

GTB internal process For introduction and evaluation of new light source categories

Introduction

At its fifty-seventh session, GRE accepted an amendment to Regulation No. 37 GRE/2007/17 (Supplement 30 to the 03 series of amendments, WP.29/64 + Add.1), which covered a new system of restrictions. The essence of this proposal was to group categories of light sources in accordance with their suitability for use in lighting devices and to reduce the numbers of footnotes indicating use restrictions. GTB would prepare further amendments and transitional provisions, if needed.

Status

In the mean time GTB has developed an internal procedure for proposing new light source categories and a supporting tool of criteria for evaluation of the suitability of light sources for lighting devices. All of this comprised by a package of documents, consisting of:

- This general overview; (*GTB reference: CE-4233*)
- A flow chart describing the GTB process (*GTB reference: CE-4179 Annex 1*);
- A description to the flow chart: "Recommended practice for the introduction of new ECE light source categories" (*GTB reference: CE-4179 Annex 2*);
- The "criteria tool", in the form of a table completed with reference data (*GTB reference: CE-4234*);
- A usage manual for the criteria tool (*GTB reference: CE-4179 – Annex 4*);
- A form to be completed with new proposals to be able to maintain the reference data (*GTB reference: CE-4179 – Annex 5*).

The way forward

As a conclusion from the discussion on grouping of categories filament lamps and the discussion on the application of the criteria tool for evaluating suitability of light source categories for lighting devices, GTB considers initiating a general review of the purpose and scope of Regulation No. 37. The following items need particular attention:

- Is Regulation No. 37 a reference book for filament light source categories complying with minimum requirements necessary for traffic safety or a list of selected light source categories complying with the highest standards/ state-of-the-art technology?

- What are the specific/objective and general criteria for incorporation in Regulation No.37, to be applied to all new/existing light source categories?

This discussion should not be restricted to the experts in GTB and its Working Group Light Sources but should involve also the GRE experts, in particular the Contracting Parties applying Regulation No. 37.

Information

The evaluation criteria that are applied to filament lamps of *normal* production as specified by the data sheets are listed as follows:

1. The values of:
 - a. The objective luminous flux
 - b. The filament length (nominal, minimum, maximum)
 - c. A single accuracy parameter, calculated from the tolerances as below.
2. The tolerances of:
 - a. The objective luminous flux
 - b. The filament length
 - c. The filament position re to the reference axis and reference plane.
3. Necessary data to determine the tolerances
 - a. The shape and dimensions of the tolerance box, if any
 - b. The diameter of the filament, or an assumption in case of relative data.
4. The avoidance of stray light images by:
 - a. The specification of the distortion free area
 - b. The specification of the metal free zone
 - c. The displacement of the bulb-axis vs. filament axis (only possible for axial filaments)
 - d. The specification of a possible opaque top.
5. The year of introduction
(More precise: the year of enforcement of the amendment to Regulation 37 introducing the new light source category).
6. Use restrictions, if any, on top of the grouping of light source categories.

Example of one of those criteria

