
**Cycles — Lighting and retro-reflective
devices —**

**Part 1:
Lighting and light signalling devices**

Cycles — Éclairage et dispositifs rétroréfléchissants —

Partie 1: Équipements de signalisation et d'éclairage



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Published in Switzerland

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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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This document was prepared by Technical Committee ISO/TC 149, *Cycles*, Subcommittee SC 1, *Cycles and major sub-assemblies*.

This fourth edition cancels and replaces the third edition (ISO 6742-1:2015), which has been technically revised.

The main changes are as follows:

- terms and definitions: “continuous light” and “light emitting surface” were added;
- some terms and definitions were reviewed;
- improvement of [Clause 4](#);
- addition of [Table 3](#) in [4.4.2](#);
- addition of [4.9](#) “Daytime running lamp”;
- addition of [6.4](#);
- addition of [Annex C](#).

A list of all parts in the ISO 6742 series can be found on the ISO website.

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.

Cycles — Lighting and retro-reflective devices —

Part 1: Lighting and light signalling devices

1 Scope

This document is applicable to lighting devices used on cycles intended to be used on public roads and, especially, bicycles complying with ISO 4210^[1] and ISO 8098^[2].

This document specifies the functions, safety requirements, photometric performance and test methods of lighting and signalling devices that can be used on cycles.

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 6742-4, *Cycles — Lighting and retro-reflective devices — Part 4: Lighting systems powered by the cycle's movement*

ISO 6742-5, *Cycles — Lighting and retro-reflective devices — Part 5: Lighting systems not powered by the cycle's movement*

ISO/CIE 19476, *Characterization of the performance of illuminance meters and luminance meters*

CIE 1931, *XYZ colour space of the International Commission on Illumination*

3 Terms and definitions

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

ISO and IEC maintain terminological 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

front position lamp

lamp emitting a white or an amber light to the front of the cycle, so as to indicate its presence on the road

3.2

headlamp

lamp to light the road to the front of the cycle that has either low beam, high beam or both

3.3

rear lamp

lamp emitting a red light to the rear of the cycle and used to indicate its presence on the road