



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).....	8
2.1.	TEST RESULT.....	8
2.2.	TEST PLOTS.....	8
3.	MODULATION CHARACTERISTICS.....	12
3.1.	TEST BAND = LTE BAND 7.....	12
3.1.1.	TEST MODE = LTE /TM1 20MHz.....	12
3.1.1.1.	TEST CHANNEL = MCH.....	12
3.1.2.	TEST MODE = LTE /TM2 20MHz.....	13
3.1.2.1.	TEST CHANNEL = MCH.....	13
4.	26DB BANDWIDTH AND OCCUPIED BANDWIDTH.....	14
4.1.	TEST RESULT.....	14
4.2.	TEST PLOTS.....	15
5.	BAND EDGE COMPLIANCE.....	27
5.1.	TEST PLOTS.....	27
6.	SPURIOUS EMISSION AT ANTENNA TERMINAL.....	43
6.1.	TEST PLOTS.....	43
7.	FIELD STRENGTH OF SPURIOUS RADIATION.....	49
7.1.	TEST BAND = LTE BAND 7.....	49
7.1.1.	TEST MODE =LTE/TM1 (MAIN ANT).....	49
7.1.1.1.	TEST CHANNEL = LCH.....	49
7.1.1.2.	TEST CHANNEL = MCH.....	49
7.1.1.3.	TEST CHANNEL = HCH.....	50
7.1.	TEST MODE =LTE/TM1 (SECOND ANT).....	50
7.1.1.	TEST CHANNEL = LCH.....	50
7.1.2.	TEST CHANNEL = MCH.....	50
7.1.3.	TEST CHANNEL = HCH.....	51



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.....	52
8.1.	FREQUENCY VS VOLTAGE.....	52
8.2.	FREQUENCY VS TEMPERATURE	52



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	22.42	22.92	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	22.70	23.20	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.39	22.89	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	21.55	22.05	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	21.61	22.11	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	21.54	22.04	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.58	22.08	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.46	22.96	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.44	22.94	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.73	23.23	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.60	22.10	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	21.64	22.14	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	21.55	22.05	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.59	22.09	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.46	22.96	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.46	22.96	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	22.77	23.27	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	21.61	22.11	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	21.64	22.14	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	21.58	22.08	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.60	22.10	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	21.60	22.10	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.92	22.42	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.55	22.05	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	20.58	21.08	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	20.54	21.04	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	20.52	21.02	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.54	21.04	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.54	23.04	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.85	22.35	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.58	22.08	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	20.61	21.11	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	20.60	21.10	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	20.63	21.13	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.59	21.09	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.91	22.41	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.62	22.12	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.70	22.20	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.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	21425	12RB#0	20.63	21.13	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	20.65	21.15	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	20.58	21.08	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	22.58	23.08	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.64	23.14	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	22.48	22.98	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.54	23.04	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	21.67	22.17	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#12	21.65	22.15	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	21.62	22.12	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.67	22.17	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.58	23.08	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	22.51	23.01	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.67	23.17	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	21.65	22.15	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	21.73	22.23	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#12	21.67	22.17	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.70	22.20	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.67	23.17	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.57	23.07	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.55	23.05	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#0	21.71	22.21	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	21.60	22.10	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#12	21.66	22.16	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.71	22.21	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	21.66	22.16	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.74	22.24	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	21.88	22.38	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	20.61	21.11	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#12	20.62	21.12	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	20.67	21.17	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	20.65	21.15	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.76	22.26	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.79	22.29	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.93	22.43	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	20.62	21.12	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	22.62	23.12	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#12	20.64	21.14	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	20.66	21.16	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.87	22.37	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	21.71	22.21	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.69	22.19	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	20.68	21.18	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#12	20.64	21.14	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	20.57	21.07	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	20.66	21.16	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.51	23.01	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.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	1RB#38	22.58	23.08	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.46	22.96	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	21.66	22.16	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	21.65	22.15	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	21.64	22.14	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	21.64	22.14	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.55	23.05	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.46	22.96	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.60	23.10	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	21.69	22.19	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	21.67	22.17	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	21.61	22.11	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.65	22.15	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.54	23.04	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.55	23.05	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.57	23.07	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	21.68	22.18	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	21.66	22.16	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	21.58	22.08	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.62	22.12	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.64	22.14	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	21.81	22.31	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	21.64	22.14	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	20.61	21.11	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	20.63	21.13	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	20.59	21.09	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	20.62	21.12	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.73	22.23	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.78	22.28	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	21.68	22.18	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	20.57	21.07	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	20.66	21.16	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#18	20.62	21.12	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	20.64	21.14	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	21.76	22.26	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	21.76	22.26	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.61	23.11	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	20.62	21.12	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	20.62	21.12	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	20.57	21.07	33.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	20.60	21.10	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.37	22.87	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	22.70	23.20	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.48	22.98	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	21.65	22.15	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	21.68	22.18	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	21.67	22.17	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.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	21.65	22.15	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.49	22.99	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.37	22.87	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.69	23.19	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	21.57	22.07	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	21.74	22.24	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	21.66	22.16	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.63	22.13	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.68	23.18	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.52	23.02	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.42	22.92	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.66	22.16	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	21.55	22.05	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	21.67	22.17	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.58	22.08	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.50	22.00	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.64	22.14	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	21.87	22.37	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	20.61	21.11	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	20.63	21.13	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	20.63	21.13	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	20.65	21.15	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	21.52	22.02	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.75	22.25	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.82	22.32	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	20.55	21.05	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	20.72	21.22	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	20.65	21.15	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	20.62	21.12	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	21.87	22.37	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	21.76	22.26	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.61	22.11	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	20.63	21.13	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	20.65	21.15	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	20.51	21.01	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	20.60	21.10	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-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

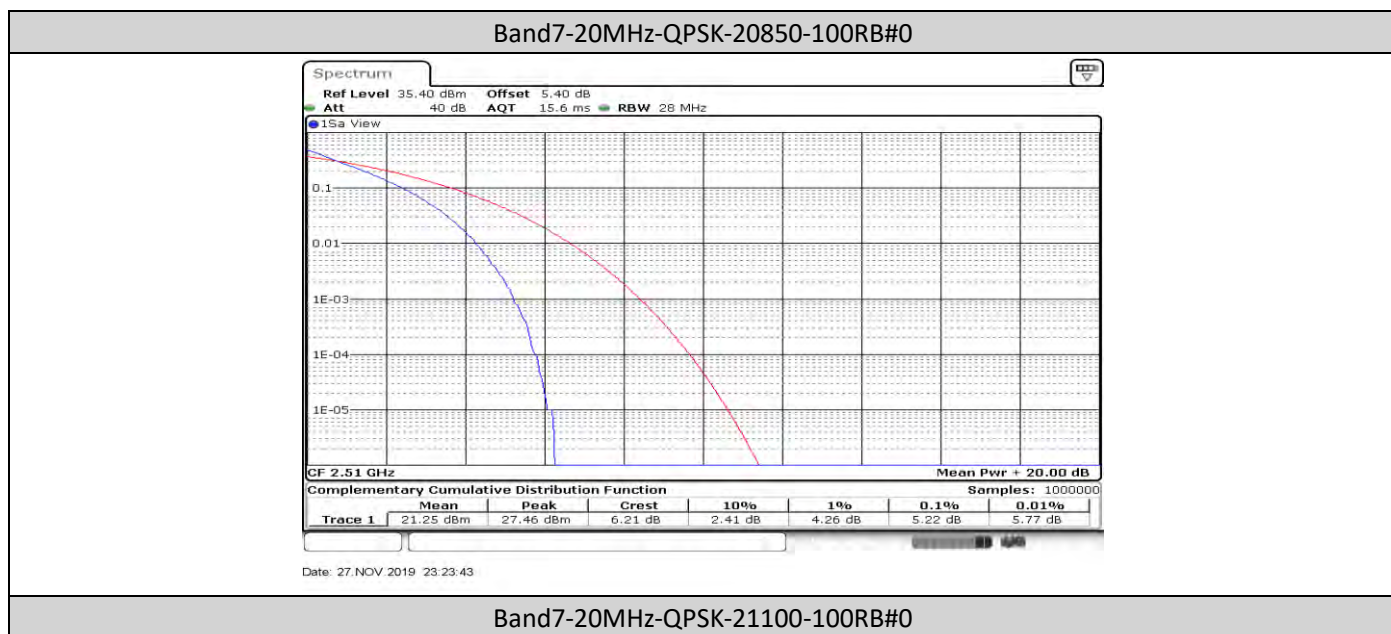


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.22	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.30	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.22	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.06	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.12	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.03	13	PASS

2.2. Test Plots





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



Band7-20MHz-16QAM-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.

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-21100-100RB#0



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-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: 27.NOV.2019 23:24:39



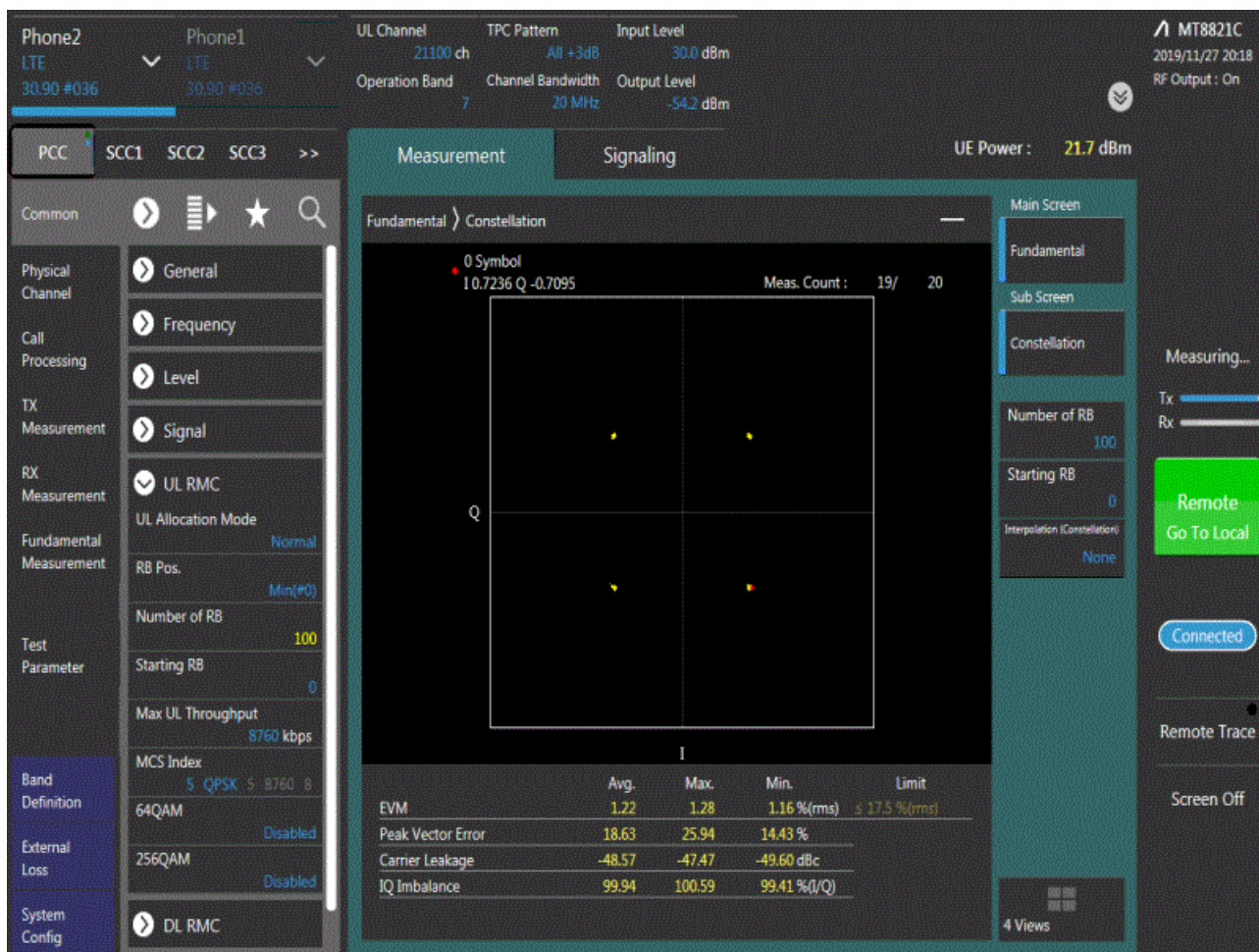


3. Modulation Characteristics

3.1. Test Band = LTE Band 7

3.1.1. Test Mode = LTE /TM1 20MHz

3.1.1.1. Test Channel = MCH



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

中国·深圳·科技园中区M-10栋一号厂房

t (86-755) 26012053

邮编: 518057

f (86-755) 26710594

t (86-755) 26012053

f (86-755) 26710594

www.sgs.com.cn

www.sgs.com.cn

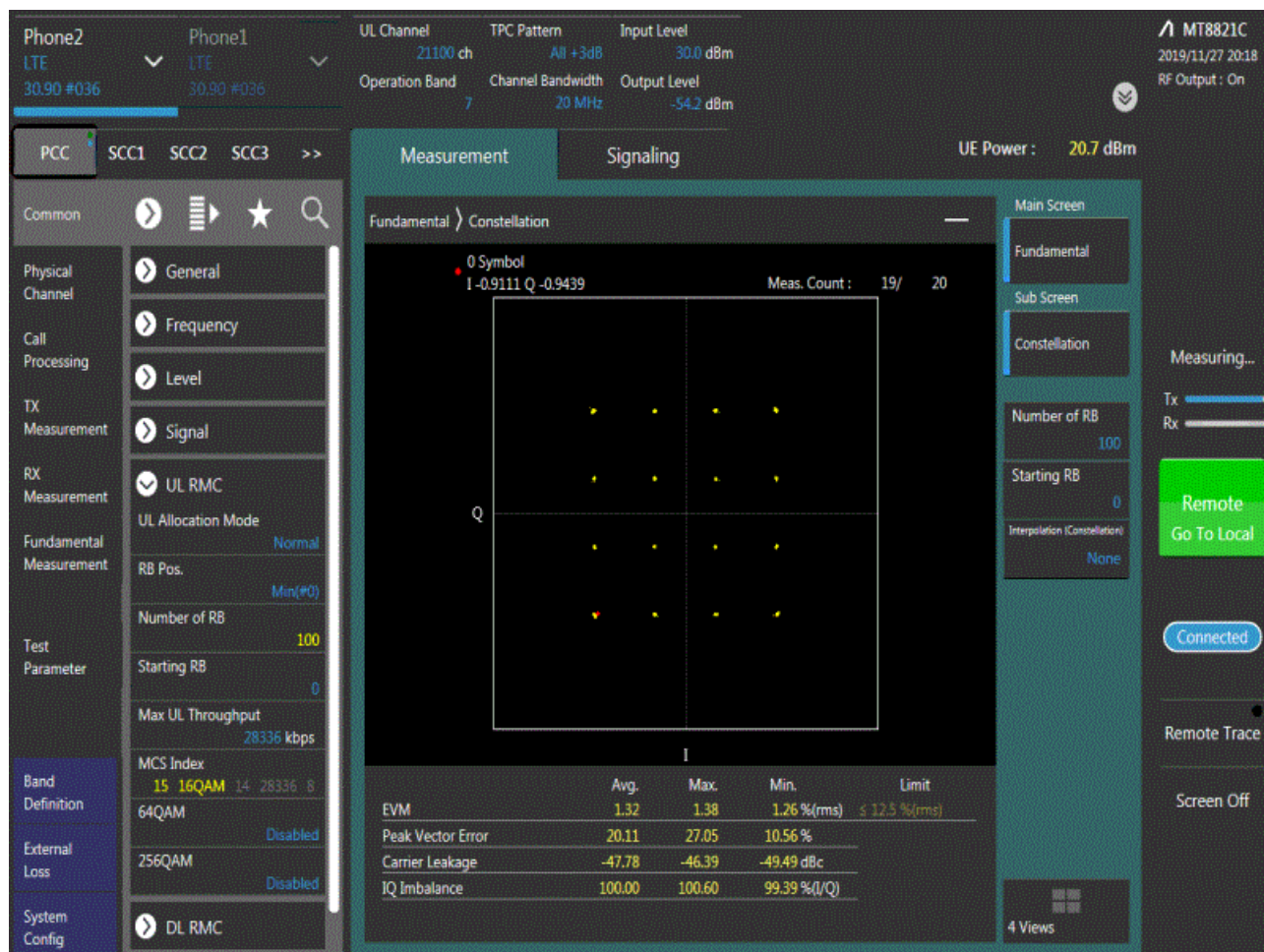
sgs.china@sgs.com

Member of the SGS Group (SGS SA)



3.1.2. Test Mode = LTE /TM2 20MHz

3.1.2.1. 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	4.486	4.870	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.486	4.930	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.486	4.950	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.486	4.900	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.496	4.860	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.496	4.880	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.931	10.520	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.971	9.740	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.971	9.640	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.951	9.600	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.951	9.620	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.991	9.580	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.636	14.970	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.636	14.820	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.636	14.880	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.666	14.850	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.636	14.850	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.636	14.850	PASS
Band7	20MHz	QPSK	20850	100RB#0	18.182	19.520	PASS
Band7	20MHz	QPSK	21100	100RB#0	18.142	19.360	PASS
Band7	20MHz	QPSK	21350	100RB#0	18.142	19.360	PASS
Band7	20MHz	16QAM	20850	100RB#0	18.102	19.360	PASS
Band7	20MHz	16QAM	21100	100RB#0	18.102	19.320	PASS
Band7	20MHz	16QAM	21350	100RB#0	18.062	19.520	PASS



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

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

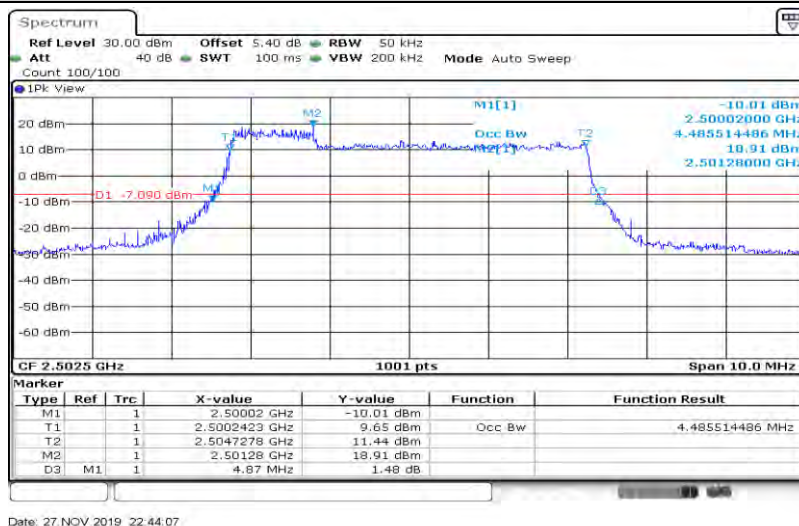
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS-CSTC Laboratory)

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



4.2. Test Plots

Band7-5MHz-QPSK-20775-25RB#0-4.486

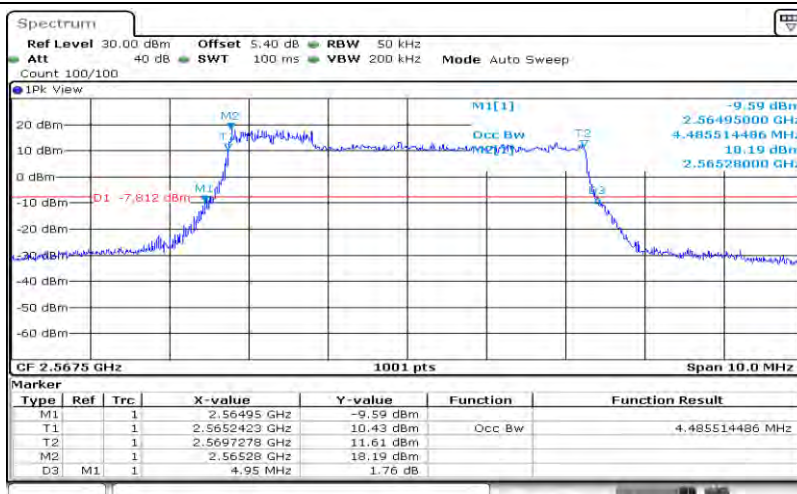


Band7-5MHz-QPSK-21100-25RB#0-4.486



Band7-5MHz-QPSK-21425-25RB#0-4.486





Date: 27.NOV.2019 22:45:26

Band7-5MHz-16QAM-20775-25RB#0-4.486



Date: 27.NOV.2019 22:44:27

Band7-5MHz-16QAM-21100-25RB#0-4.496



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

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN.Doccheck@sgs.com

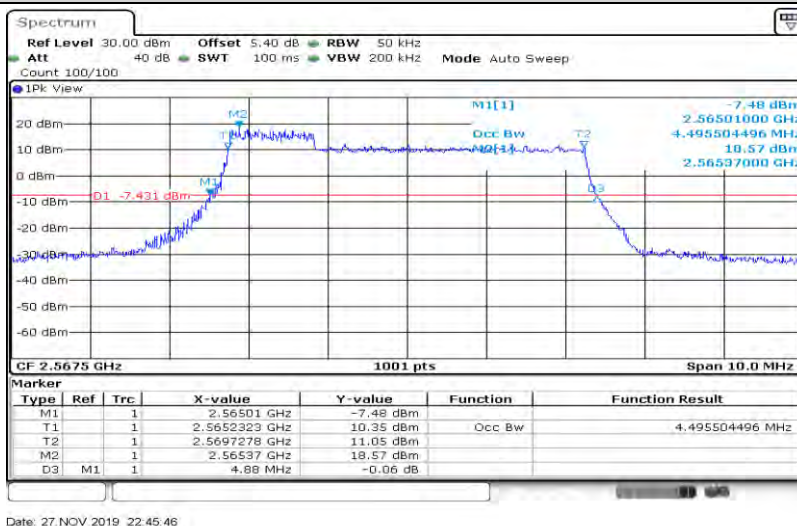
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

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



Band7-5MHz-16QAM-21425-25RB#0-4.496

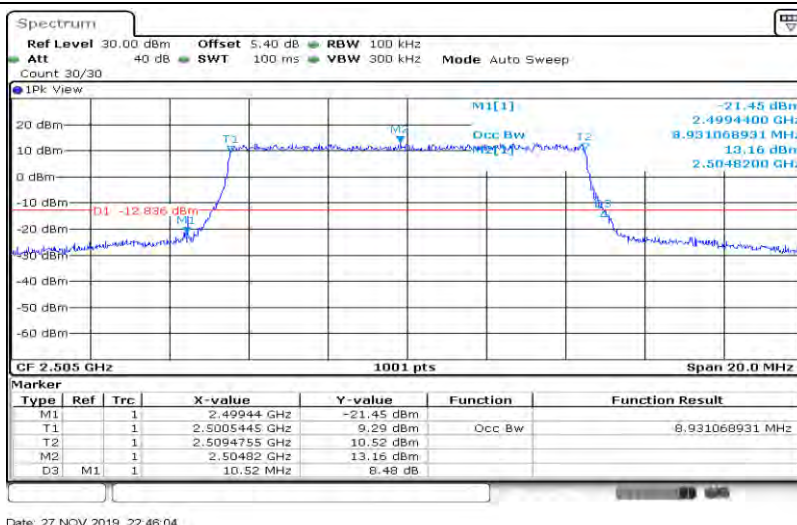


Band7-10MHz-QPSK-20800-50RB#0-8.931

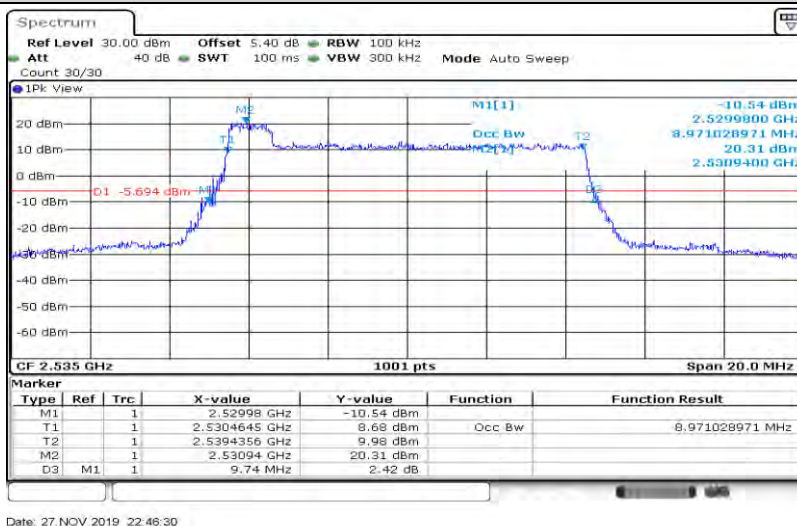


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

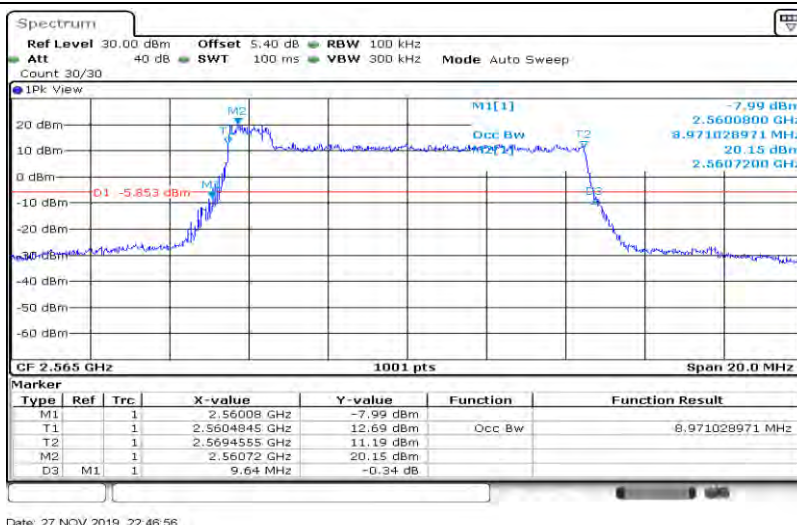


Band7-10MHz-QPSK-21100-50RB#0-8.971

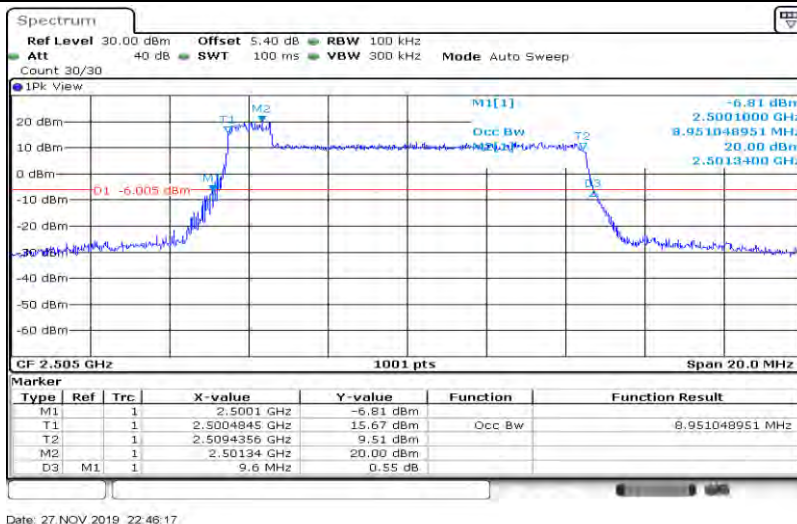


Band7-10MHz-QPSK-21400-50RB#0-8.971





Band7-10MHz-16QAM-20800-50RB#0-8.951

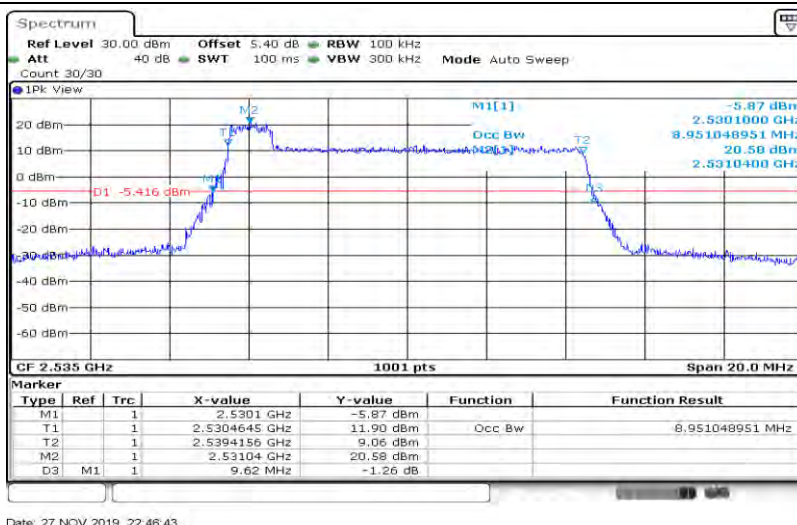


Band7-10MHz-16QAM-21100-50RB#0-8.951

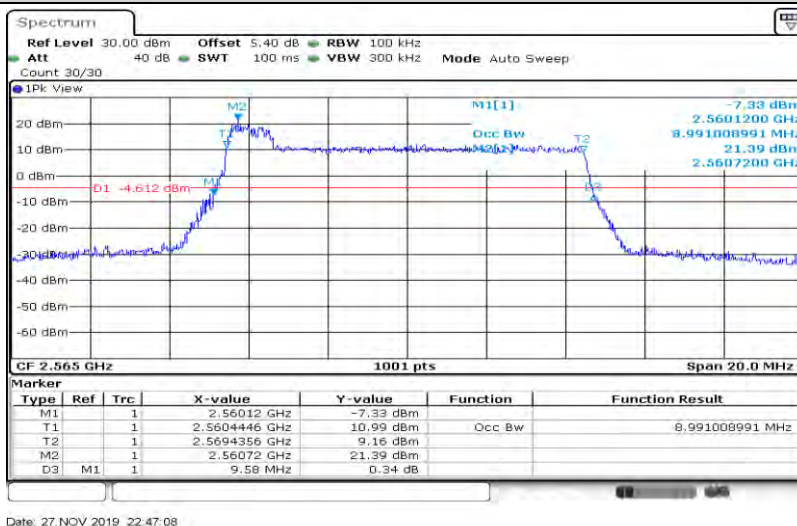


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 and certificate, please contact us at telephone: (86-755) 83071443, 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



Band7-10MHz-16QAM-21400-50RB#0-8.991



Band7-15MHz-QPSK-20825-75RB#0-13.636



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-21100-75RB#0-13.636



Band7-15MHz-QPSK-21375-75RB#0-13.636



Band7-15MHz-16QAM-20825-75RB#0-13.666



Band7-15MHz-16QAM-21100-75RB#0-13.636



Date: 27 NOV 2019 22:48:05

Band7-15MHz-16QAM-21375-75RB#0-13.636



Date: 27.NOV.2019 22:48:31

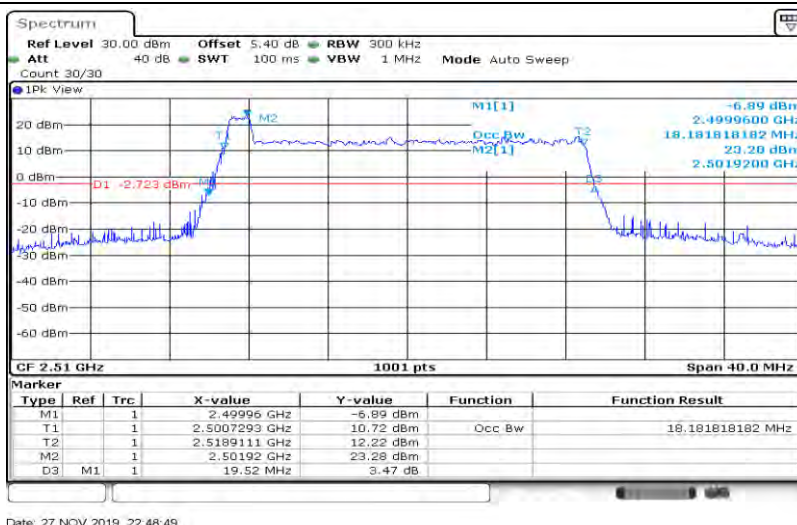
Band7-20MHz-QPSK-20850-100RB#0-18.182



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 deemed to have accepted the Company's terms and conditions, and the Company's responsibility is limited to the extent of its Client's instructions. Any Company sole responsibility is limited 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 strictly prohibited and may result in severe civil or criminal penalties. 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.Doocheck@sigs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sigsgroup.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 sigs.china@sigs.com



Band7-20MHz-QPSK-21100-100RB#0-18.142

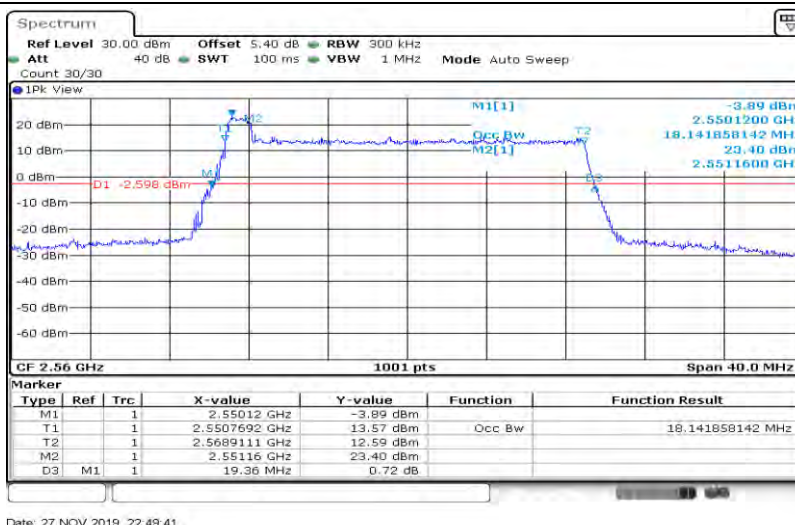


Band7-20MHz-QPSK-21350-100RB#0-18.142

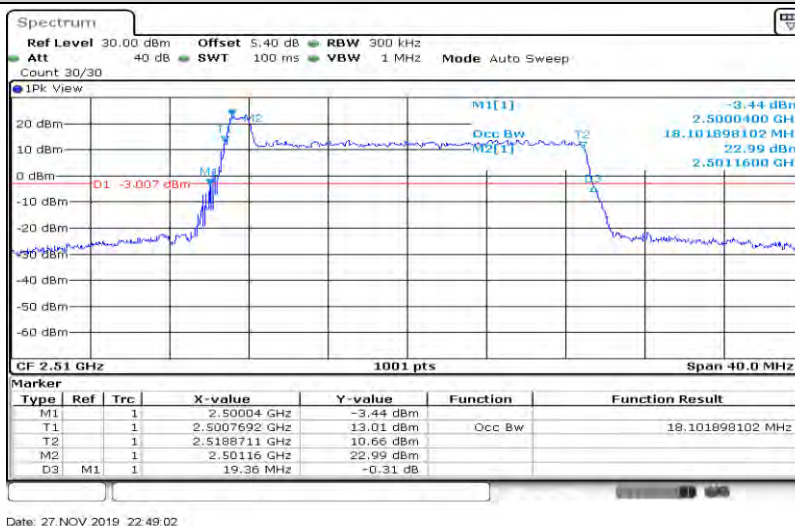


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 and certificate, please contact us at telephone: (86-755) 83071443, 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-20850-100RB#0-18.102

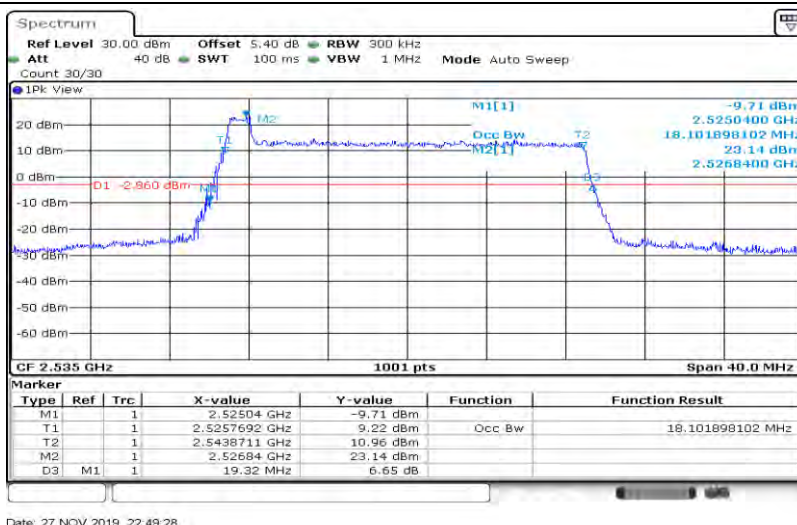


Band7-20MHz-16QAM-21100-100RB#0-18.102



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

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN.Doccheck@sgs.com
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#0-18.062

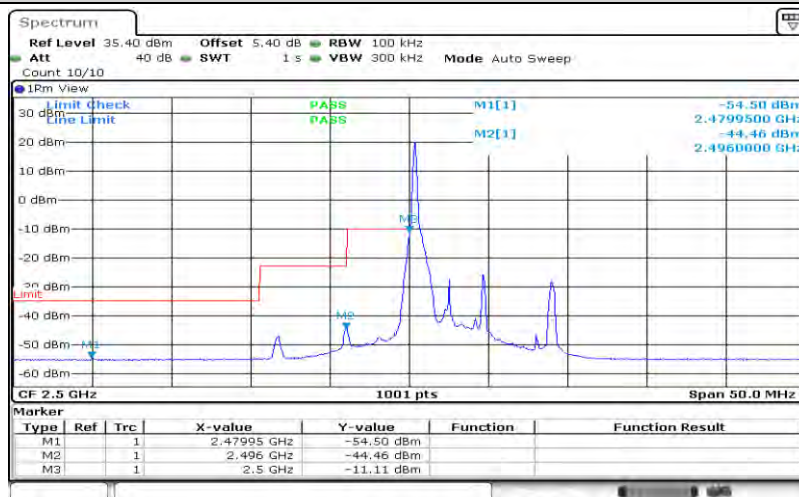




5. Band Edge Compliance

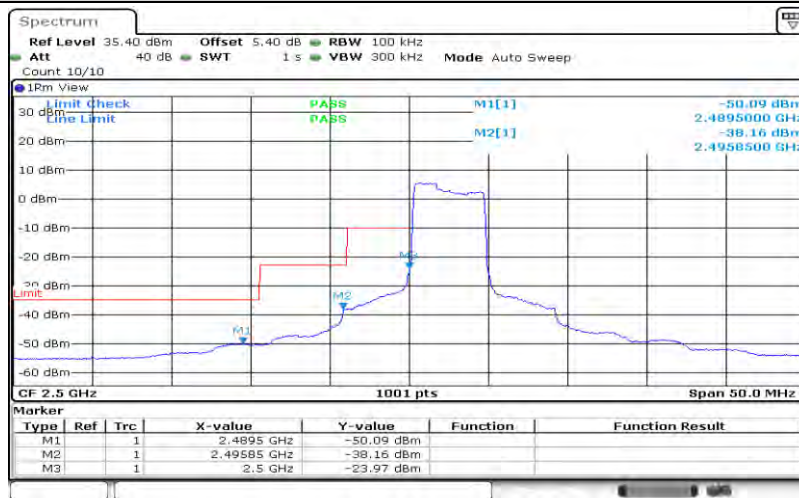
5.1. Test Plots

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



Date: 27.NOV 2019 22:50:19

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



Date: 27.NOV 2019 22:51:49

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

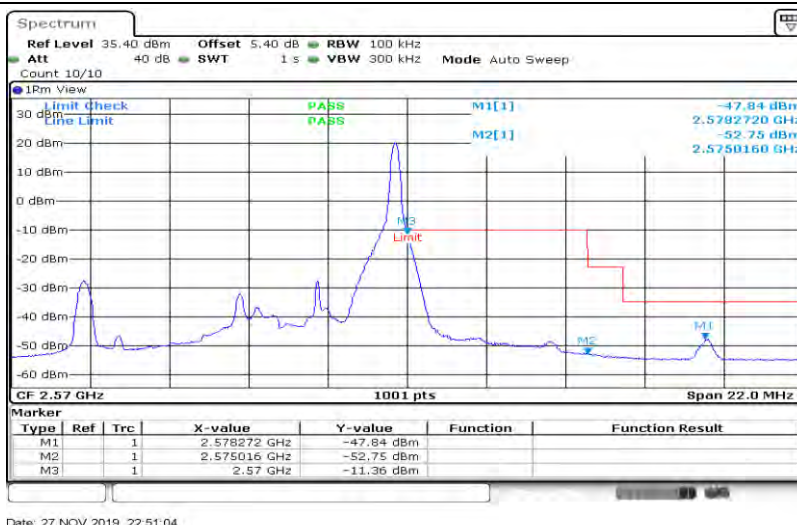


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

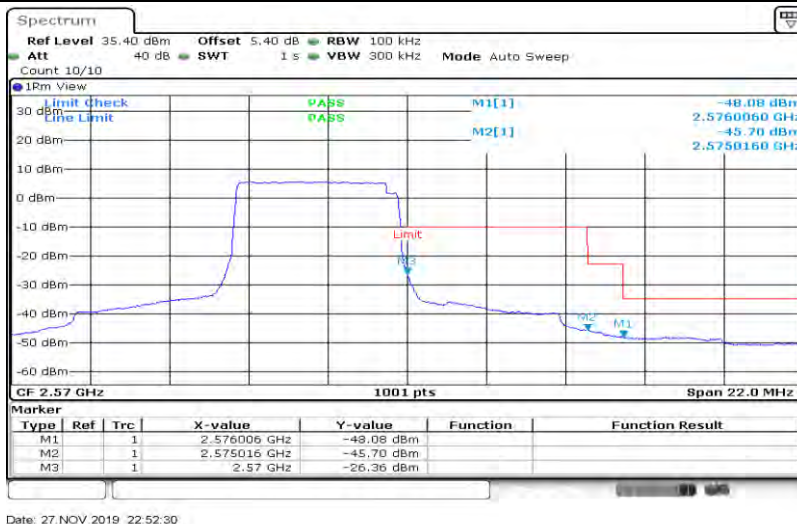
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

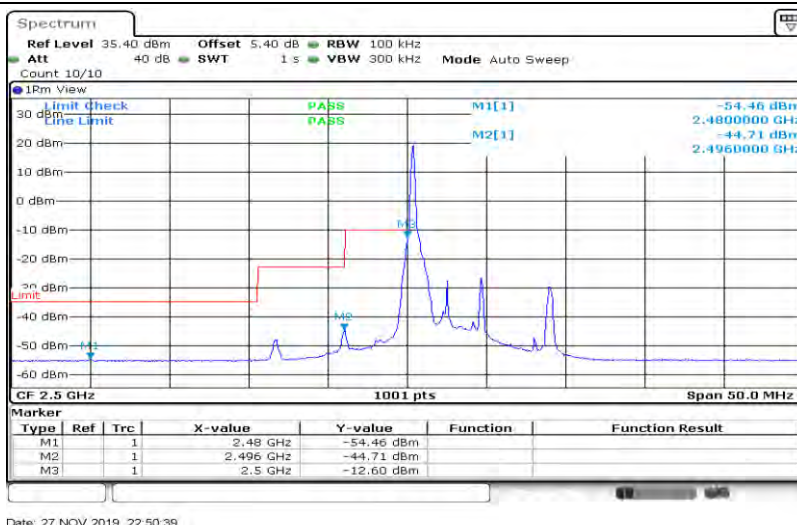


Band7-5MHz-QPSK-21425-25RB#0



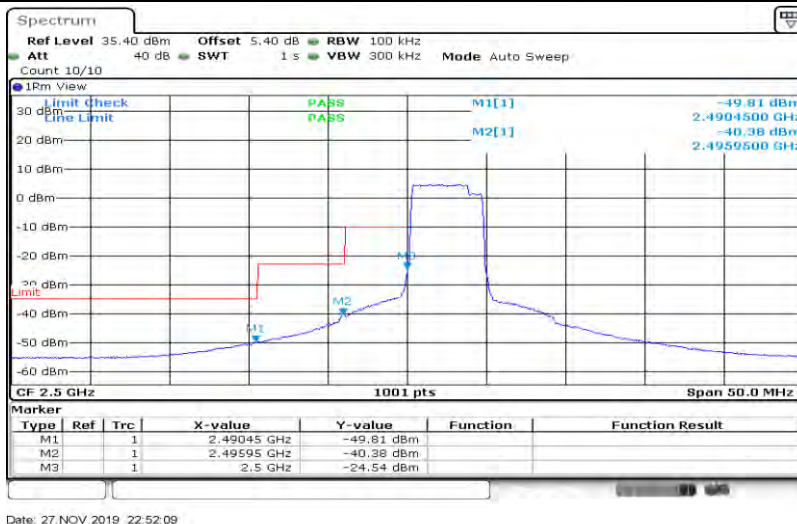
Band7-5MHz-16QAM-20775-1RB#0





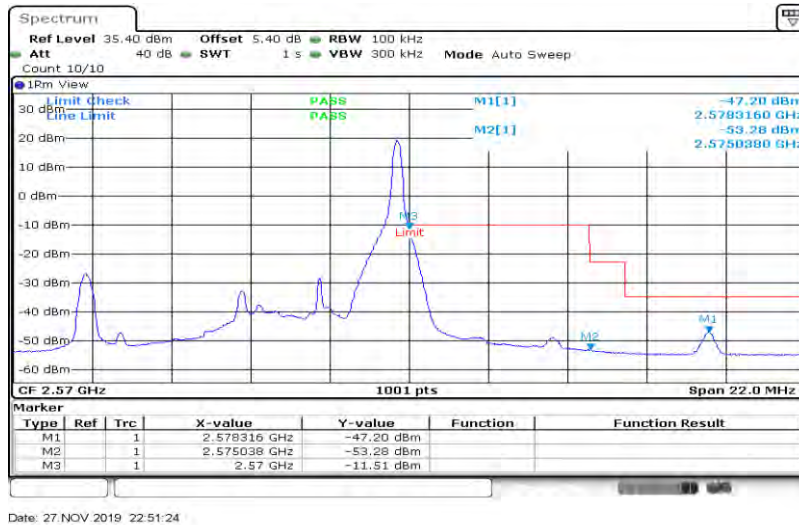
Date: 27.NOV.2019 22:50:39

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

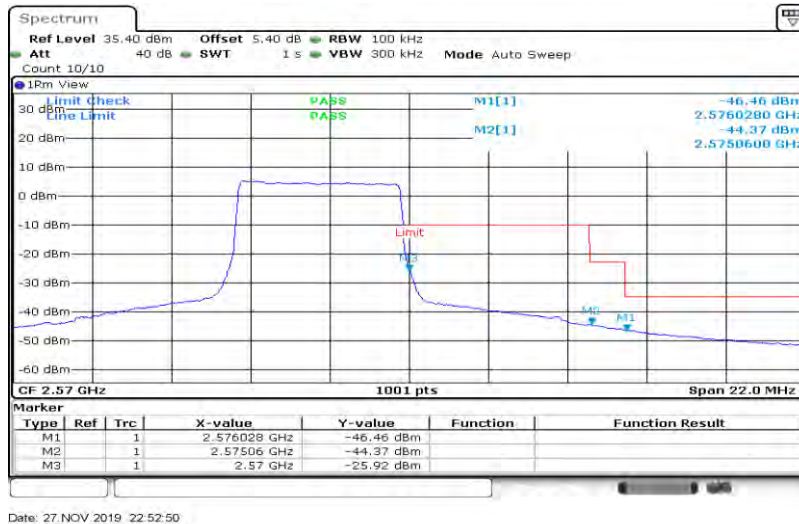


Date: 27.NOV.2019 22:52:09

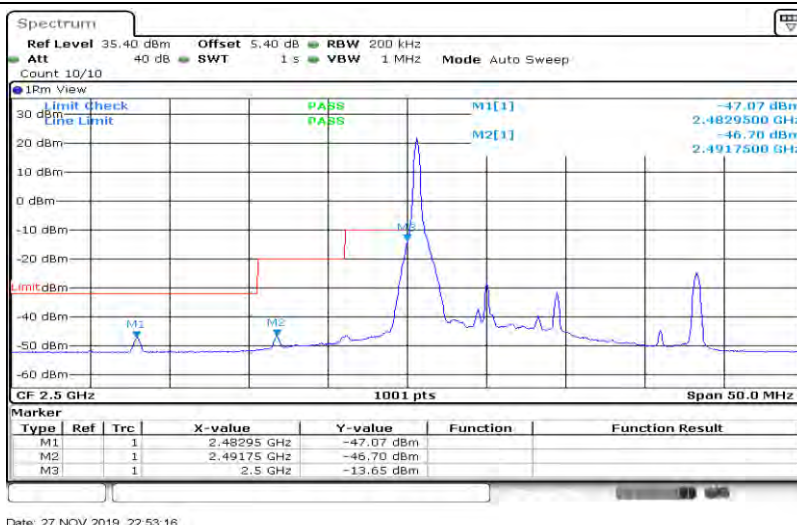
Band7-5MHz-16QAM-21425-1RB#24



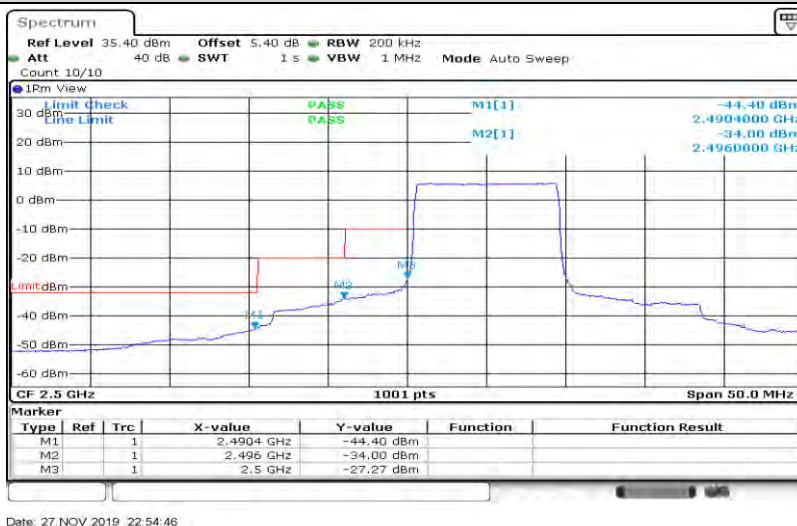
Band7-5MHz-16QAM-21425-25RB#0



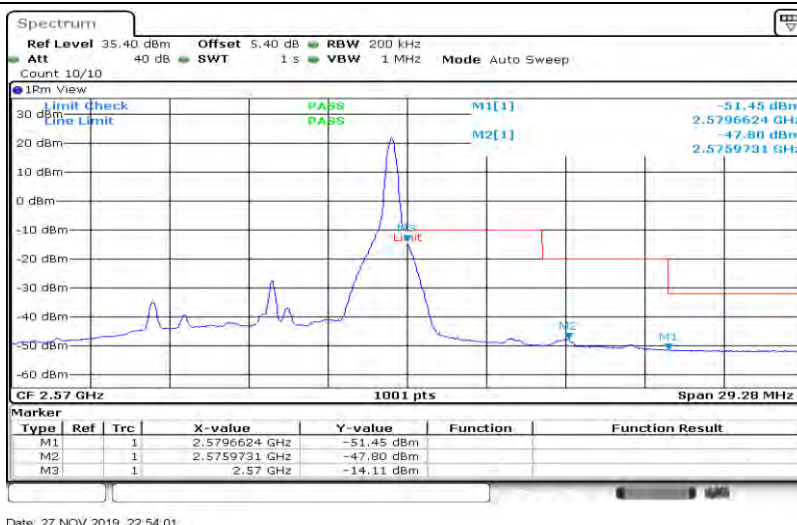
Band7-10MHz-QPSK-20800-1RB#0



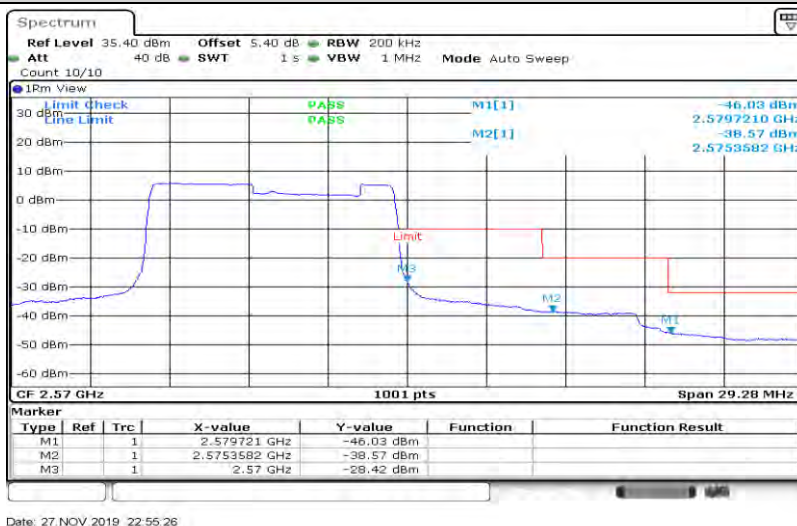
Band7-10MHz-QPSK-20800-50RB#0



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

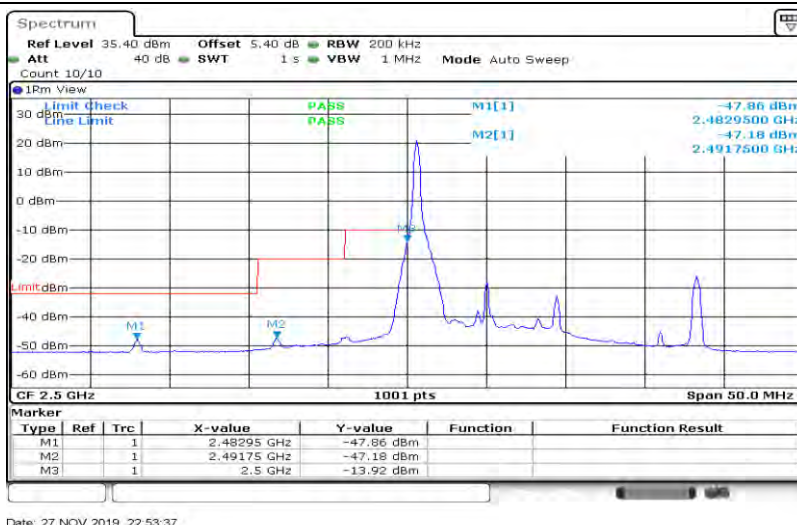


Band7-10MHz-QPSK-21400-50RB#0



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





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

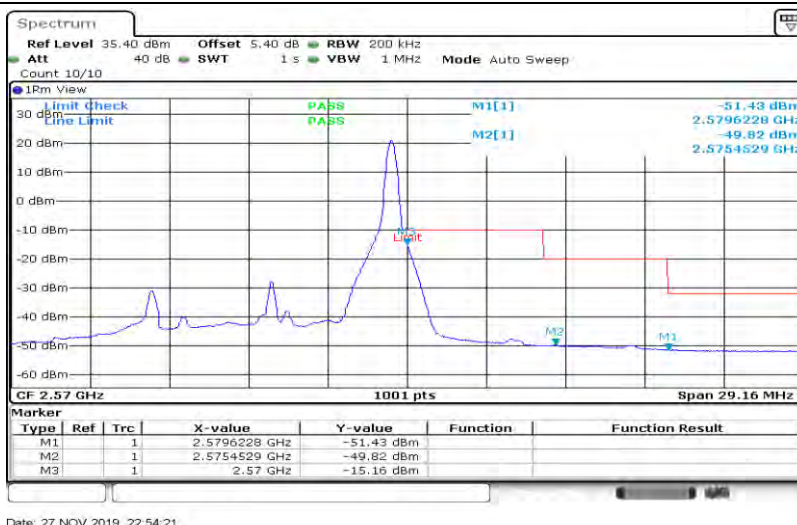


Band7-10MHz-16QAM-21400-1RB#49

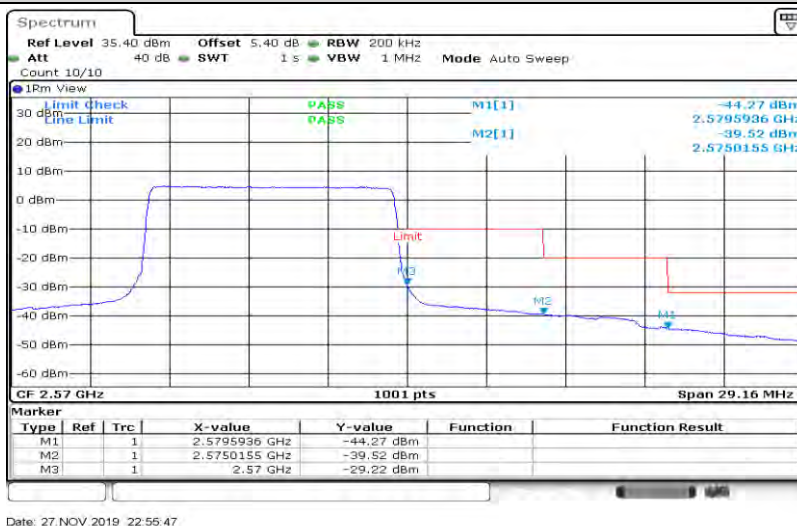


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



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

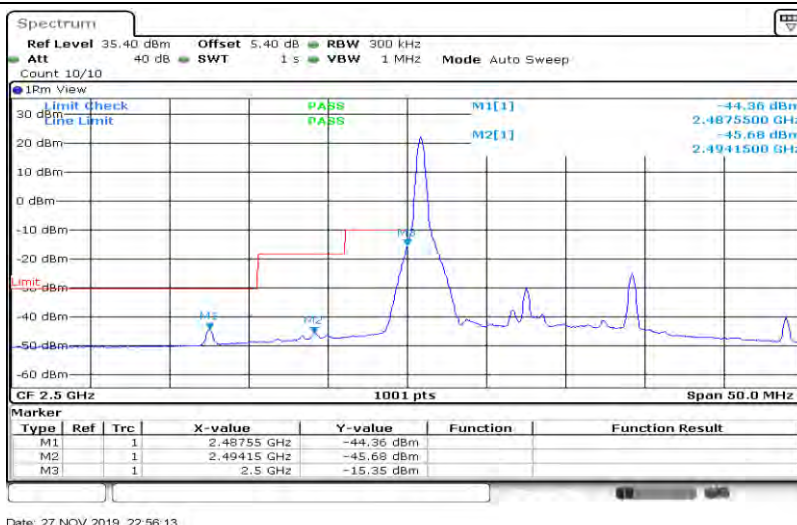


Band7-15MHz-QPSK-20825-1RB#0

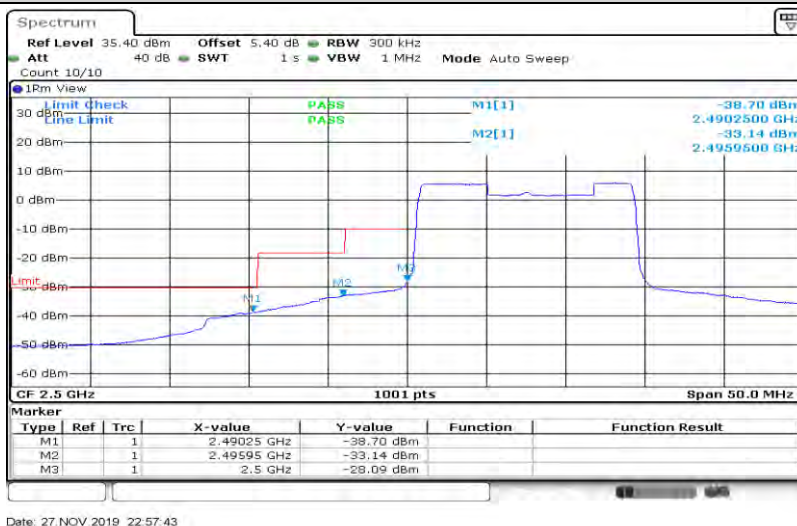


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

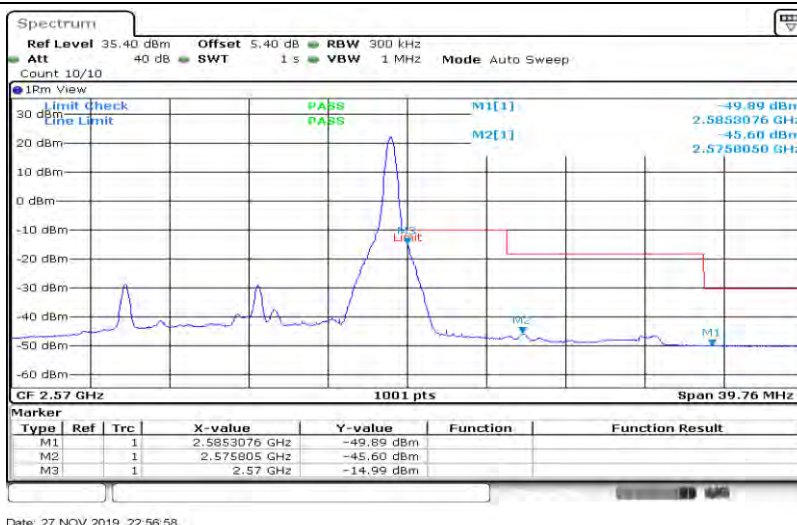


Band7-15MHz-QPSK-21375-1RB#74

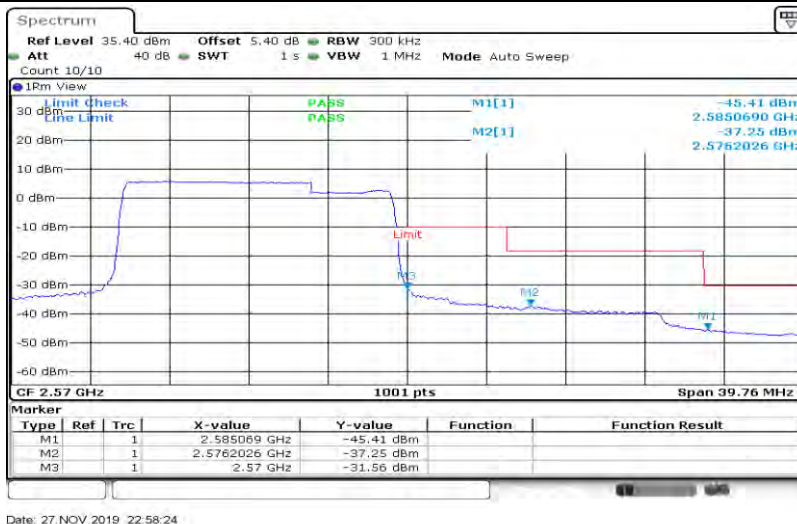


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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-21375-75RB#0

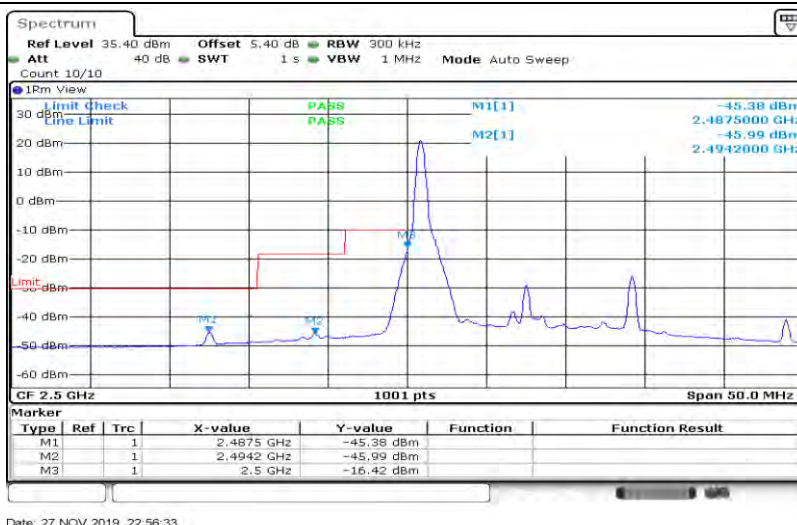


Band7-15MHz-16QAM-20825-1RB#0



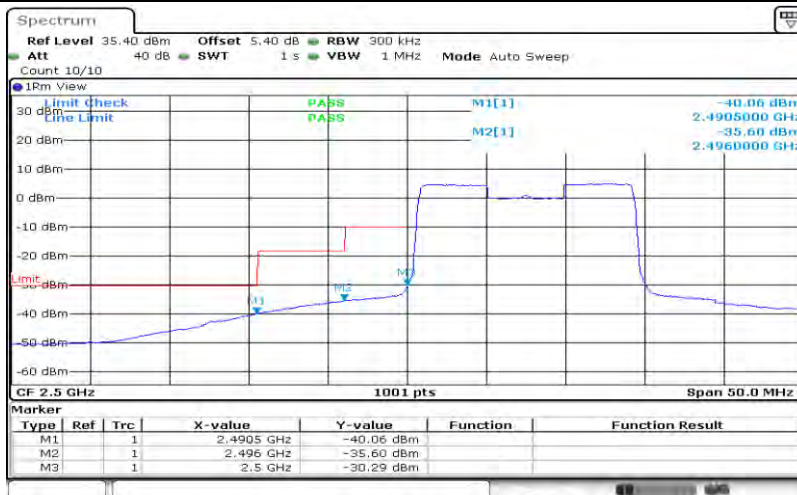
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



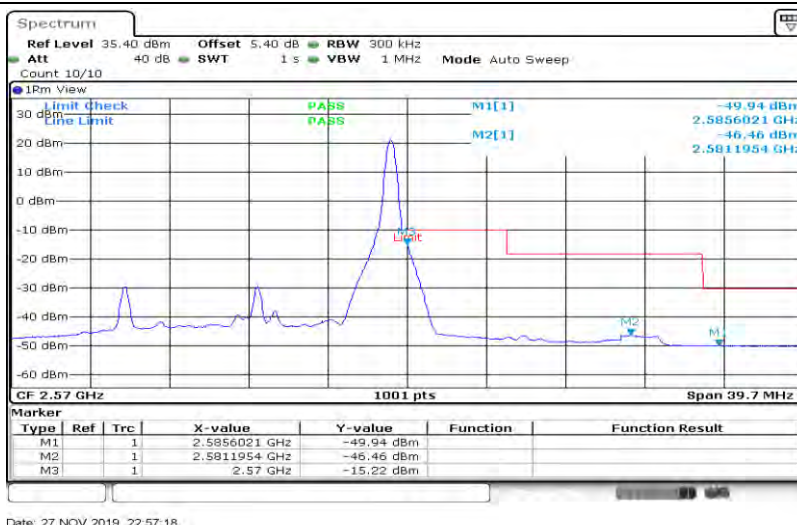
Date: 27.NOV.2019 22:56:33

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

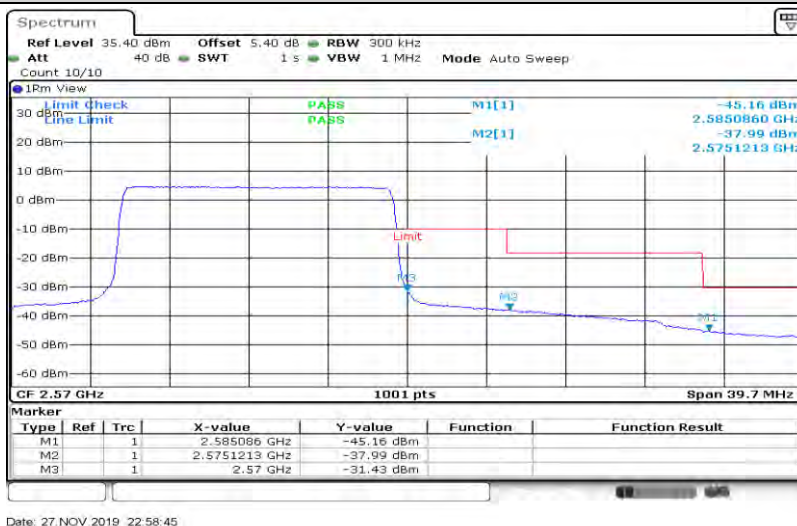


Date: 27.NOV.2019 22:58:04

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



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

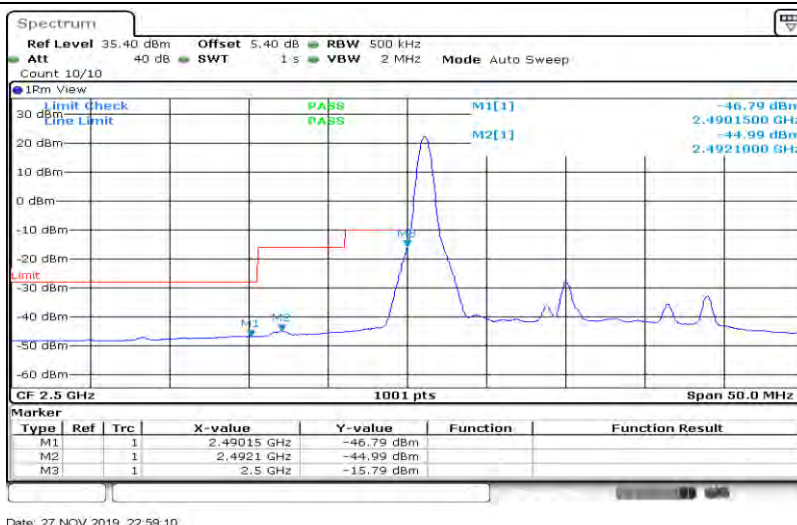


Band7-20MHz-QPSK-20850-1RB#0



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

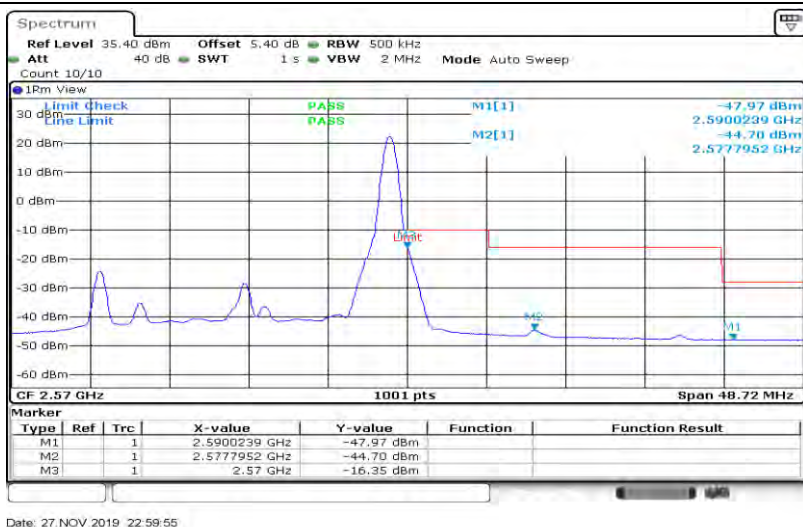


Band7-20MHz-QPSK-20850-100RB#0

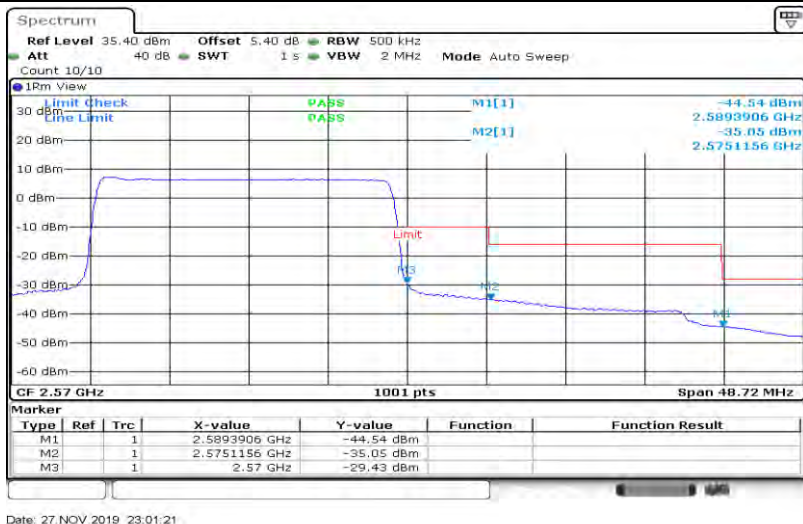


Band7-20MHz-QPSK-21350-1RB#99



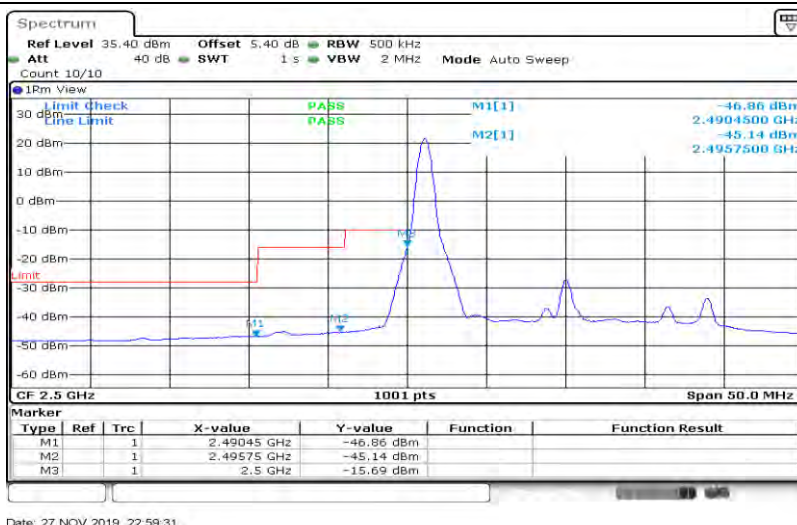


Band7-20MHz-QPSK-21350-100RB#0

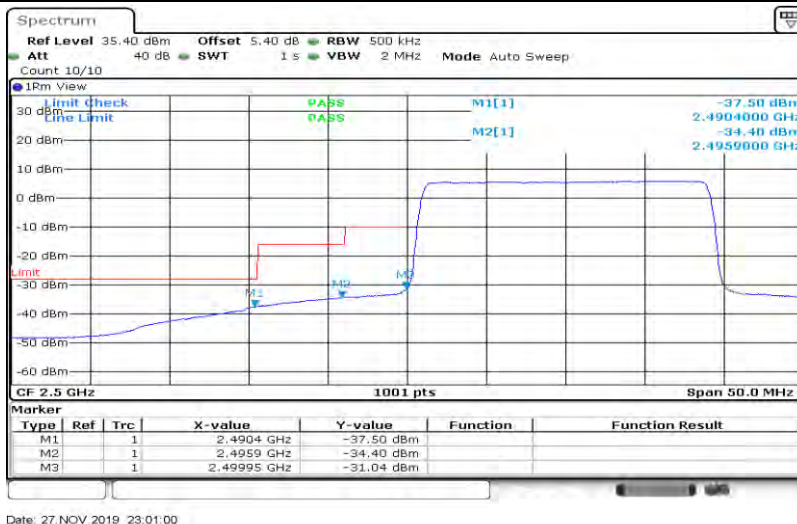


Band7-20MHz-16QAM-20850-1RB#0





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

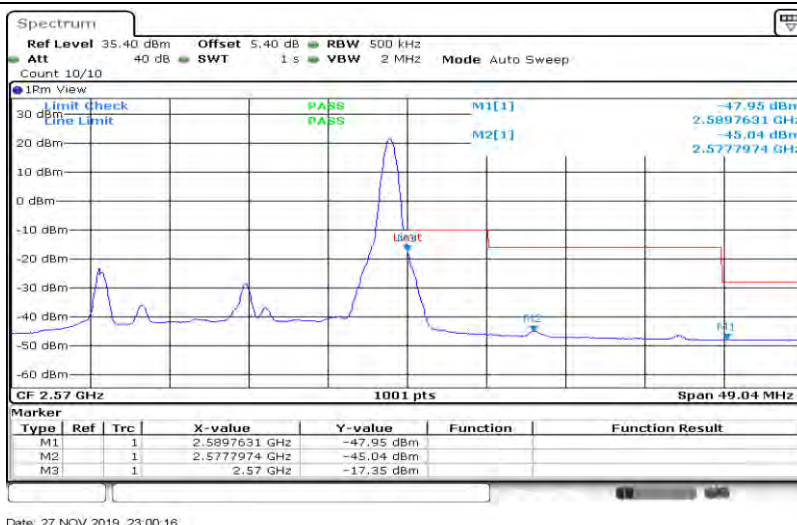


Band7-20MHz-16QAM-21350-1RB#99



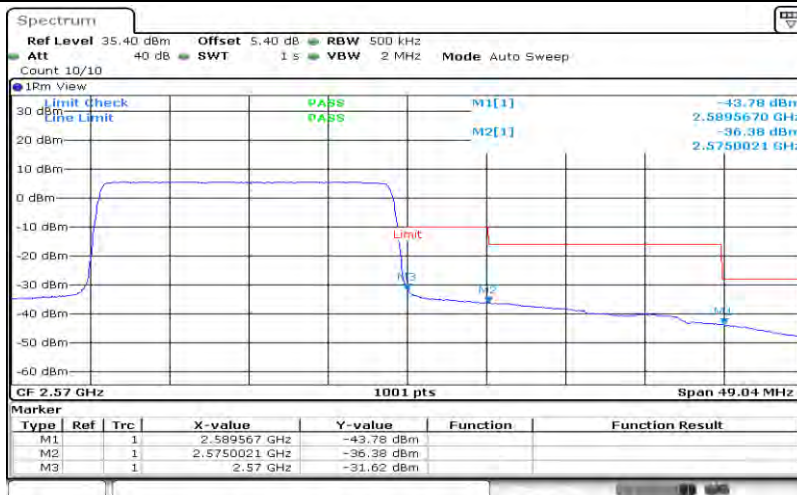
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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: 27.NOV.2019 23:00:16

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



Date: 27.NOV.2019 23:01:42



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.

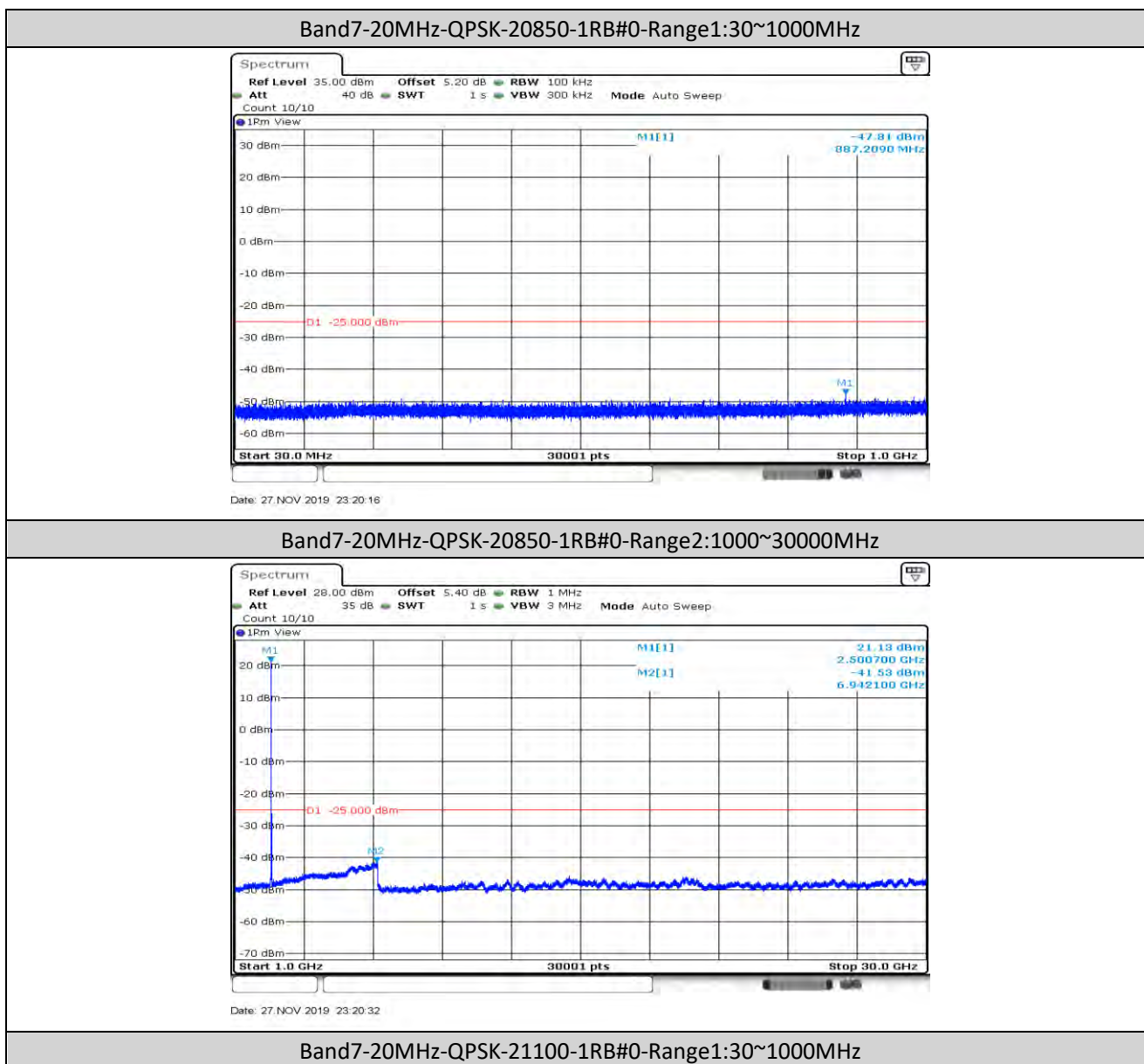
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn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

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.

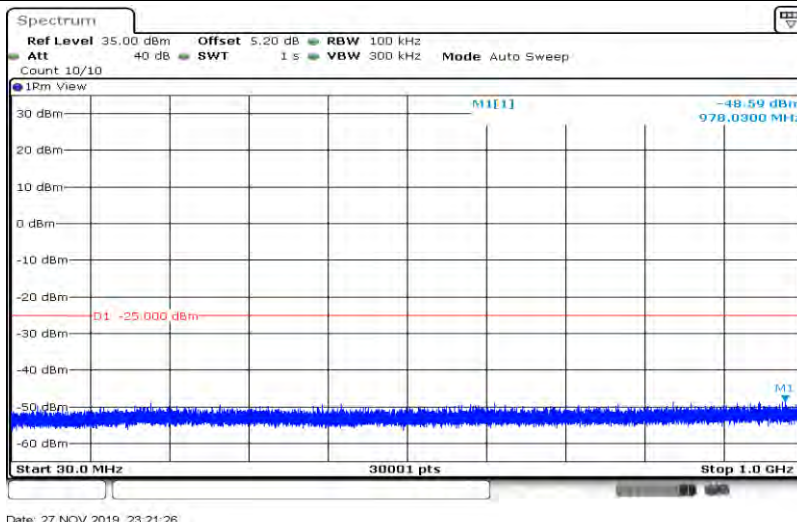
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

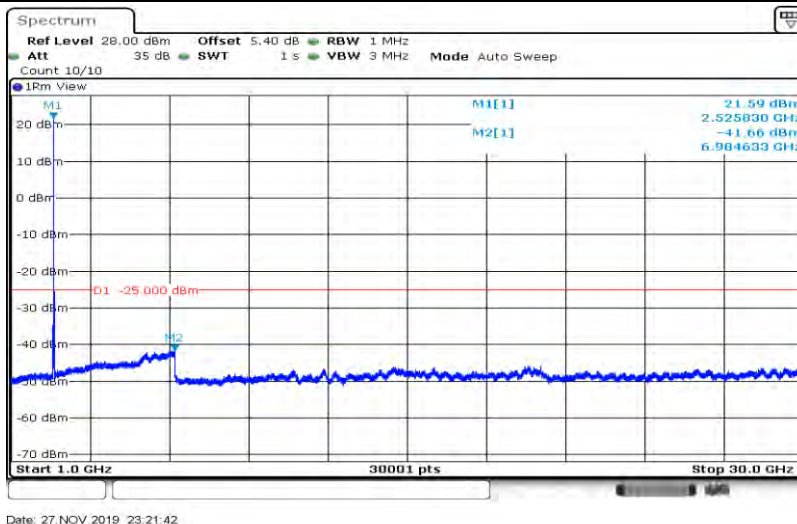


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

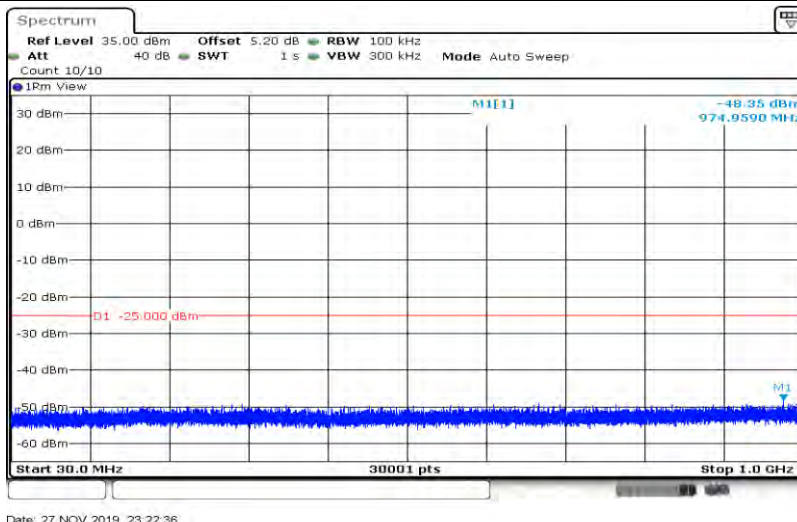


Band7-20MHz-QPSK-21100-1RB#0-Range2:1000~30000MHz

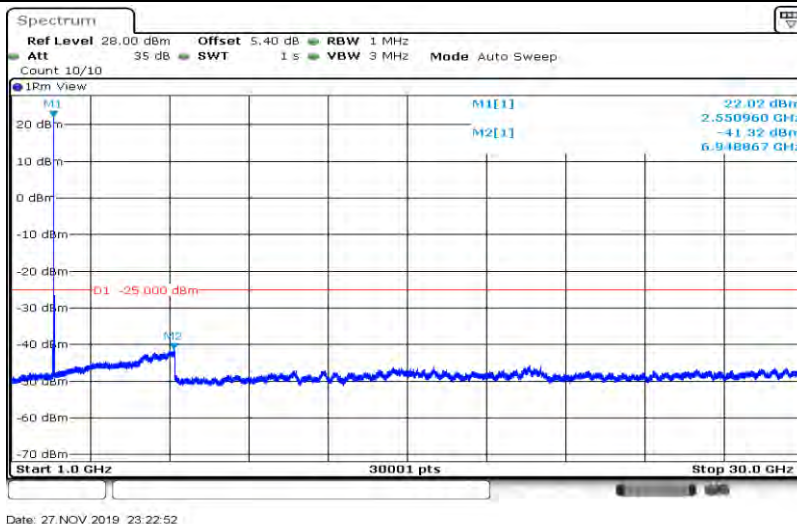


Band7-20MHz-QPSK-21350-1RB#0-Range1:30~1000MHz





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

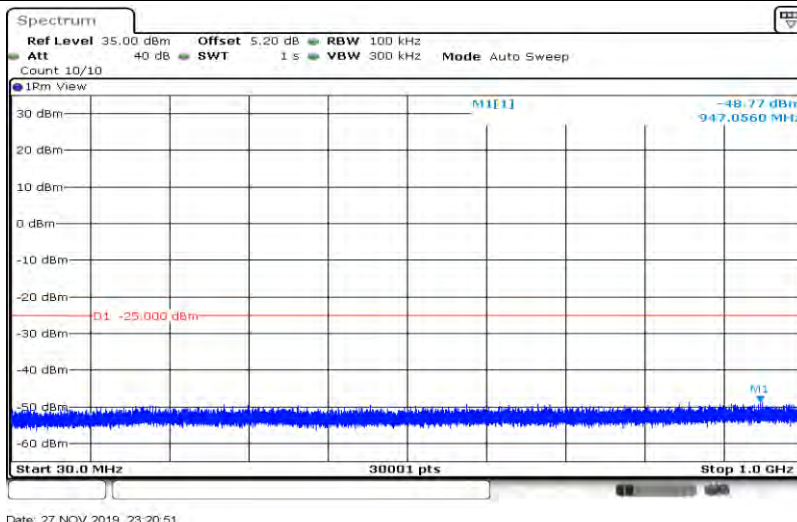


Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz

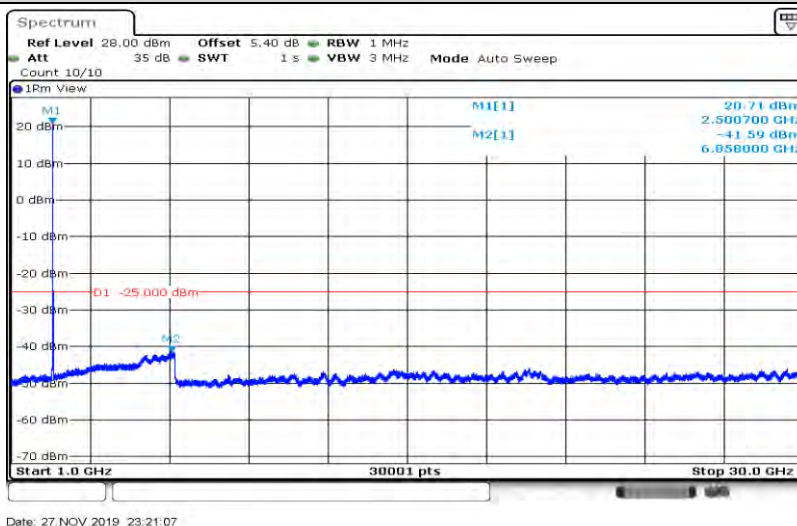


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

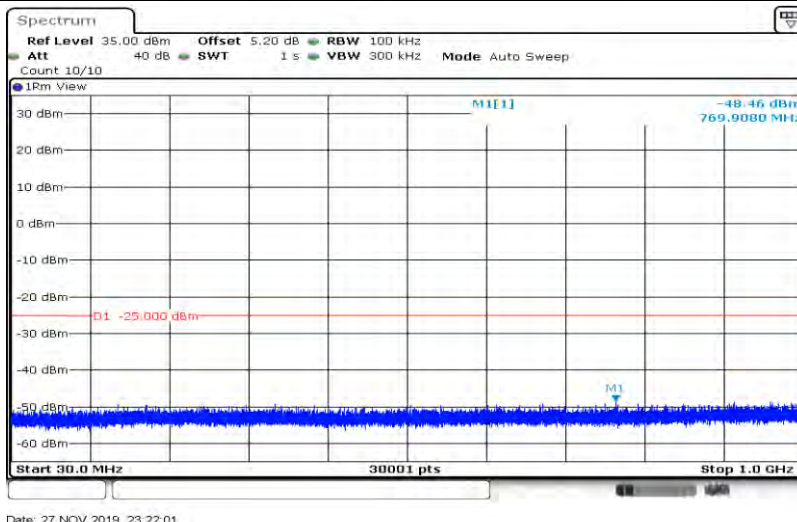


Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~30000MHz

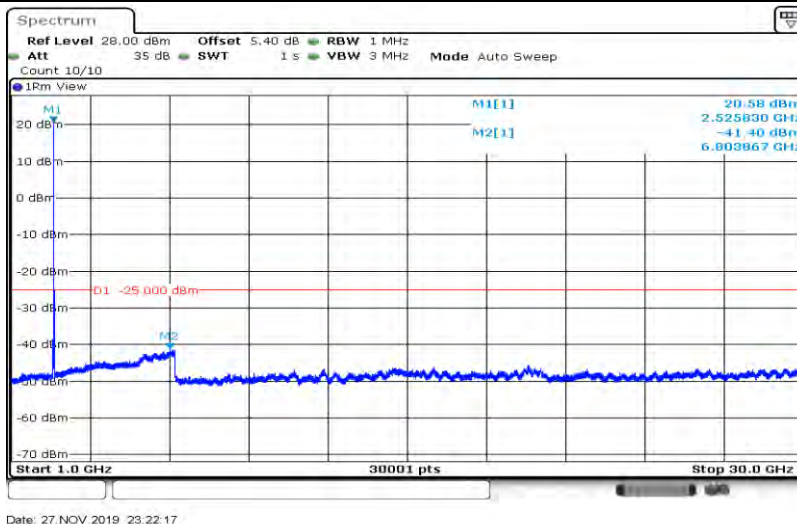


Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz



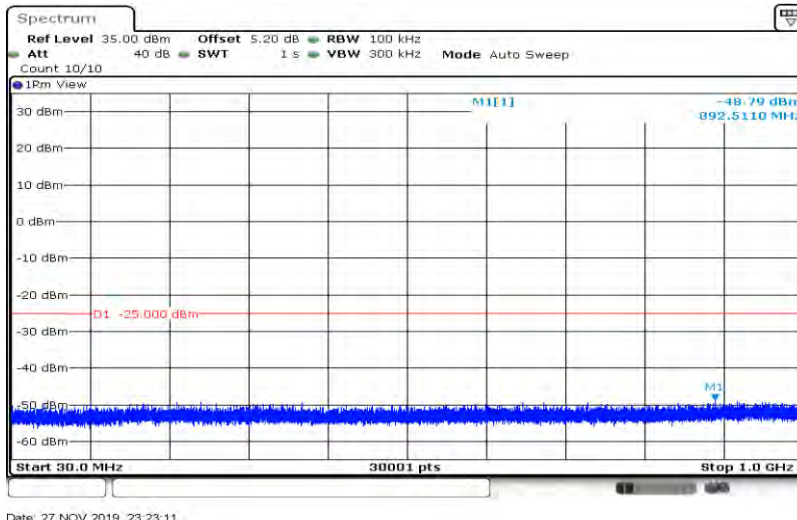


Band7-20MHz-16QAM-21100-1RB#0-Range2:1000~30000MHz

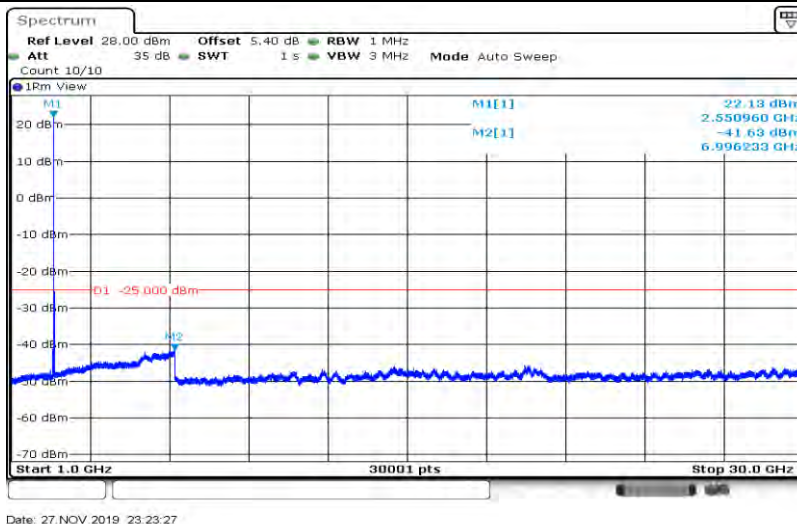


Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz





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





7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 7

7.1.1. Test Mode = LTE/TM1 (Main Ant)

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
112.2116	-64.78	-25.00	39.78	Vertical
752.2011	-62.21	-25.00	37.21	Vertical
1699.7399	-45.15	-25.00	20.15	Vertical
7321.3729	-55.15	-25.00	30.15	Vertical
14490.4596	-45.27	-25.00	20.27	Vertical
17992.1997	-36.78	-25.00	11.78	Vertical
42.0286	-64.48	-25.00	39.48	Horizontal
230.9941	-68.89	-25.00	43.89	Horizontal
2117.0234	-41.93	-25.00	16.93	Horizontal
7351.9741	-55.49	-25.00	30.49	Horizontal
16396.1358	-41.02	-25.00	16.02	Horizontal
17993.9998	-41.45	-25.00	16.45	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
108.8164	-66.18	-25.00	41.18	Vertical
864.7752	-60.90	-25.00	35.90	Vertical
1712.9426	-45.42	-25.00	20.42	Vertical
7344.7738	-55.47	-25.00	30.47	Vertical
14489.2596	-45.67	-25.00	20.67	Vertical
17995.7998	-38.04	-25.00	13.04	Vertical
45.0843	-64.65	-25.00	39.65	Horizontal
233.7587	-68.36	-25.00	43.36	Horizontal
1800.5601	-44.54	-25.00	19.54	Horizontal
7362.7745	-56.13	-25.00	31.13	Horizontal
16385.9354	-41.10	-25.00	16.10	Horizontal
17989.1996	-41.88	-25.00	16.88	Horizontal



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

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

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)	Polarization
109.7380	-66.44	-25.00	41.44	Vertical
660.7255	-65.25	-25.00	40.25	Vertical
1685.3371	-45.46	-25.00	20.46	Vertical
7386.7755	-55.93	-25.00	30.93	Vertical
14455.6582	-46.27	-25.00	21.27	Vertical
17908.7964	-39.37	-25.00	14.37	Vertical
42.4166	-66.00	-25.00	41.00	Horizontal
892.0821	-62.12	-25.00	37.12	Horizontal
2977.5955	-39.65	-25.00	14.65	Horizontal
7425.1770	-56.18	-25.00	31.18	Horizontal
16397.9359	-42.08	-25.00	17.08	Horizontal
17983.7994	-43.31	-25.00	18.31	Horizontal

7.1. Test Mode =LTE/TM1 (Second Ant)

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
111.1931	-65.95	-25.00	40.95	Vertical
603.5412	-65.01	-25.00	40.01	Vertical
1753.7508	-43.77	-25.00	18.77	Vertical
7342.9737	-55.45	-25.00	30.45	Vertical
14729.8692	-46.00	-25.00	21.00	Vertical
17996.9999	-37.53	-25.00	12.53	Vertical
42.2711	-65.65	-25.00	40.65	Horizontal
249.4250	-69.50	-25.00	44.50	Horizontal
2940.7882	-39.89	-25.00	14.89	Horizontal
7363.9746	-56.12	-25.00	31.12	Horizontal
16389.5356	-42.48	-25.00	17.48	Horizontal
17995.1998	-43.27	-25.00	18.27	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
111.7751	-65.32	-25.00	40.32	Vertical
786.7348	-62.35	-25.00	37.35	Vertical
2941.5883	-39.28	-25.00	14.28	Vertical
7393.9758	-55.12	-25.00	30.12	Vertical



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

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

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



14688.4675	-45.18	-25.00	20.18	Vertical
17992.7997	-36.73	-25.00	11.73	Vertical
43.3867	-64.67	-25.00	39.67	Horizontal
232.3036	-69.67	-25.00	44.67	Horizontal
2700.3401	-37.31	-25.00	12.31	Horizontal
9305.0522	-51.06	-25.00	26.06	Horizontal
16398.5359	-40.93	-25.00	15.93	Horizontal
17999.4000	-41.71	-25.00	16.71	Horizontal

7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
114.1517	-65.72	-25.00	40.72	Vertical
817.8249	-62.73	-25.00	37.73	Vertical
2243.0486	-40.63	-25.00	15.63	Vertical
7350.1740	-54.41	-25.00	29.41	Vertical
14716.6687	-44.76	-25.00	19.76	Vertical
17998.8000	-35.91	-25.00	10.91	Vertical
40.0400	-64.82	-25.00	39.82	Horizontal
228.3264	-69.71	-25.00	44.71	Horizontal
1799.3599	-44.26	-25.00	19.26	Horizontal
7448.5779	-55.15	-25.00	30.15	Horizontal
16396.1358	-39.78	-25.00	14.78	Horizontal
17997.5999	-40.44	-25.00	15.44	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.





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	20.70	0.008247	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	20.80	0.008287	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	-12.00	-0.004781	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	2.70	0.001065	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-20.30	-0.008008	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	22.80	0.008994	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	-20.20	-0.007891	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	1.50	0.000586	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	14.10	0.005508	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-14.00	-0.005578	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	6.80	0.002709	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	-16.40	-0.006534	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	-26.00	-0.010256	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-16.00	-0.006312	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-27.60	-0.010888	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-30.30	-0.011836	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-22.10	-0.008633	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-20.00	-0.007813	±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	-7.60	-0.003028	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	13.60	0.005418	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	2.30	0.000916	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	-8.70	-0.003466	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	-19.30	-0.007689	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	7.30	0.002908	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	-10.60	-0.004223	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-13.10	-0.005219	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	21.60	0.008521	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	13.40	0.005286	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	18.60	0.007337	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	20.20	0.007968	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-10.20	-0.004024	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-16.50	-0.006509	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-11.90	-0.004694	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-10.10	-0.003984	±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	21350	100RB#0	NV	-30	8.90	0.003477	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-3.90	-0.001523	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-18.50	-0.007227	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-19.30	-0.007539	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	-3.90	-0.001523	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-18.70	-0.007305	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	6.70	0.002669	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	13.40	0.005234	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-15.20	-0.006056	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	6.70	0.002669	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	-23.20	-0.009243	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	-10.60	-0.004223	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	12.40	0.004892	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	-4.60	-0.001833	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	10.30	0.004104	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	-9.40	-0.003745	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	4.80	0.001893	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	8.10	0.003195	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-19.30	-0.007613	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-11.40	-0.004497	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	12.40	0.004892	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	18.30	0.007219	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	5.40	0.002130	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	-6.60	-0.002604	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	4.70	0.001836	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-12.20	-0.004766	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	0.70	0.000273	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-18.50	-0.007227	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	1.80	0.000703	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	9.60	0.003750	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	3.90	0.001523	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-19.70	-0.007695	±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