Smart LED A19





Connected vis Lightcloud HUB or Gateway.



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.

ССТ

Tunable white 2700K - 6500K.

Color Metrics

CRI - Color Rendering Index: 2700K: CRI 98 R9 96 3000K: CRI 96 R9 96 6500K: CRI 97 R9 95 Color Fidelity Index - TM30: 2700K: Rf 97 Rg 102 3000K: Rf 96 Rg 101 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 warrantied to shift no more than 200K in CCT over a 3-year period.

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. Highend 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.

PERFO	PERFORMANCE SPECIFICATIONS									
Shape	Input Wattage	Equivalent	Lumens (Nominal)	Efficacy	CRI	Color Temp	lnput 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

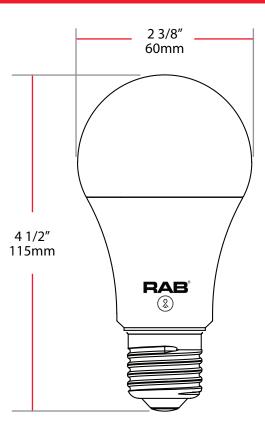
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of three (3) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

APPLICATIONS

HEALTHCARE	OFFICE	RETAIL	EDUCATION

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

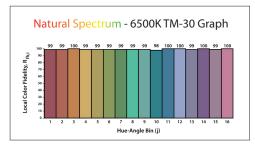
Natural Spectrum Technology delivers a spectra similar to that of natural daylight. The human-centric benefits of this include beautifully rendered colors across all R values, a high degree of contrast, as well as promoting better sleep cycles if applied properly.

SPECTRUM AS IT RELATES TO COLOR

- Natrual 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.

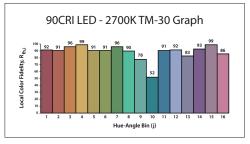
Natural Spectrum Technology

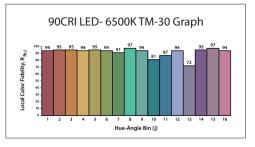




90CRI LED

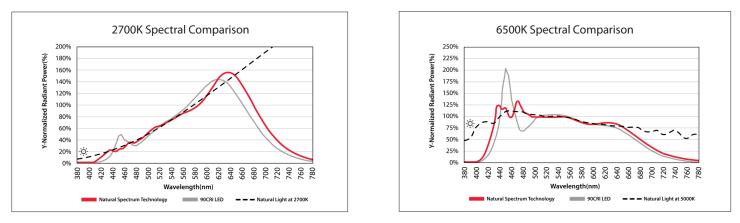






SPECTRUM AS IT RELATES TO WELLNESS

Spectral Comparison 90CRI vs Natural Spectrum

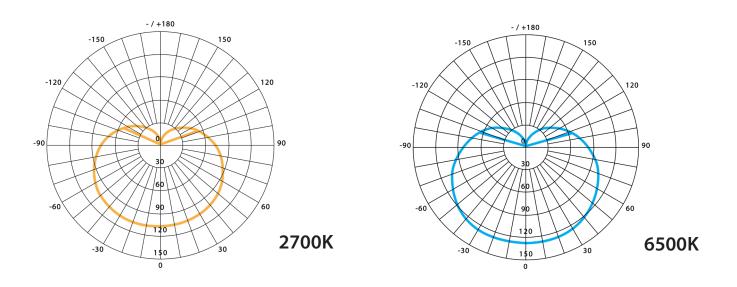


- Low-blue energy in the cooler CCTs provided by Natural Spectrum technology can help to promote better sleep cycles if applied properly.
- Natural Spectrum visually is more comfortable to the human eye under longer exposure duration like school or office applications.
- Natural Spectrum keeps the human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

Smart LED A19



PHOTOMETRICS



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.

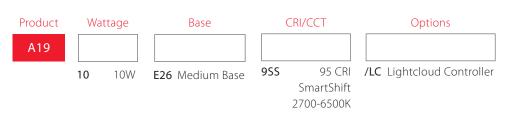
Fault Notifications : Fault and offline notifications.

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



Smart LED BR30





Connected vis Lightcloud HUB or Gateway.



TECHNICAL SPECIFICATIONS

LED CHARACTERISTICS

LEDs

Natural Spectrum, 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.

ССТ

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 warrantied to shift no more than 200K in CCT over a 3-year period.

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. Highend 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.

PERFO	PERFORMANCE SUMMARY										
Shape	Input Wattage	Equivalent	Lumens (Nominal)	Efficacy	CRI	Color Temp	Input Voltage	Power Factor	Dimmable	Standby Power	
BR30	10W	65W Incandescent Equivalent	800 lumens	82 lm/W	95+	SmartShift Tunable White 2700K-6500K	120V	0.9	1% - 100%	.2W	

Smart LED BR30



TECHNICAL SPECIFICATIONS (CONTINUED)

CONSTRUCTION

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

Enclosed/Open Fixture Rated May be used in both enclosed and open 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 120 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: 2361084 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.1A

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.

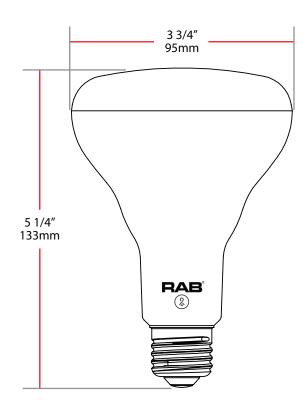
Warranty

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.

APPLICATIONS			
HEALTHCARE	OFFICE	RETAIL	EDUCATION

CASE AND PALLET DIMENSIONS



Weight: 0.33lbs

	QTY	LENGTH X WIDTH X HEIGHT (in)			
CASE	6	12 x 8 x 6.1 (in)			
PALLET	LLET 864 49.2 x 36.5 x 48 (in)				



NATURAL SPECTRUM TECHNOLOGY

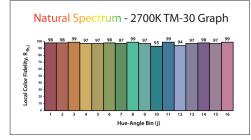
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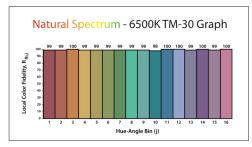
SPECTRUM AS IT RELATES TO COLOR

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- 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

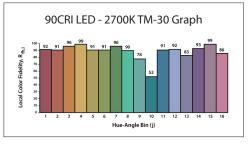


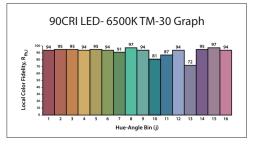




90CRI LED

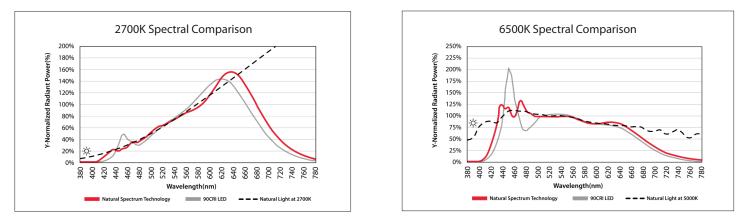






SPECTRUM AS IT RELATES TO WELLNESS

Spectral Comparison 90CRI vs Natural Spectrum

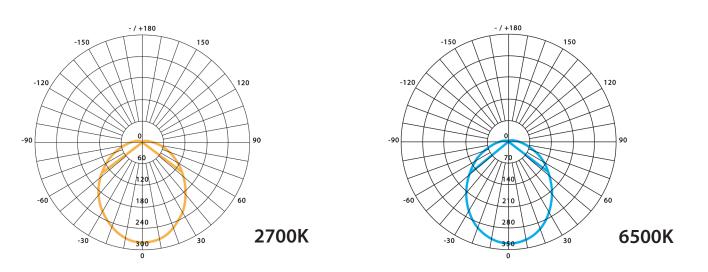


- Low-blue energy in the cooler CCTs provided by Natural Spectrum technology can help to promote better sleep cycles if applied properly.
- Natural Spectrum visually is more comfortable to the human eye under longer exposure duration like school or office applications.
- Natural Spectrum keeps the human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

Smart LED BR30



PHOTOMETRICS



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.

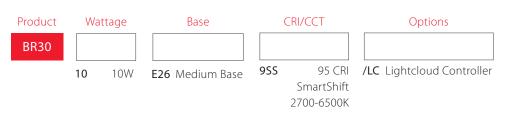
Fault Notifications : Fault and offline notifications.

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



Smart LED Post Top





Connected via Lightcloud HUB or Gateway.

















RECYCLE

TECHNICAL SPECIFICATIONS

LED CHARACTERISTICS

LEDs

Long-Life, high-efficacy and high-output LEDs.

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 warrantied to shift no more than 200K in CCT over a 5-year period.

L70 Lifespan 50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations.

CRI

80 CRI, renders colors beautifully. CCT 5000K.

COMPLIANCE

UL Listed Suitable for damp locations.

CEC Status Lawful for sale in California. FCC This device complies with Part 15 of the FCC Rules. **DLC** Certified DLC Standard compliant with V5.1.

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, 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.

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.

PERFORMANCE SPECIFICATIONS										
Shape	Input Wattage	Equivalent	Lumens (Nominal)	Efficacy	CRI	Color Temp	Input Voltage	Power Factor	Dimmable	Standby Power
Post Top	54W	200W Metal Halide	8100 Iumens	82 lm/W	80	5000K	100-277V	0.9	1% - 100%	.2W

V10192020

Smart LED Post Top

RAB

TECHNICAL SPECIFICATIONS (CONTINUED)

CONSTRUCTION

Ambient Operating Temperature -30°C (-22°F) - 60°C (140°F)

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

Housing White finish and aluminum heatsink which allows for superior heat dissipation.

Installation Type Type B, Ballast Bypass wire directly to line voltage.

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

Base Type EX39 Exclusionary Mogul Base.

Burning Position Base up (Keep the Post top as Universal)

Light Distribution

360 degree beam angle with 10% light output toward the ceiling which eliminates "cave effect".

ELECTRICAL

Power Factor >0.9

THD 50/60 Hz

Surge Protection 4kV

Driver Constant Current, 120V .6A

OTHER

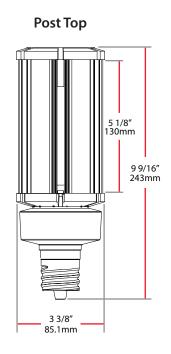
Warranty

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) 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.







Lightcloud Module





	QTY	LENGTH X WIDTH X HEIGHT (in)
CASE	12	15.6 x 11.8 x 11.4 (in)
PALLET	432	37.4 x 33.1 x 39 (in)

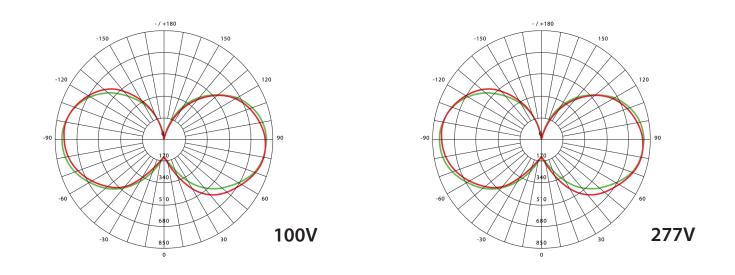
MINIMUM COMPARTMENT

High Bay	Lamp Quantity	Length x Width x Height (in)
	1	7.9 x 7.9 x 10.6 (in)

Smart LED Post Top

RAB

PHOTOMETRICS



CONTROL SPECIFICATIONS

LIGHTCLOUD® CONTROLLER BUILT IN

Wireless switching/dimming/CCT, power monitoring with a smaller footprint for 3A applications.

Easy setup - simply screw in lamp and power on, confirm device connectivity and call 844-LIGHTCLOUD

Small profile for concealed installations.

Cloud-based management - no software to install or maintain.

Connects to Lightcloud Gateway and other Lightcloud devices.

Connects via a secure, encrypted, and self-healing 2.4 GHz wireless mesh network.

Repeater Mode to extend range of wireless mesh network.

If power to Controller is lost, notification is shown in Lightcloud application.

If communication is lost, Controller can fall back to a customizable emergency state.



Plug in Lightcloud controller



Smart LED High Bay





Connected via Lightcloud HUB or Gateway.

2 POWERED BY LIGHTCLOUD®











TECHNICAL SPECIFICATIONS

LED CHARACTERISTICS

LEDs

Long-life, high-efficacy and high-output LEDs.

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.

BALLAST BYPASS

Color Stability

LED color temperature is warrantied to shift no more than 200K in CCT over a 5-year period.

L70 Lifespan

50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations.

CRI

80 CRI, renders colors beautifully. ССТ 5000K.

COMPLIANCE

UL Listed Suitable for damp locations. **CEC Status**

Lawful for sale in California.

FCC This device complies with Part 15 of the FCC Rules. **DLC Certified** DLC Standard compliant with V5.1.

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, 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.

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.

PERF	PERFORMANCE SPECIFICATIONS										
Shape	Input Wattage	Equivalent	Lumens (Nominal)	Efficacy	CRI	Color Temp	Input Voltage	Power Factor	Dimmable	Standby Power	
High Ba	y 115W	400W Metal Halide	15800 Iumens	137 lm/W	80	5000K	100-277V	0.9	No	.2W	

Smart LED High Bay



TECHNICAL SPECIFICATIONS (CONTINUED)

CONSTRUCTION

Ambient Operating Temperature -30°C (-22°F) - 60°C (140°F)

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

Housing White finish and aluminum heatsink which allows for superior heat dissipation.

Installation Type Type B, Ballast Bypass wire directly to line voltage.

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

Base Type EX39 Exclusionary Mogul Base.

Burning Position Base up (Keep the Post top as Universal)

Light Distribution

 $1\overline{20}$ degree beam angle with 10% light output toward the ceiling which eliminates "cave effect".

ELECTRICAL

Power Factor >0.9

THD 50/60 Hz

Surge Protection 4kV

Driver Constant Current, 120V 1.277A

OTHER

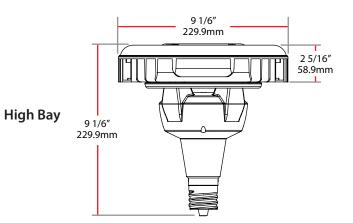
Warranty

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

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APPLICATIONS			
**			
INDUSTRIAL	WAREHOUSE	RETAIL	EDUCATION

DIMENSIONS







	QTY	LENGTH X WIDTH X HEIGHT (in)
CASE	4	20.5 x 20.5 x 10 (in)
PALLET	16	22.4 x 42.9 x 44.9 (in)

1 11/16" 42.9mm

MINIMUM COMPARTMENT									
High Bay	Lamp Quantity	Length x Width x Height (in)							
	1	9.8 x 9.8 x 9.1 (in)							

CONTROL SPECIFICATIONS

LIGHTCLOUD® CONTROLLER BUILT IN

Wireless switching/dimming/CCT, power monitoring with a smaller footprint for 3A applications.

Easy setup - simply screw in lamp and power on, confirm device connectivity and call 844-LIGHTCLOUD

Small profile for concealed installations.

Cloud-based management - no software to install or maintain.

Connects to Lightcloud Gateway and other Lightcloud devices.

Connects via a secure, encrypted, and self-healing 2.4 GHz wireless mesh network.

Repeater Mode to extend range of wireless mesh network.

If power to Controller is lost, notification is shown in Lightcloud application.

If communication is lost, Controller can fall back to a customizable emergency state.



Plug in Lightcloud controller

Product HID	Si	ze		allation entation		Base	CRI	/CCT	Balla	st Installation	Ар	plication		Options
	115	115W	V	Vertical	EX39	Exclusionary	850	80CRI,	BYP	Ballast Bypass		High Bay		Lightcloud Controller
						Mogul Base		5000K		(UL Type B)			/LCS /LCS/M	Lightcloud PIR Sensor Lightcloud Microwave Sensor

