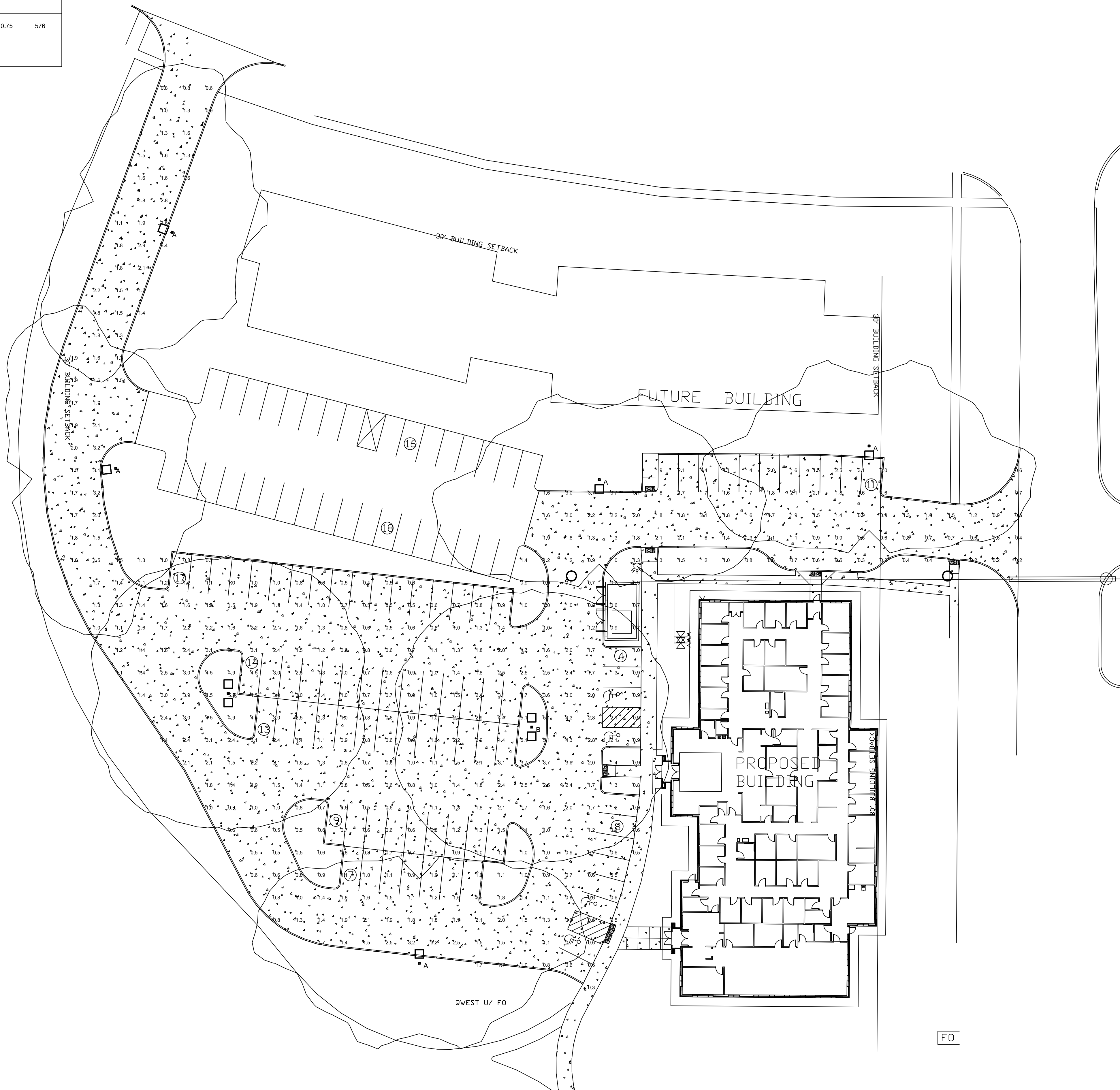


Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
□	A	5	AS2 250M SR3 (PULSE START)	ARCHITECTURAL ARM-MOUNTED CUTOFF LUMINAIRE WITH SR3 REFLECTOR. MEETS THE 'NIGHTTIME FRIENDLY' CRITERIA	ONE 250-WATT ED28 PULSE START METAL HALIDE. HORIZONTAL POS.	AS2_250M_SR3_(PULSE_START).ies	25000	0.75	288
□	B	2	AS2 250M SR4W (PULSE START)	ARCHITECTURAL ARM-MOUNTED CUTOFF LUMINAIRE WITH SR4W REFLECTOR. MEETS THE 'NIGHTTIME FRIENDLY' CRITERIA	ONE 250-WATT ED28 PULSE START METAL HALIDE. HORIZONTAL POS.	AS2_250M_SR4W_(PULSE_START).ies	25000	0.75	576

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone	+	1.5 fc	5.2 fc	0.2 fc	26.0:1	7.5:1

**NOTES**

- 25' POLE & 2' BASE



**1 ELECTRICAL SITE PLAN**  
SCALE: N.T.S.

**WOLIN**  
Mechanical • Electrical  
CONTRACTORS  
DELIVERING COMFORT SINCE 1920  
515-243-5191  
WWW.WOLIN.COM  
1720 FULLER ROAD • P.O. BOX 66721 • WEST DES MOINES, IOWA 50306

Mercy Clinic  
Waukee  
Waukee, Iowa

KEY PLAN  
**BALL** Construction Services, LLC

MARK	DATE	DESCRIPTION
ISSUED:	9/29/09	
PROJECT NO:	200000	
CAD DWG FILE:	ES100	
DRAWN BY:	AM	
CHECKED BY:	JP	

SHEET TITLE  
**Electrical Site Plan**

**ES100**

## FEATURES & SPECIFICATIONS

**INTENDED USE** — Streets, walkways, parking lots and surrounding areas.

**CONSTRUCTION** — Rugged, die-cast, single-piece aluminum housing with nominal wall thickness of 1/8". Die-cast door frame has impact-resistant, tempered, glass lens (3/16" thick). Door frame is fully gasketed with one-piece tubular silicone. **US. Patent No. D447,590. Canada Patent No. 94324.**

**FINISH** — Standard finish is dark bronze polyester powder finish. Additional architectural colors are available; see [www.lithonia.com/archcolors](http://www.lithonia.com/archcolors).

**OPTICAL SYSTEM** — Anodized segmented reflectors for superior uniformity and control. Reflectors attach with tool-less fasteners and are rotatable and interchangeable. Five full cutoff distributions available: Type II (roadway), Type III (asymmetric), Type IV (forward throw), Type IV (wide, forward throw) and Type V (symmetric square).

**ELECTRICAL SYSTEM** — Ballast: Constant-wattage autotransformer ballast standard. Super CWA pulse-start ballast required 200W, 320W and 350W (SCWA option). Ballast is copper-wound and 100% factory-tested. All ballasts are mounted on a removable power tray with tool-less latch and have positive locking disconnect plugs.

Socket: Porcelain, horizontally-mounted, mogul-base socket with copper alloy, nickel-plated screw shell and center contact.

**INSTALLATION** — Integral arm for pole or wall mounting. Optional mountings available.

**LISTING** — UL Listed (standard). CSA Certified (see Options). UL listed for 25°C ambient and wet locations. IP65 Rated.

NOTE: Specifications subject to change without notice.

Catalog Number	
Notes	Type

# AERIS™

Architectural Area & Roadway Luminaires

## AS2



**METAL HALIDE: 200W-400W**  
**HIGH PRESSURE SODIUM: 200W-400W**  
 10' to 35' Mounting

### Specifications

EPA: 1.2 ft<sup>2</sup>

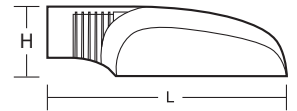
Length: 28.6 (72.6)

Width: 17.1 (43.4)

Depth: 8.3 (21.0)

\*Weight: 40 lbs (18.2 kg)

\*Weight as configured in example below.



All dimensions are inches (centimeters) unless otherwise specified.

## ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: AS2 250M SR3 TB SPA LPI

AS2								
Series	Wattage <sup>1</sup>	Voltage	Mounting	Ballast	Options	Finish <sup>13</sup>	Lamp <sup>14</sup>	
<b>AS2</b>	<b>Metal halide</b>	120	<b>SPA Square pole mounting</b>	(blank) <b>Magnetic ballast</b>	<b>Shipped installed in fixture</b>	(blank) <b>Dark bronze</b>	<b>LPI Lamp included</b>	
	200M <sup>2</sup>	208 <sup>5</sup>	<b>RPA Round pole mounting</b>	CWI Constant wattage isolated	SF Single fuse 120, 277, 347V	<b>DBL Black</b>	<b>L/LP Less lamp</b>	
	<b>250M</b>	240 <sup>5</sup>	WBA Wall bracket (up or down) <sup>9</sup>	<b>Pulse Start</b> <small>High Performance Electronic System</small>	DF Double fuse 208, 240, 480V	DGC Charcoal gray		
	320M <sup>2,3</sup>	277	ASKMA2 Mast arm adapter <sup>10</sup>	SCWA Super CWA pulse start ballast	PER NEMA twist-lock receptacle only (no photocontrol)	<b>DMB Medium bronze</b>		
	350M <sup>2,3</sup>	347	DCAS2 Decorative curved arm, square pole only <sup>10</sup>	NOTE: SCWA ballast must be selected to comply with California Title 20 metal halide regulations. SCWA also may be required to meet other states' regulations. Consult local authorities.	EC Emergency circuit <sup>11</sup>	<b>DNA Natural aluminum</b>		
	<b>400M<sup>3</sup></b>	480 <sup>5</sup>	DCAS2R Decorative curved arm, round pole only <sup>10</sup>		QRS Quartz restrrike system <sup>11</sup>	<b>DWH White</b>		
	<b>High pressure sodium<sup>4</sup></b>	TB <sup>6</sup>			HS Houseside shield (SR2, SR3, SR4W)	CR Corrosion resistance		
200S	TBV <sup>7</sup>			CSA CSA Certified				
250S	23050HZ <sup>8</sup>			NOM NOM Certified	<b>Shipped separately<sup>12</sup></b>			
400S				PE1 NEMA twist-lock PE (120, 208, 240V)				
				PE3 NEMA twist-lock PE (347V)				
				PE4 NEMA twist-lock PE (480V)				
				PE7 NEMA twist-lock PE (277V)				
				VG Vandal guard				
				SC Shorting cap				

### Distribution

- SR2 Segmented type II roadway
- SR3 Segmented type III asymmetric**
- SR4SC Segmented type IV forward throw, sharp cutoff**
- SR4W Segmented type IV wide, forward throw**
- SR5S Segmented type V square

### NOTES:

- 1 Lower wattages available. Consult factory.
- 2 Must be ordered with SCWA.
- 3 Must use reduced jacket lamp.
- 4 Not available with SCWA.
- 5 Must specify CWI for use in Canada.
- 6 Optional multi-tap ballast (120, 208, 240, 277V) (120, 277, 347V in Canada).
- 7 Optional 5-tap ballast (120, 208, 240, 277, 480V).
- 8 Consult factory for available wattage.<sup>5</sup>
- 9 Mounted in lens-up orientation, fixture is damp location listed.
- 10 Shipped separately.
- 11 Maximum allowance wattage lamp included.
- 12 May be ordered as an accessory.
- 13 Additional architectural colors available; see [www.lithonia.com/archcolors](http://www.lithonia.com/archcolors).
- 14 Must be specified.

**Note:** Aeris™ has a unique drilling template that requires an Aeris drilling pattern to be specified when ordering poles. See example below.  
 Example: SSA 20 4C **DM19AS** DDB

### Aeris Drilling Pattern

- DM19AS** 1 at 90 degrees
- DM28AS** 2 at 180 degrees
- DM29AS** 2 at 90 degrees
- DM39AS** 3 at 90 degrees
- DM49AS** 4 at 90 degrees
- DM32AS** 3 at 120 degrees (round poles only)

### Accessories: Tenon Mounting Slipfitter

Order as separate catalog number. Must be used with round pole mounting (RPA).

Tenon O.D.	Number of fixtures					
	One	Two@180°	Two@90°	Three@120°	Three@90°	Four@90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490
AS2VG	Vandal guard					



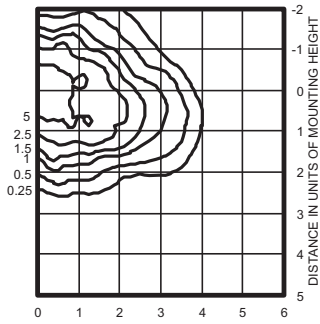
Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

# AS2 Metal Halide, High Pressure Sodium Area Lighting

## Coefficient of Utilization Initial Footcandles

**AS2 400M SR3**

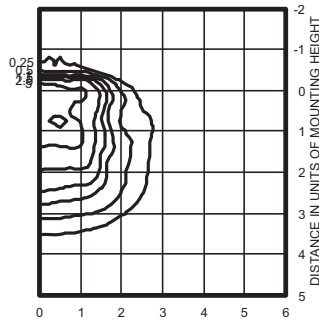
TEST NO: LTL10099



400W lamp, rated 32000 lumens. Footcandle values based on 20' mounting height.  
Classification: Type III, Medium, Full Cutoff

**AS2 400M SR4SC**

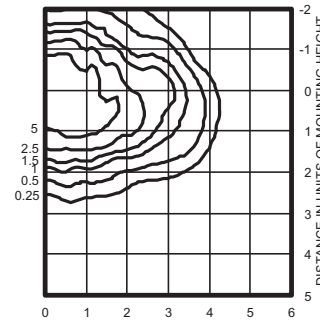
TEST NO: LTL10100



400W lamp, rated 32000 lumens. Footcandle values based on 20' mounting height.  
Classification: Unclassified (Type IV, Very Short), Full Cutoff

**AS2 400S SR3**

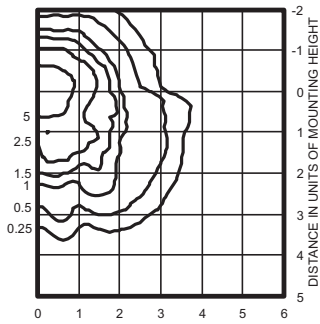
TEST NO: LTL10104



400W lamp, rated 50000 lumens. Footcandle values based on 20' mounting height.  
Classification: Type II, Medium, Full Cutoff

**AS2 400M SR4W**

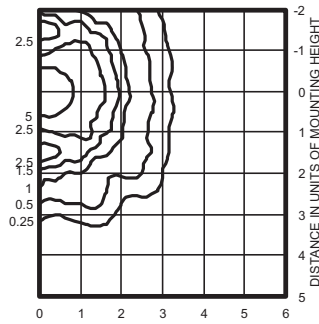
TEST NO: LTL10101



400W lamp, rated 32000 lumens. Footcandle values based on 20' mounting height.  
Classification: Type IV, Short, Full Cutoff

**AS2 400M SR5S**

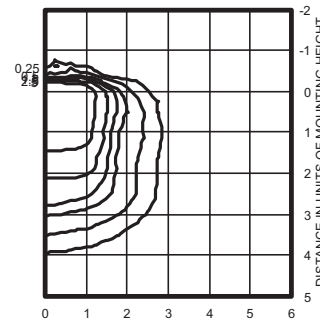
TEST NO: LTL10102



400W lamp, rated 32000 lumens. Footcandle values based on 20' mounting height.  
Classification: Unclassified (Type V), Full Cutoff

**AS2 400S SR4SC**

TEST NO: LTL10105



400W lamp, rated 50000 lumens. Footcandle values based on 20' mounting height.  
Classification: Unclassified (Type IV, Very Short), Full Cutoff

### NOTES:

- 1 Photometric data for other distributions can be accessed at [www.lithonia.com](http://www.lithonia.com).
- 2 For electrical characteristics consult technical data tab.
- 3 Tested to current IESNA and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory and actual field measurements. Dimensions and specifications are based on the most current data and are subject to change.

### Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

- 10 ft. = 12.25
- 15 ft. = 5.4
- 30 ft. = 1.36
- 40ft. = 0.77

$$\frac{\text{Existing Mounting Height}^2}{\text{New Mounting Height}^2} = \text{Correction Factor}$$

## FEATURES & SPECIFICATIONS

### CONSTRUCTION

Weldable-grade, hot-rolled, commercial-quality carbon steel tubing with a minimum yield of 55,000 psi (11-gauge), 50,000 psi (7-gauge). Uniform wall thickness of .125" or .188". Shafts are one-piece with a longitudinal electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsion. Available shaft widths are 4", 5" and 6".

Anchor base is fabricated from hot-rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base is provided with slotted holes. Base cover is finished to match pole.

A handhole having nominal dimensions of 3" x 5" for all shafts. Included is a cover with attachment screws.

Top cap provided with all drill-mount poles.

Fasteners are high-strength galvanized zinc-plated or stainless steel.

**FINISH** — Dark bronze (DDB) polyester powder standard. Other architectural colors available. See [www.lithonia.com/archcolors](http://www.lithonia.com/archcolors).

**GROUNDING** — A nut holder located immediately inside the handhole rim is provided (ground bolt and nut provided by others).

**ANCHOR BOLTS** — Top portion of anchor bolt is galvanized per ASTM A-153. Made of steel rod having a minimum yield strength of 55,000 psi.

Catalog Number	
Notes	Type



Anchor Base Poles

# SSS

SQUARE STRAIGHT STEEL

## ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

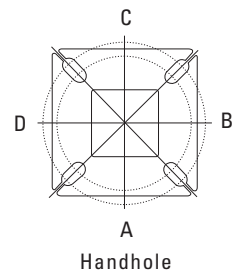
Example: SSS 20 5C DM19 DDB

Shaft type	Nominal shaft length	Nominal shaft base size/wall thickness	Mounting <sup>1</sup>	Options	Finish <sup>7</sup>
SSS	10 – 39 feet (see back page.)	(See back page.)	<b>Tenon Mounting</b> PT Open top T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) <b>Drill Mounting<sup>2</sup></b> DM19 1 at 90° DM28 2 at 180° DM28PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° <b>AERIS/OMERO Drill Mounting<sup>2</sup></b> DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° <b>AERIS Suspend Drill Mounting<sup>2,3</sup></b> DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° <b>OMERO Suspend Drill Mounting<sup>2,3</sup></b> DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	<b>Shipped installed</b> L/AB Less anchor bolts VD Vibration damper TP Tamper proof Hxx Horizontal arm bracket (1 fixture) <sup>4,5</sup> FDLxx Festoon outlet less electrical <sup>4</sup> FGLxx Festoon GFI outlet less electrical <sup>4</sup> 12CPxx 1/2" coupling <sup>4</sup> 34CPxx 3/4" coupling <sup>4</sup> 1CPxx 1" coupling <sup>4</sup> 12NPxx 1/2" threaded nipple <sup>4</sup> 34NPxx 3/4" threaded nipple <sup>4</sup> 1NPxx 1" threaded nipple <sup>4</sup> HHxx Extra handhole <sup>4,6</sup>	DDB Dark bronze DWH White DBL Black DMB Medium bronze DNA Natural aluminum GALV Galvanized finish

### NOTES:

- When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination requires an extra handhole.
- The drilling template to be used for a particular luminaire depends on the luminaire that is used. Refer to the Technical Data Section of the Outdoor Binder for Drilling Templates.
- Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
- Specify location and orientation when ordering option.  
 For 1st "x": Specify the height in feet above base of pole.  
*Example: 5ft = 5 and 20ft = 20*  
 For 2nd "x": Specify orientation from handhole (A,B,C,D)  
*Refer to the Handhole Orientation diagram on this page.*
- Horizontal arm is 18" x 2-3/8" O.D. tenon standard.
- Combination of tenon-top and drill mount requires extra handhole.
- Additional colors available; see [www.lithonia.com/archcolors](http://www.lithonia.com/archcolors). Powder finish standard.

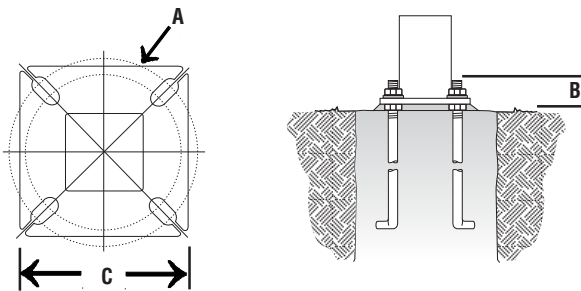
## HANDHOLE ORIENTATION



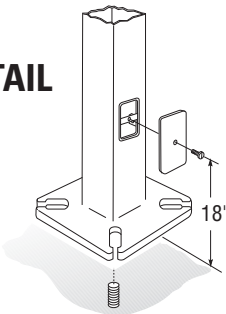
# SSS Square Straight Steel Poles

## TECHNICAL INFORMATION

Catalog Number	Nominal shaft length (feet)	Pole Shaft Size (in x in x ft)	Wall Thickness (inches)	Gauge	EPA (ft <sup>2</sup> ) with 1.3 gust						Bolt Circle (inches)	Bolt Size (in. x in. x in.)	Approximate ship weight (pounds)
					80 mph	Max. weight	90 mph	Max. weight	100 mph	Max. weight			
SSS 10 4C	10	4.0 x 10.0	0.125	11	30.6	765	23.8	595	18.9	473	8--9	3/4 x 18 x 3	75
SSS 12 4C	12	4.0 x 12.0	0.125	11	24.4	610	18.8	470	14.8	370	8--9	3/4 x 18 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.125	11	19.9	498	15.1	378	11.7	293	8--9	3/4 x 18 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.125	11	15.9	398	11.8	295	8.9	223	8--9	3/4 x 18 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.125	11	12.6	315	9.2	230	6.7	168	8--9	3/4 x 18 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.125	11	9.6	240	6.7	167	4.5	150	8--9	3/4 x 18 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.188	7	16.5	415	12.25	310	9.3	240	8--9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.125	11	17.7	443	12.7	343	9.4	235	10--12	1 x 36 x 4	185
SSS 20 5G	20	5.0 x 20.0	0.188	7	28.1	703	21.4	535	16.2	405	10--12	1 x 36 x 4	265
SSS 25 4C	25	4.0 x 25.0	0.125	11	4.8	150	2.6	100	1.0	50	8--9	3/4 x 18 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.188	7	10.8	270	7.7	188	5.4	135	8--9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.125	11	9.8	245	6.3	157	3.7	150	10--12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.188	7	18.0	350	12.6	350	9.0	250	10--12	1 x 36 x 4	320
SSS 30 4G	30	4.0 x 30.0	0.188	7	6.4	160	4.0	100	2.3	58	8--9	3/4 x 30 x 3	295
SSS 30 5C	30	5.0 x 30.0	0.125	11	4.7	150	2.0	50	--	--	10--12	1 x 36 x 4	265
SSS 30 5G	30	5.0 x 30.0	0.188	7	10.7	267	6.7	167	3.9	100	10--12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.188	7	15.7	392	10.2	257	6.4	160	11--13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.188	7	5.9	150	2.5	100	--	--	10--12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.188	7	9.5	237	5.0	150	1.8	50	11--13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.188	7	5.1	128	1.3	33	--	--	11--13	1 x 36 x 4	605



### BASE DETAIL



Shaft Base Size	Bolt Circle A	Bolt Projection B	Base Square C	Anchor Bolt Description	Warehouse Anchor Description	Template Bolt Number
4"C	8-1/2"	2-3/4"-4"	8"	ABSSS-4C	AB18-0	PJ50004
4"G	8-1/2"	2-3/4"-4"	8"	ABSSS-4G	AB30-0	PJ50004
5"	10"-12"	3-3/8"-4"	11"	ABSSS-5	AB36-0	PJ50010
6"	11"-13"	3-3/8"-4"	12-1/2"	ABSSS-6	AB36-0	PJ50011

#### IMPORTANT INSTALLATION NOTES:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia will not accept claim for incorrect anchorage placement due to failure to use factory template.
- If poles are stored outside, all protective wrapping must be removed immediately to prevent finish damage.
- Lithonia is not responsible for the foundation design.
- Installation requires grout to be packed under base to ensure full contact with foundation.

#### IMPORTANT:

- These specifications are intended for general purposes only. Lithonia reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.