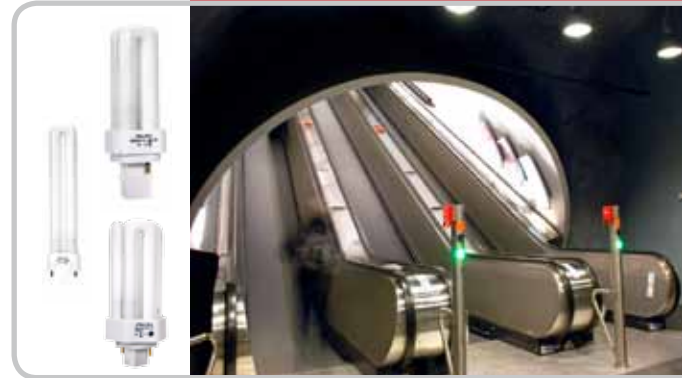


Aura develops and supplies Long Life light sources and solutions with a clear environmental and sustainable focus. With a lifetime that is three times longer than standard products, maintenance costs and environmental impact are cut by two thirds. Our energy-saving lighting solutions can lower your energy consumption by up to 80 percent, depending on your existing equipment. Aura helps you to reduce your costs and carbon footprint.



Aura Unique-S/-D/-T Long Life

Energy efficient compact
lighting solutions



Aura's Unique Long Life range are tri-phosphor lamps with high colour rendering and ideally suited in applications that need high light output. It is a Long Life compact fluorescent lamp developed to reduce maintenance.

The service life of the lamp is 24,000 hours operated with electronic ballast (warm start). When operated with electromagnetic ballast and starter, the service life is 15,000 hours.

The lamp is designed for applications as shops, restaurants, hotels, hospitals, public areas, car parks, small signs, ambient lighting, down lighting and emergency lighting.

Benefits

- Energy efficient.
- High lumen output and low energy consumption.
- Long Life reduces your maintenance by two thirds.

Shops

Floors

Hotels

Hospitals

Public areas

Car parks

Small signs

Ambient lighting

Down lighting

Emergency lighting

Overview

Aura Unique-S, -S/E, -D, -D/E, -T, T/E Long Life are prepared for general lighting applications. The electric characteristics, compact size and the lumen output are beneficial for use in small, flat and miniaturised luminaires. Unique-D, -D/E, -T and -T/E Long Life are very favourable to use in downlights.

Aura Unique-S, -S/E, -D, -D/E, -T, T/E Long Life provide advantages in total cost of operation especially in applications where lamp replacement is difficult and time consuming or disturbs running processes.

Group replacement of fluorescent lamps provides an optimal control of operational costs and gives a uniform level of light. For economical and environmental reasons Aura recommends group replacement of Long Life fluorescent lamps.

Long Life Technology

Aura Unique-S, -S/E, -D, -D/E, -T, T/E Long Life is developed on base of best available components and excellent processing which achieve a multiple lifetime compared to standard lamps. The lumen depreciation process is minimized with a protection layer inside the glass tube.

Lifetime

A lamps service life is defined as the elapsed time when the amount of light in an installation reaches 80% of its initial 100-hour value. The service life of the lamp failure rate and the lumen depreciation is calculated based on the lamp being operated with a switching cycle of three hours.

The three hour switching cycle is defines as having the lamp switched on for two hours and 45 minutes and then switched off for 15 minutes.

A switching cycle that is more close to common use is the 12 hour switching cycle, this is defined as having the lamp switched on for 11 hours and then switched off for one hour, and the lifetime shown is accounted for 10% mortality.

LIFETIME	SWITCHING CYCLE	MAGNETIC BALLAST + STARTER UNIQUE-S+D+T	ELECTRONIC BALLAST (WARMSTART) UNIQUE-S/E+D/E+T/E
	3 h Service life *)		15 000 h
12 h **) 10% mortality rate		24 000 h	30 000 h
12 h **) Average lifetime 50% survivals		36 000 h	42 000 h

*) 2 h 45 min on, 15 min off **) 11 h on, 1 h off

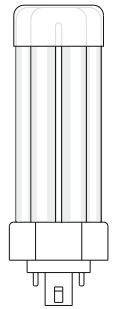
Technical Information

Aura Unique-S, -S/E, -D, -D/E, -T and -T/E Long Life are compact fluorescent lamps are single capped with multiple discharge tubes. The optimum light output is achieved at +25 °C. The lamps can be positioned in three ways in an installation; base down (most optimal), horizontal and base up.

The lamps -S/E, -D/E and -T/E are designed for operation with electronic ballast (preferably warm start). These lamps can also be dimmed by using electronic dimming ballasts, it is then necessary to operate the lamp at full level (100%) for 100 hours in order to stabilise the lamp and to reach the full potential of its lifetime. These lamps have a cap with 4-pin connection. The lamps fit in luminaires designed for standard compact fluorescent lamps TC-S/E, TC-D/E and TC-T/E.

The lamps -S, -D and -T have an internal starting device and a cap with 2-pin connections. They are operated with electromagnetic ballasts. The lamps fit in luminaires designed for standard compact fluorescent lamps TC-S, TC-D and TC-T.

In addition to Aura Unique -T Long Life we have a Aura Unique-T Thermo Long Life version available, particularly suited for use in public outdoor lighting or specific areas with low ambient temperature. With a special plastic cover added on top of a normal Aura Unique -T Long Life lamp the optimum operating temperature is shifted to $\leq -5^{\circ}\text{C}$ (see graph for details).



Aura Unique-S, -S/E, -D, -D/E, -T and -T/E Long Life is a high colour rendering tri-phosphor lamp ($R_a \geq 80$) and is available in several colours.

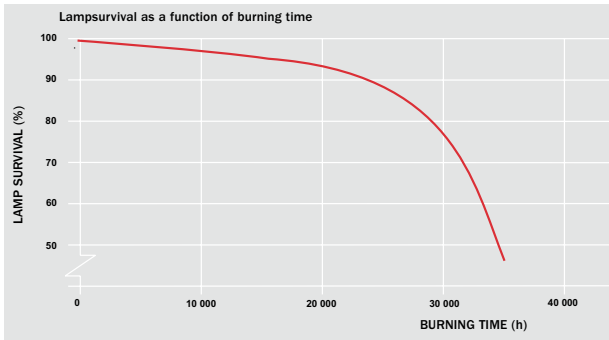
Long Life Guarantee

The Aura Long Life fluorescent lamps are developed and manufactured in accordance with the IEC/EN 60901-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.

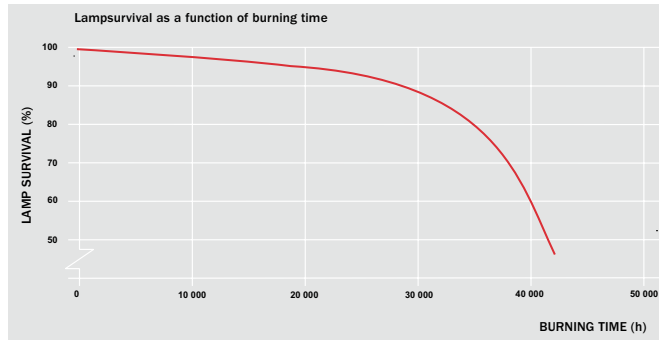


Lifetime Aura Unique-S, -D and -T Long Life for operation with magnetic ballast (starter integrated in lamp socket)
 - 12 h-switching cycle (11 h on, 1 h off)



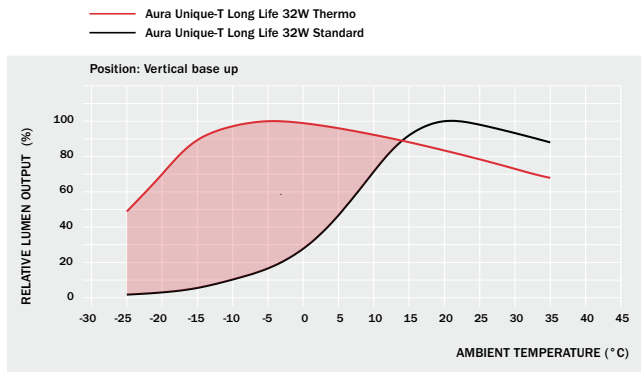
The 12 h-switching cycle is defined as the time when 10% of the lamps in an installation are failed. The lumen depreciation at this time is indicated with approximately 15%.

Lifetime Aura Unique-S/E, -D/E and -T/E Long Life for operation with electronic ballast (warm start)
 - 12 h-switching cycle (11 h on, 1 h off)



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 approximately 15%.

Aura Unique-T and Unique-T Thermo Long Life
 - light output in relation to ambient temperature:



Optimum temperature level for Aura Unique-T Long Life = ≥ +25 °C, Aura Unique-T Thermo Long Life = ≤ -5 °C.

PROGRAMME	ARTICLE NO.	TYPE	COLOUR	COLOUR TEMP. (K)	LUMINOUS FLUX AT +25°C (lm/100h)	LUMINOUS EFFICACY (lm/W)	Ø TUBE (mm)	LENGTH WITHOUT PINS (mm)	CAP	UNITS/ PACK (pcs)	
	Aura Unique-S Long Life (TC-S), 2 pin, integrated starter										
	490022	7W 827	Interior	2700	400	57	13	114	G23	50	
	490023	7W 830	Warm White	3000	400	57	13	114	G23	50	
	490024	7W 840	White	4000	400	57	13	114	G23	50	
	490032	9W 827	Interior	2700	600	67	13	144	G23	50	
	490033	9W 830	Warm White	3000	600	67	13	144	G23	50	
	490034	9W 840	White	4000	600	67	13	144	G23	50	
	490042	11W 827	Interior	2700	900	82	13	214	G23	50	
	490043	11W 830	Warm White	3000	900	82	13	214	G23	50	
490044	11W 840	White	4000	900	82	13	214	G23	50		
Aura Unique-S/E Long Life (TC-S/E), 4 pin, without starter - primarily for electronic ballast											
491022	7W 827	Interior	2700	400	57	13	114	2G7	50		
491023	7W 830	Warm White	3000	400	57	13	114	2G7	50		
491024	7W 840	White	4000	400	57	13	114	2G7	50		
491032	9W 827	Interior	2700	600	67	13	144	2G7	50		
491033	9W 830	Warm White	3000	600	67	13	144	2G7	50		
491034	9W 840	White	4000	600	67	13	144	2G7	50		
491042	11W 827	Interior	2700	900	82	13	214	2G7	50		
491043	11W 830	Warm White	3000	900	82	13	214	2G7	50		
491044	11W 840	White	4000	900	82	13	214	2G7	50		

The programme continues on the next page.

ARTICLE NO.	TYPE	COLOUR	COLOUR TEMP. (K)	LUMINOUS FLUX AT +25°C (lm/100h)	LUMINOUS EFFICACY (lm/W)	Ø TUBE (mm)	LENGTH WITHOUT PINS (mm)	CAP	UNITS/ PACK (pcs)
Aura Unique-D Long Life (TC-D), 2 pin, integrated starter									
492212	10W 827	Interior	2700	600	60	13	85	G24d-1	50
492213	10W 830	Warm White	3000	600	60	13	85	G24d-1	50
492214	10W 840	White	4000	600	60	13	85	G24d-1	50
492222	13W 827	Interior	2700	900	69	13	120	G24d-1	50
492223	13W 830	Warm White	3000	900	69	13	120	G24d-1	50
492224	13W 840	White	4000	900	69	13	120	G24d-1	50
492232	18W 827	Interior	2700	1200	67	13	130	G24d-2	50
492233	18W 830	Warm White	3000	1200	67	13	130	G24d-2	50
492234	18W 840	White	4000	1200	67	13	130	G24d-2	50
492242	26W 827	Interior	2700	1800	69	13	150	G24d-3	50
492243	26W 830	Warm White	3000	1800	69	13	150	G24d-3	50
492244	26W 840	White	4000	1800	69	13	150	G24d-3	50
Aura Unique-D/E Long Life (TC-D/E), 4 pin, without starter - mainly for electronic ballast									
493212	10W 827	Interior	2700	600	60	13	85	G24q-1	50
493213	10W 830	Warm White	3000	600	60	13	85	G24q-1	50
493214	10W 840	White	4000	600	60	13	85	G24q-1	50
493222	13W 827	Interior	2700	900	69	13	120	G24q-1	50
493223	13W 830	Warm White	3000	900	69	13	120	G24q-1	50
493224	13W 840	White	4000	900	69	13	120	G24q-1	50
493232	18W 827	Interior	2700	1200	67	13	130	G24q-2	50
493233	18W 830	Warm White	3000	1200	67	13	130	G24q-2	50
493234	18W 840	White	4000	1200	67	13	130	G24q-2	50
493242	26W 827	Interior	2700	1800	69	13	150	G24q-3	50
493243	26W 830	Warm White	3000	1800	69	13	150	G24q-3	50
493244	26W 840	White	4000	1800	69	13	150	G24q-3	50
Aura Unique-T Long Life (TC-T), 2 pin, integrated starter									
494333	18W 830	Warm White	3000	1200	67	13	99,5	GX24d-2	50
494334	18W 840	White	4000	1200	67	13	99,5	GX24d-2	50
494343	26W 830	Warm White	3000	1800	69	13	113,5	GX24d-3	50
494344	26W 840	White	4000	1800	69	13	113,5	GX24d-3	50
Aura Unique-T/E Long Life (TC-T/E), 4 pin, without starter - mainly for electronic ballast									
495332	18W 827	Interior	2700	1200	67	13	99,5	GX24q-2	50
495333	18W 830	Warm White	3000	1200	67	13	99,5	GX24q-2	50
495334	18W 840	White	4000	1200	67	13	99,5	GX24q-2	50
495342	26W 827	Interior	2700	1800	69	13	113,5	GX24q-3	50
495343	26W 830	Warm White	3000	1800	69	13	113,5	GX24q-3	50
495344	26W 840	White	4000	1800	69	13	113,5	GX24q-3	50
495352	32W 827	Interior	2700	2400	75	13	129	GX24q-3	50
495353	32W 830	Warm White	3000	2400	75	13	129	GX24q-3	50
495354	32W 840	White	4000	2400	75	13	129	GX24q-3	50
495363	42W 830	Warm White	3000	3200	76	13	150	GX24q-4	50
495364	42W 840	White	4000	3200	76	13	150	GX24q-4	50
495373	57W 830	Warm White	3000	4300	75	13	180,5	GX24q-5	50
495374	57W 840	White	4000	4300	75	13	180,5	GX24q-5	50
Aura Unique-T/E Thermo Long Life (TC-T/E Thermo), 4 pin, without starter - mainly for electronic ballast									
495653	32W 830	Warm White	3000	2400*	75	13	129	GX24q-3	50
495654	32W 840	White	4000	2400*	75	13	129	GX24q-3	50
495663	42W 830	Warm White	3000	3200*	76	13	150	GX24q-4	50
495664	42W 840	White	4000	3200*	76	13	150	GX24q-4	50

