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

GB/T 18910.5-2008

**Liquid crystal and solid-state display devices -- Part 5:
Environmental, endurance and mechanical test methods
(English Translation)**

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Foreword

GB/T 18910 "liquid crystal display devices and solid state" is expected structure as follows.

- Part 1. Generic specification;
- Part 2. Liquid crystal display module specification;
- Part 2-1. Passive matrix monochrome LCD modules - Blank detail specification;
- Part 3. LCD specification;
- Part 3-1. Blank detail specification LCD screen;
- Part 4. liquid crystal display modules and cells - Essential ratings and characteristics;
- Part 5. Environmental, endurance and mechanical test methods;
- Part 6. LCD module test methods --- transmission type.

This section is GB/T Part 518 910, equivalent uses 61747-5 IEC . Part 5 "LCD display and solid state 1998 Score. Environmental, endurance and mechanical test methods "(in English).

For ease of use, this section made the following editorial changes.

- a) instead of as a decimal by decimal comma ", ". ";
- b) Remove the preface international standards;
- c) cancel the references in Chapter 2 of "IEC 60747-5 and its supplement" and has a corresponding national standard IEC standards change as the national standard;
- d) All the tables are added to the number table in Appendix A;
- e) Remove all 1.4 (860mbar ~ 1060mbar);
- f) The original Annex A is informative appendix, its content is relevant references table, the file listed in the table not referenced in this section, Therefore, to remove the appendix.

Appendix A of this section is informative appendix.

This section proposed by the People's Republic of China Ministry of Information Industry.

This part of the jurisdiction of the China Electronics Standardization Institute (CESI).

1.1 Scope

GB/T 18910 in this section lists the test methods for liquid crystal display device, as far as possible while taking into account specified in IEC 60068 Environmental test methods.

This section also includes a visual inspection methods and the LCD module.

Note 1: This section is extracted from IEC 60749 out of, because the liquid crystal display technology is completely different from the semiconductor device, for example.

--- Shape and size;

--- Use of materials and structures;

---Features;

---Measurement methods;

---working principle.

Note 2: The device includes an LCD screen and modules.

The purpose of this section is to evaluate the environmental performance of the liquid crystal display device, to determine the preferred uniform test methods and stress level preferred value.

When this section if inconsistent with the relevant regulations should be based on relevant norms prevail.

1.2 Normative references

The following documents contain provisions which, through reference GB/T 18910 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 2421-1999 Environmental testing for electric and electronic products - Part 1. General (idt IEC 60068-1. 1988) GB/T 2423.1-2001 Environmental testing for electric and electronic products - Part 2. Test methods Test A. Cold (Idt IEC 60068-2-1:1990) GB 2423.2-2001 Environmental testing for electric and electronic products - Part 2. Test methods Test B. Dry heat (Idt IEC 60068-2-2. 1978) GB/T 2423.3-1993 electric and electronic products environmental testing procedures Test Ca. Damp heat test method (Eqv IEC 60068-2-3. 1984) GB/T 2423.4-1993 electric and electronic products environmental testing procedures Test Db. Damp heat test, cyclic (Eqv IEC 60068-2-30. 1980) GB/T 2423.5-1995

Environmental testing for electric and electronic products Part II. Test methods - Test Ea and guidance. Shock (Idt IEC 60068-2-27. 1987) GB/T 2423.15-1995 Environmental testing for electric and electronic products Part II. Test methods - Test Ga and guidance. Acceleration, steady state Degree (idt IEC 60068-2-7. 1983) GB/T 2423.22-2002 Environmental testing for electric and electronic products Part 2. Test methods - Test N. Temperature change (Idt IEC 60068-2-14. 1984) 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 (idt IEC 60068-2-5. 1975) GB/T 2423.28-1982 electric and electronic products environmental testing procedures Test T. Soldering tests methods (eqv IEC 60068-2-20. 1979) GB/T 18910.5-2008/IEC 61747-5:1998