

Reflector T2 and GU10 6,000 hours

Compact Fluorescent Lamps Integrated
Reflector T2 - 7W and 11W
GU10 T2 - 7W and 9W

Product information

CFL Reflector and GU10 6,000 hours lamps offer traditional incandescent and halogen shapes and sizes, long life and elegant light. Suitable for spotlight fittings or recessed downlights, GE Lighting's Decor CFL range is an ideal and eco-friendly solution.

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 and offer high quality light.

With continuing technological advancements and miniaturisation, today's T2 CFL lamps are similar to the incandescent and halogen lamps that they replace to ensure that they are discreet – yet high performing.

- 6,000 hours life
- Small dimensions
- Low mercury content



Application areas

Reflector T2 and GU10 T2 lamps are recommended for general indoor applications such as:

- Home lighting
- Retail lighting
- Hotels
- Restaurants
- Corridors, hallways

Product range

Reflector T2 and GU10 T2 lamps are available in a full range of:

- 7, 9 and 11 wattages
- E14, E27, B22 and GU10 caps
- Warm (2700K) and Cool (4000K) colours
- Box and blister packs



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 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 (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)
- ErP Directional Lamp definition: Directive 2009/125/EC – directional lamp means a lamp having at least 80% light output within a solid angle of π sr (corresponding to a cone with angle of 120°)
- Energy Labelling: Commission Directive 98/11/EC of 27 January 1998 implementing Council Directive 92/75/EEC with regard to energy labelling of household lamps
- WEEE: Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE)
- REACH: Commission Regulation 453/2010/EC on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

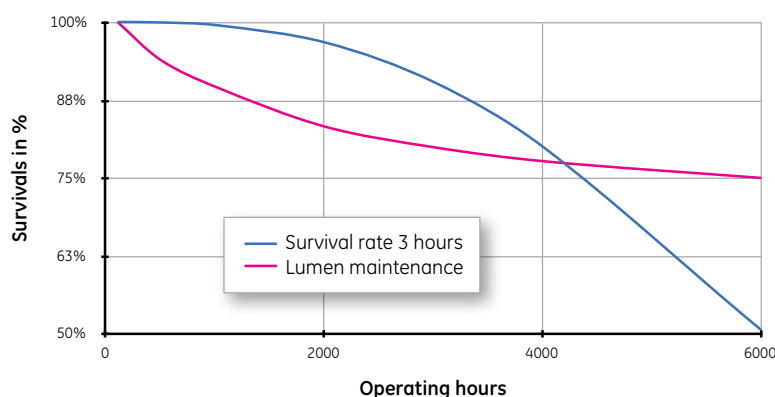
Basic data

Rated* Wattage [W]	Volts [V]	Cap	Product Description	Product Code Box pack	Product Code Blister pack	Beam Angle [° Degree]	Rated* Lumen [lm]	CCT [K]	CRI [Ra]	Rated* Life [h]	Length [mm]	Diameter [mm]	EEC	Pack Qty
Electronic Reflector T2 – 6,000 hours														
7,0	220-240	E14	FLE7R50/T2/827/E14	88845	73400	115	120	2700	80	6,000	91	50	N/A	10
7,0	220-240	E27	FLE7R50/T2/827/E27	78701		115	120	2700	80	6,000	91	50	N/A	10
7,0	220-240	B22	FLE7R50/T2/827/B22	78700		115	120	2700	80	6,000	90	50	N/A	10
7,0	220-240	E14	FLE7R50/T2/840/E14	73403		115	120	4000	80	6,000	91	50	N/A	10
11,0	220-240	E14	FLE11R63/T2/827/E14	78699		118	260	2700	80	6,000	105	63	N/A	10
11,0	220-240	E27	FLE11R63/T2/827/E27	88849	96918	118	260	2700	80	6,000	105	63	N/A	10
11,0	220-240	B22	FLE11R63/T2/827/B22	88850		118	260	2700	80	6,000	104	63	N/A	10
11,0	220-240	E14	FLE11R63/T2/840/E14	73405		118	260	4000	80	6,000	105	63	N/A	10
Electronic GU10 T2 – 6,000 hours														
7,0	220-240	GU10	FLE7GU10/T2/827	73454	88857	106	90	2700	80	6,000	86.5	50	N/A	8
9,0	220-240	GU10	FLE9GU10/T2/827	78702	96921	113	180	2700	80	6,000	86.5	50	N/A	8

*Rated wattage, life and lumen are equivalent to nominal values, which are indicated on product packaging
Lumen measured at beam angle.

Survival rate and lumen maintenance

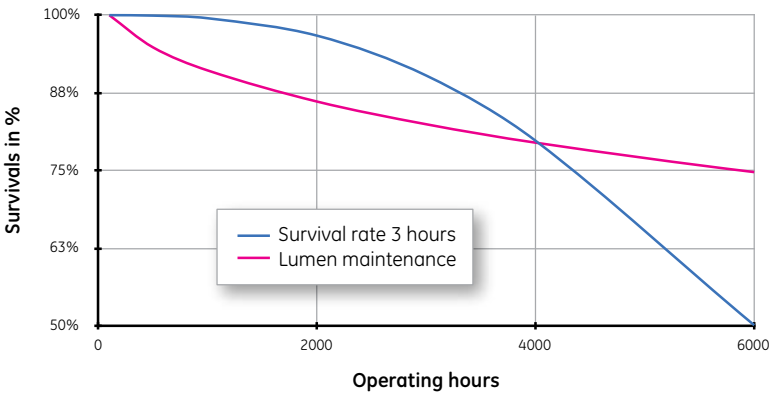
Life Expectancy and Lumen Maintenance
Reflector 7W, GU10 7-9W 6,000 hours



Test condition: 50Hz 230V 3 hours cycling - according to IEC60969

Hours	Survival rate 3 hours	Lumen maintenance
100	1.00	1.00
2,000	0.97	0.83
4,000	0.80	0.78
6,000	0.51	0.75

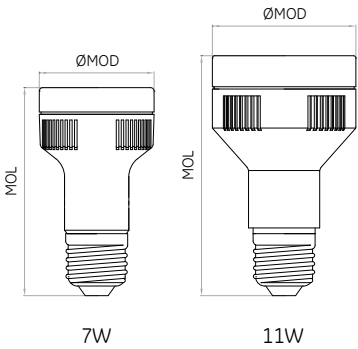
Life Expectancy and Lumen Maintenance
Reflector 11W 6,000 hours



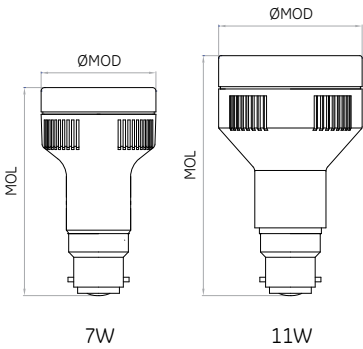
Test condition: 50Hz 230V 3 hours cycling - according to IEC60969

Hours	Survival rate 3 hours	Lumen maintenance
100	1.00	1.00
2,000	0.97	0.86
4,000	0.80	0.80
6,000	0.51	0.75

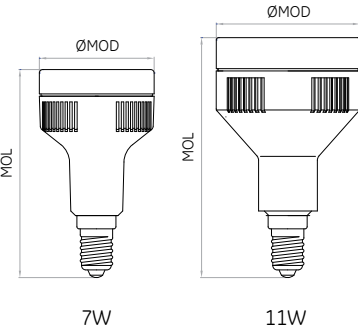
Dimensions



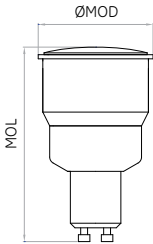
E27 cap		
	MOL [mm]	MOD [mm]
7W	91	50
11W	105	63



B22 cap		
	MOL [mm]	MOD [mm]
7W	90	50
11W	104	63

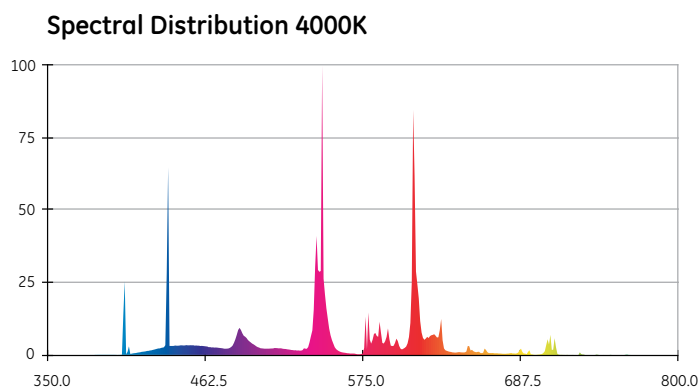
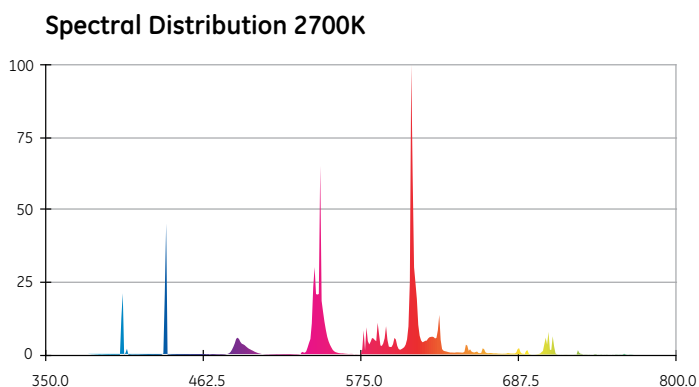


E14 cap		
	MOL [mm]	MOD [mm]
7W	91	50
11W	105	63



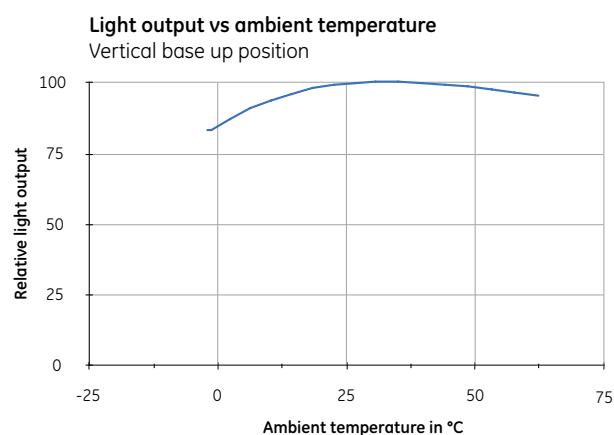
GU10 cap		
	MOL [mm]	MOD [mm]
7W	86.5	50
9W	86.5	50

Spectral power distribution



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.



Additional information – EuP Compliance



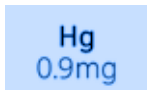
EU Regulations: GE Lighting's CFL lamps are all compliant with WEEE (Waste Electrical and Electronic Equipment), RoHS (Reduction of Hazardous Substances) and EuP (Energy Using Products) directives and are available in compliant packaging.



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).
Reflector T2 6,000 hours starting time: Instant; GU10 T2 6,000 hours starting time: Instant



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).
Reflector T2 6,000 hours: standard warm-up (<60sec); GU10 T2 6,000 hours: standard warm-up (<60sec)



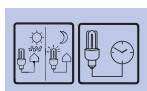
Mercury content: GE Lighting's CFL lamps contain a minimised level of mercury, some of our best-in class lamps as low as 0.9mg vs. the max. 5.0mg allowed by RoHS.
Reflector T2 6,000 hours: mercury content 2.0mg; GU10 T2 6,000 hours: mercury content 2.0mg



Switching cycle: switching endurance is a minimum 3000 cycles based on official EU standard – one minute on, three minutes off.
Reflector T2 6,000 hours switching cycle: 5,000; GU10 T2 6,000 hours switching cycle: 5,000



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

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.

Reflector T2 6,000 hours power factor: >0.5; GU10 T2 6,000 hours power factor: >0.5



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.

Reflector T2 6,000 hours ambient operating temperature range: -20-50°C

GU10 T2 6,000 hours ambient operating temperature range: -20-50°C



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

Reflector T2 6,000 hours minimum starting temperature: -20°C;

GU10 T2 6,000 hours minimum starting temperature: -20°C

**220-240V
50Hz**

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.