Non-Cycling, Low Mercury HPS Lamps

Reduced mercury for lower disposal costs. Environmentally-friendly Ecolux® NC™ lamps feature mercury reduction of 56% up to 93% vs. standard HPS lamps and a lead-free base. Passes the EPA Toxicity Characteristic Leaching Procedure Test ( TCLP), substantially lowering disposal costs (up to $4 per lamp reduction), where applicable.*

Non-cycling makes end-of-life replacement quick and easy. Most high pressure sodium lamps will cycle on and off when approaching end of life, making expired lamps difficult to locate and replace. The Ecolux NC lamps simply die, they will not light, so it is easy to spot for replacement. This can reduce maintenance service trips thus reducing labor costs by $20 per lamp in a typical streetlighting system.

More light. Popular 100- and 400-watt types feature 6% and 11% higher initial lumens, respectively, than standard lamps. Other wattages deliver the same high light output as standard HPS lamps.

Direct replacement of existing HPS lamps. GE Ecolux NC lamps fit standard high pressure sodium sockets. No new ballasts or fixtures are needed.

Longer life and same outstanding efficiency as standard HPS lamps.

*State regulations vary. Consult your state EPA.
GE Ecolux NC™ Non-Cycling, Low Mercury High Pressure Sodium Lamp Specifications

<table>
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<tr>
<th>PRODUCT INFORMATION</th>
<th>CLEAR 70-WATT ELLIPTICAL</th>
<th>CLEAR 100-WATT ELLIPTICAL</th>
<th>CLEAR 150-WATT ELLIPTICAL</th>
<th>CLEAR 250-WATT TUBULAR</th>
<th>CLEAR 400-WATT TUBULAR</th>
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<tr>
<td>Product Code</td>
<td>16472</td>
<td>16473</td>
<td>40390</td>
<td>14674</td>
<td>16475</td>
<td>45059</td>
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<tr>
<td>ANSI or IEC Code</td>
<td>SE2ME-70</td>
<td>S54SB-100</td>
<td>S55SC-50</td>
<td>S55VA-250</td>
<td>S51WA-400</td>
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<tr>
<td>Description</td>
<td>LU70/ECCO/NC</td>
<td>LU100/ECCO/NC</td>
<td>LU150/55/ECCO/NC</td>
<td>LU250/ECCO/NC</td>
<td>LU400/ECCO/NC</td>
<td>LU200/ECCO/NC</td>
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</tbody>
</table>

### Physical Characteristics

- **Burning Position**: Universal
- **Bulb Designation**: ED23.5
- **Bulb Material**: Hard Glass
- **Bulb Nominal Diameter, mm (in.)**: 75 (2.15/16")
- **Base Type**: Mogul
- **(Material)**: (Brass/No Lead)
- **Light Center Length, mm (in.)**: 127 (5")
- **Max. Overall Length, mm (in.)**: 197 (7.3/4")
- **Arc Length, mm (in.)**: 30 (1 1/8")
- **Max. Bulb Temp. °C**: 400°C
- **Max. Base Temp. °C**: 210°C
- **Eccentricity: Bulb to Base**: 3°
- **Eccentricity: Bulb to Arc Axis**: 3°

### Luminaire Characteristics — Open or Enclosed

- **Nominal Lamp Watts**: 70
- **Nominal Lamp Volts**: 52
- **Maximum Lamp Amps – Starting**: 2.4 A
- **Nominal Lamp Amps – Operating**: 1.6 A
- **Max. Current Crest Factor**: 1.8
- **Ballast OCV, Minimum**: 110

### Starting Pulse Requirements

- **Pulse Peak Volts (min.) (max.)**: 2500 (4000)
- **Min. Pulse Width (milliseconds) Min. Pulse Repetition Min. Pulse Peak Current (amp)**: 1 @ 2250 50 per second 0.2

### Photometric Characteristics

- **Initial Lumens**: 6300
- **Mean Lumens @ 50% Rated Life**: 5670
- **Average Rated Life (hrs.)**: 30000
- **Color Rendering Index @ CCT (K)**: 23 @ 1900 23 @ 2000 30 @ 2000
- **Warm Up Time (Minutes) to 90%**: 3 to 4
- **Hot Restart Time (Minutes) to 90%**: 5 maximum
- **CIE Chromaticity Coordinates: X**: 0.536
- **CIE Chromaticity Coordinates: Y**: 0.414

**Reference Lumens** - Rated average lamp lumens obtained under controlled laboratory conditions in a prescribed burning position. Initial Reference Lumens refer to the lamp lumen output after 100-hours burning. Mean Reference Lumens refer to the lamp lumen output at the mean lumen point during lamp life. The mean lumen point occurs at 50% rated life for high pressure sodium lamps. Lamp performance on typical systems under typical service conditions will vary from the reference lumens ratings.

Lumen maintenance is measured under specified test conditions at rated lamp watts for lamps that have been operated 10 or more burning hours per start on typical commercial ballasts. Rated mean lumens are measured at 50% of rated life, at rated lamp watts.

For spot relamping calculations, use an estimated average life (@ 10 hours/start) of 30,000 hours corresponding to 50% burnouts.

**Caution**—THE FOLLOWING INSTRUCTIONS MUST BE COMPLIED WITH TO HELP AVOID POSSIBLE SHATTERING AND EARLY FAILURE OF THE LAMP.

General Electric Company will not be responsible for poor lamp performance, personal injury or property damage resulting from failure to follow these instructions.

**WARNING**

- This is a vacuum jacket lamp and may implode if broken. As a precaution, wear safety glasses and gloves when installing or removing lamp.

**CAUTION**

- Electrically insulate any metal to glass support in fixture to avoid decomposition of the glass.
- Protect lamps from direct contact with liquids (such as rain, sleet or snow) to avoid breakage from thermal shock.
- Do not scratch glass bulb because it may break during installation or later during lamp operation.
- Turn power off and let lamp cool before removal to avoid potential burn and electrical shock hazard during lamp replacement.
- Do not touch the lamp base shell during operation to avoid potential electrical shock hazard.

Information provided is subject to change without notice. Please verify all details with GE. All values are design or typical values when measured under laboratory conditions, and GE makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.

For additional product and application information, please consult GE’s Website: www.gelighting.com

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