

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<br>HA High ambient operating temperature, 55°C <sup>[3]</sup><br>FA Frosted acrylic<br>FP Frosted polycarbonate<br>HE High efficacy <sup>[4]</sup><br>ND Narrow distribution |
|        | 4 4'   |                       |               | 9 90 <sup>[2]</sup> | 40 4000K    |   |
|        |        | L80 8,000lm           | L120 12,000lm | L180 18,000lm       |             |   |
|        |        | L120 12,000lm         | L180 18,000lm | L240 24,000lm       |             |   |
|        |        | L180 18,000lm         | L240 24,000lm | L300 30,000lm       |             |   |
|        |        | L240 24,000lm         | L300 30,000lm | L400 40,000lm       |             |   |
|        |        | L300 30,000lm         | L400 40,000lm | L480 48,000lm       |             |   |
|        |        | L360 36,000lm         | L480 48,000lm | L540 54,000lm       |             |   |
|        |        |                       | L540 54,000lm | L600 60,000lm       |             |   |
|        |        |                       | L600 60,000lm | L660 66,000lm       |             |   |
|        |        | L660 66,000lm         | 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.
- 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>**

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

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

|                  |   |            |  |
|------------------|---|------------|--|
| <b>DIM</b>       | Dimming driver  | <b>120</b> | 120V   |
| <b>DRV</b>       | Non-dimming driver  | <b>277</b> | 277V   |
|                  |   | <b>UNV</b> | 120-277V                                       |
| <b>LA-R/DA</b>   | LINKTair wireless fixture control, RF only <sup>[14]</sup>                                    | <b>347</b> | 347V with stepdown transformer <sup>[17]</sup> |
| <b>LA-SL1/DA</b> | LINKTair wireless fixture control with occupancy and daylight sensor, L1 lens <sup>[15]</sup> | <b>480</b> | 480V with stepdown transformer <sup>[18]</sup> |
| <b>LA-SL2/DA</b> | LINKTair wireless fixture control with occupancy and daylight sensor, L2 lens <sup>[16]</sup> |            |  |

**OCCUPANCY SENSORS<sup>[19]</sup>**

|                                     |   |
|-------------------------------------|---|
| <b>OCCWS FSP-321B-L_-120-480</b>    | Factory-installed occupancy and daylight control, 120V-480V, Bluetooth configurable <sup>[20]</sup> |
| <b>OCCWS FSP-221B-L_-120-480</b>    | Factory-installed occupancy and daylight control, 120V-480V <sup>[21]</sup>                         |
| <b>OCCWS-HBP-111-L7-120/277/347</b> | Factory-installed occupancy and daylight control, 120/277/347 <sup>[22]</sup>                       |
| <b>FSIR-100</b>                     | Remote controller for occupancy sensor FSP-221B. <sup>[23]</sup>                                    |

**NOTES**

- Lumen output based on 4000 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- Extended lead times may apply. Consult factory for availability.
- May increase fixture width. Lumen restrictions apply. Must be suspended minimum 18" from ceiling. See page 2 for FIXTURE PERFORMANCE DATA.
- High efficacy is achieved through removal of diffusing lens media.
- See page 4 for MOUNTING DETAILS.
- See page 3 for ADDITIONAL CONTROL OPTIONS.
- Percentage of uplight depends on fixture width. See page 2 for FIXTURE PERFORMANCE DATA.
- Shipped not attached.
- Shipped not attached.
- Shipped not attached.
- Not available with HA Option. See page 4 for SURFACE MOUNT KIT DETAILS.
- DRV only.
- DRV only.
- Specify in increments of 1000 nominal lumens. Option must be specified with next higher lumen package.
- Provided with dimming driver with 12V auxiliary.
- Provided with dimming driver with 12V auxiliary. See page 5 for LINKTair wireless SENSOR DETAILS.
- Provided with dimming driver with 12V auxiliary. See page 5 for LINKTair wireless SENSOR DETAILS.
- Not available with EM batteries
- Not available with EM batteries
- See page 5 for OCCUPANCY SENSOR DETAILS.
- Must specify lens: L3 or L7. Adjustable via sensor configuration app.
- Must specify lens: L3 or L7. Adjustable via remote. Optional FSIR-100 remote controller available, ordered separately.
- Adjustable via remote. Optional FSIR-100 remote controller available, ordered separately.
- Please specify quantity required per project, ships separately.

## 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"   | —                                     | —       | —               | —     |

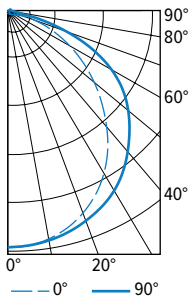
### MULTIPLIER TABLES

|        |       | 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              |                   |                |                   |
|        |       |                   | UPLIGHT %         |                |                   |
|        |       |                   | WIDTH             | 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

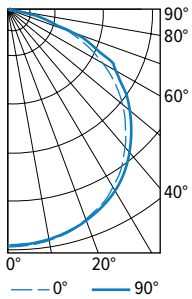
**GH-2-L240/840-FA-DIM-UNV** Report #: 13309242.03; 04/16/20 | Total Luminaire Output: 23470 lumens; 176.8 Watts | Efficacy: 132.7 lm/W | 80 CRI; 4000K CCT



| 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       |

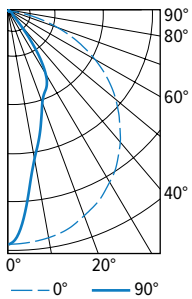
**GH-2-L240/840-HE-DIM-UNV** Report #: 13309242.04; 04/16/20 | Total Luminaire Output: 25500 lumens; 177.1 Watts | Efficacy: 144.0 lm/W | 80 CRI; 4000K CCT



| 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

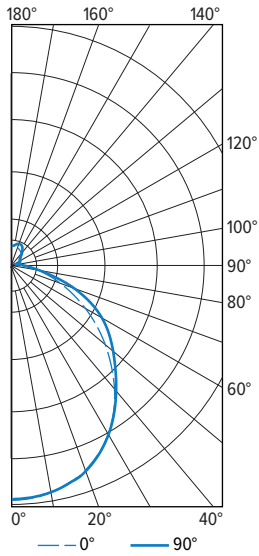


| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE |       |       | ZONAL LUMENS |
|--------------------------|----------------|------------------|-------|-------|--------------|
|                          |                | 0°               | 45°   | 90°   |              |
|                          | 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  |              |

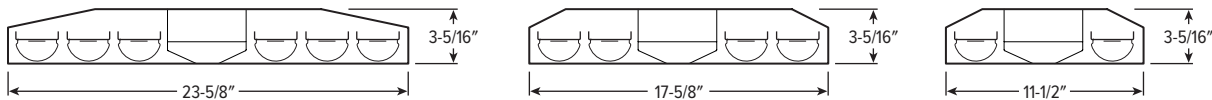
| LUMEN SUMMARY | ZONE     | LUMENS | % FIXTURE |
|---------------|----------|--------|-----------|
|               | 0 - 40   | 9732   | 43        |
|               | 0 - 60   | 16403  | 72        |
|               | 0 - 90   | 20408  | 90        |
|               | 90 - 180 | 2259   | 10        |
|               | 0 - 180  | 22670  | 100       |

### ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

| 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 (Must specify 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                                   |

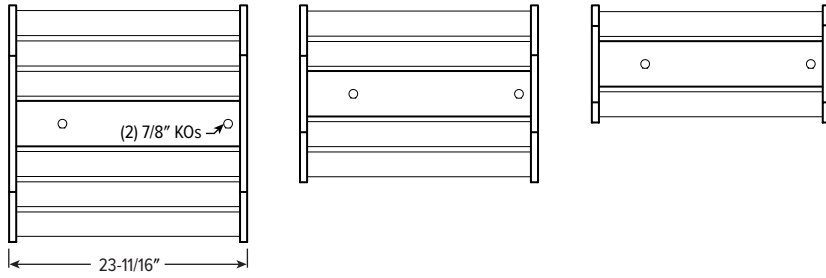
### CROSS SECTIONS



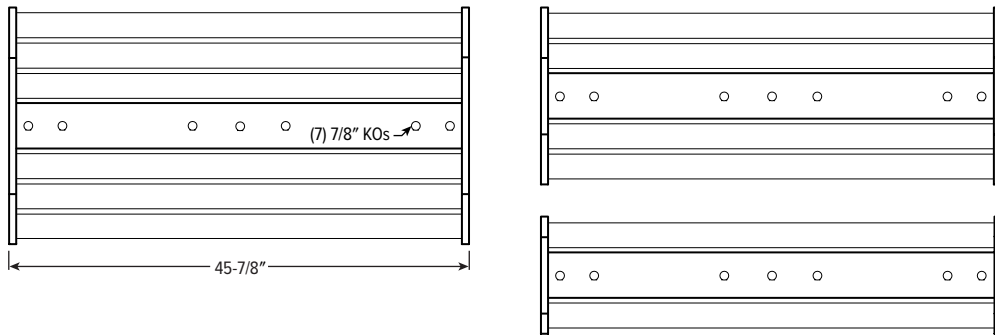
## FIXTURE DETAILS

### BACKVIEW

2'



4'



## MOUNTING DETAILS

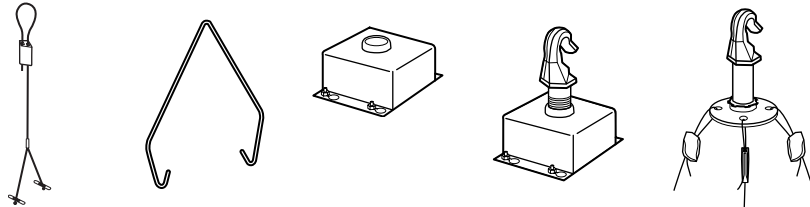
GC2/Y18/\_

VBY | VBY-2

HUB MT

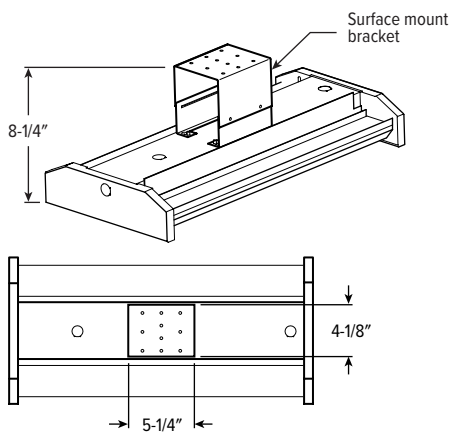
HUB/HOOK MT

HOOK/CABLE

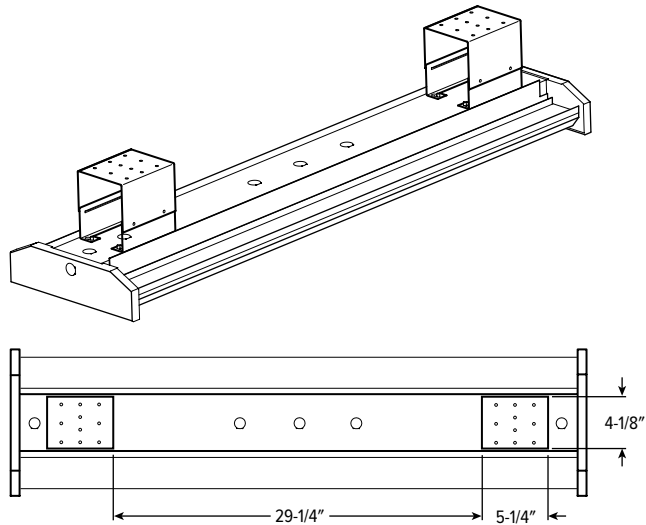


## SURFACE MOUNT KIT DETAILS

2'



4'



## 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

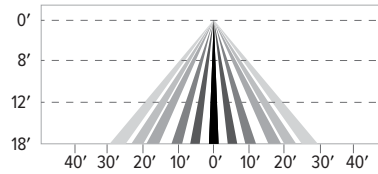
### SPECIFICATIONS

- 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

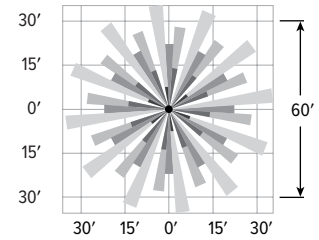
#### SIDE VIEW

L1 Coverage at 18' mounting height: ø60'

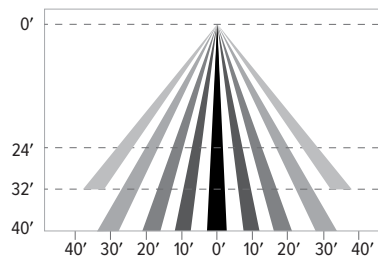


#### TOP VIEW

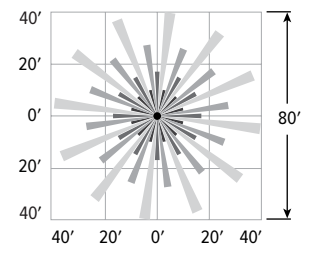
Coverage at 18' mounting height: ø60'



L2 Coverage at 40' mounting height: ø70'



Coverage at 32' mounting height: ø80'



## OCCUPANCY SENSOR DETAILS

OCCWS FSP-321B-L\_-120-480 Bluetooth configurable  
OCCWS FSP-221B-L\_-120-480 Adjustable via remote

### 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 handheld wireless configuration tool or bluetooth enabled 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.

### REMOTE CONTROLLER



**FSIR-100** Remote controller for OCCWS FSP-221B occupancy sensor (specify quantity per project)

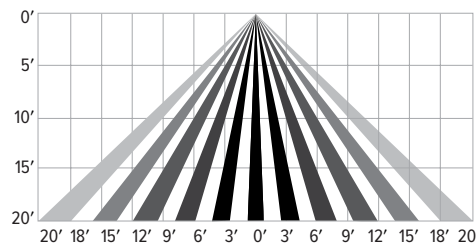
Initial setup and subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. Please specify quantity required per project.

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

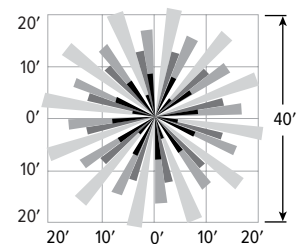
### LENS COVERAGE PATTERNS

#### SIDE VIEW

L3 Coverage at 20' mounting height: ø40'



#### TOP VIEW



L7 Coverage at 40' mounting height: ø100'

