

Double-capped fluorescent lamps — Safety specifications

The European Standard EN 61195:1994 with the incorporation of amendment A1:1998 has the status of a British Standard

ICS 29.140.30

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the national committees of the following countries:

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard, having been prepared under the direction of the Electrical Illuminations Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 June 1994

© BSI 05-1999

The following BSI references relate to the work on this standard:
Committee reference LGL/6
Draft for comment 91/20224 DC

ISBN 0 580 23314 6

Amendments issued since publication

Amd. No.	Date	Comments
10298	March 1999	New clause 2.12 and Annex E

Contents

	Page
Cooperating organizations	Inside front cover
National foreword	ii
Foreword	2
Text of EN 61195	5
National annex NA (informative) Committees responsible	Inside back cover
National annex NB (informative) Cross-references	Inside back cover

National foreword

This British Standard has been prepared under the direction of the Electrical Illuminations Standards Policy Committee and is the English language version of EN 61195:1994 *Double-capped fluorescent lamps — Safety specifications*, including amendment A1:1998, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 61195:1993 including amendment 1:1998 published by the International Electrotechnical Commission (IEC).

The following print types are used in this standard:

requirements proper in roman type

test specifications *in italic type*

explanatory matter in smaller roman type

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 20, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

ICS 29.140.30

Descriptors: Lighting equipment, fluorescent lamp, lamp cap, safety, specifications, marking, mechanical resistance, insulation resistance, dielectric strength, thermal resistance, heating, dimensions, quality control

English version

Double-capped fluorescent lamps — Safety specifications

(includes amendment A1:1998)
(IEC 61195:1993 + A1:1998)

Lampes à fluorescence à deux culots —
Prescriptions de sécurité
(inclut l'amendement A1:1998)
(CEI 61195:1993 + A1:1998)

Zweiseitig gesockelte Leuchstofflampen
Sicherheitsanforderungen
(enthält Änderung A1:1998)
(IEC 61195:1993 + A1:1998)

This European Standard was approved by CENELEC on 1993-12-08; amendment A1 was approved by CENELEC on 1998-08-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

© 1994 Copyright reserved to CENELEC members

Ref. No. EN 61195:1994 + A1:1998
 **Documents**
Document Sharing Hub

Foreword

The text of document 34A(CO)648, as prepared by Subcommittee 34: Lamps, of IEC Technical Committee 34A: Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote in December 1992.

The reference document was approved by CENELEC as EN 61195 on 8 December 1993.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1994-12-01
- latest date of withdrawal of conflicting national standards (dow) 1994-12-01

Annexes designated “normative” are part of the body of the standard. Annexes designated “informative” are given only for information. In this standard, Annex A, Annex B, Annex D and Annex ZA are normative and Annex C is informative.

For products which have complied with the relevant national standard before 1994-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1999-12-01.

Foreword to amendment A1

The text of document 34A/786/FDIS, future amendment 1 to IEC 61195:1993, prepared by SC 34A, Lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 61195:1994 on 1998-08-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1999-05-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2001-05-01

Contents

	Page
Foreword	2
Section 1. General	
1.1 Scope	5
1.2 Normative references	5
1.3 Definitions	5
Section 2. Safety Requirements	
2.1 General	7
2.2 Marking	7
2.3 Mechanical requirements for caps	7
2.4 Insulation resistance	7
2.5 Electric strength	8
2.6 Parts which can become accidentally live	8
2.7 Resistance to heat and fire	8
2.8 Creepage distance for caps	8
2.9 Lamp cap temperature rise	8
2.10 Lamp minimum overall length	9
2.11 Information for luminaire design	9
2.12 Information for ballast design	9
Section 3. Assessment	
3.1 General	10
3.2 Whole production appraisal by means of the manufacturer’s records	10
3.3 Assessment of the manufacturer’s records of particular tests	10
3.4 Rejection conditions of batches	11
3.5 Sampling procedures for whole production testing	11
3.6 Sampling for batch testing	11
Annex A (normative) Test holder for torsion test for G5 and G13 capped lamps	16
Annex B (normative) Test for lamp cap temperature rise	16
Annex C (informative) Information for luminaire design	17
Annex D (normative) Conditions of compliance for design tests	17
Annex E (informative) Information for ballast design	18
Annex ZA (normative) Other international publications quoted in this standard with the references of the relevant European publications	19
Figure A.1 — Holder for torsion tests on lamps with bi-pin caps	16
Table 1 — Torque values for unused lamps	7

	Page
Table 2 — Torque values after heating treatment	7
Table 3 — Sheet references of IEC 61	7
Table 4 — Grouping of test records — Sampling and acceptable quality levels	12
Table 5a — Acceptance numbers AQL = 0,65 %	13
Table 5b — Acceptance numbers AQL = 2,5 %	14
Table 6 — Batch sample size and rejection number	15

