



BSI Standards Publication

Luminaires

Part 2-11: Particular requirements — Aquarium luminaires

National foreword

This British Standard is the UK implementation of EN 60598-2-11:2013+A1:2022. It is identical to IEC 60598-2-11:2013, incorporating amendment 1:2022. It supersedes BS EN 60598-2-11:2005, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by **A1** ^{A1}.

The UK participation in its preparation was entrusted to Technical Committee CPL/34/4, Luminaires.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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EN 60598-2-11+A1

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English version

**Luminaires -
Part 2-11: Particular requirements -
Aquarium luminaires
(IEC 60598-2-11:2013)**

Luminaires -
Partie 2-11: Exigences particulières -
Luminaires pour aquarium
(CEI 60598-2-11:2013)

Leuchten -
Teil 2-11: Besondere Anforderungen -
Aquarienleuchten
(IEC 60598-2-11:2013)

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

European foreword

The text of document 34D/1046/CDV, future edition 2 of IEC 60598-2-11, prepared by SC 34D "Luminaires" of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60598-2-11:2013.

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This document supersedes EN 60598-2-11:2005 + corrigendum August 2005.

EN 60598-2-11:2013 includes the following significant technical changes with respect to EN 60598-2-11:2005:

- a) Subclause 11.1, change of the scope to open the standard for all kinds of electrical light sources;
- b) Subclause 11.4.2 (former 11.3.2), change of the definition in order to clarify non-permanently attached aquarium luminaire;
- c) Subclause 11.11.3 (former 11.10.3), for indoor operated aquarium luminaire, change of the size of conductors to at least 0,75 mm² instead of 1,0 mm² in the former edition.

This standard is to be read in conjunction with EN 60598-1.

NOTE In this standard, the following print types are used:

– requirements: in roman type.

– *test specifications: in italic type.*

– notes: in small roman type.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 60598-2-11:2013 was approved by CENELEC as a European Standard without any modification.

European foreword to amendment 1

The text of document 34D/1612/CDV, future IEC 60598-2-11/AMD1, prepared by SC 34D "Luminaires" of IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60598-2-11:2013/A1:2022.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-08-08

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This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZZ, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice to amendment 1

The text of the International Standard IEC 60598-2-11:2013/AMD1:2022 was approved by CENELEC as a European Standard without any modification.



IEC 60598-2-11

Edition 2.0 2013-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Luminaires –

Part 2-11: Particular requirements – Aquarium luminaires

Luminaires –

Partie 2-11: Exigences particulières – Luminaires pour aquarium

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES –**Part 2-11: Particular requirements –
Aquarium luminaires**

FOREWORD

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International Standard IEC 60598-2-11 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This standard is to be read in conjunction with IEC 60598-1.

This second edition cancels and replaces the first edition published in 2005. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Subclause 11.1, change of the scope to open the standard for all kinds of electrical light sources.
- b) Subclause 11.4.2, change of the definition in order to clarify non-permanently attached aquarium luminaire.

- c) Subclause 11.11.3, for indoor operated aquarium luminaire, change of the size of external cable to at least 0,75 mm² instead of 1,0 mm² in the former edition.

The text of this standard is based on the following documents:

FDIS	Report on voting
34D/1046/FDIS	34D/1089/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 60598 series, published under the general title *Luminaires* can be found on the IEC website.

NOTE In this standard, the following print types are used:

- requirements: in roman type;
- *test specifications: in italic type*;
- notes: in small roman type.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

Aquarium luminaires are predominantly used on the topside of an aquarium tank to achieve an effective illumination and are, therefore, very close to the water inside the tank. Because constant refilling of water is required as a consequence of evaporation and regular servicing, e.g. feeding the fish, it is necessary to open the top cover or to remove the aquarium luminaire frequently in order to have a good and sufficient access to the water surface.

The requirements of this standard are necessary to prevent any dangerous contact between current-carrying parts of the aquarium luminaire and the water inside the tank during refilling or maintenance. Another aspect is to prevent any accidental immersion of the aquarium luminaire into the water.

LUMINAIRES –

Part 2-11: Particular requirements – Aquarium luminaires

11.1 Scope

This part of the IEC 60598 series specifies requirements for household aquarium luminaires incorporating electric light sources on supply voltages not exceeding 1 000 V.

NOTE In the U.S., electrical equipment used on or in aquariums must be supplied by voltages not exceeding 300 V.

11.2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60598-1, *Luminaires – Part 1: General requirements and tests*

11.3 General test requirements

The provisions of Section 0 of IEC 60598-1 apply. The tests described in each appropriate section of IEC 60598-1 shall be carried out in the order listed in this part of IEC 60598-2.

11.4 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60598-1, as well as the following apply.

11.4.1

aquarium luminaire

luminaire intended to illuminate the inside of an aquarium and which is placed in close proximity of the top of the tank or in/on the tank

11.4.2

A1 non-permanently attached aquarium luminaire A1

luminaire which can be positioned on top of an aquarium tank, or on a removable top cover frame or on a fixed top cover frame, and which is removable by hand; a luminaire which must be detached from the aquarium for lamp replacement and/or for maintenance is considered as a non-permanently attached luminaire

Note 1 to entry: Non-permanently attached aquarium luminaires can contain provisions for fixing.

11.4.3

A1 permanently attached aquarium luminaire A1

luminaire which is mounted on the tank of the aquarium or on a fixed top cover frame of the aquarium and which is only removable by the use of a tool

Note 1 to entry: Luminaires and their parts can be mounted separately by the user.