International Standard

ISO 6760-1

Second edition
2025-07

Optics and photonics — Test method for temperature coefficient of refractive index of optical glasses —

Part 1: Minimum deviation method

Optique et photonique — Méthode d'essai pour déterminer le coefficient de température de l'indice de réfraction des verres optiques —

Partie 1: Méthode de la déviation minimale

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Foreword

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This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 3, *Optical materials and components*.

This second edition cancels and replaces the first edition (ISO 6760-1:2024), which has been technically revised.

The main changes are as follows:

— The status of Annex C and Annex D was changed from “informative” to “normative”.

A list of all parts in the ISO 6760 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Optical glass is widely used in optical devices such as cameras, telescopes, and microscopes, and its refractive index is measured by the minimum deviation method (see ISO 21395-1) and the V-block refractometer method (see ISO 21395-2[4]). Here, when designing an optical apparatus that requires high resolution, it is necessary to consider the temperature change of the refractive index of the optical glass in the usage environment, however up until now, there is no International Standard. In view of the above situation, this document proposes a method for measuring the temperature coefficient of refractive index of optical glass with high accuracy, aiming to help mutual understanding of measured value users and contribute to efficiency and fairness.