

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 1 of 91

# TEST REPORT

**Application No.:** XEWA2305000017RG  
**Applicant:** Quectel Wireless Solutions Co., Ltd.  
**Address of Applicant:** Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233  
**Manufacturer:** Quectel Wireless Solutions Co., Ltd.  
**Address of Manufacturer:** Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233  
**EUT Description:** Wi-Fi & Bluetooth Module  
**Model No.:** FCM360K  
**Trade Mark:** Quectel  
**FCC ID:** XMR2023FCM360K  
**Standards:** FCC 47 CFR Part 2, Subpart J  
FCC 47 CFR Part 15, Subpart C  
**Date of Receipt:** 2023/05/19  
**Date of Test:** 2023/06/04 to 2023/06/18  
**Date of Issue:** 2023/06/26

|                      |               |
|----------------------|---------------|
| <b>Test Result :</b> | <b>PASS *</b> |
|----------------------|---------------|

\* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:

Peter Tan  
Regulatory Technical Manager



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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 2 of 91

## 1 Version

| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2023/06/26 |          | Original |

|             |                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------|
| Prepared By | <br>(Leah Chen) / Test Engineer |
| Checked By  | <br>(Andy Yao) / Reviewer       |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 3 of 91

## 2 Test Summary

| Test Item                                                         | FCC Rule No.     | Test Method                                       | Test Result | Result |
|-------------------------------------------------------------------|------------------|---------------------------------------------------|-------------|--------|
| Antenna Requirement                                               | 15.203/15.247(b) | --                                                | Clause 4.1  | PASS   |
| AC Power Line Conducted Emission                                  | 15.207           | ANSI C63.10-2020<br>Section 6.2                   | Clause 4.2  | PASS   |
| Conducted Output Power                                            | 15.247 (b)(3)    | ANSI C63.10-2020<br>Section 11.9.1.2              | Clause 4.4  | PASS   |
| DTS (6 dB) Bandwidth & 99% Occupied Bandwidth                     | 15.247 (a)(2)    | ANSI C63.10-2020<br>Section 11.8 Option 2 / 6.9.3 | Clause 4.5  | PASS   |
| Power Spectral Density                                            | 15.247 (e)       | ANSI C63.10-2020<br>Section 11.10.2               | Clause 4.6  | PASS   |
| Band-edge for RF Conducted Emissions                              | 15.247(d)        | ANSI C63.10-2020<br>Section 11.11                 | Clause 4.7  | PASS   |
| RF Conducted Spurious Emissions                                   | 15.247(d)        | ANSI C63.10-2020<br>Section 11.11                 | Clause 4.8  | PASS   |
| Radiated Spurious Emissions                                       | 15.205/15.209    | ANSI C63.10-2020<br>Section 11.12                 | Clause 4.9  | PASS   |
| Restricted bands around fundamental frequency (Radiated Emission) | 15.205/15.209    | ANSI C63.10-2020<br>Section 11.12                 | Clause 4.10 | PASS   |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 4 of 91

## Contents

|      |                                                            |    |
|------|------------------------------------------------------------|----|
| 1    | Version .....                                              | 2  |
| 2    | Test Summary .....                                         | 3  |
| 3    | General Information .....                                  | 5  |
| 3.1  | Details of Client .....                                    | 5  |
| 3.2  | Test Location .....                                        | 5  |
| 3.3  | Test Facility .....                                        | 5  |
| 3.4  | General Description of EUT .....                           | 6  |
| 3.5  | Test Environment .....                                     | 8  |
| 3.6  | Description of Support Units .....                         | 8  |
| 4    | Test results and Measurement Data .....                    | 9  |
| 4.1  | Antenna Requirement .....                                  | 9  |
| 4.2  | AC Power Line Conducted Emissions .....                    | 10 |
| 4.3  | Duty Cycle .....                                           | 16 |
| 4.4  | Conducted Output Power .....                               | 17 |
| 4.5  | DTS (6 dB) Bandwidth & 99% Occupied Bandwidth .....        | 18 |
| 4.6  | Power Spectral Density .....                               | 19 |
| 4.7  | Band-edge for RF Conducted Emissions .....                 | 20 |
| 4.8  | RF Conducted Spurious Emissions .....                      | 21 |
| 4.9  | Radiated Spurious Emissions .....                          | 22 |
| 4.10 | Restricted bands around fundamental frequency .....        | 25 |
| 5    | Measurement Uncertainty (95% confidence levels, k=2) ..... | 27 |
| 6    | Equipment List .....                                       | 28 |
| 7    | Photographs - Setup Photos .....                           | 30 |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 5 of 91

### 3 General Information

#### 3.1 Details of Client

|                          |                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Applicant:               | Quectel Wireless Solutions Co., Ltd.                                                                                  |
| Address of Applicant:    | Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233 |
| Manufacturer:            | Quectel Wireless Solutions Co., Ltd.                                                                                  |
| Address of Manufacturer: | Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233 |

#### 3.2 Test Location

|                |                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Company:       | SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.                                                                 |
| Address:       | 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi China |
| Post code:     | 710086                                                                                                                  |
| Test engineer: | Qiang Zhang, Ken Liu                                                                                                    |

#### 3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 4854.01)**

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0095.

IC#: 25613.

• **FCC –Designation Number: CN1337**

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. has been recognized as an accredited testing laboratory.

Designation Number: CN1337.

Test Firm Registration Number: 917410



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 6 of 91

### 3.4 General Description of EUT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                     |                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| EUT Description:                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Wi-Fi & Bluetooth Module                                                                                                                            |                 |
| Model No.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | FCM360K                                                                                                                                             |                 |
| Trade Mark:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quectel                                                                                                                                             |                 |
| Hardware Version:                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | R1.0                                                                                                                                                |                 |
| Software Version:                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | FCM360KAAR01A03                                                                                                                                     |                 |
| SN:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | RF Conducted                                                                                                                                        | E1M23D806000131 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | RSE & AC power line                                                                                                                                 | E1M23D806000169 |
| Operation Frequency:                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2400MHz~2483.5MHz<br>fc = 2402 MHz + N * 2 MHz, where:<br>-fc = “Operating Frequency” in MHz,<br>-N = “Channel Number” with the range from 0 to 39. |                 |
| Bluetooth version:                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Bluetooth V5.2                                                                                                                                      |                 |
| Modulation Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | GFSK                                                                                                                                                |                 |
| Number of Channel:                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 40                                                                                                                                                  |                 |
| Rates Type*:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input checked="" type="checkbox"/> Provided by client                                                                                              |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1M PHY                                                                                                                                              | 2M PHY          |
| Antenna Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | PCB Antenna                                                                                                                                         |                 |
| Antenna Gain:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2dBi (Ant0)                                                                                                                                         |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Note:<br>The antenna gain are derived from the gain information report provided by the manufacturer.                                                |                 |
| RF Cable:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1.2dB                                                                                                                                               |                 |
| Note: *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.<br>Remark:<br>As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information. |                                                                                                                                                     |                 |



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

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

W/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 7 of 91

| Operation Frequency of each channel |           |         |           |         |           |         |           |
|-------------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|
| Channel                             | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 0                                   | 2402MHz   | 10      | 2422MHz   | 20      | 2442MHz   | 30      | 2462MHz   |
| 1                                   | 2404MHz   | 11      | 2424MHz   | 21      | 2444MHz   | 31      | 2464MHz   |
| 2                                   | 2406MHz   | 12      | 2426MHz   | 22      | 2446MHz   | 32      | 2466MHz   |
| 3                                   | 2408MHz   | 13      | 2428MHz   | 23      | 2448MHz   | 33      | 2468MHz   |
| 4                                   | 2410MHz   | 14      | 2430MHz   | 24      | 2450MHz   | 34      | 2470MHz   |
| 5                                   | 2412MHz   | 15      | 2432MHz   | 25      | 2452MHz   | 35      | 2472MHz   |
| 6                                   | 2414MHz   | 16      | 2434MHz   | 26      | 2454MHz   | 36      | 2474MHz   |
| 7                                   | 2416MHz   | 17      | 2436MHz   | 27      | 2456MHz   | 37      | 2476MHz   |
| 8                                   | 2418MHz   | 18      | 2438MHz   | 28      | 2458MHz   | 38      | 2478MHz   |
| 9                                   | 2420MHz   | 19      | 2440MHz   | 29      | 2460MHz   | 39      | 2480MHz   |

Remark:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| Channel                   | Frequency |
|---------------------------|-----------|
| The Lowest channel(CH0)   | 2402MHz   |
| The Middle channel(CH19)  | 2440MHz   |
| The Highest channel(CH39) | 2480MHz   |



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

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
 V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 8 of 91

### 3.5 Test Environment

| Environment Parameter                                   | 96~101 kPa Selected Values During Tests |            |
|---------------------------------------------------------|-----------------------------------------|------------|
| Relative Humidity                                       | 40-60 % RH Ambient                      |            |
| Value                                                   | Temperature(°C)                         | Voltage(V) |
| NTNV                                                    | 22~25                                   | 3.3        |
| Remark:<br>NV: Normal Voltage<br>NT: Normal Temperature |                                         |            |

### 3.6 Description of Support Units

| Description                                                        | Manufacturer | Model No. |
|--------------------------------------------------------------------|--------------|-----------|
| Mother board                                                       | Quectel      | N/A       |
| Remark: all above the information of table are provided by client. |              |           |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 9 of 91

## 4 Test results and Measurement Data

### 4.1 Antenna Requirement

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Standard requirement:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 47 CFR Part 15C Section 15.203 /247(b) |
| <p>15.203 requirement:<br/>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> <p>15.247(b) (4) requirement:<br/>The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p> |                                        |
| <p>The antenna is PCB Antenna on the main PCB and no consideration of replacement.<br/>The best case gain of the antenna is 2dBi (Ant0). *</p> <p><i>*Note:</i><br/><i>The antenna gain are derived from the gain information report provided by the manufacturer.</i></p> <p><i>Remark:</i><br/><i>As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                        |



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

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

W/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 10 of 91

## 4.2 AC Power Line Conducted Emissions

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |           |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|
| Test Requirement:                                | 47 CFR Part 15C Section 15.207                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |           |
| Test Method:                                     | ANSI C63.10-2020 Section 6.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |           |
| Test Frequency Range:                            | 150kHz to 30MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |           |
| Receiver Setup:                                  | RBW = 9kHz, VBW = 30kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |           |
| Limit:                                           | Frequency range(MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Limit (dBuV) |           |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quasi-peak   | Average   |
|                                                  | 0.15-0.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 66 to 56*    | 56 to 46* |
|                                                  | 0.5-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 56           | 46        |
|                                                  | 5-30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 60           | 50        |
| * Decreases with the logarithm of the frequency. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |           |
| Test Procedure:                                  | <ol style="list-style-type: none"> <li>1) The mains terminal disturbance voltage test was conducted in a shielded room.</li> <li>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.</li> <li>3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.</li> <li>4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.</li> <li>5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10-2020 on conducted measurement.</li> </ol> |              |           |



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

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
 W/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 11 of 91

|                   |                                                                   |
|-------------------|-------------------------------------------------------------------|
| Test Setup:       |                                                                   |
| Test Mode:        | Transmitting with GFSK modulation.<br>Charge + Transmitting mode. |
| Instruments Used: | Refer to section 6 for details.                                   |
| Test Results:     | 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.cn/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.cn/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 its specific instructions. The Company is not responsible for any consequences of the use of this document nor exonerates 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 sample(s) tested and the result(s) 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.**

|                                                                                                                   |        |  |                     |                                                              |
|-------------------------------------------------------------------------------------------------------------------|--------|--|---------------------|--------------------------------------------------------------|
| 1/1F, Unit 14, Building A, Kanghong Garden Science Park, No.137, Keyuan Road, Fengcheng New Town, Shenzhen, China | 710086 |  | t (86-29) 6282 7885 | <a href="http://www.sgsgroup.com.cn">www.sgsgroup.com.cn</a> |
| 中国·西安·洋东新城科源三座137号楼方格科技园1号楼单元1F                                                                                   | 710086 |  | t (86-29) 6282 7885 | <a href="mailto:sgs.china@sgs.com">sgs.china@sgs.com</a>     |

Member of the SGS Group (SGS SA)

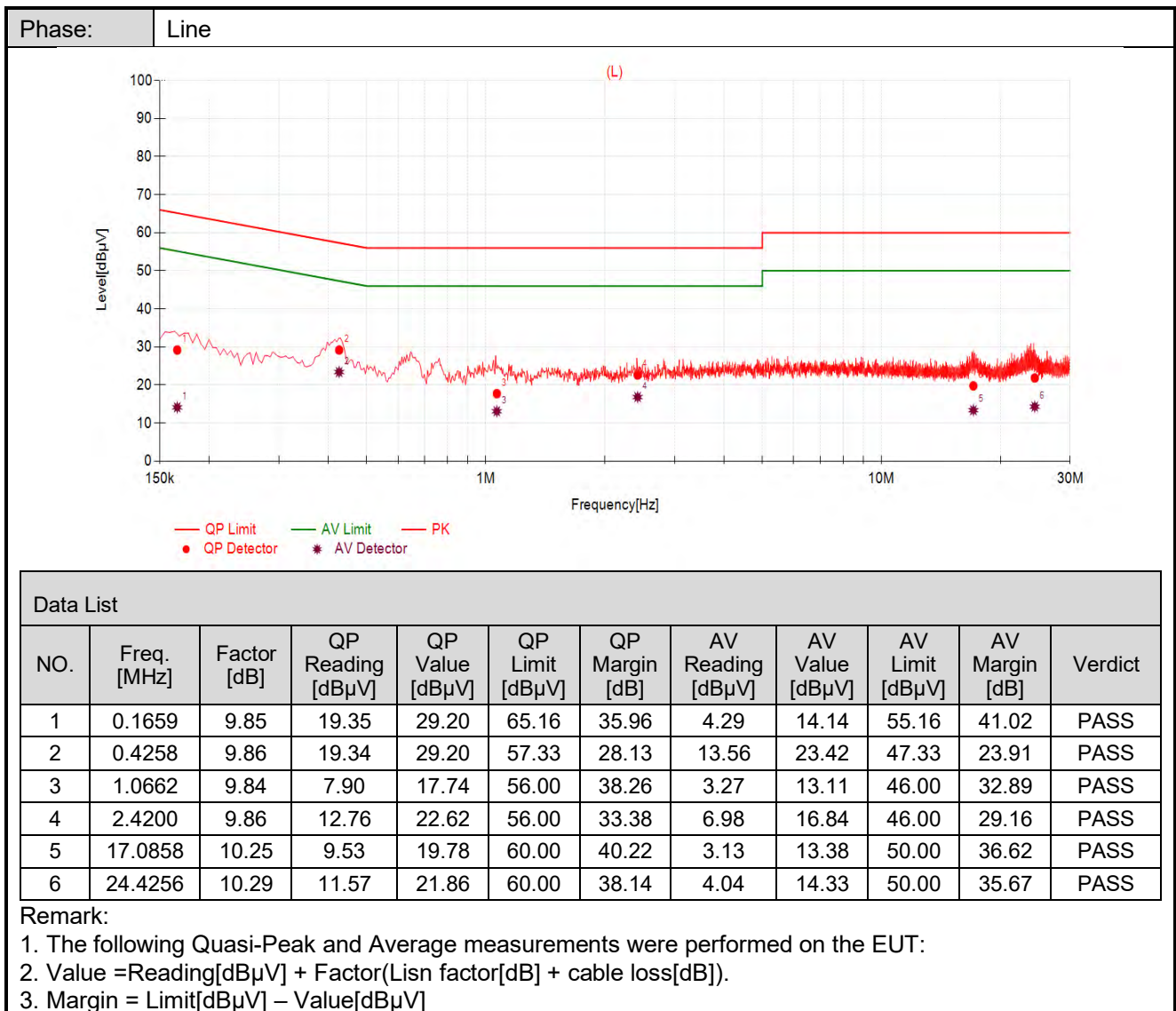
Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 12 of 91

### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

### BLE 1M:



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 herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

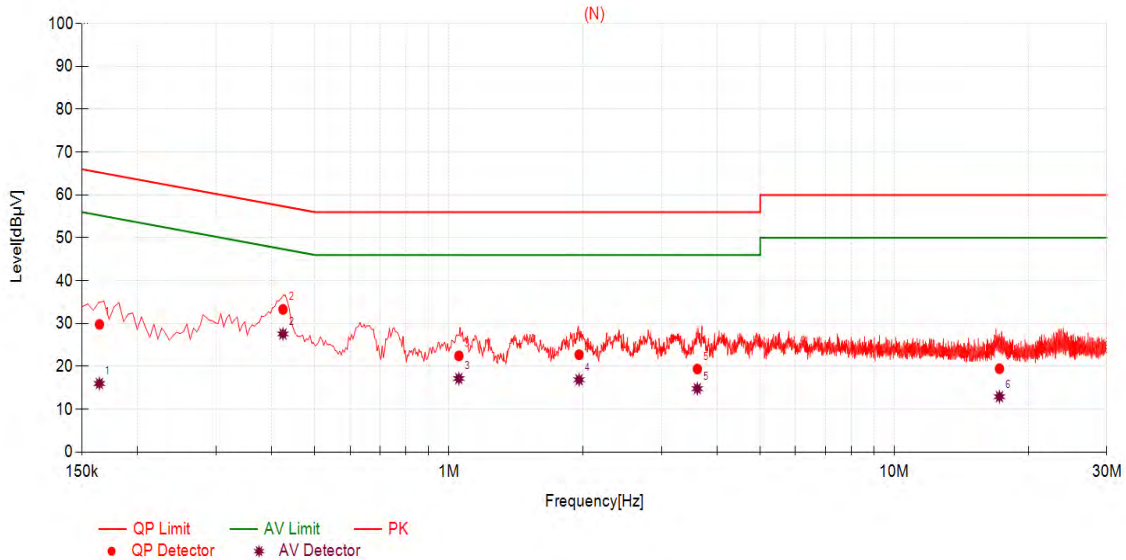
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 13 of 91

Phase: Neutral



## Data List

| NO. | Freq. [MHz] | Factor [dB] | QP Reading [dBμV] | QP Value [dBμV] | QP Limit [dBμV] | QP Margin [dB] | AV Reading [dBμV] | AV Value [dBμV] | AV Limit [dBμV] | AV Margin [dB] | Verdict |
|-----|-------------|-------------|-------------------|-----------------|-----------------|----------------|-------------------|-----------------|-----------------|----------------|---------|
| 1   | 0.1641      | 9.79        | 20.02             | 29.81           | 65.25           | 35.44          | 6.22              | 16.01           | 55.25           | 39.24          | PASS    |
| 2   | 0.4240      | 9.82        | 23.49             | 33.31           | 57.37           | 24.06          | 17.76             | 27.58           | 47.37           | 19.79          | PASS    |
| 3   | 1.0526      | 9.81        | 12.66             | 22.47           | 56.00           | 33.53          | 7.37              | 17.18           | 46.00           | 28.82          | PASS    |
| 4   | 1.9601      | 9.85        | 12.88             | 22.73           | 56.00           | 33.27          | 7.04              | 16.89           | 46.00           | 29.11          | PASS    |
| 5   | 3.6127      | 9.96        | 9.43              | 19.39           | 56.00           | 36.61          | 4.85              | 14.81           | 46.00           | 31.19          | PASS    |
| 6   | 17.2275     | 10.31       | 9.17              | 19.48           | 60.00           | 40.52          | 2.63              | 12.94           | 50.00           | 37.06          | PASS    |

## Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Value = Reading[dBμV] + Factor(Lisn factor[dB] + cable loss[dB]).
3. Margin = Limit[dBμV] – Value[dBμV]



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 herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

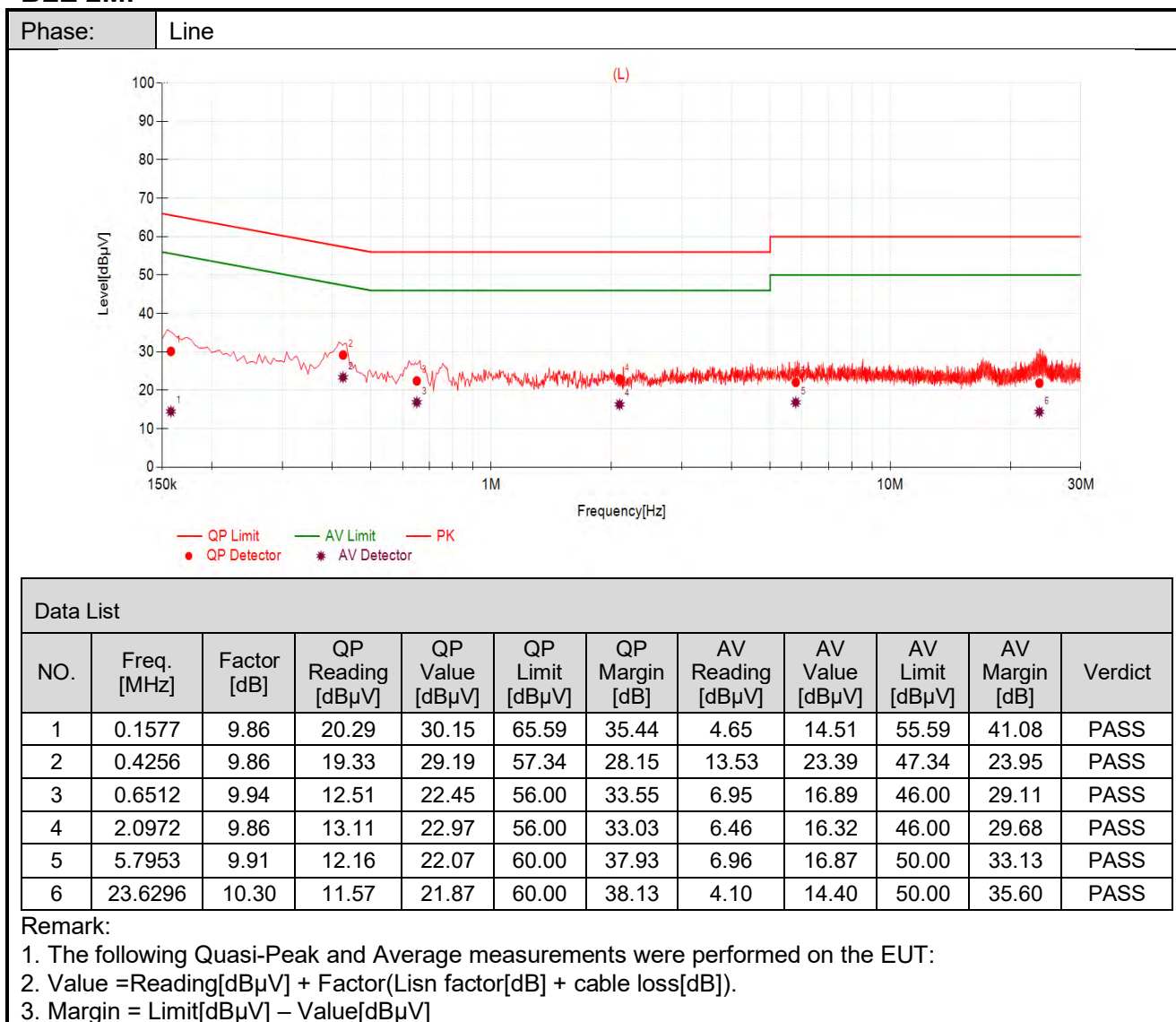
W/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 14 of 91

## BLE 2M:

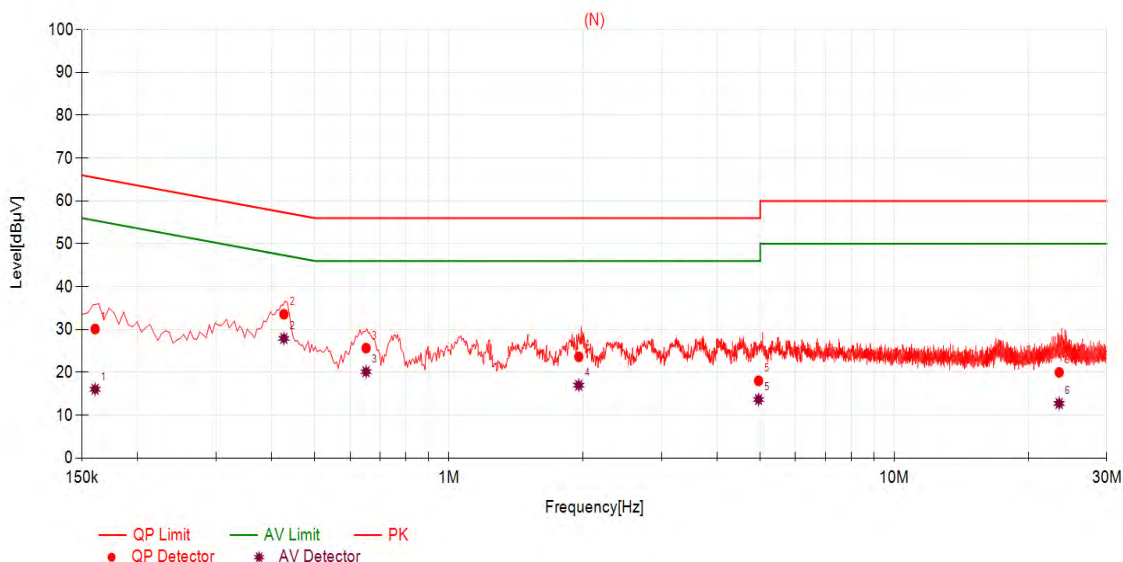


Report No.: XEWA2305000017RG02

Rev.: 01

Page: 15 of 91

Phase: Neutral



## Data List

| NO. | Freq. [MHz] | Factor [dB] | QP Reading [dBμV] | QP Value [dBμV] | QP Limit [dBμV] | QP Margin [dB] | AV Reading [dBμV] | AV Value [dBμV] | AV Limit [dBμV] | AV Margin [dB] | Verdict |
|-----|-------------|-------------|-------------------|-----------------|-----------------|----------------|-------------------|-----------------|-----------------|----------------|---------|
| 1   | 0.1605      | 9.79        | 20.34             | 30.13           | 65.44           | 35.31          | 6.28              | 16.07           | 55.44           | 39.37          | PASS    |
| 2   | 0.4259      | 9.83        | 23.74             | 33.57           | 57.33           | 23.76          | 18.11             | 27.94           | 47.33           | 19.39          | PASS    |
| 3   | 0.6515      | 9.85        | 15.82             | 25.67           | 56.00           | 30.33          | 10.33             | 20.18           | 46.00           | 25.82          | PASS    |
| 4   | 1.9572      | 9.85        | 13.81             | 23.66           | 56.00           | 32.34          | 7.15              | 17.00           | 46.00           | 29.00          | PASS    |
| 5   | 4.9578      | 9.97        | 8.07              | 18.04           | 56.00           | 37.96          | 3.71              | 13.68           | 46.00           | 32.32          | PASS    |
| 6   | 23.4565     | 10.31       | 9.70              | 20.01           | 60.00           | 39.99          | 2.46              | 12.77           | 50.00           | 37.23          | PASS    |

## Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Value = Reading[dBμV] + Factor(Lisn factor[dB] + cable loss[dB]).
3. Margin = Limit[dBμV] – Value[dBμV]



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

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

W/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengsong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 16 of 91

## 4.3 Duty Cycle

The detailed test data see: **Appendix**



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

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

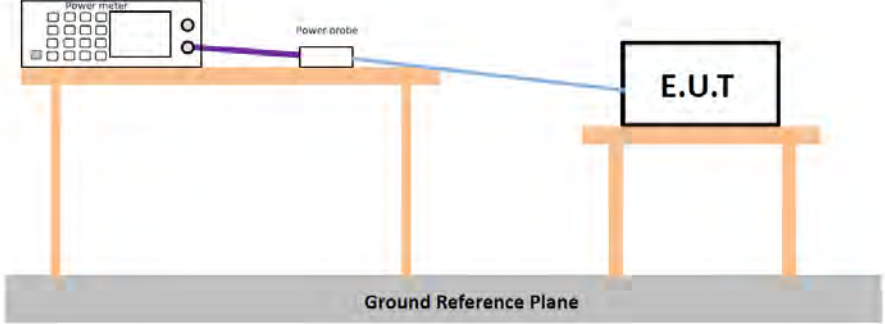
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 17 of 91

#### 4.4 Conducted Output Power

|                                             |                                                                                                                                             |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement:                           | 47 CFR Part 15C Section 15.247 (b)(3)                                                                                                       |
| Test Method:                                | ANSI C63.10-2020 Section 11.9.1.2                                                                                                           |
| Test Setup:                                 |  <p>* Test with power meter (Detector function: Peak)</p> |
| Test Instruments:                           | Refer to section 6 for details                                                                                                              |
| Test Mode:                                  | Transmitting with GFSK modulation.                                                                                                          |
| Limit:                                      | 30dBm                                                                                                                                       |
| Test Results:                               | Pass                                                                                                                                        |
| The detailed test data see: <b>Appendix</b> |                                                                                                                                             |

Report No.: XEWA2305000017RG02

Rev.: 01

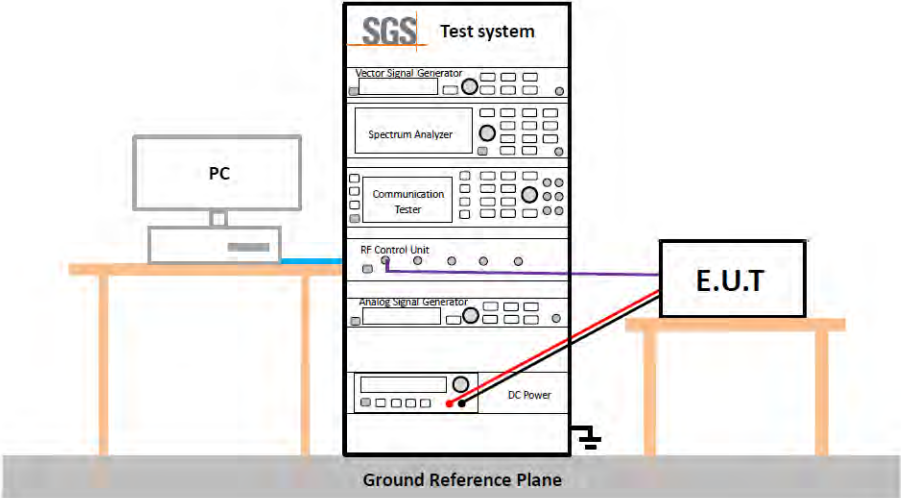
Page: 18 of 91

#### 4.5 DTS (6 dB) Bandwidth & 99% Occupied Bandwidth

|                                             |                                                |
|---------------------------------------------|------------------------------------------------|
| Test Requirement:                           | 47 CFR Part 15C Section 15.247 (a)(2)          |
| Test Method:                                | ANSI C63.10-2020 Section 11.8 Option 2 / 6.9.3 |
| Test Setup:                                 |                                                |
| Instruments Used:                           | Refer to section 6 for details                 |
| Test Mode:                                  | Transmitting with GFSK modulation.             |
| Limit:                                      | $\geq 500$ kHz                                 |
| Test Results:                               | Pass                                           |
| The detailed test data see: <b>Appendix</b> |                                                |

Report No.: XEWA2305000017RG02  
 Rev.: 01  
 Page: 19 of 91

## 4.6 Power Spectral Density

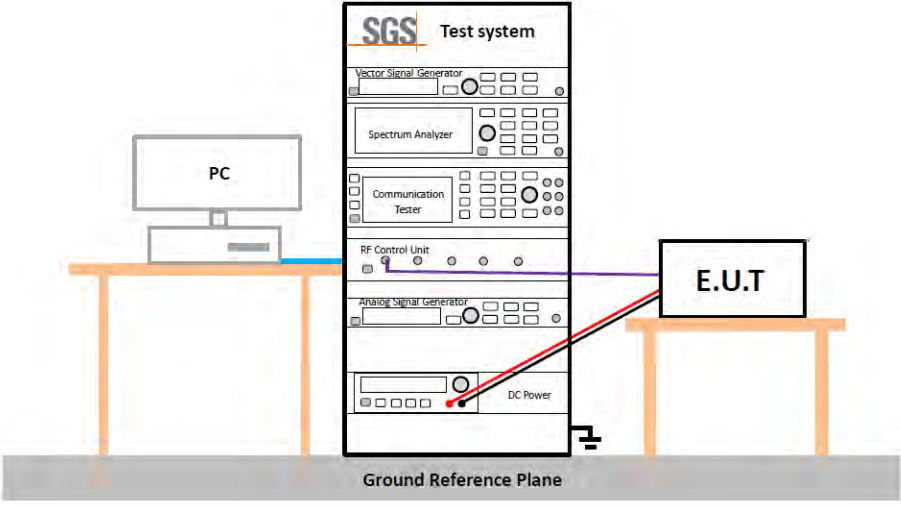
|                                             |                                                                                     |
|---------------------------------------------|-------------------------------------------------------------------------------------|
| Test Requirement:                           | 47 CFR Part 15C Section 15.247 (e)                                                  |
| Test Method:                                | ANSI C63.10-2020 Section 11.10.2                                                    |
| Test Setup:                                 |  |
| Test Instruments:                           | Refer to section 6 for details                                                      |
| Test Mode:                                  | Transmitting with GFSK modulation.                                                  |
| Limit:                                      | $\leq 8.00\text{dBm}/3\text{kHz}$                                                   |
| Test Results:                               | Pass                                                                                |
| The detailed test data see: <b>Appendix</b> |                                                                                     |

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 20 of 91

## 4.7 Band-edge for RF Conducted Emissions

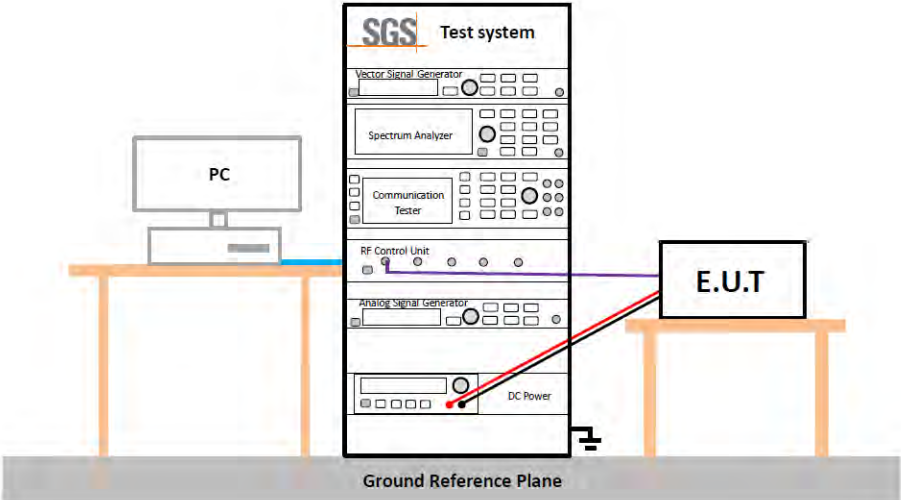
|                                             |                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement:                           | 47 CFR Part 15C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                      |
| Test Method:                                | ANSI C63.10-2020 Section 11.11                                                                                                                                                                                                                                                                                                                                                          |
| Test Setup:                                 |                                                                                                                                                                                                                                                                                                      |
| Instruments Used:                           | Refer to section 6 for details                                                                                                                                                                                                                                                                                                                                                          |
| Test Mode:                                  | Transmitting with GFSK modulation.                                                                                                                                                                                                                                                                                                                                                      |
| Limit:                                      | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Test Results:                               | Pass                                                                                                                                                                                                                                                                                                                                                                                    |
| The detailed test data see: <b>Appendix</b> |                                                                                                                                                                                                                                                                                                                                                                                         |

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 21 of 91

## 4.8 RF Conducted Spurious Emissions

|                                             |                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement:                           | 47 CFR Part 15C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                      |
| Test Method:                                | ANSI C63.10-2020 Section 11.11                                                                                                                                                                                                                                                                                                                                                          |
| Test Setup:                                 |                                                                                                                                                                                                                                                                                                      |
| Instruments Used:                           | Refer to section 6 for details                                                                                                                                                                                                                                                                                                                                                          |
| Test Mode:                                  | Transmitting with GFSK modulation.                                                                                                                                                                                                                                                                                                                                                      |
| Limit:                                      | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Test Results:                               | Pass                                                                                                                                                                                                                                                                                                                                                                                    |
| The detailed test data see: <b>Appendix</b> |                                                                                                                                                                                                                                                                                                                                                                                         |

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 22 of 91

## 4.9 Radiated Spurious Emissions

|                                                                                                                                                                                                                                                                               |                                                  |                                  |                |            |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------|----------------|------------|--------------------------|
| Test Requirement:                                                                                                                                                                                                                                                             | 47 CFR Part 15C Section 15.209 and 15.205        |                                  |                |            |                          |
| Test Method:                                                                                                                                                                                                                                                                  | ANSI C63.10-2020 Section 11.12                   |                                  |                |            |                          |
| Test Site:                                                                                                                                                                                                                                                                    | Measurement Distance: 3m (Semi-Anechoic Chamber) |                                  |                |            |                          |
| Test Frequency:                                                                                                                                                                                                                                                               | 9kHz ~ 25GHz                                     |                                  |                |            |                          |
| Limit:                                                                                                                                                                                                                                                                        | Frequency                                        | Field strength (microvolt/meter) | Limit (dBuV/m) | Remark     | Measurement distance (m) |
|                                                                                                                                                                                                                                                                               | 0.009MHz-0.490MHz                                | 2400/F(kHz)                      | -              | -          | 300                      |
|                                                                                                                                                                                                                                                                               | 0.490MHz-1.705MHz                                | 24000/F(kHz)                     | -              | -          | 30                       |
|                                                                                                                                                                                                                                                                               | 1.705MHz-30MHz                                   | 30                               | -              | -          | 30                       |
|                                                                                                                                                                                                                                                                               | 30MHz-88MHz                                      | 100                              | 40.0           | Quasi-peak | 3                        |
|                                                                                                                                                                                                                                                                               | 88MHz-216MHz                                     | 150                              | 43.5           | Quasi-peak | 3                        |
|                                                                                                                                                                                                                                                                               | 216MHz-960MHz                                    | 200                              | 46.0           | Quasi-peak | 3                        |
|                                                                                                                                                                                                                                                                               | 960MHz-1GHz                                      | 500                              | 54.0           | Quasi-peak | 3                        |
|                                                                                                                                                                                                                                                                               | Above 1GHz                                       | 500                              | 54.0           | Average    | 3                        |
| Remark: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device. |                                                  |                                  |                |            |                          |

### Test Setup:

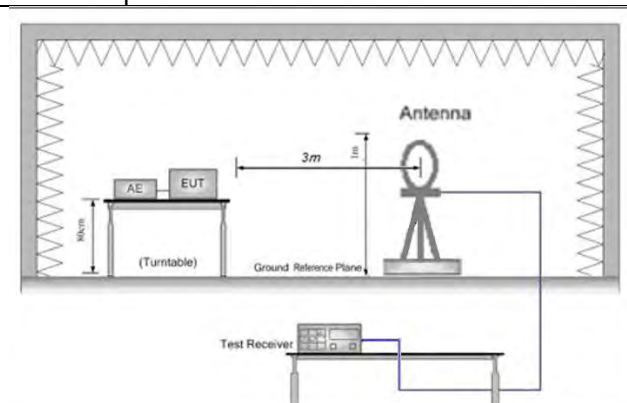


Figure 1. Below 30MHz

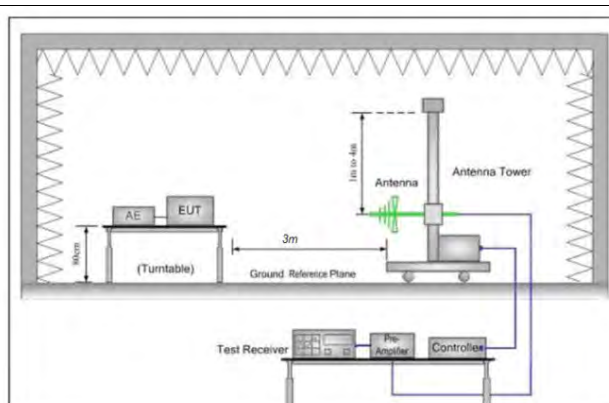


Figure 2. 30MHz to 1GHz

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 23 of 91

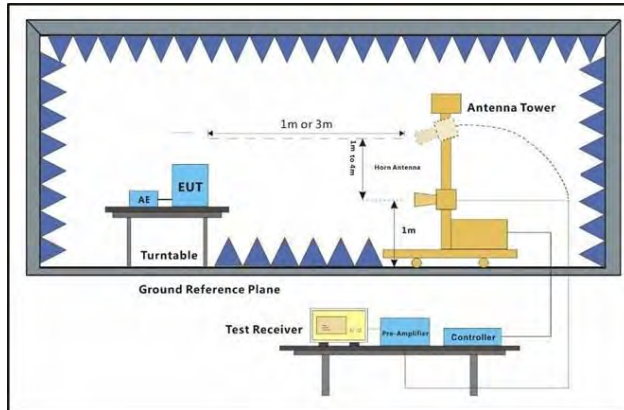


Figure 3. Above 1 GHz

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Test Procedure:</p>     | <ol style="list-style-type: none"> <li>For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation (Distance from antenna to EUT is 1m for measurements &gt;18GHz).</li> <li>The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>Test the EUT in the lowest channel, the middle channel, the Highest channel.</li> <li>The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.</li> <li>Repeat above procedures until all frequencies measured was complete.</li> <li>The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported</li> <li>The disturbance above 18GHz was very low, and the harmonics were the highest point could be found when testing, so only the harmonics had been displayed.</li> <li>At a measurement distance of 1 meter the limit line was increased by <math>20 \cdot \log(3/1) = 9.54 \text{ dB}</math>.</li> </ol> |
| <p>Test Configuration:</p> | <p>Measurements below 30MHz</p> <ul style="list-style-type: none"> <li>RBW = 10 kHz</li> <li>VBW = 30 kHz</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 24 of 91

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             | <ul style="list-style-type: none"> <li>• Detector = Peak &amp; Average &amp; Quasi-peak</li> <li>• Trace mode = max hold</li> </ul> <p>Measurements Below 1000MHz</p> <ul style="list-style-type: none"> <li>• RBW = 120 kHz</li> <li>• VBW = 300 kHz</li> <li>• Detector = Quasi-peak</li> <li>• Trace mode = max hold</li> </ul> <p>Peak Measurements Above 1000 MHz</p> <ul style="list-style-type: none"> <li>• RBW = 1 MHz</li> <li>• VBW ≥ 3 MHz</li> <li>• Detector = Peak</li> <li>• Sweep time = auto</li> <li>• Trace mode = max hold</li> </ul> <p>Average Measurements Above 1000MHz</p> <ul style="list-style-type: none"> <li>• RBW = 1 MHz</li> <li>• VBW = 10 Hz, when duty cycle is no less than 98 percent.</li> <li>• VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.</li> </ul> |
| Exploratory Test Mode:                      | Transmitting with GFSK modulation.<br>Charge + Transmitting mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Final Test Mode:                            | Transmitting with GFSK modulation.<br>Pretest the EUT at Charge + Transmitting mode,<br>For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Instruments Used:                           | Refer to section 6 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Results:                               | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| The detailed test data see: <b>Appendix</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 25 of 91

### 4.10 Restricted bands around fundamental frequency

|                   |                                                  |                |               |
|-------------------|--------------------------------------------------|----------------|---------------|
| Test Requirement: | 47 CFR Part 15C Section 15.209 and 15.205        |                |               |
| Test Method:      | ANSI C63.10-2020 Section 11.12                   |                |               |
| Test Site:        | Measurement Distance: 3m (Semi-Anechoic Chamber) |                |               |
| Limit:            | Frequency                                        | Limit (dBuV/m) | Remark        |
|                   | 30MHz-88MHz                                      | 40.0           | Quasi-peak    |
|                   | 88MHz-216MHz                                     | 43.5           | Quasi-peak    |
|                   | 216MHz-960MHz                                    | 46.0           | Quasi-peak    |
|                   | 960MHz-1GHz                                      | 54.0           | Quasi-peak    |
|                   | Above 1GHz                                       | 54.0           | Average Value |
|                   |                                                  | 74.0           | Peak Value    |

#### Test Setup:

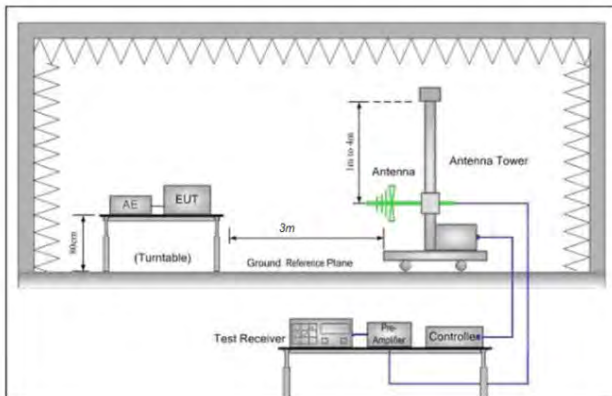


Figure 1. 30MHz to 1GHz

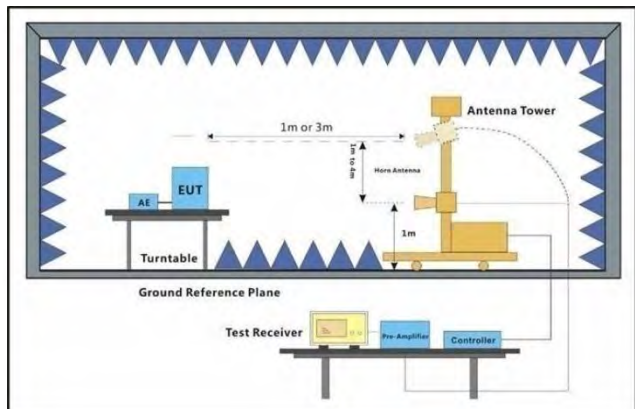


Figure 2. Above 1 GHz

#### Test Procedure:

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 26 of 91

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             | <p>Bandwidth with Maximum Hold Mode.</p> <p>g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel</p> <p>h. Test the EUT in the lowest channel , the Highest channel</p> <p>i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.</p> <p>j. Repeat above procedures until all frequencies measured was complete.</p>                                                                                                                                                                                                                                       |
| Test Configuration:                         | <p>Measurements Below 1000MHz</p> <ul style="list-style-type: none"> <li>• RBW = 120 kHz</li> <li>• VBW = 300 kHz</li> <li>• Detector = Quasi-peak</li> <li>• Trace mode = max hold</li> </ul> <p>Peak Measurements Above 1000 MHz</p> <ul style="list-style-type: none"> <li>• RBW = 1 MHz</li> <li>• VBW <math>\geq</math> 3 MHz</li> <li>• Detector = Peak</li> <li>• Sweep time = auto</li> <li>• Trace mode = max hold</li> </ul> <p>Average Measurements Above 1000MHz</p> <ul style="list-style-type: none"> <li>• RBW = 1 MHz</li> <li>• VBW = 10 Hz, when duty cycle is no less than 98 percent.</li> <li>• VBW <math>\geq</math> 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.</li> </ul> |
| Exploratory Test Mode:                      | <p>Transmitting with GFSK modulation.</p> <p>Charge + Transmitting mode.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Final Test Mode:                            | <p>Transmitting with GFSK modulation.</p> <p>Pretest the EUT at Charge + Transmitting mode.</p> <p>Only the worst case is recorded in the report.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Instruments Used:                           | Refer to section 6 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Test Results:                               | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| The detailed test data see: <b>Appendix</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 27 of 91

## 5 Measurement Uncertainty (95% confidence levels, k=2)

| No. | Item                         | Measurement Uncertainty        |
|-----|------------------------------|--------------------------------|
| 1   | Radio Frequency              | $\pm 7.25 \times 10^{-8}$ GHz  |
| 2   | Duty cycle                   | $\pm 0.37\%$                   |
| 3   | Occupied Bandwidth           | $\pm 0.2\%$                    |
| 4   | RF conducted power           | $\pm 0.21$ dB                  |
| 5   | RF power density             | $\pm 2.84$ dB                  |
| 6   | Conducted Spurious emissions | $\pm 0.75$ dB                  |
| 7   | Conduction Emission          | $\pm 3.0$ dB (150kHz to 30MHz) |
| 8   | Radiated Emission            | $\pm 4.6$ dB (9kHz to 30MHz)   |
|     |                              | $\pm 4.9$ dB (30MHz to 1GHz)   |
|     |                              | $\pm 4.9$ dB (1GHz to 6GHz)    |
|     |                              | $\pm 4.7$ dB (6GHz to 18GHz)   |
|     |                              | $\pm 5.26$ dB (Above 18GHz)    |

### Remark:

The  $U_{lab}$  (lab Uncertainty) is less than  $U_{CISPR/ETSI}$  (CISPR/ETSI Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 28 of 91

## 6 Equipment List

| RF Test System                 |              |                      |               |                           |                              |
|--------------------------------|--------------|----------------------|---------------|---------------------------|------------------------------|
| Test Equipment                 | Manufacturer | Model No.            | Inventory No. | Cal. date<br>(yyyy/mm/dd) | Cal.Due date<br>(yyyy/mm/dd) |
| MXA signal analyzer            | Agilent      | N9020A               | XAW01-06-07   | 2023/02/16                | 2024/02/15                   |
| MXG vector signal Generator    | Agilent      | N5182B               | XAW01-07-16   | 2023/02/16                | 2024/02/15                   |
| Measurement Software           | Tonscend     | JS1120-3<br>(3.2.18) | XAW02-14-01   | NCR                       | NCR                          |
| RF control unit                | Tonscend     | JS0806-2             | XAW03-37-01   | NCR                       | NCR                          |
| Power Meter                    | Anritsu      | ML2495A              | XAW01-25-03   | 2023/02/16                | 2024/02/15                   |
| Power Supply                   | Agilent      | 66311B               | XAW01-17-01   | 2023/02/16                | 2024/02/15                   |
| Temperature and humidity meter | MingGao      | T809                 | XAW01-01-16   | 2022/09/18                | 2023/09/17                   |

| CE Test System                 |               |                 |               |                           |                              |
|--------------------------------|---------------|-----------------|---------------|---------------------------|------------------------------|
| Test Equipment                 | Manufacturer  | Model No.       | Inventory No. | Cal. date<br>(yyyy/mm/dd) | Cal.Due date<br>(yyyy/mm/dd) |
| Shielding Room                 | Brilliant-emc | N/A             | XAW04-03-01   | N/A                       | N/A                          |
| Test receiver                  | ROHDE&SCHWARZ | ESR             | XAW01-08-01   | 2022/09/08                | 2023/09/07                   |
| Artificial network             | ROHDE&SCHWARZ | ENV216          | XAW01-04-01   | 2022/06/30                | 2023/06/29                   |
| Temperature and humidity meter | MingGao       | TH101B          | XAW01-01-02   | 2022/09/18                | 2023/09/17                   |
| Measurement Software           | Tonscend      | TS+<br>V4.0.0.0 | XAW02-07-01   | NCR                       | NCR                          |
| Radio communication analyzer   | ROHDE&SCHWARZ | CMW 500         | XAW01-03-02   | 2023/02/16                | 2024/02/15                   |
| Artificial network             | ROHDE&SCHWARZ | ENV216          | XAW01-04-02   | 2022/06/30                | 2023/06/29                   |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 29 of 91

| RSE Test System                        |                   |              |               |                               |                                  |
|----------------------------------------|-------------------|--------------|---------------|-------------------------------|----------------------------------|
| Test Equipment                         | Manufacturer      | Model No.    | Inventory No. | Cal. date<br>(yyyy/mm/d<br>d) | Cal.Due date<br>(yyyy/mm/d<br>d) |
| Semi-Anechoic Chamber                  | Brilliant-emc     | N/A          | XAW03-35-01   | 2021/09/09                    | 2024/09/08                       |
| MXA signal analyzer                    | Keysight          | N9020A       | XAW01-06-01   | 2023/02/16                    | 2024/02/15                       |
| Spectrum Analyzer                      | ROHDE<br>&SCHWARZ | FSV3044      | XAW01-13-05   | 2023/05/15                    | 2024/05/14                       |
| Test receiver                          | ROHDE<br>&SCHWARZ | ESR          | XAW01-08-01   | 2022/09/08                    | 2023/09/07                       |
| Receiving antenna<br>(30MHz-3GHz)      | Schwarzbeck       | VULB 9163    | XAW01-09-01   | 2022/07/28                    | 2024/07/27                       |
| Receiving<br>antenna(1GHz~18GH<br>z)   | Schwarzbeck       | BBHA 9120D   | XAW01-09-02   | 2022/07/28                    | 2024/07/27                       |
| Receiving antenna<br>(15GHz~40GHz)     | Schwarzbeck       | BBHA 9170    | XAW01-09-03   | 2022/07/23                    | 2024/07/22                       |
| Directional antenna<br>rack controller | Max-Full          | MF-7802BS    | XAW03-03-01   | NCR                           | NCR                              |
| High-speed antenna<br>rack controller  | Max-Full          | MF-7802      | XAW03-04-01   | NCR                           | NCR                              |
| Filter bank                            | Tonscend          | JS0806-F     | XAW03-05-01   | NCR                           | NCR                              |
| Filter bank                            | Tonscend          | JS0806s      | XAW03-05-02   | NCR                           | NCR                              |
| Amplifier                              | Tonscend          | TAP9K3G32    | XAW01-41-01   | 2023/05/15                    | 2024/05/14                       |
| Amplifier                              | Tonscend          | TAP01018048  | XAW01-41-02   | 2022/09/14                    | 2023/09/13                       |
| Amplifier                              | Tonscend          | TAP18040048  | XAW01-41-03   | 2022/09/14                    | 2023/09/13                       |
| Amplifier                              | Shanghai<br>Steed | YX28980930   | XAW01-41-06   | 2022/09/14                    | 2023/09/13                       |
| Temperature and<br>humidity meter      | MingGao           | TH101B       | XAW01-01-02   | 2022/09/18                    | 2023/09/17                       |
| Radio communication<br>analyzer        | ROHDE&SCH<br>WARZ | CMW 500      | XAW01-03-02   | 2023/02/16                    | 2024/02/15                       |
| Measurement<br>Software                | Tonscend          | TS+ V4.0.0.0 | XAW02-05-01   | NCR                           | NCR                              |
| Loop Antenna                           | Schwarzbeck       | FMZB 1519B   | XAW01-48-02   | 2022/05/26                    | 2024/05/25                       |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 30 of 91

## 7 Photographs - Setup Photos

Refer to Appendix A.2 WLAN Setup Photos.



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 31 of 91

# Appendix

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

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

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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 32 of 91

## DTS Bandwidth Test Result

| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|----------------|--------------|----------|----------|------------|---------|
| BLE_1M   | Ant0    | 2402           | 0.668        | 2401.672 | 2402.340 | 0.5        | PASS    |
|          |         | 2440           | 0.688        | 2439.656 | 2440.344 | 0.5        | PASS    |
|          |         | 2480           | 0.720        | 2479.632 | 2480.352 | 0.5        | PASS    |
| BLE_2M   | Ant0    | 2402           | 1.152        | 2401.432 | 2402.584 | 0.5        | PASS    |
|          |         | 2440           | 1.172        | 2439.424 | 2440.596 | 0.5        | PASS    |
|          |         | 2480           | 1.244        | 2479.332 | 2480.576 | 0.5        | PASS    |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 33 of 91

### Test Graphs



Report No.: XEWA2305000017RG02

Rev.: 01

Page: 34 of 91

### BLE\_1M\_Ant0\_2480



### BLE\_2M\_Ant0\_2402



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 35 of 91

### BLE\_2M\_Ant0\_2440



### BLE\_2M\_Ant0\_2480



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

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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086

中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885

t (86-29) 6282 7885

[www.sgs.com](http://www.sgs.com)

[sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 36 of 91

## Occupied Channel Bandwidth Test Result

| TestMode | Antenna | Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Verdict                  |
|----------|---------|----------------|-----------|-----------|-----------|--------------------------|
| BLE_1M   | Ant0    | 2402           | 1.0477    | 2401.4745 | 2402.5222 | For<br>Report<br>Purpose |
|          |         | 2440           | 1.0327    | 2439.4870 | 2440.5197 |                          |
|          |         | 2480           | 1.0457    | 2479.4725 | 2480.5182 |                          |
| BLE_2M   | Ant0    | 2402           | 2.0573    | 2400.9812 | 2403.0385 |                          |
|          |         | 2440           | 2.1082    | 2438.9520 | 2441.0602 |                          |
|          |         | 2480           | 2.0871    | 2478.9719 | 2481.0590 |                          |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 37 of 91

### Test Graphs



Report No.: XEWA2305000017RG02

Rev.: 01

Page: 38 of 91

### BLE\_1M\_Ant0\_2480



### BLE\_2M\_Ant0\_2402



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

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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086

中国·西安·沣东新城科源三路137号康鸿程方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com

t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 39 of 91

### BLE\_2M\_Ant0\_2440



### BLE\_2M\_Ant0\_2480



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

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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086

中国·西安·沣东新城科源三路137号康鸿程方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com

t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 40 of 91

## Maximum conducted output power

### Test Result Peak

| TestMode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|----------|---------|----------------|---------------------------|----------------------|---------|
| BLE_1M   | Ant0    | 2402           | 1.67                      | ≤30                  | PASS    |
|          |         | 2440           | 1.89                      | ≤30                  | PASS    |
|          |         | 2480           | 1.98                      | ≤30                  | PASS    |
| BLE_2M   | Ant0    | 2402           | 1.98                      | ≤30                  | PASS    |
|          |         | 2440           | 1.78                      | ≤30                  | PASS    |
|          |         | 2480           | 2.01                      | ≤30                  | PASS    |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 41 of 91

## Maximum power spectral density Test Result

| TestMode | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|----------|---------|----------------|------------------|-----------------|---------|
| BLE_1M   | Ant0    | 2402           | -15.15           | ≤8.00           | PASS    |
|          |         | 2440           | -14.26           | ≤8.00           | PASS    |
|          |         | 2480           | -13.66           | ≤8.00           | PASS    |
| BLE_2M   | Ant0    | 2402           | -18.35           | ≤8.00           | PASS    |
|          |         | 2440           | -17.56           | ≤8.00           | PASS    |
|          |         | 2480           | -16.8            | ≤8.00           | PASS    |



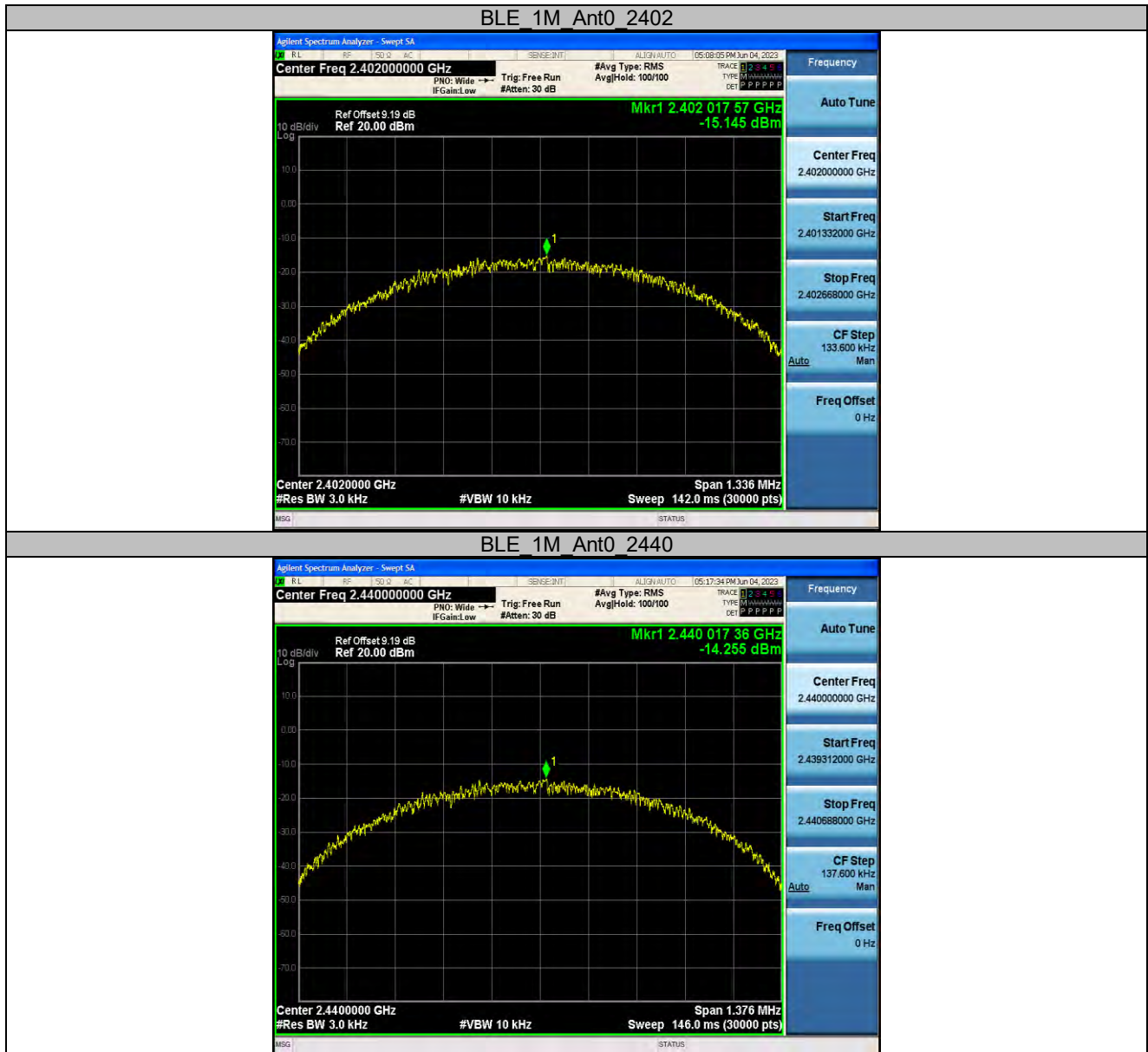
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 42 of 91

### Test Graphs



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

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

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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 43 of 91

### BLE\_1M\_Ant0\_2480



### BLE\_2M\_Ant0\_2402



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 44 of 91

### BLE\_2M\_Ant0\_2440



### BLE\_2M\_Ant0\_2480



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 45 of 91

## Band edge measurements

### Test Result

| TestMode | Antenna | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|--------|----------------|---------------|-------------|------------|---------|
| BLE_1M   | Ant0    | Low    | 2402           | -0.38         | -45.66      | ≤-20.38    | PASS    |
|          |         | High   | 2480           | 1.92          | -49.97      | ≤-18.08    | PASS    |
| BLE_2M   | Ant0    | Low    | 2402           | -1.26         | -35.59      | ≤-21.26    | PASS    |
|          |         | High   | 2480           | 0.61          | -49.13      | ≤-19.39    | PASS    |



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

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

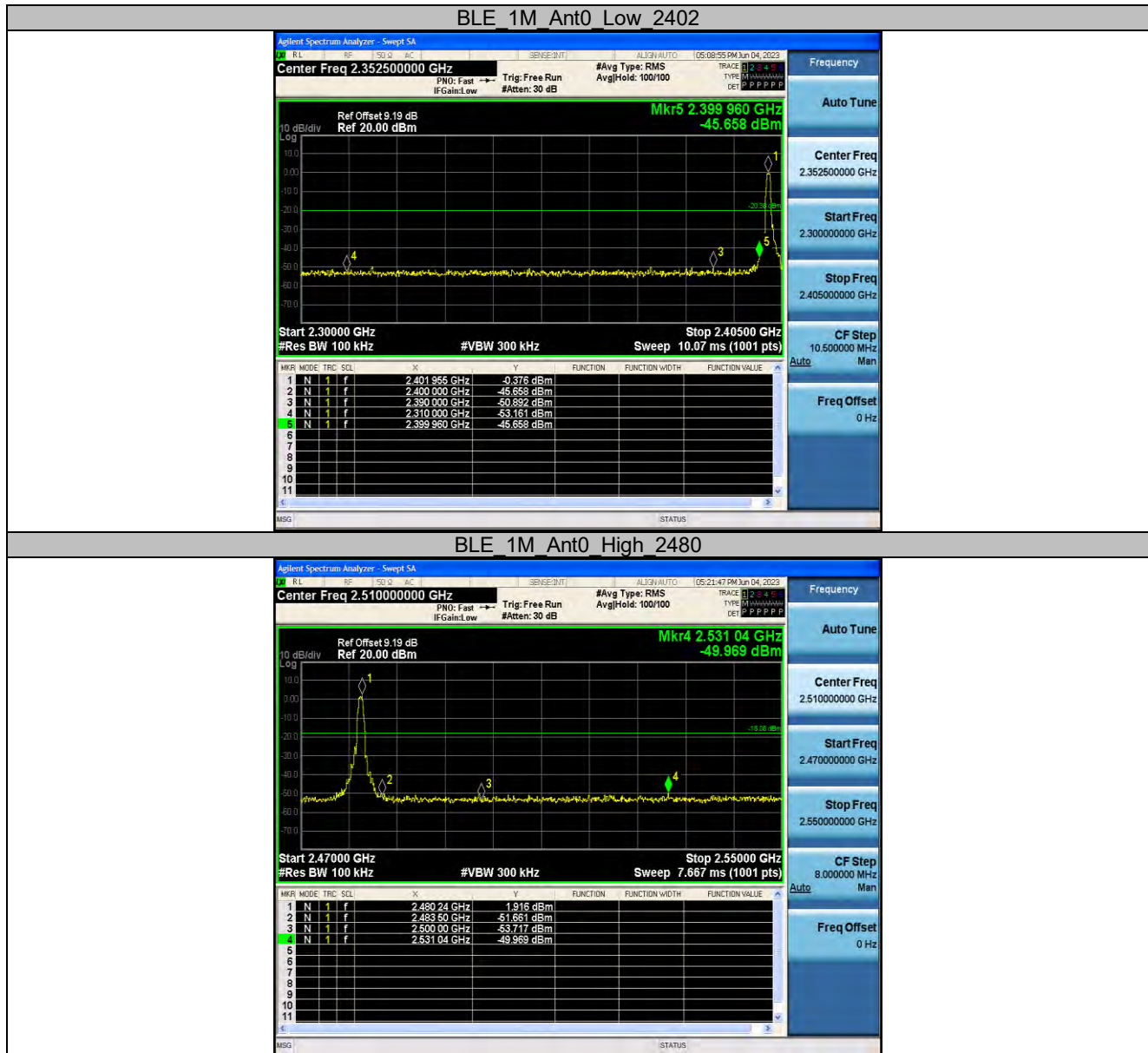
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 46 of 91

### Test Graphs

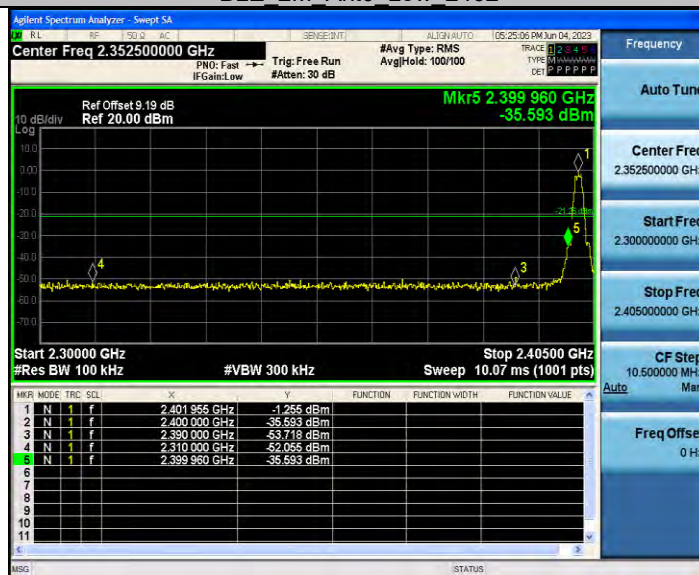


Report No.: XEWA2305000017RG02

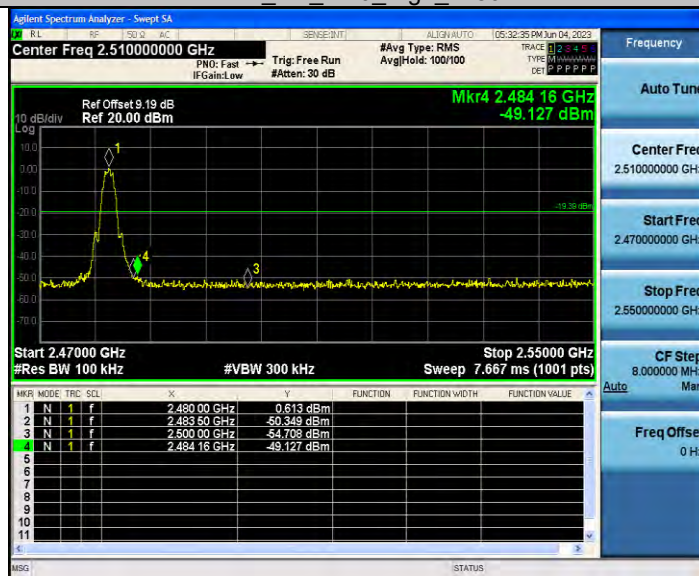
Rev.: 01

Page: 47 of 91

### BLE 2M Ant0 Low 2402



### BLE 2M Ant0 High 2480



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 48 of 91

## Conducted Spurious Emission Test Result

| TestMode | Antenna | Frequency[MHz] | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|----------------|-----------------|----------------|-------------|------------|---------|
| BLE_1M   | Ant0    | 2402           | Reference       | -0.27          | -0.27       | ---        | PASS    |
|          |         |                | 30~1000         | -0.27          | -59.95      | ≤-20.27    | PASS    |
|          |         |                | 1000~26500      | -0.27          | -45.56      | ≤-20.27    | PASS    |
|          |         | 2440           | Reference       | -0.08          | -0.08       | ---        | PASS    |
|          |         |                | 30~1000         | -0.08          | -60.03      | ≤-20.08    | PASS    |
|          |         |                | 1000~26500      | -0.08          | -46.03      | ≤-20.08    | PASS    |
|          |         | 2480           | Reference       | 1.62           | 1.62        | ---        | PASS    |
|          |         |                | 30~1000         | 1.62           | -59.74      | ≤-18.38    | PASS    |
|          |         |                | 1000~26500      | 1.62           | -45.69      | ≤-18.38    | PASS    |
| BLE_2M   | Ant0    | 2402           | Reference       | -2.97          | -2.97       | ---        | PASS    |
|          |         |                | 30~1000         | -2.97          | -60.56      | ≤-22.97    | PASS    |
|          |         |                | 1000~26500      | -2.97          | -46.14      | ≤-22.97    | PASS    |
|          |         | 2440           | Reference       | -2.34          | -2.34       | ---        | PASS    |
|          |         |                | 30~1000         | -2.34          | -58.9       | ≤-22.34    | PASS    |
|          |         |                | 1000~26500      | -2.34          | -44.83      | ≤-22.34    | PASS    |
|          |         | 2480           | Reference       | 1.01           | 1.01        | ---        | PASS    |
|          |         |                | 30~1000         | 1.01           | -60.38      | ≤-18.99    | PASS    |
|          |         |                | 1000~26500      | 1.01           | -45.54      | ≤-18.99    | PASS    |



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

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

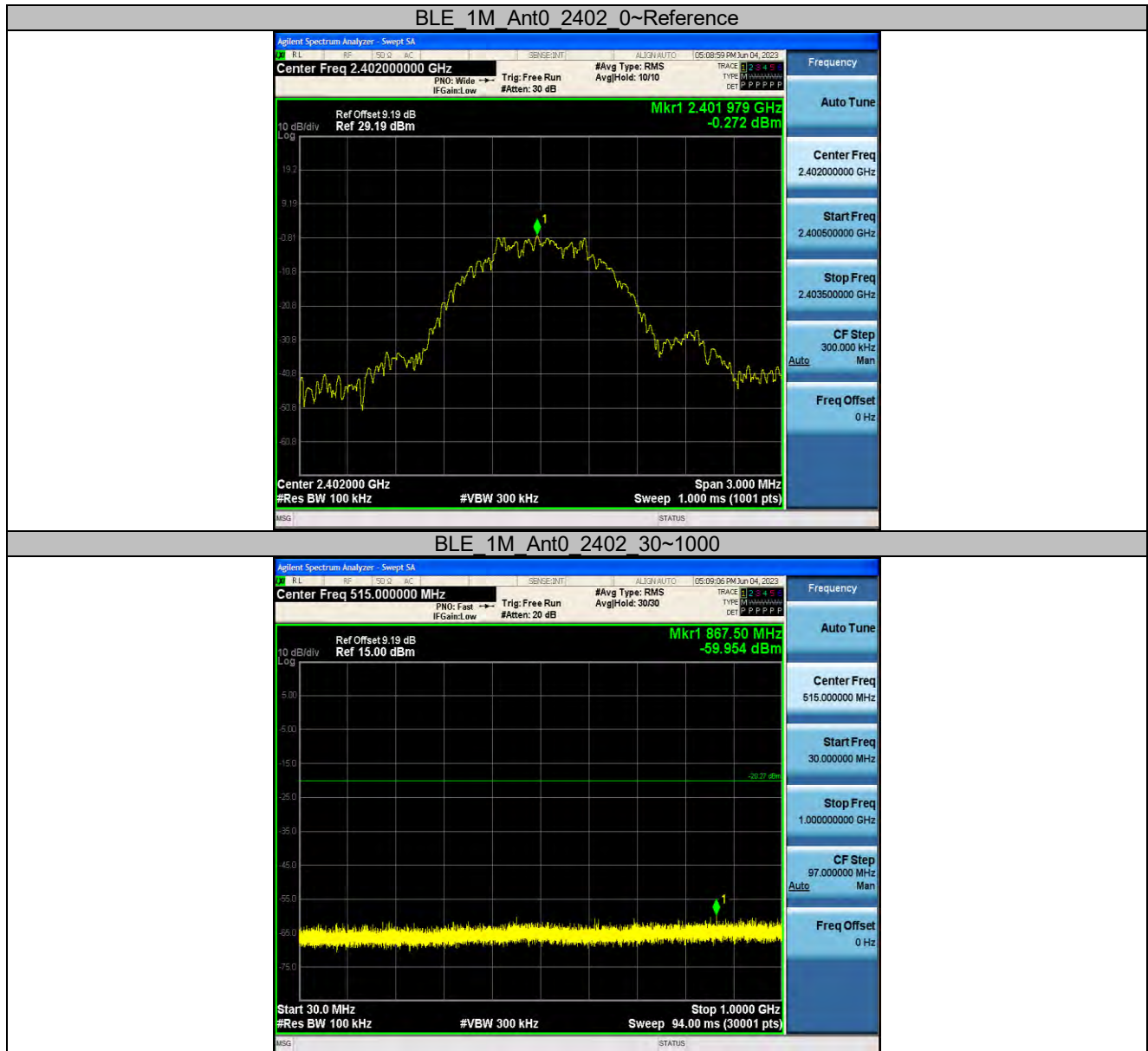
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 49 of 91

### Test Graphs



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

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 50 of 91

### BLE\_1M\_Ant0\_2402\_1000~26500



### BLE\_1M\_Ant0\_2440\_0~Reference

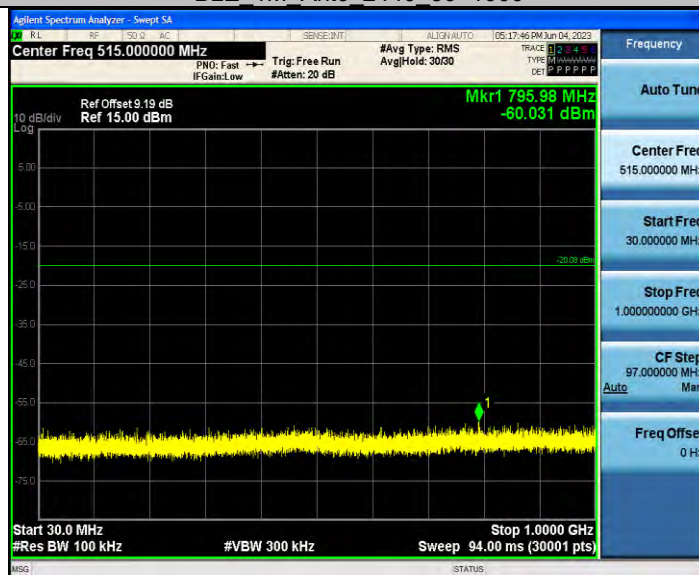


Report No.: XEWA2305000017RG02

Rev.: 01

Page: 51 of 91

### BLE 1M Ant0 2440 30~1000



### BLE 1M Ant0 2440 1000~26500



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

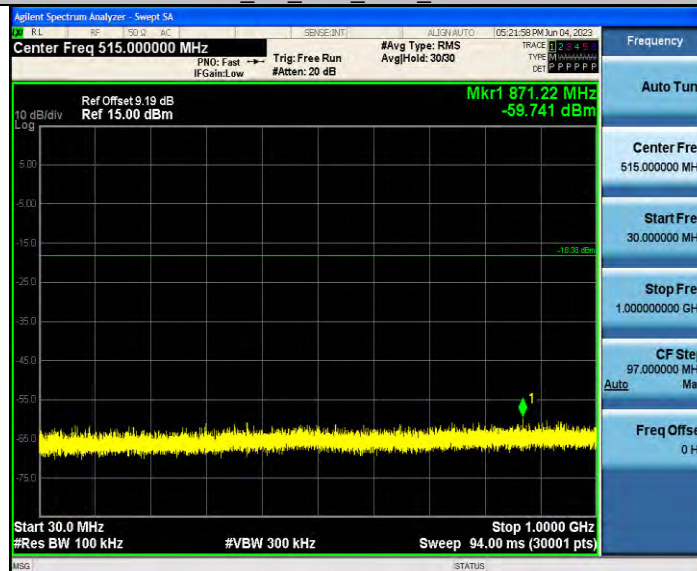
Rev.: 01

Page: 52 of 91

### BLE 1M Ant0 2480 0~Reference



### BLE 1M Ant0 2480 30~1000



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 53 of 91

### BLE 1M\_Ant0\_2480\_1000~26500



### BLE 2M\_Ant0\_2402\_0~Reference



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

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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

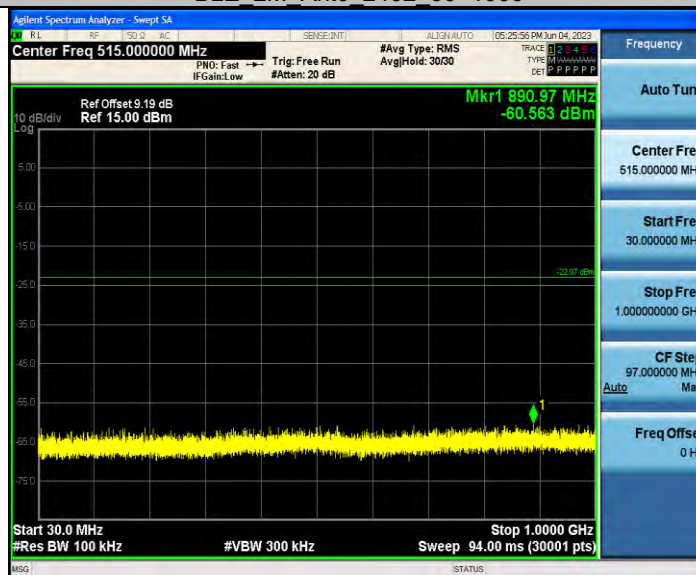
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 54 of 91

### BLE 2M Ant0 2402 30~1000



### BLE 2M Ant0 2402 1000~26500



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

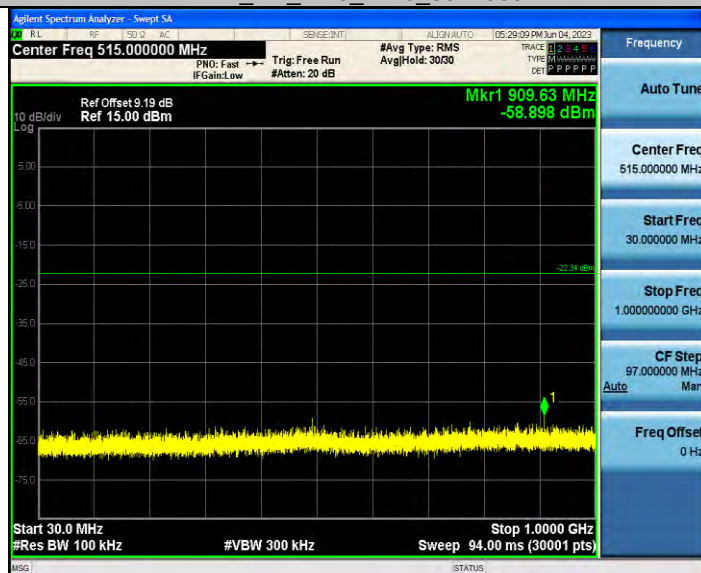
Rev.: 01

Page: 55 of 91

### BLE 2M Ant0 2440 0~Reference



### BLE 2M Ant0 2440 30~1000



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

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

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 56 of 91

### BLE 2M Ant0 2440 1000~26500



### BLE 2M Ant0 2480 0~Reference



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

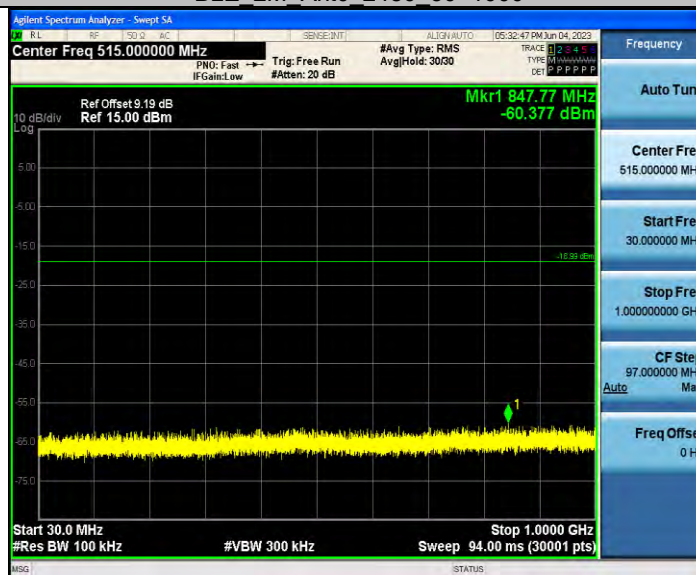
t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 57 of 91

### BLE 2M Ant0 2480 30~1000



### BLE 2M Ant0 2480 1000~26500



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 58 of 91

## Duty Cycle Test Result

| TestMode | Antenna | Frequency[MHz] | ON Time<br>[ms] | Period<br>[ms] | Duty Cycle<br>[%] | Duty Cycle<br>Factor[dB] |
|----------|---------|----------------|-----------------|----------------|-------------------|--------------------------|
| BLE_1M   | Ant0    | 2402           | 2.12            | 2.50           | 84.80             | 0.72                     |
|          |         | 2440           | 2.12            | 2.50           | 84.80             | 0.72                     |
|          |         | 2480           | 2.13            | 2.50           | 85.20             | 0.70                     |
| BLE_2M   | Ant0    | 2402           | 1.06            | 1.87           | 56.68             | 2.47                     |
|          |         | 2440           | 1.06            | 1.87           | 56.68             | 2.47                     |
|          |         | 2480           | 1.06            | 1.87           | 56.68             | 2.47                     |

Note:

Radiated Emission Average VBW = 1 / T

| TestMode | T[ms] | Period[ms] | Duty Cycle[%] | 1/T[kHz] | VBW Setting |
|----------|-------|------------|---------------|----------|-------------|
| BLE_1M   | 2.12  | 2.50       | 84.80         | 0.47170  | 0.51KHz     |
| BLE_2M   | 1.06  | 1.87       | 56.68         | 0.94340  | 1KHz        |



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

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

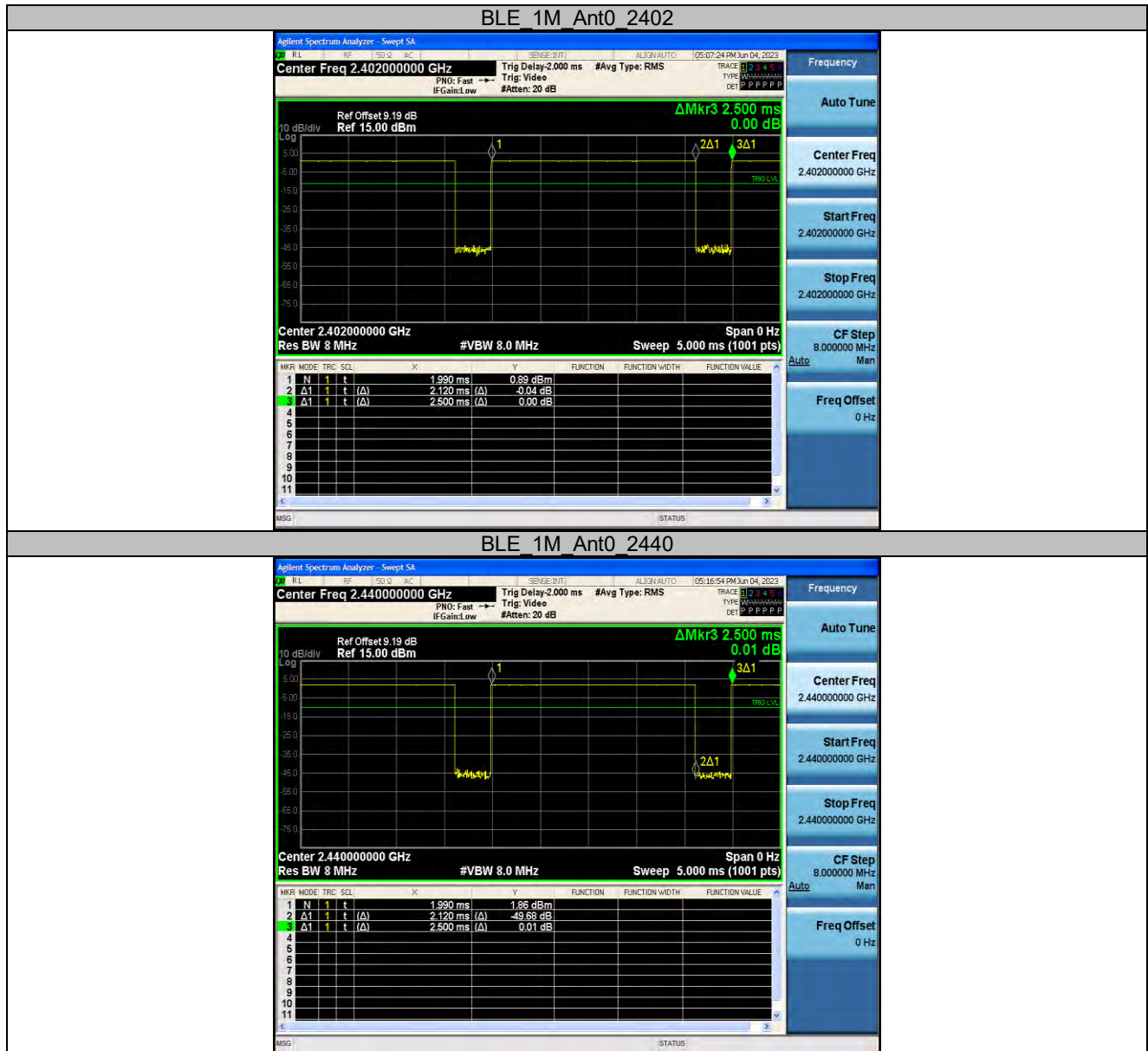
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

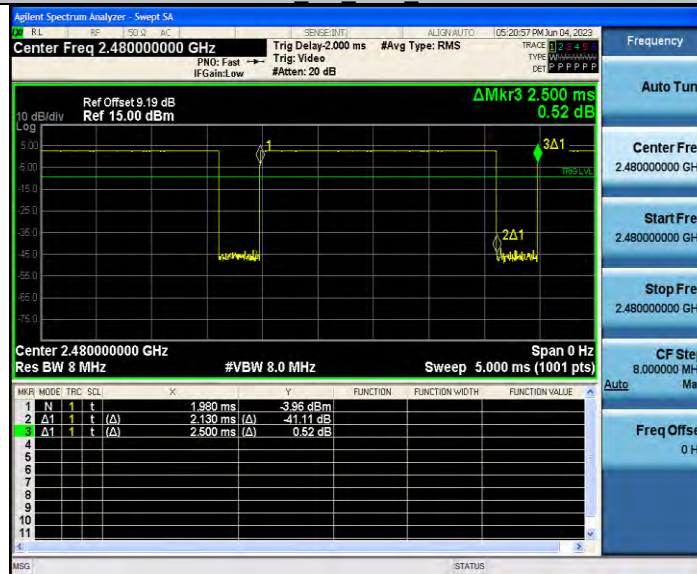
Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 59 of 91

### Test Graphs



Report No.: XEWA2305000017RG02  
Rev.: 01  
Page: 60 of 91

### BLE\_1M\_Ant0\_2480



### BLE\_2M\_Ant0\_2402



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 61 of 91

### BLE\_2M\_Ant0\_2440



### BLE\_2M\_Ant0\_2480



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

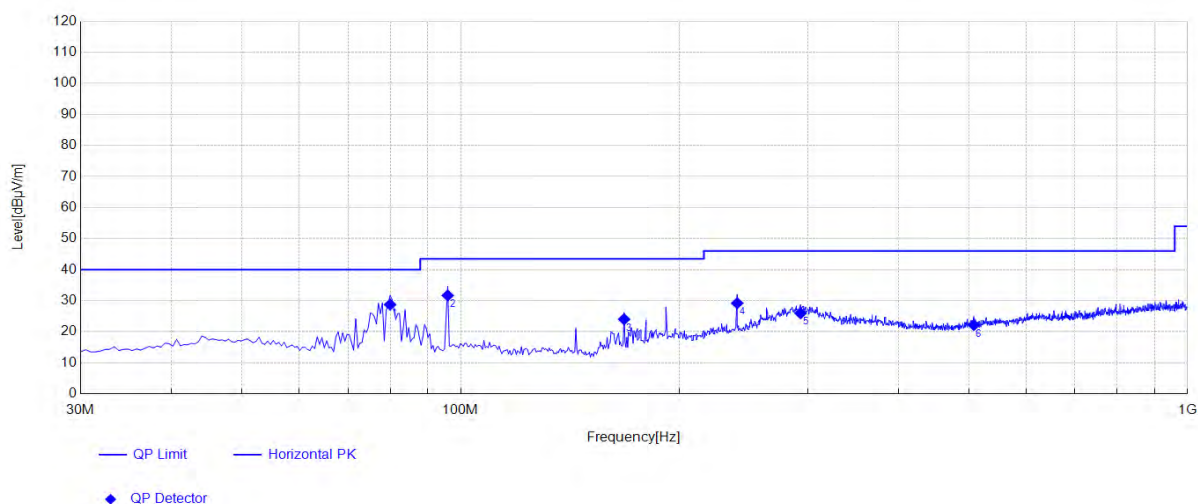
Rev.: 01

Page: 62 of 91

## Radiated Spurious Emissions

## Radiated emission below 1GHz

## Worst case Mode: BLE\_1M\_Channel 0



## Data List

| NO. | Freq. [MHz] | AF[dB/m] | Factor [dB] | QP Reading [dBμV] | QP Value [dBμV/m] | QP Limit [dBμV/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity   |
|-----|-------------|----------|-------------|-------------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 79.98       | 7.20     | -27.23      | 48.78             | 28.75             | 40.00             | 11.25          | 103         | 170       | Horizontal |
| 2   | 95.993      | 10.80    | -27.32      | 48.21             | 31.69             | 43.50             | 11.81          | 121         | 331       | Horizontal |
| 3   | 167.8089    | 8.86     | -26.49      | 41.66             | 24.03             | 43.50             | 19.47          | 386         | 294       | Horizontal |
| 4   | 240.1101    | 12.50    | -26.29      | 43                | 29.21             | 46.00             | 16.79          | 143         | 331       | Horizontal |
| 5   | 293.4867    | 13.31    | -25.74      | 38.38             | 25.95             | 46.00             | 20.05          | 222         | 289       | Horizontal |
| 6   | 507.964     | 17.38    | -24.90      | 29.67             | 22.15             | 46.00             | 23.85          | 326         | 72        | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

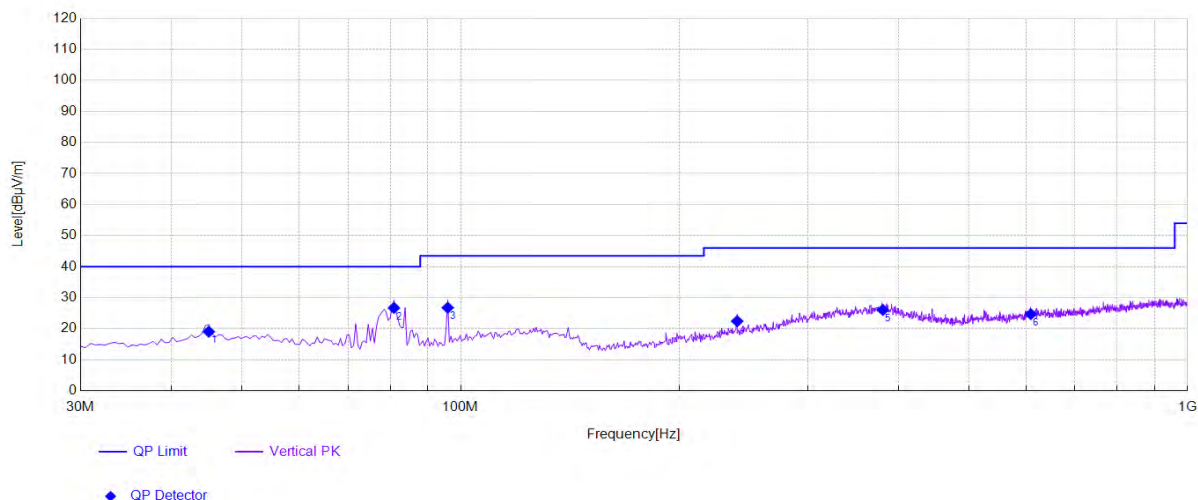
V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 63 of 91



| Data List |             |          |             |                   |                   |                   |                |             |           |          |
|-----------|-------------|----------|-------------|-------------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| NO.       | Freq. [MHz] | AF[dB/m] | Factor [dB] | QP Reading [dBμV] | QP Value [dBμV/m] | QP Limit [dBμV/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 45.0425     | 13.91    | -27.83      | 32.99             | 19.07             | 40.00             | 20.93          | 270         | 16        | Vertical |
| 2         | 80.9505     | 7.30     | -27.27      | 46.68             | 26.71             | 40.00             | 13.29          | 282         | 214       | Vertical |
| 3         | 95.993      | 10.80    | -27.32      | 43.3              | 26.78             | 43.50             | 16.72          | 306         | 255       | Vertical |
| 4         | 240.1101    | 12.50    | -26.29      | 36.23             | 22.44             | 46.00             | 23.56          | 233         | 259       | Vertical |
| 5         | 380.8304    | 15.12    | -25.58      | 36.54             | 26.08             | 46.00             | 19.92          | 321         | 168       | Vertical |
| 6         | 608.4092    | 19.27    | -24.60      | 30.05             | 24.72             | 46.00             | 21.28          | 265         | 356       | Vertical |

## Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier gain. The basic equation with a sample calculation is as follows:

Value = Reading(dBμV) + AF(dB/m) + Factor(dB):

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier gain(dB)

Margin = Limit(dBμV/m) – Value(dBμV/m)

- 2) All channels have been tested, but only the worst case data displayed in this report.



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

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

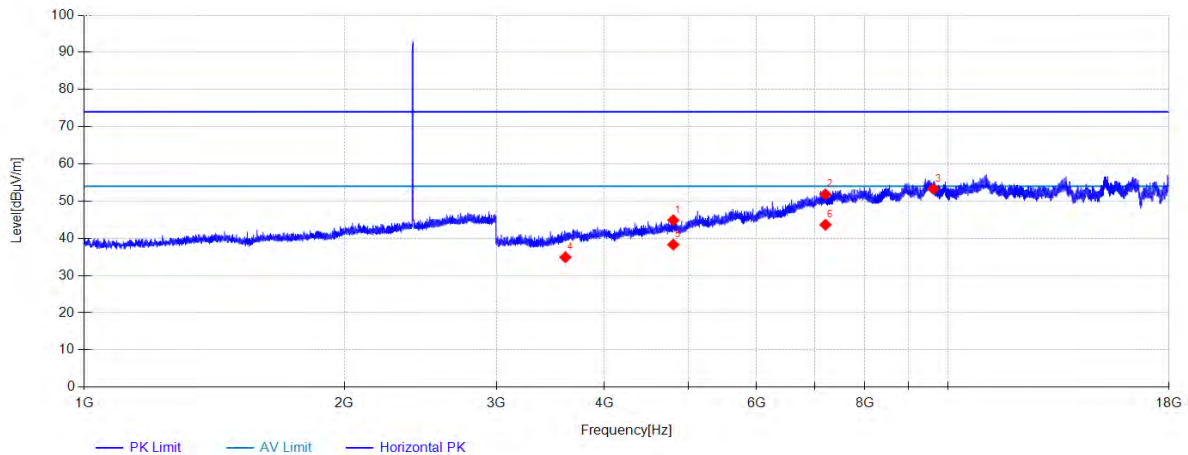
Report No.: XEWA2305000017RG02

Rev.: 01

Page: 64 of 91

## Transmitter emission Above 1GHz

## BLE\_1M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 4804            | 57.02          | 30.78    | -42.95      | 44.85          | 74.00          | 29.15       | 244         | 49        | Horizontal |
| 2         | 7206            | 53.97          | 36.56    | -38.71      | 51.82          | 74.00          | 22.18       | 160         | 360       | Horizontal |
| 3         | 9608            | 51.13          | 37.85    | -35.70      | 53.28          | 74.00          | 20.72       | 189         | 125       | Horizontal |
| 4         | 3603.6241       | 50.35          | 28.93    | -44.36      | 34.92          | 54.00          | 19.08       | 292         | 49        | Horizontal |
| 5         | 4804.2722       | 50.47          | 30.78    | -42.95      | 38.30          | 54.00          | 15.70       | 115         | 58        | Horizontal |
| 6         | 7206.7683       | 45.80          | 36.56    | -38.71      | 43.65          | 54.00          | 10.35       | 185         | 327       | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

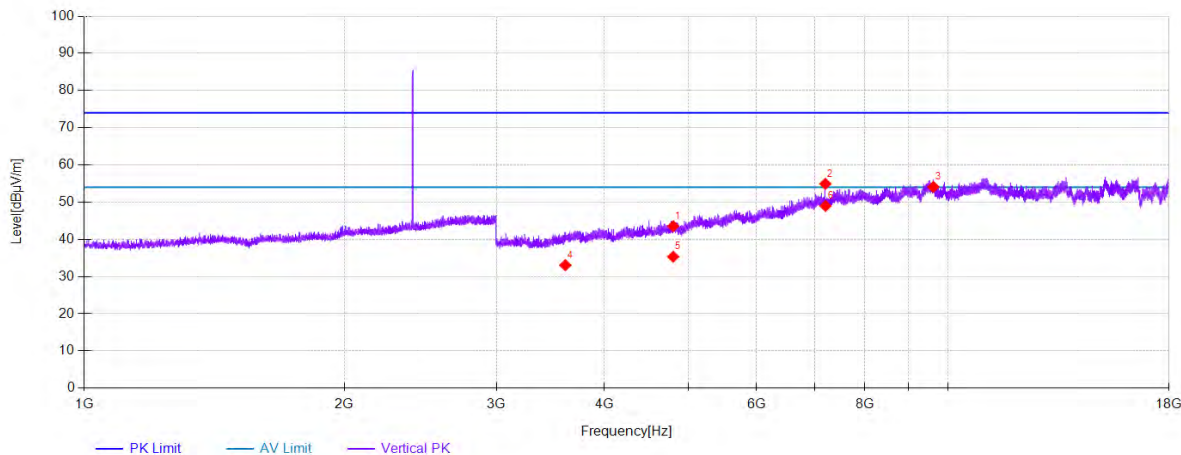
t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 65 of 91

## BLE\_1M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 4804            | 55.70          | 30.78    | -42.95      | 43.53          | 74.00          | 30.47       | 133         | 125       | Vertical |
| 2         | 7206            | 57.06          | 36.56    | -38.71      | 54.91          | 74.00          | 19.09       | 395         | 327       | Vertical |
| 3         | 9608            | 51.94          | 37.85    | -35.70      | 54.09          | 74.00          | 19.91       | 353         | 269       | Vertical |
| 4         | 3603.6241       | 48.49          | 28.93    | -44.36      | 33.06          | 54.00          | 20.94       | 114         | 279       | Vertical |
| 5         | 4804.2722       | 47.50          | 30.78    | -42.95      | 35.33          | 54.00          | 18.67       | 109         | 240       | Vertical |
| 6         | 7207.3683       | 51.13          | 36.56    | -38.71      | 48.98          | 54.00          | 5.02        | 232         | 317       | Vertical |



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

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

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086

中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

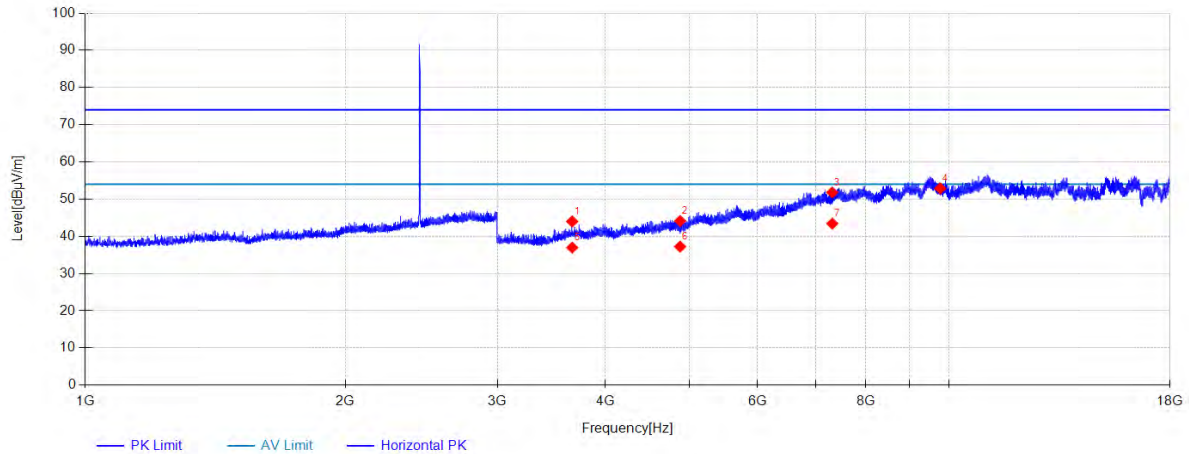
t (86-29) 6282 7885 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 66 of 91

## BLE\_1M\_Channel 19



| Data List |                 |                |           |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|-----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 3660.0264       | 59.14          | 29.30     | -44.45      | 43.99          | 74.00          | 30.01       | 277         | 68        | Horizontal |
| 2         | 4880            | 56.24          | 30.78     | -42.89      | 44.13          | 74.00          | 29.87       | 320         | 97        | Horizontal |
| 3         | 7320            | 54.13          | 36.44     | -38.76      | 51.81          | 74.00          | 22.19       | 212         | 49        | Horizontal |
| 4         | 9760            | 50.51          | 38.34     | -35.97      | 52.88          | 74.00          | 21.12       | 149         | 327       | Horizontal |
| 5         | 3660.6264       | 52.13          | 29.30     | -44.45      | 36.98          | 54.00          | 17.02       | 148         | 231       | Horizontal |
| 6         | 4880.4752       | 49.34          | 30.78     | -42.89      | 37.23          | 54.00          | 16.77       | 125         | 78        | Horizontal |
| 7         | 7320.1728       | 45.74          | 36.44     | -38.76      | 43.42          | 54.00          | 10.58       | 118         | 336       | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

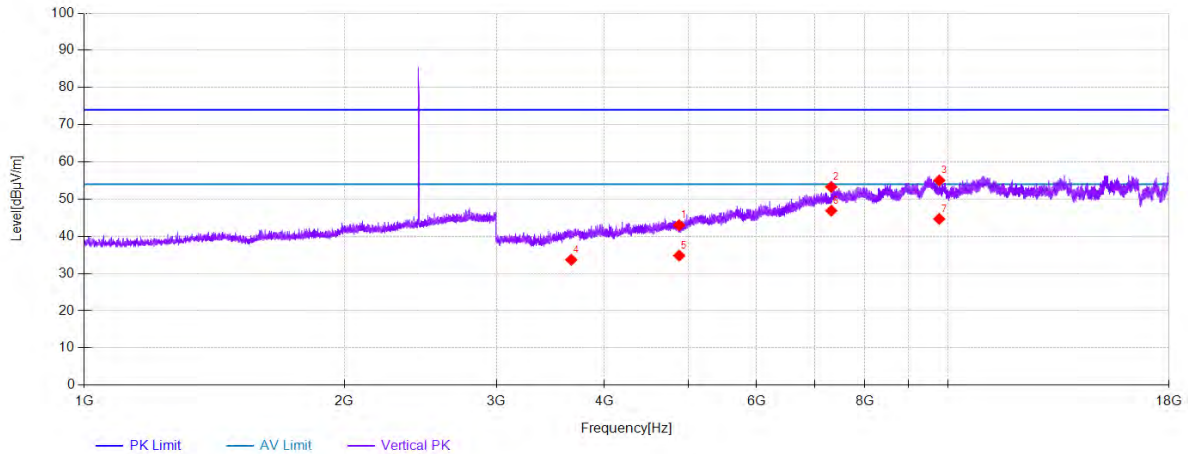
t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 67 of 91

## BLE\_1M\_Channel 19



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 4880            | 55.11          | 30.78    | -42.89      | 43.00          | 74.00          | 31.00       | 383         | 246       | Vertical |
| 2         | 7320            | 55.59          | 36.44    | -38.76      | 53.27          | 74.00          | 20.73       | 258         | 338       | Vertical |
| 3         | 9760            | 52.66          | 38.34    | -35.97      | 55.03          | 74.00          | 18.97       | 351         | 24        | Vertical |
| 4         | 3660.6264       | 48.85          | 29.30    | -44.45      | 33.70          | 54.00          | 20.30       | 286         | 126       | Vertical |
| 5         | 4881.0752       | 46.91          | 30.79    | -42.89      | 34.81          | 54.00          | 19.19       | 238         | 246       | Vertical |
| 6         | 7320.7728       | 49.21          | 36.44    | -38.76      | 46.89          | 54.00          | 7.11        | 341         | 318       | Vertical |
| 7         | 9759.8704       | 42.31          | 38.34    | -35.97      | 44.68          | 54.00          | 9.32        | 321         | 2         | Vertical |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

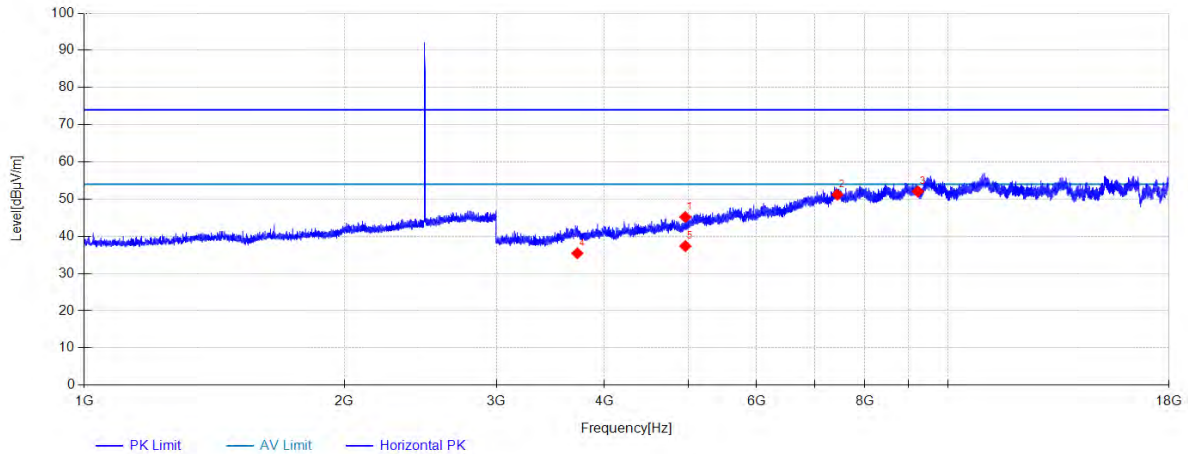
t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 68 of 91

## BLE\_1M\_Channel 39



| Data List |                 |                |           |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|-----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 4960            | 56.94          | 31.04     | -42.78      | 45.20          | 74.00          | 28.80       | 229         | 77        | Horizontal |
| 2         | 7440            | 52.71          | 36.78     | -38.28      | 51.21          | 74.00          | 22.79       | 288         | 58        | Horizontal |
| 3         | 9220            | 50.63          | 37.50     | -36.04      | 52.09          | 74.00          | 21.91       | 258         | 138       | Horizontal |
| 4         | 3720.6288       | 50.62          | 29.42     | -44.60      | 35.44          | 54.00          | 18.56       | 216         | 226       | Horizontal |
| 5         | 4960.8784       | 49.12          | 31.04     | -42.78      | 37.38          | 54.00          | 16.62       | 261         | 68        | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

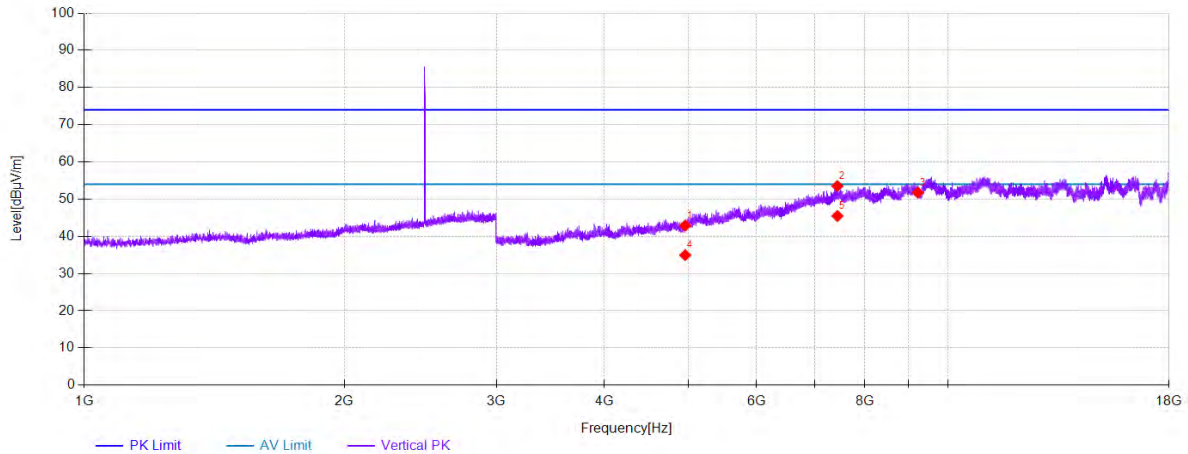
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 69 of 91

## BLE\_1M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 4960            | 54.64          | 31.04    | -42.78      | 42.90          | 74.00          | 31.10       | 167         | 126       | Vertical |
| 2         | 7439.5776       | 55.01          | 36.78    | -38.28      | 53.51          | 74.00          | 20.49       | 240         | 241       | Vertical |
| 3         | 9220            | 50.29          | 37.50    | -36.04      | 51.75          | 74.00          | 22.25       | 204         | 309       | Vertical |
| 4         | 4960.2784       | 46.69          | 31.04    | -42.78      | 34.95          | 54.00          | 19.05       | 223         | 126       | Vertical |
| 5         | 7440.7776       | 46.97          | 36.78    | -38.28      | 45.47          | 54.00          | 8.53        | 165         | 232       | Vertical |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

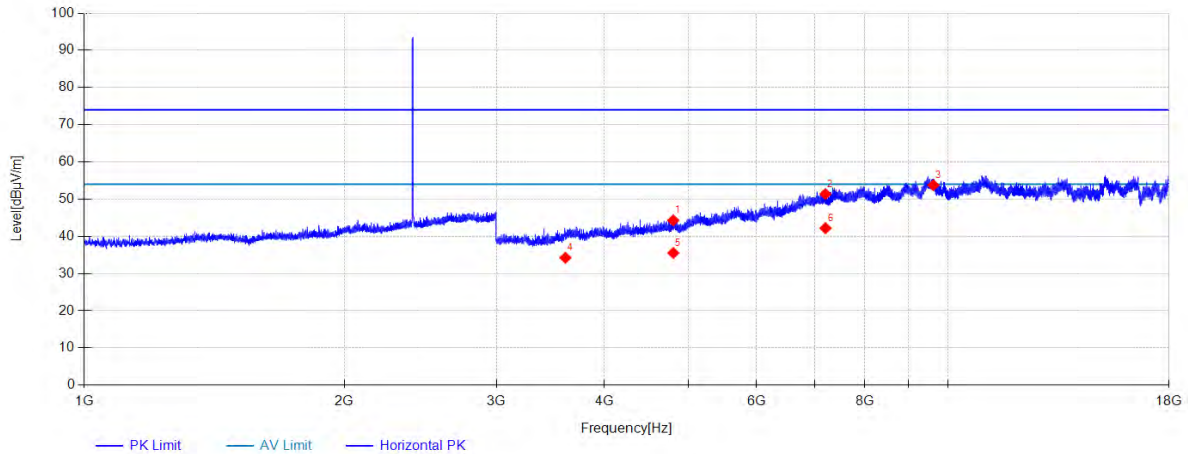
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 70 of 91

## BLE\_2M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 4804            | 56.47          | 30.78    | -42.95      | 44.30          | 74.00          | 29.70       | 377         | 330       | Horizontal |
| 2         | 7206            | 53.51          | 36.56    | -38.71      | 51.36          | 74.00          | 22.64       | 261         | 340       | Horizontal |
| 3         | 9608            | 51.59          | 37.85    | -35.70      | 53.74          | 74.00          | 20.26       | 168         | 14        | Horizontal |
| 4         | 3604.2242       | 49.68          | 28.93    | -44.36      | 34.25          | 54.00          | 19.75       | 210         | 234       | Horizontal |
| 5         | 4804.8722       | 47.70          | 30.78    | -42.95      | 35.53          | 54.00          | 18.47       | 188         | 100       | Horizontal |
| 6         | 7207.9683       | 44.34          | 36.55    | -38.71      | 42.18          | 54.00          | 11.82       | 216         | 358       | Horizontal |



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

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

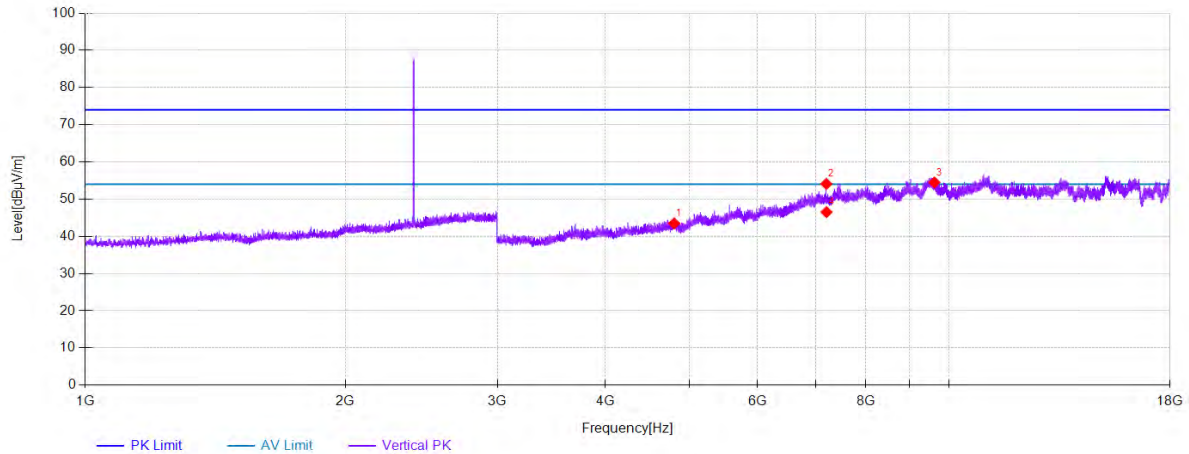
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 71 of 91

## BLE\_2M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 4804            | 55.65          | 30.78    | -42.95      | 43.48          | 74.00          | 30.52       | 198         | 118       | Vertical |
| 2         | 7204.9682       | 56.23          | 36.57    | -38.71      | 54.09          | 74.00          | 19.91       | 261         | 301       | Vertical |
| 3         | 9608            | 52.33          | 37.85    | -35.70      | 54.48          | 74.00          | 19.52       | 228         | 196       | Vertical |
| 4         | 7207.9683       | 48.66          | 36.55    | -38.71      | 46.50          | 54.00          | 7.50        | 143         | 282       | Vertical |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

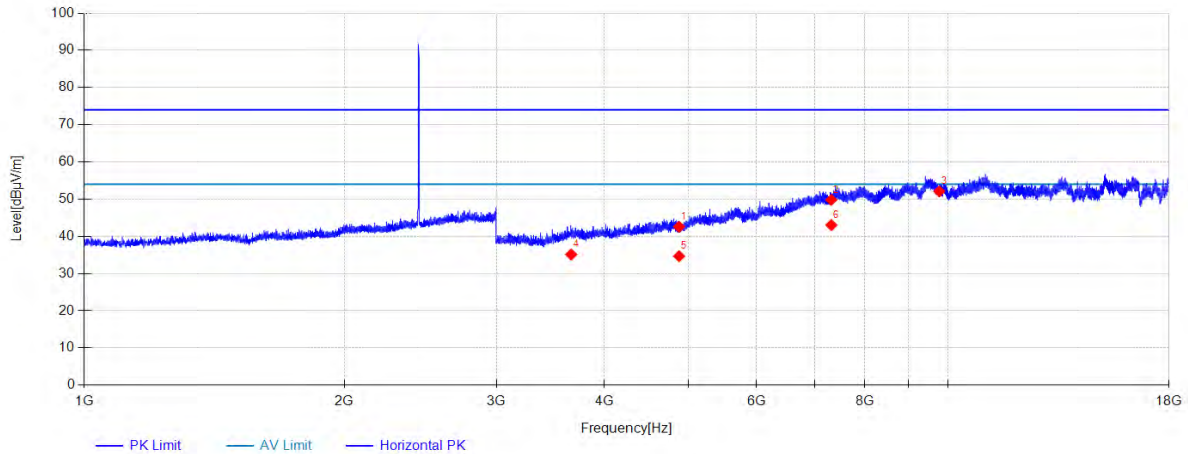
t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 72 of 91

## BLE\_2M\_Channel 19



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 4880            | 54.67          | 30.78    | -42.89      | 42.56          | 74.00          | 31.44       | 315         | 68        | Horizontal |
| 2         | 7320            | 52.12          | 36.44    | -38.76      | 49.80          | 74.00          | 24.20       | 121         | 202       | Horizontal |
| 3         | 9760            | 49.71          | 38.34    | -35.97      | 52.08          | 74.00          | 21.92       | 120         | 174       | Horizontal |
| 4         | 3660.6264       | 50.27          | 29.30    | -44.45      | 35.12          | 54.00          | 18.88       | 377         | 231       | Horizontal |
| 5         | 4880.4752       | 46.78          | 30.78    | -42.89      | 34.67          | 54.00          | 19.33       | 225         | 58        | Horizontal |
| 6         | 7321.9729       | 45.32          | 36.44    | -38.75      | 43.01          | 54.00          | 10.99       | 261         | 337       | Horizontal |



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

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

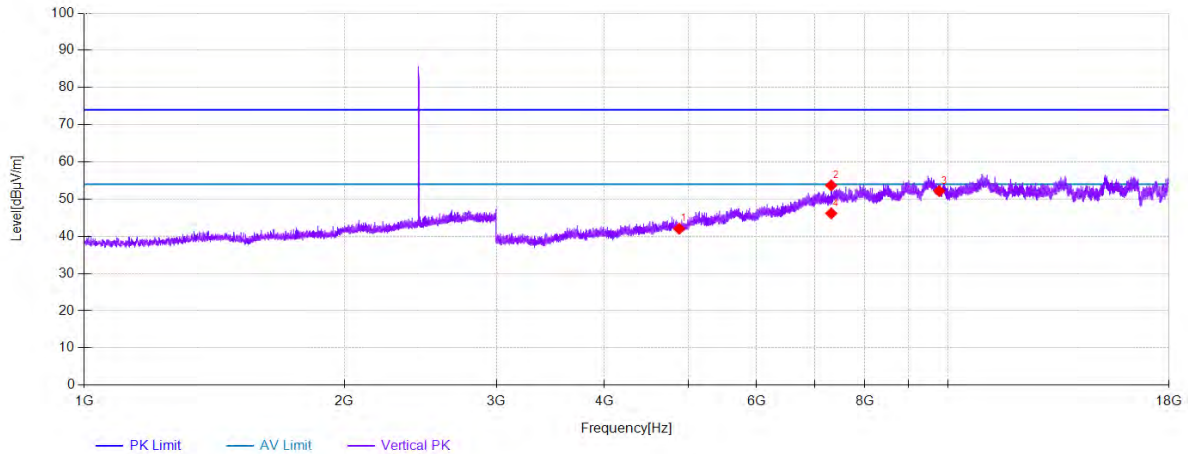
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 73 of 91

## BLE\_2M\_Channel 19



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 4880            | 54.15          | 30.78    | -42.89      | 42.04          | 74.00          | 31.96       | 241         | 128       | Vertical |
| 2         | 7318.9728       | 56.02          | 36.44    | -38.77      | 53.69          | 74.00          | 20.31       | 216         | 352       | Vertical |
| 3         | 9760            | 49.78          | 38.34    | -35.97      | 52.15          | 74.00          | 21.85       | 297         | 234       | Vertical |
| 4         | 7319.5728       | 48.48          | 36.44    | -38.76      | 46.16          | 54.00          | 7.84        | 261         | 352       | Vertical |



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

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

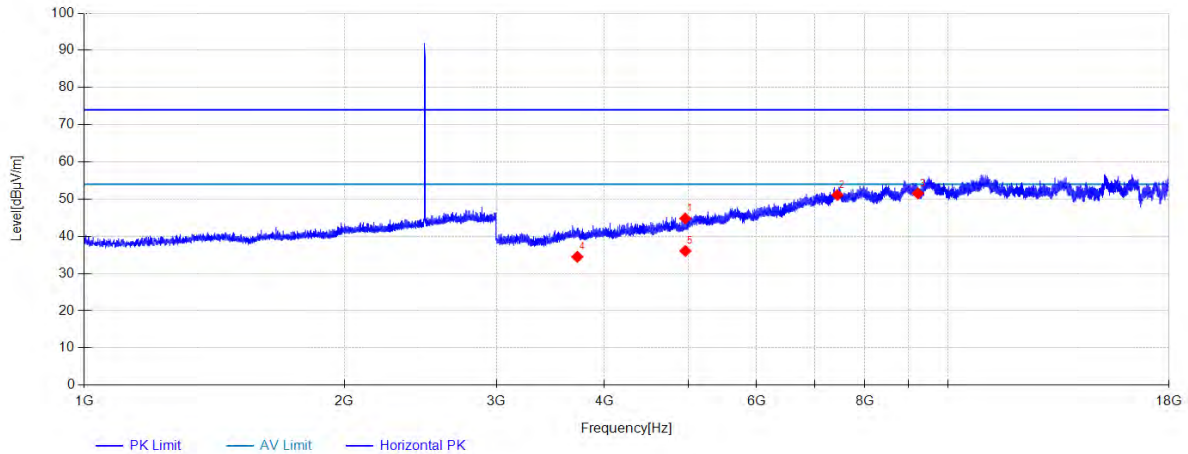
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 74 of 91

## BLE\_2M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 4960            | 56.54          | 31.04    | -42.78      | 44.80          | 74.00          | 29.20       | 167         | 87        | Horizontal |
| 2         | 7440            | 52.62          | 36.78    | -38.28      | 51.12          | 74.00          | 22.88       | 255         | 175       | Horizontal |
| 3         | 9220            | 50.08          | 37.50    | -36.04      | 51.54          | 74.00          | 22.46       | 366         | 194       | Horizontal |
| 4         | 3720.6288       | 49.67          | 29.42    | -44.60      | 34.49          | 54.00          | 19.51       | 354         | 117       | Horizontal |
| 5         | 4960.8784       | 47.81          | 31.04    | -42.78      | 36.07          | 54.00          | 17.93       | 215         | 87        | Horizontal |



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

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

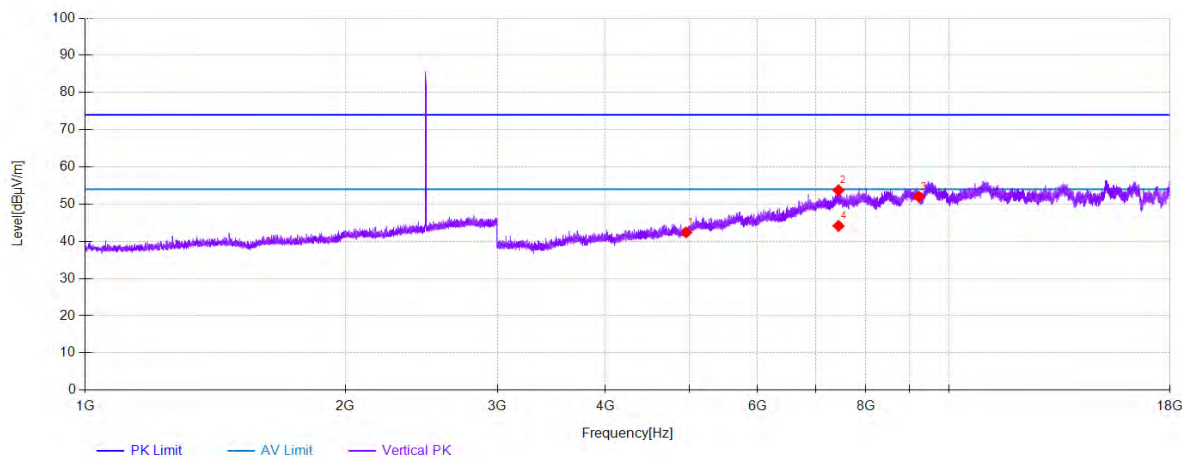
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 75 of 91

## BLE\_2M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 4960            | 54.15          | 31.04    | -42.78      | 42.41          | 74.00          | 31.59       | 265         | 39        | Vertical |
| 2         | 7441.3777       | 55.23          | 36.78    | -38.28      | 53.73          | 74.00          | 20.27       | 145         | 242       | Vertical |
| 3         | 9220            | 50.57          | 37.50    | -36.04      | 52.03          | 74.00          | 21.97       | 125         | 204       | Vertical |
| 4         | 7441.9777       | 45.65          | 36.78    | -38.28      | 44.15          | 54.00          | 9.85        | 256         | 232       | Vertical |

## Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier gain. The basic equation with a sample calculation is as follows:  
Level = Reading(dBμV) + AF(dB/m) + Factor(dB):  
AF = Antenna Factor(dB/m)  
Factor = Cable Factor(dB) - Preamplifier gain(dB)  
Margin = Limit(dBμV/m) – Level(dBμV/m)
- 2) All channels have been tested, but only the worst case data displayed in this report.
- 3) Both peak and average measured complies with the limit line, so test result is "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](mailto:CN.Doccheck@sgs.com)  
V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

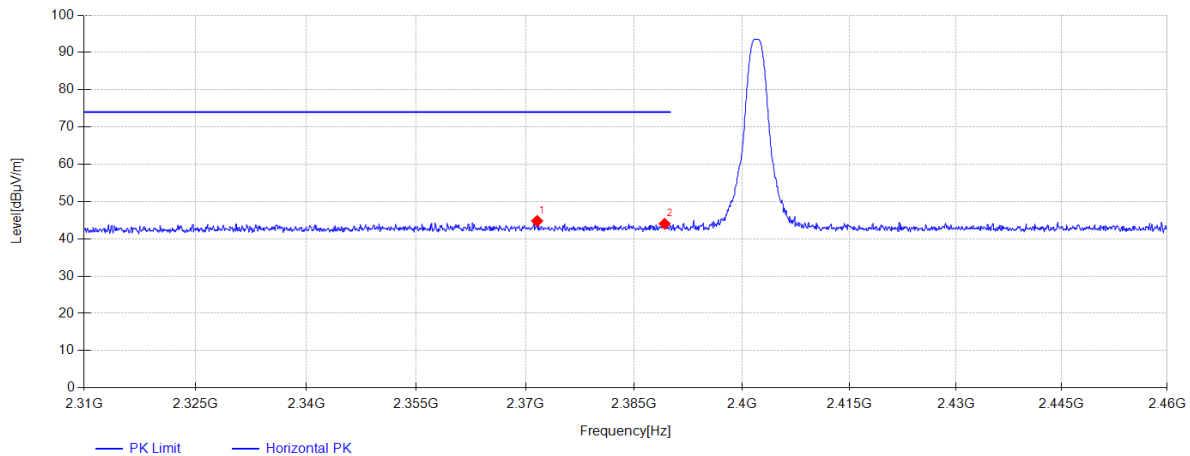
Report No.: XEWA2305000017RG02

Rev.: 01

Page: 76 of 91

## Restricted bands around fundamental frequency

### BLE\_1M\_Channel 0



| Data List |                 |                |           |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|-----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2371.6058       | 40.33          | 27.51     | -23.05      | 44.79          | 74.00          | 29.21       | 102         | 243       | Horizontal |
| 2         | 2389.2396       | 39.61          | 27.44     | -23.02      | 44.03          | 74.00          | 29.97       | 102         | 243       | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

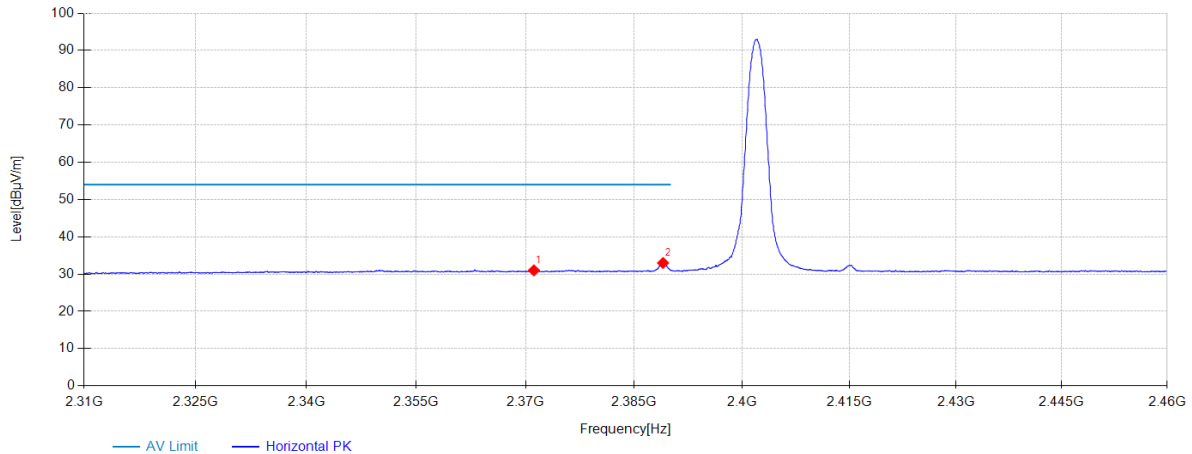
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 77 of 91

## BLE\_1M\_Channel 0



| Data List |                 |                |           |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|-----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2371.1556       | 26.53          | 27.52     | -23.05      | 31.00          | 54.00          | 23.00       | 102         | 243       | Horizontal |
| 2         | 2389.0145       | 28.56          | 27.44     | -23.02      | 32.98          | 54.00          | 21.02       | 102         | 243       | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

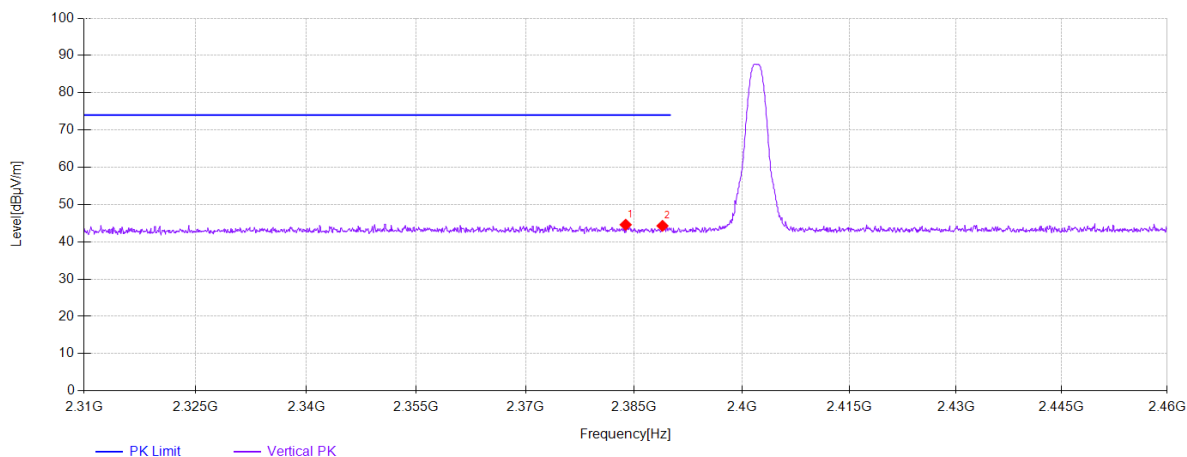
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 78 of 91

## BLE\_1M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2383.8369       | 40.15          | 27.46    | -23.03      | 44.58          | 74.00          | 29.42       | 327         | 203       | Vertical |
| 2         | 2388.9395       | 39.87          | 27.44    | -23.02      | 44.29          | 74.00          | 29.71       | 327         | 203       | Vertical |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

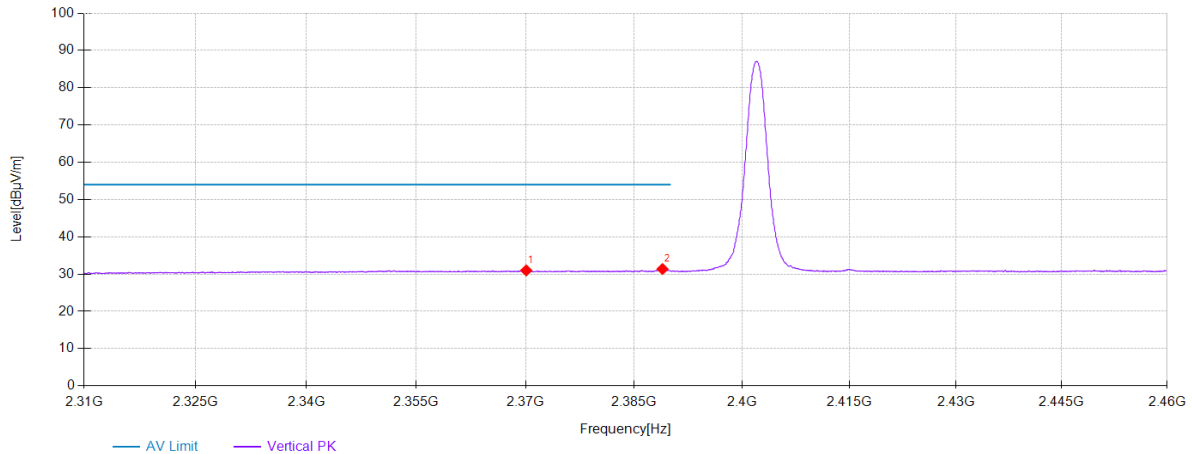
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 79 of 91

## BLE\_1M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2370.1051       | 26.52          | 27.52    | -23.05      | 30.99          | 54.00          | 23.01       | 327         | 203       | Vertical |
| 2         | 2388.9395       | 26.94          | 27.44    | -23.02      | 31.36          | 54.00          | 22.64       | 327         | 203       | Vertical |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

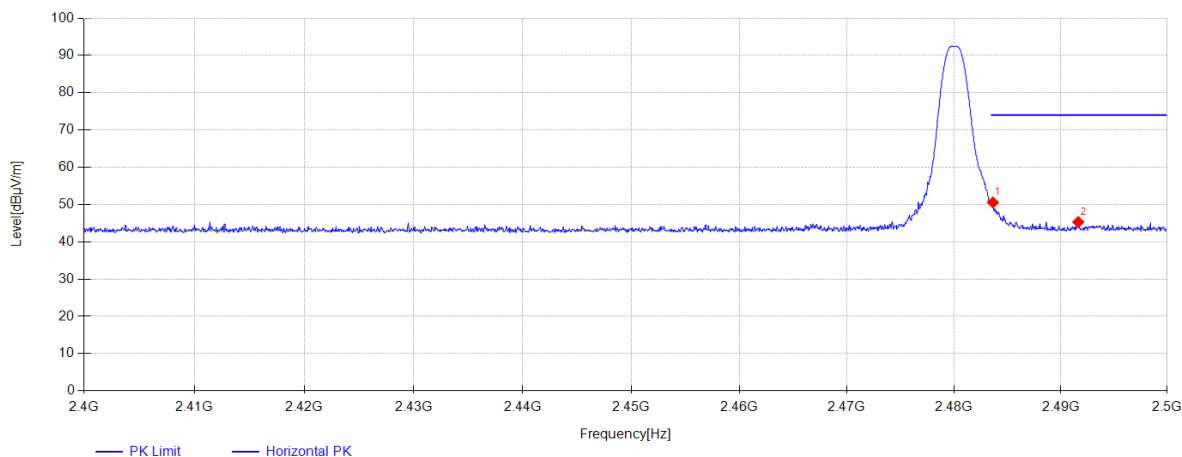
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 80 of 91

## BLE\_1M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2483.6418       | 45.96          | 27.73    | -23.12      | 50.57          | 74.00          | 23.43       | 103         | 245       | Horizontal |
| 2         | 2491.6458       | 40.67          | 27.77    | -23.13      | 45.31          | 74.00          | 28.69       | 103         | 245       | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

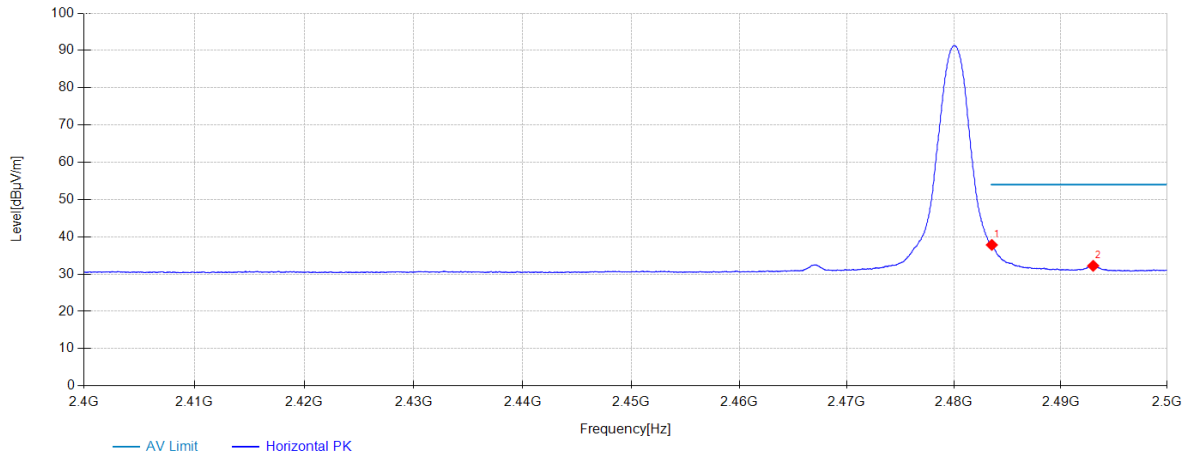
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 81 of 91

## BLE\_1M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2483.5418       | 33.21          | 27.73    | -23.12      | 37.82          | 54.00          | 16.18       | 103         | 245       | Horizontal |
| 2         | 2493.0465       | 27.58          | 27.77    | -23.13      | 32.22          | 54.00          | 21.78       | 103         | 245       | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

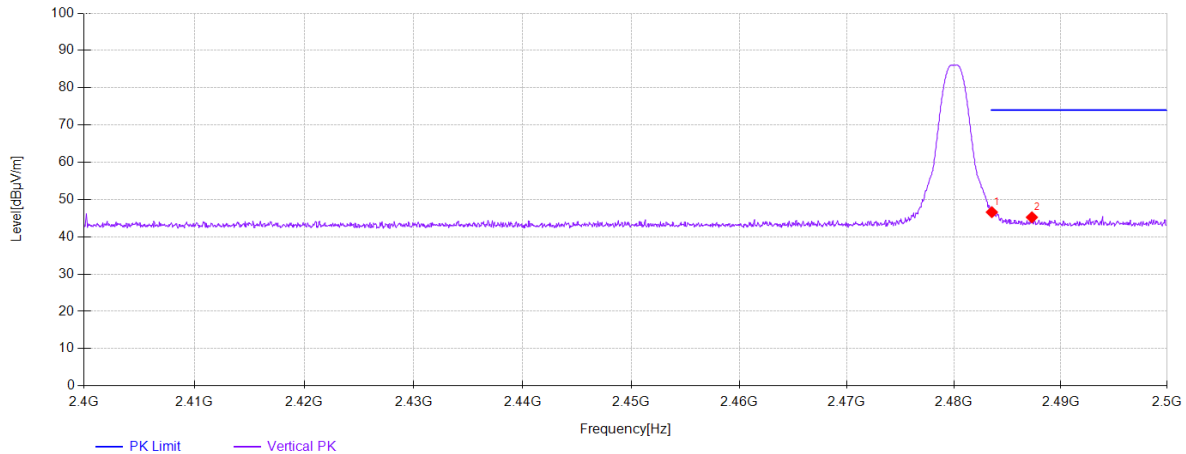
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 82 of 91

## BLE\_1M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2483.5418       | 42.01          | 27.73    | -23.12      | 46.62          | 74.00          | 27.38       | 382         | 178       | Vertical |
| 2         | 2487.2936       | 40.61          | 27.75    | -23.12      | 45.24          | 74.00          | 28.76       | 382         | 178       | Vertical |



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

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

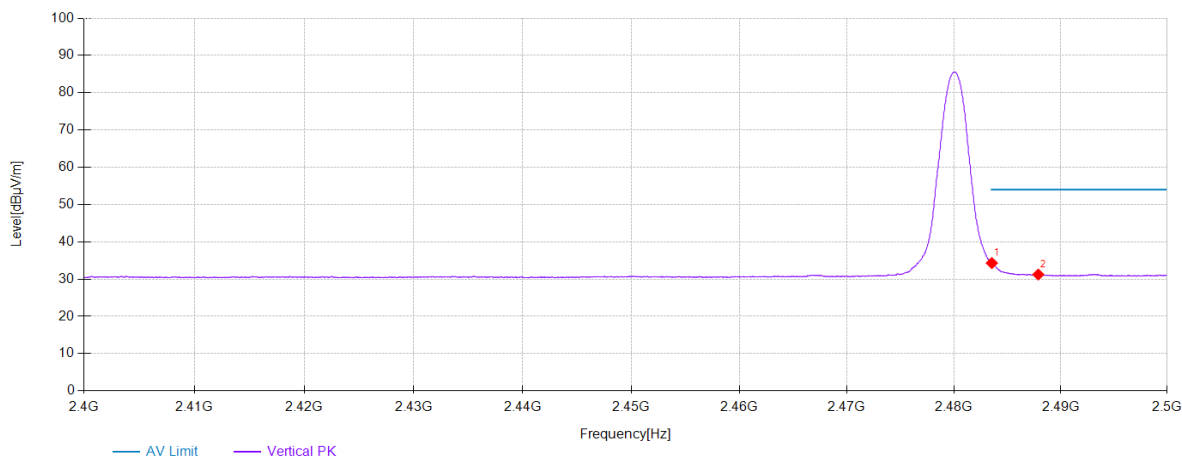
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgs.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 83 of 91

## BLE\_1M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2483.5418       | 29.69          | 27.73    | -23.12      | 34.30          | 54.00          | 19.70       | 382         | 178       | Vertical |
| 2         | 2487.8939       | 26.59          | 27.75    | -23.12      | 31.22          | 54.00          | 22.78       | 382         | 178       | Vertical |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

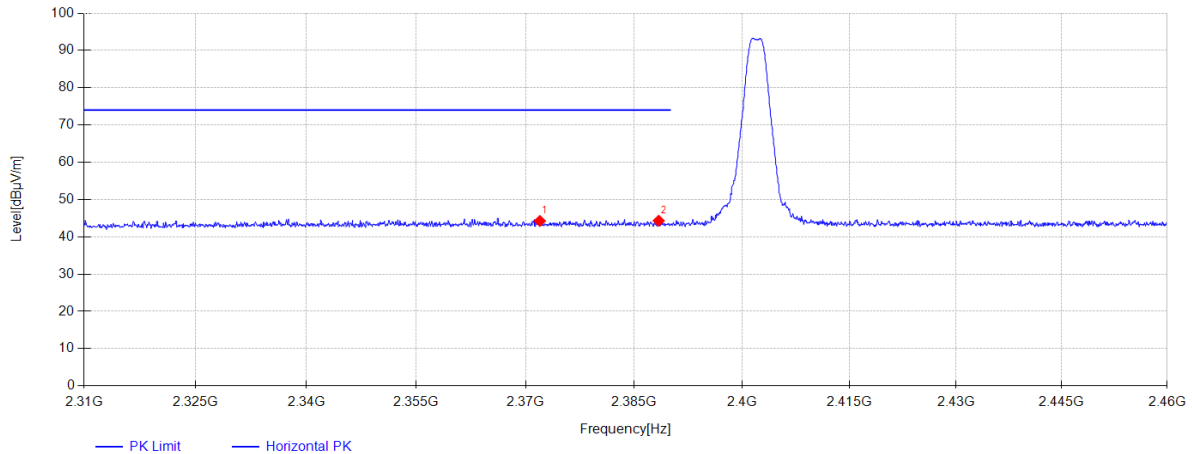
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 84 of 91

## BLE\_2M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2371.981        | 39.77          | 27.51    | -23.04      | 44.24          | 74.00          | 29.76       | 105         | 68        | Horizontal |
| 2         | 2388.4142       | 39.89          | 27.45    | -23.02      | 44.32          | 74.00          | 29.68       | 105         | 68        | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

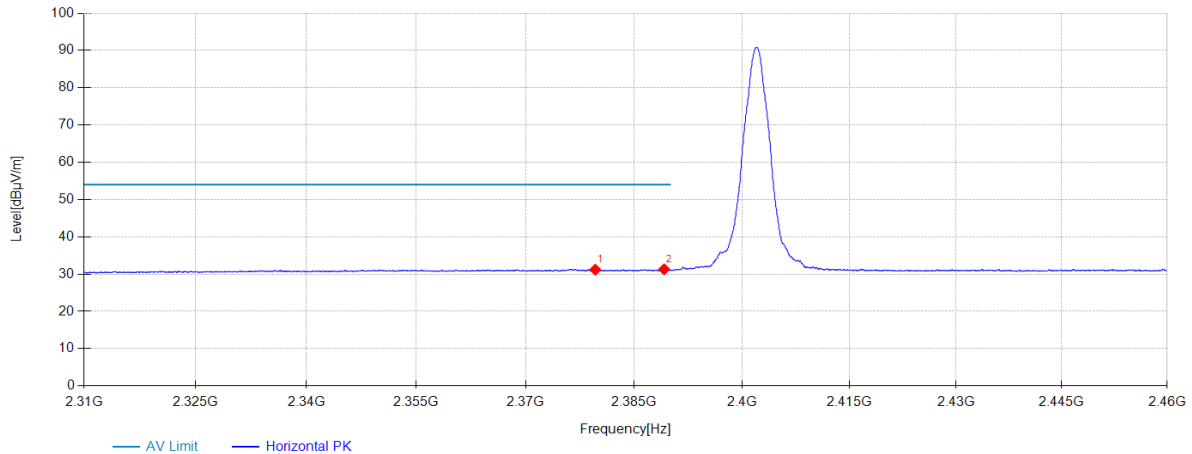
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 85 of 91

## BLE\_2M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2379.6348       | 26.72          | 27.48    | -23.03      | 31.17          | 54.00          | 22.83       | 105         | 68        | Horizontal |
| 2         | 2389.1646       | 26.86          | 27.44    | -23.02      | 31.28          | 54.00          | 22.72       | 105         | 68        | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

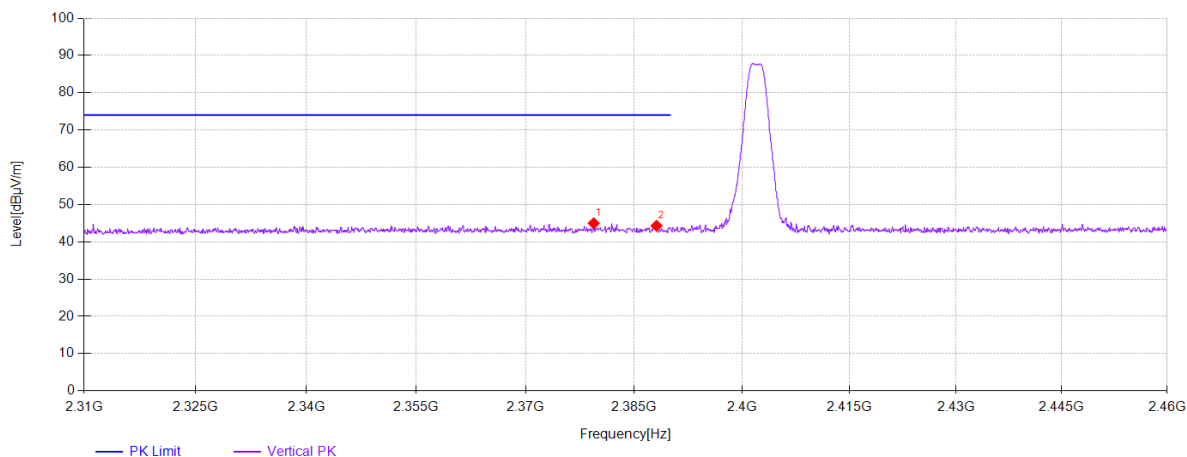
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 86 of 91

### BLE\_2M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2379.4097       | 40.52          | 27.48    | -23.03      | 44.97          | 74.00          | 29.03       | 331         | 206       | Vertical |
| 2         | 2388.1141       | 39.86          | 27.45    | -23.02      | 44.29          | 74.00          | 29.71       | 331         | 206       | Vertical |



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

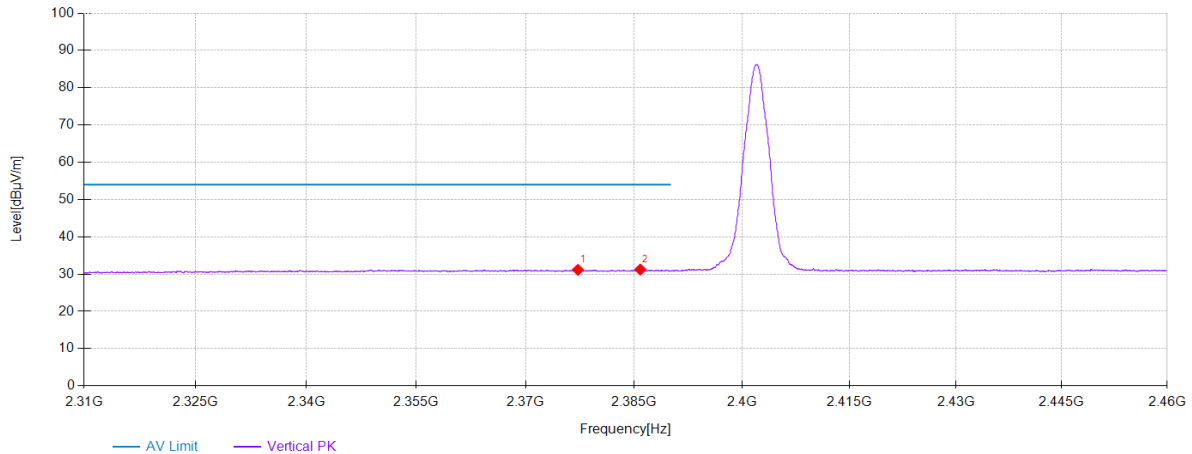
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
 V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 87 of 91

## BLE\_2M\_Channel 0



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2377.2336       | 26.69          | 27.49    | -23.04      | 31.14          | 54.00          | 22.86       | 331         | 206       | Vertical |
| 2         | 2385.8629       | 26.78          | 27.46    | -23.02      | 31.22          | 54.00          | 22.78       | 331         | 206       | Vertical |

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

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

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

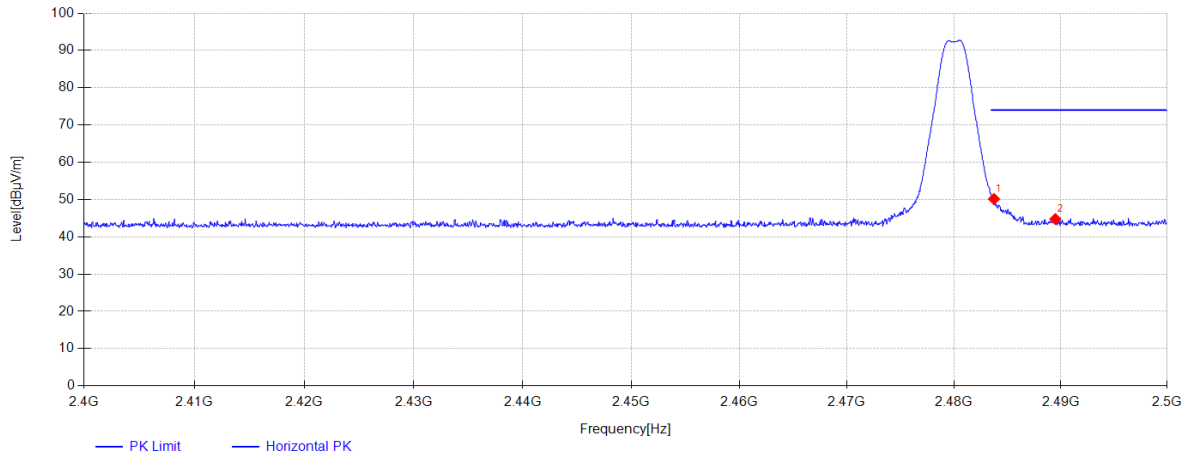
V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 88 of 91

## BLE\_2M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2483.7419       | 45.54          | 27.73    | -23.12      | 50.15          | 74.00          | 23.85       | 107         | 62        | Horizontal |
| 2         | 2489.4947       | 40.12          | 27.76    | -23.13      | 44.75          | 74.00          | 29.25       | 107         | 62        | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

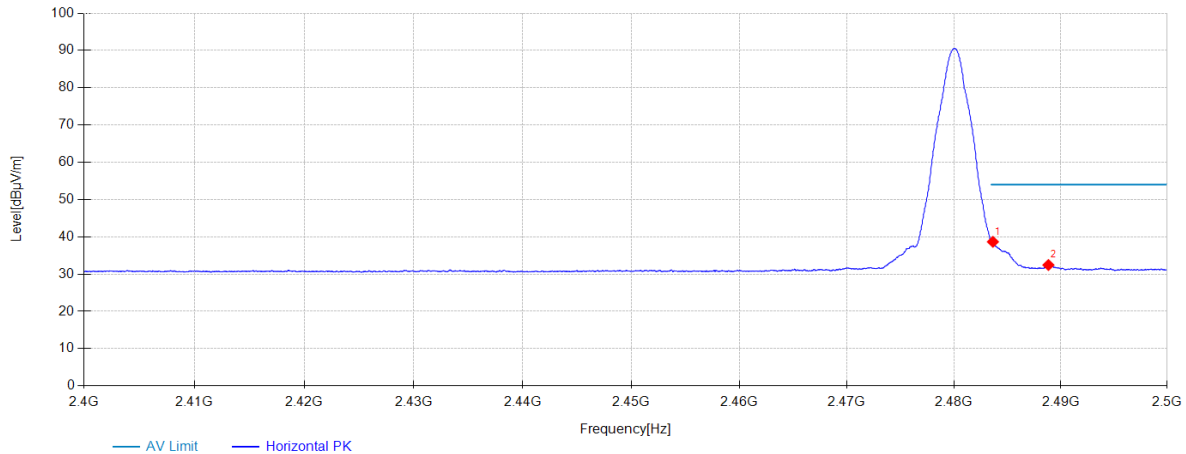
t (86-29) 6282 7885 www.sgsgroup.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 89 of 91

## BLE\_2M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |            |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|------------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1         | 2483.6418       | 34.05          | 27.73    | -23.12      | 38.66          | 54.00          | 15.34       | 107         | 62        | Horizontal |
| 2         | 2488.8444       | 27.79          | 27.76    | -23.12      | 32.43          | 54.00          | 21.57       | 107         | 62        | Horizontal |



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

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

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.  
Wireless Laboratory

V/F Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

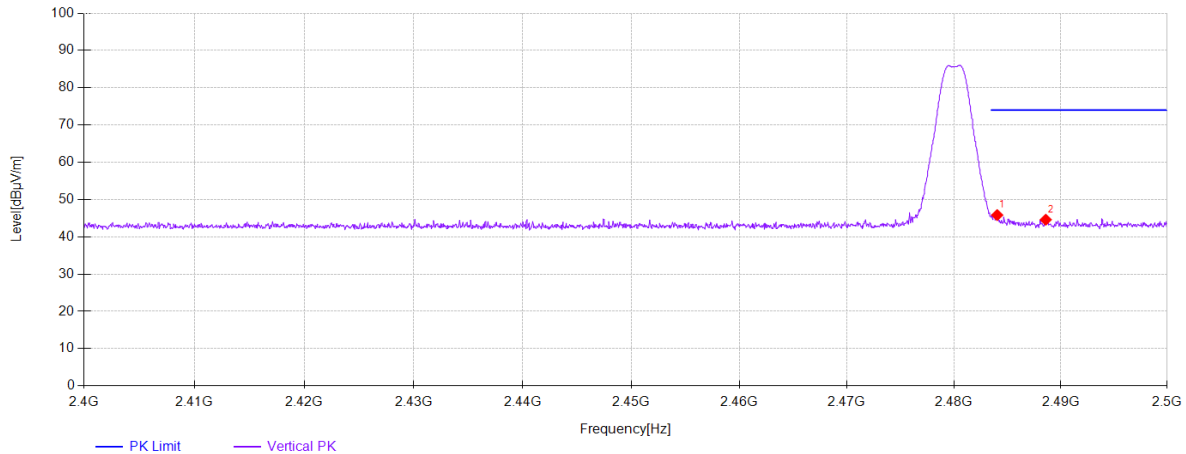
t (86-29) 6282 7885 www.sgs.com.cn  
t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 90 of 91

## BLE\_2M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2484.042        | 41.22          | 27.74    | -23.12      | 45.84          | 74.00          | 28.16       | 341         | 191       | Vertical |
| 2         | 2488.5943       | 39.96          | 27.75    | -23.12      | 44.59          | 74.00          | 29.41       | 341         | 191       | Vertical |



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

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

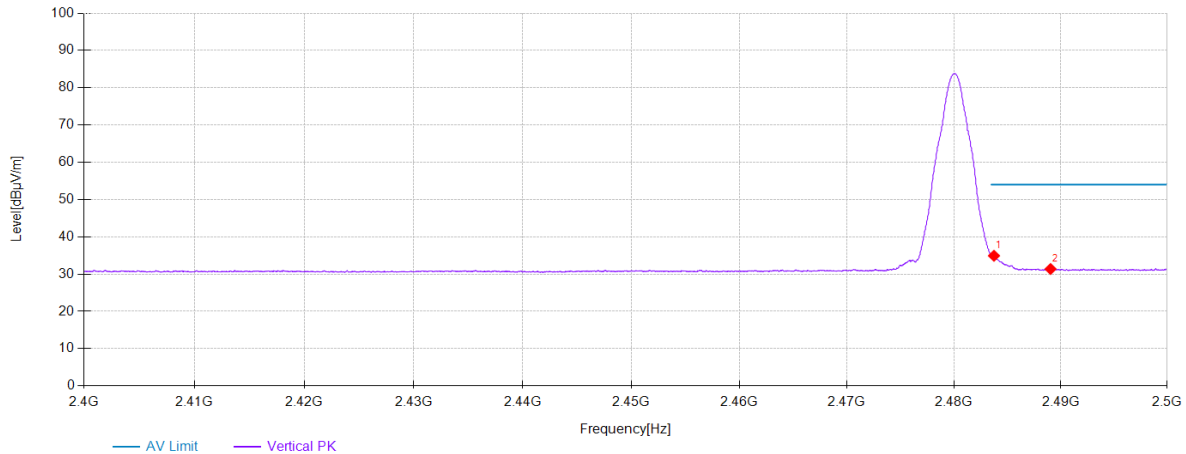
SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. 1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn  
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

Report No.: XEWA2305000017RG02

Rev.: 01

Page: 91 of 91

## BLE\_2M\_Channel 39



| Data List |                 |                |          |             |                |                |             |             |           |          |
|-----------|-----------------|----------------|----------|-------------|----------------|----------------|-------------|-------------|-----------|----------|
| NO.       | Frequency [MHz] | Reading [dBμV] | AF[dB/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1         | 2483.7419       | 30.30          | 27.73    | -23.12      | 34.91          | 54.00          | 19.09       | 341         | 191       | Vertical |
| 2         | 2489.0445       | 26.73          | 27.76    | -23.12      | 31.37          | 54.00          | 22.63       | 341         | 191       | Vertical |

## Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier gain. The basic equation with a sample calculation is as follows:

Level = Reading(dBμV) + AF(dB/m) + Factor(dB):

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier gain(dB)

Margin = Limit(dBμV/m) – Level(dBμV/m)

- 2) Both peak and average measured complies with the limit line, so test result is "PASS"

---End of Report---

