

**Integrated optics - Interfaces - Parameters
relevant to coupling properties**

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to coupling properties

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 14881:2005 sisaldab Euroopa standardi EN ISO 14881:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.04.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 14881:2005 consists of the English text of the European standard EN ISO 14881:2005.</p> <p>This document is endorsed on 28.04.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This International Standard defines the relevant properties for coupling light into and out of integrated optical chips (IOC) and chips with optoelectronic integrated circuits (OEIC).</p>	<p>Scope:</p> <p>This International Standard defines the relevant properties for coupling light into and out of integrated optical chips (IOC) and chips with optoelectronic integrated circuits (OEIC).</p>
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ICS 31.260

Võtmesõnad:

English version

Integrated optics – Interfaces
Parameters relevant to coupling properties
(ISO 14881:2001)

Optique intégrée – Interfaces – Paramètres caractérisant les propriétés de couplage (ISO 14881:2001)

Integrierte Optik – Schnittstellen – Kopplungsrelevante Parameter (ISO 14881:2001)

This European Standard was approved by CEN on 2005-02-07.

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 Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: 36, rue de Stassart, B-1050 Brussels

Foreword

International Standard

ISO 14881:2001 Integrated optics – Interfaces – Parameters relevant to coupling properties, which was prepared by ISO/TC 172 'Optics and optical instruments' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 123 'Lasers and laser-related equipment', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by September 2005 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 14881:2001 was approved by CEN as a European Standard without any modification.

1 Scope

This International Standard defines the relevant properties for coupling light into and out of integrated optical chips (IOC) and chips with optoelectronic integrated circuits (OEIC). This International Standard is limited to butt coupling via the waveguide endfaces. The definitions provide the basis for specifying the elements to be coupled (e. g. fibres, integrated optical chips) related to coupling properties.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 4288:1996, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*.

ISO 11807-1:—¹⁾, *Integrated optics — Vocabulary — Part 1: Basic terms and symbols*.

ISO 11807-2, *Integrated optics — Vocabulary — Part 2: Terms used in classification*.

IEC 60793-1-2:1995, *Optical fibres — Part 1: Generic specification — Section 2: Measuring methods for dimensions*.

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 11807-1:— and ISO 11807-2 and the following apply.

3.1

anti-reflective coating of endfaces

thin surface coating designed to reduce the Fresnel loss

3.2

alignment structure

precise mechanical structure to enable coupling of optical and electro-optical elements without the need for adjustment

EXAMPLE Elements coupled may include optical fibres, fibre arrays, detectors, lasers, LEDs, integrated optical chips.

3.3

array block

mechanical alignment structure of micrometre or submicrometre precision for the reception of optical fibres

1) To be published.