

GUARANTEE

Aura Light International AB, Karlskrona (Sweden), grants a guarantee for all installed **Aura Long Life fluorescent lamps**.

This guarantee is valid for all installations fulfilling the relevant norms. The guarantee is granted for the service lifetime of the Long Life fluorescent lamps.

The Service life is reached when the amount of light of an installation falls to 80 % of the initial luminous flux (100 h - value). It is the result of the technical failure rate and the lumen depreciation based on a switching cycle of 165 min. "on" and 15 min. "off" according to IEC/EN 60081.

<u>Type of Long Life fluorescent lamp</u>	<u>Service Life, operated by</u>		
Lamps with high quality tri-phosphor powders with excellent colour rendering (R_a 85)	magnetic ballast (ind. operation)	elec. ballast (warm start)	
<i>ULTIMATE</i>	18W, 36 W-1m, 36W, 58W,	48.000 h	70.000 h
<i>ULTIMATE</i>	30 W, 38 W	36.000 h	46.000 h
<i>UNIVERSAL</i>	18W, 36 W-1m, 36W, 58W,	36.000 h	50.000 h
<i>UNIVERSAL</i>	30 W	24.000 h	32.000 h
T5 LL HE	14W, 21W, 28W, 35W	no operation	48.000 h
T5 LL HO	24W, 39W, 54W, 49 W, 54W	no operation	48.000 h

The Service Life of the special versions Protector (FEP), Thermo, Reflector and Signette is identical with the inside basic Long Life fluorescent lamp.

Lamps for special application

Super Ex-LL *)	18W, 36W, 58W	no operation	36.000 h
*) Super Ex-LL lamps are only operating with electronic cold start ballast, according to the specific safety requirements in applications of combustive proof areas.			
Gourmé-LL (with PET-Folie)	18W, 30W, 36W, 58W	18.000 h	20.000 h

electrical lifetime

T5 LL 8 Watt / 13Watt	8W, 13W	20.000 h	20.000 h
Electrical failures < 10%, lumen depreciation < 20%, measured by 24 h operation, installations according to EN 1838, Emergency lighting. Not for operation with relays start function.			
U-Power	18W, 36W, 58W	18.000 h	18.000 h
Electrical failures < 10%, lumen depreciation < 15%, measured by 1 switching in 12 hours.			

When the failure rate (electrical) is more then 10 % within the guaranteed Service Life the defect fluorescent lamps above 10 % will be compensated free of charge.

The use of the lamps have to comply with:

- The guarantee is valid by operating the Aura Long-Life fluorescent lamps with customized and according to IEC standards produced ballasts and accessories.
 - Conventional / low loss ballasts and starters
 - Electronic ballasts - warm start
 - Electronic ballasts - cold start, when switching cycle > 12 hrs.
 - Glow switch starters Aura T1, T4 or equivalent
 - Electronic starters Aura Electronic Strike or equivalent
 - Energy Saving Systems ES 2000 or equivalent
- Deos 171, SiS 10 are not to recommend to use at low temperatures with Aura Long Life fluorescent lamps 58W
- After announcement every defect lamp has to be returned to Aura Light for a test in the Aura laboratory. Only failures confirmed by the laboratory test will lead to a guarantee compensation.
- Installation costs for lamp replacement within the guaranteed lifetime have to be carried by the user.
- The guarantee is valid from day of use which has to be recorded by the user.