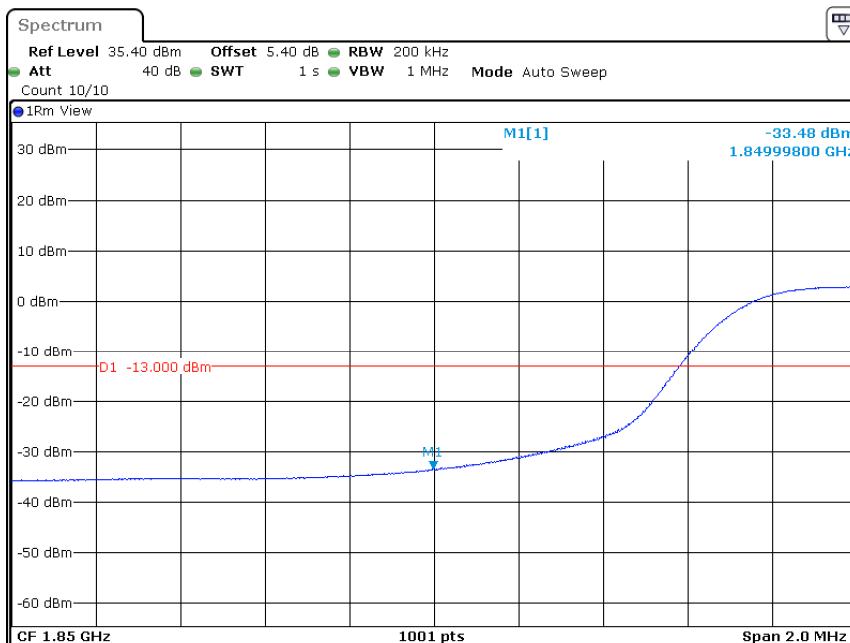


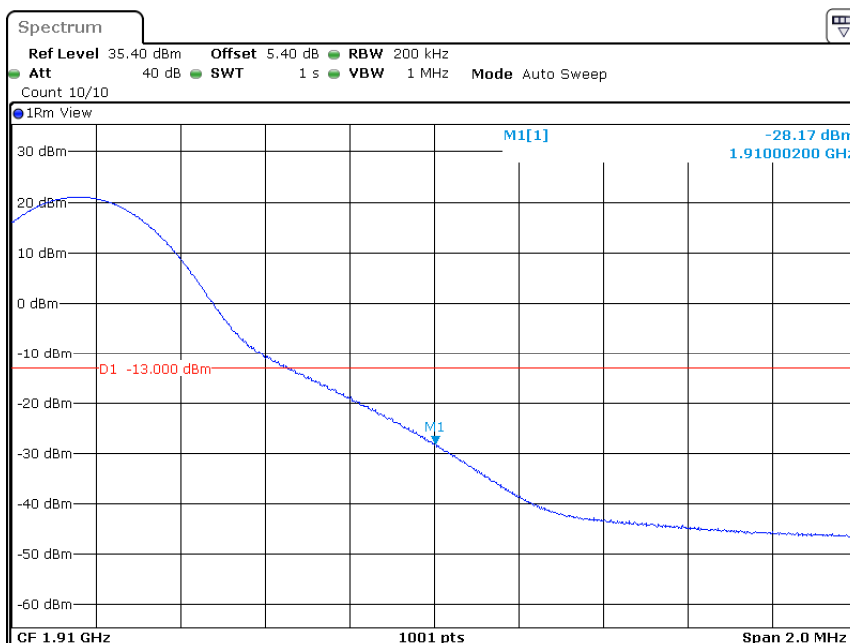


Band2-15MHz-64QAM-18675-75RB#0



Date: 7.SEP.2020 12:23:55

Band2-15MHz-64QAM-19125-1RB#74



Date: 7.SEP.2020 12:23:09



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

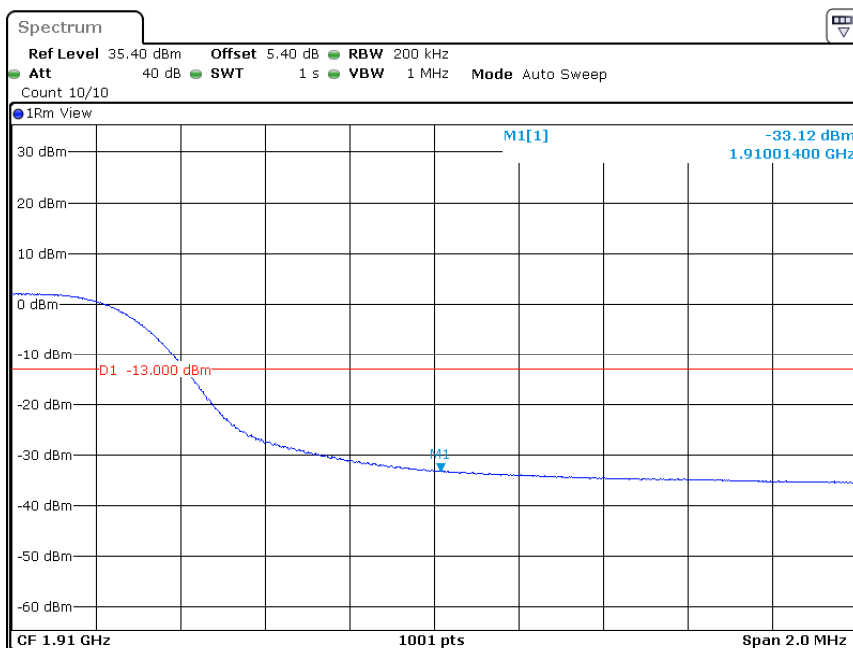
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

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

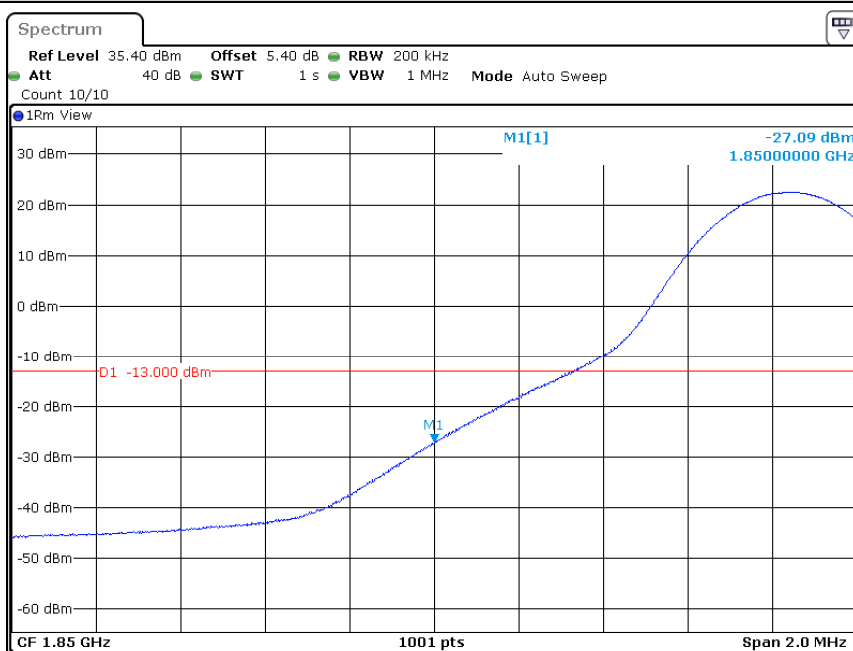


Band2-15MHz-64QAM-19125-75RB#0



Date: 7.SEP.2020 12:24:16

Band2-15MHz-16QAM-18675-1RB#0



Date: 7.SEP.2020 10:32:44



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

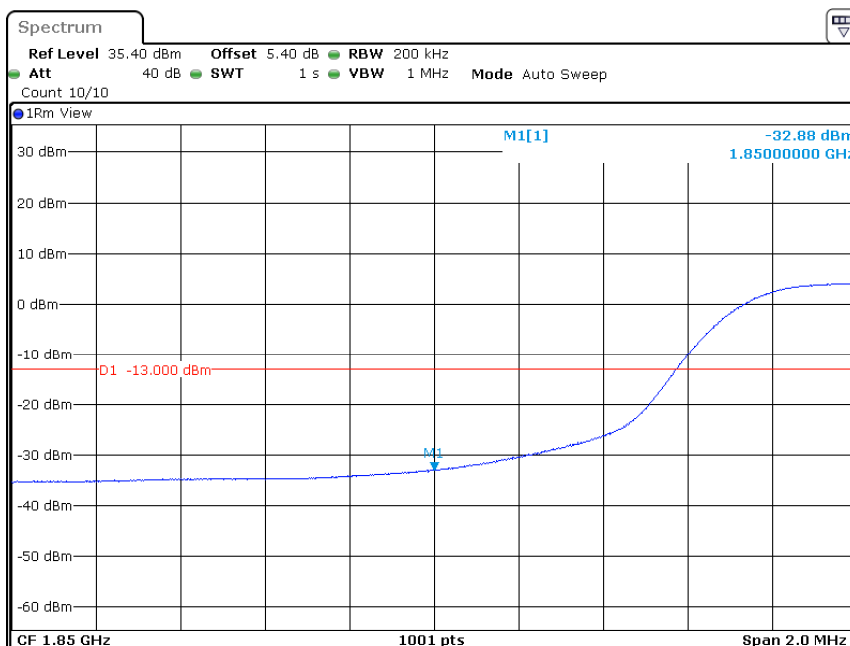
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SZ) CCC Laboratory

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

Member of the SGS Group (SGS SA)

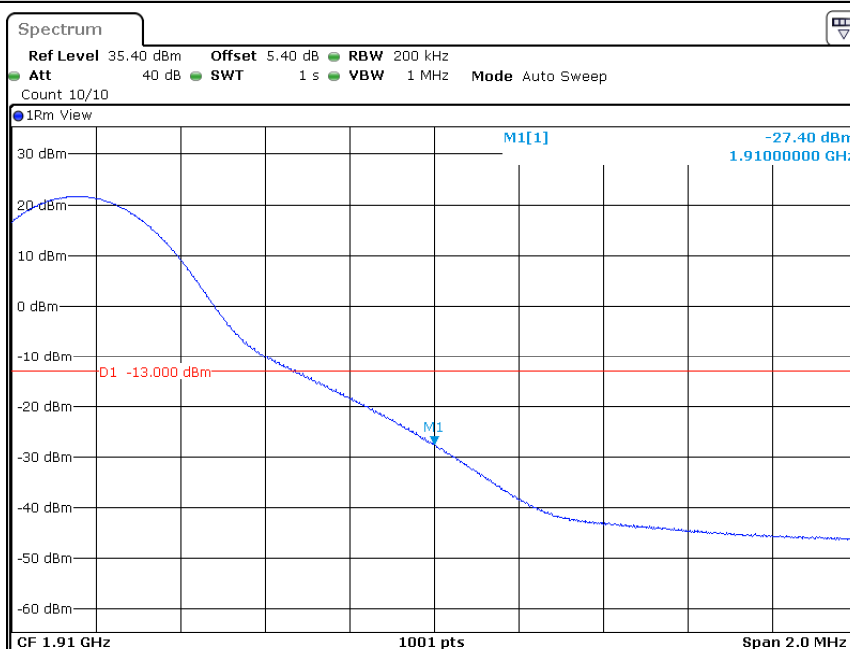


Band2-15MHz-16QAM-18675-75RB#0



Date: 7.SEP.2020 10:35:38

Band2-15MHz-16QAM-19125-1RB#74



Date: 7.SEP.2020 10:34:10



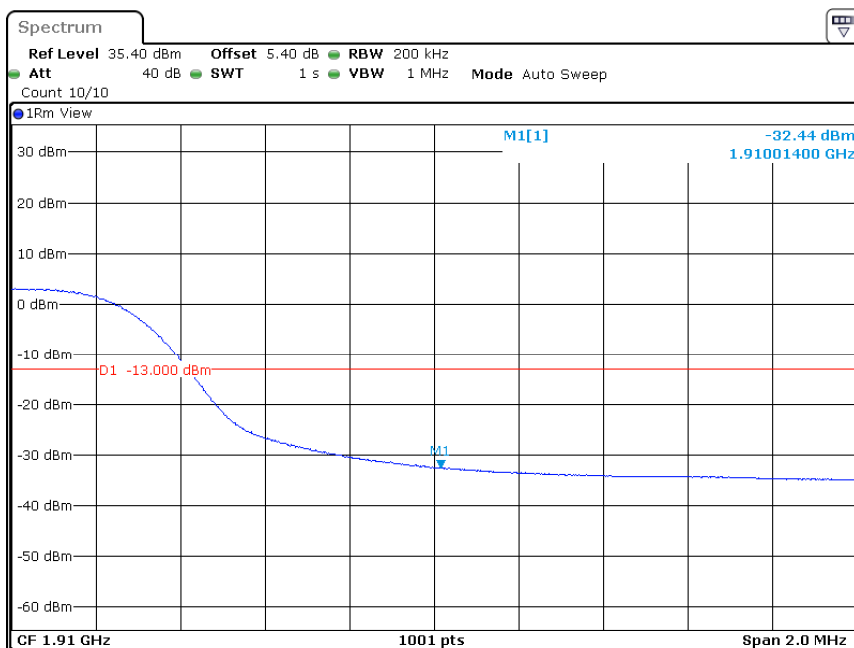
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (2019) China CCC Laboratory

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

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

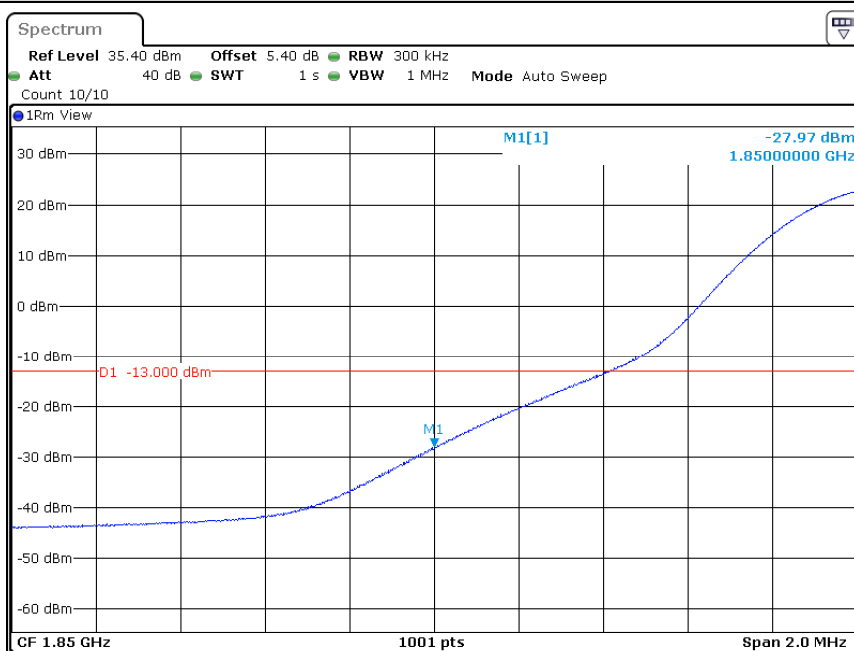


Band2-15MHz-16QAM-19125-75RB#0



Date: 7.SEP.2020 10:36:19

Band2-20MHz-QPSK-18700-1RB#0



Date: 7.SEP.2020 10:36:45



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.

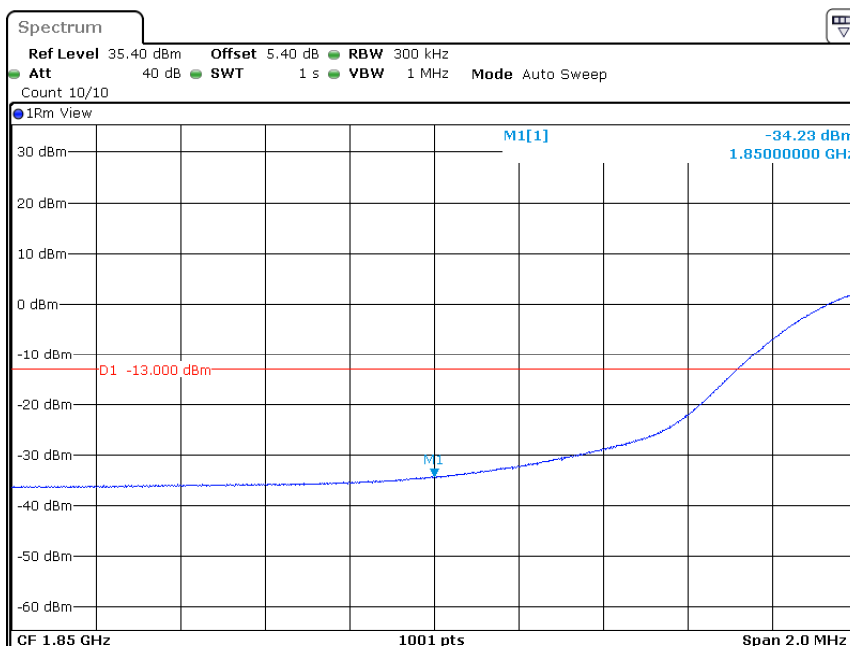
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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

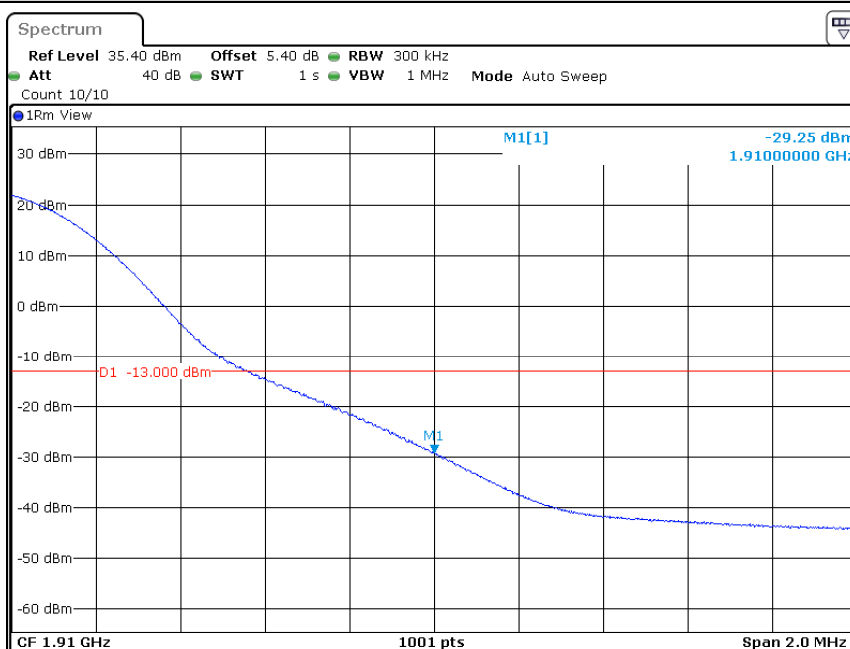


Band2-20MHz-QPSK-18700-100RB#0



Date: 7.SEP.2020 10:39:40

Band2-20MHz-QPSK-19100-1RB#99



Date: 7.SEP.2020 10:38:12



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

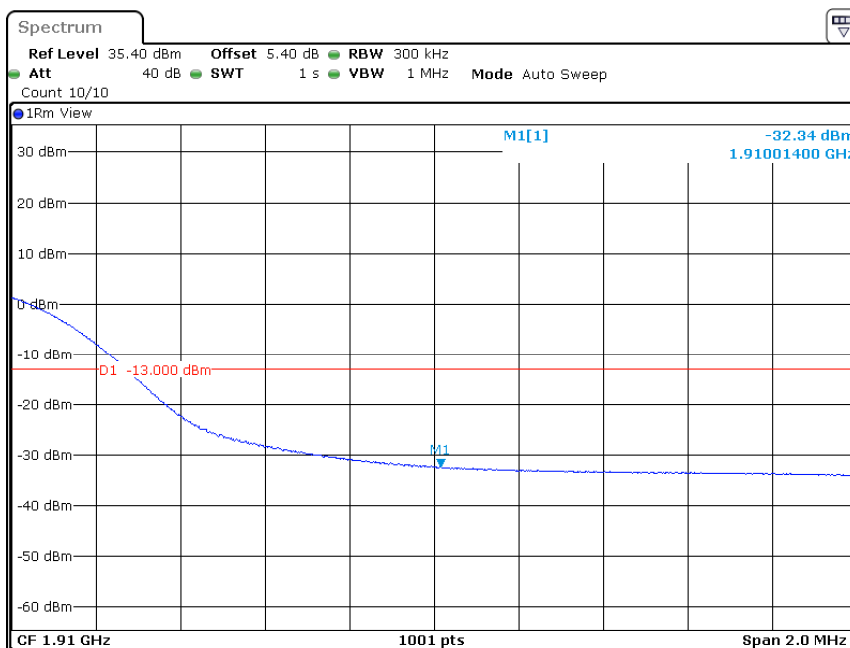
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

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

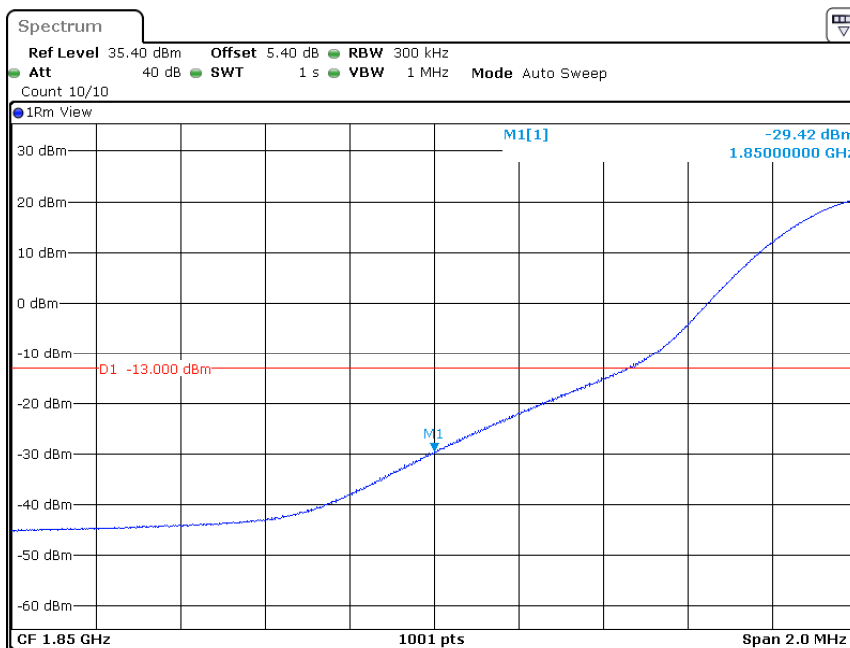


Band2-20MHz-QPSK-19100-100RB#0



Date: 7.SEP.2020 10:40:21

Band2-20MHz-64QAM-18700-1RB#0

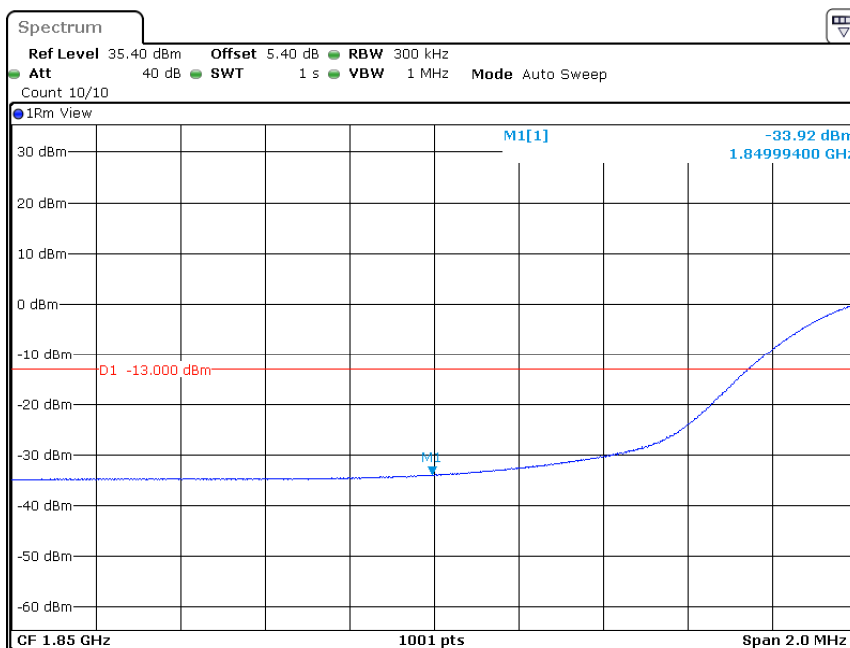


Date: 7.SEP.2020 12:24:43



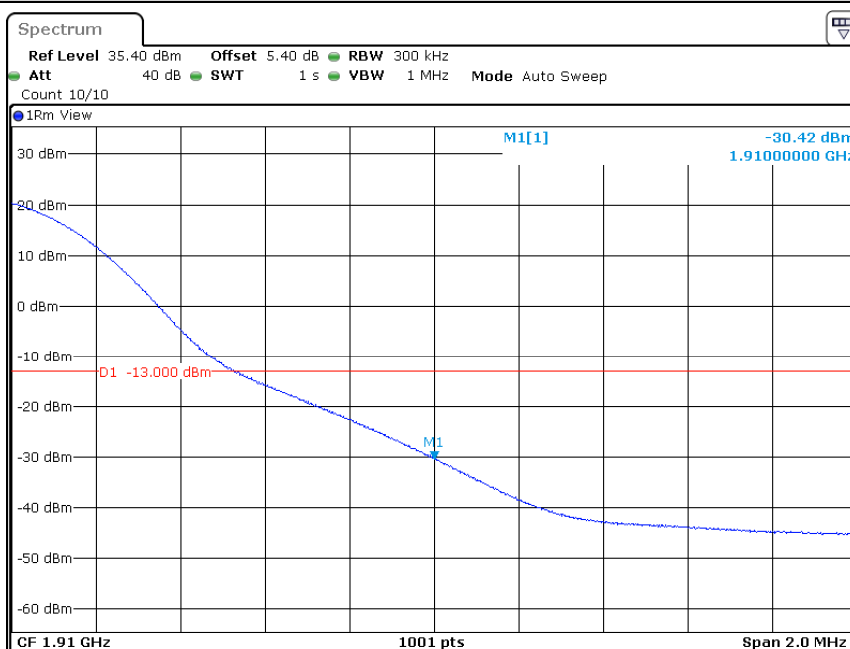


Band2-20MHz-64QAM-18700-100RB#0



Date: 7.SEP.2020 12:26:17

Band2-20MHz-64QAM-19100-1RB#99



Date: 7.SEP.2020 12:25:30



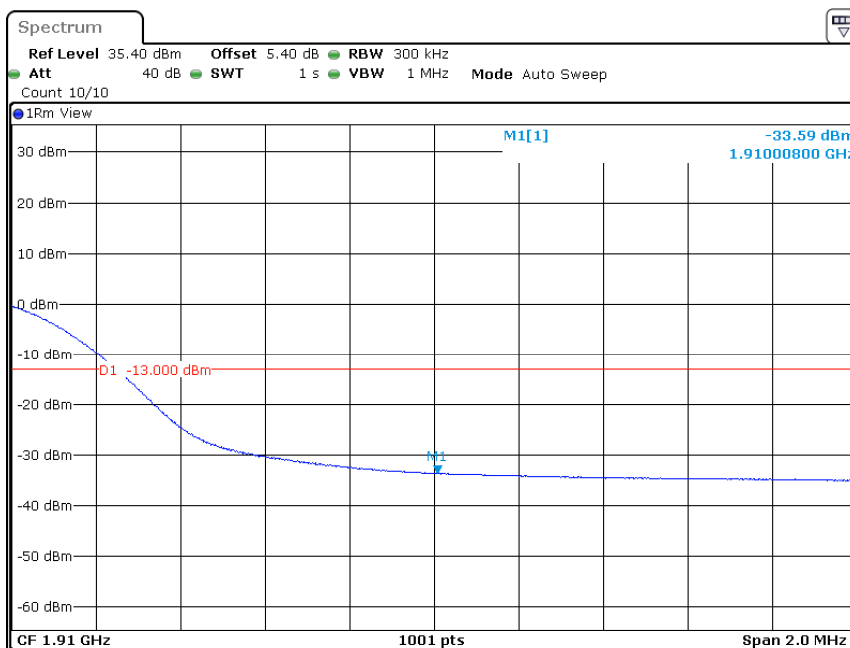
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (CCC Laboratory)

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

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

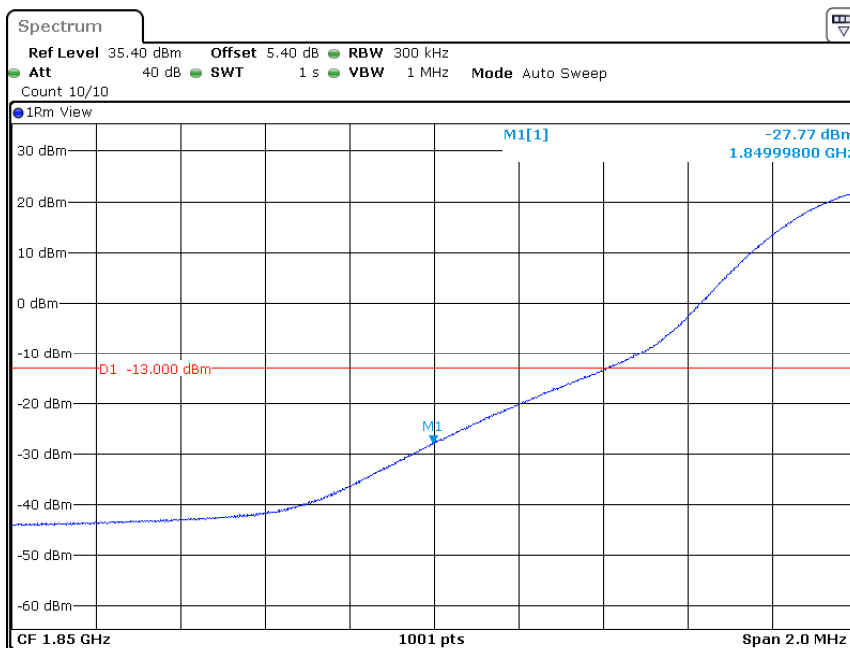


Band2-20MHz-64QAM-19100-100RB#0



Date: 7.SEP.2020 12:26:37

Band2-20MHz-16QAM-18700-1RB#0



Date: 7.SEP.2020 10:37:06



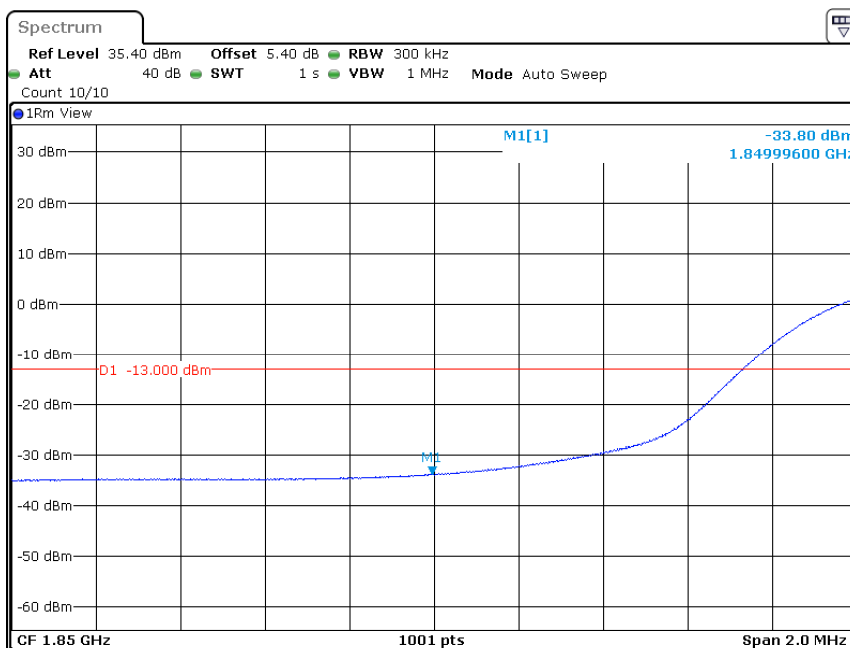
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (2019) China CCC Laboratory

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

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

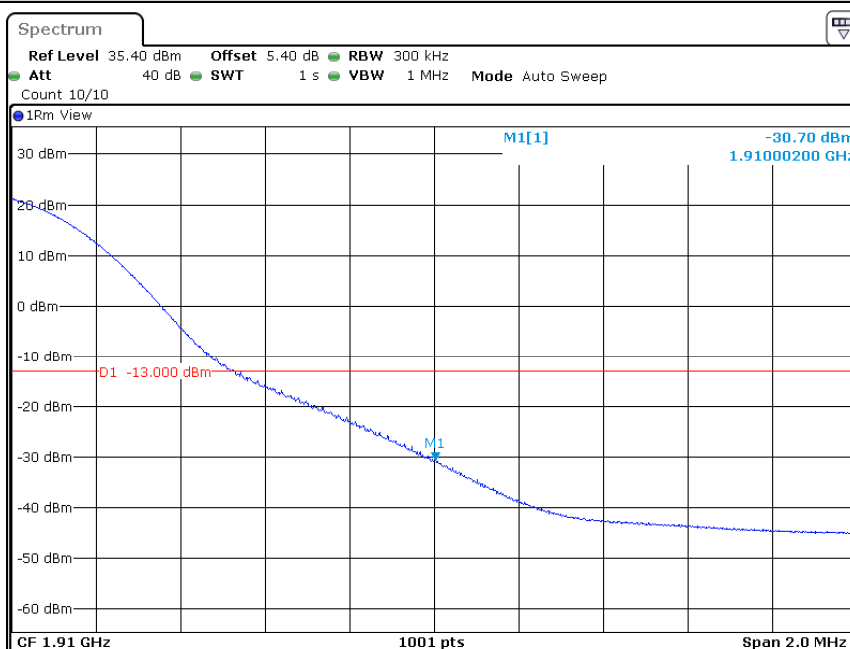


Band2-20MHz-16QAM-18700-100RB#0



Date: 7.SEP.2020 10:40:00

Band2-20MHz-16QAM-19100-1RB#99



Date: 7.SEP.2020 10:38:33



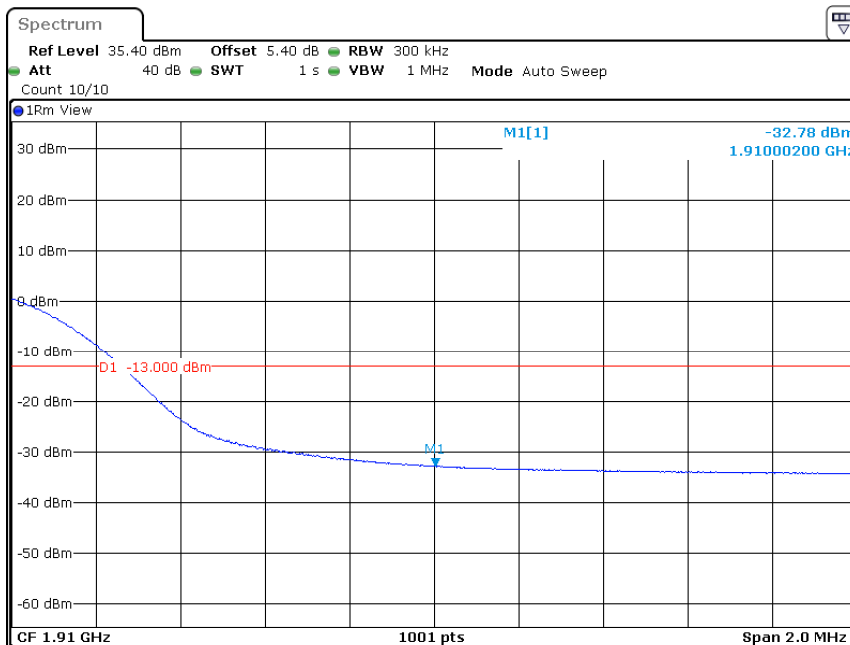
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

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

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



Band2-20MHz-16QAM-19100-100RB#0



Date: 7.SEP.2020 10:40:42



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

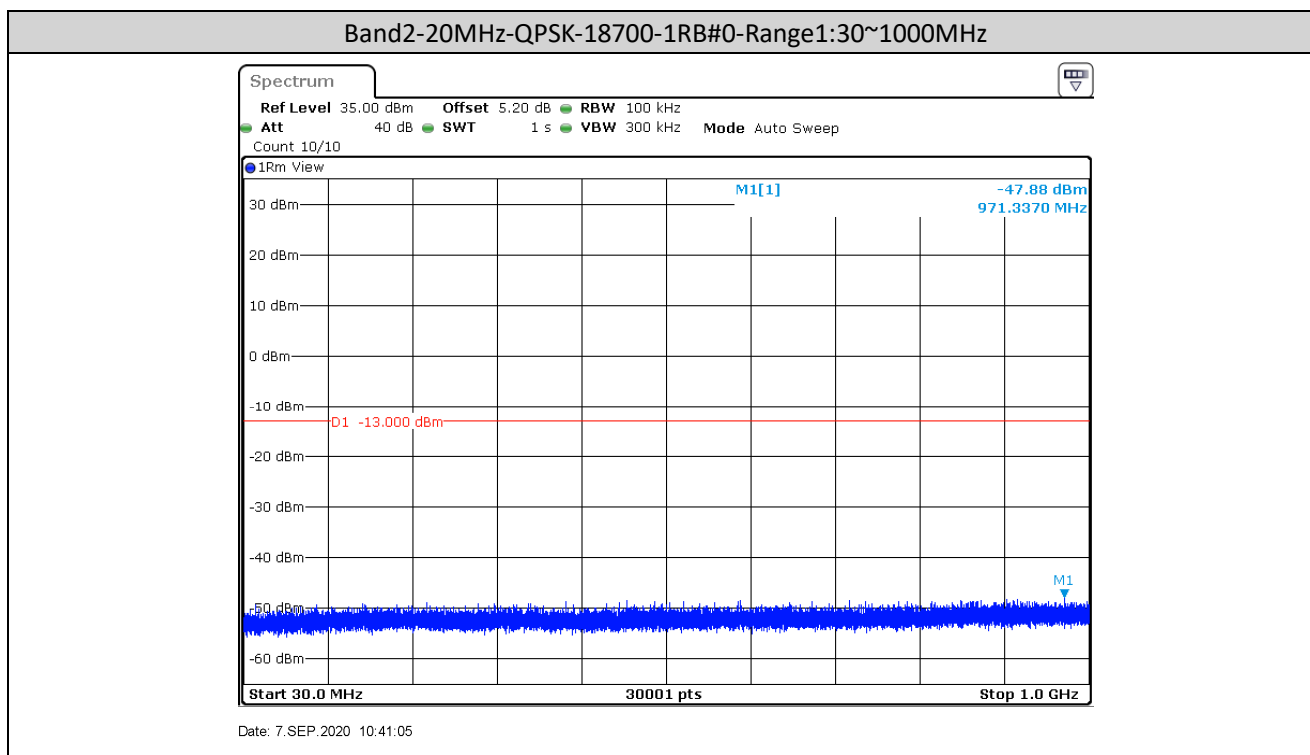
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6. Spurious Emission at Antenna Terminal

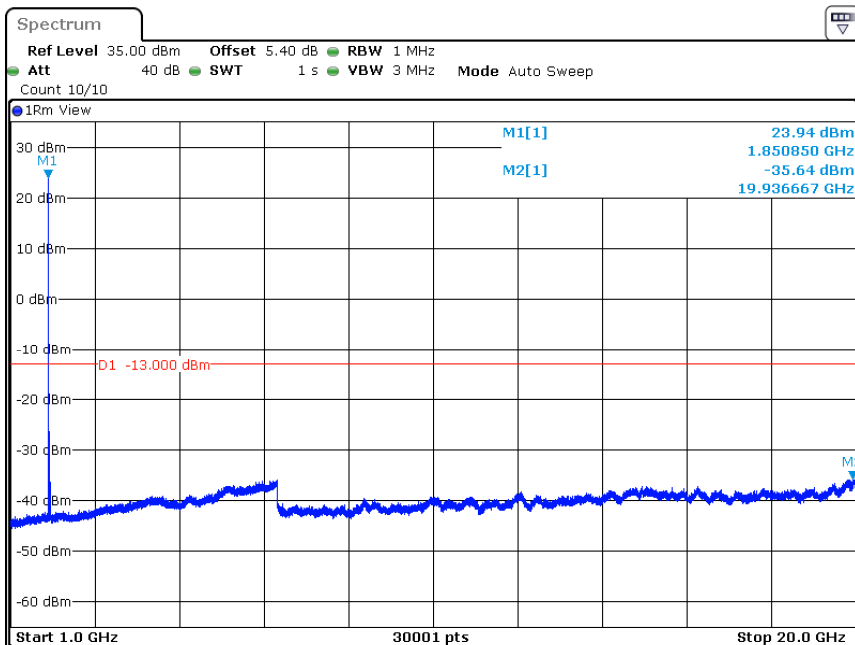
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =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

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

6.1. Test Plots

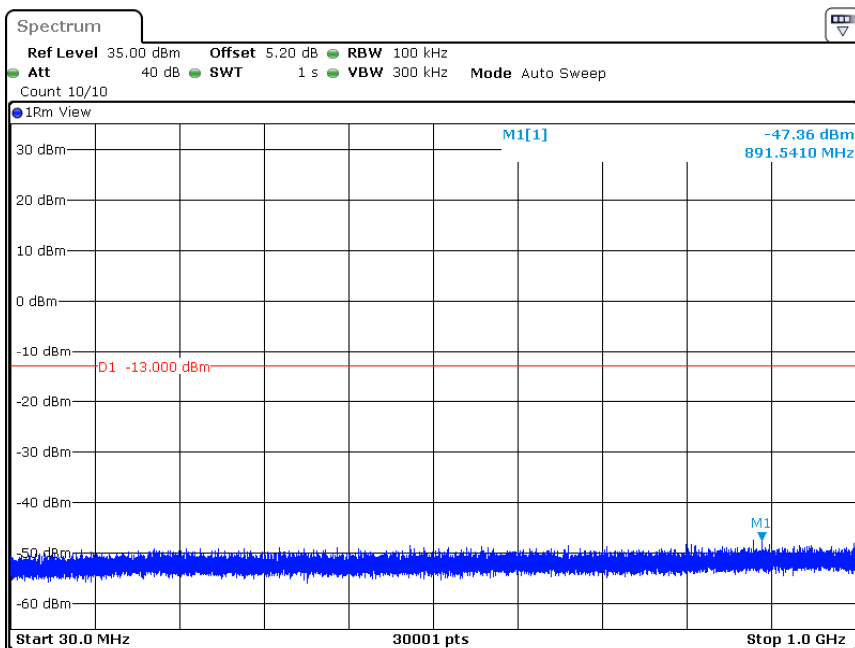


Band2-20MHz-QPSK-18700-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 10:41:21

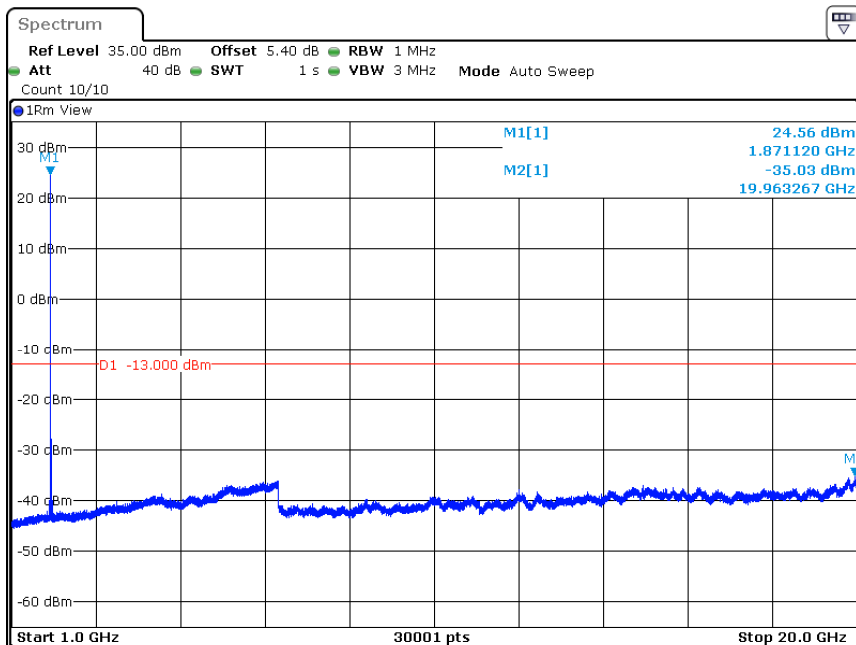
Band2-20MHz-QPSK-18900-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 10:42:16

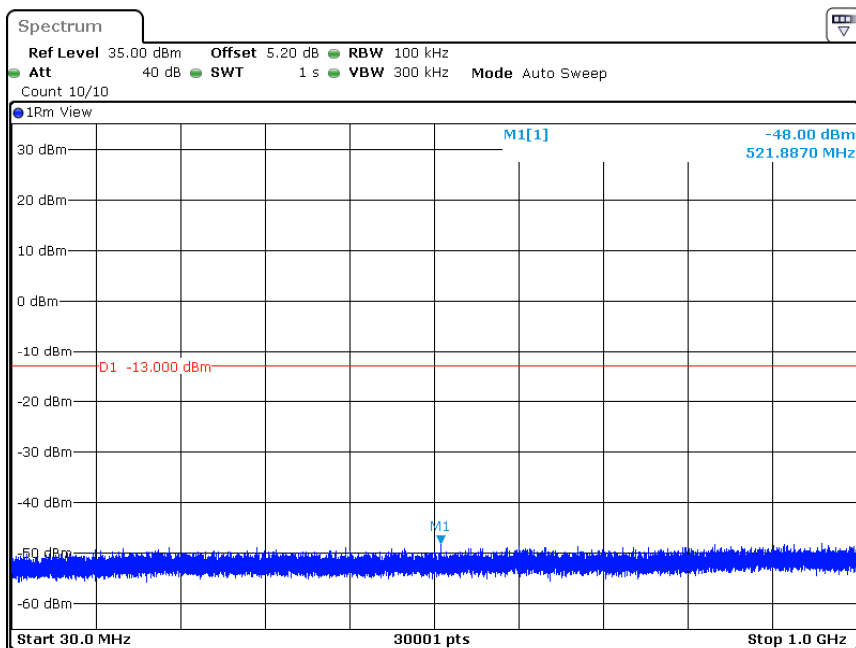


Band2-20MHz-QPSK-18900-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 10:42:32

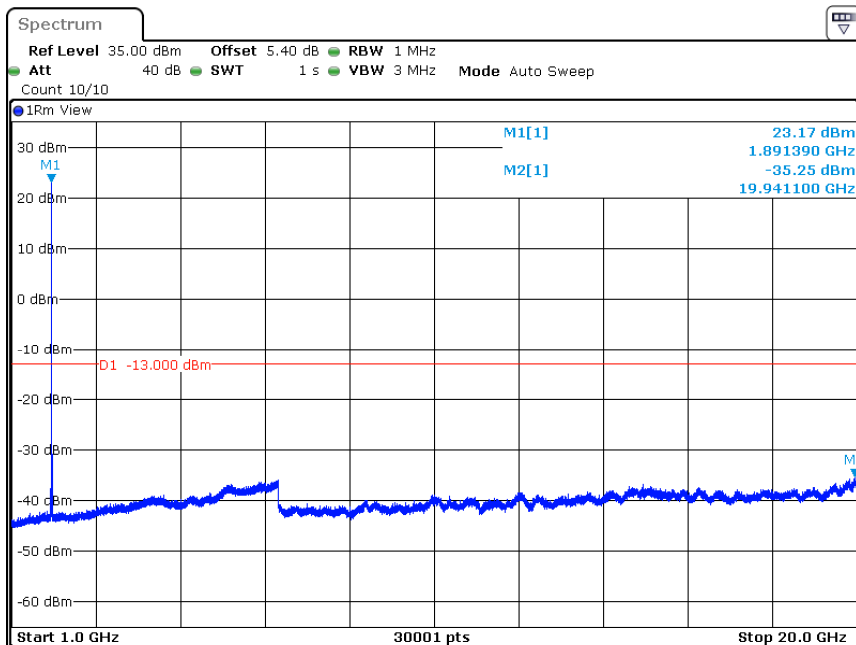
Band2-20MHz-QPSK-19100-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 10:43:26

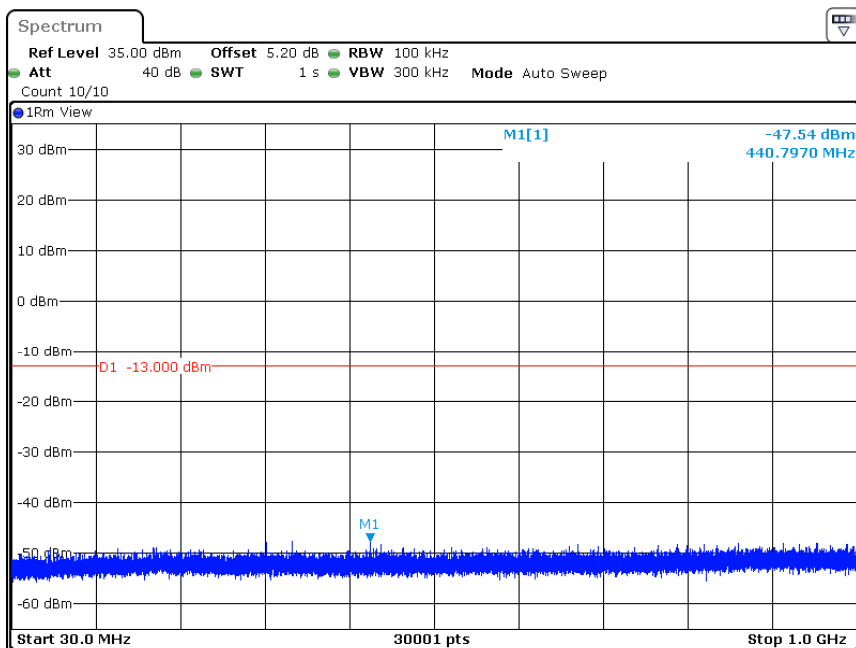


Band2-20MHz-QPSK-19100-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 10:43:42

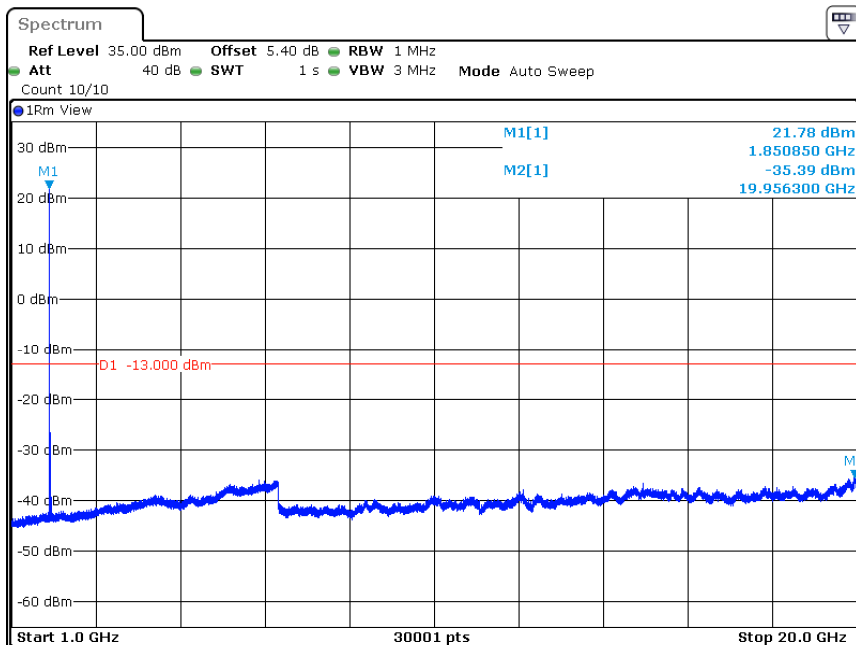
Band2-20MHz-64QAM-18700-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 12:27:02

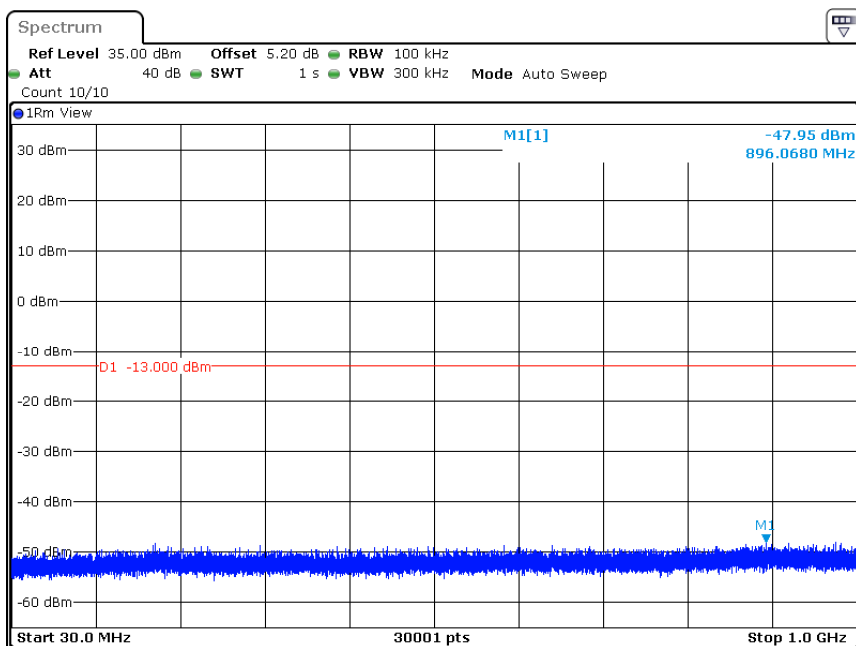


Band2-20MHz-64QAM-18700-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 12:27:18

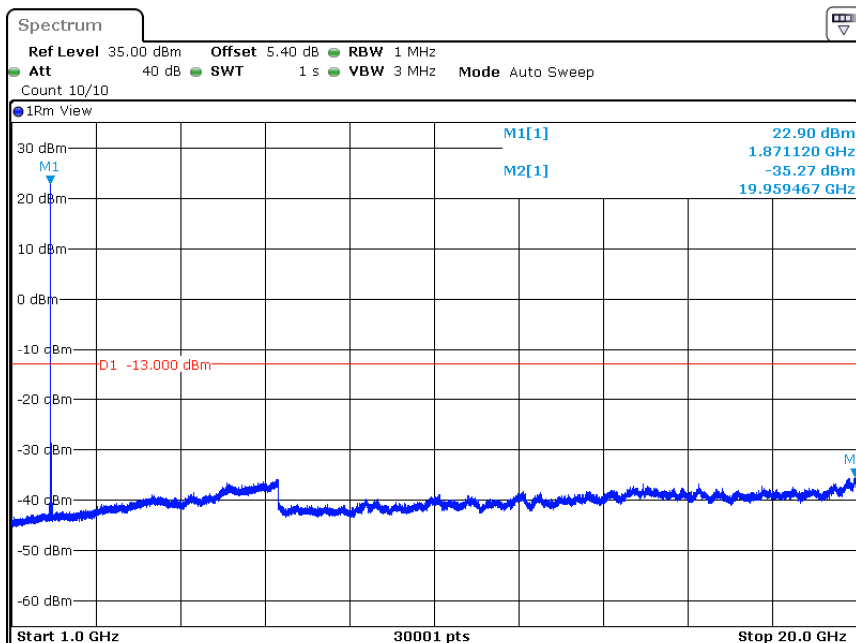
Band2-20MHz-64QAM-18900-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 12:27:37

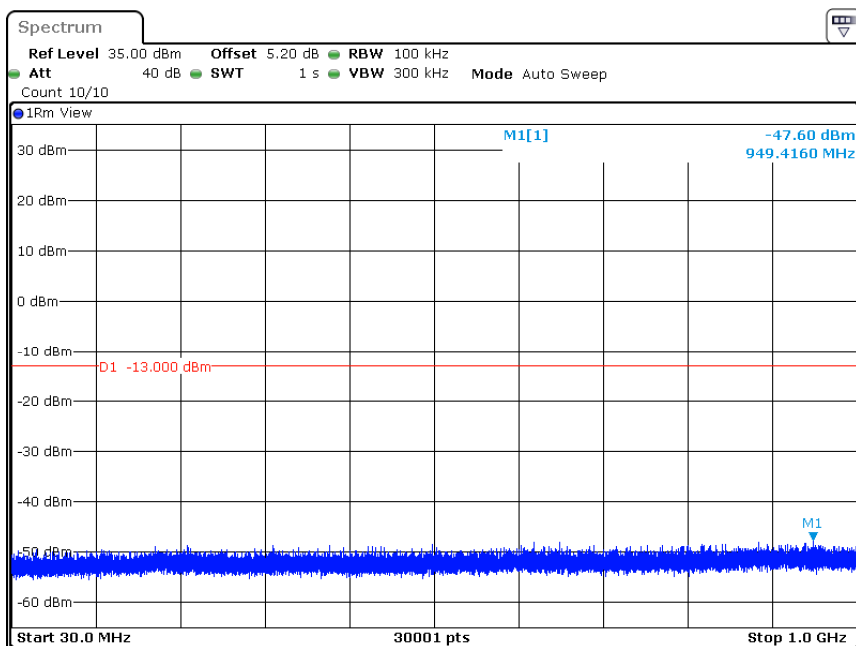


Band2-20MHz-64QAM-18900-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 12:27:53

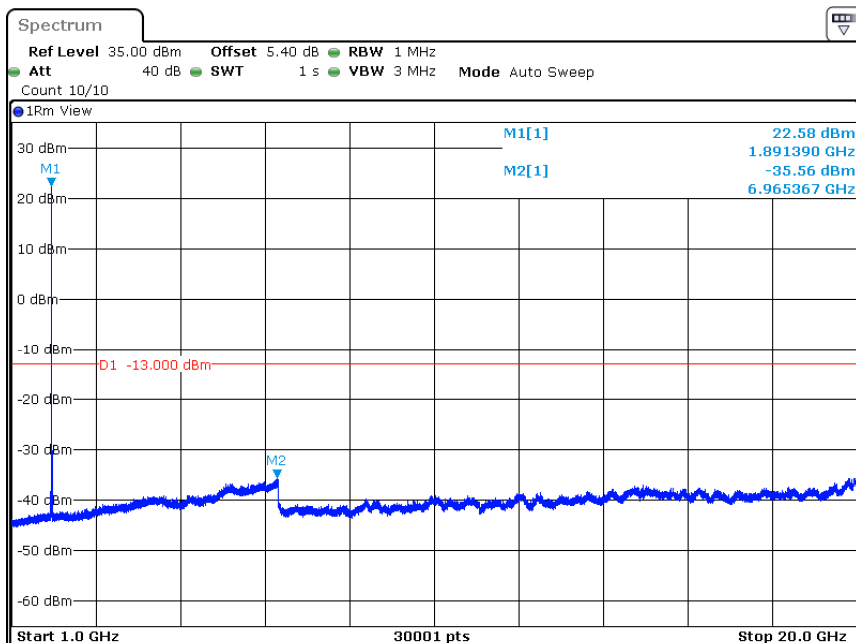
Band2-20MHz-64QAM-19100-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 12:28:12

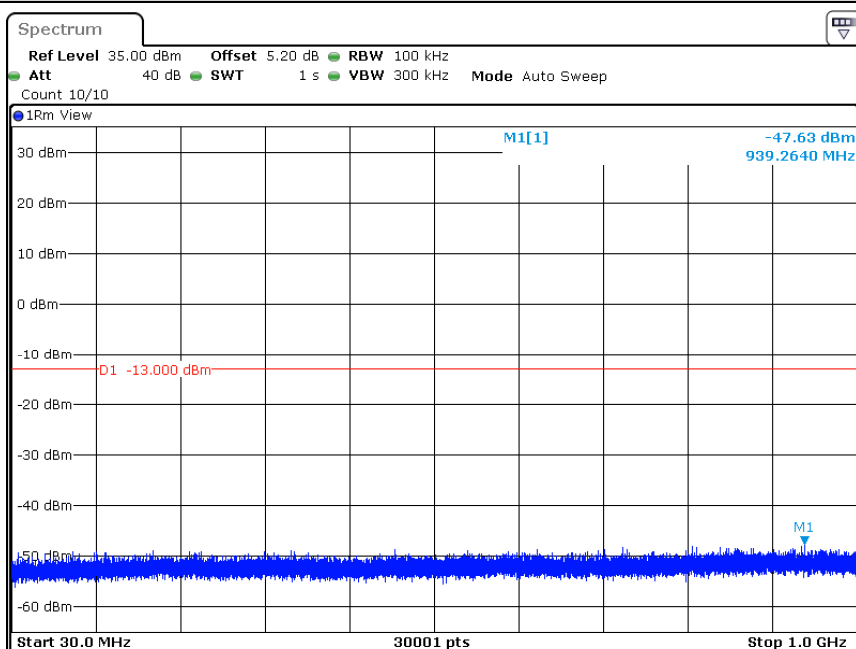


Band2-20MHz-64QAM-19100-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 12:28:28

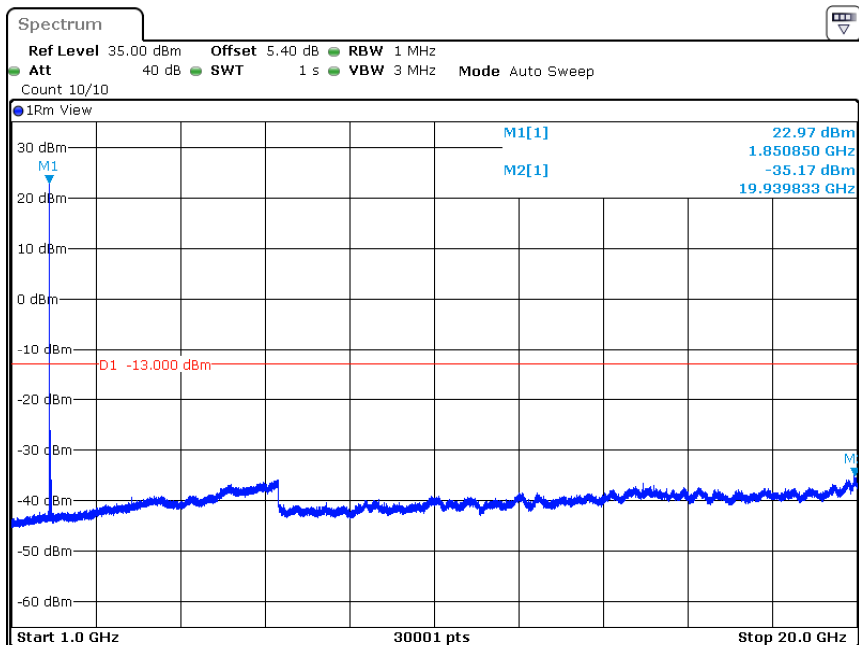
Band2-20MHz-16QAM-18700-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 10:41:40

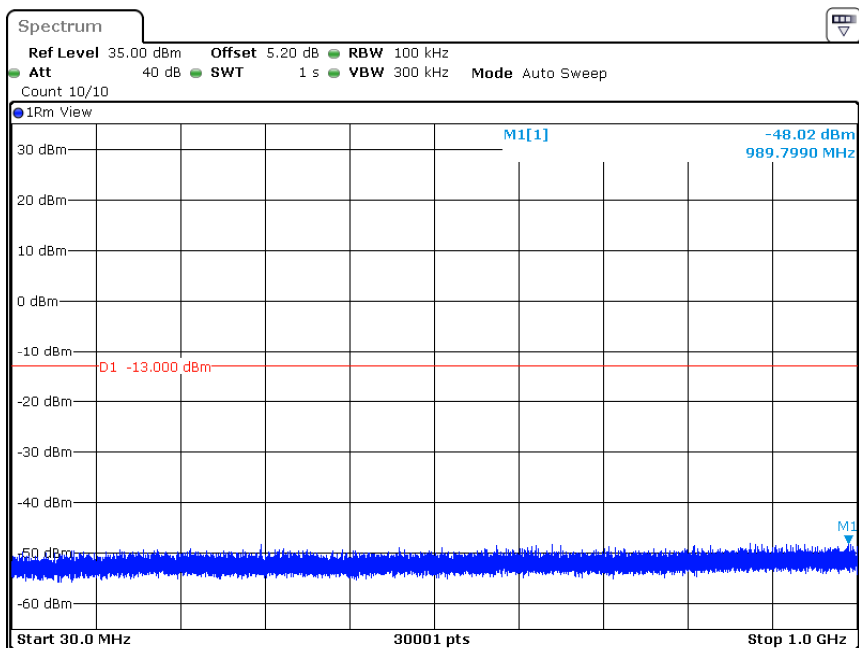


Band2-20MHz-16QAM-18700-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 10:41:57

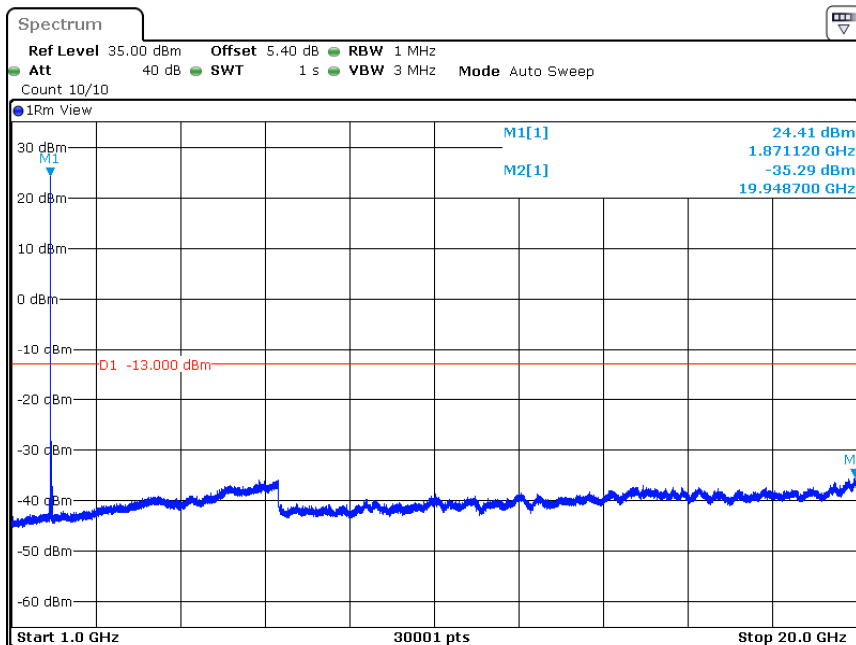
Band2-20MHz-16QAM-18900-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 10:42:51

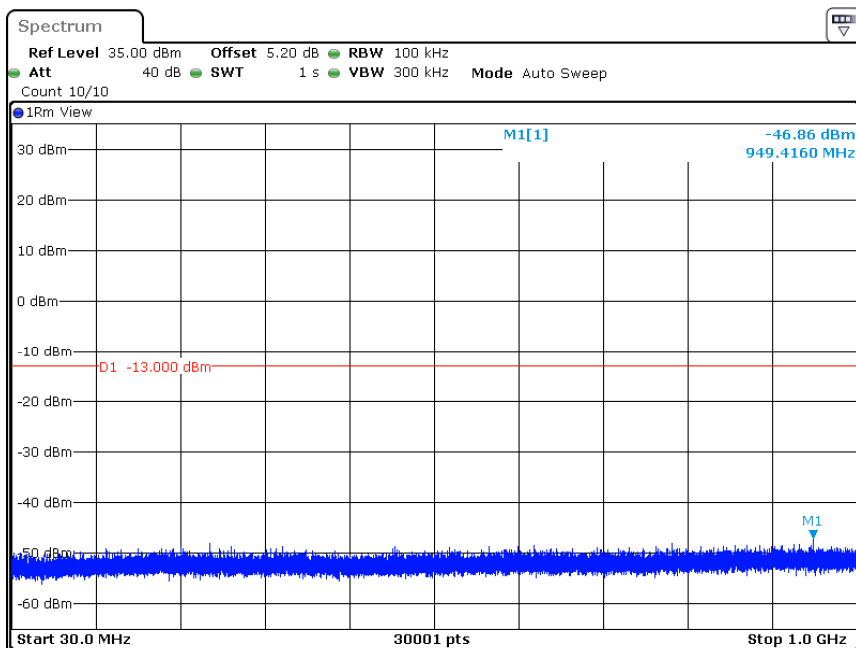


Band2-20MHz-16QAM-18900-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 10:43:07

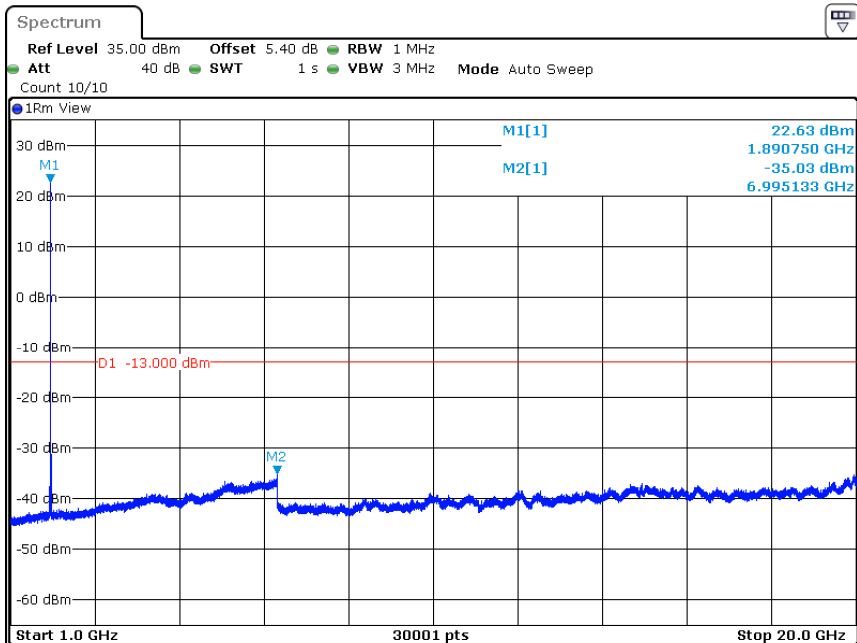
Band2-20MHz-16QAM-19100-1RB#0-Range1:30~1000MHz



Date: 7.SEP.2020 10:44:01



Band2-20MHz-16QAM-19100-1RB#0-Range2:1000~20000MHz



Date: 7.SEP.2020 10:44:17



7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1 20MHz

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
51.0016	-72.93	-13.00	59.93	Vertical
111.9206	-65.24	-13.00	52.24	Vertical
647.7754	-63.53	-13.00	50.53	Vertical
5611.5871	-61.54	-13.00	48.54	Vertical
11190.7730	-51.33	-13.00	38.33	Vertical
17999.0000	-40.48	-13.00	27.48	Vertical
40.1370	-64.34	-13.00	51.34	Horizontal
97.4669	-74.57	-13.00	61.57	Horizontal
239.3850	-68.89	-13.00	55.89	Horizontal
3658.5220	-60.93	-13.00	47.93	Horizontal
7480.6494	-56.28	-13.00	43.28	Horizontal
16391.4464	-43.53	-13.00	30.53	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
47.3639	-72.80	-13.00	59.80	Vertical
109.3985	-65.23	-13.00	52.23	Vertical
424.2762	-68.31	-13.00	55.31	Vertical
5647.5883	-61.33	-13.00	48.33	Vertical
7364.6455	-55.92	-13.00	42.92	Vertical
17997.4999	-40.79	-13.00	27.79	Vertical
40.5250	-63.53	-13.00	50.53	Horizontal
102.5111	-74.26	-13.00	61.26	Horizontal
233.2252	-68.88	-13.00	55.88	Horizontal
5658.5886	-61.37	-13.00	48.37	Horizontal
10021.7341	-52.64	-13.00	39.64	Horizontal
16397.9466	-43.40	-13.00	30.40	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
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
115.3158	-65.85	-13.00	52.85	Vertical
652.7711	-64.39	-13.00	51.39	Vertical
2700.3401	-37.61	-13.00	24.61	Vertical
7480.6494	-55.77	-13.00	42.77	Vertical
14491.3830	-47.33	-13.00	34.33	Vertical
17999.0000	-40.43	-13.00	27.43	Vertical
47.0244	-64.69	-13.00	51.69	Horizontal
571.2871	-64.52	-13.00	51.52	Horizontal
2697.5395	-36.58	-13.00	23.58	Horizontal
3782.5261	-59.70	-13.00	46.70	Horizontal
12846.8282	-50.63	-13.00	37.63	Horizontal
16390.9464	-43.52	-13.00	30.52	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

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

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



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
Band2	20MHz	QPSK	18700	100RB#0	VL	NT	1.30	0.000699	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	VN	NT	-0.20	-0.000108	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	VH	NT	3.30	0.001774	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VL	NT	3.10	0.001649	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VN	NT	0.20	0.000106	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VH	NT	2.80	0.001489	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	VL	NT	-4.60	-0.002421	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	VN	NT	-3.10	-0.001632	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	VH	NT	-1.80	-0.000947	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	VL	NT	7.30	0.003925	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	VN	NT	3.30	0.001774	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	VH	NT	4.40	0.002366	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	VL	NT	0.40	0.000213	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	VN	NT	3.20	0.001702	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	VH	NT	0.30	0.000160	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	VL	NT	-0.50	-0.000263	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	VN	NT	0.80	0.000421	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	VH	NT	0.90	0.000474	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	VL	NT	3.10	0.001667	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	VN	NT	3.10	0.001667	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	VH	NT	2.90	0.001559	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	VL	NT	1.80	0.000957	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	VN	NT	3.10	0.001649	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	VH	NT	1.40	0.000745	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	VL	NT	-1.80	-0.000947	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	VN	NT	-2.80	-0.001474	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	VH	NT	2.40	0.001263	±2.5	PASS



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

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



8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	20MHz	QPSK	18700	100RB#0	NV	-30	1.40	0.000753	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	-20	1.70	0.000914	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	-10	1.70	0.000914	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	0	2.00	0.001075	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	10	1.30	0.000699	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	20	4.00	0.002151	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	30	1.30	0.000699	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	40	3.30	0.001774	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	50	1.30	0.000699	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-30	1.30	0.000691	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-20	3.60	0.001915	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-10	2.90	0.001543	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	0	-0.30	-0.000160	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	10	0.30	0.000160	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	20	0.00	0.000000	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	30	0.40	0.000213	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	40	4.20	0.002234	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	50	4.10	0.002181	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	-30	-1.80	-0.000947	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	-20	-3.70	-0.001947	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	-10	-2.00	-0.001053	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	0	-3.20	-0.001684	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	10	-2.10	-0.001105	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	20	-2.80	-0.001474	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	30	-4.40	-0.002316	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	40	-0.70	-0.000368	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	50	-1.00	-0.000526	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	-30	7.50	0.004032	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	-20	0.10	0.000054	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	-10	3.70	0.001989	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	0	1.50	0.000806	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	10	5.40	0.002903	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	20	3.60	0.001935	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	30	4.20	0.002258	±2.5	PASS
Band2	20MHz	64QAM	18700	100RB#0	NV	40	3.20	0.001720	±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-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

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

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



Band2	20MHz	64QAM	18700	100RB#0	NV	50	6.10	0.003280	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	-30	5.30	0.002819	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	-20	2.50	0.001330	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	-10	0.90	0.000479	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	0	2.00	0.001064	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	10	0.40	0.000213	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	20	1.30	0.000691	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	30	5.00	0.002660	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	40	0.40	0.000213	±2.5	PASS
Band2	20MHz	64QAM	18900	100RB#0	NV	50	-1.90	-0.001011	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	-30	-0.70	-0.000368	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	-20	-1.70	-0.000895	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	-10	-1.60	-0.000842	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	0	-1.90	-0.001000	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	10	-1.30	-0.000684	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	20	-0.70	-0.000368	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	30	1.80	0.000947	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	40	-3.80	-0.002000	±2.5	PASS
Band2	20MHz	64QAM	19100	100RB#0	NV	50	-2.30	-0.001211	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	-30	2.80	0.001505	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	-20	3.70	0.001989	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	-10	5.00	0.002688	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	0	5.00	0.002688	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	10	4.10	0.002204	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	20	3.30	0.001774	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	30	3.50	0.001882	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	40	0.80	0.000430	±2.5	PASS
Band2	20MHz	16QAM	18700	100RB#0	NV	50	3.00	0.001613	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	-30	1.50	0.000798	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	-20	2.80	0.001489	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	-10	3.50	0.001862	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	0	0.40	0.000213	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	10	-0.40	-0.000213	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	20	-0.40	-0.000213	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	30	0.70	0.000372	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	40	2.00	0.001064	±2.5	PASS
Band2	20MHz	16QAM	18900	100RB#0	NV	50	0.60	0.000319	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	-30	-1.90	-0.001000	±2.5	PASS



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

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

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

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



Band2	20MHz	16QAM	19100	100RB#0	NV	-20	-0.60	-0.000316	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	-10	-3.40	-0.001789	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	0	-3.50	-0.001842	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	10	-0.50	-0.000263	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	20	-2.50	-0.001316	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	30	-2.80	-0.001474	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	40	0.40	0.000211	±2.5	PASS
Band2	20MHz	16QAM	19100	100RB#0	NV	50	-2.50	-0.001316	±2.5	PASS



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (2010) China CCC 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