Cleanroom KL-R/TR Top Relamp Troffers

2x4 & 1x4 High Efficiency LED Recessed Luminaires with Top and Bottom Access

- Rated IP66
- Suitable for ISO 3-9 Cleanspaces
- Suitable for 209E Class 1-100,000 Cleanspaces
- **ETL listed for Wet Locations**
- One piece overlapping doorframe
- Robotically seam welded housing
- 0-10v 1% Dimming Standard.
- Service to Luminare from Plenum Side of ceiling
- Recessed Housing suitable for Tbar Grid AND Hardlid Installations
- BAA 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 information is the informer of the combination. 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























ORDERING GUIDE

Voltage LED Type CCT/CRI Optics Options

KL-R/TR

Series	Material	Size	Light Source		V-14		0.11			
			Row Qty.	LED Type	CCT/CRI	Voltage	Optics			Options
KL-R/TR	1 White CRS Hsg. & White CRS Door	1x4 1' x 4' Housing	1	LEDR	83 CRI:	120V	P12ACF	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			LEDHF	835 3500K	UNV	A19	0.156" A19 Prismatic Impact Resistant Acrylic (Inverted)	PxW	 Programmed to User Specified Wattage Value.
		2x4 2' x 4' Housing	2		840 4000K	347V*	TG	0.156" Prismatic Tempered Glass (Inverted)	10KV	10KV Parallel Surge Protection (One Supplied Per Circuit)
			3] [850 5000K	*347V Available with 10% dim-	HIA	0.140" P12 Prismatic High Impact Resistant Acrylic (Inverted)	GTD	Generator Transfer Device
			4				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	OCCMV	Internal microwave OCC Sensor
					935 3500K	ming, not all options are	LBW	0.125" Flat Diffused Acrylic with Linear Batwing Distribution	FC	Fuse & Holder (One Supplied Per Circuit)
					940 4000K compatible	GH85	0.125" Flat Diffused Acrylic with Glare Suppression Distribution	EM10	10W Integral LED EM (Specify Input Voltage)	
				950 5000K Wi	with 347V		EM20	20W Remote LED EM (Specify Input Voltage)		
						1	NOTE-P12ACR option is standard and will be provided when no other option is selected	GG	1/8" Thick Grid Gasket (Provided Loose)	
						1		EDL	-40F Electronic Driver	
					ole in 95 + CRI with Seoul Sun-Like actory for more information.			WHT	White Finished Door & HSG	
								AMW	Anti-Microbrial White Powdercoat	
									2/ED	Two Drivers/Two Circuits

Ordering Notes, If Applicable



Cleanroom KL-R/TR Top Relamp Troffers

2x4 & 1x4 High Efficiency LED Recessed Luminaires with Top and Bottom Access

SPECIFICATIONS

HOUSING: One piece, hole free, robotically seam welded 20Ga CRS housing has flattened knockouts for a superior seal. Gasketed top cover allows all services from above. Fully white powder coated.

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 hinged by aircraft cables and is supplied with captive stainless steel flush head screws to allow easy wiping of the surface. 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.

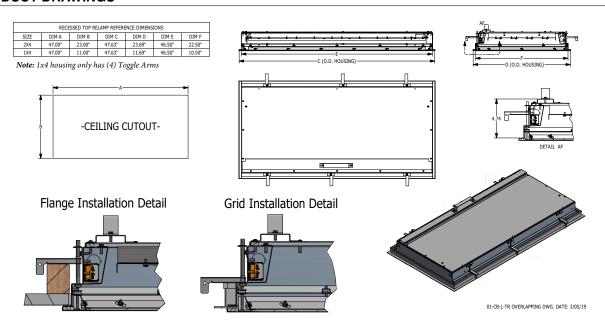
REFLECTOR: Die formed metal with high reflectance white polyester powder coat finish. Typical reflectivity 92%.

INSTALLATION: Suitable for recessed NON-IC installation into grid or flange ceilings. Accommodates most 1" and 1.5" T-Bar Grid see below installation details. Four or six adjustable toggle arms with holes for seismic support wire attachment. Supply entry via 1/2" trade size flattened knockouts located at the ends of the fixture.

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 is Buy American Act (B.A.A.) compliant.

PRODUCT DRAWINGS





Cleanroom KL-R/TR Top Relamp Troffers

2x4 & 1x4 High Efficiency LED Luminaires with Top and Bottom Access

ENERGY DATA

RECESSED OVERLAP TOP RELAMP LED TROFFER (APPROX¹ LUMENS DELIVERED)												
ENCLOSURE	LIGHT PACKAGE	83 CRI (3000K - 5000K)				90 CRI (3500K, 4000K)				STANDARD DIMMING		
SIZE		LUMENS	WATTS ²	EFFICACY ³	MAX AMB TEMP	LUMENS	WATTS ²	EFFICACY ³	MAX AMB TEMP⁴			
1X4	1LEDR	2,974	29	103	45°C (113°F)	2,868	29	99	45°C (113°F)	0-10V 1%		
1X4	2LEDR	5,948	55	108	45°C (113°F)	5,736	56	103	45°C (113°F)	0-10V 1%		
1X4	2LEDH	11,493	109	106	35°C (95°F)	10,980	109	101	35°C (95°F)	0-10V 1%		
1X4	2LEDHF	18,046	153	118	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		
2X4	2LEDR	6,864	55	125	45°C (113°F)	6,567	56	117	45°C (113°F)	0-10V 1%		
2X4	3LEDR	10,295	83	124	45°C (113°F)	9,851	83	119	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	20,233	165	123	40°C (104°F)	19,224	165	117	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	39,373	305	129	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		

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

PHOTOMETRICS

P12 PRISMATIC

Report No: 20898

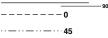
Total Lumens: 12,642

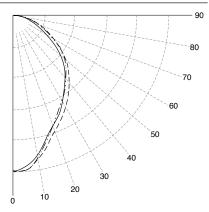
Wattage: 102.43

Efficacy: 123.4 (Lumens Per Watt)

Fixture Size: 1'x4'

Key: _____





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

³ EFFICACY CALCULATED USING 4000K CCT DATA.

⁴ MAX AMBIENT TEMP RATING, NON-IC INSTALLATON. TEMP RATING MAY VARY WITH SPECIFIED DRIVERS OR ANY NON-STANDARD SELECTION

⁸ 90 MINUTE 10W EMERGENCY DRIVER; LUMENS CALCULATED BASED ON FIXTURE EFFICACY.