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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 46505.1-2025

Application scenarios of intelligent household appliances - Part 1: General requirements

智能家用电器应用场景 第1部分：通用要求

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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 1 of GB/T 46505 "Application Scenarios of Intelligent Home Appliances". GB/T 46505 has already published the following parts.

1.General 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). This document was drafted by: China Household Electric Appliance Research Institute, Hisense Home Appliances Group Co., Ltd., University of Science and Technology Beijing, and Qingdao Haier Technology. Limited Liability Company, Shenzhen H&T Intelligent Control Co., Ltd., Guangdong Midea Refrigeration Equipment Co., Ltd., BSH Home Appliances Investment (China) Limited Liability Company, TCL Air Conditioner (Zhongshan) Co., Ltd., Changhong Meiling Co., Ltd., Midea Group (Shanghai) Co., Ltd., Hangzhou Robam Electrical Appliances Co., Ltd., Hefei Hualing Co., Ltd., Qingdao Haier Washing Machine Co., Ltd., China Household Electric Appliance Research Institute (Beijing) Testing and Certification Co., Ltd. Company, Guangdong Wanhe New Electric Co., Ltd., Qingdao Haier Refrigerator Co., Ltd., Hisense Air Conditioning Co., Ltd., Foshan Shunde Midea Washing Machine Co., Ltd. Polyester Electric Manufacturing Co., Ltd., Daikin (China) Investment Co., Ltd., Songyan Technology (Hangzhou) Co., Ltd., Weikai Testing Technology Co., Ltd. TCL Industrial Holdings Co., Ltd., Zhejiang Tianxi Kitchen Appliances Co., Ltd., Anhui Zhongjia Zhirui Technology Co., Ltd., Guangdong Xinbao Electric Appliances Joint-stock companies, Jomoo Kitchen & Bath Co., Ltd., Xiamen Yidian Intelligent Technology Co., Ltd., Zhejiang Haozhonghao Health Products Co., Ltd. Ningbo Qishang Electric Appliance Co., Ltd. The main drafters of this document are. Qu Zongfeng, Luo Xiao, Jiao Limin, Huang Guozhong, Wang Miao, Liu Fuxin, Dong Chuchu, Wang Yiming, Chen Weijie, and Liu Hao. Gao Yu, Zhou Haixin, Liu Lu, Lü Peishi, Hu Yaxin, Yang Nan, Liu Ganming, Kong Linglei, Bie Qingfeng, Wu Qijun, Liu Chenhao, Yang Jianwen, Gu Ziqian Qu Qianwen, Xing Jun, Zhou Liangjun, Liang Yuqing, Zhang Tao, Yang Bin, Yu Haifeng, Wang Bing, Zhao Siyang, Xiong Ying.

With the continuous advancement of technology, the functions and application scenarios of smart home appliances are becoming increasingly diverse, and the demand for their standardization is becoming more and more urgent. GB/T 46505 "Application Scenarios of Intelligent Home Appliances" is divided into several parts. This document is Part

1.Subsequent parts will be based on different... For application scenarios or specific needs, more detailed and specific standards should be developed. Each part is related to Part 1,

and together they constitute a smart home system. A standard system for electrical appliance application scenarios. GB/T 46505 "Application Scenarios of Intelligent Home Appliances" is proposed to consist of the following three parts.

1.General Requirements. The purpose is to standardize the general technical requirements for smart home appliance application scenarios.

2.Smart Kitchen. The aim is to standardize the specific requirements for smart kitchens.

3.Smart Living Room. The purpose is to standardize the specific requirements for smart living rooms. Smart home appliance application scenarios Part

1 Scope

GB/T 46505.1-2025 is the Chinese national standard covering describing what a smart appliance is actually supposed to do in the home - the scenarios and the actors in them, the triggers and the responses, the interaction between appliances, and the description format the later parts will use. Part 1 of the series, first edition, and it belongs with the intelligentization requirements GB/T 28219.1-2025. In force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026.

This document defines the terminology and definitions for smart home appliance application scenarios, specifies the types and implementation methods, implementation requirements, and describes the application scenarios. The site provides evaluation guidelines. This document applies to application scenarios of smart home appliances (hereinafter referred to as "smart appliances") in homes and similar environments (hereinafter referred to as "scenario"). The design, development, construction, and operation and maintenance of [the equipment/services].

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 4343.1 Electromagnetic compatibility requirements for household appliances, power tools and similar appliances - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 28219.1-2025, as well as the following terms and definitions, apply to this document.

3.1 Application scenarios In specific spatiotemporal environments, based on technologies

such as the Internet of Things and artificial intelligence, smart home appliances can be used either individually or interconnected with other devices and systems. Collaboration is a specific context and usage pattern used to meet specific user needs and achieve specific functions.

4 Types and Implementation Methods of Scenarios

4.1 Types of Scenes Based on hierarchy, scenes are divided into four types, as shown in Table

a) Based on users' daily needs, the major categories of scenarios are divided into spatial scenarios and functional scenarios;

b) The major scenarios are broken down into intermediate scenarios based on the user's specific spatial and functional requirements;