

Shown with PCFR or HIAFR diffuser

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

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

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

**FEATURES**

- Fully gasketed fixture resists dust, bugs, and moisture
- Standard stainless steel latches protect the fixture from corrosion in harsh environments
- Latches ensure a tight seal and provide easy access to electrical components.
- Tamper-resistant latches available
- Closed-cell polyurethane gasket poured and formed in place to ensure tight seal—does not absorb water or support fungal growth
- NSF/ANSI Standard 2—Splash Zone certified
- IP65, IP66, and IP67 certified
- Made Right Here® in the USA

**SPECIFICATIONS**

- ENCLOSURE – Outer housing consists of 5VA (f1) fiberglass, rated for flame and weather resistance.
- INTERNAL HOUSING – .050" aluminum.
- LATCHING – Stainless steel latches. Injection-molded polycarbonate latches available (not recommended for use in harsh environments, such as a car wash).
- REFLECTOR – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal.
- SHIELDING – Frosted, ribbed, impact-resistant acrylic.
- ELECTRICAL – High quality mid-power LED board. L70 >50,000 hours. -20°C to 40°C maximum ambient operating temperature (restrictions apply, see Performance Data for details). -40°C minimum operating temperature with LA40 option.
- MOUNTING – Surface or suspended. Stainless steel ceiling mount brackets included.
- LISTINGS –
  - cETLus conforms to UL STD 1598 and UL STD 8750. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for dry or damp locations.
  - DesignLights Consortium qualified product. Not all versions of this product may be DLC qualified, see the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL).
  - cETLus listed as suitable for wet locations when specified with watertight hub, STOW or SOOW cord, or mini-male receptacle option.
  - NSF/ANSI Standard 2—Splash Zone certified, IP65, IP66, and IP67 certified, and rated for NEMA 4X.
- WARRANTY – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

**ORDERING EXAMPLE: 96 - 4 - L62/830 - HIAFR - OPTIONS - DRV - UNV**

**ORDERING INFO**

SERIES	LENGTH	LUMENS <sup>[1]</sup>	CRI	CCT	SHIELDING
96	2 2'	2'	8 80	30 3000K	HIAFR Frosted, ribbed, impact-resistant acrylic
	4 4'	L21 2,100lm		35 3500K	PCFR Frosted, ribbed, UV stabilized polycarbonate <sup>[3]</sup>
	8 8' <sup>[2]</sup>	L29 2,900lm		40 4000K	
		4'		50 5000K	
		L40 4,000lm			DFR Drop, frosted, impact-resistant acrylic
		L62 6,200lm			DCL Drop, clear, impact-resistant acrylic with frosted ends
		L81 8,100lm			
		L110 11,000lm			
		8'			
		L80 8,000lm			
	L130 13,000lm				
	L160 16,000lm				
	L220 22,000lm				

**OPTIONS <sup>[4]</sup>**

- (L\_\_\_\_) Additional lower lumen packages available. <sup>[6]</sup> Example: 4,100 nominal lumens = 96-4-L62/840-HIAFR-(L41).
- EM/10W 10-watt emergency battery <sup>[7]</sup>
- EM/18WC 18-watt emergency, low temperature battery <sup>[8]</sup>
- LA40 -40°C minimum operating temperature
- WET/1 (1) 1/2" watertight hub, side access <sup>[9]</sup>
- WET/2 (2) 1/2" watertight hubs, side access <sup>[10]</sup>
- WTT/1 (1) 1/2" watertight hub, back access <sup>[11]</sup>
- WTT/2 (2) 1/2" watertight hub, back access <sup>[12]</sup>
- SSCMB Stainless steel chain mounting brackets <sup>[13]</sup>
- PCL Injection-molded polycarbonate latches <sup>[14]</sup>
- TP Tamper-resistant screws <sup>[15]</sup>
- WMB Stainless steel 45° wall mount bracket <sup>[16]</sup>

**CONTROL <sup>[5]</sup>**

- DIM Dimming driver
- DRV Non-dimming driver

**VOLTAGE**

- 120 120V
- 277 277V
- UNV 120-277V
- 347 347V <sup>[20]</sup>

**OCCUPANCY SENSORS <sup>[17]</sup>**

- OCCWS HB350W-L3W-\_\_\_\_ High Bay passive infrared 360° lens <sup>[18]</sup>
- OCCWS FSP-321B-L\_-120-480 Factory-installed occupancy and daylight control, 120V–480V. <sup>[19]</sup>

**ACCESSORIES**

- TPTG TOOL Tamper-resistant tool for tri-grove screws. <sup>[21]</sup>

**NOTES**

- Lumen output based on 4000 CCT and HIAFR shielding. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen package available, see options.
- Acrylic diffusers only.
- Not available with 8' units.
- Stainless steel latches required for applications with harsh chemicals. Cord and receptacle options available. See page 3 for CORD OPTIONS.
- See page 2 for ADDITIONAL CONTROL OPTIONS.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Not available with L110 or L220 lumen packages. 4' or 8' only. Temperature restrictions apply. See page 2 for FIXTURE PERFORMANCE DATA.
- Not available with L110 or L220 lumen packages. 4' or 8' only. Rated for -20°C to 25°C ambient temperature.
- Factory-installed in end of housing.
- Factory-installed in ends of housing; not available with occupancy sensor option.
- 4' only, factory-installed in back of fixture.
- 4' only, factory-installed in back of fixture.
- 2 per fixture.
- Not recommended for use in harsh environments, such as a car wash.
- This option requires a tamper-resistant tool, see Accessories.
- 2 per fixture. See page 3 for MOUNTING DETAILS.
- Not available with IP66 or IP67 certification when specified with occupancy sensor.
- Factory-installed; must specify 120 or 277V.
- Must specify lens, L2 or L3. See page 4 for OCCUPANCY SENSOR DETAILS.
- Not available with EM drivers.
- Tamper-resistant tool must be ordered separately. Please specify quantity required per project.



## FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	MAXIMUM TEMPERATURE (°C)	
					STANDARD	EMERGENCY
2'	L21	2201	18	120.5	40	—
	L29	3028	25	118.4	40	—
4'	L40	4086	30	137.4	40	40
	L62	6434	48	134.0	40	30
	L81	8121	65	125.0	30	25
	L110	11075	88	126.2	30	—
8'	L80	8018	61	132.8	40	40
	L130	13026	95	138.0	40	30
	L160	16188	123	133.3	30	25
	L220	22056	166	135.7	30	—

- 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 4000K and HIAFR shielding actual lumens may vary +/-5%
- Use multiplier tables to calculate additional options.

## MULTIPLIER TABLES

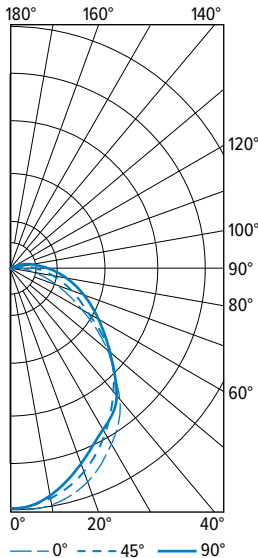
	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.94
	3000K	0.96
	3500K	0.97
	4000K	1.00
	5000K	1.03
90 CRI	2700K	0.77
	3000K	0.79
	3500K	0.80
	4000K	0.83
	5000K	0.86

SHIELDING	
LENS	CONVERSION FACTOR
HIAFR	1.00
PCFR	0.91
DFR	1.05
DCL <sup>1</sup>	1.06

<sup>1</sup> Due to lens being clear, striations in the light distribution will be visible.

## PHOTOMETRY

96-4-L62/840-HIAFR-DRV Report #: 20008.0; 08/15/17 | Total Luminaire Output: 6434 lumens; 48.3 Watts | Efficacy: 133.1 lm/W | 83.6 CRI; 4041K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2318	2318	2318	
5	2352	2298	2283	220
15	2259	2169	2120	617
25	2066	1943	1865	899
35	1780	1666	1704	1065
45	1370	1379	1389	1055
55	943	1007	1062	901
65	546	695	828	691
75	231	449	599	457
85	38	251	361	252
90	15	185	272	
95	14	150	217	143
105	8	84	138	79
115	4	39	85	39
125	0	8	42	14
135	0	0	9	2
145	0	0	2	1
155	0	0	0	0
165	0	0	0	0
175	0	0	0	0
180	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1736	27
0 - 40	2801	44	
0 - 60	4757	74	
0 - 90	6156	96	
90 - 120	262	4	
90 - 150	275	4	
90 - 180	278	4	
0 - 180	6434	100	

## ADDITIONAL CONTROL OPTIONS

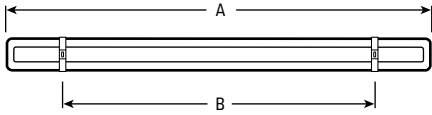
Note: Lumen restrictions apply, consult product builder at [hew.com/product-builder](http://hew.com/product-builder).

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 (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 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



## FIXTURE DETAILS

### BACKVIEW



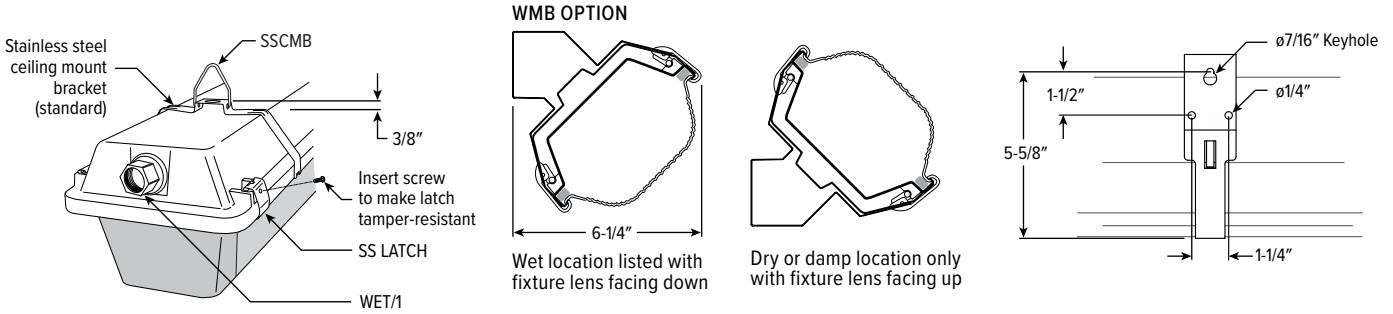
NOMINAL LENGTH	OVERALL LENGTH (A)	MOUNTING DISTANCE (B)
2'	27-5/8"	12"- 17" OC
4'	51-7/8"	30"- 42" OC
8'	100-1/4"	48"- 80" OC

## CORD OPTIONS

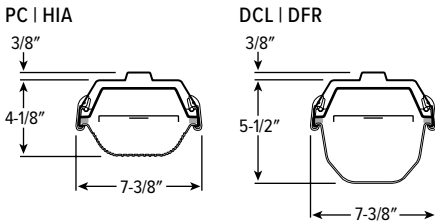
EXAMPLE: 5WMRC6		
NUMBER OF CONDUCTORS	POWER CONNECTION – NON-DIMMING	CORD LENGTH
3 3-wire	WMR Mini-male receptacle only	-
	WC STOW cord	6 6'
4 4-wire	WMRC Mini-male receptacle with STOW cord	20 20'
	POWER CONNECTION – DIMMING	
5 5-wire	WMR Mini-male receptacle only	-
	WC SOOW cord	6 6'
6 6-wire	WMRC Mini-male receptacle with SOOW cord	20 20'

Wet location cord sets are yellow.

## MOUNTING DETAILS

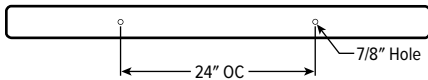


## CROSS SECTIONS



## OPTIONS DETAILS

### WTT/1 | WTT/2



**OCCUPANCY SENSOR DETAILS**

**ORDERING EXAMPLE: OCCWS FSP-321B - L2 - 120-480**

**FEATURES**

- Fully adjustable high and low dimmed light levels.
- Designed for LED fixtures; rated for extreme temperatures and up to 200,000 on/off cycles.
- Hold-off setpoint with automatic calibration option for convenience and added energy savings.
- Adjustable via sensor configuration app.
- IP66 rated with choice of lenses for wet and outdoor locations, and mounting heights from 8' to 20'.
- Adjustable time delay and cutoff delay.
- Factory set to 10% dimming at 5 minutes, cutoff at 1 hour.
- Multi-level control based on motion and/or daylight contribution.
- Universal voltage for 120V – 480V.

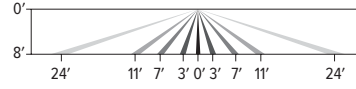
**SENSOR CONFIGURATION APP**

Initial setup and subsequent sensor adjustments are made using the iOS or Android Sensor Configuration App. This app enables adjustment of parameters including high and low modes, sensitivity, time delay, cut off and more. The smartphone app is also used to initiate automatic calibration of the FSP-3x1B ambient light level setpoint. The setpoint is used to hold the controlled lighting off or at low level when there is sufficient daylight. The wireless tool stores an unlimited number of sensor parameter profiles to speed configuration of multiple sensors.

Visit [www.wattstopper.com](http://www.wattstopper.com) for more information.

**LENS COVERAGE PATTERNS**

**L2 Coverage at 8' mounting height: ø48'**



**L3 Coverage at 20' mounting height: ø40'**

