

Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 20171

*Greenhouse and Energy Minimum Standards Act 2012*

I, JOSH FRYDENBERG, Minister for the Environment and Energy, make this Determination under sections 23 and 35 of the *Greenhouse and Energy Minimum Standards Act 2012*.

Dated  1/6/2017

JOSH FRYDENBERG

Minister for the Environment and Energy

**COPYRIGHT**

© 2017 Commonwealth of Australia

This Determination includes material from Australian Standards and/or Australian/New Zealand Standards, which are copyright Standards Australia Ltd. Apart from reproduction for personal and non-commercial use, and uses permitted under the *Copyright Act 1968,* Standards Australia Ltd material may not be reproduced without permission or licence.

With the exception of the Commonwealth Coat of Arms, Commonwealth copyright material is licensed under the Creative Commons Attribution-Non-Commercial-ShareAlike 4.0 International Licence. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-sa/4.0/>.

You are free to copy, communicate and adapt the Commonwealth copyright material, so long as you attribute the Commonwealth of Australia.

Complete Australian/New Zealand Standards are available for purchase from Standards Australia Ltd. Requests and inquiries concerning other reproduction and rights pertaining to standards should be directed to SAI Global Limited.

1 Name of Determination

This Determination is the *Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2017*.

2 Commencement, Revocation and Replacement

(1) This Determination comes into force 6 months after the day it is registered.

(2) This Determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2012*.

3 Definitions

In this Determination:

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

***AS 1852.845-1989*** means *Australian Standard* *1852.845-1989 International electrotechnical vocabulary*– *Lighting*, as it existed on the day this Determination came into force.

***AS/NZS 4782.3:2014*** means *Australian/New Zealand Standard 4782.3:2014* – *Double-capped fluorescent lamps* – *Performance specifications* – *Part 3: Procedure for quantitative analysis of mercury present in fluorescent lamps*,as it existed on the day this Determination came into force.

*Note:* AS/NZS 4782.3:2014 is available from Standards Australia Limited.

***AS/NZS 4847.1:2010*** means *and* , as it existed on the day this Determination came into force.

*Note 1:* AS/NZS 4847.1:2010 is available from Standards Australia Limited.

***AS/NZS 4847.2:2010*** means *Australian/New Zealand Standard 4847.2:2010* *Self ballasted lamps for general lighting services*– *Part 2: Minimum Energy Performance Standards (MEPS) requirements*, as it existed on the day this Determination came into force.

*Note 1:* AS/NZS 4847.2:2010 is available from Standards Australia Limited.

*Note 2:* AS/NZS 4847.2.2010 includes all amendments up to and including AS/NZS 4847.2:2010/Amdt 1:2011 made on 23 December 2011.

***IEC 62321-4*** means *International Standard IEC 62321-4 Ed. 1.0 (Bilingual 2013): Determination of certain substances in electrotechnical products – Part 4: Mercury in polymers, metals and electronics by CV-AAS, CV-AFS, ICP-OES and ICP-MS*, as it existed on the day this Determination came into force.

*Note:* IEC 62321-4 is available from Standards Australia Limited.

***IEC 62554*** means *International Standard IEC 62554 Ed. 1.0 (Bilingual 2011): Sample preparation for measurement of mercury level in fluorescent lamps*,as it existed on the day this Determination came into force.

*Note:* IEC 62554 is available from Standards Australia Limited.

***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.

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

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

***general lighting*** means substantially uniform lighting of an area without provision for special local requirements

*Note:* This is the same meaning as in clause 845-09-06 IEC 60050-845 Ed.1.

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

***lamp cap*** means the point at the base of the lamp at which power enters the lamp.

*Note:* This is the same meaning as in clause 3.13 of AS/NZS 4847.1:2010.

***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.

*Note :* This is the same meaning as in section 845.10 of AS 1852.845-1989.

***self-ballasted compact fluorescent lamp*** means a unit that cannot be dismantled without being permanently damaged, which consists of:

(a) a lamp cap;

(b) an electric discharge tube that generates visible light through fluorescence; and

(c) any additional elements necessary for starting or stabilising the operation of the light source.

*Note:* This is the same meaning as in clause 3.31 of AS/NZS 4847.1:2010.

***standard*** means an Australian Standard, an Australian/New Zealand Standard, a CIE 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 there is inconsistency in the definitions of words or expressions, words or expression will be interpreted in the following order of priority to the extent of any inconsistency:
2. the Act;
3. this Determination;
4. the Standards.
5. A word or expression defined in a standard mentioned specifically in section 3 of this Determination has the meaning given to it in 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

1. For the purposes of this Determination the applicable version of any:
2. Standard; or
3. other document that:
4. is referred to in a standard under the heading ‘Referenced Documents’, or under an equivalent heading in a standard; and
5. must be applied to give effect to this Determination or a standard referred to in this Determination,

is the version of the standard or other document that existed at the date this Determination came into force.

*Note:* For example, table 1 in clause 4.2 of AS/NZS 4847.2:2010 requires that self-ballasted compact fluorescent lamps comply with the requirements for harmonic current emissions specified in IEC 61000-3-2. The applicable version of IEC 61000‑3‑2 is the version that existed at the date this Determination came into force.

5 Specified product class covered by this Determination

1. This Determination covers self-ballasted compact fluorescent lamps of any voltage or wattage and with any type of lamp cap, whether supplied as an individual lamp or as part of a luminaire, that are ordinarily supplied and used for general lighting services.

*Note 1:* This subsection reflects the scope specified in clause 1.1 of AS/NZS 4847.2:2010

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

1. These products form a single product class for the purposes of the Act.
2. For subsection 23 (2) of the Act, this Determination does not cover self-ballasted compact fluorescent lamps that are:
3. coloured lamps;
4. lamps for the production of UV radiation;
5. insect repellent lamps; or
6. cold-cathode lamps.

*Note:* This subsection reflects the exclusions in clause 1.2 of AS 4847.2:2010.

6 GEMS level requirements

Energy use and greenhouse gas production

(1) For paragraphs 24 (1) (a) and 25 (a) of the Act, the specified requirements for energy use and greenhouse gas production are the requirements relating to efficacy (including luminous flux) mentioned in clauses 4.2 and 4.3 of AS/NZS 4847.2:2010.

Conducting tests

(2) For paragraphs 24(1) (a) and 25 (b) of the Act, the specified requirements for conducting tests are the requirements mentioned in clauses 4.1 and 4.7 of AS/NZS 4847.1:2010.

7 GEMS labelling requirements

Labelling and communication requirements

1. For paragraphs 24 (1) (b), 26 (1) (a) and 26 (1) (b) of the Act, the specified labelling and communication requirements are the requirements mentioned in clause 4.4 of AS/NZS 4847.2:2010, with the exception that the following requirements apply instead of paragraph 4.4.1(d) of AS/NZS 4847.2:2010 in relation to communicating the mercury content of the product:
2. the word ‘mercury’ must appear on the packaging, accompanied by a declaration of the mercury content in one of the following formats:
	1. the mercury content in mg to one decimal place (for example 4.3 mg); or
	2. a statement that the mercury content is less than 5 mg, less than 2.5 mg, or less than 1.5 mg (whichever is applicable).

Conducting tests

1. For paragraphs 24 (1) (b) and 26 (1) (c) of the Act, the specified requirements for conducting tests are the requirements mentioned in section 4 of AS/NZS 4847.1:2010.

8 Other GEMS requirements

Product performance

1. For subsection 24 (2) and paragraph 27 (1) (b) of the Act, the specified product performance requirements are the requirements mentioned in clauses 4.2 and 4.3 of AS/NZS 4847.2:2010, with the exception that the requirements of the standard that relate to efficacy (including luminous flux) and maximum mercury content do not apply.

 *Note:* Requirements that relate to efficacy and maximum mercury content are covered in subsection 6 (1) and subsection 8 (2), respectively, of this Determination

Impact on environment and health

1. For subsection 24 (2) and paragraph 27 (1) (c) of the Act, the specified requirements relating to impact on environment and health are that the amount of mercury contained in the product must not exceed:
2. for products 30 watts and over—5 mg; and
3. for products less than 30 watts—2.5 mg.

Conducting tests

(3) For subsection 24 (2) and paragraph 27 (1) (e) of the Act, the specified requirements for conducting tests in relation to paragraph 27 (1) (b) of the Act, are the requirements mentioned in clause 4.1 and section 5 of AS/NZS 4847.1:2010, and, in addition, the following clauses of AS/NZS 4847.1:2010:

1. 4.2 (Starting Time);
2. 4.3 (Run-up Time);
3. 4.4 (Low Temperature Starting);
4. 4.6 (True Power Factor);
5. 4.8 (Colour Appearance and Colour Rendering Index);
6. 4.9 (Switching Withstand);
7. 4.10 (Lamp Life and Premature Lamp Failure Rate);
8. 4.11 (Lumen Maintenance);
9. 4.12 (Light Distribution); and
10. 4.13 (Harmonics and Electromagnetic Compatibility).
11. For subsection 24 (2) and paragraph 27 (1) (e) of the Act, the specified requirements for conducting tests in relation to paragraph 27 (1) (c) of the Act relating to maximum mercury content are the requirements mentioned in:
12. section 5 of AS/NZS 4847.1:2010 in relation to mercury content; and

(b) either:

1. AS/NZS 4782.3:2014; or
2. IEC 62321-4 and IEC 62554.

9 Families of models

1. Subject to subsection 9 (2) of this Determination, 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 of models, are when the models:
2. are of a single brand;
3. rely on the same test report that sets out the results of testing conducted in accordance with section 6, 7 and 8 of this Determination;
4. have the same physical characteristics that are relevant to complying with sections 6, 7 and 8 of this Determination, including, but not limited to, the following:
	1. overall size;
	2. geometric form factor; and
	3. any other dimensions, components or component arrangements that may affect performance; and
5. have the same 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) efficacy; and

(ii) wattage.

1. 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 4 models.

10 Category A products

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

11 Registrations affected by this Determination

 For section 36 of the Act, this Determination affects the registration of the models registered against the *Greenhouse and Energy Minimum Standards (Self Ballasted Compact Fluorescent Lamps for General Lighting Services) Determination* *2012* that are specified in Schedule 1 of this Determination.

*Note:* If a model’s registration is affected, the model’s registration against the *Greenhouse and Energy Minimum Standards (Self Ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2012* ceases to be in force and the model is not registered against a GEMS Determination. See section 48 of the Act.

*Note:* If a model’s registration is not affected the model is taken to be registered against this Determination. See section 36 of the Act.

Schedule 1 Registrations affected by this Determination
(section 11)

| **Brand** | **Model No.** | **Registration No.** |
| --- | --- | --- |
| COUGAR | CFL PAR38 | SCF0001 |
| IGA Signature | IGAA9W-1BC | NCF0349 |
| IGA Signature | IGAA9W-1ES | NCF0349 |
| Brilliant Lighting | 47803 | VCF0076 |
| Brilliant Lighting | 17483 | VCF0077 |
| Brilliant Lighting | 47512 | VCF0077 |
| Brilliant Lighting | 80912 | VCF0079 |
| Olsent | FLE18TBX/840/B22/T3 | NCF0364 |
| Olsent | FLE18TBX/840/E27/T3 | NCF0364 |
| Olsent | FLE18TBX/827/B22/T3 | NCF0363 |
| Olsent | FLE18TBX/827/E27/T3 | NCF0363 |
| Olsent | FLE8/TBX/827/B22/T3 | NCF0362 |
| Olsent | FLE8/TBX/827/E14/T3 | NCF0362 |
| Olsent | FLE14/TBX/827/B22/T3 | NCF0361 |
| Olsent | FLE14TBX/827/E27/T3 | NCF0361 |
| Brilliant Lighting | 17549 | VCF0080 |
| Brilliant Lighting | 17636 | VCF0080 |
| CLA | CLAT225WBCWW | NCF0370 |
| CLA | CLAT225WESWW | NCF0370 |
| CLA | CLAT225WBCDL | NCF0369 |
| CLA | CLAT225WESDL | NCF0369 |
| CLA | CLAT215WBCDL | NCF0367 |
| CLA | CLAT29WBCWW | NCF0374 |
| CLA | CLAT29WESWW | NCF0374 |
| CLA | CLAT29WBCDL | NCF0373 |
| CLA | CLAT29WESDL | NCF0373 |
| CLA | CLAT29WBCCW | NCF0373 |
| CLA | CLAT29WESCW | NCF0373 |
| Olsent | FLE14/TBX/840/B22/T3 | NCF0371 |
| Olsent | FLE14TBX/840/E27/T3 | NCF0371 |
| Brilliant Lighting | 80917 | VCF0081 |
| KK light | GX53 7W | VCF0090 |
| Brilliant Lighting | 57001 | VCF0092 |
| Brilliant Lighting | 58001 | VCF0092 |
| Olsent | FLE11TBX/840/E27/T3 | NCF0385 |
| Olsent | FLE11TBX/840/B22/T3 | NCF0385 |
| Olsent | FLE11TBX/827/B22/T3 | NCF0384 |
| Olsent | FLE11TBX/827/E27/T3 | NCF0384 |
| Luxman | ELT20WBCDL | NCF0388 |
| Luxman | ELT20WESDL | NCF0388 |
| Luxman | ELT11WBCCW | NCF0387 |
| Luxman | ELT11WESCW | NCF0387 |
| Luxman | ELT11WBCDL | NCF0386 |
| Luxman | ELT11WESDL | NCF0386 |
| Black&Gold | FLE18TBX/827/B22/T3 | NCF0400 |
| Black&Gold | FLE18TBX/827/E27/T3 | NCF0400 |
| Black&Gold | FLE8TBX/827/E14/T3 | NCF0399 |
| Black&Gold | FLE8TBX/827/B22/T3 | NCF0399 |
| Black&Gold | FLE8TBX/827/E27/T3 | NCF0399 |
| Black&Gold | FLE14/TBX/840/B22/T3 | NCF0398 |
| Black&Gold | FLE14TBX/840/E27/T3 | NCF0398 |
| Olsent | FLE8HLX/840/E27/T2 | NCF0401 |
| Olsent | FLE8HLX/840/E14/T2 | NCF0401 |
| Olsent | FLE8HLX/840/B22/T2 | NCF0401 |
| Olsent | FLE8HLX/840/B15/T2 | NCF0401 |
| Sylvania | MICRO-LYNX F/11W/827 | NCF0403 |
| Sylvania | MICRO-LYNX F/11W/840 | NCF0404 |
| Brilliant Lighting | 47511 | ACF0018 |
| Brilliant Lighting | 100630 | ACF0019 |
| MERCATOR | XFC2711 | ACF0062 |
| MERCATOR | XFC3211 | ACF0062 |
| Provalue | PVTP4540E27 | ACF0088 |
| Provalue | PVTP4540B22 | ACF0088 |
| PHILIPS | Tornado T2 20W CDL B22 | ACF0128 |
| PHILIPS | Tornado T2 20W CDL E27 | ACF0128 |
| PHILIPS | Tornado T2 24W CDL B22 | ACF0149 |
| PHILIPS | Tornado T2 24W CDL E27 | ACF0149 |
| NELSON | MELQAL20BC | ACF0174 |
| NELSON | MELQAL20ES | ACF0174 |
| NELSON | MELQAL11ESN | ACF0176 |
| NELSON | MELQAL11ES | ACF0176 |
| NELSON | MELQAL11BCN | ACF0176 |
| NELSON | MELQA11BC | ACF0176 |
| NELSON | MELSHPF15ESCW | ACF0177 |
| NELSON | MELSHPF15BCCW | ACF0177 |
| NELSON | MELQAL15ESCW | ACF0179 |
| NELSON | MELQAL15BCCW | ACF0179 |
| NELSON | MELQAL20ESN | ACF0181 |
| NELSON | MELQAL20BCN | ACF0181 |
| NELSON | MELQAL15ES | ACF0185 |
| NELSON | MELQAL15BC | ACF0185 |
| LUCCI ENVIROLUX | SLC-7W B15 2700K (SKU# 120760) | ACF0201 |
| LUCCI ENVIROLUX | SLC-7W E14 2700K (SKU# 120762) | ACF0201 |
| LUCCI ENVIROLUX | SLC-7W B22 2700K (SKU# 120764) | ACF0201 |
| LUCCI ENVIROLUX | SLC-7W E27 2700K (SKU# 120766) | ACF0201 |
| LUCCI ENVIROLUX | SLG-7W B15 2700K (SKU#120750) | ACF0200 |
| LUCCI ENVIROLUX | SLG-7W E14 2700K (SKU# 120752) | ACF0200 |
| LUCCI ENVIROLUX | SLG-7W B22 2700K (SKU# 120754) | ACF0200 |
| LUCCI ENVIROLUX | SLG-7W E27 2700K (SKU# 120756) | ACF0200 |
| LUCCI ENVIROLUX | SLG-7W B15 4000K (SKU# 120751) | ACF0203 |
| LUCCI ENVIROLUX | SLG-7W E14 4000K (SKU# 120753) | ACF0203 |
| LUCCI ENVIROLUX | SLG-7W B22 4000K (SKU# 120755) | ACF0203 |
| LUCCI ENVIROLUX | SLG-7W E27 4000K (SKU# 120757) | ACF0203 |
| LUCCI ENVIROLUX | SLC-7W B15 4000K (SKU# 120761) | ACF0202 |
| LUCCI ENVIROLUX | SLC-7W E14 4000K (SKU# 120763) | ACF0202 |
| LUCCI ENVIROLUX | SLC-7W B22 4000K (SKU# 120765) | ACF0202 |
| LUCCI ENVIROLUX | SLC-7W E27 4000K (SKU# 120767) | ACF0202 |
| NELSON | MELT28BCS | ACF0204 |
| NELSON | MELT28ESS | ACF0204 |
| NELSON | MELQAL20ESN15 | ACF0211 |
| NELSON | MELQAL20BCN15 | ACF0211 |
| NELSON | MELST225BC | ACF0209 |
| NELSON | MELST225ES | ACF0209 |
| NELSON | MELST209SES | ACF0208 |
| NELSON | MELST209SBC | ACF0208 |
| NELSON | MELST209BC | ACF0208 |
| NELSON | MELST209ES | ACF0208 |
| NELSON | MELTG15SESN | ACF0205 |
| NELSON | MELTG15SBCN | ACF0205 |
| NELSON | MELTG15ESN | ACF0205 |
| NELSON | MELTG15BCN | ACF0205 |
| NELSON | MELT28BCNS | ACF0206 |
| NELSON | MELT28ESNS | ACF0206 |
| NELSON | MELST215BC | ACF0213 |
| NELSON | MELST215ES | ACF0213 |
| NELSON | MELTS20BCNS | ACF0212 |
| NELSON | MELTS20ESNS | ACF0212 |
| NELSON | MELT28BCNS | ACF0217 |
| NELSON | MELT28ESNS | ACF0217 |
| NELSON | MELQAL15BCN | ACF0219 |
| NELSON | MELQAL15ESN | ACF0219 |
| GE | FLE20HLX/827/B22/T3 | ACF0225 |
| GE | FLE20HLX/827/E27/T3 | ACF0225 |
| GE | FLE18TBX/840/B22/T3 | ACF0226 |
| GE | FLE18TBX/840/E27/T3 | ACF0226 |
| GE | FLE18TBX/827/B22/T3 | ACF0224 |
| GE | FLE18TBX/827/E27/T3 | ACF0224 |
| GE | FLE14/TBX/865/B22/T3 | ACF0223 |
| GE | FLE14TBX/865/E27/T3 | ACF0223 |
| GE | FLE14HLX/840/B22/T3 | ACF0222 |
| GE | FLE14HLX/840/E27/T3 | ACF0222 |
| GE | FLE14HLX/827/B22/T3 | ACF0221 |
| GE | FLE14HLX/827/E27/T3 | ACF0221 |
| IXL | 12280 | ACF0228 |
| GE | FLE15HLX/827/E14/T2 | ACF0231 |
| GE | FLE15HLX/827/E27/T2 | ACF0231 |
| GE | FLE15HLX/827/B22/T2 | ACF0231 |
| GE | FLE15HLX/865/B22/T2 | ACF0230 |
| GE | FLE15HLX/865/E27/T2 | ACF0230 |
| GE | FLE8/HLX/840/E27/T2 | ACF0236 |
| GE | FLE8/HLX/840/E14/T2 | ACF0236 |
| GE | FLE8/HLX/840/B22/T2 | ACF0236 |
| GE | FLE8/HLX/840/B15/T2 | ACF0236 |
| NELSON | MELTG11ES | ACF0245 |
| NELSON | MELTG11BC | ACF0245 |

**Note**

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislation Act 2003.* See https://www. legislation.gov.au.