SPECIFICATIONS

OPTICAL HOUSING
Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling fins. The Optical Panel mounting surface is milled flat (surface variance <±.003" over 12") to facilitate thermal transfer of heat to housing and cooling fins. Solid barrier wall separates optical and electrical compartments. The optical and electrical compartments are integrated to create one assembly. Minimum wall thickness is .188".

ELECTRICAL HOUSING w/ INTEGRATED ARM
Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling ribs surrounding the electrical compartment and a flat surface on the top of the arm to accommodate a photocell receptacle. Solid barrier wall separates optical and electrical compartments. The optical compartment and electrical compartment with the integrated support arm combine to create one assembly. Minimum wall thickness is .188". Cast and hinged driver assembly cover is integrated with wiring compartment cover.

PLED® OPTICS
Emitters (LED’s) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

LED DRIVER(S)
Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

LED EMITTERS
High output LED’s are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED’s are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

FINISH
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.
**VALULUME SERIES - PLED**

**SPECIFICATIONS**

**POLE DRILLING TEMPLATE**

[Diagram of pole drilling template]

**WALL MOUNT**

[Diagram of wall mount]

**PLED** MODULES

- **VLL PLED**
  
  E.P.A. = 0.77
  
  Available in: 80 & 40 LED Array

  - **80 LED Array**
  - **40 LED Array**

**SPECIFICATION EXAMPLE**

Spec/Order Example: VLL-LED/PLED-V-SQ/80LED-700mA/NW/277/1/RAL9005

**ORDER INFORMATION**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OPTICS</th>
<th>LED</th>
<th>MOUNTING</th>
<th>FINISH</th>
<th>OPTIONS</th>
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<tr>
<td>VLL</td>
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<td></td>
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**ORDERING INFORMATION**

- **No. of LEDs**
  
  - **40**
  - **80**

- **Drive Current**
  
  - 350mA
  - 525mA
  - 700mA
  - 1050mA

- **System Watts**
  
  - 45
  - 66
  - 91
  - 142

- **HID Equivalent**
  
  - 70 - 100
  - 100 - 150
  - 175
  - 200 - 250

**COMPANY INFORMATION**

- **U.S. Architectural Lighting**
  
  - Address: 660 West Avenue D, Palmdale, CA 93551
  - Phone: (661) 233-2000
  - Fax: (661) 233-2001
  - Website: www.usaltg.com
<table>
<thead>
<tr>
<th>LED COUNT</th>
<th>SOURCE TYPE</th>
<th>SOURCE</th>
<th>INITIAL LUMENS - 4000K</th>
<th>INITIAL LUMENS - 3000K</th>
<th>INITIAL LUMENS - 5000K</th>
<th>L70 GREATER THAN (HR)</th>
<th>STARTING TEMP</th>
<th>SYSTEM VOLTS</th>
<th>MAX INPUT AMPS</th>
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<tbody>
<tr>
<td>40</td>
<td>LED</td>
<td>40 PLED Optical Module - 350mA</td>
<td>5,585 - 6,408</td>
<td>5,306 - 6,088</td>
<td>5,864 - 6,729</td>
<td>85,000+</td>
<td>-40°F</td>
<td>43</td>
<td>120</td>
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<td>LED</td>
<td>40 PLED Optical Module - 525mA</td>
<td>8,059 - 9,246</td>
<td>7,656 - 8,784</td>
<td>8,462 - 9,709</td>
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<td>10,240 - 11,749</td>
<td>9,728 - 11,162</td>
<td>10,752 - 12,337</td>
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<td>LED</td>
<td>40 PLED Optical Module - 1050mA</td>
<td>13,642 - 15,652</td>
<td>12,960 - 14,870</td>
<td>14,324 - 16,435</td>
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<td>80 PLED Optical Module - 350mA</td>
<td>10,824 - 12,419</td>
<td>10,283 - 11,798</td>
<td>11,365 - 13,040</td>
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<td>80 PLED Optical Module - 525mA</td>
<td>15,587 - 17,884</td>
<td>14,808 - 16,990</td>
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<td>19,767 - 22,680</td>
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<tr>
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<td>80 PLED Optical Module - 1050mA</td>
<td>26,255 - 30,124</td>
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<td>27,568 - 31,630</td>
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**NOTES:**
1. Max Input Amps is the highest of starting, operating, or open circuit currents.
2. Lumen values for LED Modules vary according to the distribution type.
3. System Watts includes the source watts and all driver components.
4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV – 20KV surge suppressors.
5. L70(9K) – TM-21 6x rule applied.

**WARNING:** All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.