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World Forum for Harmonization of Vehicle Regulations
Working Party on Lighting and Light-Signalling
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Other business – Any other business

Proposal for Supplement 20 to the original series of amendments to Regulation No. 23 (Reversing lamps)

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 the GTB to amend the photometric stability 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 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, 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

Paragraph 7.4., amend to read:

"7.4 For any lamp, except those equipped with filament lamps, the luminous intensities measured after one minute and after 30 minutes of operation, shall comply with the minimum and maximum requirements. The luminous intensity distribution after one and after 10 minutes of operation can shall be calculated from the luminous intensity distribution measured after photometric stability has occurred 30 minutes of operation by applying at each test point the ratio of luminous intensities measured at HV: after one minute and after 30 minutes of operation.

(a) after one minute;
(b) after 10 minutes; and
(c) after photometric stability has occurred.

“Photometric stability has occurred” means the variation of the luminous intensity for the specified test point is less than 3 per cent within any 15 minute period."

II. Justification

1. According to Regulation No. 23, reversing lamps and manoeuvring lamps equipped with light sources other than filament lamps are currently required to meet the relevant photometric requirements after 1 minute and after 30 minutes of operation.

2. However, under normal traffic conditions these lamps, taking into account specification requirements of various carmakers that reflect the hardest conditions of operation, are being operated for no more than 6 minutes. Subsequently, it is proposed to carry out the second measurement after 10 minutes instead of 30 minutes. This will also harmonize the requirements with standard SAE J1889.1

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