

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 *SIGNETTE*

LONG LIFE

light for attractive signs



The Aura *SIGNETTE LL* fluorescent lamps are designed to give internally illuminated signs a uniform distribution of light. A 26 mm Long Life fluorescent lamp is contained in a 38 mm diameter outer glass tube. Inside the outer tube are specially designed diffuser layers integrated to give optimised light uniformity both for single- and double-sided signs.

The construction is comparable with the Aura *THERMO* lamps. The thermo insulation effects significant high lumen output at low ambient temperatures compared to standard 26 mm fluorescent lamps.

The Aura Long Life fluorescent lamps are based on our two special patents for a new unique cathode construction and an inside protection layer.

Aura *SIGNETTE* lamps are available with the high-quality tri-phosphor Long Life fluorescent lamps *ULTIMATE* with excellent colour rendering of Ra 85 (colour /865 Ra 80).

Two basic versions are available:

- *SIGNETTE-D*: two layers opposite of each 80°.
type A = diffuser layers horizontal to the socket pins.
type B = diffuser layers vertical to the socket pins.
- *SIGNETTE-S*: one diffuser layer of 100° horizontal to the socket pins.

Operation is possible with conventional or low loss ballast and starter or electronic ballast. Starting characteristics of Aura *SIGNETTE* Long Life are excellent.

**Outdoor sign boards,
single- and doublesided
Outdoor displays**

Applications

SIGNETTE Long Life lamps are mainly directed for use in sign boards. The diffused light distribution optimises the overall image of the advertisement and the direct intensity of the lamp is very low. The lamp replacement in sign boards is time consuming and the operational costs are high.

Lifetime

The service life of *SIGNETTE* Long Life fluorescent lamps is based on the integrated 26 mm Long Life lamp. 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.

The service life data for conventional or low loss ballast with starter and electronic ballast operation are 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 rational 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 the Long Life fluorescent lamps.

Long Life Guarantee

The Aura Long Life fluorescent lamps are developed and manufactured in accordance with the IEC/EN 60081 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.



Clear Channel has 25.000 advertising signs throughout Sweden that are illuminated using Aura Long Life fluorescent lamps.



It is time consuming work replacing fluorescent lamps on elevated signs. Which is why you should choose OK-Q8 Aura Lights fluorescent lamps that have a longer service life.

LIFETIME	SWITCHING CYCLE	MAGNETIC BALLAST + STARTER	ELECTRONIC BALLAST (WARM START)
	3 h (Service Life) 80% light available	48.000 h	70.000 h
12 h 10% mortality rate	60.000 h	80.000 h	

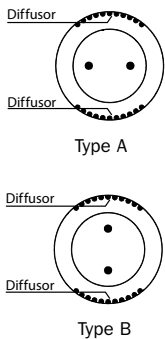
Product range

T8 Long Life (26 mm)

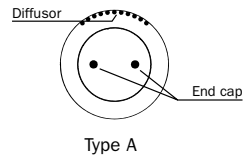
SIGNETTE Long Life lamps are available based on basic 26 mm Ø fluorescent lamps Aura *ULTIMATE* which are integrated in a 38 mm Ø outer glass tube. The excellent characteristics of the *ULTIMATE* lamps and the most optimal lighting effect of the *SIGNETTE* diffuser layers are combined to an exceptional product range for use in outdoor signs.

The different placing of the diffuser layers allows easy installation to realise the best positioning of the lamp in the signs.

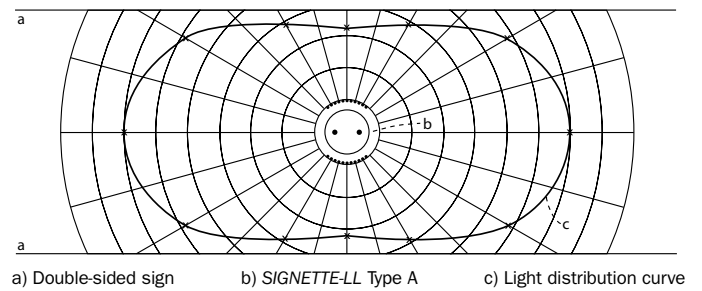
Diffusor-segment: 2x80°
SIGNETTE D



Diffusor-segment: 1x100°
SIGNETTE S

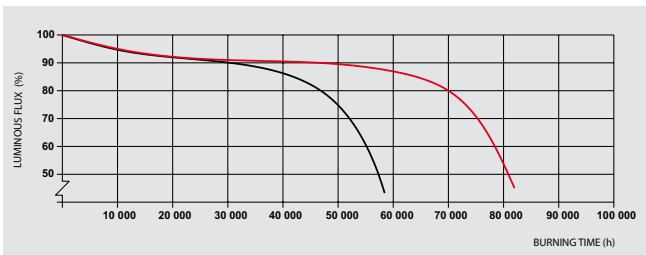


Light distribution effect of SIGNETTE-LL-D in a double sided sign



Service Life Aura *ULTIMATE* Signette Long Life
- 3 h-switching cycle (2 h 45 min. on, 15 min. off)

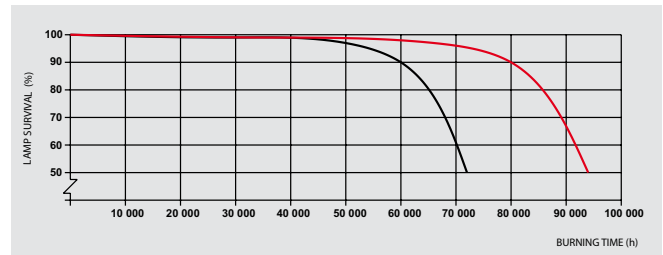
OPERATING CIRCUIT: — ELECTRONIC BALLAST (WARM START)
— MAGNETIC BALLAST + STARTER



Service life is based on the standard IEC/EN 60081 for fluorescent lamps and indicates the time when the amount of light in an installation falls to 80% of the initial 100 h-value. The service life is calculated as result of lamp failure rate and lumen depreciation.

Lifetime Aura *ULTIMATE* Signette Long Life
- 12 h-switching cycle (11 h on, 1 h off)

OPERATING CIRCUIT: — ELECTRONIC BALLAST (WARM START)
— MAGNETIC BALLAST + STARTER



The 12 h-switching cycle is defined as the time when 10% of the lamps in an installation are failed. The lumen depreciation at this time is indicated with less than 10%.

PROGRAMME	TYPE	COLOUR	COLOUR TEMP. (K)	LUMINOUS FLUX (lm/100 h)*	LUMINOUS EFFICACY (lm/W)	OUTER TUBE DIAMETER Ø (mm)	LENGTH WITHOUT PINS (mm)	ART. NO.
	Cap: G13							
	ULTIMATE Signette-D							
	Pin position A							
	18 W/830 D-A	Warm white	3000	1200	66	38	590	434813
	18 W/865 D-A	Daylight	6500	1150	64	38	590	434816
	30 W/865 D-A	Daylight	6500	2250	75	38	895	434826
	36 W-1m/845 D-A	White plus	4500	2900	81	38	970	434845
	36 W/830 D-A	Warm white	3000	3150	87	38	1200	434833
	36 W/845 D-A	White plus	4500	3150	87	38	1200	434835
	36 W/865 D-A	Daylight	6500	3050	85	38	1200	434836
	58 W/845 D-A	White plus	4500	4850	84	38	1500	434855
	58 W/865 D-A	Daylight	6500	4700	84	38	1500	434856
	UNIVERSAL Signette-D							
	Pin position B							
	18 W/840 D-B	White	4000	1200	66	38	590	434714
	18 W/865 D-B	Daylight	6500	1150	64	38	590	434716
	36 W-1m/840 D-B	White	4000	2900	81	38	970	434744
	36 W-1m/845 D-B	White plus	4500	2900	81	38	970	434745
	36 W-1m/865 D-B	Daylight	6500	2800	78	38	970	434748
	36 W/840 D-B	White	4000	3150	87	38	1200	434734
	36 W/845 D-B	White plus	4500	3150	87	38	1200	434735
	36 W/865 D-B	Daylight	6500	3050	85	38	1200	434736
	58 W/840 D-B	White	4000	4850	84	38	1500	434754
	58 W/845 D-B	White plus	4500	4850	84	38	1500	434755
	58 W/865 D-B	Daylight	6500	4700	81	38	1500	434756
	ULTIMATE Signette-S							
	Pin position A							
	18 W/865 S-A	Daylight	6500	1150	64	38	590	434816
	36 W/835 S-A	Middle white	3500	3150	87	38	1200	434838
	36 W/865 S-A	Daylight	6500	3050	85	38	1200	434836
	58 W/845 S-A	White plus	4500	4850	84	38	1500	434855
	58 W/865 S-A	Daylight	6500	4700	81	38	1500	434856

*) At ambient temperature (Ta)18W + 15°C, 36W + 10 °C, 58W + 5°C

