

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 the  
controlgear

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62442-1:2018 sisaldab Euroopa standardi EN IEC 62442-1:2018 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 62442-1:2018 consists of the English text of the European standard EN IEC 62442-1:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 28.09.2018.	Date of Availability of the European standard is 28.09.2018.
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ICS 29.140.99

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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 the  
controlgear  
(IEC 62442-1:2018)

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 62442-1:2018)

Energieeffizienz von Lampenbetriebsgeräten - Teil 1:  
Betriebsgeräte für Leuchtstofflampen - Messverfahren zur  
Bestimmung der Gesamteingangsleistung von  
Betriebsgeräteschaltungen und des Wirkungsgrades von  
Betriebsgeräten  
(IEC 62442-1:2018)

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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

## European foreword

The text of document 34C/1335A/CDV, future edition 2 of IEC 62442-1, prepared by SC 34C "Auxiliaries for lamps" of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62442-1:2018.

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) 2019-03-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-09-28

This document supersedes EN 62442-1:2011.

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.

## Endorsement notice

The text of the International Standard IEC 62442-1:2018 was approved by CENELEC as a European Standard without any modification.

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

IEC 62442-1	NOTE Harmonized as EN 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 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 61347-2-3	-	Lamp control gear - Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps	EN 61347-2-3	-
IEC 61347-2-8	-	Lamp control gear - Part 2-8: Particular requirements for ballasts for fluorescent lamps	EN 61347-2-8	-

## CONTENTS

FOREWORD .....	4
1 Scope .....	6
2 Normative references .....	6
3 Terms and definitions .....	7
4 General .....	9
4.1 Applicability .....	9
4.2 Ballast lumen factor .....	9
4.3 Dimmable controlgear .....	10
4.4 Multi-power and/or multi-number-lamp controlgear .....	10
4.5 General notes on tests .....	10
4.6 Sampling of controlgear for testing .....	10
4.7 Size of the test sample .....	10
4.8 Conditioning of lamps .....	10
4.9 Test voltages and frequencies .....	10
4.10 Sensor and network connections .....	11
5 Method of measurement and calculation of total input power of controlgear-lamp circuits and the efficiency of controlgear .....	11
5.1 Correction for ballast lumen factor .....	11
5.2 Method of measurement .....	11
5.3 Measurement and calculation of the total input power of magnetic controlgear-lamp circuits .....	12
5.4 Calculation of the efficiency of electromagnetic controlgear .....	12
5.5 Measurement and calculation of the total input power of electronic controlgear-lamp circuits .....	12
5.6 Calculation of the efficiency of electronic controlgear .....	13
5.7 Measuring the standby power .....	13
Annex A (normative) Energy performance measurement setup .....	14
A.1 Measurement setup for electromagnetic controlgear .....	14
A.2 Measurement setup for electronic controlgear .....	14
A.2.1 Measurement of the total input power .....	14
A.2.2 Measuring method of standby power .....	15
A.2.3 Light output measurement .....	15
A.2.4 Distance to lamp related to lamp length: explanations .....	17
Annex B (informative) Application of the reference ballast when assessing lamps in electronic operation .....	19
B.1 Calculation of the reference ballast impedance .....	19
B.2 Method of adjusting the lamp power .....	19
Bibliography .....	20
Figure A.1 – Measurement of electromagnetic controlgear-lamp circuits .....	14
Figure A.2 – Measurement of AC supplied electronic controlgear-lamp circuits .....	15
Figure A.3 – Test setup for measuring standby power .....	15
Figure A.4 – Side view of light output measurement system .....	16
Figure A.5 – Top view of light output measurement system .....	16
Figure A.6 – Configuration of lamp and photocell sensor .....	18

Table 1 – Typical nominal electricity supply details for some regions .....	11
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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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International Standard IEC 62442-1 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision and has been harmonized with IEC 62442-2 and IEC 62442-3.

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

CDV	Report on voting
34C/1335A/CDV	34C/1376/RVC

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.

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 "<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.

## 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:

- linear fluorescent lamps;
- single-ended (compact) fluorescent lamps;
- other general purpose fluorescent lamps.

This document does not apply to:

- controlgear which form an integral part of the lamp;
- controllable wire-wound magnetic controlgear;
- luminaires, which rely on additional optical performance aspects.

#### 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 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 61347-2-3, *Lamp control gear – Part 2-3: Particular requirements for AC and/or DC supplied electronic control gear for fluorescent lamps*