AS/NZS 1158.1.3:1997

# Australian/New Zealand Standard®

## **Road lighting**

Part 1.3: Vehicular traffic (Category V) lighting—Guide to design, installation, operation and maintenance

#### AS/NZS 1158.1.3:1997

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee LG/2, Road Lighting. It was approved on behalf of the Council of Standards Australia on 27 September 1996 and on behalf of the Council of Standards New Zealand on 19 August 1996. It was published on 5 April 1997.

The following interests are represented on Committee LG/2:

Australian Electrical and Electronic Manufacturers Association AUSTROADS Electricity Supply Association of Australia Illuminating Engineering Society of Australia and New Zealand Institute of Municipal Engineering Australia Land Transport Safety Authority, New Zealand Metal Trades Industry Association of Australia Queensland Department of Main Roads

**Review of Standards.** To keep abreast of progress in industry, Joint Australian/ New Zealand Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Joint Standards and related publications will be found in the Standards Australia and Standards New Zealand Catalogue of Publications; this information is supplemented each month by the magazines 'The Australian Standard' and 'Standards New Zealand', which subscribing members receive, and which give details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Joint Standards, addressed to the head office of either Standards Australia or Standards New Zealand, are welcomed. Notification of any inaccuracy or ambiguity found in a Joint Australian/New Zealand Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 94167.

#### © Copyright - STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Users of Standards are reminded that copyright subsists in all Standards Australia and Standards New Zealand publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia or Standards New Zealand may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia or Standards New Zealand. Permission may be conditional on an appropriate royalty payment. Australian requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia. New Zealand requests should be directed to Standards New Zealand.

Up to 10 percent of the technical content pages of a Standard may be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia or Standards New Zealand.

Inclusion of copyright material in computer software programs is also permitted without royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia or Standards New Zealand at any time.

AS/NZS 1158.1.3:1997

# Australian/New Zealand Standard®

## **Road lighting**

Part 1.3: Vehicular traffic (Category V) lighting—Guide to design, installation, operation and maintenance

First published as AS/NZS 1158.1.3:1997.

PUBLISHED JOINTLY BY:

STANDARDS AUSTRALIA 1 The Crescent, Homebush NSW 2140 Australia

STANDARDS NEW ZEALAND Level 10, Standards House, 155 The Terrace, Wellington 6001 New Zealand 2

### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee LG/2, Road Lighting.

This Standard forms Part 1.3 of a new series, the AS/NZS 1158 series, which will collectively cover lighting for the generality of roads and outdoor public areas, for the movement of vehicles and pedestrians. The AS/NZS 1158 series will progressively replace Standards existing in the AS 1158 series, and NZS 6701.

For the application of Standards in the AS/NZS 1158 series, a number of lighting categories are defined in AS/NZS 1158.0, which may be broadly described as follows:

- (a) *Category V lighting* Lighting which is applicable to roads on which the visual requirements of motorists are dominant, e.g. traffic routes.
- (b) *Category B lighting* Lighting which is applicable to roads on which the visual requirements of pedestrians are dominant, e.g. local roads.
- (c) *Category C lighting* Lighting which is applicable to outdoor public areas, other than roads, where the visual requirements of pedestrians are dominant, e.g. outdoor shopping precincts.

This Standard applies to Category V lighting and has as its objective the provision of guidance to all concerned with the design, installation, operation and maintenance of such lighting, to facilitate compliance with the requirements of AS/NZS 1158.1.1.

As at the date of publication of this Standard, the following Standards have been issued in the AS/NZS 1158 series:

### AS/NZS

### 1158 Road lighting

- 1158.0 Part 0: Introduction
- 1158.1.1 Part 1.1: Vehicular traffic (Category V) lighting —Performance and installation design requirements
- 1158.1.3 Part 1.3: Vehicular traffic (Category V) lighting—Guide to design, installation, operation and maintenance (this Standard)

Requirements for the lighting of minor roads (i.e. Category B lighting) and for the lighting of outdoor public areas for pedestrian movement (i.e. Category C lighting) have yet to be issued within the AS/NZS 1158 series. Until that time, the relevant requirements of AS 1158.1—1986 or NZS 6701:1983 will continue to apply.

The subject matter covered in this Standard is divided into three main elements, as follows:

- (i) *Fundamentals* The information which must be known before engaging in a road lighting design.
- (ii) *Design* The considerations and processes involved in the development of a design for a road lighting scheme.
- (iii) *Application* Advice relating to the installation, operation and maintenance of a road lighting scheme.

These three broad subject areas are further divided into sections within this Standard as shown in the flow chart below.



Road lighting is acknowledged to be an effective accident counter-measure. The costs involved in providing road lighting can be demonstrated to provide significant financial and community benefits in terms of reductions in road accidents at night. Studies in Australia and New Zealand, and in other countries, have led to the conclusion that traffic route lighting is likely to reduce night time casualty accidents by about 30%, taken over the road network. See CIE Publication No. 93\* and Reference 18 in Appendix A.

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.

\* CIE Publication No. 93, Road lighting as an accident countermeasure (see extract in Appendix C).



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

**Product Page** 

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation