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Standard on kinnitatud Eesti Standardikeskuse 31.08.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 31.08.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
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ICS 11.040.70

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 10342

June 2010

ICS 11.040.70

Supersedes EN ISO 10342:2003

English Version

Ophthalmic instruments - Eye refractometers (ISO 10342:2010)

Instruments ophtalmiques - Réfractomètres (ISO 10342:2010)

Ophthalmische Instrumente - Augenrefraktometer (ISO 10342:2010)

This European Standard was approved by CEN on 29 May 2010.

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Foreword

This document (EN ISO 10342:2010) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 170 "Ophthalmic optics" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2010, and conflicting national standards shall be withdrawn at the latest by December 2010.

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Endorsement notice

The text of ISO 10342:2010 has been approved by CEN as a EN ISO 10342:2010 without any modification.

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Ophthalmic instruments — Eye refractometers

1 Scope

This International Standard, together with ISO 15004-1, specifies requirements and test methods for eye refractometers using an objective measuring principle. It is limited to the measurement of spherocylindrical refractive error.

This International Standard takes precedence over ISO 15004-1, if differences exist.

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 7944, *Optics and optical instruments — Reference wavelengths*

ISO 8429, *Optics and optical instruments — Ophthalmology — Graduated dial scale*

ISO 13666, *Ophthalmic optics — Spectacle lenses — Vocabulary*

ISO 15004-1:2006, *Ophthalmic instruments — Fundamental requirements and test methods — Part 1: General requirements applicable to all ophthalmic instruments*

IEC 60601-1:2005, *Medical electrical equipment — Part 1: General requirements for basic safety and essential performance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13666 as well as the following apply.

3.1

eye refractometer

instrument with continuous or digital readout used for measuring the refractive errors of the eye

3.2

tolerance

range of permissible difference between mean measured value and nominal value