

HALO LED H4 Series - 2nd Generation

The Halo H4 LED is a family of 4" aperture recessed downlight H457 series of housings designed for exclusive use with Halo EL406, ELG406, ELSG406 Series LED Light Engines and compatible TL4 and TLS4 LED trims. Halo H4 LED housings have integral LED drivers that offer dimming as a standard feature.

This is an insulated ceiling*, AIR-TITE™, remodel housing offering 120 volt dimming capability. The H4 LED series offers high quality downlighting along with high efficacy – the result being great light-ing and significant energy savings.

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

DESIGN FEATURES

MECHANICAL

Housings

Single wall formed aluminum construction. Openings are gasketed for AIR-TITE installation. 5 1/2" height allows use in 2"x 6 joist construction. AIR-TITE aperture gasket is pre-installed.

Remodel Arm

- Spring steel construction designed for ease of installation and ceiling support of LED driver.

MOUNTING

Remodel Springs

- Four remodel clips secure housing and accommodate 1/2" and 5/8" ceiling material.

ELECTRICAL

Junction Box

- Seven 1/2" trade size conduit knockouts with true pry-out slots
- Slide-N-Side™ connectors allow non metallic sheathed cable to be installed without tools and without removing knockouts.
- Accepts a wide range of non-metallic 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 nonmetallic sheathed cable types:
 - US: #14/2, #14/3, #12/2, #12/3
 - Canada: #14/2, #14/3, #12/2

LED Light Engine Connection

- LED connector is a non-screw base connector offering easy installation with the H4 LED 2nd Generation EL406, ELG406, ELSG406 Series LED Light Engines.
- LED connector meets high-ef-ficacy luminaire requirement for a non-screw base socket, and where required to qualify as a high-ef-ficacy luminaire (California Title-24).

LED Driver

- LED dimmable driver mounts to the housing junction box.
- 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 power factor >.90, THD <20% and has integral thermal protection in the event of over temperature or internal failure.
- Driver is specifically designed for compatibility with EL406 LED Light Engines, and ELG406, ELSG406 Adjustable Gimbal Light Engine / Trims.
- If dimming is not required the fixture can be operated from a standard wall switch.

Dimming

- The HALO H4 LED luminaire is designed for dimming capability to 10% in normal operation with most 120V leading edge (LE) and trailing edge (TE) phase control dimmers. H4 LED may also dim to 5% using dimmers with low end trim adjustment. (Consult dimmer manufacturer for application/compatibility/loading. Note, some dimmers require a neutral in the wallbox).

Warranty

Eaton provides a five 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 Direct Contact with insulation and combustible material*

Qualifications

- ENERGY STAR® Certification.**
- Use with designated LED light engines and trims for State of California Title 24 high efficacy luminaire compliance**
- Can be used for International Energy Conservation Code (IECC) high efficacy luminaire compliance

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:

- International Energy Conservation Code (IECC)
- State of California Title 24 "Recessed Downlight Luminaires in Ceilings."



H457RICAT1E

4-Inch LED Recessed Remodel Housing Insulated Ceiling

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:

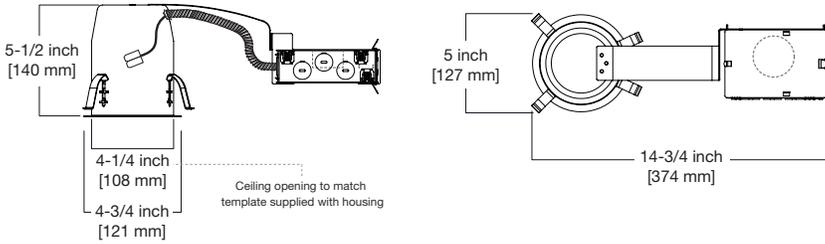
| |
|--|
| (Values at non-dimming line voltage.) |
| Minimum Starting Temp: -30°C (-22°F) |
| EMI/RFI: FCC Title 47 CFR, Part 18, (Consumer) |
| Sound Rating: Class A standards |
| Input Voltage: 120V |
| Power Factor: >0.90 |
| Input Frequency: 50/60Hz |
| THD: <20% |
| Input Power: 13W |
| Input Current: 120mA |
| Driver Compliance: UL8750, Class II 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) |



*Not for use with housings in direct contact with spray foam insulation.

**Refer to ENERGY STAR® Certified Products List and CEC Appliance Database for listings.

DIMENSIONS



ORDERING INFORMATION - H4 LED Downlights

SAMPLE NUMBER: H457RICAT1E - EL406927 - TL410SC
 Complete unit includes LED housing, light engine and trim; ordered separately.

| H4 LED Housing | | | H4 LED Light Engine | | |
|---|---|--|--|-------------------|--|
| | | | EL406 | CRI | CCT |
| H457 = 4" housing H4 LED series downlight 2nd Generation | RICAT = Remodel, Insulated Ceiling, AIR-TITE | 1E = LED driver, 120V, 50/60 Hz, dimmable, LE/TE* phase control dimmers (refer to dimmer manufacturer). | EL406 = 4" LED Downlight Engine, 2nd Generation | 9 = 90 CRI | 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K |

| Trim Options | | Accessories |
|--|---|--|
| TL410SC = Specular Clear Reflector, Diffuse Polymer Dome Lens, White Ring, Shower Rated | TL402TBZS = Tuscan Bronze Reflector, Solite® Glass Lens, and Tuscan Bronze Ring, Shower Rated | Thin Profile Designer Trim Rings For use with Round TL4 trims (not compatible with Square TLS4 trims, or adjustable gimbals ELG, ELSG trims.) TRM400WH = White TRM400BK = Black TRM400SN = Satin Nickel TRM400TBZ = Tuscan Bronze TRM400PC = Polished Chrome |
| TL410H = Haze Reflector, Diffuse Polymer Dome Lens, White Ring, Shower Rated | TL402SBKS = Specular Black Reflector, Solite® Glass Lens, and White Ring, Shower Rated | |
| TL410WH = White Reflector, Diffuse Polymer Dome Lens, White Ring, Shower Rated | TL403WBS = White Baffle, Solite® Glass Lens, and White Ring, Shower Rated | |
| TL410SN = Satin Nickel Reflector, Diffuse Polymer Dome Lens, Satin Nickel Ring, Shower Rated | TL403BBS = Black Baffle, Solite® Glass Lens, and White Ring, Shower Rated | |
| TL410TBZ = Tuscan Bronze Reflector, Diffuse Polymer Dome Lens, Tuscan Bronze Ring, Shower Rated | TLS408WHWB = Square Baffle Trim, Solite® Glass Lens, White Ring with White Baffle, Shower Rated | |
| TL410SBK = Specular Black Reflector, Diffuse Polymer Dome Lens, White Ring, Shower Rated | TLS408WHBB = Square Baffle Trim, Solite® Glass Lens, White Ring with Black Baffle, Shower Rated | |
| TL411WB = White Baffle, Diffuse Polymer Dome Lens, White Ring, Shower Rated | TLS408SNBB = Square Baffle Trim, Solite® Glass Lens, Satin Nickel Ring with Black Baffle, Shower Rated | |
| TL411BB = Black Baffle, Diffuse Polymer Dome Lens, White Ring, Shower Rated | TLS408TBZBB = Square Baffle Trim, Solite® Glass Lens, Tuscan Bronze Ring with Black Baffle, Shower Rated | |
| TL402SCS = Specular Clear Reflector, Solite® Glass Lens, and White Ring, Shower Rated | TL409WW = Wall Wash, Semi-Specular Clear Reflector with White Ring, Shower Rated | |
| TL402HS = Haze Reflector, Solite® Glass Lens, and White Ring, Shower Rated | TL409WHWW = Wall Wash, White Reflector with White Ring, Shower Rated | |
| TL402WHS = White Reflector, Solite® Glass Lens, and White Ring, Shower Rated | TL422PS = Polymer "Dead Front" White Baffle & Regressed Lens, White Ring, Shower Rated | |
| TL402SNS = Satin Nickel Reflector, Solite® Glass Lens, and Satin Nickel Ring, Shower Rated | | |

* LE = Leading Edge (forward phase control) dimming
 * TE = Trailing Edge (reverse phase control) dimming

ORDERING INFORMATION - H4 LED Adjustable Gimbals

SAMPLE NUMBER: H457RICAT1E - ELG406930WH
 Complete unit includes LED housing, light engine and trim; ordered separately.

| H4 LED Light Engine | | | | Optional Accessory Reflector Kit | Optional Len Media |
|---|-------------------|--|---|--|--|
| | CRI | CCT | Finish | (order separately) | (order separately) |
| ELG406 = Round LED Adjustable Gimbal Light Engine - 2nd Generation | 9 = 90 CRI | 27 = 2700K | WH = White SN = Satin Nickel TBZ = Tuscan Bronze | TL412RK includes: • 25° reflector (one is included with gimbal) • 35° reflector • 50° reflector TL412RK is for use with ELGxx and ELSGxx gimbals only. | 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 |
| ELSG406 = Square LED Adjustable Gimbal Light Engine - 2nd Generation | | 30 = 3000K | | | |
| | | 35 = 3500K 40 = 4000K | | | |

Solite® is a registered trademark of AGC Flat Glass North America