APPLICATIONS

Sustainable Lighting for Hospitality
Halo LED luminaires are ideal for creating maintenance-free public spaces. Hotels, restaurants and night-time businesses will reduce expensive electric bills and maintenance costs by choosing the Halo LED downlight. Luminaires will last approximately eleven years based on twelve hours of use per day.

Maintenance-Free for Healthcare
Cooper Lighting’s LED’s are ideal for creating low maintenance public spaces, patient rooms and recovery rooms. Energy efficient fixtures reduce energy consumption and LED’s long life lowers maintenance costs. A warm white color temperature creates a familiar home-like environment.

Comparable Task Lighting for Commercial Spaces
Focus on the importance of lighting. Halo LED luminaires provide light output comparable to traditional sources while saving energy and eliminating the inconvenience and distraction of frequent maintenance.

Unique Benefits for Retailers
LED luminaires do not emit damaging ultraviolet or infrared wavelengths so garments and fabrics can be illuminated without color deterioration. An LED does not emit heat like traditional light sources reducing the load on air conditioning systems.

Comfortable Illumination for the Home
Quality optical design provides light output and distribution comparable to an incandescent lamp source. Excellent cut-off, color quality and a warm white color temperature create an enjoyable illuminated environment. Full range dimming provides the ability to set different moods.
HALO LED FEATURES

Superior light quality

Consumes 75% less energy compared to 65W BR30 incandescent lamp

For use in new construction or existing applications

Uses less than 15 watts

600 lumen output

Projected 50,000 hour life

Warm color temperature (3000°K with CRI over 80)

Greater than 40 lumens per watt

Dimmable

Designed to last

Virtually maintenance free

Three year limited warranty
Features and Benefits of LED Lighting

Revolutionary Lighting Technology
An LED (Light Emitting Diode) is composed of various semiconductor materials and when an electrical current passes through the diode, the recombination of positive and negative charges within the different compositions results in the emission of photons or light. LED's are also referred to as “Solid State lighting.” Environmental and legislative awareness continues to drive demand for energy efficient lighting solutions in residential and commercial applications. LED luminaires are high-efficiency alternatives to traditional light sources. Capitalize on the light quality, longevity and convenience benefits of solid state lighting.

Reduces the Environmental Impact of Lighting
The supply of fossil fuels impacts lighting and all energy consuming products. Lighting fixtures constitute a large percentage of electric utility bills - as much as 40% in some commercial facilities. Lighting will need to change to meet higher mandated efficiency levels. Changes in the lighting industry are being driven by energy legislation that has been established to meet concerns of excessive consumption. The future of lighting is with high efficiency products that meet lower energy consumption levels.

Saves Energy and Money
Changing one incandescent lamp to a HALO LED recessed downlight will save you hundreds of dollars over the life of the fixture. Changing multiple fixtures will significantly lower your electric bill and change how you view lighting. The Halo LED luminaire is more efficient than traditional light sources consuming 75% less energy than a 65 watt incandescent lamp.

Increases Reliability
LED’s are solid state devices that do not have filaments or glass components that could break. Due to LED’s solid state principles the light source is not susceptible to vibration reducing the risk of premature failure. Over 70% of the initial light output is maintained after 50,000 hours of operation. The sustainability of the Halo LED fixture dramatically reduces maintenance and service costs over traditional sources. The Halo LED fixture can last five times longer than a fluorescent or fifty times longer than an incandescent source.

10 Fixtures operating for 50,000 hours at 10c/Kwh

14W LED=$700 (10 fixtures operating over 50,000 hrs.)
65W Incandescent=$3,250 (10 fixtures operating over 50,000 hrs.)

Reduces Energy Cost

Six hours use per day 50,000 Hour Life

LED = 22.8 years (50,000 hour life)

Incandescent= 0.46 years (published 1,000 hour life)
Fluorescent=5.5 years (published 12,000 hour life)
ML706830 LED Module includes LED, Driver, Heat Sink, Torsion Springs and Edison Base Adapter

Quality of Light
The HALO LED luminaire provides light output and distribution comparable to a 65 watt BR30 incandescent lamp or an 18 watt compact fluorescent lamp. It provides excellent color rendering; a warm white color temperature, and produces over 600 productive beam lumens out of the luminaire. The superior optical design also yields good cutoff and low-glare. The Halo luminaire can be dimmed to 15% (nominal) with most standard AC incandescent analog dimmers and is capable of dimming to 5% (nominal) with select incandescent dimmers that have a low-end adjustment.

Cutoff
The cutoff angle of a luminaire is the angle when the brightness of the source is no longer visible. This is the deciding factor for visual comfort in a lighting system. Deep cutoff optics are desirable in creating low brightness luminaires, allowing the eye to see more effectively. The Halo LED downlight provides a 50° cutoff and low-glare.

Modular Design
Installation and replacement is simple. The product is contractor friendly and installs in the same manner as a lamp. The ML706830 is designed for use in the dedicated H750ICAT housing for new construction applications or for retrofit application with a screw-in Edison base adapter (included with module) for use in existing HALO or ALL-PRO H7 housings. The HALO LED Module is compatible with H7 AIRTITE, IC rated housings and is Title 24 compliant when used with the dedicated LED H750ICAT housing.

Engineering and Construction
Durable die-cast aluminum construction conducts heat away from the LED keeping the junction temperatures below specified maximums even when installed in insulated ceiling environments. The LED module is controlled with a high efficiency driver with a power factor of >.90 at an input power of 120V, 60 Hz.

Features
- Comparable in light output and distribution to a 65 watt BR30 incandescent lamp or an 18 watt compact fluorescent luminaire while consuming less than 15 watts of electricity.
- Exceeds high efficacy requirements for California Title 24 2005 standard
- Can be dimmed to 15% (nominal) with most standard AC incandescent analog dimmers and is capable of dimming to 5% (nominal) with select incandescent dimmers that have a low-end adjustment.
- Excellent color rendering (80 nominal CRI) and warm white color temperature (3045K nominal).
- Does not emit damaging ultraviolet or infrared wavelengths that could damage fabrics and merchandise.
- Does not emit heat like traditional light sources.
- No mercury is present eliminating special recycling requirements.
- Patent pending optical design provides 50° cutoff and low glare.
- Product life is rated for 50,000 hours at 70% lumen maintenance (or approximately 20 years based on six hours of use per day).
- Compatible HALO and ALL-PRO housings include: H750ICAT, H7ICAT, H7ICATNB, H7ICT, H7ICTNB, H7RICAT, H7RT, H7T, H7TNB, EI700AT, EI700NB, EI700ATNB, EI700RAT, EI700, ET700, EI770R, ET770R.
- Multiple trim and reflector options including a wet location listed shower trim.
- High efficiency driver: power factor of >.90 at an input power of 120V, 60Hz.
- Cooper Lighting provides a three year warranty on the Halo LED Module.

PERFORMS LIKE A TRADITIONAL DOWNLIGHT

HALO
**Dedicated HALO LED Housings**

**New Construction Housing**

**H750ICAT**

- 6” Aperture New Construction Housing
- For Use With Halo 6” LED Modules
- Meets high efficacy California Title 24 - 2005 standard
- For Use in Insulated Ceilings - May Be Covered with Insulation
- AIR-TITE™ to Meet Restricted Airflow Requirements per ASTM-E283
- UL Listed Connector for Easy Installation
- Input 120V Line Voltage
- UL/cUL Listed

**Compliance**

The Halo LED fixture is designed to exceed the highest energy efficiency codes and standards in the industry. The HALO LED recessed luminaire exceeds high efficacy requirements for California Title 24 with energy savings in excess of 75% when compared to incandescent lamps.

**Product Standards**

HALO LED H7 Collection is in compliance with UL/cUL requirements. Module is compatible with IC-rated HALO housings for direct contact with insulation. The dedicated LED new construction housing (H750ICAT) exceeds California’s high efficiency Title-24 standards and meets Restricted Air Flow Standard ASTM-E283.

**Housing Features - Got Nail! Hanger Bars**

The H750ICAT features the GOT NAIL!™ hanger bars with a preinstalled ready to use nail that easily penetrates regular lumber as well as engineered lumber, I-joists, and laminated veneer beams.
- The nail is regressed to prevent snagging and to ensure straight penetration.
- The right levelling flange on the hanger bar rests on the bottom of the joist and the housing can be held in position with one hand while the nails are hammered into the joist.
- Should it be necessary to reposition the housing, the bar hanger can be removed with a claw hammer without damaging the nail or the bar hanger.
- To accommodate tight joist spacing, the patented Pass-N-Thru™ feature allows tool-free shortening of bar hangers if necessary without having to remove them from the housing.

**Housing Features - Junction Box**

The H750ICAT housing is provided with the Slide-N-Side III™ junction box wire traps.
- Wiring connections with non-metallic sheathed cable (NM) can be made outside the junction box first and then the NM cable can be slid into place in the wire trap.
- The H750ICAT housing is also equipped with Quick Connect wiring connectors.
- Simply trim the supply wires and push the wires into the connectors. No additional connectors or wire nuts are needed.
- In addition to the wire traps for type NM non metallic sheathed cable, Halo housings include several knockouts for use with metallic cable or rigid conduit connectors.
- Slide-N-Side wire trap accommodates these popular sizes:
  - U.S. #14/2, #14/3, #12/2, #12/3
  - Canada: #14/2, #14/3, #12/2

EXCEEDS INDUSTRY ENERGY & SAFETY STANDARDS
New Home or Existing Home?
Whether you are building a new home or if you have an existing house with Halo H7's already installed, you can start saving money and energy by switching to energy efficient LED lighting. For new construction, use the dedicated H750ICAT housing that is already wired to accept the Halo LED module. For existing housings, the LED modules can be easily installed with the Edison Base Adapter (included with module) - no special tools or rewiring needed.

New Construction

Easy Installation in New Construction

1. Install H750ICAT in joists and make wiring connections.

2. Connect LED module with housing wiring.

3. Install LED Module with trim in H750ICAT housing.

Retrofit

Retrofit Made Simple

1. Remove trim (and socket plate if present) from existing Halo H7 housing.

2. Install Edison base adapter into recessed housing socket.


4. Install LED module with trim in existing housing.
**494P06**
White Reflector and White Trim Ring
- Halo matte white finish
- Die-cast trim ring and aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal

**494SC06**
Specular Reflector and White Trim Ring
- Halo matte white finish trim ring
- Die-cast trim ring and aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal

**494H06**
Haze Reflector and White Trim Ring
- Halo matte white finish trim ring
- Die-cast trim ring and aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal

**494WB06**
White Baffle and White Trim Ring
- Halo matte white finish
- Die-Cast trim ring and aluminum baffle
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal

**492PS06** Shower Trim and White Trim Ring
- White trim ring and baffle with regressed lens
- Wet location listed for use in showers and protected canopy applications
- Suggested for use:
  - over tubs and showers  
  - eaves and soffits
- Aluminum reflector and die-cast trim ring
- Frosted glass regressed lens
- Trim Height of .160" at OD & .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal

**TRM490WH**
Thin Profile Trim Ring (optional accessory)
- Die-cast trim ring
- Thin trim ring provides a more subtle ceiling appearance
- Purchase as accessory and discard ring supplied with trim
- Trim ring height of .120" at OD and .180" at ID
Technical Specification Sheets

Individual specification sheets are available from your HALO representative or at www.cooperlighting.com. Sheets contain detailed line drawings, critical dimensions, construction features and photometric information. Photometric tests provided are based upon IC, Airtight housing testing by a third party certified testing facility. Photometric information may vary slightly between fixtures. Information published regarding performance represents the nominal performance of production units.

Warranty

Cooper Lighting provides a three-year warranty on the HALO H750ICAT housing, HALO LED Module and HALO LED trims against defects in workmanship.

Many HALO features are protected by U.S. and foreign patents, and we will aggressively pursue any infringement. We reserve the right to change material, design or dimensions without notice.

Halo Lighting
Cooper Lighting is a participating member and significant contributor in industry associations to assure that our lighting and control systems adhere to the highest performance and efficiency standards.

The US Environmental Protection Agency’s ENERGY STAR program is designed to identify and promote energy efficient products and buildings. Cooper Lighting is proud to have hundreds of qualified products including many of our Halo recessed downlights.

www.energystar.gov

Cooper Lighting supports state codes enforcing more stringent and environmentally protective standards such as California Energy Commission’s Title 24 Energy Efficiency standards for Residential and Nonresidential Buildings.

www.energy.ca.gov/title24

Cooper Lighting’s full cutoff luminaires limit the detrimental effects of sky glow, otherwise referred to as light pollution, and typically comply with most local and state adopted lighting ordinances.

ASHRAE/IESNA 90.1 standard is generally regarded as the definitive source of guidelines for achieving energy efficiency requiring certain watts per square foot (w/ft²) depending on the application.

www.ashrae.org

International Energy Conservation Code (IECC) establishes energy-related heating, cooling, water heating, electrical and lighting system standards for residential, multi-family, and commercial buildings.

www.iccsafe.org

As a U.S. Green Building Council member, Cooper Lighting supports their mission to promote buildings that are environmentally responsible, profitable and healthy places to live and work.

www.usgbc.org

The American Lighting Association is a trade association representing the lighting industry. Members include lighting and ceiling fan manufacturers, retail showrooms, sales representatives and professional residential lighting designers.

www.americanlightingassoc.com/

The LIRC works to enhance communication between professional lighting designers and manufacturers of lighting equipment and together to work to improve products, services business practices, and lighting design education.

http://www.iud.org

The mission of the National Association of Homebuilders is to enhance the climate for housing and the building industry.

Cooper Lighting is a proud participating member of the NAHB.

www.nahb.org

As the first major lighting manufacturer to partner with the Clinton Climate Initiative (CCI), Cooper Lighting is working with the C40 Large Cities Climate Leadership Group (C40) to accelerate efforts to reduce greenhouse gas emissions and serve as models for other cities.

http://c40cities.org/

www.clintonfoundation.org/cf-pgm-ccihome.htm
3 YEAR PRODUCT WARRANTY

Cooper Lighting (The Company) warrants the HALO ML706830 LED Module, HALO H750ICAT housing and HALO LED trims against defects in material or workmanship for a period of three years from date of original purchase, and agrees to repair or, at the company's option, replace a defective product without charge for either replacement parts or labor during such time. This does not include labor to remove or install fixtures.

This warranty is extended only to the original purchaser of the product. A purchasers receipt or other proof of date of original purchase acceptable to the Company is required before warranty performance shall be rendered.

This warranty only covers product failure due to defects in materials or workmanship which occurs in normal use. It does not cover the failure of product caused by accident, misuse, abuse, lack of reasonable care, alteration, or faulty installation, subjecting the product to any but the specified electrical service or any other failure not resulting from defects in materials or workmanship. Damage to the product caused by separately purchased, non-Company supplied components and corrosion or discoloration of components are not covered by this warranty.

There are no express warranties except as described above.

THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL IMPLIED WARRANTIES, IF ANY, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THIS EXPRESS WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

No other warranty, written or verbal, is authorized by the Company. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To obtain warranty service, please write to Cooper Lighting, 1121 Highway 74 South, Peachtree City Georgia 30269. Enclose product model number and problems you are experiencing, along with address and telephone number. You will then be contacted with a solution or a Return Goods Authorization number and full instructions for returning the product. All returned products must be accompanied by a Return Goods Authorization Number issued by the Company and must be returned freight prepaid. Any product received without a Return Goods Authorization Number from the Company will be refused.

Cooper Lighting is not responsible for merchandise damaged in transit. Repaired or replaced products shall be subject to the terms of this warranty and are inspected when packed. Evident or concealed damage that is made in transit should be reported at once to the carrier making the delivery and a claim filed with them.
The Cooper Lighting Family

Halo - Includes LED recessed downlighting
Metalux
Lumark
Sure-Lites - Sure Lites includes a number of LED equipped Exit signs
Neo-Ray
Corelite
Portfolio
Iris
Shaper
Lumière - includes LED step lights, perimeter lights and pathway light
Invue
McGraw-Edison
Io - A complete line of innovative LED products for architectural applications
Fail-Safe
MWS
DLG
RSA - Specialty LED lighting for commercial and institutional applications
Ametrix

USA Facilities
Cranbury, New Jersey
Elk Grove Village, Illinois
Irving, Texas
Ontario, California
Peachtree City, Georgia

Canadian Facilities
Calgary, Alberta

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