

CATALOG #: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

## FEATURES

- Ideal for potentially rough environments such as recreational facilities, schools, supervised behavioral centers, or other vandal prone areas
- Impact-resistant prismatic lens with polycarbonate overlay provides added security
- Fully gasketed door option allows for use in light moisture vandal environments such as locker rooms
- Tamper-resistant screws secure door frame
- T-slot steel hinge ensures positive retention when door is opened
- Back reinforcement ribs and rolled-edge channel provide added strength
- Integral T-bar clips quickly secure fixture to structure. (2x2 and 2x4 only)
- Maximize energy savings with efficacies as high as to 124 lm/W
- Rated for direct contact with insulation
- Made Right Here® in the USA

## SPECIFICATIONS

- HOUSING – 22-gauge die-formed C.R.S.
- DOOR FRAME – .050" flat extruded aluminum, with mitered corners. T-slot steel hinge allows reversible hinging and latching. Fully enclosed spring-loaded cam latches secured with six tamper-resistant, tri-grove screws.
- SHIELDING – Frosted acrylic, pattern #12, .157" thick chemically welded to clear polycarbonate, .177" thick.
- FINISH – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL – High quality mid-power LED board. L70 at 50,000 hours. 25°C maximum ambient operating temperature.
- MOUNTING – NEMA Type "G" standard. NEMA Type "F" available.
- LISTINGS –
  - cETLus conforms to UL STD 1598. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations
  - IC-rated for direct contact with insulation
  - City of Chicago Environmental Air approved when specified with CP option
- WARRANTY – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

## ORDERING EXAMPLE: V50 G - S 2 4 - L130/835 - F - VLF - OPTIONS - DIM - UNV

### ORDERING INFO

SERIES	CEILING TYPE	FIXTURE STYLE	WIDTH	LENGTH	LUMENS <sup>[1]</sup>	
V50	G NEMA Type "G"	S Full door frame—no reveal	1 1' <sup>[3]</sup>	2 2' <sup>[4]</sup>	1x4	
			2 2'	4 4'	L23 2,300lm L39 3,900lm L58 5,800lm	
	F NEMA Type "F" <sup>[2]</sup>					2x2
						L23 2,300lm L39 3,900lm L58 5,800lm
				2x4		
				L31 3,100lm L56 5,600lm L81 8,100lm L117 11,700lm		

CRI	CCT	DOOR FRAME	SHIELDING
8 80	27 2700K	F White flat aluminum	VLF Frosted, pattern #12, .187" thick acrylic chemically welded to clear .177" thick polycarbonate
9 90 <sup>[5]</sup>	30 3000K	FB Black flat aluminum	VL Acrylic, pattern #12, .187" thick acrylic chemically welded to clear .177" thick polycarbonate <sup>[6]</sup>
	35 3500K		
	40 4000K		PC12187 Polycarbonate, pattern #12, .187" thick
	50 5000K		

OPTIONS <sup>[7]</sup>	CONTROL <sup>[8]</sup>	VOLTAGE
EM/10W 10-watt emergency battery	DIM Dimming driver	120 120V
DG Double gasket <sup>[9]</sup>	DRV Non-dimming driver	277 277V
TG Triple gasket <sup>[10]</sup>		UNV 120-277V
EQCLIPS Earthquake clips <sup>[11]</sup>		347 347V <sup>[14]</sup>
(L___) Additional lower lumen packages available. <sup>[12]</sup> Example: 9,500 nominal lumens = V50G-S24-L117/835-(L95).		
WET Wet location under covered ceiling <sup>[13]</sup>		
CP Chicago Plenum (CCEA)		

### ACCESSORIES

TPTG TOOL Tamper-resistant tool for tri-grove screws. <sup>[15]</sup>

### NOTES

- <sup>1</sup> Lumen output based on 3500 CCT, 80 CRI. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- <sup>2</sup> Additional lumen package available, see options
- <sup>3</sup> See page 3 for NEMA TYPE "F" INSTALLATION.
- <sup>4</sup> 4' length only
- <sup>5</sup> 2' width only
- <sup>6</sup> Extended lead times may apply. Consult factory for availability.
- <sup>7</sup> LED pixelation will be visible.
- <sup>8</sup> See page 4 for FLEXIBLE WHIP OPTIONS.
- <sup>9</sup> See page 2 for ADDITIONAL CONTROL OPTIONS.
- <sup>9</sup> See page 3 for GASKETING DETAILS.
- <sup>10</sup> Field installed. See page 3 for GASKETING DETAILS.
- <sup>11</sup> 4 per fixture. NEMA Type "G" only.
- <sup>12</sup> Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- <sup>13</sup> TG option included
- <sup>14</sup> Not available with EM drivers
- <sup>15</sup> Tamper-resistant tool must be ordered separately. Please specify quantity required per project



## FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/w)
1x4	L23	2359	20.1	117.4
	L39	3856	33.7	114.4
	L58	5871	55.7	105.4
2x2	L23	2353	21.3	110.5
	L39	3903	33.7	115.8
	L58	5827	54.4	107.1
2x4	L31	3103	24.9	124.6
	L56	5574	48	116.1
	L81	8146	67.1	121.4
	L117	11733	101.2	115.9

## MULTIPLIER TABLES

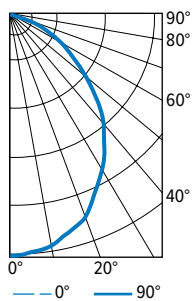
		COLOR TEMPERATURE	
		CCT	CONVERSION FACTOR
80 CRI	2700K		0.97
	3000K		0.99
	3500K		1.00
	4000K		1.03
	5000K		1.06
90 CRI	2700K		0.80
	3000K		0.82
	3500K		0.83
	4000K		0.86
	5000K		0.89

SHIELDING	
CATALOG NUMBER	CONVERSION FACTOR
VLF	1.00
VL	0.97
PC12187	0.83

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier tables to calculate additional options.

## PHOTOMETRY

V50G-S24-L117/835-FVLF-DIM-UNV Total Luminaire Output: 11733 lumens; 101.2 Watts | Efficacy: 115.9 lm/W | 82 CRI;3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	5497	5497	5497	
5	5510	5459	5444	519
15	5284	5243	5224	1479
25	4825	4780	4759	2198
35	4071	3967	3946	2479
45	2954	2750	2705	2158
55	1776	1632	1578	1504
65	958	866	871	904
75	413	377	375	416
85	63	49	36	76
90	0	0	0	

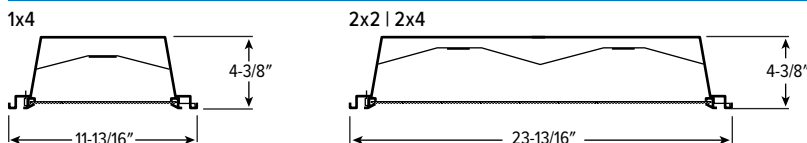
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	4196	36
	0 - 40	6675	57
	0 - 60	10337	88
	0 - 90	11733	100
	0 - 180	11733	100

## ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at [hew.com/product-builder](http://hew.com/product-builder).

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (Must specify 120V or 277V only)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
LDE5	Lutron 5-Series 5% EcoSystem dimming LED driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

## CROSS SECTIONS



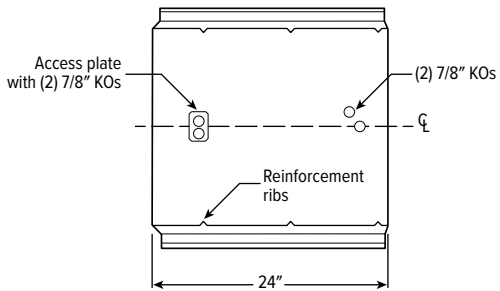
# V50 LED

## Vandal-Resistant Static Troffer

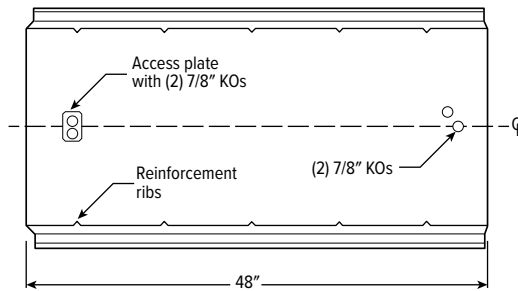
### FIXTURE DETAILS

#### BACKVIEW

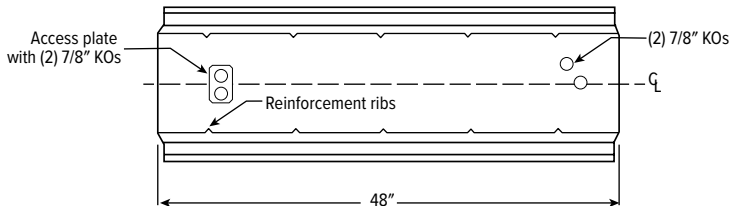
2x2



2x4

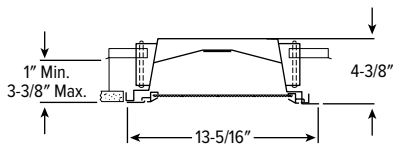


1x4

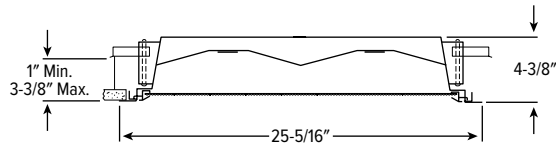


### NEMA TYPE "F" INSTALLATION

1x4



2x2 | 2x4

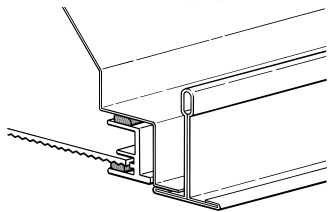


Note: Maximum recommended ceiling opening is 12-3/8" x 48-3/8". For continuous row mounting, add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.

Note: Maximum recommended ceiling opening is 24-3/8" x 24-3/8" for 2'x2' and 24-3/8" x 48-3/8" for 2'x4'. For continuous row mounting, add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.

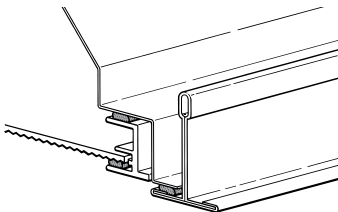
### GASKETING DETAILS

#### DOUBLE GASKETING (DG)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens.

#### TRIPLE GASKETING



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens. Gasketing between bottom perimeter of unit (adjacent to T-bar or hardpan ceiling) is provided by factory and field installed.



## FLEXIBLE WHIP OPTIONS

All Williams recessed troffers are available with a flexible metallic wiring harness, factory-attached and hard-wired to the luminaire. See ordering information table.

Straight connectors are a snap-in type. Consult factory for wiring harness utilizing connectors secured by lock nuts, optional flex size, lengths, and other wire sizes or circuitry. Three-wire flex utilizes black, white, and green wire. Four-wire flex utilizes black, white, red, and green wire. Adding an emergency option requires an additional wire.

Williams fixtures are UL listed to provide factory-installation of several manufacturers' modular wiring devices. Consult factory for availability and ordering information.

DESIGNATION	DESCRIPTION	DRIVER
F338	6' of 3/8" flex, (3) No. 18 AWG wires with (2) straight connectors	DRV, LTE LINE
F348	6' of 3/8" flex, (4) No. 18 AWG wires with (2) straight connectors	SD40
F334	6' of 3/8" flex, (3) No. 14 AWG wires with (2) straight connectors	DRV, LTE LINE
F344	6' of 3/8" flex, (4) No. 14 AWG wires with (2) straight connectors	SD40
F358	6' of 3/8" flex, (5) #18 AWG wires with (2) straight connectors	DIM, DALI

