



Appendix B

E-UTRA BAND 25



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

Page

1	EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	3
1.1.	Test Result	3
2	PEAK-TO-AVERAGE RATIO.....	9
2.1.	Test Result	9
2.2.	Test Plots.....	9
3	MODULATION CHARACTERISTICS	13
3.1.	For LTE	13
3.1.1	Test BAND = LTE BAND 25	13
4	26DB BANDWIDTH AND OCCUPIED BANDWIDTH.....	15
4.1.	Test Result	15
4.2.	Test Plots.....	16
5	BAND EDGES COMPLIANCE.....	34
5.1.	Test Plots.....	34
6	SPURIOUS EMISSION AT ANTENNA TERMINAL	58
6.1.	Test Plots.....	58
7	FIELD STRENGTH OF SPURIOUS RADIATION	64
FOR LTE		64
7.1.1	Test BAND = LTE BAND 25	64
8	FREQUENCY STABILITY	66
8.1.	Frequency Vs Voltage	66
8.2.	Frequency Vs Temperature	66



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



1 Effective (Isotropic) Radiated Power Output Data

1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)			Verdict
Band25	1.4MHz	QPSK	26047	1RB#0	22.98	24.57	33.00	PASS
Band25	1.4MHz	QPSK	26047	1RB#2	23.33	24.92	33.00	PASS
Band25	1.4MHz	QPSK	26047	1RB#5	23.09	24.68	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#0	23.34	24.93	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#1	23.46	25.05	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#3	23.54	25.13	33.00	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	22.48	24.07	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#0	23.09	24.68	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#2	23.45	25.04	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#5	23.26	24.85	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#0	23.47	25.06	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#1	23.81	25.40	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#3	23.58	25.17	33.00	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	22.46	24.05	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#0	23.06	24.65	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#2	22.65	24.24	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#5	22.00	23.59	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#0	22.75	24.34	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#1	22.56	24.15	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#3	22.20	23.79	33.00	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	22.37	23.96	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#0	21.93	23.52	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#2	22.16	23.75	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#5	22.11	23.70	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#0	22.53	24.12	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#1	22.66	24.25	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#3	22.77	24.36	33.00	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	21.34	22.93	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#0	21.95	23.54	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#2	22.10	23.69	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#5	22.06	23.65	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#0	22.69	24.28	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#1	22.67	24.26	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#3	22.57	24.16	33.00	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	21.51	23.10	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#0	21.94	23.53	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#2	21.98	23.57	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#5	21.34	22.93	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#0	21.97	23.56	33.00	PASS



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

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



Band25	1.4MHz	16QAM	26683	3RB#1	21.79	23.38	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#3	21.90	23.49	33.00	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	21.58	23.17	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#0	23.43	25.02	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#8	23.53	25.12	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#14	23.42	25.01	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#0	22.54	24.13	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#4	22.57	24.16	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#7	22.56	24.15	33.00	PASS
Band25	3MHz	QPSK	26055	15RB#0	22.60	24.19	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#0	23.19	24.78	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#8	23.66	25.25	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#14	23.36	24.95	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#0	22.62	24.21	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#4	22.64	24.23	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#7	22.61	24.20	33.00	PASS
Band25	3MHz	QPSK	26365	15RB#0	22.52	24.11	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#0	23.60	25.19	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#8	23.00	24.59	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#14	21.78	23.37	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#0	23.57	25.16	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#4	22.25	23.84	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#7	22.24	23.83	33.00	PASS
Band25	3MHz	QPSK	26675	15RB#0	22.94	24.53	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#0	22.14	23.73	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#8	22.21	23.80	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#14	22.10	23.69	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#0	21.26	22.85	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#4	21.26	22.85	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#7	21.37	22.96	33.00	PASS
Band25	3MHz	16QAM	26055	15RB#0	21.48	23.07	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#0	22.14	23.73	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#8	22.12	23.71	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#14	22.25	23.84	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#0	21.35	22.94	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#4	21.38	22.97	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#7	21.45	23.04	33.00	PASS
Band25	3MHz	16QAM	26365	15RB#0	21.57	23.16	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#0	22.18	23.77	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#8	22.08	23.67	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#14	20.33	21.92	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#0	21.35	22.94	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#4	21.36	22.95	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#7	21.35	22.94	33.00	PASS
Band25	3MHz	16QAM	26675	15RB#0	21.66	23.25	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#0	23.35	24.94	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#12	23.44	25.03	33.00	PASS



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



Band25	5MHz	QPSK	26065	1RB#24	23.54	25.13	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#0	22.59	24.18	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#6	22.55	24.14	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#13	22.61	24.20	33.00	PASS
Band25	5MHz	QPSK	26065	25RB#0	22.58	24.17	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#0	23.39	24.98	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#12	23.50	25.09	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#24	23.32	24.91	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#0	22.58	24.17	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#6	22.73	24.32	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#13	22.49	24.08	33.00	PASS
Band25	5MHz	QPSK	26365	25RB#0	22.53	24.12	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#0	23.47	25.06	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#12	23.27	24.86	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#24	21.73	23.32	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#0	21.36	22.95	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#6	22.41	24.00	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#13	22.09	23.68	33.00	PASS
Band25	5MHz	QPSK	26665	25RB#0	22.55	24.14	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#0	22.02	23.61	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#12	22.63	24.22	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#24	22.04	23.63	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#0	21.28	22.87	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#6	21.55	23.14	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#13	21.53	23.12	33.00	PASS
Band25	5MHz	16QAM	26065	25RB#0	21.43	23.02	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#0	21.75	23.34	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#12	22.55	24.14	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#24	22.10	23.69	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#0	21.37	22.96	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#6	21.51	23.10	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#13	21.53	23.12	33.00	PASS
Band25	5MHz	16QAM	26365	25RB#0	21.49	23.08	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#0	22.13	23.72	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#12	22.54	24.13	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#24	21.13	22.72	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#0	21.47	23.06	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#6	21.57	23.16	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#13	21.34	22.93	33.00	PASS
Band25	5MHz	16QAM	26665	25RB#0	21.57	23.16	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#0	23.55	25.14	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#24	23.94	25.53	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#49	23.14	24.73	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#0	22.69	24.28	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#12	22.75	24.34	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#25	22.53	24.12	33.00	PASS
Band25	10MHz	QPSK	26090	50RB#0	22.58	24.17	33.00	PASS



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

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

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



Band25	10MHz	QPSK	26365	1RB#0	23.32	24.91	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#24	23.83	25.42	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#49	23.40	24.99	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#0	22.57	24.16	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#12	22.77	24.36	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#25	22.54	24.13	33.00	PASS
Band25	10MHz	QPSK	26365	50RB#0	22.58	24.17	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#0	22.86	24.45	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#24	24.55	26.14	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#49	21.38	22.97	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#0	23.99	25.58	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#12	22.63	24.22	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#25	22.32	23.91	33.00	PASS
Band25	10MHz	QPSK	26640	50RB#0	22.46	24.05	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#0	22.31	23.90	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#24	22.12	23.71	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#49	22.09	23.68	33.00	PASS
Band25	10MHz	16QAM	26090	25RB#0	21.76	23.35	33.00	PASS
Band25	10MHz	16QAM	26090	25RB#12	21.51	23.10	33.00	PASS
Band25	10MHz	16QAM	26090	25RB#25	21.60	23.19	33.00	PASS
Band25	10MHz	16QAM	26090	50RB#0	21.56	23.15	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#0	22.12	23.71	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#24	22.25	23.84	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#49	22.21	23.80	33.00	PASS
Band25	10MHz	16QAM	26365	25RB#0	21.58	23.17	33.00	PASS
Band25	10MHz	16QAM	26365	25RB#12	21.63	23.22	33.00	PASS
Band25	10MHz	16QAM	26365	25RB#25	21.51	23.10	33.00	PASS
Band25	10MHz	16QAM	26365	50RB#0	21.60	23.19	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#0	22.16	23.75	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#24	22.30	23.89	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#49	22.03	23.62	33.00	PASS
Band25	10MHz	16QAM	26640	25RB#0	21.52	23.11	33.00	PASS
Band25	10MHz	16QAM	26640	25RB#12	21.56	23.15	33.00	PASS
Band25	10MHz	16QAM	26640	25RB#25	21.41	23.00	33.00	PASS
Band25	10MHz	16QAM	26640	50RB#0	21.53	23.12	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#0	23.59	25.18	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#38	23.86	25.45	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#74	22.92	24.51	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#0	22.78	24.37	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#18	22.71	24.30	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#39	22.33	23.92	33.00	PASS
Band25	15MHz	QPSK	26115	75RB#0	22.61	24.20	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#0	23.26	24.85	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#38	23.66	25.25	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#74	23.36	24.95	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#0	22.44	24.03	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#18	22.81	24.40	33.00	PASS



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



Band25	15MHz	QPSK	26365	36RB#39	22.44	24.03	33.00	PASS
Band25	15MHz	QPSK	26365	75RB#0	22.57	24.16	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#0	23.06	24.65	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#38	24.12	25.71	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#74	21.46	23.05	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#0	23.45	25.04	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#18	22.75	24.34	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#39	22.52	24.11	33.00	PASS
Band25	15MHz	QPSK	26615	75RB#0	22.49	24.08	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#0	22.37	23.96	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#38	22.01	23.60	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#74	22.16	23.75	33.00	PASS
Band25	15MHz	16QAM	26115	36RB#0	21.61	23.20	33.00	PASS
Band25	15MHz	16QAM	26115	36RB#18	21.69	23.28	33.00	PASS
Band25	15MHz	16QAM	26115	36RB#39	21.69	23.28	33.00	PASS
Band25	15MHz	16QAM	26115	75RB#0	21.58	23.17	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#0	22.12	23.71	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#38	22.20	23.79	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#74	22.27	23.86	33.00	PASS
Band25	15MHz	16QAM	26365	36RB#0	21.65	23.24	33.00	PASS
Band25	15MHz	16QAM	26365	36RB#18	21.50	23.09	33.00	PASS
Band25	15MHz	16QAM	26365	36RB#39	21.65	23.24	33.00	PASS
Band25	15MHz	16QAM	26365	75RB#0	21.62	23.21	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#0	22.41	24.00	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#38	22.11	23.70	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#74	22.43	24.02	33.00	PASS
Band25	15MHz	16QAM	26615	36RB#0	21.68	23.27	33.00	PASS
Band25	15MHz	16QAM	26615	36RB#18	21.44	23.03	33.00	PASS
Band25	15MHz	16QAM	26615	36RB#39	21.58	23.17	33.00	PASS
Band25	15MHz	16QAM	26615	75RB#0	21.53	23.12	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#0	23.50	25.09	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#49	23.80	25.39	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#99	23.02	24.61	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#0	23.31	24.90	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#25	22.81	24.40	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#50	22.07	23.66	33.00	PASS
Band25	20MHz	QPSK	26140	100RB#0	22.72	24.31	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#0	23.08	24.67	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#49	23.24	24.83	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#99	23.23	24.82	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#0	22.52	24.11	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#25	23.00	24.59	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#50	22.37	23.96	33.00	PASS
Band25	20MHz	QPSK	26365	100RB#0	22.57	24.16	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#0	23.46	25.05	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#49	23.44	25.03	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#99	21.48	23.07	33.00	PASS



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

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

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



Band25	20MHz	QPSK	26590	50RB#0	23.87	25.46	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#25	22.76	24.35	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#50	22.59	24.18	33.00	PASS
Band25	20MHz	QPSK	26590	100RB#0	22.54	24.13	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#0	22.27	23.86	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#49	22.31	23.90	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#99	22.22	23.81	33.00	PASS
Band25	20MHz	16QAM	26140	50RB#0	21.68	23.27	33.00	PASS
Band25	20MHz	16QAM	26140	50RB#25	21.62	23.21	33.00	PASS
Band25	20MHz	16QAM	26140	50RB#50	21.71	23.30	33.00	PASS
Band25	20MHz	16QAM	26140	100RB#0	21.61	23.20	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#0	22.30	23.89	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#49	22.37	23.96	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#99	22.16	23.75	33.00	PASS
Band25	20MHz	16QAM	26365	50RB#0	21.69	23.28	33.00	PASS
Band25	20MHz	16QAM	26365	50RB#25	21.62	23.21	33.00	PASS
Band25	20MHz	16QAM	26365	50RB#50	21.57	23.16	33.00	PASS
Band25	20MHz	16QAM	26365	100RB#0	21.62	23.21	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#0	22.25	23.84	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#49	22.23	23.82	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#99	21.03	22.62	33.00	PASS
Band25	20MHz	16QAM	26590	50RB#0	21.55	23.14	33.00	PASS
Band25	20MHz	16QAM	26590	50RB#25	21.70	23.29	33.00	PASS
Band25	20MHz	16QAM	26590	50RB#50	21.53	23.12	33.00	PASS
Band25	20MHz	16QAM	26590	100RB#0	21.53	23.12	33.00	PASS

Remark:

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

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b: SGP=Signal Generator Level



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

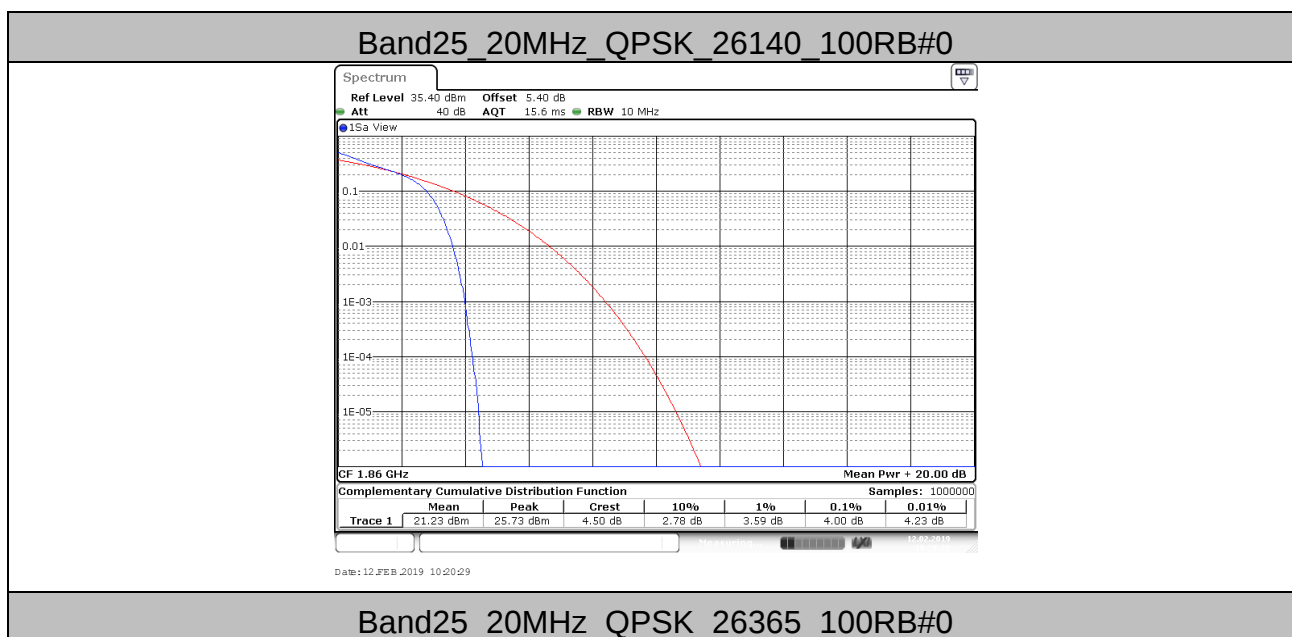
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

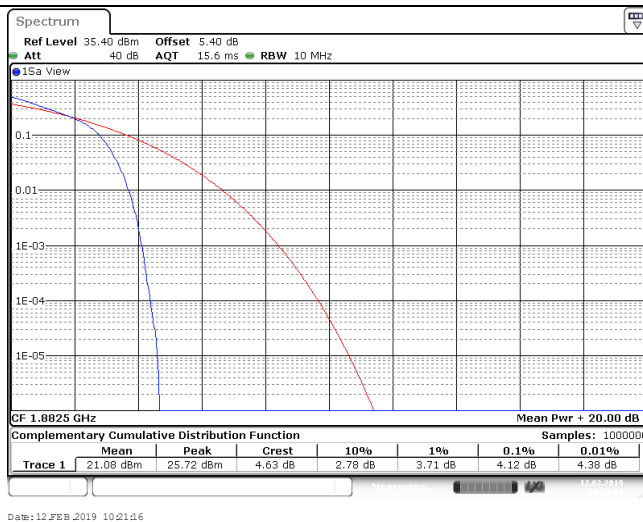
2 Peak-to-Average Ratio

2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band25	20MHz	QPSK	26140	100RB#0	4.00	13	PASS
Band25	20MHz	QPSK	26365	100RB#0	4.12	13	PASS
Band25	20MHz	QPSK	26590	100RB#0	4.38	13	PASS
Band25	20MHz	16QAM	26140	100RB#0	5.77	13	PASS
Band25	20MHz	16QAM	26365	100RB#0	5.86	13	PASS
Band25	20MHz	16QAM	26590	100RB#0	5.97	13	PASS

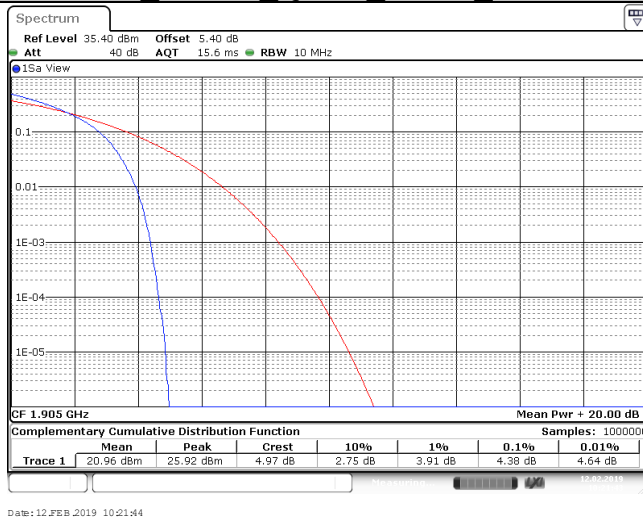
2.2. Test Plots





Date: 12 FEB 2019 10:21:46

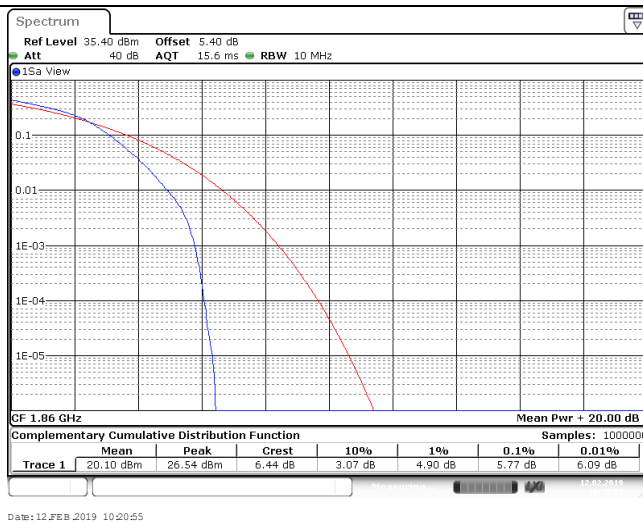
Band25 20MHz QPSK 26590 100RB#0



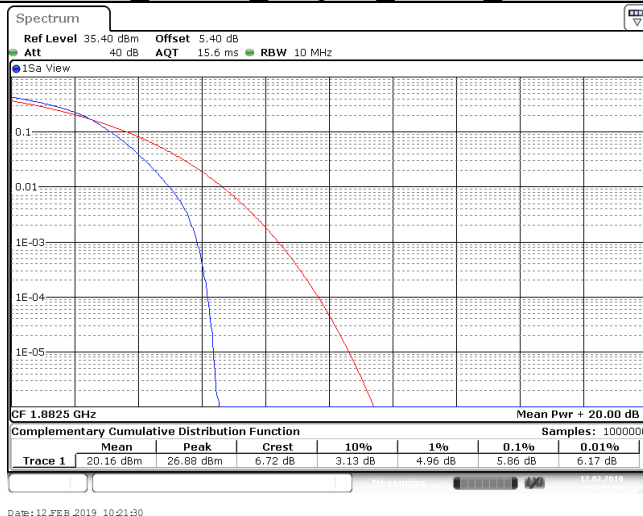
Date: 12 FEB 2019 10:21:44

Band25 20MHz 16QAM 26140 100RB#0



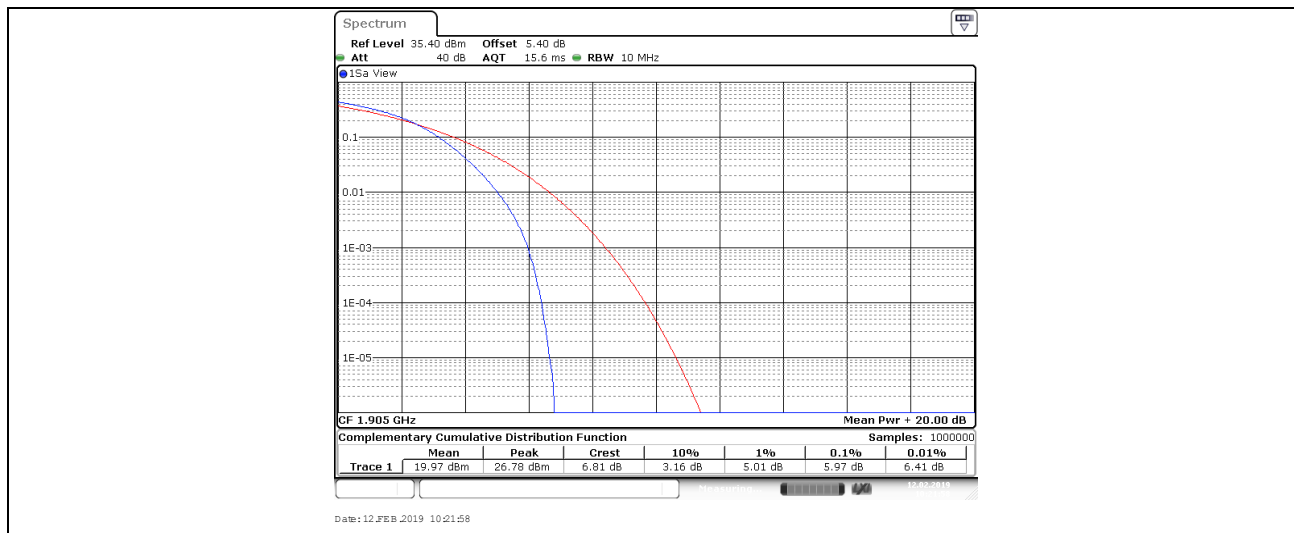


Band25 20MHz 16QAM 26365 100RB#0



Band25 20MHz 16QAM 26590 100RB#0





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

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

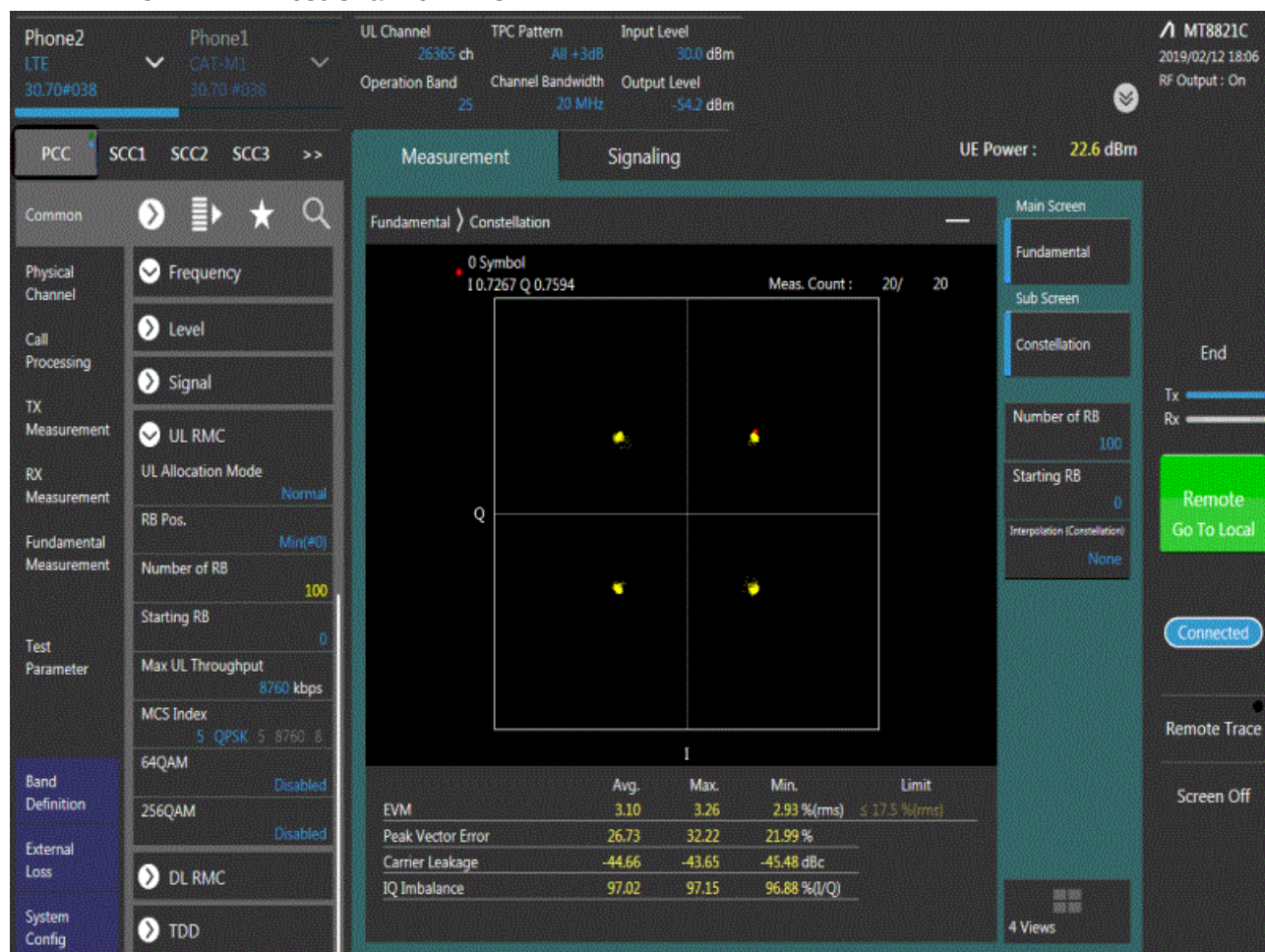
3 Modulation Characteristics

3.1. For LTE

3.1.1 Test BAND = LTE BAND 25

3.1.1.1 Test Mode = LTE /TM1 20MHz

3.1.1.1.1 Test Channel = MCH



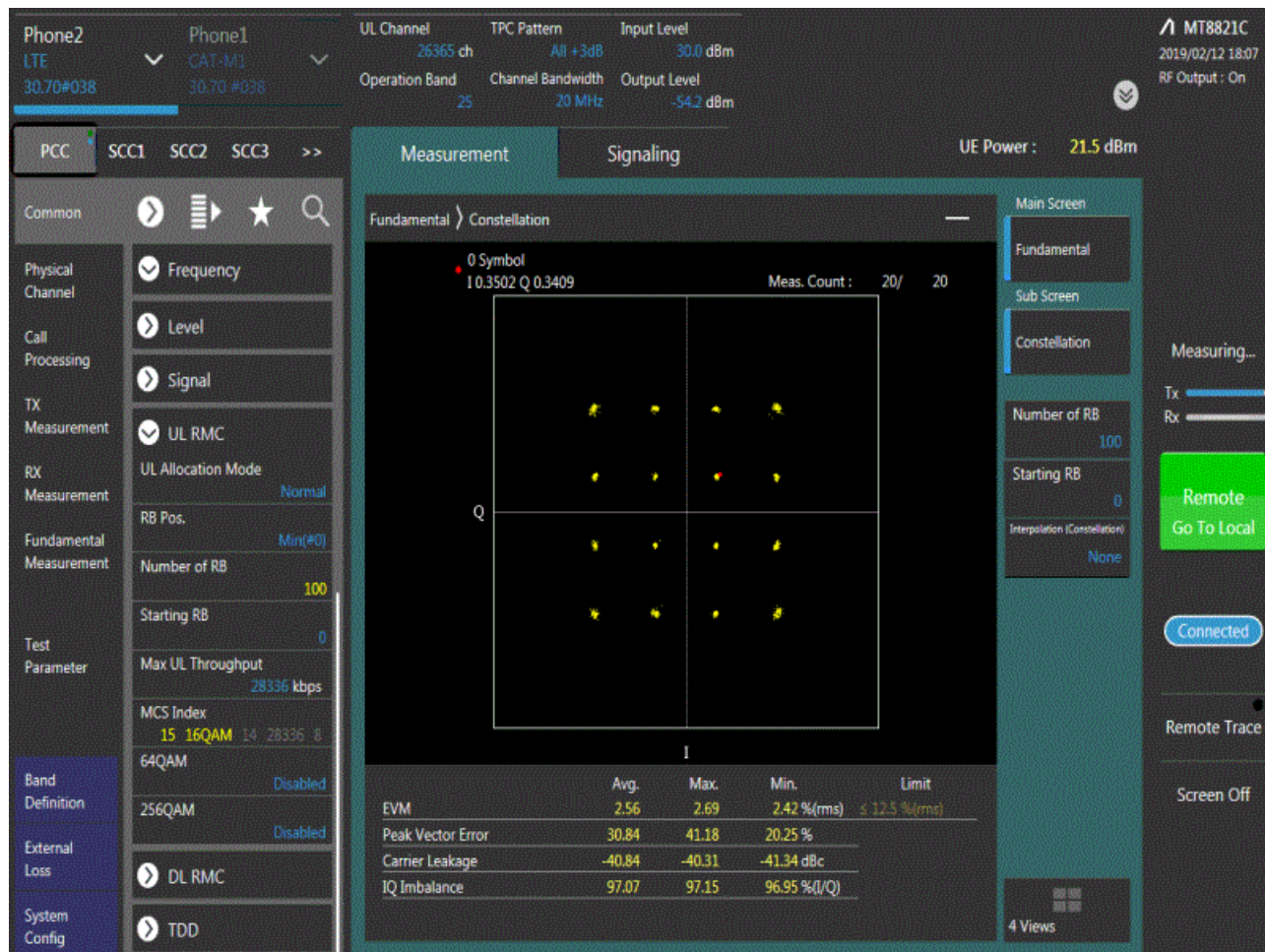
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

3.1.1.2 Test Mode = LTE /TM2 20MHz

3.1.1.2.1 Test Channel = MCH



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

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

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

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



4 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band25	1.4MHz	QPSK	26047	6RB#0	1.094	1.290	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	1.091	1.290	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	1.091	1.296	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	1.091	1.281	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	1.088	1.296	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	1.088	1.278	PASS
Band25	3MHz	QPSK	26055	15RB#0	2.697	2.982	PASS
Band25	3MHz	QPSK	26365	15RB#0	2.697	2.994	PASS
Band25	3MHz	QPSK	26675	15RB#0	2.691	2.970	PASS
Band25	3MHz	16QAM	26055	15RB#0	2.685	2.964	PASS
Band25	3MHz	16QAM	26365	15RB#0	2.691	2.976	PASS
Band25	3MHz	16QAM	26675	15RB#0	2.685	2.964	PASS
Band25	5MHz	QPSK	26065	25RB#0	4.466	4.950	PASS
Band25	5MHz	QPSK	26365	25RB#0	4.466	4.950	PASS
Band25	5MHz	QPSK	26665	25RB#0	4.466	4.910	PASS
Band25	5MHz	16QAM	26065	25RB#0	4.486	4.970	PASS
Band25	5MHz	16QAM	26365	25RB#0	4.486	4.950	PASS
Band25	5MHz	16QAM	26665	25RB#0	4.486	4.920	PASS
Band25	10MHz	QPSK	26090	50RB#0	8.911	9.680	PASS
Band25	10MHz	QPSK	26365	50RB#0	8.911	9.700	PASS
Band25	10MHz	QPSK	26640	50RB#0	8.891	9.620	PASS
Band25	10MHz	16QAM	26090	50RB#0	8.911	9.740	PASS
Band25	10MHz	16QAM	26365	50RB#0	8.931	9.740	PASS
Band25	10MHz	16QAM	26640	50RB#0	8.891	9.640	PASS
Band25	15MHz	QPSK	26115	75RB#0	13.427	14.730	PASS
Band25	15MHz	QPSK	26365	75RB#0	13.457	14.730	PASS
Band25	15MHz	QPSK	26615	75RB#0	13.397	14.580	PASS
Band25	15MHz	16QAM	26115	75RB#0	13.397	14.730	PASS
Band25	15MHz	16QAM	26365	75RB#0	13.397	14.640	PASS
Band25	15MHz	16QAM	26615	75RB#0	13.397	14.640	PASS
Band25	20MHz	QPSK	26140	100RB#0	17.822	19.320	PASS
Band25	20MHz	QPSK	26365	100RB#0	17.822	19.320	PASS
Band25	20MHz	QPSK	26590	100RB#0	17.862	19.360	PASS
Band25	20MHz	16QAM	26140	100RB#0	17.822	19.320	PASS
Band25	20MHz	16QAM	26365	100RB#0	17.822	19.360	PASS
Band25	20MHz	16QAM	26590	100RB#0	17.862	19.320	PASS

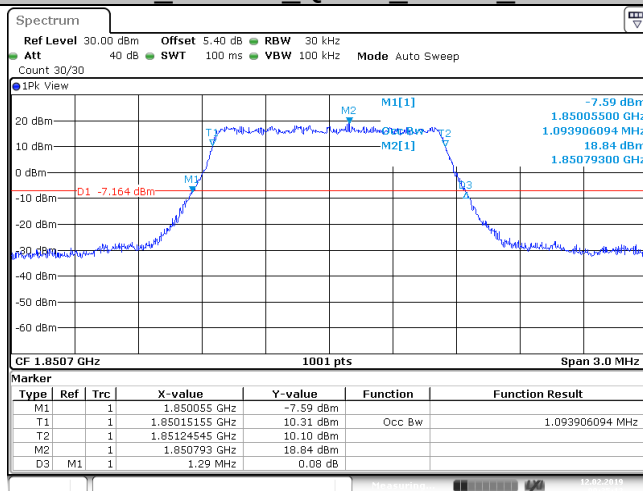


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

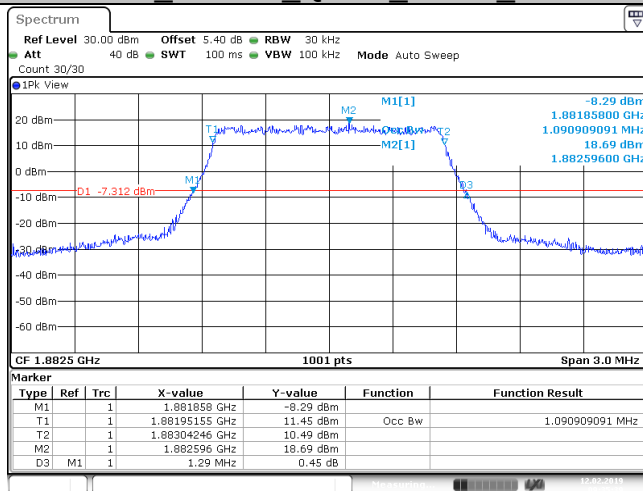
4.2. Test Plots

Band25_1.4MHz_QPSK_26047_6RB#0



Date: 12 FEB 2019 09:35:13

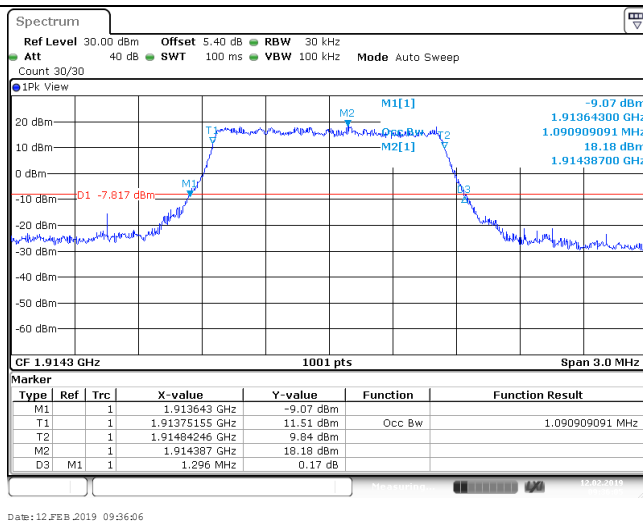
Band25_1.4MHz_QPSK_26365_6RB#0



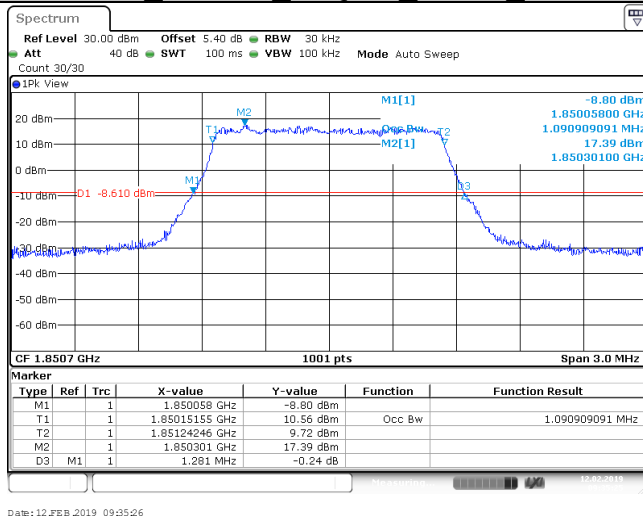
Date: 12 FEB 2019 09:35:39

Band25_1.4MHz_QPSK_26683_6RB#0



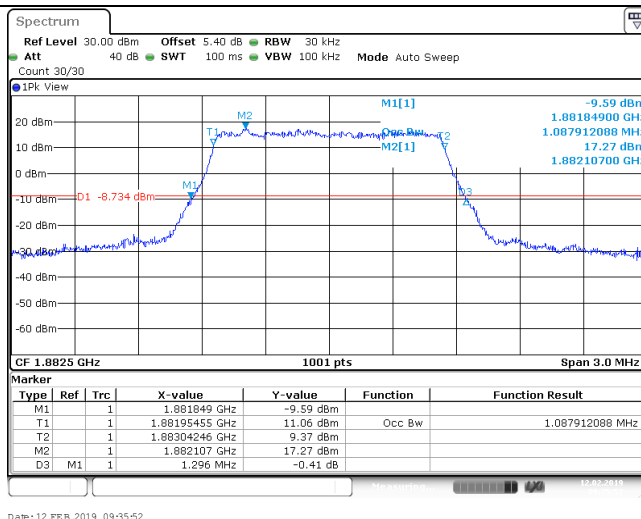


Band25 1.4MHz 16QAM 26047 6RB#0



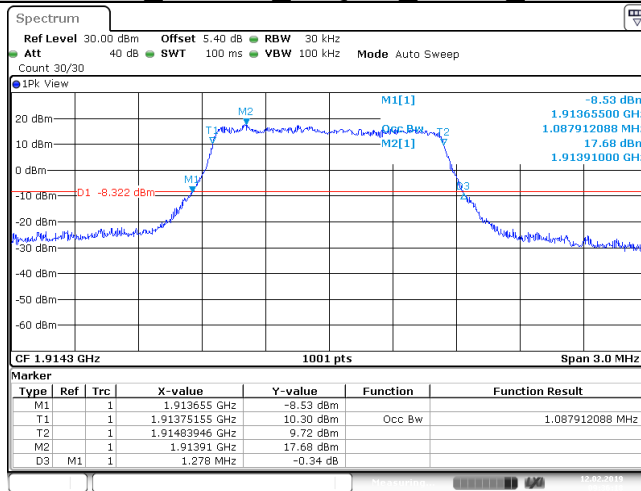
Band25 1.4MHz 16QAM 26365 6RB#0





Date: 12 FEB 2019 09:35:52

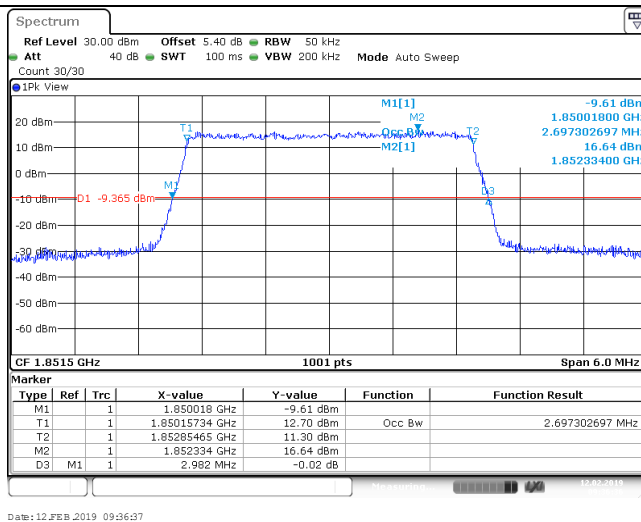
Band25 1.4MHz 16QAM 26683 6RB#0



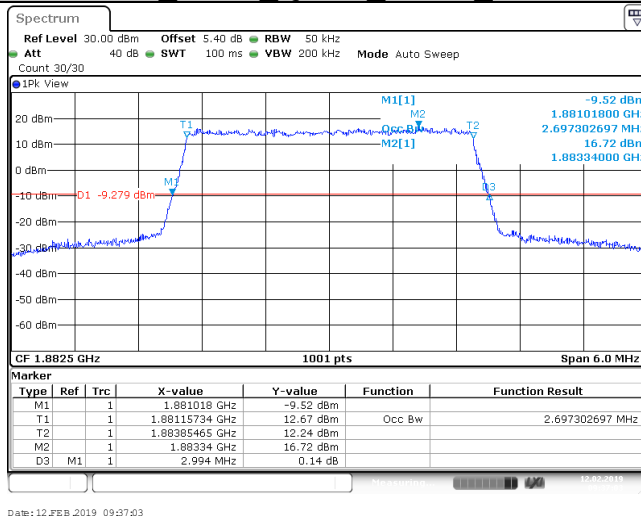
Date: 12 FEB 2019 09:36:19

Band25 3MHz QPSK 26055 15RB#0



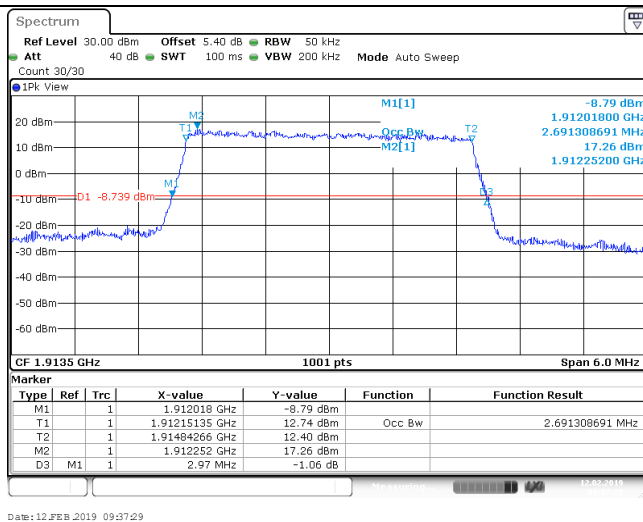


Band25 3MHz QPSK 26365 15RB#0

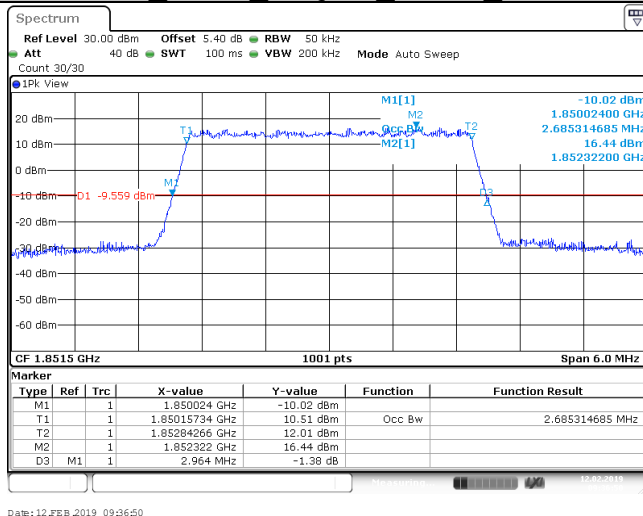


Band25 3MHz QPSK 26675 15RB#0



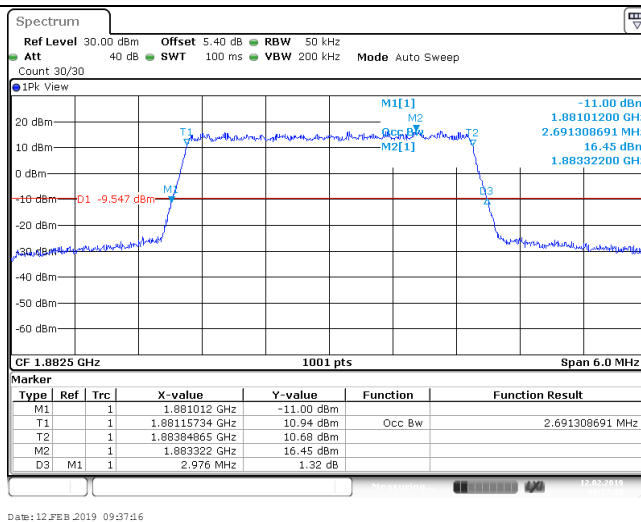


Band25 3MHz 16QAM 26055 15RB#0

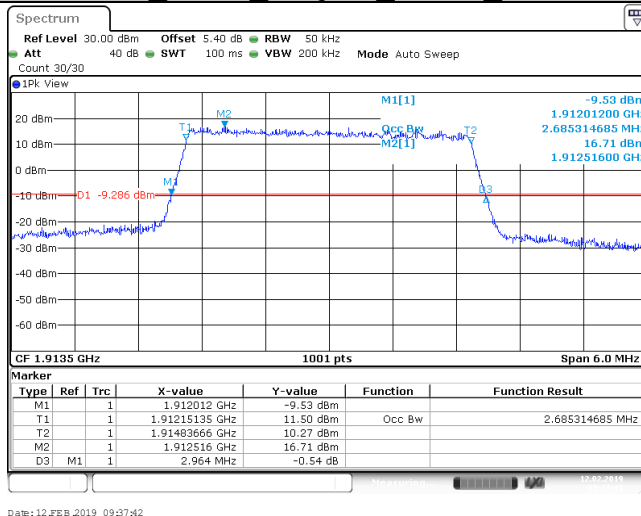


Band25 3MHz 16QAM 26365 15RB#0



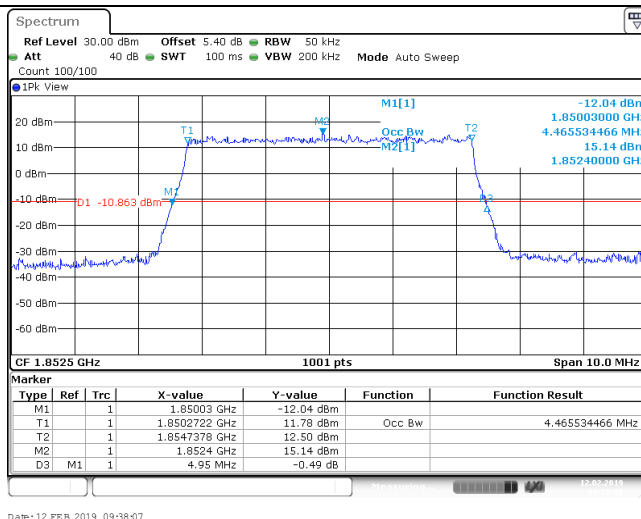


Band25 3MHz 16QAM 26675 15RB#0

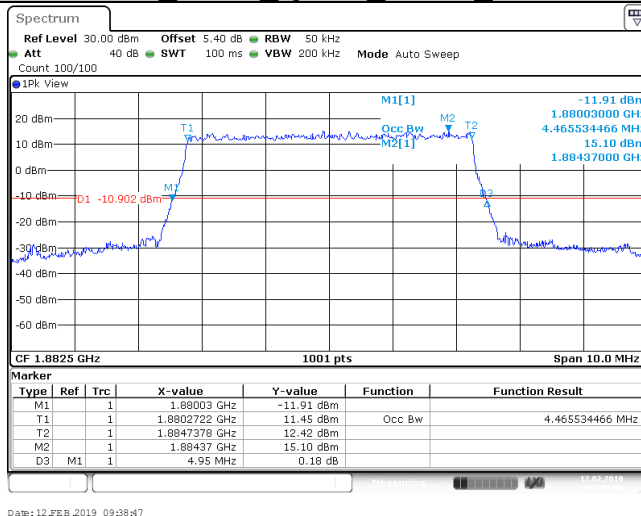


Band25 5MHz QPSK 26065 25RB#0



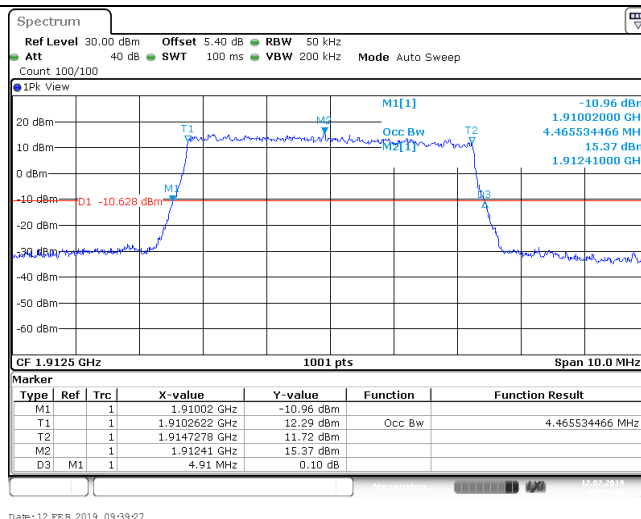


Band25 5MHz QPSK 26365 25RB#0



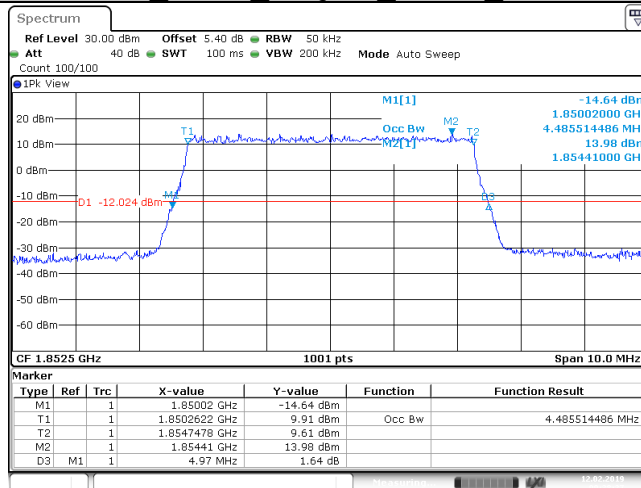
Band25 5MHz QPSK 26665 25RB#0





Date: 12 FEB 2019 09:39:27

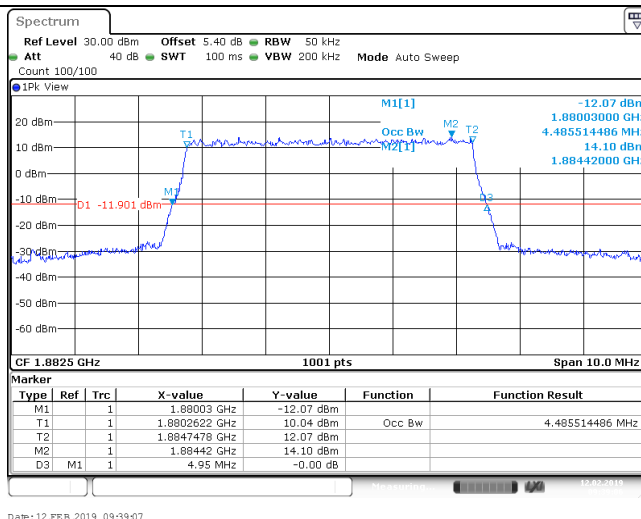
Band25 5MHz 16QAM 26065 25RB#0



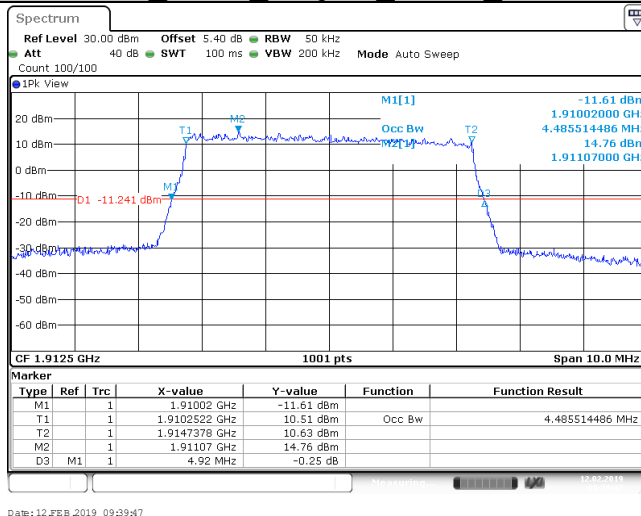
Date: 12 FEB 2019 09:38:26

Band25 5MHz 16QAM 26365 25RB#0



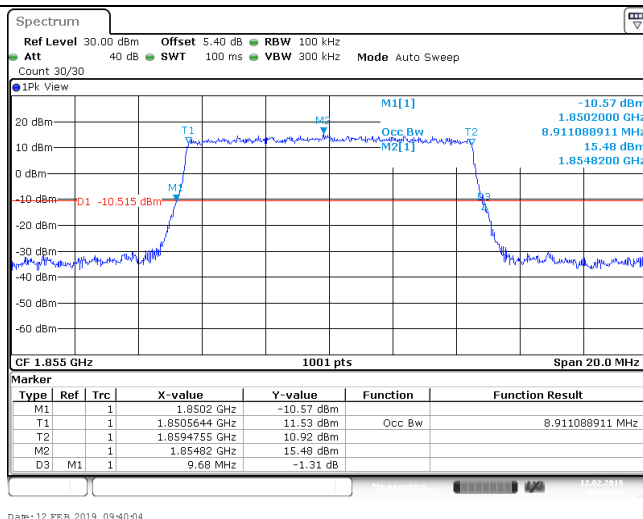


Band25 5MHz 16QAM 26665 25RB#0



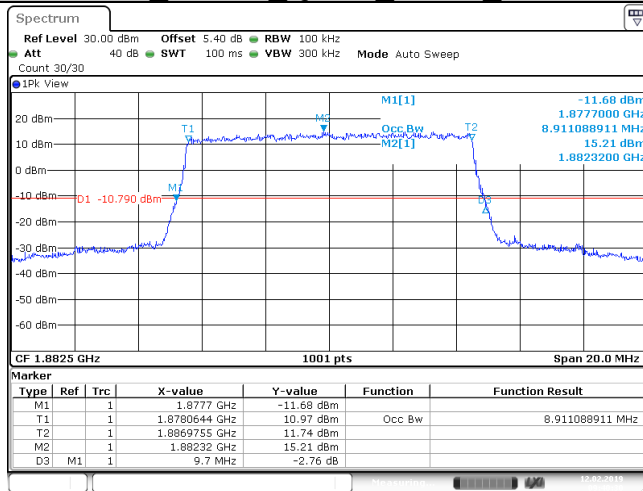
Band25 10MHz QPSK 26090 50RB#0





Date: 12 FEB 2019 09:40:04

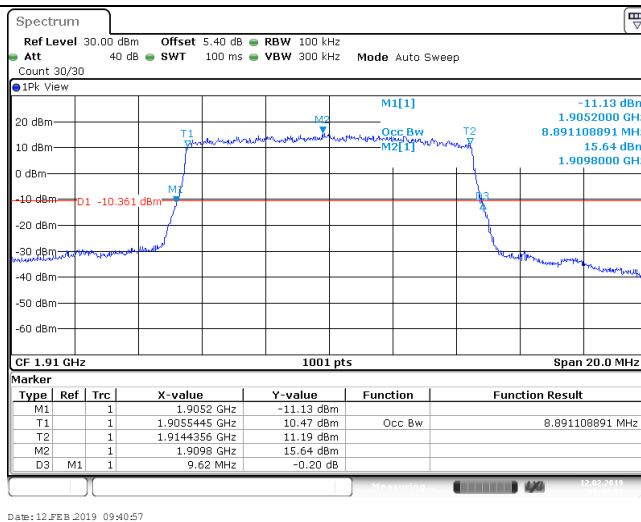
Band25 10MHz QPSK 26365 50RB#0



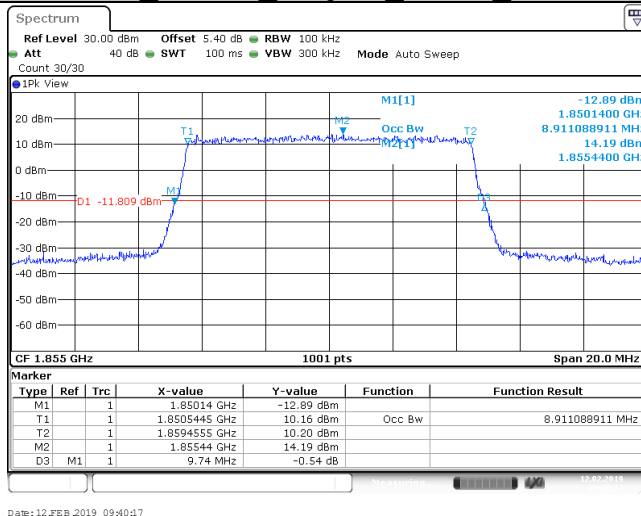
Date: 12 FEB 2019 09:40:31

Band25 10MHz QPSK 26640 50RB#0



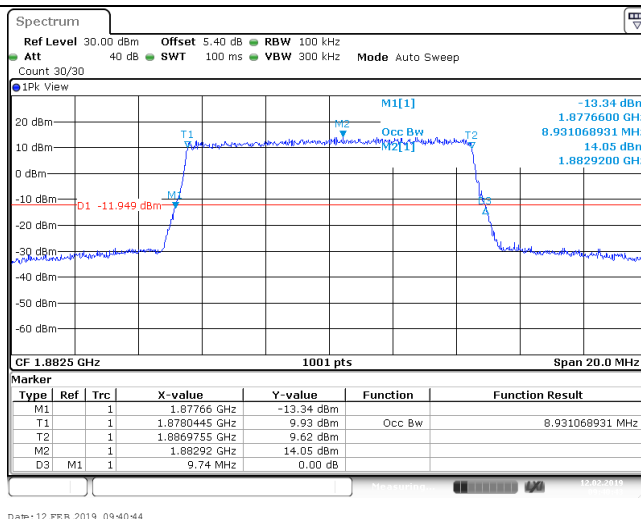


Band25 10MHz 16QAM 26090 50RB#0

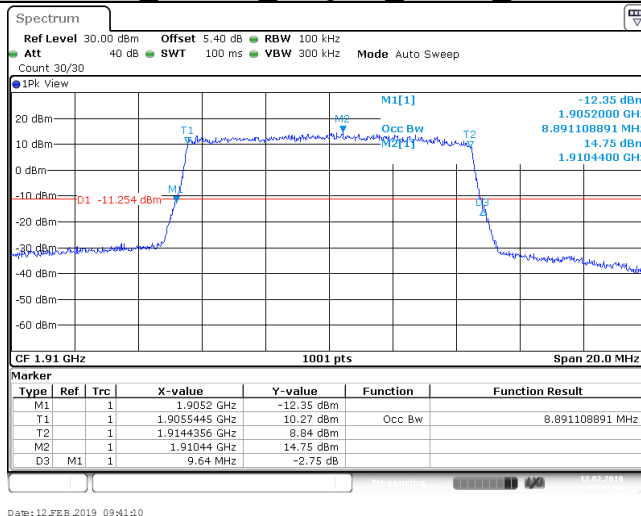


Band25 10MHz 16QAM 26365 50RB#0





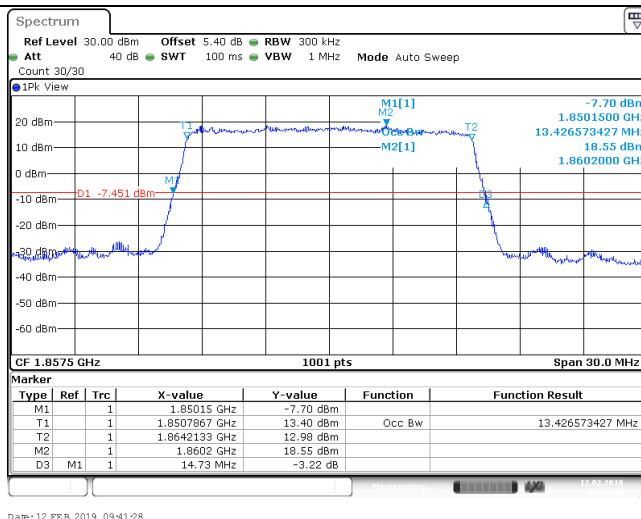
Band25 10MHz 16QAM 26640 50RB#0



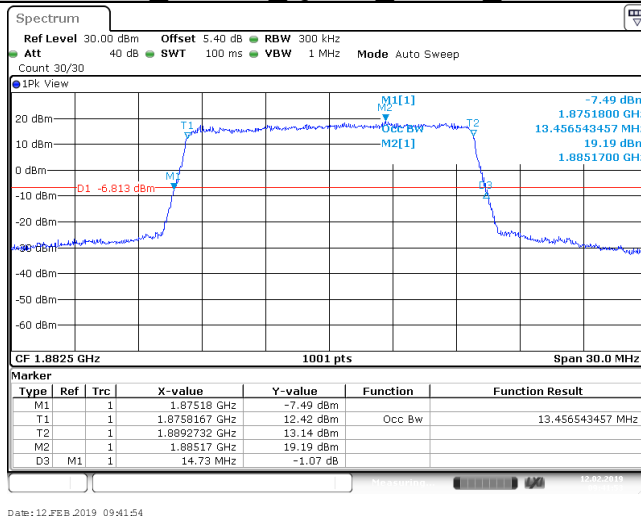
Band25 15MHz QPSK 26115 75RB#0



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-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.

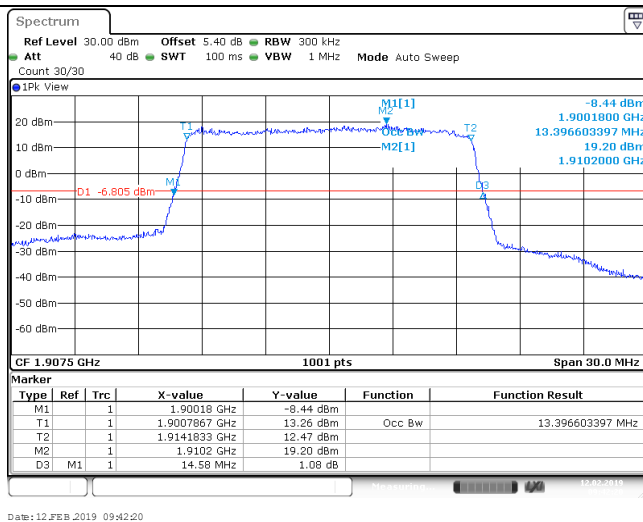


Band25 15MHz QPSK 26365 75RB#0

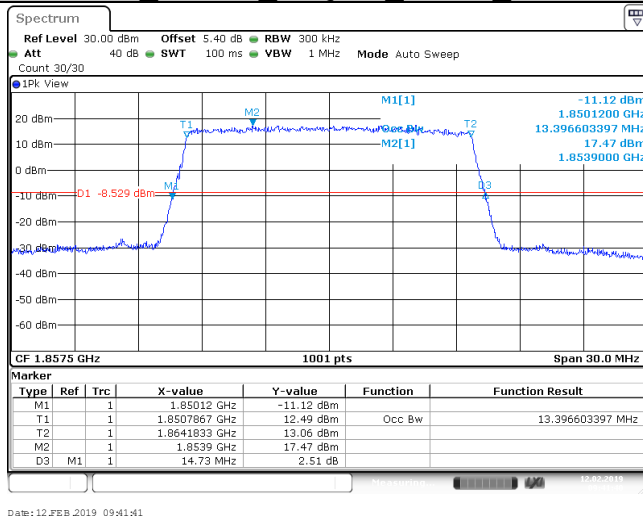


Band25 15MHz QPSK 26615 75RB#0



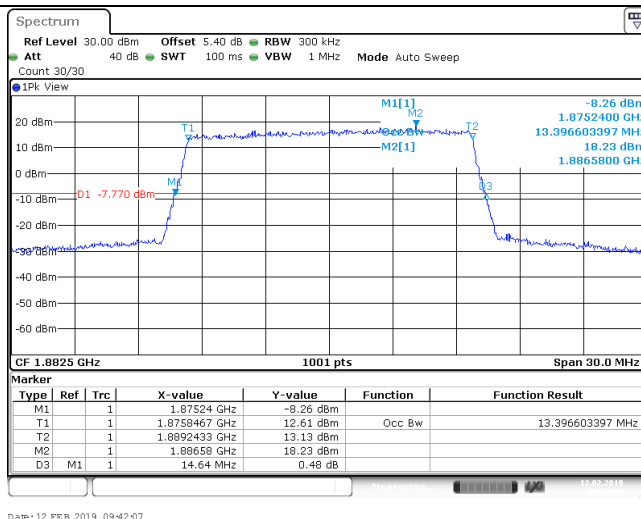


Band25 15MHz 16QAM 26115 75RB#0

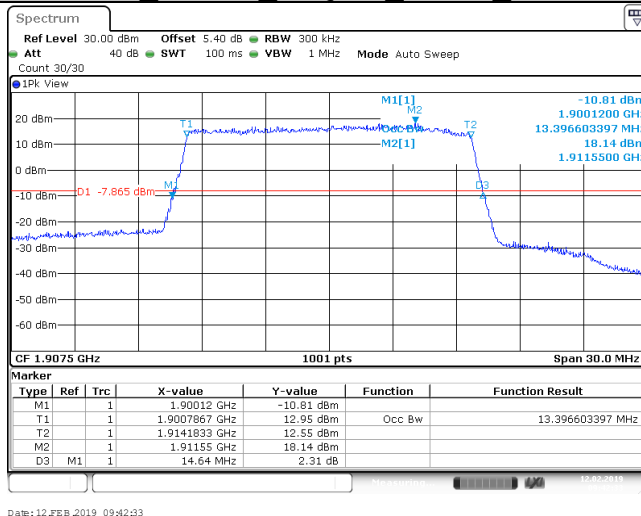


Band25 15MHz 16QAM 26365 75RB#0



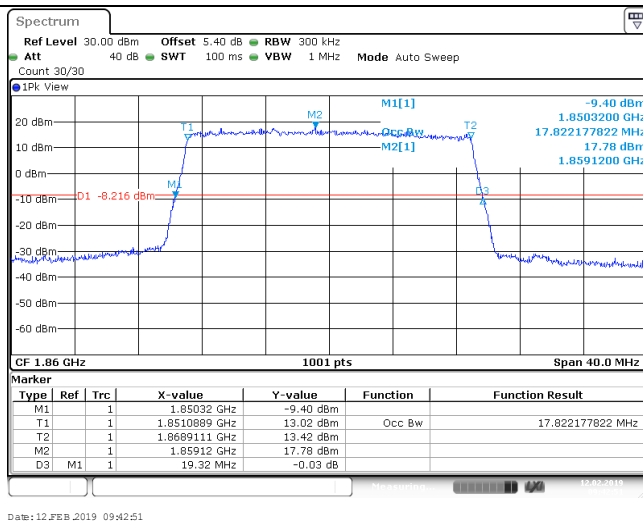


Band25 15MHz 16QAM 26615 75RB#0



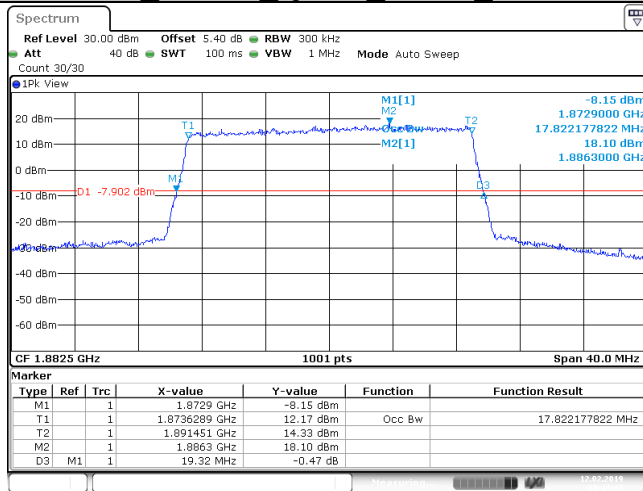
Band25 20MHz QPSK 26140 100RB#0





Date: 12 FEB 2019 09:42:51

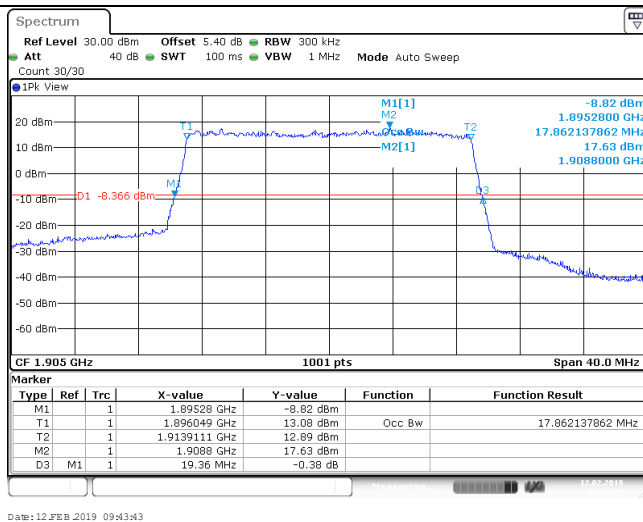
Band25 20MHz QPSK 26365 100RB#0



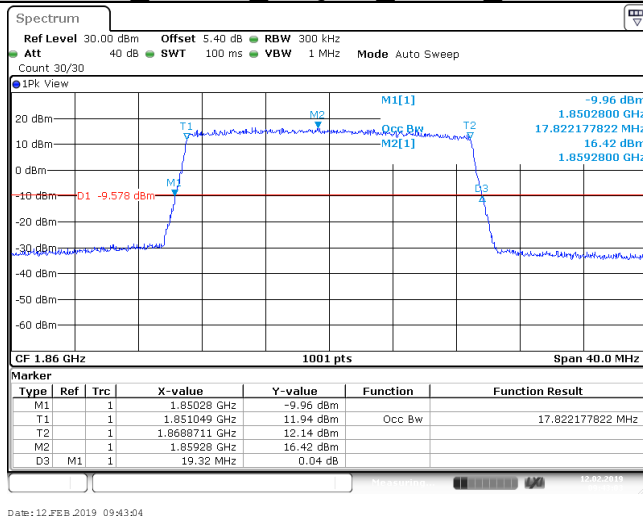
Date: 12 FEB 2019 09:43:17

Band25 20MHz QPSK 26590 100RB#0



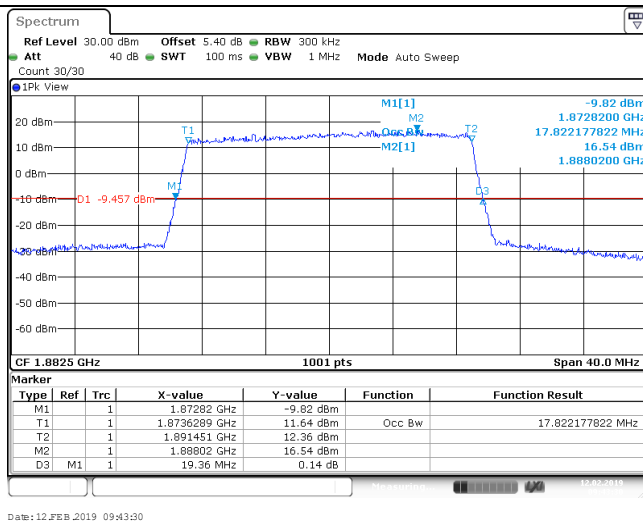


Band25 20MHz 16QAM 26140 100RB#0

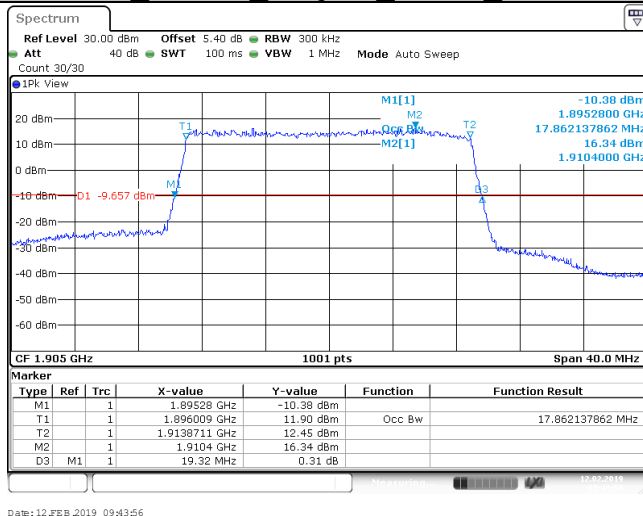


Band25 20MHz 16QAM 26365 100RB#0





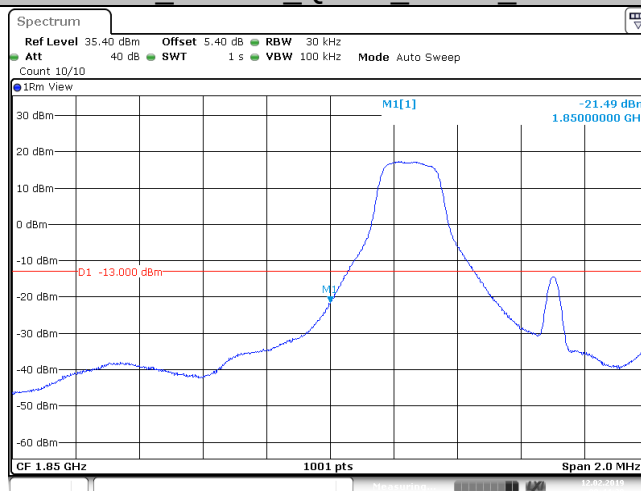
Band25 20MHz 16QAM 26590 100RB#0



5 Band Edges Compliance

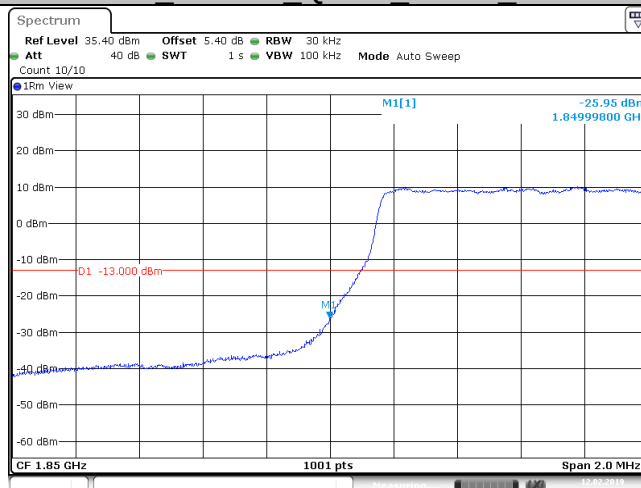
5.1. Test Plots

Band25 1.4MHz QPSK 26047 1RB#0



Date: 12.FEB.2019 09:44:21

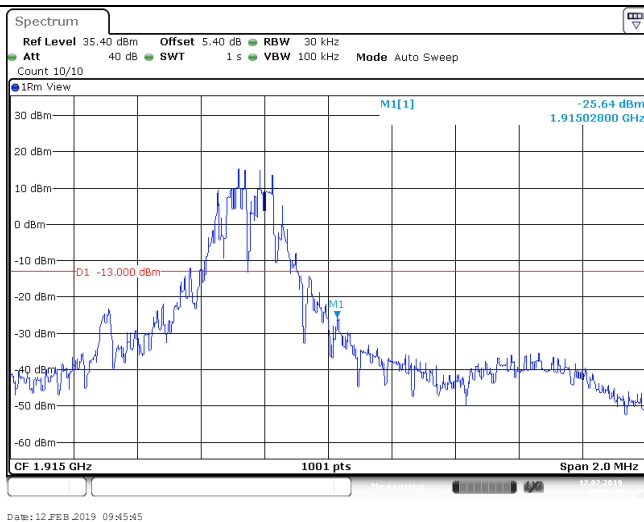
Band25 1.4MHz QPSK 26047 6RB#0



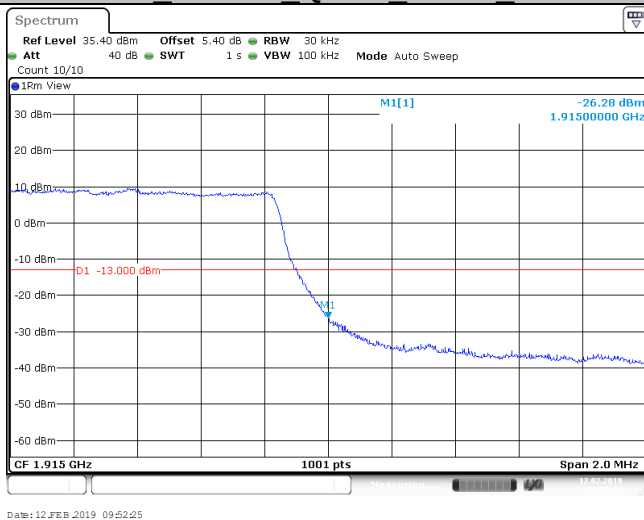
Date: 12.FEB.2019 09:51:01

Band25 1.4MHz QPSK 26683 1RB#5



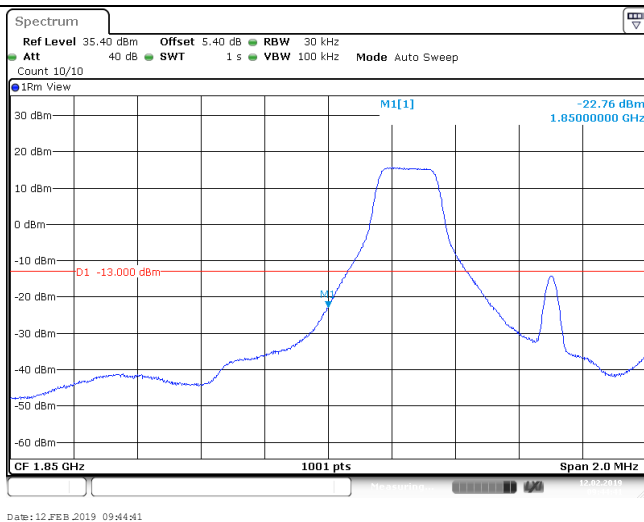


Band25 1.4MHz QPSK 26683 6RB#0

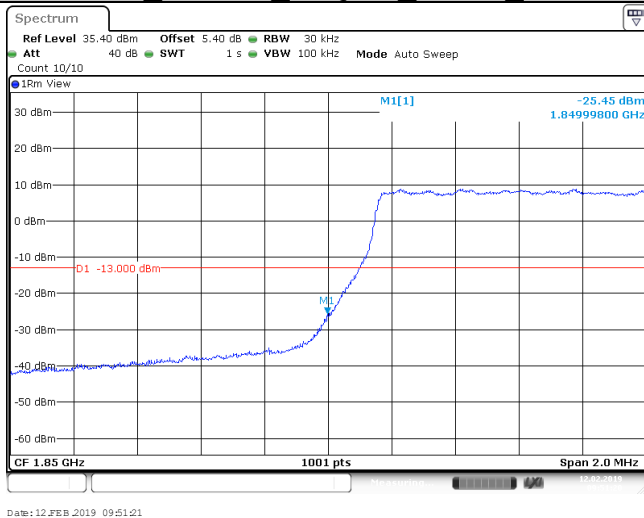


Band25 1.4MHz 16QAM 26047 1RB#0



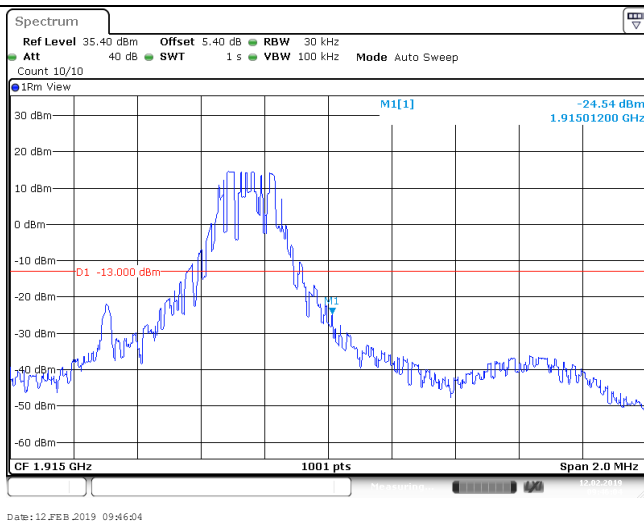


Band25 1.4MHz 16QAM 26047 6RB#0

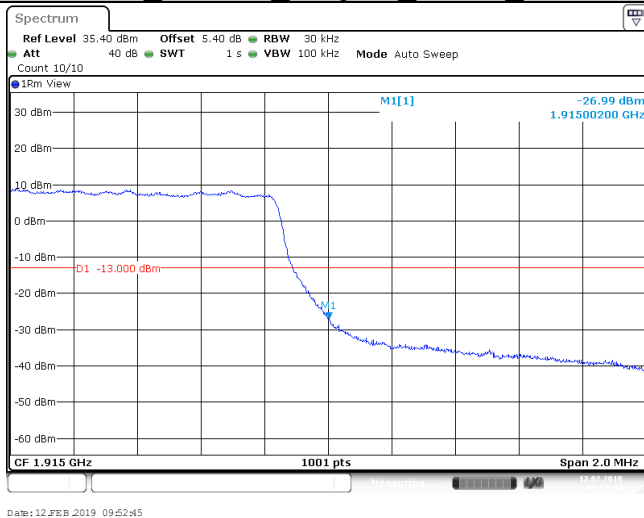


Band25 1.4MHz 16QAM 26683 1RB#5



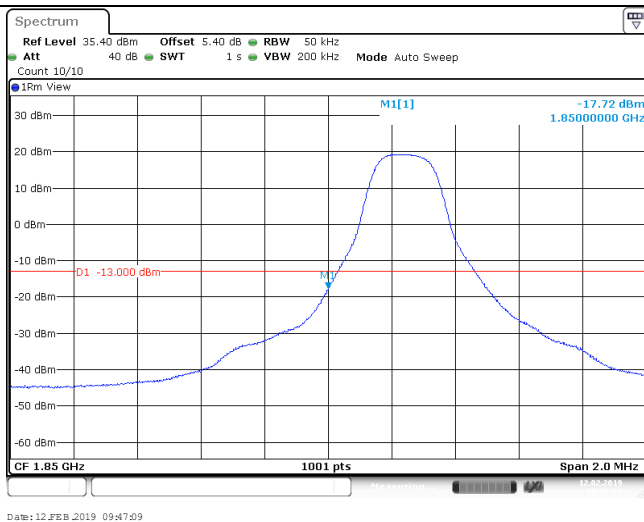


Band25 1.4MHz 16QAM 26683 6RB#0

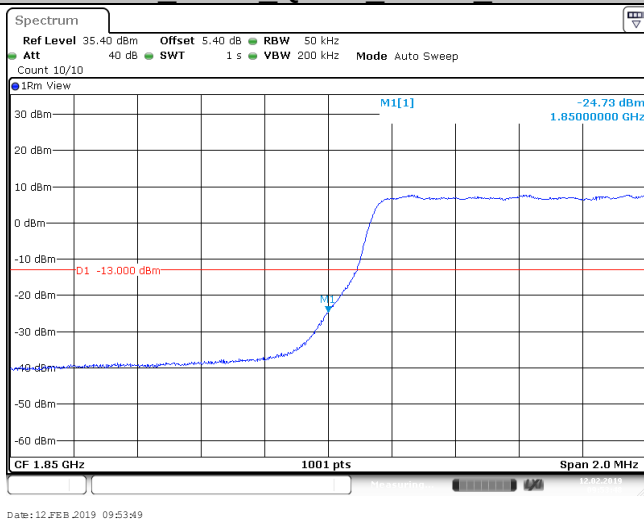


Band25 3MHz QPSK 26055 1RB#0



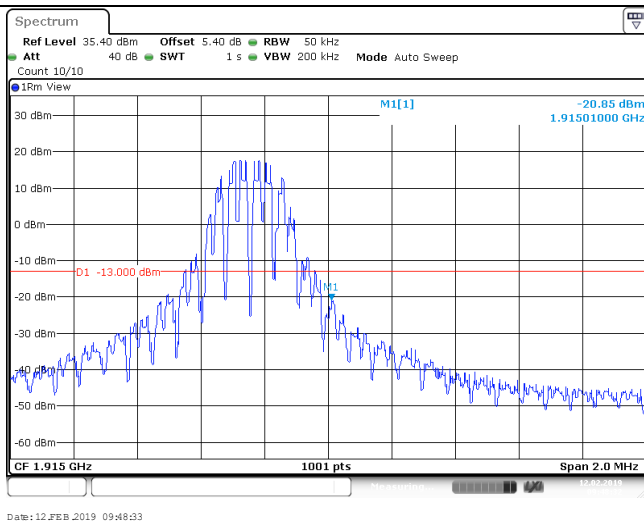


Band25 3MHz QPSK 26055 15RB#0

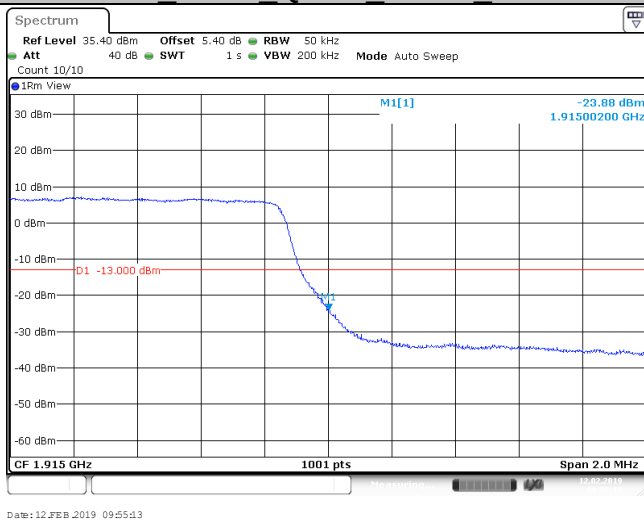


Band25 3MHz QPSK 26675 1RB#14



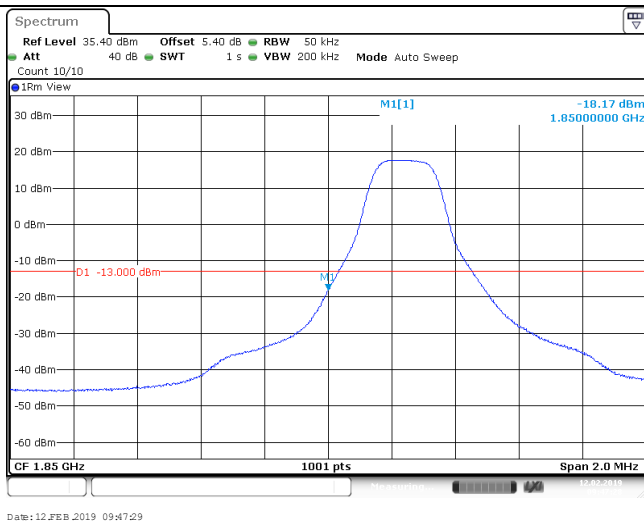


Band25 3MHz QPSK 26675 15RB#0

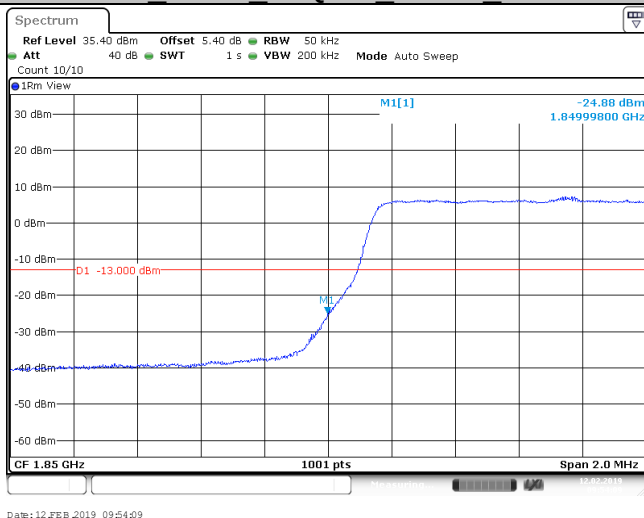


Band25 3MHz 16QAM 26055 1RB#0





Band25 3MHz 16QAM 26055 15RB#0

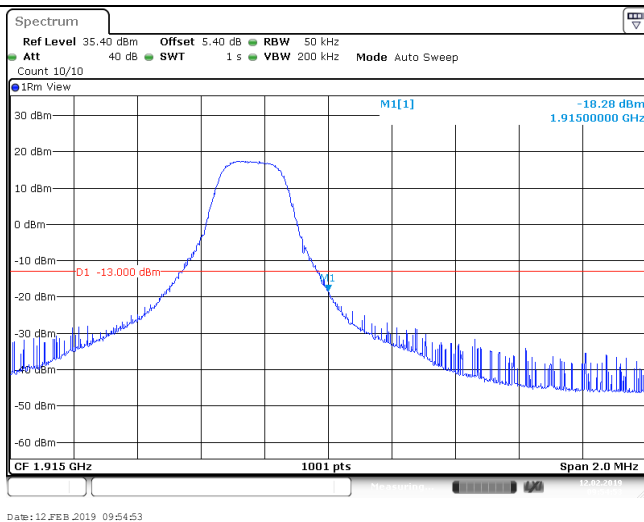


Band25 3MHz 16QAM 26675 1RB#14

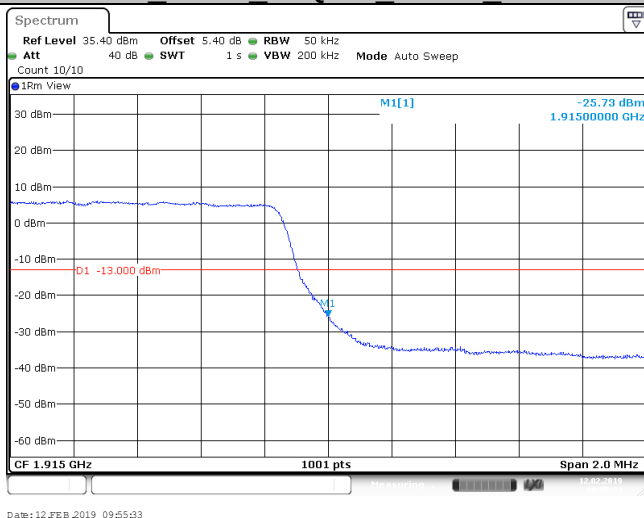


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

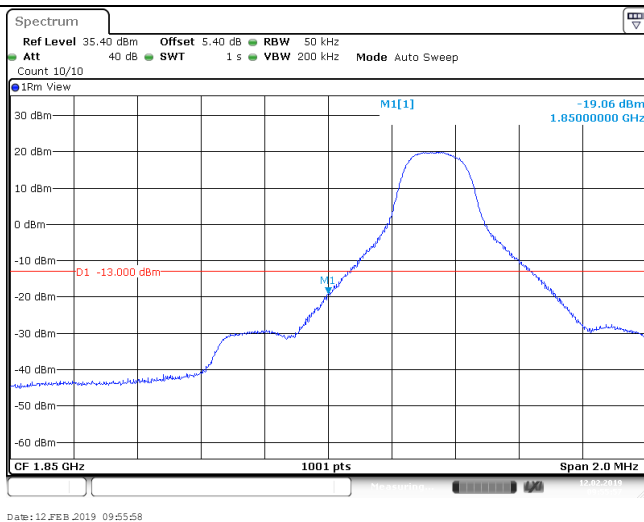


Band25 3MHz 16QAM 26675 15RB#0

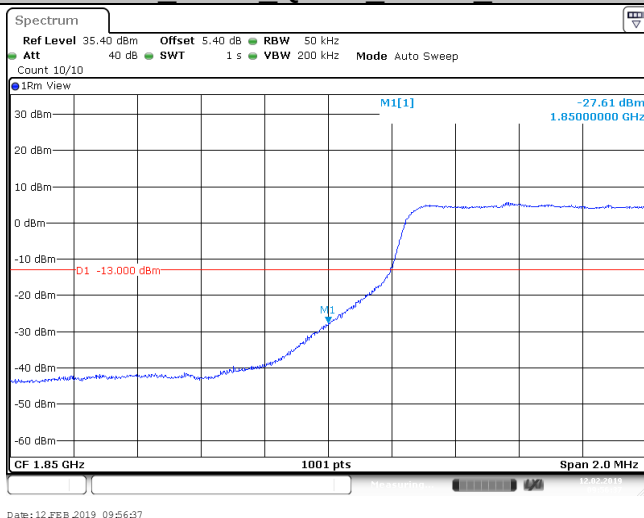


Band25 5MHz QPSK 26065 1RB#0



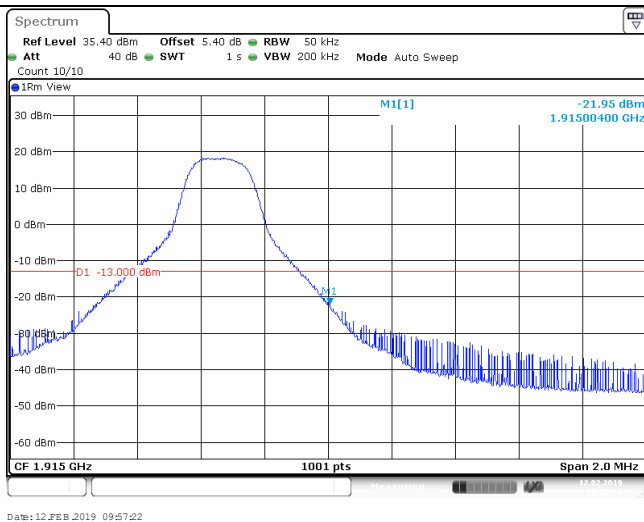


Band25 5MHz QPSK 26065 25RB#0

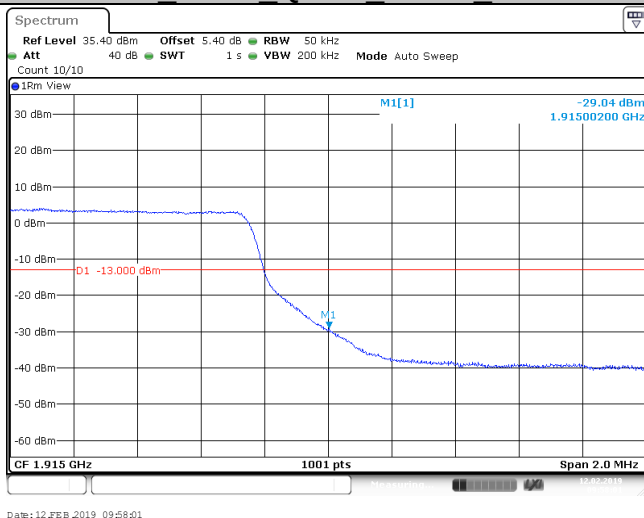


Band25 5MHz QPSK 26665 1RB#24



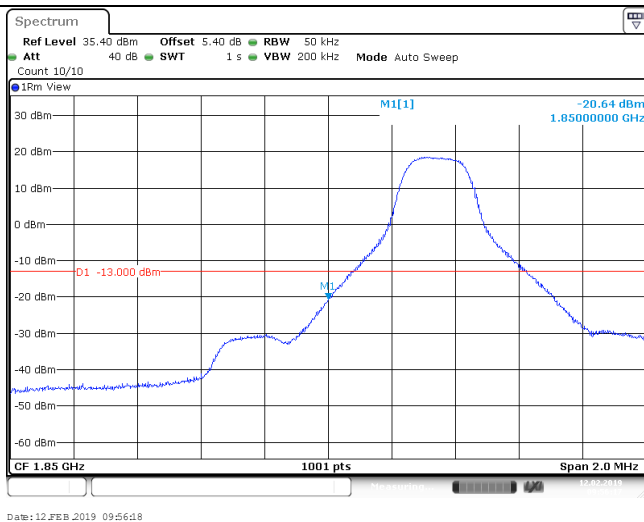


Band25 5MHz QPSK 26665 25RB#0

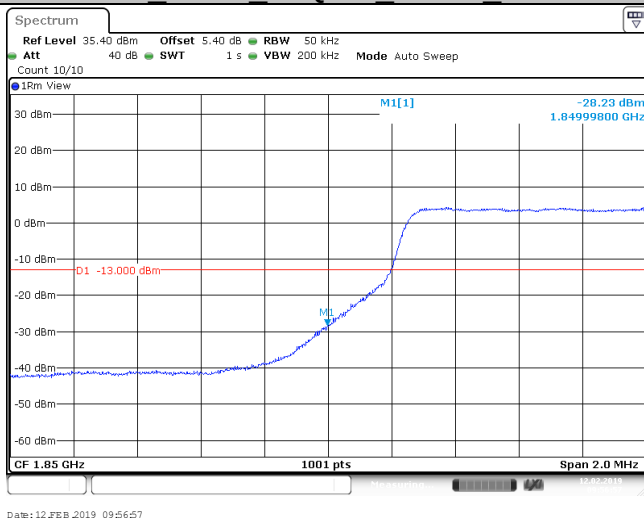


Band25 5MHz 16QAM 26065 1RB#0



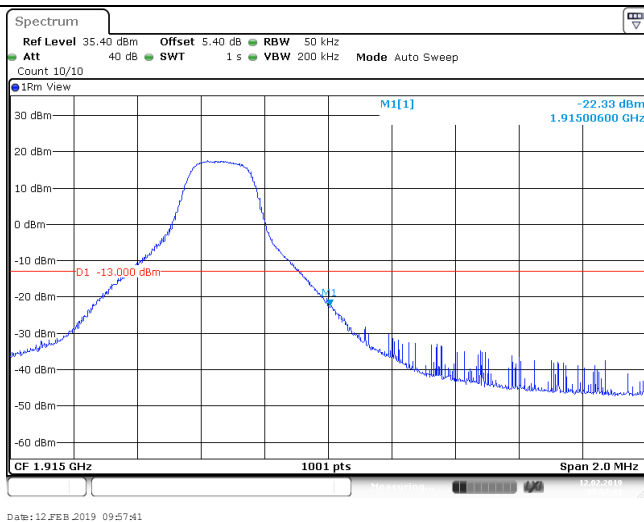


Band25 5MHz 16QAM 26065 25RB#0



Band25 5MHz 16QAM 26665 1RB#24



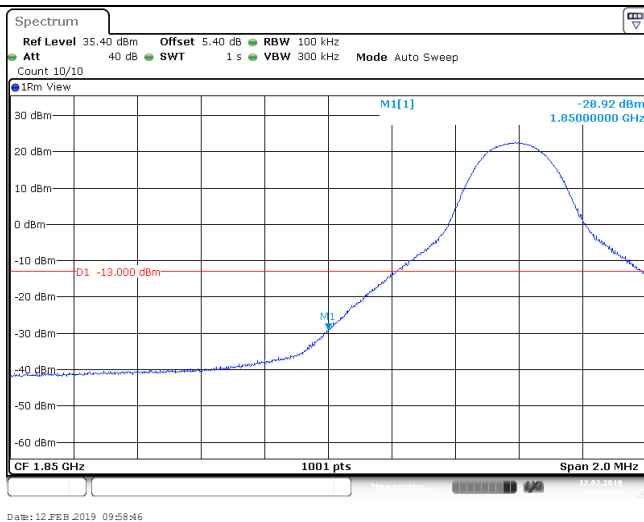


Band25 5MHz 16QAM 26665 25RB#0

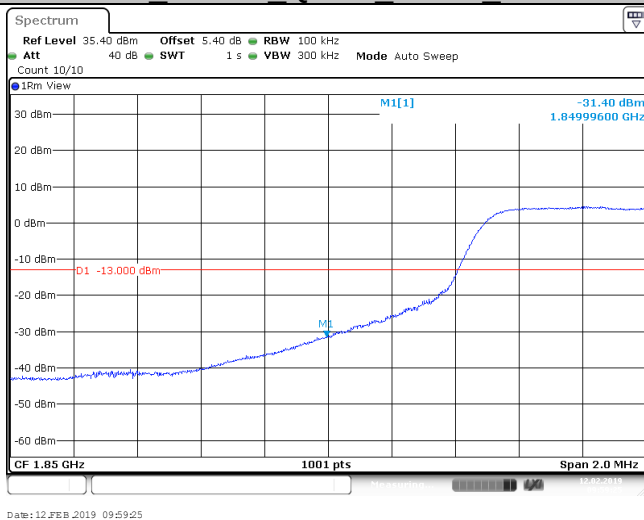


Band25 10MHz QPSK 26090 1RB#0



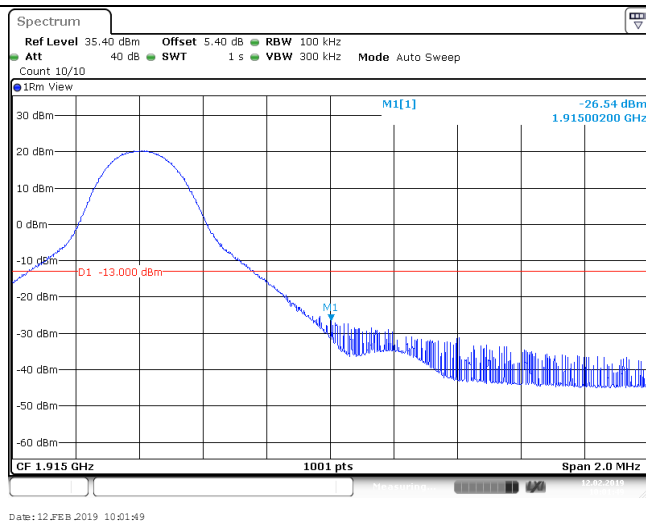


Band25 10MHz QPSK 26090 50RB#0

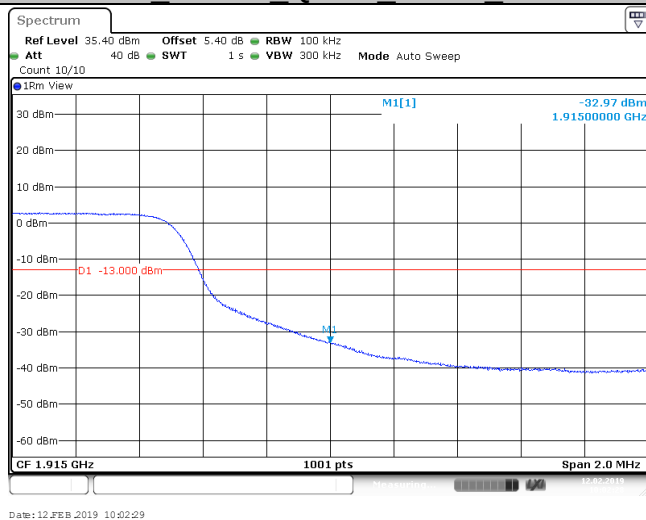


Band25 10MHz QPSK 26640 1RB#49



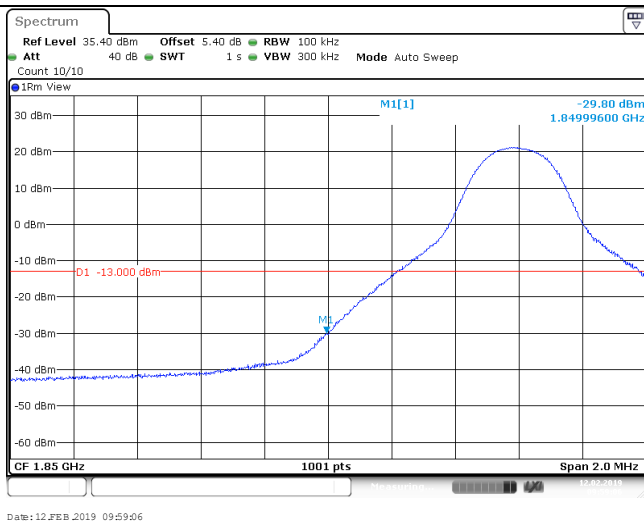


Band25 10MHz QPSK 26640 50RB#0

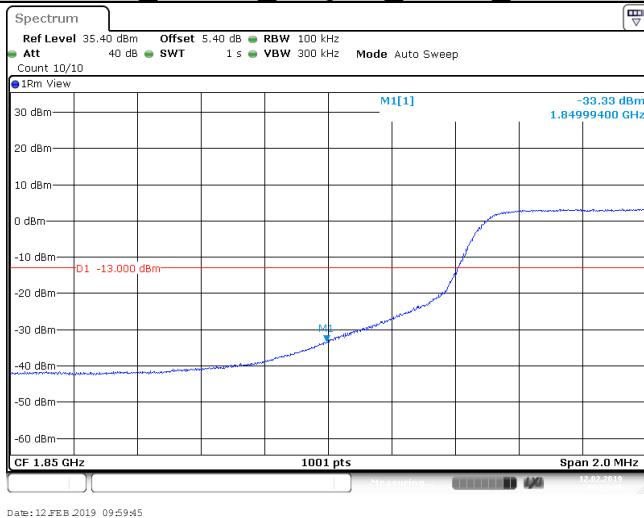


Band25 10MHz 16QAM 26090 1RB#0



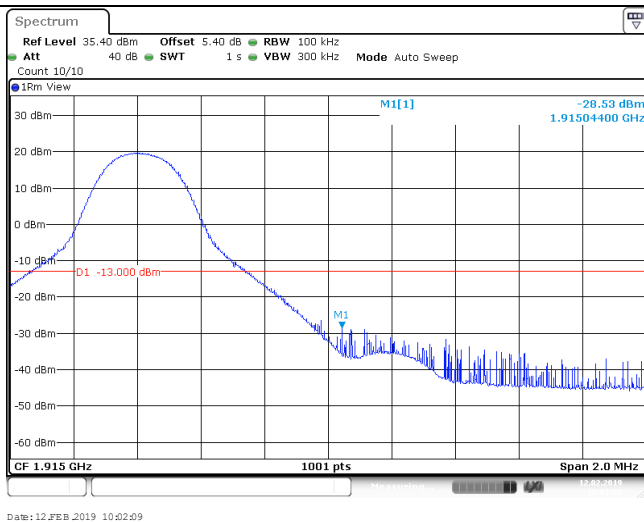


Band25 10MHz 16QAM 26090 50RB#0

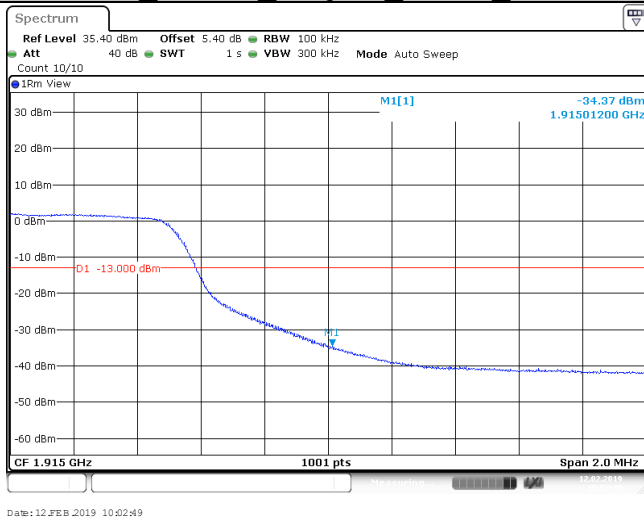


Band25 10MHz 16QAM 26640 1RB#49



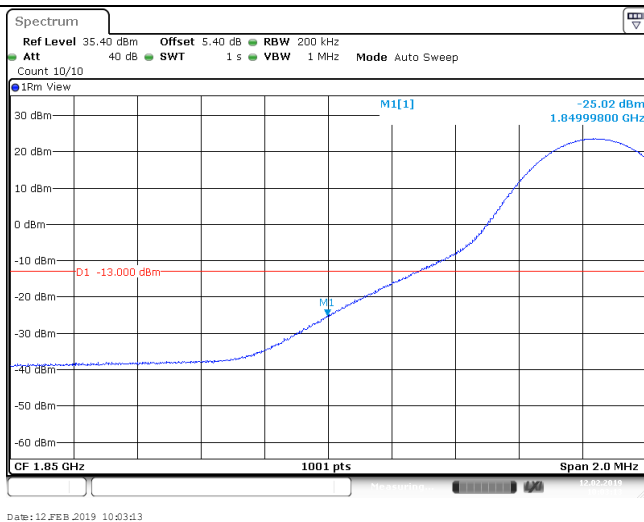


Band25 10MHz 16QAM 26640 50RB#0

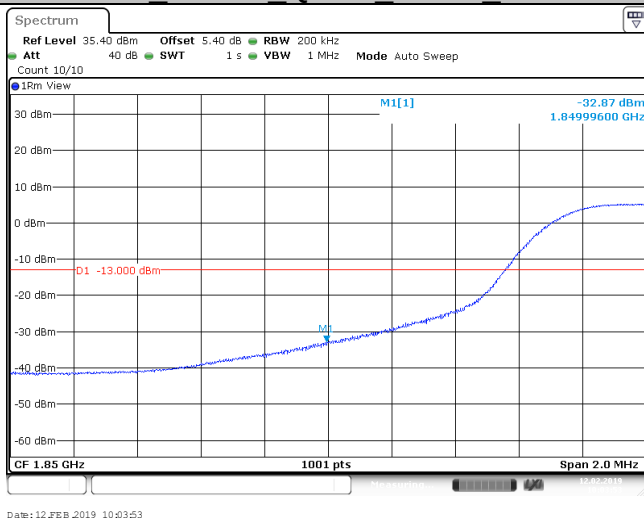


Band25 15MHz QPSK 26115 1RB#0





Band25 15MHz QPSK 26115 75RB#0



Band25 15MHz QPSK 26615 1RB#74

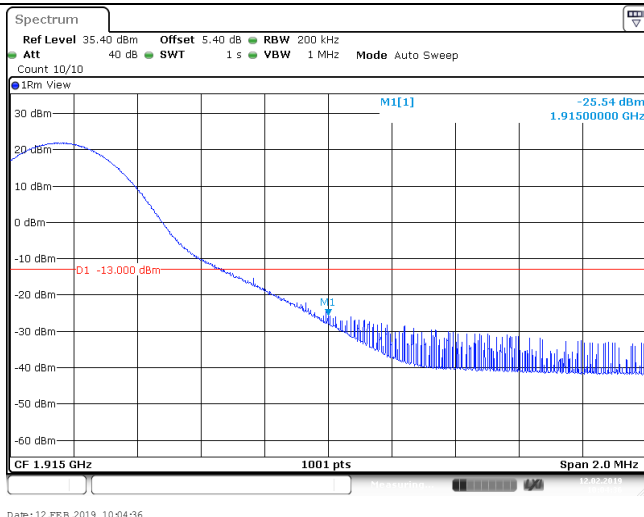


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

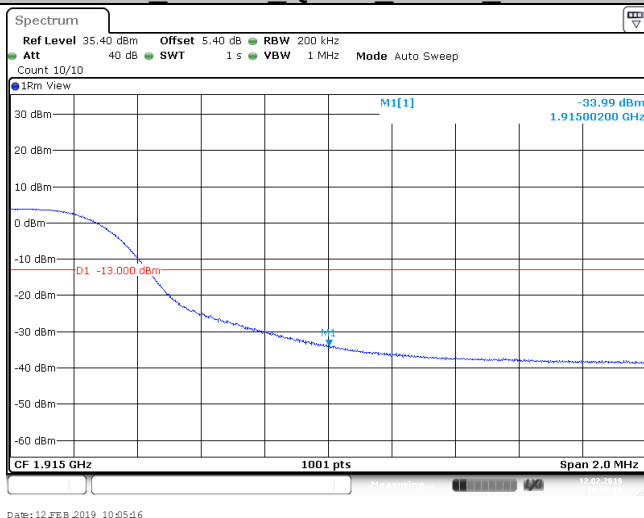
Attention: To check the authenticity of testing / inspection report and certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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

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



Band25 15MHz QPSK 26615 75RB#0

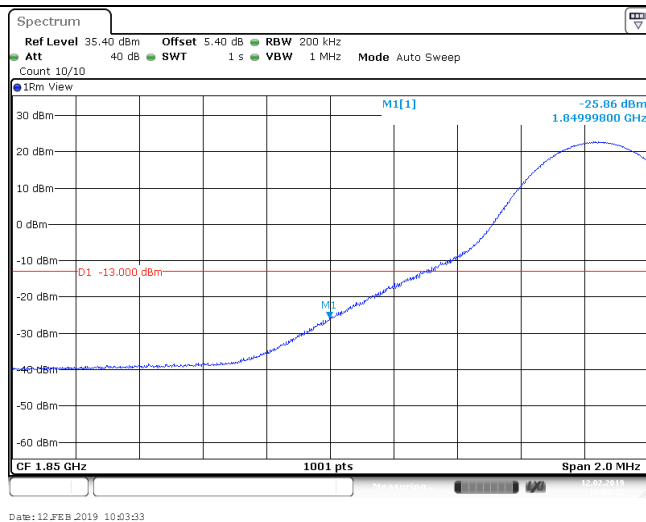


Band25 15MHz 16QAM 26115 1RB#0

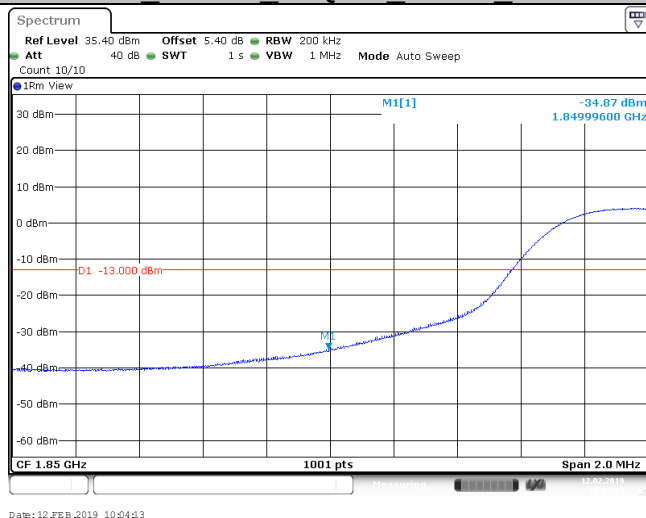


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



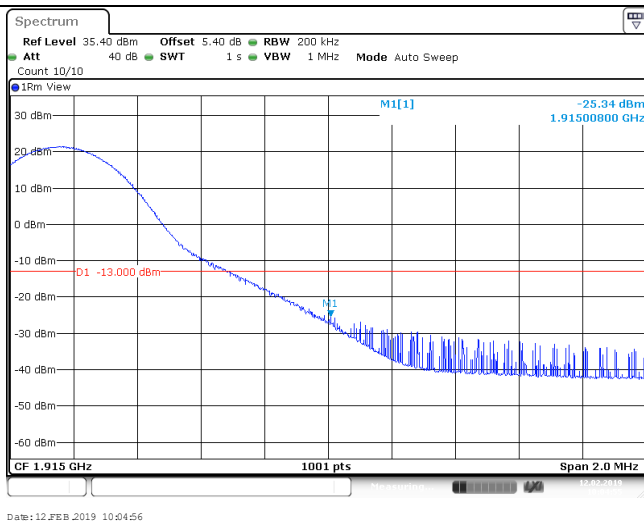
Band25 15MHz 16QAM 26115 75RB#0



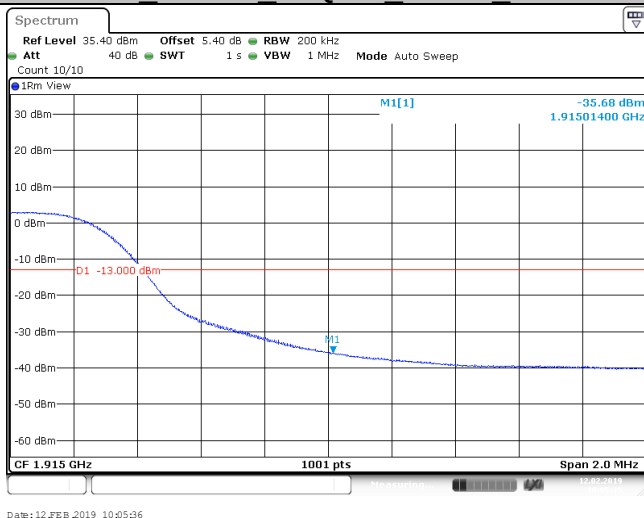
Band25 15MHz 16QAM 26615 1RB#74



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



Band25 15MHz 16QAM 26615 75RB#0

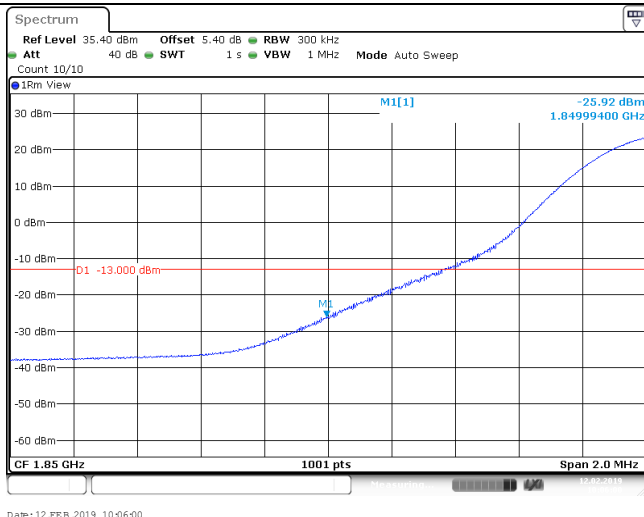


Band25 20MHz QPSK 26140 1RB#0



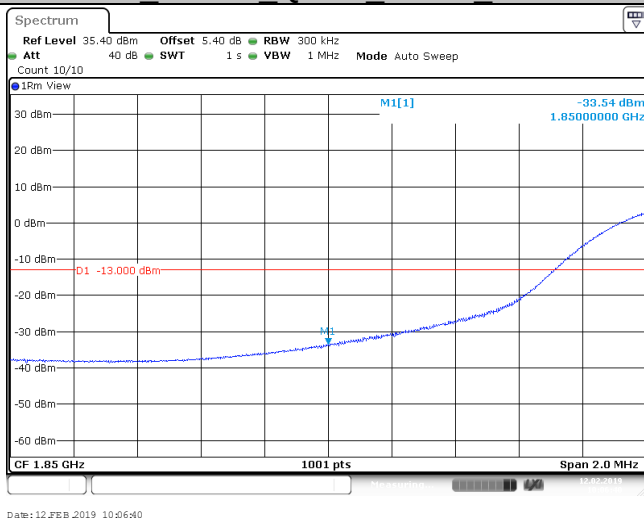
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Date: 12 FEB 2019 10:06:00

Band25 20MHz QPSK 26140 100RB#0



Date: 12 FEB 2019 10:06:40

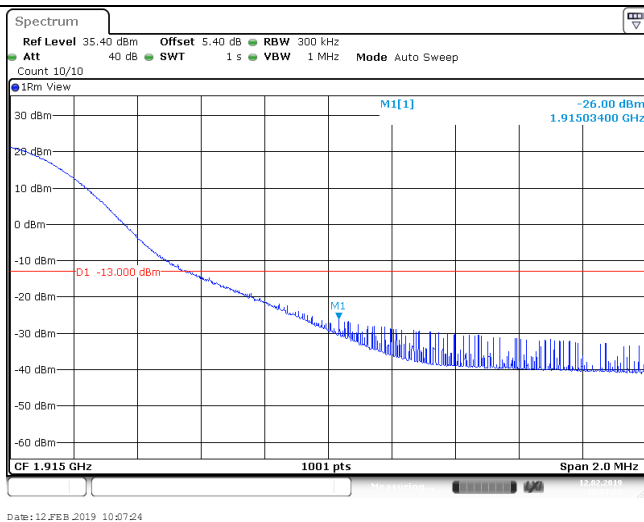
Band25 20MHz QPSK 26590 1RB#99



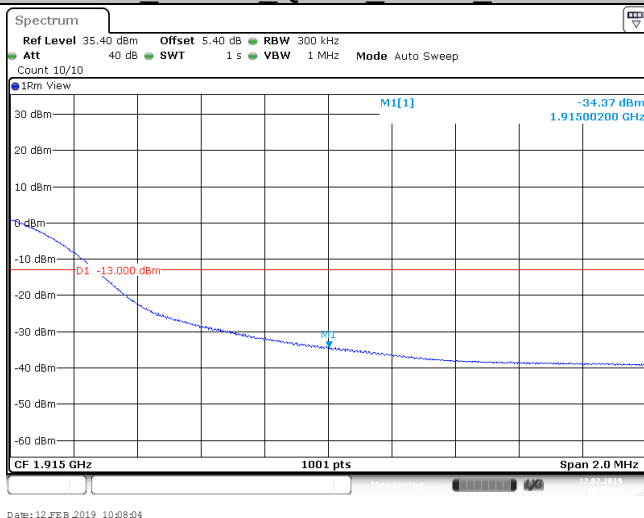
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

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

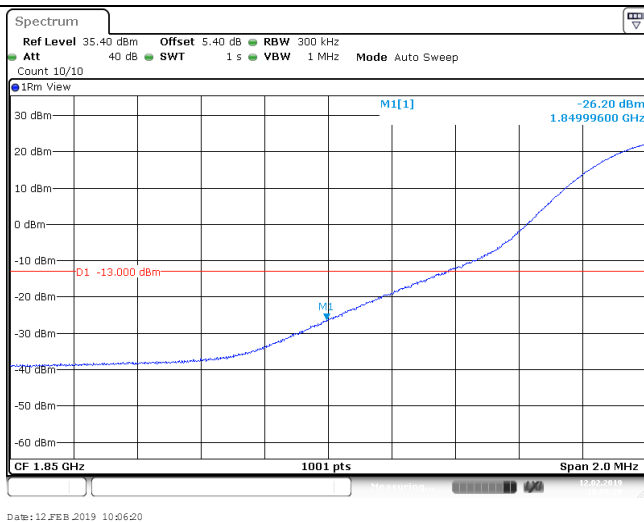


Band25 20MHz QPSK 26590 100RB#0

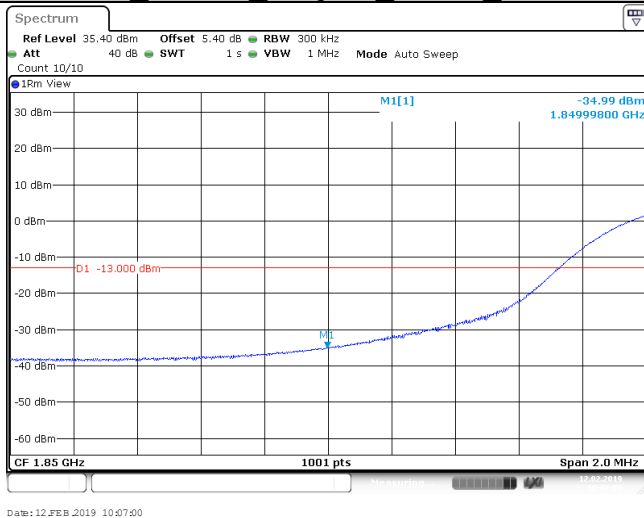


Band25 20MHz 16QAM 26140 1RB#0



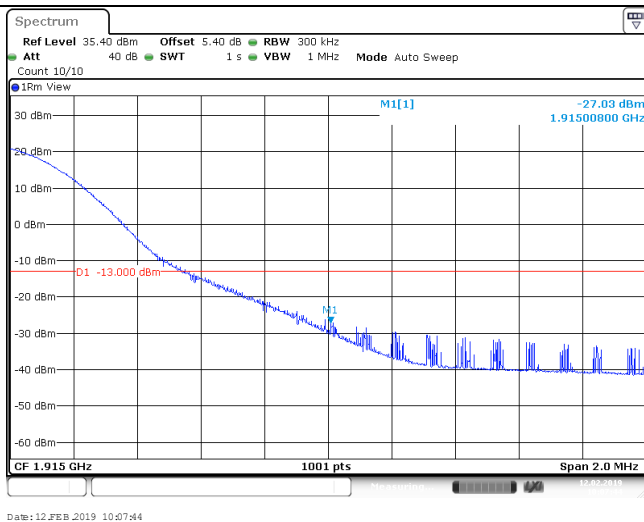


Band25 20MHz 16QAM 26140 100RB#0

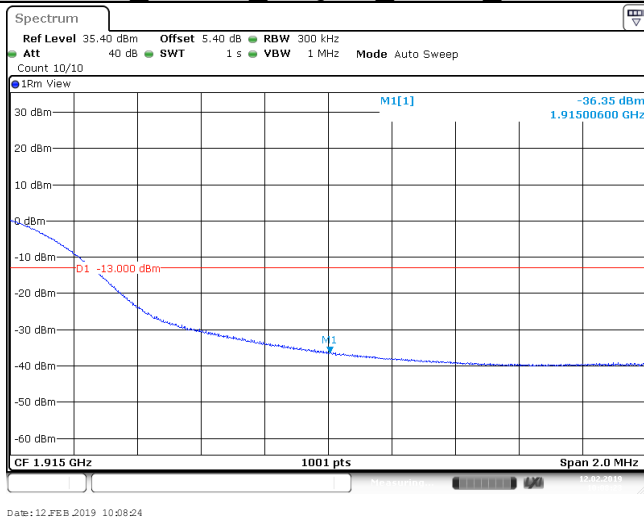


Band25 20MHz 16QAM 26590 1RB#99





Band25 20MHz 16QAM 26590 100RB#0

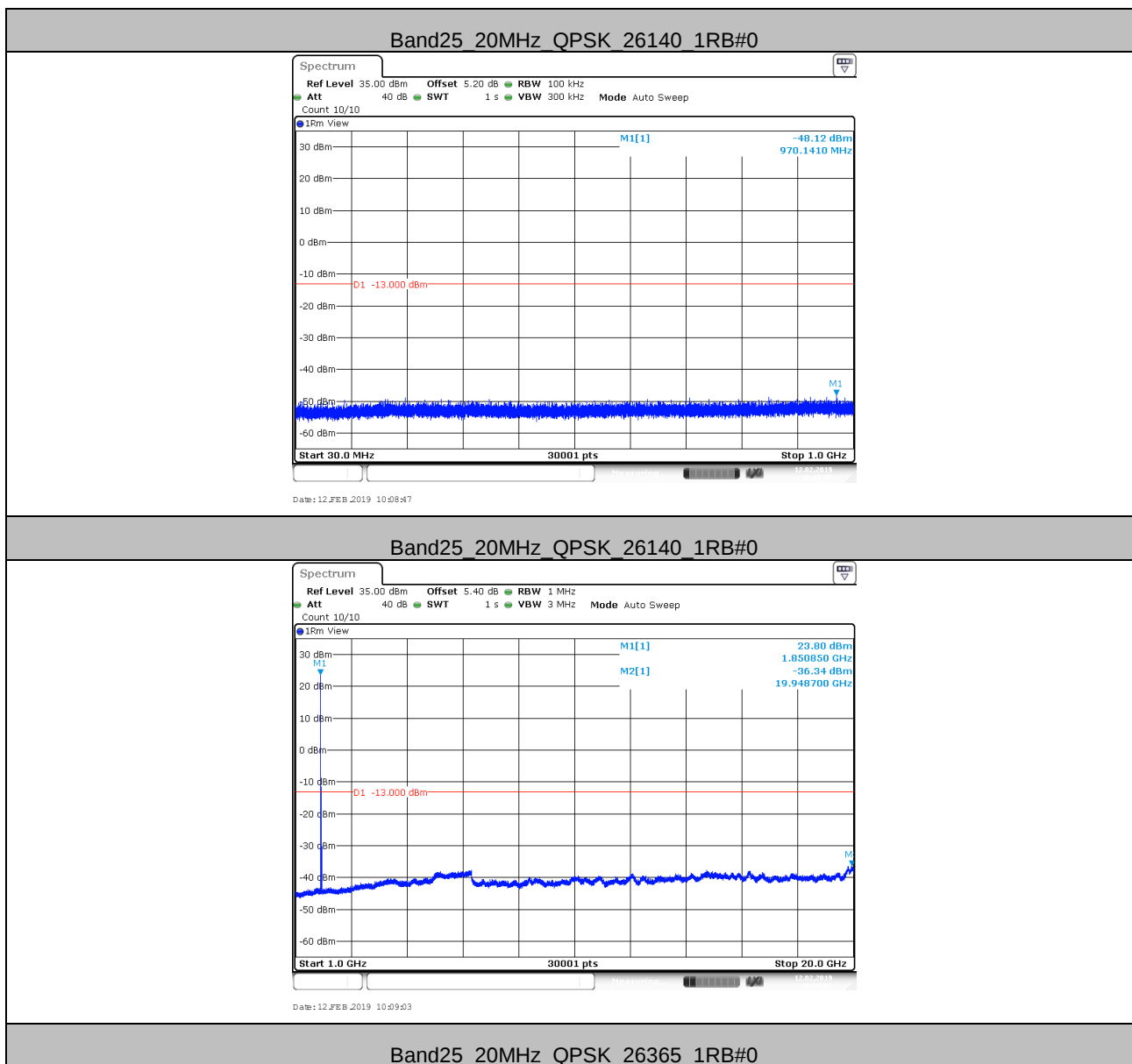


6 Spurious Emission at Antenna Terminal

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

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

6.1. Test Plots

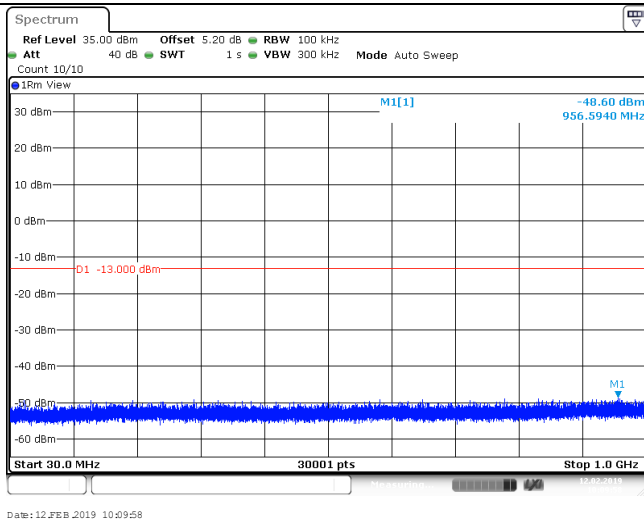


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

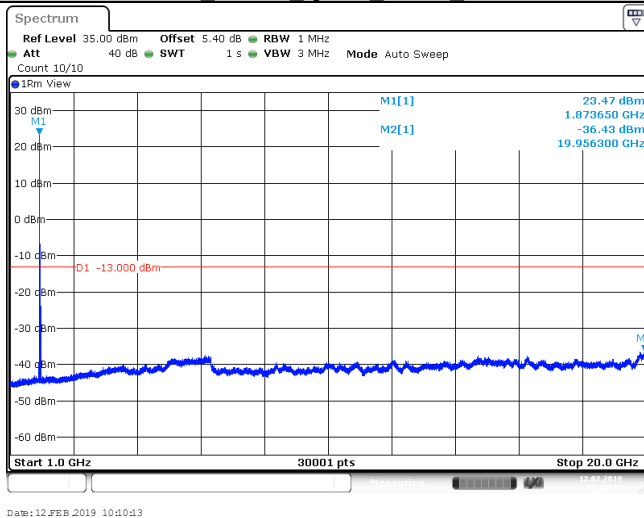
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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



Band25 20MHz QPSK 26365 1RB#0

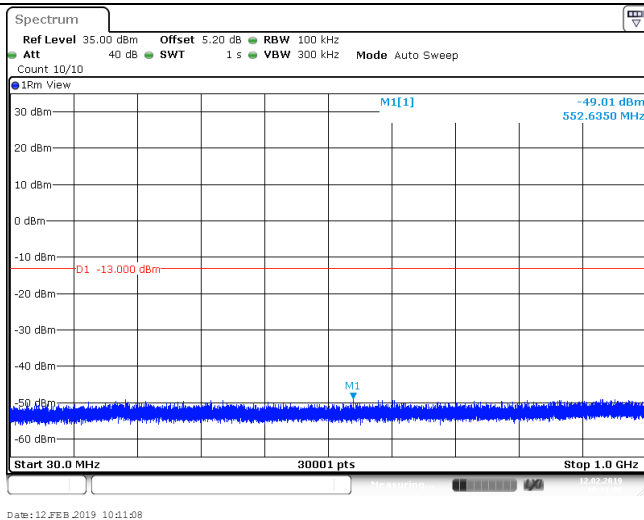


Band25 20MHz QPSK 26590 1RB#0

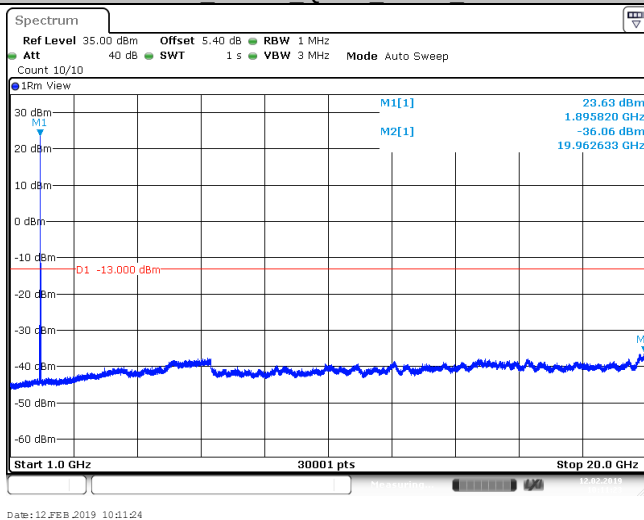


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-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 and certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



Band25 20MHz QPSK 26590 1RB#0

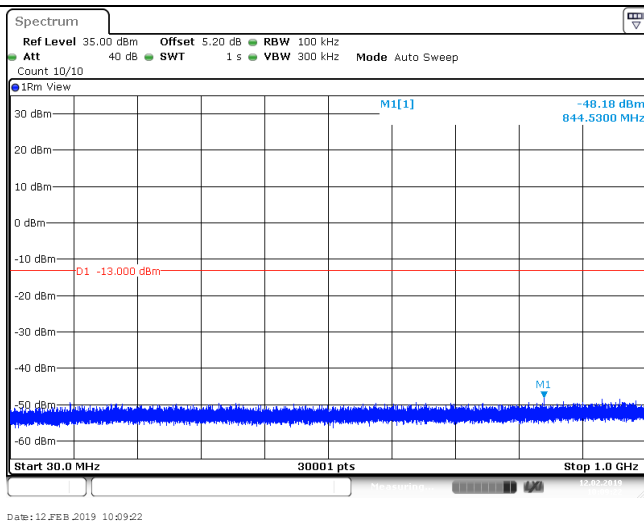


Band25 20MHz 16QAM 26140 1RB#0

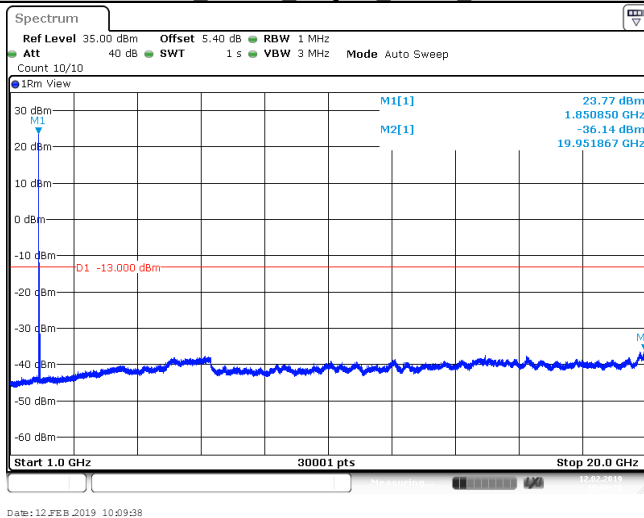


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-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 and certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

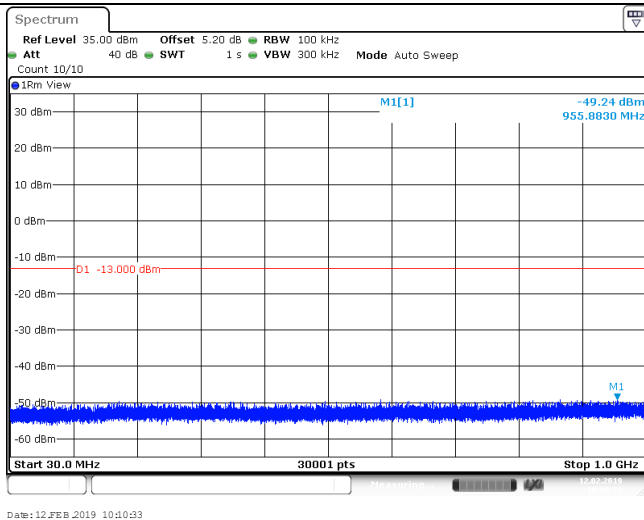


Band25 20MHz 16QAM 26140 1RB#0

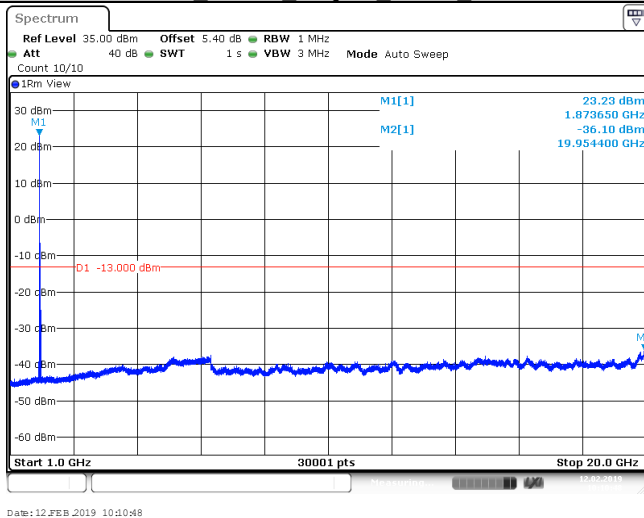


Band25 20MHz 16QAM 26365 1RB#0



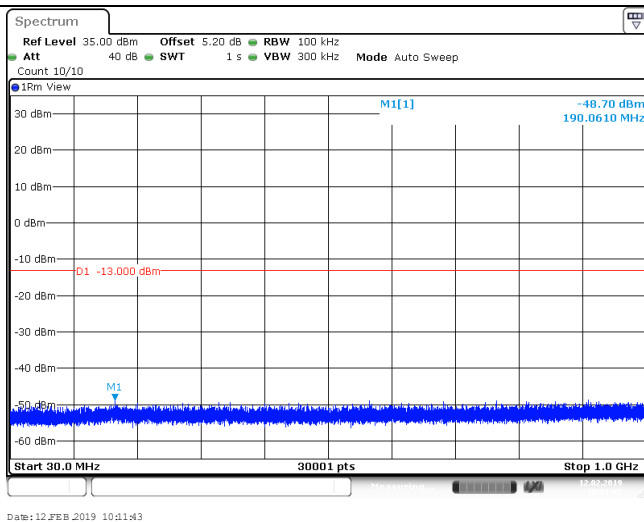


Band25 20MHz 16QAM 26365 1RB#0

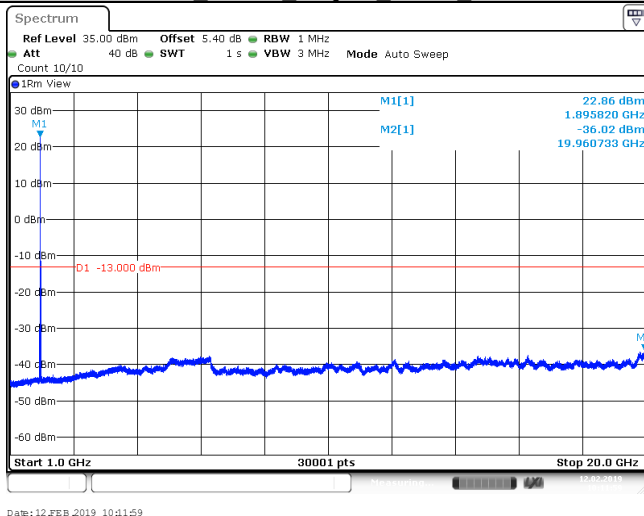


Band25 20MHz 16QAM 26590 1RB#0





Band25 20MHz 16QAM 26590 1RB#0



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

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



7 Field Strength of Spurious Radiation

For LTE

7.1.1 Test BAND = LTE BAND 25

7.1.1.1 Test Mode =LTE/TM1 20MHz RB1#0

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
78.2114	-68.85	-13.00	55.85	Vertical
110.7565	-64.98	-13.00	51.98	Vertical
350.7950	-69.05	-13.00	56.05	Vertical
3702.0234	-50.25	-13.00	37.25	Vertical
7404.1468	-50.01	-13.00	37.01	Vertical
17946.4982	-35.05	-13.00	22.05	Vertical
44.6477	-64.67	-13.00	51.67	Horizontal
165.8553	-69.23	-13.00	56.23	Horizontal
675.3248	-63.92	-13.00	50.92	Horizontal
2700.3401	-36.65	-13.00	23.65	Horizontal
5553.5851	-53.28	-13.00	40.28	Horizontal
16398.9466	-38.59	-13.00	25.59	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.6595	-65.63	-13.00	52.63	Vertical
344.3927	-68.87	-13.00	55.87	Vertical
879.8595	-61.62	-13.00	48.62	Vertical
2698.3397	-37.80	-13.00	24.80	Vertical
5620.5874	-43.82	-13.00	30.82	Vertical
17990.9997	-33.10	-13.00	20.10	Vertical
41.9316	-64.74	-13.00	51.74	Horizontal
150.8680	-68.13	-13.00	55.13	Horizontal
620.0320	-63.78	-13.00	50.78	Horizontal
2703.1406	-36.65	-13.00	23.65	Horizontal
5621.0874	-48.16	-13.00	35.16	Horizontal
17953.9985	-37.48	-13.00	24.48	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 Testing Center (CCL) Laboratory

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

t (86-755) 26012053 f (86-755) 26710594
邮编: 518057 t (86-755) 26012053 f (86-755) 26710594

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

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
75.3983	-69.34	-13.00	56.34	Vertical
108.8164	-65.43	-13.00	52.43	Vertical
648.5514	-64.23	-13.00	51.23	Vertical
2701.9404	-37.75	-13.00	24.75	Vertical
5688.0896	-43.80	-13.00	30.80	Vertical
17990.4997	-33.03	-13.00	20.03	Vertical
41.7376	-65.11	-13.00	52.11	Horizontal
163.8182	-68.54	-13.00	55.54	Horizontal
623.5242	-64.39	-13.00	51.39	Horizontal
2698.7397	-36.60	-13.00	23.60	Horizontal
5688.0896	-47.70	-13.00	34.70	Horizontal
17999.0000	-37.96	-13.00	24.96	Horizontal

7.1.1.1.4 Spot check worse mode

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
66.2798	-67.92	-13.00	54.92	Vertical
115.2188	-64.48	-13.00	51.48	Vertical
488.2994	-66.35	-13.00	53.35	Vertical
5620.5874	-46.19	-13.00	33.19	Vertical
9367.7123	-47.86	-13.00	34.86	Vertical
17995.9999	-33.62	-13.00	20.62	Vertical
42.2711	-64.08	-13.00	51.08	Horizontal
150.4315	-66.91	-13.00	53.91	Horizontal
236.9598	-67.83	-13.00	54.83	Horizontal
5621.0874	-49.15	-13.00	36.15	Horizontal
9962.7321	-49.00	-13.00	36.00	Horizontal
16393.9465	-38.38	-13.00	25.38	Horizontal

Remark:

- 1) The disturbance above 12.75GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.
- 2) We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.



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

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



8 Frequency Stability

8.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band25	20MHz	QPSK	26140	100RB#0	VL	NT	-1.20	-0.000645	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	VN	NT	-0.20	-0.000108	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	VH	NT	0.40	0.000215	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	VL	NT	2.70	0.001434	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	VN	NT	1.80	0.000956	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	VH	NT	1.80	0.000956	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	VL	NT	-0.10	-0.000052	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	VN	NT	0.90	0.000472	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	VH	NT	0.60	0.000315	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	VL	NT	1.00	0.000538	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	VN	NT	-0.30	-0.000161	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	VH	NT	-0.80	-0.000430	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	VL	NT	0.40	0.000212	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	VN	NT	-0.40	-0.000212	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	VH	NT	1.50	0.000797	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	VL	NT	1.00	0.000525	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	VN	NT	1.20	0.000630	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	VH	NT	2.10	0.001102	±2.5	PASS

8.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band25	20MHz	QPSK	26140	100RB#0	NV	-30	1.30	0.000699	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	-20	0.60	0.000323	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	0	0.30	0.000161	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	10	2.30	0.001237	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	20	1.10	0.000591	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	30	1.80	0.000968	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	40	2.10	0.001129	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	50	0.30	0.000161	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	-30	-0.90	-0.000478	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	-20	2.00	0.001062	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	0	-0.50	-0.000266	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	10	1.10	0.000584	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	20	-0.60	-0.000319	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	30	-0.80	-0.000425	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	40	-0.10	-0.000053	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	50	2.00	0.001062	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	-30	0.10	0.000052	±2.5	PASS



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

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

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

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

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



Band25	20MHz	QPSK	26590	100RB#0	NV	-20	0.70	0.000367	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	0	-1.30	-0.000682	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	10	0.70	0.000367	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	20	0.70	0.000367	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	30	-0.50	-0.000262	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	40	1.30	0.000682	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	50	2.20	0.001155	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	-30	0.40	0.000215	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	-20	1.20	0.000645	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	0	0.30	0.000161	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	10	2.00	0.001075	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	20	1.20	0.000645	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	30	2.20	0.001183	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	40	0.70	0.000376	±2.5	PASS
Band25	20MHz	16QAM	26140	100RB#0	NV	50	1.50	0.000806	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	-30	2.20	0.001169	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	-20	1.70	0.000903	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	0	2.00	0.001062	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	10	1.30	0.000691	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	20	1.80	0.000956	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	30	1.10	0.000584	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	40	1.30	0.000691	±2.5	PASS
Band25	20MHz	16QAM	26365	100RB#0	NV	50	1.60	0.000850	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	-30	2.40	0.001260	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	-20	0.90	0.000472	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	0	0.90	0.000472	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	10	0.30	0.000157	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	20	0.20	0.000105	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	30	2.50	0.001312	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	40	2.30	0.001207	±2.5	PASS
Band25	20MHz	16QAM	26590	100RB#0	NV	50	-0.50	-0.000262	±2.5	PASS

The End



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

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

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