

## LED Characteristics Explanation

Information provided in the catalogue for every LED product is designed to help make the right choice with LED lighting. Not all LED information is the same and every manufacturer's LED technology can be unique. Therefore it is important to allow an informed decision made on accurate and reliable information. That is why key performance information is included based on industry best practice standards - an example is shown with a detailed explanation.

### LED Characteristics

Product Type	Colour Temp. (K)	Ra	Life (hrs) L70/B10	P/U	R/Rx	Driver Efficiency (%)	Power Factor	Efficacy (lm/W)
50W LED	4,000	80	60,000	P	R	>85	>0.95	95.5
1	2	3	4	5	6	7	8	9

- 1 **Product Type** = Enables referencing to exact product in the product range table.
- 2 **Colour Temp. (K)** = approx. colour temperature of the light source.
- 3 **Ra** = Indicates colour rendering index (colour quality).
- 4 **Life (hrs) L70/B10** = Indicates life expectancy of the LEDs combining light output degradation (L70-when light output has reduced to 70% of initial level) and lamp failure expectation (B10 – when 10% of the LEDs have failed to meet operational expectations).
- 5 **P/U** = Protected/Unprotected some LEDs are connected in series or in a series/parallel group. Protected (P) means the failure of a single LED will not affect others in the group. Unprotected (U) means failure of one LED will cause the others in the group to extinguish.
- 6 **R/Rx** = When the LED fails, some luminaires require replacement in their entirety (Rx), some have replaceable LED assemblies (R).
- 7 **Driver Efficiency (%)** = Illustrates driver efficiency.
- 8 **Power Factor** = Indicates LED driver power factor
- 9 **Efficacy (lm/W)** = Lumens/Watt indicates efficacy including all optical and gear losses. It is important to compare figures correctly, Eg - other manufacturers may state LED efficacy which does not include all losses within the system producing a misleading higher figure.

