

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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IEC 60598-2-11 edition 2.1 contains the second edition (2013-05) [documents 34D/1047/FDIS and 34D/1089/RVD] and its amendment 1 (2022-07) [documents 34D/1612/CDV and 34D/1632/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

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 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.

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 the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under webstore.iec.ch in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
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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 voltage 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

non-permanently attached aquarium luminaire

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

permanently attached aquarium luminaire

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.