

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

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

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



## FEATURES

- High performance aisle light in a classic strip style
- Innovative optics provide even illumination from floor to ceiling
- High-performance up to 151 lm/W
- Mounting options include stem, chain, or surface
- Quick-connect wiring option for continuous row mounting
- Optional extended inner row aligner insures straight rows with single hanging point at each intersection
- 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.
- ELECTRICAL** – High-quality mid-power LED boards. 40°C maximum ambient operating temperature. See fixture performance data for lumen maintenance.
- MOUNTING** – Stem, chain, or surface with extended fixture to fixture row aligner.
- LISTINGS** –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/baa](http://hew.com/baa).
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

## ORDERING EXAMPLE: GA - 8 - L70/840 - N - OPTIONS - CONTROL/DRV - UNV

### ORDERING INFO

SERIES	LENGTH	LUMENS <sup>[1]</sup>	CRI	CCT	DISTRIBUTION	OPTIONS <sup>[2]</sup>
GA	4 4'	4'	8 80	27 2700K	N Narrow	EM/10W 10-watt emergency LED battery (L___)
	8 8'	L35 3,500lm	9 90 <sup>[3]</sup>	30 3000K		Additional lower lumen packages available. <sup>[4]</sup>
		L55 5,500lm		35 3500K		Example: 9,000 nominal lumens = GA-8-L110/840-(L90)
		L90 9,000lm		40 4000K		QC___ Quick-connect wiring harness. <sup>[5]</sup>
		L70 7,000lm		50 5000K		SS-12 Single stem and canopy, 12" <sup>[6]</sup>
		L110 11,000lm				SWS-12 Swivel stem and canopy, 12" <sup>[7]</sup>
		L180 18,000lm				320 1-1/2" ceiling spacer
						GAT GAT fastener (T-bar clip)
						VBV (2) Y-hangers
						VBV-2 (2) Y-hangers and (2) 2' chains
						RA-GA Row aligner <sup>[8]</sup>
						SP1 10kV surge protection, 120 or 277V
						SP2 10kV surge protection, 208 or 240V
						SP3 10kV surge protection, 347 or 480V

### CONTROL <sup>[9]</sup>

See page 5 for ADDITIONAL CONTROL OPTIONS.

–	None
AVI-LVFA	Avi-on wireless fixture control <sup>[11]</sup>
AVI-LVFA-PIR-ELB	Avi-on wireless fixture control with PIR motion and daylight sensor, end mount <sup>[12]</sup>

### DRIVER

See page 6 for ADDITIONAL DRIVER OPTIONS.

DIM	Driver with external dimming wires
DRV	Driver without external dimming wires
DA	Driver with 12V auxiliary power, without external dimming wires <sup>[13]</sup>

### VOLTAGE <sup>[10]</sup>

120	120V
208	208V
240	240V
277	277V
UNV	120-277V
347	347V <sup>[14]</sup>
480	480V with stepdown transformer <sup>[15]</sup>

## NOTES

- Lumen output based on 80 CRI/4000K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen package available, see options
- See page 3 for MOUNTING DETAILS.
- Extended lead times may apply. Consult factory for availability.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- RA-GA option required. See page 3 for QUICK-CONNECT OPTIONS.
- 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.

- Required when row mounting.
- See page 3 for SENSOR PLACEMENT DETAILS. See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
- Must specify voltage (not UNV) if using cord and plug or occupancy sensor.
- 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)	LUMEN MAINTENANCE <sup>(1)</sup>			
					L70	L80	L85	L90
4'	L35	3505	25.6	137	>72000	>72000	63000	42000
	L55	5502	37.5	147	>72000	>72000	63000	42000
	L90	8932	75.2	119	>72000	62000	45000	29000
8'	L70	7096	50.3	141	>72000	>72000	63000	42000
	L110	11004	73.1	151	>72000	>72000	63000	42000
	L180	17865	128.4	139	>72000	62000	45000	29000

<sup>1</sup> Predicted lumen maintenance calculated in accordance with IES TM-21 per Energy Star (R) TM-21 Calculator rev. 02.08.16.

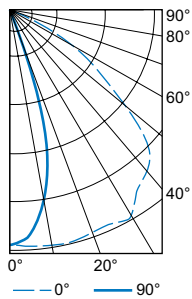
- Photometrics tested in accordance with IESNA LM-79. Results based on 80 CRI/4000K CCT, average wattage for 120V through 277V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier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

## MULTIPLIER 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

## PHOTOMETRY

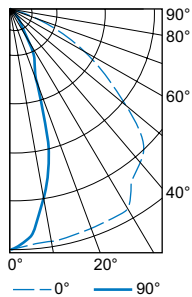
**GA-8-L70/840-N** Total Luminaire Output: 7096 lumens; 50.3 Watts | Efficacy: 141 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	6846	6846	6846	
5	7047	6658	6232	618
15	7006	5203	3934	1476
25	6867	2704	1482	1563
35	6344	925	562	1250
45	4991	506	327	931
55	3018	203	184	608
65	1388	126	130	319
75	432	120	149	188
85	38	114	147	115
90	6	50	87	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	3656	52
	0 - 40	4907	69
	0 - 60	6446	91
	0 - 90	7068	100
	0 - 180	7096	100

**GA-8-L110/840-N** Total Luminaire Output: 11004 lumens; 73.1 Watts | Efficacy: 151 lm/W | 80 CRI; 4000K CCT

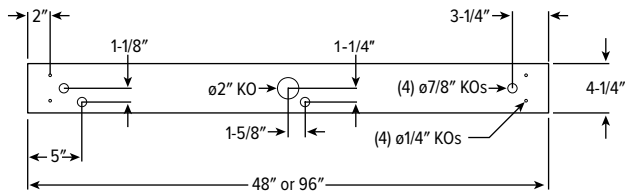


VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	10616	10616	10616	
5	10928	10325	9664	958
15	10864	8068	6101	2289
25	10648	4194	2298	2423
35	9838	1435	872	1939
45	7740	785	507	1444
55	4680	314	285	943
65	2153	195	202	495
75	670	186	232	292
85	60	177	227	178
90	9	78	135	

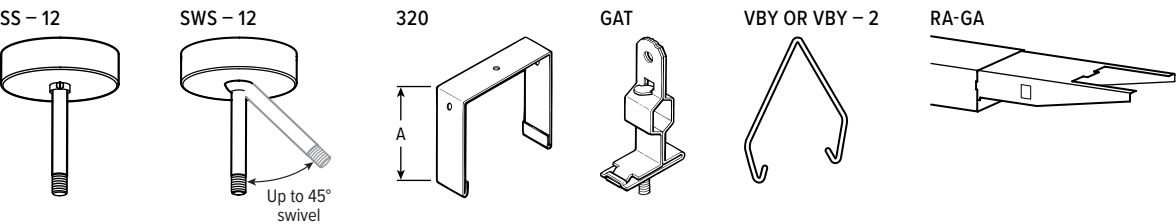
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	5670	52
	0 - 40	7609	69
	0 - 60	9996	91
	0 - 90	10961	100
	0 - 180	11004	100

## FIXTURE DETAILS

### BACKVIEW



MOUNTING DETAILS

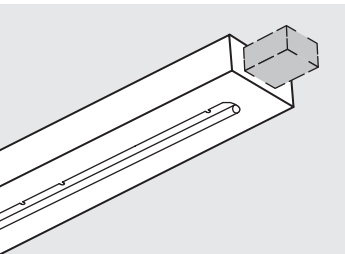


QUICK-CONNECT OPTIONS

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

SENSOR PLACEMENT DETAILS



SEE NEXT PAGE FOR CONTROL DETAILS.

## AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

### FEATURES

#### Simple

- Gateway-free distributed control
- Factory pre-commissioning
- 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-2401AC	Scene controller - numbered 1-4, 120-277VAC
AVI-2402BAT	Scene controller - numbered 1-4, battery powered
AVI-2401AC-2	Dimmer with presets - percentages, 120-277VAC
AVI-2402BAT-2	Dimmer with presets - percentages, battery powered
AVI-2401AC-3	On/off/dimming, 120-277VAC
AVI-2402BAT-3	On/off/dimming, battery powered

NETWORK	
AVI-RAB-LTE	Remote access bridge
AVI-KIT-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)

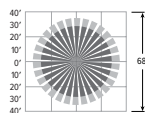
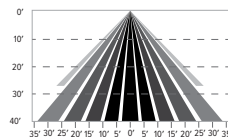
### AVI-LVFA-PIR-ELB Avi-on wireless fixture control with PIR motion and daylight sensor, end mount. DA Driver only.

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

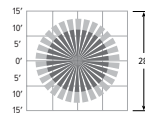
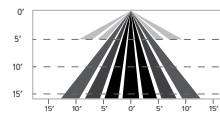
#### Large motion

40' height: ø68' coverage



#### Small motion

15' height: ø28' coverage



### SENSOR DETAIL



## ADDITIONAL CONTROL OPTIONS

**OCCWS-FSP-321B-L\_-120-480** Wattstopper PIR motion and daylight sensor using 0-10V internal control, 120V-480V. Must specify lens: L2, L3 or L7. Factory installed.

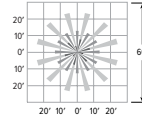
**OCCWS-FSP-221B-L\_-120-480** Wattstopper PIR motion and daylight sensor using 0-10V internal control, 120V-480V. Must specify lens: L2, L3 or L7. Factory installed.

**FSIR-100** FSIR-100 Remote controller for 221B sensor. Please specify quantity required per project. Ordered and shipped separately.

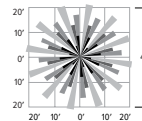
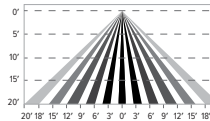
SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 40'
DETECTION ANGLE	360°
TEMPERATURE RANGE	-40° to 75°C
COMMISSIONING	321B Sensor: App (iOS or Android) 221B Sensor: FSIR-100 Remote

### SENSOR COVERAGE PATTERNS

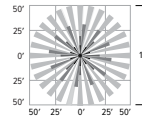
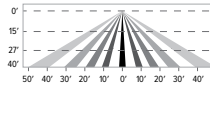
#### L2 8' height: ø48' coverage



#### L3 20' height: ø40' coverage



#### L7 40' height: ø100' coverage



### SENSOR DETAIL



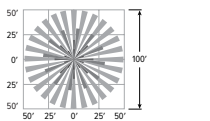
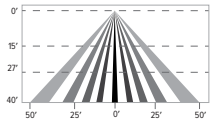
**OCCWS-HBP-111-L7-120/277/347** Wattstopper PIR motion and daylight hold off sensor, 120/277/347V. Adjustable via remote. Optional FSIR-100 remote controller available.

**FSIR-100** Remote controller for HBP-111 sensor. Please specify quantity required per project. Ordered and shipped separately.

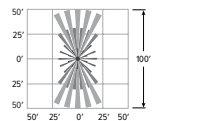
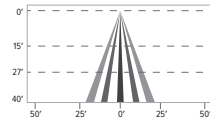
SPECIFICATIONS	
TYPE	PIR Motion + Daylight Hold Off
MOUNTING HEIGHT	15' – 40'
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 70°C
RELATIVE HUMIDITY	5 to 95%, non-condensing
COMMISSIONING	FSIR-100 Remote

### SENSOR COVERAGE PATTERNS

#### 40' height: ø100' coverage



#### With mask: 40' height: ø50' coverage



### SENSOR DETAIL



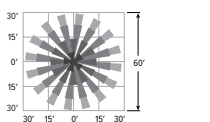
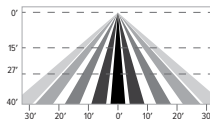
**OCCLV-OSFHU-ITW-120-347** Leviton PIR motion sensor, 120-347V

**OCCLV-OSFHU-I4W-208/240/480** Leviton PIR motion sensor, 208/240/480V

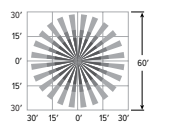
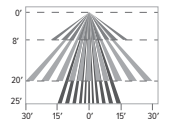
SPECIFICATIONS	
TYPE	PIR Motion
MOUNTING HEIGHT	8' – 40'
LENS	Interchangeable high bay, low bay or aisle mask
DETECTION ANGLE	360°
TEMPERATURE RANGE	-10° to 71°C
RELATIVE HUMIDITY	20% to 90% non-condensing

### SENSOR COVERAGE PATTERNS

#### High bay 40' height: ø60' coverage



#### Low bay 25' height: ø60' coverage



### SENSOR DETAIL

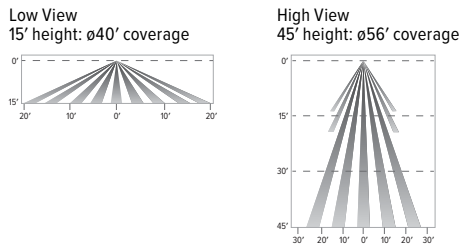


**OCCSS LSXR-6-120-277** Sensor Switch PIR motion sensor, 120-277V

**OCCSS LSXR-6-347/480** Sensor Switch PIR motion sensor, 347/480V

SPECIFICATIONS	
TYPE	PIR Motion
MOUNTING HEIGHT	15' – 45'
DETECTION ANGLE	360°
TEMPERATURE RANGE	-10° to 60°C
RELATIVE HUMIDITY	Up to 90% non-condensing

## SENSOR COVERAGE PATTERNS



## SENSOR DETAIL

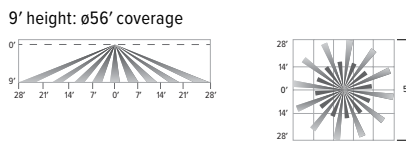


**OCCSS LSXR-10-120-277** Sensor Switch PIR motion sensor, 120-277V

**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



## SENSOR DETAIL

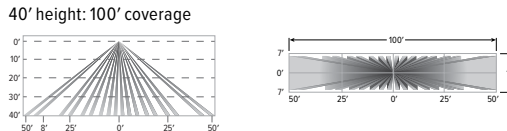


**OCCSS LSXR-50-120-277** Sensor Switch PIR motion aisleway sensor, 120-277V

**OCCSS LSXR-50-347/480** Sensor Switch PIR motion aisleway sensor, 347/480V

SPECIFICATIONS	
TYPE	PIR Motion
MOUNTING HEIGHT	40'
DETECTION ANGLE	50° bi-directional
TEMPERATURE RANGE	-10° to 60°C
RELATIVE HUMIDITY	Up to 90% non-condensing

## SENSOR COVERAGE PATTERNS



## 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 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 only)
DA	Driver with 12V auxiliary power
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

