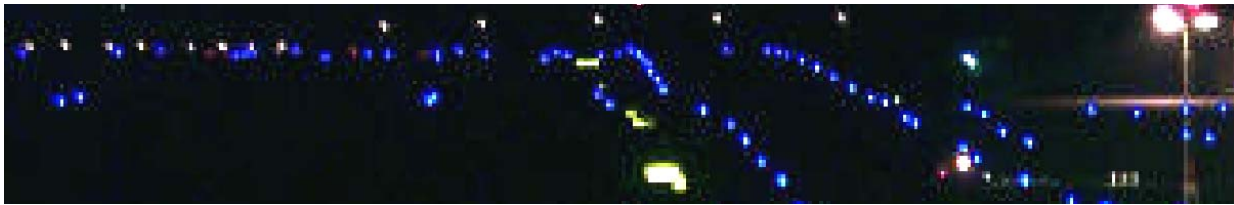


LLS Led Lighting System

Taxiway lighting

Quality and availability

The quality and availability of an airfield lighting system relies on the quality of the lamps used. Furthermore, the lamps replacement represents a significant part of the operating costs of the airfield ground lighting department (both in terms of supply and main tenance costs) . Halogen lamp life is given at 1000 hours or at best 1500 hours.



80,000 hours life time lighting

Using the latest achievement in terms of LED technology, FB Technology manufactures a revolutionary system of lighting allowing for 80,000 hours life time. The LLS has been FAA approved.

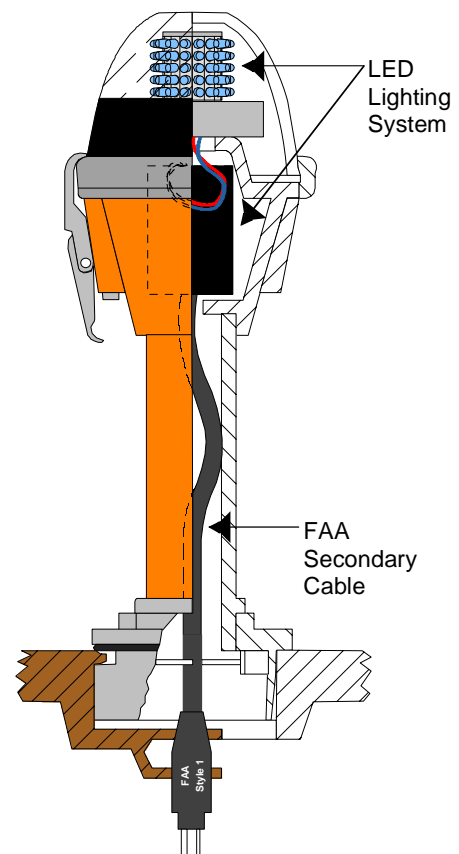


FAA CERTIFICATE
n°073085-1
February 10th, 2003

The FB Technology design is such that the **LLS** can be installed by simply replacing the existing halogen lamp, keeping existing transformers and connections.

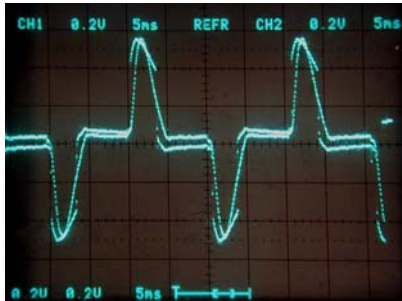
The **LLS** can be installed on any existing fitting accepting the standard clear glass for application as Taxiway Edge Omni directional low-intensity elevated light.

The **LLS** is made up of a group of blue High Intensity Long Life LED's installed on a specially developed cylindrical circuit and supplied through a specific converter that can be plugged directly to a standard Airfield Lighting Isolating Transformer.



LLS Led Lighting System

Taxiway lighting



Oscilloscope view of the signals taken on a Pk30d 45W lamp and on a LLS supplied from a CCR (different voltages scales).

The signal from the LLS shows that LLS behaviour is identical to an halogen lamp.



Advantages

- No maintenance with more than 80,000 hours life time by using long life LED's and the converter protecting the system
- Very low consumption < 10W
- Easy installation by replacing existing halogen lamps using existing fitting with glassware and aluminium body
- No additional heater required for cold weather operations
- No requirement for changing or modifying the AFL Primary circuits
- No interference on the CCR with its special converter.



Compliance

- ICAO Annex 14, Volume 1 2nd Edition paragraph 5.3.16
- FAA AC 150/5345 - 46A L-861T
- STNA



All our products are compliant with ICAO, FAA, STNA standards and recommendations.