

Australian Standard™

**Sports lighting**

**Part 1: General principles**

This Australian Standard was prepared by Committee LG-009, Sports Lighting. It was approved on behalf of the Council of Standards Australia on 8 April 2002 and published on 10 May 2002.

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The following interests are represented on Committee LG-009:

Association of Consulting Engineers Australia  
Australian Electrical and Electronic Manufacturers Association  
Confederation of Australian Sport  
Department of Tourism, Sport and Racing (Qld)  
Electricity Supply Association of Australia  
Illuminating Engineering Society of Australia and New Zealand  
N.S.W Department of Sport and Recreation  
Parks and Leisure Australia  
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Tennis Australia  
Tennis Coaches Australia  
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**Sports lighting**

**Part 1: General principles**

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## PREFACE

This Standard was prepared by the Standards Australia Committee LG-009 Sports Lighting, to supersede AS 2560.1—1982, *Guide to sports lighting—Part 1: General principles*.

The AS 2560 series is in two main parts. Part 1 deals with the lighting of places, both indoors and outdoors, where sport is played. Part 2 comprises a collection of separate Standards, each dealing with the lighting of a specific sport or associated sporting venue.

The series was called ‘Guide to sport lighting’ with Part 2 giving ‘Specific recommendations’. As each Part of the series is revised the main title changes to ‘Sports lighting’ and Part 2 deals with ‘Specific applications’, including requirements.

When revision is completed, the series will consist of the following:

### AS

2560	Sports lighting
2560.1	Part 1: General principles (this Standard)
2560.2.1	Part 2.1 Specific applications—Lighting for outdoor tennis
2560.2.2	Part 2.2: Specific applications—Lighting of multipurpose indoor sports centres
2560.2.3	Part 2.3: Specific applications—Lighting for football (all codes)
2560.2.4	Part 2.4: Specific applications—Lighting for outdoor netball and basketball
2560.2.5	Part 2.5: Specific applications—Swimming pools
2560.2.6	Part 2.6: Specific applications—Baseball and softball
2560.2.7	Part 2.7: Specific applications—Outdoor hockey
2560.2.8	Part 2.8: Specific applications—Bowling greens

The AS 2560 series does not include consideration of the lighting necessary for television broadcasting because specialist advice is normally required for such installations and, in any event, there are international recommendations on this subject. (Refer to CIE Publication No. 83, *Guide for the lighting of sports events for colour television and film systems*, International Commission on Illumination (CIE), Vienna, 1989.)

The major changes introduced in this edition of the Standard are as follows:

- (a) Substitution of the concept and term of ‘maintained illuminance’ for ‘service illuminance’.
- (b) Updating of information on lamp properties and luminaire types.
- (c) Revision and supplementation of the information on maintenance, including the introduction of worked examples.
- (d) Revision of the Appendix covering relative cost estimation.
- (e) Revision of the Appendix covering illuminance measurements, including the replacement of some details with direct reference to CIE Publication No. 67.

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.

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**STANDARDS AUSTRALIA****Australian Standard****Sports lighting****Part 1: General principles****SECTION 1 SCOPE AND GENERAL****1.1 SCOPE**

This Standard contains recommendations and requirements for the lighting of places, both indoors and outdoors, where sport is played. It includes general principles and recommendations for sports lighting, descriptions of suitable types of lighting equipment, and requirements regarding methods for the assessment or measurement of sports lighting installations.

This Standard is intended to be read in conjunction with the applicable Standard in the AS 2560.2 series covering the sport of interest. Taken together, these Standards cater for the requirements of different levels of play, e.g. recreational, training, club, national and international, and provide for the visual requirements of participants, officials and spectators, as appropriate.

This Standard does not detail the special requirements of lighting for colour television broadcasting.

This Standard makes recommendations, but does not set requirements, regarding obtrusive light released into the environment from sports lighting installations. (See Clause 2.8.4).

**1.2 APPLICATION**

For this Standard to be properly applied, the lighting needs of sports areas should be considered at the design and layout stage of the planning of such venues, in order that lighting equipment and supporting structures may be located so as to provide the required uniformity of illumination, to minimize glare and obstruction to participants and play respectively and to minimize the obtrusive effects of outdoor lighting.

For each type of sport there are preferred locations for the mounting of lighting equipment. These locations are related to the nature of the sport, the direction of play and other factors. Early consultation between the architect (venue designer) and the lighting engineer is desirable to ensure provision is made for suitable locations and mountings for lighting equipment. A completely satisfactory installation is often difficult to achieve when limited by physical constraints, which can be avoided if lighting is considered at the design stage.

**1.3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS	
1680	Interior lighting
1680.1	Part 1: General principles and recommendations
1852	International electrotechnical vocabulary
1852.845	Chapter 845: Lighting