Dimmable Spiral
T3 10,000 hours
Compact Fluorescent Lamps Integrated
20W

Product information
The T3 10,000 hours dimmable spiral lamp is a premium solution combining energy savings with the ability to create the desired mood by adjusting the light level. Spiral shaped lamps provide an energy saving alternative for almost all applications where incandescent bulbs are currently used – ensuring 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 ten times longer than their incandescent predecessors, are rated energy class ‘A’ and offer high quality light.

With continuing technological advancements and miniaturisation, today’s CFL lamps are similar to the incandescent lamps that they replace to ensure that they are discreet – yet high performing.

• 10,000 hours life
• Fast warm-up
• 15-100% continuous dimming
• Flicker-free operation
• ‘A’ energy class

Application areas
Dimmable Spiral T3 10,000 hours lamps are recommended for general indoor and outdoor (in enclosed fittings) applications such as:

• Home lighting
• Retail lighting
• Hotels
• Restaurants
• Corridors, hallways
• Gardens, courtyards

Product range
Dimmable Spiral T3 10,000 hours lamps are available in:

• 20 wattage
• E27, B22 caps
• Warm (2700K) colour
• Box pack
Compliance

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 5 009/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 (LVD) 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

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<td>135</td>
<td>59</td>
<td>A</td>
<td>6</td>
<td>90</td>
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*Rated wattage, life and lumen are equivalent to nominal values, which are indicated on product packaging.

Survival rate and lumen maintenance

[Graph showing life expectancy and lumen maintenance over operating hours]

Survivals in %

- Survival rate 3 hours
- Lumen maintenance

<table>
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<tr>
<th>Hours</th>
<th>Survival rate 3 hours</th>
<th>Lumen maintenance</th>
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<tr>
<td>100</td>
<td>1.00</td>
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<td>2,000</td>
<td>0.99</td>
<td>0.90</td>
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<tr>
<td>4,000</td>
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<td>6,000</td>
<td>0.84</td>
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<td>8,000</td>
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<td>10,000</td>
<td>0.50</td>
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Test condition: 50Hz 230V 3 hours cycling - according to IEC60969
Dimensions

![Dimensions Diagram]

### E27 cap

<table>
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<tr>
<th>MOL [mm]</th>
<th>MOD [mm]</th>
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<td>15W</td>
<td>136</td>
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### B22 cap

<table>
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<th>MOD [mm]</th>
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<td>135</td>
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<td></td>
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Spectral power distribution

![Spectral Power Distribution Graph]

**Spectral power distribution 2700K**

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>
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<tbody>
<tr>
<td>P1 Between plastic housing and collar</td>
<td>90°C</td>
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</table>

Lamp measured in vertical base up position, between the cathodes.
Dimmable Spiral T3 10,000 hours provides linearity dimming. The lamp operates with most conventional dimming systems, specifically tested with below list of dimmers:

- Honeywell K4501
- Honeywell K1531
- Varilight 1way 40-250W
- Crabtree CRO 1W400
- Varilight digiflux 1 to 6HQ7
- GET 2way 60 400W

**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.

**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.

**Dimmable Spiral T3 10,000 hours power factor:** >0.5

**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).

**Dimmable Spiral T3 10,000 hours: fast warm-up (<30sec)**

**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.

**Dimmable Spiral T3 10,000 hours: mercury content 1.0mg**

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

**Dimmable Spiral T3 10,000 hours minimum starting temperature:** -20°C

**220-240V 50Hz:** all lamps operate on 220-240 Volt (-10%; +6%), 50 Hertz
**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.