SLOVENSKI STANDARD

oSIST prEN IEC 62387:2022/oprAA:2022

01-julij-2022

Instrumenti za zaščito pred sevanjem - Sistemi za dozimetrijo z integriranimi pasivnimi detektorji za posamezno, delovno in okoljsko spremljanje fotonskega in beta sevanja - Dopolnilo AA

Radiation protection instrumentation - Dosimetry systems with integrating passive detectors for individual, workplace and environmental monitoring of photon and beta radiation

Strahlenschutz-Messgeräte - Dosimetriesysteme mit integrierenden passiven Detektoren zur Personen-, Arbeitsplatz- und Umgebungsüberwachung auf Photonen- und Betastrahlung

Instrumentation pour la radioprotection - Systèmes dosimétriques avec détecteurs intégrés passifs pour le contrôle radiologique individuel, du lieu de travail et de l'environnement des rayonnements photoniques et bêta

Ta slovenski standard je istoveten z: prEN IEC 62387/prAA

ICS:

13.280	Varstvo pred sevanjem	Radiation protection

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Radiation protection instrumentation - Dosimetry systems with integrating passive detectors for individual, workplace and environmental monitoring of photon and beta radiation

Instrumentation pour la radioprotection - Systèmes dosimétriques avec détecteurs intégrés passifs pour le contrôle radiologique individuel, du lieu de travail et de l'environnement des rayonnements photoniques et bêta

Strahlenschutz-Messgeräte - Dosimetriesysteme mit integrierenden passiven Detektoren zur Personen-, Arbeitsplatz- und Umgebungsüberwachung auf Photonen- und Betastrahlung

This draft amendment prAA, if approved, will modify the European Standard prEN IEC 62387; it is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2022-08-05.

It has been drawn up by CLC/TC 45B.

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC in three official versions (English, French, German).
A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (prEN IEC 62387:2022/prAA:2022) has been prepared by CLC/TC 45B "Radiation protection instrumentation".

This document is currently submitted to the Enquiry.

The following dates are proposed:

• latest date by which the existence of this document has to be announced at national level	(doa)	dor + 6 months
• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	dor + 12 months
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	dor + 36 months (to be confirmed or modified when voting)

EN IEC 62387:2022/prAA:2022 includes Common Modifications with respect to prEN IEC 62387:2022.

1 Modification to the Scope

Modify Table 1 as follows:

Replace in line 3, the 4th column with “0,8 MeV for $H_p(0,07)$ and 0,24 MeV to 0,8 MeV for $H'(0,07)$”.

Add the following note below the current text:

NOTE Z Some tests can be performed also for dosemeters containing active parts. Those tests not matching this document are expected to be performed according to IEC 61526.

2 Modification to Clause 3

Modify the following definitions as follows:

3.8
detector
radiation detector

Delete the first part of the definition which reads “apparatus or substance used to convert incident ionizing radiation energy into a signal suitable for indication and/or measurement an”.

Add at the end of the SOURCE indication “… and the Notes 1, 2 and 3 to entry have been added”.

3.14
indicated value
indication

Replace in the SOURCE indication “Notes 1, 2 and 3” with “Notes 1 and 2”.

3.21
maximum rated measurement time

Add a statement about OSL detectors to Note 2 to entry, so that it reads “… erasing the dose by heating (for TLDs) or by light (for OSL detectors), or a dose reset …”.

3.29
reader
dosemeter reader

Delete Note 2 to entry.

3.30
readout

Replace in Note 1 to entry “self-reading” with “electronic”.

3 Modification to 9.2

Add at the last but third dash at the end in the bracket “for $H_p(0,07)$ dosemeters including the response to beta radiation with a mean energy of 0,24 MeV, see Table 10, line 10”.

4 Modification to 11.3.3

Add details of validity to the beginning of the fourth sentence of Note 1, so that it reads “For example, for w = 12 and n = 5, a dosimetry system …”.

Add details of validity to the first sentence of Note 2, so that it reads “… (method of test so far), then, for example for w = 12 and n = 5 and a dosimetry system …”.

5 Modification to 11.5.1.2

Modify Table 3 as follows:

Delete the right cell of line 5 (90° test, indication for *H**(10) dosemeters) and **take** the entry “This test is given in 11.8” across both columns.

6 Modification to 11.6.1.2

Modify Table 4 as follows:

Add to the right cell of line 3 (75° test, indication for *H′*(3) dosemeters) after “For” the following text: “workplace dosemeters with 75° ≤ α_{max} and for”.

Delete the right cell of line 5 (90° test, indication for *H′*(3) dosemeters) and **take** the entry “This test is given in 11.8” across both columns.

7 Modification to 11.7.1.2

Modify Table 5 as follows:

Add to the right cell of line 3 (75° test, indication for *H′*(0,07) dosemeters) after “For” the following text: “workplace dosemeters with 75° ≤ α_{max} and for”.

Delete the right cell of line 5 (90° test, indication for *H′*(0,07) dosemeters) and **take** the entry “This test is given in 11.8” across both columns.

8 Modification to 11.8

Delete “n $H_p(10)$, $H_p(3)$ or $H_p(0,07)$”.

9 Modification to 13.7.3

Replace in the fourth and fifth paragraph “temperature of the reader” with “temperature of the reader’s environment”.

Add in the fourth paragraph after “shall be” the following text “at least 4 h” and **add** after “(see Table 7)” the following text “at the end of this period”.

Replace in the fifth paragraph “at least 4 h” with “this period”.

10 Modification to 13.7.4

Add after “(for type S influence quantities)” the following text: ”and if for type F and type S, $v(H_{low})$ fulfils line 6 of Table 8 to Table 13, respectively”.

11 Modification to 14.4

Replace in the note “U_m” with “U_{com}” two times.

12 Modification to 16.2

Add at the last but second dash at the end in the bracket “for $H_p(0,07)$ dosemeters including the response to beta radiation with a mean energy of 0,24 MeV, see Table 10, line 10”.

13 Modification to Table 10

Replace in line 9, third column, ”250 keV” with “1,25 MeV”.

Delete in line 10, third column, “0,24 MeV to” and **replace** “for extremity dosemeters” with “and a mandatory test at 0,24 MeV and 0° to ±60° for extremity dosemeters”.

Add in line 10, fourth column, “Compliance at 0,24 MeV is not required but results shall be stated”.