



## **Double-capped fluorescent lamps — Performance specifications**

### **Part 2: Minimum Energy Performance Standard (MEPS)**



AS 4782.2:2019

This Australian Standard® was prepared by EL-041, Lamps and Related Equipment. It was approved on behalf of the Council of Standards Australia on 3 May 2019.

This Standard was published on 3 June 2019.

The following are represented on Committee EL-041:

- Australian Industry Group
- Consumers Federation of Australia
- Department of the Environment and Energy (Australian Government)
- Electrical Compliance Testing Association of Australia
- Electrical Regulatory Authorities Council
- IES: The Lighting Society
- Joint Accreditation System of Australia and New Zealand
- Lighting Council Australia
- Master Electricians Australia
- NSW Fair Trading

This Standard was issued in draft form for comment as DR AS 4782.2:2018.

### **Keeping Standards up-to-date**

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

[www.standards.org.au](http://www.standards.org.au)

ISBN 978 1 76072 481 8



## **Double-capped fluorescent lamps — Performance specifications**

### **Part 2: Minimum Energy Performance Standard (MEPS)**

Originated as AS/NZS 4782.2:2004.  
Revised and redesignated as AS 4782.2:2019.

#### **COPYRIGHT**

© Standards Australia Limited 2019

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

## Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Technical Committee EL-041, Lamps and Related Equipment, to supersede AS/NZS 4782.2:2004.

After consultation with stakeholders, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this part of the Standard AS 4782.2 is twofold:

- (a) To specify Minimum Energy Performance Standard requirements for double-capped general purpose tubular fluorescent lamps of certain length and wattage, operating in single-phase 50 Hz supply, that are sold in Australia.
- (b) To specify maximum permissible quantity of mercury present in fluorescent lamps.

The major changes in this edition are as follows:

- (i) Updates references to standards.
- (ii) Aligns the maximum mercury levels with the requirements of the *Greenhouse and Energy Minimum Standards (Double-capped Fluorescent Lamps) Determination*.
- (iii) Updates information on product registration requirements under regulation.

This Standard when complete will consist of the following parts:

AS/NZS 4782.1 , *Double-capped fluorescent lamps — Performance specifications, Part 1: General*

AS 4782.2 , *Double-capped fluorescent lamps — Performance specifications, Part 2: Minimum Energy Performance Standard (MEPS)* (this Standard)

AS/NZS 4782.3 , *Double-capped fluorescent lamps — Performance specifications, Part 3: Procedure for quantitative analysis of mercury present in fluorescent lamps*

This Standard is published with the approval of the Equipment Energy Efficiency Program, representing the Commonwealth, state and territory governments under the Council of Australian Governments (COAG) and is structured to be suitable for reference in legislation calling up Minimum Energy Performance Standards and also for reference in product energy efficiency legislation. It refers to AS/NZS 4782.1 and either AS/NZS 4782.3 or IEC 62321-4 and IEC 62554 for test procedures.

The regulations arising from this Standard are intended to eliminate halophosphate lamps from the Australian market, thereby ensuring that savings are maintained.

The term “informative” is used in this Standard to define the application of the appendix to which it applies. An informative appendix is for information and guidance.

# Contents

<b>Preface</b> .....	<b>ii</b>
<b>Section 1 Scope and general</b> .....	<b>1</b>
1.1 Scope .....	1
1.2 Exclusions .....	1
1.3 Application .....	1
1.4 Normative references .....	1
1.5 Terms and definitions .....	2
<b>Section 2 Performance criteria</b> .....	<b>4</b>
2.1 General .....	4
2.2 Minimum Energy Performance Standard (MEPS) .....	4
2.3 Test conditions for determining minimum energy performance standard of tubular fluorescent lamps .....	4
2.4 Number of tests and processing of data .....	4
2.5 Determination of mercury content .....	5
2.5.1 General .....	5
2.5.2 Criteria .....	5
2.5.3 Test procedure .....	5
<b>Section 3 Application and test result formats</b> .....	<b>6</b>
<b>Appendix A (informative) Summary test report for a tubular fluorescent lamp for MEPS</b> .....	<b>7</b>
<b>Bibliography</b> .....	<b>9</b>

# Australian Standard<sup>®</sup>

## Double-capped fluorescent lamps — Performance specifications

### Part 2: Minimum Energy Performance Standard (MEPS)

#### Section 1 Scope and general

##### 1.1 Scope

This Standard specifies Minimum Energy Performance Standard (MEPS) requirements for double-capped (FD and FDH) tubular fluorescent lamps with a nominal length of 550 mm to 1500 mm and having nominal lamp wattage of 16 W or more, that are within the scope of AS/NZS 4782.1.

This Standard further specifies the following:

- (a) Efficacy determination.
- (b) Colour rendering index requirements.
- (c) Test report format.

This Standard covers lamps for general illumination purposes, for use in luminaires and with lamp ballasts connected to a 230 V 50 Hz single phase or similar mains supply. Lamps that are intended for use only with high frequency (electronic) ballasts are also covered.

##### 1.2 Exclusions

This Standard does not apply to lamps that are clearly not intended for general illumination, specifically —

- (a) lamps with a dominant colour or with an output that is predominantly outside the visible spectrum;
- (b) lamps for colour matching and that have a colour rendering index greater than 90 and a colour appearance approximating to a point on the black body locus;
- (c) lamps that are specifically for use in an industrial or agricultural process;
- (d) lamps for medical applications; or
- (e) lamps that have been given written exemption by the relevant regulatory authority on the grounds that they are for a specific purpose other than general illumination and are clearly distinguishable from lamps for general illumination.

This Standard does not specify electrical safety requirements.

##### 1.3 Application

This Standard shall be read in conjunction with AS/NZS 4782.1 and AS/NZS 4782.3.

##### 1.4 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.

NOTE Documents for informative purposes are listed in the Bibliography.

AS/NZS 4782.1, *Double-capped fluorescent lamps — Performance specifications, Part 1: Performance specifications*