



**BSI Standards Publication**

## **Railway applications - Electrical lighting for rolling stock in public transport systems**

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Part 2: Urban rail

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## National foreword

This British Standard is the UK implementation of EN 13272-2:2019. Together with BS EN 13272-1:2019, it supersedes BS EN 13272:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee RAE/4/-/7, Railway Applications - Lighting.

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.

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Published by BSI Standards Limited 2019

ISBN 978 0 580 96816 7

ICS 45.140; 91.160.10

**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 30 November 2019.

### Amendments/corrigenda issued since publication

Date	Text affected
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## EUROPÄISCHE NORM

October 2019

ICS 45.140; 91.160.10

Supersedes EN 13272:2012

English Version

## Railway applications - Electrical lighting for rolling stock in public transport systems - Part 2: Urban rail

Applications ferroviaires - Éclairage électrique pour  
matériel roulant des systèmes de transport public -  
Partie 2 : Rail urbain

Bahnwendungen - Elektrische Beleuchtung in  
Schienenfahrzeugen des öffentlichen Verkehrs - Teil 2:  
Städtische Schienenbahnen

This European Standard was approved by CEN on 19 August 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

This document (EN 13272-2:2019) has been prepared by Technical Committee CEN/TC 256 "*Railway applications*", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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

This document, together with EN 13272-1:2019, supersedes EN 13272:2012.

This series of documents *Railway applications — Electrical lighting for rolling stock in public transport systems* consists of the following parts:

- Part 1: *Heavy rail*;
- Part 2: *Urban rail* (this document).

With regard to the previous edition, the following changes have been made:

- This part of EN 13272 for electrical lighting in urban rail vehicles is new, whereas EN 13272-1 (for heavy rail) has been revised with regard to applicable TSIs and new lighting technologies.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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

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## **Introduction**

This document sets out the requirements for interior lighting for urban rail vehicles, as defined in the CEN-CENELEC Guide 26.

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## 1 Scope

This document contains performance requirements and recommendations for electrical lighting systems in the interiors of public transport urban rail vehicles, as defined in the CEN-CENELEC Guide 26, i.e. metro systems, trams, light rail, and local rail systems, under all operating and emergency conditions.

This document applies only to new units.

The application of this document for retro-fitting of existing units is subject to agreement between Contractors.

This document also defines the requirements for testing and conformity assessment.

This document does not address lighting installed in instruments or controls.

This document does not address lighting installed for indication or effect purposes, including flashing lights and decorative lighting.

NOTE 1 The requirements for interior lighting for heavy rail vehicles can be found in EN 13272-1.

NOTE 2 The requirements for cab instrument lighting for heavy rail vehicles can be found in EN 16186-2.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13272-1:2019, *Railway applications — Electrical lighting for rolling stock in public transport system - Part 1 Heavy rail*

IEC 60050-845:1987+A1:2016,<sup>1</sup> *International Electrotechnical Vocabulary Chapter 845: Lighting*

EN 62031:2008+A2:2015, *LED modules for general lighting - Safety specifications*

EN 62471:2008, *Photobiological safety of lamps and lamp systems*

EN 45545-1:2013, *Railway applications - Fire protection on railway vehicles - Part 1: General*

IEC/TR 62778:2014, *Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires*

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<sup>1</sup> IEC 60050-845:1987+A1:2016 is identical to CIE Publication No. CIE S 017/E:2011.