



1 Scope

This standard applies to RKF approval for front headlamps, and rear signalling lamps (and retroreflectors when integrated in the lamp) for bicycles in the Netherlands.

2 General Requirements for approval

- a. The device shall be designed for permanent mounting on the bicycle or integration into the main parts of the bicycle. Devices that are not designed for permanent mounting or for integration on a bicycle, in other words that have a provision that only allows the light to be attached to clothing or on the body with or without the use of additional materials are excluded from approval.
- b. If the device is removable the construction shall be such that the device can only be remounted in the original position.
- c. If the device is removed from the construction it shall be possible to only mount the device in the original position. This shall be demonstrated by the manufacturer and shall be shown in a separate drawing or (part of) the owner's manual.
- d. In the case of a front lamp the orientation of the lamp or construction shall be easily changeable in order to aim the beam correctly.
- e. When the lamp is in operation no flashing or blinking shall be visible. Pulses (luminous intensity) over a constant value (ripple) are allowed if the pulse height is less than [10]% of the constant value. If the light sources are operated by special electronics the frequency of the pulses shall be at least 50 Hz. This shall be demonstrated by the manufacturer by means of the information submitted for approval. Alternatively, when the technical description mentions "To be determined by the test house" (see §3.2.2 (f)), this is checked during testing, using one sample, by means of an oscilloscope and an optical sensor fast enough to follow the signals.
- f. In the case of a replaceable light source the design of the device shall be such that the light source can be fixed in no other position but the correct one.
- g. For Lamps or Lamps with reflectors that consist of more than one units that are intended to be combined with specially designed bicycles that have mounting positions for these units, in such a way that the units combined meet the requirements can also be submitted for approval, provided that they are accompanied with drawings that describe the bicycle part or parts that is or are used to mount the units on. If deemed relevant to the performance photometrical test shall be performed with the units in the same position and orientation relative to each other as described in this drawing.

Explanatory examples:

- A front light consisting of two lamp units and one retroreflector unit that are mounted into a specially designed suspended front fork.
- A rear light consisting of one lamp unit and one retroreflector unit that are both mounted onto a specially designed luggage carrier.

3 Specific Technical requirements for approval

- Front lamp

A front lamp shall

- comply with the German type-approval requirements given in StVZO § 67 ,
or
- comply with the lighting requirements given in ISO 6742-1:2015 point 4.5 (low-beam) ;
in case of a battery as energy supply: the front lamp shall have a battery-low indicator that
complies with the requirement given in ISO 6742-5:2015 point 6.3

- Rear lamp

A rear lamp shall comply with

- the German type-approval requirements given in StVZO § 67
or
- the lighting requirements given in ISO 6742-1:2015 point 4.3 (rear lamps) ;
in case of a battery as energy supply: the rear lamp shall have a battery-low indicator that
complies with the requirement given in ISO 6742-5:2015 point 6.3

- A front lamp and a rear lamp may be fitted with an integrated retroreflector

* When a front lamp is fitted with an integrated white retroreflector, this retroreflector shall
comply with:

- the requirements for the type 1A reflector of the latest version of UNECE Regulation No. 3
OR
- the requirements of ISO 6742-2:2015 table 4A.

* When a rear lamp is fitted with an integrated red retroreflector, this retroreflector shall comply
with the requirements of :

- the type 1A reflector of the latest version of UNECE Regulation No. 3
OR
- the applicable requirements of ISO 6742-2:2015 Table 4A and/or Table 7.
OR

- "Kategorie Z Rückstrahler nach § 22a der Straßenverkehrs-Zulassungs-Ordnung
(StVZO) in der Fassung vom 28.09.1988 (BHBI I S. 1793) in Verbindung mit der
Verordnung über die Prüfung und Genehmigung der Bauart von Fahrzeugteilen
sowie der Kennzeichnung (FzTV) in der Fassung vom 12.08.1998 (BGBl I S. 2142)".

4 Compliance with the technical requirements

The applicant being the manufacturer or his duly accredited representative must prove compliance
with the requirements by means of a :

- a valid type-approval certificate [issued after 1 January 2014](#) of the KBA that shows conformity
with the requirements of StVZO § 67
OR
- a recent certificate of an ECE 3 approval
OR
- a test report of a renowned test institute for bicycle lamp testing ⁽¹⁾, stating that the lamp /
lamp and retroreflector complies with the relevant requirements of ISO 6742

⁽¹⁾ applicants for approval shall inform beforehand if the test institute of their choice will be
accepted by RAI Association