

This is a preview of "BS EN 60809:2015". [Click here to purchase the full version from the ANSI store.](#)

**BS EN 60809:2015**



**BSI Standards Publication**

# **Lamps for road vehicles — Dimensional, electrical and luminous requirements**

**bsi.**

...making excellence a habit.™

This is a preview of "BS EN 60809:2015". [Click here to purchase the full version from the ANSI store.](#)

This British Standard is the UK implementation of EN 60809:2015. It is identical to IEC 60809:2014. It supersedes BS EN 60809:1996+A5:2012, which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee CPL/34, Lamps and Related Equipment, to Subcommittee CPL/34/1, Electric lamps.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2015.  
Published by BSI Standards Limited 2015

ISBN 978 0 580 80032 0  
ICS 29.140.20; 43.040.20

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2015.

#### **Amendments/corrigenda issued since publication**

<b>Date</b>	<b>Text affected</b>
-------------	----------------------

---

This is a preview of "BS EN 60809:2015". [Click here to purchase the full version from the ANSI store.](#)

## EUROPÄISCHE NORM

March 2015

ICS 43.040.20; 29.140.20

Supersedes EN 60809:1996

English Version

## Lamps for road vehicles - Dimensional, electrical and luminous requirements (IEC 60809:2014)

Lampes pour véhicules routiers - Exigences dimensionnelles, électriques et lumineuses  
(IEC 60809:2014)

Lampen für Straßenfahrzeuge - Maße, elektrische und lichttechnische Anforderungen  
(IEC 60809:2014)

This European Standard was approved by CENELEC on 2015-01-20. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

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

This is a preview of "BS EN 60809:2015". [Click here to purchase the full version from the ANSI store.](#)

## Foreword

The text of document 34A/1798/FDIS, future edition 3 of IEC 60809, prepared by SC 34A "Lamps", of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60809:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-10-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-01-20

This document supersedes EN 60809:1996.

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.

## Endorsement notice

The text of the International Standard IEC 60809:2014 was approved by CENELEC as a European Standard without any modification.

This is a preview of "BS EN 60809:2015". Click here to purchase the full version from the ANSI store.

(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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050	series	International electrotechnical vocabulary	-	-
IEC 60051-1	-	Direct acting indicating analogue electrical measuring instruments and their accessories - Part 1: Definitions and general requirements common to all parts	EN 60051-1	-
IEC 60061-1	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 1: Lamp caps	EN 60061-1	-
IEC 60810	2014	Lamps for road vehicles - Performance requirements	EN 60810	2015
IEC 60983	-	Miniature lamps	EN 60983	-
IEC 62504	-	General lighting - Light emitting diode (LED) products and related equipment - Terms and definitions	EN 62504	-
CIE 15	2004	Colorimetry	-	-
UNECE 1958 Agreement	-	Agreement concerning the adoption of uniform technical prescription for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions	-	-
UNECE 4	-	1958 Agreement, Addendum 3: Regulation No. 4: Uniform provisions concerning the approval of devices for the illumination of rear registration plates of power-driven vehicles and their trailers	-	-
UNECE 6	-	1958 Agreement, Addendum 5: Regulation No. 6: Uniform provisions concerning the approval of direction indicators for power-driven vehicles and their trailers	-	-

This is a preview of "BS EN 60809:2015". [Click here to purchase the full version from the ANSI store.](#)

UNECE 7	-	1958 Agreement, Addendum 6: Regulation No. 7: Uniform provisions concerning the approval of front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles (except motor cycles) and their trailers	-	-
UNECE 23	-	1958 Agreement, Addendum 22: Regulation No. 23: Uniform provisions concerning the approval of reversing and manoeuvring lamps for power-driven vehicles and their trailers	-	-
UNECE 37	-	1958 Agreement, Addendum 36: Regulation No. 37: Uniform provisions concerning the approval of filament lamps for use in approved lamp units of power-driven vehicles and of their trailers	-	-
UNECE 38	-	1958 Agreement, Addendum 37: Regulation No. 38: Uniform provisions concerning the approval of rear fog lamps for power-driven vehicles and their trailers	-	-
UNECE 50	-	1958 Agreement, Addendum 49: Regulation No. 50: Uniform provisions concerning the approval of front position lamps, rear position lamps, stop lamps, direction indicators and rear-registration-plate illuminating devices for vehicles of category L	-	-
UNECE 77	-	1958 Agreement, Addendum 76: Regulation No. 77: Uniform provisions concerning the approval of parking lamps for power-driven vehicles	-	-
UNECE 87	-	1958 Agreement, Addendum 86: Regulation No. 87: Uniform provisions concerning the approval of daytime running lamps for power-driven vehicles	-	-
UNECE 91	-	1958 Agreement, Addendum 90: Regulation No. 91: Uniform provisions concerning the approval of side-marker lamps for motor vehicles and their trailers	-	-
UNECE 99	-	1958 Agreement, Addendum 98: Regulation No. 99: Uniform provisions concerning the approval of gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	-	-
UNECE 101	-	1958 Agreement, Addendum 100: Regulation No. 101: Uniform provisions concerning the approval of passenger cars powered by an internal combustion engine only, or powered by a hybrid electric power train with regard to the measurement of the emission of carbon dioxide and fuel consumption and/or the measurement of electric energy consumption and electric range, and of categories M <sub>1</sub> and N <sub>1</sub> vehicles powered by an electric power train only with regard to the measurement of electric energy consumption and electric range	-	-
UNECE 119	-	1958 Agreement, Addendum 118: Regulation No. 119: Uniform provisions concerning the approval of cornering lamps for power-driven vehicles	-	-
UNECE 128	-	1958 Agreement, Addendum 127: Regulation No. 128: Uniform provisions concerning the approval of light emitting diode (LED) light sources for use in approved lamp units on power-driven vehicles and their trailers	-	-

This is a preview of "BS EN 60809:2015". [Click here to purchase the full version from the ANSI store.](#)

## CONTENTS

1	Scope .....	9
2	Normative references .....	9
3	Terms and definitions .....	11
4	Requirements and test conditions for filament lamps .....	14
4.1	General requirements .....	14
4.2	Lamp marking .....	14
4.3	Bulbs .....	14
4.4	Colour .....	15
4.4.1	Colour of light .....	15
4.4.2	Colour endurance .....	16
4.4.3	Coated bulb .....	16
4.5	Lamp dimensions .....	16
4.6	Caps and bases .....	16
4.7	Initial electrical and luminous requirements .....	17
4.8	Check on optical quality .....	17
4.8.1	General .....	17
4.8.2	12 V lamps emitting white light .....	17
4.8.3	6 V and 24 V lamps emitting white light .....	17
4.8.4	Lamps emitting selective-yellow light .....	17
4.9	UV radiation .....	18
4.10	Standard (étalon) filament lamps .....	18
4.11	Non-replaceable filament lamps .....	18
4.11.1	General .....	18
4.11.2	Fixation .....	19
4.11.3	Lifetime .....	19
4.11.4	Colour endurance .....	20
4.11.5	Luminous flux and colour maintenance .....	20
4.11.6	Vibration and shock resistance .....	20
5	Requirements and test conditions for discharge lamps .....	21
5.1	General requirements .....	21
5.2	Lamp marking .....	21
5.3	Bulbs .....	21
5.4	Caps .....	21
5.5	Position and dimensions of electrodes, arc and black stripes .....	22
5.5.1	Measurements .....	22
5.5.2	Electrodes .....	22
5.5.3	Arc .....	22
5.5.4	Black stripes .....	22
5.6	Starting, run-up and hot-restrike characteristics .....	22
5.6.1	Starting .....	22
5.6.2	Run-up .....	22
5.6.3	Hot-restrike .....	23
5.6.4	Compliance .....	23
5.7	Electrical and photometric characteristics .....	23
5.7.1	Voltage and wattage .....	23