

# HBLED13A



Bullet shape die cast aluminum flood with 13 Watt LED Light Engine. Comes with flood reflector installed. Optional spot reflector included for field installation.

Color: Bronze

Weight: 3.5 lbs

**Project:**

**Type:**

**Prepared By:**

**Date:**

## Driver Info

Type:	Constant Current
120V:	0.12A
208V:	0.09A
240V:	0.08A
277V:	0.07A
Input Watts:	14W
Efficiency:	92%

## LED Info

Watts:	13W
Color Temp:	5000K
Color Accuracy:	67 CRI
L70 Lifespan:	100000
Lumens:	1,490
Efficacy:	105 LPW

# HBLEDD13A

## Technical Specifications

### Listings

#### UL Listing:

Suitable for wet locations. Suitable for ground mounting.

#### IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

### LED Characteristics

#### Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

#### Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

#### Color Stability:

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

#### 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 C78.377-2015.

### Construction

#### Thermal Management:

Cast aluminum patent pending Thermal Management system for optimal heat sinking. The LFLOOD is designed for cool operation, most efficient output and maximum LED life by minimizing LED junction temperature.

#### Swivels:

Fully adjustable with sure-grip locks. 1/2" NPS threaded arm with serrated locking swivel fits all standard mounting covers. Color matched EZ Grip lock nuts. Stainless steel screw.

#### Housing:

Precision die cast aluminum housing.

#### Gaskets:

High Temperature Silicone.

#### Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

#### Green Technology:

RAB LEDs are Mercury and UV free.

#### Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

#### Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures

#### LFLOOD 13W:

LED Floodlight that reduces energy consumption by 85% compared to 100W PAR38. Spot and Flood beam patterns. Recommended for Residential and Commercial applications.

### Electrical

#### THD:

10% at 120V

#### Power Factor:

98.6% at 120V

#### Driver:

Multi-chip 13W high output long life LED Driver Constant Current, 100V - 277V, 50/60 Hz.

#### Surge Protection:

4KV

### 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.

#### California Title 24:

HBLEDD13 complies with 2013 California Title 24 building and electrical codes as a commercial outdoor non-pole-mounted fixture < 30 Watts when used with a photosensor control. Select catalog number PCS900(120V) or PCS900/277 to order a photosensor.

#### Equivalency:

The HBLEDD13 is Equivalent in delivered lumens to a 100W PAR Halogen.

#### Patents:

LFLOOD thermal Management technology is protected under utility patents pending in the U.S., Canada and China.

#### Equivalency:

The HBLEDD13 is Equivalent in delivered lumens to a 90W PAR Floodlight.

#### HID Replacement Range:

The HBLEDD13 can be used to replace 90-100W PAR Floodlights based on delivered lumens.

#### Country of Origin:

Designed by RAB in New Jersey and assembled in Taiwan.

## Technical Specifications (continued)

### Other

#### Trade Agreements Act Compliant:

This product is a product of Taiwan and a "designated country" end product that complies with the Trade Agreements Act.

#### GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

### Optical

#### Lumen Maintenance:

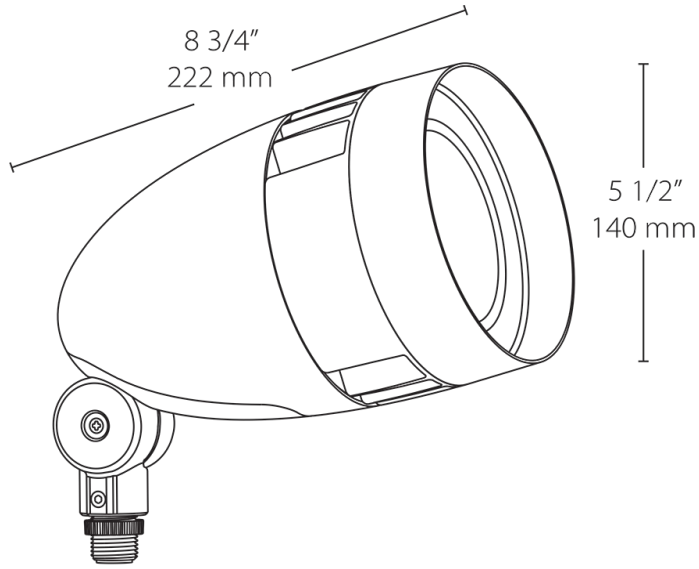
The LED will deliver 70% of its initial lumens at 100,000 hours of operation.

#### Reflectors:

NEMA 5x5 floodlight reflector with 4x4 optional spotlight reflector for field installation. Photometrics show flood configuration.

# HBLED13A

## Dimensions



## Features

- Ultra efficient LED and optical design
- Rugged die cast aluminum housing with powder coat finish
- Glare shield for effective light control
- Weatherproof high temperature silicone gaskets
- 5-year warranty

## Ordering Matrix

Family	Watts	Color Temp	Finish
HBLED	13 = 13W	= 5000K (Cool) Y = 3000K (Warm)	A = Bronze W = White B = Black VG = Verde Green

# HBLED13NA



Bullet shape die cast aluminum flood with 13 Watt LED Light Engine. Comes with flood reflector installed. Optional spot reflector included for field installation.

Color: Bronze

Weight: 3.5 lbs

**Project:**

**Type:**

**Prepared By:**

**Date:**

## Driver Info

Type:	Constant Current
120V:	0.12A
208V:	0.09A
240V:	0.08A
277V:	0.07A
Input Watts:	14W
Efficiency:	91%

## LED Info

Watts:	13W
Color Temp:	4000K
Color Accuracy:	82 CRI
L70 Lifespan:	100000
Lumens:	1,259
Efficacy:	88 LPW

# HBLED13NA

## Technical Specifications

### Listings

#### UL Listing:

Suitable for wet locations. Suitable for ground mounting.

#### IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

### LED Characteristics

#### Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

#### Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

#### Color Stability:

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

#### 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 C78.377-2015.

### Construction

#### Thermal Management:

Cast aluminum patent pending Thermal Management system for optimal heat sinking. The LFLOOD is designed for cool operation, most efficient output and maximum LED life by minimizing LED junction temperature.

#### Swivels:

Fully adjustable with sure-grip locks. 1/2" NPS threaded arm with serrated locking swivel fits all standard mounting covers. Color matched EZ Grip lock nuts. Stainless steel screw.

#### Housing:

Precision die cast aluminum housing.

#### Gaskets:

High Temperature Silicone.

#### Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

#### Green Technology:

RAB LEDs are Mercury and UV free.

#### Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

#### Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures

### Electrical

#### THD:

9.9% at 120V

#### Power Factor:

99.3% at 120V

#### Driver:

Multi-chip 13W high output long life LED Driver Constant Current, Class 2 100V - 277V, 50/60 Hz.

#### Surge Protection:

4KV

### 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.

#### California Title 24:

HBLED13 complies with 2013 California Title 24 building and electrical codes as a commercial outdoor non-pole-mounted fixture < 30 Watts when used with a photosensor control. Select catalog number PCS900(120V) or PCS900/277 to order a photosensor.

#### Equivalency:

The HBLED13 is Equivalent in delivered lumens to a 100W PAR Halogen.

#### Patents:

LFLOOD thermal Management technology is protected under utility patents pending in the U.S., Canada and China.

#### Equivalency:

The HBLED13 is Equivalent in delivered lumens to a 90W PAR Floodlight.

#### HID Replacement Range:

The HBLED13 can be used to replace 90-100W PAR Floodlights based on delivered lumens.

#### Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

#### Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

## Technical Specifications (continued)

### Other

#### Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

#### Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

#### GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

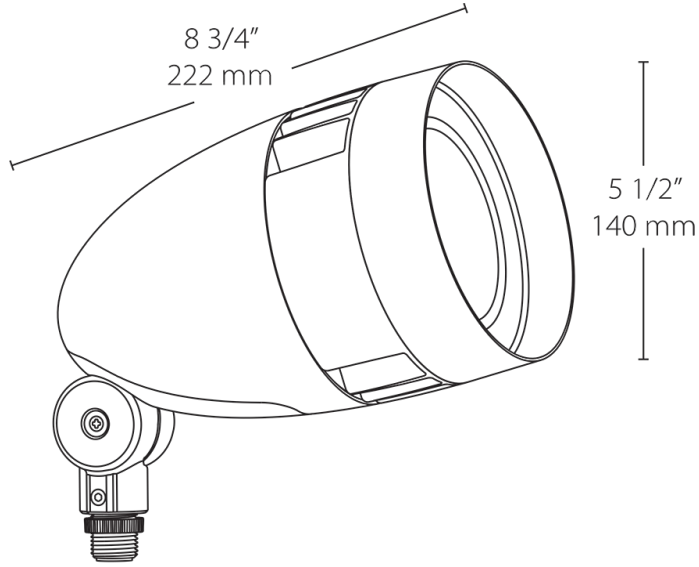
### Optical

#### Lumen Maintenance:

The LED will deliver 70% of its initial lumens at 100,000 hours of operation.

# HBLED13NA

## Dimensions



## Features

- Ultra efficient LED and optical design
- Rugged die cast aluminum housing with powder coat finish
- Glare shield for effective light control
- Weatherproof high temperature silicone gaskets
- 5-year warranty

## Ordering Matrix

Family	Watts	Color Temp	Finish
HBLED	13 = 13W	= 5000K (Cool) Y = 3000K (Warm)	A = Bronze W = White B = Black VG = Verde Green

# HBLED13YA



Bullet shape die cast aluminum flood with 13 Watt LED Light Engine. Comes with flood reflector installed. Optional spot reflector included for field installation.

Color: Bronze

Weight: 3.5 lbs

**Project:**

**Type:**

**Prepared By:**

**Date:**

## Driver Info

Type:	Constant Current
120V:	0.12A
208V:	0.09A
240V:	0.08A
277V:	0.07A
Input Watts:	14W
Efficiency:	90%

## LED Info

Watts:	13W
Color Temp:	3000K
Color Accuracy:	81 CRI
L70 Lifespan:	100000
Lumens:	1,228
Efficacy:	85 LPW

# HBLED13YA

## Technical Specifications

### Listings

#### UL Listing:

Suitable for wet locations. Suitable for ground mounting.

#### IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

### LED Characteristics

#### Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

#### Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

#### Color Stability:

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

#### 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 C78.377-2015.

### Construction

#### Thermal Management:

Cast aluminum patent pending Thermal Management system for optimal heat sinking. The LFLOOD is designed for cool operation, most efficient output and maximum LED life by minimizing LED junction temperature.

#### Swivels:

Fully adjustable with sure-grip locks. 1/2" NPS threaded arm with serrated locking swivel fits all standard mounting covers. Color matched EZ Grip lock nuts. Stainless steel screw.

#### Housing:

Precision die cast aluminum housing.

#### Gaskets:

High Temperature Silicone.

#### Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

#### Green Technology:

RAB LEDs are Mercury and UV free.

#### Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

#### Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures

### Electrical

#### THD:

9.8% at 120V

#### Power Factor:

99.2% at 120V

#### Driver:

Multi-chip 13W high output long life LED Driver Constant Current, Class 2 100V - 277V, 50/60 Hz.

#### Surge Protection:

4KV

### Other

#### Warranty:

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#### California Title 24:

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#### Patents:

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#### Equivalency:

The HBLED13 is Equivalent in delivered lumens to a 90W PAR Floodlight.

#### HID Replacement Range:

The HBLED13 can be used to replace 90-100W PAR Floodlights based on delivered lumens.

#### Country of Origin:

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#### Trade Agreements Act Compliant:

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## Technical Specifications (continued)

### Other

#### GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

### Optical

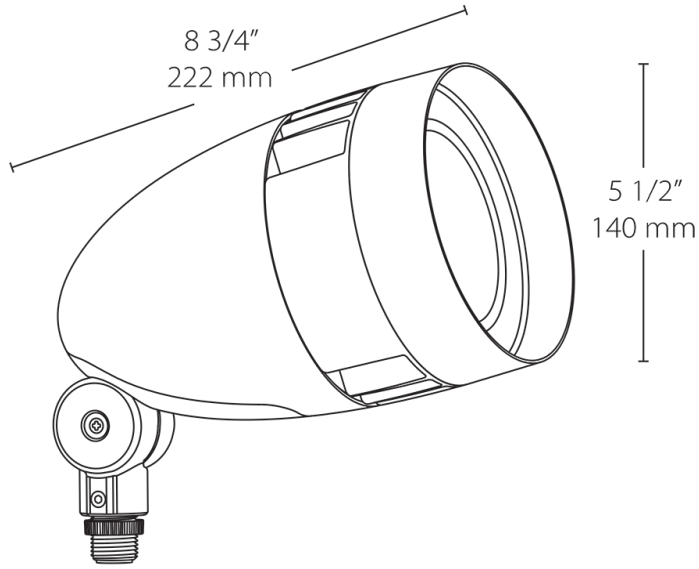
#### Lumen Maintenance:

The LED will deliver 70% of its initial lumens at 100,000 hours of operation.



# HBLED13YA

## Dimensions



## Features

- Ultra efficient LED and optical design
- Rugged die cast aluminum housing with powder coat finish
- Glare shield for effective light control
- Weatherproof high temperature silicone gaskets
- 5-year warranty

## Ordering Matrix

Family	Watts	Color Temp	Finish
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