ISO Standards Update

Below we list Optics and Photonics (TC172) documents that were published in 2025, as well as those that are in development and under review. Please contact us through OEOSC.org if you have input or questions.

Note that document titles are abbreviated for brevity. See iso.org for more information.

Last update: January 12, 2026 (JLM)

Drawings (SC1)

- Published
    - ISO 10110-6 (Centering)
    - ISO 10110-11 (Default tolerances)
- Revision in process
    - ISO 10110-5 (Surface form)
    - ISO 10110-9 (Surface treatment and coating)
- Under review
    - ISO 10110-1 (General)

Materials and Coatings (SC3)

- Published
    - ISO 6760-1 (dN/dT Testing)
    - ISO 19741 (Striae in IR materials)
    - ISO 9689 (Attack by aqueous alkaline phosphates)
    - ISO 21575 (Powder test)*
- Revision in process
    - ISO 9211-2 (Coating optical properties)
    - ISO 9211-5 (AR Coatings)
    - ISO 9211-6 (Reflective coatings)
    - ISO 12123 (Raw optical glass)
    - ISO 10629 (Attack by aqueous alkaline solutions)

Testing (SC1 and SC3)

- Published
    - ISO 9335 (Principles of OTF measurement)
    - ISO 11421 (Uncertainty of OTF measurement)
    - ISO 14999-4 (Interferometric evaluation of surface form and WFE)*
- Revision in process
    - ISO 9022-7 (Drip and rain)
    - ISO 9358 (Veiling glare → Stray Light)
    - ISO 15368-2 (Internal transmittance)
    - ISO 21395-1 (Refractive index)

- Under review
    - ISO 9022-2 (Cold, heat, humidity)
    - ISO 9022-17 (Combined contamination and solar radiation)

Telescopic Systems (SC4)

- Published
    - ISO 14133 (Specifications for binoculars, monoculars, and spotting scopes)
- Revision in process
    - ISO 14135 (Specifications for sights)
    - ISO 21094 (Specifications for night vision devices)
    - ISO 14132-5 (Terms for night vision devices), ISO 14133
- Under review
    - ISO 14990-6 (Veiling glare testing)
    - ISO 14132 (Vocab for telescopic systems)
    - ISO 9336 (OTF)

Endoscopes & Microscopes (SC5)

- Published
    - ISO 18221 (Digital microscopes – imaging performance information), ISO 8600-1 (Medical endoscopes and endotherapy devices)
- Revision in process
    - ISO 24903 (microscope interface)
    - ISO 15362 (Stereomicroscopes information)
    - ISO 8578 (Marking of objectives and eyepieces)
    - ISO 9907 (Digital operation microscopes)
- Under review – 10 documents

Geodetic and Survey Instruments (SC6)

- Published
    - ISO 9849 (Geodetic and surveying instruments – Vocabulary)
    - ISO 17123-6 (Field procedures for rotating lasers)
    - ISO 17123-11 (Field procedures for GNSS instruments)
- Revision in process
    - ISO 17123-10 (Field procedures for UAV photo measurement)
- New Work Item Proposal – ISO 17123-12 (Evaluation of the centring uncertainty)
- Under review – ISO 12858 (Tripods)

Ophthalmology (SC7)

- There were 9 documents published
- A handful of documents are in revision
- There was quite a bit of liaison work in 2025

Lasers and EO Systems (SC9)

- Published

    - ISO 11533-2 (Safety requirements for handheld lasers)*
    - ISO 15367-1 (Determination of the shape of a laser beam wavefront)*
    - ISO 21254-1 (Laser-induced damage definitions and principles)
    - ISO 11554 (Tests for power, energy, and temporal characteristics)
- Revision in process
    - ISO 13682-1 and ISO 13682-2 (Properties of ultrashort laser pulses)
    - ISO 14880-1 (Microlens array vocabulary)
    - ISO 11551 (Test method for absorption of laser components)
    - ISO 22248 (Medical beam delivery systems)
    - ISO 11810 (Laser resistance of surgical drapes)
    - ISO 15367-2 (Shack Hartmann sensors for laser beam wavefront)
    - ISO 13697 (Tests for reflectance and transmittance of laser components)
    - ISO 11670 (Laser beam spatial stability)
    - ISO 11990 (Laser resistance of tracheal tubes)
    - ISO 13694 (Test methods for laser beam irradiance distribution)
    - ISO 11145 (Lasers – Vocabulary and symbols)
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- Under review
    - ISO 22247 (Effective NA of laser lenses)
- There was quite a bit of liaison work in 2025

* Publication is expected in early 2026

Note that many other documents were reviewed and confirmed in 2025. Confirmations are indicated at iso.org by document number.