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

GB/T 46177-2025

Polarizer for organic light emitting displays

有机发光显示用偏光片

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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. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Semiconductor Equipment and Materials (SAC/TC203). This document was drafted by: Shenzhen Sanli Optoelectronics Technology Co., Ltd., China Electronics Technology Standardization Institute, and Sugon Optoelectronics. (Nanjing) Co., Ltd., Foshan Weida Optoelectronic Materials Co., Ltd., Shenzhen Yuchuang Display Technology Co., Ltd., Tianma Microelectronics Co., Ltd. Limited Company, TCL CSOT Technology Co., Ltd., Jiangxi Huapai Optoelectronics Technology Co., Ltd., Sugon Optoelectronics (Guangzhou) Co., Ltd., Chengdu Zhong Kezhuaer Intelligent Technology Group Co., Ltd., Changzhou Haolilai Optoelectronic Technology Co., Ltd., Jiangsu Chuangtuo New Materials Co., Ltd., Beijing Gaomeng New Materials Co., Ltd. The main drafters of this document are. Li Juntao, Wu Yiran, Zhu Zhiyong, Huo Bingzhong, Zhao Junsha, Sun Qin, Li Zuhua, Zhao Jinbao, Huang Weidong, and Zhang Jianjun. Cao Kewei, Li Xin, Liu Gefang, Yang Qianqian, Mu Tian, Shi Zeyuan, Li Mingquan, Wu Chunwen, Feng Yanli, Ren Zhen, Han Bing, Zhang Baoshuai, Jin Penglin, Shi Jinru Wen Shiyu, Chen Xin, Yang Wei, Pan Xiangcheng, Jin Canhui, He Changsheng. Polarizing film for organic light-emitting displays

1 Scope

GB/T 46177-2025 is the Chinese national standard covering the circular polariser on an OLED panel - the one that kills the reflection of ambient light off the metal cathode, with its transmittance and degree of polarisation, the retarder layer, the adhesion, and the durability

under heat, humidity and ultraviolet. Without it an OLED screen is a mirror in daylight. First edition, in force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026.

This document defines the terminology and definitions for polarizers used in organic light-emitting displays, and specifies the requirements, inspection rules, marking, packaging, transportation, and storage. The document describes the corresponding experimental methods. This document applies to both active-matrix driven organic light-emitting diodes (AMOLEDs) and passive-matrix driven organic light-emitting diodes. Design, research and development, production, delivery and inspection of polarizers for PMOLED displays.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 2828.1-2012 Sampling Procedures for Inspection by Attributes - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 31379.1-2025, GB/T 31379.2-2025 and GB/T 31379.3-2025, as well as the following terms and definitions. This applies to this document.

3.1 A display panel that uses organic light-emitting diodes (OLEDs) to display information.

3.2 ellipticity A physical quantity used to describe the changes in the direction and intensity of polarized light vibration. Note

1.The closer the periodic trajectory of the endpoint of the electric vector of the light wave is to a circle, the closer its ellipticity is to 1. Note

2.The ellipticity of a light wave is determined by measuring its amplitude in two orthogonal directions.