Australian/New Zealand Standard<sup>™</sup>

Household and similar electrical appliances—Safety

Part 2.27: Particular requirements for appliances for skin exposure to optical radiation (IEC 60335-2-27 Ed 6, MOD)





#### AS/NZS 60335.27:2020

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-002, Safety of Household and Similar Electrical Appliances and Small Power Transformers. It was approved on behalf of the Council of Standards Australia on 16 June 2020 and by the New Zealand Standards Approval Board on 3 June 2020.

This Standard was published on 26 June 2020.

The following are represented on Committee EL-002:

Association of Accredited Certification Bodies Australian Industry Group Business New Zealand Consumer Electronic Suppliers Association, Australia Consumers' Federation of Australia Electrical Regulatory Authorities, Australia Electrical consultants Engineers Australia JAS-ANZ National Retailers Association (Australia) New Zealand Electric Fence Energizer Manufacturers' Standards Group Testing Interests New Zealand WorkSafe, 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 Standards may also be withdrawn.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 Site at www.standards.org.au or Standards New Zealand web site at www.standards.govt.nz and looking up the relevant Standard in the online catalogue.

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 Standards Australia or the New Zealand Standards Executive at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 19918.

### Australian/New Zealand Standard<sup>™</sup>

## Household and similar electrical appliances—Safety

# Part 2.27: Particular requirements for appliances for skin exposure to optical radiation (IEC 60335-2-27 Ed 6, MOD)

Originated in Australia in part as AS 3315-1992. Originated in New Zealand as NZS 6327:1992. Jointly revised and redesignated as AS/NZS 3350.2.27:1996. Jointly revised and redesignated as AS/NZS 60335.2.27:2004. Jointly revised and redesignated as AS/NZS 60335.2.27:2010. Jointly revised and redesignated as AS/NZS 60335.2.27:2016. Jointly revised and redesignated as AS/NZS 60335.2.27:2020.

#### COPYRIGHT

© Standards Australia Limited

© The Crown in right of New Zealand, administered by the New Zealand Standards Executive

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, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

ISBN 978 1 76072 907 3

#### STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

#### AS/NZS 60335.2.27:2020

#### HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

#### Part 2.27: Particular requirements for appliances for skin exposure to optical radiation

#### Foreword

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002 - Safety of Household and Similar Electrical Appliances and Small Power Transformers to supersede AS/NZS 60335.2.27:2016 three years from the date of publication of this Standard. During this period AS/NZS 60335.2.27:2016 will also remain current. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the appliance and which may be used as the basis for approval for sale or for connection to the electricity supply mains in Australia and New Zealand.

The text of IEC 60335-2-27 Ed 6, prepared by IEC Technical Subcommittee TC 61, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

The principal changes in this edition as compared with the 2016 edition of AS/NZS 60335.2.27 are as follows (minor changes are not listed):

- the text has been aligned with the 2011 edition of Part 1;
- luminous transmission has been defined (3.1.102);
- requirements for testing parts of the appliance that are operated unattended are added (30.2).

This Standard is an adoption with national modifications of the sixth edition of IEC 60335-2-27, Household and similar electrical appliances – Safety – Part 2-27: Particular requirements for appliances for skin exposure to optical radiation. It has been varied as indicated to take account of Australian and New Zealand conditions.

This part 2 has to be used in conjunction with the latest edition of AS/NZS 60335.1 *Household* and similar electrical appliances – Safety – Part 1: General requirements and its Amendments. It was established on the basis of AS/NZS 60335.1:2011.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 60335.1 so as to convert it into the Australian/New Zealand Standard: Safety requirements for appliances for skin exposure to optical radiation.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;

COPYRIGHT

 subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.

NOTE 2 The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3.

p NOTE 3 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.

The essential safety requirements in AS/NZS 3820<sup>1</sup> that could be applicable to requirements for appliances for skin exposure to optical radiationare covered by this standard.

The national variations to IEC 60335-2-27 Ed 6 form the Australian and New Zealand national variations for purposes of the IECEE scheme for recognition of results of testing to standards for safety of electrical equipment (the CB scheme).

COPYRIGHT

<sup>&</sup>lt;sup>1</sup> AS/NZS 3820 *Essential safety requirements for electrical equipment*