

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

Type: \_\_\_\_\_

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

**FEATURES**

- Available with LINKTair wireless fixture controls, by Williams
- Maximize energy savings with efficacies as high as 154 lm/W
- Scalable footprint and variable lumen outputs
- Frosted lens reduces glare
- Optimized for single person installation
- Energy-saving alternative designed to replace traditional HID or fluorescent high bay fixtures
- Variety of mounting options for surface and suspended applications
- Made Right Here® in the USA

**ORDERING EXAMPLE: GH - 2 - L240/840 - FA - OPTIONS - DIM - UNV**

**ORDERING INFO**

SERIES	LENGTH	LUMENS <sup>[1]</sup>	CRI	CCT	TEMPERATURE	SHIELDING
GH	2 2'	2'	4'	8 80	35 3500K	- 40°C ambient operating temperature HA High ambient operating temperature, 55°C <sup>[3]</sup> FA Frosted acrylic FP Frosted polycarbonate HE High efficacy <sup>[4]</sup> ND Narrow distribution
	4 4'			9 90 <sup>[2]</sup>	40 4000K	
		L80 8,000lm	L120 12,000lm	L180 18,000lm	L240 24,000lm	
		L180 18,000lm	L240 24,000lm	L300 30,000lm	L360 36,000lm	
		L300 30,000lm	L400 40,000lm	L480 48,000lm	L540 54,000lm	
		L480 48,000lm	L540 54,000lm	L600 60,000lm	L660 66,000lm	
		L600 60,000lm	L660 66,000lm	L720 72,000lm		
		L720 72,000lm				

**SPECIFICATIONS**

- HOUSING – Die-formed steel housing.
- SHIELDING – Frosted acrylic.
- 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. L70 at 65,000 hours. 55°C maximum ambient operating temperature when specified with HA option, lumen restrictions apply, consult fixture performance data. 45°C maximum ambient operating temperature when specified with EM battery.
- MOUNTING – Suspended. Surface mount kit available.
- LISTINGS – cCSAus certified as luminaire suitable for dry or damp locations.
- WARRANTY – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

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

EM/10W	10-watt emergency battery. <sup>[7]</sup>
EM/12W	12-watt emergency battery. <sup>[8]</sup>
EM/20W	20-watt emergency battery. <sup>[9]</sup>
UP	Uplight <sup>[10]</sup>
WG11	11-gauge wireguard, field-installed
WG11 F&I	11-gauge wireguard, factory installed
VBY	(2) Y-hangers
VBY-2	(2) Y-hangers and (2) 2' chains
GC2/Y18/5	(2) Cable suspension kits, 5' length
GC2/Y18/10	(2) Cable suspension kits, 10' length
HUB MT	Cast iron hub and junction box for single 3/4" pendant mount <sup>[11]</sup>
HUB/HOOK MT	Cast iron hub with mounting hook <sup>[12]</sup>
HOOK/CABLE	Hook and cable mounting kit, 10'
GH-SMK	Surface mount kit <sup>[13]</sup>
6CPI/L5-15P/TW/LK	6' cord and NEMA twistlock 15 AMP plug, 120V <sup>[14]</sup>
6CPI/L7-15P/TW/LK (L__)	6' cord and NEMA twistlock 15 AMP plug, 277V <sup>[15]</sup>
	Additional lower lumen packages available Example: 8,000 lumens = GH-4-L120/835-(L80) <sup>[16]</sup>

**CONTROL<sup>[6]</sup>**

DIM	Dimming driver	120 120V
DRV	Non-dimming driver	277 277V
LA-R/DA	LINKTair wireless fixture control, RF only <sup>[17]</sup>	UNV 120-277V
LA-SL1/DA	LINKTair wireless fixture control with occupancy and daylight sensor, L1 lens <sup>[18]</sup>	347 347V with stepdown transformer <sup>[20]</sup>
LA-SL2/DA	LINKTair wireless fixture control with occupancy and daylight sensor, L2 lens <sup>[19]</sup>	480 480V with stepdown transformer <sup>[21]</sup>

**OCCUPANCY SENSORS<sup>[22]</sup>**

OCCWS FSP-321B-L_-120-480	Factory-installed occupancy and daylight control, 120V-480V. <sup>[23]</sup>
OCCWS-HBP-111-L7-120/277/347	Factory-installed occupancy and daylight control, 120/277/347 <sup>[24]</sup>
FSIR-100	Remote controller for occupancy sensor HBP-111 <sup>[25]</sup>

**NOTES**

- <sup>1</sup> Lumen output based on 4000 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- <sup>2</sup> Extended lead times may apply. Consult factory for availability.
- <sup>3</sup> May increase fixture width. Lumen restrictions apply. Must be suspended minimum 18" from ceiling. See page 2 for FIXTURE PERFORMANCE DATA.
- <sup>4</sup> High efficacy is achieved through removal of diffusing lens media.
- <sup>5</sup> See page 4 for MOUNTING DETAILS.
- <sup>6</sup> See page 3 for ADDITIONAL CONTROL OPTIONS.
- <sup>7</sup> Increases fixture size. See page 4 for FIXTURE DETAILS.
- <sup>8</sup> Increases fixture size. See page 4 for FIXTURE DETAILS.
- <sup>9</sup> Increases fixture size. See page 4 for FIXTURE DETAILS.
- <sup>10</sup> Percentage of uplight depends on fixture width. See page 2 for FIXTURE PERFORMANCE DATA.
- <sup>11</sup> Shipped not attached.
- <sup>12</sup> Shipped not attached.
- <sup>13</sup> Not available with HA Option. See page 5 for SURFACE MOUNT KIT DETAILS.
- <sup>14</sup> DRV only.
- <sup>15</sup> DRV only.
- <sup>16</sup> Specify in increments of 1000 nominal lumens. Option must be specified with next higher lumen package.
- <sup>17</sup> Provided with dimming driver with 12V auxiliary.
- <sup>18</sup> Provided with dimming driver with 12V auxiliary. See page 5 for LINKTair wireless SENSOR DETAILS.
- <sup>19</sup> Provided with dimming driver with 12V auxiliary. See page 5 for LINKTair wireless SENSOR DETAILS.
- <sup>20</sup> Not available with EM batteries. Fixtures greater than L480 require two step-down transformers.
- <sup>21</sup> Not available with EM batteries. Fixtures greater than L480 require two step-down transformers.
- <sup>22</sup> See page 6 for OCCUPANCY SENSOR DETAILS.
- <sup>23</sup> Must specify lens: L3 or L7.
- <sup>24</sup> Adjustable via remote. Optional FSIR-100 remote controller available, ordered separately.
- <sup>25</sup> Please specify quantity required per project, ships separately.

**LINKTair™**



## FIXTURE PERFORMANCE DATA

	LED PACKAGE	STANDARD TEMPERATURE (40°C MAXIMUM AMBIENT)				HA TEMPERATURE (55°C MAXIMUM AMBIENT)			
		DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	WIDTH	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	WIDTH
2'	L80	8,075	55.9	144.5	12"	8,075	55.9	144.5	12"
	L120	11,922	90.8	131.3	12"	12,246	79.4	154.2	18"
	L180	18,009	125.9	143.0	18"	18,357	121.5	151.1	24"
	L240	23,470	176.8	132.7	18"	24,001	163.9	146.4	24"
	L300	31,000	227.7	136.1	24"	—	—	—	—
	L360	35,765	272.6	131.2	24"	—	—	—	—
4'	L120	—	—	—	—	12,246	79.4	154.2	12"
	L180	18,009	125.9	143.0	12"	—	—	—	—
	L240	23,510	177.9	132.2	12"	—	—	—	—
	L300	—	—	—	—	31,210	215.8	144.6	18"
	L400	40,295	293.2	137.4	18"	40,268	268.9	149.8	24"
	L480	47,687	363.5	131.2	18"	48,002	327.9	146.4	24"
	L540	54,031	372.2	145.2	24"	—	—	—	—
	L600	61,173	429.8	142.3	24"	—	—	—	—
	L660	66,420	495.9	133.9	24"	—	—	—	—
	L720	72,181	539.7	133.7	24"	—	—	—	—

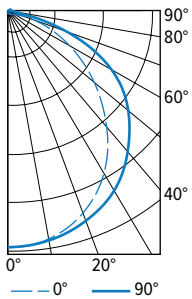
### MULTIPLIER TABLES

		COLOR TEMPERATURE		SHIELDING	
		CCT	CONVERSION FACTOR	CATALOG NUMBER	CONVERSION FACTOR
80 CRI	3500K	0.97	FA	1.00	
	4000K	1.00	FP	0.95	
	5000K	1.03	HE	1.09	
	ND		1.08		
90 CRI	3500K	0.80			
	4000K	0.83			
	5000K	0.86			
		WIDTH	UPLIGHT %		
			FA	HE   ND	
		12"	16	12	
		18"	10	7	
		24"	8	4	

- 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, 80 CRI, actual lumens may vary +/-5%
- Use multiplier tables to calculate additional options.

## PHOTOMETRY

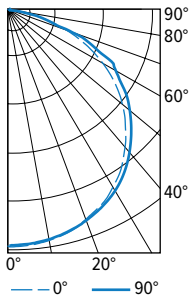
**GH-2-L240/840-FA-DIM-UNV** Report #: 13309242.03; 04/16/20 | Total Luminaire Output: 23470 lumens; 176.8 Watts | Efficacy: 132.7 lm/W | 80 CRI; 4000K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	7864	7864	7864	
	5	7830	7838	7828	188
	15	7462	7557	7617	906
	25	6743	7012	7218	1499
	35	5682	6194	6579	1882
	45	4375	5143	5680	1983
	55	3108	4068	4699	1854
	65	1942	2930	3361	1507
	75	982	1717	1749	970
	85	267	619	733	421
	90	9	301	458	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	9946	42
	0 - 60	17436	74
	0 - 90	22488	96
	90 - 180	981	4
	0 - 180	23470	100

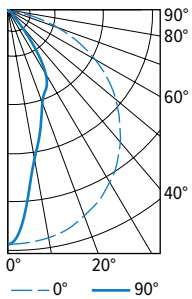
**GH-2-L240/840-HE-DIM-UNV** Report #: 13309242.04; 04/16/20 | Total Luminaire Output: 25500 lumens; 177.1 Watts | Efficacy: 144.0 lm/W | 80 CRI; 4000K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	8597	8597	8597	
	5	8610	8577	8552	205
	15	8378	8349	8310	998
	25	7828	7861	7843	1673
	35	6995	7065	7100	2142
	45	5861	5966	6058	2311
	55	4609	4721	4877	2204
	65	3121	3256	3397	1798
	75	1536	1590	1348	1011
	85	260	284	270	265
	90	9	90	65	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	11191	44
	0 - 60	20026	79
	0 - 90	25244	99
	90 - 180	263	1
	0 - 180	25500	100

**GH-2-L240/840-ND-DIM-UNV** Report #: 13309242.01; 04/14/20 | Total Luminaire Output: 25350 lumens; 177.9 Watts | Efficacy: 142.5 lm/W | 80 CRI; 4000K CCT

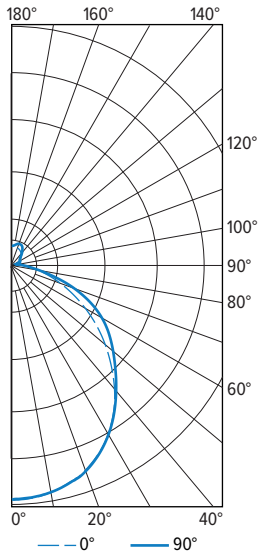


CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	23290	23290	23290	
	5	23160	21230	19520	533
	15	22430	14040	11900	1960
	25	20750	9761	8524	2581
	35	18260	7524	4111	2763
	45	15060	3348	621	2013
	55	11550	525	406	1400
	65	7463	313	271	828
	75	3238	178	70	369
	85	288	68	20	92
	90	5	37	12	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	16787	66
	0 - 60	23010	91
	0 - 90	25091	99
	90 - 180	264	1
	0 - 180	25350	100



GH-2-L240/840-FA-UP-DIM-UNV Report #: 13309242.02; 04/10/20 | Total Luminaire Output: 22670 lumens; 176.8 Watts | Efficacy: 128.2 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	7970	7970	7970	
5	7940	7936	7913	190
15	7590	7599	7597	913
25	6878	6949	6901	1493
35	5790	5890	5830	1807
45	4460	4628	4710	1819
55	3172	3478	3752	1631
65	1988	2405	2594	1279
75	1011	1339	1161	779
85	279	357	356	281
90	11	103	123	113
95	53	149	177	63
105	153	225	258	104
115	254	252	292	130
125	350	349	314	154
135	435	502	423	180
145	499	640	590	190
155	557	688	721	166
165	589	667	718	110
175	609	632	638	45
180	628	628	628	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	9732	43
	0 - 60	16403	72
	0 - 90	20408	90
	90 - 180	2259	10
	0 - 180	22670	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

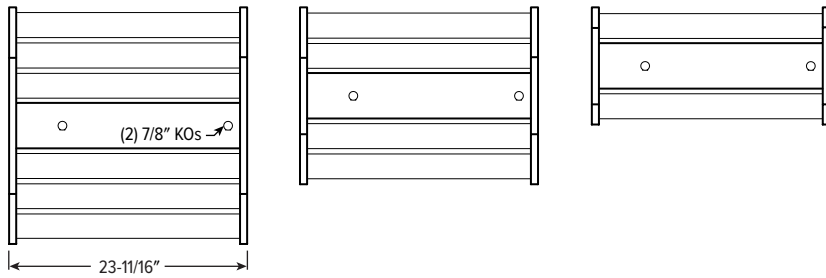
### CROSS SECTIONS



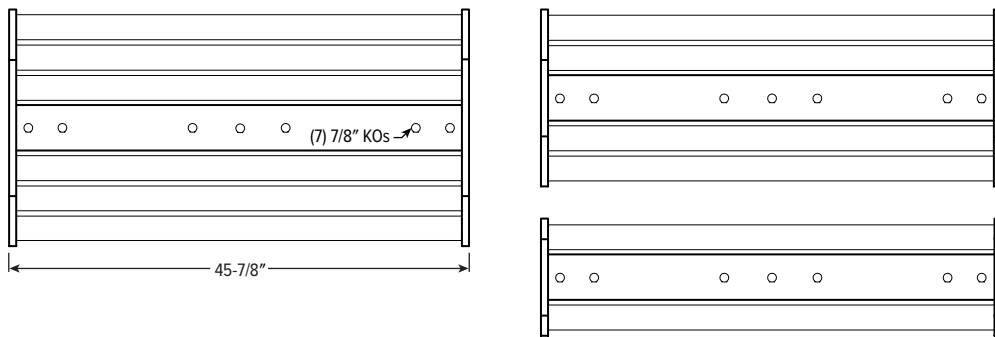
## FIXTURE DETAILS

### BACKVIEW

2'

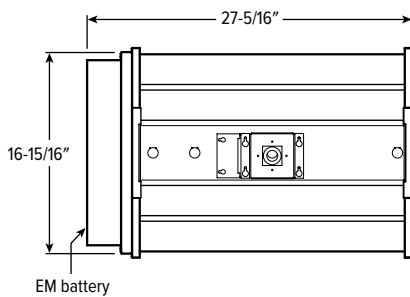


4'

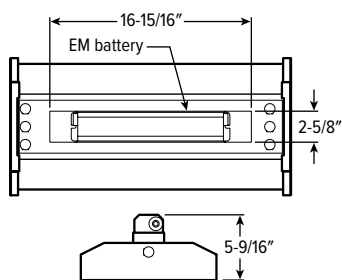


### EM/10W | EM/12W SIDE MOUNT

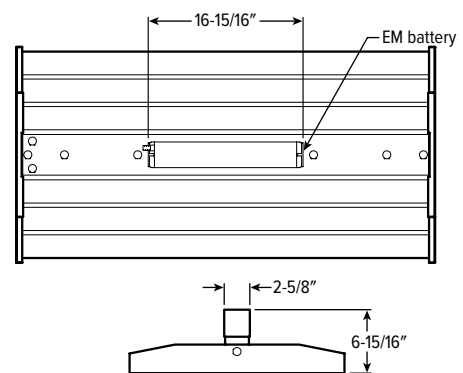
For use with GH-2 hub or surface mount only.



### EM/10W | EM/12W TOP MOUNT



### EM/20W TOP MOUNT



## MOUNTING DETAILS

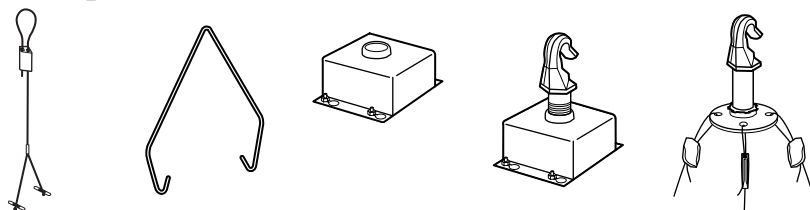
GC2/Y18/\_

VBY | VBY-2

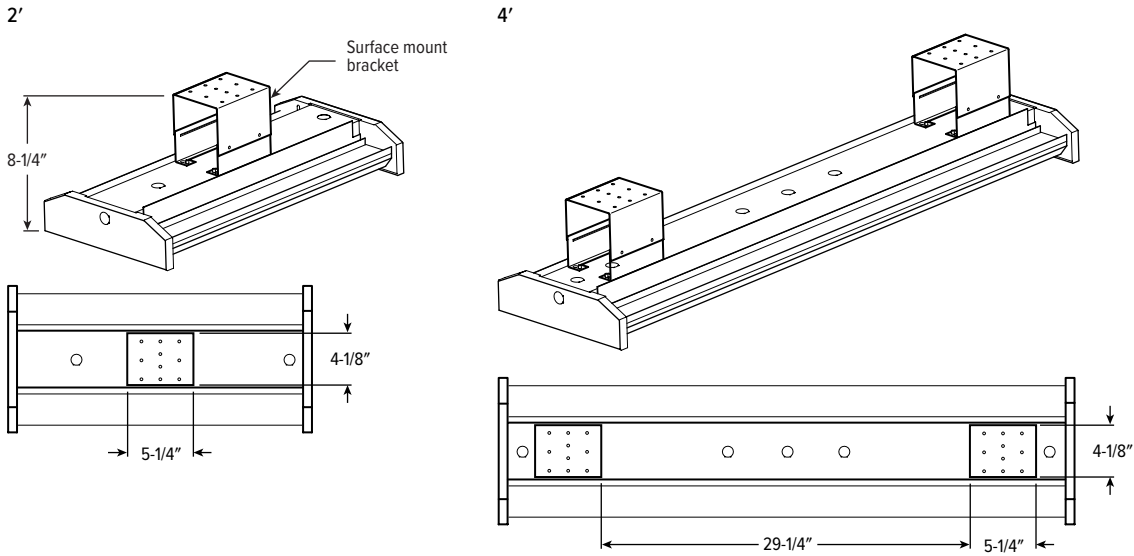
HUB MT

HUB/HOOK MT

HOOK/CABLE



## SURFACE MOUNT KIT DETAILS



## LINKTair WIRELESS SENSOR DETAILS

LA-SL1/DA  
LA-SL2/DA

### FEATURES

- Quad element PIR sensor improves detection coverage in high bay and low bay applications
- 0-10V output: set with commissioning software
- LED motion indicator
- 360° coverage pattern
- Adjustable via wireless mesh enabled app
- Configurable sensitivity settings for motion and/or daylight contribution, time delay and cutoff delay, high and low dimmed light levels

### SYSTEM REQUIREMENTS

- Williams fixtures with LINKTair wireless control
- Desktop & mobile apps

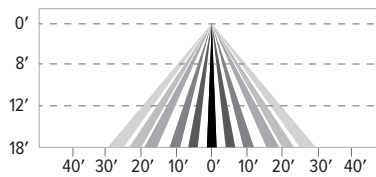
### SPECIFICATIONS

- SENSOR TYPE – PIR occupancy sensor
- FINISH – White
- MOUNTING HEIGHT – Varies with lens option. Refer to lens coverage patterns
- MAX WIRELESS MESH RANGE – 49' - 65'
- ENVIRONMENT – -30°C - 70°C. Up to 90-95% RH (non-condensing at 30°C)

### LENS COVERAGE PATTERNS

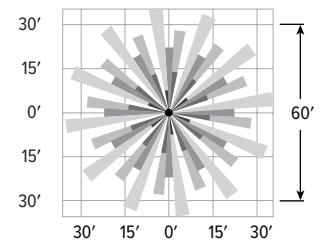
#### SIDE VIEW

L1 Coverage at 18' mounting height: ø60'

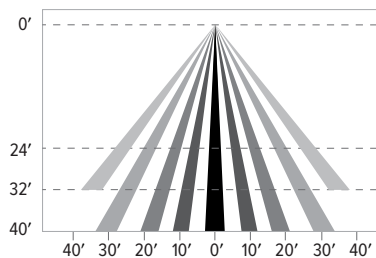


#### TOP VIEW

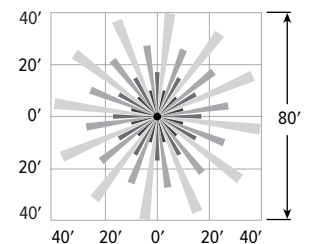
Coverage at 18' mounting height: ø60'



L2 Coverage at 40' mounting height: ø70'



Coverage at 32' mounting height: ø80'



## OCCUPANCY SENSOR DETAILS

### OCCWS FSP-321B-L\_-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

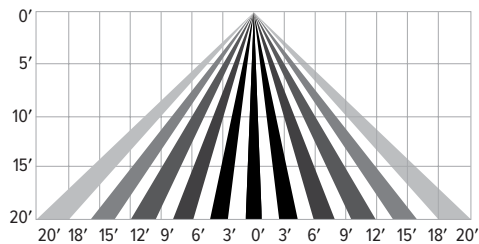
Initial setup and subsequent sensor adjustments are made using the iOS or Android Sensor Configuration App. This app enables adjustment of parameters including high and low modes, sensitivity, time delay, cut off and more. The smartphone app is also used to initiate automatic calibration of the FSP-3x1B 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.

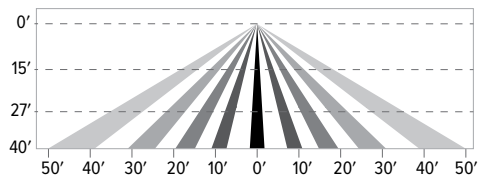
#### LENS COVERAGE PATTERNS

##### SIDE VIEW

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



##### L7 Coverage at 40' mounting height: ø100'



##### TOP VIEW

