

**TEST REPORT**

**Application No.:** KSCR2208001383AT  
**FCC ID:** SVN-HMC5100X  
**Applicant:** ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD.  
**Address of Applicant:** No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China  
**Manufacturer:** ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD.  
**Address of Manufacturer:** No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China  
**Equipment Under Test (EUT):**  
**EUT Name:** HIGH-PERFORMANCE MODULE COMPUTER  
**Model No.:** DHI-HMC5100X-H-708C2-W10A-BW,DHI-HMC5100X,  
 DH-HMC5100X#####,  
 OEM-HMC5100X#####,  
 DHI-HMC5100X#####,  
 HMC5100X#####

(The “#” symbols might consist of numbers from 0 to 9, letters from A to Z or a to z, “/”, “-”, space, and null, which indicates different sales regions, client codes, or software functions, and the product reliability and electromagnetic compatibility remain the same.)

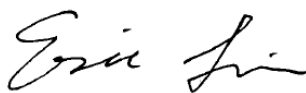
♣

Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.

**Standard(s) :** 47 CFR Part 15, Subpart C 15.247  
**Date of Receipt:** 2022-08-09  
**Date of Test:** 2022-08-15 to 2022-09-22  
**Date of Issue:** 2022-10-02

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

\* In the configuration tested, the EUT complied with the standards specified above.



Eric Lin  
Laboratory 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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 2 of 183

| Revision Record |             |            |        |
|-----------------|-------------|------------|--------|
| Version         | Description | Date       | Remark |
| 00              | Original    | 2022-10-02 | /      |
|                 |             |            |        |
|                 |             |            |        |

|                          |  |                           |  |  |
|--------------------------|--|---------------------------|--|--|
| Authorized for issue by: |  |                           |  |  |
|                          |  | Pawn. Liu                 |  |  |
|                          |  | Pawn.Liu/Project Engineer |  |  |
|                          |  | Eric Lin                  |  |  |
|                          |  | Eric Lin /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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 2 Test Summary

| Radio Spectrum Technical Requirement |                                  |        |                                                 |        |
|--------------------------------------|----------------------------------|--------|-------------------------------------------------|--------|
| Item                                 | Standard                         | Method | Requirement                                     | Result |
| Antenna Requirement                  | 47 CFR Part 15, Subpart C 15.247 | N/A    | 47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4) | Pass   |

| Radio Spectrum Matter Part                            |                                  |                                      |                                           |        |
|-------------------------------------------------------|----------------------------------|--------------------------------------|-------------------------------------------|--------|
| Item                                                  | Standard                         | Method                               | Requirement                               | Result |
| Conducted Emissions at AC Power Line (150kHz-30MHz)   | 47 CFR Part 15, Subpart C 15.247 | ANSI C63.10 (2013) Section 6.2       | 47 CFR Part 15, Subpart C 15.207          | Pass   |
| Conducted Average Output Power                        |                                  | ANSI C63.10 (2013) Section 11.9.2    | 47 CFR Part 15, Subpart C 15.247(b)(3)    | Pass   |
| Minimum 6dB Bandwidth                                 |                                  | ANSI C63.10 (2013) Section 11.8.1    | 47 CFR Part 15, Subpart C 15.247a(2)      | Pass   |
| Power Spectrum Density                                |                                  | ANSI C63.10 (2013) Section 11.10.2   | 47 CFR Part 15, Subpart C 15.247(e)       | Pass   |
| Conducted Band Edges Measurement                      |                                  | ANSI C63.10 (2013) Section 11.13.3.2 | 47 CFR Part 15, Subpart C 15.247(d)       | Pass   |
| Conducted Spurious Emissions                          |                                  | ANSI C63.10 (2013) Section 11.11     | 47 CFR Part 15, Subpart C 15.247(d)       | Pass   |
| Radiated Emissions which fall in the restricted bands |                                  | ANSI C63.10 (2013) Section 6.10.5    | 47 CFR Part 15, Subpart C 15.205 & 15.209 | Pass   |
| Radiated Spurious Emissions Below 1GHz                |                                  | ANSI C63.10 (2013) Section 6.4,6.5   | 47 CFR Part 15, Subpart C 15.205 & 15.209 | Pass   |
| Radiated Spurious Emissions Above 1GHz                |                                  | ANSI C63.10 (2013) Section 6.6       | 47 CFR Part 15, Subpart C 15.205 & 15.209 | Pass   |

There are series models mentioned in this report and they are the similar in electrical and electronic characters. Only the model DHI-HMC5100X-H-708C2-W10A-BW was tested since their differences are model number and The “#” symbols might consist of numbers from 0 to 9, letters from A to Z or a to z, “/”, “-”, space, and null, which indicates different sales regions, client codes, or software functions.



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 3 Contents

|                                                              | Page |
|--------------------------------------------------------------|------|
| 1 COVER PAGE .....                                           | 1    |
| 2 TEST SUMMARY .....                                         | 3    |
| 3 CONTENTS .....                                             | 4    |
| 4 GENERAL INFORMATION .....                                  | 6    |
| 4.1 DETAILS OF E.U.T. ....                                   | 6    |
| 4.2 POWER LEVEL SETTING USING IN TEST: .....                 | 6    |
| 4.3 ENVIRONMENT PARAMETER .....                              | 7    |
| 4.4 DESCRIPTION OF SUPPORT UNITS .....                       | 7    |
| 4.5 MEASUREMENT UNCERTAINTY .....                            | 8    |
| 4.6 TEST LOCATION.....                                       | 9    |
| 4.7 TEST FACILITY.....                                       | 9    |
| 4.8 DEVIATION FROM STANDARDS.....                            | 9    |
| 4.9 ABNORMALITIES FROM STANDARD CONDITIONS .....             | 9    |
| 5 EQUIPMENT LIST .....                                       | 10   |
| 6 RADIO SPECTRUM TECHNICAL REQUIREMENT .....                 | 11   |
| 6.1 ANTENNA REQUIREMENT .....                                | 11   |
| 6.1.1 Test Requirement: .....                                | 11   |
| 6.1.2 Conclusion .....                                       | 11   |
| 7 RADIO SPECTRUM MATTER TEST RESULTS.....                    | 12   |
| 7.1 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)..... | 12   |
| 7.1.1 E.U.T. Operation.....                                  | 12   |
| 7.1.2 Test Mode Description.....                             | 12   |
| 7.1.3 Test Setup Diagram.....                                | 13   |
| 7.1.4 Measurement Procedure and Data.....                    | 13   |
| 7.2 CONDUCTED AVERAGE OUTPUT POWER.....                      | 16   |
| 7.2.1 E.U.T. Operation.....                                  | 16   |
| 7.2.2 Test Mode Description.....                             | 16   |
| 7.2.3 Test Setup Diagram.....                                | 17   |
| 7.2.4 Measurement Procedure and Data.....                    | 17   |
| 7.3 MINIMUM 6DB BANDWIDTH.....                               | 18   |
| 7.3.1 E.U.T. Operation.....                                  | 18   |
| 7.3.2 Test Mode Description.....                             | 18   |
| 7.3.3 Test Setup Diagram.....                                | 19   |
| 7.3.4 Measurement Procedure and Data.....                    | 19   |
| 7.4 POWER SPECTRUM DENSITY.....                              | 20   |
| 7.4.1 E.U.T. Operation.....                                  | 20   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 5 of 183

|       |                                                            |    |
|-------|------------------------------------------------------------|----|
| 7.4.2 | Test Mode Description.....                                 | 20 |
| 7.4.3 | Test Setup Diagram.....                                    | 21 |
| 7.4.4 | Measurement Procedure and Data.....                        | 21 |
| 7.5   | CONDUCTED BAND EDGES MEASUREMENT.....                      | 22 |
| 7.5.1 | E.U.T. Operation.....                                      | 22 |
| 7.5.2 | Test Mode Description.....                                 | 22 |
| 7.5.3 | Test Setup Diagram.....                                    | 23 |
| 7.5.4 | Measurement Procedure and Data.....                        | 23 |
| 7.6   | CONDUCTED SPURIOUS EMISSIONS.....                          | 24 |
| 7.6.1 | E.U.T. Operation.....                                      | 24 |
| 7.6.2 | Test Mode Description.....                                 | 24 |
| 7.6.3 | Test Setup Diagram.....                                    | 25 |
| 7.6.4 | Measurement Procedure and Data.....                        | 25 |
| 7.7   | RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS..... | 26 |
| 7.7.1 | E.U.T. Operation.....                                      | 26 |
| 7.7.2 | Test Mode Description.....                                 | 26 |
| 7.7.3 | Test Setup Diagram.....                                    | 27 |
| 7.7.4 | Measurement Procedure and Data.....                        | 28 |
| 7.8   | RADIATED SPURIOUS EMISSIONS BELOW 1GHz.....                | 54 |
| 7.8.1 | E.U.T. Operation.....                                      | 54 |
| 7.8.2 | Test Mode Description.....                                 | 54 |
| 7.8.3 | Test Setup Diagram.....                                    | 55 |
| 7.8.4 | Measurement Procedure and Data.....                        | 56 |
| 7.9   | RADIATED SPURIOUS EMISSIONS ABOVE 1GHz.....                | 59 |
| 7.9.1 | E.U.T. Operation.....                                      | 59 |
| 7.9.2 | Test Mode Description.....                                 | 59 |
| 7.9.3 | Test Setup Diagram.....                                    | 60 |
| 7.9.4 | Measurement Procedure and Data.....                        | 61 |
| 8     | TEST SETUP PHOTO.....                                      | 86 |
| 9     | EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS).....               | 86 |
| 10    | APPENDIX.....                                              | 87 |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 4 General Information

#### 4.1 Details of E.U.T.

|                      |                                                                                                                                                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply:        | DC 12V,7.5A or DC 19V,4.74A<br>Adapter model:DPS-90AB-3<br>Input:100-240V,1-2A,50/60Hz<br>Output:12V,7.5A,90W<br>Adapter model:FSP090-DIEBN2<br>Input:100-240V,1.5A,50/60Hz<br>Output:12V,4.74A |
| Operation Frequency: | 802.11b/g/n(HT20): 2412MHz to 2462MHz;802.11n(HT40): 2422MHz to 2452MHz                                                                                                                         |
| Modulation Type:     | 802.11b: DSSS (CCK, DQPSK, DBPSK);802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)                                                                                                                    |
| Number of Channels:  | 802.11b/g/n(HT20):11;802.11n(HT40):7                                                                                                                                                            |
| Channel Spacing:     | 5MHz                                                                                                                                                                                            |
| Antenna Type:        | Antenna1:Dipole Antenna with RP-SMA connector,Antenna2:Dipole Antenna with RP-SMA connector                                                                                                     |
| Antenna Gain:        | Antenna1:4.43dBi (Provided by the manufacturer),<br>Antenna2:4.43dBi (Provided by the manufacturer)<br>Directional Gain: 7.44dBi                                                                |
| Test Voltage:        | AC 120V/60Hz                                                                                                                                                                                    |

#### 4.2 Power level setting using in test:

| Channel | 802.11b       |       | 802.11g |       | 802.11n(HT20) |       |
|---------|---------------|-------|---------|-------|---------------|-------|
|         | Ant 1         | Ant 2 | Ant 1   | Ant 2 | Ant 1         | Ant 2 |
| 1       | 64            | 72    | 54      | 58    | 48            | 52    |
| 6       | 66            | 74    | 56      | 60    | 48            | 52    |
| 11      | 68            | 76    | 58      | 62    | 48            | 52    |
| Channel | 802.11n(HT40) |       |         |       |               |       |
|         | Ant 1         | Ant 2 |         |       |               |       |
| 3       | 42            | 46    |         |       |               |       |
| 6       | 46            | 50    |         |       |               |       |
| 9       | 47            | 51    |         |       |               |       |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 7 of 183

### 4.3 Environment Parameter

| Environment Parameter                                                                                                                                                                                                                                             | Selected Values During Tests |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|
| Relative Humidity                                                                                                                                                                                                                                                 | Ambient                      |            |
| Value                                                                                                                                                                                                                                                             | Temperature(°C)              | Voltage(V) |
| NTNV                                                                                                                                                                                                                                                              | 25                           | AC 120     |
| Note:<br>NV:Normal Voltage                      LV:Low Extreme Test Voltage                      HV:High Extreme Test Voltage<br>NT:Normal Temperature                      LT:Low Extreme Test Temperature                      HT:High Extreme Test Temperature |                              |            |

### 4.4 Description of Support Units

| Description | Manufacturer | Model No. | Serial No.                  |
|-------------|--------------|-----------|-----------------------------|
| Displayer   | LENOVO       | T2054pC   | VNA246PX                    |
| Mouse       | LENOVO       | MS-370    | 512000000                   |
| Keyboard    | LENOVO       | SK-8827   | 8SSD50L80031AVLC0<br>5Y08DG |



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
 中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
 t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 4.5 Measurement Uncertainty

| No. | Item                            | Measurement Uncertainty |
|-----|---------------------------------|-------------------------|
| 1   | Radio Frequency                 | $8.4 \times 10^{-8}$    |
| 2   | Timeout                         | 2s                      |
| 3   | Duty Cycle                      | 0.37%                   |
| 4   | Occupied Bandwidth              | 3%                      |
| 5   | RF Conducted Power              | 0.6dB                   |
| 6   | RF Power Density                | 2.9dB                   |
| 7   | Conducted Spurious Emissions    | 0.75dB                  |
| 8   | RF Radiated Power               | 5.2dB (Below 1GHz)      |
|     |                                 | 5.9dB (Above 1GHz)      |
| 9   | Radiated Spurious Emission Test | 4.2dB (Below 30MHz)     |
|     |                                 | 4.5dB (30MHz-1GHz)      |
|     |                                 | 5.1dB (1GHz-18GHz)      |
|     |                                 | 5.4dB (Above 18GHz)     |
| 10  | Temperature Test                | 1°C                     |
| 11  | Humidity Test                   | 3%                      |
| 12  | Supply Voltages                 | 1.5%                    |
| 13  | Time                            | 3%                      |

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 www.sgsgroup.com.cn  
t/(86-512)57355888 f/(86-512)57370818 sgs.china@sgs.com

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 9 of 183

### 4.6 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

### 4.7 Test Facility

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

#### • CNAS

Compliance Certification Services (Kunshan) Inc. is accredited by the China National Accreditation Service for Conformity Assessment (CNAS). Registration No. CNAS L4354

#### • A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

#### • FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

#### • ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

#### • VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

### 4.8 Deviation from Standards

None

### 4.9 Abnormalities from Standard Conditions

None



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

## 5 Equipment List

| Item                                                        | Equipment                            | Manufacturer       | Model        | Inventory No      | Cal Date   | Cal. Due Date |
|-------------------------------------------------------------|--------------------------------------|--------------------|--------------|-------------------|------------|---------------|
| <b>Conducted Emission at Mains Terminals (150kHz-30MHz)</b> |                                      |                    |              |                   |            |               |
| 1                                                           | EMI Test Receive                     | R&S                | ESCI         | KS301101          | 01/22/2022 | 01/21/2023    |
| 2                                                           | LISN                                 | R&S                | ENV216       | KS301197          | 01/22/2022 | 01/21/2023    |
| 3                                                           | LISN                                 | Schwarzbeck        | NNLK 8129    | KS301091          | 01/22/2022 | 01/21/2023    |
| 4                                                           | Pulse Limiter                        | R&S                | ESH3-Z2      | KUS1902E001       | 01/22/2022 | 01/21/2023    |
| 5                                                           | CE test Cable                        | Thermax            | /            | CZ301102          | 11/14/2021 | 11/13/2022    |
| 6                                                           | Test Software                        | Farad              | EZ-EMC       | /                 | N.C.R      | N.C.R         |
| <b>RF Conducted Test</b>                                    |                                      |                    |              |                   |            |               |
| 1                                                           | Spectrum Analyzer                    | Keysight           | N9020A       | KUS1911E004-2     | 08/22/2022 | 08/21/2023    |
| 2                                                           | Spectrum Analyzer                    | Keysight           | N9020A       | KUS2001M001-2     | 08/22/2022 | 08/21/2023    |
| 3                                                           | Spectrum Analyzer                    | Keysight           | N9030B       | KSEM021-1         | 01/22/2022 | 01/21/2023    |
| 4                                                           | Signal Generator                     | R&S                | SMW200A      | KSEM020-1         | 08/22/2022 | 08/21/2023    |
| 5                                                           | Signal Generator                     | Agilent            | N5182A       | KUS2001M001-1     | 08/22/2022 | 08/21/2023    |
| 6                                                           | Radio Communication Test Station     | Anritsu            | MT8000A      | KSEM001-1         | 08/22/2022 | 08/21/2023    |
| 7                                                           | Radio Communication Analyzer         | Anritsu            | MT8821C      | KSEM002-1         | 04/01/2022 | 03/31/2023    |
| 8                                                           | Universal Radio Communication Tester | R&S                | CMW500       | KUS1911E004-1     | 08/22/2022 | 08/21/2023    |
| 9                                                           | Switcher                             | CCSRF              | FY562        | KUS2001M001-3     | 08/22/2022 | 08/21/2023    |
| 10                                                          | AC Power Source                      | EXTECH             | 6605         | KS301178          | N.C.R      | N.C.R         |
| 11                                                          | DC Power Supply                      | Aglient            | E3632A       | KS301180          | N.C.R      | N.C.R         |
| 12                                                          | Conducted Test Cable                 | Thermax            | RF01-RF04    | CZ301111-CZ301120 | 01/16/2022 | 01/15/2023    |
| 13                                                          | Temp. / Humidity Chamber             | TERCHY             | MHK-120AK    | KS301190          | 04/01/2021 | 03/31/2023    |
| 14                                                          | Temperature & Humidity Recorder      | Renke Control      | RS-WS-N01-6J | KSEM024-5         | 04/14/2022 | 04/13/2023    |
| 15                                                          | Software                             | BST                | TST-PASS     | /                 | N/A        | N/A           |
| <b>RF Radiated Test</b>                                     |                                      |                    |              |                   |            |               |
| 1                                                           | Spectrum Analyzer                    | R&S                | FSV40        | KUS1806E003       | 08/22/2022 | 08/21/2023    |
| 2                                                           | Universal Radio Communication Tester | R&S                | CMW500       | KSEM009-1         | 04/01/2022 | 03/31/2023    |
| 3                                                           | Signal Generator                     | Agilent            | E8257C       | KS301066          | 08/22/2022 | 08/21/2023    |
| 4                                                           | Loop Antenna                         | COM-POWER          | AL-130R      | KUS1806E001       | 04/13/2021 | 04/12/2023    |
| 5                                                           | Bilog Antenna                        | TESEQ              | CBL 6112D    | KUS1806E005       | 06/29/2021 | 06/28/2023    |
| 6                                                           | Bilog Antenna                        | SCHWARZBECK        | VULB9160     | CZ301016          | 04/13/2021 | 04/12/2024    |
| 7                                                           | Horn-antenna(1-18GHz)                | Schwarzbeck        | BBHA9120D    | KS301079          | 04/02/2022 | 04/01/2024    |
| 8                                                           | Horn-antenna(1-18GHz)                | ETS-LINDGREN       | 3117         | KS301186          | 02/22/2021 | 02/21/2023    |
| 9                                                           | Horn Antenna(18-40GHz)               | Schwarzbeck        | BBHA9170     | CZ301058          | 03/17/2022 | 03/16/2023    |
| 10                                                          | Amplifier(30MHz~18GHz)               | PANSHAN TECHNOLOGY | LNA:1~18G    | KSEM010-1         | 01/22/2022 | 01/21/2023    |
| 11                                                          | Amplifier(18~40GHz)                  | COM-POWER          | PAM-840A     | KUS1710E001       | 01/22/2022 | 01/21/2023    |
| 12                                                          | RE Test Cable                        | REBES MICROWAVE    | /            | CZ301097          | 11/14/2021 | 11/13/2022    |
| 13                                                          | Temperature & Humidity Recorder      | Renke Control      | RS-WS-N01-6J | KSEM024-4         | 01/04/2022 | 31/03/2023    |
| 14                                                          | Software                             | Faratronic         | EZ-EMC-v 3A1 | /                 | N/A        | N/A           |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

## 6 Radio Spectrum Technical Requirement

### 6.1 Antenna Requirement

#### 6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)

#### 6.1.2 Conclusion

Standard Requirement:

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.

15.247(b) (4) requirement:

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.

EUT Antenna:

The antenna 1 and antenna 2 is Dipole antenna, and no consideration of replacement. The best case gain of the antenna 1 is 4.43dBi and antenna 2 is 4.43dBi. the directional gain is:7.44dBi.

Antenna location: Refer to internal photo.



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 7 Radio Spectrum Matter Test Results

### 7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

| Frequency of emission(MHz)                                             | Conducted limit(dBμV) |           |
|------------------------------------------------------------------------|-----------------------|-----------|
|                                                                        | 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.                        |                       |           |
| Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz |                       |           |

#### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C

Humidity: 41.0 % RH

Atmospheric Pressure: 1010 mbar

#### 7.1.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report. |



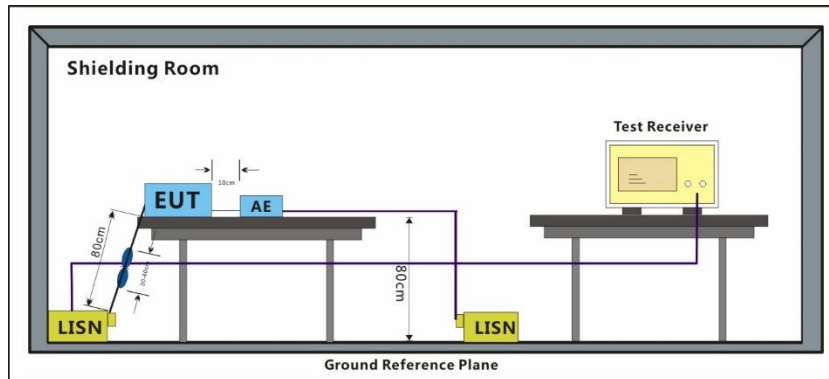
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 7.1.3 Test Setup Diagram



### 7.1.4 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a  $50\Omega/50\mu\text{H} + 50\Omega$  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.
- 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.
- 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.
- 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 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor



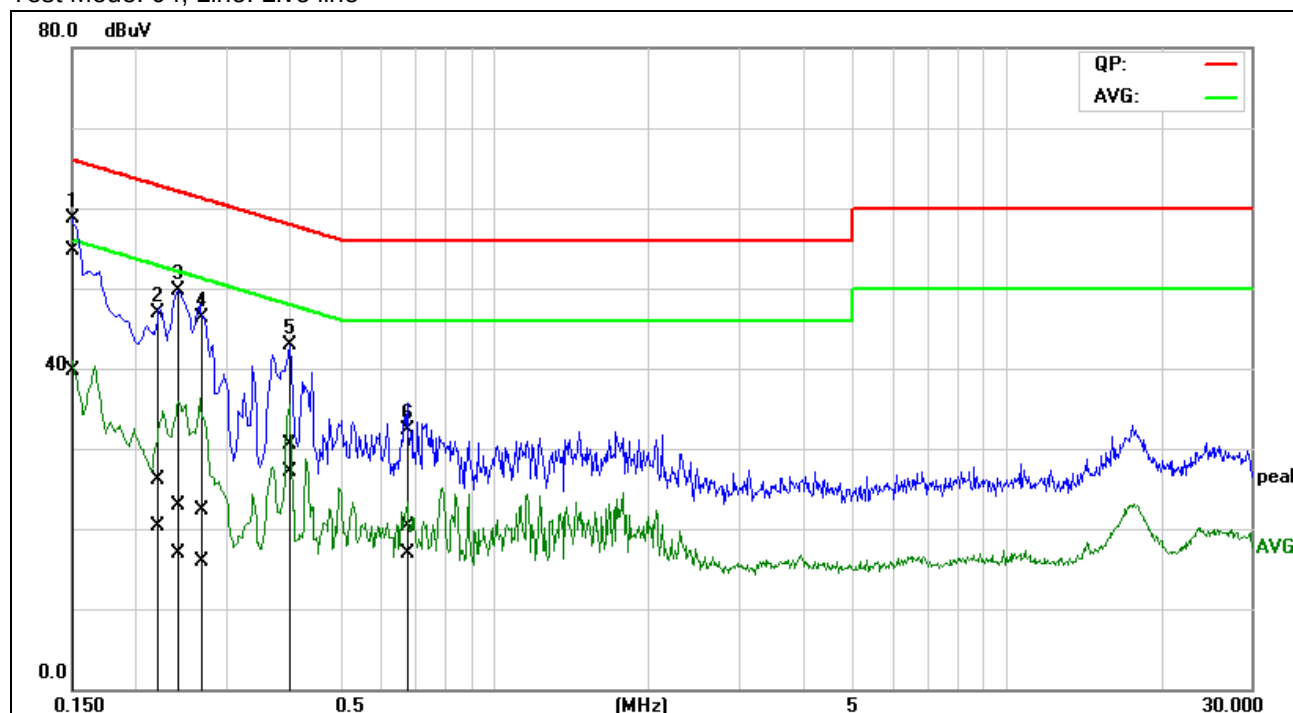
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Line: Live line



| No. | Frequency<br>(MHz) | QuasiPeak<br>reading<br>(dBuV) | Average<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QuasiPeak<br>result<br>(dBuV) | Average<br>result<br>(dBuV) | QuasiPeak<br>limit<br>(dBuV) | Average<br>limit<br>(dBuV) | QuasiPeak<br>margin<br>(dB) | Average<br>margin<br>(dB) | Remark |
|-----|--------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|--------|
| 1*  | 0.1511             | 35.17                          | 20.28                        | 19.50                        | 54.67                         | 39.78                       | 65.94                        | 55.94                      | -11.27                      | -16.16                    | Pass   |
| 2   | 0.2184             | 6.68                           | 0.89                         | 19.50                        | 26.18                         | 20.39                       | 62.88                        | 52.88                      | -36.70                      | -32.49                    | Pass   |
| 3   | 0.2399             | 3.35                           | -2.65                        | 19.50                        | 22.85                         | 16.85                       | 62.10                        | 52.10                      | -39.25                      | -35.25                    | Pass   |
| 4   | 0.2702             | 2.87                           | -3.53                        | 19.51                        | 22.38                         | 15.98                       | 61.11                        | 51.11                      | -38.73                      | -35.13                    | Pass   |
| 5   | 0.3981             | 10.97                          | 7.56                         | 19.53                        | 30.50                         | 27.09                       | 57.89                        | 47.89                      | -27.39                      | -20.80                    | Pass   |
| 6   | 0.6833             | 0.66                           | -2.69                        | 19.57                        | 20.23                         | 16.88                       | 56.00                        | 46.00                      | -35.77                      | -29.12                    | Pass   |



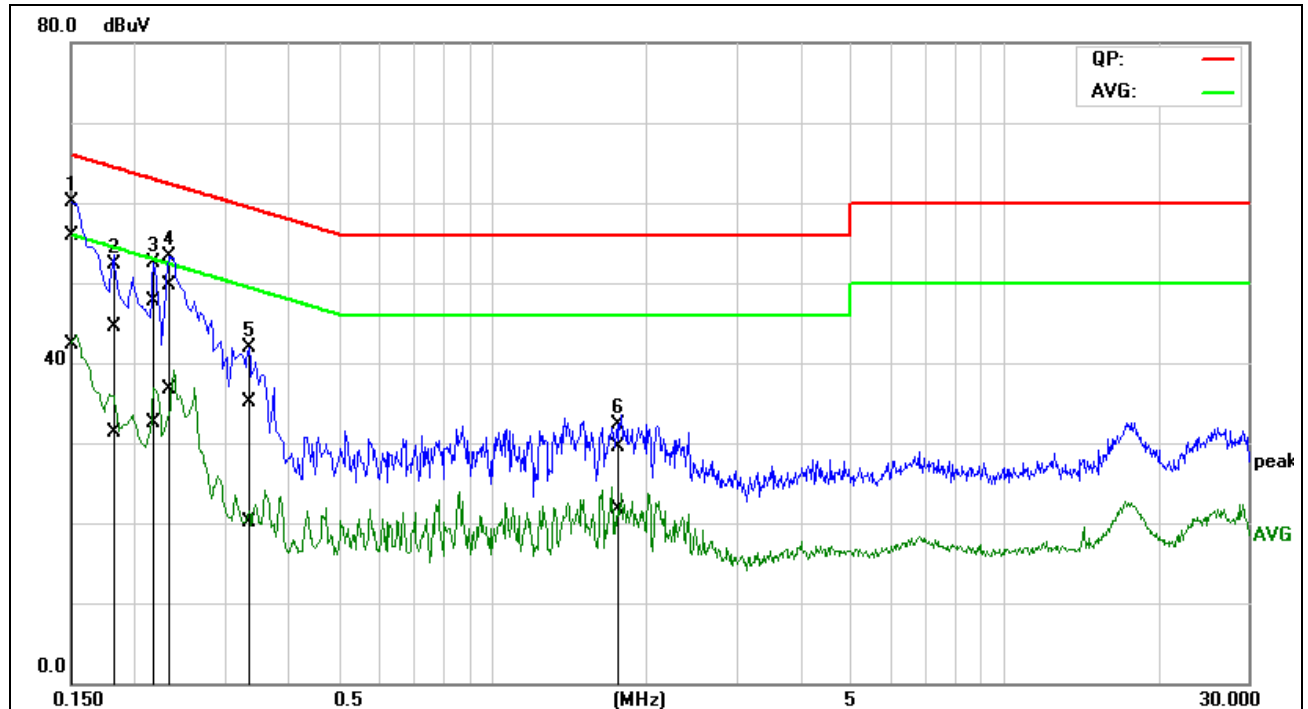
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Line: Neutral Line



| No. | Frequency<br>(MHz) | QuasiPeak<br>reading<br>(dBuV) | Average<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QuasiPeak<br>result<br>(dBuV) | Average<br>result<br>(dBuV) | QuasiPeak<br>limit<br>(dBuV) | Average<br>limit<br>(dBuV) | QuasiPeak<br>margin<br>(dB) | Average<br>margin<br>(dB) | Remark |
|-----|--------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|--------|
| 1*  | 0.1500             | 36.43                          | 22.85                        | 19.50                        | 55.93                         | 42.35                       | 66.00                        | 56.00                      | -10.07                      | -13.65                    | Pass   |
| 2   | 0.1831             | 25.10                          | 11.88                        | 19.50                        | 44.60                         | 31.38                       | 64.34                        | 54.34                      | -19.74                      | -22.96                    | Pass   |
| 3   | 0.2158             | 28.14                          | 13.00                        | 19.50                        | 47.64                         | 32.50                       | 62.98                        | 52.98                      | -15.34                      | -20.48                    | Pass   |
| 4   | 0.2349             | 30.23                          | 17.12                        | 19.50                        | 49.73                         | 36.62                       | 62.27                        | 52.27                      | -12.54                      | -15.65                    | Pass   |
| 5   | 0.3340             | 15.59                          | 0.60                         | 19.52                        | 35.11                         | 20.12                       | 59.35                        | 49.35                      | -24.24                      | -29.23                    | Pass   |
| 6   | 1.7379             | 9.88                           | 1.98                         | 19.63                        | 29.51                         | 21.61                       | 56.00                        | 46.00                      | -26.49                      | -24.39                    | 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-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 16 of 183

### 7.2 Conducted Average Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)

Test Method: ANSI C63.10 (2013) Section 11.9.2

Limit:

| Frequency range(MHz) | Output power of the intentional radiator(watt)         |
|----------------------|--------------------------------------------------------|
| 902-928              | 1 for ≥50 hopping channels                             |
|                      | 0.25 for 25≤ hopping channels <50                      |
|                      | 1 for digital modulation                               |
| 2400-2483.5          | 1 for ≥75 non-overlapping hopping channels             |
|                      | 0.125 for all other frequency hopping systems          |
|                      | 1 for digital modulation                               |
| 5725-5850            | 1 for frequency hopping systems and digital modulation |

Remark: The EUT 802.11N20&N40 mode supports 2 \* 2 MIMO transmission. The gain for Antenna 1 is 4.43dBi and for Antenna 2 is 4.43dBi, and the directional antenna gain is 7.44dBi. Therefore, the power limit should be reduced from the part exceeding 6, 2400-2483.5MHz: 28.56dBm

#### 7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C

Humidity: 41.0 % RH

Atmospheric Pressure: 1010 mbar

#### 7.2.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report. |



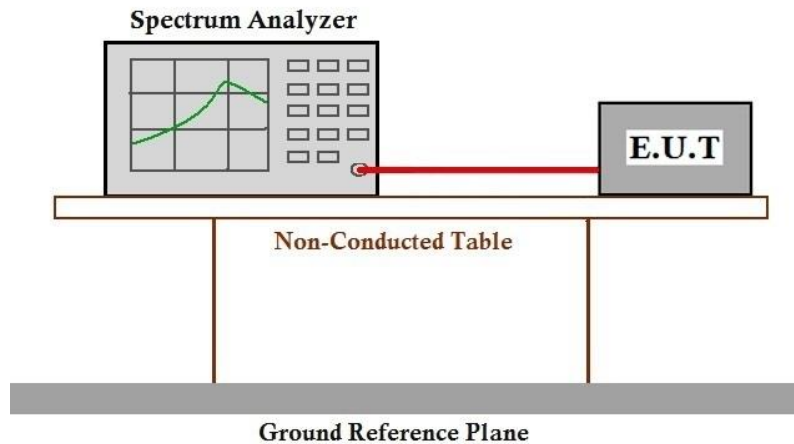
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 7.2.3 Test Setup Diagram



### 7.2.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

Please Refer to Appendix for Details



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 www.sgsgroup.com.cn  
t/(86-512)57355888 f/(86-512)57370818 sgs.china@sgs.com

### 7.3 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)

Test Method: ANSI C63.10 (2013) Section 11.8.1

Limit:

≥500 kHz

#### 7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.7 °C

Humidity: 41.0 % RH

Atmospheric Pressure: 1010 mbar

#### 7.3.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the 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)

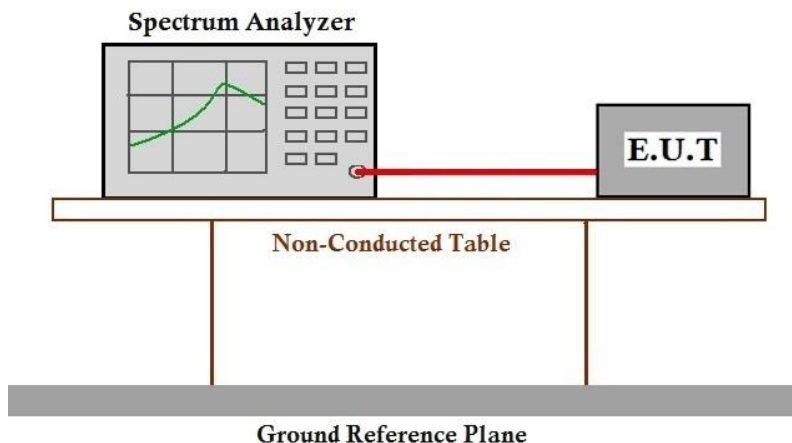
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.3.3 Test Setup Diagram



### 7.3.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.4 Power Spectrum Density

Test Requirement 47 CFR Part 15, Subpart C 15.247(e)

Test Method: ANSI C63.10 (2013) Section 11.10.2

Limit:

≤8dBm in any 3 kHz band during any time interval of continuous transmission

Remark: The EUT 802.11N20&N40 mode supports 2 \* 2 MIMO transmission. The gain for Antenna 1 is 4.43dBi and for Antenna 2 is 4.43dBi, and the directional antenna gain is 7.44dBi. Therefore, power spectral density limit should be reduced from the part exceeding 6, 2400-2483.5MHz: 6.56dBm/3KHz.

#### 7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C

Humidity: 40.9 % RH

Atmospheric Pressure: 1010 mbar

#### 7.4.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the 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)

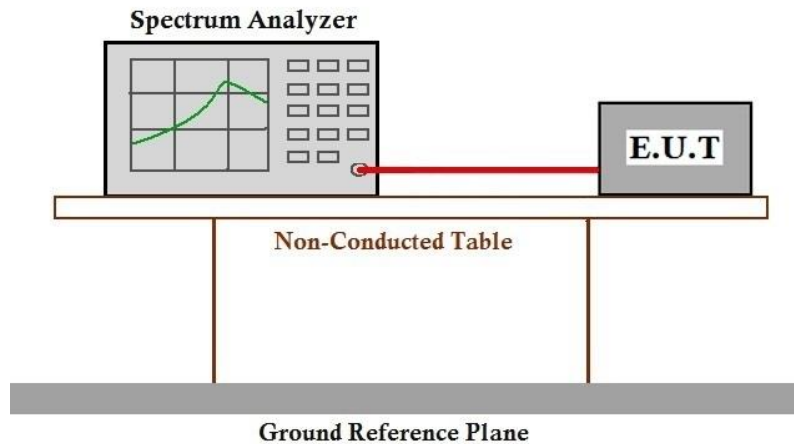
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.4.3 Test Setup Diagram



### 7.4.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.5 Conducted Band Edges Measurement

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)  
Test Method: ANSI C63.10 (2013) Section 11.13.3.2

#### Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

#### 7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C Humidity: 40.9 % RH Atmospheric Pressure: 1010 mbar

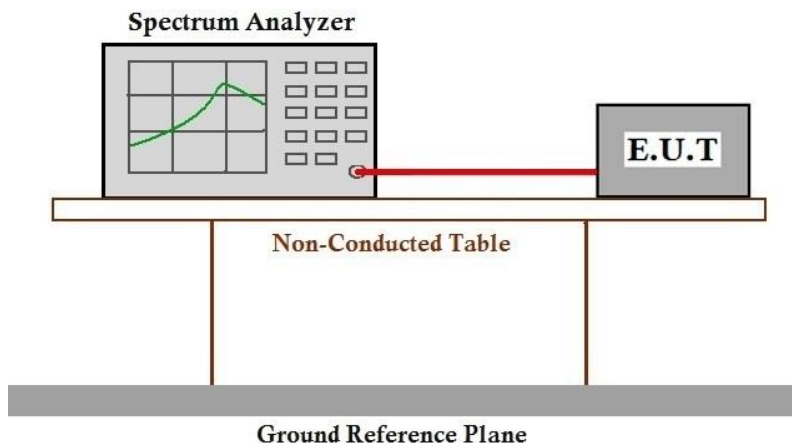
#### 7.5.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the 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)  
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300 t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 7.5.3 Test Setup Diagram



### 7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.6 Conducted Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)

Test Method: ANSI C63.10 (2013) Section 11.11

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

#### 7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C

Humidity: 40.9 % RH

Atmospheric Pressure: 1010 mbar

#### 7.6.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report. |



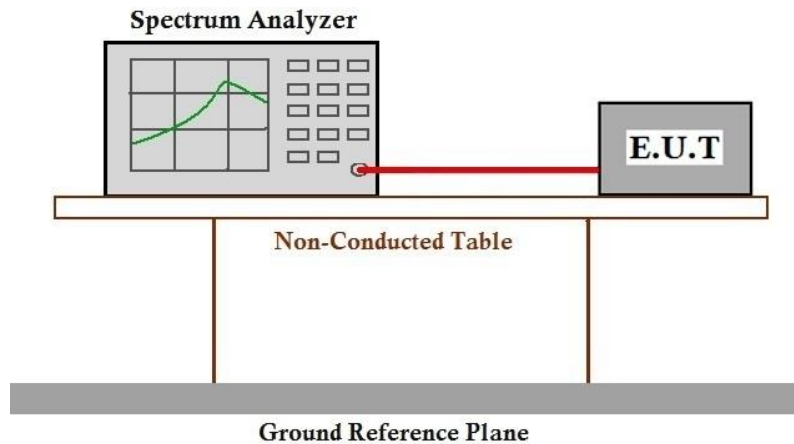
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 7.6.3 Test Setup Diagram



### 7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 7.7 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.10.5

Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 0.009-0.490    | 2400/F(kHz)                      | 300                          |
| 0.490-1.705    | 24000/F(kHz)                     | 30                           |
| 1.705-30.0     | 30                               | 30                           |
| 30-88          | 100                              | 3                            |
| 88-216         | 150                              | 3                            |
| 216-960        | 200                              | 3                            |
| Above 960      | 500                              | 3                            |

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

### 7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C

Humidity: 60.0 % RH

Atmospheric Pressure: 1010 mbar

### 7.7.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report. |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation                                                                           |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888

f(86-512)57370818

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

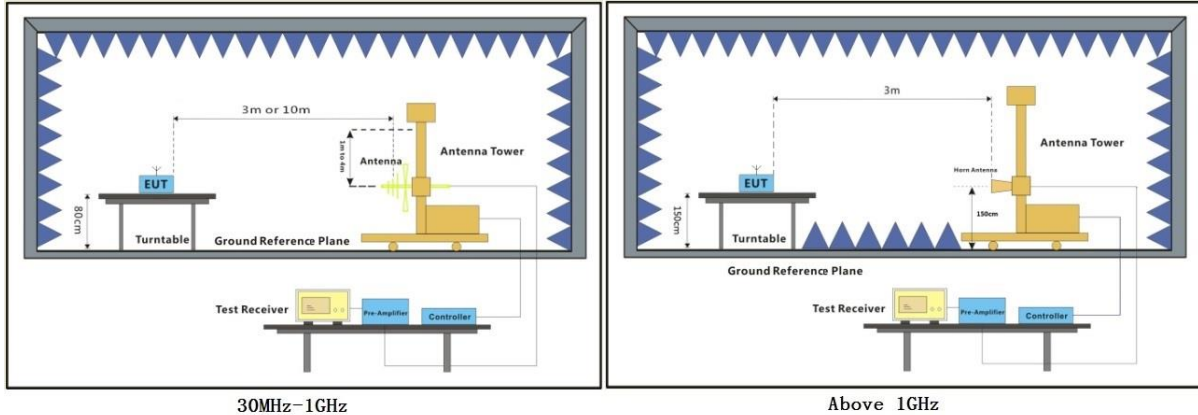
t(86-512)57355888

f(86-512)57370818

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

and worse data rates. Only the data of worst case is recorded in the report.

### 7.7.3 Test Setup Diagram



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.7.4 Measurement Procedure and Data

- a. 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.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. 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.
- d. 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.
- e. 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.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

Remark 3: For WLAN radiated test, according to the conducted power and verify test the SISO & MIMO mode, the worst-case is SISO mode for 802.11b/g, MIMO mode for 802.11n, therefore, all final test are performed in SISO & MIMO mode and reported.



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

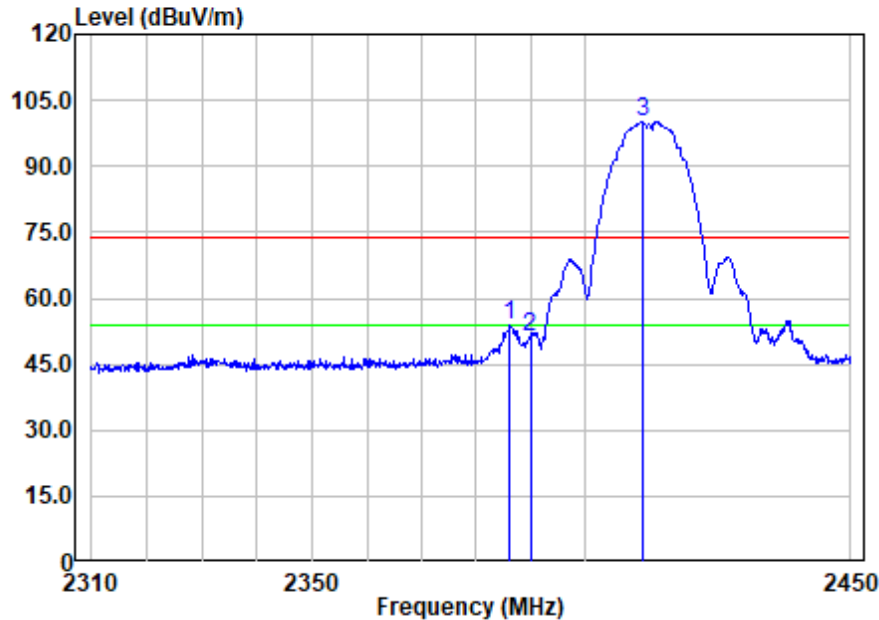
t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 29 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2386.300 | 0.00   | 42.92  | 64.43  | 53.92  | 74.00  | -20.08 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 61.53  | 51.03  | 74.00  | -22.97 | Peak   |
| 3 | 2410.800 | 0.00   | 42.93  | 110.43 | 100.00 | 74.00  | 26.00  | Peak   |



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)

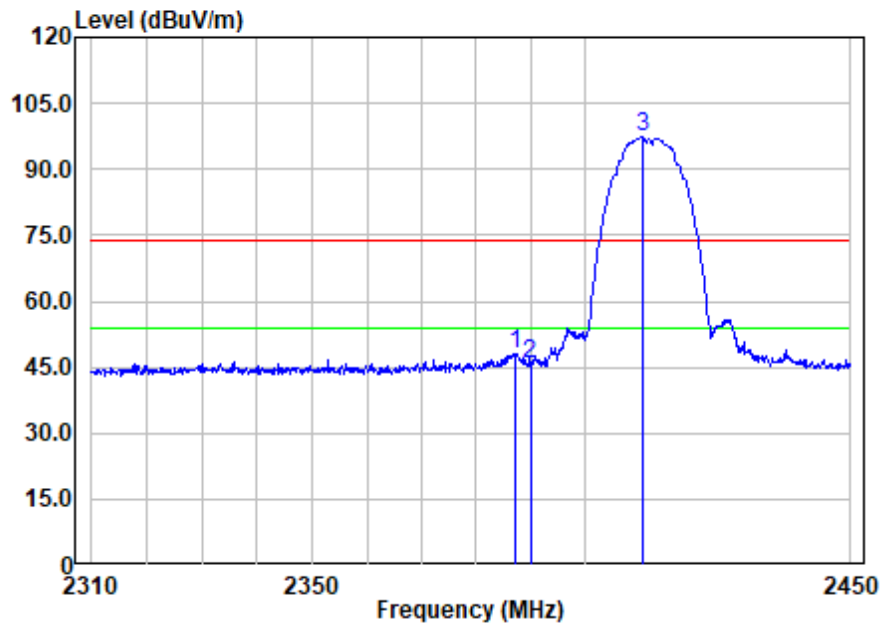
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2387.140 | 0.00   | 42.92  | 58.73  | 48.22  | 74.00  | -25.78 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 56.37  | 45.87  | 74.00  | -28.13 | Peak   |
| 3 | 2410.800 | 0.00   | 42.93  | 107.66 | 97.23  | 74.00  | 23.23  | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

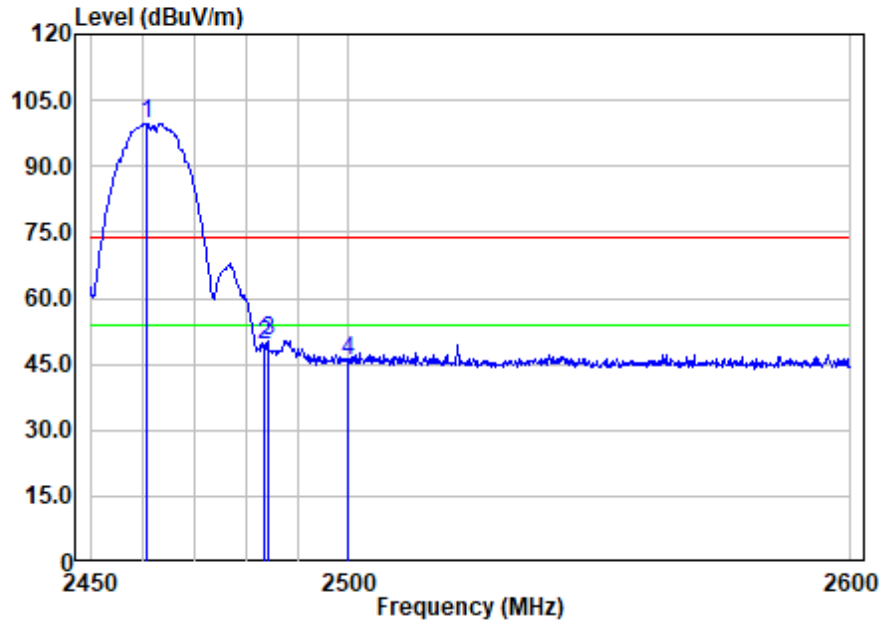
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 31 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:High



|   | Freq     | Aux Factor | Preamp Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|---|----------|------------|---------------|------------|--------|------------|------------|--------|
|   | MHz      |            | dB            | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1 | 2460.800 | 0.00       | 42.94         | 109.78     | 99.59  | 74.00      | 25.59      | Peak   |
| 2 | 2483.500 | 0.00       | 42.94         | 59.59      | 49.52  | 74.00      | -24.48     | Peak   |
| 3 | 2484.200 | 0.00       | 42.94         | 60.49      | 50.42  | 74.00      | -23.58     | Peak   |
| 4 | 2500.000 | 0.00       | 42.94         | 55.93      | 45.94  | 74.00      | -28.06     | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

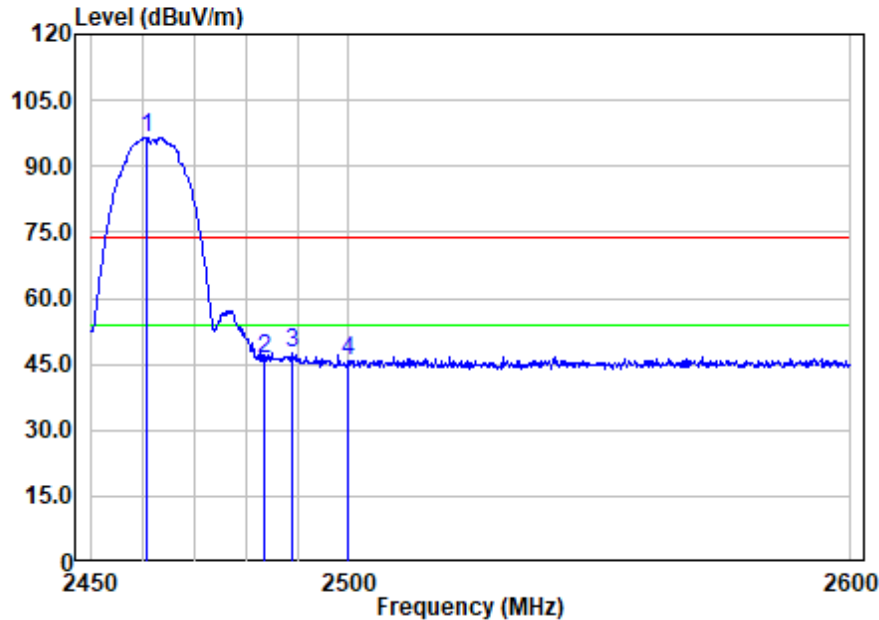
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 32 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2460.800 | 0.00   | 42.94  | 106.62 | 96.43  | 74.00  | 22.43  | Peak   |
| 2 | 2483.500 | 0.00   | 42.94  | 56.32  | 46.25  | 74.00  | -27.75 | Peak   |
| 3 | 2488.850 | 0.00   | 42.94  | 57.46  | 47.41  | 74.00  | -26.59 | Peak   |
| 4 | 2500.000 | 0.00   | 42.94  | 55.50  | 45.51  | 74.00  | -28.49 | Peak   |



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)

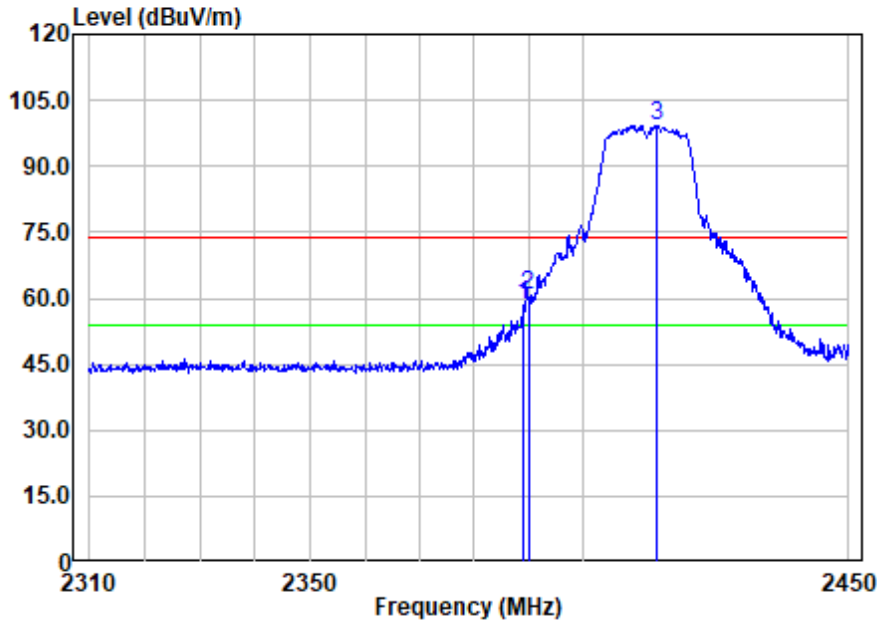
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2389.240 | 0.00   | 42.92  | 68.89  | 58.39  | 74.00  | -15.61 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 70.97  | 60.47  | 74.00  | -13.53 | Peak   |
| 3 | 2414.020 | 0.00   | 42.93  | 109.76 | 99.35  | 74.00  | 25.35  | Peak   |



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)

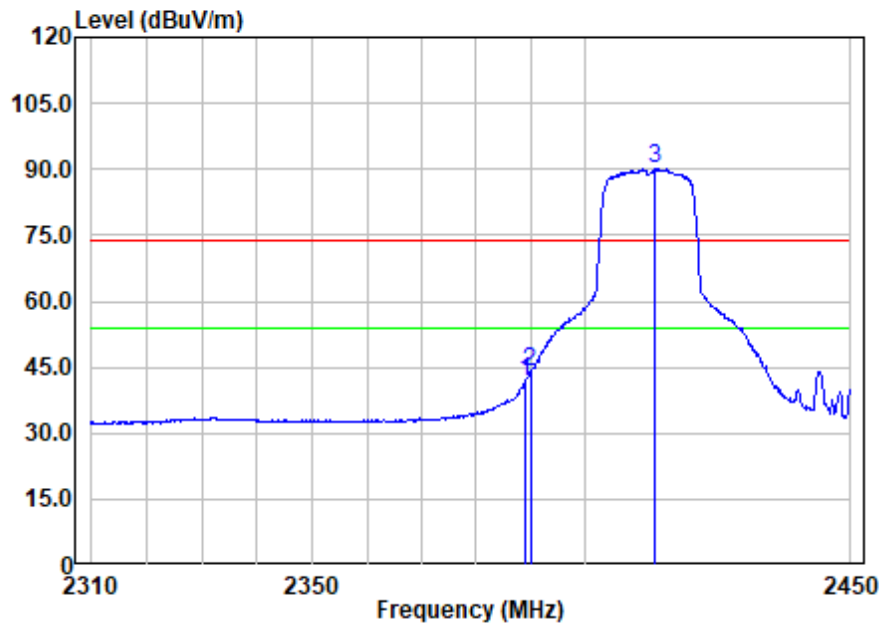
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |         |
|---|----------|--------|--------|--------|--------|--------|--------|---------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark  |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |         |
| 1 | 2389.100 | 0.00   | 42.92  | 52.29  | 41.79  | 54.00  | -12.21 | Average |
| 2 | 2390.000 | 0.00   | 42.92  | 54.24  | 43.74  | 54.00  | -10.26 | Average |
| 3 | 2413.180 | 0.00   | 42.93  | 100.50 | 90.09  | 54.00  | 36.09  | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

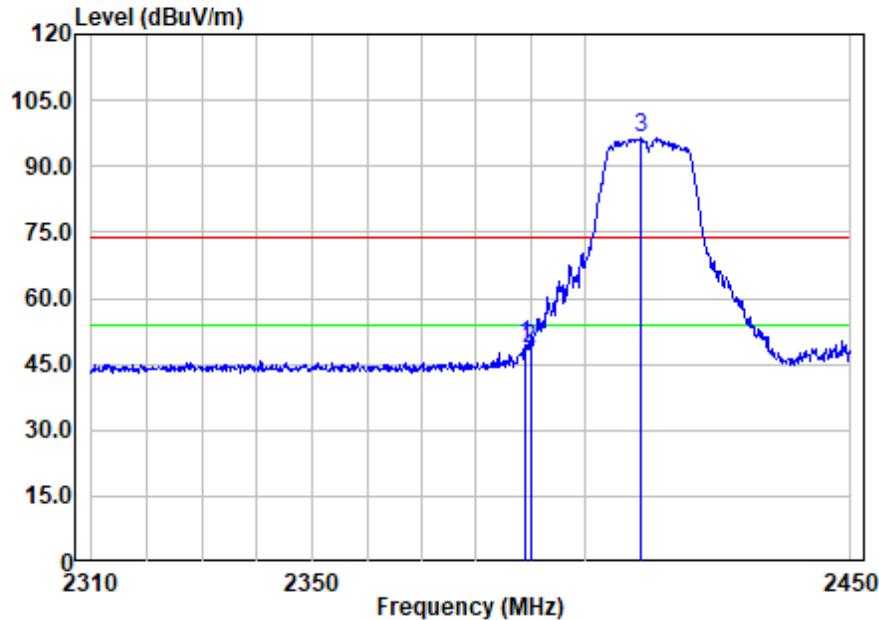
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 35 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2389.240 | 0.00   | 42.92  | 59.79  | 49.29  | 74.00  | -24.71 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 58.96  | 48.46  | 74.00  | -25.54 | Peak   |
| 3 | 2410.660 | 0.00   | 42.93  | 106.90 | 96.47  | 74.00  | 22.47  | Peak   |



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)

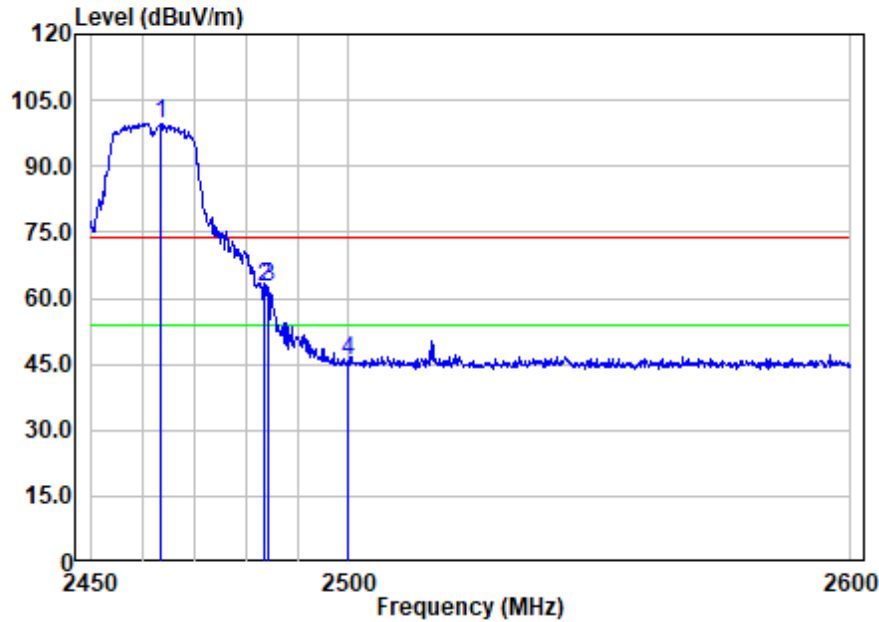
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:High



|   | Freq     | Aux Factor | Preamp Factor | Read Level | Limit  | Over Limit | Remark      |
|---|----------|------------|---------------|------------|--------|------------|-------------|
|   | MHz      |            | dB            | dBuV       | dBuV/m | dB         |             |
| 1 | 2463.650 | 0.00       | 42.94         | 109.97     | 99.80  | 74.00      | 25.80 Peak  |
| 2 | 2483.500 | 0.00       | 42.94         | 72.46      | 62.39  | 74.00      | -11.61 Peak |
| 3 | 2484.500 | 0.00       | 42.94         | 72.41      | 62.34  | 74.00      | -11.66 Peak |
| 4 | 2500.000 | 0.00       | 42.94         | 55.60      | 45.61  | 74.00      | -28.39 Peak |



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)

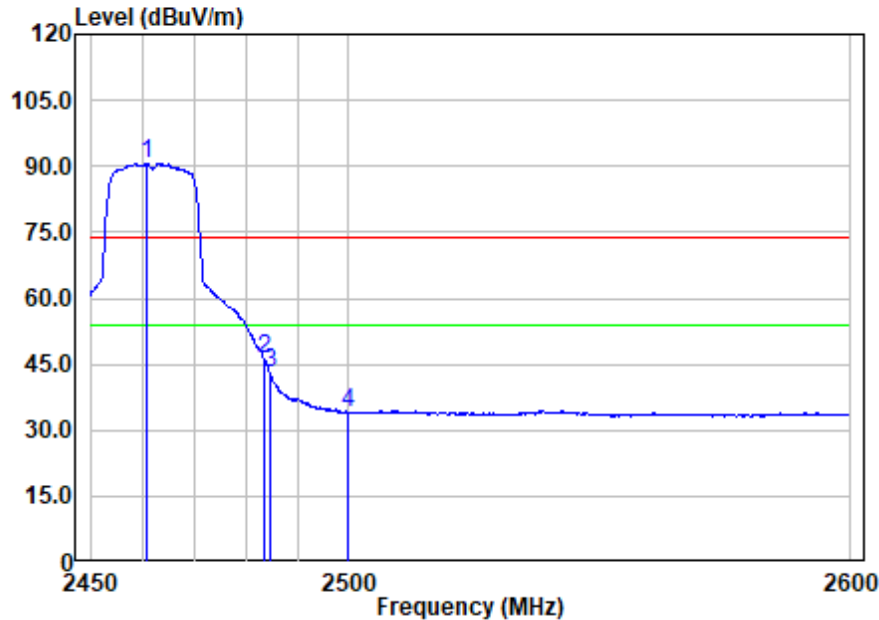
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |         |
|---|----------|--------|--------|--------|--------|--------|--------|---------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark  |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |         |
| 1 | 2460.800 | 0.00   | 42.94  | 100.78 | 90.59  | 54.00  | 36.59  | Average |
| 2 | 2483.500 | 0.00   | 42.94  | 56.32  | 46.25  | 54.00  | -7.75  | Average |
| 3 | 2484.650 | 0.00   | 42.94  | 53.28  | 43.21  | 54.00  | -10.79 | Average |
| 4 | 2500.000 | 0.00   | 42.94  | 43.95  | 33.96  | 54.00  | -20.04 | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

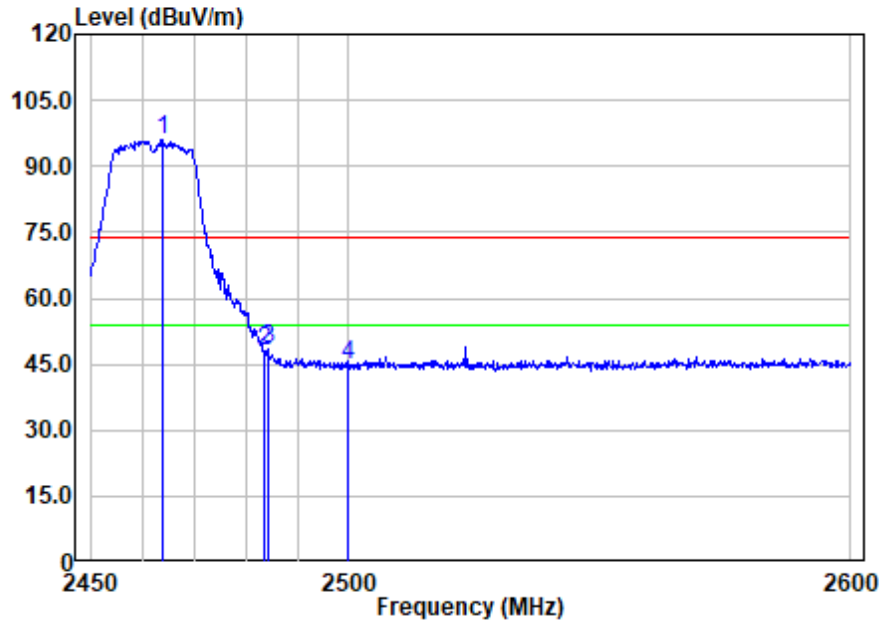
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 38 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2463.800 | 0.00   | 42.94  | 106.04 | 95.87  | 74.00  | 21.87  | Peak   |
| 2 | 2483.500 | 0.00   | 42.94  | 58.19  | 48.12  | 74.00  | -25.88 | Peak   |
| 3 | 2484.350 | 0.00   | 42.94  | 58.47  | 48.40  | 74.00  | -25.60 | Peak   |
| 4 | 2500.000 | 0.00   | 42.94  | 54.79  | 44.80  | 74.00  | -29.20 | Peak   |



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)

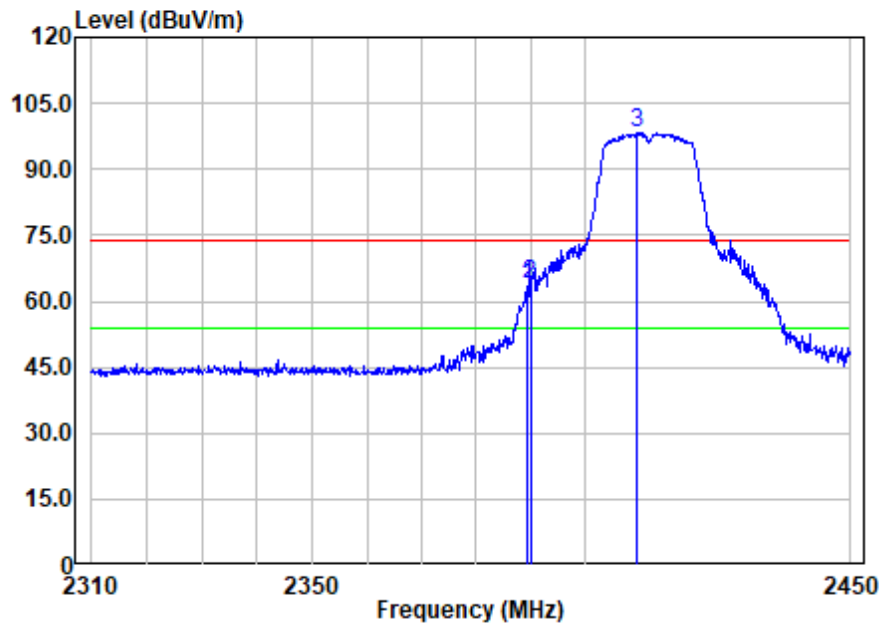
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2389.520 | 0.00   | 42.92  | 73.72  | 63.22  | 74.00  | -10.78 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 74.24  | 63.74  | 74.00  | -10.26 | Peak   |
| 3 | 2409.960 | 0.00   | 42.93  | 108.77 | 98.34  | 74.00  | 24.34  | Peak   |



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)

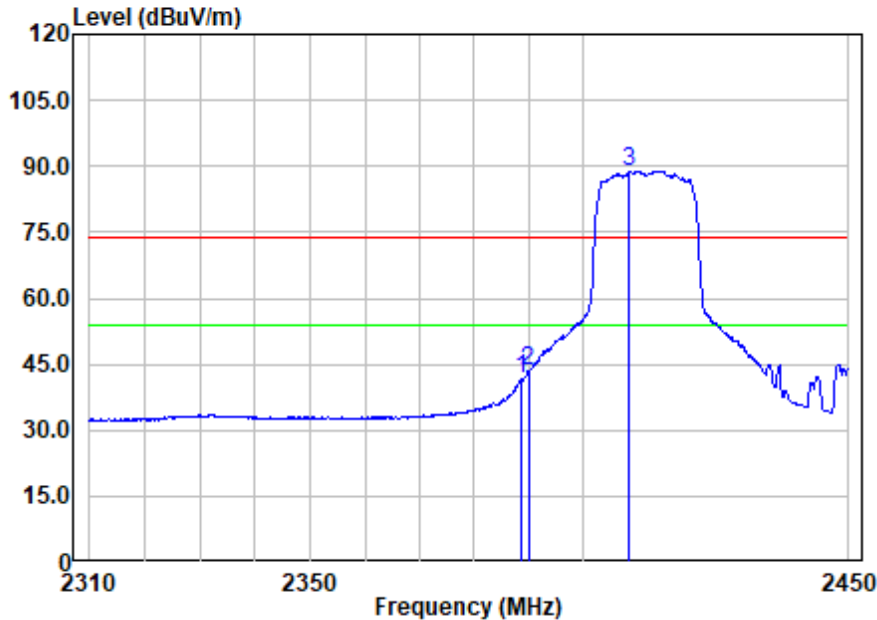
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |         |
|---|----------|--------|--------|-------|--------|--------|--------|---------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark  |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |         |
| 1 | 2388.540 | 0.00   | 42.92  | 52.04 | 41.54  | 54.00  | -12.46 | Average |
| 2 | 2390.000 | 0.00   | 42.92  | 53.84 | 43.34  | 54.00  | -10.66 | Average |
| 3 | 2408.700 | 0.00   | 42.93  | 99.27 | 88.83  | 54.00  | 34.83  | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

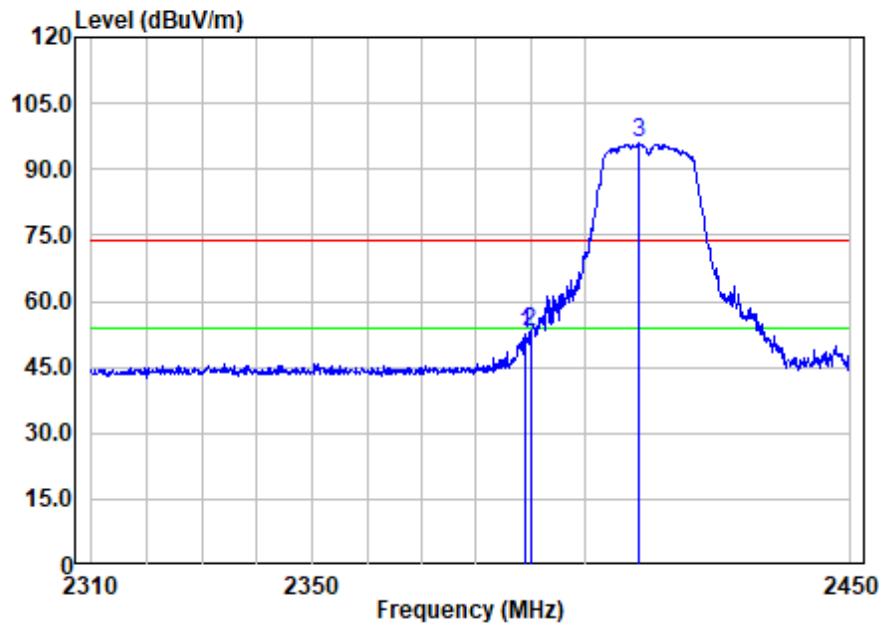
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 41 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2389.240 | 0.00   | 42.92  | 63.15  | 52.65  | 74.00  | -21.35 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 63.54  | 53.04  | 74.00  | -20.96 | Peak   |
| 3 | 2410.240 | 0.00   | 42.93  | 106.28 | 95.85  | 74.00  | 21.85  | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

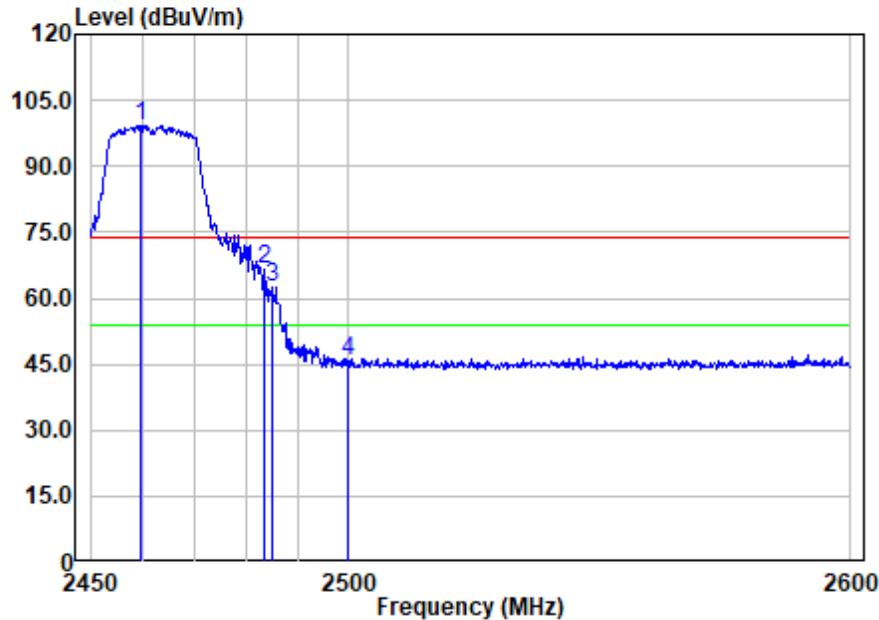
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 42 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



|   | Freq     | Aux Factor | Preamp Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|---|----------|------------|---------------|------------|--------|------------|------------|--------|
|   | MHz      |            | dB            | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1 | 2459.750 | 0.00       | 42.94         | 109.40     | 99.21  | 74.00      | 25.21      | Peak   |
| 2 | 2483.500 | 0.00       | 42.94         | 76.42      | 66.35  | 74.00      | -7.65      | Peak   |
| 3 | 2484.950 | 0.00       | 42.94         | 72.68      | 62.62  | 74.00      | -11.38     | Peak   |
| 4 | 2500.000 | 0.00       | 42.94         | 55.95      | 45.96  | 74.00      | -28.04     | Peak   |



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)

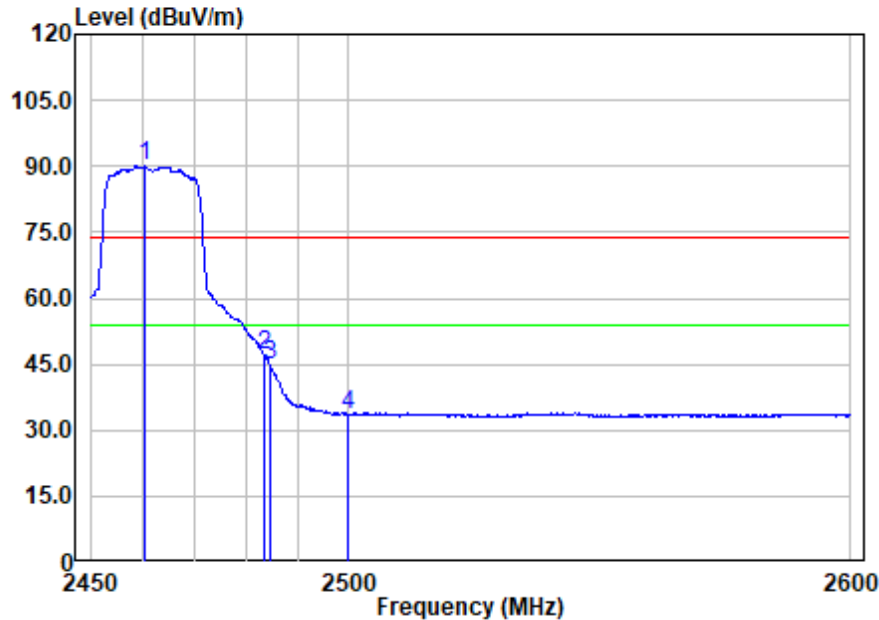
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |         |
|---|----------|--------|--------|--------|--------|--------|--------|---------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark  |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |         |
| 1 | 2460.350 | 0.00   | 42.94  | 100.18 | 89.99  | 54.00  | 35.99  | Average |
| 2 | 2483.500 | 0.00   | 42.94  | 57.28  | 47.21  | 54.00  | -6.79  | Average |
| 3 | 2484.800 | 0.00   | 42.94  | 54.75  | 44.69  | 54.00  | -9.31  | Average |
| 4 | 2500.000 | 0.00   | 42.94  | 43.49  | 33.50  | 54.00  | -20.50 | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

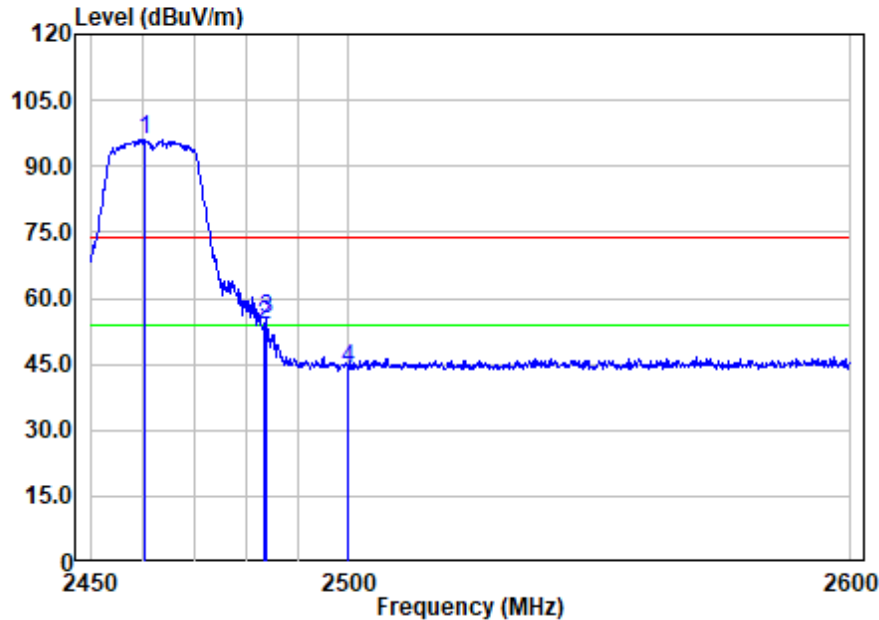
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 44 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2460.650 | 0.00   | 42.94  | 106.17 | 95.98  | 74.00  | 21.98  | Peak   |
| 2 | 2483.500 | 0.00   | 42.94  | 63.98  | 53.91  | 74.00  | -20.09 | Peak   |
| 3 | 2483.900 | 0.00   | 42.94  | 65.30  | 55.23  | 74.00  | -18.77 | Peak   |
| 4 | 2500.000 | 0.00   | 42.94  | 54.08  | 44.09  | 74.00  | -29.91 | Peak   |



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)

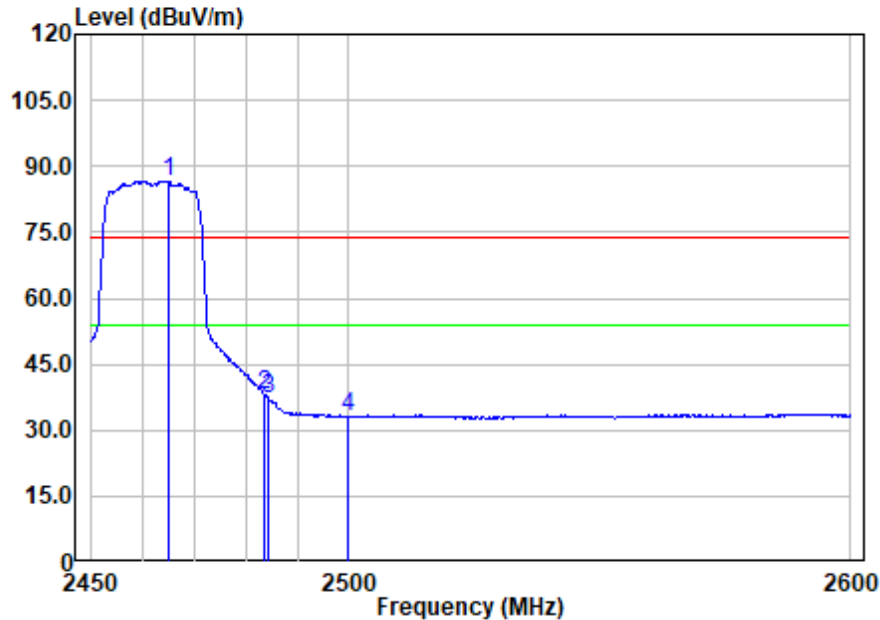
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |         |
|---|----------|--------|--------|-------|--------|--------|--------|---------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark  |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |         |
| 1 | 2465.150 | 0.00   | 42.94  | 96.87 | 86.70  | 54.00  | 32.70  | Average |
| 2 | 2483.500 | 0.00   | 42.94  | 48.25 | 38.18  | 54.00  | -15.82 | Average |
| 3 | 2484.350 | 0.00   | 42.94  | 47.40 | 37.33  | 54.00  | -16.67 | Average |
| 4 | 2500.000 | 0.00   | 42.94  | 43.03 | 33.04  | 54.00  | -20.96 | Average |



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)

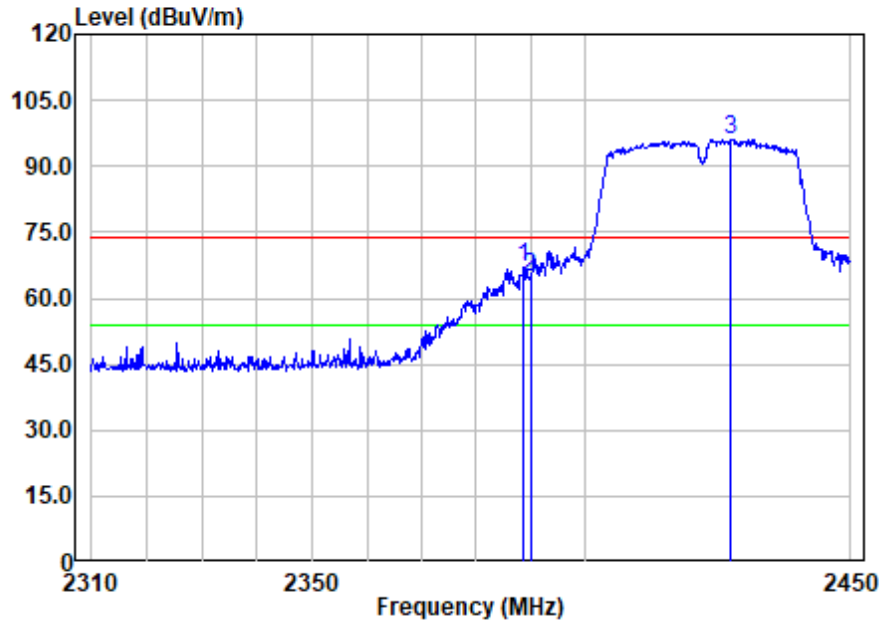
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over  |        |
|---|----------|--------|--------|--------|--------|--------|-------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB    |        |
| 1 | 2388.820 | 0.00   | 42.92  | 77.53  | 67.03  | 74.00  | -6.97 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 75.16  | 64.66  | 74.00  | -9.34 | Peak   |
| 3 | 2427.460 | 0.00   | 42.93  | 106.51 | 96.17  | 74.00  | 22.17 | Peak   |



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)

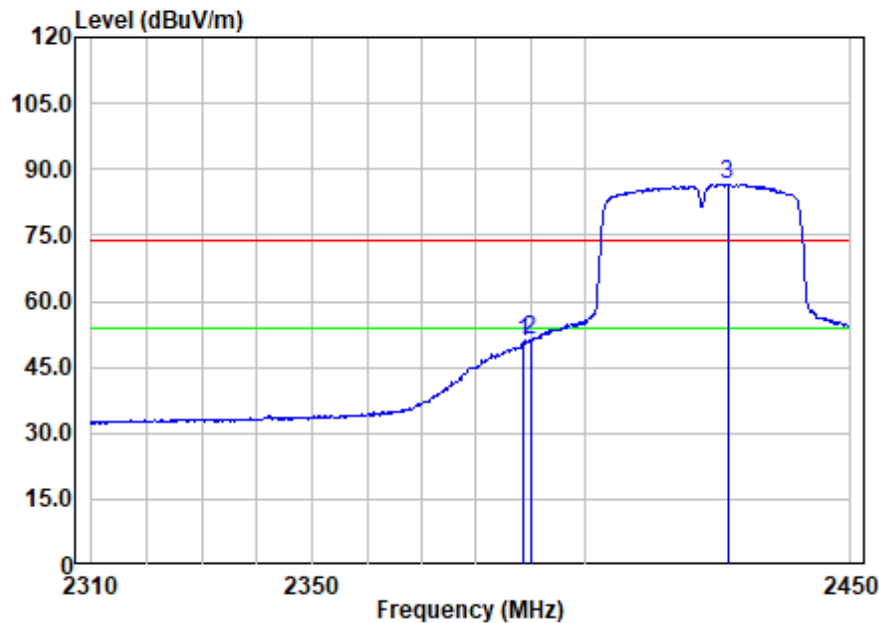
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over  |         |
|---|----------|--------|--------|-------|--------|--------|-------|---------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit | Remark  |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB    |         |
| 1 | 2388.540 | 0.00   | 42.92  | 61.00 | 50.50  | 54.00  | -3.50 | Average |
| 2 | 2390.000 | 0.00   | 42.92  | 61.47 | 50.97  | 54.00  | -3.03 | Average |
| 3 | 2426.760 | 0.00   | 42.93  | 96.89 | 86.55  | 54.00  | 32.55 | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

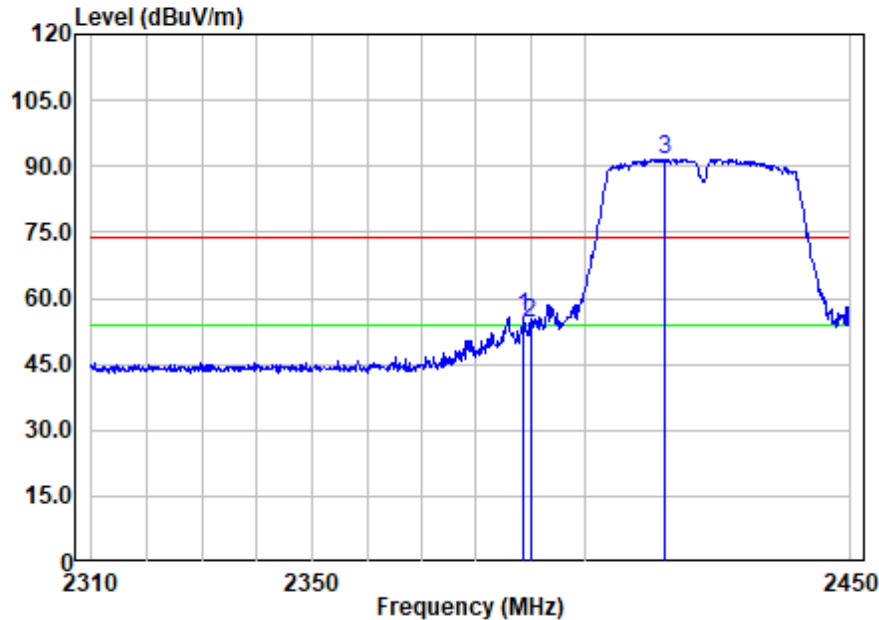
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 48 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



|   |          | Aux    | Preamp | Read   |        | Limit  | Over   |        |
|---|----------|--------|--------|--------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV   | dBuV/m | dBuV/m | dB     |        |
| 1 | 2388.820 | 0.00   | 42.92  | 66.25  | 55.75  | 74.00  | -18.25 | Peak   |
| 2 | 2390.000 | 0.00   | 42.92  | 64.66  | 54.16  | 74.00  | -19.84 | Peak   |
| 3 | 2414.860 | 0.00   | 42.93  | 102.09 | 91.68  | 74.00  | 17.68  | Peak   |



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)

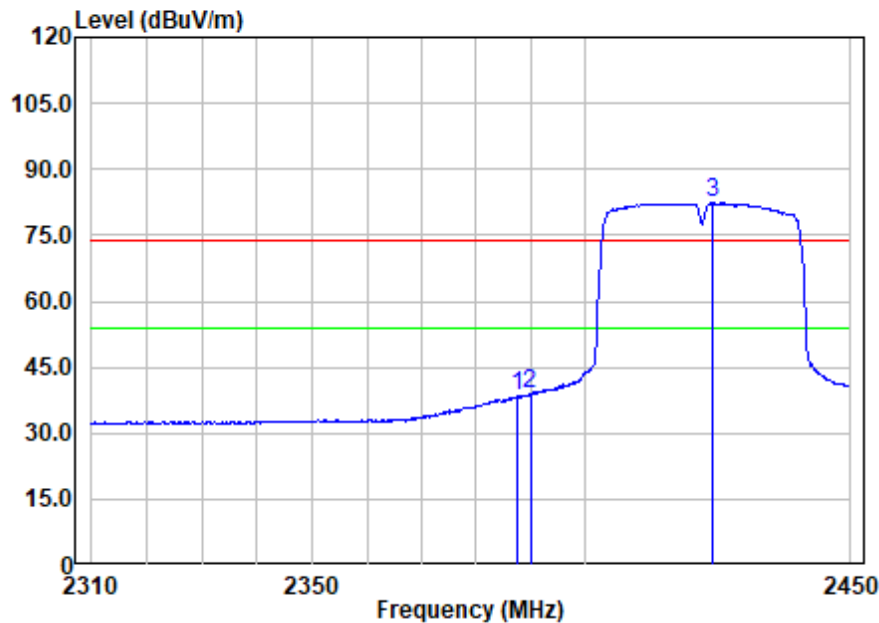
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |         |
|---|----------|--------|--------|-------|--------|--------|--------|---------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark  |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |         |
| 1 | 2387.560 | 0.00   | 42.92  | 48.82 | 38.31  | 54.00  | -15.69 | Average |
| 2 | 2390.000 | 0.00   | 42.92  | 49.62 | 39.12  | 54.00  | -14.88 | Average |
| 3 | 2424.100 | 0.00   | 42.93  | 92.62 | 82.26  | 54.00  | 28.26  | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

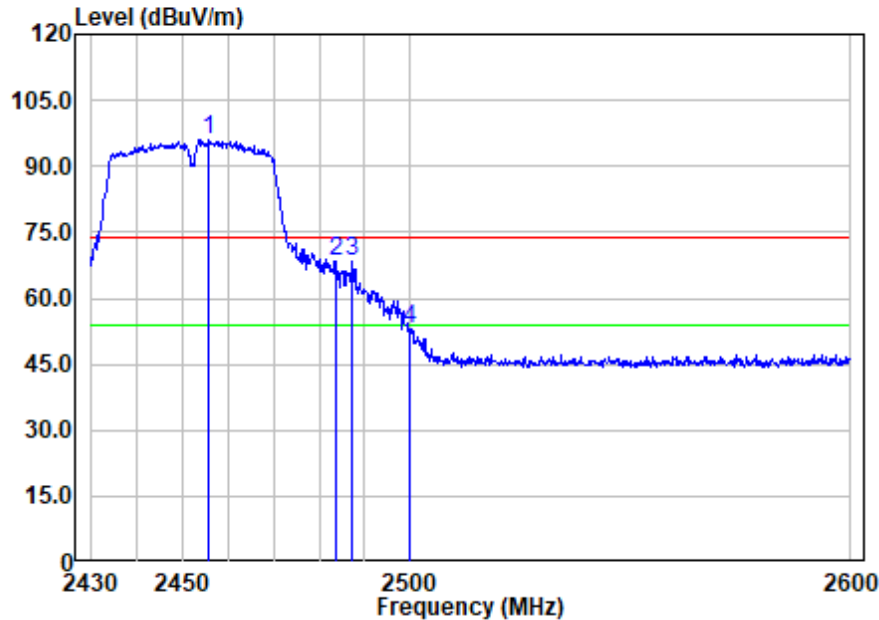
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 50 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



|   | Freq     | Aux Factor | Preamp Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|---|----------|------------|---------------|------------|--------|------------|------------|--------|
|   | MHz      |            | dB            | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1 | 2455.670 | 0.00       | 42.94         | 106.22     | 96.01  | 74.00      | 22.01      | Peak   |
| 2 | 2483.500 | 0.00       | 42.94         | 78.49      | 68.42  | 74.00      | -5.58      | Peak   |
| 3 | 2487.290 | 0.00       | 42.94         | 78.35      | 68.29  | 74.00      | -5.71      | Peak   |
| 4 | 2500.000 | 0.00       | 42.94         | 63.10      | 53.11  | 74.00      | -20.89     | Peak   |



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)

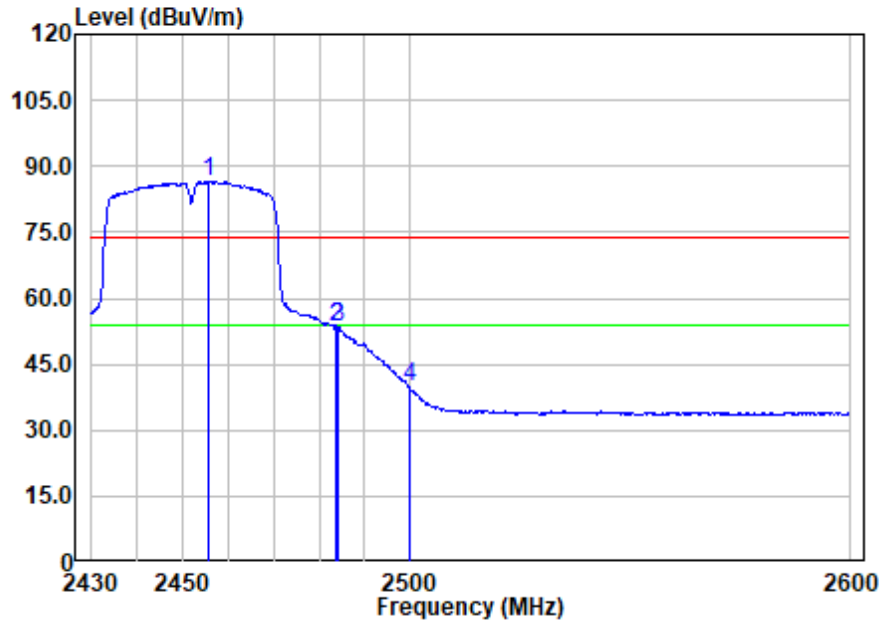
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



|   | Freq     | Aux Factor | Preamp Factor | Read Level | Level  | Limit  | Over Limit | Remark  |
|---|----------|------------|---------------|------------|--------|--------|------------|---------|
|   | MHz      |            | dB            | dBuV       | dBuV/m | dBuV/m | dB         |         |
| 1 | 2455.500 | 0.00       | 42.94         | 96.71      | 86.50  | 54.00  | 32.50      | Average |
| 2 | 2483.500 | 0.00       | 42.94         | 63.52      | 53.45  | 54.00  | -0.55      | Average |
| 3 | 2484.230 | 0.00       | 42.94         | 63.65      | 53.58  | 54.00  | -0.42      | Average |
| 4 | 2500.000 | 0.00       | 42.94         | 49.76      | 39.77  | 54.00  | -14.23     | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

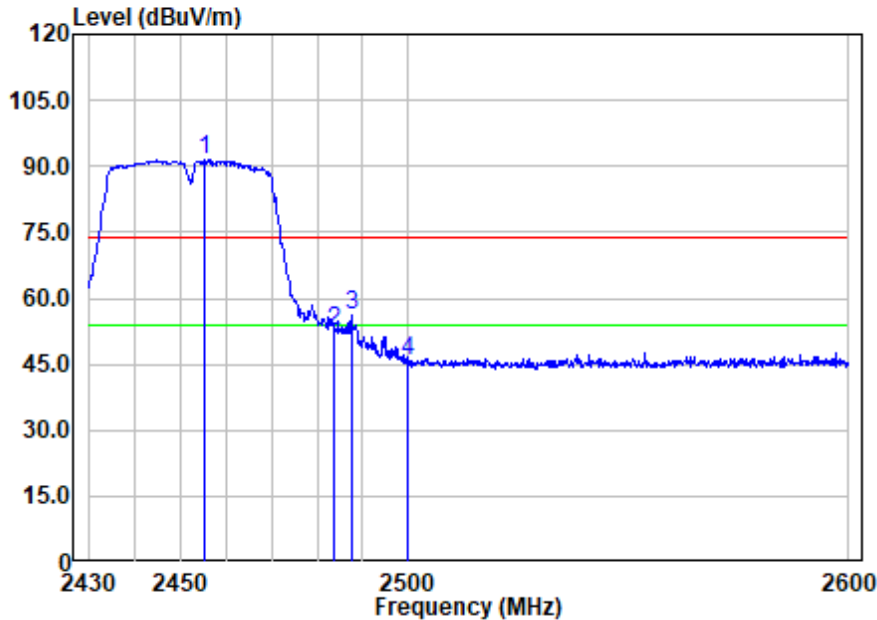
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 52 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



|   | Freq     | Aux Factor | Preamp Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|---|----------|------------|---------------|------------|--------|------------|------------|--------|
|   | MHz      |            | dB            | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1 | 2455.160 | 0.00       | 42.94         | 101.71     | 91.50  | 74.00      | 17.50      | Peak   |
| 2 | 2483.500 | 0.00       | 42.94         | 62.60      | 52.53  | 74.00      | -21.47     | Peak   |
| 3 | 2487.460 | 0.00       | 42.94         | 66.43      | 56.37  | 74.00      | -17.63     | Peak   |
| 4 | 2500.000 | 0.00       | 42.94         | 55.91      | 45.92  | 74.00      | -28.08     | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

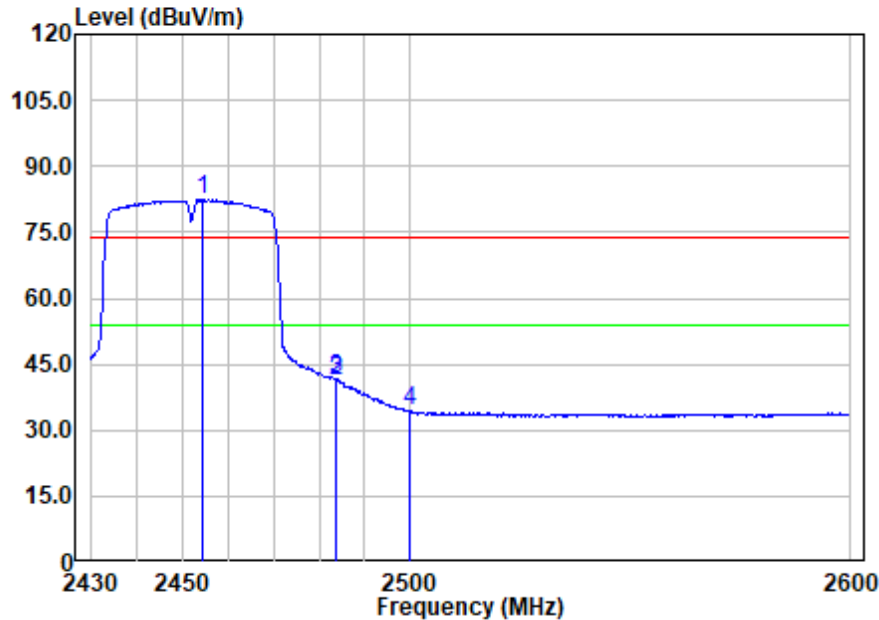
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 53 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |         |
|---|----------|--------|--------|-------|--------|--------|--------|---------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark  |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |         |
| 1 | 2454.310 | 0.00   | 42.94  | 92.52 | 82.30  | 54.00  | 28.30  | Average |
| 2 | 2483.500 | 0.00   | 42.94  | 51.42 | 41.35  | 54.00  | -12.65 | Average |
| 3 | 2483.890 | 0.00   | 42.94  | 51.72 | 41.65  | 54.00  | -12.35 | Average |
| 4 | 2500.000 | 0.00   | 42.94  | 44.49 | 34.50  | 54.00  | -19.50 | Average |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.8 Radiated Spurious Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4,6.5

Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 0.009-0.490    | 2400/F(kHz)                      | 300                          |
| 0.490-1.705    | 24000/F(kHz)                     | 30                           |
| 1.705-30.0     | 30                               | 30                           |
| 30-88          | 100                              | 3                            |
| 88-216         | 150                              | 3                            |
| 216-960        | 200                              | 3                            |
| 960-1000       | 500                              | 3                            |

#### 7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 21.0 °C

Humidity: 51.2 % RH

Atmospheric Pressure: 1010 mbar

#### 7.8.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the 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)

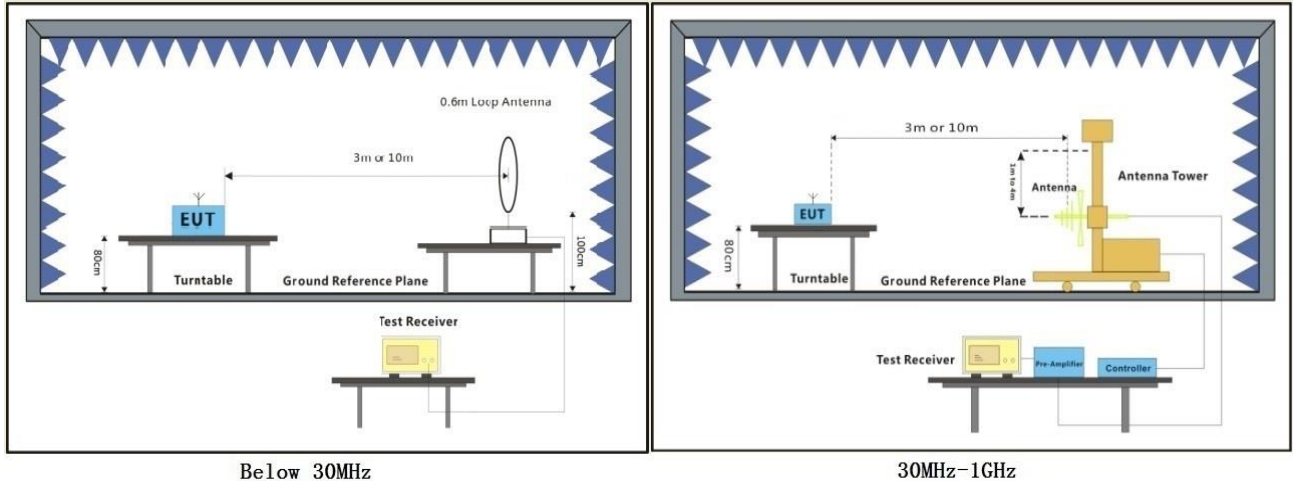
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.8.3 Test Setup Diagram



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 7.8.4 Measurement Procedure and Data

- 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.
- 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 (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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

Remark:

- Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- For WLAN radiated test, according to the conducted power and verify test the SISO & MIMO mode, the worst-case is SISO mode for 802.11b/g, MIMO mode for 802.11n, therefore, all final test are performed in SISO & MIMO mode . only the worst data recorded at 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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

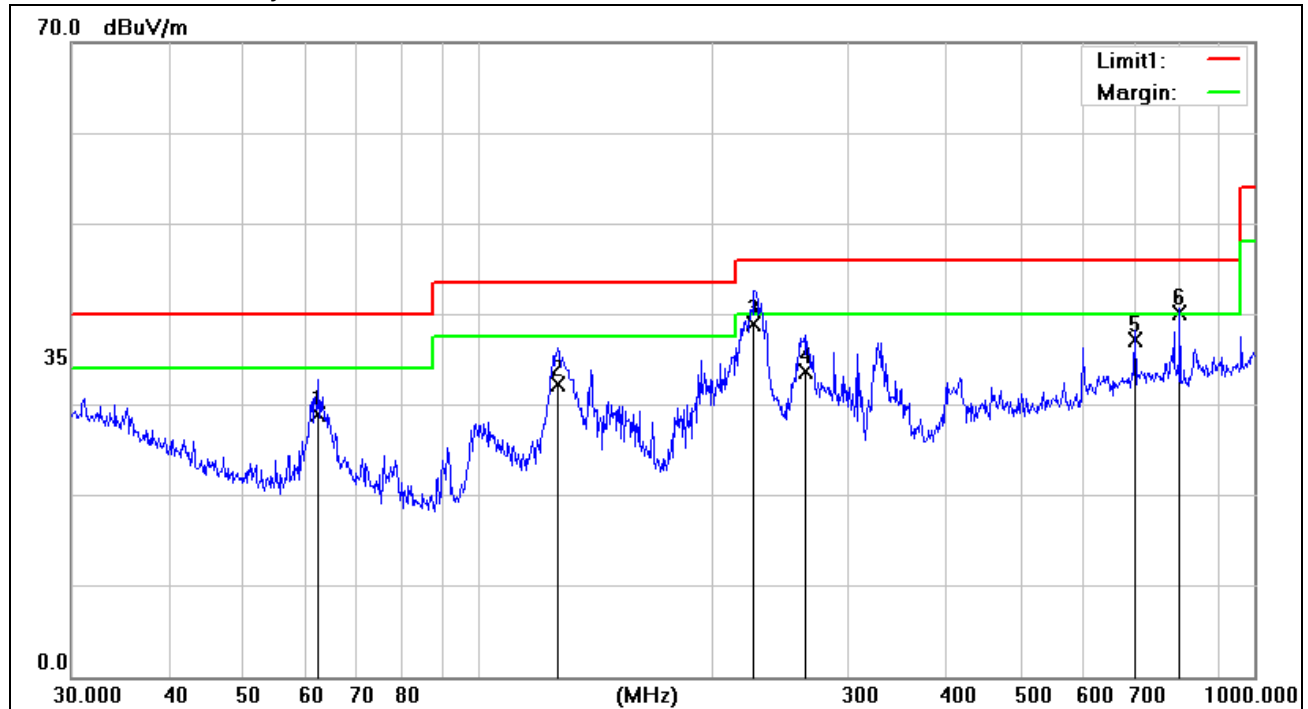
t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 57 of 183

Test Mode: 04; Polarity: Horizontal



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|--------------------|-------------------|-------------------------|--------------------|-------------------|----------------|----------------|------------------|--------|
| 1   | 62.4314            | 14.29             | 14.68                   | 28.97              | 40.00             | -11.03         | 100            | 293              | QP     |
| 2   | 126.7723           | 12.81             | 19.46                   | 32.27              | 43.50             | -11.23         | 100            | 54               | QP     |
| 3   | 226.8935           | 21.69             | 17.25                   | 38.94              | 46.00             | -7.06          | 100            | 360              | QP     |
| 4   | 263.8190           | 12.62             | 21.02                   | 33.64              | 46.00             | -12.36         | 100            | 131              | QP     |
| 5   | 701.7610           | 34.77             | 2.48                    | 37.25              | 46.00             | -8.75          | 100            | 323              | QP     |
| 6   | 801.7863           | 37.87             | 2.25                    | 40.12              | 46.00             | -5.88          | 100            | 323              | QP     |



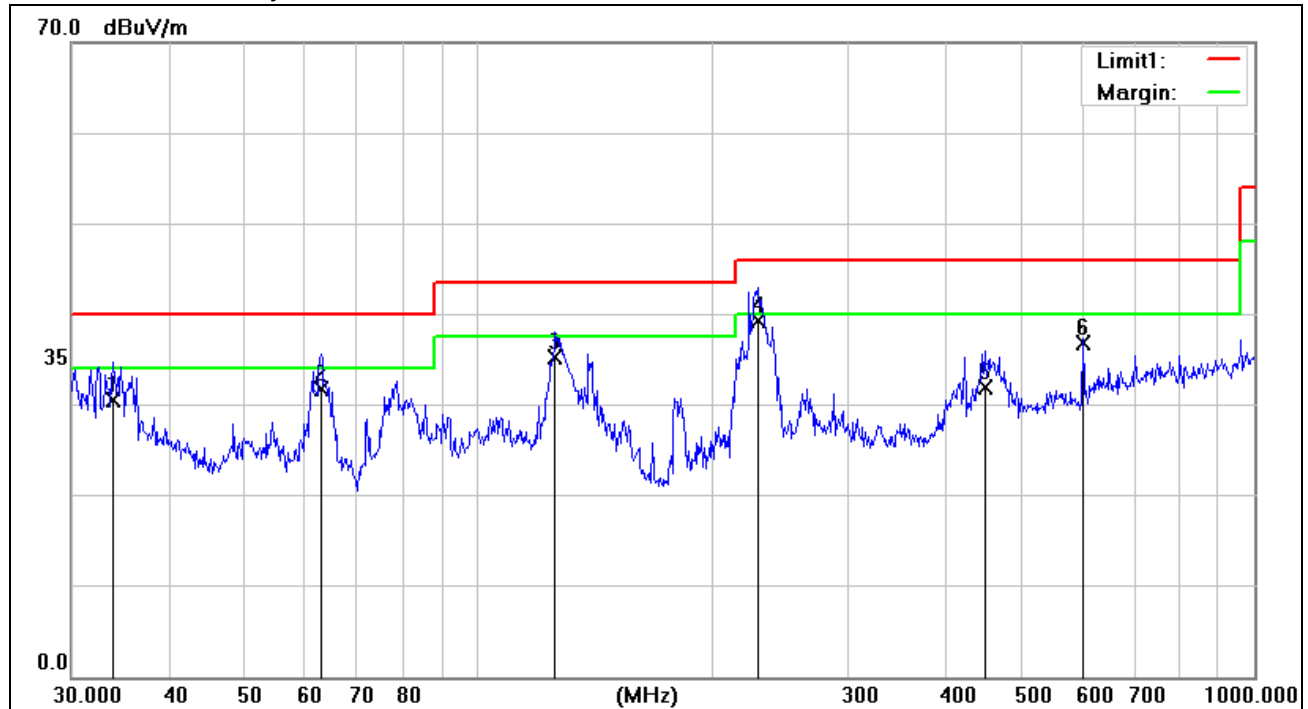
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Vertical



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|--------------------|-------------------|-------------------------|--------------------|-------------------|----------------|----------------|------------------|--------|
| 1   | 33.9174            | 5.61              | 24.91                   | 30.52              | 40.00             | -9.48          | 100            | 191              | QP     |
| 2   | 62.8708            | 17.01             | 14.69                   | 31.70              | 40.00             | -8.30          | 101            | 0                | QP     |
| 3   | 125.8864           | 15.76             | 19.45                   | 35.21              | 43.50             | -8.29          | 100            | 6                | QP     |
| 4   | 229.2931           | 21.87             | 17.50                   | 39.37              | 46.00             | -6.63          | 100            | 30               | QP     |
| 5   | 449.5558           | 7.63              | 24.24                   | 31.87              | 46.00             | -14.13         | 100            | 338              | QP     |
| 6   | 601.4265           | 9.76              | 27.09                   | 36.85              | 46.00             | -9.15          | 100            | 237              | QP     |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 59 of 183

### 7.9 Radiated Spurious Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.6

Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| Above 1000     | 500                              | 3                            |

#### 7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C

Humidity: 60.0 % RH

Atmospheric Pressure: 1010 mbar

#### 7.9.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 04        | TX mode_Power by adapter DPS-90AB-3 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.    |
| Pre-scan              | 13        | TX mode_Power by adapter FSP090-DIEBN2 and Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the 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)

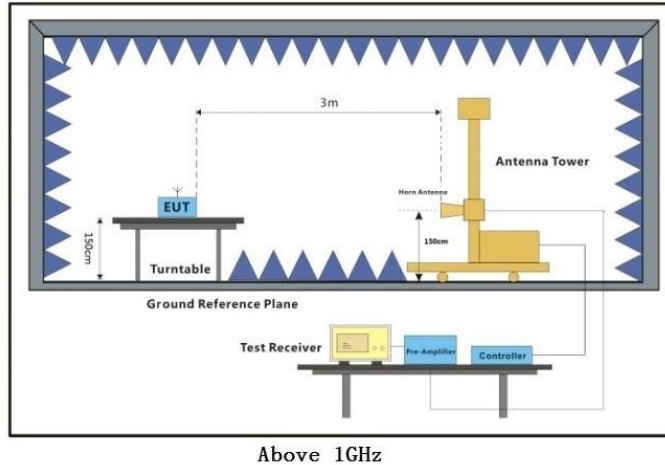
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.9.3 Test Setup Diagram



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 www.sgsgroup.com.cn  
t/(86-512)57355888 f/(86-512)57370818 sgs.china@sgs.com

### 7.9.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.
- d. 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.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
4. For WLAN radiated test, according to the conducted power and verify test the SISO & MIMO mode, the worst-case is SISO mode for 802.11b/g, MIMO mode for 802.11n, therefore, all final test are performed in SISO & MIMO mode and reported.



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

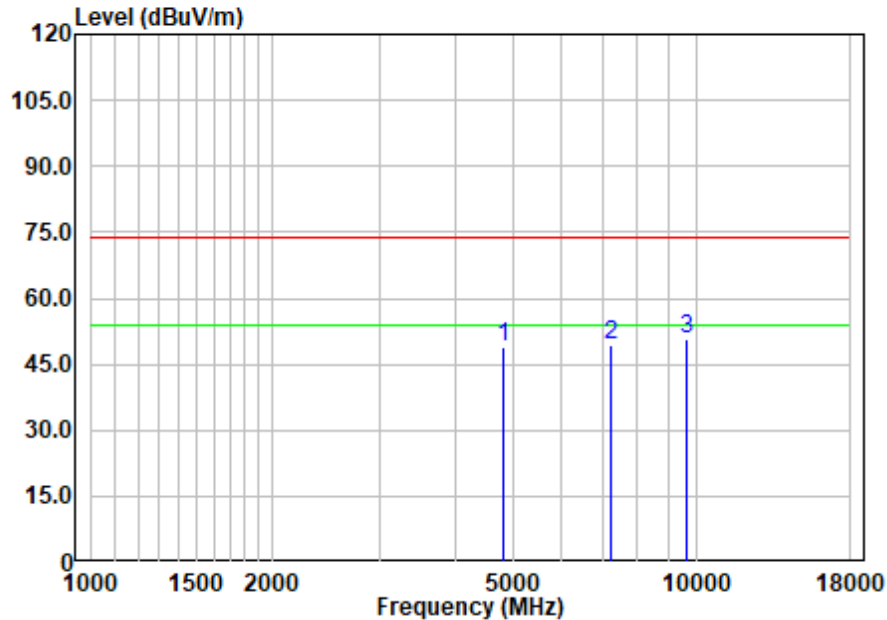
t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 62 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4824.000 | 0.00   | 42.24  | 48.92 | 48.99  | 74.00  | -25.01 | Peak   |
| 2 | 7236.000 | 0.00   | 42.61  | 45.95 | 49.15  | 74.00  | -24.85 | Peak   |
| 3 | 9648.000 | 0.00   | 42.32  | 43.65 | 50.61  | 74.00  | -23.39 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

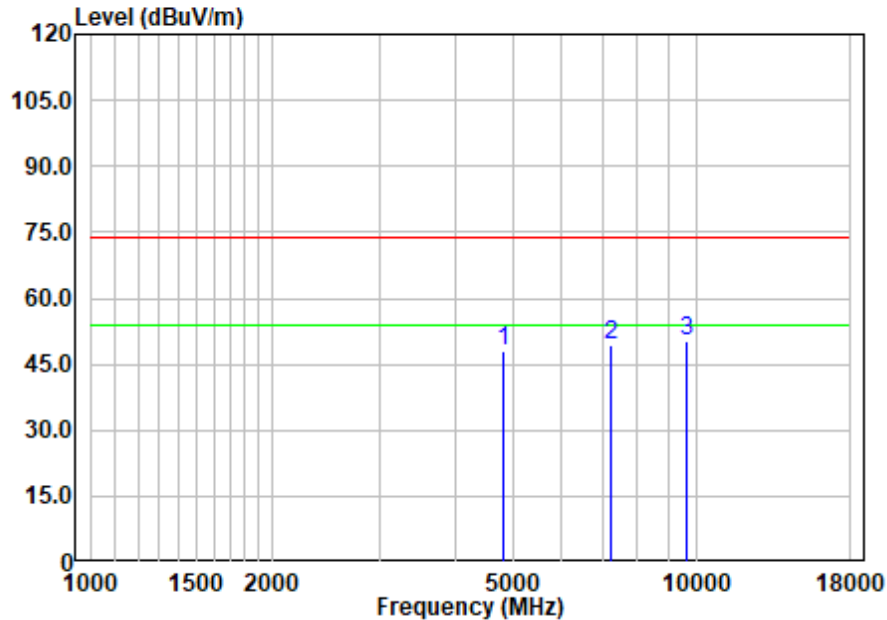
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 63 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4824.000 | 0.00   | 42.24  | 48.12 | 48.19  | 74.00  | -25.81 | Peak   |
| 2 | 7236.000 | 0.00   | 42.61  | 46.08 | 49.28  | 74.00  | -24.72 | Peak   |
| 3 | 9648.000 | 0.00   | 42.32  | 43.46 | 50.42  | 74.00  | -23.58 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

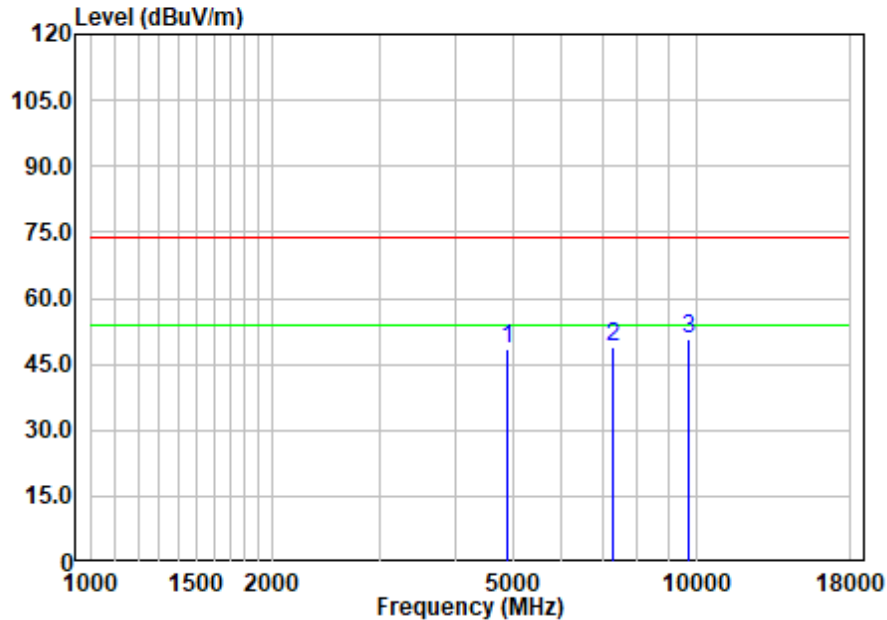
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 64 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 47.99 | 48.41  | 74.00  | -25.59 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 45.73 | 49.13  | 74.00  | -24.87 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 43.80 | 50.63  | 74.00  | -23.37 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

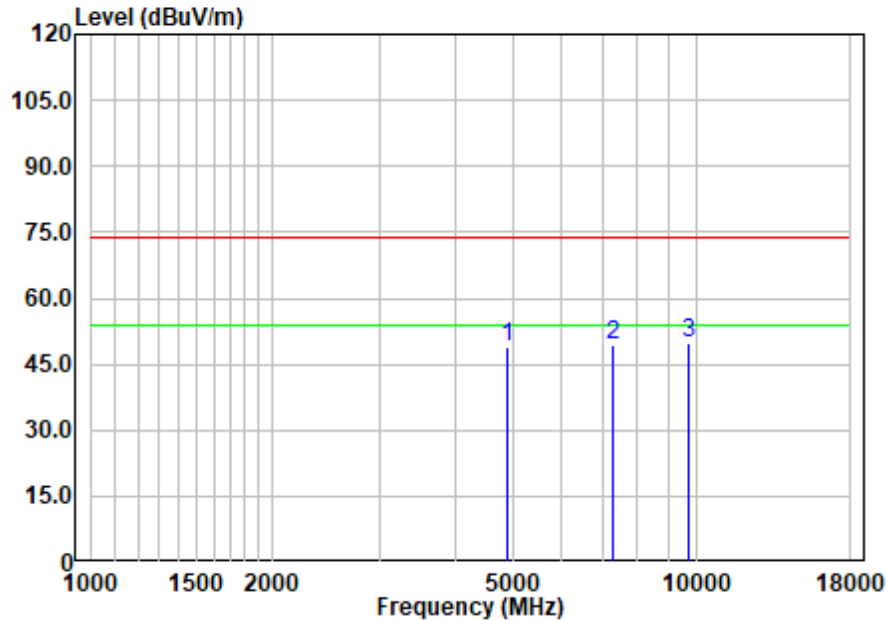
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 65 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 48.35 | 48.77  | 74.00  | -25.23 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 46.13 | 49.53  | 74.00  | -24.47 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 43.18 | 50.01  | 74.00  | -23.99 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

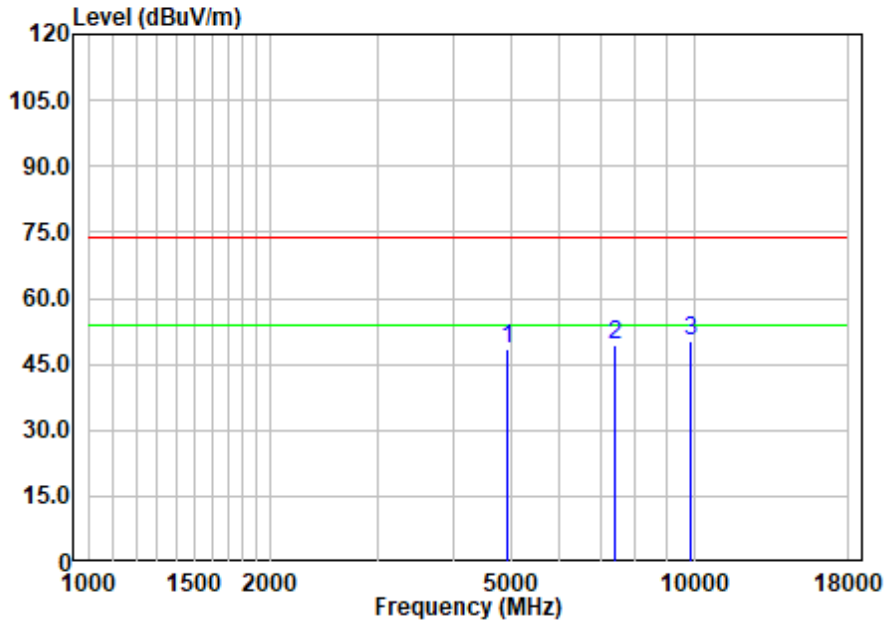
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 66 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4924.000 | 0.00   | 41.69  | 47.83 | 48.50  | 74.00  | -25.50 | Peak   |
| 2 | 7386.000 | 0.00   | 42.44  | 45.76 | 49.33  | 74.00  | -24.67 | Peak   |
| 3 | 9848.000 | 0.00   | 42.43  | 43.25 | 50.43  | 74.00  | -23.57 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

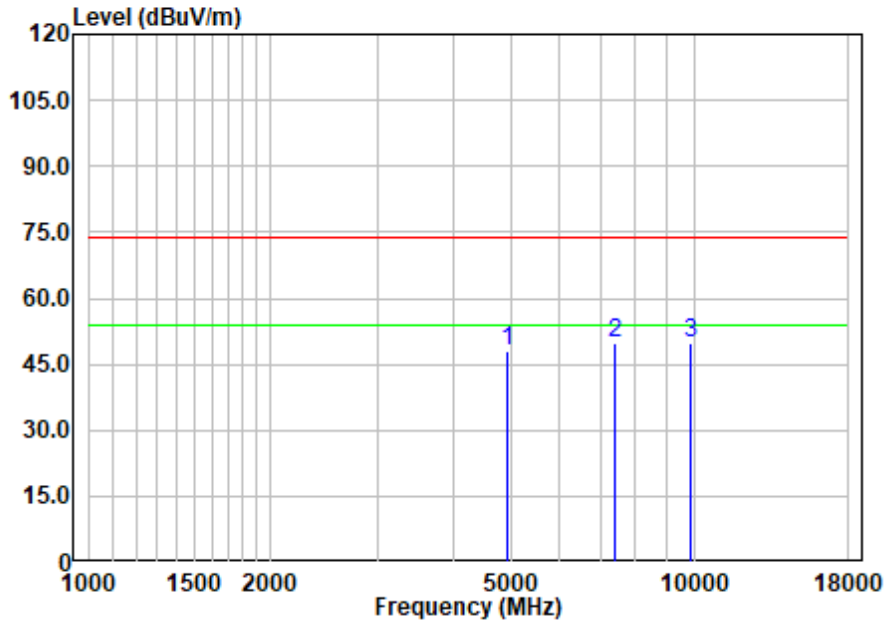
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 67 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4924.000 | 0.00   | 41.69  | 47.38 | 48.05  | 74.00  | -25.95 | Peak   |
| 2 | 7386.000 | 0.00   | 42.44  | 46.16 | 49.73  | 74.00  | -24.27 | Peak   |
| 3 | 9848.000 | 0.00   | 42.43  | 42.83 | 50.01  | 74.00  | -23.99 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

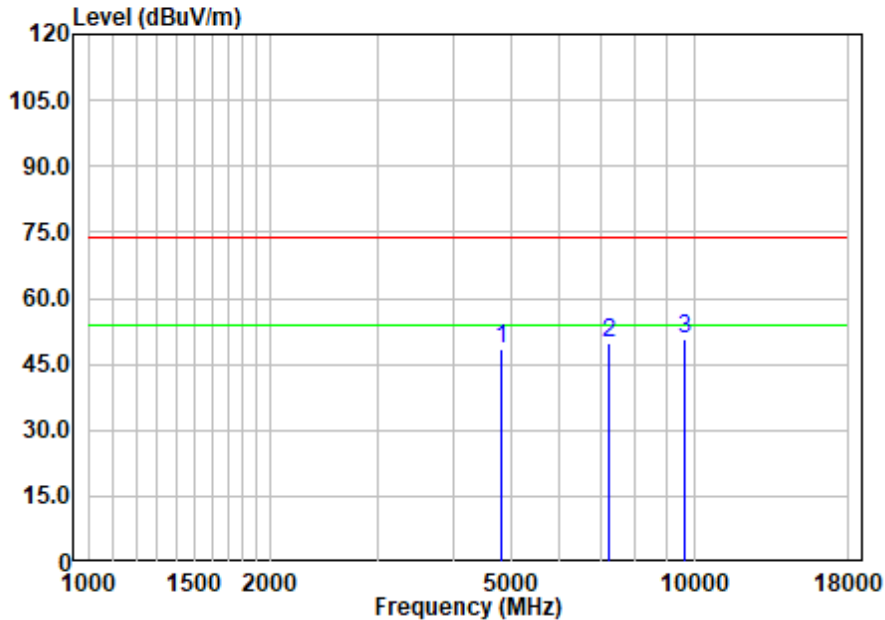
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 68 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4824.000 | 0.00   | 42.24  | 48.52 | 48.59  | 74.00  | -25.41 | Peak   |
| 2 | 7236.000 | 0.00   | 42.61  | 46.39 | 49.59  | 74.00  | -24.41 | Peak   |
| 3 | 9648.000 | 0.00   | 42.32  | 43.76 | 50.72  | 74.00  | -23.28 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

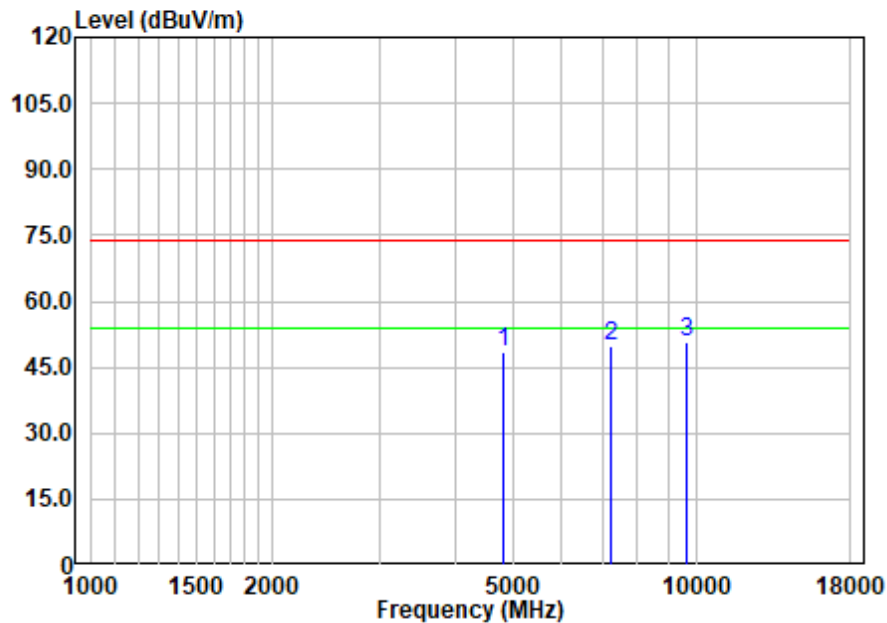
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 69 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4824.000 | 0.00   | 42.24  | 48.17 | 48.24  | 74.00  | -25.76 | Peak   |
| 2 | 7236.000 | 0.00   | 42.61  | 46.74 | 49.94  | 74.00  | -24.06 | Peak   |
| 3 | 9648.000 | 0.00   | 42.32  | 43.76 | 50.72  | 74.00  | -23.28 | Peak   |



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)

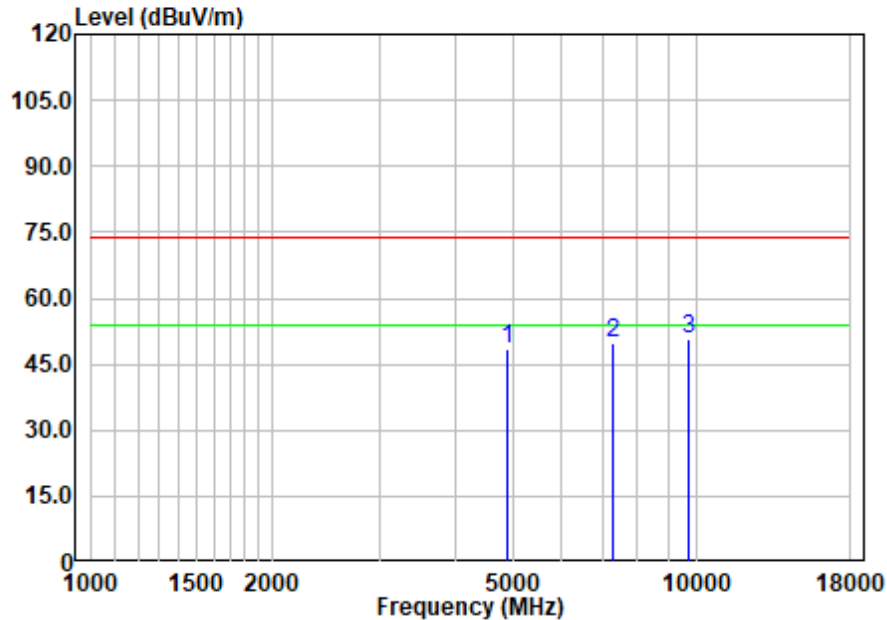
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 47.90 | 48.32  | 74.00  | -25.68 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 46.52 | 49.92  | 74.00  | -24.08 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 44.10 | 50.93  | 74.00  | -23.07 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
 中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

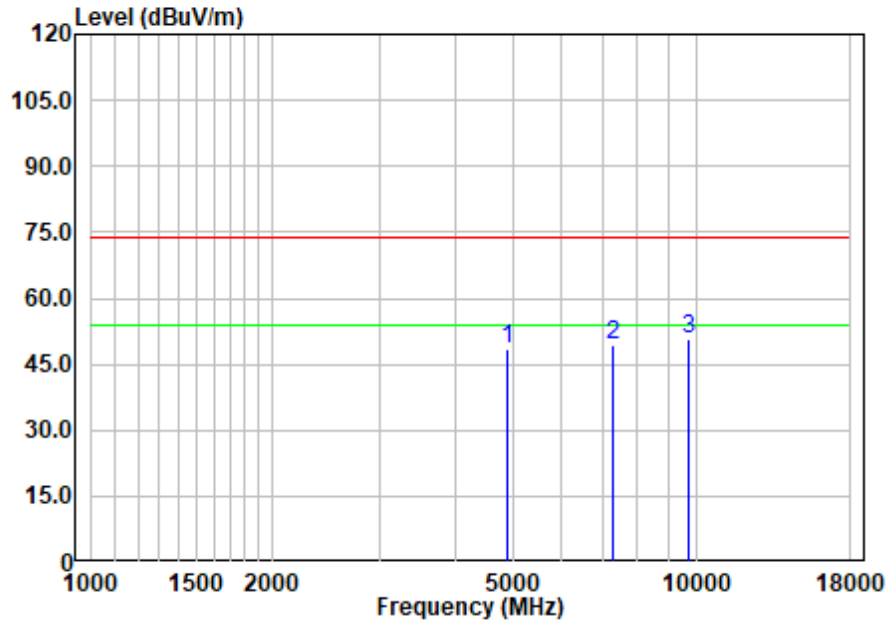
t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
 t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 71 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 48.23 | 48.65  | 74.00  | -25.35 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 46.11 | 49.51  | 74.00  | -24.49 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 43.81 | 50.64  | 74.00  | -23.36 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

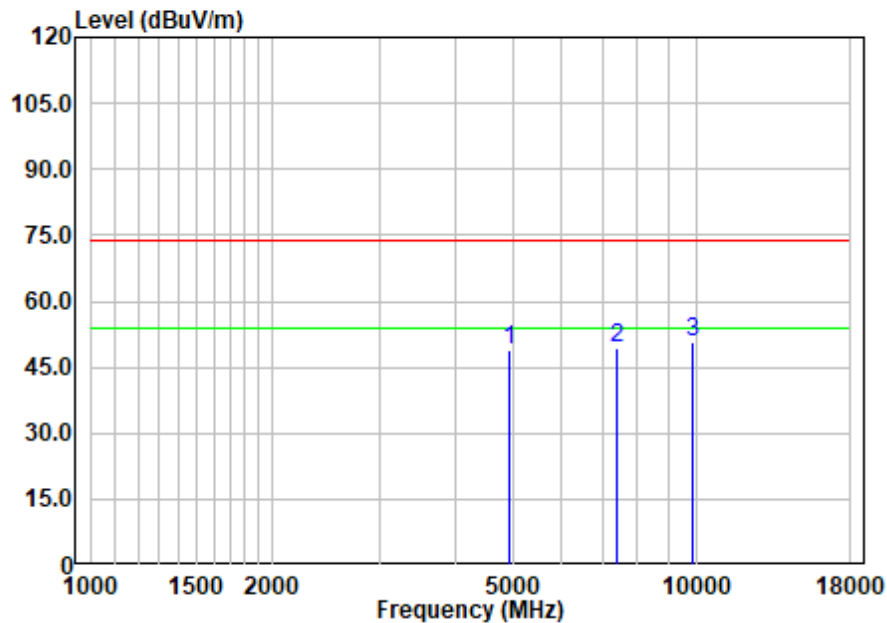
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 72 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4924.000 | 0.00   | 41.69  | 48.03 | 48.70  | 74.00  | -25.30 | Peak   |
| 2 | 7386.000 | 0.00   | 42.44  | 45.64 | 49.21  | 74.00  | -24.79 | Peak   |
| 3 | 9848.000 | 0.00   | 42.43  | 43.56 | 50.74  | 74.00  | -23.26 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

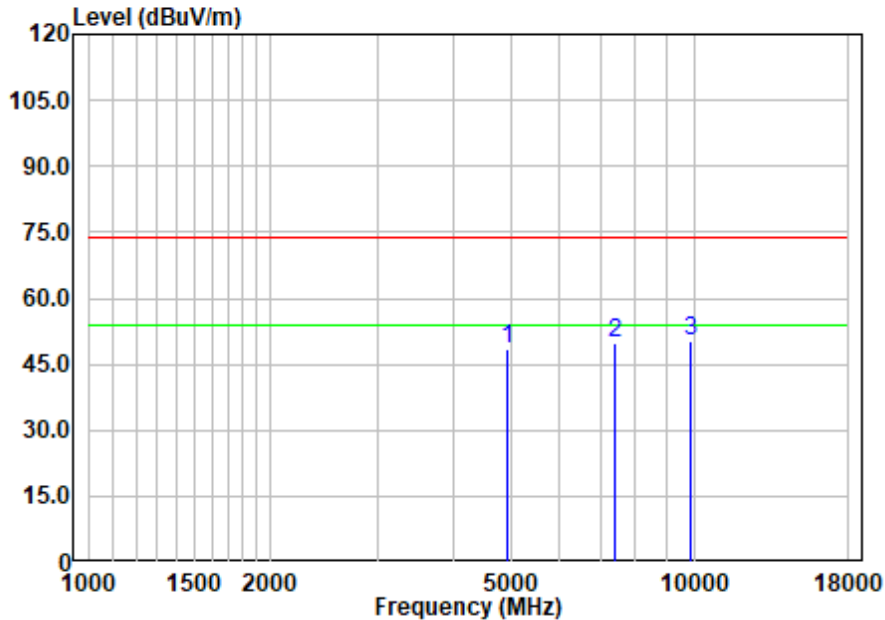
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 73 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4924.000 | 0.00   | 41.69  | 48.00 | 48.67  | 74.00  | -25.33 | Peak   |
| 2 | 7386.000 | 0.00   | 42.44  | 46.04 | 49.61  | 74.00  | -24.39 | Peak   |
| 3 | 9848.000 | 0.00   | 42.43  | 42.86 | 50.04  | 74.00  | -23.96 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

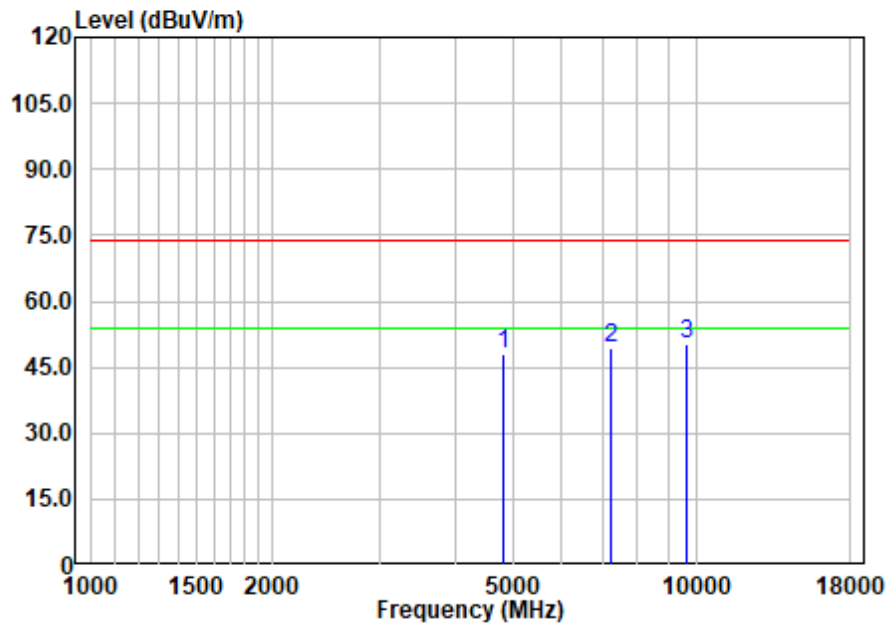
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 74 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4824.000 | 0.00   | 42.24  | 47.94 | 48.01  | 74.00  | -25.99 | Peak   |
| 2 | 7236.000 | 0.00   | 42.61  | 46.22 | 49.42  | 74.00  | -24.58 | Peak   |
| 3 | 9648.000 | 0.00   | 42.32  | 43.10 | 50.06  | 74.00  | -23.94 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

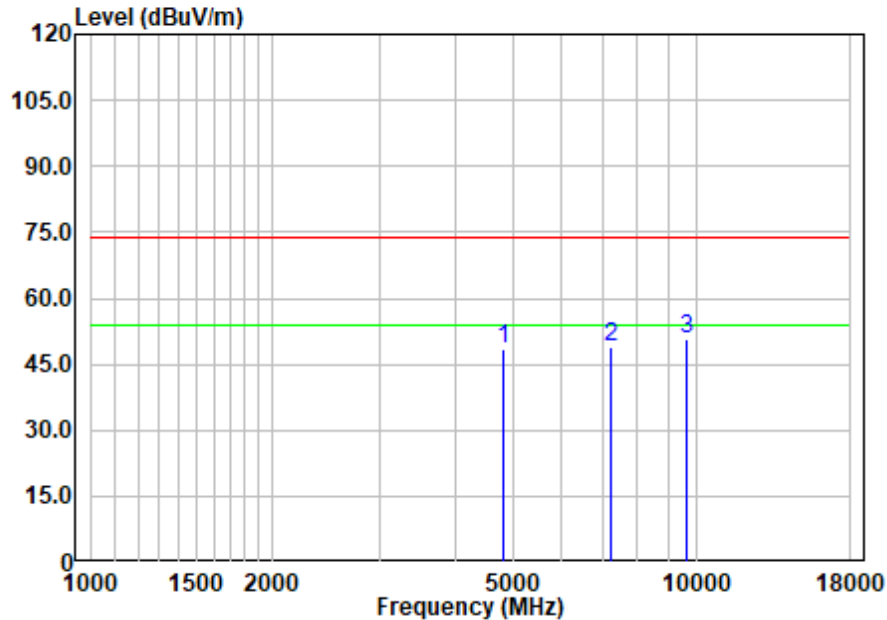
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 75 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4824.000 | 0.00   | 42.24  | 48.58 | 48.65  | 74.00  | -25.35 | Peak   |
| 2 | 7236.000 | 0.00   | 42.61  | 45.91 | 49.11  | 74.00  | -24.89 | Peak   |
| 3 | 9648.000 | 0.00   | 42.32  | 43.70 | 50.66  | 74.00  | -23.34 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

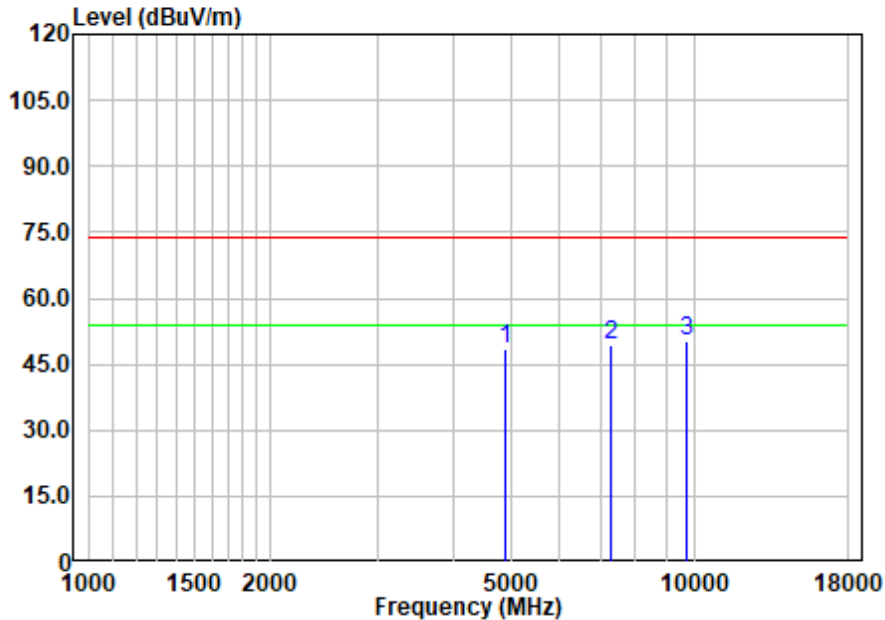
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 76 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 48.25 | 48.67  | 74.00  | -25.33 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 45.95 | 49.35  | 74.00  | -24.65 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 43.24 | 50.07  | 74.00  | -23.93 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

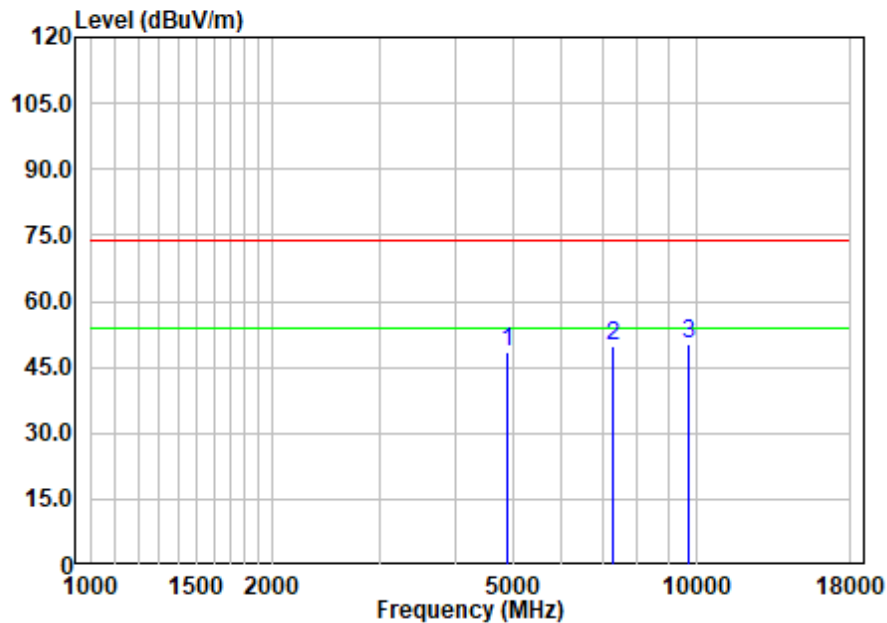
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 77 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 47.92 | 48.34  | 74.00  | -25.66 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 46.35 | 49.75  | 74.00  | -24.25 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 43.28 | 50.11  | 74.00  | -23.89 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

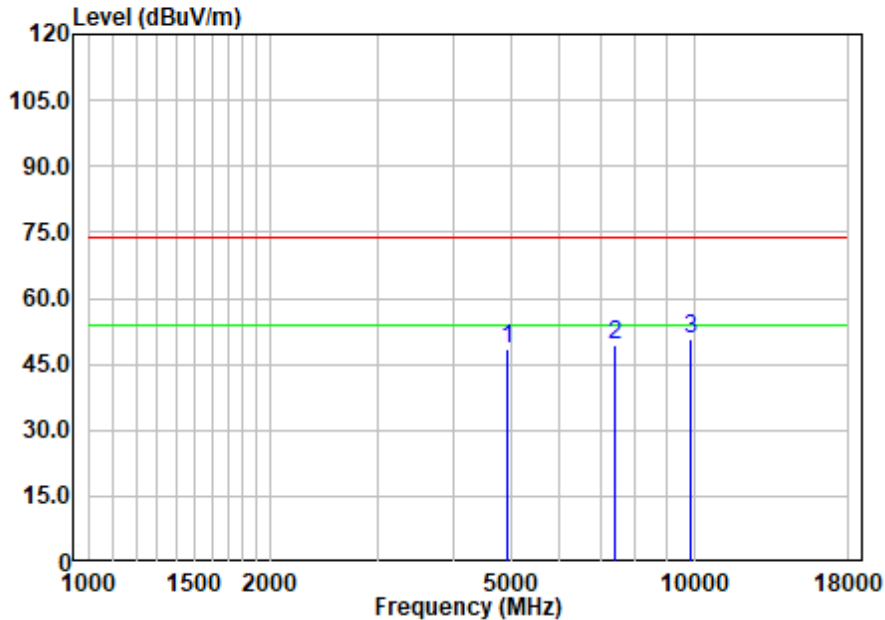
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 78 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4924.000 | 0.00   | 41.69  | 47.76 | 48.43  | 74.00  | -25.57 | Peak   |
| 2 | 7386.000 | 0.00   | 42.44  | 45.59 | 49.16  | 74.00  | -24.84 | Peak   |
| 3 | 9848.000 | 0.00   | 42.43  | 43.58 | 50.76  | 74.00  | -23.24 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

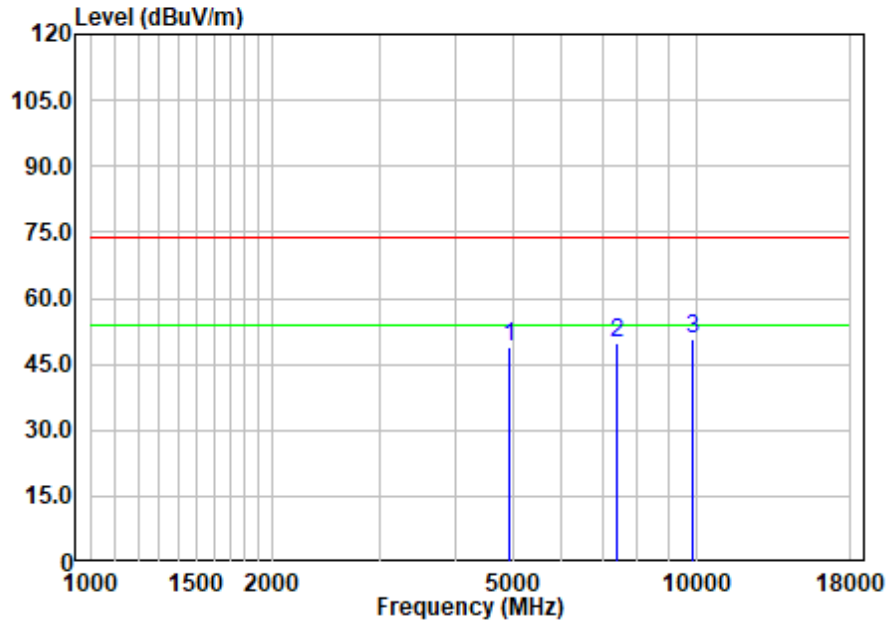
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 79 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4924.000 | 0.00   | 41.69  | 48.26 | 48.93  | 74.00  | -25.07 | Peak   |
| 2 | 7386.000 | 0.00   | 42.44  | 46.32 | 49.89  | 74.00  | -24.11 | Peak   |
| 3 | 9848.000 | 0.00   | 42.43  | 43.51 | 50.69  | 74.00  | -23.31 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

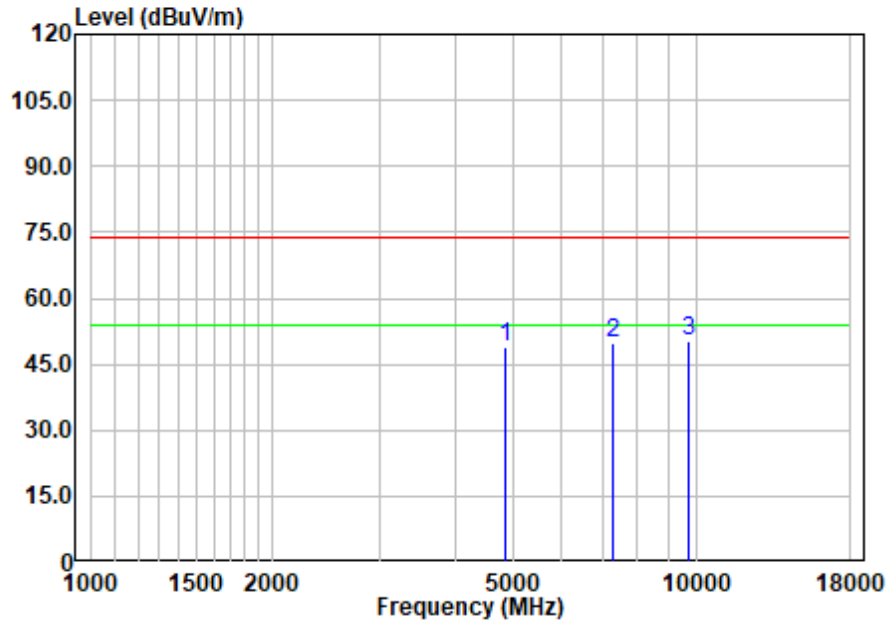
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 80 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4844.000 | 0.00   | 42.11  | 48.78 | 49.00  | 74.00  | -25.00 | Peak   |
| 2 | 7266.000 | 0.00   | 42.56  | 46.49 | 49.78  | 74.00  | -24.22 | Peak   |
| 3 | 9688.000 | 0.00   | 42.64  | 43.51 | 50.21  | 74.00  | -23.79 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

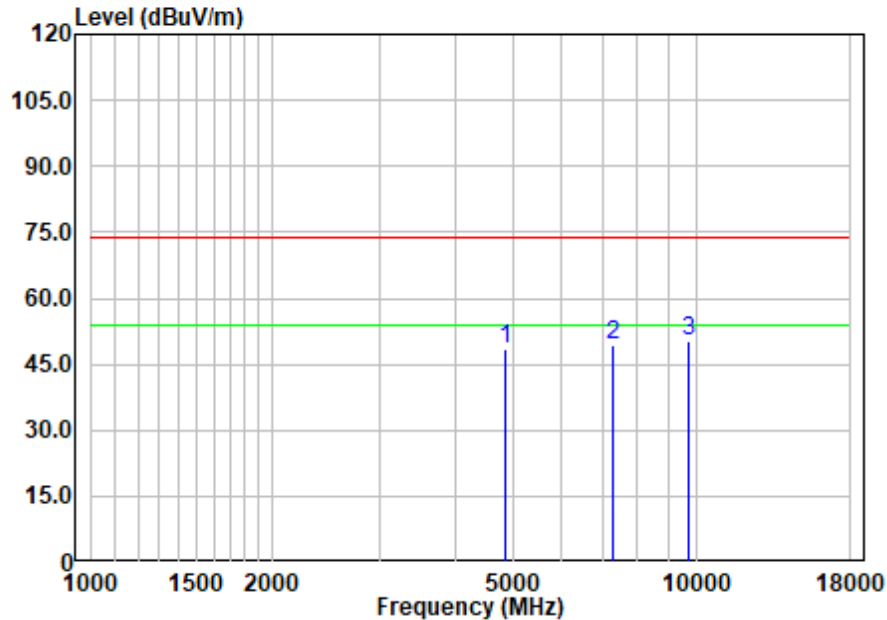
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 81 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      |        | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4844.000 | 0.00   | 42.11  | 48.01 | 48.23  | 74.00  | -25.77 | Peak   |
| 2 | 7266.000 | 0.00   | 42.56  | 46.09 | 49.38  | 74.00  | -24.62 | Peak   |
| 3 | 9688.000 | 0.00   | 42.64  | 43.69 | 50.39  | 74.00  | -23.61 | Peak   |



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)

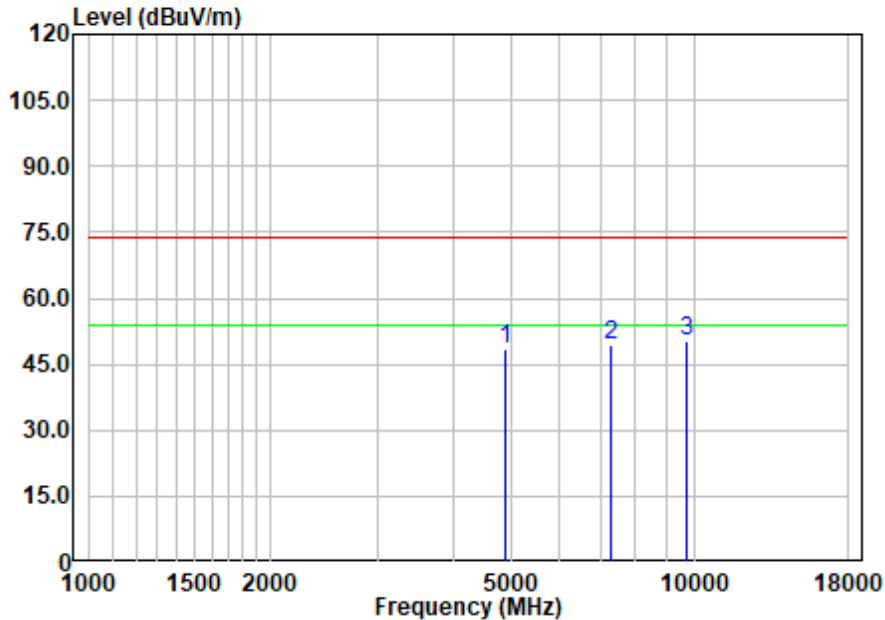
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 48.23 | 48.65  | 74.00  | -25.35 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 46.17 | 49.57  | 74.00  | -24.43 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 43.58 | 50.41  | 74.00  | -23.59 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

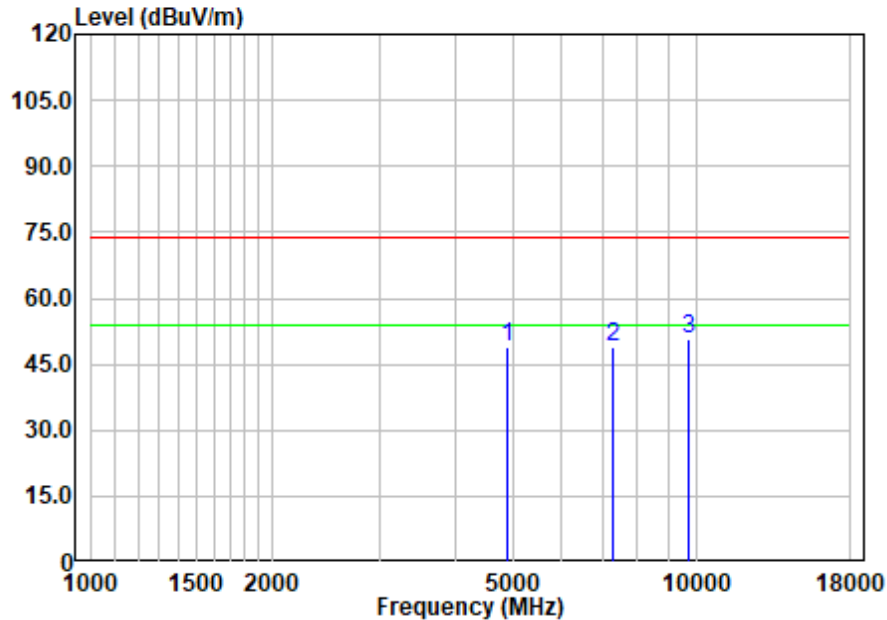
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 83 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:middle



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4874.000 | 0.00   | 41.92  | 48.45 | 48.87  | 74.00  | -25.13 | Peak   |
| 2 | 7311.000 | 0.00   | 42.50  | 45.69 | 49.09  | 74.00  | -24.91 | Peak   |
| 3 | 9748.000 | 0.00   | 42.61  | 43.87 | 50.70  | 74.00  | -23.30 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

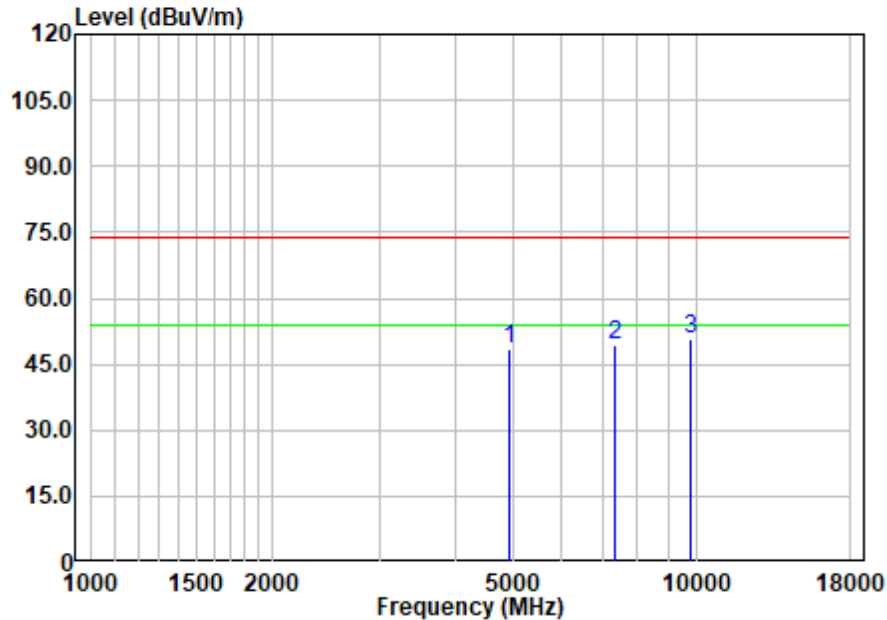
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 84 of 183

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4904.000 | 0.00   | 41.74  | 47.78 | 48.39  | 74.00  | -25.61 | Peak   |
| 2 | 7356.000 | 0.00   | 42.47  | 45.95 | 49.45  | 74.00  | -24.55 | Peak   |
| 3 | 9808.000 | 0.00   | 42.45  | 43.48 | 50.58  | 74.00  | -23.42 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

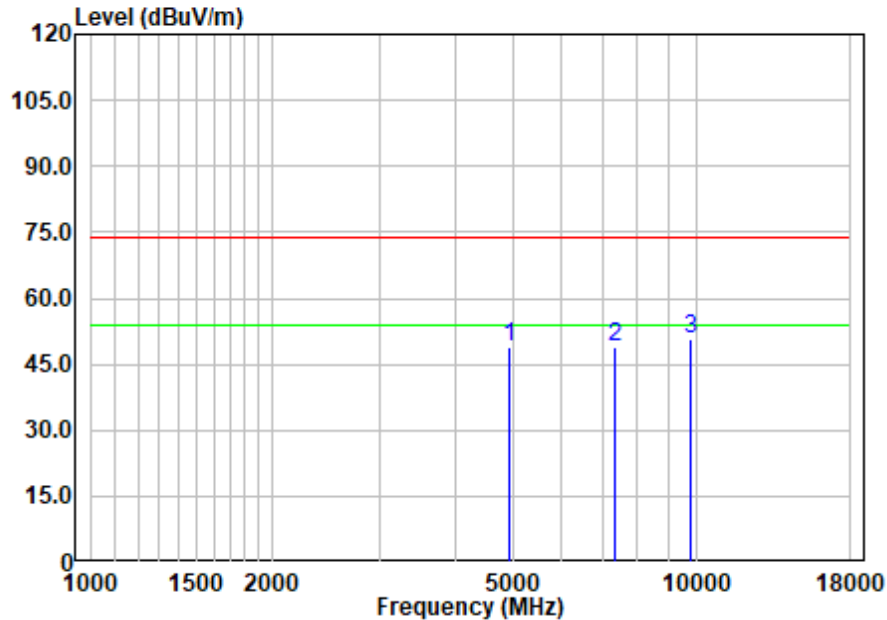
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Compliance Certification Services (Kunshan) Inc.

Report No.: KSCR220800138303

Page: 85 of 183

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



|   |          | Aux    | Preamp | Read  |        | Limit  | Over   |        |
|---|----------|--------|--------|-------|--------|--------|--------|--------|
|   | Freq     | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|   | MHz      | dB     | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 | 4904.000 | 0.00   | 41.74  | 48.31 | 48.92  | 74.00  | -25.08 | Peak   |
| 2 | 7356.000 | 0.00   | 42.47  | 45.60 | 49.10  | 74.00  | -24.90 | Peak   |
| 3 | 9808.000 | 0.00   | 42.45  | 43.76 | 50.86  | 74.00  | -23.14 | Peak   |



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2208001383AT

## 9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2208001383AT



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)**

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 10 Appendix

### Appendix for KSCR2208001383AT

#### 1. Duty Cycle

##### 1.1 Ant1

##### 1.1.1 Test Result

| Ant1           |         |                 |           |             |                |                                   |                       |
|----------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode           | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11b        | SISO    | 2412            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2462            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
| 802.11g        | SISO    | 2412            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2462            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
| 802.11n (HT20) | MIMO    | 2412            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2462            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
| 802.11n (HT40) | MIMO    | 2422            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2437            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |
|                |         | 2452            | 100.000   | 100.000     | 100.00         | 0.00                              | 0.00                  |



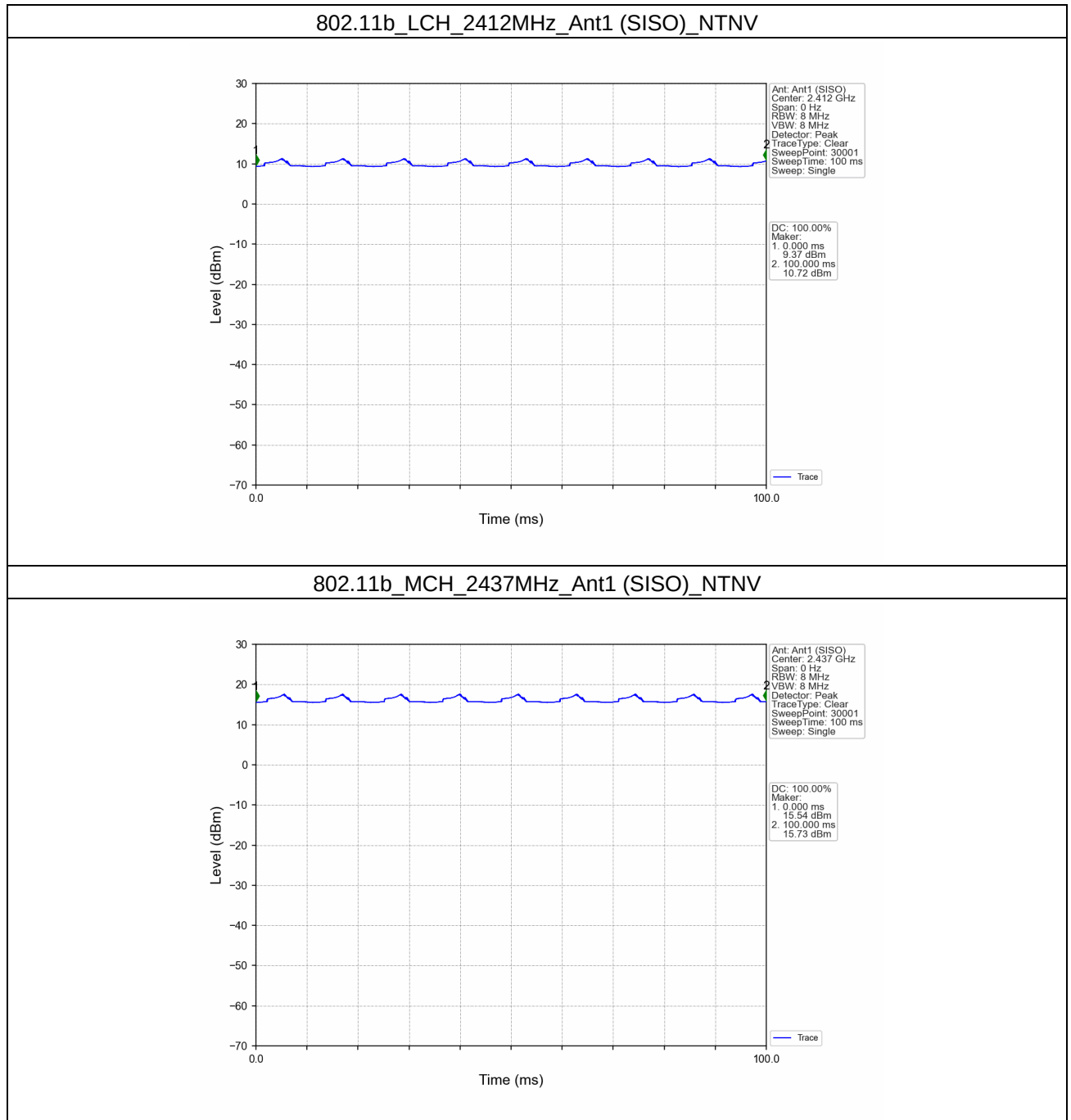
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 1.1.2 Test Graph



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

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

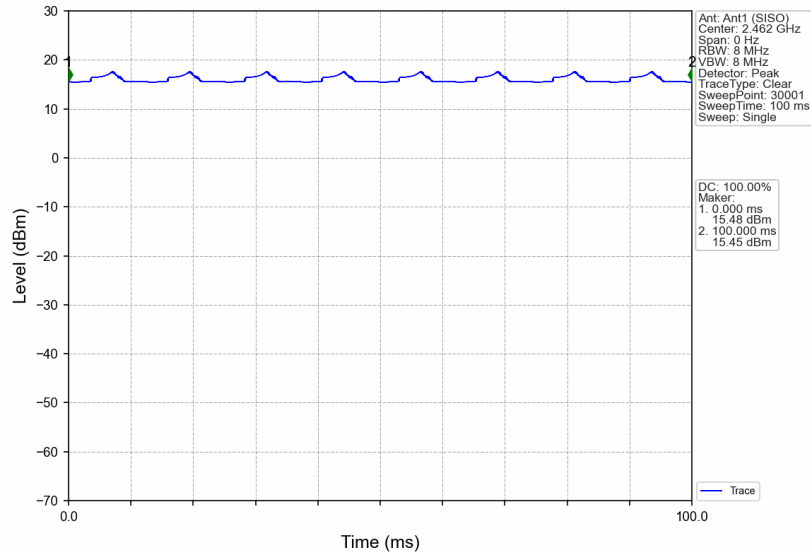
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

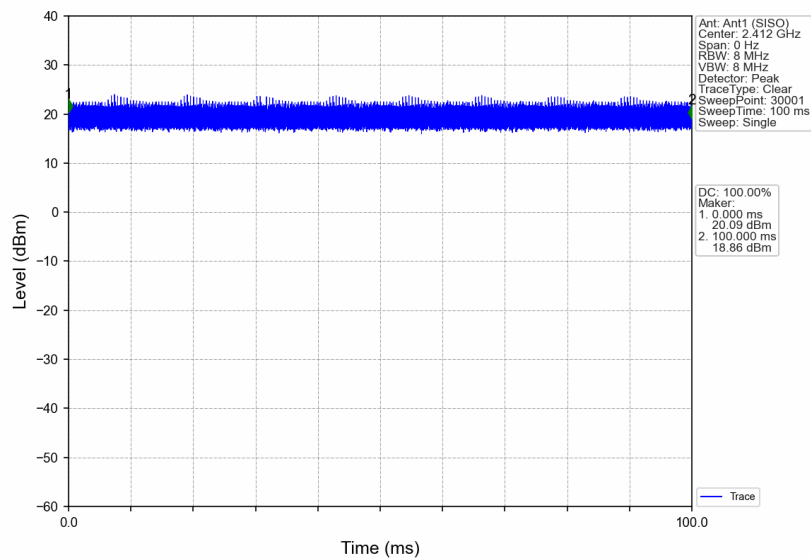
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



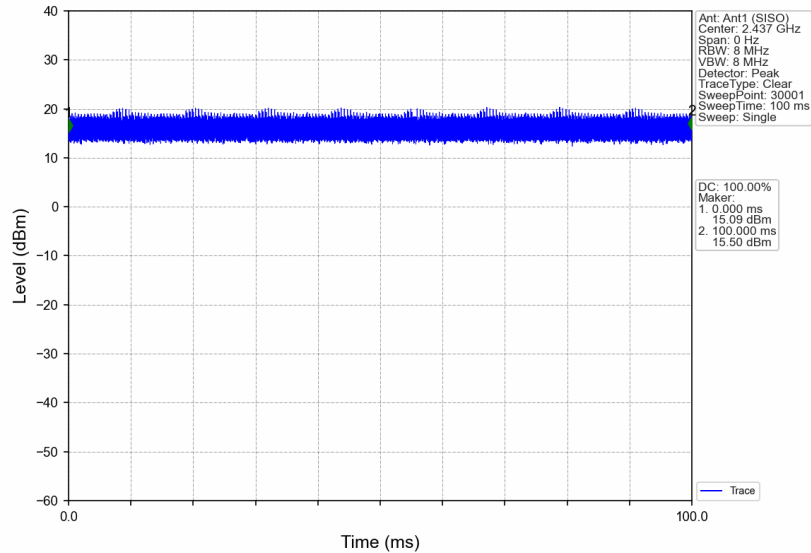
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

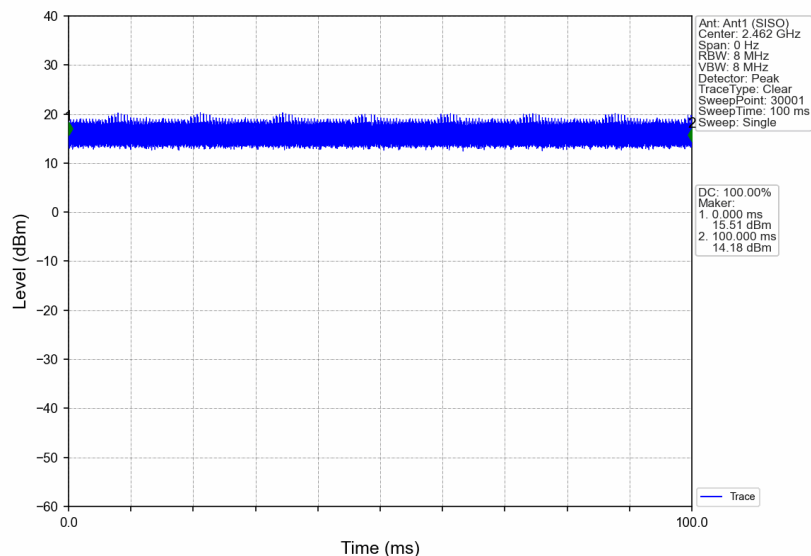
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



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

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

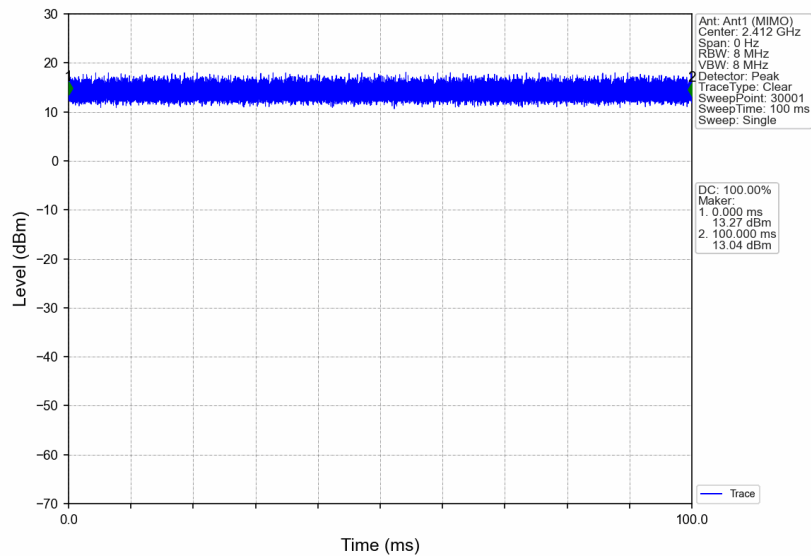
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

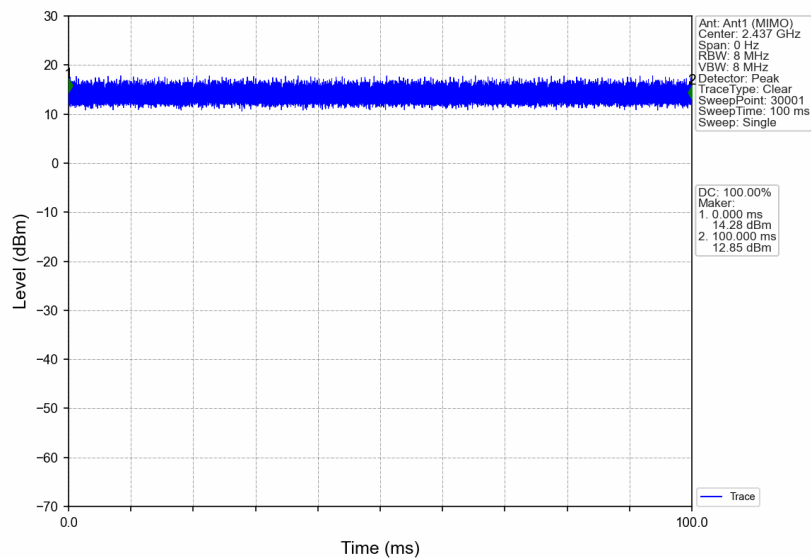
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

802.11n(HT20)\_LCH\_2412MHz\_Ant1 (MIMO)\_NTNV



802.11n(HT20)\_MCH\_2437MHz\_Ant1 (MIMO)\_NTNV



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

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

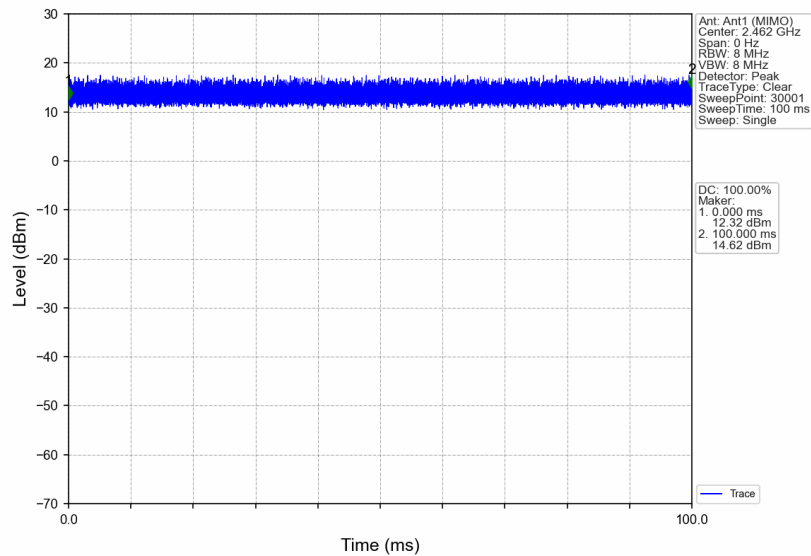
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

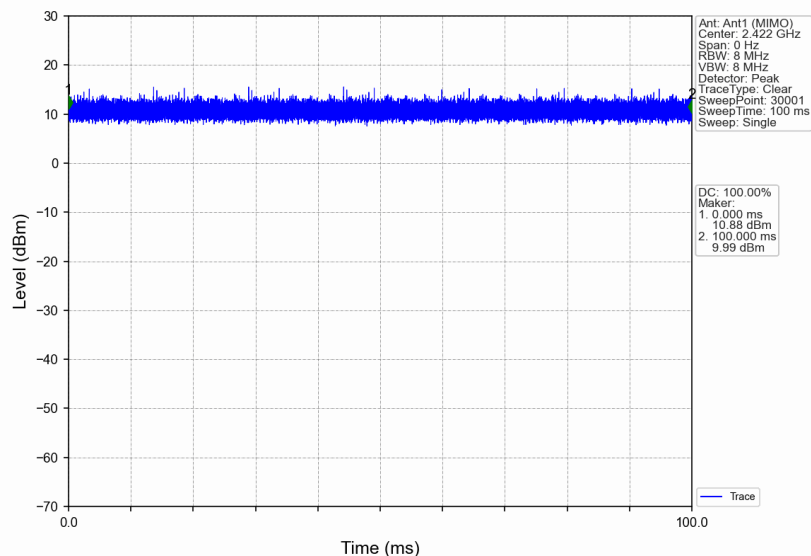
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

802.11n(HT20)\_HCH\_2462MHz\_Ant1 (MIMO)\_NTNV



802.11n(HT40)\_LCH\_2422MHz\_Ant1 (MIMO)\_NTNV



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888

f(86-512)57370818

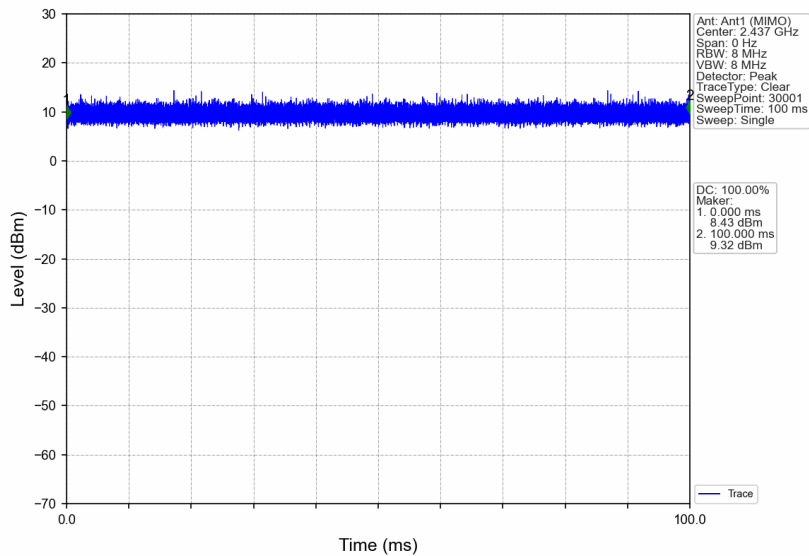
[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888

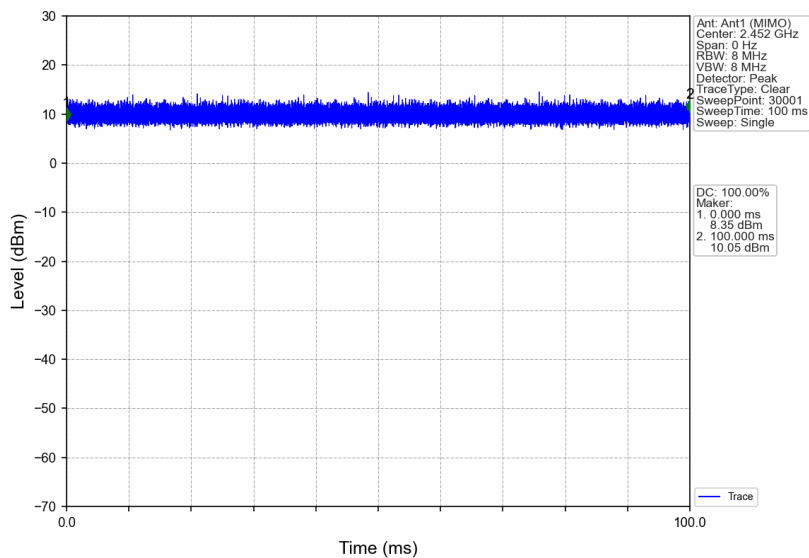
f(86-512)57370818

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

802.11n(HT40)\_MCH\_2437MHz\_Ant1 (MIMO)\_NTNV



802.11n(HT40)\_HCH\_2452MHz\_Ant1 (MIMO)\_NTNV



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888

f(86-512)57370818

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888

f(86-512)57370818

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

## 2. Bandwidth

### 2.1 OBW

#### 2.1.1 Test Result

| Mode           | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) | Verdict |
|----------------|---------|-----------------|-----|------------------------------|---------|
|                |         |                 |     | Result                       |         |
| 802.11b        | SISO    | 2412            | 1   | 14.534                       | Pass    |
|                |         |                 | 2   | 14.540                       | Pass    |
|                |         | 2437            | 1   | 14.572                       | Pass    |
|                |         |                 | 2   | 14.524                       | Pass    |
|                |         | 2462            | 1   | 14.596                       | Pass    |
|                |         |                 | 2   | 14.539                       | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 17.156                       | Pass    |
|                |         |                 | 2   | 16.944                       | Pass    |
|                |         | 2437            | 1   | 17.109                       | Pass    |
|                |         |                 | 2   | 16.846                       | Pass    |
|                |         | 2462            | 1   | 17.115                       | Pass    |
|                |         |                 | 2   | 16.847                       | Pass    |
| 802.11n (HT20) | MIMO    | 2412            | 1   | 18.224                       | Pass    |
|                |         |                 | 2   | 18.212                       | Pass    |
|                |         | 2437            | 1   | 18.218                       | Pass    |
|                |         |                 | 2   | 18.241                       | Pass    |
|                |         | 2462            | 1   | 18.224                       | Pass    |
|                |         |                 | 2   | 18.238                       | Pass    |
| 802.11n (HT40) | MIMO    | 2422            | 1   | 36.478                       | Pass    |
|                |         |                 | 2   | 36.426                       | Pass    |
|                |         | 2437            | 1   | 36.477                       | Pass    |
|                |         |                 | 2   | 36.412                       | Pass    |
|                |         | 2452            | 1   | 36.455                       | Pass    |
|                |         |                 | 2   | 36.416                       | Pass    |



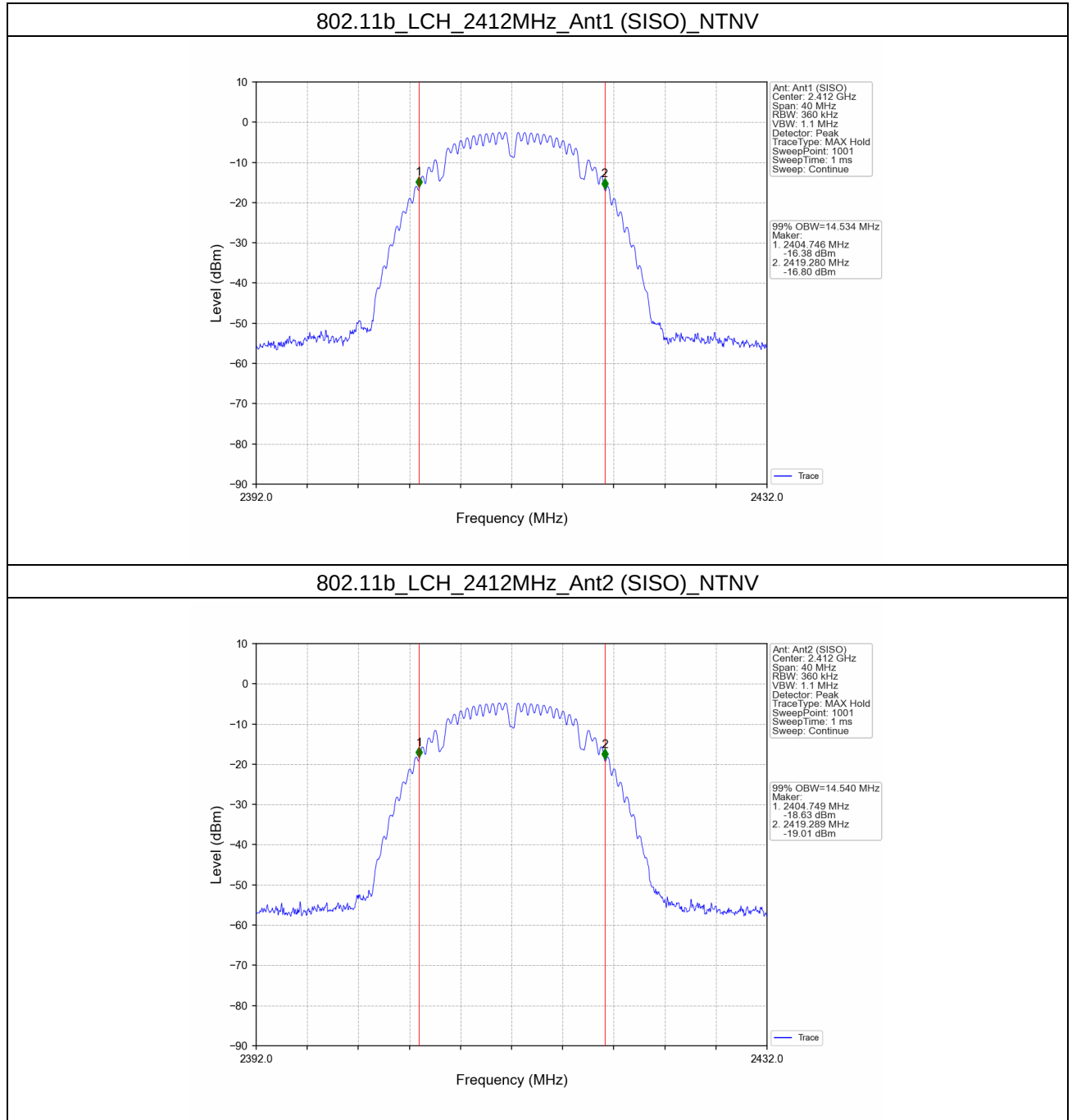
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 2.1.2 Test Graph



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)

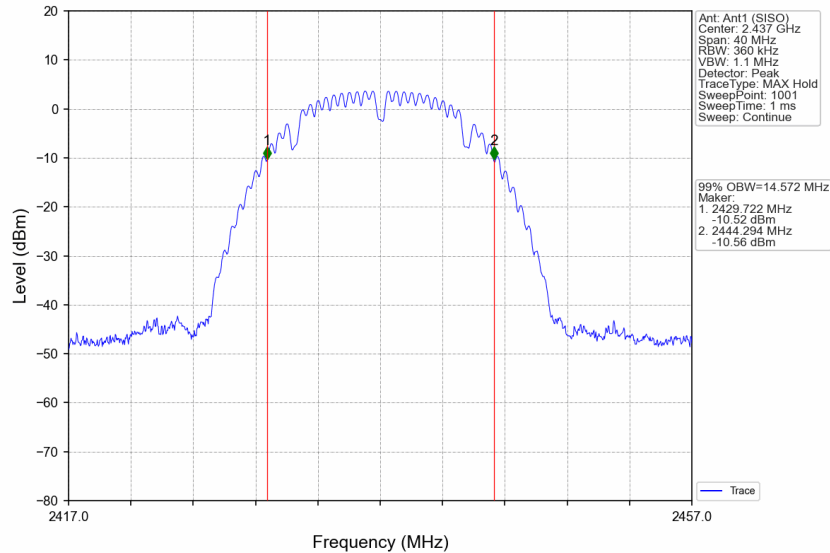
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

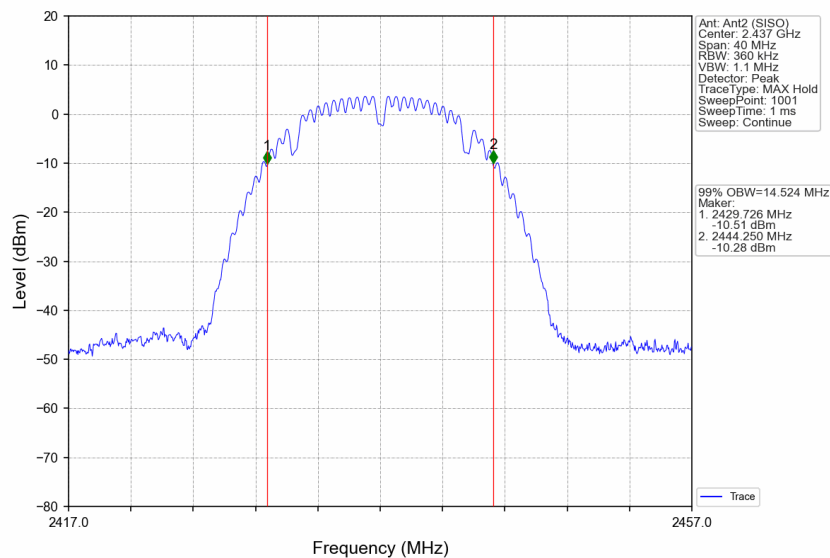
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



### 802.11b\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



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

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

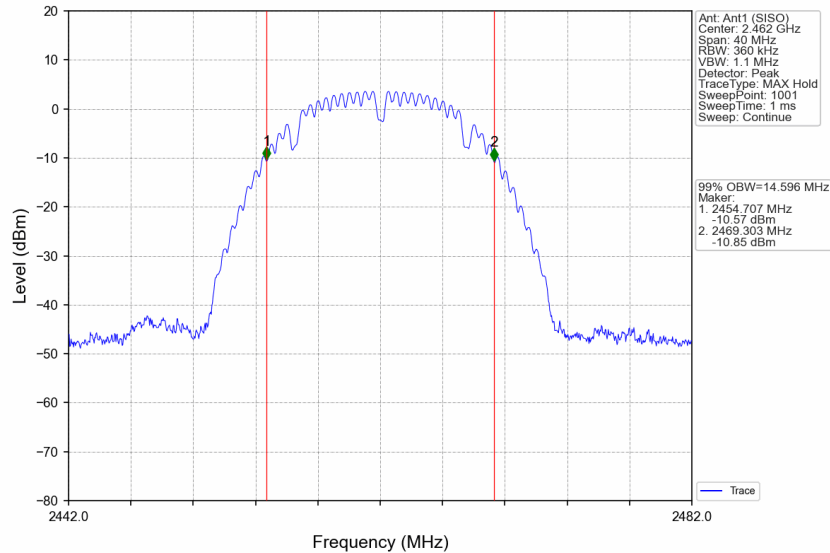
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

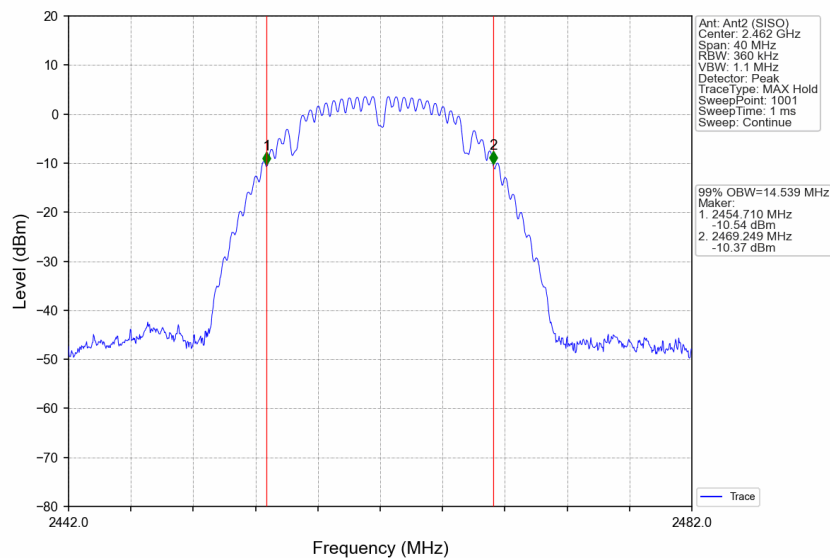
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



### 802.11b\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



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

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

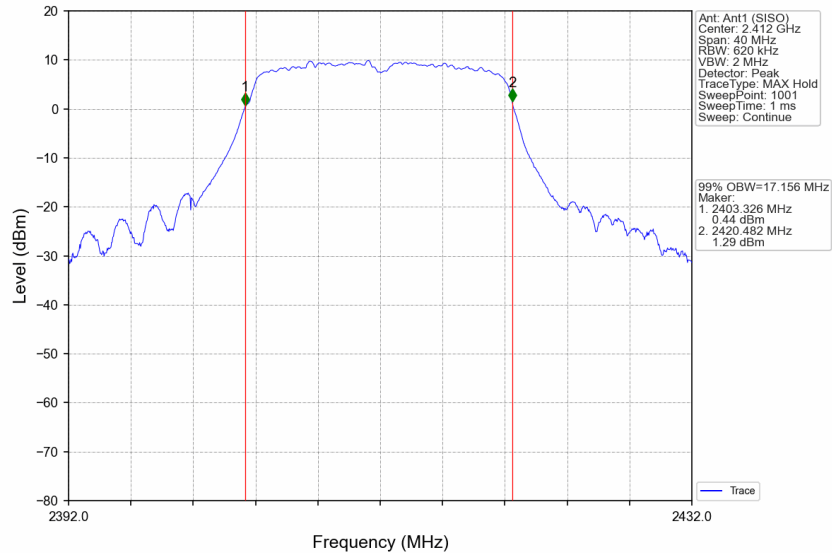
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

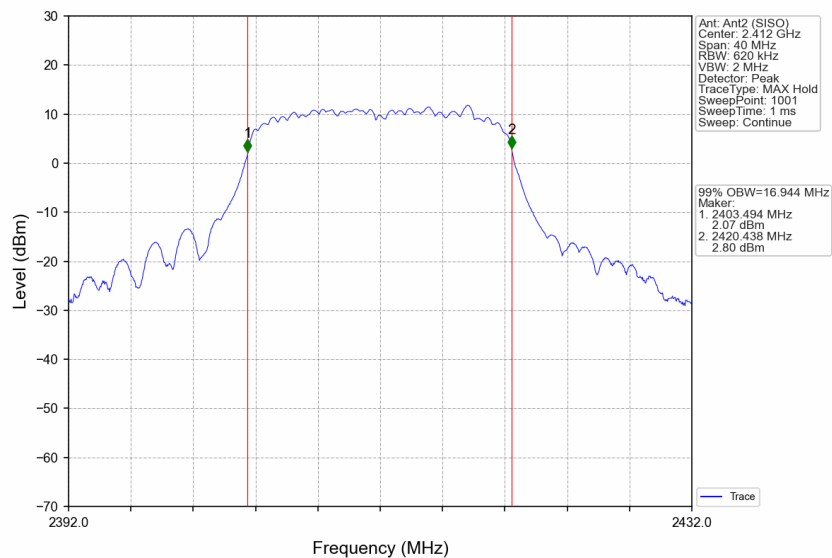
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



802.11g\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



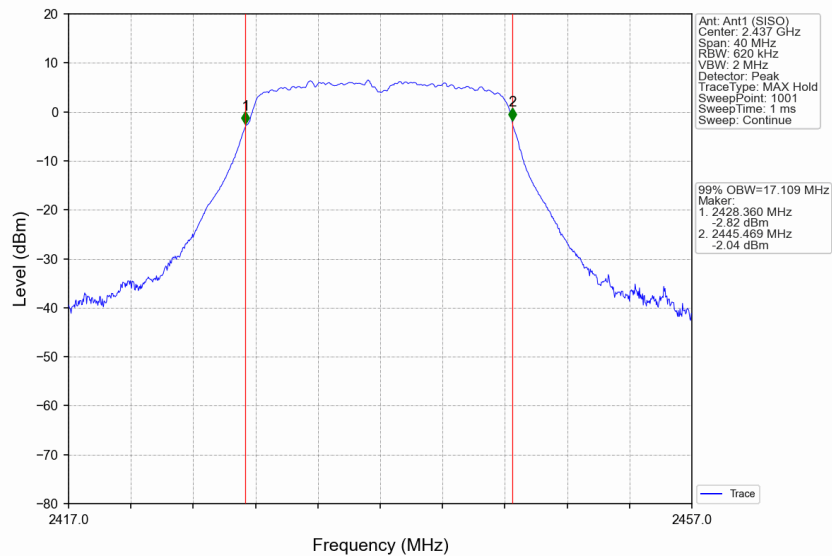
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

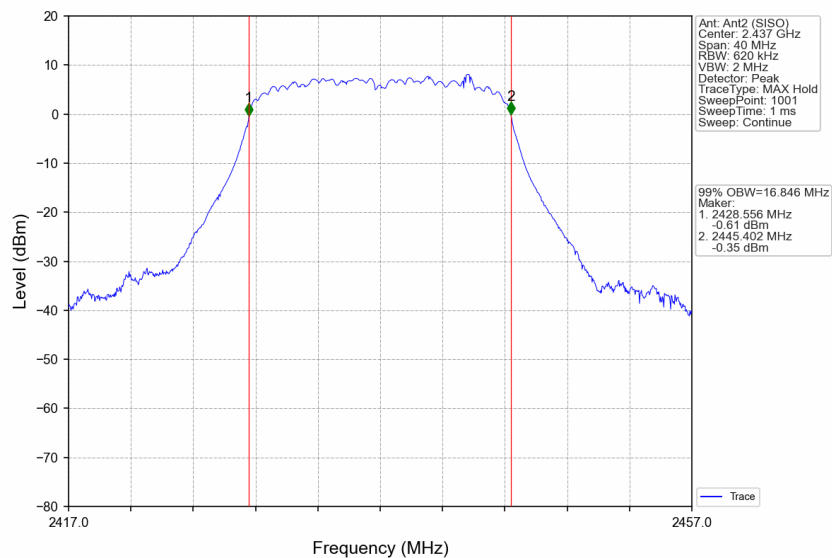
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



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

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

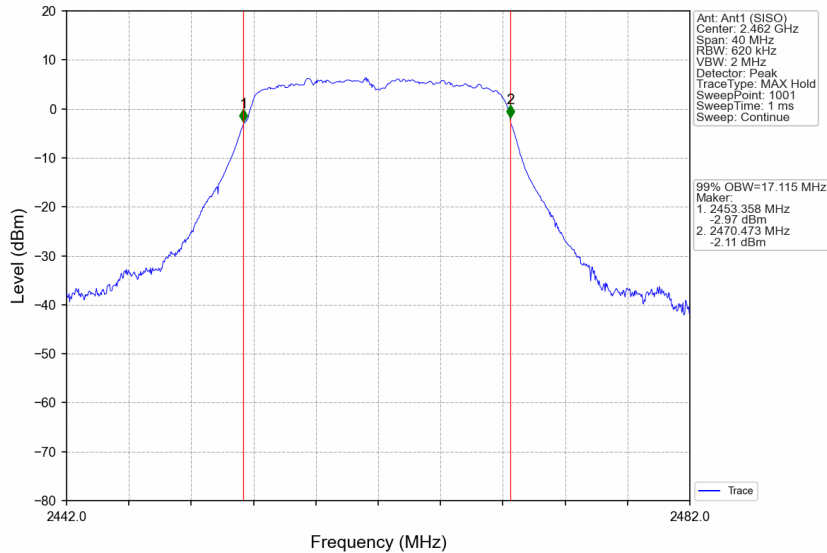
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

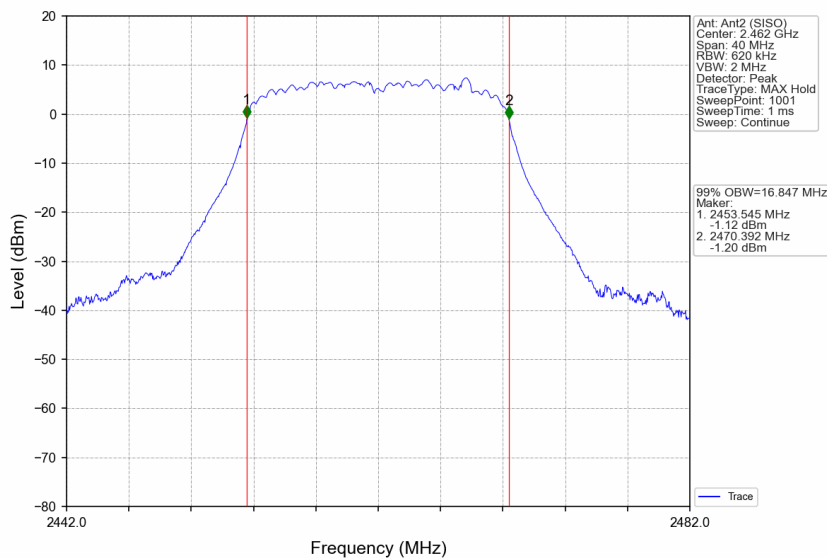
t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



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

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

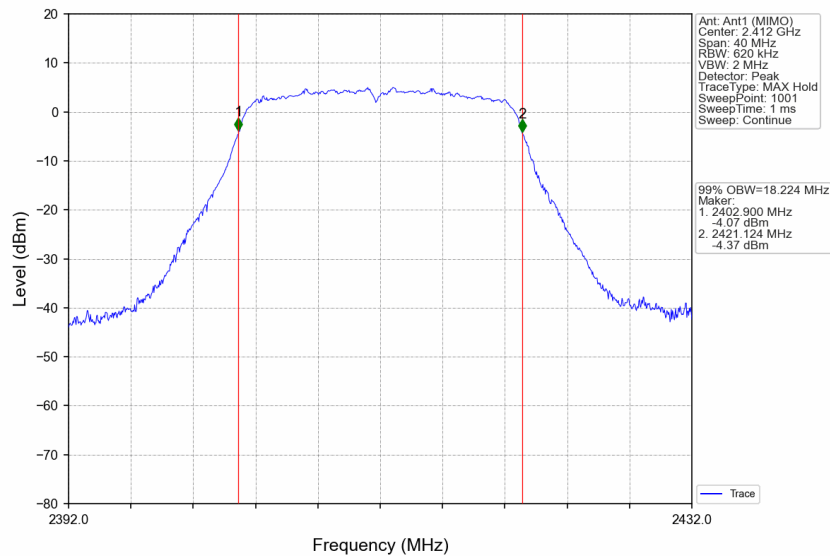
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

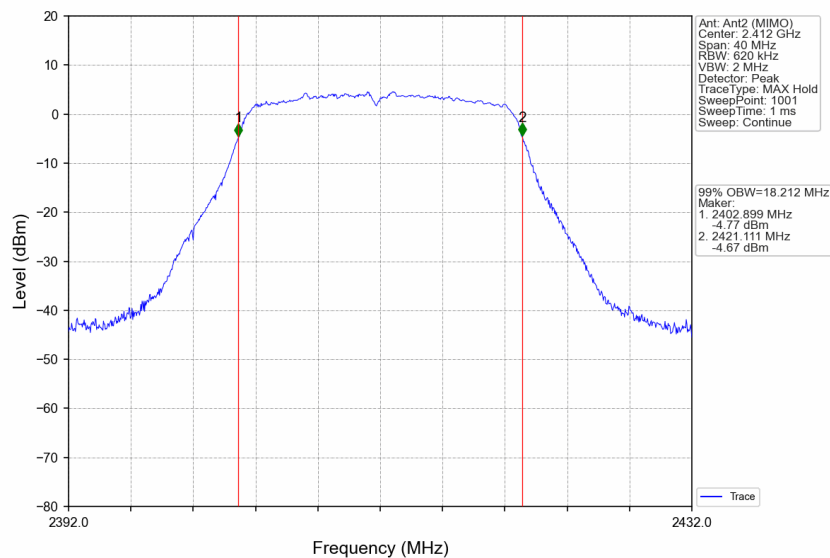
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT20)\_LCH\_2412MHz\_Ant2 (MIMO)\_NTNV



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

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

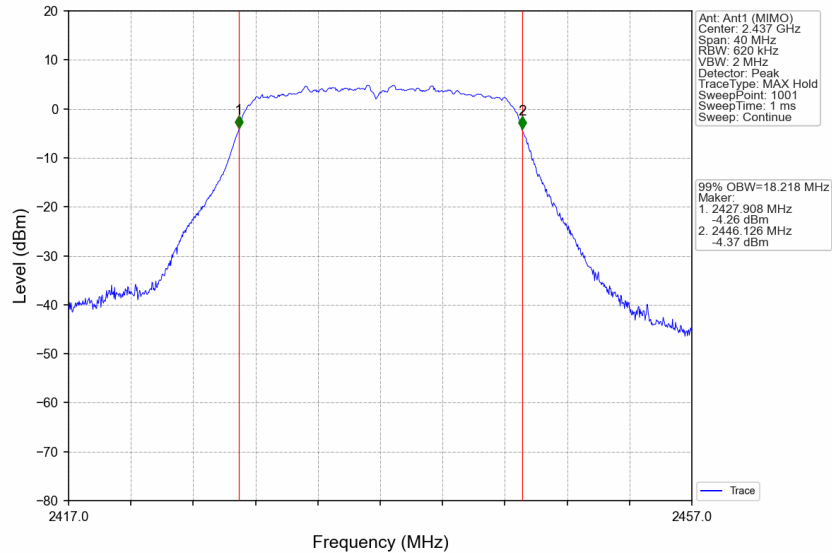
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

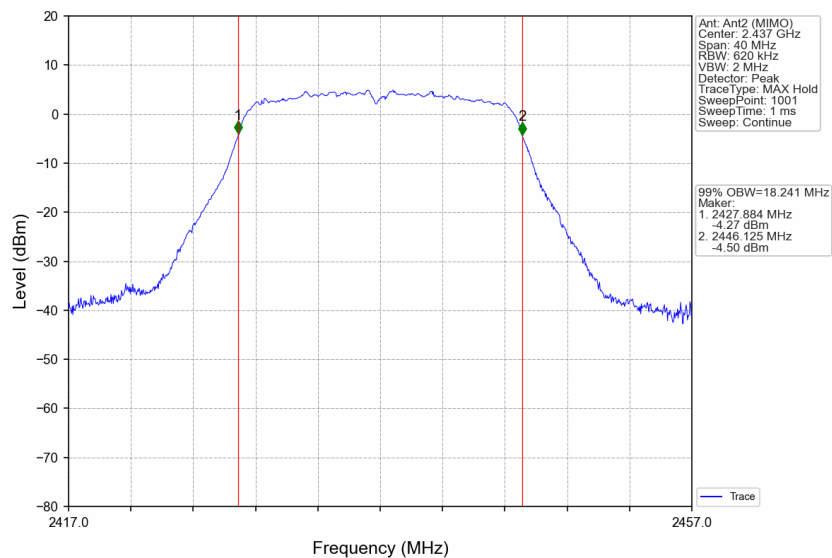
t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT20)\_MCH\_2437MHz\_Ant2 (MIMO)\_NTNV



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

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

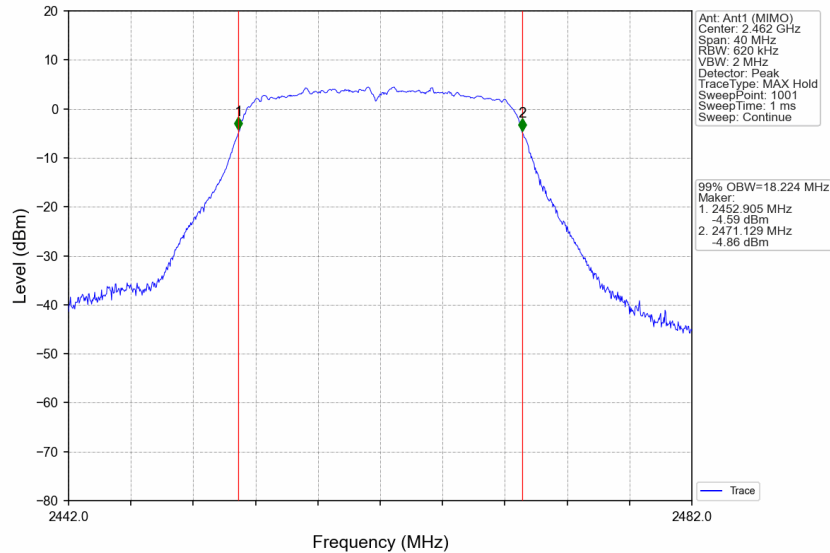
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

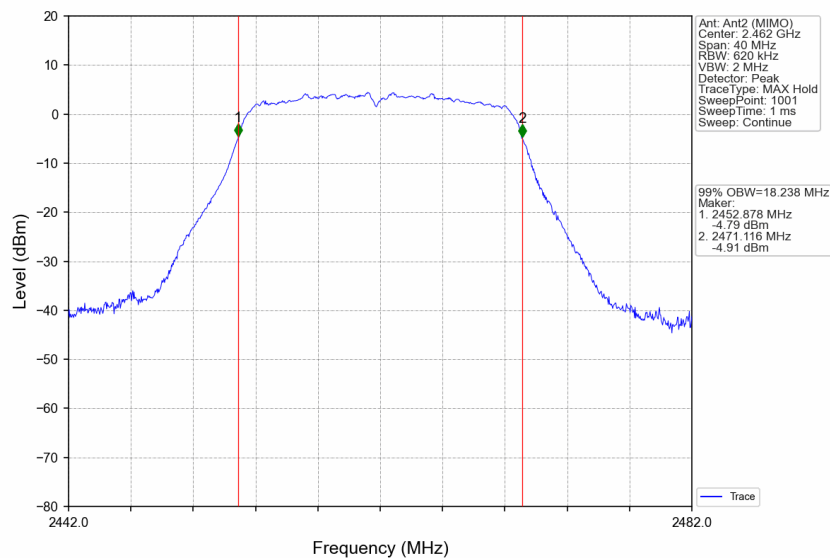
t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT20)\_HCH\_2462MHz\_Ant2 (MIMO)\_NTNV



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

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

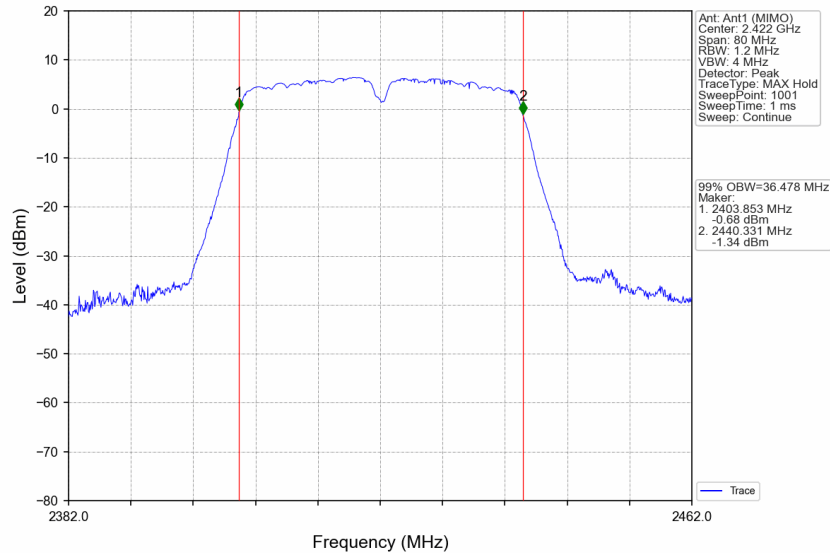
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

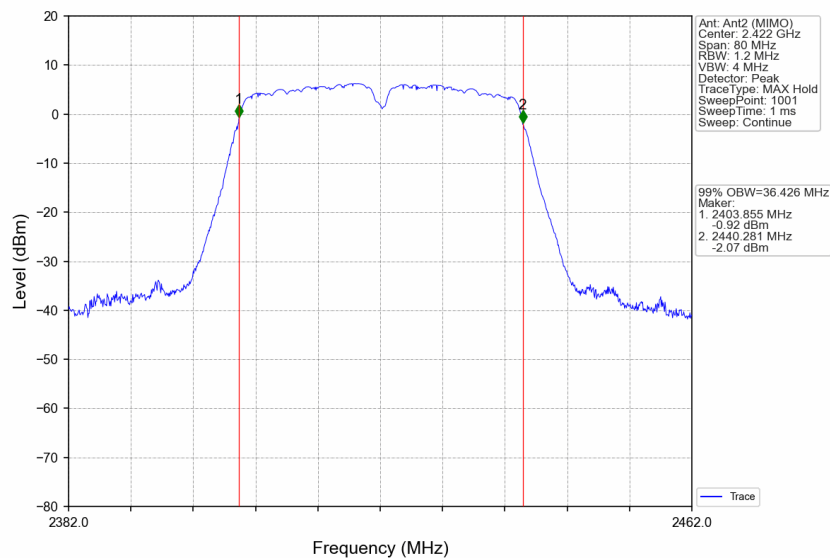
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT40)\_LCH\_2422MHz\_Ant2 (MIMO)\_NTNV



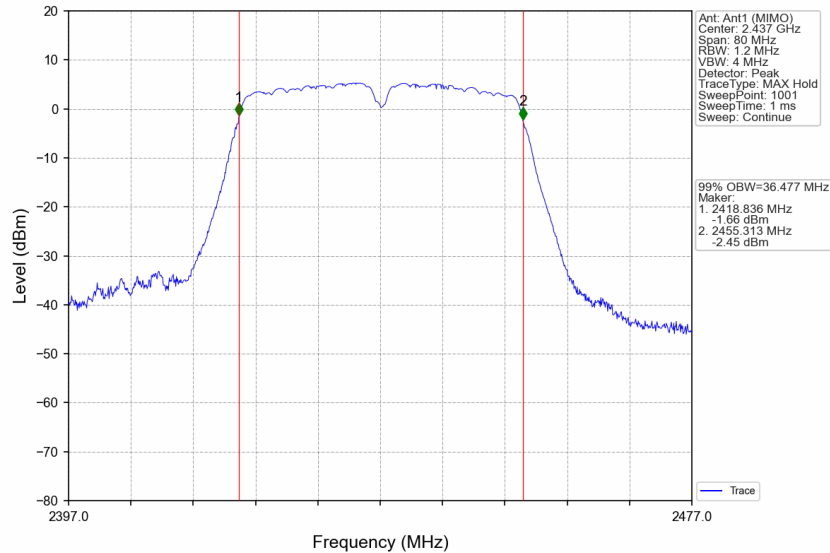
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

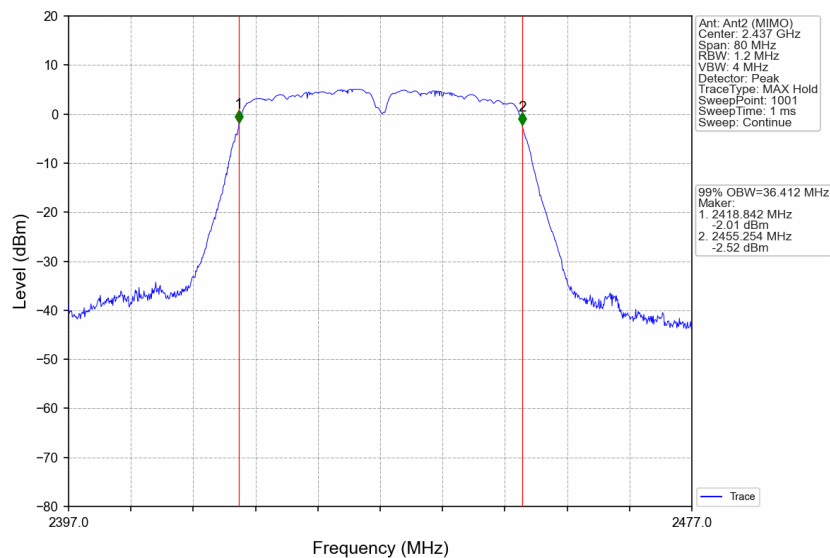
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

802.11n(HT40)\_MCH\_2437MHz\_Ant1 (MIMO)\_NTNV



802.11n(HT40)\_MCH\_2437MHz\_Ant2 (MIMO)\_NTNV



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

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

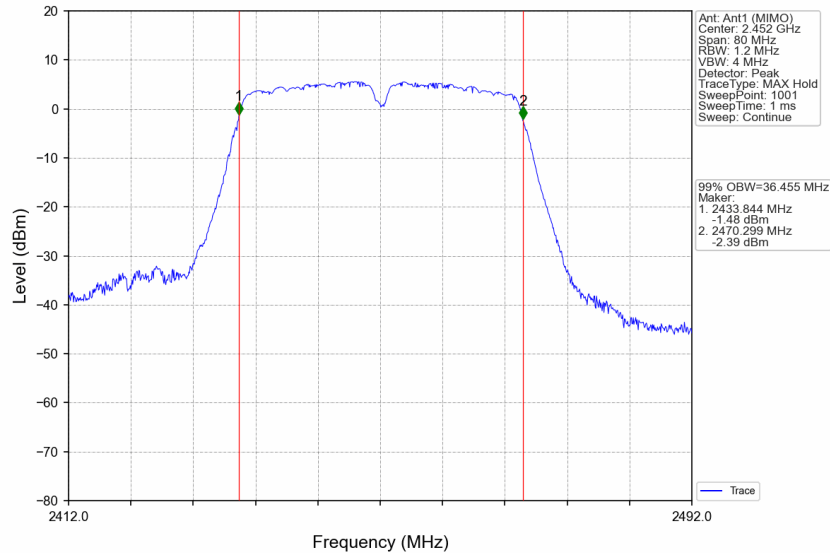
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

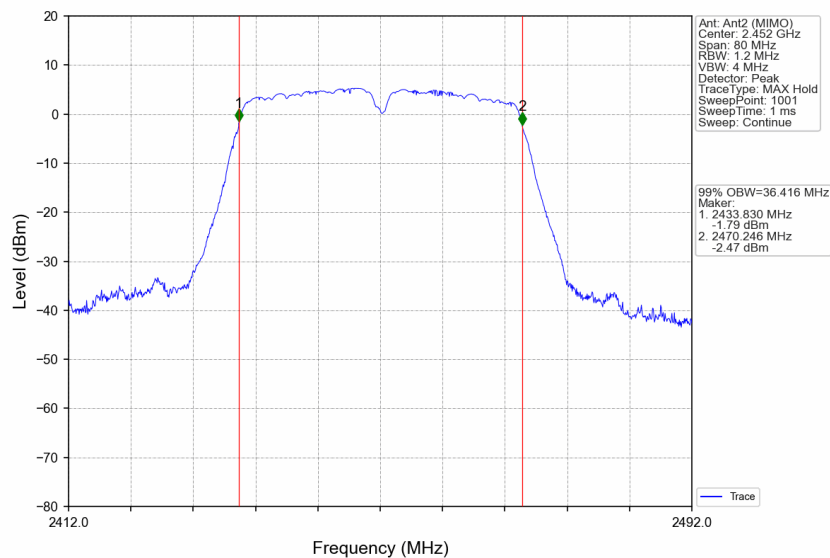
t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

802.11n(HT40)\_HCH\_2452MHz\_Ant1 (MIMO)\_NTNV



802.11n(HT40)\_HCH\_2452MHz\_Ant2 (MIMO)\_NTNV



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 2.2 6dB BW

#### 2.2.1 Test Result

| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11b        | SISO    | 2412            | 1   | 10.170              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 10.168              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 10.170              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 10.168              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 10.170              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 10.167              | $\geq 0.5$ | Pass    |
| 802.11g        | SISO    | 2412            | 1   | 16.455              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 16.443              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 16.455              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 16.443              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 16.457              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 16.442              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | MIMO    | 2412            | 1   | 17.647              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 17.652              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 17.650              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 17.643              | $\geq 0.5$ | Pass    |
|                |         | 2462            | 1   | 17.656              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 17.643              | $\geq 0.5$ | Pass    |
| 802.11n (HT40) | MIMO    | 2422            | 1   | 36.424              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 36.407              | $\geq 0.5$ | Pass    |
|                |         | 2437            | 1   | 36.439              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 36.424              | $\geq 0.5$ | Pass    |
|                |         | 2452            | 1   | 36.423              | $\geq 0.5$ | Pass    |
|                |         |                 | 2   | 36.425              | $\geq 0.5$ | Pass    |



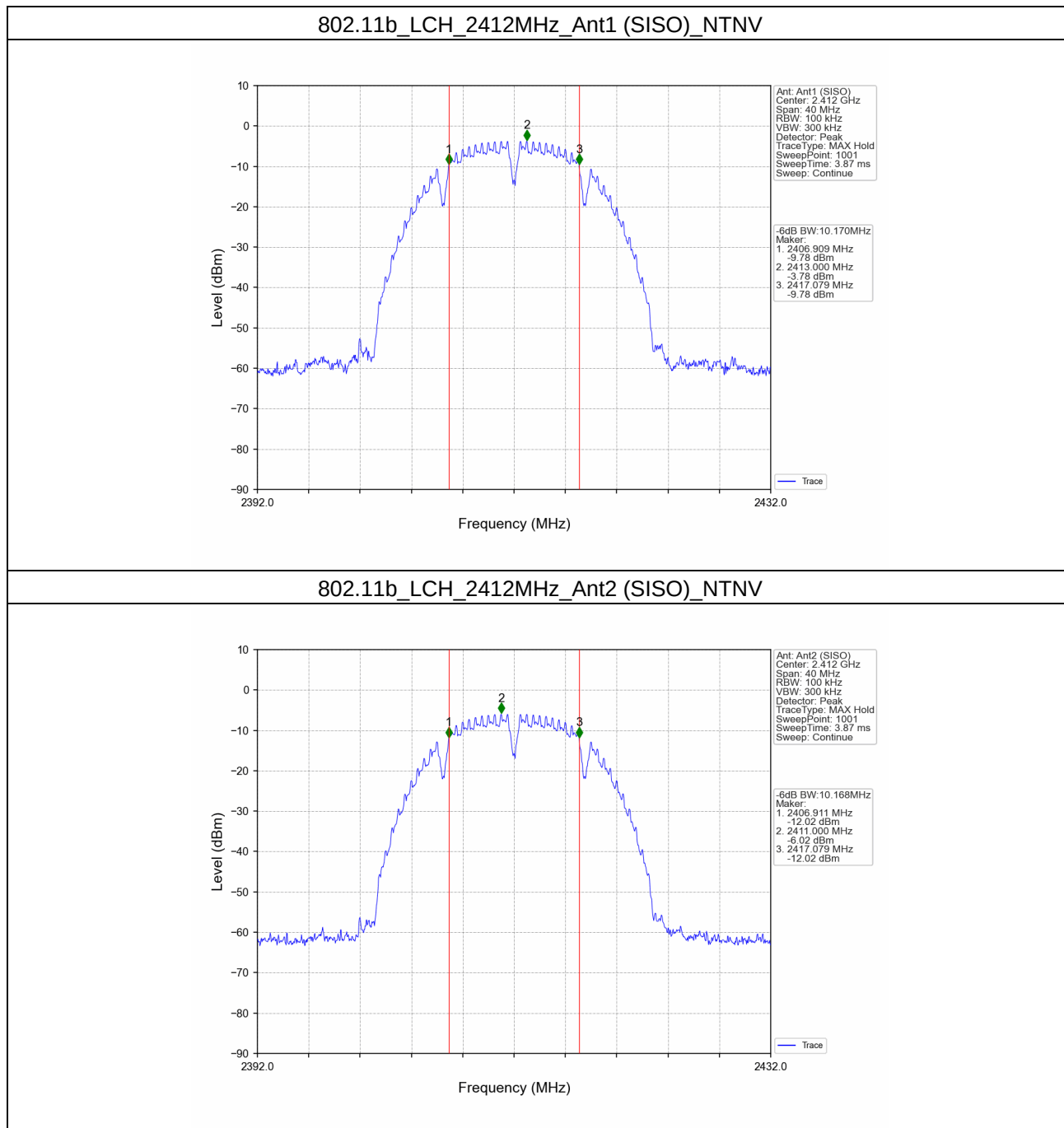
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

### 2.2.2 Test Graph



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)

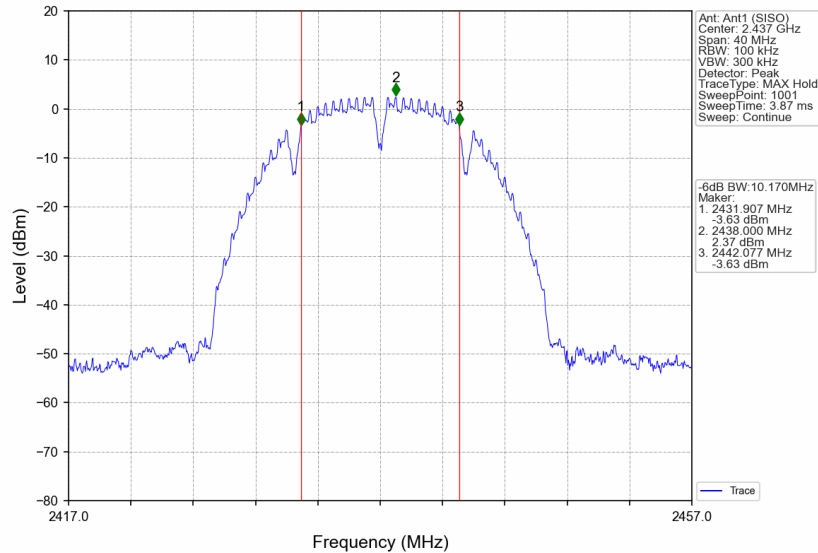
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

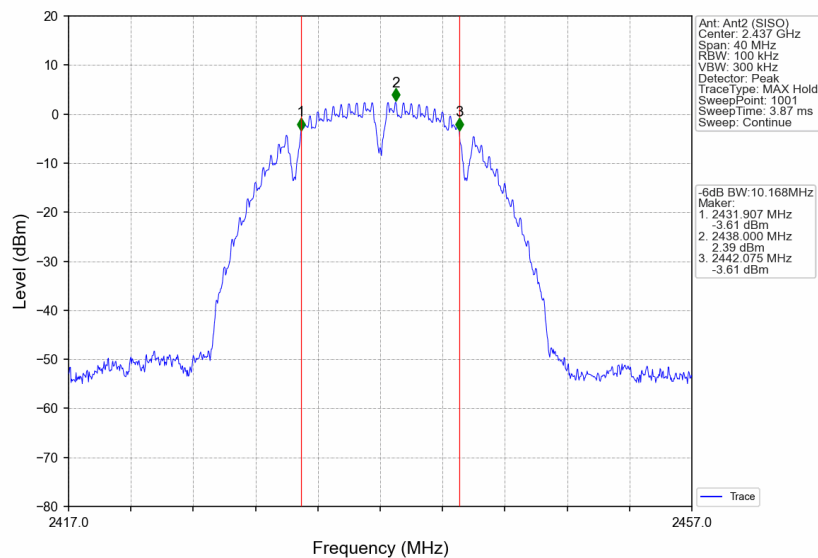
t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



### 802.11b\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



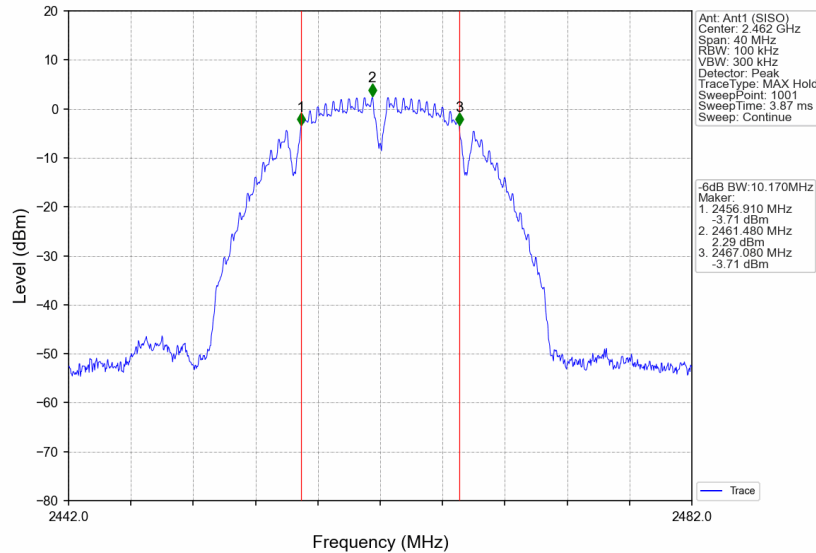
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

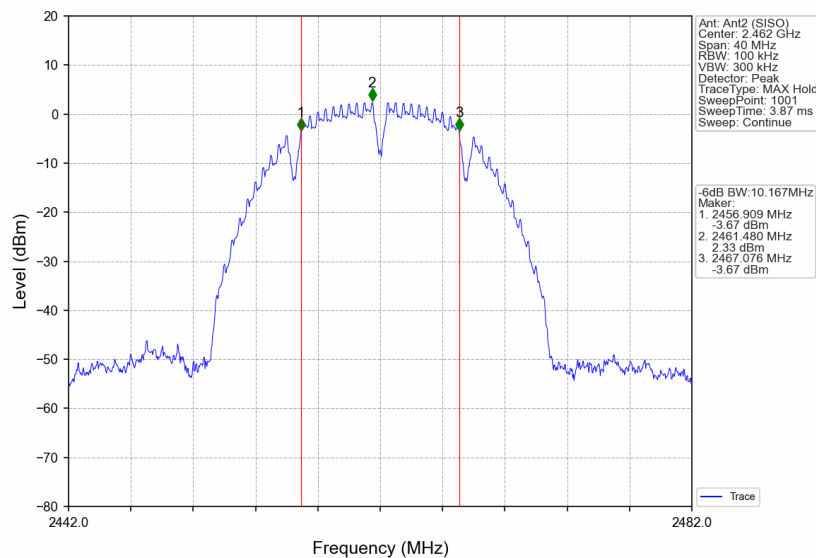
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



### 802.11b\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



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)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888

f(86-512)57370818

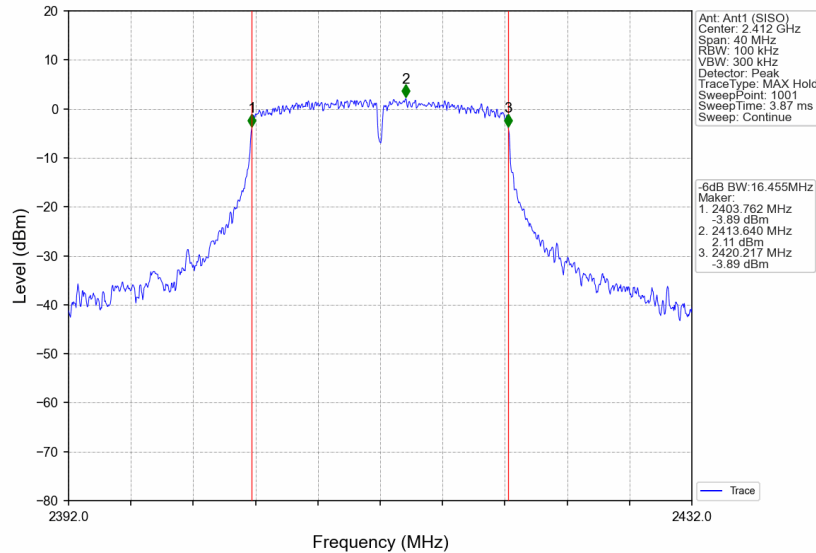
[www.ssgroup.com.cn](http://www.ssgroup.com.cn)

t(86-512)57355888

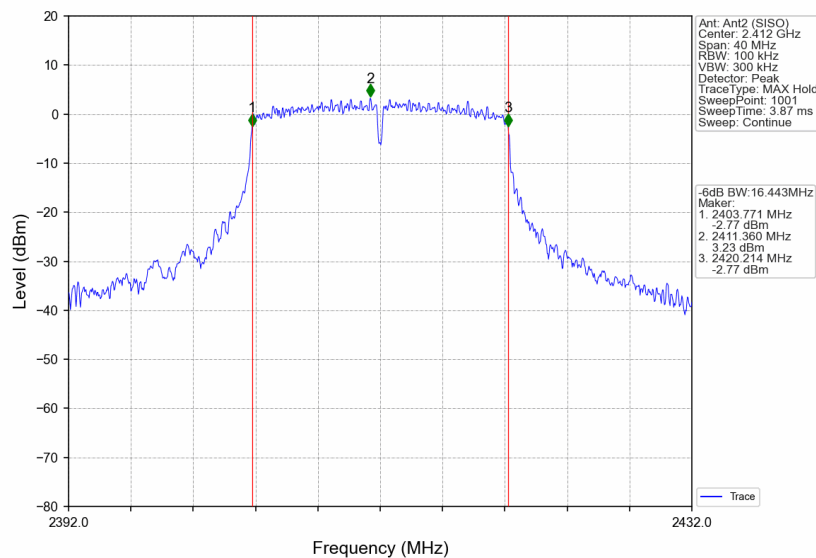
f(86-512)57370818

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

### 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



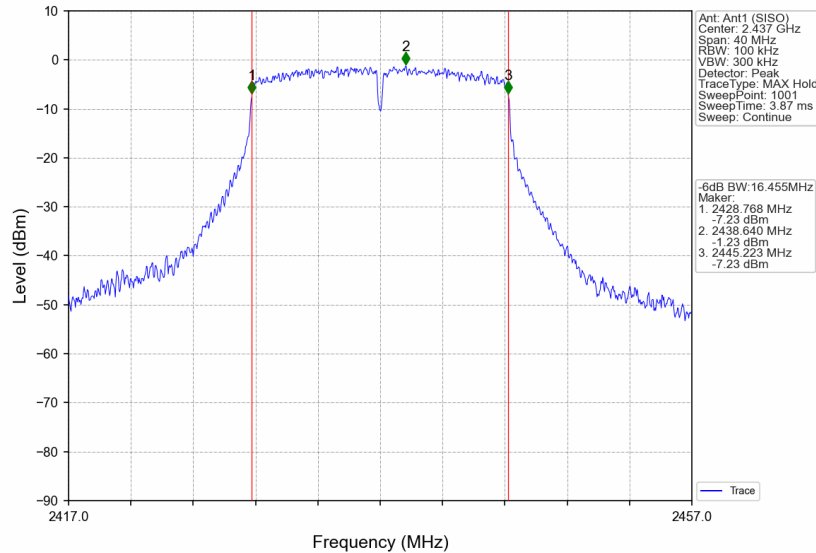
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

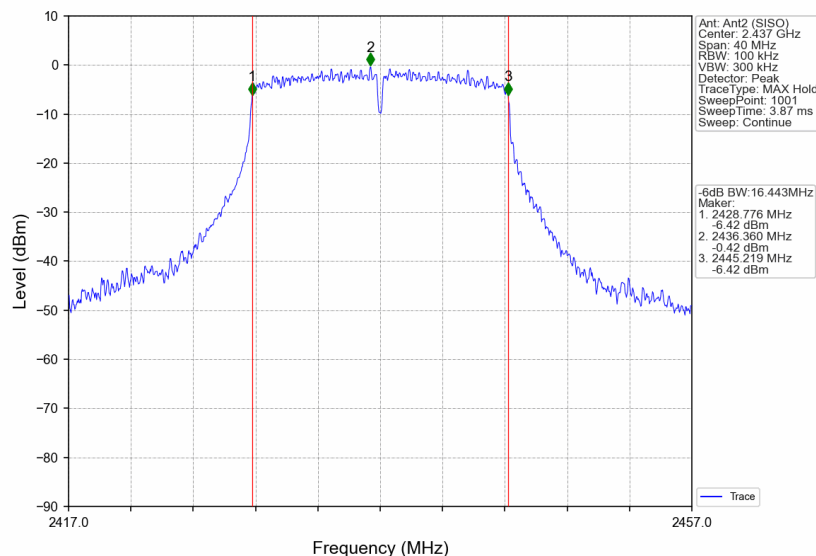
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



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

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

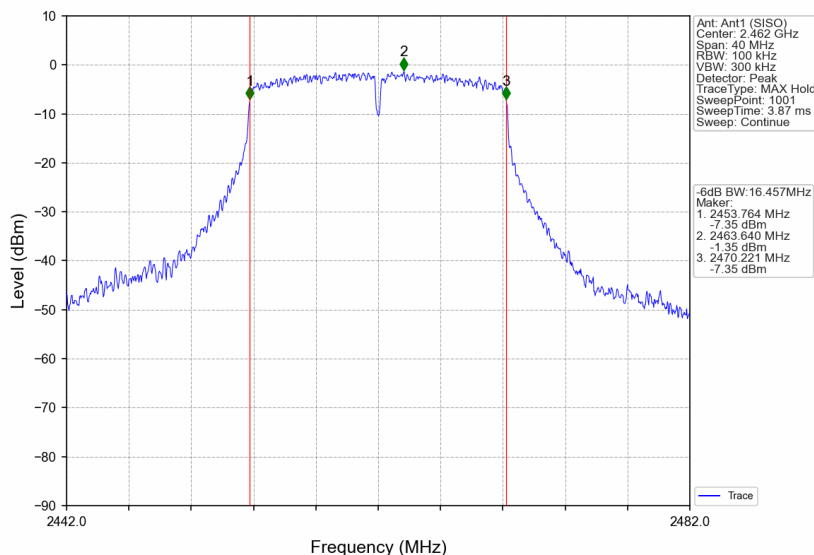
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

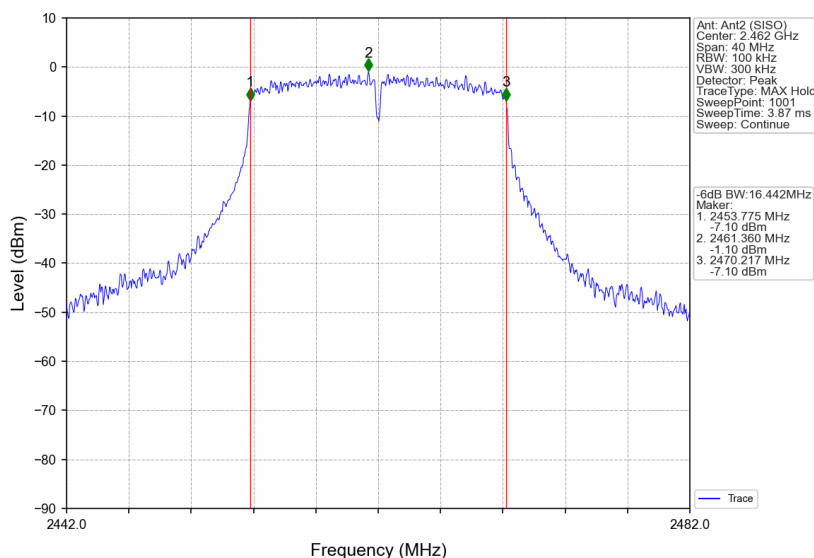
t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



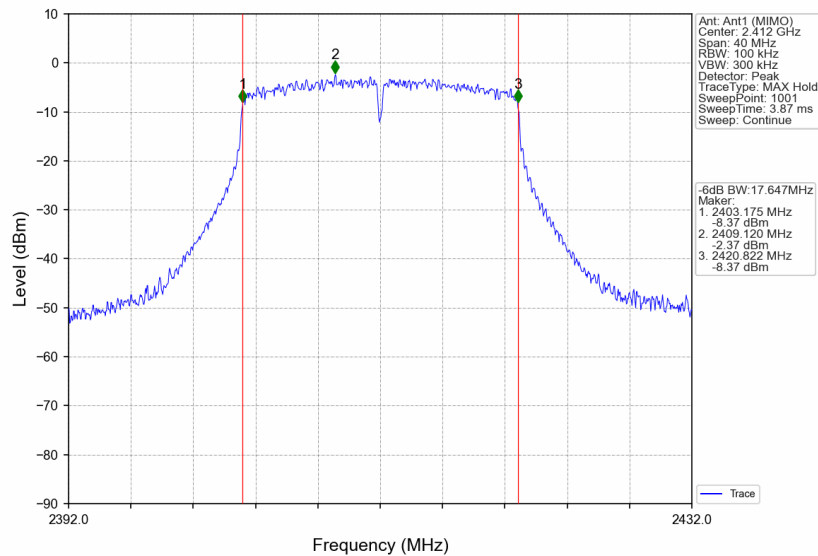
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

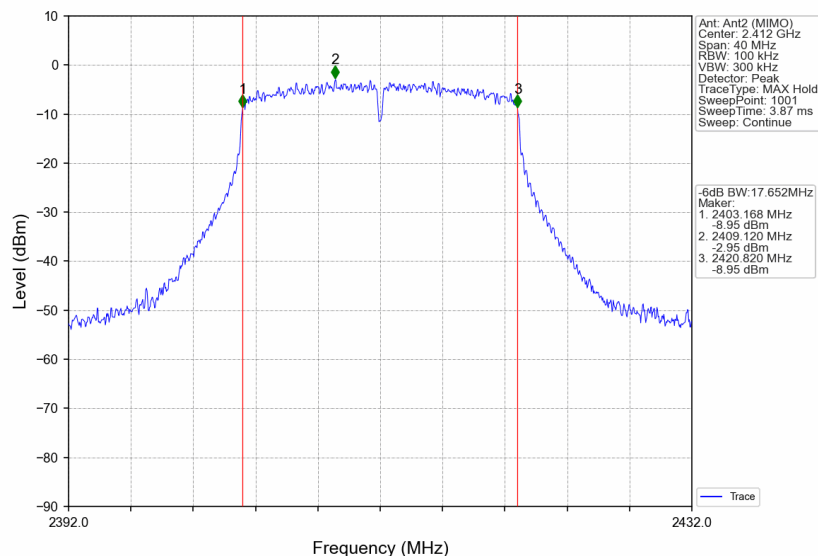
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT20)\_LCH\_2412MHz\_Ant2 (MIMO)\_NTNV



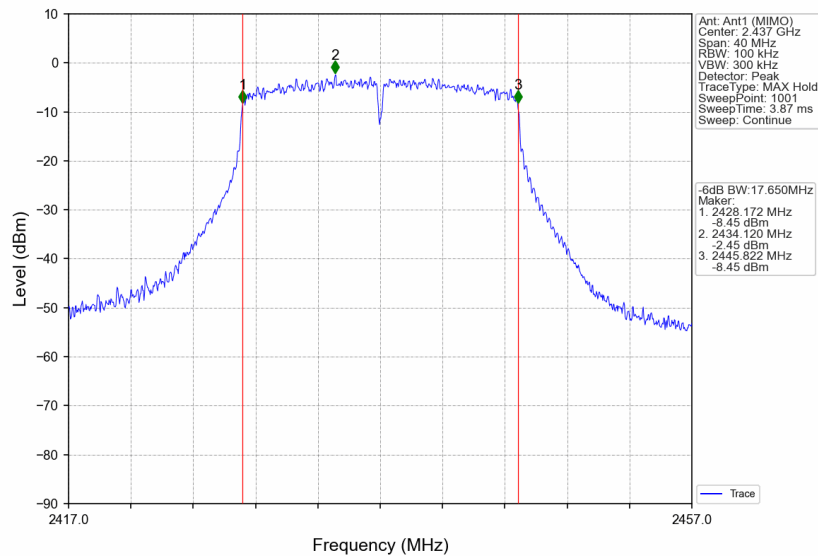
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

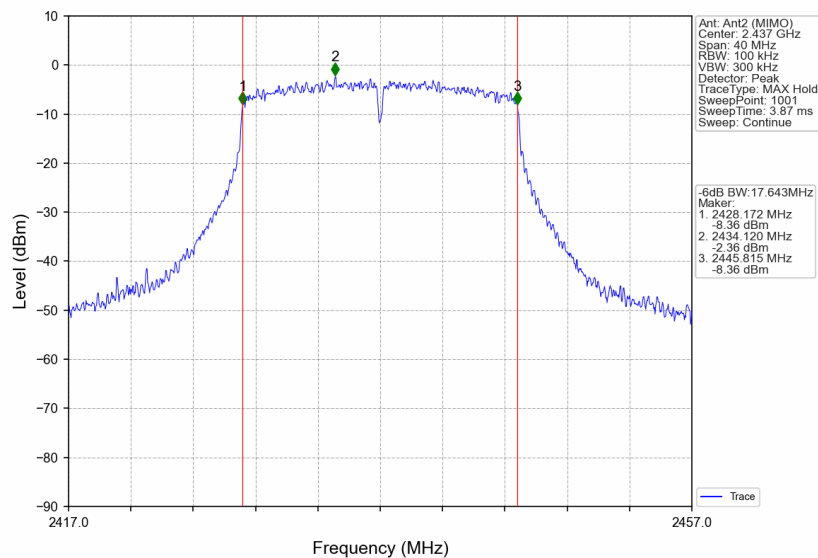
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT20)\_MCH\_2437MHz\_Ant2 (MIMO)\_NTNV



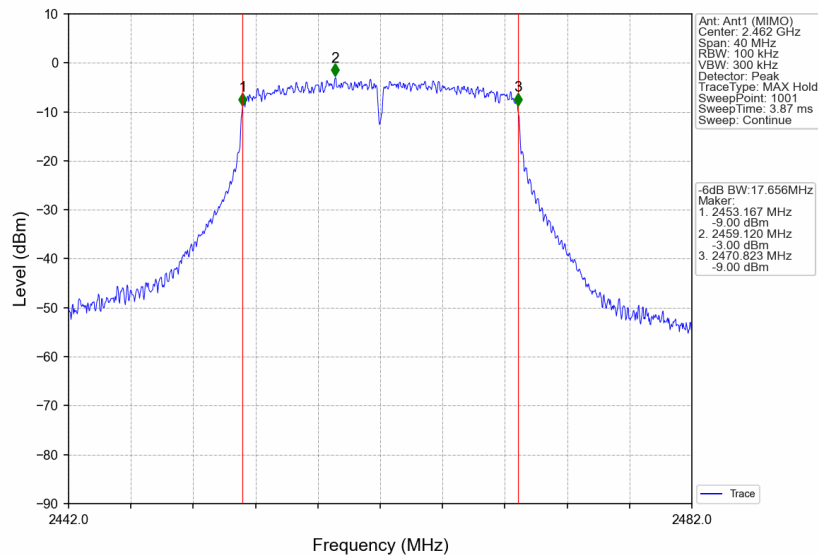
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

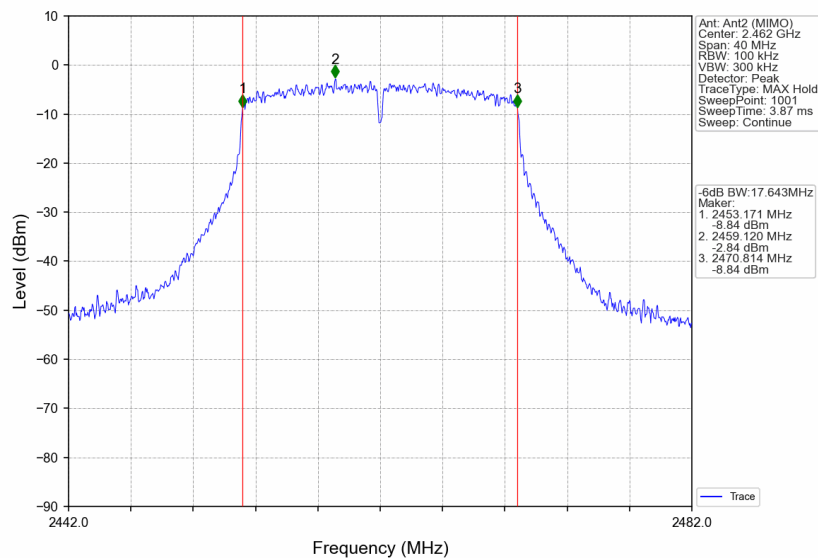
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT20)\_HCH\_2462MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT20)\_HCH\_2462MHz\_Ant2 (MIMO)\_NTNV



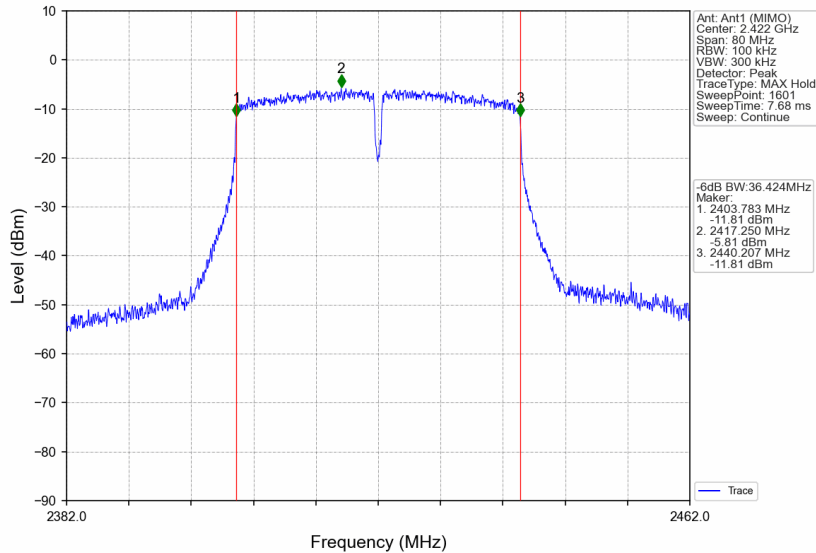
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

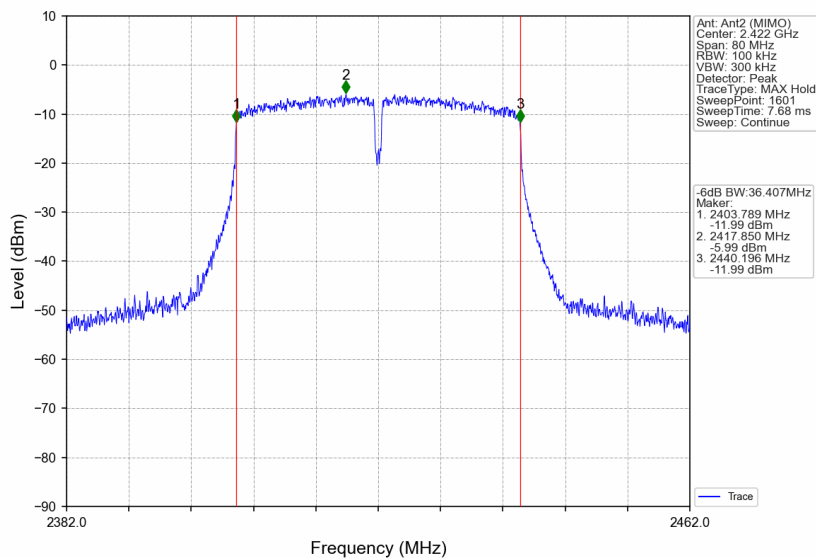
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT40)\_LCH\_2422MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT40)\_LCH\_2422MHz\_Ant2 (MIMO)\_NTNV



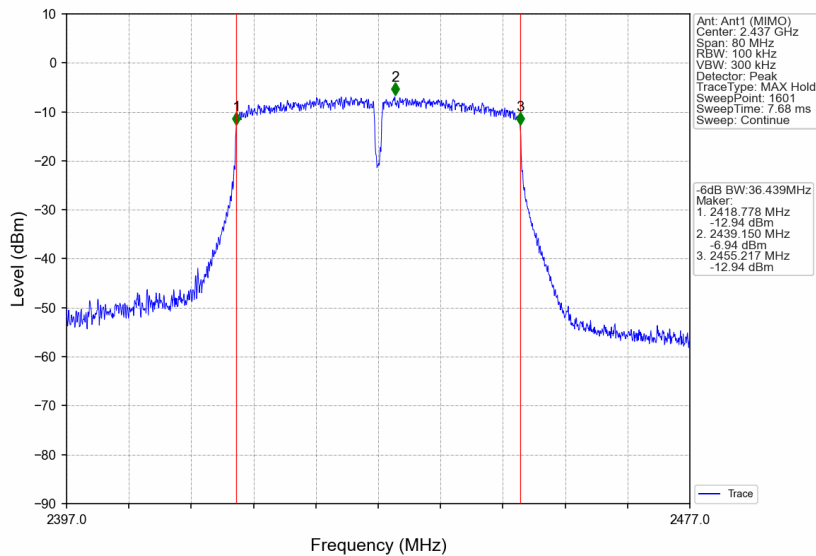
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

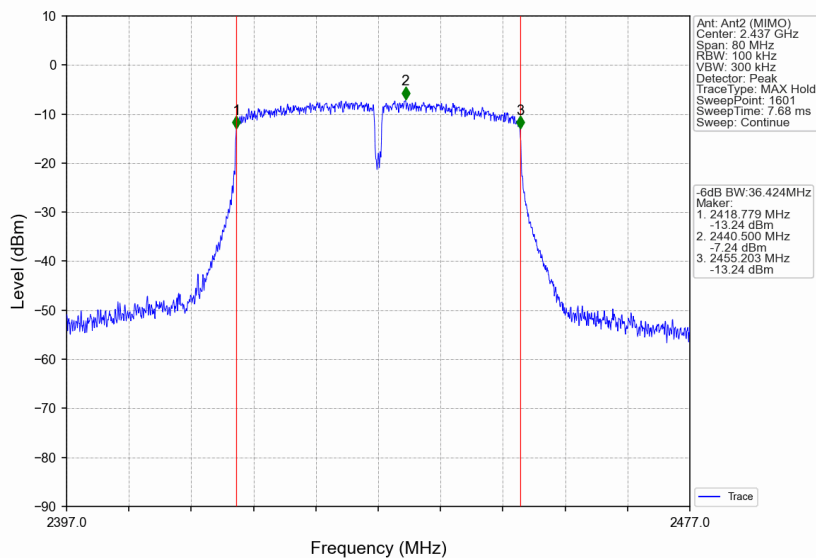
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT40)\_MCH\_2437MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT40)\_MCH\_2437MHz\_Ant2 (MIMO)\_NTNV



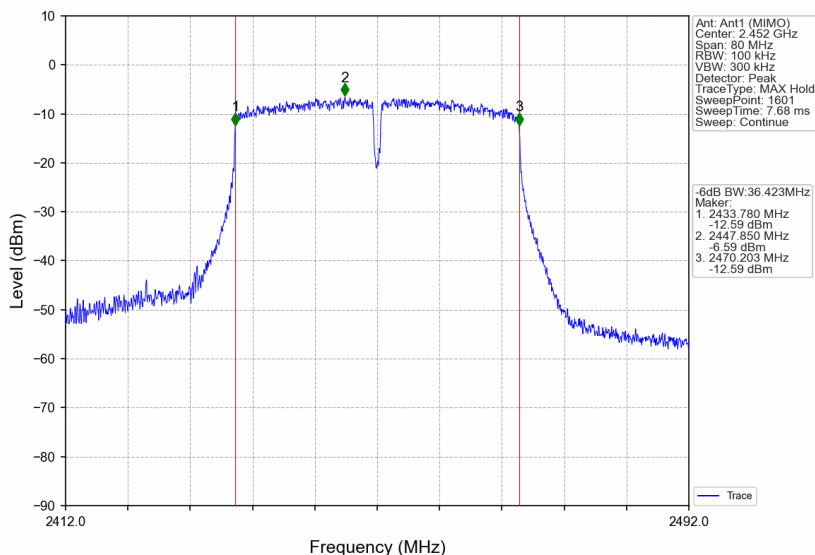
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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

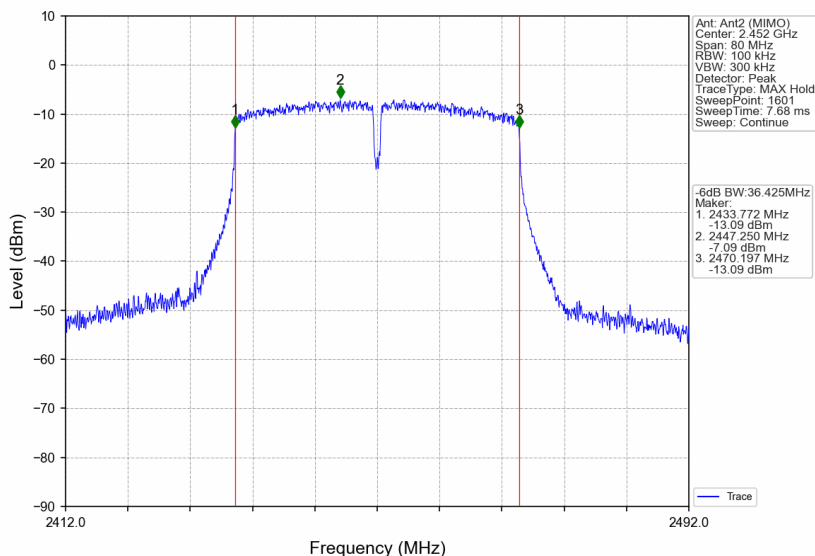
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (MIMO)\_NTNV



### 802.11n(HT40)\_HCH\_2452MHz\_Ant2 (MIMO)\_NTNV



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t(86-512)57355888 f(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 3. Maximum Conducted Output Power

#### 3.1 Power

##### 3.1.1 Test Result

| Mode           | TX Type | Frequency (MHz) | Maximum Average Conducted Output Power (dBm) |       |       |         | Verdict |
|----------------|---------|-----------------|----------------------------------------------|-------|-------|---------|---------|
|                |         |                 | ANT1                                         | ANT2  | MIMO  | Limit   |         |
| 802.11b        | SISO    | 2412            | 13.39                                        | 13.56 | /     | <=30    | Pass    |
|                |         | 2437            | 13.23                                        | 13.69 | /     | <=30    | Pass    |
|                |         | 2462            | 13.69                                        | 13.62 | /     | <=30    | Pass    |
| 802.11g        | SISO    | 2412            | 13.45                                        | 13.41 | /     | <=30    | Pass    |
|                |         | 2437            | 13.69                                        | 13.41 | /     | <=30    | Pass    |
|                |         | 2462            | 13.73                                        | 13.22 | /     | <=30    | Pass    |
| 802.11n (HT20) | MIMO    | 2412            | 10.94                                        | 10.56 | 13.76 | <=28.56 | Pass    |
|                |         | 2437            | 10.83                                        | 10.87 | 13.86 | <=28.56 | Pass    |
|                |         | 2462            | 10.45                                        | 10.38 | 13.43 | <=28.56 | Pass    |
| 802.11n (HT40) | MIMO    | 2422            | 10.81                                        | 10.35 | 13.60 | <=28.56 | Pass    |
|                |         | 2437            | 10.22                                        | 10.65 | 13.45 | <=28.56 | Pass    |
|                |         | 2452            | 11.03                                        | 10.52 | 13.79 | <=28.56 | Pass    |

Note1: Antenna Gain: Ant1: 4.43dBi; Ant2: 4.43dBi;  
Note2: Directional Gain: 7.44dBi

##### 3.1.2 Test Graph

|                                      |
|--------------------------------------|
| 802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV |
|--------------------------------------|

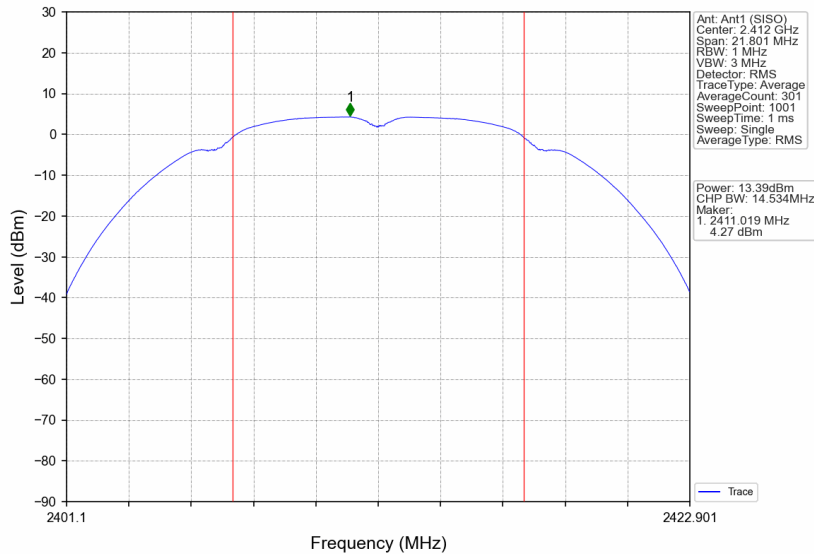


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

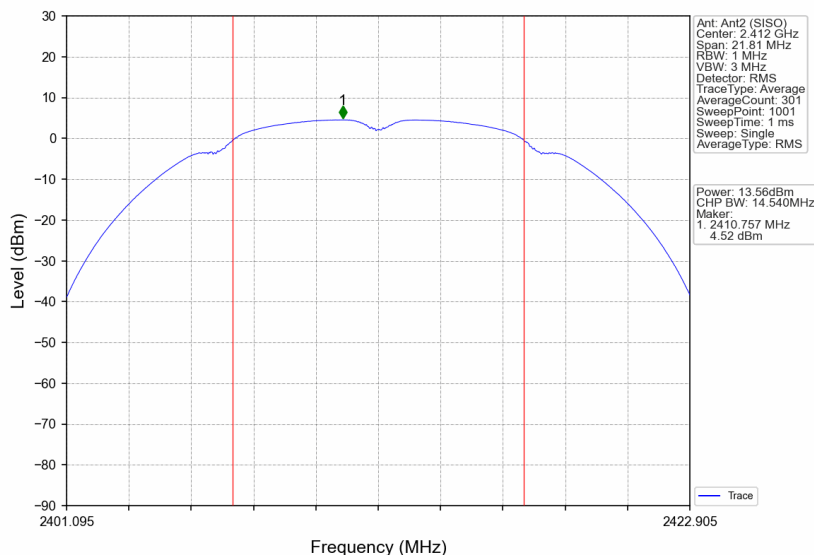
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn  
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com



802.11b\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



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

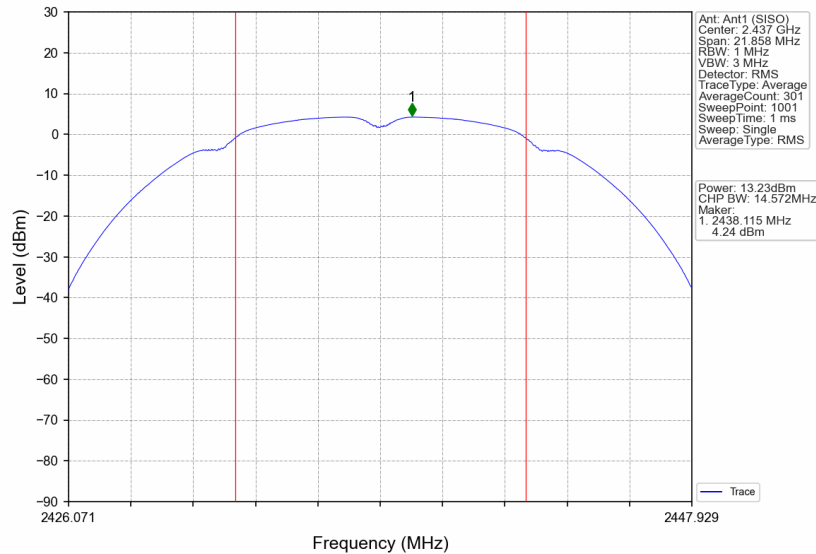
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

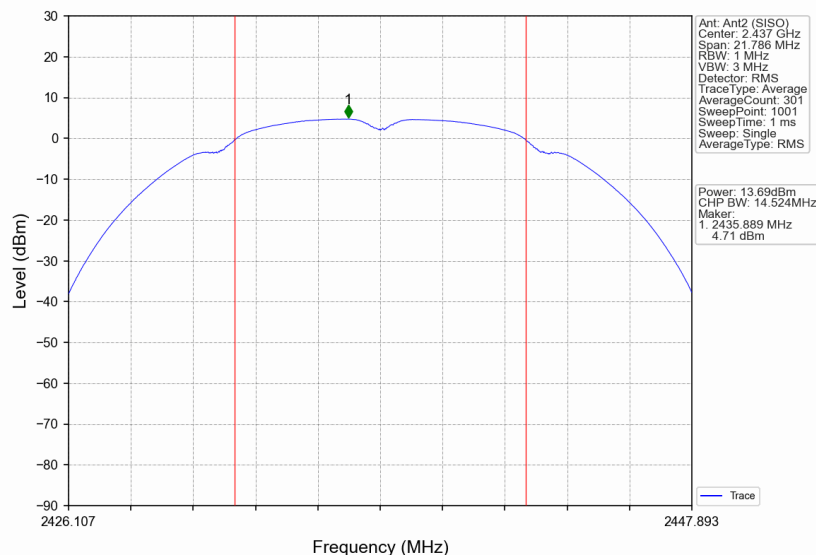
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



802.11b\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



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

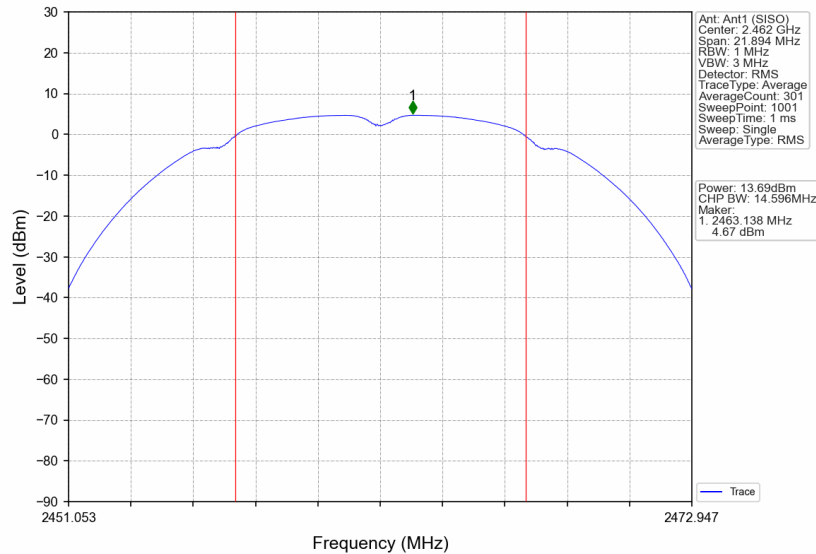
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

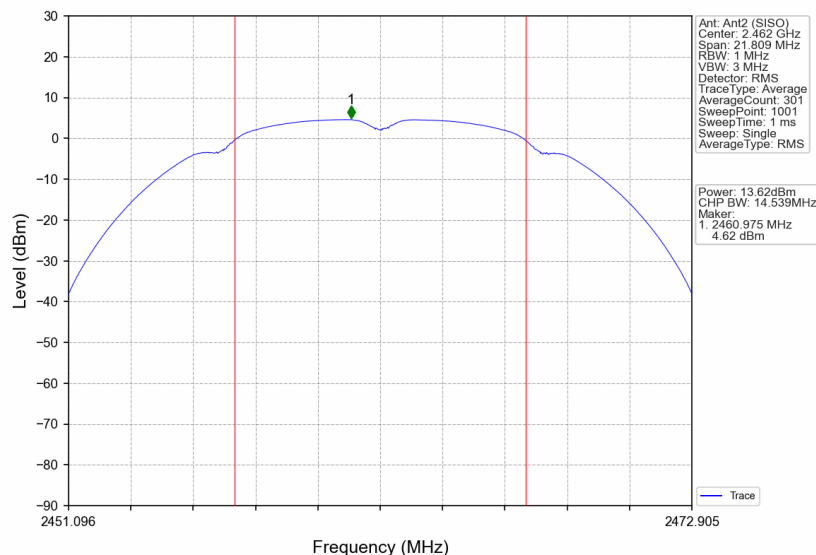
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



802.11b\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV

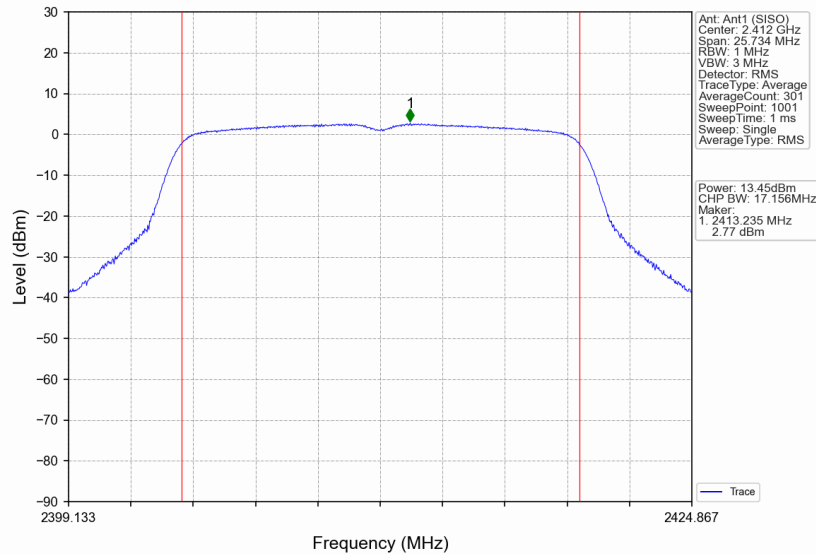


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

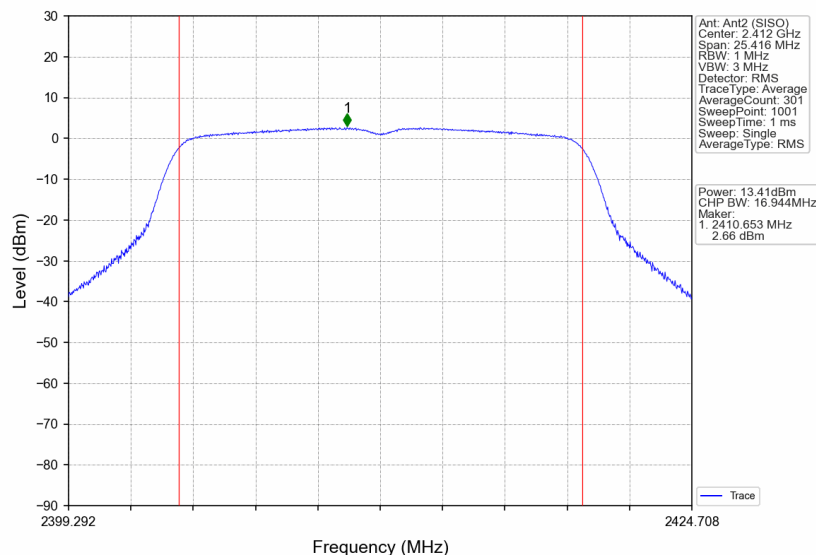
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



802.11g\_LCH\_2412MHz\_Ant2 (SISO)\_NTNV



802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



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

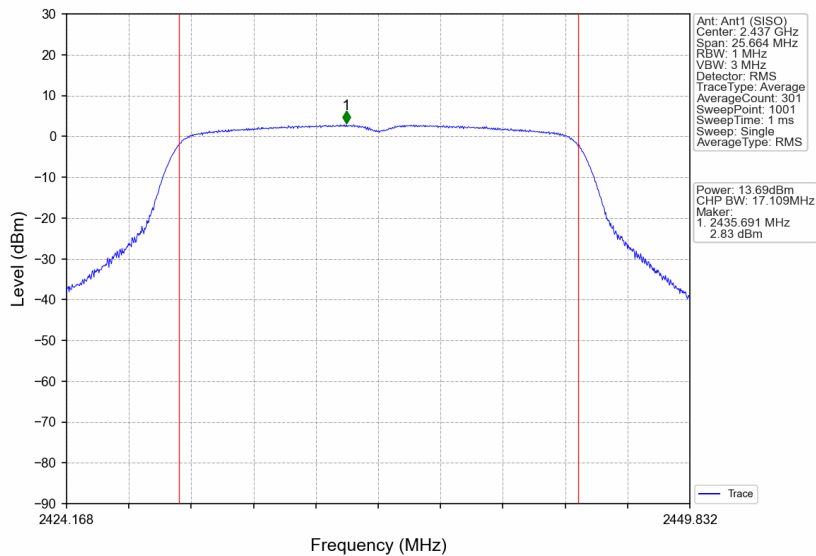
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

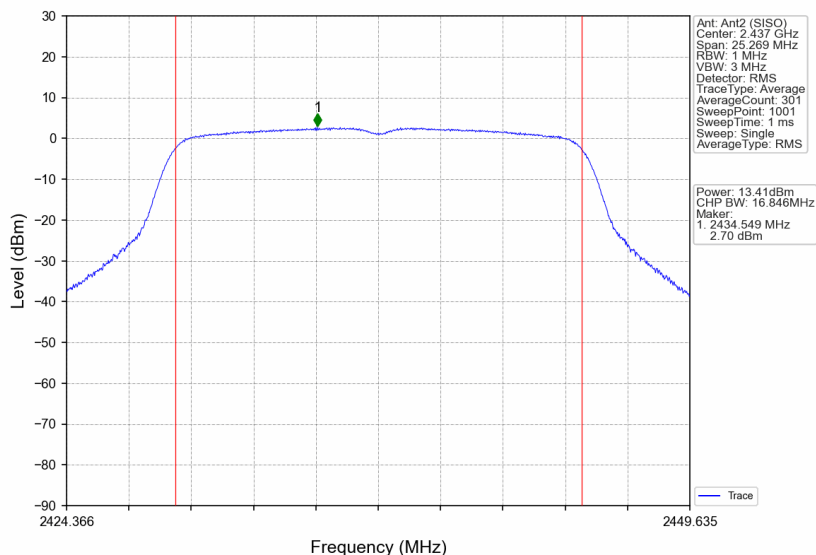
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



802.11g\_MCH\_2437MHz\_Ant2 (SISO)\_NTNV



802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

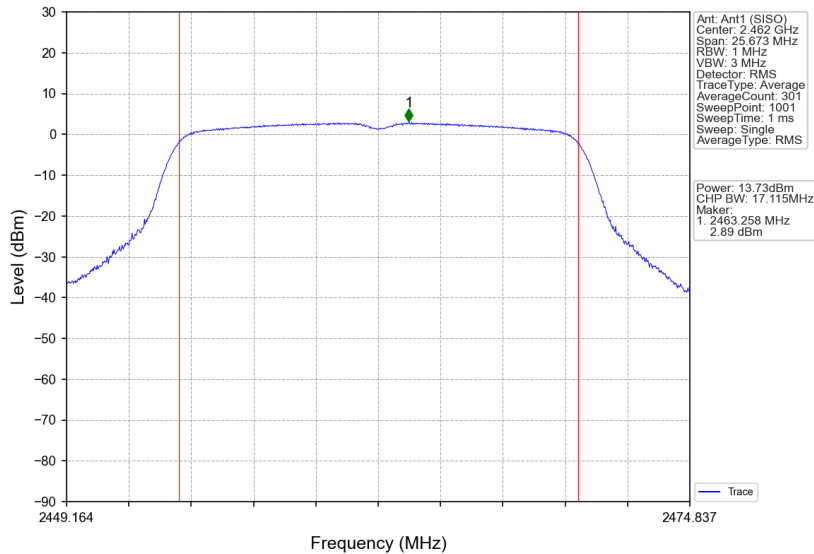


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

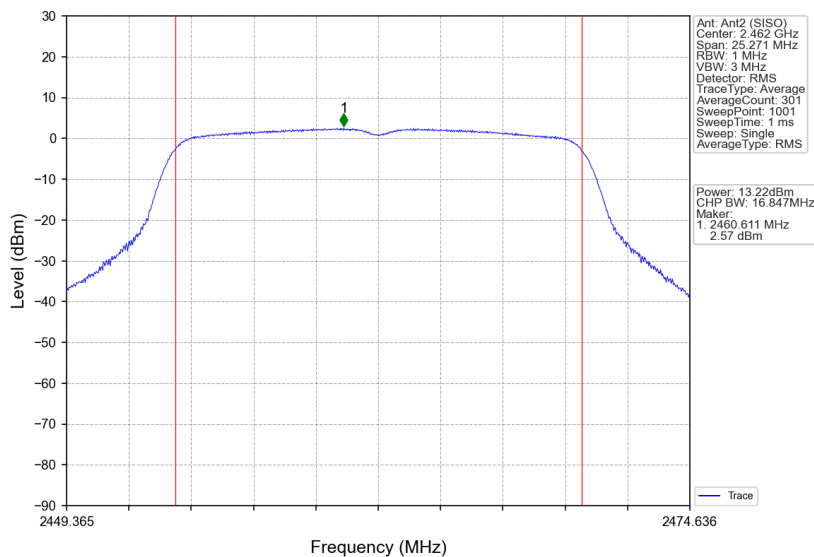
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300  
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 www.sgsgroup.com.cn  
t/(86-512)57355888 f/(86-512)57370818 sgs.china@sgs.com



802.11g\_HCH\_2462MHz\_Ant2 (SISO)\_NTNV



802.11n(HT20)\_LCH\_2412MHz\_Ant1 (MIMO)\_NTNV



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.

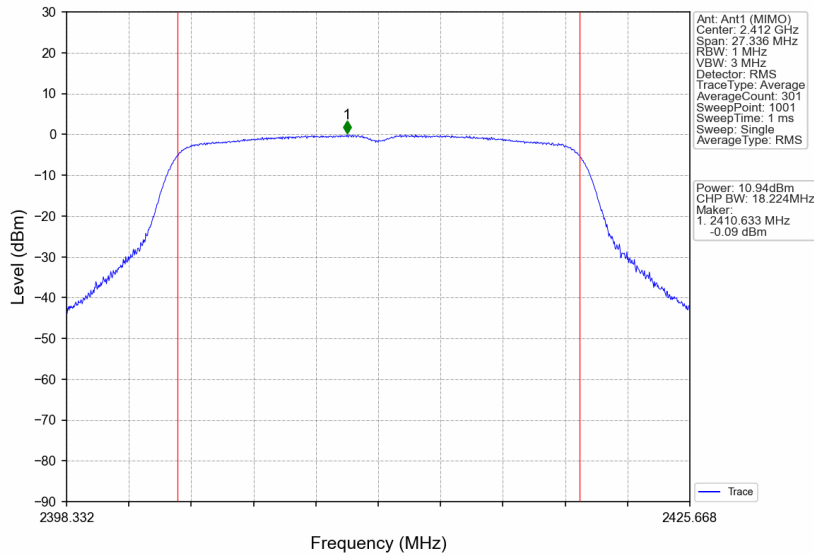
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

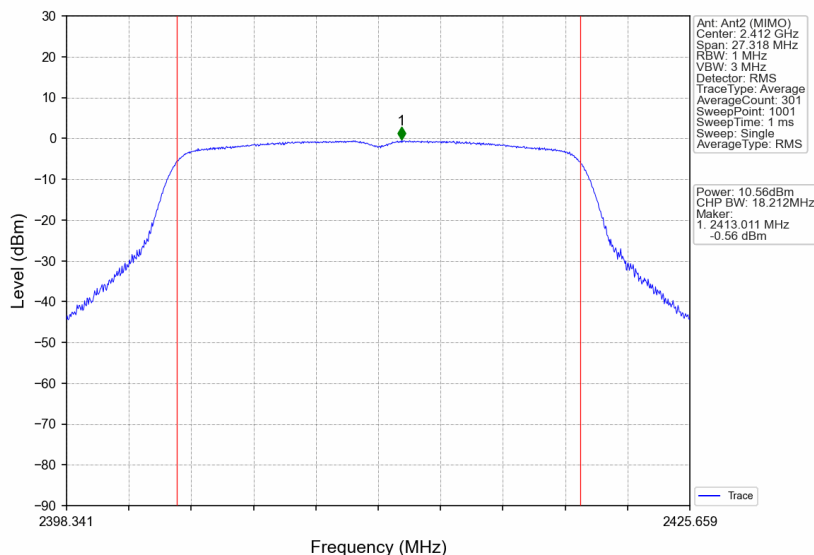
中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



802.11n(HT20)\_LCH\_2412MHz\_Ant2 (MIMO)\_NTNV



802.11n(HT20)\_MCH\_2437MHz\_Ant1 (MIMO)\_NTNV



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888

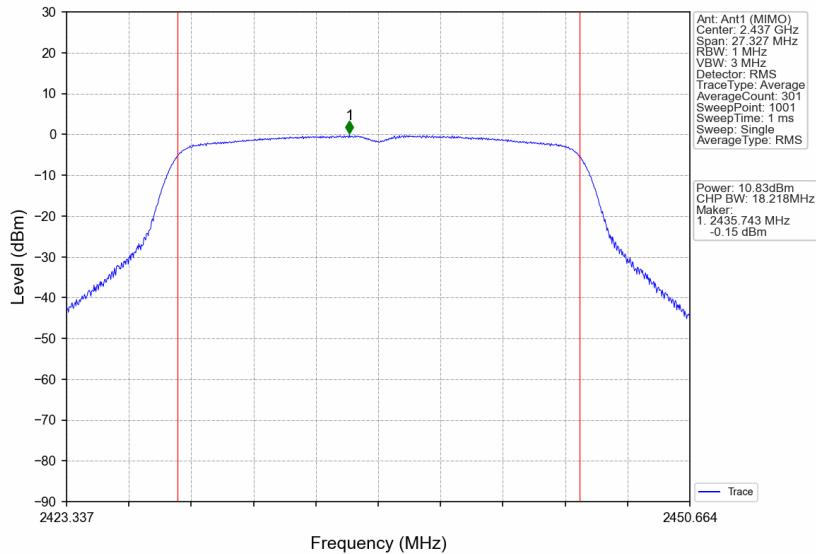
f(86-512)57370818

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

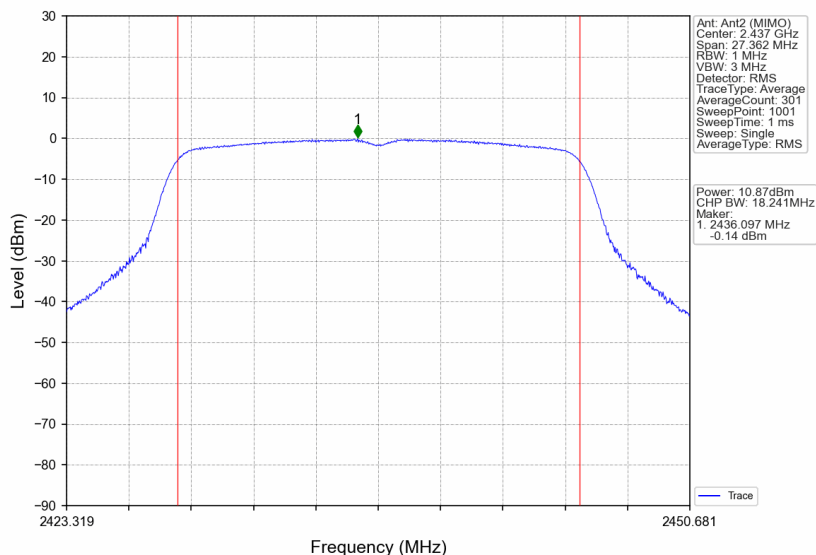
t(86-512)57355888

f(86-512)57370818

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



802.11n(HT20)\_MCH\_2437MHz\_Ant2 (MIMO)\_NTNV



802.11n(HT20)\_HCH\_2462MHz\_Ant1 (MIMO)\_NTNV



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300

中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t/(86-512)57355888 f/(86-512)57370818 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t/(86-512)57355888 f/(86-512)57370818 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)