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

**中华人民共和国国家标准**

GB/T 28046.2-2011

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**Road vehicles—Environmental conditions and testing  
for electrical and electronic equipment—**

**Part 2: Electrical loads**

**道路车辆 电气及电子设备的环境条件和试验**

**第 2 部分：电气负荷**

(ISO 16750-2: 2006, MOD)

**Issued on October 31, 2011**

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

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## Foreword

GB/T 28046 *Road vehicles—Environmental conditions and testing for electrical and electronic equipment* consists of five parts:

- Part 1: General;
- Part 2: Electrical loads;
- Part 3: Mechanical loads;
- Part 4: Climatic loads;
- Part 5: Chemical loads.

This is Part 2 of GB/T 28046.

This Part is drafted by rules given in GB/T 1.1-2009.

This Part is formulated according to redraft method and revision of ISO 16750-2: 2006 *Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 2: Electrical loads*.

Technical differences and reasons between this Part and ISO 16750-2: 2006 are as follows:

- Quoted documents increased the UL 94 used in main body;
- Added the Appendix A (informative annex), and provided relevant information quoting from UL 94, convenient for understanding and implementing standards;
- This part does not include electro magnetic compatibility (EMC), so the instructions about EMC and the document in 4.13 and Chapter 5 were deleted;
- This part does not include EMC, so the EMC standards catalogue listed in Appendix A of the source text were deleted;
- Referring to Standard 42 V, Figure 6 would accord with the meaning of the figure more after adding a "%" behind minimum supply voltage.

Corresponding to ISO 16750-2: 2006, editorial change of this part is as follow:

- Deleted the FOREWORD of International Standard.

This Standard is proposed by National Development and Reform Commission (NDRC)

This Standard is under the jurisdiction of National Technical Committee (SAC/TC 114) on Road Vehicles of Standardization Administration of China.

The responsible drafting organizations are Chinese Automotive Technology & Research Centre, Shenzhen Hangsheng Electronics Co., Ltd, Suzhou Taisite Electronic Science And Technology Co., Ltd, Changsha Auto Electric Parts Research Centre, Shanghai Quality Supervision and Inspection Center, Commercial Vehicle technical Center, Dong Feng Motor Co., Ltd, Shanghai Kostal-Huayang Automotive Electric Co., Ltd and Zhengzhou Yuebo Automotive Electric Co., Ltd

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# Road vehicles—Environmental conditions and testing for electrical and electronic equipment—

## Part 2: Electrical loads

### 1 Scope

This part describes the potential environmental loads and specifies tests and requirements for the specific mounting location on/in the road vehicle.

This part applies to electrical and electronic systems/components for road vehicles.

NOTE: Electrical loads are independent from the mounting location, but may vary due to the electrical resistance in the vehicle wiring harness and connection system.

### 2 Normative references

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (including all corrections) or revisions made thereafter shall be applicable to this Standard.

GB/T 28046.1 Road vehicles—Environmental conditions and testing for electrical and electronic equipment—Part 1: General (GB/T 28046.1-2011, ISO 16750-1:2006, MOD)

GB/T 28046.4 Road vehicles—Environmental conditions and testing for electrical and electronic equipment—Part 4: Climatic loads (GB/T 28046.4-2011, ISO 16750-4:2006, MOD)

ISO 8820 Road vehicles -- Fuse—links

UL 94 Test for Flammability of Plastic Materials for Parts in Devices and Appliances

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in GB/T 28046.1 apply.

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