

HALO LED HOUSING and MODULE for NEW CONSTRUCTION

DESCRIPTION: H750ICAT Housing

The H750ICAT is a dedicated LED new construction housing to be used in conjunction with the HALO LED module. The H750ICAT is designed for insulated ceilings and can be in direct contact with ceiling insulation. This AIRTITE™ housing design prevents airflow between attic and living areas and saves on both heating and air conditioning costs. HALO LED luminaires are designed for longevity and energy efficiency. The H750ICAT connector system allows for Title 24 compliance when used with Cooper Lighting's HALO LED module.

Catalog #		Type
Project		
Comments		Date
Prepared by		

DESIGN FEATURES

Housing

Aluminum construction for greater heat dissipation. H750ICAT housing is gasketed to prevent airflow from heated or air conditioned spaces.

Plaster Frame

Housing adjusts in plaster frame to accommodate up to 1" ceiling thickness. Regressed locking screw for securing hanger bars. Cutouts included for easily crimping hanger bars in position.

Junction Box

- Positioned to accommodate straight conduit runs.
- Seven ½" 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.
- Allows wiring connections to be made outside the box.
- Simply insert the cable directly into the trap after connections are made.

- Accommodates the following standard non-metallic sheathed cable type:
 - U.S. #14/2, #14/3, #12/2, #12/3
 - Canada: #14/2, #14/3, #12/2

GOT-NAIL!™ Pass-N-Thru™ Bar Hangers

Bar Hanger features include

- 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 allows holding the housing in place with one hand while driving nails.
- Housing can be positioned at any point within 24" joist spans
- Score lines allow tool-free shortening for 12" joists and bar hangers do not need to be re moved for shortening.
- Bar hangers may be repositioned 90° on plaster frame
- Integral T-bar clip snaps onto

T-bars – no additional clips are required.

LED Module Connection

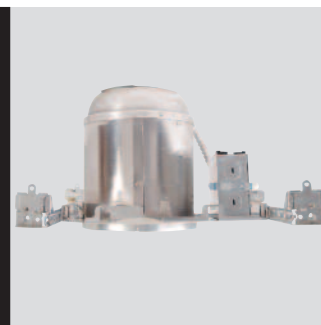
Halo LED module simply installs with a plug-in 120 volt wiring connector. This non-screw-base connection preserves the high efficacy rating and prevents use of low efficacy incandescent sources.

Labels

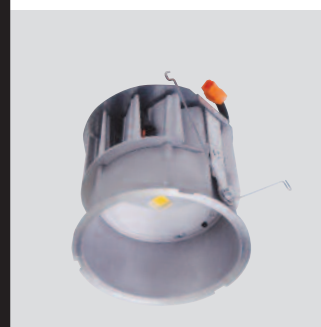
- UL/cUL Listed
- Listed for Feed Through
- Listed for direct contact with insulation and combustible material

Meets following requirements:

- State of California Title 24 High Efficacy Luminaire
- Washington State Energy Code
- International Energy Conservation Code (IECC)
- New York State Energy Conservation Construction Code
- Certified under ASTM-E283



H750ICAT Recessed Housing



ML706830 LED Module

494 Trim

6" New Construction Housing, Module and Trim Title 24 Compliant

DESCRIPTION: ML706830 LED Module

The Halo LED module is designed for use in the dedicated H750ICAT housing for new construction applications (or for retrofit applications in existing Halo and ALL-PRO H7 housings). Delivers 600 lumens with a superior optical design that yields productive beam lumens, good cutoff and low glare. The Halo LED recessed downlight exceeds high efficacy requirements for California's Title 24 with energy savings in excess of 75% when compared with incandescent sources.

DESIGN FEATURES

Comparable in light output and distribution to a 65W BR30 lamp or an 18W compact fluorescent luminaire while consuming less than 15 watts.

Dimming

The HALO LED luminaire is dimmable to 15% (nominal) of the total light output with standard AC incandescent dimmers or to 5% (nominal) using standard incandescent dimmers with low end trim adjustment. Standard dimmers require a minimum of three LED modules (minimum 40 watts load) on the circuit for full range (15%) dimming performance. For dimming fewer than three LED modules (less than 40 watts), use electronic low voltage dimmers which require a minimum circuit load of one LED module.

Quality of Light

Provides excellent color rendering (80 CRI), and a warm white color temperature (3045°K). LED's have no ultraviolet or infrared wave-

lengths and do not direct heat like conventional lamps.

Optical Design

Optical design yields over 600 productive beam lumens, 50° cutoff, and low glare.

Life

Rated for 50,000 hours at 70% lumen maintenance (or approximately 20 years based on 6 hours of use per day).

Compatibility

The Halo ML706830 LED module is designed for use in the dedicated H750ICAT housing in new construction applications or for retrofit applications in existing Halo or ALL-PRO™ housings using the screw-base adapter supplied with the module.

Module Construction

Durable die-cast aluminum construction conducts heat away from the LED keeping the LED's internal junction temperatures below specified maximums even when in-

stalled in insulated ceiling environments.

LED Driver

The LED module is controlled with a high efficiency driver with a power factor of >.90 at an input power of 120V, 50/60Hz. Driver has integral thermal protection and will shut off in the event of over temperature or internal failure.

Warranty

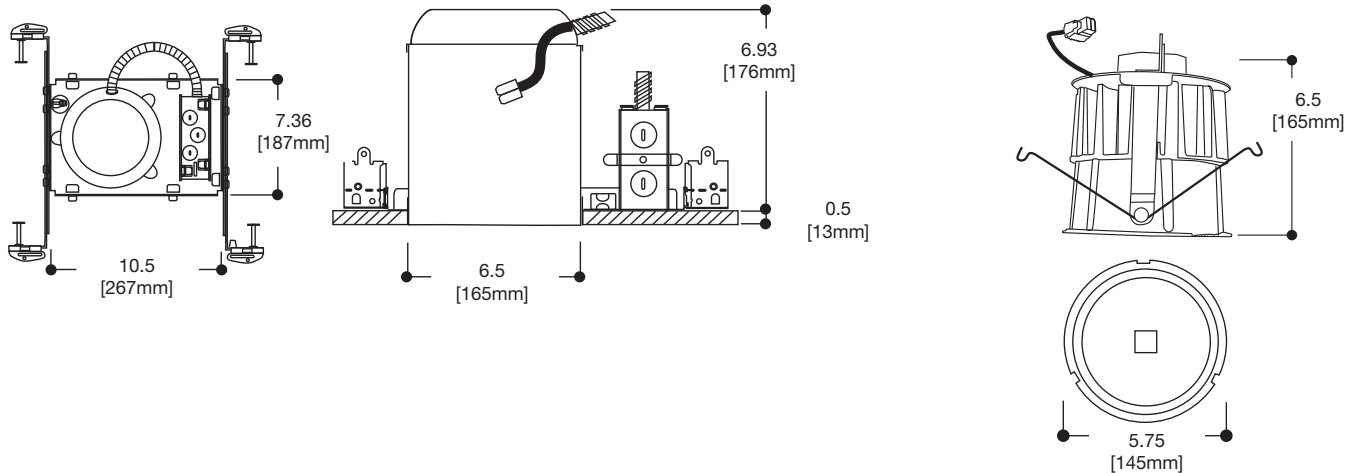
Cooper Lighting provides a three year limited warranty on the Halo LED Luminaire which includes the LED Module, LED Recessed Housing and LED trims.

Labels

- UL/cUL Listed
- Meets following requirements:
 - State of California Title 24 High Efficacy Luminaire
 - Washington State Energy Code
 - International Energy Conservation Code (IECC)
 - New York State Energy Conservation Construction Code

Energy Data:

Minimum Starting Temp:	-10°C (14°F)
EMI/RFI:	FCC Title 47 CFR, Part 18, Class B (Consumer)
Sound Rating:	Class A standards
Input Voltage:	120V
Power Factor:	>0.90
Input Frequency:	50/60Hz
THD:	<20%
Rated Wattage:	14.8W
Input Power:	14.8W
Input Current:	123mA
Values with standard line voltage input (non-dim mode)	



Incandescent Dimmers with Circuit Load of 3 LED Modules or More, Dimming to 15%

Cooper Wiring Devices

Aspire All incandescent dimmers

Lutron

AbellaAB Series	GlyderGL Series	QotoQ Series
AriadniAY/TG Series	LumeaLG Series	RotaryD Series
CeanaCN Series	LyneoLX Series	SkylarkS Series
CenturionC Series	MaestroMA Series	SpacerSPS Series
DaliaDL Series	NovaN Series	VareoV Series
DivaDV Series	Nova TNT/NTB/NTA	ViertiVT Series
FaetraFA Series Series	

Leviton

Acenti ACI. Series	ToggleTouch TGI. Series
Illumitech IPI/RPI. Series	Trimatron 6681/6683/6602
Mural MDI/MSI. Series	TrueTouch 6606/TTI. Series
Sureslide 663. Series	Vizia + VPI. Series

Universal Dimmers (Inc, MLV, ELV loads) with Circuit Load of 2 LED Modules or More, Dimming to 15%

Watt Stopper

Miro Universal	DRD-4 Series Dimmers
	DCD267 Series Dimmers
	DCD68-[series multilocation] - When used w/ DRD4 or DCD267 series master dimmers

Incandescent Dimmers with Circuit Load of 5 LED Modules or More, Dimming to 15%

Watt Stopper

Miro Incandescent	DRD2-Series Dimmers
	DCD26-Series Dimmers
	DCD68-[series multilocation] - When used w/ DRD2 or DCD26 series master dimmers

Incandescent Dimmers with Minimum Brightness Adjustment (Low End Trim), Circuit Load of 3 LED Modules or More, Dimming to 5%

Leviton

Acenti ACI/ACE/ACX/ATI Series	(Programmable low end adjustment from control panel)
Illumitech IPI/IPE Series	(Manual low end adjustment from behind face plate)
Vizia + VPI/VPE/VPX. Series	(Programmable low end adjustment from control panel)

Electronic Low Voltage Dimmers, Minimum Circuit Load of One LED Module, Dimming to 15%

Lutron

Dalia DLELV Series	Lyneo LXELV Series	Nova T NTELV Series
Diva DLELV Series	Maestro MAELV Series	Skylark SELV Series
Faetra FAELV Series	Nova NELV Series	Spacer SPSELV Series
	Vierti VTELV Series	

Leviton

Acenti ACE. Series	(Electronic low voltage dimmer with low end programmable trim from control panel for dimming to less than 5%)
Illumitech IPE. Series	(Electronic low voltage dimmer with low end manual trim behind face plate for dimming to less than 5%)
Vizia + VPE. Series	(Electronic low voltage dimmer with low end programmable trim from control panel for dimming to less than 5%)

1. Performance results may vary based upon dimmer model and manufacturer. 2. There are no warranties of compatibility implied. 3. Refer to dimmer manufacturer for further details.

ORDERING INFORMATION

SAMPLE NUMBER: H750ICAT ML706830 494P06

Order housing, LED Module and trim separately

Housing	LED Module	Trim Options	Accessory
H750ICAT	ML706 8 30		TRM490WH
H750ICAT=6" Dedicated LED IC AIRTITE Housing	ML706=6" LED Module 8=80 CRI 30=3000°K	494P06=Matte White Reflector w/die-cast white trim ring 494WB06=Matte White Baffle w/die-cast white trim ring 494H06=Haze Reflector w/die-cast white trim ring 494SC06=Specular Reflector w/die-cast white trim ring 492PS06=Wet location listed Shower Trim w/regressed frosted glass lens and white die-cast trim ring	TRM490WH=Thin Profile matte white die-cast trim ring

Note: Specifications and Dimensions subject to change without notice. Visit our web site at www.cooperlighting.com

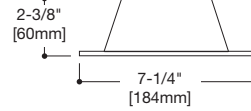
Customer First Center 1121 Highway 74 South Peachtree City, GA 30269 770.486.4800 FAX 770 486.4801
Cooper Lighting 5925 McLaughlin Rd. Mississauga, Ontario, Canada L5R 1B8 905.507.4000 FAX 905.568.7049

DESCRIPTION: LED Trims

Multiple reflector and baffle options allow the Halo LED recessed luminaire to be used anywhere in the home. Choose the best reflector finish and trim for the interior space. Aesthetically pleasing regressed shower trim is available for applications requiring wet location listings.

494P06 White Reflector with White Trim Ring

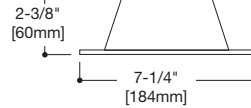
- Halo matte white finish
- Die-cast trim ring and aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal



494P06
White Reflector
with White Trim Ring

494SC06 Specular Reflector with White Trim Ring

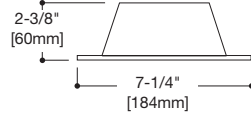
- Halo matte white finish trim ring
- Die-cast trim ring and aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal



494SC06
Specular Reflector
with White Trim Ring

494H06 Haze Reflector with White Trim Ring

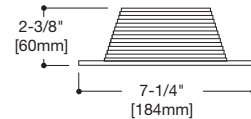
- Halo matte white finish trim ring
- Die-cast trim ring and aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal



494H06
Haze Reflector
with White Trim Ring

494WB06 White Baffle with White Trim Ring

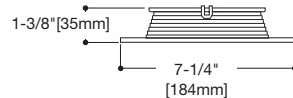
- Halo matte white finish
- Die-cast trim ring and aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal



494WB06
White Baffle
with White Trim Ring

492PS06 White Lensed Shower Trim with White Trim Ring

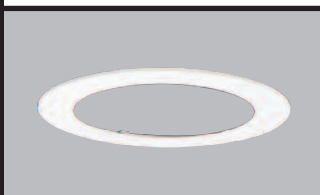
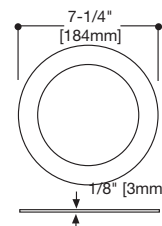
- White trim ring and baffle, regressed lens
- Wet location listed for use in showers and protected canopy applications
- Suggested for use:
 - over tubs and showers
 - eaves and soffits
- Aluminum baffle and die-cast trim ring
- Frosted glass regressed lens
- Trim Height of .160" at OD & .180" at ID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



492PS06
Lensed White Shower Trim
White Trim Ring

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



TRM490WH
Optional Accessory
Thin Profile Trim Ring

LED photometric results may vary from testing data. To assist the lighting designer in using Halo LED in a lighting layout, the following photometric tables have both lab test data and normalized data to illustrate expected typical performance. The Halo LED design standard is to achieve 600 lumens at less than 15 watts. Typical photometric data is provided to illustrate expectation of typical performance.

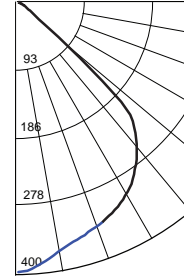
Housing: H750ICAT, Module: ML706830, Trim: 494H06 Haze Reflector

Test	
Test No:	LTL13658
Spacing Criteria:	1.26
Unit LPW:	45.3
Typical	
Spacing Criteria:	1.22
Unit LPW:	42.5

CONE OF LIGHT (Test)		
Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	13	6'6"
7'0"	8	8'5"
8'0"	6	9'6"
9'0"	5	11'0"
10'0"	4	12'0"
CONE OF LIGHT (Typical)		
5'5"	12	6'6"
7'0"	8	8'5"
8'0"	6	9'6"
9'0"	5	11'0"
10'0"	4	12'0"

ZONAL LUMEN SUMMARY (Test)			
Zone	Lumens	%Lamp	%Fixt
0-30	294	N.A.	44.3
0-40	481	N.A.	72.6
0-60	654	N.A.	98.7
0-90	663	N.A.	100.0

ZONAL LUMEN SUMMARY (Typical)			
Zone	Lumens	%Lamp	%Fixt
0-30	275.92	N.A.	44.3
0-40	452.06	N.A.	72.6
0-60	614.73	N.A.	98.7
0-90	622.57	N.A.	100.0



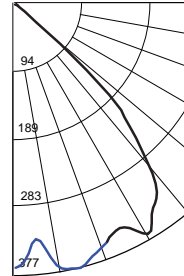
Housing: H750ICAT, Module: ML706830, Trim: 494SC06 Specular Reflector

Test	
Test No:	LTL13659
Spacing Criteria:	1.47
Unit LPW:	46.8
Typical	
Spacing Criteria:	1.42
Unit LPW:	44.0

CONE OF LIGHT (Test)		
Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	13	7'6"
7'0"	8	10'0"
8'0"	6	11'6"
9'0"	5	12'6"
10'0"	4	14'0"
CONE OF LIGHT (Typical)		
5'5"	12	7'6"
7'0"	7	10'0"
8'0"	6	11'0"
9'0"	5	12'6"
10'0"	4	14'0"

ZONAL LUMEN SUMMARY (Test)			
Zone	Lumens	%Lamp	%Fixt
0-30	323	N.A.	46.34
0-40	548	N.A.	78.70
0-60	695	N.A.	99.78
0-90	697	N.A.	100.0

ZONAL LUMEN SUMMARY (Typical)			
Zone	Lumens	%Lamp	%Fixt
0-30	303.08	N.A.	46.4
0-40	515.14	N.A.	78.7
0-60	653.44	N.A.	99.8
0-90	654.72	N.A.	100.0



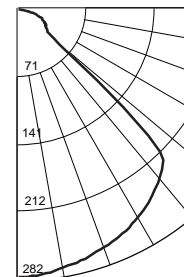
Housing: H750ICAT, Module: ML706830, Trim: 494WB06 White Baffle

Test	
Test No:	LTL13657
Spacing Criteria:	1.40
Unit LPW:	43.3
Typical	
Spacing Criteria:	1.36
Unit LPW:	40.7

CONE OF LIGHT (Test)		
Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	10	7'6"
7'0"	6	9'6"
8'0"	5	10'6"
9'0"	4	12'0"
10'0"	3	13'6"
CONE OF LIGHT (Typical)		
5'5"	9	7'6"
7'0"	6	9'6"
8'0"	4	10'6"
9'0"	3	12'0"
10'0"	3	13'6"

ZONAL LUMEN SUMMARY (Test)			
Zone	Lumens	%Lamp	%Fixt
0-30	240	N.A.	37.10
0-40	405	N.A.	62.48
0-60	589	N.A.	90.98
0-90	648	N.A.	100.00

ZONAL LUMEN SUMMARY (Typical)			
Zone	Lumens	%Lamp	%Fixt
0-30	226.06	N.A.	37.1
0-40	380.73	N.A.	62.5
0-60	553.85	N.A.	90.9
0-90	609.06	N.A.	100.0



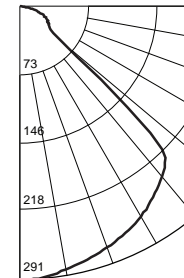
Housing: H750ICAT, Module: ML706830, Trim: 494P06 White Reflector

Test	
Test No:	LTL13656
Spacing Criteria:	1.38
Unit LPW:	44.5
Typical	
Spacing Criteria:	1.34
Unit LPW:	41.8

CONE OF LIGHT (Test)		
Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	10	7'0"
7'0"	6	9'0"
8'0"	5	10'6"
9'0"	4	12'0"
10'0"	3	13'0"
CONE OF LIGHT (Typical)		
5'5"	10	7'0"
7'0"	6	9'0"
8'0"	5	10'6"
9'0"	4	12'0"
10'0"	3	13'0"

ZONAL LUMEN SUMMARY (Test)			
Zone	Lumens	%Lamp	%Fixt
0-30	246	N.A.	37.11
0-40	412	N.A.	62.31
0-60	601	N.A.	90.81
0-90	662	N.A.	100.00

ZONAL LUMEN SUMMARY (Typical)			
Zone	Lumens	%Lamp	%Fixt
0-30	230.76	N.A.	37.1
0-40	387.42	N.A.	62.3
0-60	564.64	N.A.	90.8
0-90	621.73	N.A.	100.0



Note: Specifications and Dimensions subject to change without notice. Visit our web site at www.cooperlighting.com

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