**Product Specification**

**General Notes:**
All fixtures are UL listed for dry and damp locations.

Remote Driver for all options. Please contact the factory with any specification questions.

**Features:**
- 2" aperture recessed fixture
- High transmission frosted lenses with no diode imaging
- No visible fasteners
- Extruded aluminum housing
- Dimmable/Programmable drivers for controllable light output
- High efficacy LEDs with 5 year warranty
- Under 2 steps MacAdams Ellipse Binning
- Nearly limitless Continuous Runs

**Customization**:
- EMB7 option (BOTH OPTIONS ARE INTEGRAL ONLY).
- **The EMB12 is slightly more expensive than the EMB7.**

**Housing Finish:***
- White Primer (Standard)
- Custom Finish (Consult Factory)

**Options/Customization:**
- No EMB or Customization
- 7 Watt battery back-up** (Approximately 600 lumens)
- 12 Watt battery back-up** (Approximately 1,000 lumens)
- 90+ CRI LED BOARDS (2700K - 4000K only)
- Corners/patterns*
- Custom Driver*
- Customization Requested*

**Not all dimming options are available with 347v.**

**Specification Information**

**Driver:** [INTEGRAL]
1) NON-DIMMING: As described... this fixture will not dim.
2) DIMMING: 0-10v: 1%, 10%  ::  Lutron: 2-wire Forward phase (H-Lume 1%), Ecosystem to 1% (Soft On), Ecosystem to 5% (Series)
   **DALI** - Specify driver. See "Dimming Options" on subsequent pages for more information. For other dimming options, consult the factory.
3) EMERGENCY: Specify EMB under the Options/Customization category at the end of the cut sheet along with the desired lumen output (600 or 1,000 lumens - the latter is slightly more costly).
4) Drivers are programmed according to our standard lumen output (600 or 1,000 lumens - the latter is slightly more costly).
5) Consult factory with any questions or specification requirements.

**Finishes:**
The standard finish is a Satin Clear anodized housing with Machine Finished hardware. Machined finish is preferable for machined components (Hardware Detail) - Powder coating these parts may result in additional costs. Consult the factory with any questions about standard or custom finishing options.

**Materials:**
- High transmission frosted lenses with no diode imaging
- Finished hardware. Machined finish is preferable for machined components (Hardware Detail) - Powder coating these parts may result in additional costs. Consult the factory with any questions about standard or custom finishing options.

**Remote Driver** for all options. Please contact the factory with any specification questions.

**Note:** Customization may incur higher costs and/or increased lead times. Please consult the factory.

**Driver Options:**
- **Non-Dimming**
- **0-10v Dimming**
- **10% Dim**
- **1% Dim**
- **DALI**
- **DALI Digital Addressable Lighting Interface**

**Volts:**
- Universal (120-277v)
- 120v
- 220v
- 347v
PRODUCT SPECIFICATION

- Fixture delivered light potential: 101 Lumens/Watt*
- Uniform light distribution
- 90+ CRI LED diode options
- Exceptional binning, less than 2 step MacAdams Ellipse
- Minimum 70% initial lumen output at 70,000 hours
- Standard 0-10v dimming to %10
- Lutron, Eldoled, Dali, and other dimming options
- 5 year system warranty

*Actual fixture efficacy will be dependent on specification. Higher lumens per watt are achieved with lower drive powers. Please contact the factory with questions or for more information.

LUMEN OUTPUT*

<table>
<thead>
<tr>
<th>DRIVER OUTPUT</th>
<th>WATTAGE</th>
<th>LUMEN OUTPUT (PER FOOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERY LOW (VLO)</td>
<td>4</td>
<td>400</td>
</tr>
<tr>
<td>LOW (LO)</td>
<td>6</td>
<td>605</td>
</tr>
<tr>
<td>STANDARD (SO)</td>
<td>8</td>
<td>795</td>
</tr>
<tr>
<td>HIGH (HO)</td>
<td>10</td>
<td>995</td>
</tr>
<tr>
<td>VERY HIGH (VHO)</td>
<td>12</td>
<td>1,155</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DRIVER OUTPUT</th>
<th>WATTAGE</th>
<th>LUMEN OUTPUT (PER 4’ FIXTURE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERY LOW (VLO)</td>
<td>16</td>
<td>1,600</td>
</tr>
<tr>
<td>LOW (LO)</td>
<td>24</td>
<td>2,420</td>
</tr>
<tr>
<td>STANDARD (SO)</td>
<td>32</td>
<td>3,180</td>
</tr>
<tr>
<td>HIGH (HO)</td>
<td>40</td>
<td>3,980</td>
</tr>
<tr>
<td>VERY HIGH (VHO)</td>
<td>48</td>
<td>4,620</td>
</tr>
</tbody>
</table>

LUMINOUS INTENSITY DISTRIBUTION

FIXTURE PROPERTIES (AS TESTED)

- 4’ nominal length fixture
- Standard Output (SO)
- Total system energy consumption: 32 Watt
- 101 Lumens/Watt
- 4000K 80 CRI LED

ZONAL LUMEN SUMMARY

<table>
<thead>
<tr>
<th>ZONE</th>
<th>LUMEN</th>
<th>%LAMP</th>
<th>%FIXTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>938</td>
<td>21.7%</td>
<td>29.5%</td>
</tr>
<tr>
<td>0-40</td>
<td>1,512</td>
<td>35%</td>
<td>47.6%</td>
</tr>
<tr>
<td>0-60</td>
<td>2,571</td>
<td>59.5%</td>
<td>81%</td>
</tr>
<tr>
<td>0-90</td>
<td>3,176</td>
<td>73.5%</td>
<td>100%</td>
</tr>
</tbody>
</table>

VERY LOW: Considerably underdrives the LEDs to maximize fixture efficacy potential and limit wattage use.
LOW: Underdrives the LEDs for reasonable light output while maintaining low wattage use.
STANDARD: Drives the LEDs for the best combination of lumen output and fixture efficacy.
HIGH: Drive the LEDs at higher capacity for higher lumen output with good efficacy.
VERY HIGH: Drives the LEDs at the highest capacity for the highest lumen output with the best efficacy.

*Lumen output will vary depending on ambient temperature. Cooler ambient and LED color temperatures result in higher luminaire performance. Calculations are based on 4000K LEDs.