

# HBBF-L LED HIGH BAY LUMINAIRE

AimLite's HBBF-L is ideally suited for high ceiling applications where uniform and efficient lighting is required. The HBBF-L High Bay is a perfect solution for industrial and commercial applications that require low maintenance and high performance.

## APPLICATIONS

- Warehouses
- Factories
- Sports arenas
- Large stores
- Distribution facilities

## FEATURES & SPECIFICATIONS

### CONSTRUCTION

#### Housing

- Housing made with 22-gauge rolled steel with enamel powder coating applied post-production
- Easy to install for suspended mounting
- Specular reflectors with high reflectance
- Wireguard is optional and is secured to the luminaire with screws
- Easy driver access from the top of the luminaire
- 6" of cable standard

### SPECIFICATIONS

#### Driver

- 120-277 V, 347 V
- 0-10 V dimming driver standard

#### Mounting

Hook mount standard. Aircraft cables available separately.

#### Ambient temperature

- **A1A, A2A & A3A:** -40°C to +55°C
- **A4A:** -40°C to +45°C
- **A5A & A6A:** -40°C to +40°C

### COMPLIANCES

- Suitable for damp locations
- cCSAus
- UL1598, UL8750
- CSA Certified to C22.2 #141-15 [When use with DL option]



| OVERVIEW                                                                                                                                                                                                                                                                                                                                                                                           |                 |                       |                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------|----------------------------|
| LIGHT SOURCE                                                                                                                                                                                                                                                                                                                                                                                       | LED             | COLOR TEMPERATURE (K) | 3 000, 3 500, 4 000, 5 000 |
| WATTS (W)                                                                                                                                                                                                                                                                                                                                                                                          | 86 - 405        | CRI                   | 80 +                       |
| LUMEN OUTPUT (LM)                                                                                                                                                                                                                                                                                                                                                                                  | 12 085 - 54 396 | WEIGHT (LBS)          | 15.23                      |
| EFFICACY (LM/W)                                                                                                                                                                                                                                                                                                                                                                                    | 126 - 150       |                       |                            |
| <div>   LED            DAMP LOCATION            </div> |                 |                       |                            |

## ORDERING GUIDE

| HBBF — L — — — / — / — |           |                                        |                        |                                                      |                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------|-----------|----------------------------------------|------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SERIES                 | LAMP TYPE | LUMEN PACKAGE [LM]                     | VOLTS [V AC]           | COLOR TEMP. [K]                                      | OPTIONS                                                                                                                                                                                                                                                                                                                                                                     |
| HBBF                   | L - LED   | A1A<br>A2A<br>A3A<br>A4A<br>A5A<br>A6A | 2 - 120-277<br>8 - 347 | 30K - 3000<br>35K - 3500<br>40K - 4000<br>50K - 5000 | DIM1 <sup>1</sup> - 5 WIRE CABLE FOR AC AND 0-10 V DIMMING<br>L10 - 10' WHITE POWER CORD<br>L10-BK - 10' BLACK POWER CORD<br>KV - 10 KV SURGE PROTECTOR<br>OS <sup>2</sup> - OCCUPANCY SENSOR<br>FRL - FROSTED PRISMATIC LENS<br>CPL - CLEAR PRISMATIC LENS<br>U347 - MALE 347 V TWIST LOCK PLUG<br>DL <sup>3</sup> - EMERGENCY BACK UP (FROM 0°C - 25°C)<br>120-277 V ONLY |

<sup>1</sup> When selecting DIM1 option please also select cable option whether L10 or L10-BK.

<sup>2</sup> To see available options, please consult the occupancy sensors section.

<sup>3</sup> Fixture functional in AC mode, when power goes off emergency battery powers LED boards. One battery per fixture is standard unless otherwise specified. DL option available with A1A, A2A and A3A lumen packages only.

## TECHNICAL SPECIFICATION TABLE

| LUMEN PACKAGE | WATTS [W] | VOLTS [V AC]   | 3000 K            |                   | 3500 K            |                   | 4000 K            |                   | 5000 K            |                   | CRI | LIFE L70 [HRS] | TESTED HOURS LM-80 [HRS] | PF   | THD [%] |
|---------------|-----------|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----|----------------|--------------------------|------|---------|
|               |           |                | LUMEN OUTPUT [LM] | EFFICIENCY [LM/W] | LUMEN OUTPUT [LM] | EFFICIENCY [LM/W] | LUMEN OUTPUT [LM] | EFFICIENCY [LM/W] | LUMEN OUTPUT [LM] | EFFICIENCY [LM/W] |     |                |                          |      |         |
| LA1A          | 86        | 120-277<br>347 | 12 085            | 141               | 12 476            | 146               | 12 832            | 150               | 12 586            | 147               | 80+ | 201 220        | 10 000                   | 0.97 | 11      |
| LA2A          | 137       |                | 18 967            | 138               | 19 580            | 142               | 20 139            | 147               | 19 754            | 144               | 80+ | 179 640        | 10 000                   | 0.97 | 11      |
| LA3A          | 187       |                | 24 638            | 131               | 25 434            | 136               | 26 160            | 140               | 25 660            | 137               | 80+ | 179 640        | 10 000                   | 0.97 | 11      |
| LA4A          | 246       |                | 31 606            | 128               | 32 628            | 133               | 33 559            | 136               | 32 917            | 134               | 80+ | 179 640        | 10 000                   | 0.97 | 11      |
| LA5A          | 327       |                | 43 508            | 133               | 44 914            | 137               | 46 196            | 141               | 45 313            | 138               | 80+ | 198 490        | 10 000                   | 0.97 | 11      |
| LA6A          | 405       |                | 51 231            | 127               | 52 887            | 131               | 54 396            | 134               | 53 357            | 132               | 80+ | 186 660        | 10 000                   | 0.97 | 11      |

## ACCESSORIES (ORDER SEPARATELY)

| PART NO    | DESCRIPTION                      | COMPATIBLE WITH    |
|------------|----------------------------------|--------------------|
| WIR138-9.8 | AIRCRAFT SUSPENSION CABLES (10") | ALL CONFIGURATIONS |
| WGD060-KIT | WHITE WIREGUARD                  | A1A, A2A, A3A, A4A |
| WGD061-KIT | WHITE WIREGUARD                  | A5A, A6A           |
| BKT347     | 4" SUSPENSION CHAINS (SET OF 2)  | ALL CONFIGURATIONS |

## COMPATIBLE DIMMERS

| BRAND                       | MODEL NUMBER                                                                                                         |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------|
| ACURITY BRANDS              | ISD-BC                                                                                                               |
| COOPER                      | DEVINE DF10P-XX<br>SKYE SF10P-XX                                                                                     |
| HUBBELL BUILDING AUTOMATION | LIGHT HAWK2 LHD-IRS3-N-XX<br>LIGHT HAWK2 LHD-IRS3-N347-XX                                                            |
| LEVITON                     | ILLUMATECH IP710-DLX, IP710DLX                                                                                       |
| LUTRON                      | NOVA NFTV <sup>1</sup> DIMMER PLUS PP-120H/PP-277H RELAY PACKS<br>DIVA DVTV, DVSCVT PLUS PP-120H/PP-277H RELAY PACKS |

NOTE: The compatible dimmers table shows dimmers that have been tested and have demonstrated proper operation under normal conditions. Each installation being unique, various factors such as load, common neutrals or other electrical products on the circuit can, in certain instances, cause variance in system performance. Read and comply to the dimmer installation instructions. Consult dimming system manufacturer for additional support in operation. Standard recommends to use dimmers designed to work with LED products. Older dimmers designed for incandescent products may cause erratic operation. Some dimmers may require more than one product for stable operation. The maximum number of products is determined by the dimmer wattage rating with LEDs. Be careful, these dimmers have different ratings depending on the product type. Again, refer to the dimmer installation instructions.

## OCCUPANCY SENSORS

### ON-OFF SENSORS

Detection - On at [Detection Area] % during [Hold Time] min. Off

| PART NO       | POSITION | VOLTS (VAC) | TECHNOLOGY     | HEIGHT (FT) | DETECTION AREA (%) | HOLD TIME (MIN.) | DAYLIGHT MIN LEVEL (LUX) | REMOTE*      | LOCATION***        |
|---------------|----------|-------------|----------------|-------------|--------------------|------------------|--------------------------|--------------|--------------------|
| OSE-PO-0303** | EXTERNAL | 120-347     | PIR            | 20-40       | 100                | 20               | NA                       |              | DRY, -10°C TO 55°C |
| OSE-PO-0304** | EXTERNAL | 120-347     | PIR            | 20-40       | 100                | 20               | NA                       |              | DRY, -40°C TO 40°C |
| OSE-PO-0503** | EXTERNAL | 120-347     | PIR            | 15-40       | 100                | 15               | 3000                     | OSI-FSIR-100 | DRY, 0°C TO 55°C   |
| OSE-PO-0504** | EXTERNAL | 120-347     | PIR            | 15-40       | 100                | 15               | 3000                     |              | DRY, 0°C TO 55°C   |
| OSE-FO-0401   | EXTERNAL | 120-347     | HIGH FREQUENCY | 50 MAX      | 100                | 20               | DISABLE                  | OSI-RC-MH02  | WET, -35°C TO 55°C |

### BI-LEVEL SENSORS

Detection - On at [Detection Area] % during [Hold Time] min., then [Stand-by Dim level] %

| PART NO     | POSITION | VOLTS (VAC) | TECHNOLOGY     | HEIGHT (FT) | DETECTION AREA (%) | HOLD TIME (MIN.) | STAND-BY DIM LEVEL (%) | DAYLIGHT MIN LEVEL (LUX) | REMOTE*      | LOCATION**         |
|-------------|----------|-------------|----------------|-------------|--------------------|------------------|------------------------|--------------------------|--------------|--------------------|
| OSE-PB-0202 | EXTERNAL | 120-347     | PIR            | 20          | 100                | 30               | 40                     | DISABLE                  | OSI-FSIR-100 | WET, -40°C TO 55°C |
| OSE-FB-0401 | EXTERNAL | 120-347     | HIGH FREQUENCY | 50 MAX      | 100                | 20               | 30                     | DISABLE                  | OSI-RC-MH02  | WET, -35°C TO 55°C |

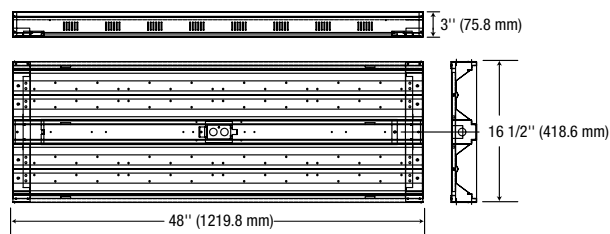
\* To be ordered separately.

\*\* Min and max ambient temperature of the fixture with the specific sensor. Please verify fixture temperature on the first page for compatibility with sensor.

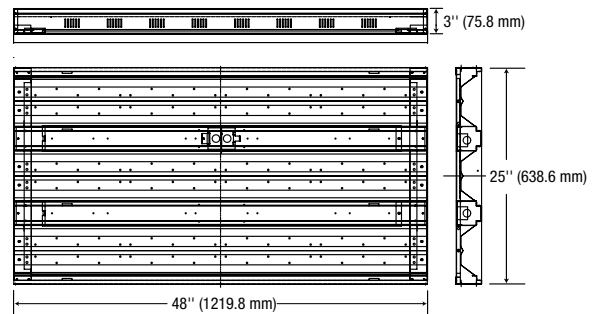
For more settings visit  
[aimlite.com/documentation/technical-information/](http://aimlite.com/documentation/technical-information/)

## DIMENSIONS

### A1A, A2A, A3A, A4A



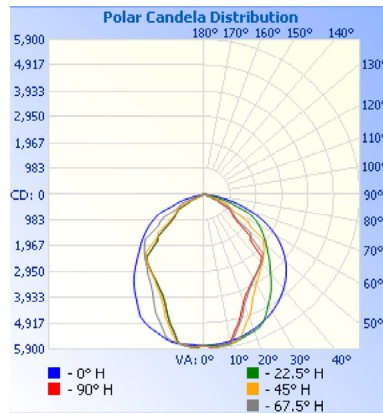
### A5A, A6A



## PHOTOMETRIC DATA<sup>1</sup>

### HBBF-LA1A-[2/8]-40K • 12 143.2 LM

#### POLAR CANDELA DISTRIBUTION



#### ZONAL LUMEN SUMMARY

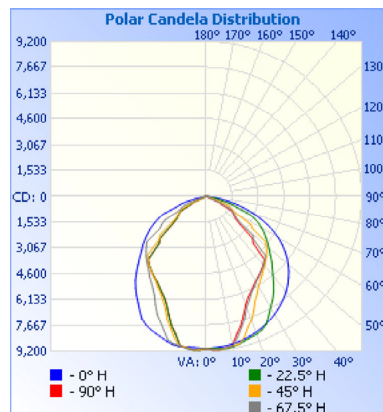
| ZONE  | LUMENS   | % FIXTURE |
|-------|----------|-----------|
| 0-30  | 4 110    | 33.8      |
| 0-40  | 6 520.7  | 53.7      |
| 0-60  | 10 740.5 | 88.4      |
| 60-90 | 1 402.7  | 11.6      |
| 0-90  | 12 143.2 | 100       |

#### ILLUMINANCE AT A DISTANCE

| CENTER BEAM FC |       |                                             | BEAM WIDTH |       |
|----------------|-------|---------------------------------------------|------------|-------|
|                |       |                                             |            |       |
| 1.7'           | 1 996 |                                             | 5.1'       | 3.2'  |
| 3.3'           | 530   |                                             | 10.0'      | 6.3'  |
| 5.0'           | 241   |                                             | 15.1'      | 9.5'  |
| 6.7'           | 129   |                                             | 20.2'      | 12.8' |
| 8.3'           | 83.7  |                                             | 25.0'      | 15.8' |
| 10.0'          | 57.7  |                                             | 30.2'      | 19.0' |
|                |       | ■ Vert. Spread: 112.9° ■ Hor. Spread: 87.2° |            |       |

### HBBF-LA2A-[2/8]-40K • 19 052.7 LM

#### POLAR CANDELA DISTRIBUTION



#### ZONAL LUMEN SUMMARY

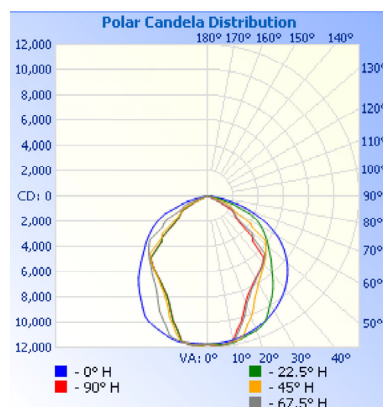
| ZONE  | LUMENS   | % FIXTURE |
|-------|----------|-----------|
| 0-30  | 6 448.7  | 33.8      |
| 0-40  | 10 230.9 | 53.7      |
| 0-60  | 16 851.9 | 88.4      |
| 60-90 | 2 200.8  | 11.6      |
| 0-90  | 19 052.7 | 100       |

#### ILLUMINANCE AT A DISTANCE

| CENTER BEAM FC |       |                                             | BEAM WIDTH |       |
|----------------|-------|---------------------------------------------|------------|-------|
|                |       |                                             |            |       |
| 1.7'           | 3 132 |                                             | 5.1'       | 3.2'  |
| 3.3'           | 831   |                                             | 10.0'      | 6.3'  |
| 5.0'           | 362   |                                             | 15.1'      | 9.5'  |
| 6.7'           | 202   |                                             | 20.2'      | 12.8' |
| 8.3'           | 131   |                                             | 25.0'      | 15.8' |
| 10.0'          | 90.5  |                                             | 30.2'      | 19.0' |
|                |       | ■ Vert. Spread: 112.9° ■ Hor. Spread: 87.2° |            |       |

### HBBF-LA3A-[2/8]-40K • 24 760.0 LM

#### POLAR CANDELA DISTRIBUTION



#### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS   | % FIXTURE |
|-------|----------|-----------|
| 0-30  | 8 380.4  | 33.8      |
| 0-40  | 13 295.7 | 53.7      |
| 0-60  | 21 899.9 | 88.4      |
| 60-90 | 2 860.1  | 11.6      |
| 0-90  | 24 760.0 | 100       |

#### ILLUMINANCE AT A DISTANCE

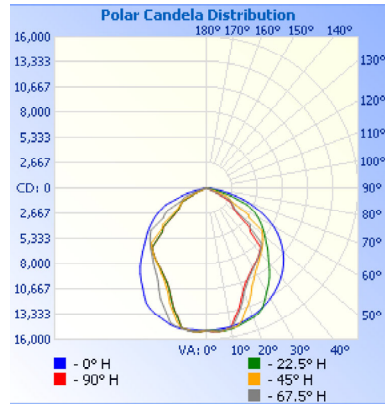
| CENTER BEAM FC |       |                                             | BEAM WIDTH |       |
|----------------|-------|---------------------------------------------|------------|-------|
|                |       |                                             |            |       |
| 1.7'           | 4 070 |                                             | 5.1'       | 3.2'  |
| 3.3'           | 1 080 |                                             | 10.0'      | 6.3'  |
| 5.0'           | 470   |                                             | 15.1'      | 9.5'  |
| 6.7'           | 262   |                                             | 20.2'      | 12.8' |
| 8.3'           | 171   |                                             | 25.0'      | 15.8' |
| 10.0'          | 87.2  |                                             | 30.2'      | 19.0' |
|                |       | ■ Vert. Spread: 112.9° ■ Hor. Spread: 87.2° |            |       |

<sup>1</sup> Complete IES files available on our website.

## PHOTOMETRIC DATA<sup>1</sup> (CONT'D)

HBBF-LA4A-[2/8]-40K • 31754.5 LM

### POLAR CANDELA DISTRIBUTION



### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS   | % FIXTURE |
|-------|----------|-----------|
| 0-30  | 10 747.8 | 33.8      |
| 0-40  | 17 051.6 | 53.7      |
| 0-60  | 28 086.4 | 88.4      |
| 60-90 | 3 668.1  | 11.6      |
| 0-90  | 31 754.5 | 100       |

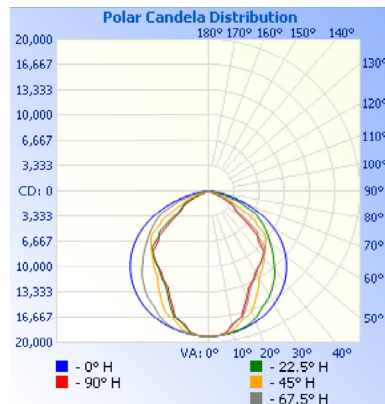
### ILLUMINANCE AT A DISTANCE

| CENTER BEAM FC | BEAM WIDTH  |
|----------------|-------------|
| 1.7'           | 5.1' 3.2'   |
| 3.3'           | 10.0' 6.3'  |
| 5.0'           | 15.1' 9.5'  |
| 6.7'           | 20.2' 12.8' |
| 8.3'           | 25.0' 15.8' |
| 10.0'          | 30.2' 19.0' |

■ Vert. Spread: 112.9° ■ Hor. Spread: 87.2°

HBBF-LA5A-[2/8]-40K • 43730.3 LM

### POLAR CANDELA DISTRIBUTION



### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS   | % FIXTURE |
|-------|----------|-----------|
| 0-30  | 13 883.1 | 31.7      |
| 0-40  | 22 238.2 | 50.9      |
| 0-60  | 37 796.9 | 86.4      |
| 60-90 | 5 933.4  | 13.6      |
| 0-90  | 43 730.3 | 100       |

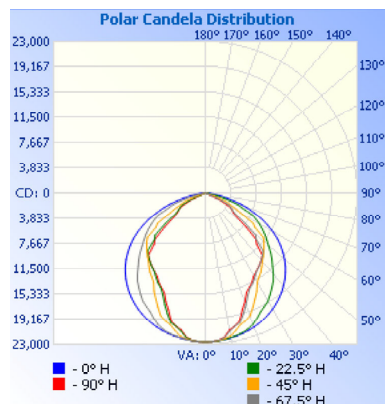
### ILLUMINANCE AT A DISTANCE

| CENTER BEAM FC | BEAM WIDTH  |
|----------------|-------------|
| 1.7'           | 6.2' 3.3'   |
| 3.3'           | 12.0' 6.5'  |
| 5.0'           | 18.1' 9.8'  |
| 6.7'           | 24.3' 13.2' |
| 8.3'           | 30.1' 16.3' |
| 10.0'          | 36.2' 19.7' |

■ Vert. Spread: 122.2° ■ Hor. Spread: 89.0°

HBBF-LA6A-[2/8]-40K • 51514.2 LM

### POLAR CANDELA DISTRIBUTION



### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS   | % FIXTURE |
|-------|----------|-----------|
| 0-30  | 16 354.3 | 31.7      |
| 0-40  | 26 196.6 | 50.9      |
| 0-60  | 44 524.7 | 86.4      |
| 60-90 | 6 989.5  | 13.6      |
| 0-90  | 51 514.2 | 100       |

### ILLUMINANCE AT A DISTANCE

| CENTER BEAM FC | BEAM WIDTH  |
|----------------|-------------|
| 1.7'           | 6.2' 3.3'   |
| 3.3'           | 12.0' 6.5'  |
| 5.0'           | 18.1' 9.8'  |
| 6.7'           | 24.3' 13.2' |
| 8.3'           | 30.1' 16.3' |
| 10.0'          | 36.2' 19.7' |

■ Vert. Spread: 122.2° ■ Hor. Spread: 89.0°

<sup>1</sup> Complete IES files available on our website.

Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions. All products are subject to change or may be discontinued any time without notice.