

DESCRIPTION

The Halo Backlit LED Downlight (BLD) incorporates state of the art lighting technology to create an ultra-low profile surface mounting luminaire with the performance and look of a traditional downlight. BLD4 is designed for installation in many 3-1/2" and 4" round or octagon junction boxes including pancake boxes. It can also retrofit in 4" aperture IC and Non-IC recessed housings. Suitable for residential or commercial installations.

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

SPECIFICATION FEATURES

CONSTRUCTION

- Stamped aluminum housing and frame

OPTICS

- Precision engineered optic provides uniform luminance from a low profile convex lens

LED

- Backlit LED technology
- Color Temperature options include: standard 3000K dedicated or SeleCCTable configuration including 2700K, 3000K, 3500K, 4000K and 5000K options.
- 90 CRI is standard
- L70 at 50,000 hours projected in accordance with TM-21

DRIVER

- Integral 120V 60Hz constant current driver provides virtually noise free operation.
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers. See dimming guide.
- Dimming to 5% 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 and E26 adapter (provided) provides mains connections.

ELECTRICAL JUNCTION BOX MOUNTING

- BLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Suitable for installation in many 3-1/2" and 4" octagon and round electrical junction boxes.
- Dedicated CCT SKUs are compatible with compact (pancake) junction boxes
- Selectable CCT configuration, driver consumes 3 cubic inches of junction box, selectable CCT configuration is not compatible with 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

RECESSED HOUSING MOUNTING

- Can be installed in industry standard 4-inch recessed housings using friction mounting springs and (E26) medium base adapter provided.
- Not for use in recessed housings in direct contact with spray foam insulation refer to NEMA LSD 57-2013

WARRANTY

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

COMPLIANCE

- cULus certified for use with Halo housings and other's housings, see instruction sheet for conditions of acceptability.
- Wet and Damp Location listed, airtight per ASTM-E283 (protected ceiling only)
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements.
- 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, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings.
- Can be used for International Energy Conservation Coe (IECC) and Washington State Energy Code high efficiency luminaire Compliance
- ENERGY STAR® Certified luminaire - consult ENERGY STAR® Certified Product List



BLD4 Series

90 CRI

4" Backlit LED Downlight

Suitable for ceiling or wall electrical junction boxes

Suitable for 4" recessed housing retrofit (IC, Non-IC & AIR-TITE™)

3000K - dedicated

| | |
|---------------|-------------|
| Lumens | 690 |
| Wattage | 8.2W |
| Input current | 0.07 |
| Efficacy | 84.1 LPW |
| THD | 15.1% |
| Frequency | 60 Hz |
| T Ambient | -30 - +40°C |
| Voltage | 120V |
| Sound Rating | Class A |
| Power Factor | 0.99 |

SeleCCTable 2700K - 5000K

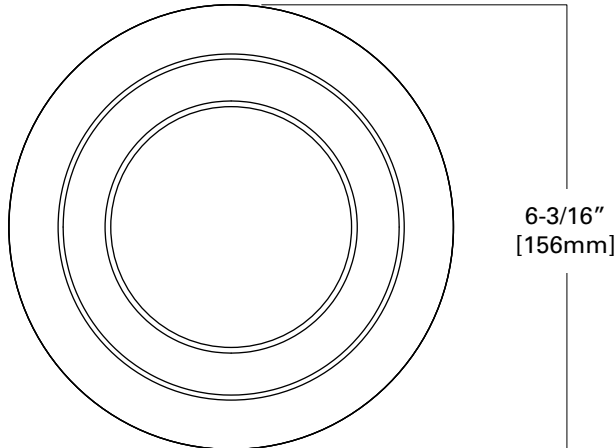
| | |
|---------------|-------------|
| Lumens | 802 |
| Wattage | 10.3W |
| Input current | 0.087 |
| Efficacy | 77.9 LPW |
| THD | 11.9% |
| Frequency | 60 Hz |
| T Ambient | -30 - +40°C |
| Voltage | 120V |
| Sound Rating | Class A |
| Power Factor | 0.99 |



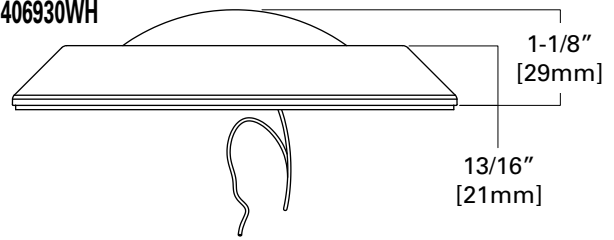
Refer to ENERGY STAR® Certified Products List. Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Appliance Efficiency Database under JAB.



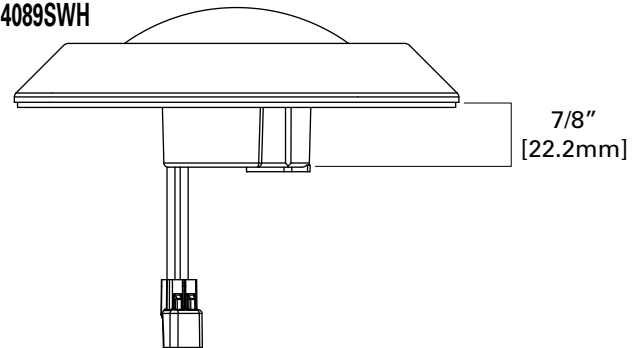
DIMENSIONS



FIXED CCT
BLD406930WH



SELECTABLE CCT
BLD4089SWH



ORDERING INFORMATION

SAMPLE NUMBER: BLD406930WH=4" Backlit LED Downlight, 90CRI, 3000K

| Models | Lumens | CRI / CCT | Finish | Voltage |
|--|-----------------------------|--------------------------|-------------------------|---------------------|
| BLD4 = 4" Backlit LED Downlight | 06 =600 lumen series | 930 =90CRI, 3000K | WH = Matte White | Blank = 120V |

SAMPLE NUMBER: BLD4089SWH = 4" Backlit LED Downlight, 90CRI, SeleCCTable CCT

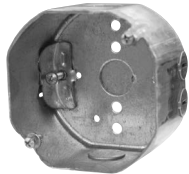
| Models | Lumens | CRI / CCT | Finish | Voltage |
|--|-----------------------------|---|-------------------------|---------------------|
| BLD4 = 4" Backlit LED Downlight | 08 =800 lumen series | 9S =90 CRI, SeleCCTable 2700K, 3000K, 3500K, 4000K & 5000K | WH = Matte White | Blank = 120V |

HOUSING COMPATIBILITY

The BLD4 is UL Certified in for use with any 4 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 62.3 in³ in addition to those noted below:

| Compatible Halo LED Housings with LED luminaire connector (high-efficacy compliant) | | |
|---|-------------------|---|
| HALO LED | Recessed Can Size | Catalog Number |
| | 4" | H995ICAT, H995RICAT, H245ICAT, H245RICAT |
| Compatible Halo Incandescent E26 Screwbase Housings | | |
| HALO | Recessed Can Size | Catalog Number |
| | 4" | H99ICAT, H99TAT, H99RTAT, E4ICATSB, E4TATSB, E4RTATSB |

COMPATIBLE WITH COOPER LIGHTING SOLUTIONS CROUSE-HINDS JUNCTION BOXES



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)

- TP316 - for non-metallic cable
- TP317 - for metal clad cable
- UL Listed
- Refer to www.crouse-hinds.com

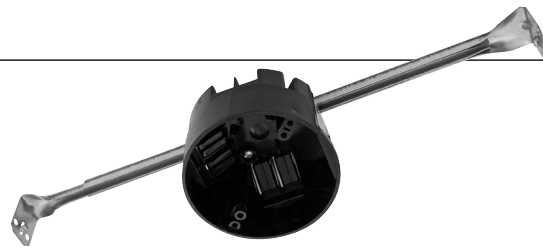
COMPATIBLE WITH MANY OTHER JUNCTION BOXES*



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 box with hanger bar assembly
4" diameter x 2-3/16" (102mm x 56mm)



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)

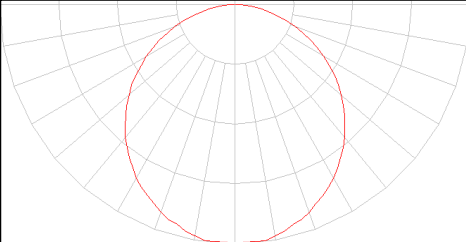


Round ceiling pan
4" diameter x 13/16"
(102mm x 21mm)
Note: only compatible with fixed CCT BLD406930

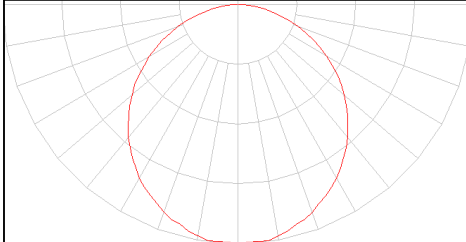
*This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Cooper Lighting Solutions makes no specific 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.

PHOTOMETRIC DATA

| BLD406930WH | | |
|-----------------------|----------|----------|
| Luminaire lumens | 690 | |
| Input watts | 8.2 | |
| LER (LPW) | 84.1 | |
| Spacing Criteria | 0-180 | 1.26 |
| | 90-270 | 1.26 |
| | Diagonal | 1.38 |
| Beam angle (degrees) | 114.4 | |
| Field angle (degrees) | 178.6 | |
| Max. Candela | 222 | |
| Zonal lumen | Lumens | % Lumens |
| 0-30 | 172 | 24.9% |
| 0-40 | 282 | 40.8% |
| 0-60 | 502 | 72.7% |
| 0-90 | 690 | 100.00% |



| BLD4089SWH | | |
|-----------------------|----------|----------|
| Luminaire lumens | 802 | |
| Input watts | 10.3 | |
| LER (LPW) | 77.9 | |
| Spacing Criteria | 0-180 | 1.28 |
| | 90-270 | 1.28 |
| | Diagonal | 1.4 |
| Beam angle (degrees) | 116.8 | |
| Field angle (degrees) | 180 | |
| Max. Candela | 250 | |
| Zonal lumen | Lumens | % Lumens |
| 0-30 | 195 | 24.3% |
| 0-40 | 321 | 40.0% |
| 0-60 | 576 | 71.8% |
| 0-90 | 802 | 100.00% |



COLOR METRIC SUMMARY

| | BLD406930WH | BLD4089SWH |
|----------|------------------------|------------------------|
| TM-30-15 | R _f = 91 | R _f = 91.8 |
| | R _g = 101.1 | R _g = 101.3 |
| CRI/CIE | R _a = 93 | R _a = 93 |
| | R ₉ = 75 | R ₉ = 70 |

CCT - Range of 2700K- 5000K




| Foot-candle Values at Nadir 0 degree Aiming Angle | | | | |
|--|---------------------|-------------|--------------------|-------------|
| DD (FT) | BLD406930WH (FC) | DIA (FT) | BLD4089SWH (FC) | DIA (FT) |
| 5.5 | 7.3 | 6.8 | 8.2 | 6.8 |
| 7 | 4.5 | 8.6 | 5.1 | 8.8 |
| 8 | 3.5 | 10 | 3.9 | 10 |
| 9 | 2.7 | 11.2 | 3.1 | 11.4 |
| 10 | 2.2 | 12.4 | 2.5 | 12.6 |
| 12 | 1.5 | 15 | 1.7 | 15.2 |

DD = distance down to illuminated work plane
 FC = initial foot-candles at nadir
 DIA = diameter

