

# Cleanroom TL-R Amber Troffers-QS

2x2 and 2x4 Amber/White LED Recessed Luminaires

- **Rated IP65**
- **Suitable for ISO 3-9 Cleanspaces**
- **Suitable for 209E class 100-100,000 Cleanspaces**
- **ETL listed for Wet Locations**
- **One piece Inset Doorframe**
- **Robotically seam welded housing**
- **Narrow Spectrum 590nm True Amber LEDs**
- **White / Amber separately controlled circuits**
- **0-10v 1% Dimming Standard for most configurations**
- **Recessed Housing suitable for Tbar Grid AND Hardlid Installations**
- **B.A.A. & B.A.B.A Compliant & Made in the USA by a Family Owned US Corporation**
- **5 Day Quick Ship For Orders Under 25 Fixtures**
- **3 Day Quick Ship For Orders Under 15 Fixtures**



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## ORDERING GUIDE

| Series | Material                                   | Size                | Row Qty.     | Amber LED | Row Qty. | White LED | CCT/CRI   | Voltage | Options  | Quick Ship              |
|--------|--|---------------------|--------------|-----------|----------|-----------|-----------|---------|--|-------------------------|
| TL-R   |  |                     |              | YLED590   |          | LEDR      |           |         |  |                         |
| Series | Material                                   | Size                | Light Source |           |          |           | CCT/CRI   | Voltage | Options  | Quick Ship              |
|        |  |                     | Row Qty.     | Amber LED | Row Qty. | White LED |           |         |  |                         |
| TL-R   | 3 White 430 SS Hsg. & Polished 304 SS Door | 2x2 2' x 2' Housing | 1            | YLED590   | 1        | LEDR      | 83 CRI:   | 120V    | EM10 10W Integral LED EM (Specify Input Voltage)               | 5DQS (5-Day Quick Ship) |
|        | 4 White AL Hsg. & Polished 304 SS Door     | 5 LED Rows Max      | 2            |           | 2        |           | 83S 3500K | 277V    | EM20 20W Remote LED EM (Specify Input Voltage)                 | 3DQS (3-Day Quick Ship) |
|        | 5 White AL Hsg. & White AL Door            | OR                  | 3            |           | 3        |           | 840 4000K | UNV     | PxL Programmed to User Specified Lumen Value.                  |                         |
|        | 7 White AL Hsg. & White CRS Door           | 2x4 2' x 4' Housing | 4            |           |          |           |           |         | PxW Programmed to User Specified Wattage Value.                |                         |
|        |  | 5 LED Rows Max      |              |           |          |           |           |         | 10KV 10KV Parallel Surge Protection (One Supplied Per Circuit) |                         |
|        |  |                     |              |           |          |           |           |         | GG 1/8" Thick Grid Gasket (Provided Loose)                     |                         |
|        |  |                     |              |           |          |           |           |         |  |                         |

Ordering Notes, If Applicable

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## SPECIFICATIONS

**HOUSING:** One piece, hole free, robotically seam welded housing has flattened knockouts for a superior seal. Housings are available in .040" 3003 Aluminum or 20Ga 430 Stainless Steel.

**DOOR FRAME:** One piece inset door frame with seam welds regressing into housing to allowing the NSF approved microcellular gasket to seal to the housing. Door frame is hinged by aircraft cables and secures to housing with captive stainless steel pan head screws. Available in .040" 3003 Powder coated Alum. , 20Ga 304 Polished SS, or 18Ga 1008 Powder coated CRS.

**GASKETS:** NSF Listed closed cell microcellular extruded KleanLock SealPro gasket with vulcanized corners making a one-piece oil and solvent resistant gasket system. GG option provides a loose 1/8" thick adhesive backed gasket intended to adhere to the top face of a suspended grid ceiling for grid profiles that do not already have gasket on them.

**OPTICS:** Standard P12 prismatic acrylic lens is provided with an inverted lens so the smooth side faces the room for easy cleaning. Other optics may be available, consult factory for more information or options not listed.

**LEDs:** Fixture available with Amber only or Amber & White LED's, each color will be supplied with its own driver for dual switching. Amber LED's provide a narrow 590nm spectrum for wavelength sensitive applications. White high efficiency LEDs are commercially available & in a wide variety of CRI and CCT. All boards have Zhaga recognized hole patterns and come with a 5 year warranty.

**DRIVERS:** Standard Universal Voltage Class 2 drivers are 0-10v Dimmable to 1% and rated -20C (-4F). They come with at least 2.5Kv surge protection, have less than 10% THD at max load, Ballast Factor Greater than .95 and are programmable to match specific lumen or wattage requirements. Drivers with higher input voltage ratings are available, consult factory for driver specifications. (each color LED comes standard with its own driver)

**REFLECTOR:** Die formed metal with high reflectance white polyester powder coat finish. Typical reflectivity 92%.

**INSTALLATION RECESSED:** Suitable for recessed Non-IC installation into covered ceilings. Fixtures are supplied with .875" flattened knockouts for supply entry. Recessed housings have (4) swing out toggle arms that are used to draw the fixture in to the ceiling for hard lid installation without the need for a yoke hanger. The toggle arm adjuster bolts are accessible from the room side of the luminaire and the actual toggles can be used as means of establishing a seismic support for lay in ceiling installations. Confirm ceiling compatibility with dimension drawings below.

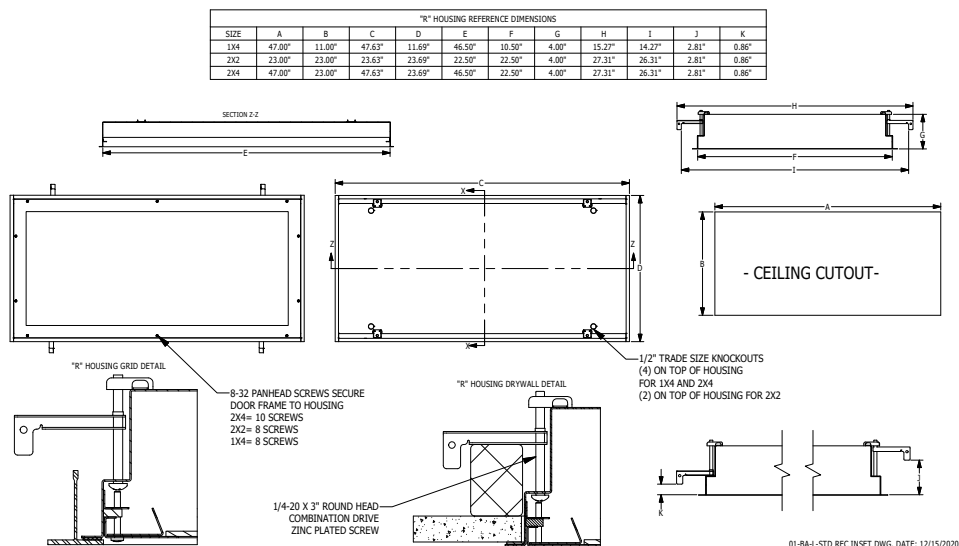
**FINISH:** Stainless steel door frames are satin polished. All other materials are provided with gloss high reflectance white polyester powdercoat with 1000hr salt spray test per ASTM B117.

**LISTINGS:** IP65 rated for dust and water ingress. Suitable for 1700 PSI high pressure hosedowns. ETL listed per UL\_1598 for wet locations. Chicago Plenum Rated. Certified ISO-14644-1 for class 3 through class 9 cleanspaces. Certified Fed Std 209E for Class 100 through Class 100,000 cleanspaces. NSF2 Listed for Non-Food & Splash Zones. Drivers and LEDs are covered by a 5 year warranty, the remaining fixture is covered by a 10 year warranty. This product Series is both Build America Buy America (B.A.B.A.) & Buy American Act (B.A.A.) compliant.

**5-DAY QUICK SHIP POLICY:** Quantity restriction of 25 fixtures. Once PO is received by 12:00 PM CST, shipping will occur within 5 business days. Standard freight applies. Expedited shipping to be paid by customer.

**3-DAY QUICK SHIP POLICY:** Quantity restriction of 15 fixtures. Once PO is received by 12:00 PM CST, shipping will occur within 3 business days. Standard freight applies. Expedited shipping to be paid by customer.

## PRODUCT DRAWINGS



## Cleanroom TL-R Amber Troffers-QS

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### ENERGY DATA

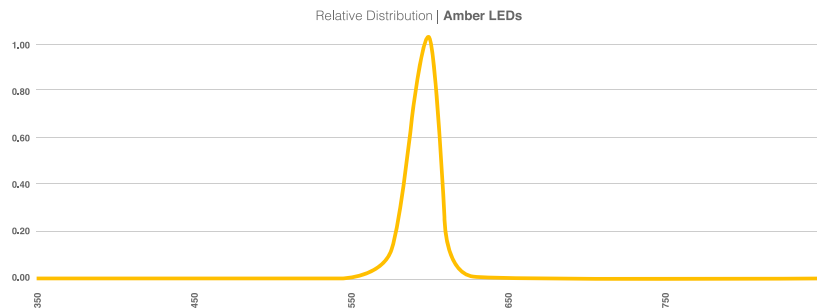
| INSET-FGRS-AMBER LED TROFFER |               |          |        |       |          |               |       |          |                     |              |
|------------------------------|---------------|----------|--------|-------|----------|---------------|-------|----------|---------------------|--------------|
| ENCLOSURE SIZE               | LED SELECTION | DIMMING  | 83 CRI |       |          | 590nm (Amber) |       |          | AMBIENT TEMP RATING |              |
|                              |               |          | LUMENS | WATTS | EFFICACY | LUMENS        | WATTS | EFFICACY | MINIMUM             | MAXIMUM*     |
| 2x2                          | 1LEDR         | 0-10V 1% | 1,493  | 15    | 100      | NA            |       |          | -20°C (-4°F)        | 40°C (104°F) |
| 2x2                          | 2LEDR         | 0-10V 1% | 2,990  | 29    | 103      |               |       |          | -20°C (-4°F)        | 40°C (104°F) |
| 2x2                          | 3LEDR         | 0-10V 1% | 4,479  | 42    | 107      |               |       |          | -20°C (-4°F)        | 40°C (104°F) |
| 2X2                          | 1YLED         | 0-10V 1% | NA     |       |          | 1,066         | 22    | 48       | -20°C (-4°F)        | 40°C (104°F) |
| 2X2                          | 2YLED         | 0-10V 1% |        |       |          | 2,132         | 43    | 50       | -20°C (-4°F)        | 40°C (104°F) |
| 2X2                          | 3YLED         | 0-10V 1% |        |       |          | 3,197         | 65    | 49       | -20°C (-4°F)        | 40°C (104°F) |
| 2X2                          | 4YLED         | 0-10V 1% |        |       |          | 4,263         | 86    | 50       | -20°C (-4°F)        | 40°C (104°F) |
| 2X4                          | 1LEDR         | 0-10V 1% | 3359   | 29    | 116      | NA            |       |          | -20°C (-4°F)        | 40°C (104°F) |
| 2X4                          | 2LEDR         | 0-10V 1% | 6,718  | 55    | 122      |               |       |          | -20°C (-4°F)        | 40°C (104°F) |
| 2X4                          | 3LEDR         | 0-10V 1% | 10,077 | 83    | 121      |               |       |          | -20°C (-4°F)        | 40°C (104°F) |
| 2X4                          | 1YLED         | 0-10V 1% | NA     |       |          | 2,390         | 44    | 54       | -20°C (-4°F)        | 40°C (104°F) |
| 2X4                          | 2YLED         | 0-10V 1% |        |       |          | 4,779         | 87    | 55       | -20°C (-4°F)        | 40°C (104°F) |
| 2X4                          | 3YLED         | 0-10V 1% |        |       |          | 7,169         | 130   | 55       | -20°C (-4°F)        | 40°C (104°F) |
| 2X4                          | 4YLED         | 0-10V 1% |        |       |          | 9,558         | 173   | 55       | -20°C (-4°F)        | 40°C (104°F) |

<sup>1</sup> DELIVERED LUMEN DATA IS EXTRAPOLATED FROM MEASURED DATA @ 25C WITH NO EXTRA OPTIONS. VARIANCES WILL OCCUR WHEN OTHER SELECTIONS ARE MADE

<sup>2</sup> WATTAGE IS MEASURED WITH LED 840 SELECTION @ 120vAC AND Tambient = 25C. WATTAGES WILL VARY AND INCREASE WHEN ALTERNATE OPTIONS ARE SELECTED.

<sup>3</sup> MAX AMBIENT TEMP RATING, NON-IC INSTALLATION. TEMP RATING IS WITH NO OTHER OPTIONS SELECTED. WHITE LEDS ONLY SUITABLE FOR 40C AMBIENT

### COLOR LED RELATIVE DISTRIBUTION



### PHOTOMETRICS

#### P12 PRISMATIC

Key:

— 0  
- - - 45  
— 90

