

Transmitted by the expert from OICA

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PROPOSAL FOR DRAFT AMENDMENTS TO REGULATIONS Nos. 48 AND 87

Installation of lighting and light-signalling devices -
Daytime running lamps

Transmitted by the expert from OICA

Note: The text reproduced below was prepared by the expert of OICA in order to amend Regulations Nos. 48 and 87 regarding colour of daytime running lamps. The suggested amendments to the Regulations are marked in **bold** characters.

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

A. PROPOSAL OF AMENDMENT TO UNECE REGULATION No. 48

Paragraph 5.15., amend to read:

"5.15. The colours of the light emitted by the lamps are the following:
...
end-outline marker lamp: white in front, red at the rear
daytime running lamp: white **or amber**
rear retro-reflector,
non- triangular: red
..."

Paragraph 6.19.7., amend to read (addition of a new sub-paragraph at the end):

"6.19.7. Electrical connections
...
The daytime running lamp shall switch off automatically when the headlamps are switched on, except when the latter are not used to give intermittent luminous warnings at short intervals.

The daytime running lamp, if combined or reciprocally incorporated with a front direction indicator, shall switch off automatically as long as the front direction indicator is activated. It shall also switch off automatically as long as the hazard warning signal is activated."

B. PROPOSAL OF AMENDMENT TO UNECE REGULATION No. 87

Insert a new paragraph 7.5., to read:

"7. INTENSITY OF LIGHT
...
7.5. All measurements shall be made with an un-coloured or amber coloured standard filament lamp of the category prescribed for the device, the supply voltage being so regulated as to produce the reference luminous flux prescribed for that category of lamp."

Paragraph 9., amend to read (deletion of the first sub-paragraph):

"9. COLOUR OF LIGHT

~~The colour of the light emitted inside the field of the light distribution grid defined at paragraph 3. of annex 3 shall be white. It shall be measured by using a source of light at a colour temperature of 2856 K (corresponding to illuminant A of the International Commission on Illumination, CIE). However, for lamps equipped with non-replaceable light sources (filament lamps and other), the~~

~~colorimetric characteristics should be verified with the light sources present in the lamp, in accordance with paragraph 10.2. of this Regulation.~~

The colour of the light emitted inside the light distribution grid defined at paragraph 5. of Annex 3 must be within the limits of the trichromatic co-ordinates prescribed in Annex 4 to this Regulation. Outside this field no sharp variation of colour shall be observed."

Annex 4., amend to read:

"Annex 4

COLOUR OF LIGHT

TRICHROMATIC COORDINATES

WHITE

Limit towards blue:	$x \geq 0.310$
Limit towards yellow:	$x \leq 0.500$
Limit towards green:	$y \leq 0.150 + 0.640 x$
	$y \leq 0.440$
Limit towards purple:	$y \geq 0.050 + 0.750 x$
Limit towards red:	$y \geq 0.382$

CORNER POINTS

<u>X</u>	<u>Y</u>
0.310	0.348
0.310	0.283
0.433	0.382
0.500	0.382
0.500	0.440
0.433	0.440

AMBER

Limit towards green:	$y \leq x - 0.120$
Limit towards red:	$y \geq 0.390$
Limit towards white:	$y \geq 0.790 - 0.670 x$

For checking these colorimetric characteristics, a source of light at a colour temperature of 2,856 K corresponding to illuminant A of the International Commission on Illumination (CIE) shall be used in conformity with the Convention on Road Traffic (E/CONF.56/16/Rev.1).

However, for lamps equipped with non-replaceable light sources (filament lamps and other), the colorimetric characteristics should be verified with the light sources present in the lamp, in accordance with paragraph 10.2. of this Regulation."

C. JUSTIFICATION

Regulations from USA, Canada and Australia permit white or amber colour for daytime running lamps (DRL). UNECE Regulation only permits white colour, which makes for instance the use of direction indicators lamps forbidden as DRL. This proposal could enlighten the harmful consequences of the current stringent prescription for what concerns safety, economy and industry:

- space competition to implement the functions in front of the vehicle;
- increase of lamps failure statistics;
- increase of complexity concerning electrical network;
- multiplication of versions depending on the vehicles destinations;
- ...

If combined or reciprocally incorporated with direction indicator lamps, DRL can adopt the same operation which has been proved efficient during many years of practice in North-America, pursuant to FMVSS 108, paragraph *S5.5.11. (a) (5)*.
