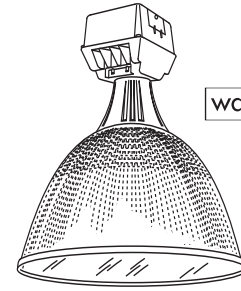


JOB NAME \_\_\_\_\_  
 TYPE \_\_\_\_\_

# HBE ENCLOSED HIGH BAY ACRYLIC REFLECTORS

150-400 watt Metal Halide  
 150-400 watt High Pressure Sodium  
 150-450 watt Pulse Start Metal Halide



electronic  
**wattwatcher™**  
 ballast

**Day-Brite Lighting**

The HBE400 Enclosed High Bay Luminaire features an enclosed, acrylic reflector for maximum efficiency in general purpose retail, educational and industrial applications requiring upright and enclosed construction.

## ORDERING MATRIX

SAMPLE CATALOG NUMBER: HBE400PMT-PSC AR22 22FL

|   |  |  |  |  |  |   |
|---|--|--|--|--|--|---|
| <b>HBE</b>  |  |  |  |  |  |   |
| <b>BALLAST ASSEMBLY</b><br>HBE  |  | <b>LAMP SOURCE<sup>8</sup></b><br>M - Metal Halide<br>S - High Pressure Sodium<br>P - Pulse Start Metal Halide (Ballast option must also be specified)   |  | <b>OPTIONS (add as suffix)</b><br>CUL - UL Listing to meet CSA standards<br>WEB - Pulse Start Electronic Ballast (150, 200, 250, 340, 350, 400, 440, 450 watt only) Consult factory for available voltages and ambient temperature rating.<br>EP - Encased and Potted core and coil ballast for quiet operation <sup>48</sup><br>HR - Hot Restrike (150W HPS only.)<br>MR - Magnetic Regulated Ballast <sup>35</sup><br>PSC - Pulse Start CWA Ballast<br>PSM - Pulse Start Magnetic Regulated Ballast (175, 200, 250 & 400 watt only.)<br>PSR - Pulse Start Reactor Ballast (150, 200, 250, 320, 350, 400, 450 watt. 277 volt only.)<br>Q - Quartz Standby<br>QEM - Quartz Emergency <sup>40</sup><br>QTD - Quartz Time Delay<br>WDF - Wired Double Fuse <sup>45</sup><br>WSF - Wired Single Fuse <sup>46</sup><br>HL - HI/LO Ballast <sup>45</sup><br>NFZ - Non Food Zone |  | <b>LENS ASSEMBLY</b><br>16FL - 16" Flat Acrylic Lens<br>16CL - 16" Conical Acrylic Lens<br>16DL - 16" Drop Acrylic Lens<br>19FL - 19" Flat Acrylic Lens<br>19CL - 19" Conical Acrylic Lens<br>22FL - 22" Flat Acrylic Lens<br>22CL - 22" Conical Acrylic Lens<br>22DL - 22" Drop Acrylic Lens<br>25FL - 25" Flat Acrylic Lens<br>25DL - 25" Drop Acrylic Lens |
| <b>WATTAGE</b><br>150 - 150<br>175 - 175 <sup>4</sup><br>200 - 200 <sup>31</sup><br>250 - 250<br>320 - 320 <sup>30</sup><br>340 - 340 <sup>30</sup><br>350 - 350 <sup>30</sup><br>400 - 400<br>440 - 440 <sup>30</sup><br>450 - 450 <sup>30</sup> |  | <b>VOLTAGE</b><br>12 - 120<br>20 - 208<br>24 - 240<br>27 - 277<br>34 - 347<br>48 - 480<br>2T - 208/277<br>MT - 120/208<br>240/277<br>TT - 120/277<br>347 |  |  |  | <b>OPTICAL ASSEMBLY</b><br>AR16 - Open 16" Acrylic Reflector<br>AR19 - Open 19" Acrylic Reflector<br>AR22 - Open 22" Acrylic Reflector<br>AR25 - Open 25" Acrylic Reflector   |

### ACCESSORIES (ORDER SEPARATELY)

- |  |   |
|--|---|
| CH - Cover Half for Power Hook (use with PB) | WCG25 - Wire Cage 22" and 25" Acrylic                                   |
| PB - Power Box for Power Hook (use with CH)  | WGA16 - Wire Guard 16" Acrylic  |
| HP12 - Hook-Cord-Plug Assembly 120V          | WGA19 - Wire Guard 19" Acrylic  |
| HP25 - Hook-Cord-Plug Assembly 208-240V      | WCG19D - Wire Guard 19" Acrylic (for use with AR19 w/EP option)         |
| HP27 - Hook-Cord-Plug Assembly 277V          | WGA22 - Wire Guard 22" Acrylic  |
| HP48 - Hook-Cord-Plug Assembly 480V          | WGA25 - Wire Guard 25" Acrylic  |
| HMR - Suspension Hook Male                   | WCG25D - Wire Guard 25" Acrylic (for use with 25DL or AR22 w/EP option) |
| LMR - Suspension Loop Male                   |   |
| SCB3 - Ballast Retainer Chain 3'             |   |
| WCG19 - Wire Cage 16" and 19" Acrylic        |   |

### Footnotes:

- <sup>4</sup>Not available in High Pressure Sodium  
<sup>8</sup>Coated lamp recommended.  
<sup>30</sup>Pulse Start Metal Halide Only.  
<sup>31</sup>Not available in standard Metal Halide.  
<sup>35</sup>Available 150 - 400W High Pressure Sodium.  
<sup>40</sup>Requires 120V secondary power supply.  
<sup>45</sup>Use with 208, 240, and 480 volt.  
<sup>46</sup>Use with 120, 277, and 347 volt.  
<sup>48</sup>May require deep ballast housing.  
<sup>49</sup>Must specify voltage.

### General Notes:

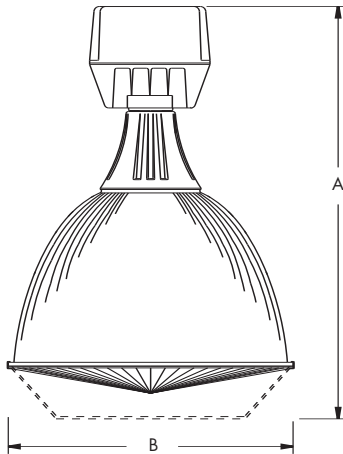
All accessories are field installed.  
 Mogul base lamp only.  
 All options factory installed.

**Warning:** Refer to and follow the lamp manufacturer's warnings and instructions.

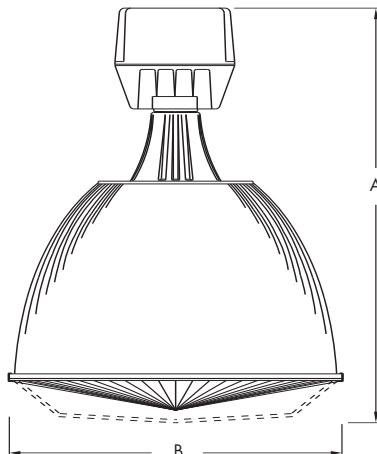
(Refer to Section 18000 for additional accessories.)

## DIMENSIONS

AR16 & AR19



AR22 & AR25



Note: Add 2.5" to all height dimensions for EP option.

## ENERGY DATA

### HIGH PRESSURE SODIUM

HX BALLAST INPUT WATTS

150 watt-188 watts

CWA BALLAST INPUT WATTS

200 watt-240 watts

250 watt-295 watts

310 watt-365 watts

400 watt-464 watts

### METAL HALIDE

HX BALLAST INPUT WATTS

150 watt-185 watts

BALLAST INPUT WATTS

CWA WEB

150 watt 189 watts 163 watts

175 watt 210 watts -

200 watt 232 watts 213 watts

250 watt 295 watts 263 watts

320 watt 368 watts -

350 watt 400 watts 363 watts

400 watt 458 watts 413 watts

450 watt 508 watts 465 watts

### A DIMENSION

#### AR16

FL - 24-5/16" (617.5mm)

CL - 26-1/16" (661.9mm)

DL - 27-5/8" (701.6mm)

#### AR19

FL - 25-5/16" (642.9mm)

CL - 27-1/16" (687.3mm)

#### AR22

FL - 26-3/16" (665.1mm)

CL - 28-5/16" (719.1mm)

DL - 28-15/16" (735mm)

#### AR25

FL - 28-15/16" (735mm)

DL - 32" (812.8mm)

### B DIMENSION

#### AR16

16-1/4" (412.8mm)

#### AR19

19-3/16" (487.4mm)

#### AR22

22-7/16" (569.9mm)

#### AR25

25-3/8" (644.5mm)

**HB-10140.2**

HBE400-HIGH BAY AR16, AR19, AR22 & AR25

## HBE COATED 400W MH AR22-22FL/POSITION 3

MEDIUM SPREAD S/MH = 1.7

TEST NO. 19333

| DISTRIBUTION CURVE | COEFFICIENTS OF UTILIZATION                          |    |    |    |    |    |    |    |    |    | AVERAGE BRIGHTNESS |     |       |       | ZONAL SUMMARY |        |        |           | CANDLEPOWER |              |       |              |    |    |    |
|--------------------|--|----|----|----|----|----|----|----|----|----|--------------------|-----|-------|-------|---------------|--------|--------|-----------|-------------|--------------|-------|--------------|----|----|----|
|                    | EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20) |    |    |    |    |    |    |    |    |    | ZONE               | END | 45    | CROSS | Degrees       | Lumens | % Lamp | % Fixture | Angle       | Avg. Candela | Angle | Avg. Candela |    |    |    |
|                    | CEIL   | 80 | 70 | 50 | 30 | 10 |    |    |    |    |                    | 45  | 21528 | 20183 | 20683         | (0-30) | 7529   | 20.9      | 25.4        |              |       |              |    |    |    |
|                    | WALL   | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30                 | 10  | 50    | 30    | 10            | 50     | 30     | 10        | 50          | 30           | 10    | 50           | 30 | 10 |    |
|                    | RCR  | 0  | 94 | 94 | 94 | 90 | 90 | 90 | 83 | 83 | 83                 | 76  | 76    | 76    | 70            | 70     | 70     | 70        | 70          | 70           | 70    | 70           | 70 | 70 | 70 |
|                    | 1  | 86 | 82 | 79 | 76 | 82 | 79 | 76 | 73 | 73 | 70                 | 68  | 67    | 65    | 63            | 61     | 60     | 59        |             |              |       |              |    |    |    |
|                    | 2  | 79 | 73 | 67 | 63 | 75 | 70 | 65 | 61 | 64 | 61                 | 57  | 60    | 57    | 54            | 55     | 53     | 50        |             |              |       |              |    |    |    |
|                    | 3  | 73 | 65 | 59 | 54 | 69 | 62 | 57 | 52 | 58 | 53                 | 49  | 53    | 50    | 47            | 50     | 47     | 44        |             |              |       |              |    |    |    |
|                    | 4  | 67 | 58 | 51 | 46 | 64 | 56 | 50 | 45 | 52 | 47                 | 43  | 48    | 44    | 41            | 45     | 41     | 39        |             |              |       |              |    |    |    |
|                    | 5  | 62 | 52 | 45 | 40 | 59 | 50 | 44 | 39 | 47 | 42                 | 38  | 44    | 39    | 36            | 41     | 37     | 34        |             |              |       |              |    |    |    |
|                    | 6  | 57 | 47 | 40 | 36 | 55 | 46 | 39 | 35 | 43 | 37                 | 33  | 40    | 35    | 32            | 37     | 33     | 30        |             |              |       |              |    |    |    |
|                    | 7  | 53 | 43 | 36 | 32 | 51 | 42 | 35 | 31 | 39 | 34                 | 30  | 37    | 32    | 28            | 34     | 30     | 27        |             |              |       |              |    |    |    |
| 8                  | 50   | 39 | 33 | 28 | 48 | 38 | 32 | 28 | 36 | 30 | 27                 | 34  | 29    | 26    | 32            | 28     | 25     |           |             |              |       |              |    |    |    |
| 9                  | 46   | 36 | 30 | 25 | 44 | 35 | 29 | 25 | 33 | 28 | 24                 | 31  | 26    | 23    | 29            | 25     | 22     |           |             |              |       |              |    |    |    |
| 10                 | 43   | 33 | 27 | 23 | 42 | 32 | 26 | 22 | 30 | 25 | 22                 | 29  | 24    | 21    | 27            | 23     | 20     |           |             |              |       |              |    |    |    |

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.69 BASED ON 3000 HRS. AND \$.08 PER KWH. IER-65

These photometric results were obtained in the Day-Brite Lighting Laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

ADDITIONAL TEST NUMBERS

| AR22-22FL 250 WATT |      | METAL HALIDE |  |
|--------------------|------|--------------|--|
| SOCKET             | S/MH | TEST NUMBER  |  |
| POSITION 1         | 1.4  | 19292        |  |
| POSITION 2         | 1.5  | 19293        |  |
| POSITION 3         | 1.6  | 19294        |  |
| POSITION 4         | 1.9  | 19295        |  |
| POSITION 5         | 2.1  | 19296        |  |
| POSITION 6         | 2.2  | 19297        |  |

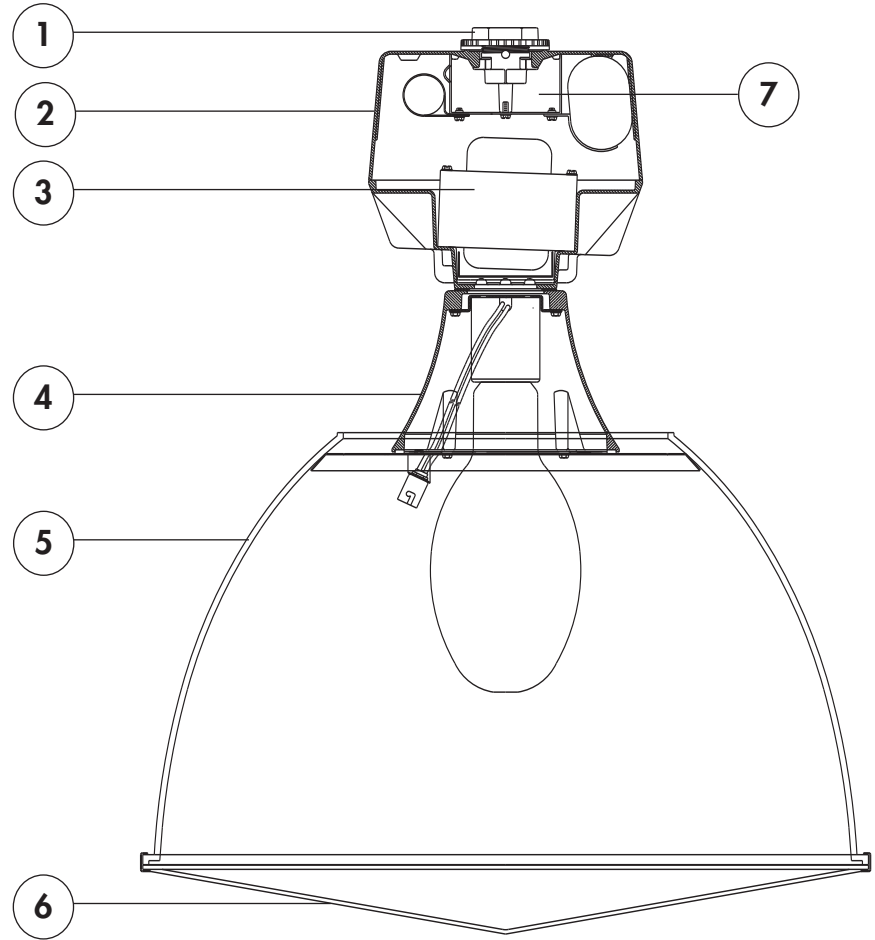
| AR22-22FL 400 WATT |      | METAL HALIDE |  |
|--------------------|------|--------------|--|
| SOCKET             | S/MH | TEST NUMBER  |  |
| POSITION 1         | 1.5  | 19331        |  |
| POSITION 2         | 1.6  | 19332        |  |
| POSITION 3         | 1.7  | 19333        |  |
| POSITION 4         | 2.0  | 19334        |  |
| POSITION 5         | 2.1  | 19335        |  |
| POSITION 6         | 2.2  | 19336        |  |

| AR25-25FL 400 WATT |      | METAL HALIDE |  |
|--------------------|------|--------------|--|
| SOCKET             | S/MH | TEST NUMBER  |  |
| POSITION 1         | 1.0  | 19355        |  |
| POSITION 2         | 1.1  | 19356        |  |
| POSITION 3         | 1.2  | 19357        |  |
| POSITION 4         | 1.5  | 19358        |  |
| POSITION 5         | 1.6  | 19359        |  |
| POSITION 6         | 1.7  | 19360        |  |

PRODUCT FEATURES

UL 1598 Listed suitable for damp location n. 55°C ambient for all lamp wattages listed with magnetic ballast. Consult factory for ambient temperature rating for electronic ballast (WEB option).

- 3/4" threaded cast aluminum nut and hub for easy, positive mounting.
- Heavy wall, two piece die cast aluminum housing with white polyester powder finish.
- Day-Brite "Slant 2" ballast mounting for cooler operation. Ballast has high temperature class H insulation and a minimum starting temperature of -40°C (-40°F) for HPS and Pulse Start MH or -30°C (-20°F) for MH.
- Die cast aluminum neck provides positive mounting of reflector to ballast assembly and field adjustable light distribution patterns.
- Injection molded 100% virgin acrylic prismatic reflector.
- Acrylic lens: conical, drop or flat.
- Large wiring access with captive retainer screw.



| ENCLOSED ACRYLIC TEMPERATURE GUIDELINES |      |                         |
|---|------|-------------------------|
| Lamp Wattage                            | 175  | 200/250/320/350/400/450 |
| Ambient Temp                            | 40°C | 40°C                    |
| Reflector/Lens                          |      |                         |
| AR16/16FL                               | ✓    |                         |
| AR16/16CL                               | ✓    |                         |
| AR16/16DL                               | ✓    |                         |
| AR19/19FL                               | ✓    |                         |
| AR19/19CL                               | ✓    |                         |
| AR22/22FL                               | ✓    | ✓                       |
| AR22/22CL                               | ✓    | ✓                       |
| AR22/22DL                               | ✓    | ✓                       |
| AR25/25FL                               | ✓    | ✓                       |
| AR25/25DL                               | ✓    | ✓                       |

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