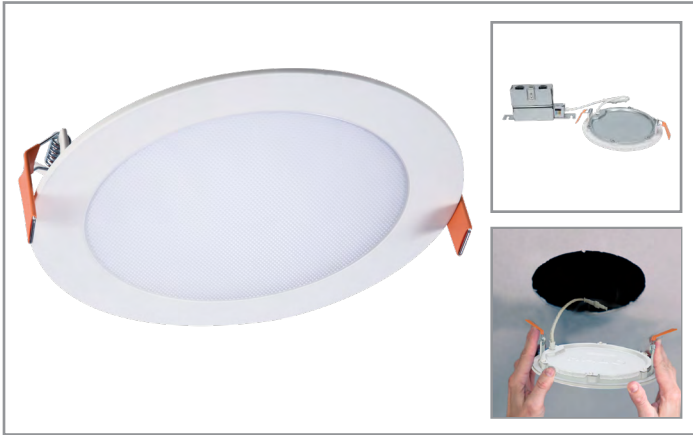


|             |  |           |  |      |  |
|-------------|--|-----------|--|------|--|
| Project     |  | Catalog # |  | Type |  |
| Prepared by |  | Notes     |  | Date |  |



# HALO

## HLB6

### 6" LED Lens Downlight with Remote Driver / Junction Box

#### Typical Applications

Residential

#### Interactive Menu

- Order Information page 2
- Product Specifications page 2
- Energy Data page 3
- Photometric Data page 3
- Product Warranty
- Dimming Guide

#### Product Certification



Refer to ENERGY STAR® Certified Products List.  
Can be used to comply with California Title 24 High Efficacy requirements.  
Certified to California Appliance Efficiency Database under JAB.

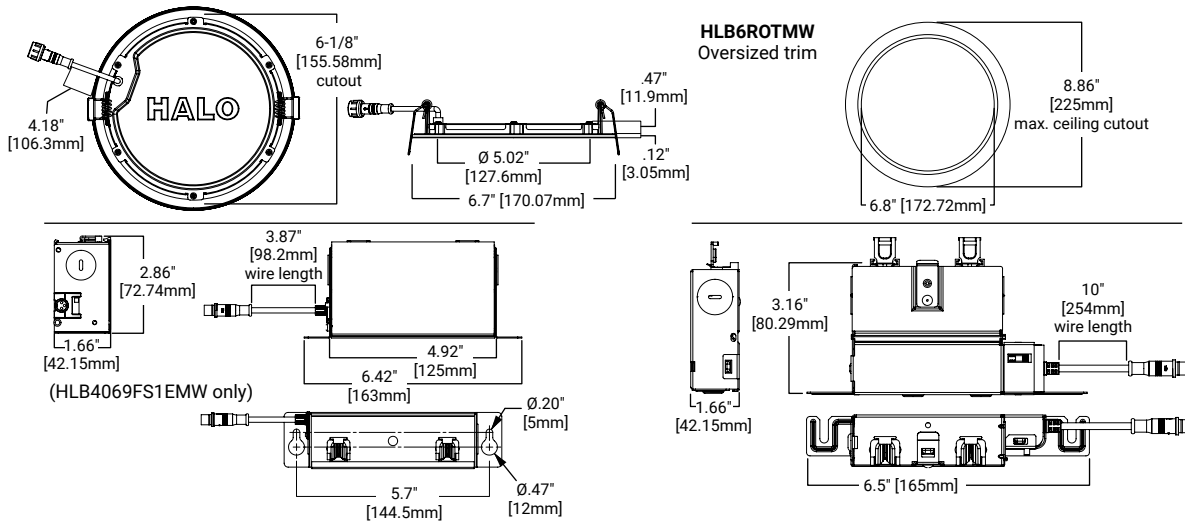
#### Product Features



#### Top Product Features

- Direct mount (does not require recessed housing or junction box)
- Delivers up to 1,150 lumens; Achieves L70 at 50,000 hours in IC and non-IC applications
- 2700K, 3000K, 3500K, 4000K and 5000K field selectable CCT; 3000K and 4000K fixed CCT
- 90 CRI (min), R9 50 and color accuracy within 4 SDCM
- Wet location listed for showers and protected ceilings; Available in 120V or 120-277V

#### Dimensional and Mounting Details



## Order Information

SAMPLE ORDER NUMBER: **HLB6099FS1EMWR**

| Models  | Lumens                           | CRI / CCT  | Driver   | Finish                         | Packaging  |
|---|----------------------------------|--|--|--------------------------------|--|
| <b>HLB6</b> = 6-Inch LED lens<br>downtight with remote<br>driver / junction box | <b>09</b> = 900 lumens (nominal) | <b>930</b> = 90 CRI minimum, 3000K CCT<br><b>940</b> = 90 CRI minimum, 4000K CCT<br><b>9FS</b> = 90 CRI minimum, field selectable 2700K,<br>3000K, 3500K, 4000K or 5000K CCT | <b>1E</b> = 120V 60Hz, LE & TE phase<br>cut 5% dimming<br><b>E010</b> = 120-277V, 0-10V 5%<br>dimming <sup>(1)</sup> | <b>MW</b> = matte white flange | <b>R</b> = recyclable 4-color unit carton<br>suitable for point of purchase<br>merchandising display |
| <b>Notes</b>  | <b>Notes</b>                     | <b>Notes</b>   | <b>Notes</b><br><small>(1) E010 driver is only available in FS<br/>color temperature.</small>                        | <b>Notes</b>                   | <b>Notes</b>   |

### Accessories

| Accessories  |   |
|--|---|
| <b>HL6RSMF</b> = 6" round and square mounting frame<br><b>HLB6ROTMW</b> = 6" round oversized trim, 6.8" ID, 8.86" OD, matte white<br><br><b>Designer Trims</b><br><b>HLB6RTRMMW</b> = 6" round decorative overlay, matte white<br><b>HLB6RTRMMB</b> = 6" round decorative overlay, matte black<br><b>HLB6RTRMSN</b> = 6" round decorative overlay, satin nickel<br><b>HLB6RTRMTBZ</b> = 6" round decorative overlay, tuscan bronze | <b>Extension Cable   Dedicated Driver/Jbox</b><br><b>HLB06EC</b> – 6 ft. extension cable<br><b>HLB12EC</b> – 12 ft. extension cable<br><b>HLB20EC</b> – 20 ft. extension cable<br><br><b>Extension Cable   select CCTable Driver/Jbox</b><br><b>HLB06FSEC</b> – 6 ft. extension cable<br><b>HLB12FSEC</b> – 12 ft. extension cable<br><b>HLB20FSEC</b> – 20 ft. extension cable |



**HLB6RTRMMW**  
White (Paintable), Splay



**HLB6RTRMMB**  
Matte Black, Splay



**HLB6RTRMSN**  
Satin Nickel, Splay



**HLB6RTRMTBZ**  
Tuscan Bronze, Splay

## Product Specifications

### Housing

- Die-cast aluminum mounting frame with integral flange provides passive thermal cooling
- Achieves L70 at 50,000 hours in IC and non-IC applications
- High impact diffuse lens provides shielding to the light guide minimizing pixilation

### Gasket

- Closed cell gasket achieves restrictive airflow and wet location listing without additional gaskets or caulking

### Optics

- Precision acrylic light guide organizes source flux into wide distribution with 1.4 spacing criteria, useful for general area illumination

### LED Array

- Plurality of mid power LED's provides a uniform source with high efficiency and long life
- 90 CRI minimum; R9 greater than 50 provides high color rendering
- Fixed 3000K and 4000K CCT color temperatures; color accuracy within 3 SDCM
- Optional field selectable color temperature, select 2700K, 3000K, 3500K, 4000K or 5000K CCT; color accuracy within 4 SDCM
- Meets ENERGY STAR® color angular uniformity requirements; Deviation is less than 0.006 u' v'

### Remote Driver/Junction Box

- Pre-galvanized steel driver/junction box with captive hinged junction box cover
- Listed for six #12 AWG 90° C splice conductors: two in, two out plus two ground
- Two 1/2" conduit pry-outs
- Two Slide-N-Side™ non-metallic (NM) wire traps allows wiring outside the box
- Accepts NM cable types: 14-2, 14-3, 12-2, 12-3 (U.S.) and 14-2, 14-3, 12-2 (Canadian)
- Three 4-port push wire nuts with clear caps for quick and reliable mains voltage connections
- Integral mounting holes facilitate direct mounting to building structure or mounting frame

### Driver

- Available in 120V or 120-277V, providing noise free operation
- Continuous flicker-free dimming down to 5% with select dimmers
- Plenum rated inline electrical quick connect provides low voltage connection to fixture fitting, CMP/FT6 rated

### Installation

- Can be installed in 1/2" to 1-1/4" thick ceilings
- Cutout utilizes standard round hole saw sizes; cutout template provided
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leak
- Housing is less than 1/2" thick and can span a 2" nominal framing member
- Can be removed from below the ceiling for service or replacement

### Optical Mounting Frame

- Pre-galvanized steel mounting frame locates fixture fittings during electrical rough-in and provides cutout guidance for drywall contractor
- Provides attachment of remote driver/junction box

### Compliance

- cULus Certified type IC suitable for direct contact with air permeable insulation
- Not recommended for use in direct contact with spray foam insulation (reference NEMA LSD57-2013)
- Wet location listed and IP44 ingress protection
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 consumer limits
- Contains no mercury or lead and RoHS compliant
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- State of California Title 24 high efficacy
- LED compliance under JA8, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2016 JA8 High Efficacy Lighting
- ENERGY STAR® certified (reference "Certified Light Fixtures" database)

### Warranty

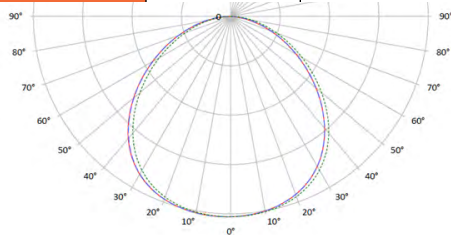
- Five year limited warranty, consult website for details. [www.cooperlighting.com/warranty](http://www.cooperlighting.com/warranty)

## Energy Data

|               |              |
|---------------|--------------|
| Lumens        | 900 Series   |
| Input Voltage | 120V         |
| Input Current | 132 (mA)     |
| Input Power   | 13.8 (W)     |
| Efficiency    | 74.1 (LPW)   |
| Inrush (A)    | 2.1 A @ 14mS |
| THD           | ≤ 20%        |
| PF            | ≥ 0.90       |
| T Ambient     | -30° - +40°C |
| Sound Rating  | ≤ 22 dba     |

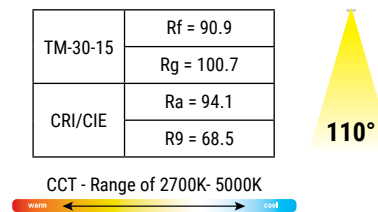
## Photometric Data

| HLB6099FS1EMWR-3000K  |          |          |
|-----------------------|----------|----------|
| Luminaire lumens      | 1023     |          |
| Input watts           | 13.8     |          |
| LER (LPW)             | 74.1     |          |
| Spacing Criteria      | 0-180    | 1.31     |
|                       | 90-270   | 1.31     |
|                       | Diagonal | 1.41     |
| Beam angle (degrees)  | 112.2    |          |
| Field angle (degrees) | 161.3    |          |
| Zonal lumen           | Lumens   | % Lumens |
| 0-30                  | 294      | 27.7     |
| 0-40                  | 486      | 45.8     |
| 0-60                  | 851      | 80.2     |
| 0-90                  | 1061     | 100      |



\* Tested in accordance with IES LM63. Field results may vary.

## Color Metric Summary - 3000K

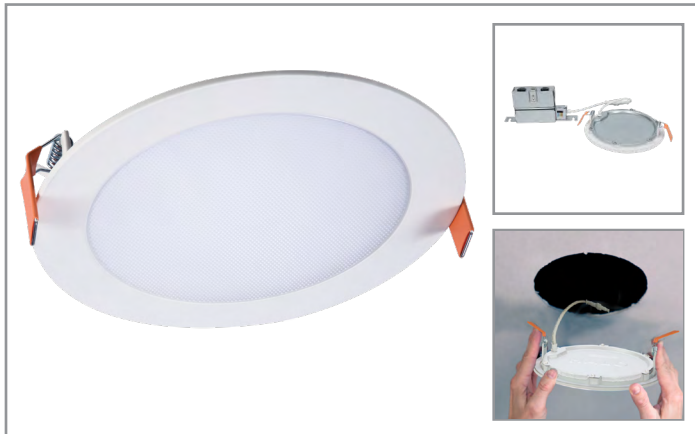


## Product Specifications

| PRODUCT SPECIFICATIONS                                  |                         |
|---|-------------------------|
| Lumens  | 1023                    |
| Watts   | 13.8                    |
| Lumens Per Watt (Efficacy)                              | 74.1                    |
| Color Accuracy (CRI)                                    | 94                      |
| Light Color (CCT)<br>Correlated Color Temperature (CCT) | 3000K                   |
|   |                         |
|   | 2700K 3000K 4500K 6500K |

| HLB6 6-inch          | CCT   | Lumens | Power (W) | LPW  |
|----------------------|-------|--------|-----------|------|
| Fixed CCT            | 3000K | 992.3  | 13.6      | 73.4 |
|                      | 4000K | 1057.7 | 13.6      | 78.0 |
| Field Selectable CCT | 2700K | 989    | 13.7      | 72.2 |
|                      | 3000K | 1023   | 13.8      | 74.1 |
|                      | 3500K | 1060   | 13.8      | 76.8 |
|                      | 4000K | 1096   | 13.8      | 79.4 |
|                      | 5000K | 1141   | 13.7      | 83.3 |

|             |  |           |  |      |  |
|-------------|--|-----------|--|------|--|
| Project     |  | Catalog # |  | Type |  |
| Prepared by |  | Notes     |  | Date |  |



# HALO

## HLB6

6" LED Lens Downlight with Remote Driver / Junction Box

### Typical Applications

Residential

### Interactive Menu

- Order Information page 2
- Product Specifications page 2
- Energy Data page 3
- Photometric Data page 3
- Product Warranty
- Dimming Guide

### Product Certification



Refer to ENERGY STAR® Certified Products List.  
Can be used to comply with California Title 24 High Efficacy requirements.  
Certified to California Appliance Efficiency Database under JAB.

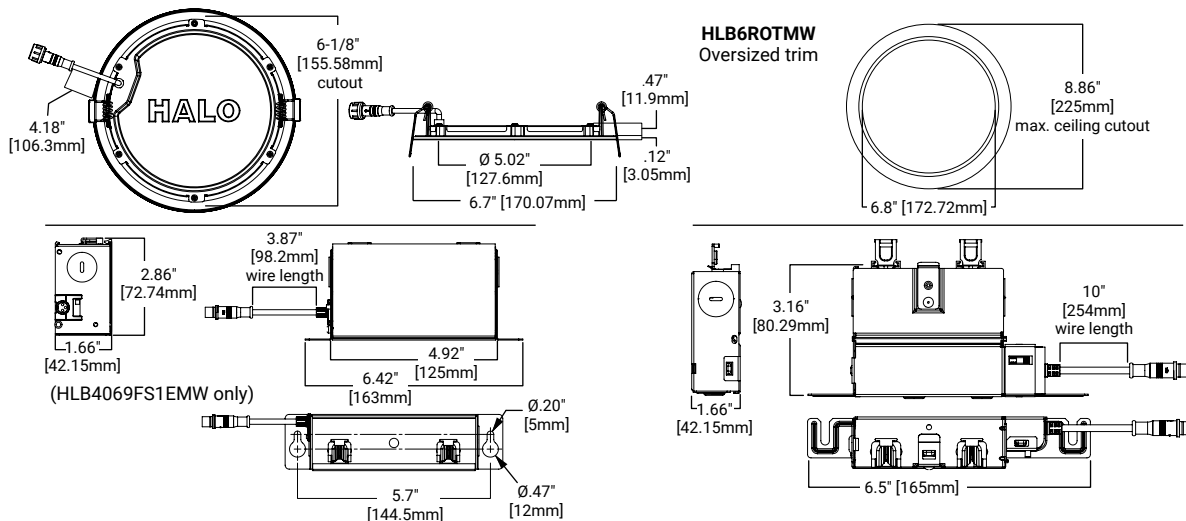
### Product Features



### Top Product Features

- Direct mount (does not require recessed housing or junction box)
- Delivers up to 1,150 lumens; Achieves L70 at 50,000 hours in IC and non-IC applications
- 2700K, 3000K, 3500K, 4000K and 5000K field selectable CCT; 3000K and 4000K fixed CCT
- 90 CRI (min), R9 50 and color accuracy within 4 SDCM
- Wet location listed for showers and protected ceilings; Available in 120V or 120-277V

### Dimensional and Mounting Details



## Order Information

SAMPLE ORDER NUMBER: **HLB6099FS1EMWR**

| Models  | Lumens                           | CRI / CCT  | Driver   | Finish                         | Packaging  |
|---|----------------------------------|--|--|--------------------------------|--|
| <b>HLB6</b> = 6-Inch LED lens<br>downtight with remote<br>driver / junction box | <b>09</b> = 900 lumens (nominal) | <b>930</b> = 90 CRI minimum, 3000K CCT<br><b>940</b> = 90 CRI minimum, 4000K CCT<br><b>9FS</b> = 90 CRI minimum, field selectable 2700K,<br>3000K, 3500K, 4000K or 5000K CCT | <b>1E</b> = 120V 60Hz, LE & TE phase<br>cut 5% dimming<br><b>E010</b> = 120-277V, 0-10V 5%<br>dimming <sup>(1)</sup> | <b>MW</b> = matte white flange | <b>R</b> = recyclable 4-color unit carton<br>suitable for point of purchase<br>merchandising display |
| <b>Notes</b>  | <b>Notes</b>                     | <b>Notes</b>   | <b>Notes</b><br><small>(1) E010 driver is only available in FS<br/>color temperature.</small>                        | <b>Notes</b>                   | <b>Notes</b>   |

### Accessories

| Accessories  |   |
|--|---|
| <b>HL6RSMF</b> = 6" round and square mounting frame<br><b>HLB6ROTMW</b> = 6" round oversized trim, 6.8" ID, 8.86" OD, matte white<br><br><b>Designer Trims</b><br><b>HLB6RTRMMW</b> = 6" round decorative overlay, matte white<br><b>HLB6RTRMMB</b> = 6" round decorative overlay, matte black<br><b>HLB6RTRMSN</b> = 6" round decorative overlay, satin nickel<br><b>HLB6RTRMTBZ</b> = 6" round decorative overlay, tuscan bronze | <b>Extension Cable   Dedicated Driver/Jbox</b><br><b>HLB06EC</b> – 6 ft. extension cable<br><b>HLB12EC</b> – 12 ft. extension cable<br><b>HLB20EC</b> – 20 ft. extension cable<br><br><b>Extension Cable   select CCTable Driver/Jbox</b><br><b>HLB06FSEC</b> – 6 ft. extension cable<br><b>HLB12FSEC</b> – 12 ft. extension cable<br><b>HLB20FSEC</b> – 20 ft. extension cable |



**HLB6RTRMMW**  
White (Paintable), Splay



**HLB6RTRMMB**  
Matte Black, Splay



**HLB6RTRMSN**  
Satin Nickel, Splay



**HLB6RTRMTBZ**  
Tuscan Bronze, Splay

## Product Specifications

### Housing

- Die-cast aluminum mounting frame with integral flange provides passive thermal cooling
- Achieves L70 at 50,000 hours in IC and non-IC applications
- High impact diffuse lens provides shielding to the light guide minimizing pixilation

### Gasket

- Closed cell gasket achieves restrictive airflow and wet location listing without additional gaskets or caulking

### Optics

- Precision acrylic light guide organizes source flux into wide distribution with 1.4 spacing criteria, useful for general area illumination

### LED Array

- Plurality of mid power LED's provides a uniform source with high efficiency and long life
- 90 CRI minimum; R9 greater than 50 provides high color rendering
- Fixed 3000K and 4000K CCT color temperatures; color accuracy within 3 SDCM
- Optional field selectable color temperature, select 2700K, 3000K, 3500K, 4000K or 5000K CCT; color accuracy within 4 SDCM
- Meets ENERGY STAR® color angular uniformity requirements; Deviation is less than 0.006 u' v'

### Remote Driver/Junction Box

- Pre-galvanized steel driver/junction box with captive hinged junction box cover
- Listed for six #12 AWG 90° C splice conductors: two in, two out plus two ground
- Two 1/2" conduit pry-outs
- Two Slide-N-Side™ non-metallic (NM) wire traps allows wiring outside the box
- Accepts NM cable types: 14-2, 14-3, 12-2, 12-3 (U.S.) and 14-2, 14-3, 12-2 (Canadian)
- Three 4-port push wire nuts with clear caps for quick and reliable mains voltage connections
- Integral mounting holes facilitate direct mounting to building structure or mounting frame

### Driver

- Available in 120V or 120-277V, providing noise free operation
- Continuous flicker-free dimming down to 5% with select dimmers
- Plenum rated inline electrical quick connect provides low voltage connection to fixture fitting, CMP/FT6 rated

### Installation

- Can be installed in 1/2" to 1-1/4" thick ceilings
- Cutout utilizes standard round hole saw sizes; cutout template provided
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leak
- Housing is less than 1/2" thick and can span a 2" nominal framing member
- Can be removed from below the ceiling for service or replacement

### Optical Mounting Frame

- Pre-galvanized steel mounting frame locates fixture fittings during electrical rough-in and provides cutout guidance for drywall contractor
- Provides attachment of remote driver/junction box

### Compliance

- cULus Certified type IC suitable for direct contact with air permeable insulation
- Not recommended for use in direct contact with spray foam insulation (reference NEMA LSD57-2013)
- Wet location listed and IP44 ingress protection
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 consumer limits
- Contains no mercury or lead and RoHS compliant
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- State of California Title 24 high efficacy
- LED compliance under JA8, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2016 JA8 High Efficacy Lighting
- ENERGY STAR® certified (reference "Certified Light Fixtures" database)

### Warranty

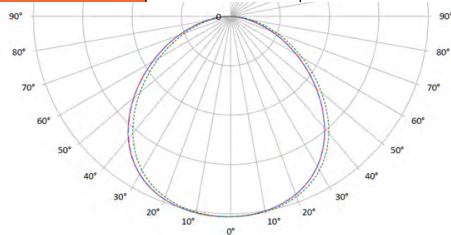
- Five year limited warranty, consult website for details. [www.cooperlighting.com/warranty](http://www.cooperlighting.com/warranty)

## Energy Data

|               |              |
|---------------|--------------|
| Lumens        | 900 Series   |
| Input Voltage | 120V         |
| Input Current | 132 (mA)     |
| Input Power   | 13.8 (W)     |
| Efficiency    | 74.1 (LPW)   |
| Inrush (A)    | 2.1 A @ 14mS |
| THD           | ≤ 20%        |
| PF            | ≥ 0.90       |
| T Ambient     | -30° - +40°C |
| Sound Rating  | ≤ 22 dba     |

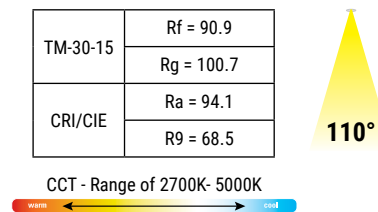
## Photometric Data

| HLB6099FS1EMWR-3000K  |          |          |
|-----------------------|----------|----------|
| Luminaire lumens      | 1023     |          |
| Input watts           | 13.8     |          |
| LER (LPW)             | 74.1     |          |
| Spacing Criteria      | 0-180    | 1.31     |
|                       | 90-270   | 1.31     |
|                       | Diagonal | 1.41     |
| Beam angle (degrees)  | 112.2    |          |
| Field angle (degrees) | 161.3    |          |
| Zonal lumen           | Lumens   | % Lumens |
| 0-30                  | 294      | 27.7     |
| 0-40                  | 486      | 45.8     |
| 0-60                  | 851      | 80.2     |
| 0-90                  | 1061     | 100      |



\* Tested in accordance with IES LM63. Field results may vary.

## Color Metric Summary - 3000K



## Product Specifications

| PRODUCT SPECIFICATIONS                                  |                         |
|---|-------------------------|
| Lumens  | 1023                    |
| Watts   | 13.8                    |
| Lumens Per Watt (Efficacy)                              | 74.1                    |
| Color Accuracy (CRI)                                    | 94                      |
| Light Color (CCT)<br>Correlated Color Temperature (CCT) | 3000K                   |
|   |                         |
|   | 2700K 3000K 4500K 6500K |

| HLB6 6-inch          | CCT   | Lumens | Power (W) | LPW  |
|----------------------|-------|--------|-----------|------|
| Fixed CCT            | 3000K | 992.3  | 13.6      | 73.4 |
|                      | 4000K | 1057.7 | 13.6      | 78.0 |
| Field Selectable CCT | 2700K | 989    | 13.7      | 72.2 |
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|                      | 5000K | 1141   | 13.7      | 83.3 |