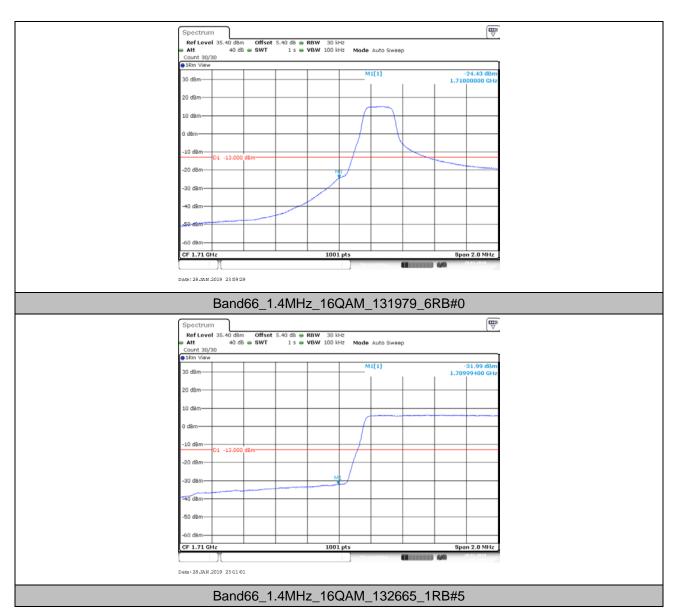
Report No.: HR/2019/1001201

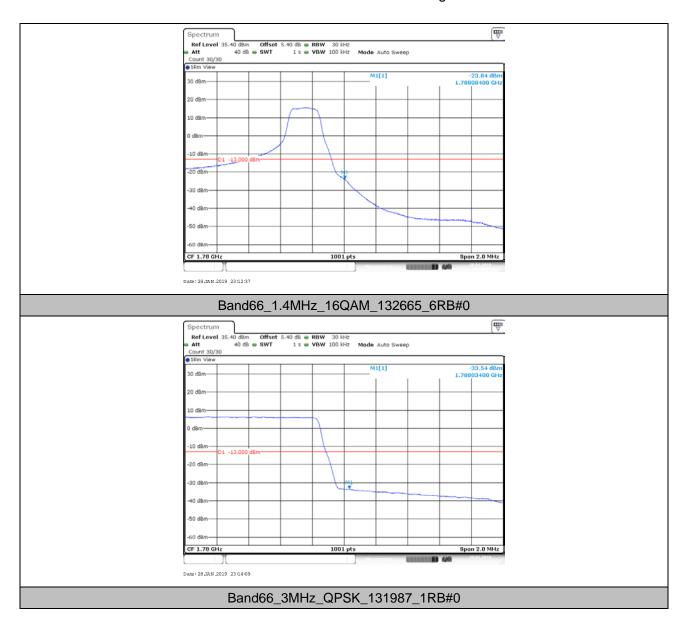
Page: 55 of 107





Report No.: HR/2019/1001201

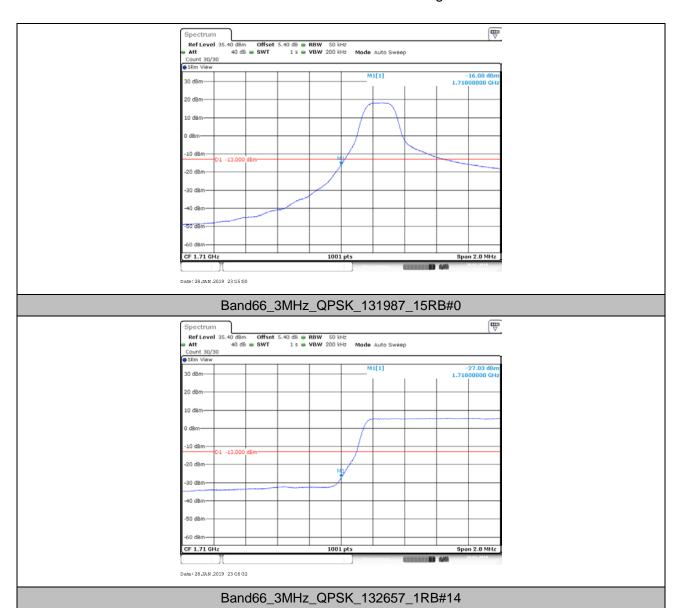
Page: 56 of 107





Report No.: HR/2019/1001201

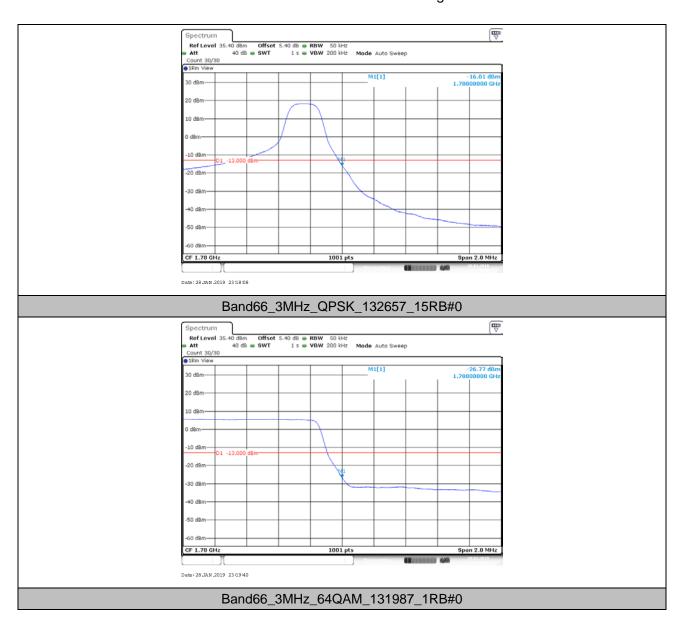
Page: 57 of 107





Report No.: HR/2019/1001201

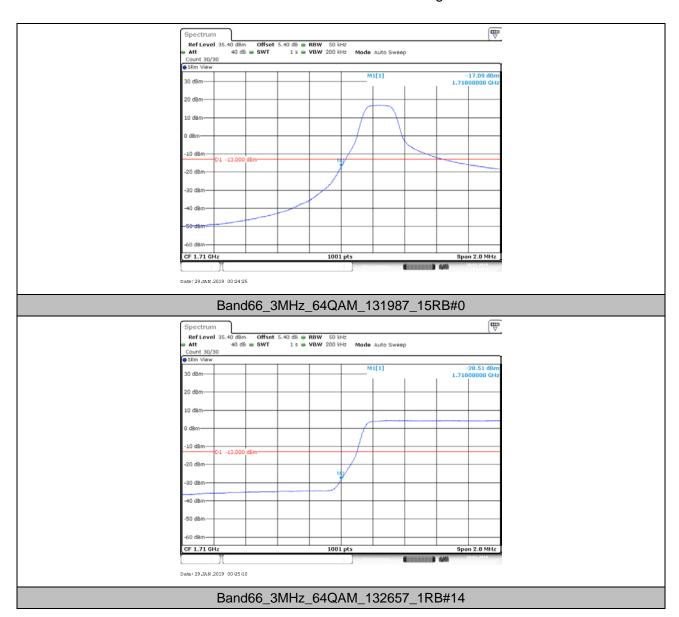
Page: 58 of 107





Report No.: HR/2019/1001201

Page: 59 of 107





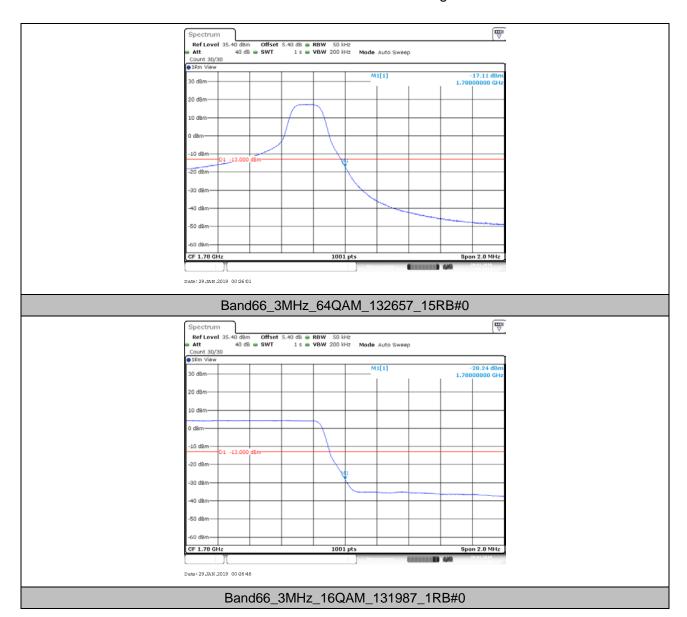
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

Report No.: HR/2019/1001201

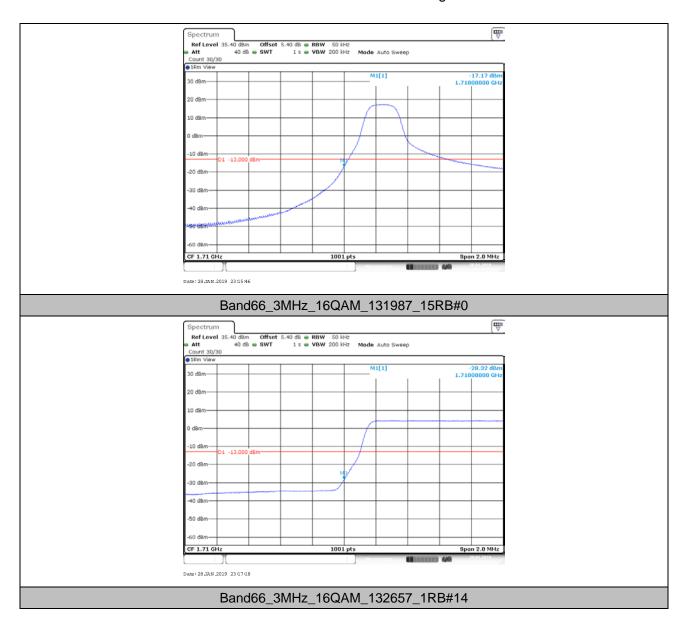
Page: 60 of 107





Report No.: HR/2019/1001201

Page: 61 of 107





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 issue 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.

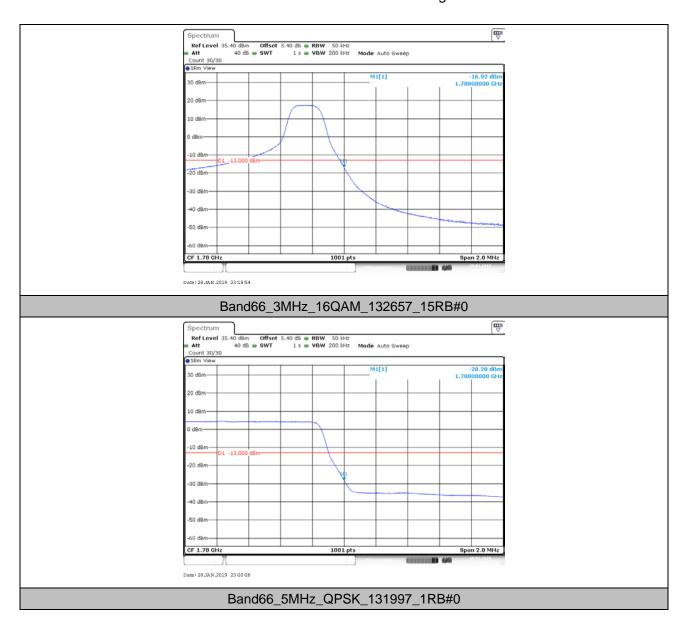
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

Report No.: HR/2019/1001201

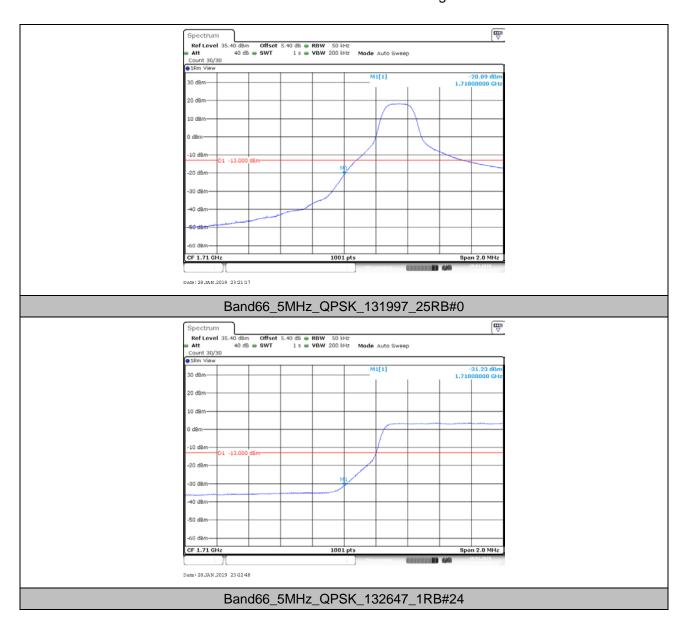
Page: 62 of 107





Report No.: HR/2019/1001201

Page: 63 of 107





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 issue 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.

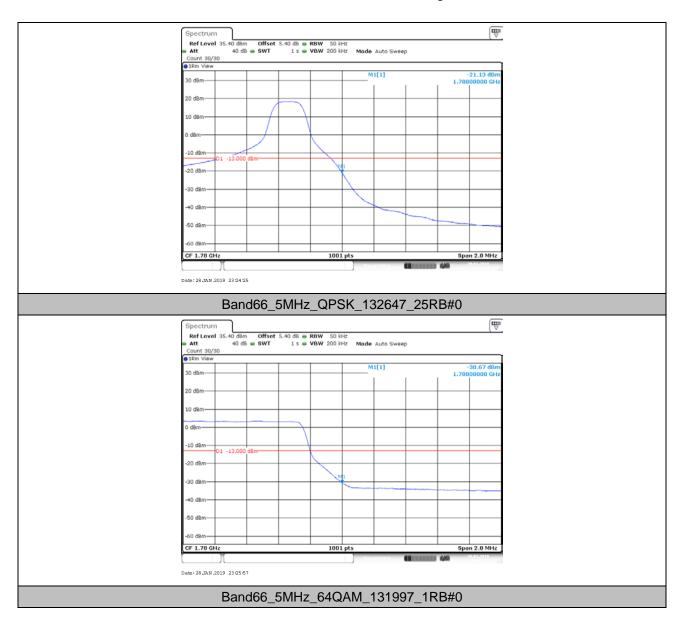
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

Report No.: HR/2019/1001201

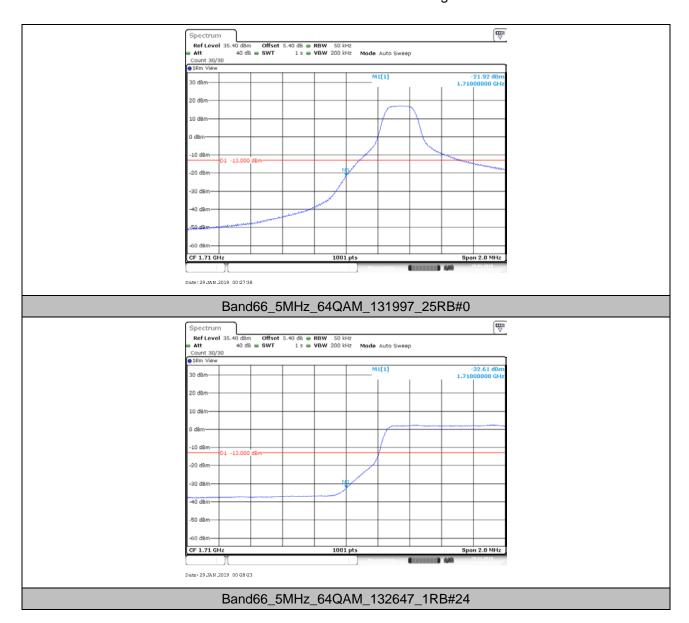
Page: 64 of 107





Report No.: HR/2019/1001201

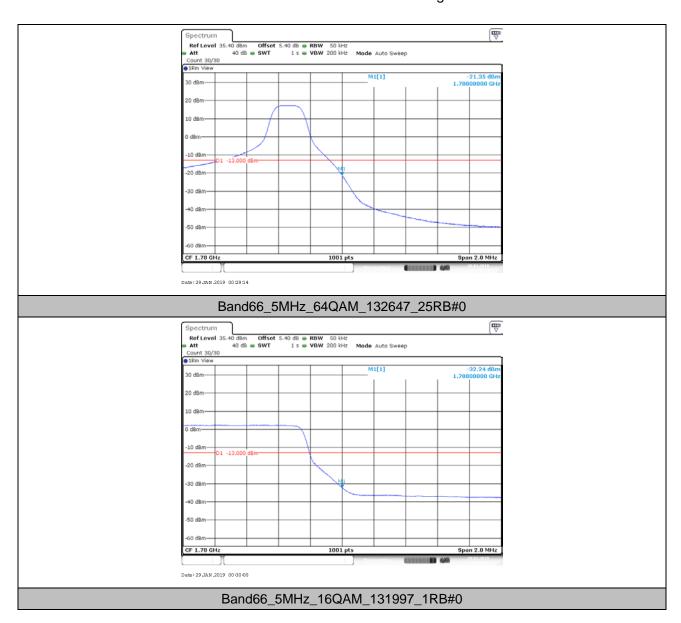
Page: 65 of 107





Report No.: HR/2019/1001201

Page: 66 of 107





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 issue 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.

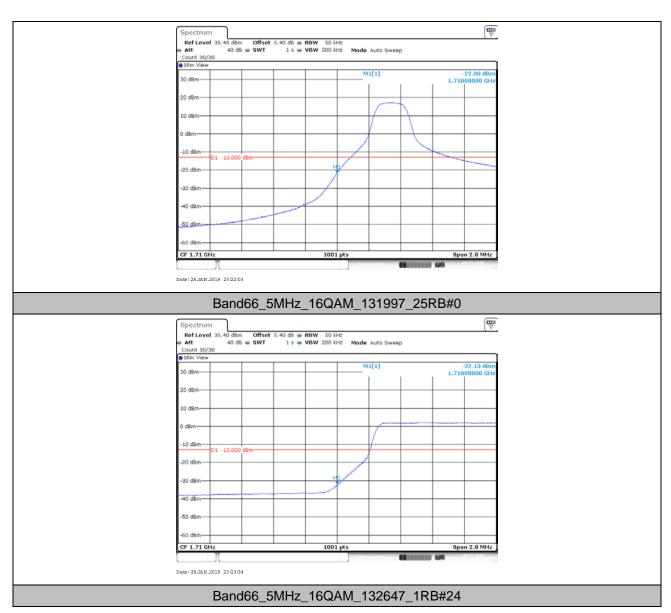
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

Report No.: HR/2019/1001201

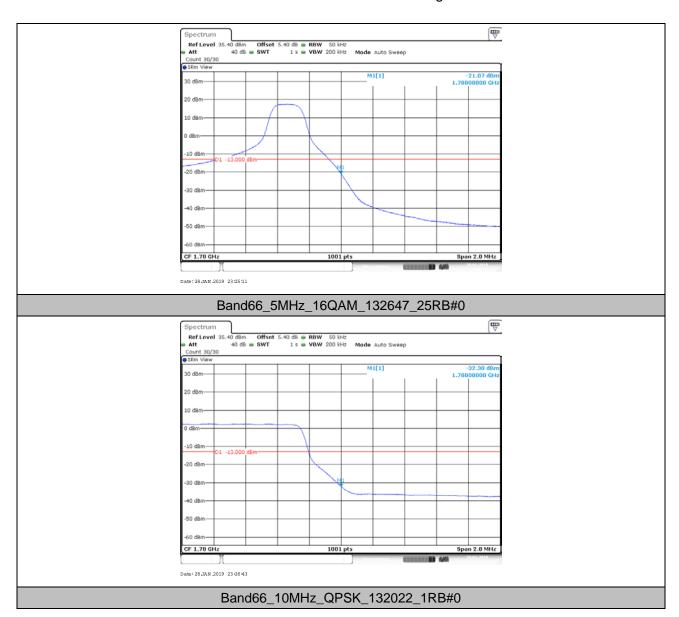
Page: 67 of 107





Report No.: HR/2019/1001201

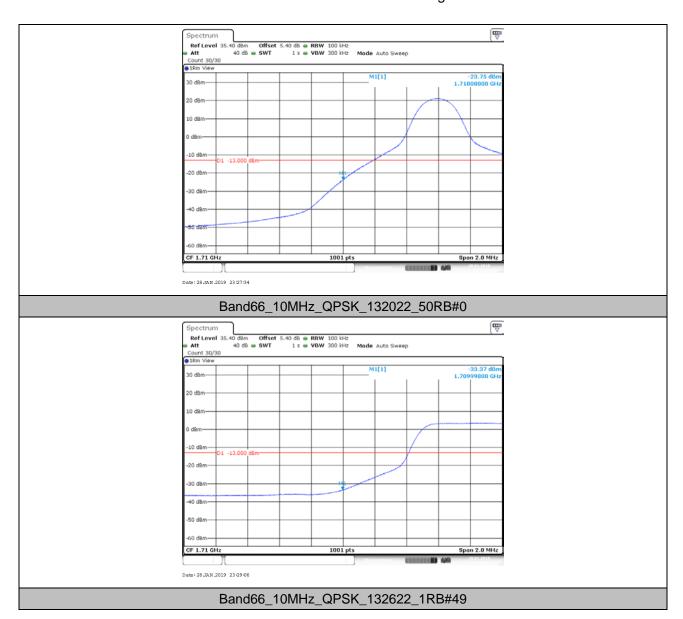
Page: 68 of 107





Report No.: HR/2019/1001201

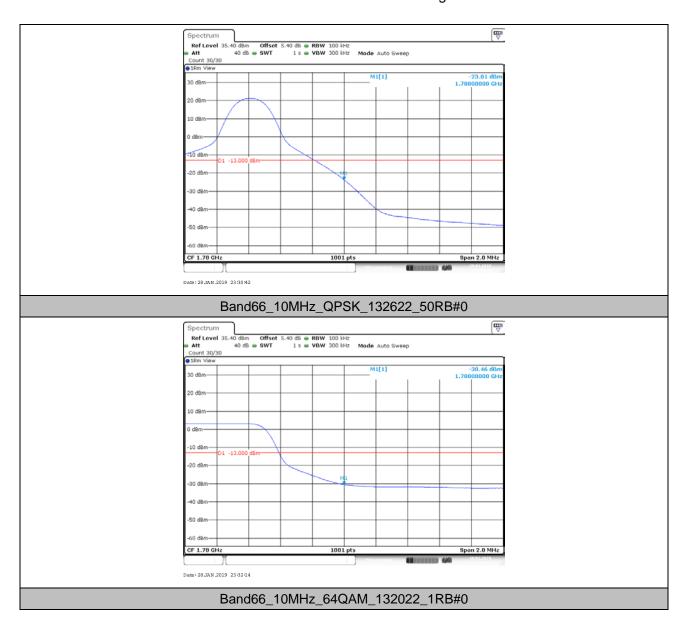
Page: 69 of 107





Report No.: HR/2019/1001201

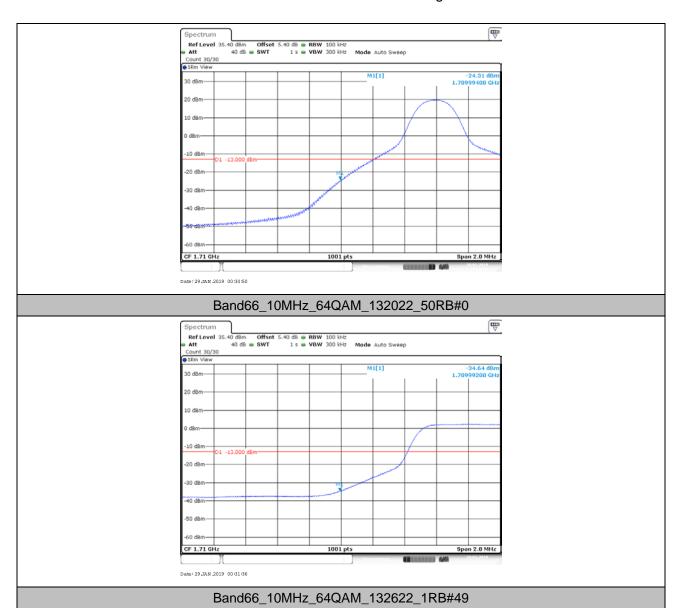
Page: 70 of 107





Report No.: HR/2019/1001201

71 of 107 Page:





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 issue 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.

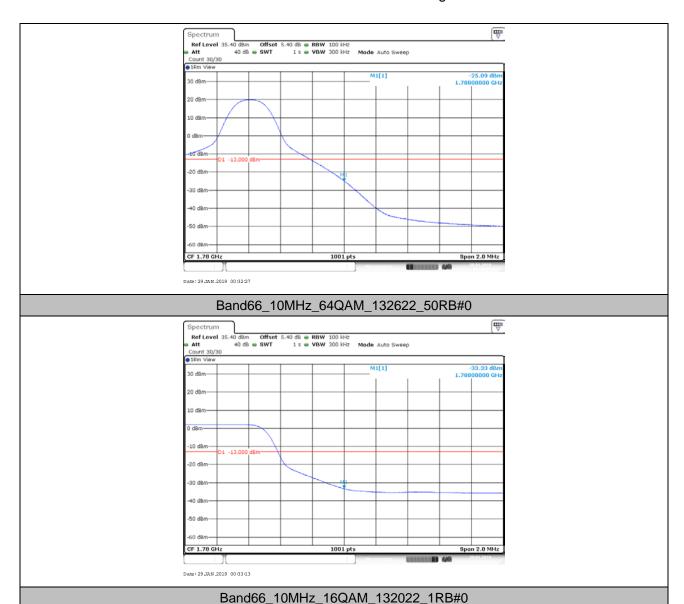
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

Report No.: HR/2019/1001201

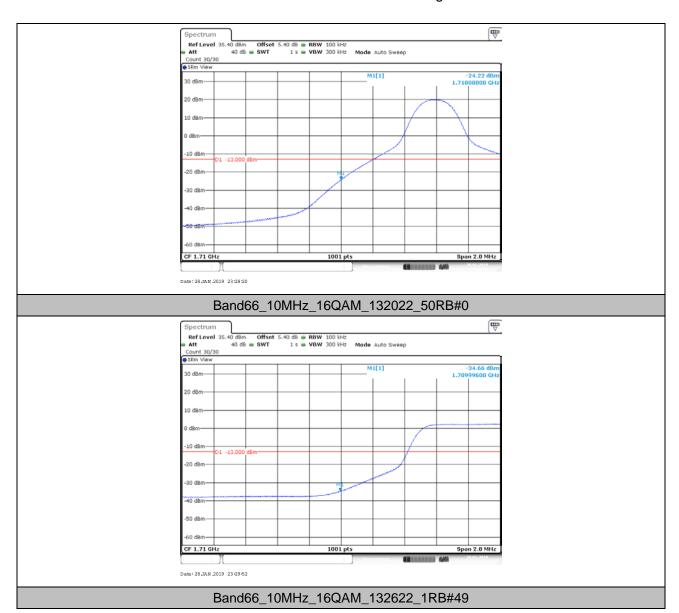
Page: 72 of 107





Report No.: HR/2019/1001201

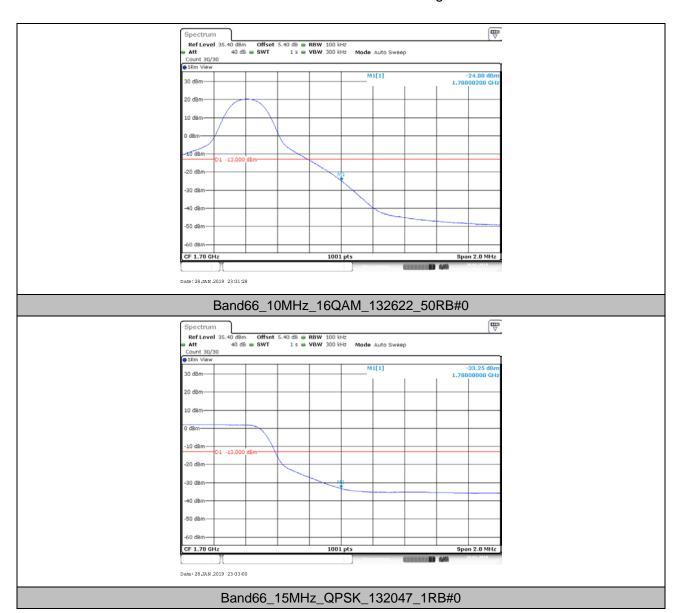
Page: 73 of 107





Report No.: HR/2019/1001201

Page: 74 of 107





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 issue 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.

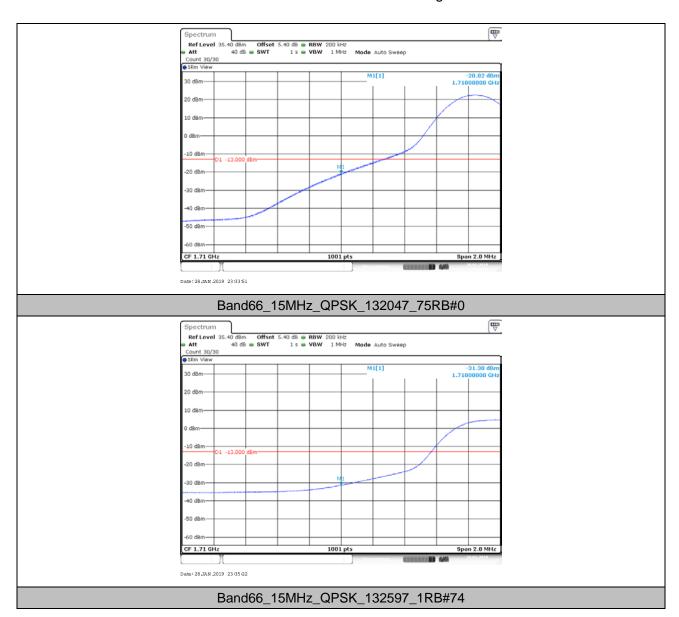
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

Report No.: HR/2019/1001201

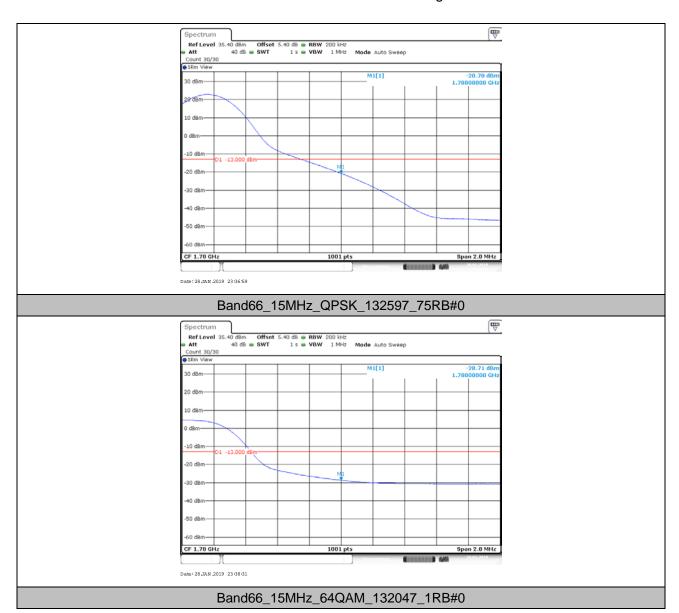
Page: 75 of 107





Report No.: HR/2019/1001201

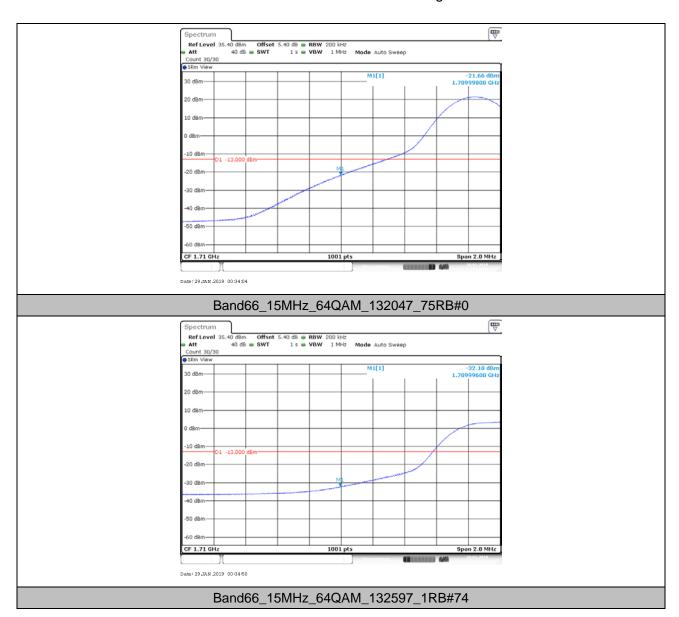
Page: 76 of 107





Report No.: HR/2019/1001201

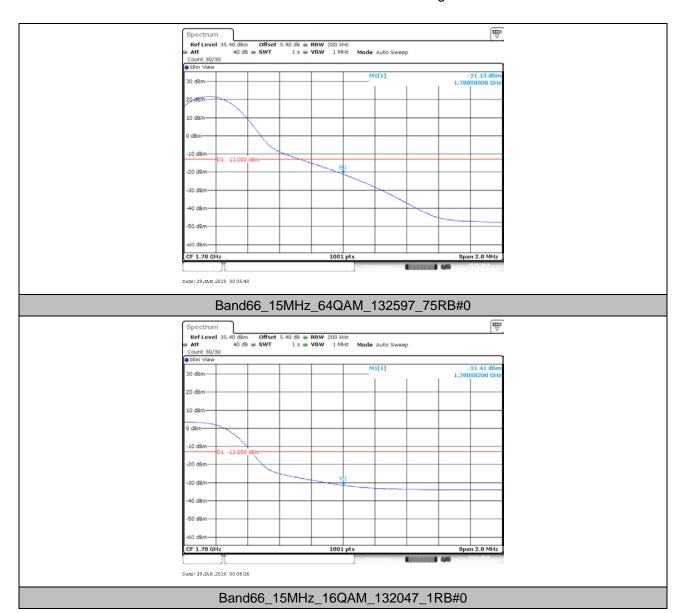
Page: 77 of 107





Report No.: HR/2019/1001201

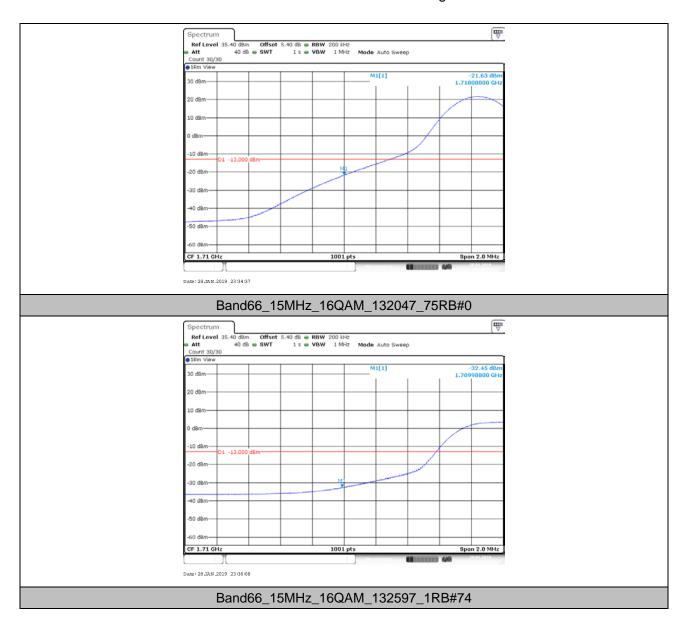
Page: 78 of 107





Report No.: HR/2019/1001201

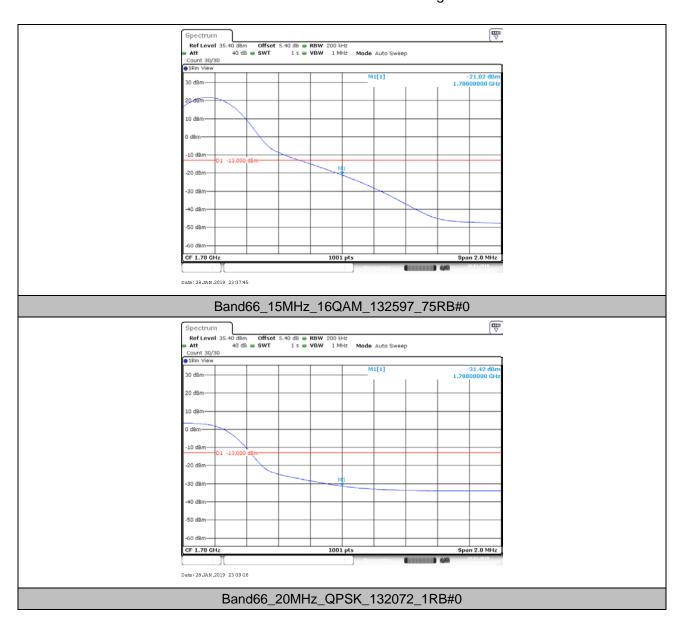
Page: 79 of 107





Report No.: HR/2019/1001201

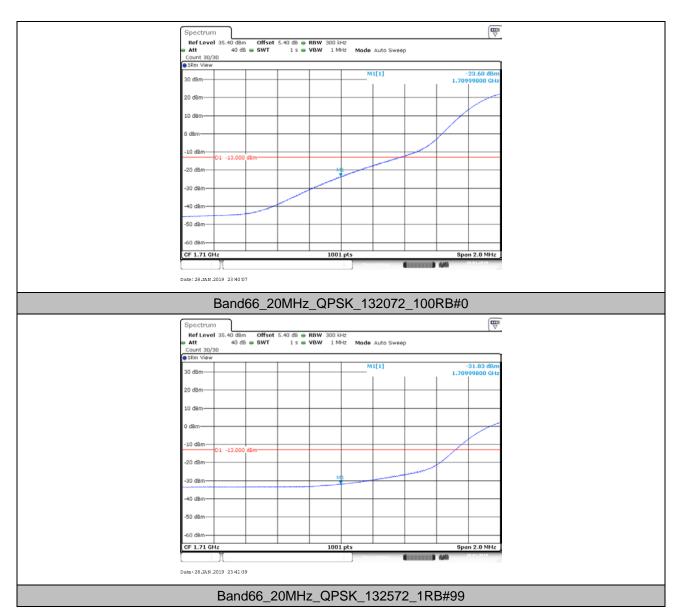
Page: 80 of 107





Report No.: HR/2019/1001201

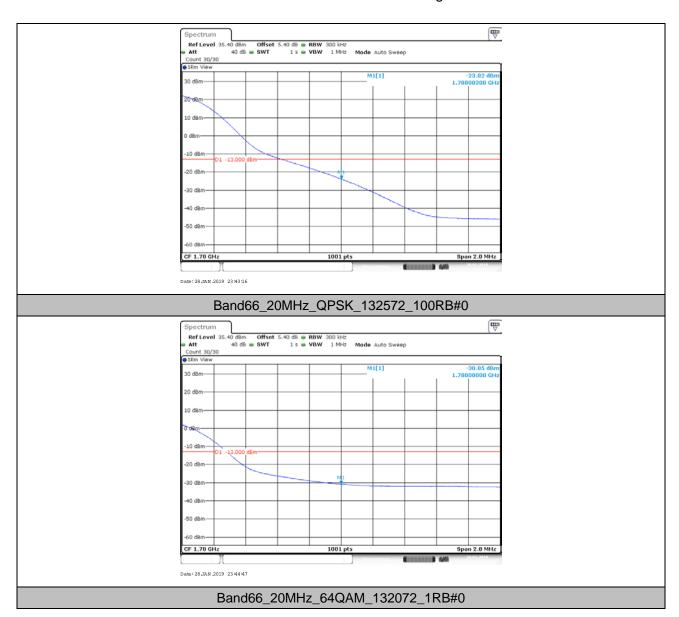
Page: 81 of 107





Report No.: HR/2019/1001201

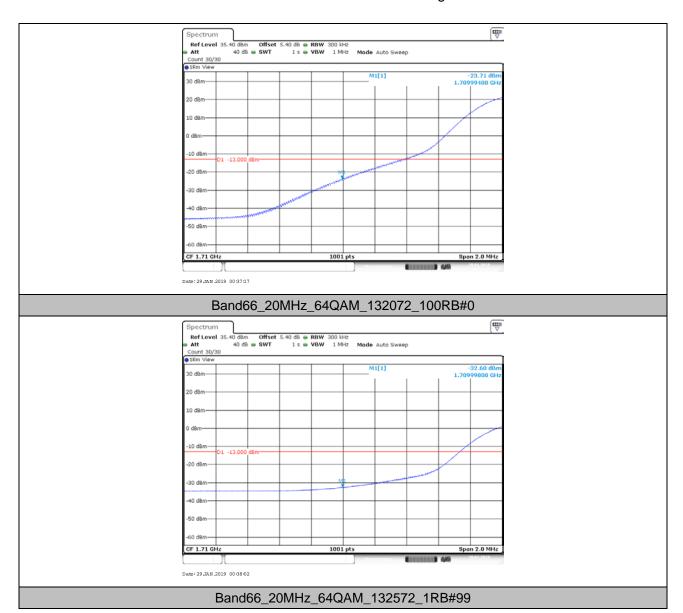
Page: 82 of 107





Report No.: HR/2019/1001201

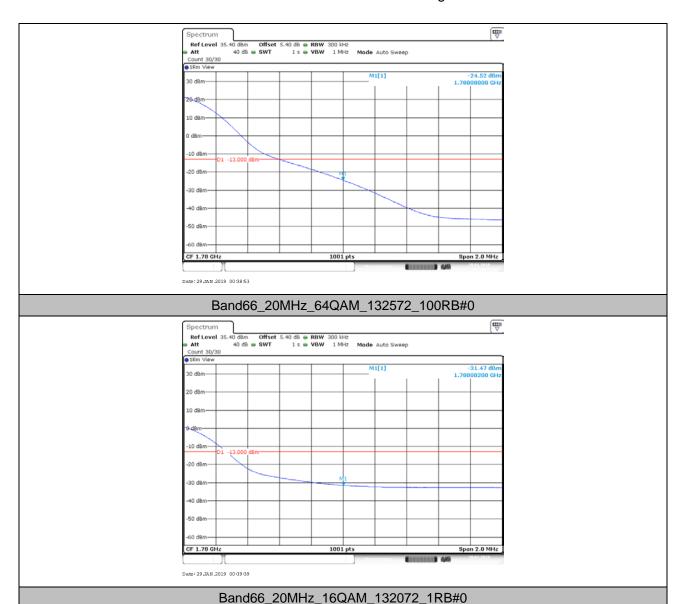
Page: 83 of 107





Report No.: HR/2019/1001201

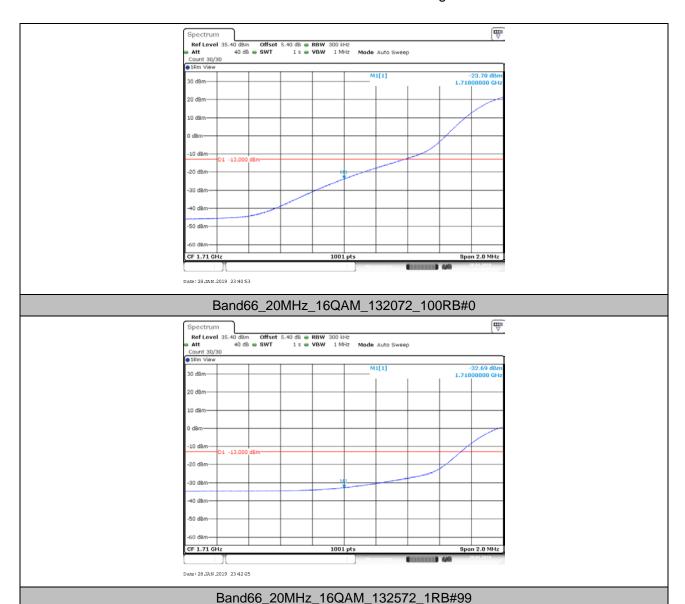
Page: 84 of 107





Report No.: HR/2019/1001201

Page: 85 of 107





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 issue 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.

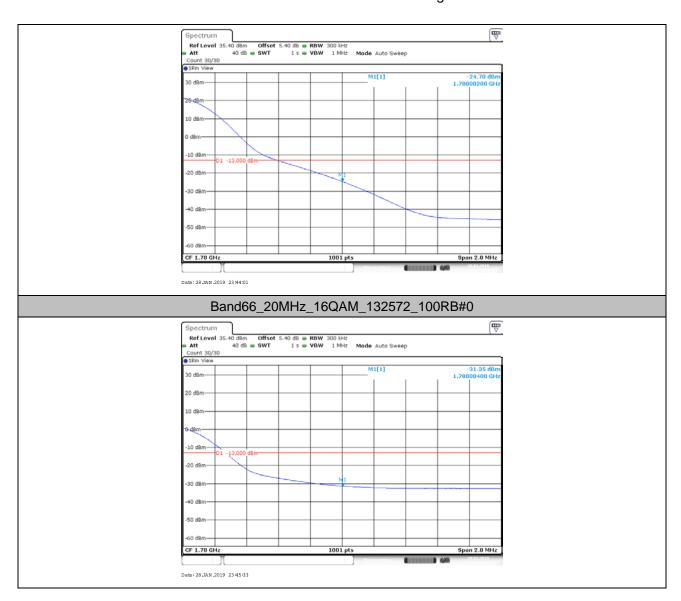
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

Report No.: HR/2019/1001201

Page: 86 of 107





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 issue 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, **Certificate**.

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

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

sgs.china@sgs.com

Report No.: HR/2019/1001201

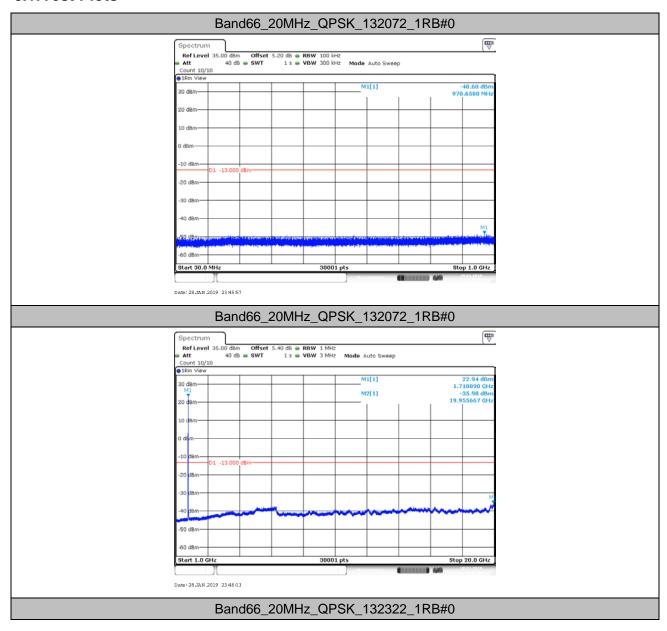
Page: 87 of 107

6. Spurious Emission at Antenna Terminal

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

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

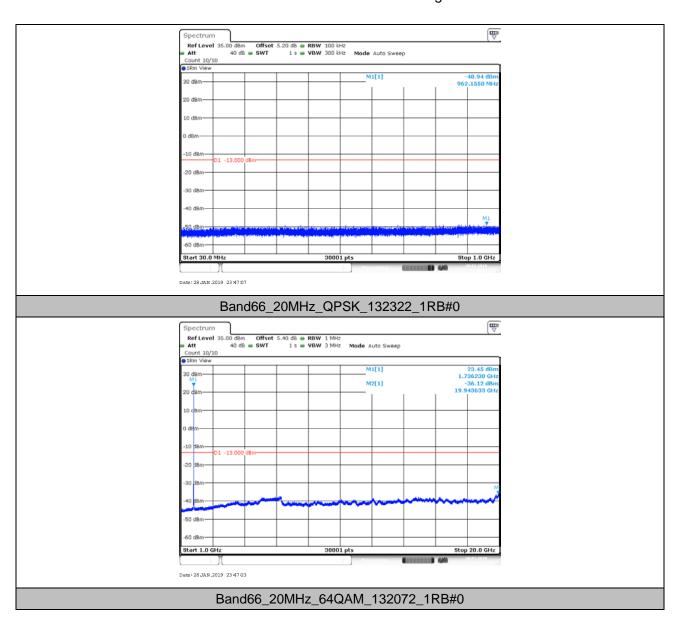
6.1. Test Plots





Report No.: HR/2019/1001201

Page: 88 of 107

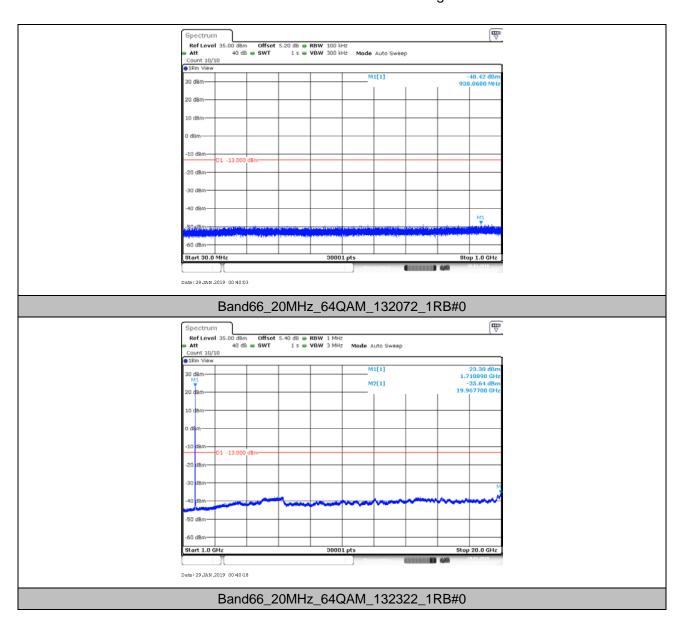






Report No.: HR/2019/1001201

Page: 89 of 107

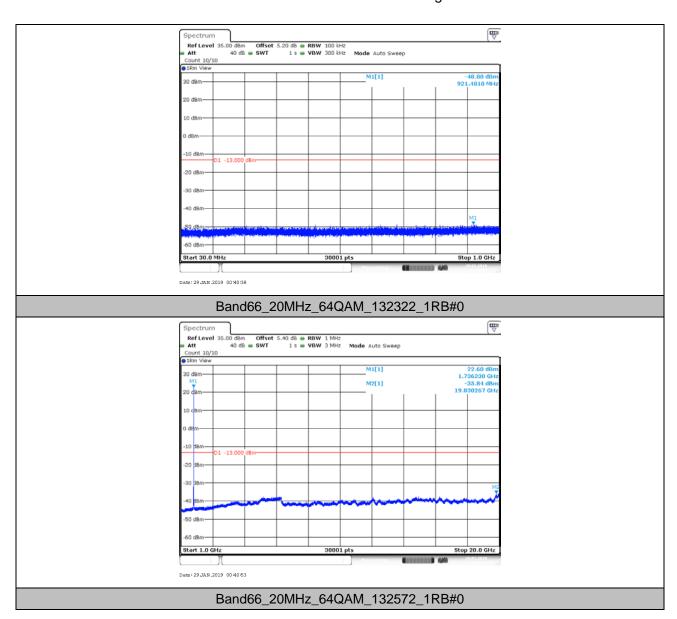






Report No.: HR/2019/1001201

Page: 90 of 107



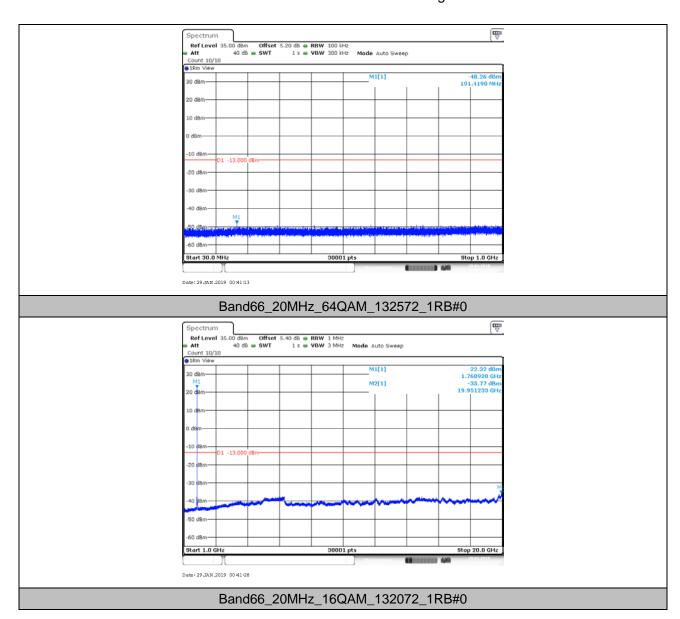




SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen

Report No.: HR/2019/1001201

Page: 91 of 107



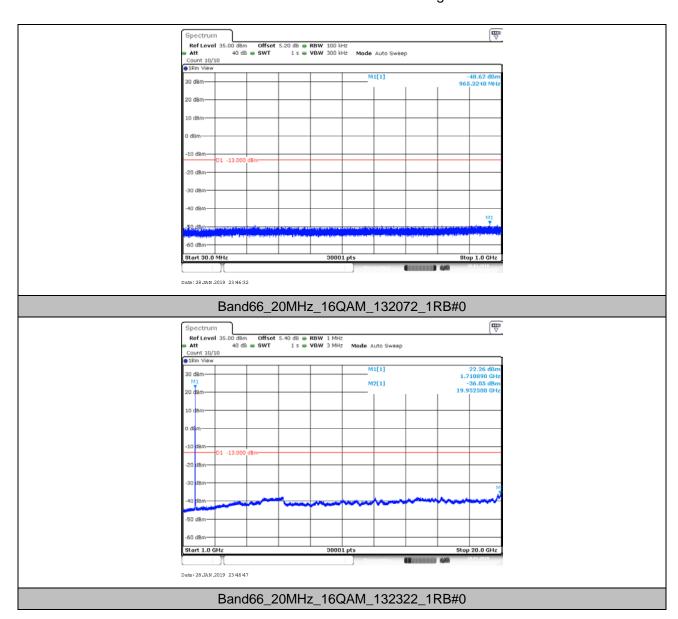




SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen

Report No.: HR/2019/1001201

Page: 92 of 107



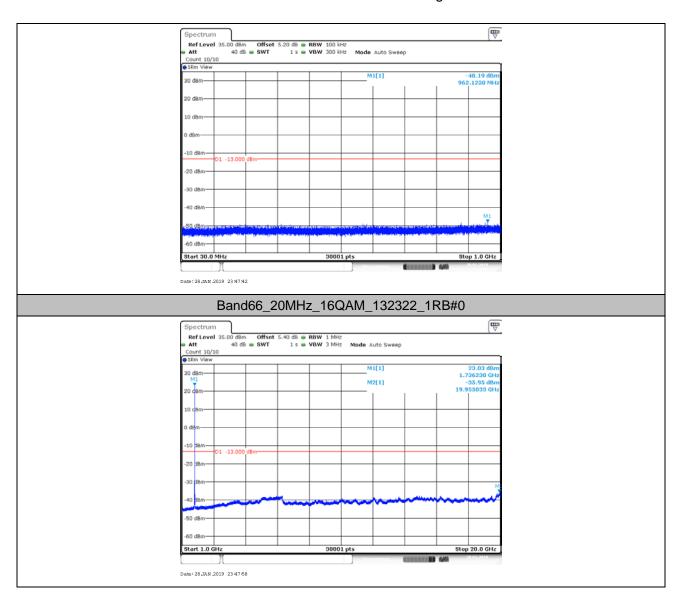




SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen

Report No.: HR/2019/1001201

Page: 93 of 107





Page: 94 of 107

7. Field Strength of Spurious Radiation

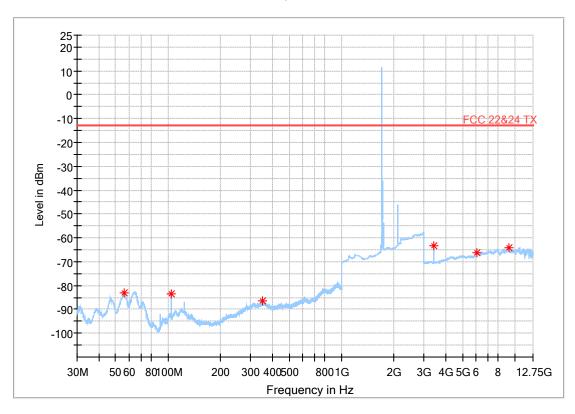
7.1. Main Antenna

7.1.1. Test BAND = LTE BAND 66

7.1.1.1. Test Mode =LTE/TM1

7.1.1.1.1 LCH-Vertical

Full Spectrum



Critical_Freqs

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
56.350000	-83.12	-13.00	70.12			200.0	V	123.0	-101.3
104.300000	-83.42	-13.00	70.42			200.0	V	123.0	-106.8
353.250000	-86.63	-13.00	73.63			200.0	V	169.0	-101.4
3422.175000	-63.40	-13.00	50.40			200.0	V	212.0	-105.5
6022.500000	-66.19	-13.00	53.19			200.0	V	212.0	-100.0
9249.750000	-64.18	-13.00	51.18			200.0	V	0.0	-97.0



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

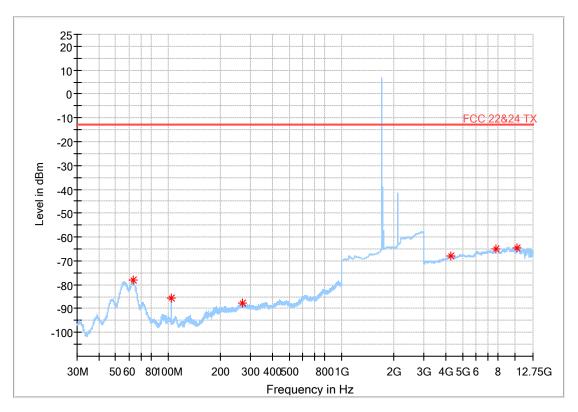
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)8307 1443, or email: CNP Deccheck-Ress cents.

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 tt (86-755) 26012053 ft (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 tt (86-755) 26012053 ft (86-755) 26710594 sgs.china@sgs.com

95 of 107 Page:

7.1.1.1.2. LCH-Horizontal

Full Spectrum



Critical_Freqs

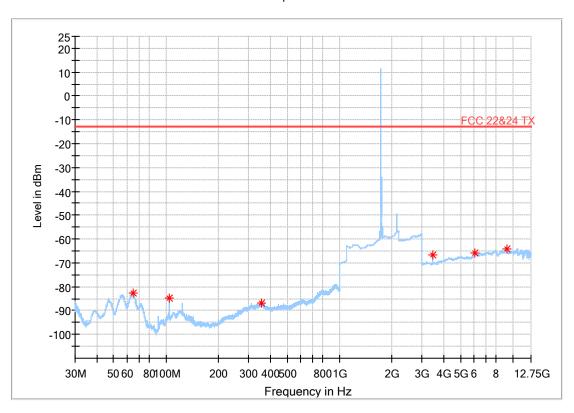
Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
63.100000	-78.04	-13.00	65.04			200.0	Η	100.0	-95.8
104.300000	-85.77	-13.00	72.77			200.0	Н	359.0	-109.6
270.400000	-87.70	-13.00	74.70			200.0	Н	170.0	-102.3
4271.075000	-67.96	-13.00	54.96			200.0	Η	0.0	-102.7
7838.275000	-65.10	-13.00	52.10			200.0	Н	2.0	-97.9
10266.675000	-64.41	-13.00	51.41			200.0	Η	2.0	-96.6



96 of 107 Page:

7.1.1.1.3. MCH-Vertical

Full Spectrum



Critical_Freqs

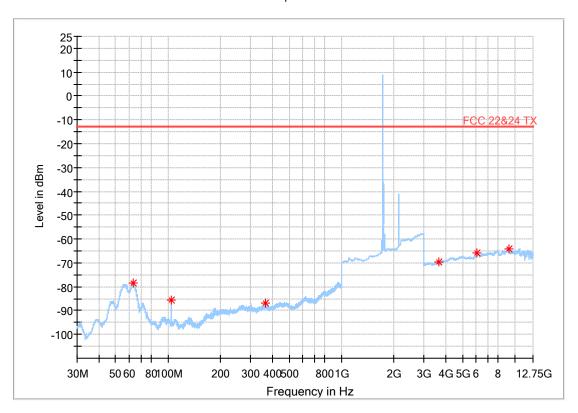
Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
65.300000	-82.68	-13.00	69.68			200.0	>	8.0	-99.7
104.250000	-84.56	-13.00	71.56			200.0	V	77.0	-106.8
356.950000	-87.00	-13.00	74.00			200.0	V	124.0	-101.3
3471.900000	-66.71	-13.00	53.71			200.0	V	213.0	-105.4
6050.125000	-65.92	-13.00	52.92			200.0	V	213.0	-99.8
9255.275000	-64.18	-13.00	51.18			200.0	V	1.0	-97.0



Page: 97 of 107

7.1.1.1.4. MCH-Horizontal

Full Spectrum



Critical_Freqs

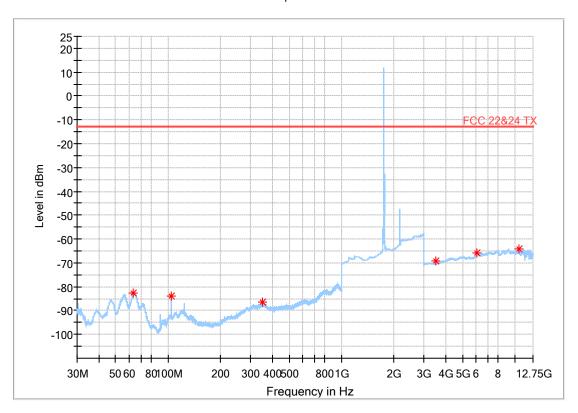
Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
62.850000	-78.34	-13.00	65.34			200.0	Н	0.0	-95.5
104.300000	-85.77	-13.00	72.77			200.0	Н	264.0	-109.6
366.050000	-87.00	-13.00	74.00			200.0	Н	358.0	-103.4
3631.150000	-69.78	-13.00	56.78			200.0	Н	2.0	-104.8
6051.100000	-66.00	-13.00	53.00			200.0	Н	0.0	-99.9
9246.500000	-64.21	-13.00	51.21			200.0	Н	213.0	-96.9



98 of 107 Page:

7.1.1.1.5. HCH-Vertical

Full Spectrum



Critical_Freqs

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
63.550000	-82.76	-13.00	69.76			200.0	V	309.0	-100.1
104.250000	-83.76	-13.00	70.76			200.0	V	0.0	-106.8
353.500000	-86.61	-13.00	73.61			200.0	V	52.0	-101.4
3521.950000	-69.02	-13.00	56.02			200.0	V	211.0	-105.3
6052.400000	-66.00	-13.00	53.00			200.0	V	0.0	-99.8
10647.900000	-63.99	-13.00	50.99			200.0	V	0.0	-96.2



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 issue 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.

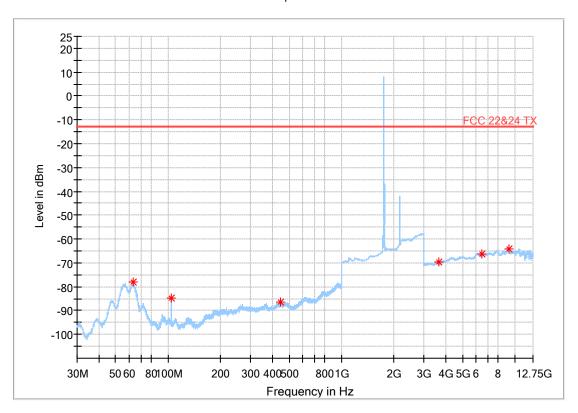
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

99 of 107 Page:

7.1.1.1.6. HCH-Horizontal

Full Spectrum



Critical_Freqs

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
62.950000	-77.92	-13.00	64.92			200.0	Ι	358.0	-95.6
104.300000	-84.84	-13.00	71.84			200.0	Н	0.0	-109.6
443.550000	-86.54	-13.00	73.54			200.0	Н	55.0	-100.8
3642.525000	-69.55	-13.00	56.55			200.0	Н	0.0	-104.7
6503.175000	-66.17	-13.00	53.17			200.0	Н	1.0	-99.3
9248.775000	-64.24	-13.00	51.24			200.0	Н	1.0	-96.9



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 issue 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, **Certificate**.

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

100 of 107 Page:

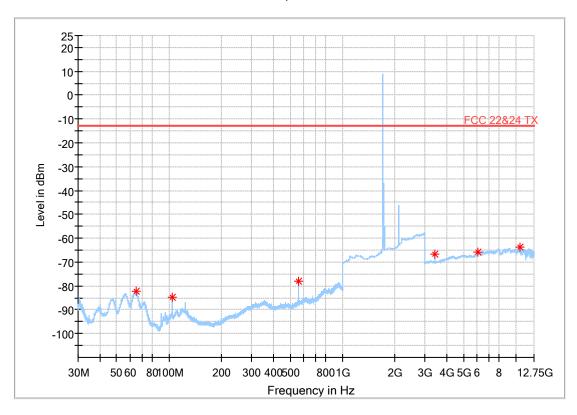
7.2. **Secondary Antenna**

7.2.1. Test BAND = LTE BAND 66

7.2.1.1. Test Mode =LTE/TM1

7.2.1.1.1. LCH-Vertical

Full Spectrum



Critical_Freqs

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
64.750000	-82.43	-13.00	69.43			200.0	V	310.0	-99.8
104.250000	-84.78	-13.00	71.78			200.0	V	359.0	-106.8
561.604167	-77.94	-13.00	64.94			200.0	V	115.0	-100.3
3421.850000	-66.84	-13.00	53.84			200.0	V	212.0	-105.5
6048.500000	-65.64	-13.00	52.64			200.0	V	212.0	-99.8
10613.450000	-63.93	-13.00	50.93			200.0	V	0.0	-96.3



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 issue 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.

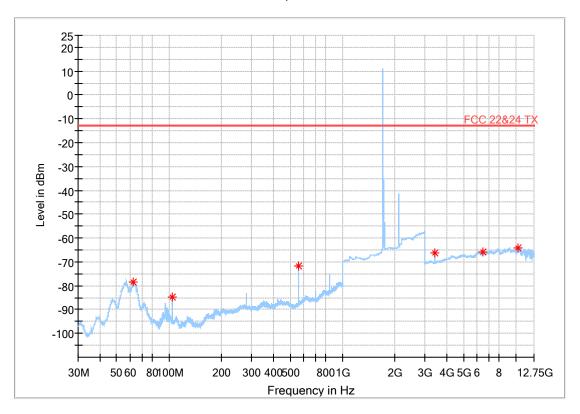
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate**.

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

101 of 107 Page:

7.2.1.1.2. LCH-Horizontal

Full Spectrum



Critical_Freqs

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
62.550000	-78.35	-13.00	65.35			200.0	Н	0.0	-95.2
104.300000	-84.66	-13.00	71.66			200.0	Н	309.0	-109.6
561.558333	-71.71	-13.00	58.71			200.0	Н	339.0	-100.8
3422.175000	-66.32	-13.00	53.32			200.0	Н	213.0	-105.7
6486.600000	-66.00	-13.00	53.00			200.0	Н	0.0	-99.4
10266.350000	-64.04	-13.00	51.04			200.0	Н	2.0	-96.6



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 issue 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, **Certificate**.

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

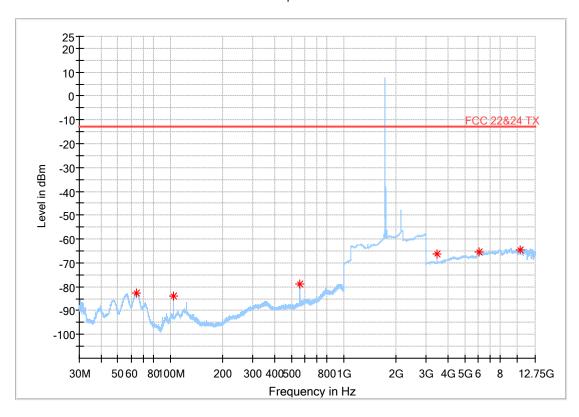
邮编: 518057 t (86-755) 26012053 f (86-755) 26710594

sgs.china@sgs.com

102 of 107 Page:

7.2.1.1.3. MCH-Vertical

Full Spectrum



Critical_Freqs

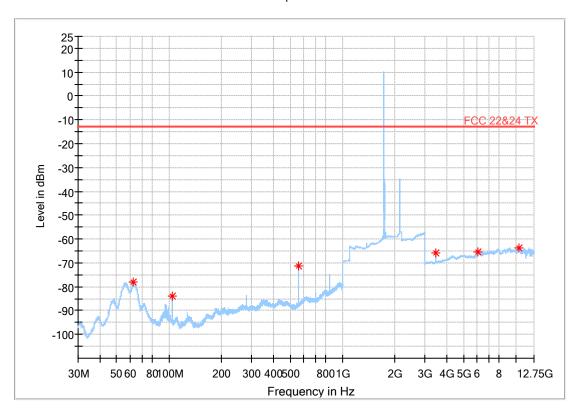
Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
63.800000	-82.67	-13.00	69.67			200.0	V	286.0	-100.1
104.250000	-83.88	-13.00	70.88			200.0	V	76.0	-106.8
561.558333	-79.07	-13.00	66.07			200.0	V	113.0	-100.3
3471.900000	-66.32	-13.00	53.32			200.0	V	212.0	-105.4
6059.550000	-65.51	-13.00	52.51			200.0	V	1.0	-99.7
10416.500000	-64.59	-13.00	51.59			200.0	V	1.0	-96.4



Page: 103 of 107

7.2.1.1.4. MCH-Horizontal

Full Spectrum



Critical_Freqs

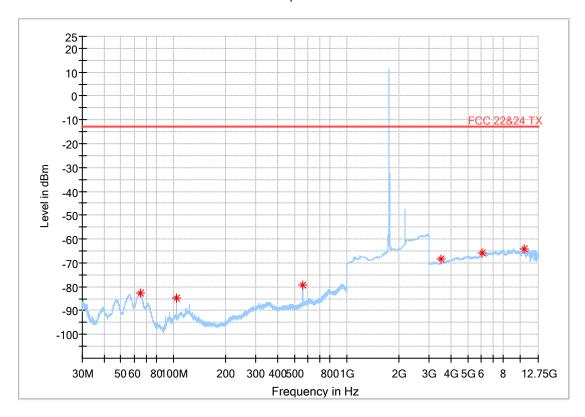
Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
62.500000	-78.08	-13.00	65.08			200.0	Н	53.0	-95.1
104.300000	-84.00	-13.00	71.00			200.0	Н	310.0	-109.6
561.604167	-71.14	-13.00	58.14			200.0	Η	337.0	-100.8
3472.225000	-66.00	-13.00	53.00			200.0	Н	1.0	-105.5
6052.725000	-65.43	-13.00	52.43			200.0	Н	0.0	-99.9
10416.500000	-63.86	-13.00	50.86			200.0	Н	1.0	-96.4



104 of 107 Page:

7.2.1.1.5. HCH-Vertical

Full Spectrum



Critical_Freqs

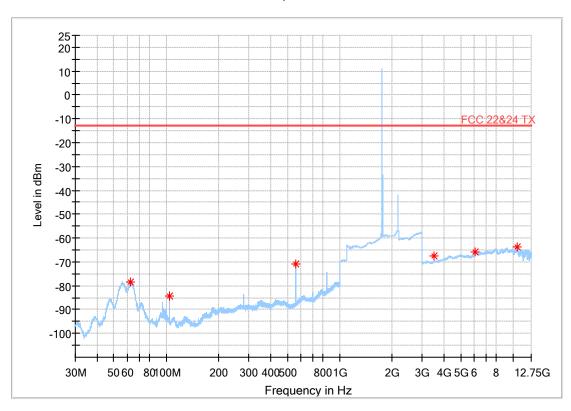
Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
64.550000	-82.58	-13.00	69.58			200.0	V	148.0	-99.9
104.250000	-84.72	-13.00	71.72			200.0	V	8.0	-106.8
561.604167	-79.26	-13.00	66.26			200.0	V	115.0	-100.3
3521.950000	-68.21	-13.00	55.21			200.0	V	213.0	-105.3
6051.425000	-65.85	-13.00	52.85			200.0	V	213.0	-99.8
10631.975000	-64.11	-13.00	51.11			200.0	V	2.0	-96.3



Page: 105 of 107

7.2.1.1.6. HCH-Horizontal





Critical_Freqs

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
62.650000	-78.58	-13.00	65.58			200.0	Н	8.0	-95.3
104.300000	-84.51	-13.00	71.51			200.0	Н	358.0	-109.6
561.604167	-70.91	-13.00	57.91			200.0	Н	0.0	-100.8
3521.950000	-67.62	-13.00	54.62			200.0	Н	212.0	-105.2
6051.100000	-65.81	-13.00	52.81			200.0	Н	1.0	-99.9
10566.975000	-63.57	-13.00	50.57			200.0	Н	1.0	-96.5

Remark:

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue 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, **Certificate**, please contact us at telephone: (86-755) 8307 1443, **Certificate**, please contact us at telephone: (86-755) 8307 1443, **Certificate**, please contact us at telephone: (86-755) 8307 1443, **Certificate**, please contact us at telephone: (86-755) 8307 1443, **Certificate**, please contact us at telephone: (86-755) 8307 1443, **Certificate**, please contact us at telephone: (86-755) 8307 1443, **Certificate**, please contact us at telepho

or email: CN_Docchesk@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—号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Page: 106 of 107

8. Frequency Stability

8.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	20MHz	QPSK	132072	100RB#0	VL	NT	0.10	0.000058	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	VN	NT	-0.20	-0.000116	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	VH	NT	0.00	0.000000	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VL	NT	2.30	0.001318	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VN	NT	2.00	0.001146	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VH	NT	1.80	0.001032	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	VL	NT	1.90	0.001073	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	VN	NT	1.90	0.001073	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	VH	NT	1.90	0.001073	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	VL	NT	0.20	0.000116	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	VN	NT	0.00	0.000000	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	VH	NT	0.10	0.000058	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	VL	NT	2.30	0.001318	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	VN	NT	1.90	0.001089	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	VH	NT	1.80	0.001032	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	VL	NT	2.00	0.001130	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	VN	NT	2.00	0.001130	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	VH	NT	1.80	0.001017	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	VL	NT	0.20	0.000116	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	VN	NT	0.20	0.000116	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	VH	NT	0.20	0.000116	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	VL	NT	2.10	0.001203	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	VN	NT	2.00	0.001146	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	VH	NT	2.00	0.001146	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	VL	NT	2.10	0.001186	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	VN	NT	2.70	0.001525	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	VH	NT	2.40	0.001356	±2.5	PASS

8.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	20MHz	QPSK	132072	100RB#0	NV	-30	0.30	0.000174	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	-20	0.20	0.000116	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	0	0.30	0.000174	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	10	0.20	0.000116	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	20	0.00	0.000000	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	-30	1.90	0.001089	±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 issue 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, **Certificate**.

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 tt (86-755) 26012053 ft (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 tt (86-755) 26012053 ft (86-755) 26710594 sgs.china@sgs.com



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

Report No.: HR/2019/1001201 Page: 107 of 107

Band66	20MHz	QPSK	132322	100RB#0	NV	-20	2.30	0.001318	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	0	2.10	0.001203	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	10	2.00	0.001146	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	20	1.90	0.001089	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	-30	1.70	0.000960	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	-20	1.80	0.001017	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	0	2.00	0.001130	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	10	1.50	0.000847	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	20	2.00	0.001130	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	NV	-30	0.30	0.000174	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	NV	-20	0.00	0.000000	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	NV	0	-0.10	-0.000058	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	NV	10	-0.20	-0.000116	±2.5	PASS
Band66	20MHz	64QAM	132072	100RB#0	NV	20	-0.30	-0.000174	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	NV	-30	2.20	0.001261	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	NV	-20	2.00	0.001146	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	NV	0	2.20	0.001261	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	NV	10	2.30	0.001318	±2.5	PASS
Band66	20MHz	64QAM	132322	100RB#0	NV	20	2.00	0.001146	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	NV	-30	2.00	0.001130	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	NV	-20	1.90	0.001073	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	NV	0	2.10	0.001186	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	NV	10	2.00	0.001130	±2.5	PASS
Band66	20MHz	64QAM	132572	100RB#0	NV	20	2.20	0.001243	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	-30	0.50	0.000291	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	-20	0.10	0.000058	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	0	0.40	0.000233	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	10	0.10	0.000058	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	20	0.20	0.000116	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	-30	2.00	0.001146	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	-20	2.20	0.001261	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	0	1.70	0.000974	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	10	2.00	0.001146	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	20	2.10	0.001203	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	-30	2.30	0.001299	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	-20	2.00	0.001130	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	0	2.10	0.001186	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	10	2.30	0.001299	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	20	2.30	0.001299	±2.5	PASS

The End



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue 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, **Certificate**.

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