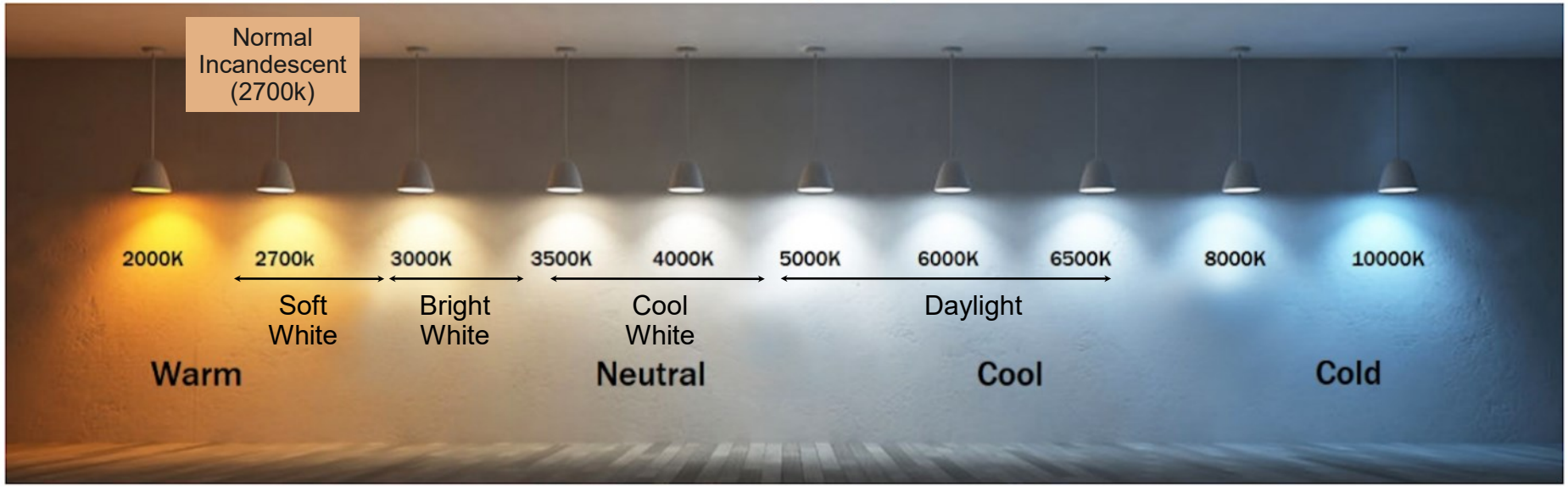
LED Brightness Equivalents and Color Temperature Spectrum

BULB | BRIGHTNESS	450 LUMENS	800 LUMENS	1100 LUMENS	1600 LUMENS	2600 LUMENS	5800 LUMENS
 LED	6W	9 - 10W	13W	16 - 18W	24W	45W
					SPECIAL HIGH VOLTAGE LAMPS	
 Regular INCANDESCENT	40W	60W	75W	100W	150W	300W



Lighting to Render Colors Accurately

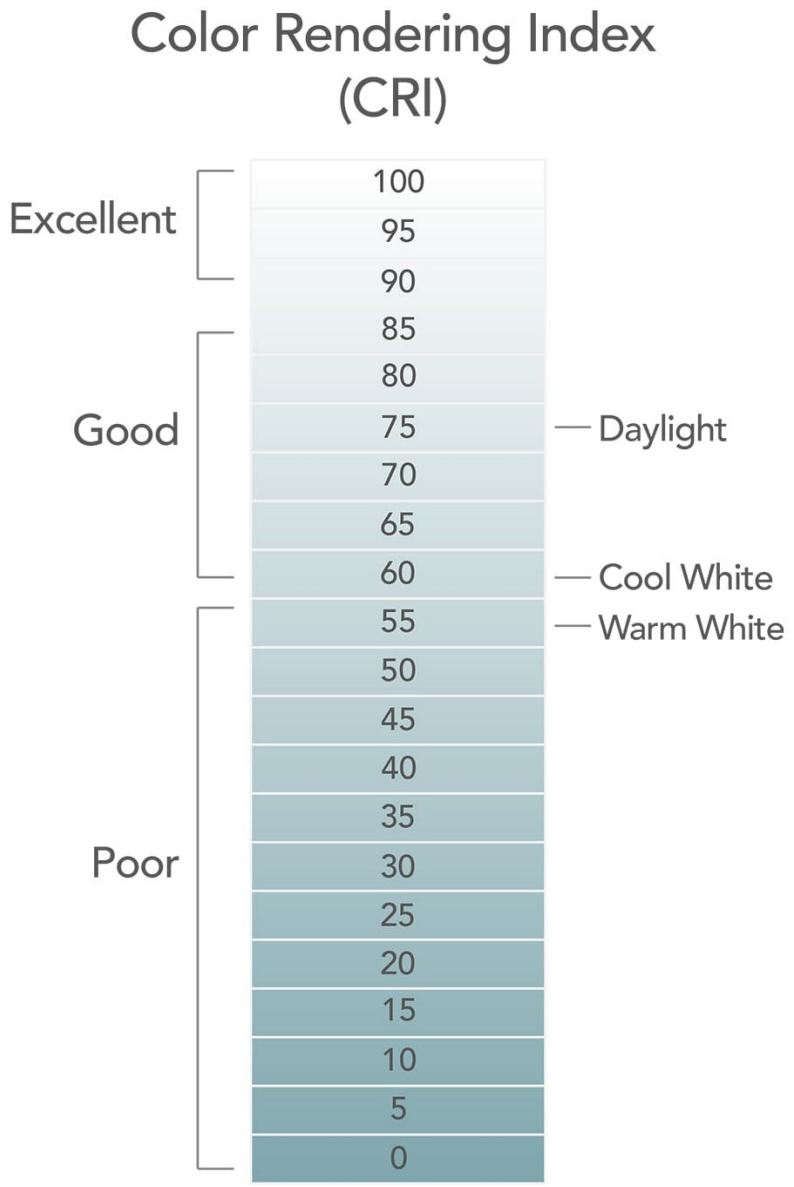
When it comes to lighting areas where color accuracy is crucial (such as portrait studios) a high color-rendering index (CRI) is key. CRI refers to how accurately a light source reveals the true colors of objects, people, and surroundings and involves a distinct testing method with comparisons to incandescent light or daylight.

Incandescent lights have a notoriously good ability to render color. The color rendering index for an incandescent bulb with a color temperature of 2700K is 100 (a perfect score). As color temperature rises the CRI ratings drop off only slightly but typically remain above 95 (considered an excellent rating).

The CRI for LED bulbs is highly dependent on the particular light in question. That said, a very broad spectrum of CRI values is available ranging generally from 65-95.

www.stouchlighting.com/blog/light-comparison-led-lighting-vs-incandescent-lighting

If you want to use an LED bulb, you may want to use the General Electric Reveal bulb, with a color rendering index of 90.



Details About Light Bulb Bases & Shapes

What are the different types of light bulbs?

The most common types of light bulbs are incandescent bulbs, halogen bulbs, CFL bulbs, and LED bulbs. For each of these types, the bulb light is produced by a different process.

Light bulbs can also be distinguished by shape and base design. These differences do matter, as certain types of bulbs are recommended for certain types of fixtures.

You can check out our light bulb identifier and finder guide for what light bulb type to buy for a particular fixture.
www.lampsplus.com/ideas-and-advice/light-bulb-identifier-and-finder-guide/

What are the different light bulbs based on how they work?

Incandescent – passes an electric current through a metal filament to produce heat
Halogen – recycles halogen gas and tungsten within a quartz envelope
CFL (compact fluorescent light) – passes an electric current through a gaseous tube
LED (light emitting diode) – passes an electric current through a semi-conducting material, currently the most energy efficient type of bulb

What are the different light bulb shapes?

The most common light bulb shapes are:

Standard Household – denoted with an A
Candle – denoted with a C
Reflector – denoted with an R
Mini Reflector – denoted with MR
Parabolic Aluminized Reflector – denoted with PAR
Globe – denoted with G
Tubular – denoted with a T

The light bulb shape code will be listed on the packaging. The shape code consists of a letter that indicated the physical shape, followed by a number that indicates the size (measured in eighths of a diameter). For example, an "A19 bulb" means that that the bulb comes in a standard household shape and is 19/8 inches in size**. A19 bulbs are the most common light bulb shape, so this is what you'll see the most.**

What are the different light bulb bases?
The most common light bulb base types are:

Standard-medium – a regular sized screw-in base, usually denoted with an E26 or E27
Candelabra – a smaller screw-in base, denoted most often with an E12
Bi-pin – a pin-in base with two points of contact, often denoted by a G4 or GU24
GU10 – a twist-and-lock base

The letter indicates the shape of the base, while the number indicates the size. Always check your lighting fixture before purchasing bulbs. After all, you couldn't screw in an E26 bulb into a candelabra socket size – it just isn't possible!

Common Household Bulb:
A19 Bulb
E26/27 Base