



Appendix B

E-UTRA Band 7



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



CONTENT

1	EFFECTIVE (ISOTROPIC) RADIATED POWER	4
1.1.	TEST RESULT	4
2.	PEAK-TO-AVERAGE RATIO (CCDF)	10
2.1.	TEST RESULT	10
2.2.	TEST PLOTS.....	10
3.	MODULATION CHARACTERISTICS	15
3.1.	TEST BAND = LTE BAND 7	15
3.1.1.	TEST MODE = LTE /TM1 20MHZ	15
3.1.1.1.	TEST CHANNEL = MCH.....	15
3.1.2.	TEST MODE = LTE /TM2 20MHZ	16
3.1.2.1.	TEST CHANNEL = MCH.....	16
3.1.3.	TEST MODE = LTE /TM3 20MHZ	17
3.1.3.1.	TEST CHANNEL = MCH.....	17
4.	26DB BANDWIDTH AND OCCUPIED BANDWIDTH	18
4.1.	TEST RESULT	18
4.2.	TEST PLOTS.....	19
5.	BAND EDGE COMPLIANCE	37
5.1.	TEST PLOTS.....	37
6.	SPURIOUS EMISSION AT ANTENNA TERMINAL	61
6.1.	TEST PLOTS.....	61
7.	FIELD STRENGTH OF SPURIOUS RADIATION	70
7.1.	TEST BAND = LTE BAND 7	70
7.1.1.	TEST MODE =LTE/TM1	70
7.1.1.1.	TEST CHANNEL = LCH	70
7.1.1.2.	TEST CHANNEL = MCH.....	71
7.1.1.3.	TEST CHANNEL = HCH	72
8.	FREQUENCY STABILITY.....	73
8.1.	FREQUENCY VS VOLTAGE	73



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 Co., Ltd.
Shenzhen Branch 深圳分公司实验室

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057
中国·深圳·科技园中区M-10栋一号厂房

t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



8.2. FREQUENCY VS TEMPERATURE 73



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



1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.14	22.18	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	22.36	22.40	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.08	22.12	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	21.30	21.34	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	21.25	21.29	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	21.24	21.28	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.25	21.29	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.02	22.06	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.07	22.11	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.27	22.31	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.15	21.19	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	21.19	21.23	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	21.15	21.19	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.15	21.19	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	22.44	22.48	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.22	22.26	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.20	22.24	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	21.35	21.39	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	21.41	21.45	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	21.35	21.39	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.37	21.41	33.00	PASS
Band7	5MHz	64QAM	20775	1RB#0	20.52	20.56	33.00	PASS
Band7	5MHz	64QAM	20775	1RB#24	20.51	20.55	33.00	PASS
Band7	5MHz	64QAM	20775	1RB#12	20.77	20.81	33.00	PASS
Band7	5MHz	64QAM	20775	12RB#0	19.53	19.57	33.00	PASS
Band7	5MHz	64QAM	20775	12RB#6	19.59	19.63	33.00	PASS
Band7	5MHz	64QAM	20775	12RB#13	19.54	19.58	33.00	PASS
Band7	5MHz	64QAM	20775	25RB#0	19.55	19.59	33.00	PASS
Band7	5MHz	64QAM	21100	1RB#0	20.36	20.40	33.00	PASS
Band7	5MHz	64QAM	21100	1RB#12	20.56	20.60	33.00	PASS
Band7	5MHz	64QAM	21100	1RB#24	20.32	20.36	33.00	PASS
Band7	5MHz	64QAM	21100	12RB#13	19.30	19.34	33.00	PASS
Band7	5MHz	64QAM	21100	12RB#6	19.36	19.40	33.00	PASS
Band7	5MHz	64QAM	21100	12RB#0	19.32	19.36	33.00	PASS
Band7	5MHz	64QAM	21100	25RB#0	19.31	19.35	33.00	PASS
Band7	5MHz	64QAM	21425	1RB#0	20.26	20.30	33.00	PASS
Band7	5MHz	64QAM	21425	1RB#12	20.45	20.49	33.00	PASS
Band7	5MHz	64QAM	21425	1RB#24	20.18	20.22	33.00	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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	5MHz	64QAM	21425	12RB#0	19.21	19.25	33.00	PASS
Band7	5MHz	64QAM	21425	12RB#6	19.24	19.28	33.00	PASS
Band7	5MHz	64QAM	21425	12RB#13	19.20	19.24	33.00	PASS
Band7	5MHz	64QAM	21425	25RB#0	19.23	19.27	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	21.44	21.48	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.27	21.31	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.63	21.67	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	20.30	20.34	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	20.33	20.37	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	20.27	20.31	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.28	20.32	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	21.32	21.36	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.57	21.61	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.22	21.26	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	20.19	20.23	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	20.24	20.28	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	20.23	20.27	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.21	20.25	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.41	21.45	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.52	21.56	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.69	21.73	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#0	20.39	20.43	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	20.42	20.46	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	20.40	20.44	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	20.39	20.43	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	22.18	22.22	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.32	22.36	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.24	22.28	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#12	21.29	21.33	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	21.30	21.34	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	21.28	21.32	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.28	21.32	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.22	22.26	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	22.13	22.17	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.14	22.18	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	21.23	21.27	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	21.20	21.24	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#12	21.18	21.22	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.22	21.26	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.27	22.31	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.41	22.45	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.33	22.37	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	21.42	21.46	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#0	21.40	21.44	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#12	21.41	21.45	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.41	21.45	33.00	PASS
Band7	10MHz	64QAM	20800	1RB#24	20.71	20.75	33.00	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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	10MHz	64QAM	20800	1RB#49	20.67	20.71	33.00	PASS
Band7	10MHz	64QAM	20800	1RB#0	20.67	20.71	33.00	PASS
Band7	10MHz	64QAM	20800	25RB#0	19.59	19.63	33.00	PASS
Band7	10MHz	64QAM	20800	25RB#12	19.61	19.65	33.00	PASS
Band7	10MHz	64QAM	20800	25RB#25	19.60	19.64	33.00	PASS
Band7	10MHz	64QAM	20800	50RB#0	19.58	19.62	33.00	PASS
Band7	10MHz	64QAM	21100	1RB#49	20.38	20.42	33.00	PASS
Band7	10MHz	64QAM	21100	1RB#0	20.55	20.59	33.00	PASS
Band7	10MHz	64QAM	21100	1RB#24	20.56	20.60	33.00	PASS
Band7	10MHz	64QAM	21100	25RB#0	19.40	19.44	33.00	PASS
Band7	10MHz	64QAM	21100	25RB#12	19.38	19.42	33.00	PASS
Band7	10MHz	64QAM	21100	25RB#25	19.41	19.45	33.00	PASS
Band7	10MHz	64QAM	21100	50RB#0	19.41	19.45	33.00	PASS
Band7	10MHz	64QAM	21400	1RB#0	20.41	20.45	33.00	PASS
Band7	10MHz	64QAM	21400	1RB#49	20.24	20.28	33.00	PASS
Band7	10MHz	64QAM	21400	1RB#24	20.42	20.46	33.00	PASS
Band7	10MHz	64QAM	21400	25RB#25	19.30	19.34	33.00	PASS
Band7	10MHz	64QAM	21400	25RB#0	19.26	19.30	33.00	PASS
Band7	10MHz	64QAM	21400	25RB#12	19.29	19.33	33.00	PASS
Band7	10MHz	64QAM	21400	50RB#0	19.30	19.34	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.55	21.59	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	21.54	21.58	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	21.44	21.48	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#12	20.34	20.38	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	20.32	20.36	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	20.31	20.35	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	20.31	20.35	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.39	21.43	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.45	21.49	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.52	21.56	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	20.21	20.25	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	20.26	20.30	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#12	20.23	20.27	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	20.24	20.28	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	21.56	21.60	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.56	21.60	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.66	21.70	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	20.39	20.43	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#12	20.42	20.46	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	20.42	20.46	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	20.40	20.44	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.08	22.12	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	22.23	22.27	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.21	22.25	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	21.26	21.30	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	21.27	21.31	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	21.30	21.34	33.00	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
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	15MHz	QPSK	20825	75RB#0	21.25	21.29	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.10	22.14	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.15	22.19	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.05	22.09	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	21.19	21.23	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	21.21	21.25	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	21.20	21.24	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.22	21.26	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.24	22.28	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.35	22.39	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.21	22.25	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	21.39	21.43	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	21.41	21.45	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	21.40	21.44	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.37	21.41	33.00	PASS
Band7	15MHz	64QAM	20825	1RB#74	20.56	20.60	33.00	PASS
Band7	15MHz	64QAM	20825	1RB#38	20.67	20.71	33.00	PASS
Band7	15MHz	64QAM	20825	1RB#0	20.60	20.64	33.00	PASS
Band7	15MHz	64QAM	20825	36RB#0	19.54	19.58	33.00	PASS
Band7	15MHz	64QAM	20825	36RB#18	19.55	19.59	33.00	PASS
Band7	15MHz	64QAM	20825	36RB#39	19.53	19.57	33.00	PASS
Band7	15MHz	64QAM	20825	75RB#0	19.54	19.58	33.00	PASS
Band7	15MHz	64QAM	21100	1RB#38	20.44	20.48	33.00	PASS
Band7	15MHz	64QAM	21100	1RB#74	20.28	20.32	33.00	PASS
Band7	15MHz	64QAM	21100	1RB#0	20.47	20.51	33.00	PASS
Band7	15MHz	64QAM	21100	36RB#39	19.33	19.37	33.00	PASS
Band7	15MHz	64QAM	21100	36RB#0	19.38	19.42	33.00	PASS
Band7	15MHz	64QAM	21100	36RB#18	19.37	19.41	33.00	PASS
Band7	15MHz	64QAM	21100	75RB#0	19.36	19.40	33.00	PASS
Band7	15MHz	64QAM	21375	1RB#0	20.28	20.32	33.00	PASS
Band7	15MHz	64QAM	21375	1RB#38	20.44	20.48	33.00	PASS
Band7	15MHz	64QAM	21375	1RB#74	20.19	20.23	33.00	PASS
Band7	15MHz	64QAM	21375	36RB#18	19.29	19.33	33.00	PASS
Band7	15MHz	64QAM	21375	36RB#0	19.28	19.32	33.00	PASS
Band7	15MHz	64QAM	21375	36RB#39	19.25	19.29	33.00	PASS
Band7	15MHz	64QAM	21375	75RB#0	19.27	19.31	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	21.49	21.53	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.39	21.43	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	21.30	21.34	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	20.30	20.34	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	20.28	20.32	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	20.31	20.35	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	20.28	20.32	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.40	21.44	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	21.33	21.37	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.44	21.48	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	20.19	20.23	33.00	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
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	15MHz	16QAM	21100	36RB#18	20.20	20.24	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	20.20	20.24	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	20.22	20.26	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	21.51	21.55	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	21.60	21.64	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	21.40	21.44	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	20.35	20.39	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	20.39	20.43	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	20.39	20.43	33.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	20.38	20.42	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.03	22.07	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	22.30	22.34	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	21.89	21.93	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	21.26	21.30	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	21.24	21.28	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	21.25	21.29	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	21.22	21.26	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	21.88	21.92	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	21.93	21.97	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.24	22.28	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	21.13	21.17	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	21.23	21.27	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	21.16	21.20	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.14	21.18	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.41	22.45	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.06	22.10	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.01	22.05	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	21.40	21.44	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.31	21.35	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	21.41	21.45	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.38	21.42	33.00	PASS
Band7	20MHz	64QAM	20850	1RB#0	20.46	20.50	33.00	PASS
Band7	20MHz	64QAM	20850	1RB#49	20.73	20.77	33.00	PASS
Band7	20MHz	64QAM	20850	1RB#99	20.38	20.42	33.00	PASS
Band7	20MHz	64QAM	20850	50RB#50	19.56	19.60	33.00	PASS
Band7	20MHz	64QAM	20850	50RB#0	19.50	19.54	33.00	PASS
Band7	20MHz	64QAM	20850	50RB#25	19.57	19.61	33.00	PASS
Band7	20MHz	64QAM	20850	100RB#0	19.50	19.54	33.00	PASS
Band7	20MHz	64QAM	21100	1RB#0	20.35	20.39	33.00	PASS
Band7	20MHz	64QAM	21100	1RB#49	20.58	20.62	33.00	PASS
Band7	20MHz	64QAM	21100	1RB#99	20.12	20.16	33.00	PASS
Band7	20MHz	64QAM	21100	50RB#0	19.35	19.39	33.00	PASS
Band7	20MHz	64QAM	21100	50RB#25	19.40	19.44	33.00	PASS
Band7	20MHz	64QAM	21100	50RB#50	19.32	19.36	33.00	PASS
Band7	20MHz	64QAM	21100	100RB#0	19.31	19.35	33.00	PASS
Band7	20MHz	64QAM	21350	1RB#99	20.00	20.04	33.00	PASS
Band7	20MHz	64QAM	21350	1RB#0	20.20	20.24	33.00	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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	20MHz	64QAM	21350	1RB#49	20.45	20.49	33.00	PASS
Band7	20MHz	64QAM	21350	50RB#0	19.26	19.30	33.00	PASS
Band7	20MHz	64QAM	21350	50RB#50	19.30	19.34	33.00	PASS
Band7	20MHz	64QAM	21350	50RB#25	19.29	19.33	33.00	PASS
Band7	20MHz	64QAM	21350	100RB#0	19.26	19.30	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.28	21.32	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	21.56	21.60	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.22	21.26	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	20.26	20.30	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	20.29	20.33	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	20.27	20.31	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	20.27	20.31	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.23	21.27	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	21.13	21.17	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.53	21.57	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	20.12	20.16	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	20.24	20.28	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	20.19	20.23	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	20.13	20.17	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	21.38	21.42	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.22	21.26	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	21.70	21.74	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	20.41	20.45	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	20.39	20.43	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	20.32	20.36	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	20.37	20.41	33.00	PASS

Remark:

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

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

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



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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

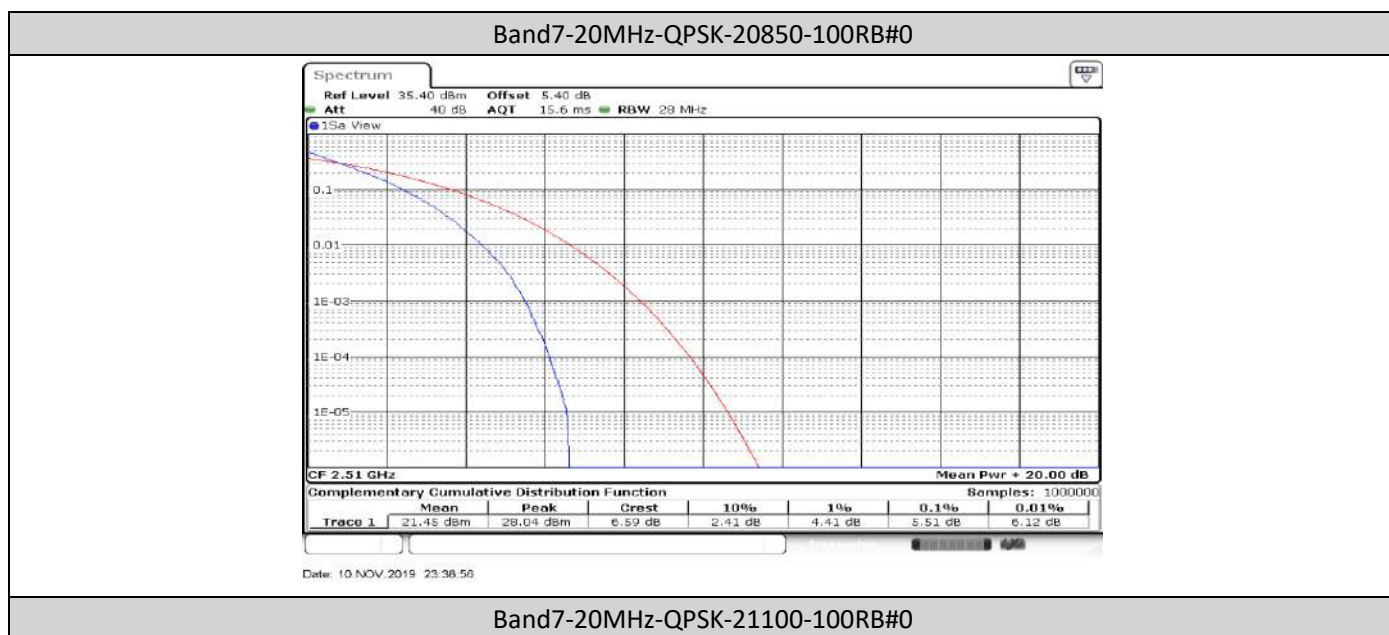


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.51	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.42	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.39	13	PASS
Band7	20MHz	64QAM	20850	100RB#0	6.58	13	PASS
Band7	20MHz	64QAM	21100	100RB#0	6.49	13	PASS
Band7	20MHz	64QAM	21350	100RB#0	6.55	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.32	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.29	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.29	13	PASS

2.2. Test Plots



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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7-20MHz-QPSK-21350-100RB#0



Band7-20MHz-64QAM-20850-100RB#0



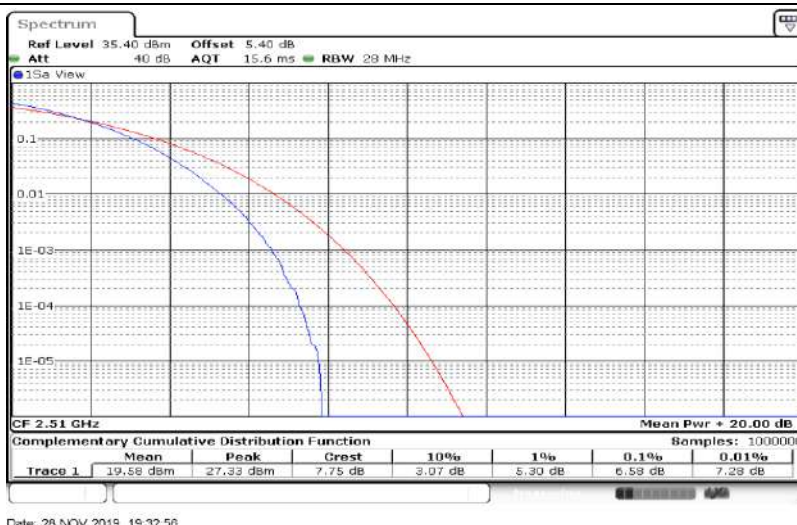
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057
中国·深圳·科技园中区M-10栋一号厂房

t (86-755) 26012053 f (86-755) 26710594
t (86-755) 26012053 f (86-755) 26710594

www.sgsgroup.com.cn
sgs.china@sgs.com



Date: 28 NOV 2019 19:32:50

Band7-20MHz-64QAM-21100-100RB#0



Date: 28 NOV 2019 19:33:07

Band7-20MHz-64QAM-21350-100RB#0





Date: 28 NOV 2019 19:33:19

Band7-20MHz-16QAM-20850-100RB#0



Date: 10 NOV 2019 23:39:04

Band7-20MHz-16QAM-21100-100RB#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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7-20MHz-16QAM-21350-100RB#0



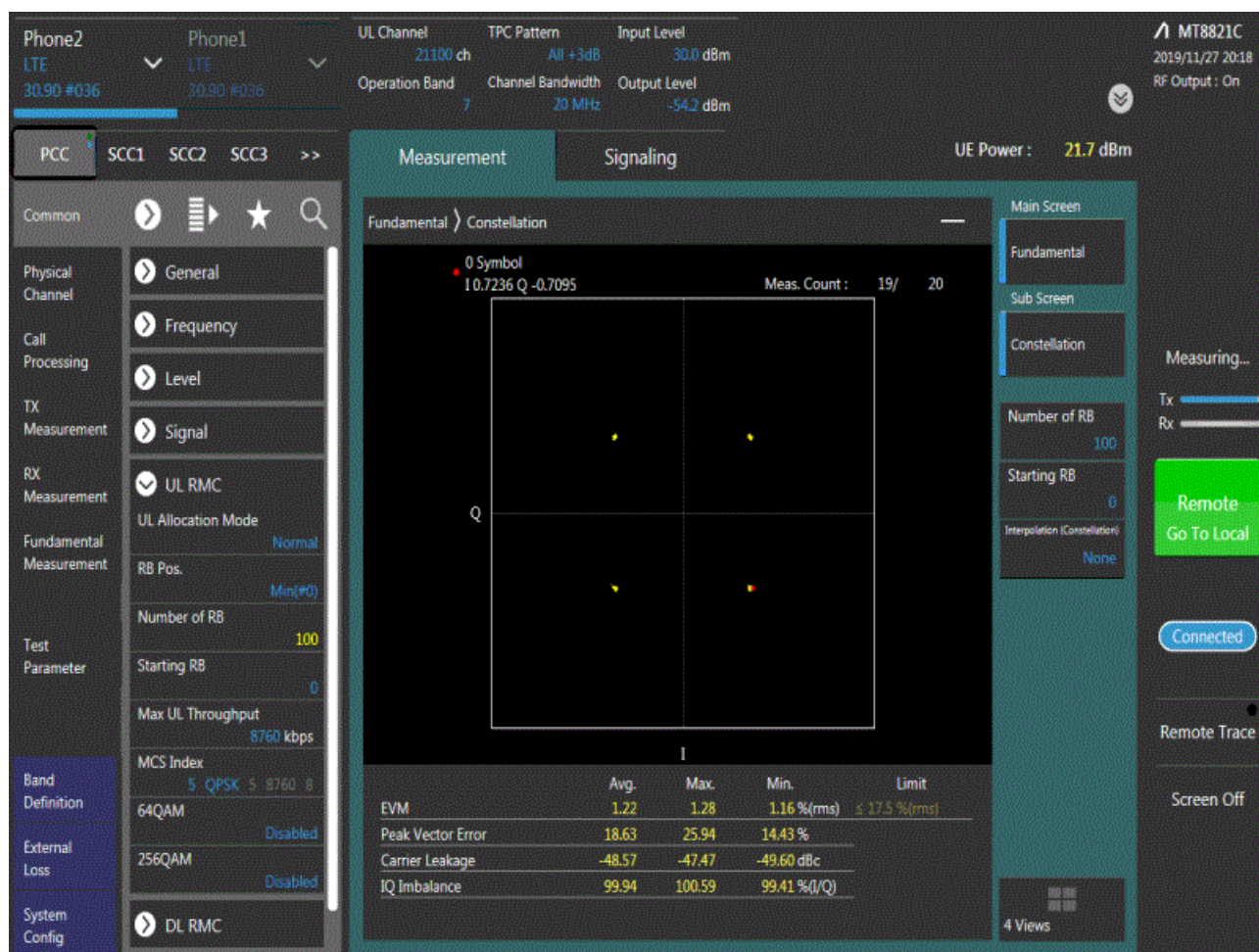
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

3. Modulation Characteristics

3.1. Test Band = LTE Band 7

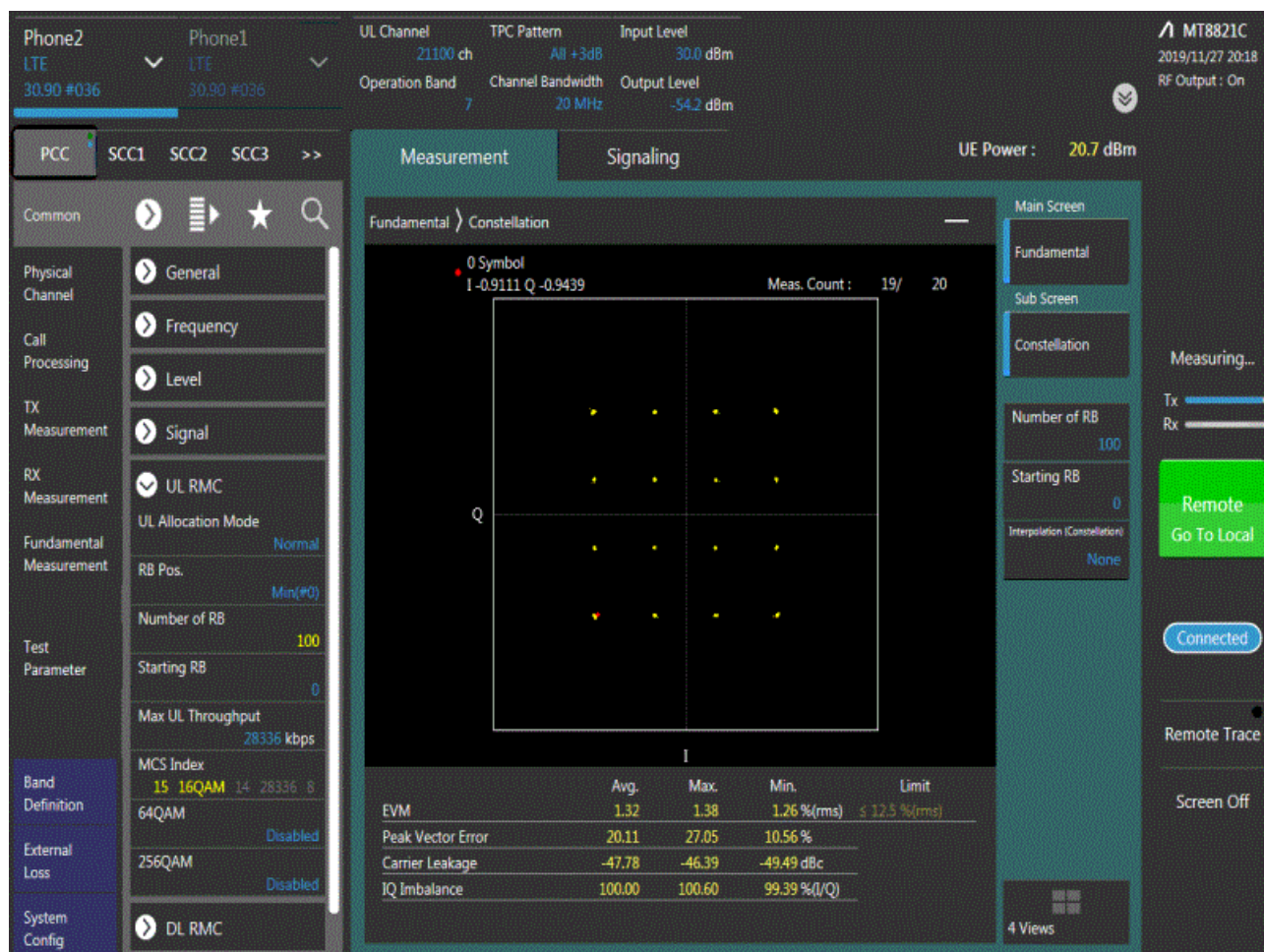
3.1.1. Test Mode = LTE /TM1 20MHz

3.1.1.1. Test Channel = MCH



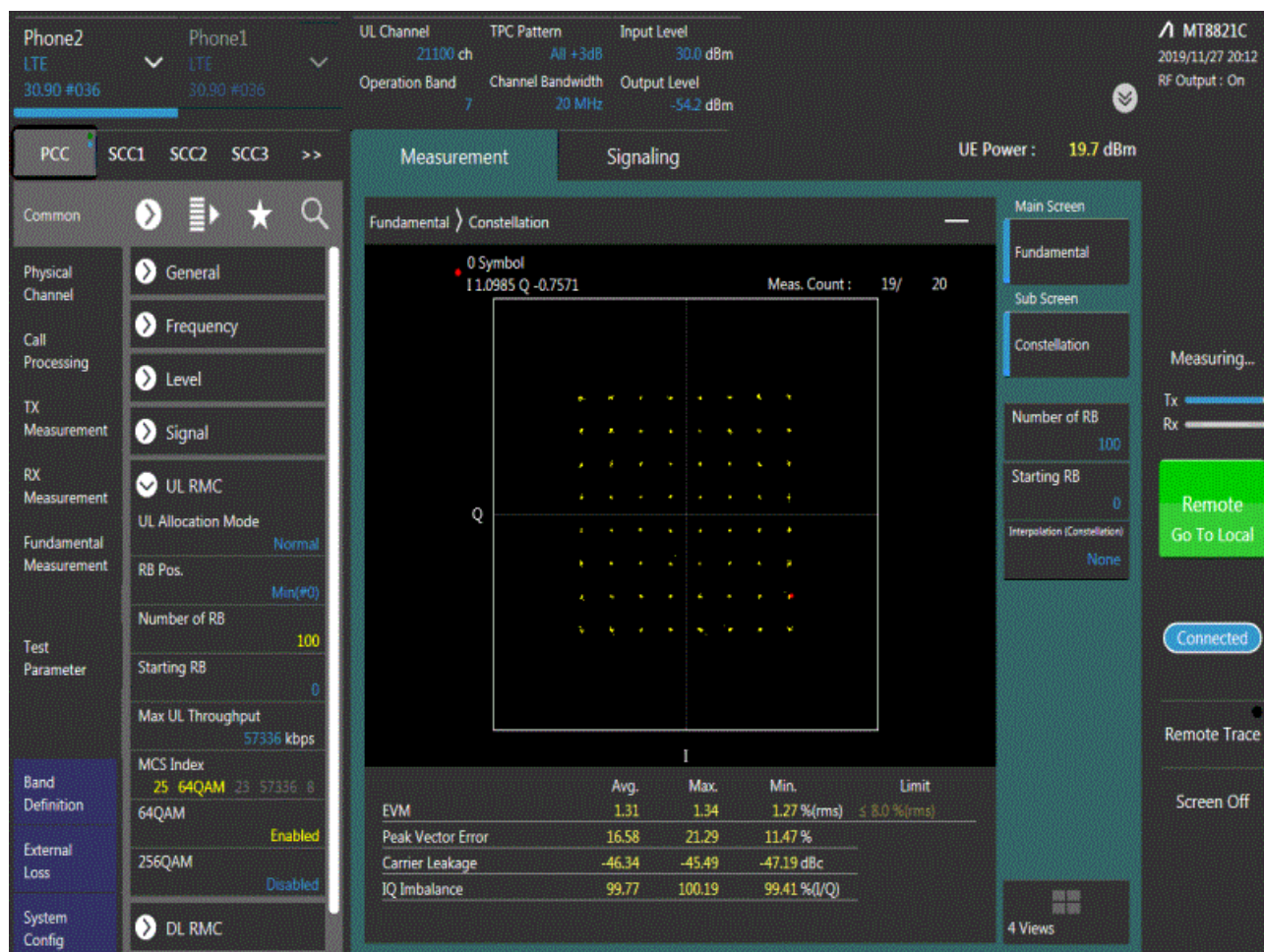
3.1.2. Test Mode = LTE /TM2 20MHz

3.1.2.1. Test Channel = MCH



3.1.3. Test Mode = LTE /TM3 20MHz

3.1.3.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.476	4.850	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.476	4.870	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.466	4.840	PASS
Band7	5MHz	64QAM	20775	25RB#0	4.466	4.830	PASS
Band7	5MHz	64QAM	21100	25RB#0	4.476	4.840	PASS
Band7	5MHz	64QAM	21425	25RB#0	4.466	4.820	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.456	4.790	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.466	4.800	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.466	4.860	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.951	9.660	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.931	9.660	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.951	9.640	PASS
Band7	10MHz	64QAM	20800	50RB#0	8.911	9.560	PASS
Band7	10MHz	64QAM	21100	50RB#0	8.911	9.580	PASS
Band7	10MHz	64QAM	21400	50RB#0	8.931	9.580	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.931	9.520	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.931	9.560	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.931	9.600	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.457	14.790	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.457	14.790	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.457	14.730	PASS
Band7	15MHz	64QAM	20825	75RB#0	13.457	14.760	PASS
Band7	15MHz	64QAM	21100	75RB#0	13.427	14.790	PASS
Band7	15MHz	64QAM	21375	75RB#0	13.457	14.700	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.457	14.730	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.457	14.730	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.457	14.670	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.862	19.200	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.902	19.520	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.862	19.200	PASS
Band7	20MHz	64QAM	20850	100RB#0	17.822	19.360	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.

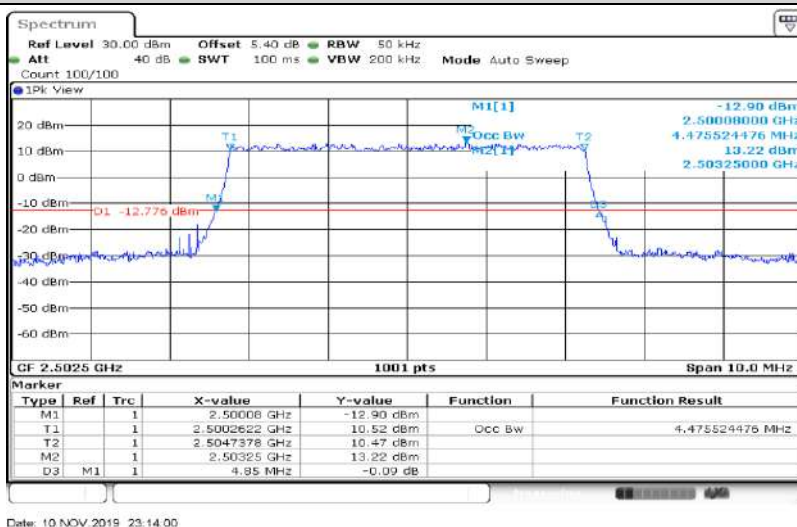
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



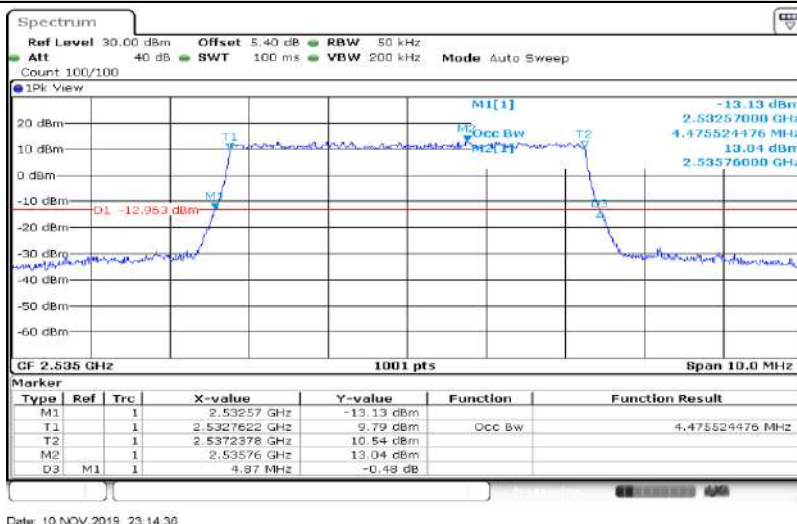
Band7	20MHz	64QAM	21100	100RB#0	17.862	19.320	PASS
Band7	20MHz	64QAM	21350	100RB#0	17.862	19.320	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.902	19.240	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.862	19.320	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.902	19.360	PASS

4.2. Test Plots

Band7-5MHz-QPSK-20775-25RB#0-4.476



Band7-5MHz-QPSK-21100-25RB#0-4.476

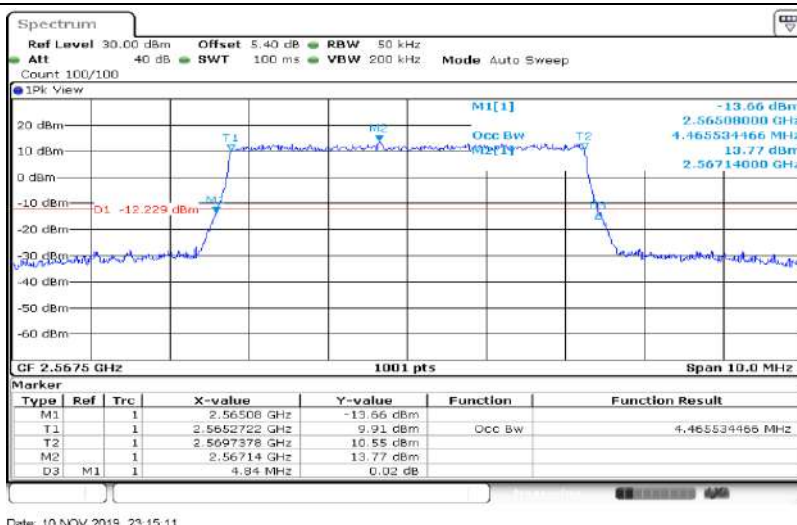


Band7-5MHz-QPSK-21425-25RB#0-4.466

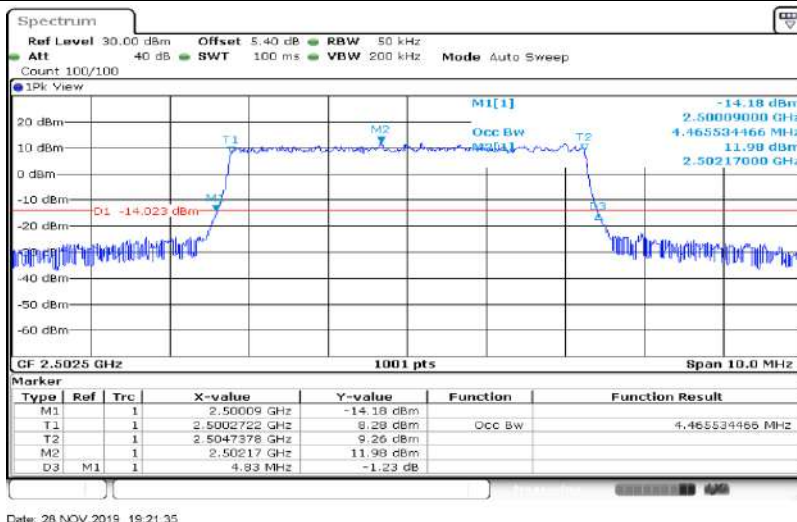


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

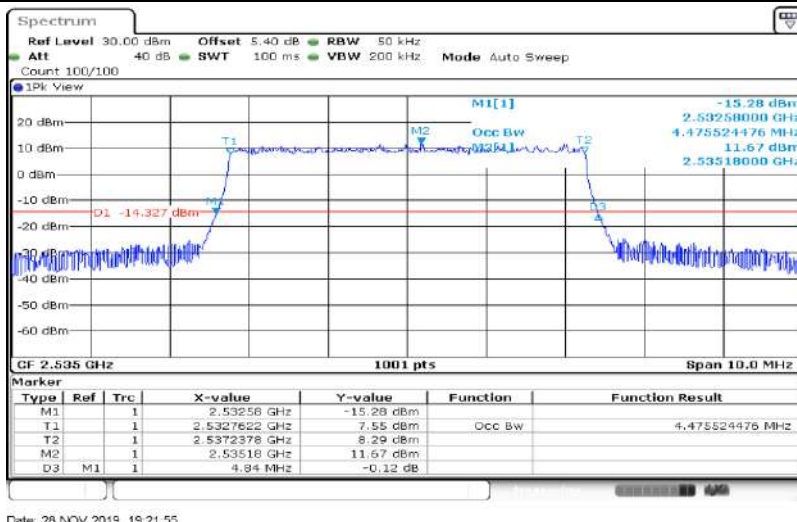


Band7-5MHz-64QAM-20775-25RB#0-4.466

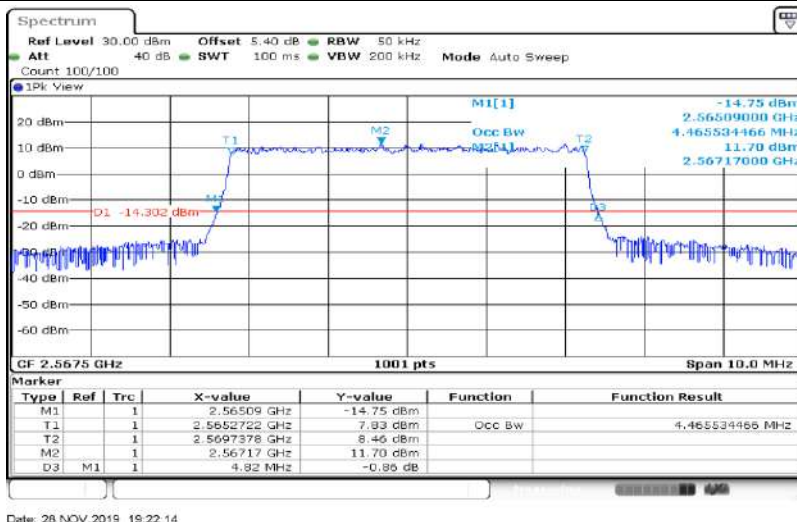


Band7-5MHz-64QAM-21100-25RB#0-4.476



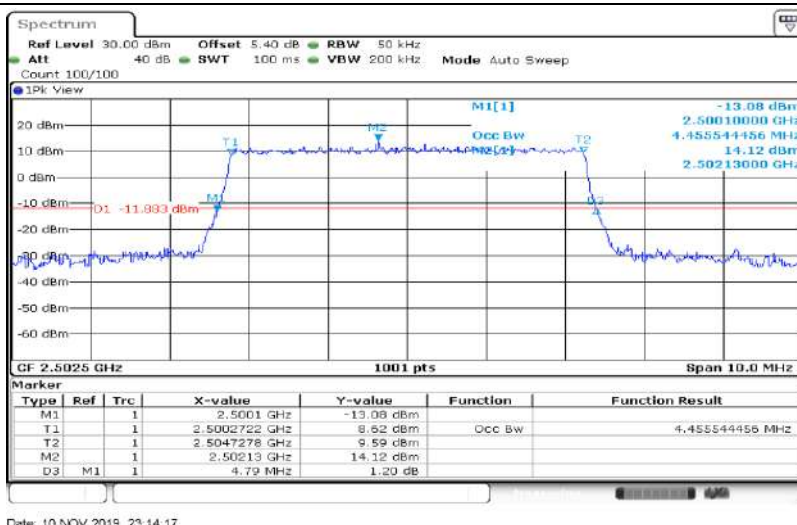


Band7-5MHz-64QAM-21425-25RB#0-4.466

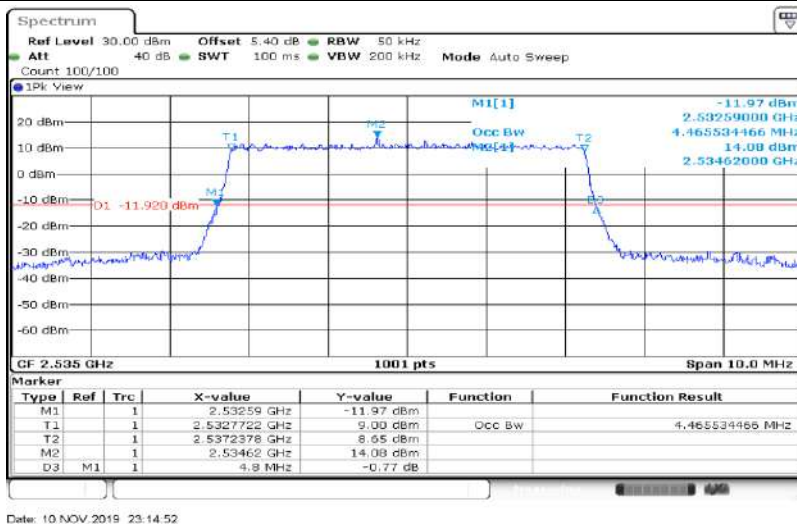


Band7-5MHz-16QAM-20775-25RB#0-4.456



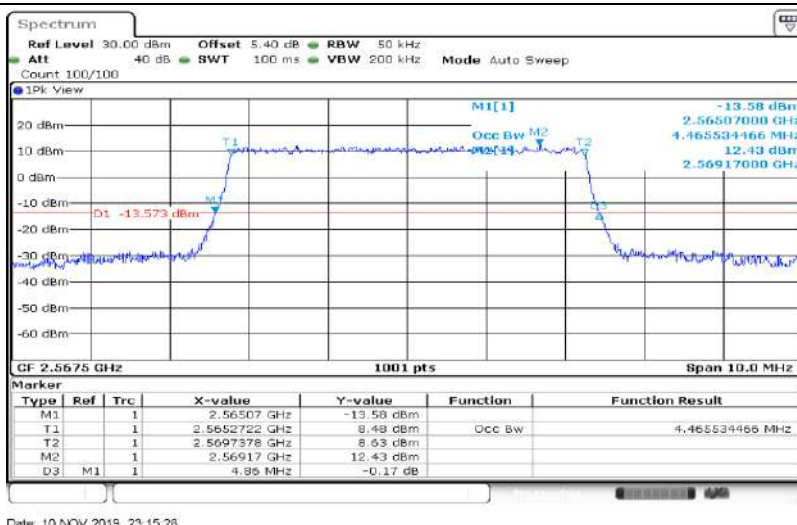


Band7-5MHz-16QAM-21100-25RB#0-4.466

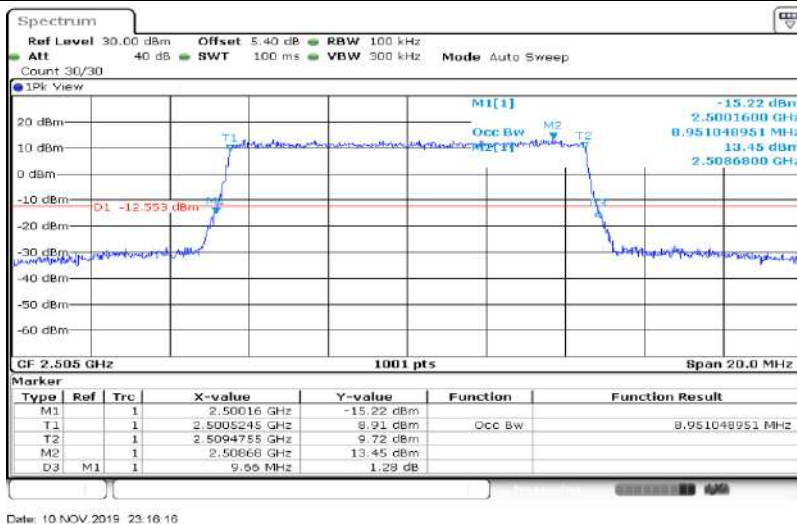


Band7-5MHz-16QAM-21425-25RB#0-4.466



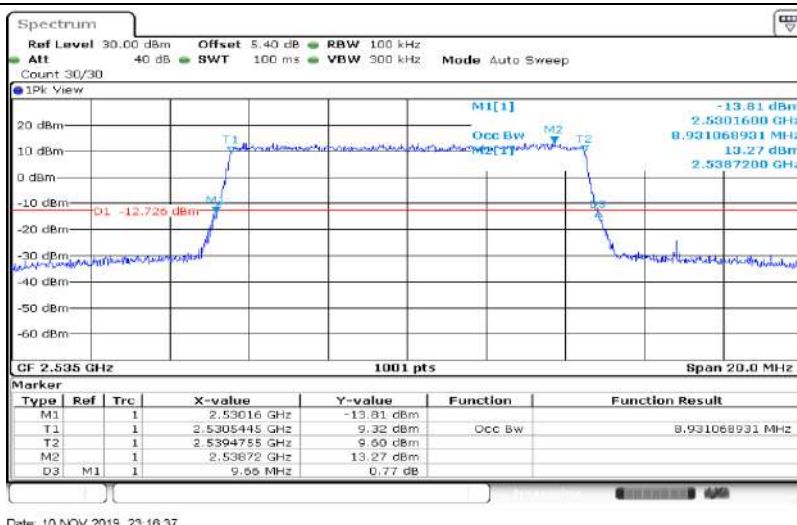


Band7-10MHz-QPSK-20800-50RB#0-8.951

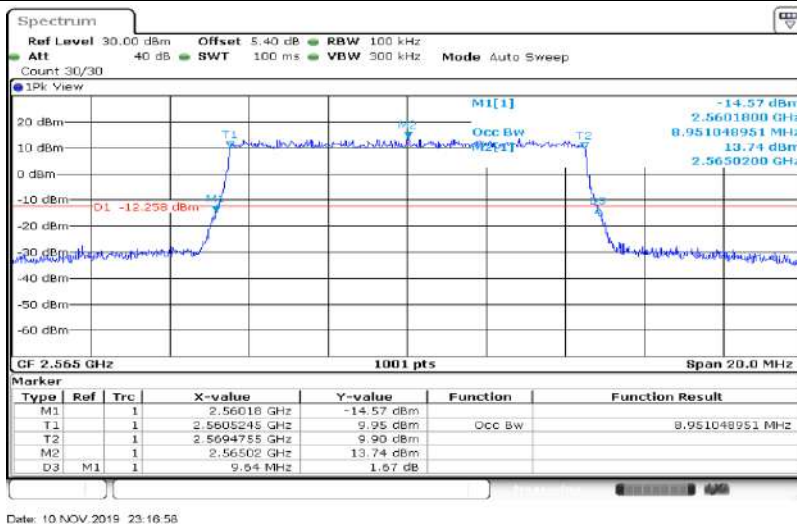


Band7-10MHz-QPSK-21100-50RB#0-8.931



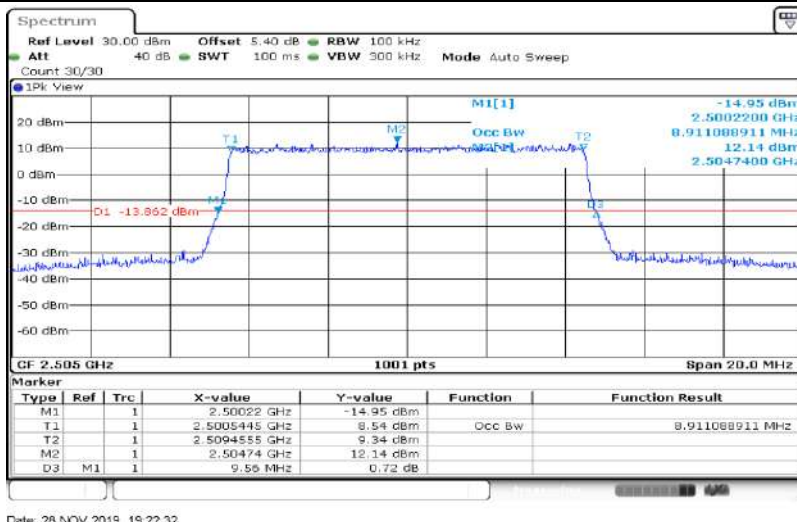


Band7-10MHz-QPSK-21400-50RB#0-8.951

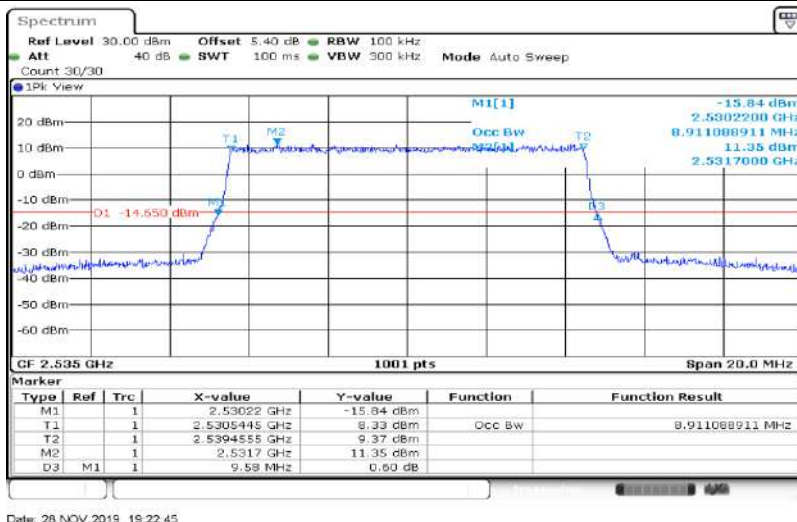


Band7-10MHz-64QAM-20800-50RB#0-8.911



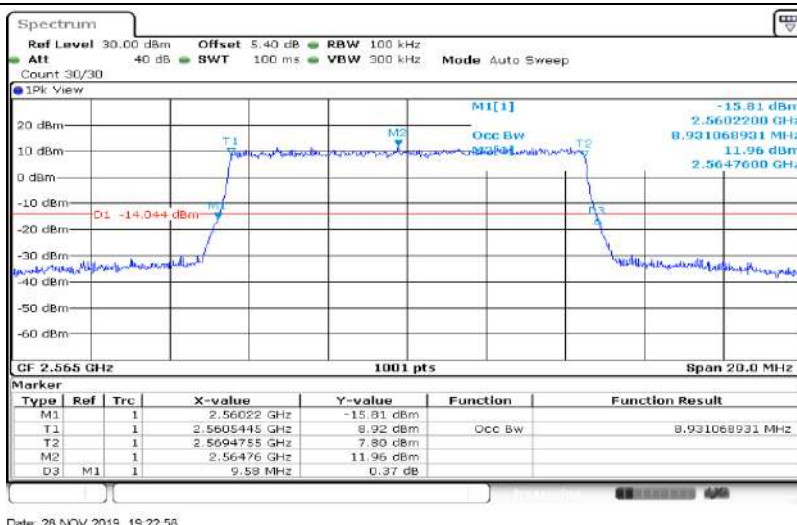


Band7-10MHz-64QAM-21100-50RB#0-8.911

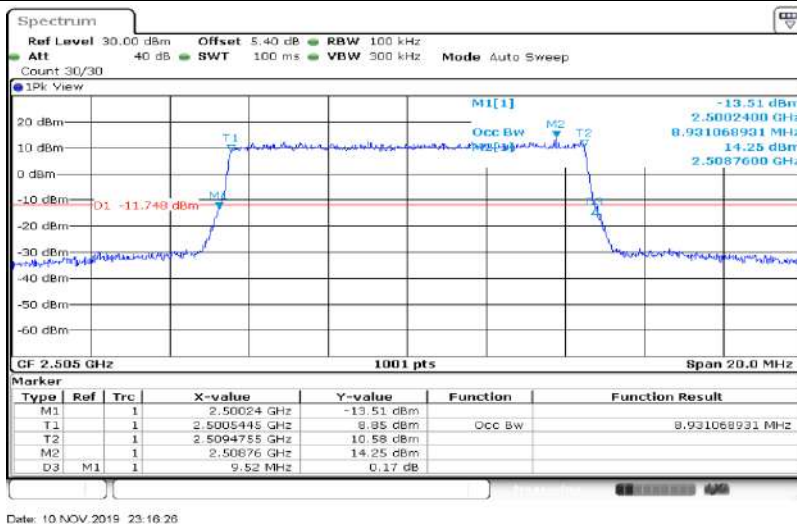


Band7-10MHz-64QAM-21400-50RB#0-8.931



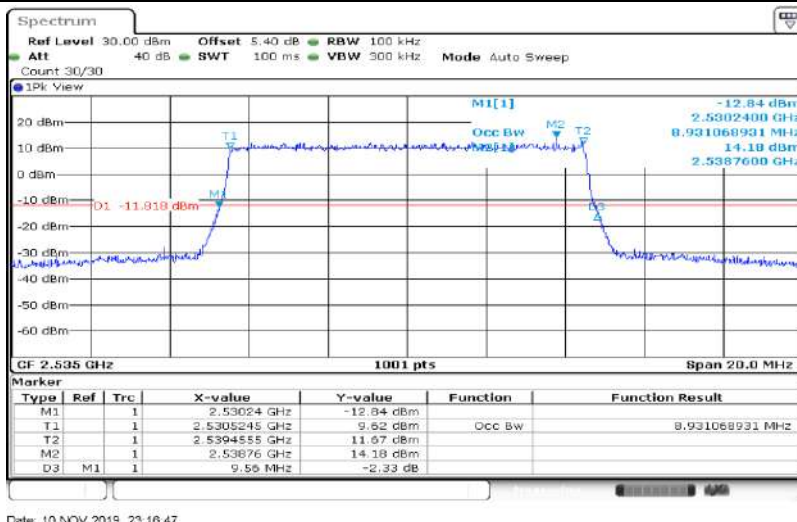


Band7-10MHz-16QAM-20800-50RB#0-8.931

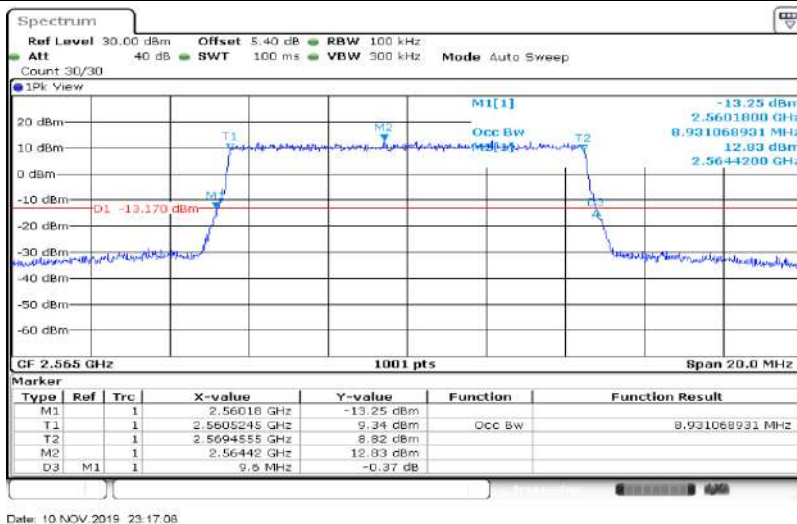


Band7-10MHz-16QAM-21100-50RB#0-8.931



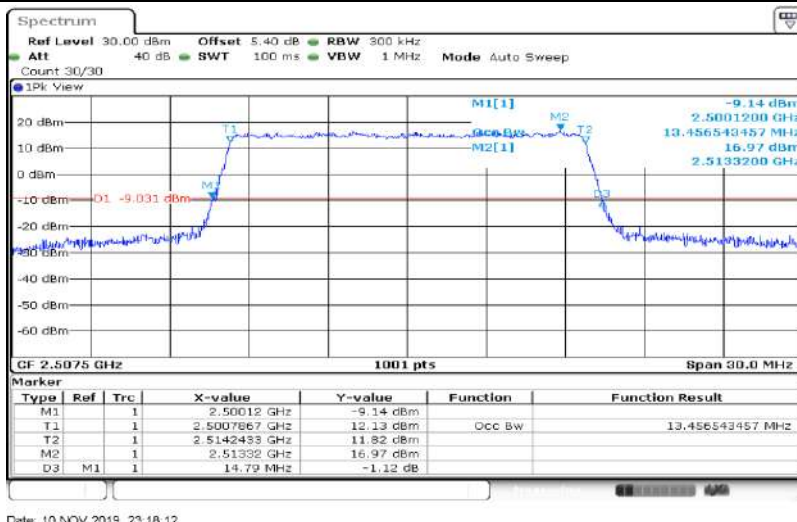


Band7-10MHz-16QAM-21400-50RB#0-8.931

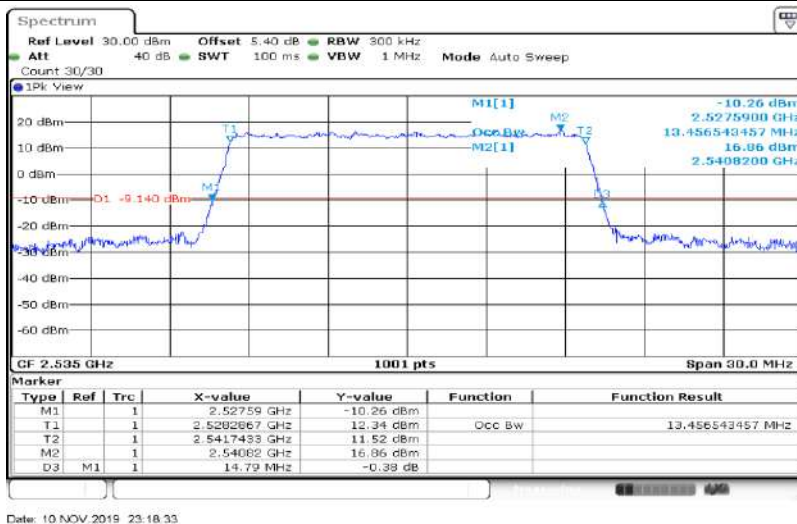


Band7-15MHz-QPSK-20825-75RB#0-13.457



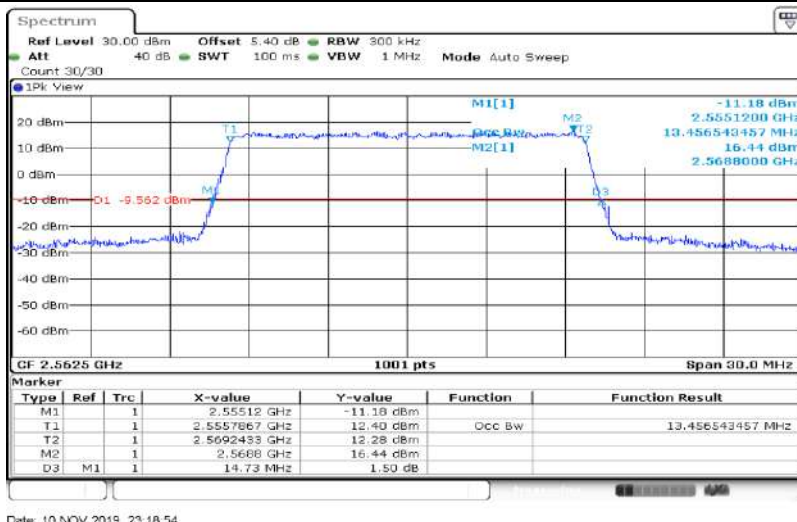


Band7-15MHz-QPSK-21100-75RB#0-13.457

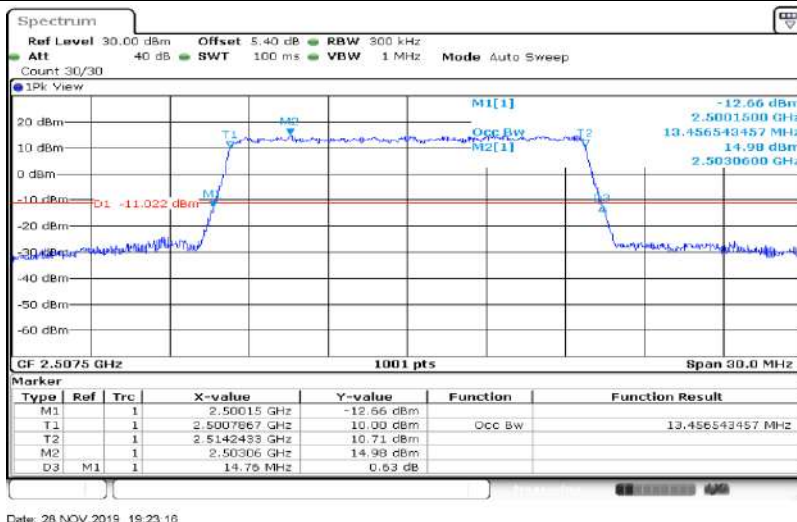


Band7-15MHz-QPSK-21375-75RB#0-13.457





Band7-15MHz-64QAM-20825-75RB#0-13.457

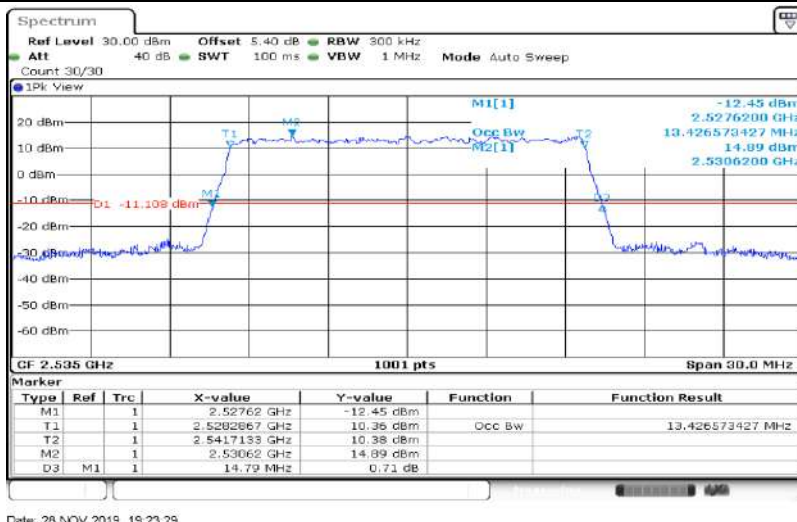


Band7-15MHz-64QAM-21100-75RB#0-13.427

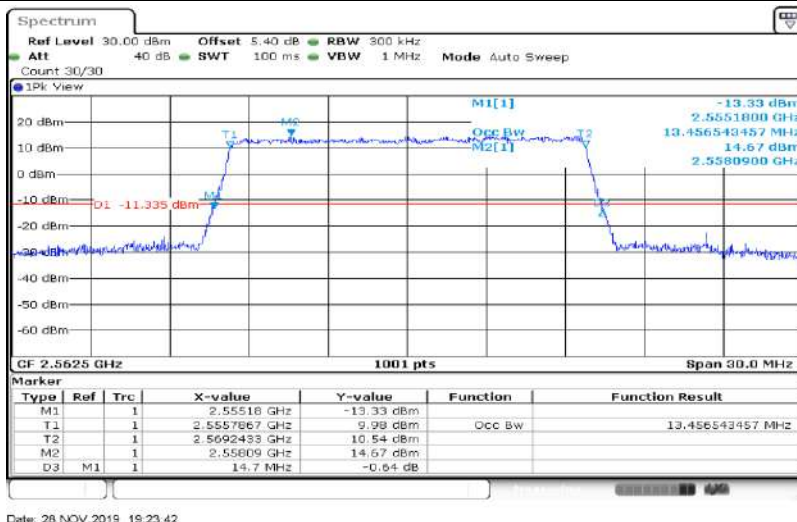


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

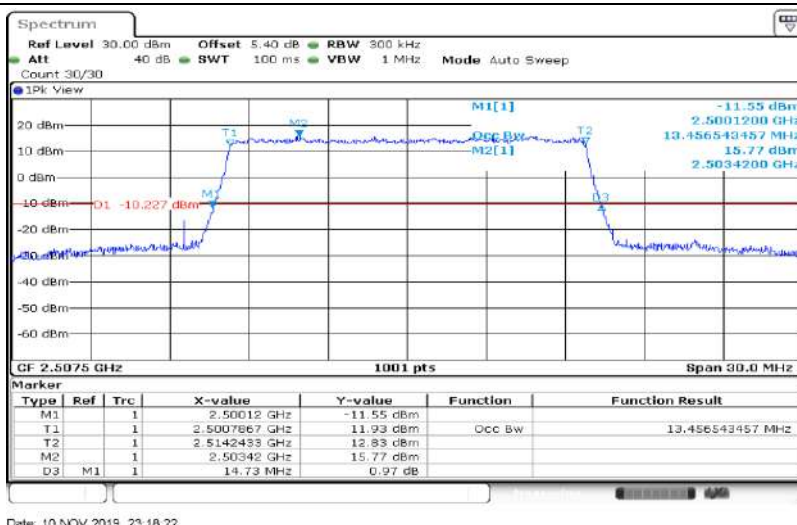


Band7-15MHz-64QAM-21375-75RB#0-13.457

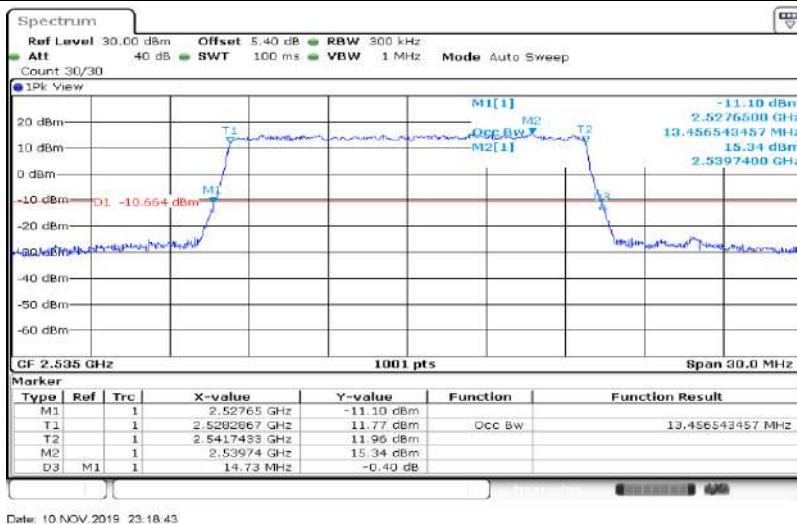


Band7-15MHz-16QAM-20825-75RB#0-13.457



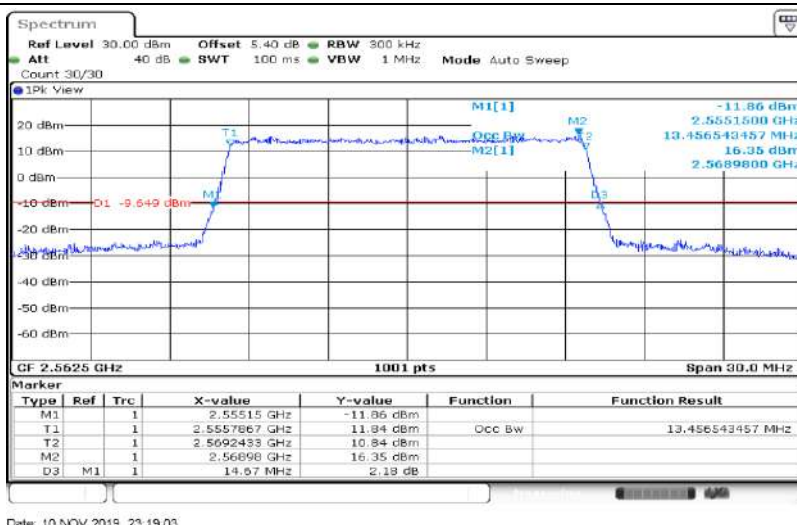


Band7-15MHz-16QAM-21100-75RB#0-13.457

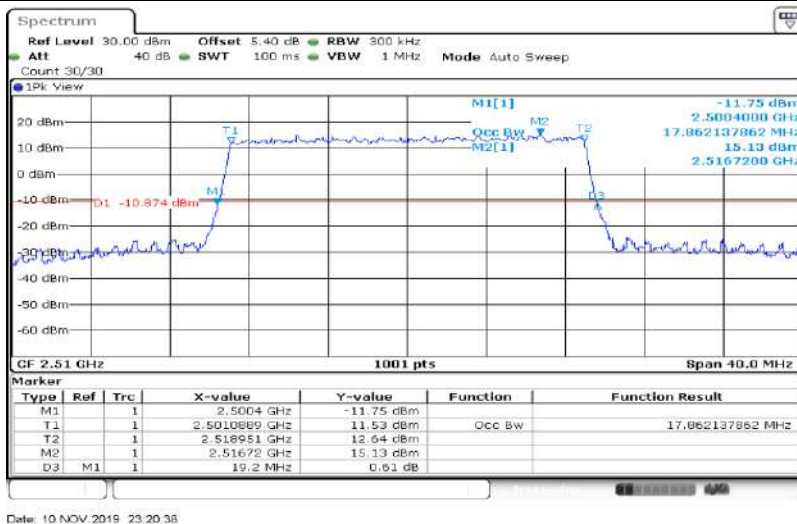


Band7-15MHz-16QAM-21375-75RB#0-13.457



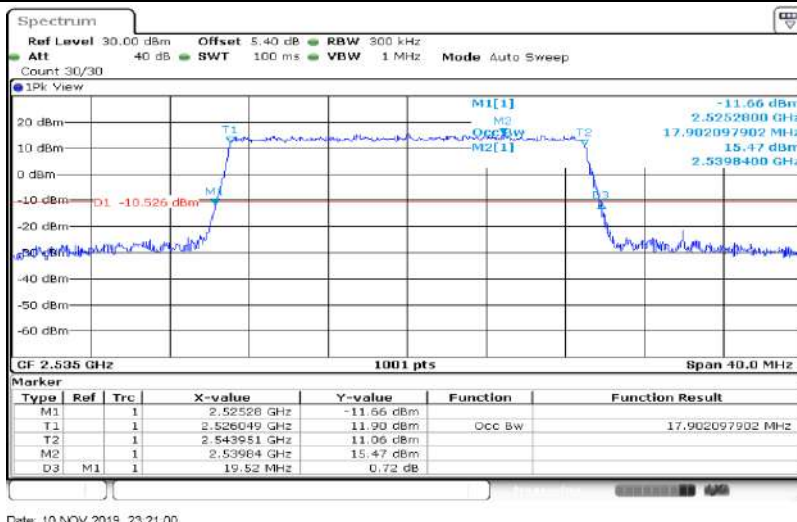


Band7-20MHz-QPSK-20850-100RB#0-17.862

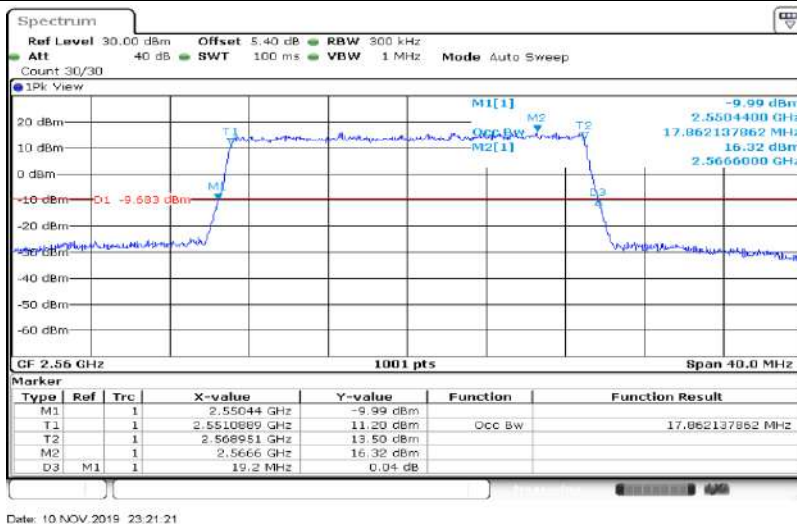


Band7-20MHz-QPSK-21100-100RB#0-17.902



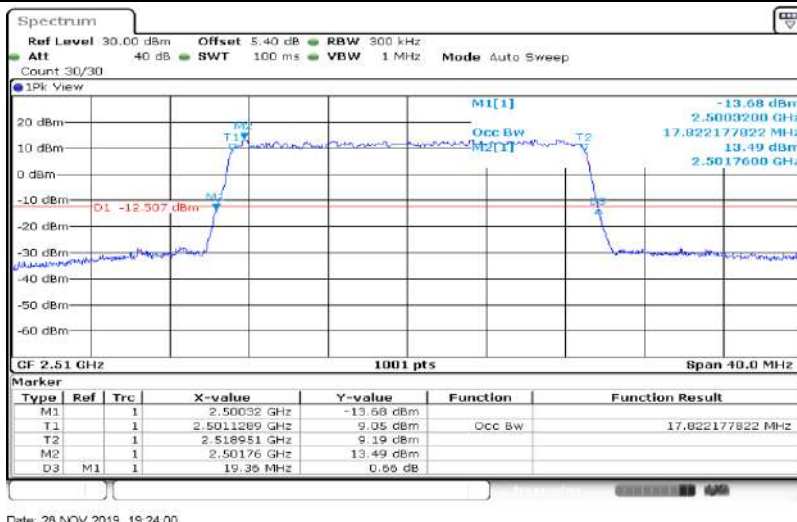


Band7-20MHz-QPSK-21350-100RB#0-17.862

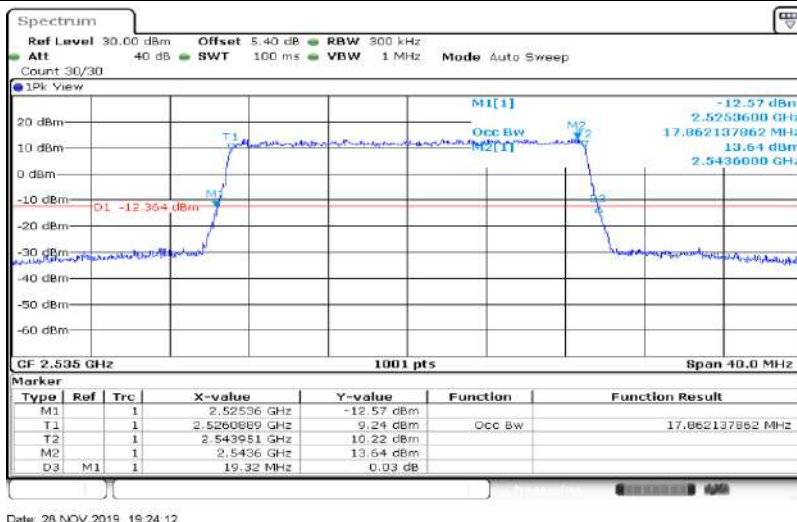


Band7-20MHz-64QAM-20850-100RB#0-17.822



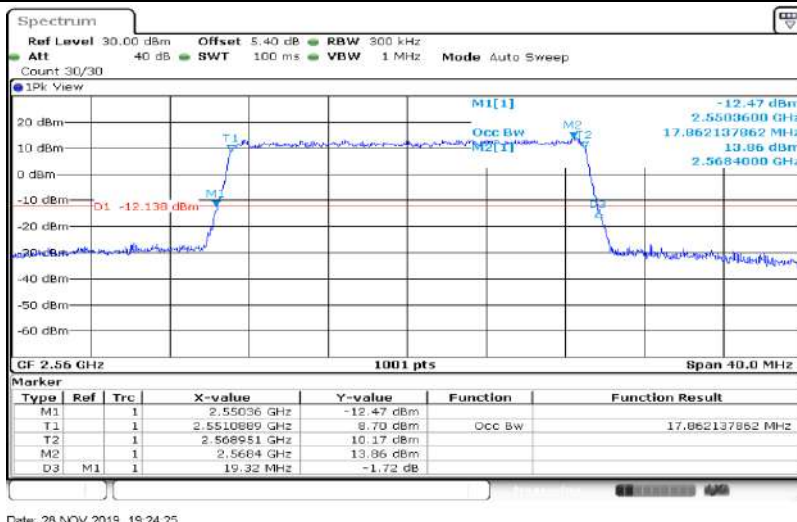


Band7-20MHz-64QAM-21100-100RB#0-17.862

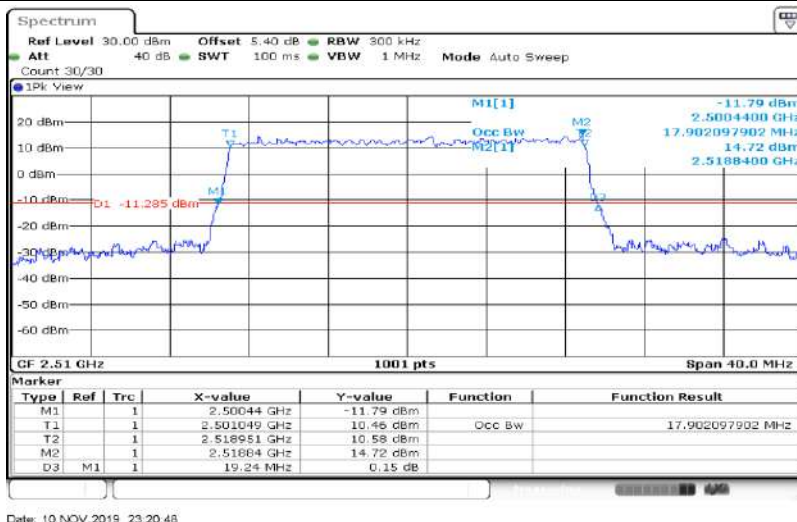


Band7-20MHz-64QAM-21350-100RB#0-17.862



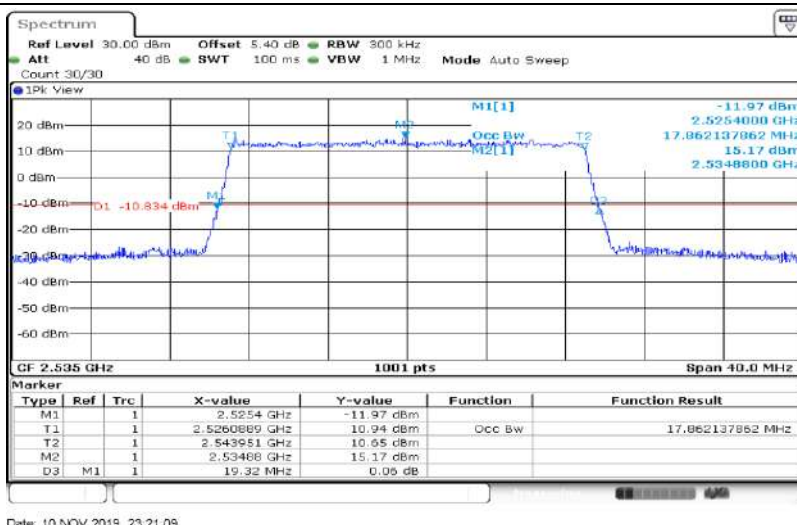


Band7-20MHz-16QAM-20850-100RB#0-17.902

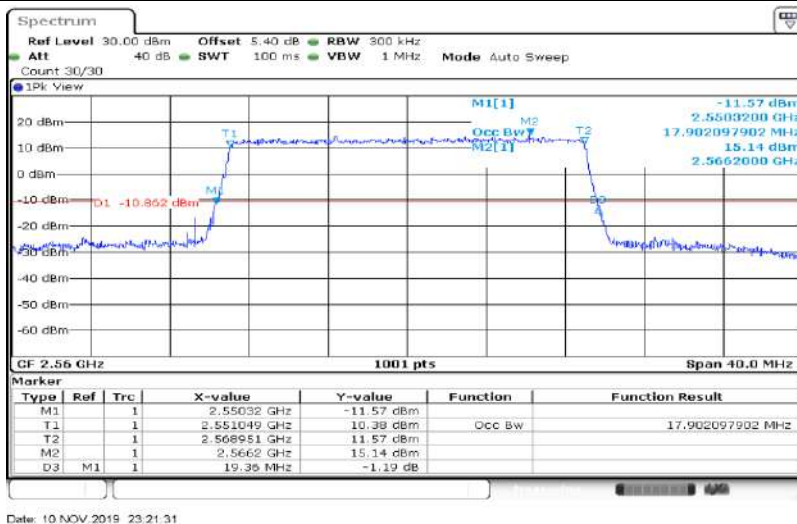


Band7-20MHz-16QAM-21100-100RB#0-17.862





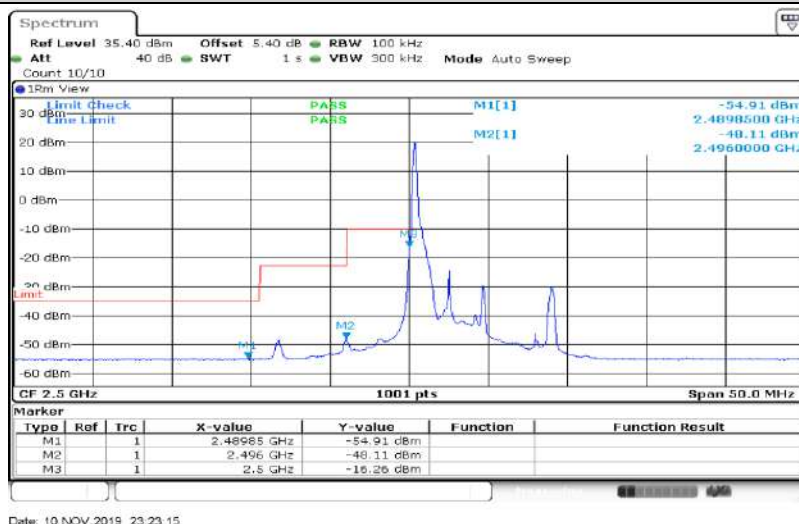
Band7-20MHz-16QAM-21350-100RB#0-17.902



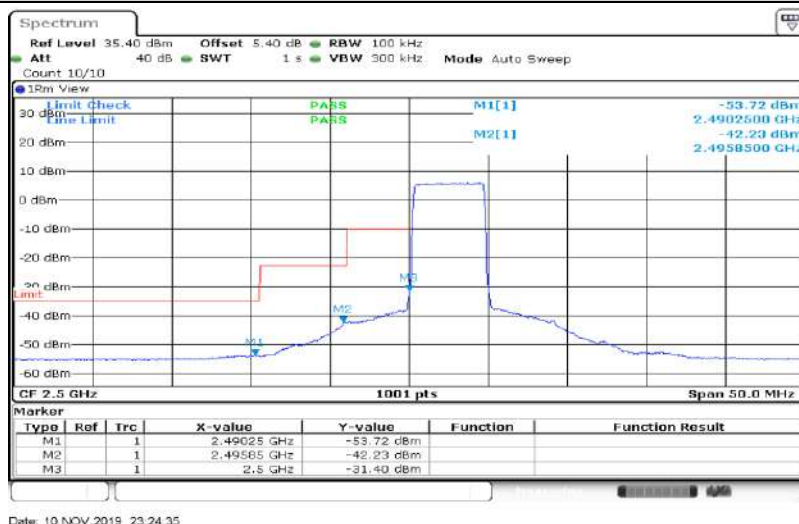
5. Band Edge Compliance

5.1. Test Plots

Band7-5MHz-QPSK-20775-1RB#0



Band7-5MHz-QPSK-20775-25RB#0



Band7-5MHz-QPSK-21425-1RB#24

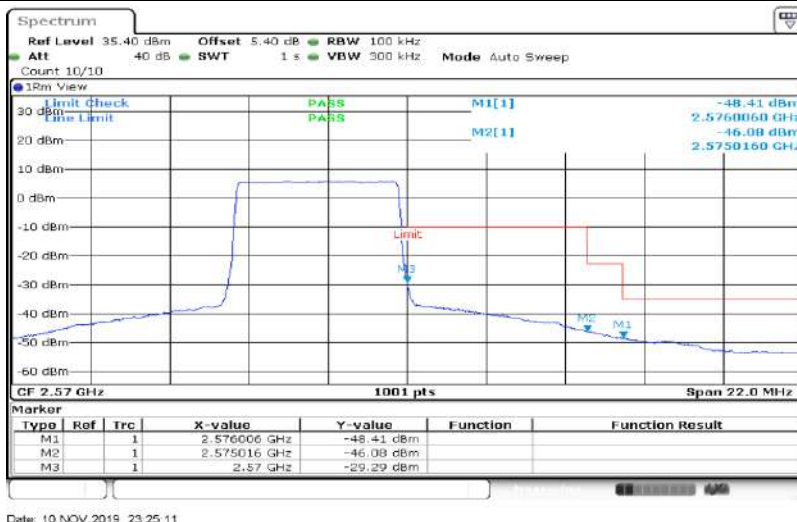


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7-5MHz-QPSK-21425-25RB#0

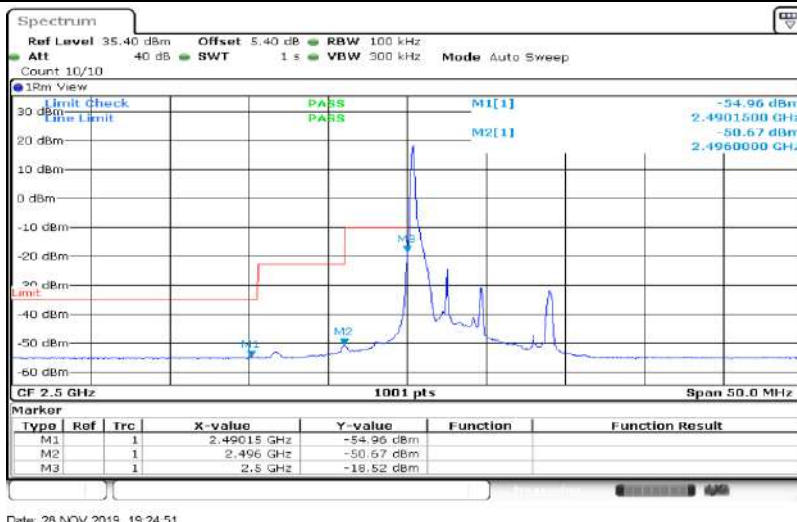


Band7-5MHz-64QAM-20775-1RB#0

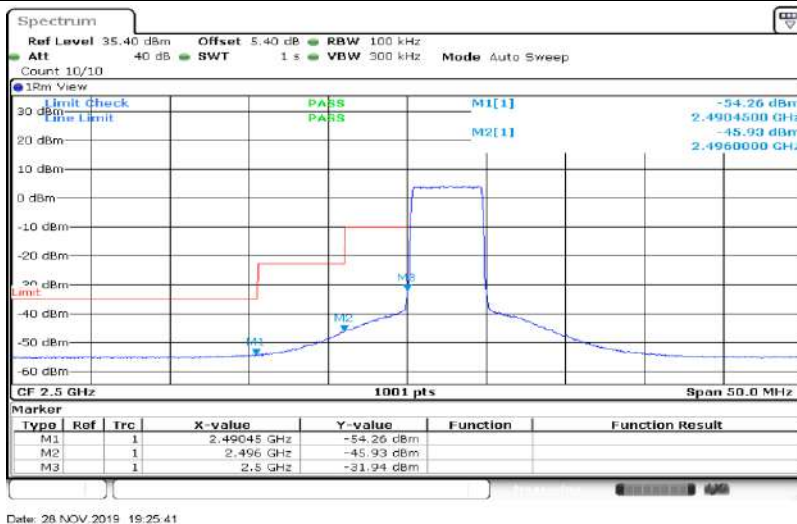


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

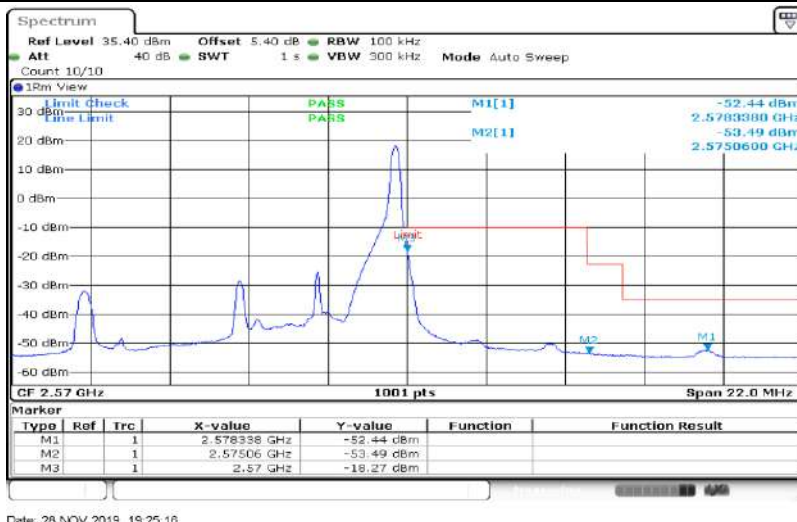


Band7-5MHz-64QAM-20775-25RB#0



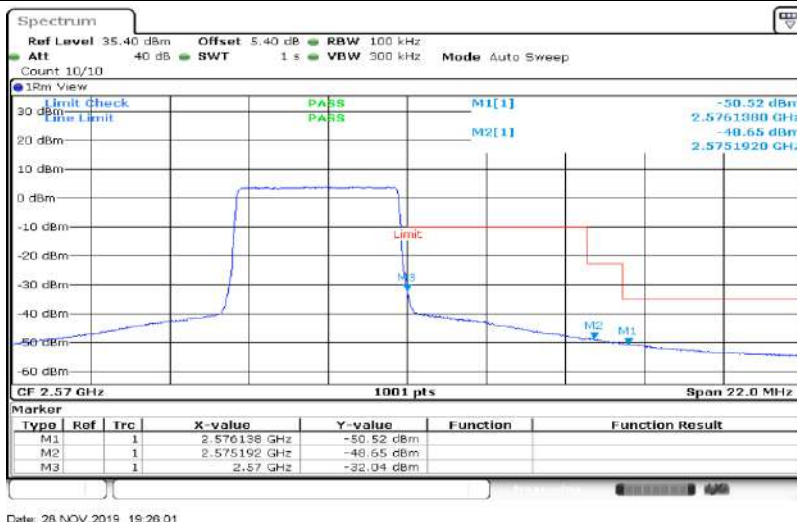
Band7-5MHz-64QAM-21425-1RB#24





Date: 28 NOV 2019 19:25:16

Band7-5MHz-64QAM-21425-25RB#0



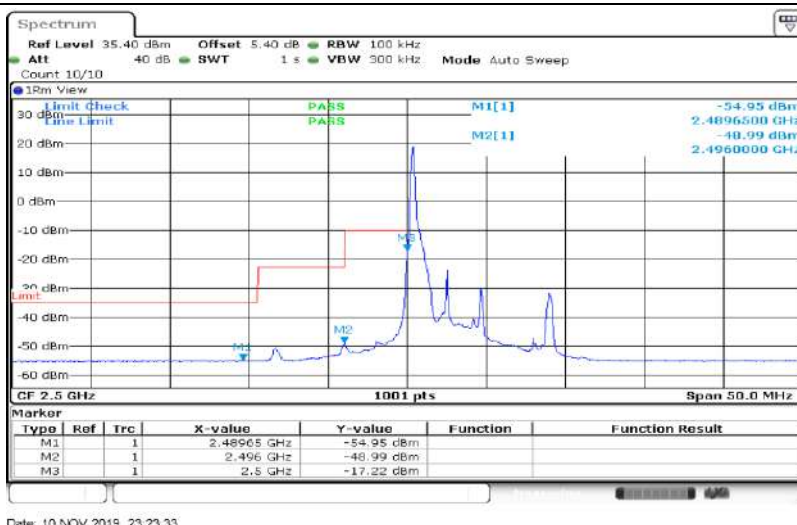
Date: 28 NOV 2019 19:26:01

Band7-5MHz-16QAM-20775-1RB#0

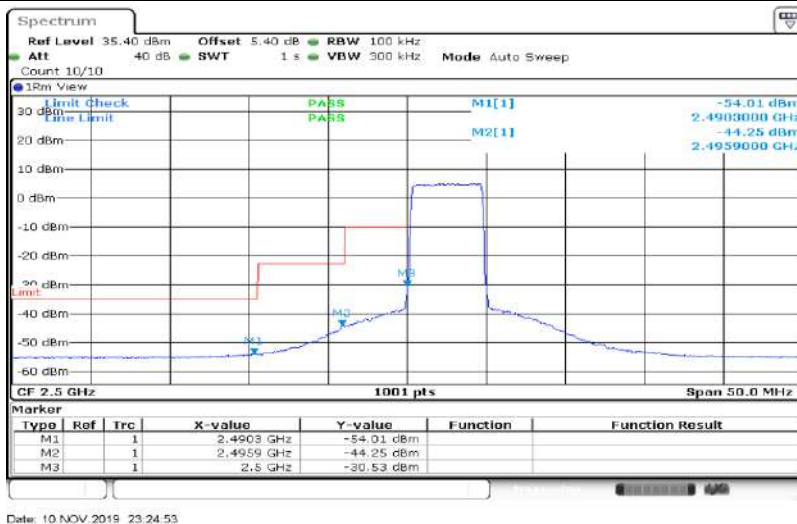


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7-5MHz-16QAM-20775-25RB#0

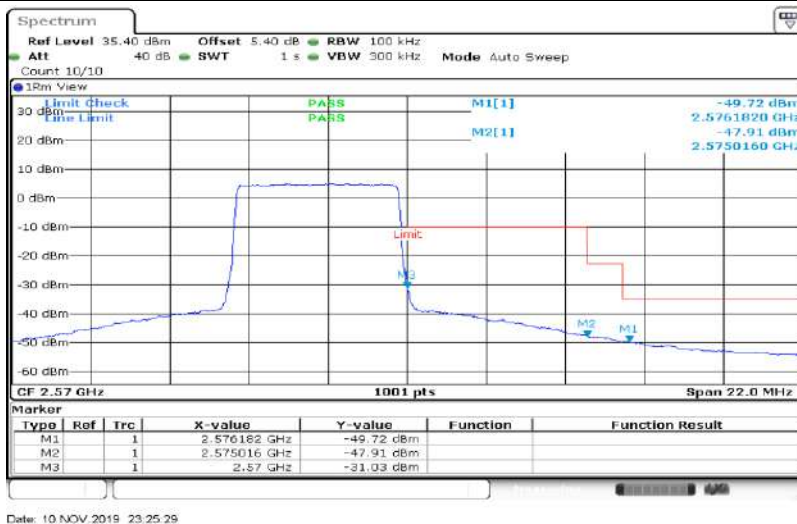


Band7-5MHz-16QAM-21425-1RB#24



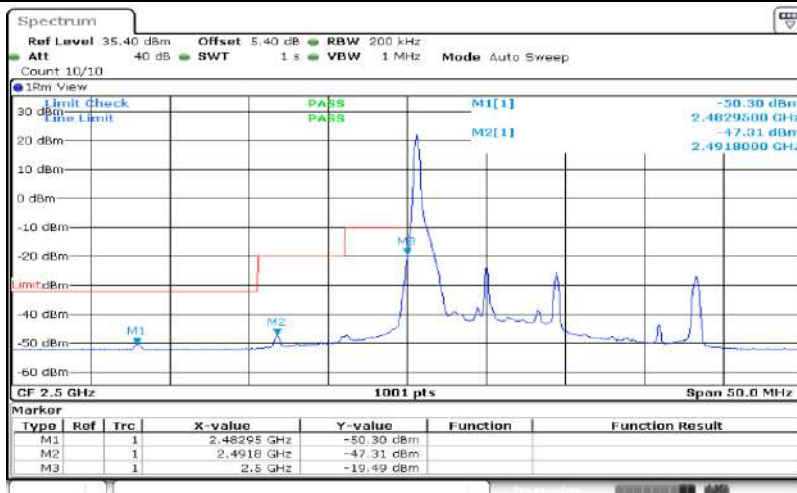


Band7-5MHz-16QAM-21425-25RB#0



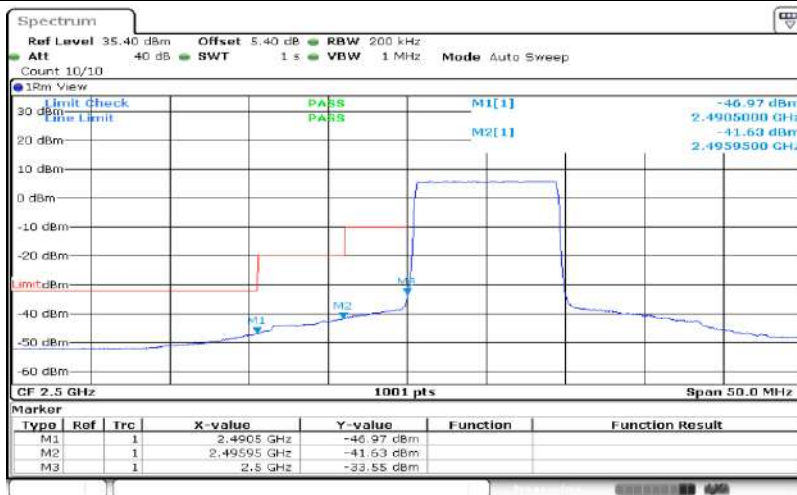
Band7-10MHz-QPSK-20800-1RB#0





Date: 10 NOV 2019 23:26:26

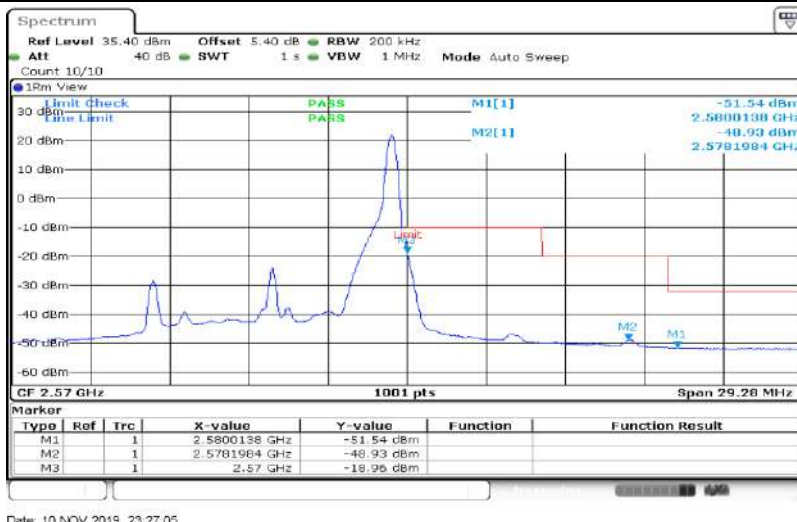
Band7-10MHz-QPSK-20800-50RB#0



Date: 10 NOV 2019 23:27:45

Band7-10MHz-QPSK-21400-1RB#49





Band7-10MHz-QPSK-21400-50RB#0



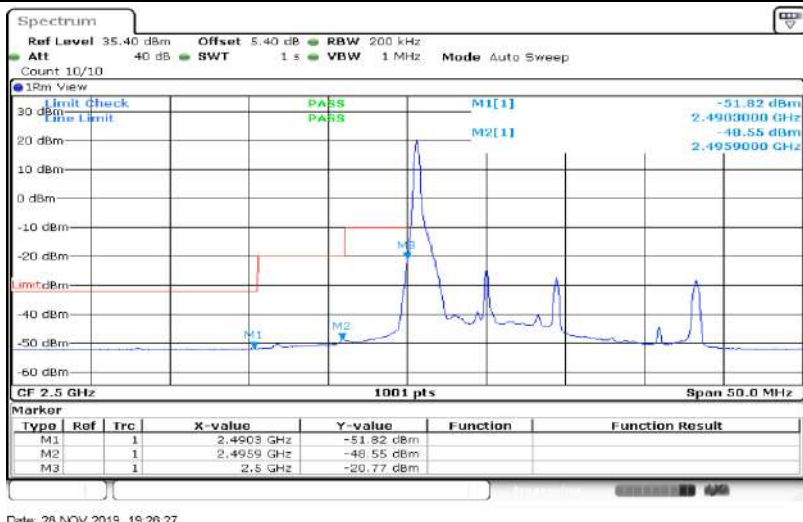
Band7-10MHz-64QAM-20800-1RB#0



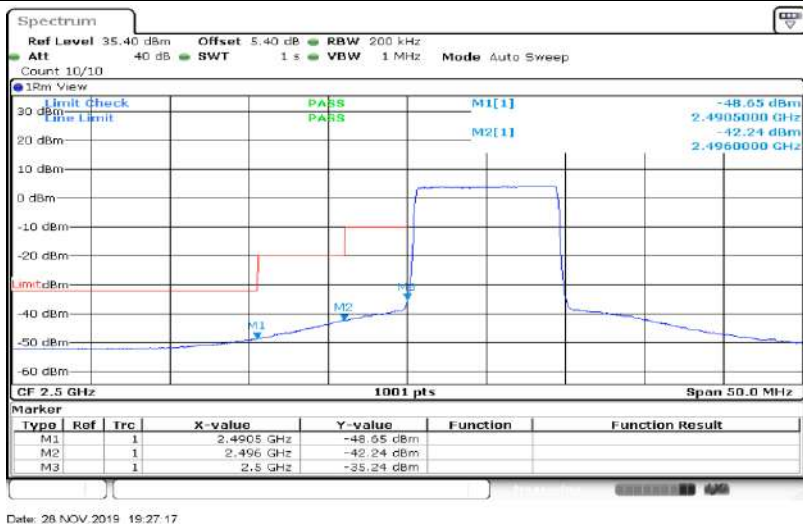
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057
中国·深圳·科技园中区M-10栋一号厂房
t (86-755) 26012053 f (86-755) 26710594
t (86-755) 26012053 f (86-755) 26710594
www.sgsgroup.com.cn
sgs.china@sgs.com

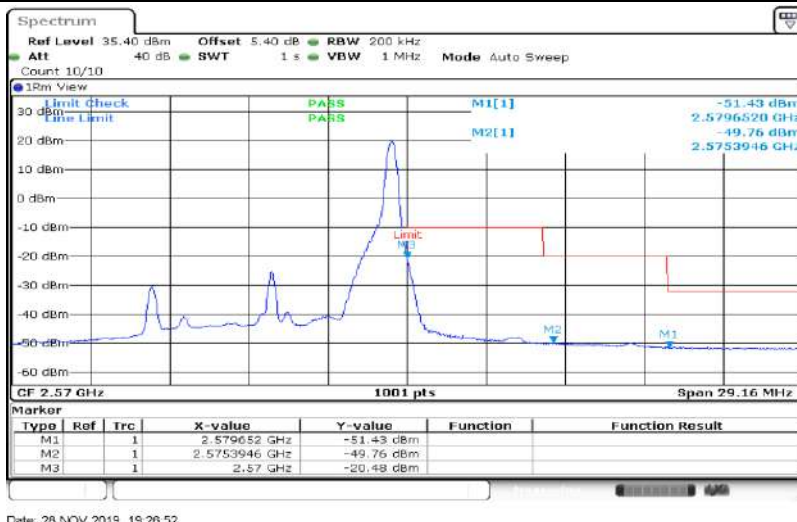


Band7-10MHz-64QAM-20800-50RB#0



Band7-10MHz-64QAM-21400-1RB#49





Date: 28 NOV 2019 19:26:52

Band7-10MHz-64QAM-21400-50RB#0



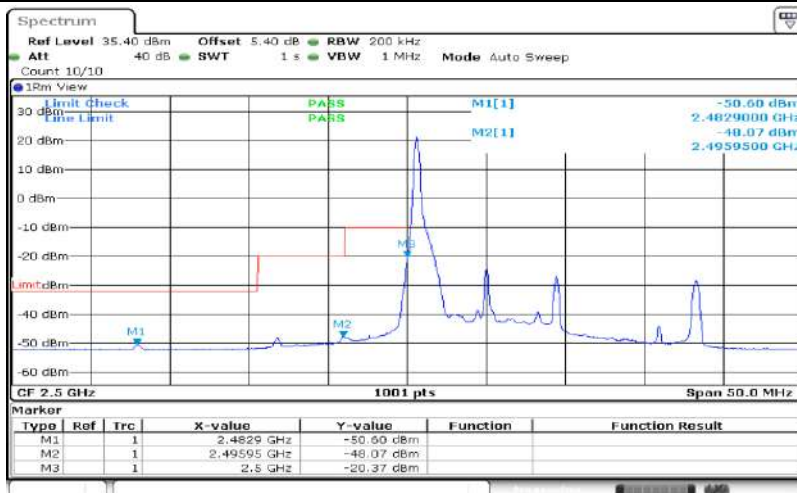
Date: 28 NOV 2019 19:27:37

Band7-10MHz-16QAM-20800-1RB#0



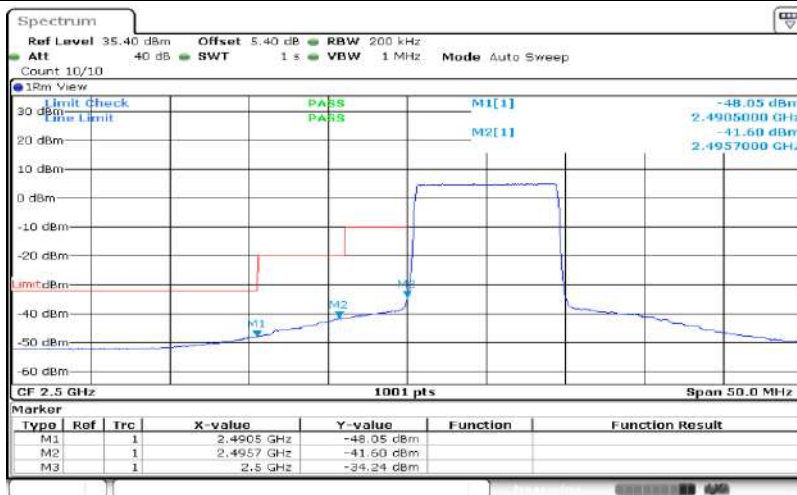
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Date: 10 NOV 2019 23:26:43

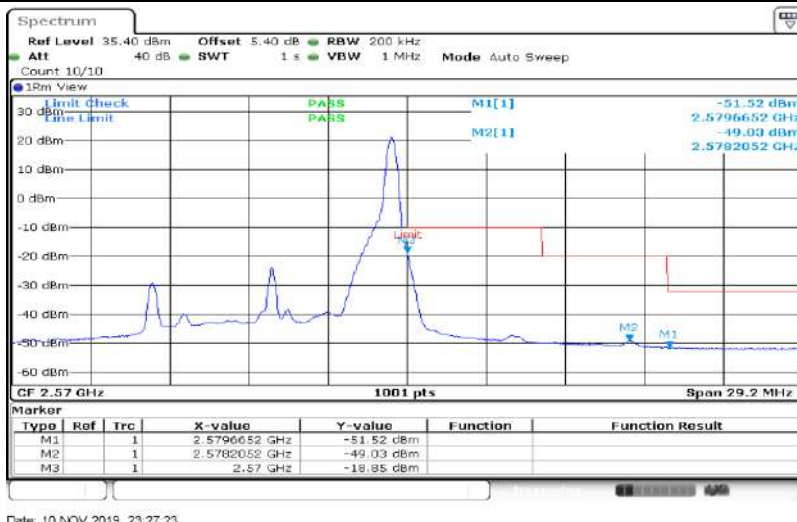
Band7-10MHz-16QAM-20800-50RB#0



Date: 10 NOV 2019 23:26:03

Band7-10MHz-16QAM-21400-1RB#49





Date: 10 NOV 2019 23:27:23

Band7-10MHz-16QAM-21400-50RB#0



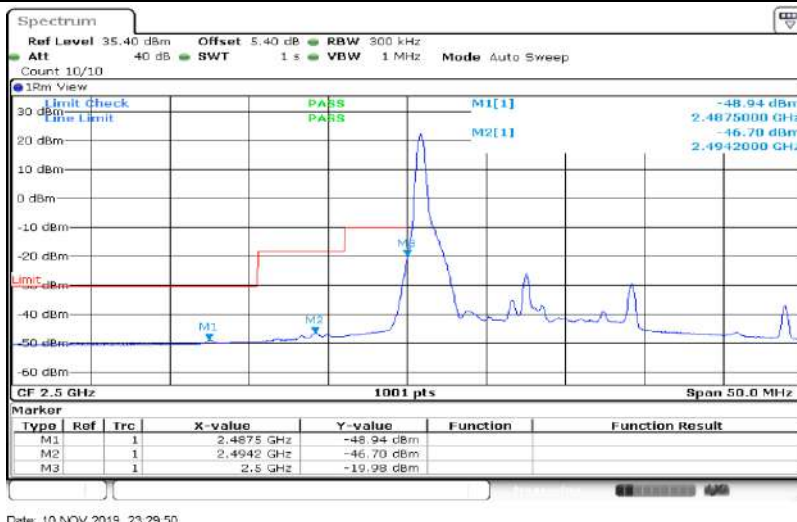
Date: 10 NOV 2019 23:28:40

Band7-15MHz-QPSK-20825-1RB#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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

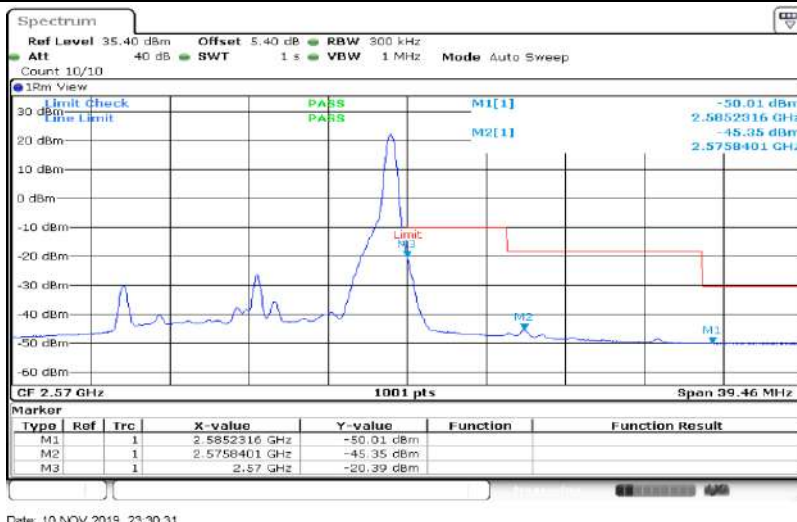


Band7-15MHz-QPSK-20825-75RB#0



Band7-15MHz-QPSK-21375-1RB#74



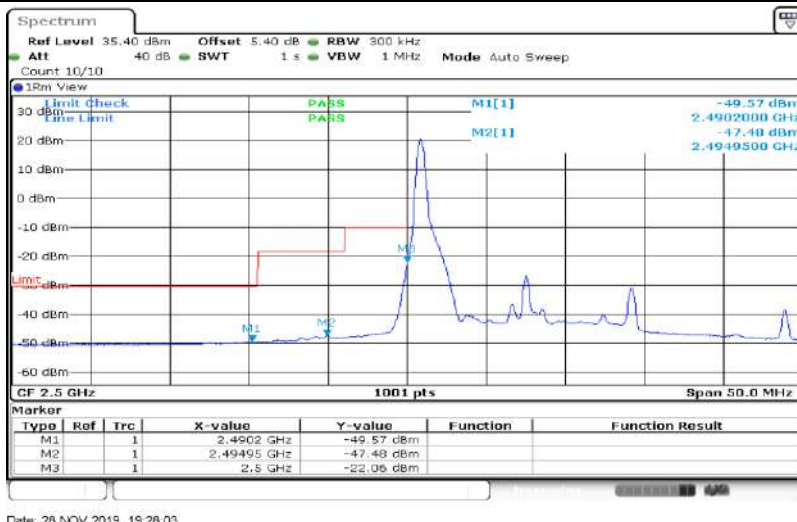


Band7-15MHz-QPSK-21375-75RB#0



Band7-15MHz-64QAM-20825-1RB#0





Date: 26 NOV 2019 19:28:03

Band7-15MHz-64QAM-20825-75RB#0



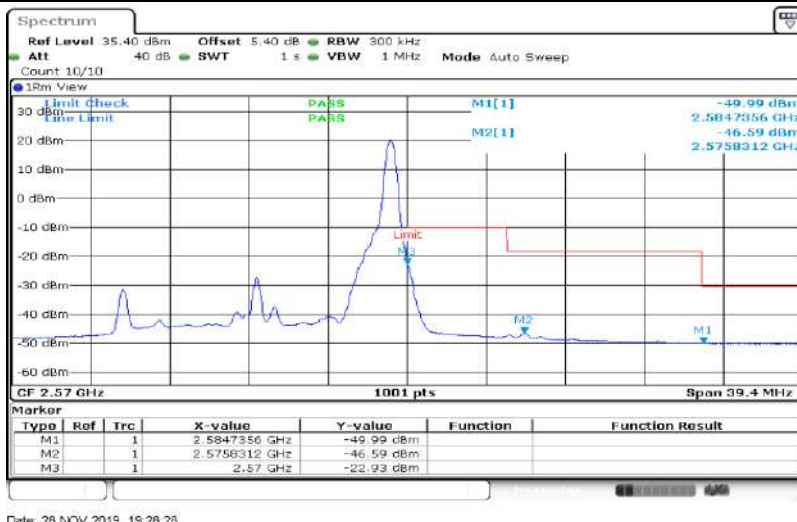
Date: 26 NOV 2019 19:28:53

Band7-15MHz-64QAM-21375-1RB#74



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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

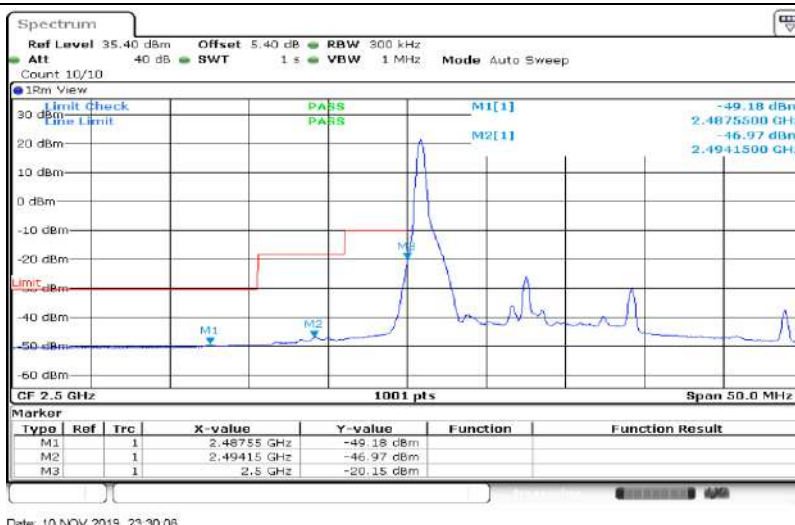


Band7-15MHz-64QAM-21375-75RB#0



Band7-15MHz-16QAM-20825-1RB#0





Date: 10 NOV 2019 23:30:05

Band7-15MHz-16QAM-20825-75RB#0



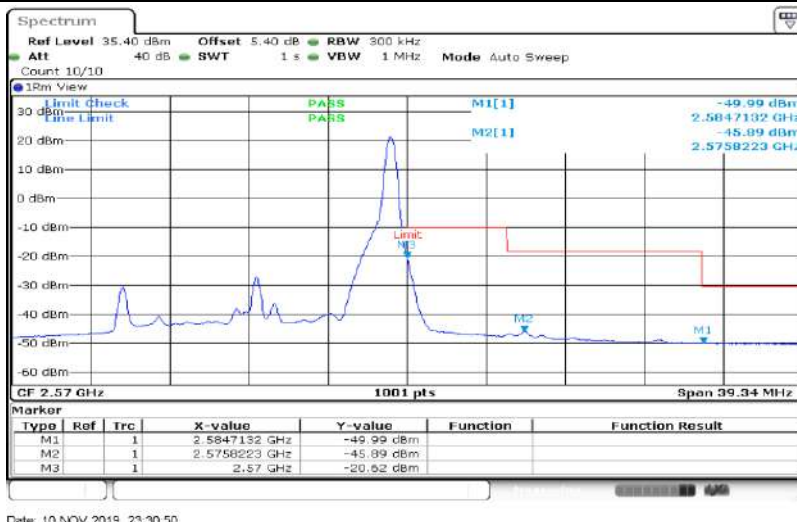
Date: 10 NOV 2019 23:31:30

Band7-15MHz-16QAM-21375-1RB#74



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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

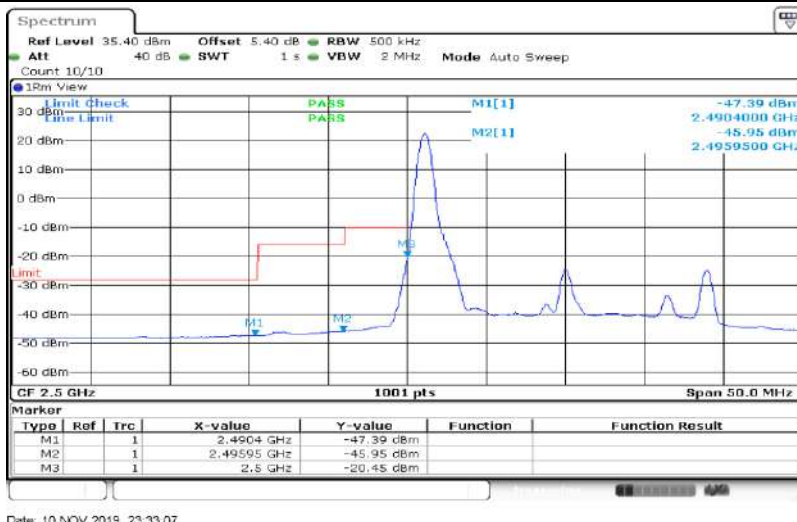


Band7-15MHz-16QAM-21375-75RB#0



Band7-20MHz-QPSK-20850-1RB#0





Band7-20MHz-QPSK-20850-100RB#0

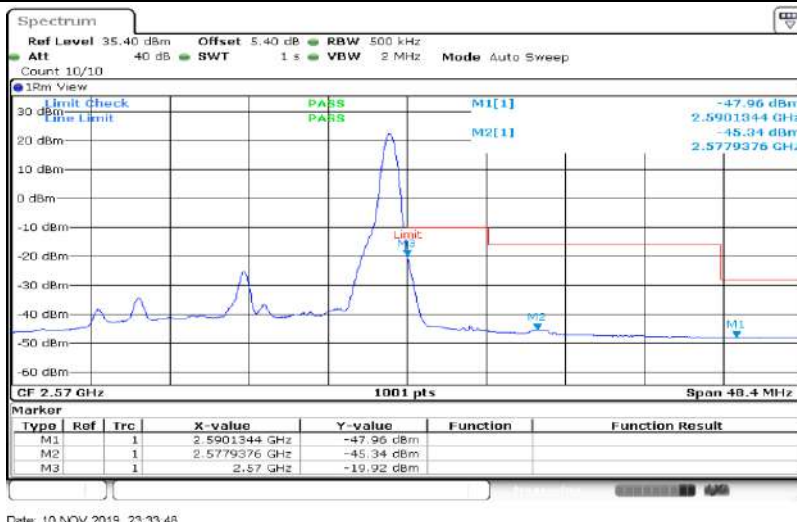


Band7-20MHz-QPSK-21350-1RB#99



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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7-20MHz-QPSK-21350-100RB#0

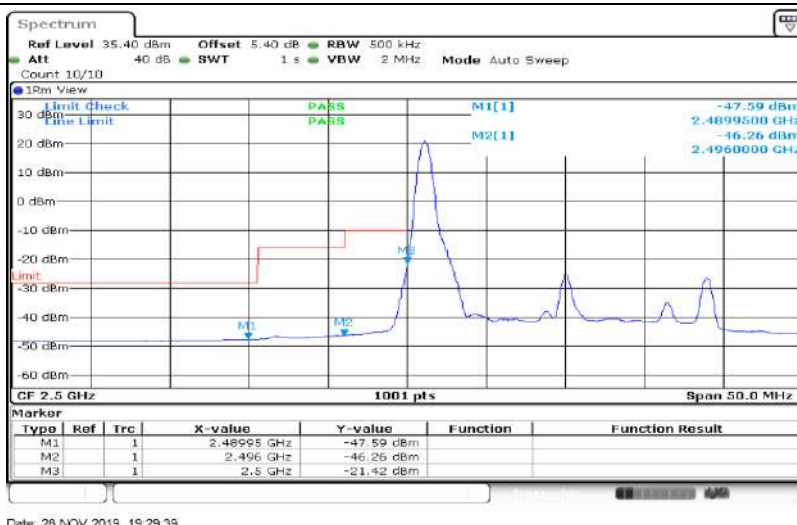


Band7-20MHz-64QAM-20850-1RB#0



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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



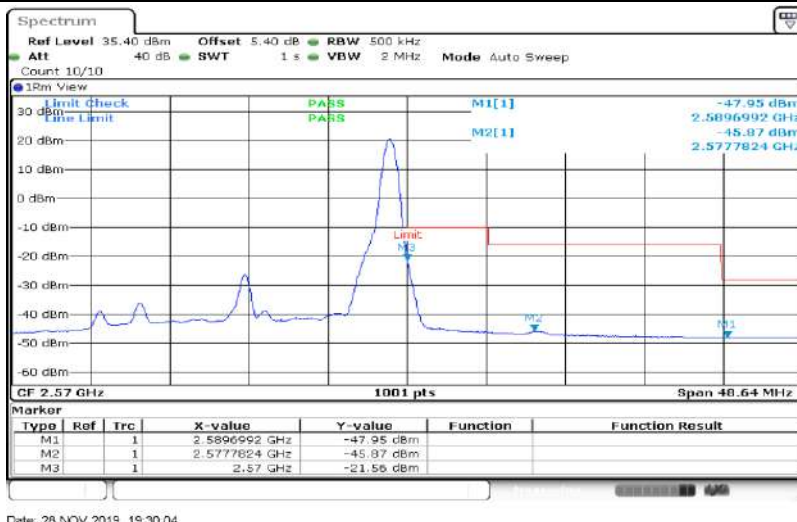
Band7-20MHz-64QAM-20850-100RB#0



Band7-20MHz-64QAM-21350-1RB#99



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 herein 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.

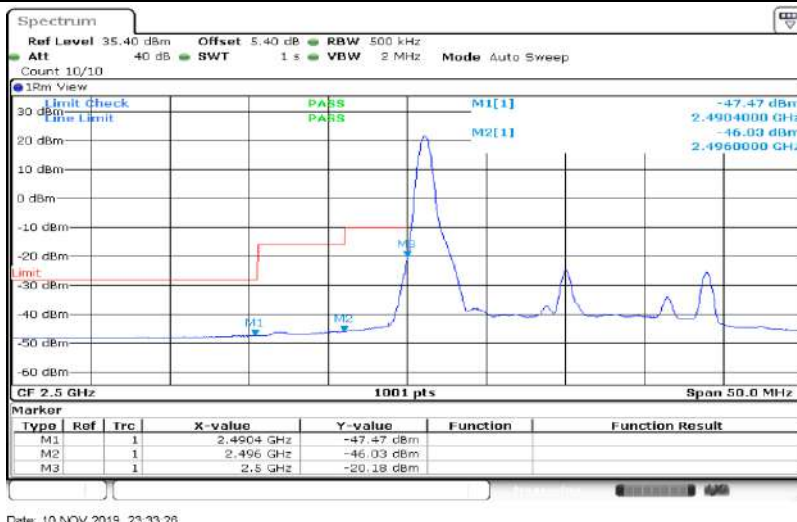


Band7-20MHz-64QAM-21350-100RB#0



Band7-20MHz-16QAM-20850-1RB#0





Date: 10 NOV 2019 23:33:26

Band7-20MHz-16QAM-20850-100RB#0



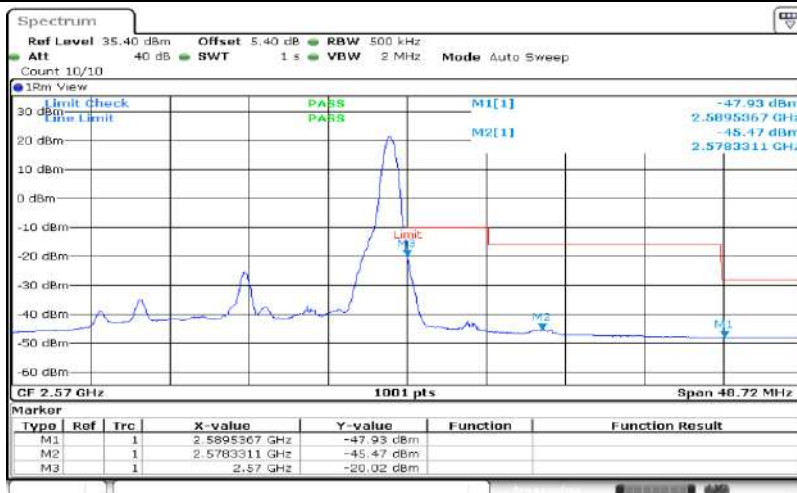
Date: 10 NOV 2019 23:34:49

Band7-20MHz-16QAM-21350-1RB#99



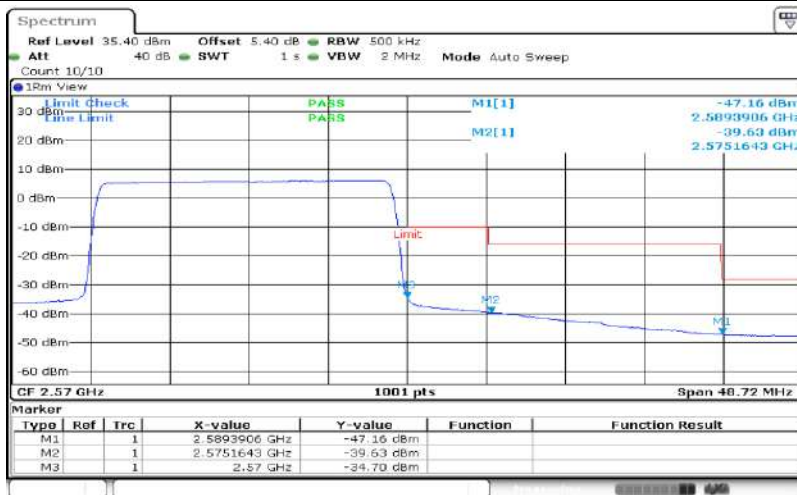
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Date: 10 NOV 2019 23:34:07

Band7-20MHz-16QAM-21350-100RB#0



Date: 10 NOV 2019 23:35:27



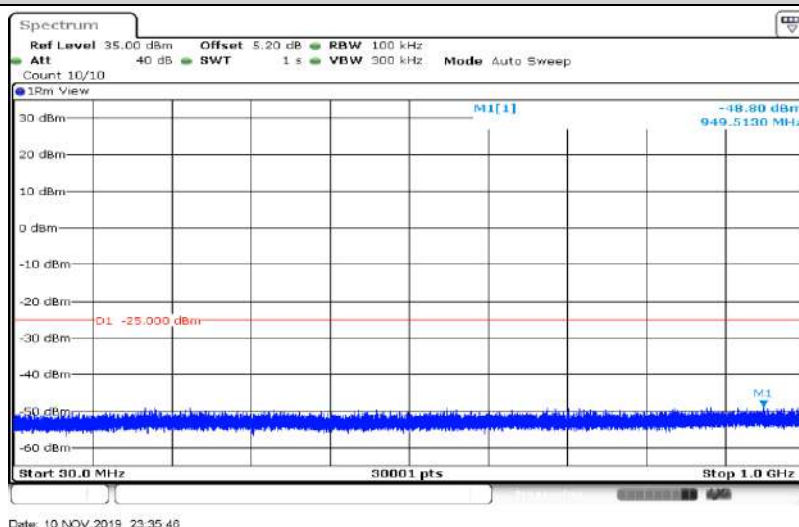
6. Spurious Emission at Antenna Terminal

Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

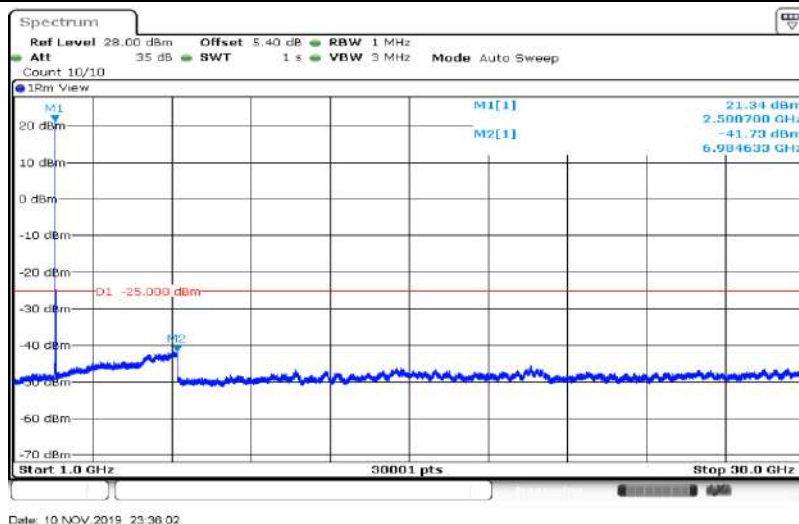
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

Band7-20MHz-QPSK-20850-1RB#0-Range1:30~1000MHz

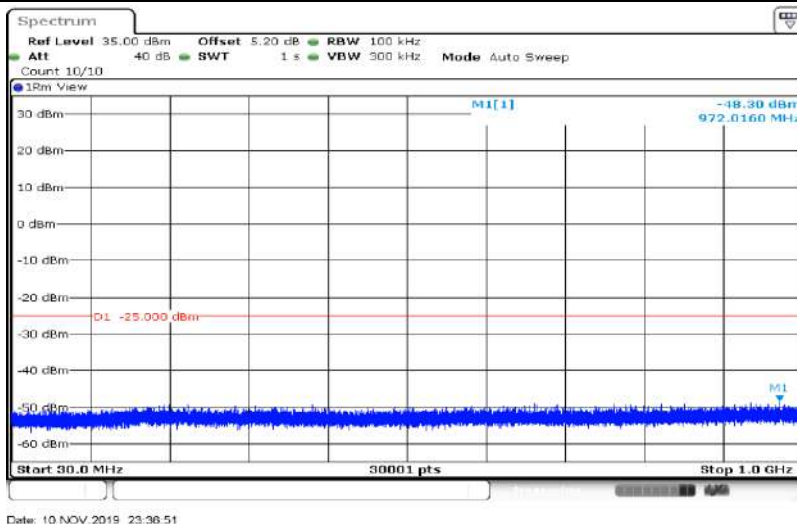


Band7-20MHz-QPSK-20850-1RB#0-Range2:1000~30000MHz

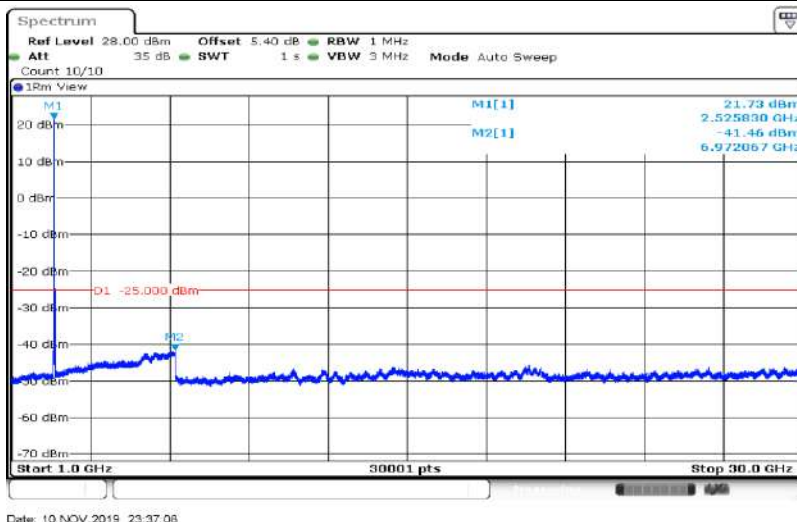


Band7-20MHz-QPSK-21100-1RB#0-Range1:30~1000MHz



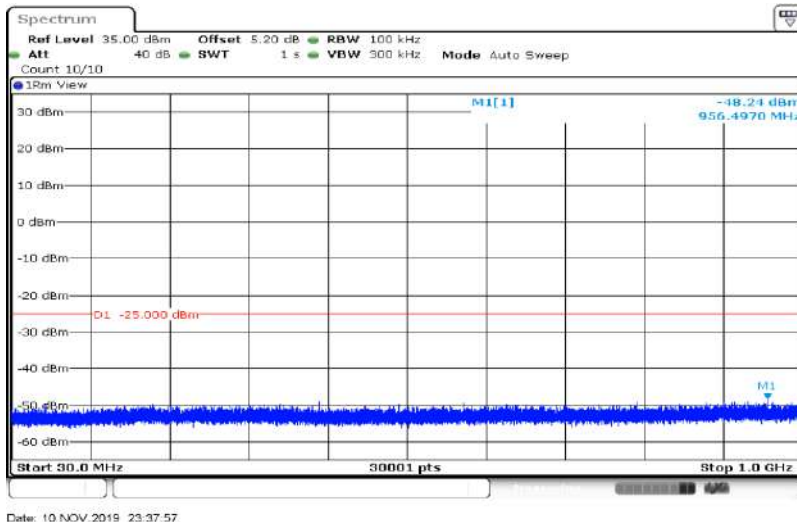


Band7-20MHz-QPSK-21100-1RB#0-Range2:1000~30000MHz

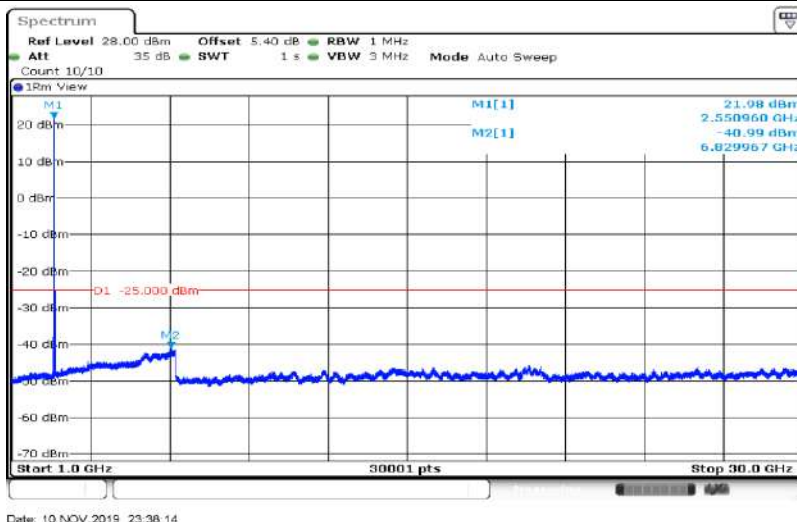


Band7-20MHz-QPSK-21350-1RB#0-Range1:30~1000MHz





Band7-20MHz-QPSK-21350-1RB#0-Range2:1000~30000MHz

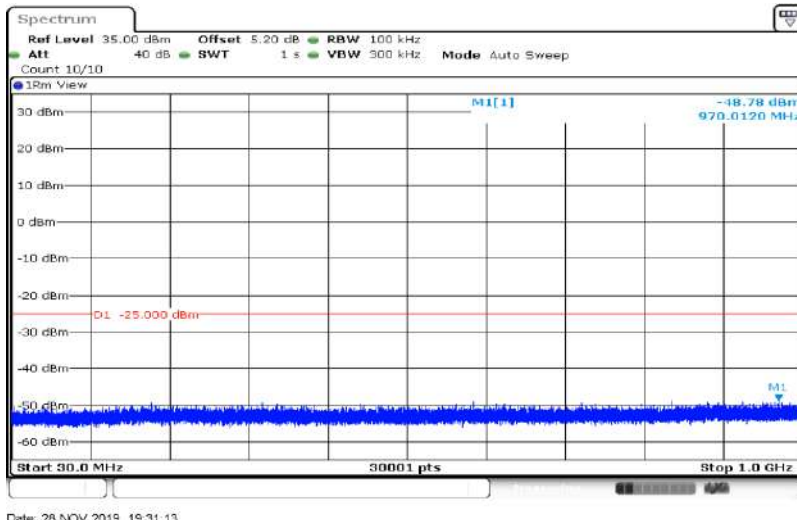


Band7-20MHz-64QAM-20850-1RB#0-Range1:30~1000MHz

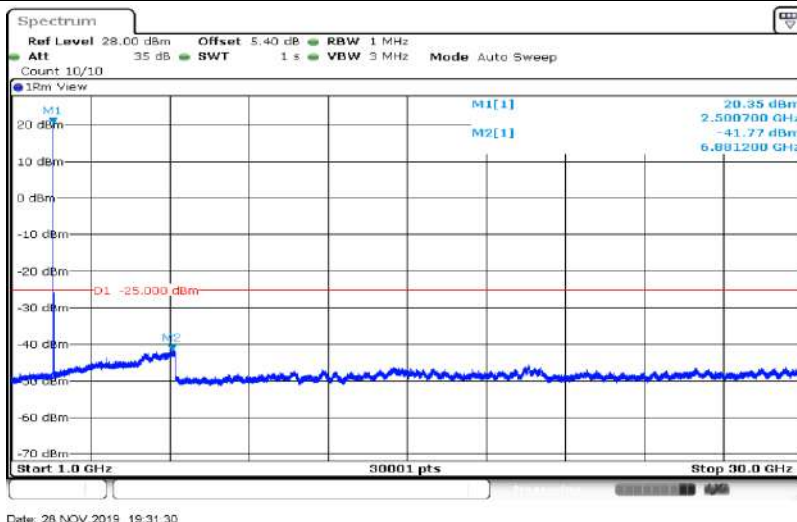


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



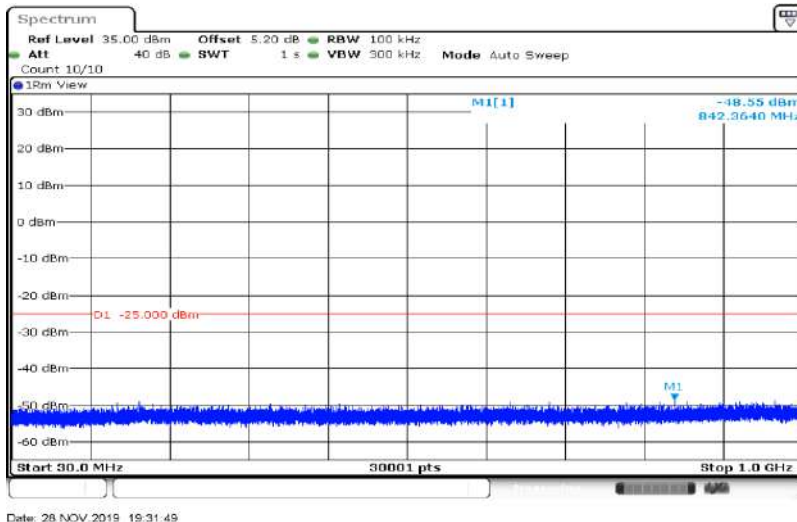
Band7-20MHz-64QAM-20850-1RB#0-Range2:1000~30000MHz



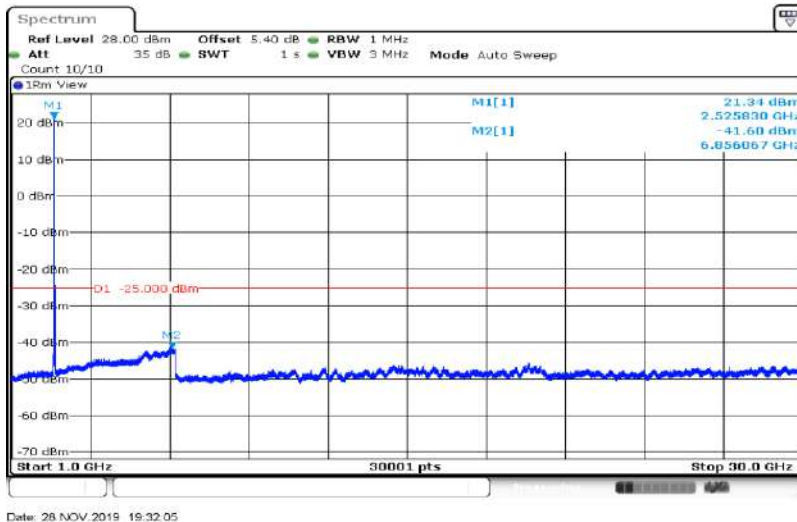
Band7-20MHz-64QAM-21100-1RB#0-Range1:30~1000MHz



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.

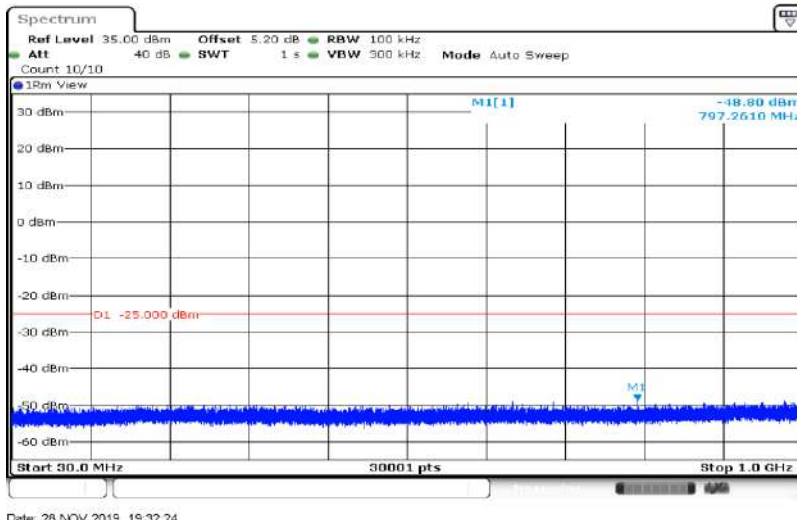


Band7-20MHz-64QAM-21100-1RB#0-Range2:1000~30000MHz

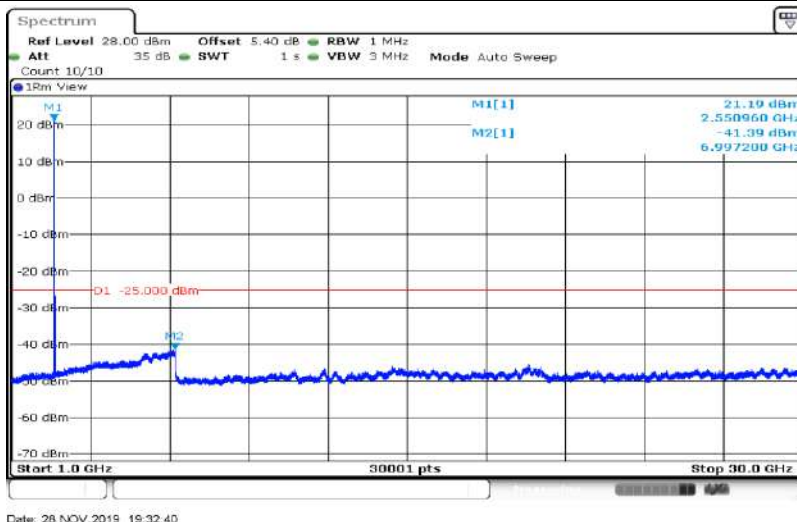


Band7-20MHz-64QAM-21350-1RB#0-Range1:30~1000MHz





Band7-20MHz-64QAM-21350-1RB#0-Range2:1000~30000MHz

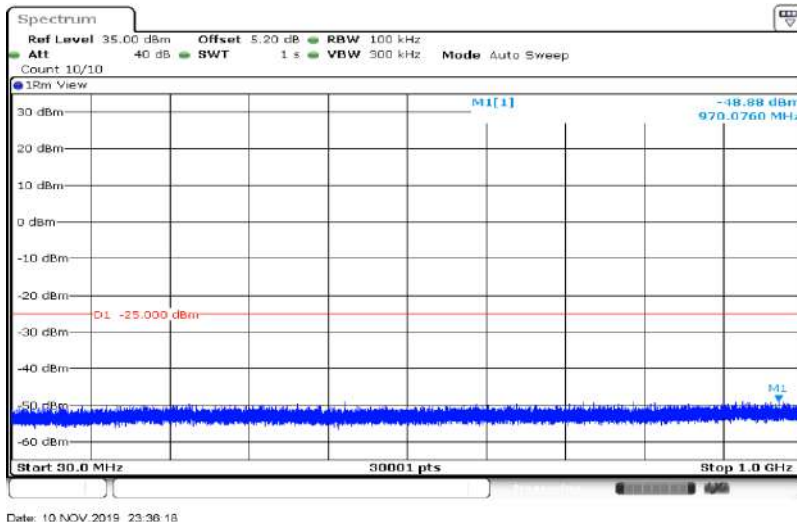


Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz

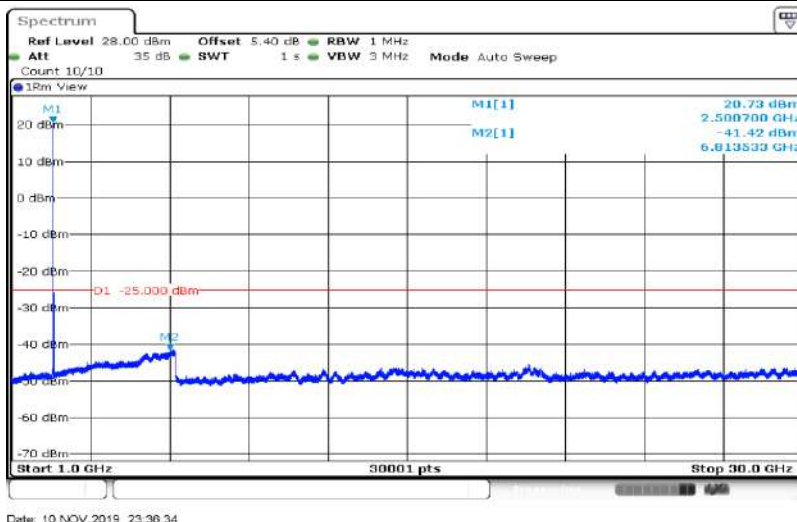


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~30000MHz



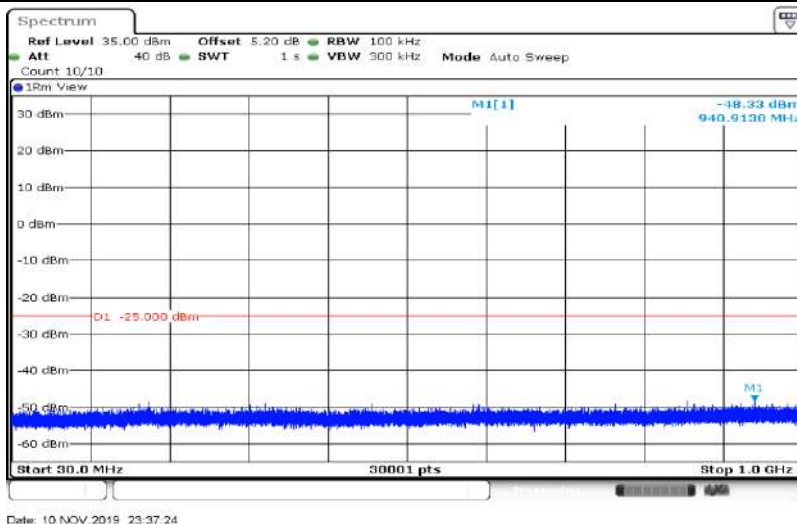
Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz



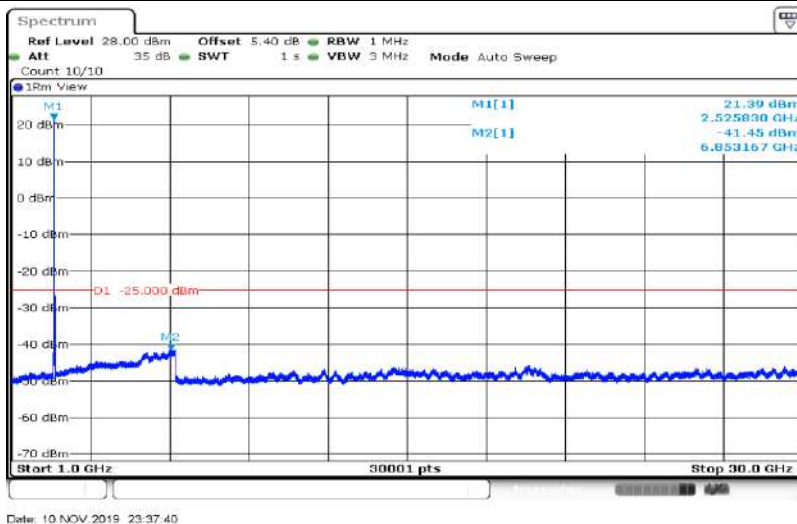
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

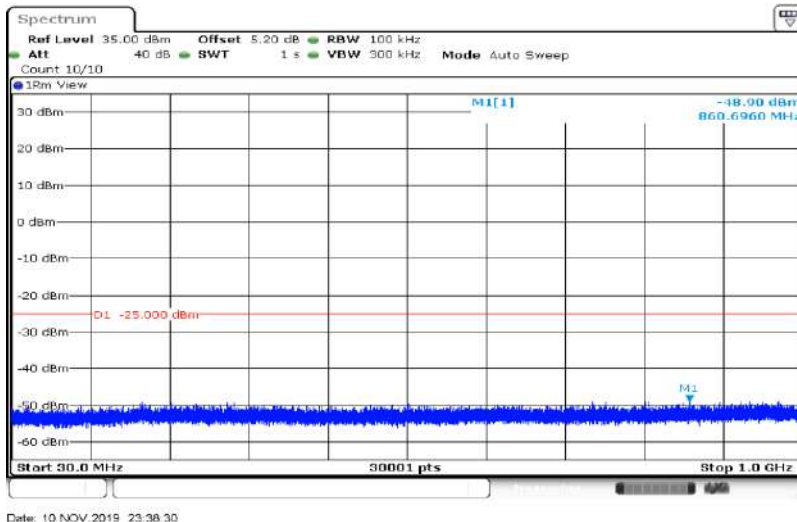


Band7-20MHz-16QAM-21100-1RB#0-Range2:1000~30000MHz

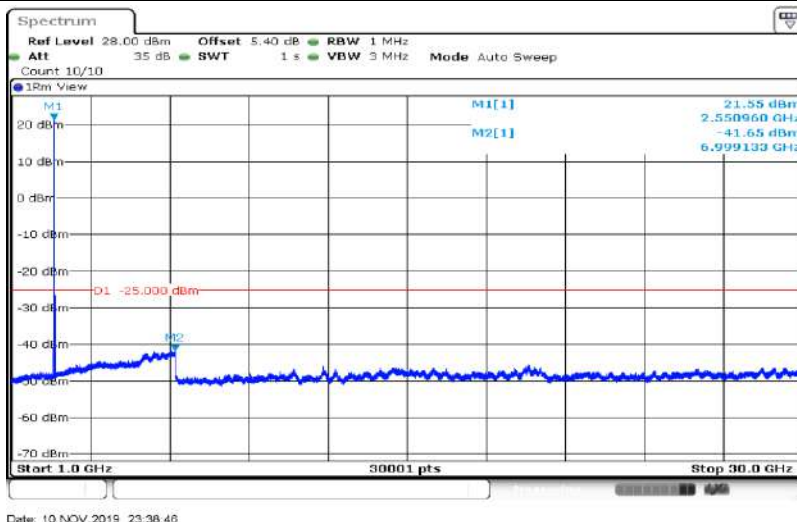


Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz





Band7-20MHz-16QAM-21350-1RB#0-Range2:1000~30000MHz



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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 7

7.1.1. Test Mode = LTE/TM1

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
66.6193	-67.12	-25.00	42.12	196	198	Vertical
109.8835	-65.35	-25.00	40.35	231	304	Vertical
426.5073	-67.72	-25.00	42.72	262	26	Vertical
1746.1492	-44.01	-25.00	19.01	284	179	Vertical
8025.2010	-54.61	-25.00	29.61	156	283	Vertical
17988.5995	-37.02	-25.00	12.02	194	219	Vertical
40.5250	-64.31	-25.00	39.31	178	300	Horizontal
235.7473	-68.66	-25.00	43.66	199	280	Horizontal
726.4463	-62.75	-25.00	37.75	174	131	Horizontal
3733.8294	-59.83	-25.00	34.83	158	258	Horizontal
9303.2521	-51.45	-25.00	26.45	213	258	Horizontal
16399.7360	-40.30	-25.00	15.30	262	348	Horizontal





7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
66.6193	-67.09	-25.00	42.09	174	215	Vertical
113.8607	-65.70	-25.00	40.70	185	195	Vertical
631.1391	-64.79	-25.00	39.79	196	360	Vertical
1739.7480	-45.01	-25.00	20.01	211	153	Vertical
8010.2004	-54.86	-25.00	29.86	262	360	Vertical
17996.3999	-37.18	-25.00	12.18	261	173	Vertical
42.7076	-64.62	-25.00	39.62	174	195	Horizontal
231.7701	-68.82	-25.00	43.82	185	195	Horizontal
503.8202	-66.76	-25.00	41.76	196	26	Horizontal
1803.3607	-44.31	-25.00	19.31	231	260	Horizontal
7359.7744	-55.18	-25.00	30.18	232	152	Horizontal
16388.9356	-40.71	-25.00	15.71	261	237	Horizontal



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

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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
44.5022	-66.79	-25.00	41.79	215	280	Vertical
116.1403	-65.14	-25.00	40.14	161	280	Vertical
385.6198	-68.25	-25.00	43.25	185	153	Vertical
1580.9162	-45.79	-25.00	20.79	184	127	Vertical
7353.7742	-54.86	-25.00	29.86	174	110	Vertical
17995.7998	-37.63	-25.00	12.63	196	342	Vertical
42.7561	-65.26	-25.00	40.26	159	173	Horizontal
234.5347	-68.21	-25.00	43.21	185	360	Horizontal
572.1601	-65.17	-25.00	40.17	321	88	Horizontal
1804.9610	-44.25	-25.00	19.25	262	178	Horizontal
7369.3748	-55.46	-25.00	30.46	248	360	Horizontal
16398.5359	-40.37	-25.00	15.37	194	131	Horizontal

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.
- 3 all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.



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

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	VL	NT	-20.57	-0.008195	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	-17.95	-0.007151	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	-14.35	-0.005717	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-28.24	-0.011140	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-20.84	-0.008221	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-17.72	-0.006990	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	-20.81	-0.008129	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	-18.55	-0.007246	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	-20.07	-0.007840	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	VL	NT	-7.00	-0.002789	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	VN	NT	-8.00	-0.003187	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	VH	NT	-8.90	-0.003546	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	VL	NT	-4.40	-0.001736	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	VN	NT	2.40	0.000947	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	VH	NT	-5.30	-0.002091	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	VL	NT	-17.40	-0.006797	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	VN	NT	-5.10	-0.001992	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	VH	NT	-7.10	-0.002773	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-17.68	-0.007044	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-17.12	-0.006821	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	-23.06	-0.009187	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	-23.40	-0.009231	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-18.40	-0.007258	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-22.99	-0.009069	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-16.19	-0.006324	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-17.48	-0.006828	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-16.45	-0.006426	±2.5	PASS

8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	NV	-30	-14.45	-0.005757	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	-16.88	-0.006725	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	-17.57	-0.007000	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	-15.36	-0.006120	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	-19.17	-0.007637	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	-23.12	-0.009211	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	-15.18	-0.006048	±2.5	PASS



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

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	20MHz	QPSK	20850	100RB#0	NV	50	-19.71	-0.007853	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-22.65	-0.008935	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-18.88	-0.007448	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-20.48	-0.008079	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-23.26	-0.009176	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-18.47	-0.007286	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-22.09	-0.008714	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-24.66	-0.009728	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-20.41	-0.008051	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-30	-15.41	-0.006020	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-26.18	-0.010227	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-22.77	-0.008895	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-17.65	-0.006895	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	-23.46	-0.009164	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-25.25	-0.009863	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-25.05	-0.009785	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	-24.08	-0.009406	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	-30	-3.80	-0.001514	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	-20	-3.30	-0.001315	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	0	-14.40	-0.005737	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	10	-10.60	-0.004223	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	20	-8.50	-0.003386	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	30	-4.30	-0.001713	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	40	-4.90	-0.001952	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	50	-5.50	-0.002191	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	-30	9.90	0.003905	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	-20	-5.80	-0.002288	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	0	-6.00	-0.002367	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	10	-5.50	-0.002170	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	20	-11.60	-0.004576	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	30	-6.60	-0.002604	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	40	3.90	0.001538	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	50	7.30	0.002880	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	-30	-8.80	-0.003438	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	-20	-7.20	-0.002813	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	0	-16.60	-0.006484	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	10	-10.80	-0.004219	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	20	4.30	0.001680	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	30	-10.90	-0.004258	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	40	-13.70	-0.005352	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	50	-8.60	-0.003359	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-18.54	-0.007386	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-15.58	-0.006207	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	-19.50	-0.007769	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	-14.05	-0.005598	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	-21.37	-0.008514	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	-19.34	-0.007705	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	-18.05	-0.007191	±2.5	PASS



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

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	20MHz	16QAM	20850	100RB#0	NV	50	-20.31	-0.008092	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-22.62	-0.008923	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-20.26	-0.007992	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-21.49	-0.008477	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-21.72	-0.008568	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	-22.95	-0.009053	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	-21.73	-0.008572	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-22.57	-0.008903	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	-21.04	-0.008300	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-17.95	-0.007012	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-21.00	-0.008203	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-19.74	-0.007711	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-17.65	-0.006895	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-16.48	-0.006438	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-19.80	-0.007734	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	-21.04	-0.008219	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-18.80	-0.007344	±2.5	PASS



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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com