Suggested Specification: UEL

The elevated unidirectional approach, threshold and/or runway end, or supplementary stop bar high-intensity elevated light, or flashing light shall be in compliance with ICAO Annex 14, Volume I, for use in Cat. I, II and III.

The light unit shall meet the approach, threshold and threshold wing bar photometric specifications with a lamp of 150 W max. For the runway end and the supplementary stop bar lights the lamp power will be limited to respectively 100 W and 45 W only. The expected lamp life shall not be less than 1000 hours at full intensity (3 600 000 flashes for the flashing lamp).

The design and construction shall take the main mechanical requirements of FAA AC 150/5345-46 and E-982 specification into account. The weight of the light unit, including lamp and glassware shall not exceed 1.7 kg. In order to improve its frangibility and resistance against jet blast or wind load, the front area surface of the fitting will be as low as possible.

The fitting shall include a hinged and removable front optical cartridge to facilitate maintenance and re-lamping either on site or in the maintenance base. The optical components shall be housed in an optical cartridge held together and sealed by just one gasket. No readjustment of the light fixture shall be needed afterwards. No tools shall be required for dismantling and reassembling the optical cartridge or for re-lamping.

The optical system shall consist of a high purity aluminum reflector, a tungsten halogen or xenon discharge lamp and a front glass appropriate to its function. Separate colour filters outside the fitting shall be prohibited.

The design of the fitting shall allow to mechanically protect the supply cable over its complete run from transformer to lamp. A cable stress reliever shall be included to avoid traction on the lamp wires.

The light design shall allow its installation either at ground level on a breakable coupling, on any conduit or safety (frangible) mast with a 60 mm O.D. mounting interface. Fixation on this support shall require only one screw.

All components shall be made out of temperature and UV-resistant material, suitably protected against corrosion. Plain stainless-steel hardware shall be used throughout.

The elevation setting shall be easy, and shall remain stable in time by making use of two lockable adjustment screws, working in opposition.

The protection degree of the fitting shall be min. IP 43 or better.

The light unit shall be available, combined with a low-intensity omnidirectional light to form a high-intensity/low-intensity system.