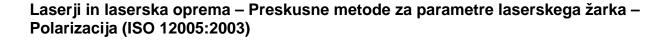


SLOVENSKI STANDARD SIST EN ISO 12005:2003

01-september-2003

BUXca Yý U. SIST EN ISO 12005:2000



Lasers and laser-related equipment - Test methods for laser beam parameters - Polarization (ISO 12005:2003)

Laser und Laseranlagen - Prüfverfahren für Laserstrahlparameter APolarisation (ISO 12005:2003) (standards.iteh.ai)

Lasers et équipements associés aux lasers : Méthodes d'essai des parametres du faisceau laser - Polarisation (ISO:12005:2003) ds/sist/9ca19f78-9ff8-4b9e-9e9a-5e031d17ba92/sist-en-iso-12005-2003

Ta slovenski standard je istoveten z: EN ISO 12005:2003

ICS:

31.260 Optoelektronika, laserska oprema

Optoelectronics. Laser equipment

SIST EN ISO 12005:2003

en

SIST EN ISO 12005:2003

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 12005:2003

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 12005

April 2003

ICS 31.260

Supersedes EN ISO 12005:1999

English version

Lasers and laser-related equipment - Test methods for laser beam parameters - Polarization (ISO 12005:2003)

Lasers et équipements associés aux lasers - Méthodes d'essai des paramètres du faisceau laser - Polarisation (ISO 12005:2003) Laser und Laseranlagen - Prüfverfahren für Laserstrahlparameter - Polarisation (ISO 12005:2003)

This European Standard was approved by CEN on 21 February 2003.

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.

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 Management Centre has the same status as the official versions.

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

<u>SIST EN ISO 12005:2003</u> https://standards.iteh.ai/catalog/standards/sist/9ca19f78-9ff8-4b9e-9e9a-5e031d17ba92/sist-en-iso-12005-2003



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

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

© 2003 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 12005:2003 E

EN ISO 12005:2003 (E)

CORRECTED 2003-07-02

Foreword

This document (EN ISO 12005:2003) has been prepared by Technical Committee ISO/TC 172 "Optics and optical instruments" in collaboration with 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 October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

This document supersedes EN ISO 12005:1999.

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

iTeh STAEndorsement noticeEVIEW

The text of ISO 12005:2003 has been approved by CEN as EN ISO 12005:2003 without any modifications.

SIST EN ISO 12005:2003

NOTE Normativerreferences to International Standards are listed in Annex ZA (normative). 5e031d17ba92/sist-en-iso-12005-2003

Annex ZA (normative)

Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

Publication	Year	Title	<u>EN</u>	<u>Year</u>
ISO 11145	2001	Optics and optical instruments - Lasers and laser-related equipment - Vocabulary and symbols	EN ISO 11145	2001

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 12005:2003

iTeh STANDARD PREVIEW (standards.iteh.ai)



INTERNATIONAL STANDARD

ISO 12005

Second edition 2003-04-01

Lasers and laser-related equipment — Test methods for laser beam parameters — Polarization

Lasers et équipements associés aux lasers — Méthodes d'essai des paramètres du faisceau laser — Polarisation

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 12005:2003</u> https://standards.iteh.ai/catalog/standards/sist/9ca19f78-9ff8-4b9e-9e9a-5e031d17ba92/sist-en-iso-12005-2003



Reference number ISO 12005:2003(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 12005:2003</u> https://standards.iteh.ai/catalog/standards/sist/9ca19f78-9ff8-4b9e-9e9a-5e031d17ba92/sist-en-iso-12005-2003

© ISO 2003

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Contents

Page

1	Scope	1	
2	Normative references	1	
3	Terms and definitions	1	
4	Test method for state of polarization	3	
4.1	Principle of measurement	3	
4.2	Equipment arrangement	3	
4.3	Components	4	
4.4	Test procedure	5	
4.5	Analysis of the results	6	
5	Test report	7	
Ann Iase	ex A (informative) Complete description of the polarization status of a monochromatic r beam	9	
Bibl	Bibliography		

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 12005:2003

https://standards.iteh.ai/catalog/standards/sist/9ca19f78-9ff8-4b9e-9e9a-5e031d17ba92/sist-en-iso-12005-2003

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 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 12005 was prepared by Technical Committee ISO/TC 172, *Optics and optical instruments*, Subcommittee SC 9, *Electro-optical systems*.

This second edition cancels and replaces the first edition (ISO 12005:1999), which has been technically revised. (standards.iteh.ai)

Introduction

This International Standard specifies a relatively quick and simple method, requiring minimum equipment, for determining the state of polarization of a laser beam.

This method is for well-polarized laser beams, including those emitted by lasers with a high divergence angle. However, if more completeness in the determination of the polarization status is required, the use of a more sophisticated analysing device is necessary. Although not within the scope of this International Standard, the principle of operation of such devices is given in Annex A, together with a description of the Stokes parameters which are needed in that case.

iTeh STANDARD PREVIEW (standards.iteh.ai)