

<b>STN</b>	<b>Malé plavidlá. Elektrické navigačné svetlá. Výkonnosť svetiel LED (ISO 19009: 2015).</b>	<b>STN EN ISO 19009</b>  32 6724
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Small craft - Electric navigation lights - Performance of LED lights (ISO 19009:2015)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/16

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**Small craft - Electric navigation lights - Performance of  
LED lights (ISO 19009:2015)**Petits navires - Feux de navigation électriques -  
Performance des feux à LED (ISO 19009:2015)Kleine Wasserfahrzeuge - Elektrische  
Positionslaternen - Leistung von LED-Leuchten (ISO  
19009:2015)

This European Standard was approved by CEN on 13 June 2015.

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## European foreword

This document (EN ISO 19009:2015) has been prepared by Technical Committee ISO/TC 188 "Small craft".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2016, and conflicting national standards shall be withdrawn at the latest by April 2016.

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

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

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

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 19009:2015 has been approved by CEN as EN ISO 19009:2015 without any modification.

**Annex ZA**  
(informative)  
**Relationship between this European Standard and the Essential  
Requirements of EU Directive 2013/53/EC**

This European standard has been prepared under a mandate given to CEN by the European Commission to provide one means of conforming to Essential Requirements of the New Approach Directive 2013/53/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one member state, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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**Small craft — Electric navigation lights  
— Performance of LED lights**

*Petits navires — Feux de navigation électriques — Performance  
des feux à LED*





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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 188, *Small craft*.

## Introduction

This document was developed to provide uniform criteria for the performance, construction, and testing of LED navigation lights. Conflicting national standards might lead to confusion on the part of operators and manufacturers of craft, as well as manufacturers of LED navigation lights. These conflicts could lead to barriers to trade.

If the colour locus of navigation light is within the coordinates specified in this document, the COLREGs, CCNR<sup>[1]</sup> and CEVNI<sup>[2]</sup> requirements relating to colour loci are satisfied.

# Small craft — Electric navigation lights — Performance of LED lights

## 1 Scope

This International Standard applies to requirements and testing for navigation lights with permanently fixed light emitting diode (LED) assemblies for small craft up to 24 m length of the hull.

## 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.

ISO 11664-1, *Colorimetry — Part 1: CIE standard colorimetric observers*

CIE 15, *Colorimetry*

CIE 69, *Methods of characterizing illuminance meters and luminance meters — Performance, characteristics and specifications*

CIE 70:1987, *Measurement of absolute luminous intensity distributions*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60945:2002, *Maritime navigation and radiocommunication equipment and systems — General requirements — Methods of testing and required test results*

IEC 60068-2-27:2008, *Environmental testing — Part 2-27: Tests — Test Ea and guidance: Shock*

COLREGs, *International Regulations for Preventing Collisions at Sea, 1972*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**