ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Lighting and Light-Signalling (GRE)
(Forty-eighth session, 9-12 April 2002,
agenda item 2.8.)

PROPOSAL FOR DRAFT CORRIGENDUM 1 TO REGULATION No. 112
(Headlamps emitting an asymmetrical passing beam)

Transmitted by the Expert from the Working Party "Brussels 1952" (GTB)

Note: The text reproduced below was prepared by the expert from GTB in order to incorporate in the Regulation the specifications of the harmonized driving beam pattern (TRANS/WP.29/GRE/47, para. 60). Only the amendments to the text of the Regulation (not to its annex 3) are marked in bold characters.

Note: This document is distributed to the Experts on Lighting and Light-Signalling only.

GE.02-20388
Paragraph 1.4., amend to read:

"1.4. Headlamps of different "Classes" (A or B or C) mean headlamps identified by particular photometric provisions."

Paragraph 2.1.4., amend to read:

"2.1.4 whether it concerns a Class A or B or C headlamp;"

Paragraph 4.2.2.3., amend to read:

"4.2.2.3. on headlamps meeting the requirements of this Regulation in respect of the passing beam only, the letters "C" for Class A headlamp or "HC" for Class B headlamp or "WC" for Class C headlamp;"

Paragraph 4.2.3.1., amend to read:

4.2.3.1. on headlamps meeting the requirements of this Regulation which are so designed that the filament of the passing beam shall not be lit simultaneously with that of any other lighting function with which it may be reciprocally incorporated: an oblique stroke (\/) shall be placed behind the passing lamp symbol in the approval mark.

On headlamps meeting the requirements of this Regulation which are so designed that the filament of the passing beam shall be lit simultaneously with that of any other lighting function with which it may be reciprocally incorporated; a plus symbol (+) shall be placed behind the passing lamp symbol in the approval mark."

Paragraph 6.3.2.1., amend to read:

"6.3.2.1. The point of intersection (HV) of lines hh and vv shall be situated within the isolux 80 per cent of maximum illumination. This maximum value ($E_{M}$) shall not be less than 32 lux for Class A headlamps, 48 lux for Class B headlamps, and 51.2 lux for Class C headlamps. The maximum value shall in no circumstances exceed 240 lux in the case of Class A and B headlamps and 180 lux in the case of Class C headlamps; in addition, in the case of a combined passing and driving headlamp, this maximum value shall not be more than 16 times the illumination measured for the passing beam at point 75 R (or 75 L)."

Paragraph 6.3.2.2., amend to read:

6.3.2.2. Starting from point HV, horizontally to the right and left, the illumination shall be not less than 16 lux for Class A headlamp and 24 lux for Class B headlamp up to a distance of 1.125 m and not less than 4 lux for Class A headlamp and 6 lux for Class B headlamp up to a distance of 2.25 m.

In the case of a Class C headlamp, the intensities shall conform to the tables C and D in annex 3. Table C applies in the case where a primary driving beam is being produced with a single light source. Table D applies in the case where the driving beam is being
produced by a Secondary driving beam headlamp operated with a harmonized passing beam headlamp or a primary driving beam headlamp."

Annex 3, insert at the end Tables C and D and Figures C and D, to read as follows: 1/

Table C – Primary high beam headlamp

Refer to Figure C for details of test point positions

<table>
<thead>
<tr>
<th>TEST POINT NUMBER</th>
<th>TEST POINT LOCATION</th>
<th>Required illumination in lux</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Min.</td>
</tr>
<tr>
<td>1</td>
<td>H-V (1)</td>
<td>(1)</td>
</tr>
<tr>
<td>2</td>
<td>H-3R &amp; 3L</td>
<td>19.2</td>
</tr>
<tr>
<td>3</td>
<td>H-6R &amp; 6L</td>
<td>6.4</td>
</tr>
<tr>
<td>4</td>
<td>H-9R &amp; 9L</td>
<td>3.84</td>
</tr>
<tr>
<td>5</td>
<td>H-12R &amp; 12L</td>
<td>1.28</td>
</tr>
<tr>
<td>6</td>
<td>2U-V</td>
<td>1.92</td>
</tr>
<tr>
<td>7</td>
<td>4D-V</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>MIN. LUMINOUS INTENSITY OF THE MAXIMUM</td>
<td>51.2</td>
</tr>
<tr>
<td></td>
<td>MAX. LUMINOUS INTENSITY</td>
<td>---</td>
</tr>
</tbody>
</table>

(1) Intensity at H-V shall be equal to or greater than 80 per cent of the maximum intensity in the beam pattern.

(2) Intensity at 4D-V shall be equal to or less than 30 per cent of the maximum intensity in the beam pattern.

1/ Note by the secretariat: Figure C already exists in the current text of the Regulation and shows the measuring points for right-hand traffic. Should new Figure C replace it, or should new Figure C (and Table C?) be renamed?
Table D - Secondary high beam headlamp operated with a harmonized passing beam headlamp or a primary driving beam headlamp

Refer to Figure D for details of test point positions

<table>
<thead>
<tr>
<th>TEST POINT NUMBER</th>
<th>TEST POINT LOCATION</th>
<th>Required illumination in lux</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H-V (1)</td>
<td>(1) ---</td>
</tr>
<tr>
<td>2</td>
<td>H-3R &amp; 3L</td>
<td>19.2 ---</td>
</tr>
<tr>
<td>3</td>
<td>H-6R &amp; 6L</td>
<td>6.4 ---</td>
</tr>
<tr>
<td>6</td>
<td>2U-V</td>
<td>1.92 ---</td>
</tr>
<tr>
<td>7</td>
<td>4D-V</td>
<td>--- (2)</td>
</tr>
</tbody>
</table>

MIN. LUMINOUS INTENSITY OF THE MAXIMUM
MAX. LUMINOUS INTENSITY

(1) Intensity at H-V shall be equal to or greater than 80 per cent of the maximum intensity in the beam pattern.

(2) Intensity at 4D-V shall be equal to or less than 30 per cent of the maximum intensity in the beam pattern.

(3) Table C plus Table D maximum values added together must be no greater than 180 lux.

Figure C
Primary Driving Beam

Points 1-7 refer to those in Table C
Figure D
Secondary Driving Beam

Points 1-7 refer to those in table D