



Retrofit without Compromise GE High Output LED Lamps



Including NEW LED PAR30 lamps



GE imagination at work

GE High Output LED Lamps

GE's innovative high output LED retrofit lamp solutions offer substantial opportunities to reduce energy consumption and maintenance costs in applications where directional, high quality light is required. Offering low cost of ownership, and with paybacks of less than 1 year in professional applications, these lamps are TRUE retrofits that require no compromise to achieve dramatic through-life savings:

- Lamps are the same size as their incandescent or halogen equivalents, having been designed around the international standard outline
- Peak intensity (candela) and beam angle match incandescent or halogen equivalents
- Lamps are available in warm white colour temperatures (2700K-3100K)
- Excellent CRI >80

In addition, these lamps offer all of the benefits that LED technology is known for: Extra long life, no heat, UV or IR in the beam, and entirely mercury-free.

LED Case Study

How LED can save money and help the environment

In this example, a hotel containing 1000 20W halogen GU10 lamps was retrofitted with GE LED GU10 4W lamps. Lamps were situated in rooms burning 6 hours per day, and in corridors burning 24 hours per day. Average burn time was assumed to be 4000 hours per year per lamp.

Benefits achieved were:

- 80% saving in energy consumption and CO₂ emissions
- 62% reduction in total cost of ownership over 5 years
- Payback in less than 1 year









 $\label{eq:second} \begin{array}{l} \textbf{Assumptions} \ \text{Energy} \ \text{cost} \ \text{of} \ \texttt{\pounds0.10} \ \text{per} \ \text{kWh}. \ \texttt{0.536} \ \text{kg} \ \text{CO}_2 \ \text{emitted} \ \text{per} \ \text{kWh} \ \text{(European average from Econnvent)}. \\ \textbf{4000} \ \text{operational hours} \ \text{per} \ \text{year}. \ \text{NOTE theoretical 'typical' example only. All applications will vary}. \\ \end{array}$

LED 4 Watt GU10 Lamps

Energy Saving

- Designed for retrofit replacement of halogen GU10 with maximised energy reduction
- Light output and beam spread comparable to commercially available halogen GU10 lamps Low maintenance costs
- Long life 15000 hours to 70% initial light output
- Designed for 45000 hours on like for like measure versus halogen

High quality light

- Warm white with CRI >80 Easy installation
- Same size as halogen GU10 lamps
 Uses industry standard GU10 cap

- Main applications
- Downlighting and accent lighting in domestic and commercial (hotel, retail, leisure etc) applications

SWITCH TO

SWITCH TO

Sustainable solution

- No mercury
- 80% or greater energy saving
- No UV, IR or heat in beam
- High power factor



LED 4 Watt R50 Lamps

Energy Saving

- Designed for retrofit replacement of incandescent R50 with maximised energy reduction
- Light output and beam spread comparable to commercially available incandescent R50 lamps

Low maintenance costs

- Long life 15000 hours to 70% initial light output
- Designed for 45000 hours on like for like measure versus incandescent
- High quality light
- Warm white with CRI >80
- Easy installation
- Same size as incandescent R50 lamps
- Uses industry standard E14 cap

Main applications

• Downlighting and accent lighting in domestic and commercial (hotel, retail, leisure etc) applications

Sustainable solution

- No mercury
- Up to 90% energy saving
- No UV, IR or heat in beam
- High power factor

LED 7 Watt R63 Lamps

Energy Saving

- Designed for retrofit replacement of incandescent R63 and halogen PAR20 with maximised energy reduction
- Light output and beam spread comparable to commercially available incandescent R63 and halogen PAR20 lamps

Low maintenance costs

- Long life 25000 hours* to 70% initial light output
- Designed for 45000 hours on like for like measure versus incandescent & halogen High quality light
- Warm white with CRI >80
- Choice of colour temperatures (2700K & 3000K

Easy installation

- Same size as incandescent R63 lamps.
- Comparable size to halogen PAR20 lamps
- Industry standard E27 and B22 cap versions

Main applications

- Downlighting and accent lighting in domestic and commercial (hotel, retail, leisure etc) applications Sustainable solution
- No mercury
- 80% or greater energy saving
- No UV, IR or heat in beam
- * Preliminary upgrade to L70 rated lifetime based on recent test data



LED 10 Watt PAR30 Lamps

Energy Saving

- Designed for retrofit replacement of halogen PAR30 with maximised energy reduction
- Light output and beam spread comparable to commercially available halogen PAR30 lamps Low maintenance costs
- Long life 25000 hours* to 70% initial light output
- Designed for 45000 hours on like for like measure versus incandescent & halogen High quality light
- Warm white with CRI >80
- Choice of colour temperatures (2700K & 3000K)

Easy installation

- Same size as halogen PAR30 lamps
- Comparable size to incandescent R95 lamps.
- Industry standard E27 cap
- Main applications
- Downlighting and accent lighting in commercial (hotel, retail, leisure etc) applications
- Sustainable solution
- No mercury
- 80% or greater energy saving
- No UV, IR or heat in beam
- * Preliminary upgrade to L70 rated lifetime based on recent test data



Distribution of luminous intensity for LED High output lamps The following diagrams show polar light intensity curves and beam diagrams.

LED 4W GU10 and R50 WFL Nominal beam angle: 36°



LED 7W R63 WFL Nominal beam angle: 36°











LED 7W R63 FL Nominal beam angle: 20°



Intensity (cd) 105° 120° 135° 135° 120° 105° 90° 90° 30 15 309 Gamma (°) 200 75° 75° 400 60° 60° 600 800 45° 45° 1000 1200 ----



PAR30 2700K Nominal beam angle: 24°



PAR30 3000K

Nominal beam angle: 24°



PAR30 2700K Nominal beam angle: 36°















PAR30 3000K Nominal beam angle: 36°







Wattage [W]	Volts [V]	Сар	Product Description	Candela [cd]	Beam Angle [°]	ССТ [К]	CRI [Ra]	Life* [L70, h]	Life [B50, h]	Diameter [mm]	Length [mm]	Pack Qty	Product Code	
4	230	GU10	LED4/GU10/830/230V/WFL	225	36	3100	80+	15000	45000	50	57	8	75280	
4	240	GU10	LED4/GU10/830/240V/WFL	225	36	3100	80+	15000	45000	50	57	8	75281	
4	230	E14	LED4/R50/830/230V/WFL/E14	225	36	3100	80+	15000	45000	50	76	8	75288	
4	240	E14	LED4/R50/830/240V/WFL/E14	225	36	3100	80+	15000	45000	50	76	8	75289	
7	220- 240	E27	LED7/R63/827/220-240V/FL/E27	1200	20	2700	80+	25000*	45000	63	101	8	76093	
7	220- 240	E27	LED7/R63/827/220-240V/WFL/E27	520	36	2700	80+	25000*	45000	63	101	8	76094	
7	220- 240	B22	LED7/R63/827/220-240V/FL/B22	1200	20	2700	80+	25000*	45000	63	101	8	76099	
7	220- 240	B22	LED7/R63/827/220-240V/WFL/B22	520	36	2700	80+	25000*	45000	63	101	8	76100	
7	220- 240	E27	LED7/R63/830/220-240V/FL/E27	1200	20	3000	80+	25000*	45000	63	101	8	75294	
7	220- 240	E27	LED7/R63/830/220-240V/WFL/E27	520	36	3000	80+	25000*	45000	63	101	8	75296	
7	220- 240	B22	LED7/R63/830/220-240V/FL/B22	1200	20	3000	80+	25000*	45000	63	101	8	75295	
7	220- 240	B22	LED7/R63/830/220-240V/WFL/B22	520	36	3000	80+	25000*	45000	63	101	8	75297	
10	220- 240	E27	LED10/PAR30/827/220-240V/FL/E27	1600	24	2700	80+	25000*	45000	95	92	6	78553	NEW
10	220- 240	E27	LED10/PAR30/827/220-240V/WFL/E27	900	36	2700	80+	25000*	45000	95	92	6	78554	NEW
10	220- 240	E27	LED10/PAR30/830/220-240V/FL/E27	1700	24	3000	80+	25000*	45000	95	92	6	78555	NEW
10	220- 240	E27	LED10/PAR30/830/220-240V/WFL/E27	1000	36	3000	80+	25000*	45000	95	92	6	78556	NEW
* Prelimin	nary upgr	ade to L7	0 rated lifetime based on recent test data											

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