



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 1 of 39

Appendix B.11

LTE Band 18(824-830)



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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 2 of 39

Effective (Isotropic) Radiated Power Output Data**Test Result****Ant13:**

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
18(824-830)	5MHz	QPSK	23965	1RB#0	23.26	15.71	38.45	PASS
18(824-830)	5MHz	QPSK	23965	1RB#12	23.22	15.67	38.45	PASS
18(824-830)	5MHz	QPSK	23965	1RB#24	23.16	15.61	38.45	PASS
18(824-830)	5MHz	QPSK	23965	25RB#0	22.24	14.69	38.45	PASS
18(824-830)	5MHz	QPSK	23970	1RB#0	23.37	15.82	38.45	PASS
18(824-830)	5MHz	QPSK	23970	1RB#12	23.13	15.58	38.45	PASS
18(824-830)	5MHz	QPSK	23970	1RB#24	23.1	15.55	38.45	PASS
18(824-830)	5MHz	QPSK	23970	25RB#0	22.21	14.66	38.45	PASS
18(824-830)	5MHz	QPSK	23975	1RB#0	23.33	15.78	38.45	PASS
18(824-830)	5MHz	QPSK	23975	1RB#12	23.07	15.52	38.45	PASS
18(824-830)	5MHz	QPSK	23975	1RB#24	23.09	15.54	38.45	PASS
18(824-830)	5MHz	QPSK	23975	25RB#0	22.19	14.64	38.45	PASS
18(824-830)	5MHz	16QAM	23965	1RB#0	22.82	15.27	38.45	PASS
18(824-830)	5MHz	16QAM	23965	1RB#12	22.35	14.8	38.45	PASS
18(824-830)	5MHz	16QAM	23965	1RB#24	22.47	14.92	38.45	PASS
18(824-830)	5MHz	16QAM	23965	25RB#0	21.25	13.7	38.45	PASS
18(824-830)	5MHz	16QAM	23970	1RB#0	22.55	15	38.45	PASS
18(824-830)	5MHz	16QAM	23970	1RB#12	22.49	14.94	38.45	PASS
18(824-830)	5MHz	16QAM	23970	1RB#24	22.5	14.95	38.45	PASS
18(824-830)	5MHz	16QAM	23970	25RB#0	21.24	13.69	38.45	PASS
18(824-830)	5MHz	16QAM	23975	1RB#0	22.56	15.01	38.45	PASS
18(824-830)	5MHz	16QAM	23975	1RB#12	22.52	14.97	38.45	PASS
18(824-830)	5MHz	16QAM	23975	1RB#24	22.5	14.95	38.45	PASS
18(824-830)	5MHz	16QAM	23975	25RB#0	21.2	13.65	38.45	PASS
18(824-830)	5MHz	64QAM	23965	1RB#0	22.35	14.8	38.45	PASS
18(824-830)	5MHz	64QAM	23965	1RB#12	21.81	14.26	38.45	PASS
18(824-830)	5MHz	64QAM	23965	1RB#24	21.79	14.24	38.45	PASS
18(824-830)	5MHz	64QAM	23965	25RB#0	20.63	13.08	38.45	PASS
18(824-830)	5MHz	64QAM	23970	1RB#0	22.04	14.49	38.45	PASS
18(824-830)	5MHz	64QAM	23970	1RB#12	21.73	14.18	38.45	PASS



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

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

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 3 of 39

18(824-830)	5MHz	64QAM	23970	1RB#24	22.05	14.5	38.45	PASS
18(824-830)	5MHz	64QAM	23970	25RB#0	20.7	13.15	38.45	PASS
18(824-830)	5MHz	64QAM	23975	1RB#0	21.83	14.28	38.45	PASS
18(824-830)	5MHz	64QAM	23975	1RB#12	21.87	14.32	38.45	PASS
18(824-830)	5MHz	64QAM	23975	1RB#24	21.91	14.36	38.45	PASS
18(824-830)	5MHz	64QAM	23975	25RB#0	20.7	13.15	38.45	PASS



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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWM2303000343RG02
Rev.: 01
Page: 4 of 39

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band18	5MHz	QPSK	23965	25RB#0	5.80	13	PASS
Band18	5MHz	QPSK	23970	25RB#0	5.80	13	PASS
Band18	5MHz	QPSK	23975	25RB#0	5.77	13	PASS
Band18	5MHz	16QAM	23965	25RB#0	6.49	13	PASS
Band18	5MHz	16QAM	23970	25RB#0	6.49	13	PASS
Band18	5MHz	16QAM	23975	25RB#0	6.46	13	PASS
Band18	5MHz	64QAM	23965	25RB#0	6.87	13	PASS
Band18	5MHz	64QAM	23970	25RB#0	6.84	13	PASS
Band18	5MHz	64QAM	23975	25RB#0	6.84	13	PASS



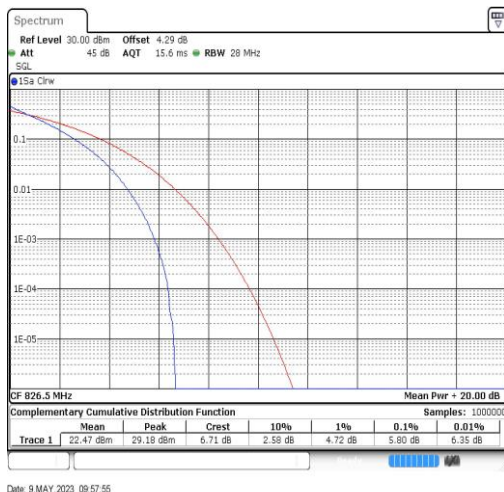
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Wireless Laboratory

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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

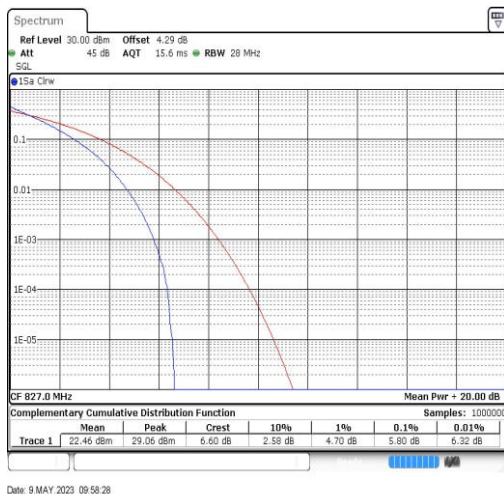
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Test Graphs



Band18-5MHz-QPSK-23965-25RB#0



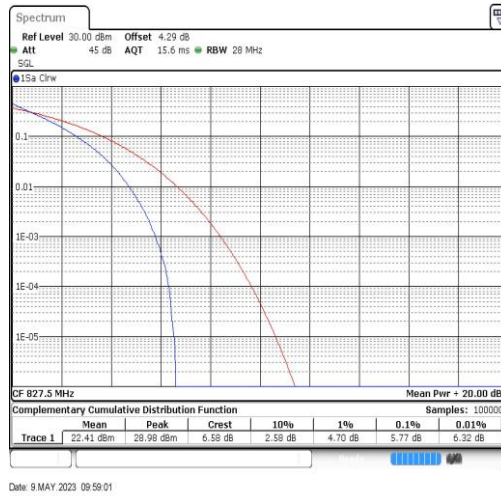
Band18-5MHz-QPSK-23970-25RB#0



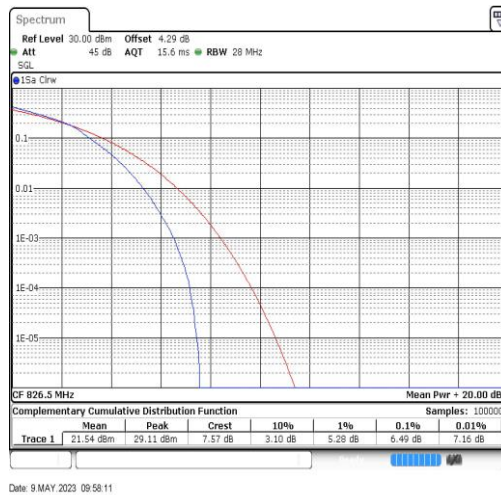
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

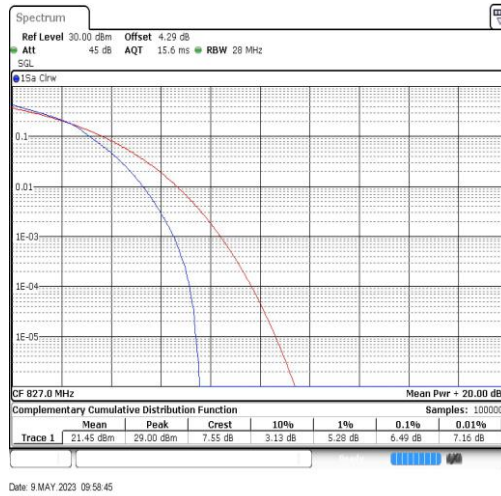


Band18-5MHz-QPSK-23975-25RB#0

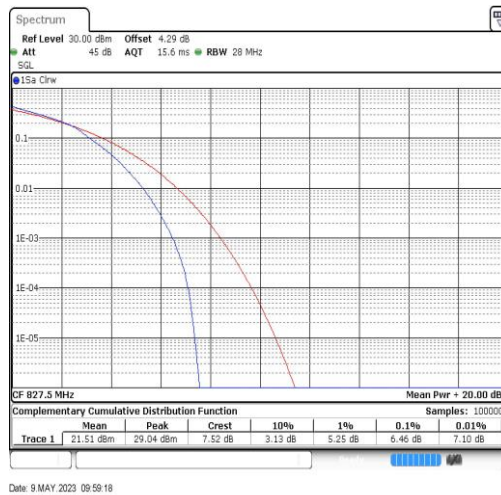


Band18-5MHz-16QAM-23965-25RB#0



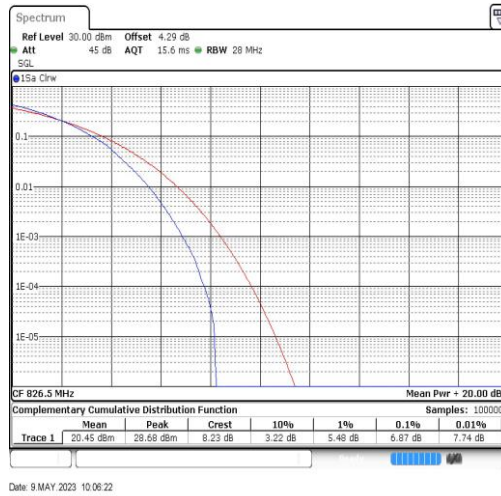


Band18-5MHz-16QAM-23970-25RB#0

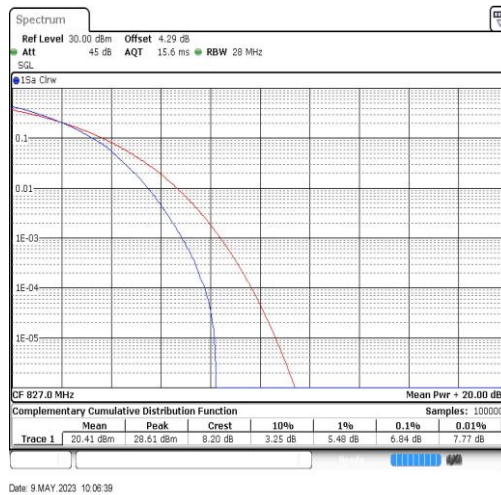


Band18-5MHz-16QAM-23975-25RB#0





Band18-5MHz-64QAM-23965-25RB#0



Band18-5MHz-64QAM-23970-25RB#0

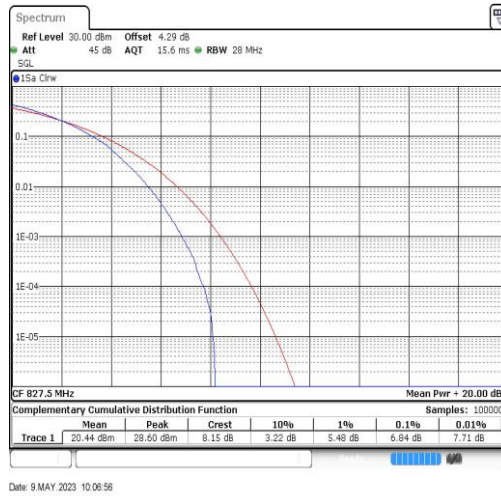




Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 9 of 39



Band18-5MHz-64QAM-23975-25RB#0



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch 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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 10 of 39

Modulation Characteristics

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result	Verdict
Band18	5MHz	QPSK	23970	25RB#0	PASS	PASS
Band18	5MHz	16QAM	23970	25RB#0	PASS	PASS
Band18	5MHz	64QAM	23970	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

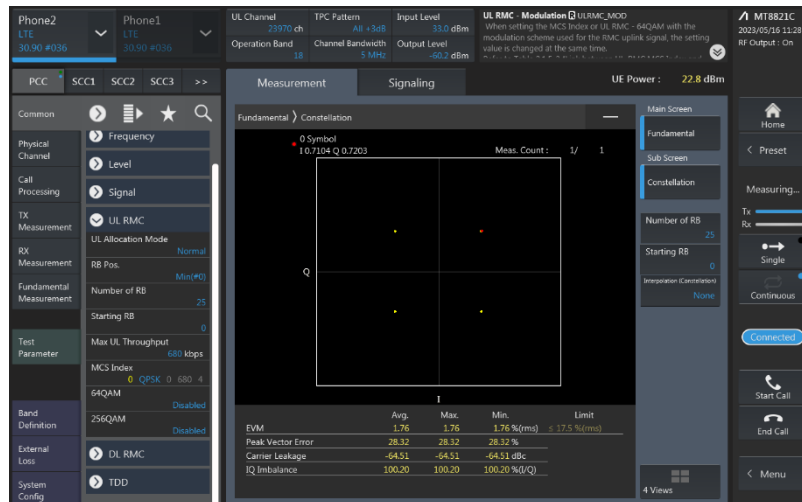
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Report No.: ZEWM2303000343RG02

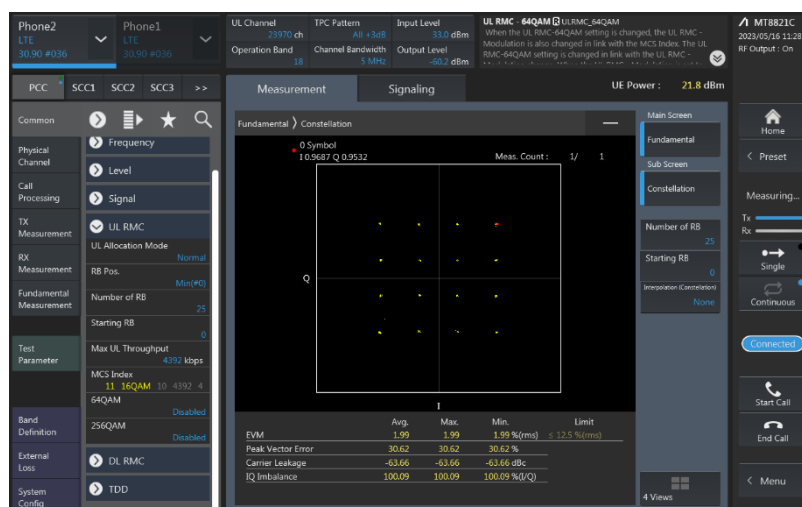
Rev.: 01

Page: 11 of 39

Test Graphs

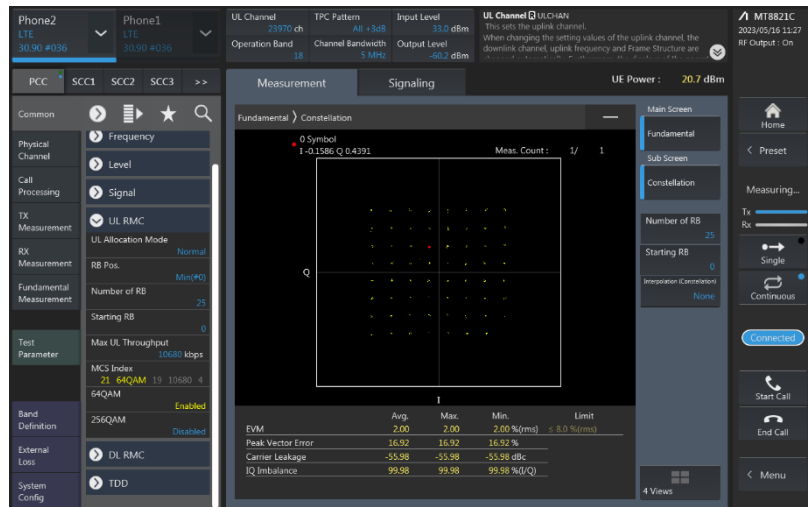


Band26-15MHz-QPSK-23970-25RB#0



Band26-15MHz-16QAM-23970-25RB#0





Band26-15MHz-64QAM-23970-25RB#0





Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 13 of 39

26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band18	5MHz	QPSK	23965	25RB#0	4.476	4.92	PASS
Band18	5MHz	QPSK	23970	25RB#0	4.476	4.90	PASS
Band18	5MHz	QPSK	23975	25RB#0	4.476	4.91	PASS
Band18	5MHz	16QAM	23965	25RB#0	4.466	4.95	PASS
Band18	5MHz	16QAM	23970	25RB#0	4.466	4.94	PASS
Band18	5MHz	16QAM	23975	25RB#0	4.466	4.95	PASS
Band18	5MHz	64QAM	23965	25RB#0	4.476	4.93	PASS
Band18	5MHz	64QAM	23970	25RB#0	4.486	4.94	PASS
Band18	5MHz	64QAM	23975	25RB#0	4.486	4.95	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

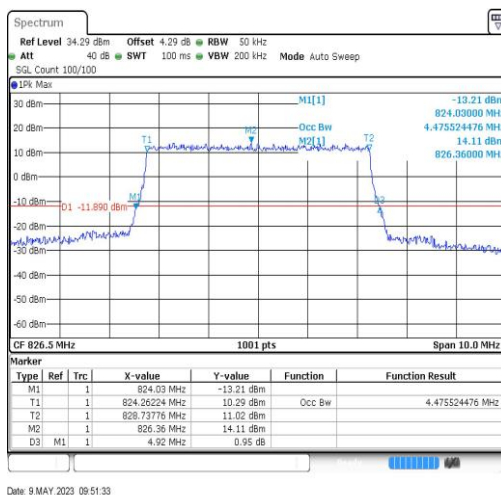
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Report No.: ZEWM2303000343RG02

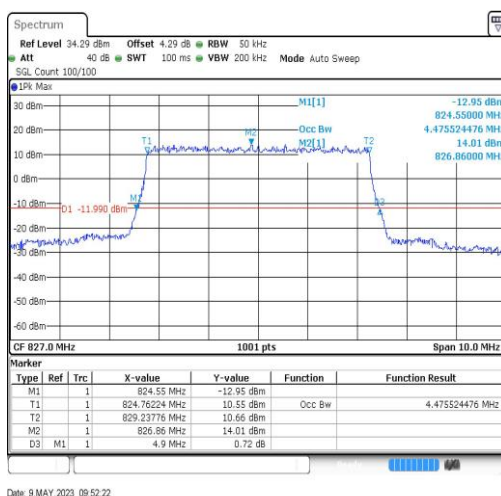
Rev.: 01

Page: 14 of 39

Test Graphs



Band18-5MHz-QPSK-23965-25RB#0-4.476



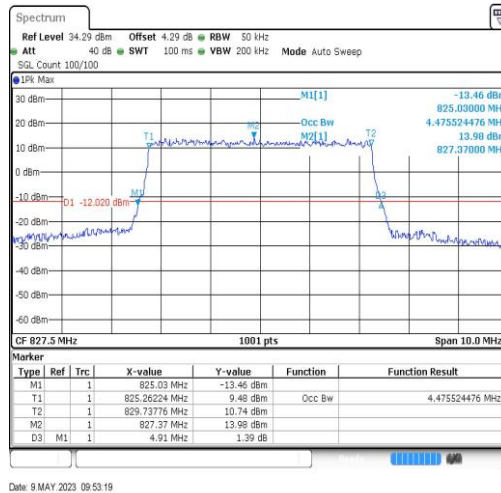
Band18-5MHz-QPSK-23970-25RB#0-4.476



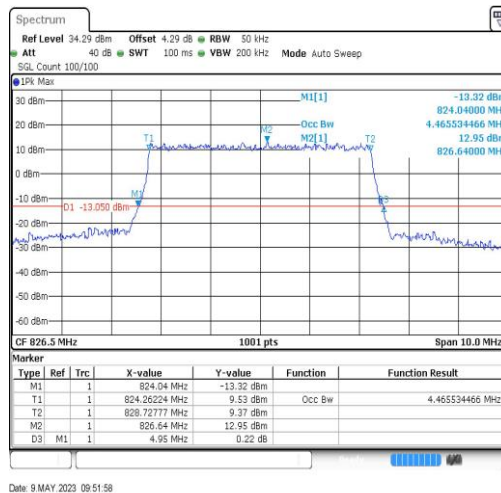
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 15 of 39



Band18-5MHz-QPSK-23975-25RB#0-4.476



Band18-5MHz-16QAM-23965-25RB#0-4.466

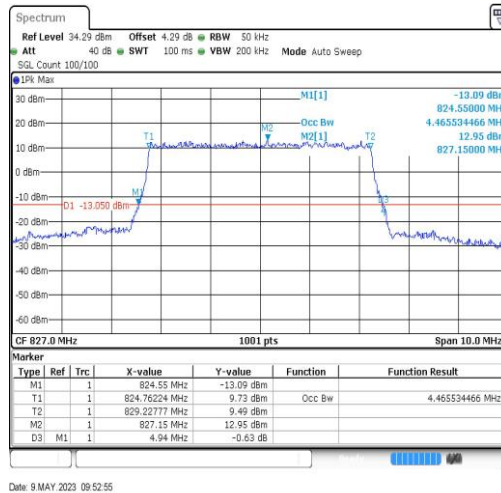


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

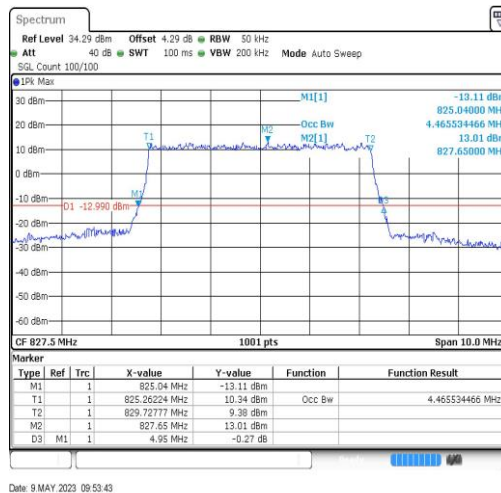
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Band18-5MHz-16QAM-23970-25RB#0-4.466



Band18-5MHz-16QAM-23975-25RB#0-4.466



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

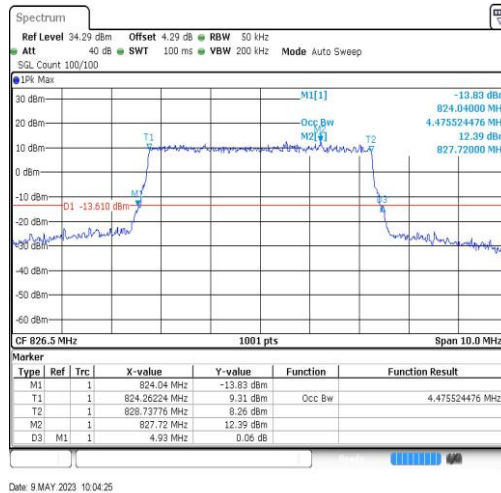
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

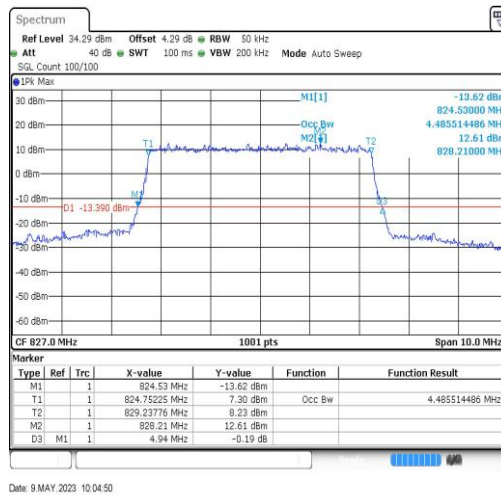
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 17 of 39



Band18-5MHz-64QAM-23965-25RB#0-4.476



Band18-5MHz-64QAM-23970-25RB#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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
 中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

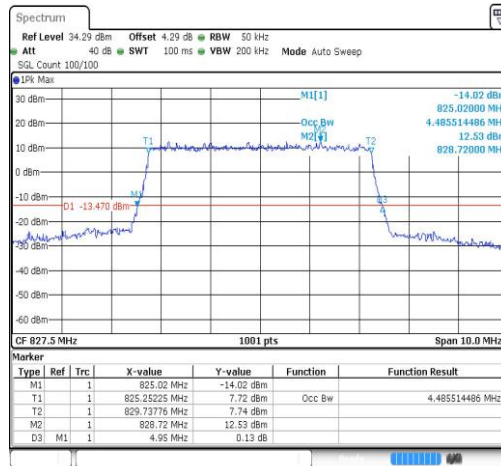
Member of the SGS Group (SGS SA)



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 18 of 39



Band18-5MHz-64QAM-23975-25RB#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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

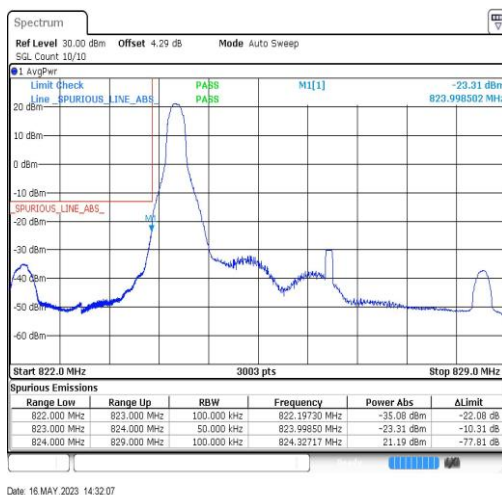
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

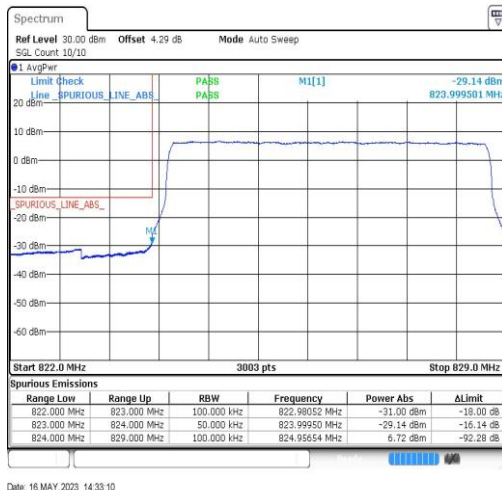


Band Edge

Test Graphs



18(824-830)_Band18_5MHz_QPSK_23965_1RB#0



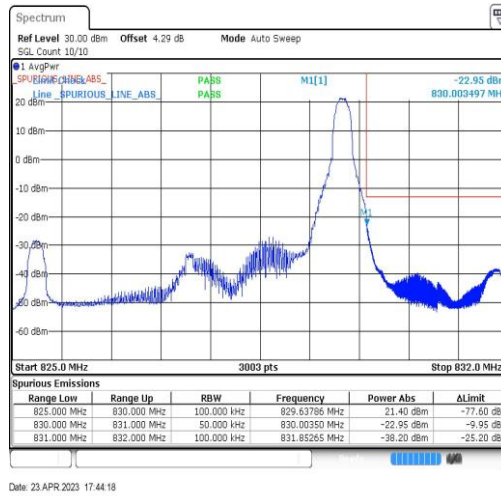
18(824-830)_Band18_5MHz_QPSK_23965_25RB#0



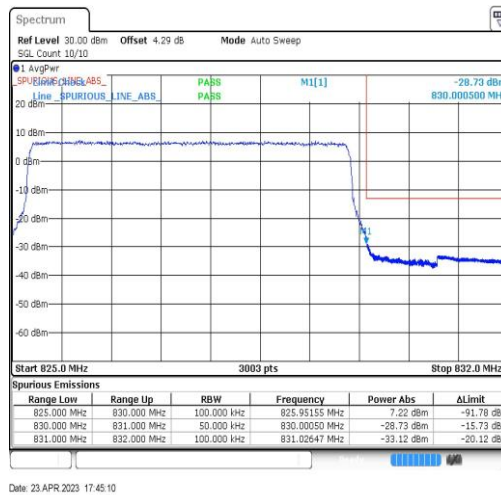
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 20 of 39



18(824-830)_Band18_5MHz_QPSK_23975_1RB#24



18(824-830)_Band18_5MHz_QPSK_23975_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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

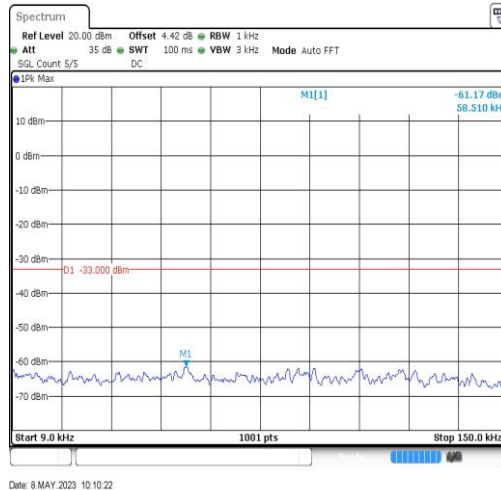
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

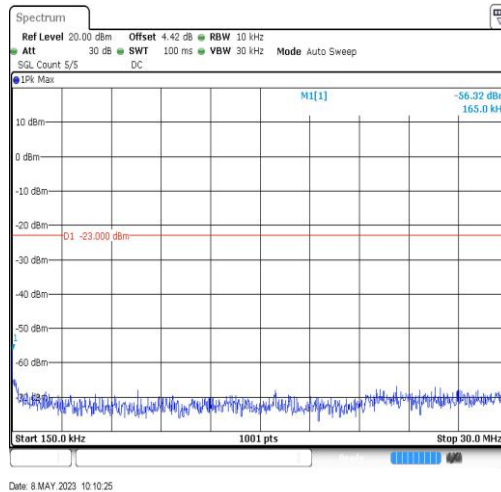


Conducted Spurious Emission

Test Graphs



Band18-5MHz-QPSK-23875-1RB#0-Range1:0.009~0.15MHz



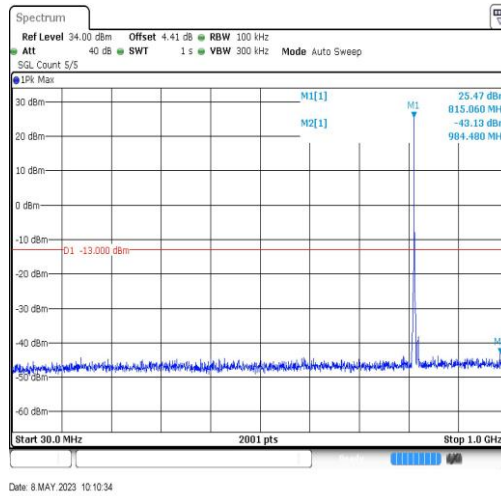
Band18-5MHz-QPSK-23875-1RB#0-Range2:0.15~30MHz



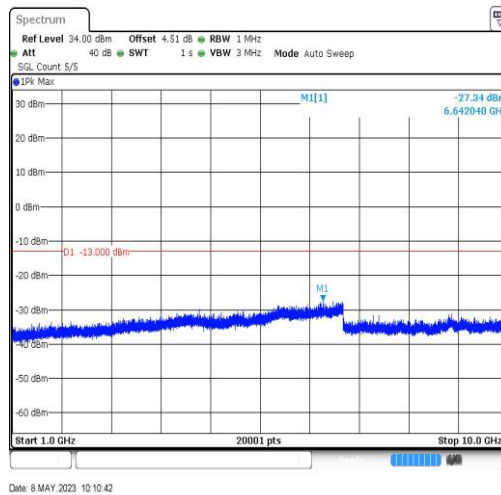
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 22 of 39



Band18-5MHz-QPSK-23875-1RB#0-Range3:30~1000MHz



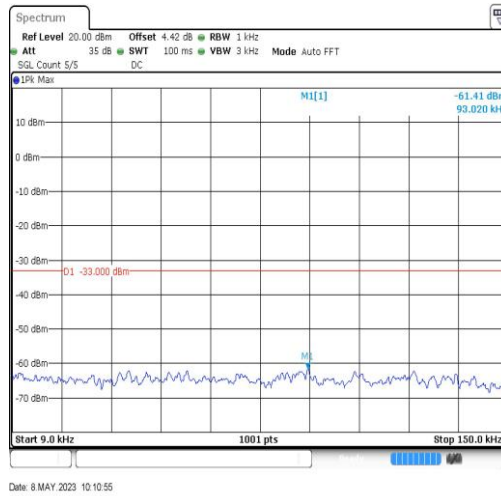
Band18-5MHz-QPSK-23875-1RB#0-Range4:1000~10000MHz



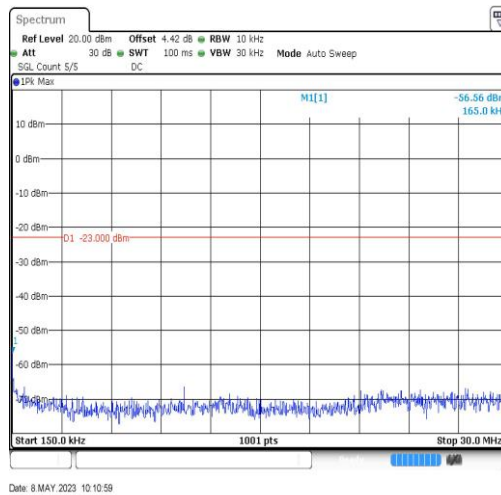
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Band18-5MHz-QPSK-23895-1RB#0-Range1:0.009~0.15MHz



Band18-5MHz-QPSK-23895-1RB#0-Range2:0.15~30MHz



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

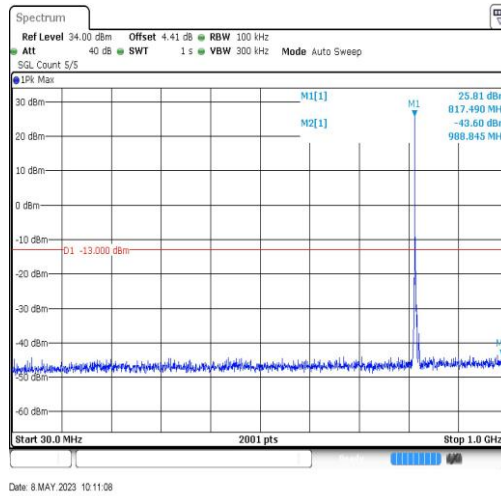
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

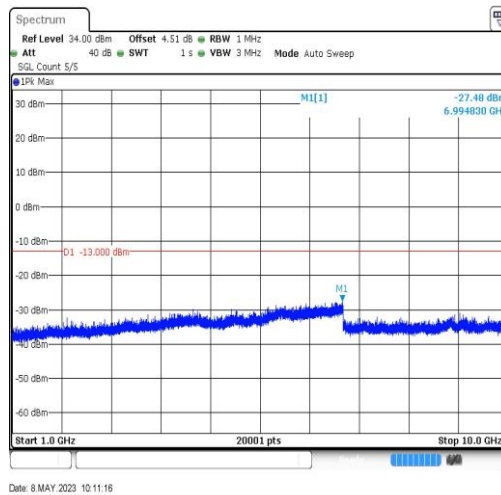
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 24 of 39



Band18-5MHz-QPSK-23895-1RB#0-Range3:30~1000MHz



Band18-5MHz-QPSK-23895-1RB#0-Range4:1000~10000MHz

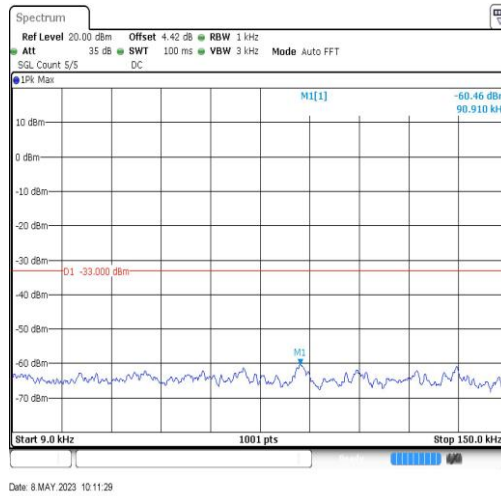


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

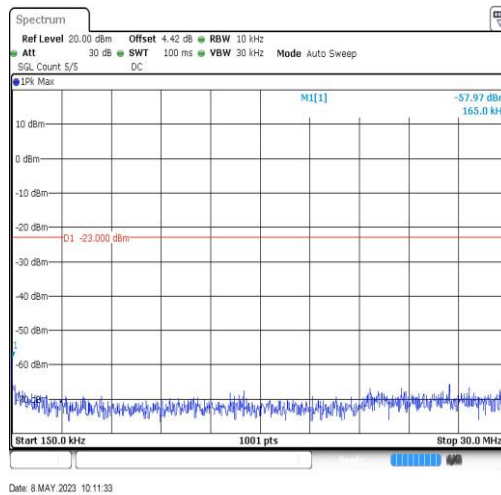
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Band18-5MHz-QPSK-23915-1RB#0-Range1:0.009~0.15MHz



Band18-5MHz-QPSK-23915-1RB#0-Range2:0.15~30MHz



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

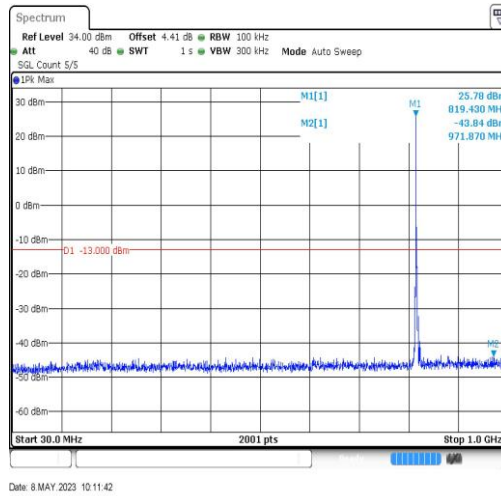
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

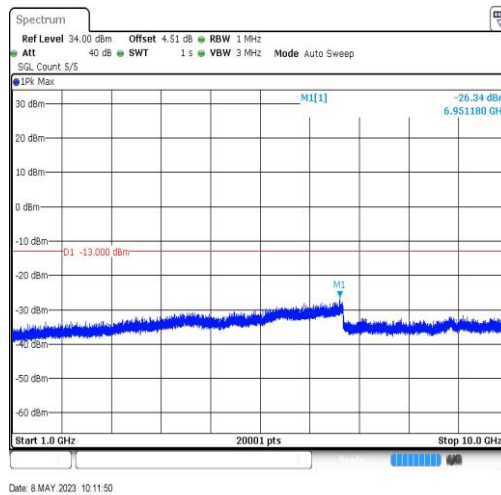
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 26 of 39



Band18-5MHz-QPSK-23915-1RB#0-Range3:30~1000MHz



Band18-5MHz-QPSK-23915-1RB#0-Range4:1000~10000MHz



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

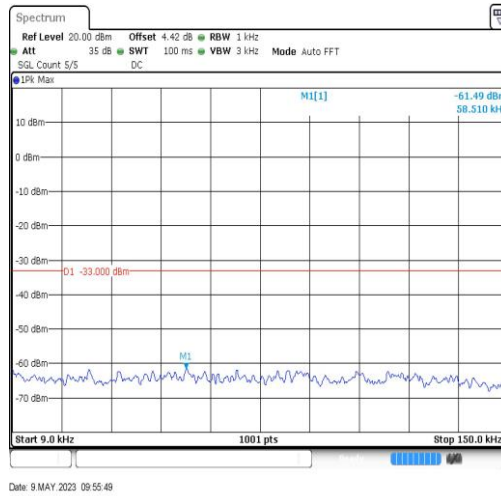
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

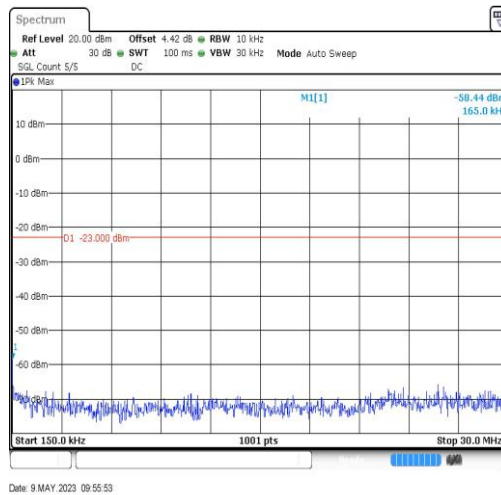
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 27 of 39



Band18-5MHz-QPSK-23965-1RB#0-Range1:0.009~0.15MHz



Band18-5MHz-QPSK-23965-1RB#0-Range2:0.15~30MHz



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

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

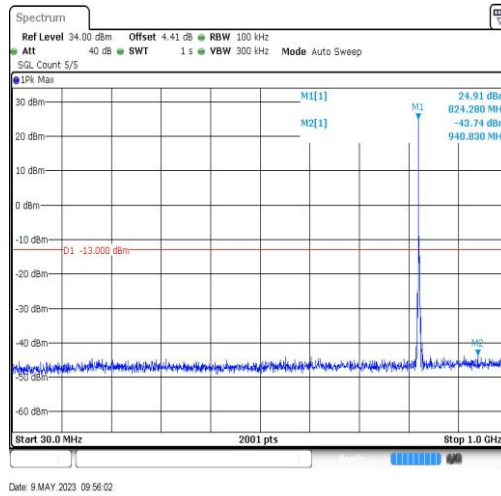
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
 中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

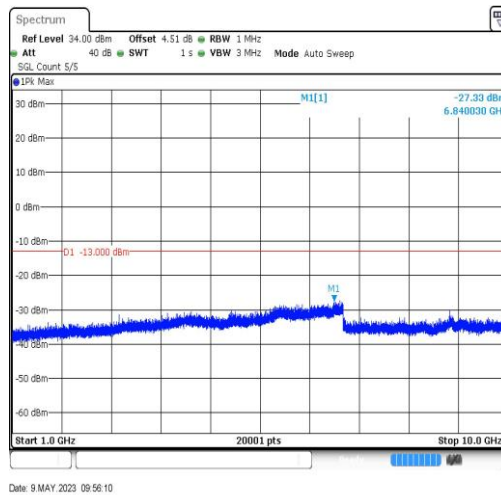
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 28 of 39



Band18-5MHz-QPSK-23965-1RB#0-Range3:30~1000MHz



Band18-5MHz-QPSK-23965-1RB#0-Range4:1000~10000MHz



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

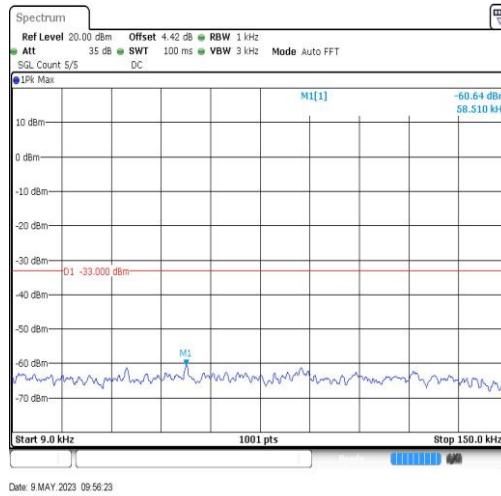
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

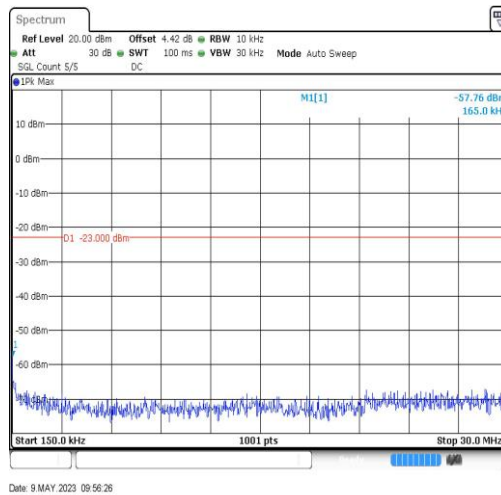
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 29 of 39



Band18-5MHz-QPSK-23970-1RB#0-Range1:0.009~0.15MHz



Band18-5MHz-QPSK-23970-1RB#0-Range2:0.15~30MHz

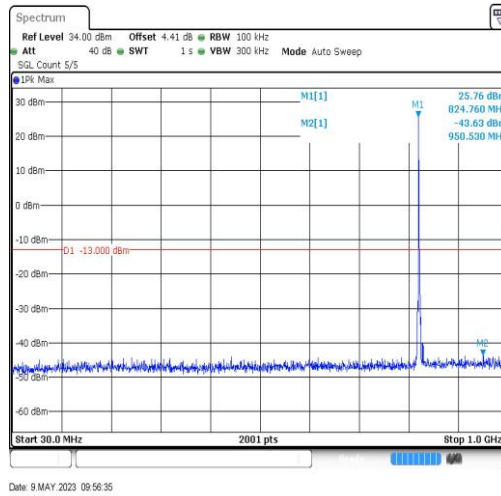


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

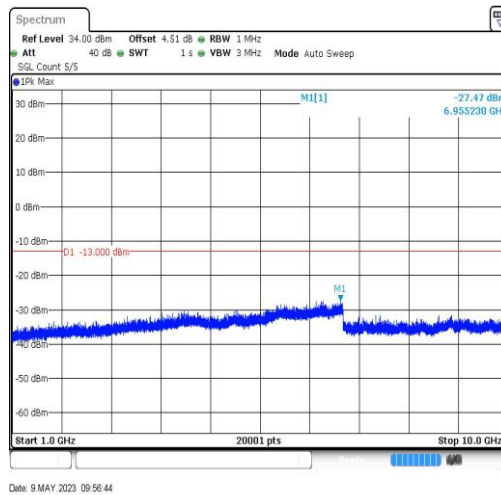
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Band18-5MHz-QPSK-23970-1RB#0-Range3:30~1000MHz



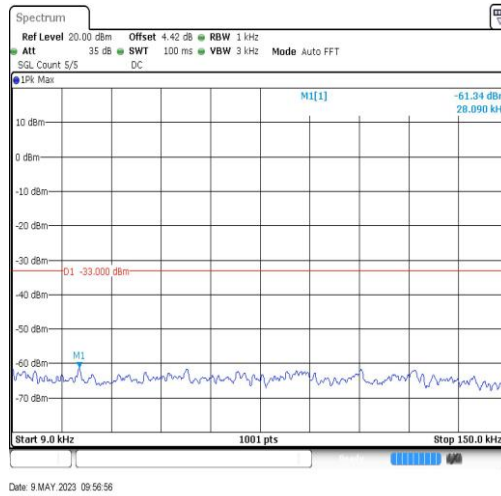
Band18-5MHz-QPSK-23970-1RB#0-Range4:1000~10000MHz



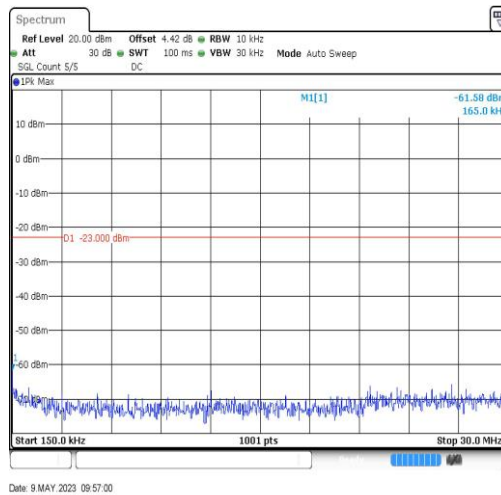
Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 31 of 39



Band18-5MHz-QPSK-23975-1RB#0-Range1:0.009~0.15MHz



Band18-5MHz-QPSK-23975-1RB#0-Range2:0.15~30MHz

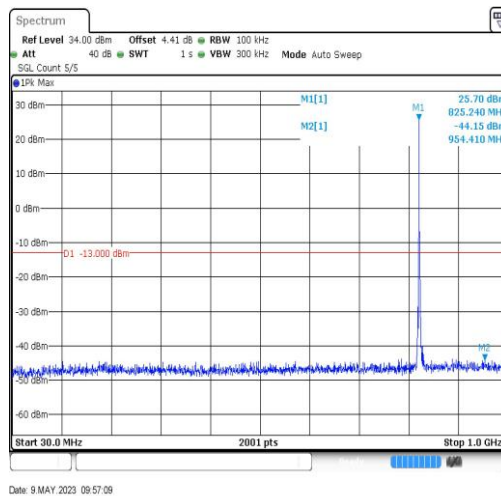


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

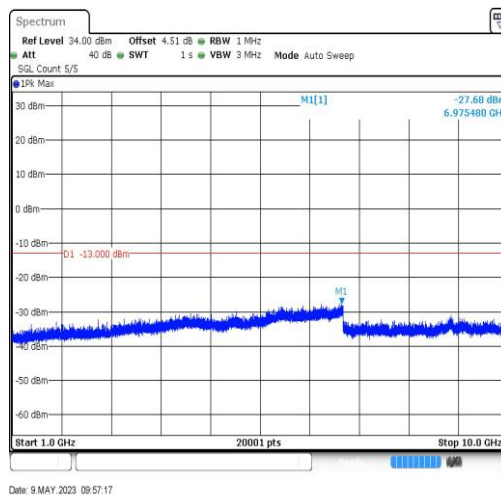
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
 中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Band18-5MHz-QPSK-23975-1RB#0-Range3:30~1000MHz



Band18-5MHz-QPSK-23975-1RB#0-Range4:1000~10000MHz





Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 33 of 39

Field Strength of Spurious Radiation

Test Band = LTE_18(824-830)_5M_ANT13_TM1

Test Channel = LCH

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle[°]	Polarity
1	1648.8311	32.37	-19.03	25.90	-56.02	-13.00	43.02	215	78	Horizontal
2	2558.6948	25.38	-17.67	28.32	-59.23	-13.00	46.23	208	221	Horizontal
3	3613.2307	53.26	-49.51	30.25	-61.26	-13.00	48.26	138	59	Horizontal
4	5701.7851	50.55	-44.76	33.51	-55.96	-13.00	42.96	244	69	Horizontal
5	7838.6419	49.23	-43.23	37.10	-52.16	-13.00	39.16	308	324	Horizontal
6	9724.1862	47.98	-41.14	38.75	-49.67	-13.00	36.67	163	344	Horizontal

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1648.8311	30.41	-19.03	25.90	-57.98	-13.00	44.98	184	70	Vertical
2	2544.193	25.13	-17.68	28.27	-59.54	-13.00	46.54	234	240	Vertical
3	3626.1813	52.77	-49.38	30.30	-61.57	-13.00	48.57	273	153	Vertical
4	5696.5348	50.26	-44.76	33.49	-56.27	-13.00	43.27	352	172	Vertical
5	7478.1239	49.41	-43.33	36.64	-52.54	-13.00	39.54	231	226	Vertical
6	9259.013	47.92	-41.32	39.05	-49.61	-13.00	36.61	240	236	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 34 of 39

Test Band = LTE_18(824-830)_5M_ANT13_TM1

Test Channel = MCH

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1649.5812	32.92	-19.02	25.90	-55.46	-13.00	42.46	194	206	Horizontal
2	2788.7236	24.83	-16.97	28.62	-58.78	-13.00	45.78	380	292	Horizontal
3	3613.2307	53.41	-49.51	30.25	-61.11	-13.00	48.11	139	60	Horizontal
4	5019.951	51.29	-47.16	33.22	-57.91	-13.00	44.91	398	315	Horizontal
5	6961.4981	50.03	-44.40	36.42	-53.21	-13.00	40.21	215	94	Horizontal
6	9018.9009	48.59	-41.73	38.76	-49.64	-13.00	36.64	202	75	Horizontal

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1649.5812	30.61	-19.02	25.90	-57.77	-13.00	44.77	331	65	Vertical
2	2671.2089	25.24	-17.58	28.38	-59.22	-13.00	46.22	171	292	Vertical
3	3635.2818	52.69	-49.29	30.34	-61.52	-13.00	48.52	254	246	Vertical
4	5800.84	50.31	-45.51	34.10	-56.36	-13.00	43.36	252	172	Vertical
5	7114.1057	49.50	-43.87	36.96	-52.67	-13.00	39.67	174	152	Vertical
6	9001.7501	48.10	-41.66	38.80	-50.02	-13.00	37.02	349	172	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 <https://www.sgs.com/en/Terms-and-Conditions>. 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_Docscheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 35 of 39

Test Band = LTE_18(824-830)_5M_ANT13_TM1

Test Channel = HCH

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1650.5813	33.88	-19.02	25.90	-54.50	-13.00	41.50	142	206	Horizontal
2	2198.6498	24.05	-17.85	27.69	-61.37	-13.00	48.37	160	222	Horizontal
3	3621.9811	53.24	-49.42	30.29	-61.15	-13.00	48.15	122	311	Horizontal
4	4996.4998	51.02	-46.93	33.11	-58.06	-13.00	45.06	326	126	Horizontal
5	6951.6976	50.35	-44.43	36.40	-52.94	-13.00	39.94	267	299	Horizontal
6	8996.8498	48.52	-41.68	38.78	-49.64	-13.00	36.64	301	145	Horizontal

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1650.8314	29.80	-19.01	25.90	-58.57	-13.00	45.57	239	106	Vertical
2	2434.9294	24.68	-17.64	27.87	-60.35	-13.00	47.35	103	358	Vertical
3	3630.7315	52.74	-49.33	30.32	-61.53	-13.00	48.53	149	300	Vertical
4	4878.1939	51.56	-47.59	32.97	-58.32	-13.00	45.32	322	57	Vertical
5	6508.9254	50.30	-44.24	35.12	-54.08	-13.00	41.08	312	324	Vertical
6	9022.0511	48.46	-41.75	38.76	-49.79	-13.00	36.79	254	5	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 <https://www.sgs.com/en/Terms-and-Conditions>. 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_Docscheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 36 of 39

Test Band = LTE_18(824-830)_5M_ANT31_TM1

Test Channel = LCH

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1378.5473	22.93	-19.35	25.84	-65.84	-13.00	52.84	206	320	Horizontal
2	2413.6767	24.70	-17.54	27.83	-60.27	-13.00	47.27	117	197	Horizontal
3	4529.9265	51.52	-48.21	31.98	-59.97	-13.00	46.97	293	324	Horizontal
4	5698.6349	49.28	-44.73	33.49	-57.22	-13.00	44.22	124	158	Horizontal
5	7465.5233	48.91	-43.43	36.67	-53.11	-13.00	40.11	152	286	Horizontal
6	9292.2646	47.27	-41.85	38.85	-50.99	-13.00	37.99	345	54	Horizontal

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1359.2949	23.30	-19.38	25.88	-65.46	-13.00	52.46	330	6	Vertical
2	2556.6946	25.04	-17.66	28.31	-59.57	-13.00	46.57	238	136	Vertical
3	4374.8687	51.44	-48.60	32.05	-60.37	-13.00	47.37	214	346	Vertical
4	5697.9349	49.63	-44.74	33.49	-56.88	-13.00	43.88	248	85	Vertical
5	7495.2748	48.37	-43.20	36.61	-53.48	-13.00	40.48	119	65	Vertical
6	9031.8516	47.10	-41.79	38.74	-51.21	-13.00	38.21	126	281	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 37 of 39

Test Band = LTE_18(824-830)_5M_ANT31_TM1

Test Channel = MCH

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1518.0648	23.48	-18.96	25.71	-65.03	-13.00	52.03	248	175	Horizontal
2	2134.3918	24.39	-18.63	27.43	-62.07	-13.00	49.07	280	316	Horizontal
3	3648.5824	52.10	-49.15	30.39	-61.92	-13.00	48.92	144	134	Horizontal
4	5137.5569	50.02	-47.07	33.58	-58.73	-13.00	45.73	249	70	Horizontal
5	7487.5744	48.59	-43.26	36.62	-53.31	-13.00	40.31	354	267	Horizontal
6	9551.6276	46.62	-41.59	39.10	-51.13	-13.00	38.13	236	321	Horizontal

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1171.2714	23.01	-19.21	25.77	-65.69	-13.00	52.69	265	312	Vertical
2	1720.8401	23.58	-18.90	25.67	-64.91	-13.00	51.91	100	239	Vertical
3	3527.8264	52.78	-49.41	29.97	-61.92	-13.00	48.92	236	56	Vertical
4	5012.9506	49.77	-47.07	33.18	-59.38	-13.00	46.38	101	2	Vertical
5	7467.2734	48.48	-43.41	36.67	-53.52	-13.00	40.52	254	2	Vertical
6	9019.251	47.72	-41.73	38.76	-50.51	-13.00	37.51	269	306	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 38 of 39

Test Band = LTE_18(824-830)_5M_ANT31_TM1

Test Channel = HCH

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1698.8374	23.71	-18.72	25.80	-64.47	-13.00	51.47	363	30	Horizontal
2	2564.4456	24.90	-17.70	28.33	-59.73	-13.00	46.73	284	168	Horizontal
3	4433.3217	51.09	-48.27	32.00	-60.44	-13.00	47.44	100	65	Horizontal
4	6390.6195	49.15	-45.17	34.56	-56.72	-13.00	43.72	266	20	Horizontal
5	7466.2233	48.43	-43.42	36.67	-53.58	-13.00	40.58	216	277	Horizontal
6	9507.1754	46.45	-41.52	39.19	-51.14	-13.00	38.14	226	218	Horizontal

Final Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF [dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2632.9541	25.46	-17.64	28.33	-59.11	-13.00	46.11	220	250	Vertical
2	3630.7315	52.56	-49.33	30.32	-61.71	-13.00	48.71	348	158	Vertical
3	4402.1701	51.25	-48.45	32.19	-60.27	-13.00	47.27	129	99	Vertical
4	5709.4855	49.87	-44.96	33.58	-56.77	-13.00	43.77	385	2	Vertical
5	7495.9748	48.46	-43.20	36.61	-53.39	-13.00	40.39	213	252	Vertical
6	9564.2282	46.64	-41.46	39.13	-50.95	-13.00	37.95	265	340	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 <https://www.sgs.com/en/Terms-and-Conditions>. 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_Docscheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWM2303000343RG02

Rev.: 01

Page: 39 of 39

Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band18	5MHz	QPSK	23970	25RB#0	VN	NT	3.40	0.004111	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	VL	NT	1.70	0.002056	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	VH	NT	1.20	0.001451	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band18	5MHz	QPSK	23970	25RB#0	NV	-30	0.40	0.000484	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	-20	3.20	0.003869	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	-10	-0.50	-0.000605	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	0	3.20	0.003869	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	10	-0.80	-0.000967	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	20	3.60	0.004353	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	30	2.00	0.002418	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	40	0.40	0.000484	±2.5	PASS
Band18	5MHz	QPSK	23970	25RB#0	NV	50	0.60	0.000726	±2.5	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com