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Irish Standard  
I.S. EN 60598-2-11:2013

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

## I.S. EN 60598-2-11:2013

*Incorporating amendments/corrigenda issued since publication:*

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<b>NSAI</b> 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie  W NSAI.ie	<b>Sales:</b> T +353 1 857 6730 F +353 1 857 6729 W standards.ie
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EUROPEAN STANDARD  
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EUROPÄISCHE NORM

**EN 60598-2-11**

August 2013

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Supersedes EN 60598-2-11:2005 + corr. Aug.2005

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## 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.

The following dates are fixed:

- latest date by which the document has to be (dop) 2014-03-20  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2016-06-20  
standards conflicting with the  
document have to be withdrawn

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 mm<sup>2</sup> instead of 1,0 mm<sup>2</sup> 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.

## **Annex ZA**

(normative)

### **Normative references to international publications with their corresponding European publications**

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60598-1	-	Luminaires - Part 1: General requirements and tests	EN 60598-1	-

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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 mm<sup>2</sup> instead of 1,0 mm<sup>2</sup> 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.

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