

Australian Standard™

**Sports lighting**

**Part 2.3: Specific applications—  
Lighting for football (all codes)**

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 16 May 2002.

---

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)  
Illuminating Engineering Society of Australia and New Zealand  
NSW Department of Sport and Recreation  
Parks and Leisure Australia  
Sport and Recreation Victoria  
Tennis Australia  
Tennis Coaches Australia  
Tennis Court Builders' Association of 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 Standards may also be withdrawn.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 Standards can be found by visiting the Standards Australia web site at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.com.au](mailto:mail@standards.com.au), or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

---

Australian Standard™

## **Sports lighting**

### **Part 2.3: Specific applications— Lighting for football (all codes)**

Originated as AS 2560.2.3—1986.  
Second edition 2002.

#### **COPYRIGHT**

© Standards Australia International

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.

Published by Standards Australia International Ltd  
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 4502 4

## PREFACE

This Standard was prepared by the Standards Australia Committee LG-009, Sports Lighting, to supersede AS 2560.2.3 — 1986 *Guide to sports lighting—Lighting for football (all codes)*.

The series was called ‘Guide to sports 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
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) (this Standard)
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 proper application of this Standard will require reference to AS 2560.1 for the definitions of various technical parameters and the explanation of basic concepts and principles.

In the preparation of this Standard consideration was given to the following documents:

CIE Publication No. 57 (1983), *Lighting for Football*, International Commission on Illumination (CIE).

IES *Lighting Guide—Sports*, Publication No. 7 (1974), The Illuminating Engineering Society, London.

## CONTENTS

	<i>Page</i>
1 SCOPE.....	4
2 REFERENCED DOCUMENTS.....	4
3 DEFINITIONS.....	5
4 CHARACTERISTICS OF SPORT AND IMPLICATIONS FOR LIGHTING.....	5
5 GENERAL DESIGN OBJECTIVES.....	6
6 ILLUMINANCE LEVELS.....	6
7 UNIFORMITY OF ILLUMINANCE.....	8
8 CONTROL OF GLARE.....	9
9 COLOUR RENDERING REQUIREMENTS.....	11
10 ENVIRONMENTAL CONSIDERATIONS.....	11
11 SURROUND BRIGHTNESS.....	11
12 LUMINAIRE SELECTION.....	11

**STANDARDS AUSTRALIA****Australian Standard  
Sports lighting****Part 2.3: Specific applications—Lighting for football (all codes)****1 SCOPE**

This Standard contains recommendations and requirements (the requirements refer to methods of assessment and measurement and levels of performance) specific to the lighting of outdoor football grounds for all codes commonly played in Australia, namely—

- (a) Rugby League;
- (b) Rugby Union;
- (c) Australian Rules; and
- (d) Soccer.

This Standard deals with training and competition levels of play, and takes into account spectator viewing requirements associated with these levels of play.

The Standard does not address the amenity and emergency lighting which may be required in public areas associated with stadiums.

Additional recommendations and requirements applicable to all sports venues, including those for football, are contained in AS 2560.1.

The Standard does not detail 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 10).

**2 REFERENCED DOCUMENTS**

The following Standards are referred to in this Standard:

**AS**

- 2560 Sports Lighting
- 2560.1 Part 1: General Principles.
- 4282 Control of the obtrusive effects of outdoor lighting

**AS/NZS**

- 3827 Lighting system performance—Accuracies and tolerances
- 3827.1 Part 1: Overview and general recommendations
- 3827.2 Part 2: Compliance requirements

**CIE\***

- 112 Glare evaluation system for use within outdoor sports and area lighting

---

\* International Commission on Illumination, Vienna