

HALO LED H4 Series

The Halo H4 LED is a family of 4" aperture recessed downlight housings designed for exclusive use with Halo EL4, ELG4, ELSG4 Series LED Light Engines and compatible 4" LED trims. Halo H4 LED housings have integral LED drivers that offer dimming as a standard feature.

H456ICAT120D is an insulated ceiling, AIR-TITE™ housing offering 120 volt dimming capability. Designed for use with EL4 series LED Light Engines and TL4 and TLS4 LED Series Trims; and ELG4, ELSG4 Adjustable Gimbal Light Engine/Trim combination. The H456ICAT120D offers high quality downlighting along with high efficacy – the result being great lighting and significant energy savings.

DESIGN FEATURES

MECHANICAL

Housings

- Box enclosure of formed aluminum construction.
- Openings are gasketed AIR-TITE.
- Designed for insulated ceilings in direct contact with insulation. (May also be installed in non-insulated ceilings.)

Plaster Frame

- Galvanized steel die-formed construction.
- The housing can be removed from plaster frame to provide access to the junction box.
- Plaster frame features include:
 - Patented regressed locking screw positioned for securing hanger bars from below the ceiling.
 - Cutouts for easily crimping hanger bars in position.
 - AIR-TITE aperture gasket is pre-installed.
 - HALO identity embossed on plaster frame.

GOT NAIL! Pass -N-Thru™ Bar Hangers

- Pre-installed nail easily installs in regular lumber, engineered lumber and laminated beams.
- Safety and guidance system prevents snagging, ensures smooth straight nail penetration and allows bar hangers to be easily removed if necessary.
- Automatic leveling flange aligns the housing and lets you hold the housing in place with one hand while driving nails.
- Housing can be positioned at any point within 24" joist span.
- Pass-N-Thru™ feature allows bar hangers to be shortened without removing from plaster frame.
- Score lines allow "toolless" shortening for 12" joists.
- Bar hangers may be repositioned 90°.
- Integral T-bar clip snaps onto T-bars - no additional clips required.

Slide-N-Side™ Junction Box

- Positioned to accommodate straight conduit runs
- Seven 1/2" trade size conduit knockouts with true pry-out slots

- Slide-N-Side™ wire traps allow non-metallic sheathed cable to be installed without tools and without removing knockouts.
- Accepts a wide range of non-metallic (type NM) sheathed cables - the standard cable types used in lighting in both U.S. and Canada.
 - Allows wiring connections to be made outside the junction box
 - Simply insert the cable directly into the trap after connections are made.
 - Accommodates the following standard non-metallic sheathed cable sizes:
 - (US) #14/2, #14/3, #12/2, #12/3
 - (Canada) #14/2, #14/3, #12/2

LED Connection

- LED connector is a non-screw base connector offering easy installation with the EL4, ELG4, ELSG4 Series LED Light Engines.
- LED connector meets California Title-24 high-efficacy luminaire requirement for a non-screw base socket, and where required to qualify as a high-efficacy luminaire.

LED Driver

- LED dimmable driver mounts to the housing.
- Driver is a 120 Volt, high efficiency, electronic power supply providing low voltage power to EL Series LED Light Engines.
- Driver meets FCC EMI/RFI Consumer Level limits for use in residential and commercial installations.
- Driver features high power factor and low THD and has integral thermal protection in the event of over temperature or internal failure.
- Driver is specifically designed for compatibility with EL4 LED Light Engines, and ELG4, ELSG4 Adjustable Gimbal Light Engine / Trims; and operates the LED for long life, meeting 50,000 hour / 70% lumen maintenance standard.
- If dimming is not required the fixture can be operated from a standard wall switch.

Catalog #		Type
Project		
Comments		Date
Prepared by		

Dimming

- The HALO H4 LED luminaire is designed for dimming capability to 15% in normal operation with standard 120V LED-Rated, electronic low voltage, and many incandescent dimmers. The LED module may also dim to 5% using dimmers with low end trim adjustment. (Consult dimmer manufacturer for application/compatibility. Note, some dimmers require a neutral in the wallbox).

Warranty

Cooper Lighting provides a three year limited warranty on Halo LED Luminaires which includes the LED Recessed Housing, LED Light Engine, and LED trims.

Labels

- UL/cUL Listed 1598 Luminaire
- UL/cUL Listed for Damp Location
- UL/cUL Listed for Wet Location, covered ceiling - with select trims
- UL/cUL listed for Feed Through
- UL/cUL listed for Direct Contact with insulation and combustible material

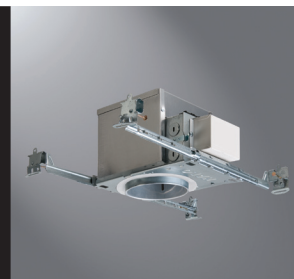
Compliance

- Use with designated LED light engines and trims for ENERGY STAR® qualification.
- Can be used for State of California Title 24 high efficacy compliance with designated LED light engines and trims.
- Can be used for International Energy Conservation Code (IECC) high efficacy compliance with designated LED light engines and trims.
- Refer to H4 LED Light Engine and Trim specification sheets online for compliance information.

Qualification

IC and AIR-TITE™ Certified under ASTM-E283 and listed UL/cUL 1598. May be used to meet insulated ceiling and restricted air-flow requirements such as:

- Washington State Energy Code
- International Energy Conservation Code (IECC)
- New York State Energy Conservation Construction Code (NY-ECCC)
- State of California Title 24 "Recessed Luminaires in Insulated Ceilings."



H456ICAT120D

4-Inch LED Recessed Housing New Construction Insulated Ceiling - With 4" LED Light Engines and 4" LED Trims

High Efficacy LED Housing-Dimmable

FOR USE IN INSULATED CEILINGS FOR DIRECT CONTACT WITH INSULATION

ALSO SUITABLE FOR NON-IC APPLICATIONS

H4 Series LED Energy Data:

(Values at non-dimming line voltage.)
Minimum Starting Temp: -30°C (-22°F)
EMI/RFI: FCC Title 47 CFR, Part 18 (Consumer)
Sound Rating: Class A standards
Input Voltage: 120V
Power Factor: >0.90
Input Frequency: 50/60Hz
THD: <20%
Rated Wattage: 15W max.
Input Power: 14.0W
Input Current: 121mA
Driver Compliance: UL6950, LPS rated
Maximum IC (Insulated Ceiling) Ambient Continuous Operating Room Temperature: 25°C (77°F)
Maximum Non-IC (Non-Insulated Ceiling) Ambient Continuous Operating Room Temperature: 40°C (104°F)

H4 Series LED

Summary Lighting Data:

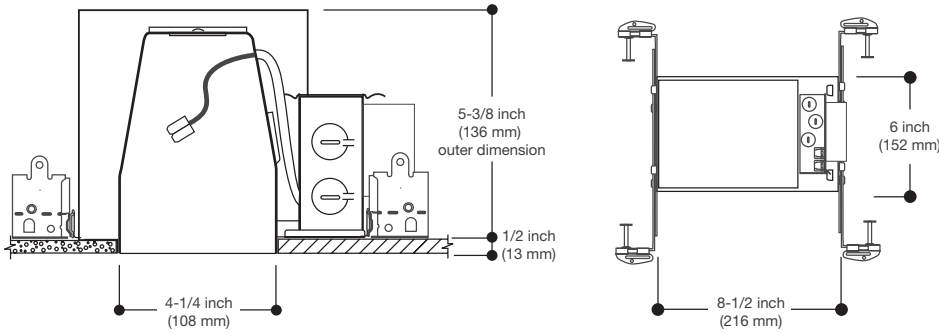
Lumen range: 534-700
 Lumens per watt: up to 46

Color

Correlated Color Temperature (CCT): 2700K-4000K
 Color Rendering Index (CRI, Ra): ... 80



DIMENSIONS



ORDERING INFORMATION - H4 LED Downlights

SAMPLE NUMBER: H456ICAT120D EL405827 TL400SC

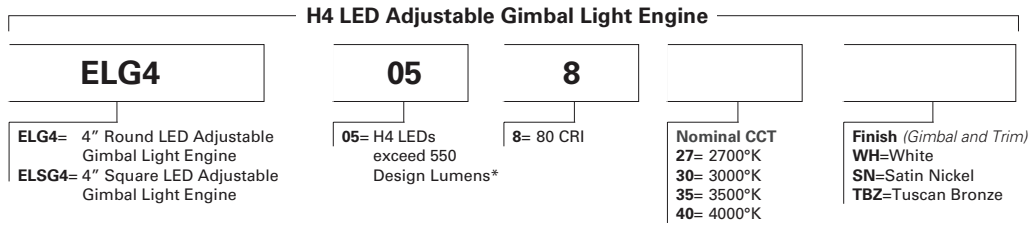
Complete unit includes LED housing, light engine, and trim, ordered separately

H4 LED Housing			H4 LED Light Engine				H4 LED Trim
H456	ICAT	120D	EL4	05	8	27	TL40x
<p>H456= 4" Housing H4 LED Series Downlight</p>	<p>ICAT= New Construction, Insulated Ceiling, AIR-TITE</p>	<p>120D= LED driver, 120V, 50/60Hz, Dimmable - most standard electronic low voltage (recommended) and incandescent/ magnetic low voltage dimmers (see dimming application notes, and refer to dimmer manufacturers for compatibility)</p>	<p>EL4= 4" LED Downlight Light Engine</p>	<p>05= 550 Design Lumens*</p>	<p>8= 80 CRI</p>	<p>27=2725°K 30=3045°K 35=3465°K 40=3985°K</p>	<p>TL400SC=Specular Clear Reflector, White Trim Ring TL400H=Haze Reflector, White Trim Ring TL400WH=White Reflector, White Trim Ring TL400SBK=Specular Black Reflector, White Trim Ring TL400SN=Satin Nickel Reflector, Satin Nickel Trim Ring TL400TBZ=Tuscan Bronze Reflector, Tuscan Bronze Trim Ring TL401WB=White Baffle, White Trim Ring TL401BB=Black Baffle, White Trim Ring TL402SCS=Specular Clear Reflector with Solite® Lens, White Trim Ring TL402HS=Haze Reflector with Solite® Lens, White Trim Ring TL402WHS=White Reflector with Solite® Lens, White Trim Ring TL402SBKS=Specular Black Reflector with Solite® Lens, White Trim Ring TL402SNS=Satin Nickel Reflector with Solite® Lens, Satin Nickel Trim Ring TL402TBZS=Tuscan Bronze Reflector with Solite® Lens, Tuscan Bronze Trim Ring TL403WBS=White Baffle with Solite® Lens, White Trim Ring TL403BBS=Black Baffle with Solite® Lens, White Trim Ring TLS408WHWB=Square Baffle Trim with Solite® Regressed Lens, White Baffle, White Ring TLS408WHBB=Square Baffle Trim with Solite® Regressed Lens, Black Baffle, White Ring TLS408SNBB=Square Baffle Trim with Solite® Regressed Lens, Black Baffle, Satin Nickel Ring TLS408TBZBB=Square Baffle Trim with Solite® Regressed Lens, Black Baffle, Tuscan Bronze Ring TL409WW=Wall Wash Downlight - Semi-Specular Clear Reflector with Specular Wall Wash Optic, Diffusing Lens and White Ring TL409WHWW=Wall Wash Downlight - White Reflector with Specular Wall Wash Optic, Diffusing Lens and White Ring TL422PS=White Polymer Baffle and Ring, and Regressed Prismatic Polymer Lens. Shower Trim front is non-electrically conductive with "dead-front" polymer material.</p>
			<p>* Lumen output range of 534-700 lumens (depending upon color temperature and trim)</p>				
Accessories							
<div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div>							
<p>Designer Trim Rings, Thin Profile For use with Round TL4 trims (not compatible with Square TLS4 trims). TRM400WH=White, die-cast trim ring TRM400BK=Black, die-cast trim ring TRM400SN=Satin Nickel, die-cast trim ring TRM400TBZ=Tuscan Bronze, die-cast trim ring TRM400PC=Polished Chrome, die-cast trim ring</p>							

ORDERING INFORMATION - H4 LED Downlights

SAMPLE NUMBER: H4561CAT120D ELG405827TBZ

Complete unit includes H4 LED housing and Adjustable Gimbal Light Engine, ordered separately.
 (Note H4 LED TL4xx Downlight Trims are not compatible with H4 LED ELG4xx Adjustable Gimbals.)



* Lumen output of 598 lumens based upon 2700°K color temperature.

Optional Accessory Reflector Kit (ordered separately)

TL412RK includes:

- 25° reflector (one is included with gimbal)
- 35° reflector
- 50° reflector

TL412RK is for use with ELGxx and ELSGxx Gimbals only.

Optional Lens Media (ordered separately)

One lens media may be used in place of clear lens.

Optical Lenses

- L110 Diffuse Sand Blasted Lens
- L111 Soft Focus Textured Lens
- L113 Prismatic Lens
- L115 Linear Spread Lens

Dichroic Color Films

- L114 UV Filter
- L120 Red
- L121 Amber
- L122 Yellow
- L123 Green
- L124 Daylight
- L125 Blue
- L127 Cosmetic Color Filters
- L130 Yellow

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Note: Specifications and Dimensions subject to change without notice.

Visit our web site at www.cooperlighting.com

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