



# SLOVENSKI STANDARD SIST EN ISO 8529-3:2024

01-september-2024

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**Referenčna polja nevtronskega sevanja - 3. del: Umerjanje površinskih in osebnih dozimetrov ter določanje njihovega odziva kot funkcije energije nevtronov in vpadnega kota (ISO 8529-3:2023, vključno s popravljeno različico 2023-09)**

Neutron reference radiation fields - Part 3: Calibration of area and personal dosimeters and determination of their response as a function of neutron energy and angle of incidence (ISO 8529-3:2023, including corrected version 2023-09)

Neutronen-Referenzstrahlungsfelder - Teil 3: Kalibrierung von Orts- und Personendosimetern und Bestimmung ihres Ansprechvermögens als Funktion der Neutronenenergie und des Einfallswinkels (ISO 8529-3:2023, einschließlich der korrigierten Fassung von 2023-09)

Champs de rayonnement neutronique de référence - Partie 3: Étalonage des dosimètres de zone et individuels et détermination de leur réponse en fonction de l'énergie et de l'angle d'incidence des neutrons (ISO 8529-3:2023, y compris version corrigée 2023-09)

**Ta slovenski standard je istoveten z: EN ISO 8529-3:2024**

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**ICS:**

17.240 Merjenje sevanja Radiation measurements

**SIST EN ISO 8529-3:2024**

**en,fr,de**



EUROPEAN STANDARD

EN ISO 8529-3

NORME EUROPÉENNE

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July 2024

ICS 17.240

English Version

Neutron reference radiation fields - Part 3: Calibration of area and personal dosimeters and determination of their response as a function of neutron energy and angle of incidence (ISO 8529-3:2023, including corrected version 2023-09)

Champs de rayonnement neutronique de référence -  
Partie 3: Étalonnage des dosimètres de zone et  
individuels et détermination de leur réponse en  
fonction de l'énergie et de l'angle d'incidence des  
neutrons (ISO 8529-3:2023, y compris version corrigée  
2023-09)

Neutronen-Referenzstrahlungsfelder - Teil 3:  
Kalibrierung von Orts- und Personendosimetern und  
Bestimmung ihres Ansprechvermögens als Funktion  
der Neutronenenergie und des Einfallswinkels (ISO  
8529-3:2023, einschließlich der korrigierten Fassung  
von 2023-09)

This European Standard was approved by CEN on 7 July 2024.

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Contents	Page
European foreword.....	3

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## European foreword

The text of ISO 8529-3:2023, including corrected version 2023-09 has been prepared by Technical Committee ISO/TC 85 “Nuclear energy, nuclear technologies, and radiological protection” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 8529-3:2024 by Technical Committee CEN/TC 430 “Nuclear energy, nuclear technologies, and radiological protection” the secretariat of which is held by AFNOR.

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 January 2025, and conflicting national standards shall be withdrawn at the latest by January 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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# INTERNATIONAL STANDARD

# ISO 8529-3

Second edition  
2023-06

Corrected version  
2023-09

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## Neutron reference radiation fields — Part 3: Calibration of area and personal dosimeters and determination of their response as a function of neutron energy and angle of incidence

*Champs de rayonnement neutronique de référence —*

*Partie 3: Étalonnage des dosimètres de zone et individuels et  
détermination de leur réponse en fonction de l'énergie et de l'angle  
d'incidence des neutrons*

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# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Procedures applicable to area and personal dosimeters</b> .....	<b>2</b>
4.1 Neutron fields.....	2
4.2 Conversion coefficients.....	2
4.3 Determination of the response.....	3
4.4 Calibration procedures.....	3
<b>5 Procedures for calibrating and determining the ambient dose equivalent response of area dosimeters</b> .....	<b>4</b>
5.1 Quantity to be measured and conversion coefficients.....	4
5.2 Required response characteristics.....	4
5.3 Dosimeter conditions.....	4
5.4 Irradiation geometry.....	4
5.5 Evaluation of measurement.....	4
<b>6 Procedures for calibrating and determining the personal dose equivalent response of personal dosimeters</b> .....	<b>5</b>
6.1 Quantity to be measured and conversion coefficients.....	5
6.2 Required response characteristics.....	6
6.3 Calibration phantom.....	6
6.4 Dosimeter conditions.....	6
6.5 Irradiation geometry.....	6
6.6 Evaluation of measurement.....	7
<b>7 Uncertainty</b> .....	<b>8</b>
<b>Annex A (informative) List of reference conditions and standard test conditions</b> .....	<b>9</b>
<b>Bibliography</b> .....	<b>10</b>

## ISO 8529-3:2023(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.

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)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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This document was prepared by Technical Committee ISO/TC 85, *Nuclear energy, nuclear technologies, and radiological protection*, Subcommittee SC 2, *Radiation protection*.

This second edition cancels and replaces the first edition (ISO 8529-3:1998), which has been technically revised.

The main changes are as follows:

- The second and last edition of ISO 8529-1:2021 revised the neutron reference radiation fields produced with radionuclide sources as well as those produced with monoenergetic neutrons, thus requiring calculation of new conversion coefficients from neutron fluence to ambient dose equivalent or personal dose equivalent.

A list of all parts in the ISO 8529 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

This corrected version of ISO 8529-3:2023 incorporates the following corrections:

- The unit "pSv cm<sup>-2</sup>" was corrected to "pSv cm<sup>2</sup>" in [Tables 1](#) to [4](#).