TECHNICAL BULLETIN
MERCURY VAPOR LAMP

ANSI Code: H39
Product Code: 69770

Features:
- Long life
- Nickel-plated base
- Rugged construction

Applications: Roadway, Landscape Factory, Sports, Parking, Security

PERFORMANCE DATA

<table>
<thead>
<tr>
<th>Performance Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial lumens at rated watts</td>
<td>7800 lm</td>
</tr>
<tr>
<td>after 100 hours operation</td>
<td></td>
</tr>
<tr>
<td>Mean lumens at 10 hours/start</td>
<td>6365 lm</td>
</tr>
<tr>
<td>Rated average life</td>
<td>24000 h</td>
</tr>
<tr>
<td>Warm up time (90% lumens)</td>
<td>4 min</td>
</tr>
<tr>
<td>Correlated color temperature</td>
<td>5700 K</td>
</tr>
<tr>
<td>CIE chromaticity</td>
<td>0.327, 0.381 x, y</td>
</tr>
<tr>
<td>Color rendering index</td>
<td>20</td>
</tr>
<tr>
<td>Operating Position</td>
<td>Universal</td>
</tr>
<tr>
<td>Time to hot re-start (max)</td>
<td>10 min</td>
</tr>
</tbody>
</table>

ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Electrical Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal lamp wattage</td>
<td>175 W</td>
</tr>
<tr>
<td>Nominal lamp voltage</td>
<td>130 V</td>
</tr>
<tr>
<td>Nominal lamp current</td>
<td>1.5 Aqns</td>
</tr>
<tr>
<td>Current crest factor (max)</td>
<td>2</td>
</tr>
<tr>
<td>Ballast requirements</td>
<td></td>
</tr>
<tr>
<td>Open circuit voltage</td>
<td>225 Vqns</td>
</tr>
<tr>
<td>-30°C (-22°F)</td>
<td>318 Vpeak</td>
</tr>
<tr>
<td>Min. starting current</td>
<td>1.5 Aqns</td>
</tr>
<tr>
<td>Max. starting current</td>
<td>3.25 Aqns</td>
</tr>
</tbody>
</table>

PHYSICAL DESCRIPTION

<table>
<thead>
<tr>
<th>Physical Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective arc length</td>
<td>42 (1.65) mm (in)</td>
</tr>
<tr>
<td>Maximum overall length</td>
<td>211 (8.31) mm (in)</td>
</tr>
<tr>
<td>Light center length</td>
<td>127 (5) mm (in)</td>
</tr>
<tr>
<td>Bulb diameter</td>
<td>90 (3.54) mm (in)</td>
</tr>
<tr>
<td>Base to bulb eccentricity (max)</td>
<td>3 deg</td>
</tr>
<tr>
<td>Maximum base temperature</td>
<td>210 (410) °C (°F)</td>
</tr>
<tr>
<td>Maximum bulb temperature</td>
<td>400 (752) °C (°F)</td>
</tr>
<tr>
<td>Bulb designation</td>
<td>BT28</td>
</tr>
<tr>
<td>Bulb material</td>
<td>Borosilicate glass (Hard Glass Lead Free)</td>
</tr>
<tr>
<td>Arc tube / Shroud material</td>
<td>Quartz / None</td>
</tr>
<tr>
<td>Bulb shape</td>
<td>BT28</td>
</tr>
<tr>
<td>Bulb finish</td>
<td>Clear</td>
</tr>
<tr>
<td>Base designation</td>
<td>E39 Mogul</td>
</tr>
<tr>
<td>Base Solder (one side only)</td>
<td>Sn (tin) 5% and Pb (lead) 95%</td>
</tr>
</tbody>
</table>
**WARNING**

This lamp can cause serious skin burn and eye inflammation from short-wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.

**RISK OF ELECTRIC SHOCK**
- Turn power off before inspection, installation or removal
- Protect lamp from direct contact with liquids to avoid breakage from thermal shock

**RISK OF FIRE**
- Keep combustible materials away from lamp during operation

**UNEXPECTED LAMP RUPTURE MAY CAUSE INJURY, FIRE, OR PROPERTY DAMAGE**
- Do not exceed rated ballast voltage
- Do not use lamp if outer glass is scratched or broken.
- Do not use beyond rated life
- Do not turn on lamp until fully installed
- Use only with a fixture and ballast rated for this product
- Turn lamp off at least once a week for 15 minutes
- Electrically insulate any metal to glass support in fixture

**CAUTION**

**RISK OF BURN**
- Allow lamp to cool before handling.

**LAMP MAY SHATTER AND CAUSE INJURY**
- Do not use excessive force when installing lamp
- Dispose of lamp in a closed container

**LAMP OPERATING INSTRUCTIONS**

This is a discharge lamp and requires some time to restart and come up to full brightness after a power interruption. If power supply dips or is interrupted, lamps may extinguish and not restart. Turn off power supply for 10-15 minutes and allow lamp to fully cool. Lamp will restart when power is restored.
