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

GB/T 44077.41-2024

**Transparent display devices - Part 41: Measuring methods of
optical performance**

透明显示器件 第41部分：测试方法 光学性能

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 41 of GB/T 44077 Transparent Display Devices. GB/T 44077 has published the following parts.

--- Part 41: Test methods for optical properties.

Introduction

GB/T 44077 "Transparent Display Devices" is intended to develop requirements for the production, manufacturing, inspection, import and export of transparent display devices in my country.

The demand standards are proposed to consist of the following parts.

--- Part 1: Terms and text symbols. The purpose is to define the preferred terms, definitions and text symbols for transparent display devices.

--- Part 2: Ratings and characteristics. The purpose is to specify the basic ratings and characteristics requirements of transparent display devices.

--- Part 3: General specification. The purpose is to specify the classification, technical requirements, inspection methods, inspection rules and standards of transparent display devices.

Labeling, packaging, transportation and storage requirements.

--- Part 41: Test methods for optical properties. The purpose is to specify standard test conditions and Test Methods.

--- Part 51: Mechanical test methods. The purpose is to specify standard test methods for the mechanical reliability of transparent display devices.

--- Part 52: Environmental test methods. The purpose is to provide the specified conditions of use, storage and transportation of transparent display devices.

Test methods for environmental adaptability.

Transparent display devices Part 41.

Test Methods Optical Performance

1 Scope

This document describes the test method for the optical performance of transparent display devices under darkroom conditions.

This document applies to passive light-emitting transparent display devices represented by liquid crystal (LCD) transparent display devices and organic light-emitting diodes.

Optical performance evaluation of active light-emitting transparent display devices represented by (OLED) transparent display devices.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 18910.12-2024 Liquid crystal display devices Part 1-2.Terms and symbols (IEC 61747-1-2:2014, MOD) Note. There is no technical difference between the referenced content of GB/T 18910.12-2024 and the referenced content of IEC 61747-1-2:2014.

GB/T 18910.61-2021 Liquid crystal display devices Part 6-1.Test methods for liquid crystal display devices - Photoelectric parameters (IEC 61747-30-1:2012,NEQ) GB/T 18978.307-2015 Ergonomics of human-system interaction Part 307: Analysis and conformity testing of electronic visual displays Method (ISO 9241-307:2008, IDT) GB/T 20871.12-2024 Organic light emitting diode display devices Part 1-2.Terminology and text symbols (IEC 62341-1-2:2014,IDT) GB/T 20871.61-2024 Organic light-emitting diode display devices Part 6-1.Test methods for optical and optoelectronic parameters (IEC 62341-6-1:2009,IDT) ISO 11664-1 Colorimetry - Part 1: CIE standard colorimetric observer CIE15 Colorimetry

3 Terms and definitions

The terms and definitions defined in GB/T 18910.12-2024 and GB/T 20871.12-2024 and the following apply to this document.

A display device that enables a viewer to view images on a display screen and see objects behind the screen through the display screen.

on-screenproperty

Optical properties of images on the display screen of a transparent display device.