

**Oftalmiline optika. Nägemisteravuse kontrollimine.
Standardoptotüüp ja selle esitus**

Ophthalmic optics - Visual acuity testing - Standard optotype
and its presentation

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 8596:2010 sisaldab Euroopa standardi EN ISO 8596:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.07.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 8596:2010 consists of the English text of the European standard EN ISO 8596:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 01.07.2009.

The standard is available from Estonian standardisation organisation.

ICS 11.040.70

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:
Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

English Version

Ophthalmic optics - Visual acuity testing - Standard optotype
and its presentation (ISO 8596:2009)

Optique ophtalmique - Essai d'acuité visuelle - Optotype
normalisé et sa présentation (ISO 8596:2009)

Augenoptik - Sehschärfepfung - Das Normsehzeichen
und seine Darbietung (ISO 8596:2009)

This European Standard was approved by CEN on 27 June 2009.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN ISO 8596:2009) has been prepared by Technical Committee ISO/TC 172 "Optics and optical instruments" 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 January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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

This document supersedes EN ISO 8596:1996.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 8596:2009 has been approved by CEN as a EN ISO 8596:2009 without any modification.

Ophthalmic optics — Visual acuity testing — Standard optotype and its presentation

1 Scope

This International Standard specifies a range of Landolt ring optotypes and describes a method for measuring distance visual acuity under daylight conditions for the purposes of certification or licensing.

It is neither intended as a standard for clinical measurements nor for the certification of blindness or partial sight.

For the purposes of measuring visual acuity, the standard optotype should be used.

For clinical use, see the recommendation prepared by the Visual Functions Committee of the International Council of Ophthalmology^[1].

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 3:1973, *Preferred numbers — Series of preferred numbers*

3 Standard optotype

The standard optotype shall be the Landolt ring as detailed in Table 1 and as shown in Figure 1.

The visual acuity grade 1 shall be represented by a Landolt ring whose outer diameter, d , subtends an angle of 5' and whose width, as well as the gap in its continuity, subtends an angle of 1' at the designated viewing distance.

The Landolt ring shall be capable of being presented in eight different positions (see 6.2).

4 Visual acuity grades and standard optotype grades

The visual acuity grades shall be as given in Table 1 and shall be expressed as the reciprocal of the gap width measured in minutes of arc.

The acuity values for the size of the optotype shall be graduated logarithmically. The quotient of the size of the optotype and that of the next smaller one shall be:

$$\sqrt[10]{10} = 1,258\,9 \text{ (series of preferred numbers R10 from ISO 3:1973).}$$

Optotypes of acuity grades 0,05, 0,06, 0,08 and 2,0 may be omitted if necessary. Addition of further acuity grades is permitted.