

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



# HALO

## HLBSL6

6-Inch LED Lens Downlight with Remote Driver / Junction Box

### Typical Applications

Residential

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### Top Product Features

- Direct mount - does not require recessed housing or junction box
- Delivers up to 1,049 lumens
- Achieves L70 at 35,000 hours in IC and non-IC applications
- 2700, 3000, 3500, 4000 and 5000, 6000K field selectable CCT

### Product Certification

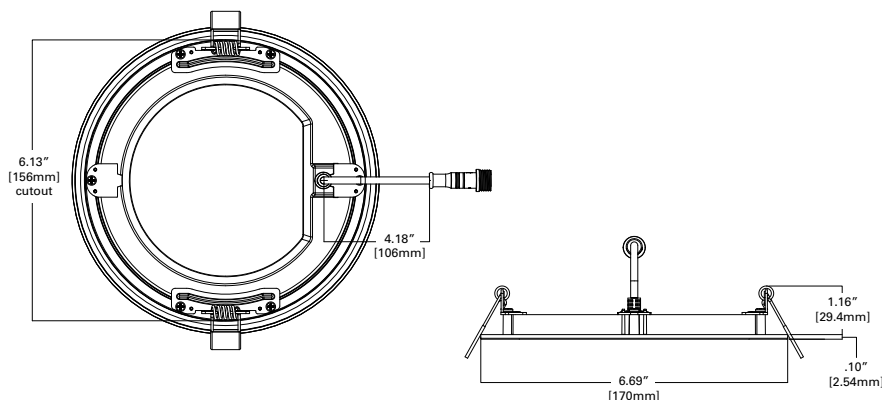


Refer to ENERGY STAR® Certified Products List.  
Can be used to comply with California Title 24 High Efficacy requirements.  
Certified to California Appliance Efficiency Database under JAG.

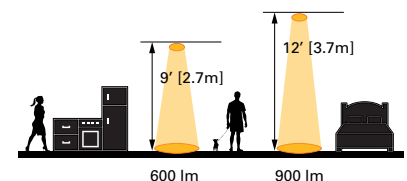
### Product Features



### Dimensional and Mounting Details



### Scale



[additional product diagrams](#)

## Order Information

SAMPLE ORDER NUMBER: **HLBSL6099FS351EMWR**

| Models   | Lumens                           | CRI / CCT   | Driver   | Finish                         | Packaging  |
|--|----------------------------------|---|--|--------------------------------|--|
| <b>HLBSL6</b> = 6-Inch LED smooth lens downlight with plastic housing and remote driver / junction box | <b>09</b> = 900 lumens (nominal) | <b>9FS23</b> = 90 CRI minimum, field selectable 2700K, 3000K, 3500K CCT<br><b>9FS35</b> = 90 CRI minimum, field selectable 3000K, 4000K, 5000K CCT<br><b>9FS46</b> = 90 CRI minimum, field selectable 4000K, 5000K, 6000K CCT | <b>1E</b> = 120V 60Hz, LE & TE phase cut 10% dimming | <b>MW</b> = matte white flange | <b>R</b> = recyclable 4-color unit carton suitable for point of purchase merchandising display |
| <b>Notes</b>   | <b>Notes</b>                     | <b>Notes</b>  | <b>Notes</b>   | <b>Notes</b>                   | <b>Notes</b>   |

### Accessories

| Accessories  |  |
|--|--|
| <b>HL6RSMF</b> = 6" new construction mounting frame<br><b>HLB6ROTMW</b> = 6" round oversized trim ring, 8.875" OD, matte white<br><br><b>Designer Trims</b><br><b>HLB6TRMMW</b> = 6" round decorative overlay, matte white<br><b>HLB6TRMSN</b> = 6" round decorative overlay, satin nickel<br><b>HLB6TRMTBZ</b> = 6" round decorative overlay, tuscan bronze | <b>Extension Cable   seleCCTable 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 |
| <b>Notes</b>   |  |

## Product Specifications

### Housing

- Plastic mounting frame with integral flange provides passive thermal cooling achieving L70 at 35,000 hours in IC and non-IC applications

### Optics

- Precision acrylic light guide organizes source flux into wide distribution with 1.28 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
- Available in 90 CRI minimum, R9 greater than 50 provides high color rendering
- Field Selectable color temperature (3 colors)
  - 2700K, 3000K, 3500K
  - 3000K, 4000K, 5000K
  - 4000K, 5000K, 6000K
- Color accuracy of 4 step at the ends, 7 step in the middle
- Meets ENERGY STAR® color angular uniformity requirements, deviation is less than 0.006 u' v'

### Remote Driver / Junction Box

- Die formed metal driver / junction box with captive hingd junction box cover
- Listed for (6) #12 AWG 90° C splice conductors, 2-in, 2-out plus (2) ground
- (4) ½" conduit pry-outs
- Accepts 14-2, 14-3, 12-2, 12-3 U.S. and 14-2, 14-3, 12-2 Canadian NM cable
- (3) wire nuts for quick and reliable mains voltage connections
- Integral mounting facilitates direct mounting to building structure or mounting frame

### Driver

- 120V 60 Hz constant current driver provides noise free operation
- Continuous, flicker-free dimming from 100% to 10% with select leading or trailing edge 120V phase cut dimmers

### Installation

- Can be installed in 3/8" to 5/8" thick ceilings
- Round ceiling cutout
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leaks
- Housing is less than ½" thick and can span a 2" nominal framing member
- Can be removed from below the ceiling for service or replacement

### Compliance

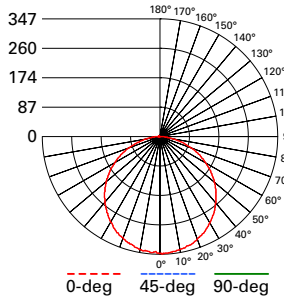
- cULus certified type IC suitable for direct contact with air permeable insulation
- Not recommended for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- Wet location listed and IP44 ingress protection
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when 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
- Can be used for State of California Title 24 high efficacy LED compliance under JA8, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2019 JA8 High Efficacy Lighting
- ENERGY STAR® certified, reference "Certified Light Fixtures" database

### Warranty

- Five year warranty standard.

## Photometric Data

[View IES files](#)



**HLBSL6099FS351EMWR**  
 Spacing criterion: (0-180) 1.28  
 (90-270) 1.24  
 (Diagonal) 1.38  
 Beam Angle: 112.9°  
 Field Angle: 161.5°  
 Lumens: 866  
 Input Watts: 12.9 W  
 Efficacy: 67.13 LPW  
 Test Report:  
 HLBSL6099FS351EMWR.ies

| Zonal Lumen | Lumens | % Lumens |
|-------------|--------|----------|
| 0-30        | 233.8  | 27       |
| 0-40        | 383.6  | 44.3     |
| 0-60        | 682.4  | 78.8     |
| 0-90        | 866.0  | 100      |



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### COLOR METRIC SUMMARY

#### HLBSL6099FS231EMW

| 2700K    |                        | 3000K    |                        | 3500K    |                        |
|----------|------------------------|----------|------------------------|----------|------------------------|
| TM-30-15 | Rf = 91.0<br>Rg = 98.0 | TM-30-15 | Rf = 91.0<br>Rg = 99.0 | TM-30-15 | Rf = 91.0<br>Rg = 99.0 |
| CRI/CIE  | Ra = 93.1<br>R9 = 60.1 | CRI/CIE  | Ra = 94.2<br>R9 = 68.7 | CRI/CIE  | Ra = 93.6<br>R9 = 69.3 |

#### HLBSL6099FS351EMW

| 3000K    |                        | 4000K    |                        | 5000K    |                        |
|----------|------------------------|----------|------------------------|----------|------------------------|
| TM-30-15 | Rf = 92.0<br>Rg = 99.0 | TM-30-15 | Rf = 90.0<br>Rg = 98.0 | TM-30-15 | Rf = 90.0<br>Rg = 97.0 |
| CRI/CIE  | Ra = 94.4<br>R9 = 72.4 | CRI/CIE  | Ra = 95.6<br>R9 = 86.1 | CRI/CIE  | Ra = 94.4<br>R9 = 80.6 |

#### HLBSL6099FS461EMW

| 4000K    |                        | 5000K    |                        | 6000K    |                        |
|----------|------------------------|----------|------------------------|----------|------------------------|
| TM-30-15 | Rf = 91.0<br>Rg = 98.0 | TM-30-15 | Rf = 91.0<br>Rg = 99.0 | TM-30-15 | Rf = 91.0<br>Rg = 99.0 |
| CRI/CIE  | Ra = 94.0<br>R9 = 78.1 | CRI/CIE  | Ra = 94.9<br>R9 = 84.9 | CRI/CIE  | Ra = 95.1<br>R9 = 84.4 |

## Energy and Performance Data

|                   |       | Lumens | Power (W) | LPW  |
|-------------------|-------|--------|-----------|------|
| HLBSL6099FS231EMW | 2700K | 940    | 12.6      | 74.6 |
|                   | 3000K | 1018   | 12.5      | 81.4 |
|                   | 3500K | 1005   | 12.5      | 80.4 |
| HLBSL6099FS351EMW | 3000K | 866    | 12.9      | 67.1 |
|                   | 4000K | 954    | 12.7      | 75.1 |
|                   | 5000K | 957    | 12.9      | 74.2 |
| HLBSL6099FS461EMW | 4000K | 991    | 12.5      | 79.3 |
|                   | 5000K | 1049   | 12.3      | 85.3 |
|                   | 6000K | 1015   | 12.5      | 81.2 |

Note: Refer to IES files for more product data.

HLBSL6099FS231EMW

| PRODUCT SPECIFICATIONS                                  |            |
|---|------------|
| Lumens  | 954        |
| Watts   | 12.7       |
| Lumens Per Watt (Efficacy)                              | 75.1       |
| Color Accuracy (CRI)                                    | 93         |
| Light Color (CCT)<br>Correlated Color Temperature (CCT) | 3000K      |
|   |            |
| warm white  | soft white |
| 2700K   | 3000K      |
| 4500K   | 6500K      |

HLBSL6099FS351EMW

| PRODUCT SPECIFICATIONS                                  |            |
|---|------------|
| Lumens  | 940        |
| Watts   | 12.6       |
| Lumens Per Watt (Efficacy)                              | 74.6       |
| Color Accuracy (CRI)                                    | 93         |
| Light Color (CCT)<br>Correlated Color Temperature (CCT) | 3000K      |
|   |            |
| warm white  | soft white |
| 2700K   | 3000K      |
| 4500K   | 6500K      |

HLBSL6099FS461EMW

| PRODUCT SPECIFICATIONS                                  |            |
|---|------------|
| Lumens  | 991        |
| Watts   | 12.5       |
| Lumens Per Watt (Efficacy)                              | 79.3       |
| Color Accuracy (CRI)                                    | 93         |
| Light Color (CCT)<br>Correlated Color Temperature (CCT) | 4000K      |
|   |            |
| warm white  | soft white |
| 2700K   | 3000K      |
| 4500K   | 6500K      |

## Dimensional Details

