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Optics and photonics - Reference wavelengths (ISO 7944:2024)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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EN ISO 7944:2024 (E)

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European foreword

This document (EN ISO 7944:2024) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 170 "Ophthalmic optics" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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Endorsement notice

The text of ISO 7944:2024 has been approved by CEN as EN ISO 7944:2024 without any modification.



International Standard

ISO 7944

Optics and photonics — Reference wavelengths

Optique et photonique — Longueurs d'onde de référence

Third edition 2024-11



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 170, *Ophthalmic optics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 7944:1998). It also incorporates the Technical Corrigendum ISO 7944:1998/Cor 1:2009, which has been technically revised.

The main changes are as follows:

- updated to the current format and drafting rules;
- clarification through rewording in <u>4.1</u> and deletion of Note;
- addition of wavelengths to <u>Tables 1</u>, <u>2</u> and <u>3</u>, alignment of precision of the stated wavelengths with the sources and explanation of the source.

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.

Optics and photonics — Reference wavelengths

1 Scope

This document specifies reference wavelengths to be used for the characterization of optical materials, optical systems and instruments, and ophthalmic lenses. It defines the associated principal refractive indices and principal dispersions, as well as the Abbe numbers with regard to these reference wavelengths and principal dispersions.

2 Normative references

There are no normative references in this document.

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