RAB DESIGN®

RHB3S-LED300
LED Round Highbay

Wide Voltage Range 120-347V

IDEAL APPLICATIONS

- ✓ Warehouses
- ✓ Factories
- ✓ Gyms
- ✓ Industrial Applications
- ✓ Food and Beverage Processing
- ✓ Commercial Kitchens

DESCRIPTION:

The Round Highbay provides optimal widespread illumination ideal for warehouses, factories, gyms and other highbay applications. NEMA4X and NSF certified.

FEATURES:

- Ruggedly designed with die cast aluminum body and polycarbonate lens.
- Standard unit comes with a hook for suspension mounting. Yoke and Junction Box Kits for 1/2" or 3/4" NPT for pendant mounting are optional.
- This fixture is available in 4000K or 5000K.
- Easy to install with mounting hook and 2 meter cab tire for line voltage and 0.5 meter cab tire for 0-10V Dimming.
- Accessory options include Aluminum reflector, Yoke, Wire guard, DC Motion sensor, Remote Control, Battery Back Up, Junction Box Kit with 1/2" or 3/4" NPT adapter for Pendant Mount.
- Optional dual-functionality motion sensor/dimmer with easy plug-and-play install with no wiring needed.
- Optional smart lighting control available: Lutron Athena Wireless smart control allows zone and control changes digitally and wirelessly.
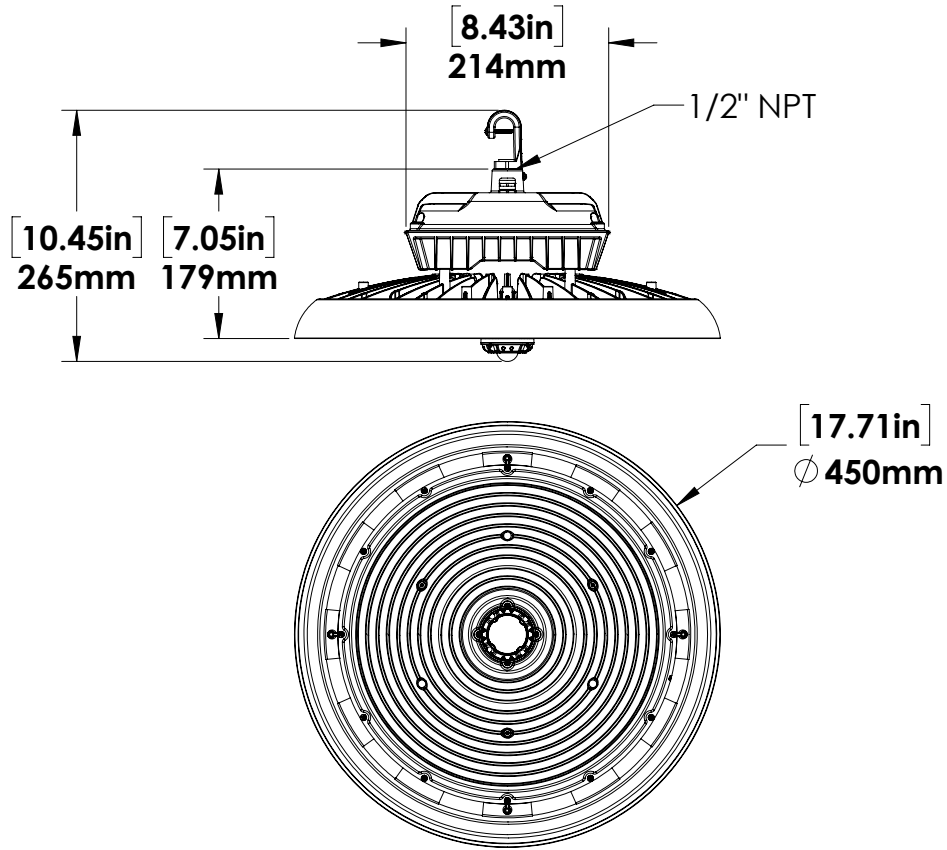- Ideal for mounting heights of 25-40 feet.

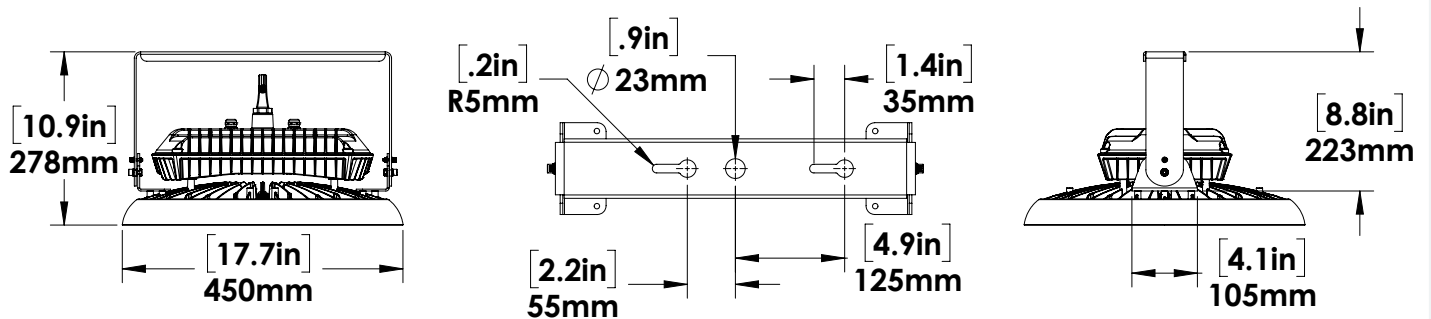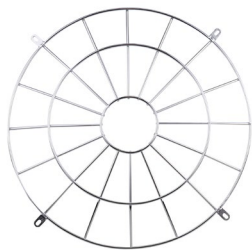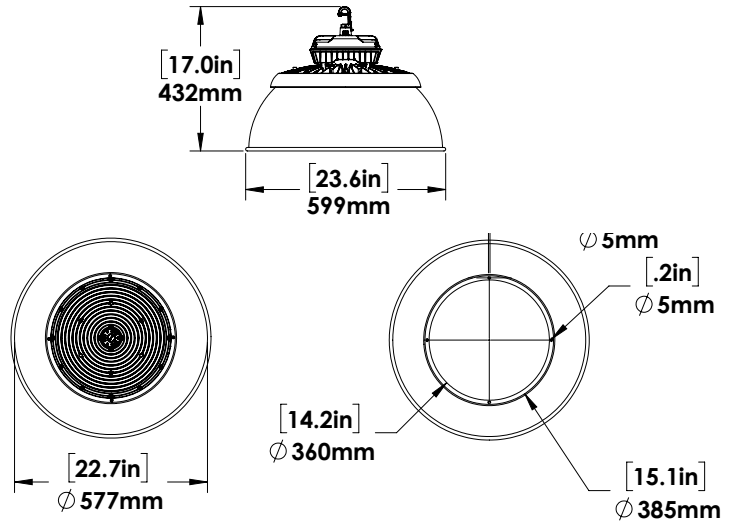| SPECIFICATIONS	RHB3S-LED300
Watts	300.7W
Lumens	43163 Lm
Efficacy	143.6 Lm/W
Replaces	1000 MH
Voltage	120-347V
Colour Temp	4000K, 5000K
CRI	83
Dimming	0-10V Dim (10% to 100%)
THD	<15%
PF	0.9
Beam Distribution	90 Degree
LED Life (L81)	100,000 Hours
Housing Finish	Black
Housing Details	Die Cast Aluminum
Lens Details	Clear Polycarbonate Lens
Mounting	Suspended*, Pendant, Yoke
Cable Length	Input Power - 2m Cabtire Cable (3x18 AWG) Dimming - 0.5m Cabtire Cable (2x22 AWG)
Operating Temp.	Without Motion Sensor: -40ºC TO 50ºC With Motion Sensor: -30ºC TO 50º C With Battery Back Up: 10ºC TO 50º C
Options Sold Separately	Yoke, Aluminum Reflector, Wire Guard, DC Microwave Motion Sensor, Battery Back Up, Junction Box Kit with 1/2" or 3/4" NPT adapter for Pendant Mount, Lutron Athena Wireless Lighting Control
Certifications	cULus Listed for Canada and USA, per UL1598, CSA C22.2 NO. 250.0-18, Wet Location, IP65, DLC Premium, NEMA 4X per UL 50E, CSA C22.2 No.94.2:20, NSF (Splash Zone and Non Food Zone), 5 Year Warranty

*Standard Configuration

UL CERTIFIED SAFETY US-CA E361278 | APPROVED FOR WET LOCATION | IP65 RATED | 5 YEAR WARRANTY | NEMA 4X CERTIFIED | NSF | DLC LISTED PREMIUM

DIMENSIONS:

8.43in
214mm

1/2" NPT

10.45in
265mm

7.05in
179mm

17.71in
⌀ 450mm

DIMENSIONS OF FIXTURE WITH YOKE MOUNT

10.9in
278mm

17.7in
450mm

.2in
R5mm

.9in
⌀ 23mm

1.4in
35mm

2.2in
55mm

4.9in
125mm

8.8in
223mm

4.1in
105mm

RAB

ALUMINUM REFLECTOR

17.0in
432mm

23.6in
599mm

Ø 5mm
.2in
Ø 5mm

14.2in
Ø 360mm

22.7in
Ø 577mm

15.1in
Ø 385mm

WIRE GUARD

11.0in
281mm

1.6in
39mm

.2in
Ø 5mm

17.7in
Ø 449mm

15.1in
Ø 385mm

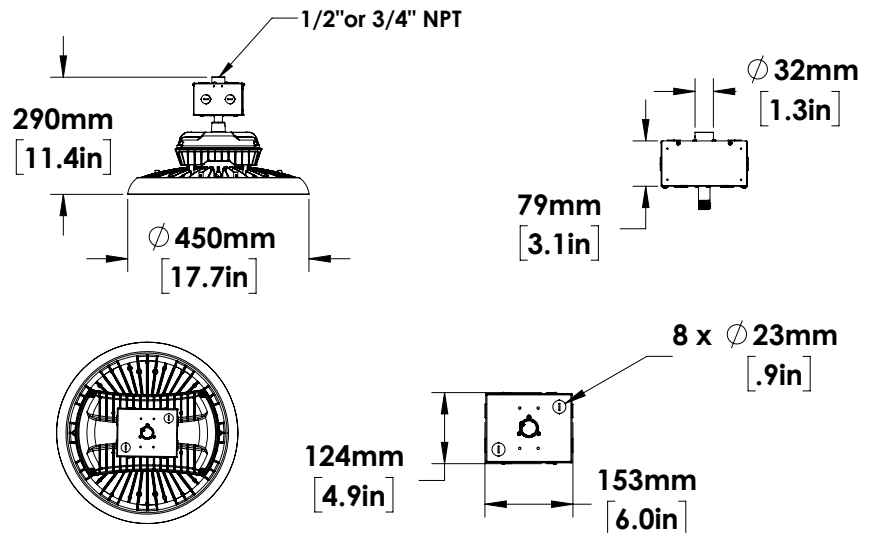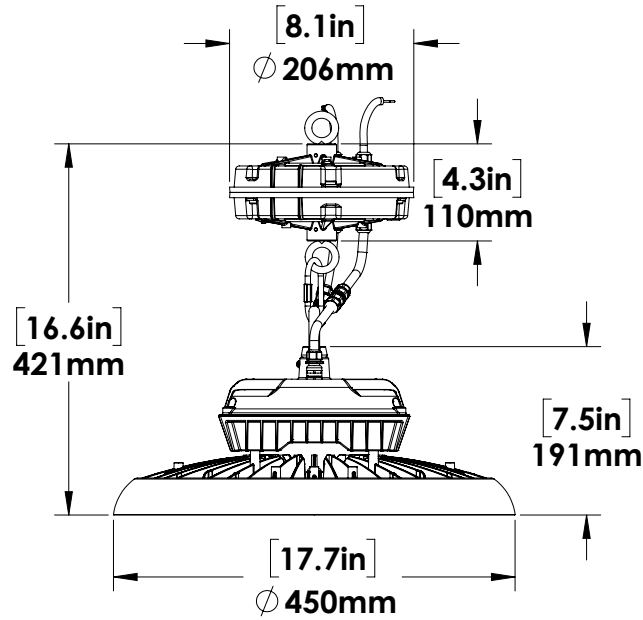## JUNCTION BOX

NOTE: Athena Wireless Node is installed in the junction box (not wet location rated) for the option with Lutron Athena Wireless Control system.

1/2"or 3/4" NPT

290mm
[11.4in]

Ø 450mm
[17.7in]

Ø 32mm
[1.3in]

79mm
[3.1in]

8 x Ø 23mm
[.9in]

124mm
[4.9in]

153mm
[6.0in]

DIMENSIONS OF FIXTURE WITH BATTERY BACK UP:

[8.1in]
⌀ 206mm

[4.3in]
110mm

[16.6in]
421mm

[7.5in]
191mm

Note: Easy to Install – Cable connectors and hooks are included in the package.

[17.7in]
⌀ 450mm

AMPERAGE DRAW & SURGE PROTECTION

	CURRENT (A)					INTERNAL SURGE PROTECTION (kV)
	120V	208V	240V	277V	347V	120-347V
RHB3S-LED300	2.63A	1.52A	1.32A	1.14A	0.91A	6kV

TM-21 ESTIMATED LUMEN MAINTENANCE

	50,000 Hours	75,000 Hours	100,000 Hours
RHB3S-LED300	90.2%	85.7%	81.4%

WEIGHTS (lbs)

RHB3S-LED300	15

SPECIFICATIONS

| Model Number	Voltage (V)	Power (W)	Light Output (lm)	Efficacy (lm/W)	THD (%)	PF	CCT (K)
RHB3S-LED300-H-5K-BLK-DIM-PCL-FS-N4X	120-347	301	43163	143.6	<15.0	0.900	5000
RHB3S-LED300-H-4K-BLK-DIM-PCL-FS-N4X	120-347	302	42510	140.9	<15.0	0.900	4000

LEGEND

H - 120-347V
4K - 4000K, 5K - 5000K
DIM - 0-10V Dimming
PCL - Polycarbonate Lens
FS - NSF Rated
N4X - NEMA4X Rated

RHB3S-LED300-B-4K-DIM
MOUNTED AT 30 FEET

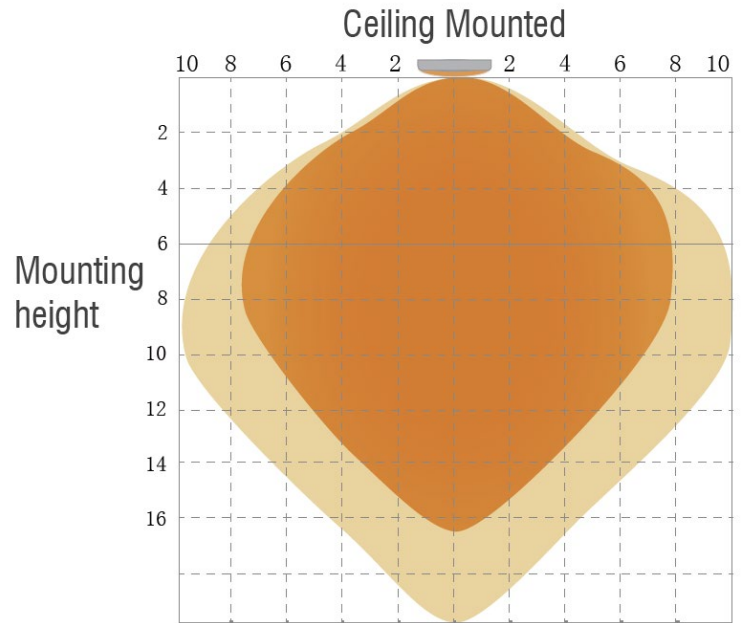Total Lumens = 42266   Mounting 30 Feet   Maximum Calculated Value = 21.44 Fc
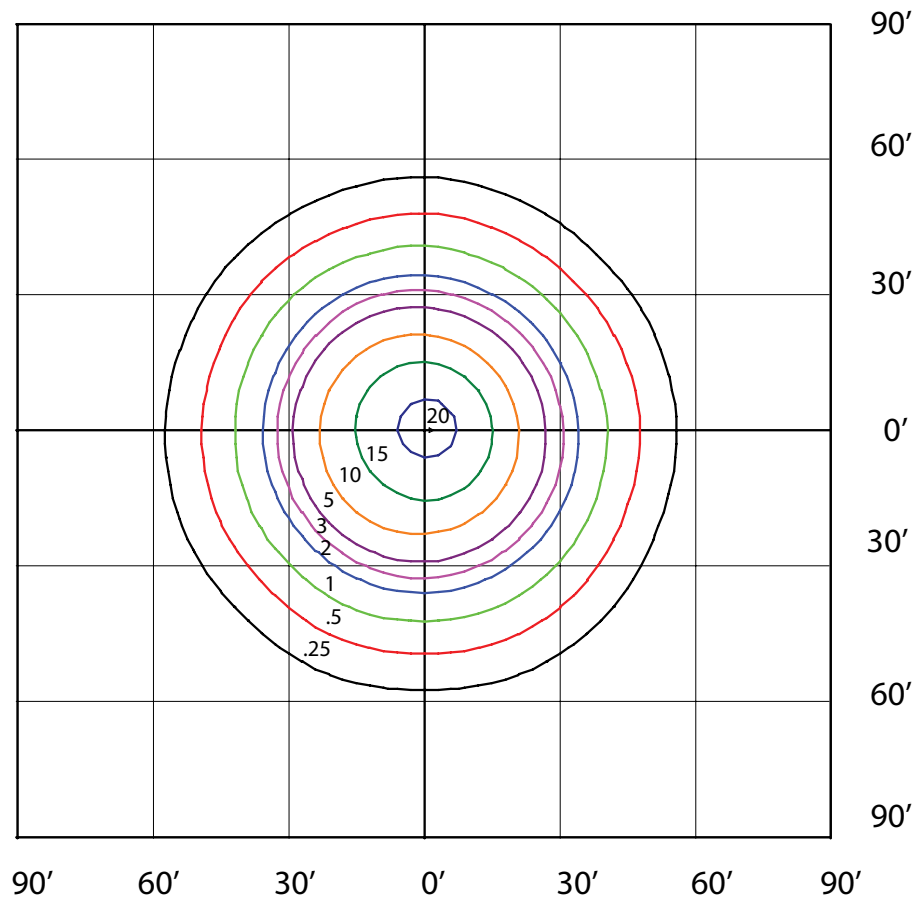
DC MICROWAVE MOTION SENSOR/ DIMMER SPECIFICATIONS

SENSOR SPECIFICATIONS

SPECIFICATIONS	
Operating Voltage	12V DC
Operating Current	30mA
Output	0-10V DC
Stand-by Power	0.5W
Frequency	5.8GHz +/-75MHz
IP Rating	IP65
Detection Angle	30° - 150°
Mounting Height	Max 15m (50ft)
Brightness	70%/80%/90%/100%
Sensitivity	20%/50%/75%/100%
Hold time	10s/1min/10min/30min
Daylight threshold	10Lux/30Lux/50Lux/100Lux/ Disabled
Stand-by time	1min/30min/60min/+∞
Stand-by Dimming Level	10%/20%/30%/50%

DEFAULT SETTINGS	
Brightness	70%
Sensitivity	20%
Hold time	10s
Daylight threshold	Disabled
Stand-by time	+ ∞
Stand-by Dimming Level	10%

SENSOR DETECTION RANGE (METRE)

DC MOTION SENSOR/DIMMER REMOTE CONTROL SETTINGS

SPECIFICATIONS	
ON/OFF	Long press until the brightness indicator light is on. Then press to permanently turn on and off the fixture.
BRIGHTNESS	Sets the highest light fixture brightness when motion is detected.
HOLD TIME	The time the light fixture will remain at the brightness setting after it detects motion.
STAND-BY DIM	The dim level that the light fixture will dim down after the Hold Time has expired.
STAND-BY TIME	The time the light fixture will remain in the Stand-by dim state before it shuts off. To disable the light from shutting off, select the INFINITY icon.
SENSITIVITY	Sets the sensitivity to which the sensor will detect motion.
DAYLIGHT	The lux setting that the light fixture will turn on/off. If the ambient lux is more than the defined lux setting, the fixture & sensor function will turn off and remain off until the ambient lux is below the setting. Long press until the daylight indicator light is on. Then press to select the desired lux setting.
SEND	Uploads the selected remote-control parameters to the light fixture sensor.
RESET	Resets the light fixture sensor parameters to the default settings.
- / +	Press to increase or decrease brightness from 0% to 100% at increments of 2%.
TEST	Press to test the sensor (hold time is 3s).

Top Section: Settings Display Area

Bottom Section: Button Setting Area

Note: To switch from motion sensor mode to dimmer mode, long press the ON/OFF button until only the BRIGHTNESS option lights up. If all options light up, long press again. Then use the -/+ buttons to adjust the brightness.

PROGRAMMING INSTRUCTIONS

1. Press the ON/OFF button
2. Select the desired settings
   • Select the brightness level by pressing the BRIGHTNESS button.
   • Select the hold time by pressing the HOLD TIME button.
   • Select the stand-by dim level by pressing the STANDBY DIM button.
   • Select the stand-by time by pressing the STANDBY TIME button.
   • Select the sensor sensitivity by pressing the SENSITVITY button.
   • Optional: If daylight sensor is desired, long press the DAYLIGHT button and then choose the lux setting.
3. Press SEND- the fixture responds by strobing.

LED EMERGENCY DRIVER

TECHNICAL DATA

ITEM	DATA
Rated Input Voltage	100-347 VAC, 50-60Hz
Input Current	20-100mA
Input Power (Charging)	8W max
Power Factor	0.6 at 100VAC, 0.5 at 347VAC
Output Power (Discharging)	40W
Battery Pack Voltage/Capacity	LiFePO4 12.8V 6600mAh, 84.48 Wh
Recharge Current	0-500mA
Recharge Time	24 Hours
Discharge Time	90 Minutes
Max. Casing Temperature tc.	70°C
Ambient Temperature Range	0°C to 50°C
Remote Control Range	15 metres
Certification	cULus, IP65

Note: Lumen output with emergency battery backup can be calculated by multiplying battery power output (40W) with efficacy of fixture.

SAFETY FEATURES
- Input over current protection.
- Output over voltage protection.
- Output under current protection.
- Output short circuit protection (Emergency Mode).

REMOTE CONTROL
- Remote control provided to test the emergency battery back-up.

TEST SWITCH
- Test the emergency battery back-up.

LED INDICATOR LIGHT
- Red stable indicating charging mode or charging full
- Red off indicating main power off or discharging mode

ORDERING GUIDE:

RHB3S	LED300	H		BLK	DIM	PCL	FS	N4X
Fixture	**Wattage**	**Voltage**	**Colour Temp.**	**Paint Finish**	**Dimming**	**Lens**	**NSF Certification**	**NEMA 4X Certification**
	LED300	H - 120-347V	4K - 4000K	BLK - Matte Black	DIM - 0-10V Dimming	PCL-Polycarbonate Lens	FS - NSF	N4X - NEMA 4X
			5K - 5000K					

STOCK CODE	DESCRIPTION
081381	RHB3S-LED300-H-4K-BLK-DIM-PCL-FS-N4X
081382	RHB3S-LED300-H-5K-BLK-DIM-PCL-FS-N4X

ORDERING GUIDE FOR ACCESSORIES

Options Sold Separately
Check the items that you wish to order:

☐ 081245 - RHB3S ALUMINUM REFLECTOR

☐ 002348 - RHB3S STEEL WIRE GUARD

☐ 081244 - RHB3S YOKE BLK

☐ 002363 - RHB3S JUNCTION BOX PENDANT KIT BLK

☐ 080909 - MICROWAVE MOTION SENSOR/DIMMER

☐ 080970 - DC MOTION SENSOR REMOTE CONTROL

☐ 002318 - RHB3S 120-347V LED EMERGENCY BATTERY BACKUP

☐ 002390 - RHB3S JUNCTION BOX PENDANT KIT BLK W/AWNR*

*Lutron Athena Wireless Node with RF only (A-WN-D01-RF-BL) is installed in a separate junction box (see page 3). Gateway and controller not included.

RATINGS TABLE:

NEMA 4X CERTIFIED	NEMA 4X fixtures are for Indoor or outdoor use, including offshore applications. Offers protection against windblown dust and rain. Offers protection from splashing water and hose-directed water. Corrosion-resistant.
NSF	NSF-approved lighting products must deliver light output (footcandle) levels that are adequate for food preparation and food storage areas. These products must be shatterproof to ensure that no broken glass splinters over food or other equipment. Fixtures must be easily accessible, resistant to the intrusion of dust, water and other hazards, and designed for easy cleaning to minimize the breeding of bacteria or mold.