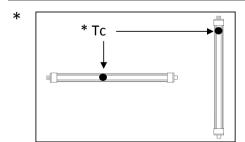


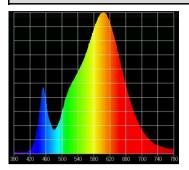
Aura UltiLED PRO Long Life (G2)

Nominal wattage (W)
Diameter (mm) 16
Nominal and rated flux¹¹ @ 25 °C (Im/W) 116,7 122,2 127,8 123,2 132 141 123,5 132,4 14 14 14 14 14 14 14
Colour Rendering Index CRI ≥80 ≥80 ≥80 ≥80 ≥80
SDCM 3 3 3 3 3 3 3 3 3
Light Colour 830 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 8300 840 850 840
Nominal and rated flux ¹) @ 25 °C (lm) (+/- 8% tolerance) 2100 2200 2300 3450 3700 3950 4200 4500 48
Nominal and rated flux ¹) @ 25 °C (lm) (+/- 8% tolerance) 2100 2200 2300 3450 3700 3950 4200 4500 48
Nominal and rated flux ¹⁾ @ 25 °C (lm) (+/- 8% tolerance) 2100 2200 2300 3450 3700 3950 4200 4500 48
Lamp efficacy ¹⁾ @ 25 °C (lm/W)
System power with driver, 90% eff. 19,8 19,8 19,8 30,8 30,8 30,8 37,4
System power with driver, 90% eff. 19,8 19,8 19,8 30,8 30,8 30,8 37,4 37,4 37
Rated Wattage (W) 18 28 34
Power Factor (Pf) >0,9 (in combination with approved driver)
Total Tota
Outpu
On the second se
Outpu
Outpu
Nominal lifetime 58 000
Rated lifetime 58 000
LLMF - Lamp Lumen Maintenance Factor end of nominal life
LLMF - Lamp Lumen Maintenance Factor end of nominal life 80% LSF - Lamp Survival Factor end of nominal life 90%
Installation environment Indoor and outdoor
Ingress Protection IP65
Warm-up time to 60% light output Instant full light Starting time 0,5 seconds (max) will depend on driver used
MaxTc 75°C
Ambient temperature (Ta) -30°C to +55°C
Nominal beam angle 120°
Rated beam angle 120°
Suitable for accent lighting No
Switching cycles 1 500 000 (min)
Dimmable Yes (depends on driver used)
Cap G5
Tube and cap material Glass and PC
Mercury Content 0
Notice When replacing flourescent lighting, light distribution and overall energy efficiency will determined by the design of the installation

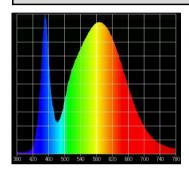




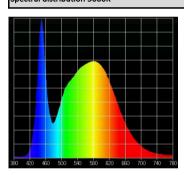
Spectral distribution 3000K



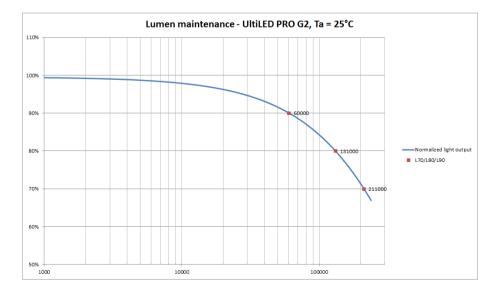
Spectral distribution 4000K



Spectral distribution 5000K



Calculated LED Lifetime h (TM-21)	L70	L80	L90
	211 000	131 000	60 000





Installation guide - UltiLED PRO

This guide explains the steps necessary to install UltiLED PRO inside a luminaire and ensure optimal performance. The guide is only for reference and is intended for qualified electricians or lighting technicians.

Installation 6 steps:

- 1) Make sure that the right type of driver is within the luminaire. (A SELV driver is recommended. Should a non-SELV driver be used that still meets the requirements of the tube, power to the luminaire should be disconnected prior to installing or changing the UltiLED tube if the UoutMax (no load voltage) is equal to or greater than 400V.)
 - a) 18W tube needs 700mA and 26,1VDC
 - b) 28W tube needs 700mA and 40,6VDC
 - c) 34W tube needs 700mA and 49,3VDC
- 2) Unpack the UltiLED PRO tube.
- a) Carefully examine the product
- b) Do not use the product if it's damaged
- 3) Make sure that the active side (metal pin side) is connected to the active side within the luminaire. See picture below.
 - a)The UltiLED PRO tube is bipolar so the LED+ and LED- side doesn't matter.

UltiLED PRO is not a retrofit LED lamp for T8 or T5 replacement application. An external LED driver complying for European safety & performance norms should be used. All light fitting manufacturers should conform to the international standards IEC 60598-luminaires

LED +

L LED

Driver

Circuit diagram

UltiLED

- 4) Make sure that the UltiLED PRO is turned into the luminaire so that the light output is directed the desired way.
- 5) Reconnect power to the luminaire and turn it on.

Additional information

- because of external power supply, tubes can only be used in therefore suitable luminaires.
- installation instructions and warnings are provided with the products
- to avoid dangerous situation for end user, the tube is double/re-inforced insulated from live parts.
- LED tube is recommended to be used with certified SELV LED driver

Limitation of use

Due to dimension of the and cap, the LED tubes can only be used with lampholders which are provided with rotor in the middle.