BSI Standards Publication

Electric irons for household or similar use — Methods for measuring performance

bsi.

National foreword

This British Standard is the UK implementation of EN IEC 60311:2019. It is identical to IEC 60311:2016. It supersedes BS EN 60311:2003+A2:2009, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CPL/59, Performance of household electrical appliances.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD **EN IEC 60311**

EUROPÄISCHE NORM

October 2019

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Supersedes EN 60311:2003 and all of its amendments and corrigenda (if any)

English Version

Electric irons for household or similar use - Methods for measuring performance (IEC 60311:2016)

Fers à repasser électriques pour usage domestique ou analogue - Méthodes de mesure de l'aptitude à la fonction (IEC 60311:2016)

Elektrische Bügeleisen für Haushalt und ähnliche Zwecke - Verfahren zur Messung der Gebrauchseigenschaften (IEC 60311:2016)

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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.

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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 59L/116/CDV, future edition 5 of IEC 60311, prepared by SC 59L "Small household appliances" of IEC/TC 59 "Performance of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60311:2019.

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)	2020-04-11
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2022-10-11

This document supersedes EN 60311:2003.

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 60311:2016 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 60454-3-2	NOTE	Harmonized as EN 60454-3-2
ISO 3758	NOTE	Harmonized as EN ISO 3758

(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.

Publication	Year	Title	EN/HD	Year
IEC 60051-1	-		EN 60051-1	-
IEC 60734	-	Household electrical appliances - Performance - Water for testing	EN 60734	-
ISO 105-F01	-	Textiles_- Tests for colour fastness_-- Part_F01: Specification for wool adjacent fabric		-
ISO 105-F02	-	Textiles_- Tests for colour fastness_-- Part_F02: Specification for cotton and viscose adjacent fabrics		-
ISO 105-F03	-	Textiles_- Tests for colour fastness_-- Part_F03: Specification for polyamide adjacent fabric		-
ISO 1518-1	-		EN ISO 1518-1	-
ISO 2409		Paints and varnishes - Cross-cut test	EN ISO 2409	2013
ISO 3801	-	Textiles; Woven fabrics; Determination of- mass per unit length and mass per unit area		-
ISO 6330			EN ISO 6330	2012
ISO 7211-2 (mod)	-	Textiles - Woven fabrics - Construction - Methods of analysis -- Part 2: Determination of number of threads per unit length	EN 1049-2	-
ISO 9073-2	-	Textiles -- Test methods for nonwovens -- Part 2: Determination of thickness	EN ISO 9073-2	-
ISO 13934-1	-	Textiles_- Tensile properties of fabrics_-- Part_1: Determination of maximum force and elongation at maximum force using the strip method		-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRIC IRONS FOR HOUSEHOLD OR SIMILAR USE – METHODS FOR MEASURING PERFORMANCE

FOREWORD

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International Standard IEC 60311 has been prepared by subcommittee 59L: Small household appliance, of IEC technical committee 59: Performance of household and similar electrical appliances.

This fifth edition cancels and replaces the fourth edition published in 2002, Amendment 1:2005 and Amendment 2:2009. This edition constitutes a technical revision.

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

a) 5.3: introduction of clarifications on voltage and frequency to be applied for the tests;
b) 5.12: introduction of an anti-circumvention subclause;
c) 9.2.3: clarification on the procedure for measuring steaming rate;
d) 14.1 and 14.2: clarification on type of water used for the tests;
e) Figure 2: clarifications and alignment with the relevant formula.

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

CDV	Report on voting
59L/116/CDV	59L/121/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.

In this standard, the following print types are used:

- *test specifications: in italic type*
- notes: in small roman type
- other texts: in roman type

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.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

ELECTRIC IRONS FOR HOUSEHOLD OR SIMILAR USE – METHODS FOR MEASURING PERFORMANCE

1 Scope

This International Standard applies to electric irons for household or similar use.

The purpose of this document is to state and define the principal performance characteristics of electric irons for household or similar use which are of interest to the user and to describe the standard methods for measuring these characteristics.

Electric irons covered by this standard include

- dry irons;
- steam irons;
- vented steam irons with motor pump;
- spray irons;
- steam irons with separate water reservoir or boiler/generator having a capacity not exceeding 5 l.

This document is concerned neither with safety nor with performance requirements.

NOTE The primary characteristic to be taken into account in assessing the performance of an electric iron is its basic ability to produce a smooth finish to textile materials, without risk of scorching or other damage. It has not proved possible to devise a single method which will measure this characteristic in a consistently reproducible way and measurements have therefore been included to check certain factors, such as the temperature of the sole-plate at the mid-point, sole-plate temperature distribution, etc., which affect the basic characteristic. In evaluating the results, while a very exceptional result in any one of them may significantly affect performance, there is considerable latitude in the combination of results which will give satisfactory ironing performance, and too much significance is not given to minor differences in any one result.

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 60051-1, *Direct acting indicating analogue electrical measuring instruments and their accessories – Part 1: Definitions and general requirements common to all parts*

IEC 60734, *Household electrical applicances – Performance – Hard water for testing*

ISO 105–F01, *Textiles – Test for colour fastness – Specification for wool adjacent fabric*

ISO 105–F02, *Textiles – Test for colour fastness – Specification for cotton and viscose adjacent fabrics.*

ISO 105–F03, *Textiles – Test for colour fastness – Specification for polyamid adjacent fabric*

ISO 1518–1, *Paints and varnishes – Determination of scracth resistance – Part 1: constant-loading method*