



Product Highlights:

- Optical cover is stable to UV radiation
- Specially designed diffuser clip make lamp replacement a snap
- Durable polycarbonate housing with good impact resistance and high transparency
- Good protection against water and dust ingress and impact, IP65 and IK08 certified
- Available in both T5 and T8 models, single and twin types

Light is advancement OLUX® WATER-PROOF outdoor luminaires

Waterproof, dust-proof and impact-resistant luminaire for indoor, outdoor and industrial applications.

Light is OSRAM



OLUX® WATER-PROOF



Advantages & Benefits

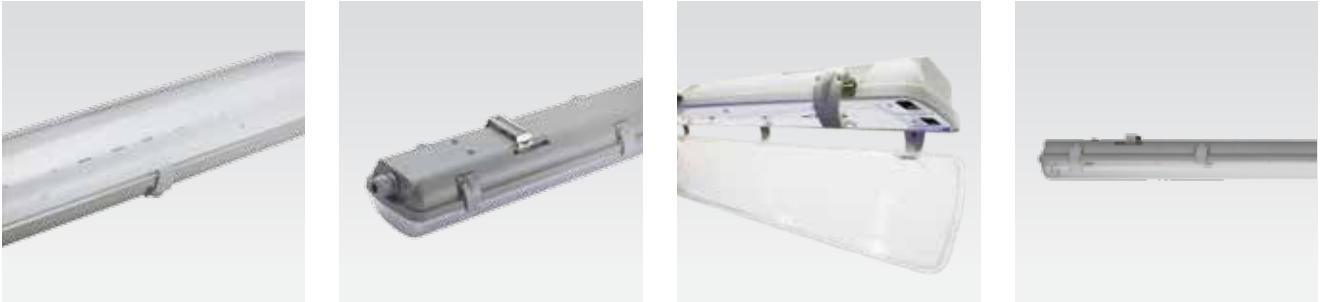
- Reliable utility fixture with a low-investment cost
- Designed for different fluorescent lamps and wattages
- Reliable, high efficiency Electronic Control Gear
- Good light distribution and light output
- Stainless steel mounting brackets

The OLUX® WATER-PROOF luminaire is designed to withstand damp and dusty environments. The high-grade polycarbonate housing provides excellent impact resistance while its ribbed, crystal clear optical cover allows exceptional light transmission. The optical cover is UV-stabilized, which gives better resistance to cracking, hazing or yellowing. The OLUX® WATER-PROOF is an ideal, dependable lighting solution for demanding indoor or outdoor environments.

Ideal Applications

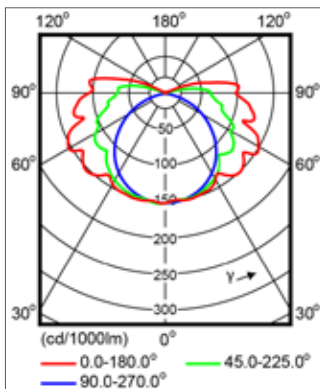
- Roofed outdoor areas: stations, gardens, walkways and sidewalks
- Wet and dusty environments: humid and dirty industrial conditions like food/beverage factories, cement plants, power plants, etc
- General interior lighting: warehouses and car parks
- Below ground applications: pedestrian underpasses

OLUX® WATER-PROOF

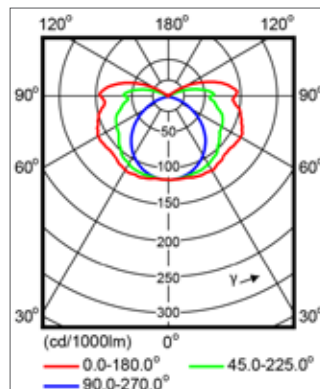


Light Distribution for OLUX® WATER-PROOF

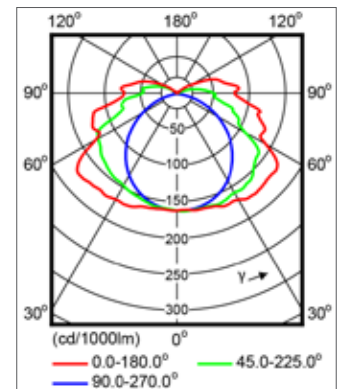
OLUX® WATER-PROOF 1X28W



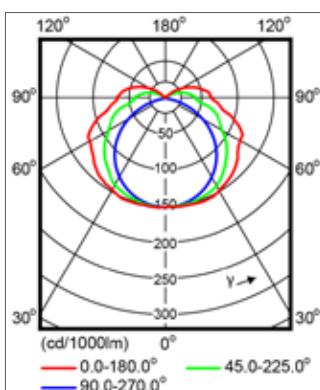
OLUX® WATER-PROOF 1X36W



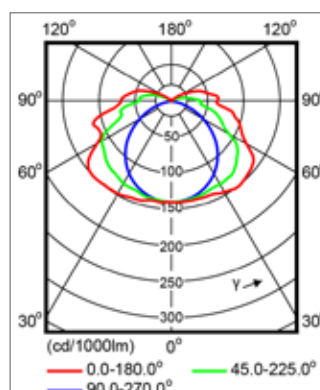
OLUX® WATER-PROOF 2X14W



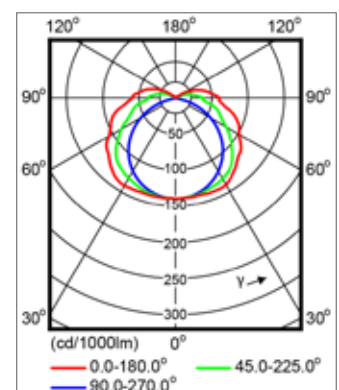
OLUX® WATER-PROOF 2X18W



OLUX® WATER-PROOF 2X28W








OLUX® WATER-PROOF 2X36W

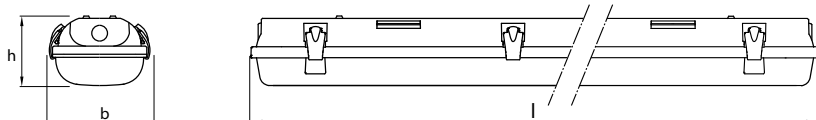


OLUX® WATER-PROOF



Product Reference	Code (EAN)	V	W	Hz	PF					
OLUX® WATER-PROOF 1X14W	4052899027367	220-240	14	50/60	0.98	T5, G5	615	84	80	12
OLUX® WATER-PROOF 2X14W	4052899027381	220-240	28	50/60	0.98	T5, G5	615	113	80	10
OLUX® WATER-PROOF 1X28W	4052899027404	220-240	28	50/60	0.98	T5, G5	1215	84	80	12
OLUX® WATER-PROOF 2X28W	4052899027428	220-240	56	50/60	0.98	T5, G5	1215	113	80	8
OLUX® WATER-PROOF 1X35W	4052899027442	220-240	35	50/60	0.98	T5, G5	1515	84	80	9
OLUX® WATER-PROOF 2X35W	4052899027466	220-240	70	50/60	0.98	T5, G5	1515	113	80	8
OLUX® WATER-PROOF 1X18W	4052899027602	220-240	18	50/60	0.98	T8, G13	651	96	92	12
OLUX® WATER-PROOF 2X18W	4052899027626	220-240	36	50/60	0.98	T8, G13	651	131	89	10
OLUX® WATER-PROOF 1X36W	4052899027640	220-240	36	50/60	0.98	T8, G13	1260	96	92	8
OLUX® WATER-PROOF 2X36W	4052899027664	220-240	72	50/60	0.98	T8, G13	1260	131	89	6
OLUX® WATER-PROOF 1X58W	4052899027688	220-240	58	50/60	0.98	T8, G13	1560	96	92	8
OLUX® WATER-PROOF 2X58W	4052899027701	220-240	116	50/60	0.98	T8, G13	1560	131	89	6

* Technical data subject to variation and change without notice.



SubstiTUBE® Value T8



Benefit:

innovative LED-lamp, easy and safe to use with direct AC input

High lumen efficacy, providing excellent energy saving comparing to traditional FL T8

Lower maintenance cost thanks to longer lifetime than traditional Fluorescent.

Quick, simple and safe replacement. Correct operation temperature -20° ... $+45^{\circ}\text{C}$

Technical Features

- T8 LED tube made of glass with G13 base
- Weight: <500g
- Replace for fluorescent T8 tube
- Up to 30.000 h lifetime (L70B50)
- CCT: 3000k, 4000K, 6500K
- Length: 2FT (0.6m) / 4FT(1.2m)

Application:

- Train Station
- Underground subway
- Supermarket, retail store
- Parking lot
- Office

Electrical and photometric data (rated value)

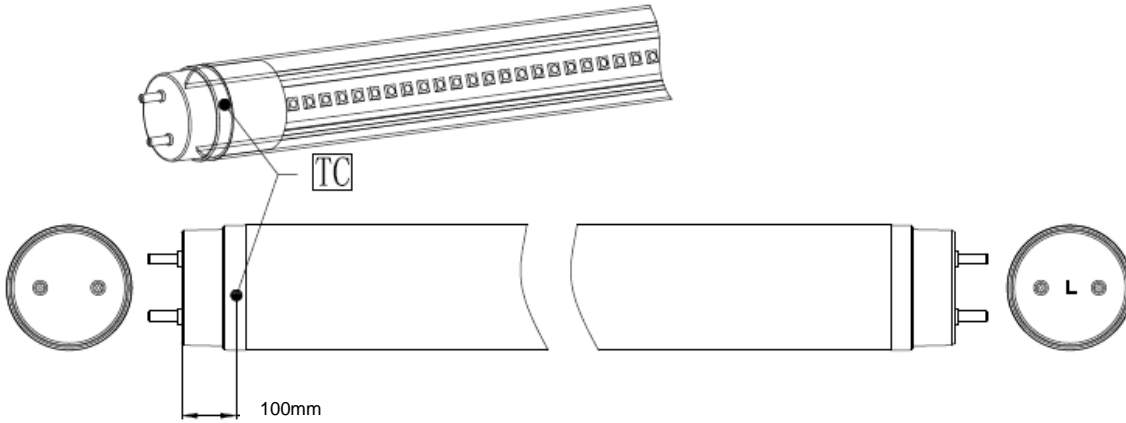
	Voltage [V]	Frequency [Hz]	Power (100%) [W]	Lumen Flux(100%) [lm]	CCT [K]	PF	CRI (Ra)
ST8V-0.6M 8.7W/830 230V EM	220-240	50/60	8.7	945	3000	0.9	80
ST8V-0.6M 8.7W/840 230V EM	220-240	50/60	8.7	1050	4000	0.9	80
ST8V-0.6M 8.7W/865 230V EM	220-240	50/60	8.7	1050	6500	0.9	80
ST8V-1.2M 17.5W/830 230V EM	220-240	50/60	17.5	1890	3000	0.9	80
ST8V-1.2M 17.5W/840 230V EM	220-240	50/60	17.5	2100	4000	0.9	80
ST8V-1.2M 17.5W/865 230V EM	220-240	50/60	17.5	2100	6500	0.9	80

1. All technical parameters apply to the entire lamp. Because of the complex manufacturing process for light-emitting diodes (LEDs), the specified typical values for LED technical parameters represent only purely statistical variables. They do not necessarily correspond to the actual technical parameters for each individual product which can deviate from the typical value. For parameter of Lumen and Watt, production control tolerance with $\pm 10\%$ in delivery.
2. L70B50 is the average operating life of the LED Lamp during which the luminous flux is greater than or equal to 70% of the initial luminous flux, for 50% of the population. The lifetime is estimated at room temperature (25°C), free air burning, base up position.

**Minimum /
Maximum
ratings**

Ambient temperature T_a Maximum temperature T_c Storage temperature T_s [°C]

ST8V-0.6m-8.7W	-20~45°C	<75 °C	-20°... 80°C
ST8V-1.2m-17.5W	-20~45°C	<75 °C	-20°... 80°C



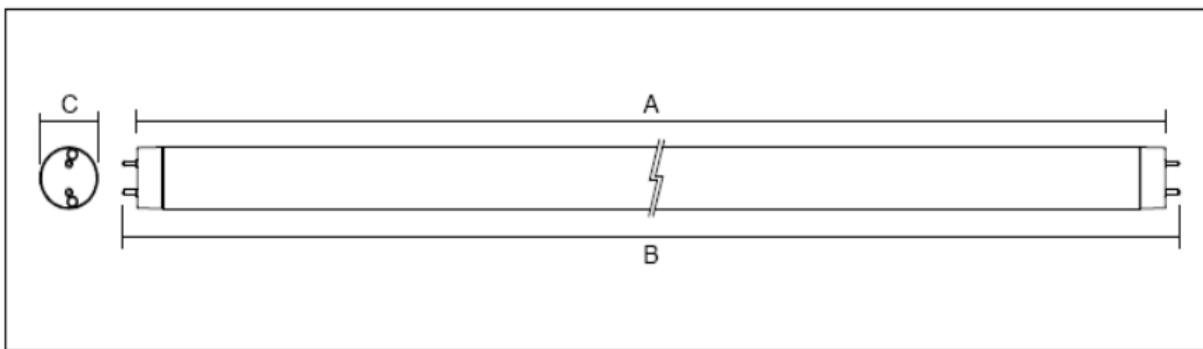
Drawings

B (mm)

C (mm)

Net Weight (g)

ST8V-0.6m-8.7W	<604	<28	116
ST8V-1.2m-17.5W	<1213.6	<28	200

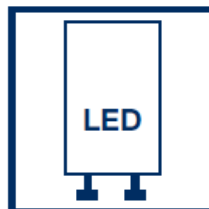


Safety and application notes

- The SubstiTUBE® T8 Tube must be handled with care. Do not operate product in a damaged condition.
- When operating with double side input wiring, SubstiTUBE® Starter has to be inserted to replace the conventional fluorescent lamp starter. If the conventional starter is not replaced, the SubstiTUBE® T8 Tube will start blinking and be damaged!
- Do not use SubstiTUBE® T8 Tube in luminaires which do not have any conventional starter or whereby the conventional starter cannot be replaced. Otherwise, rewiring is needed.
- Not suitable for luminaires with serial lamp connection i.e. more than one tube at one magnetic ballast.
- The SubstiTUBE® T8 Tube emits light at a limited angle, unlike conventional fluorescent tubes in 360° omni-direction.
- Due to the light distribution characteristic of the SubstiTUBE® T8 Tube the resulting luminaires light characteristic is likely to change. It is not guaranteed that e.g. standards for lighting at working places will be complied with after replacement. A photometric check of the installation is highly recommended.
- The effective energy savings depend on the efficiency of the luminaire setup to be replaced and should be considered individually in each case. Particularly magnetic ballast losses are reduced to ohmic losses and are normally only about 1W.
- The SubstiTUBE® T8 Tube is protected according to IP20. Applications with external risk of moisture and dust can be served with an adequately protected luminaire.
- SubstiTUBE® T8 products differ in their diameters and geometries from fluorescent lamps. Their use in open batten luminaires with gaskets is possible if no excessive force is expended during the fixing. Obtaining the necessary IP protection in open batten luminaires with gaskets cannot be ensured.
- SubstiTUBE® T8 Tubes can be driven directly on line voltage. In order to grant a safe operation mode please refer to the installation instructions for further information.
- Photobiological Safety of lamps and lamp systems according to IEC 62471. Risk Group: Exempt



Dimming not allowed

Lamp suitable for
50 Hz or 60 Hz
operationLED replacement
starterLamp to be used in
dry conditions or
in a luminaire that
provides protectionLamp not suitable for
emergency operation

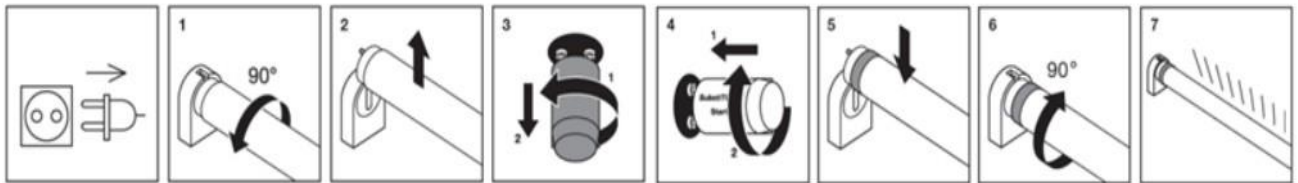
Installation Guide

1) Retrofitting a CCG luminaire accord. to EN 62776

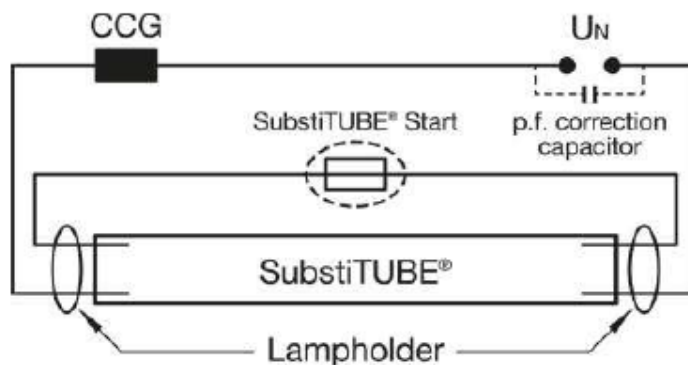
Replacing fluorescent T8 tube and installed starter by SubstiTUBE® EM Tube and SubstiTUBE® Starter

Below is an example for typical lamp holder types

- ✓ Please ensure that the voltage supply is disconnected.
- ✓ Carefully remove the fluorescent tube and conventional starter according to the lamp holder type
- ✓ Insert SubstiTUBE® EM Tube and SubstiTUBE® Starter properly.



- ✓ Turn the conventional lamp 90° and take it out of the socket.
- ✓ Remove the conventional starter by turning it.
- ✓ Insert and latch the SubstiTUBE® Starter into starter socket.
- ✓ Insert SubstiTUBE® EM Tube into socket and locate into position by turning 90°.
- ✓ Check light the emission direction



Circuit diagram of a retrofitted CCG luminaire

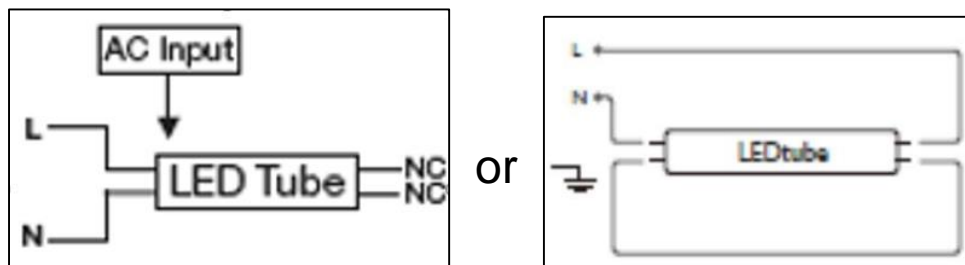
NOTE: If a luminaire contains a power factor correction capacitor, it is recommended to remove it from the circuit to maintain power factor >0.9. This should only be carried out by a licensed electrician.

Installation Guide

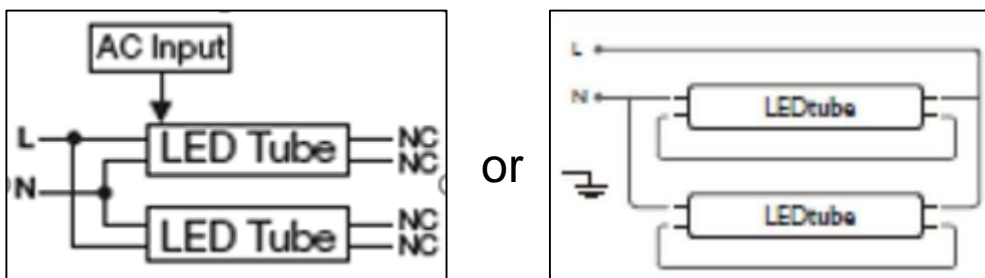
2) Installation directly on line voltage

SubstiTUBE® EM Tube may also be driven directly on line voltage. **Please check the L/N markings on the LED tube.** In order to grant a safe operation mode please refer to the installation instructions for further information. Installation must be done by licensed electricians.

2.1) Two different wiring configurations for single tube



2.2) Two different wiring configurations for double tubes.



3) Installation of an ECG luminaire with EM tube

WARNING: SubstiTUBE® EM Tube is not compatible for use with electronic control gear (ECG). If there is an existing ECG, bypass the ballast and re-wire* according to “2) Installation directly on line voltage” and diagrams above.

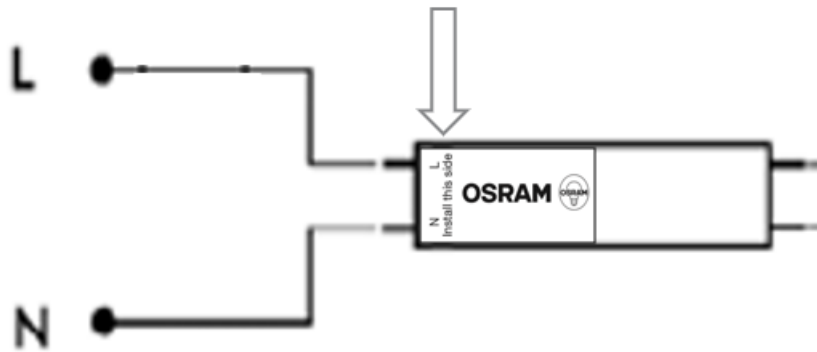
***WARNING:** Modifications to the wiring of an existing luminaire must be carried out by qualified personnel only. Any modifications made to the original luminaire will alter the safety aspects of the original luminaire; hence compliance certification of the original luminaire will no longer be applicable to the modified luminaire.

Installation Guide

CAUTIONS: Installation Instructions for SubstiTUBE® EM T8 LED tube

Connect both line (L) and neutral (N) power to one lampholder as below diagram.

Tube side with the marking “AC input” around the cap should be facing the lampholder with mains connection otherwise the lamps will not be functionally ON, and AC line in might short circuit.





Ordering Guide

Product	EAN-10*	EAN-40**	S-Unit***
ST8V-0.6M 8.7W/830 230V EM25X1G8APMOSRAM	4058075183261	4058075183278	25X1
ST8V-0.6M 8.7W/840 230V EM25X1G8APMOSRAM	4058075183247	4058075183254	25X1
ST8V-0.6M 8.7W/865 230V EM25X1G8APMOSRAM	4058075183223	4058075183230	25X1
ST8V-1.2M 17.5W/830 230VEM25X1G8APMOSRAM	4058075183322	4058075183339	25X1
ST8V-1.2M 17.5W/840 230VEM25X1G8APMOSRAM	4058075183308	4058075183315	25X1
ST8V-1.2M 17.5W/865 230VEM25X1G8APMOSRAM	4058075183285	4058075183292	25X1

* EAN-10: ordering code for single unit

** EAN-40: ordering code for shipping unit

*** S-Unit: Lamps per shipping unit

Sales and Technical Support

Sales and technical support is given by the local LEDVANCE subsidiaries.

On our worldwide homepage all LEDVANCE subsidiaries are listed with complete address and phone numbers.

WWW.ledvance.com

WWW.osram-lamps.com/substitube

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Please contact LEDVANCE for detailed information