

Australian/New Zealand Standard™

**Incandescent lamps for general lighting
service**

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



AS/NZS 4934.1:2014

This Joint Australian/New Zealand 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 28 March 2014 and on behalf of the Council of Standards New Zealand on 7 February 2014.
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The following are represented on Committee EL-041:

Australasian Fire and Emergency Service Authorities Council
Australian Industry Group
Consumers Federation of Australia
Department of Industry
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Energy Efficiency & Conservation Authority of New Zealand
Fair Trading NSW
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This Standard was issued in draft form for comment as DR AS/NZS 4934.1.

Australian/New Zealand Standard™

Incandescent lamps for general lighting service

Part 1: Test methods—Energy performance

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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 constituted Subcommittee EL-041-08, Lighting Equipment—Energy Performance, to supersede AS/NZS 4934.1(Int):2008.

This Standard incorporates a number of amendments to the Interim Standard, which expired on 7 April 2013. The main changes are reference to the optional use of IES LM-79-08, and restructuring and making a number of minor improvements to the methods of measurement.

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 Standard)
- 4934.2 Part 2: Minimum Energy Performance Standards (MEPS) requirements

The objectives of this Standard series are as follows:

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

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

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

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Australian/New Zealand Standard
Incandescent lamps for general lighting service

Part 1: Test methods—Energy performance

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies test methods for the energy performance of incandescent lamps, both tungsten filament and tungsten halogen, that are used in general lighting service.

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

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

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

- | | |
|---------|--|
| 60432 | Incandescent lamps—Safety specifications |
| 60432.1 | 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

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

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| 053 | Methods of Characterizing the Performance of Radiometers and Photometers |
| 084 | The Measurement of Luminous Flux |
| 121 | The Photometry and Goniophotometry of Luminaires |

IES

- | | |
|----------|---|
| LM-79-08 | Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products |
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1.3 DEFINITIONS

For the purposes of this Standard, the definitions provided in AS/NZS 60432.1 and AS/NZS 60432.2 shall apply, in addition to the definitions in this Clause (1.3).

1.3.1 Efficacy

Quotient of luminous flux by power.