



Economic and Social Council

Distr.: General
22 July 2011

Original: English
English and French only

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Sixty-sixth session

Geneva, 4-6 October 2011

Item 5(e) of the provisional agenda

Collective amendments - Regulation Nos. 98, 112 and 123

Proposal for Supplement 3 to the 01 Series of Regulation No. 98, Supplement 3 to the 01 Series of Regulation No. 112 and Supplement 3 to the 01 Series of Regulation No. 123

Submitted by the expert from the Working Party "Brussels 1952"*

The text reproduced below was prepared by the expert from the Working Party "Brussels 1952" (GTB) in order to clarify the heat test requirements. The modifications to the existing text of the 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 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Annex 4, paragraphs 2.2.1. to 2.2.2, amend to read:

- "2.2.1. The result expressed in milliradians (mrad) shall be considered as acceptable for a passing beam headlamp when the absolute value $\Delta r_1 = |r_3 - r_{60}|$ recorded on the headlamp is not more than 1.0 mrad ($\Delta r_1 \leq 1.0$ mrad) **upward and not more than 2.0 mrad ($\Delta r_1 \leq 2.0$ mrad) downwards.**
- 2.2.2. However, if this value is ~~more than 1.0 mrad but not more than 1.5 mrad~~ **(1.0 mrad $< \Delta r_1 \leq 1.5$ mrad)** :

movement	
upward	more than 1.0 mrad but not more than 1.5 mrad (1.0 mrad $< \Delta r_1 \leq 1.5$ mrad)
downward	more than 2.0 mrad but not more than 3.0 mrad (2.0 mrad $< \Delta r_1 \leq 3.0$ mrad)

a ~~second~~ **further sample of a** headlamp shall be tested as described in paragraph 2.1. after being subjected three consecutive times to the cycle as described below, in order to stabilize the position of mechanical parts of the headlamp on a base representative of the correct installation on the vehicle:

Operation of the passing beam for one hour, (the voltage shall be adjusted as specified in paragraph 1.1.1.2.),

~~Period of rest for one hour.~~

~~The headlamp type shall be considered as acceptable if the mean value of the absolute values Δr_I measured on the first sample and Δr_{II} measured on the second sample is not more than 1.0 mrad.~~

After this period of one hour, the headlamp type shall be considered as acceptable if the absolute values Δr measured on the following sample meets the requirements in paragraph 2.2.1. above.

$$\left(\frac{\Delta r_I + \Delta r_{II}}{2} \leq 1.0 \text{ mrad} \right) \quad "$$

II. Justification

Upward movement of the cut-off line during operation of the lamp could result in increased glare and for this reason only a small deviation is permitted following the heat tests. Downward movement has the effect of reducing the illumination on the road but this is evaluated during the one hour dirty headlamp test that already takes account of the effect of heat. Thus, the strict requirement currently specified in paragraphs 2.2.1. and 2.2.2. need not to be applied with the downward movement of the cut-off line.