



Connected via Lightcloud HUB or Gateway



PROJECT: \_\_\_\_\_

DATE: \_\_\_\_\_

TYPE: \_\_\_\_\_

PREPARED BY: \_\_\_\_\_



## KEY FEATURES

### Wireless Dimming

Dim individual lights or use scenes to instantly adjust your light levels for any area in your building. Combine dimming with occupancy sensing, daylight harvesting or scheduling to layer in more energy savings. High-end trimming ensures that you always save a little bit off the top.

### Remote Control

Use mobile device or computer to make adjustments from remote locations near or far.

### Natural Spectrum Technology

Low blue LEDs deliver a spectrum of light similar to that of natural Sunlight. They beautifully render colors with greater than 95+ CRI and an R9 value greater than 90. In addition, these LEDs don't suppress melatonin creation which aids in promoting better sleep/wake cycles.

### SmartShift Capable

SmartShift is an automated circadian lighting system that matches the natural patterns of daylight throughout the day.

### Programmable Schedules

Program different lighting schedules and scenes across multiple zones based on shifts or the type of work occurring throughout the day. Tweak schedules from your smartphone, or just call us and we'll do it for you.

### Power Monitoring

Measure, track and report real and estimated power usage over time. Use analytics to identify and implement ways to curtail energy usage.

### Demand Response

Device is capable of shedding load. This Smart Lamp is power monitoring capable. Lower power consumption to a preconfigured setting.

## TECHNICAL SPECIFICATIONS

### LED CHARACTERISTICS

#### LEDs

Long-life, high-efficacy, LEDs with low-blue energy.

#### L70 Lifespan

25,000-Hour LED Lifespan based on IES LM-80 results and TM-21 Calculations

#### Dimming

Dimming range 1% up to 100%.

#### M/P Ratio

0.95@5000K | 0.52@2700K.

#### CCT

Tunable white 2700K - 6500K.

#### Color Metrics

CRI - Color Rendering Index:	Color Fidelity Index - TM30:
2700K: CRI 98 R9 96	2700K: Rf 97 Rg 102
3000K: CRI 96 R9 96	3000K: Rf 96 Rg 101
6500K: CRI 97 R9 95	6500K: Rf 94 Rg 98

#### Color Uniformity

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

#### Color Stability

LED color temperature is warranted to shift no more than 200K in CCT over a 3-year period.

## PERFORMANCE SPECIFICATIONS

Shape	Input Wattage	Equivalent	Lumens (Nominal)	Efficacy	CRI	Color Temp	Input Voltage	Power Factor	Dimmable	Standby Power
A19	10W	60W Incandescent Equivalent	800 lumens	82 lm/W	95+	SmartShift Tunable White 2700K-6500K	120V	0.9	1% - 100%	.2W

## TECHNICAL SPECIFICATIONS (CONTINUED)

### CONSTRUCTION

**Ambient Operating Temperature**  
-20°C (-4°F) to 45°C (113°F)

**Enclosed/Open Fixture Rated**  
May be used in enclosed fixtures.

**Housing**  
White Plastic housing that eliminates breakage compared to conventional glass bulbs.

**Green Technology**  
Mercury and UV free. RoHS-compliant components.

**Base Type**  
E26 Medium Base.

**Light Distribution**  
230 degree beam angle.

**Lens**  
Frosted polycarbonate lens provides smooth diffuse and comfortable light.

### COMPLIANCE

**UL Listed**  
Suitable for damp locations.

**CEC Status**  
Complies with CEC Title 20.

**Energy Star ID: 2361590**  
This product is ENERGY STAR® Version 2.0 Certified.

**FCC**  
Complies with Part 15 of the FCC Rules.

### ELECTRICAL

**Power Factor**  
>0.9

**Flicker**  
<5%

**THD**  
50/60 Hz

**Driver**  
Constant Current, 120V .09A

### OTHER

#### SmartShift

SmartShift is the most advanced — yet easiest to use — circadian lighting system, which syncs white color tuning with the local sunrise and sunset.

#### Warranty

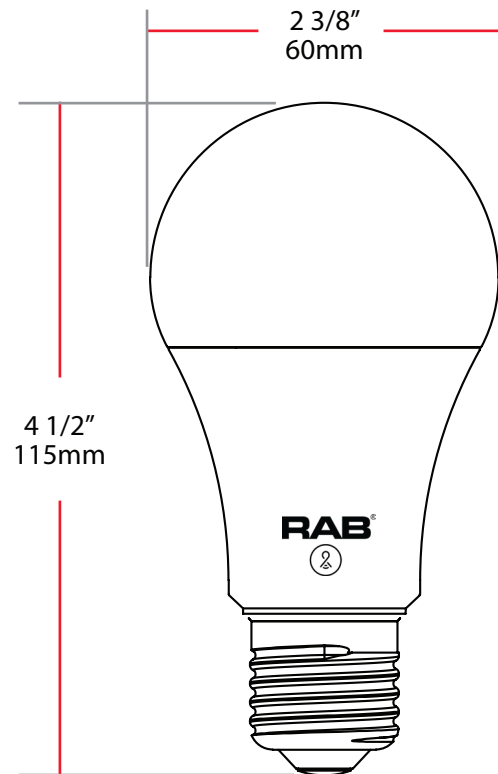
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of three (3) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

RAB's warranty is subject to all terms and conditions found at [rablighting.com/warranty](http://rablighting.com/warranty).

### APPLICATIONS



### CASE AND PALLET DIMENSIONS



Weight: 0.34lbs

	QTY	LENGTH X WIDTH X HEIGHT (in)
CASE	12	10 x 7.8 x 5.3 (in)
PALLET	2160	42 x 40 x 47.8 (in)

## NATURAL SPECTRUM TECHNOLOGY

Natural Spectrum Technology delivers a spectra similar to that of natural daylight. The human-centric benefits of this include beautifully rendered colors across all R values, a high degree of contrast, as well as promoting better sleep cycles if applied properly.

### SPECTRUM AS IT RELATES TO COLOR

- Natural Spectrum technology renders colors beautifully as all R values are greater than 95. Not just the red R values.
- By having superior performance across all R values, Natural Spectrum produces better contrast which makes textiles appear more vivid, colors more rich, and can make text easier to read.
- Unlike other artificial light sources, Natural Spectrum mirrors natural daylight. When viewed under Natural Spectrum, the color of products will appear closer to how they would appear under natural daylight. This could help reduce clothing returns in retail shops and increase the purchase of produce in markets.

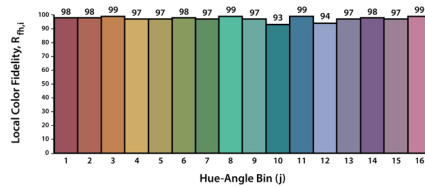
Natural Spectrum Technology



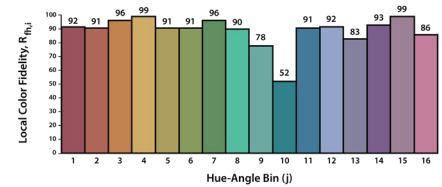
90CRI LED



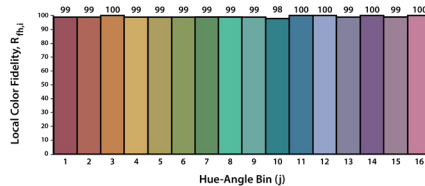
Natural Spectrum - 2700K TM-30 Graph



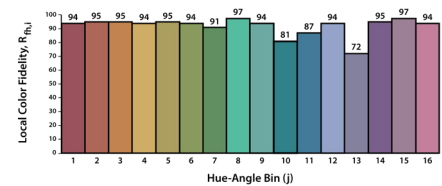
90CRI LED - 2700K TM-30 Graph



Natural Spectrum - 6500K TM-30 Graph

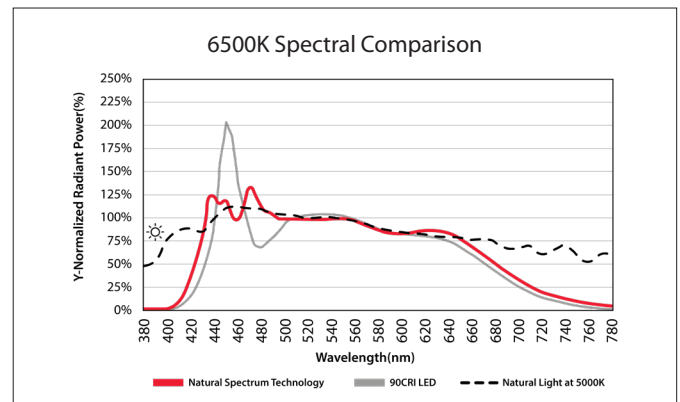
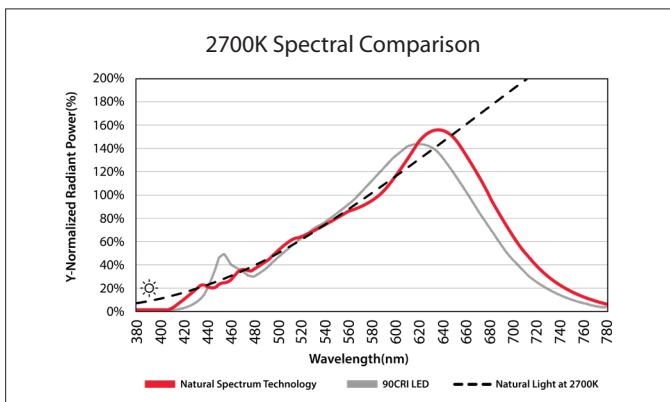


90CRI LED- 6500K TM-30 Graph



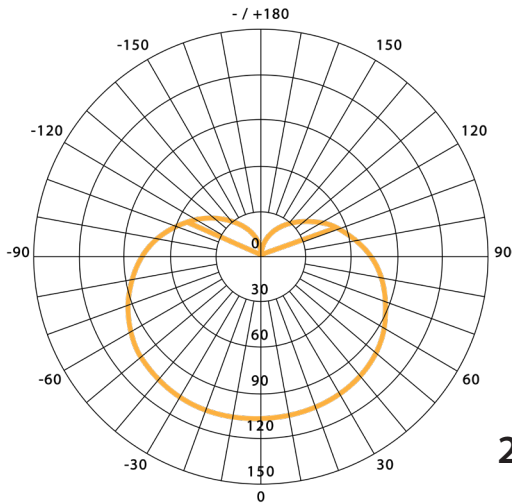
### SPECTRUM AS IT RELATES TO WELLNESS

#### Spectral Comparison 90CRI vs Natural Spectrum

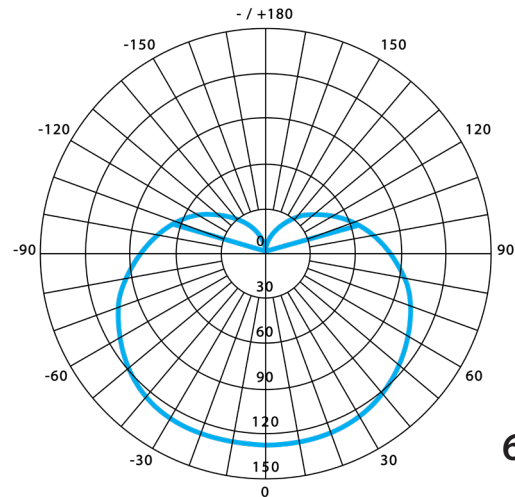


- Low-blue energy in the cooler CCTs provided by Natural Spectrum technology can help to promote better sleep cycles if applied properly.
- Natural Spectrum visually is more comfortable to the human eye under longer exposure duration like school or office applications.
- Natural Spectrum keeps the human eye more comfortable during longer exposures such as in schools or offices.

## PHOTOMETRICS



2700K



6500K

## LIGHTING CONTROL SPECIFICATIONS

### LIGHTCLOUD® ENABLED CONTROLLER BUILT IN

- Wireless** : Switching / dimming / CCT tuning.
- Individually Controllable** : Each lamp is (1) individually addressable device on the network.
- Range** : 100' indoor / 1000' outdoor.
- Energy monitoring** : Metered and backup in cloud.
- Mesh Repeater** : Send, receive and repeat command. Extends range of mesh network.
- Gateway Required** : Connects to Lightcloud Gateway and other devices.
- Secure** : Connects via secure, encrypted, and self-healing 2.4 Ghz wireless mesh network.
- Fault Notifications** : Fault and offline notifications.
- If power is lost**, notification is shown in Lightcloud application.
- If communication is lost**, the lamps will fall back into a customization emergency state.



Internal Lightcloud controller

## ORDERING MATRIX

Product	Wattage	Base	CRI/CCT	Options
A19	10W	E26 Medium Base	95 CRI SmartShift 2700-6500K	/LC Lightcloud Controller