

SLOVENSKI STANDARD

SIST EN ISO 11151-2:2015

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Nadomešča:

SIST EN ISO 11151-2:2000

Laserji in laserska oprema - Standardne optične komponente - 2. del: Komponente za območje infrardečega spektra (ISO 11151-2:2015)

Lasers and laser-related equipment - Standard optical components - Part 2: Components for the infrared spectral range (ISO 11151-2:2015)

Laser und Laseranlagen - Optische Standardkomponenten - Teil 2: Komponenten für den infraroten Spektralbereich (ISO 11151-2:2015)

Lasers et équipements associés aux lasers - Composants optiques standards - Partie 2: Composants pour la plage spectrale infrarouge (ISO 11151-2:2015)

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ICS:

31.260

Optoelektronika, laserska oprema

Optoelectronics. Laser equipment

SIST EN ISO 11151-2:2015

en

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

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English Version

Lasers and laser-related equipment - Standard optical components - Part 2: Components for the infrared spectral range (ISO 11151-2:2015)

Lasers et équipements associés aux lasers - Composants optiques standards - Partie 2: Composants pour la plage spectrale infrarouge (ISO 11151-2:2015)

Laser und Laseranlagen - Optische Standardkomponenten - Teil 2: Komponenten für den infraroten Spektralbereich (ISO 11151-2:2015)

This European Standard was approved by CEN on 21 February 2015.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN ISO 11151-2:2015) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 123 "Lasers and photonics" 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 2016, and conflicting national standards shall be withdrawn at the latest by January 2016.

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

This document supersedes EN ISO 11151-2:2000.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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Endorsement notice

The text of ISO 11151-2:2015 has been approved by CEN as EN ISO 11151-2:2015 without any modification.

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INTERNATIONAL STANDARD

ISO
11151-2

Second edition
2015-07-01

Lasers and laser-related equipment — Standard optical components —

Part 2: Components for the infrared spectral range

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*Lasers et équipements associés aux lasers — Composants optiques
standards —
Partie 2: Composants pour la plage spectrale infrarouge*

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ISO 11151-2:2015(E)

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).

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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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 172, *Optics and photonics*, Subcommittee SC 9, *Electro-optical systems*.

This second edition cancels and replaces the first edition (ISO 11151-2:2000), which has been technically revised with the following changes:

- [Clause 1](#), note was revised;
 - new normative references in [Clause 2](#) were added;
 - [Clause 4](#) was revised;
 - footnotes were added in [Tables 5](#) and [6](#);
 - Bibliography was revised;
 - [Figure 1](#) was revised.
- ISO 11151 consists of the following parts, under the general title *Lasers and laser-related equipment — Standard optical components*:
- *Part 1: Components for the UV, visible and near-infrared spectral ranges*
 - *Part 2: Components for the infrared spectral range*

[Annex A](#) of this part of ISO 11151 is for information only.

Introduction

Lasers are used in a wide variety of applications, including medicine, materials processing, information technology, and metrology. Most lasers contain optical windows and mirrors (intracavity) and most laser systems use a variety of windows, beam splitters, deflectors, mirrors, and lenses. Those components used in high-power laser applications must withstand high-peak power and/or energy densities to avoid laser-induced damage, thus their component specifications are more demanding than those used in low-power applications.

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