KURTZON
SPECIFICATION GRADE LIGHTING
ILLUMINATING YOUR WORLD

PROJECT

DATE   TYPE

NOTES

REV: 1/4/2021

Vandal **Troffers**

Vandal Resistant High Abuse 1x4, 2x2 and 2x4 LED Luminaires

- **Rigid, One piece inset door sits flush with housing.**

- **Provided with SS tamper resistant fasteners standard**

- **Combined lensing up to 3/8" thickness**

- **Robotically seam welded enclosure**

- **IP65 rated**

- **Suitable for use in public spaces**

- **0-10V 1% dimming standard (except 2x2 with HF LED Selection)**

To See All DLC Listings,
Visit www.Kurtzon.com/

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	Material	Size	Source	CCT	Voltage	Lens: LED Side / Room Side	Options
VL								

Series	Installation Type	Material	Size	Source	CCT	Voltage	Lens: LED Side / Room Side	Options
VL	**R**: Recessed (Suitable for Flange & Grid)	**3:** White 430 SS Hsg. & Polished 304 SS Door **4:** White AL Hsg. & Polished 304 SS Door **5:** White AL Hsg. & White AL Door **7:** White AL Hsg. & White CRS Door	**1x4:** 1' x 4' Housing	**1/LEDR** **2/LEDR** **2/LEDH** **2/LEDHF**	**83 CRI:** **830** = 3000K CCT **835** = 3500K CCT **840** = 4000K CCT **850** = 5000K CCT	**120V** **277V** **UNV** **347V***	**Choose One Layer of Prismatic Lenses** **1:** .125" P12 Polycarbonate **2:** .140" P12 High Impact Acrylic **3:** .156" P12 Polycarbonate **4:** .156" P73 Tempered Glass	**FC:** Fuse & Holder (One Supplied Per Circuit) **2/ED:** Two Drivers (Two Circuits) **EDL:** -40F Electronic Driver **EM10:** 10W Integral LED EM (Specify Input Voltage) **EM20:** 20W External LED EM (Specify Input Voltage) **WHT:** White Finished Door & HSG **SW:** Wet Locatoin Hub Supplied (not installed)
			2x2: 2' x 2' Housing OR **2x4:** 2' x 4' Housing	**2/LEDR** **2/LEDH** **3/LEDR** **3/LEDH** **4/LEDR** **4/LEDH** **4/LEDHF**	**90 + CRI:** **935** = 3500K CCT **940** = 4000K CCT **950** = 5000K CCT		**Choose One Layer of Non prismatic Lensing** **5:** .125" Clear Flat Polycarbonate **6:** .187" Clear Flat Polycarbonate **7:** .250" Clear Flat Polycarbonate	**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 **AH**: Allen Head SS Tamperproof Fasteners
	S: Surface	**1:** White CRS Hsg. & White CRS Door **2:** White CRS Hsg. & Polished 304 SS Door **3:** Polished 304 SS Hsg. & Polished 304 SS Door **4:** White AL Hsg. & Polished 304 SS Door **5:** White AL Hsg. & White AL Door **6:** White CRS Hsg. & White AL Door **7:** White AL Hsg. & White CRS Door	**1x4:** 1' x 4' Housing	**1/LEDR** **2/LEDR** **2/LEDH** **2/LEDHF**				**PMB:** Pendant Mounting Bracket (Surface Housing Only) **HF1:** 1% Dimming driver for 2x2 with LEDHF **OCCMW:** Internal Microwave OCC Sensor
			2x2: 2' x 2' Housing OR **2x4:** 2' x 4' Housing	**2/LEDR** **2/LEDH** **3/LEDR** **3/LEDH** **4/LEDR** **4/LEDH** **4/LEDHF**				

Vandal **Troffers**

Vandal Resistant High Abuse 1x4, 2x2 and 2x4 LED Luminaires

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. Surface housings are available in .050" 3003 Aluminum, 20Ga 430 Stainless Steel, or 20Ga Cold Rolled Steel.

DOOR FRAME: One piece seam welded inset door frame regresses flush into the housing. Door frame is hinged by aircraft cables and secures to housing with captive stainless steel torx pan head screws. Available in .040" 3003 Powder coated Alum. , 20Ga 304 Polished SS, or 18Ga Powder coated Cold Rolled Steel.

GASKETS: Closed cell microcellular extruded KleanLock SealPro gasket with vulcanized corners making a one-piece oil and solvent resistant gasket system.

LENS: Select up to 2 layers of lensing up to a combined thickness of .375". Available in flat or prismatic polycarbonate, tempered glass, or high impact acrylic.

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% 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. 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%.
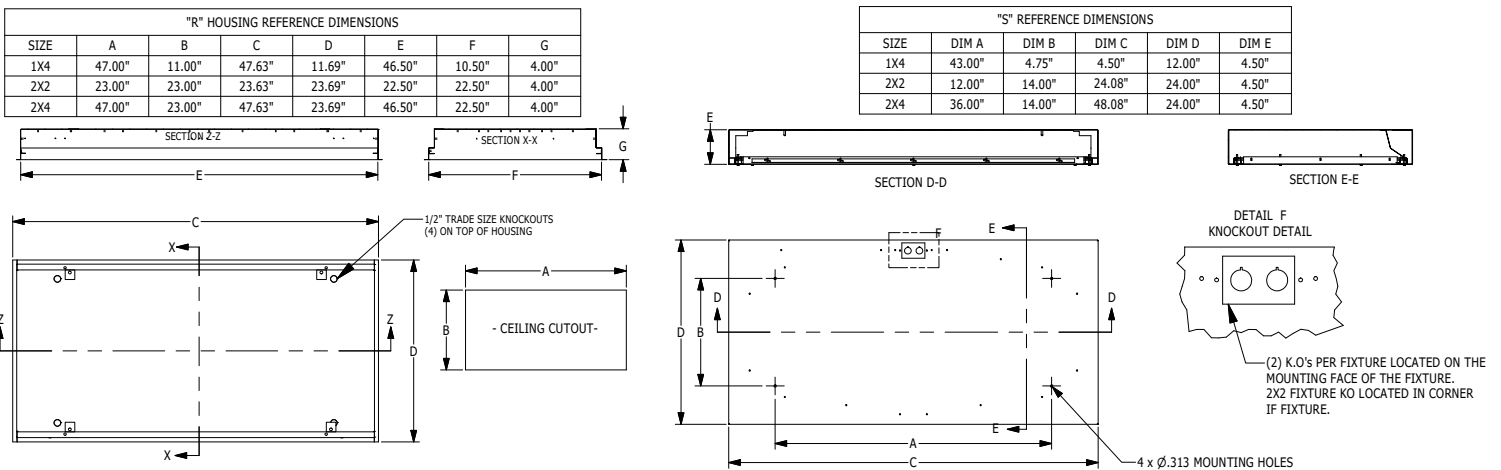
INSTALL RECESSED: One fixture suitable for Grid and Flanged installation. Accommodates 1" and 1.5" T-Bar Grid (Consult factory for 2" T-Bar Grid compatibility). Four adjustable toggle arms with holes for seismic support wire attachment. Supply entry via 1/2" trade size flattened knockouts.

INSTALL SURFACE: Four .312" dia. mounting holes and a removable gasketed wiring access plate with Supply entry via 1/2" trade size flattened knockouts. Optional mounting brackets available for pendant mounting.

FINISH: Gloss white high reflectance 1000 hr. salt spray polyester powder coat finish standard for all recessed housings. Stainless steel doorframes and surface housings are satin polished unless option WHT is chosen.

LISTINGS: IP65 rated for dust and water ingress. Suitable for 1700 PSI high pressure hosedowns. ETL listed per UL_1598 for wet locations. Chicago Plenum Rated. Drivers and LEDs are covered by a 5 year warranty, the remaining fixture is covered by a 10 year warranty.

PRODUCT DRAWINGS

"R" HOUSING REFERENCE DIMENSIONS							
SIZE	A	B	C	D	E	F	G
1X4	47.00"	11.00"	47.63"	11.69"	46.50"	10.50"	4.00"
2X2	23.00"	23.00"	23.63"	23.69"	22.50"	22.50"	4.00"
2X4	47.00"	23.00"	47.63"	23.69"	46.50"	22.50"	4.00"

"S" REFERENCE DIMENSIONS				
SIZE	DIM A	DIM B	DIM C	DIM D	DIM E
1X4	43.00"	4.75"	4.50"	12.00"	4.50"
2X2	12.00"	14.00"	24.08"	24.00"	4.50"
2X4	36.00"	14.00"	48.08"	24.00"	4.50"

Vandal **Troffers**

Vandal Resistant High Abuse 1x4, 2x2 and 2x4 LED Luminaires

ENERGY DATA

POLY INSET-FGRS-LED TROFFER (APPROX¹ LUMENS DELIVERED)													
ENCLOSURE SIZE	LIGHT PACKAGE	STANDARD DIMMING	83 CRI (3000K - 5000K)			AMBIENT TEMP		90+ CRI (3500K, 4000K)			AMBIENT TEMP		
			LUMENS¹	WATTS²	EFFICACY³	MINIMUM	MAXIMUM	LUMENS¹	WATTS²	EFFICACY³	MINUMUM	MAXIMUM
1X4	1LEDR	0-10V 1%	3,150	34	93	-20°C (-4°F)	40°C (104°F)	2,520	34	74	-20°C (-4°F)	40°C (104°F)
1X4	2LEDR	0-10V 1%	6,390	68	94	-20°C (-4°F)	40°C (104°F)	5,112	62	82	-20°C (-4°F)	40°C (104°F)
1X4	2LEDH	0-10V 1%	11,520	113	102	-20°C (-4°F)	40°C (104°F)	11,110	146	76	-20°C (-4°F)	35°C (95°F)
1X4	2LEDHF	0-10V 1%	14,040	139	101	-20°C (-4°F)	35°C (95°F)	14,454	182.5	79.2	-20°C (-4°F)	35°C (95°F)
1X4	EM10	NA	930 - 1020	4	NA	0°C (32°F)	40°C (104°F)	740 - 820	4	NA	0°C (32°F)	40°C (104°F)
2X2	2LEDR	0-10V 1%	3,180	35	91	-20°C (-4°F)	40°C (104°F)	2,540	32	79	-20°C (-4°F)	40°C (104°F)
2X2	3LEDR	0-10V 1%	4,850	53	92	-20°C (-4°F)	40°C (104°F)	3,880	48	81	-20°C (-4°F)	40°C (104°F)
2X2	2LEDH	0-10V 1%	5,040	57	88	-20°C (-4°F)	40°C (104°F)	4,870	73	67	-20°C (-4°F)	35°C (95°F)
2X2	4LEDR	0-10V 1%	6,050	68	89	-20°C (-4°F)	40°C (104°F)	4,840	62	78	-20°C (-4°F)	40°C (104°F)
2X2	3LEDH	0-10V 1%	8,020	86	93	-20°C (-4°F)	40°C (104°F)	7,740	110	71	-20°C (-4°F)	35°C (95°F)
2X2	4LEDH	0-10V 1%	10,100	113	89	-20°C (-4°F)	40°C (104°F)	9,760	146	67	-20°C (-4°F)	35°C (95°F)
2X2	4LEDHF	0-10V 5%	**18,073**	**173**	104	-40°C (-40°F)	35°C (95°F)	NA	NA	NA	NA	NA
2X2	4LEDHF (1%)	0-10V 1%	14,590	138	105	-20°C (-4°F)	35°C (95°F)	14,766	183.8	80.3	-20°C (-4°F)	35°C (95°F)
2X2	EM10	NA	880 - 1050	4	NA	0°C (32°F)	40°C (104°F)	670 - 810	4	NA	0°C (32°F)	40°C (104°F)
2X4	2LEDR	0-10V 1%	7,230	68	106	-20°C (-4°F)	40°C (104°F)	5,780	62	93	-20°C (-4°F)	40°C (104°F)
2X4	3LEDR	0-10V 1%	10,850	103	105	-20°C (-4°F)	40°C (104°F)	8,680	94	92	-20°C (-4°F)	40°C (104°F)
2X4	2LEDH	0-10V 1%	11,970	113	106	-20°C (-4°F)	40°C (104°F)	11,500	148	78	-20°C (-4°F)	35°C (95°F)
2X4	4LEDR	0-10V 1%	14,130	135	105	-20°C (-4°F)	40°C (104°F)	11,300	124	91	-20°C (-4°F)	40°C (104°F)
2X4	3LEDH	0-10V 1%	17,950	169	106	-20°C (-4°F)	40°C (104°F)	17,320	221	78	-20°C (-4°F)	35°C (95°F)
2X4	4LEDH	0-10V 1%	23,940	225	106	-20°C (-4°F)	40°C (104°F)	22,960	295	78	-20°C (-4°F)	35°C (95°F)
2X4	4LEDHF	0-10V 1%	31,350	279	112	-20°C (-4°F)	35°C (95°F)	35,344	373.3	94.7	-20°C (-4°F)	35°C (95°F)
2X4	EM10	NA	1050 - 1120	4	NA	0°C (32°F)	40°C (104°F)	780 - 930	4	NA	0°C (32°F)	40°C (104°F)

¹ DELIVERED LUMEN DATA IS ADJUSTED FROM TESTED DATA WITH ACRYLIC LENS

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.

PHOTOMETRICS

VL-R-5-2X2-4/LEDHF850-UNV-1

Report No: 19768.0

Total Lumens: 18,073

Wattage: 173.040

Efficacy: 104.4 (Lumens Per Watt)

Fixture Size: 2'x2'

Key:
- – – – – 0
- – ·· – 45
- ——— 90