AS/NZS 4879.2:2010

Australian/New Zealand Standard™

Performance of transformers and electronic step-down convertors for ELV lamps

Part 2: Minimum Energy Performance Standards (MEPS) requirements

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-041, Lamps and Lighting Equipment—Energy Performance. It was approved on behalf of the Council of Standards Australia on 19 January 2010 and on behalf of the Council of Standards New Zealand on 29 January 2010.
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The following are represented on Committee EL-041:

Consumers' Federation of Australia
Department of the Environment, Water, Heritage and the Arts
Electrical Compliance Testing Association
Energy Efficiency and Conservation Authority of New Zealand
Equipment Energy Efficiency Committee
Institution of Professional Engineers New Zealand
Lighting Council New Zealand
Lighting Council of Australia

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Part 2: Minimum Energy Performance Standards (MEPS) requirements

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment, with contributions from the Subcommittee EL-041-08, Lamps and Lighting Equipment—Energy Performance.

The objective of this Standard is to specify the Minimum Energy Performance Standards requirements (MEPS) for transformers and electronic step-down converters for ELV lamps.

This Standard is Part 2 of a series that consists of the following:

AS/NZS 4879	Performance of transformers and electronic step-down convertors for ELV lamps	
4879.1	Part 1:	Test method—Energy performance
4879.2	Part 2:	Minimum Energy Performance Standards requirements (this Standard)

The terms ‘normative’ and ‘informative’ are used in this Standard to define the application of the Appendix to which they apply. A normative appendix is an integral part of a Standard, whereas an informative appendix is for information and guidance.

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FOREWORD

The prevalence of ELV lighting systems in Australia and New Zealand has led to the development of Standards to enforce Minimum Energy Performance Standards (MEPS) requirements for ELV lighting systems in Australia and New Zealand, which are not as common in other countries. The MEPS requirement in this Standard is believed to be the first of its kind.

A technical report is available for download from the website http://www.energyrating.gov.au/library/pubs/200513-mepshalogentrans.pdf

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

Performance of transformers and electronic step-down convertors for ELV lamps

Part 2: Minimum Energy Performance Standards (MEPS) requirements

1 SCOPE AND GENERAL

1.1 Scope

This Standard specifies Minimum Energy Performance Standards (MEPS) requirements for magnetic isolating transformers and electronic step-down convertors with the following characteristics:

(a) For use with extra-low voltage (ELV).

(b) Mains supply input.

(c) Single a.c or d.c ELV output (up to 50 V).

(d) Rated load up to and including 500 VA.

Units covered by this Standard are referred to as ELV lighting converters (ELCs) throughout the document.

This Standard is to be read in conjunction with AS/NZS 4879.1.

This Standard does not cover safety requirements that are covered separately in AS/NZS 61347.1 and AS/NZS 61347.2.2.

1.2 Application

This Standard applies to ELCs used in Class III luminaires or SELV lighting systems with an output voltage not exceeding 50 V a.c.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS		
4879	Performance of transformers and electronic step-down convertors for ELV lamps	
4879.1	Part 1:	Test method—Energy performance
61347	Lamp controlgear	
61347.1	Part 1:	General and safety requirements (IEC 61347-1:2000, MOD)
61347.2.2	Part 2.2:	Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps (IEC 61347-2-2, Ed. 1.2 (2006) MOD)

3 DEFINITIONS

For the purposes of this Standard, the definitions given in AS/NZS 4879.1 apply.

4 ENERGY EFFICIENCY CLASSIFICATION

4.1 Number of samples

At least one ELC shall be tested in accordance with AS/NZS 4879.1. In addition, at the vendor’s discretion, more than one ELC may be tested to verify performance.