

ICS 91.160.10

English Version

## Light and lighting - Commissioning of lighting systems in buildings

Lumière et éclairage - Mise en service des systèmes d'éclairage dans les bâtiments

Licht und Beleuchtung - Inbetriebnahme von Beleuchtungsanlagen in Gebäuden

This Technical Specification (CEN/TS) was approved by CEN on 15 March 2024 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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## European foreword

This document (CEN/TS 18036:2024) has been prepared by Technical Committee CEN/TC 169 “Light and lighting”, the secretariat of which is held by DIN.

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 is based on ISO/TS 21274 “Light and lighting — Commissioning of lighting systems in buildings”, which was prepared by ISO/TC 274 “Light and lighting”. CEN/TC 169 decided to adapt ISO/TS 21274 integrating modifications.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: 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, Türkiye and the United Kingdom.

## Introduction

Building users are expecting a better quality of visual environment while there is also a need to reduce the impact on natural resources and minimize energy use from lighting. The use of a control system can help to deliver the correct quantity and quality of light where it is needed and when it is needed. The use of a well-designed, installed and commissioned control system can provide a high level of energy efficiency, support flexibility of use within a space and increase occupant satisfaction.

Commissioning is a quality-oriented process for achieving, verifying and documenting whether the performance of lighting systems and its associated components meets defined objectives and criteria. Potential benefits of commissioning include:

- reduced energy consumption and operating costs;
- higher user acceptance and satisfaction;
- enhanced marketability and value of commercial property;
- full accountability by project participants for the quality of their work;
- verification that a lighting system performs as intended.

The purpose of this document is to identify the minimum requirements for the commissioning of lighting systems, including roles and responsibilities, commissioning activities, documentation requirements and system handover procedure.

## 1 Scope

This document specifies requirements for the commissioning of lighting systems in buildings to meet defined design specifications. This document presents details of the commissioning of lighting systems without focusing on the technical characteristics of specific components.

This document can be applied to new installations or renovations of non-residential buildings and public spaces of multi-occupancy residential buildings.

This document does not cover electrical power connection aspects of lighting system components, which are deemed to be in compliance with relevant legislation or standards.

This document is not applicable to the commissioning of emergency lighting.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 3.1

#### **lighting system**

system designed to provide lighting

Note 1 to entry: A lighting system can be dedicated to

- a) the support of one or more specified visual tasks under specified conditions considering other requirements such as human comfort, safety, the appearance of the surrounding environment and energy consumption;
- b) the support of other than human tasks.

Note 2 to entry: A lighting system can include a set of light sources, other physical components, communication protocols, user interfaces, software and networks to provide control and monitoring functions.

Note 3 to entry: The light source(s) and the related equipment can be integrated in a single item, e.g. an LED module, a lamp or a luminaire.

Note 4 to entry: A lighting system can be networked to provide central or remote control and monitoring functions.

Note 5 to entry: A lighting system can be connected to or integrated with other systems or devices.

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