

Australian/New Zealand Standard™

**Incandescent lamps—Safety
specifications**

**Part 3: Tungsten-nitrogen lamps
(non-vehicle)**



AS/NZS 60432.3:2007

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 1 June 2007 and on behalf of the Council of Standards New Zealand on 4 May 2007.

This Standard was published on 31 August 2007.

The following are represented on Committee EL-041:

Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Certification Interests (New Zealand)
Consumers' Federation of Australia
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Energy Efficiency and Conservation Authority of New Zealand
IES: The Lighting Society
Institution of Professional Engineers New Zealand
Ministry of Economic Development (New Zealand)

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.standards.com.au or Standards New Zealand website at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 07126.

Australian/New Zealand StandardTM

**Incandescent lamps—Safety
specifications**

**Part 3: Tungsten-halogen lamps
(non-vehicle)**

First published as AS/NZS 60432.3:2007.

COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 8339 2

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment.

The objective of this Standard is to specify requirements for tungsten-halogen lamps for photography, projection, floodlighting, stage lighting and other general purposes.

This Standard is identical with, and has been reproduced from IEC 60432-3, Ed. 1.1 (2005), *Incandescent lamps—Safety specifications—Part 3: Tungsten-halogen lamps (non-vehicle)*.

This Standard is Part 3 of a series which, when complete, will consist of the following:

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
60432.3	Part 3: Tungsten-halogen lamps (non-vehicle) (this Standard)

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'IEC 60432-3' should read 'AS/NZS 60432.3'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

The terms 'normative' and 'informative' are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

CONTENTS

	<i>Page</i>
1 General.....	1
1.1 Scope	1
1.2 Normative references.....	1
1.3 Definitions.....	2
2 Requirements.....	4
2.1 General.....	4
2.2 Marking.....	4
2.3 Caps or bases.....	5
2.4 Maximum UV radiation of self-shielded lamps	6
2.5 Gas pressure of low-pressure self-shielded extra low voltage lamps	6
2.6 Safety at end of life of self-shielded lamps with rated voltages 50 V - 250 V	6
2.7 Information for luminaire design	6
3 Assessment	6
3.1 General.....	6
3.2 Whole production assessment by means of manufacturer's records	7
3.3 Assessment of batches	12
Annex A (normative) Symbols	13
Annex B (normative) Method of testing the gas-pressure.....	15
Annex C (informative) Information for luminaire design.....	16
Annex D (normative) Conditions of compliance for design tests.....	20
Annex E (informative) Bulb wall temperature measurement.....	21
Annex F (normative) Induced failure test	22
Bibliography	23

Currently in preview, click buy full version

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

**Incandescent lamps—Safety specifications
Part 3: Tungsten-halogen lamps (non-vehicle)**
1 General**1.1 Scope**

This part of IEC 60432 specifies the safety requirements for single-capped and double-capped tungsten-halogen lamps, having rated voltages of up to 250 V, used for the following applications:

- Projection (including cinematograph and still projection)
- Photographic (including studio)
- Floodlighting
- Special purpose
- General purpose
- Stage lighting

This International Standard does not apply to general purpose single-capped tungsten-halogen lamps, covered by IEC 60432-2, that are used as replacement for conventional tungsten filament lamps.

1.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60050-845:1987 International Electrotechnical Vocabulary (IEV)—Chapter 845: Lighting~~

AS 1852.845 *International electrotechnical vocabulary—Lighting* (identical to IEC 60050-845)

IEC 60061-1, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps*

IEC 60061-3, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges*

IEC 60061-4, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 4: Guidelines and general information*

IEC 60357, *Tungsten-halogen lamps (non-vehicle)*