



Appendix B

E-UTRA Band 7



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

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

CONTENT

1	EFFECTIVE (ISOTROPIC) RADIATED POWER.....	4
1.1.	TEST RESULT.....	4
2.	PEAK-TO-AVERAGE RATIO (CCDF).....	12
2.1.	TEST RESULT.....	12
2.2.	TEST PLOTS.....	12
3.	MODULATION CHARACTERISTICS.....	17
3.1.	TEST BAND = LTE BAND 7.....	17
3.1.1.	TEST MODE = LTE /TM1 20MHz.....	17
3.1.1.1.	TEST CHANNEL = MCH.....	17
3.1.2.	TEST MODE = LTE /TM2 20MHz.....	18
3.1.2.1.	TEST CHANNEL = MCH.....	18
3.1.3.	TEST MODE = LTE /TM3 20MHz.....	19
3.1.3.1.	TEST CHANNEL = MCH.....	19
4.	26DB BANDWIDTH AND OCCUPIED BANDWIDTH.....	20
4.1.	TEST RESULT.....	20
4.2.	TEST PLOTS.....	21
5.	BAND EDGE COMPLIANCE.....	39
5.1.	TEST RESULT.....	39
5.2.	TEST PLOTS.....	40
6.	SPURIOUS EMISSION AT ANTENNA TERMINAL.....	65
6.1.	TEST RESULT.....	65
6.2.	TEST PLOTS.....	65
7.	FIELD STRENGTH OF SPURIOUS RADIATION.....	75
7.1.	TEST BAND = LTE BAND 7.....	75
7.1.1.	TEST MODE =LTE/TM1 20MHZ.....	75
7.1.1.1.	TEST CHANNEL = LCH.....	75
7.1.1.2.	TEST CHANNEL = MCH.....	75
7.1.1.3.	TEST CHANNEL = HCH.....	76



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



8.	FREQUENCY STABILITY.....	77
8.1.	FREQUENCY VS VOLTAGE.....	77
8.2.	FREQUENCY VS TEMPERATURE	77



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

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



1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.13	21.67	33	PASS
Band7	5MHz	QPSK	20775	1RB#12	22.49	22.03	33	PASS
Band7	5MHz	QPSK	20775	1RB#24	21.80	21.34	33	PASS
Band7	5MHz	QPSK	20775	12RB#6	21.33	20.87	33	PASS
Band7	5MHz	QPSK	20775	12RB#0	21.25	20.79	33	PASS
Band7	5MHz	QPSK	20775	12RB#13	21.11	20.65	33	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.25	20.79	33	PASS
Band7	5MHz	QPSK	21100	1RB#24	21.77	21.31	33	PASS
Band7	5MHz	QPSK	21100	1RB#0	21.92	21.46	33	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.37	21.91	33	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.09	20.63	33	PASS
Band7	5MHz	QPSK	21100	12RB#6	21.07	20.61	33	PASS
Band7	5MHz	QPSK	21100	12RB#13	20.83	20.37	33	PASS
Band7	5MHz	QPSK	21100	25RB#0	20.92	20.46	33	PASS
Band7	5MHz	QPSK	21425	1RB#12	22.68	22.22	33	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.23	21.77	33	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.00	21.54	33	PASS
Band7	5MHz	QPSK	21425	12RB#13	21.25	20.79	33	PASS
Band7	5MHz	QPSK	21425	12RB#6	21.38	20.92	33	PASS
Band7	5MHz	QPSK	21425	12RB#0	21.45	20.99	33	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.35	20.89	33	PASS
Band7	5MHz	64QAM	20775	1RB#0	20.30	19.84	33	PASS
Band7	5MHz	64QAM	20775	1RB#24	20.35	19.89	33	PASS
Band7	5MHz	64QAM	20775	1RB#12	20.80	20.34	33	PASS
Band7	5MHz	64QAM	20775	12RB#0	20.33	19.87	33	PASS
Band7	5MHz	64QAM	20775	12RB#6	20.31	19.85	33	PASS
Band7	5MHz	64QAM	20775	12RB#13	20.38	19.92	33	PASS



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

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



Band7	5MHz	64QAM	20775	25RB#0	20.30	19.84	33	PASS
Band7	5MHz	64QAM	21100	1RB#0	20.36	19.90	33	PASS
Band7	5MHz	64QAM	21100	1RB#12	20.36	19.90	33	PASS
Band7	5MHz	64QAM	21100	1RB#24	20.36	19.90	33	PASS
Band7	5MHz	64QAM	21100	12RB#13	20.30	19.84	33	PASS
Band7	5MHz	64QAM	21100	12RB#6	20.34	19.88	33	PASS
Band7	5MHz	64QAM	21100	12RB#0	20.38	19.92	33	PASS
Band7	5MHz	64QAM	21100	25RB#0	20.35	19.89	33	PASS
Band7	5MHz	64QAM	21425	1RB#0	20.32	19.86	33	PASS
Band7	5MHz	64QAM	21425	1RB#12	20.79	20.33	33	PASS
Band7	5MHz	64QAM	21425	1RB#24	20.30	19.84	33	PASS
Band7	5MHz	64QAM	21425	12RB#0	20.38	19.92	33	PASS
Band7	5MHz	64QAM	21425	12RB#6	20.30	19.84	33	PASS
Band7	5MHz	64QAM	21425	12RB#13	20.30	19.84	33	PASS
Band7	5MHz	64QAM	21425	25RB#0	20.37	19.91	33	PASS
Band7	5MHz	16QAM	20775	1RB#0	20.78	20.32	33	PASS
Band7	5MHz	16QAM	20775	1RB#24	20.70	20.24	33	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.23	20.77	33	PASS
Band7	5MHz	16QAM	20775	12RB#13	20.37	19.91	33	PASS
Band7	5MHz	16QAM	20775	12RB#6	20.30	19.84	33	PASS
Band7	5MHz	16QAM	20775	12RB#0	20.38	19.92	33	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.35	19.89	33	PASS
Band7	5MHz	16QAM	21100	1RB#0	20.73	20.27	33	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.02	20.56	33	PASS
Band7	5MHz	16QAM	21100	1RB#24	20.51	20.05	33	PASS
Band7	5MHz	16QAM	21100	12RB#0	20.36	19.90	33	PASS
Band7	5MHz	16QAM	21100	12RB#6	20.30	19.84	33	PASS
Band7	5MHz	16QAM	21100	12RB#13	20.38	19.92	33	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.39	19.93	33	PASS
Band7	5MHz	16QAM	21425	1RB#0	20.84	20.38	33	PASS
Band7	5MHz	16QAM	21425	1RB#24	20.88	20.42	33	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.34	20.88	33	PASS
Band7	5MHz	16QAM	21425	12RB#0	20.41	19.95	33	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 (CSTC) Laboratory

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



Band7	5MHz	16QAM	21425	12RB#6	20.43	19.97	33	PASS
Band7	5MHz	16QAM	21425	12RB#13	20.37	19.91	33	PASS
Band7	5MHz	16QAM	21425	25RB#0	20.39	19.93	33	PASS
Band7	10MHz	QPSK	20800	1RB#49	21.75	21.29	33	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.54	22.08	33	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.03	21.57	33	PASS
Band7	10MHz	QPSK	20800	25RB#12	21.36	20.90	33	PASS
Band7	10MHz	QPSK	20800	25RB#0	21.31	20.85	33	PASS
Band7	10MHz	QPSK	20800	25RB#25	20.99	20.53	33	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.17	20.71	33	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.52	22.06	33	PASS
Band7	10MHz	QPSK	21100	1RB#49	21.66	21.20	33	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.00	21.54	33	PASS
Band7	10MHz	QPSK	21100	25RB#25	20.90	20.44	33	PASS
Band7	10MHz	QPSK	21100	25RB#0	21.16	20.70	33	PASS
Band7	10MHz	QPSK	21100	25RB#12	21.07	20.61	33	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.03	20.57	33	PASS
Band7	10MHz	QPSK	21400	1RB#49	21.88	21.42	33	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.83	22.37	33	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.21	21.75	33	PASS
Band7	10MHz	QPSK	21400	25RB#25	21.17	20.71	33	PASS
Band7	10MHz	QPSK	21400	25RB#0	21.41	20.95	33	PASS
Band7	10MHz	QPSK	21400	25RB#12	21.47	21.01	33	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.30	20.84	33	PASS
Band7	10MHz	64QAM	20800	1RB#24	20.97	20.51	33	PASS
Band7	10MHz	64QAM	20800	1RB#49	20.37	19.91	33	PASS
Band7	10MHz	64QAM	20800	1RB#0	20.39	19.93	33	PASS
Band7	10MHz	64QAM	20800	25RB#0	20.34	19.88	33	PASS
Band7	10MHz	64QAM	20800	25RB#12	20.32	19.86	33	PASS
Band7	10MHz	64QAM	20800	25RB#25	20.34	19.88	33	PASS
Band7	10MHz	64QAM	20800	50RB#0	20.33	19.87	33	PASS
Band7	10MHz	64QAM	21100	1RB#49	20.31	19.85	33	PASS
Band7	10MHz	64QAM	21100	1RB#0	20.30	19.84	33	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 (CSTC) Laboratory

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



Band7	10MHz	64QAM	21100	1RB#24	20.42	19.96	33	PASS
Band7	10MHz	64QAM	21100	25RB#0	20.31	19.85	33	PASS
Band7	10MHz	64QAM	21100	25RB#12	20.31	19.85	33	PASS
Band7	10MHz	64QAM	21100	25RB#25	20.33	19.87	33	PASS
Band7	10MHz	64QAM	21100	50RB#0	20.30	19.84	33	PASS
Band7	10MHz	64QAM	21400	1RB#0	20.38	19.92	33	PASS
Band7	10MHz	64QAM	21400	1RB#49	20.37	19.91	33	PASS
Band7	10MHz	64QAM	21400	1RB#24	20.92	20.46	33	PASS
Band7	10MHz	64QAM	21400	25RB#25	20.32	19.86	33	PASS
Band7	10MHz	64QAM	21400	25RB#0	20.36	19.90	33	PASS
Band7	10MHz	64QAM	21400	25RB#12	20.34	19.88	33	PASS
Band7	10MHz	64QAM	21400	50RB#0	20.33	19.87	33	PASS
Band7	10MHz	16QAM	20800	1RB#0	20.85	20.39	33	PASS
Band7	10MHz	16QAM	20800	1RB#24	20.99	20.53	33	PASS
Band7	10MHz	16QAM	20800	1RB#49	20.69	20.23	33	PASS
Band7	10MHz	16QAM	20800	25RB#12	20.37	19.91	33	PASS
Band7	10MHz	16QAM	20800	25RB#0	20.33	19.87	33	PASS
Band7	10MHz	16QAM	20800	25RB#25	20.35	19.89	33	PASS
Band7	10MHz	16QAM	20800	50RB#0	20.38	19.92	33	PASS
Band7	10MHz	16QAM	21100	1RB#0	20.82	20.36	33	PASS
Band7	10MHz	16QAM	21100	1RB#49	20.64	20.18	33	PASS
Band7	10MHz	16QAM	21100	1RB#24	20.74	20.28	33	PASS
Band7	10MHz	16QAM	21100	25RB#0	20.14	19.68	33	PASS
Band7	10MHz	16QAM	21100	25RB#25	20.37	19.91	33	PASS
Band7	10MHz	16QAM	21100	25RB#12	20.34	19.88	33	PASS
Band7	10MHz	16QAM	21100	50RB#0	20.35	19.89	33	PASS
Band7	10MHz	16QAM	21400	1RB#0	20.94	20.48	33	PASS
Band7	10MHz	16QAM	21400	1RB#49	20.98	20.52	33	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.85	21.39	33	PASS
Band7	10MHz	16QAM	21400	25RB#0	20.39	19.93	33	PASS
Band7	10MHz	16QAM	21400	25RB#12	20.65	20.19	33	PASS
Band7	10MHz	16QAM	21400	25RB#25	20.34	19.88	33	PASS
Band7	10MHz	16QAM	21400	50RB#0	20.42	19.96	33	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 (CSTC Laboratory)

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



Band7	15MHz	QPSK	20825	1RB#74	21.71	21.25	33	PASS
Band7	15MHz	QPSK	20825	1RB#38	22.37	21.91	33	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.09	21.63	33	PASS
Band7	15MHz	QPSK	20825	36RB#39	20.97	20.51	33	PASS
Band7	15MHz	QPSK	20825	36RB#18	21.23	20.77	33	PASS
Band7	15MHz	QPSK	20825	36RB#0	21.31	20.85	33	PASS
Band7	15MHz	QPSK	20825	75RB#0	21.15	20.69	33	PASS
Band7	15MHz	QPSK	21100	1RB#0	21.93	21.47	33	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.58	22.12	33	PASS
Band7	15MHz	QPSK	21100	1RB#74	21.59	21.13	33	PASS
Band7	15MHz	QPSK	21100	36RB#0	21.14	20.68	33	PASS
Band7	15MHz	QPSK	21100	36RB#18	21.08	20.62	33	PASS
Band7	15MHz	QPSK	21100	36RB#39	20.82	20.36	33	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.01	20.55	33	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.15	21.69	33	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.63	22.17	33	PASS
Band7	15MHz	QPSK	21375	1RB#74	21.95	21.49	33	PASS
Band7	15MHz	QPSK	21375	36RB#0	21.31	20.85	33	PASS
Band7	15MHz	QPSK	21375	36RB#18	21.33	20.87	33	PASS
Band7	15MHz	QPSK	21375	36RB#39	21.12	20.66	33	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.25	20.79	33	PASS
Band7	15MHz	64QAM	20825	1RB#74	20.388	19.93	33	PASS
Band7	15MHz	64QAM	20825	1RB#38	20.97	20.51	33	PASS
Band7	15MHz	64QAM	20825	1RB#0	20.34	19.88	33	PASS
Band7	15MHz	64QAM	20825	36RB#0	20.30	19.84	33	PASS
Band7	15MHz	64QAM	20825	36RB#18	20.34	19.88	33	PASS
Band7	15MHz	64QAM	20825	36RB#39	20.32	19.86	33	PASS
Band7	15MHz	64QAM	20825	75RB#0	20.30	19.84	33	PASS
Band7	15MHz	64QAM	21100	1RB#38	20.48	20.02	33	PASS
Band7	15MHz	64QAM	21100	1RB#74	20.36	19.90	33	PASS
Band7	15MHz	64QAM	21100	1RB#0	20.30	19.84	33	PASS
Band7	15MHz	64QAM	21100	36RB#39	20.36	19.90	33	PASS
Band7	15MHz	64QAM	21100	36RB#0	20.32	19.86	33	PASS



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

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



Band7	15MHz	64QAM	21100	36RB#18	20.30	19.84	33	PASS
Band7	15MHz	64QAM	21100	75RB#0	20.34	19.88	33	PASS
Band7	15MHz	64QAM	21375	1RB#0	20.39	19.93	33	PASS
Band7	15MHz	64QAM	21375	1RB#38	21.17	20.71	33	PASS
Band7	15MHz	64QAM	21375	1RB#74	20.31	19.85	33	PASS
Band7	15MHz	64QAM	21375	36RB#18	20.33	19.87	33	PASS
Band7	15MHz	64QAM	21375	36RB#0	20.31	19.85	33	PASS
Band7	15MHz	64QAM	21375	36RB#39	20.39	19.93	33	PASS
Band7	15MHz	64QAM	21375	75RB#0	20.38	19.92	33	PASS
Band7	15MHz	16QAM	20825	1RB#38	20.68	20.22	33	PASS
Band7	15MHz	16QAM	20825	1RB#0	20.97	20.51	33	PASS
Band7	15MHz	16QAM	20825	1RB#74	20.71	20.25	33	PASS
Band7	15MHz	16QAM	20825	36RB#0	20.35	19.89	33	PASS
Band7	15MHz	16QAM	20825	36RB#39	20.39	19.93	33	PASS
Band7	15MHz	16QAM	20825	36RB#18	20.31	19.85	33	PASS
Band7	15MHz	16QAM	20825	75RB#0	20.36	19.90	33	PASS
Band7	15MHz	16QAM	21100	1RB#38	20.65	20.19	33	PASS
Band7	15MHz	16QAM	21100	1RB#74	20.33	19.87	33	PASS
Band7	15MHz	16QAM	21100	1RB#0	20.70	20.24	33	PASS
Band7	15MHz	16QAM	21100	36RB#0	20.38	19.92	33	PASS
Band7	15MHz	16QAM	21100	36RB#18	20.38	19.92	33	PASS
Band7	15MHz	16QAM	21100	36RB#39	20.39	19.93	33	PASS
Band7	15MHz	16QAM	21100	75RB#0	20.32	19.86	33	PASS
Band7	15MHz	16QAM	21375	1RB#0	20.97	20.51	33	PASS
Band7	15MHz	16QAM	21375	1RB#38	20.85	20.39	33	PASS
Band7	15MHz	16QAM	21375	1RB#74	20.90	20.44	33	PASS
Band7	15MHz	16QAM	21375	36RB#0	20.37	19.91	33	PASS
Band7	15MHz	16QAM	21375	36RB#18	20.30	19.84	33	PASS
Band7	15MHz	16QAM	21375	36RB#39	20.38	19.92	33	PASS
Band7	15MHz	16QAM	21375	75RB#0	20.39	19.93	33	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.10	21.64	33	PASS
Band7	20MHz	QPSK	20850	1RB#49	22.67	22.21	33	PASS
Band7	20MHz	QPSK	20850	1RB#99	21.81	21.35	33	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 (CMAA Laboratory)

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



Band7	20MHz	QPSK	20850	50RB#25	21.22	20.76	33	PASS
Band7	20MHz	QPSK	20850	50RB#0	21.30	20.84	33	PASS
Band7	20MHz	QPSK	20850	50RB#50	21.00	20.54	33	PASS
Band7	20MHz	QPSK	20850	100RB#0	21.08	20.62	33	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.06	21.60	33	PASS
Band7	20MHz	QPSK	21100	1RB#0	21.57	21.11	33	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.29	21.83	33	PASS
Band7	20MHz	QPSK	21100	50RB#0	21.37	20.91	33	PASS
Band7	20MHz	QPSK	21100	50RB#25	21.06	20.60	33	PASS
Band7	20MHz	QPSK	21100	50RB#50	20.84	20.38	33	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.01	20.55	33	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.91	22.45	33	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.03	21.57	33	PASS
Band7	20MHz	QPSK	21350	1RB#99	21.92	21.46	33	PASS
Band7	20MHz	QPSK	21350	50RB#25	21.30	20.84	33	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.69	21.23	33	PASS
Band7	20MHz	QPSK	21350	50RB#50	21.03	20.57	33	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.26	20.80	33	PASS
Band7	20MHz	64QAM	20850	1RB#0	20.34	19.88	33	PASS
Band7	20MHz	64QAM	20850	1RB#49	20.88	20.42	33	PASS
Band7	20MHz	64QAM	20850	1RB#99	20.33	19.87	33	PASS
Band7	20MHz	64QAM	20850	50RB#50	20.38	19.92	33	PASS
Band7	20MHz	64QAM	20850	50RB#0	20.32	19.86	33	PASS
Band7	20MHz	64QAM	20850	50RB#25	20.34	19.88	33	PASS
Band7	20MHz	64QAM	20850	100RB#0	20.37	19.91	33	PASS
Band7	20MHz	64QAM	21100	1RB#0	20.35	19.89	33	PASS
Band7	20MHz	64QAM	21100	1RB#49	20.76	20.30	33	PASS
Band7	20MHz	64QAM	21100	1RB#99	20.30	19.84	33	PASS
Band7	20MHz	64QAM	21100	50RB#0	20.36	19.90	33	PASS
Band7	20MHz	64QAM	21100	50RB#25	20.39	19.93	33	PASS
Band7	20MHz	64QAM	21100	50RB#50	20.31	19.85	33	PASS
Band7	20MHz	64QAM	21100	100RB#0	20.37	19.91	33	PASS
Band7	20MHz	64QAM	21350	1RB#99	20.32	19.86	33	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 (CSTC) Laboratory

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



Band7	20MHz	64QAM	21350	1RB#0	20.33	19.87	33	PASS
Band7	20MHz	64QAM	21350	1RB#49	20.72	20.26	33	PASS
Band7	20MHz	64QAM	21350	50RB#0	20.31	19.85	33	PASS
Band7	20MHz	64QAM	21350	50RB#50	20.30	19.84	33	PASS
Band7	20MHz	64QAM	21350	50RB#25	20.32	19.86	33	PASS
Band7	20MHz	64QAM	21350	100RB#0	20.31	19.85	33	PASS
Band7	20MHz	16QAM	20850	1RB#0	20.45	19.99	33	PASS
Band7	20MHz	16QAM	20850	1RB#49	20.89	20.43	33	PASS
Band7	20MHz	16QAM	20850	1RB#99	20.60	20.14	33	PASS
Band7	20MHz	16QAM	20850	50RB#0	20.39	19.93	33	PASS
Band7	20MHz	16QAM	20850	50RB#25	20.37	19.91	33	PASS
Band7	20MHz	16QAM	20850	50RB#50	20.39	19.93	33	PASS
Band7	20MHz	16QAM	20850	100RB#0	20.36	19.90	33	PASS
Band7	20MHz	16QAM	21100	1RB#0	20.84	20.38	33	PASS
Band7	20MHz	16QAM	21100	1RB#99	20.34	19.88	33	PASS
Band7	20MHz	16QAM	21100	1RB#49	20.80	20.34	33	PASS
Band7	20MHz	16QAM	21100	50RB#0	20.33	19.87	33	PASS
Band7	20MHz	16QAM	21100	50RB#25	20.34	19.88	33	PASS
Band7	20MHz	16QAM	21100	50RB#50	20.36	19.90	33	PASS
Band7	20MHz	16QAM	21100	100RB#0	20.36	19.90	33	PASS
Band7	20MHz	16QAM	21350	1RB#0	20.49	20.03	33	PASS
Band7	20MHz	16QAM	21350	1RB#99	20.85	20.39	33	PASS
Band7	20MHz	16QAM	21350	1RB#49	20.86	20.40	33	PASS
Band7	20MHz	16QAM	21350	50RB#50	20.35	19.89	33	PASS
Band7	20MHz	16QAM	21350	50RB#25	20.32	19.86	33	PASS
Band7	20MHz	16QAM	21350	50RB#0	20.37	19.91	33	PASS
Band7	20MHz	16QAM	21350	100RB#0	20.39	19.93	33	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

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

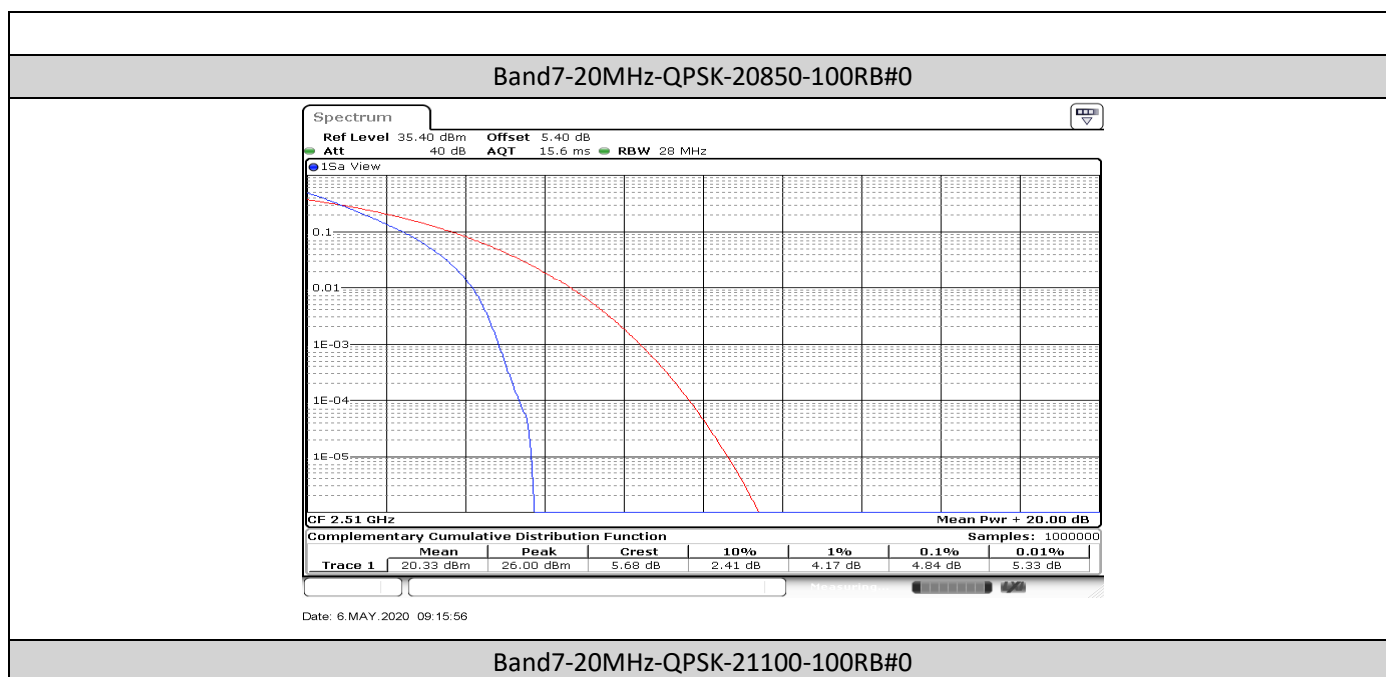


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	4.84	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	4.81	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	4.87	13	PASS
Band7	20MHz	64QAM	20850	100RB#0	6.14	13	PASS
Band7	20MHz	64QAM	21100	100RB#0	6.06	13	PASS
Band7	20MHz	64QAM	21350	100RB#0	6.26	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	5.71	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	5.54	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.80	13	PASS

2.2. Test Plots



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

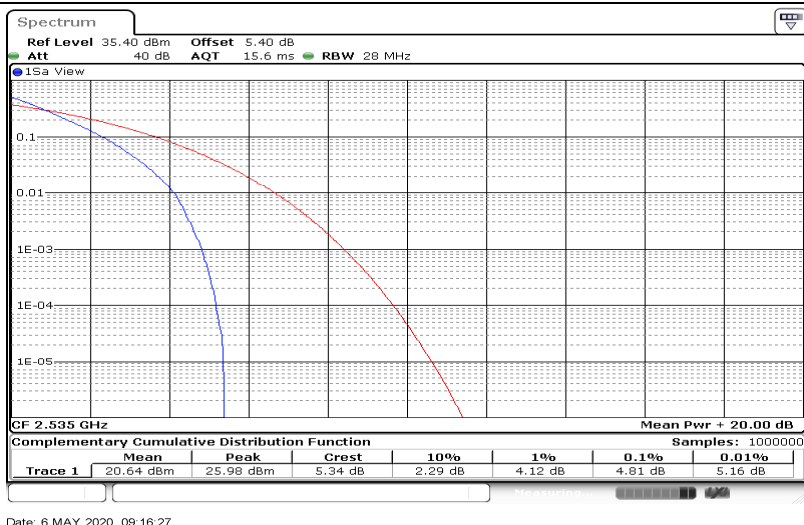


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

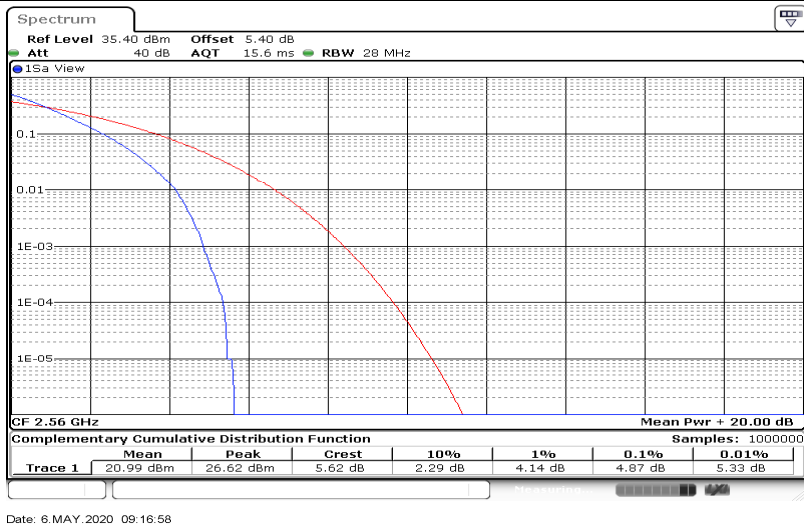
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

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

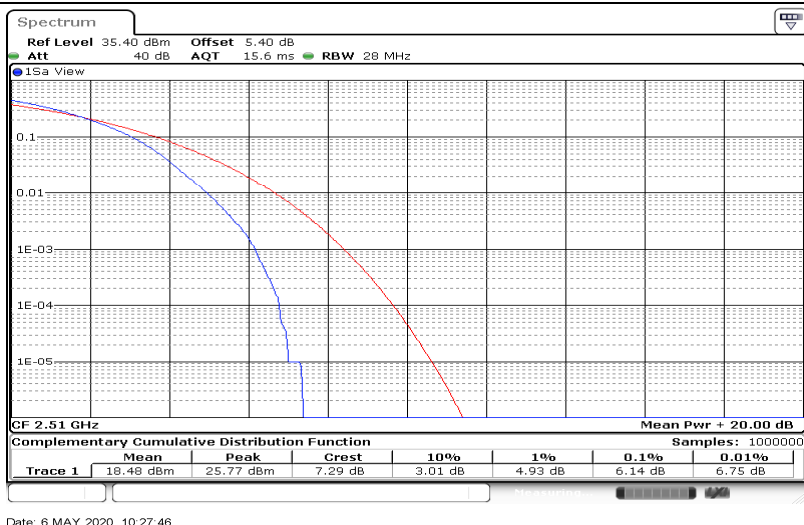


Band7-20MHz-QPSK-21350-100RB#0

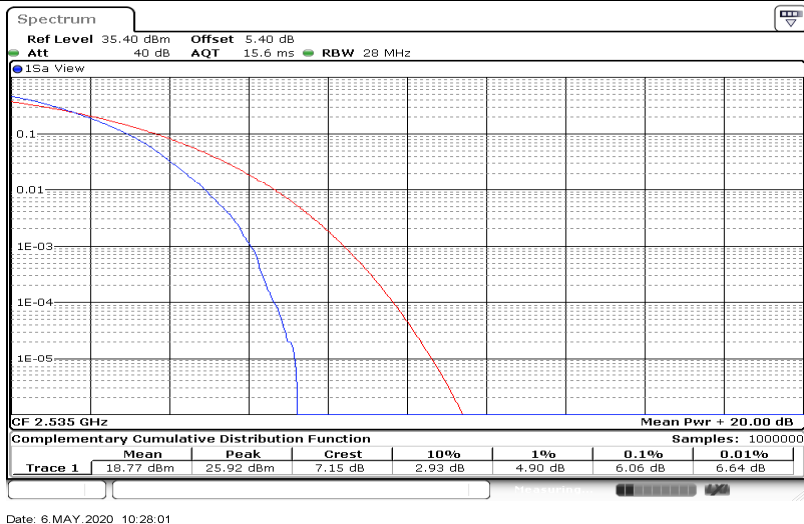


Band7-20MHz-64QAM-20850-100RB#0





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

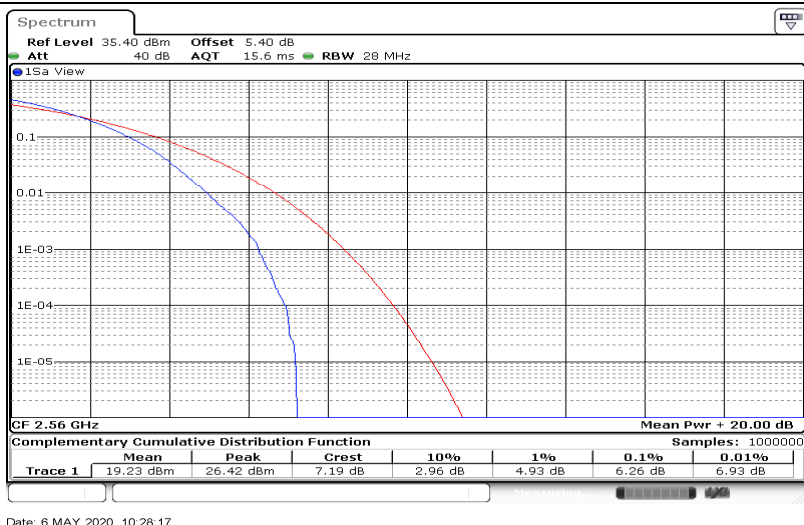


Band7-20MHz-64QAM-21350-100RB#0

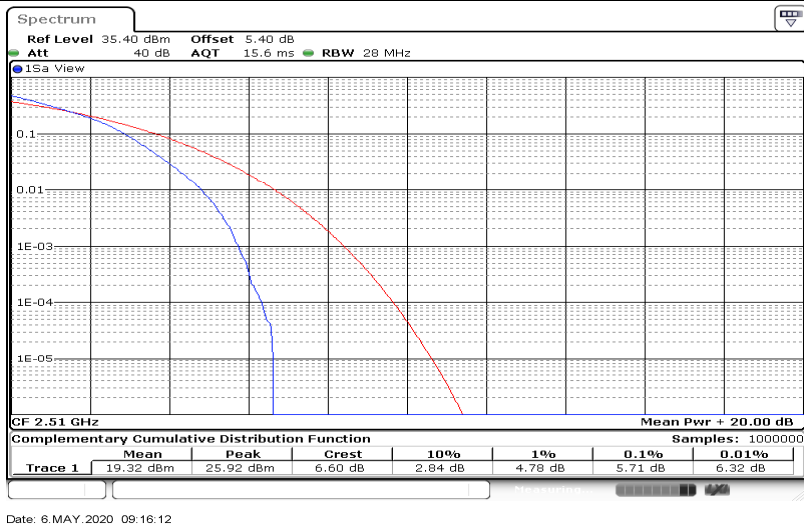


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

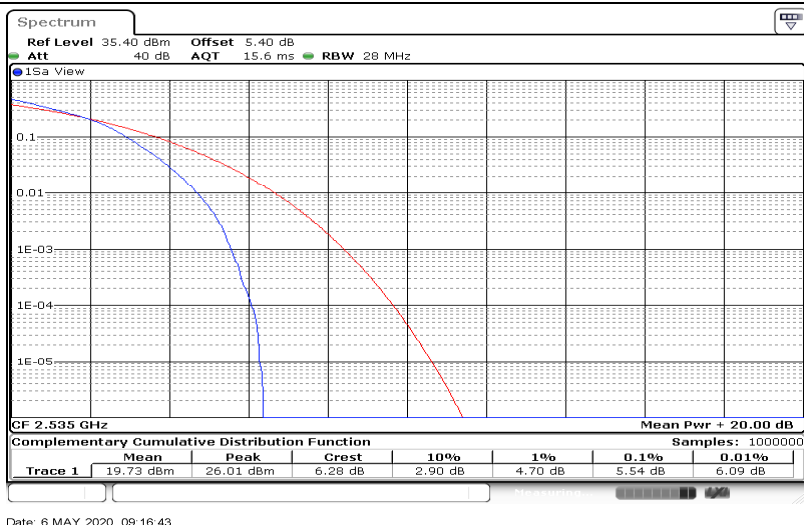


Band7-20MHz-16QAM-20850-100RB#0

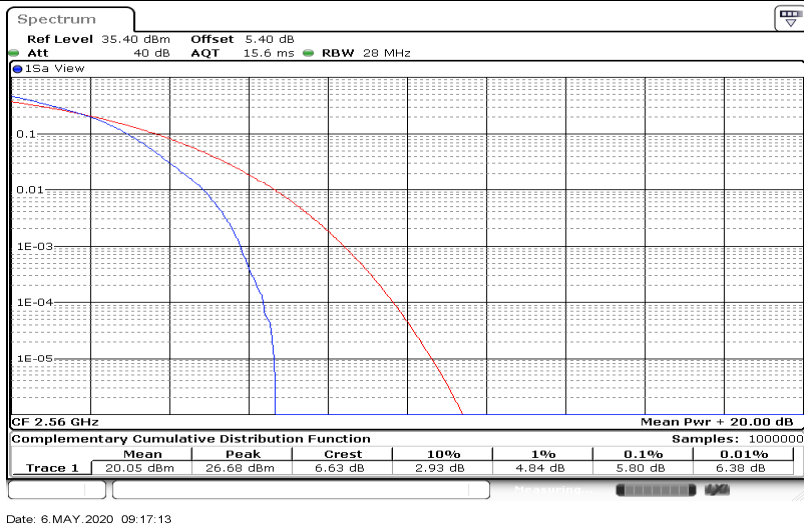


Band7-20MHz-16QAM-21100-100RB#0





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

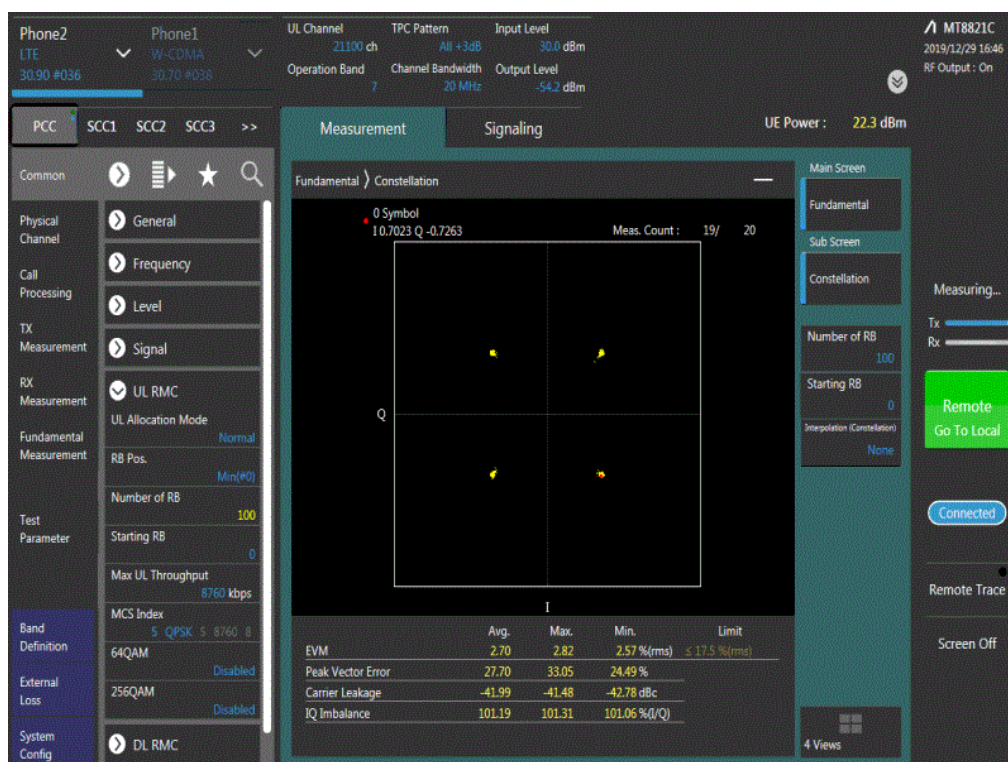


3. Modulation Characteristics

3.1. Test Band = LTE Band 7

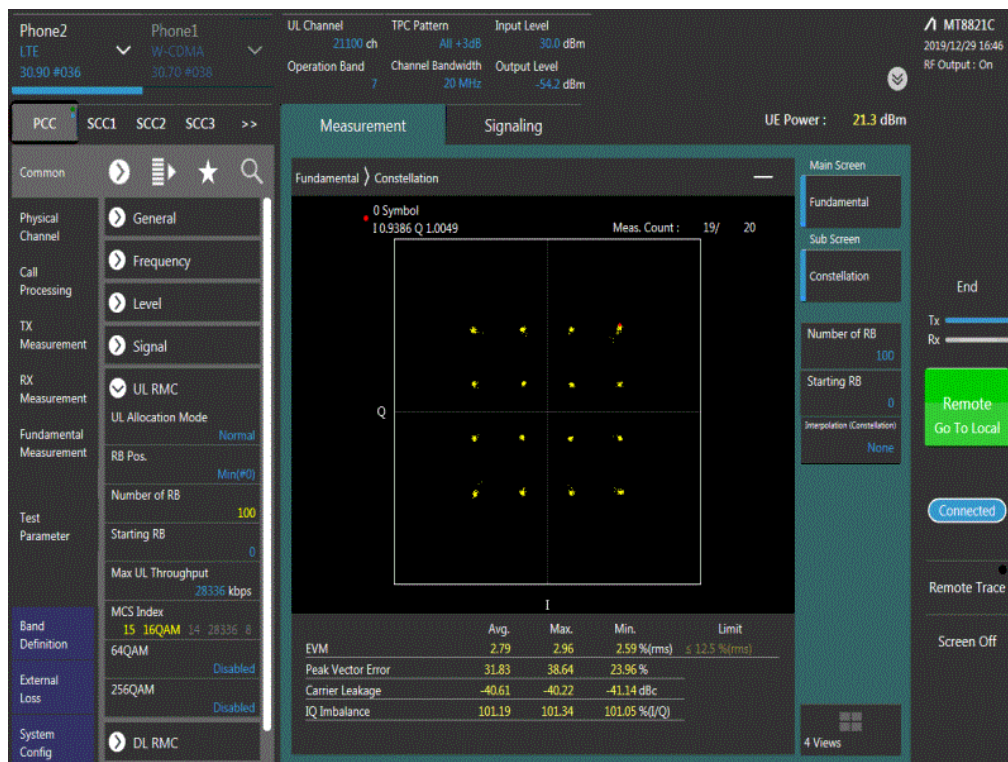
3.1.1. Test Mode = LTE /TM1 20MHz

3.1.1.1. Test Channel = MCH



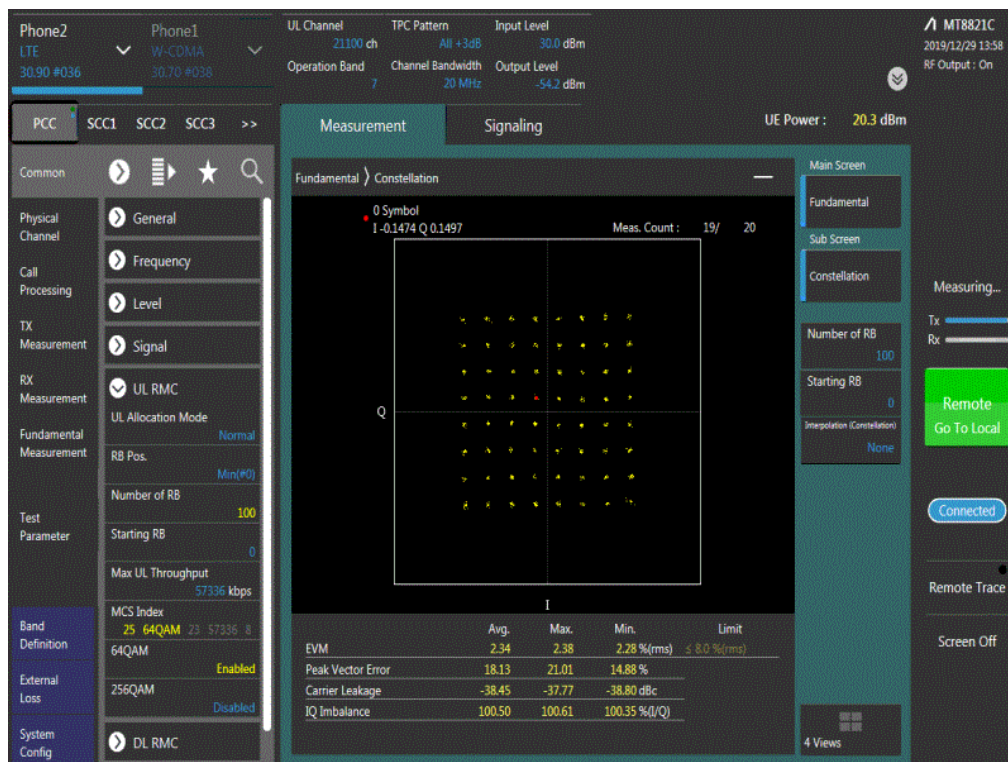
3.1.2. Test Mode = LTE /TM2 20MHz

3.1.2.1. Test Channel = MCH



3.1.3. Test Mode = LTE /TM3 20MHz

3.1.3.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.466	4.910	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.466	4.900	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.466	4.910	PASS
Band7	5MHz	64QAM	20775	25RB#0	4.466	4.970	PASS
Band7	5MHz	64QAM	21100	25RB#0	4.466	4.970	PASS
Band7	5MHz	64QAM	21425	25RB#0	4.466	4.960	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.486	4.970	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.486	4.950	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.486	4.970	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.911	9.720	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.911	9.700	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.911	9.700	PASS
Band7	10MHz	64QAM	20800	50RB#0	8.931	9.760	PASS
Band7	10MHz	64QAM	21100	50RB#0	8.911	9.780	PASS
Band7	10MHz	64QAM	21400	50RB#0	8.911	9.800	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.931	9.780	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.911	9.720	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.911	9.760	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.427	14.730	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.427	14.790	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.427	14.820	PASS
Band7	15MHz	64QAM	20825	75RB#0	13.397	14.700	PASS
Band7	15MHz	64QAM	21100	75RB#0	13.427	14.730	PASS
Band7	15MHz	64QAM	21375	75RB#0	13.427	14.700	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.427	14.790	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.427	14.760	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.427	14.790	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.862	19.240	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.862	19.480	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.822	19.400	PASS
Band7	20MHz	64QAM	20850	100RB#0	17.822	19.320	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 (CSTC) Laboratory

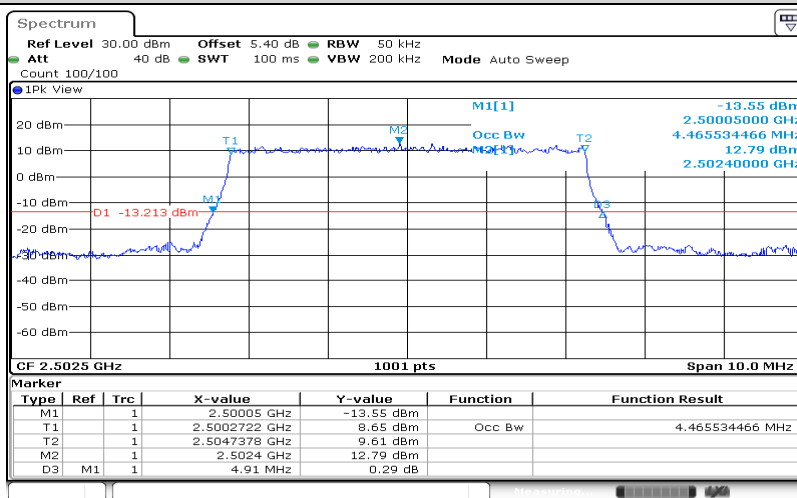
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	20MHz	64QAM	21100	100RB#0	17.862	19.440	PASS
Band7	20MHz	64QAM	21350	100RB#0	17.822	19.400	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.822	19.280	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.862	19.440	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.862	19.400	PASS

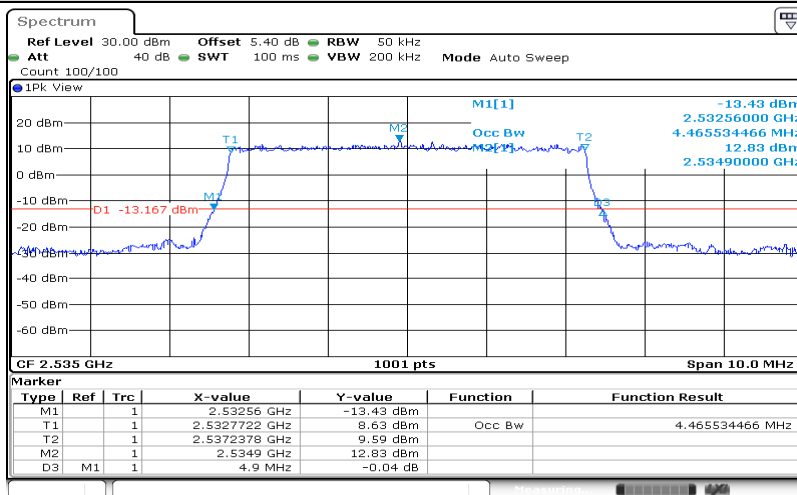
4.2. Test Plots

Band7-5MHz-QPSK-20775-25RB#0-4.466



Date: 5 APR 2020 05:38:52

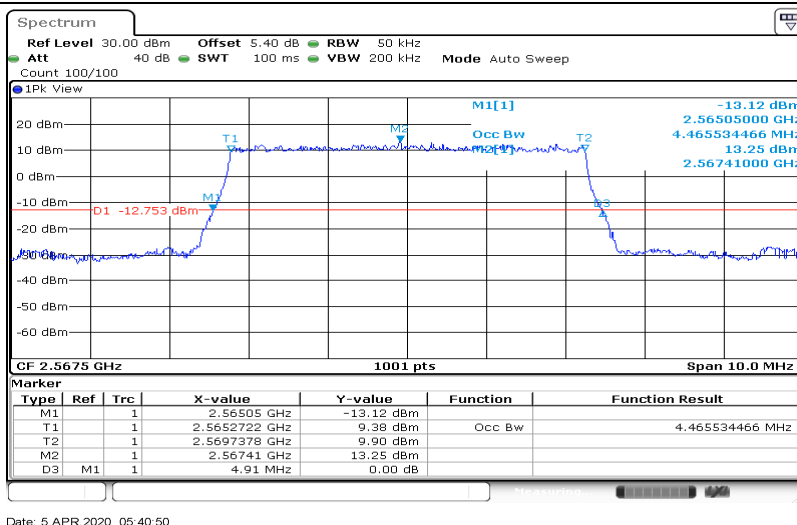
Band7-5MHz-QPSK-21100-25RB#0-4.466



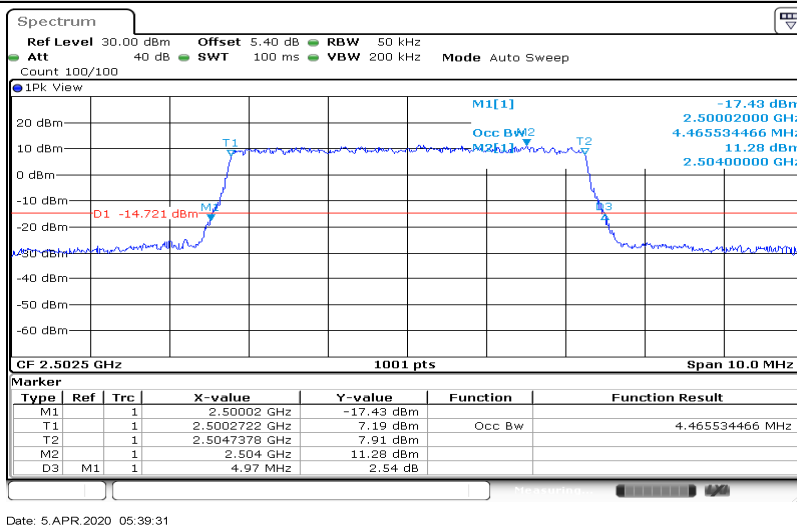
Date: 5 APR 2020 05:39:51

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



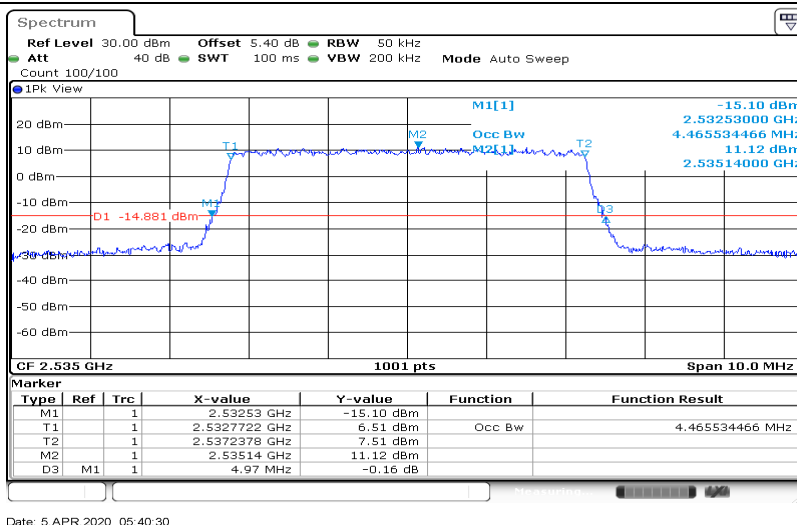


Band7-5MHz-64QAM-20775-25RB#0-4.466

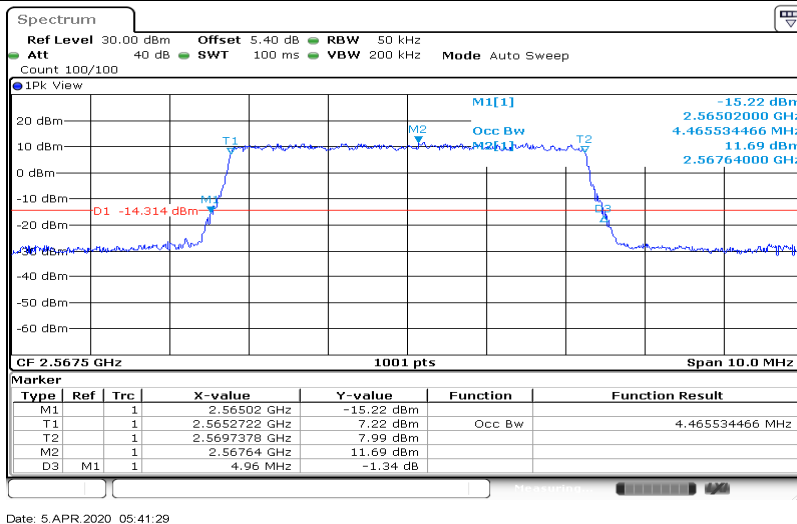


Band7-5MHz-64QAM-21100-25RB#0-4.466



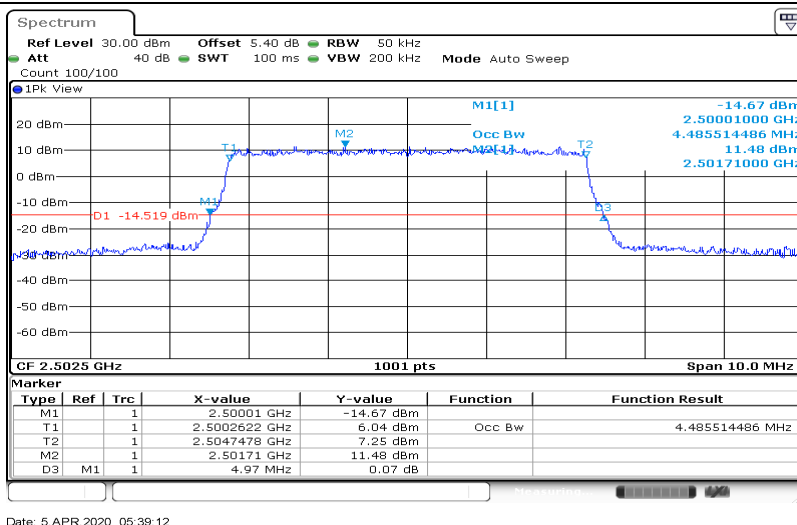


Band7-5MHz-64QAM-21425-25RB#0-4.466

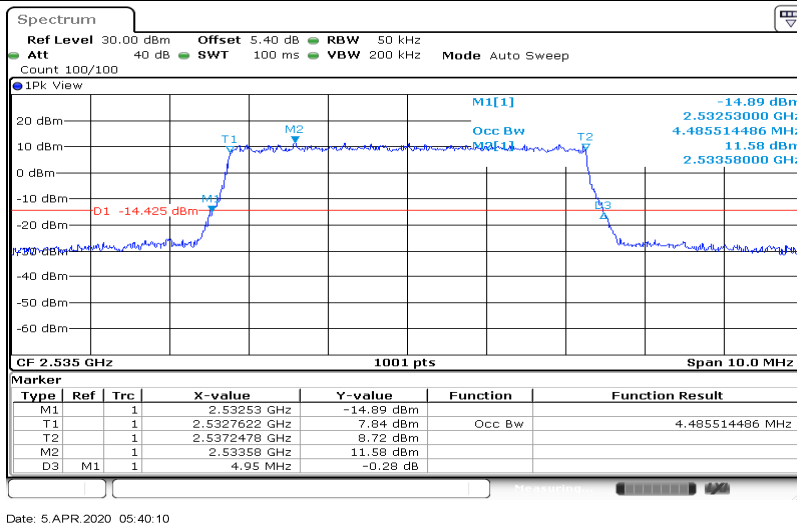


Band7-5MHz-16QAM-20775-25RB#0-4.486



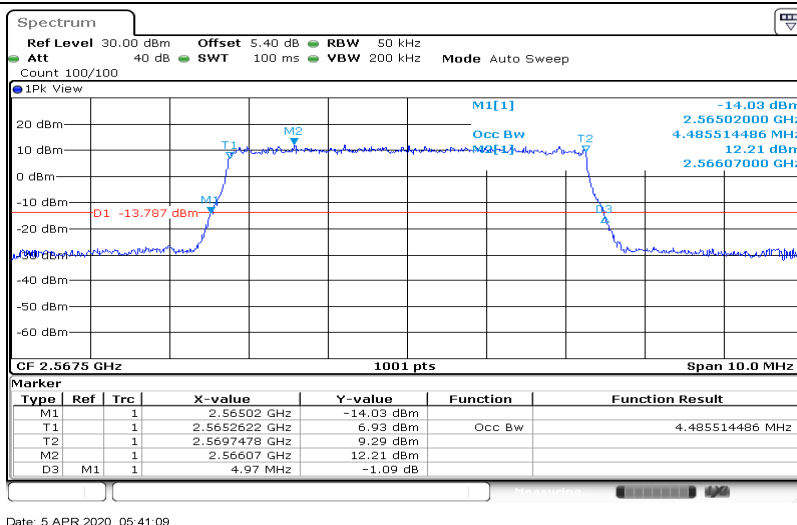


Band7-5MHz-16QAM-21100-25RB#0-4.486

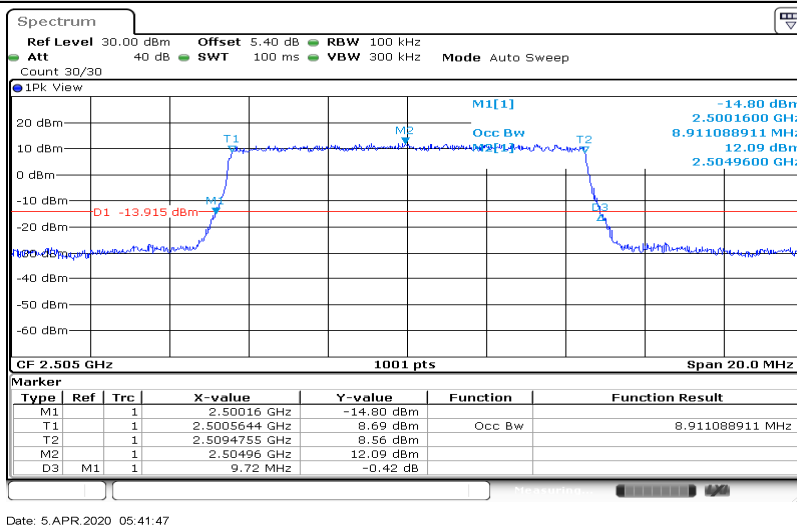


Band7-5MHz-16QAM-21425-25RB#0-4.486



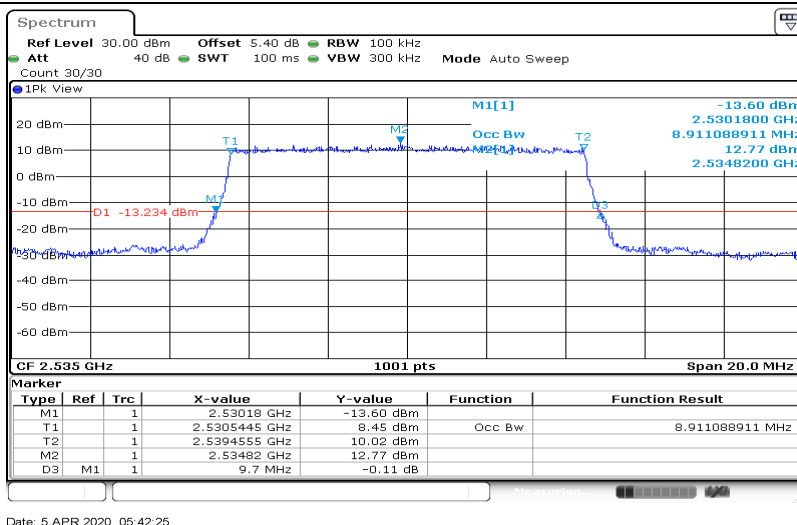


Band7-10MHz-QPSK-20800-50RB#0-8.911

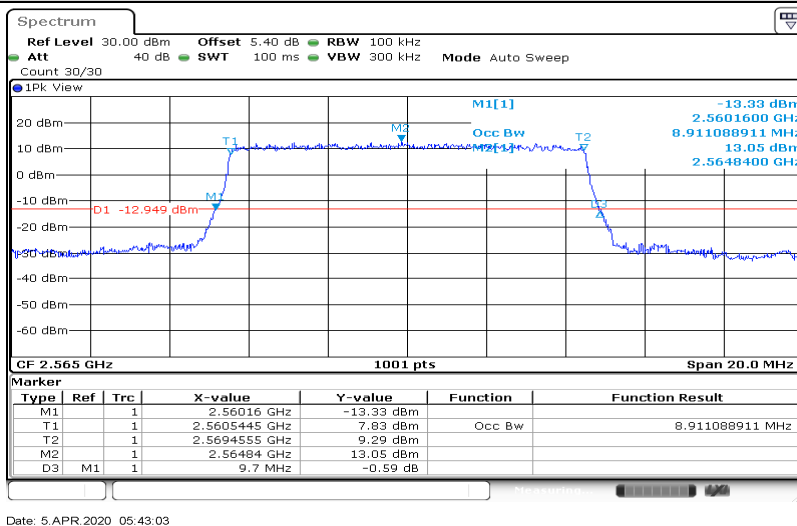


Band7-10MHz-QPSK-21100-50RB#0-8.911



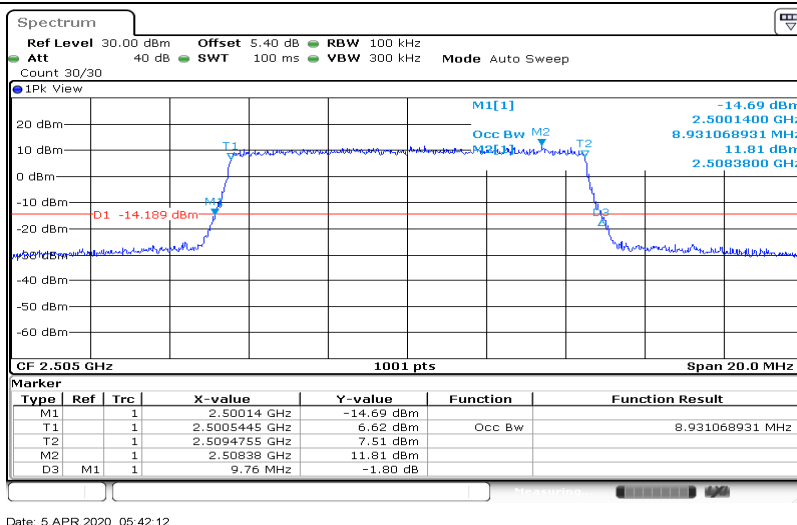


Band7-10MHz-QPSK-21400-50RB#0-8.911

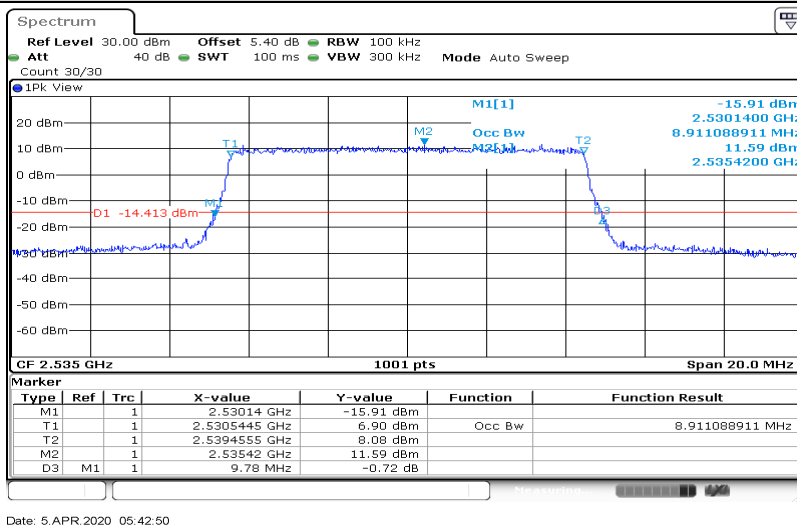


Band7-10MHz-64QAM-20800-50RB#0-8.931



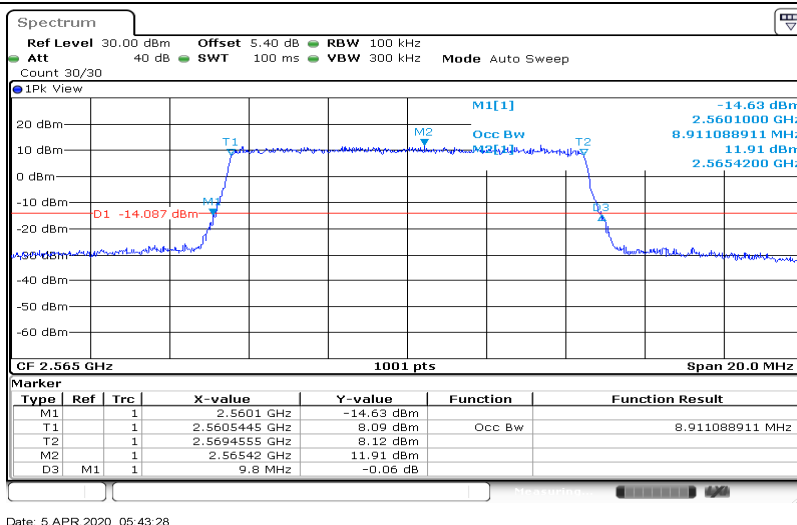


Band7-10MHz-64QAM-21100-50RB#0-8.911

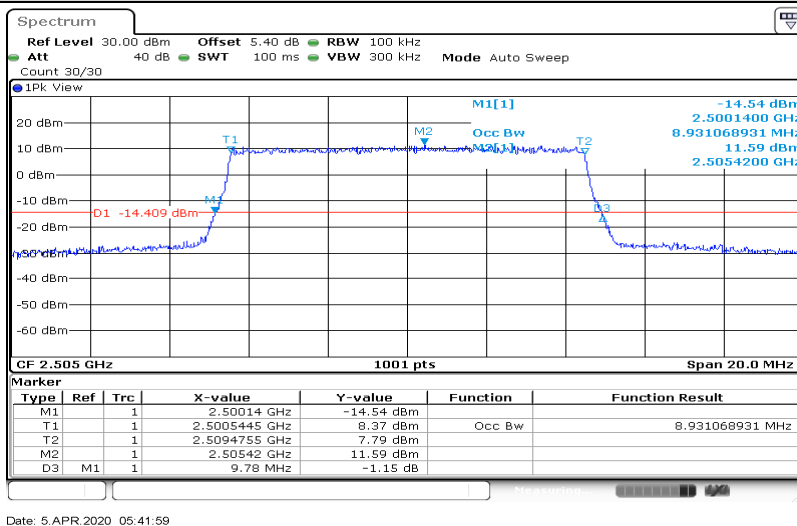


Band7-10MHz-64QAM-21400-50RB#0-8.911



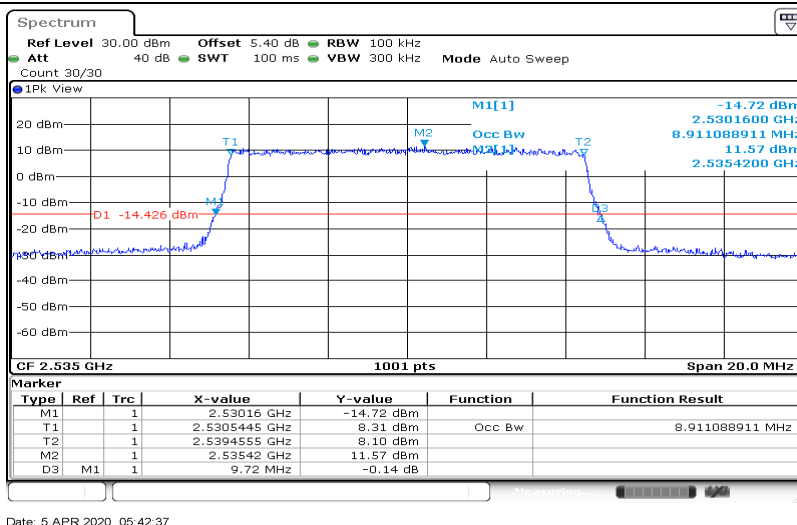


Band7-10MHz-16QAM-20800-50RB#0-8.931

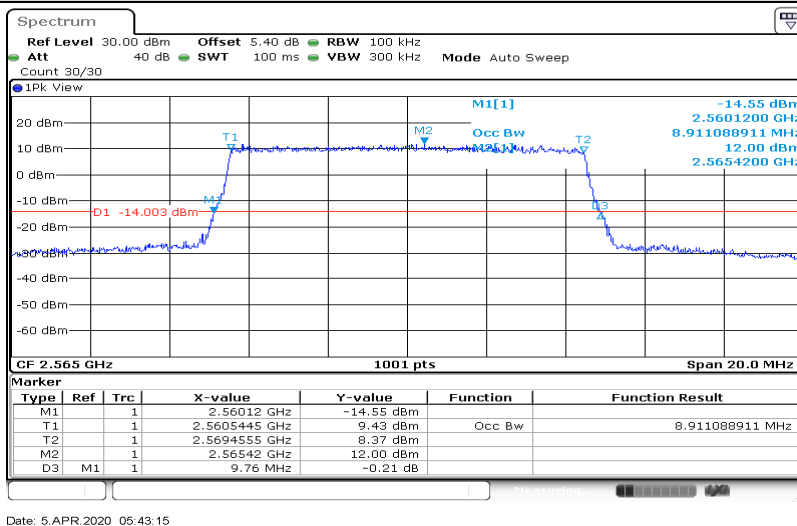


Band7-10MHz-16QAM-21100-50RB#0-8.911



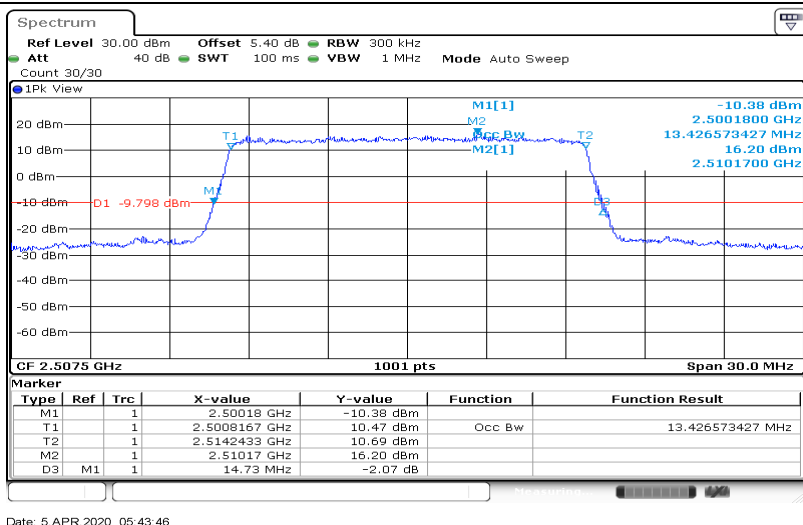


Band7-10MHz-16QAM-21400-50RB#0-8.911

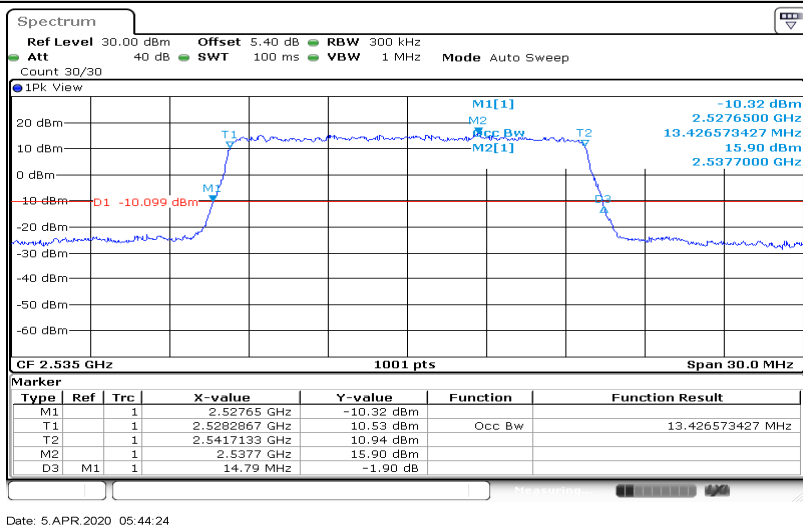


Band7-15MHz-QPSK-20825-75RB#0-13.427



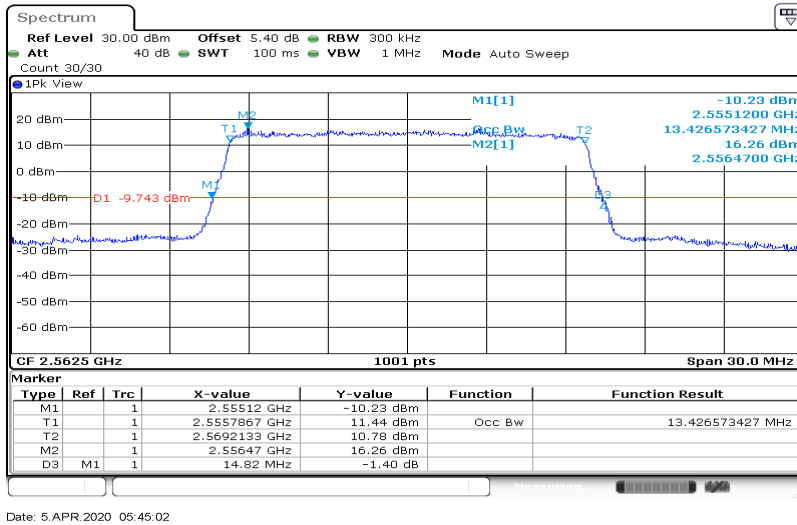


Band7-15MHz-QPSK-21100-75RB#0-13.427

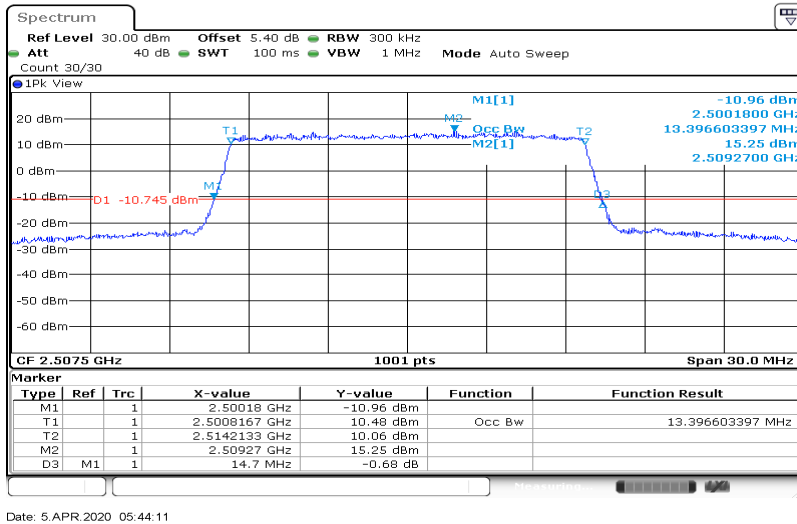


Band7-15MHz-QPSK-21375-75RB#0-13.427





Band7-15MHz-64QAM-20825-75RB#0-13.397

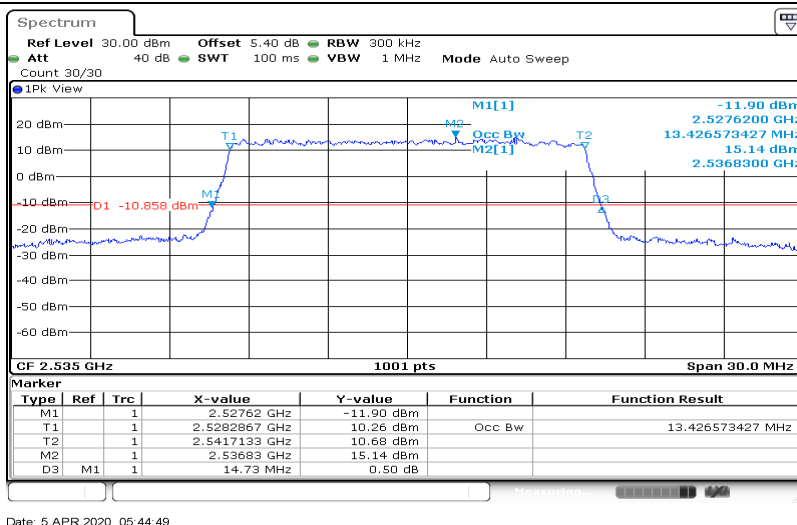


Band7-15MHz-64QAM-21100-75RB#0-13.427

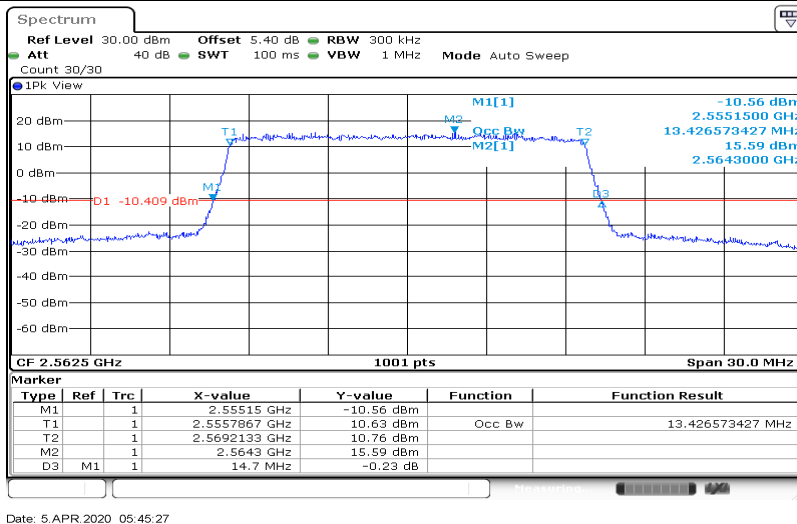


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

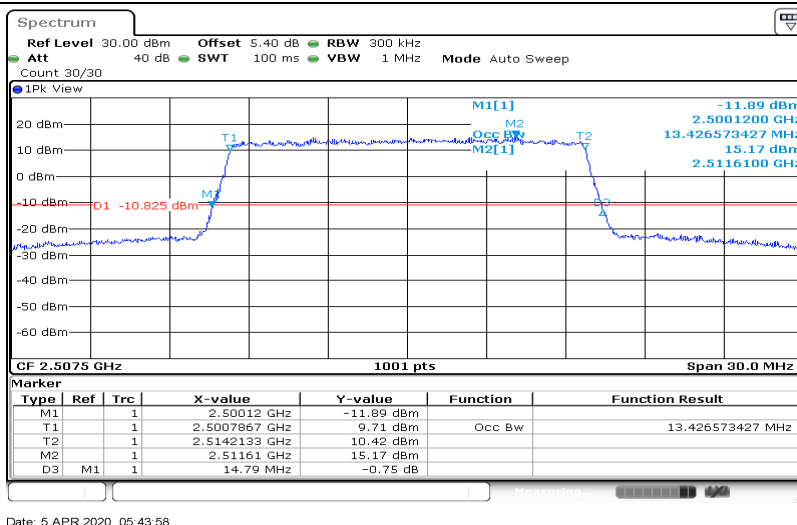


Band7-15MHz-64QAM-21375-75RB#0-13.427

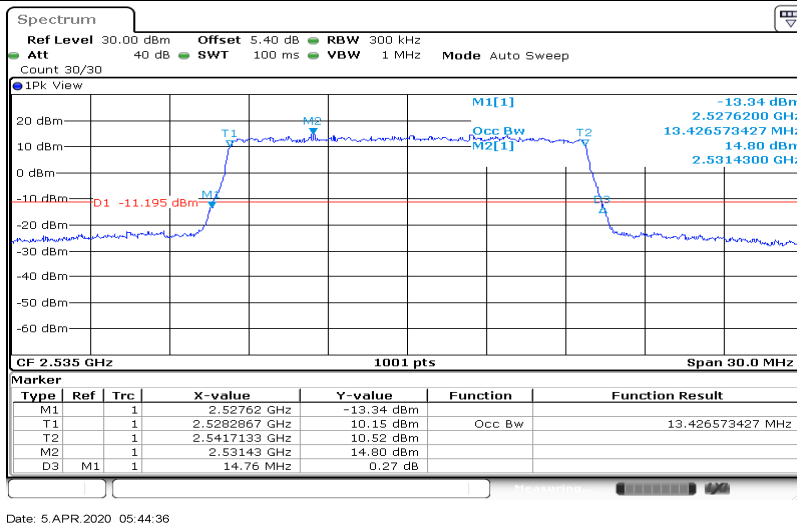


Band7-15MHz-16QAM-20825-75RB#0-13.427



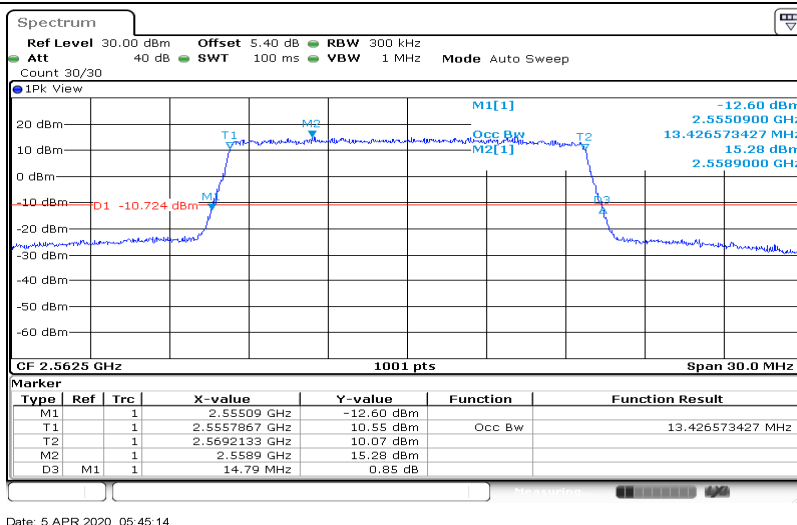


Band7-15MHz-16QAM-21100-75RB#0-13.427

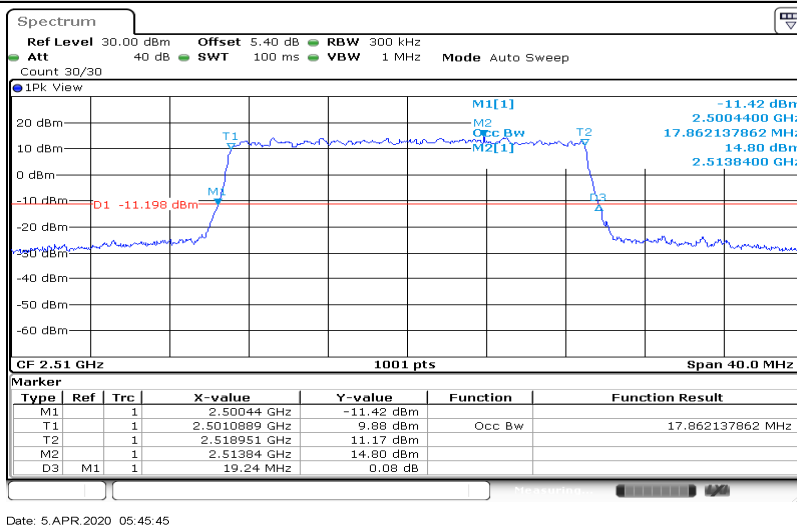


Band7-15MHz-16QAM-21375-75RB#0-13.427



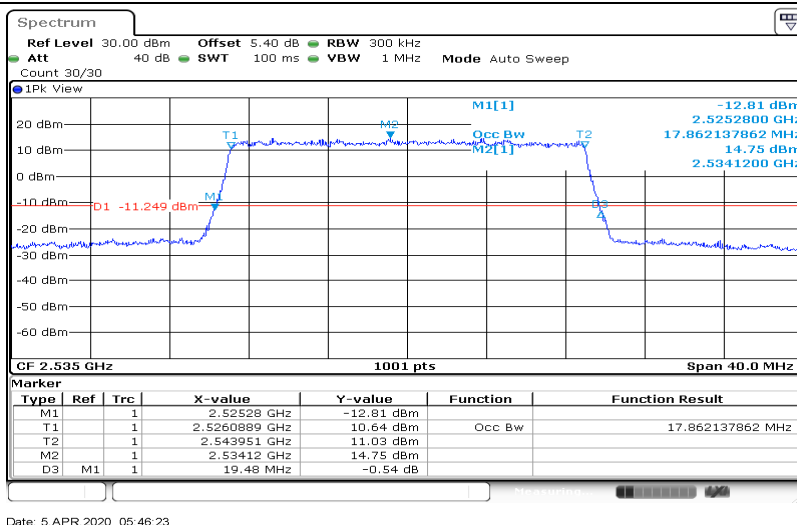


Band7-20MHz-QPSK-20850-100RB#0-17.862

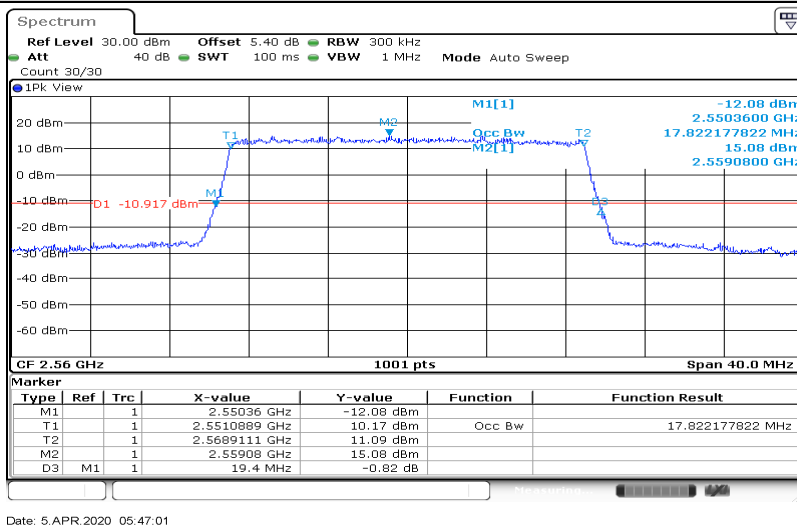


Band7-20MHz-QPSK-21100-100RB#0-17.862



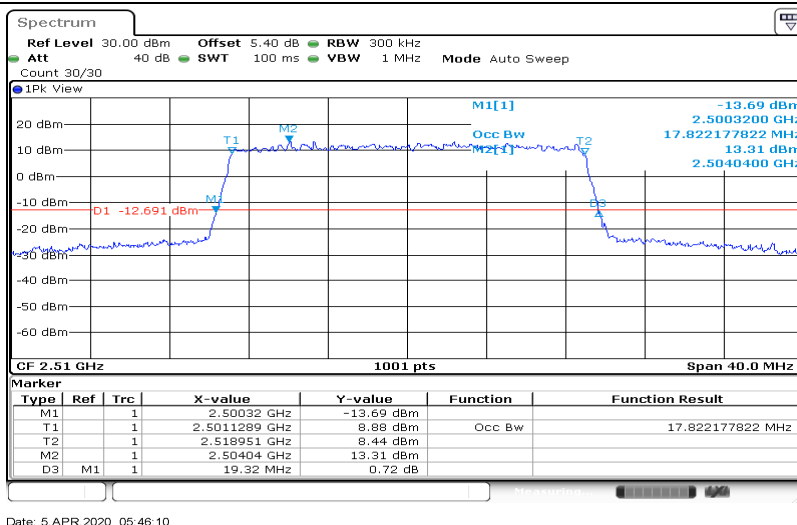


Band7-20MHz-QPSK-21350-100RB#0-17.822

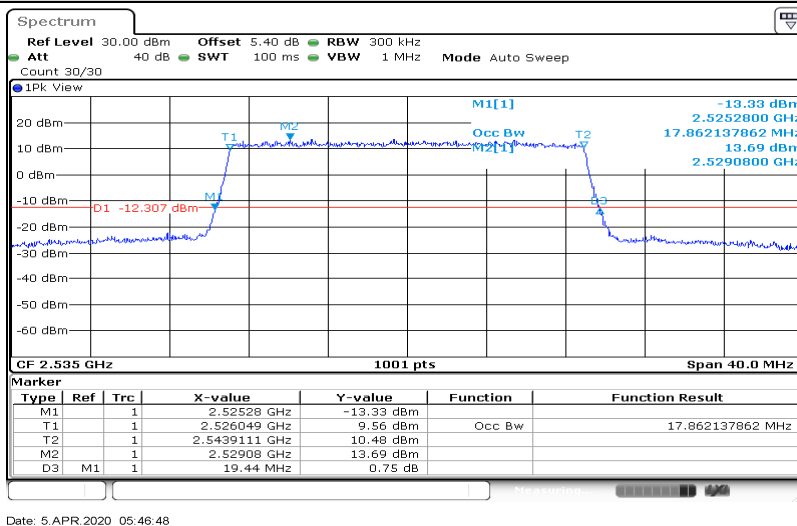


Band7-20MHz-64QAM-20850-100RB#0-17.822





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

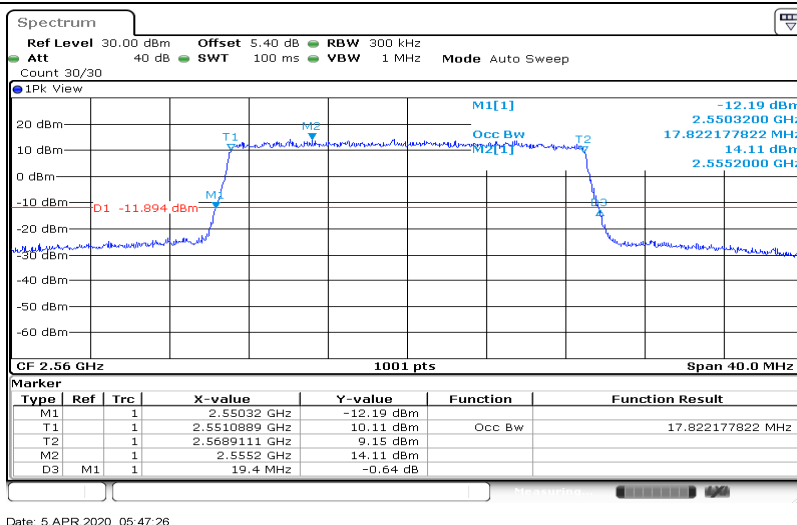


Band7-20MHz-64QAM-21350-100RB#0-17.822

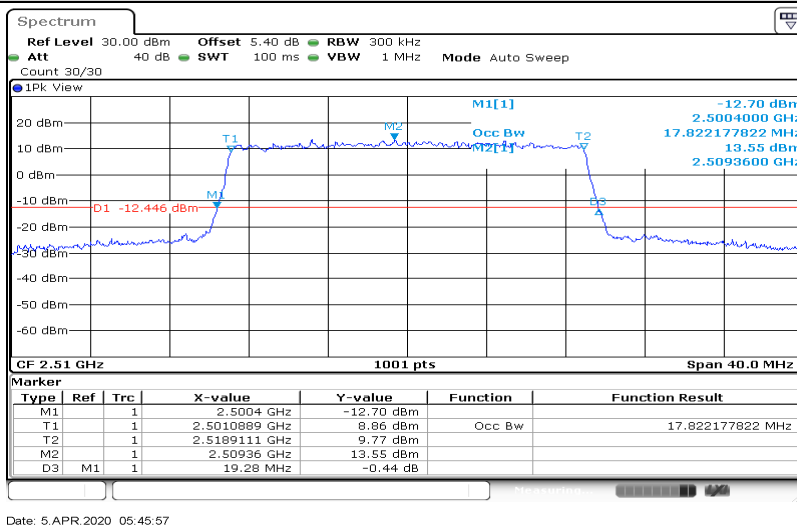


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

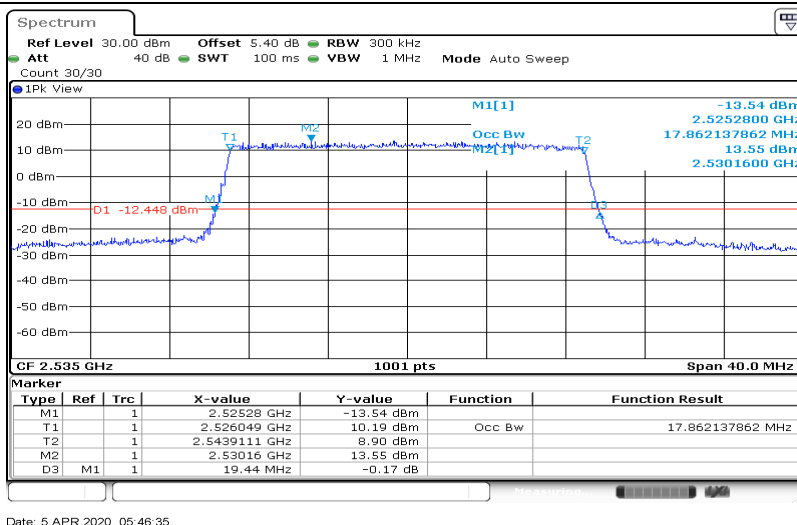


Band7-20MHz-16QAM-20850-100RB#0-17.822

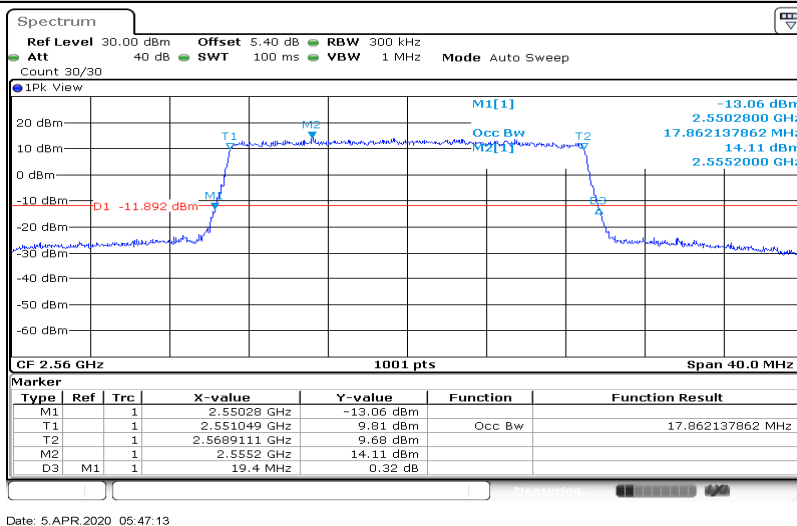


Band7-20MHz-16QAM-21100-100RB#0-17.862





Band7-20MHz-16QAM-21350-100RB#0-17.862





5. Band Edge Compliance

5.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	-54.55,-44.74,-17.14	PASS
Band7	5MHz	QPSK	20775	25RB#0	-52.73,-39.49,-27.58	PASS
Band7	5MHz	QPSK	21425	1RB#24	-50.73,-53.11,-16.88	PASS
Band7	5MHz	QPSK	21425	25RB#0	-44.79,-44.75,-27.00	PASS
Band7	5MHz	64QAM	20775	1RB#0	-54.57,-48.71,-19.52	PASS
Band7	5MHz	64QAM	20775	25RB#0	-53.68,-42.27,-28.63	PASS
Band7	5MHz	64QAM	21425	1RB#24	-53.01,-53.52,-17.96	PASS
Band7	5MHz	64QAM	21425	25RB#0	-47.39,-45.09,-28.65	PASS
Band7	5MHz	16QAM	20775	1RB#0	-54.53,-47.79,-18.84	PASS
Band7	5MHz	16QAM	20775	25RB#0	-53.17,-41.43,-27.39	PASS
Band7	5MHz	16QAM	21425	1RB#24	-52.73,-53.49,-17.70	PASS
Band7	5MHz	16QAM	21425	25RB#0	-45.69,-43.83,-27.14	PASS
Band7	10MHz	QPSK	20800	1RB#0	-51.12,-44.68,-25.83	PASS
Band7	10MHz	QPSK	20800	50RB#0	-46.19,-36.87,-29.63	PASS
Band7	10MHz	QPSK	21400	1RB#49	-51.24,-47.68,-25.19	PASS
Band7	10MHz	QPSK	21400	50RB#0	-44.86,-38.10,-29.64	PASS
Band7	10MHz	64QAM	20800	1RB#0	-51.42,-46.86,-27.48	PASS
Band7	10MHz	64QAM	20800	50RB#0	-45.72,-36.71,-31.24	PASS
Band7	10MHz	64QAM	21400	1RB#49	-51.13,-49.32,-27.19	PASS
Band7	10MHz	64QAM	21400	50RB#0	-44.89,-38.28,-31.02	PASS
Band7	10MHz	16QAM	20800	1RB#0	-50.82,-46.04,-26.28	PASS
Band7	10MHz	16QAM	20800	50RB#0	-45.05,-36.35,-30.49	PASS
Band7	10MHz	16QAM	21400	1RB#49	-51.29,-47.69,-27.09	PASS
Band7	10MHz	16QAM	21400	50RB#0	-44.10,-38.03,-30.51	PASS
Band7	15MHz	QPSK	20825	1RB#0	-45.57,-46.03,-25.04	PASS
Band7	15MHz	QPSK	20825	75RB#0	-38.95,-36.50,-31.41	PASS
Band7	15MHz	QPSK	21375	1RB#74	-49.63,-46.90,-24.03	PASS
Band7	15MHz	QPSK	21375	75RB#0	-45.92,-37.71,-31.68	PASS
Band7	15MHz	64QAM	20825	1RB#0	-47.21,-46.73,-25.60	PASS
Band7	15MHz	64QAM	20825	75RB#0	-41.01,-35.33,-32.36	PASS
Band7	15MHz	64QAM	21375	1RB#74	-49.62,-48.24,-24.45	PASS
Band7	15MHz	64QAM	21375	75RB#0	-45.50,-36.69,-32.43	PASS



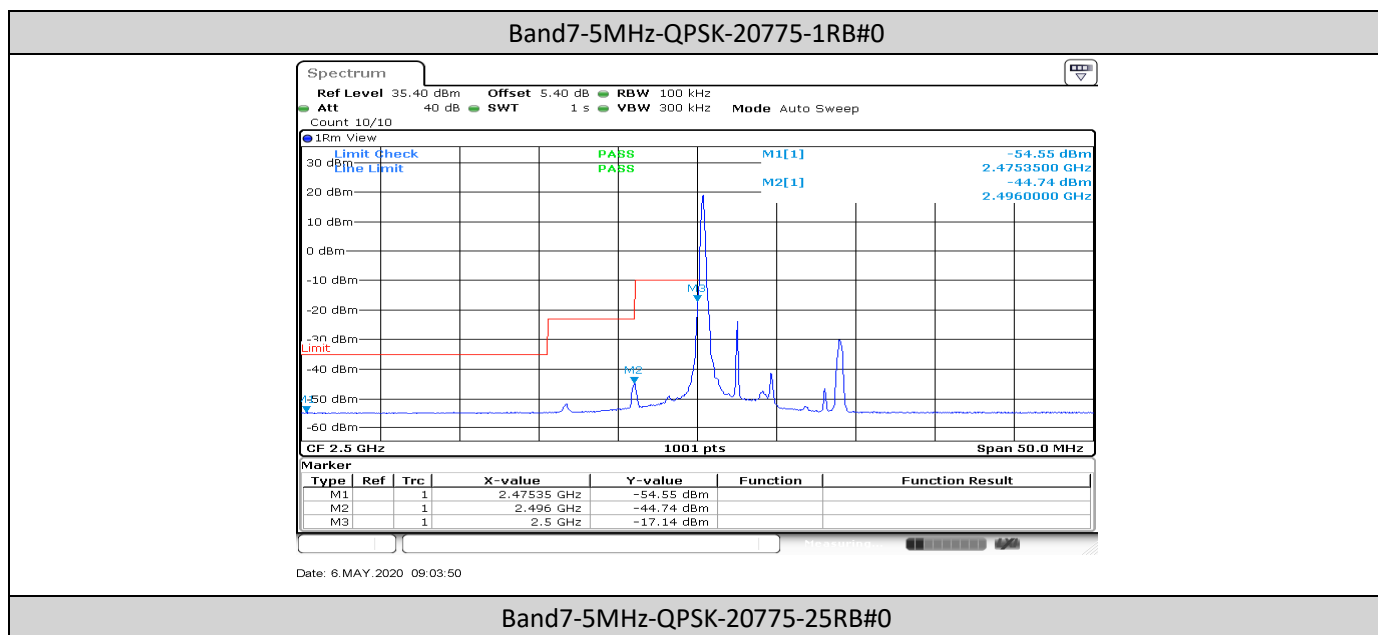
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

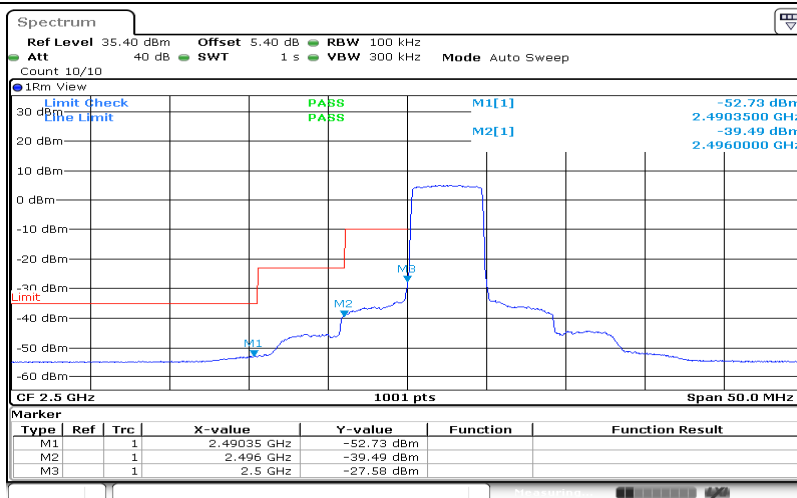
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn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



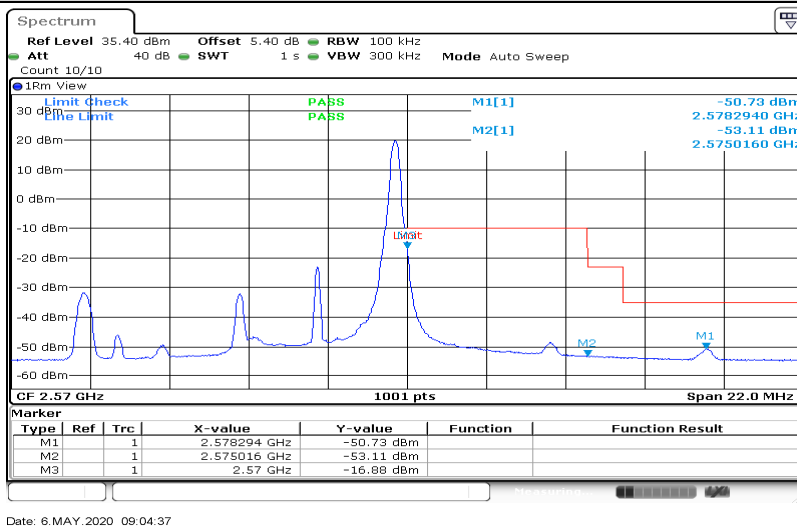
Band7	15MHz	16QAM	20825	1RB#0	-46.60,-46.58,-25.94	PASS
Band7	15MHz	16QAM	20825	75RB#0	-40.49,-35.48,-31.84	PASS
Band7	15MHz	16QAM	21375	1RB#74	-49.62,-47.00,-24.13	PASS
Band7	15MHz	16QAM	21375	75RB#0	-45.01,-36.58,-31.65	PASS
Band7	20MHz	QPSK	20850	1RB#0	-46.44,-45.71,-22.73	PASS
Band7	20MHz	QPSK	20850	100RB#0	-37.37,-34.52,-30.36	PASS
Band7	20MHz	QPSK	21350	1RB#99	-47.55,-45.60,-22.53	PASS
Band7	20MHz	QPSK	21350	100RB#0	-46.69,-35.44,-30.82	PASS
Band7	20MHz	64QAM	20850	1RB#0	-47.12,-46.30,-24.53	PASS
Band7	20MHz	64QAM	20850	100RB#0	-37.82,-33.63,-31.36	PASS
Band7	20MHz	64QAM	21350	1RB#99	-47.54,-46.02,-23.62	PASS
Band7	20MHz	64QAM	21350	100RB#0	-46.52,-34.65,-31.99	PASS
Band7	20MHz	16QAM	20850	1RB#0	-46.71,-45.38,-23.29	PASS
Band7	20MHz	16QAM	20850	100RB#0	-37.49,-33.71,-30.93	PASS
Band7	20MHz	16QAM	21350	1RB#99	-47.53,-46.06,-24.78	PASS
Band7	20MHz	16QAM	21350	100RB#0	-46.27,-34.60,-31.15	PASS

5.2. Test Plots



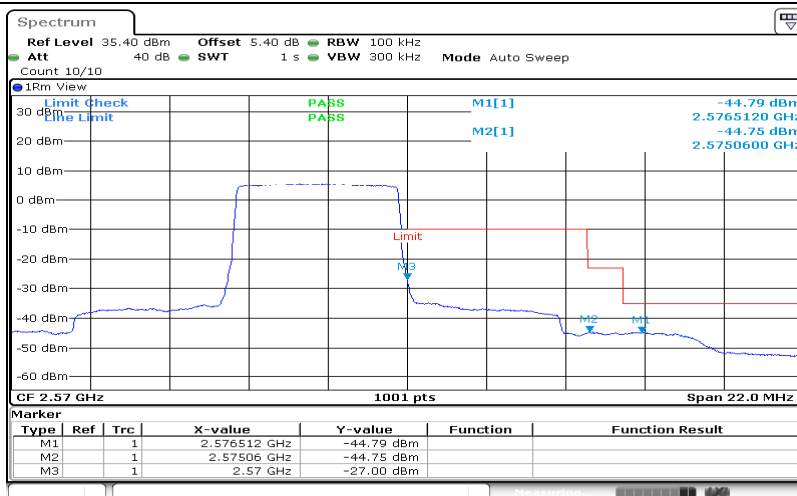


Band7-5MHz-QPSK-21425-1RB#24



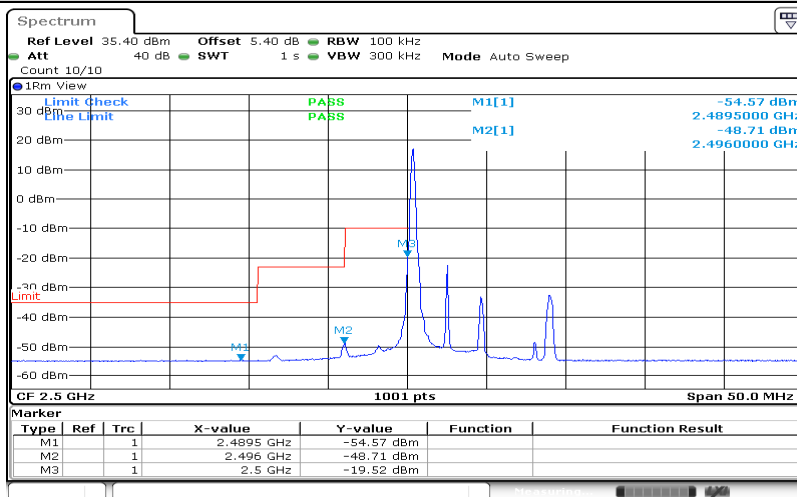
Band7-5MHz-QPSK-21425-25RB#0





Date: 6 MAY 2020 09:06:07

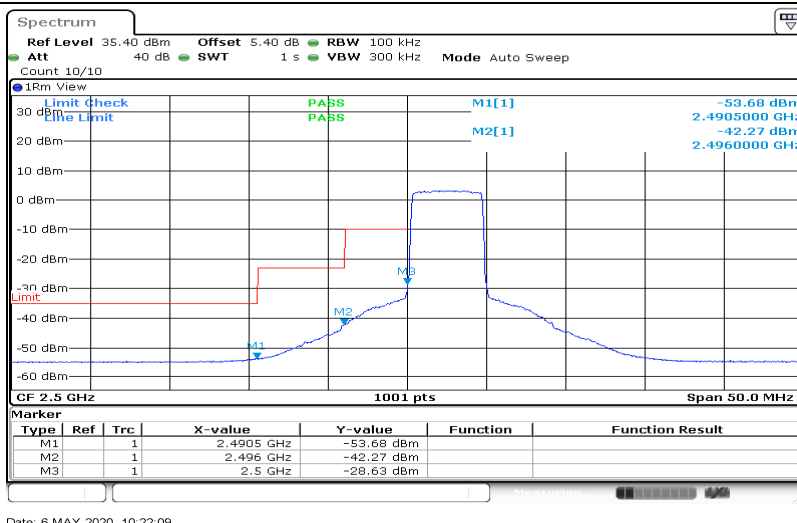
Band7-5MHz-64QAM-20775-1RB#0



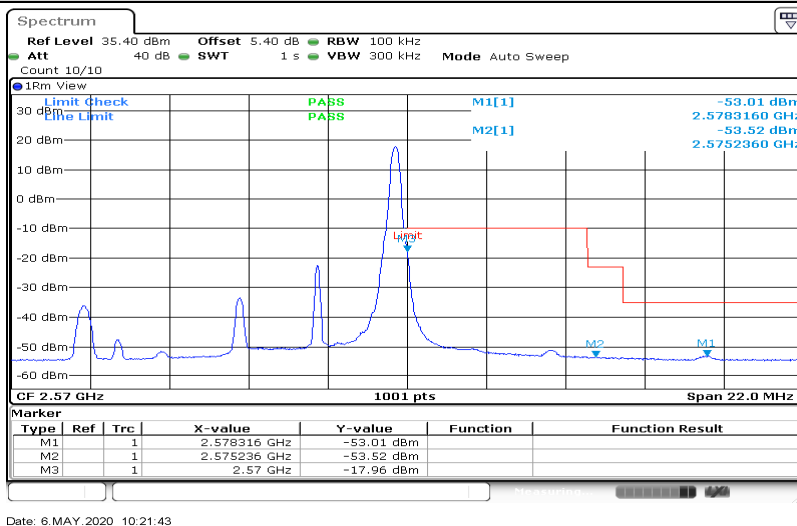
Date: 6 MAY 2020 10:21:17

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



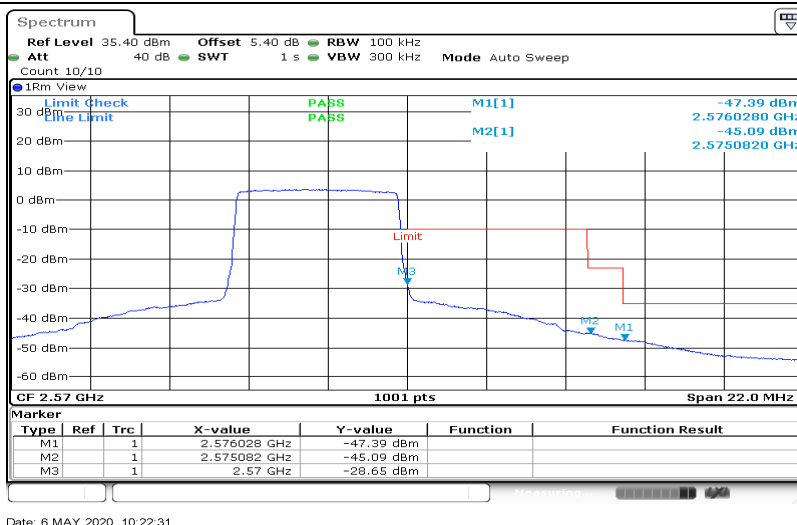


Band7-5MHz-64QAM-21425-1RB#24

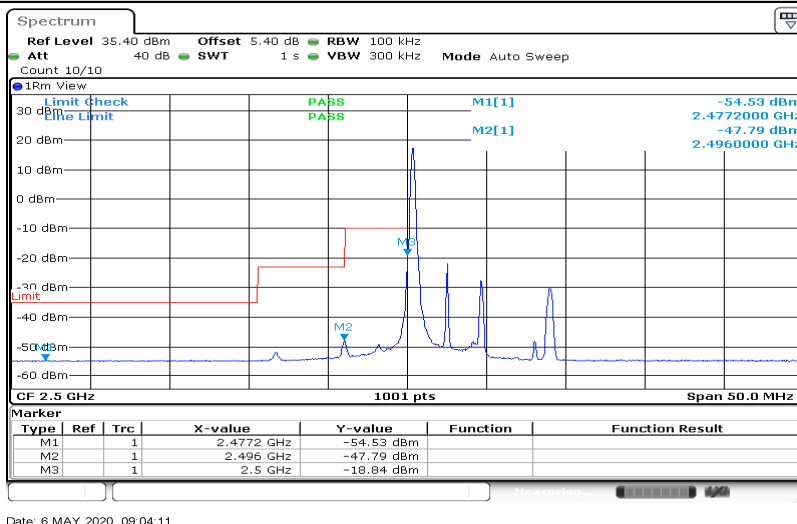


Band7-5MHz-64QAM-21425-25RB#0





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

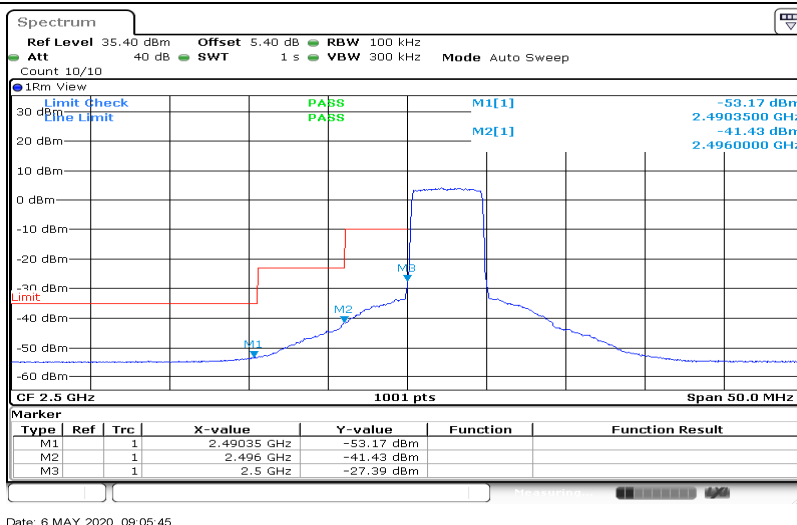


Band7-5MHz-16QAM-20775-25RB#0

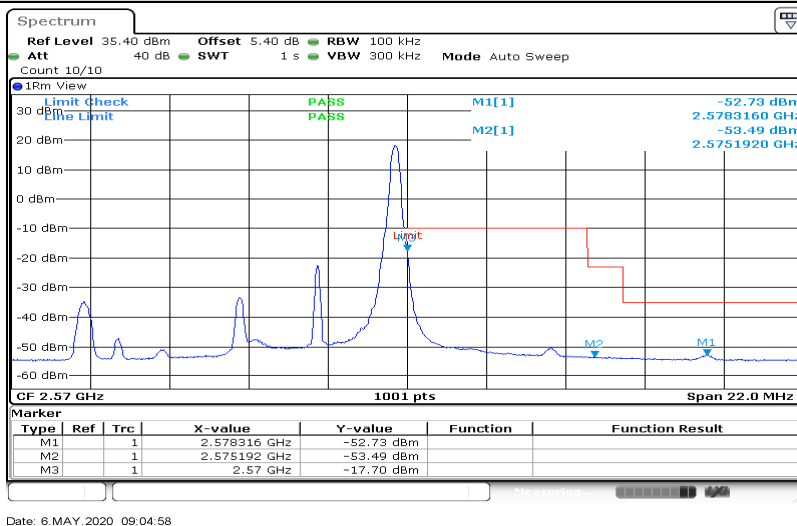


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

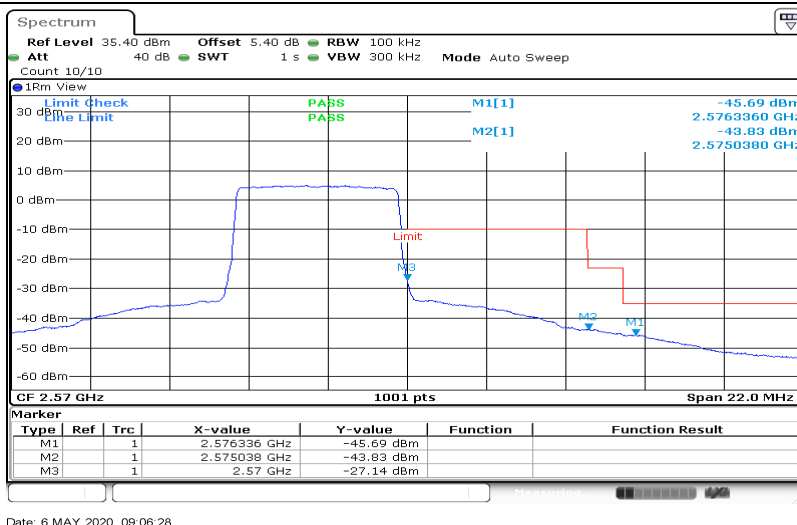


Band7-5MHz-16QAM-21425-1RB#24

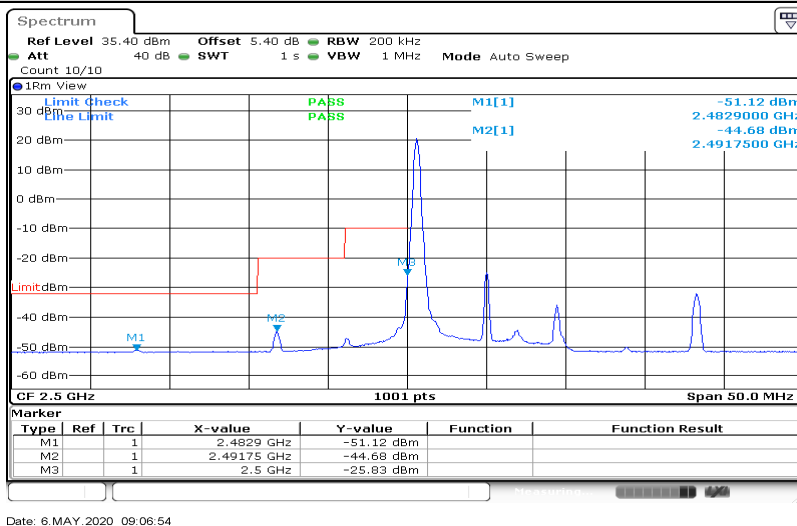


Band7-5MHz-16QAM-21425-25RB#0



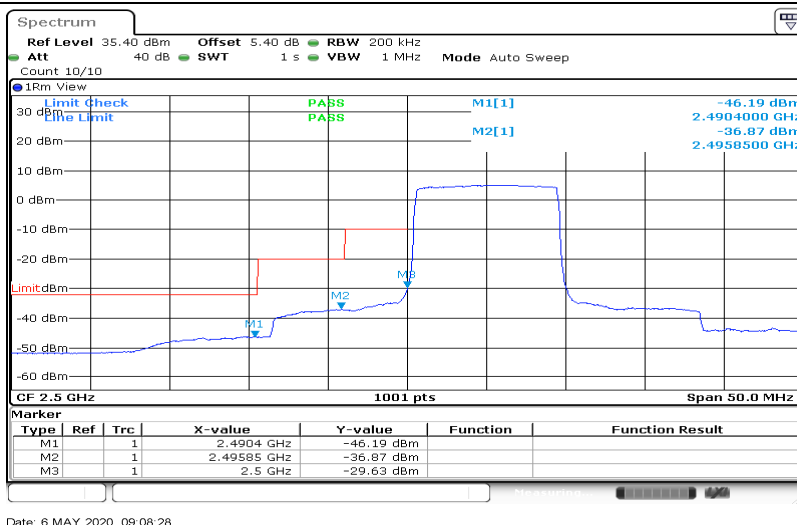


Band7-10MHz-QPSK-20800-1RB#0

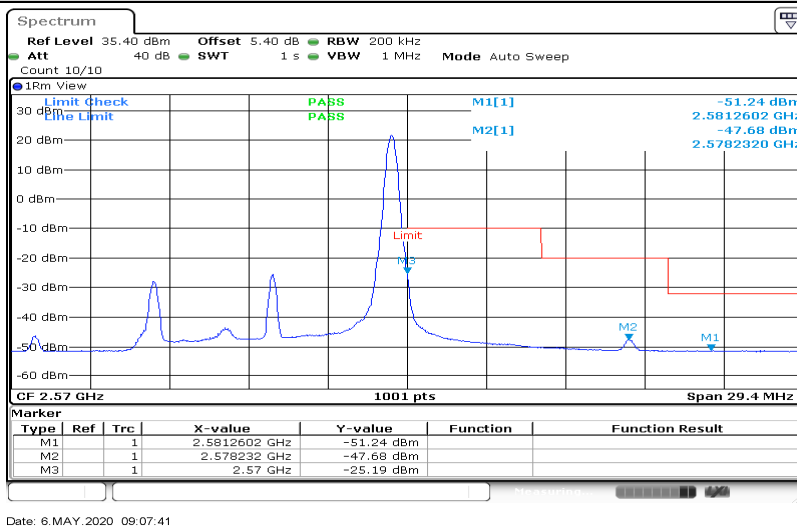


Band7-10MHz-QPSK-20800-50RB#0



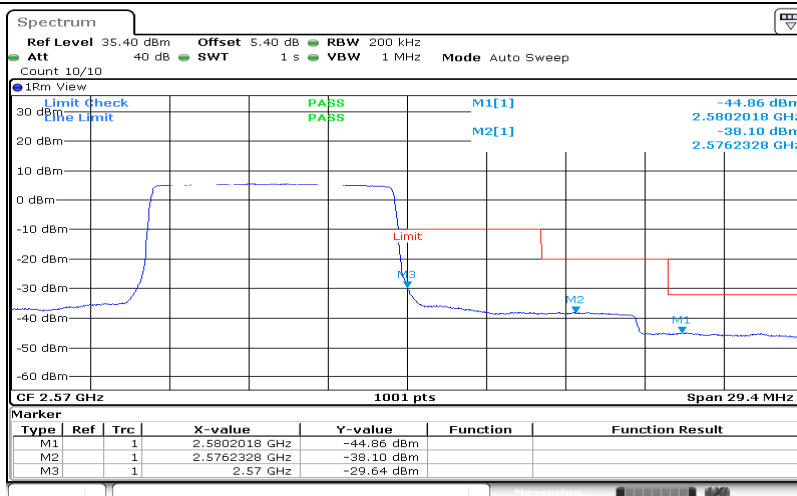


Band7-10MHz-QPSK-21400-1RB#49

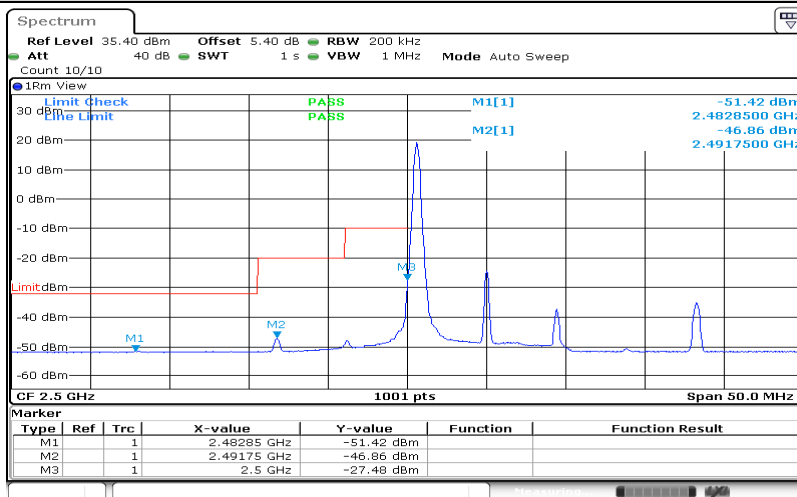


Band7-10MHz-QPSK-21400-50RB#0



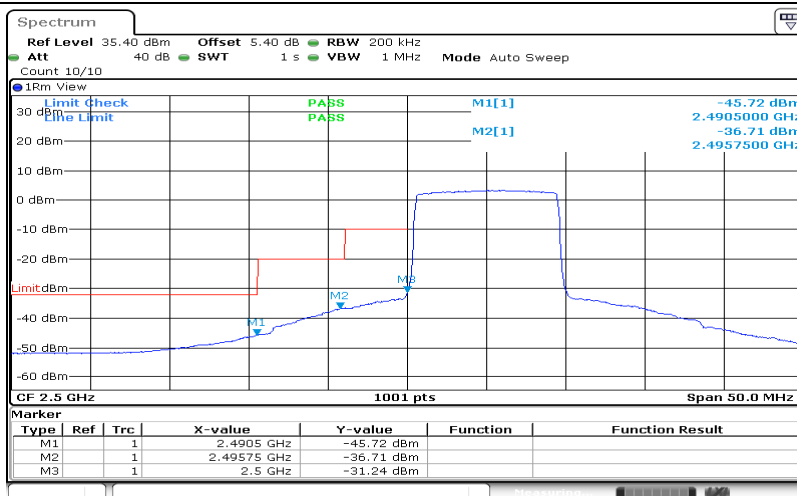


Band7-10MHz-64QAM-20800-1RB#0



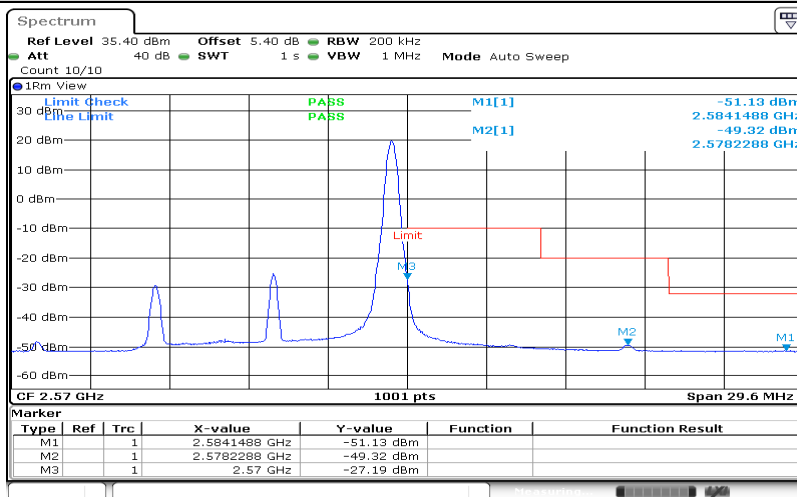
Band7-10MHz-64QAM-20800-50RB#0





Date: 6 MAY 2020 10:23:49

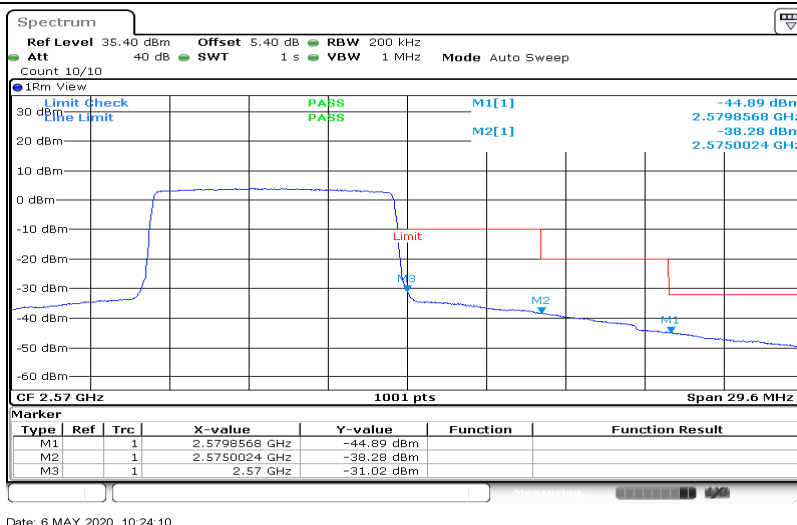
Band7-10MHz-64QAM-21400-1RB#49



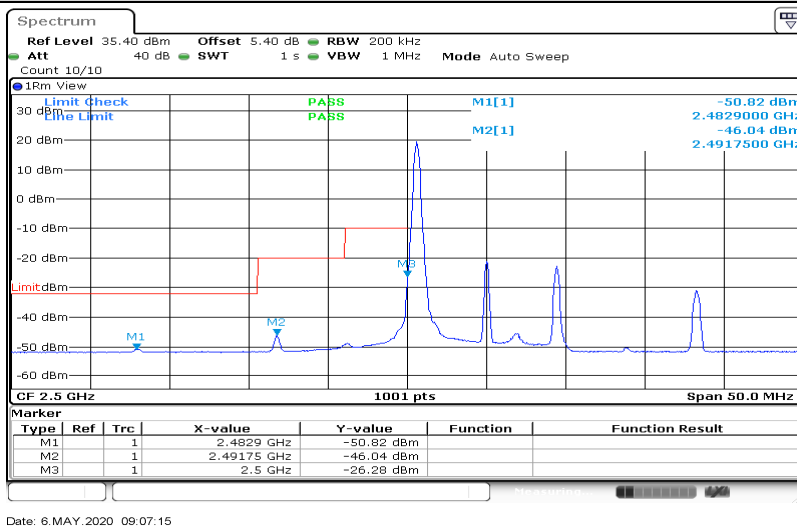
Date: 6 MAY 2020 10:23:23

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



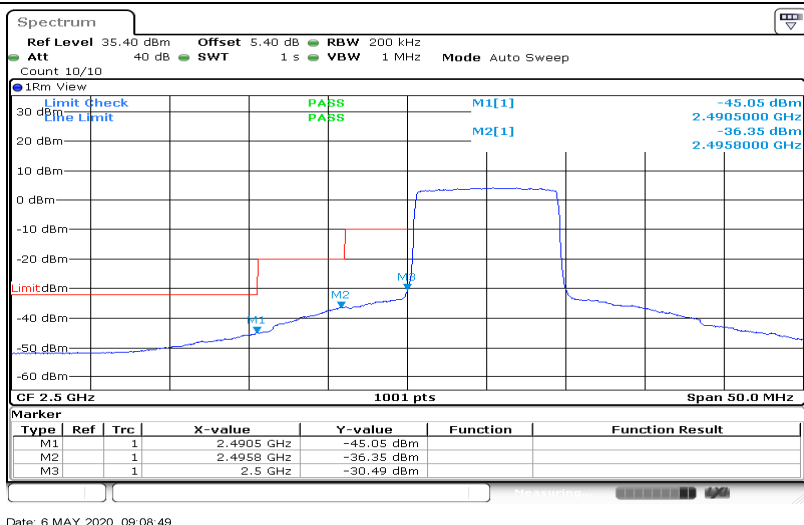


Band7-10MHz-16QAM-20800-1RB#0

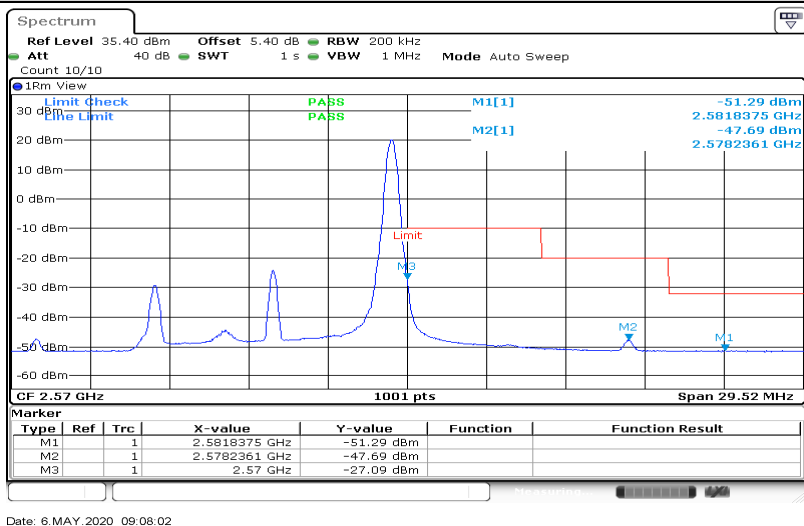


Band7-10MHz-16QAM-20800-50RB#0



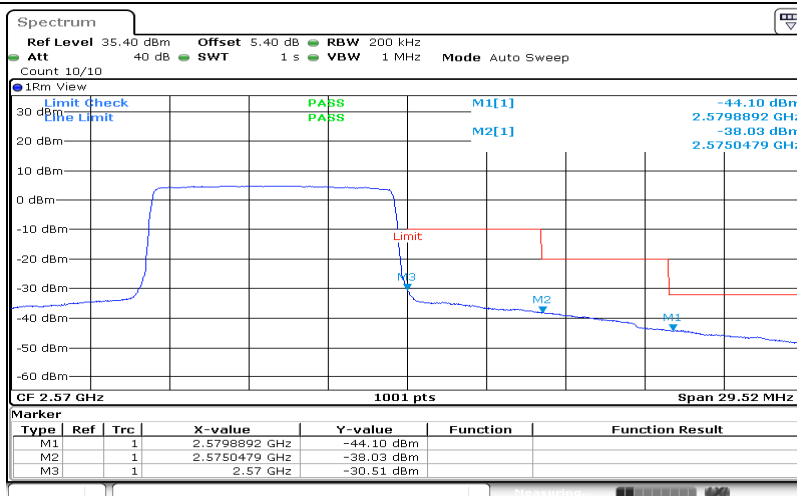


Band7-10MHz-16QAM-21400-1RB#49

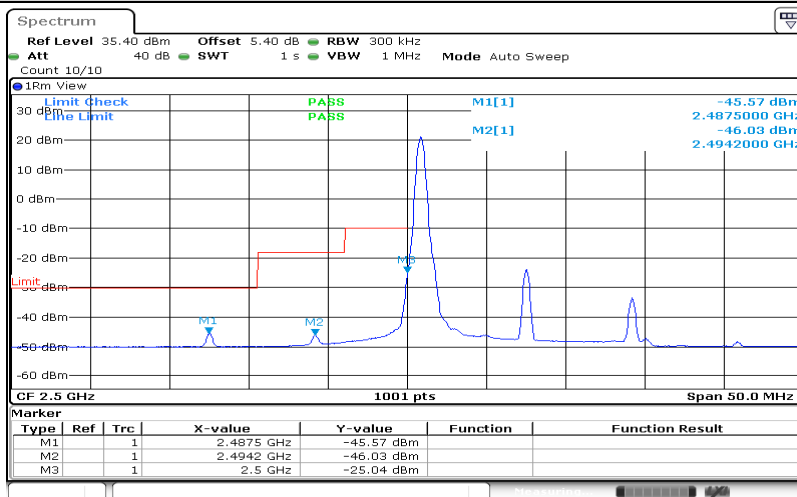


Band7-10MHz-16QAM-21400-50RB#0



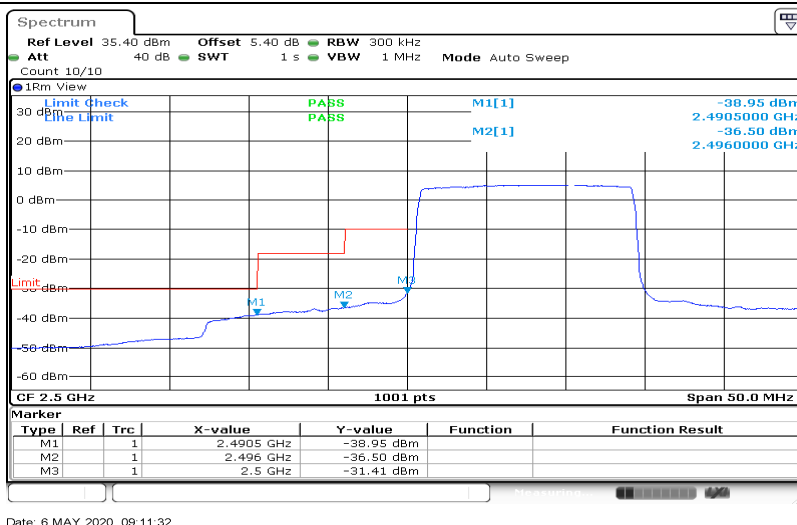


Band7-15MHz-QPSK-20825-1RB#0

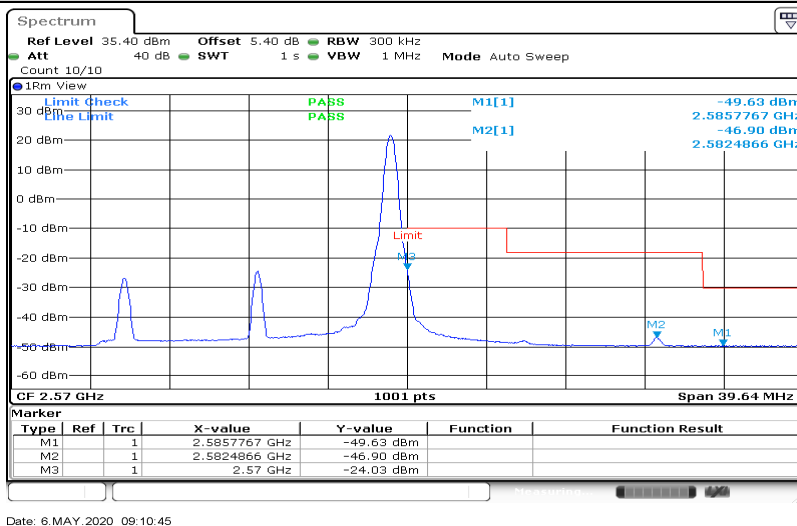


Band7-15MHz-QPSK-20825-75RB#0



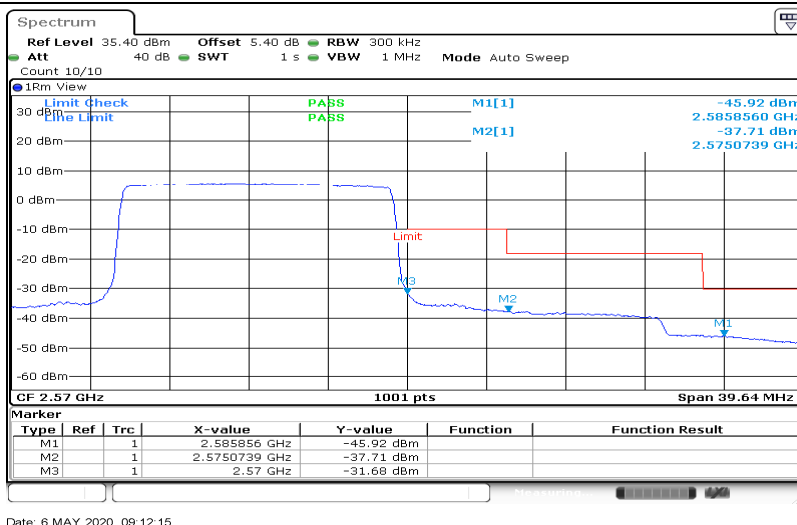


Band7-15MHz-QPSK-21375-1RB#74

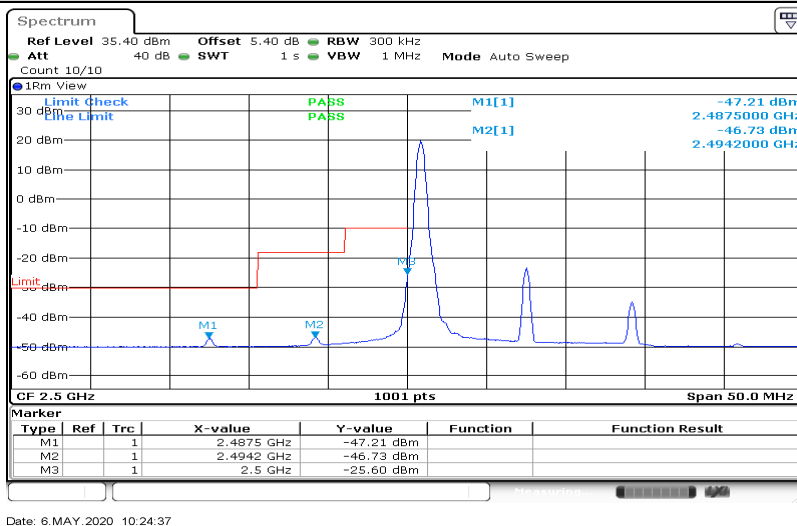


Band7-15MHz-QPSK-21375-75RB#0



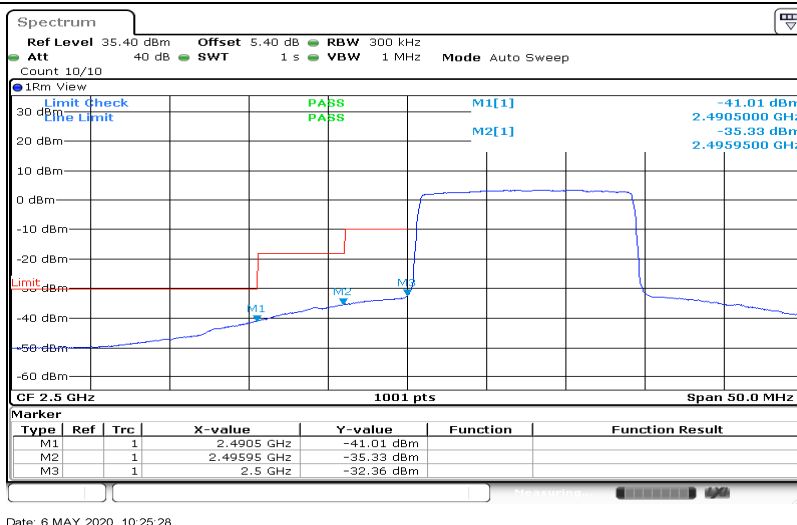


Band7-15MHz-64QAM-20825-1RB#0

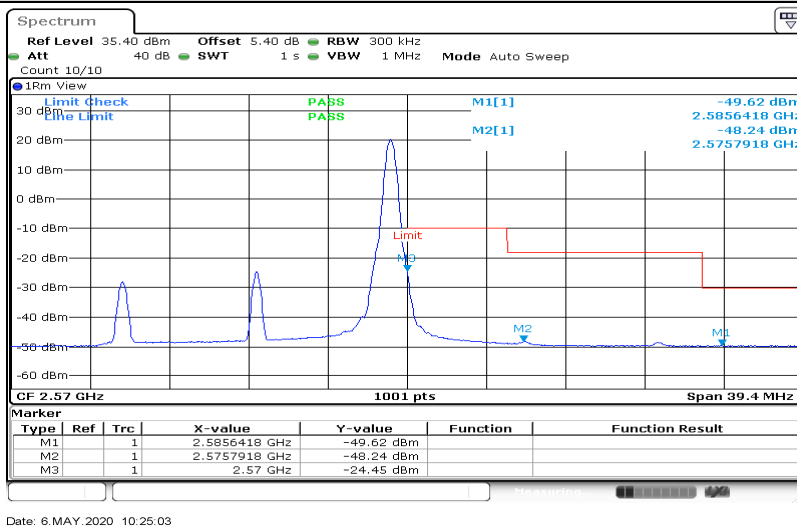


Band7-15MHz-64QAM-20825-75RB#0



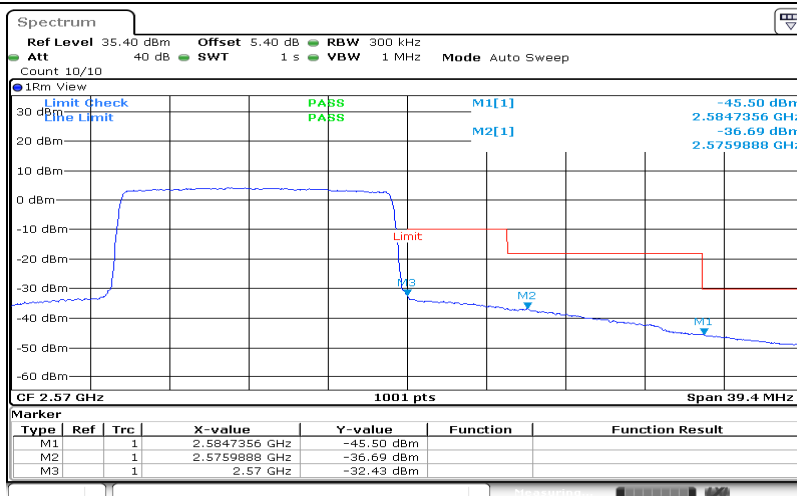


Band7-15MHz-64QAM-21375-1RB#74

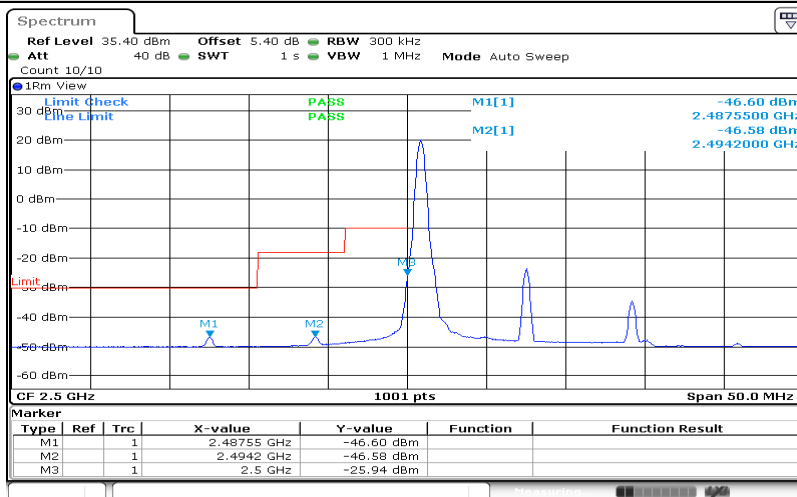


Band7-15MHz-64QAM-21375-75RB#0



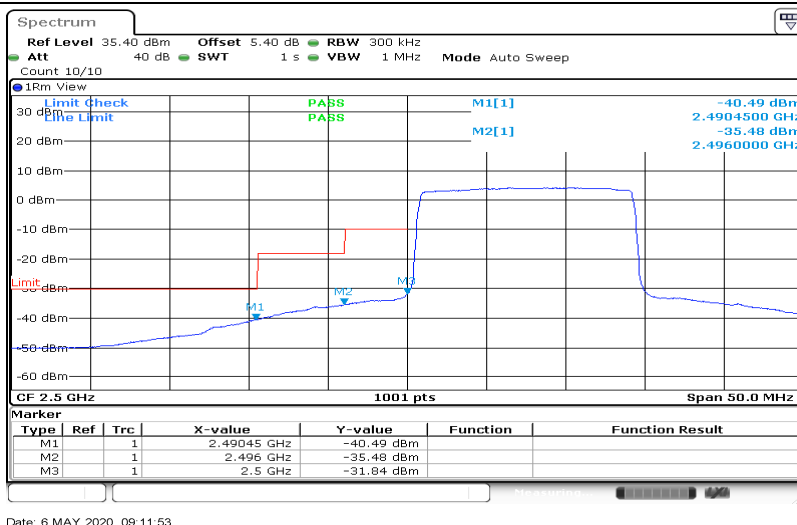


Band7-15MHz-16QAM-20825-1RB#0

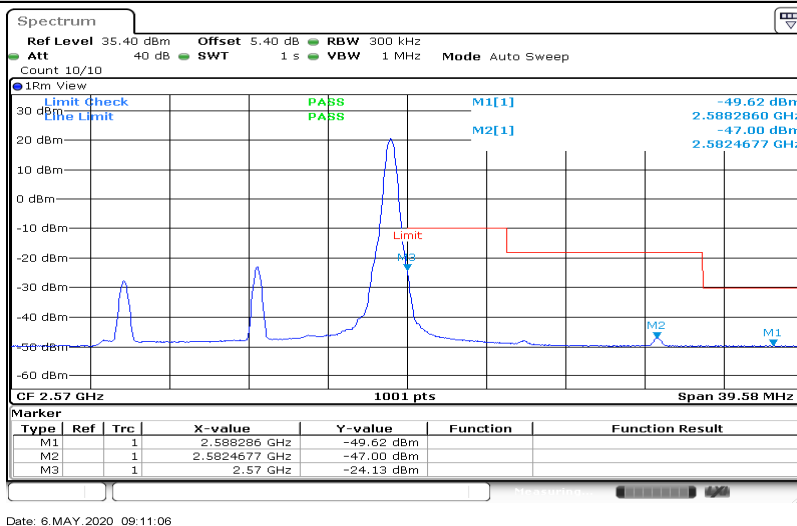


Band7-15MHz-16QAM-20825-75RB#0





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

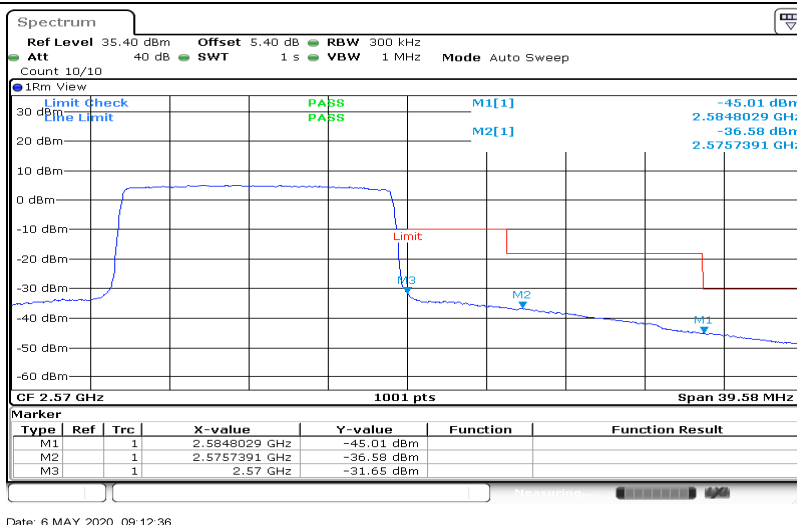


Band7-15MHz-16QAM-21375-75RB#0

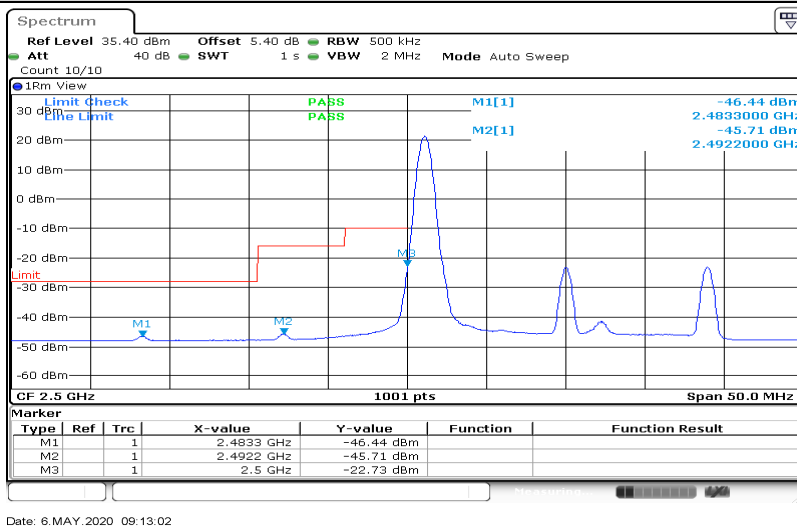


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

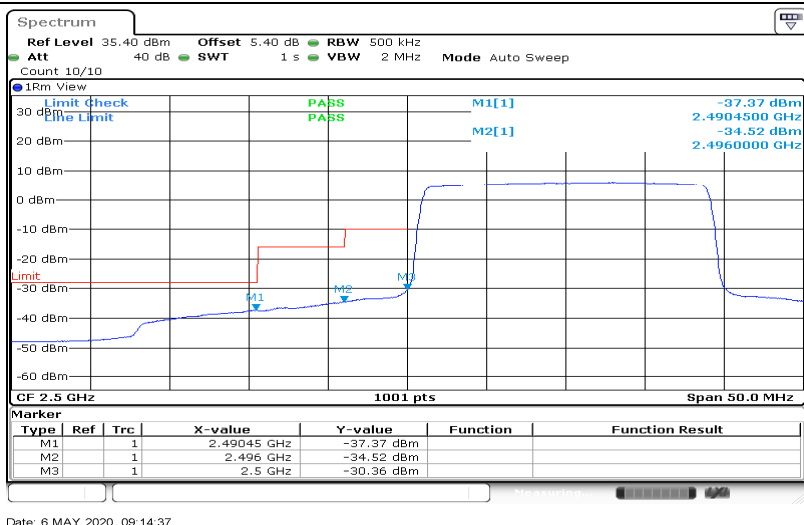


Band7-20MHz-QPSK-20850-1RB#0

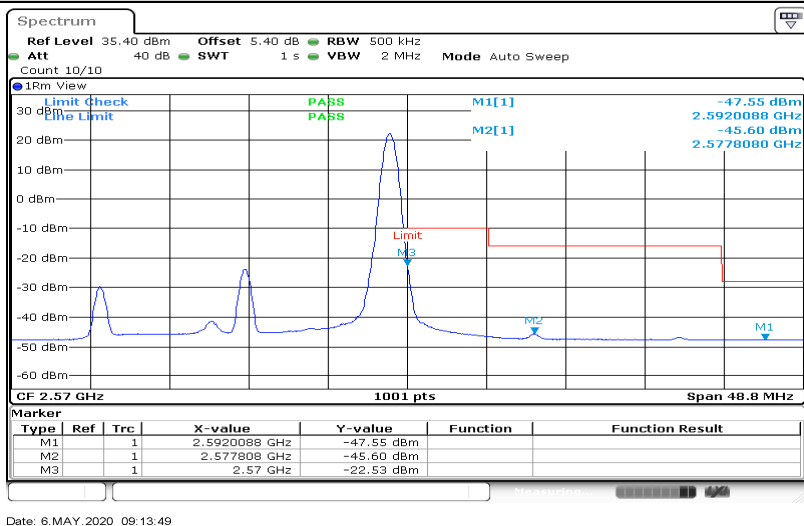


Band7-20MHz-QPSK-20850-100RB#0



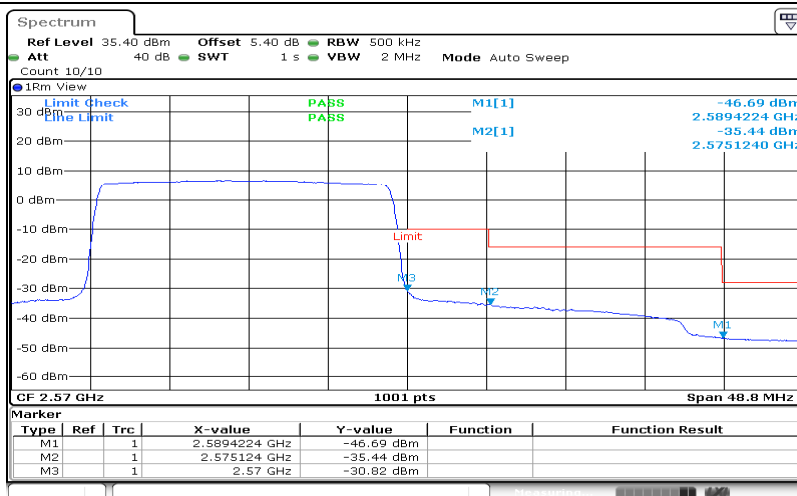


Band7-20MHz-QPSK-21350-1RB#99

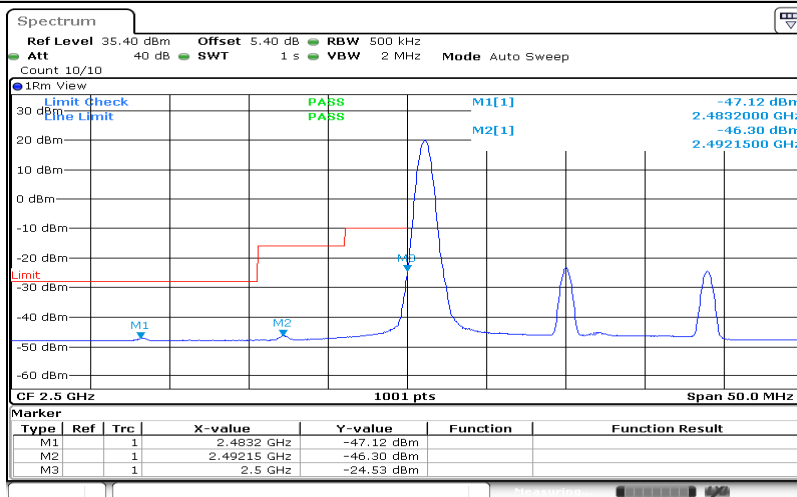


Band7-20MHz-QPSK-21350-100RB#0



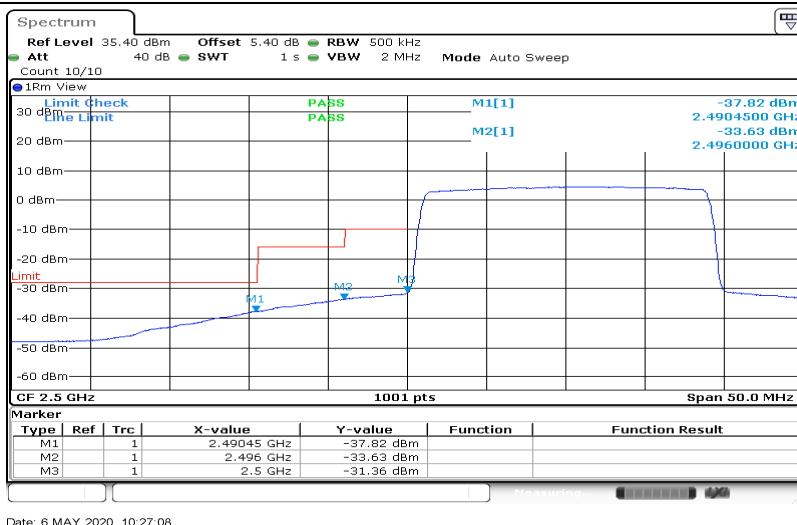


Band7-20MHz-64QAM-20850-1RB#0

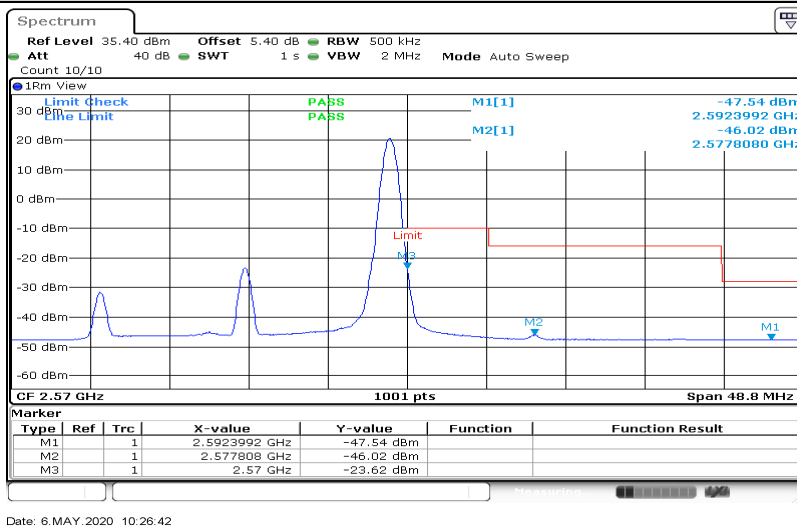


Band7-20MHz-64QAM-20850-100RB#0



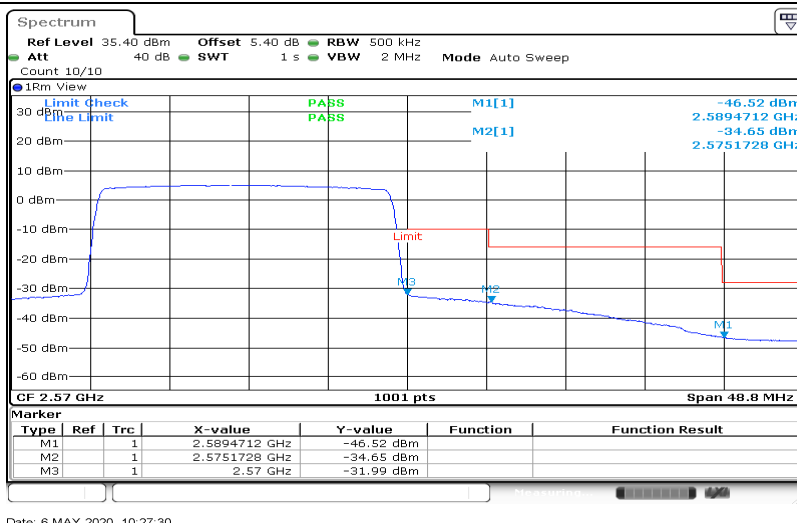


Band7-20MHz-64QAM-21350-1RB#99

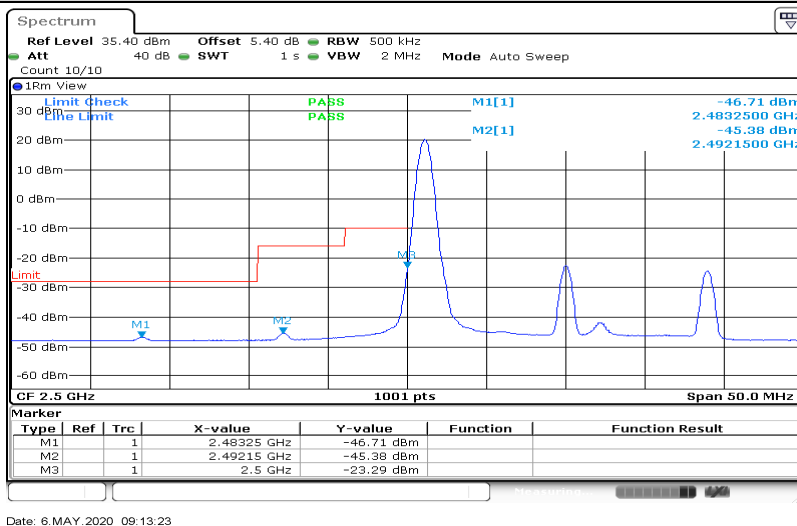


Band7-20MHz-64QAM-21350-100RB#0



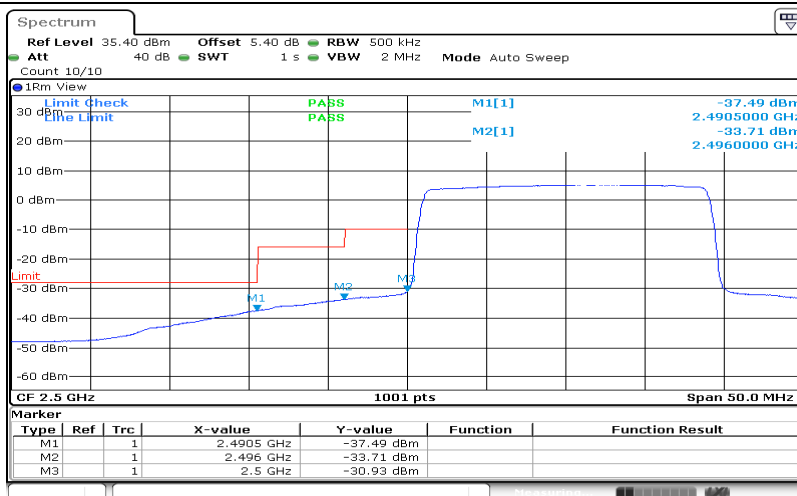


Band7-20MHz-16QAM-20850-1RB#0



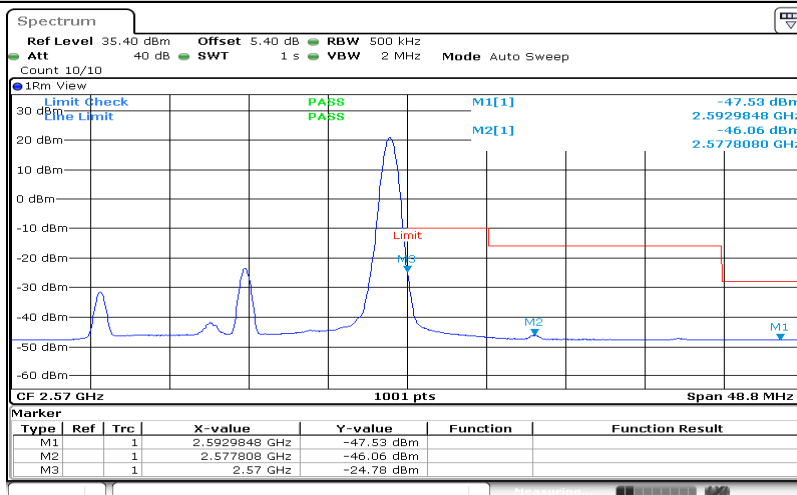
Band7-20MHz-16QAM-20850-100RB#0





Date: 6 MAY 2020 09:14:58

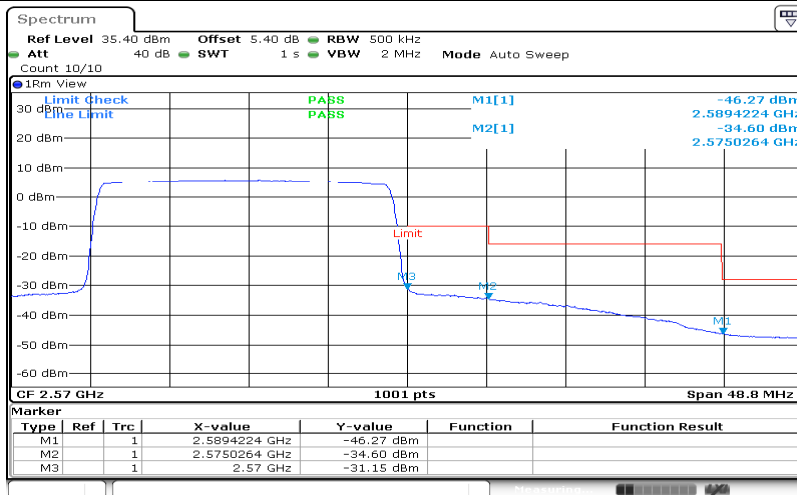
Band7-20MHz-16QAM-21350-1RB#99



Date: 6 MAY 2020 09:14:11

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





Date: 6 MAY 2020 09:15:41





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 Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band7	20MHz	QPSK	20850	1RB#0	Range1:30~1000MHz	-48.76	PASS
Band7	20MHz	QPSK	20850	1RB#0	Range2:1000~30000MHz	-41.45	PASS
Band7	20MHz	QPSK	21100	1RB#0	Range1:30~1000MHz	-48.23	PASS
Band7	20MHz	QPSK	21100	1RB#0	Range2:1000~30000MHz	-41.84	PASS
Band7	20MHz	QPSK	21350	1RB#0	Range1:30~1000MHz	-48.38	PASS
Band7	20MHz	QPSK	21350	1RB#0	Range2:1000~30000MHz	-41.58	PASS
Band7	20MHz	64QAM	20850	1RB#0	Range1:30~1000MHz	-48.6	PASS
Band7	20MHz	64QAM	20850	1RB#0	Range2:1000~30000MHz	-41.65	PASS
Band7	20MHz	64QAM	21100	1RB#0	Range1:30~1000MHz	-48.64	PASS
Band7	20MHz	64QAM	21100	1RB#0	Range2:1000~30000MHz	-41.85	PASS
Band7	20MHz	64QAM	21350	1RB#0	Range1:30~1000MHz	-48.78	PASS
Band7	20MHz	64QAM	21350	1RB#0	Range2:1000~30000MHz	-41.86	PASS
Band7	20MHz	16QAM	20850	1RB#0	Range1:30~1000MHz	-48.08	PASS
Band7	20MHz	16QAM	20850	1RB#0	Range2:1000~30000MHz	-41.69	PASS
Band7	20MHz	16QAM	21100	1RB#0	Range1:30~1000MHz	-48.91	PASS
Band7	20MHz	16QAM	21100	1RB#0	Range2:1000~30000MHz	-41.59	PASS
Band7	20MHz	16QAM	21350	1RB#0	Range1:30~1000MHz	-48.55	PASS
Band7	20MHz	16QAM	21350	1RB#0	Range2:1000~30000MHz	-41.35	PASS

6.2. Test Plots

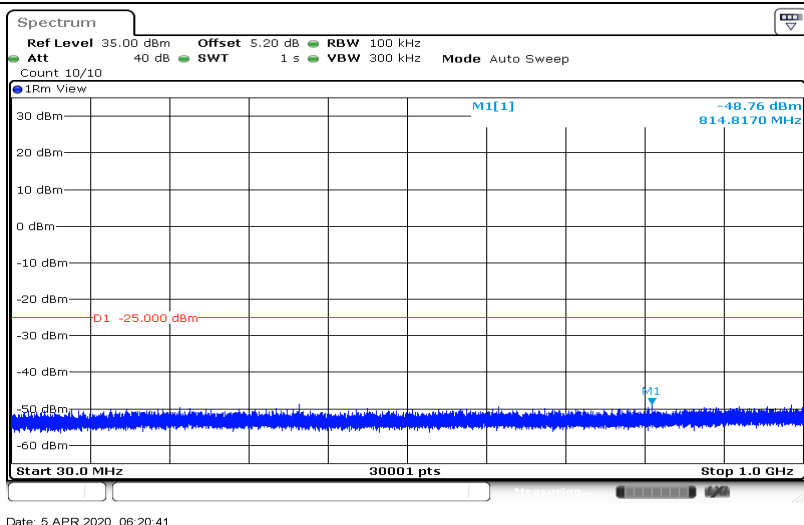
Band7-20MHz-QPSK-20850-1RB#0-Range1:30~1000MHz



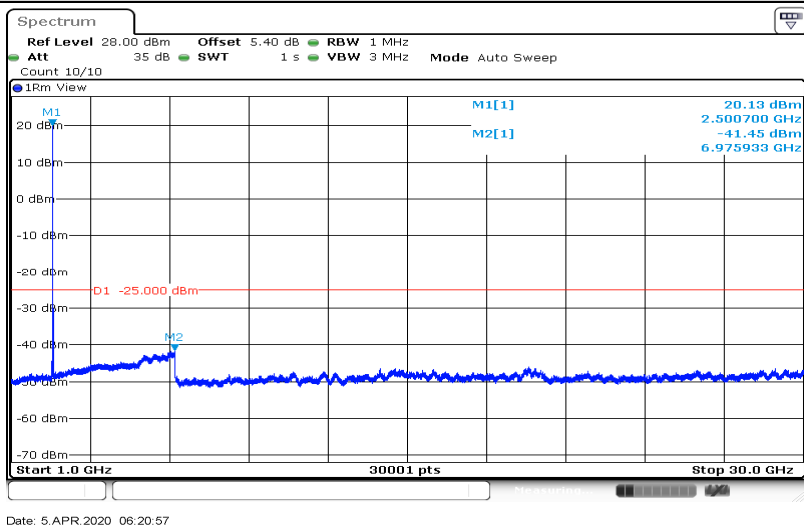
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

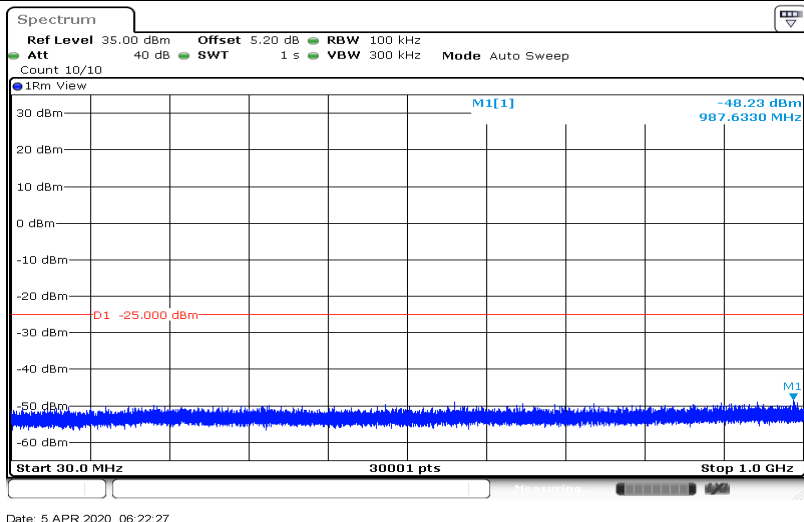


Band7-20MHz-QPSK-20850-1RB#0-Range2:1000~30000MHz

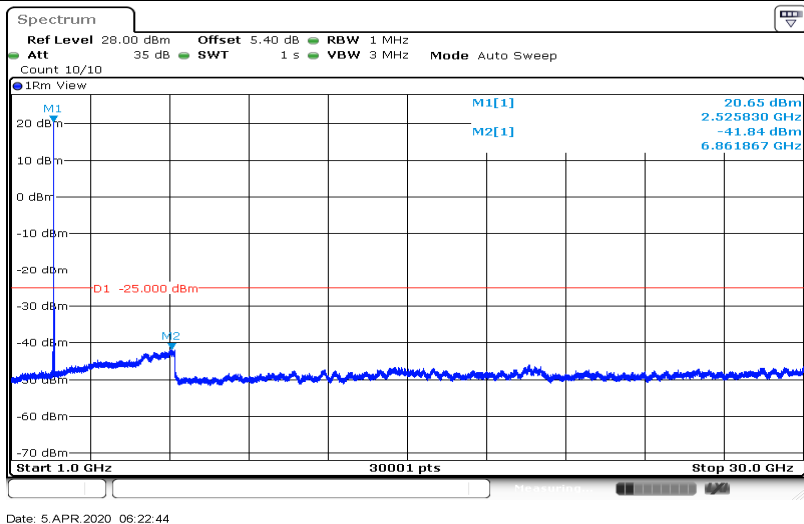


Band7-20MHz-QPSK-21100-1RB#0-Range1:30~1000MHz



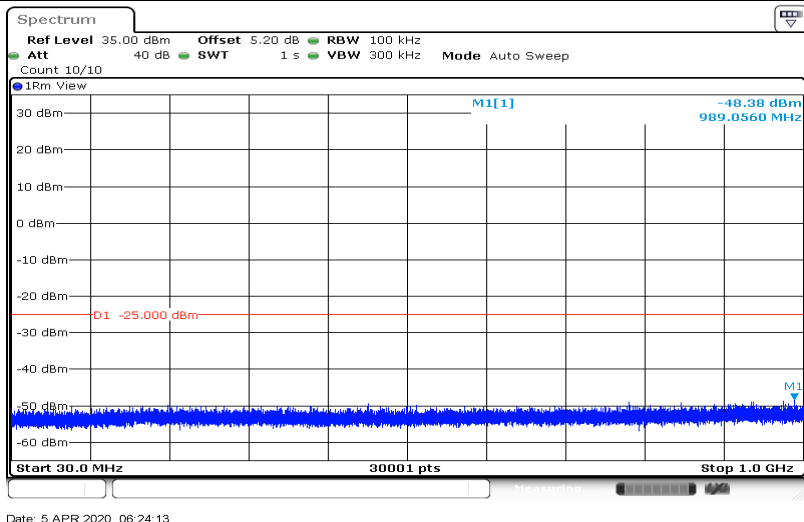


Band7-20MHz-QPSK-21100-1RB#0-Range2:1000~30000MHz

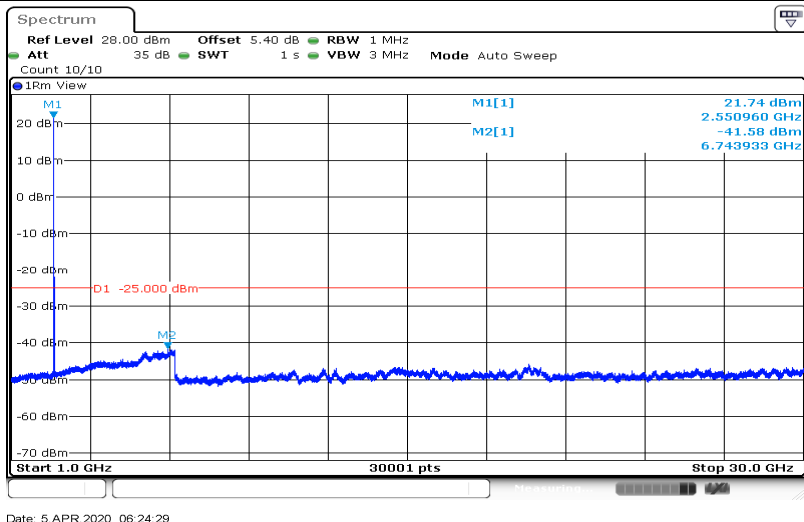


Band7-20MHz-QPSK-21350-1RB#0-Range1:30~1000MHz



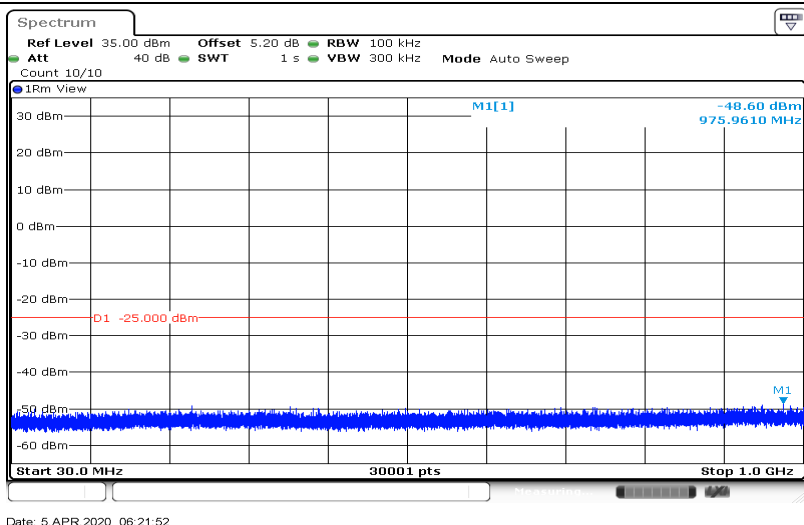


Band7-20MHz-QPSK-21350-1RB#0-Range2:1000~30000MHz

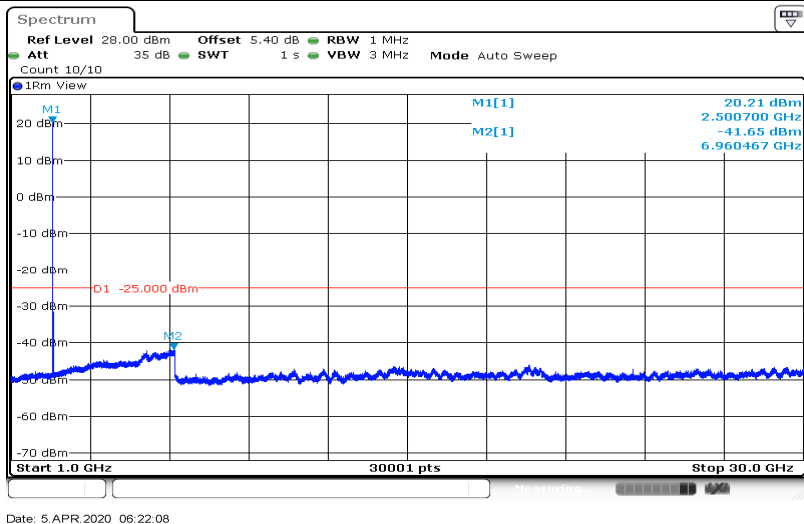


Band7-20MHz-64QAM-20850-1RB#0-Range1:30~1000MHz



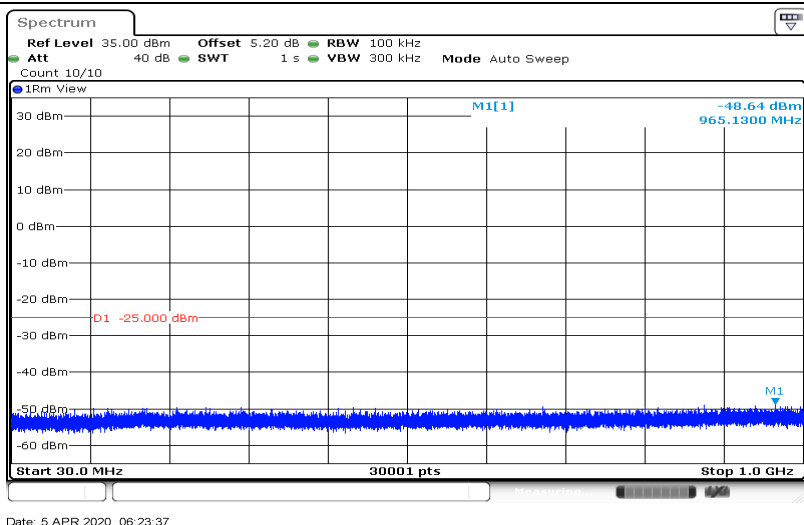


Band7-20MHz-64QAM-20850-1RB#0-Range2:1000~30000MHz

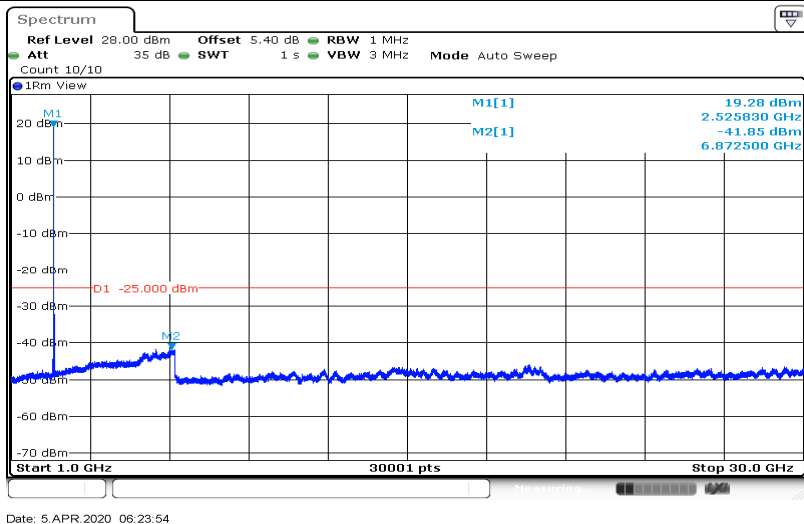


Band7-20MHz-64QAM-21100-1RB#0-Range1:30~1000MHz



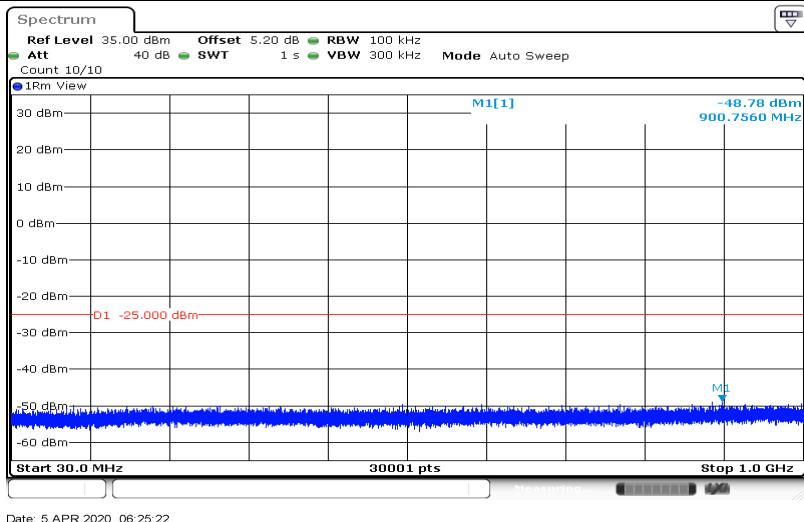


Band7-20MHz-64QAM-21100-1RB#0-Range2:1000~30000MHz

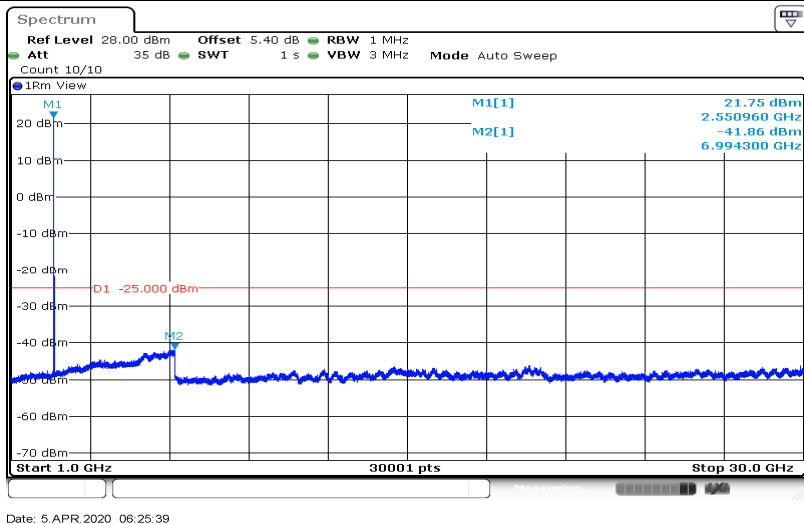


Band7-20MHz-64QAM-21350-1RB#0-Range1:30~1000MHz



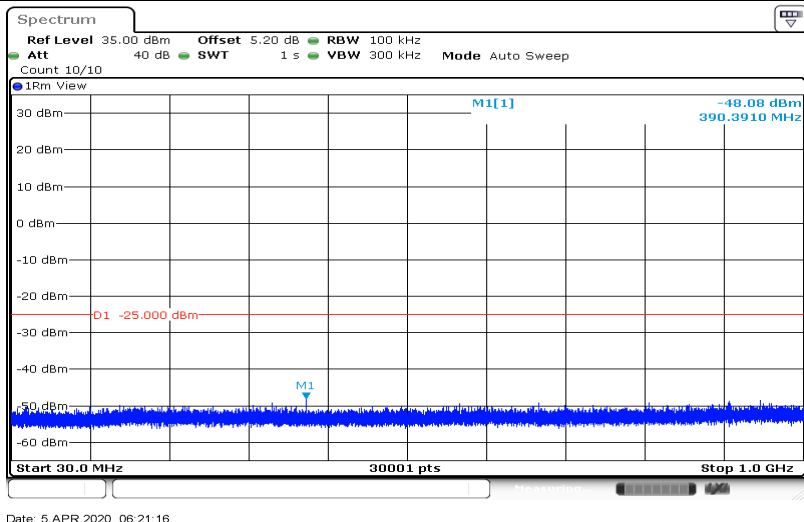


Band7-20MHz-64QAM-21350-1RB#0-Range2:1000~30000MHz

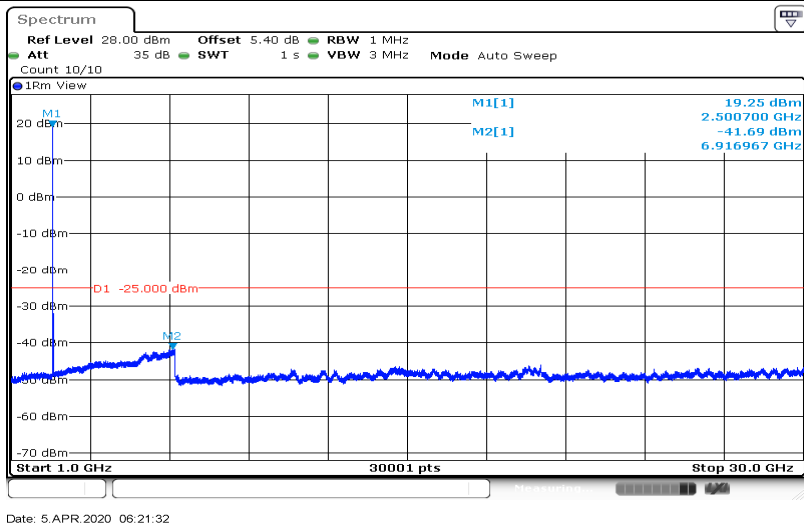


Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz



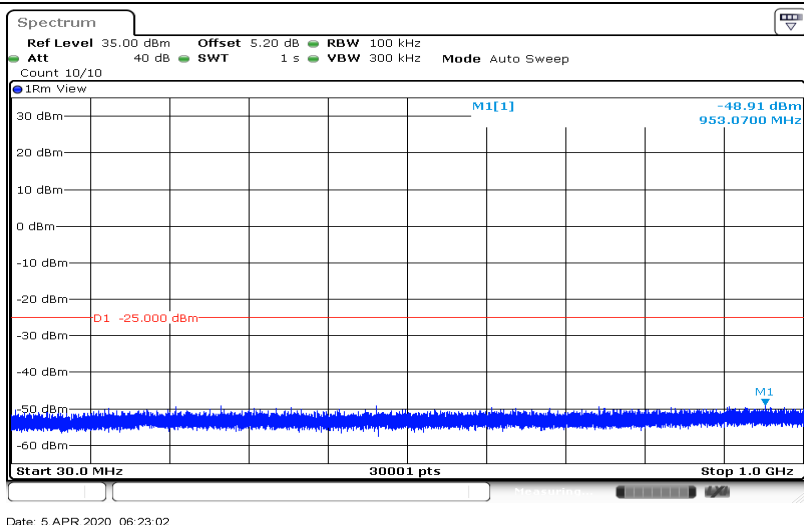


Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~30000MHz

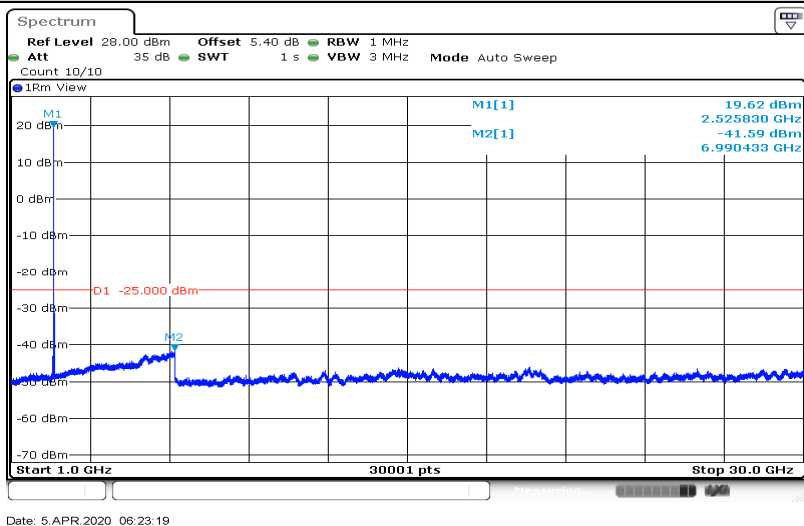


Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz



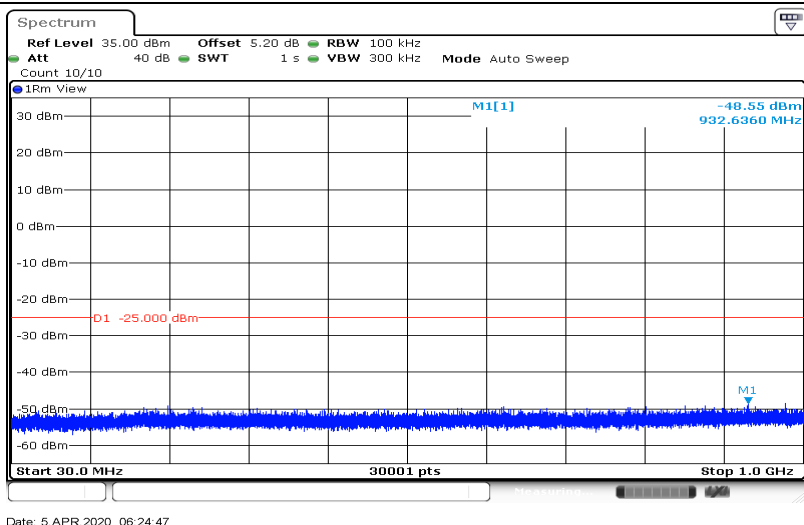


Band7-20MHz-16QAM-21100-1RB#0-Range2:1000~30000MHz

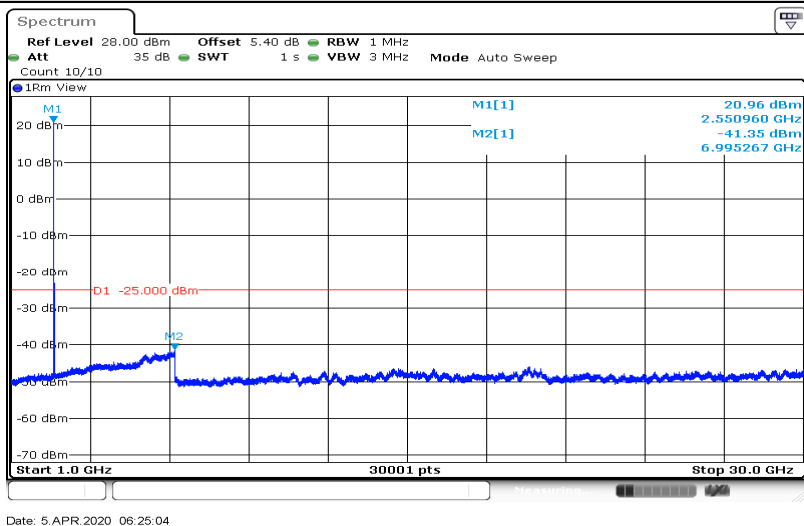


Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz





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





7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 7

7.1.1. Test Mode = LTE/TM1 20MHz

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
56.400000	-77.49	-25.00	52.49	Vertical
349.300000	-84.19	-25.00	59.19	Vertical
960.629167	-75.23	-25.00	50.23	Vertical
5002.000000	-63.37	-25.00	38.37	Vertical
7503.200000	-50.65	-25.00	25.65	Vertical
10231.250000	-61.45	-25.00	36.45	Vertical
56.250000	-74.93	-25.00	49.93	Horizontal
226.600000	-82.01	-25.00	57.01	Horizontal
959.208333	-74.64	-25.00	49.64	Horizontal
5002.325000	-61.84	-25.00	36.84	Horizontal
7503.200000	-47.47	-25.00	22.47	Horizontal
10561.775000	-60.84	-25.00	35.84	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
57.100000	-80.08	-25.00	55.08	Vertical
341.050000	-83.69	-25.00	58.69	Vertical
959.804167	-75.11	-25.00	50.11	Vertical
5051.725000	-64.16	-25.00	39.16	Vertical
7577.950000	-45.79	-25.00	20.79	Vertical
10276.425000	-60.93	-25.00	35.93	Vertical
63.850000	-76.23	-25.00	51.23	Horizontal
226.300000	-82.20	-25.00	57.20	Horizontal
953.295833	-74.83	-25.00	49.83	Horizontal
5036.450000	-65.40	-25.00	40.40	Horizontal
7578.275000	-48.54	-25.00	23.54	Horizontal
10269.275000	-61.89	-25.00	36.89	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 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



7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
56.800000	-79.10	-25.00	54.10	Vertical
343.750000	-83.68	-25.00	58.68	Vertical
944.541667	-75.66	-25.00	50.66	Vertical
5102.100000	-59.80	-25.00	34.80	Vertical
7653.025000	-54.98	-25.00	29.98	Vertical
10503.925000	-61.63	-25.00	36.63	Vertical
63.550000	-75.52	-25.00	50.52	Horizontal
226.750000	-81.98	-25.00	56.98	Horizontal
954.395833	-74.75	-25.00	49.75	Horizontal
5102.100000	-59.89	-25.00	34.89	Horizontal
7653.025000	-60.40	-25.00	35.40	Horizontal
10305.025000	-61.02	-25.00	36.02	Horizontal

Remark:

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





8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	VL	NT	2.00	0.000797	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	0.90	0.000359	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	2.20	0.000876	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-5.70	-0.002249	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-2.40	-0.000947	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-1.50	-0.000592	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	0.50	0.000195	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	2.30	0.000898	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	2.10	0.000820	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	VL	NT	1.50	0.000598	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	VN	NT	2.90	0.001155	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	VH	NT	3.20	0.001275	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	VL	NT	-1.80	-0.000710	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	VN	NT	-4.90	-0.001933	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	VH	NT	-3.40	-0.001341	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	VL	NT	2.40	0.000938	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	VN	NT	0.40	0.000156	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	VH	NT	0.40	0.000156	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-0.10	-0.000040	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	2.70	0.001076	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	3.10	0.001235	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	-2.30	-0.000907	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-0.90	-0.000355	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-3.50	-0.001381	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	2.90	0.001133	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-0.40	-0.000156	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-1.90	-0.000742	±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
------	-----------	------------	---------	--------------	---------------	------------------	----------------	-----------------	-------------	---------



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

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



Band7	20MHz	QPSK	20850	100RB#0	NV	-30	4.40	0.001753	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	1.90	0.000757	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	1.00	0.000398	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	0.90	0.000359	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	2.60	0.001036	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	0.00	0.000000	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	5.90	0.002351	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	4.40	0.001753	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-2.20	-0.000868	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-5.10	-0.002012	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-2.30	-0.000907	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-3.70	-0.001460	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-2.30	-0.000907	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-4.80	-0.001893	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-1.10	-0.000434	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-3.80	-0.001499	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-30	0.60	0.000234	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	1.30	0.000508	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	0.50	0.000195	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	1.10	0.000430	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	1.10	0.000430	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-1.00	-0.000391	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-1.10	-0.000430	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	-1.90	-0.000742	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	-30	4.30	0.001713	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	-20	1.10	0.000438	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	0	3.80	0.001514	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	10	0.20	0.000080	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	20	-0.30	-0.000120	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	30	0.60	0.000239	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	40	1.80	0.000717	±2.5	PASS
Band7	20MHz	64QAM	20850	100RB#0	NV	50	3.10	0.001235	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	-30	-1.70	-0.000671	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	-20	-2.90	-0.001144	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	0	-6.10	-0.002406	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	10	-2.90	-0.001144	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	20	-3.70	-0.001460	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	30	-2.00	-0.000789	±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.sgs.com
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band7	20MHz	64QAM	21100	100RB#0	NV	40	-3.80	-0.001499	±2.5	PASS
Band7	20MHz	64QAM	21100	100RB#0	NV	50	-3.30	-0.001302	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	-30	-1.00	-0.000391	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	-20	1.20	0.000469	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	0	1.70	0.000664	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	10	0.70	0.000273	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	20	0.60	0.000234	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	30	1.00	0.000391	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	40	-0.80	-0.000313	±2.5	PASS
Band7	20MHz	64QAM	21350	100RB#0	NV	50	1.90	0.000742	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-0.80	-0.000319	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	3.70	0.001474	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	1.00	0.000398	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	1.60	0.000637	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	4.10	0.001633	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	2.30	0.000916	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	2.60	0.001036	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	3.80	0.001514	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-4.90	-0.001933	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-2.90	-0.001144	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-4.40	-0.001736	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-4.40	-0.001736	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	-4.50	-0.001775	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	-2.40	-0.000947	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-3.90	-0.001538	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	-4.80	-0.001893	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-1.40	-0.000547	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-1.70	-0.000664	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-0.20	-0.000078	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	2.80	0.001094	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	1.20	0.000469	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-1.20	-0.000469	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	0.40	0.000156	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	1.00	0.000391	±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 herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
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 (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