

**Economic and Social Council**Distr.: General  
8 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 modify the photometric stability test point of the passing beam and adaptive front-lighting system (AFS) Class C. 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

Annex10, Table A10-1, amend to read:

“ Table A10-1  
**Points in time for additional testing**

<i>Lamp (function)</i>	<i>Time after activation (seconds)</i>	<i>Test point</i>
Driving-beam (Headlamp producing only driving-beam)	1	HV
Passing-beam <sup>a</sup>	4	<del>50V</del> 25V(V, 1.72°D)
AFS class C <sup>a</sup>	4	<del>50V</del> 25V(V, 1.72°D)
Front fog	4	V, 2.5°D
Cornering lamp	1	45°L 2.5°D resp. 45°R 2.5°D

<sup>a</sup> After 1 second it shall meet at least 25 % of the requirement at the test point”

## II. Justification

1. The test points for light emitting diodes (LED) photometric stability of the passing beam and AFS Class C were ‘50V’ until Supplement 3 to the 01 series of amendments to UN Regulation No. 112 and Supplement 3 to the 01 series of amendments to UN Regulation No. 123. The test point 50V is located too close to the cut-off line, so it could be easily affected by other factors. Therefore, the test points for LED photometric stability of the passing beam and AFS Class C were amended to 25R and 25RR respectively through ECE/TRANS/WP.29/GRE/2012/10.

2. According to the justification in ECE/TRANS/WP.29/GRE/2012/10, due to the intensity gradient through the cut-off, at the test point 50V a small vertical movement in the beam pattern, not caused by temperature variations, and within the allowed limits can easily lead to a change of more than 10 per cent of the measured luminous intensity value.

3. The proposed test point 25V (V, 1.72°D) is less affected by other factors than the 50V (V, 0.86°D) for measuring temperature stability and is located at the centre of the passing beam patterns.