

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

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

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



## FEATURES

- For light industrial applications and low to medium mounting heights
- Diffuse acrylic lens enhances uniformity and minimizes glare
- High-performance up to 147 lm/W
- Diverse selection of mounting accessories for surface and suspended applications
- Channel connector furnished for continuous row applications (included with 8' units only)
- Optional wireguard provides added protection
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

## SPECIFICATIONS

- HOUSING OR REFLECTOR** – 22-gauge die-formed C.R.S.
- 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.
- SHIELDING** – Linear ribbed diffuse acrylic
- ELECTRICAL** – High-quality mid-power LED boards. L70 at 60,000 hours. L85 at 60,000 hours. L90 at 46,000 hours. 40°C maximum ambient operating temperature. 50°C maximum ambient operating temperature with HA Option, lumen restrictions apply. 50/60 Hz constant current driver.
- MOUNTING** – Surface (ceiling or wall) or suspended (hanging hardware required).
- LISTINGS** –
  - cCSAus certified as luminaire suitable for dry or damp location.
  - UL 924 available, see Options.
  - Build America, Buy America (BABA) and Buy American Act (BAA) compliant. Request certification at [hew.com/buy-american](http://hew.com/buy-american)
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty)

## ORDERING EXAMPLE: 80R - 4 - L52/840 - OPTIONS - CONTROL/DIM - UNV

SERIES	LENGTH <sup>[1]</sup>	LUMENS <sup>[2]</sup>	CRI	CCT	OPTIONS <sup>[3]</sup>
80R	4 4'	4'	8 80	27 2700K	<b>EM/10W</b> 10-watt emergency battery <sup>[7]</sup> (L___) Additional lower lumen packages available <sup>[8]</sup> Example: 4,000 nominal lumens = 80R-4-L52/840-(L40)
		<b>L30</b> 3,000lm	9 90	30 3000K	
	8 8' <sup>[4]</sup>	<b>L52</b> 5,200lm		35 3500K	<b>WG-80R11</b> 11-gauge white powder coat wireguard <b>WG-80R14</b> 14-gauge white powder coat wireguard <b>SS-12</b> Single stem and canopy, 12" <sup>[9]</sup> <b>SWS-12</b> Swivel stem and canopy, 12" <sup>[10]</sup> <b>GAT</b> GAT fastener (T-bar clip) <b>VBY</b> (2) Y-hangers <b>VBY-2</b> (2) Y-hangers with 2' chains <b>SMH-76R</b> Surface mount hanger <b>SHS-76R</b> Surface mount hanger for grid ceilings <b>RA-80</b> (2) Steel reflector row aligners <b>RA-GA</b> Heavy-duty housing row aligner <b>HA</b> High ambient operating temperature, 50°C <sup>[11]</sup> <b>QC___</b> Quick-connect wiring harness <sup>[12]</sup> <b>GEN</b> Approved for UL 924 emergency generator circuit through-feed wiring <sup>[13]</sup>
		<b>L72</b> 7,200lm		40 4000K	
		<b>L85</b> 8,500lm <sup>[5]</sup>		50 5000K	
		8'			
		<b>L60</b> 6,000lm			
		<b>L104</b> 10,400lm			
		<b>L144</b> 14,400lm			
		<b>L170</b> 17,000lm <sup>[6]</sup>			

## AIRCRAFT CABLES (EXAMPLE: ACFL/D48) <sup>[14]</sup>

Prefix	Type	Length
ACFL/ Feeder	D 1" grid & hardpan	24 24"
ACJL/ Joiner	N 9/16" grid	48 48"
	S Slot grid	96 96"

## CONTROL <sup>[15]</sup>

See page 5 for ADDITIONAL CONTROL OPTIONS.

–	None
AVI-LVFA	Avi-on wireless fixture control <sup>[16]</sup>
AVI-LVFA-PIR-ELB	Avi-on wireless fixture control with PIR motion and daylight sensor, end mount <sup>[17]</sup>

## DRIVER

See page 5 for ADDITIONAL DRIVER OPTIONS.

<b>DIM</b>	Driver with external 0-10V dimming wires
<b>DRV</b>	Driver without external dimming wires
<b>DA</b>	Driver with 12V auxiliary power, without external dimming wires <sup>[18]</sup>

## VOLTAGE

<b>120</b>	120V
<b>277</b>	277V
<b>UNV</b>	120-277V
<b>347</b>	347V <sup>[19]</sup>
<b>480</b>	480V with stepdown transformer <sup>[20]</sup>

## NOTES

- For actual length, see page 2 for FIXTURE DETAILS
- Lumen output based on 80 CRI/4000K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see options.
- See page 3 for MOUNTING DETAILS.
- Ships with (2) 4' lenses.
- 30°C maximum ambient operating temperature.
- 30°C maximum ambient operating temperature.
- 30° maximum ambient operating temperature.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Two stem sets required. One additional stem set required for each row mounted fixture.

- Two stem sets required. One additional stem set required for each row mounted fixture.
- L72 max for 4', L144 max for 8'. Not available with EM batteries.
- See page 3 for QUICK-CONNECT OPTIONS.
- Maximum mounting height is 26.2' (8.0 m). Minimum lumen output is 400 lm/ft. See [hew.com/UL924](http://hew.com/UL924) for details.
- VBY hanger(s) included. Units specified with aircraft cable require cord. See page 3 for MOUNTING DETAILS.
- See page 3 for SENSOR PLACEMENT DETAILS. See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
- DA Driver only.
- DA Driver only.
- Avi-on Controls only.
- Not available with EM batteries or DA Driver.
- Not available with EM batteries or DA Driver.



## FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
4'	L30	3,031	20.5	148
	L52	5,224	37.6	139
	L72	7,291	54.3	134
	L85	8,563	65.5	131
8'	L60	6,062	41.3	147
	L104	10,447	73.4	142
	L144	14,583	108.6	134
	L170	17,126	131.0	131

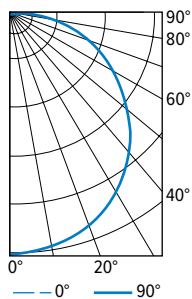
- Photometrics tested in accordance with IESNA LM-79. Results based on 80 CRI/4000K CCT, average wattage for 120V through 277V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier table to calculate additional options.

### MULTIPLIER TABLE

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

## PHOTOMETRY

**80R-4-L85/840** Total Luminaire Output: 8563 lumens; 65.5 Watts | Efficacy: 131 lm/W



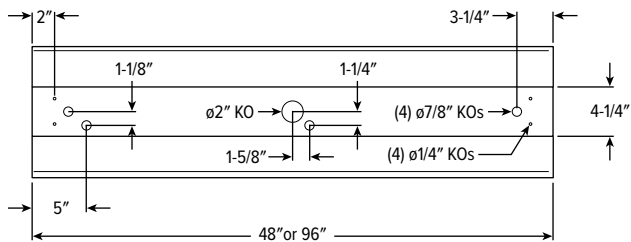
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	2930	2930	2930	
	5	2953	2907	2904	277
	15	2811	2799	2821	790
	25	2526	2583	2646	1189
	35	2121	2278	2395	1416
	45	1648	1868	2048	1441
	55	1176	1450	1671	1290
	65	734	1039	1242	1010
	75	375	689	868	692
	85	76	376	485	366
	90	2	210	296	
	95	0	57	156	88
	105	0	6	2	4
	115	0	2	1	1
	125	0	1	0	0
	135	0	0	0	0
	145	0	0	0	0
	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	2256	26
	0 - 40	3672	43
	0 - 60	6402	75
	0 - 90	8470	99
	90 - 120	92	1
	90 - 150	93	1
	90 - 180	93	1
	0 - 180	8563	100

## FIXTURE DETAILS

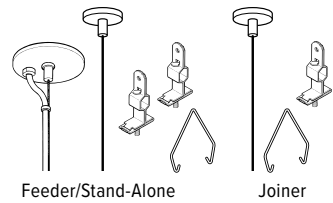
## BACKVIEW

8' fixture uses (4) 4' reflectors.



MOUNTING DETAILS

STANDARD HARDWARE FOR SUSPENDED PRODUCT (Grid and Hardpan)



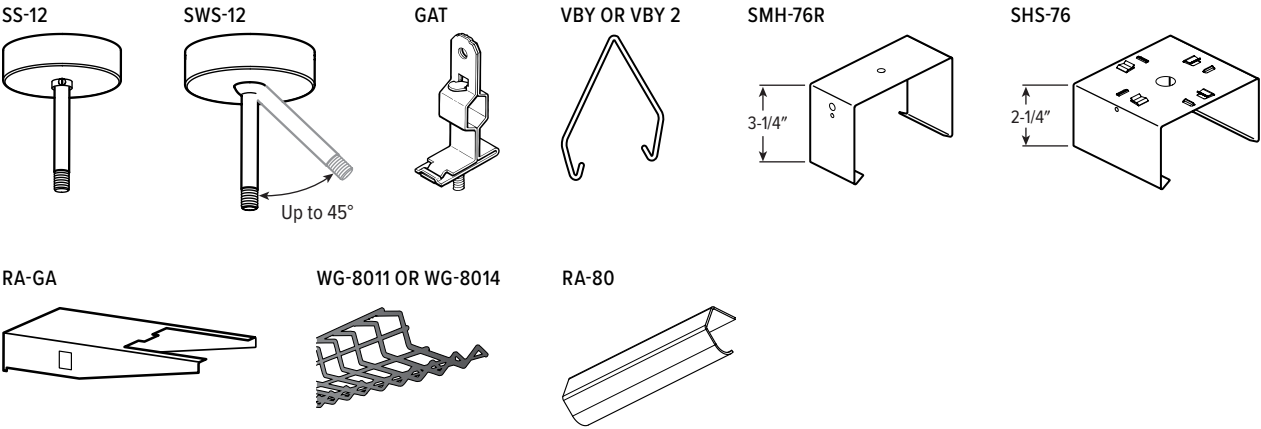
- Notes:
- Fixtures are provided with adjustable length aircraft cables, (2) VBY hangers and mounting hardware, must specify.
  - Electrical supply is brought into the feeder fixture, either as part of a row or as a stand-alone unit. Joiner fixtures complete the row.
  - The feeder kits are standard with a 5" canopy to cover the junction box and a 2" canopy at the non-feed point. No J-box is required at non-feed points.

CORD FOR SUSPENDED PRODUCT

Units specified with aircraft cable require cord. Please specify cord type using ordering information below. Long fixture rows may require multiple feed points based on 18ga conductor size.

EXAMPLE: S2438D/W				
CORD TYPE	LENGTH	# OF COND. <sup>[1]</sup>	WIRE SIZE	COLOR
S	24 24"	3	8D 18ga	/W White /B Black
	48 48"	4		
	96 96"	5 6		

<sup>1</sup> Includes (2) 22ga purple & pink dimming conductors

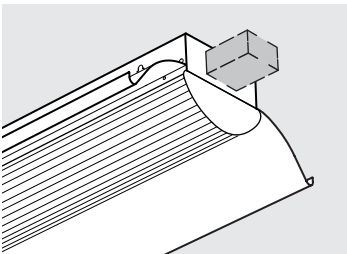


QUICK-CONNECT OPTIONS

Note: Quick-connect wiring required for row mounting. All QC harnesses contain (5) 16ga conductors plus ground.

DESIGNATION	NUMBER OF 16GA WIRES FACTORY CONNECTED (EXCLUDING GROUND)	WIRE COLOR/POWER SUPPLY FACTORY CONNECTIONS	TYPICAL USE
QCBW	2	Black, White	On/off switching (DRV) or line voltage dimming (DIM LINE)
QCRW	2	Red, White	Alternating circuits on/off switching (DRV) or line voltage dimming (DIM LINE)
QCBRW	3	Black, Red, White	On/off switching (DRV) or line voltage dimming when equipped with EM battery packs
QCBW/PK	4	Black, White, Purple, Pink	Single circuit with 0-10V low voltage dimming (DIM)
QCRW/PK	4	Red, White, Purple, Pink	Alternating circuits on/off switching with 0-10V low voltage dimming (DIM)
QCBRW/PK	5	Black, Red, White, Purple, Pink	On/off switching when equipped with EM battery packs and 0-10V dimming (DIM)
QCBW/RPK	5	Black, White, Red, Purple, Pink	On/off switching with 0-10v dimming and 0-10v tunable using shared common
QCUU	N/A	N/A	QC harness passes through fixture, but is not connected to it

SENSOR PLACEMENT DETAILS



AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

FEATURES

Simple

- Gateway-free distributed control
- Contractor friendly installation
- Occupancy/vacancy/daylight sensing

Scalable

- Virtually unlimited network size
- Spans small areas to large garages
- Flexible control strategies

Secure

- Optional cloud connectivity
- UL IoT platinum security rating
- DLC 5.0 compliant

COMMISSIONING & INSTALLATION TOOLS

Avi-on mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers. Live commissioning training and on-site or remote support by Avi-on must be ordered separately through Avi-on.



Commissioning Mobile App



Zone Scanner Web App



Commissioning Pro App

SYSTEM COMPONENTS



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ACCESSORIES

WALL STATIONS	
AVI-B-2401AC-1	Scene controller - buttons numbered 1-4 and up/down/off, 120-277VAC
AVI-B-2402BAT-1	Scene controller - buttons numbered 1-4 and up/down/off, battery powered
AVI-B-2401AC-2	Dimmer with presets - buttons with percentages and up/down/off, 120-277VAC
AVI-B-2402BAT-2	Dimmer with presets - buttons with percentages and up/down/off, battery powered
AVI-B-2401AC-3	Two button control on/off or hold to dim up/down, 120-277VAC
AVI-B-2402BAT-3	Two button control on/off or hold to dim up/down, battery powered

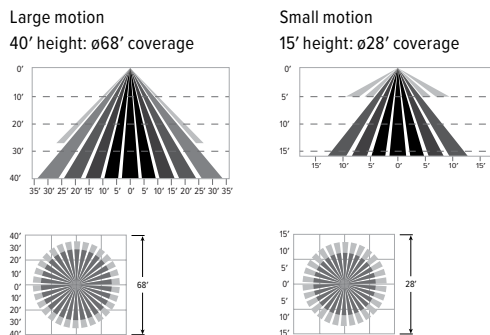
NETWORK	
AVI-RAB-LTE	Remote access bridge
AVI-NTM	Network time manager with battery backup
CEILING MOUNT SENSORS	
AVI-KIT-SEN-DUCM	PIR motion and ultrasonic sensor kit
AVI-KIT-SEN-ICM	PIR motion and photocell sensor kit

For load controllers and additional accessory info, see [hew.com/avi-on](http://hew.com/avi-on)

AVI-LVFA-PIR-ELB Avi-on wireless fixture control with PIR motion and daylight sensor, end mount. DA Driver only.

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 45'
LENS	Single lens detects high and low bay motion.
DETECTION ANGLE	360°
TEMPERATURE RANGE	-30° to 70°C
RELATIVE HUMIDITY	90 to 95% at 30°C
COMMISSIONING	App (iOS or Android)
SYSTEM REQUIREMENTS	Avi-On wireless fixture controls plus desktop and mobile apps
MANUFACTURER	Avi-On
	

SENSOR COVERAGE PATTERNS



SENSOR DETAIL



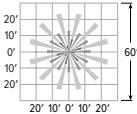
ADDITIONAL CONTROL OPTIONS

OCCWS-FSP-311B-L\_-120/277 Wattstopper PIR motion and daylight sensor, 120/277V. Must specify lens: L2, L3, or L7

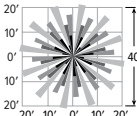
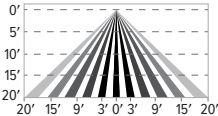
SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 40'
DETECTION ANGLE	360°
TEMPERATURE RANGE	-40° to 75°C
COMMISSIONING	App (iOS or Android)

SENSOR COVERAGE PATTERNS

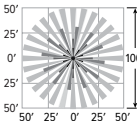
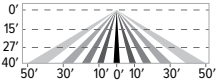
L2 8' height: ø48' coverage



L3 20' height: ø40' coverage



L7 40' height: ø100' coverage



SENSOR DETAIL

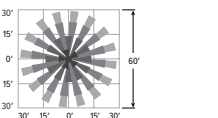
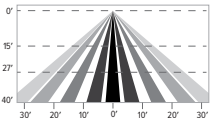


OCCLV-OSFHU-ITW-120-347 Leviton PIR motion sensor, 120-347V.

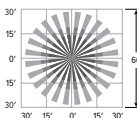
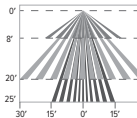
SPECIFICATIONS	
TYPE	PIR Motion
MOUNTING HEIGHT	8' – 40'
LENS	Interchangeable high bay, low bay or aisle mask
DETECTION ANGLE	360°
TEMPERATURE RANGE	-10° to 71°C
RELATIVE HUMIDITY	20% to 90% non-condensing

SENSOR COVERAGE PATTERNS

High bay  
40' height: ø60' coverage



Low bay  
25' height: ø60' coverage



SENSOR DETAIL



ADDITIONAL DRIVER OPTIONS

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

CATALOG NUMBER	DESCRIPTION
DRV	Driver without external dimming wires prewired for non-dimming applications
DIM	Driver with external dimming wires prewired for 0-10V low voltage applications
DIM1	1% driver with external dimming wires 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 only)
DA	Driver with 12V auxiliary power, without external dimming wires
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming driver

