



# **REFLECTOR LONG LIFE**

## **Guaranteed up to 60,000 Hours**

The Aura Reflector LL is a 26mm diameter long life fluorescent lamp contained in an outer glass tube (T12 38mm) which gives three times longer service life than standard lamps. Inside the outer tube a reflecting layer of 160° is integrated horizontally to the socket pins allowing light to be directed to the area where it is required

Based on Ultimate LL, Reflector LL is available in high colour rendering triphosphor range (Ra 85).

With the basic 26mm diameter Ultimate LL the two special patents for the unique cathode construction and the inside protection layer are used.

The design, together with strict quality controls during the high precision manufacturing process, provides a fluorescent lamp that solves special lighting requirements.

Operation is possible in all types of luminaries either by conventional or low loss ballast and starter or electronic HF ballast.

The outer glass tube provides the same thermal insulation effect as Thermo LL with a high lumen output at low ambient temperatures.



### Long Life Lights

The Long Life Lights concept comprises light sources with extra long service life. The concept is the result of innovative product development and rigorous quality control. For our customers, the unique service life means that light sources do not need to be changed so often, which reduces their maintenance costs. The products in the concept are therefore an investment for our customers and for the environment. Products such as fluorescent tubes and light bulbs are developed, manufactured and sold within the framework of the Long Life Lights concept.



Unit H Hillcroft Business Park, Whisby Road, Lincoln LN6 3QT

Tel: 0845 25 70 444 Fax: 0845 25 70 545 E Mail: [sales@greenstock.co.uk](mailto:sales@greenstock.co.uk) Web Site: [www.greenstock.co.uk](http://www.greenstock.co.uk)

**The Greenstock Lamp Company**

# REFLECTOR LONG LIFE

## Applications

Reflector LL is developed for use in dusty and cold environments where lamp replacement is complicated and directed light is requested. In these areas it is impossible to install reflector luminaires because of the high degree of dirt which reduces the light output.

An additional use for the Reflector LL is indirect lighting where the lamp has to be fixed in a way that the light is directed into the fitting or onto the ceiling.

Application areas are industrial facilities, eg car industry, colour industry, sawmills, foundries, car parks, sign boards and cold stores.

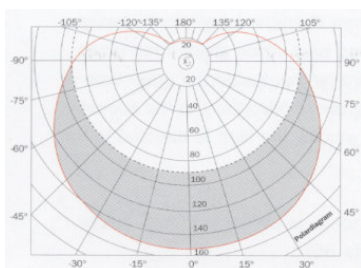
## Lifetime

The service life of Reflector LL high colour rendering triphosphor range Ra 85 is 46,000 hours for 18W, 36W and 58W for the most used light colours. The service life is reached when the amount of light in an installation falls to 70% of the initial 100 hour value.

## Light distribution curve (cd/1000 lm)

- ⊗ Lightsource
- - - 26mm tube
- Reflector Long Life

Reflector LL gives 2/3 more light intensity compared to a standard 26mm fluorescent lamp without reflector.



The service life of the lamp failure rate and the lumen depreciation are calculated according to IEC/EN 60081, which is based on a three hour operation switching cycle. When operated by electronic ballast (warm start) the service life for these triphosphor lamps is extended to 60,000 hours.

## Long Life Guarantee

The Aura long life fluorescent lamps are manufactured in accordance with IEC/EN 60081. For economical reasons Greenstock recommends group replacement of fluorescent lamps.

With group replacement Aura guarantees the following service life:

|                                        |                     |
|----------------------------------------|---------------------|
| <b>Reflector LL</b>                    |                     |
| <b>Ultimate 18W, 36W 58W:</b>          | <b>46,000 Hours</b> |
| <b>Ultimate 30W:</b>                   | <b>36,000 Hours</b> |
| <b>Ultimate Daylight 18W, 36W, 58W</b> | <b>46,000 Hours</b> |



## PRODUCT INFORMATION

| Cap: G13 Type | Colour   | Colour Temp (K) | Luminous Flux (lm/100h) | Luminous Efficacy (lm/W) | Diameter (mm) | Length without Pins (mm) | Packing Unit (pcs) | Lifetime (hrs) | Art No  | Colour Rendering Ra |
|---------------|----------|-----------------|-------------------------|--------------------------|---------------|--------------------------|--------------------|----------------|---------|---------------------|
| 18W/830       | W White  | 3000            | 1150                    | 64                       | 38            | 590                      | 25                 | 46,000         | 45 1368 | 85                  |
| 18W/840       | White    | 4000            | 1150                    | 64                       | 38            | 590                      | 25                 | 46,000         | 45 1369 | 85                  |
| 18W/865       | Daylight | 6500            | 1100                    | 62                       | 38            | 590                      | 25                 | 46,000         | 45 1931 | 80                  |
| 30W/840       | White    | 4000            | 2250                    | 75                       | 38            | 895                      | 25                 | 36,000         | 45 1359 | 85                  |
| 36W/830       | W White  | 3000            | 2950                    | 82                       | 38            | 1200                     | 25                 | 46,000         | 45 1370 | 85                  |
| 36W/840       | White    | 4000            | 2950                    | 82                       | 38            | 1200                     | 25                 | 46,000         | 45 1371 | 85                  |
| 36W/865       | Daylight | 6500            | 2850                    | 79                       | 38            | 1200                     | 25                 | 46,000         | 45 1933 | 80                  |
| 58W/830       | W White  | 3000            | 4700                    | 81                       | 38            | 1500                     | 25                 | 46,000         | 45 1372 | 85                  |
| 58W/840       | White    | 4000            | 4700                    | 81                       | 38            | 1500                     | 25                 | 46,000         | 45 1373 | 85                  |
| 58W/865       | Daylight | 6500            | 4600                    | 79                       | 38            | 1500                     | 25                 | 46,000         | 45 1934 | 80                  |



Unit H Hillcroft Business Park, Whisby Road, Lincoln LN6 3QT

Tel: 0845 25 70 444 Fax: 0845 25 70 545 E Mail: sales@greenstock.co.uk Web Site: www.greenstock.co.uk

The Greenstock Lamp Company