## BALLARD DESIGNS

## Lighting Guide

CHOOSING THE RIGHT BULB

## GETTING THE BRIGHTNESS RIGHT

Most of us associate wattages like 25W, 75W or 100W with how much light a bulb can produce. But, in fact, wattage is really a measure of how much *energy* it uses.

A light bulb's brightness is actually measured in lumens. And that's the big beautiful difference between LED and incandescent bulbs – an LED uses much less energy (wattage) to produce the same brightness (lumens) as its incandescent cousin. So while LED bulbs may be more expensive to buy, they last far longer and cost much less to use overtime.

The average incandescent bulb lasts 1,500 – 2,000 hours.

The average LED can last 15,000 – 27,000 hours.

Use the chart below to figure out which LED bulb you'll need to produce the same brightness as its incandescent equivalent:

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LED	LUMENS EMITTED	INCANDESCENT
1-2W	220 lm	25W
6-9W	450 lm	40W
8-12W	800 lm	60W
9-13W	1100 lm	75W
16-20W	1600 lm	100W
25-28W	2600 lm	150W

good to know

Vintage incandescent filament bulbs are usually less efficient than other incandescent bulbs, so they will be less bright and have a lower lumen rating.

## CHOOSING THE BEST COLOR

The color of light a bulb produces (also known as "temperature") is measured in degrees Kelvin (K). Incandescent bulbs usually produce warm light with a color temperature of 2700K to 3000K.

LEDs bulbs can produce a wider range of color, from warm (2700K) to cool daylight tones (5000K). To match the light quality of an incandescent bulb, choose an LED with similar color temperature. See chart below:

Warm White		Natura	l White	D	aylight White
2700K	3000K	3500K	4100K	5000K	6500K
		Kelvin Tempe	erature Scale		