

## DESCRIPTION

The Prismatic High-bay combines the popular Steeler ballast housing with an acrylic reflector for maximum durability and photometric performance. U.L. listed and labeled for damp location. CSA Certified. The Prismatic High-bay is perfect for retail stores, wholesale warehouses, grocery chains, malls and auto showrooms.

Catalog #		Type
Project		
Comments		Date
Prepared by		

## SPECIFICATION FEATURES

### Construction

**HOUSING:** Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a white polyester powder coat. **UNIVERSAL BRACKETS:** Universal ladder brackets allow for the flexibility to change out with other reflectors available in aluminum or glass.

### Electrical

**BALLAST:** High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HPS and -30°C (-20°F) for MH, MP and ML. CSA certified. **SOCKET:** Mogul-base socket standard for HPS. For Metal Halide, protected socket standard, for use with "O" open-rated protected Metal Halide lamps only.

### Optical

**REFLECTOR:** Easily mounted prismatic acrylic reflector has multiple field-adjustable distribution patterns for precision control.

### Mounting

Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit.



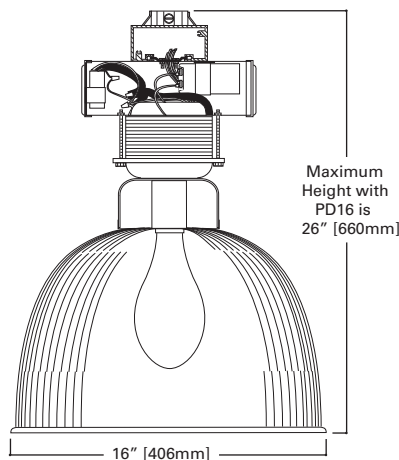
## SS 16" PRISMATIC HIGH-BAY

175 - 400W

High Pressure Sodium  
Pulse Start Metal Halide  
Metal Halide

INDUSTRIAL LUMINAIRE

## DIMENSIONS



(Drop Bottom adds 3 1/2" to overall height.)

## TECHNICAL DATA

EISA Compliant  
40°C Maximum Ambient Environment  
90° C Minimum Supply Wiring

## ENERGY DATA

### CWI Ballast Input Watts

250W HPS HPF (300 Watts)  
250W MH HPF (300 Watts)  
400W HPS HPF (465 Watts)  
400W MH HPF (475 Watts)

### CWA Ballast Input Watts

175W MP HPF (198 Watts) E  
200W MP HPF (227 Watts) E  
250W MP HPF (283 Watts) E  
320W MP HPF (365 Watts) E  
350W MP HPF (400 Watts) E  
400W MP HPF (452 Watts) E  
400W HPS HPF (465 Watts)

## SHIPPING DATA

Approximate Net Weight:  
30 lbs. (14 kgs.)



## ORDERING INFORMATION

Sample Number: MPSS-PD16-M-250-MT-OR-Q

<b>Lamp Type</b> <b>MP</b> =Pulse Start Metal <sup>1, 2</sup> Halide <b>MH</b> =Metal Halide <sup>1, 3</sup> <b>HP</b> =High Pressure <sup>4</sup> Sodium  <b>Series</b> <b>SS</b> = Steeler	<b>Reflector Type</b> <b>PD</b> =Prismatic Acrylic  <b>Reflector Diameter</b> <b>16</b> = 16" Diameter  <b>Distribution</b> <sup>5</sup> <b>C</b> = Concentrated <b>M</b> = Medium <b>W</b> = Wide	<b>Lamp Wattage</b> <b>MP</b> <b>175</b> =175W <b>250</b> =250W <b>320</b> = 320W <b>400</b> = 400W <b>MH</b> <sup>3</sup> <b>175</b> = 175W <b>250</b> = 250W <b>400</b> = 400W <b>HP</b> <b>250</b> = 250W <b>400</b> = 400W	<b>Voltage</b> <sup>6</sup> <b>120V</b> =120V <b>208V</b> =208V <b>240V</b> =240V <b>277V</b> = 277V <b>347V</b> = 347V <b>480V</b> = 480V <b>MT</b> = Multi-Tap, <sup>7</sup> wired 277V <b>TT</b> = Triple-Tap, <sup>8</sup> wired 347V <b>5T</b> = 5-Tap <sup>9</sup>  <b>Socket</b> <b>OR</b> = Open Rated Socket for Metal Halide Lamps  = Non Applicable (HPS or Not compatible with OR Socket) <sup>10</sup>	<b>Options</b> <b>C3</b> =3" cord with no plug. Other cord lengths <sup>11</sup> available by specifying length (C6 for 6' Cord) (Must be used with FH-1 or FL-1) (No Switching) <b>PC3</b> = 3' Cord with NEMA Plug (120V-L5-15P, <sup>11</sup> 208V-L6-15P, 347V-L37-20P, AND 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' Cord) Requires FH-1 or FL-1, or SHK. Example: PC3-120V Use with TPPH-NEMA. Specify Voltage. <b>PHC</b> = Power Cord and Plug (18" Power Cord and Non-NEMA plug configuration. Must be used with FL-1 and TPPH (Thru-Way Pendant Power Hook). Must specify single voltage. <b>PHC-NEMA</b> = Power Cord and NEMA Plug (18" Power Cord and 20 AMP NEMA plug configuration). Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook). <b>P</b> = Pre-set Socket Position from the factory <b>FH-1</b> = Die-cast Aluminum Fixture Hook (with 3/4" threads for easy installation) <b>FL-1</b> =Malleable Iron Plated Fixture Loop (with 3/4" threads for easy installation) <b>SHK</b> =Die-cast Aluminum Fixture Hook (with safety screw and 3/4" threads for easy installation) <b>HSW</b> =Integral LumaWatt Sensor and Control <sup>12</sup> w/ Wide Distribution <b>F1</b> =Single Fuse (120, 277 or 347V only) <b>F2</b> =Double Fuse (208, 240 or 480V only) <b>SCF</b> =3" Aircraft Safety Cable secures Housing to Ceiling (Alternative lengths available. Example: SCF6 = 6' Cable) <b>Q</b> =Quartz Restrike (Hot Strike Only) <b>EM</b> =Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts) <b>EM/SC</b> =Emergency Separate Circuit <sup>13</sup> <b>L/TCB</b> =Less Top Connector Box (Housing shipped less top connector box. (Specify when using TWMBs accessory) <b>LL</b> =Lamp Included <sup>14</sup> <b>CEC</b> =California Title 20 Compliant Ballast (Applies to 250-320W and 400-450W MP only) <b>SCR</b> =Aircraft Safety Cable-Housing to Reflector <b>W/MWS</b> =MWS Industrial components attached to the fixture at the factory. (Standard cord length is 3 ft. 6 ft. and 11 ft. also available. Please refer to MWS Modular Wiring System section for additional information. <b>HC</b> =LumaWatt Fixture Control Module <sup>15, 12, 16</sup> (Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit) <b>HL</b> = LumaWatt Fixture Control Module <sup>15, 12</sup> (Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems) <b>QLL</b> = Quartz Lamp Included (Lamp is Cooper designated product based on luminaire requirements. Lamp is shipped separate from luminaire unless otherwise noted)	<b>Accessories</b> <sup>17</sup> <b>C3</b> =3' Cord-No Plug - Requires FH-1, FL-1, or <sup>11</sup> SHK <b>PC3</b> =3' Cord with NEMA Plug - (120V-L5, 208V-L6-15P, 347V-L37-20P and 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' cord). Requires FH-1 or FL-1, or SHK. Use with TPPH-NEMA. Specify Voltage. <b>PHC</b> = Power Hook Cord and Non-NEMA plug configuration. Must be used with FL-1 and TPPH (Thru-Way Pendant Power Hook) <b>PHC-NEMA</b> = Power Cord and NEMA plug - 18" Power Cord and 20 Amp NEMA plug configuration. Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook) <b>SGB16A</b> = Safety Glass Bottom for 16" Refractor (not compatible with "WG") (250W maximum) <b>WG16</b> = Wire Guard <b>WG16/GLC</b> = Gym Wireguard w/ Safety Glass <b>WG16/SGB16A</b> = Gym Wire Guard with Safety Glass Bottom for 16" Refractor <b>FWG16/WG16</b> = Full Wire Guard for PD16 (SGB not included) <b>FWG16/WG16/SGB16A</b> = Full Wire Guard for 16" Refractor and SGB 16 Lens <b>WGD16</b> =Wire Guard for DB16 <b>DB16</b> =16" Drop Lens (250W max.) <b>MBT</b> =Twin Mount Bracket (Fixtures must be same voltage and without hooks, loops or plugs.) <b>TPPH</b> =Thru-Way Pendant Power Hook. Requires FL-1 and PHC. Specify Voltage. <b>TPPH-F</b> =Thru-Way Pendant Power Hook Single Fuse, 120, 277 or 347 Volt. Requires FL-1 and PHC. Specify Voltage. <b>TPPH-F2</b> =Thru-Way Pendant Power Hook - Double Fused, 208, 240, or 480 Volt. Requires FL-1 and PHC. Specify Voltage. <b>TPPH-F-QD</b> =Thru-Way Pendant Power Hook Single Fuse, Quick Disconnect. Requires FL-1 and PHC. Specify Voltage (120, 277, or 347V) <b>TPPH-F2-QD</b> =Thru-Way Pendant Power Hook Double Fuse, Quick Disconnect. Requires FL-1 and PHC. Specify Voltage (208, 240, or 480V) <b>TPPH-NEMA</b> =Thru-Way Pendant Power Hook. Requires FL-1 and PHC-XXXV-NEMA. (Specify <b>FH-1</b> =Fixture Hook <b>FL-1</b> =Fixture Loop <b>SHK</b> =Hook with Safety Screw <b>TWMBs</b> =Thru-Way Mounting Box <sup>18</sup>
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- Notes:**
- 1 Open Rated socket and lamp must be used.
  - 2 175, 200, 250, 320, 350 and 400W only.
  - 3 MH available in non-U.S. markets only.
  - 4 Not available in 175, 200, 320 and 350W.
  - 5 Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise fixture is shipped in medium setting.
  - 6 Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Representative for availability and ordering information. 88% Efficient EISA Compliant MP Fixtures not available in 347V and TT Voltages.
  - 7 Multi-Tap ballast 120/208/240/277V wired 277V.
  - 8 Triple-Tap ballast 120/277/347V wired 347V.
  - 9 5-Tap ballast 120/208/240/277/480V wired 277V. 400W Metal Halide only. 88% efficient EISA Compliant MP fixtures not available in 5-Tap Voltages.
  - 10 Not applicable for HPS.
  - 11 Requires FH-1or FL-1or SHK.
  - 12 30 second time delay when switching from bright to dim. Consult individual lamp manufacturers recommendations for compatible lamps. For use with CWA ballast only.
  - 13 Not available with HL or HC options.
  - 14 Lamp is shipped separately.
  - 15 Not available with W or WL options.
  - 16 Not available with PC3, C3, PHC or MWS. Not available with single circuit MWS special order.
  - 17 Order separately.
  - 18 Specify L/TCB when using thru-way mounting box (TWMBs) accessory.

LAMP TYPE	WATTAGE
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

VOLTAGE CHART	
MT=Multi-Tap	120/208/240/277 (wired 277V)
TT=Triple-Tap	120/277/347 (wired 347V)
5T=5-Tap <sup>9</sup>	120/208/240/277/480 (wired 277V)

NOTE: Specifications and dimensions subject to change without notice.

Visit our web site at [www.cooperlighting.com](http://www.cooperlighting.com)

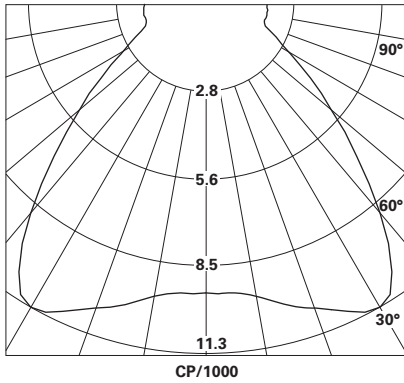
Customer First Center 1121 Highway 74 South Peachtree City, GA 30269 770.486.4800 FAX 770.486.4801

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2010-10-27 10:00:07

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## PHOTOMETRICS



**MPSS-PD16-M-400-LL**  
 400-Watt MP  
 42,000-Lumen Coated Lamp\*  
 \*Coated lamp recommended.

## Coefficients Of Utilization

		Effective floor cavity reflectance												20%											
rc		80%				70%				50%				30%				10%				0%			
rw		70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10		50	30	10	0
<b>RCR</b>																									
1		93	88	84	80	88	84	80	77	77	74	71		70	68	66		64	62	60		57			
2		84	77	71	66	80	74	68	63	67	63	59		62	58	55		56	53	51		48			
3		77	68	61	55	73	65	59	53	60	54	50		55	50	47		50	47	44		41			
4		71	61	53	47	67	58	51	46	53	48	43		49	44	40		45	41	38		35			
5		65	54	46	41	62	52	45	40	48	42	37		44	39	35		41	36	33		31			
6		60	49	41	36	57	47	40	35	43	37	33		40	35	31		37	33	29		27			
7		56	44	37	31	53	43	36	31	40	33	29		37	31	28		34	29	26		24			
8		52	40	33	28	50	39	32	27	36	30	26		34	28	25		31	27	23		22			
9		49	37	30	25	46	36	29	24	33	27	23		31	26	22		29	24	21		19			
10		45	34	27	23	43	33	26	22	31	25	21		29	24	20		27	22	19		18			

## Spacing Criterion 1.4

Zone	%Lamp	Zone	%Lamp
0-30	19.9	0-90	70.6
0-40	34.6	90-180	19.5
0-60	55.2	Total	90.1

## Candlepower

Degree	CP
0	9331
5	9363
15	10034
25	10958
35	10537
45	6931
55	4141
65	2509
75	1988
85	2012
90	1984
95	1958
105	1802
115	1506
125	1205
135	1032
145	1004
155	859
165	613
175	165
180	109