PROJECT

DATE

NOTES

REV: 01/29/2025

Cleanroom EL-R Vivarium Troffers-QS

2x2 and 2x4 Red/White LED Recessed Luminaires

- **ETL Listed for Wet Locations**
- IP55 Rated
- Suitable for ISO 5-9 Cleanspaces
- Suitable for FED Std 209E Class 100-100,000 Cleanspaces
- Channel inset door frame
- Robotically seam welded housing
- Narrow Spectrum 630nm red non-filtered LEDs
- White / Red separately controlled circuits
- 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





























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 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

ORDERING GUIDE

Series	Material	Size	Row Qty.	Red LED	Row Qty.	White LED	CCT/CRI	Voltage	Options	Quick Ship	
EL-R				RLED630		LEDR					
	Material	Size	Light Source					No. III		0.11.011	
Series			Row Qty.	Red LED	Row Qty.	White LED	CCT/CRI	Voltage	Options	Quick Ship	
EL-R	3 White 430 SS Hsg. & Polished 304 SS Door	2x2 2' x 2' Housing	1	RLED630	1	LEDR	83 CRI:	120V	EM10 10W Integral LED EM (Specify Input Voltage) 5D	QS (5-Day Quick Ship)	
	4 White AL Hsg. & Polished 304 SS Door	5 LED Rows Max	2		2		835 3500K	277V	EM20 20W Remote LED EM (Specify Input Voltage) 3D	QS (3-Day Quick Ship)	
	5 White AL Hsg. & White AL Door	OR	3		3		840 4000K	UNV	PxL Programmed to User Specified Lumen Value.		
		2x4 2' x 4' Housing	4						PxW Programmed to User Specified Wattage Value.		
		5 LED Rows Max							10KV Parallel Surge Protection (One Supplied Per Circuit)		
									GG 1/8" Thick Grid Gasket (Provided Loose)		

Ordering Notes, If Applicable



Cleanroom EL-R Vivarium Troffers-QS

2x2 and 2x4 Red/White LED Recessed Luminaires

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: Inset door frame made from welded channels regresses into the housing to allow the neoprene 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.

GASKETS: Closed cell 100% pure neoprene 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 Red only or Red & White LEDs, each color will be supplied with its own driver for dual switching. Red LED's provide a narrow 630nm spectrum light for wavelength sensitive applications. White high efficiency LEDs are are commercially available and 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.

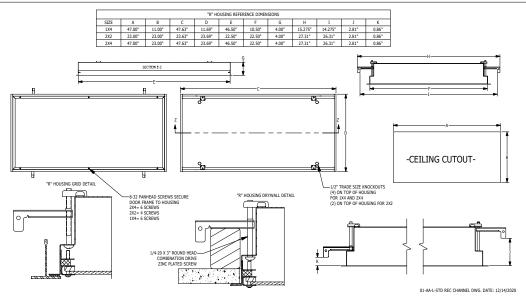
FINISH: Stainless steel door frames are satin polished. All other materials are provided with gloss high reflectance white polyester powdercoat with 1000hr salt spray test per ASTM B117.

LISTINGS: IP55 rated for dust and water ingress. ETL listed per UL_1598 for wet locations. Chicago Plenum Rated. Certified ISO-14644-1 for class 5 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 EL-R Vivarium Troffers-QS

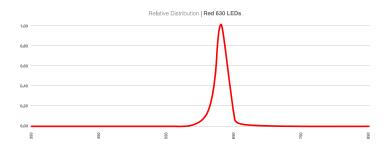
2x2 and 2x4 Red/White LED Recessed Luminaires

ENERGY DATA

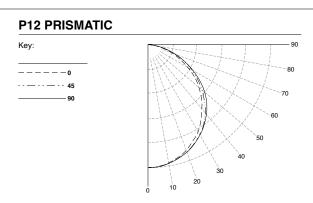
CHANNEL-FGRS-RED LED TROFFER											
ENCLOSURE	LED SELECTION	DIMMING	83 CRI			630nm (RED)			AMBIENT TEMP RATING		
			LUMENS	WATTS	EFFICACY	LUMENS	WATTS	EFFICACY	MINIMUM	MAXIMUM ³	
2x2	1LEDR	0-10V 1%	1,630	15	109		•		-20°C (-4°F)	40°C (104°F)	
2x2	2LEDR	0-10V 1%	3,260 29 112				NA		-20°C (-4°F)	40°C (104°F)	
2x2	3LEDR	0-10V 1%	4,887	42	116				-20°C (-4°F)	40°C (104°F)	
2X2	1RLED	0-10V 1%		-		549	14	39	-20°C (-4°F)	40°C (104°F)	
2X2	2RLED	0-10V 1%	NA			1011	27	37	-20°C (-4°F)	40°C (104°F)	
2X2	3RLED	0-10V 1%				1560	41	38	-20°C (-4°F)	40°C (104°F)	
2X2	4RLED	0-10V 1%				2022	53	38	-20°C (-4°F)	40°C (104°F)	
2X4	1LEDR	0-10V 1%	3,470	29	120				-20°C (-4°F)	40°C (104°F)	
2X4	2LEDR	0-10V 1%	6,942	55	126	NA			-20°C (-4°F)	40°C (104°F)	
2X4	3LEDR	0-10V 1%	10,412	83	125				-20°C (-4°F)	40°C (104°F)	
2X4	1RLED	0-10V 1%				1247	27	46	-20°C (-4°F)	40°C (104°F)	
2X4	2RLED	0-10V 1%	NA			2298	53	43	-20°C (-4°F)	40°C (104°F)	
2X4	3RLED	0-10V 1%		INA		3545	80	44	-20°C (-4°F)	40°C (104°F)	
2X4	4RLED	0-10V 1%				4596	106	43	-20°C (-4°F)	40°C (104°F)	

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

COLOR LED RELATIVE DISTRIBUTION



PHOTOMETRICS



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

³ MAX AMBIENT TEMP RATING, NON-IC INSTALLATON. TEMP RATING IS WITH NO OTHER OPTIONS SELECTED. WHITE LEDS ONLY SUITABLE FOR 40C AMBIENT