



MALAYSIAN STANDARD

MS 141:2014

Ballasts for tubular fluorescent lamps - Performance (watt loss) requirements (Second revision)

ICS: 29.140.30

Descriptors: ballast, tubular, fluorescent, lamp, performance, watt loss

© Copyright 2014

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (STANDARDS MALAYSIA)** is the national standards and accreditation body of Malaysia.

The main function of STANDARDS MALAYSIA is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting the consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. To the greatest extent possible, Malaysian Standards are aligned to or are adoption of international standards. Approval of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Malaysian Standards are reviewed periodically. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

For the purposes of Malaysian Standards, the following definitions apply:

Revision: A process where existing Malaysian Standard is reviewed and updated which resulted in the publication of a new edition of the Malaysian Standard.

Confirmed MS: A Malaysian Standard that has been reviewed by the responsible committee and confirmed that its contents are current.

Amendment: A process where a provision(s) of existing Malaysian Standard is altered. The changes are indicated in an amendment page which is incorporated into the existing Malaysian Standard. Amendments can be of technical and/or editorial nature.

Technical corrigendum: A corrected reprint of the current edition which is issued to correct either a technical error or ambiguity in a Malaysian Standard inadvertently introduced either in drafting or in printing and which could lead to incorrect or unsafe application of the publication.

NOTE: Technical corrigenda are not to correct errors which can be assumed to have no consequences in the application of the MS, for example minor printing errors.

STANDARDS MALAYSIA has appointed **SIRIM Berhad** as the agent to develop, distribute and sell Malaysian Standards.

For further information on Malaysian Standards, please contact:

Department of Standards Malaysia
Ministry of Science, Technology and Innovation
Level 1 & 2, Block 2300, Century Square
Jalan Usahawan
63000 Cyberjaya
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 8318 0002
Fax: 60 3 8319 3131
<http://www.jsm.gov.my>
E-mail: central@jsm.gov.my

OR **SIRIM Berhad**
(Company No. 367474 - V)
1, Persiaran Dato' Menteri
Section 2, P. O. Box 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 5544 6000
Fax: 60 3 5510 8095
<http://www.sirim.my>
E-mail: msonline@sirim.my

Contents

	Page
Committee representation	ii
Foreword.....	iii
1 Scope	1
2 Normative references.....	1
3 General notes on tests.....	1
4 Marking	2
5 Watt loss.....	2
Annex A Watt loss test.....	3

MS 141:2014

Committee representation

The Industry Standards Committee on Electrical and Electronics Equipments and Accessories (ISC S) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Atomic Energy Licensing Board
Department of Standards Malaysia
Federation of Malaysian Manufacturers
Jabatan Kerja Raya Malaysia
Malaysian Association of Standards Users
Malaysian Cable Manufacturers Association
Malaysian Electrical Appliances and Distributors Association
Malaysian Green Technology Corporation
Ministry of Domestic Trade, Co-operatives and Consumerism
Ministry of International Trade and Industry
Multimedia University
SIRIM Berhad (Secretariat)
SIRIM QAS International Sdn Bhd
Suruhanjaya Komunikasi dan Multimedia Malaysia
Suruhanjaya Tenaga
Tenaga Nasional Berhad
The Electrical and Electronics Association of Malaysia
Universiti Teknologi Malaysia
Universiti Tenaga Nasional

The Technical Committee on Lighting, Lamps and Accessories which developed this Malaysian Standard consists of representatives from the following organisations:

Association of Consulting Engineers Malaysia

Federation of Malaysian Manufacturers

Jabatan Kerja Raya Malaysia

Malaysia Green Building Confederation

SIRIM Berhad (Secretariat)

SIRIM QAS International Sdn Bhd (Product Certification and Inspection Department)

SIRIM QAS International Sdn Bhd (Testing Services Department)

Suruhanjaya Tenaga

The Electrical and Electronics Association of Malaysia

The Institution of Engineers, Malaysia

Foreword

This Malaysian Standard was developed by the Technical Committee on Lighting, Lamps and Accessories under the authority of the Industry Standards Committee on Electrical and Electronics Equipments and Accessories.

Major modifications in this revision are as follows:

- a) the title has been changed to “Ballasts for tubular fluorescent lamps - Performance (watt loss) requirements”;
- b) the scope has been changed as in Clause 1;
- c) subclauses 3.1, 3.2, 4.1 and 4.2 have been deleted;
- d) Clauses 5, 6, 7, 8, 9, 10, 11, 12 and 13 have been deleted; and
- e) Annexes A, B, C and D have been deleted.

This Malaysian Standard cancels and replaces, MS 141: Part 2:1993, *Specification for ballasts for tubular fluorescent lamps - Part 2: Performance requirements (First revision)*.

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