



BSI Standards Publication

Cold cathode fluorescent lamps

Part 2: Performance specifications

National foreword

This Published Document is the UK implementation of IEC/PAS 62815-2:2013.

The UK participation in its preparation was entrusted by Technical Committee CPL/34, Lamps and Related Equipment, to Subcommittee CPL/34/1, Electric lamps.

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.

© The British Standards Institution 2013

Published by BSI Standards Limited 2013

ISBN 978 0 580 80167 9

ICS 29.140.99

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

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 November 2013.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------



PUBLICLY AVAILABLE SPECIFICATION

PRE-STANDARD

**Cold cathode fluorescent lamps –
Part 2: Performance specifications**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

P

ICS 29.140.99

ISBN 978-2-8322-1125-0

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Classification.....	7
5 Lamp requirements.....	7
5.1 General.....	7
5.2 Tests.....	8
5.2.1 General.....	8
5.2.2 Construction.....	8
5.2.3 Starting characteristic.....	8
5.2.4 Luminance.....	8
5.2.5 Luminance uniformity.....	9
5.2.6 Effective luminance length (under consideration).....	9
5.2.7 Chromaticity coordinates (under consideration).....	9
5.2.8 Colour uniformity.....	9
5.2.9 Dark starting time.....	9
5.2.10 Tube surface temperature.....	9
5.2.11 Lead wire tensile strength.....	9
5.2.12 Lead wire bending.....	9
5.2.13 Life (Reference).....	9
5.3 Marking.....	10
Annex A (normative) Dimensions and criteria of CCFL.....	12
Annex B (normative) Measurement points of CCFL.....	13
Annex C (normative) Method of test for CCFL.....	14
Figure A.1 – Dimensions and criteria of CCFL.....	12
Figure B.1 – Measurement point division method of CCFL.....	13
Figure C.1 – Test circuit (HOT-COLD).....	15
Figure C.2 – Test circuit (HOT-HOT).....	15
Table 1 – Measurement items of test for life and criteria of failure.....	10
Table 2 – Assurance.....	10
Table 3 – Inspection levels and the criteria for decision.....	10

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COLD CATHODE FLUORESCENT LAMPS –

Part 2: Performance specifications

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.

A PAS is a technical specification not fulfilling the requirements for a standard, but made available to the public.

IEC/PAS 62815-2 has been processed by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

Draft PAS	Report on voting
34A/1596/PAS	34A/1615/RVD

Following publication of this PAS, which is a pre-standard publication, the technical committee or subcommittee concerned may transform it into an International Standard.

This PAS shall remain valid for an initial maximum period of 3 years starting from the publication date. The validity may be extended for a single period up to a maximum of 3 years, at the end of which it shall be published as another type of normative document, or shall be withdrawn.

Currently in preview, click buy full version

COLD CATHODE FLUORESCENT LAMPS –

Part 2: Performance specifications

1 Scope

This part of IEC/PAS 62815 specifies the performance requirements for tubular type cold cathode fluorescent lamps for backlight unit purposes used to flat panel displays such as TV and monitor etc., hereafter called “lamps”. For other types of lamp, additionally it will be revised when a need for them is recognized.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050 (all parts), *International Electrotechnical Vocabulary* (available at <http://www.electropedia.org>)

IEC/PAS 62815-1, *Cold cathode fluorescent lamps – Safety specifications*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-845 and the following apply.

3.1

cold cathode fluorescent lamp

fluorescent lamp with cold cathode, in which most light is emitted by the excitation of phosphors coated in the discharge vessel

3.2

nominal value

approximate quantity value used to designate or identify a lamp

3.3

rated value

quantity value for a characteristic of a lamp for specified operating conditions

Note 1 to entry: The value and the conditions are specified in this PAS, or assigned by the manufacturer or responsible vendor.

3.4

lumen maintenance

ratio of the luminous flux of a lamp at a given time in its life to its initial luminous flux, the lamp being operated under specific conditions

Note 1 to entry: The ratio is generally expressed as a percentage.