

# LED LIGHTING EXPLAINED

## LIGHT COLOUR

Expressed in Degrees Kelvin (K), light colours are the key to determining the mood of a room.

<b>WARM WHITE</b>	DEGREES	2700-3000K
	DESCRIPTION	<b>SOFTER, WARMER LIGHT</b> Comparable to traditional incandescent lighting. Preferred in cooler climates
	ROOM	Bedroom, living room, bathroom, kitchen
<b>COOL WHITE</b>	DEGREES	4000K
	DESCRIPTION	<b>NEUTRAL LIGHT</b> Used for task lighting and preferred in warmer, tropical climates
	ROOM	Laundry, garage, study, bathroom, kitchen

## AVERAGE LAMP LIFE

LED 20,000 HOURS	COMPACT FLUORESCENT 10,000 HOURS	INCANDESCENT 1,000 HOURS
------------------	----------------------------------	--------------------------

**DURABILITY:** LEDs are very long-lasting compared to other lighting technologies, with an average 20,000 hours life expectancy. We use quality components which make our lamps even more durable, being laboratory tested and assessed at 30,000 hours life expectancy. That represents approximately 20 years based on 3 to 4 hours usage per day.

## DIMMING COMPATIBILITY

Critical to a successful installation is an understanding of LED compatibility with dimmers.

HPM is one of the only major brands on the market to deliver a full solution from dimmers to drivers and LED fixtures. Choose the winning combination of HPM LED fixtures and HPM or Legrand dimmers to ensure superior performance – including smooth dimming with no flickering, reliability and long life.



## LIGHT PERFORMANCE

LIGHT OUTPUT	INCANDESCENT	HALOGEN	CFL	LED
220lm	25W	18W	5-7W	3W
420lm	40W	28W	7-8W	4-5W
720lm	60W	42W	11-12W	6-8W
930lm	75W	52W	13-18W	9-13W
1300lm	100W	70W	18-23W	16-20W

## LUMINOUS EFFICACY (lm/W)

Picking a lamp fixture based only on wattage or physical size could result in the wrong choice: Wattage (measured in W) represents the power consumed by the luminaire. The actual output of a lamp is measured in lumens (lm): the more lumens, the more light emitted by the luminaire. A smart criteria for determining the efficiency of a light fixture is its lumens/Watt ratio, which represents how much light the fixture delivers versus what it consumes to perform. This value is called luminous efficacy, and proves LED lights are more efficient than other light technologies.

## COLOUR RENDERING INDEX (CRI)

CRI measures how well a lamp makes colours appear. CRI scores light sources from 1 – 100: a high CRI means that the eye can pick up slight variations in colour, making details in an interior appear sharper and more vibrant. For outstanding colour rendering, opt for our Dalia series which boasts a very high 92 index.

Our downlights range from 80 to 92, to enhance skin tones, hues and textures in rooms.

## BEAM ANGLE

The light effect from a luminaire is determined by its beam angle, that is the shape and direction of light generated by the lamp. Most conventional fixtures deliver a focused light distribution at 35-60° beam angle, but LED technology can go well above those values, while still maintaining a fair pool of light.

Our lights deliver beam angles ranging from 80 to 120° to ensure a beautiful light is spread throughout a room.

## OUR QUALITY PROMISE



### DIMMING COMPATIBILITY

Yes! Our lights can be dimmed effectively. For optimum dimming performance and to avoid flickering, use HPM or Legrand dimmers. See p.46-47 for more details



### INSULATION RATING

All recessed luminaires included in this brochure have an IC or IC-F insulation rating. This means insulation may abut or cover the LED luminaire



### NATA ACCREDITED LABORATORY

To ensure the highest possible quality assurance standards all HPM lighting fixtures and lamps are tested in our NATA accredited laboratory in Sydney



All our products are assured against insects and moisture, with IP ratings ranging from IP44 to IP65. See IP chart on p.48 for more information