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Light and lighting — Commissioning of lighting systems in buildings — Explanation and justification of ISO/TS 21274

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National foreword

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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 document 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).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 274, *Light and lighting*.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The increasing use of solid-state lighting technology e.g. LED lighting, the growing scientific insight on the impact of light on humans and the diverse individual demands for lighting function bring a significant incentive for the application of lighting control. However, the resulting complexity of installed systems needs more professional skills to design, install, and maintain.

Commissioning is a very important measure that can be taken to guarantee the quality of lighting systems as close as possible to its design intent. ISO/TS 21274 specifies requirements for the commissioning of lighting systems in buildings to meet design specifications, including roles and responsibilities, commissioning activities, documentation requirements and system handover.

This document presents explanation and justification to support the correct understanding, use and national implementations of ISO/TS 21274.

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TECHNICAL REPORT **ISO/TR 5911:2023(E)**

Light and lighting – Commissioning of lighting systems in buildings – Explanation and justification of ISO/TS 21274

1 Scope

This document provides information to support the correct understanding, use and national implementations of ISO/TS 21274. It gives explanations on the procedures and background information. It also provides justifications of the choices that have been made. It gives detailed examples to illustrate the overall workings of ISO/TS 21274.

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.

ISO/TS 21274, *Light and lighting — Commissioning of lighting systems in buildings*

ISO 52000-1, *Energy performance of buildings — Overarching EPB assessment — Part 1: General framework and procedures*

CIE S 017, *ILV: International Lighting Vocabulary*[1)]

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 52000-1, ISO/TS 21274 and CIE S 017 and the following 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.

1) Online version: CIE e-ILV: https://cie.co.at/e-ilv

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