
**Optics and photonics — Lasers and
laser-related equipment — Test
method for absorptance of optical
laser components**

*Optique et photonique — Lasers et équipements associés aux lasers
— Méthode d'essai du facteur d'absorption des composants optiques
pour lasers*

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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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.

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This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee 9, *Laser and electro-optical systems*.

This third edition cancels and replaces the second edition ISO 11551:2003 which has been technically revised.

The main changes compared to the previous edition are as follows:

- a) Introduction: The assumptions were revised in the second paragraph. Minor wording and example adjustment in third paragraph.
- b) [Clause 4](#): Table for symbols and units was corrected.
- c) [Clause 5](#): More detailed specification of environmental conditions for UV- and IR applications are provided in the second paragraph. ISO 7 specification was deleted.

In the fourth paragraph, [Annex A](#) is explicitly mentioned for the dependence of absorption on other test parameters.

In the fifth paragraph, [Annex B](#) is explicitly mentioned to account for the critical issue of finite heat conductivity.

- d) In [7.2.3](#): In the first paragraph, the calibration procedure is specified in more detail, including the consideration of the heating scheme for thick samples.

Note 1 is complemented by the restriction for thin samples.

Note 2 is complemented with the consideration of heating scheme for finite heat conduction.

- e) In [7.3](#): In the first paragraph the specifications for the ambient temperature drift were clarified.

The requirements to the total temperature rise during heating were generalized.