AS/NZS IEC 60825.1:2014
IEC 60825-1, Ed. 3.0 (2014)

AS/NZS IEC 60825.1:2014

Australian/New Zealand Standard™

# Safety of laser products

# Part 1: Equipment classification and requirements


This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF-019, Personal Protection Against Laser Radiation. It was approved on behalf of the Council of Standards Australia on 2 October 2014 and on behalf of the Council of Standards New Zealand on 3 October 2014.
This Standard was published on 12 November 2014.

---

The following are represented on Committee SF-019:

Australasian Faculty of Occupational and Environmental Medicine
Australian Dental Association
Australian Radiation Protection and Nuclear Safety Agency
Defence Materiel Organisation
Department of Defence, Australia
Electronics Industry Association
Institute of Environmental Science and Research
NSW Business Chamber
Royal Australian and New Zealand College of Ophthalmologists
Telecom New Zealand
Telstra Corporation

---

## 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 Standards may also be withdrawn.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.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line 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 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 AS/NZS IEC 60825.1:2014.*

Australian/New Zealand Standard™

# Safety of laser products

# Part 1: Equipment classification and requirements

Originated in Australia as AS 2211—1978.
Previous edition AS/NZS IEC 60825.1:2011.
Second edition 2014.



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 978 1 74342 875 7

# PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-019, Personal Protection Against Laser Radiation, to supersede AS/NZS IEC 60825.1:2011.

It is important to note that the designation of this Standard has changed; prior to 2011, this Standard was designated AS/NZS 2211.1:2004, *Safety of laser products*, Part 1: *Equipment classification, requirements and user's guide* (IEC 60825-1:2001, MOD).

Standards in the IEC 60825 series may have been adopted as either AS/NZS IEC 60825 series standards (e.g. IEC/TR 60825-14 has been adopted as AS/NZS IEC 60825.14), or AS/NZS 2211 series standards (e.g. IEC 60825-4 has been adopted as AS/NZS 2211.4).

The objectives of this Standard are as follows:

(a) To protect people from laser radiation in the wavelength range 180 nm to 1 mm by introducing a system of classification of lasers and laser products according to their degree of optical radiation hazard.

(b) To specify requirements for the manufacturer to supply information so that proper precautions can be adopted.

(c) To ensure adequate warnings are provided to individuals of hazards associated with accessible radiation from laser products through the use of labels and instructions.

(d) To reduce the possibility of injury by minimizing unnecessary accessible radiation and to give improved control of the laser radiation hazards through protective features.

This Standard is identical with, and has been reproduced from, IEC 60825-1, Ed. 3.0 (2014), *Safety of laser products*, Part 1: *Equipment classification and requirements*.

This Standard adopts the 2013 maximum permissible exposure (MPE) limits published by the International Commission on Non-Ionizing Radiation Protection. The MPE limits in Annex A of this Standard are more recent than the MPE limits in other earlier standards in this series, and may be used in preference.

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

(i) In the source text 'this part of IEC 60825' should read 'this Australian/New Zealand Standard.'

(ii) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian/New Zealand Standards, as follows:

| *Reference to International Standard* | | *Australian/New Zealand Standard* | |
|---|---|---|---|
| IEC 62471 | Photobiological safety of lamps and lamp systems (all parts) | AS/NZS IEC 62471 | Photobiological safety of lamps and lamp systems (series) |

Only normative references that have been adopted as Australian or Australian/New Zealand Standard have been listed.

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' annex is only for information and guidance.

# CONTENTS