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

GB/T 46281.2-2025

**Household and similar refrigerating appliances -
Characteristics and test methods - Part 2: Performance
requirements**

家用和类似用途制冷器具 特性和测试方法 第2部分：性能要求

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 2 of GB/T 46281 "Characteristics and Test Methods of Refrigeration Appliances for Household and Similar Purposes".

The following sections have been released.

---Part 1: General Requirements;

---Part 2: Performance Requirements;

---Part 3: Power Consumption and Capacity.

This document adopts IEC 62552-2:2020 "Domestic refrigeration appliances - Characteristics and test methods - Part 2: Performance requirements".

The following minimal editorial changes have been made to this document.

---To harmonize with existing standards, the standard title has been changed to "Characteristics and Test Methods for Refrigeration Appliances for Household and Similar Purposes - Part 2.

Performance requirements.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Household Appliances (SAC/TC46).

Introduction

GB/T 46281, "Characteristics and Test Methods for Refrigeration Appliances for Household and Similar Purposes," aims to specify the characteristics and test methods for refrigeration appliances for household and similar purposes.

The sex and testing methods are proposed to consist of three parts.

---Part 1: General Requirements. The purpose is to define the scope, terminology and definitions, instruments, laboratories, and setup for refrigeration products.

---Part 2: Performance Requirements. This section aims to specify the general performance requirements and test methods for refrigeration appliances.

---Part 3: Energy Consumption and Volume. The purpose is to specify the measurement of energy consumption and volume.

Characteristics and test methods of household and similar refrigeration appliances Part 2: Performance Requirements

1 Scope

This document specifies the basic requirements for household and similar refrigeration appliances that use natural or forced air convection for internal cooling.

Features describe the performance testing methods.

Although this document describes some commonalities in the settings of different tests (therefore, it may be advantageous to perform all tests on the same sample).

(These are individual tests used to evaluate the specified characteristics of the tested sample. This document does not specify the generalization of sample test results into...) A procedure for predicting the overall characteristics of a selected sample.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 46281.1-2025 Characteristics and Test Methods for Refrigeration Appliances for Household and Similar Purposes - Part 1: General Requirements (IEC 62552-1:2020, IDT)

GB/T 46281.3-2025 Characteristics and test methods for household and similar refrigeration appliances - Part 3: Power consumption and volume (IEC 62552-3:2020, IDT)

3 Terms and definitions, symbols

The terms and definitions defined in GB/T 46281.1-2025 apply to this document.

4.1 General Requirements

This document specifies the tests required to evaluate the performance of refrigeration appliances for household and similar purposes. While these tests are not mandatory under this document.

However, when conducting tests, they should be carried out in accordance with the provisions of this document.

4.2 Storage Temperature Test

Storage temperature testing is used to determine whether refrigeration appliances can meet the storage requirements of each compartment under the ambient temperature required for the rated climate type.

Storage temperature requirements. See Chapter 6.

4.3 Cooling Capacity Test

Cooling capacity testing measures the load on a cold storage compartment by determining the time it takes to cool a specified test load from ambient temperature to a specified temperature.

Processing capacity. See Chapter 7.