

**SLOVENSKI STANDARD  
SIST EN IEC 62442-2:2022****01-maj-2022****Nadomešča:****SIST EN IEC 62442-2:2018****SIST EN IEC 62442-2:2018/AC:2019**

---

**Energijske lastnosti krmilne naprave sijalke - 2. del: Krmilna naprava za razelektrivne sijalke (razen nizkotlačnih živosrebrnih fluorescenčnih sijalk) - Merilna metoda za ugotavljanje učinkovitosti krmilne naprave (IEC 62442-2:2022)**

Energy performance of lamp controlgear - Part 2: Controlgear for discharge lamps (excluding low-pressure mercury fluorescent lamps) - Method of measurement to determine the efficiency of controlgear (IEC 62442-2:2022)

Energieeffizienz von Lampenbetriebsgeräten - Teil 2: Betriebsgeräte für Hochdruck-Entladungslampen (ausgenommen Leuchtstofflampen) - Messverfahren zur Bestimmung des Wirkungsgrades von Betriebsgeräten (IEC 62442-2:2022)

Performance énergétique des appareillages de lampes - Partie 2: Appareillages des lampes à décharge à haute intensité (à l'exclusion des lampes à fluorescence) - Méthode de mesure pour la détermination du rendement des appareillages (IEC 62442-2:2022)

**Ta slovenski standard je istoveten z: EN IEC 62442-2:2022**

---

**ICS:**

29.140.99	Drugi standardi v zvezi z žarnicami	Other standards related to lamps
-----------	-------------------------------------	----------------------------------

**SIST EN IEC 62442-2:2022****en**

**iTeh STANDARD  
PREVIEW  
(standards.iteh.ai)**

SIST EN IEC 62442-2:2022

<https://standards.iteh.ai/catalog/standards/sist/b167932c-f9d5-47f9-8640-7c62ee696743/sist-en-iec-62442-2-2022>

EUROPEAN STANDARD

EN IEC 62442-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2022

ICS 29.140.99

Supersedes EN IEC 62442-2:2018 and all of its  
amendments and corrigenda (if any)

English Version

Energy performance of lamp controlgear - Part 2: Controlgear for  
discharge lamps (excluding low-pressure mercury fluorescent  
lamps) - Method of measurement to determine the efficiency of  
controlgear  
(IEC 62442-2:2022)

Performance énergétique des appareillages de lampes -  
Partie 2: Appareillages des lampes à décharge (à  
l'exclusion des lampes à fluorescence à vapeur de mercure  
à basse pression) - Méthode de mesurage pour la  
détermination du rendement des appareillages  
(IEC 62442-2:2022)

Energieeffizienz von Lampenbetriebsgeräten - Teil 2:  
Betriebsgeräte für Hochdruck-Entladungslampen  
(ausgenommen Leuchtstofflampen) - Messverfahren zur  
Bestimmung des Wirkungsgrades von Betriebsgeräten  
(IEC 62442-2:2022)

This European Standard was approved by CENELEC on 2022-03-16. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists 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.



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 62442-2:2022 (E)****European foreword**

The text of document 34C/1546/FDIS, future edition 3 of IEC 62442-2, 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 62442-2:2022.

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

This document supersedes EN IEC 62442-2:2018 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC 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 committee. A complete listing of these bodies can be found on the CENELEC website.

**iteh STANDARD**  
**PREVIEW**  
**Endorsement notice**  
**(standards.iteh.ai)**

The text of the International Standard IEC 62442-2:2022 was approved by CENELEC as a European Standard without any modification. [SIST EN IEC 62442-2:2022](https://standards.iteh.ai/catalog/standards/sist/b167932c-f915-4719-b440-7602e0000003/sist-en-iec-62442-2-2022)

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

- IEC 60188 NOTE Harmonized as EN 60188
- IEC 60662 NOTE Harmonized as EN 60662
- IEC 60923 NOTE Harmonized as EN 60923
- IEC 61167 NOTE Harmonized as EN 61167
- IEC 62035 NOTE Harmonized as EN 62035
- IEC 62442-1 NOTE Harmonized as EN IEC 62442-1
- 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](http://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 (IEC) – Part 845: Lighting	-	-
IEC 61347-1	2015	Lamp controlgear - Part 1: General and safety requirements	EN 61347-1	2015
IEC 63103	2020	Lighting equipment - Non-active mode power measurement	EN IEC 63103	2020
IEC TS 63105	2021	Lighting systems and related equipment - Vocabulary	-	-
IEC Guide 115	2021	Application of uncertainty of measurement to conformity assessment activities in the electrotechnical sector	-	-

<https://standards.iteh.ai/standards/iec/iec-60050-845/iec-60050-845-2015/iec-60050-845-2015-167932c-f9d5-4719-8640-762cc06743/sist-en-iec-62442-2-2022>

**iTeh STANDARD  
PREVIEW  
(standards.iteh.ai)**

SIST EN IEC 62442-2:2022

<https://standards.iteh.ai/catalog/standards/sist/b167932c-f9d5-47f9-8640-7c62ee696743/sist-en-iec-62442-2-2022>



IEC 62442-2

Edition 3.0 2022-02

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

---

iTeh STANDARD

**Energy performance of lamp controlgear –  
Part 2: Controlgear for discharge lamps (excluding low-pressure mercury  
fluorescent lamps) – Method of measurement to determine the efficiency of  
controlgear**

**Performance énergétique des appareillages de lampes –  
Partie 2: Appareillages des lampes à décharge (à l'exclusion des lampes à  
fluorescence à vapeur de mercure à basse pression) – Méthode de mesurage  
pour la détermination du rendement des appareillages**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

---

ICS 29.140.99

ISBN 978-2-8322-1077-1

**Warning! Make sure that you obtained this publication from an authorized distributor.  
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

## CONTENTS

FOREWORD .....	3
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	6
4 General .....	8
4.1 General notes on tests .....	8
4.2 Controllable controlgear .....	8
4.3 Multi-lamp type controlgear .....	8
4.4 Measurement uncertainty .....	8
4.5 Sampling of controlgear for testing .....	8
4.6 Size of the test sample .....	8
4.7 Power supply .....	8
4.8 Supply voltage waveform .....	9
4.9 Instrument accuracy .....	9
4.10 Multi-rated voltage controlgear .....	10
4.11 Sensor and network connections .....	10
5 Method of measurement of the input power and calculation of the efficiency .....	10
5.1 Measurement set-up: electromagnetic controlgear .....	10
5.2 Efficiency calculation: electromagnetic controlgear .....	11
5.3 Measurement set-up: electronic controlgear .....	11
5.4 Efficiency calculation: electronic controlgear .....	12
5.5 Standby power measurement of electronic controlgear .....	12
5.6 Networked standby power measurement of electronic controlgear .....	12
5.7 Reporting of power measurements .....	12
Bibliography .....	13
Figure 1 – Measurement set-up for electromagnetic controlgear .....	10
Figure 2 – Measurement set-up for electronic controlgear .....	11
Table 1 – Typical nominal electricity supply details for some regions .....	9



## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ENERGY PERFORMANCE OF LAMP CONTROLGEAR –

**Part 2: Controlgear for discharge lamps  
(excluding low-pressure mercury fluorescent lamps) –  
Method of measurement to determine the efficiency of controlgear**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 62442-2 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) the title of Part 2 has been modified;
- b) this edition has been harmonized with IEC 62442-1 and IEC 62442-3;
- c) 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/1546/FDIS	34C/1549/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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://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](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.

ITEH STANDARD  
PREVIEW  
(standards.iteh.ai)

SIST EN IEC 62442-2:2022  
<https://standards.iteh.ai/catalog/standards/sist/b167932c-f9d5-47f9-8640-7c62ee696743/sist-en-iec-62442-2-2022>