

**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.

# Aura *UNIVERSAL*

LONG LIFE

cost efficient lighting for  
less critical applications

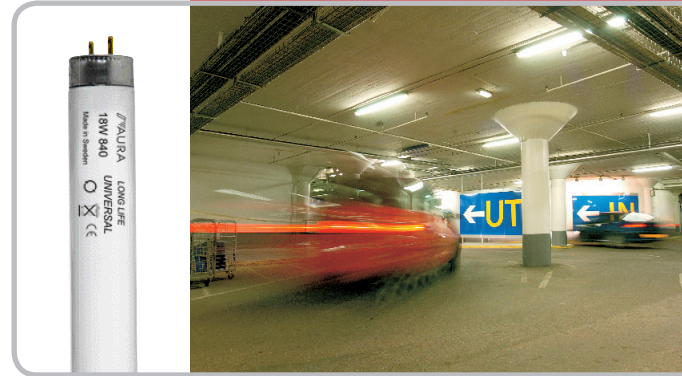
The Aura *UNIVERSAL* is a tri-phosphor Long Life fluorescent lamp developed to give you cost efficient lighting for less critical applications. Aura *UNIVERSAL* gives you a service life of 36.000 hours when operated with magnetic ballast with starter.

In some areas, it is not that difficult to effect a lamp replacement. Aiming to offer a lighting solution that is cost-effective even in these environments, we have developed Aura *UNIVERSAL*. It is perfect for application areas where a Long Life solution is recommended, but the actual replacement is not too cost intensive and the luminaires are not too hard to reach. Aura *UNIVERSAL* puts you in control of your costs and makes it easier to schedule lamp group replacement. The combination of Aura *UNIVERSAL* and group replacement gives you an excellent opportunity to reduce the maintenance costs for your lighting installation.

Aura *UNIVERSAL* is developed based on our patented cathode shield construction. This design provides a unique fluorescent lamp with a long service life combined with an improved end-of-life protection against overheating.

## Applications

Wherever a Long Life solution is an advantage, replacement costs are not extremely high, and the luminaires are relatively easy to reach.



**Car parks**

**Shops**

**Offices**

**Hotels**

**Train stations**

**Ware houses**

## Specifications

The Aura *UNIVERSAL* has the same characteristics for electrical operation and light technical data compared to other T8 (26 mm) fluorescent lamps. They fit in all luminaires developed and installed for T8 lamps.

The *UNIVERSAL* range is designed for operation with electronic ballast (preferably warm start) and magnetic ballast with starter.

The *UNIVERSAL* is a high colour rendering tri-phosphor fluorescent lamp (Ra 85). It is available in several colours as the most used /830 warm white and /840 white.

## Lifetime

Service life is reached when the amount of light in an installation falls to 80% of the initial 100-hour value. Service life of the lamp failure rate and the lumen depreciation is calculated based on a 3-hour operation switching cycle according to IEC/EN 60081.

In installations where lamp replacement is difficult and cost intensive, the long running time of Aura Long Life lamps gives more cost effective lighting maintenance and improved long term planning for group replacement. Group replacement of fluorescent lamps provides an optimal control of the operational costs and a uniform level of light.

For economical and environmental reasons Aura recommends group replacement of Long Life fluorescent lamps.

## Long Life guarantee

The Aura Long Life fluorescent lamps are developed and manufactured in accordance with the IEC/EN60081 standard. Continuous strict quality control processes secure fluorescent lamps of top quality.

Aura guarantees the published service life of the Long Life fluorescent lamps for installations that comply with the relevant standards.

LIFETIME	SWITCHING CYCLE	MAGNETIC BALLAST + STARTER	ELECTRONIC BALLAST (WARM START)
	<b>3 h (Service Life)</b> (2 h 45 min on, 15 min off) 80% light available	<b>36.000 h</b>	<b>50.000 h</b>
	<b>12 h</b> (11 h on, 1 h off) 10% mortality rate	<b>43.000 h</b>	<b>60.000 h</b>
	<b>One single start</b>	<b>46.000 h</b>	<b>63.000 h</b>

PROGRAMME	TYPE	COLOUR	COLOUR TEMPERATURE (K)	LUMINOUS FLUX (lm/100 h)	LUMINOUS EFFICACY (lm/W)	LENGTH WITHOUT PINS (mm)	ART. NO.
	Cap: G13						
	18 W/827	Interior	2700	1300	72	590	435212
	18 W/830	Warm white	3000	1300	72	590	435213
	18 W/835	Middle white	3500	1300	72	590	435218
	18 W/840	White	4000	1300	72	590	435214
	18 W/865	Daylight	6500	1250	69	590	435216
	30 W/830	Warm white	3000	2450	82	895	435223
	30 W/840	White	4000	2450	82	895	435224
	30 W/865	Daylight	6500	2300	77	895	435226
	36 W-1m/830	Warm white	3000	3000	83	970	435243
	36 W-1m/840	White	4000	3000	83	970	435244
	36 W-1m/865	Daylight	6500	2900	81	970	435246
	36 W/827	Interior	2700	3350	93	1200	435232
	36 W/830	Warm white	3000	3350	93	1200	435233
	36 W/835	Middle white	3500	3350	93	1200	435238
	36 W/840	White	4000	3350	93	1200	435234
	36 W/865	Daylight	6500	3250	90	1200	435236
	58 W/827	Interior	2700	5200	90	1500	435252
	58 W/830	Warm white	3000	5200	90	1500	435253
	58 W/835	Middle white	3500	5200	90	1500	435258
	58 W/840	White	4000	5200	90	1500	435254
	58 W/865	Daylight	6500	5000	86	1500	435256

