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Nuclear instrumentation - Housed scintillators - Test methods of light output and intrinsic resolution

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/23

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English Version

**Nuclear instrumentation - Housed scintillators - Test methods of
light output and intrinsic resolution
(IEC 62372:2021)**

Instrumentation nucléaire - Scintillateurs montés -
Méthodes de mesure de la lumière sortante et de résolution
intrinsèque
(IEC 62372:2021)

Strahlungsmessgeräte - Ummantelte Szintillatoren -
Prüfverfahren für Lichtabgabe und intrinsische Auflösung
(IEC 62372:2021)

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

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

EN IEC 62372:2022 (E)**European foreword**

This document (EN IEC 62372:2022) consists of the text of IEC 62372:2021 prepared by IEC/SC 45B "Radiation protection instrumentation" of IEC/TC 45 "Nuclear instrumentation".

The following dates are fixed:

- latest date by which this document has to be (dop) 2023-06-16 implemented at national level by publication of an identical national standard or by endorsement
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IEC 62372

Edition 2.0 2021-02

INTERNATIONAL STANDARD

**Nuclear instrumentation – Housed scintillators – Test methods of light output
and intrinsic resolution**





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IEC 62372

Edition 2.0 2021-02

INTERNATIONAL STANDARD

**Nuclear instrumentation – Housed scintillators – Test methods of light output
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

NUCLEAR INSTRUMENTATION – HOUSED SCINTILLATORS – TEST METHODS OF LIGHT OUTPUT AND INTRINSIC RESOLUTION

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International Standard IEC 62372 has been prepared by IEC technical committee 45: Nuclear instrumentation.

This second edition cancels and replaces the first edition published in 2006. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- Title has been modified.
- To review the existing requirements and to update the terminology, definitions and normative references.

The text of this International Standard is based on the following documents:

| FDIS | Report on voting |
|-------------|------------------|
| 45/913/FDIS | 45/915/RVD |

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NUCLEAR INSTRUMENTATION – HOUSED SCINTILLATORS – TEST METHODS OF LIGHT OUTPUT AND INTRINSIC RESOLUTION

1 Scope

This document is applicable to housed scintillators for registration and spectrometry of alpha-, beta-, gamma-, X-ray and neutron radiation.

The main parameters, such as a light output and intrinsic resolution are established. This document specifies the requirements for the testing equipment and test methods of the basic parameters of housed scintillators, such as:

- the direct method is applicable to measure the light output of housed scintillators based on scintillation material. The housed scintillators certified by this method can be used as working standard of housed scintillators (hereinafter: working standard) when performing measurements by a relative method of comparison.
- the relative method of comparison with the working standard is applicable to housed scintillators based on the same scintillation material as the working standard.

This document does not apply to gas or liquid scintillators and scintillators for counting and current modes.

The numerical values of the parameters are set to the specific type of scintillators in the specifications.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN