

# Cleanroom KL-R/EZ LED Screwless Troffers

1x4, 2x2 and 2x4 High Efficiency LED Recessed Luminaires With Screwless Door Frame

- **Rated IP66**
- **Suitable for ISO 3-9 Cleanspaces**
- **Suitable for 209E Class 1-100,000 Cleanspaces**
- **ETL listed for Wet Locations**
- **One piece overlapping Screwless door frame for smooth cleanable surface**
- **Robotically seam welded housing**
- **0-10v 1% Dimming Standard**
- **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**



DISCLAIMER: Although KURTZON has prepared the information contained in this document with all due care, KURTZON does not warrant or represent that the information is free from errors or omission. While the information is considered to be true and correct at the date of publication, changes in circumstances after the time of publication may impact on the accuracy of the information. The information may change without notice and KURTZON is not in any way liable for the accuracy of any information printed and stored or in any way interpreted or used.



## ORDERING GUIDE

Series	Material	Size	Row Qty.	LED Type	CCT/CRI	Voltage	Optics	Options			
KL-R/EZ											
Series	Material	Size	Light Source			Voltage	Optics	Options			
			Row Qty.	LED Type	CCT/CRI						
KL-R/EZ	1	White CRS Hsg. & White CRS Door	1x4 1' x 4' Housing	1	LEDR	83 CRI:	120V	P12ACR 0.135" P12 Prismatic Impact Resistant Acrylic (Inverted)	SW	Wet Location Hub Supplied (not installed)	
				2	LEDH	830 3000K	277V	LEX 0.125" P12 Prismatic Polycarbonate (Inverted)	PxL *	Programmed to User Specified Lumen Value.	
	2	White CRS Hsg. & Polished 304 SS Door	2x2 2' x 2' Housing	OR	2	LEDHF	835 3500K	UNV	A19 0.156" A19 Prismatic Impact Resistant Acrylic (Inverted)	PxW *	Programmed to User Specified Wattage Value.
					3		840 4000K	347V*	TG 0.156" Prismatic Tempered Glass (Inverted)	10KV	10KV Parallel Surge Protection (One Supplied Per Circuit)
	3	White 430 SS Hsg. & Polished 304 SS Door	2x4 2' x 4' Housing		4		850 5000K		HIA 0.140" P12 Prismatic High Impact Resistant Acrylic (Inverted)	GTD	Generator Transfer Device
									FROST 0.125" Flat Diffusing Frost Acrylic	WHIP	Must Specify Length and Wire Qty
						90+ CRI:		2DBW 0.125" Flat Diffused Acrylic with Bi-Directional Batwing Distribution	OCCMW	Internal microwave OCC Sensor	
						935 3500K		LBW 0.125" Flat Diffused Acrylic with Linear Batwing Distribution	FC	Fuse & Holder (One Supplied Per Circuit)	
						940 4000K		GH85 0.125" Flat Diffused Acrylic with Glare Suppression Distribution	EM10	10W Integral LED EM (Specify Input Voltage)	
						950 5000K			EM20	20W Remote LED EM (Specify Input Voltage)	
									GG	1/8" Thick Grid Gasket (Provided Loose)	
									EDL	-40F Electronic Driver	
								WHT	White Finished Door & HSG		
								AMW	Anti-Microbial White Powdercoat		
								2/ED	Two Drivers/Two Circuits		
Note*: Specify Value in Ordering Notes											
Ordering Notes, If Applicable											

Ordering Notes, If Applicable

# Cleanroom KL R/EZ Screwless Troffers

1x4, 2x2 and 2x4 High Efficiency LED Luminaires With Screwless Door Frame

## SPECIFICATIONS

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

**DOOR FRAME:** One piece door frame with welded corners overlaps the fixture allowing the NSF approved microcellular gasket to seal to the mounting surface. Door frame is secured to the housing with torsion springs for a crevice free door frame that can be opened without tools. Available in 20Ga 304 Polished SS, or 18Ga 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 when no other options are selected. All prismatic lensing options come with an inverted lens so the smooth side faces the room for easy cleaning. All optics are sealed to the door with NSF listed RTV silicone sealant. Other optics are available, consult factory for more information or options not listed.

**LEDs:** Commercially available in a wide variety of Color Temperature (CCT), FLUX, and CRI. Highly efficient and consistent color maintained to 3 SDMC for color critical applications. B50/L70 and compliant with Zhaga recognized hole patterns. Consult factory for LED options or configurations not listed below.

**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.

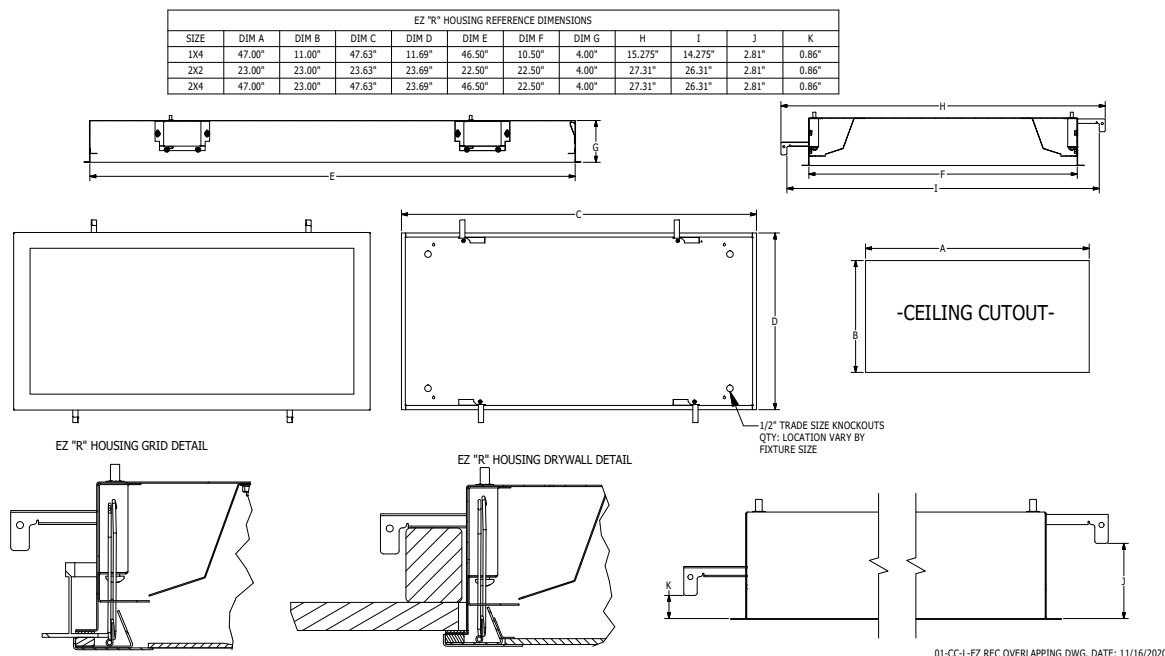
**REFLECTOR:** Die formed metal with high reflectance white polyester powder coat finish. Typical reflectivity 92%.

**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 unless WHT or AMW options are selected. All other materials are provided with gloss high reflectance white polyester powdercoat with 1000hr salt spray test per ASTM B117. AMW option provides a white anti-microbial polyester powder coat to all exposed surfaces.

**LISTINGS:** IP66 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 1 through Class 100,000 cleanspaces. NSF2 Listed for non-food zones & 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.

## PRODUCT DRAWINGS



# Cleanroom KL R/EZ Screwless Troffers

1x4, 2x2 and 2x4 High Efficiency LED Luminaires With Screwless Door Frame

## ENERGY DATA- WHITE

SURFACE & RECESSED OVERLAPPING LED TROFFER (APPROX <sup>1</sup> LUMENS DELIVERED)										
ENCLOSURE SIZE	LIGHT PACKAGE	83 CRI (3000K - 5000K)				90 CRI (3500K, 4000K)				STANDARD DIMMING
		LUMENS	WATTS <sup>2</sup>	EFFICACY <sup>3</sup>	MAX AMB TEMP	LUMENS	WATTS <sup>2</sup>	EFFICACY <sup>3</sup>	MAX AMB TEMP <sup>4</sup>	
1X4	1LEDR	2,974	29	103	45°C (113°F)	2,868	29	99	45°C (113°F)	0-10V 1%
1X4	2LEDR	<b>5,948</b>	<b>55</b>	<b>108</b>	45°C (113°F)	<b>5,736</b>	<b>56</b>	<b>103</b>	45°C (113°F)	0-10V 1%
1X4	2LEDH	<b>11,493</b>	<b>109</b>	<b>106</b>	35°C (95°F)	<b>10,980</b>	<b>109</b>	<b>101</b>	35°C (95°F)	0-10V 1%
1X4	2LEDHF	<b>18,046</b>	<b>153</b>	<b>118</b>	35°C (95°F)	15,546	183	85	35°C (95°F)	0-10V 1%
1X4	EM10	1030-1180	4	NA	40°C (104°F)	850-1030	4	NA	40°C (104°F)	NA
2X2	2LEDR	3,165	29	109	45°C (113°F)	3,042	29	105	45°C (113°F)	0-10V 1%
2X2	3LEDR	<b>4,747</b>	<b>42</b>	<b>113</b>	45°C (113°F)	<b>4,563</b>	<b>42</b>	<b>109</b>	45°C (113°F)	0-10V 1%
2X2	2LEDH	6,213	55	113	40°C (104°F)	5,928	55	108	40°C (104°F)	0-10V 1%
2X2	4LEDR	6,328	55	115	45°C (113°F)	6,084	55	111	45°C (113°F)	0-10V 1%
2X2	3LEDH	<b>9,319</b>	<b>80</b>	<b>116</b>	40°C (104°F)	<b>8,892</b>	<b>81</b>	<b>110</b>	35°C (95°F)	0-10V 1%
2X2	4LEDH	12,425	109	114	40°C (104°F)	11,856	109	109	35°C (95°F)	0-10V 1%
2X2	4LEDHF	<b>18,523</b>	<b>153</b>	<b>121</b>	35°C (95°F)	16,425	184	89	35°C (95°F)	0-10V 1%
2X2	EM10	1090-1210	4	NA	40°C (104°F)	890-1110	4	NA	40°C (104°F)	NA
2X4	2LEDR	6,864	55	125	45°C (113°F)	6,567	56	117	45°C (113°F)	0-10V 1%
2X4	3LEDR	<b>10,295</b>	<b>83</b>	<b>124</b>	45°C (113°F)	<b>9,851</b>	<b>83</b>	<b>119</b>	45°C (113°F)	0-10V 1%
2X4	2LEDH	13,488	109	124	40°C (104°F)	12,816	109	118	40°C (104°F)	0-10V 1%
2X4	4LEDR	13,726	111	124	45°C (113°F)	13,134	113	116	45°C (113°F)	0-10V 1%
2X4	3LEDH	<b>20,233</b>	<b>165</b>	<b>123</b>	40°C (104°F)	<b>19,224</b>	<b>165</b>	<b>117</b>	40°C (104°F)	0-10V 1%
2X4	4LEDH	26,977	220	123	40°C (104°F)	25,632	220	117	40°C (104°F)	0-10V 1%
2X4	4LEDHF	<b>39,373</b>	<b>305</b>	<b>129</b>	35°C (95°F)	35,488	373	95	35°C (95°F)	0-10V 1%
2X4	EM10	1230-1290	4	NA	40°C (104°F)	950-1190	4	NA	40°C (104°F)	NA

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

<sup>2</sup> WATTAGE IS MEASURED WITH 4000K SELECTION @ 120vAC AND Tambient = 25C. WATTAGES MAY VARY WITH ALTERNATE CONFIGURATIONS

<sup>3</sup> EFFICACY CALCULATED USING 4000K CCT DATA.

<sup>4</sup> MAX AMBIENT TEMP RATING, NON-IC INSTALLATION. TEMP RATING MAY VARY WITH SPECIFIED DRIVERS OR ANY NON-STANDARD SELECTION

<sup>6</sup> 90 MINUTE 10W EMERGENCY DRIVER; LUMENS CALCULATED BASED ON FIXTURE EFFICACY.

## PHOTOMETRICS

### P12 PRISMATIC

Key:

