



# **Greenhouse and Energy Minimum Standards (Double-capped Fluorescent Lamps) Determination 2012<sup>1</sup>**

*Greenhouse and Energy Minimum Standards Act 2012*

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I, MARK DREYFUS, Parliamentary Secretary for Climate Change and Energy Efficiency, make this Determination under section 23 of the *Greenhouse and Energy Minimum Standards Act 2012*.

Dated                      25 October 2012

MARK DREYFUS

Parliamentary Secretary for Climate Change and Energy Efficiency

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## 1 Name of Determination

This Determination is the *Greenhouse and Energy Minimum Standards (Double-capped Fluorescent Lamps) Determination 2012*.

## 2 Commencement

This Determination comes into force on the day after it is registered.

## 3 Definitions

In this Determination:

*Act* means the *Greenhouse and Energy Minimum Standards Act 2012*.

**AS/NZS 4782.1:2004** means *Australian/New Zealand Standard 4782.1:2004 Double-capped fluorescent lamps—Performance specifications - Part 1: General (IEC 60081:2000 MOD)*, as it existed on the date this Determination came into force.

Note: AS/NZS 4782.1:2004 is available from Standards Australia Limited.

**AS/NZS 4782.2:2004** means *Australian/New Zealand Standard 4782.2:2004 Double-capped fluorescent lamps—Performance specifications - Part 2: Minimum Energy Performance Standard (MEPS)*, as it existed on the date this Determination came into force.

Note 1: AS/NZS 4782.2:2004 is available from Standards Australia Limited.

Note 2: AS/NZS 4782.2:2004 includes all amendments up to and including AS/NZS 4782.2:2004/Amdt:2 published on 19 July 2006.

**AS/NZS 4782.3(Int):2006** means *Australian /New Zealand Standard 4782.3(Int):2006 – Double-capped fluorescent lamps – Performance specifications – Part 3: Procedure for quantitative analysis of mercury present in fluorescent lamps*, as it existed on 5 June 2006.

Note 1: AS/NZS 4782.3:2006 is available from Standards Australia Limited.

Note 2: This standard applies to give effect to this Determination or a standard referred to in this Determination despite the fact that it expired on 5 June 2008.

**AS/NZS 61231:2001** means *Australian/New Zealand Standard 61231:2001, International Lamp Coding System (ILCOS)*, as it existed on the date this Determination came into force.

Note: AS/NZS 61231:2001 is available from Standards Australia Limited.

**Australian Standard** means a standard that is published by Standards Australia Limited denoted by the letters "AS" and identifying numbers and/or letters.

**Australian/New Zealand Standard** means a standard that is jointly published by Standards Australia and Standards New Zealand, is applicable in both countries and denoted by the letters "AS/NZS" and identifying numbers and/or letters.

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**CIE Standard** means a standard that is published by, or on behalf of, the International Commission on Illumination.

**colour rendering index** is a relative measure of the shift in surface colour of an object when lit by a particular lamp, compared with how the object would appear under a reference light source. Colour rendering index is a numerical representation that rates the 'colour rendering' ability of a light source in comparison with natural daylight, which has a Colour rendering index of 100.

*Note:* This is the same meaning as in subclause 1.5.2 of AS/NZS 4782.2:2004

**efficacy** has the same meaning as in subclause 1.5.3 of AS/NZS 4782.2:2004.

**IEC Standard** means a standard that is published by, or on behalf of, the International Electrotechnical Commission.

**standard** means an Australian Standard, an Australian/New Zealand Standard, an IEC Standard or any other equivalent document.

*Note:* Several other words and expressions used in this Determination have the meaning given by section 5 of the Act. For example:

- category A product
- covered by
- family of models
- GEMS
- GEMS labelling requirements
- GEMS level requirements
- model
- product classes

## 4 Interpretation

### *Applicable definitions of terms or phrases*

- (1) If a term or phrase is not defined under the Act, the Regulations to the Act or in this Determination, but the term is defined in a standard mentioned specifically in section 3 of this Determination, the term or phrase is to be read for the purposes of this Determination as having the meaning of the term under the relevant standard.

*Note:* Notwithstanding this, for convenience to users, the key terms for ascertaining if a product is covered by this Determination are defined in this Determination.

### *Applicable version of documents incorporated into standards*

- (2) For the purposes of this Determination the applicable version of any document, including a standard, that:
  - (a) is referred to in a standard under the heading 'Referenced Documents', or under an equivalent heading in a standard; and

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- (b) must be applied to give effect to this Determination or a standard referred to in this Determination,

is the following version of the document:

- (c) if the document is the subject of a definition in section 3 of this Determination which specifies a date of effect—the version of the document that existed at that date; and
- (d) otherwise—the version of the document that existed at the date this Determination came into force.

*Note:* For example clause 2.3 of AS/NZS 4782.2:2004 provides that the initial lamp efficacy (lumen output and lamp power) shall be determined in accordance with Annex B of AS/NZS 4782.1:2004. The applicable version of AS/NZS 4782.1:2004 is the version that existed at the date this Determination came into force. However, AS/NZS 4782.3(Int):2006 is to be applied as it existed on 5 June 2006.

## 5 Specified product classes covered by this Determination

- (1) This Determination covers double-capped fluorescent lamps in the product classes set out in subsection (2) that are:
- (a) for general illumination purposes; and
  - (b) for use in a luminaire; and
  - (c) for either:
    - (i) alternating current mains (FD) applications; or
    - (ii) high frequency (FDH) applications; and
  - (d) with a nominal length from 550 mm to 1500 mm; and
  - (e) with a nominal lamp wattage of 16 watts or more; and
  - (f) with a lamp ballast connected to a 230 volt 50 hertz single phase or similar mains supply.

*Note 1:* This subsection reflects the scope specified in clause 1.1 of AS/NZS 4782.2:2004.

*Note 2:* This subsection specifies products that are covered by the Determination. See subsection (3) for products that are not covered.

- (2) The product classes are as follows:

### Product Class Products covered by class

- |   |   |
|---|---|
| 1 | Lamps with a nominal length greater than or equal to 550 mm and less than 700 mm.   |
| 2 | Lamps with a nominal length greater than or equal to 700 mm and less than 1150 mm.  |
| 3 | Lamps with a nominal length greater than or equal to 1150 mm and less than 1350 mm. |

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4 Lamps with a nominal length greater than or equal to 1350 mm and less than or equal to 1500 mm.

- (3) For subsection 23 (2) of the Act, this Determination does not cover a lamp that is not intended for general illumination, and is:
- (a) a lamp with a dominant colour or with an output that is predominantly outside the visible spectrum; or
  - (b) a lamp for colour matching and that has a colour rendering index greater than 90 and a colour appearance approximating to a point on the black body locus; or
  - (c) a lamp that is specifically for use in an industrial or agricultural process; or
  - (d) a lamp for a medical application; or
  - (e) a lamp designed specifically for use in a flame proof luminaire.

*Note:* This subsection reflects the exclusions specified in clause 1.2 of AS/NZS 4782.2:2004.

- (4) In this section:

***double-capped fluorescent lamp*** means a fluorescent lamp with two separate caps and mostly of tubular form and linear shape.

*Note:* This is the same meaning as in subclause 1.4.2 of AS/NZS4782.1:2004

***luminaire*** means an apparatus which distributes, filters or transforms the light transmitted from one or more lamps and which includes, except the lamps themselves, all the parts necessary for fixing and protecting the lamps and, where necessary, circuit auxiliaries together with the means for connecting them to the electric supply.

## 6 GEMS level requirements

### *Energy use and greenhouse gas production*

- (1) For paragraphs 24 (1) (a) and 25 (a) of the Act, the specified energy use requirements for products covered by this Determination are the requirements mentioned in clause 2.2 of AS/NZS 4782.2: 2004 in relation to initial efficacy and maintained efficacy.

### *Conducting tests*

- (2) For paragraphs 24 (1) (a) and 25 (b) of the Act, the specified requirements for conducting tests for products covered by this Determination are the requirements mentioned in:
- (a) for initial efficacy, Annex B of AS/NZS 4782.1:2004, with the exception that tests on high frequency operated lamps with a nominal diameter of 16 mm (T5) may be made at an ambient temperature of 35°C (instead of 25°C); and
  - (b) for maintained efficacy, Annex C of AS/NZS 4782.1:2004.
- (3) In this section:

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*initial efficacy* has the same meaning as in subclause 1.5.4 of AS/NZS 4782.2:2004.

*maintained efficacy* has the same meaning as in subclause 1.5.5 of AS/NZS 4782.2:2004.

## **7 GEMS labelling requirements**

There are no GEMS labelling requirements for products covered by this Determination.

## **8 Other GEMS requirements**

### *Product performance*

- (1) For subsection 24 (2) and paragraph 27 (1) (b) of the Act, the specified requirements relating to product performance for products covered by this Determination are the requirements mentioned in clause 2.2 of AS/NZS 4782.2:2004 in relation to minimum colour rendering index.

### *Environmental and health impacts*

- (2) For subsection 24 (2) and paragraph 27 (1) (c) of the Act, the specified requirements relating to the impact on the environment or health of human beings for products covered by this Determination are the requirements mentioned in clause 2.5 of AS/NZS 4782.2:2004 in relation to maximum quantity of mercury.

### *Conducting tests*

- (3) For subsection 24 (2) and paragraph 27 (1) (e) of the Act, the specified requirements for conducting tests for products covered by this Determination in relation to paragraphs 27 (1) (b) and 27 (1) (c) are the requirements mentioned in:
  - (a) clauses 2.3 and 2.4 of AS/NZS 4782.2:2004 in relation to product performance; and
  - (b) clause 2.5 of AS/NZS 4782.2:2004 in relation to environment and health impacts.

## **9 Families of models**

- (1) For section 28 of the Act, the specified circumstances, in which 2 or more models from a single product class covered by this Determination are in the same family, are when the models:
  - (a) are in the same product class; and
  - (b) are of a single brand; and
  - (c) rely on the same test report that sets out the results of testing conducted in accordance with sections 6 and 7 of this Determination; and

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- (d) have the same physical characteristics that are relevant to complying with sections 6 and 7 of this Determination, including, but not limited to, the following:
    - (i) overall size;
    - (ii) geometric form factor; and
    - (iii) any other dimensions, components or component arrangements that may affect performance; and
  - (e) have the same claimed energy performance characteristics that are relevant to complying with sections 6, 7 and 8 of this Determination, including, but not limited to the following:
    - (i) colour temperature;
    - (ii) colour rendering index;
    - (iii) efficacy; and
    - (iv) wattage.
- (2) For subsection (1), a model cannot be a member of a family of models if its inclusion in that family would lead to the family consisting of more than 5 models.

## **10 Product Categories**

For section 29 of the Act, the products covered by this Determination are category A products.

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### **Note**

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See <http://www.frli.gov.au>.