
**Lasers and laser-related equipment —
Standard optical components —**

**Part 2:
Components for the infrared spectral
range**

*Lasers et équipements associés aux lasers — Composants optiques
standards —*

Partie 2: Composants pour la plage spectrale infrarouge

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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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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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