

Ophthalmic optics - Uncut finished spectacle lenses -  
Part 3: Transmittance specifications and test methods  
(ISO 8980-3:2022)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.07.2022.	Date of Availability of the European standard is 06.07.2022.
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English Version

Ophthalmic optics - Uncut finished spectacle lenses - Part  
3: Transmittance specifications and test methods (ISO  
8980-3:2022)

Optique ophtalmique - Verres de lunettes finis non  
détourés - Partie 3: Spécifications relatives au facteur  
de transmission et méthodes d'essai (ISO 8980-  
3:2022)

Augenoptik - Rohkantige fertige Brillengläser - Teil 3:  
Transmissionsanforderungen und Prüfverfahren (ISO  
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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

This document (EN ISO 8980-3:2022) 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of an identical text or by endorsement, at the latest by January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 8980-3:2013.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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## Endorsement notice

The text of ISO 8980-3:2022 has been approved by CEN as EN ISO 8980-3:2022 without any modification.

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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 documents 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](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*, 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 fourth edition cancels and replaces the third edition (ISO 8980-3:2013), which has been technically revised.

The main changes are as follows:

- terms and definitions, previously in [Clause 3](#), have been referenced to ISO 13666;
- requirements regarding claimed transmittance properties have been added in [6.6](#);
- references have been updated as appropriate and needed;
- descriptions of requirements throughout the document have been updated and amended for clarification.

A list of all parts in the ISO 8980 series can be found on the ISO website.

# Ophthalmic optics — Uncut finished spectacle lenses —

## Part 3: Transmittance specifications and test methods

### 1 Scope

This document specifies requirements for the transmittance properties of uncut and unmounted finished spectacle lenses, including attenuation of solar radiation.

This document is not applicable to

- spectacle lenses having specific transmittance or absorption characteristics prescribed for medical reasons,
- products to which specific personal protective equipment transmittance standards apply, and
- products intended for direct observation of the sun, such as for solar-eclipse viewing.

NOTE 1 By reference to ISO 21987 and ISO 14889, this document also applies to lenses mounted in spectacles.

NOTE 2 Optical and geometric requirements are given for uncut finished spectacle lenses in ISO 8980-1 and ISO 8980-2, and for mounted lenses, in ISO 21987.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 11664-1, *Colorimetry — Part 1: CIE standard colorimetric observers*

ISO 11664-2, *Colorimetry — Part 2: CIE standard illuminants*

ISO 13666:2019, *Ophthalmic optics — Spectacle lenses — Vocabulary*

ISO 14889, *Ophthalmic optics — Spectacle lenses — Fundamental requirements for uncut finished lenses*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13666 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 4 Symbols

The symbols for the characteristic luminous transmittances of photochromic lenses are given in [Table 1](#).