



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145601

Page: 1 of 23

# TEST REPORT

**Application No.:** SHCR2307001456AT  
**FCC ID:** 2BA76WG03MNT005  
**Applicant:** MotoMotion China Corporation  
**Address of Applicant:** No. 61 Xinggang Road, Zhonglou Economic Development Zone, Changzhou, Jiangsu, P.R. China  
**Manufacturer:** MotoMotion China Corporation  
**Address of Manufacturer:** No. 61 Xinggang Road, Zhonglou Economic Development Zone, Changzhou, Jiangsu, P.R. China  
**Equipment Under Test (EUT):**  
**EUT Name:** Wireless Charger  
**Model No.:** WG03-6  
**Standard(s) :** 47 CFR Part 15, Subpart C  
**Date of Receipt:** 2023-06-14  
**Date of Test:** 2023-07-27 to 2023-07-31  
**Date of Issue:** 2023-08-03

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

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

Parlam Zhan

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612 t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145601

Page: 2 of 23

<b>Revision Record</b>			
<b>Version</b>	<b>Description</b>	<b>Date</b>	<b>Remark</b>
00	Original	2023-08-03	/

Authorized for issue by:			
			
	Bill Wu/Project Engineer		
			
	Parlam Zhan/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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted.

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



SGS-CSTC Testing Services (Shanghai) Co. Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国 上海 松江区金都西路588号 邮编: 201612

For more information, please contact us at telephone: (86-755) 8307 1443,  
e-mail: [sgs\\_china@sgs.com](mailto:sgs_china@sgs.com)

Member of the SGS Group (SGS SA)

## 2 Test Summary

<b>Radio Spectrum Technical Requirement</b>				
<b>Item</b>	<b>Standard</b>	<b>Method</b>	<b>Requirement</b>	<b>Result</b>
Antenna Requirement	47 CFR Part 15, Subpart C	N/A	47 CFR Part 15, Subpart C 15.203	Customer Declaration

<b>Radio Spectrum Matter Part</b>				
<b>Item</b>	<b>Standard</b>	<b>Method</b>	<b>Requirement</b>	<b>Result</b>
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart C	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
20dB Bandwidth		ANSI C63.10 (2013) Section 6.9.2	47 CFR Part 15, Subpart C 15.215	Pass
Radiated Emissions (9kHz-30MHz)		ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Emissions (30MHz-1GHz)		ANSI C63.10 (2013) Section 6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
EEC EMC Lab 中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
[sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 3 Contents

	Page
<b>1 COVER PAGE</b>	<b>1</b>
<b>2 Test Summary</b>	<b>3</b>
<b>3 Contents</b>	<b>4</b>
<b>4 General Information</b>	<b>5</b>
4.1 Details of E.U.T.	5
4.2 Description of Support Units	5
4.3 Measurement Uncertainty	5
4.4 Test Location	6
4.5 Test Facility	6
4.6 Deviation from Standards	6
4.7 Abnormalities from Standard Conditions	6
<b>5 Equipment List</b>	<b>7</b>
<b>6 Radio Spectrum Technical Requirement</b>	<b>8</b>
6.1 Antenna Requirement	8
<b>7 Radio Spectrum Matter Test Results</b>	<b>9</b>
7.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)	9
7.2 20dB Bandwidth	13
7.3 Radiated Emissions (9kHz-30MHz)	15
7.4 Radiated Emissions (30MHz-1GHz)	19
<b>8 Test Setup Photo</b>	<b>23</b>
<b>9 EUT Constructional Details (EUT Photos)</b>	<b>23</b>



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612

中国·上海·松江区金都西路588号

邮编: 201612

t (86-21) 61915666

t (86-21) 61915666

f (86-21) 61915678

f (86-21) 61915678

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

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

## 4 General Information

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

Power supply:	DC 29V
Operation Frequency:	110-148kHz
Wireless Output:	15W Max.
Modulation Type:	Load Modulation
Antenna Type:	Loop Antenna

### 4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Load	/	/	/
AC Adapter	/	E010-1K050200VUU	/

### 4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4 x 10 <sup>-8</sup>
2	Timeout	2s
3	Duty Cycle	0.37%
4	RF Radiated Power	5.2dB (Below 1GHz) 5.9dB (Above 1GHz)
5	Radiated Spurious Emission Test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-18GHz) 5.4dB (Above 18GHz)
6	Temperature Test	1°C
7	Humidity Test	3%
8	Supply Voltages	1.5%
9	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 www.sgsgroup.com.cn  
sgs.china@sgs.com

#### 4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666      Fax: +86 21 6191 5678

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal 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).

#### 4.5 Test Facility

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

- **A2LA (Certificate No. 6332.01)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA).

- **FCC (Designation Number: CN1301)**

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

- **ISED (CAB Identifier: CN0020)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 8617A

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.

#### 4.6 Deviation from Standards

None

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 www.sgsgroup.com.cn  
sgs.china@sgs.com

## 5 Equipment List

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
<b>RF Radiated Test</b>					
EMI test Receiver	R&S	ESU40	SHEM051-1	2022-12-20	2023-12-19
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2022-12-20	2023-12-19
Communication Tester	R&S	CMW500	SHEM268-1	2023-06-01	2024-05-31
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2022-12-20	2023-12-19
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM048-1	2021-09-11	2023-09-10
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM202-1	2022-05-07	2024-05-06
Horn Antenna (1-18GHz)	Schwarzbeck	HF906	SHEM009-1	2022-08-11	2024-08-10
Horn Antenna (1-18GHz)	Schwarzbeck	BBHA9120D	SHEM050-1	2021-09-18	2023-09-17
Horn Antenna (14-40GHz)	Schwarzbeck	BBHA 9170	SHEM049-1	2021-09-18	2023-09-17
Pre-Amplifier	HP	8447D	SHEM236-1	2022-08-02	2023-08-01
High-amplifier (14-40GHz)	Schwarzbeck	10001	SHEM049-2	2022-12-20	2023-12-19
Band Filter	LORCH	9BRX-875/X150	SHEM156-1	/	/
Band Filter	LORCH	13BRX-1950/X500	SHEM083-2	/	/
Band Filter	LORCH	5BRX-2400/X200	SHEM155-1	/	/
Band Filter	LORCH	5BRX-5500/X1000	SHEM157-2	/	/
High pass Filter	Wainwright	WHK3.0/18G	SHEM157-1	/	/
High pass Filter	Wainwright	WHKS1700	SHEM157-3	/	/
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2021-05-25	2024-05-24
RE test Cable	/	RE01, RE02, RE06	/	2023-01-07	2024-01-06
Test software	FARAD	EZ EMC	1.1.4.2	/	/

<b>Conducted Emissions at AC Mains Power Port (150kHz-30MHz)</b>					
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2022/12/20	2023/12/19
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2022/12/20	2023/12/19
Line impedance stabilization network	EMCO	3816_2	SHEM019-1	2022/12/20	2023/12/19
Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2022/12/20	2023/12/19
Shielding Room	ZHONGYU	8*4*3M	SHEM079-2	2020/12/20	2023/12/19
CE test Cable	/	/	SHEM172-1	2022/12/20	2023/12/19
Test Software	ESE	e3	Version: 6.111221a	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 www.sgsgroup.com.cn  
EEC EMC Lab t (86-21) 61915666 f (86-21) 61915678 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

#### 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 an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement.

Refer to internal photos



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

**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612

中国·上海·松江区金都西路588号

邮编: 201612

t (86-21) 61915666

t (86-21) 61915666

f (86-21) 61915678

f (86-21) 61915678

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

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

## 7 Radio Spectrum Matter Test Results

### 7.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

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

Limit:

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\* Decreases with the logarithm of the frequency.

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

Operating Environment:

Temperature: 24 °C      Humidity: 48 % RH      Atmospheric Pressure: 1010 mbar

#### 7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	Wireless Output (The load shall be set at full load (15W).
	01	Wireless Output (The load shall be set at half load (7.5W).
	02	Wireless Output (The load shall be set at empty load (0W).
Final test	00	Wireless Output (The load shall be set at full load (15W).

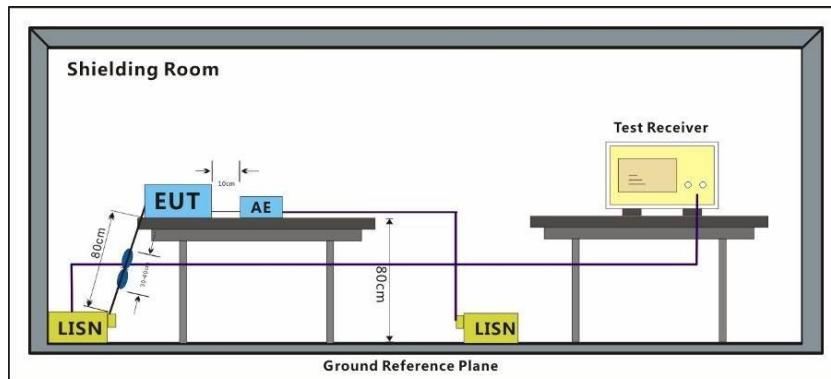


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
EEC EMC Lab 中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn) [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 7.1.3 Test Setup Diagram



#### 7.1.4 Measurement Procedure and Data

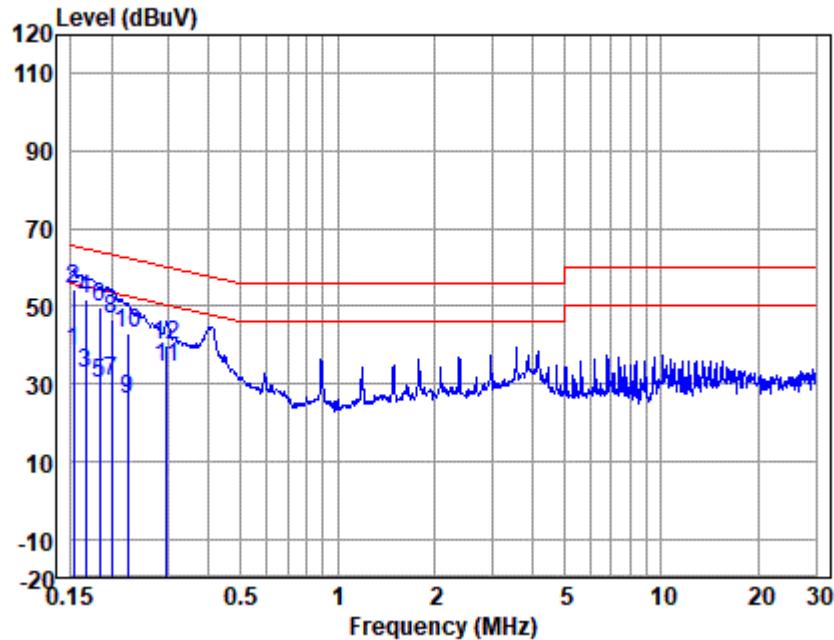
- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50µH + 50hm linear impedance. The power cables of all other units of the EUT were connected to 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

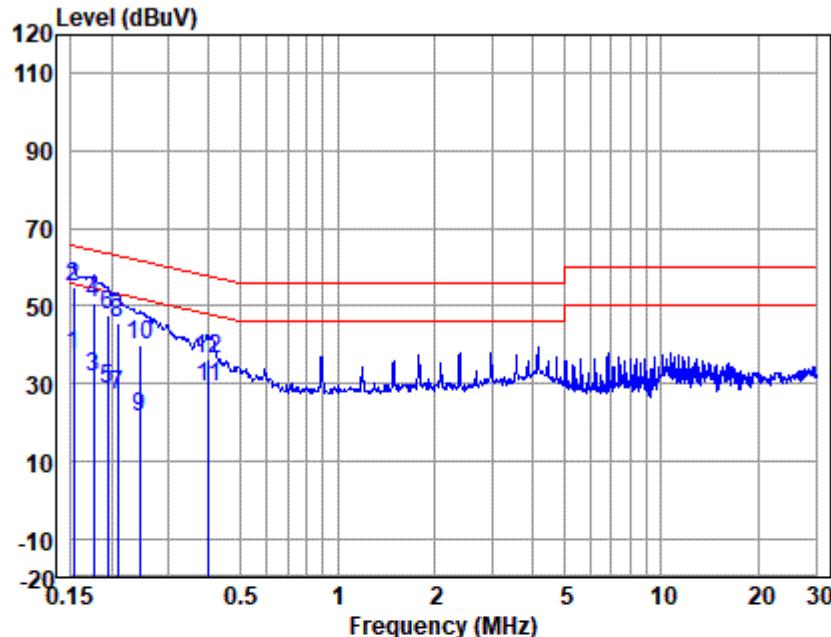
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

Test Mode: 00; Line: Live line



Test Mode: 00; Line: Neutral Line



Freq (MHz)	Read level (dBuV)	LISN Factor	Cable Loss (dB)	Emission Level (dBuV)	Emission Limit (dBuV)	Over Limit (dB)	Remark
1 0.15	27.28	0.34	9.87	37.49	55.87	-18.38	Average
2 0.15	44.58	0.34	9.87	54.79	65.87	-11.08	QP
3 0.18	21.65	0.32	9.87	31.84	54.64	-22.80	Average
4 0.18	40.67	0.32	9.87	50.86	64.64	-13.78	QP
5 0.19	18.26	0.30	9.87	28.43	53.84	-25.41	Average
6 0.19	37.55	0.30	9.87	47.72	63.84	-16.12	QP
7 0.21	16.99	0.30	9.87	27.16	53.27	-26.11	Average
8 0.21	35.43	0.30	9.87	45.60	63.27	-17.67	QP
9 0.24	11.30	0.30	9.87	21.47	51.95	-30.48	Average
10 0.24	29.58	0.30	9.87	39.75	61.95	-22.20	QP
11 0.40	19.13	0.30	9.87	29.30	47.86	-18.56	Average
12 0.40	26.36	0.30	9.87	36.53	57.86	-21.33	QP

Notes: Emission Level = Read Level + LISN Factor + Cable loss

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 www.sgsgroup.com.cn  
sgs.china@sgs.com

## 7.2 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215

Test Method: ANSI C63.10 (2013) Section 6.9.2

Measurement Distance: 3m

Limit:

For report reference only

### 7.2.1 E.U.T. Operation

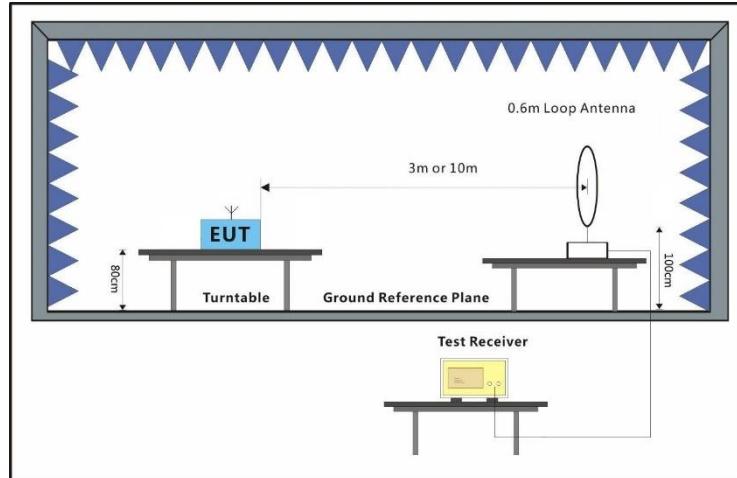
Operating Environment:

Temperature: 24 °C      Humidity: 48 % RH      Atmospheric Pressure: 1010 mbar

### 7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	Wireless Output (The load shall be set at full load (15W)).
	01	Wireless Output (The load shall be set at half load (7.5W)).
	02	Wireless Output (The load shall be set at empty load (0W)).
Final test	00	Wireless Output (The load shall be set at full load (15W)).

### 7.2.3 Test Setup Diagram



### 7.2.4 Measurement Procedure and Data



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

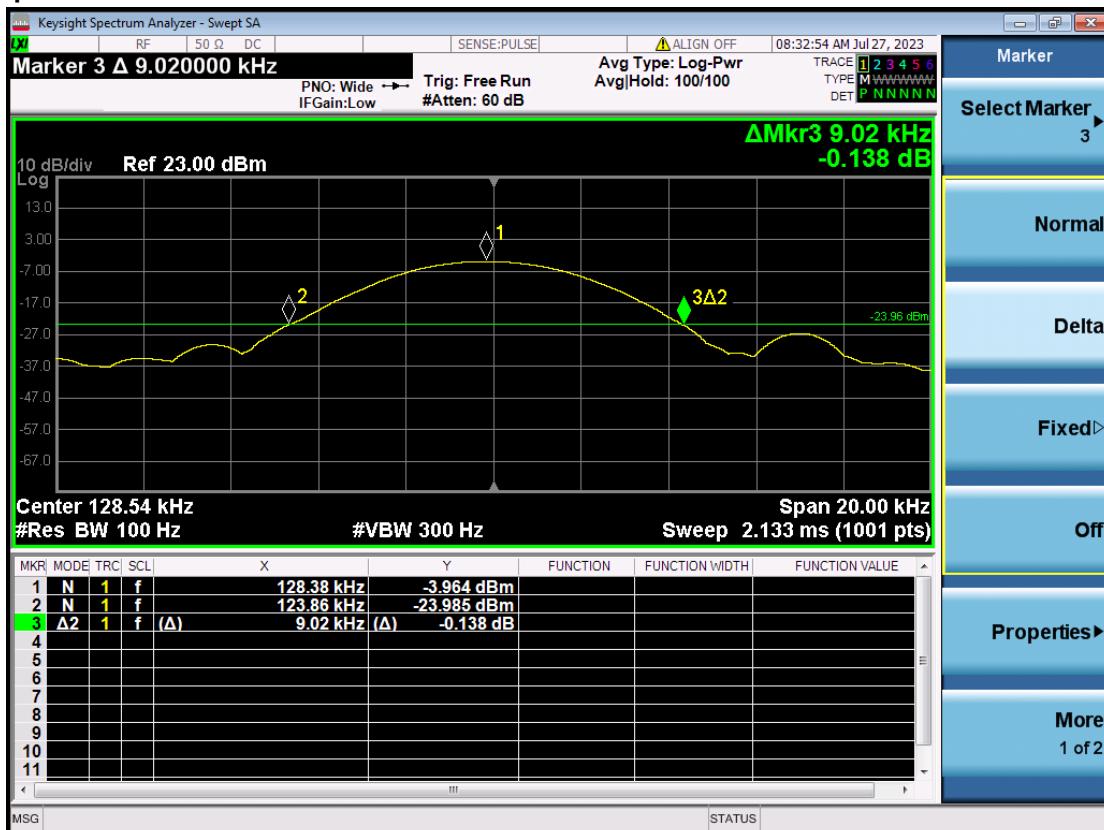
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Frequency(kHz)	20dB bandwidth (kHz)	Result
128.54	9.02	Pass

**Test plot as follows:**


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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
EEC EMC Lab 中国 · 上海 · 松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915666 www.sgsgroup.com.cn  
sgs.china@sgs.com

### 7.3 Radiated Emissions (9kHz-30MHz)

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

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

Measurement Distance: 3m

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

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. 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.

If field strength is measured at only a single point, then that point shall be at the radial from the EUT that produces the maximum emission at the frequency being measured, as described in 5.4. If that point is closer to the EUT than  $\lambda/2\pi$  and the limit distance is greater than  $\lambda/2\pi$ , the measurement shall be extrapolated to the limit distance by conservatively presuming that the field strength decreases at a 40 dB/decade of distance rate to the  $\lambda/2\pi$  distance, and at a 20 dB/decade of distance rate beyond  $\lambda/2\pi$ . This shall be accomplished using Equation (2):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(near field)}/d_{(10m)}\} + 20\log\{d_{(30/300m)}/d_{(near field)}\} \quad (2)$$

If the single point measured is at a distance greater than  $\lambda/2\pi$ , then extrapolation to the limit distance shall be calculated using Equation (3):

$$FS_{(10m)} = FS_{(30/300m)} + 20\log\{d_{(30/300m)}/d_{(10m)}\} \quad (3)$$

If both the single point and the limit distance are equal to or closer to the EUT than  $\lambda/2\pi$ , then extrapolation to the limit distance shall be calculated using Equation (4):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(30/300m)}/d_{(10m)}\} \quad (4)$$

Remark:

$$d_{near field} = 47.77 / f_{MHz}$$

where  $f_{MHz}$  is the frequency of the emission being measured in MHz.

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

Operating Environment:

Temperature: 24 °C      Humidity: 48 % RH      Atmospheric Pressure: 1010 mbar



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612

中国·上海·松江区金都西路588号

邮编: 201612

t (86-21) 61915666

t (86-21) 61915666

f (86-21) 61915678

f (86-21) 61915678

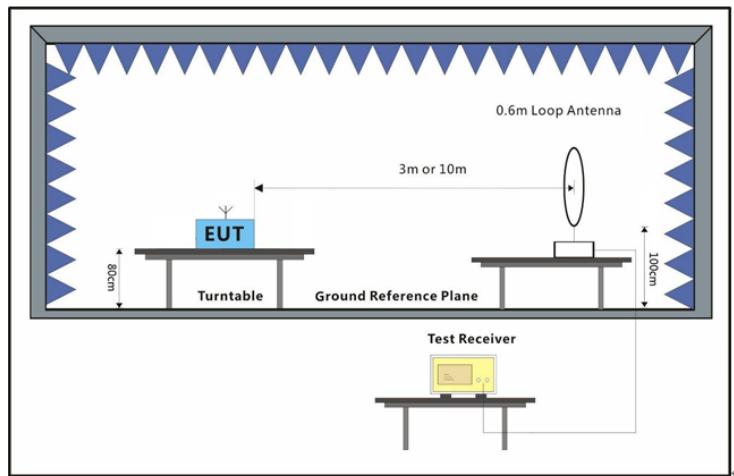
[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

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

### 7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	Wireless Output (The load shall be set at full load (15W)).
	01	Wireless Output (The load shall be set at half load (7.5W)).
	02	Wireless Output (The load shall be set at empty load (0W)).
Final test	00	Wireless Output (The load shall be set at full load (15W)).

### 7.3.3 Test Setup Diagram



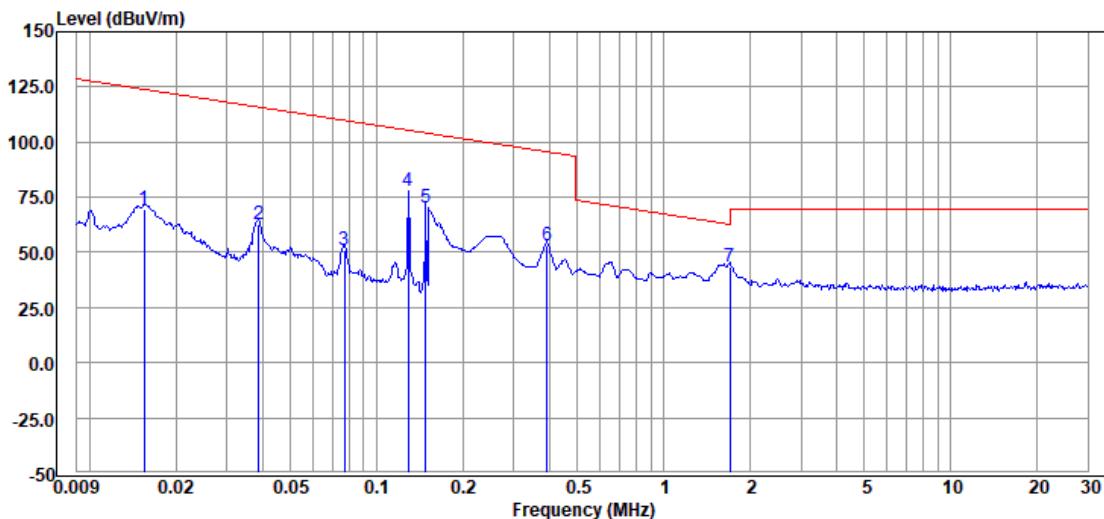
### 7.3.4 Measurement Procedure and Data

- All radiated emission measurements in terms of magnetic field strength shall be performed with a shielded loop antenna.
- For all radiated emission measurements in terms of magnetic field strength, the loop antenna were placed such that:
  - its centre shall be at 1.3 m height above the ground plane;
  - the projection of its centre onto the ground plane shall be at the specified measurement distance from the projection on the ground plane of the closest point on the boundary of the equipment under test (EUT); and
  - measurements shall be performed with the loop antenna placed vertically, in turn, in two polarizations (the measurement axis specified below is the line segment connecting the projections on the ground plane of the centre of the loop antenna and the centre of the EUT arrangement):
    - coaxial (loop plane perpendicular to the ground plane and to the measurement axis); and
    - coplanar (loop plane perpendicular to the ground plane and coplanar with the measurement axis).



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

**coaxial:**


Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level@3m	Result Level@SPEC	Limit Line@SPEC	Over Limit	Detector
(Mark)	(MHz)	(dB $\mu$ V)	(dB/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.016	49.69	20.00	0.10	69.79	-10.21	43.78	-53.99	QP
2	0.039	42.47	19.90	0.10	62.47	-17.53	35.82	-53.35	QP
3	0.077	30.87	19.95	0.10	50.92	-29.08	29.84	-58.92	QP
4	0.129	57.76	20.00	0.10	77.86	-2.14	25.40	-27.54	Peak
5	0.148	50.23	20.00	0.10	70.33	-9.67	24.21	-33.88	QP
6	0.391	33.01	20.00	0.10	53.11	-26.89	15.76	-42.65	QP
7	1.698	22.87	20.28	0.12	43.27	3.27	23.03	-19.76	QP

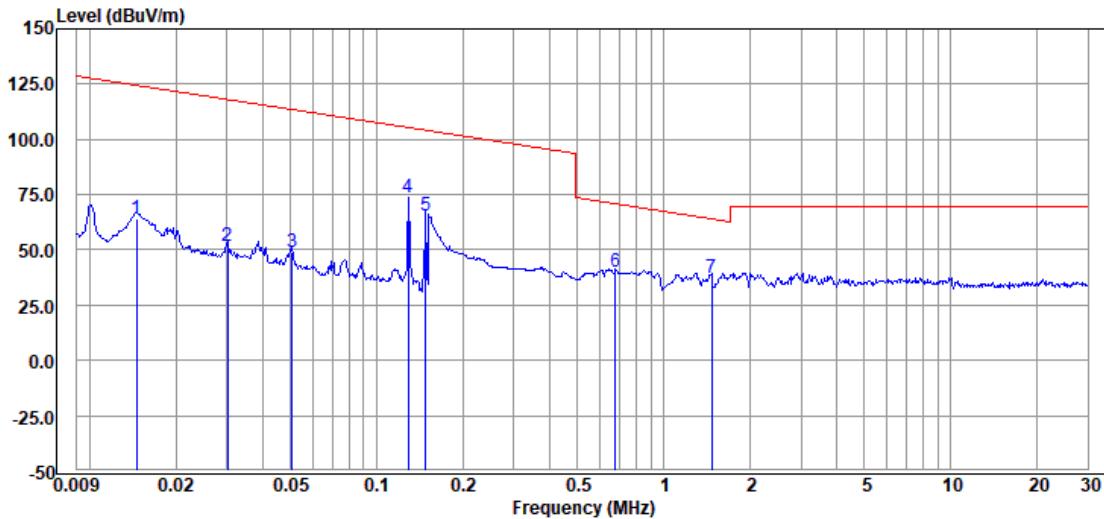
Remark: Result Level= Read Level + Antenna Factor + Cable Loss

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 www.sgsgroup.com.cn  
sgs.china@sgs.com

**coplanar:**


Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level@3m	Result Level@SPEC	Limit Line@SPEC	Over Limit	Detector
(Mark)	(MHz)	(dB $\mu$ V)	(dB/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.015	43.70	20.00	0.10	63.80	-16.20	44.35	-60.55	QP
2	0.030	31.89	19.90	0.10	51.89	-28.11	38.01	-66.12	QP
3	0.051	29.03	19.80	0.10	48.93	-31.07	33.50	-64.57	QP
4	0.129	53.75	20.00	0.10	73.85	-6.15	25.40	-31.55	Peak
5	0.148	45.06	20.00	0.10	65.16	-14.84	24.21	-39.05	QP
6	0.679	19.54	20.10	0.10	39.74	-40.26	-9.03	-31.23	QP
7	1.468	17.16	20.26	0.12	37.54	-2.46	24.30	-26.76	QP

Remark: Result Level= Read Level + Antenna Factor + Cable Loss

**NOTE:**

(1) For test distance other than what is specified, but fulfilling the requirements of section 15.31(f) (2) the field strength is calculated by adding additionally an extrapolation factor of 40dB/decade (inverse linear distance for field strength measurements).

So the Distance Extrapolation Factor in dB is  $40 \times \log(D_{TEST} / D_{SPEC})$  where  $D_{TEST}$  = Test Distance and  $D_{SPEC}$  = Specified Distance.

Field strength limit (dB $\mu$ V/m)@test distance= Field strength limit (dB $\mu$ V/m)@specified distance + Distance Extrapolation Factor

(2) The lower limit shall apply at the transition frequencies.



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

**7.4 Radiated Emissions (30MHz-1GHz)**

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

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

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
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.

**7.4.1 E.U.T. Operation**

Operating Environment:

Temperature: 24 °C      Humidity: 48 % RH      Atmospheric Pressure: 1010 mbar

**7.4.2 Test Mode Description**

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	Wireless Output (The load shall be set at full load (15W)).
	01	Wireless Output (The load shall be set at half load (7.5W)).
	02	Wireless Output (The load shall be set at empty load (0W)).
Final test	00	Wireless Output (The load shall be set at full load (15W)).

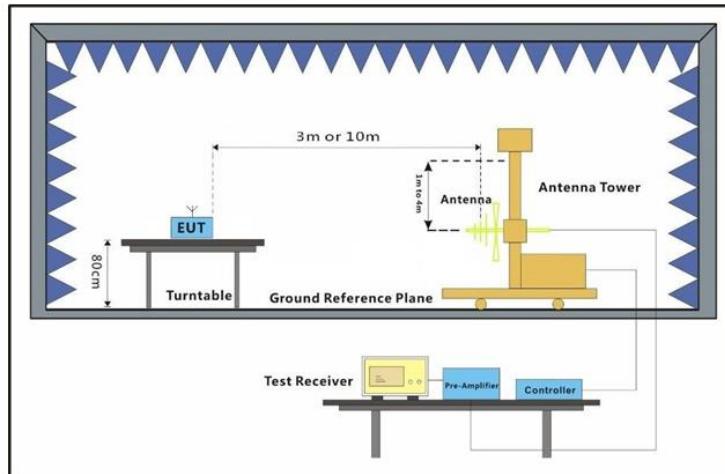


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

**7.4.3 Test Setup Diagram****7.4.4 Measurement Procedure and Data**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. 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.
- 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, quasi-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 worse case.
- i. Repeat above procedures until all frequencies measured was complete.

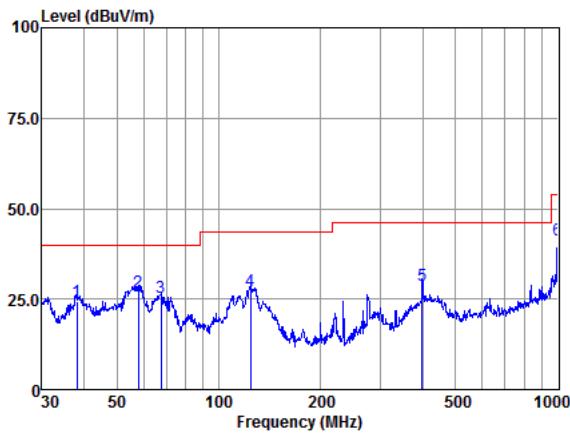
Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

Horizontal:



Freq	Read	Antenna	Cable	Preamp	Emission	Limit	Over	Remark
	Level	Factor	Loss	Factor	Level	Line	Limit	
1	38.08	51.58	16.13	0.22	43.69	24.24	40.00	-15.76 QP
2	57.80	58.08	12.18	0.29	43.74	26.81	40.00	-13.19 QP
3	67.44	57.26	11.70	0.33	43.74	25.55	40.00	-14.45 QP
4	124.13	59.47	11.22	0.55	43.75	27.49	43.50	-16.01 QP
5	399.03	56.18	15.08	0.99	43.60	28.65	46.00	-17.35 QP
6	1000.00	56.19	23.80	2.83	41.39	41.43	54.00	-12.57 QP

Note: Emission Level=Read Level+Antenna Factor+Cable loss+Preamp Factor

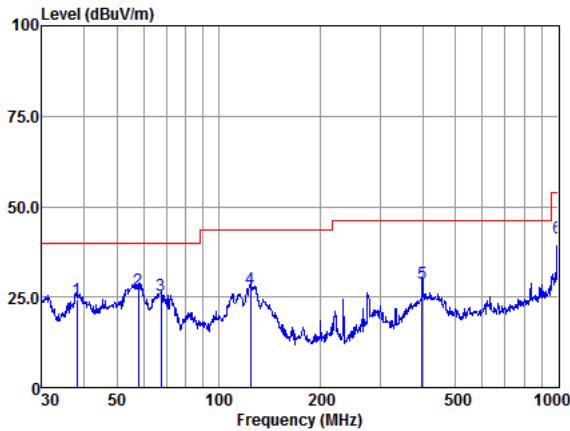
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
EEC EMC Lab  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915666 www.sgsgroup.com.cn  
sgs.china@sgs.com

Vertical:



Freq	Read	Antenna	Cable	Preamp	Emission	Limit	Over	Remark
	Level	Factor	Loss	Factor	Level	Line	Limit	
1	38.08	51.58	16.13	0.22	43.69	24.24	40.00	-15.76 QP
2	57.80	58.08	12.18	0.29	43.74	26.81	40.00	-13.19 QP
3	67.44	57.26	11.70	0.33	43.74	25.55	40.00	-14.45 QP
4	124.13	59.47	11.22	0.55	43.75	27.49	43.50	-16.01 QP
5	399.03	56.18	15.08	0.99	43.60	28.65	46.00	-17.35 QP
6	1000.00	56.19	23.80	2.83	41.39	41.43	54.00	-12.57 QP

Note: Emission Level=Read Level+Antenna Factor+Cable loss+Preamp 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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666 or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915666 www.sgsgroup.com.cn  
sgs.china@sgs.com

## 8 Test Setup Photo

Refer to Appendix - Test Setup Photo for SHCR2307001456AT

## 9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for SHCR2307001456AT

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

**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)**



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 www.sgsgroup.com.cn  
sgs.china@sgs.com