

Position paper on the LED retrofit light sources proposal from TF SR

OICA would like to highlight a number of concerns which it sees as a risk with the TF S/R proposal when LED retrofit light-sources are installed in the aftermarket.

We list a few of our concerns below:

- The beam pattern from LED retrofit light sources is significantly different, with more light in the far-field and less in the near-field of the vehicle. There is an increase of around 30% more light in the far-field compared with standard Halogen light-sources. This is a change of beam pattern that usually requires at minimum an extension, or even a new type-approval.
- For near-field illumination, the beam pattern is not as strictly regulated as far-field, but this is still a comfort substantial area defined in individual vehicle manufacturer specifications. The reduction of light in this area could lead to less visibility on relatively close roadside objects, e.g. pedestrians crossing in front of the vehicle and an increase in driver drowsiness.
- Halogen headlamps are usually used in already registered vehicles with a manual levelling device. The situation will be the same as today with the potential misuse of the manual levelling device, but the resulting level of glare will be higher. This will likely lead to an increase in glare complaints from other road users who, will not be able to determine if the cause is from the original equipment light source or from an LED retrofit light source. The knock-on effect of potential reputational damage to vehicle manufacturers should also be considered.
- We are not confident that all EMC aspects have been considered. Have the light sources been verified for electromagnetic emissions and immunity?

OICA is not opposed to the general principle of LED retrofit light sources. Vehicle manufacturers will not accept responsibility for any issues arising from the installation of such components.

OICA wishes that this position paper will be recorded in the GRE 90th session report.