

## Type-Approval Procedure

### Information System of the German Type-Approval Authority

#### Lighting devices on moving parts of vehicle trailers

##### Issue

With the tailgate open or lift gate or ramp lowered, it is possible that the lighting devices on the rear end of a vehicle could be masked.

Therefore it is necessary to clarify when and under which conditions the lighting devices have to be repeatedly mounted, if they were covered by moving parts or when they are mounted on moving parts.

##### References:

- a) Direktive 2007/46/EC of the European Parliament and of the council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive) as amended by Commission Regulation (EU) No. 678/2011 of 14 July 2011
- b) Council Directive of 27 July 1976 on the approximation of the laws of the Member States relating to the installation of lighting and light-signaling devices on motor vehicles and their trailers (76/756/EEC) as amended by Commission Directive 2008/89/EC of 24 September 2008

as well as Annex II, first sentence of Commission Directive 76/756/EEC

- c) "The relevant technical requirements of sections 2, 5 and 6 and of the Annexes 3 to 11 of the UN / ECE Regulation No. 48."

In 5.21 of ECE-regulation No. 48 the conditions are stated, which have to be considered for the installation of the lighting devices

- 5.21 The apparent surface in the direction of the reference axis of front and rear position lamps, front and rear direction-indicator lamps and retro-reflectors shall not be hidden more than 50 per cent by any movable component, with or without a light-signalling device installed on it, in any fixed position different from the "normal position of use".

If the above requirement is not practicable:

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- 5.21.1. Additional lamps satisfying all the position, geometric visibility and photometric requirements for the above indicated lamps shall be activated when the apparent surface in the direction of the reference axis of these lamps is more than 50 per cent hidden by the movable component; or
- 5.21.2. A remark in the communication form (item 10.1. of Annex 1) shall inform other Administrations that more than 50 per cent of the apparent surface in the direction of the reference axis can be hidden by the movable components; and A notice in the vehicle shall inform the user that in certain position(s) of the movable components other road users shall be warned of the presence of the vehicle on the road; for example by means of a warning triangle or other devices according to national requirements for use on the road.
- 5.21.3 Paragraph 5.21.2. does not apply to retro-reflectors.

### Result-Summary:

Retro-reflectors must be placed so that the apparent surface is in the direction of the reference axis in any fixed position - different from the normal position of use - shall not be hidden more than 50 per cent by any movable component.  
If compliance with the requirements is not possible, additional retro-reflectors have to be placed in such a way, that the geometric visibility of the reflector is given and the photometric values are fulfilled.

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