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**Ophthalmic optics and instruments —  
Electro-optical devices for enhancing low  
vision**

*Optique et instruments ophtalmiques — Dispositifs électro-optiques  
pour malvoyants*



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## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15254 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

This second edition cancels and replaces the first edition (ISO 15254:2002), which has undergone minor revision to update normative references.

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# Ophthalmic optics and instruments — Electro-optical devices for enhancing low vision

## 1 Scope

This International Standard applies to electro-optical devices specified by the manufacturer for use by visually impaired persons, as low-vision aids.

It specifies electro-optical and mechanical requirements and test methods.

This International Standard does not cover optical devices for enhancing low vision which are specified in ISO 15253.

## 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 12870, *Ophthalmic optics — Spectacle frames — Requirements and test methods*

ISO 15004-1, *Ophthalmic instruments — Fundamental requirements and test methods — Part 1: General requirements applicable to all ophthalmic instruments*

IEC 60601-1-1, *Medical electrical equipment — Part 1-1: General requirements for safety — Collateral standard: Safety requirements for medical electrical systems*

IEC 61000-4-2, *Electromagnetic compatibility (EMC) — Part 4-2: Testing and measuring techniques — Electrostatic discharge immunity test*

IEC 61000-4-3, *Electromagnetic compatibility (EMC) — Part 4-3: Testing and measurement techniques — Radiated, radio-frequency, electromagnetic field immunity test*

EN 55022, *Information technology equipment — Radio disturbance characteristics — Limits and methods of measurement* (IEC/CISPR 22:2005, modified + A1:2005)

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **electro-optical low-vision device**

system intended for low vision that produces an image by electronic means

### 3.2

#### **display size**

horizontal and vertical dimensions of the display within which the image is visible