

PROPOSAL FOR DRAFT AMENDMENTS (SUPPLEMENT 4)
TO REGULATION No. 65

Special warning lamps

Transmitted by the Expert from Germany

A PROPOSAL:

The new paragraphs 6.2. to 6.3.1.2..., amend to read:

"6.2. The effective luminous intensity J_e within the relevant vertical angles for a special warning lamp (Category T) shall be as specified in the table below:

			Colour	
			blue	amber
Minimum value of the effective luminous intensity J_e , within the specified vertical angles and a horizontal angle of 360° around the reference axis	0°	by day	105	230
		by night	42	100
	± 4°	by day	55	--
		by night	22	---
	± 81°	by day		168
		by night		67
Maximum value of the effective luminous intensity J_e .	inside :E 2'	by day	2000	
		by night	1000	
	inside :E 811	by day	1500	
		by night	600	
	Outside the above areas	by day	1000	
		by night	300	

6.3. The effective luminous intensities in the reference axis for a directional flashing lamp (Category X) shall be as specified in the table below:

Colour blue		Colour amber	
Minimum value of the effective luminous intensity J_e in the reference axis	H = 0, v=00	by day 200	400
		by night 100	200
Maximum value of the effective luminous intensity J_e ,	inside H = ±100 V = ±40	by day 2000	
		by night 1000	
	inside V = ±80	by day 1500	
		by night 600	
	Outside the above areas	by day 1000	
by night 300			

B JUSTIFICATION:

At the forty-fourth session of GRE in April 2000, agenda item 2.8, TRANS/WP19/GRE/44, paragraph 40 to 43, GRE has had a discussion about the proposed maximum value of the effective luminous intensity J_e with 2000 ed

by day and 1000 ed by night. The maximum value of the effective luminous intensity J_e , as required in the existing regulation is 1680 ed by day and 670 ed by night. The Experts of the United Kingdom has reported about an investigation which results that maximum values as proposed in the Document TRANS 1 W.29 1 GRE 1 1999 1 10/Rev.1 could causing glare, because there was no limitation in the area of geometrical visibility. Therefore exist the danger that an oncoming driver, which is relative close to the vehicle with such a special warning lamp or is passing this vehicle could be glared by this lamp. This glare situation could be defused by restriction of the angular area in which the higher maximum will be used. This is completely in line with the application, because the need of high luminous intensities is necessary for the visibility of this signal in far distances and there is no glare in this situation. But the warning signal is good visible! The maximum values proposed by the Experts of the United Kingdom with 1000 ed by day and 300 ed by night are relative low and not comparable with a good visibility of a warning signal in large distances, but applicable for areas with short viewing distances (large vertical angles) at which a good conspicuity is given with values lower than these maximums.

The text reproduced below was prepared by the Experts from Germany in order to prevent the possible glare situation in the near field and to get a good visibility in the far field. Such far-field visibility is needed for vehicle applications on highways and gives industry the possibility to develop special warning lamps especially for such difficult applications. The maximum values for the area inside $V = \pm 8'$ are rounded figures of values as specified in the regulation.