Circlite

Compact Fluorescent Lamps Integrated
22W

Product information
The CFL Circlite lamp from GE has been specially designed for easy retrofit in incandescent sockets. Due to its circular shape, light is evenly distributed, providing high luminous flux to any environment. The instant light on and fast warm-up just adds to its excellent light quality and reliable energy savings.

Features
Compact Fluorescent Lamps (CFL) have an important role to play in the future of lighting, helping to protect the environment by using less energy and creating less CO₂ emissions. In addition, CFL lamps contribute to the reduction of maintenance costs, ensuring that financial benefits are enjoyed alongside environmental benefits.

There are a variety of performance advantages afforded by GE Lighting CFL lamps. They use almost 80% less energy and last six times longer than their incandescent predecessors, are rated energy class ‘A’ and offer high quality light.

- 6,000 hours life
- Fast warm-up
- Excellent light distribution
- ‘A’ energy class

Application areas
Circlite lamps are recommended for general indoor and outdoor applications such as:

- Home lighting
- Hotels
- Restaurants
- Corridors, hallways
- Gardens, courtyards

Product range
Circlite lamps are available in:

- 22 watt
- E27 cap
- Warm (2700K) and Daylight (6500K) colours
- Box pack

GE imagination at work
Standards

- IEC 60061-1: Lamp caps and holders together with gauges for the control of interchangeability and safety
- IEC or EN 60969: Self ballasted lamps for general lighting services – performance requirements
- IEC or EN 60968: Self-ballasted lamps for general lighting services – safety requirements
- EN 50285: Energy labelling of household lamps
- CIE S 009/E:2002: Photobiological safety of lamps and lamp systems
- EN 61547: Requirement for general lighting purposes – EMC immunity requirement
- EN 55015 or CISPR 15: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
- EN 61000-3-2: Electromagnetic compatibility (EMC) – Part 3-2: Limits – limits for harmonic current emissions (equipment input current up to and including 16A per phase)
- EN 61000-3-3: Electromagnetic compatibility (EMC) – Part 3-3: Limits – limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to 16A

European Directives:

- Safety: Low Voltage (LV)D 2006/95/EC
- Electromagnetic Compatibility: (EMC) 2004/108/EC
- RoHS: Directive 2011/65/EC on Restrictions of the use of certain Hazardous Substances (RoHS)
- REACH: Commission Regulation 453/2010/EC on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Basic data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22,0</td>
<td>220-240</td>
<td>E27</td>
<td>FLE22/CLITE/T5/827/E27</td>
<td>73767</td>
<td>1800</td>
<td>2700</td>
<td>80</td>
<td>6,000</td>
<td>80</td>
<td>230</td>
<td>A</td>
<td>6</td>
<td>124</td>
</tr>
<tr>
<td>22,0</td>
<td>220-240</td>
<td>E27</td>
<td>FLE22/CLITE/T5/865/E27</td>
<td>73768</td>
<td>1700</td>
<td>6500</td>
<td>80</td>
<td>6,000</td>
<td>80</td>
<td>230</td>
<td>A</td>
<td>6</td>
<td>118</td>
</tr>
</tbody>
</table>

*Rated wattage, life and lumen are equivalent to nominal values, which are indicated on product packaging.

Survival rate and lumen maintenance

Test condition: 50Hz 230V 3 hours cycling - according to IEC60969
### Influence of ambient temperature on light output

Photometrical and light parameters of a fluorescent lamp depend on the mercury vapor pressure inside the lamp. Mercury vapor pressure in turn is controlled by temperature. When installed in a luminaire, the temperature of the air surrounding the lamp cap changes and this can affect the light output of the lamp. The effects of changes in ambient temperature for a typical lamp are shown on the graph.

### Operating temperature limit

Lamp surface temperature in any application shall not exceed maximum temperature values specified.

<table>
<thead>
<tr>
<th>Location</th>
<th>Max temperature value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between plastic housing and collar</td>
<td>80°C</td>
</tr>
</tbody>
</table>

Lamp measured in vertical base up position, between the cathodes.
Incandescent watt equivalence: select the preferred wattage to enjoy the same light output as the original incandescent bulb while at the same time achieving significant energy savings. The Basic Data table and the updated EuP packaging include the CFL-Incandescent wattage equivalences according to the new EuP luminous flux standards.

Starting time: the time needed for the lamp to start fully and remain alight. GE Lighting’s CFL lamps are usually instant light on. Starting categories are: instant on (<0.3sec), quick (0.3-1sec), standard (1-1.5sec).

Warm-up: GE Lighting’s CFL lamps are usually characterised by fast warm-up times. Warm-up categories at 60% lumen are: fast (<30sec), standard (30-60sec) and slow (60-120sec).

Mercury content: GE Lighting’s CFL lamps contain a minimised level of mercury, some of our best-in class lamps as low as 0.9mg vs. the max. 5.0mg allowed by RoHS.

Switching cycle: switching endurance is a minimum 3000 cycles based on official EU standard – one minute on, three minutes off.

Dimming: not recommended to use with dimmers.

Timer, photo cell circuits: not suitable for use with electronically switched devices. Please refer to the device instructions.

Power Factor: ratio of the measured active input power to the product of the supply voltage (r.m.s.) and the supply current (r.m.s.). measures how efficiently the current is being converted into real power. Lamps of power factor >0.9 are referred to as High Power Factor lamps, below that as Low Power Factor lamps. All CFL lamps above 25 watts sold in EU need to be High Power Factor lamp.

Ambient temperature range: temperature at which a lighting product can be safely used and can meet the claimed rated life. Outside of this temperature range, the product might still operate, although the life could be reduced.

Minimum starting temperature: the lowest temperature condition at which the product can reliably start at within 3sec at 230V.

Enclosed fixture: usage in enclosed fixture may reduce life. Not recommended in totally enclosed fixture.

Website: instructions on how to dispose of lamps at end of life or in the case of accidental lamp breakage are available on the GE Lighting website.

GE Lighting is constantly developing and improving its products. For this reason, all product descriptions in this brochure are intended as a general guide, and we may change specifications from time to time in the interest of product development, without prior notification or public announcement. All descriptions in this publication present only general particulars of the goods to which they refer and shall not form part of any contract. Data in this guide has been obtained in controlled experimental conditions. However, GE Lighting cannot accept any liability arising from the reliance on such data to the extent permitted.