

Make light work of LEDs

All lamps used to be specified according to the power they consume. So the higher the power, the more light they would output – meaning they'd be brighter.

This is now much harder to measure, as LEDs drive down power consumption, so it's better to compare the relative light (lumens) output of a device instead. Use our cheat sheet to help you make the right switch from incandescent or fluorescent to LED lamps.

Lumens or Watts?

Incandescent Wattage	Approx Lumens
25W	230-270 lamp
35W	250-280 spotlight 390-410 lamp
40W	440-460 lamp
50W	330-400 spotlight
60W	800-850 lamp
75W	1000-1100 lamp
100W	1500-1600 lamp

Fluorescent Wattage	Approx Lumens
Twin Tube 11W	640
Twin Tube 22W	1440
2D 16W	1050
2D 28W	2100
28D 38W	2850
Linear T5 14W	1200
Linear T5 35W	3300
Linear T5 49W	4450
Linear T8 18W	1350
Linear T8 36W	3350
Linear T8 58W	5200

What is the colour rendering index?

The colour rendering index (CRI) is a scale from 0 to 100 to measure how colours look under a light source when compared with daylight. So a reading of 100 indicates that colours under the light appear the same as they would under natural sunlight.

So CRI90+ lamps, for example, are ideal for lighting in settings such as museums and quality control departments, as accuracy is really important.

Dimmable vs non-dimmable lights

Not all lamps are dimmable, so it's worth checking if this is going to be a requirement. Also, some traditional dimmers don't work with LEDs, meaning the dimmer will need to be updated. Operating a dimmable lamp at 90-95% power can result in considerable savings while benefiting from little reduction in light levels.

Colour temperature

This describes the light appearance provided by a light source. It's measured in degrees of Kelvin (K) on a scale from 1,000 to 10,000. Choose by colour temperature to influence a room's atmosphere, for example:

2,700K – this is a warm white light, more suitable for where ambience is needed, such as in homes and restaurants.

4,000K – this emits cool white light, ideal for offices, production areas, corridors, washrooms and exterior fittings.

6,000K – this light is ideal for commercial and industrial areas.

Beam angle

The beam angle of a lamp is the angle at which the light is distributed or emitted. Lamps vary in effective beam angle to meet different applications.

Emergency lighting

The term 'maintained' or 'non-maintained' can sometimes be confusing. Emergency Lighting will either be configured as:

Non-Maintained: Lighting is only illuminated when power is lost

Maintained: Lighting is always on and remains on when power is lost

Fitting

Please make sure to select the correct cap fitting when selecting your lamp. The diagrams below show some of the fitting types you may come across:

