
**Road vehicles — LED lamp characteristics
for bulb compatible failure detection —**

**Part 1:
LED lamps used as direction indicators**

*Véhicules routiers — Caractéristiques des lampes LED pour détection
de défaut compatible avec l'ampoule —*

Partie 1: Lampes LED utilisées comme feux indicateurs de direction



This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 13207-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

ISO 13207 consists of the following parts, under the general title *Road vehicles — LED lamp characteristics for bulb compatible failure detection*:

— *Part 1: LED lamps used as direction indicators*

Road vehicles — LED lamp characteristics for bulb compatible failure detection —

Part 1: LED lamps used as direction indicators

1 Scope

This part of ISO 13207 specifies the characteristics of LED (Light Emitting Diode) lamps used as direction indicators when optionally monitored. It applies primarily to those lamps which are installed on 24V truck/trailer combinations. It will enable lamp-failure detection of LED lamps on the drawn vehicle to be compatible with that for bulbs when analysed by the towing unit.

2 Terminals

The connection between the towing vehicle and the towed vehicle should be either as described in ISO 1185 and ISO 3731 or as described in ISO 12098. Towing vehicles should be equipped with electronic control units (ECUs), which drive the trailer direction indicator lamps as described in ISO 4082.

3 Functional description

3.1 Principle

Lamp-failure monitoring electronics are required for mandatory mounted direction-indicator functions. For this purpose, the LED direction-indicator function generates a current impulse at a certain time; this current impulse corresponds in terms of amount with the current of a conventional bulb lamp. If the LED direction indicator fails (in relation to the legal requirement of the photometric output), this pulse is not generated. An ECU or intelligent flasher interprets whether the LED direction indicator fails on the basis of this pulse. The result should be used to inform the driver accordingly.