

ICS 97.040.20

CCS Y 68



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18800-2017

**Household microwave oven -- Methods for measuring
performance**

家用微波炉 性能试验方法

(English Translation)

Issued on: October 14, 2017

Implemented on: November 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Foreword V.	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 Categories	
4.1 By type	
4.2 According to the characteristics of	
5 Test Schedule	
6 General conditions of the test	
6.1 General	
6.2 Supply voltage	
6.3 Test space	
6.4 Water	
6.5 Microwave initial conditions	
6.6 Controller Settings	
6.7 Instruments and Measurement	
6.8 Appliance placement	
7 Size and volume	
7.1 External dimensions	
7.2 Effective cavity size and calculated volume	
7.2.1 General	
7.2.2 Effective height	
7.2.3 Effective width	
7.2.4 Effective Depth	
7.2.5 Reciprocating tray	
7.2.6 Calculate the volume	
7.2.7 Food support size	
7.3 Total internal dimensions and total volume	
7.3.1 General	
7.3.2 Total height (H)	
7.3.3 Total width (W)	
7.3.4 Total Depth (D)	

- 7.3.5 Rectangular cavity total volume
- 7.3.6 The total volume of non-rectangular cavity
- 8 Determination of microwave output power
- Efficiency
- 10 Performance Technical Test
- 10.1 General
- 10.2 Square tank test
- 10.2.1 Test Procedure
- 10.2.2 Evaluation
- 10.3 Multiple cup test
- 10.3.1 Test Procedure
- 10.3.2 Evaluation
- 11 Heating performance
- 11.1 Heat beverages
- 11.1.1 General
- 11.1.2 Test Procedure
- 11.1.3 Evaluation
- 11.2 Heating simulated food
- 11.2.1 Test Purposes
- 11.2.2 Test Procedure
- 11.2.3 Evaluation
- 12 Cooking performance
- 12.1 General
- 12.2 Evaluation
- 12.3 Test
- 12.3.1 Custard
- 12.3.2 Soft cake
- 12.3.3 Meat Cake
- 12.3.4 Cheese and Potatoes
- 12.3.5 Cake
- 12.3.6 Chicken
- 13 Thaw function
- 13.1 General
- 13.2 Evaluation
- 13.3 Meat thawing test

13.3.1 Test Purposes

13.3.2 Container

13.3.3 Ingredients

13.3.4 Test Procedure

Energy consumption of microwave function

14.1 General

14.2 Test load

14.3 Preparation

14.4 Load placed on the appliance

14.5 Energy Consumption Testing of a Cooking Cycle

14.6 Calculating Energy Consumption for a Cooking Cycle

14.7 Final result

14.8 Test results report

15 Low power mode energy consumption test

Appendix A (Informative) Regional Thaw Test

Appendix B (informative) Chapter 12 and Chapter 13 of the required plate

Appendix C (informative) blender

Appendix D (informative) Chapter 8 and Chapter 14 suitable glass containers

Appendix E (Informative) Data and Calculation Tables. Microwave Functions Energy Consumption During Cooking Cycle (Chapter 14)

Appendix F (Informative) Energy consumption during cooling

References

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 18800-2008 "household microwave oven performance test methods", and GB/T 18800-2008 the main technology the changes are as follows.

--- Added microwave function, combined microwave function, set to shutdown mode, set to standby mode, cooling and food stand Definition (see Chapter 3);

--- Increase equipment and measurement requirements (see 6.7);

--- Removed paste performance test (2008 edition of Chapter 5);

--- The original "7.2 effective cavity size" and the original "7.3 effective volume" into "7.2 effective cavity size and calculated volume", and Modify the relevant content (see 7.2, 7.2 and 7.3 of the 2008 edition);

- Added "7.3 total internal dimensions and total volume" clause content (see 7.3);
- Removed the original Appendix A "paste selection heating test" (2008 edition of Appendix A);
- Original Appendix B "Regional Thaw Test" was changed to Appendix A "Regional Thaw Test" (see Appendix A, 2008 edition of the appendix B);
- Added Chapter 14, Chapter 15, Appendix B ~ Appendix F (see Chapter 14, Chapter 15, Appendix B ~ Appendix F).

This standard uses the translation method identical with IEC 60705:2014 (Ed4.1) "household microwave oven performance test methods." the documents of our country that are consistent with the corresponding international documents that are normative references in this standard are as follows.

--- GB/T 16839.2-1997 Thermocouple Part 2. Tolerance (idt IEC 60584-2:1982) Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents.

This standard proposed by the China Light Industry Federation.

This standard by the National Standardization Technical Committee appliances (SAC/TC46) centralized.

This standard was drafted unit. Guangdong Galanz microwave oven Electric Manufacturing Co., Ltd., Guangdong Midea Kitchen Appliance Manufacturing Co., Ltd., Hefei Rong Shida Sanyo Electric Co., Ltd., China Household Electrical Appliances Standard and Technology Industry Alliance, Wanyuan alliance Alliance Technology (Beijing) Co., Ltd., Shanghai Matsushita Microwave Co., Ltd., Hangzhou boss Electric Co., Ltd., Ningbo side too kitchenware Co., Ltd., Boshi household appliances (China) Co., Ltd., Qingdao Haier complete sets of home appliances Services Ltd., Anhui in recognition of Best Technology Co., Ltd., Wei Kai Detection Technology Co., Ltd..

1 Scope

This standard specifies the main performance characteristics of household microwave oven users interested in, and specifies the test methods for these characteristics.

This standard applies to domestic microwave ovens and combined microwave ovens.

Note 1: This standard does not apply to.

- Can not place a diameter ≥ 200 mm or height ≥ 120 mm load microwave oven;
- Safety requirements (see GB 4706.21 and GB 4706.90).

Note 2: This standard does not apply to stoves that have only conventional heating methods (see IEC 60350).