

STN	Energetické vlastnosti ovládacích zariadení svetelných zdrojov Časť 1: Ovládacie zariadenia žiaroviek Metóda merania na stanovenie celkového príkonu obvodov ovládacieho zariadenia a účinnosti ovládacieho zariadenia	STN EN IEC 62442-1 36 0513
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Energy performance of lamp controlgear - Part 1: Controlgear for fluorescent lamps - Method of measurement to determine the total input power of controlgear circuits and the efficiency of controlgear

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. 06/22

Obsahuje: EN IEC 62442-1:2022, IEC 62442-1:2022

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NORME EUROPÉENNE

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March 2022

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Supersedes EN IEC 62442-1:2018 and all of its
amendments and corrigenda (if any)

English Version

**Energy performance of lamp controlgear - Part 1: Controlgear for
fluorescent lamps - Method of measurement to determine the
total input power of controlgear circuits and the efficiency of
controlgear
(IEC 62442-1:2022)**

Performance énergétique des appareillages de lampes -
Partie 1 : Appareillages des lampes à fluorescence -
Méthode de mesure pour la détermination de la
puissance d'entrée totale des circuits d'appareillage et du
rendement des appareillages
(IEC 62442-1:2022)

Energieeffizienz von Lampenbetriebsgeräten - Teil 1:
Betriebsgeräte für Leuchtstofflampen - Messverfahren zur
Bestimmung der Gesamteingangsleistung von
Betriebsgeräteschaltungen und des Wirkungsgrades von
Betriebsgeräten
(IEC 62442-1:2022)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

EN IEC 62442-1:2022 (E)**European foreword**

The text of document 34C/1545/FDIS, future edition 3 of IEC 62442-1, prepared by SC 34C "Auxiliaries for lamps" of IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62442-1:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-12-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-03-16

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62442-2 NOTE Harmonized as EN IEC 62442-2

IEC 62442-3 NOTE Harmonized as EN IEC 62442-3

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-845	-	International Electrotechnical Vocabulary (IEV) – Part 845: Lighting	-	-
IEC 60081	1997	Double-capped fluorescent lamps - Performance specifications	EN 60081	1998
+ A4	2010		+ A4	2010
-	-		+ A11	2018
IEC 60901	1996	Single-capped fluorescent lamps - Performance specifications	EN 60901	1996
+ A5	2011		+ A5	2012
IEC 60921	2004	Ballasts for tubular fluorescent lamps - Performance requirements	EN 60921	2004
IEC 60929	2011	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirements	EN 60929	2011
-	-		+ AC	2011
IEC 63103	2020	Lighting equipment - Non-active mode power measurement	EN IEC 63103	2020
IEC TS 63105		Lighting systems and related equipment - Vocabulary	-	-



IEC 62442-1

Edition 3.0 2022-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Energy performance of lamp controlgear –
Part 1: Controlgear for fluorescent lamps – Method of measurement to determine
the total input power of controlgear circuits and the efficiency of controlgear**

**Performance énergétique des appareillages de lampes –
Partie 1: Appareillages des lampes à fluorescence – Méthode de mesure pour
la détermination de la puissance d'entrée totale des circuits d'appareillage et du
rendement des appareillages**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ENERGY PERFORMANCE OF LAMP CONTROLGEAR –**Part 1: Controlgear for fluorescent lamps –
Method of measurement to determine the total input power
of controlgear circuits and the efficiency of controlgear**

FOREWORD

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IEC 62442-1 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lighting. It is an International Standard.

This third edition cancels and replaces the second edition published in 2018. This edition constitutes a technical revision.

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

- a) this edition has been harmonized with IEC 62442-2 and IEC 62442-3;
- b) the reference to and use of the measurement methods for non-active power consumption in accordance with IEC 63103 have been added.

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

Draft	Report on voting
34C/1545/FDIS	34C/1548/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 62442 series, published under the general title *Energy performance of lamp controlgear*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under 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.

ENERGY PERFORMANCE OF LAMP CONTROLGEAR –

Part 1: Controlgear for fluorescent lamps – Method of measurement to determine the total input power of controlgear circuits and the efficiency of controlgear

1 Scope

This part of IEC 62442 defines a measurement and calculation method of the total input power for controlgear-lamp circuits when operating with their associated fluorescent lamp(s). The calculation method for the efficiency of the lamp controlgear is also defined. This document applies to electrical controlgear-lamp circuits consisting only of the controlgear and the lamp(s). It is intended for use on DC supplies up to 1 000 V and/or AC supplies up to 1 000 V at 50 Hz or 60 Hz.

NOTE Requirements for testing individual controlgear during production are not included.

This document specifies the measurement method for the total input power and the calculation method of the controlgear efficiency for all controlgear used for domestic and normal commercial purposes operating with the following fluorescent lamps:

- double-capped fluorescent lamps (IEC 60081);
- single-capped fluorescent lamps (IEC 60901);
- other general purpose low-pressure mercury fluorescent lamps.

This document does not apply to:

- controlgear which form an integral part of the lamp;
- controllable wire-wound magnetic controlgear.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-845, *International Electrotechnical Vocabulary (IEV) – Part 845: Lighting* (available at <http://www.electropedia.org>)

IEC 60081:1997, *Double-capped fluorescent lamps – Performance specifications*
IEC 60081:1997/AMD4:2010

IEC 60901:1996, *Single-capped fluorescent lamps – Performance specifications*
IEC 60901:1996/AMD5:2011

IEC 60921:2004, *Ballasts for tubular fluorescent lamps – Performance requirements*

IEC 60929:2011, *AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements*

IEC 63103:2020, *Lighting equipment – Non-active mode power measurement*

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IEC TS 63105, *Lighting systems and related equipment – Vocabulary*

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