

Report No.: SEWM2305000159RG01

Rev.: 01

Page: 1 of 41

Appendix B.4

LTE 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-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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

Page: 2 of 41

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.1	22.95	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	22.75	22.6	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	22.86	22.71	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	21.92	21.77	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.06	22.91	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	22.82	22.67	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	22.72	22.57	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	21.83	21.68	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.56	23.41	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.37	23.22	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.29	23.14	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.57	22.42	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	21.88	21.73	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.15	22	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.08	21.93	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.14	20.99	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22	21.85	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.18	22.03	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.04	21.89	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	20.95	20.8	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.9	22.75	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.82	22.67	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.61	22.46	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.58	21.43	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.36	23.21	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.14	22.99	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.26	23.11	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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南面 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

Page: 3 of 41

Band12	3MHz	QPSK	23025	15RB#0	22.03	21.88	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.22	23.07	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	22.85	22.7	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	22.44	22.29	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	21.87	21.72	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.62	23.47	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.6	23.45	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.25	23.1	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.71	22.56	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	21.79	21.64	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.47	22.32	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.52	22.37	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.21	21.06	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.44	22.29	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.09	21.94	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	21.81	21.66	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	20.98	20.83	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.95	22.8	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.93	22.78	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.55	22.4	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.65	21.5	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.03	22.88	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.28	23.13	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.66	23.51	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.39	22.24	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.51	23.36	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	22.88	22.73	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	22.69	22.54	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	21.99	21.84	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.3	23.15	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.83	23.68	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.4	23.25	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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

Page: 4 of 41

Band12	5MHz	QPSK	23155	25RB#0	22.65	22.5	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.1	21.95	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.65	22.5	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	23.02	22.87	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.55	21.4	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.8	22.65	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.13	21.98	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.02	21.87	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.07	20.92	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.56	22.41	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	23.11	22.96	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.74	22.59	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.77	21.62	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.25	23.1	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.49	23.34	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	22.46	22.31	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.31	22.16	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.58	23.43	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	22.82	22.67	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.18	23.03	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.13	21.98	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.29	23.14	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.11	22.96	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.43	23.28	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.39	22.24	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.04	21.89	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.89	22.74	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.03	21.88	34.77	PASS
Band12	10MHz	16QAM	23060	27RB#0	22.35	22.2	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.78	22.63	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.14	21.99	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.35	22.2	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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com



Report No.: SEWM2305000159RG01

Rev.: 01

Page: 5 of 41

Band12	10MHz	16QAM	23095	27RB#0	22.91	22.76	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.53	22.38	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.51	22.36	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.76	22.61	34.77	PASS
Band12	10MHz	16QAM	23130	27RB#0	22.97	22.82	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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

Page: 6 of 41

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	5.72	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.70	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.78	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-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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com

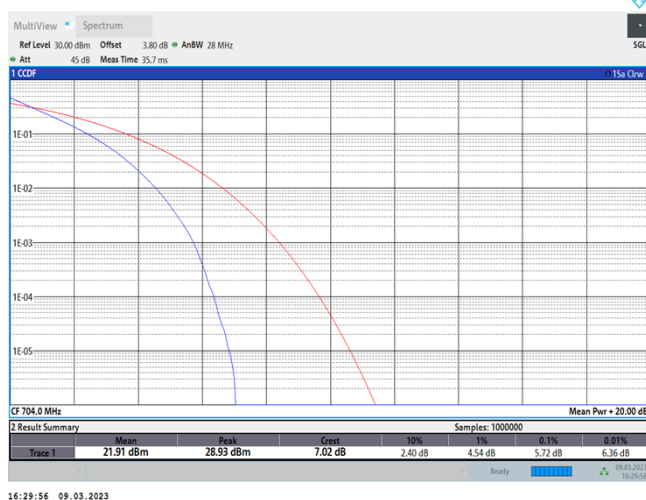
Report No.: SEWM2305000159RG01

Rev.: 01

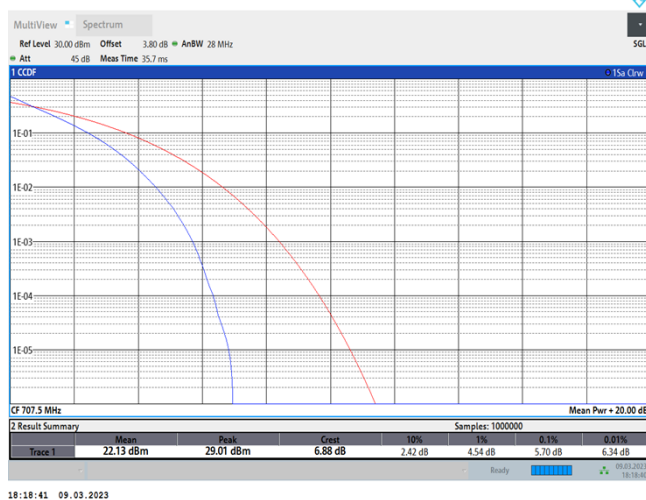
Page: 7 of 41

Test Graphs

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



Band12-10MHz-QPSK-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-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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南面 邮编: 215000

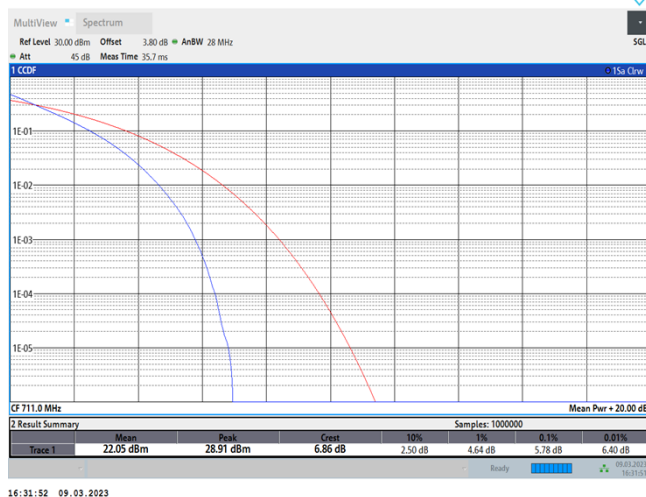
t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

Page: 8 of 41

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-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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 t (86-512) 62992980 www.sgsgroup.com.cn
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



Report No.: SEWM2305000159RG01

Rev.: 01

Page: 9 of 41

Modulation Characteristics

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result	Verdict
Band12	5MHz	QPSK	23095	25RB#0	PASS	PASS
Band12	5MHz	16QAM	23095	25RB#0	PASS	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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com

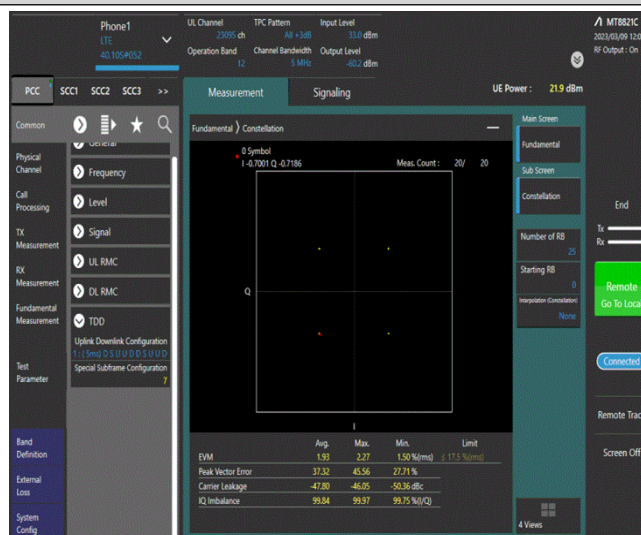
Report No.: SEWM2305000159RG01

Rev.: 01

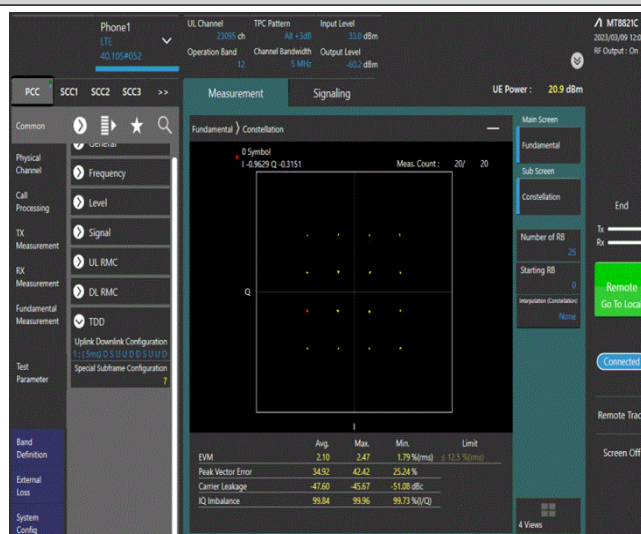
Page: 10 of 41

Test Graphs

Band12-5MHz-QPSK-23095-50RB#0



Band12-5MHz-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.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国 (江苏) 自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

Page: 11 of 41

26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.088	1.30	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.036	1.14	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.054	1.18	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.096	1.31	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.096	1.31	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.099	1.30	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.695	3.00	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.698	2.98	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.695	2.99	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.688	3.01	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.687	3.02	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.689	3.01	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.467	4.95	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.468	4.94	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.469	4.93	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.467	4.97	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.464	4.94	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.464	4.97	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.926	9.86	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.933	9.96	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.947	9.94	PASS
Band12	10MHz	16QAM	23060	27RB#0	4.886	5.90	PASS
Band12	10MHz	16QAM	23095	27RB#0	4.877	5.88	PASS
Band12	10MHz	16QAM	23130	27RB#0	4.886	5.90	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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com

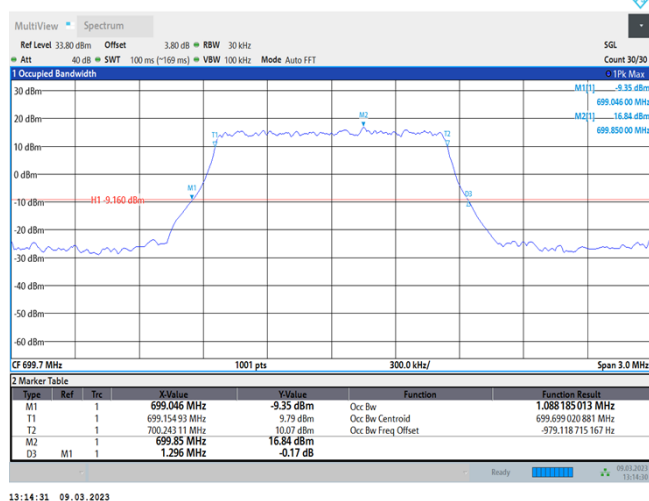
Report No.: SEWM2305000159RG01

Rev.: 01

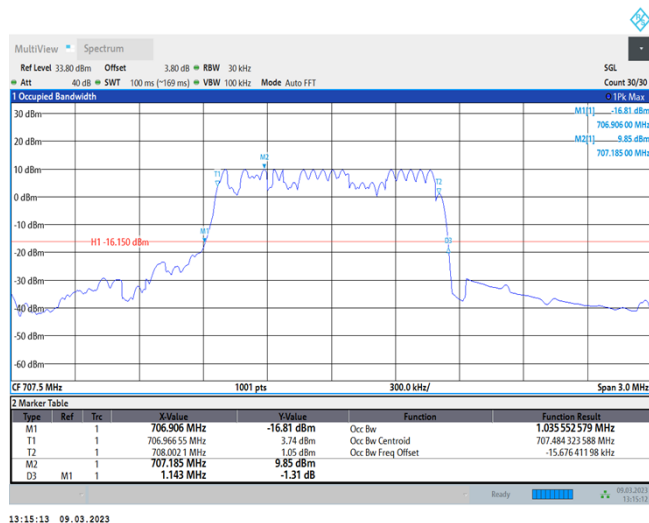
Page: 12 of 41

Test Graphs

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



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国 (江苏) 自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南面 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

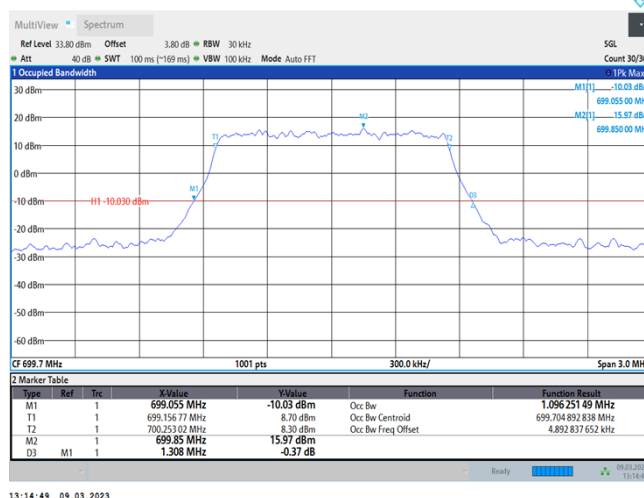
Rev.: 01

Page: 13 of 41

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



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

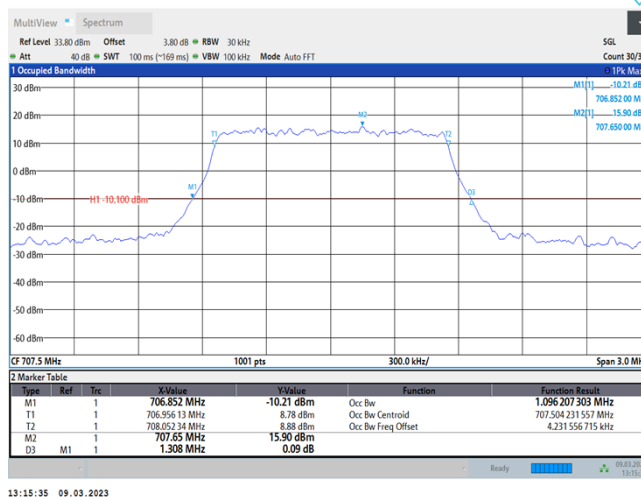


Report No.: SEWM2305000159RG01

Rev.: 01

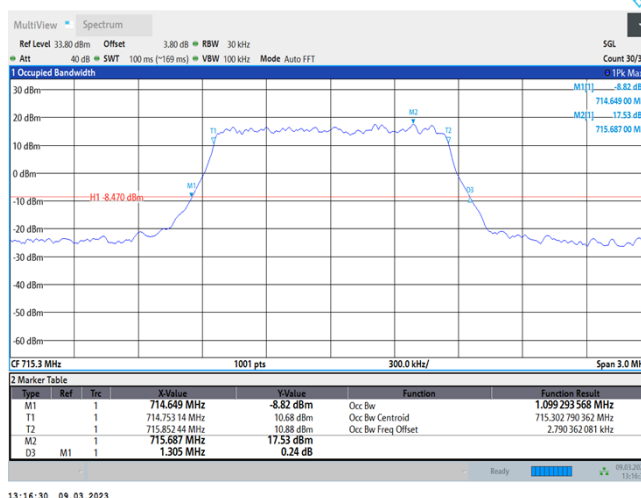
Page: 14 of 41

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



13:15:35 09.03.2023

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



13:16:30 09.03.2023



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

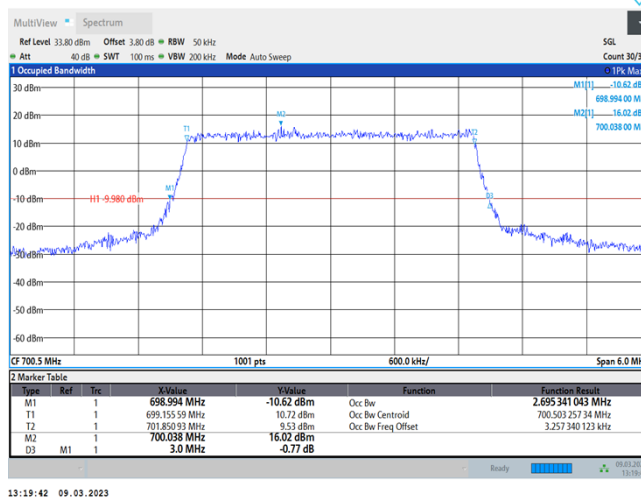
t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

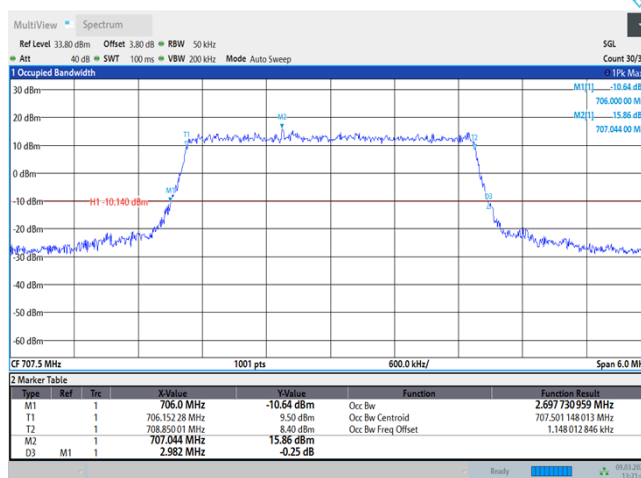
Page: 15 of 41

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



13:19:42 09.03.2023

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



13:21:50 09.03.2023



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

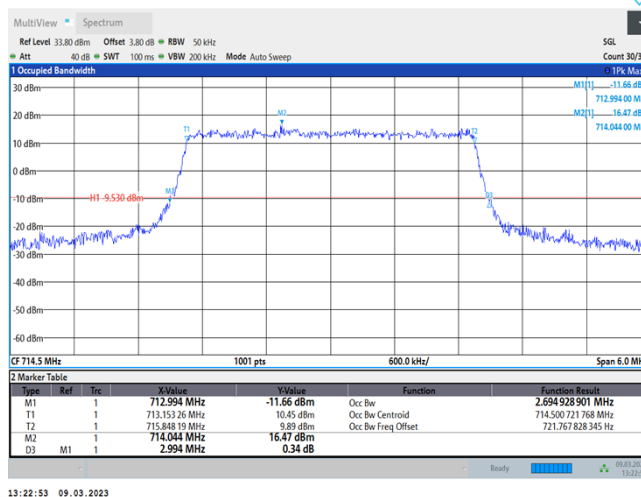
t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

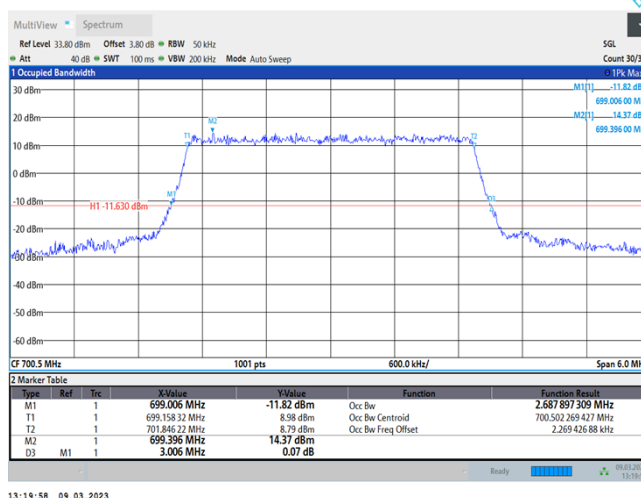
Rev.: 01

Page: 16 of 41

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



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

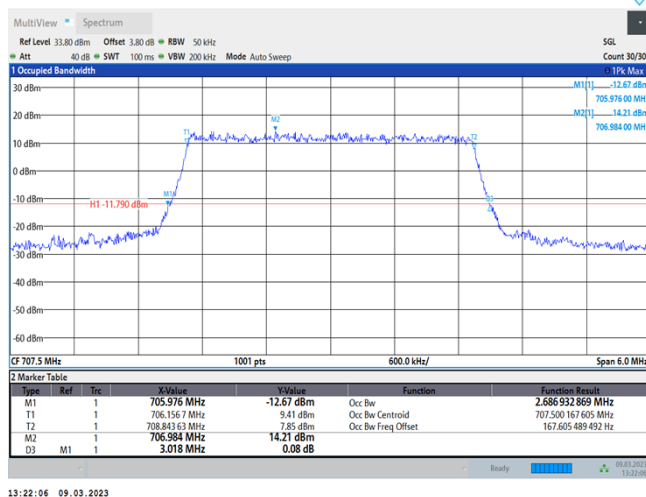


Report No.: SEWM2305000159RG01

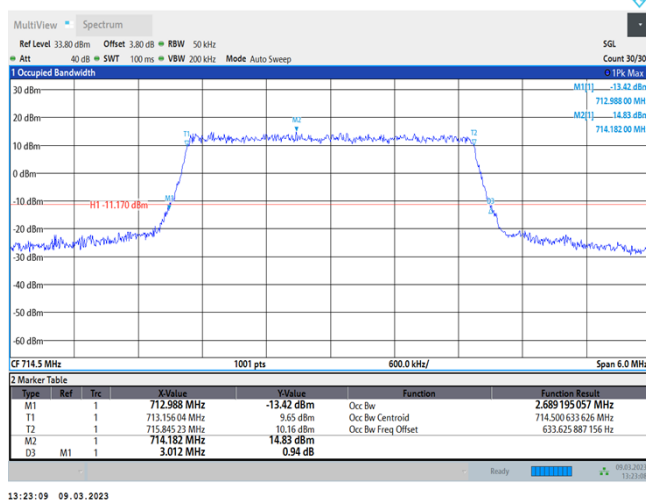
Rev.: 01

Page: 17 of 41

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



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



Report No.: SEWM2305000159RG01

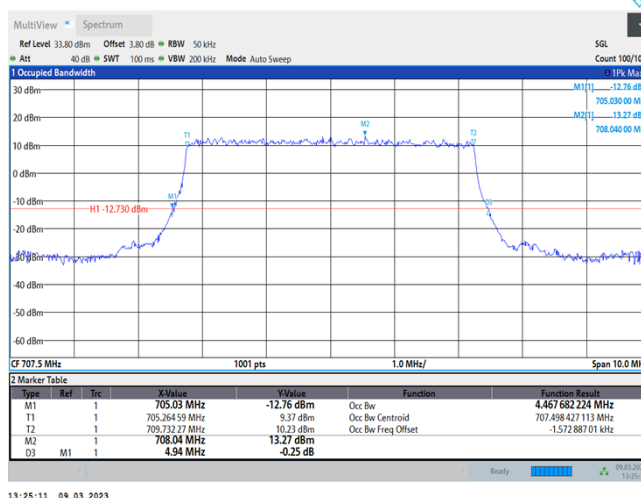
Rev.: 01

Page: 18 of 41

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



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

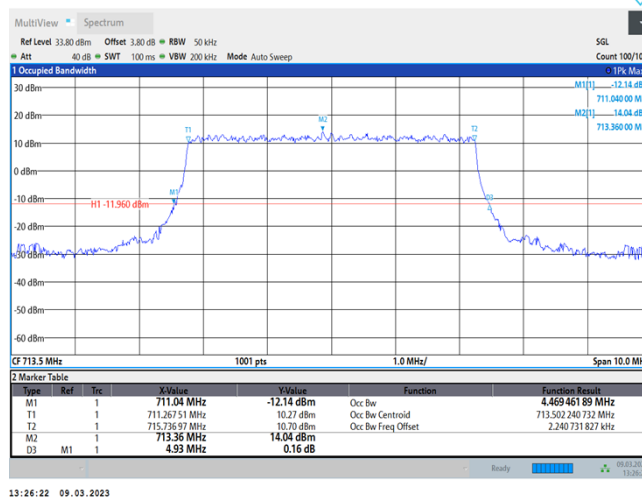
t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

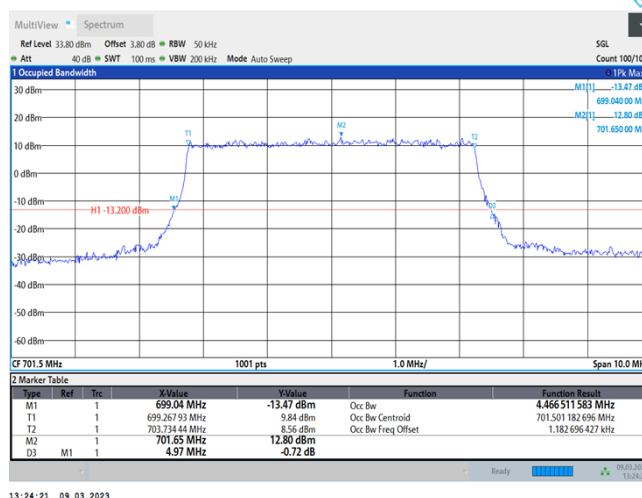
Page: 19 of 41

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



13:26:22 09.03.2023

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



13:24:21 09.03.2023



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国 (江苏) 自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

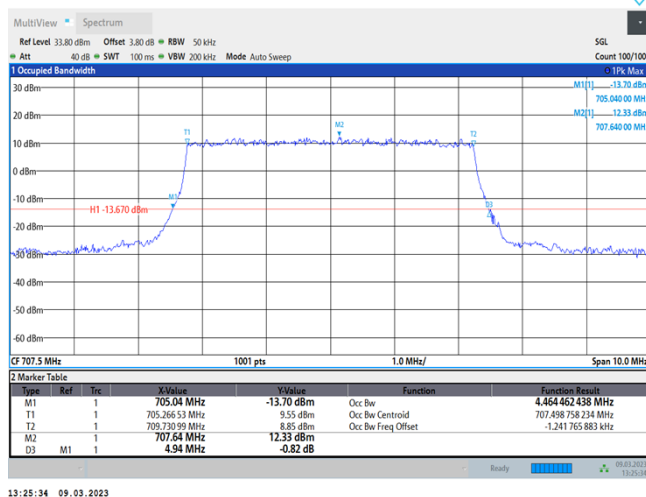
t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2305000159RG01

Rev.: 01

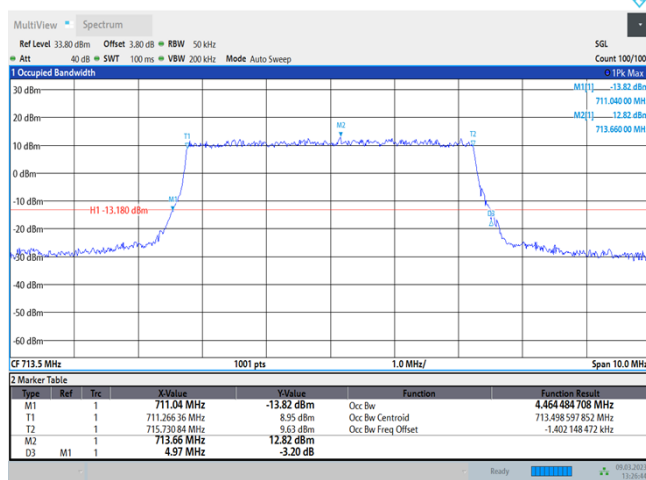
Page: 20 of 41

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



13:25:34 09.03.2023

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



13:26:45 09.03.2023



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
中国·苏州·中国（江苏）自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn
t (86-512) 62992980 sgs.china@sgs.com