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

**GB/T 20159.4-2011**

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**Classification of environmental condition -- Guidance for the correlation and  
transformation of environmental condition classes to the environmental tests --  
Stationary use at non-weather protected locations**

环境条件分类 环境条件分类与环境试验之间的关系及转换指南 无气候防护场所  
固定使用

**(English Translation)**

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Appendix A (Informative Appendix) without the use of fixed-weather protected locations  
--- climatic conditions

Annex B (informative) no fixed place climate protection using mechanical conditions ---

## Foreword

GB/T 20159 "between the environmental conditions classification Classification of environmental conditions and environmental tests Relationship and Conversion Guide" is divided into the following section.

--- Storage;

---transport;

--- Use weather protected locations fixed;

--- No fixed workplace climate protection use;

--- Ground vehicles;

--- Marine;

--- Portable and non-stationary use;

---preface.

This is Part 4 GB/T 20159 of.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section identical with the international standard IEC 60721-4-4:2003 "Classification of environmental conditions - Part 4-4. IEC 60721-3 Environmental Condition Classification and IEC 60068-2 relationship between the environment and conversion guide test without using a fixed workplace climate protection. " this part of the IEC 60721-4-4 made the following editorial changes.

- "IEC 60721 Part" was changed to "GB/T 20159 in this section";
- The "Technical Report" to "this Part";
- Cited international standards of our standards, rather than international standards, and change the order in which to fit the national conditions of China;
- Remove the IEC 60721-4-4 foreword and introduction;
- Increase the national standard foreword;
- To IEC standard chart made editorial changes.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Electrical and Electronic Products Environmental conditions and environmental tests for Standardization Technical Committee (SAC/TC8) centralized.

Drafting this Part. Mechanical Industry Guangzhou Electric Apparatus Research Institute.

## 1 Scope and purpose

This section GB/T 20159 elaboration of the relationship between environmental conditions and environmental tests and conversion guide.

Environmental composed by a number of environmental conditions, such as climate, biological and chemical active substances due to the active substance, and mechanical machinery Other effects produced. This section only consider the mechanical and climatic conditions.

The purpose of this section is to provide a set of guidelines and to facilitate the application form, so the form of interrelated conditions and conversion.

## 2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2421.1-2008 Environmental testing for electric and electronic products overview and guidance (IEC 60068-1. 1988, IDT) GB/T 2423.1-2008 Environmental testing for electric and electronic products Part 2. Test methods Test A. Cold (IEC 60068-2-1.

2007, IDT)

GB/T 2423.2-2008 Environmental testing for electric and electronic products Part 2. Test methods Test B. Dry heat (IEC 60068-2-2.

2007, IDT)

GB/T 2423.3-2006 Environmental testing for electric and electronic products Part 2. Test methods - Test Cab. Damp heat test (IEC 60068-2-78:2001, IDT) GB/T 2423.4-2008 Environmental testing for electric and electronic products Part 2. Test methods - Test Db. Damp heat (12h 12h cycle) (IEC 60068-2-30:2005, IDT) GB/T 2423.5-1995 Environmental testing for electric and electronic products Part 2. Test methods Test Ea and guidance. Shock (IEC 60068-2-27. 1987, IDT) GB/T 2423.6-1995 Environmental testing for electric and electronic products Part 2. Test methods - Test Eb and guidance. Bump (IEC 60068-2-29. 1987, IDT) GB/T 2423.10-2008 Environmental testing for electric and electronic products Part 2. Test methods Test Fc. Vibration (sinusoidal) (IEC 60068-2-6:1995, IDT) GB/T 2423.21-2008 Environmental testing for electric and electronic products Part 2. Test methods - Test M. Low air pressure (IEC 60068-2-13. 1983, IDT) GB/T 2423.22-2002 Environmental testing for electric and electronic products Part 2. Test methods - Test N. Temperature change (IEC 60068-2-14. 1984, IDT) GB/T 2423.24-1995 Environmental testing for electric and electronic products Part 2. Test methods - Test Sa. too on the analogue terrestrial Solar radiation (IEC 60068-2-5. 1975, IDT) GB/T 2423.38-2008 Environmental testing for electric and electronic products Part 2. Test methods Test R. Water test method and guidance Then (IEC 60068-2-18:2000, IDT) GB/T 4797.2-2005 electric and electronic products natural environmental conditions - Part 2. Altitude and air pressure, water depth and water pressure (IEC