

Luminaires —

Part 102: Particular requirements —

Section 102.22 Specification for luminaires for emergency lighting

This European Standard EN 60 598-2-22:1990 has the status of a
British Standard

Cooperating organizations

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National foreword

This Section of BS 4533 has been prepared under the direction of the Electrical Illumination Standards Policy Committee and is the English language version of EN 60 598-2-22 “*Luminaires — Part 2: Particular requirements — Section 22 Luminaires for emergency lighting*”, published by the European Committee for Electrotechnical Standardization (CENELEC). It was derived by that organization from IEC Publication 598-2-22 (1990) edition 2, which has a similar title as that of the European Standard. This Section of BS 4533 supersedes BS 4533-102.22:1981 which is withdrawn.

The CENELEC Common Modifications have been implemented at the appropriate places in the text of IEC Publication 598-2-20 (1990) edition 2, and are indicated by a side line in the margin. The foreword and preface of IEC Publication 598-2-22 (1990) edition 2, and the deleted parts of the original IEC text which do not form part of the text of EN 60 598-2-22 have been quoted in National appendix NA. Annexes designated “normative” are part of the body of the standard. Annexes designated “informative” are given for information only. National appendices are designated “informative”.

In **22.1**, **22.2**, **22.12** and **22.13** where the words “section of Part 2 of IEC Publication 598”, “section of Part 2” and “section of IEC Publication 598-2” appear they should be read as “section of BS 4533”. In **22.1** and **22.2** where “Part 1” appears this should be read as “Part 101”. Where the words “Publication 598-1” appear they should be read as “BS 4533-101”.

Cross-references. Details of other international publications quoted in this British Standard are given in Annex ZA. Where there are British Standards corresponding to these international standards the relationships are given in National appendix NB.

Product certification. Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing surveillance, which may be coupled with assessment of a supplier’s quality systems against the appropriate Part of BS 5750.

Enquiries as to the availability of third party certification schemes will be forwarded by BSI to the Association of Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching an appropriate body from the list of Association members.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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English version

Luminaires — Part 2: Particular requirements Section 22: Luminaires for emergency lighting

(IEC 598-2-22:1990, modified)

Luminaires

Deuxième partie: Règles particulières

Section vingt-deux: Luminaires pour éclairage
de secours

(IEC 598-2-22:1990, modifiée)

Leuchten

Teil 2: Besondere Anforderungen

Hauptabschnitt Zweiundzwanzig: Leuchten
für Notbeleuchtung

(IEC 598-2-22:1990, modifiziert)

This European Standard was approved by CENELEC on 5 March 1990. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue Bréderode 2, B-1000 Brussels

Brief history

The CENELEC Questionnaire Procedure, performed for finding out whether or not IEC 598-2-22:1990 could be accepted without textual changes, has shown that . some CENELEC common modifications were necessary for the acceptance as European Standard (EN). The Reference Document in manuscript form was submitted to the CENELEC members for formal vote and acceptance by CENELEC.

Technical text

The text of the International Standard IEC 598-2 22:1990, modified, was approved by all CENELEC members with the exception of Sweden on 5 March 1990 as a European Standard.

Annexes designated “normative” are part of the body of the standard. Annexes designated “informative” are given only for information.

In this standard, Annex ZA and Annex ZB are normative and Annex ZC and Annex ZD are informative.

The following dates are applicable:

- latest date of announcement of the EN at national level (doa): 1990-09-01
- date of latest publication of a new harmonized standard (dop): 1991-09-01
- date of withdrawal of conflicting national standards (dow): 1992-09-01

For products which have complied with the relevant national standard before 1992-09-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1997-09-01.

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22.1 Scope

This section of Part 2 of IEC Publication 598 specifies requirements for emergency lighting luminaires for use with tungsten filament, tubular fluorescent and other discharge lamps on emergency power supplies not exceeding 1 000 V. It is to be read in conjunction with those sections of Part 1 to which reference is made.

This section does not cover “explosion-proof” luminaires for emergency lighting (see IEC Publication 79) and does not cover the effects of non-emergency voltage reductions on luminaires incorporating high pressure discharge lamps.

NOTE Some emergency lighting luminaires are designed for operation on normal power supplies during non-emergency periods.

22.2 General test requirements

The provisions of Section 0 of Publication 598-1 apply. The tests described in each appropriate section of Part 1 shall be carried out in the order listed in this section of Part 2.

When testing combined emergency luminaires according to the requirements of this section, the tests are limited to those parts of the luminaire which are involved with providing, emergency lighting. The components and parts of the luminaires designed to provide only normal lighting shall be subjected to the tests according to the requirements of the relevant section of Part 2 (for example, if the luminaire is recessed, it shall be tested according to the requirements of the section dealing with recessed luminaires).

If some elements of a self-contained emergency luminaire are adjacent (within 1 m) to the main part of the luminaire all the elements of the luminaire, including the means of interconnection, shall satisfy the relevant requirements of this section.

22.3 Definitions

For the purposes of this section, the definitions of Section 1 of Publication 598-1 apply. In addition, the definitions of the relevant IEC lighting publications apply, in particular the definitions of Publications 81, 920 (being printed), 924 (being printed) and 925. The following definitions also apply:

1) *Emergency lighting*: Lighting for use when the supply to the normal lighting fails; it includes escape lighting and standby lighting.

2) *Escape lighting*: That part of emergency lighting which is provided to ensure that the means of escape can be effectively identified and safely used at all times when normal or emergency lighting is required.

3) *Standby lighting*: That part of emergency lighting enabling normal activities to continue or to be terminated safely.

NOTE This may be at a lower illuminance.

4) *Maintained emergency luminaire*: A luminaire in which the emergency lighting lamps are energized at all times when normal or emergency lighting is required.

5) *Non-maintained emergency luminaire*: A luminaire in which the emergency lighting lamps are in operation only when the supply to the normal lighting fails.

6) *Combined emergency luminaire*: An emergency lighting luminaire containing two or more lamps, at least one of which is energized from the emergency lighting supply and the others from normal lighting supply. A combined emergency luminaire is either maintained or non-maintained.

7) *Self-contained emergency luminaire*: A luminaire providing maintained or non-maintained emergency lighting in which all the elements, such as the battery, the lamp, the control unit and the test and monitoring facilities, where provided, are contained within the luminaire or adjacent to it (that is, within 1 m)

8) *Centrally supplied luminaire*: A luminaire for maintained or non-maintained operation which is energized from a central emergency power system, that is, one not contained within the luminaire.

9) *Compound self-contained emergency luminaire*: A self-contained luminaire providing maintained or non-maintained emergency lighting and also providing emergency supply for operating a satellite luminaire.

10) *Satellite luminaire*: A luminaire for maintained or non-maintained operation which derives emergency operation supply from an associated compound self-contained emergency luminaire.

11) *Control unit*: A unit or units comprising a supply changeover system, a battery charging device and, where appropriate, a means for testing. For tubular fluorescent lamp luminaires an inverter and lamp ballast can also be included in the unit.