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

**Part 2:
Retro-reflective devices**

*Cycles — Dispositifs d'éclairage et dispositifs rétroréfléchissants —
Partie 2: Dispositifs rétroréfléchissants*



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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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 149, *Cycles*, SC 1, *Cycles and major sub-assemblies*.

This third edition cancels and replaces the second edition (ISO 6742-2:1985), which has been technically revised.

ISO 6742 consists of the following parts, under the general title *Cycles — Lighting and retro-reflective devices*:

- *Part 1: Lighting and light signalling devices*
- *Part 2: Retro-reflective devices*
- *Part 3: Installation and use of lighting and retro-reflective devices*
- *Part 4: Lighting systems powered by the cycle's movement*
- *Part 5: Lighting systems not powered by the cycle's movement*

Cycles — Lighting and retro-reflective devices —

Part 2: Retro-reflective devices

1 Scope

This part of ISO 6742 is applicable to retro-reflective devices used on cycles intended to be used on public roads and, especially, bicycles complying with ISO 4210 and ISO 8098.

This part of ISO 6742 specifies photometric and physical requirements of retro-reflective devices.

2 Normative references

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.

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

CIE 15, *Colorimetry: official recommendations of the International Commission on Illumination*

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.

3.1

retro-reflective device; reflector

assembly ready for use and comprising one or more retro-reflecting optical units

3.2

wide angle reflector

device providing retro-reflection through horizontal entrance angles of not less than 50° on either side of the reference axis

3.3

conventional reflector

device providing retro-reflection through entrance angles of not less than 20° on either side of the reference axis

3.4

high values reflector

red retro-reflective device with high values of reflection e.g. dedicated to be mounted on luggage carrier

3.5

retro-reflective spoke

spoke with retro-reflective surface

3.6

retro-reflective spoke case

device, e.g. cylinder, with retro-reflective surface with or without a gap, providing a secured mounting on a spoke