

## საქართველოს სტანდარტი

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ოპტიკა და ფოტოტიკა - ლაზერები და ლაზერებთან დაკავშირებული  
მოწყობილობა - ლექსიკონი და სიმბოლოები (ისო11145:2016)

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

# სსტ ენ ისო 11145:2016/2019

## საინფორმაციო მონაცემები

**1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ**

**2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 20 დეკემბრის № 102 განკარგულებით**

**3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ ისო 11145:2016 “ოპტიკა და ფოტოტიკა - ლაზერები და ლაზერებთან დაკავშირებული მოწყობილობა - ლექსიკონი და სიმბოლოები (ისო11145:2016)”**

## 4 პირველად

**5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეგისტრში: 2019 წლის 20 დეკემბერი №268-1.3-016717**

**დაუშვებელია წინამდებარე სტანდარტის სრული ან ნაწილობრივი კვლავწარმოება, ტირაჟირება და გავრცელება სსიპ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე**

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN ISO 11145

March 2016

ICS 01.080.40; 01.040.31; 31.260

Supersedes EN ISO 11145:2008

English Version

Optics and photonics - Lasers and laser-related equipment  
- Vocabulary and symbols (ISO 11145:2016)

Optique et photonique - Lasers et équipements  
associés aux lasers - Vocabulaire et symboles (ISO  
11145:2016)

Optik und Photonik - Laser und Laseranlagen - Begriffe  
und Formelzeichen (ISO 11145:2016)

This European Standard was approved by CEN on 19 September 2015.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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საინფორმაციო ნაწილი. სრული გენერაცია სანახავის დაწესების დროის მიზნით.

## European foreword

This document (EN ISO 11145:2016) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 123 "Lasers and photonics" 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of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

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 11145:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 11145:2016 has been approved by CEN as EN ISO 11145:2016 without any modification.

**Annex ZA**  
 (informative)  
**Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC on machinery**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and EU Directive 2006/42/EC on machinery**

Clauses and subclauses of this European standard	Essential Requirements (ERs) of EU Directive 2006/42/EC	Qualifying remarks/Notes
3	1.5.10	
3	1.5.12	

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

INTERNATIONAL  
STANDARD

ISO  
11145

Fourth edition  
2016-03-01

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## Optics and photonics — Lasers and laser-related equipment — Vocabulary and symbols

*Optique et photonique — Lasers et équipements associés aux lasers  
— Vocabulaire et symboles*

საინფორმაციო ნაწილი. სრული ტექსტი გვხვდეთ სანახავაზე შეკვეთის დროისათვის.



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 172, *Optics and photonics*, Subcommittee SC 9, *Electro-optical systems*.

This fourth edition cancels and replaces the third edition (ISO 11145:2006) which has been technically revised with the following changes:

- a) in [3.5.3](#), a formula for beam ellipticity has been added;
- b) in [3.53](#), the definition of relative intensity noise has been revised and a formula was added.