

McGRAW-EDISON



Talon

Architectural Area Luminaire

COOPER Lighting

TALON



ARCHITECTURAL AREA LUMINAIRE

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VERSATILE PERFORMANCE

Talon's ingenious blend of performance and versatility allows application specific illumination by way of fourteen [14] high efficiency, field rotatable optical systems. Offered with the unrivaled Spill Light Eliminator [SL] optic for areas requiring strict light trespass control, and the premier Automotive Front Row [AF] optic for precisely illuminated automotive dealership front row displays. Flat glass or sag, vertical lamp or horizontal, segmented optic or formed, Talon offers a myriad of optical solutions to satisfy exacting application requirements.

SITE + PARKING | ROADWAY | PATH OF EGRESS



IMPERMEABLE FORM

Coupling precise mechanical design with premium quality materials, the Talon site light is constructed to sustain the rigors of outdoor operation. Thick wall die-cast aluminum construction and channel set silicone gasketing form an impermeable IP65 barrier optimizing optical efficiency and fixture longevity in the harshest of environments.

INNOVATIVE FOREFRONT

Forward Leaning—two words that describe McGraw-Edison's product development process and relentless commitment to providing progressive solutions for emerging market trends. Regardless of the ordinance governing your site—spill control, emergency egress, energy efficiency or curfew compliance, the Talon offers progressive features to address rigorous regulatory needs.

PERFORMANCE + VERSATILITY

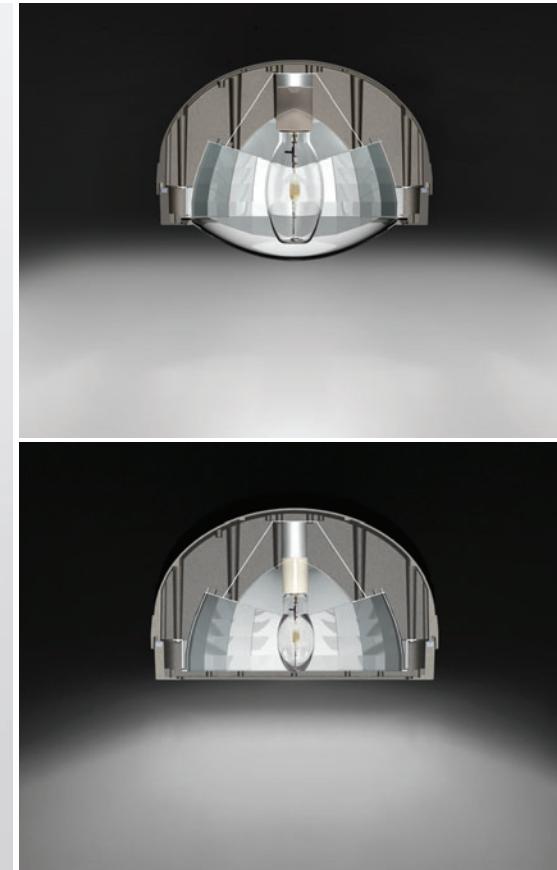
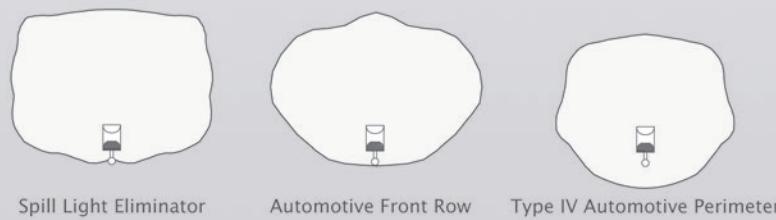
Hydroformed + Segmented



Vertical



Specialty Applications



OPTICAL VERSATILITY

Never before has a single luminaire supported this magnitude of optical choices, touting four [4] distinct families of optical assemblies, all with compelling performance. Hydroformed, segmented, vertical and specialty application optical systems allow finely tuned site lighting solutions with unprecedented levels of uniformity and control.

MAXIMIZE SITE UNIFORMITY

Add sparkle to your site and maximize pole spacings with sag glass optical systems offered in both cutoff and semi-cutoff configurations. For applications mandating full cutoff, choose from a complete offering of flat glass vertical lamp solutions. The vertically lamped family of optical systems minimizes light levels directly below the luminaire while increasing lateral illumination, maximizing overall site uniformity. Available in Type III, Area Round, Area Square, Type IV Automotive Perimeter and Automotive Front Row [TLL only] distributions.

OPTICAL SOLUTIONS AS DIVERSE AS THE ENVIRONMENTS THEY ILLUMINATE.

Exterior lighting requirements continue to grow more stringent with added emphasis on light control and system efficiency. Whether the goal of your site lighting design is safety, general illumination or highlighting prominent features, Talon offers application-specific optical solutions that provide the highest level of photometric performance and control.



ROTATIONAL FLEXIBILITY

Maintain uniform site spacing and fixture orientation with rotatable optical assemblies. All optics are capable of rotating in 90° increments allowing for manipulation of distribution orientation independent of fixture position.

DARK SKY FRIENDLY

For applications requiring dark sky friendly solutions, look to full cutoff flat glass optical assemblies providing focused illumination with zero uplight and minimal high angle illumination while retaining superior uniformity. Available in hydroformed or segmented Type II, III, IV V and SL distributions.

LEADING SPILL CONTROL

The Spill Light Eliminator [SL] optic is the industry leader in effective spill light control, eliminating light beyond one [1] mounting height behind the pole with no sacrifice in forward illumination. Used along site perimeters and property lines, the Spill Light Eliminator keeps the light inside and the darkness out.

GET NOTICED

Accel Optics, the Talon's family of automotive reflector solutions specialize in focused front row product displays that engage the customer, general merchandise lighting that creates an inviting dealership appearance emanating safety and security, and perimeter lighting that precisely frames the automotive dealership lot.



**DARK SKY
COMPLIANT** **FCO**
Full Cutoff

NOTE: In Flat Glass configurations only.

AUTOMOTIVE SOLUTIONS

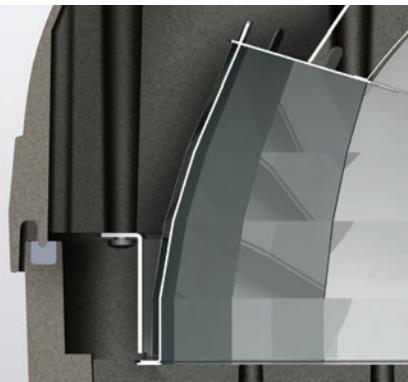
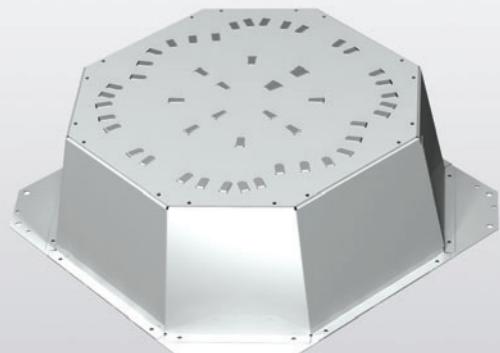


OUTDOOR SITE LIGHTING THAT ENGAGES CUSTOMER AWARENESS.

Exterior site lighting provides the first impression of an automotive dealership and is an outward expression of image. During daytime hours the exterior site lighting fixture form should be selected to lend focus to dealership architecture and branding. For evening operation, properly illuminated uniform site lighting will entice customers, drawing them into the dealership.



QUALITY + DURABILITY



DURABLE CAST CONSTRUCTION

Low-copper alloy die-cast aluminum construction offers corrosion resistance while precise tolerance control ensures tight nesting of the door and housing. Combining heat extracting reveal channels with independent optical and electrical chambers that isolate heat producing sources, the Talon's housing design is both functionally relevant and aesthetically pleasing.

TOOLLESS ENTRY

Invisibly integrated door retaining latches allow for a consistent outward aesthetic while providing maintenance-friendly, toolless entry into the optical and electrical chambers. The corrosion-resistant stainless spring steel latch and door receiver pin create an audible engagement confirming secure door closure and fixture sealing.

RIGID OPTICAL CONSTRUCTION

A commitment to optical research and precision build quality result in unequaled levels of performance and repeatability. A rigid box enclosure shields segmented optical facets on all sides from performance degrading damage while each facet bank is secured to both the top and bottom of the enclosure providing repeatable facet orientation relative to light center.

PREMIUM MATERIALS

Superior optical design and a commitment to premium 95% reflective sheet aluminum make Talon's segmented reflector family the benchmark of optical excellence. Reflector facets are flat and unobstructed by rivets or other means of attachment which may cause streaks or striations in the light distribution. First class construction and attention to detail ensure dependable performance in every installation.

INGRESS PROTECTION

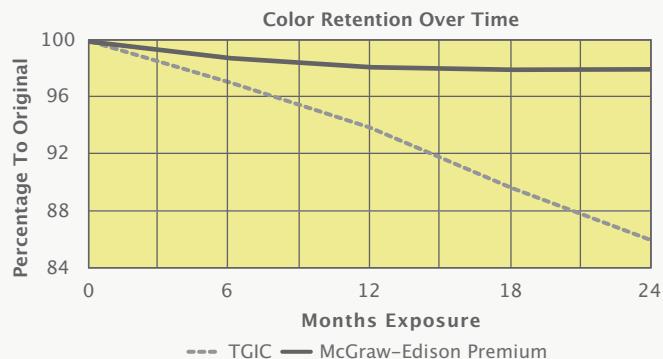
"IP" stands for Ingress Protection and is a rating system recognized internationally as the standard for electrical products and other related technologies. The two numbers proceeding the "IP" individually callout the fixture's protection rating against moisture and airborne particulates. The channel set silicone gasketing system incorporated in Talon is IP65 certified. Dust, insects and moisture simply have no chance of penetrating the outer enclosure.

CONFIDENCE-INSPIRING QUALITY BEYOND THE SUM OF ITS PARTS.

From the stainless steel hinges to the rugged housing, every detail of the Talon construction is precisely designed with industry leading craftsmanship. Heavy-wall die-cast aluminum construction, premium TGIC [triglycidyl isocyanurate] polyester powder coat paint and an IP65 rated optical cavity ensure Talon can endure the harshest environments.

FINISH OPTIONS

McGraw-Edison's premium polyester powder coatings are enhanced TGIC based coatings formulated to withstand extended outdoor exposure. The powders are designed not only to be functional, but decorative, combining good film appearance with excellent mechanical and exterior exposure qualities. Formulated with properties similar to a standard TGIC, the improved weathering characteristics of premium TGIC result from the integration of a new polyester resin technology. These coatings consistently display at least twice the gloss retention of standard TGIC materials in both weatherometer and QUV testing, making them ideal for outdoor lighting fixtures and poles. Applied to a nominal 2.5 mil thickness, Talon's six (6) standard finishes offer superior protection against fade and wear.



GREY [AP]



BLACK [BK]



BRONZE [BZ]



WHITE [WH]



DARK PLATINUM [DP]



GRAPHITE METALLIC [GM]

CONTROL + EFFICIENCY

LUMINAIRE CLASSIFICATION

The IESNA's revised Luminaire Classification System [TM15-07 revised] creates a new basis of measurement for site lighting visibility and adjacent property interaction. This technical memorandum subdivides the luminaire distribution into smaller angular zones and subzones to more clearly represent how much light is emitted at various angles. The values for each subzone give an indication of the appropriate use for the luminaire within an application. For dark sky sensitive areas, the uplight component tells how much the luminaire will contribute to sky glow. For applications with strict light trespass regulations, the back light portion of the distribution helps determine how much light will reach neighboring properties. Talon reflector assemblies keep light on task by contributing as little as 0.0% total upward illumination and 0.8% total back light.

Forward Light

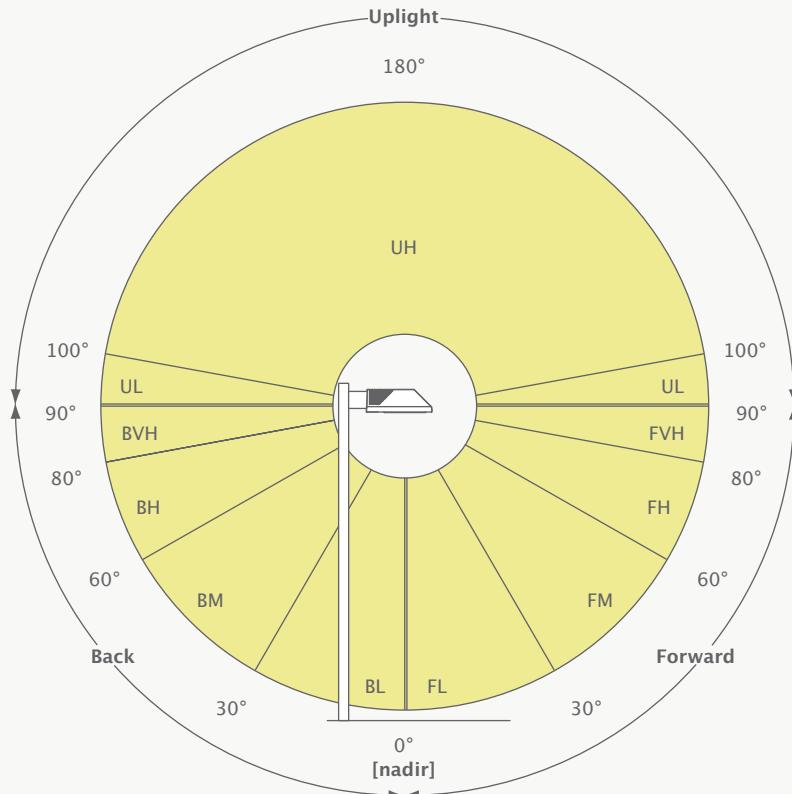
- Forward Light Low [FL]
- Forward Light Mid [FM]
- Forward Light High [FH]
- Forward Light Very High [F VH]

Back Light

- Back Light Low [BL]
- Back Light Mid [BM]
- Back Light High [BH]
- Back Light Very High [BVH]

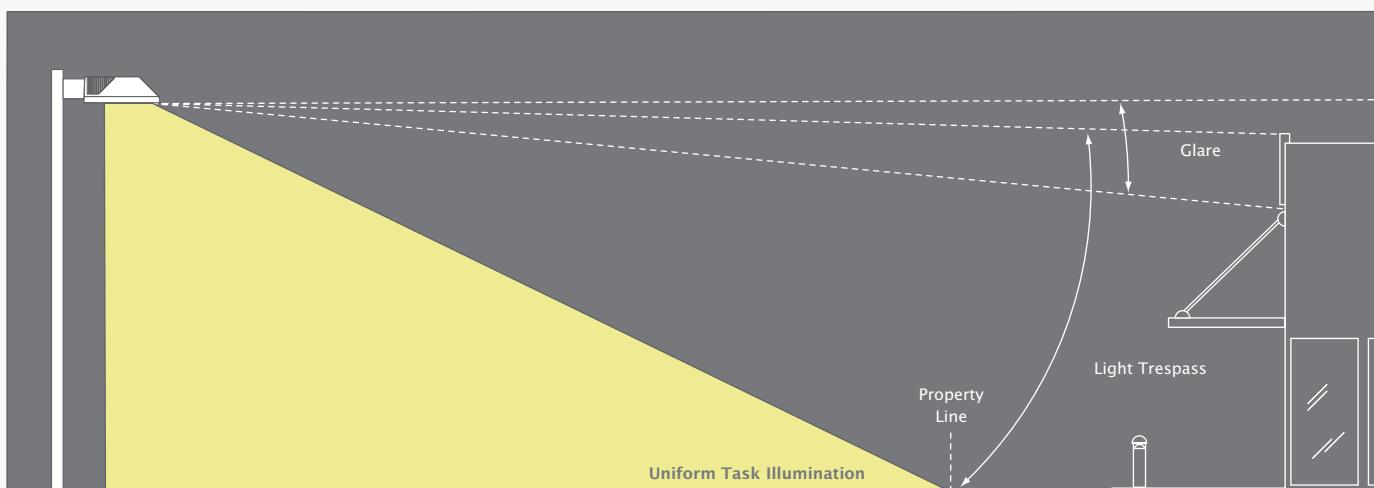
Uplight

- Uplight Low [UL]
- Uplight High [UH]



NEIGHBORHOOD AND DARK SKY FRIENDLY

National organizations work to educate the general public on best lighting practices in order to minimize light trespass, reduce sky-glow and improve nighttime visibility through glare reduction. Experts understand the visual system adapts to surrounding ambient conditions, spurring a move from universal light level recommendations to a set of custom tailored guidelines for each task based on an application's lighting zone. When surrounding conditions are dim, lower levels of light are able to be detected more easily. In these environments, high light level applications can be a source of discomfort and glare. Careful selection and placement of luminaires eliminates glare and creates a comfortable nighttime environment. Talon's assortment of specialty light control optical assemblies combined with a wide array of internal or external house-side shields provide the perfect solution for every application.

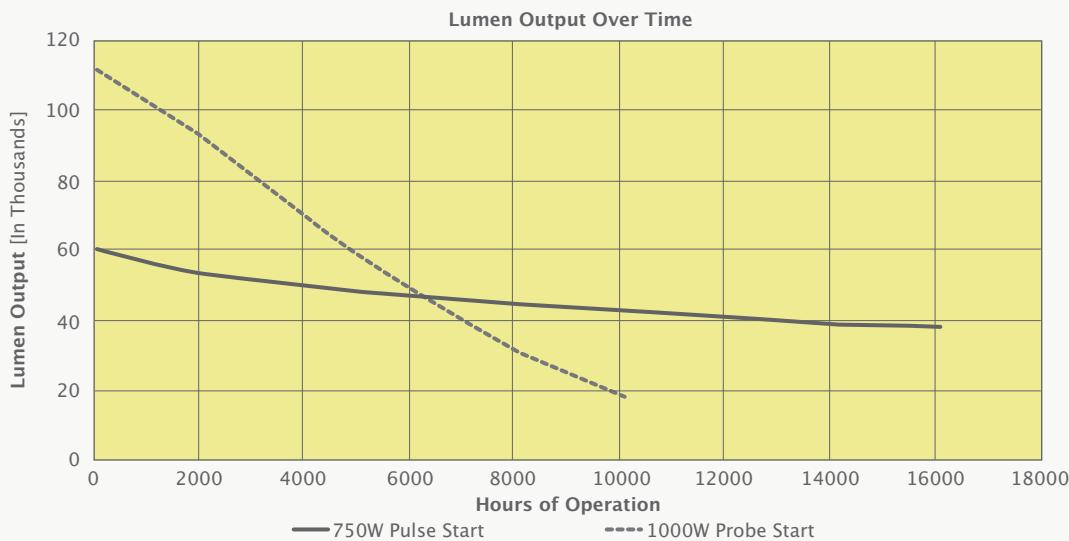


STEPPING UP TO THE CHALLENGE.

As visual research advances so too the core understanding of how light interacts with surrounding communities and nocturnal environments. Utilizing this knowledge, Federal programs, national organizations and industry leaders institute guidelines for illuminating an area safely and securely while reducing energy, eliminating spill light and minimizing glare. Talon steps up to the challenge, offering innovative solutions to regulatory compliance issues.

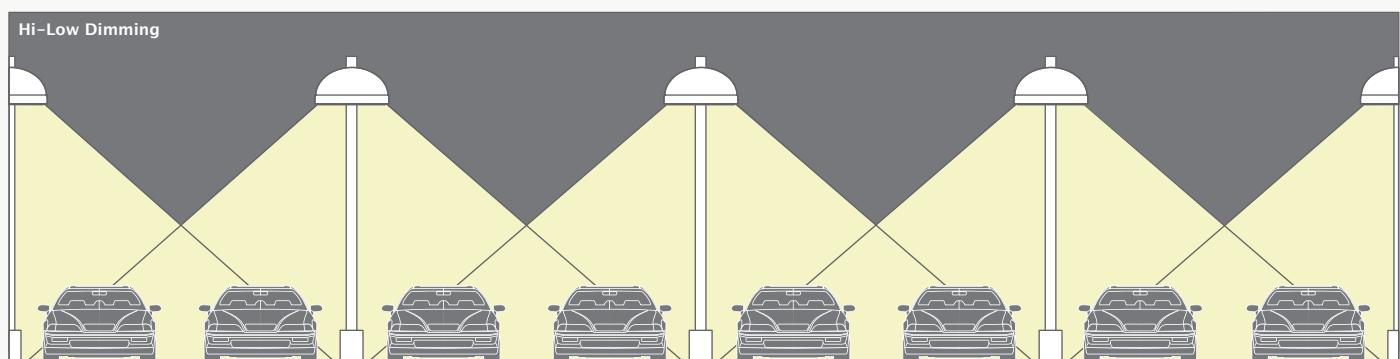
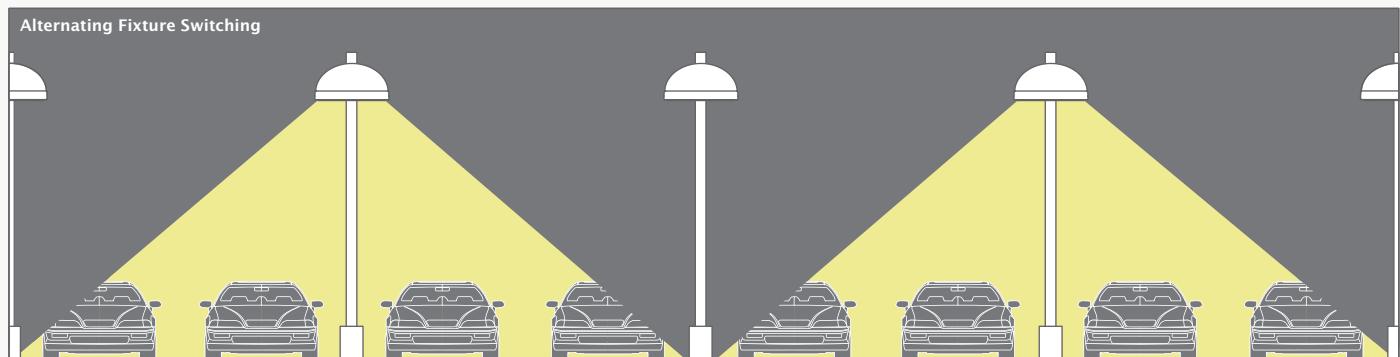
ENERGY EFFICIENCY

With the Federal Energy Independence and Security Act effective January 1, 2009, states are rapidly adopting energy legislation limiting the use of probe start sources in favor of higher efficiency options. Pulse start technology is being embraced for its efficacy, extended life, high lumen maintenance, and color consistency. The increased color rendering of a pulse start lamp improves visibility and heightens the overall safety and security of the site. Higher lumen maintenance levels reduce the number of fixtures needed to achieve a consistent light level over the fixture's installed life. Initial savings are compounded by decreased energy consumption and less frequent maintenance requirements. By supporting a full array of both horizontal and vertical lamp distributions, Talon offers the broadest selection of energy saving pulse start solutions.



CURFEW COMPLIANCE

Certain regulatory documents incorporate energy saving measures beyond standard source efficacy, including curfew regulations calling for close of business site lighting power reduction. When alternating luminaires are turned off to accomplish the reduction, site lighting uniformity is greatly reduced, compromising visibility and the feeling of security. The Talon Hi-Low [HL] option enables curfew compliance through an integrated dimming relay internal to the housing that reduces power while closely maintaining critical-to-safety site lighting uniformity levels.







SPECIFICATION FEATURES



MOUNTING

Extruded 8" [TLM Talon Medium] or 10 1/2" [TLL Talon Large] aluminum arm includes internal bolt guides allowing for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging of housing, square pole arm and round pole adapter for contractor friendly arrival of product on site.

CONSTRUCTION

Heavy-wall, die-cast low-copper alloy aluminum construction with integral reveal channels along top surface of housing to promote heat extraction and prolong electrical component life. Internal cast-in wall separates optical and electrical chambers, allowing components to operate cooler. One-piece heavy-wall, die-cast aluminum door frame with integral cast-in gasket channel seals optical chamber to an IP65 rating. Stainless steel latches and hinges.

OPTICAL SYSTEMS

Choice of 14 high efficiency optical systems utilizing horizontal and vertical lamp orientations, including five [5] optional high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a thick gauge aluminum housing for superior protection. All segment faces are clean of rivet heads, tabs or other means of attachment which may cause streaking in the light distribution. Standard with mogul-base socket for HPS and 175-1000W MH. Standard with medium-base socket for 150W MH and below. All optical modules feature quick disconnect wiring plugs and are field rotatable in 90° increments.

ELECTRICAL

TLM offered standard with ballast and related electrical componentry hard mounted to die-cast housing for optimal heat transfer and improved operating efficiency. TLM optional and TLL standard, electrical componentry mounted to a swing-down galvanized steel power tray with integral handle. Electrical disconnects allow tray to be completely removed from the housing providing ample hand and tool room for attachment of fixture during installation.

Distribution	TALON MEDIUM [TLM]				TALON LARGE [TLL]	
	Lamp Orientation	Standard Door Configuration	70-200W Lens Type	250-400W Lens Type	Lamp Orientation	250-1000W Lens Type
2F	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
2S	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
3F	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
3S	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
4F	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
4S	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
5F	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
5S	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
SL	Horizontal	Recessed	Flat/Sag	Flat/Sag	Horizontal	Flat/Sag
AR	Vertical	Deep	Flat/Sag	Sag	Vertical	Flat/Sag
AS	Vertical	Deep	Flat/Sag	Sag	Vertical	Flat/Sag
3V	Vertical	Deep	Flat/Sag	Sag	Vertical	Flat/Sag
4V	Vertical	Deep	Flat/Sag	Sag	Vertical	Flat/Sag
AF	Horizontal	Recessed	Flat/Sag	Flat/Sag	Vertical	Flat/Sag



Certifications

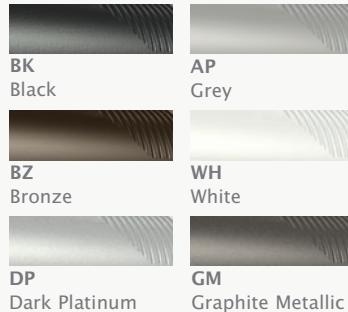
IP65 Rated	U.L. 1598 Listed	ISO 9001
CSA Listed	25°C Ambient	

DARK SKY **FCO**
COMPLIANT Full Cutoff

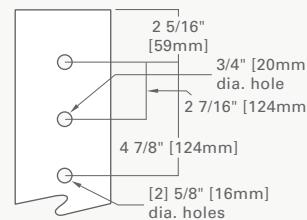
NOTE: In Flat Glass configurations only.

FINISH

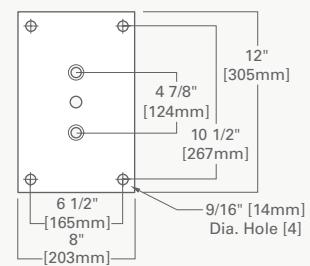
Housing and arm finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.



DRILLING PATTERNS Type "M"



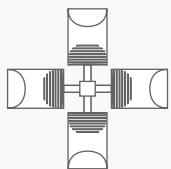
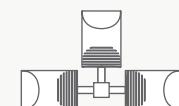
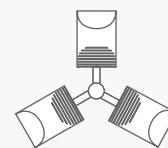
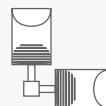
Wall Mount



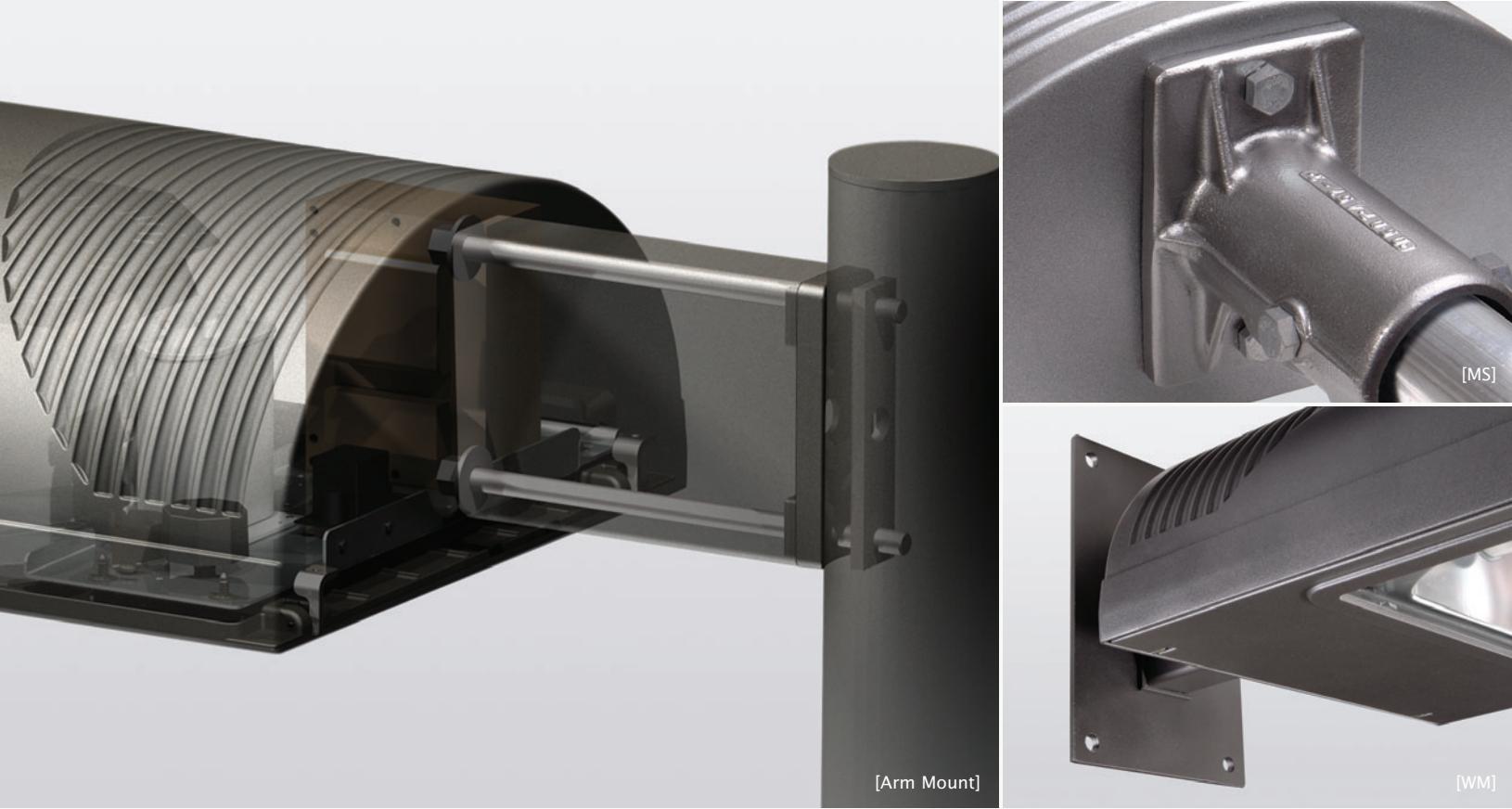
MOUNTING CONFIGURATIONS

Talon is available in seven [7] unique luminaire mounting configurations.

Wall Mount	Arm Mount Single E.P.A. TLM	Arm Mount 2 @ 180° E.P.A. TLM	Arm Mount 2 @ 90° E.P.A. TLM	Arm Mount 3 @ 120° E.P.A. TLM	Arm Mount 3 @ 90° E.P.A. TLM	Arm Mount 4 @ 90° E.P.A. TLM
Recessed Door Deep Door TLL	1.22 1.45 2.51	2.44 2.90 5.02	2.44 2.90 5.02	3.23 3.92 6.85	3.23 3.92 6.85	3.63 4.43 7.77



OPTIONS + ACCESSORIES



ARM MOUNT

Standard 8" [TLM] or 10 1/2" [TLL] extruded aluminum arm features internal bolt guides for twin support rods. Round pole mounting accommodated by utilizing provided round pole adapter between the fixture arm and pole shaft.

EXTERNAL MAST ARM ADAPTER [MS]

Cast aluminum mast arm adapter secures fixture head to nominal 2" [2 3/8" O.D. pipe size] horizontal steel tenon arm. Adapter casting slip fits over tenon arm and is secured via two [2] stainless steel bolts.

WALL MOUNT [WM]

Wall mount plate secured to wall via four [4] lag bolts [lag bolts supplied by other]. Wall mount kit includes 1/2" thick steel adapter plate, a 8" [TLM] or 10 1/2" [TLL] machined extruded aluminum arm and two [2] fixture support rods.

TENON ADAPTER

Tenon adapters available to slip fit over poles equipped with nominal 2" pipe size steel tenon [2 3/8" O.D., 4" length] or nominal 3" pipe size steel tenons [3 1/2" O.D., 5" length]. Adapter secures to tenon via six [6] stainless steel bolts. For complete configuration availability, see Tenon Adapters on page 16.

POLYCARBONATE VANDAL SHIELD [VS]

Internally mounted 3/16" thick molded polycarbonate lens, treated with UV inhibitor to discourage the gradual discoloration that results from exposure to sunlight and UV radiating sources.

QUARTZ RESTRIKE [Q + EM + EM/SC]

Optional quartz restrike [Q] energizes auxiliary quartz lamp upon power reactivation and extinguishes once HID lamp re-ignites. Quartz restrike with time delay [EM] adds cold start activation. Emergency Separate Circuit [EM/SC] allows the quartz lamp socket to be wired to an independent relay controlled power source.

PHOTOCONTROL RECEPTACLE [R]

Fixtures available with gasketed photocontrol receptacle for mounting a standard NEMA photocontrol [ordered separately]. Medium housing also available with a button-style photocontrol [P].

INTERNAL HOUSE-SIDE SHIELD [HS]

Internal house-side shield reduces light concentration behind the pole while maintaining street side efficiency. Internal house-side shields available on Type II, III, IV and AF distributions.

EXTERNAL HOUSE-SIDE SHIELD

[MA1213-XX + MA1214-XX]

External house-side shield provides sharp cutoff behind the pole and shields the lamp from direct view. Mounted to the door frame via double-sided VHB adhesive [TLM] or three [3] stainless steel fasteners [TLL]. Rotatable in 90° increments, the external house-side shield provides industry leading glare and spill light control.



OPTIONS

[Factory installed and shipped complete with luminaire]

Electrical

F=Single Fuse [120, 277 or 347V]
FF=Double Fuse [208, 240 or 480V]

Q=Quartz Restrike

EM=Quartz Restrike w/Delay [Also Strikes at Cold Start]

EM/SC=Quartz Emergency Separate Circuit

PT=Electrical Power Tray [Standard on TLL]

P=Button Type Photocontrol [TLM Only]

R=NEMA Twistlock Photocontrol Receptacle

HL=Hi/Low Dimming [Vertical Optics Only]

L=Lamp Included

Shields + Doors

HS=Internal House Side Shield

VS=Polycarbonate Vandal Shield [TLM Only]

DD=Deep Door [TLM Only]

Mounting

WM=Wall Mount Bracket with Arm

DM=Direct Mount for Round or Square Pole

DW=Direct Wall Mount

MS=External Mast Arm Adapter [TLM Only]

ACCESSORIES

[Field installed and shipped independent of luminaire]

Electrical

OA/RA1016=NEMA Photocontrol [105-285V]

OA/RA1027=NEMA Photocontrol [480V]

OA/RA1201=NEMA Photocontrol [347V]

OA/RA1013=Shorting Cap

Tenon Adapters

MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon

MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon

MA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

MA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon

MA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon

MA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

MA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon

MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon

MA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon

MA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon

MA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon

MA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon

MA1049-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon

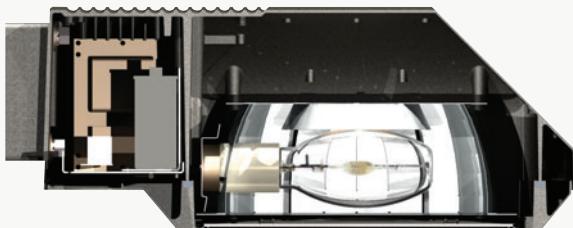
Shields

MA1213-XX=External House-side Shield Kit [TLM Only]

MA1214-XX=External House-side Shield Kit [TLL Only]

DEEP DOOR [DD]

Medium housing vertically lamped optics are shipped standard with Deep Door. For sites combining horizontal and vertical optics, specify the Deep Door [DD] option on horizontal lamp fixtures to maintain a uniform outward aesthetic. Reflector shifted downward toward the lens to maintain optimal photometric performance [TLM only].



Horizontal optic in deep door position.



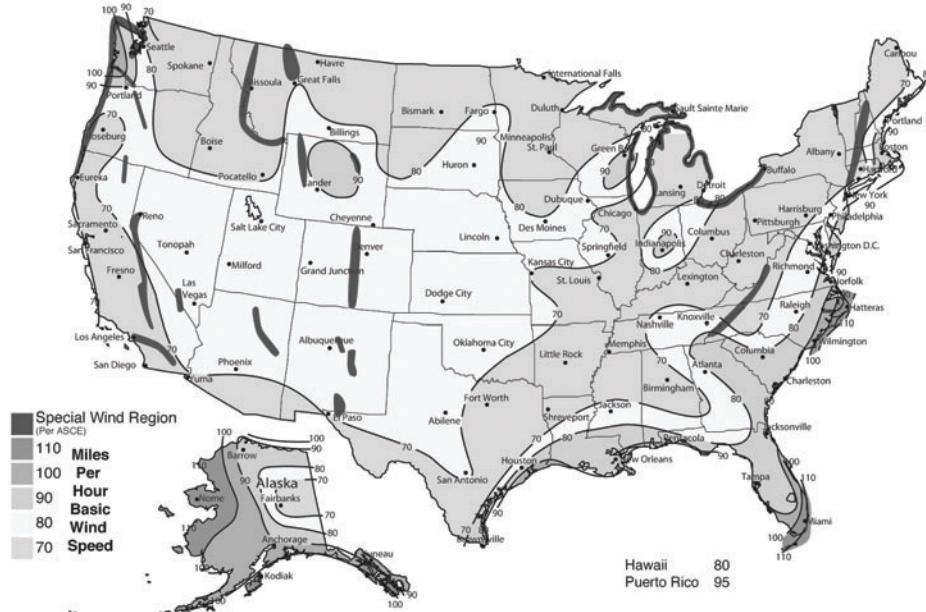
Horizontal optic in recessed door position.

STEEL POLES + BRACKETS

ISOTACH WIND MAP

This map has been included to aid in pole selection with regard to geographic location. Although a less stringent 25-year mean recurrence map is sometimes used by other pole suppliers, it is our belief that the added measure of assurance offered with the use of this map deems it more desirable.

NOTE: This wind map is intended as a general guideline only. Consult local engineering standards to determine the exact wind loading conditions for your application.



ORDERING INFORMATION

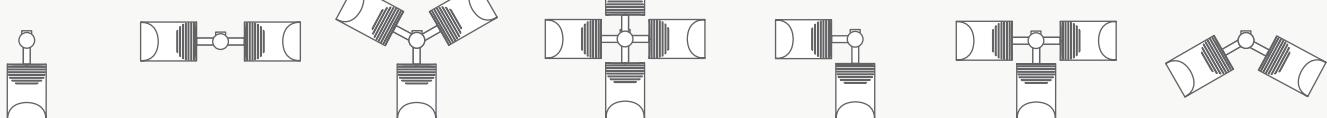
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1st Digit=Shape	2nd Digit=Shaft Type	3rd Digit=Material	4th Digit=Shaft Dim. at Base ¹	5th Digit=Wall Thickness	6th & 7th Digit=Mounting Height	8th Digit=Base Type	9th Digit=Finish	10th Digit=Fixture Mounting Type	11th Digit=Number & Location of Arms	12th Digit=Length of Arm	13th Digit=Accessories
R=Round	S=Straight	A=Aluminum	0=10"	A=.120"	12=12'	A=Aluminum	L=Dark	2=2" Tenon	1=Single	X=None	A=1/2" Hub ⁴
S=Square	T=Tapered	S=Steel	4=4"	D=.180"	15=15'	[Round 4-Bolt Pole]	F=Dark Bronze	[2 3/8" O.D. 2=2 @ 180°	2=2" @ 180°		B=3/4" Hub ⁴
			5=5"	L=.156"	20=20'	S=Steel Square	T=Graphite	3=3" Tenon	3=Triple ²		C=Convenience Outlet ⁵
			6=6"	M=.188"	25=25'	Base Plate	Metallic	[3 1/2" O.D. 4=4 @ 90°	5=2 @ 90°		E=GFI Convenience Outlet
			7=7"	T=.125"	30=30'	N=Aluminum	V=Grey	5" Long]	6=Triple ³		F=Vibration Pad ⁶
			8=8"	X=.250"	35=35'	[Round 3-Bolt Pole]	W=White	M=Talon	7=2 @ 120°		G=Ground Lug ⁷
			9=9" on Steel [6 3/4" on Aluminum]		39=39'	X=Custom	Drilling	X=None		H=Additional Handhole ⁸	
						W=Aluminum [Square Pole]	[For specify color]			J=Cable Support	
						Y=Black				V=Vibration Damper	
										L=Drilled for Bumper Glitter	

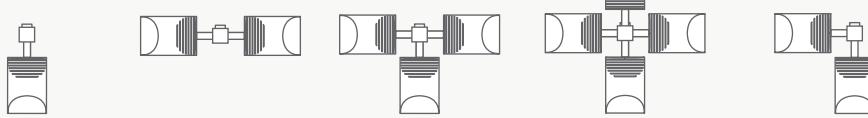
FIXTURE DRILLING [Note handhole position relative to drill locations]

"M1"	"M2"	"M3"	"M4"	"M5"	"M6"	"M7"
Arm Mount Single E.P.A.	Arm Mount 2 @ 180° E.P.A.	Arm Mount Triple ² E.P.A.	Arm Mount 4 @ 90° E.P.A.	Arm Mount 2 @ 90° E.P.A.	Arm Mount Triple ³ E.P.A.	Arm Mount 2 @ 120° E.P.A.
TLM	TLM	TLM	TLM	TLM	TLM	TLM
Recessed Door 1.22	Recessed Door 2.44	Recessed Door 3.23	Recessed Door 3.63	Recessed Door 2.44	Recessed Door 3.23	Recessed Door 2.44
Deep Door 1.45	Deep Door 2.90	Deep Door 3.92	Deep Door 4.43	Deep Door 2.90	Deep Door 3.92	Deep Door 2.90
TLL 2.51	TLL	TLL 5.02	TLL 6.85	TLL 7.77	TLL 5.02	TLL 5.02

Round Pole [Fixture Drilling]



Square Pole [Fixture Drilling]



NOTES: 1 All shaft sizes nominal. 2 Square poles are 3 @ 90°. Round poles are 3 @ 120°. 3 Round poles are 3 @ 90°. 4 Location is 3' above base—90° from handhole. 5 Outlet is located 4' above base and on same side of pole as handhole. Receptacle not included, provision only. 6 Aluminum poles only. 7 Maximum wire #8 AWG. 8 Location is 12" below pole top—90° from handhole.

CAUTION: Cooper Lighting poles have been designed to support only the luminaires and equipment originally intended. Miscellaneous items such as pennants, signs, and decorations may cause pole failure because of overloading. Addition of these items voids the Cooper Lighting warranty. Cooper Lighting will, however, supply information regarding total loading capacity on request. Cooper Lighting poles are guaranteed only when used in a pole/luminaire or floodlight combination. Any other application of poles, including application without a luminaire or floodlight, voids Cooper Lighting's warranty. This warranty specifically excludes failure as the result of a third party act or omission, misuse, unanticipated uses, fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the product.

FROM ANCHOR BOLTS TO LUMINAIRE AND EVERYTHING IN BETWEEN.

Cooper Lighting offers a comprehensive line of steel and aluminum poles, brackets and mounting accessories to complete your site lighting application. Visit www.mcgraw-edison.com to view McGraw-Edison's entire collection of mounting options.

STEEL POLES [Specification Features]

Fixture Mounting

Drilled or Tenon [Must specify].

Shaft

ASTM A500 grade "B" steel shaft. Shot blasted and painted with polyester powder coat.

Handhole

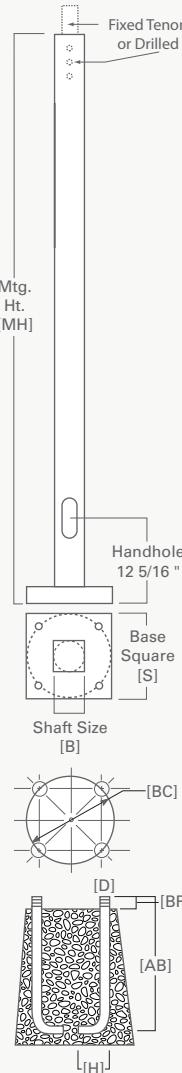
Handhole assembly 3" x 5" on RTS and 5" and 6" on RSS and SSS poles, 2" x 4" on 4" RSS and SSS poles

Base

ASTM grade steel base plate with ASTM A366 base cover.

Anchorage [4-Bolt]

Anchor bolt per ASTM A576 with [2] nuts, [2] flat washers, and [1] lock washer. Nuts, washers and threaded portion of bolt are hot dip galvanized 3" hook for 3/4" bolt. 4" hook for 1" bolt.



ROUND STRAIGHT STEEL [RSS]

Mtg. Height Number	Catalog Number	Wall Thickness [In.]	Base Square [In.]	Bolt			Anchor Bolt Dia. & Length [In.]	Net. Wt. [Lbs.]	EPA [Sq. Ft.] ⁴ At Pole Top			Max. Load [Lbs.]	
				Circle Dia. [In.]	Bolt Proj. [In.]	Shaft Size ³ [In.]			D x AB x H	70	80	90	
MH		S	BC	BP	B					70	80	90	100
15	RSS4A15S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	113	11.3	8.1	6.0	4.5	150
20	RSS4A20S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	144	6.4	4.2	2.7	1.8	200
20	RSS5M20S	.188	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	236	20.4	14.9	11.5	9.2	300
25	RSS5M25S	.188	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	288	13.7	9.6	7.3	5.7	300
30	RSS6M30S	.188	12 1/2	12.5	5	6	1 x 36 x 4	419	13.8	10.0	7.5	5.8	300

ROUND TAPERED STEEL [RTS]

Mtg. Height Number	Catalog Number	Wall Thickness [In.]	Base Square [In.]	Bolt			Anchor Bolt Dia. & Length [In.]	Net. Wt. [Lbs.]	EPA [Sq. Ft.] ⁴ At Pole Top			Max. Load [Lbs.]	
				Circle Dia. [In.]	Bolt Proj. [In.]	Shaft Size ³ [In.]			D x AB x H	70	80	90	
20	RTS6A20S	.120	10 1/2	11.0	4 1/2	6.3 x 3.5	3/4 x 25 x 3	173	29.8	22.7	17.8	14.3	400
25	RTS7A25S	.120	10 1/2	11.0	4 1/2	7.0 x 3.5	3/4 x 25 x 3	214	28.1	21.4	16.7	13.4	400
30	RTS8A30S	.120	12 1/2	12.5	5	7.7 x 3.5	1 x 36 x 4	290	24.0	18.2	14.2	11.3	400
35	RTS8A35S	.120	12 1/2	12.5	5	8.4 x 3.5	1 x 36 x 4	342	23.0	17.3	13.5	10.5	400
35	RTS9D35S	.180	12 1/2	12.5	5	8.4 x 3.5	1 x 36 x 4	482	38.9	29.6	23.2	18.3	400
39	RTS9A39S	.120	12 1/2	12.5	5	8.9 x 3.5	1 x 36 x 4	341	21.5	16.2	12.4	9.5	400
39	RTS9D39S	.180	12 1/2	12.5	5	8.9 x 3.5	1 x 36 x 4	536	38.2	29.0	22.5	17.7	400

SQUARE STRAIGHT STEEL [SSS]

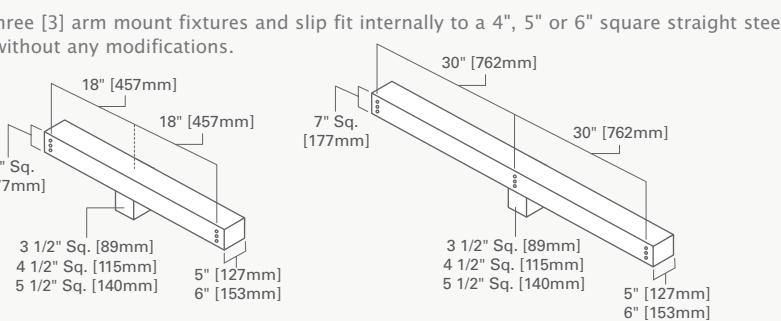
Mtg. Height Number	Catalog Number	Wall Thickness [In.]	Base Square [In.]	Bolt			Anchor Bolt Dia. & Length [In.]	Net. Wt. [Lbs.]	EPA [Sq. Ft.] ⁴ At Pole Top			Max. Load [Lbs.]	
				Circle Dia. [In.]	Bolt Proj. [In.]	Shaft Size ³ [In.]			D x AB x H	70	80	90	
15	SSS4A15S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	133	19.6	14.4	10.8	8.2	150
20	SSS4A20S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	152	12.9	9.1	6.5	4.6	200
20	SSS5A20S	.120	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	202	21.9	15.7	11.6	8.5	200
25	SSS4A25S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	208	8.7	5.6	3.6	2.1	200
25	SSS5A25S	.120	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	248	15.5	10.5	7.2	4.8	200
25	SSS5M25S	.188	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	308	28.1	20.0	14.5	10.6	300
25	SSS6A25S	.120	12 1/2	12.5	5	6	1 x 36 x 4	295	24.1	16.8	12.0	8.5	200
30	SSS5A30S	.120	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	293	8.2	4.6	2.1	--	300
30	SSS5M30S	.188	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	369	15.2	9.5	5.8	3.1	300
30	SSS6A30S	.120	12 1/2	12.5	5	6	1 x 36 x 4	347	14.0	8.7	5.0	2.5	300
30	SSS6M30S	.188	12 1/2	12.5	5	6	1 x 36 x 4	505	26.4	18.1	12.5	8.4	300

NOTES: 1 Catalog number does not include anchor bolts [BEFORE INSTALLING ANCHOR BOLTS MAKE SURE PROPER ANCHOR BOLT TEMPLATE IS OBTAINED FROM COOPER LIGHTING]. 2 Tenon size or machining for rectangular arms must be specified. handhole is located 180° from single arm. 3 Shaft size, base plate, anchor bolts and projections may vary slightly—all dimensions nominal. 4 EPA's based on shaft properties with wind normal to flat. EPA's calculated using base wind velocity as indicated plus 30% gust factor.

INTERNAL SQUARE SLIPFITTER BRACKET [ISBD]

Internal square slipfitter brackets designed to accept two [2] or three [3] arm mount fixtures and slip fit internally to a 4", 5" or 6" square straight steel pole. Assembly secured to square straight steel M4 drill pattern without any modifications.

Catalog Number	Pole Dimen.	Mounting Config.	Net Wt. E.P.A [Lbs.]
2 Arm Mountings			
ISBD-4-2L-M-BZ	4"	2 In-Line	1.98 50
ISBD-5-2L-M-BZ	5"	2 In-Line	1.98 52
ISBD-6-2L-M-BZ	6"	2 In-Line	1.98 70
3 Arm Mountings			
ISBD-4-3L-M-BZ	4"	3 In-Line	3.72 87
ISBD-5-3L-M-BZ	5"	3 In Line	3.72 89
ISBD-6-3L-M-BZ	6"	3 In-Line	3.72 95



WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE. COOPER LIGHTING'S POLE WARRANTY IS ALSO VOIDED IF THE LUMINAIRE IS NOT INSTALLED AT TIME OF POLE INSTALLATION. THIS WARRANTY SPECIFICALLY EXCLUDES FAILURE AS THE RESULT OF A THIRD PARTY ACT OR OMISSION, MISUSE, UNANTICIPATED USES, FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT.

ALUMINUM POLES + PHOTOMETRICS

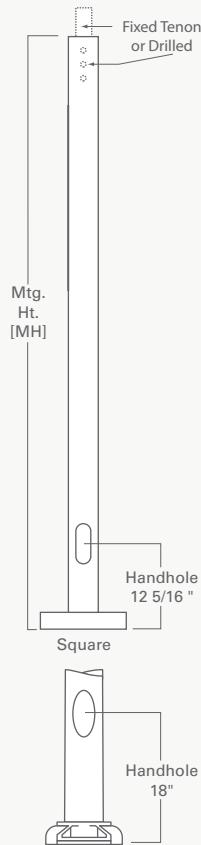
ALUMINUM POLES [Specification Features]

Fixture Mounting

Drilled or Tenon [Must specify].

Shaft

6005-T6 aluminum alloy with polished finish.



Handhole

Flush reinforced 2 3/8" x 4 1/2" for 4" shafts.
Handhole assembly with internal reinforcing frame. 3" X 5" for 6" shafts, 4" x 6" for 7", 8" and 10" shafts. Ground lug located opposite handhole opening drilled & tapped for 3/8" 16NC-2 grounding screw.

Base

356-T6 cast aluminum alloy shoe base with aluminum alloy knock-in bolt covers or base cover dependent on base type.

Anchorage

Anchor bolt per ASTM A576 with [1] nut, [1] flat washer, and [2] shims. Nuts, washers and threaded portion of bolt are hot dip galvanized.

ROUND STRAIGHT ALUMINUM [RSA]

Mtg. Height [Ft.]	Catalog Number ¹	Wall Thickness [In.]	Shaft Dia. [In.]	Bolt Proj. [In.]	Bolt Circle Dia. [In.]	Anchor Bolt Dia. & Length [In.]	Net. Wt. [Lbs.]	EPA [Sq. Ft.] ^{3,4} At Pole Top	Max. Load [Lbs.]
MH		B	BP	BC	D x AB x H	70 80 90 100			
15	RSA4M15N	.188	4	1 7/8	6 3/4	3/4 x 17 x 3	33	6.4 4.2 2.8 1.8	100
15	RSA5T15N	.125	5	1 7/8	7 3/4	3/4 x 17 x 3	40	11.5 8.2 6.2 4.9	100
18	RSA4M18N ²	.188	4	1 7/8	6 3/4	3/4 x 17 x 3	54	7.2 4.8 3.1 2.1	100
18	RSA5M18N	.188	5	1 7/8	7 3/4	3/4 x 17 x 3	66	13.0 9.2 7.0 5.5	150
20	RSA5M20N	.188	5	1 7/8	7 3/4	3/4 x 17 x 3	73	10.3 7.1 5.3 4.1	150

ROUND TAPERED ALUMINUM [RTA]

Mtg. Height [Ft.]	Catalog Number ¹	Wall Thickness [In.]	Shaft Dia. [In.]	Base Square Dia. [In.]	Bolt Proj. [In.]	Bolt Circle Dia. [In.]	Anchor Bolt Dia. & Length [In.]	Net. Wt. [Lbs.]	EPA [Sq. Ft.] ^{3,4} At Pole Top	Max. Load [Lbs.]
MH		B	BP	BC	D x AB x H	70 80 90 100				
12	RTA4T12N	.125	9 1/4	4 x 3	1 7/8	6 3/4	3/4 x 17 x 3	25	10.1 7.3 5.3 4.0	100
15	RTA4T15N	.125	9 1/4	4 x 3	1 7/8	6 3/4	3/4 x 17 x 3	30	7.0 4.8 3.3 2.3	100
15	RTA5T15N	.125	10 1/2	5 x 3	1 7/8	7 3/4	3/4 x 17 x 3	33	12.7 9.1 6.7 5.1	100
18	RTA5T18N	.125	10 1/2	5 x 3	1 7/8	7 3/4	3/4 x 17 x 3	39	8.8 6.0 4.3 3.1	100
18	RTA6L18A	.156	10 1/4	6 x 4	2 1/8	9 3/8	3/4 x 17 x 3	57	18.2 13.3 10.2 8.0	100
20	RTA5T20N	.125	9 1/4	5 x 3	1 7/8	8 1/2	3/4 x 17 x 3	43	7.0 4.6 3.1 2.1	100
20	RTA6L20A	.156	10 1/4	6 x 4	2 1/8	9 3/8	3/4 x 17 x 3	64	14.7 10.6 7.9 6.2	150
25	RTA6L25A ²	.156	10 1/4	6 x 4	2 1/8	9 3/8	3/4 x 17 x 3	81	8.8 5.9 4.1 3.0	150
25	RTA8L25A ²	.156	11 5/8	8 x 4 1/2	2 3/4	11 1/2	1 x 36 x 4	106	20.3 15.0 11.5 9.0	200
30	RTA7L30A ²	.156	10 5/8	7 x 4	2 3/4	10 1/2	1 x 36 x 4	108	9.0 5.9 4.1 3.0	150
30	RTA8L30A ²	.156	11 5/8	8 x 4 1/2	2 3/4	11 1/2	1 x 36 x 4	117	13.5 9.6 7.2 5.5	200
30	RTA0L30A ²	.156	14 1/2	10 x 6	2 7/8	14 1/2	1 x 36 x 4	152	25.8 19.3 14.8 11.5	250
35	RTA8L35A ²	.156	11 5/8	8 x 4 1/2	2 3/4	11 1/2	1 x 36 x 4	140	9.0 6.0 4.3 3.1	150
35	RTA0L35A ²	.156	14 1/2	10 x 6	2 7/8	14 1/2	1 x 36 x 4	180	19.0 14.0 10.5 8.0	200

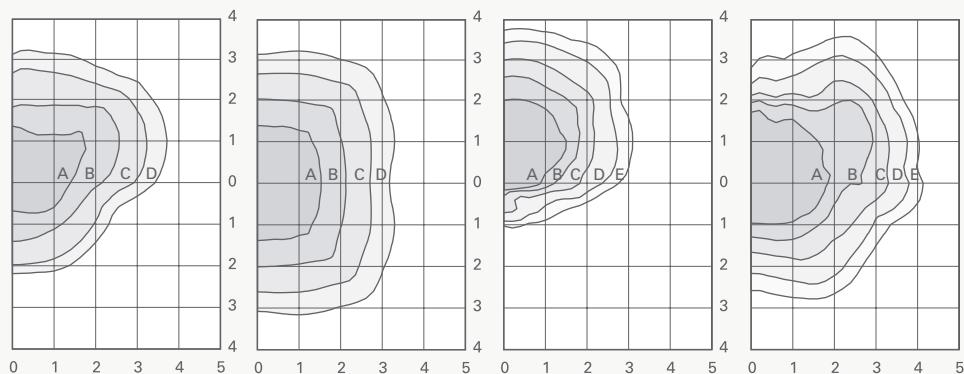
SQUARE STRAIGHT ALUMINUM [SSA]

Mtg. Height [Ft.]	Catalog Number ¹	Wall Thickness [In.]	Shaft Dia. [In.]	Bolt Proj. [In.]	Bolt Circle Dia. [In.]	Anchor Bolt Dia. & Length [In.]	Net. Wt. [Lbs.]	EPA [Sq. Ft.] ^{3,4} At Pole Top	Max. Load [Lbs.]
MH		B	BP	BC	D x AB x H	70 80 90 100			
12	SSA4T12W	.125	4	1 3/4	9	3/4 x 17 x 3	32	16.0 11.5 8.5 6.3	260
15	SSA4T15W	.125	4	1 3/4	9	3/4 x 17 x 3	39	9.1 6.2 4.2 2.8	200
15	SSA4M15W	.188	4	1 3/4	9	3/4 x 17 x 3	55	14.8 10.6 7.7 5.6	200
15	SSA5T15W	.125	5	2	11	3/4 x 17 x 3	52	16.0 11.3 8.1 5.8	260
18	SSA4T18W	.125	4	1 3/4	9	3/4 x 17 x 3	46	6.4 4.0 2.3 1.1	100
18	SSA4M18W	.188	4	1 3/4	9	3/4 x 17 x 3	66	11.0 7.4 5.0 3.3	150
18	SSA5T18W	.125	5	2	11	3/4 x 17 x 3	61	11.8 7.8 5.1 3.2	150
18	SSA5M18W	.188	5	2	11	3/4 x 17 x 3	85	19.2 13.5 9.6 6.8	260
20	SSA4M20W	.188	4	1 3/4	9	3/4 x 17 x 3	72	8.8 5.6 3.5 1.9	150
20	SSA5T20W	.125	5	2	11	3/4 x 17 x 3	66	9.5 5.9 3.5 1.7	100
20	SSA5M20W	.188	5	2	11	3/4 x 17 x 3	94	16.4 11.2 7.6 5.0	150
25	SSA5M25W	.188	5	2	11	3/4 x 17 x 3	115	10.2 6.0 3.2 1.1	100
25	SSA6M25W	.188	6	2	12 1/2	1 x 36 x 4	140	16.6 10.6 6.5 3.5	260
30	SSA6X30W	.250	6	2	12 1/2	1 x 36 x 4	215	14.8 9.0 5.0 2.1	260
30	SSA9X30W	.250	6 3/4	2 3/4	14 1/4	1 x 36 x 4	237	21.1 13.5 8.2 4.5	260

NOTES: 1 Catalog number does not include anchor bolts. 2 Factory installed vibration dampeners. 3 Where higher EPA/wind speed capability or mounting height is required, other shaft dimensions and/or wall thickness are available. Consult Cooper Lighting representative for pricing and lead times. The above E.P.A. capacities are based on loading from [1994] and pole drag coefficients from [2001] American Association of State Highway and Transportation Officials Specification. 4 EPAs based on shaft properties with wind normal to flat. EPAs calculated using base wind velocity as indicated plus 30% gust factor.

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE. COOPER LIGHTING'S POLE WARRANTY IS ALSO VOIDED IF THE LUMINAIRE IS NOT INSTALLED AT TIME OF POLE INSTALLATION. THIS WARRANTY SPECIFICALLY EXCLUDES FAILURE AS THE RESULT OF A THIRD PARTY ACT OR OMISSION, MISUSE, UNANTICIPATED USES, FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT.

PHOTOMETRICS [Complete IES files available at www.cooperlighting.com]

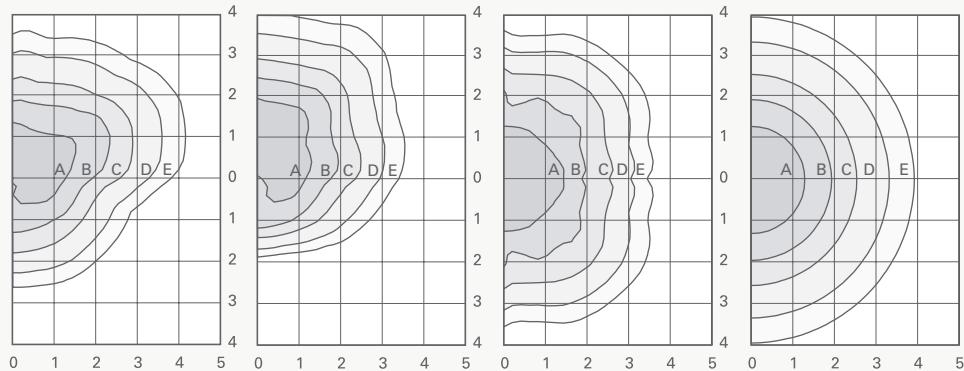


TLM-175-MH-3V-FG
175-Watt MH
14,000-Lumen Clear Lamp
Type III Vertical
Flat Glass

TLM-175-MH-AS-FG
175-Watt MH
14,000-Lumen Clear Lamp
Area Square
Flat Glass

TLM-250-MH-SL-FG
250-Watt MH
20,500-Lumen Clear Lamp
Spill Light Eliminator
Flat Glass

TLM-400-MH-3S-FG
400-Watt MH
36,000-Lumen Clear Lamp
Type III Segmented
Flat Glass

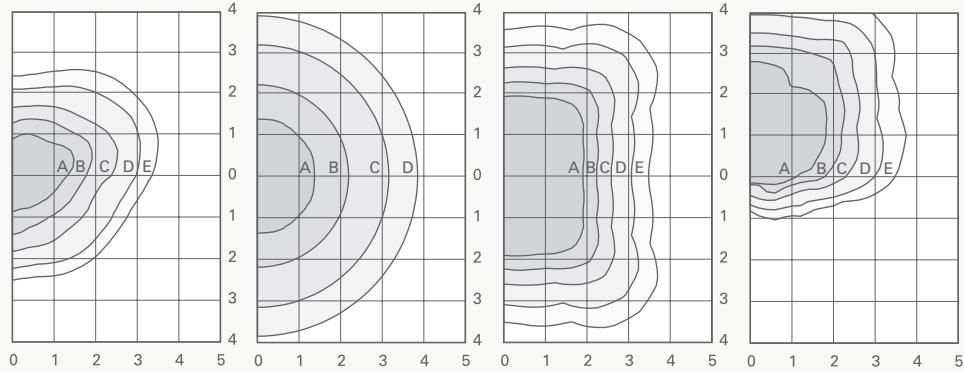


TLM-400-MH-3V-SG
400-Watt MH
36,000-Lumen Clear Lamp
Type III Vertical
Sag Glass

TLM-400-MH-4V-SG
400-Watt MH
36,000-Lumen Clear Lamp
Type IV Automotive Perimeter
Sag Glass

TLM-400-MH-5S-FG
400-Watt MH
36,000-Lumen Clear Lamp
Type V Segmented
Flat Glass

TLM-400-MH-AR-SG
400-Watt MH
36,000-Lumen Clear Lamp
Area Round
Sag Glass

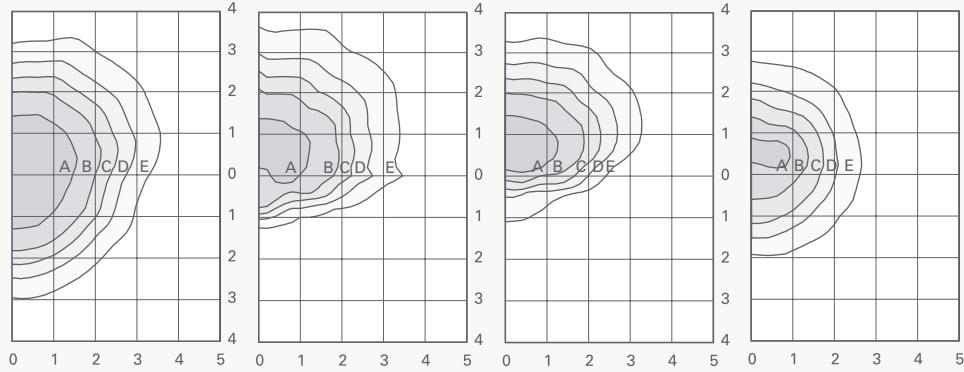


TLL-400-MH-3F-FG
400-Watt MH
36,000-Lumen Clear Lamp
Type III Formed
Flat Glass

TLL-400-MH-AR-SG
400-Watt MH
36,000-Lumen Clear Lamp
Area Round
Sag Glass

TLL-1000-MH-AS-FG
1000-Watt MH
110,000-Lumen Clear Lamp
Area Square
Flat Glass

TLL-1000-MH-SL-FG
1000-Watt MH
110,000-Lumen Clear Lamp
Spill Light Eliminator
Flat Glass



TLL-1000-MH-3V-FG
1000-Watt MH
110,000-Lumen Clear Lamp
Type III Vertical
Flat Glass

TLL-1000-MH-4V-FG-HS
1000-Watt MH
110,000-Lumen Clear Lamp
Type IV Automotive Perimeter
Flat Glass—House-Side Shield

TLL-1000-MH-3V-FG-EHS
1000-Watt MH
110,000-Lumen Clear Lamp
Type III Vertical
Flat Glass—External
House-Side Shield

TLL-1000-MH-AF-FG
1000-Watt MH
110,000-Lumen Clear Lamp
Automotive Front Row
Flat Glass

FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
175W [3V/AS]					
15'	1.70	0.85	0.34	0.17	--
20'	1.00	0.50	0.20	0.10	--
25'	0.64	0.32	0.13	0.06	--
250W [SL]/400W [3S]					
20'	2.00	1.00	0.50	0.20	0.10
25'	1.28	0.64	0.32	0.13	0.06
30'	0.88	0.44	0.22	0.09	0.04

FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
400W [3V/4V/5S/AR]					
20'	3.00	1.50	0.75	0.30	0.15
25'	2.00	1.00	0.50	0.20	0.10
30'	1.38	0.69	0.34	0.13	0.06

FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
400W [3F]/1000W [AS/SL]					
25'	2.88	1.44	0.72	0.29	0.14
30'	2.00	1.00	0.50	0.20	0.10
35'	1.46	0.73	0.37	0.15	0.07
400W [AR]					
25'	1.44	0.72	0.29	0.14	--
30'	1.00	0.50	0.20	0.10	--
35'	0.73	0.37	0.15	0.07	--

FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
1000W [3V/4V-HS/3V-EHS]					
25'	7.20	2.88	1.44	0.72	0.29
30'	5.00	2.00	1.00	0.50	0.20
35'	3.65	1.46	0.73	0.37	0.15
1000W [AF]					
25'	30.00	10.00	3.00	1.00	0.20
27'	25.50	8.50	2.55	0.85	0.17
30'	20.70	6.90	2.07	0.69	0.14

TLM TALON MEDIUM

ORDERING INFORMATION

SAMPLE NUMBER: TLM-400-MH-MT-3F-FG-BK-HS

PRODUCT FAMILY ¹	LAMP WATTAGE ²	LAMP TYPE	VOLTAGE ⁵	DISTRIBUTION	LENS TYPE	COLOR ⁹	OPTIONS + ACCESSORIES [See Below]
TLM=Talon Site Medium	70=70W 100=100W 150=150W 175=175W 250=250W 320=320W ^{3,4} 350=350W ^{3,4} 400=400W ⁴	MH=Metal Halide MP=Pulse Start Metal Halide HPS=High Pressure Sodium	120=120V 208=208V 240=240V 277=277V 347=347V 480=480V DT=Dual-Tap ⁶ MT=Multi-Tap ⁶ TT=Triple-Tap ⁶ 5T=5-Tap ^{6,7}	Horizontal Lamp 2F=Type II Formed 2S=Type II Segmented 3F=Type III Formed 3S=Type III Segmented 4F=Type IV Formed 4S=Type IV Segmented 5F=Type V Formed 5S=Type V Segmented SL=Spill Light Eliminator AF=Automotive Front Row Vertical Lamp 3V=Type III Vertical ⁸ 4V=Type IV Automotive Perimeter ⁸ AR=Area Round ⁸ AS=Area Square ⁸	FG=Flat Glass SG=Sag Glass	[add as suffix/ must specify] BK=Black AP=Grey BZ=Bronze WH=White DP=Dark Platinum GM=Graphite Metallic	

OPTIONS + ACCESSORIES [Must be listed in the order shown and separated by a dash]

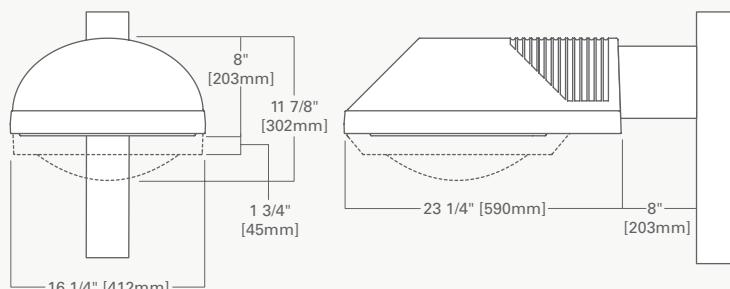
OPTIONS [add as suffix]

F=Single Fuse [120, 277 or 347V]¹⁰
 FF=Double Fuse [208, 240 or 480V]¹⁰
 Q=Quartz Restrike¹¹
 EM=Quartz Restrike w/Delay [Also Strikes at Cold Start]¹¹
 EM/SC=Quartz Emergency Separate Circuit¹¹
 PT=Electrical Power Tray
 P=Button Type Photocontrol [120, 208, 240 or 277V]¹⁰
 R=NEMA Twistlock Photocontrol Receptacle
 HS=Internal House-side Shield¹²
 VS=Polycarbonate Vandal Shield
 DD=Deep Door
 WM=Wall Mount with 8" Arm
 DM=Direct Mount for Round or Square Pole
 DW=Direct Wall Mount
 MS=External Mast Arm Adapter
 HL=Hi/Low Dimming¹³
 L=Lamp Included

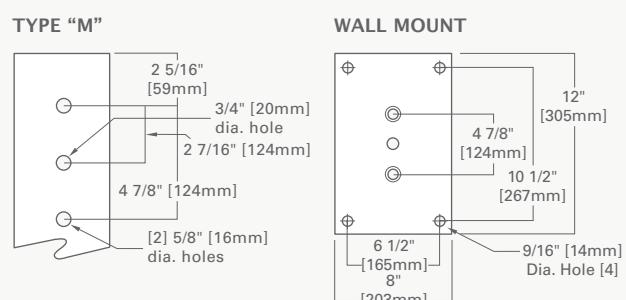
ACCESSORIES [order separately/replace XX with color designation]

OA/RA1016=NEMA Photocontrol [105-285V]
 OA/RA1027=NEMA Photocontrol [480V]
 OA/RA1201=NEMA Photocontrol [347V]
 OA/RA1013=Shorting Cap
 MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon
 MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon
 MA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1049-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1213-XX=External House-side Shield Kit [EPA=0.38]

DIMENSIONS



DRILLING PATTERNS



CERTIFICATIONS

IP65 Rated	CSA Listed
25°C Ambient Temperature	ISO 9001
U.L. 1598 Listed	FCO [Full Cutoff] Flat Glass Only

WATTAGE TABLE

Lamp Type	Wattage
Metal Halide	175, 250, 400W
High Pressure Sodium	70, 100, 150, 250, 400W
Pulse Start Metal Halide	70, 100, 150, 250, 320, 350, 400W

EPA

Effective Projected Area
Recessed Door w/o Arm: 0.79
Deep Door w/o Arm: 1.02
8" Arm: 0.43

STANDARD COLORS



NOTES: 1 8" arm and round pole adapter included with fixture. 2 Standard with mogul-base socket for HPS and 175-400W MH. Standard with medium-base socket for 150W MH and below. 3 320/350W Pulse Start Metal Halide lamps only. 4 Requires reduced envelope lamp. 5 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 6 Dual-Tap is 120/277V wired 277V. Multi-Tap is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V. 5-Tap is 120/208/240/277/480V wired 480V. 7 Available for 250-400W only. 8 Vertical lamp optics ship standard with deep door. 250-400W vertically lamped optics not available with flat glass. 9 Custom and RAL color matching available upon request. Consult Cooper Lighting Representative for further information. 10 Must specify voltage. 11 Quartz options not available with SL and AF optics. 12 House-side shield not available on 5S, 5F, AS, AR, and SL optics. 13 Requires vertical lamp orientation. Provides 24V low voltage leads used in dimming controls. 14 Specifications and dimensions subject to change without notice.

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SHIPPING DATA

Approximate Net Weight
Recessed Door 47 lbs. [21.79 kgs.]
Deep Door 52 lbs. [23.63 kgs.]

TLL TALON LARGE

ORDERING INFORMATION

SAMPLE NUMBER: TLL-1000-MH-5T-SL-FG-BK

PRODUCT FAMILY ¹	LAMP WATTAGE	LAMP TYPE	VOLTAGE ⁴	DISTRIBUTION	LENS TYPE	COLOR ⁷	OPTIONS + ACCESSORIES [See Below]
TLL=Talon	250=250W	MH=Metal Halide	120=120V	Horizontal Lamp	FG=Flat Glass	[add as suffix/ must specify]	
Site Large	320=320W ²	MP=Pulse Start	208=208V	2F=Type II Formed	SG=Sag Glass	BK=Black	
	350=350W ²	Metal Halide	240=240V	2S=Type II Segmented ^{3,6}		AP=Grey	
	400=400W	HPS=High Pressure	277=277V	3F=Type III Formed		BZ=Bronze	
	750=750W	Sodium	347=347V	3S=Type III Segmented ^{3,6}		WH=White	
	875=875W ²		480=480V	4F=Type IV Formed		DP=Dark Platinum	
	1000=1000W ³		DT=Dual-Tap ⁵	4S=Type IV Segmented ^{3,6}		GM=Graphite Metallic	
			MT=Multi-Tap ⁵	5F=Type V Formed			
			TT=Triple-Tap ⁵	5S=Type V Segmented ^{3,6}			
			ST=5-Tap ⁵	SL=Spill Light Eliminator			
				Vertical Lamp			
				3V=Type III Vertical			
				4V=Type IV Automotive Perimeter			
				AR=Area Round			
				AS=Area Square			
				AF=Automotive Front Row			

OPTIONS + ACCESSORIES [Must be listed in the order shown and separated by a dash]

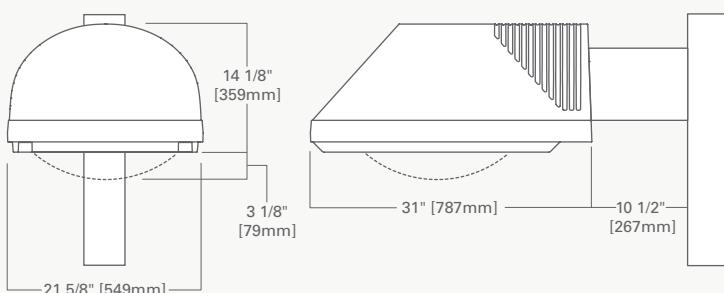
OPTIONS [add as suffix]

F=Single Fuse [120, 277 or 347V]⁸
 FF=Double Fuse [208, 240 or 480V]⁸
 Q=Quartz Restrike⁹
 EM=Quartz Restrike w/Delay [Also Strikes at Cold Start]⁹
 EM/SC=Quartz Emergency Separate Circuit⁹
 R=NEMA Twistlock Photocontrol Receptacle
 HS=Internal House-side Shield¹⁰
 WM=Wall Mount with 10 1/2" Arm
 DM=Direct Mount for Round or Square Pole
 DW=Direct Wall Mount
 HL=Hi/Low Dimming¹¹
 L=Lamp Included

ACCESSORIES [order separately/replace XX with color designation]

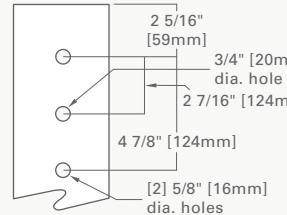
OA/RA1016=NEMA Photocontrol [105-285V]
 OA/RA1027=NEMA Photocontrol [480V]
 OA/RA1201=NEMA Photocontrol [347V]
 OA/RA1013=Shorting Cap
 MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon
 MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
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 MA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon
 MA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1049-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1214-XX=External House-side Shield Kit [EPA=0.94]

DIMENSIONS

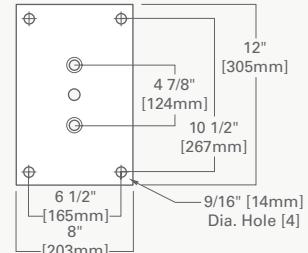


DRILLING PATTERNS

TYPE "M"



WALL MOUNT



CERTIFICATIONS

IP65 Rated	CSA Listed
25°C Ambient Temperature	ISO 9001
U.L. 1598 Listed	FCO [Full Cutoff] Flat Glass Only

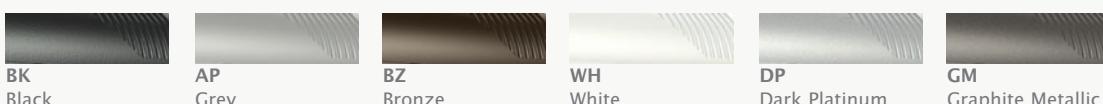
WATTAGE TABLE

Lamp Type	Wattage
Metal Halide	250, 400, 1000W
High Pressure Sodium	250, 400, 750, 1000W
Pulse Start Metal Halide	250, 320, 350, 400, 750, 875, 1000W

EPA

Effective Projected Area	
Without Arm:	1.82
10 1/2" Arm:	0.6

STANDARD COLORS



NOTES: 1 10 1/2" arm and round pole adapter included with fixture. 2 320/350/875W Pulse Start Metal Halide lamps only. 3 Requires reduced envelope lamp. 4 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 5 Dual-Tap is 120/277V wired 277V. Multi-Tap is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V. 6 Maximum wattage on segmented optical distributions are 400W. 7 Custom and RAL color matching available upon request. Consult Cooper Lighting Representative for further information. 8 Must specify voltage. 9 Quartz options not available with SL and AF optics. 10 House-side shield not available on SS, 5F, AS, AR, and SL optics. 11 Requires vertical lamp orientation. Provides 24V low voltage leads used in dimming controls. 12 Specifications and dimensions subject to change without notice.

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