90+LIGHTING

LED TUBE 12W



LIGHT OUTPUT	1650 lumens		
ССТ	3500K		
BEAM ANGLE	320°		
WATTAGE	12W		
EFFICACY	135 lm/W		
OWER FACTOR	0.9		
APPLICATION	Fluorescent replacement for indoor		
	dry/damp/enclosed fixtures		
	applications.		

SKU: SE-350.096



COLOR RENDERING: 90CRI, R9>50 FLICKER <30% High quality of light and low flicker.

ENERGY EFFICIENCY: 135 lm/W

LONG LIFE: 50,000 hours.

Listed by Edison Testing Laboratories, Design Lights Consortium and National Sanitation Foundation.

- ✓ Rated lifetime to L70: 50,000 hours.
- ✓ Warranty: 5 years.

CERTIFICATIONS AND APPROVALS

ETL, DLC 4.0, NSF







HIGHLY COMPATIBLE

Ρ

3 in 1: Ballast compatible, single-ended ballast bypass, double ended ballast bypass.

Constant power output when work with ballast. Shatterproof design.

Compatible with standard fixtures using an G13 base. Standard form factor can be used with most fixtures.

INTENDED USE AND APPLICATIONS

32W 4ft (120cm) fluorescent replacement. Intended for use in G13 compatible existing fixtures.

Suitable for dry or damp locations.

Not for use in fully enclosed fixtures.

Remove or do not use any optional glass lens in front of lamp.

GENERAL SPECIFICATIONS

Electrical Specifications		Operating Temperature	Mechanical Spec.
Wattage: 12W	Voltage: 120-277V	Minimum: -20°C	Measures: 1.1in x 47.2in
Power Factor: 0.9	Frequency: 60Hz	Maximum: 60°C	Material: Glass

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DIMENSIONS



Spectrum 1.2 7

LUMINOUS INTENSITY



1.0 = 1.738e+001mW/nm

SPECTRAL DISTRIBUTION



RA – CHART: 90



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INSTALLATION PROCEDURE

TYPE A INSTALLATION INSTRUCTIONS (With Ballast)

- 1. Switch off power to the fixture
- 2. Remove the existing fluorescent lamps from the fixture
- 3. Install the LED tube lamp.
- 4. Switch on power to the fixture



Note:

Before installation, please check specifications for ballast compatibility, if not compatible, please follow Type B Installation instructions bellow.

TYPE B INSTALLATION INSTRUCTIONS (Ballast Bypass)

- 1. Switch off power to the fixture
- 2. Remove the existing fluorescent lamps from the fixture
- 3. Retrofit the fixture
- 4. Remove all connections between the ballast, starter (if present) and the tubes
- 5. Check label on the LED tubes to ensure the correct way to power then.
- 6. Connect L and N wires to the tubes through the connectors, respecting the label instructions (as per item b.)
- 7. Switch on power to the fixture

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Note:

This LED tube can work with either one side power input, or double side power input.

WARNING

- Risk of fire or electric shock. LED retrofit of fixtures demand knowledge of electrical installation procedures. Please contact a qualified electrician
- Risk of fire or electric shock. Please respect the fixture maximum input ratings.
- Do not make or alter any holes during installation
- To avoid damages, do not expose wiring to abrasive or sharped edges of metal.
- Do not use the LED tubes on fixtures containing shunted bi-pin holders.
- Installers should not disconnect existing wires from lamp holder terminals, wires must be cut away from the lamp holders and connected to the wiring through applicable connectors.
- For linear LED lamp conversions, there shall be a text or diagram showing the electrical connections.
- This LED tubes are accepted as a component of a luminaire where the suitability of the combination shall be determined by authorities having JURISDICTION.
- Please refer to the installation instructions available from 90+ for complete information on installation procedure.