Light Bulbs

Standard ICC Light Bulb

GE Relax LED - 60w replacement - Soft White (2700K)

Lowe's Item #952355 4-pack



Lowe's Item #952356 8-pack



Light Bulb Label Definitions

Light Output/Lumens

Measures light output. The higher the number, the more light is emitted. Reported as "Total Integrated Flux (Lumens)" on LM-79 test report.

Watts

Measures energy required to light the product. The lower the wattage, the less energy used. Reported as "Input Power (Watts)" on LM-79 report.

Lumens per Watt/Efficacy

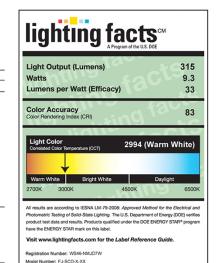
Measures efficiency. The higher the number, the more efficient the product.

Reported as "Efficacy" on LM-79 test report.

IESNA LM-79-2008 -

Industry standardized test procedure that measures performance qualities of LED luminaires and integral lamps. It allows for a true comparison of luminaires regardless of the light source.

Brand & Model Number



Color Rendering Index (CRI)

Measures color accuracy.
Color rendition is the effect of the lamp's light spectrum on the color appearance of objects.

Correlated Color

Temperature (CCT)
Measures light color.

"Cool" colors have higher Kelvin temperatures (3600–5500K); "Warm" colors have lower color temperatures (2700–3500K).

Color Temperature - Kelvin

Kelvin Color Temperature	2700K	3000K	3500K	4100K	5000K	6500K
Ambiance	Cozy Personal	Relaxing	Friendly	Clean	Institutional	Cool
Applications	Living/Family/ Dining Rooms Bedrooms	Living/Family/ Dining Rooms Bedrooms	Kitchens Bathrooms	Garage Basement	Commercial Industrial	Commercial Industrial

Traditional color temperature for a medium base bulb = 2700K

Most people prefer low color temperatures in homes.

Do not confuse color temperature (Kelvin) with light output (lumens).

Light Bulbs

Light Output - Lumens

Standard for refrigerator bulbs -

Standard for bedrooms & common rooms -

Standard for exterior lights & mechanical rooms -

LUMENS*	INCANDESCENT	CFL	LED LED
500	40 watts	9 watts	7 watts
850	60 watts	13 watts	11 watts
1600	100 watts	23 watts	20 watts

Common Bulb Bases



Fluorescent Tubes

T12 - 1st Generation - 1930's

T8 - 2nd Generation – 1980's

 $T5 - 3^{rd}$ Generation – 2000's

