

**Economic and Social Council**Distr.: General
10 August 2018

Original: English

Economic Commission for Europe**Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****Working Party on Lighting and Light-Signalling****Eightieth session**

Geneva, 23-26 October 2018

Item 5 of the provisional agenda

UN Regulations Nos. 37 (Filament lamps), 99 (Gas discharge light sources), 128 (Light emitting diodes light sources) and the Consolidated Resolution on the common specification of light source categories.**Proposal for Supplement [8] to the original version of UN Regulation No. 128 (Light emitting diodes light sources)****Submitted by the expert from the International Automotive Lighting and Light Signalling Expert Group (GTB)***

The text reproduced below was prepared by the expert from GTB to amend requirements to light emitting diode (LED) light sources. There is an associated amendment to the Consolidated Resolution on the common specification of light source categories (R.E.5) (ECE/TRANS/WP.29/ GRE/2018/48). The modifications to the existing text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, cluster 3.1), 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

Annex 4, Paragraph 1.2., amend to read:

- “1.2. The luminous flux values, as measured after
- (a) 30 minutes, or
 - (b) Stabilisation of temperature T_b
- shall comply with the minimum and maximum requirements.
- Additionally, in case of (a), unless otherwise specified on the data sheet,
- (i) **either the ~~this~~ luminous flux value measured after 30 minutes** shall be in between 100 per cent and 80 per cent of the **luminous flux** value measured after 1 minute, **or**
 - (ii) **the luminous flux value measured after 1 minute shall comply with the minimum and maximum requirements, and in addition the luminous flux value measured after 30 minutes shall not deviate by more than ± 20 per cent from the luminous flux value measured after 1 minute.**”

II. Justification

1. The current text of UN Regulation No. 128, Annex 4, paragraph 1.2. allows only for a decrease of luminous flux from 1 minute to 30 minutes. This has proven to be unnecessarily design restrictive as the drive electronics in a stabilized light source can lead to a slight increase in the luminous flux from 1 minute to 30 minutes.
2. It is proposed to allow also a limited increase of luminous flux from 1 minute to 30 minutes within the given minimum and maximum requirements, without negatively affecting luminaire photometric performance (traffic safety). An example of the luminous flux behaviour of the light source under the new proposal is illustrated in Figure 1.
3. In order to allow the limited increase a new clause (ii) was added to the existing wording. The old wording was maintained as clause (i) with some slight improvements. A complete rewriting of Annex 4, section 1.2. could improve the readability and could be considered as an activity under stage 2 of the simplification process.
4. As a consequence of this proposal, there is a related proposal (ECE/TRANS/WP.29/GRE/2018/48) to the LR4 category sheet in the Consolidated Resolution on the common specification of light source categories (R.E.5).