



# GPE GHB® PRISMATIC LUMINAIRE (Acrylic) NuVation™ Electronic Ballast — High Bay, Open — Bracket Mount Optical Series, General Die-Cast Housing

## APPLICATIONS

- Assembly lines, inspection areas, production bays, storage areas, warehouses and commercial areas

## SPECIFICATION FEATURES

- 1598 Listed
- Suitable For Damp Locations
- NuVation™ electronic ballast:
  - Dimming Option — dims lamp to 50% of rated lamp wattage.
  - Two piece heavy-duty die cast aluminum housing
  - Flexible Spacing Criterion (SC)—five position mounting bracket allows field-adjustable light distribution
  - Attractive round ballast housing design with white polyester paint finish
- Integral air gap between optical mounting and ballast for optimum temperature control and thermal management
- Slide-on mounting box adaptor with 3/4-in pendant and thru feed capability for ease of installation and mounting.
- External wattage selection port for selection of 250, 320, 350 & 400 watt choices.
- Safety chain provisions
- Mogul base socket – E39 standard
- Shipped as components: Ballast, Optical. Magnapack available for ballast.

## ORDERING NUMBER LOGIC

| GPE   | W                          | 40   | M  | 0  | E                             | V6   | NA  | 11   | X  |
|---|----------------------------|--|--|--|-------------------------------|--|---|--|--|
| PRODUCT IDENT   | COLOR                      | WATTAGE                                      | LIGHT SOURCE   | VOLTAGE  | BALLAST TYPE                  | OPTICAL CODE   | PHOTOMETRY CODE   | MOUNTING CODE  | OPTIONS  |
| XXX   | X                          | XX   | X  | X  | X                             | XX   | XX  | XX   | X  |
| GPE = GHPB Luminaire with NuVation Electronic Ballast | W = White Polyester Powder | 25 = 250<br>32 = 320<br>35 = 350<br>40 = 400 | N = Ballast will operate Pulse Start or Ceramic Metal Halide Lamps<br>Note: Lamp is vertical base up. Lamp not included. | G = 208-277 Discrete voltages must be specified when ordering cord & plug assemblies:<br>2 = 208<br>3 = 240<br>4 = 277 | E = Electronic<br>C = Dimming | V4 = Open ventilated 14-inch glass<br>D4 = 14-inch glass with door glass kit<br>V6 = Open ventilated 16-inch acrylic<br>V2 = Open ventilated 22-inch acrylic<br>NOTE: Do not use open opticals with lamps specified for use in enclosed fixtures only. Note: Lens assemblies' available. | NA = Not Applicable (Reflector position is set at installation)<br>See opposing page. | XX = Select Code Below<br>11 = Pendant mounting<br>13 = Provision for Slide-on Primary Electrical Disconnect. Order TWOBP Box (Thru Feed Capability Only) Separately.<br>14 = Provision for Slide-on Primary Electrical Disconnect. (Pendant and Thru Feed Capability) Order PED Box Separately<br>15 = Prewire with Loop, Cord and Plug Part of "Power Hook". Order Receptacle/Hook Box Separately. (Not CSA/CUL)<br>31 = Prewire with Hook, 3-ft (0.9 Meters) #16/3 Cord, and Nema Plug<br>33 = Prewire with Loop, 3-ft (0.9 Meters) #16/3 Cord, and Nema Plug (Order locking receptacle hook box separately.) | Q = Automatic Switch Quartz<br>S = Exclusionary mogul base socket for MH open fixtures |

## BALLAST DATA

- \* 13% Improvement in Pulse Start Metal Halide lamp lumen maintenance vs. magnetic.
- \* 6% improvement in Ceramic Metal Halide lamp lumen maintenance vs. magnetic.
- \* 50% lower ballast losses than typical CWA magnetic HID ballast.
- \* Lamp wattage regulation of +/-2% change for +/-10% change in line voltage.
- \* Ballast is rated for use with voltage range between 208 and 277 with +/-10% line voltage tolerance, 50/60 Hz, and will automatically sense voltage within specified range.
- \* Ballast input current total harmonic distortion (THD) of less than 15% when operated at nominal line voltage.
- \* Ballast is thermally protected to shut off when operating temperatures are above unacceptable levels for the ballast safe and reliable operation.
- \* Ballast has an end-of-lamp-life detection and shutdown circuit.
- \* The ballast shall have a minimum starting temperature of -20 degrees F and maximum operating ambient of 55 degrees C.
- \* Ballast is capable of operating pulse start metal halide or ceramic metal halide lamp types.
- \* Five-Year Fixture Failure Warranty.
- \* Meets requirements of FCC rules and regulations, Title 47 CFR part 18 for nonconsumer equipment.

### Dimming Ballast

- \* The ballast is supplied with a violet (+) and gray (-) wire for dimming control connections.
- \* Ballast dims to fifty percent of rated lamp wattage.
- \* Dimming voltage is 0-10V where 10V is high wattage and 0 is fifty percent of rated lamp wattage.
- \* Ballast operates the lamp at high wattage for 15 minutes at start up.
- \* Ballast operates lamp at high wattage for fifteen minutes after operating in dim mode for twenty-four hours.

Exclusionary base socket is available for use with Metal Halide lamps in open fixtures to comply with NEC 2005 regulations (GELS "S" Option). Customer should consult or review local electrical codes for compliance.

All Electronic devices are susceptible to transient voltage spikes. For facilities where the lighting circuits are not protected from transient voltage spikes a (TVSS) Transient Voltage Surge Suppression system is recommended. To protect the NuVation ballast a TVS protection system must be able to suppress a 3000V ring wave as described in ANSI/IEEE C62.41 B1.

MODULAR PREWIRE  
41 = ACS with 3-ft (0.9 meter) cord & Hook  
69 = ACS with 6-ft (1.8 meter) cord & Hook  
43 = ACS with 3-ft (0.9 meter) cord & Loop  
70 = ACS with 6-ft (1.8 meter) cord & Loop

### PLUG-N-GO

51 = Plug-N-Go with 3 ft. (0.9 meter) Cord & Hook  
71 = Plug-N-Go with 6 ft. (1.8meter) Cord & Hook  
53 = Plug-N-Go with 3 ft. (0.9 meter) Cord & Loop  
72 = Plug-N-Go with 6 ft. (1.8 meter) Cord & Loop  
Note: ACS = Flex 3+  
Plug-N-Go = FSC Series

## INPUT WATTAGE TABLE

| Lamp Wattage | Line Voltage | Input Watts |
|--------------|--------------|-------------|
| 400          | 277          | 428         |
| 400          | 240          | 432         |
| 400          | 208          | 435         |
| 350          | 277          | 377         |
| 350          | 240          | 380         |
| 350          | 208          | 383         |
| 320          | 277          | 346         |
| 320          | 240          | 347         |
| 320          | 208          | 349         |
| 250          | 277          | 276         |
| 250          | 240          | 272         |
| 250          | 208          | 271         |

# GPE GHB® PRISMATIC LUMINAIRE (Acrylic)

NuVation™ Electronic Ballast  
High Bay, Open – Bracket Mount Optical Series  
General Die-Cast Housing

## Lens Assemblies

For Acrylic/Polycarbonate opticals only (Order separately)

### •EAL2-GHBP

Clear acrylic lens for 22-in. (559mm) optical  
(40°C max. ambient on 400 watt fixtures)

### •EAL6-GHBP

Clear acrylic lens for 16-in (406mm) optical  
(40°C max. ambient on 250 watt fixtures)

### •EAPL2-GHBP

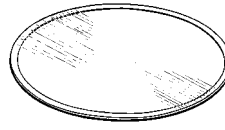
Clear acrylic prismatic conical lens for 22-in (559mm) optical  
(40°C max. ambient on 400 watt fixtures)

### •EAPL6-GHBP

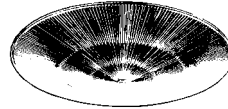
Clear acrylic prismatic conical lens for 16-inch optical  
(40°C maximum ambient on 250W fixtures)

### •EARL6-GHBP

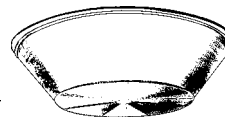
Clear prismatic drop lens for 16-inch optical  
(40°C maximum ambient on 250W fixtures)



E\*L2-  
E\*L6-

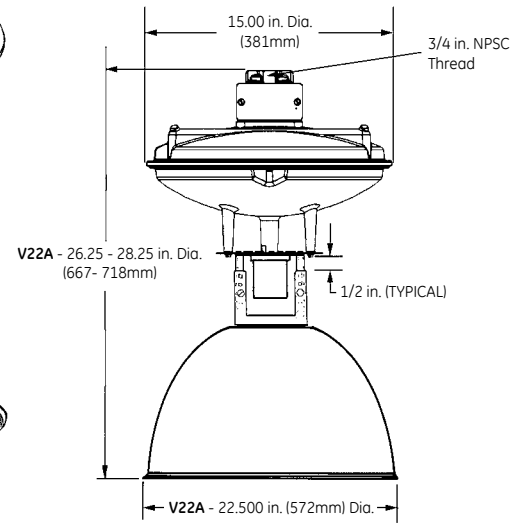


E\*PL2-  
E\*PL6-



E\*RL6-

## FIXTURE DIMENSIONS



## DATA

|   |              |              |
|---|--------------|--------------|
| Approximate Net Weight<br>Ballast and Optical | lbs<br>22-32 | kgs<br>10-15 |
|---|--------------|--------------|

### PHOTOMETRIC SELECTION TABLE

**V4 OPTICAL - Open & Ventilated 14in. Prismatic Glass Reflector**  
MH requires "S" option EX39 base socket

| Wattage         | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-----------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 350,400         | MH,P         | 55       | 1.5              | 9                 | 450161            | V4           | NA              |
| 350,400         | MH,P         | 55       | 1.8              | 7                 | 450159            | V4           | NA              |
| 350,400         | MH,P         | 55       | 2.0              | 5                 | 450157            | V4           | NA              |
| 350,400, Coated | MH,P         | 55       | 1.3              | 8                 | 450169            | V4           | NA              |
| 350,400, Coated | MH,P         | 55       | 1.5              | 6                 | 450167            | V4           | NA              |
| 350,400, Coated | MH,P         | 55       | 2.0              | 2                 | 450163            | V4           | NA              |
| 250             | HPS          | 55       | 1.5              | 3                 | 450175            | V4           | NA              |
| 250             | HPS          | 55       | 1.8              | 2                 | 450177            | V4           | NA              |
| 400             | HPS          | 55       | 1.7              | 2                 | 450153            | V4           | NA              |

**D4 OPTICAL - Endosed & Ventilated 14in. Prismatic Glass Reflector with Flat Glass Lens**

| Wattage               | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-----------------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 250,320 (ED28)        | MH, P        | 55       | 1.4              | 2                 | 450196            | D4           | NA              |
| 250,320 (ED28) Coated | MH, P        | 55       | 1.3              | 2                 | 450207            | D4           | NA              |
| 350,400, Coated       | MH, P        | 55       | 1.3              | 9                 | 450190            | D4           | NA              |
| 350,400, Coated       | MH, P        | 55       | 1.7              | 5                 | 450187            | D4           | NA              |
| 350,400, Coated       | MH, P        | 55       | 1.9              | 3                 | 450185            | D4           | NA              |

**V6 OPTICAL - Open & Ventilated 16in. Acrylic Prismatic Reflector**  
MH requires "S" option EX39 base socket

| Wattage          | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|------------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 350, 400         | MH,P         | 40       | 2.0              | 3                 | 179381            | V6           | NA              |
| 350, 400, Coated | MH,P         | 40       | 1.9              | 3                 | 179382            | V6           | NA              |
| 250              | HPS          | 55       | 1.7              | 4                 | 178415            | V6           | NA              |
| 250              | HPS          | 55       | 1.9              | 5                 | 178413            | V6           | NA              |

**V6 OPTICAL - Ventilated 16in. Acrylic Prismatic Reflector with E\*L6-GHBP Flat Polymeric Lens\*\***  
MH requires "S" option EX39 base socket

| Wattage     | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 250         | MH, P        | 40       | 1.5              | 4                 | 179274            | V6           | NA              |
| 250         | MH, P        | 40       | 1.7              | 5                 | 179271            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.5              | 4                 | 179273            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.7              | 5                 | 179272            | V6           | NA              |

**V6 OPTICAL - Ventilated 16in. Acrylic with E\*PL6-GHBP Prismatic Conical Polymeric Lens\*\***  
MH requires "S" option EX39 base socket

| Wattage     | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 175         | MH, P        | 40       | 1.5              | 3                 | 450246            | V6           | NA              |
| 175         | MH, P        | 40       | 1.7              | 4                 | 450247            | V6           | NA              |
| 175         | MH, P        | 40       | 2.0              | 5                 | 450248            | V6           | NA              |
| 175, Coated | MH, P        | 40       | 1.5              | 3                 | 450226            | V6           | NA              |
| 175, Coated | MH, P        | 40       | 1.7              | 4                 | 450229            | V6           | NA              |
| 175, Coated | MH, P        | 40       | 1.9              | 5                 | 450232            | V6           | NA              |
| 250         | MH, P        | 40       | 1.5              | 3                 | 450237            | V6           | NA              |
| 250         | MH, P        | 40       | 1.7              | 4                 | 450238            | V6           | NA              |
| 250         | MH, P        | 40       | 2.0              | 5                 | 450239            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.4              | 3                 | 450217            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.6              | 4                 | 450220            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.8              | 5                 | 450223            | V6           | NA              |

\*\* Ordered separately

\* Select Lens material (Example EAL2-GHBP = Standard Acrylic)

**Note 1:** For Advanced "ST" HID Acrylic, use corresponding Acrylic Photometry Code listed in Photometric Section and associated photometric data.

**Note 2:** See page T-34 for Alternative Material explanation.

### PHOTOMETRIC SELECTION TABLE

**V6 OPTICAL - Ventilated 16in. Acrylic with E\*RL6-GHBP Drop Polymeric Lens\*\***  
MH requires "S" option EX39 base socket

| Wattage     | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 250         | MH, P        | 40       | 1.3              | 3                 | 450240            | V6           | NA              |
| 250         | MH, P        | 40       | 1.5              | 4                 | 450241            | V6           | NA              |
| 250         | MH, P        | 40       | 1.7              | 5                 | 450242            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.2              | 3                 | 450218            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.4              | 4                 | 450221            | V6           | NA              |
| 250, Coated | MH, P        | 40       | 1.6              | 5                 | 450224            | V6           | NA              |

**V2 OPTICAL - Open & Ventilated 22in. Prismatic Acrylic Reflector**  
MH requires "S" option EX39 base socket

| Wattage               | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-----------------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 250,320 (ED28)        | MH, P        | 55       | 0.8              | 5                 | 451942            | V2           | NA              |
| 250,320 (ED28) Coated | MH           | 55       | 1.0              | 5                 | 451943            | V2           | NA              |
| 350,400               | MH, P        | 55       | 1.5              | 5                 | 451948            | V2           | NA              |
| 350,400, Coated       | MH           | 55       | 1.4              | 5                 | 451949            | V2           | NA              |
| 400                   | HPS          | 55       | 0.9              | 4                 | 451954            | V2           | NA              |
| 400                   | HPS          | 55       | 1.2              | 5                 | 451955            | V2           | NA              |

**V2 OPTICAL - Ventilated 22in. Prismatic Acrylic Reflector with E\*PL2-GHBP Prismatic Conical Polymeric Lens\*\***  
MH requires "S" option EX39 base socket

| Wattage               | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-----------------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 250,320 (ED28)        | MH, P        | 40       | 1.0              | 3                 | 451946            | V2           | NA              |
| 250,320 (ED28) Coated | MH           | 40       | 1.0              | 3                 | 451947            | V2           | NA              |
| 350,400               | MH, P        | 40       | 1.5              | 4                 | 451952            | V2           | NA              |
| 350,400 Coated        | MH           | 40       | 1.5              | 5                 | 451953            | V2           | NA              |

**V2 OPTICAL - Ventilated 22in. Prismatic Acrylic Reflector with E\*L2-GHBP Flat Clear Polymeric Lens\*\***  
MH requires "S" option EX39 base socket

| Wattage         | Light Source | Max Temp | Spacing Criteria | Reflect. Position | Photometric Curve | Optical Code | Photometry Code |
|-----------------|--------------|----------|------------------|-------------------|-------------------|--------------|-----------------|
| 250,320 (ED28)  | MH, P        | 40       | 0.8              | 5                 | 451944            | V2           | NA              |
| 350,400         | MH, P        | 40       | 1.5              | 4                 | 451950            | V2           | NA              |
| 350,400, Coated | MH           | 40       | 1.4              | 5                 | 451951            | V2           | NA              |

\*\* Ordered separately

\* Select Lens material (Example EAL2-GHBP = Standard Acrylic)

## NOTES

See explanation on "Optical Flexibility" Page I-5. See References.

## REFERENCES

See Page I-104 for start of Accessories.

See Page I-117 for Component Ordering Logic.

See Page I-129 for Explanation of Options and Other Terms Used.

