



Appendix B

E-UTRA Band 5



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 MODE = LTE /TM1 10MHZ.....	12
3.1.1.	TEST CHANNEL = MCH.....	12
3.2.	TEST MODE = LTE /TM2 10MHZ.....	13
3.2.1.	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 MODE =LTE/TM1 (MAIN ANT).....	49
7.1.1.	TEST CHANNEL = LCH.....	49
7.1.2.	TEST CHANNEL = MCH.....	49
7.1.3.	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
8.	FREQUENCY STABILITY.....	52
8.1.	FREQUENCY VS VOLTAGE.....	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
 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



8.2.	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)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	23.15	21.50	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.28	21.63	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.14	21.49	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.26	21.61	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.31	21.66	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.27	21.62	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.28	20.63	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.16	21.51	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.17	21.52	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.30	21.65	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.27	21.62	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.34	21.69	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.27	21.62	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.27	20.62	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.12	21.47	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.11	21.46	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.26	21.61	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.24	21.59	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.29	21.64	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.23	21.58	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.24	20.59	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.27	20.62	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.46	20.81	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	22.41	20.76	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.40	20.75	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.23	20.58	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.32	20.67	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	21.38	19.73	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	22.39	20.74	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	22.54	20.89	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	22.37	20.72	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.36	20.71	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.42	20.77	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.37	20.72	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.33	19.68	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.51	20.86	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	22.30	20.65	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	22.38	20.73	38.45	PASS



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



Band5	1.4MHz	16QAM	20643	3RB#0	22.36	20.71	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.39	20.74	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.26	20.61	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.30	19.65	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.19	21.54	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.21	21.56	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.21	21.56	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.23	20.58	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.27	20.62	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.23	20.58	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.24	20.59	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.22	21.57	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.19	21.54	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.23	21.58	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.24	20.59	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.25	20.60	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.28	20.63	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.24	20.59	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.17	21.52	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.18	21.53	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.16	21.51	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.22	20.57	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.20	20.55	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.23	20.58	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.21	20.56	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.47	20.82	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.43	20.78	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.34	20.69	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	21.33	19.68	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	21.34	19.69	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.32	19.67	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.23	19.58	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.50	20.85	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.51	20.86	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	22.40	20.75	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.28	19.63	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.32	19.67	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	21.33	19.68	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.21	19.56	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.46	20.81	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.41	20.76	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.40	20.75	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.24	19.59	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#4	21.29	19.64	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.25	19.60	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.22	19.57	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.10	21.45	38.45	PASS



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



Band5	5MHz	QPSK	20425	1RB#12	23.39	21.74	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.12	21.47	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.22	20.57	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.32	20.67	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.31	20.66	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.28	20.63	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.12	21.47	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.08	21.43	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.40	21.75	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.27	20.62	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.31	20.66	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.23	20.58	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.25	20.60	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.05	21.40	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.07	21.42	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.38	21.73	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.23	20.58	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.29	20.64	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.16	20.51	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.22	20.57	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.37	20.72	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.53	20.88	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.40	20.75	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	21.31	19.66	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.27	19.62	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	21.30	19.65	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.26	19.61	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	22.39	20.74	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.55	20.90	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	22.29	20.64	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	23.22	21.57	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	21.29	19.64	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	21.31	19.66	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.25	19.60	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.60	20.95	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.27	20.62	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.38	20.73	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.24	19.59	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.29	19.64	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.17	19.52	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.19	19.54	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.23	21.58	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.34	21.69	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.21	21.56	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.32	20.67	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.35	20.70	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.33	20.68	38.45	PASS



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



Band5	10MHz	QPSK	20450	50RB#0	22.36	20.71	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.24	21.59	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.18	21.53	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.36	21.71	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.33	20.68	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.34	20.69	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.31	20.66	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.34	20.69	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.28	21.63	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.21	21.56	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.15	21.50	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.32	20.67	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.26	20.61	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.31	20.66	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.30	20.65	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	22.41	20.76	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.42	20.77	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.50	20.85	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.32	19.67	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.33	19.68	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.32	19.67	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.35	19.70	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	22.45	20.80	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.52	20.87	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.64	20.99	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.32	19.67	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.31	19.66	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.32	19.67	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.34	19.69	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.44	20.79	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.40	20.75	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	22.38	20.73	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.32	19.67	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.28	19.63	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	21.26	19.61	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.30	19.65	38.45	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

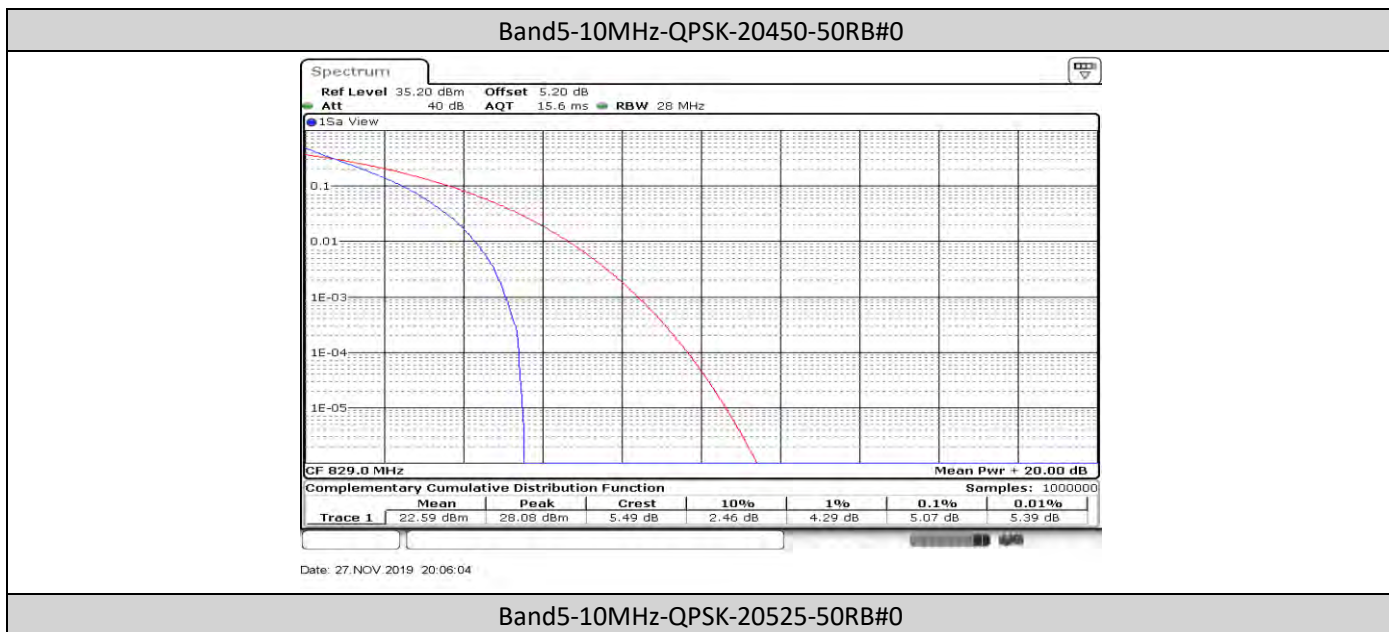


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	5.07	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.33	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.25	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.88	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.20	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.97	13	PASS

2.2. Test Plots





Band5-10MHz-QPSK-20600-50RB#0



Band5-10MHz-16QAM-20450-50RB#0





Band5-10MHz-16QAM-20525-50RB#0



Band5-10MHz-16QAM-20600-50RB#0



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

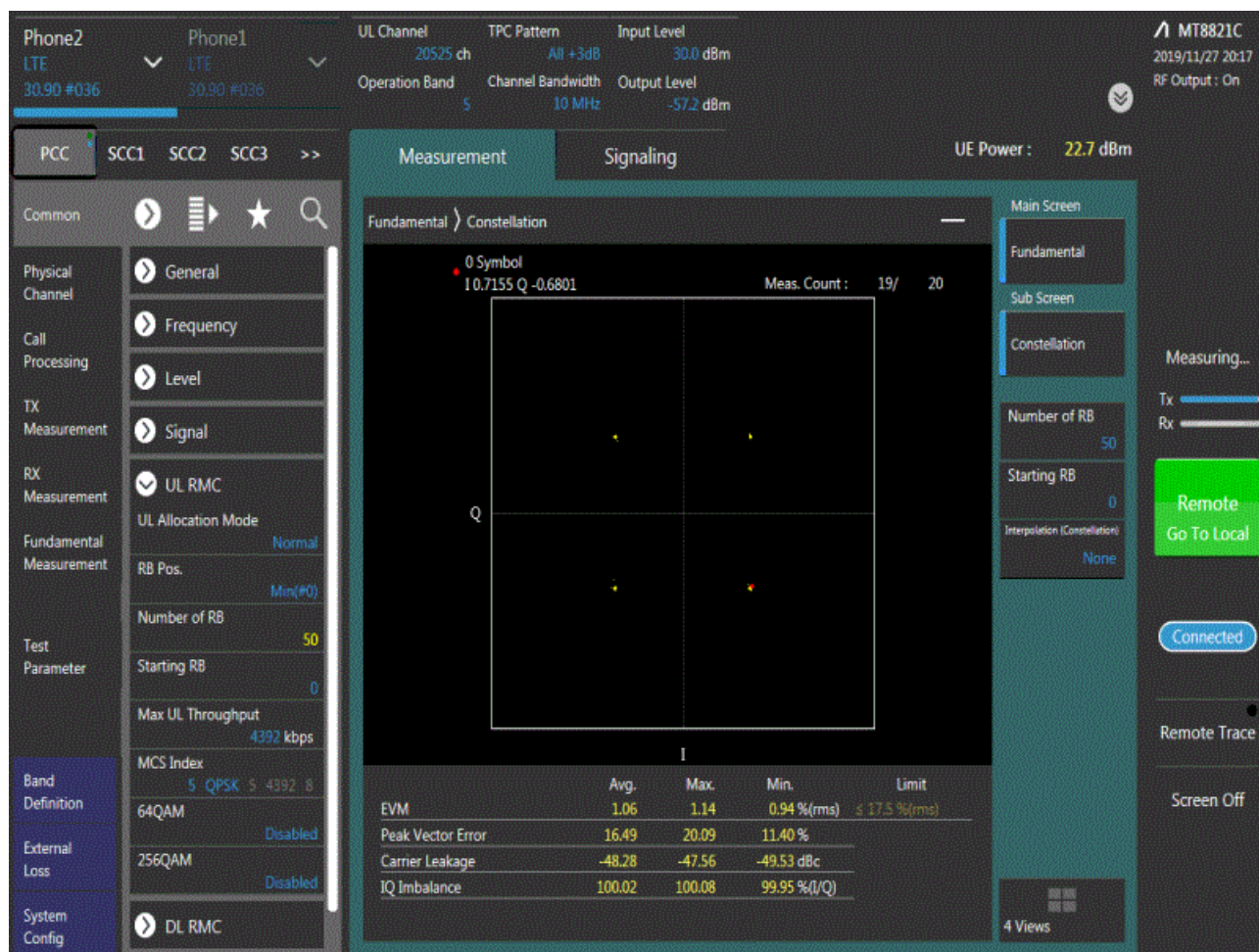
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn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



3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 10MHz

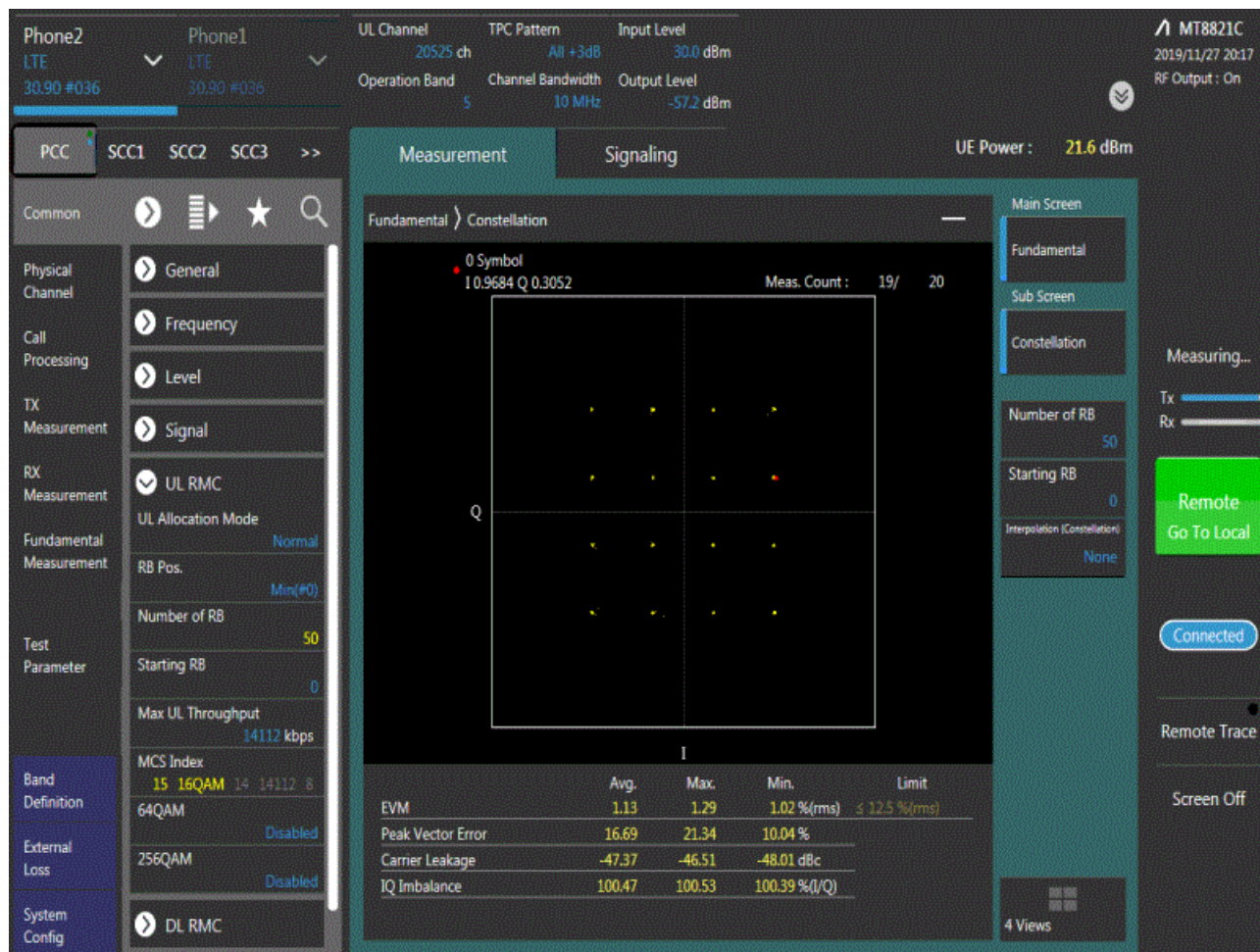
3.1.1. Test Channel = MCH





3.2. Test Mode = LTE /TM2 10MHz

3.2.1. 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
Band5	1.4MHz	QPSK	20407	6RB#0	1.094	1.290	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.088	1.281	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.091	1.287	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.091	1.284	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.091	1.290	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.091	1.281	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.685	2.898	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.685	2.892	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.685	2.886	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.673	2.868	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.685	2.880	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.667	2.880	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.486	5.030	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.476	4.840	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.486	4.950	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.505	4.970	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.496	4.890	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.910	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.991	9.640	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.971	9.660	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.971	9.560	PASS
Band5	10MHz	16QAM	20450	50RB#0	9.011	9.640	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.991	9.560	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.951	9.560	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

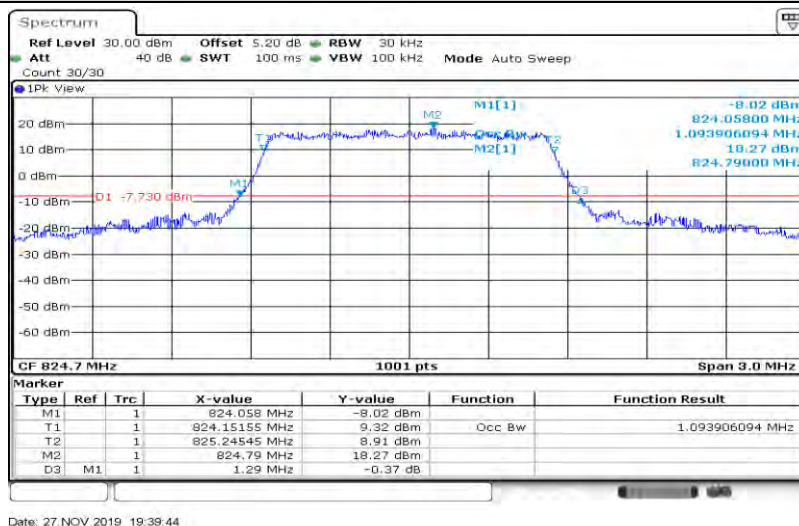
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS-CSTC Laboratory)

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

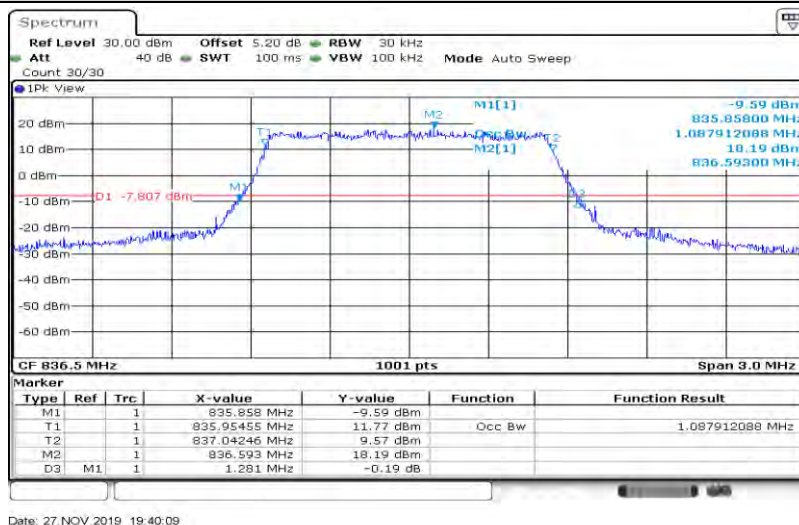


4.2. Test Plots

Band5-1.4MHz-QPSK-20407-6RB#0-1.094

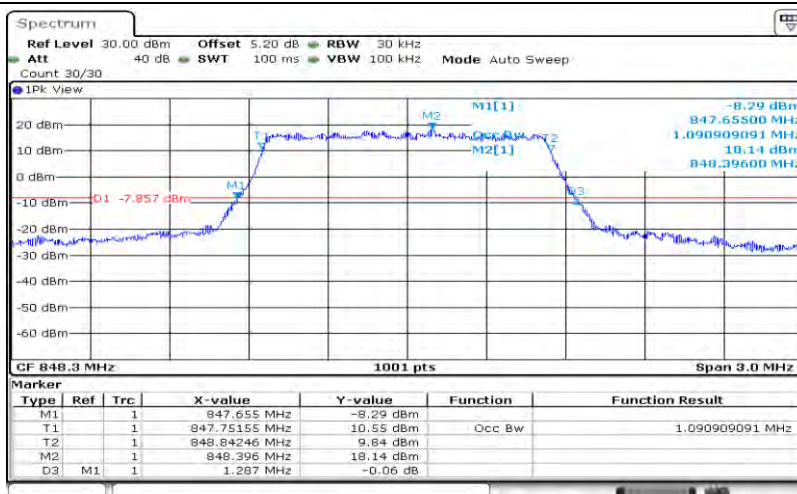


Band5-1.4MHz-QPSK-20525-6RB#0-1.088



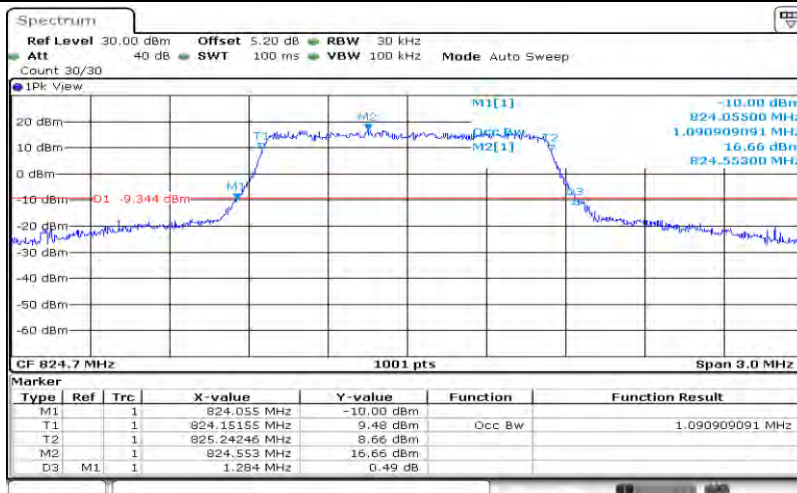
Band5-1.4MHz-QPSK-20643-6RB#0-1.091





Date: 27.NOV.2019 19:40:35

Band5-1.4MHz-16QAM-20407-6RB#0-1.091



Date: 27.NOV.2019 19:39:56

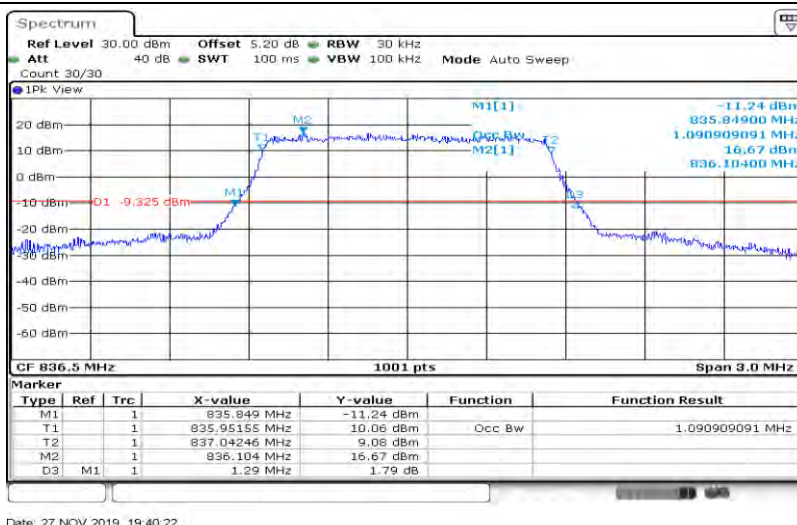
Band5-1.4MHz-16QAM-20525-6RB#0-1.091



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



Band5-1.4MHz-16QAM-20643-6RB#0-1.091

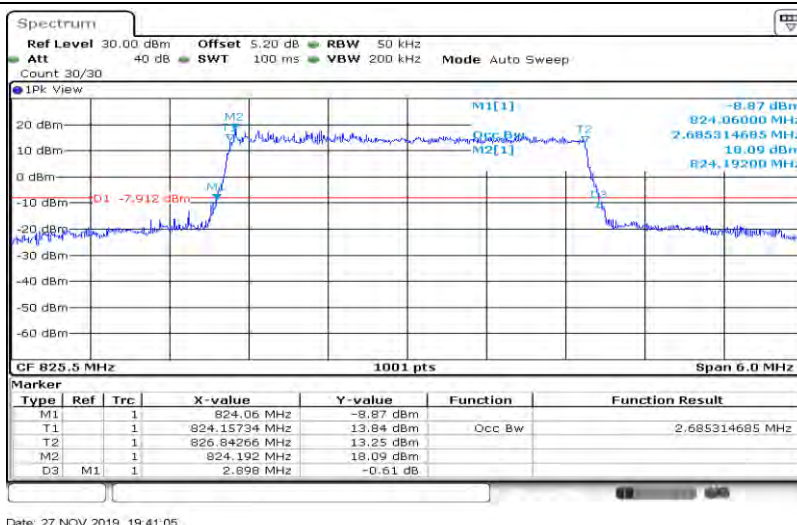


Band5-3MHz-QPSK-20415-15RB#0-2.685



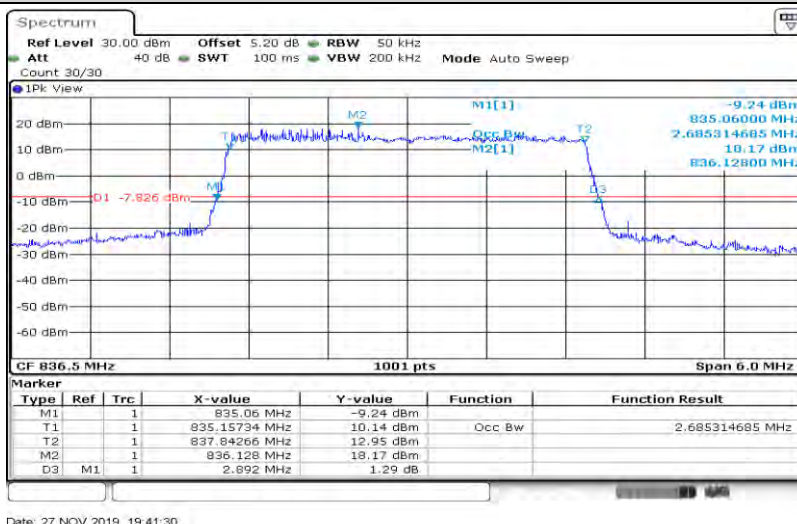
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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 19:41:05

Band5-3MHz-QPSK-20525-15RB#0-2.685



Date: 27.NOV.2019 19:41:30

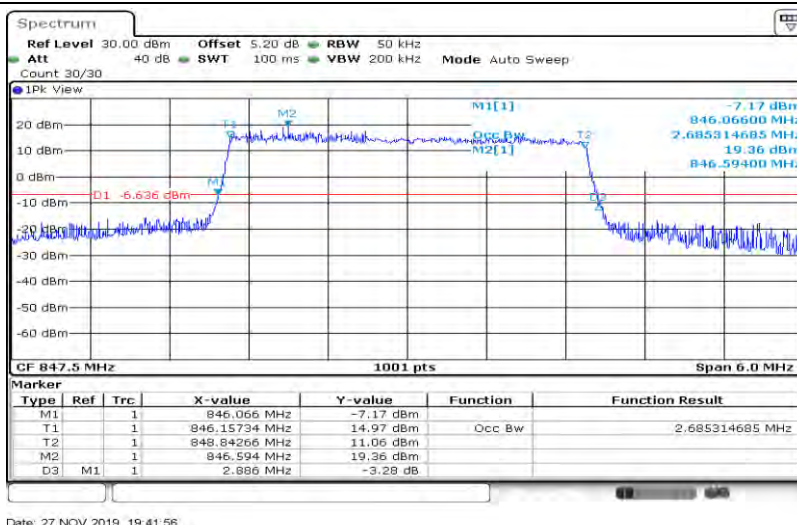
Band5-3MHz-QPSK-20635-15RB#0-2.685



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.

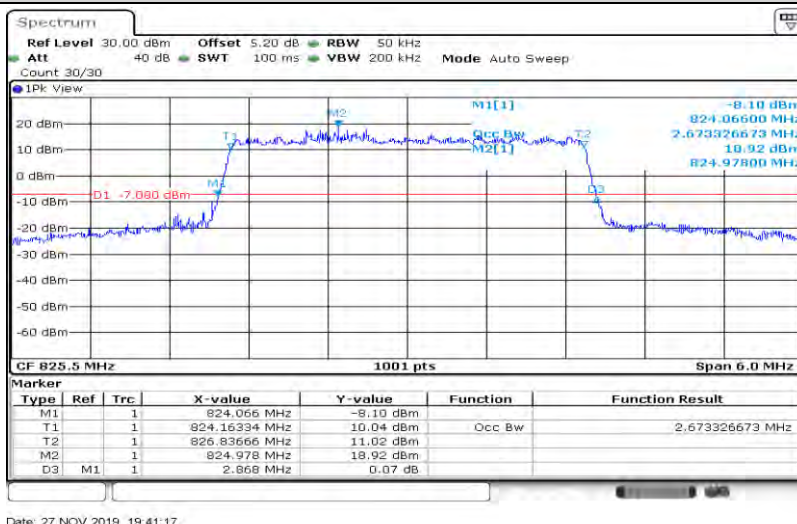
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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



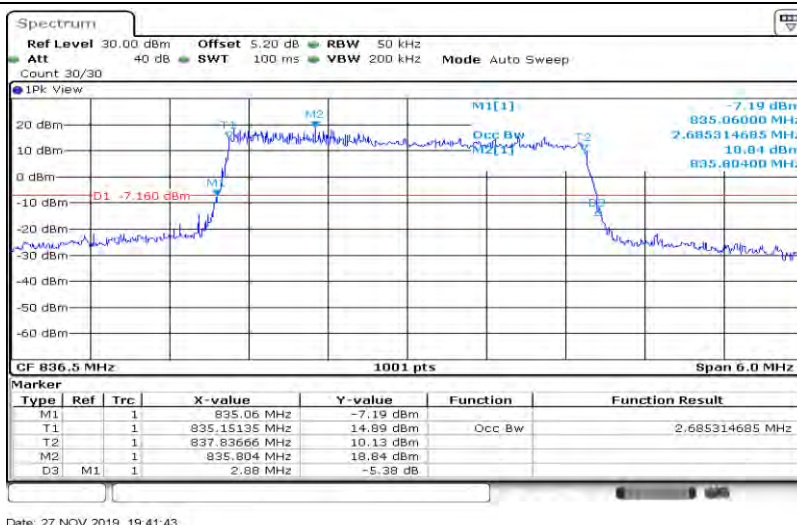
Date: 27.NOV.2019 19:41:56

Band5-3MHz-16QAM-20415-15RB#0-2.673

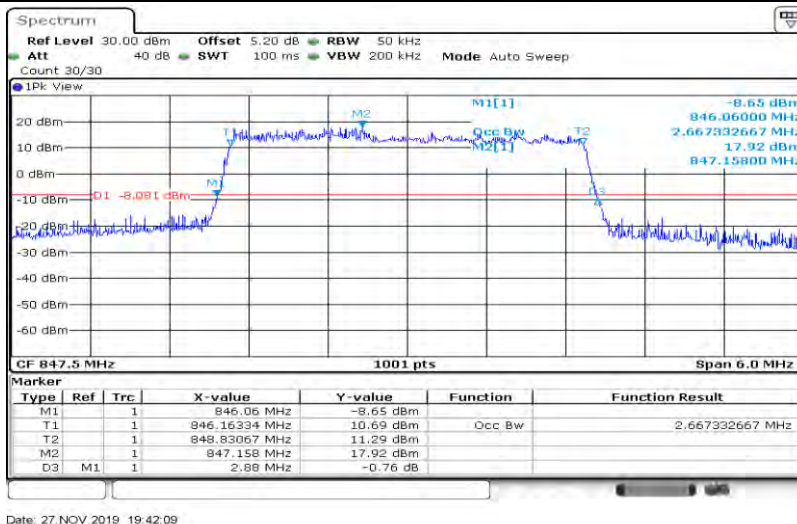


Date: 27.NOV.2019 19:41:17

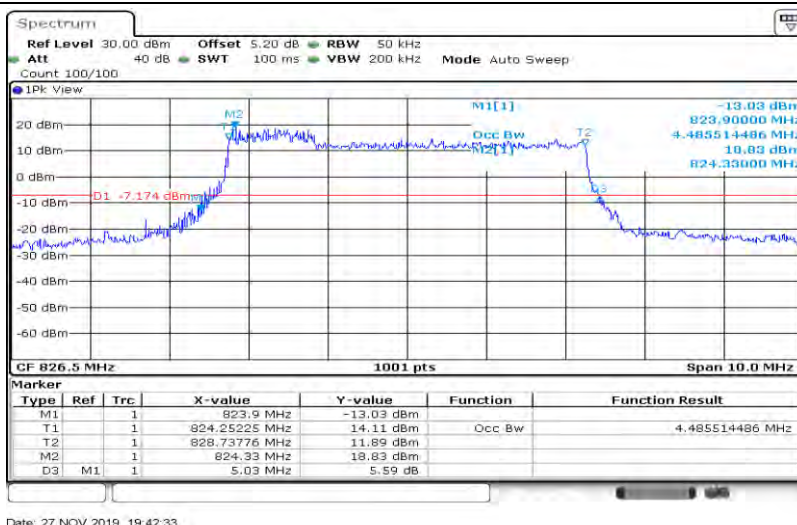
Band5-3MHz-16QAM-20525-15RB#0-2.685



Band5-3MHz-16QAM-20635-15RB#0-2.667



Band5-5MHz-QPSK-20425-25RB#0-4.486



Band5-5MHz-QPSK-20525-25RB#0-4.476



Band5-5MHz-QPSK-20625-25RB#0-4.486

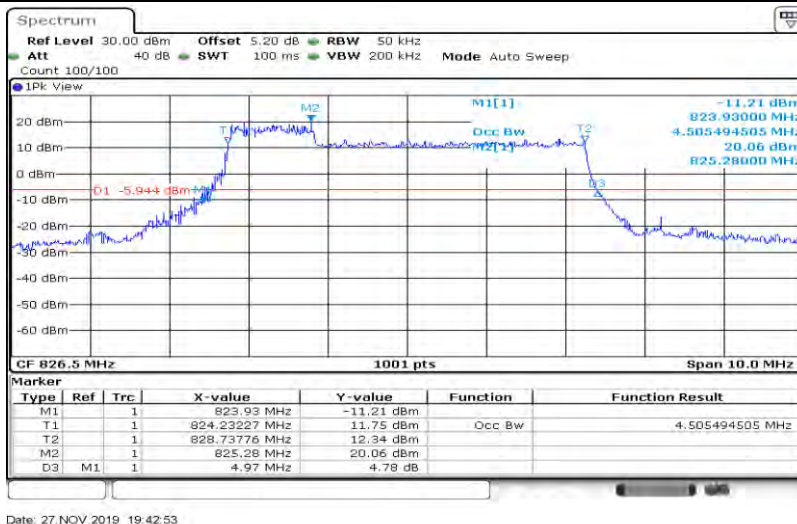


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

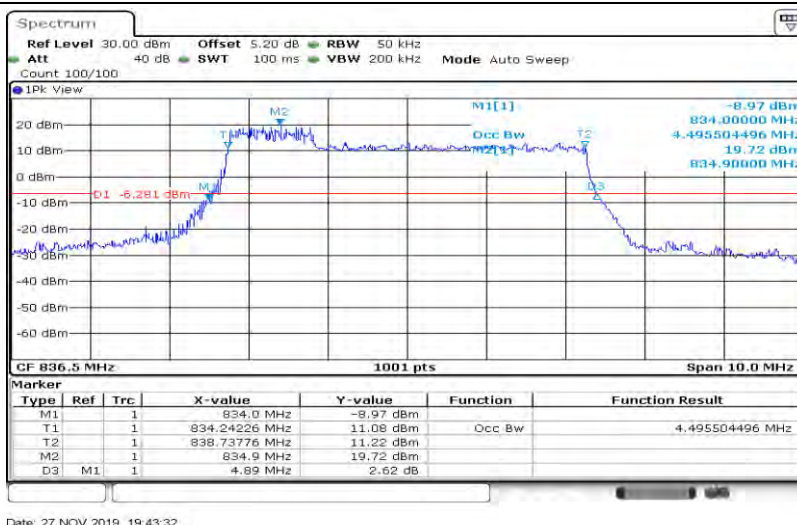


Band5-5MHz-16QAM-20425-25RB#0-4.505

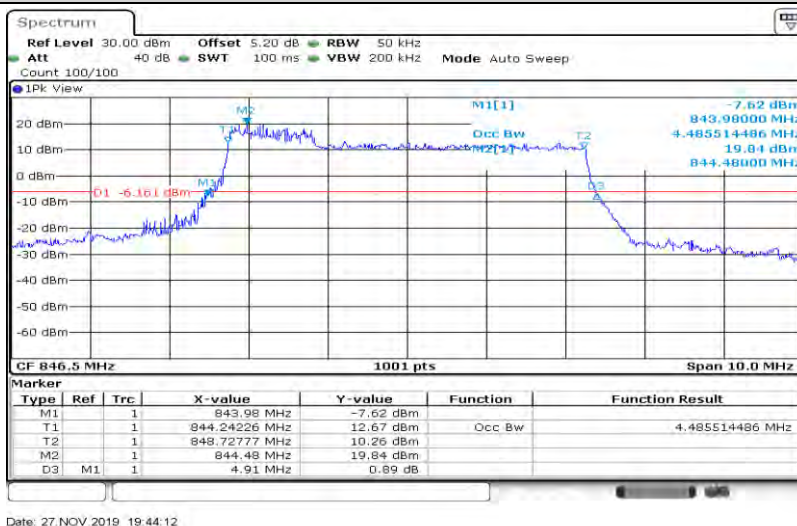


Band5-5MHz-16QAM-20525-25RB#0-4.496





Band5-5MHz-16QAM-20625-25RB#0-4.486



Band5-10MHz-QPSK-20450-50RB#0-8.991



Band5-10MHz-QPSK-20525-50RB#0-8.971

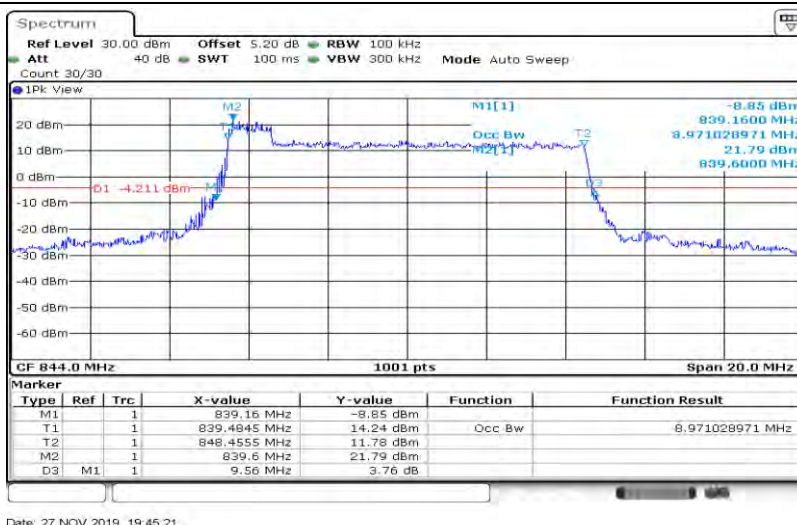


Band5-10MHz-QPSK-20600-50RB#0-8.971

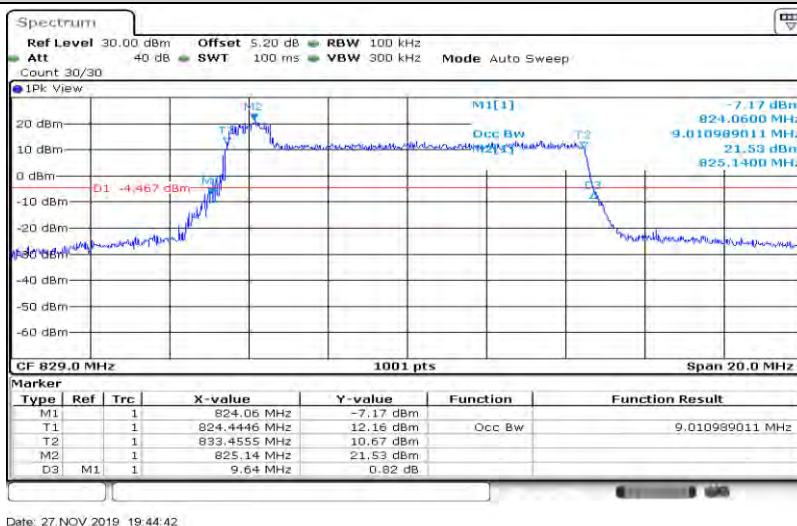


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band5-10MHz-16QAM-20450-50RB#0-9.011



Band5-10MHz-16QAM-20525-50RB#0-8.991



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



Band5-10MHz-16QAM-20600-50RB#0-8.951





5. Band Edge Compliance

5.1. Test Plots

Band5-1.4MHz-QPSK-20407-1RB#0



Date: 27.NOV.2019 19:45:58

Band5-1.4MHz-QPSK-20407-6RB#0



Date: 27.NOV.2019 19:46:37

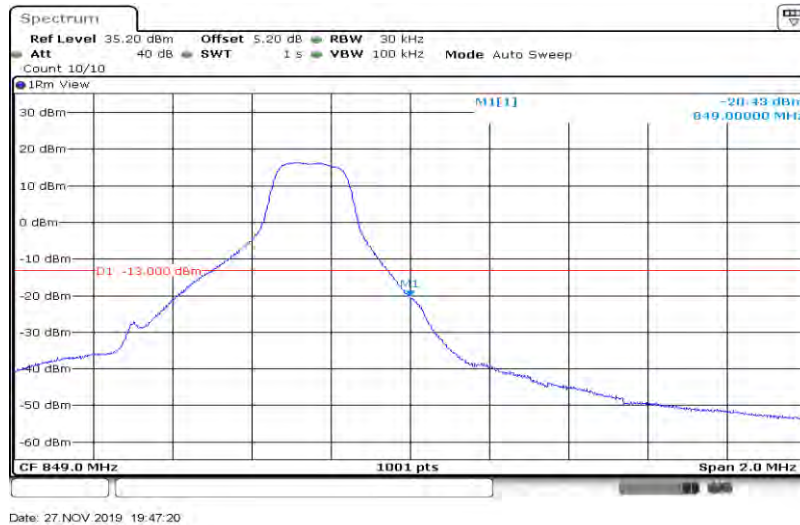
Band5-1.4MHz-QPSK-20643-1RB#5



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-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



Band5-1.4MHz-QPSK-20643-6RB#0



Band5-1.4MHz-16QAM-20407-1RB#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



Band5-1.4MHz-16QAM-20407-6RB#0



Band5-1.4MHz-16QAM-20643-1RB#5



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 19:47:40

Band5-1.4MHz-16QAM-20643-6RB#0



Date: 27.NOV.2019 19:48:19

Band5-3MHz-QPSK-20415-1RB#0





Band5-3MHz-QPSK-20415-15RB#0



Band5-3MHz-QPSK-20635-1RB#14



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



Band5-3MHz-QPSK-20635-15RB#0



Band5-3MHz-16QAM-20415-1RB#0





Band5-3MHz-16QAM-20415-15RB#0



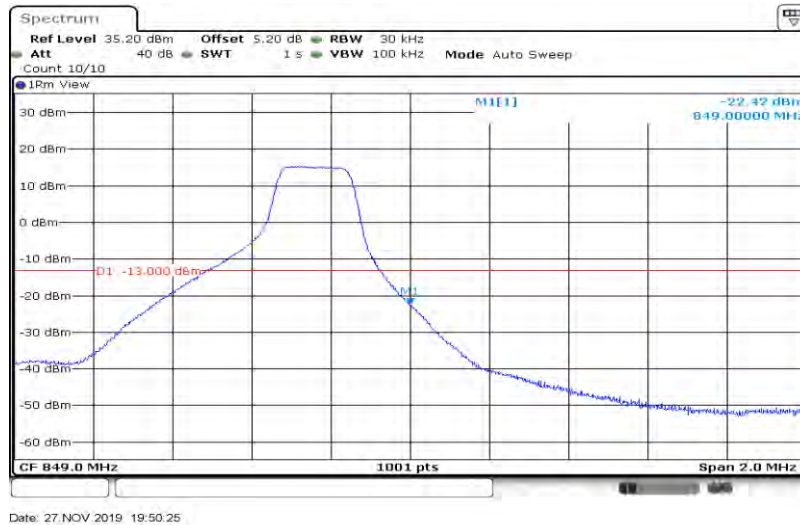
Band5-3MHz-16QAM-20635-1RB#14



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



Band5-3MHz-16QAM-20635-15RB#0



Band5-5MHz-QPSK-20425-1RB#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



Band5-5MHz-QPSK-20425-25RB#0



Band5-5MHz-QPSK-20625-1RB#24





Date: 27.NOV.2019 19:52:50

Band5-5MHz-QPSK-20625-25RB#0



Date: 27.NOV.2019 19:53:29

Band5-5MHz-16QAM-20425-1RB#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



Band5-5MHz-16QAM-20425-25RB#0



Band5-5MHz-16QAM-20625-1RB#24





Date: 27.NOV.2019 19:53:09

Band5-5MHz-16QAM-20625-25RB#0



Date: 27.NOV.2019 19:53:48

Band5-10MHz-QPSK-20450-1RB#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



Band5-10MHz-QPSK-20450-50RB#0



Band5-10MHz-QPSK-20600-1RB#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



Date: 27.NOV.2019 19:56:34

Band5-10MHz-QPSK-20600-50RB#0



Date: 27.NOV.2019 19:56:13

Band5-10MHz-16QAM-20450-1RB#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



Band5-10MHz-16QAM-20450-50RB#0



Band5-10MHz-16QAM-20600-1RB#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



Date: 27 NOV 2019 19:55:54

Band5-10MHz-16QAM-20600-50RB#0



Date: 27 NOV 2019 19:56:33



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.

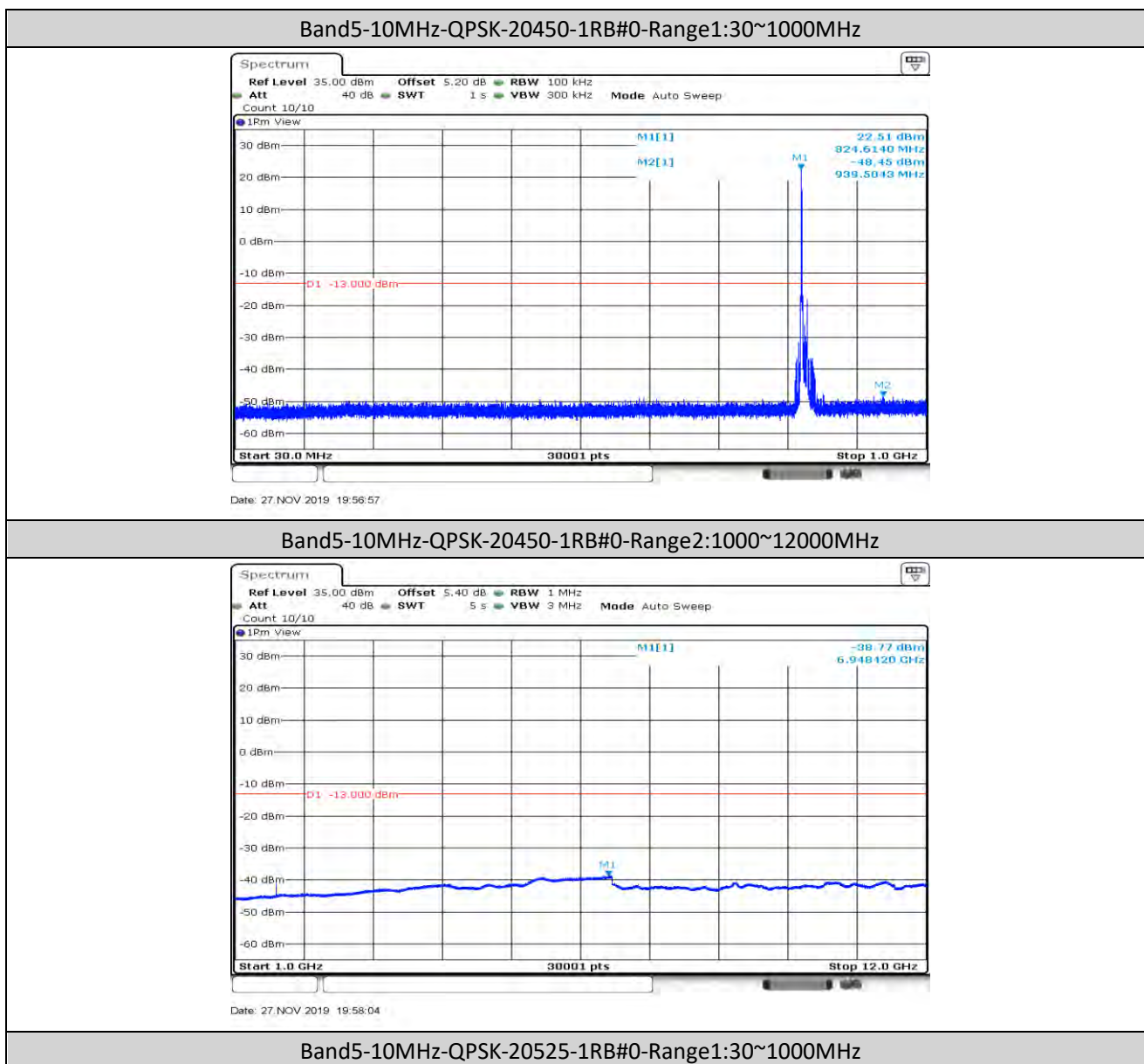
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn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

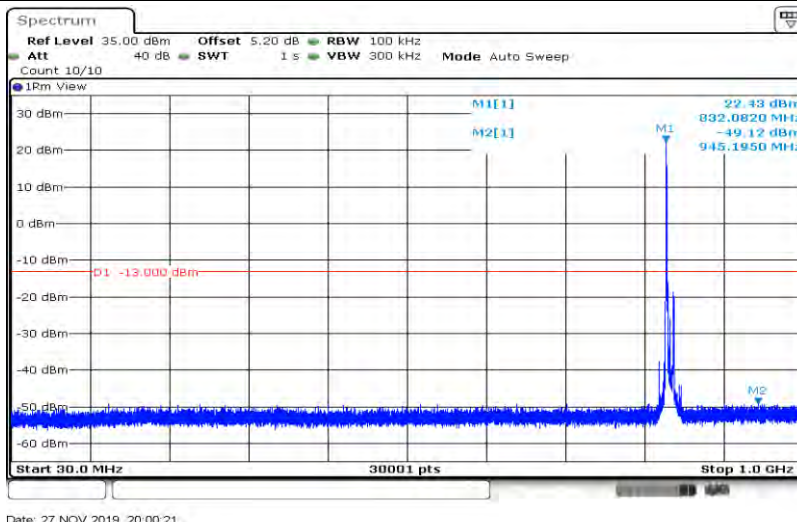
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

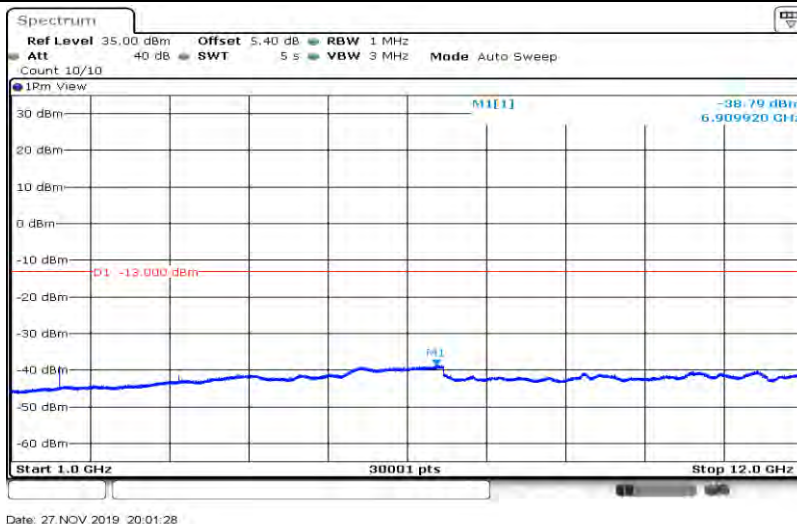


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band5-10MHz-QPSK-20525-1RB#0-Range2:1000~12000MHz

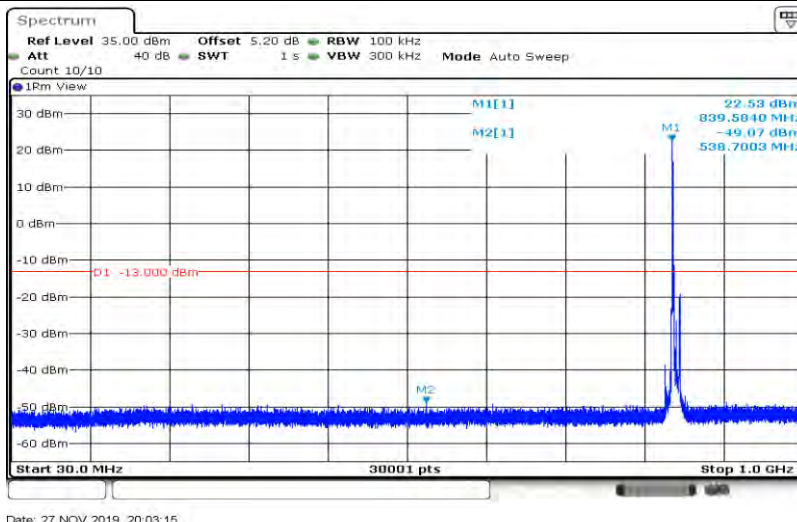


Band5-10MHz-QPSK-20600-1RB#0-Range1:30~1000MHz

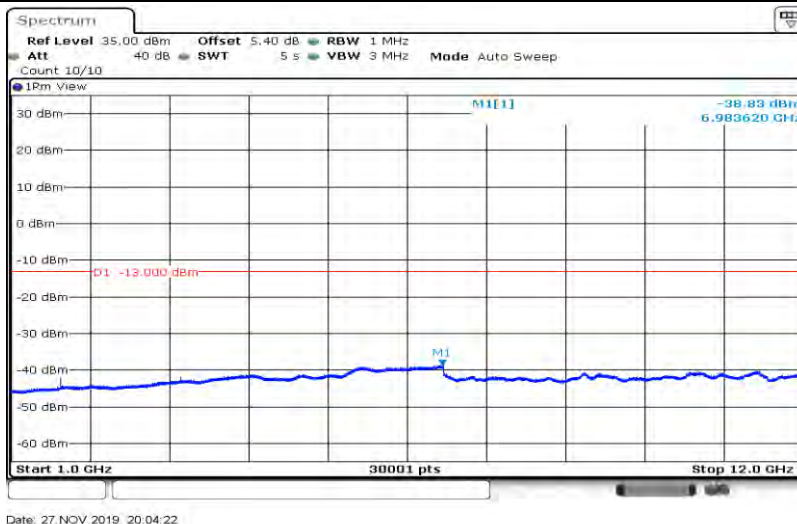


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~12000MHz

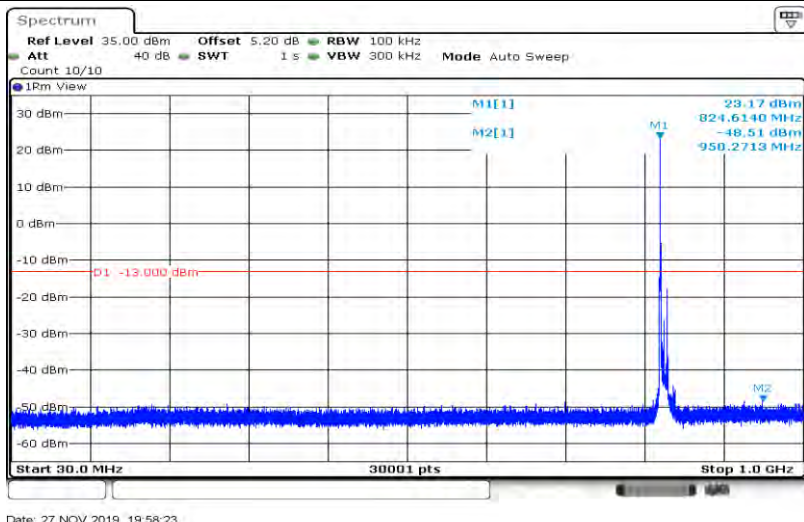


Band5-10MHz-16QAM-20450-1RB#0-Range1:30~1000MHz

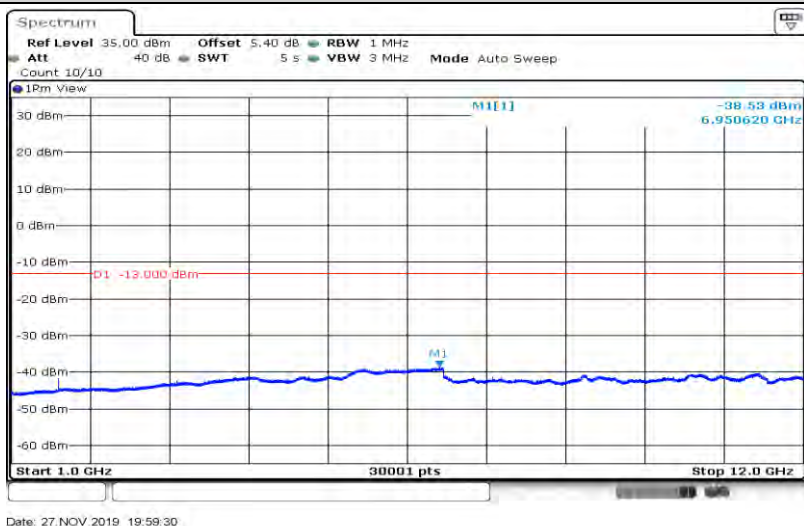


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band5-10MHz-16QAM-20450-1RB#0-Range2:1000~12000MHz

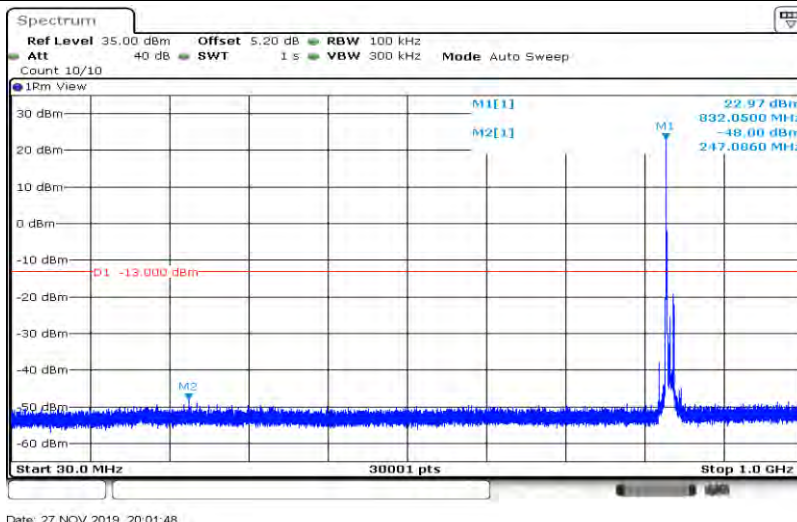


Band5-10MHz-16QAM-20525-1RB#0-Range1:30~1000MHz

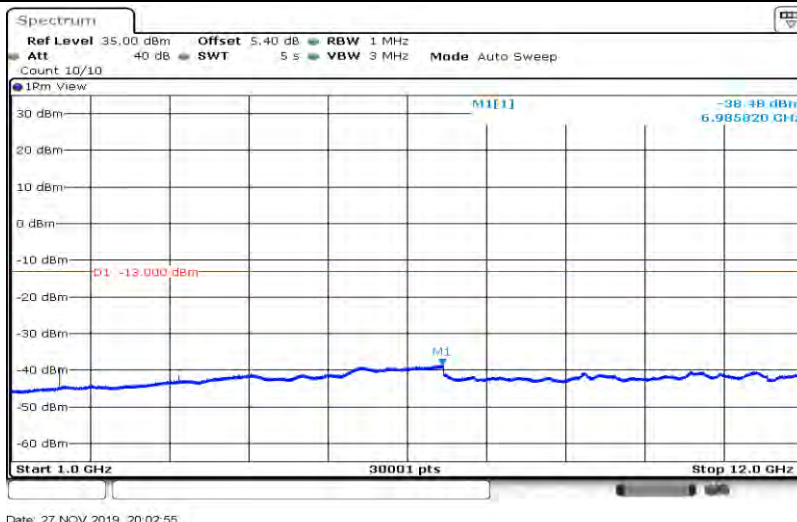


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band5-10MHz-16QAM-20525-1RB#0-Range2:1000~12000MHz

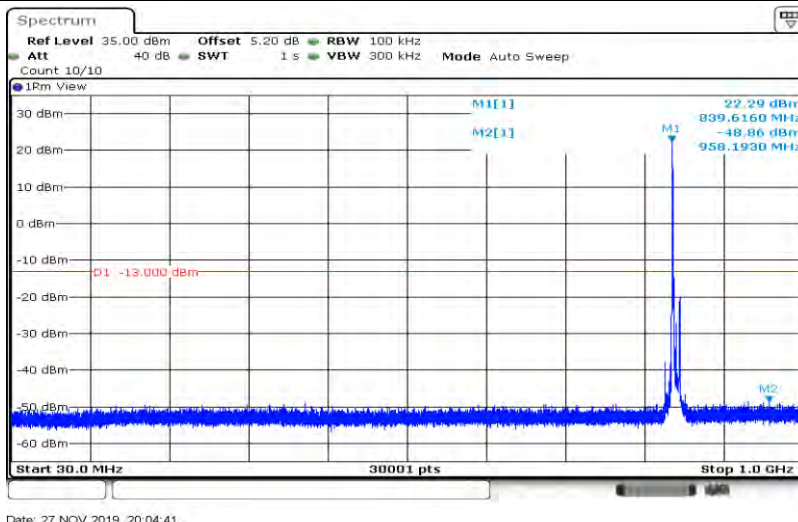


Band5-10MHz-16QAM-20600-1RB#0-Range1:30~1000MHz

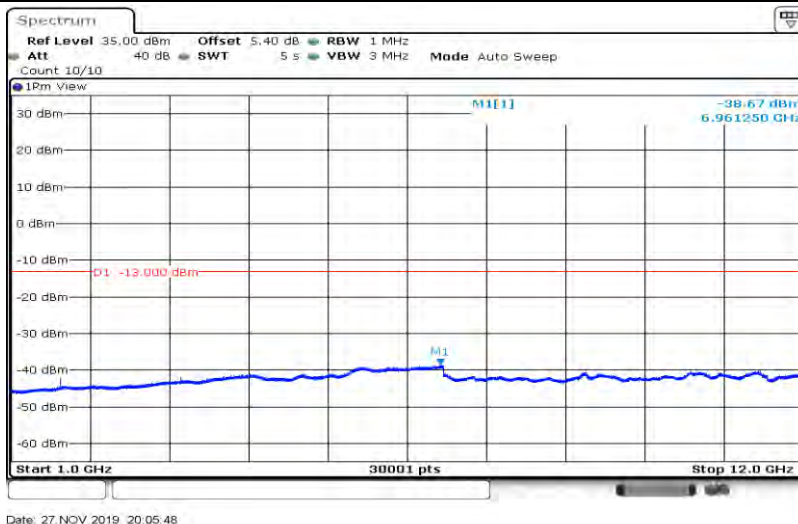


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~12000MHz



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. Field Strength of Spurious Radiation

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

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
109.7380	-61.95	-13.00	48.95	Vertical
1649.3299	-48.30	-13.00	35.30	Vertical
1745.7492	-55.23	-13.00	42.23	Vertical
3298.2099	-53.80	-13.00	40.80	Vertical
7382.9461	-52.30	-13.00	39.30	Vertical
8624.5875	-51.45	-13.00	38.45	Vertical
42.4651	-61.82	-13.00	48.82	Horizontal
239.1425	-64.97	-13.00	51.97	Horizontal
1242.4485	-62.39	-13.00	49.39	Horizontal
1648.9298	-49.59	-13.00	36.59	Horizontal
2443.0886	-53.35	-13.00	40.35	Horizontal
8565.1855	-52.40	-13.00	39.40	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
111.0476	-62.19	-13.00	49.19	Vertical
1664.1328	-51.80	-13.00	38.80	Vertical
2480.6961	-34.39	-13.00	21.39	Vertical
3328.2109	-57.03	-13.00	44.03	Vertical
7358.9453	-52.36	-13.00	39.36	Vertical
8859.1953	-50.82	-13.00	37.82	Vertical
43.0957	-60.91	-13.00	47.91	Horizontal
1242.0484	-61.48	-13.00	48.48	Horizontal
1664.1328	-53.24	-13.00	40.24	Horizontal
2571.9144	-56.28	-13.00	43.28	Horizontal
7460.1487	-52.85	-13.00	39.85	Horizontal
8849.1950	-51.66	-13.00	38.66	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

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
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



7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
108.1859	-62.46	-13.00	49.46	Vertical
1242.0484	-61.39	-13.00	48.39	Vertical
1679.3359	-45.51	-13.00	32.51	Vertical
2677.9356	-45.19	-13.00	32.19	Vertical
3358.2119	-51.26	-13.00	38.26	Vertical
8795.3932	-51.05	-13.00	38.05	Vertical
39.4580	-62.60	-13.00	49.60	Horizontal
238.5604	-65.54	-13.00	52.54	Horizontal
1242.0484	-60.75	-13.00	47.75	Horizontal
1792.5585	-50.21	-13.00	37.21	Horizontal
3358.2119	-54.77	-13.00	41.77	Horizontal
7358.3453	-52.87	-13.00	39.87	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
106.5368	-62.69	-13.00	49.69	Vertical
1666.9334	-47.08	-13.00	34.08	Vertical
2500.3001	-56.39	-13.00	43.39	Vertical
7357.7453	-52.86	-13.00	39.86	Vertical
8862.3954	-51.36	-13.00	38.36	Vertical
106.5368	-62.69	-13.00	49.69	Vertical
45.1813	-61.61	-13.00	48.61	Horizontal
1666.9334	-42.36	-13.00	29.36	Horizontal
2500.3001	-55.06	-13.00	42.06	Horizontal
3333.6111	-55.86	-13.00	42.86	Horizontal
7360.1453	-53.35	-13.00	40.35	Horizontal
8801.9934	-51.49	-13.00	38.49	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
111.0476	-63.12	-13.00	50.12	Vertical
1681.7363	-44.80	-13.00	31.80	Vertical
2523.1046	-56.73	-13.00	43.73	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



3363.4121	-57.21	-13.00	44.21	Vertical
4204.4401	-56.75	-13.00	43.75	Vertical
8875.9959	-51.81	-13.00	38.81	Vertical
40.9615	-62.73	-13.00	49.73	Horizontal
1681.7363	-40.07	-13.00	27.07	Horizontal
2440.2881	-27.74	-13.00	14.74	Horizontal
3363.4121	-53.59	-13.00	40.59	Horizontal
7351.9451	-53.56	-13.00	40.56	Horizontal
8834.3945	-51.33	-13.00	38.33	Horizontal

7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
112.9391	-62.43	-13.00	49.43	Vertical
1696.9394	-48.69	-13.00	35.69	Vertical
2410.6821	-52.75	-13.00	39.75	Vertical
2582.3165	-43.82	-13.00	30.82	Vertical
3393.6131	-57.88	-13.00	44.88	Vertical
8790.3930	-52.06	-13.00	39.06	Vertical
41.3011	-63.04	-13.00	50.04	Horizontal
1696.9394	-44.21	-13.00	31.21	Horizontal
1902.1804	-58.06	-13.00	45.06	Horizontal
3393.6131	-54.33	-13.00	41.33	Horizontal
7356.3452	-53.90	-13.00	40.90	Horizontal
8861.5954	-52.24	-13.00	39.24	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
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-0.10	-0.000121	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-8.10	-0.009771	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-10.50	-0.012666	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-2.20	-0.002630	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-10.10	-0.012074	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	0.30	0.000359	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-9.00	-0.010664	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-13.00	-0.015403	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-2.80	-0.003318	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-4.40	-0.005308	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-1.40	-0.001689	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	2.40	0.002895	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-14.50	-0.017334	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-4.20	-0.005021	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-7.30	-0.008727	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-11.20	-0.013270	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-1.00	-0.001185	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-9.60	-0.011374	±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
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-9.50	-0.011460	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	-13.20	-0.015923	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-7.70	-0.009288	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	0.20	0.000241	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-10.40	-0.012545	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-5.70	-0.006876	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-2.80	-0.003378	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-2.70	-0.003257	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-6.90	-0.008249	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	0.10	0.000120	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-10.70	-0.012791	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-6.20	-0.007412	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	2.40	0.002869	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-10.00	-0.011955	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-9.30	-0.011118	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	2.60	0.003108	±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



Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-15.20	-0.018009	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-6.50	-0.007701	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-7.10	-0.008412	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-9.70	-0.011493	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-2.50	-0.002962	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-1.50	-0.001777	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-13.40	-0.015877	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-9.70	-0.011493	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-2.30	-0.002774	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	-6.00	-0.007238	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-13.10	-0.015802	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-2.50	-0.003016	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	2.30	0.002774	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-10.10	-0.012183	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-2.90	-0.003498	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-10.30	-0.012425	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	-1.20	-0.001435	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-1.70	-0.002032	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-1.30	-0.001554	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-4.90	-0.005858	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-6.00	-0.007173	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-9.30	-0.011019	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-9.00	-0.010759	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-10.80	-0.012911	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-9.40	-0.011137	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-10.90	-0.012915	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-12.20	-0.014455	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	-8.50	-0.010071	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-1.30	-0.001540	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-12.60	-0.014929	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-9.30	-0.011019	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-14.10	-0.016706	±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

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