

**Economic and Social Council**Distr.: General
7 August 2023

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations**Working Party on Lighting and Light-Signalling****Eighty-ninth session**

Geneva, 24-27 October 2023

Item 7 (a) of the provisional agenda

Device UN Regulations: UN Regulation No. 149 (Road Illumination Devices)**Proposal for a Supplement to the 01 series of amendments to
UN Regulation No. 149****Submitted by the experts from the International Automotive Lighting
and Light-Signalling Expert Group ***

The text reproduced below was prepared by the experts from the International Automotive Lighting and Light-Signalling Expert Group (GTB) with the aim to remove the failure mode and light source failure detection requirements for the cornering lamp. The proposed modifications to the current text of the UN Regulations are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2023 as outlined in proposed programme budget for 2023 (A/77/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.



I. Proposal

Paragraphs 5.6.2., 5.6.3. and related sub-paragraphs, delete:

- ~~“5.6.2. In the case of a single lamp containing more than one light source when all light sources are illuminated the maximum intensities shall not be exceeded.~~
- ~~5.6.3. Failure of a single lamp containing more than one light source:~~
- ~~5.6.3.1. In a single lamp containing more than one light source, a group of light sources, wired so that the failure of any one of them causes all of them to stop emitting light, shall be considered to be one light source.~~
- ~~5.6.3.2. In case of failure of any one light source in a single lamp containing more than one light source, at least one of the following provisions shall apply:~~
- ~~(a) The light intensity complies with the minimum intensity required in the table of standard light distribution in space as shown in Table 18; or~~
- ~~(b) A signal for activation of a tell tale indicating failure, as indicated in paragraph 6.20.8. of UN Regulation No. 48, is produced, provided that the luminous intensity at $2.5^{\circ}D-45^{\circ}L$ for a left side lamp (the L angle should be substituted for the R angle for a right side lamp) is at least 50 per cent of the minimum intensity required. In this case a note in the communication form states that the lamp is only for use on a vehicle fitted with a tell tale indicating failure.”~~

Paragraph 5.6.4. and related sub-paragraphs, renumber to read:

- “5.6.42. Measurement methods
- 5.6.42.1. Measuring points expressed in degrees of angle with the axis of reference are shown in Figure A4-XI.
- 5.6.42.2. Horizontal and vertical angles for the field of geometric visibility are shown in Figures A4-XII and A4-XIII. The directions $H = 0^{\circ}$ and $V = 0^{\circ}$ correspond to the axis of reference. On the vehicle they are horizontal, parallel to the median longitudinal plane of the vehicle and oriented in the required direction of visibility. They pass through the centre of reference.”

II. Justification

1. This proposal intends to remove from the 01 series of amendments to UN Regulation No. 149 the failure mode and light source failure detection requirements for the cornering lamp, by deleting the mention to a single lamp (paragraphs 5.6.2. and 5.6.3.), which is applied in UN Regulation No. 148 for signalling functions but not in UN Regulation No. 149 for lighting functions.
2. The requirements dealing with light source failure in the current UN Regulation for the cornering lamp come from the general requirements on failures for the light signalling devices. Since the cornering lamp is considered as a road illumination device, it should have similar failure requirements as for the other lighting functions.
3. The only light source failure detection required by UN Regulation No. 149 is for the principal passing beam when it is made by two or more light sources per side. Neither for main beam nor for front fog lamps, is it necessary to detect the failure of the light source(s).
4. The cornering is a lighting function which is optional and always activated in combination with the main lighting devices (passing-beam / driving-beam) . Therefore, the failure of a light source contributing to the cornering lamp would not jeopardize the traffic safety.