

### SLOVENSKI STANDARD SIST EN ISO 14881:2005

01-junij-2005

Integrirana optika – Vmesniki – Parametri, ustrezni za sklope lastnosti (ISO 14881:2001)

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

Integrierte Optik - Schnittstellen - Kopplungsrelevante Parameter (ISO 14881:2001) (standards.iteh.ai)

Optique intégrée - Interfaces - Parametres caractérisant les propriétés de couplage (ISO 14881:2001)

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Ta slovenski standard je istoveten z: EN ISO 14881:2005

ICS:

31.260 Optoelektronika, laserska Optoelectronics. Laser

oprema equipment

SIST EN ISO 14881:2005 en

**SIST EN ISO 14881:2005** 

# iTeh STANDARD PREVIEW (standards.iteh.ai)

EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

**EN ISO 14881** 

March 2005

ICS 31.260

#### **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)

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

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

EN ISO 14881:2005 (E)

### **Foreword**

The text of ISO 14881:2001 has been prepared by Technical Committee ISO/TC 172 "Optics and optical instruments" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 14881:2005 by Technical Committee CEN/TC 123 "Lasers and laser-related equipment" 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of an identical text or by endorsement, at the latest by September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

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### iTeh STANDARD PREVIEW

The text of ISO 14881:2001 has been approved by CEN as EN ISO 14881:2005 without any modifications.

**SIST EN ISO 14881:2005** 

# INTERNATIONAL STANDARD

ISO 14881

First edition 2001-06-15

### Integrated optics — Interfaces — Parameters relevant to coupling properties

Optique intégrée — Interfaces — Paramètres caractérisant les propriétés de couplage

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ISO 14881:2001(E)

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### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14881 was prepared by Technical Committee ISO/TC 172, *Optics and optical instruments*, Subcommittee SC 9, *Electro-optical systems*.

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# iTeh STANDARD PREVIEW (standards.iteh.ai)

### Integrated optics — Interfaces — Parameters relevant to coupling properties

### 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:—<sup>1)</sup>, Integrated optics — Vocabulary — Part 18 Basio terms and symbols. https://standards.iteh.ai/catalog/standards/sist/d7382de5-4db2-4bb3-900a-

ISO 11807-2, Integrated optics — Vocabulary 12: 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

<sup>1)</sup> To be published.