

# Appendix B

## E-UTRA Band 13



## CONTENT

<b>1</b>	<b>EFFECTIVE (ISOTROPIC) RADIATED POWER.....</b>	<b>4</b>
1.1.	TEST RESULT.....	4
<b>2.</b>	<b>PEAK-TO-AVERAGE RATIO (CCDF).....</b>	<b>8</b>
2.1.	TEST RESULT.....	8
2.2.	TEST PLOTS.....	8
<b>3.</b>	<b>MODULATION CHARACTERISTICS.....</b>	<b>11</b>
3.1.	TEST MODE = LTE /TM1 10MHZ.....	11
3.1.1.	TEST CHANNEL = MCH.....	11
3.2.	TEST MODE = LTE /TM2 10MHZ.....	12
3.2.1.	TEST CHANNEL = MCH.....	12
3.3.	TEST MODE = LTE /TM3 10MHZ.....	13
3.3.1.	TEST CHANNEL = MCH.....	13
3.4.	TEST MODE = LTE /TM4 10MHZ.....	14
3.4.1.	TEST CHANNEL = MCH.....	14
<b>4.</b>	<b>26DB BANDWIDTH AND OCCUPIED BANDWIDTH.....</b>	<b>15</b>
4.1.	TEST RESULT.....	15
4.2.	TEST PLOTS.....	16
<b>5.</b>	<b>BAND EDGE COMPLIANCE.....</b>	<b>24</b>
5.1.	TEST PLOTS.....	24
<b>6.</b>	<b>SPURIOUS EMISSION AT ANTENNA TERMINAL.....</b>	<b>28</b>
6.1.	TEST PLOTS.....	28
<b>7.</b>	<b>FIELD STRENGTH OF SPURIOUS RADIATION.....</b>	<b>29</b>
7.1.	TEST BAND = BAND 13.....	29
7.1.1.	Test Channel = Mid Channel.....	29
7.2.	TEST BAND = BAND 13.....	30
7.2.1.	Test Channel = Mid Channel.....	30
<b>8.</b>	<b>FREQUENCY STABILITY.....</b>	<b>31</b>
8.1.	FREQUENCY VS VOLTAGE.....	31



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)



8.2. FREQUENCY VS TEMPERATURE..... 31



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

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

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



## 1 Effective (Isotropic) Radiated Power

### 1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.48	23.27	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.59	23.38	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.51	23.3	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.44	22.23	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.49	22.28	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.31	22.1	34.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.38	22.17	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.54	23.33	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.42	23.21	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.53	23.32	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.44	22.23	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.49	22.28	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.47	22.26	34.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.46	22.25	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.54	23.33	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.50	23.29	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.47	23.26	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.35	22.14	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.37	22.16	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.41	22.2	34.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.39	22.18	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#24	21.48	21.27	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#0	21.50	21.29	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#12	21.62	21.41	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#0	20.29	20.08	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#6	20.44	20.23	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#13	20.32	20.11	34.77	PASS



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

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





Band13	5MHz	64QAM	23205	25RB#0	20.35	20.14	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#12	21.58	21.37	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#0	21.59	21.38	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#24	21.53	21.32	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#6	20.36	20.15	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#13	20.42	20.21	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#0	20.46	20.25	34.77	PASS
Band13	5MHz	64QAM	23230	25RB#0	20.44	20.23	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#12	21.56	21.35	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#24	21.45	21.24	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#0	21.52	21.31	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#6	20.35	20.14	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#0	20.31	20.1	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#13	20.32	20.11	34.77	PASS
Band13	5MHz	64QAM	23255	25RB#0	20.35	20.14	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#0	18.81	18.6	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#12	18.83	18.62	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#24	18.69	18.48	34.77	PASS
Band13	5MHz	256QAM	23205	12RB#13	18.53	18.32	34.77	PASS
Band13	5MHz	256QAM	23205	12RB#0	18.47	18.26	34.77	PASS
Band13	5MHz	256QAM	23205	12RB#6	18.55	18.34	34.77	PASS
Band13	5MHz	256QAM	23205	25RB#0	18.56	18.35	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#12	18.81	18.6	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#24	18.72	18.51	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#0	18.67	18.46	34.77	PASS
Band13	5MHz	256QAM	23230	12RB#13	18.59	18.38	34.77	PASS
Band13	5MHz	256QAM	23230	12RB#0	18.59	18.38	34.77	PASS
Band13	5MHz	256QAM	23230	12RB#6	18.54	18.33	34.77	PASS
Band13	5MHz	256QAM	23230	25RB#0	18.60	18.39	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#24	18.68	18.47	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#12	18.76	18.55	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#0	18.81	18.6	34.77	PASS
Band13	5MHz	256QAM	23255	12RB#0	18.50	18.29	34.77	PASS



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

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

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

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



Band13	5MHz	256QAM	23255	12RB#6	18.52	18.31	34.77	PASS
Band13	5MHz	256QAM	23255	12RB#13	18.49	18.28	34.77	PASS
Band13	5MHz	256QAM	23255	25RB#0	18.56	18.35	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.65	22.44	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.67	22.46	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.56	22.35	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#0	21.31	21.1	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#6	21.45	21.24	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#13	21.43	21.22	34.77	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.39	21.18	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.51	22.3	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.63	22.42	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.63	22.42	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#6	21.46	21.25	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#0	21.45	21.24	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#13	21.44	21.23	34.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.47	21.26	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.66	22.45	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.68	22.47	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.61	22.4	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#0	21.36	21.15	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#6	21.40	21.19	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#13	21.37	21.16	34.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.39	21.18	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.40	23.19	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.54	23.33	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.49	23.28	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.43	22.22	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.49	22.28	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.35	22.14	34.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.45	22.24	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#49	21.49	21.28	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#24	21.54	21.33	34.77	PASS



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

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

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

Band13	10MHz	64QAM	23230	1RB#0	21.63	21.42	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#25	20.45	20.24	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#0	20.36	20.15	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#12	20.40	20.19	34.77	PASS
Band13	10MHz	64QAM	23230	50RB#0	20.38	20.17	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#49	18.71	18.5	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#24	18.78	18.57	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#0	18.80	18.59	34.77	PASS
Band13	10MHz	256QAM	23230	25RB#0	18.55	18.34	34.77	PASS
Band13	10MHz	256QAM	23230	25RB#12	18.61	18.4	34.77	PASS
Band13	10MHz	256QAM	23230	25RB#25	18.63	18.42	34.77	PASS
Band13	10MHz	256QAM	23230	50RB#0	18.58	18.37	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.45	22.24	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.65	22.44	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.73	22.52	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.44	21.23	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.37	21.16	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.42	21.21	34.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.39	21.18	34.77	PASS

**Remark:**

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

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]

The conducted Power is measured by Base Station Simulator



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 (ECC Laboratory)

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



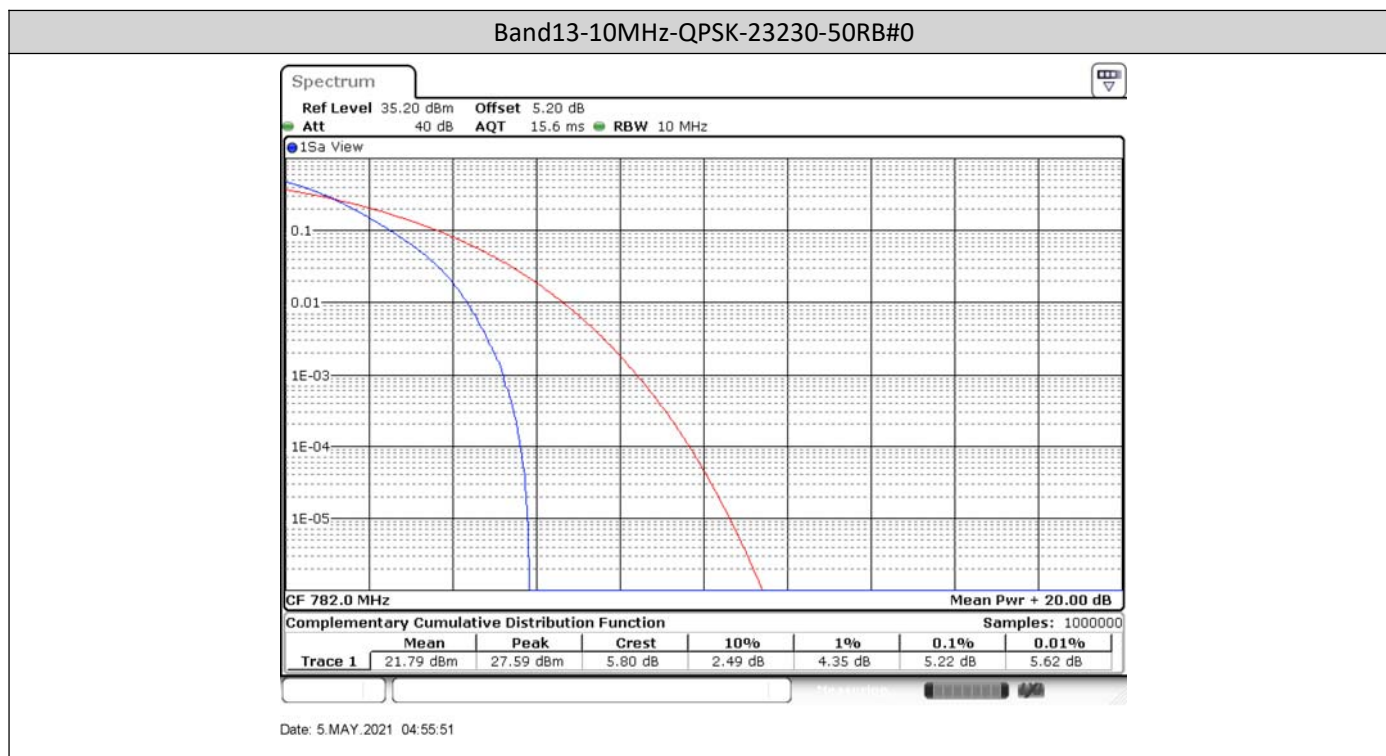


## 2. Peak-to-Average Ratio (CCDF)

### 2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	5.22	13	PASS
Band13	10MHz	64QAM	23230	50RB#0	6.20	13	PASS
Band13	10MHz	256QAM	23230	50RB#0	5.91	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.91	13	PASS

### 2.2. Test Plots





## Band13-10MHz-64QAM-23230-50RB#0



Date: 17.MAY.2021 02:00:30

## Band13-10MHz-256QAM-23230-50RB#0

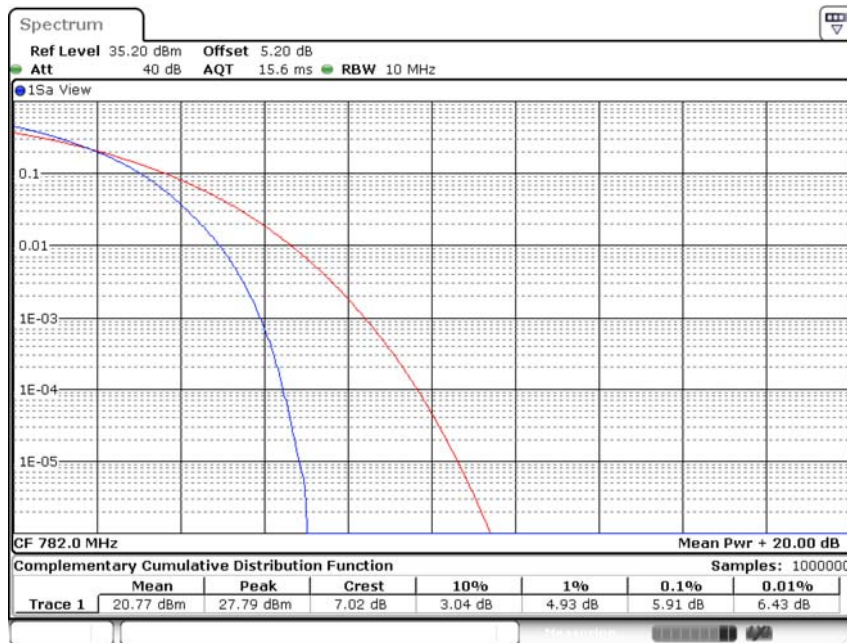


Date: 7.MAY.2021 03:23:51





Band13-10MHz-16QAM-23230-50RB#0



Date: 5 MAY 2021 04:56:02

Remark: all modulation and all Bandwidth had been tested, but only the worst configuration was displayed in this report.



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

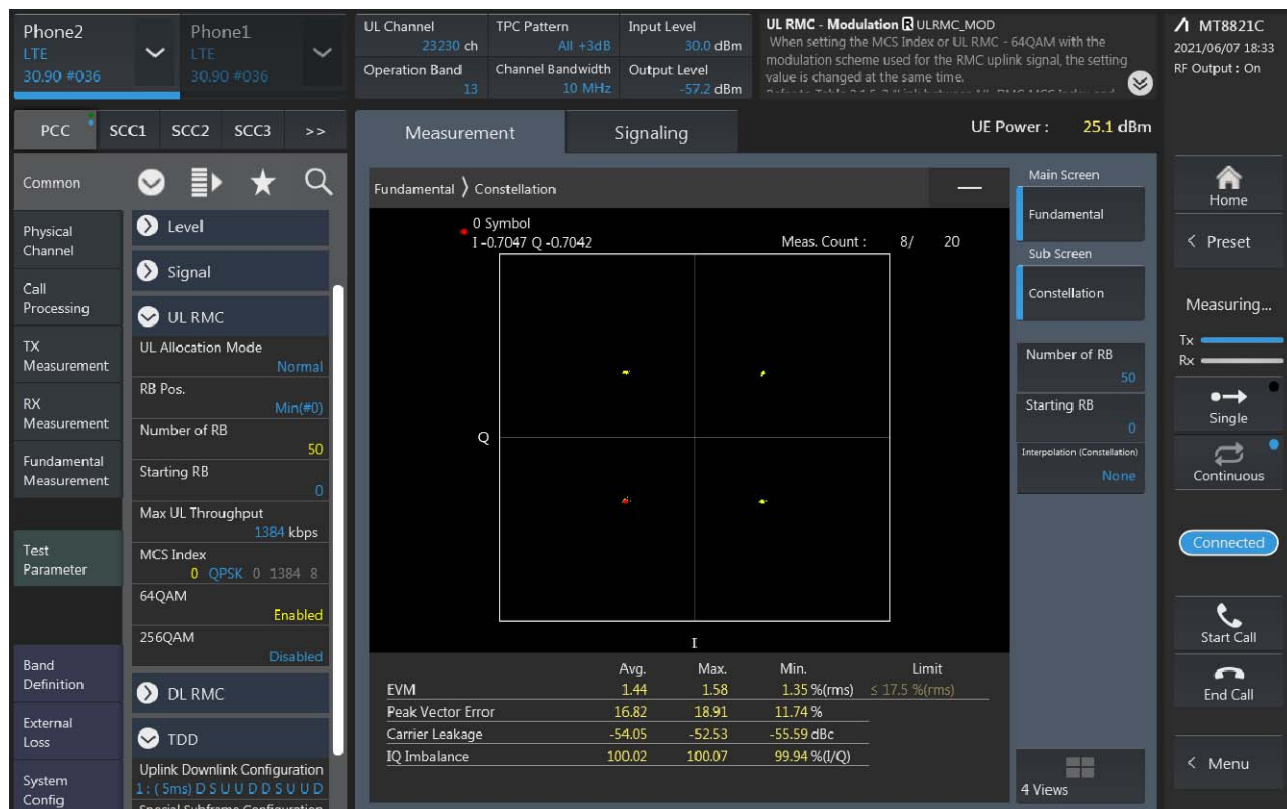
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

### 3. Modulation Characteristics

#### 3.1. Test Mode = LTE /TM1 10MHz

##### 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)

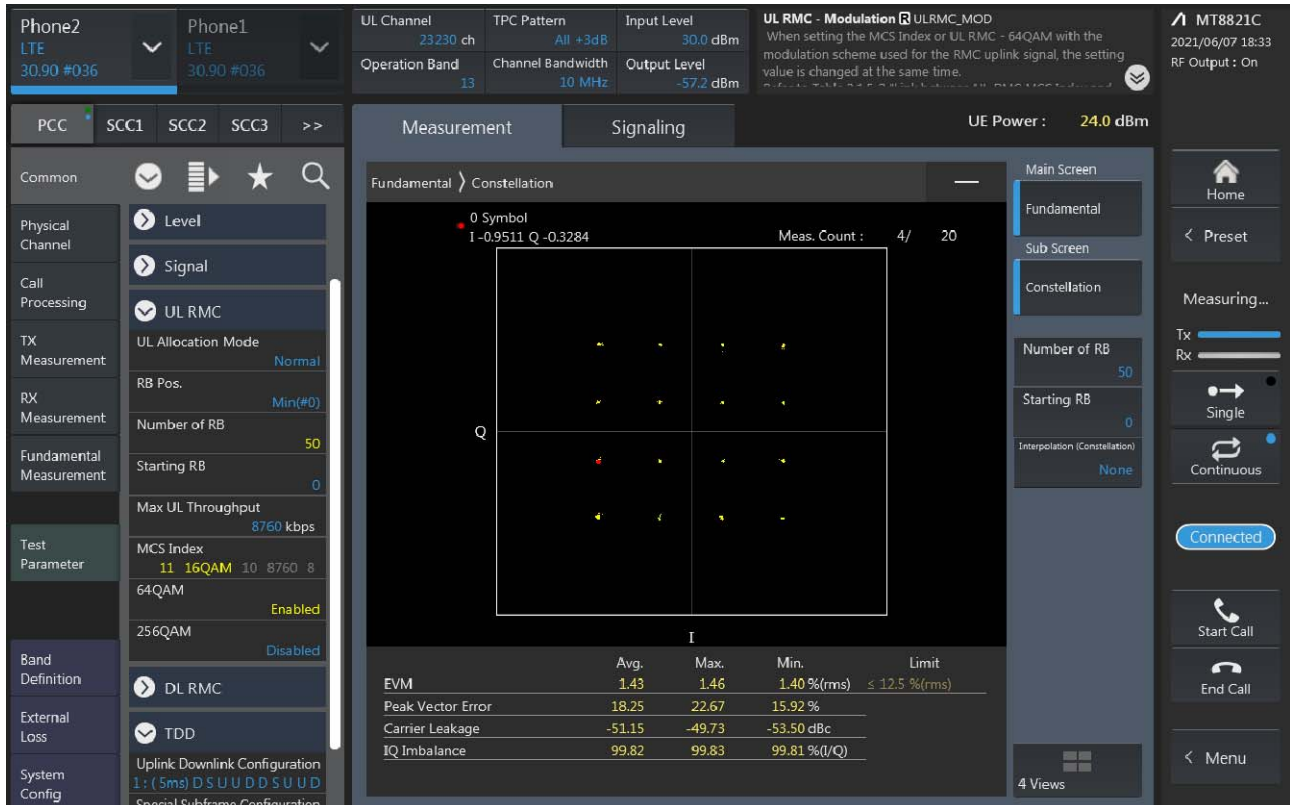
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Testing Center (CCC Laboratory)

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



## 3.2. Test Mode = LTE /TM2 10MHz

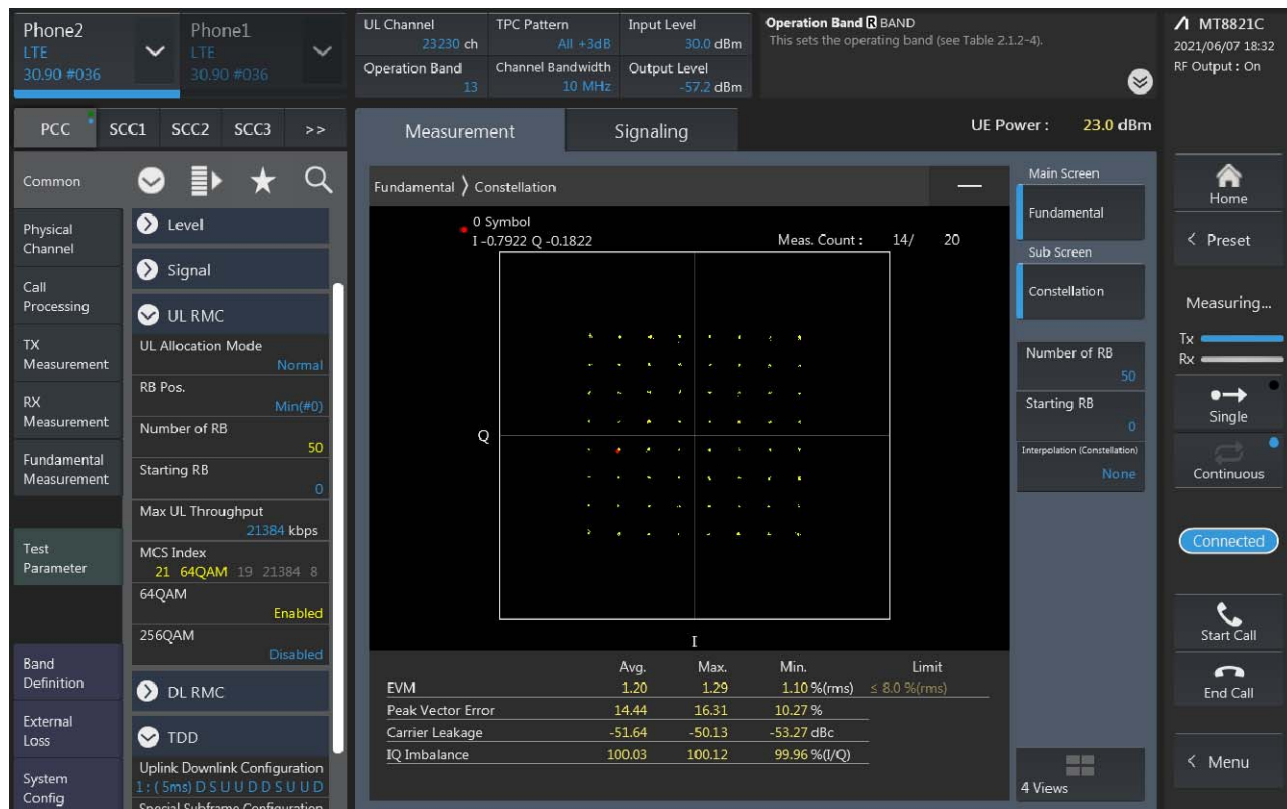
### 3.2.1. Test Channel = MCH





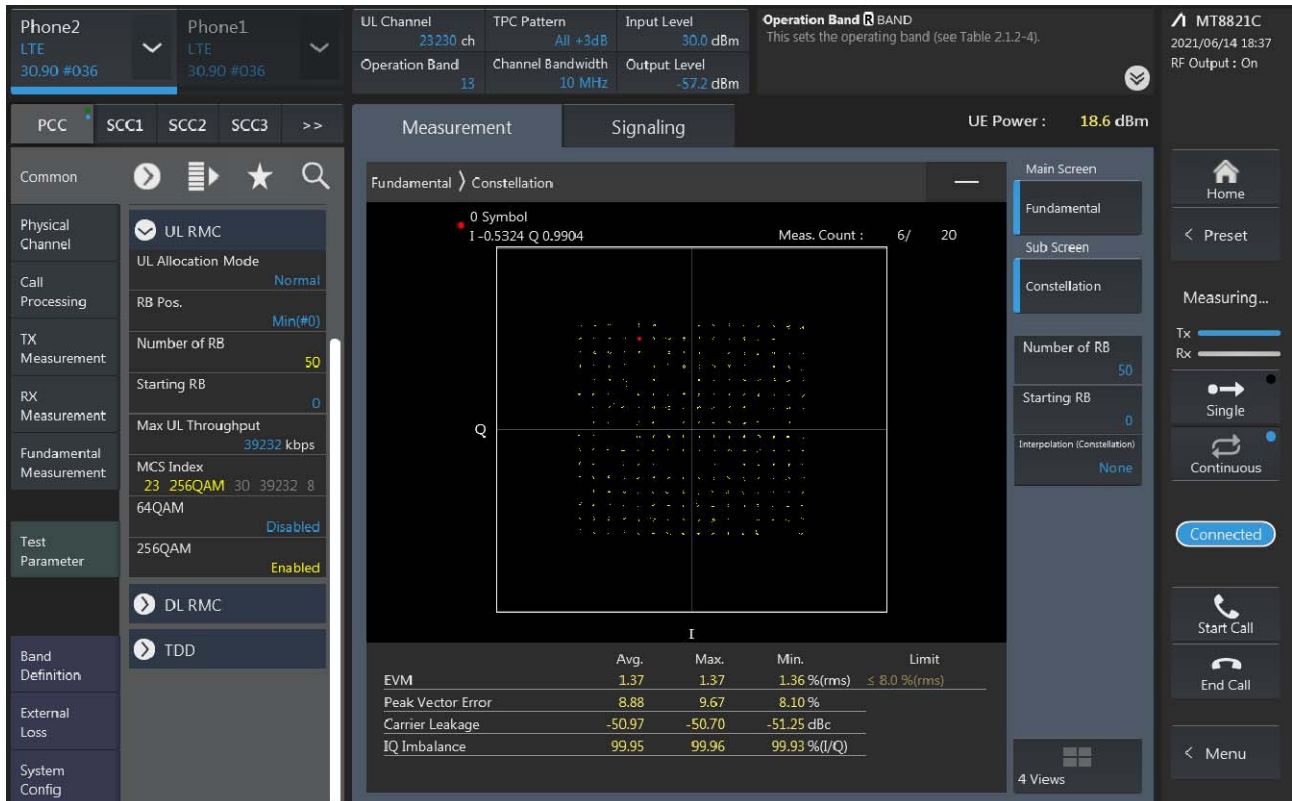
### 3.3. Test Mode = LTE /TM3 10MHz

#### 3.3.1. Test Channel = MCH



### 3.4. Test Mode = LTE /TM4 10MHz

#### 3.4.1. Test Channel = MCH





## 4. 26dB Bandwidth and Occupied Bandwidth

### 4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.456	4.850	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.476	4.880	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.466	4.850	PASS
Band13	5MHz	64QAM	23205	25RB#0	4.466	4.840	PASS
Band13	5MHz	64QAM	23230	25RB#0	4.476	4.850	PASS
Band13	5MHz	64QAM	23255	25RB#0	4.466	4.850	PASS
Band13	5MHz	256QAM	23205	25RB#0	4.486	5.900	PASS
Band13	5MHz	256QAM	23230	25RB#0	4.476	4.920	PASS
Band13	5MHz	256QAM	23255	25RB#0	4.476	4.880	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.476	4.880	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.486	4.910	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.486	4.940	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.911	9.640	PASS
Band13	10MHz	64QAM	23230	50RB#0	8.911	9.560	PASS
Band13	10MHz	256QAM	23230	50RB#0	8.931	9.600	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.911	9.660	PASS



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

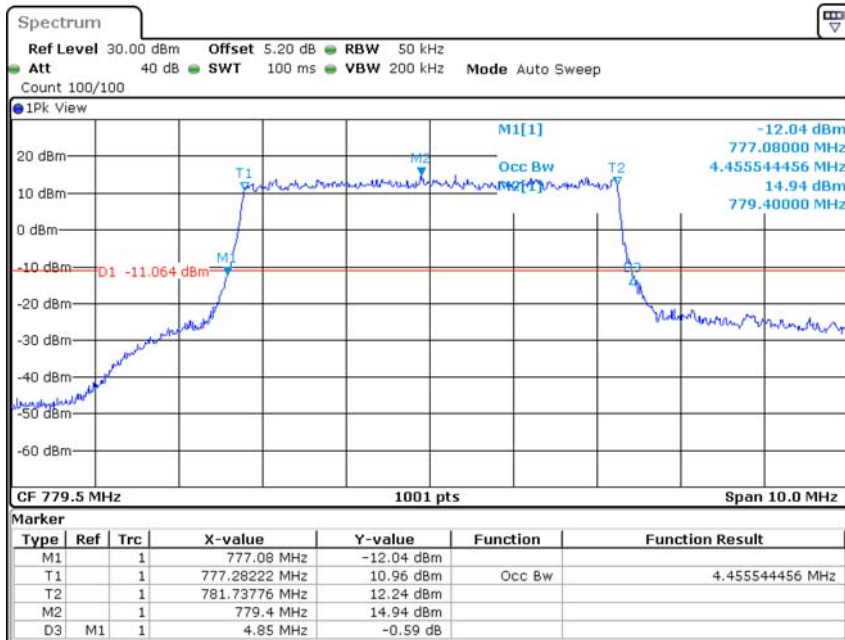
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

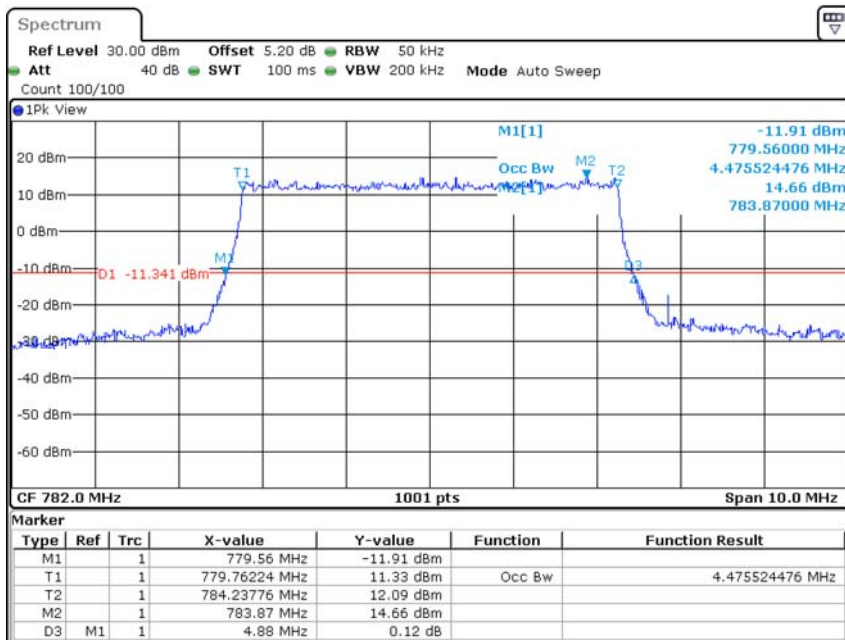
## 4.2. Test Plots

Band13-5MHz-QPSK-23205-25RB#0-4.456



Date: 17.MAY.2021 00:56:33

Band13-5MHz-QPSK-23230-25RB#0-4.476

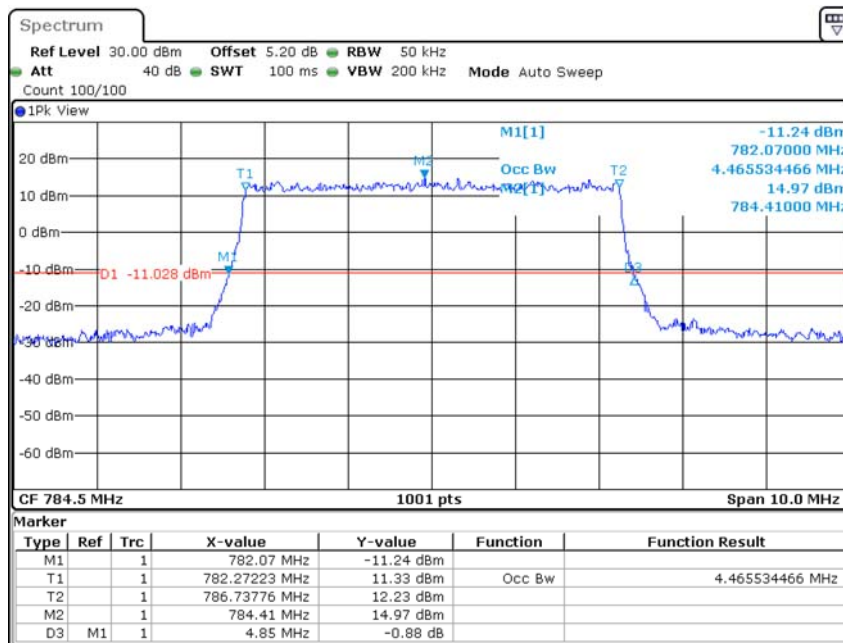


Date: 17.MAY.2021 00:57:12



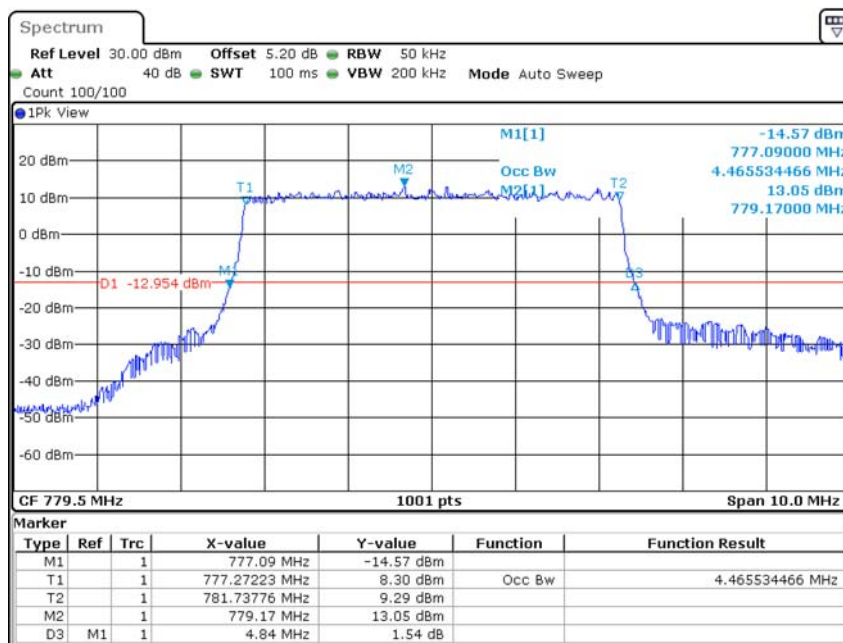


## Band13-5MHz-QPSK-23255-25RB#0-4.466



Date: 17.MAY.2021 00:57:52

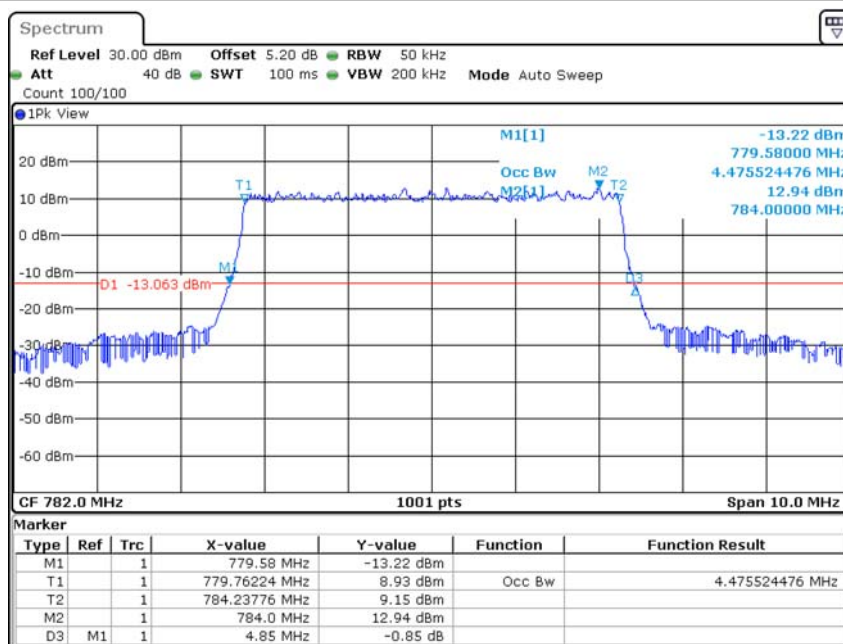
## Band13-5MHz-64QAM-23205-25RB#0-4.466



Date: 17.MAY.2021 01:55:35

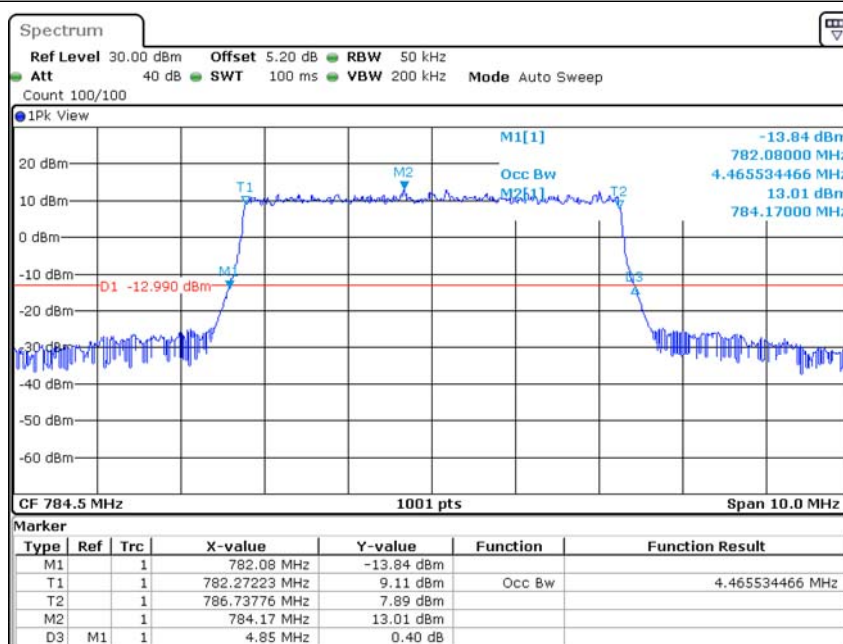


## Band13-5MHz-64QAM-23230-25RB#0-4.476



Date: 17.MAY.2021 01:55:55

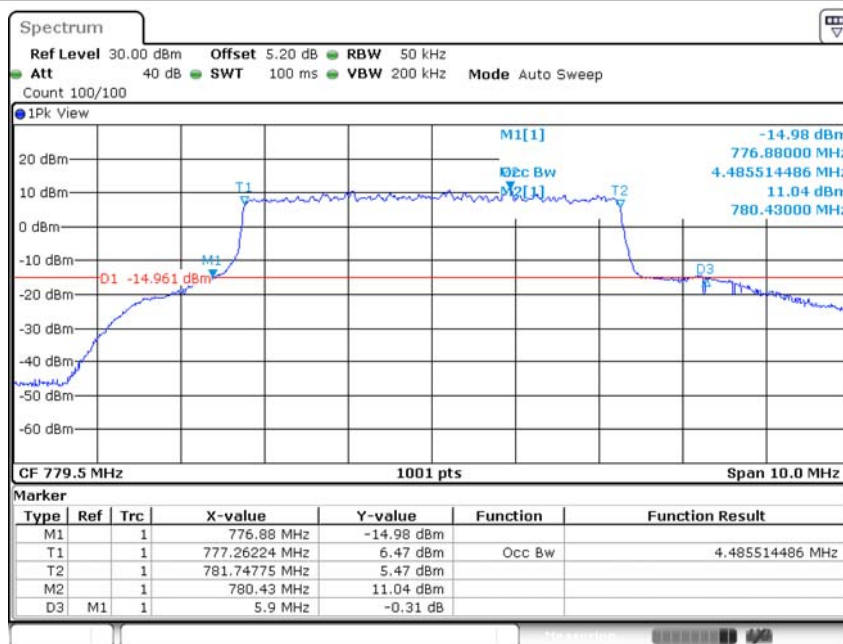
## Band13-5MHz-64QAM-23255-25RB#0-4.466



Date: 17.MAY.2021 01:56:14

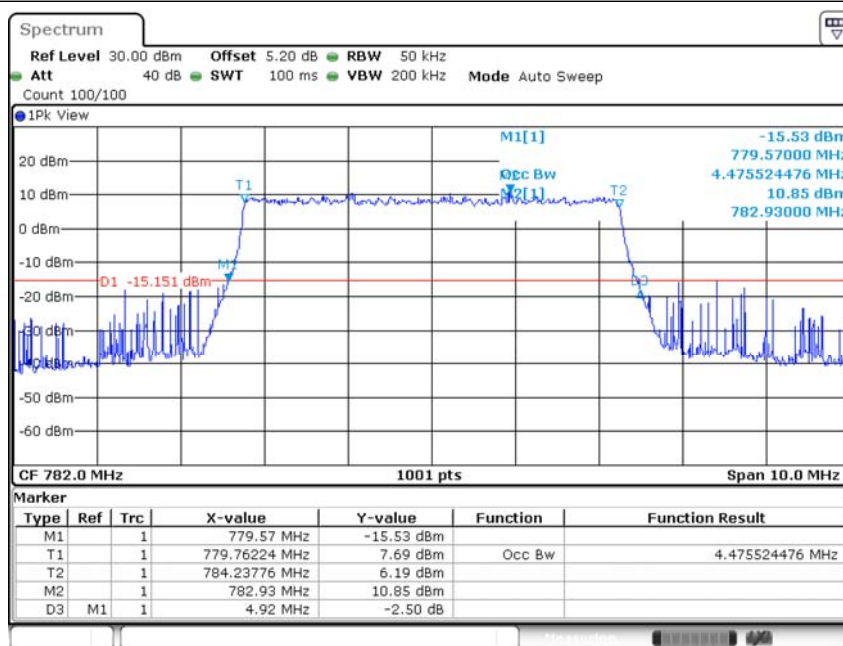


## Band13-5MHz-256QAM-23205-25RB#0-4.486



Date: 5 MAY.2021 04:20:03

## Band13-5MHz-256QAM-23230-25RB#0-4.476



Date: 5 MAY.2021 04:20:23



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

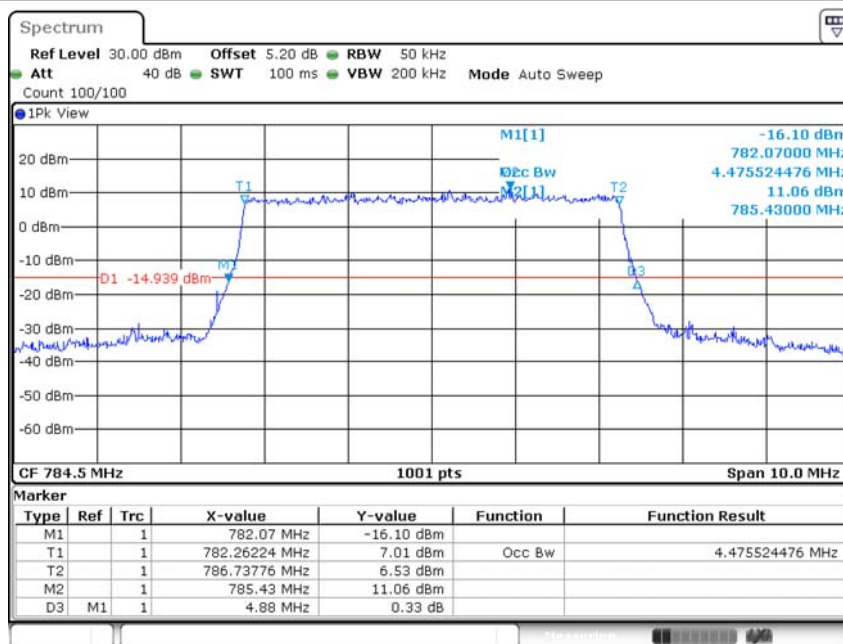
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

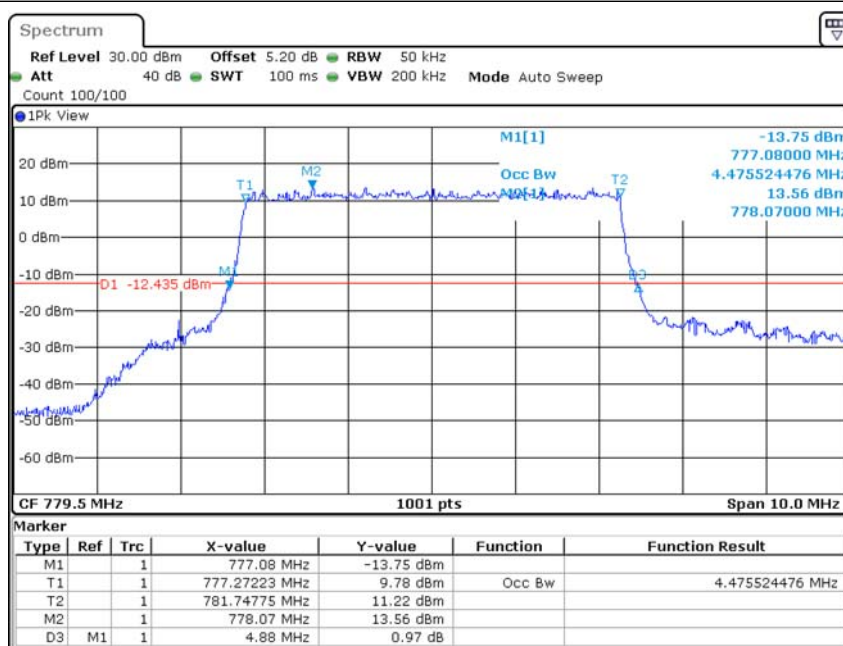


## Band13-5MHz-256QAM-23255-25RB#0-4.476



Date: 5 MAY. 2021 04:20:43

## Band13-5MHz-16QAM-23205-25RB#0-4.476



Date: 17 MAY. 2021 00:56:52



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

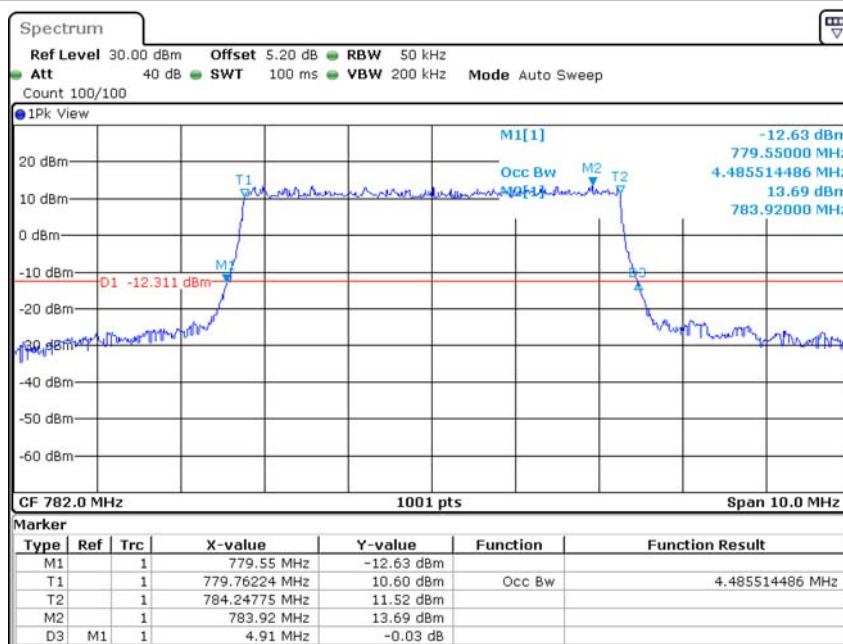
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

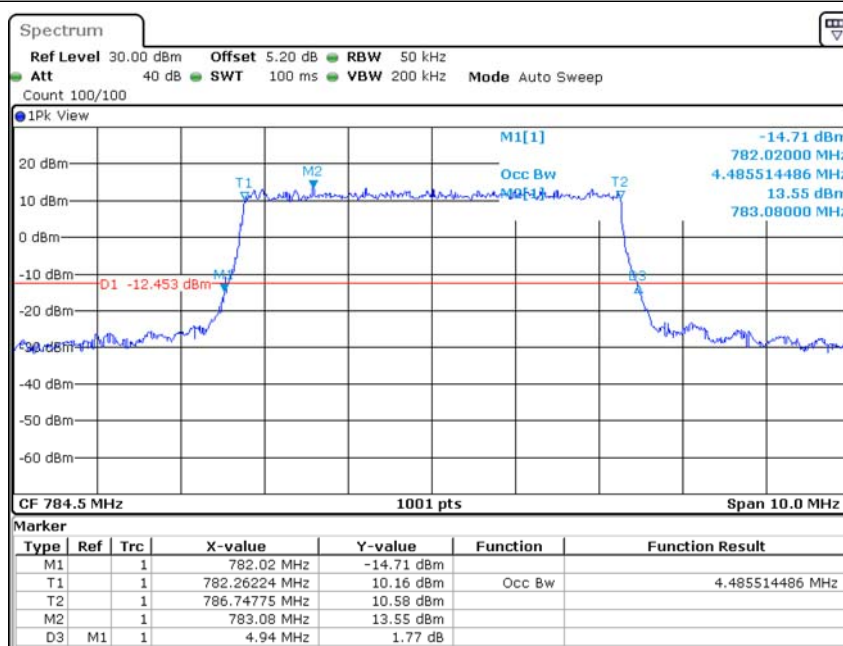


## Band13-5MHz-16QAM-23230-25RB#0-4.486



Date: 17.MAY.2021 00:57:32

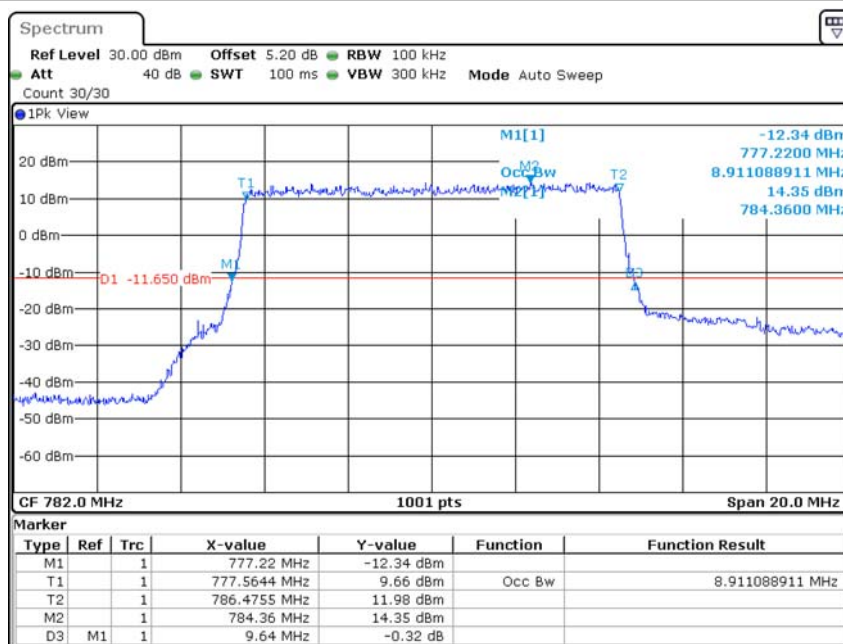
## Band13-5MHz-16QAM-23255-25RB#0-4.486



Date: 17.MAY.2021 00:58:11

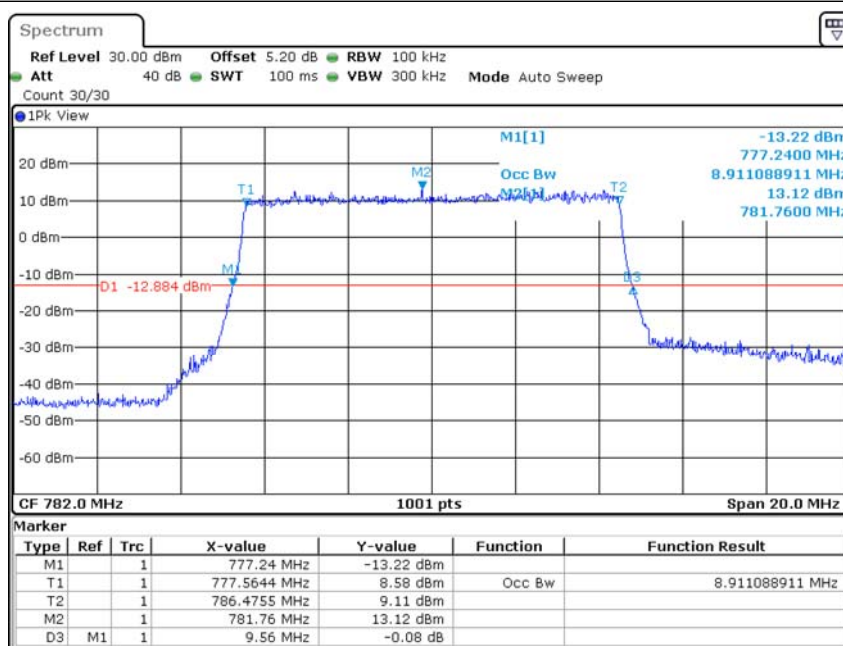


## Band13-10MHz-QPSK-23230-50RB#0-8.911



Date: 17.MAY.2021 00:58:30

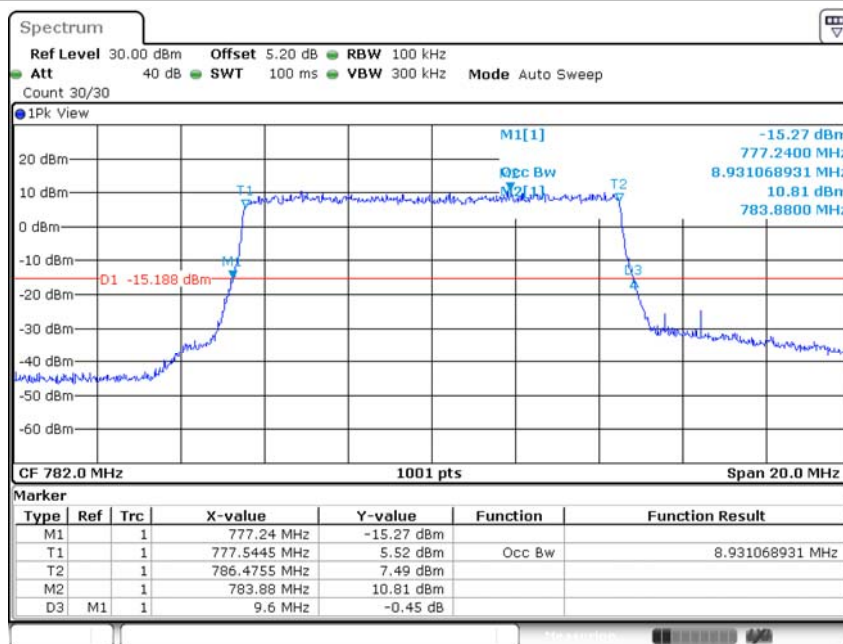
## Band13-10MHz-64QAM-23230-50RB#0-8.911



Date: 17.MAY.2021 01:56:34

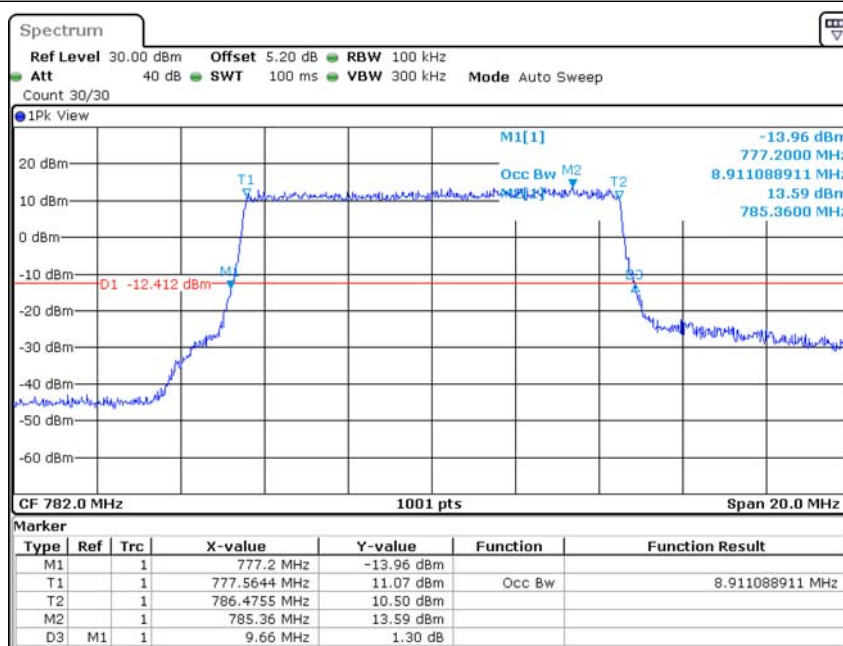


## Band13-10MHz-256QAM-23230-50RB#0-8.931



Date: 5 MAY.2021 04:26:15

## Band13-10MHz-16QAM-23230-50RB#0-8.911



Date: 17 MAY.2021 00:58:42



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

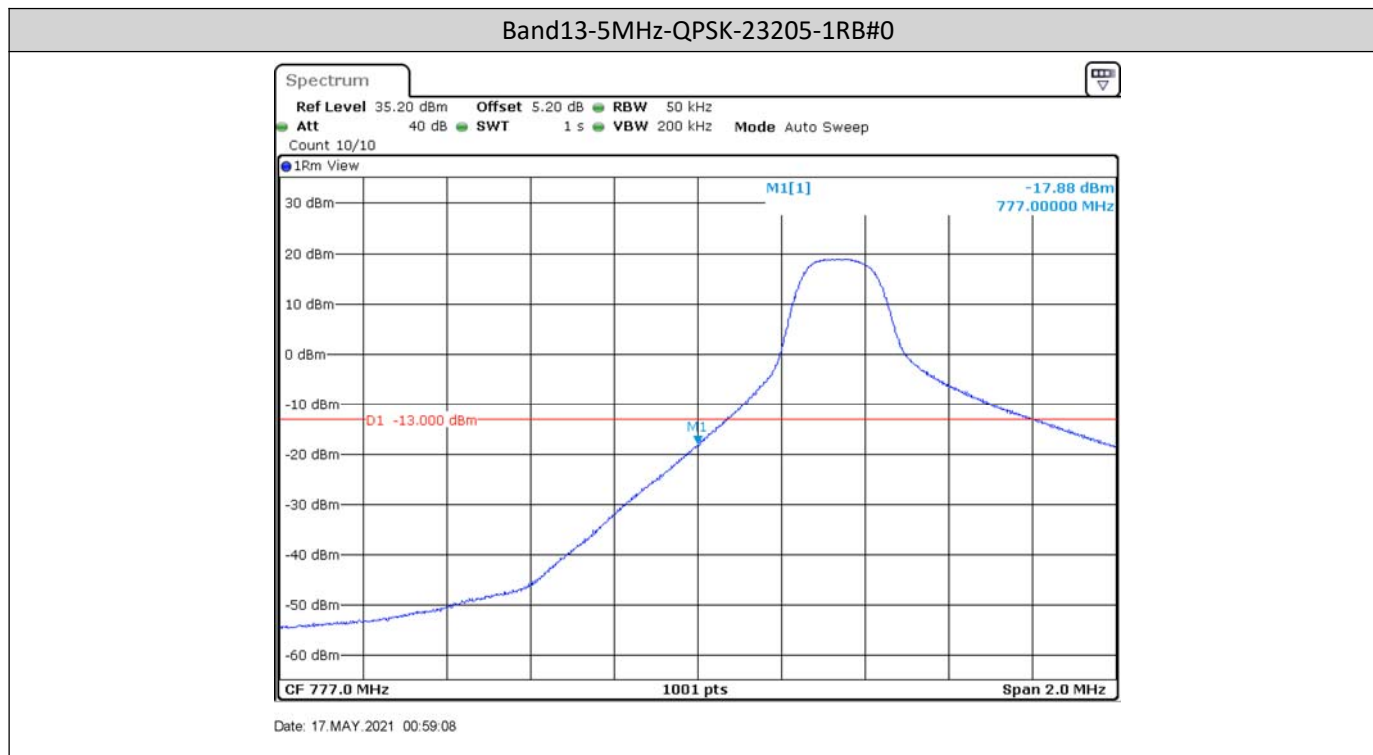
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch (Shenzhen EEC Laboratory)

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



## 5. Band Edge Compliance

### 5.1. Test Plots

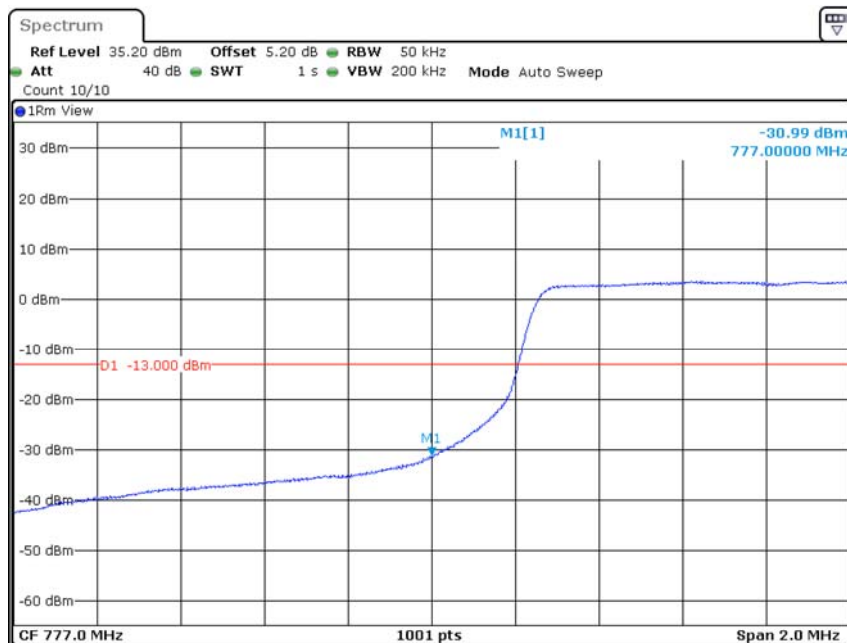


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



**Band13-5MHz-QPSK-23205-25RB#0**



Date: 17.MAY.2021 00:59:50

**Band13-5MHz-QPSK-23255-1RB#24**



Date: 17.MAY.2021 01:00:35



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 (Testing Center) EEC Laboratory

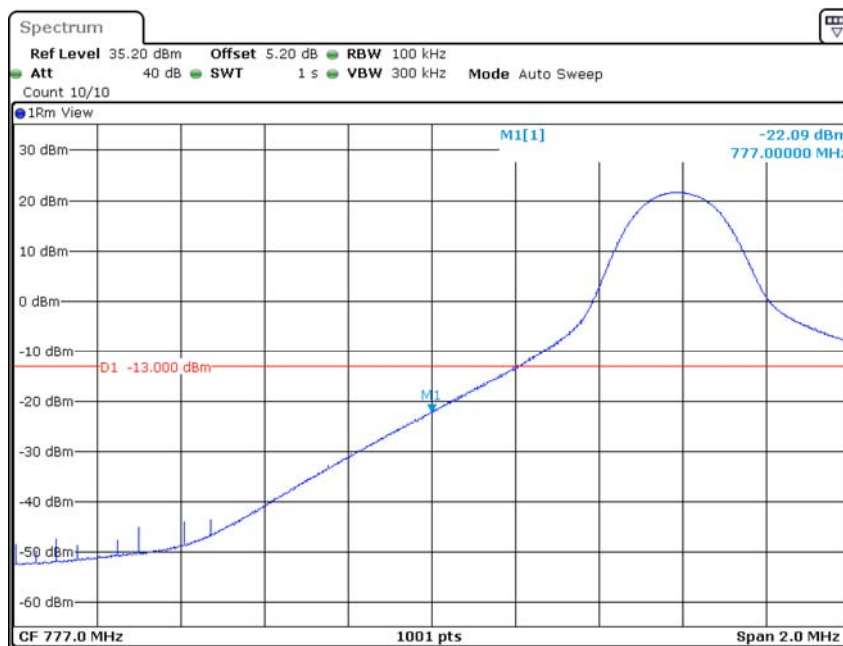
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

**Band13-5MHz-QPSK-23255-25RB#0**



Date: 17.MAY.2021 01:01:16

**Band13-10MHz-QPSK-23230\_Left-1RB#0**



Date: 17.MAY.2021 01:02:02



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  
Shenzhen Branch Testing Center EEC Laboratory

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

**Band13-10MHz-QPSK-23230\_Right-1RB#49**



Date: 17.MAY.2021 01:02:47

**Band13-10MHz-QPSK-23230\_Right-50RB#0**



Date: 17.MAY.2021 01:03:29



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

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



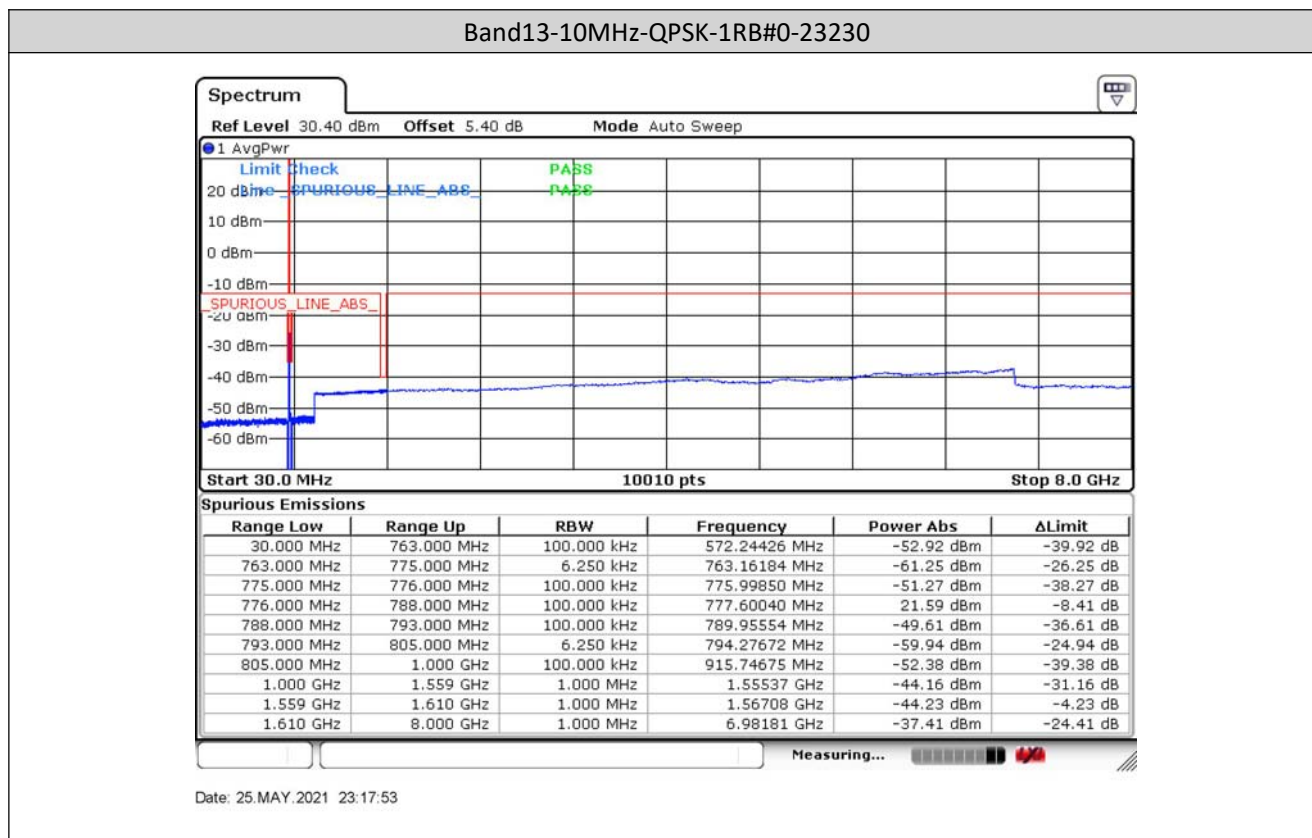
## 6. Spurious Emission at Antenna Terminal

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

Remark2: 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.

Remark3: 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 had been displayed.

### 6.1. Test Plots



## 7. Field Strength of Spurious Radiation

### 7.1. Test Band = Band 13

#### 7.1.1. Test Channel = Mid Channel

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1406.3203	35.80	-53.27	-13.00	40.27	Horizontal
2	1555.2278	38.12	-51.16	-13.00	38.16	Horizontal
3	2187.4594	28.42	-58.14	-13.00	45.14	Horizontal
4	2978.1989	21.99	-60.99	-13.00	47.99	Horizontal
5	4571.9286	51.35	-60.35	-13.00	47.35	Horizontal
6	7464.4732	48.90	-53.42	-13.00	40.42	Horizontal



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

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

## 7.2. Test Band = Band 13

### 7.2.1. Test Channel = Mid Channel

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1406.2203	40.76	-48.31	-13.00	35.31	Vertical
2	1562.5281	38.48	-50.83	-13.00	37.83	Vertical
3	2812.4906	23.08	-60.59	-13.00	47.59	Vertical
4	4531.3266	52.46	-59.37	-13.00	46.37	Vertical
5	7968.8484	53.96	-47.98	-13.00	34.98	Vertical
6	9604.4802	46.75	-51.47	-13.00	38.47	Vertical

#### 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-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)

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

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





## 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
Band13	10MHz	QPSK	23230	50RB#0	VL	NT	1.60	0.002046	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	VN	NT	3.10	0.003964	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	VH	NT	-3.50	-0.004476	±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
Band13	10MHz	QPSK	23230	50RB#0	NV	-30	1.50	0.001918	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	1.00	0.001279	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	-1.50	-0.001918	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	-2.30	-0.002941	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	-0.40	-0.000512	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	1.00	0.001279	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	0.50	0.000639	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	0.50	0.000639	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	1.80	0.002302	±2.5	PASS

