



Appendix B

E-UTRA Band 4



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

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



CONTENT

| | | |
|-----------|---|-----------|
| 1 | EFFECTIVE (ISOTROPIC) RADIATED POWER..... | 3 |
| 1.1. | TEST RESULT..... | 3 |
| 2. | PEAK-TO-AVERAGE RATIO (CCDF)..... | 9 |
| 2.1. | TEST RESULT..... | 9 |
| 2.2. | TEST PLOTS..... | 9 |
| 3. | MODULATION CHARACTERISTICS..... | 13 |
| 3.1. | TEST MODE = LTE /TM1 20MHZ..... | 13 |
| 3.1.1. | TEST CHANNEL = MCH..... | 13 |
| 3.2. | TEST MODE = LTE /TM2 20MHZ..... | 14 |
| 3.2.1. | TEST CHANNEL = MCH..... | 14 |
| 4. | 26DB BANDWIDTH AND OCCUPIED BANDWIDTH..... | 15 |
| 4.1. | TEST RESULT..... | 15 |
| 4.2. | TEST PLOTS..... | 16 |
| 5. | BAND EDGE COMPLIANCE..... | 34 |
| 5.1. | TEST PLOTS..... | 34 |
| 6. | SPURIOUS EMISSION AT ANTENNA TERMINAL..... | 58 |
| 6.1. | TEST PLOTS..... | 58 |
| 7. | FIELD STRENGTH OF SPURIOUS RADIATION..... | 64 |
| 7.1. | TEST MODE =LTE/TM1..... | 64 |
| 7.1.1. | TEST CHANNEL = LCH..... | 64 |
| 7.1.2. | TEST CHANNEL = MCH..... | 64 |
| 7.1.3. | TEST CHANNEL = HCH..... | 65 |
| 8. | FREQUENCY STABILITY..... | 66 |
| 8.1. | FREQUENCY VS VOLTAGE..... | 66 |
| 8.2. | FREQUENCY VS TEMPERATURE..... | 66 |



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

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



1 Effective (Isotropic) Radiated Power

1.1. Test Result

| Band | Bandwidth | Modulation | Channel | RB Configuration | Conducted Power(dBm) | EIRP (dBm) | Limit (dBm) | Verdict |
|-------|-----------|------------|---------|------------------|----------------------|------------|-------------|---------|
| Band4 | 1.4MHz | QPSK | 19957 | 1RB#0 | 22.73 | 23.44 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 19957 | 1RB#2 | 22.67 | 23.38 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 19957 | 1RB#5 | 22.51 | 23.22 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 19957 | 3RB#1 | 22.52 | 23.23 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 19957 | 3RB#0 | 22.67 | 23.38 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 19957 | 3RB#3 | 22.82 | 23.53 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 19957 | 6RB#0 | 21.70 | 22.41 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 1RB#5 | 22.57 | 23.28 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 1RB#0 | 22.83 | 23.54 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 1RB#2 | 22.71 | 23.42 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 3RB#0 | 22.60 | 23.31 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 3RB#1 | 22.78 | 23.49 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 3RB#3 | 22.77 | 23.48 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 6RB#0 | 21.72 | 22.43 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 1RB#2 | 22.76 | 23.47 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 1RB#5 | 22.53 | 23.24 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 1RB#0 | 22.78 | 23.49 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 3RB#0 | 22.76 | 23.47 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 3RB#3 | 22.59 | 23.30 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 3RB#1 | 22.57 | 23.28 | 30.00 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 6RB#0 | 21.81 | 22.52 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 1RB#2 | 21.59 | 22.30 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 1RB#5 | 21.53 | 22.24 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 1RB#0 | 21.59 | 22.30 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 3RB#0 | 21.59 | 22.30 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 3RB#1 | 21.61 | 22.32 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 3RB#3 | 21.54 | 22.25 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 6RB#0 | 20.59 | 21.30 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 1RB#5 | 21.54 | 22.25 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 1RB#0 | 21.51 | 22.22 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 1RB#2 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 3RB#3 | 21.75 | 22.46 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 3RB#1 | 21.66 | 22.37 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 3RB#0 | 21.63 | 22.34 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 6RB#0 | 20.65 | 21.36 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 1RB#2 | 21.78 | 22.49 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 1RB#5 | 21.78 | 22.49 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 1RB#0 | 21.76 | 22.47 | 30.00 | PASS |



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

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



| | | | | | | | | |
|-------|--------|-------|-------|--------|-------|-------|-------|------|
| Band4 | 1.4MHz | 16QAM | 20393 | 3RB#3 | 21.80 | 22.51 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 3RB#1 | 21.61 | 22.32 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 3RB#0 | 21.76 | 22.47 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 6RB#0 | 20.61 | 21.32 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 1RB#14 | 22.65 | 23.36 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 1RB#0 | 22.68 | 23.39 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 1RB#8 | 22.70 | 23.41 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 8RB#7 | 21.62 | 22.33 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 8RB#4 | 21.59 | 22.30 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 8RB#0 | 21.66 | 22.37 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 15RB#0 | 21.67 | 22.38 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 1RB#14 | 22.68 | 23.39 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 1RB#8 | 22.70 | 23.41 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 1RB#0 | 22.53 | 23.24 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 8RB#7 | 21.73 | 22.44 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 8RB#0 | 21.54 | 22.25 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 8RB#4 | 21.83 | 22.54 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 15RB#0 | 21.66 | 22.37 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 1RB#14 | 22.63 | 23.34 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 1RB#8 | 22.72 | 23.43 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 1RB#0 | 22.75 | 23.46 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 8RB#4 | 21.52 | 22.23 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 8RB#0 | 21.66 | 22.37 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 8RB#7 | 21.70 | 22.41 | 30.00 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 15RB#0 | 21.57 | 22.28 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 1RB#8 | 21.67 | 22.38 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 1RB#14 | 21.69 | 22.40 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 1RB#0 | 21.59 | 22.30 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 8RB#0 | 20.55 | 21.26 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 8RB#7 | 20.64 | 21.35 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 8RB#4 | 20.55 | 21.26 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 15RB#0 | 20.80 | 21.51 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 1RB#8 | 21.77 | 22.48 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 1RB#14 | 21.57 | 22.28 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 1RB#0 | 21.83 | 22.54 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 8RB#4 | 20.64 | 21.35 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 8RB#0 | 20.56 | 21.27 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 8RB#7 | 20.52 | 21.23 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 15RB#0 | 20.69 | 21.40 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 1RB#14 | 21.67 | 22.38 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 1RB#0 | 21.76 | 22.47 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 1RB#8 | 21.59 | 22.30 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 8RB#0 | 20.81 | 21.52 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 8RB#7 | 20.70 | 21.41 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 8RB#4 | 20.80 | 21.51 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 15RB#0 | 20.73 | 21.44 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 19975 | 1RB#24 | 22.71 | 23.42 | 30.00 | PASS |



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

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



| | | | | | | | | |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 5MHz | QPSK | 19975 | 1RB#12 | 22.54 | 23.25 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 19975 | 1RB#0 | 22.58 | 23.29 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 19975 | 12RB#6 | 21.60 | 22.31 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 19975 | 12RB#0 | 21.62 | 22.33 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 19975 | 12RB#13 | 21.81 | 22.52 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 19975 | 25RB#0 | 21.69 | 22.40 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 1RB#24 | 22.57 | 23.28 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 1RB#0 | 22.80 | 23.51 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 1RB#12 | 22.54 | 23.25 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 12RB#6 | 21.68 | 22.39 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 12RB#0 | 21.72 | 22.43 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 12RB#13 | 21.77 | 22.48 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 25RB#0 | 21.76 | 22.47 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 1RB#0 | 22.82 | 23.53 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 1RB#12 | 22.79 | 23.50 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 1RB#24 | 22.68 | 23.39 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 12RB#0 | 21.67 | 22.38 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 12RB#6 | 21.54 | 22.25 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 12RB#13 | 21.50 | 22.21 | 30.00 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 25RB#0 | 21.67 | 22.38 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 1RB#0 | 21.52 | 22.23 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 1RB#12 | 21.68 | 22.39 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 1RB#24 | 21.66 | 22.37 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 12RB#13 | 20.56 | 21.27 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 12RB#0 | 20.58 | 21.29 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 12RB#6 | 20.61 | 21.32 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 25RB#0 | 20.79 | 21.50 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 1RB#0 | 21.77 | 22.48 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 1RB#12 | 21.61 | 22.32 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 1RB#24 | 21.75 | 22.46 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 12RB#0 | 20.64 | 21.35 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 12RB#13 | 20.77 | 21.48 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 12RB#6 | 20.74 | 21.45 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 25RB#0 | 20.69 | 21.40 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 1RB#0 | 21.83 | 22.54 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 1RB#24 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 1RB#12 | 21.60 | 22.31 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 12RB#0 | 20.65 | 21.36 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 12RB#6 | 20.64 | 21.35 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 12RB#13 | 20.59 | 21.30 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 25RB#0 | 20.69 | 21.40 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20000 | 1RB#0 | 22.56 | 23.27 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20000 | 1RB#24 | 22.81 | 23.52 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20000 | 1RB#49 | 22.56 | 23.27 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20000 | 25RB#12 | 21.58 | 22.29 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20000 | 25RB#0 | 21.68 | 22.39 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20000 | 25RB#25 | 21.75 | 22.46 | 30.00 | PASS |



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

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



| | | | | | | | | |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 10MHz | QPSK | 20000 | 50RB#0 | 21.55 | 22.26 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 1RB#49 | 22.57 | 23.28 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 1RB#0 | 22.50 | 23.21 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 1RB#24 | 22.75 | 23.46 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 25RB#0 | 21.57 | 22.28 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 25RB#12 | 21.82 | 22.53 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 25RB#25 | 21.51 | 22.22 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 50RB#0 | 21.50 | 22.21 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 1RB#24 | 22.59 | 23.30 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 1RB#49 | 22.55 | 23.26 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 1RB#0 | 22.79 | 23.50 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 25RB#0 | 21.58 | 22.29 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 25RB#25 | 21.50 | 22.21 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 25RB#12 | 21.50 | 22.21 | 30.00 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 50RB#0 | 21.83 | 22.54 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 1RB#24 | 21.76 | 22.47 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 1RB#49 | 21.65 | 22.36 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 1RB#0 | 21.71 | 22.42 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 25RB#0 | 20.67 | 21.38 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 25RB#12 | 20.65 | 21.36 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 25RB#25 | 20.60 | 21.31 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 50RB#0 | 20.78 | 21.49 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 1RB#49 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 1RB#0 | 21.67 | 22.38 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 1RB#24 | 21.76 | 22.47 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 25RB#25 | 20.70 | 21.41 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 25RB#12 | 20.80 | 21.51 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 25RB#0 | 20.73 | 21.44 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 50RB#0 | 20.58 | 21.29 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 1RB#24 | 21.75 | 22.46 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 1RB#49 | 21.54 | 22.25 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 1RB#0 | 21.68 | 22.39 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 25RB#25 | 20.77 | 21.48 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 25RB#12 | 20.73 | 21.44 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 25RB#0 | 20.81 | 21.52 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 50RB#0 | 20.78 | 21.49 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 1RB#74 | 22.73 | 23.44 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 1RB#0 | 22.78 | 23.49 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 1RB#38 | 22.53 | 23.24 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 36RB#39 | 21.76 | 22.47 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 36RB#18 | 21.83 | 22.54 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 36RB#0 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 75RB#0 | 21.82 | 22.53 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20175 | 1RB#74 | 22.67 | 23.38 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20175 | 1RB#38 | 22.81 | 23.52 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20175 | 1RB#0 | 22.52 | 23.23 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20175 | 36RB#0 | 21.59 | 22.30 | 30.00 | PASS |



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

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

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

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



| | | | | | | | | |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 15MHz | QPSK | 20175 | 36RB#39 | 21.56 | 22.27 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20175 | 36RB#18 | 21.69 | 22.40 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20175 | 75RB#0 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 1RB#74 | 22.61 | 23.32 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 1RB#38 | 22.79 | 23.50 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 1RB#0 | 22.56 | 23.27 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 36RB#18 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 36RB#0 | 21.51 | 22.22 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 36RB#39 | 21.68 | 22.39 | 30.00 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 75RB#0 | 21.70 | 22.41 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 1RB#0 | 21.78 | 22.49 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 1RB#74 | 21.60 | 22.31 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 1RB#38 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 36RB#0 | 20.63 | 21.34 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 36RB#39 | 20.60 | 21.31 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 36RB#18 | 20.52 | 21.23 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 75RB#0 | 20.61 | 21.32 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 1RB#38 | 21.66 | 22.37 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 1RB#74 | 21.82 | 22.53 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 1RB#0 | 21.76 | 22.47 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 36RB#18 | 20.61 | 21.32 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 36RB#0 | 20.52 | 21.23 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 36RB#39 | 20.50 | 21.21 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 75RB#0 | 20.52 | 21.23 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 1RB#74 | 21.82 | 22.53 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 1RB#0 | 21.52 | 22.23 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 1RB#38 | 21.82 | 22.53 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 36RB#0 | 20.81 | 21.52 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 36RB#39 | 20.66 | 21.37 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 36RB#18 | 20.55 | 21.26 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 75RB#0 | 20.58 | 21.29 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 1RB#99 | 22.79 | 23.50 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 1RB#49 | 22.80 | 23.51 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 1RB#0 | 22.62 | 23.33 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 50RB#25 | 21.63 | 22.34 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 50RB#0 | 21.74 | 22.45 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 50RB#50 | 21.72 | 22.43 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | 21.63 | 22.34 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 1RB#99 | 22.55 | 23.26 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 1RB#0 | 22.59 | 23.30 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 1RB#49 | 22.83 | 23.54 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 50RB#25 | 21.52 | 22.23 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 50RB#0 | 21.50 | 22.21 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 50RB#50 | 21.80 | 22.51 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | 21.67 | 22.38 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 1RB#0 | 22.59 | 23.30 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 1RB#49 | 22.53 | 23.24 | 30.00 | PASS |



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

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



| | | | | | | | | |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 20MHz | QPSK | 20300 | 1RB#99 | 22.73 | 23.44 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 50RB#0 | 21.83 | 22.54 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 50RB#25 | 21.56 | 22.27 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 50RB#50 | 21.56 | 22.27 | 30.00 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | 21.62 | 22.33 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 1RB#0 | 21.83 | 22.54 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 1RB#49 | 21.53 | 22.24 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 1RB#99 | 21.61 | 22.32 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 50RB#50 | 20.77 | 21.48 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 50RB#0 | 20.53 | 21.24 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 50RB#25 | 20.80 | 21.51 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | 20.83 | 21.54 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 1RB#0 | 21.69 | 22.40 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 1RB#49 | 21.72 | 22.43 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 1RB#99 | 21.59 | 22.30 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 50RB#0 | 20.83 | 21.54 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 50RB#50 | 20.78 | 21.49 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 50RB#25 | 20.74 | 21.45 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | 20.60 | 21.31 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 1RB#0 | 21.58 | 22.29 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 1RB#99 | 21.55 | 22.26 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 1RB#49 | 21.77 | 22.48 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 50RB#0 | 20.56 | 21.27 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 50RB#25 | 20.73 | 21.44 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 50RB#50 | 20.71 | 21.42 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | 20.79 | 21.50 | 30.00 | PASS |

Remark:

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

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

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



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 (SGS-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

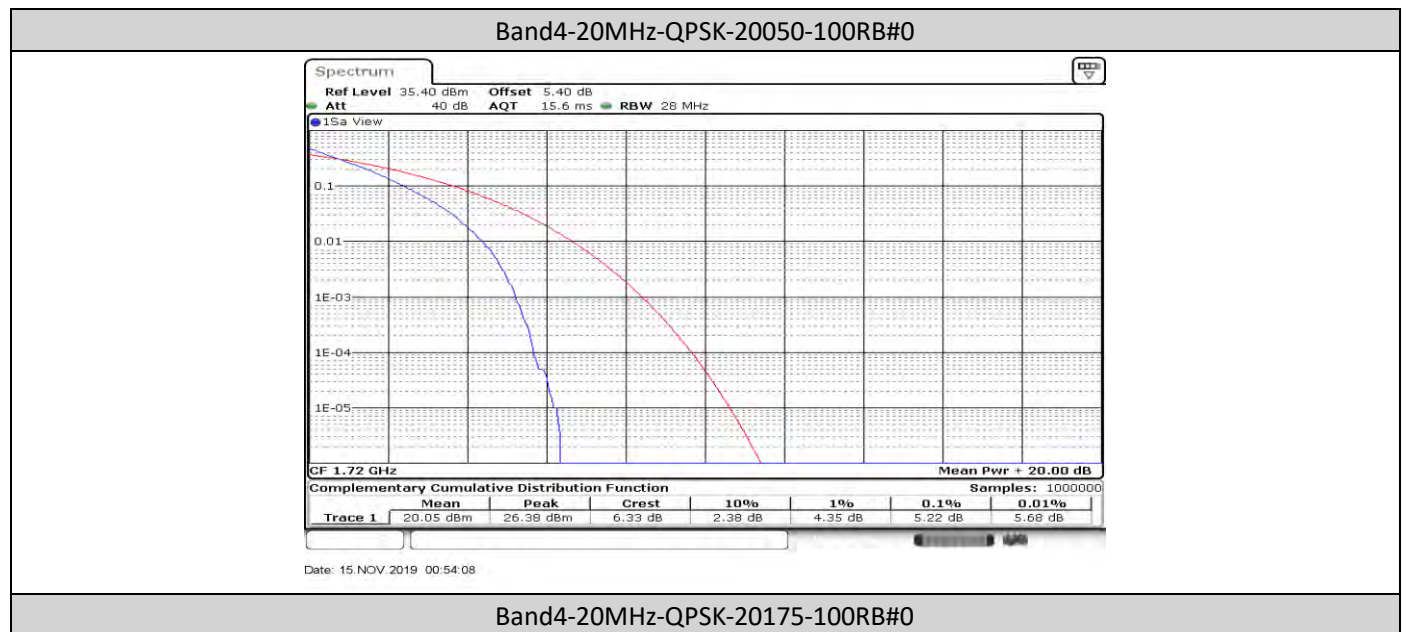


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

| Band | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|-------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | 5.22 | 13 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | 5.30 | 13 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | 5.04 | 13 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | 6.14 | 13 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | 6.14 | 13 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | 5.94 | 13 | PASS |

2.2. Test Plots





Band4-20MHz-QPSK-20300-100RB#0



Band4-20MHz-16QAM-20050-100RB#0



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

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



Band4-20MHz-16QAM-20175-100RB#0



Band4-20MHz-16QAM-20300-100RB#0



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

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

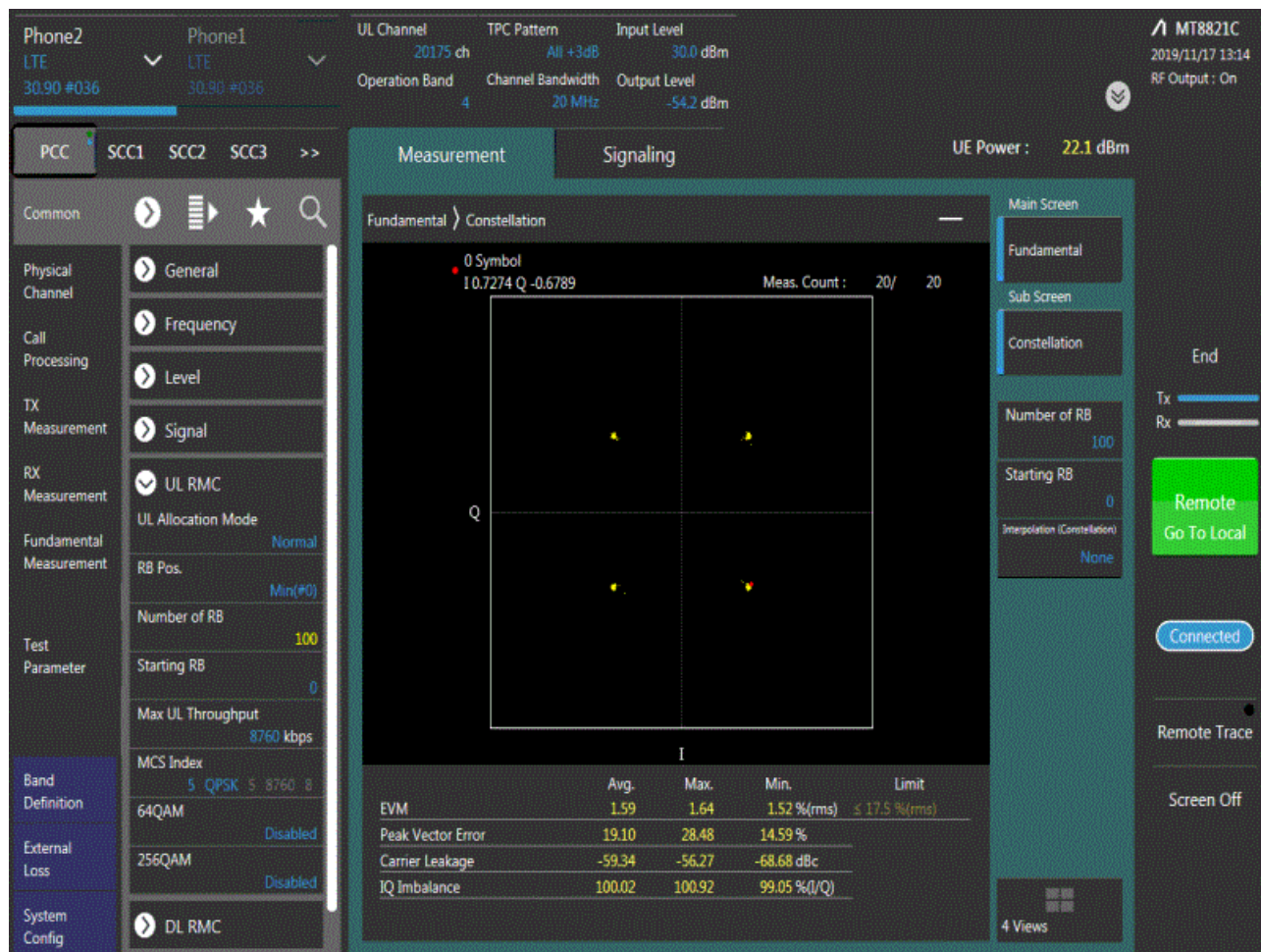




3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 20MHz

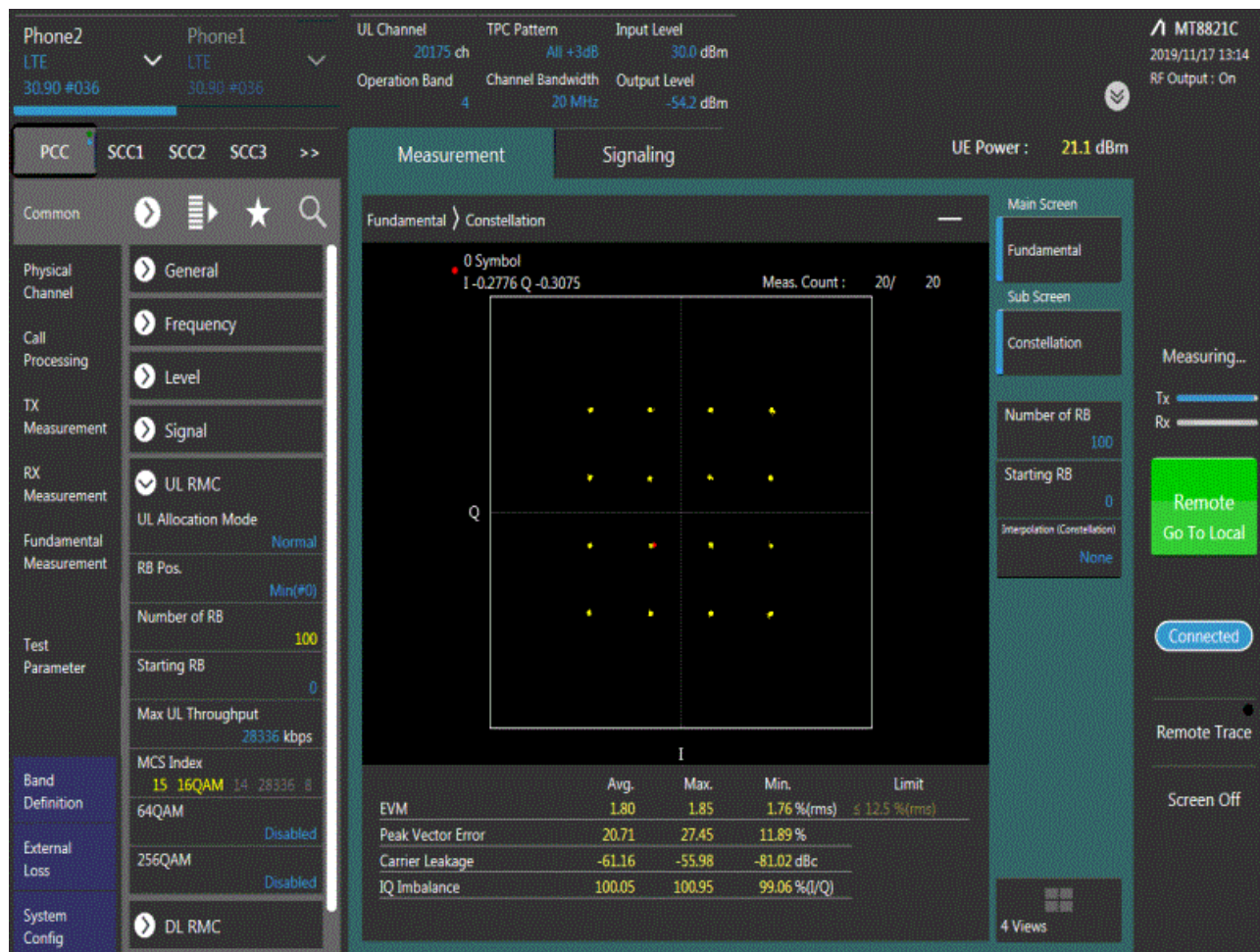
3.1.1. Test Channel = MCH





3.2. Test Mode = LTE /TM2 20MHz

3.2.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

| Band | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|-------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band4 | 1.4MHz | QPSK | 19957 | 6RB#0 | 1.097 | 1.290 | PASS |
| Band4 | 1.4MHz | QPSK | 20175 | 6RB#0 | 1.091 | 1.284 | PASS |
| Band4 | 1.4MHz | QPSK | 20393 | 6RB#0 | 1.097 | 1.296 | PASS |
| Band4 | 1.4MHz | 16QAM | 19957 | 6RB#0 | 1.094 | 1.290 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 6RB#0 | 1.091 | 1.278 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 6RB#0 | 1.094 | 1.287 | PASS |
| Band4 | 3MHz | QPSK | 19965 | 15RB#0 | 2.685 | 2.916 | PASS |
| Band4 | 3MHz | QPSK | 20175 | 15RB#0 | 2.685 | 3.024 | PASS |
| Band4 | 3MHz | QPSK | 20385 | 15RB#0 | 2.685 | 2.886 | PASS |
| Band4 | 3MHz | 16QAM | 19965 | 15RB#0 | 2.685 | 2.898 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 15RB#0 | 2.685 | 2.910 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 15RB#0 | 2.685 | 2.910 | PASS |
| Band4 | 5MHz | QPSK | 19975 | 25RB#0 | 4.476 | 4.900 | PASS |
| Band4 | 5MHz | QPSK | 20175 | 25RB#0 | 4.476 | 4.860 | PASS |
| Band4 | 5MHz | QPSK | 20375 | 25RB#0 | 4.486 | 4.830 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 25RB#0 | 4.476 | 4.890 | PASS |
| Band4 | 5MHz | 16QAM | 20175 | 25RB#0 | 4.466 | 4.870 | PASS |
| Band4 | 5MHz | 16QAM | 20375 | 25RB#0 | 4.466 | 4.800 | PASS |
| Band4 | 10MHz | QPSK | 20000 | 50RB#0 | 8.931 | 9.620 | PASS |
| Band4 | 10MHz | QPSK | 20175 | 50RB#0 | 8.931 | 9.600 | PASS |
| Band4 | 10MHz | QPSK | 20350 | 50RB#0 | 8.931 | 9.660 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 50RB#0 | 8.931 | 9.640 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 50RB#0 | 8.931 | 9.640 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 50RB#0 | 8.931 | 9.560 | PASS |
| Band4 | 15MHz | QPSK | 20025 | 75RB#0 | 13.457 | 14.730 | PASS |
| Band4 | 15MHz | QPSK | 20175 | 75RB#0 | 13.427 | 14.700 | PASS |
| Band4 | 15MHz | QPSK | 20325 | 75RB#0 | 13.457 | 14.790 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 75RB#0 | 13.487 | 14.790 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 75RB#0 | 13.457 | 14.760 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 75RB#0 | 13.487 | 14.700 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | 17.982 | 19.480 | PASS |



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

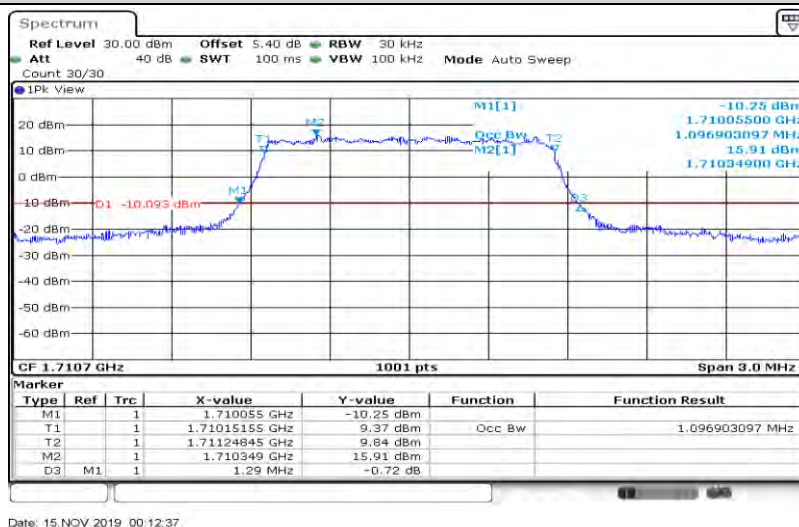
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn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



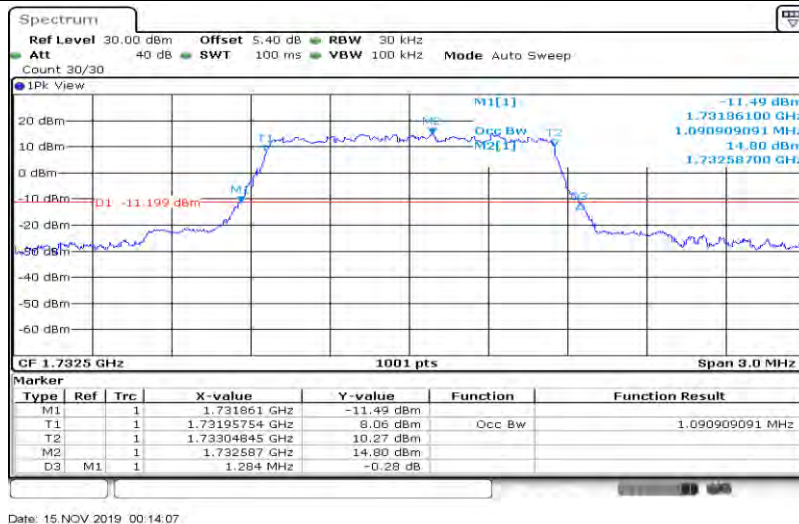
| | | | | | | | |
|-------|-------|-------|-------|---------|--------|--------|------|
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | 17.862 | 19.200 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | 17.902 | 19.120 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | 17.942 | 19.400 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | 17.862 | 19.320 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | 17.902 | 19.320 | PASS |

4.2. Test Plots

Band4-1.4MHz-QPSK-19957-6RB#0-1.097



Band4-1.4MHz-QPSK-20175-6RB#0-1.091

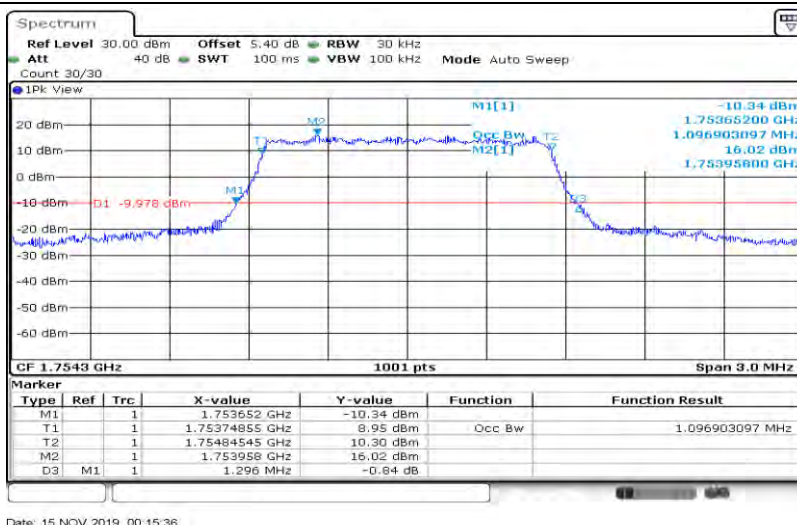


Band4-1.4MHz-QPSK-20393-6RB#0-1.097



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



Band4-1.4MHz-16QAM-19957-6RB#0-1.094



Band4-1.4MHz-16QAM-20175-6RB#0-1.091



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

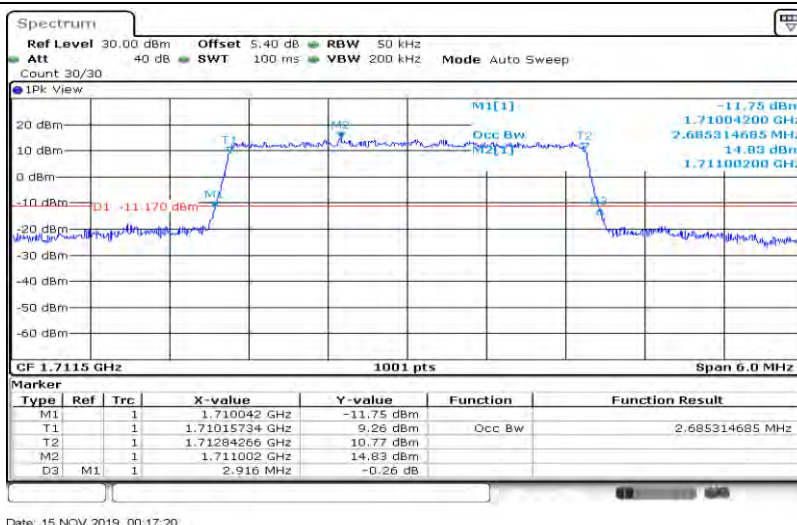


Band4-1.4MHz-16QAM-20393-6RB#0-1.094



Band4-3MHz-QPSK-19965-15RB#0-2.685



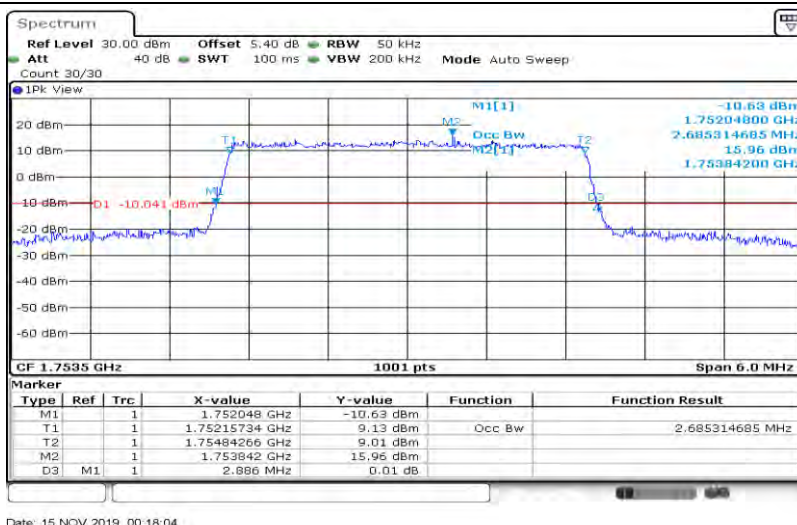


Band4-3MHz-QPSK-20175-15RB#0-2.685

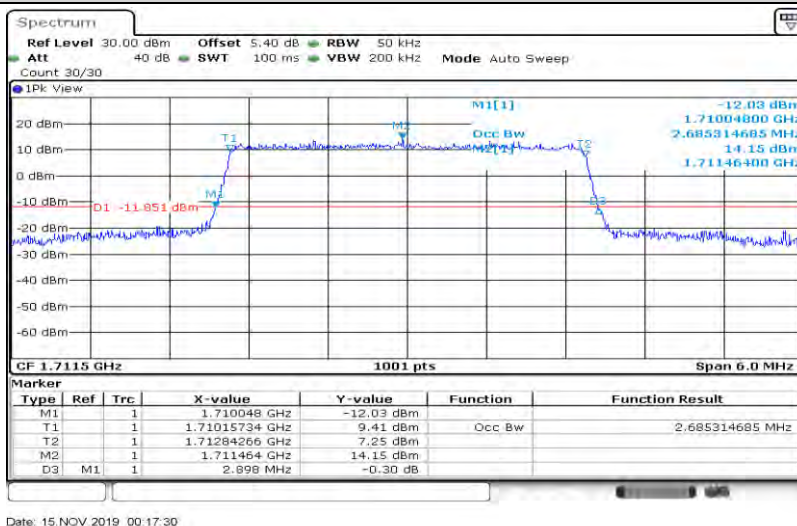


Band4-3MHz-QPSK-20385-15RB#0-2.685





Band4-3MHz-16QAM-19965-15RB#0-2.685

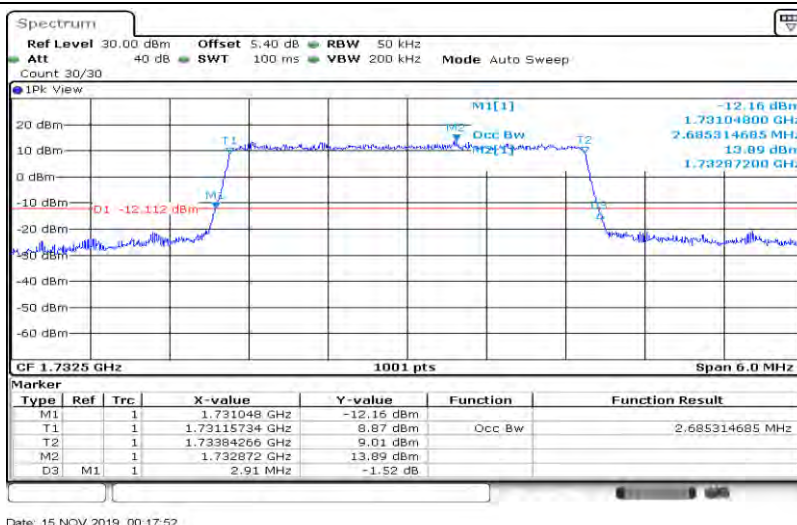


Band4-3MHz-16QAM-20175-15RB#0-2.685

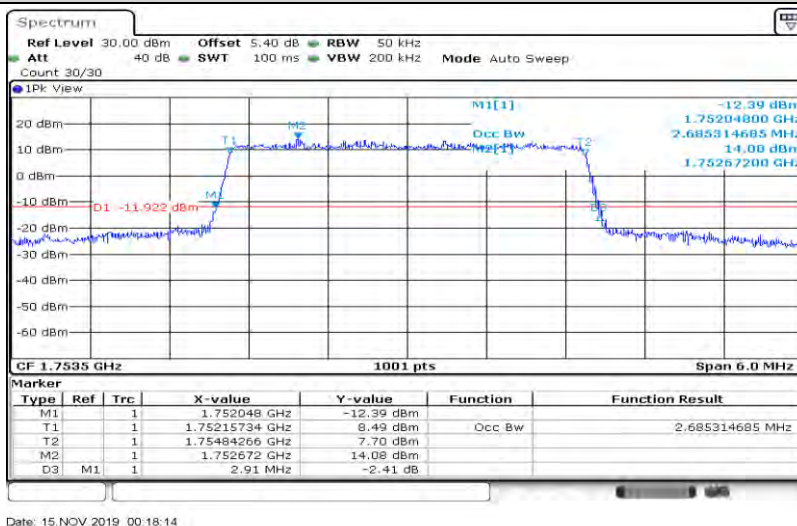


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band4-3MHz-16QAM-20385-15RB#0-2.685

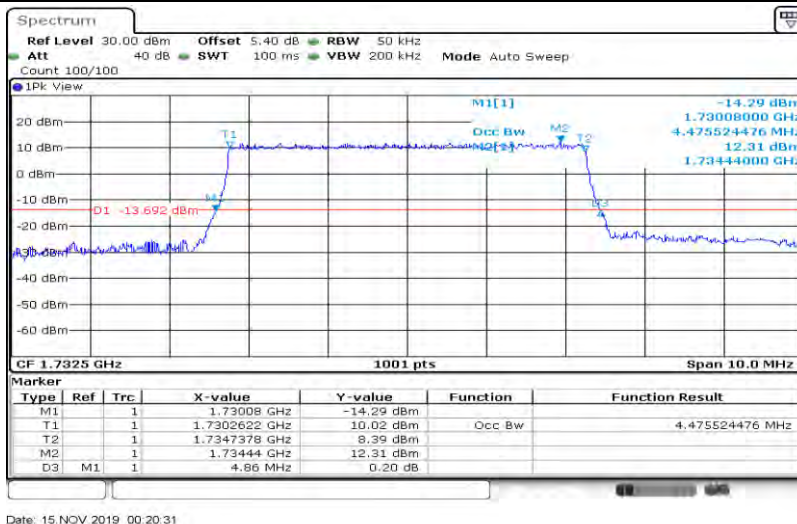


Band4-5MHz-QPSK-19975-25RB#0-4.476





Band4-5MHz-QPSK-20175-25RB#0-4.476

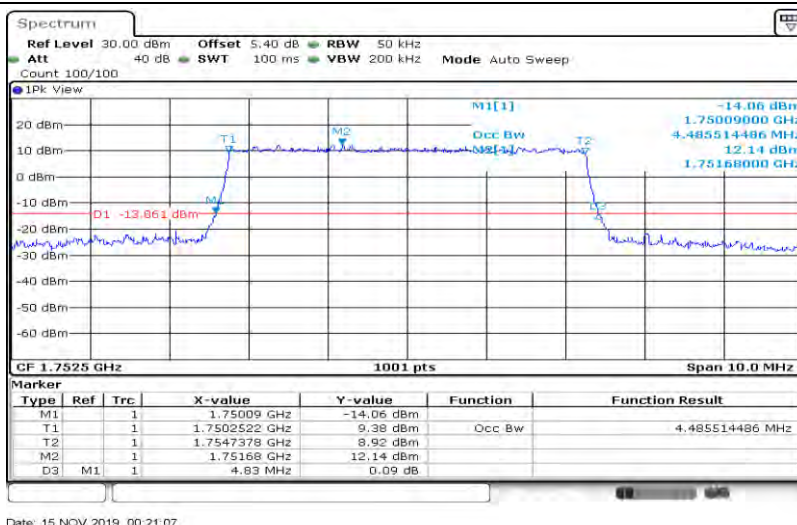


Band4-5MHz-QPSK-20375-25RB#0-4.486



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



Band4-5MHz-16QAM-19975-25RB#0-4.476

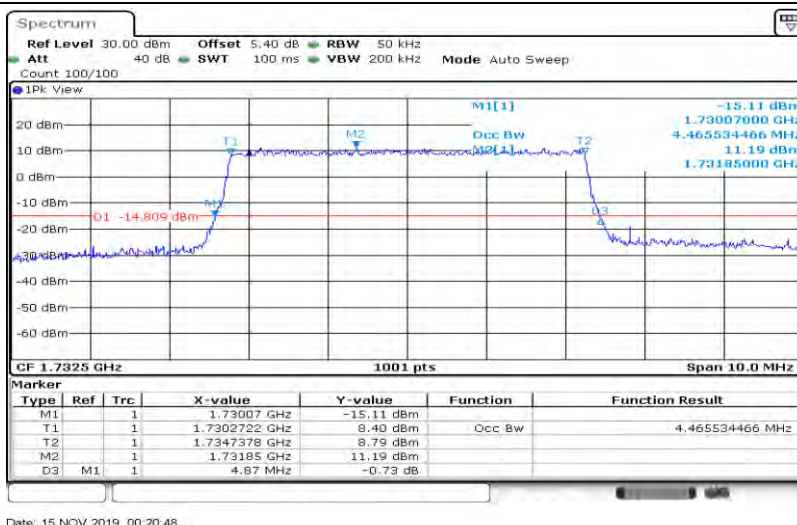


Band4-5MHz-16QAM-20175-25RB#0-4.466

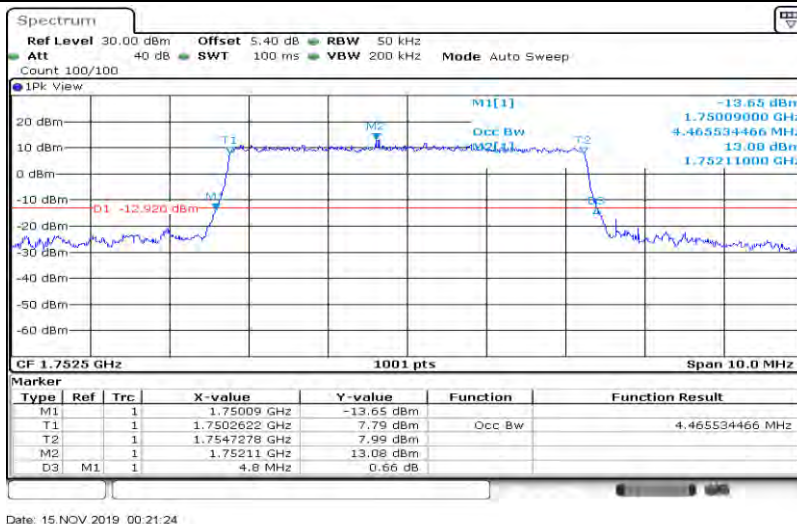


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Band4-5MHz-16QAM-20375-25RB#0-4.466



Band4-10MHz-QPSK-20000-50RB#0-8.931



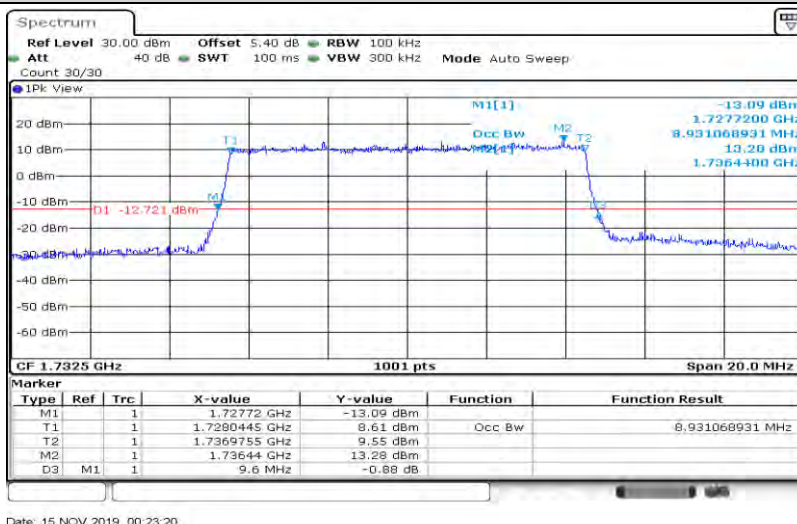
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Date: 15, NOV 2019 00:22:58

Band4-10MHz-QPSK-20175-50RB#0-8.931

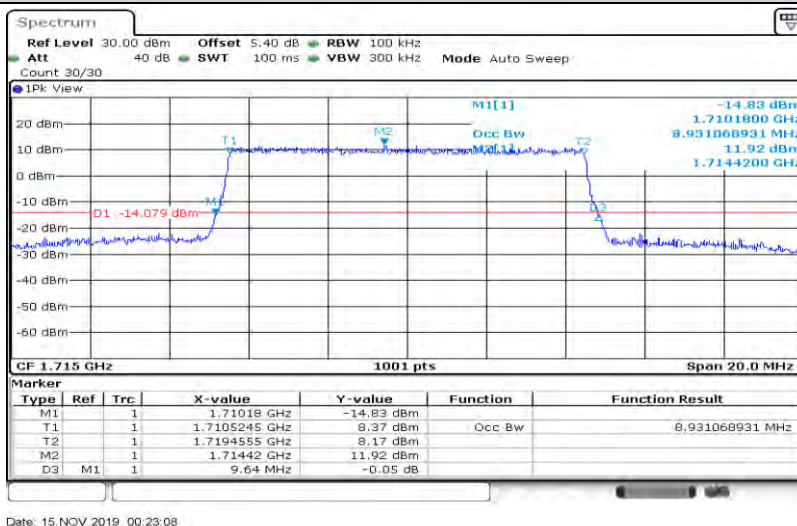


Date: 15, NOV 2019 00:23:20

Band4-10MHz-QPSK-20350-50RB#0-8.931



Band4-10MHz-16QAM-20000-50RB#0-8.931

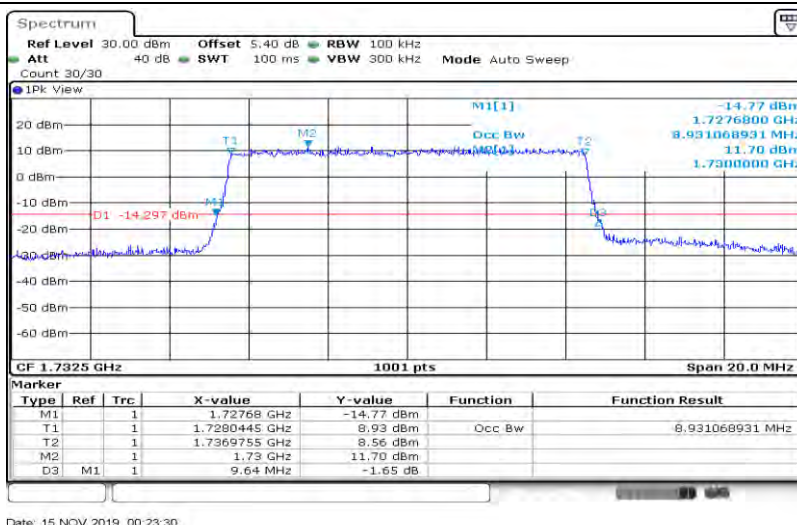


Band4-10MHz-16QAM-20175-50RB#0-8.931



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

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



Band4-10MHz-16QAM-20350-50RB#0-8.931

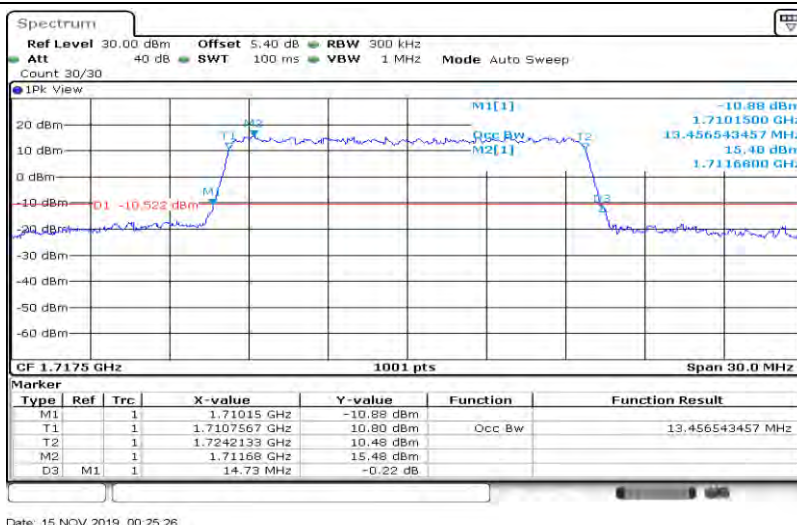


Band4-15MHz-QPSK-20025-75RB#0-13.457



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

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

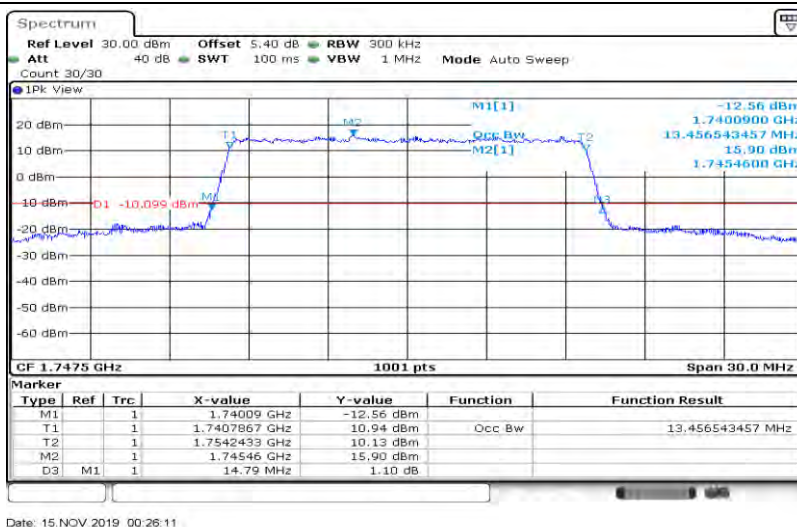


Band4-15MHz-QPSK-20175-75RB#0-13.427

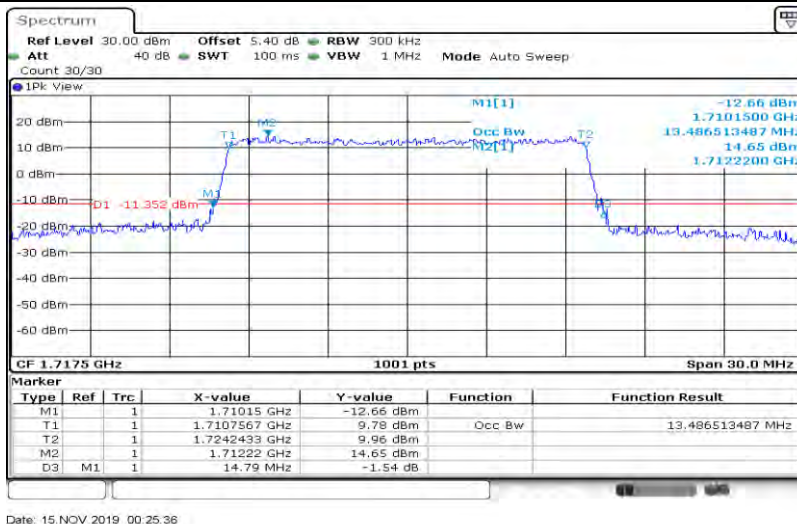


Band4-15MHz-QPSK-20325-75RB#0-13.457





Band4-15MHz-16QAM-20025-75RB#0-13.487

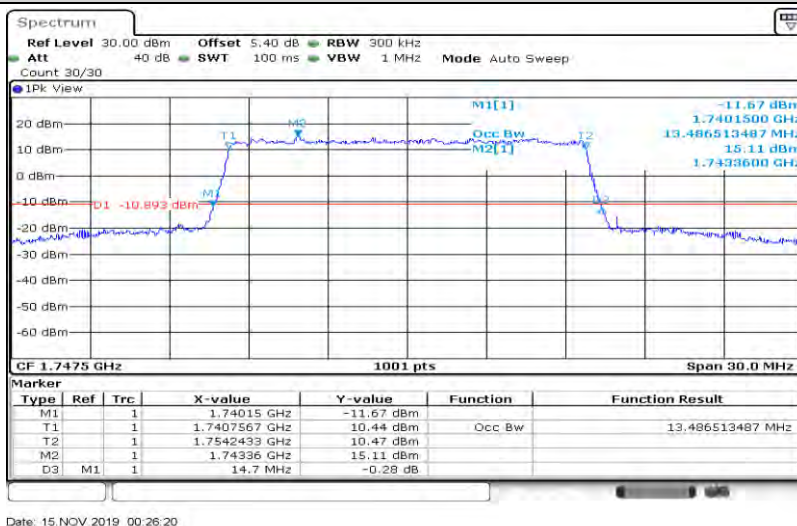


Band4-15MHz-16QAM-20175-75RB#0-13.457





Band4-15MHz-16QAM-20325-75RB#0-13.487

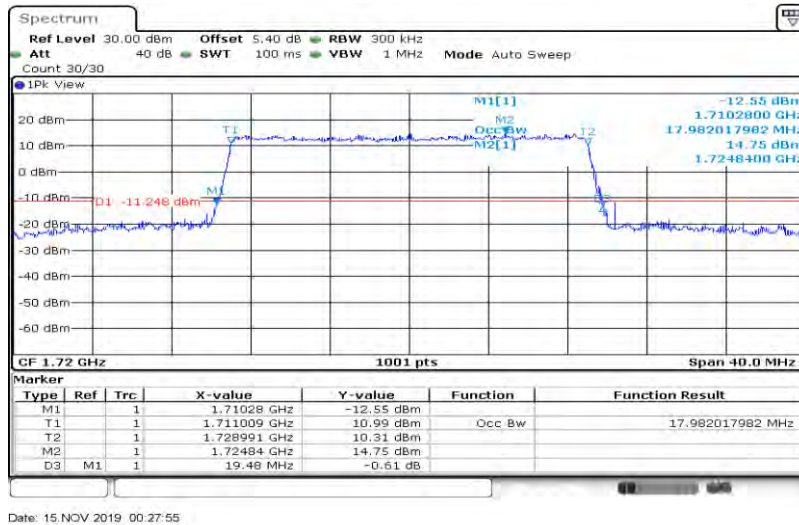


Band4-20MHz-QPSK-20050-100RB#0-17.982

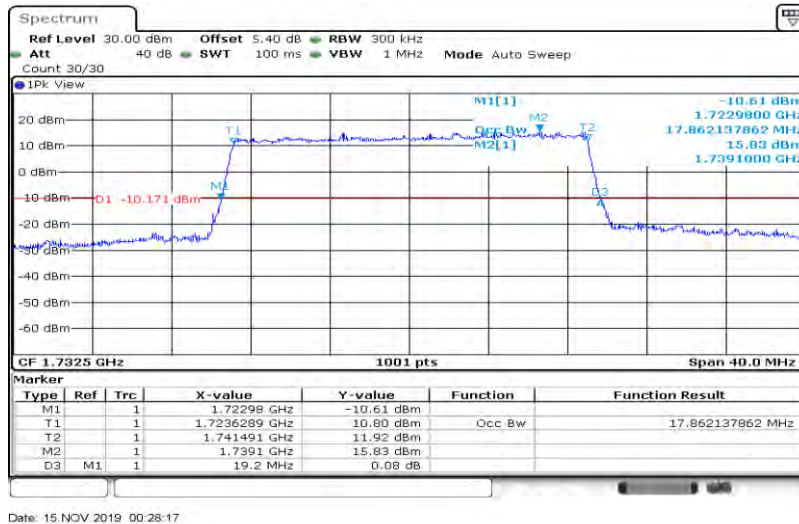


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band4-20MHz-QPSK-20175-100RB#0-17.862



Band4-20MHz-QPSK-20300-100RB#0-17.902

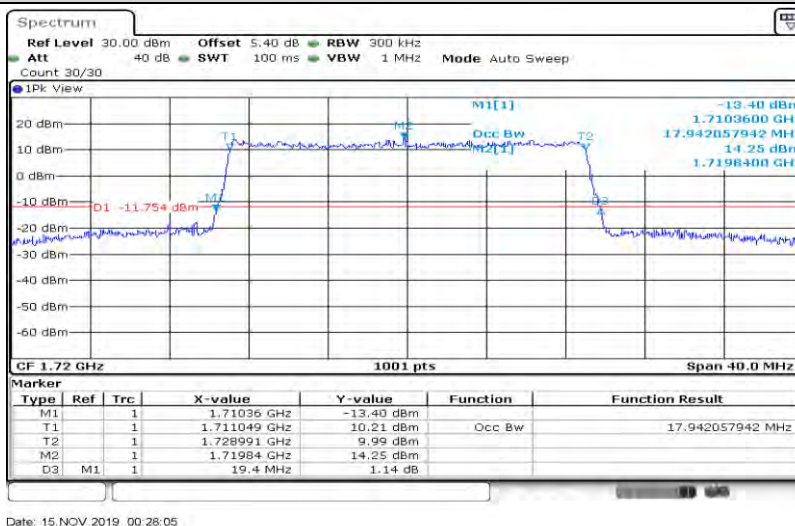


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Band4-20MHz-16QAM-20050-100RB#0-17.942

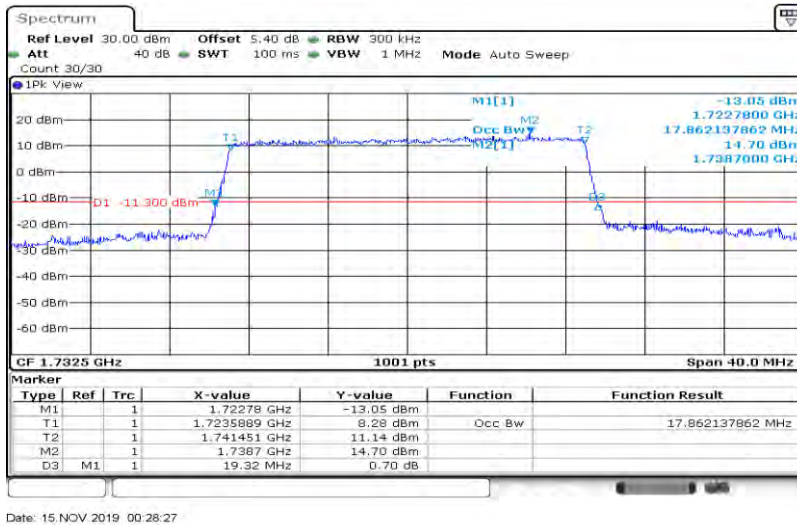


Band4-20MHz-16QAM-20175-100RB#0-17.862

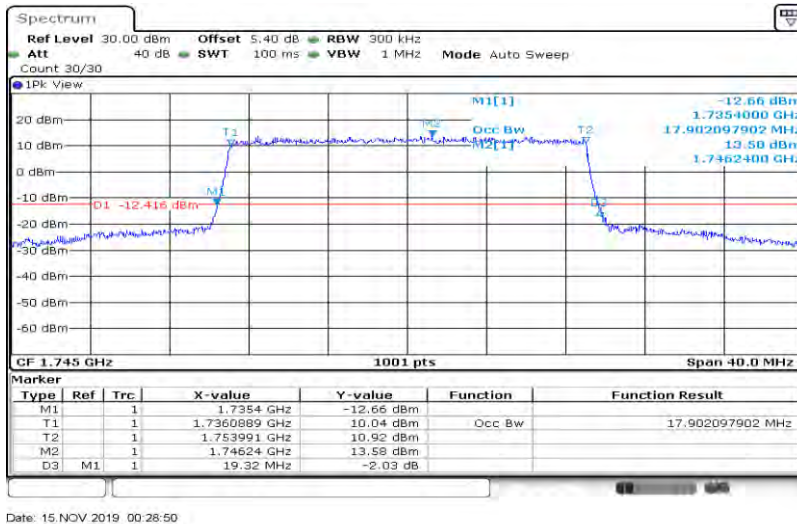


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band4-20MHz-16QAM-20300-100RB#0-17.902





5. Band Edge Compliance

5.1. Test Plots

Band4-1.4MHz-QPSK-19957-1RB#0



Band4-1.4MHz-QPSK-19957-6RB#0

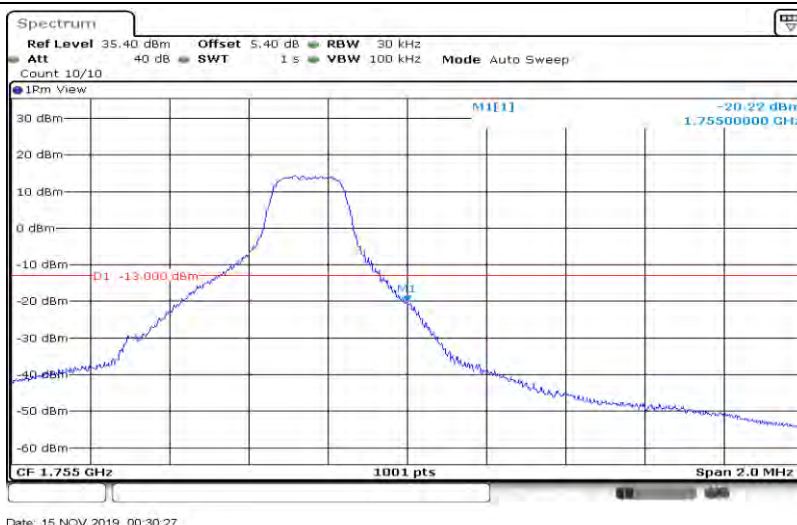


Band4-1.4MHz-QPSK-20393-1RB#5



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



Band4-1.4MHz-QPSK-20393-6RB#0

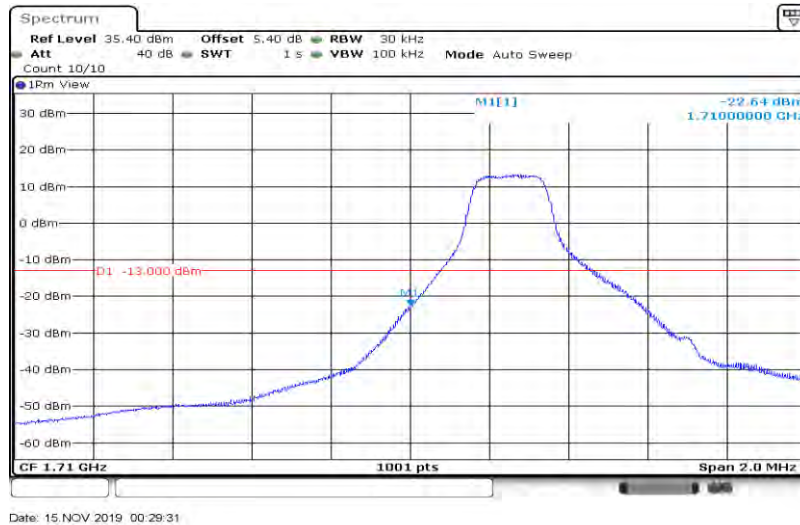


Band4-1.4MHz-16QAM-19957-1RB#0

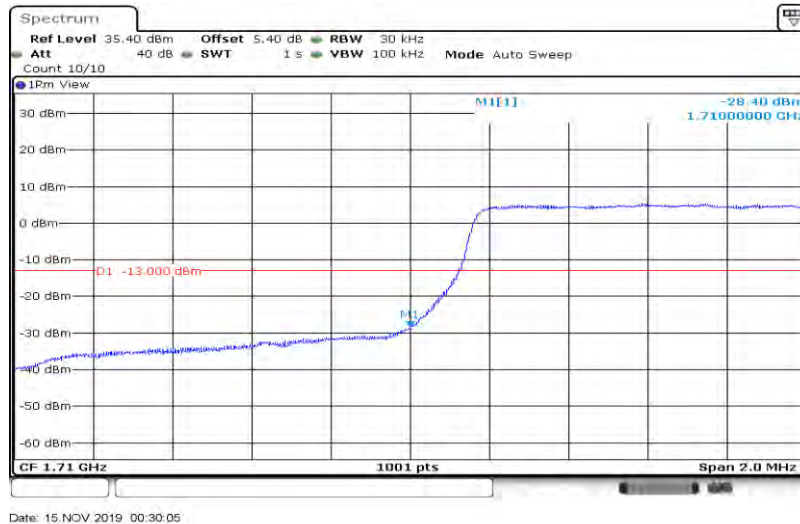


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Band4-1.4MHz-16QAM-19957-6RB#0



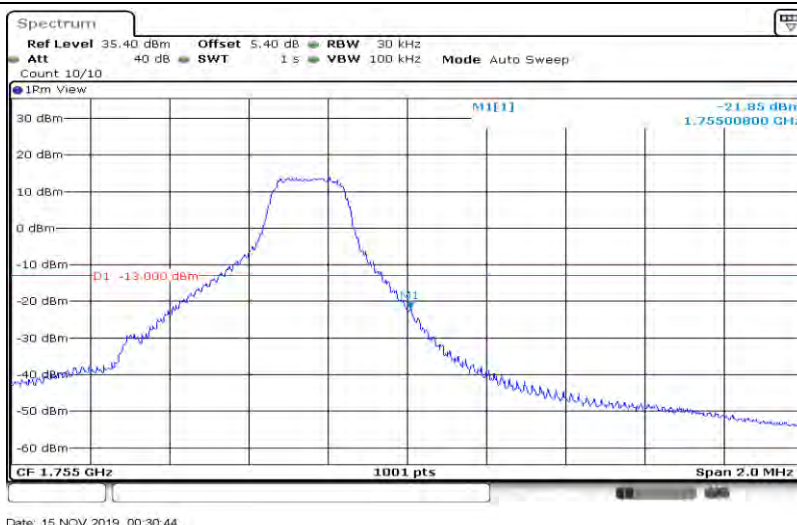
Band4-1.4MHz-16QAM-20393-1RB#5



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



Band4-1.4MHz-16QAM-20393-6RB#0



Band4-3MHz-QPSK-19965-1RB#0



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

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 83071443, 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



Band4-3MHz-QPSK-19965-15RB#0

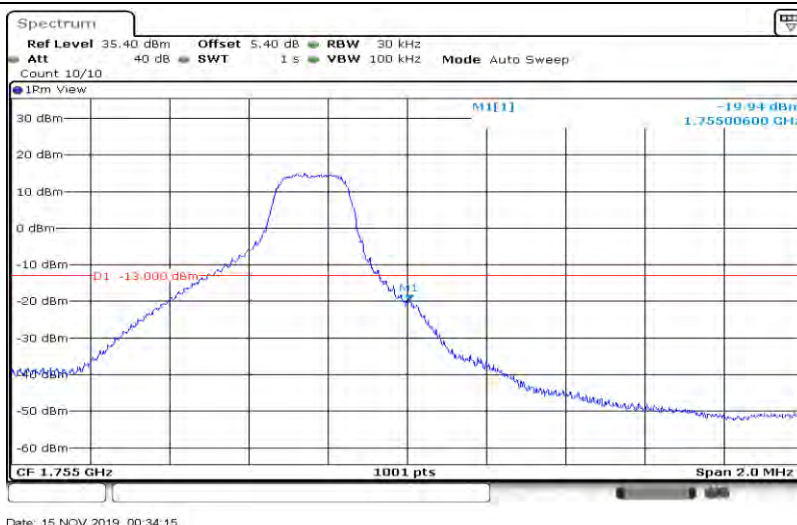


Band4-3MHz-QPSK-20385-1RB#14



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

Attention: To check the authenticity of testing/inspection report & 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



Band4-3MHz-QPSK-20385-15RB#0



Band4-3MHz-16QAM-19965-1RB#0



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

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



Date: 15, NOV 2019 00:33:19

Band4-3MHz-16QAM-19965-15RB#0



Date: 15, NOV 2019 00:33:52

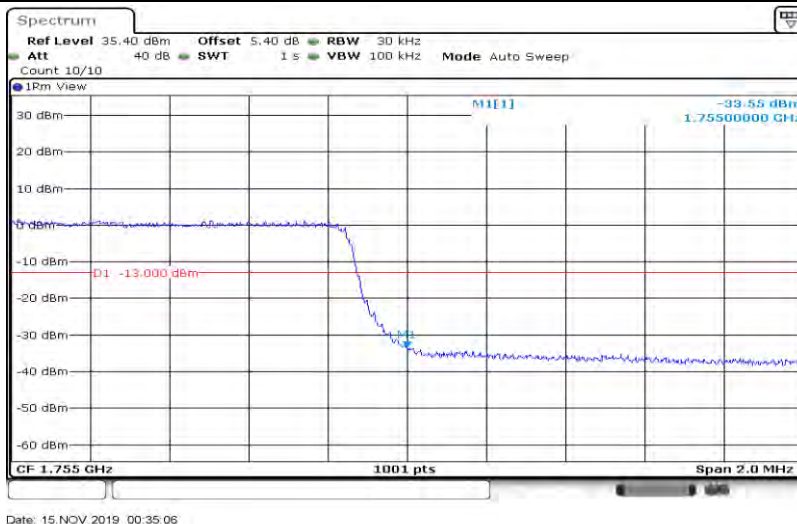
Band4-3MHz-16QAM-20385-1RB#14



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



Band4-3MHz-16QAM-20385-15RB#0



Band4-5MHz-QPSK-19975-1RB#0



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

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



Band4-5MHz-QPSK-19975-25RB#0



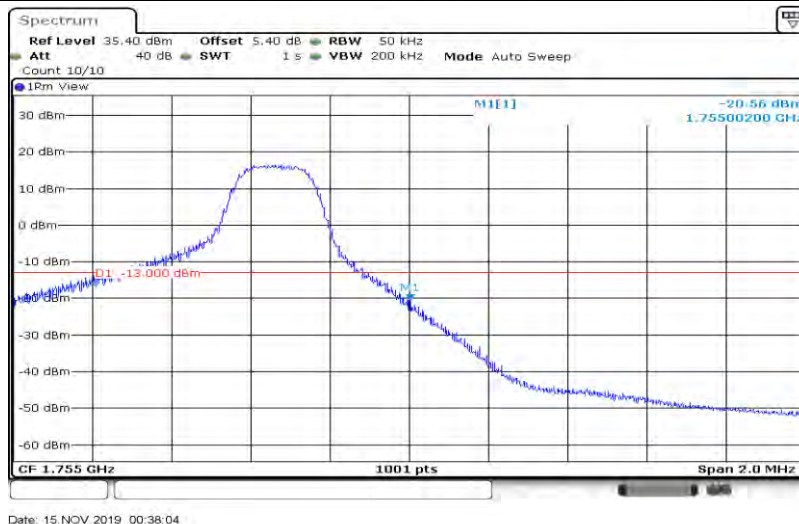
Band4-5MHz-QPSK-20375-1RB#24



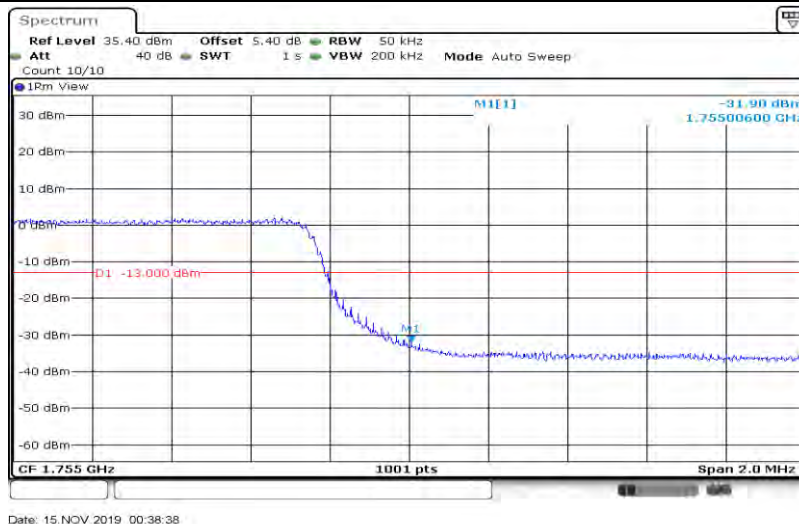
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Band4-5MHz-QPSK-20375-25RB#0



Band4-5MHz-16QAM-19975-1RB#0



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

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



Band4-5MHz-16QAM-19975-25RB#0



Band4-5MHz-16QAM-20375-1RB#24

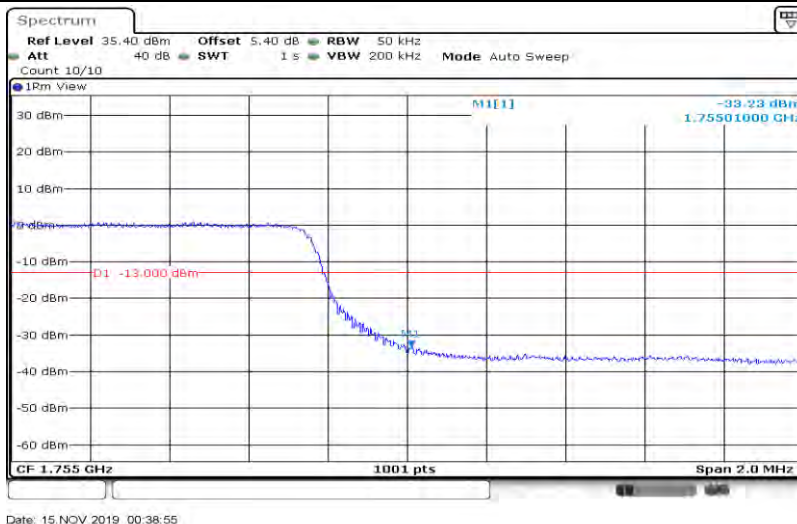


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Band4-5MHz-16QAM-20375-25RB#0



Band4-10MHz-QPSK-20000-1RB#0



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

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

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



Band4-10MHz-QPSK-20000-50RB#0



Band4-10MHz-QPSK-20350-1RB#49



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



Band4-10MHz-QPSK-20350-50RB#0



Band4-10MHz-16QAM-20000-1RB#0



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

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



Band4-10MHz-16QAM-20000-50RB#0



Band4-10MHz-16QAM-20350-1RB#49



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

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



Band4-10MHz-16QAM-20350-50RB#0



Band4-15MHz-QPSK-20025-1RB#0



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

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

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



Date: 15, NOV 2019 00:44:30

Band4-15MHz-QPSK-20025-75RB#0



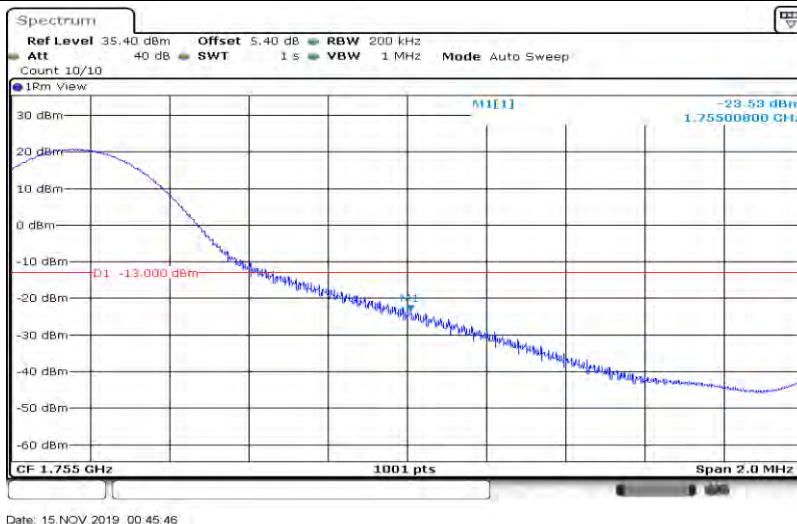
Date: 15, NOV 2019 00:45:05

Band4-15MHz-QPSK-20325-1RB#74



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

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



Band4-15MHz-QPSK-20325-75RB#0



Band4-15MHz-16QAM-20025-1RB#0



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

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



Band4-15MHz-16QAM-20025-75RB#0

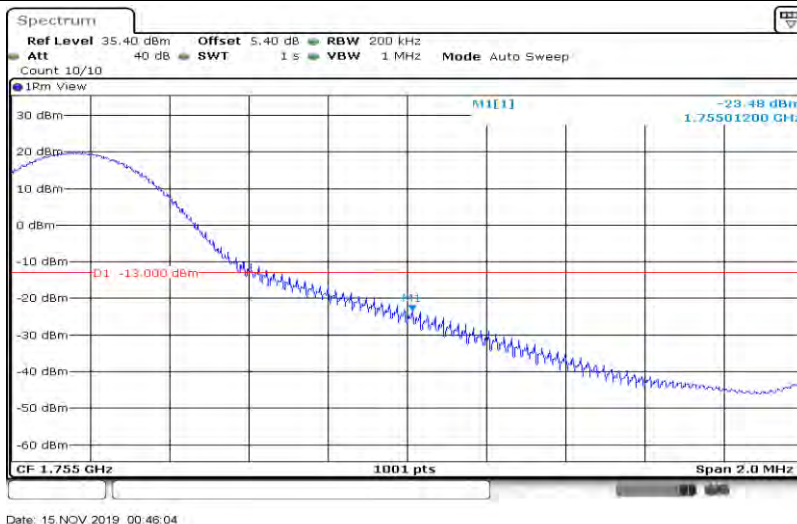


Band4-15MHz-16QAM-20325-1RB#74



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

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



Band4-15MHz-16QAM-20325-75RB#0



Band4-20MHz-QPSK-20050-1RB#0



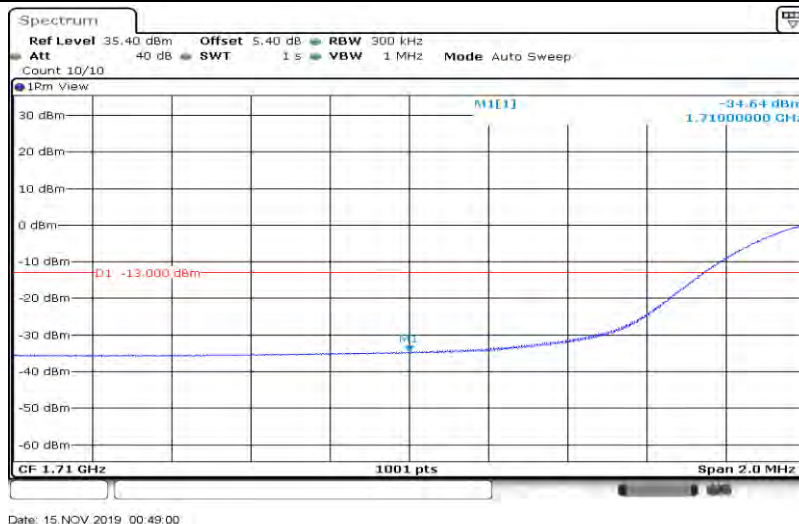
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

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



Band4-20MHz-QPSK-20050-100RB#0



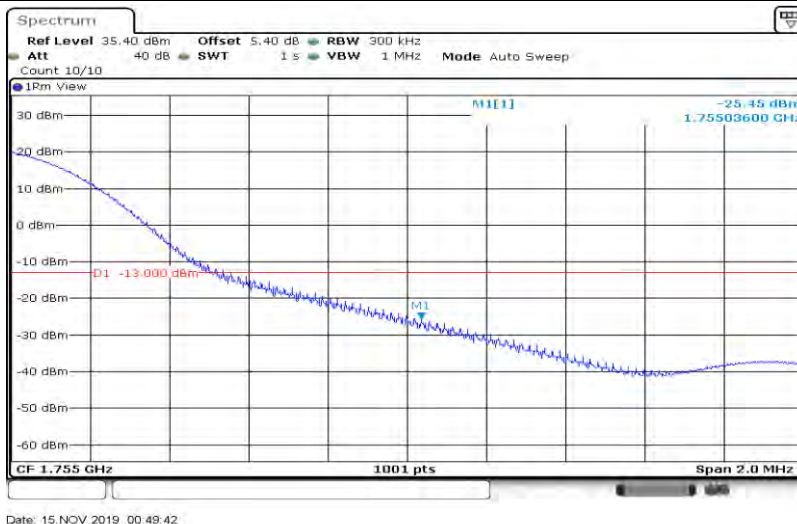
Band4-20MHz-QPSK-20300-1RB#99



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

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



Band4-20MHz-QPSK-20300-100RB#0



Band4-20MHz-16QAM-20050-1RB#0

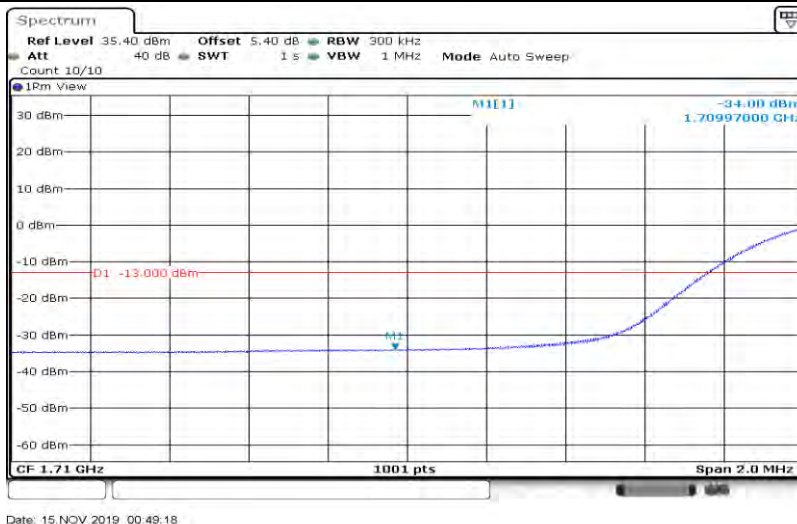


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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



Band4-20MHz-16QAM-20050-100RB#0

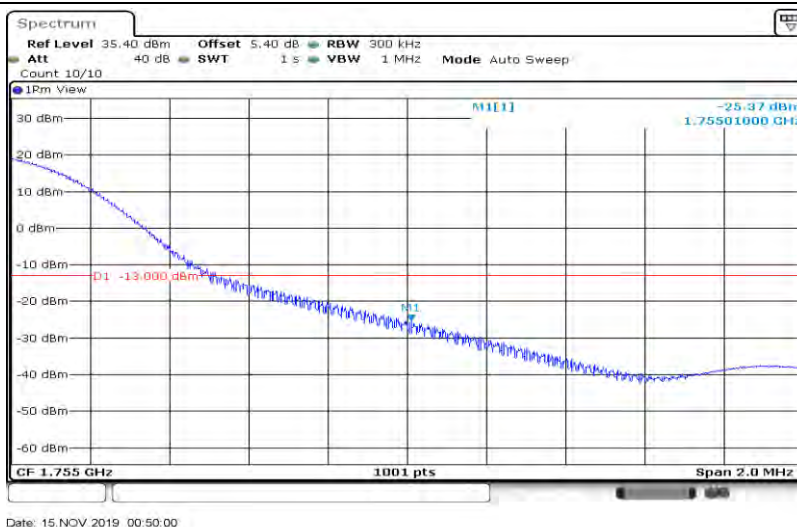


Band4-20MHz-16QAM-20300-1RB#99



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



Band4-20MHz-16QAM-20300-100RB#0



Unless otherwise agreed in writing this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is deemed to have accepted the Terms and Conditions of the document and the 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 strictly prohibited and may result in severe civil or criminal penalties, including damages and/or imprisonment. 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.Doocheck@sigs.com

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



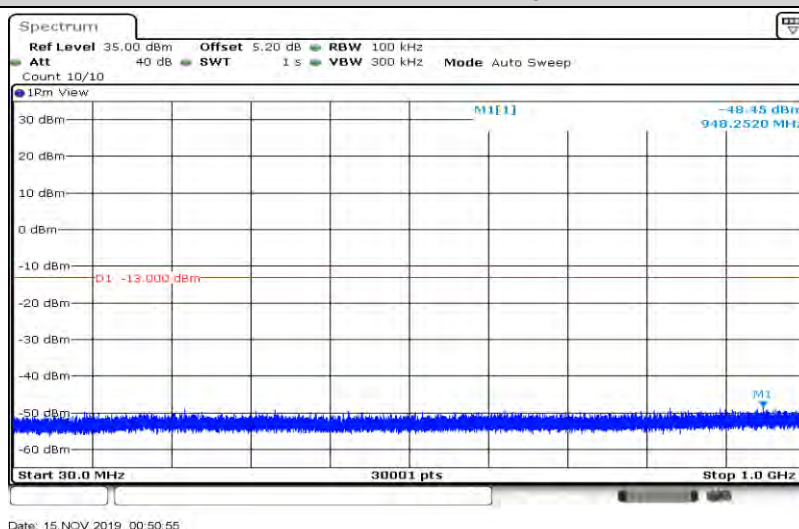
6. Spurious Emission at Antenna Terminal

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

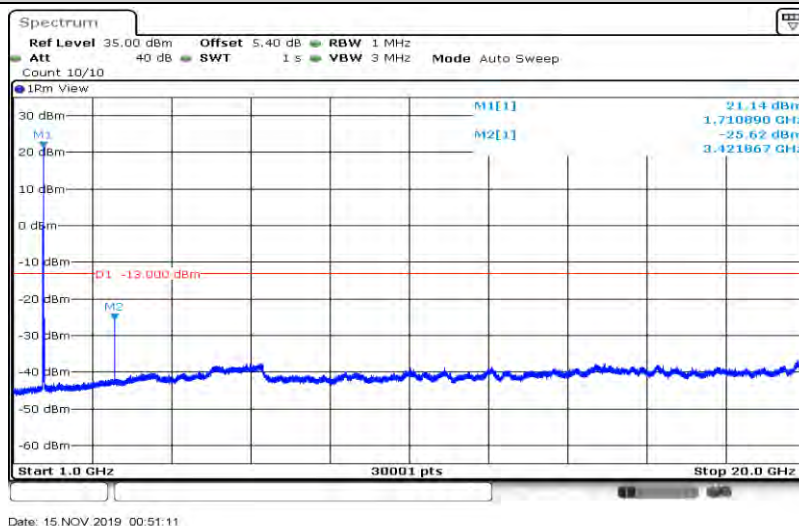
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

Band4-20MHz-QPSK-20050-1RB#0-Range1:30~1000MHz

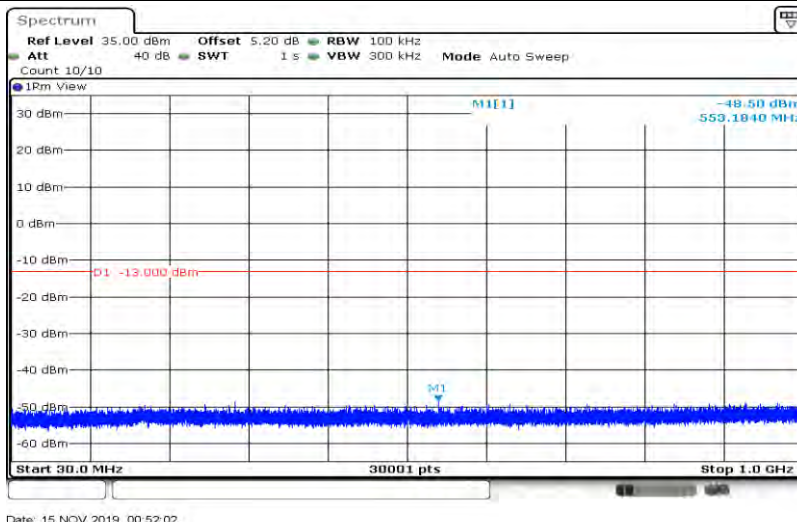


Band4-20MHz-QPSK-20050-1RB#0-Range2:1000~20000MHz

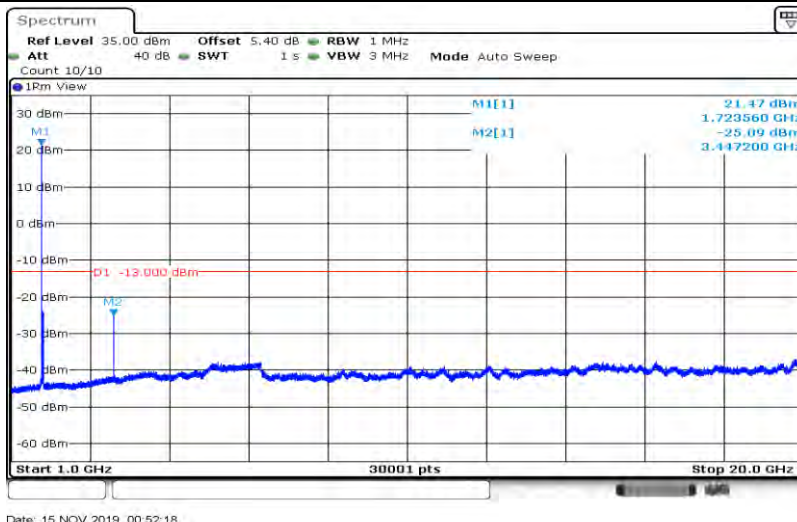


Band4-20MHz-QPSK-20175-1RB#0-Range1:30~1000MHz





Band4-20MHz-QPSK-20175-1RB#0-Range2:1000~20000MHz



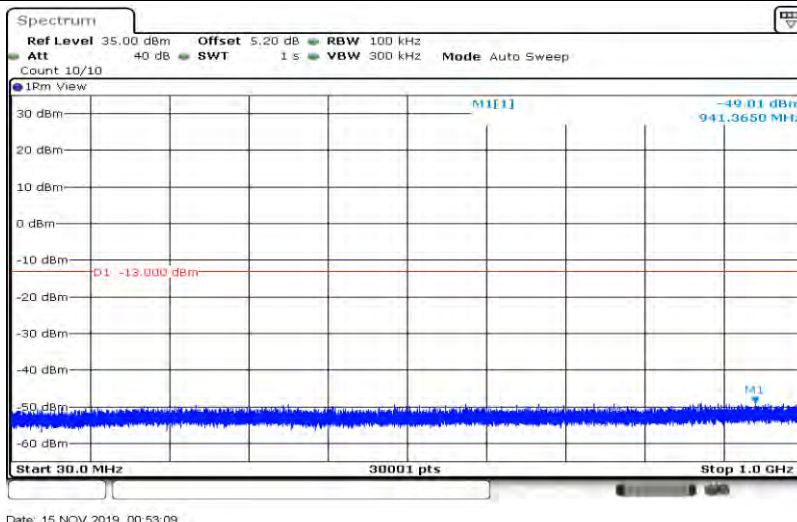
Band4-20MHz-QPSK-20300-1RB#0-Range1:30~1000MHz



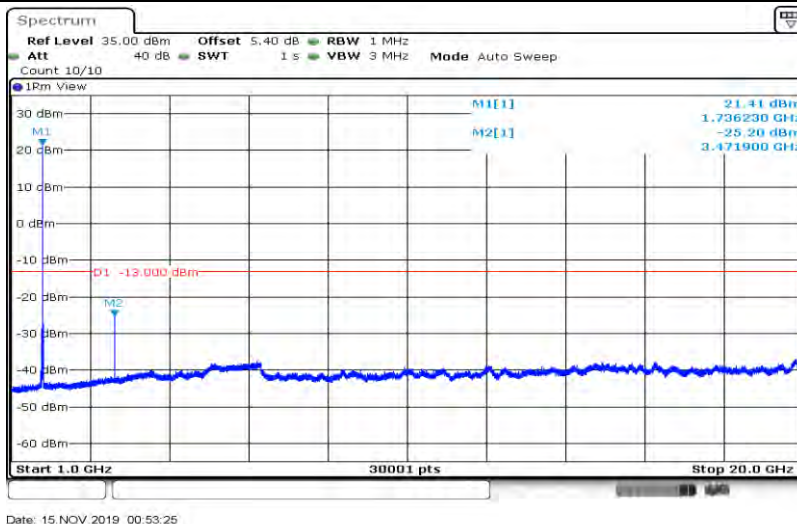
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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



Band4-20MHz-QPSK-20300-1RB#0-Range2:1000~20000MHz

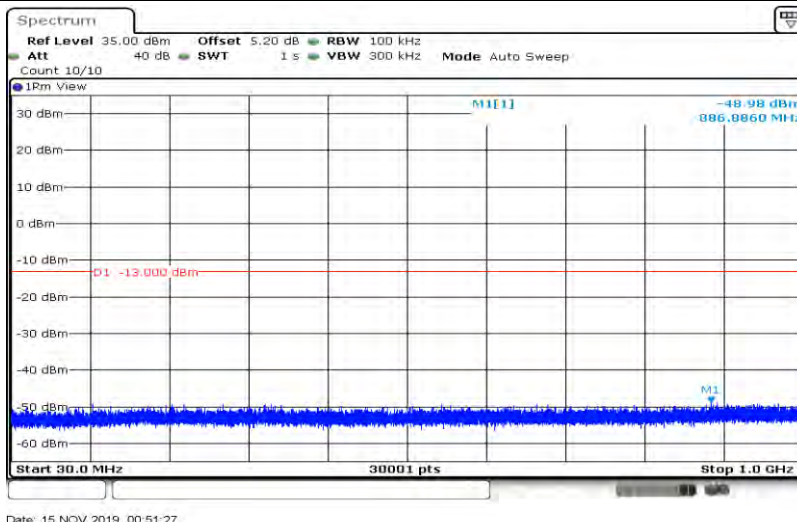


Band4-20MHz-16QAM-20050-1RB#0-Range1:30~1000MHz

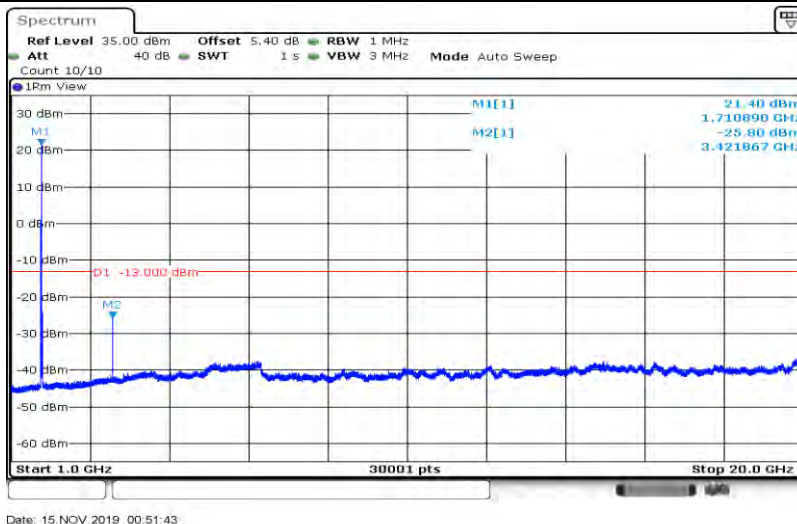


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

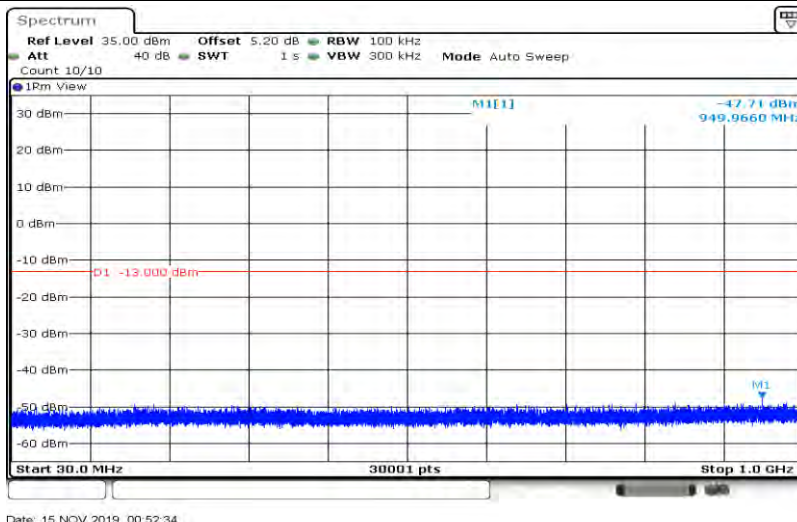


Band4-20MHz-16QAM-20050-1RB#0-Range2:1000~20000MHz

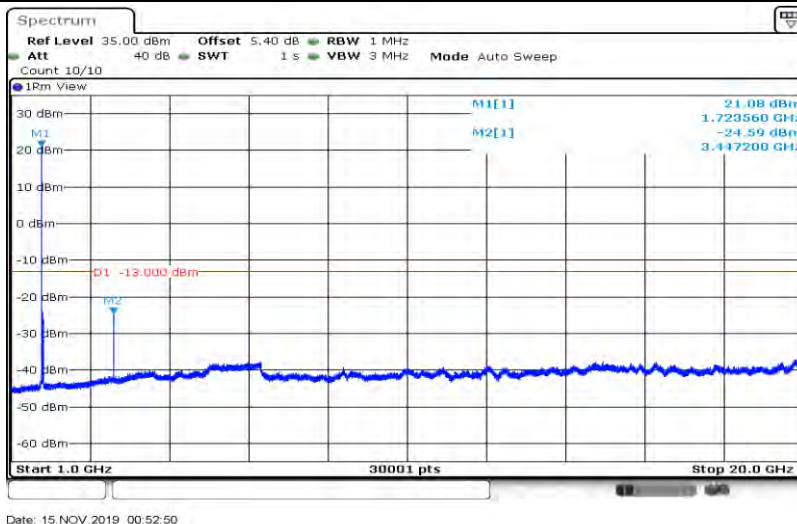


Band4-20MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



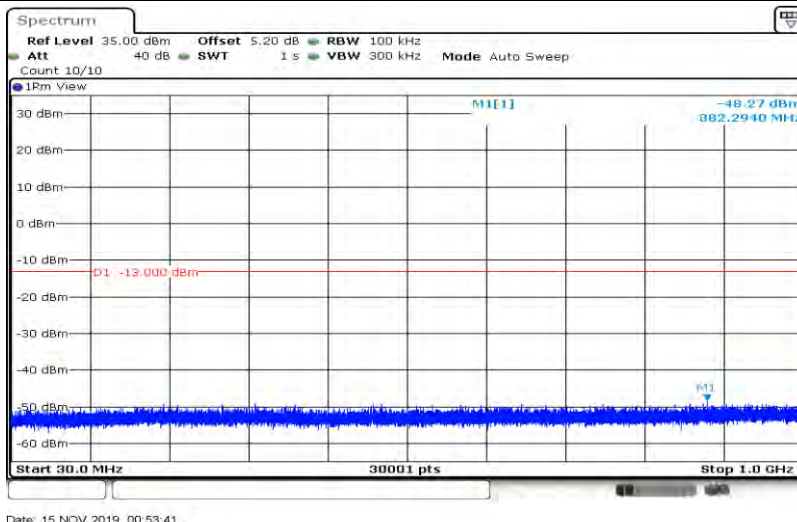


Band4-20MHz-16QAM-20175-1RB#0-Range2:1000~20000MHz

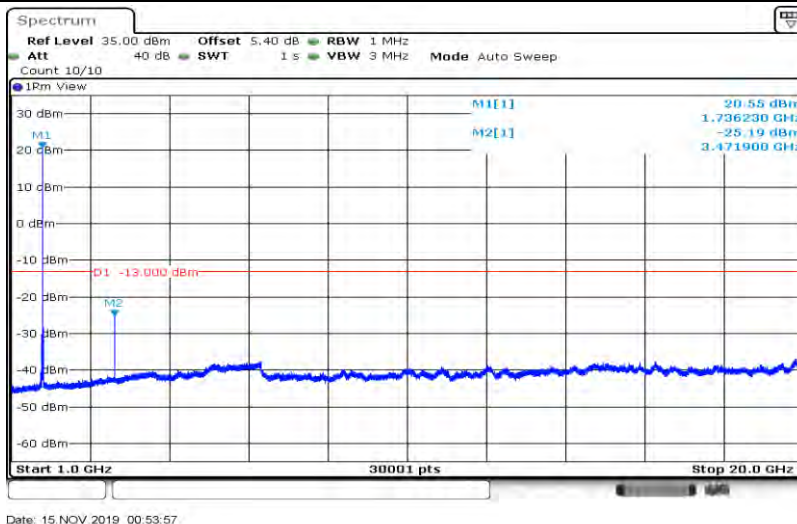


Band4-20MHz-16QAM-20300-1RB#0-Range1:30~1000MHz





Band4-20MHz-16QAM-20300-1RB#0-Range2:1000~20000MHz



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



7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1

7.1.1. Test Channel = LCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 111.0476 | -65.29 | -13.00 | 52.29 | Vertical |
| 2433.8868 | -27.34 | -13.00 | 14.34 | Vertical |
| 3422.0141 | -30.28 | -13.00 | 17.28 | Vertical |
| 6844.1281 | -44.84 | -13.00 | 31.84 | Vertical |
| 8555.6852 | -46.33 | -13.00 | 33.33 | Vertical |
| 11977.2992 | -43.68 | -13.00 | 30.68 | Vertical |
| 44.1142 | -64.84 | -13.00 | 51.84 | Horizontal |
| 768.0129 | -60.78 | -13.00 | 47.78 | Horizontal |
| 2700.7401 | -36.88 | -13.00 | 23.88 | Horizontal |
| 3422.0141 | -28.09 | -13.00 | 15.09 | Horizontal |
| 6844.1281 | -46.23 | -13.00 | 33.23 | Horizontal |
| 16385.4462 | -37.30 | -13.00 | 24.30 | Horizontal |

7.1.2. Test Channel = MCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 111.5326 | -65.80 | -13.00 | 52.80 | Vertical |
| 3447.0149 | -30.39 | -13.00 | 17.39 | Vertical |
| 6894.6298 | -41.32 | -13.00 | 28.32 | Vertical |
| 8618.1873 | -43.27 | -13.00 | 30.27 | Vertical |
| 12064.8022 | -41.99 | -13.00 | 28.99 | Vertical |
| 17999.5000 | -33.50 | -13.00 | 20.50 | Vertical |
| 45.0358 | -65.04 | -13.00 | 52.04 | Horizontal |
| 2699.5399 | -36.75 | -13.00 | 23.75 | Horizontal |
| 3447.0149 | -27.48 | -13.00 | 14.48 | Horizontal |
| 6894.1298 | -42.98 | -13.00 | 29.98 | Horizontal |
| 8617.6873 | -48.07 | -13.00 | 35.07 | Horizontal |
| 16401.9467 | -37.74 | -13.00 | 24.74 | 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-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 (SGS-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



7.1.3. Test Channel = HCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 106.4883 | -65.39 | -13.00 | 52.39 | Vertical |
| 3472.5158 | -31.38 | -13.00 | 18.38 | Vertical |
| 5208.0736 | -53.58 | -13.00 | 40.58 | Vertical |
| 6944.1315 | -44.31 | -13.00 | 31.31 | Vertical |
| 8680.1893 | -44.73 | -13.00 | 31.73 | Vertical |
| 12152.8051 | -40.40 | -13.00 | 27.40 | Vertical |
| 43.1442 | -64.99 | -13.00 | 51.99 | Horizontal |
| 753.8017 | -63.06 | -13.00 | 50.06 | Horizontal |
| 3472.5158 | -29.74 | -13.00 | 16.74 | Horizontal |
| 5208.0736 | -54.42 | -13.00 | 41.42 | Horizontal |
| 6944.1315 | -45.74 | -13.00 | 32.74 | Horizontal |
| 16394.4465 | -37.70 | -13.00 | 24.70 | 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 (SGS-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 |
|-------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | VL | NT | -5.20 | -0.003023 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | VN | NT | -6.30 | -0.003663 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | VH | NT | -8.40 | -0.004884 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | VL | NT | -1.90 | -0.001097 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | VN | NT | -5.90 | -0.003405 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | VH | NT | -1.00 | -0.000577 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | VL | NT | -4.10 | -0.002350 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | VN | NT | -5.60 | -0.003209 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | VH | NT | -5.50 | -0.003152 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | VL | NT | -5.70 | -0.003314 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | VN | NT | 0.80 | 0.000465 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | VH | NT | -0.80 | -0.000465 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | VL | NT | -4.30 | -0.002482 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | VN | NT | -7.80 | -0.004502 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | VH | NT | 1.70 | 0.000981 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | VL | NT | -10.30 | -0.005903 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | VN | NT | -1.60 | -0.000917 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | VH | NT | -4.40 | -0.002521 | ±2.5 | PASS |

8.2. Frequency Vs Temperature

| Band | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
|-------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | -30 | -9.20 | -0.005349 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | -20 | -4.70 | -0.002733 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | 0 | -4.20 | -0.002442 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | 10 | -1.80 | -0.001047 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | 20 | 2.70 | 0.001570 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | 30 | -5.00 | -0.002907 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | 40 | -8.00 | -0.004651 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20050 | 100RB#0 | NV | 50 | -0.80 | -0.000465 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | -30 | -0.40 | -0.000231 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | -20 | -6.50 | -0.003752 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | 0 | -4.80 | -0.002771 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | 10 | -0.60 | -0.000346 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | 20 | -3.30 | -0.001905 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | 30 | -1.50 | -0.000866 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | 40 | 0.80 | 0.000462 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20175 | 100RB#0 | NV | 50 | -1.30 | -0.000750 | ±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.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



| | | | | | | | | | | |
|-------|-------|-------|-------|---------|----|-----|--------|-----------|------|------|
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | -30 | -1.90 | -0.001089 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | -20 | -3.80 | -0.002178 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | 0 | -7.60 | -0.004355 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | 10 | -5.90 | -0.003381 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | 20 | -2.50 | -0.001433 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | 30 | -4.40 | -0.002521 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | 40 | -10.50 | -0.006017 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK | 20300 | 100RB#0 | NV | 50 | -7.60 | -0.004355 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | -30 | -2.50 | -0.001453 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | -20 | -8.70 | -0.005058 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 0 | -2.60 | -0.001512 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 10 | -8.80 | -0.005116 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 20 | -5.10 | -0.002965 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 30 | -3.50 | -0.002035 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 40 | -5.00 | -0.002907 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 50 | -4.30 | -0.002500 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | -30 | 2.10 | 0.001212 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | -20 | -4.80 | -0.002771 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 0 | -3.30 | -0.001905 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 10 | -0.30 | -0.000173 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 20 | -4.20 | -0.002424 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 30 | -5.30 | -0.003059 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 40 | -0.50 | -0.000289 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 50 | -1.20 | -0.000693 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | -30 | -4.90 | -0.002808 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | -20 | -6.70 | -0.003840 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 0 | -5.70 | -0.003266 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 10 | -9.40 | -0.005387 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 20 | -5.10 | -0.002923 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 30 | -3.40 | -0.001948 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 40 | -2.00 | -0.001146 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 50 | -7.50 | -0.004298 | ±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

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