AS/NZS 1158.3.1:2005 (Incorporating Amendment Nos 1, 2, 3 and 4)

Australian/New Zealand Standard™

Lighting for roads and public spaces

Part 3.1: Pedestrian area (Category P) lighting—Performance and design requirements





AS/NZS 1158.3.1:2005

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee LG-002, Lighting for Roads and Public Spaces. It was approved on behalf of the Council of Standards Australia on 29 April 2005 and on behalf of the Council of Standards New Zealand on 6 May 2005.

This Standard was published on 7 September 2005.

The following are represented on Committee LG-002:

Astronomical Society of Australia
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Australian Local Government Association
Energy Supply Association of Australia
IES: The Lighting Society
Ingenium
Institute of Public Works Engineering Australia
Land Transport Safety Authority New Zealand
Main Roads Department, Queensland
Main Roads Western Australia

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 Standards may also be withdrawn.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 03284.

AS/NZS 1158.3.1:2005 (Incorporating Amendment Nos 1, 2, 3 and 4)

Australian/New Zealand Standard™

Lighting for roads and public spaces

Part 3.1: Pedestrian area (Category P) lighting—Performance and design requirements

First published in Australia as part of AS CA19-1939. First published in New Zealand in part as NZCP 54:1962. AS 1158.1—1986 and NZS 6701:1983 jointly revised, amalgamated and redesignated in part as AS/NZS 1158.3.1:1999. Second edition 2005. Reissued incorporating Amendment No. 1 (November 2008). Reissued incorporating Amendment No. 2 (May 2010). Reissued incorporating Amendment No. 3 (June 2013). Reissued incorporating Amendment No. 4 (October 2015).

COPYRIGHT

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

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.

A4

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee LG-002, Lighting for roads and public spaces, to supersede AS/NZS 1158.3.1:1999 Road lighting, Part 3.1: Pedestrian area (Category P) lighting—Performance and installation design requirements.

This Standard incorporates Amendment No. 1 (November 2008), Amendment No. 2 (May 2010), Amendment No. 3 (June 2013) and Amendment No. 4 (October 2015). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard forms Part 3.1 of the AS/NZS 1158 series which covers lighting schemes for the generality of roads and outdoor public areas. The series title has recently been changed from 'Road lighting' to reflect an expansion in the scope of the series.

The AS/NZS 1158 series consists of the following:

	•
AS/NZS	
1158	Lighting for roads and public spaces
1158.0	Part 0: Introduction
1158.1.1	Part 1.1: Vehicular traffic (Category V) lighting—Performance and design requirements
1158.1.2	Part 1.2: Vehicular traffic (Category V) lighting—Guide to design, installation, operation and maintenance
1158.2	Part 2: Computer procedures for the calculation of light technical parameters for Category V and Category P lighting
1158.3.1	Part 3.1: Pedestrian area (Category P) lighting—Performance and design requirements
1158.4	Part 4: Lighting of pedestrian crossings
1158.5	Part 5: Tunnels and underpasses

The performance criteria for road and public space lighting schemes can include any or all of the three basic aims of—

- (a) facilitation of safe movement;
- (b) the discouragement of illegal acts; and
- (c) contributing to the amenity of an area through increased aesthetic appeal.

However as the most common primary aim of a scheme is that of safe movement of people, the series divides road and public space lighting into the two following broad categories:

- (i) Category V lighting Lighting that is applicable to roads on which the visual requirements of motorists are dominant, e.g. traffic routes.
- (ii) Category P lighting Lighting that is applicable to roads and other outdoor public spaces on which the visual requirements of pedestrians are dominant, e.g. local roads, outdoor shopping precincts and outdoor car parks.

This Standard sets out performance and design requirements for Category P lighting schemes having regard to the degree of activity (of pedestrians and vehicles), the risk of crime and the need to enhance the prestige of the locality. It should be read in conjunction with AS/NZS 1158.2 for calculation procedures.

Category P lighting is acknowledged to be an effective counter both to the occurrence of crime and to the fear of crime. It has been demonstrated, in studies from Great Britain, that the relevant Category P lighting can provide significant community benefits and that the costs involved in providing the lighting can be offset by the financial returns from the reduction in crime. See references 5, 7 and 8 in Appendix B.

For each lighting subcategory described in this Standard the light technical parameters (LTPs) and their prescribed values are both necessary and sufficient for the particular application. Compliance with this Standard will be achieved by meeting all the required values of the LTPs for the designated subcategory. A higher quality of lighting scheme can be achieved within a subcategory by, for example, increasing the minimum level of uniformity or reducing the glare allowable, or both.

The significant technical changes that have been made in this Standard in relation to the previous publication include the following:

- (A) Clarification of scope regarding single-luminaire lighting schemes.
- (B) Clarification of the application of the Standard.
- (C) Modifications regarding category P5 and categories P3 and P4 as applicable to New Zealand.
- (D) Recommendations regarding the colour of lamps and requirements regarding lamp lumen values used.
- (E) Specification of minimum ingress protection requirements for various maintenance factors and requirements regarding assumed and actual maintenance regimes and maintenance intervals.
- (F) Expansion of scope to specifically cover top-entry, pendant style luminaires.
- (G) Clarification of terms and quantities referred to.
- (H) Revision and clarification of requirements for lighting of local area traffic management devices (LATMs), including roundabouts.
- (I) Revision and clarification of requirements for the lighting of curves, intersections including with V Category roads, and cul-de-sacs.
- (J) Clarifications regarding requirements for lighting in parking areas.
- (K) Closer co-ordination of the Standard content and format with that of AS/NZS 1158.1.1 (V Category lighting).
- (L) Added emphasis on matching the designed and actual maintenance regimes.
- (M) Consideration of energy consumption and efficiency.

This joint Standard is intended to be applied in its entirety in Australia and New Zealand; however, a number of differences exist with respect to the requirements that apply in each country. These are indicated by the qualification 'In Australia' or 'In New Zealand', or similar.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.



	This is a free preview.	Purchase the e	entire publication	at the link below:
--	-------------------------	----------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation