

20 Retro-reflective markings :

20.1 Retro-reflective markings: means reflection-identifying material on vehicle, used to enhance the identifying ability at nighttime.

20.2 Effective date and Scope: As for the reverse triangle yellow portion of right and left sides and rear for vehicle of child-only vehicle and school bus, the vehicle types as of 2001/7/1, shall comply with this regulation.

20.3 Retro-reflective markings shall according to suitable types and range of principle: except for the brand and type series shall be the same, and also the same material, structure and installing ways.

20.4 Description of the function and specification: it shall describe material, structure and installing ways.

20.5 Inspection standard:

20.5.1 Color: shall be located within the following trichromatic coordinates

Color	Yellow		
		X	Y
Range of trichromatic coordinates	1	0.545	0.454
	2	0.487	0.423
	3	0.427	0.483
	4	0.465	0.534

20.5.2 Retro-reflection performance: shall comply with the following requirements.

Observe angle	0.33 degree (20')			
Vertical incident angle	0 degree			
Horizontal incident angle	+5 degree	+30 degree	+40 degree	+60 degree
	-5 degree	-30 degree	-40 degree	-60 degree
Minimum values for the yellow of Retro-reflection Unit: Cd/lx-m ²	300	130	75	10

The official directions are written in Chinese, this English edition is for your reference only.

20.5.3 Weathering test:

Use Xenon arc lamp to light up, the illuminating time used is equivalent to the lighting time that makes the standard blue-7 cloth sample fade to gray-4. After the light-bake, the specimen shall comply with the following requirements:

20.5.3.1 No swelling, bubble, crack, peel-off, twist, spot or corrosion found on the specimen surface.

20.5.3.2 The color shall be within the range of trichromatic coordinates specified above.

20.5.3.3 At the condition of 0.33 degree-observation angle and +5 & -5 degree entrance angle, the minimum values for the yellow of retro-reflection shall be greater than $240 \text{ Cd} \cdot \text{lx} \cdot \text{m}^2$.