



NEGARA BRUNEI DARUSSALAM

**BRUNEI DARUSSALAM STANDARD
PIAWAI BRUNEI DARUSSALAM**

**PBD IEC 60081:2008
IEC 60081:2008
Edition 5.1**

**DOUBLE-CAPPED FLUORESCENT LAMPS –
PERFORMANCE SPECIFICATIONS**

**ENERGY DIVISION, PRIME MINISTER'S OFFICE
IN COLLABORATION WITH MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM**

FOREWORD

This Brunei Darussalam Electrical Standard was prepared by the Technical Committee on Electrical Standards [TECO (Electrical)], Energy Division at Prime Minister's Office in collaboration with the authority of the standards committee, Construction Planning and Research Unit (CPRU), Ministry of Development, Brunei Darussalam with the objective of developing the National Electrical Standards for electrical products, systems, equipment and facilities for the local industries and consumers with reference to international standards, guidelines and procedures. In developing the national electrical standards, the aim is to promote quality, technical integrity, health, safety and environmental standards for the local industries and consumers.

This Brunei Darussalam Electrical Standard is an adoption of the International Electro technical Commission IEC 60081: 2008 (Edition 5.1) standard and implements it as the Brunei Darussalam National Standard.

Attention is drawn to the fact that this Brunei Darussalam Electrical Standard does not confer any immunity from legal obligations in any contract for compliance to the Standard.

The National Electrical Standards are subject to periodical review according to the current needs of the local industries and consumers to keep abreast of progress in the industries and consumers concerned. Suggestions of amendments will be recorded and in due course brought to the notice of the committees concerned.

COMMITTEE MEMBERS

The Technical Committee on Electrical Standards [TECO (Electrical)] was tasked by the Energy Division at the Prime Minister's Office in collaboration with Construction Planning and Research Unit (CPRU), Ministry of Development, Brunei Darussalam for the preparation of this Brunei Darussalam Electrical Standard. The members of the Technical Committee are as follows:

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**INTERNATIONAL
STANDARD**

Edition 5:1997 consolidated with amendment 1:2000

**Double-capped fluorescent lamps –
Performance specifications**



Numéro de référence
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**This IEC International Standard has been adopted by CPRU, Ministry of Development,
Negara Brunei Darussalam as a national standard under the IEC Affiliate Country Programme**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DOUBLE-CAPPED FLUORESCENT LAMPS –
PERFORMANCE SPECIFICATIONS**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60081 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

This fifth edition cancels and replaces the fourth edition, published in 1984, amendment 1 (1987), amendment 2 (1988), amendment 3 (1992), amendment 4 (1993) and amendment 5 (1994). It constitutes a technical revision.

This consolidated version of IEC 60081 consists of the fifth edition (1997) [documents 34A/759/FDIS and 34A/778/RVD] and its amendment 1 (2000) [documents 34A/896/FDIS and 34A/907/RVD].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 5.1.

Annexes A, B, C and D form an integral part of this standard.

Annexes E and F are for information only.

The committee has decided that the contents of the base publication and its amendment 1 will remain unchanged until 2003. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

DOUBLE-CAPPED FLUORESCENT LAMPS – PERFORMANCE SPECIFICATIONS

1 General

1.1 Scope

This International Standard specifies the performance requirements for double-capped fluorescent lamps for general lighting service.

The requirements of this standard relate only to type testing. Conditions of compliance, including methods of statistical assessment, are under consideration.

The following lamp types and modes of operation are included:

- a) lamps having preheated cathodes, designed for operation on a.c. mains frequencies with the use of a starter, and additionally operating on high frequency;
- b) lamps having preheated high-resistance cathodes, designed for operation on a.c. mains frequencies without the use of a starter (starterless), and additionally operating on high frequency;
- c) lamps having preheated low-resistance cathodes, designed for operation on a.c. mains frequencies without the use of a starter (starterless), and additionally operating on high frequency;
- d) lamps having preheated cathodes, designed for operation on high frequency;
- e) lamps having non-preheated cathodes, designed for operation on a.c. mains frequencies;
- f) lamps having non-preheated cathodes, designed for operation on high frequency.

1.2 Statement

It may be expected that lamps which comply with this standard will start and operate satisfactorily at voltages between 92 % and 106 % of rated supply voltage and at an ambient air temperature of between 10 °C and 50 °C, when operated with a ballast complying with IEC 60921 or IEC 60929, where relevant with a starter complying with IEC 60155 or IEC 60927, and in a luminaire complying with IEC 60598.

1.3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050(845):1987, *International Electrotechnical Vocabulary (IEV) – Chapter 845: Lighting*