STREETWORKS

Decorative
Area
Roadway
Floodlighting
Pathway
Poles

Outdoor Lighting

Product Catalog

COOPER Lighting

OUTDOOR LIGHTING AND THE ENVIRONMENT

Effective outdoor lighting solutions require designs that consider the optimum combination of performance and architecturally relevant aesthetics while remaining sensitive to the growing environmental demands of light control.

As part of the environment, the luminaires' appearance in the daytime is just as critical as how it performs at night. Everyone involved in the project demands equal satisfaction without compromise. This presents a challenge to lighting manufacturers; how to provide architecturally designed products for all applications, while maintaining the performance and maintenance features that are required.

ONE NAME...

STREETWORKS by Cooper Lighting is dedicated to bringing products to the market that offer the solutions to today's fast changing demands. From decorative, roadway and security lighting to commercial areas and sports lighting, STREETWORKS can provide comprehensive solutions for the toughest lighting applications.

STREETSCAPES

Lighting systems can say much about the aesthetics of an environment, often providing that "signature" look for downtown areas. Designing an effective streetscape demands selecting products that not only blend with the architecture, but are also in scale with their surroundings. The taller buildings and wider roads of downtown areas can often overwhelm smaller products. This environment requires poles and fixtures with higher mounting heights. In contrast, historic areas or waterfronts will use more pedestrian-scale products to create an inviting environment.

Whether a modern downtown area, historic district, waterfront or city park STREETWORKS products combine architecture with performance to give any area a signature daytime appearance while providing effective nighttime illumination.

STREETWORKS...YOUR PROVIDER OF COMPLETE OUTDOOR LIGHTING SOLUTIONS!

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EPIC COLLECTION
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EPIC COLLECTION
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> **ARC-C** GENERATION SERIES
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> **ACN** GENERATION SERIES
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> **CLB-C** GENERATION SERIES
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> **ANE** ACORN
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> **ANG** MANCHESTER
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> **MPB** BRECKENRIDGE
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PRODUCT SELECTOR

AREA
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> **TMU/TLU** TALON
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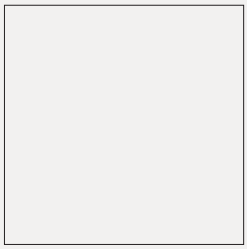

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> **ANS/ANM** ICON
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> **GR** GALLERIA ROUND
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> **OVG** LOW PROFILE GLASS
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PRODUCT SELECTOR

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> **LBS/LBR** LOUVERED BOLLARD
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POLES [STEEL + ALUMINUM]
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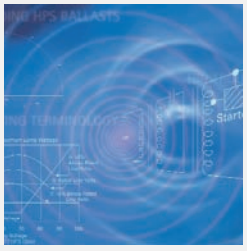

TECHNICAL
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PRODUCT MATRIX

ORDERING INFORMATION NUMBERING SYSTEM

This matrix merely communicates common options across multiple fixture platforms. This matrix does not imply that all listed selections can be combined to make a configurable product. See specific product pages for further details on compatibility.

TMU

1st, 2nd, & 3rd Digits
PRODUCT FAMILY

DECORATIVE
ACN
ACN-C
ACS
ANE
ANG
ARC
ARC-C
ARS
CBS
CEL
CEM
CLB
CLB-C
LXD
LXF
LXT
MEL
MEM
MPB
MPN
MPW
PMM
UTD
UTR
WST

AREA
ADM
ADS
AFS
ANS
ANM
ATM
ATS
AVM
AVS
C
CML
ESM
ESS
GM
GL
GR
GS
MFT
TLU
TMU
TRU
Z

ROADWAY
HMC
HMX
ORL
OVD
OVF
OVG
OVH
OVL
OVX
OVY
OVZ
RMA
RMC
TF
VAN

FLOODLIGHTING
AS
CFB
EGL
GPF
MSF
MMF

PATHWAY
LBS
LBR
SBS
SBR
WPK

40

4th, & 5th Digits
LAMP WATTAGE

50=50W
70=70W
10=100W
15=150W
17=175W
20=200W
25=250W
31=310W
32=320W
35=350W
40=400W
45=450W
75=750W
95=950W
91=1000W
99=1500W
24=250/400W
42=400/250W

M

6th Digit
LAMP TYPE

I=Incandescent
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium
R=Super Metal Halide

W

7th Digit
BALLAST TYPE

C=CWI
H=Reac./HPF
K=10KV CWA
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA
E=Electronic
X=None

PRODUCT MATRIX

W

8th Digit
VOLTAGE

2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
5T=5-Tap
D=240/120/208/277V wired 240V
F=120/240V wired 120V
G=240/120V wired 240V
K=120/277V wired 120V
L=277/120V wired 277V
H=240/480V wired 240V
J=480/240V wired 480V
W=120/208/240/277V wired 120V
T=208/120/240/277V wired 208V
V=240/120/208/277V wired 240V
N=277/120/208/240V wired 277V
P=240V with PCR wired 120V
Q=240/120V wired 240V with PCR wired 120V
R=480V with PCR wired 240V

3F

9th & 10th Digits
OPTICS

DECORATIVE

2=Type II
3=Type III
4=Type IV
5=Type V
5R=Type V Glass (Epic Only)
C=Cutoff
MA=Milk White Acrylic (Epic Only)

AREA

1F=Type I Formed
2F=Type II Formed
3F=Type III Formed
4F=Type IV Formed
5F=Type V Formed
2S=Type II Segmented
3S=Type III Segmented
4S=Type IV Segmented
5S=Type V Segmented
AR=Area Round
AS=Area Square
FT=Forward Throw
RW=Rectangular Wide
SL=Spill Light Eliminator
V=Vertical

ROADWAY

1=Type I
2=Type II
3=Type III
4=Type IV
5=Type V
6=Type VI
7=Type II / 4-Way

FLOODLIGHT + HIGH MAST

1=Type I Horizontal
2=Type II Horizontal
3=Type III Horizontal
4=Type IV Horizontal
5=Type V Horizontal
6=Type VI Horizontal
7=Type VII Horizontal
C=Flat Glass
D=Convex Glass
N=Open Unit / No Lens
M=Medium Distribution
N=Narrow Distribution
W=Wide Distribution

4

11th thru 15th Digits
OPTIONS

MUST BE ORDERED IN ALPHANUMERIC ORDER

(SEE PRODUCT PAGES)

DARK SKY SOLUTIONS

DARK SKY COMPLIANT FCO Full Cutoff

WHERE HAVE ALL THE STARS GONE?

As our communities continue to grow and expand, the night sky view is deteriorating. Under ideal conditions you might see 2,500 stars plus the Milky Way. In a typical suburb just 200-300 stars are visible. In a large city only a few of the brightest stars can be seen.

DEDICATED TO PRESERVING THE NIGHT SKY

Thanks to the leadership of organizations like international Dark Sky Association, the IESNA, NEMA and others, there is a growing understanding and recognition that we must all work together to find solutions that preserve and protect the night sky.

BRINGING SOLUTIONS TO THE MARKETPLACE

Streetworks is dedicated to bringing effective dark sky solutions to the market place. We offer a wide range of products that offer cutoff and full cutoff distributions to meet the strictest of applications.

The Streetworks team can provide recommendations and lighting application assistance that provide economical solutions while minimizing sky glow and light trespass. Our award winning "SOURCE" training facility is available to provide the most comprehensive training on exterior lighting applications and products.

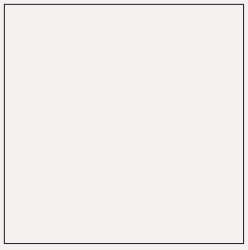
DESIGNING FOR EFFECTIVE OUTDOOR LIGHTING

The answer to Sky Glow is not as simple as just using full cutoff luminaires. While full cutoff luminaires prevent direct uplight from the luminaire, their distributions may require closer spacing and result in more reflected light. Effective outdoor lighting should consider all of the following:

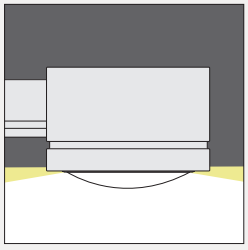
- First examine if lighting is even necessary. Many times lighting is added without consideration of the task or what is accomplished by having lighting in the first place.
- Once you have decided to light a space, define the appropriate light levels based on IESNA recommended guidelines. Excessive lighting wastes energy while increasing sky glow, light trespass and glare.
- If possible, consider using controls that allow the luminaires to be turned off or the light levels reduced during inactive periods.
- Place luminaires and poles so that light and glare are contained within property lines.
- When using floods, integrate shielding options such as top visors to minimize the light above the horizon. Illuminate areas from the front of the property toward the task to limit excess spill light and direct glare.
- Evaluate pole height and lamp wattages to find the correct combination that ensures proper uniformity and light levels while minimizing reflected light and light trespass.
- If minimizing light trespass is critical, light from the property perimeter toward the task. Use full cutoff luminaires with forward throw reflectors and house side shields that control spill light such as the Streetworks™ SL (Spill Light Eliminator) optic. Available in the: **Epic, Mesa, Talon, Vision Site, Ascent, Icon, Slide, Flite, Tribute, Galleria Square, CML, and X-Form.**

RELEVANT WEBSITES:

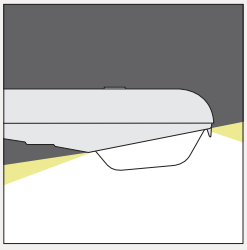
- **International Dark-Sky Association Home Page:** http://www.darksky.org/ida/index.html
- **Lighting Legislation by States and Municipalities:** http://www.darksky.org/ida/ordsregs/usamunis.htm
- **Google Web Directory Light Pollution Links:** http://directory.google.com/top/society/issues/environment/light_pollution



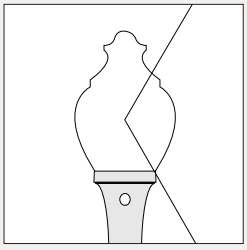
FULL CUTOFF: @ 90 < 0% Cd @ 80 < 10% Cd



CUTOFF: @ 90 < 2 1/2% Cd @ 80 < 10% Cd



SEMI-CUTOFF: @ 90 < 5% Cd @ 80 < 20% Cd



NON-CUTOFF: [NO LIMIT]

SPILL LIGHT CONTROL

SL SPILL LIGHT ELIMINATOR

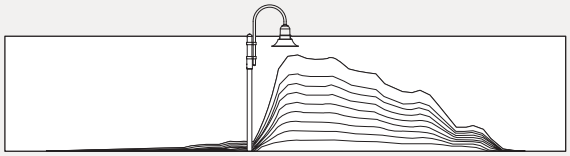
EMERGING TRENDS

Light control and environmental preservation require innovative design solutions. The solution for spill light concerns and perimeter lighting applications is the SL Spill Light Eliminator optic.

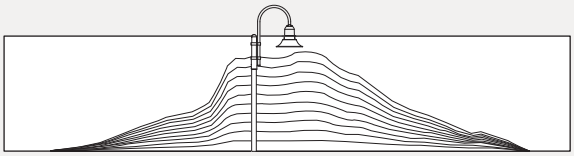
SPILL LIGHT ELIMINATOR [SL]

Allowing less than 4% of the total output to fall behind the pole with no sacrifice in forward reaching performance, the SL is the benchmark for effective spill control. Used along site perimeters and property lines, the SL keeps the light inside and the darkness out.

SL REFLECTOR—ILLUMINANCE PLOT



TYPICAL FORWARD THROW OPTIC—ILLUMINANCE PLOT



SL is also available on the following products

> **EPIC COLLECTION**
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> **PMM** MESA
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> **TMU/TLU** TALON
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> **AVS/AVM** VISION
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> **ATS/ATM** ASCENT
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> **ADS/ADM** SLIDE
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> **AFS** FLITE
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> **TRU** TRIBUTE
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> **GS/GM/GL**
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> **ESS/ESM** X-FORM
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> **C** CIRRUS
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> **Z** CREDENZA
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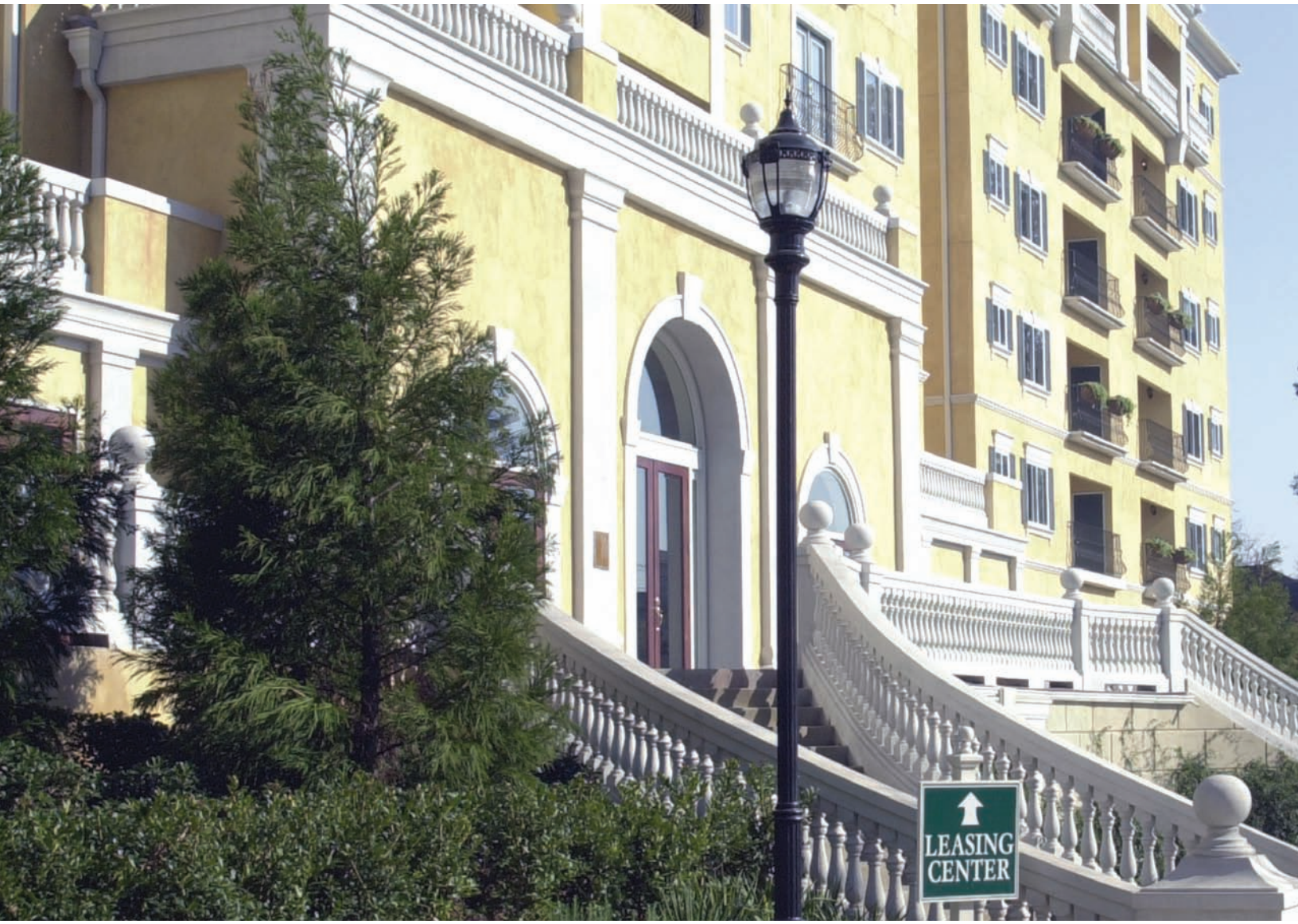
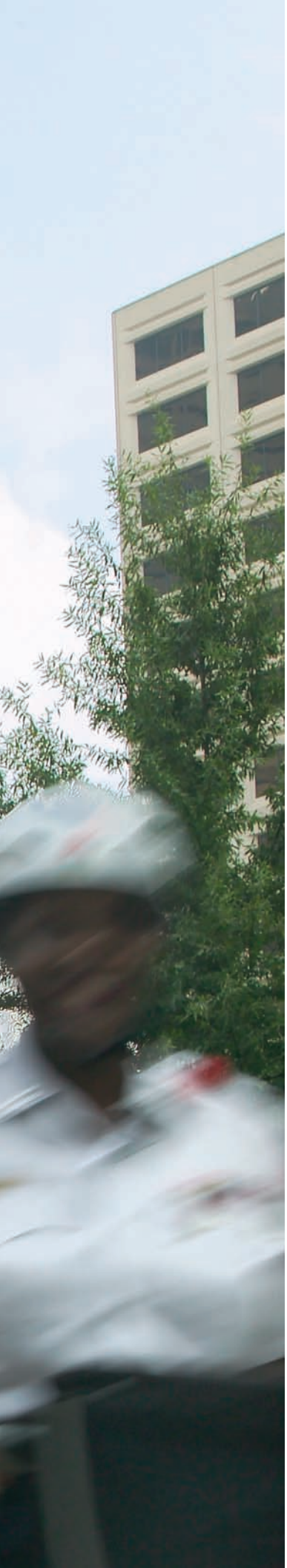
DECORATIVE



PRODUCTS

EPIC COLLECTION

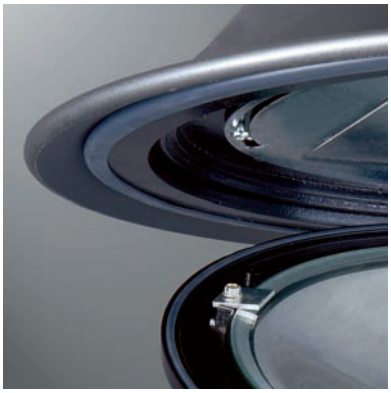


DESIGN
Modular design allows a multitude of forms.

EPIC COLLECTION

The EPIC Collection delivers custom luminaire flexibility with the quality and availability expectations of standard specification grade product. Offered in two (2) housing sizes, and hundreds of unique combinations, the EPIC Collection can be dressed to suit any application.

Designed not just to beautify, but to sustain inherent rigors of an outdoor environment, the EPIC Collection luminaires utilize IP66 rated silicone gasketing strategies and a 5 stage premium polyester powder coat paint process to insure protection from performance degrading contaminants. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class optical solutions to the decorative luminaire marketplace. The EPIC Collection offers targeted solutions for full cutoff compliance, spill light control and path of egress illumination while integrating the latest lamp technologies into visually comfortable lighting solutions.



GASKET
IP66 gasketing for a superior seal.

OPTICS
SL optics provide leading edge light control.

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass and solid mid sections configurations only

MEM/MEL MODERN EPIC

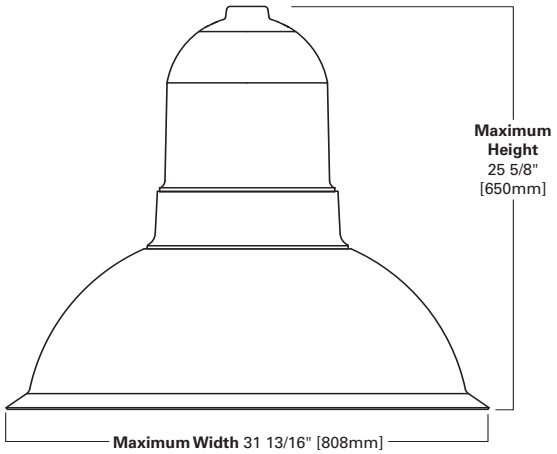
50-400W

DECORATIVE AREA COLLECTION

STREETWORKS IP65 RATED

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass and solid mid sections configurations only



NOTE: See MEM/MEL configurations below for more detailed information.

SPECIFICATION FEATURES

TOP
Cast aluminum housing maintains sidewall thickness and attaches to mounting arm hub with four (4) stainless steel fasteners.

MIDSECTION
Milky white acrylic lens utilizes continuous silicone gaskets to seal lens to top casting and shade. Optional colored luminous rings available.

SHADES
Heavy-gauge precision spun aluminum shades offer superior surface finish and consistency in form.

DOORFRAME ASSEMBLY
Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Standard with flat glass.

OPTICAL SYSTEMS
Choice of five (5) high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet and four (4) formed reflectors.

ELECTRICAL TRAY
Ballast and related electrical componentry are mounted to a reinforced one-piece tray with integral handle. Quick disconnect wiring plugs allow easy tray removal during routine maintenance.

FINISH
Housing 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, graphite metallic, and hartford green. RAL and custom color matches available. Consult your Streetworks Representative.

EPA [Effective Projected Area]:
MEM: Flat Lens .94 | Sag Lens 1.04
MEL: Flat Lens 1.55 | Sag Lens 1.75

SHIPPING DATA [Approximate Net Weight]:
MEM: 37 lbs. [17 kgs.]
MEL: 50 lbs. [23 kgs.]

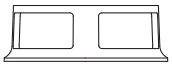
CONFIGURATIONS

HOUSING

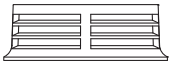
Modern
[MEM] 9.3" H x 8.8" W
[MEL] 12.8" H x 12.2" W

MID SECTION

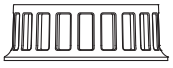
Solid
[MEM] 3.4" H x 9.9" W
[MEL] 3.8" H x 13.4" W



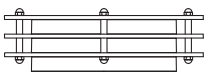
Window
[MEM] 3.4" H x 9.9" W
[MEL] 3.8" H x 13.4" W



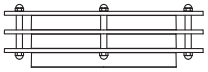
Louvered
[MEM] 3.4" H x 9.9" W
[MEL] 3.8" H x 13.4" W



Slot
[MEM] 3.4" H x 9.9" W
[MEL] 3.8" H x 13.4" W

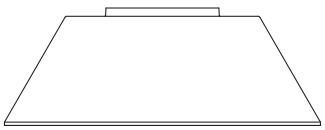


Solid Rings
[MEM] 3.4" H x 12" W
[MEL] 3.8" H x 15.8" W

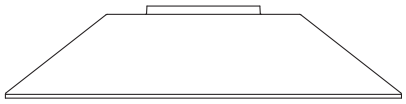


Luminous Rings
[MEM] 3.4" H x 12" W
[MEL] 3.8" H x 15.8" W

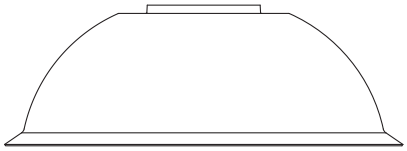
SHADE



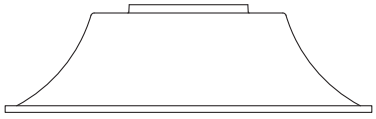
Straight Narrow
[MEM] 6.6" H x 19.1" W



Straight Wide
[MEM] 5.1" H x 23.9" W
[MEL] 6.6" H x 30" W

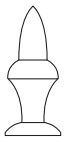


Bell
[MEM] 8" H x 24" W
[MEL] 9" H x 30" W

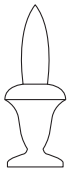


Flute
[MEM] 6" H x 22.5" W
[MEL] 8.4" H x 31.8" W

FINIALS



Architectural



Modern

Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: MEM17MWW2SXSNBK

PRODUCT FAMILY [1]	LAMP WATTAGE [2]	LAMP TYPE [5]	BALLAST TYPE [5]	VOLTAGE [5]	DISTRIBUTION	MID SECTION TYPE	SHADE TYPE	COLOR (add as suffix/ must specify) [9]	OPTIONS + ACCESSORIES
MEM=Modern Epic Medium	**50**=50W	**M**=Metal Halide	**C**=CWI	**2**=120V	**MA**=Milk White Acrylic Jar [6]	**X**=Solid (Standard)	**SN**=Straight Narrow	**AP**=Grey	(See Below)
MEL=Modern Epic Large	**70**=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**2S**=Type II Segmented	**1**=Window	**SW**=Straight Wide	**BK**=Black	
	10=100W	**S**=High Pressure Sodium	**K**=10KV CWA	**4**=240V	**3R**=Type III Glass Refractor [7]	**2**=Louvered	**BL**=Bell	**BZ**=Bronze	
	15=150W		**N**=Hi. Reac./NPF	**7**=277V	**3S**=Type III Segmented	**3**=Slot	**FL**=Flute	**DP**=Dark Platinum	
	17=175W		**P**=Hi. Reac./HPF	**8**=480V	**4S**=Type IV Segmented	**4**=Solid Rings		**GM**=Graphite Metallic	
	25=250W		**R**=Reac./NPF	**9**=347V	**5R**=Type V Glass Refractor [7]	**5**=Luminous Rings		**GN**=Hartford Green	
	32=320W [3]		**W**=CWA	**K**=120/277V wired 120V	**5S**=Type V Segmented	**Optional Mid Section Type**		**WH**=White	
	35=350W [3]			**L**=277/120V wired 277V	**SL**=Spill Light Eliminator [8]	**6**=Luminous Rings	Red		
	40=400W [4]			**N**=Multi-Tap wired 277V	**2F**=Type II Formed	**7**=Luminous Rings	Bright Blue		
				W=Multi-Tap wired 120V	**3F**=Type III Formed	**8**=Luminous Rings	Deep Green		
					4F=Type IV Formed	**9**=Luminous Rings	Warm Orange		
					5F=Type V Formed				

OPTIONS + ACCESSORIES [Must be listed in the order shown]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
C=Emergency Quartz Separate Circuit [10]
E=Emergency Quartz with Time Delay [10]
FR=Frosted Flat Glass
B=House-side Shield [11]
L=Lamp Included
M=Mogul-Base Socket (Type 3S Only)
NG=No Glow Luminous Mid Section [12]
PMT=Post Mount Tenon
PM-PCR=NEMA Type Photocontrol Receptacle (Post Mount Only)
Q=Quartz Standby [10]
SGR=Frosted Sag Glass
SG=Sag Glass
V=Vandal Shield (100W Max.)
W=Wire Guard

ACCESSORIES (order separately, replace XX with color suffix)
MEM MODERN EPIC MEDIUM ARMS
[see page 16-17 for details on arm accessories]
SA6105-XX=Bishop Single Pole Mount Arm
SA6106-XX=Bishop Single Pole Mount Arm with Cross Rod
SA6107-XX=Bishop Twin Pole Mount Arm
SA6108-XX=Bishop Twin Pole Mount Arm with Cross Rods
SA6109-XX=Traditional Single Pole Mount Arm
SA6110-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
SA6111-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [13]
SA6112-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
SA6113-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [13]
SA6114-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
SA6116-XX=Traditional Twin Pole Mount Arm
SA6117-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
SA6118-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [13]
SA6119-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
SA6120-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [13]
SA6121-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
SA6122-XX=Tenon Adapter for 2 3/8" O.D. Horizontal Tenon

MEL MODERN EPIC LARGE ARMS
[see page 16-17 for details on arm accessories]
SA6005-XX=Bishop Single Pole Mount Arm
SA6006-XX=Bishop Single Pole Mount Arm with Cross Rod
SA6007-XX=Bishop Twin Pole Mount Arm
SA6008-XX=Bishop Twin Pole Mount Arm with Cross Rods
SA6009-XX=Traditional Single Pole Mount Arm
SA6010-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
SA6011-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [13]
SA6012-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
SA6013-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [13]
SA6014-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
SA6016-XX=Traditional Twin Pole Mount Arm
SA6017-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
SA6018-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [13]
SA6019-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
SA6020-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [13]
SA6021-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
SA6022-XX=Tenon Adapter for 2 3/8" O.D. Horizontal Tenon

ACCESSORY ARM OPTIONS (add as suffix to accessory)
4=NEMA Twistlock Photocontrol Receptacle [14]
A=Architectural Finial [15]
M=Modern Finial [15]
N=Nostalgic Finial [15]

NOTE: **1** Arms not included Order Separately See accessories **2** 50-175W lamps are medium-base 150-400W lamps are mogul-base **3** 320 and 350W Pulse Start Metal Halide only **4** 400W MH requires reduced envelope ED28 Lamp **5** Refer to technical section for lamp/ballast/voltage compatibility **6** Vertical lamp option only 100W maximum in MEM, 250W maximum in MEL **7** MEM vertical lamp option only **8** SL only available with Solid Mid selection or with NG option **9** Custom and RAL color matching available upon request Consult your Cooper Lighting Representative for more information **10** Quartz options not available with SL optic or vertical lamped optical systems **10** Quartz options not available with SL optic or vertical lamps optical systems **11** House-side shield available on horizontally lamped 2S, 3S, and 4S optical systems only **12** NG option retains daytime appeal of window, louvered, slot, solid rings, or luminous rings mid section styles, but does not allow light into the upper chamber of the housing Mid section will not glow at night, maintaining the cutoff control associated with the standard solid mid section **13** Requires use of 4" O D round straight pole **14** Not compatible with finials **15** Traditional Arms only **16** Specifications and dimensions subject to change without notice

CEM/CEL CLASSICAL EPIC

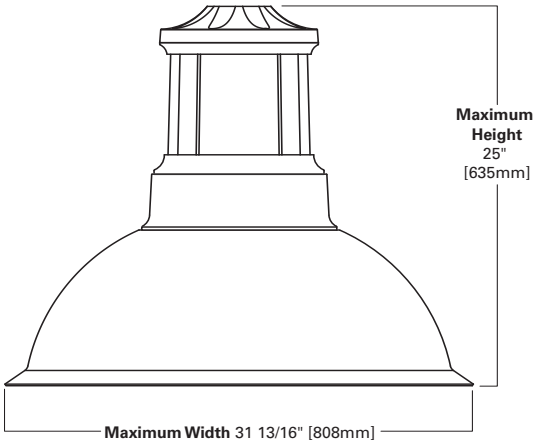
50-400W

DECORATIVE AREA COLLECTION

STREETWORKS IP65 RATED

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass and solid mid sections configurations only



NOTE: See CEM/CEL configurations at bottom for more detailed information.

SPECIFICATION FEATURES

TOP
Cast aluminum housing maintains sidewall thickness and attaches to mounting arm hub with four (4) stainless steel fasteners.

MIDSECTION
Milky white acrylic lens utilizes continuous silicone gaskets to seal lens to top casting and shade. Optional colored luminous rings available.

SHADES
Heavy-gauge precision spun aluminum shades offer superior surface finish and consistency in form.

DOORFRAME ASSEMBLY
Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Standard with flat glass.

OPTICAL SYSTEMS
Choice of five (5) high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet.

ELECTRICAL TRAY
Ballast and related electrical componentry are mounted to a reinforced one-piece tray with integral handle. Quick disconnect wiring plugs allow easy tray removal during routine maintenance.

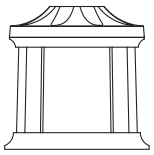
FINISH
Housing finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, graphite metallic, and hartford green. RAL and custom color matches available. Consult your Streetworks Representative.

EPA [Effective Projected Area]:
CEM: Flat Lens .94 | Sag Lens 1.04
CEL: Flat Lens 1.55 | Sag Lens 1.75

SHIPPING DATA [Approximate Net Weight]:
CEM: 37 lbs. [17 kgs.]
CEL: 50 lbs. [23 kgs.]

CONFIGURATIONS

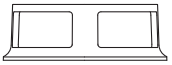
HOUSING



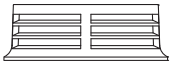
Classical
[CEM] 8.6" H x 8.7" W
[CEL] 12.2" H x 12" W

MID SECTION

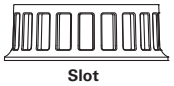
Solid
[CEM] 3.4" H x 9.9" W
[CEL] 3.8" H x 13.4" W



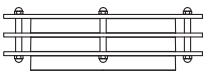
Window
[CEM] 3.4" H x 9.9" W
[CEL] 3.8" H x 13.4" W



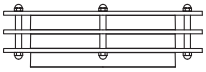
Louvered
[CEM] 3.4" H x 9.9" W
[CEL] 3.8" H x 13.4" W



Slot
[CEM] 3.4" H x 9.9" W
[CEL] 3.8" H x 13.4" W

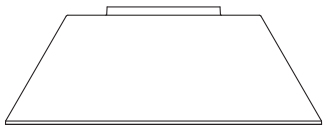


Solid Rings
[CEM] 3.4" H x 12" W
[CEL] 3.8" H x 15.8" W

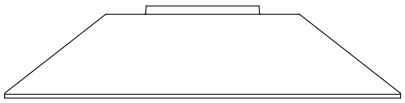


Luminous Rings
[CEM] 3.4" H x 12" W
[CEL] 3.8" H x 15.8" W

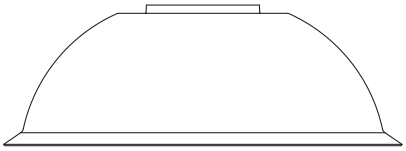
SHADE



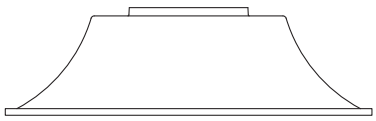
Straight Narrow
[CEM] 6.6" H x 19.1" W



Straight Wide
[CEM] 5.1" H x 23.9" W
[CEL] 6.6" H x 30" W



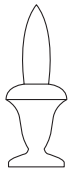
Bell
[CEM] 8" H x 24" W
[CEL] 9" H x 30" W



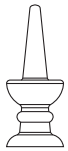
Flute
[CEM] 6" H x 22.5" W
[CEL] 8.4" H x 31.8" W

FINIALS

Architectural



Modern



Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: CEL25MWW2SXSWBK

PRODUCT FAMILY [1]	LAMP WATTAGE [2]	LAMP TYPE [5]	BALLAST TYPE [5]	VOLTAGE [5]	DISTRIBUTION	MID SECTION TYPE	SHADE TYPE	COLOR (add as suffix/ must specify) [9]	OPTIONS + ACCESSORIES
CEM=Classical Epic Medium	**50**=50W	**M**=Metal Halide	**C**=CWI	**2**=120V	**MA**=Milk White Acrylic Jar [6]	**X**=Solid (Standard)	**SN**=Straight Narrow	**AP**=Grey	(See Below)
CEL=Classical Epic Large	**70**=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**2S**=Type II Segmented	**1**=Window	**SW**=Straight Wide	**BK**=Black	
	10=100W	**S**=High Pressure Sodium	**K**=10KV CWA	**4**=240V	**3R**=Type III Glass Refractor [7]	**2**=Louvered	**BL**=Bell	**BZ**=Bronze	
	15=150W		**N**=Hi. Reac./NPF	**7**=277V	**3S**=Type III Segmented	**3**=Slot	**FL**=Flute	**DP**=Dark Platinum	
	17=175W		**P**=Hi. Reac./HPF	**8**=480V	**4S**=Type IV Segmented	**4**=Solid Rings		**GM**=Graphite Metallic	
	25=250W		**R**=Reac./NPF	**9**=347V	**5R**=Type V Glass Refractor [7]	**5**=Luminous Rings		**GN**=Hartford Green	
	32=320W [3]		**W**=CWA	**K**=120/277V wired 120V	**5S**=Type V Segmented	**Optional Mid Section Type**		**WH**=White	
	35=350W [3]			**L**=277/120V wired 277V	**SL**=Spill Light Eliminator [8]	**6**=Luminous Rings Red			
	40=400W [4]			**N**=Multi-Tap wired 277V	**2F**=Type II Formed	**7**=Luminous Rings Bright Blue			
				W=Multi-Tap wired 120V	**3F**=Type III Formed	**8**=Luminous Rings Deep Green			
					4F=Type IV Formed	**9**=Luminous Rings Warm Orange			
					5F=Type V Formed				

OPTIONS + ACCESSORIES [Must be listed in the order shown]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
C=Emergency Quartz Separate Circuit [10]
E=Emergency Quartz with Time Delay [10]
FR=Frosted Flat Glass
B=House-side Shield [11]
L=Lamp Included
M=Mogul-Base Socket (Type 3S only)
NG=No Glow Luminous Mid Section [12]
PMT=Post Mount Tenon
PM-PCR=NEMA Type Photocontrol Receptacle (Post Mount Only)
Q=Quartz Standby [10]
SGR=Frosted Sag Glass
SG=Sag Glass
V=Vandal Shield (100W Max.)
W=Wire Guard

ACCESSORIES (order separately, replace XX with color suffix)
CEM Classical Epic Medium Arms
[see page 16-17 for details on arm accessories]
SA6154-XX=Bishop Single Pole Mount Arm
SA6155-XX=Bishop Single Pole Mount Arm with Cross Rod
SA6156-XX=Bishop Twin Pole Mount Arm
SA6157-XX=Bishop Twin Pole Mount Arm with Cross Rods
SA6158-XX=Traditional Single Pole Mount Arm
SA6159-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
SA6160-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [13]
SA6161-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
SA6162-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [13]
SA6163-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
SA6165-XX=Traditional Twin Pole Mount Arm
SA6166-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
SA6167-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [13]
SA6168-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
SA6169-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [13]
SA6170-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
SA6172-XX=Tenon Adapter for 2 3/8" O.D. Horizontal Tenon
OA/RA1016=NEMA Photocontrol Multi-Tap
OA/RA1027=NEMA Photocontrol 480V
OA/RA1201=NEMA Photocontrol 347V

CEL Classical Epic Large Arms
[see page 16-17 for details on arm accessories]
SA6054-XX=Bishop Single Pole Mount Arm
SA6055-XX=Bishop Single Pole Mount Arm with Cross Rod
SA6056-XX=Bishop Twin Pole Mount Arm
SA6057-XX=Bishop Twin Pole Mount Arm with Cross Rods
SA6058-XX=Traditional Single Pole Mount Arm
SA6059-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
SA6060-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [13]
SA6061-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
SA6062-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [13]
SA6063-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
SA6065-XX=Traditional Twin Pole Mount Arm
SA6066-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
SA6067-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [13]
SA6068-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
SA6069-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [13]
SA6070-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
SA6071-XX=Tenon Adapter for 2 3/8" O.D. Horizontal Tenon
OA/RA1016=NEMA Photocontrol Multi-Tap
OA/RA1027=NEMA Photocontrol 480V
OA/RA1201=NEMA Photocontrol 347V

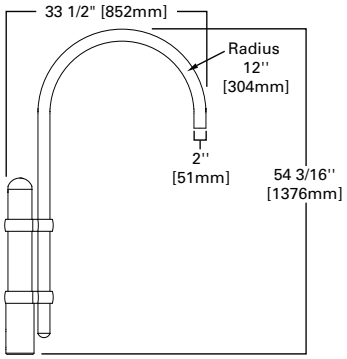
ACCESSORY ARM OPTIONS (add as suffix to accessory)
4=NEMA Twistlock Photocontrol Receptacle [14]
A=Architectural Finial [15]
M=Modern Finial [15]
N=Nostalgic Finial [15]

NOTE: **1** Arms not included Order Separately See accessories **2** 50-175W lamps are medium-base 150-400W lamps are mogul-base **3** 320 and 350W Pulse Start Metal Halide only **4** 400W MH requires reduced envelope ED28 Lamp **5** Refer to technical section for lamp/ballast/voltage compatibility **6** Vertical lamp option only 100W maximum in CEM, 250W maximum in CEL **7** CEM vertical lamp option only **8** SL only available with Solid Mid selection or with NG option **9** Custom and RAL color matching available upon request Consult your Cooper Lighting Representative for more information **10** Quartz options not available with SL optic or vertical lamps optical systems **11** House-side shield available on horizontally lamped 2S, 3S, and 4S optical systems only **12** NG option retains daytime appeal of window, louvered, slot, solid rings, or luminous rings mid section styles, but does not allow light into the upper chamber of the housing Mid section will not glow at night, maintaining the cutoff control associated with the standard solid mid section **13** Requires use of 4" O D round straight pole **14** Not compatible with finials **15** Traditional Arms only **16** Specifications and dimensions subject to change without notice

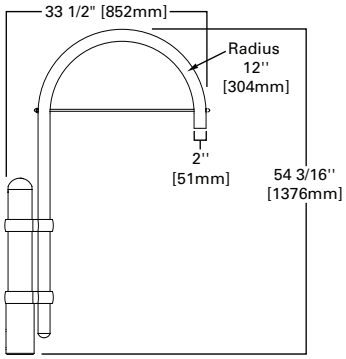
EPIC COLLECTION ARMS

DECORATIVE AREA COLLECTION

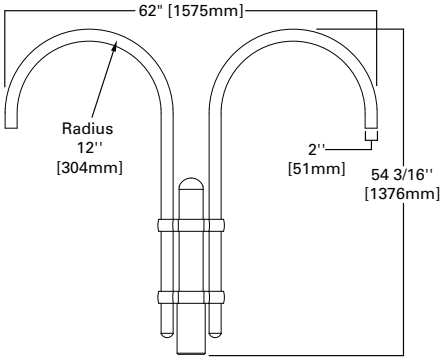
ARMS SPECIFICATIONS



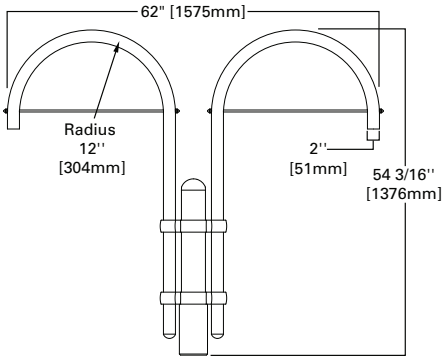
BISHOP SINGLE POLE MOUNT ARM
[SA6105, SA6154, SA6005, SA6054]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 24 lbs. **E.P.A:** .92



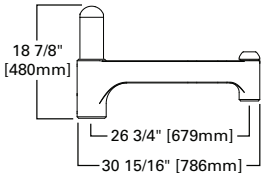
BISHOP SINGLE POLE MOUNT ARM WITH CROSS ROD
[SA6106, SA6155, SA6006, SA6055]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 25 lbs. **E.P.A:** .98



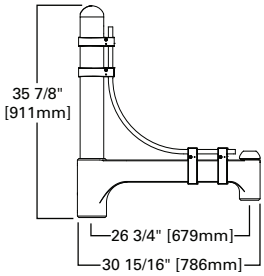
BISHOP TWIN POLE MOUNT ARM
[SA6107, SA6156, SA6007, SA6056]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 37 lbs. **E.P.A:** 1.43



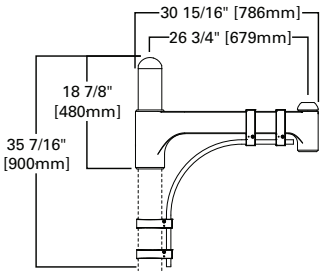
BISHOP TWIN POLE MOUNT ARM WITH CROSS RODS
[SA6108, SA6157, SA6008, SA6057]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 39 lbs. **E.P.A:** 1.55



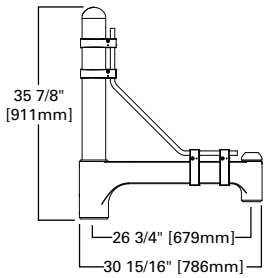
TRADITIONAL SINGLE POLE MOUNT ARM
[SA6109, SA6158, SA6009, SA6058]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 20 lbs. **E.P.A:** .86



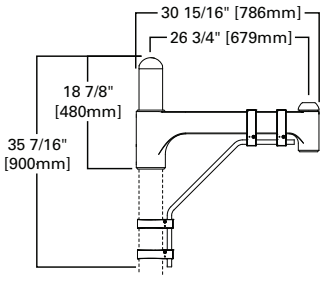
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED UPPER BAR
[SA6110, SA6159, SA6010, SA6059]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 28 lbs. **E.P.A:** 1.4



TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED LOWER BAR
[SA6111, SA6160, SA6011, SA6060]
Slipfits over 4" round straight pole. Requires use of 4" O.D. Round Straight Pole
Weight: 25 lbs. **E.P.A:** 1.16

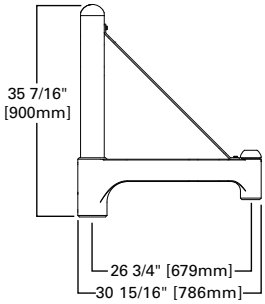


TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER BAR
[SA6112, SA6161, SA6012, SA6061]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 28 lbs. **E.P.A:** 1.38

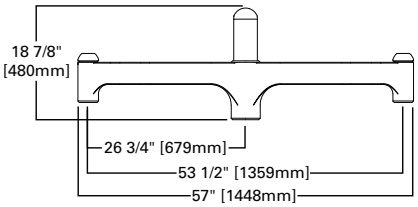


TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° LOWER BAR
[SA6113, SA6162, SA6013, SA6062]
Slipfits over 4" round straight pole. Requires use of 4" O.D. Round Straight Pole
Weight: 25 lbs. **E.P.A:** 1.14

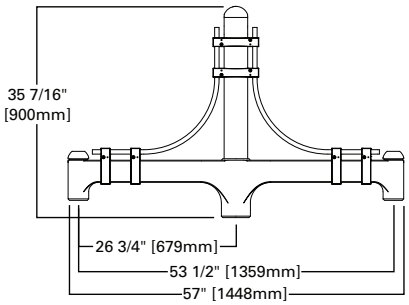
ARMS SPECIFICATIONS (CON'T.)



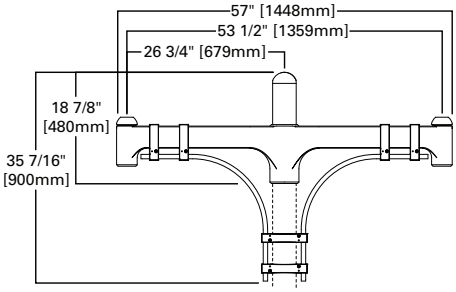
TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER STRAP
[SA6114, SA6163, SA6014, SA6063]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 24 lbs. **E.P.A:** 1.17



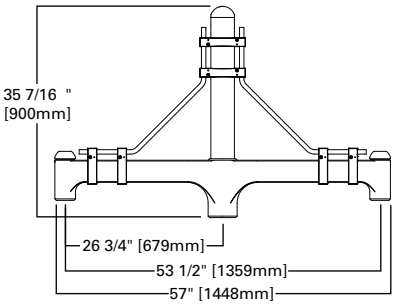
TRADITIONAL TWIN POLE MOUNT ARM
[SA6116, SA6165, SA6016, SA6065]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 30 lbs. **E.P.A:** 1.44



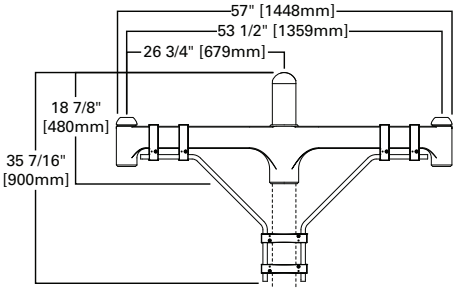
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED UPPER BARS
[SA6117, SA6166, SA6017, SA6066]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 43 lbs. **E.P.A:** 2.28



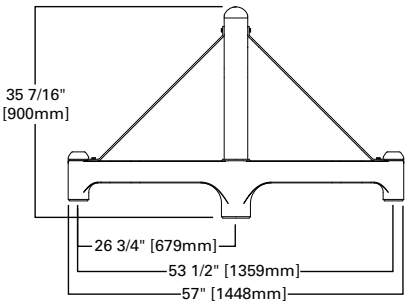
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED LOWER BARS
[SA6118, SA6167, SA6018, SA6067]
Slipfits over 4" round straight pole. Requires use of 4" O.D. Round Straight Pole
Weight: 40 lbs. **E.P.A:** 2.04



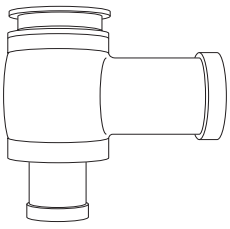
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER BARS
[SA6119, SA6168, SA6019, SA6068]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 43 lbs. **E.P.A:** 2.24



TRADITIONAL TWIN POLE MOUNT ARM WITH 45° LOWER BARS
[SA6120, SA6169, SA6020, SA6069]
Slipfits over 4" round straight pole. Requires use of 4" O.D. Round Straight Pole
Weight: 40 lbs. **E.P.A:** 2.0



TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER STRAPS
[SA6121, SA6170, SA6021, SA6070]
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall tenon.
Weight: 37 lbs. **E.P.A:** 1.81



TENON ADAPTER
[SA6022, SA6071, SA6122, SA6172]
Attaches to a 2 3/8" O.D. horizontal tenon.
Weight: 4 lbs. **E.P.A:** .08

MESA

MESA

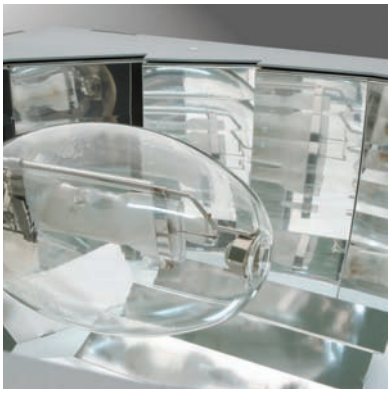
MESA's simple geometric form allows it to adapt to either contemporary or traditional architectural settings. Available in single or twin pole mount applications with optional wall mounting capability, MESA allows for harmonized site design whether at the entryway or in the parking lot.

Designed to sustain a lifetime of tough environmental conditions, MESA's precisely engineered die-cast aluminum housing and base utilize an IP66 rated gasketing strategy combined with a seamless 5 stage polyester powder coat finish to seal out performance degrading contaminants.

Recognizing evolving environmental and legislative trends, MESA delivers world class optical solutions to the decorative luminaire marketplace. MESA offers targeted solutions for full cutoff compliance, spill light control, and path of egress illumination while integrating the latest lamp technologies into visually comfortable lighting solutions.

DARK SKY COMPLIANT CO Cutoff

HOUSING
Die-cast aluminum main housing and cast aluminum spider mount base maintain a minimum .125" wall thickness and utilize continuous silicone gasketing between castings for a forbidding seal.



OPTICAL SYSTEM
Choice of five (5) high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a heavy wall 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. All reflector modules feature toolless removal, quick disconnect wiring and are field rotatable in 90° increments.

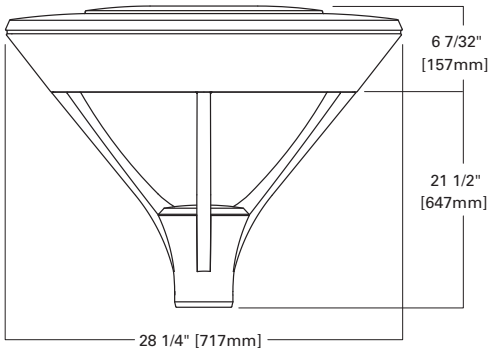
SPILL LIGHT ELIMINATOR [SL]
Allowing less than 2% of the total fixture output to fall behind the pole with no sacrifice in forward reaching performance the SL is the benchmark for effective spill control. Used along site perimeters and property lines, the SL keeps the light inside and the darkness out.

PMM MESA

DECORATIVE LUMINAIRE

70-400W

STREETWORKS IP66 RATED



DARK SKY COMPLIANT CO Cutoff

SPECIFICATION FEATURES

HOUSING

Die-cast aluminum main housing and cast aluminum spider mount base maintain a minimum .125 wall thickness and utilize continuous silicone gasketing between castings for a forbidding seal. Four (4) inset quick release fasteners on underside of housing provide access to luminaire interior.

DOOR ASSEMBLY

Top mounted, heavy wall, die-cast aluminum door maintains a nominal .125 thickness. Continuous silicone gasketing provides IP66 compliant seal to both housing and assembly. Concealed, stainless steel four (4) bar hinge lock allows opened door to lock into place in the open position for servicing the luminaire.

LENS

Impact resistant 1/8" tempered clear or optional frosted flat glass for concealment of lamp image. Optional clear or frosted tempered sag glass lens improves fixture visibility while providing a subtle performance gain.

OPTICAL SYSTEM

Choice of five (5) high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a heavy wall 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. All reflector modules feature toolless removal, quick disconnect wiring and are toolless field rotatable in 90° increments. 250-400W HID lamp sources feature mogul-base lampholders, while 50-175W HID wattages feature medium-base lampholders.

ELECTRICAL TRAY

Ballast and related electrical components are mounted to a reinforced one-piece tray. In-line quick disconnects allow tray to be removed from housing without the use of tools.

MOUNTING

Fitter assembly mounts over 3" O.D. Tenon via three (3) concealed, stainless steel set screws and provides seamless transition to 4" round poles.

FINISH

Housing 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, graphite metallic, and hartford green.

EPA [Effective Projected Area]:
Single Mount 1.1 | **Dual Mount** 3.56

SHIPPING DATA [Approximate Net Weight]:
50 lbs. [22 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: PMM40MWWSL

PRODUCT FAMILY
PMM=Mesa

LAMP WATTAGE[1]
HID
70=70W
10=100W
15=150W
17=175W
20=200W
25=250W
32=320W
35=350W
40=400W[2]

LAMP TYPE
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE
C=CWI
H=Reac./HPF
K=10KV CWA
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA

VOLTAGE
2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
5T=5-Tap
D=240/120/208/277V wired 240V w/PCR wired 120V
G=240/120V wired 240V
K=120/277V wired 120V
L=277/120V wired 277V
H=240/480V wired 240V
J=480/240V wired 480V
W=120/208/240/277V wired 120V
T=208/120/240/277V wired 208V
V=240/120/208/277V wired 240V
N=277/120/208/240V wired 277V
P=240V with PCR wired 120V
Q=240/120V wired 240 with PCR wired 120V
R=480V with PCR wired 240V

DISTRIBUTION
2S=Type II Segmented
3S=Type III Segmented
4S=Type IV Segmented
5S=Type V Segmented
SL=Spill Light Eliminator

COLORS (add as suffix/ must specify)
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
GM=Graphite Metallic
GN=Hartford Green
WH=White

OPTIONS + ACCESSORIES (See Below)

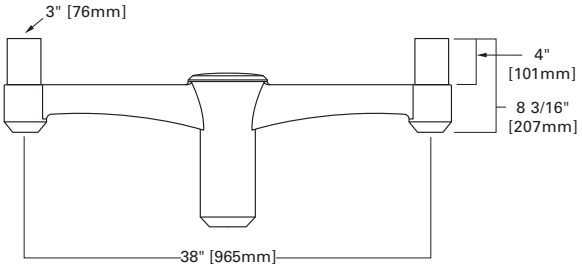
OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277 or 347V) Specify Voltage
2=Double Fuse (208 or 240V) Specify Voltage
3=3 Place Terminal Block
4=NEMA photocontrol Receptacle
B=House-side Shield[3]
FR=Frosted Flat Lens
L=Lamp Included
M=Metal Oxide Varistors
P=Button Type Photocontrol
Q=Quartz Standby[4]
SG=Sag Lens
SGR=Frosted Sag Lens
V=Vandal Shield[5]

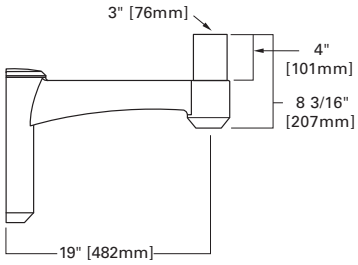
ACCESSORIES (order separately)
SA6028-XX=Dual Mount Arm [EPA 1.36]
SA6029-XX=Wall Mount Arm
OA/RA1016=NEMA Photocontrol Multi-Tap
OA/RA1027=NEMA Photocontrol 480V
OA/RA1201=NEMA Photocontrol 347V

MOUNTING ACCESSORIES

SA6028-XX
DUAL MOUNT ARM [EPA 1.36]



SA6029-XX
WALL MOUNT ARM



NOTE: 1 70-150W HID lamps use medium-base lampholders 175-400W HID lamps use mogul-base lampholders **2** 400W Metal Halide and Pulse Start Metal Halide requires a reduced envelope ED-28 lamp **3** House-side shield not available on 5S and SL optics **4** Quartz options not available with SL optic **5** Maximum wattage of 250W HID **6** Specifications and dimensions subject to change without notice

ARC

ARC featuring Classical top, Classical cage and Modern finial.

ARC featuring Victorian top, Modern cage and Modern finial.

GENERATION™ SERIES

ARC

The Generation's ARC series is the marriage of traditional shapes and contemporary styling. Its superior photometrics offers excellent roadway illumination and uniformity. Its styling blends well in many settings-downtown streetscapes, roadways, residential neighborhoods and city parks.

ARC featuring Decorative Brass banding, Acorn top and Victorian finial.

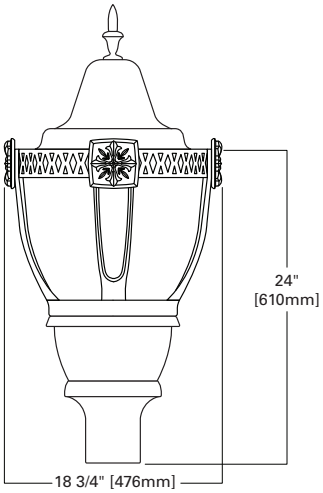
ARC GENERATION SERIES

50-400W

ARCHITECTURAL DECORATIVE LUMINAIRE

STREETWORKS

GENERATION™ SERIES



SPECIFICATION FEATURES

GLOBE
Refractive globe is a 9" high efficiency UV resistant acrylic or optional polycarbonate design and utilizes a combination of refractive and reflective prisms for optional Type III or V distributions. Globes maintain consistency in form and photometric performance between both distributions. Polycarbonate not recommended for Metal Halide applications.

HOUSING
Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

ELECTRICAL
Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

CAGE ASSEMBLIES
All uprights are manufactured of cast aluminum. Banding is extruded aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

TOPS + FINIALS
All hard mount tops are made of spun aluminum and all glow tops are manufactured of acrylic. Finials are manufactured of cast aluminum.

MOUNTING
Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

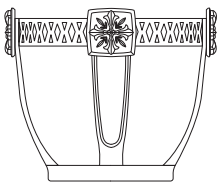
FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

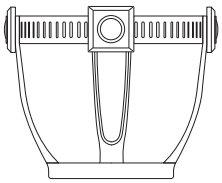
EPA [Effective Projected Area]:
2.1

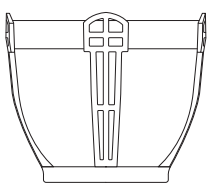
SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

CONFIGURATIONS

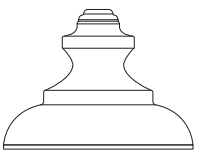
CAGE TYPE

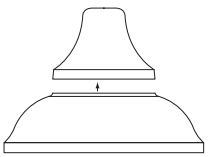

Classical

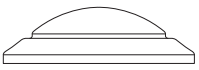

Modern

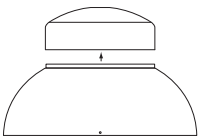

Architectural

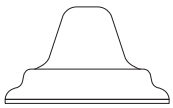
TOP TYPE

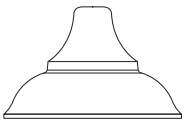

Acorn
(Glow Top)


Nostalgic
(Top Access)


Modern

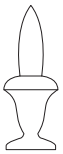

Architectural
(Top Access)


Victorian
(Glow Top)

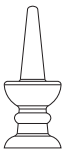

Classical

FINIAL TYPE


Architectural


Modern


Victorian


Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: ARC15SWW33112

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE[2]	BALLAST TYPE[2]	VOLTAGE[2]	REFRACTOR TYPE
ARC=Architectural	**50**=50W	**M**=Metal Halide[3]	**R**=Reac./NPF[4]	**2**=120V	**33**=Type III
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**55**=Type V
	10=100W		**N**=Hi. Reac./NPF	**4**=240V	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V	
	17=175W		**W**=CWA	**8**=480V	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA[5]	**9**=347V	
	32=320W			**W**=Multi-Tap wired 120V	
	35=350W			**N**=Multi-Tap wired 277V	
	40=400W[1]				

CAGE TYPE[6]	TOP TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS + ACCESSORIES
1=CLASSICAL	**1**=Acorn	**1**=Victorian	**AP**=Grey	(See Below)
A=Classical/Sun Gold	**2**=Modern	**2**=Modern	**BZ**=Bronze	
B=Classical/Antique Gold	**3**=Victorian	**3**=Architectural	**DP**=Dark Platinum	
C=Classical/Colonial Bronze	**4**=Classical	**4**=Nostalgic	**GM**=Graphite Metallic	
2=MODERN	**6**=Nostalgic (Top Access)	**X**=None	**GN**=Hartford Green	
D=Modern/Sun Gold	**7**=Architectural (Top Access)		**WH**=White	
E=Modern/Antique Gold				
F=Modern/Colonial Bronze				
3=ARCHITECTURAL				
G=Architectural/Sun Gold				
H=Architectural/Antique Gold				
J=Architectural/Colonial Bronze				
X=None				

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA photocontrol Receptacle
A=Twistlock Refractor
B=Decorative Brass Banding[7]
L=Lamp Included
P=Polycarbonate Refractor[8]
R=Internal Downlight Reflector
U=UL/CSA Listed

ACCESSORIES (order separately)
AA2000=House-side Shield Mogul-base Socket
AA2001=House-side Shield Medium-base Socket

NOTE: 1 400W available only in Metal Halide Not Available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base socket standard for 150W and below Metal Halide **4** Available 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Cage Type 1, 2, 3 will be finished same color as base **7** When brass banding is chosen, finial finished in gold **8** Polycarbonate parts used with Metal Halide lamps will eventually yellow **9** Specifications and dimensions subject to change without notice

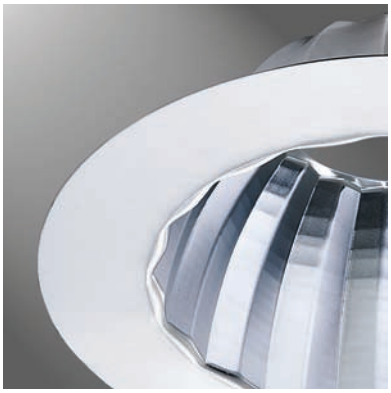
ARC-C CUTOFF

GENERATION™ SERIES CVL

ARC-C CUTOFF

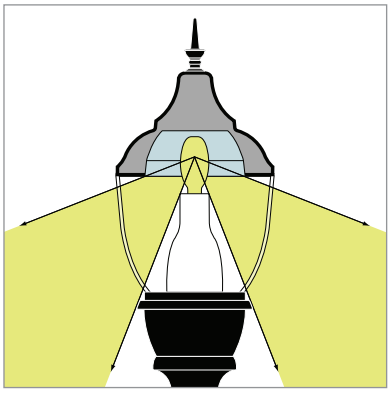
The ARC Cutoff series is the marriage of traditional shapes and contemporary styling. The CVL optical systems achieve an IES cutoff classification while providing excellent performance and uniformity. Its styling blends well in many settings-downtown streetscapes, roadways, residential neighborhoods and city parks.

DARK SKY COMPLIANT CO Cutoff



THE COMMUNITY STANDARD
Generations Series CVL is first and foremost a true IES cutoff luminaire providing the dark sky benefits and light control that many communities now demand. The Type III and Type V optical systems utilize specular reflectors and a vertical lamp orientation to achieve the optimal combination of low brightness and efficiency.

TOOLLESS ENTRY
Wide handhole, toolless access capabilities and power disconnects shorten the maintenance time thereby lowering the overall operating cost of the unit.



LAMP ORIENTATION
The Generation Series utilizes a vertical lamp position and locates the lamp in the luminaire top to prevent any direct glare to pedestrians or motorists. The vertical lamp orientation allows for wider spacing and better uniformity over traditional horizontally lamped cutoff luminaires.

ARC-C CUTOFF GENERATION SERIES

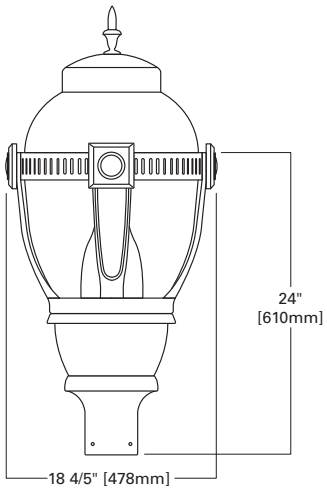
50-400W

ARCHITECTURAL DECORATIVE LUMINAIRE

STREETWORKS

GENERATION CVL SERIES

DARK SKY COMPLIANT CO Cutoff



SPECIFICATION FEATURES

TOPS + FINIALS
All hard mount tops are made of spun aluminum. Nostalgic and architectural tops are provided with top access for ease of maintenance. Finials are manufactured of cast aluminum.

REFLECTOR
Highly specular multi-faceted CVL reflector system provides a Type III or V Cutoff Distribution. Vertical lamp position maximizes light output, ensures a uniform distribution and minimizes direct glare.

GLOBE
Clear injection molded 9" globe is offered in UV resistant acrylic.

DECORATIVE CHIMNEY
Chimney provided with brushed aluminum finish standard. Optional copper finished accents available for chimney and access top.

CAGE ASSEMBLIES
All uprights are manufactured of cast aluminum. Banding is extruded aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

ELECTRICAL
Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

HOUSING
Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

MOUNTING
Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

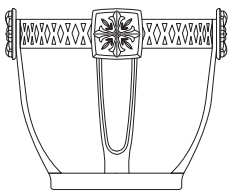
FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

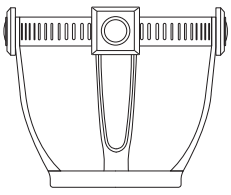
EPA [Effective Projected Area]:
2.1

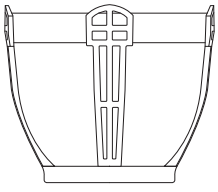
SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

CONFIGURATIONS

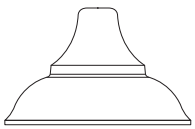
CAGE TYPE

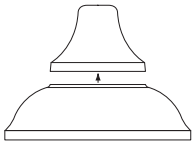

Classical

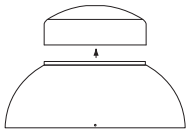

Modern


Architectural

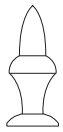
TOP TYPE

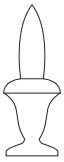

Classical


Nostalgic
(Top Access)

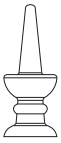

Architectural
(Top Access)

FINIAL TYPE


Architectural


Modern


Victorian


Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: ARC25MWW5C373

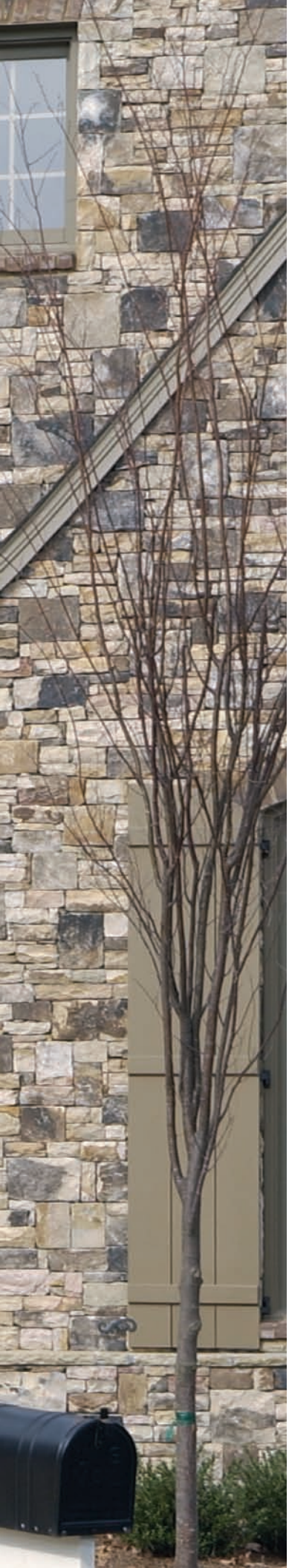
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE[2]	BALLAST TYPE[2]	VOLTAGE[2]	REFRACTOR TYPE	CAGE TYPE[6]	TOP TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS (See Below)
ARC=Architectural	**50**=50W	**M**=Metal Halide[3]	**R**=Reac./NPF[4]	**2**=120V	**3C**=Cutoff III	**1=CLASSICAL**	**4**=Classical	**1**=Victorian	**AP**=Grey	
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**5C**=Cutoff V	**A**=Classical/Sun Gold	**6**=Nostalgic (Top Access)	**2**=Modern	**BZ**=Bronze	
	10=100W		**N**=Hi. Reac./NPF	**4**=240V		**B**=Classical/Antique Gold	**7**=Architectural (Top Access)	**3**=Architectural	**DP**=Dark Platinum	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V		**C**=Classical/Colonial Bronze		**4**=Nostalgic	**GM**=Graphite Metallic	
	17=175W		**W**=CWA	**8**=480V		**2=MODERN**			**GN**=Hartford Green	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA[5]	**9**=347V		**D**=Modern/Sun Gold			**WH**=White	
	32=320W			**W**=Multi-Tap wired 120V		**E**=Modern/Antique Gold				
	35=350W			**N**=Multi-Tap wired 277V		**F**=Modern/Colonial Bronze				
	40=400W[1]					**3=ARCHITECTURAL**				
						G=Architectural/Sun Gold				
						H=Architectural/Antique Gold				
						J=Architectural/Colonial Bronze				
						X=None				

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
C=Copper Accents[7]
B=House-side Shield
L=Lamp Included
U=UL/CSA Listed
Y=Black Chimney

NOTE: **1** Metal Halide only Not available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base lamp standard for 150W and below Metal Halide 400W Metal Halide requires reduced jacket ED28 lamp **4** Available 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Cage Type 1, 2, 3 will be finished same color as base standard **7** Chimney and Access Top finished in copper **8** Specifications and dimensions subject to change without notice

ACN



ACN featuring Victorian top, Classical cage and Modern finial.

ACN featuring Modern top, Architectural cage and Modern finial.

GENERATION™ SERIES

ACN

The ACN series traditional character with updated styling and superior photometric performance offers roadway illumination and uniformity to set a new standard for decorative post top luminaires. It's traditional styling ties in well with historic districts, downtown streetscapes, walkways, and parking lots.

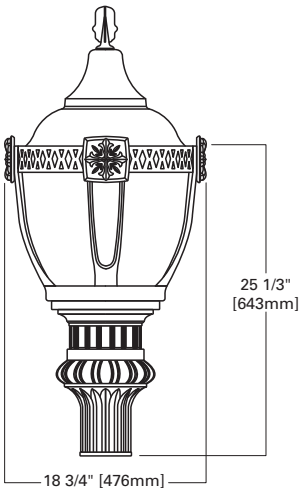
ACN featuring Decorative Brass banding, Acorn top and Architectural finial.

ACN GENERATION SERIES

50-400W

ACORN DECORATIVE LUMINAIRE

STREETWORKS



SPECIFICATION FEATURES

GLOBE
Refractive globe is a 9" high efficiency UV resistant acrylic or optional polycarbonate design and utilizes a combination of refractive and reflective prisms for optional Type III or V distributions. Globes maintain consistency in form and photometric performance between both distributions. Polycarbonate not recommended for MH applications.

HOUSING
Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

ELECTRICAL
Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

CAGE ASSEMBLIES
All uprights are manufactured of cast aluminum. Banding is extruded aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

TOPS + FINIALS
All hard mount tops are made of spun aluminum and all glow tops are manufactured of acrylic. Finials are manufactured of cast aluminum.

MOUNTING
Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

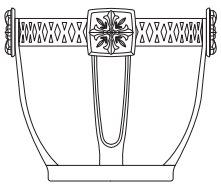
FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

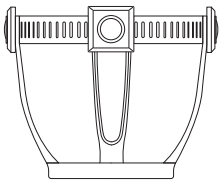
EPA [Effective Projected Area]:
2.1

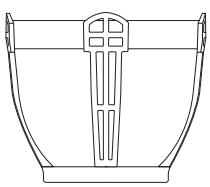
SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

CONFIGURATIONS

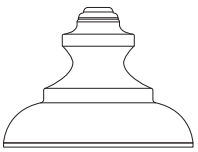
CAGE TYPE

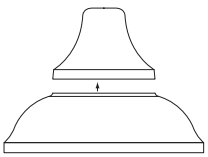

Classical


Modern

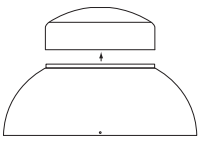

Architectural

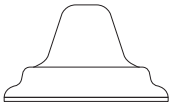
TOP TYPE

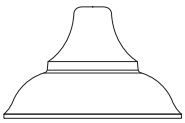

Acorn
(Glow Top)


Nostalgic
(Top Access)


Modern


Architectural
(Top Access)


Victorian
(Glow Top)

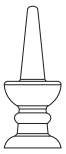

Classical

FINIAL TYPE


Architectural


Modern


Victorian


Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: ACN17MWW33222

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	REFRACTOR TYPE
ACN=Acorn	**50**=50W	**M**=Metal Halide [3]	**R**=Reac./NPF [4]	**2**=120V	**33**=Type III
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**55**=Type V
	10=100W		**N**=Hi. Reac./NPF	**4**=240V	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V	
	17=175W		**W**=CWA	**8**=480V	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA [5]	**9**=347V	
	32=320W			**W**=Multi-Tap wired 120V	
	35=350W			**N**=Multi-Tap wired 277V	
	40=400W [1]				

CAGE TYPE [6]	TOP TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS + ACCESSORIES
1=CLASSICAL	**1**=Acorn	**1**=Victorian	**AP**=Grey	(See Below)
A=Classical/Sun Gold	**2**=Modern	**2**=Modern	**BZ**=Bronze	
B=Classical/Antique Gold	**3**=Victorian	**3**=Architectural	**DP**=Dark Platinum	
C=Classical/Colonial Bronze	**4**=Classical	**4**=Nostalgic	**GM**=Graphite Metallic	
2=MODERN	**6**=Nostalgic (Top Access)	**X**=None	**GN**=Hartford Green	
D=Modern/Sun Gold	**7**=Architectural (Top Access)		**WH**=White	
E=Modern/Antique Gold				
F=Modern/Colonial Bronze				
3=ARCHITECTURAL				
G=Architectural/Sun Gold				
H=Architectural/Antique Gold				
J=Architectural/Colonial Bronze				
X=None				

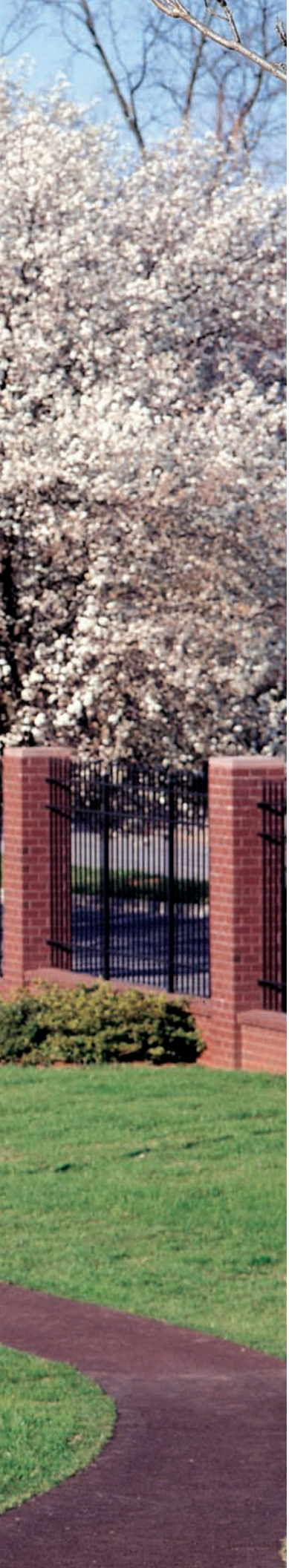
OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
B=Decorative Brass Banding [7]
L=Lamp Included
P=Polycarbonate Refractor [8]
R=Internal Downlight Reflector
U=UL/CSA Listed

ACCESSORIES (order separately)
AA2000=House-side Shield Mogul-base Socket
AA2001=House-side Shield Medium-base Socket

NOTE: 1 400W available only in Metal Halide Not Available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base socket standard for 150W and below Metal Halide **4** Available 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Cage Type 1, 2, 3 will be finished same color as base **7** When brass banding is chosen, finial finished in gold **8** Polycarbonate parts used with Metal Halide lamps will eventually yellow **9** Specifications and dimensions subject to change without notice

ACN-C CUTOFF

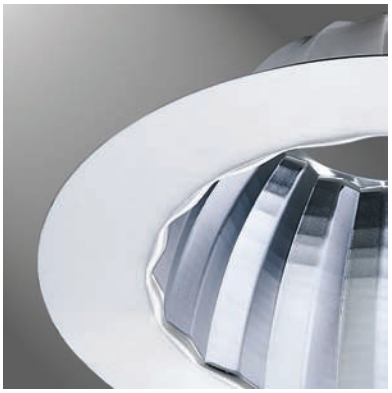


GENERATION™ SERIES CVL

ACN-C CUTOFF

The ACN Cutoff series is the marriage of traditional shapes and contemporary styling. The CVL optical systems achieve an IES cutoff classification while providing excellent performance and uniformity. Its styling blends well in many settings-downtown streetscapes, roadways, residential neighborhoods and city parks.

DARK SKY COMPLIANT CO Cutoff

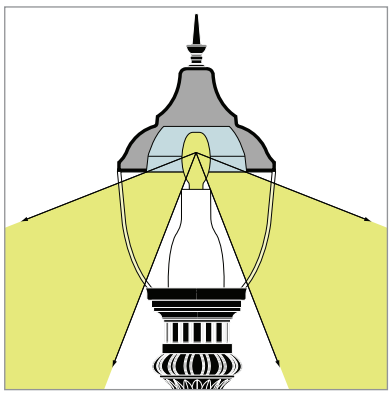


THE COMMUNITY STANDARD

Generations Series CVL is first and foremost a true IES cutoff luminaire providing the dark sky benefits and light control that many communities now demand. The Type III and Type V optical systems utilize specular reflectors and a vertical lamp orientation to achieve the optimal combination of low brightness and efficiency.

THE MAINTENANCE STANDARD

Ease of maintenance was a leading design consideration for the Generation Series. Three (3) heavy-duty, spun aluminum tops are available with removable caps to allow easy access to the lamp without having to remove the globe. Access to the NEMA style photocontrol and starter is a simple twist away via the Generation housing's side entry door assembly.



LAMP ORIENTATION

The Generation Series utilizes a vertical lamp position and locates the lamp in the luminaire top to prevent any direct glare to pedestrians or motorists. The vertical lamp orientation allows for wider spacing and better uniformity over traditional horizontally lamped cutoff luminaires.

ACN-C CUTOFF GENERATION SERIES

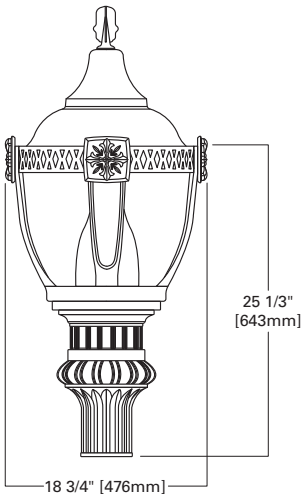
50-400W

DECORATIVE LUMINAIRE

STREETWORKS

GENERATION CVL SERIES

DARK SKY COMPLIANT CO Cutoff



SPECIFICATION FEATURES

TOPS + FINIALS
All hard mount tops are made of spun aluminum. Nostalgic and architectural tops are provided with top access for ease of maintenance. Finials are manufactured of cast aluminum.

REFLECTOR
Highly specular multi-faceted CVL reflector system provides a Type III or V Cutoff Distribution. Vertical lamp position maximizes light output, ensures a uniform distribution and minimizes direct glare.

GLOBE
Clear injection molded 9" globe is offered in UV resistant acrylic.

DECORATIVE CHIMNEY
Chimney provided with brushed aluminum finish standard. Optional copper finished accents available for chimney and access top.

CAGE ASSEMBLIES
All uprights are manufactured of cast aluminum. Banding is extruded aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

ELECTRICAL
Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

HOUSING
Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

MOUNTING
Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

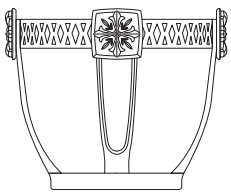
FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

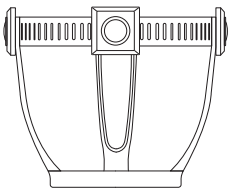
EPA [Effective Projected Area]:
2.1

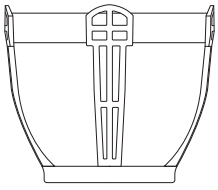
SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

CONFIGURATIONS

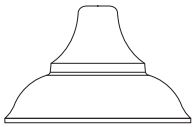
CAGE TYPE

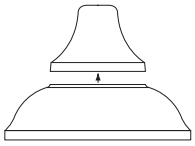

Classical

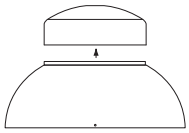

Modern


Architectural

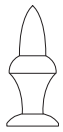
TOP TYPE

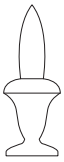

Classical


Nostalgic
(Top Access)

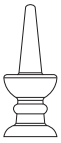

Architectural
(Top Access)

FINIAL TYPE


Architectural


Modern


Victorian


Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: ACN25MWW5C373

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE[2]	BALLAST TYPE[2]	VOLTAGE[2]	REFRACTOR TYPE	CAGE TYPE[6]	TOP TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS (See Below)
ACN=Acorn	**50**=50W	**M**=Metal Halide[3]	**R**=Reac./NPF[4]	**2**=120V	**3C**=Cutoff III	**1=CLASSICAL**	**4**=Classical	**1**=Victorian	**AP**=Grey	
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**5C**=Cutoff V	**A**=Classical/Sun Gold	**6**=Nostalgic (Top Access)	**2**=Modern	**BZ**=Bronze	
	10=100W		**N**=Hi. Reac./NPF	**4**=240V		**B**=Classical/Antique Gold	**7**=Architectural (Top Access)	**3**=Architectural	**DP**=Dark Platinum	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V		**C**=Classical/Colonial Bronze		**4**=Nostalgic	**GM**=Graphite Metallic	
	17=175W		**W**=CWA	**8**=480V		**2=MODERN**			**GN**=Hartford Green	
	25=250W		**K**=10KV CWA[5]	**9**=347V		**D**=Modern/Sun Gold			**WH**=White	
	32=320W			**W**=Multi-Tap wired 120V		**E**=Modern/Antique Gold				
	35=350W			**N**=Multi-Tap wired 277V		**F**=Modern/Colonial Bronze				
	40=400W[1]					**3=ARCHITECTURAL**				
						G=Architectural/Sun Gold				
						H=Architectural/Antique Gold				
						J=Architectural/Colonial Bronze				
						X=None				

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
C=Copper Accents[7]
B=House-side Shield
L=Lamp Included
U=UL/CSA Listed
Y=Black Chimney

NOTE: **1** Metal Halide only Not available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base lamp standard for 150W and below Metal Halide 400W Metal Halide requires reduced jacket ED28 lamp **4** Available 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Cage Type 1, 2, 3 will be finished same color as base **7** Chimney and Access Top finished in copper **8** Specifications and dimensions subject to change without notice

CLB

CLB featuring Classical top, Architectural cage and Modern finial.

CLB featuring Victorian top, Classical cage and Modern finial.

GENERATION™ SERIES

CLB

The CLB series contemporary lines and style transitions to a more traditional fluted design. Its style makes an excellent transitional design for many of today's applications. Great for today's trend of planned communities, outdoor retail applications and school campuses.

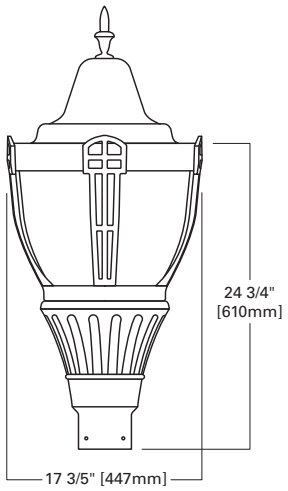
CLB featuring Decorative Brass banding, Acorn top and Architectural finial.

CLB GENERATION SERIES

50-400W

CLASSICAL DECORATIVE LUMINAIRE

STREETWORKS



SPECIFICATION FEATURES

GLOBE
Refractive globe is a 9" high efficiency UV resistant acrylic or optional polycarbonate design and utilizes a combination of refractive and reflective prisms for optional Type III or V distributions. Globes maintain consistency in form and photometric performance between both distributions. Polycarbonate not recommended for MH applications.

HOUSING
Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

ELECTRICAL
Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

CAGE ASSEMBLIES
All uprights are manufactured of cast aluminum. Banding is extruded aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

TOPS + FINIALS
All hard mount tops are made of spun aluminum and all glow tops are manufactured of acrylic. Finials are manufactured of cast aluminum.

MOUNTING
Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

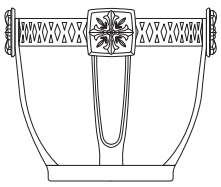
FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

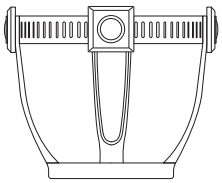
EPA [Effective Projected Area]:
2.1

SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

CONFIGURATIONS

CAGE TYPE


Classical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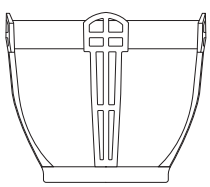
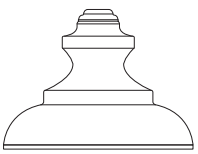
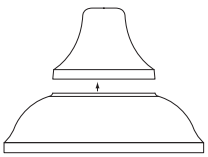
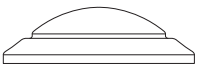
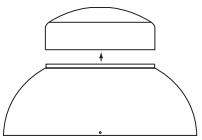

Architectural

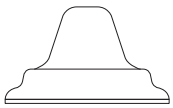
TOP TYPE

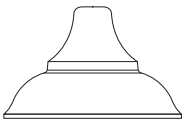

Acorn
(Glow Top)


Nostalgic
(Top Access)


Modern

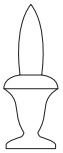

Architectural
(Top Access)


Victorian
(Glow Top)

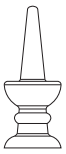

Classical

FINIAL TYPE


Architectural


Modern


Victorian


Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: CLB25MWW55373

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	REFRACTOR TYPE
CLB=Classical	**50**=50W	**M**=Metal Halide [3]	**R**=Reac./NPF [4]	**2**=120V	**33**=Type III
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**55**=Type V
	10=100W		**N**=Hi. Reac./NPF	**4**=240V	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V	
	17=175W		**W**=CWA	**8**=480V	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA [5]	**9**=347V	
	32=320W			**W**=Multi-Tap wired 120V	
	35=350W			**N**=Multi-Tap wired 277V	
	40=400W [1]				

CAGE TYPE [6]	TOP TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS + ACCESSORIES
1=CLASSICAL	**1**=Acorn	**1**=Victorian	**AP**=Grey	(See Below)
A=Classical/Sun Gold	**2**=Modern	**2**=Modern	**BZ**=Bronze	
B=Classical/Antique Gold	**3**=Victorian	**3**=Architectural	**DP**=Dark Platinum	
C=Classical/Colonial Bronze	**4**=Classical	**4**=Nostalgic	**GM**=Graphite Metallic	
2=MODERN	**6**=Nostalgic (Top Access)	**X**=None	**GN**=Hartford Green	
D=Modern/Sun Gold	**7**=Architectural (Top Access)		**WH**=White	
E=Modern/Antique Gold				
F=Modern/Colonial Bronze				
3=ARCHITECTURAL				
G=Architectural/Sun Gold				
H=Architectural/Antique Gold				
J=Architectural/Colonial Bronze				
X=None				

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
A=Twistlock Globe
B=Decorative Brass Banding [7]
L=Lamp Included
P=Polycarbonate Refractor [8]
R=Internal Downlight Reflector
U=UL/CSA Listed

ACCESSORIES (order separately)
AA2000=House-side Shield Mogul-base Socket
AA2001=House-side Shield Medium-base Socket

NOTE: 1 400W available only in Metal Halide Not available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base socket standard for 150W and below Metal Halide **4** Available 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Cage Type 1, 2, 3 will be finished same color as base unless specified otherwise **7** When brass banding is chosen, finial finished in gold **8** Polycarbonate parts used with Metal Halide lamps will eventually yellow **9** Specifications and dimensions subject to change without notice

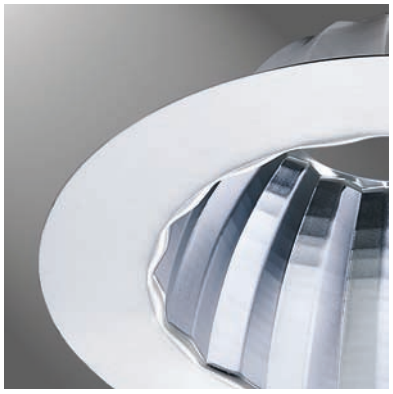
CLB-C CUTOFF

GENERATION SERIES CVL

CLB-C CUTOFF

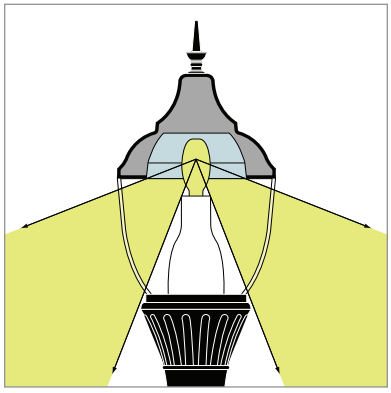
The CLB Cutoff series contemporary lines and style transitions to a more traditional fluted design. Its style makes an excellent transitional design for many of today's applications. The CVL optical systems achieve an IES cutoff classification while providing excellent performance and uniformity. Great for today's trends of planned communities, outdoor retail applications and school campuses.

DARK SKY COMPLIANT CO Cutoff



THE COMMUNITY STANDARD
Generations Series CVL is first and foremost a true IES cutoff luminaire providing the dark sky benefits and light control that many communities now demand. The Type III and Type V optical systems utilize specular reflectors and a vertical lamp orientation to achieve the optimal combination of low brightness and efficiency.

THE MAINTENANCE STANDARD
Ease of maintenance was a leading design consideration for the Generation Series. Three (3) heavy-duty, spun aluminum tops are available with removable caps to allow easy access to the lamp without having to remove the globe. Access to the NEMA style photocontrol and starter is a simple twist away via the Generation housing's side entry door assembly.



LAMP ORIENTATION
The Generation Series utilizes a vertical lamp position and locates the lamp in the luminaire top to prevent any direct glare to pedestrians or motorists. The vertical lamp orientation allows for wider spacing and better uniformity over traditional horizontally lamped cutoff luminaires.

CLB-C CUTOFF GENERATION SERIES

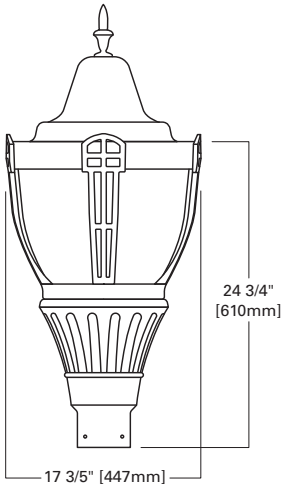
50-400W

CLASSICAL DECORATIVE LUMINAIRE

STREETWORKS

GENERATION SERIES CVL

DARK SKY COMPLIANT CO Cutoff



SPECIFICATION FEATURES

TOPS + FINIALS
All hard mount tops are made of spun aluminum. Nostalgic and architectural tops are provided with top access for ease of maintenance. Finials are manufactured of cast aluminum.

REFLECTOR
Highly specular multi-faceted CVL reflector system provides a Type III or V Cutoff Distribution. Vertical lamp position maximizes light output, ensures a uniform distribution and minimizes direct glare.

GLOBE
Clear injection molded 9" globe is offered in UV resistant acrylic.

DECORATIVE CHIMNEY
Chimney provided with brushed aluminum finish standard. Optional copper finished accents available for chimney and access top.

CAGE ASSEMBLIES
All uprights are manufactured of cast aluminum. Banding is extruded aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

ELECTRICAL
Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

HOUSING
Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

MOUNTING
Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

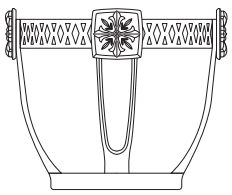
FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

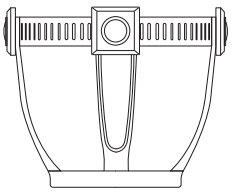
EPA [Effective Projected Area]:
2.1

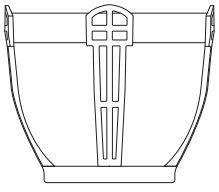
SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

CONFIGURATIONS

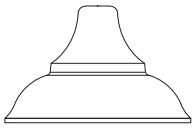
CAGE TYPE

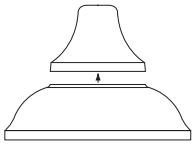

Classical

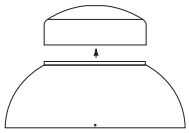

Modern


Architectural

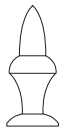
TOP TYPE


Classical


Nostalgic
(Top Access)

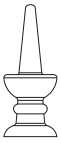

Architectural
(Top Access)

FINIAL TYPE


Architectural


Modern


Victorian


Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: CLB25MWW5C373

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE[2]	BALLAST TYPE[2]	VOLTAGE[2]	REFRACTOR TYPE	CAGE TYPE[6]	TOP TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS (See Below)
CLB=Classical	**50**=50W	**M**=Metal Halide[3]	**R**=Reac./NPF[4]	**2**=120V	**3C**=Cutoff III	**1=CLASSICAL**	**4**=Classical	**1**=Victorian	**AP**=Grey	
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**5C**=Cutoff V	**A**=Classical/Sun Gold	**6**=Nostalgic (Top Access)	**2**=Modern	**BZ**=Bronze	
	10=100W		**N**=Hi. Reac./NPF	**4**=240V		**B**=Classical/Antique Gold	**7**=Architectural (Top Access)	**3**=Architectural	**DP**=Dark Platinum	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V		**C**=Classical/Colonial Bronze		**4**=Nostalgic	**GM**=Graphite Metallic	
	17=175W		**W**=CWA	**8**=480V		**2=MODERN**			**GN**=Hartford Green	
	25=250W		**K**=10KV CWA[5]	**9**=347V		**D**=Modern/Sun Gold			**WH**=White	
	32=320W	**S**=High Pressure Sodium		**W**=Multi-Tap wired 120V		**E**=Modern/Antique Gold				
	35=350W			**N**=Multi-Tap wired 277V		**F**=Modern/Colonial Bronze				
	40=400W[1]					**3=ARCHITECTURAL**				
						G=Architectural/Sun Gold				
						H=Architectural/Antique Gold				
						J=Architectural/Colonial Bronze				
						X=None				

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
B=House-side Shield
C=Copper Accents[7]
L=Lamp Included
U=UL/CSA Listed
Y=Black Chimney

NOTE: 1 Metal Halide only Not available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base lamp standard for 150W and below Metal Halide 400W Metal Halide requires reduced jacket ED28 lamp **4** Available 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Cage Type 1, 2, 3 will be finished same color as base **7** Chimney and Access Top finished in copper **8** Specifications and dimensions subject to change without notice

ARC—AVENUE

GENERATION™ SERIES

ARC AVENUE

The Generation Series Avenue provides an updated styling and smooth exterior appearance, making it the perfect choice to add a contemporary feel to any setting. Refractive globe provides superior photometrics, maximum pole spacing, excellent roadway illumination and uniformity.

EASE OF MAINTENANCE
Removable top allows easy access to the lamp without having to remove the globe. A great feature that's ideal for coordinated relamping programs and tremendous labor savings opportunities.

UNMATCHED PERFORMANCE
The refractive globe utilized in the Avenue is designed to provide strong downward illumination yet still maintain proper vertical illumination for nighttime visibility while achieving the maximum pole spacing possible.

TOOLLESS ENTRY
Wide handhole, toolless access capabilities and power disconnects shorten the maintenance time thereby lowering the overall operating cost of the unit.

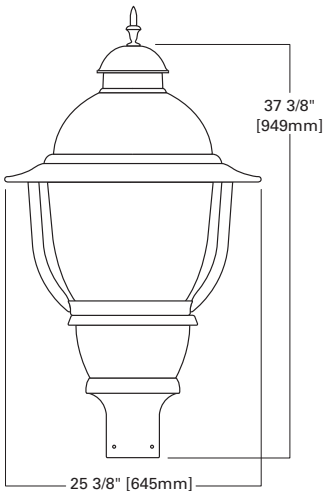
ARC AVENUE

DECORATIVE LUMINAIRE

50-400W

STREETWORKS

GENERATION SERIES



SPECIFICATION FEATURES

TOPS + FINIALS

All hard mount tops are made of spun aluminum. Top provided with toolless access for ease of maintenance. Finials are manufactured of cast aluminum.

GLOBE

Globe is available in 9" high efficiency UV resistant acrylic or optional polycarbonate refractive design. Internal and external prisms work in conjunction to provide excellent vertical and horizontal illumination.

CAGE ASSEMBLIES

Two (2) uprights are manufactured of cast aluminum. Banding is spun aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

ELECTRICAL

Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

HOUSING

Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

MOUNTING

Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

FINISH

Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
2.1

SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: ARC25MWW5552

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	REFRACTOR TYPE	CAGE TYPE [6,7]	TOP TYPE [6]	FINIAL TYPE	COLORS (add as suffix)	OPTIONS + ACCESSORIES
ARC=Architectural	**50**=50W	**M**=Metal Halide [3]	**R**=Reac./NPF [4]	**2**=120V	**33**=Type III	**6**=Avenue	**5**=Avenue (Top Access)	**2**=Modern	**AP**=Grey	(See Below)
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**55**=Type V	**X**=None		**3**=Architectural	**BZ**=Bronze	
	10=100W		**N**=Hi. Reac./NPF	**4**=240V					**DP**=Dark Platinum	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V					**GM**=Graphite Metallic	
	17=175W		**W**=CWA	**8**=480V					**GN**=Hartford Green	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA [5]	**9**=347V					**WH**=White	
	32=320W			**W**=Multi-Tap wired 120V						
	35=350W			**N**=Multi-Tap wired 277V						
	40=400W [1]									

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
L=Lamp Included
P=Polycarbonate Refractor [8]
R=Internal Downlight Reflector
U=UL/CSA Listed

ACCESSORIES (order separately)
AA2000=House-side Shield Mogul-base Socket
AA2001=House-side Shield Medium-base Socket

NOTE: 1 400W available only in Metal Halide Not available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base lamp standard for 150W and below Metal Halide **4** Available 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Avenue Cage must be used with Avenue Top Avenue Top is available without cage **7** Cage Type 6 will be finished same color as base **8** Polycarbonate parts used with Metal Halide lamps will eventually yellow **9** Specifications and dimensions subject to change without notice

ARC CUTOFF AVENUE

GENERATION SERIES CVL

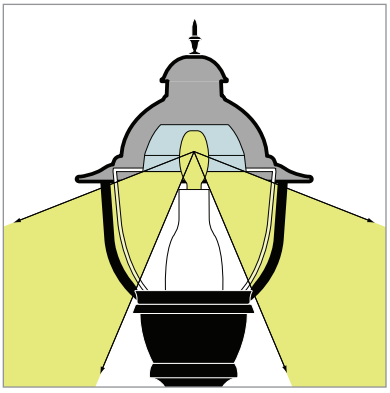
ARC CUTOFF AVENUE

The Generation Series ARC Avenue Cutoff provides an updated styling and smooth exterior appearance, making it the perfect choice to add a contemporary feel to any setting. The CVL optical systems achieve an IES cutoff classification while providing excellent performance and uniformity.

DARK SKY COMPLIANT CO Cutoff

EASE OF MAINTENANCE
Removable top allows easy access to the lamp without having to remove the globe. A great feature that's ideal for coordinated relamping programs and tremendous labor savings opportunities.

TOOLLESS ENTRY
Wide handhole, toolless access capabilities and power disconnects shorten the maintenance time thereby lowering the overall operating cost of the unit.



LAMP ORIENTATION
The Generation Series utilizes a vertical lamp position and locates the lamp in the luminaire top to prevent any direct glare to pedestrians or motorists. The vertical lamp orientation allows for wider spacing and better uniformity over traditional horizontally lamped cutoff luminaires.

ARC-C CUTOFF AVENUE

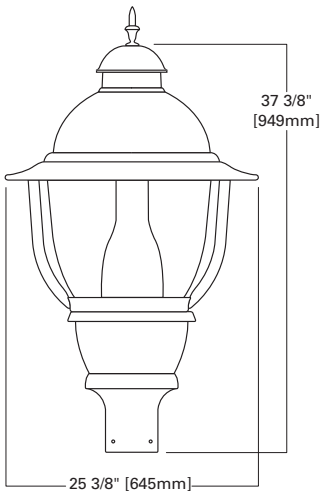
DECORATIVE LUMINAIRE

50-400W

STREETWORKS

GENERATION CVL SERIES

DARK SKY COMPLIANT CO Cutoff



SPECIFICATION FEATURES

TOPS + FINIALS

All hard mount tops are made of spun aluminum. Top provided with toolless access for ease of maintenance. Finials are manufactured of cast aluminum.

REFLECTOR

Highly specular multi-faceted CVL reflector system provides a Type III or V Cutoff Distribution. Vertical lamp position maximizes light output, ensures a uniform distribution and minimizes direct glare.

GLOBE

Clear injection molded 9" globe is UV resistant acrylic.

DECORATIVE CHIMNEY

Chimney provided with brushed aluminum finish standard. Optional copper finished accents available for chimney and access top.

CAGE ASSEMBLIES

Two (2) uprights are manufactured of cast aluminum. Banding is spun aluminum. All cage assemblies are mounted to the exterior of the housing via four (4) stainless steel fasteners. A variety of finishes are available.

ELECTRICAL

Available up to 400W Metal Halide and 250W High Pressure Sodium. Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter standard when applicable. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway. UL listing available.

HOUSING

Heavy duty-cast aluminum housing and door. Wide handhole provide toolless entry for access to plug-in starters and optional NEMA twistlock PCR. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

MOUNTING

Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

FINISH

Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
2.1

SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: ARC25MWW5C652

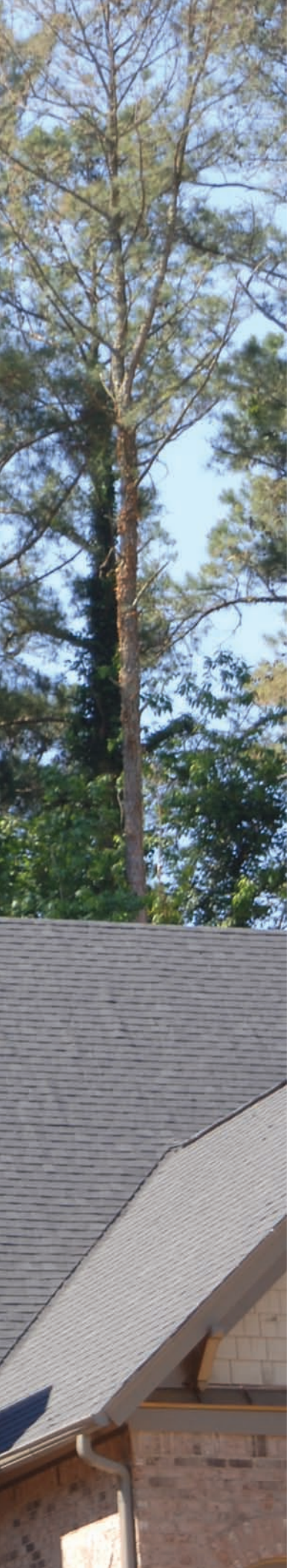
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	REFRACTOR TYPE	CAGE TYPE [6,7]	TOP TYPE [6]	FINIAL TYPE	COLORS (add as suffix)	OPTIONS + ACCESSORIES
ARC=Architectural	**50**=50W	**M**=Metal Halide [3]	**R**=Reac./NPF [4]	**2**=120V	**3C**=Cutoff III	**6**=Avenue	**5**=Avenue (Top Access)	**2**=Modern	**AP**=Grey	(See Below)
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**5C**=Cutoff V	**X**=None		**3**=Architectural	**BZ**=Bronze	
	10=100W		**N**=Hi. Reac./NPF	**4**=240V					**DP**=Dark Platinum	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V					**GM**=Graphite Metallic	
	17=175W		**W**=CWA	**8**=480V					**GN**=Hartford Green	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA [5]	**9**=347V					**WH**=White	
	32=320W			**W**=Multi-Tap wired 120V						
	35=350W			**N**=Multi-Tap wired 277V						
	40=400W [1]									

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
C=Copper Accents [8]
L=Lamp Included
U=UL/CSA Listed
Y=Black Chimney

NOTE: **1** Metal Halide only Not available in 480V **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base lamp standard for 150W and below Metal Halide 400W Metal Halide requires reduced jacket ED28 lamp **4** Available in 120V only **5** Available 50-150W, 120/240V or single voltage only **6** Avenue Cage must be used with Avenue Top Avenue Top is available without cage **7** Cage Type 6 will be finished same color as base **8** Chimney and Access Top copper finished **9** Specifications and dimensions subject to change without notice

CASCADE



GENERATION SERIES CVL

CASCADE

The Generation Cascade Series series offers traditional styling while the optical systems achieve an IES cutoff classification that provides excellent performance and uniformity. It's styling blends well in many settings downtown streetscapes, roadways residential neighborhoods and city parks.

DARK SKY COMPLIANT CO Cutoff

EASE OF MAINTENANCE
Removable top allows easy access to the lamp without having to remove the globe. A great feature that's ideal for coordinated relamping programs and tremendous labor savings opportunities.

UNMATCHED PERFORMANCE
Highly specular multi-faceted CVL reflector system provides a Type III or V Cutoff Distribution. The vertical lamp position maximizes light output, ensures a uniform distribution and minimizes direct glare.

TOOLLESS ENTRY
Wide handhole, toolless access capabilities and power disconnects shorten the maintenance time thereby lowering the overall operating cost of the unit.

CBS/ARS/ACS CASCADE

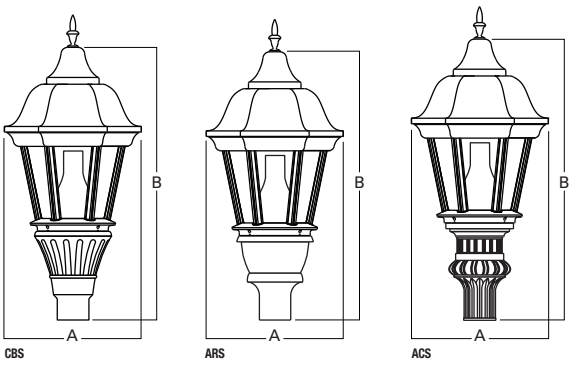
50-250W

DECORATIVE LUMINAIRE

STREETWORKS

GENERATION SERIES CVL

DARK SKY COMPLIANT CO Cutoff



CBS ARS ACS

FIXTURE		A	B
CBS	(in)	20 3/8	40 7/8
	(mm)	516	1038
ARS	(in)	20 3/8	40 1/4
	(mm)	516	1022
ACS	(in)	20 3/8	41 1/4
	(mm)	516	1048

SPECIFICATION FEATURES

TOPS + FINIALS
Six-sided cast aluminum top provided with spun aluminum top access cover for toolless lamp replacement. Various cast aluminum finials available.

REFLECTOR
Highly specular multi-faceted CVL reflector system provides a Type III or V Cutoff Distribution. Vertical lamp position maximizes light output, ensures a uniform distribution and minimizes direct glare.

GLOBE
Six-sided thermoformed acrylic lens is standard.

DECORATIVE CHIMNEY
Decorative spun aluminum chimney provided with brushed aluminum finish standard. Optional copper finished accents available for chimney and top. Black finished chimney also available.

CAGE ASSEMBLIES
Six (6) uprights are manufactured of cast aluminum and attached to the cage ring via four (4) stainless steel fasteners. Cage is attached to the top casting via four (4) stainless steel set screws. Finish color match housing color choice.

ELECTRICAL
Ballast assembly is mounted on a removable tray with quick disconnects for ease of installation and maintenance. Plug-in starter is standard for all High Pressure Sodium systems. Terminal block is hard mounted to the casting and easily accessible through the door's wide entryway.

HOUSING
Heavy duty-cast aluminum housing for up to 250W Metal Halide or 250W High Pressure Sodium systems. Optional NEMA PCR is provided with toolless access for ease of maintenance.

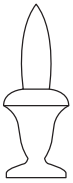
MOUNTING
Post top mount fits 3" OD tenons. Four (4) stainless steel fasteners standard.

FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
2.4

SHIPPING DATA [Approximate Net Weight]:
50 lbs. [23 kgs.]

FINIAL OPTIONS [Painted to match housing]


Modern


Architectural


Nostalgic

ORDERING INFORMATION

SAMPLE NUMBER: CBS15SWW3C78X

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	REFRACTOR TYPE	CAGE TYPE	TOP TYPE	FINIAL TYPE	COLORS	OPTIONS
CBS=Cascade with Classical Base	**50**=50W	**M**=Metal Halide [2]	**C**=CWI	**2**=120V	**3C**=Cutoff III	**7**=Lantern	**8**=Six Sided	**2**=Modern	(add as suffix)	(See Below)
ARS=Cascade with Architectural Base	**70**=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF [3]	**0**=208V	**5C**=Cutoff V			**3**=Architectural	**AP**=Grey	
ACS=Cascade with Acorn Base	**10**=100W	**S**=High Pressure Sodium	**K**=10KV CWA [4]	**4**=240V				**4**=Nostalgic	**BZ**=Bronze	
	15=150W		**N**=Hi. Reac./NPF	**7**=277V				**X**=None	**DP**=Dark Platinum	
	17=175W		**P**=Hi. Reac./HPF	**8**=480V					**GM**=Graphite Metallic	
	25=250W		**R**=Reac./NPF [4]	**9**=347V					**GN**=Hartford Green	
			W=CWA	**W**=Multi-Tap wired 120V					**WH**=White	
				N=Multi-Tap wired 277V						

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
C=Copper Accents (Chimney and Top) [5]
L=Lamp Included
U=UL/CSA Listed
Y=Black Chimney

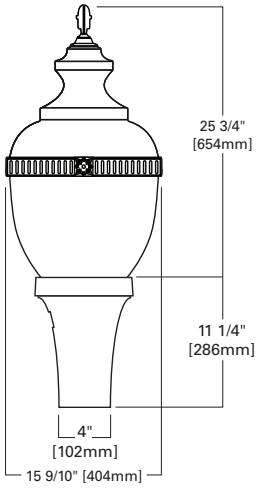
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** Medium-base lamp standard for 150W and below Metal Halide **3** Available in 120V only **4** Available 50-150W, 120/240 or single voltage only **5** Chimney and Access Top anodized copper **6** Specifications and dimensions subject to change without notice

WESTMINSTER

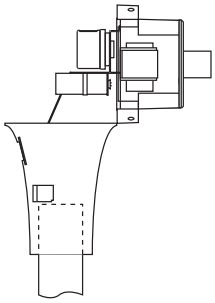
50-250W

WST WESTMINSTER

POST-TOP AREA LUMINAIRE



TILT-BACK POWER MODULE



STREETWORKS

SPECIFICATION FEATURES

GLOBE
Globe is available in 9" high efficiency polycarbonate or standard acrylic design. Optional brass banding and finial available. Housing and finial standard black. Other finish colors available. Consult your Streetworks Representative.

BALLAST
Easily accessible, tilt-back power module. Standard plug-in starter when applicable.

SOCKET
Mogul-base socket for 50W through 250W High Pressure Sodium and 175W and 250W Metal Halide; 50W through 150W Metal Halide is medium-base socket.

PHOTOCONTROL
Photocontrol receptacle available.

HOUSING
Cast aluminum housing. Standard color is black. Other finish colors available. Consult your Streetworks Representative.
1" ANSI wattage/source label.

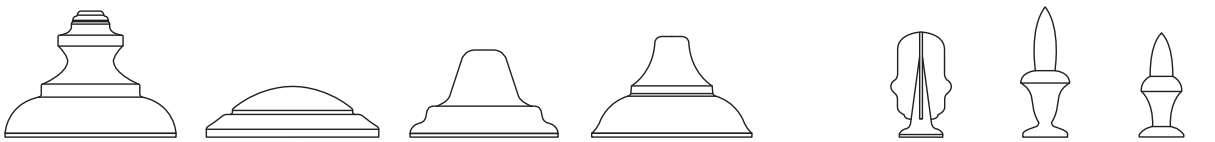
MOUNTING
Post-top mount fits 3" O.D. tenons. Secures with three (3) square headed 1 1/4" polymer coated mounting bolts.

FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
30 lbs. [14 kgs.]

TOP + FINIAL OPTIONS



Acorn (Glow Top) | Modern | Victorian (Glow Top) | Classical | Victorian | Modern | Architectural

ORDERING INFORMATION

SAMPLE NUMBER: WST50SR2554

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	REFRACTOR TYPE	BAND TYPE [5]	TOP TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS + ACCESSORIES
WST=Westminster	**50**=50W	**M**=Metal Halide [2]	**R**=Reac./NPF [3]	**2**=120V	**33**=Type III	**4**=Brass Band	**1**=Acorn	**1**=Victorian	**AP**=Grey	(See Below)
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**55**=Type V	**5**=Painted Band [6]	**2**=Modern	**2**=Modern	**BZ**=Bronze	
	10=100W	**S**=High Pressure Sodium	**N**=Hi. Reac./NPF	**4**=240V		**X**=None	**3**=Victorian	**3**=Architectural	**DP**=Dark Platinum	
	15=150W		**P**=Hi. Reac./HPF	**7**=277V			**4**=Classical	**X**=None	**GM**=Graphite Metallic	
	17=175W		**W**=CWA	**8**=480V					**GN**=Hartford Green	
	25=250W		**K**=10KV CWA [4]	**9**=347V					**WH**=White	
				W=Multi-Tap wired 120V						
				N=Multi-Tap wired 277V						
				V=Multi-Tap wired 240V						

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
4=NEMA Twistlock Photocontrol Receptacle
L=Lamp Included
P=Polycarbonate Refractor
R=Internal Downlight Reflector
U=UL/CSA Listed

ACCESSORIES (order separately)
AA1000=House-side Shield

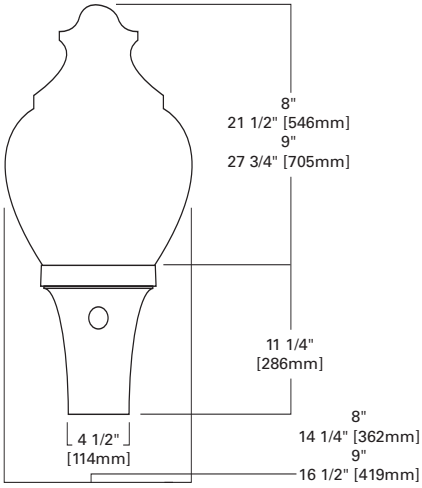
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** Available in 120V only **3** Medium-base porcelain socket standard, for 150W and below Metal Halide **4** Available 50-150W, 120/240V or single voltage only **5** When brass band is chosen, finial finished in gold **6** Painted to match luminaire **7** Standard color is black Other finish colors available Consult your Cooper Lighting representative **8** Specifications and dimensions subject to change without notice

ACORN

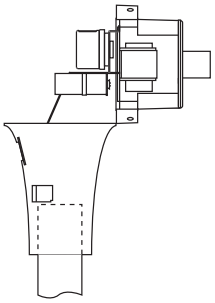
50-250W

ANE ACORN

DECORATIVE LUMINAIRE



TILT-BACK POWER MODULE



STREETWORKS

SPECIFICATION FEATURES

GLOBE
8" textured polycarbonate globe is standard. Optional globes include a 9" polycarbonate, 8" and 9" milk white, and 8" and 9" acrylic. (Optional internal Type III refractor available.)

SOCKET
Mogul-base socket for 50W through 150W High Pressure Sodium and 175W and 250W Metal Halide; 50W through 150W Metal Halide is medium-base socket. All sockets are 4KV pulse rated.

BALLAST
Easily accessible, tilt-back power module. Standard plug-in starter when applicable.

PHOTOCONTROL
Photocontrol receptacle available.

HOUSING
Cast aluminum housing. Standard with two position terminal block. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

MOUNTING
Post-top mount fits 3" tenons. Secures with three (3) square headed 1 1/4" polymer coated mounting bolts.

FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
30 lbs. [14 kgs.]

TOP + FINIAL OPTIONS

Victorian Modern Architectural

ORDERING INFORMATION

SAMPLE NUMBER: ANE50SR2554

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [3]	BALLAST TYPE [3]	VOLTAGE [3]	REFRACTOR TYPE	FINIAL TYPE	COLORS (add as suffix)	OPTIONS + ACCESSORIES
ANE=Acorn	**50**=50W [1] **70**=70W **10**=100W **15**=150W **17**=175W **25**=250W [2]	**M**=Metal Halide **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**R**=Reac./NPF [1] **H**=Reac./HPF **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **W**=CWA **K**=10KV CWA [4]	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **F**=120/240 wired 120V **G**=120/240 wired 240V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**33**=Type III **55**=Type V	**1**=Victorian **2**=Modern **3**=Architectural **X**=None	**AP**=Grey **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic **GN**=Hartford Green **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240, or 480V)
4=NEMA Twistlock Photocontrol Receptacle
9=9" Globe [5]
A=Acrylic Globe
B=Acrylic Globe 9"
F=Finial
L=Lamp Included
M=Milk White Globe
N=NEMA Ballast Bracket [6]
P=Internal Button Photocontrol [7]
S=Screw Secure Power Module
U=UL/CSA Listed

ACCESSORIES (order separately)
AA1000=House-side Shield (9" globe)
AA1001=House-side Shield (8" globe)

NOTE: 1 Available in 120V only **2** 250W available for 120V only **3** Refer to technical section for lamp/ballast/voltage compatibility **4** Available 50-150W, 120/240V or single voltage only **5** Standard 8" globe **6** Available in Reactor HPF and NPF For Hi Reactance or CWA availability consult your Streetworks Representative **7** Specify single voltage **8** Specifications and dimensions subject to change without notice

MANCHESTER

MANCHESTER

Evoking the classic charm of yesteryear, the Manchester offers a strong combination of aesthetic beauty and photometric performance in a fixture that reflects the architectural heritage of America's main streets and neighborhoods.

< Manchester shown with Sun Gold Classical Banding

Manchester featuring Classical banding and Modern finial.

Manchester featuring Painted band and Old World finial.

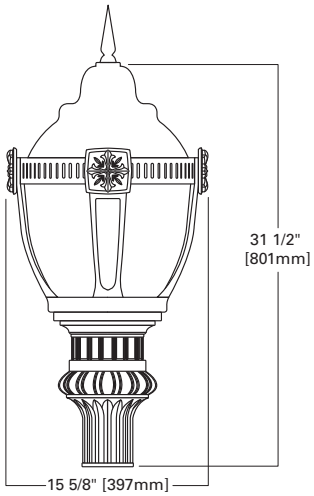
Manchester Standard.

ANG MANCHESTER

70-150W

DECORATIVE GLASS LUMINAIRE

STREETWORKS



SPECIFICATION FEATURES

FINIAL
Cast finial optional. Finial painted to match cast housing.

GLOBE
Borosilicate two-piece prismatic glass refractor, available in either a Type III or Type V distribution.

CAGE OR BAND
Optional decorative cage or band is available. Cage uprights are manufactured of cast aluminum. Bands are extruded aluminum. Finish colors match housing color choice. Optional gold anodized band available. Other finish colors available. Consult your Streetworks Representative.

HOUSING
Heavy-duty cast aluminum housing. Optional NEMA PCR is accessible through door assembly. Provided with 1" ANSI wattage source label.

BALLAST
Ballast provided with a power tray assembly for ease of maintenance. Mogul-base is standard for 70W through 150W High Pressure Sodium and 175W Metal Halide. 70W through 150W Metal Halide use medium-base. Standard plug-in starter when applicable. U.L. Listing is available.

MOUNTING
Post top mount fits 3" O.D. tenons and secures in place with four (4) allen-head set screws.

FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
1.6

SHIPPING DATA [Approximate Net Weight]:
60 lbs. [27 kgs.]

FINIAL OPTIONS [Painted to match housing]

ORDERING INFORMATION

SAMPLE NUMBER: ANG17MWW33431

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	REFRACTOR TYPE	CAGE/BAND TYPE	TOP TYPE	FINIAL TYPE [4]	COLORS (add as suffix)	OPTIONS + ACCESSORIES
ANG=Manchester	**70**=70W	**M**=Metal Halide [2]	**R**=Reac./NPF [3]	**2**=120V	**33**=Type III	**1**=Classical	**3**=Victorian	**1**=Victorian	**AP**=Grey	(See Below)
	10=100W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**55**=Type V	**A**=Classical/Sun Gold		**2**=Modern	**BZ**=Bronze	
	15=150W	**S**=High Pressure Sodium	**N**=Hi. Reac./NPF	**4**=240V		**B**=Classical/Antique Gold		**3**=Architectural	**DP**=Dark Platinum	
			P=Hi. Reac./HPF	**7**=277V		**C**=Classical/Colonial Bronze		**4**=Nostalgic	**GM**=Graphite Metallic	
			W=CWA	**8**=480V		**4**=Gold Anodized Band [4]		**5**=Old World	**GN**=Hartford Green	
				9=347V		**5**=Painted Band		**X**=None	**WH**=White	
				W=Multi-Tap wired 120V		**X**=None				
				N=Multi-Tap wired 277V						

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
4=Internal NEMA Photocontrol Receptacle
L=Lamp Included
U=UL/CSA Listed

ACCESSORIES (order separately)
AA3000=House-side Shield Mogul-base Socket
AA3001=House-side Shield Medium-base Socket

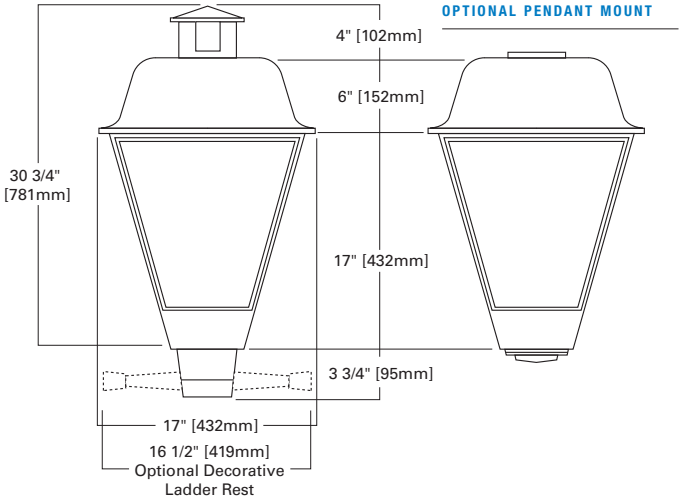
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** Medium-base socket standard for 150W and below MH **3** Available in 120V only **4** When gold anodized band is chosen, finial finished in gold **5** Specifications and dimensions subject to change without notice

TRADITIONAIRE™

50-250W

UTR TRADITIONAIRE™

POST-TOP AREA LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING + COVER
Hinged (stainless steel hinge pins) die-cast aluminum housing and cover with cupola. Standard color is black polyester powder coat. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

REFRACTOR
Injection molded acrylic refractor panels.

SOCKET
Mogul-base porcelain socket. (50-150W Metal Halide is medium-base socket standard).

BALLAST
Ballast assembly with encapsulated starter (where used). Tunnel type compression terminal lugs.

MOUNTING
Self-aligning pole-top fitter fits 3" O.D. pole tops or vertical tenons. Square headed 1 1/4" polymer coated mounting bolts with a lock nut.

FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
2.3

SHIPPING DATA [Approximate Net Weight]:
37 lbs. [17 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: UTR50SR2554

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	DISTRIBUTION	COLORS	OPTIONS + ACCESSORIES
UTR=Traditionaire™	**50**=50W **70**=70W **10**=100W **15**=150W [1] **17**=175W **20**=200W **25**=250W	**M**=Metal Halide [3] **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**H**=Reac./HPF **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA **C**=CWI	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**22**=Type II **33**=Type III [4] **55**=Type V	(add as suffix) **AP**=Grey **BZ**=Bronze **GN**=Hartford Green **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
4=NEMA Photocontrol Receptacle
B=House-side Shield
E=Factory Installed Cupola Cover with Cast Aluminum Eagle
H=Plug-in Starter Receptacle
J=Factory Installed Ladder Rest
L=Lamp Included
P=Polycarbonate Lens Panels
S=Snap Latches for Toolless Lamp Replacement
U=UL/CSA Listed
W=20' #12 Leads Installed

ACCESSORIES (order separately)
TA1BK=Decorative Ladder Rest for Field Installation
OA1219=TufGuard Vandal Shield
OA1245=Pendant Mount Kit [5]

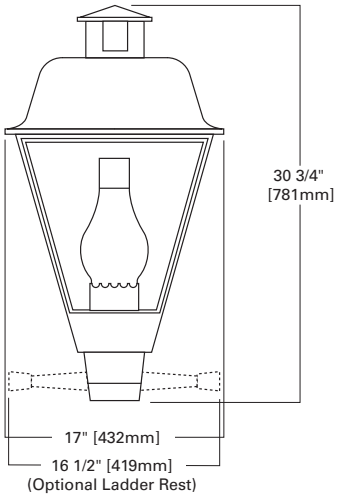
NOTE: 1 150W units are for S55 Lamps **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base porcelain socket standard for 50-150W Metal Halide **4** Requires coated lamp to achieve Type III distribution **5** Must be ordered with T Option **6** Specifications and dimensions subject to change without notice

DAYFORM TRADITIONAIRE™

50-175W

UTD DAYFORM TRADITIONAIRE™

POST-TOP AREA LUMINAIRE



DARK SKY COMPLIANT CO Cutoff

STREETWORKS

SPECIFICATION FEATURES

HOUSING + COVER
Hinged (stainless steel hinge pins) die-cast aluminum housing and cover with cupola. Standard color is black polyester powder coat. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label. Fixture is 3G vibration rated.

SOCKET
Mogul-base porcelain socket. (150W Metal Halide and below are medium-base).

REFLECTOR
Specular anodized aluminum reflector.

REFRACTOR
Injection molded, contoured polycarbonate lens panels.

CHIMNEY
Decorative glass chimney and support.

BALLAST
Ballast assembly with encapsulated starter (where used). Tunnel type compression terminal lugs.

MOUNTING
Self-aligning pole-top fitter fits 3" O.D. pole tops or vertical tenons. Square headed 1 1/4" polymer coated mounting bolts with a lock nut.

FINISH
Standard polyester powder coat finish in black. For more color options see optional color or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
2.6

SHIPPING DATA [Approximate Net Weight]:
35 lbs. [16 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: UTD50SR2554

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	DISTRIBUTION	COLORS (add as suffix)	OPTIONS + ACCESSORIES
UTD=Dayform Traditionaire™	**50**=50W **70**=70W **10**=100W **15**=150W [1] **17**=175W	**M**=Metal Halide [3] **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**H**=Reac./HPF **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V	**22**=Type II **33**=Type III **55**=Type V	**AP**=Grey **BZ**=Bronze **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
4=NEMA Photocontrol Receptacle
E=Factory Installed Cupola Cover with Cast Aluminum Eagle
H=Plug-in Starter Receptacle
J=Factory Installed Ladder Rest
L=Lamp Included
S=Snap Latches for Toolless Lamp Replacement
U=UL/CSA Listed
W=20' #12 Leads Installed

ACCESSORIES (order separately)
TA1BK=Decorative Ladder Rest for Field Installation

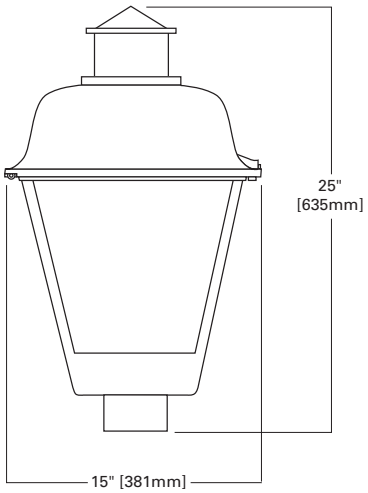
NOTE: 1 150W units are for S55 Lamps **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Medium-base porcelain socket standard 150W and below **4** Specifications and dimensions subject to change without notice

TRADITIONAL TOP LEXINGTON

70-175W

LXT TRADITIONAL TOP LEXINGTON

POST-TOP AREA LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum base housing. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

TOP
Hinged die-cast aluminum top with cupola cover.

REFRACTOR
Injection molded acrylic refractor panels.

SOCKET POSITION
Vertical socket position is mogul-base porcelain socket (Type V). 50-150W Metal Halide is medium-base socket standard. Horizontal socket position is mogul-base porcelain socket (Type III, field adjustable). 50-150W Metal Halide is medium-base socket standard.

SCREWS
Captive retaining screw.

STARTER
Plug-in starter.

TERMINAL BLOCK
Terminal block standard.

MOUNTING
Self-aligning pole-top fitter fits 2 3/8" and 3" O.D. tenons. Square headed 1 1/4" polymer coated mounting bolts.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
25 lbs. [11 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: LXT70SR2554

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	DISTRIBUTION	COLORS	OPTIONS
LXT=Traditional Top Lexington	**70**=70W **10**=100W **15**=150W **17**=175W	**M**=Metal Halide [2] **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**H**=Reac./HPF **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **P**=240 w/PCR wired 120V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**22**=Type II **33**=Type III [3] **55**=Type V **2H**=Type II Horizontal **3H**=Type III Horizontal	(add as suffix) **AP**=Grey **BZ**=Bronze **WH**=White	(See Below)

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fused, Internally Mounted (120 or 277V)
2=Double Fused, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
B=House-side Shield
L=Lamp Included
N=NEMA Ballast Bracket [4]
P=Polycarbonate Lens Panels
S=Snap Latches for Toolless Lamp Replacement
U=UL/CSA Listed

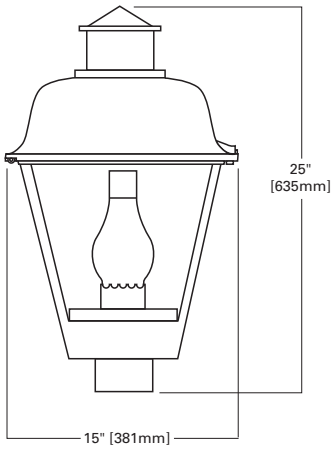
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** 50-150W Metal Halide is medium-base socket standard **3** Requires use of coated lamp to achieve Type III distribution **4** Available in Reactor HPF and NPF For Hi Reactance or CWA availability consult your Streetworks representative **5** Specifications and dimensions subject to change without notice

DAYFORM LEXINGTON

70-150W

LXD DAYFORM LEXINGTON

POST-TOP AREA LUMINAIRE



DARK SKY COMPLIANT CO Cutoff

STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum base housing. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

TOP
Hinged die-cast aluminum top with cupola cover.

REFLECTOR
Anodized aluminum reflector with field adjustable socket.

REFRACTOR
Clear acrylic refractor panels.

CHIMNEY
Decorative glass chimney and brass holder.

SCREWS
Captive retaining screw.

STARTER
Plug-in starter.

TERMINAL BLOCK
Terminal block standard.

MOUNTING
Self-aligning pole-top fitter fits 2 3/8" and 3" O.D. tenons. Square headed 1 1/4" polymer coated mounting bolts.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
25 lbs. [11 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: LXD70SR2334

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	DISTRIBUTION	COLORS	OPTIONS
LXD=Dayform Lexington	**70**=70W	**M**=Metal Halide [2]	**H**=Reac./HPF [3]	**2**=120V	**22**=Type II	(add as suffix)	(See Below)
	10=100W	**P**=Pulse Start Metal Halide	**N**=Hi. Reac./NPF		**33**=Type III	**AP**=Grey	
	15=150W	**S**=High Pressure Sodium	**R**=Reac./NPF			**BZ**=Bronze	
						WH=White	

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fused, Internally Mounted (120 or 277V)
4=NEMA Photocontrol Receptacle
L=Lamp Included
P=Polycarbonate Lens Panels
S=Snap Latches for Toolless Lamp Replacement
U=UL/CSA Listed

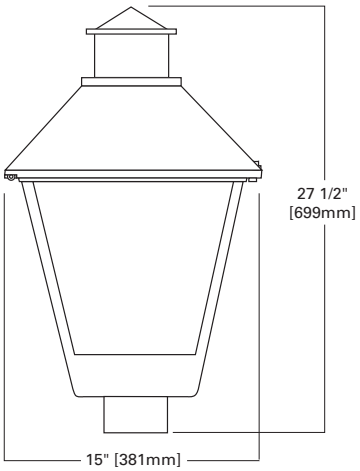
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** Medium-base porcelain socket standard **3** High Pressure Sodium only **4** Specifications and dimensions subject to change without notice

LEXINGTON

50-175W

LXF LEXINGTON

POST-TOP AREA LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum base housing. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

TOP
Hinged die-cast aluminum top with cupola cover.

REFRACTOR
Injection molded acrylic refractor panels.

VERTICAL SOCKET
Mogul-base porcelain socket (Type V). 50-150W Metal Halide is medium-base socket standard.

SCREWS
Captive retaining screw.

STARTER
Plug-in starter.

MOUNTING
Self-aligning pole-top fitter fits 2 3/8" and 3" O.D. tenons. Square headed 1 1/4" polymer coated mounting bolts.

HORIZONTAL SOCKET
Mogul-base porcelain socket (Type III, field adjustable). 50-150W Metal Halide is medium-base socket standard.

TERMINAL BLOCK
Terminal block standard.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
25 lbs. [11 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: LXF70SR2554

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	REFRACTOR TYPE	COLORS	OPTIONS
LXF=Lexington	**50**=50W	**M**=Metal Halide [2]	**N**=Hi. Reac./NPF	**2**=120V	**22**=Type II	(add as suffix)	(See Below)
	70=70W	**P**=Pulse Start Metal Halide	**P**=Hi. Reac./HPF	**0**=208V	**33**=Type III [3]	**AP**=Grey	
	10=100W	**S**=High Pressure Sodium	**R**=Reac./NPF	**4**=240V	**55**=Type V	**BZ**=Bronze	
	15=150W		**W**=CWA	**7**=277V	**2H**=Type II Horizontal	**WH**=White	
	17=175W		**H**=Reac./HPF	**8**=480V	**3H**=Type III Horizontal		
				9=347V			
				P=240 w/PCR wired 120V			
				W=Multi-Tap wired 120V			
				N=Multi-Tap wired 277V			
				V=Multi-Tap wired 240V			

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fused, Internally Mounted (120 or 277V)
2=Double Fused, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
B=House-side Shield
L=Lamp Included
N=NEMA Ballast Bracket [4]
P=Polycarbonate Lens Panels
S=Snap Latches for Toolless Lamp Replacement
U=UL/CSA Listed

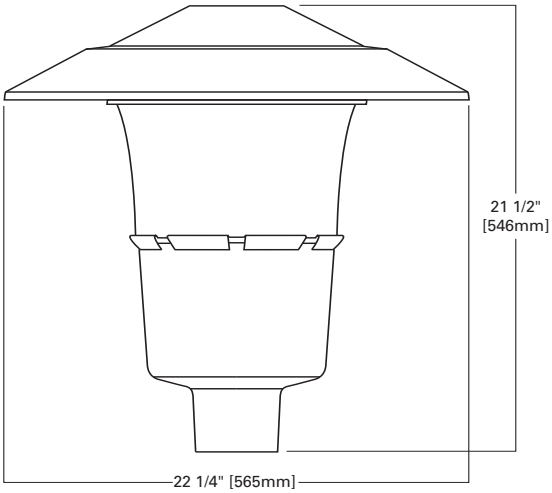
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** Medium-base porcelain socket standard 150W and below **3** Requires use of coated lamp to achieve Type III distribution **4** Available in Reactor HPF and NPF For Hi Reactance or CWA availability consult your Streetworks representative **5** Specifications and dimensions subject to change without notice

WOODBRIDGE

50-250W

MPW WOODBRIDGE

POST-TOP AREA LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING + TOP
Die-cast aluminum housing with spun and stamped aluminum top. Over-center latch for relamping and ballast power module access. Top is completely removable without the use of tools. Standard color is grey. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

REFRACTOR
Injection molded acrylic refractors available in Type II, III or V distributions. Optional glass refractor available.

SOCKET
Mogul-base socket for 50W through 150W High Pressure Sodium and 175W and 250W Metal Halide; 50W through 150W Metal Halide is medium-base socket. All sockets are 4KV pulse rated.

BALLAST
Power module designed for easy removal of all electrical components for servicing by loosening two screws. Encapsulated plug-in starter may be replaced through top access. Two-position tunnel type compression terminal block with housing grounding screw. Removable tethered door assembly for easy access to wiring connections with stainless steel captive screw.

PHOTOCONTROL
Optional internal NEMA twistlock photocontrol available. Accessible through door assembly.

MOUNTING
Post top mount fits 3" O.D. tenons. Secured by square head 3/8" stainless steel mounting bolts.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
34 lbs. [14 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: MPW50SR255

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	COLORS (add as suffix)	OPTIONS + ACCESSORIES (See Below)
MPW=Woodbridge	**50**=50W **70**=70W **10**=100W **15**=150W **17**=175W **25**=250W [1]	**M**=Metal Halide [2] **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**R**=Reac./NPF [3] **H**=Reac./HPF [3] **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **W**=CWA **K**=10KV CWA [4]	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **N**=Multi-Tap wired 277V **W**=Multi-Tap wired 120V **P**=240/120 PCR	**22**=Type II **33**=Type III **55**=Type V	**BK**=Black **BZ**=Bronze **WH**=White	

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277 or 347V)
2=Double Fused (208, 240 or 480V)
3=Three Place Terminal Block
4=Internal NEMA Photocontrol Receptacle
5=Top Mount NEMA Photocontrol Receptacle
B=House-side Shield [5]
G=Glass Refractor
L=Lamp Included
P=Polycarbonate Refractor
S=Scrolls
U=UL/CSA Listed

ACCESSORIES (order separately)
OA1202=House-side Shield

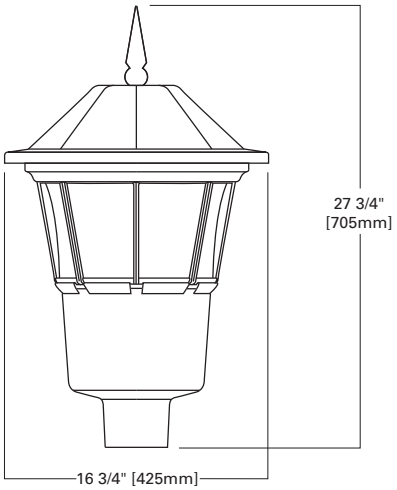
NOTE: 1 Metal Halide only **2** 50W through 150W Metal Halide are medium-base socket All others are mogul-base **3** 120V only **4** 50W through 150W High Pressure Sodium only **5** Order OA1202 for field installation **6** Specifications and dimensions subject to change without notice

NEW HAVEN

50-250W

MPN NEW HAVEN

POST-TOP AREA LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING + TOP
Die-cast aluminum housing with spun and stamped aluminum top. Toolless entry latch for relamping and ballast power module access. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

REFRACTOR
Injection molded acrylic refractors available in Type II, III or V distributions. Optional glass or polycarbonate refractors available.

SOCKET
Mogul-base socket for 50W through 150W High Pressure Sodium and 175W and 250W Metal Halide; 50W through 150W Metal Halide is medium-base socket. All sockets are 4KV pulse rated.

BALLAST
Power module designed for easy removal of all electrical components for servicing by loosening two screws. Encapsulated plug-in starter may be replaced through top access. Two-position tunnel type compression terminal block with housing grounding screw. Removable tethered door assembly for easy access to wiring connections with stainless steel captive screw.

PHOTOCONTROL
Optional internal NEMA twistlock photocontrol available. Accessible through door assembly.

MOUNTING
Post top mount fits 3" O.D. tenons. Secured by 3 3/8" allen-head stainless steel fasteners.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
34 lbs. [14 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: MPN50SR255

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	COLORS (add as suffix)	OPTIONS + ACCESSORIES (See Below)
MPN=New Haven	**50**=50W **70**=70W **10**=100W **15**=150W **17**=175W **25**=250W [1]	**M**=Metal Halide [2] **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**R**=Reac./NPF [3] **H**=Reac./HPF [3] **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **W**=CWA **K**=10KV CWA [4]	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **N**=Multi-Tap wired 277V **W**=Multi-Tap wired 120V **P**=240/120 PCR	**22**=Type II **33**=Type III **55**=Type V	**AP**=Grey **BZ**=Bronze **GN**=Hartford Green **WH**=White	

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277 or 347V)
2=Double Fused (208, 240 or 480V)
3=Three Place Terminal Block
4=Internal NEMA Photocontrol Receptacle
B=House-side Shield [5]
G=Glass Refractor [6]
L=Lamp Included
P=Polycarbonate Refractor
U=UL/CSA Listed
T=Thumb Screw Latch

ACCESSORIES (order separately)
OA1202=House-side Shield

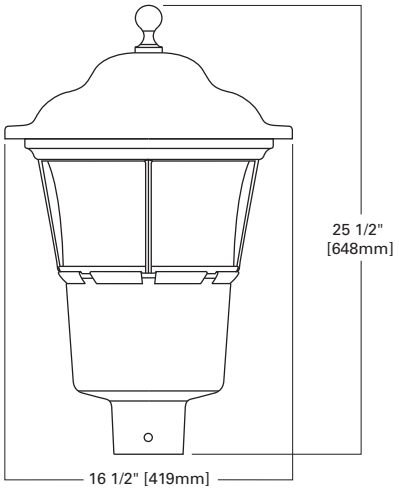
NOTE: 1 Metal Halide only **2** 50W through 150W Metal Halide are medium-base socket All others are mogul-base **3** 120V only **4** 50W through 150W High Pressure Sodium only **5** Order OA1202 for field installation **6** Available in Type III and V only **7** Specifications and dimensions subject to change without notice

BRECKENRIDGE

50-250W

MPB BRECKENRIDGE

POST-TOP AREA LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING + TOP
Die-cast aluminum housing with spun and stamped aluminum top. Toolless entry latch for relamping and ballast power module access. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

REFRACTOR
Injection molded acrylic refractors available in Type II, III or V distributions. Optional glass or polycarbonate refractors available.

SOCKET
Mogul-base socket for 50W through 150W High Pressure Sodium and 175W and 250W Metal Halide; 50W through 150W Metal Halide is medium-base socket. All sockets are 4KV pulse rated.

BALLAST
Power module designed for easy removal of all electrical components for servicing by loosening two screws. Encapsulated plug-in starter may be replaced through top access. Two-position tunnel type compression terminal block with housing grounding screw. Removable tethered door assembly for easy access to wiring connections with stainless steel captive screw.

PHOTOCONTROL
Optional internal NEMA twistlock photocontrol available. Accessible through door assembly.

MOUNTING
Post top mount fits 3" O.D. tenons. Secured by 3/8" allen-head stainless steel fasteners.

EPA [Effective Projected Area]:
1.7

SHIPPING DATA [Approximate Net Weight]:
34 lbs. [14 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: MPB50SR255

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	COLORS	OPTIONS + ACCESSORIES
MPB=Breckenridge	**50**=50W **70**=70W **10**=100W **15**=150W **17**=175W **25**=250W [1]	**M**=Metal Halide [2] **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**R**=Reac./NPF [3] **H**=Reac./HPF [3] **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **W**=CWA **K**=10KV CWA [4]	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **N**=Multi-Tap wired 277V **W**=Multi-Tap wired 120V **P**=240/120 PCR	**22**=Type II **33**=Type III **55**=Type V	(add as suffix) **AP**=Grey **BZ**=Bronze **GN**=Hartford Green **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277 or 347V)
2=Double Fused (208, 240 or 480V)
3=Three Place Terminal Block
4=Internal NEMA Photocontrol Receptacle
B=House-side Shield [5]
G=Glass Refractor [6]
L=Lamp Included
P=Polycarbonate Refractor
U=UL/CSA Listed
T=Thumb Screw Latch

ACCESSORIES (order separately)
OA1202=House-side Shield

NOTE: 1 Metal Halide only. **2** 50W through 150W Metal Halide are medium-base socket. All others are mogul-base. **3** 120V only. **4** 50W through 150W High Pressure Sodium only. **5** Order OA1202 for field installation. **6** Available in Type III and V only. **7** Specifications and dimensions subject to change without notice.

AREA

PRODUCTS

TALON

TALON

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.

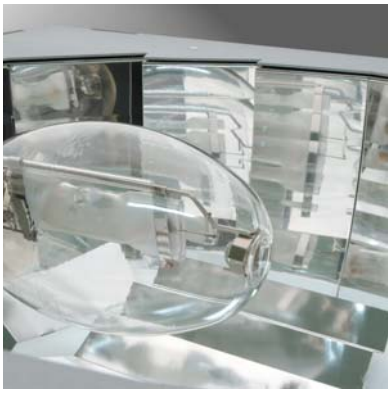
Coupling precise mechanical design with premium quality materials, the Talon site light is constructed to sustain the rigors of outdoor operation. Thick wall die-cast aluminum construction and channel set silicone gasketing form an impenetrable IP66 barrier optimizing optical efficiency and fixture longevity in the harshest of environments.

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass configurations only.

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.

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 IP66 rating. Stainless steel latches and hinges.



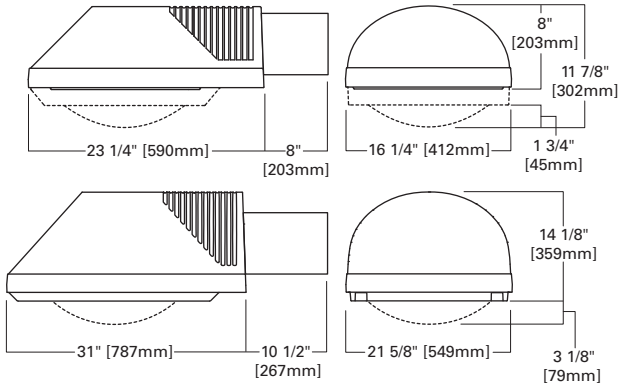
REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. All reflectors are field rotatable in 90° increments.

TMU/TLU TALON

ARCHITECTURAL AREA LUMINAIRE

TMU 70-400W | **TLU** 250-1000W

STREETWORKS IP66 RATED



DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass configurations only.

SPECIFICATION FEATURES

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 IP66 rating. Stainless steel latches and hinges.

OPTICAL SYSTEMS

Choice of fourteen [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 High Pressure Sodium and 100-1000W Metal Halide. Standard with medium-base socket for 70W Pulse Start Metal Halide. All optical modules feature quick disconnect wiring plugs and are field rotatable in 90°increments.

ELECTRICAL

TMU offered standard with ballast and related electrical componentry hard mounted to die-cast housing for optimal heat transfer and improved operating efficiency. TMU optional and TLU 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.

MOUNTING

Extruded 8" [TMU Talon Medium] or 10 1/2" [TLU 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.

FINISH

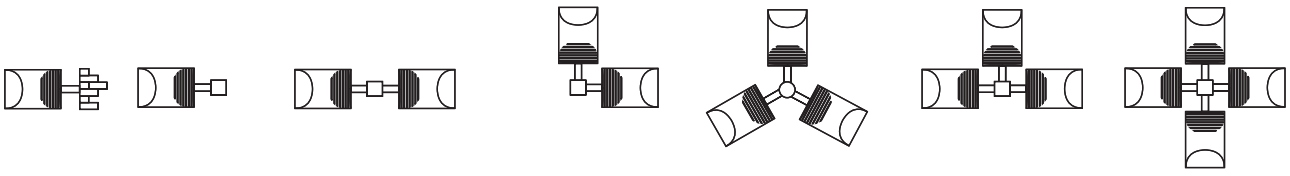
Housing and arm finished in premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic.

EPA [Effective Projected Area]
TMU: Recessed Door w/o Arm: 0.79
Deep Door w/o Arm: 1.02
8" Arm: 0.43
TLU: Without Arm: 1.82
10 1/2" Arm: 0.6

SHIPPING DATA [Approximate Net Weight]
TMU: 47-52 lbs. [21.79-23.63 kgs.]
TLU: 98 lbs. [44.54 kgs.]

MOUNTING CONFIGURATIONS

Wall Mount | **Arm Mount Single** | **Arm Mount 2 @ 180°** | **Arm Mount 2 @ 90°** | **Arm Mount 3 @ 120° (Round Pole Only)** | **Arm Mount 3 @ 90°** | **Arm Mount 4 @ 90°**



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
TMU	"M"	Recessed Door 1.22	Recessed Door 2.44	Recessed Door 2.44	Recessed Door 3.23	Recessed Door 3.23	Recessed Door 3.63
		Deep Door 1.45	Deep Door 2.90	Deep Door 2.90	Deep Door 3.92	Deep Door 3.92	Deep Door 4.43
TLU	"M"	2.51	5.02	5.02	6.85	6.85	7.77

ORDERING INFORMATION

SAMPLE NUMBER: TMU40SWW3SF

PRODUCT FAMILY[1]	LAMP WATTAGE[2]	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	LENS TYPE	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES
TMU=Talon Site Medium	**70**=70W	**S**=High Pressure Sodium	**C**=CWI	**2**=120V	**Horizontal Lamp**	**F**=Flat Glass	**AP**=Grey	[See Below]
TLU=Talon Site Large	**10**=100W	**R**=Super Metal Halide	**H**=Reac./HPF	**0**=208V	**2F**=Type II Formed	**S**=Sag Glass	**BK**=Black	
	15=150W	**M**=Metal Halide	**K**=10KV CWA	**4**=240V	**2S**=Type II Segmented[5]		**BZ**=Bronze	
	17=175W	**P**=Pulse Start Metal Halide	**M**=Mag. Reg.	**7**=277V	**3F**=Type III Formed		**DP**=Dark Platinum	
	20=200W[3,4]		**N**=Hi. Reac./NPF	**8**=480V	**3S**=Type III Segmented[5]		**GM**=Graphite Metallic	
	25=250W		**P**=Hi. Reac./HPF	**9**=347V	**4F**=Type IV Formed		**WH**=White	
	32=320W[3,4]		**R**=Reac./NPF	**N**=Multi-Tap wired 277V	**4S**=Type IV Segmented[5]			
	35=350W[3,4]		**W**=CWA	**W**=Multi-Tap wired 120V	**5F**=Type V Formed			
	40=400W[4]			**V**=Multi-Tap wired 240V	**5S**=Type V Segmented[5]			
	24=250/400W wired 250W				**SL**=Spill Light Eliminator			
	42=250/400W wired 400W				**AF**=Automotive Front Row[6]			
	75=750W				**Vertical Lamp**			
	87=875W				**3V**=Type III Vertical[7]			
	91=1000W[4]				**4V**=Type IV Vertical[7]			
					AR=Area Round[7]			
					AS=Area Square[7]			
					AF=Automotive Front Row[8]			

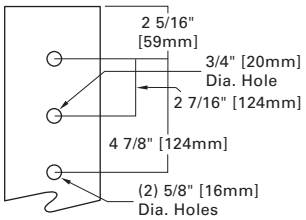
OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse [120, 277 or 347V][9]
2=Double Fuse [208, 240 or 480V][9]
3=Three Position Terminal Block
4=NEMA Twistlock Photocontrol Receptacle
B=Internal House-side Shield[10]
DD=Deep Door
DM=Direct Mount for Round or Square Pole
DW=Direct Wall Mount Kit
E=Quartz Restrike w/Delay [Also Strikes at Cold Start][11]
H=Plug-in Starter Receptacle[12]
HL=Hi/Low Dimming[13]
L=Lamp Included
MS=External Mast Arm Adapter
P=Button Type Photocontrol [120, 208, 240 or 277V][6,9]
Q=Quartz Restrike [Hot Restrike Only][11]
R=Removable Power Tray[6]
U=U.L. Listed
V=Polycarbonate Vandal Shield[6]
WM=Wall Bracket

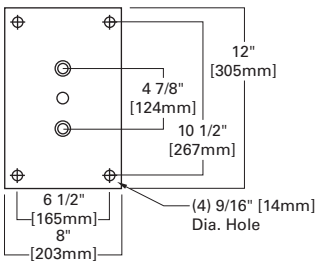
ACCESSORIES (order separately, replace XX with color suffix)
OA/RA1016=NEMA Photocontrol—Multt-Tap
OA/RA1027=NEMA Photocontrol—480V
OA/RA1201=NEMA Photocontrol—347V
OA/RA1013=Shorting Cap
MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon
MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
MA1012-XX=3 @ 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=TMU External House-side Shield Kit [EPA 0.38][6]
MA1214-XX=TLU External House-side Shield Kit [EPA 0.94][8]

DRILLING PATTERNS

TYPE "M"



WALL MOUNT



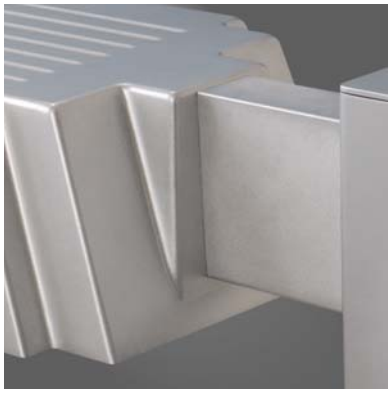
NOTES: 1 8" arm (TMU), 10 1/2" (TLU) arm and round pole adapter included with fixture. **2** Standard with mogul-base socket for High Pressure Sodium and 100-1000W Metal Halide. Standard with medium-base socket for 70W Pulse Start Metal Halide. **3** 200/320/350/875W Pulse Start Metal Halide lamp only. **4** Requires reduced envelope lamp. **5** Maximum wattage on segmented optical distributions is 400W. 400W Metal Halide lamp must use reduced envelope ED-28 lamp. **6** TMU only. **7** TMU vertical lamp optics ship standard with deep door, not available with flat glass for 250-400W. **8** TLU only. **9** Must Specify Voltage. **10** House-side shield not available on 5S, 5F, AS, AR and SL optics. **11** Quartz options not available with SL and AF optics. **12** Not available in 1000W. **13** Requires vertical lamp orientation. Provides 24V low voltage leads used in dimming control. **14** Specifications and dimensions subject to change without notice.

VISION SITE

VISION SITE

The classic lines and sophisticated construction of the Vision Site makes it an ideal complement to site design. Without dominating from a distance, the luminaire's combination of smooth contours and sharp reveals allow the luminaire to change character from different viewing angles. The Vision Site luminaire is designed to withstand the rigors of outdoor lighting while offering the features needed for simple maintenance.

DARK SKY COMPLIANT FCO Full Cutoff



MOUNTING
Extruded aluminum arm available in 6" or 10" lengths. Integral guides within arm allow fixture to be easily secured to the pole or wall mount plate.

REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. Reflector modules attach to the housing via toolless fasteners. All reflectors are field rotatable in 90° increments.

TOOLLESS POWER TRAY
Ballast and related electrical componentry are mounted to a reinforced tray with handle for ease of maintenance. Quick electrical disconnects allow the tray to be completely removed from the housing providing ample room for attachment to the pole. Optional power tray fuse connections offer a distinct and easy to maintain alternative to common inline fuse connections.

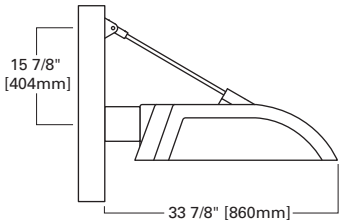
AVS/AVM VISION SITE

ARCHITECTURAL AREA LUMINAIRE

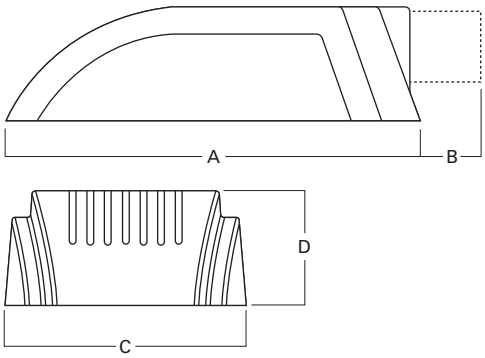
AVS 70-175W | **AVM** 150-400W

STREETWORKS IP66 (AVS), IP54 (AVM) RATED

STRUCTURAL MOUNT



DARK SKY COMPLIANT FCO Full Cutoff



Fixture	A	B	C	D
AVS (in.)	23	5	13 1/2	6
(mm)	584	127	343	152
AVM (in.)	28	6 or 10	17	7
(mm)	724	152 or 254	432	178

SPECIFICATION FEATURES

HOUSING

Heavy wall die-cast aluminum housing maintains a nominal .120 thickness. Vision is standard in black. Other colors available. Consult your Streetworks Representative. U.L. Listed and CSA certified. ANSI wattage/source label.

DOOR

One-piece die-cast door frame. Door frame opens in a toolless fashion via release of one (AVS) or two (AVM) flush mounted toolless latches. Tempered 1/8" thick clear glass lens seals to door with a weather-tight continuous gasket. Optical chamber is sealed against entry of dirt and moisture by a continuous door mounted gasket which firmly compresses against optical enclosure walls.

LENS

Impact resistant 1/8" thick tempered clear flat glass.

OPTICAL SYSTEMS

Choice of five (5) 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. Optional high efficiency hydroformed reflectors available in AVM housing only in four (4) distributions patterns. All reflector modules feature toolless removal, quick disconnect wiring plugs, and are field rotatable in 90° increments. HID lamp sources in medium housing (AVM) optics feature mogul-base lampholders while the small housing (AVS) optics feature medium-base lampholders.

ARM

One-piece extruded rectangular arm available in standard 5" (AVS), or 6", and 10" lengths (AVM). Internal bolt guides allow easy positioning of fixture during installation to pole or wall surface.

STRUCTURAL MOUNT

Die-cast cleat factory mounted to luminaire and finished in luminaire color. Stainless steel structural rod measures 1/2" in diameter and is provided in luminaire finish color or optional natural finish. Product works in conjunction with accessory AVS 5" arm and AVM 10" arm.

ELECTRICAL TRAY

Ballast and related electrical componentry are mounted to a reinforced one-piece galvanized steel tray with integral handle. For ease of maintenance, tray hinges open via toolless release of one spring loaded latch. Electrical quick disconnects allow tray to be completely removed from housing providing ample hand and tool room for attachment of fixture during installation, and a safer servicing environment. Optional tray mounted fuse connections offer a distinct and easy to maintain alternative to common inline fuse connections.

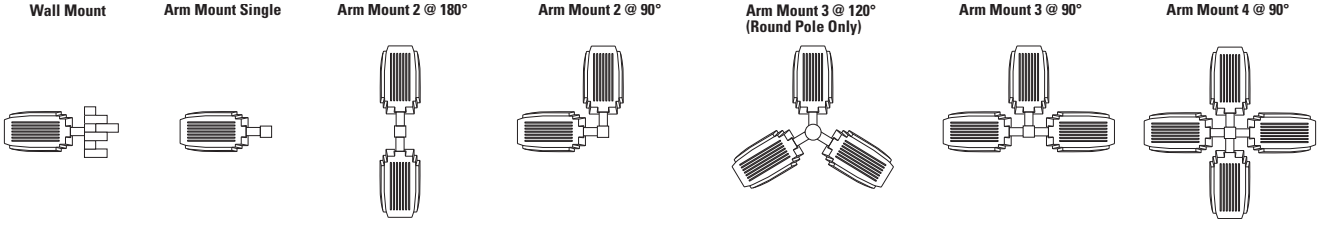
FINISH

Housing and arm finished in 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.

EPA [Effective Projected Area]:
AVS: Single 1.27 | Single Structural 1.28
AVM: Single 1.6 | Single Structural 1.82

SHIPPING DATA [Approximate Net Weight]:
AVS: 35 lbs. [16 kgs.]
AVM: 51 lbs. [23 kgs.]

MOUNTING CONFIGURATIONS



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
AVS	"E"	1.27	2.54	2.54	3.6	3.6	4.13
AVM	"M"	1.6	3.2	3.2	4.5	4.5	5.55

NOTE: 1 Assumes 10" arm for 90° and 120° mounting configurations, 6" for all else.

ORDERING INFORMATION

SAMPLE NUMBER: AVM40MWW3S

PRODUCT FAMILY [1]
AVS=Vision Site Small
AVM=Vision Site Medium

LAMP WATTAGE [2]
70=70W
10=100W
15=150W
17=175W
20=200W
25=250W
32=320W
35=350W
40=400W [3]

LAMP TYPE
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE
C=CWI
H=Reac./HPF
K=10KV CWA
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA

VOLTAGE
2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
5T=5-Tap
D=240/120/208/277V wired 240V w/PCR wired 120V
G=240/120V wired 240V
K=120/277V wired 120V
L=277/120V wired 277V
H=240/480V wired 240V
J=480/240V wired 480V
W=120/208/240/277V wired 120V
T=208/120/240/277V wired 208V
V=240/120/208/277V wired 240V
N=277/120/208/240V wired 277V
P=240V with PCR wired 120V
Q=240/120V wired 240 with PCR wired 120V
R=480V with PCR wired 240V

DISTRIBUTION
2F=Type II Formed
3F=Type III Formed
4F=Type IV Formed
5F=Type V Formed
2S=Type II Segmented
3S=Type III Segmented
4S=Type IV Segmented
5S=Type V Segmented
SL=Spill Light Eliminator

COLOR
(add as suffix/ must specify)
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
GM=Graphite Metallic
WH=White

STRUCTURAL OPTIONS [4]
CPS=Strut Rod/ Square Pole
CSS=Strut Rod/ Square Pole Stainless Steel
CPR=Strut Rod/ Round Pole
CSR=Strut Rod/ Round Pole Stainless Steel
CPW=Strut Rod/ Wall Mount
CSW=Strut Rod/ Wall Mount Stainless Steel

OPTIONS + ACCESSORIES
(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277, or 347V)
2=Double Fuse (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
B=House-side Shield [5]
L=Lamp Included
M=Metal Oxide Varistors
Q=Quartz Standby [6]
V=Vandal Shield

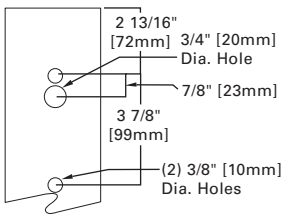
ACCESSORIES (order separately, replace XX with color suffix)
OA/RA1016=Photocontrol—Multi-Tap
OA/RA1027=Photocontrol—480V
OA/RA1201=Photocontrol—347V

AVS (Vision Site Small)
SA1071-XX=5" Arm For Square Pole
SA1074-XX=5" Arm For Round Pole
SA1073-XX=Direct Mount for Square Pole
SA1076-XX=Direct Mount For Round Pole
SA1077-XX=Wall Mount Kit with 5" Arm [7]
SA1200-XX=Direct Wall Mount Kit [7]
SA1101-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1102-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1103-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1104-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1105-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1106-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1107-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1108-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1109-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1110-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1111-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1112-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1113-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1114-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

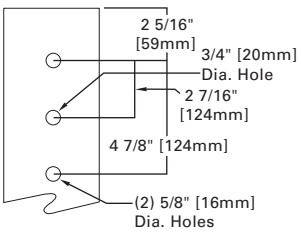
AVM (Vision Site Medium)
SA1050-XX=6" Arm For Square Pole
SA1051-XX=10" Arm For Square Pole [8]
SA1052-XX=6" Arm For Round Pole
SA1053-XX=10" Arm For Round Pole [8]
SA1054-XX=Wall Mount Kit with 6" Arm [7]
SA1056-XX=Direct Mount for Square Pole
SA1057-XX=Direct Mount for Round Pole
SA1201-XX=Direct Wall Mount Kit [7]
SA1207-XX=Mast Arm Adapter
SA1231-XX=Structural Mount Wall Mount Arm
SA1017-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1115-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1116-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1010-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D.Tenon

DRILLING PATTERNS

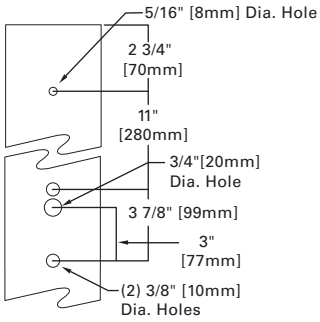
TYPE "E" (AVS)



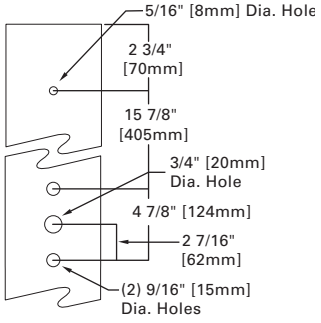
TYPE "M" (AVM)



TYPE "F" (AVS)
STRUCTURAL MOUNT



TYPE "G" (AVM)
STRUCTURAL MOUNT



NOTE: 1 Arm not included—see accessories. **2** AVS 70-175W medium-base socket, AVM 175-400W mogul-base. **3** 400W Metal Halide and Pulse Start Metal Halide use reduced envelope lamp. **4** Strut options do not include arm—please order separately. **5** House-side Shield not available with 5S or SL optics. **6** Quartz option not available with SL optics. **7** For use in down lighting applications only. **8** Use when mounting fixture heads at 90° increments. **9** Specifications and dimensions subject to change without notice.

ASCENT

ASCENT

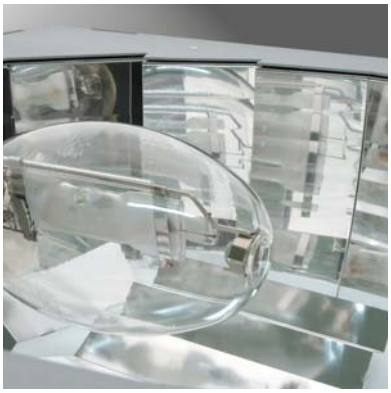
ASCENT enhances the rectilinear form with a housing that blends effortlessly to traditional or ambitious architectural settings. ASCENT offers two (2) housing sizes and a fluid form to match the culture in which it resides.

ASCENT articulates the Streetworks' design philosophy: Adapted form merged with superior design features. ASCENT is IP66 rated and all key luminaire components can be accessed and maintained without the use tools.

Environmental and legislative challenges continue to propagate as the public awareness of light in the environment expands. ASCENT responds to these evolving design trends by offering targeted solutions for full cutoff compliance, spill light control and path of egress illumination,while merging the latest in high efficiency lamp technologies.

DARK SKY COMPLIANT FCO Full Cutoff

DOOR
Door frame assembly features toolless release and removal. Raised door retainer detail on hinge bracket prevents accidental release while hinged down for maintenance.



REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. Reflector modules attach to the housing via toolless fasteners. All reflectors are field rotatable in 90° increments.

BALLAST TRAY
One-piece unitized, die-cast aluminum ballast tray can be accessed and removed without the use of tools. Integral handle ensures safe removal when disengaging and transporting tray

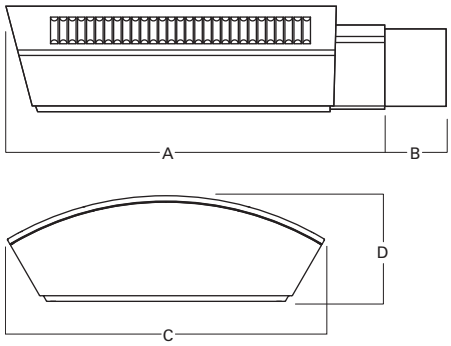
ATS/ATM ASCENT

ARCHITECTURAL AREA LUMINAIRE

ATS 70-175W | **ATM** 150-400W

STREETWORKS IP66 RATED

DARK SKY COMPLIANT FCO Full Cutoff



Fixture		A	B	C	D
ATS	(in.)	19 19/32	6 3/4	15 11/16	5 5/16
	(mm)	497	171	298	135
ATM	(in.)	25 9/32	6 1/2 or 9	21 3/16	7 1/16
	(mm)	642	166 or 229	537	179

SPECIFICATION FEATURES

HOUSING

Two-piece heavy-wall, die-cast aluminum housing maintains a nominal .125 wall thickness and utilizes continuous silicone gasketing between castings for a forbidding seal.

DOOR

Heavy-wall, die-cast aluminum door maintains a nominal .125 thickness. Continuous silicone gasketing provides IP66 compliant optical cavity. Toolless entry to housing is provided via two (2) flush mounted quick release latches. Concealed hinging allows door to be removed from housing without tools.

LENS

Impact resistant 1/8" thick tempered clear or optional frosted flat glass for concealment of lamp image.

OPTICAL SYSTEMS

Choice of five (5) 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. All reflector modules feature toolless removal, quick disconnect wiring plugs, and are toolless field rotatable in 90° increments. Small housing (ATS) optics feature medium-base lampholders for HID lamp sources. Medium housing (ATM) optics feature mogul-base lampholders for HID lamp sources.

ELECTRICAL TRAY

Ballast and related electrical components are mounted to a reinforced one-piece die-cast aluminum power tray. Quick disconnects allow tray to be completely removed from housing providing ample hand and tool room for attachment of luminaire during installation.

FINISH

Housing and arm finished in 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.

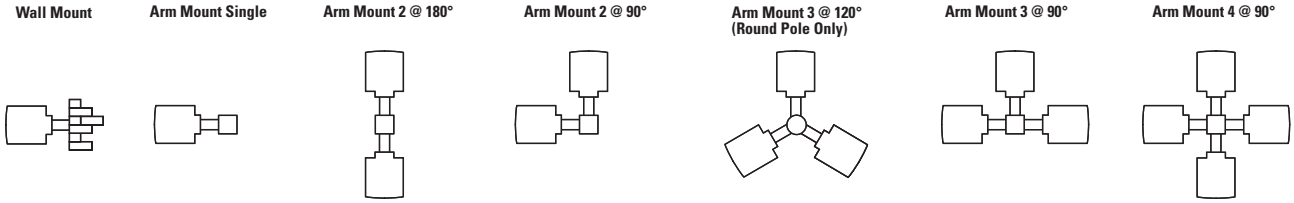
EPA [Effective Projected Area]:

ATS: 0.85
ATM: 1.35

SHIPPING DATA [Approximate Net Weight]:

ATS: 35 lbs. [15.91 kgs.]
ATM: 51 lbs. [23.18 kgs.]

MOUNTING CONFIGURATIONS



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
ATS	"A"	0.85	1.7	1.7	2.35	2.35	2.68
ATM	"C"	1.35	2.7	2.7	3.83	3.83	4.56

ORDERING INFORMATION

SAMPLE NUMBER: ATM25MWWSL

PRODUCT FAMILY [1]
ATS=Ascent Small
ATM=Ascent Medium

LAMP WATTAGE [2]
70=70W
10=100W
15=150W
17=175W
20=200W
25=250W
32=320W
35=350W
40=400W [3]

LAMP TYPE
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE
C=CWI
H=Reac./HPF
K=10KV CWA
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA

VOLTAGE
2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
5T=5-Tap
D=240/120/208/277V wired 240V w/PCR wired 120V
G=240/120V wired 240V
K=120/277V wired 120V
L=277/120V wired 277V
H=240/480V wired 240V
J=480/240V wired 480V
W=120/208/240/277V wired 120V
T=208/120/240/277V wired 208V
V=240/120/208/277V wired 240V
N=277/120/208/240V wired 277V
P=240V with PCR wired 120V
Q=240/120V wired 240 with PCR wired 120V
R=480V with PCR wired 240V

DISTRIBUTION
2S=Type II Segmented
3S=Type III Segmented
4S=Type IV Segmented
5S=Type V Segmented
SL=Spill Light Eliminator

COLOR (add as suffix/ must specify)
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
GM=Graphite Metallic
WH=White

OPTIONS + ACCESSORIES (See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277, or 347V)
2=Double Fuse (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
B=House-side Shield [4]
FR=Frosted Glass
L=Lamp Included
M=Metal Oxide Varistors
P=Button Photocontrol
Q=Quartz Standby [5]
V=Vandal Shield [6]

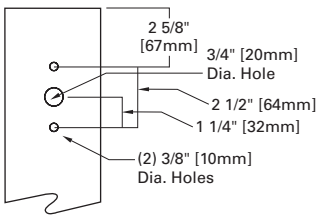
ACCESSORIES (order separately, replace XX with color suffix)
OA/RA1016=Photocontrol—Multi-Tap
OA/RA1027=Photocontrol—480V
OA/RA1201=Photocontrol—347V

ATS (Ascent Site Small)
SA1047-XX=Direct Wall Mount Kit [7]
SA1048-XX=Direct Mount Kit with 6 3/4" Arm [7]
SA1051-XX=6 3/4" Arm for Square Pole
SA1053-XX=6 3/4" Arm for Round Pole
SA1017-XX=Mast Arm Adapter Kit
SA1019-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1020-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1021-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1022-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1023-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1024-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1025-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1026-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1027-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1028-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1029-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1030-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1031-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1032-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

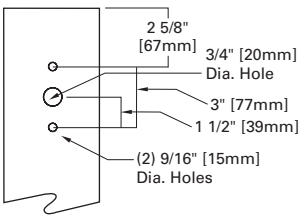
ATM (Ascent Site Medium)
SA1049-XX=Direct Wall Mount Kit [7]
SA1050-XX=Direct Mount Kit with 6 1/2" Arm [7]
SA1055-XX=6 1/2" Arm for Square Pole
SA1056-XX=9" Arm for Square Pole [8]
SA1057-XX=6 1/2" Arm for Round Pole
SA1059-XX=9" Arm for Round Pole [8]
SA1018-XX=Mast Arm Adapter Kit
SA1033-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1034-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1035-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1036-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1037-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1038-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1039-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1040-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1041-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1042-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1043-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1044-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1045-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1046-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

DRILLING PATTERNS

TYPE "A" (ATS)



TYPE "C" (ATM)



NOTE: 1 Arm not included—see accessories. **2** ATS 70-175W medium-base socket, ATM 175-400W mogul-base **3** 400W Metal Halide and Pulse Start Metal Halide use reduced envelope lamp **4** House-side Shield not available with 5S or SL optics. **5** Quartz option not available with SL optics. **6** 175W maximum. Available for ATS only. **7** For use in down lighting applications only. **8** Use when mounting fixture heads at 90° increments. **9** Specifications and dimensions subject to change without notice.

ICON

DOOR
Door frame assembly features toolless entry via two (2) recessed button style latches.

ICON

ICON's gentle curves and sleek profile create a shape that is beyond common. Two (2) unique arm choices combined with structural element options and multiple housing sizes provide no limitations in bridging to the architectural application.

Designed to sustain a lifetime of tough environmental conditions, ICON's precisely engineered die-cast aluminum housing utilizes an IP65 rated gasketing strategy combined with a seamless 5 stage polyester powder coat finish to seal out performance degrading contaminants.

Environmental and legislative challenges continue to propagate as the public awareness of light in the environment expands. ICON responds to these evolving design trends by offering targeted solutions for full cutoff compliance, spill light control, and path of egress illumination,while merging the latest in high efficiency lamp technologies.

BALLAST TRAY
One-piece unitized ballast tray can be accessed and removed without the use of tools. Integral handle ensures safe removal when disengaging and transporting tray

REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. Reflector modules attach to the housing via toolless fasteners. All reflectors are field rotatable in 90° increments.

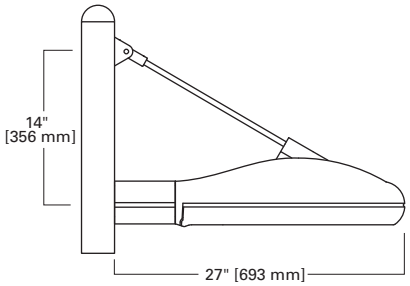
DARK SKY COMPLIANT FCO Full Cutoff

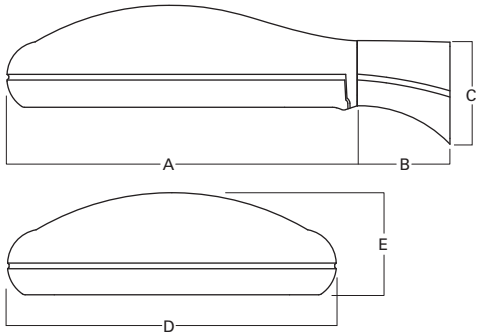
ANS/ANM ICON

ARCHITECTURAL AREA LUMINAIRE

ANS 70-175W | **ANM** 150-400W

STREETWORKS IP65 RATED





DARK SKY COMPLIANT FCO Full Cutoff

Fixture	A	B	C	D	E
ANS (in.)	21 3/16	5 5/8	6 1/2	19 5/8	6 11/64
(mm)	533	143	165	497	157
ANM (in.)	27 11/16	7	8 1/2	24 15/16	7 1/16
(mm)	687	178	216	332	179

SPECIFICATION FEATURES

HOUSING
Heavy wall, die-cast aluminum housing maintains a nominal .125 wall thickness for precise tolerance control and repeatability in manufacturing.

DOOR
Heavy wall, die-cast aluminum door maintains a nominal .125 wall thickness. Continuous silicone gasketing provides an IP65 fixture rating. Toolless entry to housing is provided via two (2) recess mounted button style latches. Captive hinging is fully concealed.

LENS
Impact-resistant 1/8" thick tempered clear or optional frosted flat glass for concealment of lamp image.

OPTICAL SYSTEMS
Choice of five (5) 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. All reflector modules feature toolless removal, quick disconnect wiring plugs, and are toolless field rotatable in 90°increments. Medium housing (ANM) optics feature mogul-base lampholders for HID lamp sources while small housing (ANS) optics feature medium-base lampholders.

ELECTRICAL TRAY
Ballast and related electrical components are mounted to a reinforced one piece toolless release power tray. Electrical quick disconnects allow tray to be completely removed from housing providing ample hand and tool room for attachment of luminaire during installation.

UPSWEEP ARM
Manufactured of heavy wall cast aluminum. Internal bolts guides provided for positioning arm to housing and pole.

LINEAR ARM
Manufactured of heavy wall extruded aluminum. Arm features internal bolt guides for positioning arm to housing and pole.

STRUCTURAL MOUNT
Die-cast aluminum cleat factory mounted and finished in luminaire color. Stainless steel structural rod measures 1/2" in diameter and is provided in luminaire finish or optional natural finish. Product functions in conjunction with linear arm. Poles provided pre-drilled for suspension mount applications.

STRUCTURAL WALL MOUNT
Die-cast cleat factory mounted to luminaire and finished in luminaire color. Stainless steel structural rod measures 1/2" in diameter and is provided in luminaire finish or optional natural finish. Wall bracket works in conjunction with linear arm.

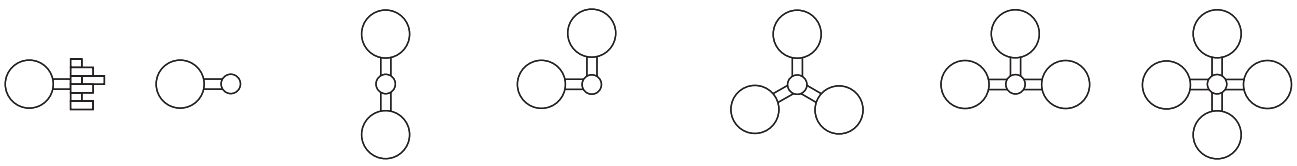
FINISH
Housing and arm finished in premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic.

EPA [Effective Projected Area]:
ANS: Single .69 | Single Structural .71
ANM: Single 1.09 | Single Structural 1.11

SHIPPING DATA [Approximate Net Weight]:
ANS: 37 lbs. [16.82 kgs.]
ANM: 53 lbs. [24.09 kgs.]

MOUNTING CONFIGURATIONS

Wall Mount | **Arm Mount Single** | **Arm Mount 2 @ 180°** | **Arm Mount 2 @ 90°** | **Arm Mount 3 @ 120° (Round Pole Only)** | **Arm Mount 3 @ 90°** | **Arm Mount 4 @ 90°**



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
ANS	"A"	0.69	1.38	1.38	1.84	1.84	2.07
ANM	"C"	1.09	2.18	2.18	2.86	2.86	3.20

NOTE: 1 Assumes 12" arm for 90° and 120° mounting configurations, 6" for all else.

ORDERING INFORMATION

SAMPLE NUMBER: ANM40MC2SLCPSDP

PRODUCT FAMILY [1]	LAMP WATTAGE [2]	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	STRUCTURAL OPTIONS [4]	COLORS (add as suffix/ must specify)	OPTIONS + ACCESSORIES (See Below)
ANS=Icon Small **ANM**=Icon Medium	**70**=70W **10**=100W **15**=150W **17**=175W **20**=200W **25**=250W **32**=320W **35**=350W **40**=400W [3]	**M**=Metal Halide **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**C**=CWI **H**=Reac./HPF **K**=10KV CWA **M**=Mag. Reg. **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **D**=240/120/208/277V wired 240V w/PCR wired 120V **G**=240/120V wired 240V **K**=120/277V wired 120V **L**=277/120V wired 277V **H**=240/480V wired 240V **J**=480/240V wired 480V **W**=120/208/240/277V wired 120V **T**=208/120/240/277V wired 208V **V**=240/120/208/277V wired 240V **N**=277/120/208/240V wired 277V **P**=240V with PCR wired 120V **Q**=240/120V wired 240 with PCR wired 120V **R**=480V with PCR wired 240V	**2S**=Type II Segmented **3S**=Type III Segmented **4S**=Type IV Segmented **5S**=Type V Segmented **SL**=Spill Light Eliminator	**CPS**=Strut Rod/ Square Pole **CSS**=Strut Rod/ Square Pole Stainless Steel **CPR**=Strut Rod/ Round Pole **CSR**=Strut Rod/ Round Pole Stainless Steel **CPW**=Strut Rod/ Wall Mount **CSW**=Strut Rod/ Wall Mount Stainless Steel	**AP**=Grey **BK**=Black **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
3=Three Position Terminal Block
4=Internal NEMA Photocontrol Receptacle
B=House-side Shield [5]
FR=Frosted Flat Glass
L=Lamp Included
M=Metal Oxide Varistors
P=Button Photocontrol
Q=Quartz Standby [6]
V=Vandal Shield [7]

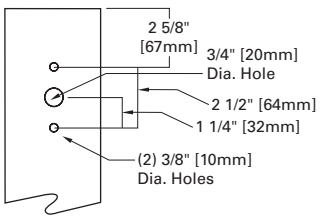
ACCESSORIES (order separately, replace XX with color suffix)
OA/RA1016=NEMA Photocontrol—Multi-Tap
OA/RA1027=NEMA Photocontrol—480V
OA/RA1201=NEMA Photocontrol—347V

ANS (Icon Small)
SA1001-XX=Wall Mount Kit with Upsweep Arm [8]
SA1002-XX=Wall Mount Kit with Linear Arm [8]
SA1005-XX=Upsweep Arm for Square Pole
SA1006-XX=Upsweep Arm for Round Pole
SA1008-XX=Linear Arm for Square Pole
SA1009-XX=Linear Arm for Round Pole
SA1017-XX=Mast Arm Adapter Kit
SA1019-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1020-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1021-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1022-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1023-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1024-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1025-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1026-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1027-XX=2 @180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1028-XX=3 @120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1039-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1030-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1031-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1032-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

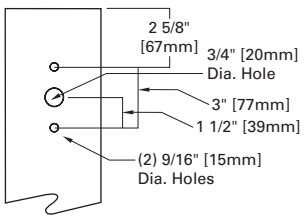
ANM (Icon Medium)
SA1003-XX=Wall Mount Kit with Upsweep Arm
SA1004-XX=Wall Mount Kit with Linear Arm
SA1011-XX=Upsweep Arm for Square Pole
SA1012-XX=Upsweep Arm for Round Pole
SA1014-XX=Linear Arm for Square Pole
SA1015-XX=Linear Arm for Round Pole
SA1018-XX=Mast Arm Adapter Kit
SA1033-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1034-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1035-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1036-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1037-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1038-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1039-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1040-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1041-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1042-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1043-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1044-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1045-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1046-XX=4 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

DRILLING PATTERNS

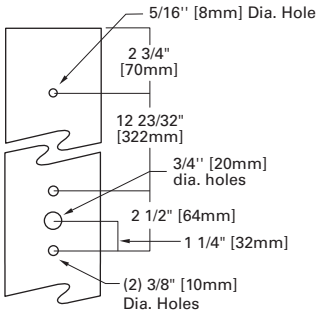
TYPE "A" (ANS)



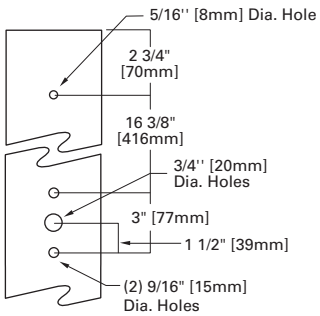
TYPE "C" (ANM)



TYPE "J" (ANS)
STRUCTURAL MOUNT

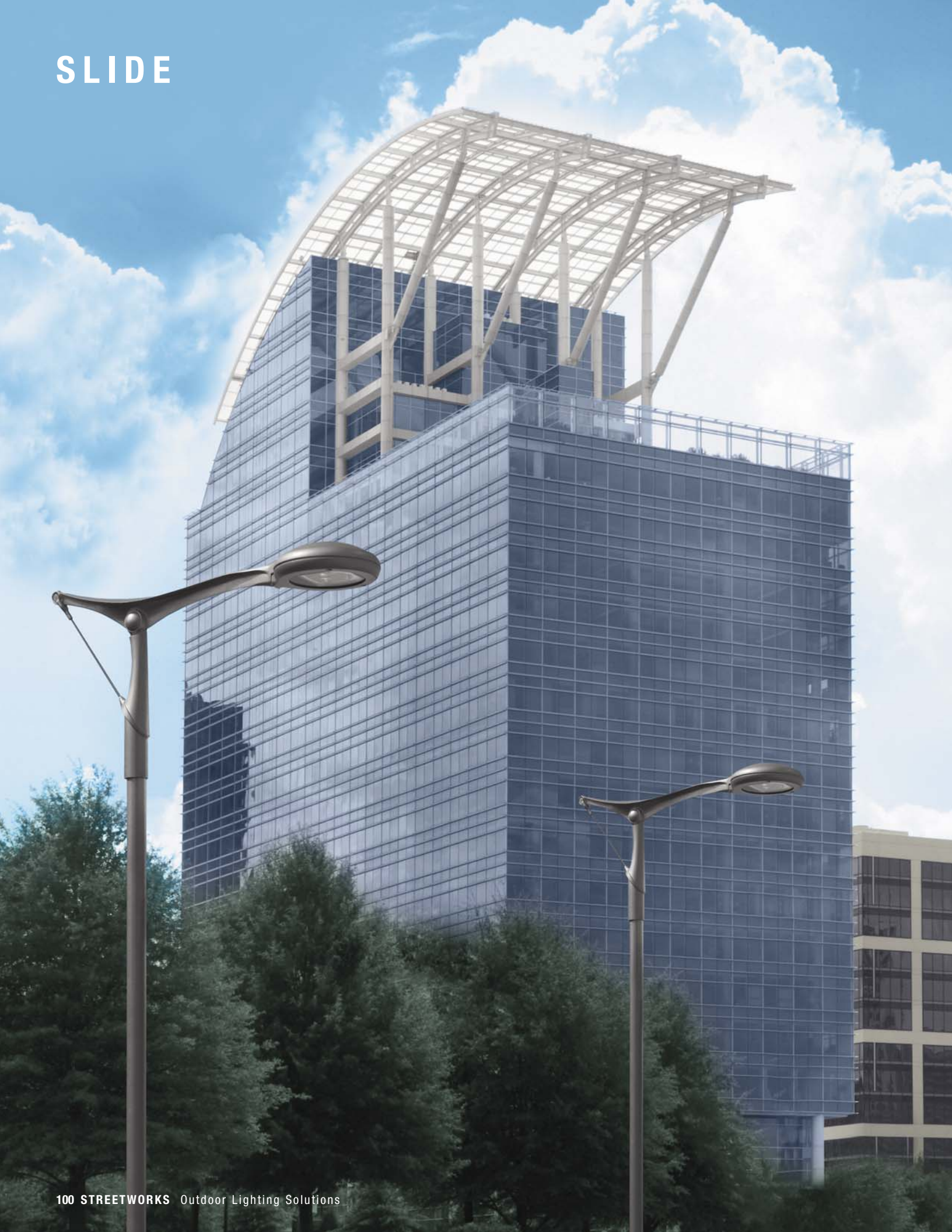


TYPE "K" (ANM)
STRUCTURAL MOUNT



NOTES: 1 Arm not included—see accessories. **2** ANS 70-175W medium-base socket, ANM 175-400W mogul-base. **3** 400W Metal Halide and Pulse Start Metal Halide use reduced envelope lamp. **4** Strut options do not include arm—please order separately. **5** House-side Shield not available with 5S or SL optics. **6** Quartz option not available with SL optics. **7** 175W maximum. Available for ANS only. **8** For use in down lighting applications only. **9** Specifications and dimensions subject to change without notice.

SLIDE



SLIDE

SLIDE's elegant cantilever arm assembly articulates a lighting system in suspended balance. The extended cast aluminum arm and rear suspension detail in conjunction with the flowing lines from pole to luminaire provide a dramatic form for entryways or other high visibility applications where excitement in design is desired.

Designed to sustain a lifetime of tough environmental conditions, SLIDE 's precisely engineered die-cast aluminum housing utilizes an IP65 rated gasketing strategy combined with a seamless 5 stage polyester powder coat finish to seal out performance degrading contaminants.

Environmental and legislative challenges continue to propagate as the public awareness of light in the environment expands. SLIDE responds to these evolving design trends by offering targeted solutions for full cutoff compliance, spill light control and path of egress illumination, while merging the latest in high efficiency lamp technologies.

DARK SKY COMPLIANT FCO Full Cutoff

DOOR
Door frame assembly features toolless entry via two (2) recessed button style latches.

BALLAST TRAY
One-piece unitized ballast tray can be accessed and removed without the use of tools. Integral handle ensures safe removal when disengaging and transporting tray

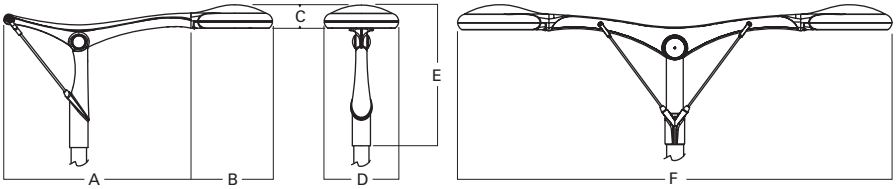
REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. Reflector modules attach to the housing via toolless fasteners. All reflectors are field rotatable in 90° increments.

ADS/ADM SLIDE

ARCHITECTURAL AREA LUMINAIRE

ADS 70-175W | **ADM** 150-400W

STREETWORKS IP65 RATED



DARK SKY COMPLIANT FCO Full Cutoff

Fixture		A	B	C	D	E	F
ADS	(in.)	43 21/32	2 3/16	6 11/64	19 5/8	37 7/64	--
	(mm)	1235	533	157	497	942	
ADM1	(in.)	43 21/32	2 3/16	6 11/64	19 5/8	37 7/64	--
	(mm)	1235	533	157	497	942	
ADM2	(in.)	53 5/16	27 11/16	7 1/16	24 15/16	41 1/2	128
	(mm)	1354	687	179	632	1054	3251

SPECIFICATION FEATURES

HOUSING

Heavy wall, die-cast aluminum housing maintains a nominal .125 wall thickness for precise tolerance control and repeatability in manufacturing.

DOOR

Heavy wall, die-cast aluminum door maintains a nominal .125 wall thickness. Continuous silicone gasketing provides an IP65 fixture rating. Toolless entry to housing is provided via two (2) recess mounted button style latches. Captive hinging is fully concealed.

LENS

Impact-resistant 1/8" thick tempered clear or optional frosted flat glass for concealment of lamp image.

OPTICAL SYSTEMS

Choice of five (5) 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. All reflector modules feature toolless removal, quick disconnect wiring plugs, and are toolless field rotatable in 90°increments. Medium housing (ADM1/ADM2) optics feature mogul-base lampholders for HID lamp sources while small housing (ADS) optics feature medium-base lampholders.

ELECTRICAL TRAY

Ballast and related electrical components are mounted to a reinforced one piece toolless release power tray. Electrical quick disconnects allow tray to be completely removed from housing providing ample hand and tool room for attachment of luminaire during installation.

ARM [ADS]

Arm manufactured of heavy wall, cast aluminum. Fits 4" O.D. by 6" tall tenon or slipfits over 4" round straight pole. SLIDE is secured via four (4) stainless steel hex head fasteners.

ARM [ADM1/ADM2]

Arm weldment assembly manufactured out of 6016, 6063 and cast aluminum subcomponents. Arm assembly mounts to a 5" O.D. round straight pole equipped with a 4" O.D. by 10" tenon. Arm secures to pole with provided stainless steel hex head fasteners. Arm includes a removable side cap for wire access and inspection.

FINISH

Housing and arm finished in 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.

EPA [Effective Projected Area]:

ADS: .97
ADM1: 3.48
ADM2: 4.82

SHIPPING DATA [Approximate Net Weight]:

ADS: 88 lbs. [40 kgs.]
ADM1: 108 lbs. [49 kgs.]
ADM2: 177 lbs. [80 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: ADM140MC2SLDP

PRODUCT FAMILY [1]	LAMP WATTAGE [2]	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES
ADS=Slide Single Small	**70**=70W	**M**=Metal Halide	**C**=CWI	**2**=120V	**2S**=Type II Segmented	**AP**=Grey	(See Below)
ADM1=Slide Single Medium	**10**=100W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**3S**=Type III Segmented	**BK**=Black	
ADM2=Slide Dual Medium	**15**=150W	**S**=High Pressure Sodium	**K**=10KV CWA	**4**=240V	**4S**=Type IV Segmented	**BZ**=Bronze	
	17=175W		**M**=Mag. Reg.	**7**=277V	**5S**=Type V Segmented	**DP**=Dark Platinum	
	20=200W		**N**=Hi. Reac./NPF	**8**=480V	**SL**=Spill Light Eliminator	**GM**=Graphite Metallic	
	25=250W		**P**=Hi. Reac./HPF	**9**=347V		**WH**=White	
	32=320W		**R**=Reac./NPF	**D**=240/120/208/277V wired 240V w/PCR wired 120V			
	35=350W		**W**=CWA	**G**=240/120V wired 240V			
	40=400W [3]			**K**=120/277V wired 120V			
				L=277/120V wired 277V			
				H=240/480V wired 240V			
				J=480/240V wired 480V			
				W=120/208/240/277V wired 120V			
				T=208/120/240/277V wired 208V			
				V=240/120/208/277V wired 240V			
				N=277/120/208/240V wired 277V			
				P=240V with PCR wired 120V			
				Q=240/120V wired 240 with PCR wired 120V			
				R=480V with PCR wired 240V			

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
3=Three Position Terminal Block
4=Internal NEMA Photocontrol Receptacle
B=House-side Shield [5]
FR=Frosted Flat Glass
L=Lamp Included
M=Metal Oxide Varistors
P=Button Photocontrol
Q=Quartz Standby [6]
V=Vandal Shield [7]

ACCESSORIES (order separately)
OA/RA1016=NEMA Photocontrol—Multi-Tap
OA/RA1027=NEMA Photocontrol—480V
OA/RA1201=NEMA Photocontrol—347V

NOTES: 1 Fixture(s) include decorative arm assembly. **2** ADS 70-175W medium-base socket, ADM1 & ADM2 175-400W mogul-base. **3** 400W Metal Halide and Pulse Start Metal Halide use reduced envelope lamp. **4** House-side Shield not available with 5S or SL optics. **5** Quartz option not available with SL optics. **6** Available for ADS only. **7** Specifications and dimensions subject to change without notice.

FLITE

DOOR
Door frame assembly features toolless entry via two (2) recessed button style latches.

FLITE

Dramatic styling launches FLITE into its own stratosphere. The 90° design of the cast arm assembly in conjunction with the flowing lines from pole to luminaire provide statement that both daring form and spectacular performance can coexist harmoniously in application.

Designed to sustain a lifetime of tough environmental conditions, FLITE's precisely engineered die-cast aluminum housing utilizes an IP65 rated gasketing strategy combined with a seamless 5 stage polyester powder coat finish to seal out performance degrading contaminants.

Environmental and legislative challenges continue to propagate as the public awareness of light in the environment expands. FLITE responds to these evolving design trends by offering targeted solutions for full cutoff compliance, spill light control and path of egress illumination, while merging the latest in high efficiency lamp technologies.

BALLAST TRAY
One-piece unitized ballast tray can be accessed and removed without the use of tools. Integral handle ensures safe removal when disengaging and transporting tray

REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. Reflector modules attach to the housing via toolless fasteners. All reflectors are field rotatable in 90° increments.

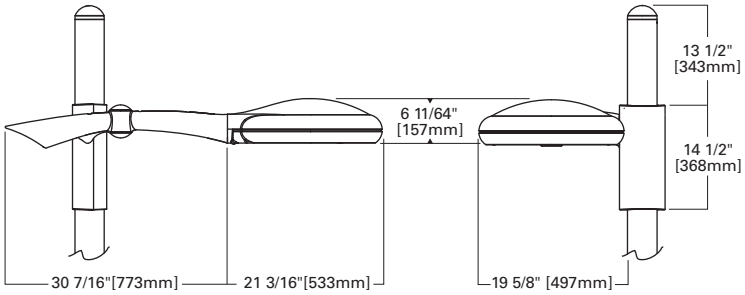
DARK SKY COMPLIANT FCO Full Cutoff

AFS FLITE

ARCHITECTURAL AREA LUMINAIRE

AFS 70-175W

STREETWORKS IP65 RATED



DARK SKY COMPLIANT FCO Full Cutoff

SPECIFICATION FEATURES

HOUSING

Heavy wall, die-cast aluminum housing maintains a nominal .125 wall thickness for precise tolerance control and repeatability in manufacturing.

DOOR

Heavy wall, die-cast aluminum door maintains a nominal .125 wall thickness. Continuous silicone gasketing provides an IP65 fixture rating. Toolless entry to housing is provided via two (2) recess mounted button style latches. Captive hinging is fully concealed.

LENS

Impact-resistant 1/8" thick tempered clear or optional frosted flat glass for concealment of lamp image.

OPTICAL SYSTEMS

Choice of five (5) 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. All reflector modules feature toolless removal, quick disconnect wiring plugs, and are toolless field rotatable in 90°increments. Optics feature medium-base lampholders.

ELECTRICAL TRAY

Ballast and related electrical components are mounted to a reinforced one piece toolless release power tray. Electrical quick disconnects allow tray to be completely removed from housing providing ample hand and tool room for attachment of luminaire during installation.

ARM

Arm manufactured of heavy wall, cast aluminum. Fits 4" O.D. by 6" tall tenon or slipfits over 4" round straight pole. Arm assembly secures via four (4) stainless steel hex head fasteners. Includes 12" length of 4" round straight aluminum pipe and domed pole cap for mounting above arm assembly.

FINISH

Housing and arm finished in 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.

EPA [Effective Projected Area]:
AFS: Single Mount 1.56 | Dual Mount 3.52

SHIPPING DATA [Approximate Net Weight]:
AFS: 86 lbs. [39 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: ADM140MC2SLDP

PRODUCT FAMILY [1]
AFS=Flite Single Small

LAMP WATTAGE [2]
70=70W
10=100W
15=150W
17=175W

LAMP TYPE
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE
C=CWI
H=Reac./HPF
K=10KV CWA
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA

VOLTAGE
2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
D=240/120/208/277V wired 240V w/PCR wired 120V
G=240/120V wired 240V
K=120/277V wired 120V
L=277/120V wired 277V
H=240/480V wired 240V
J=480/240V wired 480V
W=120/208/240/277V wired 120V
T=208/120/240/277V wired 208V
V=240/120/208/277V wired 240V
N=277/120/208/240V wired 277V
P=240V with PCR wired 120V
Q=240/120V wired 240 with PCR wired 120V
R=480V with PCR wired 240V

DISTRIBUTION
2S=Type II Segmented
3S=Type III Segmented
4S=Type IV Segmented
5S=Type V Segmented
SL=Spill Light Eliminator

COLOR (add as suffix/ must specify)
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
GM=Graphite Metallic
WH=White

OPTIONS + ACCESSORIES (See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
3=Three Position Terminal Block
4=Internal NEMA Photocontrol Receptacle
B=House-side Shield [5]
FR=Frosted Flat Glass
L=Lamp Included
M=Metal Oxide Varistors
P=Button Photocontrol
Q=Quartz Standby [6]
V=Vandal Shield [7]

ACCESSORIES (order separately)
OA/RA1016=NEMA Photocontrol—Multi-Tap
OA/RA1027=NEMA Photocontrol—480V
OA/RA1201=NEMA Photocontrol—347V

NOTES: 1 Fixture includes decorative arm assembly. **2** Medium-base socket. **3** House-side Shield not available with 5S or SL optics. **4** Quartz option not available with SL optics. **5** Specifications and dimensions subject to change without notice.

TRIBUTE

TRIBUTE

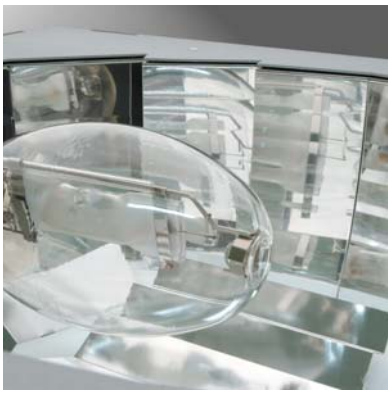
From the parking lot to the highway, Tribute is the ideal lighting solution for area and roadway applications. Tribute's rugged die-cast construction and classic form provide enduring performance and universal appeal. Coupled with contractor-friendly features such as toolless entry and an optional electrical power tray, Tribute is a breeze to install and maintain.

Tribute is available with nine (9) uniquely shaped optical distributions, each classifying as dark sky friendly IESNA full cutoff. Whether selecting a high efficiency hydroformed optic or a premium 95% reflective segmented reflector, Tribute's optical versatility provides custom tailored lighting solutions for exacting site requirements. Tribute also features Cooper's-exclusive SL Spill Light Eliminator optic which provides outstanding cutoff behind the pole and maximum street-side reach.

Tribute is offered in five (5) distinct mounting configurations, providing unrivaled versatility in mounting. Choose from arm mount, mast arm or wall mount for horizontal fixture attachment, or trunnion or slipfitter mount for vertical tilt adjustment.

DARK SKY COMPLIANT FCO Full Cutoff

CONSTRUCTION
Rugged one-piece die-cast aluminum housing and door frame. One-piece silicone gasket protects the optical chamber from performance degrading contaminants. One (1) stainless spring latch and two (2) stainless steel hinges allow toolless opening and removal of door frame.



REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. All reflectors are field rotatable in 90° increments.

ELECTRICAL POWER TRAY
Electrical componentry mounted to an optional swing-down galvanized steel power tray with integral handle. Electrical disconnects allow tray to be completely removed from housing providing ample hand and tool room during fixture maintenance and installation.

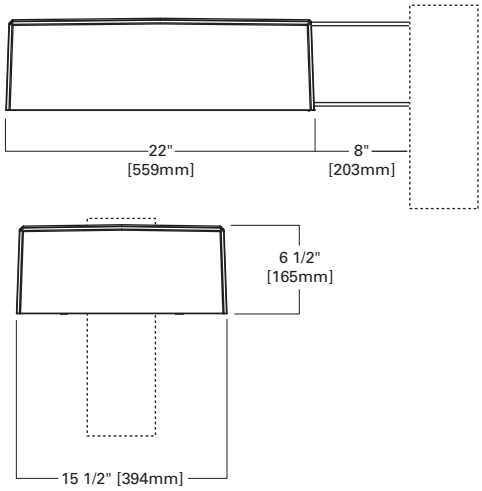
TRU TRIBUTE

AREA LUMINAIRE

70-400W

STREETWORKS IP55 RATED

DARK SKY COMPLIANT FCO Full Cutoff



SPECIFICATION FEATURES

CONSTRUCTION

Rugged one-piece die-cast aluminum housing and door frame. One-piece silicone gasket protects the optical chamber from performance degrading contaminants. One (1) stainless spring latch and two (2) stainless steel hinges allow toolless opening and removal of door frame.

REFLECTOR

Choice of nine (9) high efficiency optical distributions, including five (5) 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. Optical modules are field rotatable in 90° increments and offered standard with mogul-base lampholders for 150-400W assemblies or medium-base lampholders for 100W and below.

ELECTRICAL

Ballast and related electrical componentry are hard mounted to die-cast housing for optimal heat transfer and operating efficiency. Optional swing-down galvanized steel power tray with integral handle and quick disconnects allows tray to be completely removed from housing providing ample room for fixture installation and maintenance.

MOUNTING

Extruded 8" aluminum arm features internal bolt guides 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 allow for consolidated product arrival to site. Optional internal mast arm mount accepts a 1 1/4" to 2 3/8" O.D. horizontal tenon, while 4-bolt clamping mechanism secures fixture. Cast-in leveling guides provide ±5° vertical leveling adjustment.

FINISH

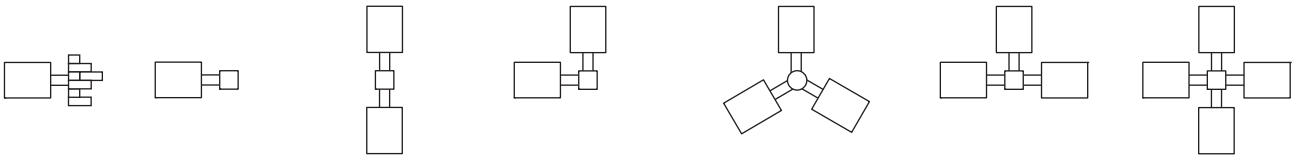
Housing and arm finished in premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic.

EPA [Effective Projected Area]:
1.19 (Without Arm)

SHIPPING DATA [Approximate Net Weight]:
39 lbs. [17.73 kgs.]

MOUNTING CONFIGURATIONS

Wall Mount | Arm Mount Single | Arm Mount 2 @ 180° | Arm Mount 2 @ 90° | Arm Mount 3 @ 120° (Round Pole Only) | Arm Mount 3 @ 90° | Arm Mount 4 @ 90°



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
TRU	"M"	1.62	3.24	3.24	4.43	4.43	5.03

ORDERING INFORMATION

SAMPLE NUMBER: TRU40MWWSLAP

PRODUCT FAMILY[1]	LAMP WATTAGE[2]	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES
TRU=Tribute (Arm Included)	**70**=70W **10**=100W **15**=150W **17**=175W **20**=200W **25**=250W **40**=400W[3] **24**=250/400W wired 250W **42**=250/400W wired 400W	**M**=Metal Halide **P**=Pulse Start Metal Halide **R**=Super Metal Halide **S**=High Pressure Sodium	**C**=CWI **H**=Reac./HPF **K**=10KV CWA **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V	**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	**AP**=Grey **BK**=Black **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)

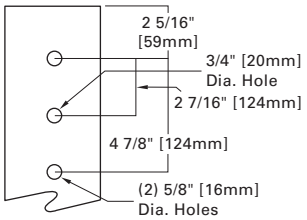
1=Single Fused, Internally Mounted (120 or 277V)[4]
2=Double Fused, Internally Mounted (208, 240 or 480V)[4]
4=NEMA Twistlock Photocontrol Receptacle
B=House-side Shield[5]
EM=Quartz Restrike with Delay (Also Strikes at Cold Start)[6]
H=Plug-In Starter Receptacle
K=Level Indicator
L=Lamp Included
LA=Less Arm (Order Mounting Separately)
P=Button Photocontrol
PT=Electrical Power Tray
Q=Quartz Restrike (Hot Restrike Only)[6]
S=1 1/4"-2 3/8" Internal Mast Arm Mount
TM=Trunnion Mount
U=U.L./CSA Listed

ACCESSORIES (order separately, replace XX with color suffix)

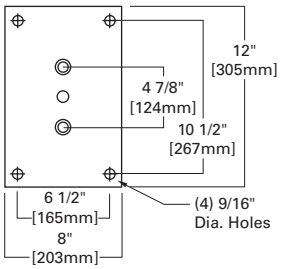
OA/RA1016=NEMA Photocontrol—Multi-Tap
OA/RA1027=NEMA Photocontrol—480V
OA/RA1201=NEMA Photocontrol—347V
OA/RA1013=Shorting Cap
OA1090-XX=Adjustable Slipfitter Arm for Tenon Mount 2 3/8" O.D.[1]
MA1201-XX=Direct Wall Mount Kit[1]
MA1216-XX=8" Tribute Arm [EPA 0.43][1](Includes Round Pole Adapter)
MA1218-XX=Direct Mount for Pole[1]
MA1219-XX=Wall Bracket with 8" Arm[1]
TR/VS=Field Installed Vandal Shield[7]
MA1221-XX=External House-side Shield Kit [EPA 0.38]
MA1222=Internal House-side Shield Kit for 2S/3S
MA1223=Internal House-side Shield Kit for 4S
MA1224=Internal House-side Shield Kit for 2F/3F
MA1225=Internal House-side Shield Kit for 4F
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

DRILLING PATTERNS

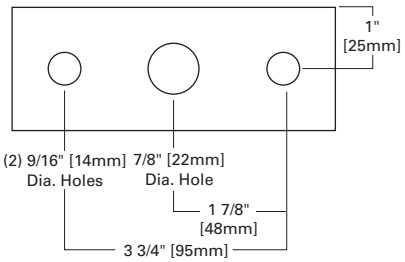
TYPE "M"



WALL MOUNT



TRUNNION MOUNT



NOTES: 1 8" arm and round pole adapter included with fixture. Specify Less Arm "LA" option when mounting accessory is ordered separately. **2** Standard with mogul-base socket for 150-400W and medium-base socket for 100W and below. **3** Requires reduced envelope lamp. **4** Must specify voltage. **5** House-side shield not available on 5S, 5F and SL optics. **6** Quartz options not available with SL optics. **7** Not available with SL or House-side Shield. **8** Specifications and dimensions subject to change without notice.

GALLERIA SQUARE

GALLERIA SQUARE

Cooper Lighting's brilliant small, medium and large area performer comes to work with a dayform that's crisp, clean and architectural, while delivering nighttime performance second to none.

DARK SKY COMPLIANT FCO Full Cutoff

HOUSING
The Galleria design concept features a formed aluminum housing with an aesthetic reveal that further enhances its dayform appearance.

OPTICAL PERFORMANCE
Available with no less than thirteen (13) unique high performance optical systems, and choice of flat or sag lens, Galleria Square is sure to provide the exact distribution and cutoff rating required for any site lighting application.

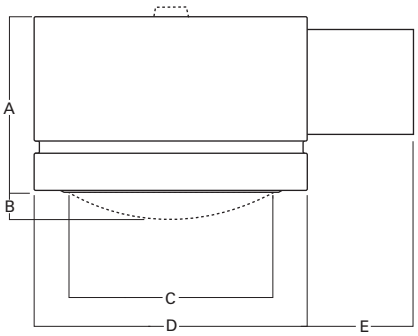
MOUNTING
Galleria Square can be pole mounted in a variety of configurations including the attractive spider mount pole top option.

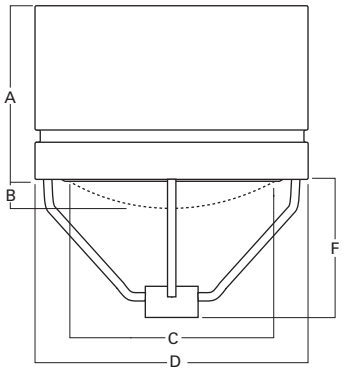
GS/GM/GL GALLERIA SQUARE

ARCHITECTURAL AREA LUMINAIRE

GS 100-175W | **GM** 175-1000W
GL 400-1000W

STREETWORKS





DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass configurations only.

NOTE: Top cap used on GM with 1000W flat glass vertically lamped optics only.

Fixture		A	B	C	D	E	F
GS	(in.)	9 1/4	1 1/2	12 7/8	15 5/8	6 or 9	3 1/4
	(mm)	235	38	327	397	152 or 229	337
GM	(in.)	11	3 1/2	19 1/4	21 3/4	6 or 14	15 or 16
	(mm)	279	89	480	552	152 or 356	381 or 406
GL	(in.)	14 1/2	4 1/4	25 7/8	27	6 or 14	18 3/4 or 19 3/4
	(mm)	368	108	657	686	152 or 356	476 or 502

SPECIFICATION FEATURES

HOUSING
Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity. Optional NEMA twistlock photocontrol. ANSI wattage/source label.

BALLAST
Ballast is hard-mounted to housing interior for cooler operation. Optional removable ballast tray.

REFLECTOR
Spun and stamped aluminum reflector in vertical lamp units, hydroformed anodized aluminum reflector or high performance segmented optical system in horizontal lamp units.

DOOR
Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in polyester powder coat. (Spider mount unit has steel door.)

LENS
Convex tempered glass lens. Tempered flat glass available.

FINISH
Housing and arm finished in 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.

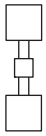
SHIPPING DATA [Approximate Net Weight]:
GS: 36 lbs. [16 kgs.]
GM: 79 lbs. [36 kgs.]
GL: 88 lbs. [40 kgs.]

MOUNTING CONFIGURATIONS

Wall Mount

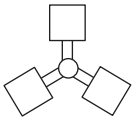
Arm Mount Single

Arm Mount 2 @ 180°

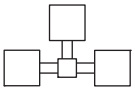


Arm Mount 2 @ 90°

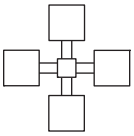
Arm Mount 3 @ 120° (Round Pole Only)



Arm Mount 3 @ 90°



Arm Mount 4 @ 90°



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
GSA [Arm Mount]	"M"	1.7	3.4	3.4	4.6	4.6	5.2
GMB [Spider Mount]	2 3/8" or 3"	1.04	n/a	n/a	n/a	n/a	n/a
GMA [Arm Mount]	"M" [1]	2.9	5.8	6.8	9.2	9.2	10.4
GMB [Spider Mount]	3"	2.22	n/a	n/a	n/a	n/a	n/a
GLA [Arm Mount]	"M" [1]	4.4	8.8	9.8	13.7	13.7	15.6
GLC [Spider Mount]	3" or 3 1/2"	3.7	n/a	n/a	n/a	n/a	n/a

NOTE: 1 Assumes 14" arm for 90° and 120° mounting configurations, 6" for all else.

ORDERING INFORMATION

SAMPLE NUMBER: GMA25SWWAR

PRODUCT FAMILY	MOUNTING METHOD	LAMP WATTAGE	LAMP TYPE [3]	BALLAST TYPE [3]	VOLTAGE [3]	DISTRIBUTION	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES (See Below)
GS=Galleria Square Small	**A**=Arm Mount	**10**=100W	**M**=Metal Halide	**C**=CWI	**2**=120V	**1D**=Type I MCO (Horizontal)	**AP**=Grey	
GM=Galleria Square Medium	**B**=Spider Mount (2 3/8"—3" O.D. Tenon)	**15**=150W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**2D**=Type II MCO (Horizontal)	**BK**=Black	
GL=Galleria Square Large	**C**=Spider Mount (3 1/2" O.D. Tenon)	**17**=175W	**R**=Super Metal Halide	**K**=10KV CWA	**4**=240V	**2S**=Type II Segmented (Horizontal) [4]	**BZ**=Bronze	
		25=250W	**S**=High Pressure Sodium	**M**=Mag. Reg.	**7**=277V	**3D**=Type III MCO (Horizontal)	**DP**=Dark Platinum	
		40=400W		**N**=Hi. Reac./NPF	**8**=480V	**3S**=Type III Segmented (Horizontal) [4]	**GM**=Graphite Metallic	
		75=750W [1]		**P**=Hi. Reac./HPF	**9**=347V	**3V**=Type III (Vertical)	**WH**=White	
		91=1000W [2]		**R**=Reac./NPF	**W**=Multi-Tap wired 120V	**4S**=Type IV Segmented (Horizontal) [4]		
				W=CWA	**N**=Multi-Tap wired 277V	**5S**=Type V Segmented (Horizontal) [4]		
					V=Multi-Tap wired 240V	**FT**=Forward Throw (Horizontal)		
						AR=Area Round (Vertical)		
						AS=Area Square (Vertical)		
						RW=Rectangular Wide (Vertical)		
						SL=Spill Light Eliminator (Horizontal) [5]		

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)

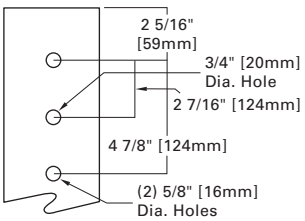
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
AIR=Arm Included for Round Pole [5]
AIS=Arm Included for Square Pole [5]
B=House-side Shield
CSR=Color Reveal Stripe—Red
CSB=Color Reveal Stripe—Blue
CSY=Color Reveal Stripe—Yellow
CSG=Color Reveal Stripe—Green
CSD=Color Reveal Stripe—Gold
CSS=Color Reveal Stripe—Silver
CSW=Color Reveal Stripe—White
F=Flat Glass
H=Plug-in Starter Receptacle [6]
L=Lamp Included
T=Removable Ballast Tray

ACCESSORIES (order separately, replace XX with color suffix)

MA1004=14" Arm for Square Pole (GM & GL only) [7]
MA1005=6" Arm for Square Pole (GM & GL only)
MA1006=Direct Mount Kit for Square Pole
MA1007=14" Arm for Round Pole (GM & GL only) [7]
MA1008=6" Arm for Round Pole (GM & GL only)
MA1009=Direct Mount Kit for Round Pole
MA1021=6" Arm for Square Pole (GS Only)
MA1022=6" Arm for Round Pole (GS Only)
MA1023=9" Arm for Square Pole (GS Only) [7]
MA1024=9" Arm for Round Pole (GS Only) [7]
MA1029=Wall Bracket
MA1060=House-side Shield for GS (Field Installed)
MA1061=House-side Shield for GM (Field Installed)
MA1062=House-side Shield for GL (Field Installed)
OA1066=Pipe Adapter
OA1209=TufGuard Vandal Shield for GS
OA1210=TufGuard Vandal Shield for GM
GSM-EXTHS-XX=Medium External House-side Shield (Specify Color)
GSL-EXTHS-XX=Large External House-side Shield (Specify Color)

DRILLING PATTERN

TYPE "M"



NOTES: 1 Pulse Start Metal Halide vertical mount only. Medium-based lamp for GS housing. Mogul-base on GM and GL housings. **2** 1000W GM with flat glass requires BT-37 lamp and is not available in AS, RW, 3V distributions. **3** Refer to technical section for lamp/ballast/voltage compatibility. **4** Requires reduced envelope lamps for 400 and 1000W Metal Halide. Not available in 1000 Watt High Pressure Sodium. Not available in GL. **5** Arm length varies based on housing size. Arm supplied with luminaire: 9" for GS (EPA 0.5), 11 1/2" for GM (EPA 0.62) and 14" for GL (EPA 1.0). **6** Not available in 1000W. **7** Required for mounting fixtures at 90° increments. **8** Specifications and dimensions subject to change without notice.

CML SQUARE

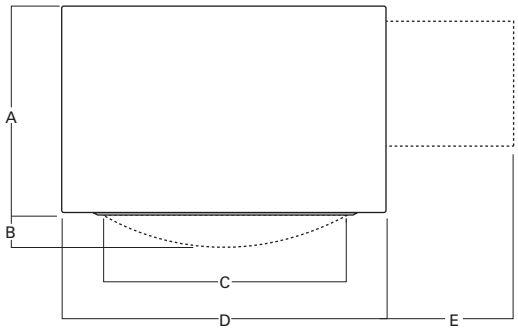
ARCHITECTURAL AREA LUMINAIRE

250-1000W

STREETWORK IP55 RATED

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass configurations only.



Fixture	A	B	C	D	E
CML (in.)	14	3 1/2	19 1/4	22	6 or 14
(mm)	356	89	489	559	152 or 356

SPECIFICATION FEATURES

HOUSING

Formed aluminum housing has interior-welded seams for structural integrity and is finished in premium TGIC polyester powder coat paint. U.L. listed and CSA certified for wet locations.

BALLAST TRAY

Ballast tray is securely mounted and inter-locked to housing interior for cooler operation. Tray features toolless removal capability for ease of maintenance and replacement.

BALLAST

Long-life core and coil ballast.

REFLECTOR

Standard rotatable and interchangeable optics allow for an easy field retrofit with respective sag and flat glass doors for areas with restrictive lighting ordinances such as “Dark Sky”.

DOOR

Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in premium TGIC polyester powder coat paint.

LENS

Convex tempered glass lens or flat glass.

GASKET

Standard one-piece extruded EPDM gasket ensures a bug proof installation and is backed by IP55 rating.

FINISH

Housing and arm finished in 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.

EPA [Effective Projected Area]:

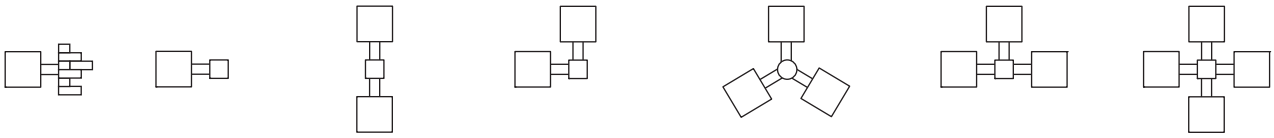
3.1

SHIPPING DATA [Approximate Net Weight]:

79 lbs. [36 kgs.]

MOUNTING CONFIGURATIONS

Wall Mount | **Arm Mount Single** | **Arm Mount 2 @ 180°** | **Arm Mount 2 @ 90°** | **Arm Mount 3 @ 120° (Round Pole Only)** | **Arm Mount 3 @ 90°** | **Arm Mount 4 @ 90°**



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
CML	“M”	3.1	6.2	7.2	9.8	9.8	11.1

NOTE: 1 Assumes 14“ arm for 90° and 120° mounting configurations, 6“ for all else.

ORDERING INFORMATION

SAMPLE NUMBER: CML40MN3VSGBKL

PRODUCT FAMILY [1]	LAMP WATTAGE [2]	LAMP TYPE	VOLTAGE [5]	DISTRIBUTION	LENS TYPE	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES (See Below)
CML=CML Square	**25**=250W **40**=400W **75**=750W [3] **91**=1000W [4]	**M**=Metal Halide **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**1F**=Type I MCO (Horizontal) **2F**=Type II MCO (Horizontal) **2S**=Type II Segmented (Horizontal) [6] **3F**=Type III MCO (Horizontal) **3S**=Type III Segmented (Horizontal) [6] **4S**=Type IV Segmented (Horizontal) [6] **5S**=Type V Segmented (Horizontal) [6] **FT**=Forward Throw (Horizontal) **AR**=Area Round (Vertical) **AS**=Area Square (Vertical) **3V**=Type III (Vertical) **RW**=Rectangular Wide (Vertical) [7] **SL**=Spill Light Eliminator (Horizontal) [8]	**FG**=Flat Glass **SG**=Sag Glass	**AP**=Grey **BK**=Black **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	

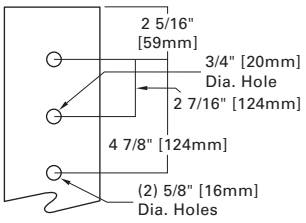
OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277, or 347V)
2=Double Fuse (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
AIR=Arm Included for Round Pole [9]
AIS=Arm Included for Square Pole [9]
B=House-side Shield [10]
EHS=External House-side Shield
EM=Quartz Restrike with Delay (Also Strikes at Cold Start)
L=Lamp Included
Q=Quartz Restrike (Hot Restrike Only)
VS=Vandal Shield (Arm Mount Only, 400W Maximum)

ACCESSORIES (order separately, replace XX with color suffix)
OA1016=NEMA Photocontrol–Multi-Tap
OA1027=NEMA Photocontrol–480V
OA1201=NEMA Photoelectric Control—347V
MA1004-XX=14" Arm for Square Pole [11]
MA1005-XX=6" Arm for Square Pole
MA1006-XX=Direct Mount Kit for Square Pole
MA1007-XX=14" Arm for Round Pole [1]
MA1008-XX=6" Arm for Round Pole
MA1009-XX=Direct Mount Kit for Round Pole
MA1010-XX=Single-arm 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-arm 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
MA1029-XX=Wall Mount Bracket with 10" Arm (Specify color)
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
EHS-XX=External House-side Shield

DRILLING PATTERN

TYPE "M"



NOTES: 1 Arm not included. See options and accessories. **2** Mogul-base lamp socket. **3** 750W Pulse Start for vertical mount only. **4** Requires reduced envelope BT-37 lamp on Metal Halide or ED-37 on High Pressure Sodium. **5** Standard with CWA ballast. **6** Maximum wattage on segmented optical distributions is 400W. 400W Metal Halide lamp must use reduced envelope ED-28 lamp. **7** RW optic not available with flat glass. **8** Must use reduced envelope lamp. Not available in 1000W High Pressure Sodium. **9** Provided with 11 1/2" arm. **10** House-side shields available on 2F, 3F, FT, 3V (flat glass), 2S, 3S, 4S distributions only, and all vertically lamped optics when specified with sag lens. **12** Provided when mounting fixtures at 90° increments (Arm EPA 0.62). **13** Specifications and dimensions subject to change without notice.

X-FORM

X-FORM

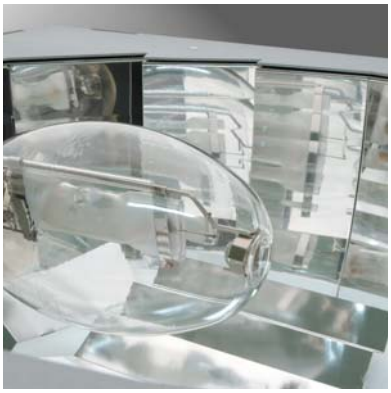
X-FORM'S timeless silhouette fluently complements the architectural environment in which it inhabits. X-FORM is offered in 14" and 20" housing sizes to insure proper scale in application.

The crisp consistent corners, tight seams, and superior IP65 rated gasketing strategy of the X-FORM housing set the standard for superior performance under the toughest environmental conditions.

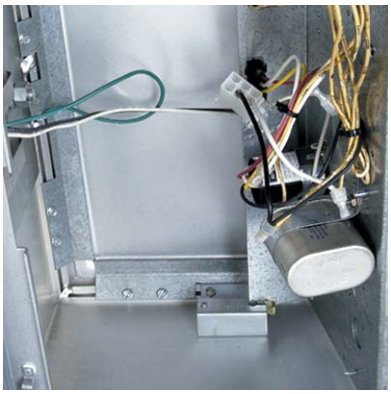
Meeting evolving design trends, X-FORM brings leading-edge technology to today's most demanding environmental and legislative challenges. X-FORM offers targeted solutions for full cutoff compliance, spill light control, and path of egress illumination while integrating the latest lamp technologies into visually comfortable lighting solutions.

DARK SKY COMPLIANT FCO Full Cutoff

DOOR
Door frame assembly features toolless release and removal. Integral channel blocks safeguard door frame from unexpected release while hinged down for maintenance.



REFLECTOR ASSEMBLY
Optional high efficiency segmented or hydroformed reflectors available in a range of distributions. Reflector modules attach to the housing via toolless fasteners. All reflectors are field rotatable in 90° increments.



BALLAST TRAY
One-piece unitized ballast tray can be accessed and removed without the use of tools. Integral handle ensures safe removal when disengaging and transporting tray.

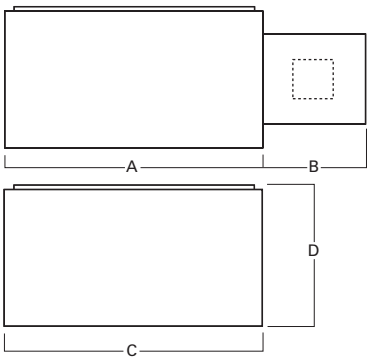
ESS/ESM X-FORM

ARCHITECTURAL AREA LUMINAIRE

ESS 70-175W | **ESM** 150-400W

STREETWORKS IP65 RATED

DARK SKY COMPLIANT FCO Full Cutoff



Fixture	A	B	C	D
ESS (in.)	14	6 or 8	14	7 3/8
(mm)	356	152 or 203	356	187
ESM (in.)	20	6 or 12	20	10 3/8
(mm)	508	152 or 305	508	264

SPECIFICATION FEATURES

HOUSING

One-piece extruded aluminum sidewall of 1/8" nominal thickness with precision mitered corners. Die-formed aluminum top panel of .08" nominal thickness mechanically attaches to sidewalls and is internally sealed with a continuous gasket.

DOOR

Extruded aluminum door of 1/16" nominal thickness with mitered corners and standard natural aluminum anodized finish. Door frame releases in a toolless fashion via two (2) concealed stainless steel spring-loaded thumb latches. Once opened, toolless removal of door frame is achieved via the release of two (2) additional thumb latches. Door frame captures glass with a robust one piece molded silicone gasket. Gasket envelopes glass on top and bottom while simultaneously sealing the door frame to the housing.

LENS

Impact resistant 1/8" thick tempered clear flat glass or 3/16" thick convex tempered sag glass.

OPTICAL SYSTEMS

Choice of five (5) high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a heavy wall 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. All reflector modules feature toolless removal, quick disconnect wiring plugs, and are toolless field rotatable in 90° increments. Medium housing (ESM) optics feature mogul-base lampholders. Small housing (ESS) optics feature standard medium-base lampholders, though mogul-base is optional.

ELECTRICAL TRAY

Ballast and related electrical componentry are mounted to a reinforced one piece tray with integral handle. For ease of maintenance, tray hinges open via toolless release of one (1) spring loaded latch. Electrical quick disconnects allow tray to be completely removed from housing providing ample hand and tool room for attachment of fixture during installation, and a safer servicing environment. Optional tray mounted fuse connections offer a distinct and easy to maintain alternative to common inline fuse connections.

ARM

One-piece extruded rectangular arm available in standard 6" and 8" lengths. Internal bolt guides allow easy positioning of fixture during installation. Standard wiring compartment access area provided on side of arm. Cover plate for wiring compartment secures via two (2) stainless steel flat head screws.

FINISH

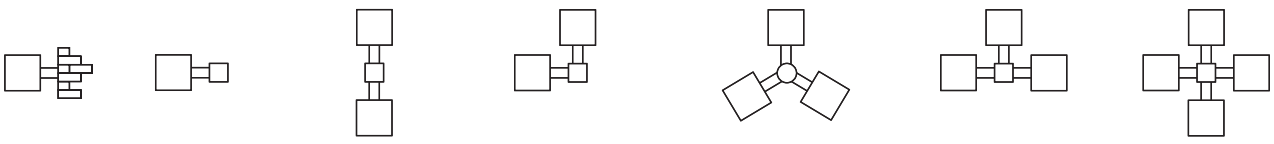
Housing and arm finished in premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. Anodized black, bronze or natural aluminum finishes available.

EPA [Effective Projected Area]:
ESS: Flat Lens 0.85 | Sag Lens 1.1
ESM: Flat Lens 1.8 | Sag Lens 2.2

SHIPPING DATA [Approximate Net Weight]:
ESS: 35 lbs. [15.91 kgs.]
ESM: 56 lbs. [25.45 kgs.]

MOUNTING CONFIGURATIONS

Wall Mount | **Arm Mount Single** | **Arm Mount 2 @ 180°** | **Arm Mount 2 @ 90°** | **Arm Mount 3 @ 120° (Round Pole Only)** | **Arm Mount 3 @ 90°** | **Arm Mount 4 @ 90°**



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
ESS	"E"	1.15	2.30	2.30	3.20	3.20	3.81
ESM	"M"	2.1	4.2	4.2	6.0	6.0	7.5

ORDERING INFORMATION

SAMPLE NUMBER: ESM17MWWDP

PRODUCT FAMILY [1]
ESS=X-Form Extruded Site Small
ESM=X-Form Extruded Site Medium

LAMP WATTAGE [2]
70=70W
10=100W
15=150W
17=175W
20=200W
25=250W
32=320W
35=350W
40=400W [3]

LAMP TYPE
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE
C=CWI
H=Reac./HPF
K=10KV CWA
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA

VOLTAGE
2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
5T=5-Tap
D=240/120/208/277V wired 240V w/PCR wired 120V
G=240/120V wired 240V
K=120/277V wired 120V
L=277/120V wired 277V
H=240/480V wired 240V
J=480/240V wired 480V
W=120/208/240/277V wired 120V
T=208/120/240/277V wired 208V
V=240/120/208/277V wired 240V
N=277/120/208/240V wired 277V
P=240V with PCR wired 120V
Q=240/120V wired 240V with PCR wired 120V
R=480V with PCR wired 240V

DISTRIBUTION
2S=Type II Segmented
3S=Type III Segmented
4S=Type IV Segmented
5S=Type V Segmented
SL=Spill Light Eliminator

COLOR (add as suffix/ must specify)
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
GM=Graphite Metallic
WH=White
A=Anodized Natural Aluminum
C=Bronze Anodized
D=Black Anodized

OPTIONS + ACCESSORIES (See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120 or 277V)
2=Double Fuse (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
B=House-side Shield [4]
L=Lamp Included
M=Metal Oxide Varistors
MB=Mogul-Base Socket for ESS [5]
P=Button Photocontrol
Q=Quartz Standby [6]
SG=Sag Glass
U=UL/CSA Listed
V=Vandal Shield [7]

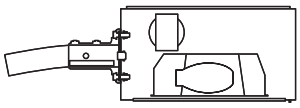
ACCESSORIES (order separately, replace XX with color suffix)
0A1016=NEMA Photocontrol—Multi-Tap
0A1027=NEMA Photocontrol—480V
0A1201=NEMA Photocontrol—347

ESS (X-Form Small)
SA1080-XX=Direct Wall Mount Kit
SA1081-XX=Direct Mount Kit with 6" Arm
SA1084-XX=6" Arm for Square Pole
SA1085-XX=8" Arm for Square Pole [8]
SA1086-XX=6" Arm for Round Pole
SA1087-XX=8" Arm for Round Pole [8]
SA1093-XX=0-30° Adjustable Arm for Square Pole [EPA .5]
SA1094-XX=0-30° Adjustable Arm for Round Pole [EPA .5]
SA1099-XX=Mast Arm Adapter Kit
SA1101-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1102-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1103-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1104-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1105-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1106-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1107-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1108-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1109-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1110-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1111-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1112-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1113-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1114-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

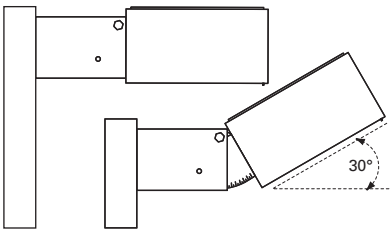
ESM (X-Form Medium)
SA1082-XX=Direct Wall Mount Kit
SA1083-XX=Direct Mount Kit with 6" Arm
SA1088-XX=6" Arm for Square Pole
SA1089-XX=12" Arm for Square Pole [8]
SA1090-XX=6" Arm for Round Pole
SA1092-XX=12" Arm for Round Pole [8]
SA1096-XX=0-30° Adjustable Arm for Square Pole [EPA .86]
SA1098-XX=0-30° Adjustable Arm for Round Pole [EPA .86]
SA1100-XX=Mast Arm Adapter Kit
SA1117-XX=Single Arm Tenon Adapter for 2 3/8" O.D. Tenon
SA1118-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
SA1119-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1115-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
SA1116-XX=2 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
SA1010-XX=Single Arm Tenon Adapter for 3 1/2" O.D. Tenon
SA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
SA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
SA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
SA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon

ACCESSORIES

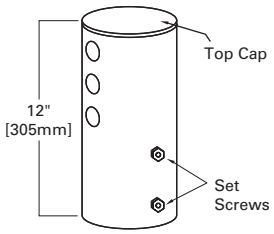
MAST ARM ADAPTER



ADJUSTABLE ARM

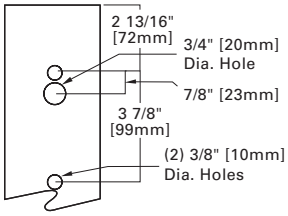


TENON ADAPTER

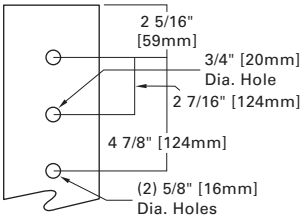


DRILLING PATTERNS

TYPE "E" (ESS)



TYPE "M" (ESM)



NOTE: **1** Arm not included—see accessories. **2** ESS 70-175W medium-base socket, ESM 175-400W mogul-base. **3** 400W Metal Halide and Pulse Start Metal Halide use reduced envelope lamp. **4** House-side Shield not available with 5S or SL optics. **5** Available on Type 3S distribution only (ESS). **6** Quartz option not available with SL optics. **7** 250W maximum. **8** Use when mounting fixture heads at 90° increments. **9** Must use a 5" square pole when mounting SA1096 adjustable arm at 90° increments to avoid interference. **10** Must use a 5" square pole when mounting SA1098 adjustable arm at 90° increments to avoid interference. **11** Specifications and dimensions subject to change without notice.

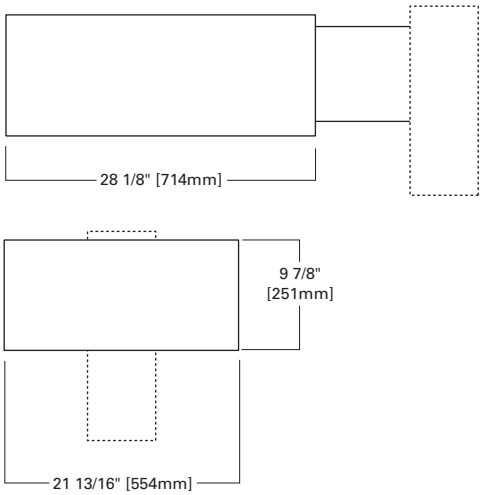
MFT LANDAU

320-1000W

LARGE AREA LUMINAIRE

STREETWORKS

DARK SKY COMPLIANT FCO Full Cutoff



SPECIFICATION FEATURES

HOUSING
Formed aluminum housing. ANSI wattage/source label.

REFLECTOR
Anodized, specular aluminum reflector is field-rotatable for forward or side throw illumination. Mogul-base lampholder.

GASKETING
High temperature door gasket.

DOOR
Extruded aluminum hinged door with tempered-glass lens and captive retaining screws.

BALLAST
Removable ballast assembly with quick disconnect.

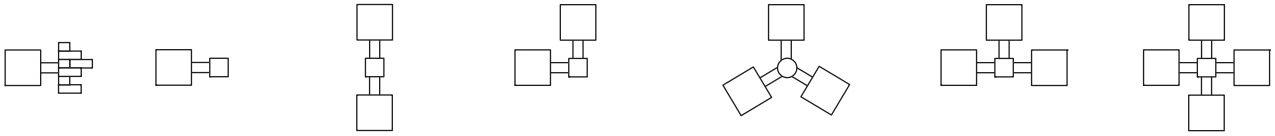
FINISH
Standard polyester powder coat finish in bronze. For more color options see optional colors or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
2.7

SHIPPING DATA [Approximate Net Weight]:
62 lbs. [28.12 kgs.]

MOUNTING CONFIGURATIONS

Wall Mount | **Arm Mount Single** | **Arm Mount 2 @ 180°** | **Arm Mount 2 @ 90°** | **Arm Mount 3 @ 120° (Round Pole Only)** | **Arm Mount 3 @ 90°** | **Arm Mount 4 @ 90°**



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
MFT	"M"	2.7	5.4	6	8.5	8.5	9.75

NOTE: 1 Assumes 12" arm for 90° and 120° mounting configurations, 6" for all else.

ORDERING INFORMATION

SAMPLE NUMBER: MFT91MWWFT4

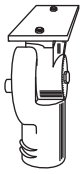
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	DISTRIBUTION	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES
MFT=Landau	**40**=400W **91**=1000W	**M**=Metal Halide **P**=Pulse Start Metal Halide **S**=High Pressure Sodium **R**=Super Metal Halide	**W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V	**FT**=Forward Throw **3D**=Type III MCO	**AP**=Grey **BK**=Black **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

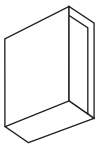
OPTIONS (add as suffix)
1=Single Fused, Internally Mounted (120 or 277V)
2=Double Fused, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
AIR=Arm Included for Round Pole
AIS=Arm Included for Round Pole
HS=House-side Shield
L=Lamp Included

ACCESSORIES (order separately)
OA1016=NEMA Photocontrol—Multi-Tap
OA1027=NEMA Photocontrol—480V
OA1066=Mast Arm Adapter for Existing 2 3/8" O.D. Horizontal Arm
OA1090=Adjustable Slipfitter for 2 3/8" O.D. Vertical Tenon
OA1149=Polycarbonate Vandal Shield, Field Installed
OA1156=6" Rectangular Arm for Square Pole [EPA .20]
OA1157=12" Rectangular Arm for Square Pole [EPA .50]
OA1158=18" Rectangular Arm for Square Pole [EPA .70]
OA1159=Tenon-mounted Crossarm for Two Units
OA1160=Tenon-mounted Crossarm for Three Units
OA1161=Direct Crossarm Mounting Set
OA1167=6" Rectangular Arm for Round Pole [EPA .20]
OA1168=12" Rectangular Arm for Round Pole [EPA .50]
OA1169=18" Rectangular Arm for Round Pole [EPA .70]
OA1201=NEMA Photocontrol—347V

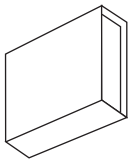
MOUNTING SYSTEMS



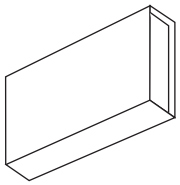
OA1090
Slipfitter for tenon mount 2 3/8" O.D.



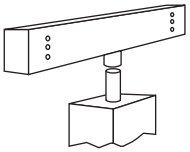
OA1156
6" rectangular arm for square pole



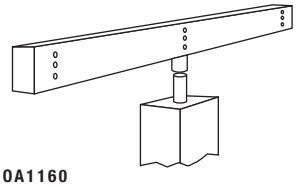
OA1157
12" rectangular arm for square pole



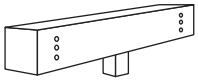
OA1158
18" rectangular arm for square pole



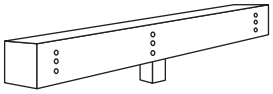
OA1159
Tenon-mounted cross-arm for two units. For 3 1/2" O.D. tenon.



OA1160
Tenon-mounted cross-arm for three units. For 3 1/2" O.D. tenon.



ISBD-_-2L
Tenon-mounted cross-arm for two units. 4", 5", or 6" square pole top.

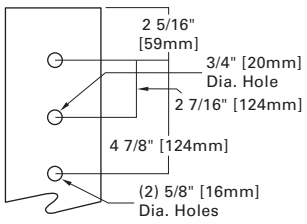


ISBD-_-3L
Tenon-mounted cross-arm for three units. 4", 5", or 6" square pole top.

NOTE: OA1156, OA1157, OA1158 or OA1161 must be ordered for each fixture when ordering OA1159, OA1160, ISBD-_-2L or ISBD-_-3L. Other mounting configurations available. Consult factory. 6" arms (OA1156, OA1167) cannot be used to mount multiple fixtures at 90°.

DRILLING PATTERN

TYPE "M"



NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility. **2** Specifications and dimensions subject to change without notice.

GALLERIA ROUND

HOUSING
Architectural reveal maintains Galleria's family heritage.

OPTICAL SYSTEM
The proven superior, single piece optical systems are universal between the Round and Square Galleria housings.

MOUNTING
Round form is carried through form fixture to base plate cover (round poles only).

GALLERIA ROUND

Maintaining a family lineage with the Galleria Square, the attractive round housing incorporated an aesthetic reveal to its timeless silhouette while utilizing the identical seamless Galleria optical systems that have been an industry benchmark for well over a decade.

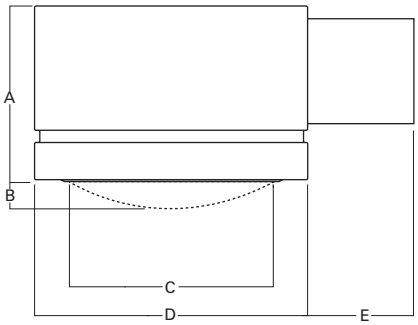
DARK SKY COMPLIANT FCO Full Cutoff

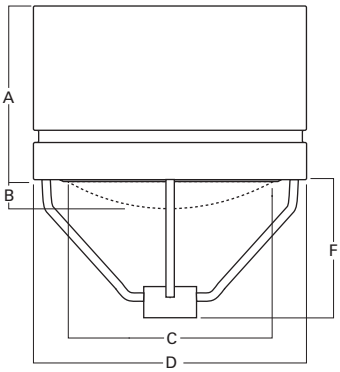
GR GALLERIA ROUND

250-1000W

ARCHITECTURAL AREA LUMINAIRE

STREETWORKS





DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In all flat glass configurations only.

Fixture		A	B	C	D	E	F
250-1000W	(in.)	18 1/4	3 1/2	19 3/4	24 1/2	6 or 14	16
	(mm)	464	89	502	676	152 or 356	406
1000W	(in.)	19 3/4	4 1/4	25 5/8	32 15/16	6 or 14	19 3/4
	(mm)	502	108	651	837	152 or 356	502

SPECIFICATION FEATURES

HOUSING
Roll-formed aluminum housing with stamped reveal has interior-welded seams for structural integrity. Optional NEMA twistlock photocontrol. ANSI wattage/source label.

BALLAST
Ballast is hard-mounted to housing interior for cooler operation.

REFLECTOR
Spun and stamped aluminum reflector in vertical lamp units, hydroformed anodized aluminum reflector or high performance segmented optical system in horizontal lamp units.

SPRINGS
Aluminum door retaining springs.

DOOR
Formed aluminum door for arm-mount fixture has retaining springs, while spider-mount unit has a heavy-duty hinge and captive retaining screws. Door is finished in polyester powder coat.

BALLAST ASSEMBLY
Convex tempered glass lens. Tempered flat glass available.

SOCKET
Porcelain screw-shell socket fits mogul-base HID lamps.

FINISH
Standard polyester powder coat finish in bronze. For more color options see optional colors or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:
2.7

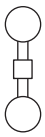
SHIPPING DATA [Approximate Net Weight]:
86 lbs. [40 kgs.]

MOUNTING CONFIGURATIONS

Spider Mount

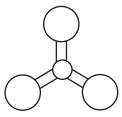
Arm Mount Single

Arm Mount 2 @ 180°

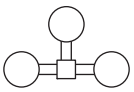


Arm Mount 2 @ 90°

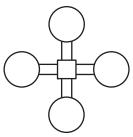
Arm Mount 3 @ 120° (Requires 14" Arm) Round Pole Only



Arm Mount 3 @ 90° (Requires 14" Arm)



Arm Mount 4 @ 90° (Requires 14" Arm)



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
GRA [Arm Mount] 250-400W	"M" [1]	2.2	4.4	5.4	7.1	7.1	7.9
GRC [Spider Mount] 250-400W	3"	2.0	n/a	n/a	n/a	n/a	n/a
GRA [Arm Mount] 1000W	"M" [1]	3.0	6.0	7.0	9.5	9.5	10.7
GRC [Spider Mount] 1000W	3"	2.8	n/a	n/a	n/a	n/a	n/a

NOTE: 1 Assumes 14" arm for 90° and 120° mounting configurations, 6" for all else.

ORDERING INFORMATION

SAMPLE NUMBER: GRA25MWWXX

PRODUCT FAMILY [1]	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE [2]	VOLTAGE [2]	DISTRIBUTION	LENS TYPE	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES
GRA=Arm	**25**=250W	**M**=Metal Halide	**C**=CWI	**2**=120V	**1D**=Type I MCO (Horizontal)	**FG**=Flat Glass [3,5]	**AP**=Grey	(See Below)
GRC=Spider 2 3/8" - 3" O.D.	**40**=400W	**P**=Pulse Start Metal Halide	**M**=Mag. Reg.	**0**=208V	**2D**=Type II MCO (Horizontal)	**SG**=Sag Glass	**BK**=Black	
	91=1000W	**S**=High Pressure Sodium	**W**=CWA	**4**=240V	**3D**=Type III MCO (Horizontal)		**BZ**=Bronze	
				7=277V	**3V**=Type III (Vertical)		**DP**=Dark Platinum	
				8=480V	**FT**=Forward Throw (Horizontal)		**GM**=Graphite Metallic	
				W=Multi-Tap wired 120V	**AR**=Area Round (Vertical)		**WH**=White	
				N=Multi-Tap wired 277V	**AS**=Area Square (Vertical)			
				V=Multi-Tap wired 240V	**RW**=Rectangular Wide (Vertical)			
					SL=Spill Light Eliminator (Horizontal) [3,4]			

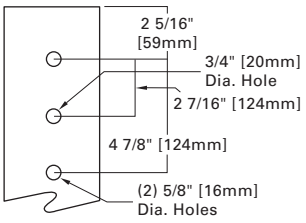
OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
AIR=Arm Included for Round Pole [6]
AIS=Arm Included for Square Pole [6]
B=House-side Shield
F=Flat Glass
H=Plug-in Starter Receptacle [4]
L=Lamp Included
CSR=Color Reveal Stripe—Red
CSB=Color Reveal Stripe—Blue
CSY=Color Reveal Stripe—Yellow
CSG=Color Reveal Stripe—Green
CSD=Color Reveal Stripe—Gold
CSS=Color Reveal Stripe—Silver
CSW=Color Reveal Stripe—White

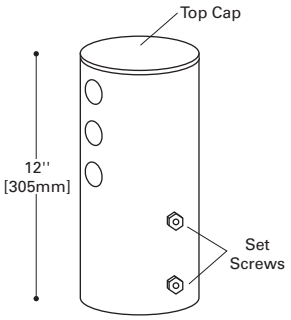
ACCESSORIES (order separately)
MA1025=14" Arm for Square Pole [7]
MA1026=6" Arm for Square Pole
MA1006=Direct Mounting Kit for Square Pole
MA1027=14" Arm for Round Pole [7]
MA1028=6" Arm for Round Pole
MA1009=Direct Mounting Kit for Round Pole
MA1061=House-side Shield—Field Installed (Medium Housing)
MA1062=House-side Shield—Field Installed (Large Housing)

DRILLING PATTERN

TYPE "M"



2" OR 3" DIRECT MOUNT TENON ADAPTER



("M" Drilling for Arm Mounting)

ORDERING INFORMATION

Catalog Number	Tenon Size (In.)	Fixture Configuration
MA1010	3 1/2 O.D.	1 Fixture
MA1011	3 1/2 O.D.	2 Fixtures at 180°
MA1012	3 1/2 O.D.	3 Fixtures at 120°
MA1013	3 1/2 O.D.	4 Fixtures at 90°
MA1014	3 1/2 O.D.	2 Fixtures at 90°
MA1015	3 1/2 O.D.	2 Fixtures at 120°
MA1016	3 1/2 O.D.	3 Fixtures at 90°
MA1017	2 3/8 O.D.	1 Fixture
MA1018	2 3/8 O.D.	2 Fixtures at 180°

NOTES: Fitters for other tenon sizes available. Consult your Streetworks representative. Tenon adapter for through bolt mounted luminaires. Standard adapter is bronze painted steel.

NOTE: 1 Order arm separately. **2** Refer to technical section for lamp/ballast/voltage compatibility. **3** Must use reduced envelop lamp. **4** Not available in 1000W. **5** Available in 1D, 2D, 3D, FT. AR. **6** Arm length varies based on housing size. **7** Required for mounting fixtures at 90° increments. **8** 1000W medium housing requires small jacket lamp. **9** 1000W large housing requires small jacket lamp—Not available with AS RW or 3V distributions. **10** Specifications and dimensions subject to change without notice.

CIRRUS

CIRRUS

The low-profile of the Cirrus luminaire compliments and accentuates virtually any architectural style or landscape space. Offered in three (3) different housing sizes, and with lamp options up to 1000W HID, the Cirrus family of luminaires allows the design flexibility to match fixture proportions and lamp wattage to the scale and task at hand.

DARK SKY COMPLIANT FCO Full Cutoff

HOUSING
Designer reveal on housing adds a nice aesthetic touch to both solid and luminous tops. Consistency of design is maintained on round pole base cover which features a matching reveal.

MOUNTING
Cirrus can be pole mounted in a variety of configurations including the attractive spider and yoke mount pole top options.

OPTICAL SYSTEM
Cirrus offers a broad selection of premium performance segmented and hydroformed optical systems designed to optimize pole spacings and curtail spill light.

C CIRRUS

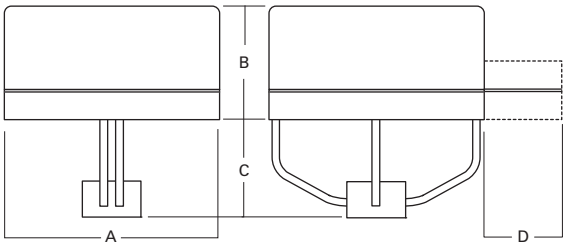
ARCHITECTURAL AREA LUMINAIRE

70-1000W

STREETWORKS IP55 RATED

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In solid top configuration only.



Yoke Mount **Spider Mount / Arm Mount**

FIXTURE		A	B	C	D
SMALL	(in.)	20 1/2	10 1/4	11	6
	(mm)	521	260	279	152
MEDIUM	(in.)	24	12 1/8	12 5/8	7 /2
	(mm)	610	308	321	191
LARGE	(in.)	28	14 1/4	16	9
	(mm)	610	362	406	229

SPECIFICATION FEATURES

STRUCTURAL FRAME

Heavy-duty, die-cast aluminum frame is the main load-bearing structure for arm, yoke or spider mountings and serves as a heat sink for cooler operation and longer ballast life. Each optional package seats within the frame for precise photometric repeatability.

HOUSING

Spun-aluminum top is finished in polyester powder coat enamel. Round shape reduces EPA and size of poles required. ANSI wattage/source label.

OPTICAL SYSTEM

Cirrus offers a broad selection of premium performance segmented and hydroformed optical systems designed to optimize pole spacings and curtail spill light.

DOOR

Die-cast aluminum door frame has concealed hinges and is flush with the bottom of the housing.

LENS

Thermal shock- and impact-resistant clear tempered glass.

BALLAST ASSEMBLY

Long life core-and-coil HID ballast is hard mounted for cooler operation. Ballast is mounted in pole for luminous tops.

SOCKET

Porcelain screw-shell socket fits mogul-base HID lamps.

FINISH

Standard polyester powder coat finish in bronze. For more color options see optional colors or consult your Streetworks represenatitive for more information.

EPA [Effective Projected Area]:

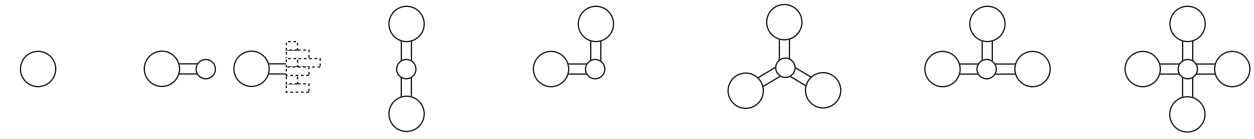
2.7

SHIPPING DATA [Approximate Net Weight]:

65 lbs. [30 kgs.]

MOUNTING CONFIGURATIONS

Spider/Yoke Mount | Arm Mount/Wall Mount Single | Arm Mount 2 @ 180° | Arm Mount 2 @ 90° | Arm Mount 3 @ 120° | Arm Mount 3 @ 90° | Arm Mount 4 @ 90°



EPA TABLE

	DRILL PATTERN	SINGLE [W/Arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
SMALL [Arm Mount]	"Z"	1.19	2.38	2.38	3.57	3.57	4.165
SMALL[Spider/Yoke Mount]	4" or 5"	1.13	n/a	n/a	n/a	n/a	n/a
MEDIUM [Arm Mount]	"Z"	1.7	3.4	3.4	5.1	5.1	5.95
MEDIUM [Spider/Yoke Mount]	5"	1.52	n/a	n/a	n/a	n/a	n/a
LARGE [Arm Mount]	"Z"	2.36	4.72	4.72	7.08	7.08	8.26
LARGE [Spider/Yoke Mount]	6"	2.1	n/a	n/a	n/a	n/a	n/a

ORDERING INFORMATION

SAMPLE NUMBER: CAS17MWW3D

PRODUCT FAMILY [1]	LAMP WATTAGE	LAMP TYPE [4]	BALLAST TYPE [4]	VOLTAGE [4]	DISTRIBUTION [6]	COLOR (add as suffix/ must specify)	OPTIONS + ACCESSORIES (See Below)
CAS=Arm Solid Top	**70**=70W	**M**=Metal Halide	**C**=CWI	**2**=120V	**1D**=Type I MCO	**AP**=Grey	
CSS=Spider Solid Top	**10**=100W [3]	**P**=Pulse Start Metal Halide	**K**=10KV CWA [5]	**0**=208V	**2D**=Type II MCO	**BK**=Black	
CYS=Yoke Solid Top	**15**=150W	**S**=High Pressure Sodium	**P**=Hi. Reac./HPF	**4**=240V	**3D**=Type III MCO	**BZ**=Bronze	
CAP=Arm Luminous Top [2]	**17**=175W	**R**=Super Metal Halide	**W**=CWA	**7**=277V	**4D**=Type IV MCO	**DP**=Dark Platinum	
CSP=Spider Luminous Top [2]	**25**=250W			**8**=480V	**5D**=Type V MCO	**GM**=Graphite Metallic	
CYP=Yoke Luminous Top [2]	**40**=400W			**W**=Multi-Tap wired 120V	**2S**=Type II Segmented	**WH**=White	
	91=1000W			**N**=Multi-Tap wired 277V	**3S**=Type III Segmented		
				V=Multi-Tap wired 240V	**4S**=Type IV Segmented		
					5S=Type V Segmented		
					SL=Spill Light Eliminator [7]		

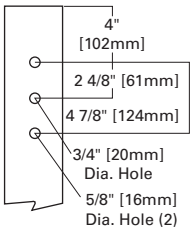
OPTIONS + ACCESSORIES [Must be listed in the order shown and separated by a dash]

OPTIONS (add as suffix)
1=Single Fused, Internally Mounted (120 or 277)
2=Double Fused, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
B=House-side Shield
L=Lamp Included
P=Button Photocontrol

ACCESSORIES (order separately)
MA1001=Wall Bracket for Solid Top units [8]
MA1003=Wall Bracket for Luminous Top units [9]

DRILLING PATTERN

TYPE "Z"



NOTE: **1** Small up to 175W. Medium 250 to 400W. Large 1000W. **2** Luminous dome available in 250W maximum and designed to fit 5" poles. Luminous units only available in 120 or 277V. **3** Medium-base lamp. **4** Refer to technical section for lamp/ballast/voltage compatibility. **5** 70-150W maximum. **6** Segmented optics available on solid top designs and small/medium housings only. Maximum wattage on small segmented optics is medium-base 175W. Reduce jacket lamp required on 400W Metal Halide. **7** Not available in 1000W. **8** Available for small and medium units only. **9** Not available in 250W High Pressure Sodium. **10** Specifications and dimensions subject to change without notice.

CREDENZA

CREDENZA

The low-profile of the Credenza luminaire compliments and accentuates virtually any architectural style or landscape space. Offered in three (3) different housing sizes, and with lamp options up to 1000W HID, the Credenza family of luminaires allows the design flexibility to match fixture proportions and lamp wattage to the scale and task at hand.

DARK SKY COMPLIANT FCO Full Cutoff

HOUSING
Designer reveal on housing adds a nice aesthetic touch to both solid and luminous tops. Consistency of design is maintained on round pole base cover which features a matching reveal.

MOUNTING
Credenza can be pole mounted in a variety of configurations including the attractive spider and arm mount pole top options.

OPTICAL SYSTEM
Credenza offers a broad selection of premium performance segmented and hydroformed optical systems designed to optimize pole spacings and curtail spill light.

Z CREDENZA

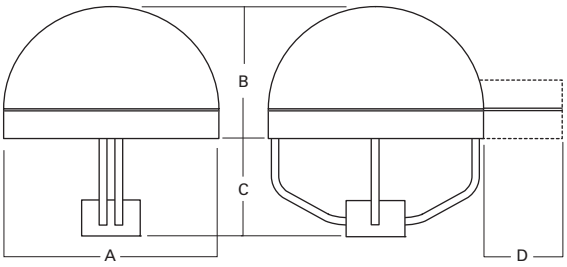
70-1000W

ARCHITECTURAL AREA LUMINAIRE

STREETWORKS IP55 RATED

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In solid top configuration only.



Yoke Mount **Spider Mount / Arm Mount**

FIXTURE		A	B	C	D
SMALL	(in.)	20 1/2	10 1/4	11	6
	(mm)	521	260	279	152
MEDIUM	(in.)	24	12 1/8	12 5/8	7 /2
	(mm)	610	308	321	191
LARGE	(in.)	28	14 1/4	16	9
	(mm)	610	362	406	229

SPECIFICATION FEATURES

STRUCTURAL FRAME

Heavy-duty, die-cast aluminum frame is the main load-bearing structure for arm, yoke or spider mountings and serves as a heat sink for cooler operation and longer ballast life. Each optional package seats within frame for precise photometric repeatability.

HOUSING

Spun-aluminum top is finished in polyester powder coat enamel. Round shape reduces EPA and size of poles required. ANSI wattage/source label.

OPTICAL SYSTEM

Credenza offers a broad selection of premium performance segmented and hydroformed optical systems designed to optimize pole spacings and curtail spill light.

DOOR

Die-cast aluminum door frame has concealed hinges and is flush with the bottom of the housing.

LENS

Thermal shock- and impact- resistant clear tempered glass.

BALLAST ASSEMBLY

Long life core-and-coil HID ballast is hard mounted for cooler operation. Ballast is mounted in pole for luminous tops.

SOCKET

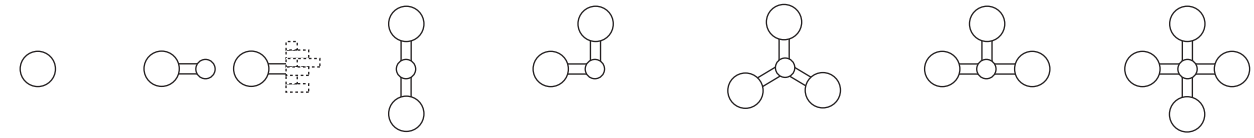
Porcelain screw-shell socket fits mogul-base HID lamps.

SHIPPING DATA [Approximate Net Weight]:

64 lbs. [29 kgs.]

MOUNTING CONFIGURATIONS

Spider/Yoke Mount | Arm Mount/Wall Mount Single | Arm Mount 2 @ 180° | Arm Mount 2 @ 90° | Arm Mount 3 @ 120° | Arm Mount 3 @ 90° | Arm Mount 4 @ 90°



EPA TABLE

	DRILL PATTERN	SINGLE [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
SMALL [Arm Mount]	"Z"	1.19	2.38	2.38	3.57	3.57	4.165
SMALL [Spider/Yoke Mount]	4" or 5"	1.13	n/a	n/a	n/a	n/a	n/a
MEDIUM [Arm Mount]	"Z"	1.7	3.4	3.4	5.1	5.1	5.95
MEDIUM [Spider/Yoke Mount]	5"	1.52	n/a	n/a	n/a	n/a	n/a
LARGE [Arm Mount]	"Z"	2.36	4.72	4.72	7.08	7.08	8.26
LARGE [Spider/Yoke Mount]	6"	2.1	n/a	n/a	n/a	n/a	n/a

ORDERING INFORMATION

SAMPLE NUMBER: ZAD17MWW3D

PRODUCT FAMILY [1]
ZAD=Arm Dome
ZSD=Spider Dome
ZYD=Yoke Dome
ZAG=Arm Luminous Dome [2]
ZSG=Spider Luminous Dome [2]
ZYG=Yoke Luminous Dome [2]

LAMP WATTAGE
70=70W [3]
10=100W [3]
15=150W [3]
17=175W
25=250W
40=400W
91=1000W

LAMP TYPE [4]
S=High Pressure Sodium
M=Metal Halide
R=SMH

BALLAST TYPE [4]
C=CWI
K=10KV CWA [5]
P=Hi. Reac./HPF
W=CWA

VOLTAGE [4]
2=120V
0=208V
4=240V
7=277V
8=480V
W=Multi-Tap wired 120V
N=Multi-Tap wired 277V
V=Multi-Tap wired 240V

DISTRIBUTION [6]
1D=Type I MCO
2D=Type II MCO
3D=Type III MCO
4D=Type IV MCO
5D=Type V MCO
2S=Type II Segmented
3S=Type III Segmented
4S=Type IV Segmented
5S=Type V Segmented
SL=Spill Light Eliminator [7]

COLOR
(add as suffix/ must specify)
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
GM=Graphite Metallic
WH=White

AOPTIONS + ACCESSORIES
(See Below)

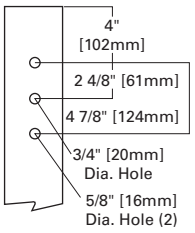
OPTIONS + ACCESSORIES [Must be listed in the order shown and separated by a dash]

OPTIONS (add as suffix)
1=Single Fused, Internally Mounted (120 or 277)
2=Double Fused, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
B=House-side Shield
L=Lamp Included
P=Button Photocontrol

ACCESSORIES (order separately)
MA1001=Wall Bracket for Solid Top units [8]
MA1003=Wall Bracket for Luminous Top units [9]

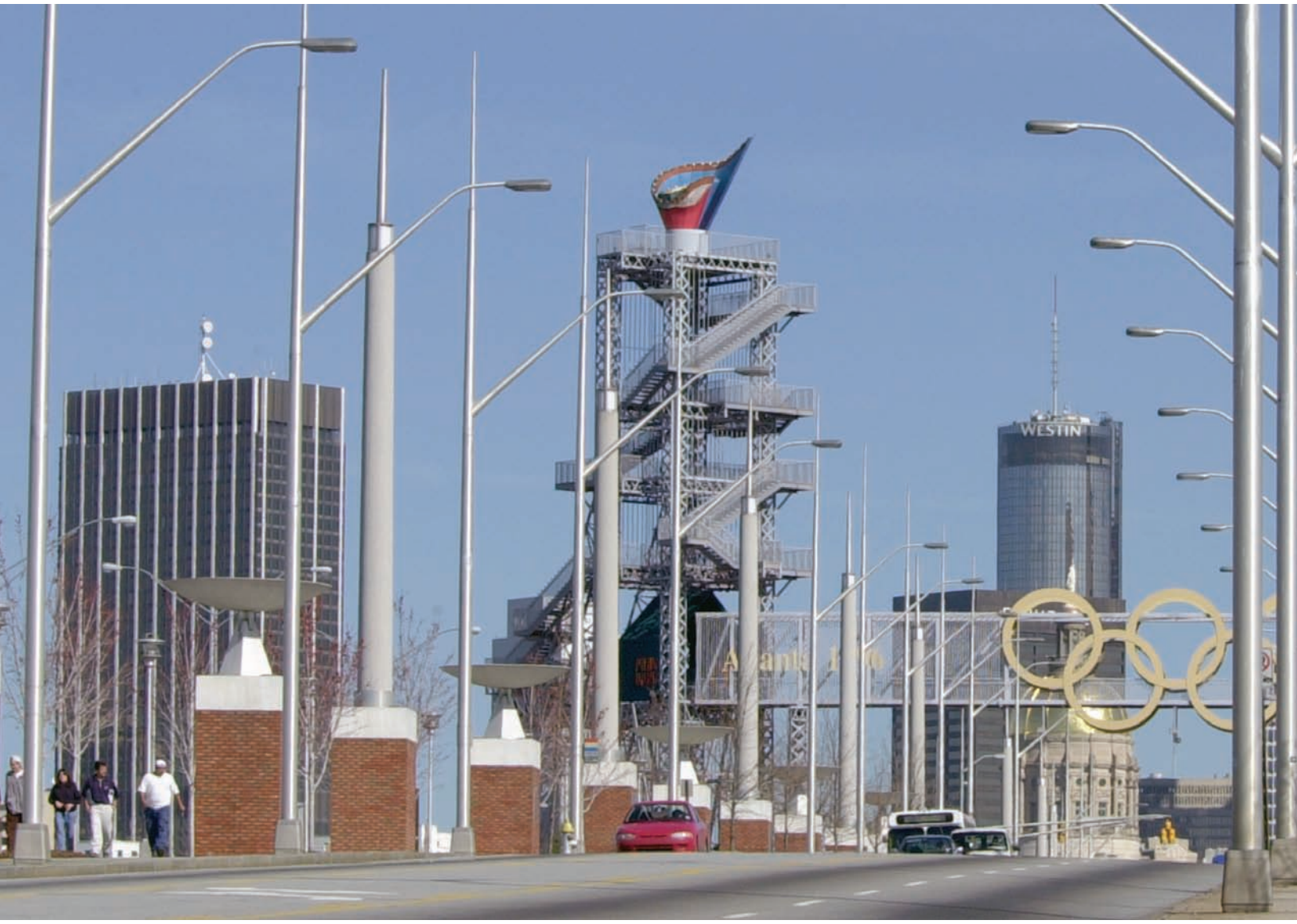
DRILLING PATTERN

TYPE "Z"



NOTE: 1 Small up to 175W. Medium 250 to 400W. Large 1000W. **2** Luminous dome available in 250W maximum and designed to fit 5" poles. Luminous units only available in 120 or 277V. **3** Medium-base lamp. **4** Refer to technical section for lamp/ballast/voltage compatibility. **5** 70-150W maximum. **6** Segmented optics available on solid top designs and small/medium housings only. Maximum wattage on small segmented optics is medium-base 175W. Reduce jacket lamp required on 400W Metal Halide. **7** Not available in 1000W. **8** Available for small and medium units only. **9** Not available in 250W High Pressure Sodium. **10** Specifications and dimensions subject to change without notice.

ROADWAY



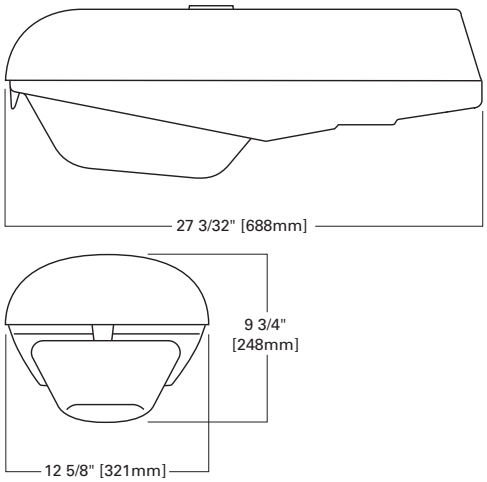
PRODUCTS

OVZ DROP LENS REFRACTOR

50-250W

ROADWAY LUMINAIRE

STREETWORKS



SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and latch. Standard grey polyester powder coat finish. Other finish colors available. 3G vibration rated.

SOCKET
Adjustable mogul-base porcelain socket. 150W Metal Halide and below is medium-base.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Removable prismatic refractor for use with Metal Halide, Pulse Start Metal Halide and High Pressure Sodium lamp sources.

REFLECTOR
The optical system is a hydroformed anodized aluminum reflector with a Dacron polyester filter.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Three position available. Electronic ballast optional.

MOUNTING
Two-bolt/one bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1 1/4" or 2" mounting arms. (Birdguard not needed for 2" arm.)

EPA [Effected Projected Area]:
.85

SHIPPING DATA [Approximate Net Weight]:
31 lbs. [14 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVZ50SR22E4

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	DISTRIBUTION [4]	CUTOFF [4]	COLORS (add as suffix)	OPTIONS + ACCESSORIES
OVZ	**50**=50W **70**=70W **10**=100W **15**=150W [1] **17**=175W **20**=200W **25**=250W	**M**=Metal Halide **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**C**=CWI **H**=Reac./HPF **M**=Mag. Reg. **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA **E**=Electronic [3]	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **F**=120/240V wired 120V **G**=240/120V wired 240V **D**=Multi-Tap 240V w/PCR wired 120V **P**=240V w/PCR wired 120V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**2**=Type II **3**=Type III	**D**=MCO **E**=MSCO	**BK**=Black **BZ**=Bronze **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
A=Raw Aluminum Unfinished
E=150W/100V/HPS Ballast
F=Flat Glass
G=Borosilicate Glass Refractor (175W & below) [5]
H=Plug-in Starter Receptacle
K=Level Indicator
L=Lamp Included
M=MOV Lightning Surge Protector [6]
P=Polycarbonate Refractor (250W Max.)
U=UL/CSA Listed

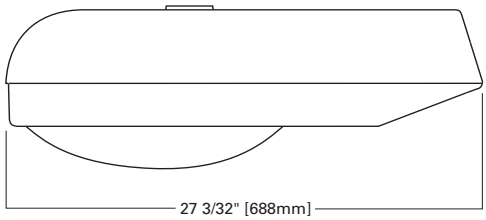
ACCESSORIES (order separately)
RA1001=Cutoff Visor
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1028=Field Installed NEMA PCR Kit
OA1216=TufGuard Vandal Shield

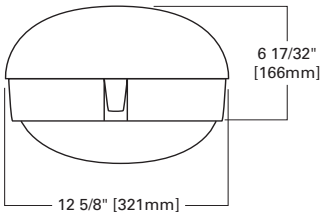
NOTE: 1 150W units are for S55 lamp **2** Refer to technical section for lamp/ballast/voltage compatibility **3** 100 and 150W HPS only 100W is universal 120-277V 150W is 120V only and for S56 lamps only **4** Other distributions & cutoffs available Consult your Streetworks Representative **5** Acrylic is standard on units 50W through 175W Glass standard for 200-250W **6** MOV option is not available for any system requiring a three position terminal block (Example 240V with PCR wired 120V) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **7** Specifications and dimensions subject to change without notice

50-250W

OVG LOW PROFILE GLASS

ROADWAY LUMINAIRE





DARK SKY COMPLIANT CO Cutoff

STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and latch. Standard grey polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative. Optional NEMA twistlock photocontrol receptacle also available. 3G vibration rated.

SOCKET
Adjustable mogul-base porcelain socket. 150W Metal Halide and below is medium-base.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Removable low profile glass for use with Metal Halide, Pulse Start Metal Halide and High Pressure Sodium lamp sources.

REFLECTOR
The optical system is a hydroformed anodized aluminum reflector with a Dacron polyester filter.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Three position available. Electronic ballast optional.

MOUNTING
Two-bolt/one bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1 1/4" or 2" mounting arms. (Birdguard not needed for 2" arm.)

EPA [Effected Projected Area]:
.80

SHIPPING DATA [Approximate Net Weight]:
30 lbs. [14 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVG10SR22D4

PRODUCT FAMILY
OVG

LAMP WATTAGE
50=50W
70=70W
10=100W
15=150W [1]
17=175W
20=200W
25=250W

LAMP TYPE [2]
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE [2]
C=CWI
H=Reac./HPF
K=10KV CWA [3]
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA
E=Electronic [4]

VOLTAGE [2]
2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
F=120/240V wired 120V
G=240/120V wired 240V
P=240V w/PCR wired 120V
W=Multi-Tap wired 120V
N=Multi-Tap wired 277V
V=Multi-Tap wired 240V

DISTRIBUTION
2=Type II
3=Type III

CUTOFF
D=MCO

COLORS (add as suffix)
BK=Black
BZ=Bronze
WH=White

OPTIONS + ACCESSORIES
(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Place Terminal Block
4=Photocontrol Receptacle
A=Raw Aluminum Unfinished
E=150W/100V/HPS Ballast
H=Plug-in Starter Receptacle
K=Level Indicator [5]
L=Lamp Included
M=MOV Lightning Surge Protector [6]
U=UL/CSA Listed

ACCESSORIES (order separately)
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1028=Field Installed NEMA PCR Kit
OA1216=TufGuard Vandal Shield

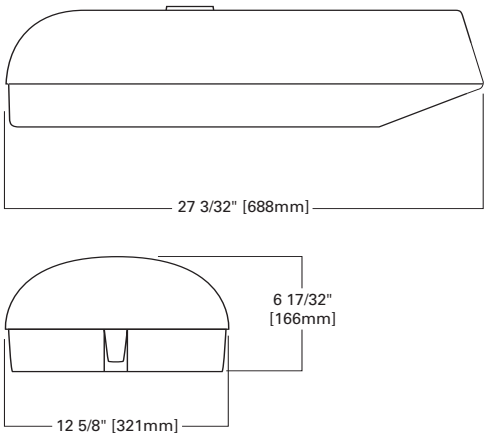
NOTE: 1 150W units are for S55 lamp **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Available in 120/240V dual voltage or single voltage only for 50-150W **4** 100 and 150W HPS only 100W is universal 120-277V 150W is 120V only and for S56 lamps only **5** Field installed only **6** MOV option is not available for any system requiring a three position terminal block (Example 240V with PCR wired 120V) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **7** Specifications and dimensions subject to change without notice

OVH FLAT GLASS

50-250W

ROADWAY LUMINAIRE

STREETWORKS



DARK SKY COMPLIANT CO Cutoff

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and latch. Standard grey polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative. Optional NEMA twistlock photocontrol receptacle also available. 3G vibration rated.

SOCKET
Adjustable mogul-base porcelain socket. 150W Metal Halide and below is medium-base.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Removable tempered flat glass for use with Metal Halide, Pulse Start Metal Halide and High Pressure Sodium lamp sources.

REFLECTOR
The optical system is a hydroformed anodized aluminum reflector with a Dacron polyester filter.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Three position available. Electronic ballast optional.

MOUNTING
Two-bolt/one bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1 1/4" or 2" mounting arms. (Birdguard not needed for 2" arm.)

EPA [Effected Projected Area]:
.80

SHIPPING DATA [Approximate Net Weight]:
28 lbs. [13 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVH50SR22D4

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	DISTRIBUTION	CUTOFF	COLORS (add as suffix)	OPTIONS + ACCESSORIES
OVH	**50**=50W **70**=70W **10**=100W **15**=150W [1] **17**=175W **20**=200W **25**=250W	**M**=Metal Halide **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**C**=CWI **H**=Reac./HPF **K**=10KV CWA [3] **M**=Mag. Reg. **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA **E**=Electronic [4]	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **F**=120/240V wired 120V **G**=240/120V wired 240V **P**=240V w/PCR wired 120V **D**=Multi-Tap wired 240V w/PCR wired 120V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**2**=Type II **3**=Type III	**D**=MCO	**BK**=Black **BZ**=Bronze **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
A=Raw Aluminum Unfinished
E=150W/100V/HPS Ballast
H=Plug-in Starter Receptacle
K=Level Indicator
L=Lamp Included
M=MOV Lightning Surge Protector [5]
U=UL/CSA Listed

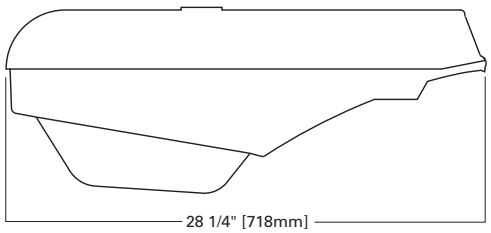
ACCESSORIES (order separately)
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1028=Field Installed NEMA PCR Kit
OA1213=TufGuard Vandal Shield
SH007=House-side Shield

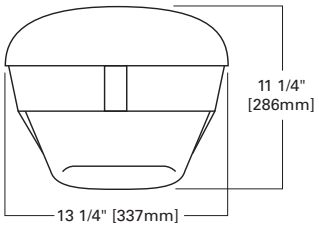
NOTE: 1 150W units are for S55 lamp **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Available in 120/240V dual voltage or single voltage only for 50-150W **4** 100 and 150W HPS only 100W is universal 120-227V 150W is 120V only and for S56 lamps only **5** MOV option is not available for any system requiring a three position terminal block (Example 240V with PCR wired 120V) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **6** Specifications and dimensions subject to change without notice

50-400W

OVX DROP PRISMATIC REFRACTOR

ROADWAY LUMINAIRE





DARK SKY COMPLIANT — CO Cutoff

NOTE: In flat glass applications only

STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and latch. Standard grey polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative. Optional NEMA twistlock photocontrol receptacle also available. 3G vibration rated.

SOCKET
Adjustable mogul-base porcelain socket. 150W Metal Halide and below is medium-base.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Removable prismatic refractor for use with Metal Halide, Pulse Start Metal Halide and High Pressure Sodium lamp sources.

REFLECTOR
The optical system is a hydroformed anodized aluminum reflector with a Dacron polyester filter.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Optional swing-down ballast bridge also available (up to 250W).

MOUNTING
Two-bolt/one bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1 1/4" or 2" mounting arms. (Birdguard not needed for 2" arm.)

EPA [Effected Projected Area]:
.87

SHIPPING DATA [Approximate Net Weight]:
35 lbs. [16 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVX40SWW3E4

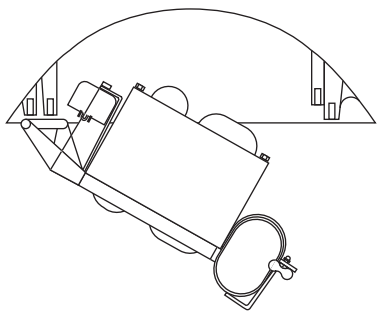
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [3]	BALLAST TYPE [3]	VOLTAGE [3]	DISTRIBUTION [5]	CUTOFF [5]	COLORS (add as suffix)	OPTIONS + ACCESSORIES
OVX	**50**=50W	**M**=Metal Halide	**C**=CWI	**2**=120V	**2**=Type II	**D**=MCO	**BK**=Black	(See Below)
	70=70W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**3**=Type III	**E**=MSCO	**BZ**=Bronze	
	10=100W	**S**=High Pressure Sodium	**K**=10KV CWA [4]	**4**=240V			**WH**=White	
	15=150W [1]		**M**=Mag. Reg.	**7**=277V				
	17=175W		**N**=Hi. Reac./NPF	**8**=480V				
	20=200W		**P**=Hi. Reac./HPF	**9**=347V				
	25=250W		**R**=Reac./NPF	**F**=120/240V wired 120V				
	24=250/400W wired 250W [2]		**W**=CWA	**G**=240/120V wired 240V				
	32=320W			**P**=240V w/PCR wired 120V				
	35=350W			**W**=Multi-Tap wired 120V				
	40=400W			**N**=Multi-Tap wired 277V				
	42=400/250W wired 400W [2]			**V**=Multi-Tap wired 240V				

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
A=Raw Aluminum Unfinished
E=150W/100V/HPS Ballast
F=Flat Glass (available only in MCO)
G=Borosilicate Glass Refractor (175W & below) [6]
H=Plug-in Starter Receptacle
K=Level Indicator
L=Lamp Included
M=MOV Lightning Surge Protector [7]
P=Polycarbonate Refractor (250W Max.)
T=Swing-down Ballast Bridge [8]
U=UL/CSA Listed

ACCESSORIES (order separately)
RA1001=Cutoff Visor
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1028=Field Installed NEMA PCR Kit
OA1217=TufGuard Vandal Shield

SWING-DOWN BALLAST MODULE [7]



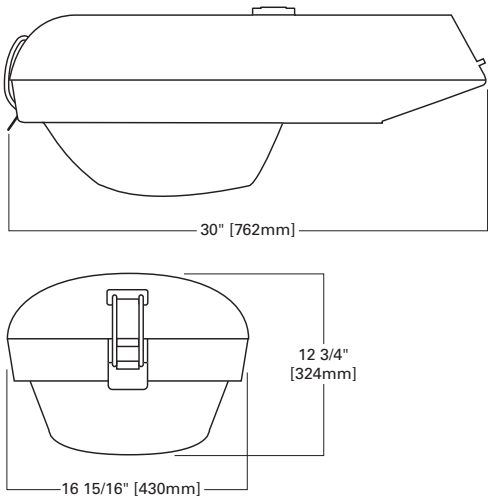
NOTE: 1 150W units are for S55 lamp **2** Not available in Pulse Start Metal Halide Metal Halide requires ED28 lamp **3** Refer to technical section for lamp/ballast/voltage compatibility **4** Available in 120/240V dual voltage or single voltage only for 50-150W **5** MCO requires flat glass Other distributions & cutoffs available Consult your Streetworks Representative **6** Acrylic is standard on units 50W through 150W HPS Glass standard for 200-250W **7** MOV option is not available for any system requiring a three position terminal block (Example 240V with PCR with wired 120V) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **8** Not available on 250W Mag Reg or 400W units **9** Specifications and dimensions subject to change without notice

OVD DEEP PRISMATIC GLASS

150-400W

ROADWAY LUMINAIRE

STREETWORKS



SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and latch. Standard grey polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative. Optional NEMA twistlock photocontrol receptacle also available. 3G vibration rated.

SOCKET
Adjustable mogul-base porcelain socket. 150W Metal Halide and below is medium-base.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Removable borosilicate glass refractor for use with Metal Halide, Pulse Start Metal Halide and High Pressure Sodium lamp sources.

REFLECTOR
The optical system is a hydroformed anodized aluminum reflector with a Dacron polyester filter.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Optional swing-down ballast bridge also available (Not available for 3G applications).

MOUNTING
Two-bolt/one bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1 1/4" or 2" mounting arms. (Birdguard not needed for 2" arm.)

EPA [Effected Projected Area]:
.64

SHIPPING DATA [Approximate Net Weight]:
35 lbs. [16 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVD15SWW2F4

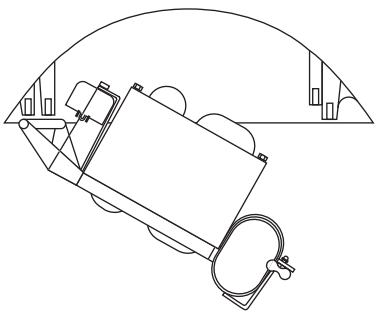
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [3]	BALLAST TYPE [3]	VOLTAGE [3]	DISTRIBUTION [4]	CUTOFF [4]	COLORS (add as suffix)	OPTIONS + ACCESSORIES
OVD	**15**=150W [1]	**M**=Metal Halide	**C**=CWI	**2**=120V	**2**=Type II	**C**=SNCO	**BK**=Black	(See Below)
	20=200W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**3**=Type III	**F**=MNCO	**BZ**=Bronze	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA	**4**=240V			**WH**=White	
	31=310W		**M**=Mag. Reg.	**7**=277V				
	32=320W		**N**=Hi. Reac./NPF	**8**=480V				
	35=350W		**W**=CWA	**9**=347V				
	40=400W [2]		**R**=Reac./NPF	**F**=120/240V wired 120V				
	24=250/400W wired 250W [2]		**P**=Hi. Reac./HPF	**G**=240/120V wired 240V				
	42=400/250W wired 400W [2]			**P**=240V w/PCR wired 120V				
				W=Multi-Tap wired 120V				
				N=Multi-Tap wired 277V				
				V=Multi-Tap wired 240V				

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
A=Raw Aluminum Unfinished
E=150W/100V/HPS Ballast
H=Plug-in Starter Receptacle
K=Level Indicator
L=Lamp Included
M=MOV Lightning Surge Protector [5]
P=Polycarbonate Refractor (250W Max.)
T=Swing-down Ballast Bridge
U=UL/CSA Listed

ACCESSORIES (order separately)
RA1003=Cutoff Visor
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1028=Field Installed NEMA PCR Kit
OA1218=TufGuard Vandal Shield

SWING-DOWN BALLAST MODULE

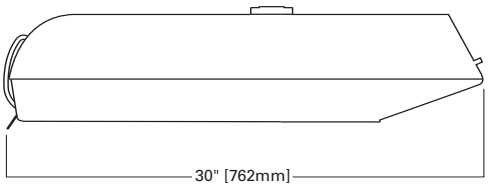


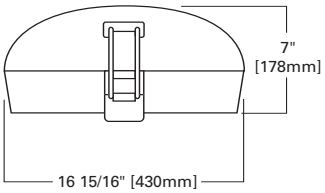
NOTE: **1** 150W units are for S55 lamp **2** Not available in Pulse Start Metal Halide Metal Halide requires ED28 lamp **3** Refer to technical section for lamp/ballast/voltage compatibility **4** Other distributions & cutoffs available Consult your Streetworks Representative **5** MOV option is not available for any system requiring a three position terminal block (Example 240V with PCR wired 120V) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **6** Specifications and dimensions subject to change without notice

150-400W

OVF FLAT GLASS

ROADWAY LUMINAIRE





DARK SKY COMPLIANT FCO Full Cutoff

STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and latch. Standard grey polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative. Optional NEMA twistlock photocontrol receptacle also available. 3G vibration rated.

SOCKET
Adjustable mogul-base porcelain socket. 150W Metal Halide and below is medium-base.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Removable tempered flat glass lens for use with Metal Halide, Pulse Start Metal Halide and High Pressure Sodium lamp sources.

REFLECTOR
The optical system is a hydroformed anodized aluminum reflector with a Dacron polyester filter.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Optional swing-down ballast bridge also available (Not available for 3G applications).

MOUNTING
Two-bolt/one bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1 1/4" or 2" mounting arms. (Birdguard not needed for 2" arm.)

EPA [Effected Projected Area]:
.51

SHIPPING DATA [Approximate Net Weight]:
30 lbs. [18 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVF15SWW2D4

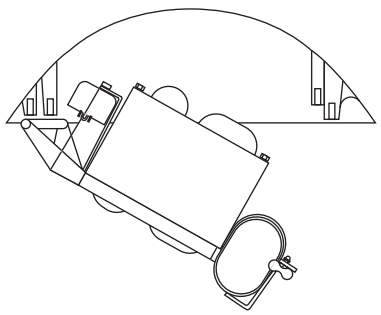
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [3]	BALLAST TYPE [3]	VOLTAGE [3]	DISTRIBUTION [4]	CUTOFF [4]	COLORS (add as suffix)	OPTIONS + ACCESSORIES
OVF	**15**=150W [1] **20**=200W **25**=250W **31**=310W **32**=320W **35**=350W **40**=400W [2] **24**=250/400W wired 250W [2] **42**=400/250W wired 400W [2]	**M**=Metal Halide **P**=Pulse Start Metal Halide **S**=High Pressure Sodium	**C**=CWI **H**=Reac./HPF **K**=10KV CWA **M**=Mag. Reg. **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **F**=120/240V wired 120V **G**=240/120V wired 240V **P**=240V w/PCR wired 120V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**1**=Type I **2**=Type II **3**=Type III	**D**=MCO	**BK**=Black **BZ**=Bronze **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
A=Raw Aluminum Unfinished
E=150W/100V/HPS Ballast
H=Plug-in Starter Receptacle
K=Level Indicator
L=Lamp Included
M=MOV Lightning Surge Protector [5]
T=Swing-down Ballast Bridge
U=UL/CSA Listed

ACCESSORIES (order separately)
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1028=Field Installed NEMA PCR Kit
OA1214=TufGuard Vandal Shield
SH005=House-side Shield

SWING-DOWN BALLAST MODULE



NOTE: 1 150W units are for S55 lamp **2** Not available in Pulse Start Metal Halide Metal Halide requires ED28 lamp **3** Refer to technical section for lamp/ballast/voltage compatibility **4** Other distributions & cutoffs available Consult your Streetworks Representative **5** MOV option is not available for any system requiring a three position terminal block (Example 240V with PCR wired120V) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **6** Specifications and dimensions subject to change without notice

OVY LOW-PROFILE DROP PRISMATIC

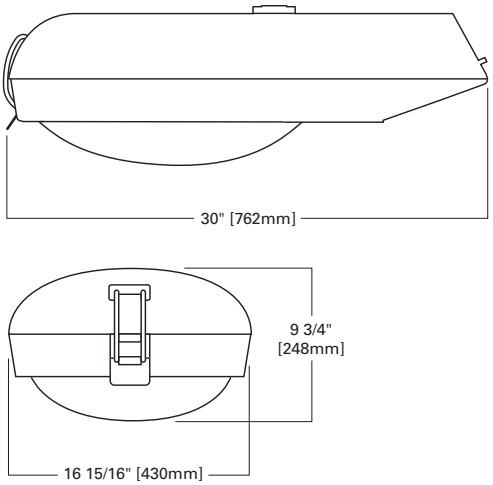
150-400W

ROADWAY LUMINAIRE

STREETWORKS

DARK SKY COMPLIANT CO Cutoff

NOTE: In select distributions only



SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and latch. Standard grey polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative. Optional NEMA twistlock photocontrol receptacle also available. 3G vibration rated.

SOCKET
Adjustable mogul-base porcelain socket. 150W Metal Halide and below is medium-base.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Removable borosilicate glass refractor for use with Metal Halide, Pulse Start Metal Halide and High Pressure Sodium lamp sources. Low profile glass provides 65% less glare than typical drop lens reflectors.

REFLECTOR
The optical system is a hydroformed anodized aluminum reflector with a Dacron polyester filter.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Optional swing-down ballast bridge also available (Not available for 3G applications).

MOUNTING
Two-bolt/one bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1 1/4" or 2" mounting arms. (Birdguard not needed for 2" arm.)

EPA [Effected Projected Area]:
.51

SHIPPING DATA [Approximate Net Weight]:
33 lbs. [15 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVY15SWW2D4

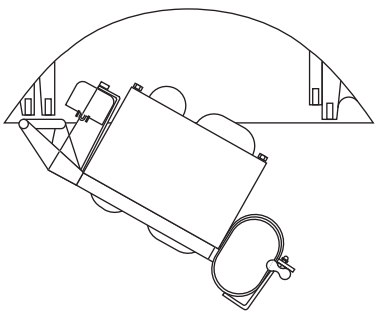
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [3]	BALLAST TYPE [3]	VOLTAGE [3]	DISTRIBUTION [4]	CUTOFF [4]	COLORS (add as suffix)	OPTIONS + ACCESSORIES
OVY	**15**=150W [1]	**M**=Metal Halide	**C**=CWI	**2**=120V	**2**=Type II	**D**=MCO	**BK**=Black	(See Below)
	20=200W	**P**=Pulse Start Metal Halide	**H**=Reac./HPF	**0**=208V	**3**=Type III	**E**=MSCO	**BZ**=Bronze	
	25=250W	**S**=High Pressure Sodium	**K**=10KV CWA	**4**=240V	**4**=Type IV	**J**=LNCO	**WH**=White	
	31=310W		**M**=Mag. Reg.	**7**=277V				
	32=320W		**N**=Hi. Reac./NPF	**8**=480V				
	35=350W		**P**=Hi. Reac./HPF	**9**=347V				
	40=400W [2]		**R**=Reac./NPF	**F**=120/240V wired 120V				
	24=250/400W wired 250W [2]		**W**=CWA	**G**=240/120V wired 240V				
	42=400/250W wired 400W [2]			**P**=240V w/PCR wired 120V				
				W=Multi-Tap wired 120V				
				N=Multi-Tap wired 277V				
				V=Multi-Tap wired 240V				

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
A=Raw Aluminum Unfinished
E=150W/100V/HPS Ballast
H=Plug-in Starter Receptacle
K=Level Indicator
L=Lamp Included
M=MOV Lightning Surge Protector [5]
T=Swing-down Ballast Bridge
U=UL/CSA Listed

ACCESSORIES (order separately)
RA1003=Cutoff Visor
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1028=Field Installed NEMA PCR Kit
OA1215=TufGuard Vandal Shield

SWING-DOWN BALLAST MODULE

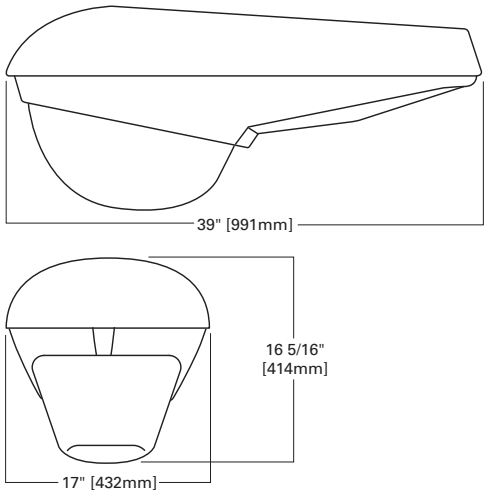


NOTE: 1 150W units are for S55 lamp **2** Not available in Pulse Start Metal Halide Metal Halide requires ED28 lamp **3** Refer to technical section for lamp/ballast/voltage compatibility **4** Other distributions & cutoffs available Consult your Streetworks Representative **5** MOV option is not available for any system requiring a three position terminal block (Example 240V with PCR wired 120V) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **6** Specifications and dimensions subject to change without notice

1000W

OVL ROADWAY LUMINAIRE

ROADWAY LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING
Precision die cast aluminum housing designed for optimum rigidity and durability with minimum weight and clean smooth unbroken lines. Standard grey polyester powder coat finish. Optional NEMA twistlock photocontrol receptacle available.

SOCKET
Adjustable mogul-base porcelain socket.

DOOR
Die-cast aluminum door frame with integral hinges for toolless relamping and maintenance. ANSI wattage/source label.

LENS
Prismatic refractor of heat-resistant borosilicate glass is designed and molded to provide precise control and high system efficiency.

REFLECTOR
Reflector is precision hydroformed aluminum highly polished by the Alzak process and is designed for optimum light control and efficiency.

BALLAST ASSEMBLY
Hard mounted ballast with encapsulated starter for protection from environmental abuse. Standard two position tunnel type compression terminal block. Optional ballast tray available.

MOUNTING
Integral slipfitter designed to accommodate 2" mounting arm and is adjustable for vertical leveling within 5° from tenon, birdguard seals around pipe opening.

EPA [Effected Projected Area]:
2.65

SHIPPING DATA [Approximate Net Weight]:
76 lbs. [34.47 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: OVL91SWW4E

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	CUTOFF	COLORS (add as suffix)	OPTIONS + ACCESSORIES
OVL	**91**=1000W	**M**=Metal Halide **S**=High Pressure Sodium	**W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **F**=120/240V wired 120V **G**=240/120V wired 240V **P**=240V w/PCR wired 120V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**3**=Type III **4**=Type IV	**E**=MSCO	**BK**=Black **BZ**=Bronze **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
A=Raw Aluminum Unfinished
L=Lamp Included
U=UL/CSA Listed

ACCESSORIES (order separately)
RA1013=Photocontrol Shorting Cap
RA1014=120V Photocontrol
RA1015=208V-277V Photocontrol
RA1016=105V-285V Photocontrol
OA1028=Field Installed NEMA PCR Kit

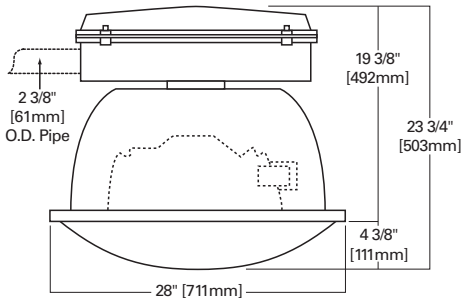
NOTE: 1 Specifications and dimensions subject to change without notice

HMC HIGH MAST

400-1000W

LARGE AREA LUMINAIRE

STREETWORKS



Horizontal Lamp Configuration

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and cover. Standard bronze polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative.

MOUNTING
Clamp type slipfitter for 2 3/8" O.D. pipe.

OPTICS
Anodized spun aluminum outer reflector housing. Light pattern can be oriented by rotating optical assembly (360°). A degree indicator is provided to identify the aiming position.

REFLECTOR
Inner hydroformed and anodized reflector.

DOOR
Die-cast aluminum door with tempered convex glass lens and silicone rubber gasket.

EPA [Effected Projected Area]:
1.46

SHIPPING DATA [Approximate Net Weight]:
68 lbs. [30 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: HMC40SC23E

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	OPTICAL PACKAGE	CUTOFF	COLORS (add as suffix)	OPTIONS + ACCESSORIES
HMC	**40**=400W	**M**=Metal Halide	**C**=CWI [2]	**2**=120V	**1**=Type I	**A**=SCO	**AP**=Grey	(See Below)
	75=750W	**P**=Pulse Start Metal Halide	**K**=10KV CWA [3]	**0**=208V	**2**=Type II	**D**=MCO		
	91=1000W	**S**=High Pressure Sodium	**M**=Mag. Reg. [4]	**4**=240V	**3**=Type III	**E**=MSCO		
			W=CWA	**7**=277V	**4**=Type IV	**J**=LNCO		
				8=480V				
				9=347V				
				W=Multi-Tap wired 120V				
				N=Multi-Tap wired 277V				
				V=Multi-Tap wired 240V				

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
AF=Four-Stage Air Filter [5]
F=Flat Glass
L=Lamp Included
M=MOV Lighting Surge Protector [6]

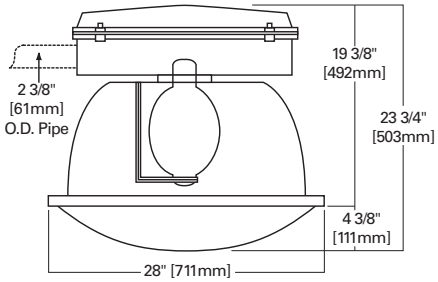
ACCESSORIES (order separately)
OA/RA1016=105-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1153=External Cutoff Shield [EPA .90]

NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** Available in 400W High Pressure Sodium only and 1000W High Pressure Sodium 347V only **3** 1000W High Pressure Sodium only **4** Not available on 1000W units **5** Four-Stage air filter prevents entrance of dust particles 00025mm and larger **6** MOV option is not available for any system requiring a three position terminal block (Example 120/240 incoming line) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **7** Specifications and dimensions subject to change without notice

400-1000W

HMX HIGH MAST

LARGE AREA LUMINAIRE



Vertical Lamp Configuration

STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum housing and cover. Standard bronze polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative.

MOUNTING
Clamp type slipfitter for 2 3/8" O.D. pipe.

OPTICS
Anodized spun aluminum reflector housing.

LAMPHOLDER
Die-cast aluminum lampholder allows several different lamp positions.

DOOR
Die-cast aluminum door with tempered convex glass lens and silicone rubber gasket.

EPA [Effected Projected Area]:
1.46

SHIPPING DATA [Approximate Net Weight]:
64 lbs. [29 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: HMX40SC2NM

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	OPTICAL PACKAGE	DISTRIBUTION	COLORS (add as suffix)	OPTIONS + ACCESSORIES
HMX	**40**=400W	**M**=Metal Halide	**C**=CWI [2]	**2**=120V	**C**=Flat Glass	**M**=Type V Medium	**AP**=Grey	(See Below)
	75=750W	**P**=Pulse Start Metal Halide	**K**=10KV CWA [3]	**0**=208V	**D**=Convex Glass	**S**=Type V Short		
	91=1000W	**S**=High Pressure Sodium	**M**=Mag. Reg. [4]	**4**=240V	**N**=Open	**W**=Type V Wide		
			W=CWA	**7**=277V				
				8=480V				
				9=347V				
				W=Multi-Tap wired 120V				
				N=Multi-Tap wired 277V				
				V=Multi-Tap wired 240V				

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
AF=Four-Stage Air Filter [5]
L=Lamp Included
M=MOV Lighting Surge Protector [6]

ACCESSORIES (order separately)
OA/RA1016=105-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1153=External Cutoff Shield [EPA .90]

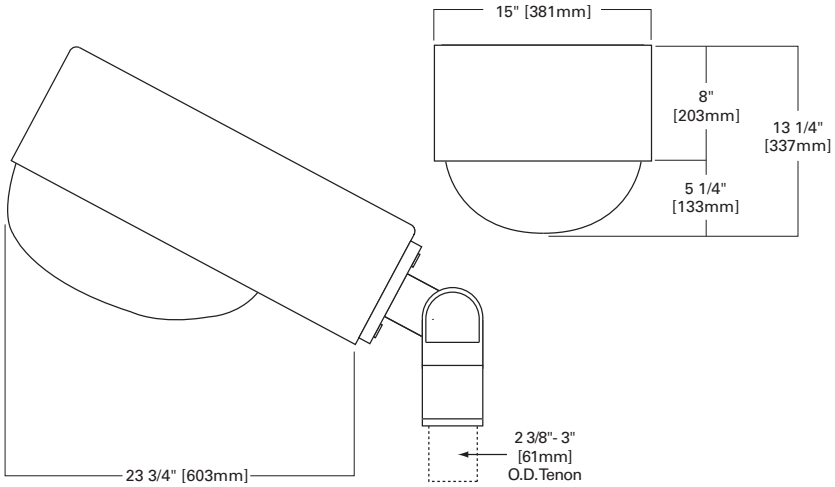
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** Available in 400W High Pressure Sodium only and 1000W High Pressure Sodium 347V only **3** 1000W High Pressure Sodium only **4** Not available on 750 or 1000W units **5** Four-Stage air filter prevents entrance of dust particles 00025mm and larger **6** MOV option is not available for any system requiring a three position terminal block (Example 120/240V incoming line) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **7** Specifications and dimensions subject to change without notice

ORL OFF-ROADWAY LIGHT

150-400W

ROADWAY LUMINAIRE

STREETWORKS



SPECIFICATION FEATURES

PHOTOCONTROL
Optional photocontrol receptacle.

HOUSING
Die-cast aluminum housing. Standard grey polyester powder coat finish. Other finish colors available. Consult your Streetworks Representative.

DOOR
Spring-loaded die-cast aluminum door sealed with a Dacron polyester filter. ANSI wattage/source label.

LENS
Borosilicate glass refractor and anodized aluminum hydroformed reflector.

SOCKET
Porcelain screw-shell socket fits mogul-base HID lamps.

BALLAST
Removable swing-down ballast tray with quick disconnect.

MOUNTING
Adjustable slipfitter for 2 3/8"-3" O.D. tenon. Optional yoke or trunnion mount available with cord grip connector 14/16 3C STWA.

EPA [Effected Projected Area]:
Side 1.75
End 1.11
(Calculated at 45°)

SHIPPING DATA [Approximate Net Weight]:
54 lbs. [25 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: ORL15SWWXX

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	DISTRIBUTION	COLORS (add as suffix)	OPTIONS + ACCESSORIES
ORL	**15**=150W [1]	**M**=Metal Halide	**C**=CWI	**2**=120V	**XX**=Not Classified	**BK**=Black	(See Below)
	25=250W	**P**=Pulse Start Metal Halide	**H**=Reac.HPF	**0**=208V		**BZ**=Bronze	
	31=310W	**S**=High Pressure Sodium	**K**=10 KV CWA	**4**=240V		**WH**=White	
	32=320W		**M**=Mag. Reg.	**7**=277V			
	35=350W		**N**=Hi. Reac./NPF	**8**=480V			
	40=400W		**P**=Hi. Reac./NPF	**9**=347V			
			R=Reac./NPF	**P**=240V w/PCR wired 120V			
			W=CWA	**W**=Multi-Tap wired 120V			
				N=Multi-Tap wired 277V			
				V=Multi-Tap wired 240V			

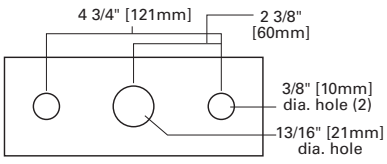
OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
3=Three Position Terminal Block
4=NEMA Photocontrol Receptacle
F=Flat Glass
H=Plug-in Starter
L=Lamp Included
M=MOV Lighting Surge Protector [3]
T=Trunnion Mount
U=UL/CSA Listed
Y=Yoke Mount

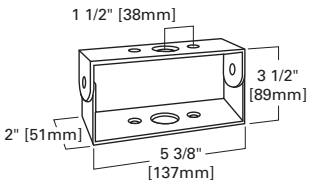
ACCESSORIES (order separately)
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
105N11=14" Wood Pole Mount Bracket

MOUNTING OPTIONS

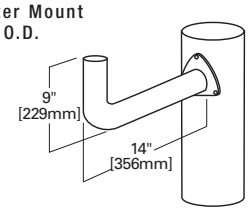
Drilling Pattern for Yoke Mount



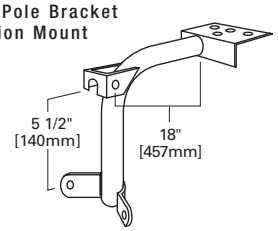
Drilling Pattern for Trunnion Mount



105N11
Wood Pole Bracket
Slipfitter Mount
2 3/8" O.D.



OA1009
Wood Pole Bracket
Trunnion Mount

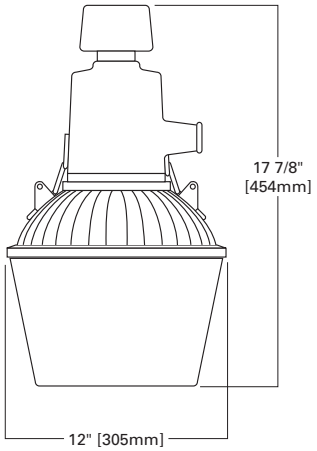


NOTE: 1 150W units are for S55 lamp **2** Refer to technical section for lamp/ballast/voltage compatibility **3** MOV option is not available for any system requiring a three position terminal block (Example 120/240V incoming line) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **4** Specifications and dimensions subject to change without notice

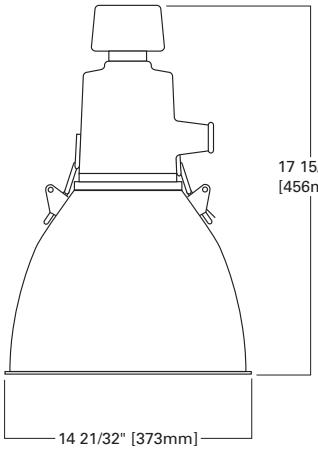
50-200W

RMA/RMC SECURITY LIGHT

SECURITY LUMINAIRE



Acrylic Refractor



Cutoff Reflector

STREETWORKS

SPECIFICATION FEATURES

PHOTOCONTROL
Optional NEMA photocontrol available.

HOUSING
Die-cast aluminum head with slipfitter for 1 5/8" to 2 3/8" O.D. pipe.

OPTICS
Open bottom acrylic refractor standard on RMA. RMC has full cutoff Type V reflector.

LAMP
Choice of High Pressure Sodium or Metal Halide (protected) lamp sources.

SOCKET
Metal Halide is medium-base standard (mogul-base optional). High Pressure Sodium is Mogul-base.

EPA [Effected Projected Area]:
1.2

SHIPPING DATA [Approximate Net Weight]:
31 lbs. [14 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: RMA50SR255LPV5

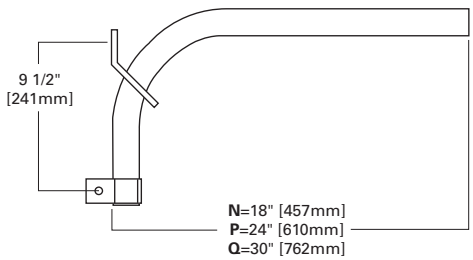
PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [4]	BALLAST TYPE [4]	VOLTAGE [4]	DISTRIBUTION	OPTIONS + ACCESSORIES
RMA=Acrylic Refractor	**50**=50W	**M**=Metal Halide [5]	**N**=Hi. Reac./NPF	**2**=120V	**22**=Type II	(See Below)
RMC=Cutoff Reflector [1]	**70**=70W	**S**=High Pressure Sodium [6]	**R**=Reac./NPF	**4**=240V	**33**=Type III	
	10=100W			**P**=240V w/PCR wired 120V	**55**=Type V	
	15=150W [2,3]				**XX**=None	
	20=200W [3]					

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
5=120V NEMA Photocontrol
6=Electronic Photocontrol
F=Spring Type Clamping Band
G=Birdguard Kit [7]
H=Plug-in Starter Receptacle
L=Lamp Included
N=18" Bracket
P=24" Bracket
Q=30" Bracket
S=Shorting Cap
T=(2) 30" #14 Leads
U=U.L. Listed
V=(2) 5' #14 Leads
W=(2) 7' #14 Leads
Y=Mogul-base for Metal Halide [8]
Z=ANSI Wattage/Source Label

ACCESSORIES (order separately)
RA1028=House-side Shield
RMCR5=Type V Full Cutoff Reflector

BRACKET



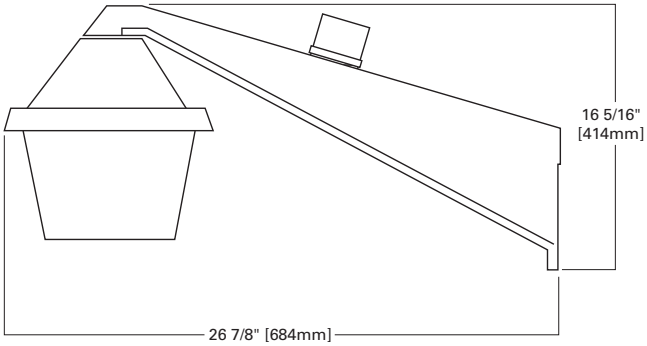
NOTE: 1 Available in Type V only **2** 150W units are for S55 lamp **3** Available in HPS only **4** Refer to technical section for lamp/ballast/voltage compatibility **5** 70 and 100W only Metal Halide units require use of open rated "protected" Metal Halide lamps **6** Terminal block sockets standard on High Pressure Sodium Not available on Metal Halide Requires use of separate terminal block **7** Not available with Mast Arm and Ballast Cover **8** Available with 100W Metal Halide only **9** Specifications and dimensions subject to change without notice

VAN VANGUARD III

70-400W

ROADWAY LUMINAIRE

STREETWORKS



SPECIFICATION FEATURES

PHOTOCONTROL
Optional NEMA twistlock photocontrol.

REFLECTOR
Spun anodized aluminum reflector. Standard with photocontrol receptacle.

LENS
Light stabilized acrylic prismatic refractor efficiently controls and directs light.

HOUSING
Die-cast aluminum housing for structural rigidity also protects integral ballast and wiring, provides offset mounting feature.

DOOR
Quick release access cover on underside for ease of servicing and installation. ANSI wattage/source label.

EPA [Effected Projected Area]:
.85

SHIPPING DATA [Approximate Net Weight]:
34 lbs. [15 kgs.]

ORDERING INFORMATION

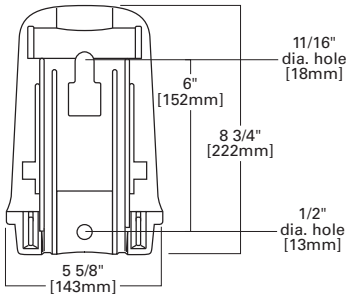
SAMPLE NUMBER: VAN70SR255LV5A

PRODUCT FAMILY [1,2]	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	COLORS (add as suffix)	OPTIONS
VAN	**70**=70W	**M**=Metal Halide	**H**=Reac./HPF [4]	**2**=120V	**33**=Type III	**AP**=Grey	(See Below)
	10=100W	**P**=Pulse Start Metal Halide	**P**=Hi. Reac./HPF	**0**=208V	**55**=Type V		
	15=150W	**S**=High Pressure Sodium	**R**=Reac./NPF [4]	**4**=240V			
	17=175W		**W**=CWA	**7**=277V			
	20=200W		**N**=Hi. Reac./NPF	**8**=480V			
	25=250W			**9**=347V			
	32=320W			**W**=Multi-Tap wired 120V			
	35=350W			**N**=Multi-Tap wired 277V			
	40=400W [3]						

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
3=Three Position Terminal Block
5=120V Photocontrol
H=Plug-in Starter Receptacle
L=Lamp Included
P=Polycarbonate Refractor
S=Shorting Cap
U=U.L. Listed
V=(2) 5' #14 Leads

MOUNTING HOLE PATTERN

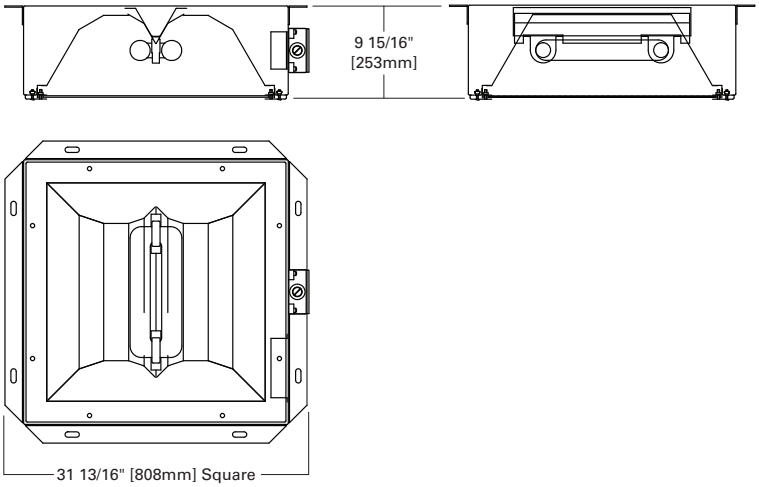


NOTE: 1 Natural aluminum finish, other colors available Consult your Streetworks Representative **2** When ordering "A" must be applied to end of catalog number **3** High Pressure Sodium not available **4** 120V only **5** Specifications and dimensions subject to change without notice

150W

TF TRANSIT AND COMPLEX ENVIRONMENT

ROADWAY LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

LENS
.156 prismatic tempered glass lens is standard. Optional polycarbonate.

HOUSING
Available in die-formed 14 gauge cold rolled steel, 14 gauge 304 brushed stainless steel or 1/8" thick aluminum. Housing is continuously welded with ground ends to form a one-piece seamless construction for maximum resistance to the environment. Specify aluminum construction for high ambient applications.

DOOR FRAME
Material to match housing. Seam welded with ground corners. Aircraft grade safety cable lanyards attaches doorframe to housing.

GASKET
One-piece die-cut EPDM closed cell sponge with pressure sensitive adhesive.

FASTENERS
Stainless steel captive Philips Head screws are used to fasten doorframe to housing.

FINISH
Grey polyester TGIC powder coat finish is standard on housing and doorframe. Available in white, bronze and black. Other finish colors available. Consult your Streetworks Representative.

REFLECTOR
Interior reflector is segmented, 95% specular aluminum and scientifically designed for maximum efficiency.

LAMPS
150W Induction Icetron™ Lamp installed and fully secured in unit. All fixtures are 100% factory tested before shipping for quality assurance.

BALLAST
High power factor, Universal 120V through 277V.

LAMPS
150W Induction.

WIRING/CONNECTIONS
Aluminum cast and fully sealed wiring box fastened with through bolts on exterior of unit. Supplied with (4) 3/4" pipe threaded conduit ports.

MOUNTING
Surface mounted with bolts through (4) exterior welded flanges.

SHIPPING DATA [Approximate Net Weight]:
76 lbs. [34.47 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: TFS15EIXX9

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE	VOLTAGE [2]	OPTICS	COLORS (add as suffix) [3]	OPTIONS
TFA=Aluminum Housing [1]	**15**=150W	**E**=Electrodeless	**I**=Induction	**MT**	**XX**	**BK**=Black	(See Below)
TFP=Steel Housing						**BZ**=Bronze	
TFS=Brushed Housing						**WH**=White	
						X=No Finish [4]	

OPTIONS [Must be ordered in alphanumeric order]

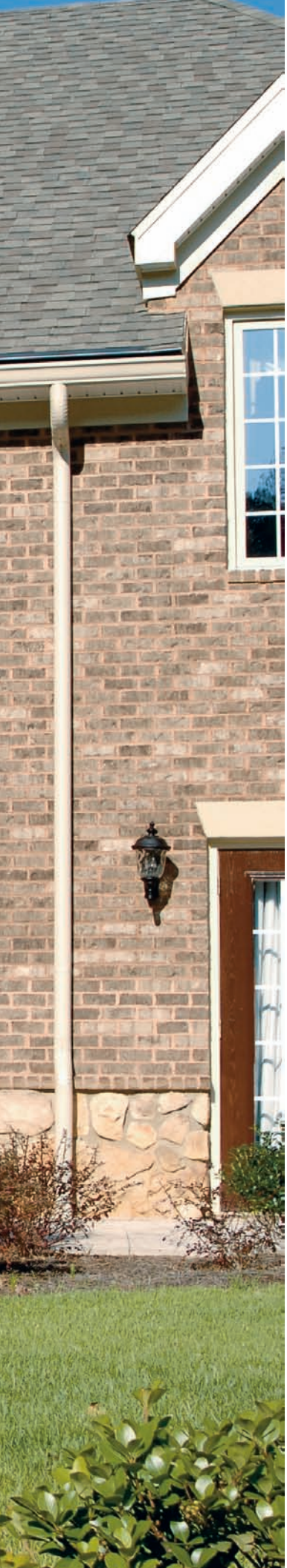
OPTIONS (add as suffix)
1=Single Fused
FS=Factory Sealed [5]
P1=0.187 Clear Polycarbonate Lens
P2=0.187 Prismatic Polycarbonate Lens
PS=High Pressure Wash Down

NOTE: 1 Aluminum housing required for high ambient applications above 25°C. **2** Voltage is universal 120 through 277V. **3** Finish must be specified. **4** Only available in brushed stainless steel housing. **5** Factory sealed and ready for immediate installation. Unit can not be opened without corrupting seal. **6** Specifications and dimensions subject to change without notice.

FLOODLIGHTING

PRODUCTS

IMPACT FLOOD



IMPACT FLOOD

Appealing round-back form combined with innovative design features make the Impact Flood series a best in class choice for commercial floodlighting applications. Compact Fluorescent sources, light control accessories and photocontrol availability provide energy efficient options and Dark Sky Friendly solutions. For applications with emergency egress requirements, quartz restrike rounds out the Impact Flood series extensive offering of options and accessories.

Offered in two (2) housing sizes, the Impact Flood series is available with a variety of HID lamp sources. The medium housing features 175-400W MH and 150-400W HPS lamp sources. The small housing features 50-175W MH and 50-150W HPS lamp sources. The choice of vertical or horizontal lamp orientation allows for added design flexibility, while premium grade reflective sheet aluminum ensures high efficiency optical systems. Combined with a full compliment of light control accessories, the Impact Flood series emerges as the ideal solution for any floodlighting application.

Thick wall die-cast construction of housing, door and knuckle make the Impact Flood ready to withstand anything Mother Nature can dish out. An impressive 3G vibration rating guarantees stability of aiming and strength of mounting in any configuration. An IP65 ingress protection rating ensures Impact Flood will be protected against the entry of contaminants and moisture, maximizing performance of fixture and lifetime of electrical components.

TWO HOUSING SIZES
Offered in two (2) housing sizes and two (2) mounting types: Knuckle or Trunnion-Mount.

LAMP ORIENTATION
Choice of vertical or horizontal lamp orientation allows for added design flexibility making the Impact Flood Series the ideal solution for any floodlighting application.

DOOR
Die-cast aluminum door features integral hinging and recessed tamper resistant stainless steel allen head fasteners. Door frame features an integral accessory channel for the mounting of a wide array of optional vandal and light control accessories. The door lens is 0.2" thick, impact resistant, clear flat tempered glass sealed to the door with a one-piece silicone gasket.

iMPACT™

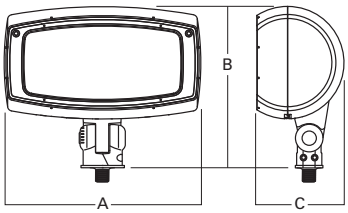
MSF/MMF IMPACT FLOOD

50-400W

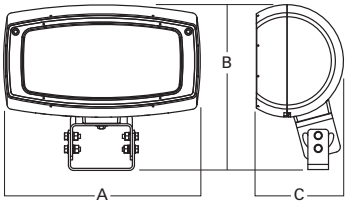
KNUCKLE OR TRUNNION-MOUNTED FLOODLIGHT

STREETWORKS IP65 RATED

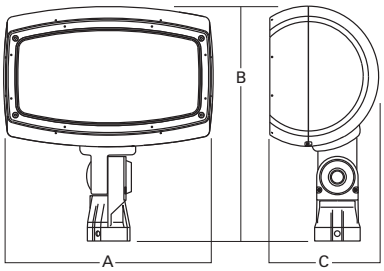
MSF—Knuckle Mount



MSF—Trunnion Mount



MMF—Knuckle Mount



Fixture		A	B	C
MSF Impact Small	(in)	15 1/8	13 7/8	6 11/16
(Knuckle Mount)	(mm)	385	352	171
MSF Impact Small	(in)	15 1/8	12 5/8	6 11/16
(Trunnion Mount)	(mm)	385	322	171
MMF Impact Medium	(in)	19 1/2	22	10
(Knuckle Mount)	(mm)	495	358	254

SPECIFICATION FEATURES

HOUSING

Rugged one-piece die-cast aluminum housing will endure the toughest environments while maintaining precise tolerance control. Housing incorporates a one-piece extruded silicone gasket that seals the optical/electrical compartment from external moisture and contaminants, achieving an exceptional IP65 rating.

DOOR

Die-cast aluminum door features integral hinging and recessed tamper resistant stainless steel allen head fasteners. Door frame features an integral accessory channel for the mounting of a wide array of optional vandal and light control accessories. The door lens is 0.2" thick, impact resistant, clear flat tempered glass sealed to the door with a one-piece silicone gasket.

OPTICAL ASSEMBLY

Available in horizontal or vertical lamp orientations, high efficiency optical systems are formed from premium reflective sheet aluminum. Medium housing optics feature mogul-base lampholders while small housing optics feature medium-base lampholders.

MOUNTING

Heavy-duty die-cast aluminum knuckle utilizes tooth-lock adjustment mechanism for both solid engagement and easy aiming adjustment. Knuckle adjustment is made via one (1) captive stainless steel allen head fastener consistent with door frame fasteners. Knuckle tested to safely sustain 3G of vibration. The medium housing knuckle slip-fits over a standard 2" pipe (2 3/8" O.D.) tenon while the small housing knuckle features a 3/4" NPT nipple for rigid attachment to available mounting accessories. Optional heavy-gauge adjustable steel trunnion mount provides additional durability when required (available on “MSF” only).

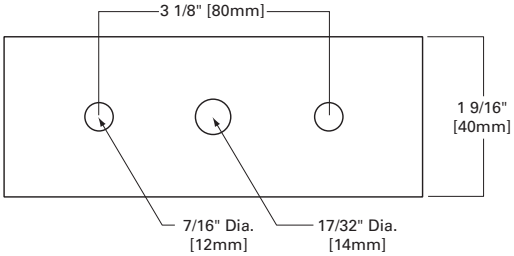
FINISH

Housing, door and mounting finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard color is bronze. Optional black, white, and grey finishes are available.

EPA [Effected Projected Area]:
MSF: 1.12
MMF: 2.10

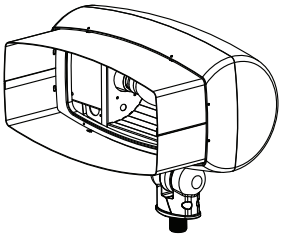
SHIPPING DATA [Approximate Net Weight]:
MSF: 25 lbs. [11 kgs.]
MMF: 40 lbs. [18 kgs.]

DRILLING PATTERN FOR TRUNNION-MOUNT

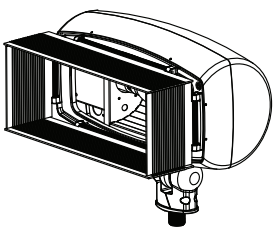


ACCESSORIES

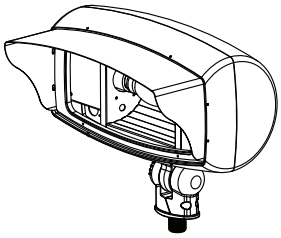
MS/4V-XX | MM/4V-XX
Four-Sided Shield



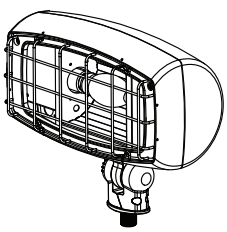
MS/BD-XX | MM/BD-XX
Barn Doors



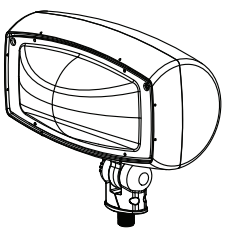
MS/TV-XX | MM/TV-XX
Top Visor



MS/WG | MM/WG
Wire Guard



MS/VS | MM/VS
Vandal Shield



ORDERING INFORMATION

SAMPLE NUMBER: MMF40MWWHF

PRODUCT FAMILY
MSF=Impact Flood Small
MMF=Impact Flood Medium

LAMP WATTAGE[1]
50=50W
70=70W
10=100W
15=150W
17=175W
20=200W
25=250W
32=320W
35=350W
40=400W

LAMP TYPE
M=Metal Halide
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE
C=CWI
H=Reac./HPF
K=10KV CWA
M=Mag. Reg.
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA

VOLTAGE
2=120V
0=208V
4=240V
7=277V
8=480V
9=347V
W=Multi-Tap wired 120V
N=Multi-Tap wired 277V
5T=5-Tap
D=240/120/208/277V wired 240V w/PCR wired 120V
G=240/120V wired 240V
K=120/277V wired 120V
L=277/120V wired 277V
H=240/480V wired 240V
J=480/240V wired 480V
W=120/208/240/277V wired 120V
T=208/120/240/277V wired 208V
V=240/120/208/277V wired 240V
N=277/120/208/240V wired 277V
P=240V with PCR wired 120V
Q=240/120V wired 240 with PCR wired 120V
R=480V with PCR wired 240V

DISTRIBUTION
HF=Horizontal Flood
VF=Vertical Flood

COLORS (add as suffix)
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
GM=Graphite Metallic
WH=White

OPTIONS + ACCESSORIES
(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
L=Lamp Included
P=Button Photocontrol
Q=Quartz Standby
T=Trunnion Mount[2]
U=UL/CSA Listed

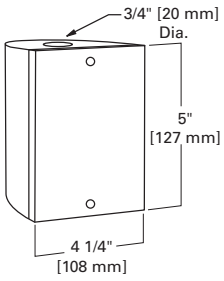
ACCESSORIES (order separately, replace XX with color suffix)

MSF (Impact Flood Small)
MS/BD-XX=Barn Doors [EPA 1.03]
MS/TV-XX=Top Visor [EPA .51]
MS/4V-XX=Four-Sided Shield [EPA .87]
MS/VS=Vandal Shield
MS/WG=Wire Guard
MS/JB-XX=Architectural Junction Box
MS/SF-XX=Slipfitter [EPA .06]
MS/TMA-XX=Twin Mount Arm [EPA .35]
MS/WMA-XX=Wall Mount Arm [EPA .22]
MS/WM-XX=Wall Mount

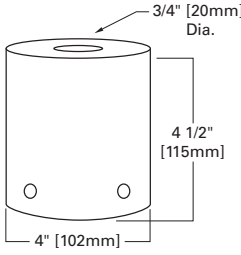
MMF (Impact Flood Medium)
MM/BD-XX=Barn Doors [EPA 2.49]
MM/TV-XX=Top Visor [EPA 1.3]
MM/4V-XX=Four-Sided Shield [EPA 2.21]
MM/WG=Wire Guard
MM/VS=Vandal Shield
MM/SMT-XX=Surface Mount Tenon
MM/ST-XX=Stanchion Mount Tenon
MM/WMT-XX=Wall Mount Arm
MM/TMT-XX=Twin Mount Arm [EPA .35]

MOUNTING ACCESSORIES [MSF Only]

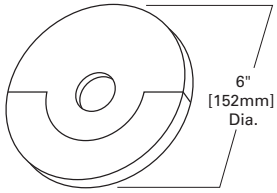
MS/JB-XX
Architectural Junction Box



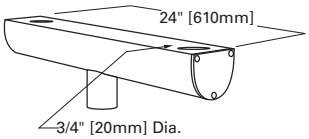
MS/SF-XX
Slipfitter



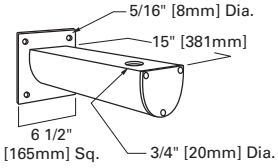
MS/WM-XX
Wall Mount



MS/TMA-XX
Twin Mount Arm

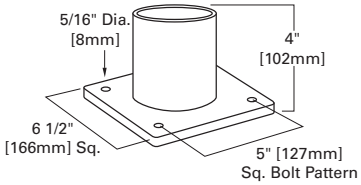


MS/WMA-XX
Wall Mount Arm

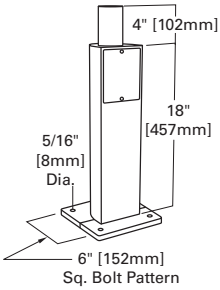


MOUNTING ACCESSORIES [MMF Only]

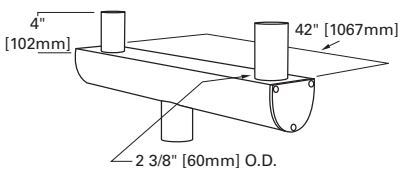
MM/SMT-XX
Surface Mount Tenon



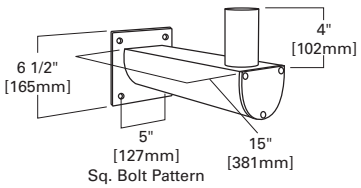
MM/ST-XX
Stanchion Mount Tenon



MM/TMT-XX
Twin Mount Tenon



MM/WMT-XX
Wall Mount Tenon



NOTES: 1 MSF 50-175W medium-base socket, MMF 150W-400W mogul-base **2** Available on MSF only **3** Specifications and dimensions subject to change without notice

GPF

GENERAL PURPOSE FLOOD

The General Purpose Flood utilizes a soft-cornered aerodynamic design to provide excellent EPA ratings and an aesthetically pleasing appearance. Dark bronze polyester powder coat finish assures corrosion resistance and long-lasting aesthetics.

The General Purpose Flood uses an innovative precision formed optical system which delivers maximum beam control for storage areas, railyards, car dealerships, loading docks and building perimeters. Available U.L. listed for wet location.

LATCHES
Formed aluminum flush draw-action latches offer easy access to lamp compartment without tools.

HOUSING
Aerodynamically designed, architecturally styled die-cast aluminum housing. Standard dark bronze polyester powder finish. Other finish colors available. Optional NEMA twistlock photocontrol receptacle.

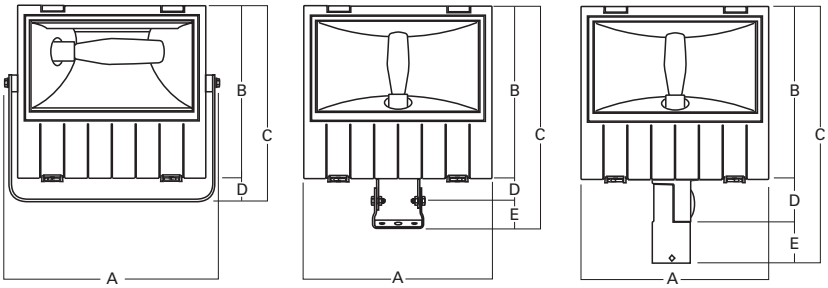
MOUNTING
Heavy-duty steel yoke provides flexibility in mounting to a variety of surfaces. Slipfitter for 2 3/8" to 3" O.D. tenon and trunnion mount also available.

GPF GENERAL PURPOSE FLOOD

150-1000W

SLIPFITTER, YOKE, OR TRUNNION-MOUNTED FLOODLIGHT

STREETWORKS



YOKE MOUNT TRUNNION MOUNT SLIPFITTER MOUNT

Fixture		A	B	C	D	E
Yoke	(in)	20 1/2	18 1/2	22 1/2	4	
	(mm)	521	470	572	102	
Trunnion	(in)	20 1/2	18 1/2	24 3/8	2 9/16	3 5/16
	(mm)	521	470	619	65	84
Slipfitter	(in)	20 1/2	18 1/2	28 1/32	5 3/16	4 11/32
	(mm)	521	470	712	132	110

NOTE: Depth Dimension: 150-400W HPS and MH, 1000W HPS 9 1/2" [241] 1000W MH 10 1/2" [267]

SPECIFICATION FEATURES

LATCHES
Formed aluminum flushdraw-action latches offer easy access to lamp compartment without tools.

HOUSING
Aerodynamically designed, architecturally styled die-cast aluminum housing. Standard dark bronze polyester powder finish. Other finish colors available. Consult your Streetworks Representative. ANSI wattage/source label. Optional NEMA twistlock photocontrol receptacle.

DOOR
Spring-loaded die-cast aluminum door with integral cast hinges for removal without tools. Door gasket is closed-cell silicone, providing maximum protection of interior components from the elements.

LENS
Heat- and impact-resistant tempered glass lens.

REFLECTOR
Computer designed precision formed reflector system delivers superior beam control and efficiency.

BALLAST
Ballast components are hard mounted to fixture housing for maximum heat dissipation and extended component and lamp life. Plastic terminal block. Prewired with 3' 14/3 STWA cord.

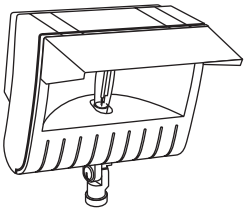
MOUNTING
Heavy-duty steel yoke provides flexibility in mounting to a variety of surfaces. Slipfitter for 2 3/8" to 3" O.D. tenon and trunnion mount also available.

EPA [Effected Projected Area]:
2.7

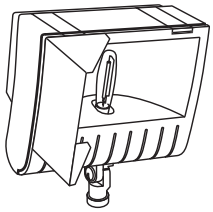
SHIPPING DATA [Approximate Net Weight]:
59 lbs. [27 kgs.]

ACCESSORIES

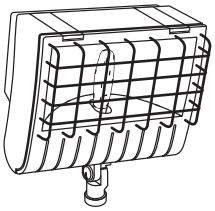
OA1179 [1]
Top/Bottom Visor



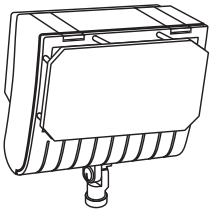
OA1180 [1]
Side Visor



OA1181
Wire Guard



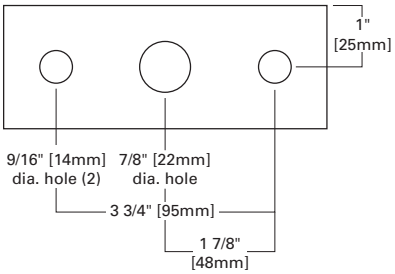
OA1182
Vandal Shield



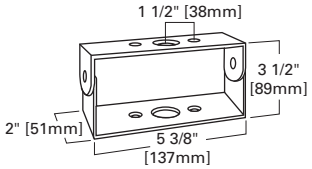
NOTE: 1 Each kit contains one (1) visor only Must specify color

DRILLING PATTERN FOR YOKE- AND TRUNNION-MOUNT

YOKE MOUNT



TRUNNION MOUNT



ORDERING INFORMATION

SAMPLE NUMBER: GPF15SPW764

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [1]	BALLAST TYPE [1]	VOLTAGE [1]	DISTRIBUTION	COLORS (add as suffix)	OPTIONS + ACCESSORIES
GPF=General Purpose Flood	**15**=150W **20**=200W **25**=250W **32**=320W **35**=350W **40**=400W **91**=1000W **24**=250/400W wired 250W **42**=400/250W wired 400W	**M**=Metal Halide **P**=Pulse Start Metal Halide **R**=Super Metal Halide **S**=High Pressure Sodium	**C**=CWI **H**=Reac./HPF **K**=10KV CWA **M**=Mag. Reg. **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **5T**=5-Tap wired 277V [2]	**76**=7x6 **77**=7x7 [3] **12**=1x2 [4] **23**=2x2 [4] **24**=2x4 [5] **43**=4x3 [4] **44**=4x4 [5] **55**=5x5 [5] **62**=6x2 [4] **65**=6x5 [4]	**AP**=Grey **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
4=NEMA Photocontrol Receptacle
A=Captive Door Screws
C=Slipfitter 2 3/8" to 3" O.D. (cord thru housing)
H=Plug-in Starter Receptacle [6]
L=Lamp Included
M=MOV Lightning Surge Protectors [7]
R=Removable Power Tray [8]
S=Slipfitter 2 3/8" to 3" O.D. (with leads thru fitter)
T=Trunnion Mount
U=UL/CSA Listed

ACCESSORIES (order separately)
OA1179=Top/Bottom Visor
OA1180=Side Visor
OA1181=Wire Guard
OA1182=Vandal Shield
OA1208=TufGuard Vandal Shield
VS/NK=Vandal Shield (for wattages below 1000W)
VS/NK/1000=Vandal Shield (for 1000W units)

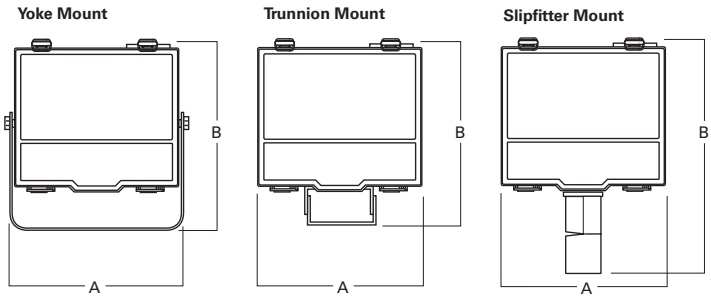
NOTE: 1 Refer to technical section for lamp/ballast/voltage compatibility **2** 250/400W, 400/250W, High Pressure Sodium only **3** 1000W only **4** Available in Metal Halide only 1000W requires reduced envelope lamp **5** Available in High Pressure Sodium only **6** Not available in 1000W **7** MOV option is not available for any system requiring a three position terminal block (Example 120/240V incoming line) In order for MOV option to function center terminal of three position terminal block must be connected to "Earth" ground **8** 400W or below, except for 400W Mag Reg **9** Specifications and dimensions subject to change without notice

CFB UTILITY FLOOD

100-400W

YOKE-, TRUNNION-, OR SLIPFITTER-MOUNTED FLOODLIGHT

STREETWORKS IP65 RATED



Fixture		A	B
Yoke	(in)	15 3/4	14 7/8
	(mm)	400	378
Trunnion	(in)	15	17
	(mm)	381	432
Slipfitter	(in)	15	19
	(mm)	381	482

NOTE: Depth Dimension is 7 1/4" (184mm)

SPECIFICATION FEATURES

HOUSING + DOOR
Die-cast aluminum housing and hinged & latched door assembly. Standard finish color is grey. Other finish colors available. Consult your Streetworks Representative. ANSI wattage/source label. Optional NEMA twistlock photocontrol receptacle.

LENS
Thermal shock- and impact-resistant clear tempered glass, utilizing a foam in place gasketing.

REFLECTOR
Anodized aluminum reflector.

LAMP
Mogul-base porcelain lamp socket.

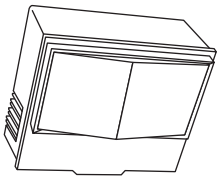
MOUNTING
Full steel yoke mounting (prewired with 3' 16/3 STWA cord). Trunnion mount also available.

EPA [Effected Projected Area]:
1.3

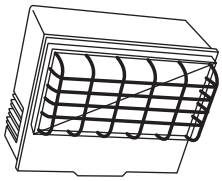
SHIPPING DATA [Approximate Net Weight]:
35 lbs. [16 kgs.]

ACCESSORIES

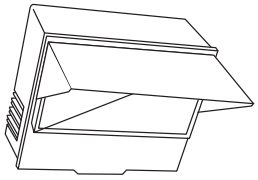
OA1197
Vandal Shield



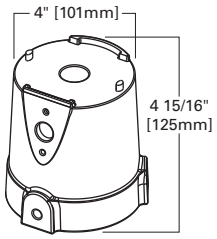
OA1198
Wire Guard



OA1199
Visor

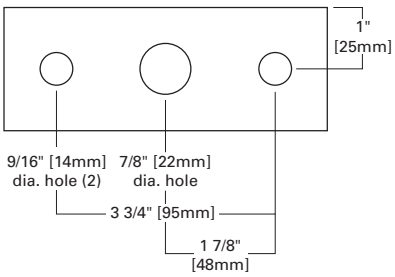


TYS
Slipfitter Adapter

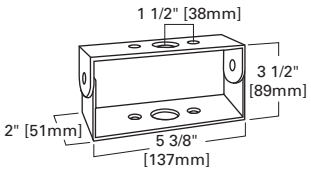


DRILLING PATTERN FOR YOKE- AND TRUNNION-MOUNT

YOKE MOUNT



TRUNNION MOUNT



ORDERING INFORMATION

SAMPLE NUMBER: CFB10SR2774

PRODUCT FAMILY	LAMP WATTAGE	LAMP TYPE [2]	BALLAST TYPE [2]	VOLTAGE [2]	DISTRIBUTION	COLORS (add as suffix)	OPTIONS + ACCESSORIES
CFB=Utility Flood	**10**=100W **15**=150W [1] **17**=175W **20**=200W **25**=250W **40**=400W **24**=250/400W wired 250W **42**=400/250W wired 400W	**M**=Metal Halide **R**=Super Metal Halide (horizontal only) **S**=High Pressure Sodium	**C**=CWI **H**=Reac./HPF **K**=10KV CWA **N**=Hi. Reac./NPF **P**=Hi. Reac./HPF **R**=Reac./NPF **W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **F**=120/240V wired 120V **P**=240V w/PCR wired 120V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V **5T**=5-Tap wired 277V [3]	**65**=6x5 **76**=7x6 **77**=7x7 [4]	**BK**=Black **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
4=External NEMA Photocontrol Receptacle
A=Door Screws (no latches)
3=Three Position Terminal Block (no cord supplied)
C=Slipfitter 2 3/8" to 3" O.D. (cord thru housing)
H=Plug-in Starter Receptacle
L=Lamp Included
S=Slipfitter 2 3/8" to 3" O.D. with leads thru fitter
T=Trunnion
U=UL/CSA Listed

ACCESSORIES (order separately)
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
OA/RA1016=105V-285V Photocontrol
OA/RA1027=480V Photocontrol
OA1197=Vandal Shield [5]
OA1198=Wire Guard
OA1199=Visor [6]
OA1223=TufGuard Vandal Shield
TYS=Slipfitter Adapter

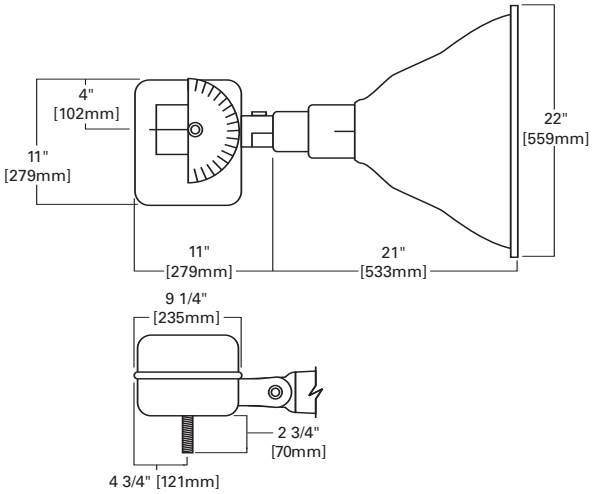
NOTE: 1 150W units are S55 lamps **2** Refer to technical section for lamp/ballast/voltage compatibility **3** 250/400W High Pressure Sodium Only **4** 175W and below Cannot be used in combination with visor accessory **5** Should only be used when fixture is tilted 45° or more above horizontal **6** Aluminum with thermostet acrylic enamel finish colors grey (AP), bronze (BZ), black (BK) **7** Specifications and dimensions subject to change without notice

EAGLE

1000-1500W

EGL SPORTS FLOODLIGHT

SPORTS FLOODLIGHTING



STREETWORKS

SPECIFICATION FEATURES

HOUSING
Rugged aluminum ballast housing finished in corrosion-resistant dark bronze powder coat. U.L. Listed for wet location.

BALLAST
Isolated ballast/capacitor compartment provides cooler operation and extended component life.

AIMING QUADRANT
Vertical aiming quadrant with repositioning stop combines with horizontal aiming protractor to allow pre-aiming while pole is on the ground.

SOCKET
Die-cast socket housing with dacron gasket which allows unit to "breathe," filtering out contaminants.

REFLECTOR
Computer designed spun-aluminum reflector produces repeatable beam distribution.

LENS
1/8" tempered, heat- and shock-resistant lens sealed with closed-cell neoprene gasketing protects optics from dust and contaminants and is hinged for easy access.

MOUNTING
Mounts using 5/8", 2 3/4" threaded bolt.

EPA [Effected Projected Area]:
2.2

SHIPPING DATA [Approximate Net Weight]:
51 lbs. [23 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: EGL91SW233

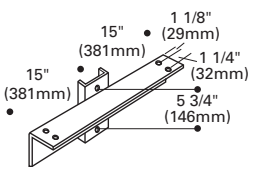
PRODUCT FAMILY [1]	LAMP WATTAGE	LAMP TYPE	BALLAST TYPE	VOLTAGE	DISTRIBUTION	OPTIONS + ACCESSORIES
EGL	**91**=1000W **99**=1500W	**M**=Metal Halide **S**=High Pressure Sodium	**W**=CWA	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **F**=120/240V wired 120V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V	**22**=2x2 **33**=3x3 **44**=4x4 **55**=5x5 **66**=6x6	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

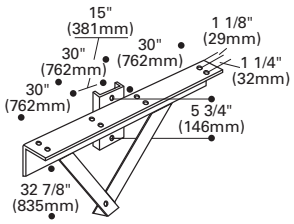
OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277)
2=Double Fuse, Internally Mounted (208, 240 or 480V)

ACCESSORIES (order separately)
C=3' Cord Pre-wired
C23=3' #12/3 Cord
C43=3' #14/3 Cord
HD/XL=Heavy-duty Shroud
S2C2=Two-In-line Crossarm for Wood Pole [EPA 0.9]
S3C3=Three-In-line Crossarm for Wood Pole [EPA 3.6]
S4C4=Four-In-line Crossarm for Wood Pole [EPA 4.5]
S/XL=Slipfitter Mount, Field Installed (Fits 2 3/8" O.D. Tenon)
TV/XL=Top Visor
VS/XL=Vandal Shield
WB/XL=Wood Crossarm Bolt (7" Length)

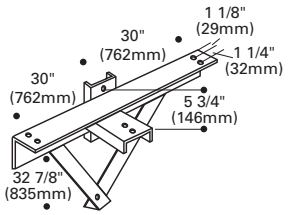
S2C2WP



S4C4WP



S3C3WPM



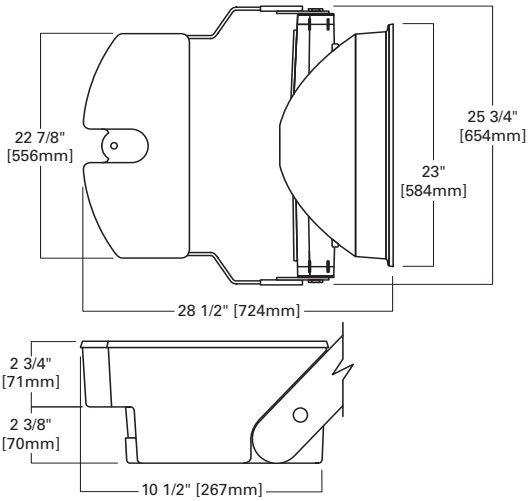
NOTE: 1 Not recommended for aiming above horizontal **2** Specifications and dimensions subject to change without notice

ALLSTAR

1000-1500W

AS ALLSTAR

SPORTS FLOODLIGHTING



ALLSTAR™ Sports Floodlight

STREETWORKS

SPECIFICATION FEATURES

BALLAST HOUSING
Rugged die-cast aluminum ballast housing finished in corrosion resistant white polyester powder coat. Transverse mounting with cast-in horizontal aiming protractor and single bolt mounting.

BALLAST COMPARTMENT
Isolated components for coolest component operation and extended component life. Ballast is rated to start and operate lamp in ambient temperatures down to -20° C.

VERTICAL FIXED AIMING
Stainless steel mounting arms feature separate vertical aiming pivot bolts and rear re-lamping hinge bolts prevent mis-aiming and provide permanent fixed aiming. Aiming degree markers on both sides of the optical allow for easy pre-aiming on the ground or after installation.

SOCKET CASTING
Die-cast aluminum socket castings are sealed with a high temperature silicone gasket to keep out contaminant's.

REFLECTOR AND INTERNAL GLARE/SPILL LIGHT CONTROL
Computer designed spun aluminum reflectors feature optional internal glare/spill light control louvers for maximum lighting control without unwanted glare and light trespass. Horizontal optics feature standard BT56 mogul-base lamps for safe, reliable operation.

LENS + DOOR FRAME
1/8" tempered, heat- and shock-resistant glass lens is sealed with high temperature silicone gasket to protect optics from dirt and contaminant's and is mounted in hinged stainless steel door frame with stainless steel latches.

EPA [Effected Projected Area]:
2.9

SHIPPING DATA [Approximate Net Weight]:
73 lbs. [33 kgs.]

ORDERING INFORMATION

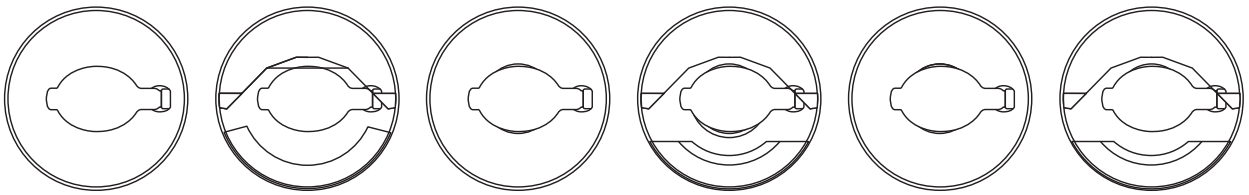
SAMPLE NUMBER: MHAS-MS-1500-480V-U3

LAMP TYPE	SERIES	DISTRIBUTION	INTERNAL LOUVERS	LAMP WATTAGE [1]	VOLTAGE [2]	OPTIONS
MH=Metal Halide	**AS**=ALLSTAR Sports Floodlight	**N**=Narrow **M**=Medium **W**=Wide	__=None **S**=Spill Light Control Louvers	**1000**=1000W **1500**=1500W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V [3] **TT**=Triple-Tap wired 347V [3] **220/50HZ**	(See Below)

OPTIONS [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
F1=Single Fuse (120, 277 or 347V)
F2=Double Fused (208, 240 or 480V)
C3=3' Cord, Prewired (Specify Voltage)
C6=6' Cord, Prewired (Specify Voltage)
HD=Heavy-Duty Shroud
TV=Top Visor (Black Polyester Powder Coated)
U3=3' USL Water Tight Cord & Plug for USL System (Specify Voltage)

DISTRIBUTION



Narrow | Narrow Spill / Glare | Medium | Medium Spill / Glare | Wide | Wide Spill / Glare

NOTES: 1 All lamps are mogul-base. Lamp not included. **2** Products also available in non-US voltages and 50 Hz for international markets. Consult your Streetworks Representative for additional information. **3** 1000 & 1500W Metal Halide only. **4** Specifications and dimensions subject to change without notice.

PATHWAY

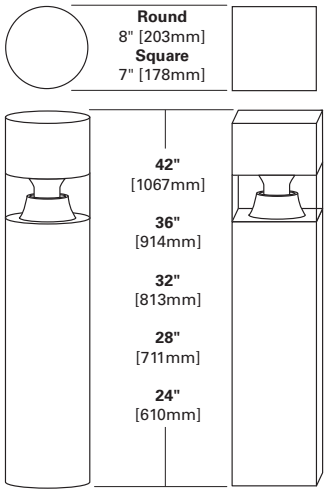
PRODUCTS

SBS/SBR CLEAR LENS BOLLARD

50-175W

SBS/SBR CLEAR LENS BOLLARD

PATHWAY LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

TOP
Rugged heavy-duty aluminum top provides rapid heat dissipation.

LENS
Impact-resistant clear acrylic lens measures 1/4" thick. Optional polycarbonate lens is available as an option (Standard on units over 100 watts).

OPTICS
Lower dispersing reflector combines with truncated octagonal upper collecting reflector to provide low-glare, efficient illumination with optimum uniformity.

HOUSING
Heavy-duty seamless extruded aluminum tube lifts off base for easy access to ballast. Finished in weather- and abrasion-resistant polyester powder coat. Standard bronze finish. Other finishes available. Consult your Streetworks Representative.

BALLAST
Quick-disconnect ballast is located at base of housing for cooler operation and easy maintenance. Ballast assembly mounted on bracket and secured to base with two screws.

BASE
Rugged cast-aluminum base is completely sealed.

SHIPPING DATA [Approximate Net Weight]:
26 lbs. [12 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: SBS100M12W366

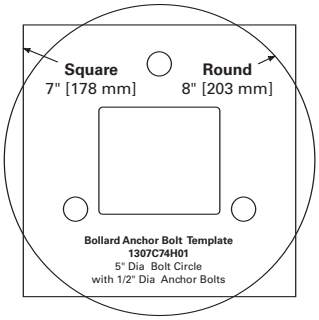
PRODUCT FAMILY	HOUSING SHAPE	LAMP WATTAGE[1]	LAMP TYPE	SOCKET	BALLAST	VOLTAGE[2]	FIXTURE HEIGHT	COLORS (add as suffix)	OPTIONS + ACCESSORIES
SB=Clear Lens Bollard	**S**=Square **R**=Round	**50**=50W **70**=70W **10**=100W **15**=150W **17**=175W	**M**=Metal Halide **S**=High Pressure Sodium	**1**=Medium	**1**=NPF **2**=HPF	**2**=120V **0**=208V **4**=240V **7**=277V **W**=Multi-Tap wired 120V	**24**=24" **28**=28" **32**=32" **36**=36" **42**=42"	**AP**=Grey **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277 or 347V)
2=Double Fused (208 or 240V)
AY=Asymmetric Distribution
L=Lamp Included
RF=Refractor (Borosilicate Glass Refractor)

ACCESSORIES (order separately)
LA2=Asymmetric Reflector
TRSD=8/32 Screwdriver for Tamper-Proof Retaining Screws

ANCHOR BOLT TEMPLATE [Not to scale]



NOTE:
Conduit must be inside of opening with a maximum height of 2 1/4" above concrete
Anchor bolt projection to be 1 1/2" minimum and 2 1/4" maximum above concrete

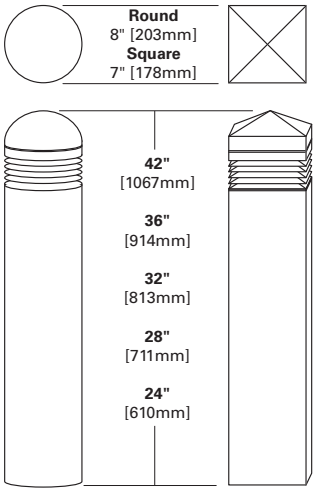
NOTE: 1 All lamps are medium-base **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Specifications and dimensions subject to change without notice

LBS/LBR LOUVERED BOLLARD

35-100W

LBS/LBR LOUVERED BOLLARD

PATHWAY LUMINAIRE



DARK SKY COMPLIANT

STREETWORKS

SPECIFICATION FEATURES

TOP
Rugged, minimum 5/32" thick cast aluminum top cap secured via a concealed stainless steel allen screw with twist removal mechanism for lamp access. Flow through ventilation assure cool to the touch top.

LOUVERS
Cast aluminum louver blades provide sharp cutoff delivering no direct light above 90°. Louvers are secured to the shaft via tamper stainless steel rods and fasteners.

LAMP ENCLOSURES
One-piece tempered glass with internal flutes for even disbursement of illumination. Globe is fully gasketed via EPDM material. Socket is porcelain medium-base.

LOWER HOUSING
Nominal 1/8" thick aluminum extruded housing. Bollard housing is secured to the base with flathead, counter-sunk screws for smooth, uncluttered appearance.

ELECTRICAL
HID high power factor ballast for -20°F starting. Product is factory mounted to the base. Quick disconnects provided between lamp and electrical assembly. Metal Halide and High Pressure Sodium lamp sources up to 100W.

FINISH
Finished in weather- and abrasion-resistant polyester powder coat. Standard bronze finish. Other finishes available. Consult your Streetworks Representative.

BASE
Rugged cast aluminum. Completely concealed.

MOUNTING
Base mounts onto foundation with three (3) 1/2" x 12 1/2" anchor bolts on a 5" Dia. bolt circle (a centrally located 2 7/8" x 3 1/2" wire entrance opening provided).

SHIPPING DATA [Approximate Net Weight]:
26 lbs. [12 kgs.]

ORDERING INFORMATION

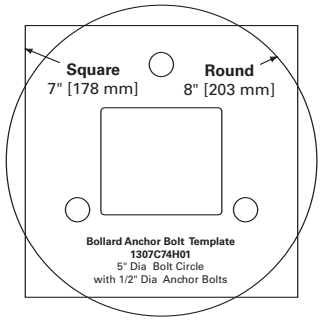
SAMPLE NUMBER: LBS10M12242BZL

PRODUCT FAMILY	LAMP WATTAGE[1]	LAMP TYPE	SOCKET	BALLAST	VOLTAGE[3]	FIXTURE HEIGHT	COLORS (add as suffix)	OPTIONS + ACCESSORIES
LBS=Square Bollard with Stacked Louvers and Pyramid Top	**35**=35W[2]	**M**=Metal Halide	**1**=Medium	**1**=NPF	**2**=120V	**24**=24"	**AP**=Grey	(See Below)
LBR=Round Bollard with Stacked Louvers and Dome Top	**50**=50W	**S**=High Pressure Sodium		**2**=HPF	**0**=208V	**28**=28"	**BK**=Black	
	70=70W				**4**=240V	**32**=32"	**BZ**=Bronze	
	10=100W				**7**=277V	**36**=36"	**DP**=Dark Platinum	
					W=Multi-Tap wired 120V	**42**=42"	**GM**=Graphite Metallic	
							WH=White	

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse (120, 277 or 347V) Specify Voltage
2=Double Fused (208 or 240V) Specify Voltage
R1=Provisional Cut for GFI Receptacle[4]
R2=Installed GFI Receptacle[4]
L=Lamp Included

ANCHOR BOLT TEMPLATE [Not to scale]



NOTE:
Conduit must be inside of opening with a maximum height of 2 1/4" above concrete
Anchor bolt projection to be 1 1/2" minimum and 2 1/4" maximum above concrete

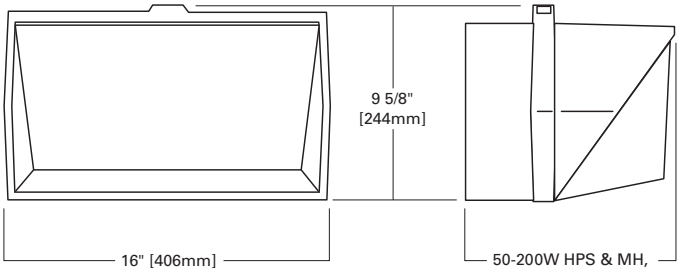
NOTE: 1 All lamps are medium-base **2** 35W High Pressure Sodium available in 120V only **3** Refer to technical section for lamp/ballast/voltage compatibility **4** Location of R1 and R2 option on housing subject to height of luminaire **5** Specifications and dimensions subject to change without notice

WAL-PAK

70-400W

WPK WAL-PAK

WALL MOUNT LUMINAIRE



STREETWORKS

SPECIFICATION FEATURES

HOUSING
Die-cast aluminum base housing and door. Standard color is grey. Other finish colors available. Consult your Streetworks Representative. U.L. listed for wet location.

LENS
Borosilicate prismatic refractor. Lens assembly hinged at bottom for easy installation and relamping.

SOCKET
Adjustable mogul-base porcelain lamp socket.

GASKETING
Closed-cell, gas-filled, high temperature silicone gasketing. 3/4" threaded hub for top conduit entry.

SHIPPING DATA [Approximate Net Weight]:
32-42 lbs. [15-19 kgs.]

ORDERING INFORMATION

SAMPLE NUMBER: WPK70SRPXX

PRODUCT FAMILY
WPK=Wal-Pak

LAMP WATTAGE
70=70W
10=100W
15=150W [1]
17=175W
20=200W
25=250W
32=320W
35=350W
40=400W

LAMP TYPE [2]
M=Metal Halide [3]
P=Pulse Start Metal Halide
S=High Pressure Sodium

BALLAST TYPE [2]
C=CWI [4]
H=Reac./HPF
N=Hi. Reac./NPF
P=Hi. Reac./HPF
R=Reac./NPF
W=CWA

VOLTAGE [2]
2=120V
0=208V
4=240V
7=277V
8=480V
W=Multi-Tap wired 120V
N=Multi-Tap wired 277V
V=Multi-Tap wired 240V

DISTRIBUTION
XX=Non-Classified

COLORS (add as suffix)
BK=Black
BZ=Bronze
WH=White

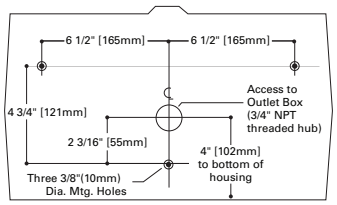
OPTIONS + ACCESSORIES
(See Below)

OPTIONS + ACCESSORIES [Must be ordered in alphanumeric order]

OPTIONS (add as suffix)
1=Single Fuse, Internally Mounted (120 or 277V)
2=Double Fuse, Internally Mounted (208, 240 or 480V)
5=External Non-Nema Photocontrol Tamper Resistant
B=Two Position Terminal Block
L=Lamp Included
P=Polycarbonate Lens [5]

ACCESSORIES (order separately)
OA1128=Wire Guard
OA1129=Polycarbonate Shield
OA1211=TufGuard Vandal Shield Up to 250W
OA1212=TufGuard Vandal Shield 400W

MOUNTING DETAIL



NOTE: 1 150W units are for S55 lamp **2** Refer to technical section for lamp/ballast/voltage compatibility **3** Metal Halide medium-based socket 150W and below **4** 200W High Pressure Sodium only **5** Polycarbonate lens available for High Pressure Sodium through 150W **6** Specifications and dimensions subject to change without notice

POLES

PRODUCTS

POLE CATALOG NUMBER LOGIC

Shape
C=Cruciform
F=Fluted
R=Round
S=Square
H=Hinged

Shaft Type
S=Straight
T=Tapered

Material
A=Aluminum
S=Steel

Shaft Size at Base[1]
0=10"
1=11"
2=12"
3=14"
4=4"
5=5"
6=6"
7=7"
8=8"
9=9" (6 3/4" on Aluminum)

Wall Thickness (gauge)
A=.120"
D=.180"
L=.156"
M=.188"
T=.125"
X=.250"

Mounting Height (ft.)
08=8'
10=10'
12=12'
15=15'
20=20'
25=25'
30=30'
39=39'
45=45'
50=50'

Base Type
A=Aluminum (Round 4-Bolt Pole)
S=Steel
T=Direct Burial
N=Aluminum (Round 3-Bolt Pole)
W=Aluminum (Square and Cruciform Poles)
R=Hinged Base (Aluminum Pole Only)

Finish Colors
A=Satin Brushed Aluminum[2]
B=Clear Anodized[2]
C=Dark Bronze Anodized[2]
D=Black Anodized[2]
E=Medium Bronze Anodized[2]
F=Dark Bronze Steel
G=Galvanized Steel
L=Dark Platinum
P=Prime Powder Coat
R=Hartford Green
S=Silver
T=Graphite Metallic
V=Grey
W=White
X=Custom Color (or Specify Color)
Y=Black Powder Coat

Fixture Mounting + Type
2=2" Tenon (2 3/8" O.D., 4" long)
3=3" Tenon (3 1/2" O.D., 5" long)
4=4" Tenon (4" O.D., 6" long) Slide/Flite/Epic (not required on 4" diameter round poles)
5=3" Tenon (3" O.D., 4" long) Mesa
6=2" Tenon (2 3/8" O.D., 6" long)
7=4" Tenon (4" O.D. , 10" long) Slide Medium
A=Type A Drilling
C=Type C Drilling
J=Type J Drilling
K=Type K Drilling
E=Type E Drilling
M=Type M Drilling
F=Type F Drilling
G=Type G Drilling
P=Scroll Arm[3]
R=Drilled for UB Bracket
S=Standard Upsweep Arm
W=Truss Arm (Clamp Mounted)
X=NONE
Z=Type Z Drilling

No. + Location of Arms
1=Single
2=2 @ 180°
3=Triple[4]
4=4 @ 90°
5=2 @ 90°
6=Triple[5]
7=2 @ 120°
X=None

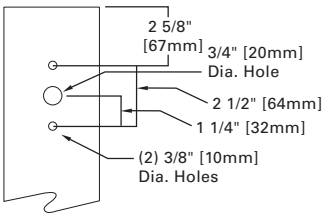
Length of Arm
0=10'
2=12'
4=4'
5=15'
6=6'
7=8'
X=None

Accessories
A=1/2" Hub
B=3/4" Hub
C=Convenience Outlet
E=GFI Convenience Outlet
F=Vibration Pad[2]
G=Ground Lug
H=Additional Hand Hole
J=Cable Support
V=Vibration Damper
L=Drilled for Bumper Glitter

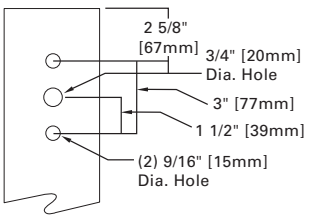
NOTES: 1 All shaft sizes nominal
2 Aluminum poles only
3 Available on FTS only
4 Square poles are 3 @ 90°, Round poles are 3 @ 120°
5 Round poles 3 @ 90°

DRILL PATTERNS

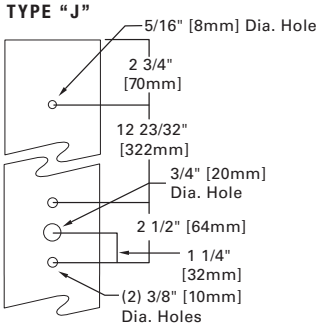
TYPE "A"



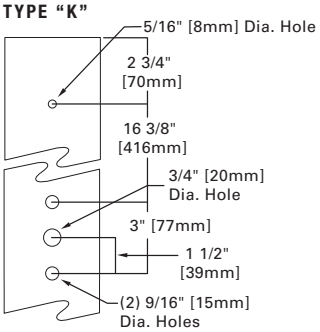
TYPE "C"



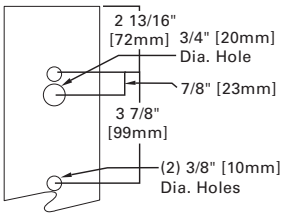
TYPE "J"



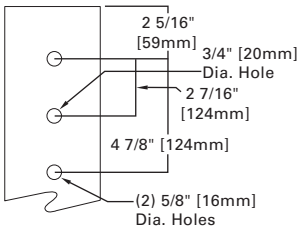
TYPE "K"



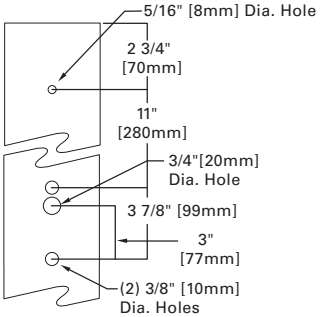
TYPE "E"



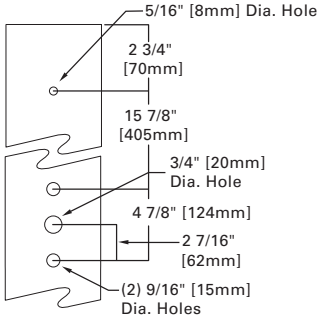
TYPE "M"



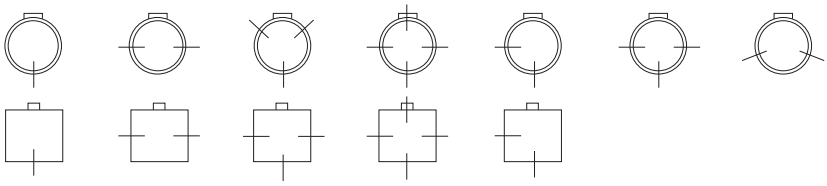
TYPE "F"



TYPE "G"



FIXTURE DRILLING OPTIONS [Note hand hole position relative to drill locations]



WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

HOW TO ORDER + INSTALLATION INSTRUCTION

Cooper Lighting offers a wide range of poles, luminaire mounting brackets and accessories. The information cataloged, including comprehensive Wind Loading Capacity Charts, provides for easy design of almost any pole-bracket-fixture combination.

HOW TO ORDER

1. Calculate the total effective projected area (EPA) of the desired luminaire(s) and mounting bracket(s) from the respective cataloged data.
2. Select the type of pole, pole material, and mounting height.
3. Determine the maximum wind velocity in your local area as shown on the National Wind Speed Chart on page 181.
4. Next, determine the specific pole you can use to mount your luminaire(s) and bracket(s) by utilizing the Wind Loading Capacity Charts for the type of pole you desire. The total wind loading rating for the desired pole must be greater than the total EPA of the fixtures and brackets.
5. Double check to make sure pole tenon or bracket matches slipfitter of luminaire or floodlight.

EXAMPLE

Installation: Four (4) Galleria Square (GSM) luminaires mounted 90° apart on 14" arms, secured to a 30' square straight steel pole in Houston, Texas. Design Calculation:

1. Total Effective Projected Area (EPA): 10.4 sq. ft. for fixtures and arms.
2. Maximum local steady wind velocity from wind speed map: 90 m.p.h. in Houston, Texas.
3. Pole ordering information shows that the following pole may be used: SSS6M30SFM4
4. Wind Loading Capacity: Note the wind loading charts show the maximum pole top EPA for SSS6M30FM4 at a steady wind velocity of 90 m.p.h. with a 1.3 gust factor is 12.4 sq. ft. The EPA also has a wind center of pressure located two feet above the top of the pole. The pole strength exceeds the design criteria of 10.4 sq. ft. and can be used.

POLE FINISHES

Custom colors available. Consult your Cooper Lighting Representative.

INSTALLATION INSTRUCTIONS
ANCHOR BOLTS

1. Only bolt and nut kits supplied by Cooper Lighting should be used.
2. Existing anchor bolts or bolt adapters supplied by other than Cooper Lighting should not be used. If they are, Cooper Lighting assumes no responsibility in case of bolt or adapter failure.
3. Anchor bolt and nuts from other sources should be used only on the advice of a Structural Engineer. Fasteners not suitable for this application can result in bolt and/or thread failure and consequent collapse of the pole.

   CAUTION: Use of nuts from other manufacturers with Cooper Lighting bolts may result in thread failure caused by improper thread fit.

4. In addition to electrical conduit and other equipment necessary to the installation, the foundation bolts should be cast into concrete, in conformance with the template drawing supplied with the anchor bolts for each particular pole.

CAUTION:

A. Check all templates for dimensional accuracy before using them to locate bolt position in the foundation.

B. Be certain that anchor bolts are properly located to provide the desired directional orientation of the pole.

C. Be certain that the anchor bolts are plumbed vertically, and they extend above the finished surface of the foundation to the extent called for on the bolt template drawing.

FOUNDATIONS

Since local soil and frost conditions vary widely a Civil Engineer familiar with these conditions should be consulted regarding dimensions and depths of foundations.

POLE ERECTION AND
FIXTURE INSTALLATION

1. All Cooper Lighting steel poles are to be installed using two nuts on each anchor bolt. The first nuts are to be run down on the thread to the top of the foundation and be checked using a hand level to ensure that the top surfaces of all these nuts are the same height. The pole should then be installed with its base plate holes over the bolts and the second nut screwed down to a moderate degree of tightness. The pole then should be checked and adjustments made to ensure that the pole is plumb. When this is satisfactory, tighten the top nuts to the proper torque values as shown using torque wrench.

BOLT DIAMETER IN INCHES	3/4	1	1 3/4	1 1/2
Recommended Ft Lbs of Torque When Nuts & Bolts are not Lubricated	105	250	500	870
Recommended Ft Lbs of Torque When Nuts & Bolts are Lubricated	78	190	380	650

2. When the installation is complete and confirmed to be correct, the void that appears between the base plate and concrete foundation is to be filled using a non-shrinking mortar grout. Then shape and finish to a neat appearance.
3. With the exception of the instructions presented on this page, the procedures for fixture installation and pole erection are the responsibility of the installation contractor.

CAUTION:

Cooper Lighting poles have been designed to support only the luminaires and equipment originally intended. Miscellaneous items such as pennants, signs, cameras and decorations may cause pole failure due to overloading. Addition of these items voids Cooper Lighting's warranty. Cooper Lighting will, however, supply information on total loading EPA on request. Cooper Lighting's 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.

GROUNDING

Poles must be grounded in accordance with requirements in the National Electrical Code and applicable Local Electrical Codes.

VIBRATION

Many isolated wind conditions exist that can be davasting to poles and luminaires. Although rare, vibrations severe enough to cause damage can occur in structures of all types influenced by many interacting variables. Vibrations are generally unpredictable. Constant winds in the 10-30 mph range can severely damage certain poles by vibration and there is no single cure that will assure the prevention of all modes of vibration. Many factors may contribute to the development of a vibration problem. It is not, however, the result of defective material or workmanship and therefore not covered by the Cooper Lighting warranty. Vibration dampers that can help alleviate this condition can be supplied by Cooper Lighting either factory installed or for field installation. Cooper Lighting recommends that vibration dampers be considered when any of the following conditions exist:

1. Poles installed on a bridge structure, overpass, or parking ramp structure.
2. Pole having a fixture epa load of less than 0.5.
3. Camera support poles.
4. Locations that experience prevailing constand winds in the 10 to 30 mph range.
5. Any site that has history of vibration problems.
6. Areas specified as special wind zones (consult local authorities).
7. Locations near an airport, mountain foothills, great lakes, large open areas of flat ground or any other unique locations that may experience abnormal wind conditions.

The user's maintenance program should include observation for excessive vibration and examination for any structural damage or bolt loosening. Failure to do so could result in structural failure.

WARRANTY AND PRODUCT USE

FOR MORE INFORMATION CONTACT YOUR LOCAL COOPER LIGHTING REPRESENTATIVE

THE FOLLOWING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY INCLUDING BUT NOT BY LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE.

Cooper Lighting warrants to the customer for resale only that Cooper Lighting's poles are free from defects in materials and workmanship. The obligation of Cooper Lighting under this warranty is expressly limited to repair or replacement without charge, at the sole option of cooper Lighting, of defective products within a period of one year from date of shipment of products and only after Cooper Lighting has issued a Return Materials Authorization to customer for the products. This warranty does not apply to Cooper products which have been altered or repaired or which have been subjected to neglect, abuse, misuse or accident (including shipping damages). THIS WARRANTY DOES NOT APPLY TO PRODUCTS NOT MANUFACTURED BY COOPER WHICH HAVE BEEN INSTALLED AND/OR USED IN CONJUNCTION WITH COOPER PRODUCTS.

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.

This warranty also specifically excludes poles installed without the luminaires or with unapproved devices such as banners, pennants, cameras or signs for which the pole was not designed. Use of such unauthorized accessories may result in pole failure causing serious injury, death, or property damage.

MAINTAINING YOUR COOPER LIGHTING POLES

Your Foundation design should assure that the accumulation of moisture cannot occur at the bottom of the pole structure. Proper drainage should be considered for naturally occurring condensation within the pole as well.

Cooper Lighting Steel and Aluminum Poles are provided with a durable polyester powder coat finish to resist corrosion. Note that all finishes are subject to deterioration over time and poles subject to more corrosive environments that include salt or heavy rains or condensation my be subject to quicker deterioration.

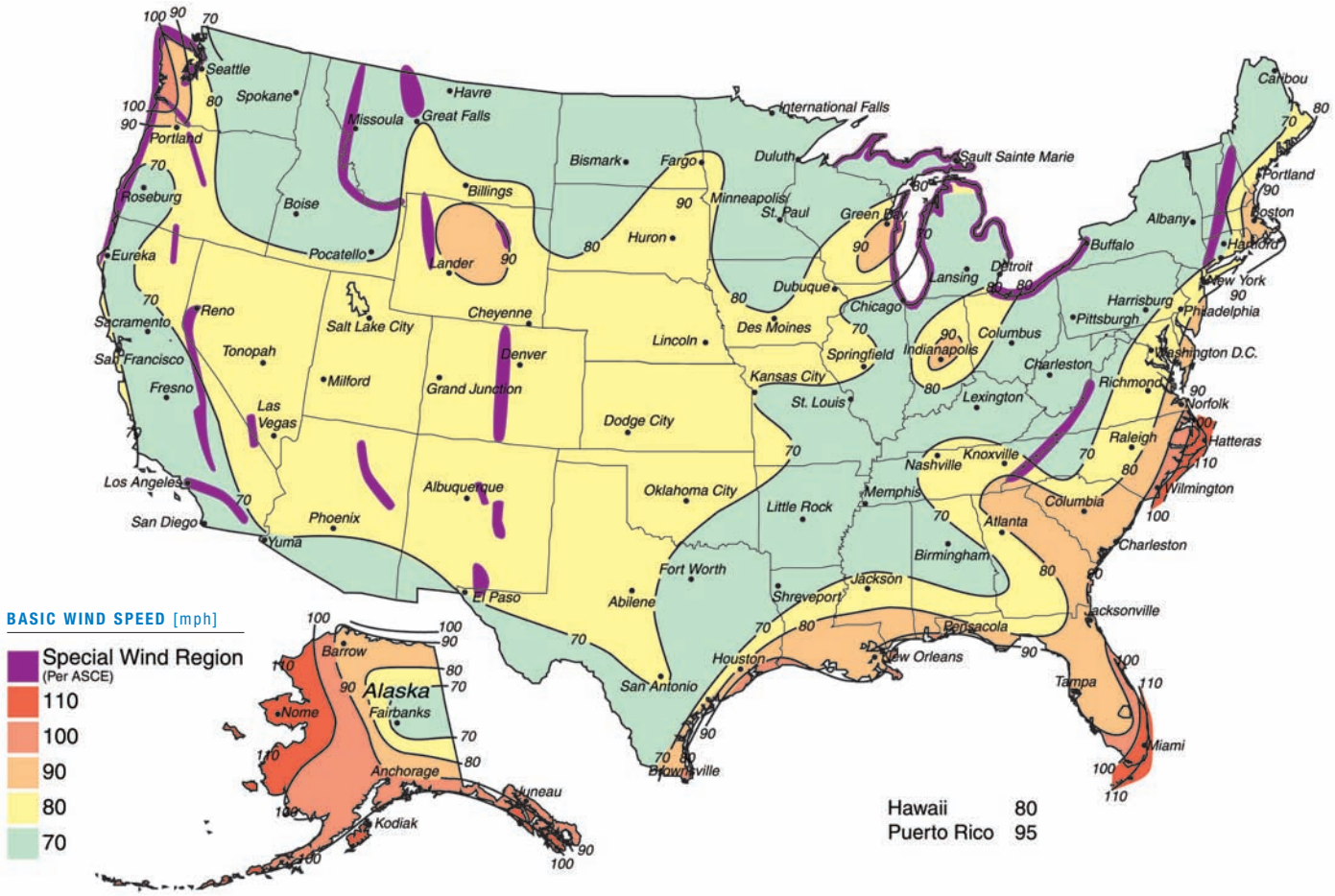
An ongoing maintenance program should be established to include periodic inspections of the structure. Inspections should review the tightness of the associated anchorage as well as the structural integrity of the pole. Any noted corrosion should be corrected immediately to prevent deterioration of the pole's strength. Failure to maintain a regular inspection program could lead to pole failure that could result in property damage and serious injury.

NOTE: For shipments outside the United States and Canada contact our Customer First Center for applicable terms and conditions.

ISOTACH WIND MAP

1994 AASHTO

The 50-year mean recurrence Isotach wind map has been included in this catalog in order to aid in the selection of a pole with regard to its 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 in the use of this map deems it more desirable. Where unusual wind conditions exist [mountains, natural terrains acting as funnels, hurricane regions (shown as 110 MPH regions)] it is advisable to contact your Cooper Lighting Representative for further consultation.



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

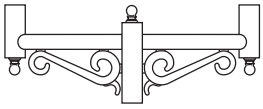
DECORATIVE POLE COLLECTION

8' 30' MOUNTING HEIGHT

DECORATIVE POLE DETAILS

Decorative pole bases are manufactured of 356.2 cooper free cast aluminum. Bases maintain a minimal wall thickness of .250". Extruded smooth or fluted shafts are manufactured of 6063 aluminum and are circumferentially welded to the base. Anchor bolt locations are cast within the base. Anchor bolts are hot dip galvanized steel. Poles are finished in a premium TGIC polyester powder coat for superior weatherability characteristics.

DECORATIVE POLE ACCESSORIES [Follow catalog number with two (2) letter color designation]



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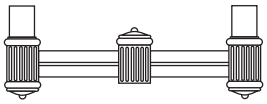

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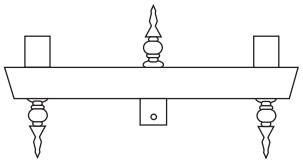

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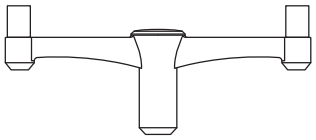
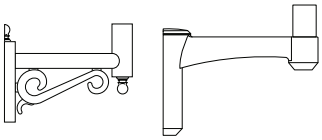
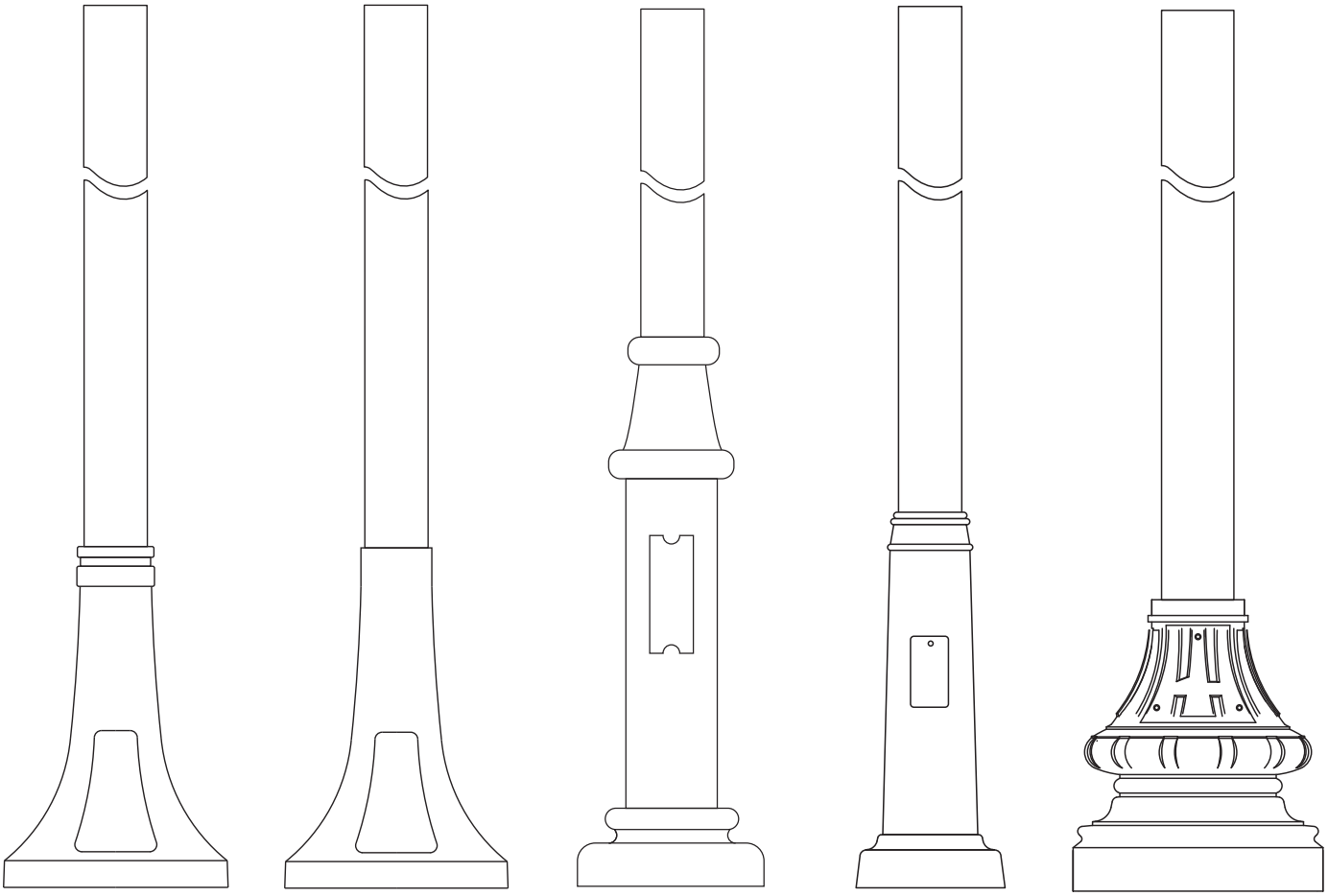


SA6028-XX

DECORATIVE WALL MOUNT ACCESSORIES



CA108506-XX SA6029-XX



STL
Seattle
Base Height: 23"
Bolt Circle: 8"

Shaft Diameter	Pole Height
4"	8', 10', 12',14', 16'

TAM
Tampa
Base Height: 30"
Bolt Circle: 8.5"

Shaft Diameter	Pole Height
4"	10', 12', 14', 16', 18'

BWR
Broadway
Base Height: 42"
Bolt Circle: 12"

Shaft Diameter	Pole Height
8" x 4"	8', 10', 12', 14', 16', 18', 20', 25', 30'

ASP
Aspen
Base Height: 40"
Bolt Circle: 15"

Shaft Diameter	Pole Height
4"	8', 10', 12', 14', 16', 18', 20'

WA3
Washington 3
Base Height: 21"
Bolt Circle: 10 3/4"

Shaft Diameter	Pole Height
4"	8', 10', 12'
5"	8', 10', 12', 14', 16'
6"	12', 14', 16', 18'

ORDERING INFORMATION

SAMPLE NUMBER: ASP0842RS5GN

BASE TYPE
ASP=Aspen
BWR=Broadway
CHI=Charleston
CPR=Chesapeake
STL=Seattle
TAM=Tampa
UBN=Utica
WA3=Washington 3

MOUNTING HEIGHT [ft.]
08=8'
10=10'
12=12'
14=14'
16=16'
18=18'
20=20'
25=25'
30=30'

SHAFT SIZE AT BASE
4=4"
5=5"
6=6"
8=8" [1]

WALL THICKNESS [gauge]
0=.125" [2]
1=.156" [3]
2=.188"
3=.250" [4]

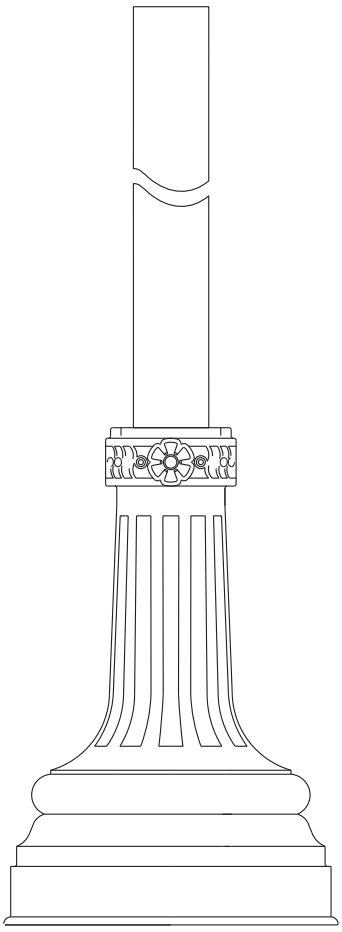
SHAFT TYPE
RS=Round Straight
RT=Round Tapered [5]
SF=Straight Fluted

LUMINAIRE
4=Tenon for EPIC Collection [6]
5=3" O.D. Tenon

COLOR
AP=Grey
BK=Black
BZ=Bronze
DP=Dark Platinum
WH=White
GN=Hartford Green
GM=Graphite Metallic

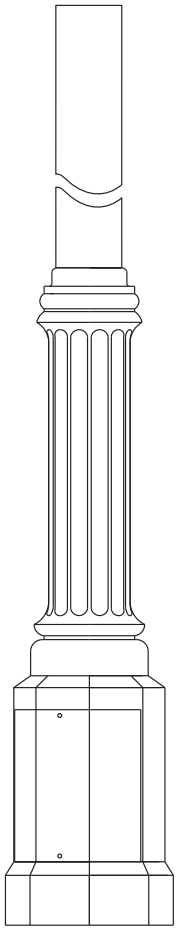
OPTIONS
C=Provision for Convenience Outlet
E=GFI Convenience Outlet
G=Ground Lug

NOTES: 1 Round Tapered only
2 0 125" thickness not available on STL, TAM, ASP, or BWR
3 0 156" thickness available on TAM and BWR only
4 0 250" thickness available on STL, BWR, and ASP only
5 "RT" shafts are tapered to 4" BWR only
6 Provides 4" Tenon on 5" shafts or no tenon on 4" shafts allowing slip over of EPIC Collection arm accessories See EPIC Collection on page ##-## for additional information on arms



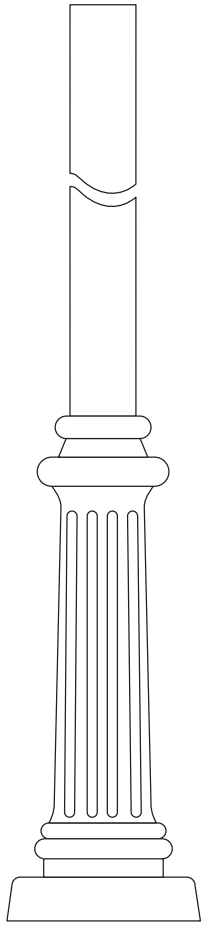
CHI
Charleston
Base Height: 32"
Bolt Circle: 10 3/4"

Shaft Diameter	Pole Height
4"	8', 10', 12'
5"	8', 10', 12', 14', 16'
6"	12', 14', 16', 18'



CPR
Chesapeake
Base Height: 46 5/8"
Bolt Circle: 13 1/4"

Shaft Diameter	Pole Height
4"	8', 10', 12', 14'
5"	8', 10', 12', 14'

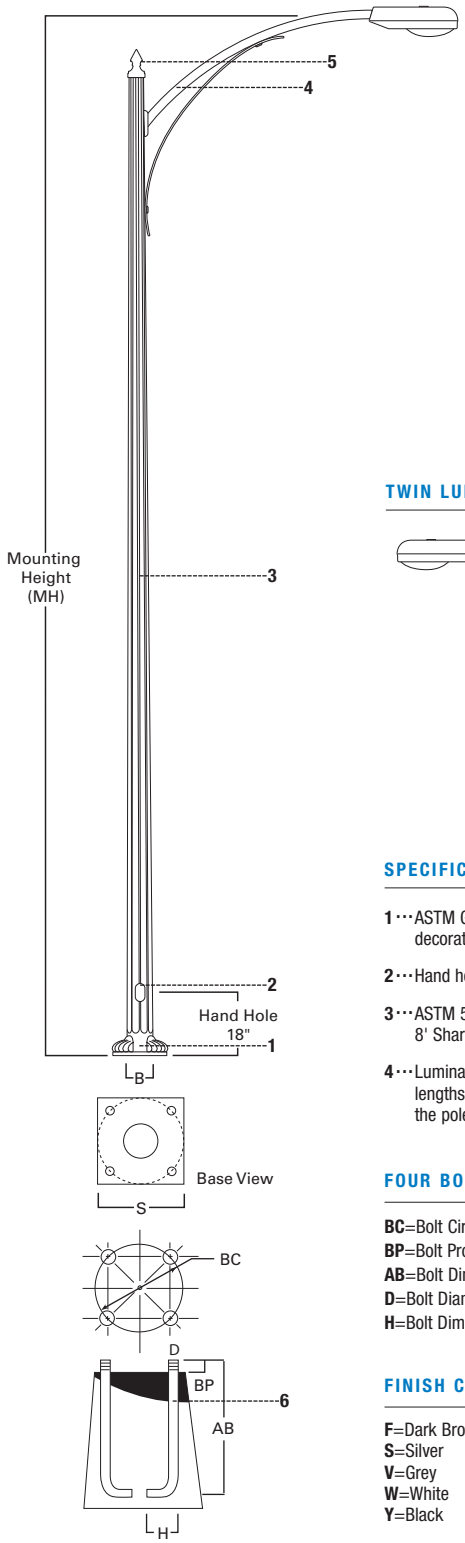


UBN
Utica
Base Height: 31 3/8"
Bolt Circle: 12 1/2"

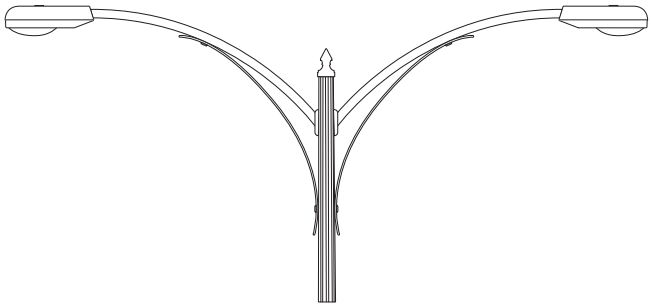
Shaft Diameter	Pole Height
4"	8', 10', 12'
5"	8', 10', 12'

FTS FLUTED TAPERED STEEL

21' 41' MOUNTING HEIGHT



TWIN LUMINAIRE ARMS AVAILABLE



SPECIFICATION FEATURES

1···ASTM Grade steel base plate. Pole provided with decorative cast aluminum nut covers.

2···Hand hole assembly 4" x 6".

3···ASTM 595 steel fluted shaft. Pole cross section is an 8' Sharp Flute.

4···Luminaire arm is 2.375" tubing available in 4', 6', and 8' lengths. Decorative scroll is attached to the underside and to the pole with hex head bolts.

5···Decorative cast aluminum pole cap attached using three (3) set screws.

6···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, 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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information]

F=Dark Bronze
S=Silver
V=Grey
W=White
Y=Black

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: FTS6A21SFP14

Fluted	Tapered	Steel	Shaft[3] Size	Mounting Height (Ft.)	Base Type	Finish[3]	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths
F	**T**	**S**	**6.5**	**21**	**F**	**P**	**1**	**1**	**4**

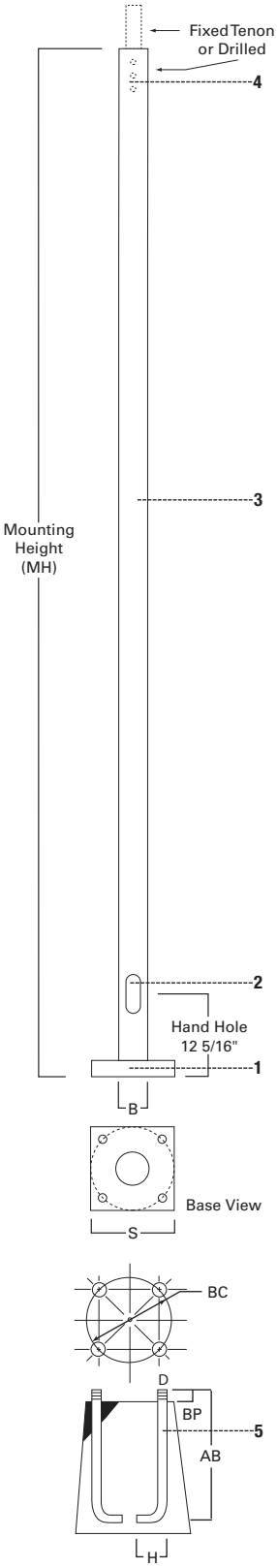
Mtg. Height (Ft.)	Catalog Number	Base Square (In.)	Bolt Circle Dia. (In.)	Bolt Proj. (In.)	Shaft Size (In.)	Anchor Bolt Dia. &. Length (In.)	Arm Length (Ft.)	Net. Wt. (Lbs.)	EPA Rating Per Arm At Pole Top (Sq. Ft.)				Max. Fixture Load Include Bracket (Lbs.)
MH			**S**	**BC**	**BP**	**B**		**AB**	**70**	**80**	**90**	**100**	
21	FTS6A21SFP14	10	9 1/2	3 3/4	6 1/2	1 x 36 x 4	4	180	1.7	1.7	1.7	1.7	60
21	FTS6A21SFP16	10	9 1/2	3 3/4	6 1/2	1 x 36 x 4	6	200	1.7	1.7	1.7	1.7	60
21	FTS6A21SFP18	10	9 1/2	3 3/4	6 1/2	1 x 36 x 4	8	220	1.7	1.7	1.7	1.7	60
21	FTS6A21SFP24	10	9 1/2	3 3/4	6 1/2	1 x 36 x 4	4	220	1.7	1.7	1.7	1.7	120
21	FTS6A21SFP26	10	9 1/2	3 3/4	6 1/2	1 x 36 x 4	6	240	1.7	1.7	1.7	1.7	120
21	FTS6A21SFP28	10	9 1/2	3 3/4	6 1/2	1 x 36 x 4	8	260	1.7	1.7	1.7	1.7	120
31	FTS8A31SFP14	11 1/2	11	4	8	1 x 36 x 4	4	295	1.7	1.7	1.7	1.7	60
31	FTS8A31SFP16	11 1/2	11	4	8	1 x 36 x 4	6	315	1.7	1.7	1.7	1.7	60
31	FTS8A31SFP18	11 1/2	11	4	8	1 x 36 x 4	8	335	1.7	1.7	1.7	1.7	60
31	FTS8A31SFP24	11 1/2	11	4	8	1 x 36 x 4	4	335	1.7	1.7	1.7	1.7	120
31	FTS8D31SFP24	11 1/2	11	4	8	1 x 36 x 4	4	335	1.7	1.7	1.7	1.7	120
31	FTS8A31SFP26	11 1/2	11	4	8	1 x 36 x 4	6	355	1.7	1.7	1.7	1.7	120
31	FTS8D31SFP26	11 1/2	11	4	8	1 x 36 x 4	6	355	1.7	1.7	1.7	1.7	120
31	FTS8A31SFP28	11 1/2	11	4	8	1 x 36 x 4	8	375	1.7	1.7	1.7	1.7	120
31	FTS8D31SFP28	11 1/2	11	4	8	1 x 36 x 4	8	375	1.7	1.7	1.7	1.7	120
41	FTS9A41SFP14	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	4	395	1.7	1.7	1.7	1.7	60
41	FTS9D41SFP14	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	4	395	1.7	1.7	1.7	1.7	60
41	FTS9A41SFP16	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	6	415	1.7	1.7	1.7	1.7	60
41	FTS9D41SFP16	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	6	415	1.7	1.7	1.7	1.7	60
41	FTS9A41SFP18	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	8	435	1.7	1.7	1.7	1.7	60
41	FTS9D41SFP18	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	8	435	1.7	1.7	1.7	1.7	60
41	FTS9A41SFP24	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	4	420	1.7	1.7	1.7	1.7	120
41	FTS9D41SFP24	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	4	420	1.7	1.7	1.7	1.7	120
41	FTS9A41SFP26	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	6	440	1.7	1.7	1.7	1.7	120
41	FTS9D41SFP26	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	6	440	1.7	1.7	1.7	1.7	120
41	FTS9A41SFP28	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	8	460	1.7	1.7	1.7	1.7	120
41	FTS9D41SFP28	13	13	5 1/4	9 1/2	1 1/4 x 42 x 6	8	460	1.7	1.7	1.7	1.7	120

NOTES: 1 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)
2 Shaft size, base plate, anchor bolts and projections may vary slightly—all dimensions nominal
3 Paint over galvanized steel available Consult your Cooper Lighting Representative

NOTE: Specifications and dimensions subject to change without notice

RSS ROUND STRAIGHT STEEL

10' 30' MOUNTING HEIGHT



SPECIFICATION FEATURES

1···ASTM Grade steel base plate with ASTM A366 base cover.

2···Hand hole assembly 3" x 5" on 5" and 6" RSS poles, 2" x 4" on 4" RSS poles.

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

4···Drilled or Tenon (specify).

5···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, 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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information]

F=Dark Bronze
S=Silver
V=Grey
W=White
Y=Black
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE. UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY. COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION. 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

ORDERING INFORMATION

SAMPLE NUMBER: RSS4A20SF2XXG

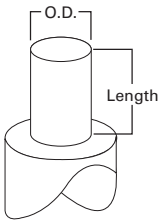
Round	Straight	Steel	Shaft[3] Size	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Ground Lug)
R	**S**	**S**	**4**	**A**	**20**	**S**	**F**	**2**	**X**	**X**	**G**

Mtg. Height (Ft.)	Catalog[1,2] Number	Wall Thickness (Ga.)	Base Square (In.)	Bolt Circle Dia. (In.)	Bolt Proj. (In.)	Shaft Size (In.)	Anchor Bolt Dia. &. Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[4] At Pole Top				EPA (Sq. Ft.)[4] 2' Above Pole Top				Max. Fixture Load Include Bracket (Lbs.)
MH			**S**	**BC**	**BP**	**B**	**D x AB x H**		**70**	**80**	**90**	**100**	**70**	**80**	**90**	**100**	
10	RSS4A10S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	82	24.4	18.2	14.0	11.1	20.3	15.2	11.7	9.3	150
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	10.0	7.2	5.3	4.0	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	5.8	3.8	2.4	1.6	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	18.5	13.6	10.5	8.3	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	12.7	8.9	6.8	5.3	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	12.9	9.4	7.1	5.4	300

NOTES: 1 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)
2 Tenon size or machining for rectangular arms must be specified Hand hole position relative to drill location noted on page 178
3 Shaft size, base plate, anchor bolts and projections may vary slightly—all dimensions nominal
4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

MOUNTING OPTIONS [add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
3	3 1/2	5
4	4	6
9	3	4

ACCESSORIES

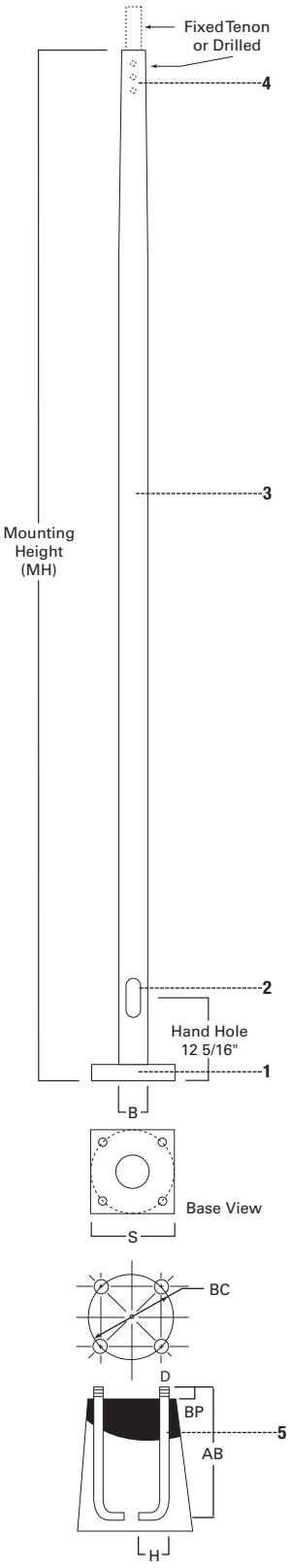
A=1/2" Tapped Hub[1]
B=3/4" Tapped Hub[1]
C=Convenience Outlet[2,3]
E=GFI Convenience Outlet[2]
G=Grounding Lug (max. wire #8 AWG)
H=Additional Hand Hole and Cover
12" below pole top 90° from hand hole.
V=Vibration Damper

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise
3 Receptacle not included, provision only

NOTE: Specifications and dimensions subject to change without notice

RTS ROUND TAPERED STEEL

20' 50' MOUNTING HEIGHT



SPECIFICATION FEATURES

1···ASTM Grade steel base plate with ASTM A366 base cover.

2···Hand hole assembly 3" x 5" on on RTS poles.

3···Steel shaft minimum yield 55,000 PSI. Shot blasted and painted with polyester powder coat.

4···Drilled or Tenon (specify).

5···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, 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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information]

F=Dark Bronze
S=Silver
V=Grey
W=White
Y=Black
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: RTS8A30SF2XXG

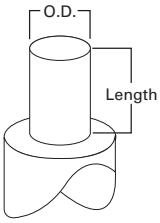
Round	Straight	Steel	Shaft[3] Size	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Ground Lug)
R	T	S	8	A	30	S	F	2	X	X	G

Mtg. Height (Ft.)	Catalog[1,2] Number	Wall Thickness (Ga.)	Base Square (In.)	Bolt Circle Dia. (In.)	Bolt Proj. (In.)	Shaft Size (In.)	Anchor Bolt Dia. &. Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[4] At Pole Top				EPA (Sq. Ft.)[4] 2' Above Pole Top				Max. Fixture Load Include Bracket (Lbs.)
MH			**S**	**BC**	**BP**	**B**	**D x AB x H**		**70**	**80**	**90**	**100**	**70**	**80**	**90**	**100**	
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	27.1	20.6	16.2	13.1	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	26.0	19.8	15.5	12.5	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	22.5	17.0	13.3	10.6	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	21.7	16.4	12.7	9.9	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	36.8	28.0	21.9	17.3	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	20.5	15.4	11.8	9.0	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	36.4	27.6	21.4	16.8	400
45	RTS0A45S[5]	.120	13 1/2	13.5	5	10.2 x 4.2	1 x 36 x 4	546	23.5	17.4	12.9	9.7	22.5	16.6	12.4	9.3	450
45	RTS0D45S[5]	.180	13 1/2	13.5	6	10.2 x 4.2	1 1/4 x 42 x 6	682	44.1	33.2	25.4	19.8	42.2	31.7	24.3	19.0	450
50	RTS0A50S[5]	.120	13 1/2	13.5	5	10.2 x 3.5	1 x 36 x 4	550	15.2	11.0	7.9	5.7	14.8	10.6	7.6	5.4	450
50	RTS0D50S[5]	.180	13 1/2	13.5	6	10.2 x 3.5	1 1/4 x 42 x 6	719	31.0	23.1	17.5	13.4	29.8	22.2	16.8	12.9	450

NOTES: 1 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)
2 Tenon size or machining for rectangular arms must be specified Hand hole position relative to drill location noted on page 178
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
5 Two piece pole Shipped in two sections and is easily joined together at the job site by slip-fitting together

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
3	3 1/2	5
9	3	4

ACCESSORIES

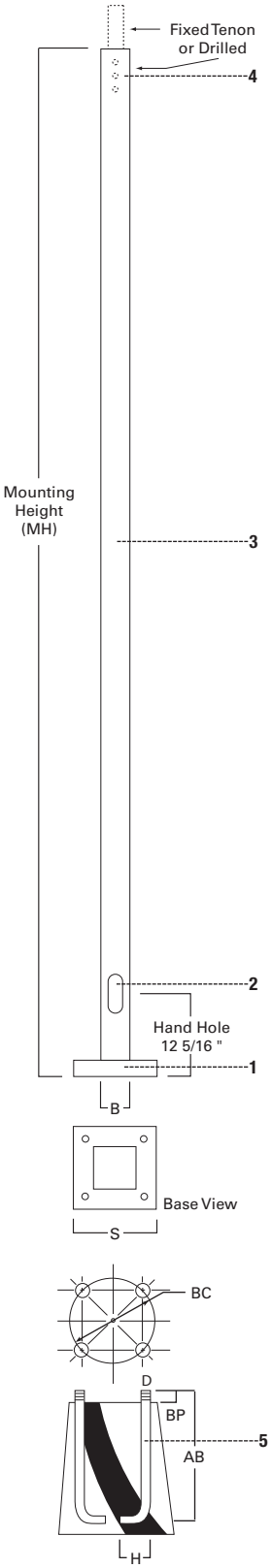
A=1/2" Tapped Hub[1]
B=3/4" Tapped Hub[1]
C=Convenience Outlet[2,3]
E=GFI Convenience Outlet[2]
G=Grounding Lug (max. wire #8 AWG)
H=Additional Hand Hole and Cover
12" below pole top 90° from hand hole.
V=Vibration Damper

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise
3 Receptacle not included, provision only

NOTE: Specifications and dimensions subject to change without notice

SSS SQUARE STRAIGHT STEEL

8' 39' MOUNTING HEIGHT



SPECIFICATION FEATURES

1···ASTM Grade steel base plate with ASTM A366 base cover.

2···Hand hole assembly 3" x 5" on 5" and 6" pole; and 2" x 4" on 4" pole.

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

4···Drilled or Tenon (specify).

5···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, 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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information]

F=Dark Bronze
S=Silver
V=Grey
W=White
Y=Black
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: SSS5A20SFM1XG

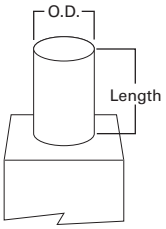
Square	Straight	Steel	Shaft[3] Size	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Ground Lug)
S	**S**	**S**	**5**	**A**	**20**	**S**	**F**	**M**	**1**	**X**	**G**

Mtg. Height (Ft.)	Catalog[1,2] Number	Wall Thickness (Ga.)	Base Square (In.)	Bolt Circle Dia. (In.)	Bolt Proj. (In.)	Shaft Size (In.)	Anchor Bolt Dia. & Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[4] At Pole Top				EPA (Sq. Ft.)[4] 2' Above Pole Top				Max. Fixture Load Include Bracket (Lbs.)
MH			**S**	**BC**	**BP**	**B**	**D x AB x H**		**70**	**80**	**90**	**100**	**70**	**80**	**90**	**100**	
8	SSS4A08S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	70	55.2	41.8	32.6	26.0	43.9	33.2	25.9	20.7	150
10	SSS4A10S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	96	39.8	29.9	23.2	18.4	33.0	24.8	19.3	15.3	150
12	SSS4A12S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	106	34.7	25.9	19.8	15.4	29.6	22.1	16.9	13.2	150
14	SSS4A14S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	123	28.7	21.1	15.9	12.2	20.0	14.7	11.1	8.5	150
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	17.2	12.7	9.5	7.3	150
16	SSS4A16S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	137	19.1	13.9	10.3	7.7	16.9	12.3	9.1	6.8	150
18	SSS4A18S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	142	16.2	11.5	8.3	6.0	14.4	10.3	7.4	5.4	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	11.7	8.2	5.9	4.2	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	19.9	14.3	10.5	7.7	200
22	SSS4A22S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	174	11.6	7.8	5.3	3.4	10.5	7.1	4.8	3.1	200
24	SSS4A24S	.120	10 1/2	11.0	4 1/2	4	3/4 x 25 x 3	190	9.8	6.4	4.0	2.3	9.0	5.8	3.7	2.1	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	8.0	5.2	3.3	2.0	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	14.3	9.8	6.6	4.4	200
25	SSS6A25S	.120	12 1/2	12.5	5	6	1 x 36 x 4	295	24.1	16.8	12.0	8.5	22.2	15.6	11.1	7.8	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	--	7.7	4.3	2.0	--	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	14.2	9.0	5.4	2.9	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	13.1	8.2	4.7	2.3	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	24.7	16.9	11.6	7.9	300
35	SSS5M35S	.188	10 1/2	11.0	4 1/2	5	3/4 x 25 x 3	480	11.8	7.1	3.8	1.5	11.1	6.6	3.6	1.4	300
35	SSS6M35S	.188	12 1/2	12.5	5	6	1 x 36 x 4	584	19.7	12.7	7.9	4.4	18.6	12.0	7.5	4.2	300
35	SSS6X35S	.250	12 1/2	12.5	5	6	1 x 36 x 4	696	28.9	19.7	13.4	8.9	8.7	18.6	12.7	8.4	300
39	SSS6M39S	.188	12 1/2	12.5	5	6	1 x 36 x 4	647	15.4	9.1	4.8	1.8	14.6	8.7	4.6	1.7	300
39	SSS6X39S	.250	12 1/2	12.5	5	6	1 x 36 x 4	822	23.5	15.4	9.8	5.7	22.4	14.6	9.3	5.4	300

NOTES: 1 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)
2 Tenon size or machining for rectangular arms must be specified Hand hole position relative to drill location noted on page 178
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

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
3	3 1/2	5
9	3	4

ACCESSORIES

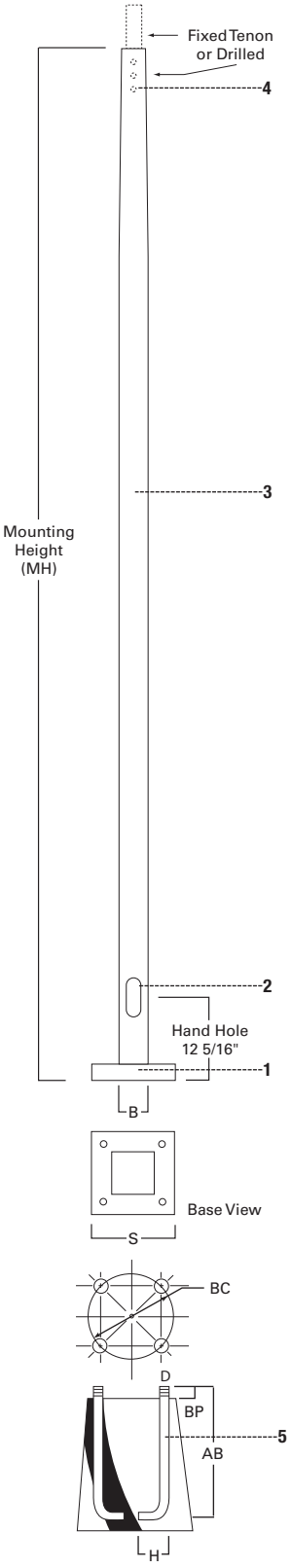
A=1/2" Tapped Hub[1]
B=3/4" Tapped Hub[1]
C=Convenience Outlet[2,3]
E=GFI Convenience Outlet[2]
G=Grounding Lug (max. wire #8 AWG)
H=Additional Hand Hole and Cover
12" below pole top 90° from hand hole.
V=Vibration Damper

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise
3 Receptacle not included, provision only

NOTE: Specifications and dimensions subject to change without notice

STS SQUARE TAPERED STEEL

20' 39' MOUNTING HEIGHT



SPECIFICATION FEATURES

1···ASTM Grade steel base plate with ASTM A366 base cover.

2···Hand hole assembly 3" x 5" on STS poles.

3···Steel shaft 55,000 PSI. Shot blasted and painted with polyester powder coat.

4···Drilled or Tenon (specify).

5···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, 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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information]

F=Dark Bronze
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Y=Black
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ORDERING INFORMATION

SAMPLE NUMBER: STS5A20SF

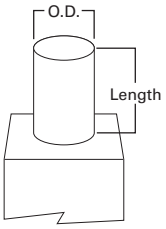
Square	Straight	Steel	Shaft[3] Size	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Ground Lug)
S	**T**	**S**	**7**	**A**	**30**	**S**	**F**	**M**	**1**	**X**	**G**

Mtg. Height (Ft.)	Catalog[1,2] Number	Wall Thickness (Ga.)	Base Square (In.)	Bolt Circle Dia. (In.)	Bolt Proj. (In.)	Shaft Size (In.)	Anchor Bolt Dia. &. Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.) At Pole Top			Max. Fixture Load Include Bracket (Lbs.)
MH			**S**	**BC**	**BP**	**B**	**D x AB x H**		**80**	**90**	**100**	
20	STS5A20S	.120		10 3/4			Consult Your Cooper Lighting Representative					
25	STS6A25S	.120		12			Consult Your Cooper Lighting Representative					
30	STS6A30S	.120		12 1/2			Consult Your Cooper Lighting Representative					
30	STS7D30S	.180		13 1/2			Consult Your Cooper Lighting Representative					
35	STS7A35S	.120		13			Consult Your Cooper Lighting Representative					
35	STS7D35S	.180		13 1/2			Consult Your Cooper Lighting Representative					
39	STS7A39S	.120		13 1/2			Consult Your Cooper Lighting Representative					
39	STS7D39S	.180		13 1/2			Consult Your Cooper Lighting Representative					
45	STS8D45S	.180		14 1/2			Consult Your Cooper Lighting Representative					
50	STS9D50S	.180		16			Consult Your Cooper Lighting Representative					

NOTES: 1 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)
2 Tenon size or machining for rectangular arms must be specified Hand hole position relative to drill location noted on 178
3 Shaft size, base plate, anchor bolts and projections may vary slightly—all dimensions nominal
4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
3	3 1/2	5
9	3	4

ACCESSORIES

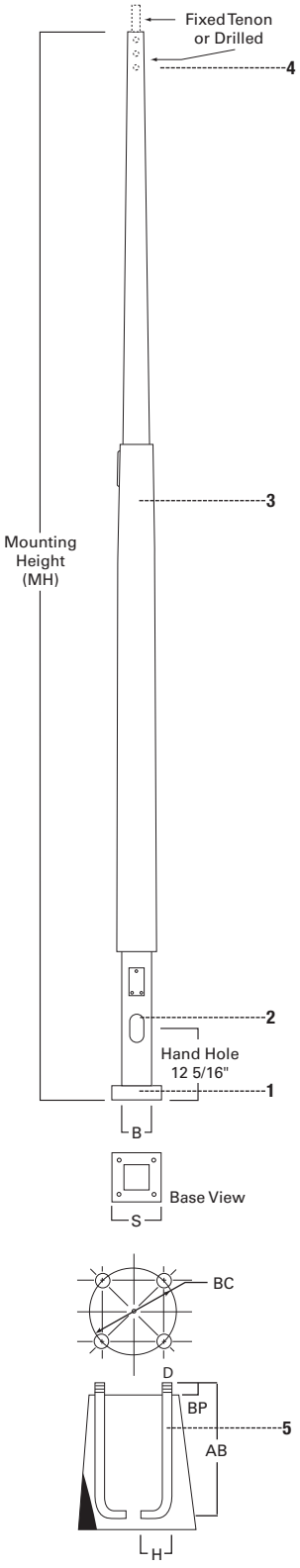
A=1/2" Tapped Hub[1]
B=3/4" Tapped Hub[1]
C=Convenience Outlet[2,3]
E=GFI Convenience Outlet[2]
G=Grounding Lug (max. wire #8 AWG)
H=Additional Hand Hole and Cover
12" below pole top 90° from hand hole.
V=Vibration Damper

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise
3 Receptacle not included, provision only

NOTE: Specifications and dimensions subject to change without notice

HTS HINGED TAPERED STEEL

25' 39' MOUNTING HEIGHT



SPECIFICATION FEATURES

1···ASTM Grade steel base plate with ASTM A366 base cover.

2···Hand hole assembly 3" x 5" on all HTS poles.

3···Steel shaft 55,000 PSI. Shot blasted and painted with polyester powder coat.

4···Drilled or Tenon (specify).

5···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, 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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information]

F=Dark Bronze
S=Silver
V=Grey
W=White
Y=Black
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: HTS6A30SFM2XG

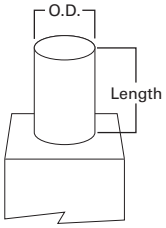
Square	Straight	Steel	Shaft[3] Size	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Ground Lug)
H	**T**	**S**	**6**	**B**	**30**	**S**	**P**	**M**	**2**	**X**	**G**

Mtg. Height (Ft.)	Catalog[1,2] Number	Wall Thickness (Ga.)	Base Square (In.)	Bolt Circle Dia. (In.)	Bolt Proj. (In.)	Shaft Size (In.)	Anchor Bolt Dia. &. Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[4] At Pole Top 80	90	100	Max. Fixture Load Include Bracket (Lbs.)
MH			**S**	**BC**	**BP**	**B**	**D x AB x H**					
25	HTS6A25S	.120		12 1/2			Consult Your Cooper Lighting Representative					
30	HTS6A30S	.120		12 1/2			Consult Your Cooper Lighting Representative					
35	HTS7A35S	.120		13 1/2			Consult Your Cooper Lighting Representative					
35	HTS7D35S	.180		13 1/2			Consult Your Cooper Lighting Representative					
39	HTS7A39S	.120		13 1/2			Consult Your Cooper Lighting Representative					
39	HTS7D39S	.180		13 1/2			Consult Your Cooper Lighting Representative					

NOTES: 1 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)
2 Tenon size or machining for rectangular arms must be specified Hand hole position relative to drill location noted on page 178
3 Shaft size, base plate, anchor bolts and projections may vary slightly—all dimensions nominal
4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



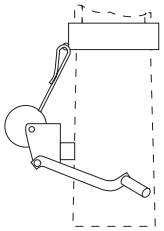
Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
3	3 1/2	5
9	3	4

ACCESSORIES

A=1/2" Tapped Hub[1]
B=3/4" Tapped Hub[1]
C=Convenience Outlet[2,3]
E=GFI Convenience Outlet[2]
G=Grounding Lug (max. wire #8 AWG)
H=Additional Hand Hole and Cover
12" below pole top 90° from hand hole.
V=Vibration Damper

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise
3 Receptacle not included, provision only

LOWERING EQUIPMENT



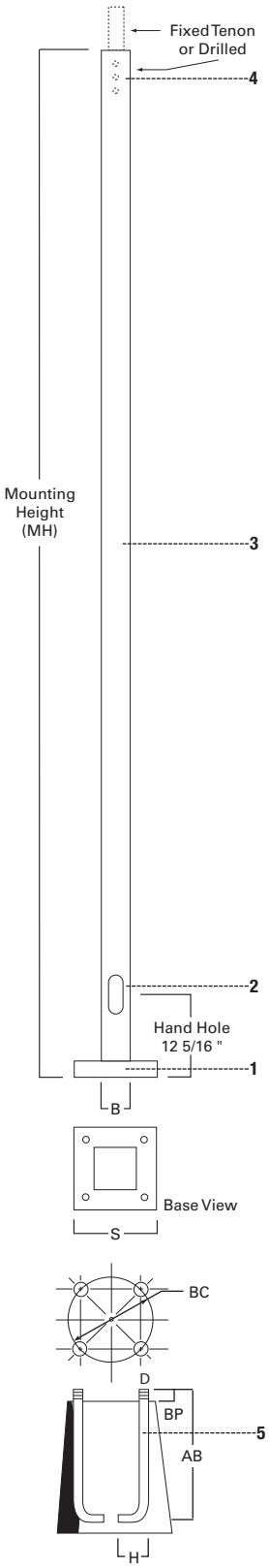
Catalog Number	Description	Net. Wt. (Lbs.)
HSSLDW	Lowering Device w/35' Cable and Snap-hook	11.5

NOTES: Lowering Device No HSS-LDW is required for use with all Cooper Lighting hinged poles This Device consist of a wench, arm, and a rotating steel drum with a two-way ratchet lock and 35' of stranded flexible aircraft cable The drum has a gear ratio of 51 to 1 Combination arm, gear and lever provide a mechanical advantage of 30 to 1 and permit a direct load lift of up to 1300 lbs

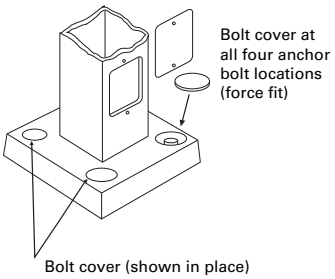
NOTE: Specifications and dimensions subject to change without notice

SSA SQUARE STRAIGHT ALUMINUM

8' 35' MOUNTING HEIGHT



ACCESSORIES [Base with hand hole and door]



SPECIFICATION FEATURES

1···356-T6 cast aluminum alloy shoe base with aluminum alloy knock-in bolt covers.

2···2" x 4" flush hand hole assembly with internal reinforcing frame (4" Shaft). 2 1/2" x 4" flush hand hole assembly (5", 6", and 6 3/4" shaft). Ground lug located opposite hand hole opening drilled & tapped for 3/8" 16NC-2 grounding screw.

3···Straight square shaft 6005-T6 aluminum alloy polished finish.

4···Drilled or Tenon (specify).

5···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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

A=Satin Brushed Aluminum
B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: SSA4T08WXM1XG

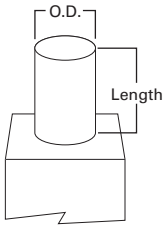
Square	Straight	Aluminum	Shaft Dia. (at base)	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Ground Lug)
S	**S**	**A**	**4**	**T**	**08**	**W**	**X**	**M**	**1**	**X**	**G**

Mtg. Height (Ft.)	Catalog Number[3]	Shaft Size (In.)	Wall Thickness (Ga.)	Bolt Proj. (In.)	Bolt Circle Dia. (In.)	Anchor Bolt Dia. & Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[2,4] At Pole Top				EPA (Sq. Ft.)[2,4] 18" Above Pole Top				Max. Fixture Load Include Bracket (Lbs.)
MH		**B**		**BP**	**BC**	**D x AB x H**		**70**	**80**	**90**	**100**	**70**	**80**	**90**	**100**	
8	SSA4T08W	4	.125	1 3/4	9	3/4 x 17 x 3	23	26.6	19.9	15.2	11.9	22.2	16.6	12.7	10.0	350
10	SSA4T10W	4	.125	1 3/4	9	3/4 x 17 x 3	28	20.6	15.2	11.4	8.8	17.8	13.1	9.9	7.6	260
12	SSA4T12W	4	.125	1 3/4	9	3/4 x 17 x 3	32	16.0	11.5	8.5	6.3	14.1	10.1	7.4	5.5	260
15	SSA4T15W	4	.125	1 3/4	9	3/4 x 17 x 3	39	9.1	6.2	4.2	2.8	8.2	5.6	3.8	2.5	200
15	SSA4M15W	4	.188	1 3/4	9	3/4 x 17 x 3	55	14.8	10.6	7.7	5.6	13.4	9.6	6.9	5.1	200
15	SSA5T15W	5	.125	2	11	3/4 x 17 x 3	52	16.0	11.3	8.1	5.8	14.4	10.2	7.3	5.2	260
18	SSA4T18W	4	.125	1 3/4	9	3/4 x 17 x 3	46	6.4	4.0	2.3	1.1	5.9	3.6	2.1	0.9	100
18	SSA4M18W	4	.188	1 3/4	9	3/4 x 17 x 3	66	11.0	7.4	5.0	3.3	10.0	6.8	4.6	3.0	150
18	SSA5T18W	5	.125	2	11	3/4 x 17 x 3	61	11.8	7.8	5.1	3.2	10.8	7.2	4.7	2.9	150
18	SSA5M18W	5	.188	2	11	3/4 x 17 x 3	85	19.2	13.5	9.6	6.8	17.6	12.4	8.8	6.2	260
20	SSA4M20W	4	.188	1 3/4	9	3/4 x 17 x 3	72	8.8	5.6	3.5	1.9	8.1	5.2	3.2	1.7	150
20	SSA5T20W	5	.125	2	11	3/4 x 17 x 3	66	9.5	5.9	3.5	1.7	8.8	5.5	3.2	1.5	100
20	SSA5M20W	5	.188	2	11	3/4 x 17 x 3	94	16.4	11.2	7.6	5.0	15.2	10.3	7.0	4.7	150
25	SSA5M25W	5	.188	2	11	3/4 x 17 x 3	115	10.2	6.0	3.2	1.1	9.5	5.6	3.0	1.0	100
25	SSA6M25W	6	.188	2	12 1/2	1 x 36 x 4	140	16.6	10.6	6.5	3.5	15.6	9.9	6.1	3.3	260
30	SSA6X30W	6	.250	2	12 1/2	1 x 36 x 4	215	14.8	9.0	5.0	2.1	14.0	8.5	4.7	2.0	260
30	SSA9X30W[1]	6 3/4	.250	2 3/4	14 1/2	1 x 36 x 4	237	21.1	13.5	8.2	4.5	20.0	12.8	7.8	4.3	260
35	SSA6X35W[1]	6	.250	2	12 1/2	1 x 36 x 4	249	9.4	4.3	--	--	9.0	4.1	--	--	100
35	SSA9X35W[1]	6 3/4	.250	2 3/4	14 1/2	1 x 36 x 4	274	14.1	7.6	3.1	--	13.5	7.2	2.9	--	150

NOTES: **1** Factory installed vibration dampeners
2 The above EPA capacities are based on loading from (1994) and pole drag coefficients from (2001) American Association of State Highway and Transportation Officials Specification
3 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)
4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
5	3	4
4	4	6

ACCESSORIES

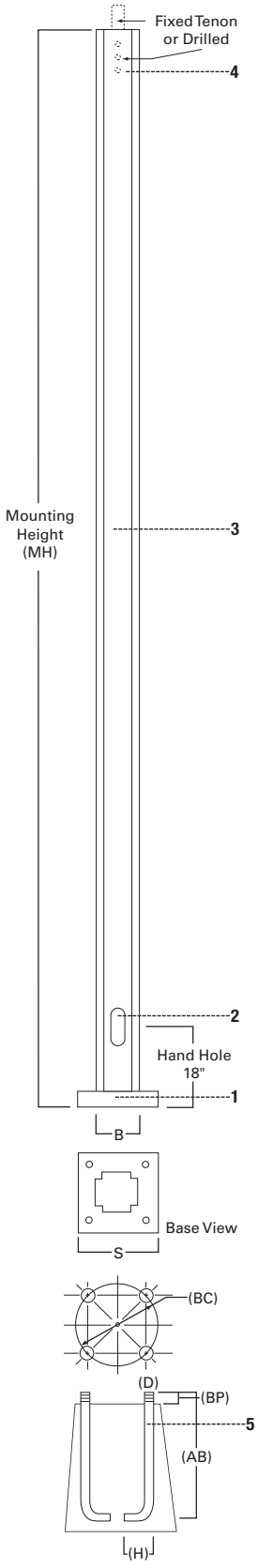
A=1/2" Tapped Hub[1]
B=3/4" Tapped Hub[1]
C=Convenience Outlet[2,3]
E=GFI Convenience Outlet[2]
G=Grounding Lug (max. wire #8 AWG)
H=Additional Hand Hole and Cover
12" below pole top 90° from hand hole.
V=Vibration Damper

NOTES: **1** Location is 3' above base–90° from hand hole Specify if desired otherwise
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise
3 Receptacle not included, provision only

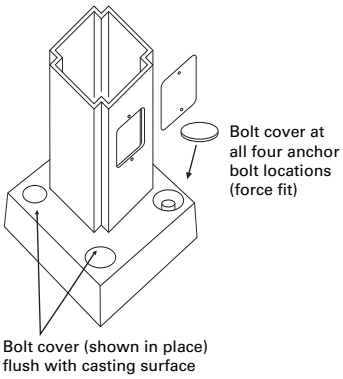
NOTE: Specifications and dimensions subject to change without notice

CFA CRUCIFORM ALUMINUM

8' 30' MOUNTING HEIGHT

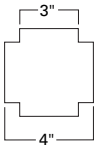


ACCESSORIES [Base with hand hole and door]

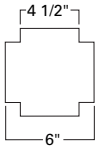


POLE DIMENSIONS [Base with hand hole and door]

4" DIAMETER



6" DIAMETER



SPECIFICATION FEATURES

1···356-T6 cast aluminum alloy shoe base with aluminum alloy knock-in bolt covers.

2···1 1/4" x 4" flush hand hole assembly (4" shaft). 2 1/2" x 4" flush hand hole assembly (6" shaft). Ground lug located opposite hand hole opening drilled & tapped for 3/8" 16NC-2 grounding screw.

3···Cruciform shaft 6005-T6 aluminum alloy polished finish.

4···Drilled or Tenon (specify).

5···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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

A=Satin Brushed Aluminum
B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: CFA4T08WXM1XG

Cruciform	Aluminum	Shaft Dia. (at base)	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Ground Lug)
CF	A	4	T	08	W	X	M	1	X	G

Mtg. Height (Ft.)	Catalog Number[2]	Wall Thickness (Ga.)	Shaft Size (In.)	Bolt Proj. (In.)	Bolt Circle Dia. (In.)	Anchor Bolt Dia. & Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[1,3] At Pole Top				EPA (Sq. Ft.)[1,3] 18" Above Pole Top				Max. Fixture Load Include Bracket (Lbs.)
MH			**B**	**BP**	**BC**	**D x AB x H**		**70**	**80**	**90**	**100**	**70**	**80**	**90**	**100**	
8	CFA4M08W	.188	4	1 3/4	9	3/4 x 17 x 3	32	34.0	30.2	23.5	18.6	33.6	25.3	19.6	15.5	350
10	CFA4M10W	.188	4	1 3/4	9	3/4 x 17 x 3	39	31.5	23.5	18.0	14.1	27.2	20.3	15.6	12.2	260
12	CFA4M12W	.188	4	1 3/4	9	3/4 x 17 x 3	45	25.1	18.4	13.9	10.7	22.1	16.3	12.3	9.4	260
15	CFA4M15W	.188	4	1 3/4	9	3/4 x 17 x 3	55	14.8	10.6	7.7	5.6	13.4	9.6	6.9	5.1	200
18	CFA4M18W	.188	4	1 3/4	9	3/4 x 17 x 3	66	10.7	7.2	4.9	3.2	9.8	6.6	4.4	2.9	200
18	CFA6M18W	.188	6	2	12 1/2	1 x 36 x 4	104	30.3	21.7	15.9	11.7	27.8	20.0	14.6	10.7	260
20	CFA4M20W	.188	4	1 3/4	9	3/4 x 17 x 3	72	9.0	5.8	3.6	2.0	8.3	5.3	3.3	1.9	100
20	CFA6M20W	.188	6	2	12 1/2	1 x 36 x 4	115	26.1	18.3	13.0	9.2	24.2	17.0	12.1	8.5	150
25	CFA6M25W	.188	6	2	12 1/2	1 x 36 x 4	140	17.1	11.0	6.8	3.7	16.1	10.3	6.3	3.5	150
30	CFA6M30W	.188	6	2	12 1/2	1 x 36 x 4	215	9.0	4.5	1.4	--	8.5	4.3	1.3	--	260

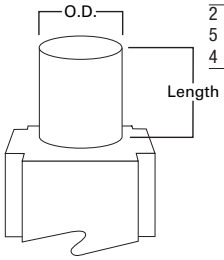
NOTES: **1** The above is our standard offering Where higher EPA/wind speed capability or mounting height is required, other shaft dimensions and/or wall thickness are available Consult Cooper Lighting representative for pricing an lead times The above EPA capacities are based on loading from (1994) and pole drag coefficients from (2001) American Association of State Highway and Transportation Officials Specification

2 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)

3 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
5	3	4
4	4	6

ACCESSORIES

A=1/2" Tapped Hub[1]
B=3/4" Tapped Hub[1]
C=Convenience Outlet[2,3]
E=GFI Convenience Outlet[2]
G=Grounding Lug (max. wire #8 AWG)
H=Additional Hand Hole and Cover
12" below pole top 90° from hand hole.
V=Vibration Damper

NOTES: **1** Location is 3' above base–90° from hand hole Specify if desired otherwise

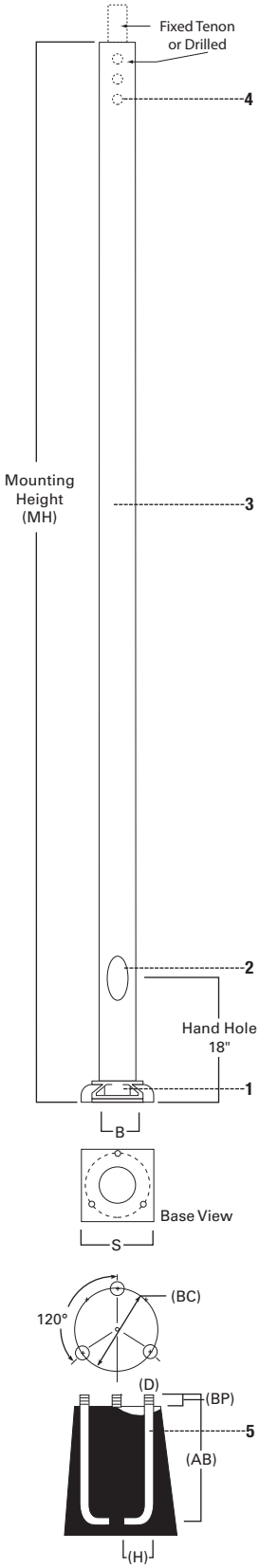
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise

3 Receptacle not included, provision only

NOTE: Specifications and dimensions subject to change without notice

RSA ROUND STRAIGHT ALUMINUM

8' 20' MOUNTING HEIGHT



SPECIFICATION FEATURES

1···356-T6 cast aluminum alloy shoe base with aluminum alloy bolt covers or base cover dependent upon base type.

2···Flush hand hole assembly 2 3/8" x 4 1/2" for 4" and 3" x 5" for 5" shafts with ground lug located opposite opening drilled & tapped. Ground lug located opposite hand hole opening drilled & tapped for 3/8" 16NC-2 grounding screw.

3···Straight round shaft 6063-T6 aluminum alloy polished finish.

4···Drilled or Tenon (specify).

5···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.

THREE BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

A=Satin Brushed Aluminum
B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: RSA4T08NA

Round	Straight	Aluminum	Shaft Dia. (at base)	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Vibration Damper)
R	**S**	**A**	**4**	**T**	**08**	**N**	**A**	**X**	**X**	**X**	**V**

Mtg. Height (Ft.)	Catalog Number[3]	Wall Thickness (Ga.)	Shaft Dia. (In.)	Bolt Proj. (In.)	Bolt Circle Dia. (In.)	Anchor Bolt Dia. & Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[2,4] At Pole Top				EPA (Sq. Ft.)[2,4] 18" Above Pole Top				Max. Fixture Load Include Bracket (Lbs.)
MH			**B**	**BP**	**BC**	**D x AB x H**		**70**	**80**	**90**	**100**	**70**	**80**	**90**	**100**	
8	RSA4T08N	.125	4	1 7/8	6 3/4	3/4 x 17 x 3	20	16.0	11.9	9.1	7.2	13.6	10.1	7.7	6.1	100
10	RSA4T10N	.125	4	1 7/8	6 3/4	3/4 x 17 x 3	24	12.2	8.9	6.6	5.1	10.6	7.7	5.8	4.5	100
12	RSA4T12N	.125	4	1 7/8	6 3/4	3/4 x 17 x 3	27	9.4	6.7	4.8	3.6	8.3	5.9	4.3	3.2	100
12	RSA5T12N	.125	5	1 7/8	7 3/4	3/4 x 17 x 3	33	16.1	11.8	9.1	7.3	14.3	10.5	8.1	6.5	100
15	RSA4T15N	.125	4	1 7/8	6 3/4	3/4 x 17 x 3	33	6.4	4.2	2.8	1.8	5.6	3.7	2.4	1.6	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	10.2	7.2	5.5	4.3	100
18	RSA4M18N[1]	.188	4	1 7/8	6 3/4	3/4 x 17 x 3	54	7.2	4.8	3.1	2.1	6.5	4.3	2.8	1.9	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	11.7	8.3	6.3	5.0	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	9.4	6.5	4.9	3.7	150

NOTES: 1 Factory installed vibration dampeners

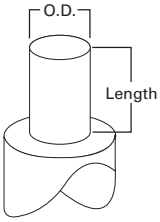
2 The above is our standard offering Where higher EPA/wind speed capability or mounting height is required, other shaft dimensions and/or wall thickness are available Consult Cooper Lighting Representative for pricing and lead times The above EPA capacities ar based on loading from (1994) and pole drag coefficients from (2001) American Association of State Highway and Transportation Officials Specification

3 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)

4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
1	2 3/8	3 1/2
2	2 3/8	4
5	3	4
4	4	6

ACCESSORIES [Order separately]

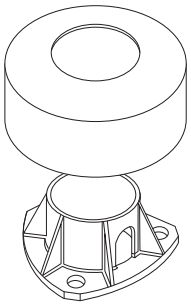
C=Convenience Outlet[1,2]
E=GFI Convenience Outlet[1]
F=Vibration Pad
G=Ground Lug
V=Vibration Damper

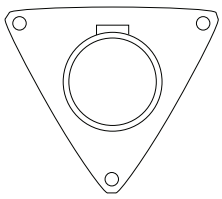
NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise

2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise

STANDARD BASE [Round aluminum pole only]

[Standard with base cover]
4", 5", or 6"



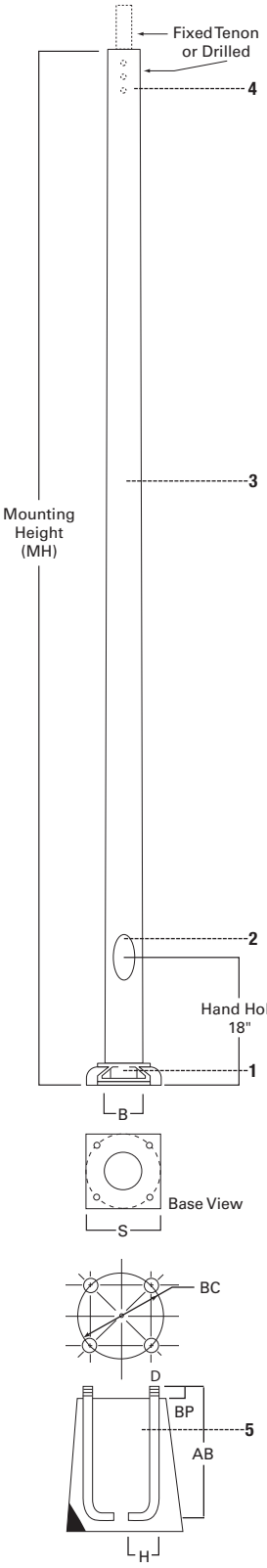


NOTE: Bolt location relative to hand hole
Refer to page 178 for drilling information

NOTE: Specifications and dimensions subject to change without notice

RTA ROUND TAPERED ALUMINUM

10' 45' MOUNTING HEIGHT



SPECIFICATION FEATURES

1···Cast aluminum alloy shoe base with aluminum alloy bolt covers or base cover dependent upon base type.

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

3···Tapered aluminum lighting shaft with polished finish.

4···Drilled or Tenon (specify).

5···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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

A=Satin Brushed Aluminum
B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat
L=Dark Platinum
T=Graphite Metallic

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: RTA5M20NA

Round	Tapered	Aluminum	Shaft Dia. (at base)	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Vibration Damper)
R	T	A	5	M	20	N	A	X	X	X	V

Mtg. Height (Ft.)	Catalog Number[3]	Wall Thickness (In.)	Base Dia. or Square (In.)	Shaft Taper (In.)	Bolt Proj. (In.)	Bolt Circle Dia. (In.)	Anchor Bolt Dia. & Length (In.)	Net. Wt. (Lbs.)	EPA (Sq. Ft.)[2,4] At Pole Top				EPA (Sq. Ft.)[2,4] 18" Above Pole Top				Max. Fixture Load Include Bracket (Lbs.)
MH			**S**	**B**	**BP**	**BC**	**D x AB x H**		**70**	**80**	**90**	**100**	**70**	**80**	**90**	**100**	
10	RTA4T10N	.125	9 1/4	4 x 3	1 7/8	6 3/4	3/4 x 17 x 3	22	13.0	9.5	7.2	5.6	11.2	8.3	6.3	4.8	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	8.9	6.4	4.7	3.5	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	6.2	4.3	2.9	2.0	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	11.2	8.1	6.0	4.5	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	7.9	5.4	3.9	2.8	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	16.3	12.0	9.2	7.2	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	6.4	4.2	2.8	1.9	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	13.4	9.6	7.2	5.6	150
25	RTA6L25A[1]	.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	8.1	5.4	3.8	2.8	150
25	RTA8L25A	.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	18.8	13.8	10.6	8.3	200
30	RTA7L30A[1]	.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	8.1	5.3	3.7	2.6	150
30	RTA8L30A[1]	.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	12.7	9.0	6.7	5.2	200
30	RTA0L30A[1]	.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	24.2	18.1	13.9	10.8	250
35	RTA8L35A[1]	.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	8.5	5.7	4.0	2.9	150
35	RTA0L35A[1]	.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	18.0	13.2	10.0	7.5	200
40	RTA8M40A[1]	.188	11 5/8	8 x 4 1/2	2 3/4	11 1/2	1 x 36 x 4	210	8.2	5.3	3.7	2.6	7.8	5.1	3.5	2.4	100
40	RTA0L40A[1]	.156	14 1/2	10 x 6	2 7/8	14 1/2	1 x 36 x 4	209	14.2	10.2	7.4	5.3	13.3	9.6	6.9	5.0	150
45	RTA0L45A[1]	.156	14 1/2	10 x 6	2 7/8	14 1/2	1 x 36 x 4	247	10.0	6.9	4.6	3.0	9.5	6.6	4.4	2.8	100
45	RTA0X45A[1]	.250	14 1/2	10 x 6	3 1/8	14 1/2	1 1/4 x 42 x 6	350	20.3	14.8	10.9	8.0	19.4	14.2	10.4	7.7	200

NOTES: 1 Factory installed vibration dampeners

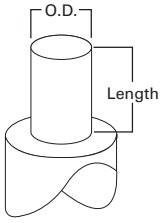
2 Where higher EPA/wind speed capability or mounting height is required, other shaft dimensions and/or wall thickness are available Consult Cooper Lighting representative for pricing and lead times The above EPA capacities are based on loading from (1994) and pole drag coefficients from (2001) American Association of State Highway and Transportation Officials Specification

3 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)

4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

MOUNTING OPTIONS [Add as suffix]

Fixed Tenon



Designation Number	O.D. (In.)	Length (In.)
2	2 3/8	4
5	3	4
4	4	6

ACCESSORIES [Order separately]

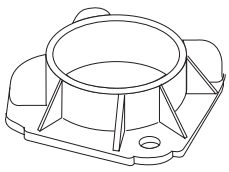
C=Convenience Outlet[1,2]
E=GFI Convenience Outlet[1]
F=Vibration Pad
G=Ground Lug
V=Vibration Damper
D=Base Cover ("A" base only)

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise

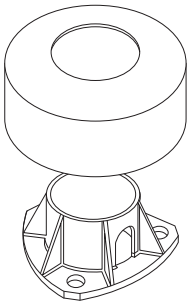
2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise

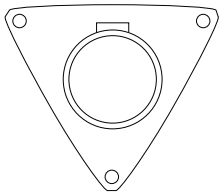
STANDARD BASE [Round aluminum pole only]

TYPE A
6", 7", 8" or 10"



TYPE N [Standard with base cover]
4", 5", or 6"



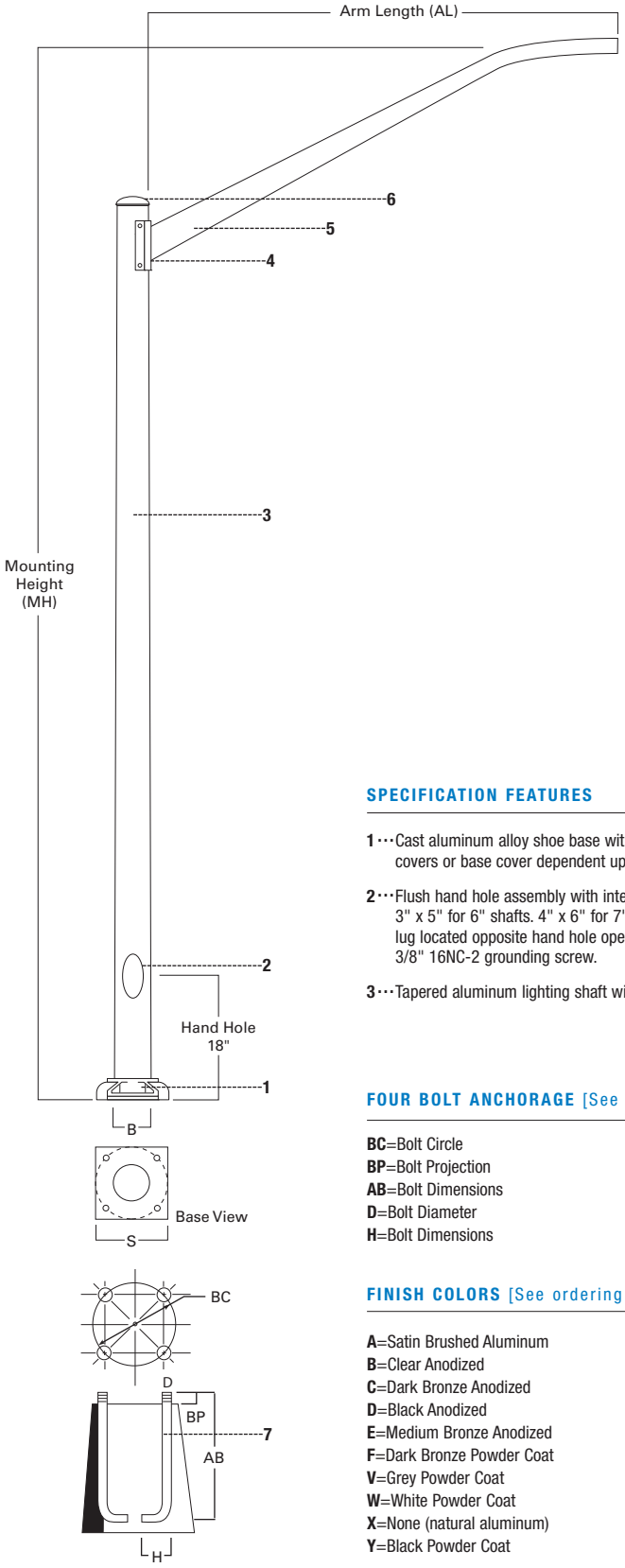


NOTE: Bolt location relative to hand hole Refer to page 178 for drilling information

NOTE: Specifications and dimensions subject to change without notice

RTA ROUND TAPERED ALUMINUM

20' 40' MOUNTING HEIGHT [WITH ROUND SINGLE ELLIPTICAL ARM]



SPECIFICATION FEATURES

1···Cast aluminum alloy shoe base with aluminum alloy bolt covers or base cover dependent upon base type.

2···Flush hand hole assembly with internal reinforcing frame. 3" x 5" for 6" shafts. 4" x 6" for 7", 8", & 10" shafts. Ground lug located opposite hand hole opening drilled & tapped for 3/8" 16NC-2 grounding screw.

3···Tapered aluminum lighting shaft with satin polish finish.

4···Aluminum alloy arm mounting plate fastened by (4) 1/2" stainless steel hex head bolts, nuts and washers. Shaft drilled 1 1/4" diameter wire hole with 1" I.D. rubber grommet installed.

5···Tapered elliptical bracket aluminum alloy polished finish.

6···Removable aluminum alloy pole cap secured with (3) 1/4" stainless steel allen head cup point set screws.

7···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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

A=Satin Brushed Aluminum
B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: RTA6L20AAS14V

Round	Tapered	Aluminum	Shaft Dia. (at base)	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Vibration Damper)
R	T	A	6	L	20	A	A	S	1	4	V

Mtg. Height (Ft.)	Arm Length (Ft.)	Catalog Number[3]	Shaft Dia. (In.)	Top Dia. (In.)	Wall Thickness (Ga.)	Bolt Circle Dia. (In.)	Anchor Bolt Dia. & Length (In.)	Bolt Projection (In.)	Net. Wt. (Lbs.)	Luminaire EPA Rating[2,4] (Sq. Ft.)				Max. Fixture Load Includes Bracket (Lbs.)
MH	**AL**					**BC**	**D x AB x H**	**BP**		**70**	**80**	**90**	**100**	
20	4	RTA6L20AAS14	6	4	.156	9 3/8	3/4 x 17 x 3	2 1/8	94	8.9	6.7	5.2	4.1	75
20	6	RTA6L20AAS16	6	4	.156	9 3/8	3/4 x 17 x 3	2 1/8	98	6.3	4.7	3.5	2.7	75
20	8	RTA6L20AAS18	6	4	.156	9 3/8	3/4 x 17 x 3	2 1/8	100	4.5	3.2	2.3	1.7	75
25	4	RTA6L25AAS14	6	4	.156	9 3/8	3/4 x 17 x 3	2 1/8	117	7.8	4.9	3.1	2.0	75
25	4	RTA7L25AAS14	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	146	8.9	6.7	5.2	4.1	75
25	6	RTA6L25AAS16	6	4	.156	9 3/8	3/4 x 17 x 3	2 1/8	120	7.0	4.3	2.6	1.5	75
25	6	RTA7L25AAS16	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	152	6.3	4.7	3.5	2.7	75
25	8	RTA7L25AAS18	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	154	4.5	3.2	2.3	1.7	75
30	4	RTA7L30AAS14[1]	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	169	8.0	5.0	3.1	2.0	75
30	4	RTA8L30AAS14	8	4	.156	11 1/2	1 x 36 x 4	2 3/4	177	8.9	6.7	5.2	4.1	75
30	6	RTA7L30AAS16[1]	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	175	6.3	4.5	2.7	1.5	75
30	6	RTA8L30AAS16	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	182	6.3	4.7	3.5	2.7	75
30	8	RTA8L30AAS18	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	184	4.5	3.2	2.3	1.7	75
35	4	RTA8L35AAS14[1]	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	199	8.1	5.1	3.3	2.1	75
35	4	RTA8M35AAS14	8	4 1/2	.188	11 1/2	1 x 36 x 4	2 3/4	231	8.9	6.7	5.2	3.6	75
35	6	RTA8L35AAS16[1]	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	203	6.3	4.6	2.8	1.6	75
35	6	RTA8M35AAS16	8	4 1/2	.188	11 1/2	1 x 36 x 4	2 3/4	235	6.3	4.7	3.5	2.7	75
35	8	RTA8M35AAS18	8	4 1/2	.188	11 1/2	1 x 36 x 4	2 3/4	237	4.5	3.2	2.3	1.7	75
40	4	RTA0L40AAS14	10	6	.156	14 1/2	1 x 36 x 4	2 7/8	273	8.9	6.7	5.2	4.1	75
40	6	RTA0L40AAS16	10	6	.156	14 1/2	1 x 36 x 4	2 7/8	282	6.3	4.7	3.5	2.7	75
40	8	RTA0L40AAS18	10	6	.156	14 1/2	1 x 36 x 4	2 7/8	284	4.5	3.2	2.3	1.7	75

NOTES: 1 Factory installed vibration dampeners

2 The above is our standard offering 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 EPA capacities are based on loading from (1994) and pole drag coefficients from (2001) American Association of State Highway and Transportation Officials Specification

3 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)

4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

ACCESSORIES [Order separately]

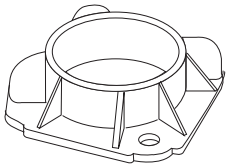
C=Convenience Outlet[1,2]
E=GFI Convenience Outlet[1]
F=Vibration Pad
G=Ground Lug
V=Vibration Damper
D=Base Cover

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise

2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise

STANDARD BASE [Round aluminum pole only]

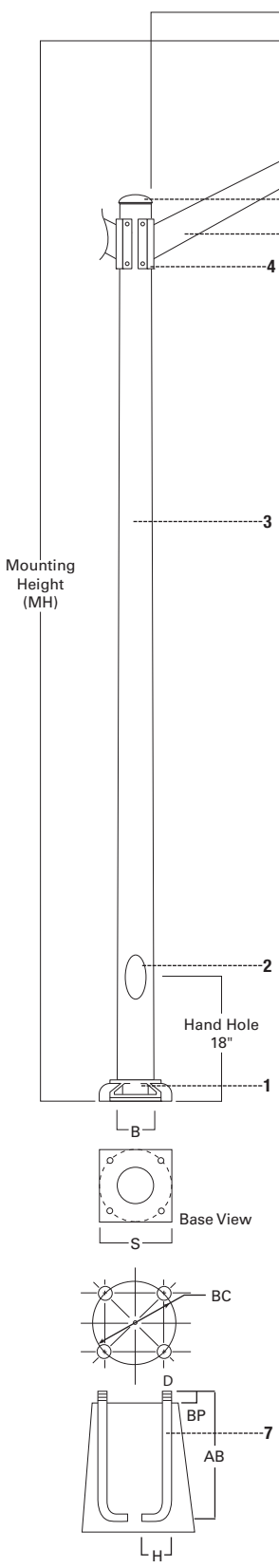
TYPE A
6", 7", 8" or 10"



NOTE: Specifications and dimensions subject to change without notice

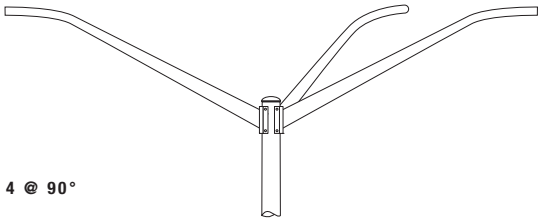
RTA ROUND TAPERED ALUMINUM

20' 40' MOUNTING HEIGHT [WITH ROUND TWIN ELLIPTICAL ARMS]

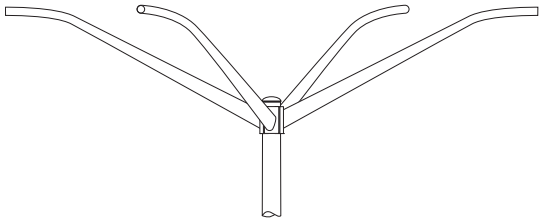


ARMS [Configurations available on request Consult factory]

3 @ 120°



4 @ 90°



SPECIFICATION FEATURES

1···Cast aluminum alloy shoe base with aluminum alloy bolt covers or base cover dependent upon base type.

2···Flush hand hole assembly with internal reinforcing frame. 3" x 5" for 6" shafts. 4" x 6" for 7", 8", & 10" shafts. Ground lug located opposite hand hole opening drilled & tapped for 3/8" 16NC-2 grounding screw.

3···Tapered aluminum lighting shaft with polished finish.

4···Aluminum alloy arm mounting plate fastened by (4) 1/2" stainless steel hex head bolts, nuts and washers. Shaft drilled 1 1/4" diameter wire hole with 1" I.D. rubber grommet installed.

5···Tapered elliptical bracket aluminum alloy satin etch finish.

6···Removable aluminum alloy pole cap secured with (3) 1/4" stainless steel allen head cup point set screws.

7···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.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

A=Satin Brushed Aluminum
B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat

WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS, CAMERAS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED VOIDS THE COOPER LIGHTING POLE WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE UPON REQUEST, COOPER LIGHTING WILL SUPPLY INFORMATION REGARDING TOTAL LOADING CAPACITY COOPER LIGHTING'S POLE WARRANTY IS VOID UNLESS POLES ARE USED AND INSTALLED AS A COMPLETE POLE/LUMINAIRE COMBINATION 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

ORDERING INFORMATION

SAMPLE NUMBER: RTA6L20AAS24V

Round	Tapered	Aluminum	Shaft Dia. (at base)	Wall Thickness	Mounting Height (Ft.)	Base Type	Finish	Fixture Mounting & Type	No. & Location of Arms	Arm Lengths	Accessories (Vibration Damper)
R	T	A	6	L	20	A	A	S	2	4	V

Mtg. Height (Ft.)	Arm Length (Ft.)	Catalog Number[3]	Shaft Dia. (In.)	Top Dia. (In.)	Wall Thickness (Ga.)	Bolt Circle Dia. (In.)	Anchor Bolt Dia. & Length (In.)	Bolt Projection (In.)	Net. Wt. (Lbs.)	Luminaire EPA Rating[2,4] (Sq. Ft.)				Max. Fixture Load Include Bracket (Lbs.)
MH	**AL**					**BC**	**D x AB x H**	**BP**		**70**	**80**	**90**	**100**	
20	4	RTA6L20AAS24	6	4	.156	9 3/8	3/4 x 17 x 3	2 1/8	97	5.9	3.9	2.6	1.7	150
20	4	RTA7L20AAS24	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	138	8.9	6.6	4.7	3.5	150
20	6	RTA6L20AAS26	6	4	.156	9 3/8	3/4 x 17 x 3	2 1/8	109	5.4	3.5	2.2	1.3	150
20	6	RTA7L20AAS26	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	150	6.3	4.7	3.5	2.7	150
20	8	RTA7L20AAS28	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	154	4.5	3.2	2.3	1.7	150
25	4	RTA7L25AAS24	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	158	5.7	3.7	2.4	1.5	150
25	4	RTA8L25AAS24	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	171	8.7	6.1	4.3	3.1	150
25	6	RTA7L25AAS26	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	170	5.3	3.2	1.9	1.1	150
25	6	RTA8L25AAS26	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	184	6.3	4.7	3.5	2.6	150
25	8	RTA8L25AAS28	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	188	4.5	3.2	2.3	1.7	150
30	4	RTA7L30AAS24[1]	7	4	.156	10 1/2	1 x 36 x 4	2 3/4	187	3.2	1.6	--	--	150
30	4	RTA8M30AAS24	8	4 1/2	.188	11 1/2	1 x 36 x 4	2 3/4	215	7.5	5.0	3.5	2.4	150
30	6	RTA8L30AAS26	8	4 1/2	.156	11 1/2	1 x 36 x 4	2 3/4	194	5.1	3.1	1.8	1.0	150
30	6	RTA8M30AAS26	8	4 1/2	.188	11 1/2	1 x 36 x 4	2 3/4	227	6.3	4.6	3.0	1.9	150
30	8	RTA8M30AAS28	8	4 1/2	.188	11 1/2	1 x 36 x 4	2 3/4	231	4.5	3.2	2.2	1.1	150
30	8	RTA0L30AAS28	10	6	.156	14 1/2	1 x 36 x 4	2 7/8	235	4.5	3.2	2.3	1.7	150
35	4	RTA0L35AAS24	10	6	.156	14 1/2	1 x 36 x 4	2 7/8	247	8.2	5.6	3.9	2.6	150
35	6	RTA0L35AAS26	10	6	.156	14 1/2	1 x 36 x 4	2 7/8	259	6.3	4.7	3.4	2.1	150
35	8	RTA0L35AAS28	10	6	.156	14 1/2	1 x 36 x 4	2 7/8	263	4.5	3.2	2.3	1.3	150
35	8	RTA0M35AAS28	10	6	.188	14 1/2	1 x 36 x 4	2 7/8	306	4.5	3.2	2.3	1.7	150
40	4	RTA0M40AAS24	10	6	.188	14 1/2	1 x 36 x 4	2 7/8	322	7.8	5.3	3.5	2.2	150
40	6	RTA0M40AAS26	10	6	.188	14 1/2	1 x 36 x 4	2 7/8	336	6.3	4.7	3.1	1.8	150
40	8	RTA0X40AAS28	10	6	.250	14 1/2	1 1/4 x 42 x 6	3 1/8	420	4.5	3.2	2.3	1.7	150

NOTES: 1 Factory installed vibration dampeners

2 The above is our standard offering 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 EPA capacities are base on loading from (1994) and pole drag coefficients from (2001) American Association of State Highway and Transportation Officials Specification

3 Catalog number includes pole with hardware kit Anchor bolts not included (BEFORE INSTALLING MAKE SURE PROPER ANCHOR BOLTS AND TEMPLATE ARE OBTAINED FROM COOPER LIGHTING HEADQUARTERS)

4 EPAs based on shaft properties with wind normal to flat EPAs calculated using base wind velocity as indicated plus 30% gust factor

ACCESSORIES [Order separately]

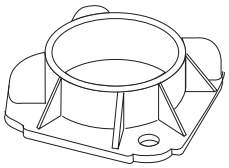
C=Convenience Outlet[1,2]
E=GFI Convenience Outlet[1]
F=Vibration Pad
G=Ground Lug
V=Vibration Damper
D=Base Cover

NOTES: 1 Location is 3' above base–90° from hand hole Specify if desired otherwise

2 Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise

STANDARD BASE [Round aluminum pole only]

TYPE A
6", 7", 8" or 10"



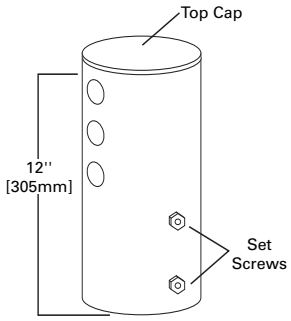
NOTE: Specifications and dimensions subject to change without notice

STEEL BRACKETS + ADAPTERS

TENONS + ADAPTERS

2" OR 3" DIRECT MOUNT TENON ADAPTER

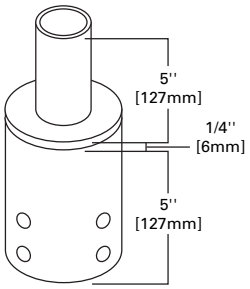
TYPE M DRILLING



Tenon Size (In.)	Fixture Configuration	Type M Drill Pattern Catalog Number	Type E Drill Pattern Catalog Number	Type C Drill Pattern Catalog Number	Type A Drill Pattern Catalog Number
2 3/8 O.D.	1 Fixture	MA1017	MA1101	VA1033	VA1019
2 3/8 O.D.	2 Fixtures at 180°	MA1018	MA1102	VA1034	VA1020
2 3/8 O.D.	3 Fixtures at 120°	MA1019	MA1103	VA1035	VA1021
2 3/8 O.D.	4 Fixtures at 90°	MA1045	MA1104	VA1036	VA1022
2 3/8 O.D.	2 Fixtures at 90°	MA1048	MA1105	VA1037	VA1023
2 3/8 O.D.	3 Fixtures at 90°	MA1049	MA1106	VA1038	VA1024
2 3/8 O.D.	2 Fixtures at 120°	MA1107	MA1116	VA1039	VA1025
3 O.D.	1 Fixture	MA1020			
3 O.D.	2 Fixtures at 180°	MA1034			
3 O.D.	4 Fixtures at 90°	MA1043			
3 1/2 O.D.	1 Fixture	MA1010	MA1108	VA1040	VA1026
3 1/2 O.D.	2 Fixtures at 180°	MA1011	MA1109	VA1041	VA1027
3 1/2 O.D.	3 Fixtures at 120°	MA1012	MA1110	VA1042	VA1028
3 1/2 O.D.	4 Fixtures at 90°	MA1013	MA1111	VA1043	VA1029
3 1/2 O.D.	2 Fixtures at 90°	MA1014	MA1112	VA1044	VA1030
3 1/2 O.D.	3 Fixtures at 90°	MA1016	MA1113	VA1045	VA1031
3 1/2 O.D.	2 Fixtures at 120°	MA1015	MA1114	VA1046	VA1032

NOTES: Fitters for other tenon sizes available Consult your Cooper Lighting Representative Tenon adapter for through bolt mounted luminaires

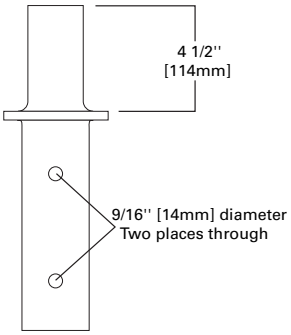
TENON REDUCER



Catalog Number[1]	Size (In.)
TR30-2	3 O.D. to 2 3/8 O.D.
TR35-2	3 1/2 O.D. to 2 3/8 O.D.
TR35-3	3 1/2 O.D. to 3 O.D.
TR40-2	4 O.D. to 2 3/8 O.D.
TR40-3	4 O.D. to 3 O.D.
TR40-3.5	4 O.D. to 3 1/2 O.D.

NOTES: 1 Standard adapter is bronze painted steel Mounting hardware included

REMOVABLE TENON FOR SQUARE STEEL POLE



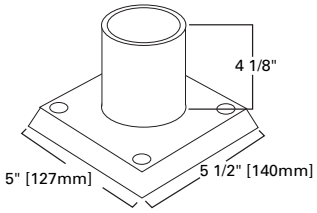
Catalog Number	Pole Size	Tenon Size (In.)
TASQ-4-2	4	2 3/8 O.D.
TASQ-4-3	4	3 O.D.
TASQ-5-2	5	2 3/8 O.D.
TASQ-5-3	5	3 O.D.
TASQ-6-2	6	2 3/8 O.D.
TASQ-6-3	6	3 O.D.
TASQ-4-3.5	4	3 1/2 O.D.
TASQ-5-3.5	5	3 1/2 O.D.
TASQ-6-3.5	6	3 1/2 O.D.

NOTES: Includes thru bolts Fits internally Standard bronze painted

STEEL BRACKETS + ADAPTERS

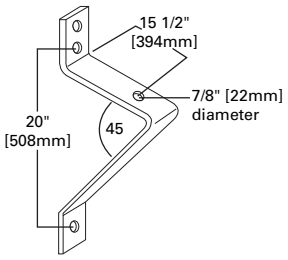
SURFACE MOUNT BRACKETS

PARAPET BRACKET



Catalog Number	Tenon Size (In.)	Fixture Configuration
FA63	3 O.D.	Single Parapet Mount

STEEL ANGLE BRACKET

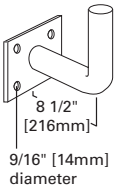


Catalog Number
SAB

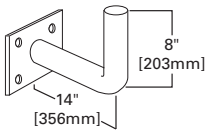
NOTES: Standard finish is hot dip galvanize Mounting hardware not included

RIGHT ANGLE BRACKET

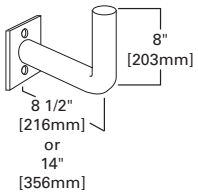
RAB



RABV



RABX / RABX14



Catalog Number [1]	Tenon Size (In.)	Bracket Length (In.)
RAB	2 3/8 O.D.	8
RABV	2 3/8 O.D.	14
RABX [2]	2 3/8 O.D.	8
RABX14 [2]	2 3/8 O.D.	14

NOTES: 1 Standard finish is primed Add suffix "G" for hot dip galvanize Mounting hardware not included **2** Steel pole mounting

STEEL BRACKETS + ADAPTERS

STEEL POLE TOP BRACKETS

SERIES 101 STEEL POLE MOUNTING BRACKETS

Series 101 steel brackets are designed for floodlights with 2" slipfitters. Unthreaded pole fitter of brackets slips 3 1/2" O.D. pole top tenons. Top fitter is unthreaded and capped. All brackets are finished with bronze paint. Galvanized brackets are available. Consult your Cooper Lighting Representative for ordering information.

Catalog[1] Number	No. of[2] Stubs	Figure	Bracket EPA (Sq. Ft.)	Bracket Weight (Lbs.)	Maximum Floodlight EPA (Sq. Ft.) per Stub 75 mph	100 mph
101-A13[3]	1	--	--	8	--	--
101-A23[4]	2	Fig. 1	.60	20	9.0	4.5
101-J33[4]	3	Fig. 2	.80	28	6.0	3.0
101-Y33[4]	3	Fig. 3	.59	32	6.0	3.0
101-W43	4	Fig. 4	.53	36	9.0	4.5
101-J43	4	Fig. 5	1.11	47	9.0	4.5

NOTES: 1 Brackets are designed for floodlights with 2" slipfitters

2 Consult your Cooper Lighting Representative regarding availability of brackets designed for more than 4 luminaires Maximum floodlight weight allowed per stub is 100 lbs

3 May be used to connect 3 1/2" O D tenon to a 2 3/8" O D tenon

4 To slip 2 3/8" O D pole top tenon, change last digit from "3" to "2"

FIGURES

Fig. 1

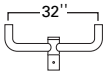


Fig. 2

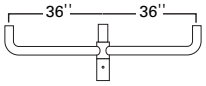
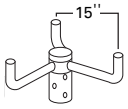


Fig. 3



120° Arm Separation

Fig. 4

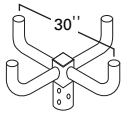
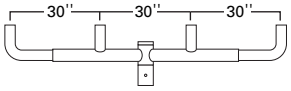


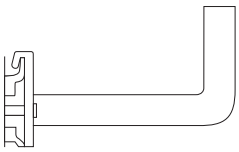
Fig. 5



SERIES 109 STEEL POLE MOUNTING BRACKETS

These steel pole brackets are used for mounting with 2" slipfitters on round or square steel poles. Poles must be specified with a simplex fitting and hardware which allows the bracket to be bolted direct to the fitting on the steel pole at the job site.

Location of the bracket with respect to the base of the pole and the hand hole must be specified on the order for the pole. All brackets are finished with bronze paint.



Catalog Number	Arm Length (In.)	Maximum Fixture Weight (Lbs.)	Bracket EPA (Sq. Ft.)	Net. Weight (Lbs.)
109W14	16	75	.40	10
109W22	22	65	.53	12

NOTES: Must be ordered with pole

STEEL BRACKETS + ADAPTERS

STEEL SPOKE AND UPSWEEP BRACKETS

SPOKE BRACKETS

Catalog Number	Figure	Number of Tenons	Arm Length "A" (In.)	Max. Wt. (Lbs.)
SB-100-08-2	1	1	8"	6
SB-100-12-2	1	1	12"	7
SB-100-15-2	1	1	15"	8
SB-100-24-2	1	1	24"	11
SB-100-30-2	1	1	30"	13
SB-100-36-2	1	1	36"	15
SB-290-08-2	2	2 @ 90°	8"	9
SB-290-12-2	2	2 @ 90°	12"	11
SB-290-15-2	2	2 @ 90°	15"	13
SB-290-24-2	2	2 @ 90°	24"	18
SB-290-30-2	2	2 @ 90°	30"	22
SB-290-36-2	2	2 @ 90°	36"	26
SB-218-08-2	3	2 @ 180°	8"	9
SB-218-12-2	3	2 @ 180°	12"	11
SB-218-15-2	3	2 @ 180°	15"	13
SB-218-24-2	3	2 @ 180°	24"	18
SB-218-30-2	3	2 @ 180°	30"	22
SB-218-36-2	3	2 @ 180°	36"	26
SB-390-08-2	4	3 @ 90°	8"	11
SB-390-12-2	4	3 @ 90°	12"	15
SB-390-15-2	4	3 @ 90°	15"	17
SB-390-24-2	4	3 @ 90°	24"	25
SB-390-30-2	4	3 @ 90°	30"	30
SB-390-36-2	4	3 @ 90°	36"	36
SB-312-08-2	5	3 @ 120°	8"	11
SB-312-12-2	5	3 @ 120°	12"	15
SB-312-15-2	5	3 @ 120°	15"	17
SB-312-24-2	5	3 @ 120°	24"	25
SB-312-30-2	5	3 @ 120°	30"	30
SB-312-36-2	5	3 @ 120°	36"	36
SB-490-08-2	6	4 @ 90°	8"	13
SB-490-12-2	6	4 @ 90°	12"	17
SB-490-15-2	6	4 @ 90°	15"	21
SB-490-24-2	6	4 @ 90°	24"	32
SB-490-30-2	6	4 @ 90°	30"	39
SB-490-36-2	6	4 @ 90°	36"	47

NOTES: Shipped with removable cap and mounting hardware assembled Slipfitter fits 2 3/8" O D tenon For hot dipped galvanized, add "G" to end of catalog number Standard finish is bronze Other finish colors available Consult your Cooper Lighting Representative

Fig. 1

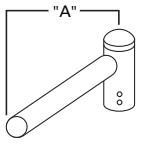


Fig. 2

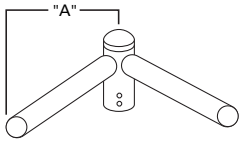


Fig. 3

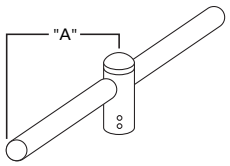


Fig. 4

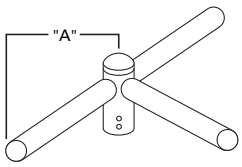


Fig. 5

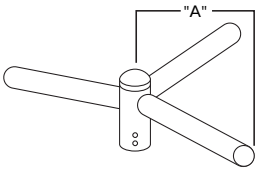
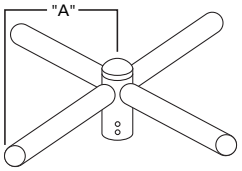


Fig. 6



UPSWEEP BRACKETS

Catalog Number	Figure	Number of Arms	Arm Length "A" (In.)	Pole Tenon Size (O.D.)	Max. Wt. (Lbs.)
UB1-4-2	7	1	48"	2 3/8"	21
UB1-6-2	7	1	72"	2 3/8"	28
UB1-8-2	7	1	96"	2 3/8"	41
UB2-4-2	8	2 @ 180°	48"	2 3/8"	38
UB2-6-2	8	2 @ 180°	72"	2 3/8"	52
UB2-8-2	8	2 @ 180°	96"	2 3/8"	69

NOTES: Shipped with removable cap and mounting hardware assembled For hot dipped galvanized, add "G" to end of catalog number Standard finish is bronze Other finish colors available Consult your Cooper Lighting Representative

Fig. 7

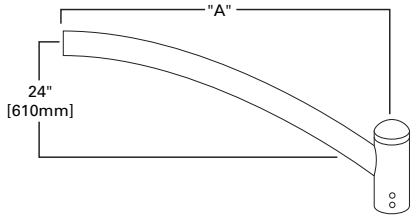
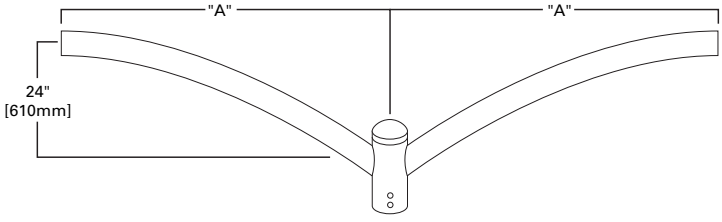


Fig. 8



STEEL BRACKETS + ADAPTERS

INTERNAL SQUARE STEEL SLIPFITTER BRACKETS [SQUARE STEEL POLES ONLY]

STEEL POLE TOP MOUNT BRACKETS [ISBD / ISBT]

ISBD/ISBT [ISBD Direct Mount and ISBT Tenon Mount] Internal square slipfitter brackets are designed for floodlights with tenons or area luminaires with arms. Brackets slips into a 4", 5", or 6" square pole top. Brackets provided with stainless steel hardware and readily adapts to Cooper Lighting poles utilizing the M4 drill pattern without any modification. 4" brackets supplied with removable end caps for access to wireway.

Fig. 1—ISBD-4-2L, ISBD-5-2L or ISBD-6-2L

2 Arm Mountings

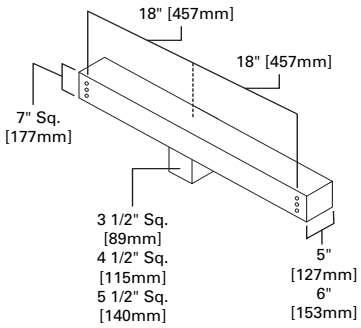


Fig. 2—ISBD-4-3L, ISBD-5-3L or ISBD-6-3L

3 Arm Mountings

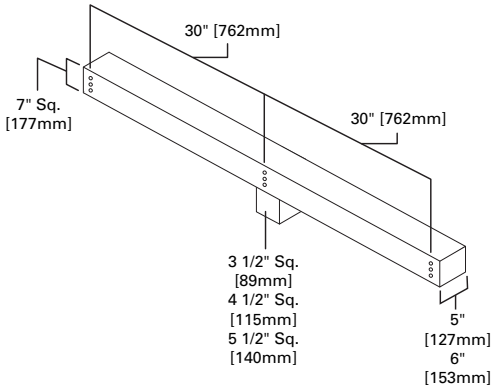


Fig. 3—ISBT-4-2L, ISBT-5-2L or ISBT-6-2L

2 Tenon Mountings

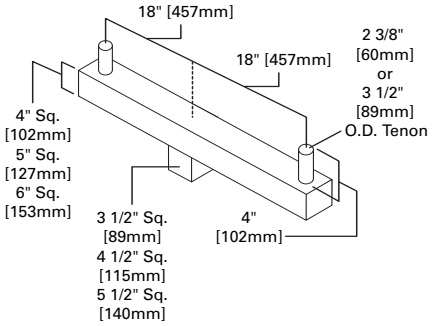


Fig. 4—ISBT-4-3L, ISBT-5-3L or ISBT-6-3L

3 Tenon Mountings

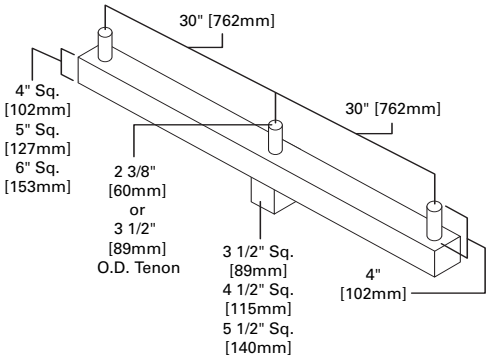


Fig. 5—ISBT-4-4Q, ISBT-5-4Q or ISBT-6-4Q

4 Tenon Mountings

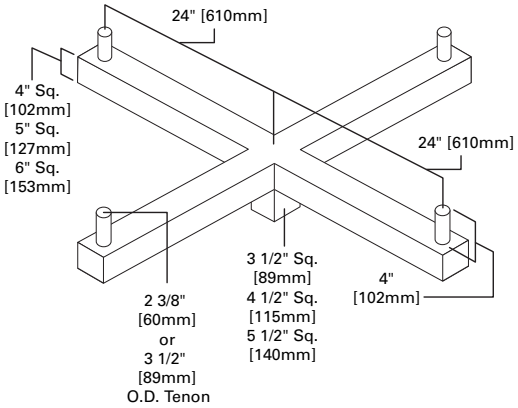
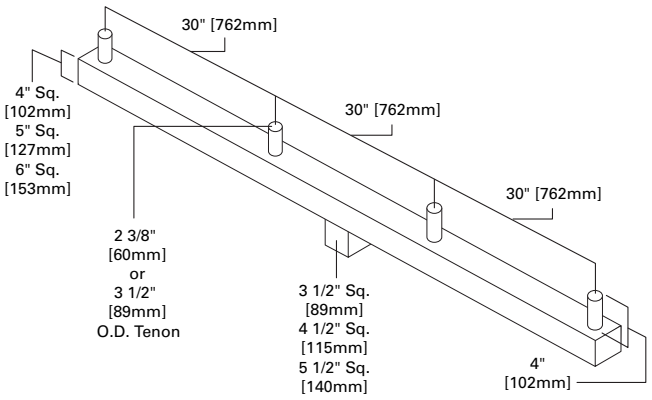


Fig. 6—ISBT-4-4L, ISBT-5-4L or ISBT-6-4L

4 Tenon Mountings



ORDERING INFORMATION

SAMPLE NUMBER: ISBT-4-2L-2-BZ

Product Family
ISBD=Internal Square Slipfitter/Direct Mount[1]
ISBT=Internal Square Slipfitter/Tenon Mount

Pole Dimension
4=4" Square Pole
5=5" Square Pole
6=6" Square Pole

Mounting Configuration
2L=2 In Line
3L=3 In Line
4L=4 In Line
4Q=4 @90°

Tenon Size/Drill Pattern
2=2 3/8" O.D. Tenon
3=3 1/2" O.D. Tenon
M=Type M Drilling

Color
BK=Black
AP=Grey
BZ=Bronze
WH=White
DP=Dark Platinum
GM=Graphite Metallic

NOTE: 1 Only available in 2L and 3L configurations

ORDERING INFORMATION [Internal square slipfitter brackets for steel square poles]

Catalog Number [1]	Figure	Pole Dimension	Mounting Configuration	Tenon Size/ Drill Pattern	EPA	Net Wt. (Lbs.)
TENON MOUNT						
ISBT-4-2L-2-XX	3	4"	2 In Line	2 3/8" O.D.	1.33	39
ISBT-5-2L-2-XX	3	5"	2 In Line	2 3/8" O.D.	1.67	48
ISBT-6-2L-2-XX	3	6"	2 In Line	2 3/8" O.D.	2.0	60
ISBT-4-3L-2-XX	4	4"	3 In Line	2 3/8" O.D.	2.13	60
ISBT-5-3L-2-XX	4	5"	3 In Line	2 3/8" O.D.	2.67	77
ISBT-6-3L-2-XX	4	6"	3 In Line	2 3/8" O.D.	3.2	93
ISBT-4-4L-2-XX	6	4"	4 In Line	2 3/8" O.D.	3.12	87
ISBT-5-4L-2-XX	6	5"	4 In Line	2 3/8" O.D.	3.92	110
ISBT-6-4L-2-XX	6	6"	4 In Line	2 3/8" O.D.	4.7	133
ISBT-4-4Q-2-XX	5	4"	4 @ 90°	2 3/8" O.D.	1.73	98
ISBT-5-4Q-2-XX	5	5"	4 @ 90°	2 3/8" O.D.	2.17	123
ISBT-6-4Q-2-XX	5	6"	4 @ 90°	2 3/8" O.D.	2.6	149
ISBT-4-2L-3-XX	3	4"	2 In Line	3 1/2" O.D.	1.33	39
ISBT-5-2L-3-XX	3	5"	2 In Line	3 1/2" O.D.	1.67	50
ISBT-6-2L-3-XX	3	6"	2 In Line	3 1/2" O.D.	2.0	60
ISBT-4-3L-3-XX	4	4"	3 In Line	3 1/2" O.D.	2.13	60
ISBT-5-3L-3-XX	4	5"	3 In Line	3 1/2" O.D.	2.67	77
ISBT-6-3L-3-XX	4	6"	3 In Line	3 1/2" O.D.	3.2	93
ISBT-4-4L-3-XX	6	4"	4 In Line	3 1/2" O.D.	3.13	87
ISBT-5-4L-3-XX	6	5"	4 In Line	3 1/2" O.D.	3.92	110
ISBT-6-4L-3-XX	6	6"	4 In Line	3 1/2" O.D.	4.7	133
ISBT-4-4Q-3-XX	5	4"	4 @ 90°	3 1/2" O.D.	1.73	98
ISBT-5-4Q-3-XX	5	5"	4 @ 90°	3 1/2" O.D.	2.17	123
ISBT-6-4Q-3-XX	5	6"	4 @ 90°	3 1/2" O.D.	2.6	149
DIRECT MOUNT				**Drill Pattern**		
ISBD-4-2L-M-XX	1	4"	2 In Line	M	1.98	50
ISBD-5-2L-M-XX	1	5"	2 In Line	M	1.98	52
ISBD-6-2L-M-XX	1	6"	2 In Line	M	1.98	70
ISBD-4-3L-M-XX	2	4"	3 In Line	M	3.72	87
ISBD-5-3L-M-XX	2	5"	3 In Line	M	3.72	89
ISBD-6-3L-M-XX	2	6"	3 In Line	M	3.72	95

ALUMINUM BRACKETS + ADAPTERS

ALUMINUM POLE TOP BRACKETS [ROUND POLES ONLY]

TENON BRACKETS

Fig. 1—T2B

2 Tenons in line with uprights
Capacity Per Tenon:
EPA 5.3; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.78

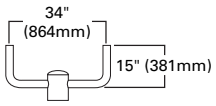


Fig. 2—T2A

2 Tenons at 180°, no uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.65

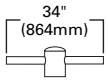


Fig. 3—T3A

3 Tenons in line with uprights
Capacity Per Tenon:
EPA 4.4; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 1.21

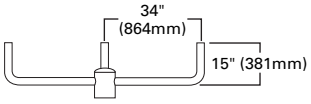


Fig. 4—T3B

3 Tenons at 120°, no uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.62

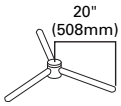


Fig. 5—T3C

3 Tenons at 120°, with uprights
Capacity Per Tenon:
EPA 4.8; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.88

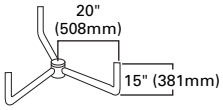


Fig. 6—T4C

4 Tenons at 90°, no uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.9

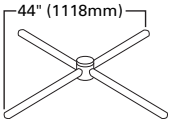


Fig. 7—T4D

4 Tenons at 90°, with uprights
Capacity Per Tenon:
EPA 4.8; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 1.00

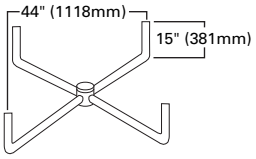
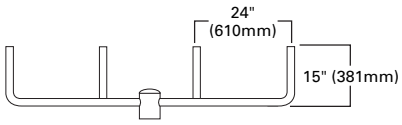


Fig. 8—T4A

4 Tenons in line with uprights
Capacity Per Tenon:
EPA 2.2; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 1.76



Catalog Number	Figure	No. of Stubs	For Pole Top (In.)	Net Wt. (Lbs.)
T2A-4	2	2	4	9
T2B-4	1	2	4	8
T3A-4	3	3	4	16
T3B-4	4	3	4	14
T3C-4	5	3	4	15
T4A-4	8	4	4	21
T4C-4	6	4	4	19
T4D-4	7	4	4	19
T2A-4.5	2	2	4 1/2	9
T2B-4.5	1	2	4 1/2	8
T3A-4.5	3	3	4 1/2	16
T3B-4.5	4	3	4 1/2	14
T3C-4.5	5	3	4 1/2	15
T4A-4.5	8	4	4 1/2	21
T4C-4.5	6	4	4 1/2	19
T4D-4.5	7	4	4 1/2	19
T2A-6	2	2	6	12
T2B-6	1	2	6	11
T3A-6	3	3	6	19
T3B-6	4	3	6	17
T3C-6	5	3	6	18
T4A-6	8	4	6	24
T4C-6	6	4	6	22
T4D-6	7	4	6	22

NOTE: Standard finish is Brushed Aluminum Other finish colors available Consult your Cooper Lighting Representative

ALUMINUM BRACKETS + ADAPTERS

ALUMINUM POLE TOP BRACKETS [SQUARE POLES ONLY]

TOP MOUNT SQUARE BRACKETS

Fig. 1—S1A

1 Tenon at 180°, no uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.3

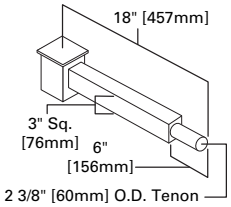


Fig. 2—S2A

2 Tenons at 180° in line with no uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.6

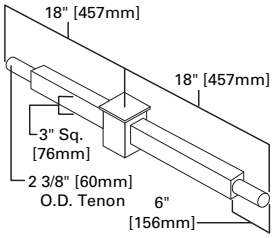


Fig. 3—S4A

4 Tenons at 90°, no uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 0.71

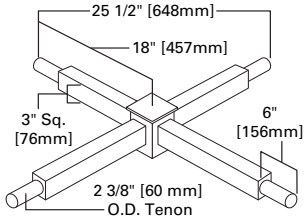


Fig. 4—S2B

2 Tenons at 180°, with uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: .90

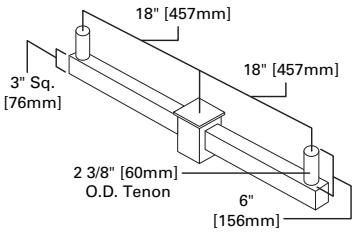


Fig. 5—S3B

3 Tenons at 180°, in line with uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 1.50

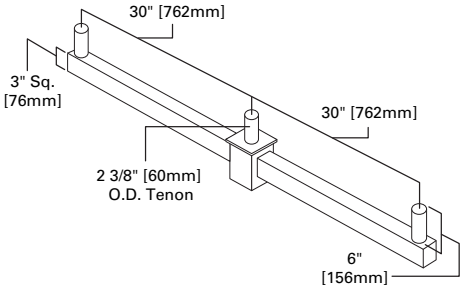


Fig. 6—S4B

4 Tenons at 180°, in line with uprights
Capacity Per Tenon:
EPA 4.0; Max. Wt. Load Per Tenon 75 lbs.
Bracket EPA: 2.25

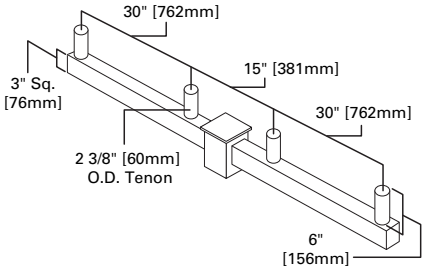


Fig. 7—S4C

4 Tenons at 90°, with uprights
Capacity Per Tenon:
EPA 6.0; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: 1.7

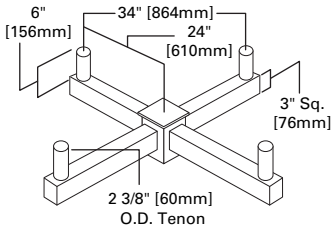
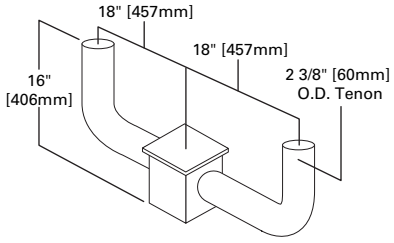


Fig. 8—S2D

2 Tenons in line with uprights
Capacity Per Tenon:
EPA 5.3; Max. Wt. Load Per Tenon 100 lbs.
Bracket EPA: .80



Catalog Number [1,2]	Figure	No. of Stubs	Pole Dia. (In.) [3]	Net Wt. (Lbs.)
S1A	1	1	Specify	3.5
S2A	2	2	Specify	8
S4A	3	4	Specify	15
S2B	4	2	Specify	9
S3B	5	3	Specify	12
S4B	6	4	Specify	17
S4C	7	4	Specify	17
S2D	8	2	Specify	9

NOTE: **1** Standard bracket has 2 3/8" O D tenon Other sizes available Consult your Cooper Lighting Representative
2 Standard finish is Brushed Aluminum Other finish colors available Consult your Cooper Lighting Representative
3 Brackets flush mount on 4", 5", 6", 6 3/4" square poles Must specify when ordering **[Example:** S1A-4**]**

BRACKETS + ADAPTERS

WOOD POLE BRACKETS AND ADAPTERS

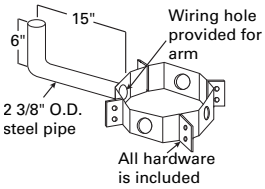


Fig. 1

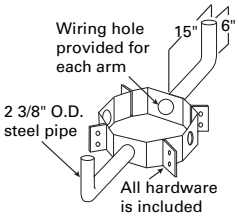


Fig. 2

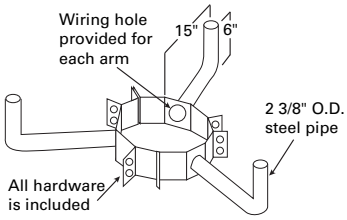


Fig. 3

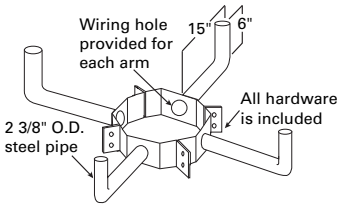


Fig. 4

Catalog Number	Pole Diameter (In.)	Figure Number
W1P710	7-10	1
W2P710	7-10	2
W3P710	7-10	3
W4P710	7-10	4

NOTES: If galvanized is desired, substitute "G" for "P" For pole sizes from 10" to 13" in diameter, substitute "1013" for "710"

CROSS ARM STEEL BRACKET FOR WOOD POLES [Not for use with steel or aluminum. See notes]

Fig. 1

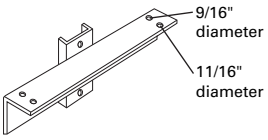


Fig. 2

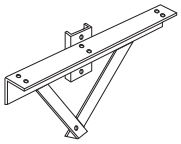


Fig. 3

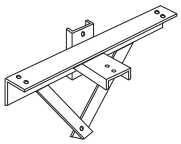
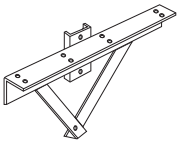
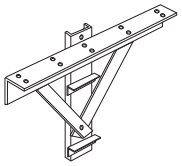


Fig. 4

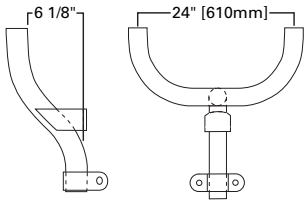




Catalog Number	Figure Number	Fixture Configuration	EPA
S2C2WP	1	2 in line	0.9
S3C3WP	2	3 in line	3.6
S3C3WPM	3	3 in line/offset	3.6
S4C4WP	4	4 in line	4.5
S5C5WP	5	5 in line	5.5

NOTES: If galvanized is desired, substitute "G" for "P" Mounting hardware not included Fixture mounting holes are 30" on center Modified versions are available for steel or aluminum pole applications Consult your Cooper Lighting Representative

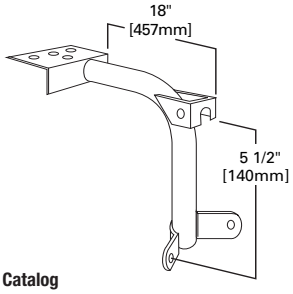
WOOD POLE FLOODLIGHT BRACKET



Catalog Number	Configuration	Tenon Size (In.)	Net. Wt. (Lbs.)
06469	Single	2 3/8 O.D.	13
06517	Twin	2 3/8 O.D.	20

NOTES: Standard finish is primed Add suffix "G" for hot dip galvanize Mounting hardware not included

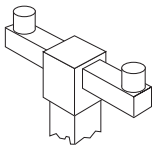
POLE MOUNTED FLOODLIGHT BRACKET FOR WOOD POLES



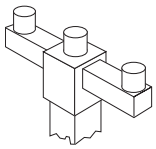
Catalog Number
OA1009

NOTES: Standard finish is hot dip galvanize Mounting hardware not included

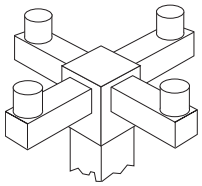
POST TOP MOUNTING SYSTEMS [Order separately]



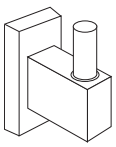
FA42
Post Top
Two Fixture



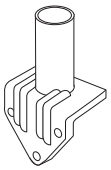
FA43
Post Top
Three Fixture



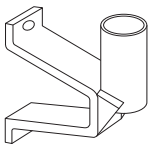
FA44
Post Top
Four Fixture



FA60
Wall
Mounting



FA61
Cross Arm
Mounting



FA62
Wood Pole
Mounting

BRACKETS + ADAPTERS

WOOD/CONCRETE POLE BRACKETS AND ADAPTERS

WOOD POLES

Catalog Number	Figure	Arm Length "A" (Ft.)	Arm Rise "B" (Ft.)	Bracket Net Wt. (Lbs.)	Max. Luminaire Wt.(Lbs.)	Max. Luminaire EPA
WE424	2	4	2'	10	60	3.0
WE636	2	6	2'	12	60	3.0
WEH836	2	8	2'	16	60	3.0
WEHT636	1	6	2'	25	60	3.0
WEHT836	1	8	2'	29	60	3.0
WEHT1036	1	10	2'	33	60	3.0
WEHT1236	1	12	2'	37	60	3.0
WEHT1536	1	15	2'	52	60	3.0
WP218	6	2	1'	7	60	3.0
WP424	6	4	2'	10	60	3.0
WP624	6	6	2'	14	60	3.0

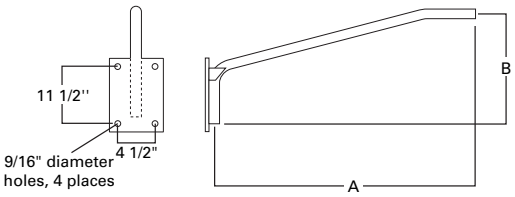
CONCRETE ROUND/SQUARE POLES

Catalog Number	Figure	Arm Length "A" (Ft.)	Arm Rise "B" (Ft.)	Bracket Net Wt. (Lbs.)	Max. Luminaire Wt. (Lbs.)	Max. Luminaire EPA
CE424	2	4	2'	12	60	3.0
CE636	2	6	3'	14	60	3.0
CEH836	2	8	3'	18	60	3.0
CEHT636	3	6	3'	29	60	3.0
CEHT836	3	8	3'	33	60	3.0
CEHT1036	3	10	3'	37	60	3.0
CEHT1236	3	12	3'	41	60	3.0
CEHT1536	3	15	3'	56	60	3.0

WOOD AND/OR CONCRETE POLES

Catalog Number	Figure	Arm Length "A" (Ft.)	Arm Rise "B" (Ft.)	Bracket Net Wt. (Lbs.)	Max. Luminaire Wt. (Lbs.)	Max. Luminaire EPA
WCE424	5	4	2'	10	75	3.0
WCE636	4	6	2'	12	75	3.0
WCE836	4	8	2'	29	75	3.0
WCE1036	4	10	2'	31	75	3.0
WCE1236	4	12	2'	37	75	3.0

"W" SERIES GALVANIZED BRACKETS FOR CONCRETE POLES



Catalog Number	Pipe Size (In.)	Arm (A) Length (Ft.)	Arm (B) Rise (Ft.)	Bracket Net. Wt. (Lbs.)	Maximum Luminaire Net. Wt. (Lbs.)	Maximum Luminaire EPA
W125C040	1 1/4	4.0	25	16	70	3.1
W200C060	2	6.0	34	29	90	4.0
W200C080	2	8.0	34	48	45	2.4

NOTES: Mounting hardware not included Available prime painted—Consult your Cooper Lighting Representative

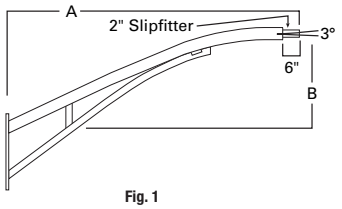


Fig. 1

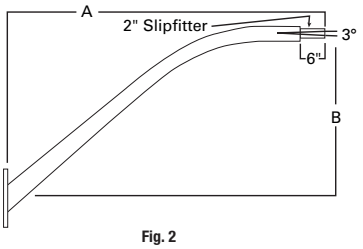


Fig. 2

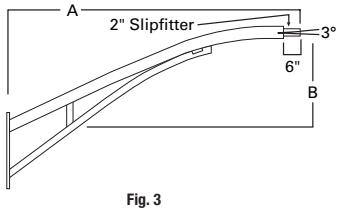


Fig. 3

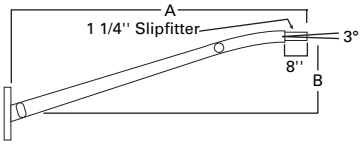


Fig. 4

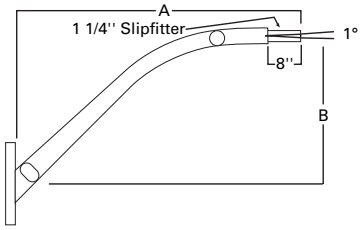


Fig. 5

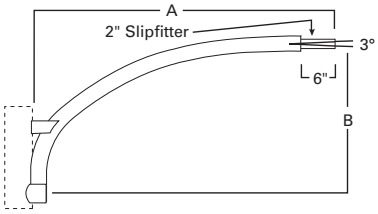
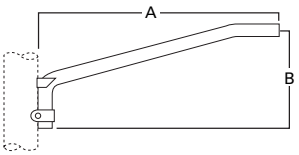


Fig. 6

BRACKETS + ADAPTERS

WOOD/CONCRETE POLE BRACKETS AND ADAPTERS

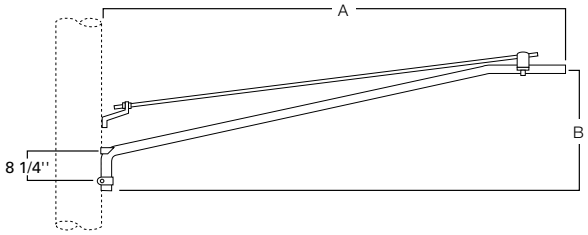
"P" SERIES STEEL BRACKETS FOR WOOD POLES [HOT DIP GALVANIZED]



Catalog Number	Pipe Size (In.)	Arm (A) Length (Ft.)	Arm (B) Rise (In.)	Bracket Net. Wt. (Lbs.)	Maximum Luminaire Net. Wt. (Lbs.)	Maximum Luminaire EPA
P125S020	1 1/4	2.0	13	7	90	5.0
P125S026	1 1/4	2.5	15	8	80	2.4
P125S040	1 1/4	4.0	19	1	80	2.4
P125S060	1 1/4	6.0	24	15	80	2.4
P125S080	1 1/4	8.0	30	19	35	1.2
P200S020	2	2.0	13	10	90	5.0
P200S026	2	2.5	15	12	80	2.4
P200S040	2	4.0	19	13	80	2.4
P200S060	2	6.0	24	23	80	2.4
P200S080	2	8.0	30	28	70	1.8

NOTES: Mounting hardware not included

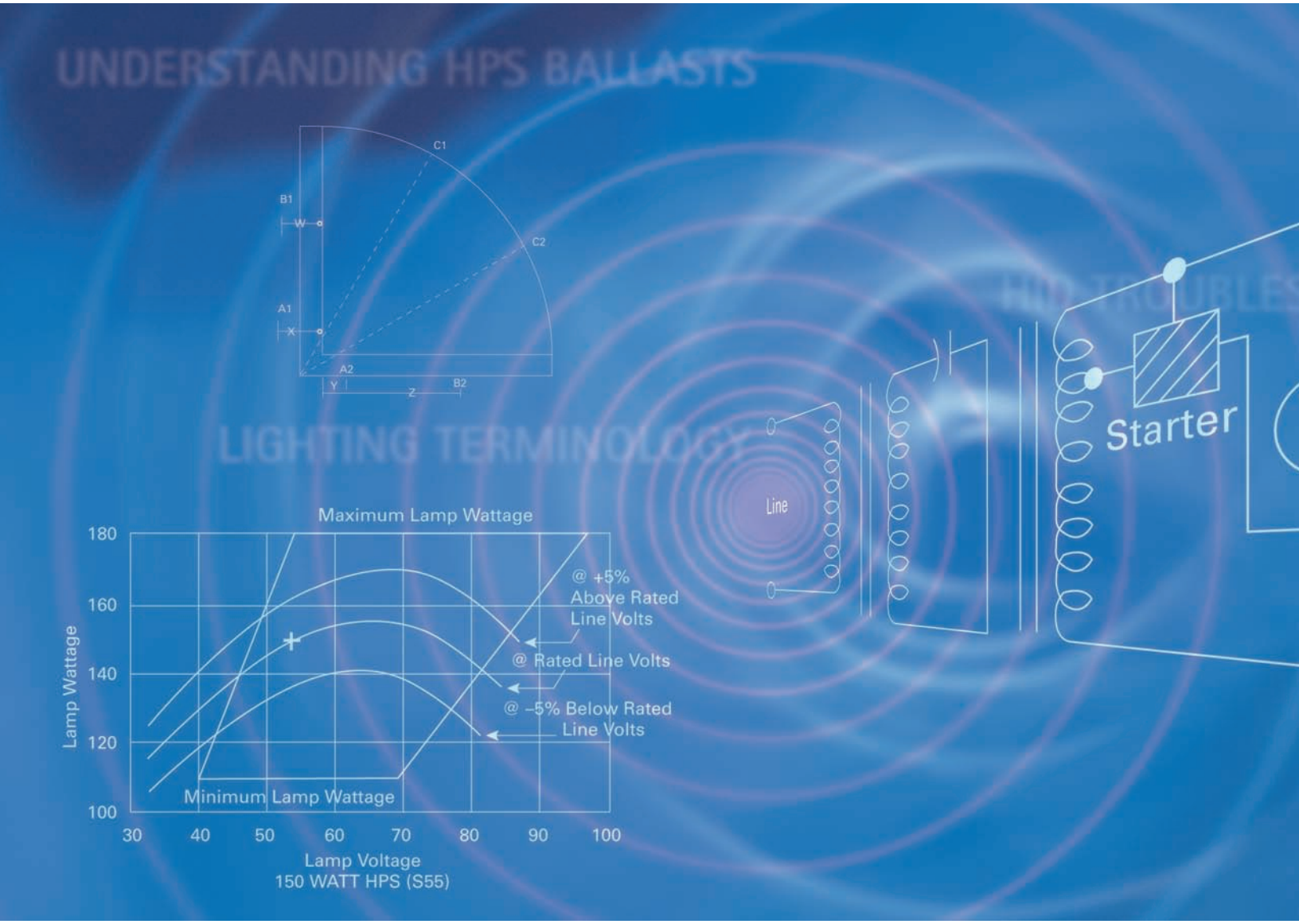
"S" SERIES SINGLE GUY ROD GALVANIZED STEEL BRACKETS FOR WOOD POLES



Catalog Number	Pipe Size (In.)	Arm (A) Length (Ft.)	Arm (B) Rise (In.)	Bracket Net. Wt. (Lbs.)	Maximum Luminaire Net. Wt. (Lbs.)	Maximum Luminaire EPA
Single Guy Wire						
S125S060	1 1/4	6	24	20	80	2.4
S125S080	1 1/4	8	30	25	70	1.8
S125S100	1 1/4	10	35	30	50	1.5
Double Guy Wire						
D200S060	2	6	24	28	80	2.4
D200S080	2	8	30	36	80	2.4
D200S100	2	10	35	43	80	2.4
D200S120	2	12	40	50	80	2.4

NOTES: Mounting hardware not included Available prime painted—Consult your Cooper Lighting Representative

TECHNICAL


UNDERSTANDING HPS BALLASTS
LIGHTING TERMINOLOGY
C1
C2
B1
W
A1
X
A2
Y
Z
B2
Maximum Lamp Wattage
@ +5%
Above Rated
Line Volts
@ Rated Line Volts
@ –5% Below Rated
Line Volts
Minimum Lamp Wattage
Lamp Wattage
180
160
140
120
100
30
40
50
60
70
80
90
100
Lamp Voltage
150 WATT HPS (S55)
Line
Starter

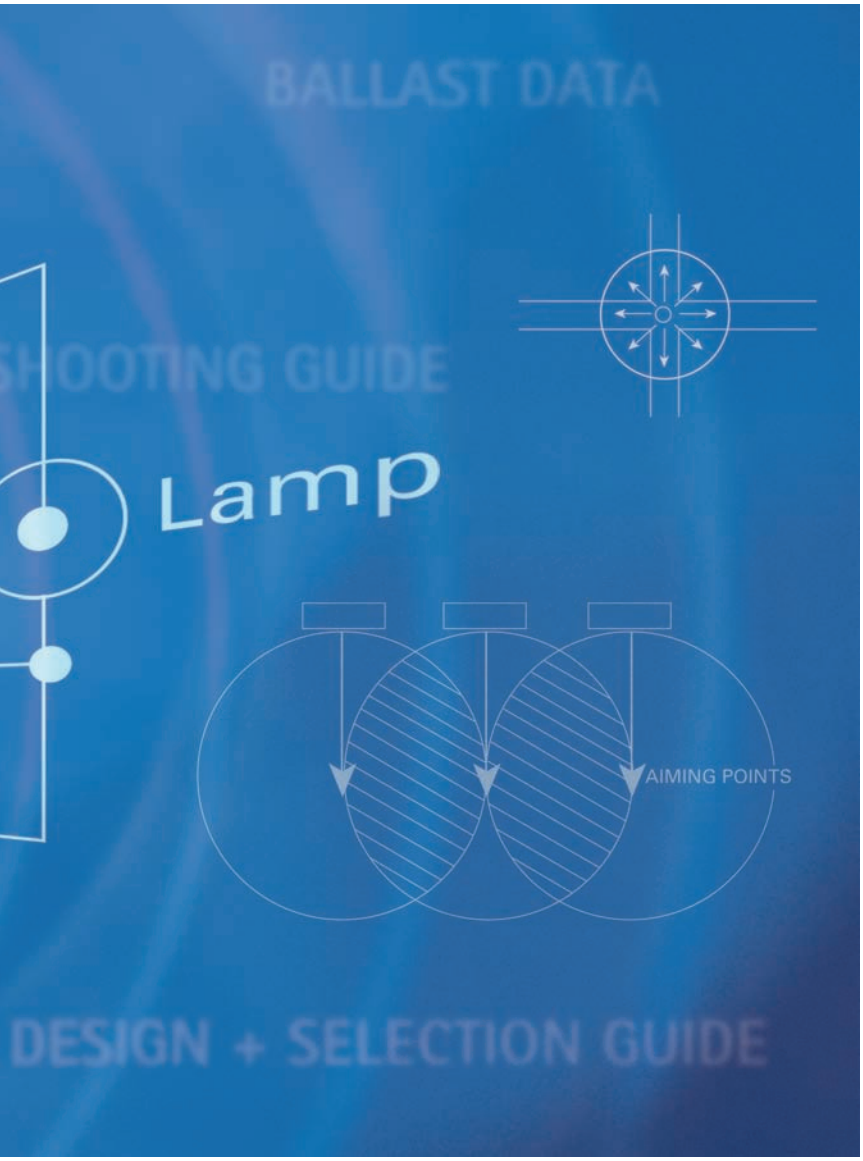


TABLE OF CONTENTS

UNDERSTANDING HPS BALLASTS

The high pressure sodium (HPS) lamps are greatly different than the popular and generally understood mercury or metal halide lamps. Mercury and metal halide lamps maintain a relatively stable voltage drop across the lamp arc tube throughout its life wattage is also essentially constant with aging being reflected only in lamp lumen depreciation decreasing light output.

Why DO HPS Lamps Act Differently?

The HPS lamp is unique in that it is a dynamic device with performance changing as the lamp ages. The arc tube voltage rises in usage; therefore, the wattage and lumen output change with aging. Because of these characteristics (coupled with adopted manufacturing tolerances) it must be understood that applications and installations using HPS lamps will experience changing footcandle levels and changes in power consumption. The early experience will be low wattage performance, low lumen output, and fewer footcandles being generated on the work task. When the lamps start to mature, the arc tube voltage rises toward its nominal design level, the lumen output and resulting footcandle levels will approach the calculated or desired levels. As the lamp continues to mature, the wattage levels continue to increase until the power supply-voltage limits have been reached, at which time the lamp will extinguish or "drop out". Cooling of the extinguished lamp permits its voltage requirement to lessen so that it may restrike and operate until it again exceeds the available power supply voltage. This cycling of "strike-burn-drop out-cool-strike-burn-drop out" is typical of lamps which have reached near end of life. These lamps will ultimately fail to cycle or restrike and must be replaced.

Typical application would assume a 400 watt HPS lamp to be a 50,000 lumen generator. Standard formulae would use 50,000 lumens, adjusted for maintenance values and fixture coefficient of utilization, to determine footcandles. A more precise prediction of footcandle levels would be obtained if we calculated based upon "infant" lumen output for the start up of a new installation, repeating the calculations using "nominal" lumens, "mature" lumens, and "end of life" lumens. To do so would be a laborious task and somewhat futile since not all lamps age at the same rate. A better anticipation of expected performance will be gained through an understanding of the industry (ANSI Std. 78) standards for performances of the lamp/ballast system.

What are "ANSI" Lamp Specifications

Specifications set forth in the ANSI Standards are as shown in Figure 1 which represents a "window" within which the power supply must maintain lamp operations.

The **maximum lamp wattage** is the limit which should not be exceeded to give reasonable life and lumen performance.

The **minimum lamp wattage** must be maintained to provide reasonable light output and reliable starting.

The **minimum lamp voltage** defines the boundary of the window on the left hand side. It allows a tolerance of -15% from the designed voltage (85 volts on a 400 watt/100 volt lamp).

The **maximum lamp voltage** referred to as the "end of life" voltage level forms the right hand side of the window.

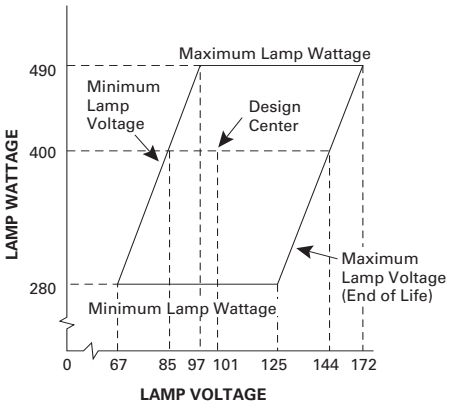


Figure 1: Volts/Watts "Window" Limits for 400W HPS Lamps.

For the 400 watt HPS lamp which has its designed center at 100 volts across the arc tube:

- Maximum lamp wattage = 490 watts
- Minimum lamp wattage = 280 watts
- Minimum lamp voltage (100 volts - 15%) = 85 volts
- Maximum lamp voltage or "end of life" voltage = 144 volts at nominal wattage.

The left hand side of the window is established by determining the lamp voltage values when operated at maximum and minimum wattages. The 400 watt lamp with 85 volt minimum, when operated at 280 watts, would see approximately 67 volts. When operated at 490 watts, this lamp would see approximately 97 volts.

Let's Look at How the "ANSI" Standard is Developed for the 400W HPS Lamp

The left side of the window, then, is a line drawn from the point of minimum lamp wattage/minimum lamp voltage (280/67) to the point of maximum lamp wattage/minimum lamp voltage (490/97).

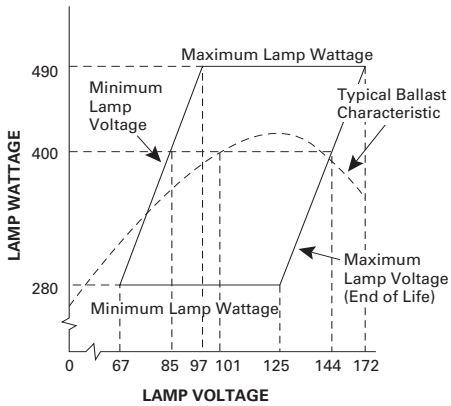


Figure 2: Typical Volts/Watts Trace for 400W HPS Lamp

The right hand side of the window is developed by determining the lamp voltage of a 400 watt nominal "end of life" (144 volt) lamp, when operated at maximum 490 watts. Voltage will be approximately 172 volts. When operated at minimum 280 watts, lamp voltage will be approximately 125 volts. The right side of the window, then, is a line drawn from the point of maximum wattage/end of life voltage, to the point of minimum wattage/end of life voltage.

It remains for the ballast manufacturer to develop a power supply that will maintain lamp wattages within the limits set for the lamps.

At nominal line voltage, the wattage must be high enough to enter the window through the left hand side of the trapezoid, pass through the 100 volt/400 watt design center (within limits), and never exceed maximum wattage through "end of life". Lamp voltage is constantly rising through this excursion, and the ballast must compensate for the wattage changes to maintain the limits of operation fixed by the trapezoid.

As the lamp voltage increases with age (Figure 2), so do the wattage and the lumen output. Under-wattage operation produces less light output, while over-wattage increases operating costs and tends to shorten lamp life.

What Effect Does Varying Line Voltage Have?

To add more complexity, we must provide for input line voltage variations. Input voltage changes must be considered in power supply design. Even at higher or lower than normal voltages, the lamp must be made to operate at wattages which will properly enter and pass through the trapezoid.

The extent to which we control wattages with these line voltage changes, and the rising lamp voltage, is called lamp wattage regulation.

What Does a Ballast Do?

High intensity discharge lamps (mercury, metal halide and HPS) are common in that they have inner arc tubes through which we must establish an arc path to strike or start the lamp. Once the arc has been established, it is necessary that we control and limit the current flow through the lamp so that its negative resistance characteristics will not destroy it with a "runaway" current.

The external device which provides this current control is the **ballast**. The ballast controls current and provides the proper power supply as needed for the lamp.

Why is a HPS Ballast Different?

The HPS ballasts differ from the mercury/metal halide ballasts in that a high-voltage (2500 volts) low-power pulse is required to strike the arc and start the HPS lamp. So a starting circuit is introduced to generate and direct this pulse. The starter is activated with the application of line voltage to the ballast. It sends forth a pulse through each cycle until the arc is established, at which time the starter ceases to pulse and goes into a standby mode until the arc is extinguished, either through loss of power, or because of high lamp voltage (end of life) cycling.

Starter circuits are designed to withstand the rigors of repeated continuous pulsing for periods of 6 months or more, providing more than ample time for failed lamp replacement. (Qualification: This is true of systems up through 400 watts. The 1000 watt lamps tend to fail in a shorted mode, and in certain applications overheating of the ballast may force earlier maintenance approximately 2 weeks).

Ballast circuits offered for operation and control of HPS lamps are varied in design, performance, and costs. The selection of the proper ballast depends on certain variables relative to the proposed application.

UNDERSTANDING HPS BALLASTS

Before proper selection can be made, it is necessary that we better understand these variables and the resulting performance.

Common ballast circuits are those with names like reactor, hi-reactance, constant-wattage auto, constant-wattage isolated, regulated, magnetic-regulated, regulator, "WATCON", solid state controlled, etc. not to mention lag and lead which gets all mixed up in other terminology pertaining to power factor; set these aside for now. Ballast circuits can be classified by their level of sophistication and performance, each with a different set of advantages to fit different applications.

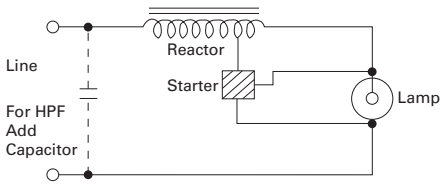
Now Let's Get Down to Selecting the Best Ballast for Your Application

Before you can do that, here are some things you should consider:

- Is the application Industrial Indoor or Utility, Roadway or other?
- What is the normal line voltage experience? Is it generally controlled within 5%? Does it swing by as much as 10%? Is it most frequently high voltage or low voltage?
- Will the higher starting currents of reactor ballasts work a hardship? Must starting currents never exceed operating currents?
- Consider costs of equipment: initial, operating, and maintenance. Normal power factor reactor units have no capacitors and lower initial costs. Regulated ballasts have higher initial, operating and maintenance costs.
- Do extreme voltage conditions exist either high or low which could be better controlled by a premium cost magnetic regulated ballast or the even more sophisticated system WATCON?
- Is the line voltage generally controlled to a reasonable level where CWA-CWI will perform at less cost?
- Would "WATCON", the solid state controlled ballast, serve better? Full light output at time of installation with a flat regulation curve (2% regulation), with 25% longer lamp life and constant input wattage through the life of the lamp at an economically justifiable premium.

Typical Ballast Circuits

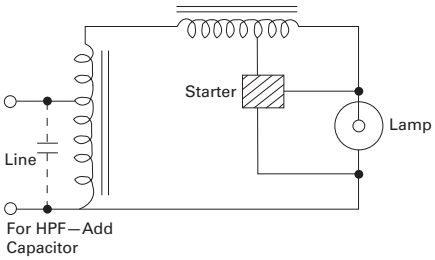
Reactor: The least complex of the ballast group is the **reactor**. It is a simple "choke" coil, placed in series with the lamp. The designed level of inductance in the coil passes only enough current to sustain lamp operation. Line voltage must be equal to the minimum voltage required to properly operate the lamp.



Advantages:

- least costly to manufacture
- lowest ballast losses least wasted energy
- least costly to operate and maintain
- may be used as either normal power factor (NPF) or high power factor (HPF)
- provides good wattage regulation on systems that control line voltage within ±5%.

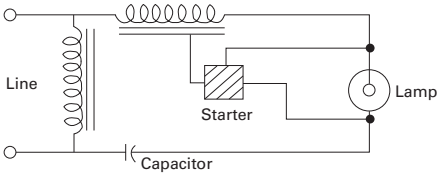
Hi-Reactance: The hi-reactance ballast is quite similar in application and performance to the reactor. It has the added feature of a voltage transforming section, permitting use on systems with voltages other than those which match the minimum voltage required to properly operate the lamp.



Advantages:

- slightly higher in cost than reactors, but less than regulated type ballasts
- lower ballast losses than regulator types
- may be used either without a capacitor (NPF) or with power factor correction (HPF)
- provides good wattage regulation when line voltage is controlled within ±5%.

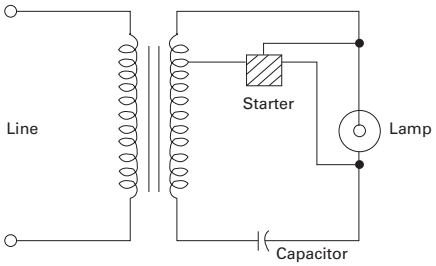
CWA-Constant Wattage Auto Regulated:
This is a more sophisticated design with a transforming section to provide proper lamp voltage. It has a capacitor in series with the lamp for added wattage control and therefore is an HPF design. The basic design is that of an auto transformer and does not provide isolation between primary and secondary.



Advantages:

- permits and responds favorably to line voltage variations of up to ±10%.
- costs less than magnetic regulator
- provides good regulation of lamp wattage, especially at nominal voltage and below systems.
- ballast losses are less than for magnetic regulator.

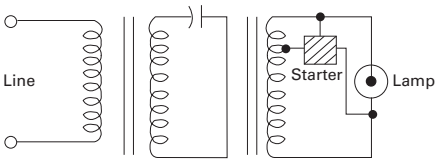
CWI-Constant Wattage Iso-Regulated:
This design is similar to the CWA auto transformer except that it has an isolated primary and secondary lamp circuit. Line surges are seen by the primary and are **shielded** from the lamp circuit.



Advantages:

- provides good wattage control with up to ±10% line voltage shift excellent wattage control in lines that operate near normal.
- costs less than magnetic regulator.
- ballast losses are less than for magnetic regulator.

Magnetic Regulated: This is a three winding ballast which is similar in design to the older mercury ballast design, but provides regulation with line voltage variation of ±10% from nominal. It has an isolated primary and secondary which transforms voltage and feeds power to the lamp through a reactor section (3rd winding). It also has a capacitor in the circuit for wattage control and is a HPF device. It provides better lamp wattage control than the other designs, but at the expense of having the highest ballast losses, the highest operation costs, and the highest manufacturing costs. Therefore, this ballast is generally not necessary for systems operating at near normal line voltage.



Advantages:

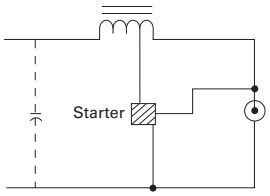
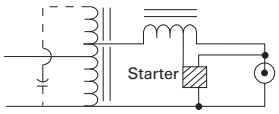
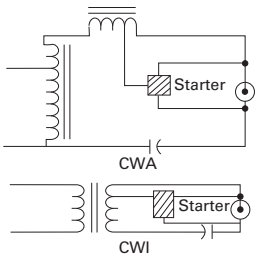
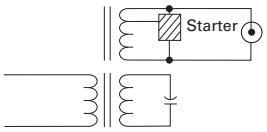
- provides the better lamp wattage regulation.
- it is responsive to systems that operate normally in extremely high or extremely low line voltage situations in the "near to + or - 10%" range. At nominal voltage, its volts/watts trace is quite like the performance of a reactor.

UNDERSTANDING HPS BALLASTS

HPS Ballast Comparisons

	Initial Cost	Ballast Losses	Line Voltage Variations	Lamp Wattage Regulation (Within Trapezoid over Lamp Life)	Fixture* Power Factor
Reactors:					
N.P.F.	Lowest	Lowest	±5%	25%	45 - 55%
H.P.F.	+Capacitor	Lowest			75 - 95%
Hi Reactance:					
N.P.F.	Low	Low	±5%	24-26%	45 - 55%
H.P.F.	+Capacitor	(Similar to Reactor)			80 - 90%
CWA-CWI	Medium	Medium	±10%	25-33%	85 - 95%
Mag-Reg	High	Highest	±10%	8-18%	95%+

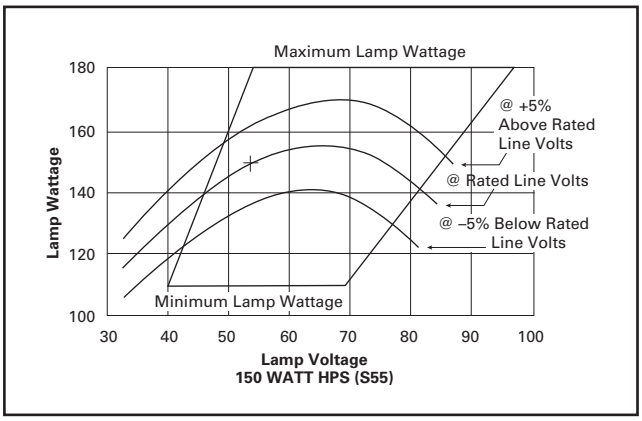
*Represents power factor of an individual fixture. Power factor is also a dynamic value, changing as the lamp ages, and since not all lamps on the system are of the same age and PF value, this does not represent the power factor of the system.

	Watts	=	Volts-Amps	x	Power Factor	
						**Reactor** Input Voltage Constant Amps Relatively Constant Power Factor Follows Lamp Wattage Dome
						**Hi-Reactance** Input Voltage Constant Amps Relatively Constant Power Factor Follows Lamp Wattage Dome
						**CWA-CWI** Input Voltage Constant Amps Rises as Lamp Ages Power Factor Reduces as Lamp Ages
						**Magnetic Regulator** Input Voltage Constant Amps Follows Lamp Wattage Dome Power Factor Relatively Constant

UNDERSTANDING HPS BALLASTS

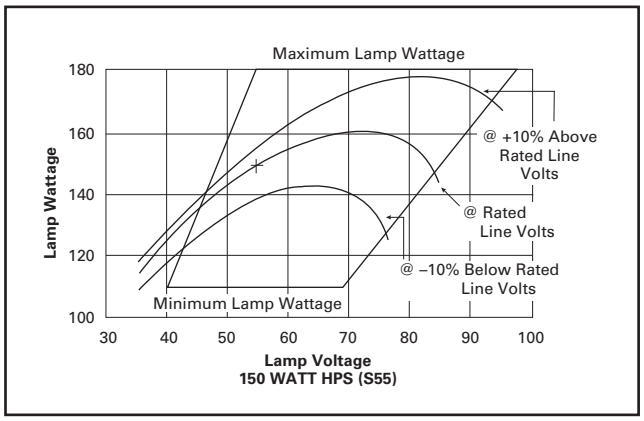
Typical Volts/Watts Trace Curves of 150 Watt HPS Ballast/Lamp

Performance of the Nominal 150 Watt HPS S55 Lamp with Reactor Ballast



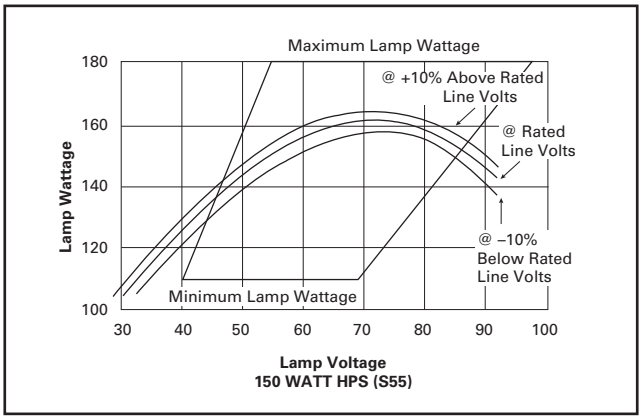
Reactor

Performance of the Nominal 150 Watt HPS S55 Lamp with CWA/CWI Circuit Ballast



CWA/CWI Regulated

Performance of the Nominal 150 Watt HPS S55 Lamp with Mag. Reg. Ballast



Magnetic Regulated

BALLAST DATA

Lamp Type	Lamp Watts	Circuit Type	Fig. No.	Input Volts	Voltage Input Range	Input Watts	Starting Amps	Operating Amps	Open Circuit Current	Nominal Power Factor	Lamp Wattage Regulation	Ballast Part #	Starter Data	Ballast Color Code
PULSE START METAL HALIDE														
M137/M152	175	CWA	--	120	+ 10%	198	0.70	1.78	1.70	H	+ 10%	--	--	--
			--	208	+ 10%	198	0.39	1.06	1.13	H	+ 10%	--	--	--
			--	240	+ 10%	198	0.35	0.85	0.85	H	+ 10%	--	--	--
			--	277	+ 10%	198	0.29	0.76	0.72	H	+ 10%	--	--	--
			--	480	+ 10%	198	0.19	0.44	0.44	H	+ 10%	--	--	--
M136	200	CWA	--	120	+ 10%	227	0.75	2.00	2.00	H	+ 10%	--	--	--
			--	208	+ 10%	227	0.40	1.20	1.20	H	+ 10%	--	--	--
			--	240	+ 10%	227	0.35	1.00	1.00	H	+ 10%	--	--	--
			--	277	+ 10%	227	0.30	0.85	0.85	H	+ 10%	--	--	--
			--	480	+ 10%	227	0.18	0.50	0.60	H	+ 10%	--	--	--
M132/M154	320	CWA	--	120	+ 10%	361	2.10	3.25	2.30	H	+ 10%	--	--	--
			--	208	+ 10%	361	1.20	1.90	1.35	H	+ 10%	--	--	--
			--	240	+ 10%	361	1.05	1.65	1.15	H	+ 10%	--	--	--
			--	277	+ 10%	361	0.95	1.40	1.00	H	+ 10%	--	--	--
			--	480	+ 10%	363	0.60	0.80	0.60	H	+ 10%			
M134/M171	350	CWA	--	120	+ 10%	397	2.20	3.40	2.20	H	+ 10%	--	--	--
			--	208	+ 10%	397	1.30	2.00	1.30	H	+ 10%	--	--	--
			--	240	+ 10%	397	1.10	1.70	1.10	H	+ 10%	--	--	--
			--	277	+ 10%	397	1.00	1.50	1.00	H	+ 10%	--	--	--
			--	480	+ 10%	397	0.65	0.85	0.65	H	+ 10%	--	--	--
M135/M155	400	CWA	--	120	+ 10%	452	2.85	3.80	2.20	H	+ 10%	--	--	--
			--	208	+ 10%	452	1.65	2.20	1.50	H	+ 10%	--	--	--
			--	240	+ 10%	452	1.45	1.90	1.10	H	+ 10%	--	--	--
			--	277	+ 10%	452	1.25	1.65	0.95	H	+ 10%	--	--	--
			--	480	+ 10%	452	0.75	1.00	0.70	H	+ 10%	--	--	--
HIGH PRESSURE SODIUM														
S68	50	Reactor	1	120	+ 5%	58	1.70	1.15	--	N	Trap	8437D59G08	220C173G01	White
			1	120	+ 5%	58	0.65	0.52	0.95	H	Trap	8437D59G08	220C173G01	White
		CWA [1]	5	120	+ 10%	72	0.44	0.66	0.28	H	Trap	1002D32G06	220C173G01	White
			5	208	+ 10%	72	0.25	0.38	0.16	H	Trap	1002D32G06	220C173G01	White
			5	240	+ 10%	72	0.22	0.33	0.14	H	Trap	1002D32G06	220C173G01	White
			5	277	+ 10%	72	0.19	0.29	0.12	H	Trap	1002D32G06	220C173G01	White
			5	480	+ 10%	72	0.11	0.17	0.07	H	Trap	1002D32G05	220C173G01	White
S62	70	Reactor	1	120	+ 5%	82	2.20	1.60	--	N	Trap	8449D71G11	220C173G01	White
			1	120	+ 5%	82	0.90	0.78	1.36	H	Trap	8449D71G11	220C173G01	White
		Hi-RX1	2	120	+ 5%	95	2.35	1.70	0.24	N	Trap	8449D10G07	220C173G01	White
			2	120	+ 5%	95	0.86	0.80	1.48	H	Trap	8449D10G07	220C173G01	White
			2	208	+ 5%	95	1.39	0.98	0.14	N	Trap	8449D10G07	220C173G01	White
			2	208	+ 5%	95	0.48	0.47	0.85	H	Trap	8449D10G07	220C173G01	White
			2	240	+ 5%	95	1.18	0.85	0.12	N	Trap	8449D10G07	220C173G01	White
			2	240	+ 5%	95	0.41	0.40	0.73	H	Trap	8449D10G07	220C173G01	White
			2	277 [2]	+ 5%	95	1.05	0.74	0.11	N	Trap	8449D10G07	220C173G01	White
			2	277 [2]	+ 5%	95	0.38	0.35	0.64	H	Trap	8449D10G07	220C173G01	White
			2	480	+ 5%	95	0.61	0.43	0.06	N	Trap	8449D10G05	220C173G01	White
			2	480	+ 5%	95	0.24	0.23	0.32	H	Trap	8449D10G05	220C173G01	White
		CWA [1]	5	120	+ 10%	97	0.66	0.95	0.40	H	Trap	1002D32G16	220C173G01	White
			5	208 [2]	+ 10%	97	0.42	0.55	0.24	H	Trap	1002D32G16	220C173G01	White
			5	240 [2]	+ 10%	97	0.36	0.48	0.21	H	Trap	1002D32G16	220C173G01	White
			5	277 [2]	+ 10%	97	0.31	0.41	0.18	H	Trap	1002D32G16	220C173G01	White
			5	480	+ 10%	97	0.21	0.24	0.10	H	Trap	1002D32G15	220C173G01	White
S62/S54	70/100	Reactor	4	120	+ 5%	82/116	2.2/3.2	1.6/2.1	--	N	Trap	8437D59G19	220C173G01	White
			4	120	+ 5%	82/116	.9/1.4	.78/1.1	1.4/1.8	H	Trap	8437D59G19	220C173G01	White
S54	100	Reactor	1	120	+ 5%	118	3.20	2.10	--	N	Trap	8449D71G12	220C173G01	White
			1	120	+ 5%	118	1.40	1.08	1.80	H	Trap	8449D71G12	220C173G01	White
		Hi-RX1	2	120	+ 5%	130	3.10	2.50	0.247	N	Trap	8447D93G37	220C173G01	White
			2	120	+ 5%	130	0.96	1.16	2.26	H	Trap	8447D93G37	220C173G01	White
			2	208	+ 5%	130	1.80	1.44	0.149	N	Trap	8447D93G37	220C173G01	White
			2	208	+ 5%	130	0.52	0.673	1.28	H	Trap	8447D93G37	220C173G01	White
			2	240	+ 5%	130	1.58	1.25	0.13	N	Trap	8447D93G37	220C173G01	White
			2	240	+ 5%	130	0.48	0.583	1.11	H	Trap	8447D93G37	220C173G01	White
			2	277 [2]	+ 5%	130	1.41	1.08	0.12	N	Trap	8447D93G37	220C173G01	White
			2	277 [2]	+ 5%	130	0.43	0.51	0.95	H	Trap	8447D93G37	220C173G01	White
			2	480	+ 5%	130	0.82	0.63	0.07	N	Trap	8447D93G35	220C173G01	White
			2	480	+ 5%	130	0.29	0.29	0.50	H	Trap	8447D93G35	220C173G01	White

NOTE: 1 Available in Multi-tap 120/208/240/277V **2** Has tap for 120 dual voltage operation

BALLAST DATA

Lamp Type	Lamp Watts	Circuit Type	Fig. No.	Input Volts	Voltage Input Range	Input Watts	Starting Amps	Operating Amps	Open Circuit Current	Nominal Power Factor	Lamp Wattage Regulation	Ballast Part #	Starter Data	Ballast Color Code
HIGH PRESSURE SODIUM														
		CWA [1]	5	120	+ 10%	130	0.89	1.22	0.47	H	Trap	1002D32G26	220C173G01	White
			5	208	+ 10%	130	0.50	0.70	0.25	H	Trap	1002D32G26	220C173G01	White
			5	240 [2]	+ 10%	130	0.44	0.61	0.22	H	Trap	1002D32G26	220C173G01	White
			5	277 [2]	+ 10%	130	0.38	0.53	0.23	H	Trap	1002D32G26	220C173G01	White
			5	480	+ 10%	130	0.24	0.31	0.12	H	Trap	1002D32G25	220C173G01	White
		Mag-Reg	7	120	+ 10%	134	0.25	1.15	0.52	H	Trap	8436D81G01	220C173G13	Red
			7	208	+ 10%	134	0.15	0.66	0.30	H	Trap	8436D81G02	220C173G13	Red
			7	240	+ 10%	134	0.13	0.58	0.26	H	Trap	8436D81G03	220C173G13	Red
			7	277	+ 10%	134	0.11	0.50	0.23	H	Trap	8436D81G04	220C173G13	Red
			7	480	+ 10%	134	0.06	0.29	0.13	H	Trap	8436D81G05	220C173G13	Red
S55	150	Reactor	1	120	+ 5%	175	4.50	3.20	--	N	Trap	8437D59G35	220C173G01	White
	(55 Volt)		1	120	+ 5%	175	2.80	1.60	2.40	H	Trap	8437D59G35	220C173G01	White
		Hi-Rx	3	120	+ 5%	190	4.80	3.75	0.44	N	Trap	8447D93G01	220C173G01	White
			3	120	+ 5%	190	1.84	1.67	2.84	H	Trap	8447D93G01	220C173G01	White
			3	208	+ 5%	190	2.70	2.16	0.25	N	Trap	8447D93G02	220C173G01	White
			3	208	+ 5%	190	1.06	0.96	1.64	H	Trap	8447D93G02	220C173G01	White
			3	240	+ 5%	190	2.35	1.88	0.22	N	Trap	8447D93G03	220C173G01	White
			3	240	+ 5%	190	0.90	0.83	1.43	H	Trap	8447D93G03	220C173G01	White
			3	277 [2]	+ 5%	190	2.08	1.62	0.19	N	Trap	8447D93G04	220C173G01	White
			3	277 [2]	+ 5%	190	0.81	0.72	1.24	H	Trap	8447D93G04	220C173G01	White
			2	480	+ 5%	190	1.12	0.93	0.11	N	Trap	8447D93G05	220C173G01	White
			2	480	+ 5%	190	0.46	0.42	1.24	H	Trap	8447D93G05	220C173G01	White
		CWA	5	120	+ 10%	196	1.20	1.80	0.85	H	Trap	1002D32G31	220C173G01	White
				208	+ 10%	196	0.60	0.90	0.43			1002D32G32	220C173G01	White
				240	+ 10%	196	0.69	1.04	0.49	H	Trap	1002D32G33	220C173G01	White
				277	+ 10%	196	0.52	0.78	0.37	H	Trap	1002D32G34	220C173G01	White
			5	480	+ 10%	196	0.30	0.45	0.21	H	Trap	1002D32G35	220C173G01	White
		Mag-Reg	7	120	+ 10%	192	0.32	1.67	0.72	H	Trap	8436D79G01	220C173G13	Red
			7	208	+ 10%	192	0.19	0.96	0.42	H	Trap	8436D79G02	220C173G13	Red
			7	240	+ 10%	192	0.16	0.84	0.36	H	Trap	8436D79G03	220C173G13	Red
			7	277	+ 10%	192	0.14	0.72	0.31	H	Trap	8436D79G04	220C173G13	Red
			7	480	+ 10%	192	0.08	0.42	0.18	H	Trap	8436D79G05	220C173G13	Red
S54-S55	100/150	Reactor	4	120	+ 5%	116/175	3.0/4.5	2.1/3.2	--	N	Trap	8437D59G16	220C173G01	White
			4	120	+ 5%	116/175	1.3/2.8	1.1/1.6	1.8/2.4	H	Trap	8437D59G16	220C173G01	White
		Hi-Rx [1]	2	120	+ 5%	190	4.80	3.75	0.44	N	Trap	8447D93G07	220C173G01	White
			2	120	+ 5%	190	1.84	1.67	2.84	H	Trap	8447D93G07	220C173G01	White
			2	208	+ 5%	190	2.70	2.16	0.26	N	Trap	8447D93G07	220C173G01	White
			2	208	+ 5%	190	1.06	0.96	1.64	H	Trap	8447D93G07	220C173G01	White
			2	240	+ 5%	190	2.35	1.88	0.22	N	Trap	8447D93G07	220C173G01	White
			2	240	+ 5%	190	0.90	0.83	1.43	H	Trap	8447D93G07	220C173G01	White
			2	277 [2]	+ 5%	190	2.08	1.62	0.19	N	Trap	8447D93G07	220C173G01	White
			2	277 [2]	+ 5%	190	0.81	0.72	1.24	H	Trap	8447D93G07	220C173G01	White
			2	480	+ 5%	190	1.12	0.93	0.11	N	Trap	8447D93G05	220C173G01	White
			2	480	+ 5%	190	0.46	0.42	1.24	H	Trap	8447D93G05	220C173G01	White
S66	200	Reactor	1	240	+ 5%	232	3.00	2.31	--	N	Trap	6720D17G13	220C173G08	Yellow
			1	240	+ 5%	232	1.05	1.19	2.05	H	Trap	6720D17G13	220C173G08	Yellow
		CWI [1]	6	120	+ 10%	250	1.12	2.40	1.43	H	Trap	8437D76G37	220C173G15	Grey
			6	208	+ 10%	250	0.65	1.38	0.82	H	Trap	8437D76G37	220C173G15	Grey
			6	240	+ 10%	250	0.56	1.20	0.71	H	Trap	8437D76G37	220C173G15	Grey
			6	277	+ 10%	250	0.49	1.03	0.62	H	Trap	8437D76G37	220C173G15	Grey
			6	480	+ 10%	250	0.28	0.60	0.36	H	Trap	8437D76G35	220C173G15	Grey
		Mag-Reg	7	120	+ 10%	246	0.40	2.05	0.90	H	Trap	8444D20G01	220C173G13	Red
			7	208	+ 10%	246	0.23	1.20	0.52	H	Trap	8444D20G02	220C173G13	Red
			7	240	+ 10%	246	0.20	1.04	0.45	H	Trap	8444D20G03	220C173G13	Red
			7	277 [2]	+ 10%	246	0.17	0.90	0.39	H	Trap	8444D20G04	220C173G13	Red
			7	480 [2]	+ 10%	246	0.10	0.52	0.23	H	Trap	8444D20G05	220C173G13	Red

NOTE: 1 Available in Multi-tap 120/208/240/277V **2** Has tap for 120 dual voltage operation

BALLAST DATA

Lamp Type	Lamp Watts	Circuit Type	Fig. No.	Input Volts	Voltage Input Range	Input Watts	Starting Amps	Operating Amps	Open Circuit Current	Nominal Power Factor	Lamp Wattage Regulation	Ballast Part #	Starter Data	Ballast Color Code
HIGH PRESSURE SODIUM														
S50	250	Reactor	1	240	+ 5%	285	3.65	3.00	--	N	Trap	1007D47G33	220C173G08	Yellow
			1	240	+ 5%	285	1.10	1.35	2.60	H	Trap	1007D47G33	220C173G08	Yellow
		Hi-Rx	2	120	+ 5%	297	8.1	5.98	0.25	N	Trap	1005D28G01	220C173G13	Red
		CWA	5	120	+ 10%	300	1.40	2.57	1.33	H	Trap	1006D76G07	220C173G05	Green
			5	208	+ 10%	300	0.81	1.48	0.77	H	Trap	1006D76G07	220C173G05	Green
			5	240	+ 10%	300	0.70	1.28	0.67	H	Trap	1006D76G07	220C173G05	Green
			5	277	+ 10%	300	0.61	1.11	0.58	H	Trap	1006D76G07	220C173G05	Green
			5	480	+ 10%	300	0.35	0.64	0.33	H	Trap	1006D76G05	220C173G05	Green
		CWI [1]	6	120	+ 10%	300	1.32	2.70	1.60	H	Trap	8437D76G27	220C173G05	Green
			6	208	+ 10%	300	0.76	1.56	0.92	H	Trap	8437D76G27	220C173G05	Green
			6	240	+ 10%	300	0.66	1.35	0.80	H	Trap	8437D76G27	220C173G05	Green
			6	277	+ 10%	300	0.57	1.17	0.69	H	Trap	8437D76G27	220C173G05	Green
			6	480	+ 10%	300	0.33	0.68	0.40	H	Trap	8437D76G25	220C173G05	Green
		Mag-Reg [1]	7	120	+ 10%	305	1.00	2.60	0.90	H	Trap	8444D19G06	220C173G13	Red
			7	208	+ 10%	305	0.60	1.50	0.55	H	Trap	8444D19G06	220C173G13	Red
			7	240	+ 10%	305	0.50	1.30	0.45	H	Trap	8444D19G06	220C173G13	Red
			7	277 [2]	+ 10%	305	0.45	1.12	0.40	H	Trap	8444D19G06	220C173G13	Red
			7	480 [2]	+ 10%	305	0.25	0.65	0.22	H	Trap	8444D19G05	220C173G13	Red
S67	310	Reactor	1	240	+ 5%	352	4.50	3.70	--	N	Trap	1007D47G53	220C173G08	Yellow
			1	240	+ 5%	352	2.00	1.72	2.70	H	Trap	1007D47G53	220C173G08	Yellow
		CWI [1]	6	120	+ 10%	370	1.50	3.48	1.30	H	Trap	8437D78G37	220C173G05	Green
			6	208	+ 10%	370	0.87	2.01	0.75	H	Trap	8437D78G37	220C173G05	Green
			6	240	+ 10%	370	0.75	1.74	0.65	H	Trap	8437D78G37	220C173G05	Green
			6	277	+ 10%	370	0.65	1.50	0.56	H	Trap	8437D78G37	220C173G05	Green
			6	480	+ 10%	370	0.38	0.87	0.33	H	Trap	8437D78G35	220C173G05	Green
		Mag-Reg [1]	7	120	+ 10%	370	1.24	3.37	1.11	H	Trap	8449D81G06	220C173G13	Red
			7	208	+ 10%	370	0.75	1.94	0.68	H	Trap	8449D81G06	220C173G13	Red
			7	240	+ 10%	370	0.62	1.68	0.56	H	Trap	8449D81G06	220C173G13	Red
			7	277 [2]	+ 10%	370	0.54	1.45	0.50	H	Trap	8449D81G06	220C173G13	Red
			7	480 [2]	+ 10%	370	0.31	0.84	0.27	H	Trap	8449D81G05	220C173G13	Red
S51	400	Reactor	1	240	+ 5%	442	5.50	4.60	--	N	Trap	1007D47G43	220C173G08	Yellow
			1	240	+ 5%	442	2.10	2.00	3.60	H	Trap	1007D47G43	220C173G08	Yellow
		CWA [1]	5	120	+ 10%	465	3.35	4.30	1.71	H	Trap	8449D40G37	220C173G05	Green
			5	208	+ 10%	465	1.93	2.48	0.98	H	Trap	8449D40G37	220C173G05	Green
			5	240	+ 10%	465	1.68	2.15	0.86	H	Trap	8449D40G37	220C173G05	Green
			5	277 [2]	+ 10%	465	1.45	1.87	0.74	H	Trap	8449D40G37	220C173G05	Green
			5	480 [2]	+ 10%	465	0.84	1.04	0.43	H	Trap	8449D40G35	220C173G05	Green
S51	400	CWI [1]	6	120	+ 10%	465	2.22	4.36	2.20	H	Trap	8437D78G27	220C173G05	Green
			6	208	+ 10%	465	1.28	2.52	1.26	H	Trap	8437D78G27	220C173G05	Green
			6	240	+ 10%	465	1.11	2.18	1.10	H	Trap	8437D78G27	220C173G05	Green
			6	277	+ 10%	465	0.96	1.89	0.95	H	Trap	8437D78G27	220C173G05	Green
			6	480	+ 10%	465	0.55	1.09	0.55	H	Trap	8437D78G25	220C173G05	Green
		Mag-Reg [1]	7	120	+ 10%	470	1.40	4.20	1.20	H	Trap	8444D06G06	220C173G13	Red
			7	208	+ 10%	470	0.80	2.42	0.70	H	Trap	8444D06G06	220C173G13	Red
			7	240	+ 10%	470	0.70	2.10	0.60	H	Trap	8444D06G06	220C173G13	Red
			7	277 [2]	+ 10%	470	0.61	1.82	0.52	H	Trap	8444D06G06	220C173G13	Red
			7	480 [2]	+ 10%	470	0.35	1.05	0.30	H	Trap	8444D06G05	220C173G13	Red
S52	1000	CWA [1]	5	120	+ 10%	1100	7.39	9.20	4.60	H	Trap	8438D68G37	219C960G09	White/Round
			5	208	+ 10%	1100	4.10	5.45	3.10	H	Trap	8438D68G37	219C960G09	White/Round
			5	240	+ 10%	1100	3.60	4.61	2.48	H	Trap	8438D68G37	219C960G09	White/Round
			5	277	+ 10%	1100	3.20	4.10	2.14	H	Trap	8438D68G37	219C960G09	White/Round
			5	480	+ 10%	1100	1.80	2.29	1.20	H	Trap	8438D68G35	219C960G09	White/Round
		CWA [1]	5	120	+ 10%	1080	7.39	9.20	4.60	H	Trap	1003D31G06	219C960G09	White/Round
			5	208	+ 10%	1080	4.10	5.45	3.10	H	Trap	1003D31G06	219C960G09	White/Round
			5	240	+ 10%	1080	3.60	4.61	2.48	H	Trap	1003D31G06	219C960G09	White/Round
			5	277	+ 10%	1080	3.20	4.10	2.14	H	Trap	1003D31G06	219C960G09	White/Round
		(Ext. Life)	5	480	+ 10%	1080	1.80	2.29	1.20	H	Trap	1003D31G05	219C960G09	White/Round

NOTE: 1 Available in Multi-tap 120/208/240/277V **2** Has tap for 120 dual voltage operation

BALLAST DATA

Lamp Type	Lamp Watts	Circuit Type	Fig. No.	Input Volts	Voltage Input Range	Input Watts	Starting Amps	Operating Amps	Open Circuit Current	Nominal Power Factor	Lamp Wattage Regulation	Ballast Part #	Starter Data	Ballast Color Code
METAL HALIDE														
M98	70	Hi-Rx [1]	10	MT	+ 5%	92	--	--	--	N	--	1006D82G07	220C173G15	Grey
			10	MT	+ 5%	92	--	--	--	H	--	1006D82G07	220C173G15	Grey
			11	480	+ 5%	92	--	--	--	N	--	1006D82G07	220C173G15	Grey
			11	480	+ 5%	92	--	--	--	H	--	1006D82G07	220C173G15	Grey
M90	100	Hi-Rx [1]	10	MT	+ 5%	128	--	--	--	N	--	1006D82G07	220C173G15	Grey
			10	MT	+ 5%	128	--	--	--	H	--	1006D82G07	220C173G15	Grey
			11	480	+ 5%	128	--	--	--	N	--	1006D82G07	220C173G15	Grey
			11	480	+ 5%	128	--	--	--	H	--	1006D82G07	220C173G15	Grey
M57 or H39	175	CWA [1]	9	120	+ 10%	210	1.00	1.75	1.85	H	+ 10%	8449D19G07	--	--
			9	208	+ 10%	210	0.57	1.01	1.06	H	+ 10%	8449D19G07	--	--
			9	240	+ 10%	210	0.50	0.86	0.92	H	+ 10%	8449D19G07	--	--
			9	277 [2]	+ 10%	210	0.43	0.76	0.80	H	+ 10%	8449D19G07	--	--
			9	480	+ 10%	210	0.25	0.43	0.46	H	+ 10%	8449D19G05	--	--
M58 or H37	250	CWA [1]	9	120	+ 10%	295	2.42	2.60	1.80	H	+ 10%	1000D14G07	--	--
			9	208	+ 10%	295	1.40	1.50	1.04	H	+ 10%	1000D14G07	--	--
			9	240	+ 10%	295	1.21	1.30	0.90	H	+ 10%	1000D14G07	--	--
			9	277 [2]	+ 10%	295	1.05	1.13	0.78	H	+ 10%	1000D14G07	--	--
			9	480	+ 10%	295	0.60	6.50	0.45	H	+ 10%	1000D14G05	--	--
M59 or H33	400	CWA [1]	9	120	+ 10%	455	3.80	4.00	2.23	H	+ 10%	1000D14G07	--	--
			9	208	+ 10%	455	2.20	2.30	1.28	H	+ 10%	1000D14G07	--	--
			9	240	+ 10%	455	1.90	2.00	1.11	H	+ 10%	1000D14G07	--	--
			9	277	+ 10%	455	1.60	1.70	0.97	H	+ 10%	1000D14G07	--	--
			9	480	+ 10%	455	0.95	1.00	0.56	H	+ 10%	1000D14G05	--	--
			10	120/240	+ 10%	455	3.8/1.9	4.0/2.0	2.20/1.11	H	+ 10%	--	--	--
M47 or H36	1000	CWA [1]	9	120	+ 10%	1080	5.60	9.40	5.40	H	+ 10%	8437D60G27	--	--
			9	208	+ 10%	1080	3.15	5.40	3.10	H	+ 10%	8437D60G27	--	--
			9	240	+ 10%	1080	2.80	4.70	2.70	H	+ 10%	8437D60G27	--	--
			9	277	+ 10%	1080	2.40	4.10	2.30	H	+ 10%	8437D60G27	--	--
			9	480	+ 10%	1080	1.40	2.35	1.35	H	+ 10%	8437D60G25	--	--
M48	1500	CWA	9	120	+ 10%	1625	8.10	14.20	9.48	H	+ 10%	8437D61G36	--	--
			9	208	+ 10%	1625	4.70	8.17	5.46	H	+ 10%	8437D61G36	--	--
			9	240	+ 10%	1625	4.05	7.10	4.74	H	+ 10%	8437D61G36	--	--
			9	277	+ 10%	1625	3.50	6.14	4.12	H	+ 10%	8437D61G36	--	--
			9	480	+ 10%	1625	2.03	3.55	2.37	H	+ 10%	8437D61G35	--	--

NOTE: 1 Available in Multi-tap 120/208/240/277V **2** Has tap for 120 dual voltage operation

BALLAST DATA

SCHEMATIC DIAGRAMS

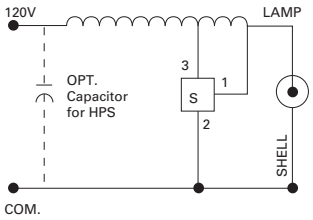


Fig. 1
Reactor - HPS

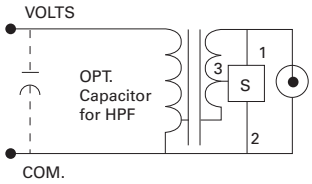


Fig. 2
Hi Reactance - HPS
Single Voltage

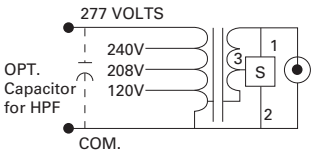


Fig. 3
Hi Reactance - HPS
Multi-Tap

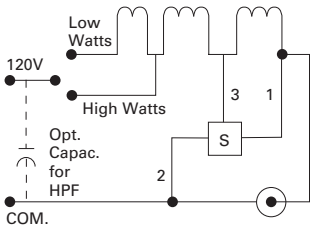


Fig. 4
Reactor - HPS
70/100 Dual Wattage
100/150 Dual Wattage

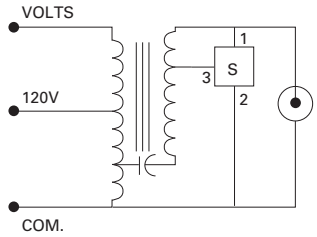


Fig. 5
CWA (Lead Circuit) HPS
*Resistor on 1000W Only

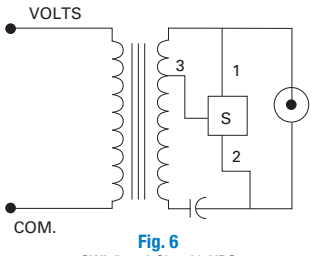


Fig. 6
CWI (Lead Circuit) HPS

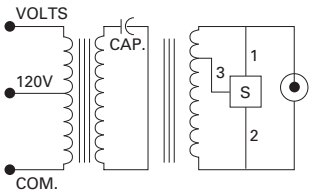


Fig. 7
Magnetic Regulated HPS

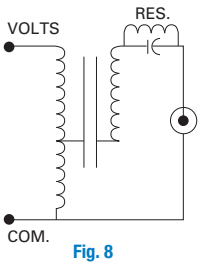


Fig. 8
CWA - MH/HG

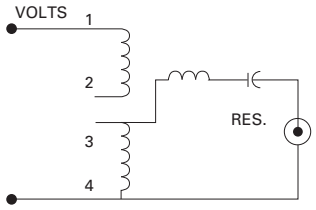


Fig. 9
CWA - MH
120V - Connect 1 & 3, 2 & 4
240V - Connect 2 & 3

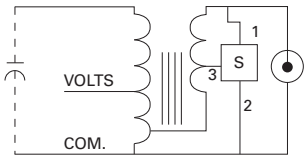


Fig. 10
Hi Reactance - MH
277 Volt

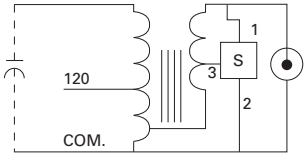


Fig. 11
Hi Reactance - MH
480 Volt

POLYESTER POWDER COAT

POLYESTER POWDER COAT [POLES]

Cooper Lighting's Polyester Powder Coat (PPC) system provides a superior alternative to conventional pole finishing processes.

PPC utilizes chemically formulated polyester resins designed for those uses requiring excellent outdoor weathering characteristics. The resins mix with curing agents, modifiers and coloring pigments to produce a high-quality gloss finish that meets the most stringent specifications. This specially prepared formula is applied to the pole with an electrostatic applicator which supplies each particle with a low amperage, high voltage charge. The pole to be coated is electrically grounded so that the charged particles bind themselves to the oppositely charged metal surface. Once coated, the pole is baked at 400°, slowly curing the powder coat, allowing the agents in the formula to tightly bond together.

The technically advanced PPC system provides a smooth, uniform pole finish that is extremely durable. The finish meets or exceeds all requirements for hardness, flexibility and resistance to environmental abuse. Complete specification features are listed to the right.

Specification Features

Data determined by testing 2.0 mil thick coating applied to abrasively cleaned .032 thick steel panel.

Property	Test Method	Value
Weatherability	Atlas Weatherometer 1,000 Hours 1,500 Hours 2,500 Hours	Initial Gloss 90% 70% Gloss 63% Gloss 63% Gloss
Impact Resistance	Gardner Impact Tester (ASTM D-2794 Modified) PTM-53008	160in.lbs.(18.1N-m) direct and reverse No cracking or loss of adhesion
Abrasion Resistance	Taber Abrader 1000 cycles CS-10 Wheels 1,000 gm. loading	61.0 mg weight loss
Pencil Hardness		2H
Flexibility	180° Bend 1/8" (3.2 mm) mandrel	No cracking or loss of adhesion
Adhesion	Cross hatch and tape pull 1/8" (3.2 mm) squares	No squares removed
Gloss	Gardner 60°	55% in standard white
Water Immersion	Tap water 24 hours at 100° F (38° C) Unscoured panel	No blistering or loss of adhesion
Salt Spray Resistance	Salt Spray Cabinet 1,000 Hours 5% salt spray 95° F (35° C) and 95% humidity	Less than 1/16" (1.6mm) disbonding at score line
Humidity Resistance	500 hours at 100% humidity 95-105° F (35-41° C)	No blistering, loss of adhesion or discoloration
Detergent Resistance	1/2% dishwashing detergent 200 Hours at 175-180° F (79-85° C) Zinc phosphated steel panel	No creepage at score line. No blistering discoloration or loss of adhesion

POLYESTER POWDER COAT [FIXTURES]

Cooper Lighting's Polyester Powder Coat (PPC) system provides a superior alternative to conventional fixture finishing processes.

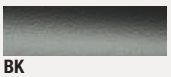
PPC utilizes chemically formulated polyester resins designed for those uses requiring excellent corrosion and weathering characteristics. The resins mix with curing agents, modifiers and coloring pigments to produce a high-quality textured finish that meets the most stringent specifications. This specially prepared formula is applied to the fixture with an electrostatic applicator which supplies each particle with a low amperage, high voltage charge. The fixture to be coated is electrically grounded so that the charged particles bind themselves to the oppositely charged metal surface. Once coated, the fixture is baked at 400°, slowly curing the powder coat, allowing the agents in the formula to tightly bond together.

The technically advanced PPC system provides a smooth, uniform fixture finish that is extremely durable. The finish meets or exceeds all requirements for hardness, flexibility and resistance to environmental abuse. Complete specification features are listed to the right.

Specification Features

Property	Test Method	Value
Weatherability	Atlas Weatherometer 1,000 Hours 1,500 Hours 2,500 Hours	Initial Gloss 90% 70% Gloss 63% Gloss 63% Gloss
Impact Resistance	Gardner Impact Tester (ASTM D-2794 Modified) PTM-53008	160in.lbs.(18.1N-m) direct and reverse No cracking or loss of adhesion
Abrasion Resistance	Taber Abrader 1000 cycles CS-10 Wheels 1,000 gm. loading	61.0 mg weight loss
Pencil Hardness		2H
Flexibility	180° Bend 1/8" (3.2 mm) mandrel	No cracking or loss of adhesion
Adhesion	Cross hatch and tape pull 1/8" (3.2 mm) squares	No squares removed
Gloss	Gardner 60°	40% in standard white
Water Immersion	Tap water 24 hours at 100° F (38° C) Unscoured panel	No blistering or loss of adhesion
Salt Spray Resistance	Salt Spray Cabinet 1,000 Hours 5% salt spray 95° F (35° C) and 95% humidity	Less than 1/16" (1.6mm) disbonding at score line
Humidity Resistance	500 hours at 100% humidity 95-105° F (35-41° C)	No blistering, loss of adhesion or discoloration
Detergent Resistance	1/2% dishwashing detergent 200 Hours at 175-180° F (79-85° C) Zinc phosphated steel panel	No creepage at score line. No blistering discoloration or loss of adhesion

COLORS

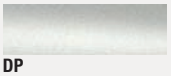


BK
Black

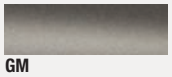
AP
Grey

BZ
Bronze

WH
White



DP
Dark Platinum



GM
Graphite Metallic

DESIGN + SELECTION GUIDE

Shown below is a simple four-step procedure to help you select the right equipment for a specific job. Typical examples with illustrations and easy-to-read charts are included in this section of the catalog.

The four steps are:

1. Determine Illumination Level — When known, proceed to step 2
2. Select Type of Lamp — When known, proceed to step 3
3. Select Type of Lighting Fixture — When known, proceed to step 4
4. Determine Number and Placement of Lighting Fixtures and Poles (if required) — Detailed Method (Beam Lumen)

1 Footcandle Levels

The information listed in the tables below is based upon the current Illuminating Engineering Society (IES) Lighting Handbook. Note that these values are the minimum average on the area. We recommend that the installation be designed to the lowest value which would occur on the area. This lowest value should not be less than 1/3 of the value given below for most applications.

GENERAL APPLICATION

	Minimum Average Recommended Footcandles		
Airports			
Hangar aprons to approx. 50' out		1.0	
Service aprons to approx. 200' out		0.5	
Center of aircraft service area		2.0 Vertical	
	City	**Suburban**	**Rural**
Building Exteriors			
Terra cotta, light marble or plaster	15	10	5
Bedford or buff limestone, smooth buff face brick, concrete, aluminum	20	15	10
Smooth or medium gray brick, common tan or dark field gray brick	30	20	15
Brownstone, stained wooden shingles, other dark surface 50	35	20	
Bulletin & Poster Boards			
Bright surroundings, light surfaces		50	
Bright surroundings, dark surfaces		100	
Dark surroundings, light surfaces		20	
Dark surroundings, dark surfaces		50	
Control Station			
Catwalks		2	
Cinder dumps		0.1	
Coal storage area		0.1	
Coal Yards (protective)		0.2	
Construction			
General		10	
Excavation		2	
Industrial Roadways			
Adjacent to buildings		1.0	
Not bordered by buildings		0.5	
Industrial Yard/Material Handling		5	
Loading/Unloading Platforms, Freight Docks		20	
Malls		5-10	
Parks & Gardens		0.2	
Parking Areas			
Industrial		1.0	
Shopping centers		2-5	
Commercial lots, open, sheltered		2-5	
Passenger Platforms		20	
Protective			
Entrances active		5	
(Normally locked, infrequently used)		1	
Vital locations or structures, prison yards		5	
Building surrounds		1	
Quarries		5	
Railroad Yards			
All Switch Points		2	
Hump area side of the car for reading numbers		20 (vertical)	
Inspection pit underneath car		20 (vertical)	
Shipyards			
General		5	
Ways		10	
Fabrication areas		30	

	Minimum Average Recommended Footcandles
Smoke Stacks and Water tanks with Advertising messages	Same as bulletin and poster boards
Storage Yards	
Active	20
Inactive	1
Used Car Lots	
Front Line 1st 20ft. of lot	100-500
Remaining area	20-75

(continued)

DESIGN + SELECTION GUIDE

ROADWAYS

Vehicular Roadway Classification	Urban Commercial Footcandle	Intermediate Footcandle	Residential Footcandle
Freeway	0.6	0.6	0.6
Expressway	1.4	1.2	1.0
Major	2.0	1.4	1.0
Collector	1.2	0.9	0.6
Local	0.9	0.6	0.4
Alleys	0.6	0.4	0.4

OUTDOOR RECREATIONAL AND SPORTS FACILITIES

	Minimum Average Recommended Footcandles
Badminton	
Tournament	30
Club	20
Recreational	10

	Infield	Outfield
Baseball		
Jr. League	30	20
Regulation		
Major League	150	100
AAA-AA	70	50
A-B	50	30
C-D	30	20
Semi-pro and municipal	20	15
Recreational	15	10
Combination baseball-football	20	15

Basketball	
Regulation	20
Recreational	10
Bathing Beaches	
On water to 150ft. out	3 (vertical)
On beach 100ft. wide	1
Football	
Index distance from nearest sideline to farthest row of spectators	
Class I, over 100 feet	100
Class II, 50 feet to 100 feet	50
Class III, 30 feet to 50 feet	30
Class IV, under 30 feet	20
Class V, no fixed seating	10

	Green or Tee	Fairways
Golf		
Courses	5	3 (vertical)
Driving range	10	5 (vertical)
Miniature	10	
Putting Green	10	

Hockey, Ice Rink 85' x 200'	
Professional	50
Amateur	20
Recreational	10

	Minimum Average Recommended Footcandles
Lacrosse	20
Marinas	1
Playgrounds	5
Racing	
Auto, Horse, Motorcycle	20
Bicycle, touring competition, recreation	30, 20, 10
Dog	30
Dragstrip, staging, acceleration	10,20
deceleration 1st 2nd 660 ft.	15, 10
shutdown 820	5
Rodeos	
Professional, amateur, recreational	50, 30, 10
Skating	
Rink	5
Pond	1
Skeet & Trap Shooting Firing, Target	5, 30
Ski Slope	1
Soccer	See Football

	Infield	Outfield
Softball		
Professional or championship	50	30
Semi-pro	30	20
Industrial League	20	15
Recreational	10	7

(continued)

DESIGN + SELECTION GUIDE

Swimming Pools, Water Surface & Aprons	10
Tennis Courts	
Tournament	30
Club	20
Recreational	10

	Minimum Average Recommended Footcandles
Volleyball	
Tournament	20
Recreational	10

INDOOR LIGHTING

	Minimum Average Recommended Footcandles
Assembly	
Rough	30
Medium	100
Fine	500
Foundries	
Annealing (Furnaces), Cleaning	30
Core Making	50
Grinding and Chipping	100
Inspection	100
Molding, Pouring, Sorting	50
Garage Automobile and Truck	
Repairs and Service	100
Parking:	
Entrance	50
Traffic Lane	10
Storage	5
Machine Shops	
Rough	50
Medium	100
Fine	500
Paper Manufacturing	
Beaters, Grinding, Calendering	30
Finishing, Trimming, Papermaking Machines	50
Wet End of Machine	70
Reel, Inspection, Labs	100
Rewinder	150
Post Offices	
Sorting, Mailing Etc.	100
Storage Rooms or Warehouses	
Inactive	5
Active:	
Rough Bulky	10
Medium	20
Fine	50
Textile Mills Cotton	
Manufacturing	30 to 50
Inspection:	
Hand Turning	100
Rapidly Moving	500
Automatic Tying-In	150
Weaving	100
Drawing-In by Hand	200
Textile Mills Silk and Synthetics	
Manufacturing	30
Winding, Twisting, Etc.:	
Light Thread	50
Dark Thread	200
Wrapping	100
Drawing	200
Weaving	100
Textile Mills Woolen and Worsted	
Grading	100
Carding, Combing, Etc.	50
Drawing, Spinning Colored	100
Wrapping Colored	100
Weaving Colored	200
Dyeing	100
Inspecting (Perching)	2000
Folding	70
Woodworking	
Rough Sawing and Bench Work	30
Sizing, Planning, Gluing, Veneering, Etc.	50
Fine Bench, Machine, Sanding and Finishing	100

DESIGN + SELECTION GUIDE

2 Lamp Selection

LAMP CHARACTERISTICS

Characteristics of six principal light sources incandescent quartz (a type of incandescent), mercury, metal halide, high pressure sodium and low pressure sodium are described to the left.

Lamp	Advantages*	Disadvantages
Incandescent	Makes colors look natural. Compact source. Good beam control. Low initial cost. Higher operating cost.	Low light output (lumens per watt). Short lamp life (500-2000 hrs.)
Quartz	Makes colors look natural. Some are compact for good beam control. Good lumen maintenance (light output remains almost the same throughout life).	Low light output (lumens per watt). Some have elongated source which limits beam control. Medium lamp life (2000-4000 hrs.) Higher operating cost.
Mercury (Color Improved)	Long lamp life (16,000-24,000 hrs.) High light output (lumens per watt). Low operating cost.	High initial cost. Large light source limited beam control (especially with phosphor coated lamps.) Does not restart immediately after power failure.
Metal Halide	Moderately long lamp life (7500-20,000 hrs.) Higher light output than mercury (lumens per watt). Makes colors look close to natural. Lower operating cost. Good beam control.	Higher initial cost. Doesn't restart immediately after power failure.
High Pressure Sodium	Long lamp life (24,000 hrs.) Exceptionally high light output (lumens per watt). Fair color rendition. Lowest operating cost.	High initial cost. Doesn't restart immediately after power failure with normal auxiliary equipment. Restarts quicker than metal halide, however.
Low Pressure Sodium	Long lamp life (18,000 hrs.) Exceptionally high light output (lumens per watt). Lowest operating cost. Very good lumen maintenance.	High initial cost. Very poor color rendition. Disposal may be a problem. Lamp requires long time to reach full output.

*All comparisons are relative to one another, and are based on existing products.

QUICK SELECTOR [LIGHT SOURCE]

If a single requirement must be met on a lighting job, simply select the lamp best suited from the table to the left. When there is no clear-cut requirement, compare the various lamp characteristics and weigh the importance of each. If more than one light source is suitable for an application, an economic study can help you determine which would be the least expensive over a number of years.

Characteristics	Incandescent	Quartz	Mercury Coated	Metal Halide	High Pressure Sodium	Low Pressure Sodium
Initial Cost	Low	Low	Higher	Higher	Higher	Higher
Initial Lumens/Watt	15-24	15-24	30-60	69-115	79-140	62-150
Annual Operating Cost	Medium	Medium	Low	Low	Low	Low
Fixture Size	Medium	Small	Medium	Medium	Medium	Large
Long Burning Hrs. Per-year (over 1000)	Fair	Fair	Good	Good	Good	Good
Short Burning Hrs. Per-year (under 1000)	Good	Good	Good	Good	Good	Good
Color Acceptability	Good	Very Good	Fair to Good	Good	Fair to Good	Very Poor
Degree of Light Control	Very Good	Very Good	Fair	Good	Good	Poor
Maint. of Lumen Output	Good	Very Good	Fair	Fair	Good	Very Good
Long Range Projection (Narrow Beam)	Good	Fair	Poor	Good	Good	Poor
Medium Range Projection	Good	Good	Fair	Good	Good	Poor

DESIGN + SELECTION GUIDE

3 BEAM LUMEN METHOD

Quick Formulas + Definitions

Using this technique, it is possible either to (A) compute the number of lights needed for a given illuminance level (footcandles), or (B) find the illuminance if the quantity of fixtures is known.

Because, by definition, footcandles are the number of lumens/sq. ft. for any area, the formulas for both (A) and (B) are expressed as follows:

$$\text{No of Lights} = \frac{\text{Length x Width x Illuminance Level}}{\text{Beam Lumens x Beam Utilization x Light Loss Factor}}$$

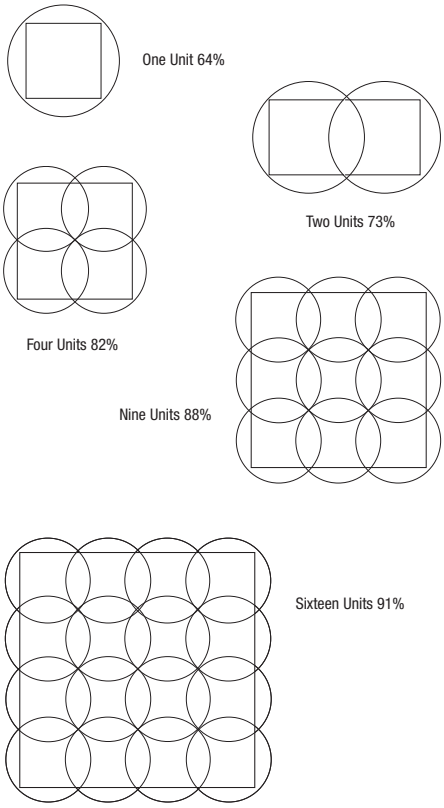
$$\text{Illuminance} = \frac{\text{No of Lights x Beam Lumens x Beam Utilization x Light Loss Factor}}{\text{Length x Width}}$$

This method is most effectively used for such applications as Sports Fields, Building Facades, Signs, Industrial Storage Areas and Freight Yards. This method will only give average footcandles on the area.

Beam Utilization

This is the percentage of the beam that falls on the area to be lighted. It can vary from 60 to 100%, and can be accurately determined only through extensive calculations. Some guides can be established, however, which will allow a fairly accurate choice of beam utilization. As a general rule, the larger the area, the higher the beam utilization. Beam spread, too, plays a part; if the beam is wider than necessary, excessive light will be spilled off the area and the beam utilization will be low.

Luminaires



Floodlights

Baseball	Infield	65% 75%
	Outfield	85%
Football		60% 80%
Tennis		75% 90%
Large Parking Lots		80%
Building Facades		65%

Example

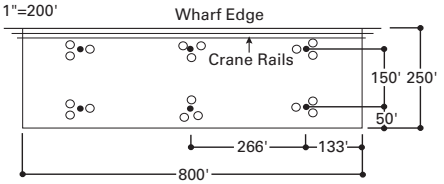
A containerized freight wharf is to be lighted to an average of 5 FC (50 LUX) using HPS lamps. The area is active 24 hrs. a day, and is surrounded by industrial buildings. It is 250' deep and 800' long, with a bridge rail crane at the water's edge.

Since all the adjacent property is industrial, glare is not a problem so HMX91SWXDW fixtures are chosen. And because the area is fairly large, a high mounting height is permissible, in this case 60'. To figure the quantity required:

$$\text{No of Lights} = \frac{\text{Length x Width x Footcandle Level}}{\text{Beam Lumens x Beam Utilization x Light Loss Factor}}$$

$$\text{No of Lights} = \frac{800 \times 250 \times 5}{76160 \times 9 \times 81} = 18 \text{ luminaires}$$

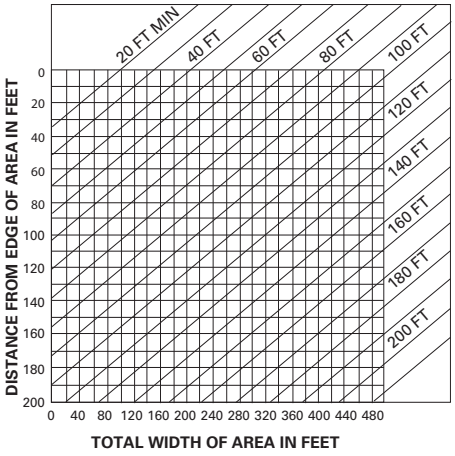
Using 3 per pole, on 6 poles, 2 rows of 3 poles each will be spaced according to the diagram below.



Locate poles from edge of area to avoid excessive loss of light beyond perimeter. Try to maintain spacings of approximately 4 times the mounting height. Refer to suggested layouts for other plans.

Mounting Height Chart

Floodlights are generally used where poles or other mounting structures are located at some distance from the edge of the area to be lighted. The chart applies to any design requiring pole setback, and will optimize beam utilization from those locations.



* For ground area sports 30 feet is minimum for area sports

Mounting height chart for all sports areas—
minimum height to bottom floodlight crossarm Read mounting height along diagonal at intersection of appropriate horizontal and vertical lines For example, where Area Width = 200 feet and Pole Setback = 70 feet, minimum height of 80 feet is indicated by diagonal at intersection of 70 and 200 feet

DESIGN + SELECTION GUIDE

SUGGESTED POLE LAYOUTS

Ground Areas

Standard layouts for ground area are given in Figs. 1-12. All pole spacings (a factor of the mounting height H) are recommended maximums. Conversely, if the distance is fixed, the minimum recommended mounting height can be determined.

The more lighting locations used, the better the quality of lighting in respect to uniformity, visibility and reduction of shadows. For example, although total light on the two areas illustrated in Fig. 4 and 5 is the same, Fig. 4 lighting is superior. If cost is a deciding factor, however, it should be noted that Fig. 4 requires more poles and wiring.

Lower mounting heights and wider spacing than shown in Figs. 1 through 12 may be used, at the cost of less uniform lighting, longer shadows, and reduction in visibility. Where these factors are not of prime importance, the spacing between poles is sometimes increased to 6 times the mounting height. The minimum number of floodlight units required at each location for adequate beam coverage is one for corner locations, two for side locations and four for center locations.

Vertical Areas

A standard layout for vertical areas using wide angle floodlights is shown in Fig. 13. The floodlight setback distance D should be at least one-quarter the height. pacing between units should not exceed twice D.

Irregular Areas

In some cases, standard application data can be used on an irregular area (Fig. 11) by breaking it up into a number of smaller areas. However, for areas that are long and narrow, irregular in shape, or require long range, narrow beam units, the services of a consulting engineer, architect, or lighting specialist may be used. Consult your Cooper Lighting representative for assistance.

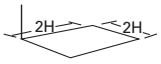


Fig. 1

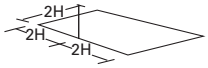


Fig. 2

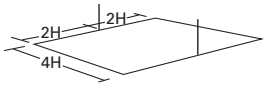


Fig. 3

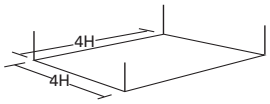


Fig. 4

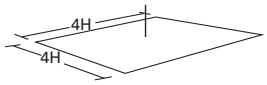


Fig. 5

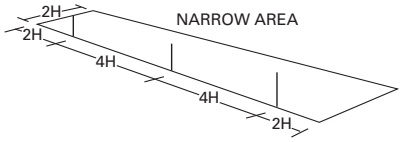


Fig. 6

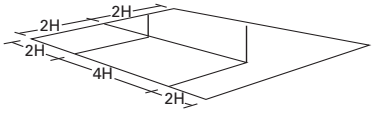


Fig. 7

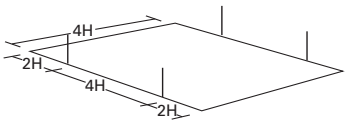


Fig. 8

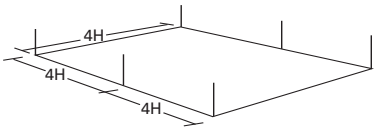


Fig. 9

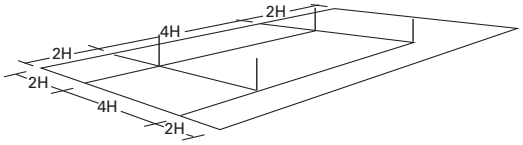


Fig. 10

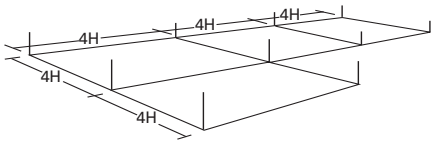


Fig. 11

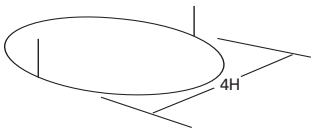


Fig. 12

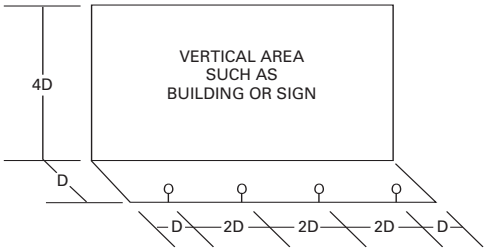


Fig. 13

ROADWAY LIGHTING

Proper distribution of the light flux from luminaires is one of the essential factors in efficient roadway lighting. Light distributions are generally designed for a typical range of conditions which include luminaire mounting height, transverse (overhang) location of luminaires, longitudinal spacing of luminaires, width of roadway to be effectively lighted, arrangement of luminaires. percentage of lamp light directed toward the pavement and adjacent areas, and maintained efficiency of the system.

Formula for Computation

The basic formula for determination of average horizontal illuminance is as follows:

$$\text{Average Maintained Horizontal Footcandles} = \frac{\text{Initial Lamp Lumens x Coefficient of Utilization x Total Light Loss Factor}}{\text{Pole Spacing x Width of Roadway}}$$

Saying the same thing another way:

$$\text{Pole Spacing} = \frac{\text{Initial Lamp Lumens x Coefficient of Utilization x Light Loss Factor}}{\text{Footcandle Level x Width of Roadway}}$$

To find the correct coefficient of utilization for the product to be used, refer to the appropriate photometric test report. An example follows. The C.U. can be found by measuring how wide the roadway is, in terms of mounting heights, and reading across to the dotted line. The scale will then indicate what percentage of lamp lumens will project on the area.

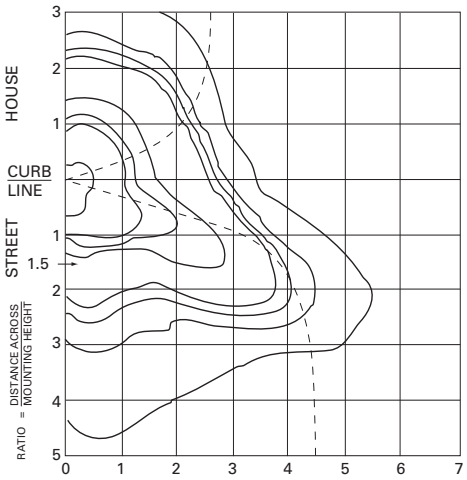
For example, an RCL15SCN3D is to be used on a 30' pole to light a 45' wide roadway to a level of 2 footcandles average maintained. The road is 1.5 mounting heights wide (45'/30' = 1.5). Reading down 1.5, and over to the C.U. curve, the street-side C.U. is 39%.

In the same way, if two lights are mounted back-to-back, then the street-side C.U. from one is added to the house-side C.U. of the other.

In this case,

$$\text{Pole Spacing} = \frac{16000 \text{ Lumens} \times 39\ C\,U \times 81\ L\,L\,F}{2 \text{ FC} \times 45' \text{ Width}} = 56'$$

Mounting Height for Isolux 30.0 Feet



Mounting Height (FT.)	Multiplier
8.0	14.10
10.0	9.00
12.0	6.25
15.0	4.00
20.0	2.25
25.0	1.44
30.0	1.00

Certified Test Report No 763972
Crouse-Hinds Area Lighting Luminaire,
Catalog No RCL15SCN3D, semi-specular aluminum reflector,
clear glass One 150 watt clear HPS lamp
Lumen Rating = 16000 LMS

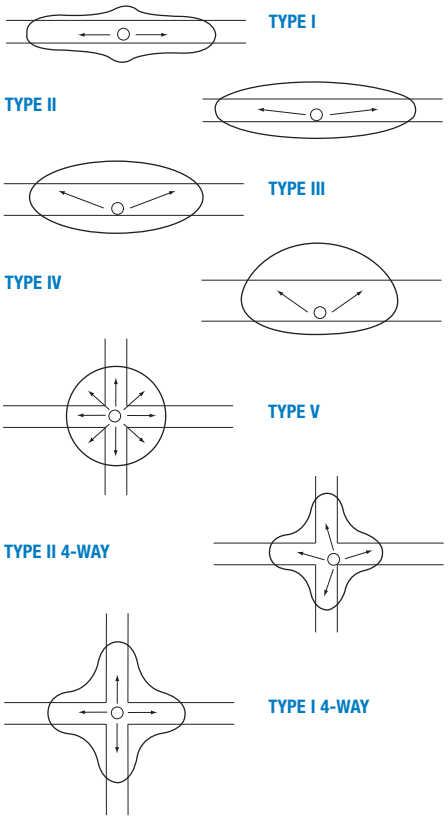
An isolux diagram is a graphic representation of points of equal illuminance connected by a continuous line. These lines may show values on a horizontal plane from a single unit having a definite mounting height, or they may show a composite picture of the illuminance from a number of sources arranged in any manner or at any mounting height. Illuminance values from one curve can be added to another, where those curves intersect.

In order to make these curves applicable to all conditions, they are computed for a given mounting height. Correction factors for other mounting heights are usually given in the tabulation alongside the isolux curves.

For other mounting heights, illuminance values may be calculated as follows:

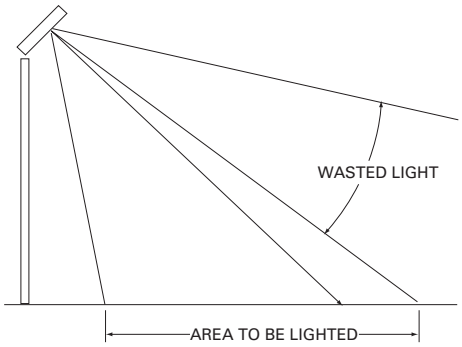
$$\text{New FC Value} = \frac{\text{Old Mounting Height}^2}{\text{New Mounting Height}^2} \times \text{Old FC Value}$$

Lateral Light Distributions



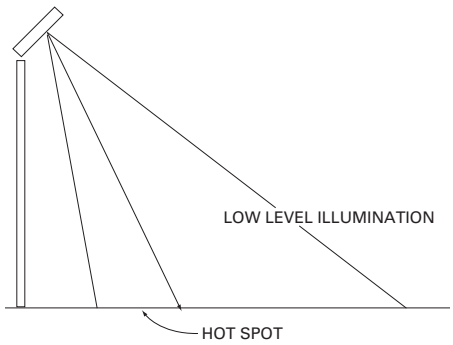
AIMING FLOODLIGHTS

1



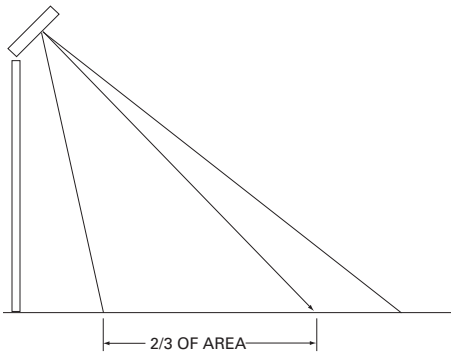
By aiming floodlight at the far edge of the area to be lighted, there will be wasted light.

2



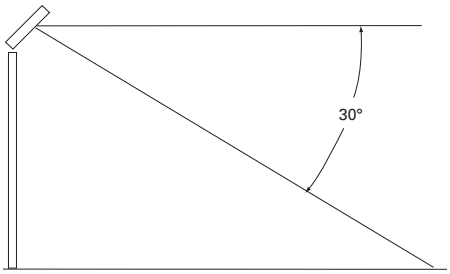
Aiming the floodlight too close to the near edge causes low level illumination at the far edge.

3



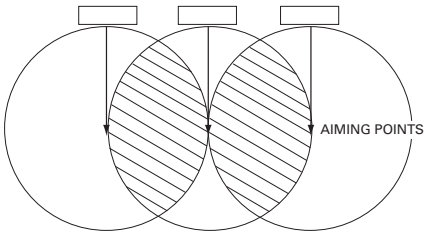
Good judgement in aiming floodlights is to aim them two-thirds of the distance to be lighted.

4



Aim floodlights at 30° below the horizontal to achieve better visual comfort. Mounting height may need to be increased to accomplish 30° below horizontal.

5



Where the edge of one beam intersects the aiming point of the next floodlight, there is more uniform light distribution.

Beam Spread Degrees	NEMA Type Designation	Beam Description
10 up to 18	1	very narrow
18 up to 29	2	narrow
29 up to 46	3	medium narrow
46 up to 70	4	medium
70 up to 100	5	medium wide
100 up to 130	6	wide
130 and up	7	very wid

AIMING SPORTSLIGHTS

APPLICATION DATA

These recommended layouts are for typical field configurations. If there are special lighting requirements or significant changes in pole locations, the Application Engineering Department at the Customer First Center in Peachtree City, Georgia will provide a design for your project.

Football

Class of Play	FC Average Maintained	Distance Pole Setback	Min. Mtg. Ht.	Layout Fig. No.	Qty. of Poles	1500 Watt Metal Halide Beam Type and Quantity Per Pole 2	3	4	5	6	Total	1000 Watt Metal Halide Beam Type and Quantity Per Pole 2	3	4	5	6	Total
I (College)	100	175	135	1	4	44					176						
		140	120	1	4	38					152						
		100	90	1	4	36					144						
II (Jr. College)	50	100	90	1	4	18					72	28					112
		75	75	1	4		8	10			72		12	16			112
		50	60	2	6		4	6			60		6	9			90
III (High School)	30	75	75	2	6		3	4			42		4	7			66
		50	60	2	6			5	2		42			7	4		66
		30	50	2	6			4	2		36			6	3		54
IV (Recreational)	50	50	60	2	6			3	2		30			4	3		42
		30	50	2	6			3	2		30			4	3		42
		20	50	3	8				3		24				4		32

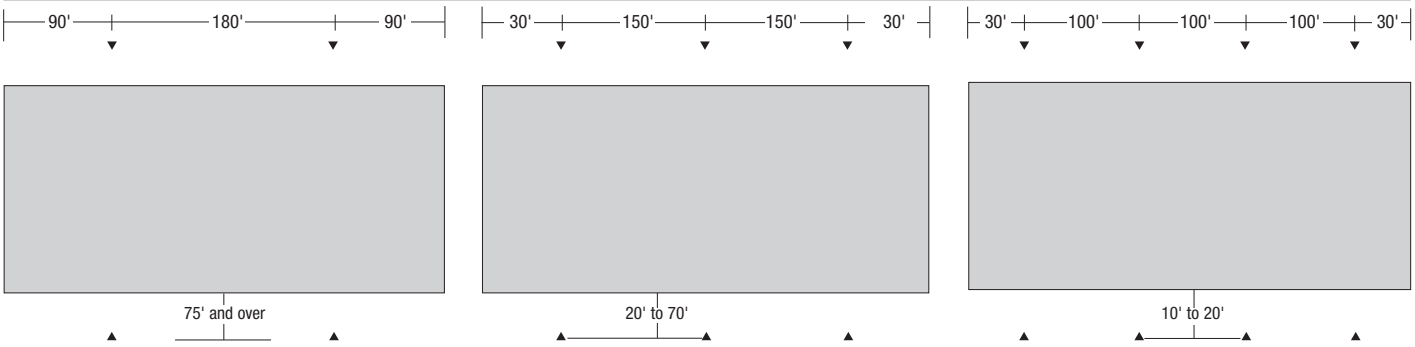


Fig. 1 Fig. 2 Fig. 3

Baseball

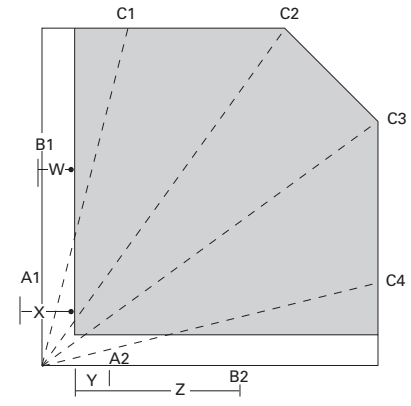


Fig. 1

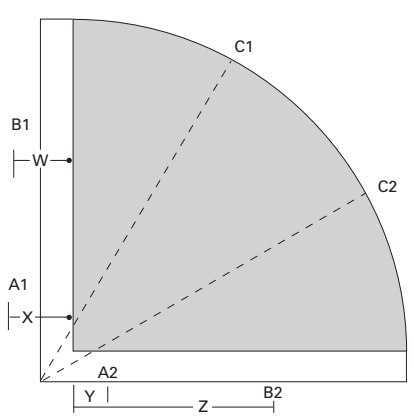


Fig. 2

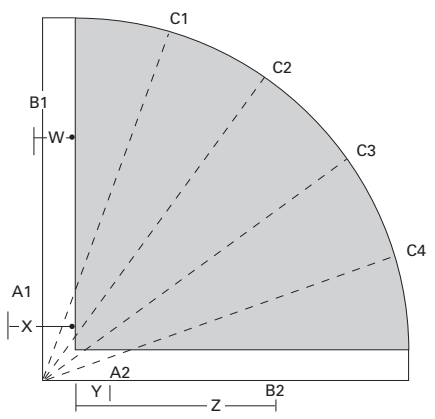


Fig. 3

Softball

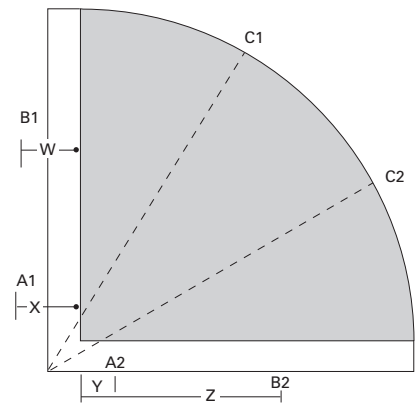


Fig. 1

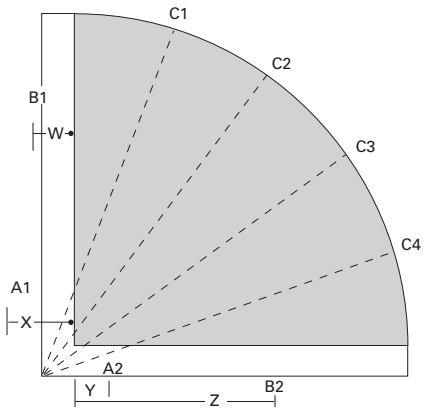


Fig. 2

BASEBALL FIELDS
Dimensions-Feet

Fig.	W	X	Y	Z
1	30-60	40-80	20-30	130-180
2	20-30	30-50	5-15	90-145
3	25-45	35-65	10-25	110-145

SOFTBALL FIELDS
Dimensions-Feet

Fig.	W	X	Y	Z
1	20-30	30-50	5-15	90-145
2	20-30	30-50	5-15	110-145

AIMING SPORTSLIGHTS

APPLICATION DATA

Baseball

		Avg. Maintained Illumination FC			1000 Watt Metal Halide Beam Type				1500 Watt Metal Halide Beam Type			
Class of Play	**Fig.**	**Infield**	**Outfield**	**Pole & MH**	**3**	**4**	**5**	**Total**	**3**	**4**	**5**	**Total**
Municipal Semi-Professional D=400'	1	20	15	A1-A2-70'		3	2	10	2	1	6	
				B1-B2-70'		7	3	20	4	3	14	
				C1-C4-70'		5	2	14	2	2	8	
				C2-C3-70'		4	3	14	2	2	8	
				Totals		**38**	**20**	**58**		**20**	**16**	**36**
C & D, D=400'	1	30	20	A1-A2-70'	2	4	2	16	1	3	2	12
				B1-B2-70'	3	6	3	24	2	4	2	16
				C1-C4-70'	2	4	3	18	1	3	2	12
				C2-C3-70'		6	3	18		4	2	12
				Totals	**14**	**40**	**22**	**76**	**8**	**28**	**16**	**52**
A & B, D=400'	1	50	30	A1-A2-90'	6	4	2	24	6	3	1	20
				B1-B2-90'	14	10		48	10	6		32
				C1-C4-90'	8	5		26	5	3		16
				C2-C3-90'	8	5		26	5	3		16
				Totals	**72**	**48**	**4**	**124**	**52**	**30**	**2**	**84**
Class I Junior League (Little League), R=185'	2	30	20	A1-A2-40'			4	8			3	6
				B1-B2-40'			5	10			3	6
				C1-C2-50'			3	6			2	4
				Totals			**24**	**24**			**16**	**16**
Class I League (Little League), R=200'	2	30	20	A1-A2-40'		1	3	8		1	2	6
				B1-B2-40'		3	3	12		2	2	8
				C1-C2-50'		2	3	10		1	2	6
				Totals		**12**	**18**	**30**		**8**	**12**	**20**
Class II League (Pony League), R=250'	3	30	20	A1-A2-50'		1	3	8		1	2	6
				B1-B2-50'		5	3	16		2	1	6
				C1-C4-60'		2	1	6		2	1	6
				C2-C3-60'		2	1	6		2	1	6
				Totals		**20**	**16**	**36**		**14**	**10**	**24**

Softball

		Avg. Maintained Illumination FC			1000 Watt Metal Halide Beam Type			1500 Watt Metal Halide Beam Type		
Class of Play	**Fig.**	**Infield**	**Outfield**	**Pole & MH**	**4**	**5**	**Total**	**4**	**5**	**Total**
Industrial League, R=200'	1	20	15	A1-A2-35'		3	6		2	4
				B1-B2-35'	2	2	6		3	6
				C1-C2-40'	2	2	8		3	6
				Totals	**8**	**14**	**22**		**16**	**16**
Industrial League, R=240'	1	20	15	A1-A2-35'		3	6		2	4
				B1-B2-35'	2	2	8	1	2	6
				C1-C2-40'	2	3	10	2	2	8
				Totals	**8**	**14**	**24**	**6**	**12**	**18**
Industrial League, R=280'	1	20	15	A1-A2-35'		3	6		2	4
				B1-B2-35'	2	3	10	2	2	8
				C1-C2-60'	4	4	16	3	2	10
				Totals	**12**	**20**	**32**	**10**	**12**	**22**
Semi-Pro, R=240'	1	30	20	A1-A2-40'	2	2	8	1	2	6
				B1-B2040'	2	3	10	2	2	8
				C1-C2-45'	4	3	14	2	2	8
				Totals	**16**	**16**	**32**	**10**	**12**	**22**
Semi Pro, R=280'	2	30	20	A1-A2-40'	1	3	8	1	2	6
				B1-B2-40'	4	3	14	2	2	8
				C1-C4-55'	3	2	10	2	1	6
				C2-C3-55'	2	3	10	1	2	6
				Totals	**20**	**22**	**42**	**12**	**14**	**26**
Professional & Championship, R=240'	1	50	30	A1-A2-50'	2	3	10	1	3	8
				B1-B2-50'	6	4	20	3	3	12
				C1-C2-60'	6	4	20	3	3	12
				Totals	**28**	**22**	**50**	**14**	**18**	**32**
Professional & Championship, R=280'	2	50	30	A1-A2-50'	3	4	14	1	3	8
				B1-B2-50'	8	4	24	5	3	16
				C1-C4-60'	3	3	12	2	2	8
				C2-C3-60'	3	3	12	2	2	8
				Totals	**34**	**28**	**62**	**20**	**20**	**40**

LIGHTING TERMINOLOGY

Like any other industry, lighting has a language of its own. Listed below are some of the most common words and terms used within the lighting industry.

Acrylic:
The generic term for a family of quality light-stabilized plastics used in making fixture diffusers and lenses.

Ambient:
The surrounding environment of a device such as a fixture or ballast. It usually refers to temperature or sound conditions.

Average Maximum Candlepower:
The average of the 10 highest readings in a floodlight beam.

Ballast:
A device which modifies incoming voltage and current to provide the circuit conditions necessary to start and operate electric discharge lamps (fluorescent and HID).

Beam Lumens:
The lumens contained within the beam spread of a floodlight.

Beam Spread:
The vertical and horizontal displacement of the beam in degrees, bounded by the angle at which 10% of maximum candlepower occurs. (Maximum candlepower is the highest intensity in the beam.)

Brightness:
As commonly applied, brightness (or luminance) is the intensity of the sensation which results from viewing a surface or space which directs light into the eyes.

Candela:
Unit of luminous intensity.

Candlepower:
Luminous intensity.

Candlepower Distribution Curve:
A curve showing the variation of luminous intensity of a lamp or luminaire
with angle.

Cavity:
An upper, lower or intermediate zone or region of a room designated as ceiling, floor or room cavity.

Cavity Ratio [CR]**:**
Geometric proportions of the ceiling, floor and room cavities.

$$\textbf{Room Cavity Ratio} = \frac{5H\ (\text{Room Length} + \text{Room Width})}{\text{Room Length} \times \text{Room Width}}$$

Coefficient of Beam Utilization [CBU]**:**
The percentage of light from a floodlight which reaches the seeing task relative to beam lumens.

Coefficient Of Utilization [CU]**:**
The percentage of light from a fixture which reaches the seeing task. It is a function of the fixture, each having its own set of CU's for a wide range of the following factors:

Fixture efficiency, distribution and mounting height
Room proportions Room Surface reflectances

Color Rendering:
General expression for the effect of a light source on the color appearance of objects when compared with their color appearance under a reference light source.

Cutoff Angle [of a luminaire]**:**
The angle measured up from nadir between the vertical axis and the first line of sight at which the bare source is not visible.

Diffuser:
See lens.

Efficacy:
The ratio of light from lamp to the electrical power (watts) consumed. Usually expressed in lumens per watt.

Efficiency:
See luminaire efficiency.

Explosion Proof Luminaire:
A luminaire which is completely enclosed and capable of withstanding an explosion of a specific gas or vapor that may occur within it and preventing the ignition of a specific gas or vapor surrounding the enclosure by sparks, flashes or explosion of the gas or vapor within. It must operate at such an external temperature that a surrounding flammable atmosphere will not be ignited.

Fixture:
The device which holds, protects and provides an optical system and power connections for the lamp(s). Fixture usually refers to interior lighting. See luminaire.

Flux [Luminous Flux]**:**
See lumen.

Footcandle [fc]**:**
A quantitative unit for measuring illuminance: the illumination on a surface one foot square on which there is a uniformly distributed flux of one lumen.

Footlambert:
The unit of luminance equal to $1/\pi$ candle per sq. ft.

General Purpose Floodlight [GP]**:**
A weatherproof unit so constructed that the housing forms the reflecting surface. The assembly is enclosed by a cover glass.

Glare:
The sensation produced by luminance within the visual field that is significantly greater than the luminance to which the eyes are adapted.

Glare, Direct:
Glare resulting from high luminances or insufficiently shielded light sources in the field of view.

Glare, Disability:
Glare resulting in reduced visual performance and visibility and often accompanied by discomfort.

Glare, Discomfort:
Glare producing discomfort. It does not necessarily interfere with visual performance or visibility.

Grid [lay-in]**:**
A type of ceiling construction where the supporting members (inverted T's) are exposed, and the ceiling tiles and lighting fixtures are laid-in on the flanges of the T's.

HID:
High intensity discharge lighting, including mercury vapor, metal halide and high pressure sodium light sources. Although low pressure sodium lamps are not HID sources, they often are included in the HID category.

Hazardous Location:
An area where ignitable vapors or dust may cause a fire or explosion created by energy emitted from lighting or other electrical equipment.

Heavy Duty Floodlight [HD]**:**
A weatherproof unit having a substantially constructed metal housing into which is placed a separate and removable reflector. A weatherproof hinged door with cover glass encloses the assembly but provides an unobstructed light opening at least equal to the effective diameter of the reflector.

High-Bay:
Generally refers to the industrial lighting where high mounting heights may be encountered. Many
industrial HID type fixtures are called high-bays.

High Intensity Discharge [HID]**:**
The term that applies to a family of light sources consisting of mercury vapor, metal halide and high pressure sodium lamps.

High Mast Lighting:
Illumination of a large area by means of a group of luminaires which are designed to be mounted on the top of a high mast generally 60 feet or higher.

Illuminance:
The density of luminous flux on a surface. Measured in footcandles or lux. The former term for this quantity was illumination. Inverse Square Law: The law stating that the illuminance E at a point on a surface varies directly with the intensity I of a point source and inversely as the square of the distance d between the source and the point. If the surface at the point is normal to the direction of the incident light, the law is expressed by E=I/d2.

Isocandela Line:
A line plotted on any appropriate set of coordinates to show directions in space, about a source of light, in which the candlepower is the same. A series of such curves, usually for equal increments of intensity, is called an isocandela diagram.

Isolux [Isofootcandle] **Line:**
A line plotted on any appropriate set of coordinates to show all points on a surface where the illuminance is the same. A series of such lines for various illuminance values is called an isolux (isofootcandle) diagram.

Lamp:
A light source. Lamps used for outdoor lighting include HID, incandescent (including tungsten halogen), and fluorescent.

Lamp Lumen Depreciation [LLD]**:**
A factor used in lighting calculations to account for the light loss that takes place in a lamp due to the gradual decay in lumen output over a designated period of burning time. The LLD is contingent upon relamping schedules and the specific lamp involved.

Lay-In:
See grid.

Lens:
The shielding or diffuser portion of a fixture, made of plastic or glass, through which the light passes on its way to the seeing task.

NOTE: Plastic lenses may be manufactured by the extrusion process or the injection molded process. Injection molded lenses are more expensive.

Lighting Distribution:
Luminaires are classified according to the manner in which they control or distribute the luminous flux.

Light Loss Factor:
A factor used in calculating the level of illumination after a given period of time and under given conditions. It takes into account temp., dirt accumulations on the luminaire and room surfaces, lamp depreciation maintenance procedures and atmosphere conditions.

Light Trespass:
A situation which occurs when, due to lack of adequate beam control, light from a source is distributed onto areas where the illumination is not wanted.

Louver:
A series of baffles used to shield a source from view at certain angles or to absorb unwanted light.

Lumen:
The unit of light output. Light output is also referred to as light flux.

Luminaire:
A complete lighting fixture including one or more lamps and a means for connection to a power source. Many luminaires also include one or more ballasts and elements to position and protect lamps and distribute their light.

Luminaire Dirt Depreciation [LDD]**:**
A factor used in
lighting calculations to account for the light loss due to the accumulation of dirt on the luminaire. The LDD is contingent upon environment, cleaning schedules and the type of luminaire involved.

Luminaire Efficiency:
The ratio of the light leaving a
luminaire to that emitted by the lamp, or lamps, used therein.

LIGHTING TERMINOLOGY

Luminance [Photometric Brightness]**:**
The luminous intensity of any surface in a given direction per unit area of that surface as viewed from that direction. Measured in footlamberts or C/in2. All visible objects have some luminance.

Luminous Flux:
The time rate of flow of light.

Lux:
The metric unit of measurement of illuminance. The light on a surface of one meter square on which there is a uniformly distributed flux of one lumen. 10.76 lux equal 1 footcandle. Decalux=10 lux.

Maintenance Factor: A multiplier which is applied to account for aging of the lamp and for dirt build-up on the luminaire during the period for which a lamp is in place. Lamp aging and luminaire dirt build-up both reduce light output, the amount of reduction usually increasing with time. In common practice, maintenance factors are applied to initial footcandles to derive the minimum light level on the area being illuminated. Light loss factor includes
maintenance factor.

Metercandle [lux, lx]**:**
The metric equivalent of footcandle.

lx	=	lumens/square meters
1 footcandle	=	10.76 lux
1 lux	=	0.0929 footcandles

Mounting Height:
The vertical distance between the luminaire and the surface to be lighted. It includes both the pole length and the base (above grade) to which the pole is affixed.

Optical System:
The lamp cavity or environment (including diffusing media) designed as part of the fixture for the purpose of controlling the light output.

Overhang:
In roadway lighting, the distance between a vertical line passing through the luminaire and the curb or edge of the roadway.

Parabolic:
The term applied to certain low brightness louver and reflector shapes as derived from the geometric shape (curve) called a parabola where, if a light source is placed at the focal point of the parabola, the resultant emitted light will be redirected parallel to the parabola's geometric axis.

Plenum:
That space between the structural ceiling slab and the finished ceiling. This space may contain air ducts, electrical wiring, etc. It's the area which conceals the housing part of a recessed fixture.

Recessed:
The term for a fixture mounted in a ceiling opening so that the housing of the fixture is hidden from view. The fixtures lens/door assembly may be slightly protruding, flush or slightly regressed relative to the ceiling surface.

Reflector:
A device used to direct the light from a source by the process of reflection.

Refraction:
The process by which the direction of a ray of light changes as it passes obliquely from one medium to another.

Refractor:
A device used to redirect the luminous flux from a source, primarily by the process of refraction.

Setback:
The distance that the center of the luminaire is behind the area to be lighted by that luminaire.

Shielding Angle: [of a luminaire]
The angle between a horizontal line through the light center and the line of sight at which the bare source first becomes visible.

Spacing:
In roadway lighting, the distance between successive light units measured along the center line of the street.

Spacing to Mounting Height Ratio:
The ratio of the distance between luminaire centers to the mounting height above a reference plane, usually the work plane.

Specular Angle:
That angle between the perpendicular to a surface and the reflected ray. It is numerically equal to the angle of incidence.

Specular Surface:
Shiny or glossy surfaces (including mirror and polished metal) that reflect incident light, providing a relatively narrow beam pattern.

Spill Light:
Lumens distributed by the luminaire which are outside the beam spread.

Styrene [Polystyrene]**:**
The generic term for a family of plastics used in the making of fixture diffusers and lenses. Tends to yellow in time due to the effect of ultraviolet radiation from fluorescent and HID lamps.

Surface Mounted:
Any fixture mounted directly on a ceiling is surface mounted.

Suspension or Pendant Mounted:
Any fixture hung from a ceiling by supports (chains, hangers, stems, etc.) is suspension or pendant mounted.

Vapor-Tight Luminaire:
A luminaire designed and approved for installation in damp or wet locations. Also described as "enclosed and gasketed."

Visual Comfort Probability [VCP]**:**
An empirical comfort rating system for fixtures as measured in various proportioned rooms at different mounting heights. The VCP number represents the number of people, out of a hundred, who would be comfortable in the specified situation when seated in the most undesirable location.

Work Plane:
The plane at which level work is usually performed, and at which the illumination is specified and measured. Unless it is otherwise specified, this plane is assumed to be a horizontal plane 2.5ft. above the floor.

Zonal Cavity:
The latest and most advanced method used by the lighting industry in the determination of coefficients of utilization for various fixtures.

METAL OXIDE VARISTORS

THREE PLACE TERMINAL BLOCK WITH METAL OXIDE VARISTOR [FIG. 1]

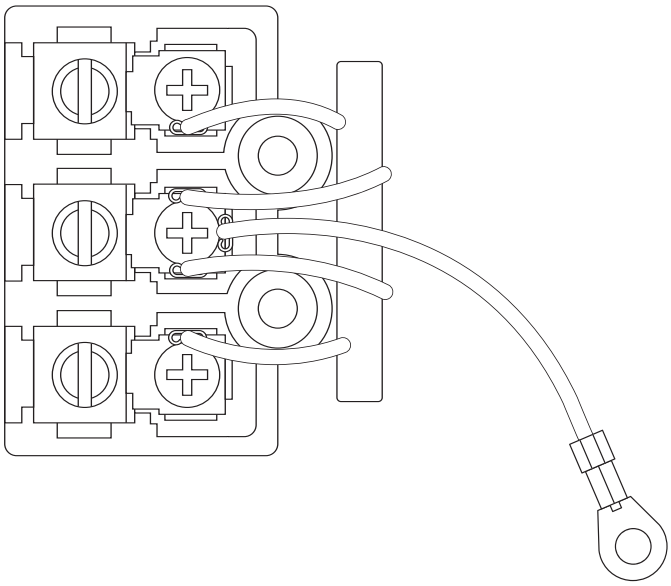
Metal Oxide Varistors, which act as electrical surge protectors, are available on a range of Cooper LIghting roadway, flood and area lights. The MOVs are attached to the fixtures terminal block. One MOV is attached to the neutral and ground, while the other is connected to the hot side and ground.

When a power surge such as lighting hits the power line, each MOV lows the maximum continuous RMS voltage (see chart) through to the fixture and discharges excess power through the ground, thus protecting the fixture components from the effects of the surge.

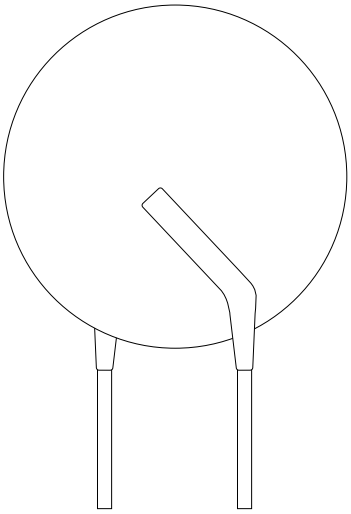
MOV option is not available for any system requiring a three position terminal block (Example 120/240 incoming line).
In order for MOV option to function center terminal of three position terminal block must be connected to “Earth” ground.

Fixture	Terminal Block	MOV Catalog Number
Cobraheads	Standard	M
Lexington	Standard	M
Acorn	Standard	M
Galleria	Order with fixture	M
CFB	Order with fixture	M

FIG. 1



METAL OXIDE VARISTOR



METAL OXIDE VARISTOR SPECS

Maximum Ratings (75°C)				Characteristics (25°C)					
Continuous		Transient		Varistor Voltage @1mA DC Test Current			Maximum Clamping Voltage Vc @ Test Current (8/20ms)		Typical Capacitance
RMS Voltage	DC Voltage	Energy (10/100ms)	Peak Current (8/20ms)						
Vm(ac)	Vm(dc)	Wtm	Itm	Min.	VN(dc)	Max.	Vc	Ip	f=1 MHz
Volts	Volts	Joules	Amps	Volts	Volts	Volts	Volts	Amps	Picofarads
575	730	220	6500	805	910	960	1410	100	450

HID TROUBLESHOOTING GUIDE

These suggestions are intended to serve as a guide in determining the possible cause of the problem and to suggest corrective maintenance procedures. If a large percentage of lamps fail to operate in a new installation, it will generally be found that operating conditions are causing the trouble. In this case, the entire electrical installation should be checked thoroughly. Because high voltages are common in HID lighting systems, it is recommended that only qualified personnel attempt to make electrical measurements or take corrective measures and that they use reasonable caution in doing so.

LAMPS [Normal End of Life]

1. Metal Halide lamps at end of life tend to emit low light output along with intermittent starting. There will be some blackening on the ends of the arc tube and some erosion of the electrode tips.
2. High Pressure Sodium lamps tend to cycle off and on at the end of life. This is a result of the lamp requiring more voltage from the ballast to stabilize and operate than the ballast can provide, thus the lamps cycle off and on. At this point the HPS lamp could have blackening on the ends of the arc tubes and possibly a brownish color on the outer envelope which is sodium deposits.
3. Low Pressure Sodium lamps retain their light output at end of life; however, starting becomes intermittent, then impossible. There will be some blackening on the end of the arc tube.

[Lamps Will Not Start]

1. The lamp could be loose in socket. Check for arcing at the center contact button and retighten lamp until it is properly seated. Tightening too much may cause lamp to break.
2. The lamp may be defective. Test the lamp in an adjacent fixture that you know operates properly.
3. The voltage at the fixture may be too low. Check the nameplate rating for the ballast. The voltage should be within 5% for reactors and high reactance and within 10% for others. If voltage is insufficient, lamp will not start.
4. Check ballast nameplate to make sure proper lamp is being installed in conjunction with the proper ballast. That is, make sure the proper light source and wattage are being installed with the proper ballast. If all of the above are correct, the ballast may be defective. This could be indicated by blackening on the ends of the arc tubes.

[Lamps Cycle]

1. This could be caused by normal end of life with High Pressure Sodium lamps.
2. Heavy motor loads could be the problem. It is always advisable to remove lighting circuits from those circuits servicing heavy and/or pulsing loads. Heavy motor loads can consume so much power that the lamp will not have enough voltage to sustain its operation.
3. If this is an outdoor application equipped with a photocell, there may be a defective photocell. Replace the photocell with a shorting cap, if the lamp remains on, the photocell is defective. If the lamp still cycles, the lamp is probably defective or the wrong lamp/ballast combination has been used.

VISUAL INSPECTIONS

Before any components are checked internally in the fixture, make a visual inspection of the lamp, electrical system and components.

[Lamps check for]

1. Cracks in the outer envelope and broken arc tubes.
2. Cracks or seal leakage where envelope meets base.
3. Blackening at ends of arc tubes.
4. Leaker (sodium deposits inside envelope).
5. Correct light source and wattage used in conjunction with proper ballast.
6. Correct orientation of Lamp Base Up (BU) or Base Down (BD) or Horizontal (HOR).

[Electrical System Check]

1. Check ballast for insulation or coil damage.
2. Check leads for loose connection, disconnected or pinched wires.
3. Check multi-tap ballast to make sure incoming line voltage is on proper tap of ballast. (120V to 120V tap, etc.)
4. Swollen top or rupture in capacitor.
5. Check to see that capacitor rating agrees with capacitor rating on ballast label.

[Ignitor]

(For High Pressure Sodium, low wattage Metal Halide, and Pulse Start Metal Halide only. This component is used as a starting aid only.)

NOTE: Never attempt to measure the voltage pulse of the ignitor (2500 volts). Attempting to measure this could destroy your measuring instrument.

1. Check fixture with a known operating lamp. If lamp starts the ignitor is good.
2. Install a known operating ignitor. If the lamp starts the original ignitor was bad or miswired. If the lamp fails to start, check the ignitor accordingly:
   - **a.** For 35 watt thru 150 watt HPS with a 55 volt lamp, insert a 120 volt incandescent lamp in the socket. If the lamp burns, the ignitor should be replaced.
   - **b.** For 150 watt thru 400 watt HPS with a 100 volt lamp, place a mercury lamp of comparable wattage in the fixture. If the lamp burns, the ignitor should be replaced.
   - **c.** For 1000 watt HPS check the ignitor by replacing the original ignitor with a known operating ignitor.

[Capacitor]

1. Disconnect capacitor from circuit.
2. The capacitor should be discharged by shorting between the terminals.
3. Set the ohmmeter to the highest resistance scale and check the capacitor. There should be one of three results:
   - **a.** If a low resistance is measured on the ohmmeter and gradually increases, the capacitor is operable.
   - **b.** If a high resistance is measured on the ohmmeter and does not decrease, the capacitor is open and should be replaced.
   - **c.** If a low resistance is measured on the ohmmeter and does not increase, the capacitor is shorted and should be replaced.

[Ballast]

If the ballast has problems, it is possible that one of the following could be the problem.

1. If the system is an older system, it could be normal end of life for the ballast.
2. Check lamp source and wattage to make sure it corresponds with ballast label ratings. If the light source and wattage are mismatched with the ballast, it can lead to premature end of life for the ballast.
3. If the ballast is located in an extremely high ambient temperature, it can overheat the ballast.
4. It is possible that a voltage surge damaged the ballast.
5. A shorted or open capacitor can damage the ballast. Also, check the capacitor rating on the ballast label with the capacitor to insure that the two match.
6. The ballast can become inoperative when the capacitor is wired wrong or if the wiring is shorting against the housing.

To determine if ballast is supplying proper starting voltage to the lamp the open circuit voltage must be verified. See table below for proper measurements per lamp source and wattage.

ANSI Lamp Type	**Wattage**	**Open Circuit Voltage** (Approx.)
METAL HALIDE		
M98	70	230
M90	100	275
M102	150	275
M57	175	300
M58	250	280
M59	400	300
M47	1000	400
M48	1500	420
PULSE START METAL HALIDE		
M137	175	272
M136	200	240
M138	250	275
M132	320	270
M131	350	270
M135	400	265
M144	450	257
M149	750	355
M141	100	415
HIGH PRESSURE SODIUM		
S62	70	110
S54	100	110
S55	150	110
S56	150	190
S66	200	190
S50	250	190
S67	310	190
S51	400	190
S52	1000	400

TERMS + CONDITIONS

FOR MORE INFORMATION CONTACT YOUR LOCAL COOPER LIGHTING REPRESENTATIVE

ACCEPTANCE/GOVERNING TERMS:
These Terms and Conditions of Sale ("Terms") shall apply to all sales of Streetworks products by Cooper Lighting, LLC (Cooper) Unless otherwise specifically agreed in writing by an authorized representative of Cooper, any different or additional terms and conditions proposed by any customer in a purchase order, response to a quotation or other proposal, are hereby rejected by Cooper and shall not be incorporated into any agreement for sale of Cooper products Customer's assent to these Terms shall be conclusively presumed from customer's ordering products quoted by Cooper, customer's failure to object in writing to these Terms, and/or customer's acceptance of all or part of any products ordered If Cooper is found to have acknowledged customer's order or proposal, and such acknowledgment constitutes an acceptance of an offer, such acceptance is expressly made conditional on customer's assent solely to these Terms which shall form part of the acknowledgment, and acceptance by customer of any products shall be deemed to constitute such assent If any quotation or other document of Cooper is deemed to constitute an offer to customer, customer's acceptance of such offer is limited to these Terms

SHIPMENT AND DELIVERY TERMS:
Unless otherwise noted, shipment of Cooper products will be F O B the Cooper facility The customer will assume the risk of loss of products upon Cooper's delivery to carrier at point of shipment When shipments of products are to be made via company truck, the risk of loss to the products shall pass to the customer at the time of delivery to the final destination or to the forwarding carrier Acceptance shall occur, if not before, when the customer fails to reject within ten days after delivery of the products The customer waives its right to revoke acceptance; it being the intent of the parties that the customer's remedies for nonconformity detected after acceptance be limited to those provided in these Terms

Freight will be prepaid by Cooper on any order in the continental United States totaling $3,000 or more, but multiple releases must be agreed to by Cooper Outside the continental United States, customers should consult with the Customer First Center to determine shipping arrangements Orders not qualified for prepaid freight will be shipped with transportation charges prepaid by Cooper and added to customer's account Partial shipments will be made at the direction of the customer, provided the customer pays excess freight When Cooper bears the cost of shipment, we reserve the right to ship all orders in one complete shipment Partial shipments may be made at Cooper's discretion Cooper will not be responsible for storage charges or cartage charges beyond the destination address acknowledged by Cooper On pole orders, if requested by customer, Cooper will ship anchor bolts and templates ahead

Shipping dates are approximate and are based on conditions existing at the time of Cooper's receipt of the customer's firm order and full information Cooper will in good faith endeavor to ship by the estimated shipping date but it shall not be responsible for any delay or any damage arising from a delay

DIRECT SHIPMENTS:
Cooper reserves the right to refuse the request of any distributor to make direct shipments of products to any destination outside the regular or assigned sales and service area of the distributor

MERCHANDISE AND CLAIMS TERMS:
Claims for defective material, shortages, delays, failures in shipment or delivery, for any other cause shall be deemed waived and released by customer or consignee unless made IN WRITING WITHIN 30 DAYS AFTER ARRIVAL OF THE PRODUCTS Proof of delivery will not be supplied by Cooper after 90 days from the original shipment date

RETURNED MERCHANDISE TERMS:
No merchandise may be returned by customer without prior written authorization in the form of a Return Materials Authorization (RMA), which has been issued by Cooper expressly for the merchandise to be returned This RMA will be issued at the sole discretion of Cooper RMAs are valid for 30 days from date of issue

Except with respect to defective items, returned merchandise must be in re-saleable condition and in its original sealed cartons

The customer may not return nonstocking special products, custom or made-to-order products, or outdated, obsolete or modified versions of cataloged factory stocking items Product older than 12 months may not be returned regardless of condition

Except for products that are defective in workmanship or materials, all returns will be subject to a 35% handling and factory inspection charge, and a deduction will be made for the freight expense of the original shipment The customer may request up to two returns of stocking product per year

Properly formatted catalog or item numbers are required in any request to return merchandise If invoice numbers are not provided, Cooper will price the material based on the lowest price paid by the distributor in the last 12 months

Merchandise accepted for return must be shipped prepaid to the factory or other destination specified by Cooper

Cooper will not take ownership of returned goods until they are received, inspected, and found to be acceptable by Cooper Damaged, unauthorized, broken, obsolete or made-to-order material received will be scrapped with no credit issued, unless the value of the material exceeds $500 For material valued in excess of $500, the material will be segregated, the customer will be notified and given the following options:

- Authorize the product to be returned to the customer
- Authorize Cooper to destroy the product with no credit given
- File a freight claim with the carrier

ORDER CANCELLATION TERMS:
Orders for stocking items may be canceled prior to shipping without charge Orders for Make to Order (MTO) product may be canceled before the product is manufactured without charge except that Cooper must be reimbursed for special materials purchased which cannot be returned to the supplier Orders for MTO product that have been manufactured and/or shipped cannot be canceled and return of MTO material is not allowed All order cancellations must be in writing All costs for warehousing and freight on orders canceled after shipment and/or refused at destination will be charged to the customer

MINIMUM ORDER CHARGE:
A service charge of $25 00 will be added to all original customer orders which total less than $50 00 net

PRICING:
Prices are subject to change without notice Cooper will ship merchandise at prices prevailing at the time of shipment Prices are exclusive of sales, use, excise or similar taxes unless otherwise noted

SPECIFICATIONS:
Cooper in no way, express or implied, accepts responsibility for voltage determination Cooper shall not be responsible for quotations of prices or specifications concerning non-catalogued products unless Cooper confirms this to the customer in writing Catalogued items are those listed in Cooper's current Buyer's Guide Dimensions of fixtures are subject to change without notice Unless specifically agreed by Cooper in writing, we do not warrant compliance of our products with individual project specifications

CHANGES IN PRODUCT DESIGN:
Cooper reserves the right to change, discontinue or modify materials or the design and construction of any of its products and to substitute materials or products equal to or superior to that originally specified

WARRANTY AND OBLIGATIONS:
THE FOLLOWING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE
Cooper warrants to resale customers only that Cooper's products are free from defects in materials and workmanship The obligation of Cooper under this warranty is expressly limited to repair or replacement without charge, at the sole option of Cooper, of defective products, within a period of one year from the date of shipment of products, and only after Cooper has issued a Return Materials Authorization to customer for the products This warranty does not apply to Cooper products which have been altered or repaired or which have been subjected to neglect, abuse, misuse or accident (including shipping damages) THIS WARRANTY DOES NOT APPLY TO PRODUCTS NOT MANUFACTURED BY COOPER WHICH HAVE BEEN INSTALLED AND/OR USED IN CONJUNCTION WITH COOPER PRODUCTS

Photoelectric controls and lamps are not manufactured by Cooper Cooper's warranty does not apply to any of these items, nor does it apply to any other component part or accessory manufactured by another manufacturer The manufacturer of the components makes any warranty regarding such components, and customer shall direct all claims to the component manufacturer

This warranty specifically excludes pole 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

This warranty also specifically excludes poles installed without the luminaires or with unapproved devices such as banners, pennants, cameras or signs for which the pole was not designed Use of such unauthorized accessories may result in pole failure causing serious injury, death, or property damage

Subject to all the limitations set forth above, for Cooper High Intensity Discharge (HID) luminaires only, supplied with a Cooper produced core and coil electrical system, Cooper warrants that the factory-installed electrical system, consisting of a Cooper core and coil ballast, igniter (if applicable), capacitor, socket and wiring, will be free from defects in material and workmanship for 5 years from the date of shipment of the products Finishes, housings, lenses and any other component not specifically mentioned in the preceding sentence are not included in the 5-year limited warranty If a covered component in a covered Cooper fixture fails to meet this warranty, Cooper will, at its sole option, ship a repaired or replacement component F O B Cooper's factory

LIMITATION OF LIABILITY:
IN NO EVENT SHALL COOPER BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, STRICT LIABILITY, OR IN TORT INCLUDING NEGLIGENCE), NOR FOR LOST PROFITS; NOR SHALL THE LIABILITY OF COOPER FOR ANY CLAIMS OR DAMAGE ARISING OUT OF OR CONNECTED WITH THESE TERMS OR THE MANUFACTURE, SALE, DELIVERY, USE, MAINTENANCE, REPAIR OR MODIFICATION OF THE PRODUCTS, OR SUPPLY OF ANY REPLACEMENT PARTS THEREFORE, EXCEED THE PURCHASE PRICE OF THE PRODUCTS THIS LIMITATION OF LIABILITY SHALL APPLY TO ANY LIABILITY FOR DEFAULT UNDER OR IN CONNECTION WITH THE PRODUCTS, PARTS, OR SERVICES DELIVERED HEREUNDER, WHETHER BASED ON WARRANTY, FAILURE OF OR DELAY IN DELIVERY, OR OTHERWISE NO LABOR CHARGES WILL BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL OF COOPER THIS CLAUSE SHALL SURVIVE FAILURE OF AN EXCLUSIVE REMEDY

FORCE MAJEURE:
Cooper shall not be liable for any delay or failure to perform its obligations, resulting directly or indirectly from or contributed to by any acts of God, acts of customer or purchaser, acts of government or other civil or military authorities, priorities, strikes, or other labor disputes, fires, accidents, floods, epidemics, war, riot, embargoes, delays in transportation, lack of or inability to obtain raw materials, components, labor, fuel, or supplies, or other circumstances beyond Cooper's reasonable control

CONSTRUCTION OF AGREEMENTS—GOVERNING LAW:
These terms and conditions and all agreements between Cooper and the customer shall be governed and construed in accordance with the laws of the State of Texas

SEVERABILITY:
If any provision or provisions of these Terms shall be held to be invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired thereby

NOTES

NOTES

ONE STOP...ONE CALL...

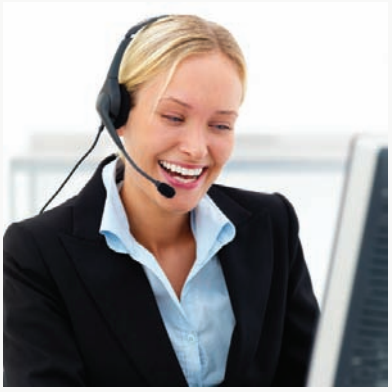
Our commitment to your success starts by putting you first. We support our philosophy with a dedicated Customer First Center featuring centralized warehousing, distribution and customer service for all your lighting requirements. We are committed to being your source for outdoor lighting solutions.

In today's world, time is of the essence. Our customer support functions have been centralized into multi-functional marketing service teams. This structure insures the success of your project from conception to installation. Lighting layouts, technical support, order entry, design, product selection, and after-sales support can be handled through one convenient location improving response time for you and your customers.

Our commitment carries into the development and construction of our products. Our facilities are ISO certified to offer the highest quality standard to you. We use the most current design software to offer products with unmatched performance and durability while backing it all with Cooper Lighting's comprehensive five-year HID warranty.

YOUR COMPLETE OUTDOOR LIGHTING SOLUTIONS!

CENTRALIZED WAREHOUSING



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