
Optics and photonics — Test method for total scattering by optical components

*Optique et photonique — Méthodes d'essai du rayonnement diffusé
par les composants optiques*



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Foreword

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This second edition cancels and replaces the first edition (ISO 13696:2002), which has been technically revised.

The main changes are as follows:

- In the Scope, measurement range outlined in more detail and limited to 250 nm. For measurements in the deep ultraviolet between 190 nm to 250 nm, specific methods are considered and are described.
- In 3.1.6, additional Note 2 inserted for high volume scattering of the specimen and additional Note 3 inserted for comprehensive illustration of the term total scattering.
- In 3.1.7, Note extended concerning diffuse reflectance standard for wavelengths below 250 nm down to the deep ultraviolet.
- In 3.2, New symbols for total scattering, σ_{TS} , forward scattering, τ_{TS} , and backward scattering, ρ_{TS} , in Table 1.
- In Figure 1 and 4.2.5, lock-in amplifier optional. For fast data acquisition modules, no Lock-in technique may be necessary.
- In 4.2.2, calibration of the monitor detector is not necessary. The power at the sample surface shall be measured by a calibrated detector.
- In 4.2.4, additional Note 1 inserted concerning aging of the diffuse reflecting material on the inner walls of the sphere.
- In 4.2.5, additional Note inserted concerning optional components for a phase sensitive detection scheme with lock-in amplifier.