

HALO LED Module for New Installations

DESCRIPTION: ML706830 LED Module

The Halo LED module is designed for retrofit applications with an Edison screw base adapter (included with the module) for use in existing HALO or ALL-PRO housings OR may also be used in new construction with the LED dedicated housing Series H750x. Halo LED ML706830 delivers Over 650 lumens with a superior optical design that yields productive beam lumens, good cutoff and low glare. The Halo LED is ENERGY STAR qualified (with designated LED trims). A Halo LED recessed luminaire also exceeds high efficacy requirements for Title 24-2008 and others. Halo LED offers savings in excess of 75% when compared with 65W BR30 incandescent lamps.

DESIGN FEATURES

Comparable in light output and distribution to a 65W BR30 incandescent lamp or an 18W compact fluorescent luminaire, while consuming less than 14 watts.

Dimming

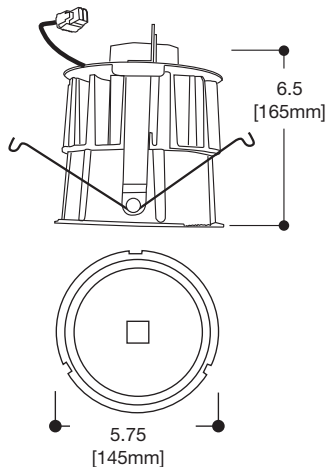
The HALO LED luminaire is dimmable to 15% (nominal) of the total light output with standard AC incandescent dimmers or to 5% (nominal) using standard incandescent dimmers with low end trim adjustment. Standard dimmers require a minimum of three LED modules (minimum 40 watts load) on the circuit for full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

Quality of Light

Provides excellent color rendering (80 CRI typical), and a warm white color temperature (3045°K). LED's have virtually no ultraviolet or infrared wavelengths and they do not direct heat like conventional lamps.

Optical Design

Optical design yields over 650 productive beam lumens and 50° cut-off.



Life

Rated for 50,000 hours at 70% lumen maintenance.

Compatibility

The Halo ML706830 LED module is designed for use in the dedicated H750 series housings or for retrofit applications in existing Halo or ALL-PRO™ H7 housings. The Halo LED module is designed for use in either IC (insulated ceiling) or non-IC construction.

Compatible HALO and ALL-PRO housings include model numbers:

- Dedicated LED Housings: H750ICAT, H750RICAT, H750T, H750TCP
- Halo Housings: H7ICT, H7ICAT, H7RICT, H7RICAT, H7ICTNB, H7ICATNB, H7T, H7RT, H7TNB,
- ALL-PRO Housings: EI700, EI700R, EI700AT, EI700RAT, EI700ATNB, EI700NB, ET700, ET700R

Screw Base Adapter

Edison screw-base adapter supplied with module allows simple wiring connection to existing housing.

Module 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.

Air-Tite™ Rating

The Halo LED module has passed restricted air flow testing, and now qualifies any housing to meet airtight building codes. Certified under ASTM-E283 standards.

LED Driver

The LED module is controlled by 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.

LED Module in New or Existing Construction – Housings other than Halo or All-Pro

If used in recessed housings other than Halo or All-Pro the Cooper Lighting 3-year warranty applies to the LED Module and Trim only. As with any electrical installation, a qualified electrician must ensure compatibility of use with a particular housing; this includes all applicable national and local electrical and building codes.

Installer is responsible to securely retain the LED Module and Trim in a housing at time of installation.

Labels

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

Accessories

- Oversize Trim Rings (Goof Rings) - OT400P and OT403P oversize trim rings are installed behind the Halo LED trim ring to aid in masking ceiling irregularities and cut-out errors.
- H277 – The H277 Step-down transformer for use with non-IC housings (H7T, H7TNB, H7RT, H750T, H750TCP) and LED Module.
- H347 – The H347 Step-down transformer for use with non-IC housings (H7T, H7TNB, H7RT, H750T, H750TCP) and LED Module.

HALO®

Catalog #		Type
Project		
Comments		Date
Prepared by		



ML706830 LED Module

49X Trim

6" LED Module and Trim For Retrofit Applications

Energy Data:	(Values at non-dim Line Voltage)
Minimum Starting Temp:	-30°C (-22°F)
EMV/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:	13.8W
Input Power:	13.8W
Input Current:	126mA
Maximum IC (Insulated Ceiling) Ambient Continuous Operating Temperature:	25°C (77°F)
Maximum Non-IC Ambient Continuous Operating Temperature:	40°C (104°F)

Lighting Data

494SC06 Specular Trim	
Lumens:	677
Lumens per watt:	50
Watts at 120VAC:	13.8
Color	
Correlated Color Temperature (CCT)	3045K
Color Rendering Index (CRI, R _a)	80



airTite™ GLED



ORDERING INFORMATION - SAMPLE NUMBER: ML706830 494P06 Order LED Module and trim separately

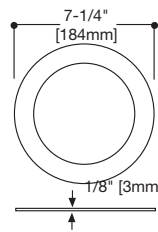
LED Module			Trim Options	Accessories (see product details for application information)
ML706	8	30		
ML706=6" LED Module	8=80 CRI	30=3000°K	<p>494P06=Matte White Reflector/ white die cast trim ring</p> <p>494WB06=White Baffle/ white die cast trim ring</p> <p>494H06=Haze Reflector/ white die cast trim ring</p> <p>494SC06=Specular Reflector/ white die cast trim ring</p> <p>492PS06=Regressed Lens, white die-cast baffle and trim ring. Shower rated.</p> <p>493WBS06=Solite Regressed Lens, upper reflector and white die-cast baffle and trim ring with anti-microbial paint (standard). Shower Rated</p> <p>493SC06=Solite Regressed Lens, upper reflector, Specular Clear die-cast reflector and die-cast white trim ring. Shower Rated.</p> <p>493HS06=Solite Regressed Lens, upper reflector Haze die-cast reflector and die-cast white trim ring. Shower Rated.</p>	<p>OT400P=Oversize White Metal Trim Ring 6" ID x 9-1/4" OD</p> <p>OT403P=Oversize White Plastic Trim Ring 6" ID x 8" OD</p> <p>H277=Transformer - Steps 277 line voltage down to 120V</p> <p>H347=Transformer - Steps 347 line voltage down to 120V</p> <p>Thin Profile Trim Rings:</p> <p>TRM490WH=Thin Profile matte white die-cast trim ring with anti-microbial paint finish.</p> <p>TRM490SN=Thin Profile Satin Nickel die-cast trim ring</p> <p>TRM490TBZ=Thin Profile Tuscan Bronze die-cast trim ring</p> <p>TRM490BK=Thin Profile Black die-cast trim ring</p> <p>TRM490PC=Thin Profile Polished Chrome die-cast trim ring</p>

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

TRM490 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
 - TRM490BK = Black
 - TRM490PC = Polished Chrome
 - TRM490SN = Satin Nickel
 - TRM490TBZ = Tuscan Bronze
 - TRM490WH = White (Anti-microbial paint finish)

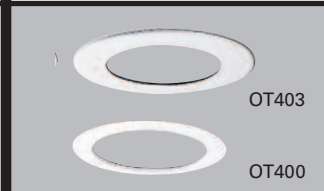


TRM490WH
Optional Accessory
Thin Profile Trim Ring

Oversize Trim Rings

For use when ceiling opening is irregular or cut too large. The oversized trim ring is installed behind the Halo LED trim ring to mask irregularities or cutout errors of the ceiling opening.

- OT400P - Oversize White Metal Trim Ring 6" ID x 9-1/4" OD
- OT403P=Oversize White Plastic Trim Ring 6" ID x 8" OD

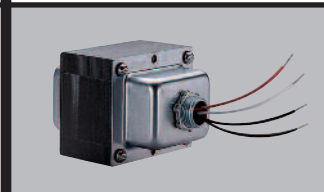
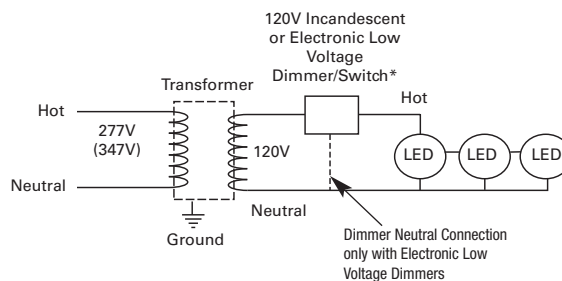


OT400, OT403
Oversize Trim Rings

Step Down Transformer

H277=Transformer - Steps 277 line voltage down to 120 volts. Attaches to knock-out on junction box and is 300VA (18 modules max.) rated. H277 is a UL Recognized Component that is listed for use under the luminaire UL/cUL listing for use with non-IC housings (H750T, H750TCP, H7T, H7TNB, H7RT and LED Module)

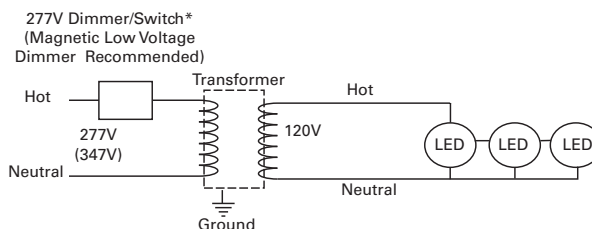
Transformer with Dimmer /Switch on Secondary



H277
277V Step Down Transformer
H347
347V Step Down Transformer

H347=Transformer - Steps 347 line voltage down to 120 volts. Attaches to knock-out on junction box and is 75VA (4 modules max.) rated. H347 is a CSA/UL Listed Component that is listed for use under the luminaire UL/cUL listing for use with non-IC housings (H750T, H750TCP, H7T, H7TNB, H7RT and LED Module) (Note: No 347V dimmers currently available)

Transformer with Dimmer /Switch on Primary



* Dimmer/Switch may be on the Primary (277V) OR Secondary (120V) side of the transformer.

Transformer Load - H277 (300VA)

1. H277 Transformer at full loading consumes a maximum of 16W of power
2. When dimmer or switch is on the secondary (120V) side of the transformer, power is consumed by the transformer when the dimmer or switch is in "OFF" mode at 6.5W and in "ON" mode at 16W maximum with full loading.
3. When a dimmer or switch is on the primary (277V) side of the transformer, power is consumed only in "ON" mode to a maximum of 16W under full loading.

Transformer Load - H347 (75VA)

1. H347 Transformer at full loading consumes a maximum of 5W of power
2. When dimmer or switch is on the secondary (120V) side of the transformer, power is consumed by the transformer when the dimmer or switch is in "OFF" mode at 2.5W and in "ON" mode at 15W maximum with full loading.
3. When a dimmer or switch is on the primary (347V) side of the transformer, power is consumed only in "ON" mode to a maximum of 15W under full loading.

Protected / Non-insulated Soffits, Porches, and Canopies

Halo LED ML706830 module when used with Non-IC H7T, H7RT, ET700, ET700R, H750T, H750TCP recessed housings in protected soffits, porches or canopies offers a solution for outdoor accent lighting without concern for typical outdoor temperatures found in both cold and warm climates. Halo LED is rated for continuous operation from -30°C to 40°C when used with H7T, ET7 or H750T Series non-IC housings.

Note: Specifications and Dimensions subject to change without notice.

Visit our web site at www.cooperlighting.com

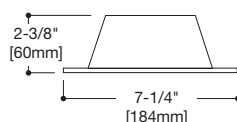
Customer First Center 1121 Highway 74 South Peachtree City, GA 30269 770.486.4800 FAX 770 486.4801
Cooper Lighting 5925 McLaughlin Rd. Mississauga, Ontario, Canada L5R 1B8 905.507.4000 FAX 905.568.7049

DESCRIPTION: LED Trims

Multiple reflector and baffle options allow the Halo LED recessed luminaire to be used in many interior spaces. 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
- Halo matte white aluminum reflector
- Trim ring height of .160" at OD and .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal

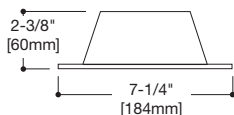


494P06
White Reflector
with White Trim Ring

Energy Star Qualified: ML706830 with 494P06

494SC06 Specular Reflector with White Trim Ring

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

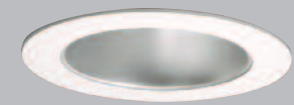
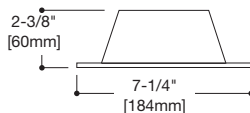


494SC06
Specular Reflector
with White Trim Ring

Energy Star Qualified: ML706830 with 494SC06

494H06 Haze Reflector with White Trim Ring

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

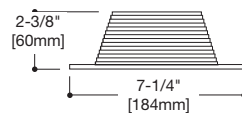


494H06
Haze Reflector
with White Trim Ring

Energy Star Qualified: ML706830 with 494H06

494WB06 White Baffle with White Trim Ring

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

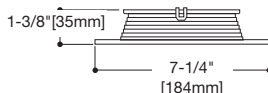


494WB06
White Baffle
with White Trim Ring

Energy Star Qualified: ML706830 with 494WB06

492PS06 Regressed Lensed Trim with White Baffle and Trim Ring

- Halo Matte White trim ring and baffle, regressed lens
- Wet location listed for use in showers and protected canopy applications
- Die-cast aluminum baffle and die-cast trim ring
- Frosted glass lens
- Trim height of .160" at OD & .180" at ID
- Provides clearance for remodeler flange and gasket for AIR-TITE™ seal



492PS06
Lensed White Baffle with
White Trim Ring

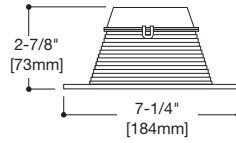
Note: Specifications and Dimensions subject to change without notice.
Visit our web site at www.cooperlighting.com

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

493WBS06 Solite® Regressed Lens Trim with White Baffle with White Trim Ring

- Halo matte white trim ring and baffle with anti-microbial finish standard
- Upper specular aluminum reflector for optical control and enhanced lumen delivery
- Wet location listed for use in showers and protected canopy applications
- Die-cast aluminum baffle and trim ring
- Solite regressed glass lens
- Trim ring height of .160" at OD & .180" at ID
- Trim ring provides clearance for remodeler flange and gasket for AIR-TITE™ seal

Energy Star Qualified: ML706830 with 493WBS06

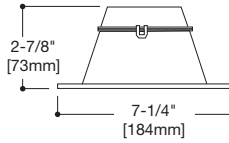


**493WBS06
White Baffle
with Solite Lens White Trim**
Showerlight

493SC06 Solite Regressed Lens Trim with Specular Clear Reflector and White Trim Ring

- Halo matte white trim ring with specular clear reflector
- Upper specular aluminum reflector for optical control and enhanced lumen delivery
- Wet location listed for use in showers and protected canopy applications
- Die-cast aluminum reflector and trim ring
- Solite® regressed glass lens
- Trim ring height of .160" at OD and .180" at ID
- Trim ring provides clearance for remodeler flange and gasket for AIR-TITE™ seal

Energy Star Qualified: ML706830 with 493SCS06

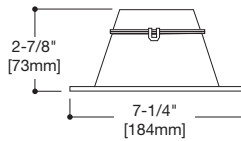


**493SC06
Specular Reflector
with Solite® Lens and
White Trim Ring**
Showerlight

493HS06 Solite Regressed Lens Trim with Haze Reflector and White Trim Ring

- Halo matte white trim ring with Haze reflector
- Upper specular aluminum reflector for optical control and enhanced lumen delivery
- Wet location listed for use in showers and protected canopy applications
- Die-cast aluminum reflector and trim ring
- Solite® regressed glass lens
- Trim ring height of .160" at OD and .180" at ID
- Trim ring provides clearance for remodeler flange and gasket for AIR-TITE™ seal

Energy Star Qualified: ML706830 with 493HS06



**493HS06
Haze Reflector
with Solite Lens® and
White Trim Ring**
Showerlight

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

Tests in IC Housings

**Housing: H750ICAT, Module: ML706830,
Trim: 494P06 White Reflector Lumens: 647**

Test

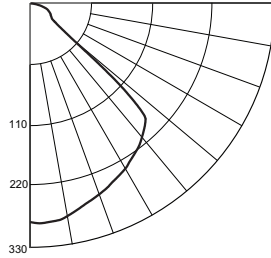
Test No:	A10067
Spacing Criteria:	1.3
Unit LPW:	47.5
Watts:	13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	10	7.2
7'0"	6	9.1
8'0"	5	10.4
9'0"	4	11.7
10'0"	3	13.0

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	238	36.7
0-40	397	61.4
0-60	592	91.5
0-90	647	100.0



**Housing: H750ICAT, Module: ML706830,
Trim: 494SC06 Specular Reflector Lumens: 649**

Test

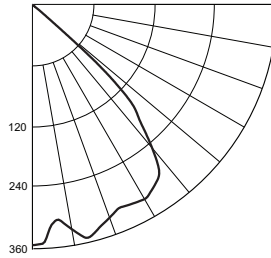
Test No:	A10085
Spacing Criteria:	1.3
Unit LPW:	47.7
Watts:	13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	12	7.6
7'0"	7	9.7
8'0"	6	11.1
9'0"	4	12.5
10'0"	4	13.9

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	285	44.0
0-40	487	75.1
0-60	645	99.5
0-90	649	100.0



**Housing: H750ICAT, Module: ML706830,
Trim: 494H06 Haze Reflector Lumens: 623**

Test

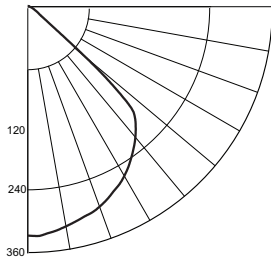
Test No:	A10071
Spacing Criteria:	1.3
Unit LPW:	45.8
Watts:	13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	11	6.9
7'0"	7	8.8
8'0"	5	10.1
9'0"	4	11.4
10'0"	3	12.6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	266	42.7
0-40	436	70.0
0-60	612	98.2
0-90	623	100.0



**Housing: H750ICAT, Module: ML706830,
Trim: 494WB06 White Baffle Lumens: 644**

Test

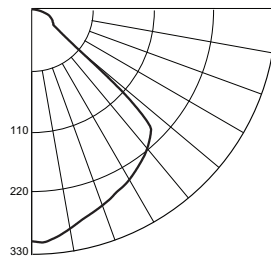
Test No:	A10068
Spacing Criteria:	1.3
Unit LPW:	47.3
Watts:	13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	10	7.0
7'0"	6	9.0
8'0"	5	10.2
9'0"	4	11.5
10'0"	3	12.8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	235	36.5
0-40	393	61.0
0-60	589	91.4
0-90	644	100.0



Tests in Non-IC Housings

**Housing: H750T, Module: ML706830,
Trim: 494P06 White Reflector Lumens: 659**

Test

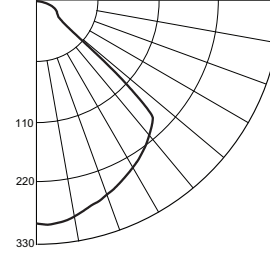
Test No:	A10076
Spacing Criteria:	1.3
Unit LPW:	47.7
Watts:	13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	10	7.1
7'0"	6	9.1
8'0"	5	10.4
9'0"	4	11.7
10'0"	3	13.0

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	245	37.2
0-40	409	62.1
0-60	603	91.5
0-90	659	100.0



**Housing: H750T, Module: ML706830,
Trim: 494SC06 Specular Reflector Lumens: 677**

Test

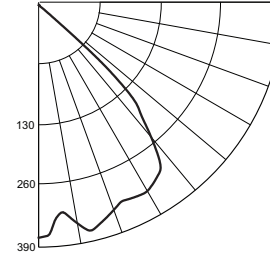
Test No:	A10084
Spacing Criteria:	1.3
Unit LPW:	49.7
Watts:	13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	12	7.6
7'0"	8	9.7
8'0"	6	11.1
9'0"	5	12.5
10'0"	4	13.8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	298	44.1
0-40	509	75.2
0-60	673	99.5
0-90	677	100.0



**Housing: H750T, Module: ML706830,
Trim: 494H06 Haze Reflector Lumens: 653**

Test

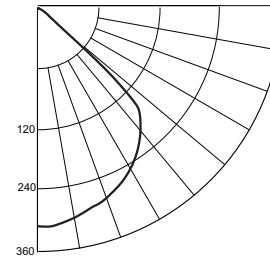
Test No:	A10074
Spacing Criteria:	1.3
Unit LPW:	47.3
Watts:	13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	12	7.0
7'0"	7	8.9
8'0"	6	10.1
9'0"	4	11.4
10'0"	4	12.6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	278	42.6
0-40	457	70.0
0-60	641	98.2
0-90	653	100.0



**Housing: H750T, Module: ML706830,
Trim: 494WB06 White Baffle Lumens: 652**

Test

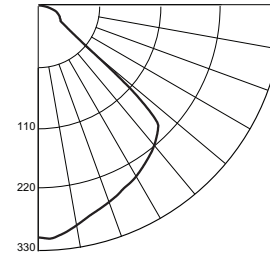
Test No:	A10075
Spacing Criteria:	1.3
Unit LPW:	47.2
Watts:	13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Foot Candles	Nadir Beam Diameter
5'5"	11	7.0
7'0"	7	8.8
8'0"	5	10.1
9'0"	4	11.4
10'0"	3	12.6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	241	37.0
0-40	403	61.8
0-60	597	91.5
0-90	652	100.0



Tests in IC Housings

**Housing: H750ICAT, Module: ML706830,
Trim: 492PS06 Lensed Baffle white Baffle Lumens: 458**

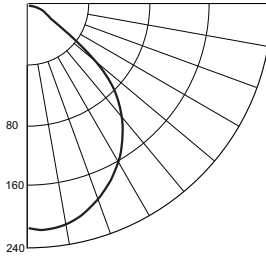
Test
Test No: A10066
Spacing Criteria: 1.2
Unit LPW: 33.6
Watts: 13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	8	6.6
7'0"	5	8.4
8'0"	4	9.6
9'0"	3	10.8
10'0"	2	12.0

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	176	38.4
0-40	281	61.4
0-60	423	92.3
0-90	458	100.0



Tests in Non-IC Housings

**Housing: H750T, Module: ML706830,
Trim: 492PS06 Lensed Baffle white Baffle Lumens: 466**

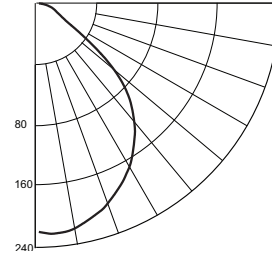
Test
Test No: A10077
Spacing Criteria: 1.2
Unit LPW: 33.7
Watts: 13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	8	6.6
7'0"	5	8.4
8'0"	4	9.6
9'0"	3	10.8
10'0"	2	12.0

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	180	38.8
0-40	288	61.9
0-60	430	92.4
0-90	466	100.0



**Housing: H750ICAT, Module: ML706830,
Trim: 493WBS06 White Baffle Glass Lens Lumens: 593**

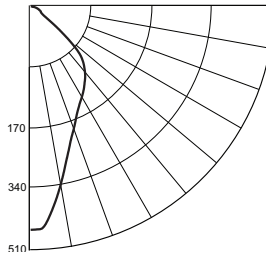
Test
Test No: A10064
Spacing Criteria: 0.7
Unit LPW: 43.6
Watts: 13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	17	3.8
7'0"	10	4.8
8'0"	8	5.5
9'0"	6	6.2
10'0"	5	6.9

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	258	43.5
0-40	392	66.2
0-60	553	93.2
0-90	593	100.0



**Housing: H750T, Module: ML706830,
Trim: 493WBS06 White Baffle Glass Lens Lumens: 603**

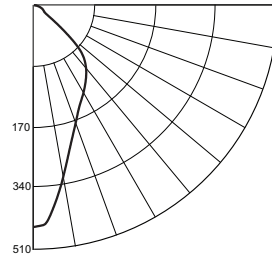
Test
Test No: A10078
Spacing Criteria: 0.7
Unit LPW: 43.6
Watts: 13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	18	3.7
7'0"	11	4.7
8'0"	8	5.4
9'0"	7	6.0
10'0"	5	6.7

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	265	44.0
0-40	403	66.8
0-60	562	93.2
0-90	603	100.0



**Housing: H750ICAT, Module: ML706830,
Trim: 493SCS06 Specular Reflector, Glass Lens Lumens: 586**

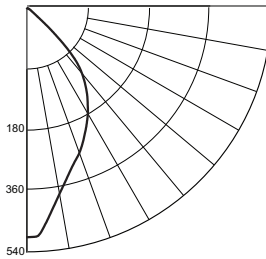
Test
Test No: A10065
Spacing Criteria: 0.8
Unit LPW: 43.0
Watts: 13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	17	4.5
7'0"	11	5.8
8'0"	8	6.6
9'0"	7	7.4
10'0"	5	8.2

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	303	51.7
0-40	455	77.5
0-60	576	98.2
0-90	586	100.0



**Housing: H750T, Module: ML706830,
Trim: 493SCS06 Specular Reflector, Glass Lens Lumens: 596**

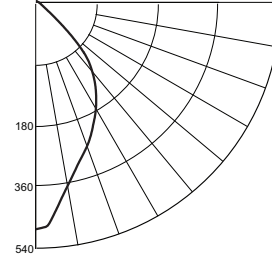
Test
Test No: A10080
Spacing Criteria: 0.8
Unit LPW: 43.1
Watts: 13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	18	4.6
7'0"	11	5.8
8'0"	9	6.6
9'0"	7	7.4
10'0"	5	8.3

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	311	52.1
0-40	466	78.1
0-60	585	98.2
0-90	596	100.0



**Housing: H750ICAT, Module: ML706830,
Trim: 493HS06 Haze Reflector, Glass Lens Lumens: 583**

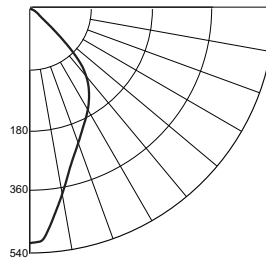
Test
Test No: A10063
Spacing Criteria: 0.8
Unit LPW: 42.8
Watts: 13.6

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	18	4.2
7'0"	11	5.3
8'0"	8	6.1
9'0"	7	6.8
10'0"	5	7.6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	289	49.6
0-40	439	75.2
0-60	569	97.5
0-90	583	100.0



**Housing: H750T, Module: ML706830,
Trim: 493HS06 Haze Reflector, Glass Lens Lumens: 593**

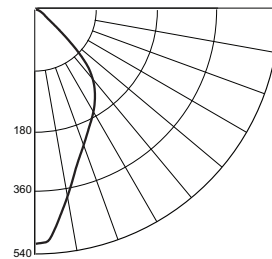
Test
Test No: A10079
Spacing Criteria: 0.7
Unit LPW: 42.9
Watts: 13.8

CONE OF LIGHT

Distance to Illuminated Plane	Initial Nadir Foot Candles	Beam Diameter
5'5"	18	4.1
7'0"	11	5.2
8'0"	9	5.9
9'0"	7	6.6
10'0"	6	7.4

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	296	49.9
0-40	449	75.7
0-60	579	97.6
0-90	593	100.0



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

Dimmer Matrix Halo LED Module ML706830

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

Cooper Wiring Devices

ASPIRE RF	N/A
ASPIRE	9530, 9532, 9538, 9540
Decorator Slide	DI06P, DI10P
Decorator Full-Slide	SI061, SI06P, SI10P
Toggle	6441, 6443, 6453
Rotary	6001, 6013, 6000, 6003, 6020, 6023
Architectural Rotary	RAI10, RAI15, RAI20

Lutron

AriadniAY/TG Series	LyneoLX Series
CeanaCN Series	NovaN Series
Centurion . .C Series	Nova TNT/NTB/NTA Series
DaliaDL Series	QotoQ Series
DivaDV Series	RotaryD Series
GlyderGL Series	SkylarkS Series
LumeaLG Series	

Leviton

Illumitech	IPI/RPI.Series	Trimatron	6681/6683/6602
Sureslide	663.Series		

Electronic Low Voltage Digital and Analog Dimmers, Minimum Circuit Load of One LED Module, Dimming to 15% Requires a neutral in the wall box

Lutron

Dalia	DLELV Series	Lyneo	LXELV Series	Nova T	NTELV Series
Diva	DLELV Series	Maestro	MAELV Series	Skylark	SELV Series
Faedra	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%)

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

Leviton

Illumitech	IP10/IP40/IPM406/IPM10 Series dimmers
Acenti	ACI/ACE/ACX/ATI Series (Programmable trim)
Vizia +	VPI/VPE/VPX.Series (Programmable trim)

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.

SPECIAL NOTE: Incandescent Digital Dimmers (also called Smart or Multi-Location) require a 15W minimum incandescent load OR for circuit loads with LED modules only - use electronic low voltage dimmers, Dimming to 15%

Cooper Wiring Devices

ASPIRE RF	RF9534-N, RF9534 (no neutral), RF9536-N, RF9536 (no neutral)
ASPIRE	9534, 9536
Smart	SM600, SM1000

Lutron

AbellaAB Series	Maestro . . .MA Series
FaedraFA Series	SpacerSPS Series
GlyderGL Series	VareoV Series
	ViertiVT Series

Leviton

Acenti	ACI.Series	TrueTouch	6606/TTI.Series
Mural	MDI/MSI.Series	Vizia +	VPI.Series
ToggleTouch	TGI.Series		

Universal Wireless Dimmers (Incandescent, Magnetic Low Voltage, Electronic Low Voltage), Minimum Circuit Load of Two LED Modules, Dimming to 15%

Watt Stopper

Miro Universal	DRD4 Series Dimmers
	DCD267 Series Dimmers
	DCD68 (series multilocation - When used with DRD4 or DCD267 series master dimmers)

Incandescent Wireless Dimmers, Minimum Circuit Load of Five LED Modules, Dimming to 15%

A 15W minimum incandescent load or a neutral in the wall box are recommended to reliably dim

Watt Stopper

Miro Incandescent	DRD2 Series Dimmers
	DCD26 Series Dimmers
	DCD68 (series multilocation - When used with DRD2 or DCD26 series master dimmers)

3 YEAR LIMITED LED WARRANTY**Energy Star SSL Labeled Recessed Lighting**

Cooper Lighting (The Company) warrants this product ("the product") 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 purchaser's 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 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.

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