TEST REPORT

Reference No.	:	WTF24F04100009N
Applicant	:	Zhongshan Eastar Group CO., LTD.
Address	:	RM1905, Hongye Building, Changjiang Road, East District, Zhongshan City, Guangdong Province , China
Manufacturer	:	Zhongshan Eastar Electrical Appliance Co.,Ltd
Address	:	No. 6 Mingyue Road, Sanjiao Town, Zhongshan, Guangdong, China.
Product Name	:	Hot plate
Model No.	:	ES-3101, ES-3201
Test specification	:	Commission Regulation (EU) No 66/2014 – Implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for domestic ovens, hobs and range hoods, 1.2 & 2.2.1 of Annex I EN 60350-2:2018+A1-2021
Date of Receipt sample	:	2024-04-30
Date of Test	:	2024-04-30 to 2024-05-22
Date of Issue	:	2024-05-22
Test Report Form No.	:	WPH-66603502A-01A
Test Result	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:
Waltek Testing Group (Foshan) Co., Ltd.
Address: No.13-19, 2/F., 2nd Building, Sunlink Machinery City, Xingye 4 Road, Guanglong Industrial Park, Chihua Neighborhood Committee, Chencun Town, Shunde District, Foshan, Guangdong, China
Tel:+86-757-23811398 Fax:+86-757-23811381 E-mail:info@waltek.com.cn

Tested by: Winnie Huang

Approved by: Jerry Mu

Unit Under Test (UUT)	:	Hot plate
Trademark	:	---
Model/Type reference	:	ES-3201
Ratings	:	220-240V~, 50/60Hz, 2500W(1500W+1000W)
Number of controls	:	2
Cooking zone	:	☒ Single zone x2 ☐ Multiple zone
Type of cooking zone	:	☒ Solid hotplate cooking zone ☐ Tubular hotplate cooking zone ☐ Radiant cooking zone ☐ Induction cooking zone
Cooking zone dimension	:	Ø185 mm, Ø155 mm
Cooking area	:	☒ None ☐ without limitative marking ☐ with limitative marking

General remarks:

The test results presented in this report relate only to the item tested.

"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator.

Use of uncertainty of measurement for decisions on conformity (decision rule):
No decision rule is specified by the standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

Summary of testing:

1. The samples are tested and complied with the requirements of standards listed on cover page.
2. Both models are similar circuit principle and construction except the outlook appearance and differences listed in below table. Unless otherwise specified, full tests have been carried out on model ES-3201 to represent the other similar models.
3. The test results refer only to the submitted samples and the tests that are fixed according to the scope of the order.

Test procedure:

(EU) No 66/2014, EC 1275/2008, (EU) 801/2013

Test method:

EN 60350-2:2018+A1-2021, Household electric cooking appliances – Part 2: Hobs – Methods for measuring performance

Test Condition:

Ambient temperature	:	20.0-25.0°C
Relative humidity	:	50-65%
Test Voltage and frequency	:	AC 230V 50Hz

Copy of marking plate:

N/A

Possible test case verdicts:

- test case does not apply to the test object: N(/A) (Not applicable)
- test object does meet the requirement: P (Pass)
- test object does not meet the requirement: F (Fail)

General product information:

1. The product is induction cooker plate for household use.

No.	Model name	Ratings	Rated input power	Control method	Quantity of cooking zone
1	ES-3101	220-240V~, 50/60Hz, Class I, IPX0	1500W	Mechanical	Single
2	ES-3201		2500W (1500W+1000W)		Double

Summary of results:

Ecodesign requirements according to Annex I of regulation (EU) No 66/2014

Annex I, 1.2 Energy efficiency (for domestic hobs)

Requirement		Result – Remark	Verdict
From 20 February 2015	Electric hob ($EC_{electric\ hob}$ in Wh/kg) <210	Model: ES-3201 $EC_{electric\ hob}$=178.6 Model: ES-3101 $EC_{electric\ hob}$=167.1	P
From 20 February 2017	Electric hob ($EC_{electric\ hob}$ in Wh/kg) <200	Model: ES-3201 $EC_{electric\ hob}$=178.6 Model: ES-3101 $EC_{electric\ hob}$=167.1	P
From 20 February 2019	Electric hob ($EC_{electric\ hob}$ in Wh/kg) <195	Model: ES-3201 $EC_{electric\ hob}$=178.6 Model: ES-3101 $EC_{electric\ hob}$=167.1	P

Annex I, 2 Product information requirements

Requirement	Result – Remark	Verdict
From 20 February 2015 The following product information shall be provided in the technical documentation of the product, the booklet of instructions and on the free access websites of manufacturers of domestic ovens, hobs and range hoods, their authorized representatives, or importers:		Not checked
(a) short title or reference to the measurement and calculation methods used to establish compliance with the ecodesign requirements;		Not checked
(b) information relevant to users in order to reduce total environmental impact (e.g. energy use) of the cooking process.		Not checked
From 20 Feb. 2015 The technical documentation and a part for professionals of the free access websites of manufacturers, their authorized representatives, or importers shall contain information relevant for non-destructive disassembly for maintenance purposes and information relevant for dismantling, in particular in relation to the motor, if applicable, and any batteries, recycling, recovery and disposal at end-of-life.		Not checked

Annex I, 2.2.1 Information for domestic electric hobs

	Symbol	Value	Unit
Model identification	ES-3201		
Type of hob	--	Domestic electric hobs	--
Number of cooking zones and/or areas	--	2	--
Heating technology (induction cooking zones and cooking areas, radiant cooking zones, solid plates)	--	solid plates	--
For circular cooking zones or area: diameter of useful surface area per electric heated cooking zone, rounded to the nearest 5 mm	Ø	Ø18.5 cm, Ø15.5 cm	cm
For non-circular cooking zones or areas: length and width of useful surface area per electric heated cooking zone or area, rounded to the nearest 5 mm	L	---	cm
	W	---	cm
Energy consumption per cooking zone or area calculated per kg	$EC_{electric\ cooking}$	167.1, 190.0	Wh/kg
Energy consumption for the hob calculated per kg	$EC_{electric\ hob}$	178.6	Wh/kg

	Symbol	Value	Unit
Model identification	ES-3101		
Type of hob	--	Domestic electric hobs	--
Number of cooking zones and/or areas	--	1	--
Heating technology (induction cooking zones and cooking areas, radiant cooking zones, solid plates)	--	solid plates	--
For circular cooking zones or area: diameter of useful surface area per electric heated cooking zone, rounded to the nearest 5 mm	Ø	Ø18.5 cm	cm
For non-circular cooking zones or areas: length and width of useful surface area per electric heated cooking zone or area, rounded to the nearest 5 mm	L	---	cm
	W	---	cm
Energy consumption per cooking zone or area calculated per kg	$EC_{electric\ cooking}$	167.1	Wh/kg
Energy consumption for the hob calculated per kg	$EC_{electric\ hob}$	167.1	Wh/kg

EN 60350-2			
Data and calculation sheet: energy consumption of a cooking process (see Clause 7 and Annex A)			
Model name	ES-3201 (left cooking zone)	Test voltage	230V, 50Hz
Test date	2024-05-21	Cookware position	Standardized cookware B
Cookware diameter	Ø180 mm	Water load (m_{cw})	1500 g

Determine Tc aacording 7.5.2.1*

No.	Ambient air pressure (hPa)	Ambient temperature (°C)	Start water temperature (°C)	Time when power level is switched off (hh:mm:ss)	T_{70} (°C)	Highest temperature value (°C)	Overshoot T_O (K)	Result Tc (°C)	Fixed Tc (°C) used
---	---	---	---	---	---	---	---	---	---

Measuring energy consumption

No.	Ambient air pressure (hPa)	Ambient temperature (°C)	Initial water temperature T_{15} (°C)	Time of Tc (h:min:s)	Determined Tc (°C)	Tc (°C)	Continuous power level	Average power (W) during ts	Time of T_{90} (h:min:s)	E_{cw} energy consumption at t_{90} (Wh)	Ts (°C) final temperature	Total test time (h:min:s)	E_{cw} total energy consumption (Wh)
1	1005	23.5	15.2	0:09:53	80	80.7		134.82	0:11:57	205.80	92.5	0:31:57	250.67
2	1004	23.5	14.9	0:10:21	80	80.5		134.66	0:12:43	206.12	91.8	0:32:43	251.35
3	1005	23.5	15.3	0:10:03	80	80.1		134.87	0:12:20	205.97	92.1	0:32:20	249.99

Remark:

According to clause 7.5.2.1 Determined Tc of EN 60350-2:2018+A1:2021:

☐ Induction cooking zones and cooking areas Tc=89°C.

☐ Radiant cooking zones Tc=85°C.

☒ Solid plates Tc=80°C.

EN 60350-2			
Data and calculation sheet: energy consumption of a cooking process (see Clause 7 and Annex A)			
Model name	ES-3201 (right cooking zone)	Test voltage	230V, 50Hz
Test date	2024-05-11	Cookware position	Standardized cookware A
Cookware diameter	Ø150 mm	Water load (m_{cw})	1030 g

Determine Tc aacording 7.5.2.1

No.	Ambient air pressure (hPa)	Ambient temperature (°C)	Start water temperature (°C)	Time when power level is switched off (h:min:s)	T_{70} (°C)	Highest temperature value (°C)	Overshoot T_O (K)	Result Tc (°C)	Fixed Tc (°C) used
---	---	---	---	---	---	---	---	---	---

Measuring energy consumption

No.	Ambient air pressure (hPa)	Ambient temperature (°C)	Initial water temperature T_{15} (°C)	Time of Tc (h:min:s)	Determined Tc (°C)	Tc (°C)	Continuous power level	Average power (W) during ts	Time of T_{90} (h:min:s)	E_{cw} energy consumption at t_{90} (Wh)	Ts (°C) final temperature	Total test time (h:min:s)	E_{cw} total energy consumption (Wh)
1	1004	23.5	15.5	0:14:58	80	80.1		133.53	0:20:56	143.43	91.2	0:40:56	195.26
2	1005	23.5	15.1	0:15:21	80	80.3		133.37	0:22:08	145.03	90.8	0:42:08	196.83
3	1004	23.5	15.3	0:14:16	80	80.1		133.49	0:20:11	144.17	91.0	0:40:11	195.15

Remark:

According to clause 7.5.2.1 Determined Tc of EN 60350-2:2018+A1:2021:

☐ Induction cooking zones and cooking areas Tc=89°C.

☐ Radiant cooking zones Tc=85°C.

☒ Solid plates Tc=80°C.

Energy consumption for a hob (Double cooking zones, 1500W+1000W)	
Calculated as followed:	$E_{hob} = \frac{1000g}{n_{cw}} \times \sum_{cw=1}^{n_{cw}} (E_{cw} / m_{cw})$
E_{cw} (Wh)	195.75, 250.67
m_{cw} (g)	1030, 1500
n_{cw}	2
E_{hob}	178.6

Energy consumption for a hob (Single cooking zone, 1500W)	
Calculated as followed:	$E_{hob} = \frac{1000g}{n_{cw}} \times \sum_{cw=1}^{n_{cw}} (E_{cw} / m_{cw})$
E_{cw} (Wh)	250.67
m_{cw} (g)	1500
n_{cw}	1
E_{hob}	167.1

Regulation (EC) No 1275/2008 and Commission Regulation (EU) No 801/2013			
Clause	Requirement	Result – Remark	Verdict
2	Stage II – four years after the Regulation has come into force		P
2(a)	Power Consumption in any off-mode condition: <= 0.5W	Off-mode: _0_ W	P
2(b)	Power Consumption in standby mode(s): (i) in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function <= 0.5W; (ii) In any condition providing only information or status display, or providing only a combination of reactivation function and information or status display <= 1W	Stand-by mode: (i)____W (ii)_____W	N
2(c)	Availability of off mode and/or standby mode Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.	☒ Yes ☐ No ☐ Off/standby mode is inappropriate for the intended use of equipment	P
2(d)	Power Management: When equipment is not providing the main function, or when other energy-using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into: — standby mode (<= 0.5 or 1 W), or — off mode (<= 0.5W), or — another condition (<= 0.5 or 1 W)	☐ Yes, ___ W Time taken to automatically reach standby/off mode, or another condition: _____ sec. ☐ No ☐ A power management function is inappropriate for the intended use ☐ A power management function activated.	N

Attachment 1: Photo document

Model: ES-3201

Photo 1

Photo 2

Photo 3

Photo 4

Model: ES-3101

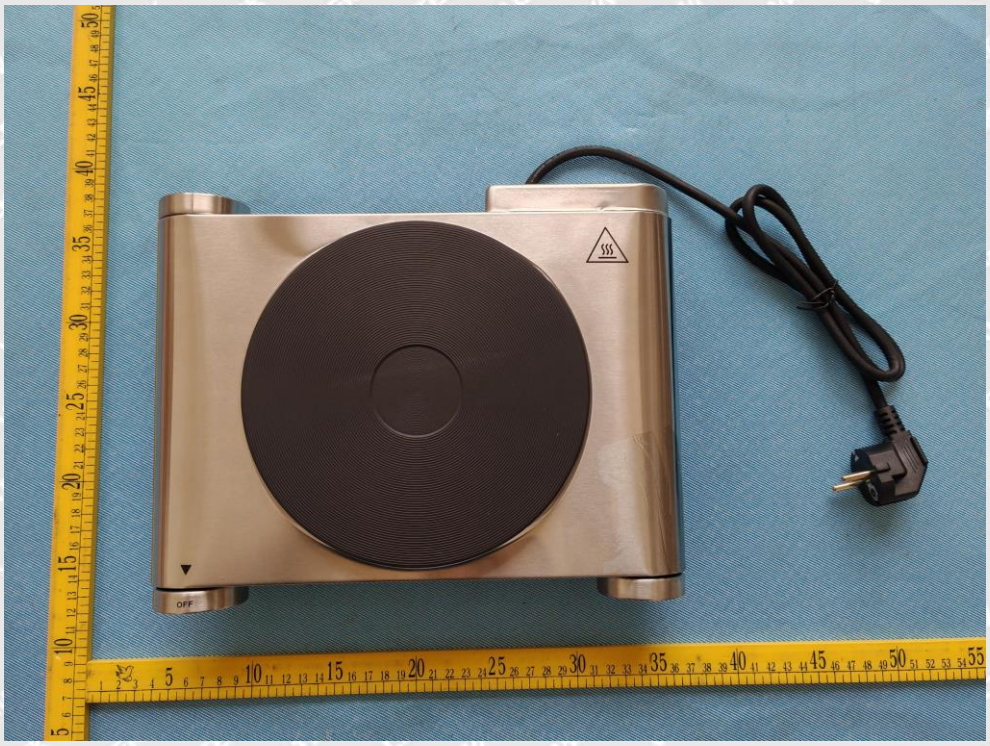

Photo 5

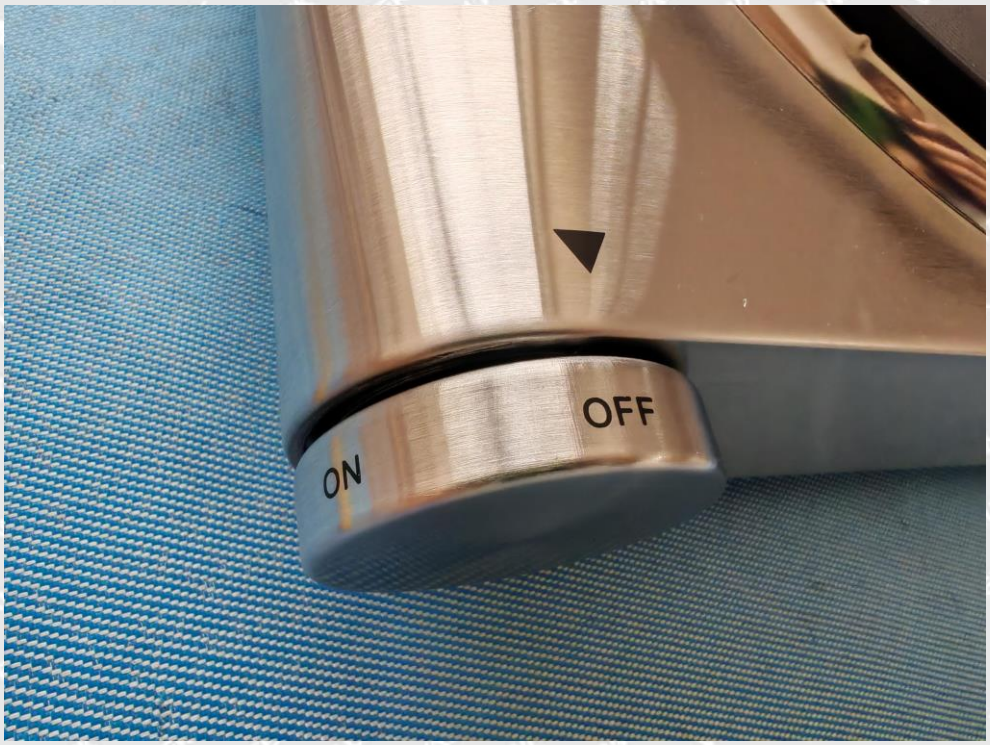

Photo 6

Photo 7

====== End of Report ======