Band12-10MHz-16QAM-23130-50RB#0





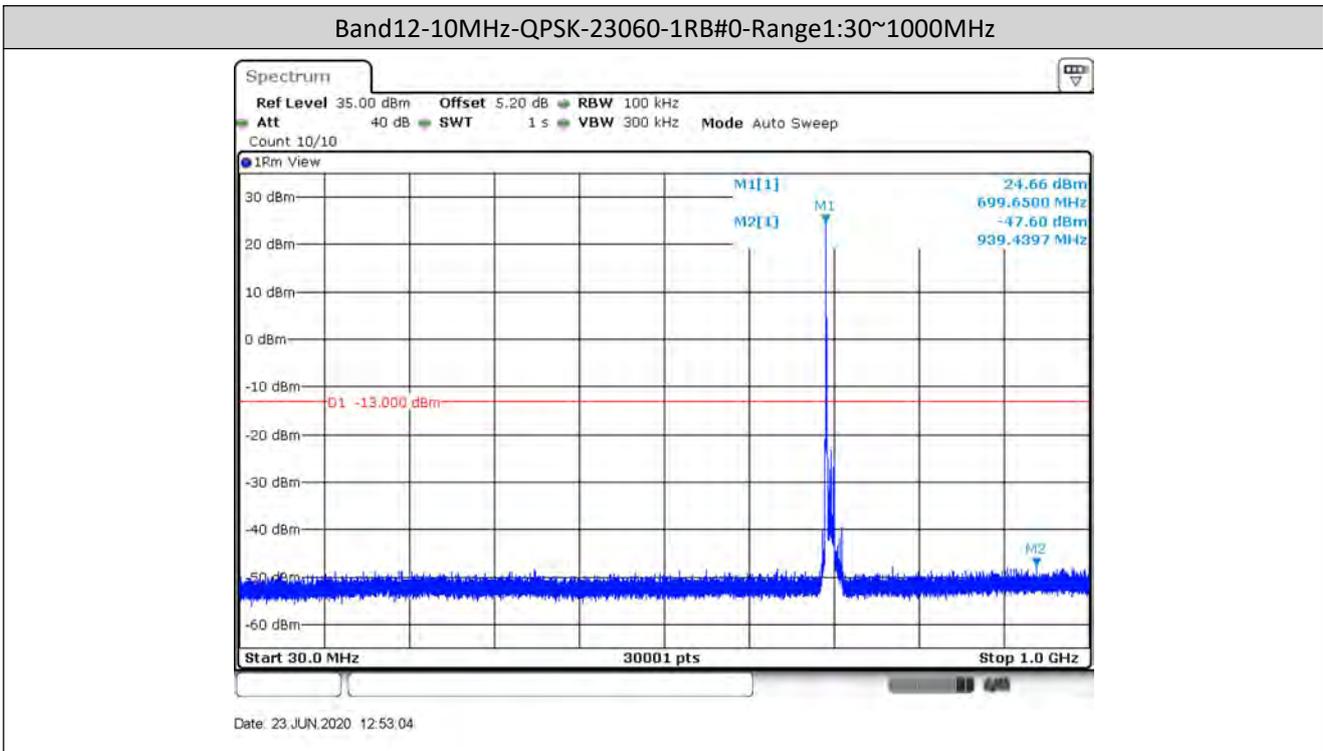
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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.

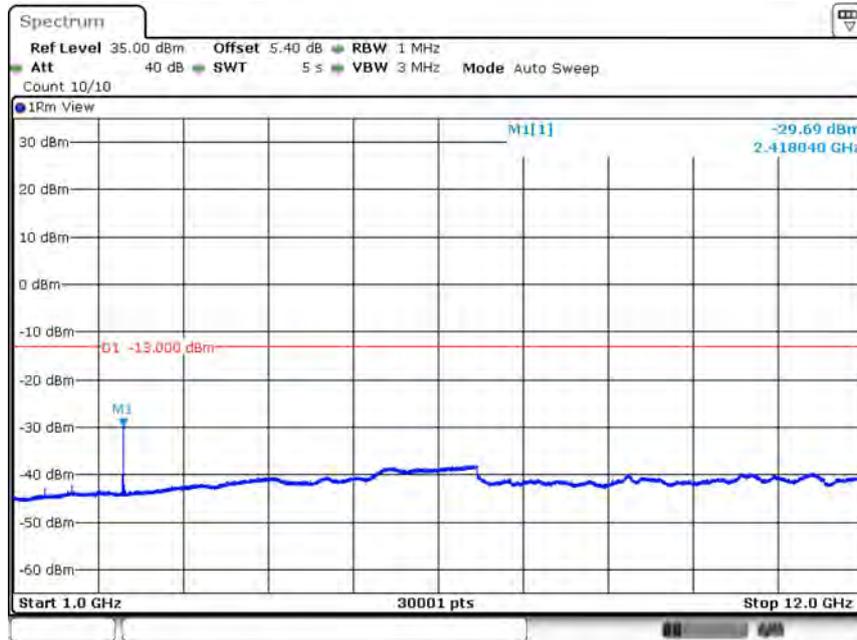
Remark2: only the worst case data displayed in this report.

6.1. Test Plots



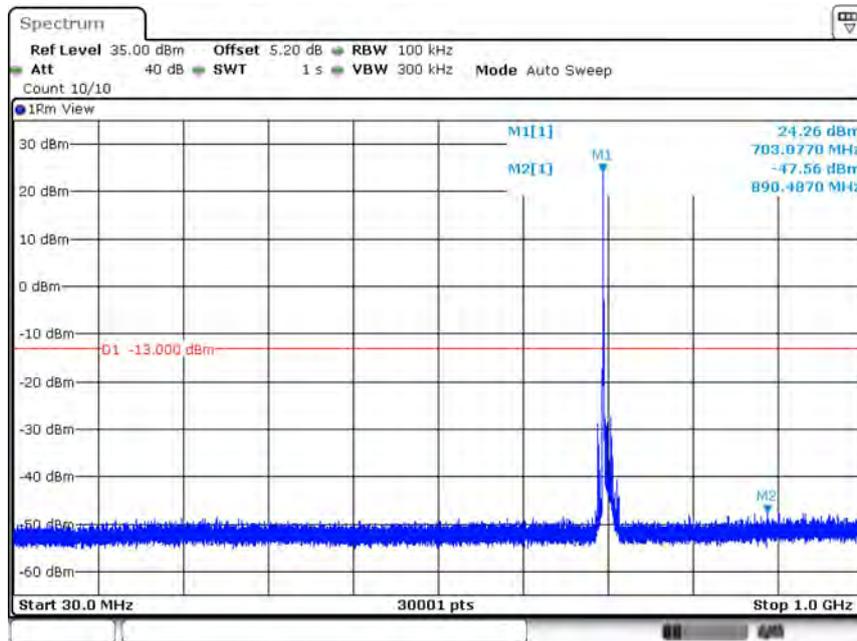
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

Band12-10MHz-QPSK-23060-1RB#0-Range2:1000~12000MHz



Date: 23 JUN 2020 12:54:11

Band12-10MHz-QPSK-23095-1RB#0-Range1:30~1000MHz

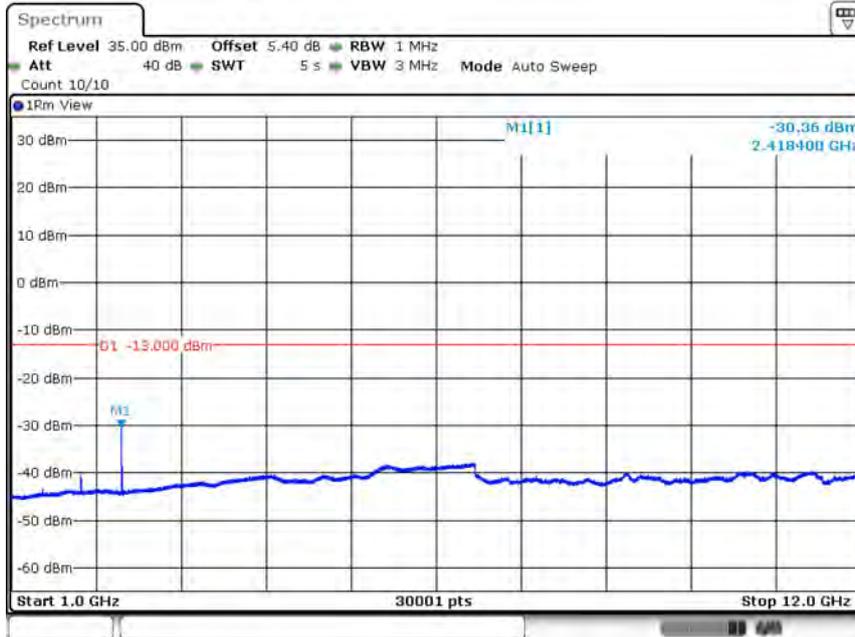


Date: 23 JUN 2020 12:55:58

Band12-10MHz-QPSK-23095-1RB#0-Range2:1000~12000MHz

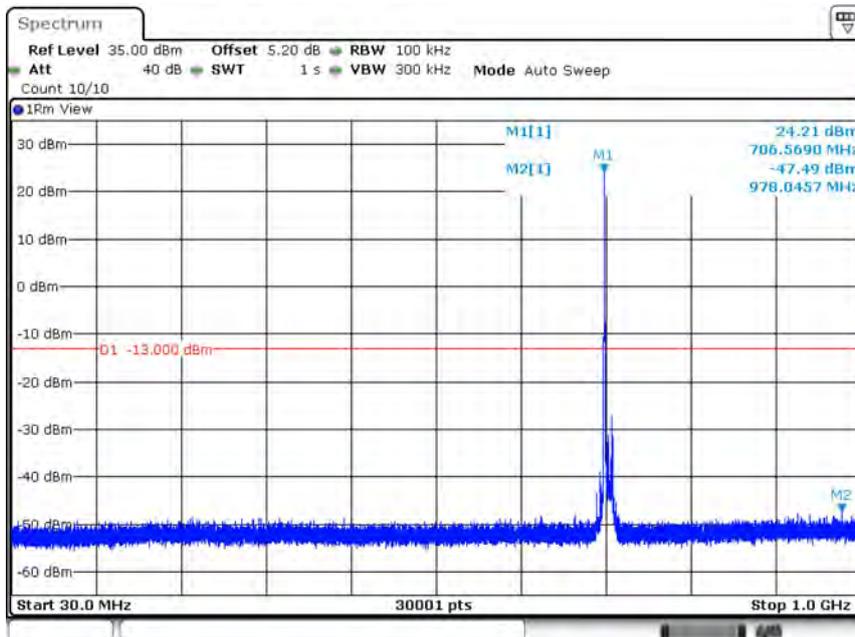


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 23 JUN 2020 12:57:05

Band12-10MHz-QPSK-23130-1RB#0-Range1:30~100MHz

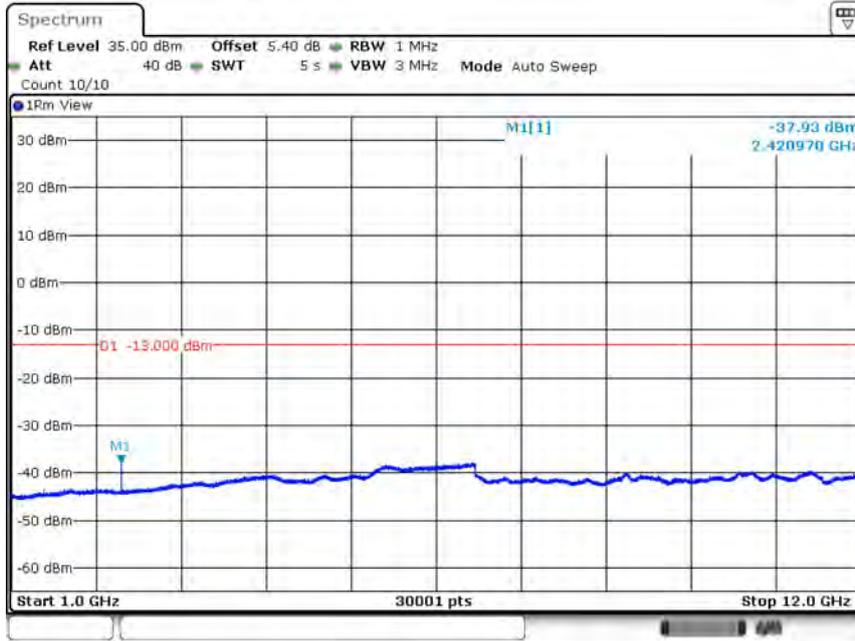


Date: 23 JUN 2020 12:58:52

Band12-10MHz-QPSK-23130-1RB#0-Range2:1000~12000MHz

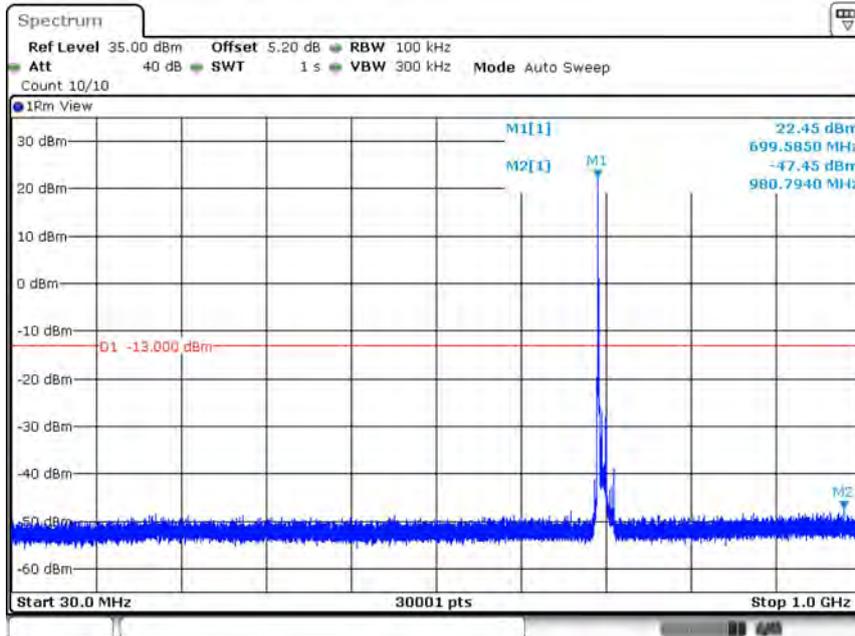


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 23 JUN 2020 12:59:59

Band12-10MHz-64QAM-23060-1RB#0-Range1:30~1000MHz

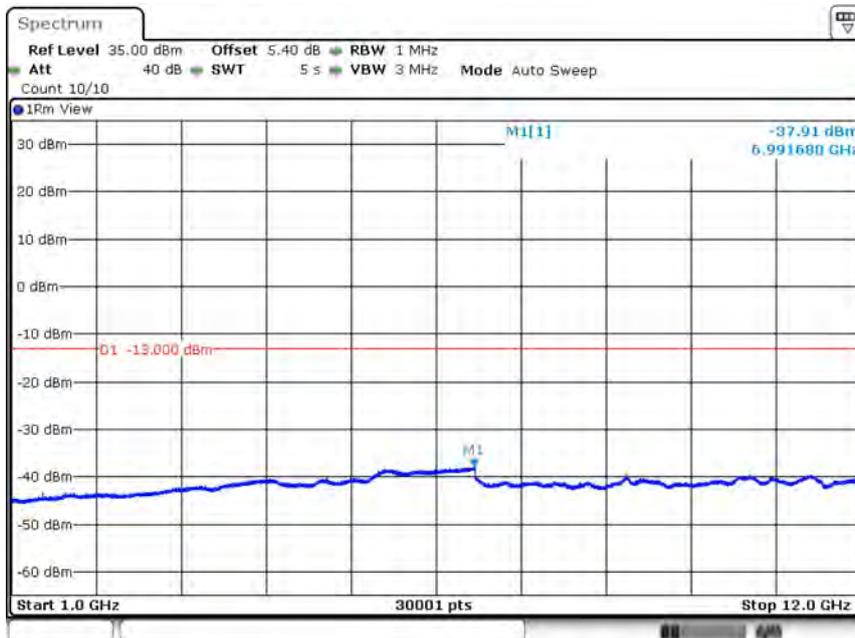


Date: 24 JUN 2020 09:35:13

Band12-10MHz-64QAM-23060-1RB#0-Range2:1000~12000MHz

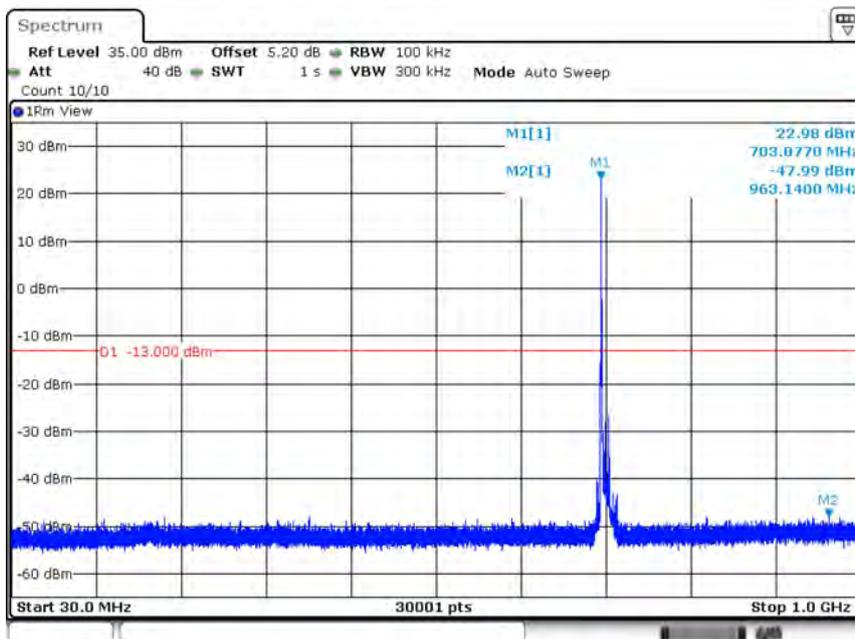


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 24 JUN 2020 09:36:21

Band12-10MHz-64QAM-23095-1RB#0-Range1:30~1000MHz



Date: 24 JUN 2020 09:36:41

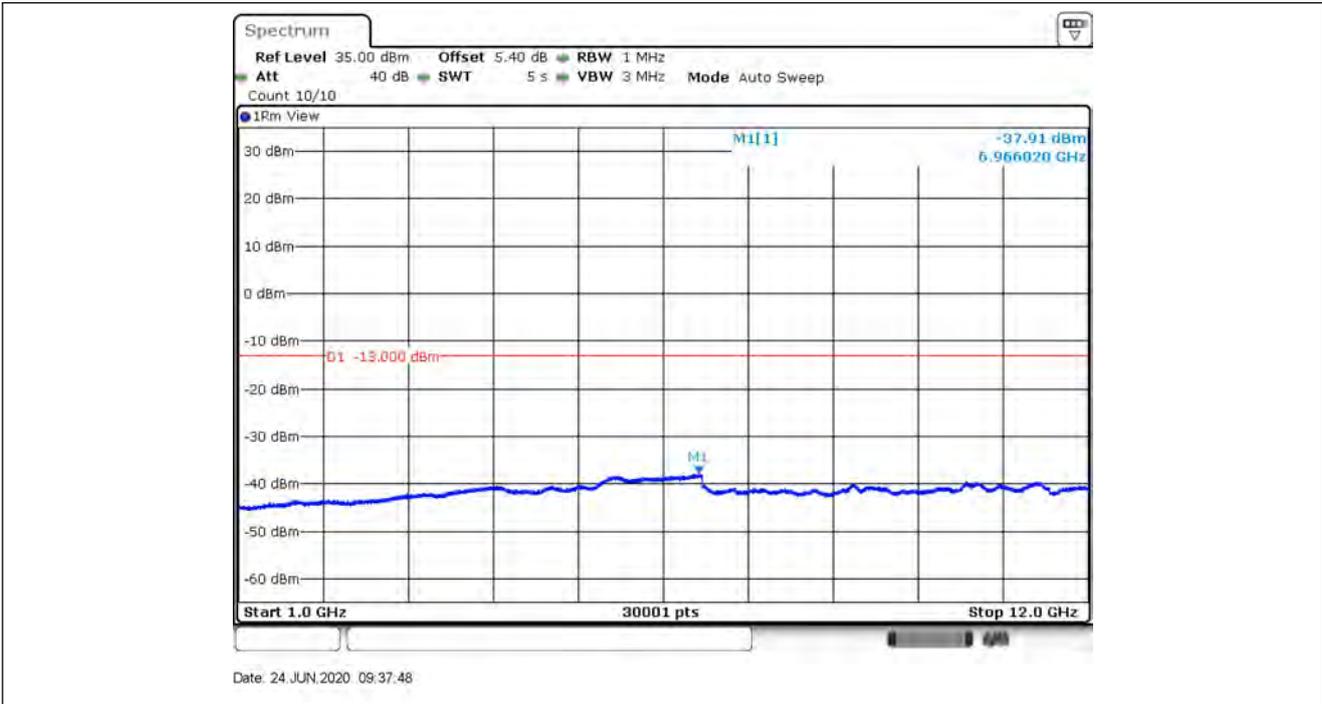
Band12-10MHz-64QAM-23095-1RB#0-Range2:1000~12000MHz



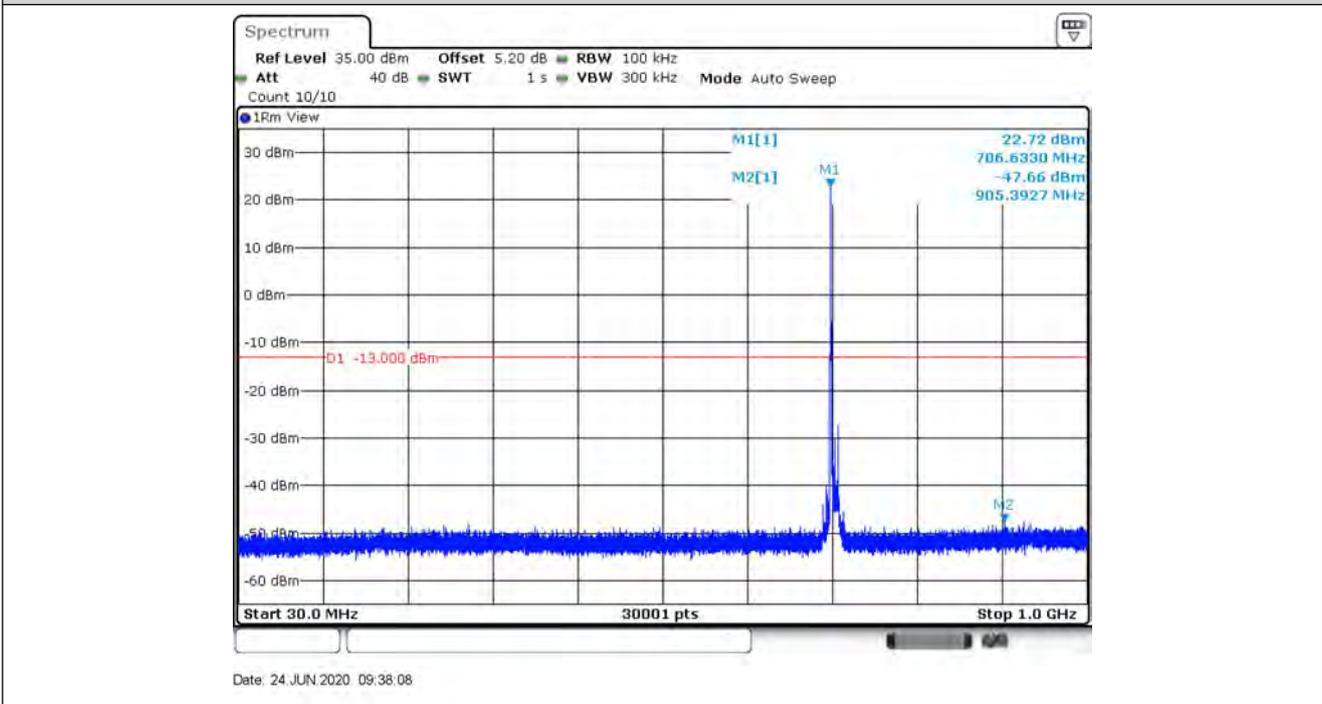
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

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



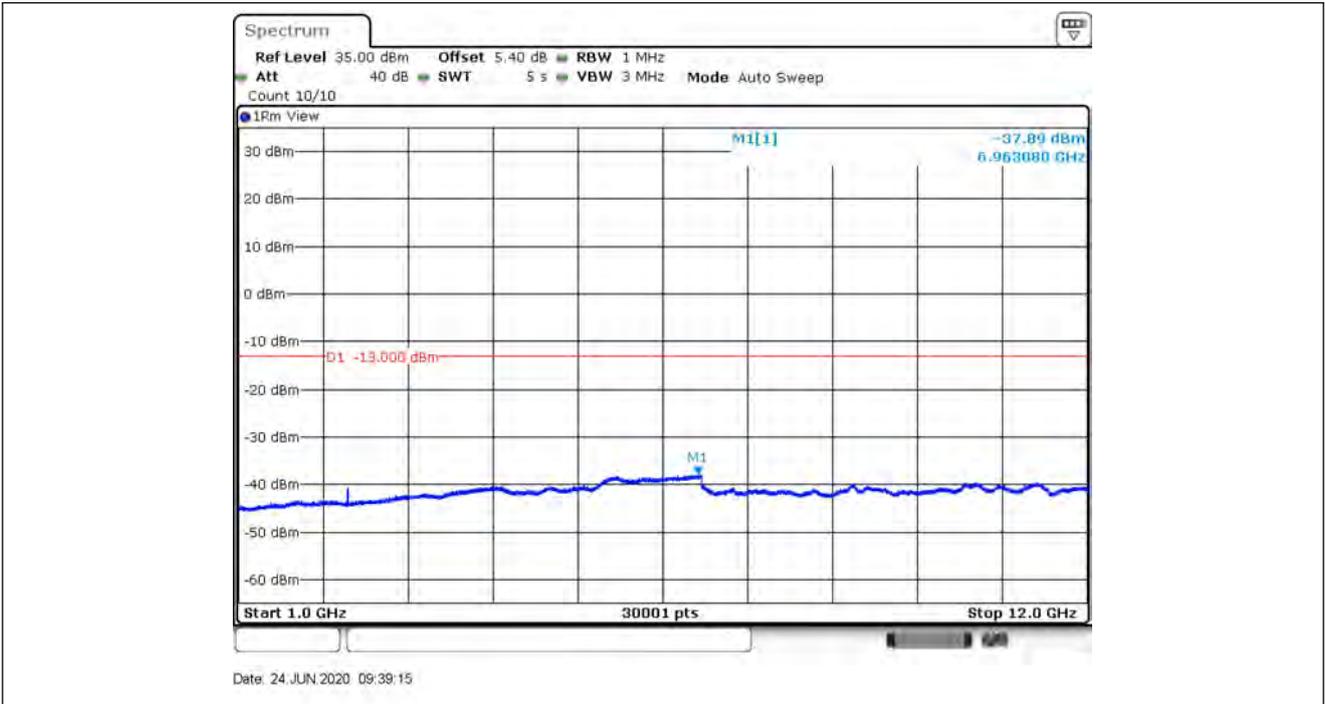
Band12-10MHz-64QAM-23130-1RB#0-Range1:30~1000MHz



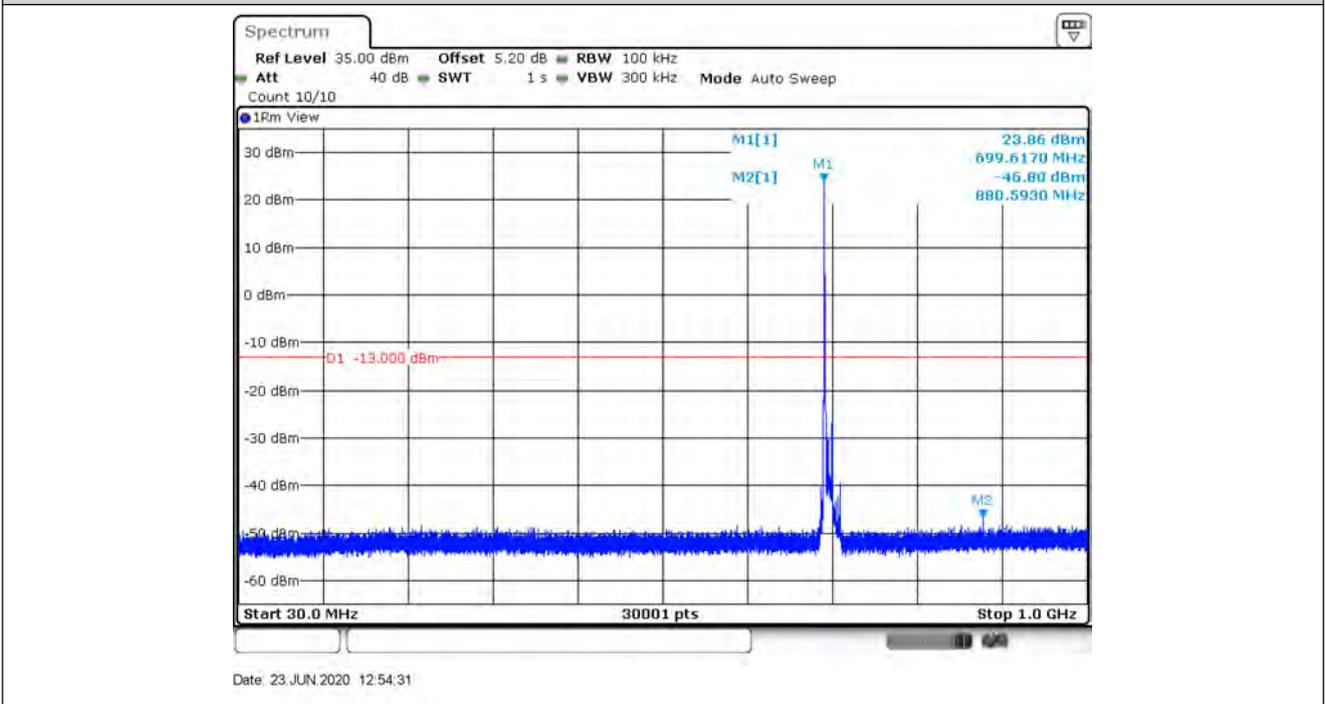
Band12-10MHz-64QAM-23130-1RB#0-Range2:1000~12000MHz



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.



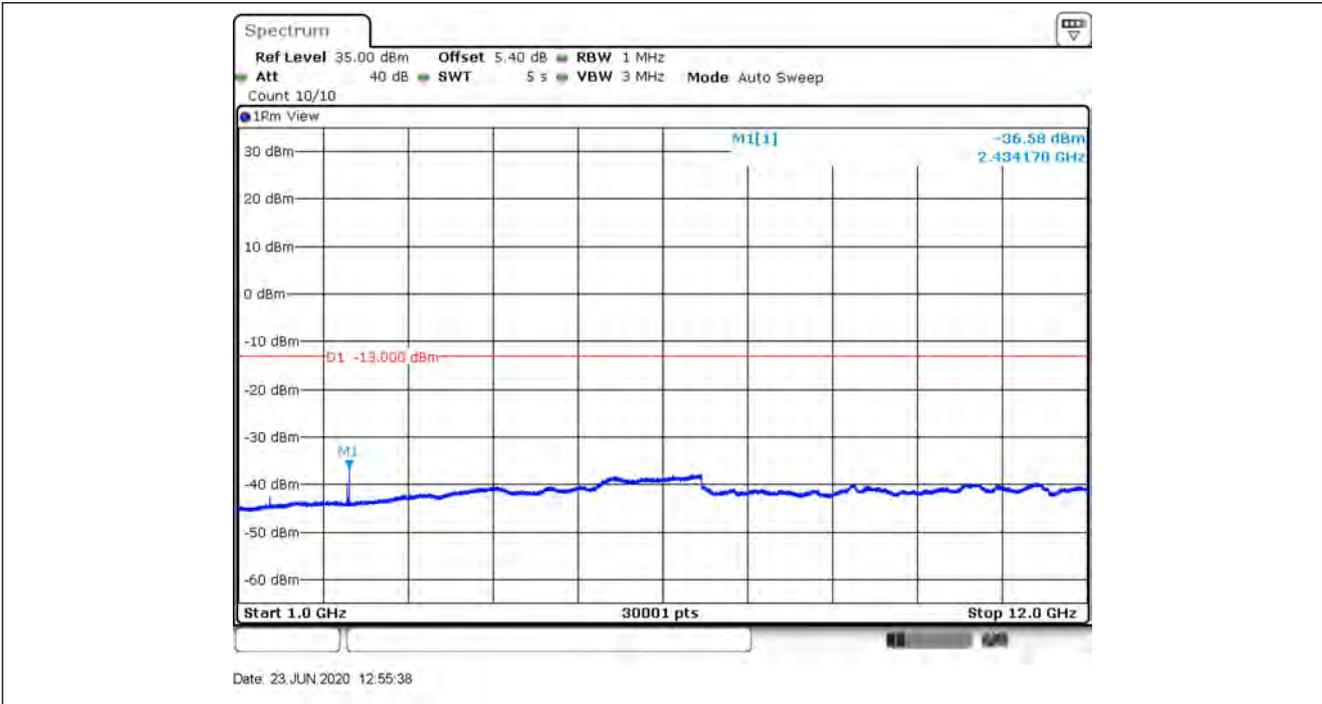
Band12-10MHz-16QAM-23060-1RB#0-Range1:30~1000MHz



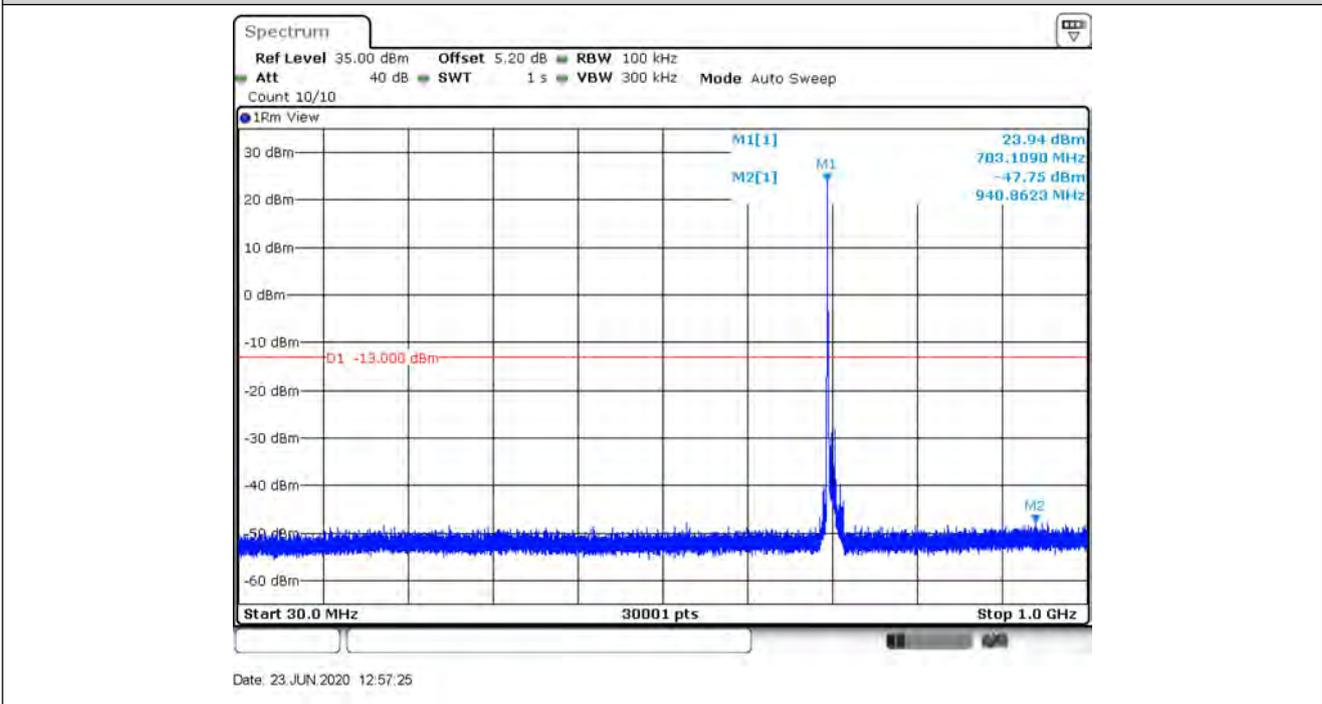
Band12-10MHz-16QAM-23060-1RB#0-Range2:1000~12000MHz



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.



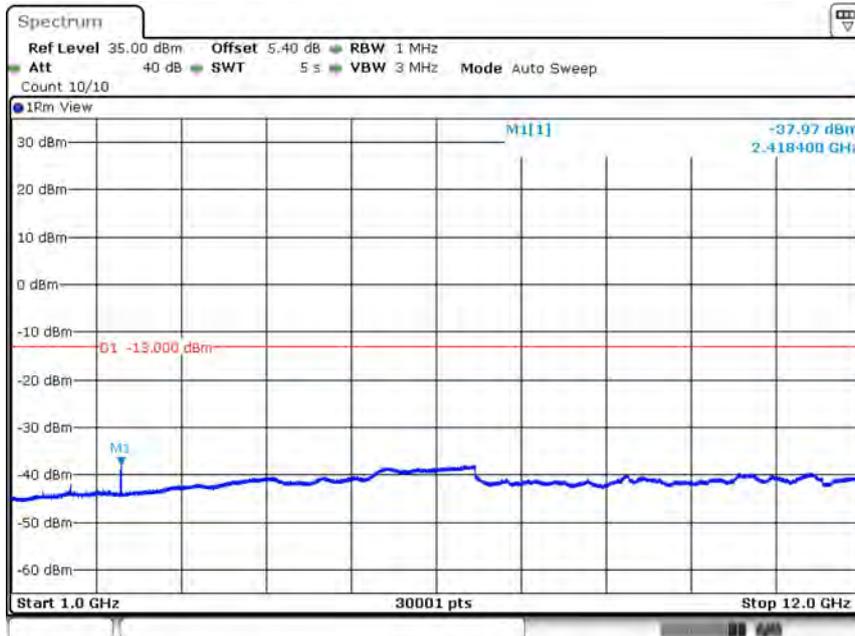
Band12-10MHz-16QAM-23095-1RB#0-Range1:30~1000MHz



Band12-10MHz-16QAM-23095-1RB#0-Range2:1000~12000MHz

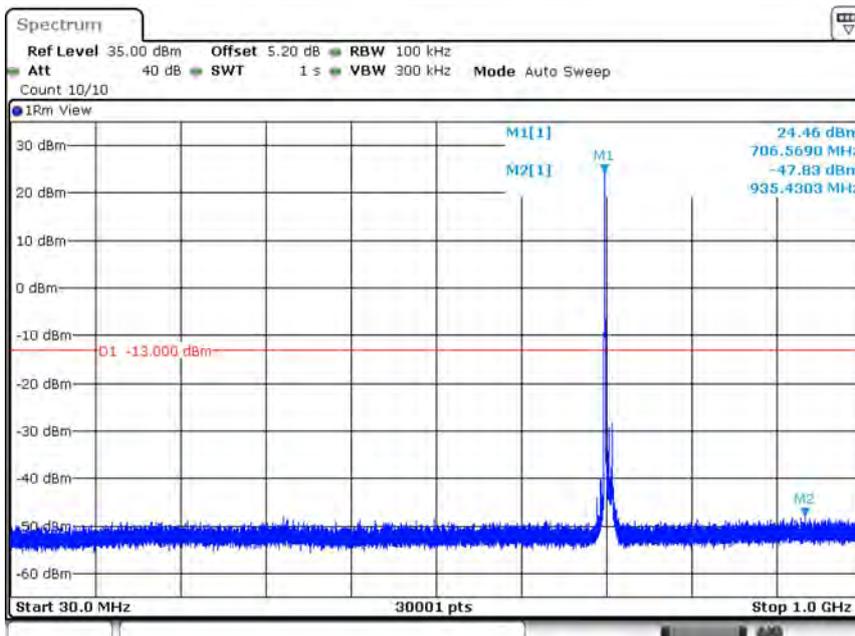


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 23 JUN 2020 12:58:32

Band12-10MHz-16QAM-23130-1RB#0-Range1:30~1000MHz

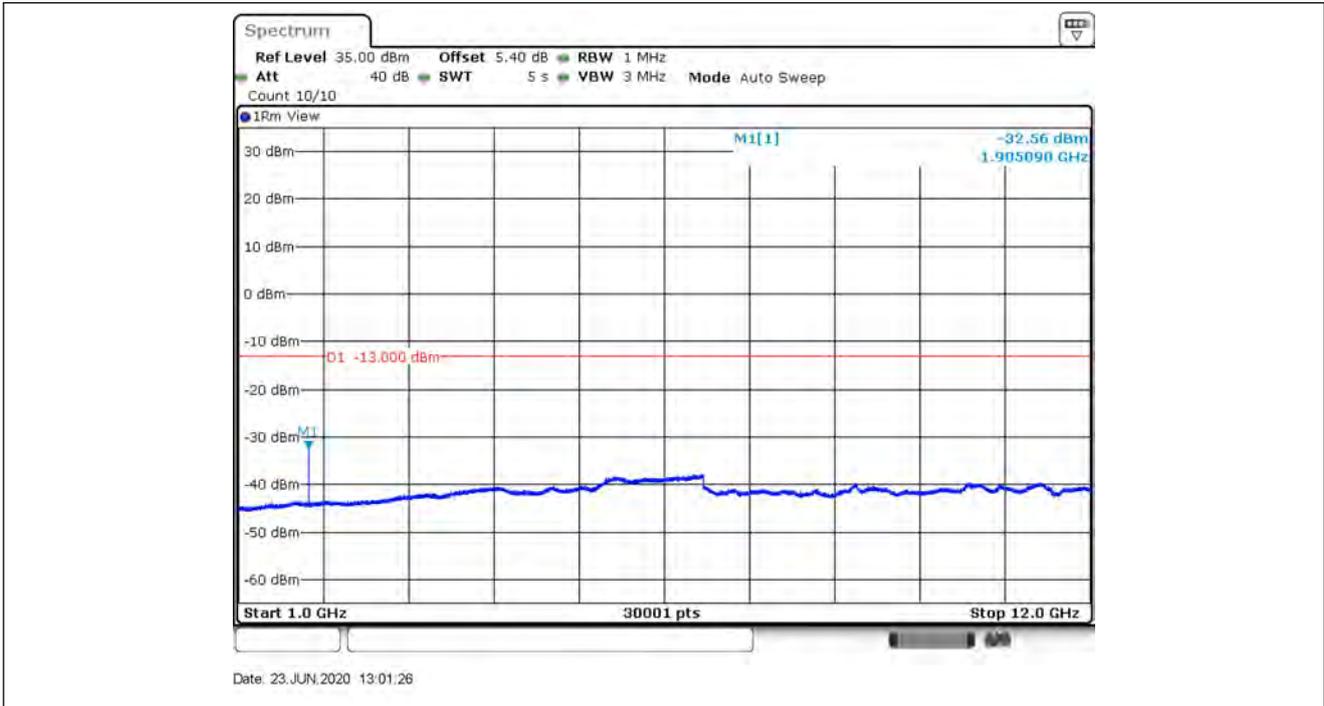


Date: 23 JUN 2020 13:00:19

Band12-10MHz-16QAM-23130-1RB#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.



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



7. Field Strength of Spurious Radiation

7.1. Test Band = LTE_Band=12 BW=10MHz _TM1

7.1.1. Test Channel = 23060

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	44.7932	-71.05	-64.04	-13.00	51.04	258	346	Horizontal
2	434.0252	-70.80	-67.68	-13.00	54.68	296	346	Horizontal
3	1398.8798	-54.08	-51.95	-13.00	38.95	123	330	Horizontal
4	2098.6197	-59.04	-51.30	-13.00	38.30	251	164	Horizontal
5	9326.0530	-58.31	-52.62	-13.00	39.62	177	132	Horizontal
6	16402.7361	-56.39	-42.01	-13.00	29.01	164	197	Horizontal



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

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



7.2. Test Band = LTE_Band=12 BW=10MHz_TM1
7.2.1. Test Channel = 23060

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	112.5996	-71.70	-65.52	-13.00	52.52	225	283	Vertical
2	461.4291	-71.24	-66.93	-13.00	53.93	174	325	Vertical
3	1398.8798	-59.71	-57.08	-13.00	44.08	196	224	Vertical
4	2099.0198	-63.86	-56.14	-13.00	43.14	231	135	Vertical
5	14483.8594	-59.26	-46.88	-13.00	33.88	262	197	Vertical
6	17998.8000	-57.13	-39.28	-13.00	26.28	215	218	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)83071443, 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



7.3. Test Band = LTE_Band=12 BW=10MHz_TM1

7.3.1. Test Channel = 23095

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	38.7304	-70.80	-64.46	-13.00	51.46	258	47	Horizontal
2	444.5017	-70.66	-67.37	-13.00	54.37	157	283	Horizontal
3	1406.0812	-52.22	-50.00	-13.00	37.00	231	233	Horizontal
4	2109.4219	-58.68	-50.84	-13.00	37.84	261	166	Horizontal
5	9329.0532	-58.25	-52.59	-13.00	39.59	194	218	Horizontal
6	16398.5359	-56.64	-42.22	-13.00	29.22	231	325	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)83071443, or email: CN.Doccheck@sgs.com



7.4. Test Band = LTE_Band=12 BW=10MHz _TM1

7.4.1. Test Channel = 23095

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	112.7936	-71.35	-65.19	-13.00	52.19	158	111	Vertical
2	522.9301	-71.09	-66.22	-13.00	53.22	213	154	Vertical
3	1406.0812	-57.50	-54.81	-13.00	41.81	261	215	Vertical
4	2109.4219	-62.56	-54.71	-13.00	41.71	174	138	Vertical
5	14707.6683	-59.05	-46.94	-13.00	33.94	185	26	Vertical
6	17997.5999	-56.74	-38.92	-13.00	25.92	231	283	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



7.5. Test Band = LTE_Band=12 BW=10MHz _TM1

7.5.1. Test Channel = 23130

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	44.3567	-70.66	-63.67	-13.00	50.67	174	260	Horizontal
2	234.0497	-70.82	-68.01	-13.00	55.01	185	47	Horizontal
3	1412.8826	-51.55	-49.24	-13.00	36.24	196	0	Horizontal
4	2119.8240	-56.97	-49.03	-13.00	36.03	231	156	Horizontal
5	9350.6540	-58.26	-52.80	-13.00	39.80	262	154	Horizontal
6	16397.3359	-56.46	-42.06	-13.00	29.06	254	154	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-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



7.6. Test Band = LTE_Band=12 BW=10MHz _TM1
7.6.1. Test Channel = 23130

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	110.3685	-71.16	-64.78	-13.00	51.78	158	68	Vertical
2	535.7348	-70.42	-65.41	-13.00	52.41	196	349	Vertical
3	1412.8826	-58.59	-55.83	-13.00	42.83	213	227	Vertical
4	2119.8240	-62.27	-54.29	-13.00	41.29	261	166	Vertical
5	14708.8684	-58.71	-46.61	-13.00	33.61	174	240	Vertical
6	17999.4000	-56.62	-38.76	-13.00	25.76	159	176	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
 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



8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	VL	NT	-2.60	-0.003693	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	-0.10	-0.000142	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	-6.80	-0.009659	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	-10.70	-0.015124	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	-3.20	-0.004523	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-8.10	-0.011449	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	-9.10	-0.012799	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	-1.60	-0.002250	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-4.60	-0.006470	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	VL	NT	-3.60	-0.005114	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	VN	NT	-6.60	-0.009375	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	VH	NT	-4.70	-0.006676	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	VL	NT	-0.60	-0.000848	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	VN	NT	-5.70	-0.008057	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	VH	NT	-4.80	-0.006784	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	VL	NT	-9.60	-0.013502	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	VN	NT	-0.60	-0.000844	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	VH	NT	-5.10	-0.007173	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	-7.60	-0.010795	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	-4.80	-0.006818	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	-7.10	-0.010085	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	-8.60	-0.012155	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	-3.00	-0.004240	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	-1.00	-0.001413	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	-10.30	-0.014487	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	0.70	0.000985	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-10.40	-0.014627	±2.5	PASS

8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
------	-----------	------------	---------	--------------	---------------	------------------	----------------	-----------------	-------------	---------



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)83071443, 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.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



Band12	10MHz	QPSK	23060	50RB#0	NV	-30	-5.40	-0.007670	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	-6.60	-0.009375	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	-4.50	-0.006392	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	-4.20	-0.005966	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	-9.20	-0.013068	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	30	-11.40	-0.016193	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	40	-4.40	-0.006250	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	50	-5.30	-0.007528	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	-2.80	-0.003958	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	-9.80	-0.013852	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	-9.20	-0.013004	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-4.70	-0.006643	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	-6.70	-0.009470	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	-3.80	-0.005371	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	-5.90	-0.008339	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	-7.30	-0.010318	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-10.20	-0.014346	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-0.20	-0.000281	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	-5.30	-0.007454	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	-9.10	-0.012799	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	-6.40	-0.009001	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-13.50	-0.018987	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	-9.40	-0.013221	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-2.80	-0.003938	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	-30	-6.50	-0.009233	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	-20	-5.20	-0.007386	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	0	-10.50	-0.014915	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	10	-1.70	-0.002415	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	20	-3.10	-0.004403	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	30	-5.40	-0.007670	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	40	-4.80	-0.006818	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	50	-6.20	-0.008807	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	-30	-8.00	-0.011307	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	-20	-1.60	-0.002261	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	0	-1.50	-0.002120	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	10	-4.80	-0.006784	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	20	-2.90	-0.004099	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	30	-7.00	-0.009894	±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.
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengong 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



Band12	10MHz	64QAM	23095	50RB#0	NV	40	-2.90	-0.004099	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	50	0.40	0.000565	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	-30	-6.80	-0.009564	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	-20	-5.40	-0.007595	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	0	-1.60	-0.002250	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	10	-6.30	-0.008861	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	20	-9.70	-0.013643	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	30	-1.30	-0.001828	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	40	-1.20	-0.001688	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	50	-9.10	-0.012799	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	-5.00	-0.007102	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	-7.90	-0.011222	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	-4.20	-0.005966	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	-1.00	-0.001420	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	-1.20	-0.001705	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	-4.70	-0.006676	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	-2.70	-0.003835	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	50	-4.90	-0.006960	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	-0.30	-0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	-2.30	-0.003251	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	-7.70	-0.010883	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	-3.10	-0.004382	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	-2.60	-0.003675	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	-6.80	-0.009611	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	-8.90	-0.012580	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	50	-0.40	-0.000565	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	-5.40	-0.007595	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	-9.20	-0.012940	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-3.80	-0.005345	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-6.80	-0.009564	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-2.70	-0.003797	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	-10.70	-0.015049	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	40	-10.20	-0.014346	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	-8.30	-0.011674	±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. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengong 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