



BSI Standards Publication

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

National foreword

This British Standard is the UK implementation of EN ISO 8529-3:2024. It is identical to ISO 8529-3:2023. It supersedes BS ISO 8529-3:2023, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee NCE/2, Radiation protection and measurement.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
31 July 2024	This corrigendum renumbers BS ISO 8529-3:2023 as BS EN ISO 8529-3:2024

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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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 8529-3:2023, including corrected version 2023-09 has been approved by CEN as EN ISO 8529-3:2024 without any modification.

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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).

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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.

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

- The unit "pSv cm⁻²" was corrected to "pSv cm²" in [Tables 1](#) to [4](#).