

Economic and Social Council

Distr.: General 6 August 2019

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Eighty-second session Geneva, 22-25 October 2019 Item 5 of the provisional agenda 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 amendment [1] to version [2] of the Consolidated Resolution on the common specification of light source categories (R.E.5)

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 light source categories L1A/6 and L1B/6 in the Consolidated Resolution on the common specification of light source categories (R.E.5). It is based upon the original version of the Consolidated Resolution on the common specification of light source categories (R.E.5) (ECE/TRANS/WP.29/1127) as amended by ECE/TRANS/WP.29/2018/33/Rev.1. There is an associated amendment to Regulation No. 128 (ECE/TRANS/WP.29/GRE/2019/15). The modifications to the existing text of the Resolution 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

The Status table, amend to read:

"Status table

This consolidated version of this Resolution contains all provisions and amendments adopted so far by the World Forum for Harmonization of Vehicle Regulations (WP.29) and is valid from the date as indicated in the following table until the date on which the next revision of this Resolution becomes valid:

		Adopted by WP.29		
Version of the Resolution	Date * as from which the version is valid	Session No.	Amendment document No.	Clarification
1 (Original)	22.06.2017	170	ECE/TRANS/WP.29/2016/111	 Based upon Annexes 1 of Regulations: No. 37, up to and including Supplement 44 No. 99, up to and including Supplement 11 No. 128, up to and including Supplement 5
[2]	[2020-xx-xx]	[180]	[ECE/TRANS/WP.29/2020/xx]	Amendment to light source categories L1A/6 and L1B/6 as a package with Supplement [10] to Regulation No.128

:

This date is the date of adoption of the amendment to the Resolution by WP.29 or the date of entering into force of an amendment to Regulation No. 37, 99 or 128 adopted by AC.1 as a package with the amendment to the Resolution in the same session of WP.29.

..

Sheet L1/2, table, amend to read:

"...

Characteristics of the light-emitting area					
Contrast	200 min.	200 min.			
		400 max.			
Size of light emitting area in relation to size of nominal emitter box ³	75% min.	75% min.			
Uniformity $R_{0.1}$ – surface ratio with luminance exceeding 10% of average luminance	75% min.	85% min.			
Uniformity $R_{0.7}$ – surface ratio with luminance exceeding 70% of average luminance	55% min.	65% min.			
Maximum luminance gradient $G_{50\mu m,max}$ on the "Cut-off" generating side 11	0.20 min.	0.20 min.			
Specific thermal test conditions					
Maximum test temperature					

Notes:

¹ The reference plane is defined on the cap and holder fit system according the IEC Publication 60061.

² The reference axis is perpendicular to the reference plane and concentric with the reference diameter c of the cap, intended passing through the centre of the nominal emitter box in figure 3.

³To be checked by means of the box system in Figure 3.

- ⁵ The emitted light shall be white.
- 6 After continuous operation for 30 minutes at 23 \pm 2.5 °C.

⁸ The Light source shall be rotated in the (measuring) holder until the reference lug contacts the plane as defined with dimension

⁴ A minimum free air space of 5 mm around the light source shall be respected for convection; the connector interface can be neglected.

⁷ The measured value shall be in between 100 per cent and 90 per cent of the value measured after 1 minute.

h from the (measuring) holder.

⁹ The bounded area defined with the dimensions c, k and m defines the maximum outline in relation to the reference system.

¹⁰ LED light source L1A/6 shall be equipped with the right-angle cap and LED light source L1B/6 with the straight cap.

¹¹ Determined according the Annex L of IEC Publication 60809, Edition 4.

Electrical characteristics, failure condition behaviour:

In case of LED light source failure (no light emitted) the maximum electrical current draw, when operated between 12 V and 14 V, shall be less than 20 mA (open circuit condition). "

II. Justification

1. This proposal is part of a package with a related proposal for amendment to Regulation No. 128 to LED forward lighting light sources.

2. In document ECE/TRANS/WP.29/GRE/2019/15 GTB proposes to insert a minimum luminance gradient as an alternative, more direct, requirement on the cut-off generating side of the Light Emitting Area (LEA). Consequently, the category sheet for L1A/6 and L1B/6 needs to be amended to include the associated required minimum values of the luminance gradient.

3. GTB proposes to insert minimum values of the luminance gradient in the table of Sheet L1/2, together with the addition of associated footnote 11.