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LIGHT AND LIGHTING - SPORTS LIGHTING

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Lumière et éclairage - Eclairage des installations sportives

Licht und Beleuchtung - Sportstättenbeleuchtung

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CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 169 "Light and lighting", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2000, and conflicting national standards shall be withdrawn at the latest by February 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European standard deals with sports lighting to ensure good visual conditions for players, athletes, referees, spectators and CTV transmission.

The objective is to specify recommendations and requirements for good quality sports lighting by

- optimizing the perception of visual information used during sports events;
- maintaining the level of visual performance;
- providing acceptable visual comfort.

1 Scope

This standard specifies lighting for those indoor and outdoor sports events most practised in Europe. It gives lighting values for the design and control of sports lighting installations in terms of illuminances, uniformity, glare restriction and colour properties of the light sources. All requirements are meant to be as minimum requirements. It also gives methods by which these values are measured. For the limitation of glare, it also points out restrictions on the location of the luminaires for specific applications.

For emergency lighting this standard refers to the requirements of EN 1838.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited in the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 1838	Lighting applications – Emergency lighting
prEN 12464 1996	Lighting applications – Lighting of work places
prEN 12665 1996	Lighting applications – Basic terms and criteria for specifying lighting requirements

3 Definitions

For the purposes of this standard the definitions of prEN 12665 and the following definitions apply:

3.1 Principal area (PA)

The actual playing area needed for the performance of a certain sport. Usually this means the actual marked out "field" area for that sport (for instance football), but in some cases this area comprises an extra playing area around the marked area (e. g. tennis, volleyball, table tennis).

NOTE: In all tables in annex A examples of area sizes are given which are most commonly used for that sport. The particular area dimensions should be checked at the time when designing a lighting installation.

3.2 Total area (TA)

Generally this area comprises the principal area (PA) plus an additional safety area outside the principal area.

3.3 Reference area

Area defined per sports on which the main lighting requirements apply including the marking lines and any extra area centred around the marked area.

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