

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 UNIQUE -S/-D/-T

LONG LIFE

Three small Long Life
innovations, several big
advantages



The complete UNIQUE range of compact fluorescent lamps offers you an energy efficient light source with all the Aura Long Life benefits. Developed on base of the best available components and excellent processing they achieve a multiple lifetime compared to standard lamps. The UNIQUE-S, D and T are patented on platform of the Aura specific cathode shield construction and the inside protection layer.

They are available with high-quality tri-phosphor colours with the high colour rendering of $Ra \geq 80$. The high lumen output with low energy consumption combines Compact Fluorescent to energy efficient light sources!

Aura UNIQUE Long Life are single-capped compact fluorescent lamps. They are based on bended discharge tubes and are connected by bridges. UNIQUE-S has one, UNIQUE-D has two, UNIQUE-T has three discharge tubes.

The UNIQUE-S, -D and -T are designed for operation with electro-magnetic ballasts and contain in the cap construction a starting device. The UNIQUE-S/E, -D/E and -T/E are constructed for mainly operation by defined electronic ballast. Therefore the cap has a 4-pin connection. With electronic dimming ballast they function in dimming applications.

Shops

Floors

Hotels

Hospitals

Public areas

Car parks

Small signs

Ambient lighting

Down lighting

Emergency lighting

Applications

Compact Fluorescent lamps Aura UNIQUE-S, -D and -T Long Life are prepared for general lighting applications.

The electrical characteristics as well as the compact size and lumen output of UNIQUE-S, -D and -T are beneficial for use in offices, shops, restaurants, hotels, hospitals, public areas, boats, busses and trains, in parks and car parks, small signs, under crossings, for task lighting, ambient lighting and emergency lighting.

Besides this broad range of applications UNIQUE-D, D/E and UNIQUE-T, T/E are very favourable for use in down lights. Precisely calculated reflectors and energy saving lamps with a high lumen package and long lifetime are a perfect solution for professional lighting requirements.

Specifications

Compact fluorescent lamps are key for the development and construction of small, flat and miniaturised luminaires. The efficient use of energy is the driver for optimal cost of operation calculation. UNIQUE-S, -D and -T with Long Life characteristics provide advantages especially in applications where lamps are burning for long periods and the lamp replacement is difficult and time consuming or disturbs running processes.

UNIQUE lamps have the optimum light output at + 25 °C. The burning position is not restricted. In installations the main use is like this:

- base down - which is most optimal
- horizontal
- base up

The lamps are able to work in dimming operation by using the defined electronic ballasts and equipment. It is recommended to start and operate the lamps for 100h on a 100 % level to stabilise the lamp process and then to dim down.

The lamps fit well in all luminaires designed for standard Compact Fluorescent lamps TC-S, TC-S/E, TC-D, TC-D/E, TC-T and TC-T/E and can be installed easily.

Lifetime

The lifetime of UNIQUE-S, -D and -T Long Life fluorescent lamps is multiple compared to standard lamps.

The lifetime data for electro-magnetic ballast and starter and electronic ballast operation is listed in the following data table.

The long lifetime of Aura Long Life lamps improves long term planning of group replacements. Group replacement of fluorescent and compact fluorescent lamps provides optimal control of the operational costs and a uniform level of light.

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

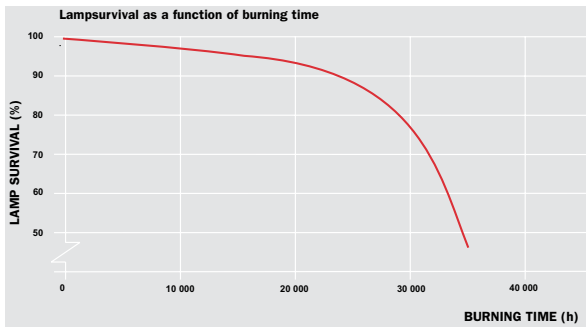
Long Life Guarantee

The Aura Long Life Compact fluorescent lamps are developed and manufactured in accordance with the IEC/EN 60901 standard. Continuous strict quality control processes secure Long Life lamps of top quality.

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

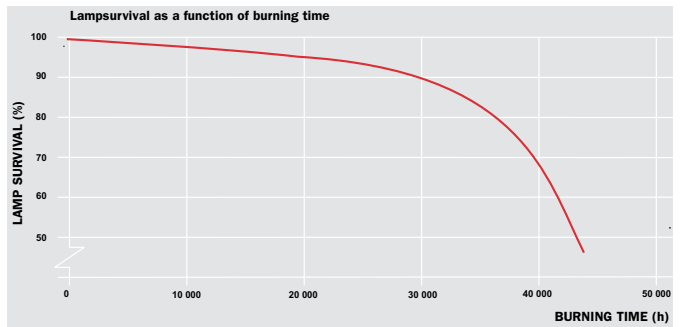


Lifetime Aura UNIQUE-S-D and -T Long Life
for operation with magnetic ballast
(starter integrated in lamp socket)
- 12 h-switching cycle (11 h on, 1 h off)



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%.

L I F E T I M E	SWITCHING CYCLE	MAGNETIC BALLAST + STARTER UNIQUE-S+D+T	ELECTRONIC BALLAST (WARMSTART) UNIQUE-S/E+D/E+T/E
	12 h *)	24,000	30,000
3 h service life **)	15,000	24,000	
average lifetime 12 h cycle 50 % survivals	36,000	42,000	

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

PROGRAMME	ART. NO.	TYPE	COLOUR	COLOUR TEMP (K)	LUMINOUS FLUX (AT 25°) (lm/100h)	LUMINOUS EFFICACY (lm/W)	CAP	Ø tube (mm)	LENGTH WITHOUT PINS (mm)	PACK UNITS (pcs)
	UNIQUE-S Long Life *)	490022	7 W/827	Interieur	2700	400	57	G23	13	114
490023		7 W/830	Warm White	3000	400	57	G23	13	114	50
490024		7 W/840	White	4000	400	57	G23	13	114	50
490032		9 W/827	Interieur	2700	600	67	G23	13	144	50
490033		9 W/830	Warm white	3000	600	67	G23	13	144	50
490034		9 W/840	White	4000	600	67	G23	13	144	50
490042		11 W/827	Interieur	2700	900	82	G23	13	214	50
490043		11 W/830	Warm White	3000	900	82	G23	13	214	50
490044		11 W/840	White	4000	900	82	G23	13	214	50
UNIQUE-S/E Long Life **)	491022	7 W/827	Interieur	2700	400	57	2G7	13	114	50
	491023	7 W/830	Warm white	3000	400	57	2G7	13	114	50
	491024	7 W/840	White	4000	400	57	2G7	13	114	50
	491032	9 W/827	Interieur	2700	600	67	2G7	13	144	50
	491033	9 W/830	Warm white	3000	600	67	2G7	13	144	50
	491034	9 W/840	White	4000	600	67	2G7	13	144	50
	491042	11 W/827	Interieur	2700	900	82	2G7	13	214	50
	491043	11 W/830	Warm white	3000	900	82	2G7	13	214	50
	491044	11 W/840	White	4000	900	82	2G7	13	214	50

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

*) Starter integrated - for operation with separate electromagnetic operation and 2pin cap G23.

**) Starterless - for electronic operation mainly - 4pin caps 2G7.

