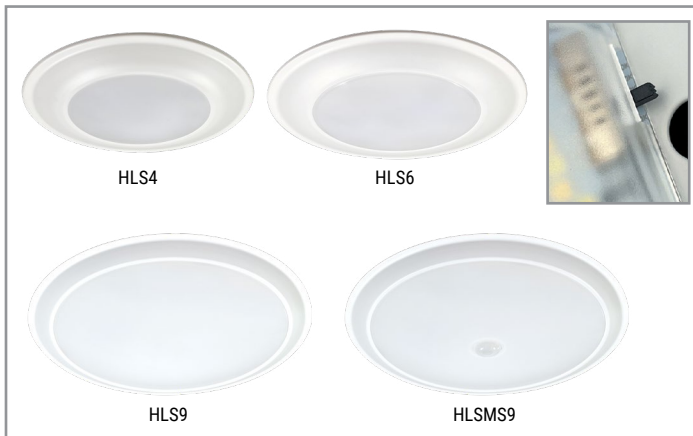


| | | | | | |
|-------------|--|-----------|--|------|--|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |



HALO

HLS Selectable Tapered Surface Mount LED Disk Lights

Low-profile tapered 4", 6", and 9" Disk Lights that are 5-color selectable, wet-rated, dim to 10%, and mount directly to junction boxes or recessed housings. Decorative overlays, 9" motion sensor option, and California versions available.

Typical Applications

Residential

Interactive Menu

- Order Information page 2
- Product Specifications page 3
- Energy Data page 3
- Photometric Data page 4
- Product Warranty

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.

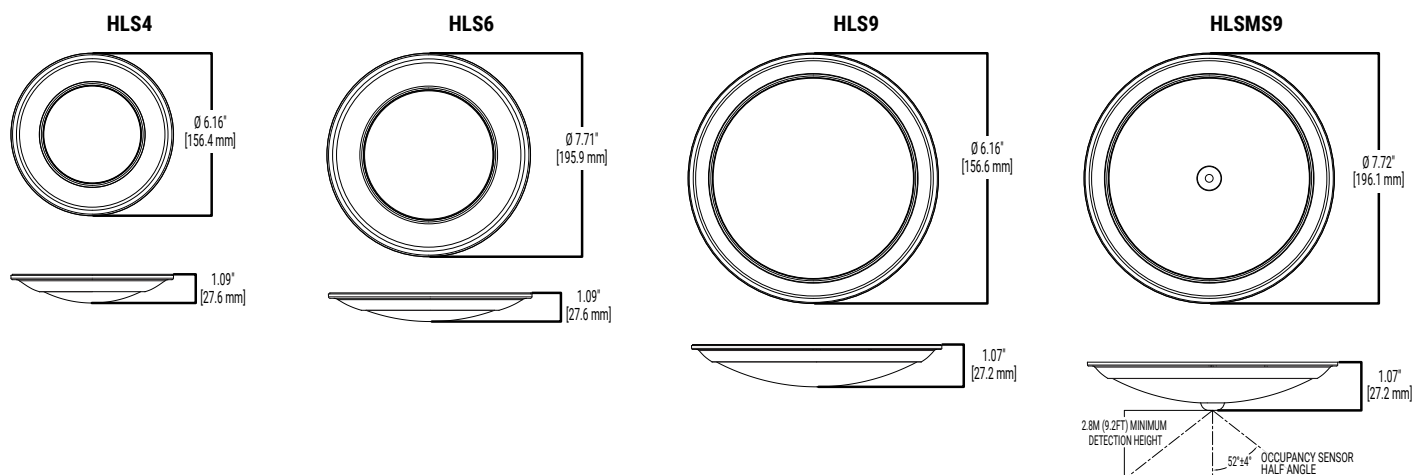
Product Features



Top Product Features

- Below the ceiling installation, no clips or plates needed
- Installs in many 3-1/2" and 4" ceiling junction and pancake boxes
- Field selectable 5CCT (2700K, 3000K, 3500K, 4000K, 5000K), 90 CRI minimum
- Dimmable down to 10%
- Wet location listed
- 9" Motion Sensor option available

Dimensional and Mounting Details



*T24 and RoHS are self-tested by Cooper Lighting Solutions. Not a third party certification.

Order Information

4" Disk Light

| Catalog Number | Description | CRI | CCT | Dimming | Finish | Packaging | Packaging Dimensions | UPC |
|------------------|-----------------------------------|---------|--|-----------------------|-------------|-----------|----------------------|--------------|
| HLS4079FS1E-6BP | 4-inch LED Disk Light, 900 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | 6 Pack | 7.283x7.48x7.874 | 080083286980 |
| HLS4079FS1E-12BP | 4-inch LED Disk Light, 900 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | 12 Pack | 7.283x7.48x15.748 | 080083287000 |

6" Disk Light

| | | | | | | | | |
|------------------|------------------------------------|---------|--|-----------------------|-------------|---------|--------------------|--------------|
| HLS6099FS1E-6BP | 6-inch LED Disk Light, 1200 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | 6 Pack | 8.858x7.677x8.858 | 080083287024 |
| HLS6099FS1E-12BP | 6-inch LED Disk Light, 1200 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | 12 Pack | 8.858x8.858x15.354 | 080083287048 |

9" Disk Light

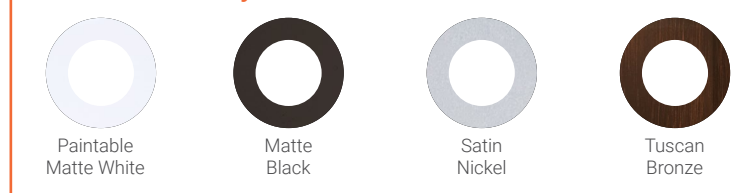
| | | | | | | | | |
|------------------|--|---------|--|-----------------------|-------------|--------------------------|--|--------------|
| HLS9129FS1E | 9-inch LED Disk Light, 1300 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | Single Pack | | 080083287062 |
| HLS9129FS1E-CA | 9-inch LED Disk Light, 1300 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | Single Pack - California | | 080083287086 |
| HLSMS9129FS1E | 9-inch LED Disk Light w/Motion Sensor, 1300 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | Single Pack | | 080083287109 |
| HLSMS9129FS1E-CA | 9-inch LED Disk Light w/Motion Sensor, 1300 lumens | 90+ CRI | 5CCT (2700K, 3000K, 3500K, 4000K, 5000K) | Phase Cut dimming 10% | Matte White | Single Pack - California | | 080083287123 |

Note: Non-California versions include an E26 medium screw-base Edison adapter for installation into compatible housings.

Accessories (sold separately)

| Accessories |
|--|
| Designer Trim Accessories |
| HLS4TRMWH = 4", Designer Trim, Paintable Matte White |
| HLS4TRMMB = 4", Designer Trim, Matte Black |
| HLS4TRMSN = 4", Designer Trim, Satin Nickel |
| HLS4TRMTBZ = 4", Designer Trim, Tuscan Bronze |
| HLS6TRMWH = 6", Designer Trim, Paintable Matte White |
| HLS6TRMMB = 6", Designer Trim, Matte Black |
| HLS6TRMSN = 6", Designer Trim, Satin Nickel |
| HLS6TRMTBZ = 6", Designer Trim, Tuscan Bronze |
| HLS9TRMWH = 9", Designer Trim, Paintable Matte White |
| HLS9TRMMB = 9", Designer Trim, Matte Black |
| HLS9TRMSN = 9", Designer Trim, Satin Nickel |
| HLS9TRMTBZ = 9", Designer Trim, Tuscan Bronze |

Decorative Overlay Finishes



Compatible Junction Boxes²



4" octagon light fixture/fan steel box
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



4" octagon steel box
4" x 4" x 1-1/2"
(102mm x 102mm x 38mm)



4" round new work non-metallic light fixture/fan box
4" diameter x 2-3/16"
(102mm x 56mm)



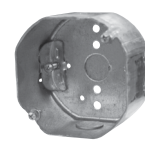
3-1/2" round new work non-metallic ceiling box
3-1/2" diameter x 2-3/4"
(89mm x 70mm)



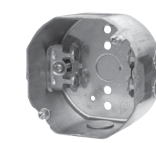
3-1/2" round old work non-metallic box
4-1/4" O.D. flange, 3-1/2" I.D. x 2-5/8"
(108mm O.D., 89mm I.D. x 67mm)



4" round surface mount box
4" diameter x 1-1/2"
(102mm x 38mm)



TP316
for non-metallic cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



TP317
for metal clad cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



Round ceiling pan
4" diameter x 13/16"
(102mm x 21mm)



4" round new work non-metallic box with hanger bar assembly
4" diameter x 2-3/16" (102mm x 56mm)



Cat #: JB4FR2
4" NC JBox for Fire Rated Ceilings
4" diameter x 5-1/2"
(102mm x 140mm)

1. Review the product's Dimming Guide for approved compatible dimmers.

2. This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Cooper Lighting Solutions makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the mounting bracket in the box.

Product Specifications

Construction

- Stamped steel

Optics

- Precision engineered optic provides uniform luminance from a low-profile convex lens
- Removable lens for easy install from below installation

LED

- Backlit LED technology
- 5CCT Field Selectable color temperature (2700K, 3000K, 3500K, 4000K, 5000K)
- 90 CRI is standard
- Color accuracy within 6SDCM at the CCT endpoints, provide color accuracy and uniformity.
- Expected Life: L70 at 50,000 hours projected in accordance with TM-21

Recessed Housing Mounting

- Extension Springs for 5" & 6" housings included in the box
- Not for use in recessed housing in the direct contact with spray foam insulation refer to NEMA LSD 57-2013
- Compatible with HALO 5" and 6" housings

Electrical Power Connections

- Wire nuts provided for mains connections
- The included E26 medium screw-based Edison adapter provides easy retrofit of incandescent housings (non-California products only)

Driver

- Integral 120V 60Hz constant current driver provides virtually noise free operation.
- Continuous, flicker-free dimming from 100% to 10% with select leading or trailing edge 120V phase cut dimmers. See dimming guide.
- Dimming to 10% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)
- Inline electrical quick connect (provided) provides mains connections
TIPS: For optimal dimming performance, consider dimmers with low-end trim adjustment and note that some dimmers require a neutral wire in the wallbox. (See the [HLS Dimming Guide](#) and then consult dimmer manufacturer for compatibility and conditions of use.)

Electrical Junction Box Mounting

- HLS series may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Install from below design
- Suitable for installation in many 3-1/2" and 4" octagon and round electrical junction boxes.
- Compatible with compact (pancake) junction boxes
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building coded NEMA LSD 57-2013

Compliance

- UL Certified for US and Canada
- Wet Location listed (except for 9-inch motion sensor version)
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements.
- Airtight per ASTM-E283 (no gasket necessary)
- EMI/RFI emissions per FCC 47CFR Part 15B
- 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 luminaire compliance
- Can be used for International Energy Conservation Code (IECC) and Washington State Energy Code high efficiency luminaire Compliance
- ENERGY STAR® Certified luminaire - consult ENERGY STAR® Certified Product List

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/warranty

Energy and Performance Data

| HLS4 | | HLS6 | | HLS9 | | HLSMS9 | |
|---------------|--------|---------------|--------|---------------|--------|---------------|--------|
| Lumens | 700 | Lumens | 900 | Lumens | 1200 | Lumens | 1200 |
| Input Voltage | 120V | Input Voltage | 120V | Input Voltage | 120V | Input Voltage | 120V |
| Input current | 97 mA | Input current | 120 mA | Input current | 145mA | Input current | 150mA |
| Input Power | 11 W | Input Power | 14 W | Input Power | 17.5W | Input Power | 17.5W |
| Efficiency | 70.00% | Efficiency | 70.00% | Efficiency | 70.00% | Efficiency | 70.00% |
| Inrush(A) | 1.005 | Inrush(A) | 1.108 | Inrush(A) | 1.3 | Inrush(A) | 1.1 |
| THD | ≤ 27% | THD | ≤ 27% | THD | 29% | THD | 29% |
| PF | ≥ 0.90 | PF | ≥ 0.90 | PF | >0.9 | PF | >0.9 |
| Sound Rating | <22dB | Sound Rating | <22dB | Sound Rating | ≤22DB | Sound Rating | ≤22DB |

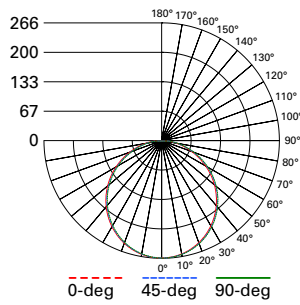
| | CCT | Watts | lumens | LPW | CRI |
|-------------|-------|-------|--------|------|-----|
| HLS4079FS1E | 2700K | 9.1 | 745 | 82.1 | 93 |
| | 3000K | 8.9 | 785 | 88.2 | 93 |
| | 3500K | 9.1 | 785 | 86.0 | 93 |
| | 4000K | 9.1 | 795 | 87.3 | 93 |
| | 5000K | 9.1 | 790 | 87.1 | 93 |

| | CCT | Watts | lumens | LPW | CRI |
|-------------|-------|-------|--------|------|-----|
| HLS9129FS1E | 2700K | 16.3 | 1245 | 76.5 | 93 |
| | 3000K | 16.5 | 1265 | 76.7 | 93 |
| | 3500K | 16.3 | 1320 | 81.0 | 93 |
| | 4000K | 16.5 | 1325 | 80.3 | 93 |
| | 5000K | 16.4 | 1285 | 78.5 | 93 |

| | CCT | Watts | lumens | LPW | CRI |
|-------------|-------|-------|--------|------|-----|
| HLS6099FS1E | 2700K | 10.7 | 900 | 83.9 | 93 |
| | 3000K | 10.6 | 935 | 88.2 | 93 |
| | 3500K | 10.8 | 950 | 88.0 | 93 |
| | 4000K | 10.8 | 960 | 88.8 | 93 |
| | 5000K | 10.7 | 945 | 88.2 | 93 |

| | CCT | Watts | lumens | LPW | CRI |
|---------------|-------|-------|--------|------|-----|
| HLSMS9129FS1E | 2700K | 16.1 | 1255 | 78.0 | 93 |
| | 3000K | 16.1 | 1275 | 79.3 | 93 |
| | 3500K | 16.0 | 1305 | 81.6 | 93 |
| | 4000K | 16.0 | 1305 | 81.6 | 93 |
| | 5000K | 15.9 | 1280 | 80.8 | 93 |

Photometric Data

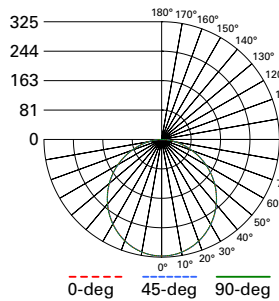


HLS4079FS1EWH-3000K

Spacing criterion:
 (0-180) 1.25 | (90-270) 1.25 | (Diagonal) 1.37
 Beam Angle: 113°
 Field Angle: 169°
 Lumens: 785
 Input Watts: 9.2 W
 Efficacy: 85.3 LPW
 UGR: 21
 Test Report: P855584

| Zonal Lumen | Lumens | % Lumens |
|-------------|--------|----------|
| 0-30 | 206 | 26.3 |
| 0-40 | 338 | 43 |
| 0-60 | 599 | 76.3 |
| 0-90 | 785 | 100 |

| | |
|----------|-----------|
| TM-30-15 | Rf = 92 |
| | Rg = 102 |
| CRI/CIE | Ra = 96.1 |
| | R9 = 76.1 |

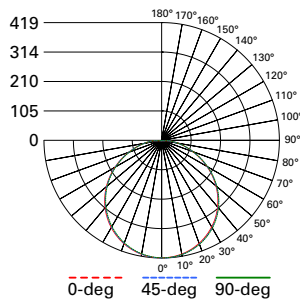


HLS6099FS1EWH-3000K

Spacing criterion:
 (0-180) 1.25 | (90-270) 1.25 | (Diagonal) 1.37
 Beam Angle: 112°
 Field Angle: 165°
 Lumens: 935
 Input Watts: 10.6 W
 Efficacy: 88.2 LPW
 UGR: 21
 Test Report: P855589

| Zonal Lumen | Lumens | % Lumens |
|-------------|--------|----------|
| 0-30 | 251 | 26.9 |
| 0-40 | 411 | 44 |
| 0-60 | 727 | 77.7 |
| 0-90 | 935 | 100 |

| | |
|----------|-----------|
| TM-30-15 | Rf = 92 |
| | Rg = 102 |
| CRI/CIE | Ra = 96.6 |
| | R9 = 76.3 |

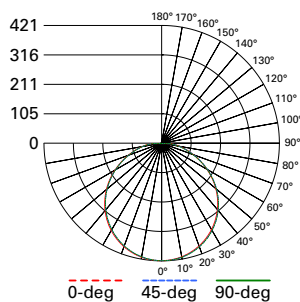


HLS9129FS1EWH-3000K

Spacing criterion:
 (0-180) 1.27 | (90-270) 1.27 | (Diagonal) 1.39
 Beam Angle: 114°
 Field Angle: 171°
 Lumens: 1265
 Input Watts: 16.5 W
 Efficacy: 76.7 LPW
 UGR: 20
 Test Report: P855594

| Zonal Lumen | Lumens | % Lumens |
|-------------|--------|----------|
| 0-30 | 327 | 25.8 |
| 0-40 | 537 | 42.5 |
| 0-60 | 958 | 75.7 |
| 0-90 | 1265 | 100 |

| | |
|----------|-----------|
| TM-30-15 | Rf = 92 |
| | Rg = 100 |
| CRI/CIE | Ra = 96.9 |
| | R9 = 81.5 |



HLSMS9129FS1EWH-3000K

Spacing criterion:
 (0-180) 1.27 | (90-270) 1.27 | (Diagonal) 1.39
 Beam Angle: 114°
 Field Angle: 171°
 Lumens: 1275
 Input Watts: 16.1 W
 Efficacy: 79.2 LPW
 UGR: 20
 Test Report: P855599

| Zonal Lumen | Lumens | % Lumens |
|-------------|--------|----------|
| 0-30 | 328 | 25.7 |
| 0-40 | 539 | 42.3 |
| 0-60 | 960 | 75.3 |
| 0-90 | 1275 | 100 |

| | |
|----------|-----------|
| TM-30-15 | Rf = 92 |
| | Rg = 100 |
| CRI/CIE | Ra = 96.6 |
| | R9 = 81.6 |

