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**Specification for Conformance Test  
of IoT Household Electrical Appliance**

物联网家电一致性测试规范

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## Foreword

This Standard was drafted as per the rules specified in GB/T 1.1-2009.

Please note that some contents of this document may involve patents. The issuing agency of this document doesn't assume responsibility for identifying these patents.

This Standard was proposed by China Light Industry Council.

This Standard shall be under the jurisdiction of National Technical Committee for Standardization of Household Electrical Appliance (SAC/TC 46).

Drafting organizations of this Standard: China Household Electrical Appliance Research Institute; Gree Electric Appliances, Inc. of Zhuhai; Hisense Kelon Electrical Holding Co., Ltd.; Qingdao Haier Technology Co., Ltd.; Whirlpool (China) Co., Ltd.; Shenzhen Academy of Inspection and Quarantine; Panasonic Home Appliances R&D Center (Hangzhou) Co., Ltd.; Nanjing Dots Intelligent Technology Co., Ltd.; Daikin (China) Investment Co., Ltd.; Anhui CHEARI Zhirui Technology Co., Ltd.; and Anhui Zenhome Cloud IoT Technology Co., Ltd.

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# Specification for Conformance Test of IoT Household Electrical Appliance

## 1 Scope

This Standard specifies the test methods and test procedures for the compliance of IoT Household Electrical Appliance.

This Standard is applicable to the interoperability test of the IoT Household electrical appliances.

## 2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

GB/T 30246.7-2013 Home Network - Part 7: Control Network Communication Protocol

GB/T 33745-2017 Internet of Things – Terminology

GB/T 36429-2018 System Architecture and Application Model of IoT Household Electrical Appliance

GB/T 36424.1-2018 Interface Requirements of IoT Household Electrical Appliance -Part 1: Interface between Control System and Communication Module

GB/T 36430-2018 Device Description File of IoT Electrical Appliance

GB/T 36428-2018 Public Instruction Set of IoT Household Electrical Appliance

## 3 Terms and Definitions

The terms and definitions stipulated in GB/T 33754-2017 are applicable to this document.

## 4 Test Instructions

### 4.1 General

The conformance test for IoT household electrical appliance is to verify the interoperability of equipment among different types and different providers in the IoT household electrical appliance system complying with GB/T 36429-2018, GB/T 36424.1-2018, GB/T 36430-2018, GB/T 36428-2018. The conformance test results shall be judged mainly by the functional verification; the test shall be performed through simulating the actual application environment.

### 4.2 Test application range

The test is mainly for the application test and interoperability test of IoT household electrical appliances, IoT household electrical appliance gateways, IoT household electrical appliance service platforms.

This Standard is only a minimum set tests for basic functional testing.

After passing the test specified in this Standard, different devices of the same manufacturer and different devices of different manufacturers can interoperate on the same interoperability platform; while the product quality shall be tested as per the relevant product standards.

The network layer function is provided by the communication module; the physical layer can use the wire or wireless mode; the protocols among the physical layer, data link layer and network layer can use the existing control network protocol: GB/T 30246.7-2013, zigbee, Lonworks, BACnet, CAN, and other control network protocols; the specific test method can refer to the corresponding protocol requirements; this Standard doesn't describe them.

## 5 Test Processes

### 5.1 Test device

The test in this Standard requires an IoT household electrical appliance, an IoT household electrical appliance gateway, a control terminal with the same communication protocol; the control terminal has been connected to the IoT household electrical appliance gateway. Thereof, the IoT household electrical appliance gateway and control terminal are testing devices; while the IoT household electrical appliance is tested device.