



Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 1/6/2017¹

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

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1 Name of Determination

This Determination is the *Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 1/6/2017*.

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

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- 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:
 - (a) the Act;
 - (b) this Determination;
 - (c) the Standards.
- (2) 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

- (3) For the purposes of this Determination the applicable version of any:
 - (a) Standard; or
 - (b) other document that:
 - (i) is referred to in a standard under the heading ‘Referenced Documents’, or under an equivalent heading in a standard; and
 - (ii) 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.

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- (2) These products form a single product class for the purposes of the Act.
 - (3) For subsection 23 (2) of the Act, this Determination does not cover self-ballasted compact fluorescent lamps that are:
 - (a) coloured lamps;
 - (b) lamps for the production of UV radiation;
 - (c) insect repellent lamps; or
 - (d) 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:
 - (a) the word ‘mercury’ must appear on the packaging, accompanied by a declaration of the mercury content in one of the following formats:
 - (i) the mercury content in mg to one decimal place (for example 4.3 mg); or
 - (ii) 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

- (2) 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

- (2) 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:
 - (a) for products 30 watts and over—5 mg; and
 - (b) 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:
 - (a) 4.2 (Starting Time);
 - (b) 4.3 (Run-up Time);
 - (c) 4.4 (Low Temperature Starting);
 - (d) 4.6 (True Power Factor);
 - (e) 4.8 (Colour Appearance and Colour Rendering Index);
 - (f) 4.9 (Switching Withstand);
 - (g) 4.10 (Lamp Life and Premature Lamp Failure Rate);
 - (h) 4.11 (Lumen Maintenance);
 - (i) 4.12 (Light Distribution); and
 - (j) 4.13 (Harmonics and Electromagnetic Compatibility).
- (4) 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:
 - (a) section 5 of AS/NZS 4847.1:2010 in relation to mercury content; and
 - (b) either:

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- (i) AS/NZS 4782.3:2014; or
 - (ii) 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:
 - (a) are of a single brand;
 - (b) 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;
 - (c) 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:
 - (i) overall size;
 - (ii) geometric form factor; and
 - (iii) any other dimensions, components or component arrangements that may affect performance; and
 - (d) 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.
- (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 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

Brand	Model No.	Registration No.
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

Brand	Model No.	Registration No.
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

Brand	Model No.	Registration No.
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

Brand	Model No.	Registration No.
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

Brand	Model No.	Registration No.
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>.