

TEST REPORT

Application No.: SHEM2308004878HS
Applicant: Ningbo Jinchang Electronics Co.,Ltd.
Address of Applicant: Guangming East Road 17, Ditang Street, Yuyao, Ningbo, 315491 Zhejiang, China
Manufacturer: Ningbo Jinchang Electronics Co.,Ltd.
Address of Manufacturer: Guangming East Road 17, Ditang Street, Yuyao, Ningbo, 315491 Zhejiang, China
Factory: Ningbo Jinchang Electronics Co.,Ltd.
Address of Factory: Guangming East Road 17, Ditang Street, Yuyao, Ningbo, 315491 Zhejiang, China
Equipment Under Test (EUT):
EUT Name: Grill
Model No.: Refer to page 2
Remark: Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Standard(s) : EN IEC 55014-1: 2021
 EN IEC 61000-3-2: 2019+A1:2021
 EN 61000-3-3: 2013+ A1:2019+A2:2021
 EN IEC 55014-2: 2021
Date of Receipt: 2023-08-01
Date of Test: 2023-08-01 to 2023-08-02
Date of Issue: 2023-08-09

Test Result:	Pass*
---------------------	--------------

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

Parlan Zhan

Parlan 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: (86-755) 8307 1443, or email: 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
sgs.china@sgs.com

Model No.:

BQ228-C,GTGE 2000 A1,BQ228-A,BQ228-AF,BQ228-B,BQ228-BF,BQ1601,BQ1601F,
BQ1601P,BQ1601A,BQ1601AF,BQ1601-S,BQ1601P-S,BQ1601-SF,BQ1601P-SF,BQ1803,
BQ1902,BQ2001,BQ2002,BQ2003,BQ238,BQ248,BQ228-AS,BQ228-ASF,BQ228-BS,
BQ228-BSF,BQ1703XL,BQ1703XLP,BQ1703XL-F,BQ1703XLP-F,BQ1703XL-W,
BQ1703XLP-W,BQ1703XL-WG,BQ1703XLP-WG,BQ1703XL-S,BQ1703XLP-S,
BQ1703XL-SF,BQ1703XLP-SF,BQ1703XL-SWG,BQ1703XLP-SWG,BQ1703XL-SWGF,
BQ1703XLP-SWGF,BQ1703XL-IPX4,BQ1703XLP-IPX4,BQ1703XL-S-IPX4,
BQ1703XLP-S-IPX4,BQ1703XL-F-IPX4,BQ1703XLP-F-IPX4,BQ1703XL-SF-IPX4,
BQ1703XLP-SF-IPX4,BQ1803-W,BQ1803-WG,BQ1803-SWG,BQ1803-SF,BQ1803-SW,
BQ1803-SWGF,BQ2000-23,BQ1703XLX,BQ1703XLX-WG,BQ1703XLX-SWG,
BQ1703XLX-S,BQ1703XLX-SWG,BQ1703XLX-SF,BQ1703XLX-SWGF,
BQ1703XL-SW,BQ1703XL-SWF,BQ1703XLP-SW,BQ1703XLP-SWF,BQ1803-S,
BQ1803-SWF,BQ1902-S,BQ1902-SW,BQ1902-W,BQ1902-WG,BQ1902-SWG,
BQ231,BQ2201,BQ2201-S
BQ231-abcd(a= blank, S; b= blank,W; c= blank, G; d=blank, F)





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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

NO.588 West Jindu Road, Songjiang District, ShanghaiChina 201612 t (86-21) 61915666 f (86-21) 61915678 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

Revision Record			
Version	Description	Date	Remark
00	Original	2023-08-09	/

Authorized for issue by:				
				
		Leo Xu/Project Engineer		
				
		Jim Xu/Reviewer		



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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

NO.588 West Jindu Road, Songjiang District, ShanghaiChina 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
sgs.china@sgs.com

2 Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Mains Power Port (150kHz-30MHz)	EN IEC 55014-1: 2021	CISPR 16-2-1	Table 5	Pass
Disturbance Power		CISPR 16-2-2	Table 7 & 8	Pass
Discontinuous Disturbance (150kHz-30MHz)		EN IEC 55014-1: 2021	Clause 4.4.2	Pass
Harmonic Current Emission	EN IEC 61000-3-2: 2019+A1:2021	EN IEC 61000-3-2: 2019+A1:2021	Class A	Pass
Voltage Fluctuations and Flicker	EN 61000-3-3: 2013+ A1:2019+A2:2021	EN 61000-3-3: 2013+ A1:2019+A2:2021	Clause 5	Pass

Electromagnetic Susceptibility (EMS)				
Item	Standard	Method	Requirement	Result
Immunity	EN IEC 55014-2:2021	N/A	N/A	N/A*

N/A: Not applicable

N/A*: Please refer to Section 7 of this report for details.

There is no EMS test requirement, since the EUT belongs to Category I of EN IEC 55014-2:2021.

Note: There are series models mentioned in this report and they are the similar in electrical and electronic characters. Only the model BQ231 was tested since their differences were model number and accessories.



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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

NO.588 West Jindu Road, Songjiang District, ShanghaiChina 201612 t (86-21) 61915666 f (86-21) 61915678 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

3 Contents

	Page
1 COVER PAGE	1
2 TEST SUMMARY	4
3 CONTENTS	5
4 GENERAL INFORMATION	6
4.1 DETAILS OF E.U.T.	6
4.2 DESCRIPTION OF SUPPORT UNITS	6
4.3 MEASUREMENT UNCERTAINTY & DECISION RULE	6
4.4 TEST LOCATION	7
4.5 DEVIATION FROM STANDARDS	7
4.6 ABNORMALITIES FROM STANDARD CONDITIONS	7
4.7 MONITORING OF EUT FOR ALL IMMUNITY TEST	7
5 EQUIPMENT LIST	8
6 EMISSION TEST RESULTS	9
6.1 CONDUCTED EMISSIONS AT AC MAINS POWER PORT (150KHZ-30MHZ)	9
6.1.1 E.U.T. Operation	9
6.1.2 Test Mode Description	9
6.1.3 Test Setup Diagram	9
6.1.4 Measurement Procedure and Data	10
6.2 DISTURBANCE POWER	13
6.2.1 E.U.T. Operation	13
6.2.2 Test Mode Description	13
6.2.3 Test Setup Diagram	13
6.2.4 Measurement Procedure and Data	13
6.3 DISCONTINUOUS DISTURBANCE (150KHZ-30MHZ)	15
6.3.1 E.U.T. Operation	15
6.3.2 Test Mode Description	15
6.3.3 Test Setup Diagram	16
6.3.4 Measurement Procedure and Data	16
6.4 HARMONIC CURRENT EMISSION	18
6.4.1 E.U.T. Operation	18
6.4.2 Test Mode Description	18
6.4.3 Test Setup Diagram	18
6.4.4 Measurement Procedure and Data	18
6.5 VOLTAGE FLUCTUATIONS AND FLICKER	21
6.5.1 E.U.T. Operation	21
6.5.2 Test Mode Description	21
6.5.3 Test Setup Diagram	21
6.5.4 Measurement Procedure and Data	21
7 ELECTROMAGNETIC SUSCEPTIBILITY TEST RESULTS	22
8 TEST SETUP PHOTO	23
9 EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS)	26



Unless otherwise agreed 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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

4 General Information

4.1 Details of E.U.T.

Power supply:	230V~, 50Hz, 2200W
Test Voltage:	AC 230V 50Hz
Maximum Clock Frequency:	N/A. No PCB

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty & Decision Rule

Measure Uncertainty:

Test Item	Freq. Range	Measurement Uncertainty	
		U_{LAB}	U_{CISPR}
Radiated Emission	30~1000MHz	4.6dB	6.3dB
Conducted Emission	0.15~30MHz	2.8dB	3.4dB
Disturbance Power	30~300MHz	2.6dB	4.5dB

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

Decision Rule:

- CISPR 16-4-2 for emission measurements is as below described.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

U_{LAB} less than U_{CISPR} , therefore:

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



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

Unless otherwise agreed 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) 8307 1443, or email: 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
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

4.4 Test Location

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

Sub-contracted at:

Ningbo Drotek Testing Service Co., Ltd.

Building 18 and 2 / F North of R&D Center, No. 518, Xinmei Road, High-tech Zone, Ningbo City, Zhejiang Province, R.P. China

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 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None

4.7 Monitoring of EUT for All Immunity Test

Visual: Working status of EUT.



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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

NO.588 West Jindu Road, Songjiang District, ShanghaiChina 201612

t (86-21) 61915666

f (86-21) 61915678

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

5 Equipment List

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due
1	EMI Test Receiver	ROHDE & SCHWARZ	ESR	102969	2023.07.15	2024.07.14
2	LISN	ROHDE & SCHWARZ	ENV 216	102835	2023.07.15	2024.07.14
3	Cable	H&S/Swiss	CBL-RE-18	NBZT001-E-36	2023.07.15	2024.07.14

Disturbance power						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due
1	EMI Test Receiver	ROHDE & SCHWARZ	ESR	102969	2023.07.15	2024.07.14
2	Absorbing Clamp	Schwarzbeck /Germany	MDS 21C	00025	2023.07.15	2024.07.14

Discontinuous Disturbance(150kHz-30MHz)						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Digital Discontinuous Analyzer	AFJ	DIA1512D	21001	2023.04.02	2024.04.01
2	LISN	ROHDE & SCHWARZ	ENV 216	102835	2023.07.15	2024.07.14

Harmonic Current/ Voltage Fluctuation and Flicker						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due
1	Harmonic current and voltage scintillation measurement system	CI /USA	5001iX-CTS-400-413	NBZT001-E-15	2023.07.15	2024.07.14



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

6 Emission Test Results

6.1 Conducted Emissions at AC Mains Power Port (150kHz-30MHz)

Test Requirement: EN IEC 55014-1: 2021

Test Method: CISPR 16-2-1

Limit:

0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 59dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

6.1.1 E.U.T. Operation

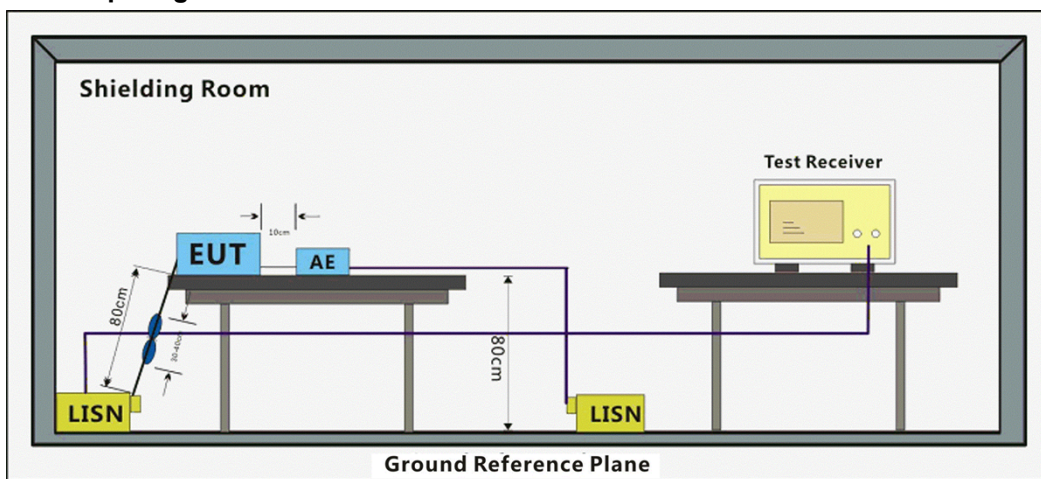
Operating Environment:

Temperature: 23 °C Humidity: 47 % RH Atmospheric Pressure: 1010 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating continual.

6.1.3 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 <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) 8307 1443, or email: 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
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

6.1.4 Measurement Procedure and Data

Frequency Range: 150kHz to 30MHz

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected. The red line show in graphic is the limit in standard used in this section.

Measured Level = Read level + Cable Loss + LISN Factor



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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

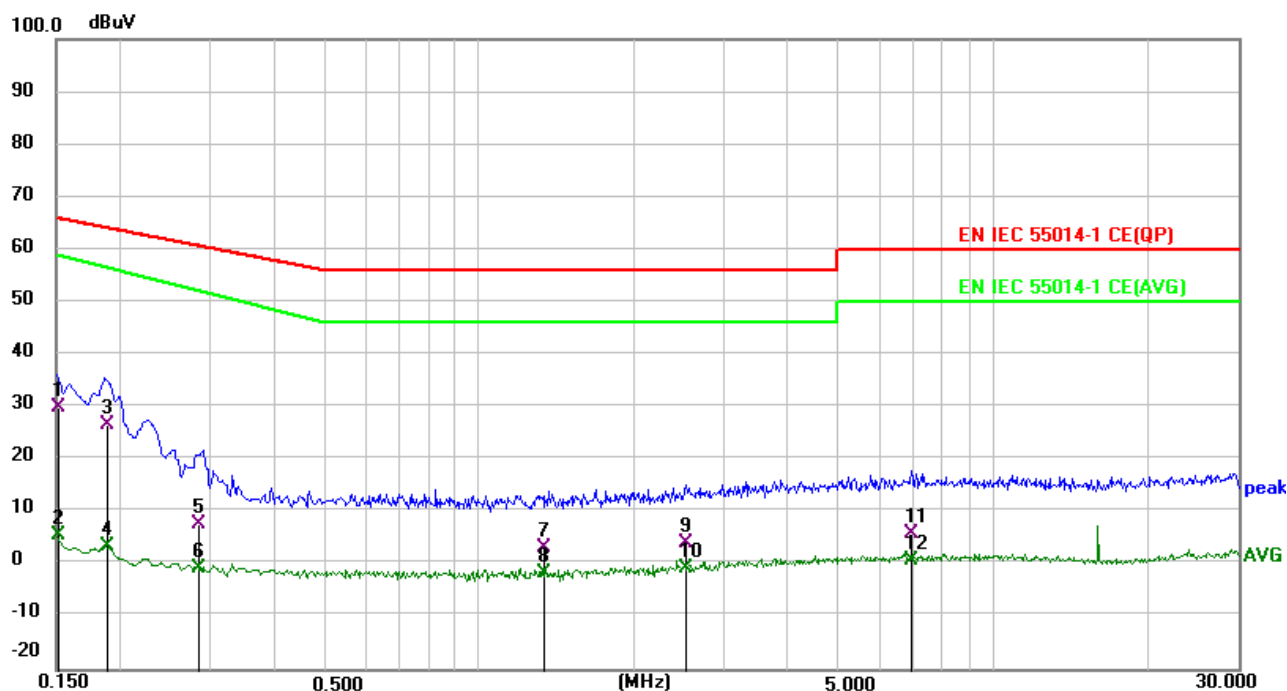
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612
中国·上海·松江区金都西路588号 邮编: 201612

t (86-21) 61915666
t (86-21) 61915666

f (86-21) 61915678
f (86-21) 61915678

www.sgsgroup.com.cn
sgs.china@sgs.com

Test Mode: 00; Line: Live Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1518	20.38	9.49	29.87	65.90	-36.03	QP	P	
2	0.1518	-3.74	9.49	5.75	58.87	-53.12	AVG	P	
3	0.1884	17.30	9.49	26.79	64.11	-37.32	QP	P	
4	0.1884	-6.00	9.49	3.49	56.54	-53.05	AVG	P	
5	0.2832	-1.79	9.50	7.71	60.72	-53.01	QP	P	
6	0.2832	-10.09	9.50	-0.59	52.14	-52.73	AVG	P	
7	1.3453	-6.16	9.53	3.37	56.00	-52.63	QP	P	
8	1.3453	-11.07	9.53	-1.54	46.00	-47.54	AVG	P	
9	2.5262	-5.42	9.56	4.14	56.00	-51.86	QP	P	
10	2.5262	-10.14	9.56	-0.58	46.00	-46.58	AVG	P	
11	6.9618	-3.80	9.72	5.92	60.00	-54.08	QP	P	
12	6.9618	-8.75	9.72	0.97	50.00	-49.03	AVG	P	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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.

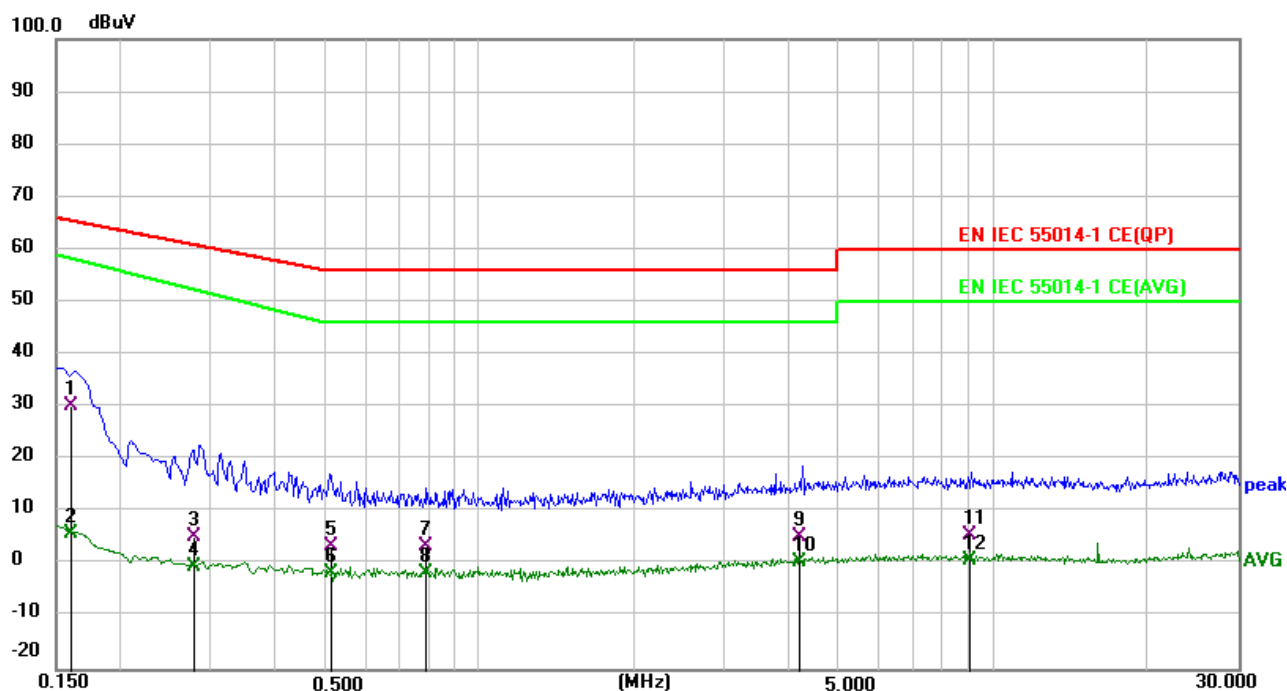
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

Test Mode: 00; Line: Neutral Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1599	20.66	9.46	30.12	65.47	-35.35	QP	P	
2	0.1599	-3.51	9.46	5.95	58.31	-52.36	AVG	P	
3	0.2784	-4.17	9.49	5.32	60.86	-55.54	QP	P	
4	0.2784	-9.88	9.49	-0.39	52.32	-52.71	AVG	P	
5	0.5149	-6.09	9.51	3.42	56.00	-52.58	QP	P	
6	0.5149	-11.04	9.51	-1.53	46.00	-47.53	AVG	P	
7	0.7884	-6.10	9.52	3.42	56.00	-52.58	QP	P	
8	0.7884	-11.13	9.52	-1.61	46.00	-47.61	AVG	P	
9	4.2446	-4.22	9.60	5.38	56.00	-50.62	QP	P	
10	4.2446	-9.11	9.60	0.49	46.00	-45.51	AVG	P	
11	9.0715	-4.13	9.75	5.62	60.00	-54.38	QP	P	
12	9.0715	-8.80	9.75	0.95	50.00	-49.05	AVG	P	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

6.2 Disturbance Power

Test Requirement: EN IEC 55014-1: 2021

Test Method: CISPR 16-2-2

Limit:

30MHz- 300MHz: 45dB(pW)-55dB(pW) quasi-peak, 35dB(pW)-45dB(pW) average

200MHz- 300MHz: 0dB(pW)-10dB(pW) quasi-peak (reduction limit)

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30MHz to 300MHz

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

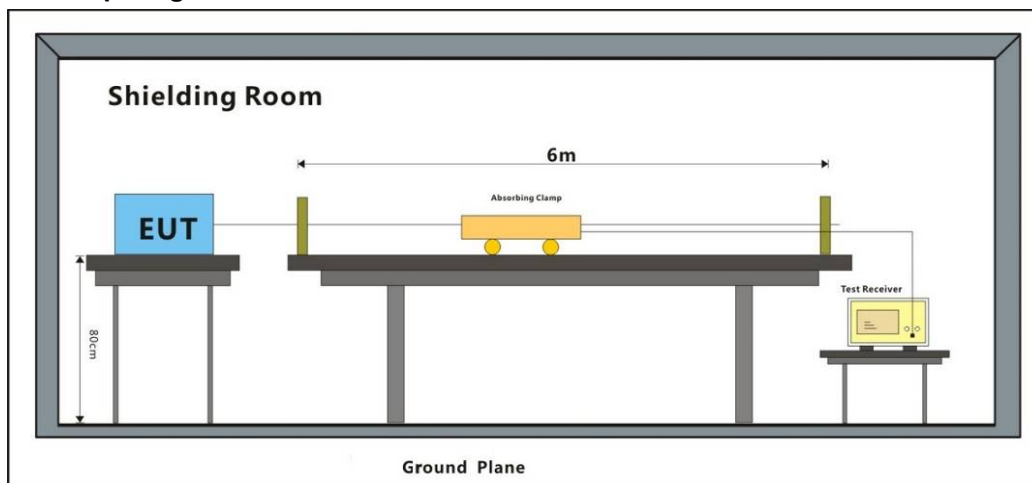
Humidity: 47 % RH

Atmospheric Pressure: 1010 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating continual.

6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

Frequency Range: 30MHz to 300MHz

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected. The red line show in graphic is the limit in standard used in this section.

Measured Level = Read level + Cable Loss + Clamp 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: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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

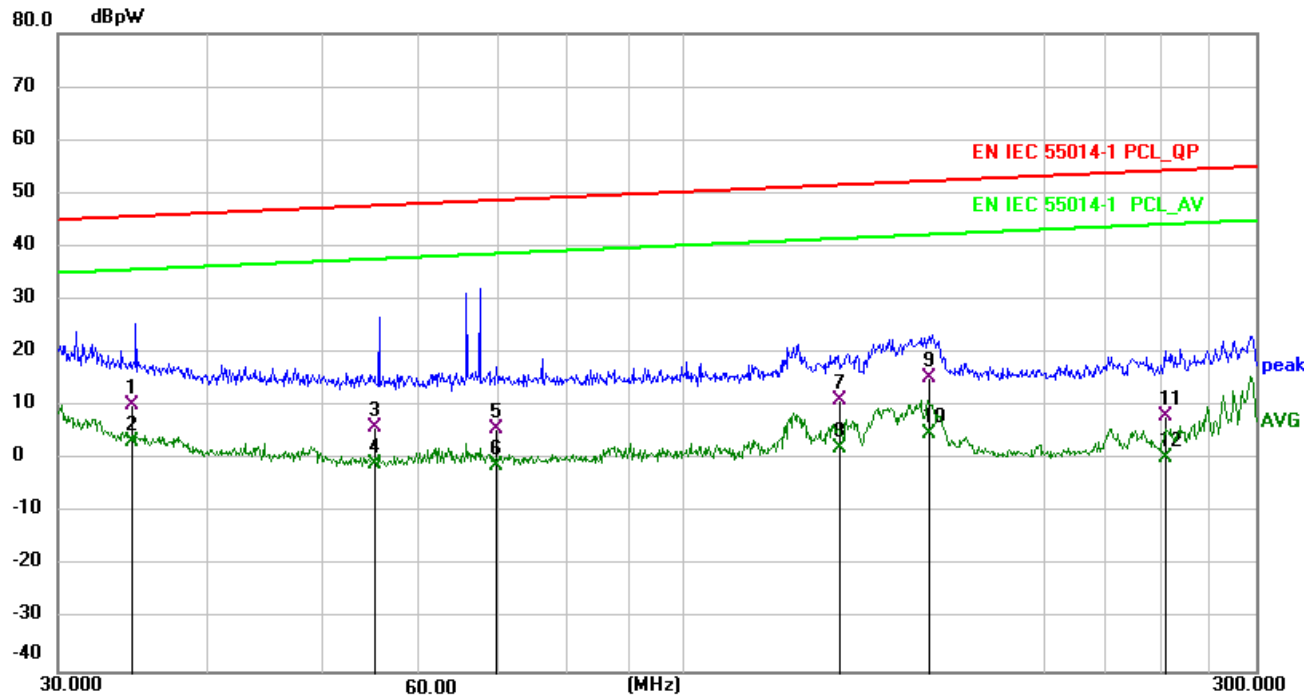
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612
中国·上海·松江区金都西路588号 邮编: 201612

t (86-21) 61915666
t (86-21) 61915666

f (86-21) 61915678
f (86-21) 61915678

www.sgsgroup.com.cn
sgs.china@sgs.com

Test Mode: 00



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB)	Level (dBpW)	Limit (dBpW)	Margin (dB)	Detector	Position (cm)	P/F	Remark
1	34.6752	1.52	8.86	10.38	45.63	-35.25	QP		P	
2 *	34.6752	-5.63	8.86	3.23	35.63	-32.40	AVG		P	
3	55.1704	-0.33	6.50	6.17	47.65	-41.48	QP		P	
4	55.1704	-7.43	6.50	-0.93	37.65	-38.58	AVG		P	
5	69.9077	-1.13	6.96	5.83	48.67	-42.84	QP		P	
6	69.9077	-8.17	6.96	-1.21	38.67	-39.88	AVG		P	
7	135.1169	4.81	6.36	11.17	51.54	-40.37	QP		P	
8	135.1169	-4.07	6.36	2.29	41.54	-39.25	AVG		P	
9	160.5306	8.72	6.68	15.40	52.28	-36.88	QP		P	
10	160.5306	-1.77	6.68	4.91	42.28	-37.37	AVG		P	
11	252.3548	1.06	7.03	8.09	54.25	-46.16	QP		P	
12	252.3548	-6.54	7.03	0.49	44.25	-43.76	AVG		P	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

6.3 Discontinuous Disturbance (150kHz-30MHz)

Test Requirement: EN IEC 55014-1: 2021

Test Method: EN IEC 55014-1: 2021

Limit:

Provision	Click Rate (N)		
1	All clicks ≤ 20 ms	90 % click ≤ 10 ms	$N \leq 5$
2	$N < 0,2$	$L_q^b = L^a + 44$	Clicks $^c \leq 25\%$ exceed L_q^b
3	$30 > N \geq 0,2$	$L_q^b = L^a + 20 \lg(30/N)$	Clicks $^c \leq 25\%$ exceed L_q^b
<p>^a The limits L of Conducted Emissions apply also to discontinuous disturbances from all equipment which produce:</p> <p>1) disturbances other than clicks, or</p> <p>2) clicks with a click rate N equal to or greater than 30</p> <p>^b The click limit L_q is calculated by increasing the relevant quasi-peak limit L for continuous disturbances by certain value.</p> <p>The click limit applies to the disturbance assessed according to the upper quartile method</p> <p>^c a quarter of the number of the clicks registered during the observation time T is allowed to exceed the click limit L_q</p>			

6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

Humidity: 47 % RH

Atmospheric Pressure: 1010 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating continual.


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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

NO.588 West Jindu Road, Songjiang District, ShanghaiChina 201612

t (86-21) 61915666

f (86-21) 61915678

www.sgsgroup.com.cn

中国·上海·松江区金都西路588号

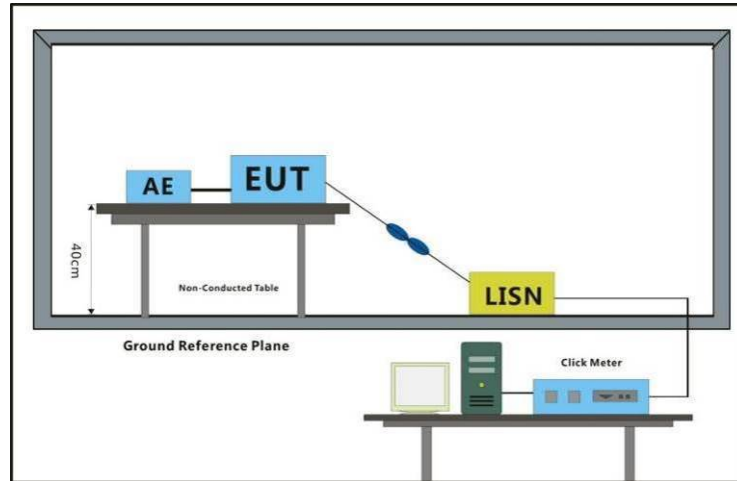
邮编: 201612

t (86-21) 61915666

f (86-21) 61915678

sgs.china@sgs.com

6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

Frequency Range: 150kHz to 30MHz



Test Mode: 00

Run A		run time= 120mins		
Frequency(MHz)	150kHz	500kHz	1.4MHz	30MHz
Limit(dBuV)	66	56	56	60
Short Clicks n1 (≤10ms)	1	0	0	0
Medium Clicks n2 (10-20ms)	0	0	0	0
Long Clicks n3 (20-200ms)	0	0	0	0
Total(Short+Medium+Long) n=n1+n2+n3	1	0	0	0
Events(≥200ms)	0.00	0.00	0.00	0.00
Switching Operation	/			
Factor(f)	/			
Click rates	0.06	0.00	0.00	0.00
☑ Click rate N≤5, 90% click rate duration less than 10ms and all click rate duration less than 20ms shall be deemed to comply the limits				
Run B		run time= / mins		
Frequency(MHz)	150kHz	500kHz	1.4MHz	30MHz
Limit(dBuV)	/	/	/	/
Short Clicks n1 (≤10ms)	/	/	/	/
Medium+ Long Clicks n2 (10-200ms)	/	/	/	/
Total(Short+Medium+Long) n=n1+n2	/	/	/	/
Limit=Run A/4	/	/	/	/



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

6.4 Harmonic Current Emission

Test Requirement: EN IEC 61000-3-2: 2019+A1:2021

Test Method: EN IEC 61000-3-2: 2019+A1:2021

6.4.1 E.U.T. Operation

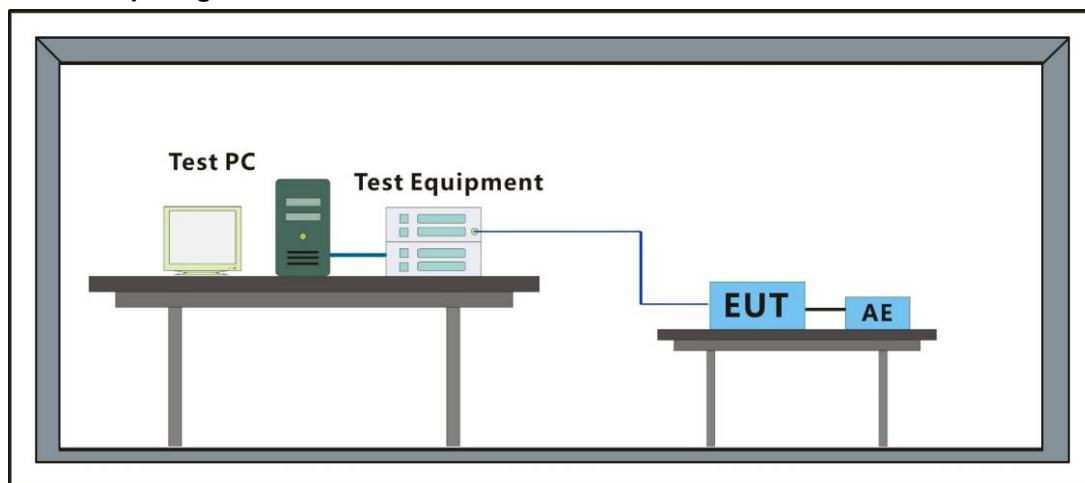
Operating Environment:

Temperature: 24 °C Humidity: 49 % RH Atmospheric Pressure: 1010 mbar

6.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating continual.

6.4.3 Test Setup Diagram



6.4.4 Measurement Procedure and Data

Frequency Range: 100Hz to 2kHz



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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

NO.588 West Jindu Road, Songjiang District, ShanghaiChina 201612 t (86-21) 61915666 f (86-21) 61915678 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

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

Report No.: SHEM230800487801

Page: 19 of 28

Test Mode: 00

Highest parameter values during test:

V_RMS (Volts):	229.90	Frequency (Hz):	50.00
I_Peak (Amps):	12.840	I_RMS (Amps):	9.055
I_Fund (Amps):	9.055	Crest Factor:	1.419
Power (Watts):	2080.8	Power Factor:	1.000

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.004	1.080	N/A	0.005	1.620	N/A	Pass
3	0.022	2.300	N/A	0.026	3.450	N/A	Pass
4	0.003	0.430	N/A	0.004	0.645	N/A	Pass
5	0.005	1.140	N/A	0.007	1.710	N/A	Pass
6	0.002	0.300	N/A	0.003	0.450	N/A	Pass
7	0.002	0.770	N/A	0.005	1.155	N/A	Pass
8	0.002	0.230	N/A	0.002	0.345	N/A	Pass
9	0.002	0.400	N/A	0.003	0.600	N/A	Pass
10	0.001	0.184	N/A	0.002	0.276	N/A	Pass
11	0.001	0.330	N/A	0.002	0.495	N/A	Pass
12	0.001	0.153	N/A	0.001	0.230	N/A	Pass
13	0.001	0.210	N/A	0.002	0.315	N/A	Pass
14	0.000	0.131	N/A	0.000	0.197	N/A	Pass
15	0.000	0.150	N/A	0.001	0.225	N/A	Pass
16	0.000	0.115	N/A	0.000	0.173	N/A	Pass
17	0.001	0.132	N/A	0.001	0.198	N/A	Pass
18	0.000	0.102	N/A	0.000	0.153	N/A	Pass
19	0.001	0.118	N/A	0.001	0.178	N/A	Pass
20	0.000	0.092	N/A	0.000	0.138	N/A	Pass
21	0.000	0.107	N/A	0.001	0.161	N/A	Pass
22	0.000	0.084	N/A	0.000	0.125	N/A	Pass
23	0.000	0.098	N/A	0.001	0.147	N/A	Pass
24	0.000	0.077	N/A	0.000	0.115	N/A	Pass
25	0.000	0.090	N/A	0.001	0.135	N/A	Pass
26	0.000	0.071	N/A	0.000	0.107	N/A	Pass
27	0.000	0.083	N/A	0.001	0.125	N/A	Pass
28	0.000	0.066	N/A	0.001	0.099	N/A	Pass
29	0.000	0.078	N/A	0.001	0.116	N/A	Pass
30	0.000	0.061	N/A	0.000	0.092	N/A	Pass
31	0.000	0.073	N/A	0.001	0.109	N/A	Pass
32	0.000	0.058	N/A	0.001	0.086	N/A	Pass
33	0.000	0.068	N/A	0.001	0.102	N/A	Pass
34	0.000	0.054	N/A	0.000	0.081	N/A	Pass
35	0.000	0.064	N/A	0.001	0.096	N/A	Pass
36	0.000	0.051	N/A	0.000	0.077	N/A	Pass
37	0.000	0.061	N/A	0.001	0.091	N/A	Pass
38	0.000	0.048	N/A	0.000	0.073	N/A	Pass
39	0.000	0.058	N/A	0.001	0.087	N/A	Pass
40	0.000	0.046	N/A	0.000	0.069	N/A	Pass

N/A: Harmonic currents less than 0.6% of the input current measured under the test conditions, or less than 5mA, whichever is greater, are disregarded.



Unless otherwise agreed 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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

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

Report No.: SHEM230800487801

Page: 20 of 28

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.079	0.460	17.08	OK
3	0.637	2.069	30.79	OK
4	0.056	0.460	12.20	OK
5	0.140	0.919	15.18	OK
6	0.058	0.460	12.54	OK
7	0.062	0.690	8.92	OK
8	0.059	0.460	12.85	OK
9	0.046	0.460	9.99	OK
10	0.037	0.460	7.99	OK
11	0.034	0.230	14.77	OK
12	0.012	0.230	5.08	OK
13	0.017	0.230	7.22	OK
14	0.005	0.230	2.34	OK
15	0.010	0.230	4.19	OK
16	0.008	0.230	3.34	OK
17	0.015	0.230	6.72	OK
18	0.007	0.230	2.99	OK
19	0.013	0.230	5.78	OK
20	0.009	0.230	3.79	OK
21	0.010	0.230	4.16	OK
22	0.004	0.230	1.59	OK
23	0.008	0.230	3.63	OK
24	0.005	0.230	1.97	OK
25	0.005	0.230	2.16	OK
26	0.003	0.230	1.29	OK
27	0.008	0.230	3.68	OK
28	0.004	0.230	1.93	OK
29	0.005	0.230	2.27	OK
30	0.002	0.230	1.00	OK
31	0.003	0.230	1.46	OK
32	0.004	0.230	1.53	OK
33	0.005	0.230	2.32	OK
34	0.003	0.230	1.22	OK
35	0.005	0.230	1.97	OK
36	0.003	0.230	1.34	OK
37	0.003	0.230	1.28	OK
38	0.003	0.230	1.16	OK
39	0.003	0.230	1.39	OK
40	0.005	0.230	2.00	OK



Unless otherwise agreed 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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

6.5 Voltage Fluctuations and Flicker

Test Requirement: EN 61000-3-3: 2013+ A1:2019+A2:2021

Test Method: EN 61000-3-3: 2013+ A1:2019+A2:2021

6.5.1 E.U.T. Operation

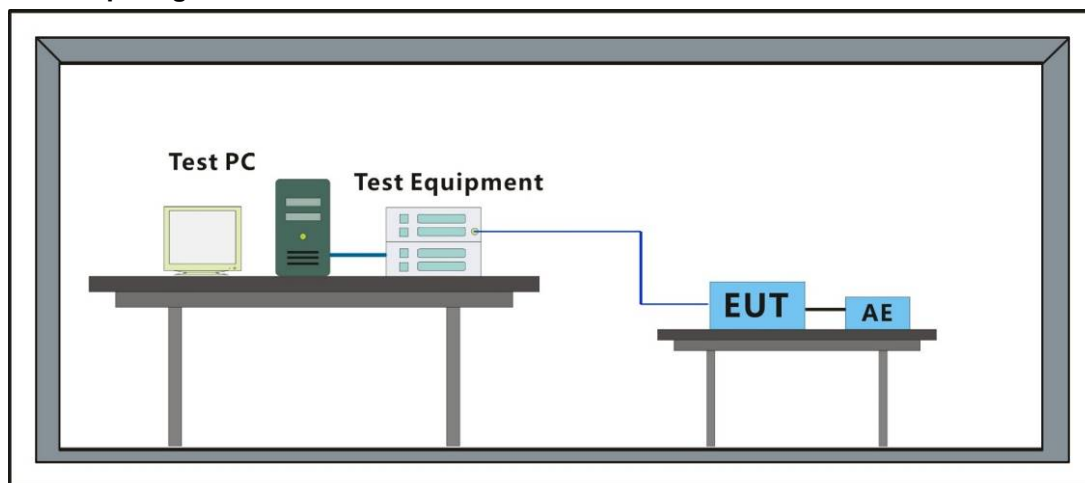
Operating Environment:

Temperature: 24 °C Humidity: 49 % RH Atmospheric Pressure: 1010 mbar

6.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating continual.

6.5.3 Test Setup Diagram



6.5.4 Measurement Procedure and Data

Test Mode: 00

Vrms at the end of test (Volt): 229.81

Highest dt (%):

T-max (mS): 0

Highest dc (%): 0.00

Highest dmax (%): 0.00

Highest Pst (10 min. period): 0.201

Highest Plt (2 hr. period): 0.088

Test limit (%):

Test limit (mS): 500.0 Pass

Test limit (%): 3.30 Pass

Test limit (%): 4.00 Pass

Test limit: 1.000 Pass

Test limit: 0.650 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: (86-755) 8307 1443, or email: 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
sgs.china@sgs.com

7 Electromagnetic Susceptibility Test Results

Test Requirement: EN IEC 55014-2:2021

Test Method: N/A

Remark: There is no need for immunity tests to be performed on this product in accordance with clause 7.2.2 of EN IEC 55014-2 which states:

“Category I equipment is deemed to comply with the immunity requirements of this document without testing.”

For further details, please refer to clause 4.2 of EN IEC 55014-2 which states:

“Category I: equipment containing no electronic control circuitry.

EXAMPLES Appliances, tools and toys that contain no electronic control circuits and only electromechanical components such as switches, thermostats, brush motors, induction motors, heating elements, lighting toys containing only batteries and LED.

Electrical circuits consisting of passive components (such as radio interference suppression capacitors or inductors, mains transformers, mains frequency rectifiers) are not considered to be electronic control circuitry.”



Unless otherwise agreed 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) 8307 1443, or email: 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
t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com

8 Test Setup Photo

Conducted Emissions at AC Mains Power Port (150kHz-30MHz)



Disturbance Power



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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

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

sgs.china@sgs.com

Discontinuous Disturbance (150kHz-30MHz)



Harmonic Current Emission



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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

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

sgs.china@sgs.com

Voltage Fluctuations and Flicker



Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

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

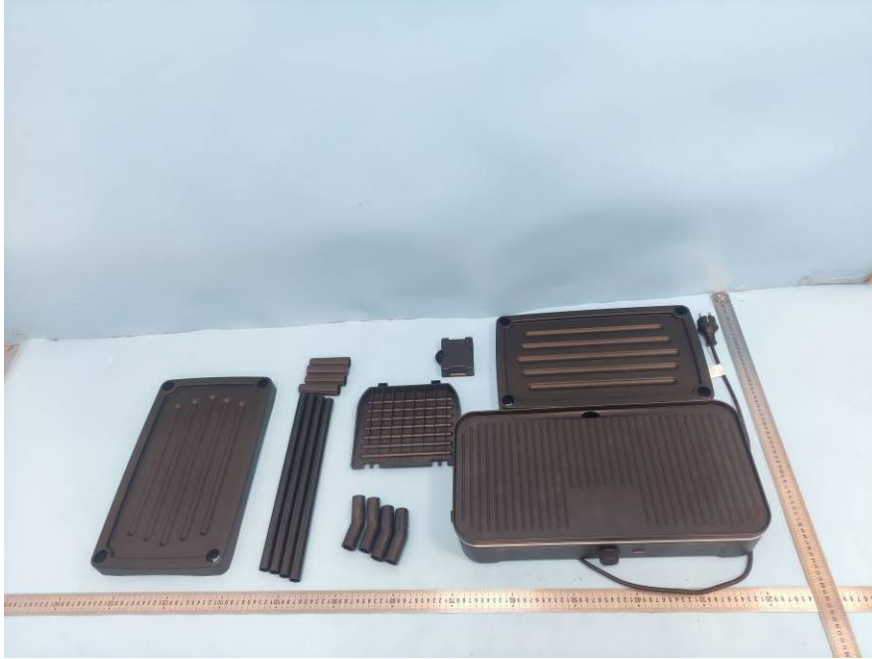
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612
中国·上海·松江区金都西路588号 邮编: 201612

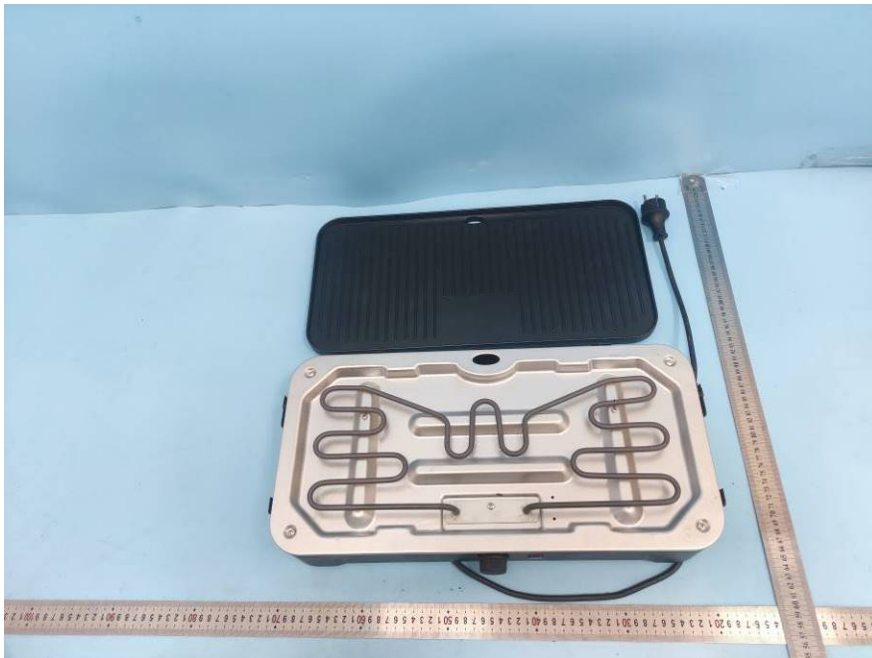
t (86-21) 61915666
t (86-21) 61915666

f (86-21) 61915678
f (86-21) 61915678

www.sgsgroup.com.cn
sgs.china@sgs.com

9 EUT Constructional Details (EUT Photos)





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

Unless otherwise agreed 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) 8307 1443, or email: CN.Doccheck@sgs.com

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

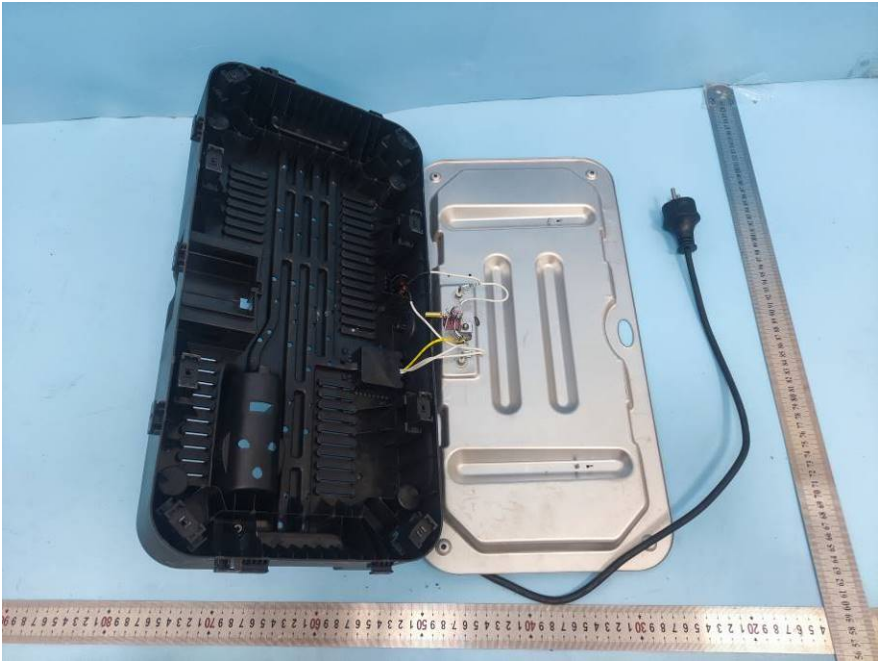
t (86-21) 61915666

f (86-21) 61915678

f (86-21) 61915678

www.sgsgroup.com.cn

sgs.china@sgs.com



- 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) 8307 1443, or email: 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
sgs.china@sgs.com