

Medical Exam Room Troffers

1x4, 2x2 and 2x4 Surface & Recessed High Lumen LED Luminaires with RF Filtering

- For use in Medical Patient and Exam Rooms
- IP55 Rating
- Rf filtered circuits standard
- Green/white switching available
- Symmetric distribution standard
- Antimicrobial finish standard
- Lutron controls available



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	Installation Type	Material	Size	Source	CCT	Circuits (White)	Green LED	Voltage	Mounting	Options
ML	ER: Recessed (Suitable for Flange & Grid)	3: White 430 SS Hsg. & White AM 430 SS Door 4: White Alum Hsg. & White AM 430 SS Door	1x4: 1' x 4' Housing <i>NOTE: Only a total of 2 combined rows of leds can be specified.</i>	1/LEDR	83 CRI:	1/CIR	(optional)	120V	IND Individual	FC: Fuse & Holder (One Supplied Per Circuit) EM10: 10W Integral LED EM (Specify Input Voltage) EM20: 20W Remote LED EM (Specify Input Voltage) ASY: Asymmetric Distribution Lens SSP: Satin Polished Stainless Steel Doorframe PxL: Programmed to User Specified Lumen Value PxW: Programmed to User Specified Wattage Value GTD: Generator Transfer Device WHIP: Must Specify Length and Wire Qty HF1: 1% Dimming for 2x2 with LEDHF LDE1: Lutron Hi-Lume 1% Ecosystem LED Driver SOFTB 10KV: 10KV Parallel Surge Protection (One Supplied Per Circuit)
				2/LEDR	830 = 3000K CCT	2/CIR	1/GLED	277V		
	ES: Surface	5: White Alum Hsg. & White AM Alum Door	2x2: 2' x 2' Housing OR 2x4: 2' x 4' Housing <i>NOTE: Only a total of 4 combined rows of leds can be specified.</i>	2/LEDH	835 = 3500K CCT	Specify Qty of RF Filtered Circuits for White Light	2/GLED	UNV	CRM Continuous Row Mount <i>CRM suitable for hardlid ceilings only.</i>	
				2/LEDHF	840 = 4000K CCT		347V*			
				2/LEDR	90+ CRI:					
				2/LEDH	935 = 3500K CCT					
				3/LEDR	940 = 4000K CCT					
				3/LEDH	950 = 5000K CCT					
				4/LEDR						
				4/LEDH						
				4/LEDHF						

Medical Exam Room Troffers

1x4, 2x2 and 2x4 Surface & Recessed High Lumen LED Luminaires with RF Filtering

SPECIFICATIONS

HOUSING: One piece, hole free, robotically seam welded housing has flattened knockouts for a superior seal. Recessed housings are available in .040" 3003 Aluminum or 20Ga 430 Stainless Steel. Optional Row Mounting for Recessed Housings Only with CRM Selected.

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 Aluminum or 20Ga 430 Stainless steel.

GASKETS: Closed cell 100% pure neoprene gasket with vulcanized corners making a one-piece oil and solvent resistant gasket system.

LENS: Standard Lens provided is a RF Shielded .125" Symmetric P12 Acrylic Lens. ASY option provides RF Shielded Asymmetric distribution lens with frost overlay.

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. See options for available 540nm Green LEDs. Consult factory for LED options or configurations not listed below.

ELECTRICAL: Standard Universal Voltage Class 2 drivers are 0-10v Dimmable to 1% for most LED configurations. 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. Multiple internal circuits are available for scene settings, each specified circuit is provided with an RFI filter that is tested to meet MIL-STD-461. Fixtures available with 10w 90min Emergency battery backups and surge protection. Consult factory for additional options not listed.

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

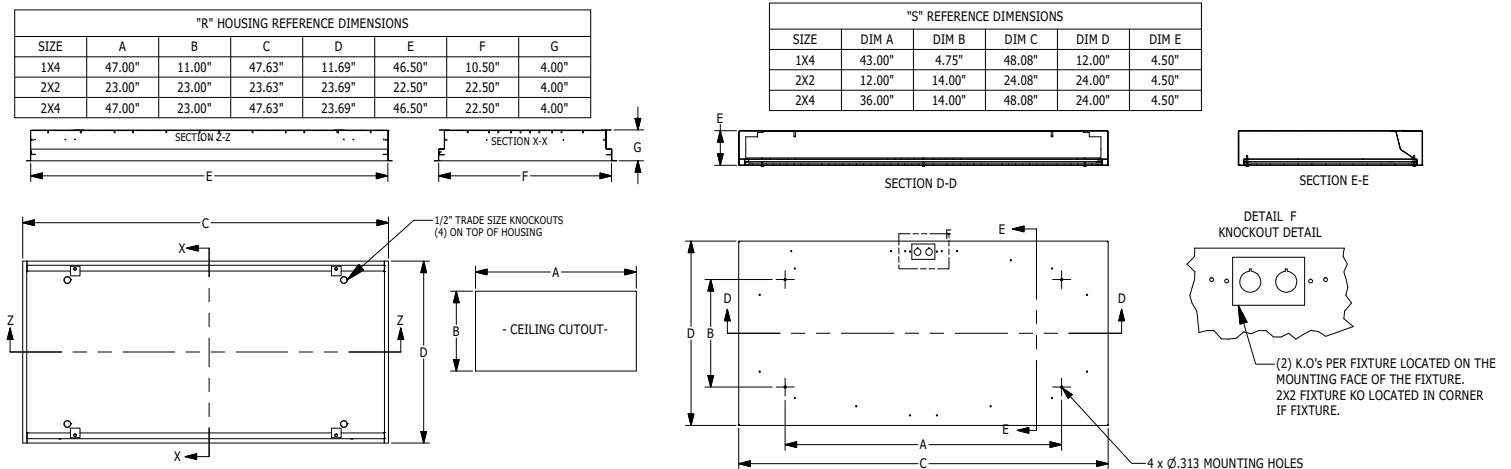
INSTALLATION: Fixtures are supplied with .875" flattened knockouts for supply entry. Recessed housings have (4) swing out toggle arms that are used to draw the fixture in to the ceiling for hard lid installation without the need for a yoke hanger. The toggle arm adjuster bolts are accessible from the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

CRM: Continuous Row Mounting (CRM) option provides a means of securing luminaires to each other end to end in straight rows only. While all recessed luminaires are suitable for thru wiring, the CRM option is only available for Hard lid installation. CRM fixtures come with flanges on 2 of the 4 sides so that the luminaires can mount to each other without the appearance of a larger gap between the two fixtures. Endcaps are factory installed based upon customer provided row configuration information and the Ceiling cutouts can be determined as shown on the CRM installation instructions that can be found on our website.

DOOR FINISH: White Dupont Alesta using Agion silver ion antimicrobial powder coat finish standard. see options for polished stainless steel.

LISTINGS: Military Standard 461F compliant for conducted and radiated emissions. IP55 rated for dust and water ingress. ETL listed per UL_1598 for wet

PRODUCT DRAWINGS



Medical Exam Room Troffers

1x4, 2x2 and 2x4 Surface & Recessed High Lumen LED Luminaires with RF Filtering

ENERGY DATA

MEDICAL SYMMETRIC CHANNEL-FGRS-LED TROFFER (APPROX ¹ LUMENS DELIVERED)												
ENCLOSURE SIZE	LIGHT PACKAGE	DIMMING	83 CRI (3000K - 5000K)			AMBIENT TEMP		90+ CRI (3500K, 4000K)			AMBIENT TEMP	
			LUMENS	WATTS ²	EFFICACY ³	MINIMUM	MAXIMUM ⁴	LUMENS	WATTS ²	EFFICACY ³	MINIMUM	MAXIMUM ⁴
1X4	1LEDR	0-10V 1%	3,600	34	106	-20°C (-4°F)	40°C (104°F)	2,880	34	85	-20°C (-4°F)	40°C (104°F)
1X4	2LEDR	0-10V 1%	7,265	68	107	-20°C (-4°F)	40°C (104°F)	5,812	62	94	-20°C (-4°F)	40°C (104°F)
1X4	2LEDH	0-10V 1%	12,569	102	123	-20°C (-4°F)	40°C (104°F)	12,129	146	83	-20°C (-4°F)	35°C (95°F)
1X4	2LEDHF	0-10V 1%	15,900	139	114	-20°C (-4°F)	35°C (95°F)	16,060	183	88	-20°C (-4°F)	35°C (95°F)
1X4	EM10	NA	1070-1150	4	NA	0°C (32°F)	40°C (104°F)	860-940	4	NA	0°C (32°F)	40°C (104°F)
2X2	2LEDR	0-10V 1%	3,691	35	105	-20°C (-4°F)	40°C (104°F)	2,953	32	92	-20°C (-4°F)	40°C (104°F)
2X2	3LEDR	0-10V 1%	5,622	53	106	-20°C (-4°F)	40°C (104°F)	4,498	48	94	-20°C (-4°F)	40°C (104°F)
2X2	2LEDH	0-10V 1%	6,551	51	128	-20°C (-4°F)	40°C (104°F)	6,322	73	87	-20°C (-4°F)	40°C (104°F)
2X2	4LEDR	0-10V 1%	7,017	68	103	-20°C (-4°F)	40°C (104°F)	5,614	62	91	-20°C (-4°F)	40°C (104°F)
2X2	3LEDH	0-10V 1%	9,951	77	129	-20°C (-4°F)	40°C (104°F)	9,603	110	88	-20°C (-4°F)	35°C (95°F)
2X2	4LEDH	0-10V 1%	12,930	102	127	-20°C (-4°F)	40°C (104°F)	11,311	146	77	-20°C (-4°F)	35°C (95°F)
2X2	4LEDHF	0-10V 5%	21,178	171	124	-40°C (-40°F)	35°C (95°F)	NA	NA	NA	-20°C (-4°F)	35°C (95°F)
2X2	4LEDHF	0-10V 1%	16,903	138	122	-20°C (-4°F)	35°C (95°F)	16,760	184	91	-20°C (-4°F)	35°C (95°F)
2X2	EM10	NA	1030-1220	4	NA	0°C (32°F)	40°C (104°F)	770-940	4	NA	0°C (32°F)	40°C (104°F)
2X4	2LEDR	0-10V 1%	8,209	68	121	-20°C (-4°F)	40°C (104°F)	6,567	62	106	-20°C (-4°F)	40°C (104°F)
2X4	3LEDR	0-10V 1%	12,320	103	120	-20°C (-4°F)	40°C (104°F)	9,856	94	105	-20°C (-4°F)	40°C (104°F)
2X4	2LEDH	0-10V 1%	14,271	103	138	-20°C (-4°F)	40°C (104°F)	13,772	148	93	-20°C (-4°F)	40°C (104°F)
2X4	4LEDR	0-10V 1%	16,048	135	119	-20°C (-4°F)	40°C (104°F)	12,838	124	104	-20°C (-4°F)	40°C (104°F)
2X4	3LEDH	0-10V 1%	20,949	153	137	-20°C (-4°F)	40°C (104°F)	20,216	221	91	-20°C (-4°F)	35°C (95°F)
2X4	4LEDH	0-10V 1%	27,450	205	134	-20°C (-4°F)	40°C (104°F)	26,054	295	88	-20°C (-4°F)	35°C (95°F)
2X4	4LEDHF	0-10V 1%	35,563	279	128	-20°C (-4°F)	35°C (95°F)	35,810	373	96	-20°C (-4°F)	35°C (95°F)
2X4	EM10	NA	1190-1280	4	NA	0°C (32°F)	40°C (104°F)	870-1060	4	NA	0°C (32°F)	40°C (104°F)

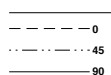
¹ DELIVERED LUMEN DATA IS EXTRAPOLATED FROM MEASURED DATA @25C WITH NO EXTRA OPTIONS. VARIANCES WILL OCCUR WHEN OPTIONS ARE CHOSEN
² WATTAGE IS MEASURED WITH 4000K SELECTION @ 120VAC AND Tambient = 25C. WATTAGES MAY VARY WITH ALTERNATE CONFIGURATIONS
³ EFFICACY CALCULATED USING 4000K CCT DATA.
⁴ MAX AMBIENT TEMP RATING, NON-IC INSTALLATION. TEMP RATING MAY VARY WITH SPECIFIED DRIVERS OR ANY NON STANDARD SELECTION
⁵ 90 MINUTE 10W EMERGENCY DRIVER; LUMENS CALCULATED BASED ON FIXTURE EFFICACY.

MEDICAL SYMMETRIC CHANNEL-FGRS-LED TROFFER (APPROX ¹ LUMENS DELIVERED)					
ENCLOSURE SIZE	LIGHT PACKAGE	STANDARD DIMMING	540nm GREEN LED		
			LUMENS	WATTS ²	EFFICACY ³
1X4	1GLED	0-10V 1%	2,500	36	69
1X4	2GLED	0-10V 1%	5,000	72	69
2X2	1GLED	0-10V 1%	1,200	18	67
2X2	2GLED	0-10V 1%	2,400	36	67
2X4	1GLED	0-10V 1%	2,500	36	69
2X4	2GLED	0-10V 1%	5,000	72	69

PHOTOMETRICS

ML-ER-X-2X4-4/LEDHF835-UNV

Report No: 19677
 Total Lumens: 35,563
 Wattage: 278.64
 Efficacy: 127.6 (Lumens Per Watt)
 Fixture Size: 2'x4'
 Key:



ML-ER-X-2X4-4/LEDHF835-1/CIR-UNV-IND-ASY

Report No: 19718.0
 Total Lumens: 32,496
 Wattage: 279.230
 Efficacy: 116.4 (Lumens Per Watt)
 Fixture Size: 2'x4'
 Key:

