

**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 *SUPREME HE*

LONG LIFE

light for maximum economy



Aura *T5 LL HIGH EFFICIENT* is a Long Life fluorescent lamp ideally suited for applications where high-quality, energy-effective lighting is required. Aura *T5 LL HE* is a 16 mm diameter Long Life tri-phosphor fluorescent lamp with a service life up to 48.000 hours. This is three times longer than standard *T5 HE* lamps. The *T5 LL HE* gives high colour rendering of Ra 85.

*T5 LL HE* is the perfect solution where you need the energy saving- and system miniaturisation characteristics of a T5 lamp. It offers extremely high efficiency and therefore the maximum economy.

The Aura Long Life fluorescent lamps are based on our two special patents for a new unique cathode shield and an inside protection layer. Operation is only possible with electronic ballast (warm start) in luminaires for *T5 HE* lamps.

## Applications

The *T5 LL HE* is recommended for the use in areas where luminaires for standard *T5 HE* are installed. It is possible to operate them in the existing equipment. With the high quality of light they are most suitable where people are staying. Especially at places where the lamp replacement is difficult and the total costs of operation are high.

Offices

Hotels

Car parks

Signs

Show rooms

## Lifetime

The service life of *T5 LL HE* is 48.000 hrs when operated with a specified electronic ballast (warm start). The service life is reached when the amount of light in an installation falls to 80% of the initial 100-hour value. The 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.

The service life data is listed in the programme data overview.

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.

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

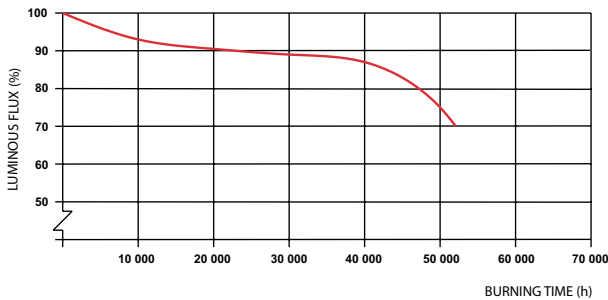
## Long Life guarantee

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.

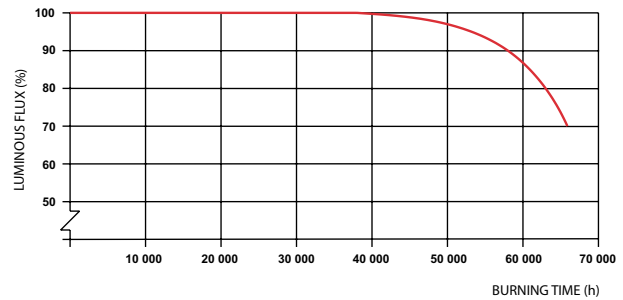
LIFETIME	SWITCHING CYCLE	ELECTRONIC BALLAST (WARM START)
	<b>3 h (Service Life)</b> 80% light available	<b>48.000 h</b>
<b>12 h</b> 10% mortality rate	<b>58.000 h</b>	

SERVICE LIFE AURA SUPREME HE  
- 3 h-switching cycle (2 h 45 min. on, 15 min. off)



Service life takes both lamp failure rate and lumen depreciation into consideration, and is calculated according to the IEC/EN 60081 standard which is based on a 3 hour switching cycle. Service life is considered to be reached when the luminous flux in a facility has dropped to 80% of its original level.

LIFETIME AURA SUPREME HE  
- 12 h-switching cycle (11 h on, 1 h off)



Service life is a combination of max 10% failed/defect lamps and a lumen depreciation of max 10%, and is calculated on a 12 hour switching cycle.

PROGRAMME	TYPE	COLOUR	COLOUR TEMP. (K)	LUMINOUS FLUX AT 35° C (lm/100 h)	LUMINOUS EFFICACY (lm/W)	LUMINOUS FLUX AT 25° C (lm/100 h)	LUMINOUS EFFICACY (lm/W)	Ø (mm)	LENGTH WITHOUT PINS (mm)	PACK UNIT (pcs.)	ART. NO.
	Cap: G13										
14 W/827	Interior	2700	1350	96	1200	86	16	549	25	454012	
14 W/830	Warm white	3000	1350	96	1200	86	16	549	25	454013	
14 W/840	White	4000	1350	96	1200	86	16	549	25	454014	
14 W/865	Daylight	6500	1300	93	1100	79	16	549	25	454016	
21 W/830	Warm white	3000	2100	100	1900	90	16	849	25	454023	
21 W/840	White	4000	2100	100	1900	90	16	849	25	454024	
21 W/865	Daylight	6500	2000	95	1750	83	16	849	25	454026	
28 W/827	Interior	2700	2900	104	2600	93	16	1149	25	454032	
28 W/830	Warm white	3000	2900	104	2600	93	16	1149	25	454033	
28 W/835	Middle white	3500	2900	104	2600	93	16	1149	25	454038	
28 W/840	White	4000	2900	104	2600	93	16	1149	25	454034	
28 W/865	Daylight	6500	2800	100	2400	86	16	1149	25	454036	
35 W/827	Interior	2700	3650	104	3300	94	16	1449	25	454052	
35 W/830	Warm white	3000	3650	104	3300	94	16	1449	25	454053	
35 W/835	Middle white	3500	3650	104	3300	94	16	1449	25	454058	
35 W/840	White	4000	3650	104	3300	94	16	1449	25	454054	
35 W/865	Daylight	6500	3500	100	3050	87	16	1449	25	454056	

**AURA**  
THE ORIGINAL LONG LIFE LIGHT