

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

EESTI STANDARDI EESSÕNA

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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)

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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.

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IEC 60188 NOTE Harmonized as EN 60188
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IEC 61167 NOTE Harmonized as EN 61167
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IEC 62442-3 NOTE Harmonized as EN IEC 62442-3

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**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**



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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**

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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. 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.

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- reconfirmed,
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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

1 Scope

This part of IEC 62442 defines a measurement method of the power losses of electromagnetic controlgear, the total input power and the standby power of electronic controlgear for discharge lamps (excluding low-pressure mercury fluorescent lamps). A calculation method of the efficiency of controlgear for discharge lamp(s) is also defined.

It is assumed that the controlgear are designed 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.

This document applies to electrical controlgear-lamp circuits comprised solely of the controlgear and of the lamp(s).

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

This document specifies the measurement method for the total input power, the standby power and the calculation method of the lamp controlgear efficiency for all controlgear sold for domestic and normal commercial purposes operating with discharge lamps.

This document does not apply to:

- controlgear which form an integral part of lamps;
- controlgear circuits with capacitors connected in series;
- controllable electromagnetic 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 61347-1:2015, *Lamp controlgear – Part 1: General and safety requirements*

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

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*