# **Product Description**

The TGL is a contractor grade Troffer that will exceed quality and performance for most commercial spaces. The TGL LED Troffer features a pre-mounted driver and a maintenance-free, fully sealed chamber with seamless aluminum frame to keep bugs and dust out. The fixture utilizes a precision-engineered, textured diffuser to deliver maximum lumen output and optimal uniformity without revealing hot spots or shadowing. Available in 3000K, 4000K, and 5000K correlated color temperatures (CCT). Now with DLC 5.1 Standard certification, ensuring top of the line quality and performance. The TGL is the perfect lighting solution for offices, hospitals, and other commercial spaces.

### Construction

- Extruded aluminum frame with powder coat finish
- Durable stamped housing
- High efficiency, maintenance-free LED chamber
- Smooth formed sides for safe handling

### **Optical System**

- Internal batwing distribution lenses
- High reflectivity internal coating
- Precision engineered polystyrene diffuser
- No visible diodes, hot-spots, or shadows providing high uniformity, and reduced glare
  80 CRI for good color definition in public places

### Electrical

- Input voltage of 120-277VAC
- Full-range dimming via 1-10VDC controls
- Power factor > 0.9
- THD < 20%
- Luminaire surge protection level designed to withstand up to 2.5kV ring wave per ANSI C82.77-5-2017 requirements for Indoor Hard-wired and Indoor Portable Luminaires
- Operating tempature range: 4°F to 104°F (-20°C to 40°C)

### Controls

- NLC (Network Lighting Controls) option available
- Bluetooth Low Energy (BLE) mesh network providing Luminaire Level Lighting Control
- Luminaire integrated BLE PIR/Daylight sensor (N1) available
- Configurable with the NICOR NLC app available on iOS and Android devices
- Provides full dimming control with occupancy and daylight harvesting functions

## **Mounting and installation**

- · Single cover plate with access to both line and low voltage connections
- Emergency battery backup available
- Integral grid tie clips with wire holes provided for seismic requirements
- · Surface mount installation with an optional adapter
- Drywall installation with an optional adaptor
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

### Listings

- cULus 1598 Listed for damp locations
- Certified for direct contact with insulation (IC)
- DLC 5.1 Standard listed
- RoHS Compliant
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- TM-21 Reported L70(9k) life >54,000 hours
- · LM-79, LM-80 testing performed in accordance with IESNA standards

### Warranty

- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge.)

Project

Catalog

Type

Date

# TGL 2x2, 2x4 LED Backlit Troffer





# Ordering

| Ordering Information Example: TG |                   |                     |                    | Example: TGL122U40 |                    |
|----------------------------------|-------------------|---------------------|--------------------|--------------------|--------------------|
| Series                           | Size              | Voltage             | CCT's              | Controls           | EM (Optional)      |
| TGL1                             | <b>22</b> (2 x 2) | <b>U</b> (120-277V) | <b>35</b> (3500 K) | Blank (none)       | <b>E1</b> (EMB045) |
|                                  | <b>24</b> (2 x 4) |                     | <b>40</b> (4000 K) | N1 (NLC Controls)  | E2 (EMB080)        |
|                                  |                   |                     | <b>50</b> (5000 K) |                    |                    |

Specifications and dimensions subject to change without notice.

| Accessories                                |           | <b>Recommended Dimmers*</b>              |
|--|-----------|--|
| Surface Mount Kit - 2x2                    | TPE10SK22 | Lutron NTSTV                             |
| Surface Mount Kit for use with E1/E2 - 2x2 | SK22M10WH | Lutron DVSTV                             |
| Flange Kit - 2x2                           | TPE10FK22 | Cooper SF10P<br>Legrand RH4FBL3PW        |
| Surface Mount Kit - 2x4                    | TPE10SK24 | *Not a complete list.                    |
| Surface Mount Kit for use with E1/E2 - 2x4 | SK24M10WH | Check compatibility before installation. |
| Flange Kit - 2x4                           | TPE10FK24 |  |

|         | Performance Data |        |       |            | Emergency Pack Performance<br>Data |           |
|---------|------------------|--------|-------|------------|------------------------------------|-----------|
| Model   | Nominal CCT      | Lumens | Watts | Efficiency | E1 Lumens                          | E2 Lumens |
|         | 3500             | 4728   |       | 118.2      | 532                                | 946       |
| TGL122U | 4000             | 4761   | 40.0  | 119.0      | 536                                | 952       |
|         | 5000             | 4794   |       | 119.9      | 540                                | 959       |
|         | 3500             | 5593   |       | 113.9      | 513                                | 911       |
| TGL124U | 4000             | 5643   | 49.1  | 114.9      | 517                                | 919       |
|         | 5000             | 5688   |       | 115.8      | 521                                | 926       |

# **Photometric Data**

#### **Cone of Light Tabulation TGL22 3500K** Mounted height Footcandles Diameter Input Voltage (VAC) 120-277 (Feet) Beam Center (Feet) 8 10 24.7 15.8 25.7 32.1 System Level Power (W) 40.0 4728 Delivered Lumens (Lm) 12 10.9 38.6 System Efficacy (Lm/W) 118.2 14 8.0 <u>45.0</u> Correlated Color Temp (K) 3521 **CCT Data Multiplier** Color Rendering Index (CRI) 83 115° TGL122U40 Beam Angle 1.007 Spacing Criteria TGL122U50 1.014 1.26 Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

# TGL24 3500K

| Input Voltage (VAC)         | 120-277 |
|-----------------------------|---------|
| System Level Power (W)      | 49.1    |
| Delivered Lumens (Lm)       | 5593    |
| System Efficacy (Lm/W)      | 113.9   |
| Correlated Color Temp (K)   | 3513    |
| Color Rendering Index (CRI) | 84      |
| Beam Angle (0)              | 116°    |
| Beam Angle (90)             | 121°    |
| Spacing Criteria (0)        | 1.30    |
| Spacing Criteria (90)       | 1.32    |
|                             |         |



|     | Con            | e of Light Tabulat | tion     |
|-----|----------------|--------------------|----------|
|     | Mounted height | Footcandles        | Diameter |
|     | (Feet)         | Beam Center        | (Feet)   |
|     | 8              | 28.5               | 25.4     |
| N . | 10             | 18.2               | 31.8     |
| Ħ   | 12             | 12.6               | 38.1     |
| 1   | 14             | 9.3                | 44.5     |
| 4   |                |                    |          |
| /   | CCT Data Multi | plier              |          |
|     | TGL122U40      | 1.009              |          |
|     | TGL122U50      | 1.017              |          |

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.



**NLC Controls** 

See www.nicorlighting/network-lighting-controls for more information and NLC Component Data Sheets

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

