

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 lifetime of the Long Life fluorescent lamps based on a 12 h switching cycle (11 h on, 1 h off).

The 12h-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 % of the initial luminous flux (100 h - value).

| <u>Type of Long Life fluorescent lamp</u> | <u>Lifetime (12 h), operated by</u> | |
|--|--|---------------------------------------|
| | magnetic ballast (ind. operation) | elec. ballast (warm start) |
| Lamps with high quality tri-phosphor powders with excellent colour rendering (R_a 85) | | |
| <i>ULTIMATE</i> | 18W, 36 W-1m, 36W, 58W, | 60.000 h |
| <i>ULTIMATE</i> | 30 W, 38 W | 47.000 h |
| <i>UNIVERSAL</i> | 18W, 36 W-1m, 36W, 58W, | 43.000 h |
| <i>UNIVERSAL</i> | 30 W | 32.000 h |
| T5 LL HE | 14W, 21W, 28W, 35W | no operation |
| T5 LL HO | 24W, 39W, 54W, 49 W, 54W | no operation |

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 | 60.000 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. | | | |
| Gourmet-LL (with PET-Folie) | 18W, 30W, 36W, 58W | 25.000 h | 27.000 h |

| <u>electrical lifetime</u> | | | |
|--|---------------|----------|----------|
| 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:

1. **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**
2. 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.
3. Installation costs for lamp replacement within the guaranteed lifetime have to be carried by the user.
4. The guarantee is valid from day of use which has to be recorded by the user.