

Report No.: SEWM2311000473RG01
Rev.: 01
Page: 1 of 22

Appendix B.47

LTE Band 70



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 (Suzhou) Co., Ltd.
Wireless Laboratories

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

Member of the SGS Group (SGS SA)



Effective (Isotropic) Radiated Power Output Data

Test ResultAnt7

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
Band70	5MHz	QPSK	132997	1RB#0	22.79	23.12	30.00	PASS
Band70	5MHz	16QAM	132997	1RB#0	22.34	22.67	30.00	PASS
Band70	5MHz	64QAM	132997	1RB#0	21.26	21.59	30.00	PASS
Band70	5MHz	256QAM	132997	1RB#0	18.06	18.39	30.00	PASS
Band70	5MHz	QPSK	132997	1RB#12	22.82	23.15	30.00	PASS
Band70	5MHz	16QAM	132997	1RB#12	22.15	22.48	30.00	PASS
Band70	5MHz	64QAM	132997	1RB#12	21.26	21.59	30.00	PASS
Band70	5MHz	256QAM	132997	1RB#12	17.99	18.32	30.00	PASS
Band70	5MHz	QPSK	132997	1RB#24	22.78	23.11	30.00	PASS
Band70	5MHz	16QAM	132997	1RB#24	22.26	22.59	30.00	PASS
Band70	5MHz	64QAM	132997	1RB#24	21.3	21.63	30.00	PASS
Band70	5MHz	256QAM	132997	1RB#24	18.22	18.55	30.00	PASS
Band70	5MHz	QPSK	132997	12RB#0	22.09	22.42	30.00	PASS
Band70	5MHz	16QAM	132997	12RB#0	21.16	21.49	30.00	PASS
Band70	5MHz	64QAM	132997	12RB#0	20.09	20.42	30.00	PASS
Band70	5MHz	256QAM	132997	12RB#0	17.98	18.31	30.00	PASS
Band70	5MHz	QPSK	132997	12RB#6	22.15	22.48	30.00	PASS
Band70	5MHz	16QAM	132997	12RB#6	21.08	21.41	30.00	PASS
Band70	5MHz	64QAM	132997	12RB#6	20.12	20.45	30.00	PASS
Band70	5MHz	256QAM	132997	12RB#6	18.05	18.38	30.00	PASS
Band70	5MHz	QPSK	132997	12RB#13	22.1	22.43	30.00	PASS
Band70	5MHz	16QAM	132997	12RB#13	21.11	21.44	30.00	PASS
Band70	5MHz	64QAM	132997	12RB#13	20.12	20.45	30.00	PASS
Band70	5MHz	256QAM	132997	12RB#13	18	18.33	30.00	PASS
Band70	5MHz	QPSK	132997	25RB#0	22.06	22.39	30.00	PASS
Band70	5MHz	16QAM	132997	25RB#0	20.99	21.32	30.00	PASS
Band70	5MHz	64QAM	132997	25RB#0	20.05	20.38	30.00	PASS
Band70	5MHz	256QAM	132997	25RB#0	17.95	18.28	30.00	PASS
Band70	5MHz	QPSK	133047	1RB#0	22.89	23.22	30.00	PASS
Band70	5MHz	16QAM	133047	1RB#0	22.26	22.59	30.00	PASS
Band70	5MHz	64QAM	133047	1RB#0	21.37	21.7	30.00	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 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号厂房南座 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



Report No.: SEWM2311000473RG01

Rev.: 01

Page: 3 of 22

Table with 9 columns: Band, Frequency, Modulation, Channel, ID, S1, S2, S3, Result. Contains 48 rows of test data for various modulation schemes (256QAM, QPSK, 16QAM, 64QAM) and channel configurations (1RB, 12RB, 25RB).



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf... 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



Report No.: SEWM2311000473RG01

Rev.: 01

Page: 4 of 22

Table with 9 columns: Band, Frequency, Modulation, ID, C1, C2, C3, C4, Result. Contains 40 rows of test data for various modulation schemes and frequencies.



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.sgs.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号厂房南座 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



Report No.: SEWM2311000473RG01
Rev.: 01
Page: 5 of 22

Table with 9 columns: Band, Frequency, Modulation, Channel, Bandwidth, S/N, C/N, BER, and Result. It contains 40 rows of test data for various modulation schemes like 256QAM, QPSK, and 16QAM.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf... 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



Report No.: SEWM2311000473RG01

Rev.: 01

Page: 6 of 22

Table with 9 columns: Band, Frequency, Modulation, ID, C1, C2, C3, C4, Result. Contains 48 rows of test data for various modulation schemes (256QAM, 16QAM, 64QAM, QPSK) and frequencies (10MHz, 15MHz).



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf... 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



Report No.: SEWM2311000473RG01

Rev.: 01

Page: 7 of 22

Band70	15MHz	256QAM	133047	1RB#38	18.14	18.47	30.00	PASS
Band70	15MHz	QPSK	133047	1RB#74	22.93	23.26	30.00	PASS
Band70	15MHz	16QAM	133047	1RB#74	22.38	22.71	30.00	PASS
Band70	15MHz	64QAM	133047	1RB#74	21.4	21.73	30.00	PASS
Band70	15MHz	256QAM	133047	1RB#74	18.24	18.57	30.00	PASS
Band70	15MHz	QPSK	133047	38RB#0	22.74	23.07	30.00	PASS
Band70	15MHz	16QAM	133047	38RB#0	22.18	22.51	30.00	PASS
Band70	15MHz	64QAM	133047	38RB#0	21.25	21.58	30.00	PASS
Band70	15MHz	256QAM	133047	38RB#0	18.04	18.37	30.00	PASS
Band70	15MHz	QPSK	133047	38RB#18	22.74	23.07	30.00	PASS
Band70	15MHz	16QAM	133047	38RB#18	22.24	22.57	30.00	PASS
Band70	15MHz	64QAM	133047	38RB#18	21.32	21.65	30.00	PASS
Band70	15MHz	256QAM	133047	38RB#18	18.17	18.5	30.00	PASS
Band70	15MHz	QPSK	133047	38RB#37	22.9	23.23	30.00	PASS
Band70	15MHz	16QAM	133047	38RB#37	22.19	22.52	30.00	PASS
Band70	15MHz	64QAM	133047	38RB#37	21.35	21.68	30.00	PASS
Band70	15MHz	256QAM	133047	38RB#37	18.19	18.52	30.00	PASS
Band70	15MHz	QPSK	133047	75RB#0	22.11	22.44	30.00	PASS
Band70	15MHz	16QAM	133047	75RB#0	21.16	21.49	30.00	PASS
Band70	15MHz	64QAM	133047	75RB#0	20.09	20.42	30.00	PASS
Band70	15MHz	256QAM	133047	75RB#0	18.05	18.38	30.00	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 t (86-512) 62992980 www.sgs.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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result	Limit	Verdict
Band70	15MHz	QPSK	133047	75RB#0	5.36	13	PASS
Band70	15MHz	16QAM	133047	75RB#0	6.14	13	PASS
Band70	15MHz	64QAM	133047	75RB#0	6.50	13	PASS
Band70	15MHz	256QAM	133047	75RB#0	6.72	13	PASS



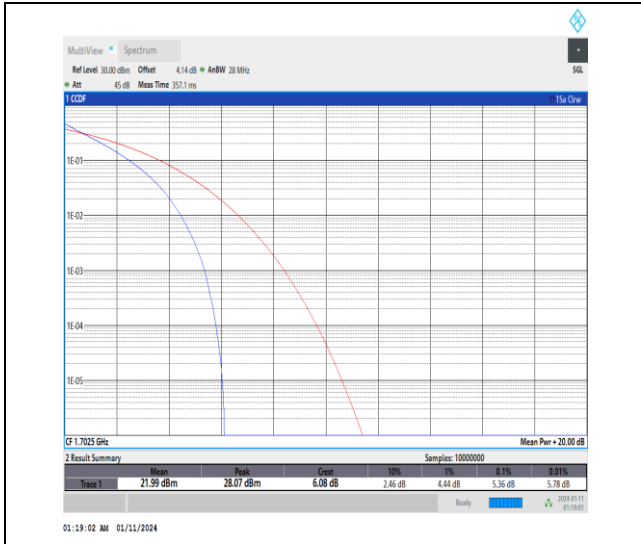
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

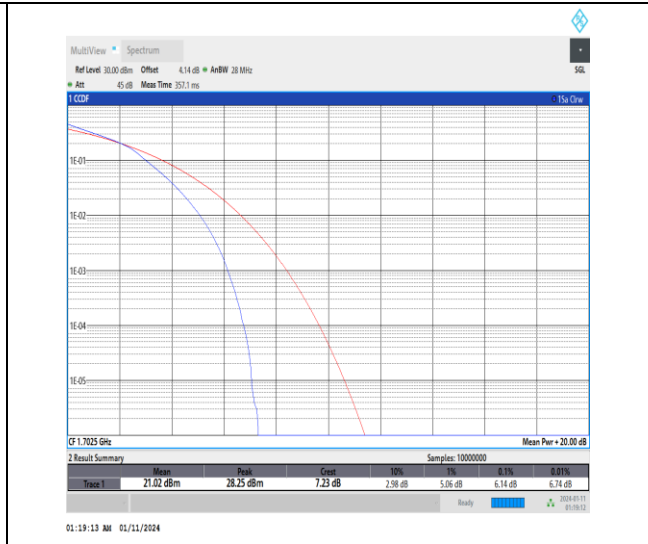
South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
 中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南面 邮编: 215000

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

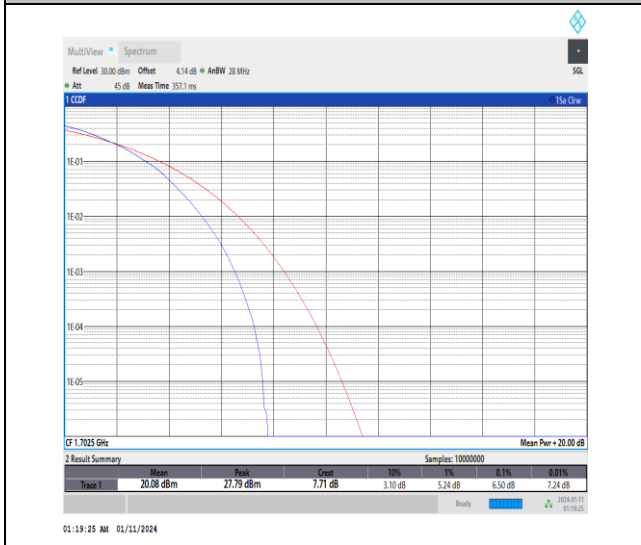
Test Graphs



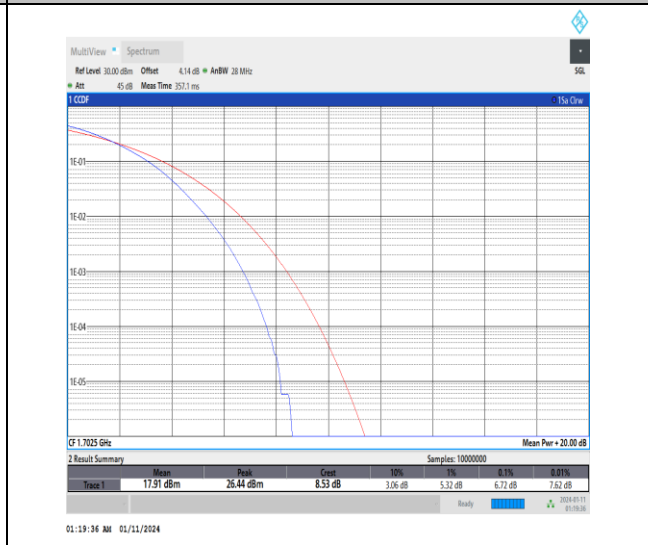
Band70-15MHz-QPSK-133047-75RB#0-PASS



Band70-15MHz-16QAM-133047-75RB#0-PASS



Band70-15MHz-64QAM-133047-75RB#0-PASS



Band70-15MHz-256QAM-133047-75RB#0-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 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

26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band70	5MHz	QPSK	133047	25RB#0	4.494	4.87	PASS
Band70	5MHz	16QAM	133047	25RB#0	4.483	4.95	PASS
Band70	5MHz	64QAM	133047	25RB#0	4.495	5.00	PASS
Band70	5MHz	256QAM	133047	25RB#0	4.481	4.91	PASS
Band70	10MHz	QPSK	133047	50RB#0	8.948	9.63	PASS
Band70	10MHz	16QAM	133047	50RB#0	8.926	9.63	PASS
Band70	10MHz	64QAM	133047	50RB#0	8.949	9.70	PASS
Band70	10MHz	256QAM	133047	50RB#0	8.945	9.67	PASS
Band70	15MHz	QPSK	133047	75RB#0	13.618	14.65	PASS
Band70	15MHz	16QAM	133047	75RB#0	13.475	14.85	PASS
Band70	15MHz	64QAM	133047	75RB#0	13.484	14.85	PASS
Band70	15MHz	256QAM	133047	75RB#0	13.474	14.80	PASS

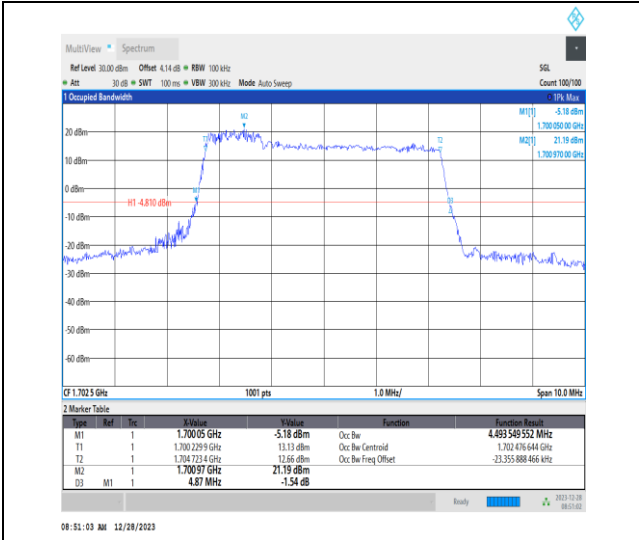


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 t (86-512) 62992980 www.sgs.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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Test Graphs



Band70-5MHz-QPSK-133047-25RB#0-PASS



Band70-5MHz-16QAM-133047-25RB#0-PASS



Band70-5MHz-64QAM-133047-25RB#0-PASS

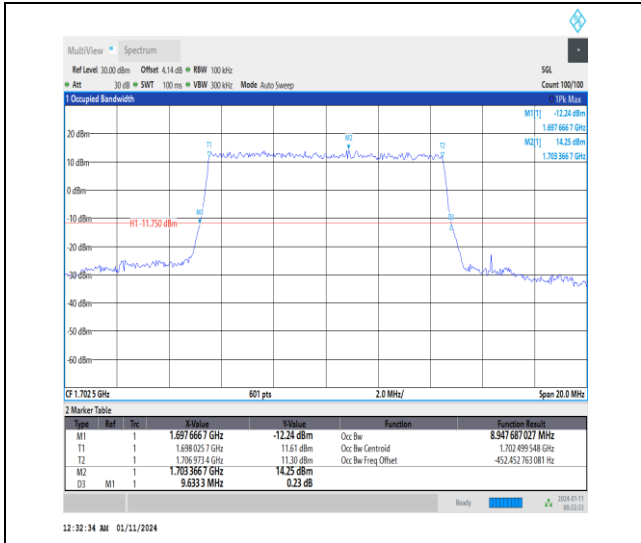


Band70-5MHz-256QAM-133047-25RB#0-PASS



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

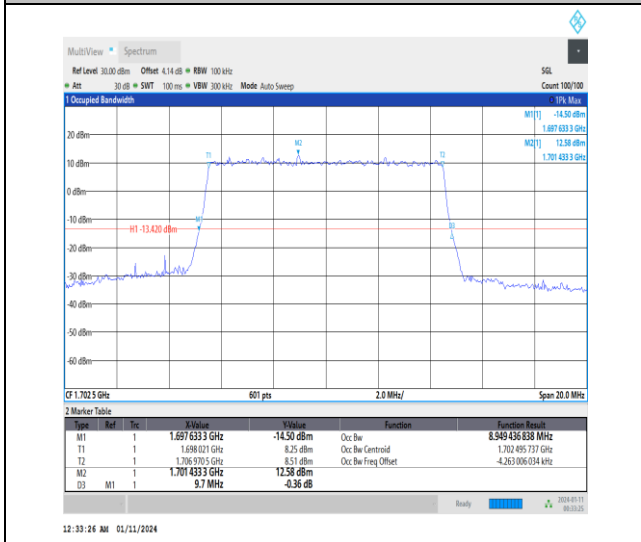
South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 t (86-512) 62992980 www.sgs.com.cn
 中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



Band70-10MHz-QPSK-133047-50RB#0-PASS



Band70-10MHz-16QAM-133047-50RB#0-PASS



Band70-10MHz-64QAM-133047-50RB#0-PASS



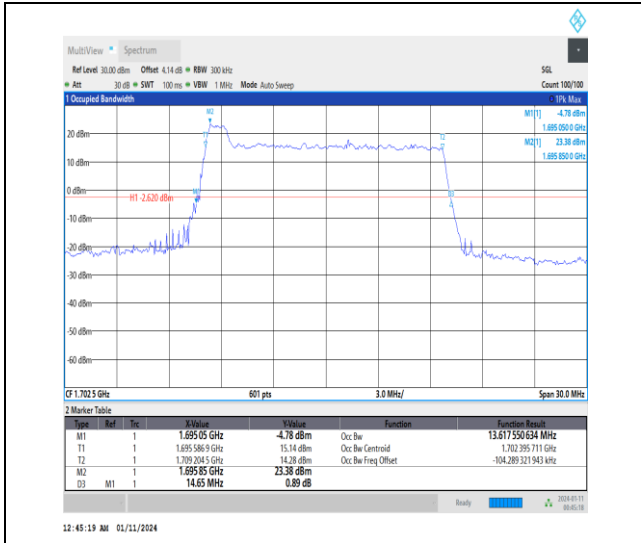
Band70-10MHz-256QAM-133047-50RB#0-PASS



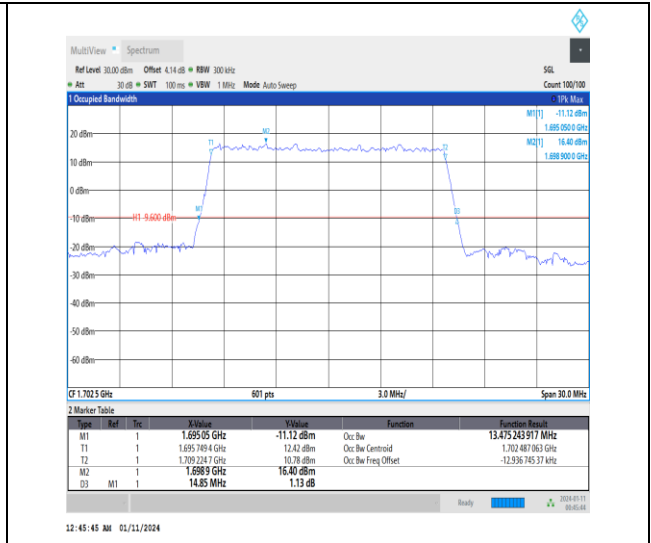
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 t (86-512) 62992980 www.sgs.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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



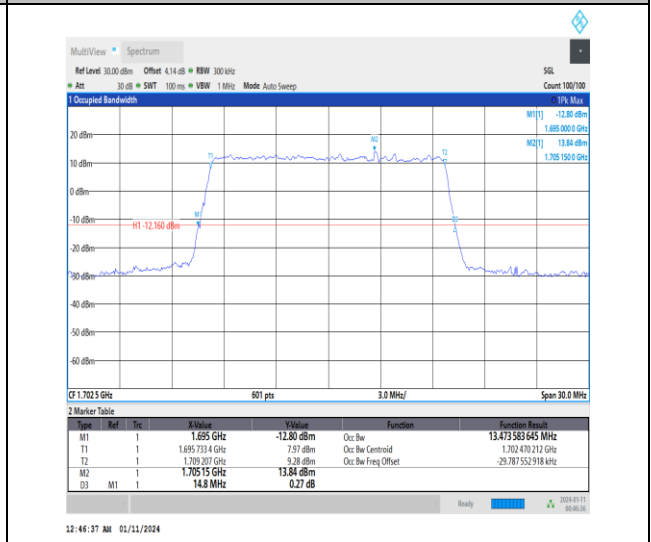
Band70-15MHz-QPSK-133047-75RB#0-PASS



Band70-15MHz-16QAM-133047-75RB#0-PASS



Band70-15MHz-64QAM-133047-75RB#0-PASS



Band70-15MHz-256QAM-133047-75RB#0-PASS



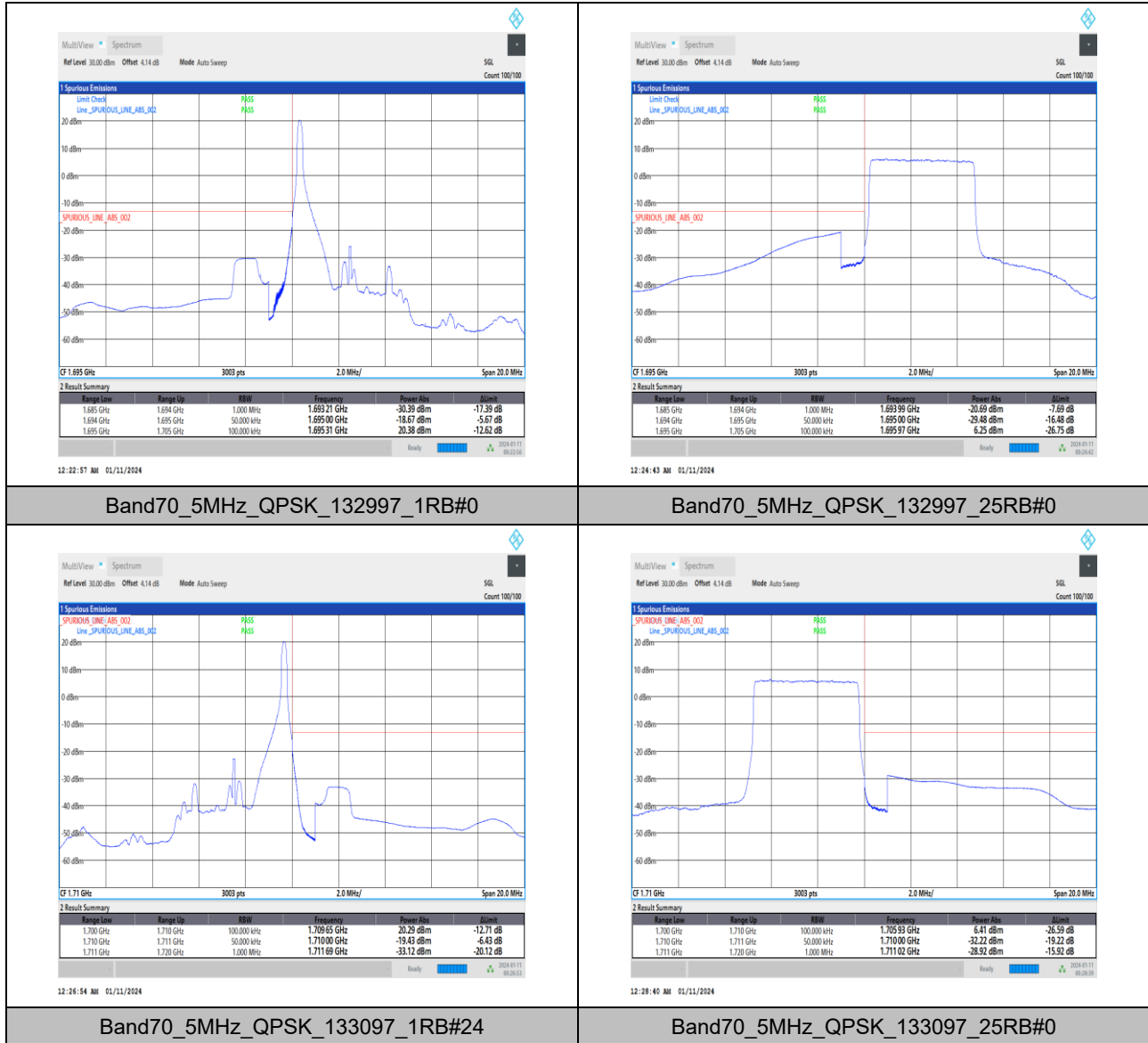
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-of-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.sgs.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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Band Edge

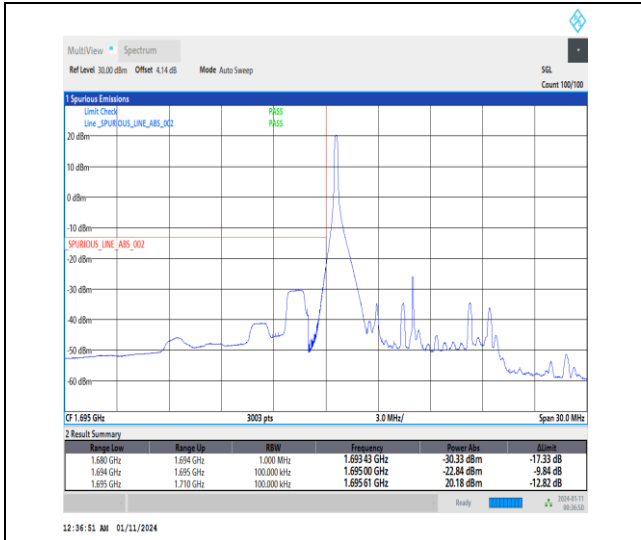
Test Graphs



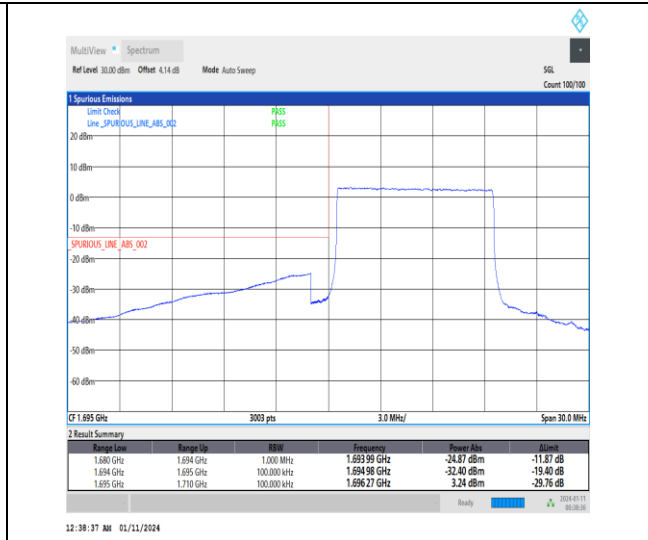
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

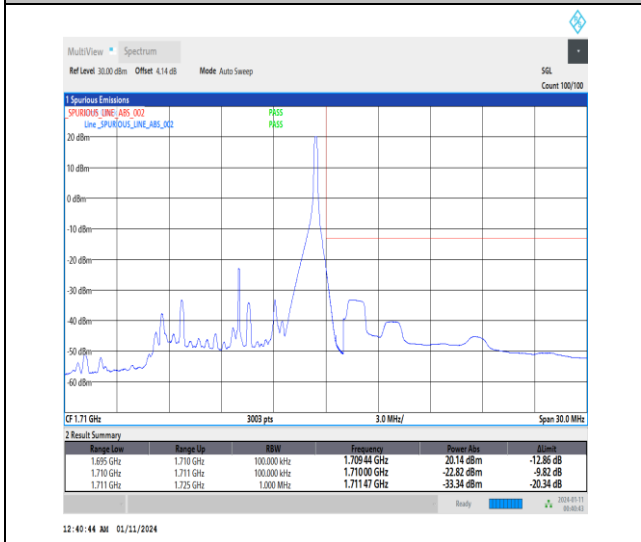
South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 t (86-512) 62992980 www.sgs.com.cn
 中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



Band70_10MHz_QPSK_133022_1RB#0



Band70_10MHz_QPSK_133022_50RB#0



Band70_10MHz_QPSK_133072_1RB#49



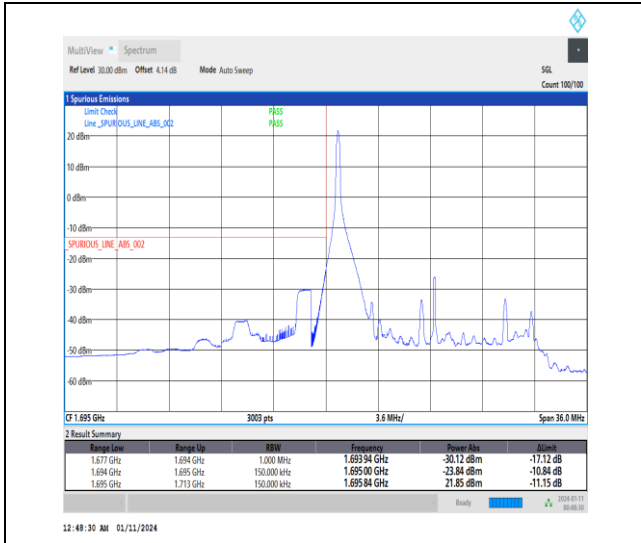
Band70_10MHz_QPSK_133072_50RB#0



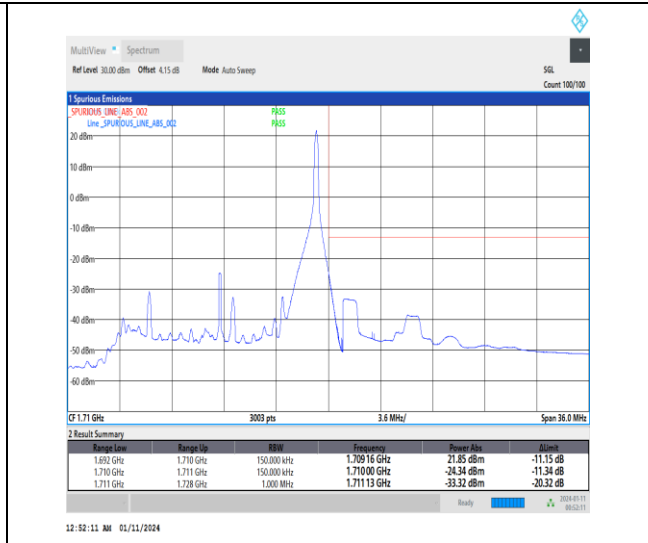
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

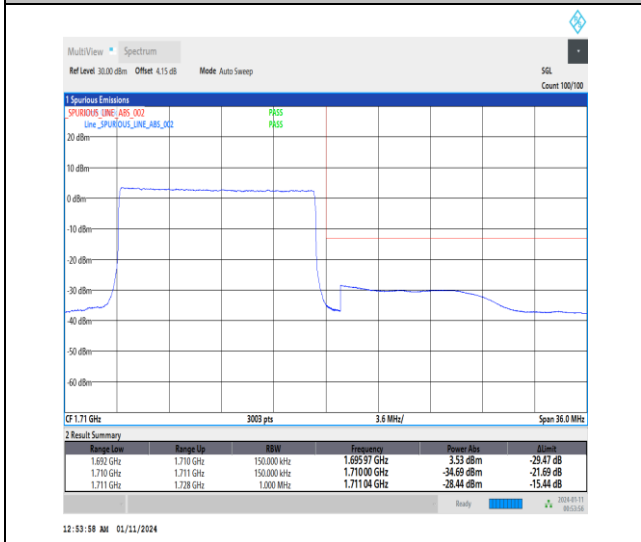
South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 t (86-512) 62992980 www.sgsgroup.com.cn
 中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



Band70_15MHz_QPSK_133047_1RB#0



Band70_15MHz_QPSK_133047_1RB#74



Band70_15MHz_QPSK_133047_75RB#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

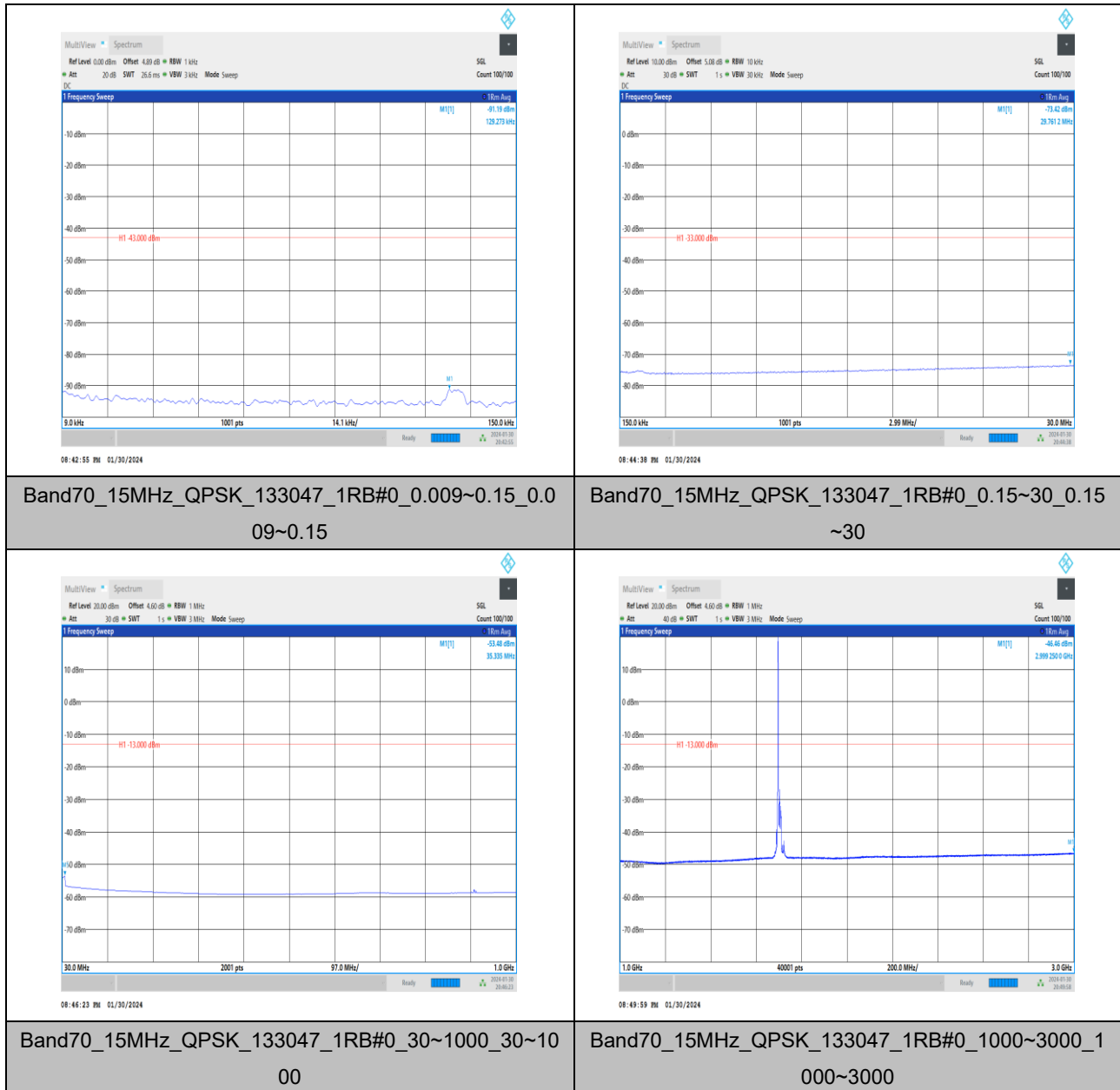
South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000
 中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南楼 邮编: 215000

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

Member of the SGS Group (SGS SA)

Conducted Spurious Emission

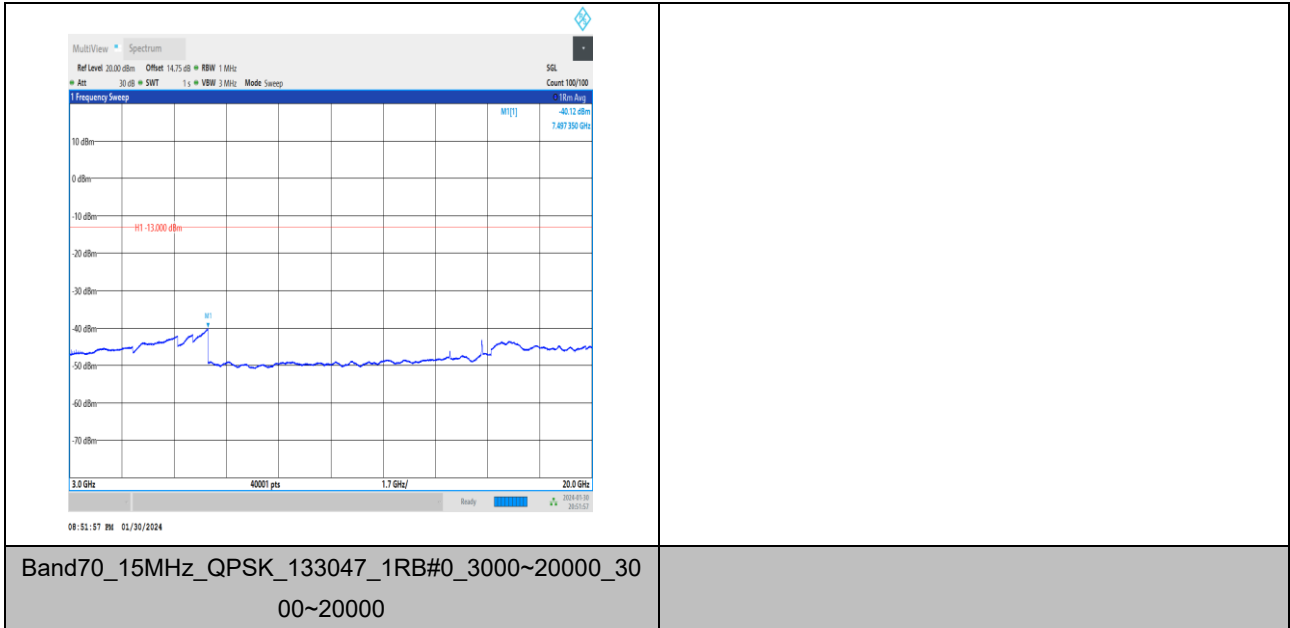
Test Graphs



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 t (86-512) 62992980 www.sgs.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



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
sgs.china@sgs.com

Field Strength of Spurious Radiation

Test Band = LTE Band 70_ TM1
 Test Channel = Low Channel

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	3391.18	44.17	-48.38	28.66	-70.81	-13.00	57.81	Horizontal
2	5086.77	42.87	-47.84	31.71	-68.52	-13.00	55.52	Horizontal
3	6782.36	42.05	-46.83	35.12	-64.92	-13.00	51.92	Horizontal
4	8477.95	40.38	-44.24	36.87	-62.25	-13.00	49.25	Horizontal
5	10173.54	37.70	-42.07	38.66	-60.97	-13.00	47.97	Horizontal
6	11869.13	36.58	-39.95	39.23	-59.41	-13.00	46.41	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	3391.18	44.68	-48.38	28.66	-70.30	-13.00	57.30	Vertical
2	5086.77	42.26	-47.84	31.71	-69.13	-13.00	56.13	Vertical
3	6782.36	42.31	-46.83	35.12	-64.66	-13.00	51.66	Vertical
4	8477.95	40.23	-44.24	36.87	-62.40	-13.00	49.40	Vertical
5	10173.54	37.16	-42.07	38.66	-61.51	-13.00	48.51	Vertical
6	11869.13	35.81	-39.95	39.23	-60.18	-13.00	47.18	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

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.sgs.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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Test Band = LTE Band 70_ TM1

Test Channel = Mid Channel

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	3396.18	43.78	-48.40	28.66	-71.22	-13.00	58.22	Horizontal
2	5094.27	42.68	-47.83	31.73	-68.68	-13.00	55.68	Horizontal
3	6792.36	43.49	-46.87	35.14	-63.49	-13.00	50.49	Horizontal
4	8490.45	39.73	-44.26	36.89	-62.91	-13.00	49.91	Horizontal
5	10188.54	37.56	-42.11	38.67	-61.14	-13.00	48.14	Horizontal
6	11886.63	35.78	-39.97	39.22	-60.23	-13.00	47.23	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	3396.18	44.61	-48.40	28.66	-70.39	-13.00	57.39	Vertical
2	5094.27	42.13	-47.83	31.73	-69.23	-13.00	56.23	Vertical
3	6792.36	42.17	-46.87	35.14	-64.81	-13.00	51.81	Vertical
4	8490.45	40.23	-44.26	36.89	-62.41	-13.00	49.41	Vertical
5	10188.54	37.62	-42.11	38.67	-61.08	-13.00	48.08	Vertical
6	11886.63	36.22	-39.97	39.22	-59.79	-13.00	46.79	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-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.
Wireless Laboratory

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

Test Band = LTE Band 70_ TM1
Test Channel = High Channel

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	3401.18	44.26	-48.41	28.66	-70.75	-13.00	57.75	Horizontal
2	5101.77	42.59	-47.82	31.75	-68.75	-13.00	55.75	Horizontal
3	6802.36	41.71	-46.89	35.17	-65.27	-13.00	52.27	Horizontal
4	8502.95	39.23	-44.27	36.90	-63.39	-13.00	50.39	Horizontal
5	10203.54	37.81	-42.10	38.68	-60.87	-13.00	47.87	Horizontal
6	11904.13	36.14	-39.96	39.22	-59.86	-13.00	46.86	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	3401.18	44.03	-48.41	28.66	-70.98	-13.00	57.98	Vertical
2	5101.77	42.79	-47.82	31.75	-68.55	-13.00	55.55	Vertical
3	6802.36	42.28	-46.89	35.17	-64.70	-13.00	51.70	Vertical
4	8502.95	40.00	-44.27	36.90	-62.62	-13.00	49.62	Vertical
5	10203.54	37.51	-42.10	38.68	-61.17	-13.00	48.17	Vertical
6	11904.13	35.82	-39.96	39.22	-60.18	-13.00	47.18	Vertical

Remark:

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

AF = Antenna Factor(dB/m)

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

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level



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.sgs.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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Frequency Stability

Test Result

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band70	15MHz	QPSK	133047	75RB#0	VN	NT	-0.20	-0.000117	PASS
Band70	15MHz	QPSK	133047	75RB#0	VL	NT	8.20	0.004816	PASS
Band70	15MHz	QPSK	133047	75RB#0	VH	NT	5.50	0.003231	PASS

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band70	15MHz	QPSK	133047	75RB#0	NV	-30	3.50	0.002056	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	-20	3.90	0.002291	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	-10	5.50	0.003231	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	0	3.80	0.002232	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	10	5.60	0.003289	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	20	-5.50	-0.003231	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	30	-9.30	-0.005463	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	40	-9.80	-0.005756	PASS
Band70	15MHz	QPSK	133047	75RB#0	NV	50	-13.10	-0.007695	PASS

---End of Attachment---



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

Member of the SGS Group (SGS SA)