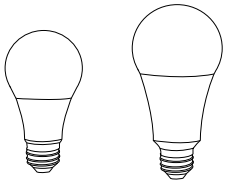
ULINE

LIGHTING GUIDE

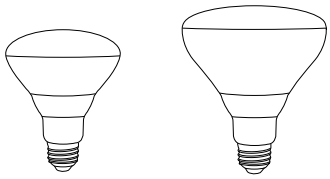
SIZE/SHAPE

A SERIES
Standard bulb for everyday use



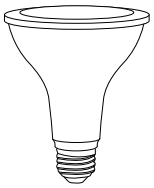
A19 A21

BR SERIES
Common bulb for overhead can lights



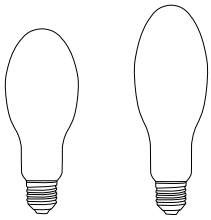
BR30 BR40

PAR SERIES
Common bulb for floodlights



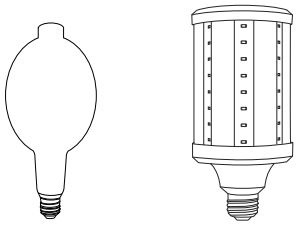
PAR38

ED SERIES
Large bulbs for tall ceilings and larger areas



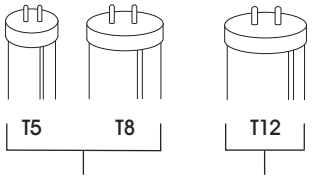
ED28 ED37

BT SERIES/CORN COB
Large bulbs for warehouses and factories



BT56 Corn Cob

LINEAR TUBES
Linear lights for office and residential ceilings



LED and Fluorescent | Fluorescent Only

WATTS/LUMENS

WATTS
Watts measure energy consumption.

LUMENS
Lumens measure visible light energy. The higher the lumens, the brighter the light.

LED WATTS	INCANDESCENT WATTS	LUMENS
7-9 W	60 W	700-900
14-16 W	100 W	1,400-1,600

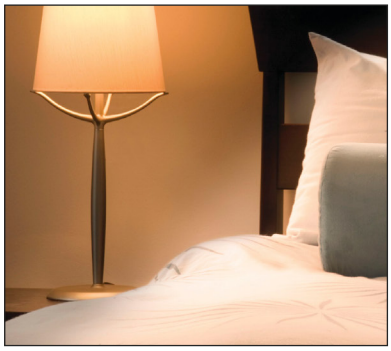
Note: Watt-to-lumen ratio may vary depending on the bulb.

COLOR TEMPERATURE

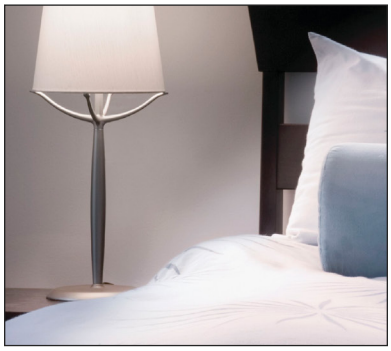
Color temperature describes the hue and tone of white that a light bulb emits. It is measured numerically on the Kelvin degrees scale. The lower the Kelvin value of a bulb, the more orange the light will appear. The higher the Kelvin value, the bluer the light will appear.

COLOR TEMPERATURE (KELVIN)	2,700K – 3,500K	3,600K – 4,900K	5,000K – 6,500K
LIGHT APPEARANCE	Warm White	Cool White	Daylight
AMBIENCE	Calming	Focus	Crisp, Invigorating
APPLICATION	Homes, Restaurants, Hospitality	Retail, Office, Schools, Showrooms	Warehouse, Manufacturing, Healthcare

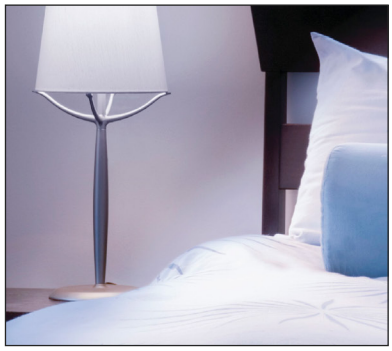
2,700 – 3,500K



3,600 – 4,900K



5,000 – 6,500K

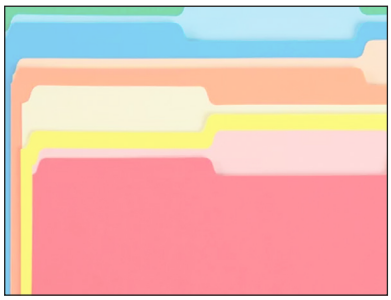


COLOR RENDERING INDEX (CRI)

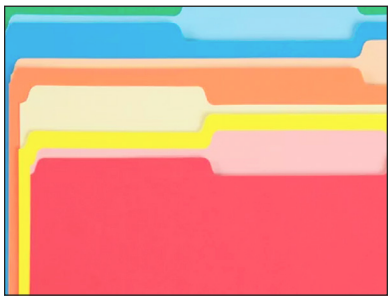
The Color Rendering Index (CRI) measures how accurately a light bulb shows color as compared to natural light.

- It is a scale from 0–100% with 100% representing the most vivid, true-to-life color.
- Light bulbs with CRI ratings between 80–89 provide good color rendering.
- Light bulbs with CRI ratings of 90 or higher provide excellent color rendering and are suitable for use in photo studios and other color-critical applications.

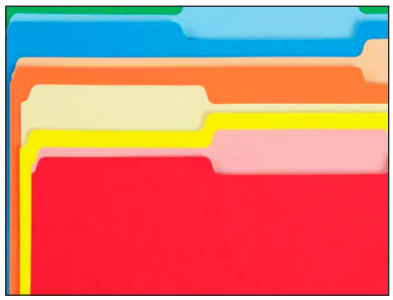
≤ 79 CRI



80–89 CRI



≥ 90 CRI



LED VS FLUORESCENT

LED

- Uses diodes powered by electricity to emit light
- Longer lifespan than traditional lighting
- More energy efficient
- Available in plastic or glass

FLUORESCENT

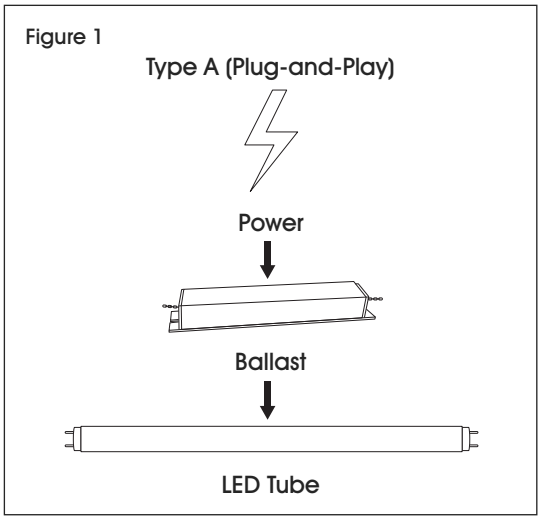
- Emits light through chemical reaction with electricity
- Shorter lifespan than LED
- Less energy efficient
- Only available in glass
- Ballast required

TYPE A (PLUG-AND-PLAY) VS TYPE B (BALLAST BYPASS)

TYPE A – PLUG-AND-PLAY LED

- Do not require any rewiring since they operate with the fixture's existing ballast, so long as they are compatible with each other. (See Figure 1)
  - **NOTE:** Not every plug-and-play bulb is compatible with every ballast, so it is important to confirm compatibility before replacing a fluorescent bulb with an LED bulb for energy and cost savings.

Figure 1



TYPE B – BALLAST BYPASS LED

- Ballast bypass is when you remove a ballast from the electrical circuit that goes to your light fixture upon initial installation.
- Since the ballast sits between the power source and the light fixture, this requires either removing the ballast completely or simply disconnecting the ballast and wiring the light fixture straight into the power source.
- Because the light bulb is powered directly by the power source, failure points are reduced and compatibility issues are eliminated. (See Figure 2)

Figure 2