This document replaces the official document ECE/TRANS/WP.29/GRE/2024/5 by extending the amendment proposed to paragraph 6.1.9.1. (Main beam headlamp) also to paragraph 6.22.9.5. (AFS).

I. Proposal

Paragraph 6.1.9.1., amend to read:

“6.1.9.1. The reference value corresponding to an aggregate maximum intensity of the main-beam headlamps which can be switched ON simultaneously shall not exceed 430,000 cd, which corresponds to a reference value of 100.”

Paragraph 6.22.9.5., amend to read:

“6.22.9.5. The reference value corresponding to an aggregate maximum intensity of the lighting units that can be energized simultaneously to provide the main-beam lighting or its modes, if any, shall not exceed 430,000 cd, which corresponds to a reference value of 100.

This maximum intensity shall be obtained by adding together the individual reference marks indicated on the several installation units that are simultaneously used to provide the main-beam.”

II. Justification

1. It is defined in UN Regulations Nos. 48 and 149 that rounding of the reference mark (I′M) shall be done to the nearest defined value. Due to uneven steps between the possible reference marks, the rounding error can be quite large under certain circumstances and, when the maximum luminous intensities are summed up, it is possible to have a total luminous intensity that exceeds the allowed maximum of 430,000 cd.

2. To avoid reducing the allowed peak intensity that is relevant for the range of the driving-beam, it is proposed to remove the double requirement of a sum of reference marks and a sum of maximum luminous intensities.