



# Appendix B

## E-UTRA Band 38



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](mailto: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



**CONTENT**

**1 EFFECTIVE (ISOTROPIC) RADIATED POWER..... 3**

1.1. TEST RESULT..... 3

**2. PEAK-TO-AVERAGE RATIO (CCDF)..... 9**

2.1. TEST RESULT..... 9

2.2. TEST PLOTS ..... 9

**3. MODULATION CHARACTERISTICS .....14**

3.1. TEST MODE = LTE /TM1 20MHZ .....14

3.1.1. TEST CHANNEL = MCH .....14

3.2. TEST MODE = LTE /TM2 20MHZ .....15

3.2.1. TEST CHANNEL = MCH .....15

3.3. TEST MODE = LTE /TM3 20MHZ .....16

3.3.1. TEST CHANNEL = MCH .....16

**4. 26DB BANDWIDTH AND OCCUPIED BANDWIDTH .....17**

4.1. TEST RESULT.....17

4.2. TEST PLOTS .....18

**5. BAND EDGE COMPLIANCE .....36**

5.1. TEST PLOTS .....36

**6. SPURIOUS EMISSION AT ANTENNA TERMINAL .....60**

6.1. TEST PLOTS .....60

**7. FIELD STRENGTH OF SPURIOUS RADIATION.....69**

7.1. TEST MODE =LTE/TM1 .....69

7.1.1. TEST CHANNEL = LCH.....69

7.1.2. TEST CHANNEL = MCH .....69

7.1.3. TEST CHANNEL = HCH .....70

**8. FREQUENCY STABILITY.....71**

8.1. FREQUENCY VS VOLTAGE.....71

8.2. FREQUENCY VS TEMPERATURE .....71



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](mailto:CN.Doccheck@sgs.com)

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



# 1 Effective (Isotropic) Radiated Power

## 1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	22.09	22.13	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	22.17	22.21	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	22.03	22.07	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#6	21.20	21.24	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#0	21.14	21.18	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#13	21.15	21.19	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	21.14	21.18	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	21.94	21.98	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	22.00	22.04	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	22.07	22.11	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#0	21.10	21.14	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#6	21.12	21.16	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#13	21.02	21.06	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	21.06	21.10	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	21.91	21.95	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	21.80	21.84	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	21.76	21.80	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#13	20.89	20.93	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#6	20.96	21.00	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#0	20.87	20.91	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	20.90	20.94	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#0	20.12	20.16	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#24	20.05	20.09	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#12	20.16	20.20	33.00	PASS
Band38	5MHz	64QAM	37775	12RB#0	18.99	19.03	33.00	PASS
Band38	5MHz	64QAM	37775	12RB#6	19.10	19.14	33.00	PASS
Band38	5MHz	64QAM	37775	12RB#13	19.03	19.07	33.00	PASS
Band38	5MHz	64QAM	37775	25RB#0	19.09	19.13	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#0	20.24	20.28	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#12	20.34	20.38	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#24	20.20	20.24	33.00	PASS
Band38	5MHz	64QAM	38000	12RB#13	19.08	19.12	33.00	PASS
Band38	5MHz	64QAM	38000	12RB#6	19.20	19.24	33.00	PASS
Band38	5MHz	64QAM	38000	12RB#0	19.07	19.11	33.00	PASS
Band38	5MHz	64QAM	38000	25RB#0	19.08	19.12	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#0	20.28	20.32	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#12	20.39	20.43	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#24	20.24	20.28	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](mailto: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



Band38	5MHz	64QAM	38225	12RB#0	19.14	19.18	33.00	PASS
Band38	5MHz	64QAM	38225	12RB#6	19.22	19.26	33.00	PASS
Band38	5MHz	64QAM	38225	12RB#13	19.19	19.23	33.00	PASS
Band38	5MHz	64QAM	38225	25RB#0	19.24	19.28	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	21.37	21.41	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	21.34	21.38	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	21.48	21.52	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#13	20.18	20.22	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#6	20.24	20.28	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#0	20.19	20.23	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	20.14	20.18	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	21.25	21.29	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	21.35	21.39	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	21.20	21.24	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#0	20.08	20.12	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#6	20.10	20.14	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#13	20.07	20.11	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	20.05	20.09	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	21.08	21.12	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	21.05	21.09	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	21.19	21.23	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#0	19.92	19.96	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#6	20.00	20.04	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#13	19.94	19.98	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	19.87	19.91	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	22.14	22.18	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	22.28	22.32	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	22.23	22.27	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#12	21.22	21.26	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#0	21.21	21.25	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#25	21.19	21.23	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	21.20	21.24	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	22.17	22.21	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.01	22.05	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	22.15	22.19	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#25	21.07	21.11	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#0	21.17	21.21	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#12	21.14	21.18	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	21.12	21.16	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	21.87	21.91	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	21.99	22.03	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	21.90	21.94	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#25	20.97	21.01	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#0	21.00	21.04	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#12	20.98	21.02	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	21.02	21.06	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#24	20.37	20.41	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) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



Band38	10MHz	64QAM	37800	1RB#49	20.25	20.29	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#0	20.34	20.38	33.00	PASS
Band38	10MHz	64QAM	37800	25RB#0	19.14	19.18	33.00	PASS
Band38	10MHz	64QAM	37800	25RB#12	19.14	19.18	33.00	PASS
Band38	10MHz	64QAM	37800	25RB#25	19.11	19.15	33.00	PASS
Band38	10MHz	64QAM	37800	50RB#0	19.13	19.17	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#49	20.28	20.32	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#0	20.35	20.39	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#24	20.45	20.49	33.00	PASS
Band38	10MHz	64QAM	38000	25RB#0	19.19	19.23	33.00	PASS
Band38	10MHz	64QAM	38000	25RB#12	19.19	19.23	33.00	PASS
Band38	10MHz	64QAM	38000	25RB#25	19.09	19.13	33.00	PASS
Band38	10MHz	64QAM	38000	50RB#0	19.25	19.29	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#0	20.39	20.43	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#49	20.35	20.39	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#24	20.48	20.52	33.00	PASS
Band38	10MHz	64QAM	38200	25RB#25	19.29	19.33	33.00	PASS
Band38	10MHz	64QAM	38200	25RB#0	19.27	19.31	33.00	PASS
Band38	10MHz	64QAM	38200	25RB#12	19.28	19.32	33.00	PASS
Band38	10MHz	64QAM	38200	50RB#0	19.28	19.32	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	21.50	21.54	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	21.55	21.59	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	21.41	21.45	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#12	20.16	20.20	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#0	20.17	20.21	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#25	20.16	20.20	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	20.25	20.29	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#0	21.41	21.45	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	21.28	21.32	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	21.45	21.49	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#0	20.15	20.19	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#25	20.05	20.09	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#12	20.15	20.19	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	20.18	20.22	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	21.25	21.29	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	21.15	21.19	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	21.29	21.33	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#0	19.96	20.00	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#12	19.94	19.98	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#25	19.93	19.97	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	20.04	20.08	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	22.07	22.11	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	22.16	22.20	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	22.13	22.17	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#39	21.16	21.20	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#18	21.17	21.21	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#0	21.18	21.22	33.00	PASS



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

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



Band38	15MHz	QPSK	37825	75RB#0	21.13	21.17	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	22.04	22.08	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	22.07	22.11	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	21.88	21.92	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#0	21.14	21.18	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#18	21.06	21.10	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#39	21.01	21.05	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	21.07	21.11	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	21.90	21.94	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	21.95	21.99	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	21.76	21.80	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#0	20.95	20.99	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#18	20.94	20.98	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#39	20.93	20.97	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	20.94	20.98	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#74	20.20	20.24	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#38	20.27	20.31	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#0	20.24	20.28	33.00	PASS
Band38	15MHz	64QAM	37825	36RB#0	19.02	19.06	33.00	PASS
Band38	15MHz	64QAM	37825	36RB#18	18.99	19.03	33.00	PASS
Band38	15MHz	64QAM	37825	36RB#39	19.01	19.05	33.00	PASS
Band38	15MHz	64QAM	37825	75RB#0	19.05	19.09	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#38	20.34	20.38	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#74	20.19	20.23	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#0	20.25	20.29	33.00	PASS
Band38	15MHz	64QAM	38000	36RB#39	19.10	19.14	33.00	PASS
Band38	15MHz	64QAM	38000	36RB#0	19.15	19.19	33.00	PASS
Band38	15MHz	64QAM	38000	36RB#18	19.10	19.14	33.00	PASS
Band38	15MHz	64QAM	38000	75RB#0	19.20	19.24	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#0	20.27	20.31	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#38	20.40	20.44	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#74	20.27	20.31	33.00	PASS
Band38	15MHz	64QAM	38175	36RB#18	19.13	19.17	33.00	PASS
Band38	15MHz	64QAM	38175	36RB#0	19.10	19.14	33.00	PASS
Band38	15MHz	64QAM	38175	36RB#39	19.16	19.20	33.00	PASS
Band38	15MHz	64QAM	38175	75RB#0	19.19	19.23	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	21.45	21.49	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	21.39	21.43	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	21.35	21.39	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#0	20.20	20.24	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#39	20.19	20.23	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#18	20.18	20.22	33.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	20.18	20.22	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	21.38	21.42	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	21.14	21.18	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	21.31	21.35	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#0	20.15	20.19	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) 83071443, or email: [CN.Doccheck@sgs.com](mailto: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



Band38	15MHz	16QAM	38000	36RB#18	20.13	20.17	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#39	20.04	20.08	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	20.12	20.16	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	21.17	21.21	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	21.23	21.27	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	21.05	21.09	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#0	19.98	20.02	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#18	19.97	20.01	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#39	19.96	20.00	33.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	19.99	20.03	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	21.96	22.00	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	22.21	22.25	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	21.80	21.84	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#25	21.15	21.19	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#0	21.12	21.16	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#50	21.04	21.08	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	21.09	21.13	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	21.68	21.72	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	21.91	21.95	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	22.12	22.16	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#0	21.11	21.15	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#25	20.96	21.00	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#50	20.93	20.97	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	21.05	21.09	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	21.98	22.02	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	21.77	21.81	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	21.57	21.61	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#25	20.98	21.02	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#0	20.98	21.02	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#50	20.91	20.95	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	20.98	21.02	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#0	20.08	20.12	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#49	20.31	20.35	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#99	19.99	20.03	33.00	PASS
Band38	20MHz	64QAM	37850	50RB#50	19.00	19.04	33.00	PASS
Band38	20MHz	64QAM	37850	50RB#0	19.07	19.11	33.00	PASS
Band38	20MHz	64QAM	37850	50RB#25	19.07	19.11	33.00	PASS
Band38	20MHz	64QAM	37850	100RB#0	18.99	19.03	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#0	20.09	20.13	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#49	20.40	20.44	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#99	20.07	20.11	33.00	PASS
Band38	20MHz	64QAM	38000	50RB#0	19.13	19.17	33.00	PASS
Band38	20MHz	64QAM	38000	50RB#25	19.17	19.21	33.00	PASS
Band38	20MHz	64QAM	38000	50RB#50	19.07	19.11	33.00	PASS
Band38	20MHz	64QAM	38000	100RB#0	19.10	19.14	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#99	20.05	20.09	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#0	20.13	20.17	33.00	PASS



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

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



Band38	20MHz	64QAM	38150	1RB#49	20.41	20.45	33.00	PASS
Band38	20MHz	64QAM	38150	50RB#0	19.16	19.20	33.00	PASS
Band38	20MHz	64QAM	38150	50RB#50	19.20	19.24	33.00	PASS
Band38	20MHz	64QAM	38150	50RB#25	19.23	19.27	33.00	PASS
Band38	20MHz	64QAM	38150	100RB#0	19.17	19.21	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	21.25	21.29	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	21.51	21.55	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	21.08	21.12	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#0	20.18	20.22	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#25	20.21	20.25	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#50	20.11	20.15	33.00	PASS
Band38	20MHz	16QAM	37850	100RB#0	20.16	20.20	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	21.17	21.21	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	20.97	21.01	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	21.41	21.45	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#0	20.17	20.21	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#25	20.13	20.17	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#50	20.00	20.04	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	20.13	20.17	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	21.06	21.10	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	20.87	20.91	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	21.26	21.30	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#50	19.96	20.00	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#25	20.04	20.08	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#0	20.05	20.09	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	20.05	20.09	33.00	PASS

Remark:

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

$$ERP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBd]}$$

$$EIRP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBi]}$$



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

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

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

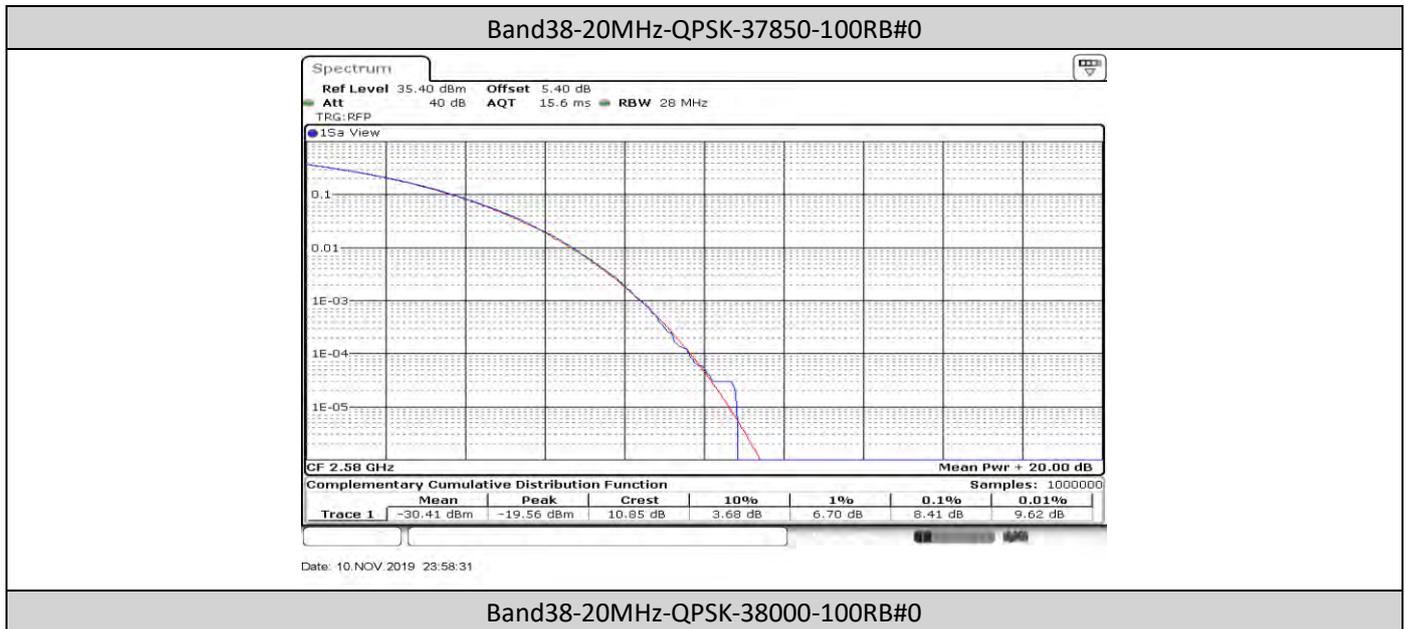


## 2. Peak-to-Average Ratio (CCDF)

### 2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	8.41	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	8.99	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	8.96	13	PASS
Band38	20MHz	64QAM	37850	100RB#0	8.46	13	PASS
Band38	20MHz	64QAM	38000	100RB#0	10.00	13	PASS
Band38	20MHz	64QAM	38150	100RB#0	10.03	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.71	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	9.74	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	9.91	13	PASS

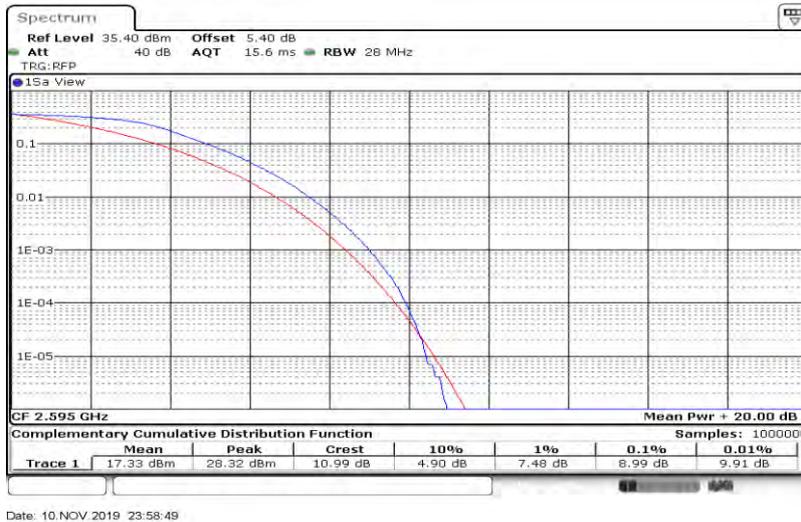
### 2.2. Test Plots



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

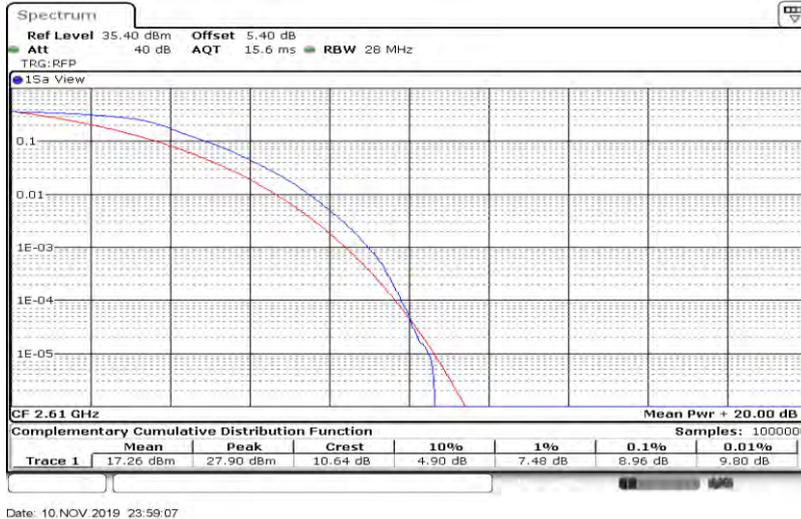
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

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



Date: 10.NOV.2019 23:58:49

**Band38-20MHz-QPSK-38150-100RB#0**

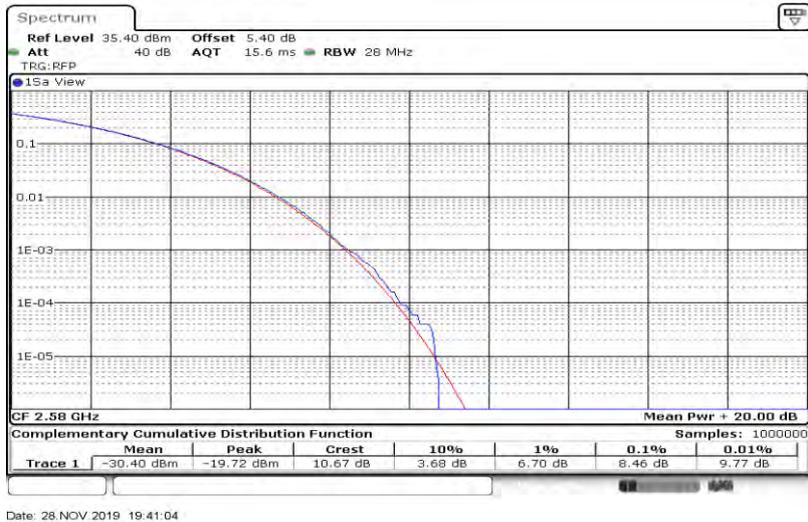


Date: 10.NOV.2019 23:59:07

**Band38-20MHz-64QAM-37850-100RB#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.



Date: 28.NOV.2019 19:41:04

**Band38-20MHz-64QAM-38000-100RB#**

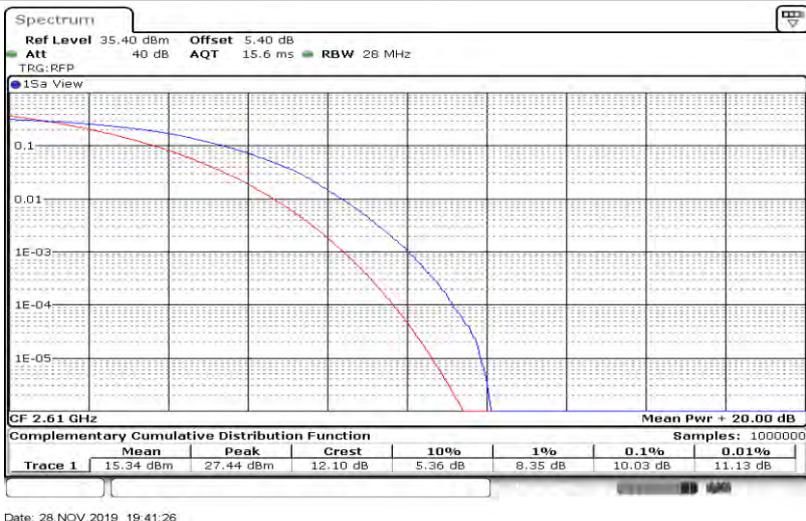


Date: 28.NOV.2019 19:41:15

**Band38-20MHz-64QAM-38150-100RB#**

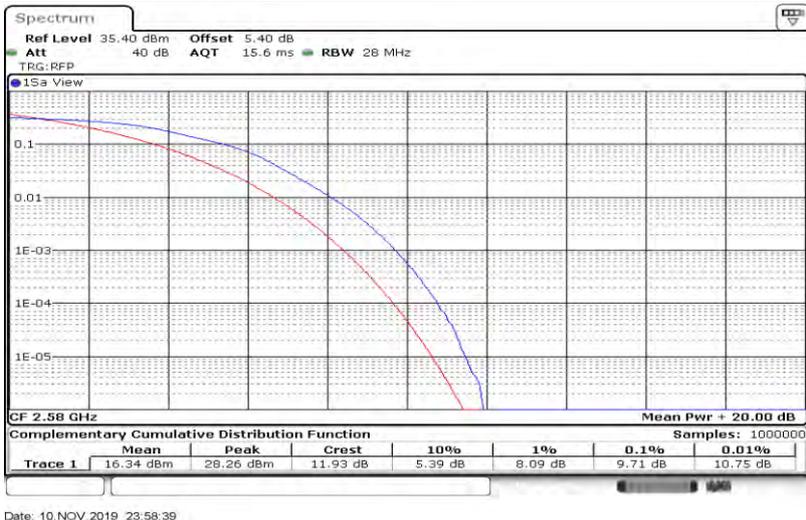


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 28.NOV.2019 19:41:26

**Band38-20MHz-16QAM-37850-100RB#0**



Date: 10.NOV.2019 23:58:39

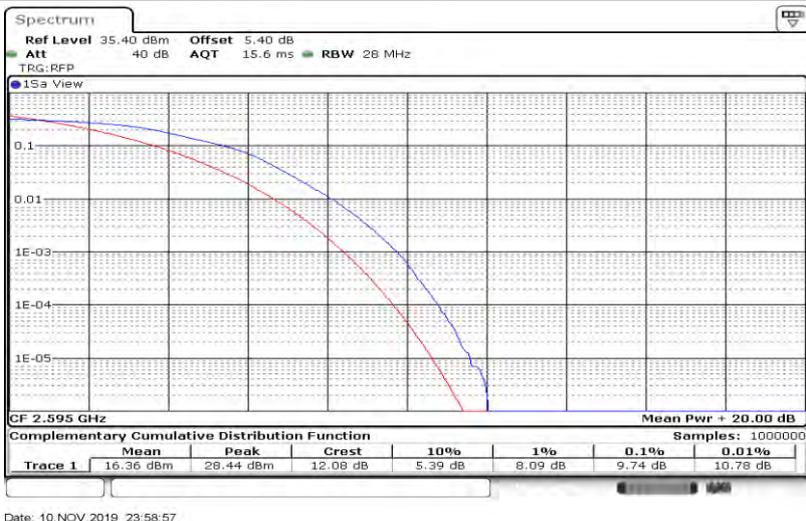
**Band38-20MHz-16QAM-38000-100RB#0**



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.

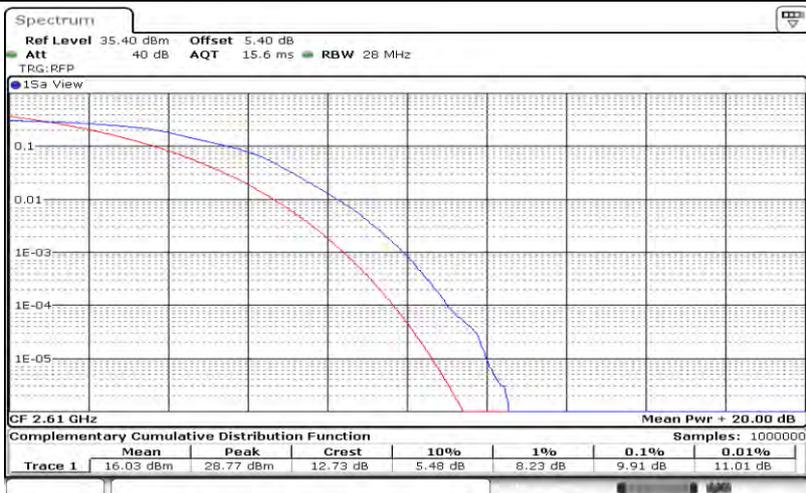
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

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



Date: 10.NOV.2019 23:58:57

Band38-20MHz-16QAM-38150-100RB#0



Date: 10.NOV.2019 23:59:15



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

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

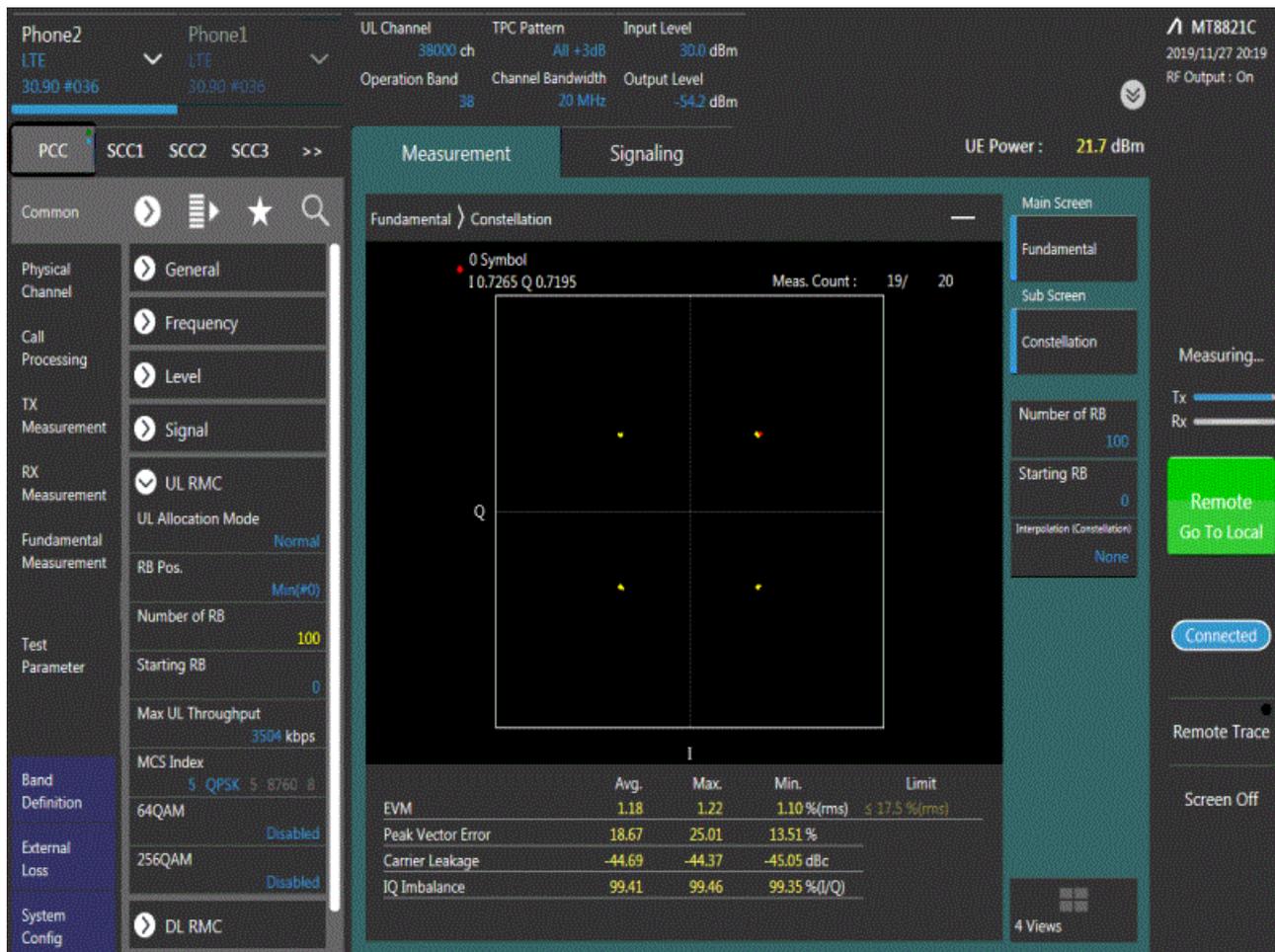
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



### 3. Modulation Characteristics

#### 3.1. Test Mode = LTE /TM1 20MHz

##### 3.1.1. Test Channel = MCH



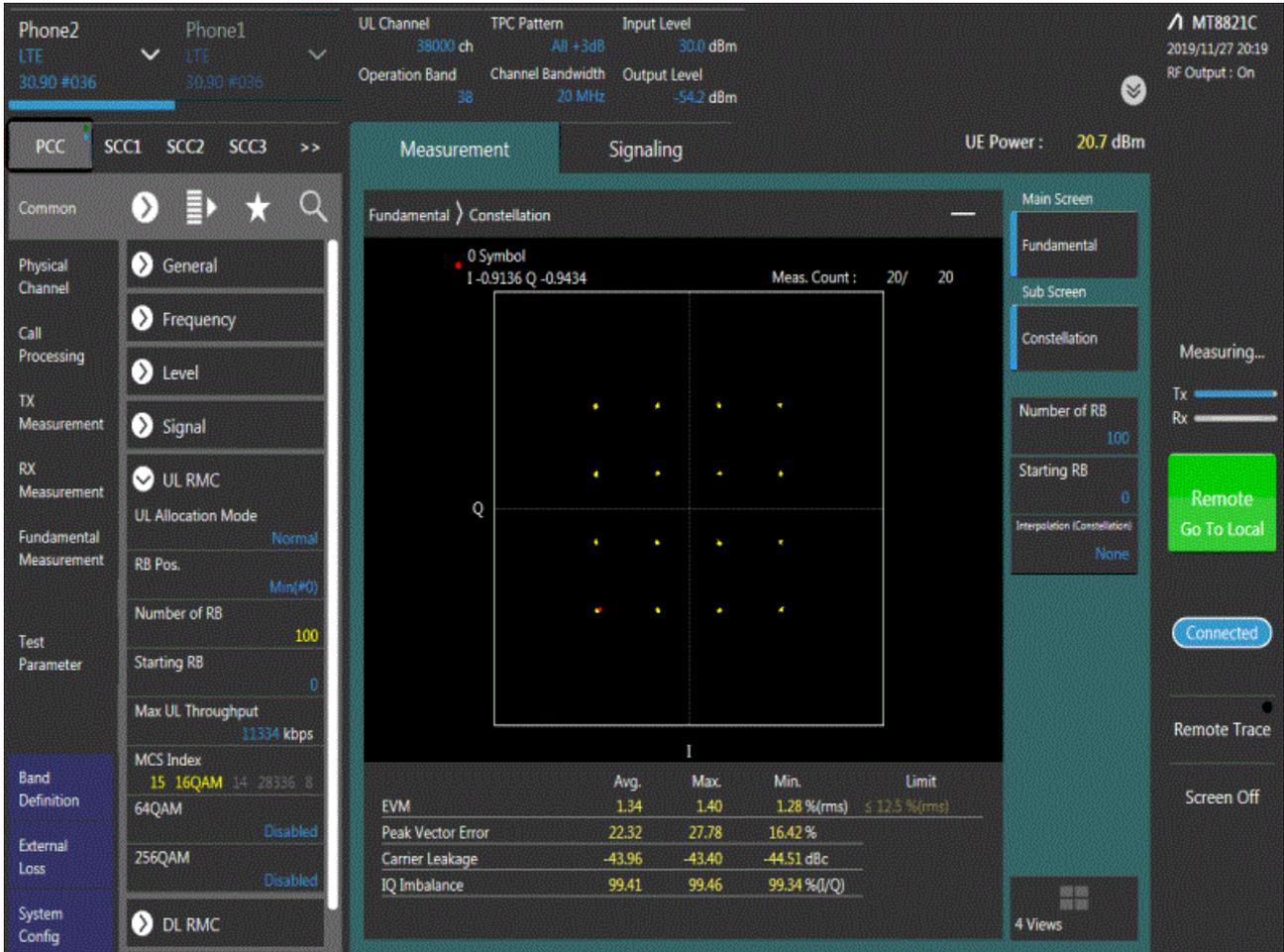
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

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

### 3.2. Test Mode = LTE /TM2 20MHz

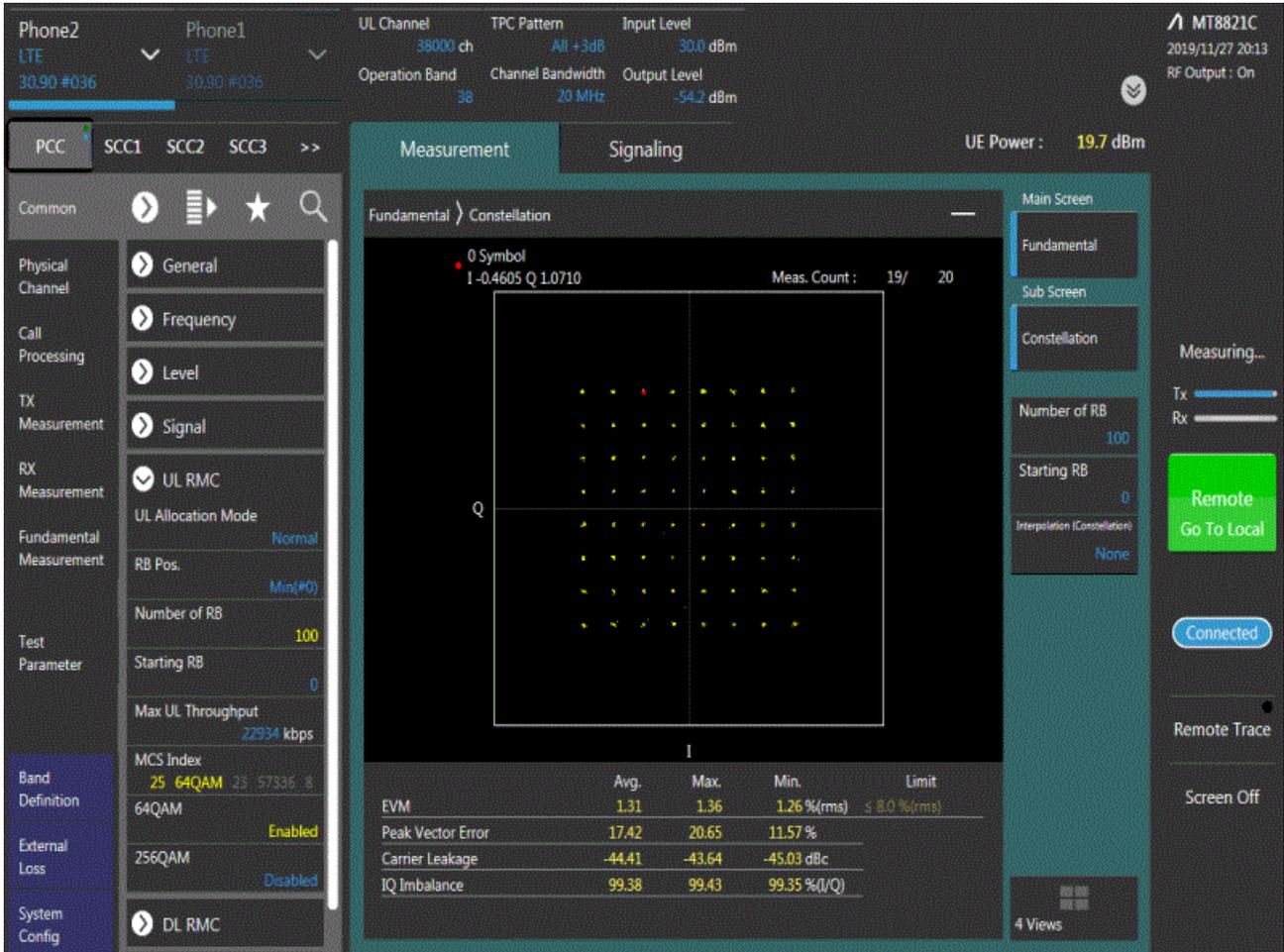
#### 3.2.1. Test Channel = MCH



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.

### 3.3. Test Mode = LTE /TM3 20MHz

#### 3.3.1. 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.



## 4. 26dB Bandwidth and Occupied Bandwidth

### 4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.466	4.870	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.466	4.850	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.476	4.800	PASS
Band38	5MHz	64QAM	37775	25RB#0	4.466	4.920	PASS
Band38	5MHz	64QAM	38000	25RB#0	4.476	4.970	PASS
Band38	5MHz	64QAM	38225	25RB#0	4.476	4.940	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.466	4.830	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.466	4.840	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.466	4.870	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.931	9.600	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.931	9.840	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.951	9.640	PASS
Band38	10MHz	64QAM	37800	50RB#0	8.951	9.580	PASS
Band38	10MHz	64QAM	38000	50RB#0	8.931	9.580	PASS
Band38	10MHz	64QAM	38200	50RB#0	8.931	9.560	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.931	9.620	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.951	9.820	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.931	9.520	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.487	15.060	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.487	15.510	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.427	14.940	PASS
Band38	15MHz	64QAM	37825	75RB#0	13.427	14.760	PASS
Band38	15MHz	64QAM	38000	75RB#0	13.427	14.610	PASS
Band38	15MHz	64QAM	38175	75RB#0	13.457	14.790	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.457	15.690	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.487	16.200	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.516	16.530	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.902	19.280	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.902	20.520	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.862	19.280	PASS
Band38	20MHz	64QAM	37850	100RB#0	17.902	19.360	PASS



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

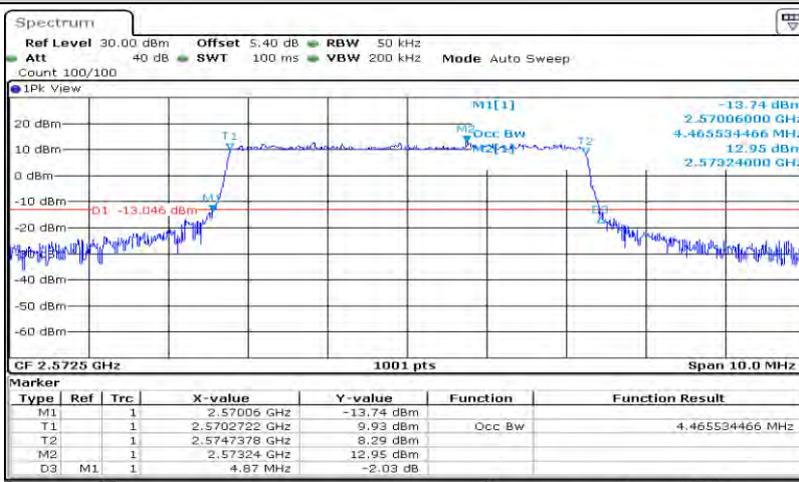
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053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



Band38	20MHz	64QAM	38000	100RB#0	17.862	19.200	PASS
Band38	20MHz	64QAM	38150	100RB#0	17.902	19.600	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.902	19.800	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.822	19.480	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.902	20.360	PASS

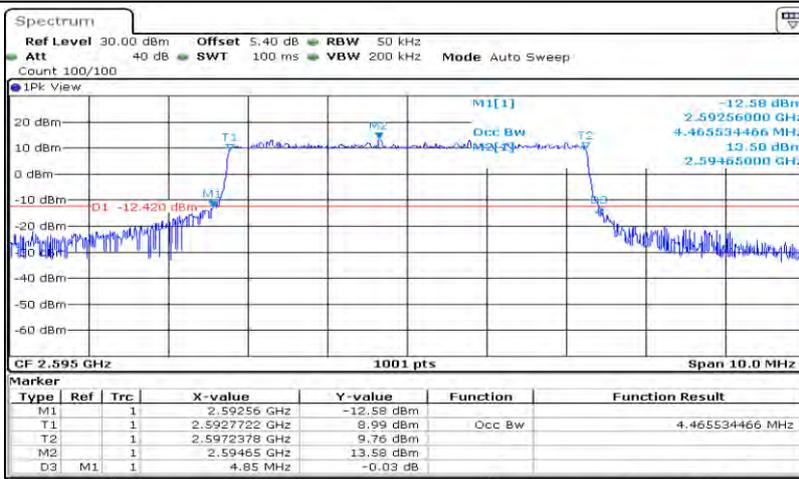
## 4.2. Test Plots

Band38-5MHz-QPSK-37775-25RB#0-4.466



Date: 10.NOV.2019 23:40:48

Band38-5MHz-QPSK-38000-25RB#0-4.466

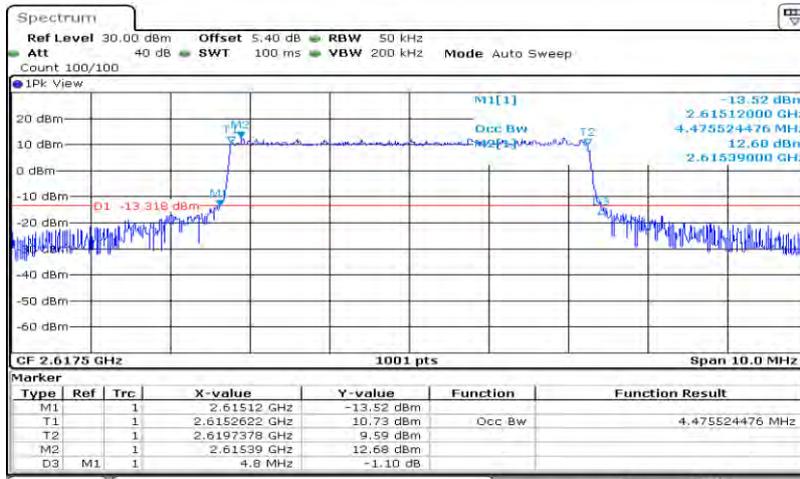


Date: 10.NOV.2019 23:41:23

Band38-5MHz-QPSK-38225-25RB#0-4.476

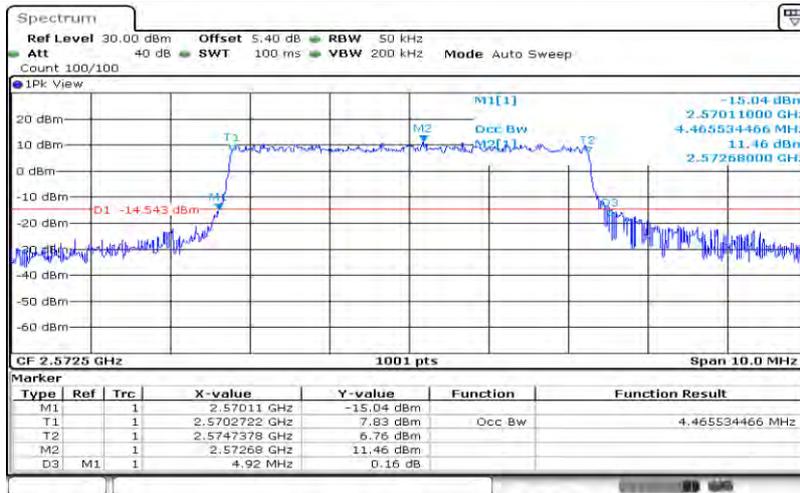


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:41:58

**Band38-5MHz-64QAM-37775-25RB#0-4.466**

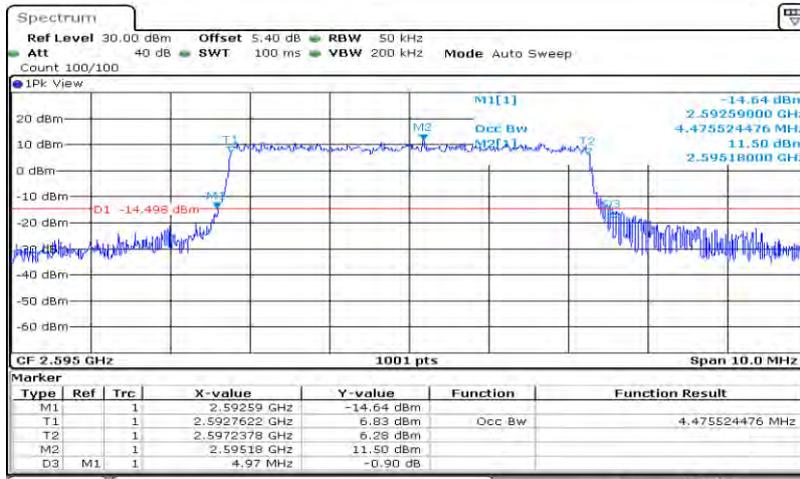


Date: 28.NOV.2019 19:33:44

**Band38-5MHz-64QAM-38000-25RB#0-4.476**

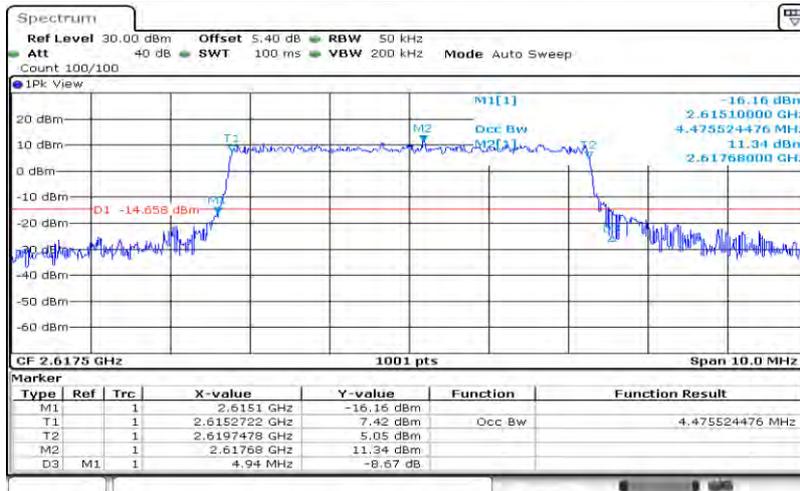


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 28.NOV.2019 19:34:04

**Band38-5MHz-64QAM-38225-25RB#0-4.476**

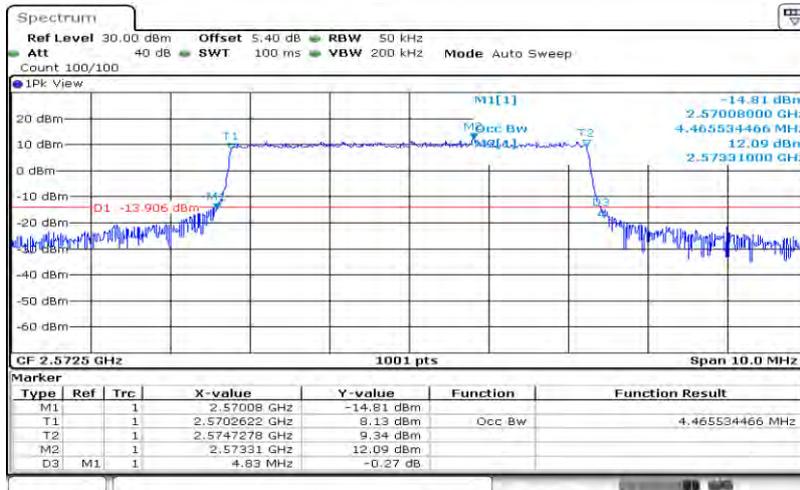


Date: 28.NOV.2019 19:34:24

**Band38-5MHz-16QAM-37775-25RB#0-4.466**

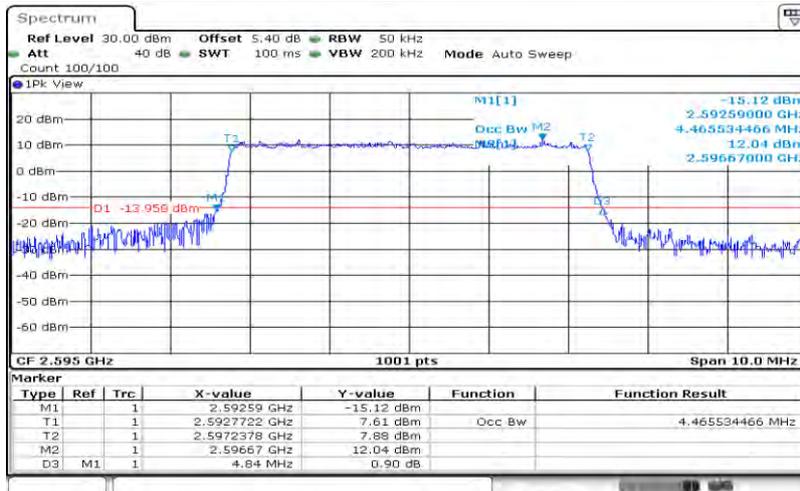


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:41:05

Band38-5MHz-16QAM-38000-25RB#0-4.466

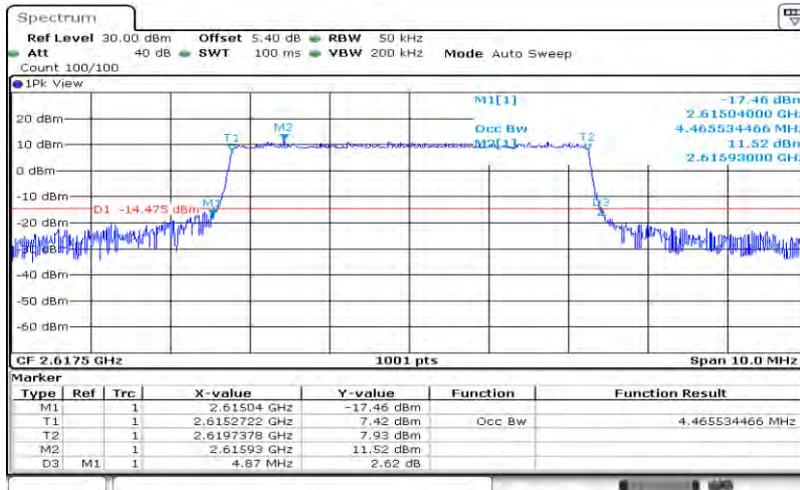


Date: 10.NOV.2019 23:41:40

Band38-5MHz-16QAM-38225-25RB#0-4.466

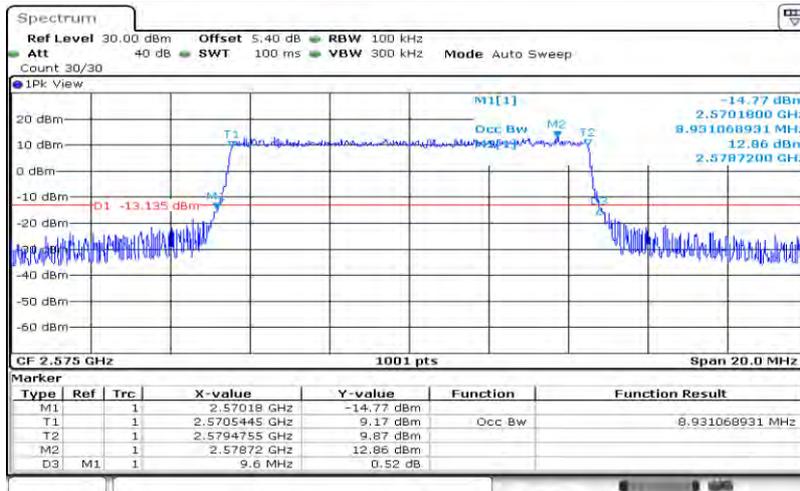


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:42:15

**Band38-10MHz-QPSK-37800-50RB#0-8.931**

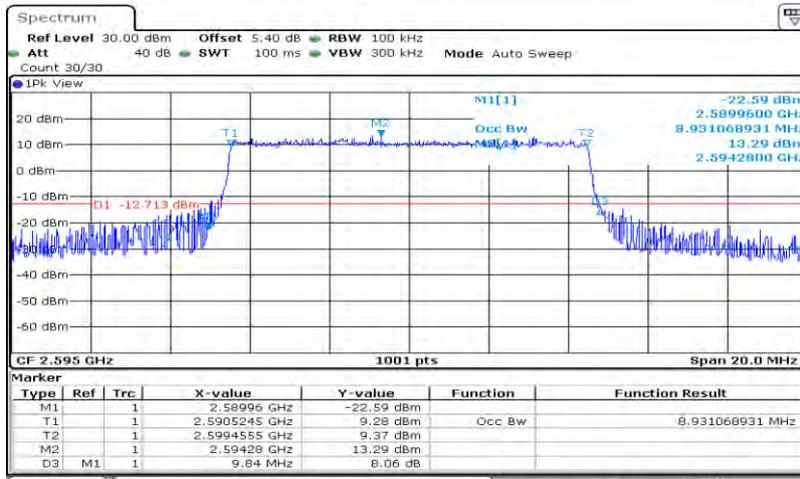


Date: 10.NOV.2019 23:43:13

**Band38-10MHz-QPSK-38000-50RB#0-8.931**

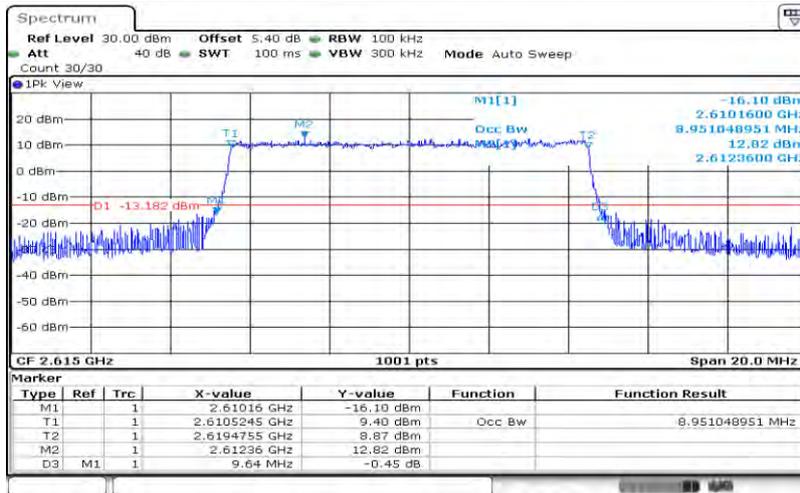


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:43:34

**Band38-10MHz-QPSK-38200-50RB#0-8.951**

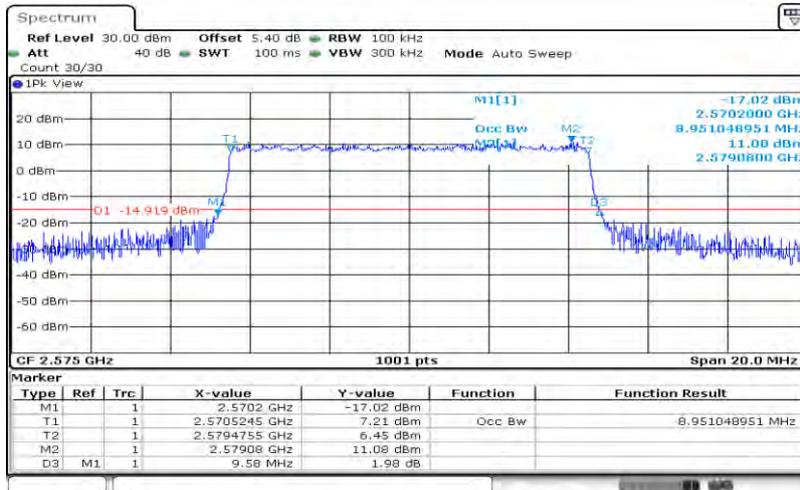


Date: 10.NOV.2019 23:43:55

**Band38-10MHz-64QAM-37800-50RB#0-8.951**

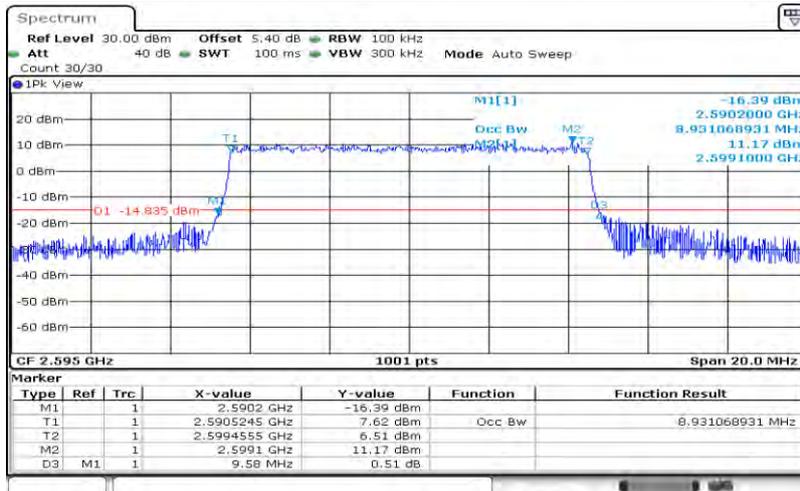


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 28.NOV.2019 19:34:42

Band38-10MHz-64QAM-38000-50RB#0-8.931

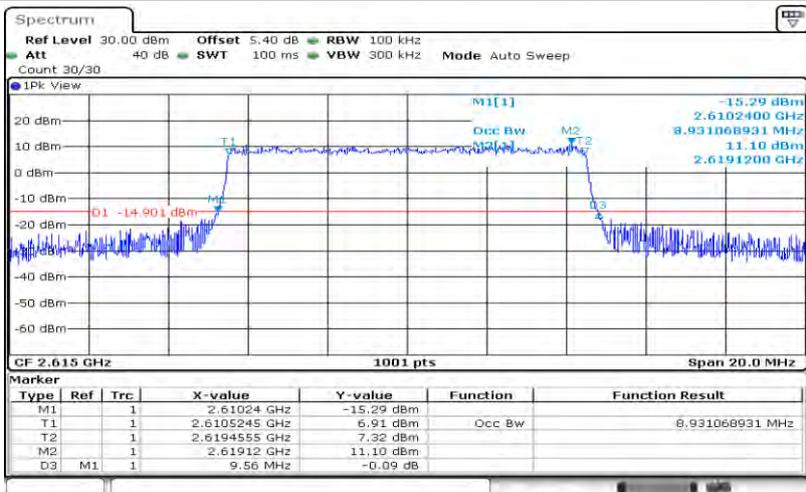


Date: 28.NOV.2019 19:34:55

Band38-10MHz-64QAM-38200-50RB#0-8.931

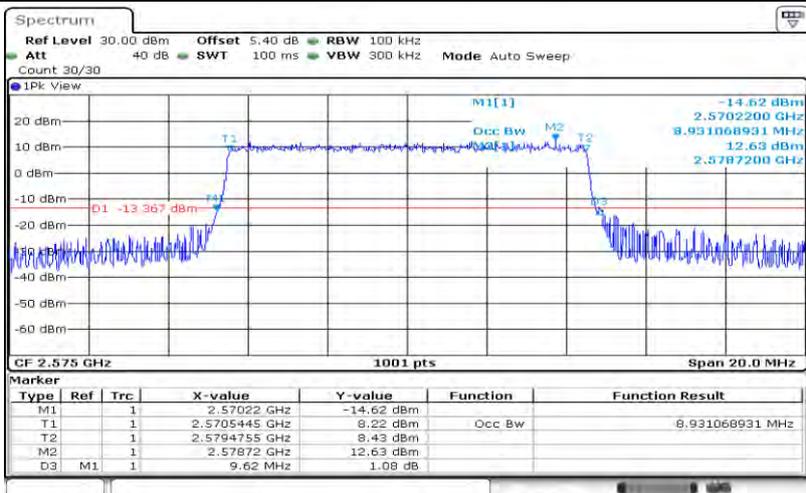


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 28.NOV.2019 19:35:08

Band38-10MHz-16QAM-37800-50RB#0-8.931



Date: 10.NOV.2019 23:43:23

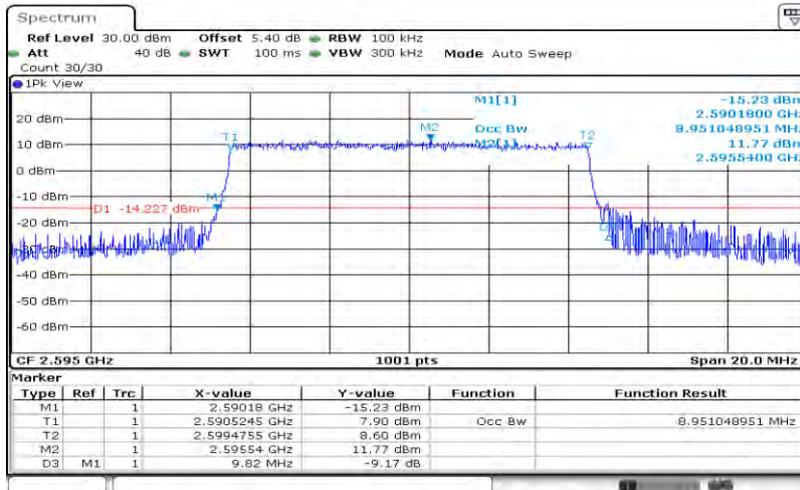
Band38-10MHz-16QAM-38000-50RB#0-8.951



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

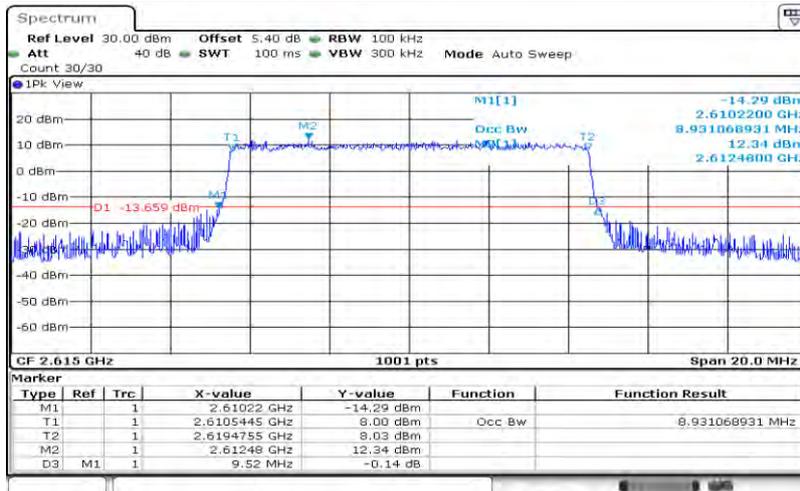
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch

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



Date: 10.NOV.2019 23:43:44

**Band38-10MHz-16QAM-38200-50RB#0-8.931**

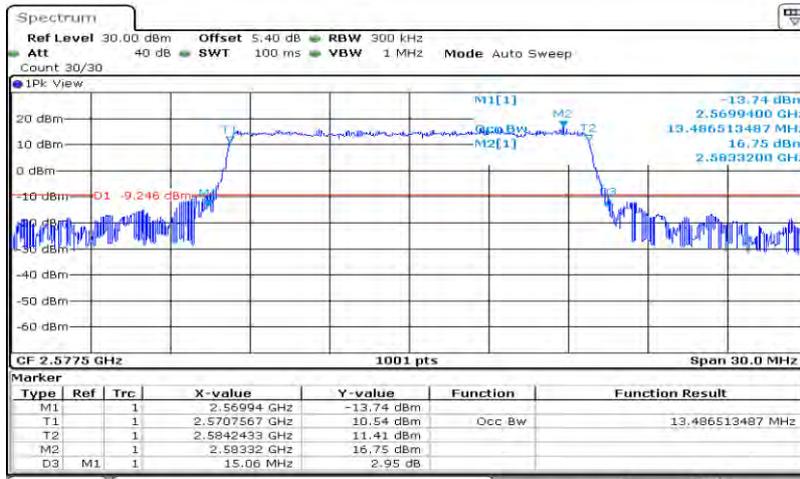


Date: 10.NOV.2019 23:44:05

**Band38-15MHz-QPSK-37825-75RB#0-13.487**

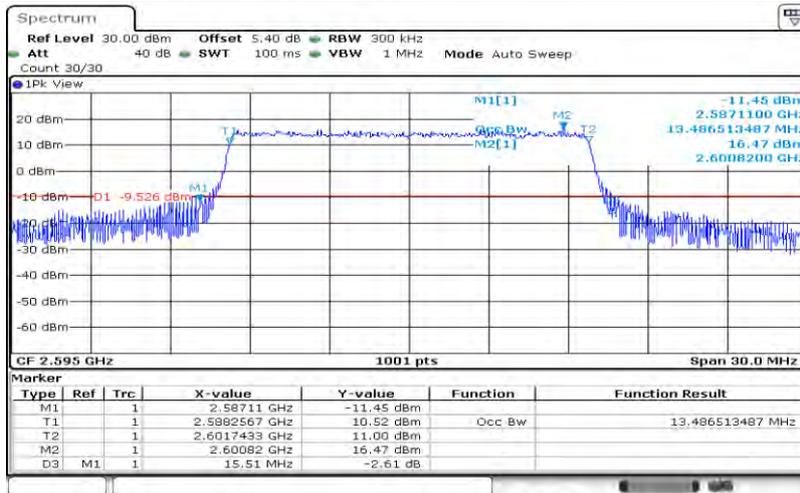


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:45:07

**Band38-15MHz-QPSK-38000-75RB#0-13.487**

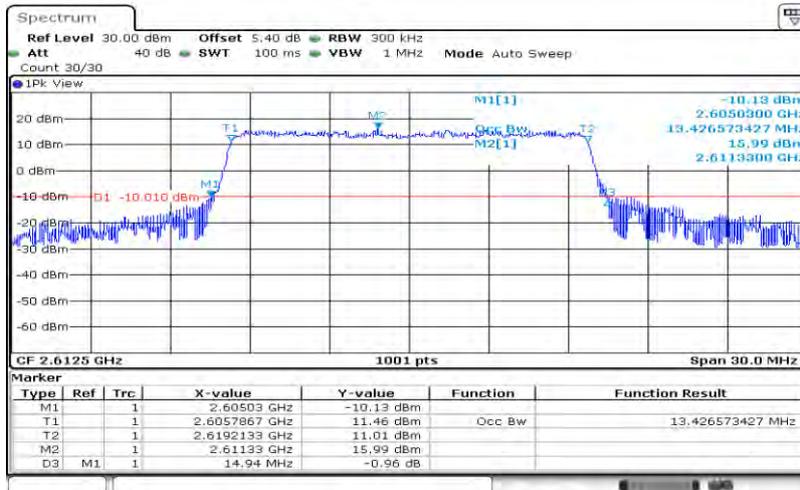


Date: 10.NOV.2019 23:45:27

**Band38-15MHz-QPSK-38175-75RB#0-13.427**

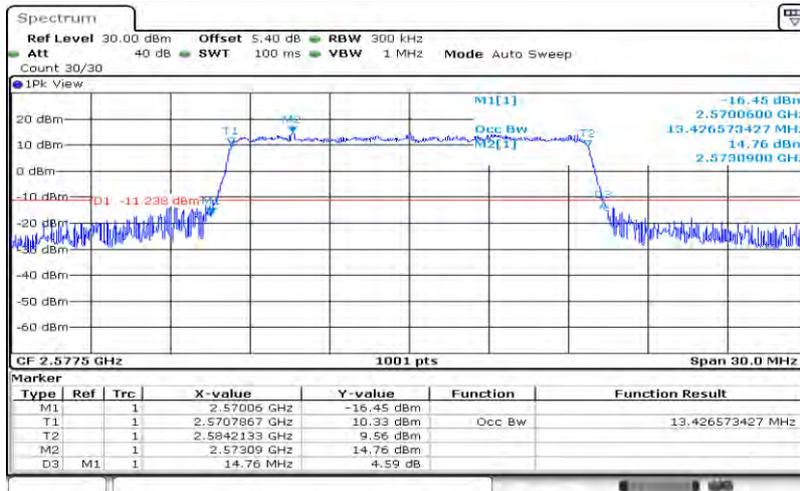


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:45:48

**Band38-15MHz-64QAM-37825-75RB#0-13.427**



Date: 28.NOV.2019 19:35:26

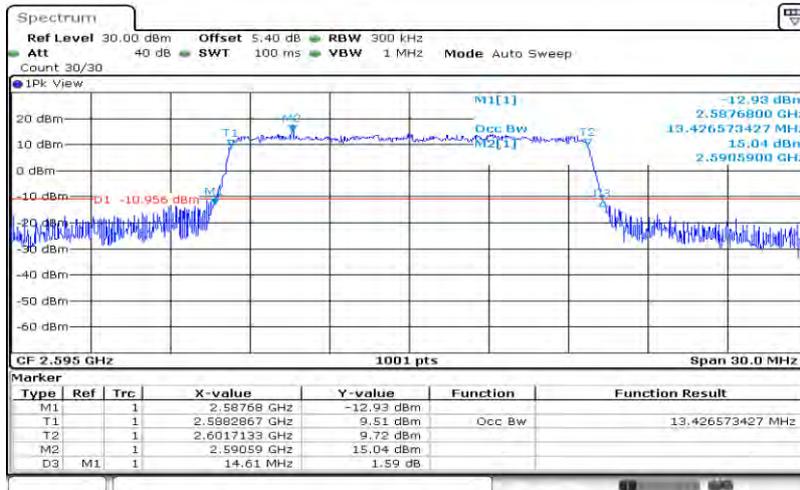
**Band38-15MHz-64QAM-38000-75RB#0-13.427**



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

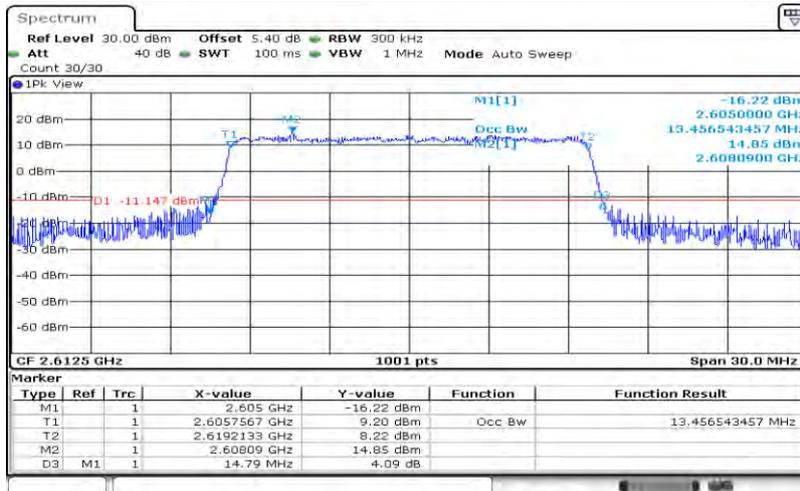
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services Laboratory

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



Date: 28.NOV.2019 19:35:39

Band38-15MHz-64QAM-38175-75RB#0-13.457

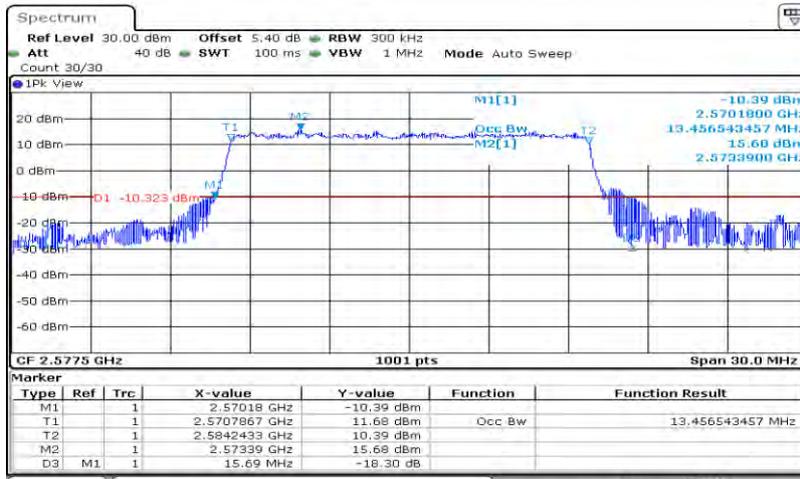


Date: 28.NOV.2019 19:35:52

Band38-15MHz-16QAM-37825-75RB#0-13.457

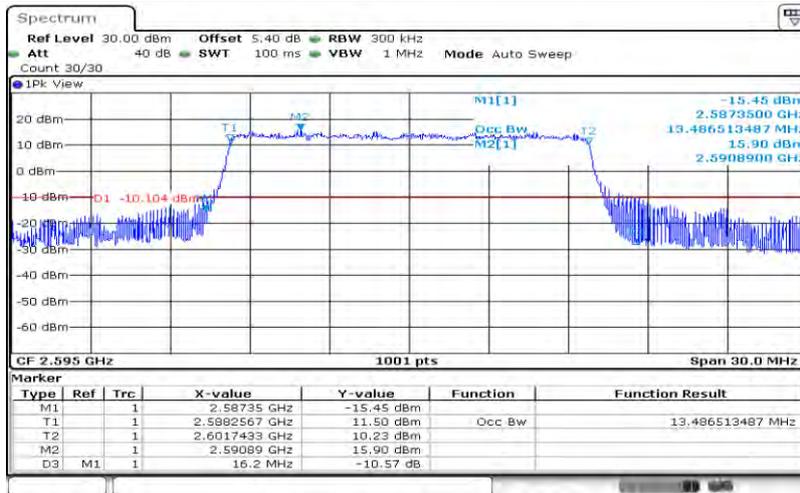


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:45:16

Band38-15MHz-16QAM-38000-75RB#0-13.487



Date: 10.NOV.2019 23:45:37

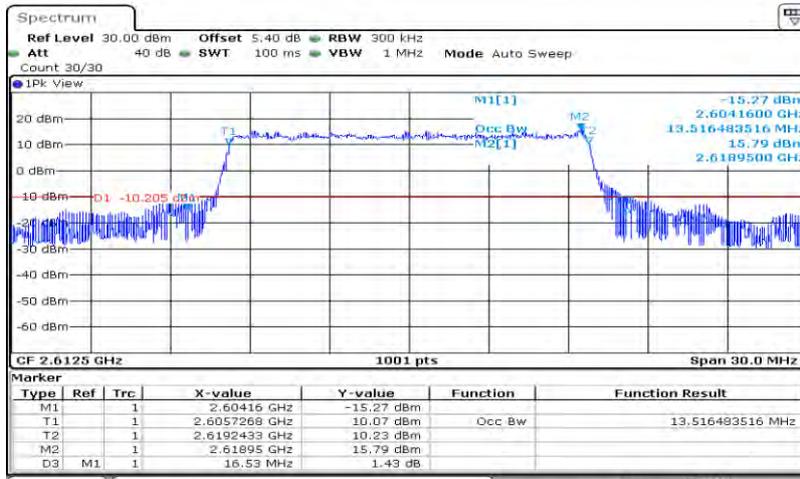
Band38-15MHz-16QAM-38175-75RB#0-13.516



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.

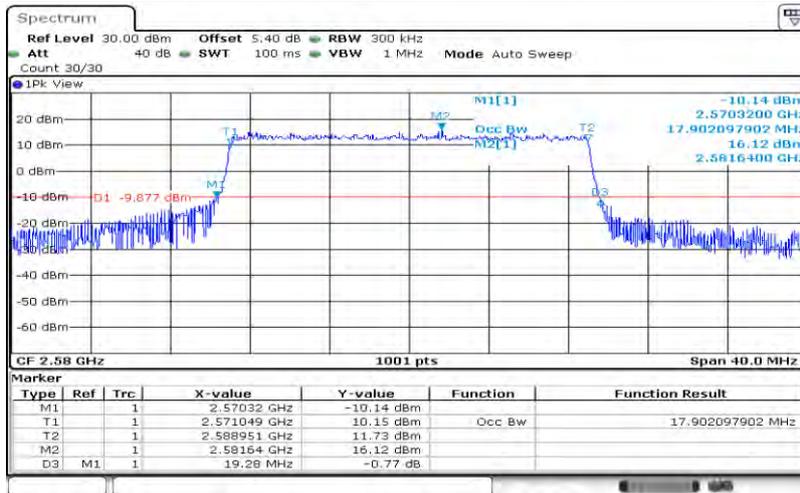
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services Laboratory

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



Date: 10.NOV.2019 23:45:58

Band38-20MHz-QPSK-37850-100RB#0-17.902



Date: 10.NOV.2019 23:47:32

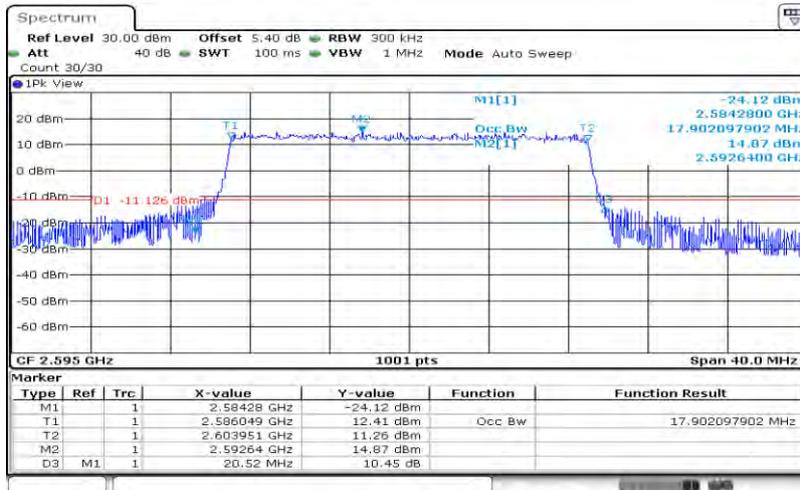
Band38-20MHz-QPSK-38000-100RB#0-17.902



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.

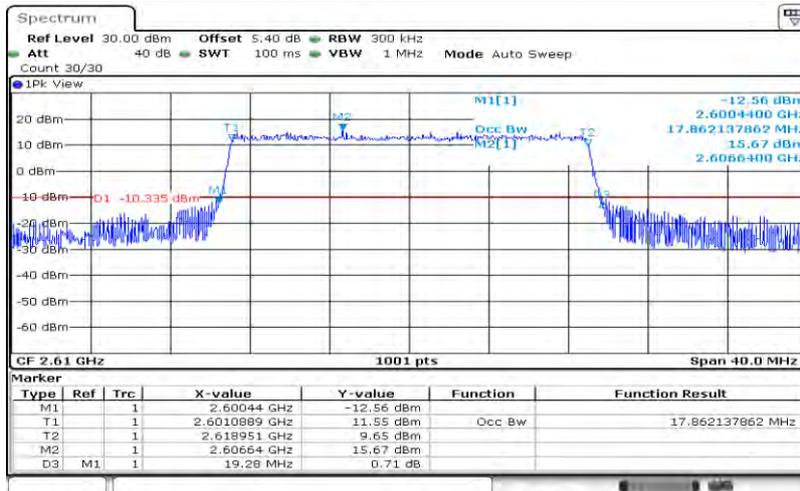
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services Laboratory

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



Date: 10.NOV.2019 23:47:53

Band38-20MHz-QPSK-38150-100RB#0-17.862

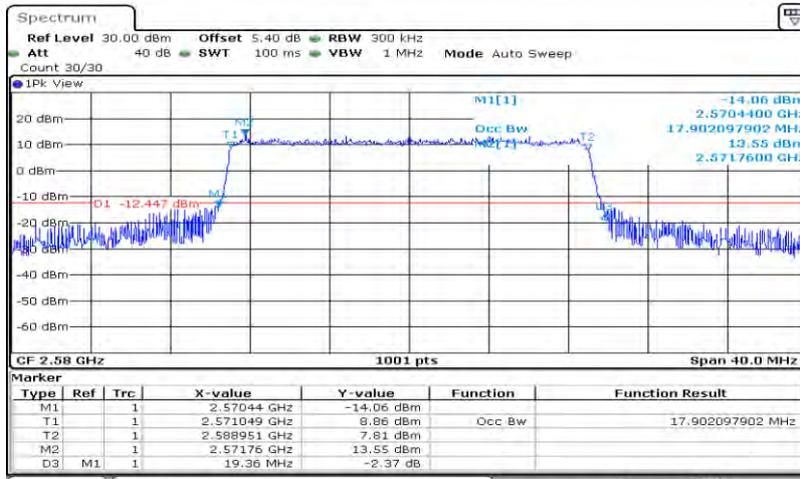


Date: 10.NOV.2019 23:48:14

Band38-20MHz-64QAM-37850-100RB#0-17.902

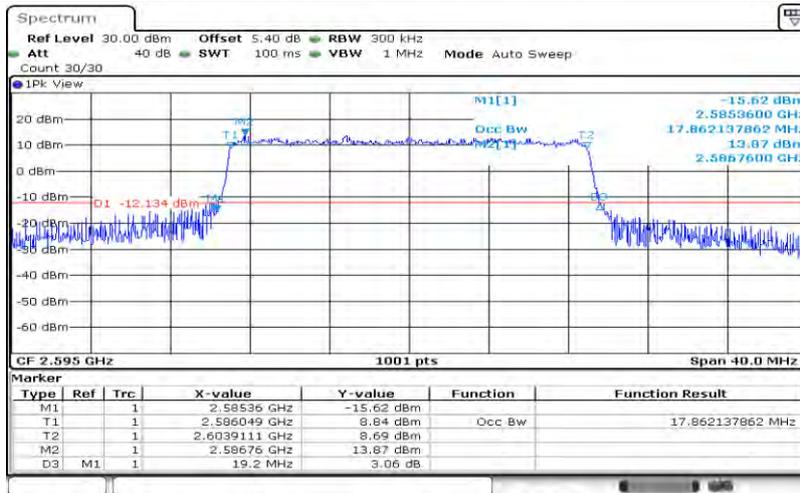


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 28.NOV.2019 19:36:10

Band38-20MHz-64QAM-38000-100RB#0-17.862



Date: 28.NOV.2019 19:36:23

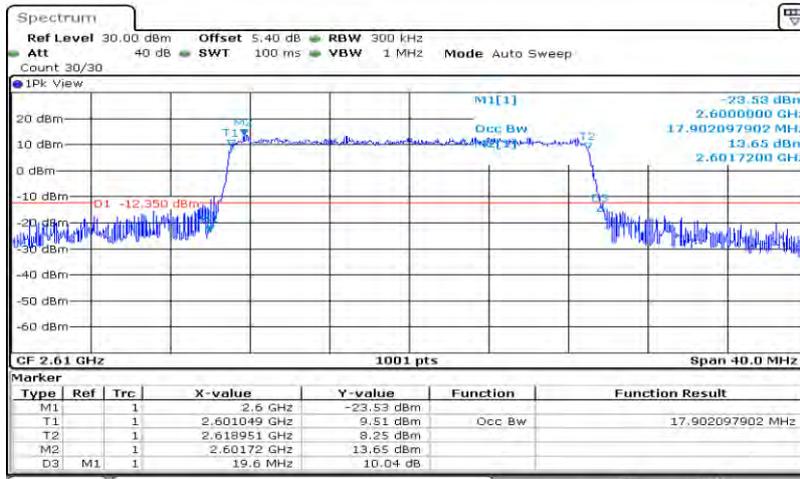
Band38-20MHz-64QAM-38150-100RB#0-17.902



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.

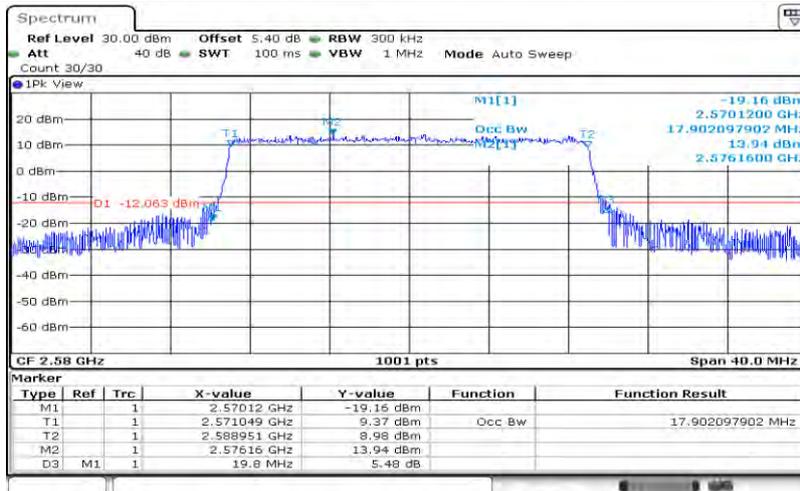
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services Laboratory

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



Date: 28.NOV.2019 19:36:36

Band38-20MHz-16QAM-37850-100RB#0-17.902



Date: 10.NOV.2019 23:47:42

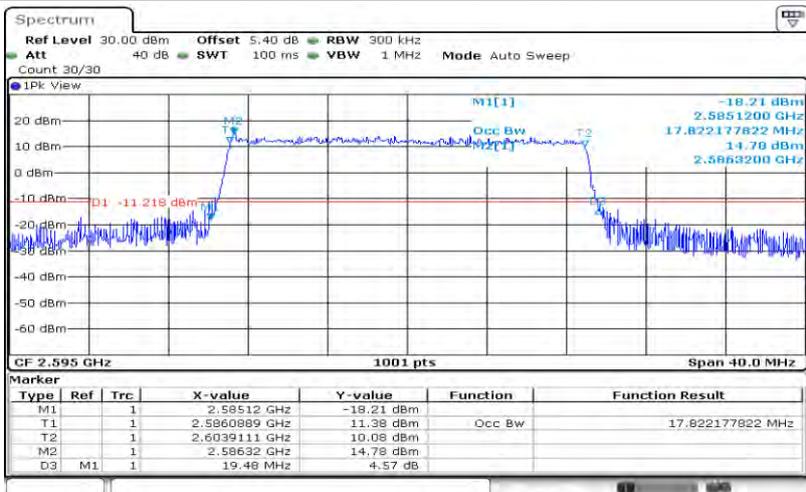
Band38-20MHz-16QAM-38000-100RB#0-17.822



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

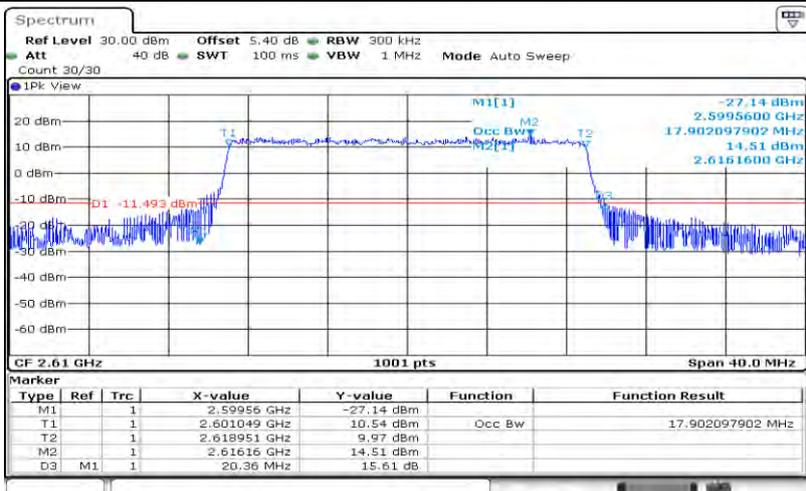
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Inspection & Testing Services Laboratory

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



Date: 10.NOV.2019 23:48:03

**Band38-20MHz-16QAM-38150-100RB#0-17.902**



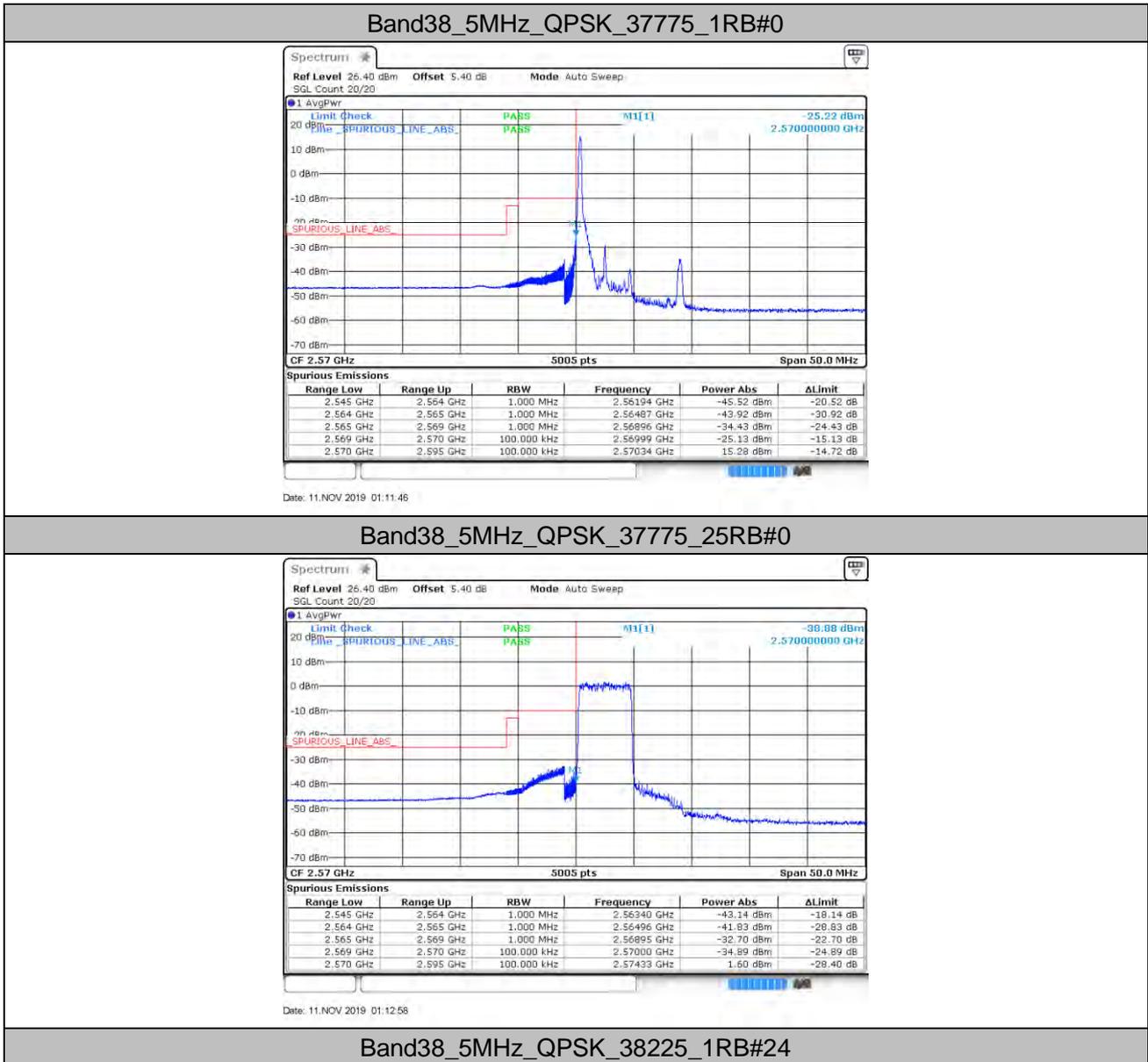
Date: 10.NOV.2019 23:48:24



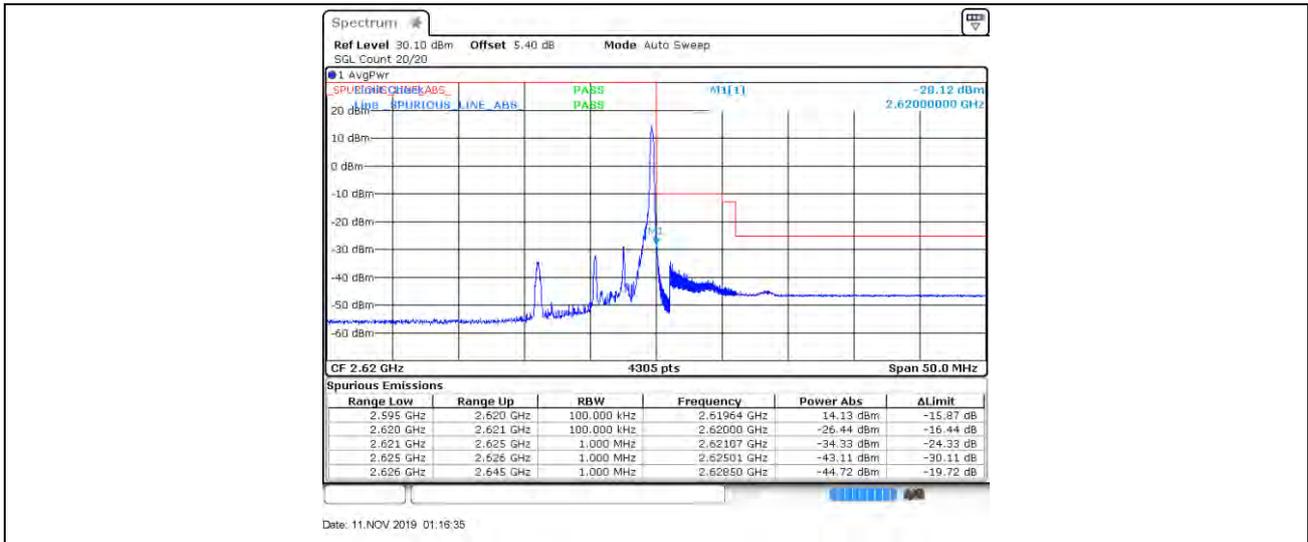
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

## 5. Band Edge Compliance

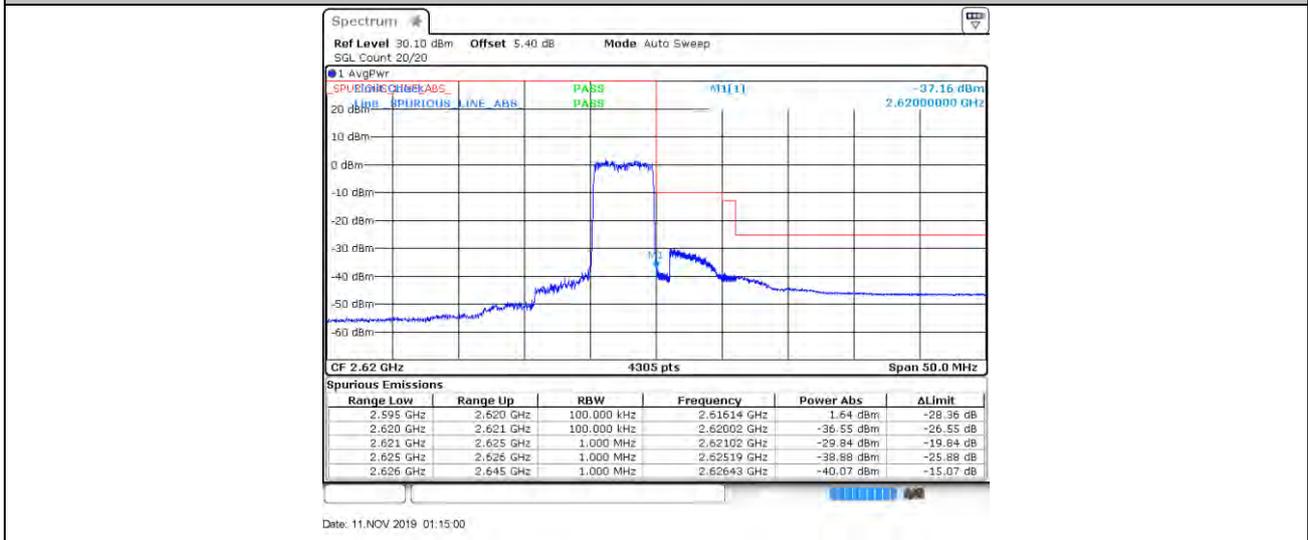
### 5.1. Test Plots



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



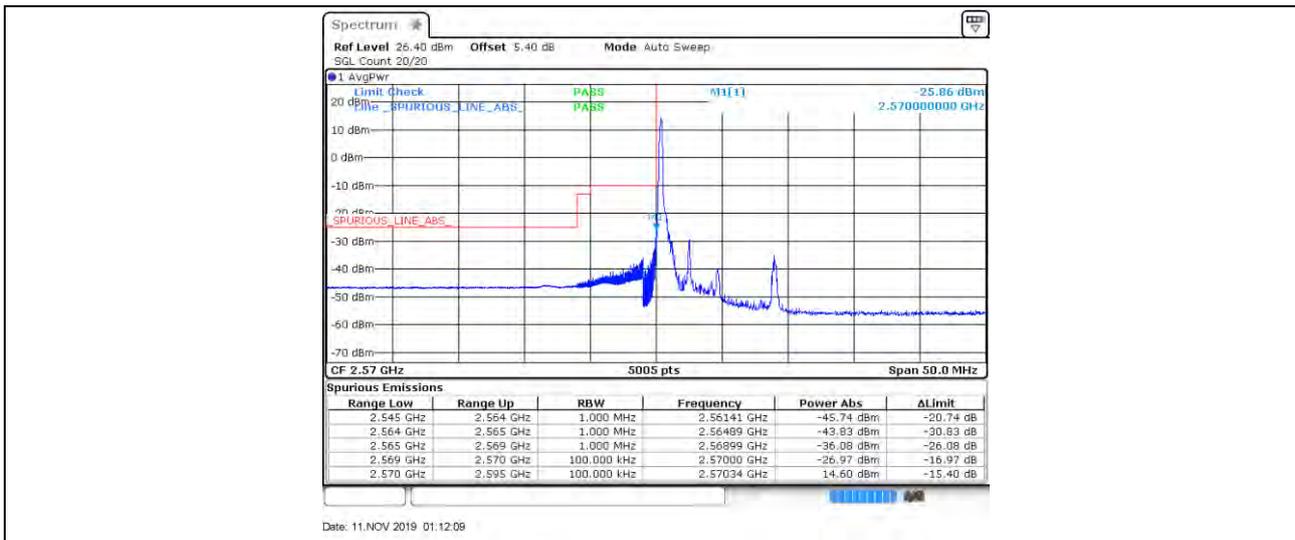
**Band38\_5MHz\_QPSK\_38225\_25RB#0**



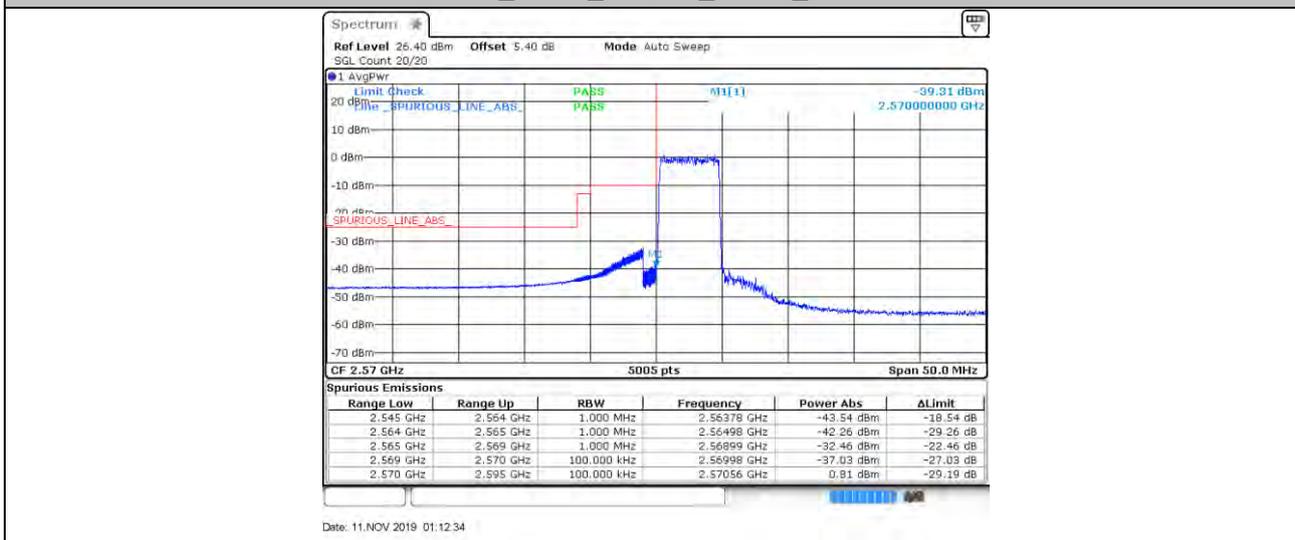
**Band38\_5MHz\_16QAM\_37775\_1RB#0**



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.



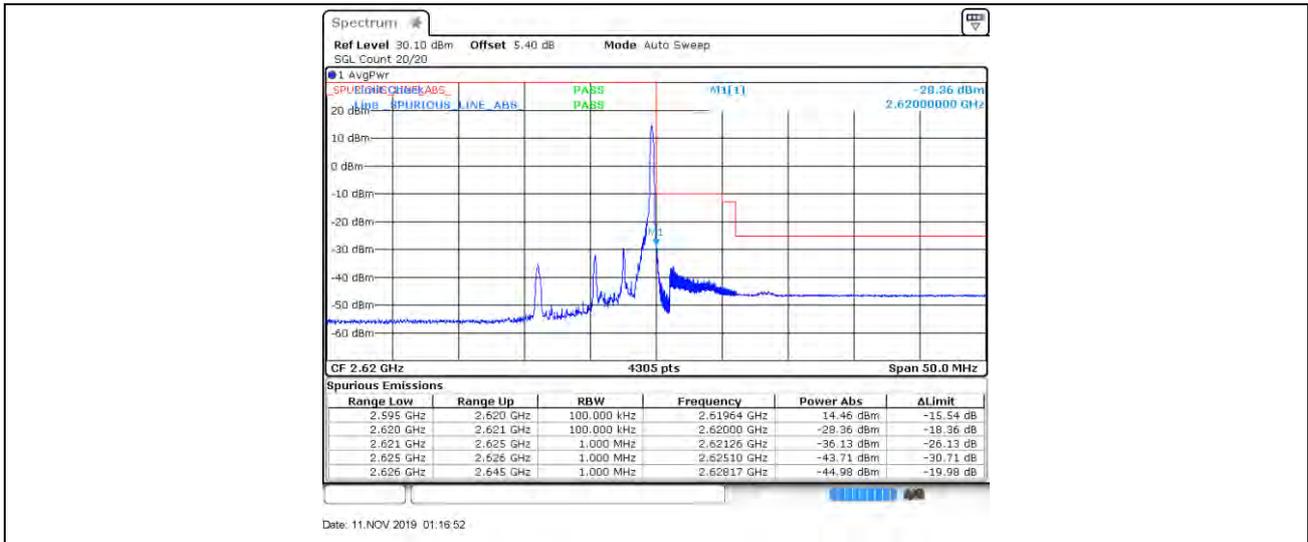
**Band38\_5MHz\_16QAM\_3775\_25RB#0**



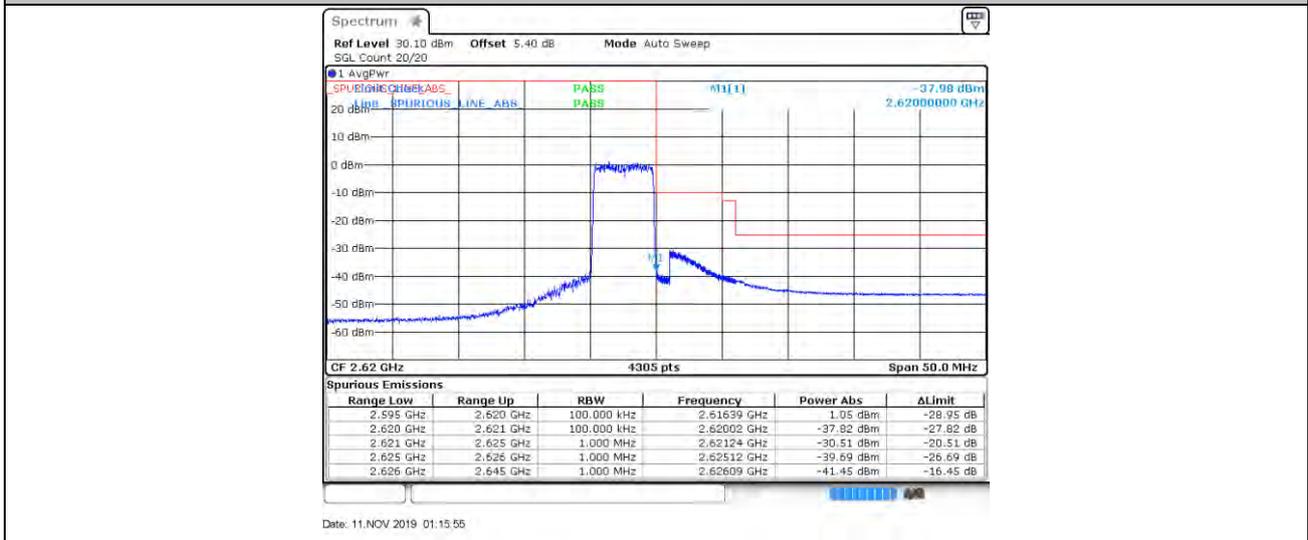
**Band38\_5MHz\_16QAM\_38225\_1RB#24**



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



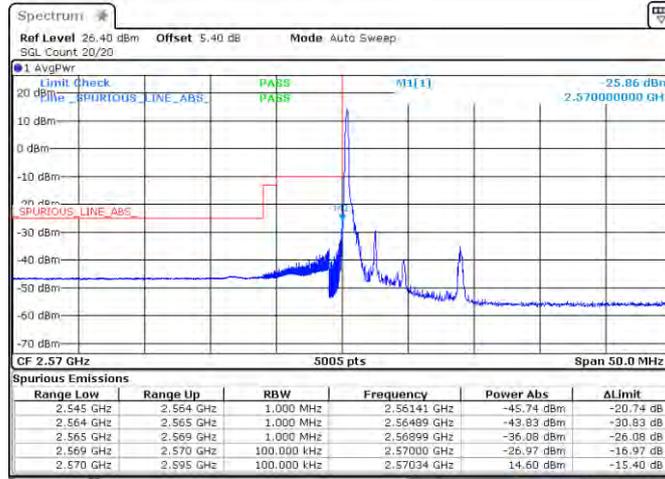
**Band38\_5MHz\_16QAM\_38225\_25RB#0**



**Band38\_5MHz\_64QAM\_37775\_1RB#0**

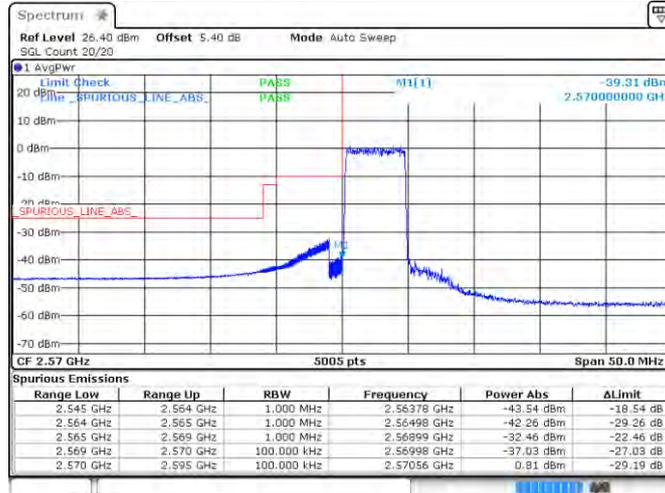


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:12:09

**Band38\_5MHz\_64QAM\_3775\_25RB#0**

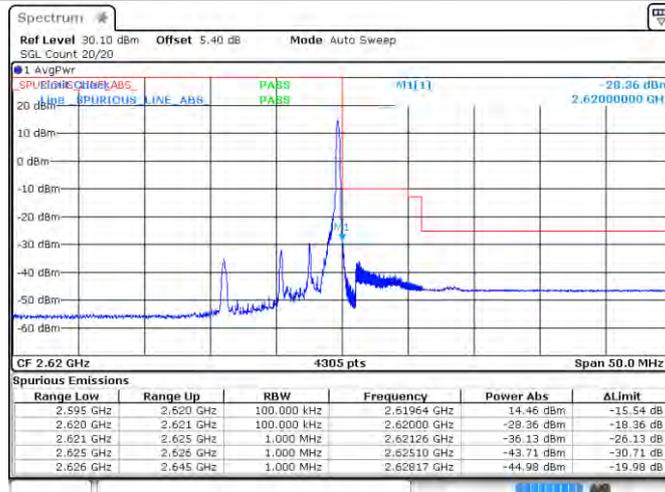


Date: 11.NOV 2019 01:12:34

**Band38\_5MHz\_64QAM\_38225\_1RB#24**

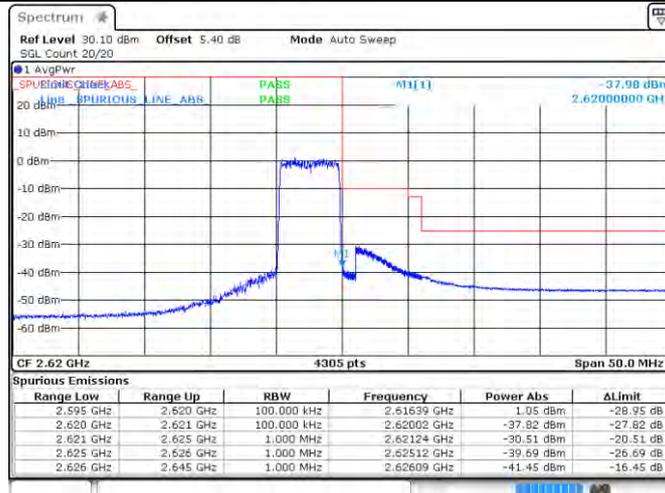


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:16:52

**Band38\_5MHz\_64QAM\_38225\_25RB#0**

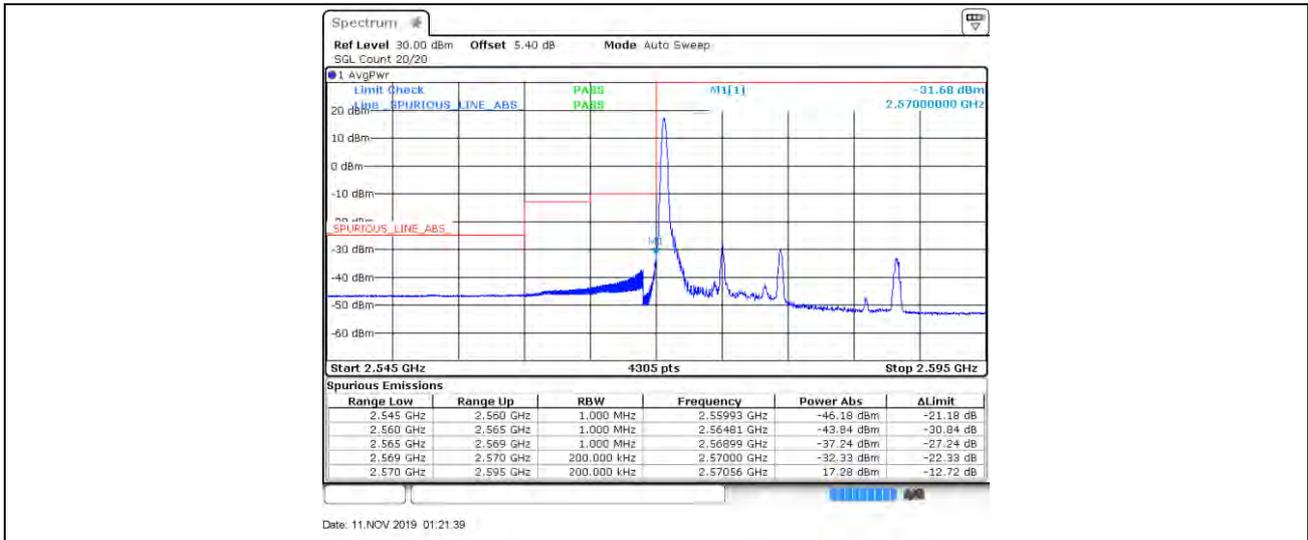


Date: 11.NOV 2019 01:15:55

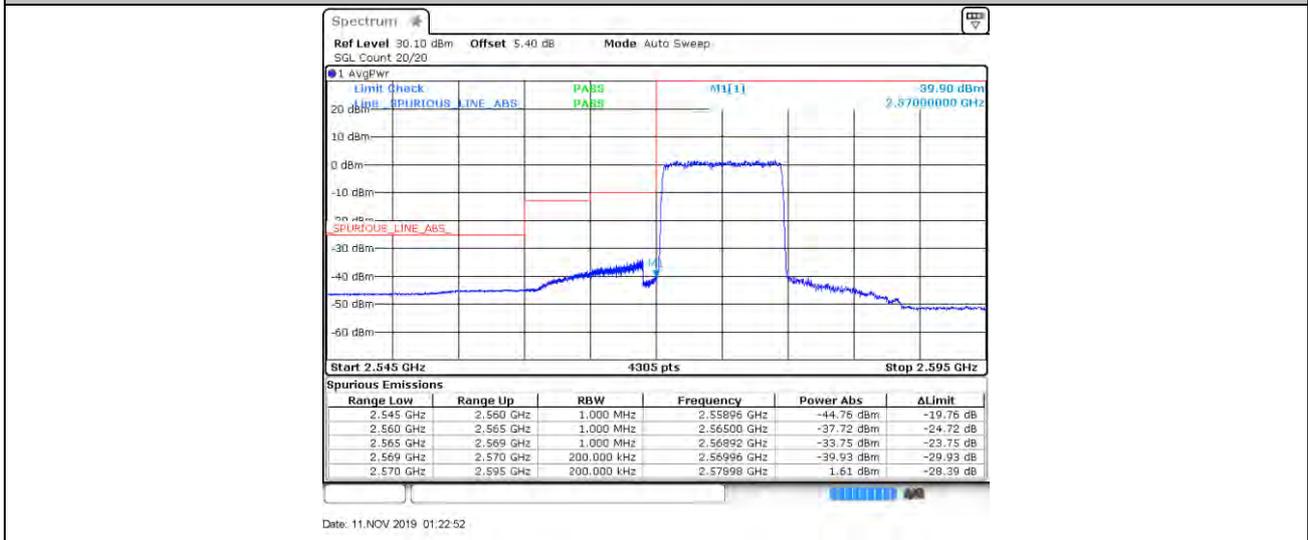
**Band38\_10MHz\_QPSK\_37800\_1RB#0**



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.



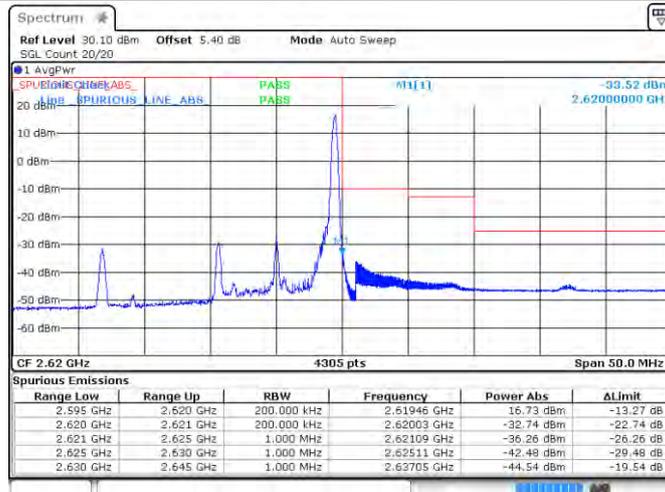
**Band38\_10MHz\_QPSK\_37800\_50RB#0**



**Band38\_10MHz\_QPSK\_38200\_1RB#49**

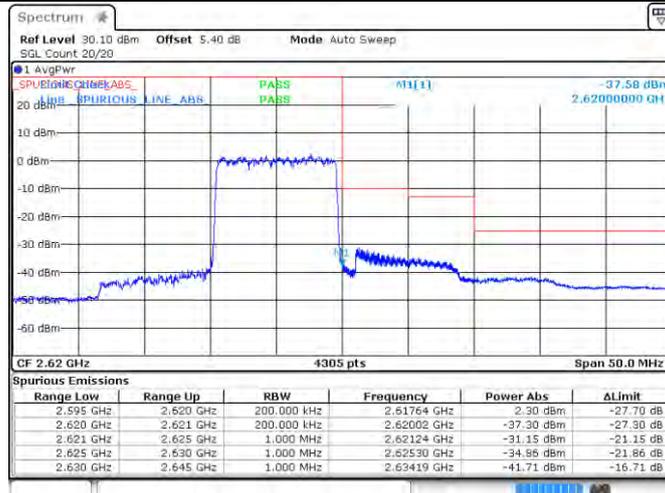


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:20:17

**Band38\_10MHz\_QPSK\_38200\_50RB#0**

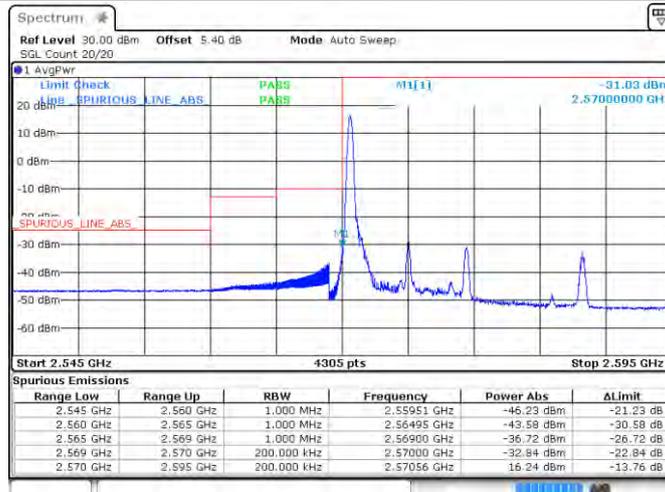


Date: 11.NOV 2019 01:19:18

**Band38\_10MHz\_16QAM\_37800\_1RB#0**

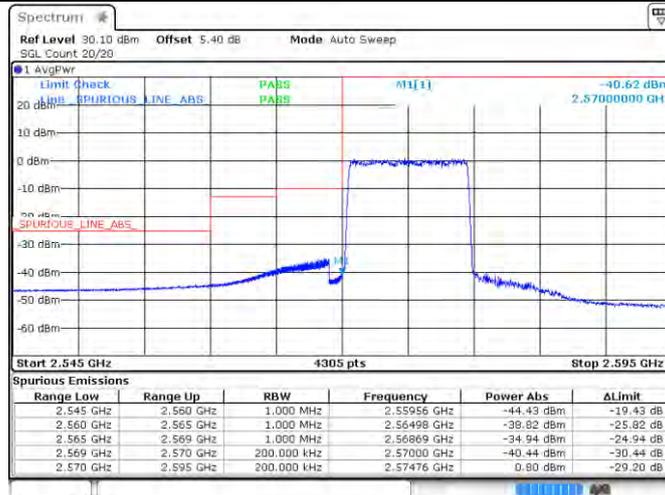


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:21:54

**Band38\_10MHz\_16QAM\_37800\_50RB#0**

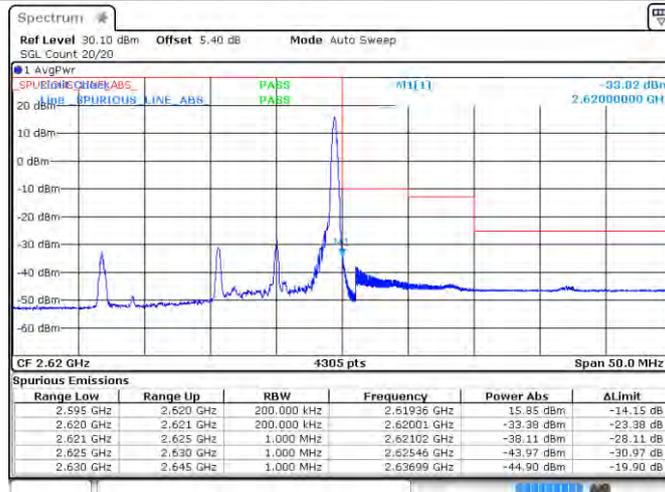


Date: 11.NOV 2019 01:22:29

**Band38\_10MHz\_16QAM\_38200\_1RB#49**

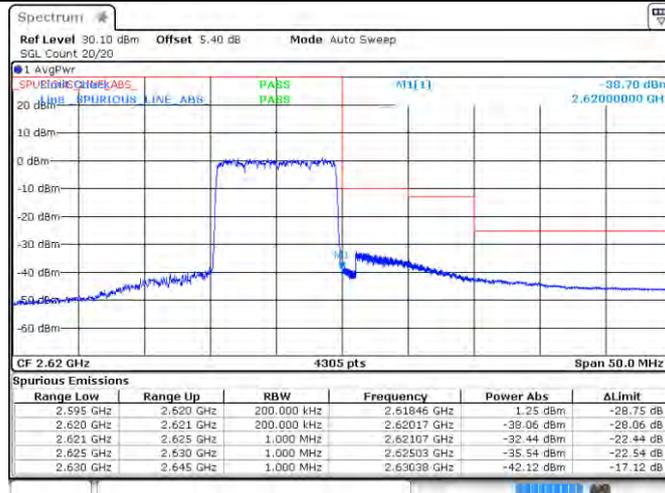


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:20:30

**Band38\_10MHz\_16QAM\_38200\_50RB#0**

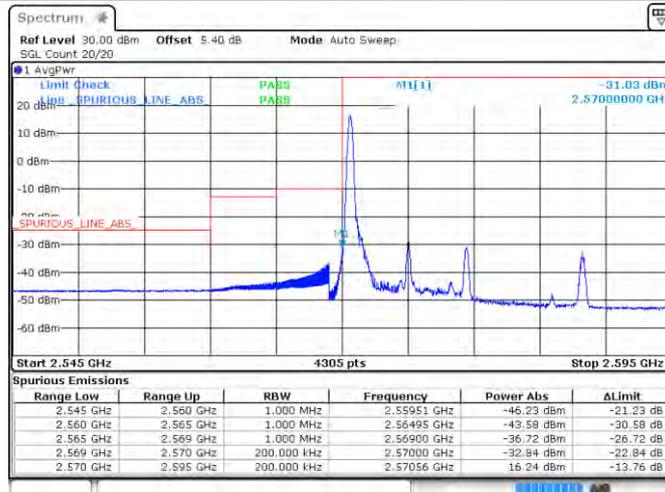


Date: 11.NOV 2019 01:18:15

**Band38\_10MHz\_64QAM\_37800\_1RB#0**

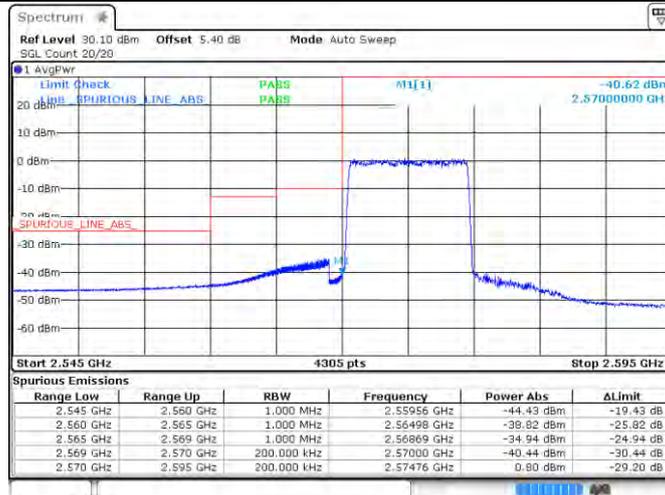


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:21:54

**Band38\_10MHz\_64QAM\_37800\_50RB#0**

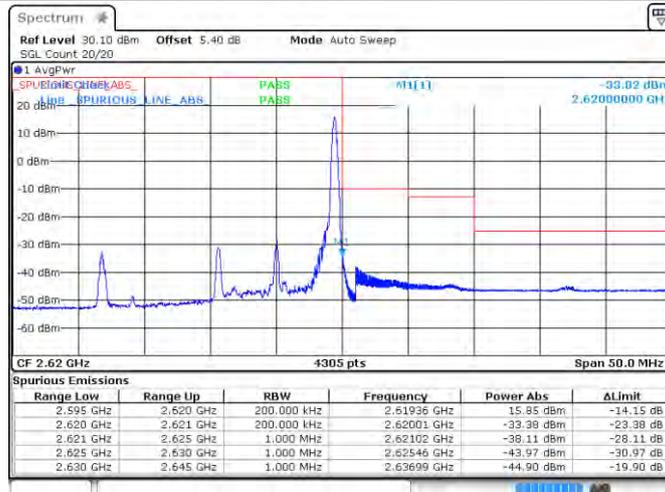


Date: 11.NOV 2019 01:22:29

**Band38\_10MHz\_64QAM\_38200\_1RB#49**

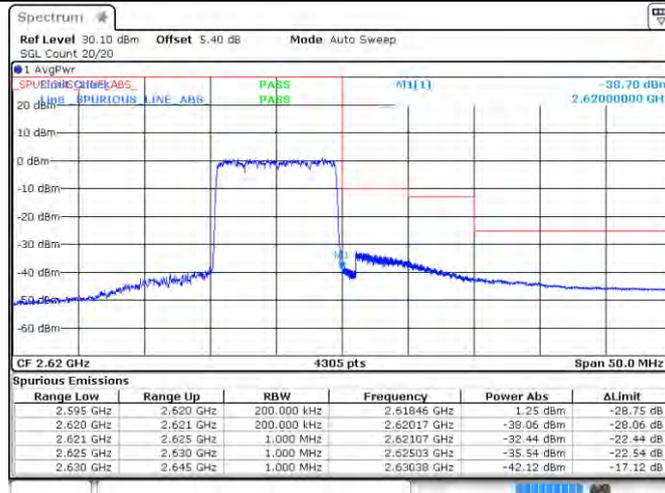


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:20:30

**Band38\_10MHz\_64QAM\_38200\_50RB#0**

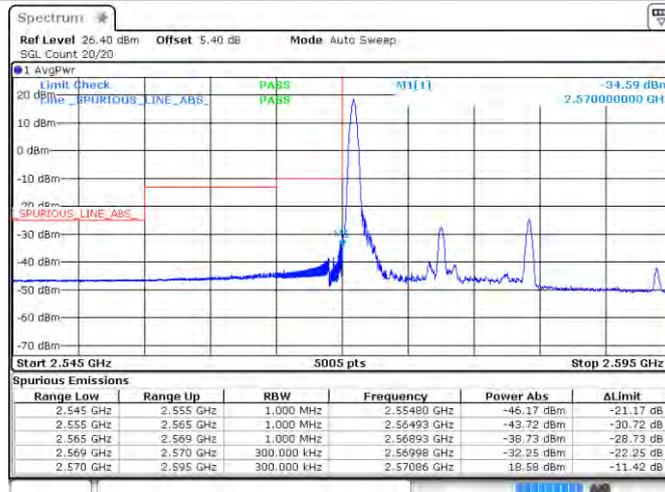


Date: 11.NOV 2019 01:18:15

**Band38\_15MHz\_QPSK\_37825\_1RB#0**

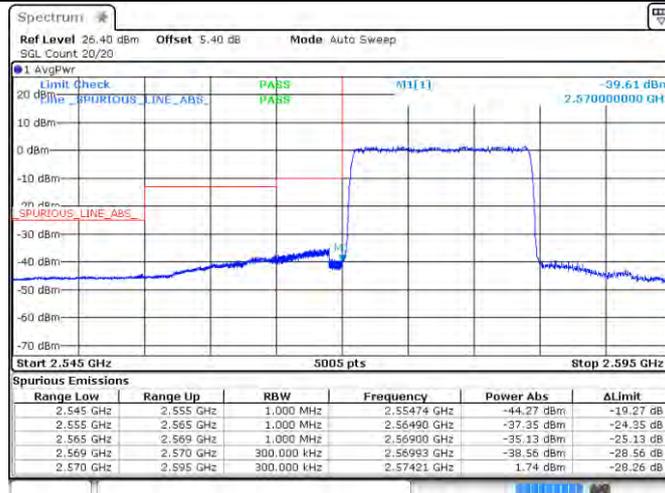


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:24:02

**Band38\_15MHz\_QPSK\_37825\_75RB#0**

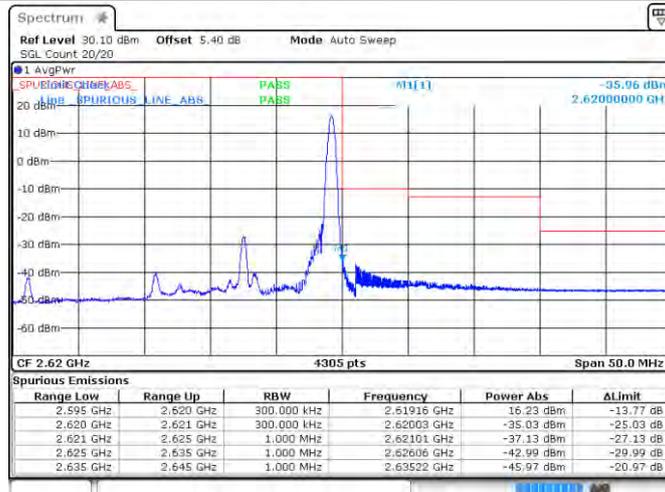


Date: 11.NOV 2019 01:24:48

**Band38\_15MHz\_QPSK\_38175\_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.



Date: 11.NOV 2019 01:26:51

**Band38\_15MHz\_QPSK\_38175\_75RB#0**

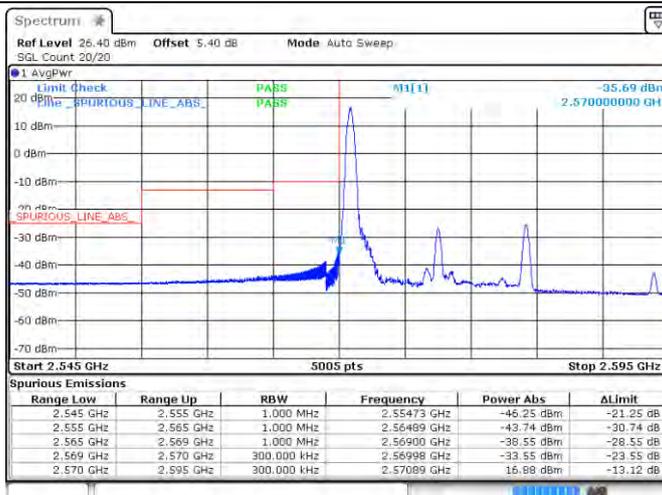


Date: 11.NOV 2019 01:25:52

**Band38\_15MHz\_16QAM\_37825\_1RB#0**

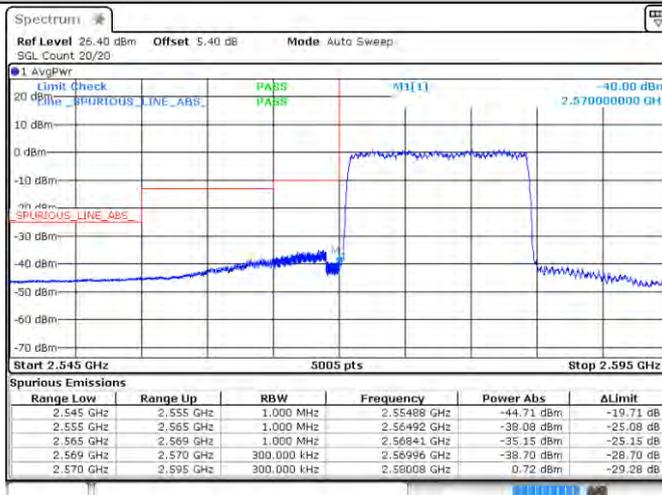


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:24:16

**Band38\_15MHz\_16QAM\_37825\_75RB#0**

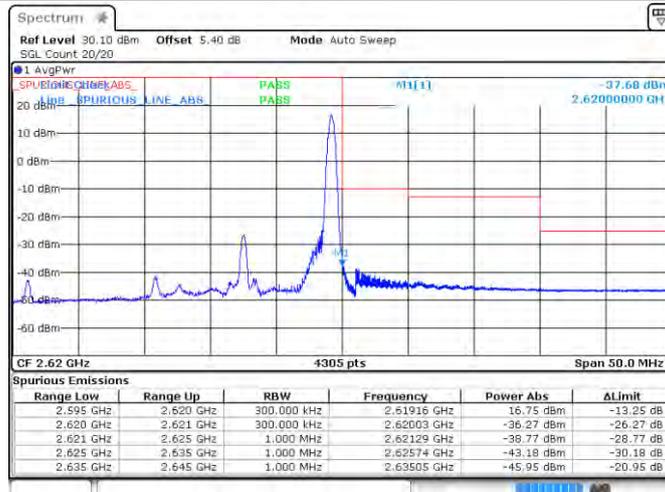


Date: 11.NOV 2019 01:24:32

**Band38\_15MHz\_16QAM\_38175\_1RB#74**

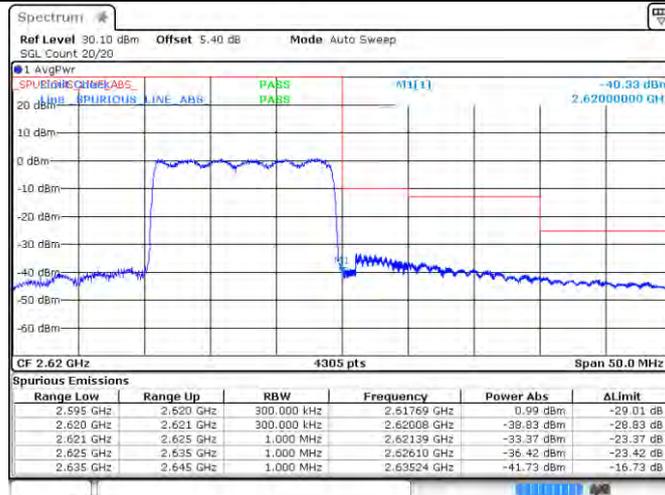


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:26:37

**Band38\_15MHz\_16QAM\_38175\_75RB#0**

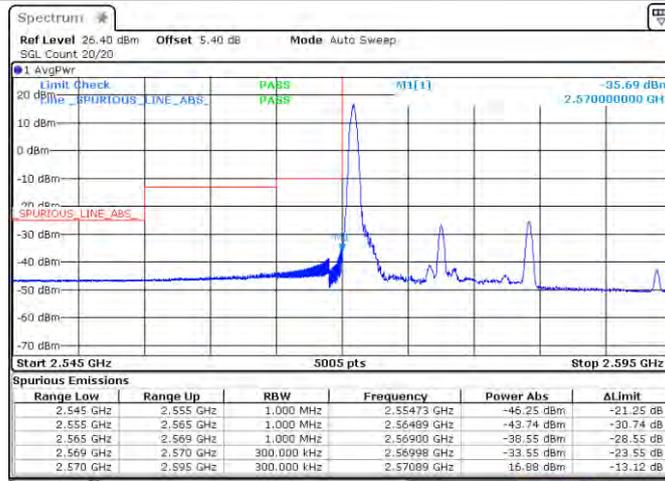


Date: 11.NOV 2019 01:26:09

**Band38\_15MHz\_64QAM\_37825\_1RB#0**

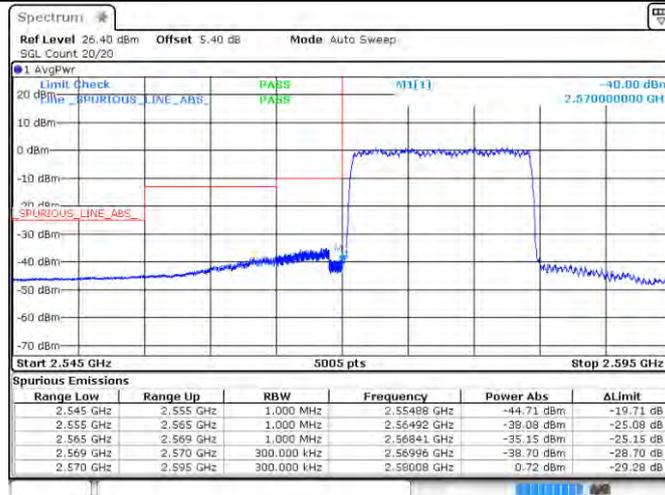


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:24:16

**Band38\_15MHz\_64QAM\_37825\_75RB#0**



Date: 11.NOV 2019 01:24:32

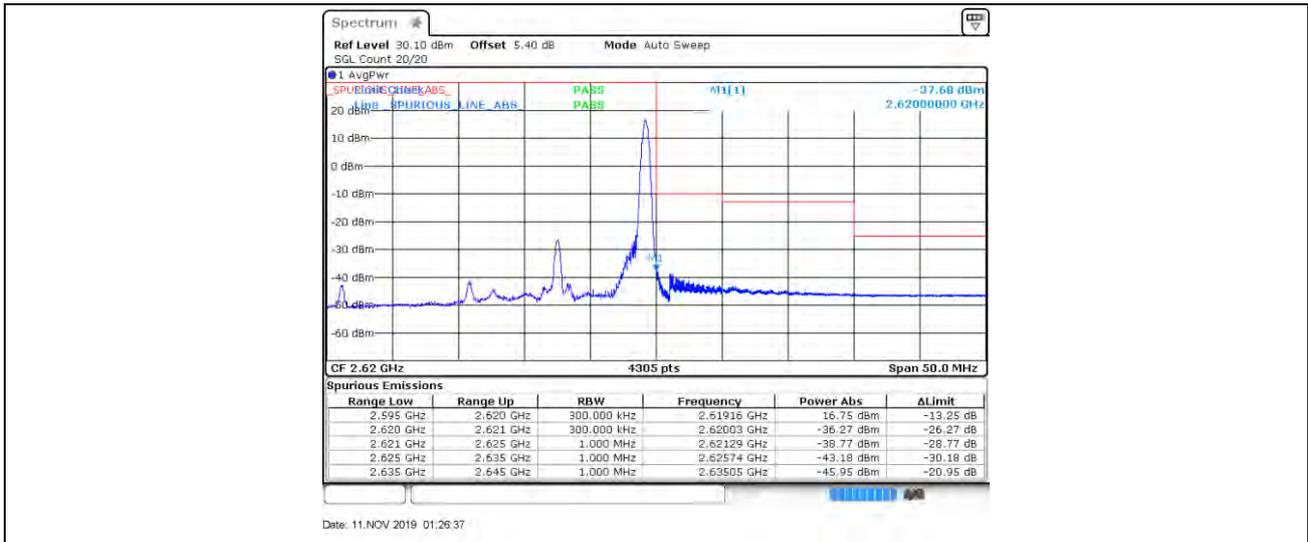
**Band38\_15MHz\_64QAM\_38175\_1RB#74**



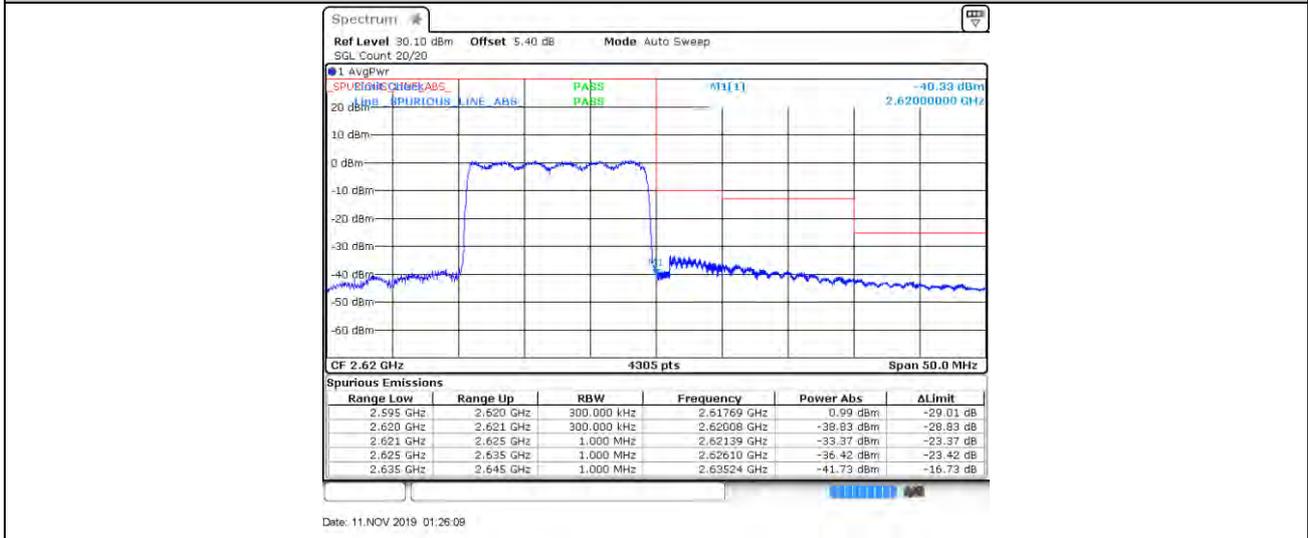
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



**Band38\_15MHz\_64QAM\_38175\_75RB#0**



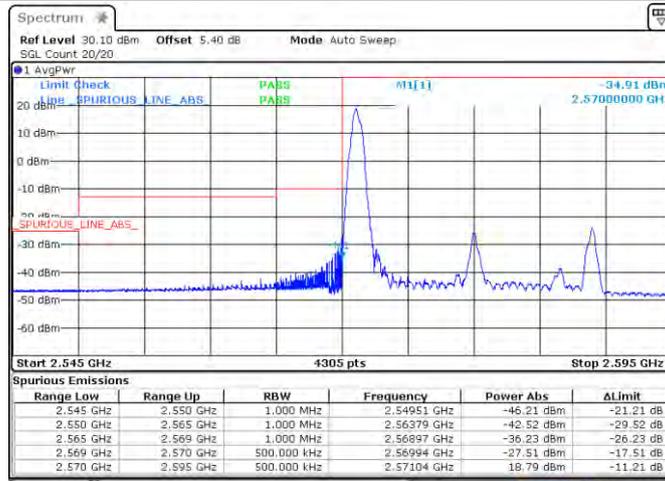
**Band38\_20MHz\_QPSK\_37850\_1RB#0**



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.

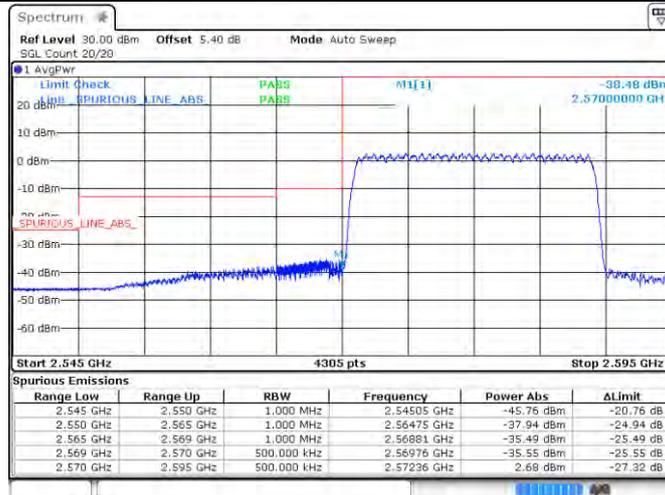
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

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



Date: 11.NOV 2019 01:32:18

**Band38\_20MHz\_QPSK\_37850\_100RB#0**

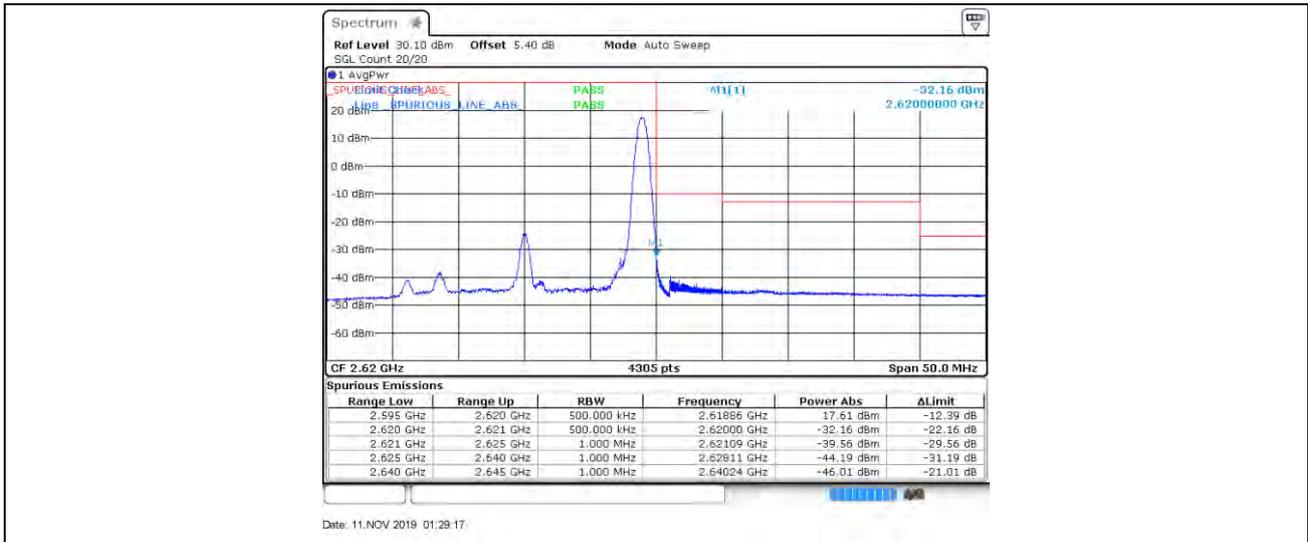


Date: 11.NOV 2019 01:31:00

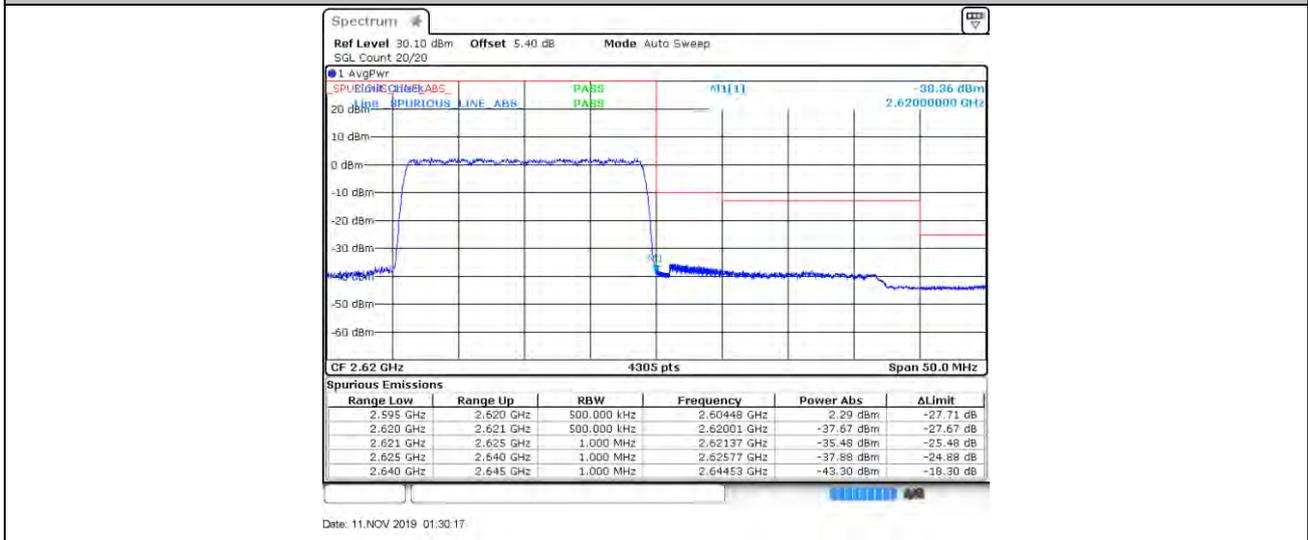
**Band38\_20MHz\_QPSK\_38150\_1RB#99**



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



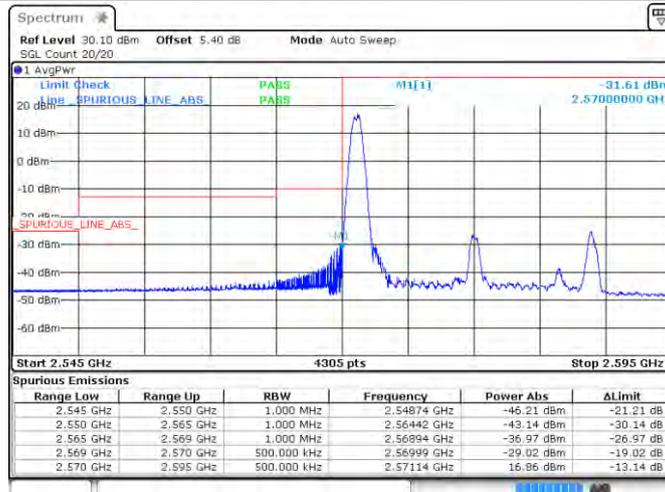
**Band38\_20MHz\_QPSK\_38150\_100RB#0**



**Band38\_20MHz\_16QAM\_37850\_1RB#0**

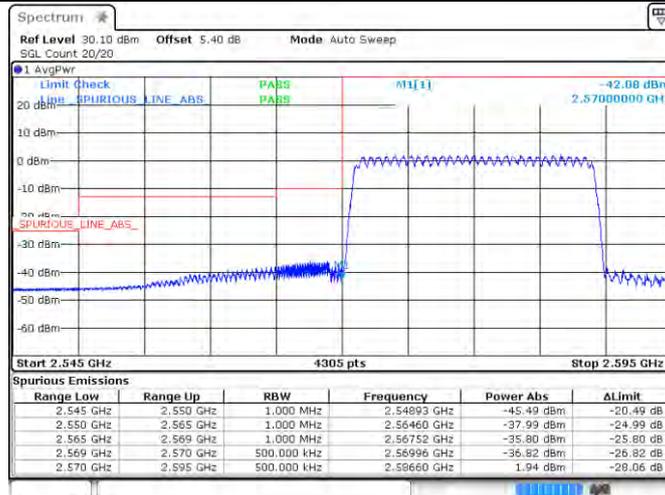


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:32:00

**Band38\_20MHz\_16QAM\_37850\_100RB#0**

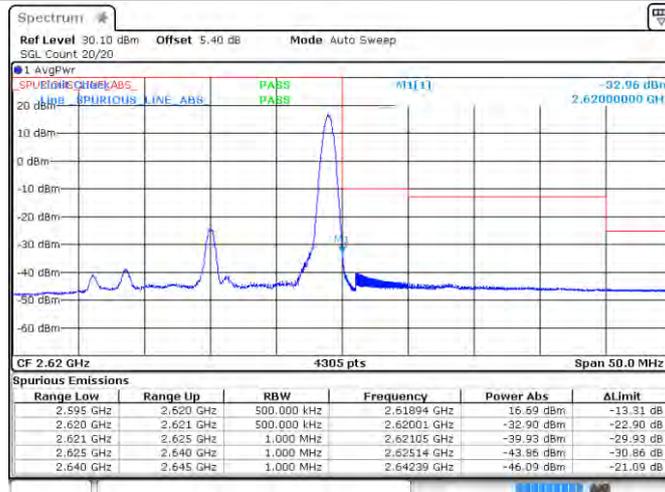


Date: 11.NOV 2019 01:31:38

**Band38\_20MHz\_16QAM\_38150\_1RB#99**

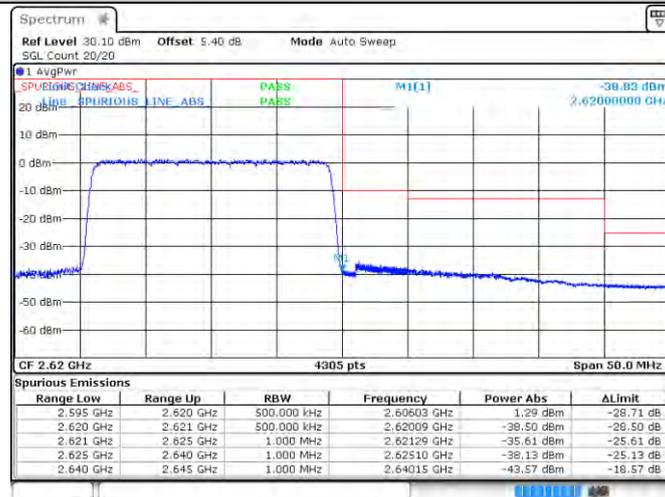


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV.2019 01:29:34

**Band38\_20MHz\_16QAM\_38150\_100RB#0**

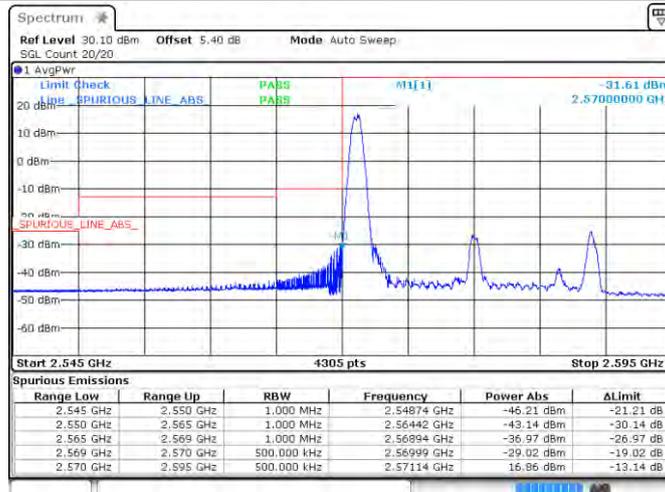


Date: 11.NOV.2019 01:29:56

**Band38\_20MHz\_64QAM\_37850\_1RB#0**

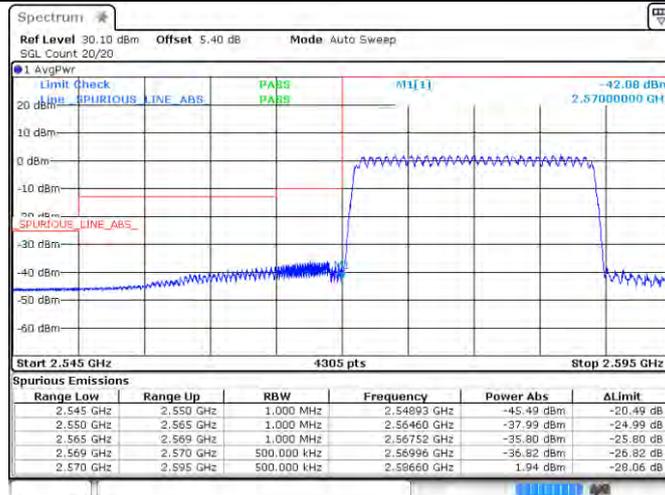


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 11.NOV 2019 01:32:00

**Band38\_20MHz\_64QAM\_37850\_100RB#0**

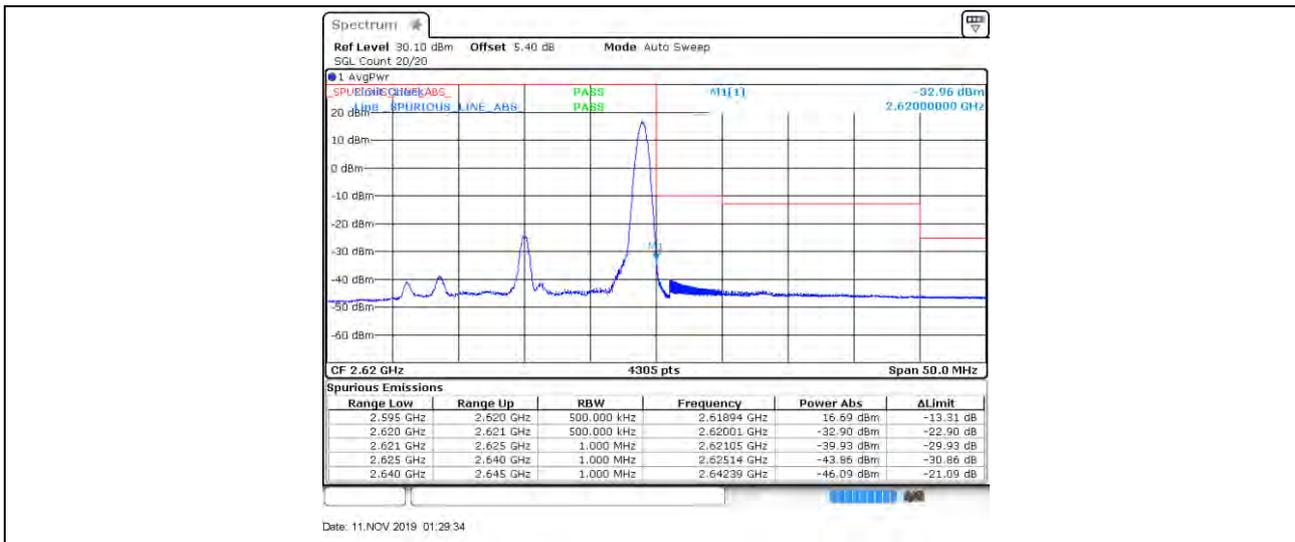


Date: 11.NOV 2019 01:31:38

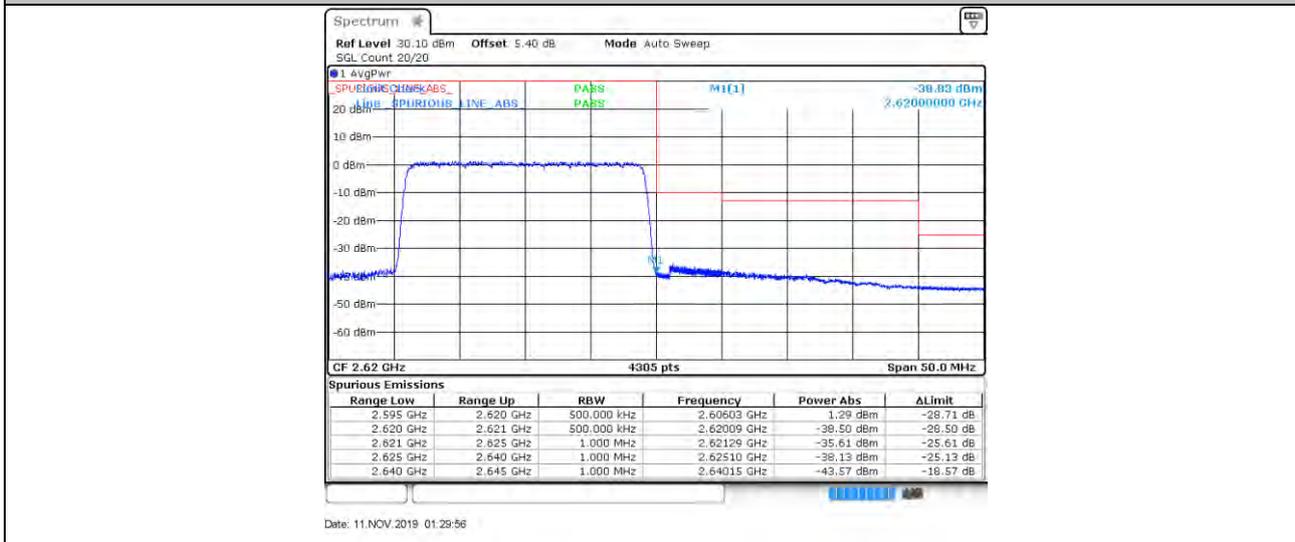
**Band38\_20MHz\_64QAM\_38150\_1RB#99**



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



**Band38\_20MHz\_64QAM\_38150\_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.

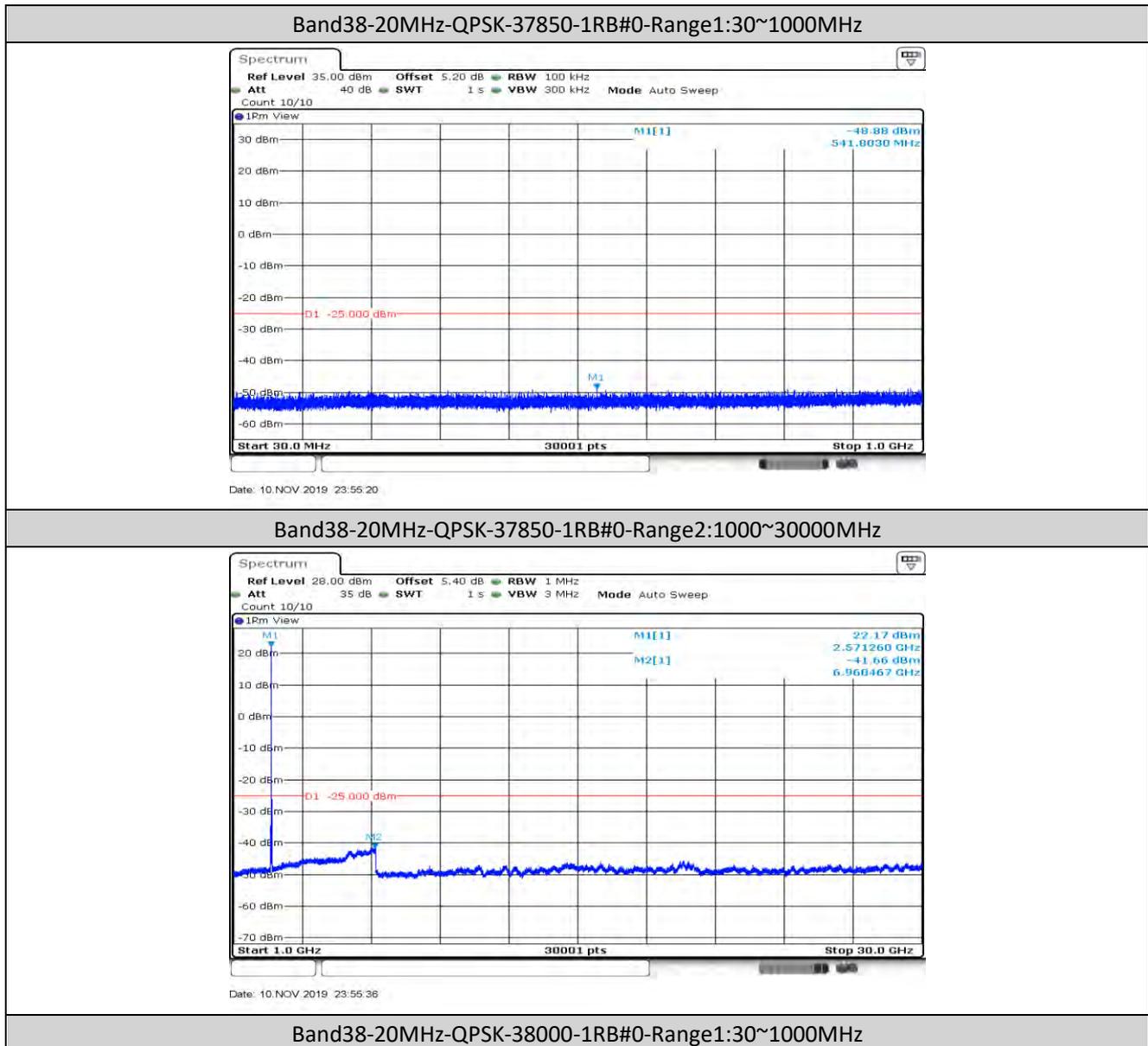


## 6. Spurious Emission at Antenna Terminal

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 =  $k * (Span / RBW)$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

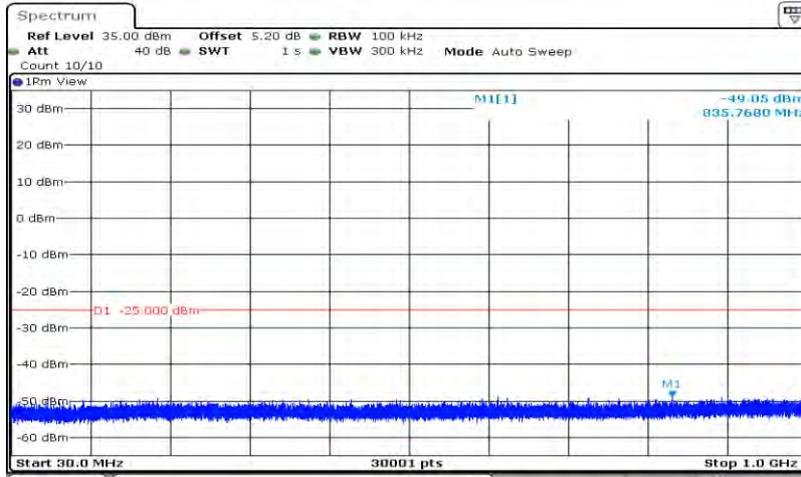
Remark2: only the worst case data displayed in this report.

### 6.1. Test Plots



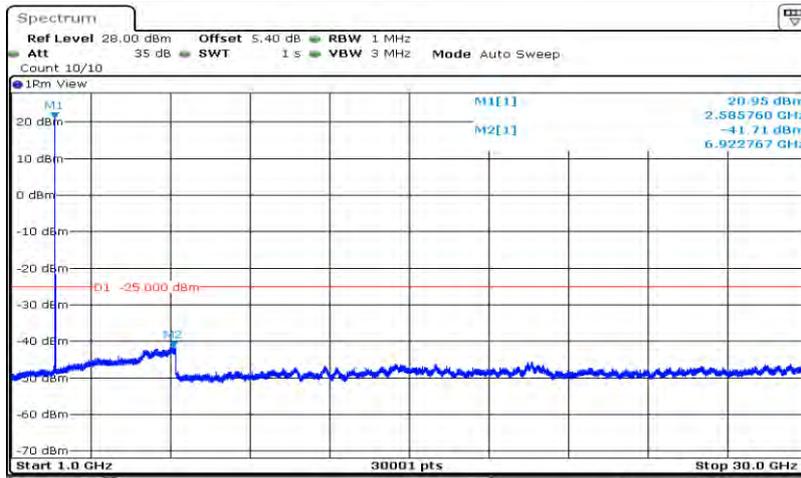
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:56:26

**Band38-20MHz-QPSK-38000-1RB#0-Range2:100~30000MHz**

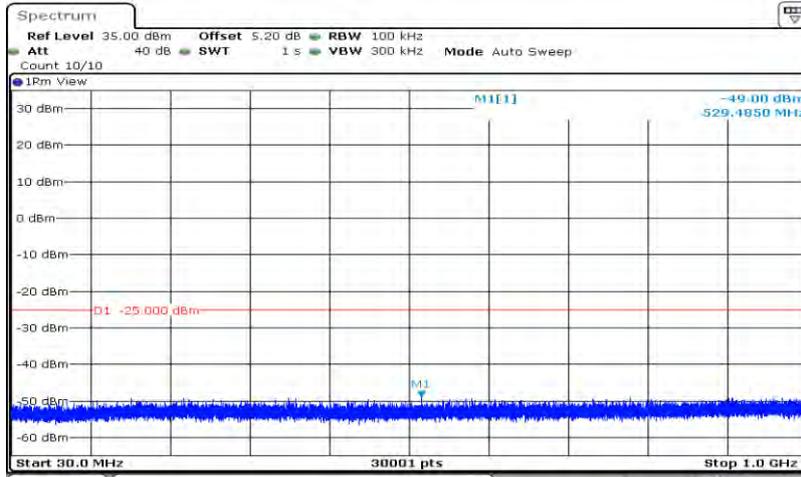


Date: 10.NOV.2019 23:56:42

**Band38-20MHz-QPSK-38150-1RB#0-Range1:30~1000MHz**

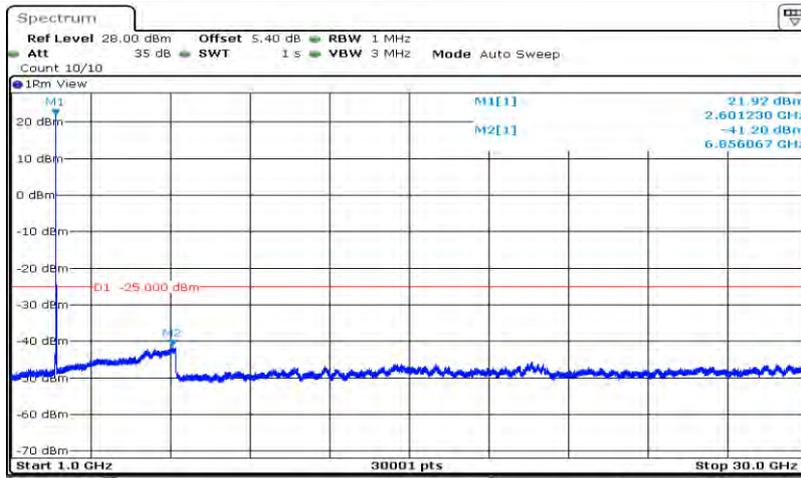


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:57:32

**Band38-20MHz-QPSK-38150-1RB#0-Range2:1000~30000MHz**

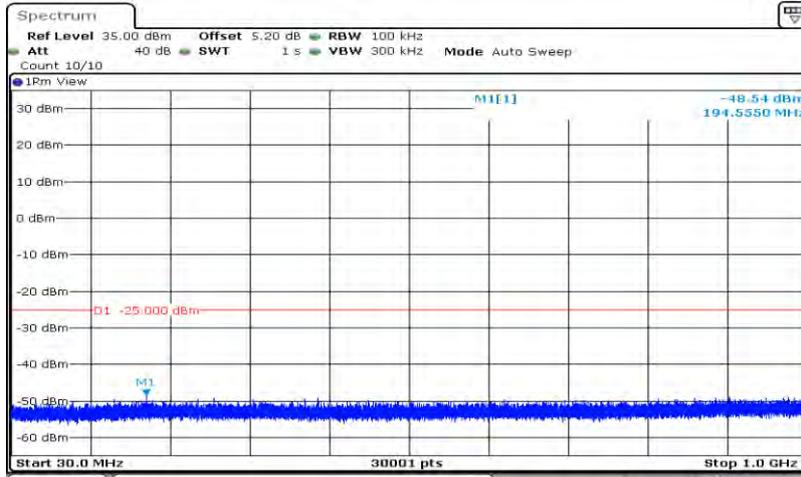


Date: 10.NOV.2019 23:57:48

**Band38-20MHz-64QAM-37850-1RB#0-Range1:30~1000MHz**

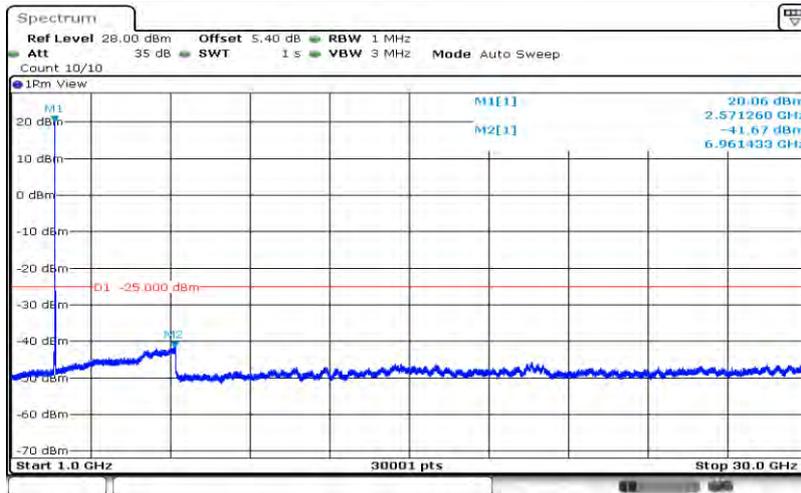


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 28.NOV.2019 19:36:59

**Band38-20MHz-64QAM-37850-1RB#0-Range2:1000~30000MHz**

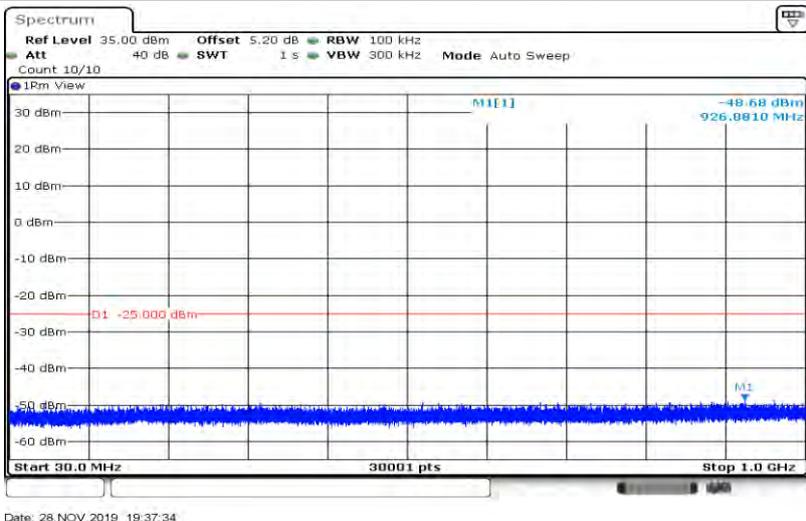


Date: 28.NOV.2019 19:37:16

**Band38-20MHz-64QAM-38000-1RB#0-Range1:30~1000MHz**

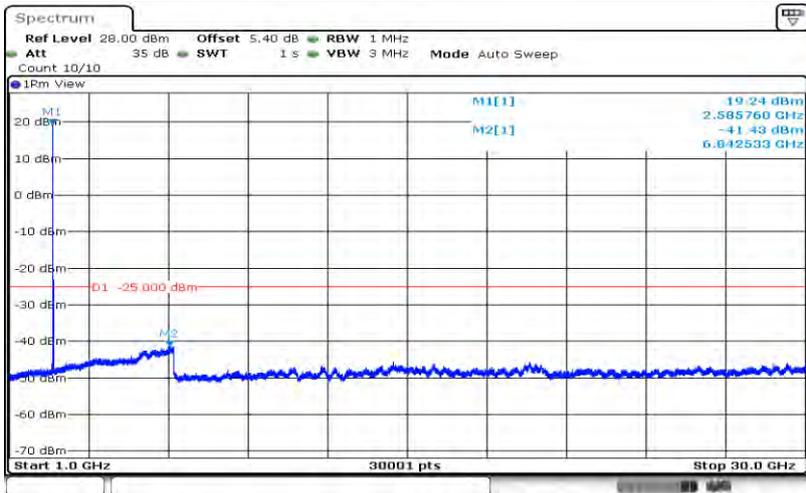


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 28.NOV.2019 19:37:34

**Band38-20MHz-64QAM-38000-1RB#0-Range2:1000~30000MHz**

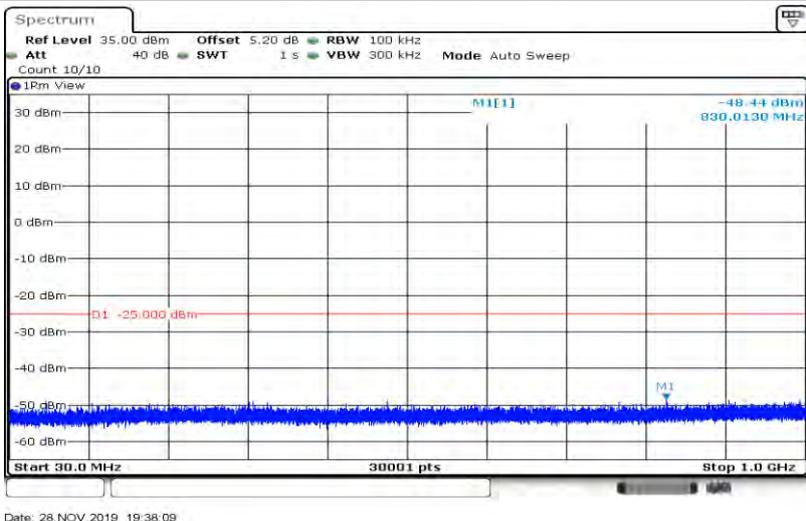


Date: 28.NOV.2019 19:37:51

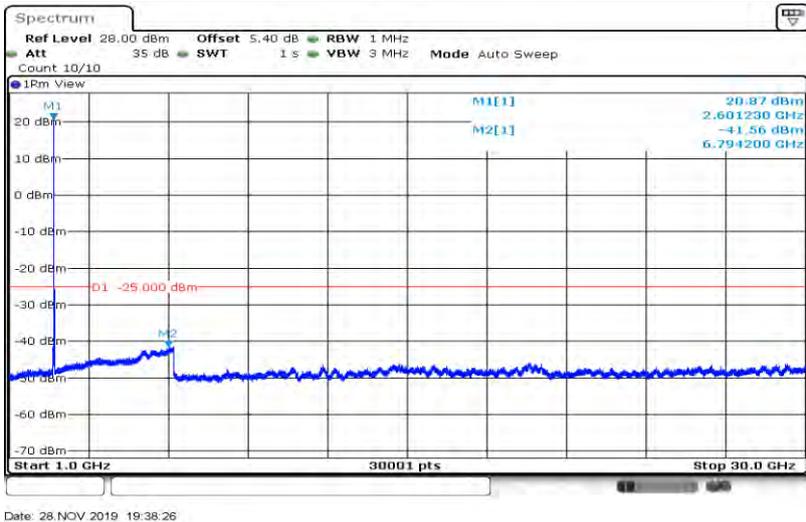
**Band38-20MHz-64QAM-38150-1RB#0-Range1:30~1000MHz**



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



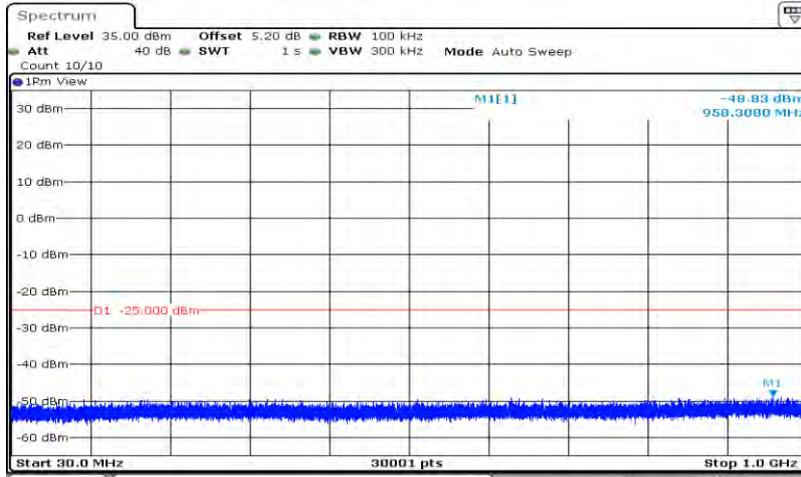
**Band38-20MHz-64QAM-38150-1RB#0-Range2:1000~30000MHz**



**Band38-20MHz-16QAM-37850-1RB#0-Range1:30~1000MHz**

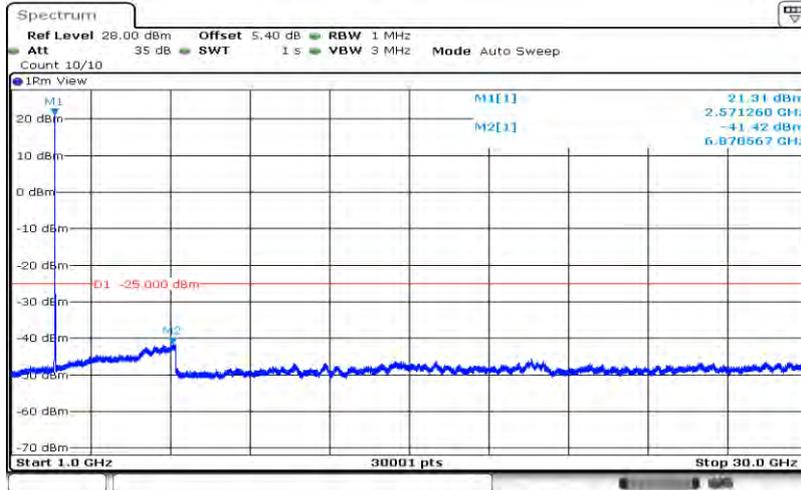


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.  
 Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Date: 10.NOV.2019 23:55:52

**Band38-20MHz-16QAM-37850-1RB#0-Range2:1000~30000MHz**

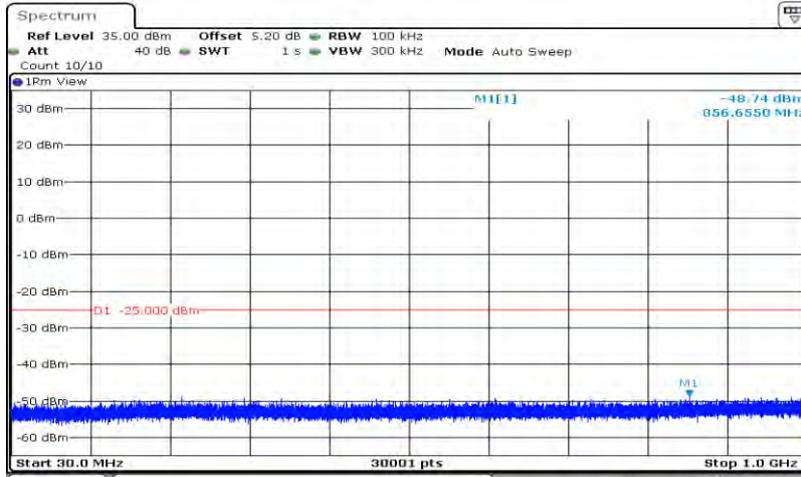


Date: 10.NOV.2019 23:56:08

**Band38-20MHz-16QAM-38000-1RB#0-Range1:30~1000MHz**

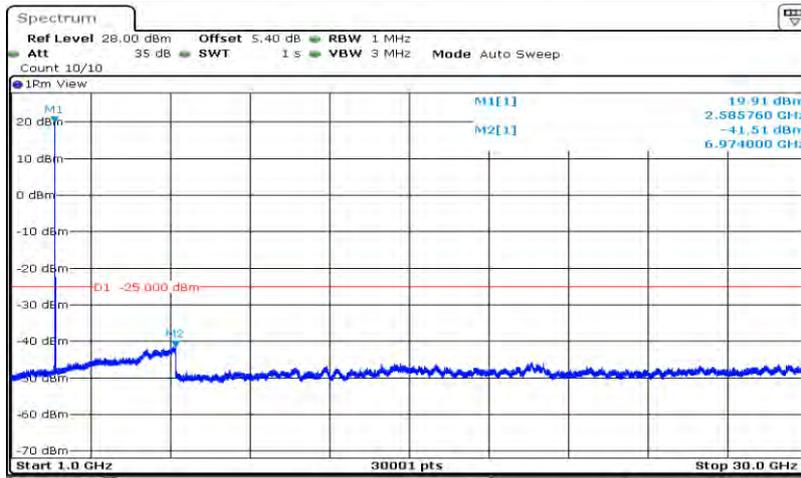


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:56:58

**Band38-20MHz-16QAM-38000-1RB#0-Range2:1000~30000MHz**

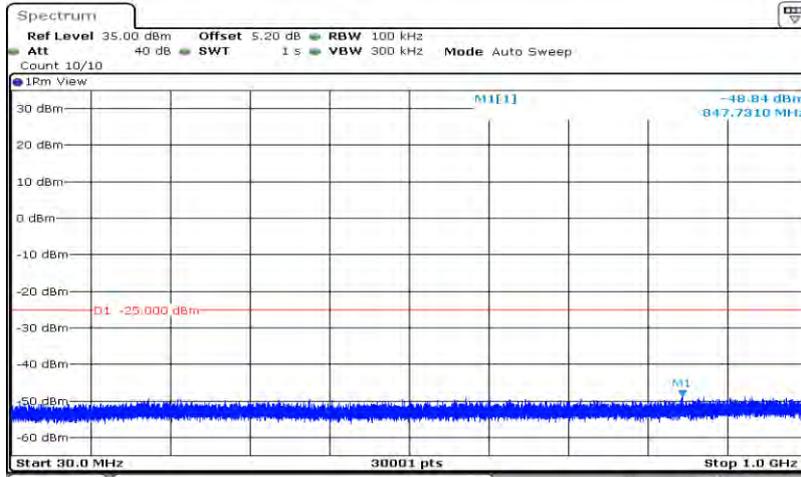


Date: 10.NOV.2019 23:57:14

**Band38-20MHz-16QAM-38150-1RB#0-Range1:30~1000MHz**

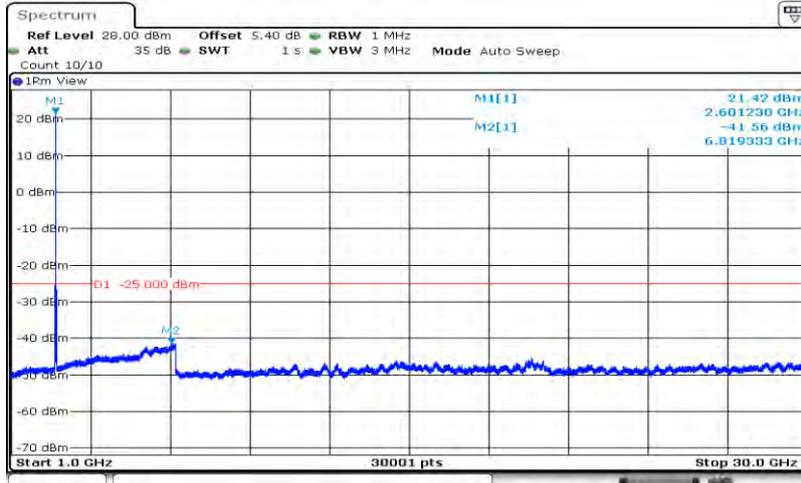


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Date: 10.NOV.2019 23:58:04

Band38-20MHz-16QAM-38150-1RB#0-Range2:1000~30000MHz



Date: 10.NOV.2019 23:58:21



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.

## 7. Field Strength of Spurious Radiation

### 7.1. Test Mode =LTE/TM1

#### 7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
113.9577	-64.07	-25.00	39.07	Vertical
238.1239	-67.94	-25.00	42.94	Vertical
720.9170	-61.41	-25.00	36.41	Vertical
4064.0355	-55.59	-25.00	30.59	Vertical
5142.0714	-54.63	-25.00	29.63	Vertical
17997.4999	-35.35	-25.00	10.35	Vertical
44.8417	-63.78	-25.00	38.78	Horizontal
238.1724	-65.12	-25.00	40.12	Horizontal
1795.7592	-43.41	-25.00	18.41	Horizontal
4064.0355	-57.43	-25.00	32.43	Horizontal
5142.0714	-54.83	-25.00	29.83	Horizontal
16399.9467	-38.56	-25.00	13.56	Horizontal

#### 7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
66.6678	-66.68	-25.00	41.68	Vertical
108.8164	-64.85	-25.00	39.85	Vertical
1237.2474	-47.89	-25.00	22.89	Vertical
4064.0355	-56.28	-25.00	31.28	Vertical
7758.1586	-50.69	-25.00	25.69	Vertical
17960.9987	-35.45	-25.00	10.45	Vertical
42.1256	-63.51	-25.00	38.51	Horizontal
238.1724	-65.53	-25.00	40.53	Horizontal
1210.8422	-48.42	-25.00	23.42	Horizontal
5172.0724	-55.25	-25.00	30.25	Horizontal
8773.1924	-51.18	-25.00	26.18	Horizontal
16397.4466	-38.27	-25.00	13.27	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](mailto:CN.Doccheck@sgs.com)  
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

**7.1.3. Test Channel = HCH**

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
66.6678	-65.88	-25.00	40.88	Vertical
110.2230	-64.56	-25.00	39.56	Vertical
238.1724	-67.25	-25.00	42.25	Vertical
4064.0355	-55.97	-25.00	30.97	Vertical
7803.6601	-47.37	-25.00	22.37	Vertical
17998.5000	-35.24	-25.00	10.24	Vertical
43.1927	-63.57	-25.00	38.57	Horizontal
238.1724	-65.33	-25.00	40.33	Horizontal
640.4030	-62.55	-25.00	37.55	Horizontal
5202.5734	-54.29	-25.00	29.29	Horizontal
7803.1601	-50.40	-25.00	25.40	Horizontal
16397.9466	-38.63	-25.00	13.63	Horizontal

Remark:

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



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

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



## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	VL	NT	-18.90	-0.007326	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VN	NT	-22.13	-0.008578	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VH	NT	-17.22	-0.006674	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-20.30	-0.007823	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VN	NT	-26.26	-0.010119	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-22.50	-0.008671	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VL	NT	-13.93	-0.005337	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VN	NT	-20.59	-0.007889	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VH	NT	-13.89	-0.005322	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	VL	NT	-11.00	-0.004264	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	VN	NT	-11.50	-0.004457	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	VH	NT	-1.80	-0.000698	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	VL	NT	0.60	0.000231	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	VN	NT	3.80	0.001464	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	VH	NT	-4.10	-0.001580	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	VL	NT	-0.70	-0.000268	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	VN	NT	7.00	0.002682	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	VH	NT	2.60	0.000996	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VL	NT	-17.38	-0.006736	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VN	NT	-20.61	-0.007988	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VH	NT	-16.82	-0.006519	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VL	NT	-21.97	-0.008466	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VN	NT	-49.07	-0.018909	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VH	NT	-22.53	-0.008682	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VL	NT	-13.50	-0.005172	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VN	NT	-14.88	-0.005701	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VH	NT	-15.34	-0.005877	±2.5	PASS

### 8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	NV	-30	-19.08	-0.007395	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	-20	-15.48	-0.006000	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	0	-18.32	-0.007101	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	10	-18.54	-0.007186	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	20	-15.85	-0.006143	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	30	-16.75	-0.006492	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	40	-19.83	-0.007686	±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](mailto: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



Band38	20MHz	QPSK	37850	100RB#0	NV	50	-25.66	-0.009946	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	-20.71	-0.007981	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-19.47	-0.007503	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-21.14	-0.008146	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	-20.74	-0.007992	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	-23.57	-0.009083	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-21.56	-0.008308	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	-21.46	-0.008270	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	-24.02	-0.009256	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-30	-16.89	-0.006471	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-20	-14.91	-0.005713	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	0	-18.61	-0.007130	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	10	-14.83	-0.005682	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	20	-14.68	-0.005625	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	30	-19.33	-0.007406	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	40	-14.45	-0.005536	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	50	-13.95	-0.005345	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	-30	-4.20	-0.001628	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	-20	-18.10	-0.007016	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	0	-14.10	-0.005465	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	10	-12.50	-0.004845	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	20	-1.50	-0.000581	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	30	-2.10	-0.000814	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	40	-12.90	-0.005000	±2.5	PASS
Band38	20MHz	64QAM	37850	100RB#0	NV	50	-1.10	-0.000426	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	-30	-10.00	-0.003854	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	-20	-8.00	-0.003083	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	0	2.50	0.000963	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	10	-1.10	-0.000424	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	20	-2.00	-0.000771	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	30	-14.00	-0.005395	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	40	2.60	0.001002	±2.5	PASS
Band38	20MHz	64QAM	38000	100RB#0	NV	50	-5.60	-0.002158	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	-30	-5.00	-0.001916	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	-20	-0.20	-0.000077	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	0	-7.40	-0.002835	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	10	-0.20	-0.000077	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	20	-0.70	-0.000268	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	30	-7.60	-0.002912	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	40	-5.10	-0.001954	±2.5	PASS
Band38	20MHz	64QAM	38150	100RB#0	NV	50	0.50	0.000192	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-30	-23.53	-0.009120	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-20	-18.44	-0.007147	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	0	-17.91	-0.006942	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	10	-16.18	-0.006271	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	20	-19.30	-0.007481	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	30	-20.73	-0.008035	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	40	-15.31	-0.005934	±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](mailto: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



Band38	20MHz	16QAM	37850	100RB#0	NV	50	-18.65	-0.007229	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-30	-21.92	-0.008447	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-20	-22.50	-0.008671	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	0	-16.89	-0.006509	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	10	-20.93	-0.008066	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	20	-19.61	-0.007557	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	30	-21.40	-0.008247	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	40	-25.81	-0.009946	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	50	-19.44	-0.007491	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-30	-15.64	-0.005992	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-20	-13.28	-0.005088	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	0	-17.64	-0.006759	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	10	-14.93	-0.005720	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	20	-14.58	-0.005586	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	30	-14.58	-0.005586	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	40	-14.52	-0.005563	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	50	-16.25	-0.006226	±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](mailto: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