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Razsvetljava - Zasilna razsvetljava

Lighting applications - Emergency lighting

Angewandte Lichttechnik - Notbeleuchtung

Éclairagisme - Eclairage de secours

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Lighting applications - Emergency lighting

Éclairagisme - Eclairage de secours

Angewandte Lichttechnik - Notbeleuchtung

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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Foreword

This document (prEN 1838:2011) has been prepared by Technical Committee CEN/TC 169 “Light and lighting”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 1838:1999.

It is intended to replace in part national standards relating to emergency lighting luminous requirements. It should be read in conjunction with the standards being produced by CEN/TC 169/WG 7, *Measurement and presentation of photometric data*, and in conjunction with EN 50172, *Emergency escape lighting systems.* Users of this European Standard, prepared in the field of application of Article 118 A of the EC Treaty, should be aware that standards have no formal legal relationship with Directives which may have been made under Article 118 A of the Treaty. In addition, national legislation in the Member states may contain more stringent requirements than the minimum requirements of a Directive based on Article 118 A Information on the relationship between the national legislation implementing Directives based on Article 118 A and this European Standard may be given in a national foreword of the national standard implementing this European Standard.

Introduction

Emergency lighting is provided for use when the supply to the normal lighting fails and is therefore powered from a source independent of that supplying the normal lighting.

For the purposes of this standard emergency lighting is regarded as a generic term of which there are a number of specific forms, as shown in Figure 1.

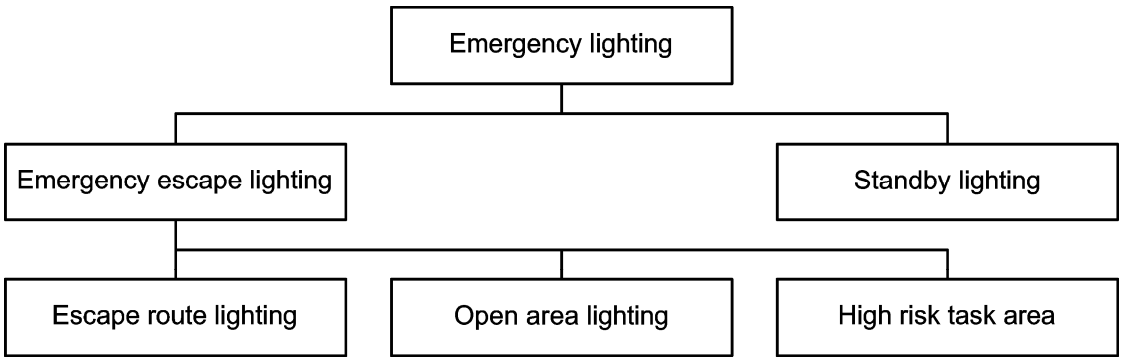

Figure 1 — Specific forms of emergency lighting

The overall objective of emergency escape lighting is to enable safe exit from a location in the event of failure of the normal supply.

The objective of escape route lighting is to enable the safe exit from a location for occupants by providing appropriate visual conditions and direction finding on escape routes and in special locations, and to ensure that fire fighting and safety equipment can be readily located and used.

The objective of open area (anti-panic) lighting is to reduce the likelihood of panic and to enable safe movement of occupants towards escape routes by providing appropriate visual conditions and direction finding. The flow of light for escape routes or open areas should be downward to the working plane but illumination should also be provided to any obstruction up to 2 m height above that plane.

The objective of high risk task area lighting is to contribute to the safety of people involved in a potentially dangerous process or situation and to enable proper shut down procedures to be carried out for the safety of other occupants of the location.

There are emerging techniques that when applied to escape routes in addition to conventional emergency lighting luminaires can enhance their effectiveness in an emergency. These techniques are not included in this standard.

Vision varies from person to person, both by the amount of light required to perceive an object clearly and in the time taken to adapt to changes in the illuminance. In general, older people need more light and take a longer time to adapt to low illuminance on a hazard or escape route.

Much anxiety and confusion can be alleviated by strategically placed signs indicating the way out of a location. It is very important that exits are clearly signposted and are visible, whenever the location is occupied.