

Interim
Australian/New Zealand Standard™

**Incandescent lamps for general lighting
service**

**Part 1: Test methods—Energy
performance**



AS/NZS 4934.1(Int):2008

This Joint Australian/New Zealand Interim Standard was prepared by Joint Technical Committee EL-041, Lamps and Related Equipment. It was approved on behalf of the Council of Standards Australia on 18 February 2008 and on behalf of the Council of Standards New Zealand on 18 March 2008.
This Standard was published on 7 April 2008.

The following are represented on Committee EL-041:

Australian Electrical and Electronic Manufacturers Association
Australian Greenhouse Office, Department of the Environment and Water Resources
Consumers' Federation of Australia
Electrical Compliance Testing Association
Energy Efficiency and Conservation Authority of New Zealand
National Appliance and Equipment Energy Efficiency Committee

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First published as AS/NZS 4934.1(Int):2008.
Reissued incorporating Amendment No. 1 (April 2011).

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Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140

ISBN 0 7337 8609 X

PREFACE

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

This Standard incorporates Amendment No. 1 (April 2011). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The Standard consists of the following parts:

AS/NZS

- 4934 Incandescent lamps for general lighting service
- 4934.1 Part 1: Test methods—Energy performance (this Interim Standard)
- 4934.2 Part 2: Minimum Energy Performance Standard (MEPS)

The objectives of this Interim Standard series are as follows:

- (a) To specify test methods for the determination of the energy performance of incandescent lamps used in general lighting services.
- (b) To specify minimum energy performance Standards requirements for incandescent lamps used in general lighting services.

This Part of the Interim Standard includes a test report to be used as evidence for compliance to MEPS requirements specified in AS/NZS 4934.2. Consequently, this qualifies incandescent lamps to be registered for sale in Australia and New Zealand.

This Interim Standard is structured for reference in minimum performance Standards legislation.

This Interim Standard is under the effective joint control of the State and Territory energy regulators and the New Zealand energy efficiency regulator who approve the Standard prior to its publication.

Standards Australia/Standards New Zealand invite comments on this Interim Standard from persons and organizations concerned with this subject. The closing date for comment is 6 months after publication. The date of expiry is two years after publication. After the closing date for comment, the Committee will consider revising the Standard in the light of public comment, with a view to the publication of a Joint Australian/New Zealand Standard before the expiry date. Please forward all comments to the Projects Manager of Committee EL-041-08.

During the life of this document the Committee will monitor all comment as it is received.

Attention is drawn to the fact that this document is an Interim Joint Australian/New Zealand Standard only and should be regarded as a developmental Standard and liable to future alteration.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Interim Australian/New Zealand Standard
Incandescent lamps for general lighting service****Test methods—Energy performance**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Interim Standard specifies test methods for the energy performance of tungsten filament and tungsten halogen lamps used in general lighting services.

This Interim Standard applies to both non-reflector and reflector lamps of all voltages.

This Interim Standard does not cover safety requirements which are covered in AS/NZS 60432.1 and AS/NZS 60432.2.

Appendix A specifies the contents of the test reports required for each test contained within this Interim Standard.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Interim Standard:

AS/NZS

60432	Incandescent lamps—Safety specifications
60432.1:2007	Part 1: Tungsten filament lamps for domestic and similar general lighting purposes
60432.2	Part 2: Tungsten-halogen lamps for domestic and similar general lighting purposes

IEC

60064:2005	Tungsten filament lamps for domestic and similar general lighting purposes—Performance requirements
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CIE

84:1989	The measurement of luminous flux
121:1996	The photometry and goniophotometry of luminaires

1.3 DEFINITIONS

For the purposes of this Interim Standard the definitions given in AS/NZS 60432.1, AS/NZS 60432.2 and those below apply.

1.3.1 Accelerated life test

A life test wherein the lamps are intentionally operated at a voltage above the rated voltage with results converted to equivalent life at rated voltage.

1.3.2 Efficacy

Quotient of the luminous flux by the lamp wattage.