



Economic and Social Council

Distr.: General
22 December 2023

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

192nd session

Geneva, 5–8 March 2024

Item 4.9.12 of the provisional agenda

1958 Agreement:

Consideration of draft amendments to existing

UN Regulations submitted by GRE

Proposal for Supplement 2 to the 01 series of amendments to UN Regulation No. 150 (Retro-reflective devices)

Submitted by the Working Party on Lighting and Light-Signalling*

The text reproduced below was adopted by the Working Party on Lighting and Light-Signalling (GRE) at its eighty-ninth session (ECE/TRANS/WP.29/GRE/89, paras. 9 and 32). It is based on ECE/TRANS/WP.29/GRE/2023/16 and ECE/TRANS/WP.29/GRE/2023/21. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration at their March 2024 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2024 as outlined in proposed programme budget for 2024 (A/78/6 (Sect. 20), table 20.5), 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.



Table 6, amend to read:

“Table 6
Minimum values for the Coefficient of Retro-reflection R_A

Observation angle α [°] $\alpha=0.33(20')$	Minimum values for the Coefficient of Retro-reflection R_A in $cd\cdot m^{-2}\cdot lx^{-1}$						
	Entrance Angle β [°]	Vertical β_1	0°	0°	0°	0°	0°
		Horizontal β_2	5°	20°	30°	40°	60°
Class C	Yellow		$3.00\cdot 10^2$	--	$1.30\cdot 10^2$	$7.5\cdot 10^1$	$1.0\cdot 10^1$
	White		$4.50\cdot 10^2$	--	$2.00\cdot 10^2$	$9.5\cdot 10^1$	$1.6\cdot 10^1$
	Red		$1.20\cdot 10^2$	$6.0\cdot 10^1$	$3.0\cdot 10^1$	$1.0\cdot 10^1$	--
Class F, 5	White		$4.50\cdot 10^2$	--	$2.00\cdot 10^2$	$9.5\cdot 10^1$	$1.6\cdot 10^1$
	Red		$1.20\cdot 10^2$		$3.0\cdot 10^1$	$1.0\cdot 10^1$	$2\cdot 10^0$
Class 1, 2, 3, 4	Yellow		$3.00\cdot 10^2$	--	$1.80\cdot 10^2$	$7.5\cdot 10^1$	$1.0\cdot 10^1$
	Red		$1.0\cdot 10^1$	--	$7\cdot 10^0$	$4\cdot 10^0$	--
Class SMV	Red of the outer border (class 1, 2)		$1.20\cdot 10^2$	$6.0\cdot 10^1$	$3.0\cdot 10^1$	$1.0\cdot 10^1$	--
	Red of the enclosed triangle (class 2)		$1.0\cdot 10^1$	$7\cdot 10^0$	$4\cdot 10^0$	--	--

Note: If the sample is provided with an orientation mark, the specified values must only be observed for this orientation. Test samples without an orientation mark must be observed for values at 0° and 90° orientations as well.”

Annex 1, item 9, amend to read:

- “9. Concise description:
 In isolation/part of an assembly of devices: ²
 Colour of light emitted: white/red/amber: ²
 Installation as an integral part of a lamp, which is integrated into the body of a vehicle: yes/no²
 Geometric conditions of installation and relating variations, if any:
 Only for limited mounting height of equal to or less than 750 mm above the ground: yes/no²”

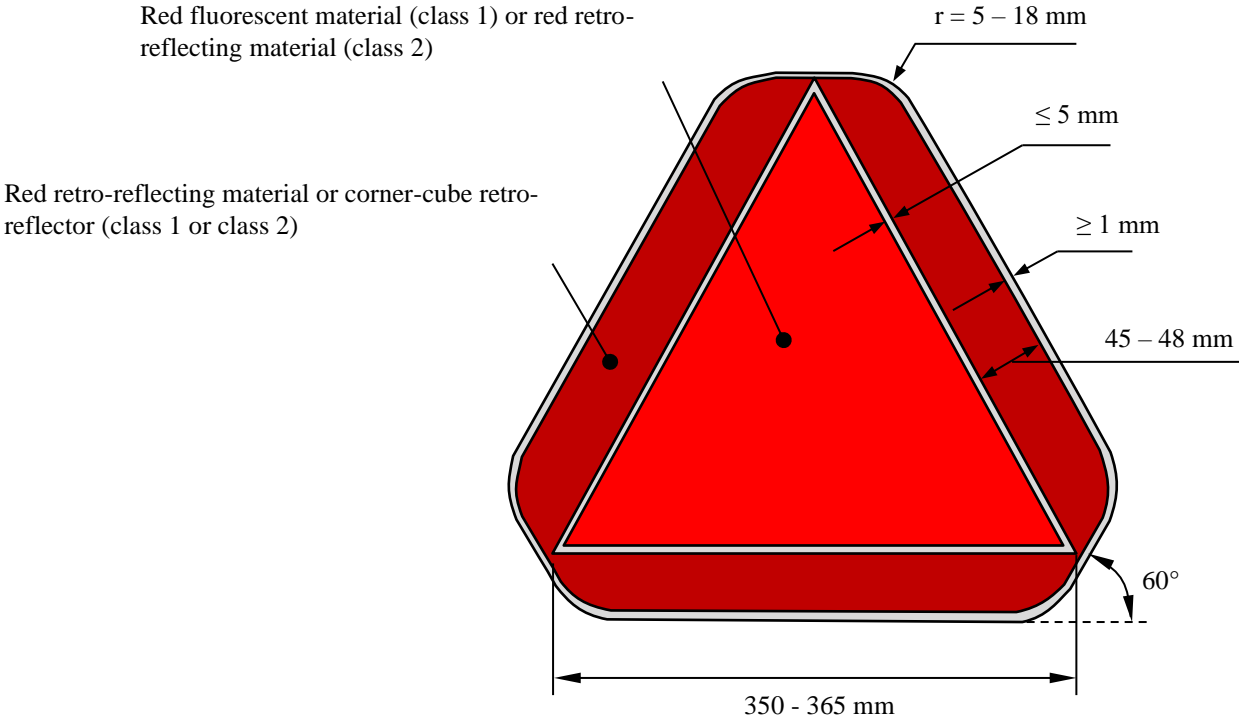
Annex 5,

Paragraph 7.3., amend to read:

- “7.3. Dimensions
 The length of the base of the enclosed fluorescent triangle (class 1) or retro-reflective triangle (class 2) shall be: minimum 350 mm and maximum 365 mm. The minimum width of the light-emitting surface of the red retro-reflective border shall be 45 mm, the maximum width 48 mm. These features are illustrated in the example of Figure A5-VII.”

Figure A5-VI “Example of a slow-moving vehicle plate”, amend to read:

“Figure A5-VII
Example of a slow-moving vehicle plate



Annex 6,

Part 1, paragraph 1, amend to read:

- “1. Test procedure in the case of moulded plastics reflectors of retro-reflecting devices as Classes IA, IB, IIIA, IIIB, IVA, SMV and advance warning triangle of type 1:
 ...”

Part 1, paragraph 2, amend to read:

- “2. Test procedure in the case of use of flexible materials for Classes C, D, E, F, Marking plates of Classes 1, 2, 3, 4, 5 and advance warning triangle of type 2:
 ...”

Part 6, paragraph 3, amend to read:

- “3. The samples shall be exposed in accordance with EN ISO 4892-2:2013 using the parameters given in Table A6-1:
 3.1. in case of retro-reflective devices for a period of 500 hours,
 3.2. in case of fluorescent materials for a period of 100 hours.”