BS EN ISO 11151-2:2015

BSI Standards Publication

Lasers and laser-related equipment — Standard optical components

Part 2: Components for the infrared spectral range

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This British Standard is the UK implementation of EN ISO 11151-2:2015. It supersedes BS EN ISO 11151-2:2000 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CPW/172, Optics and Photonics.

A list of organizations represented on this committee can be obtained on request to its secretary.

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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 11151-3:2015)

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

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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of an identical text or by endorsement, at the latest by January 2016, and conflicting national standards shall be withdrawn at the latest by January 2016.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.

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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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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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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.

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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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