KURTZON
SPECIFICATION GRADE LIGHTING
ILLUMINATING YOUR WORLD

PROJECT

DATE   TYPE

NOTES

REV: 04/2021

Medical **Exam Room Troffers:** ML-ER-LED

1x4, 2x2 and 2x4 High Lumen LED Recessed 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**

- **B.A.A. Compliant & Made in the USA by a Family Owned US Corporation**

ORDERING GUIDE

Series	Material	Size	Row Qty.	LED Type	CCT/CRI	Circuits	Green LED	Voltage	Mounting	Optics	Options
ML-ER								UNV			

Series	Material	Size		Light Source		Circuits (white)	Green LED	Voltage	Mounting	Optics	
			Row Qty.	LED Type	CCT/CRI						
ML-ER 3	White 430 SS Hsg. & White AM 430 SS Door	1x4 1' x 4' Housing	1	LEDR	**83 CRI:**	1/CIR	(optional)	UNV	**IND** Individual	**SYM** P12 Prismatic Lens With Embedded RF Grid	
			2	LEDH	**830** 3000K	2/CIR	**1/GLED**			**ASY** Diffusing Optics Assembly With Linear Prismatic Asymmetric Distribution	
4	White Alum Hsg. & White AM 430 SS Door			LEDHF	**835** 3500K		**2/GLED**			**FROST** 0.125" Flat Diffusing Frost Acrylic (No RFI Grid)	
		2x2 2' x 2' Housing	2		**840** 4000K					**LBW** 0.125" Flat Diffused Acrylic with Linear Batwing Distribution (No RFI Grid)	
5	White Alum Hsg. & White AM Alum Door	OR	3		**850** 5000K	Specify Qty of RF Filtered Circuits for White Light	Green LED's are provided with a dedicated RF Filtered circuit		**CRM** Continuous Row Mount	**GH85** 0.125" Flat Diffused Acrylic with Glare Suppression Distribution (No RFI Grid)	
		2x4 2' x 4' Housing	4		**90+ CRI:**					**AB20** 0.125" Flat Diffused 20 Degree Asymmetric Distribution (No RFI Grid)	
					935 3500K						
					940 4000K			CRM suitable for hardlid ceilings only	Note*: SYM option is standard and will be provided when no other option is selected		
					950 5000K						

Ordering Notes, If Applicable

Options

SW	Wet Location Hub Supplied (not installed)
PxL *	Programmed to User Specified Lumen Value.
PxW *	Programmed to User Specified Wattage Value.
10KV	10KV Parallel Surge Protection (One Supplied Per Circuit)
GTD	Generator Transfer Device
WHIP	Must Specify Length and Wire Qty
OCCMW	Internal microwave OCC Sensor
FC	Fuse & Holder (One Supplied Per Circuit)
EM10	10W Integral LED EM (Specify Input Voltage)
EM20	20W Remote LED EM (Specify Input Voltage)
LDE1	Lutron Hi-Lume 1% Ecosystem LED Driver SOFTB
SSP	Satin Polished Stainless Steel Doorframe
GG	1/8" Thick Grid Gasket (Provided Loose)

Note*: Specify Value in Ordering Notes Below

Medical **Exam Room Troffers: ML-ER-LED**
1x4, 2x2 and 2x4 High Lumen LED Recessed 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. 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 "SYM" lens provided is a 12 Prismatic Acrylic Lens. ASY Lens option provide a linear prismatic lense with 20 degree beam distribution with frosted overlay. Both SYM & ASY options include a silkscreened RF grid to absorb radiated emissions, (Prisms must face outward). Other optic options are avaliable but do not include the RF grid.

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 backup 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%.
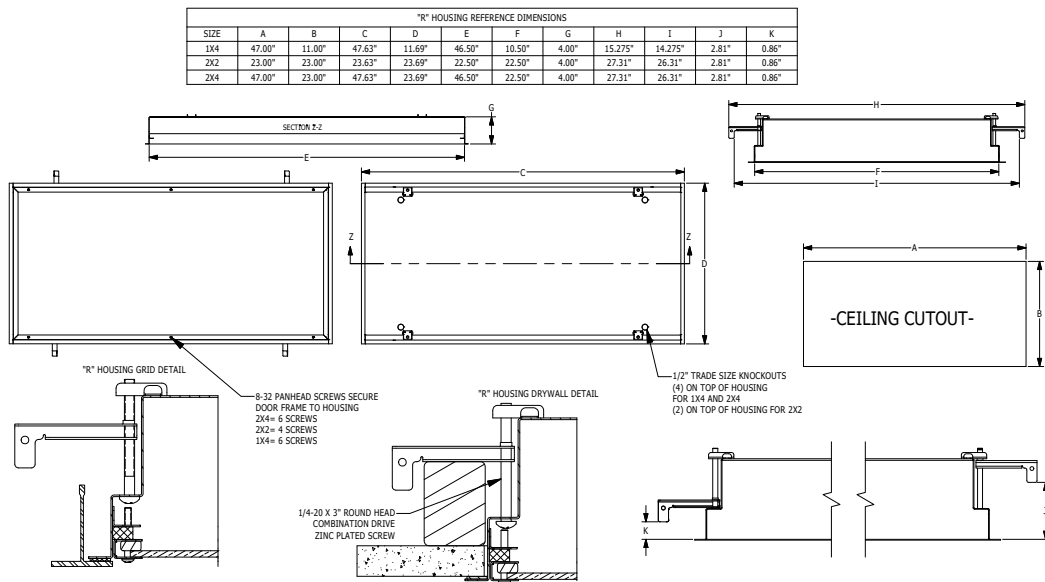
INSTALLATION: Suitable for recessed Non-IC installation into covered ceilings. Fixtures are supplied with .875" flattened knockouts for supply entry. Recessed housings have (4) swing out toggle arms that are used to draw the fixture in to the ceiling for hard lid installation without the need for a yoke 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.

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

PRODUCT DRAWINGS

SIZE	A	B	C	D	E	F	G	H	I	J	K
1X4	47.00"	11.00"	47.63"	11.69"	46.50"	10.50"	4.00"	15.275"	14.275"	2.81"	0.86"
2X2	23.00"	23.00"	23.63"	23.69"	22.50"	22.50"	4.00"	27.31"	26.31"	2.81"	0.86"
2X4	47.00"	23.00"	47.63"	23.69"	46.50"	22.50"	4.00"	27.31"	26.31"	2.81"	0.86"

"R" HOUSING REFERENCE DIMENSIONS

-CEILING CUTOUT-

"R" HOUSING GRID DETAIL

8-32 PANHEAD SCREWS SECURE
DOOR FRAME TO HOUSING
2X4= 6 SCREWS
2X2= 4 SCREWS
1X4= 6 SCREWS

"R" HOUSING DRYWALL DETAIL

1/4-20 X 3" ROUND HEAD
COMBINATION DRIVE
ZINC PLATED SCREW

1/2" TRADE SIZE KNOCKOUTS
(4) ON TOP OF HOUSING
FOR 1X4 AND 2X4
(2) ON TOP OF HOUSING FOR 2X2

01-AA-L-STD REC CHANNEL DWG. DATE: 12/14/2020

Medical **Exam Room Troffers:** ML-ER-LED

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

ENERGY DATA

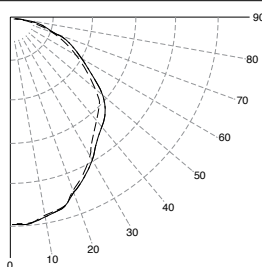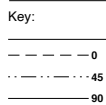| ENCLOSURE SIZE	LIGHT PACKAGE	MEDICAL SYMMETRIC CHANNEL-FGRS-LED TROFFER (APPROX[1] LUMENS DELIVERED)								STANDARD DIMMING
		80 CRI (3000K - 5000K)				90 CRI (3500K, 4000K)				
		LUMENS	WATTS[2]	EFFICACY[3]	MAX AMB TEMP	LUMENS	WATTS[2]	EFFICACY[3]	MAX AMB TEMP[4]	
1X4	1LEDR	3,215	29	111	45°C (113°F)	3,100	29	107	45°C (113°F)	0-10V 1%
1X4	2LEDR	6,430	55	117	45°C (113°F)	6,199	56	111	45°C (113°F)	0-10V 1%
1X4	2LEDH	12,446	109	114	35°C (95°F)	11,915	109	109	35°C (95°F)	0-10V 1%
1X4	2LEDHF	18,763	153	123	35°C (95°F)	16,060	182	88	35°C (95°F)	0-10V 1%
1X4	EM10	1110-1230	4	NA	40°C (104°F)	880-1110	4	NA	40°C (104°F)	NA
2X2	2LEDR	3,260	29	112	45°C (113°F)	3,270	29	113	45°C (113°F)	0-10V 1%
2X2	3LEDR	4,887	42	116	45°C (113°F)	4,902	42	117	45°C (113°F)	0-10V 1%
2X2	2LEDH	6,410	55	117	40°C (104°F)	6,130	55	111	40°C (104°F)	0-10V 1%
2X2	4LEDR	6,510	55	118	45°C (113°F)	6,530	55	119	45°C (113°F)	0-10V 1%
2X2	3LEDH	9,608	80	120	40°C (104°F)	9,186	81	113	35°C (95°F)	0-10V 1%
2X2	4LEDH	12,800	109	117	40°C (104°F)	12,240	109	112	35°C (95°F)	0-10V 1%
2X2	4LEDHF	18,782	153	123	35°C (95°F)	16,760	184	91	35°C (95°F)	0-10V 1%
2X2	EM10	1120-1230	4	NA	40°C (104°F)	910-1190	4	NA	40°C (104°F)	NA
2X4	2LEDR	6,942	55	126	45°C (113°F)	6,640	56	119	45°C (113°F)	0-10V 1%
2X4	3LEDR	10,412	83	125	45°C (113°F)	9,954	83	120	45°C (113°F)	0-10V 1%
2X4	2LEDH	13,650	109	125	40°C (104°F)	12,990	109	119	40°C (104°F)	0-10V 1%
2X4	4LEDR	13,880	111	125	45°C (113°F)	13,270	113	117	45°C (113°F)	0-10V 1%
2X4	3LEDH	20,464	164	125	40°C (104°F)	19,482	164	119	40°C (104°F)	0-10V 1%
2X4	4LEDH	27,280	220	124	40°C (104°F)	25,970	220	118	40°C (104°F)	0-10V 1%
2X4	4LEDHF	40,613	305	133	35°C (95°F)	35,810	373.3	96	35°C (95°F)	0-10V 1%
2X4	EM10	1240-1330	4	NA	40°C (104°F)	960-1200	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

[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

[5]   90 MINUTE 10W EMERGENCY DRIVER; LUMENS CALCULATED BASED ON FIXTURE EFFICACY.

ENCLOSURE SIZE	LIGHT PACKAGE	STANDARD DIMMING	MEDICAL SYMMETRIC CHANNEL-FGRS-LED TROFFER (APPROX[1] LUMENS DELIVERED)		
			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

SYMMETRIC

ASYMMETRIC

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