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**Polimerni materiali - Metode izpostavitve laboratorijskim virom svetlobe - 3. del:  
Fluorescentne UV svetilke (ISO 4892-3:1994)**

Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps  
(ISO 4892-3:1994)

Kunststoffe - Künstliches Bestrahlen oder Bewittern in Geräten - Teil 3: UV-  
Leuchtstofflampenstrahlung (ISO 4892-3:1994)

Plastiques - Méthodes d'exposition à des sources lumineuses de laboratoire - Partie 3:  
Lampes fluorescentes UV (ISO 4892-3:1994)

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**Ta slovenski standard je istoveten z: EN ISO 4892-3:1999**

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**ICS:**

83.080.01	Polimerni materiali na splošno	Plastics in general
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**SIST EN ISO 4892-3:2000****en**

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EUROPEAN STANDARD

EN ISO 4892-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 1999

ICS 83.080.00

English version

## Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps (ISO 4892-3:1994)

Plastiques - Méthodes d'exposition à des sources  
lumineuses de laboratoire - Partie 3: Lampes fluorescentes  
UV (ISO 4892-3:1994)

Kunststoffe - Bestrahlungsverfahren mit  
Laboratoriumslichtquellen - Teil 3: Fluoreszierend UV-  
Lampen (ISO 4892-3:1994)

This European Standard was approved by CEN on 16 April 1999.

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 Central Secretariat 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 Central Secretariat 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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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## Foreword

The text of the International Standard from Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

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 November 1999, and conflicting national standards shall be withdrawn at the latest by November 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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 4892-3:1994 has been approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

[SIST EN ISO 4892-3:2000](https://standards.iteh.ai/catalog/standards/sist/6f2810a0-8e11-46d0-8d9e-3a9abcec97a3/sist-en-iso-4892-3-2000)

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**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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 4892-2	1994	Plastics - Methods of exposure to laboratory light sources -	EN ISO 4892-2	1999

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# INTERNATIONAL STANDARD

**ISO**  
**4892-3**

First edition  
1994-10-01

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## Plastics — Methods of exposure to laboratory light sources —

### Part 3:

Fluorescent UV lamps

(standards.iteh.ai)

*Plastiques — Méthodes d'exposition à des sources lumineuses de  
laboratoire — ISO 4892-3:2000*

*Partie 3: Lampes fluorescentes UV*

<https://standards.iteh.ai/catalog/standards/sist/6f2810a0-8e11-46d0-8d9e-3a9abccc97a5/sist-en-iso-4892-3-2000>



Reference number  
ISO 4892-3:1994(E)

## 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.

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.

International Standard ISO 4892-3 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

Together with the other parts of ISO 4892, it cancels and replaces ISO 4892:1981, which has been technically revised.

ISO 4892 consists of the following parts, under the general title *Plastics — Methods of exposure to laboratory light sources*:

- Part 1: *General guidance*
- Part 2: *Xenon-arc sources*
- Part 3: *Fluorescent UV lamps*
- Part 4: *Open-flame carbon-arc lamps*

Annex A of this part of ISO 4892 is for information only.

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# Plastics — Methods of exposure to laboratory light sources —

## Part 3: Fluorescent UV lamps

### 1 Scope

This part of ISO 4892 specifies methods for exposing specimens to different types of fluorescent UV lamp. General guidance is given in ISO 4892-1.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 4892. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 4892 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4582:1980, *Plastics — Determination of changes in colour and variations in properties after exposure to daylight under glass, natural weathering or artificial light*.

ISO 4892-1:1994, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance*.

ISO 4892-2:1994, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc sources*.

CIE 85:1989, *Technical Report — Solar spectral irradiance*.

### 3 Definitions

For the purposes of this part of ISO 4892, the following definitions apply.

**3.1 fluorescent UV lamp:** A fluorescent lamp in which radiant emission in the ultraviolet region of the spectrum, i.e. below 400 nm, makes up at least 80 % of the total light output.

**3.2 type I fluorescent UV lamp:** A fluorescent UV lamp in which radiant emission below 300 nm is less than 2 % of the total light output. These lamps are commonly called UV-A lamps.

**3.3 type II fluorescent UV lamp:** A fluorescent UV lamp in which radiant emission below 300 nm is more than 10 % of the total light output. These lamps are commonly called UV-B lamps.

### 4 General requirements

**4.1** Specimens are exposed to fluorescent UV lamps under controlled environmental conditions. There are several different types of fluorescent UV lamp (see 3.1 and 3.2). UV-A lamps or combinations of UV-A lamps are recommended. When combinations of lamps with different spectral emissions are used, provision shall be made to ensure uniformity of the spectral irradiance at the surface of the specimens, e.g. by continuous repositioning of the specimens around the lamp array.

**4.2** Fluorescent UV lamps use the emission from a low-pressure mercury arc to excite a phosphor that produces a continuous spectrum in a relatively narrow