

Proposed amendments to Regulation No.53

The modifications to the current text of Regulation No.53 are marked in **bold** or ~~striketrough~~ characters.

A. PROPOSAL

Paragraph 5.13. amend to read:

5.13. Colours of the lights

The colours of the lights referred to in this Regulation shall be as follows:

.....

front position lamp: white **or amber**

Paragraph 6.3.7., amend to read:

6.3. DIRECTION-INDICATOR LAMP

6.3.7. May not be "reciprocally incorporated" with any other lamp, **except amber front position lamp.**

Paragraphs 6.6.1. and 6.6.7., amend to read:

6.6. FRONT POSITION LAMP

6.6.1. Number

One or two

if coloured white

or

Two (one per side)

if coloured amber

6.6.7. Other requirements

~~None.~~

When the front position lamp is reciprocally incorporated in the front direction indicator lamp, the position lamp, on the same side as the direction indicator lamp or on the both sides, shall be switched off only when the direction indicator lamp is flashing.

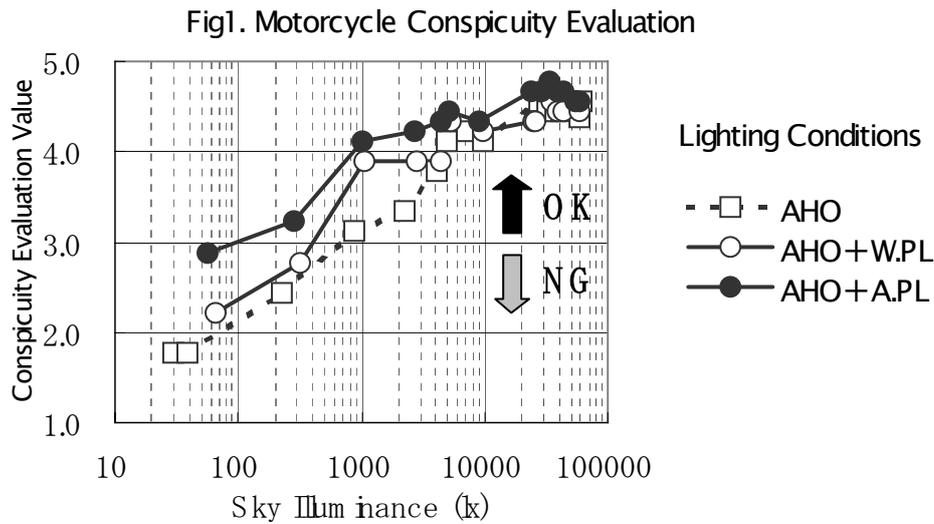
B. JUSTIFICATION

1. Addition of the amber colour to the colours of the front position lamp

For the purpose of adopting ECE R53 in Japan, we propose to add the amber colour to the colours allowed for the front position lamp.

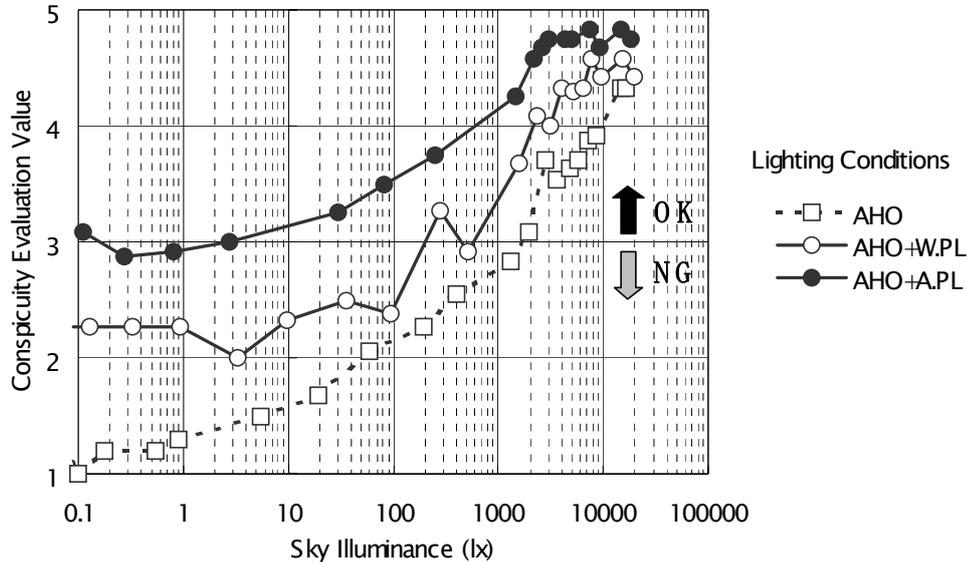
The use of the amber front position lamp is allowed in Japan, the United States, etc., where there are no safety problems, and there appear to be no demerits with the amber colour.

The results of the conspicuity evaluation for motorcycles followed by four-wheeled vehicles with DRL on (Fig. 1) indicate higher motorcycle conspicuity evaluation values for the lighting condition of AHO + amber position lamp than that of AHO only. The effect of the amber position lamp on the improvement of conspicuity is especially prominent under conditions where sky illuminance is low (about 5,000 lm or below). (For details, see “GRE-60-XX.”)



Furthermore, in the case of night driving where four-wheeled vehicles use the passing beam instead of DRL when following motorcycles, the results of the conspicuity evaluation for those motorcycles (Fig. 2) also show higher conspicuity evaluation values for the lighting condition of AHO + amber position lamp than that of AHO only. (For details, see “GRE-60-??.”)

Fig. 2 Motorcycle Conspicuity evaluation



2. Acceptance of the direction indicator lamp reciprocally incorporated with the amber front position lamp

We propose this amendment for the purpose of adopting ECE R53 in Japan.

If the amber colour is allowed to be used in the front position lamp, it will become possible for the direction indicator lamp and the front position lamp to share a lens, enabling manufacturers to reduce lamp installation space and to benefit users by offering inexpensive lamps. To achieve this, we propose that the reciprocal incorporation of the indicator lamp with other lamps be allowed only for the amber front position lamp. The use of this reciprocally-incorporated lamp is allowed in Japan, the United States, etc., where there are no major safety problems, and there appear to be no demerits, either.

In addition, considering the conspicuity of direction indicator lamps, we propose that, when a direction indicator lamp is activated, the front position lamp be switched off on the side of the flashing indicator or on both sides.
