36 Parking lamps

Refer to: R77 00-S13

36.1 Effective date and Scope:

36.1.1 From 2006/7/1, the new vehicle variants of category symbols M, N and O, and from 2008/7/1 all vehicle variants of category symbols M, N and O, shall comply with this regulation and shall be use bulbs that is conform with ”Filament lamps“ of this Direction.

36.1.2 For the vehicles imported by authorities, organizations, institutes or individuals for self-use only could exempt from Regulation of “parking lamps”.

36.1.3 For the low volume type safety approval, maximum 20□deviation of the levels of intensity standard of this test is allowed, and if the light source is LED, it can omit the failure conditions test.

36.2 Parking lamps means the lamp used to draw attention to the presence of a stationary vehicle.

36.3 Parking lamps shall according to suitable variants and range of principle：

36.3.1 Brand

36.3.2 The characteristics of the optical system (levels of intensity, light distribution angles, category of filament lamp, light source module, etc.)，however，if bulbs or filter’s color is change that it doesn’t mean to change the variants.

36.4 Photometric measurements：

36.4.1 In the reference axis, intensity of forward facing parking lamps

Minimum (cd): 2

Maximum (cd): 60

36.4.2 In the reference axis, intensity of rearward facing parking lamps

Minimum (cd): 2

Maximum (cd): 30

In the case where a device is intended to be installed at a mounting height of equal to or less than 750 mm above the ground, the photometric intensity is verified only up to an angle of 5 degrees downwards.

36.4.3 In the case of a single lamp containing more than one light source, the lamp shall comply with the minimum intensity required when any one light source has failed and when all light sources are illuminated the maximum intensity shall not be exceeded. All light sources connected in series are considered to be one light source.

36.4.4 Within the field of light distribution schematically shown as a grid in Figure 1, the light pattern should be substantially uniform.

36.4.5 Outside the reference axis and within the angular fields, the intensity of the light emitted shall, in each direction corresponding to the points in the luminous intensity distribution reproduced in Figure 1, be not less than the value shown in the said figure for the

direction in question, expressed as a percentage of the minimum specified in paragraph 36.4.1 and 36.4.2. In any direction within the space from which the light in question is visible, not exceed the maximum specified in paragraph 36.4.1 and 36.4.2.

36.4.6 A luminous intensity of 60 cd shall be permitted for parking lamps directed to the rear reciprocally incorporated with stop-lamps below a plane forming an angle of 5° with and downward from the horizontal plane.

36.4.7 Angles required for light distribution in space of the lamps: Horizontal angles are shown in Figure2 and Figure3. In all cases, the minimum vertical angles of light distribution in space are 15 degrees above and 15 degrees below the horizontal except for lamps with a mounting height of equal to or less than 750 mm above the ground, for which they are 15 degrees above and 5 degrees below the horizontal.

36.4.8 In the case of light source modules, it shall be checked that:

36.4.8.1 The design of the light source module(s) shall be such as:

36.4.8.1.1 that each light source module can only be fitted in no other position than the designated and correct one and can only be removed with the use of tool(s);

36.4.8.1.2 If there are more than one light source module used in the housing for a device, light source modules having different characteristics can not be interchanged within the same lamp housing.

36.4.8.2 The light source module(s) shall be tamperproof.

36.4.8.3 A light source module shall be so designed that regardless of the use of tool(s), it shall not be mechanically interchangeable with any replaceable approved light source.

36.5 Trichromatic coordinate：The colour of the light emitted inside the field shall be red, white or orange（amber）defined in “The installation of lighting and light-signaling devices” of “Directions”（see Figure 1）, For checking those colorimetric characteristics, a source of light at a colour temperature of 2,854 K corresponding to illuminant A of the International Commission on Illumination (CIE) shall be used. Outside this field, no sharp variation of colour shall be observed. 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.

36.6 In the case of replaceable filament lamp(s):

36.6.1 Any category or categories of filament lamp(s) approved according to 「Filament lamps」 may be used, provided that no restriction on the use is made in 「Filament lamps」 and its series of amendments in force at the time of application for type approval.

36.6.2 The design of the device shall be such that the filament lamp can be fixed in no other position but the correct one.

36.6.3 The filament lamp holder shall conform to the characteristics given in IEC Publication 60061. The holder data sheet relevant to the category of filament lamp used, applies.

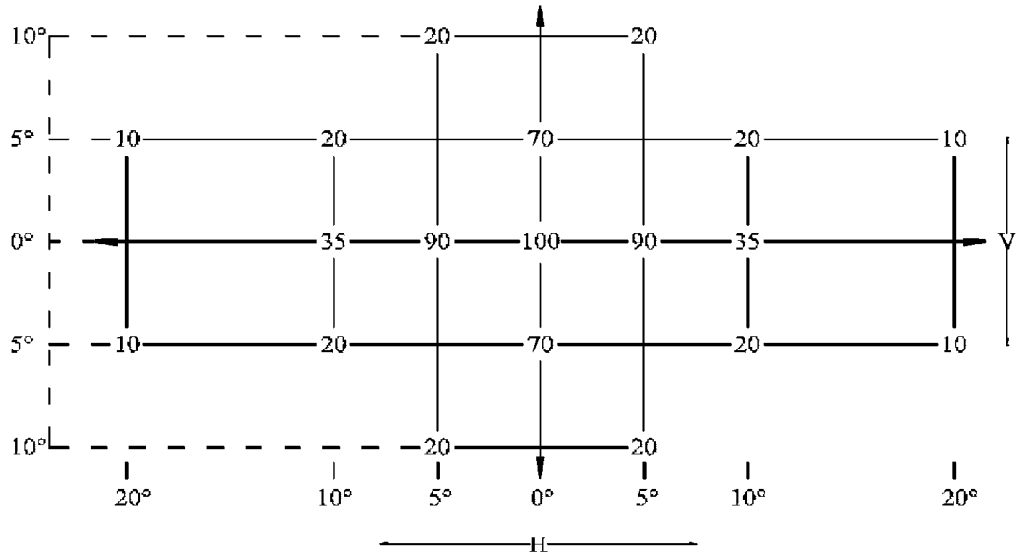

Figure 1. The minimum light intensity distribution of angular positions in percentage

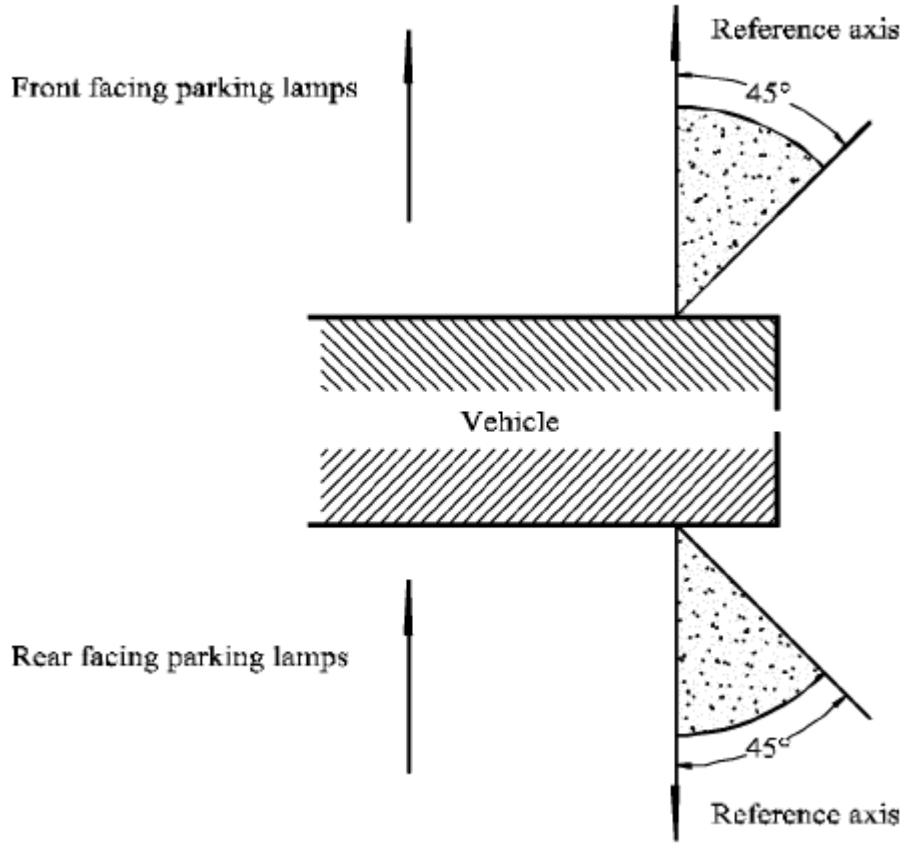

Figure 2. Horizontal angles required for the light distribution in space (1)

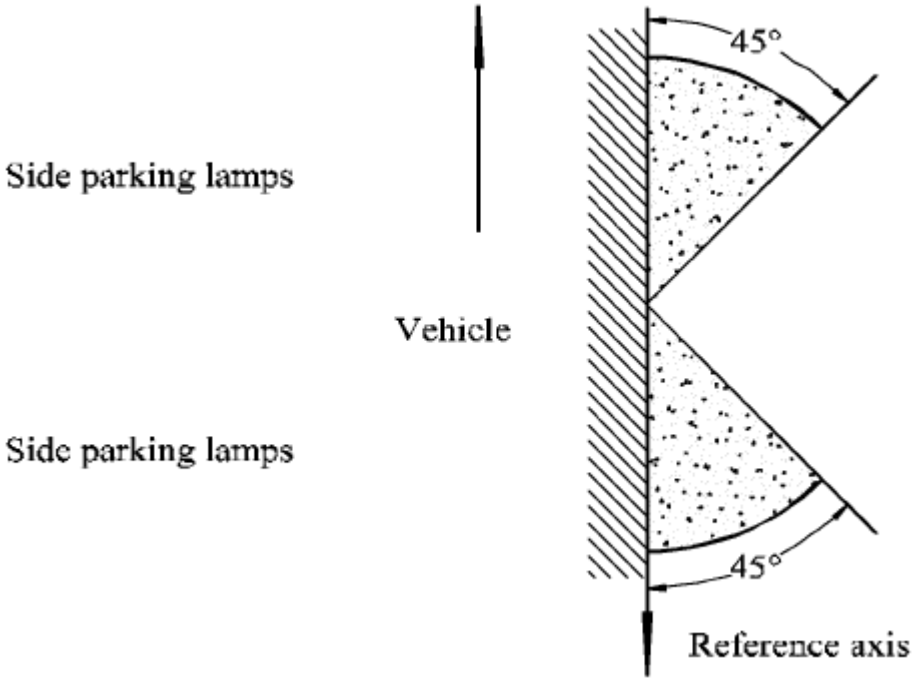

Figure 3. Horizontal angles required for the light distribution in space (2)