

AS/NZS 60598.2.23:2021



Australian/New Zealand Standard™

Luminaires

Part 2.23: Particular requirements — Extra-low-voltage lighting systems for ELV light sources (IEC 60598-2-23:2020 (ED.2.0) MOD)



AS/NZS 60598.2.23:2021

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 09 August 2021 and by the New Zealand Standards Approval Board on 04 August 2021.

This Standard was published on 20 August 2021.

The following are represented on Committee EL-041:

Australian Industry Group
Better Regulation Division (Fair Trading, Safework NSW, TestSafe)
CHOICE
Consumer Electronics Suppliers Association
Consumers Federation of Australia
Department of Industry, Science, Energy and Resources
Electrical Compliance Testing Association of Australia
Electrical Regulatory Authorities Council
Energy Efficiency & Conservation Authority of New Zealand
Energy Efficiency Council
IES: The Lighting Society
Joint Accreditation System of Australia & New Zealand
Joint Accreditation System of Australia and New Zealand —New Zealand
Lighting Council Australia
Lighting Council New Zealand
Master Electricians Australia
Master Electricians NZ
WorkSafe New Zealand

This Standard was issued in draft form for comment as DR AS/NZS 60598.2.23:2021.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

www.standards.govt.nz

ISBN 978 1 76113 461 6

Australian/New Zealand Standard™

Luminaires

Part 2.23: Particular requirements — Extra-low-voltage lighting systems for ELV light sources (IEC 60598-2-23:2020 (ED.2.0) MOD)

First published as AS/NZS 60598.2.23:2002.
Second edition 2021.

COPYRIGHT

Standards Australia Limited/Standards New Zealand 2021

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 (Cth) or the Copyright Act 1994 (New Zealand).

Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment, to supersede AS/NZS 60598.2.23:2002, *Luminaires, Part 2.23: Particular requirements - Extra low voltage lighting systems for filament lamps* (IEC 60598.2.23:1996 MOD)

The objective of this document is to specify requirements for extra-low-voltage lighting systems for ELV light sources, intended for ordinary interior use on supply voltages not exceeding 1 000 V. The luminaires, being connected in parallel, are supplied via freely suspended continuous supporting conductors or profiles, the current in the ELV part of the system not exceeding 25 A.

The essential safety requirements of AS/NZS 3820, *Essential safety requirements for electrical equipment*, which could be applicable to lighting products within the scope of this document, are covered by this document.

This document is an adoption with national modifications, and has been reproduced from, IEC 60598-2-23:2020, *Luminaires — Part 2-23: Particular requirements — Extra-low-voltage lighting systems for ELV light sources*. The modifications are additional requirements and are set out in [Appendix ZZ](#), which has been added at the end of the source text.

[Appendix ZZ](#) lists the variations to IEC 60598-2-23:2020 for the application of this document in Australia and New Zealand.

As this document has been reproduced from an International Standard the following applies:

- (a) In the source text “this part of IEC 60598” should read “this document”.
- (b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

NOTES

CONTENTS

FOREWORD	3
23.1 Scope	5
23.2 Normative references	5
23.3 Terms and definitions	5
23.4 General test requirements	7
23.5 Classification	7
23.6 Marking	7
23.7 Construction	8
23.8 Creepage distances and clearances	9
23.9 Provisions for earthing	9
23.10 Terminals and electrical connections	9
23.11 External and internal wiring	10
23.12 Protection against electric shock	10
23.13 Endurance tests and thermal tests	10
23.14 Resistance to dust, solid objects and moisture	11
23.15 Insulation resistance and electric strength	11
23.16 Resistance to heat, fire and tracking	11
Annex A (informative) Schedule of amended subclauses containing more serious/critical requirements which require products to be retested	12
Bibliography	13
Figure 1 – Typical supporting methods for lighting systems	7