

**DESCRIPTION**

The HALO Home Smart Surface Mount Downlight with Bluetooth Mesh connectivity, 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. This backlit LED downlight (BLD) 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**

**Wireless System**

- For use with the HALO Home mobile app
- Bluetooth low energy (BLE) mesh allows on/off and dimming to 5% to be controlled wirelessly with companion wall switches, smart phones and tablets using the HALO Home mobile application.
- Control adjustable white tuning (2700K - 5000K), setup groups, scenes and schedules to automate lighting with the HALO Home mobile app

**Wireless Pairing**

- See HALO Home Quick Start Guide for wireless setup, guidance and troubleshooting: [halohomesupport.eaton.com/downlight](http://halohomesupport.eaton.com/downlight)

**Bluetooth Mesh**

- HALO Home products work better together. Smartphone(s) will need to be within range of HALO Home device to control
- Expand and strengthen the Bluetooth network range by adding HALO Home devices. Learn more at [halohomesupport.eaton.com/mesh](http://halohomesupport.eaton.com/mesh)

**CONSTRUCTION**

- Stamped aluminum housing and frame

**OPTICS**

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

**LED ARRAY**

- Backlit LED technology
- 90 CRI is standard
- L70 at 50,000 hours projected in accordance with TM-21
- Color Temperature (CCT) has an adjustable range from 2700K to 5000K within the mobile app (factory default 3000K)
- Impact-resistant polycarbonate
- Diffused for even illumination

**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.
- Halo home is not compatible with standard dimmers
- 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.
- 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 codes.

**RECESSED HOUSING MOUNTING**

- Can be installed in industry standard 4-inch recessed housings using friction mounting springs and (E26) medium base adapter provided.

**WARRANTY**

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

**COMPLIANCE**

- UL Certified US and Canada 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



**HALO Home Smart Surface Mount Downlight (BLD4)**

- 90 CRI**
- Adjustable CCT 2700K-5000K**
- 4" Backlit LED Downlight**
- Suitable for ceiling or wall electrical junction boxes**
- Suitable for 4" recessed housing retrofit (IC, Non-IC & AIR-TITE™)**



**ENERGY DATA**

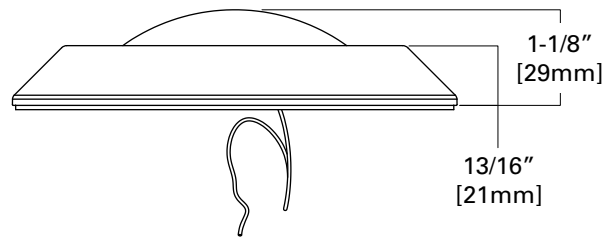
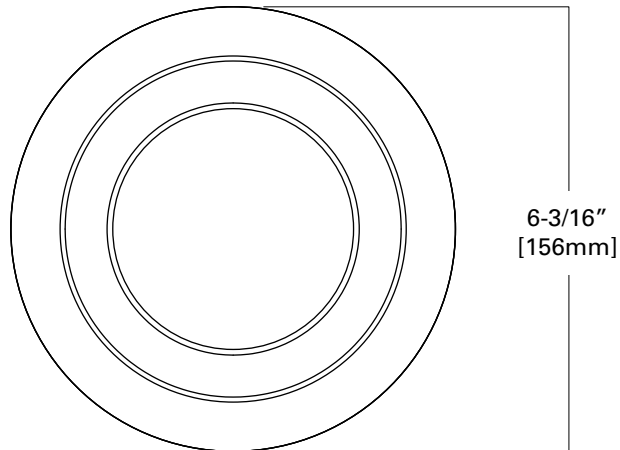
Lumens	805
Wattage	9.2W
Input current	0.087
Efficacy	87.5 LPW
THD	11.9%
Frequency	60 Hz
T Ambient	-30 - +40°C
Voltage	120V
Sound Rating	Class A
Power Factor	0.99



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



ORDERING INFORMATION

SAMPLE NUMBER: BLD4089BLE40AWH= 4" Backlit LED Downlight, 90CRI

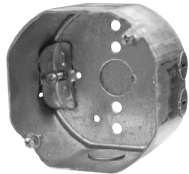
Models	Lumens	CRI / CCT	Protocol	Finish	Voltage
<b>BLD4</b> = 4" Backlit LED Downlight	<b>08</b> =800 lumen series	<b>9</b> =90 CRI minimum, white tuning, select CCT 2700K – 5000K, in the mobile app	<b>BLE40A</b> =Bluetooth Mesh wireless control, 4.0	<b>WH</b> = Matte White	<b>Blank</b> = 120V

**HOUSING COMPATIBILITY**

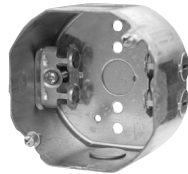
The BLD4 is UL Certified in for use with any 4 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 62.3 in<sup>3</sup> in addition to those noted below:

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

**COMPATIBLE WITH EATON'S 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](http://www.crouse-hinds.com)

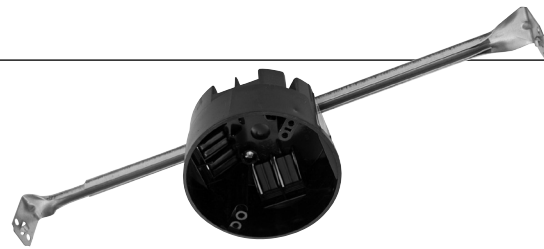
**COMPATIBLE WITH MANY OTHER JUNCTION BOXES\***



**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)

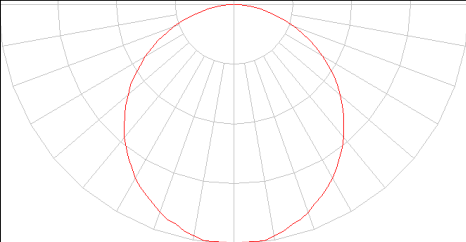


**Round ceiling pan**  
4" diameter x 13/16"  
(102mm x 21mm)  
Note: only compatible with fixed CCT BLD406930

\*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. Eaton 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.

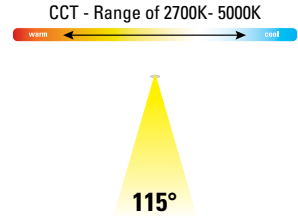
PHOTOMETRIC DATA

BLD4089BLE40AWH		
Luminaire lumens	805	
Input watts	9.2	
LER (LPW)	87.5	
Spacing Criteria	0-180	1.26
	90-270	1.26
	Diagonal	1.38
Beam angle (degrees)	114.9	
Field angle (degrees)	178.6	
Max. Candela	256	
Zonal lumen	Lumens	% Lumens
0-30	198.8	24.7%
0-40	325.2	40.4%
0-60	580.4	72.1%
0-90	805.0	100%



COLOR METRIC SUMMARY

BLD4089BLE40AWH	
TM-30-15	R <sub>f</sub> = 91.1
	R <sub>g</sub> = 98.1
CRI/CIE	R <sub>a</sub> = 93.3
	R <sub>9</sub> = 67.5



Foot-candle Values at Nadir 0 degree Aiming Angle		
DD (FT)	BLD4089BLE40AWH (FC)	DIA (FT)
5.5	8.2	6.8
7	5.1	8.8
8	3.9	10
9	3.1	11.4
10	2.5	12.6
12	1.7	15.2

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

