

CATALOG #: \_ TYPF. PROJECT: \_







#### **FEATURES**

- Diffuse acrylic lens enhances uniformity and minimizes glare
- 40°C max ambient operating temperature
- Diverse selection of mounting accessories for surface and suspended applications
- Channel connector furnished for continuous row applications (included with 8' units only)
- Special reflectors are available for precise light distribution
- Optional wireguard provides added protection
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

#### **SPECIFICATIONS**

- HOUSING 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.
- ${\sf SHIELDING-Linear\ ribbed\ diffuse\ acrylic}$
- ELECTRICAL High-quality mid-power LED boards. L70 at 60,000 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
  - cETLus conforms to UL STD 1598. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations.
  - UL 924 available, see Options
  - DesignLights Consortium qualified product. Not all versions of this product may be DLC qualified, see the DLC Qualified Products List at designlights.org/QPL
  - Build America, Buy America (BABA) and Buy American Act (BAA) compliant. Request certification at hew.com/buy-american
- WARRANTY 5-year limited warranty, see hew.com/warrantv

SERIES	LENGTH [1]	LUMEN	IS <sup>[2]</sup>	CRI	CCT	OPTIONS	[3]		
76R	4 4' 8 8 <sup>[4]</sup>	L144	3,000lm 5,200lm 7,200lm 9,400lm <sup>[5]</sup> 6,000lm 10,400lm 14,400lm 18,800lm <sup>[6]</sup>	8 80 9 90	27 2700K 30 3000K 35 3500K 40 4000K 50 5000K	See page 3 EM/10W (L) HA WG-76R11	76R-8 High: 11-gai 14-ga Single Swive GAT f. (2) Y-I Surfa Surfa Quick Appro	ecial REFLECTOR OF WISH OPTIONS. att emergency battery ional lower lumen par ple: 8,000 nominal lu i-1:104/835-(L80) ambient operating ter uge white powder coa uge white powder coa se stem and canopy, 12 astener (T-bar clip) nangers nangers with 2' chain ce mount hanger for ce connect wiring harmoved for UL 924 emerg t through-feed wiring	ckages available [8] mens =  mperature, 50°C [9] at wireguard at wireguard ["[10] "[11]  s  grid ceilings ess [12] gency generator
						Prefix	eeder	ES (EXAMPLE: ACFL Type D 1" grid & hardpan N 9/16" grid S Slot grid	Length

### CONTROL [15]

See page 5 for ADDITIONAL CONTROL OPTIONS.

None AVI-LVFA

Avi-on wireless fixture control [16] AVI-LVFA-PIR-ELB Avi-on wireless fixture control with PIR motion and daylight sensor, end mount<sup>[17]</sup> Lutron Athena wireless node integral fixture control, RF only [18]

#### DRIVER

See page 6 for ADDITIONAL DRIVER OPTIONS.

DIM Driver with external 0-10V dimming wires

DRV Driver without external

dimming wires
Driver with 12V auxiliary
power, without external
dimming wires [19]

Sensor-ready driver without external dimming wires (D4i DALI-2) [20]

#### **VOLTAGE**

120 120V **277** 277V **UNV** 120-277V

480 V with stepdown transformer [21]

#### NOTES

**AWNR** 

- 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

- 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. L72 max for 4', L144 max for 8'. Not available with EM batteries. Two stem sets required. One additional stem set required for each row mounted fixture.
- <sup>11</sup> Two stem sets required. One additional stem set required for each row mounted fixture. See page 2 for QUICK-CONNECT OPTIONS.

- See page 2 for QUICK-CONNECT OPTIONS.

  Maximum mounting height is 26.2′ (8.0 m). Minimum lumen output is 400 lm/ft. See 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 & NODE PLACEMENT DETAILS.

  See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
- DA Driver only.

- DA Driver only.
  DA Driver only.
  DA and DSR Drivers only.
  Avi-on and Lutron Athena Controls only.
  Lutron Vive and Athena Controls only.
- Not available with EM batteries, DA, or DSR driver.



#### FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (Im/W)
	L30	3067	20.3	151
_	L52	5261	35.8	147
4	L72	7212	50.2	144
	L94	9418	68.6	137
	L60	6134	39.8	154
	L104	10523	69.5	151
ŏ	L144	14425	100.5	144
	L188	18836	137.1	137

- 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.

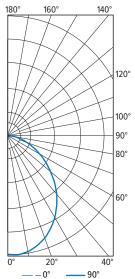
  Use multiplier table to calculate additional options.

#### **MULTIPLIER TABLE**

	COLOR TEMPERATURE					
	CCT	CONVERSION FACTOR				
	2700K	0.94				
=	3000K	0.96				
80 CRI	3500K	0.97				
∞	4000K	1.00				
	5000K	1.03				
	2700K	0.77				
=	3000K	0.79				
90 CRI	3500K	0.80				
6	4000K	0.83				
	5000K	0.86				

#### **PHOTOMETRY**

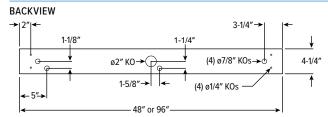
76R-4-L94/840 Total Luminaire Output: 9418 lumens; 68.6 Watts | Efficacy: 137.3 lm/W | 80 CRI; 4000K CCT



	VERTICAL ANGLE	HO	ZONAL LUMENS		
	VERTICAL ANGLE	0°	45°	90°	ZUNAL LUMENS
	0	3041	3041	3041	
	5	3067	3019	3010	288
	15	2910	2905	2926	821
	25	2599	2674	2746	1231
	35	2171	2340	2469	1458
8	45	1676	1928	2113	1478
15	55	1177	1490	1706	1311
DISTRIBUTION	65	715	1046	1284	1023
듣	75	358	701	908	711
	85	71	445	633	446
<b>3</b>	90	0	347	516	
M.	95	0	274	442	273
CANDLEPOWER	105	0	166	305	168
ব	115	0	105	210	102
	125	0	65	141	58
	135	0	41	90	31
	145	0	8	50	13
	155	0	0	37	6
	165	0	0	12	1
	175	0	0	0	0
	180	0	0	0	

_			
	ZONE	LUMENS	% FIXTURE
≿	0 - 30	2339	25
Ā	0 - 40	3798	40
≥	0 - 60	6586	70
N	0 - 90	8766	93
LUMEN SUMMARY	90 - 120	543	6
3	90 - 150	645	7
	90 - 180	652	7
	0 - 180	9418	100

#### **FIXTURE DETAILS**



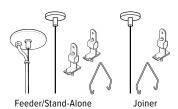
#### **QUICK-CONNECT OPTIONS**

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

#### **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

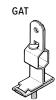
Units specified with aircraft cable require cord. Please specify cord type using ordering information below. Long fixture rows may require multiple feed points based on 18ga conductor size.

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

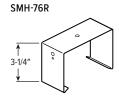
<sup>&</sup>lt;sup>1</sup> Includes (2) 22ga purple & pink dimming conductors

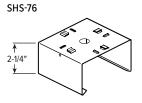




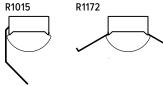


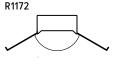


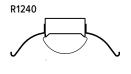




#### **SPECIAL REFLECTOR OPTIONS**











Clear polycarbonate reflector aligners for continuous row applications are supplied with reflectors.

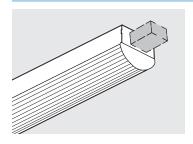
Only R1172 and R1240 can be used with wireguard accessories.

#### **FINISH OPTIONS**

WHITE	BLACK	BRONZE	NICKEL	SILVER	ALUM

For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.

#### **SENSOR & NODE PLACEMENT DETAILS**



SEE NEXT PAGE FOR CONTROL 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

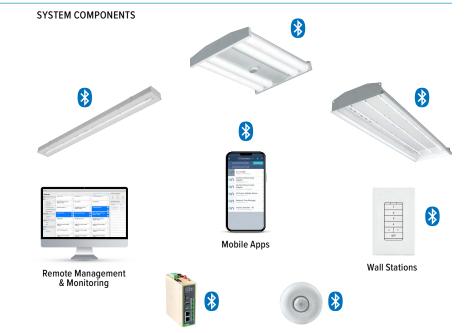
Mobile App





Zone Scanner Web App

Commissioning Pro App



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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

Remote Access Bridge

AVI-RAB-LTE Remote access bridge

AVI-NTM Network time manager with battery backup

Ceiling Sensors

#### **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

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** -30° to 70°C

RELATIVE HUMIDITY 90 to 95% at 30°C

COMMISSIONING

SYSTEM

App (iOS or Android)

REQUIREMENTS

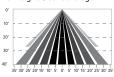
Avi-On wireless fixture controls plus desktop and mobile apps

MANUFACTURER

#### SENSOR COVERAGE PATTERNS

Large motion

40' height: ø68' coverage











#### SENSOR DETAIL



#### ADDITIONAL CONTROL OPTIONS

VDO Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC). DSR or LDE Drivers only. LDE drivers require driver interface

SPECIFICATIONS			
TYPE	PIR Motion + Daylight		
MOUNTING HEIGHT	8' – 12'		
DETECTION ANGLE	360°		

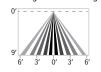
TEMPERATURE RANGE 0° to 55°C

RELATIVE HUMIDITY 0 to 90%, non-condensing COMMISSIONING App (iOS or Android)

MANUFACTURER Lutron

#### SENSOR COVERAGE PATTERNS

9' height: ø12' coverage Motion Sensor Coverage



CEILING HEIGHT	COVERAGE AREA (SQ FT)		
8′	114		
9′	144		
10′	178		
12′	256		

#### SENSOR DETAIL



Dimensions: 2-11/16" x 1"

#### **VIVE CONTROL OPTIONS**

CATALOG NUMBER	DESCRIPTION
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), for use with sensor-ready driver
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), for use with sensor-ready driver
VRF/DBI	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver
VDO/DBI	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver

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)

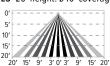
#### SENSOR COVERAGE PATTERNS

L2 8' height: ø48' coverage



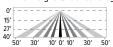


L3 20' height: ø40' coverage





L7 40' height: ø100' coverage





SENSOR DETAIL

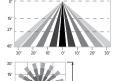


#### OCCLV-OSFHU-ITW-120-347 Leviton PIR motion sensor, 120-347V.

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**



OCCSS LSXR-10-120-277 Sensor Switch PIR motion sensor, 120-277V OCCSS LSXR-10-347/480 Sensor Switch PIR motion sensor, 347/480V

**SPECIFICATIONS** 

TYPE

PIR Motion

MOUNTING HEIGHT 7' – 15'

**DETECTION ANGLE** 360°

TEMPERATURE RANGE

-10° to 60°C

**RELATIVE HUMIDITY** Up to 90% non-condensing

#### SENSOR COVERAGE PATTERNS

9' height: ø56' coverage





#### SENSOR DETAIL



#### **ADDITIONAL DRIVER OPTIONS**

Note: Lumen restrictions apply, consult product builder at 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
DSR	Sensor-ready driver without external dimming wires (D4i DALI-2)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming driver