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

GB/T 18910.31-2026

**Liquid crystal display devices - Part 3-1: Liquid crystal display
(LCD) cells - Blank detail specification**

液晶显示器件 第3-1部分：液晶显示（LCD）屏 空白详细规范
(English Translation)

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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 3-1 of GB/T 18910 "Liquid Crystal Display Devices". GB/T 18910 has already published the following parts.

---Part 1-1.General Specification;

---Part 1-2.Terminology and Symbols;

---Part 2: Specifications for LCD Display Modules;

- Part 2-2.Detailed Specifications for Blank Spaces in Color Matrix LCD Display Modules;
- Part 3: Specifications for LCD Displays;
- Part 3-1.Detailed Specifications for Liquid Crystal Display (LCD) Screen Blanking;
- Part 4: Basic Ratings and Characteristics of Liquid Crystal Display Modules and Panels;
- Part 4-1.Basic Ratings and Characteristics of Color Matrix Liquid Crystal Display Modules;
- Part 6-1.Test methods for photoelectric parameters of liquid crystal display devices;
- Part 6-2.Test Methods for Reflective Liquid Crystal Display Modules;
- Part 6-3.Test Methods for Liquid Crystal Display Modules - Motion Artifacts in Active Matrix Liquid Crystal Display Modules;
- Part 6-4.Test Methods for Liquid Crystal Display Modules with Dynamic Backlight;
- Part 10-1.Environmental, Durability and Mechanical Testing Methods for Machinery;
- Part 10-2.Environmental, Durability and Mechanical Testing Methods Environmental and Durability;
- Part 10-3.Environmental, Durability and Mechanical Testing Methods for Glass Strength and Reliability;
- Part 20-1.Visual Inspection of Monochrome LCD Displays;
- Part 20-2.Visual Inspection of Monochrome Matrix Liquid Crystal Display Module;
- Part 20-3.Visual inspection of active matrix color LCD display modules.

This document is modified to adopt IEC 61747-3-1:2015 "Liquid crystal display devices - Part 3-1.Liquid crystal display (LCD) screen blanking details".

specification".

This document has undergone the following structural adjustments compared to IEC 61747-3-1:2015.

---A new Chapter 3, "Terminology and Definitions," has been added;

Sections 3.1 and 4.2 of IEC 61747-3-1:2015 correspond to sections 3.2, 4, 5, and 6.

Chapter 6;

---Chapter 5 corresponds to Chapter 7 in IEC 61747-3-1:2015;

---Chapter 6 corresponds to Chapter 8 in IEC 61747-3-1:2015;

---Chapter 7 corresponds to Chapter 9 in IEC 61747-3-1:2015;

---Chapter 8 corresponds to Chapter 10 of IEC 61747-3-1:2015;

---Chapter 9 corresponds to Chapters 11 and 12 of IEC 61747-3-1:2015, where 9.1 to 9.4 correspond to IEC 61747-3-1.

Sections 11.1 to 11.4, and 9.5 of IEC 61747-3-1:2015 correspond to Chapter 12 of IEC 61747-3-1:2015.

---Chapter 10 corresponds to Chapter 13 in IEC 61747-3-1:2015.

The technical differences between this document and IEC 61747-3-1:2015, and the reasons therefor, are as follows.

---The normative reference GB/T 18910.102-2021 has been added to improve the test conditions in Tables 4 and 6;

---IEC 60749-14 has been replaced with the normatively referenced GB/T 18910.101-2021, in accordance with current standards;

Table 6 specifies the test conditions for lead-out end strength, resistance to welding heat and rapid temperature changes, mechanical shock and vibration, and mark durability.

Unify requirements and eliminate ambiguity.

The following editorial changes have been made to this document.

---Add notes to Tables 1, 2, 3, 4, 5, and 6 (see Tables 1, 2, 3, 4, 5, and 6).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

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Introduction

To meet the needs of my country's manufacturing, inspection, and import/export trade of liquid crystal display (LCD) devices, a series of standards for LCD devices have been formulated.

The standard GB/T 18910 "Liquid Crystal Display Devices" is proposed to consist of the following parts.

---Part 1-1.General Specification. The purpose is to specify general procedures for the inspection of liquid crystal display devices and to provide methods for testing electro-optical characteristics.

General requirements, for climate, mechanical and durability testing.

---Part 1-2.Terms and Symbols. The purpose is to define the preferred terms, definitions, and symbols used in liquid crystal display devices.

---Part 2: Specifications for Liquid Crystal Display Modules. The purpose is to define the quality assessment procedures and inspection methods required for evaluating liquid crystal display modules.

Details of requirements, screening sequences, sampling requirements, and experimental and testing methods.

---Part 2-1.Detailed Specifications for Blank Spaces of Passive Matrix Monochrome Liquid Crystal Display Modules. The purpose is to specify the requirements for the format and summary page.

---Part 2-2.Detailed Specifications for Blank Spaces of Color Matrix Liquid Crystal Display Modules. The purpose is to specify the requirements for format and summary pages.

And the most basic content of detailed specifications.

---Part 3: LCD Display Screen Specifications. The purpose is to specify the quality assessment procedures and inspection requirements for evaluating LCD displays.

Detailed requirements for the selection, screening sequences, sampling requirements, and experimental and testing methods.

---Part 3-1.Detailed Specifications for Liquid Crystal Display (LCD) Screen Blanking. The