



Comparing the Savings – LED versus Halogen

Life of the bulb

A 5 watt power LED bulb will last 13.6 years* compared to a standard 50 watt halogen bulb which will last 8 months* meaning the 5 watt power LED bulb will last 20 times longer.

Money Savings

If you use a 5 watt power LED bulb you will save £135.00 compared to using to a 50 watt halogen bulb (over the life of the bulb i.e. 13.6 years*).

Energy Saving

Over the same time period of 13.6 years* a 5 watt power LED bulb will save 1,350 kilowatt and considerably reduce your carbon emissions.

Payback Period

It will take up to 2 years* to repay your initial investment of £20.00.

* Based on 6 hours a day use.

** To see full calculations, see below...

Here is a breakdown of how much one LED bulb can save you over halogen:

A standard 50 watt halogen bulb last for 1,500 hours and costs about £1.00;

A 5 watt power LED bulb lasts for 30,000 hours and costs about £20;

A 5 watt power LED lasts 20x longer (30,000 divided by 1,500 equals 20);

Buying 1x 5 watt power LED bulb for £20.00 is the same as buying 20x 50 watt halogen bulbs at £1.00 each, also costing £20.00;

Both work out at £20.00;

No savings are made but there are no extra costs.

However 5 watt power LED's use 90% less power than halogen.

Based on average electricity costs of 10p per kilowatt hour a 5 watt LED bulb will consume just £15.00 of electricity during its entire lifetime.

When comparing this to 20x 50 watt halogen bulbs which will consume £150.00 of electricity during the same time period. This gives you a net saving of £135.00 on just one lamp!

Here's the calculation:

5W x 30,000 hours equals 150,000. Divide 150,000 by 1000 to get 150 kilowatt hours. Multiply 150 kilowatt hours by £0.10 and you get **£15.00**

50W x 30,000 hours equals 1,500,000. Divide 1,500,000 by 1000 to get 1,500 kilowatt hours. Multiply 1,500 kilowatt hours by £0.10 and you get **£150.00**

£150.00 minus **£15.00** and you make a saving of **£135.00**

Based on the above example; an average size room of 9 meters square will have about 9 downlights. The saving of 9 downlights will be **£1,215.00** and you won't have had to replace 180 halogen bulbs in the process!



[High power 5W LED GU10 Lamp. Low energy equivalent to a 50W halogen.](#)