
**Optics and photonics — Lasers and
laser-related equipment — Test methods
for specular reflectance and regular
transmittance of optical laser
components**

*Optique et photonique — Lasers et équipements associés aux lasers —
Méthodes d'essai du facteur de réflexion spéculaire et du facteur de
transmission des composants optiques laser*



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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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Introduction

Laser-based optical systems require optical components with greatly enhanced reflectance and/or transmission characteristics. It is necessary to be able to measure these characteristics precisely. The measurement procedures in this International Standard have been optimized to allow the measurement of the specular reflectance and transmittance of the optical components to a high degree of accuracy over a wide range of values.

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Optics and photonics — Lasers and laser-related equipment — Test methods for specular reflectance and regular transmittance of optical laser components

1 Scope

This International Standard specifies measurement procedures for the precise determination of the specular reflectance and regular transmittance of optical laser components. The accuracy of the described test methods exceeds that of measurement procedures outlined in ISO 15368 by several orders of magnitude.

2 Normative references

The following referenced documents are indispensable for the application 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 31-6, *Quantities and units — Part 6: Light and related electromagnetic radiations*

ISO 11145, *Optics and photonics — Lasers and laser-related equipment — Vocabulary and symbols*

ISO 14644-1, *Cleanrooms and associated controlled environments — Part 1: Classification of air cleanliness*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in ISO 11145 and ISO 31-6 apply.