



RH3S-LED

Round Highbay



The RHS-LED Series of highbay luminaires are ruggedly designed, easy to install, and deliver a high lumen output ideal for illuminating warehouses, manufacturing facilities, recreational facilities, and gymnasiums. With Controlled capability, it integrates plug-and-play motion and daylight sensors wirelessly and with bluetooth mesh network, providing advanced lighting control without hubs or gateways.

IDEAL APPLICATIONS

- ✓

 Warehouses
- ✓

 Service Bays
- ✓

 Gymnasiums
- ✓

 Food & Beverage Processing
- ✓

 Factories
- ✓

 Retail stores

SPECIFICATIONS

	RH3S-LED300A240				
PERFORMANCE					
Light Output	51500/46300/41200 lm				
Efficacy	172 lm/W				
CCT	4000K/5000K (Color Selectable)				
Beam Angle	90°				
Replaces Up to	1000W MH				
CRI	83				
ELECTRICAL					
Wattage	300/270/240W				
Voltage	120-347V				
Surge Protection	6kV (Built-in Driver) as per IEC/EN61000-4-5				
Power Factor	>0.99				
THD	<3%				
Cord	Pre-installed Power Cable (6 ft, 3x18 AWG) &				
	Dimming and 12VDC AUX Cable (1.6ft, 3x22 AWG)				
Battery Backup	40W (Option Available)				
MAX AMPERAGE DRAW (A)					
	120V	208V	240V	277V	347V
RH3S-LED300A240	2.78	1.60	1.39	1.20	0.96

RH3S-LED300A240		
CONSTRUCTION		
Die-cast Aluminum - Matte Black		
Polycarbonate		
8.6 lbs		
AMBIENT OPERATING TEMPERATURE		
Fixture: -40°C to 50°C		
Motion Sensor: -30°C to 50°C		
Battery Backup: 0°C to 50°C		
MOUNTING		
Suspended Mount(Included), Pendant Mount, Yoke Mount		
CERTIFICATIONS		
cULus Listed for Canada and USA, per UL 1598, CSA C22.2 No. 250.0		
NEMA4X per UL 50E, NSF (Splash and Non Food Zone)		
DLC Premium		
CONTROLS		
0-10V Dimming (Dim to Off)		
PIR/ Microwave Motion Sensor/Dimmer (Dual Functionality)		
Bluetooth PIR Motion & Daylight Harvest Sensor		
LUMEN MAINTENANCE		
L90	L80	L70
43,000 Hrs	90,000 Hrs	145,000 Hrs

Life hours are derived from IESNA LM-80 testing report and projected per IESNA TM-21 calculations.

CONTROLLED

UL

CERTIFIED

SAFETY US-CA

E361278

DLC

LISTED

PREMIUM

Lumen Adjustable

CCT

4K/5K

120-347V

NEMA

4X

CERTIFIED

NSF

IP65

RATED

5

YEAR WARRANTY

Bluetooth









ORDERING GUIDE

RH3S	LED300A240	H	VK	BLK	DIM	PCL	FS	N4X
Fixture	Wattage	Voltage	Colour Temp.	Finish	Dimming	Lens	NSF Certification	NEMA4X Certification
	LED300A240	H - 120-347V	VK - Colour Selectable (4000K/ 5000K)	BLK - Matte Black	DIM - 0-10V Dimming	PCL - Polycarbonate Lens	FS - NSF	N4X - NEMA 4X

Default Setting: 300W, 5000K

STOCK CODE		INCLUDED IN THE BOX	
083582	RH3S-LED300A240-H-VK-BLK-DIM-PCL-FS-N4X		Pre-installed Power Cable & Dimming and 12VDC AUX Cable
			M10 Hook

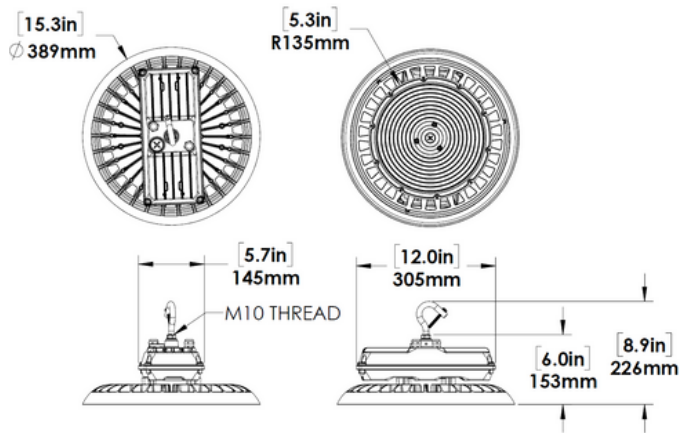
ACCESSORIES SOLD SEPARATELY

	002398 - RH3S STEEL WIRE GUARD		080909 - MICROWAVE SENSOR (50ft max height)
	083687 - RH3S ALUMINUM REFLECTOR		081300 - PIR SENSOR 1 (20ft max height)
	083689 - RH3S POLYCARBONATE REFLECTOR (CLEAR PRISMATIC)		081837 - PIR SENSOR 2 (40ft max height)
	084093 - RH3S POLYCARBONATE REFLECTOR COVER		080970 - MOTION SENSOR REMOTE CONTROL
	002327 - JUNCTION BOX PENDANT KIT BLK 002386 - JUNCTION BOX PENDANT KIT BLK W/AWNR*		084210 - HIGHBAY BLUETOOTH PIR MOTION/DLH SENSOR & ADAPTER
	083686 - RH3S YOKE BLK		140748 - M10-1/2" NPT ADAPTER NICKEL PLATED IRON BLK
	002318 - 40W 120-347V EMERGENCY BATTERY BACKUP BLK		140750 - M10-3/4" NPT ADAPTER NICKEL PLATED IRON BLK

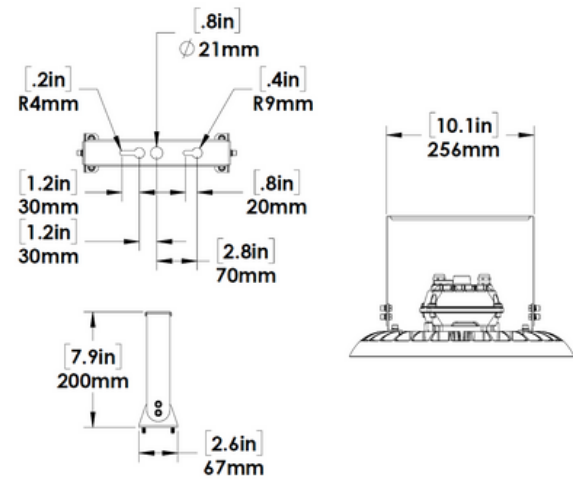
*Lutron Athena Wireless Node with RF only (A-WN-D01-RF-BL) is installed in the junction box. Gateway and controller not included.

DIMENSIONS

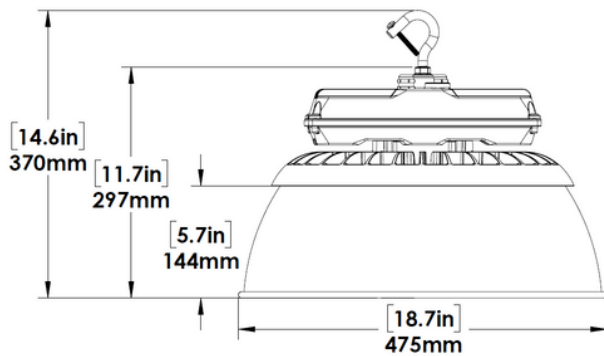
Fixture & Standard Suspension Mount



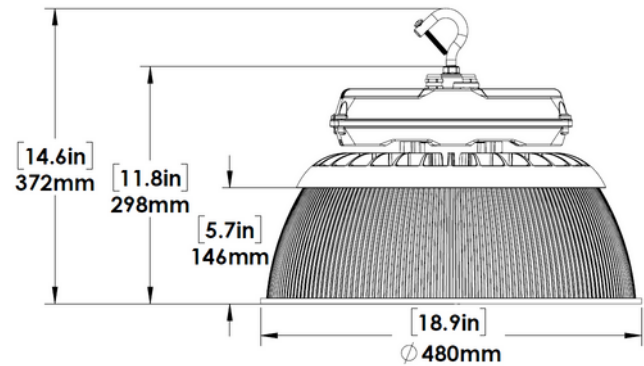
Yoke Mount



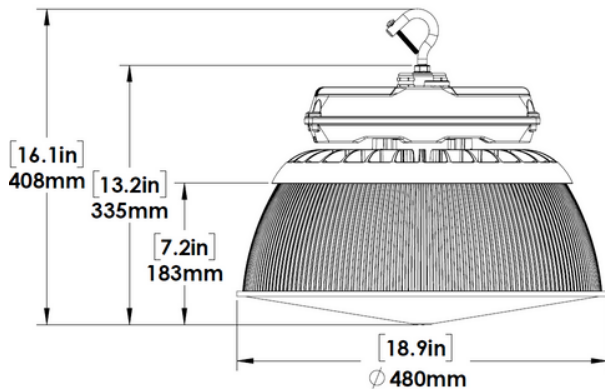
Aluminum Reflector



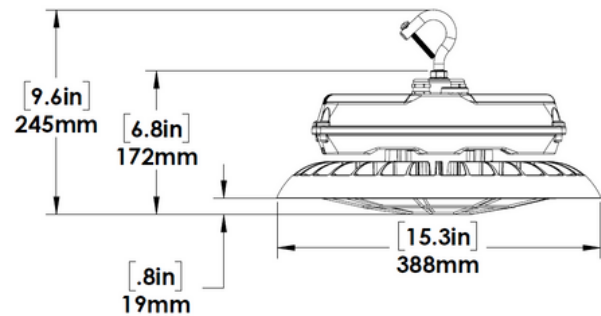
Polycarbonate Reflector



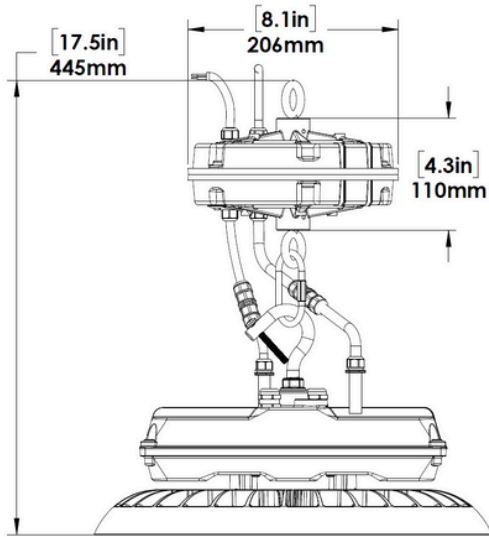
Polycarbonate Reflector & Cover



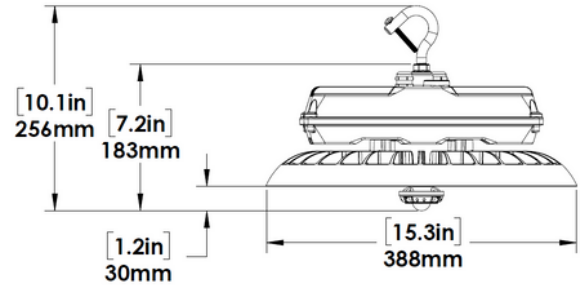
Wire Guard



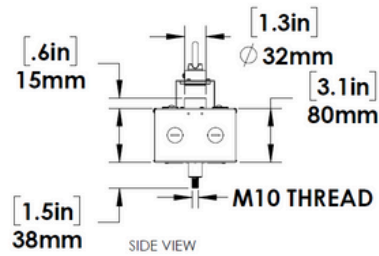
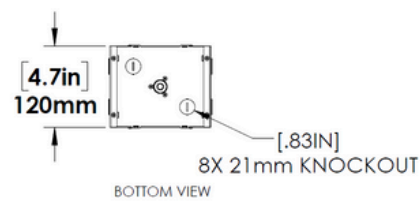
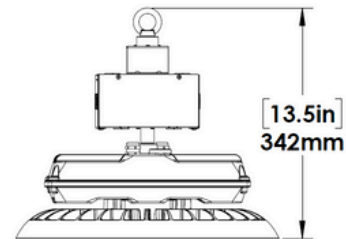
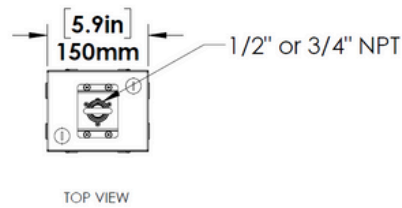
Battery Backup



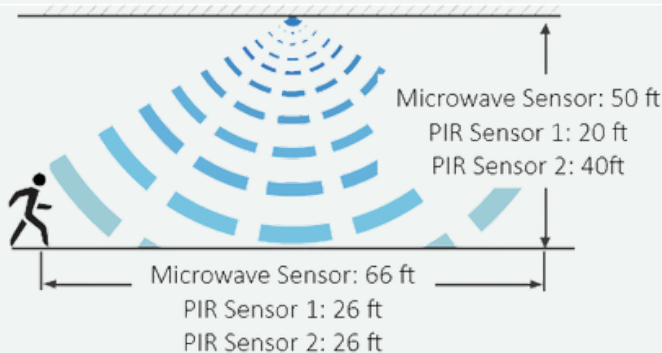
Motion Sensor



Junction Box Pendant Kit



MOTION SENSOR SPECIFICATIONS - PROGRAM USING REMOTE CONTROL


Sensor Type	Microwave & PIR
Microwave Frequency	5.8GHz +/- 75MHz
Operating Voltage	12VDC
Operating Current	30mA
Output Voltage	0-10V
Stand-by Power	<0.5W
Detection Range	
Maximum Detection Angle	360°
Ambient Operating Temperature ¹	-30°C to 60°C (-22F to 140F)
Indoor/Outdoor Use	Both Indoor & Outdoor
IP Rating	IP65
Installation	Field installed - Wireless Plug & Play

MOTION SENSOR PROGRAMMING

Programming Tool	Highbay Motion Sensor Remote Control
Brightness	70%/80%/90%/100%*
Sensitivity	20%/50%/75%/100%*
Hold Time	10s/1min*/10min/30min
Daylight Sensor	10Lux/30Lux/50Lux/100Lux/Disabled*
Standby Dim	10%/20%*/30%/50%
Standby Time	1min*/30min/60min/+∞

- Default settings marked with *
- Default Setting: After no motion for 1min (hold time), the fixture will dim from 100% (brightness) to 20% (stand-by dim level). After no motion for another 1 min (stand-by time), the fixture will turn off.
- For instructions on programming the motion sensor remote control, please see the Installation Instructions.
- ¹When installed in the fixture, the system's ambient operating temperature is limited by the component with the lowest allowable range.

BATTERY BACKUP SPECIFICATIONS

Input Power	8W	
Input Voltage	120-347V	
Output Power (Emergency Mode)	40W	
Recharge Current	0-500mA	
Recharge Time	24 Hrs	
Discharge Time	90 min	
Ambient Operating Temperature ¹	0°C to 50°C (32F to 122F)	
IP Rating	IP65	
Installation	Field installed - Suspension Mounted	
Light Output ²	6880 lm	

- ¹When installed in the fixture, the system's ambient operating temperature is limited by the component with the lowest allowable range.
- ²Lumen output with emergency battery backup can be calculated by multiplying the battery output power with the efficacy of fixture.

CONTROLLED

BLUETOOTH PIR MOTION & DAYLIGHT HARVEST SENSOR

FEATURES

- PIR motion and daylight harvest sensor
- Easy wireless plug-and-play installation
- Bluetooth mesh network
- DLC - Networked Lighting Control (NLC) & Luminaire Level Lighting Control (LLLC)

SPECIFICATIONS	
Input Voltage	12VDC
Input Current	50mA Max.
Input Power	0.6W
Output Current	10mA Max. Sinking Current
Output Power	0.1W
Dimming	Class 2, 0-10VDC
Bluetooth Transmit	328ft Max.
Radio Frequency	2.4GHz ±75MHz
Bluetooth Version	5.0
Housing Material	Polycarbonate (UL 94-5VA)
Housing Finish	White
Detection Range	40-80ft
Mounting Height	20-40ft
Indoor/Outdoor Use	Both Indoor & Outdoor Use
Operating Temperature¹	-30°C to 55°C (-22°F to 131°F)
Storage Temperature	-30°C to 85°C (-22°F to 185°F)
IP Rating	IP66 (Wet Location)
Installation	The audio jack to 3-PIN adaptor is pre-installed on the sensor for quick twist-lock installation ¹

¹When installed in the fixture, the system's ambient operating temperature is limited by the component with the lowest allowable range.

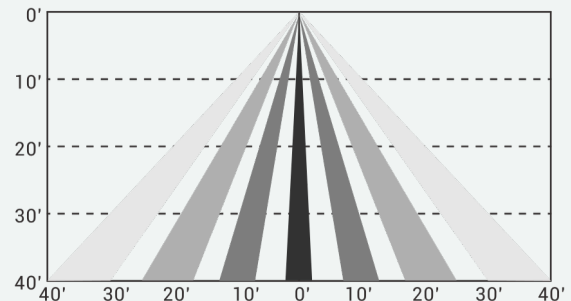
DEFAULT SETTINGS	
Motion Sensor	ON
Mode	Occupancy
High End Trim	100%
Sensitivity	High
Hold Time (T1)	20 min
Standby Dim	50%
Standby Time (T2)	1 min
Photocell	Off
Linkage	Off
Linkage Level	100%

Note: Program the sensor with the desired settings using the Controlled Mobile App (please refer to the Controlled App manual for instructions).

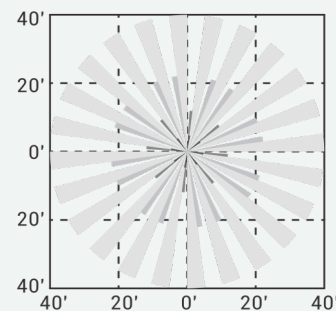


DETECTION COVERAGE

Side View (at 40ft Height)



Top View (at 40ft Height)



Bluetooth

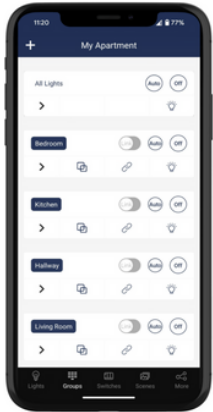


SPECIFICATIONS & COMMISSIONING

CONTROLLED

RAB
DESIGN

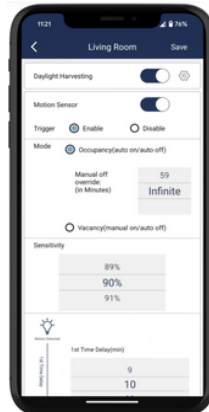
ControlLED Network Lighting Controls (NLC) delivers secure, wireless lighting management with Bluetooth Mesh and the ControlLED App. Integrated sensors enable automatic adjustments for comfort, safety, and efficiency.



Organized Workspaces:
Create Zones, Groups and Group linkages.



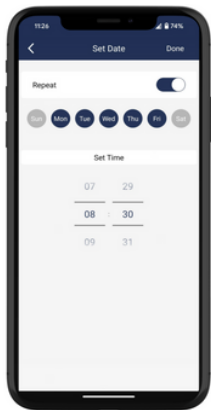
Dimming Lights:
Set dim level for groups or individual lights.



Motion and Daylight Harvest Sensors:
Custom sensor settings for groups or individual lights.



Scenes:
Create custom scenes for different scenarios.



Schedules:
Create custom schedules for recurring events.



Share Access:
Share access using QR codes.

Get the App!



RAB
DESIGN

**Engineered by skilled hands,
for skilled hands.**

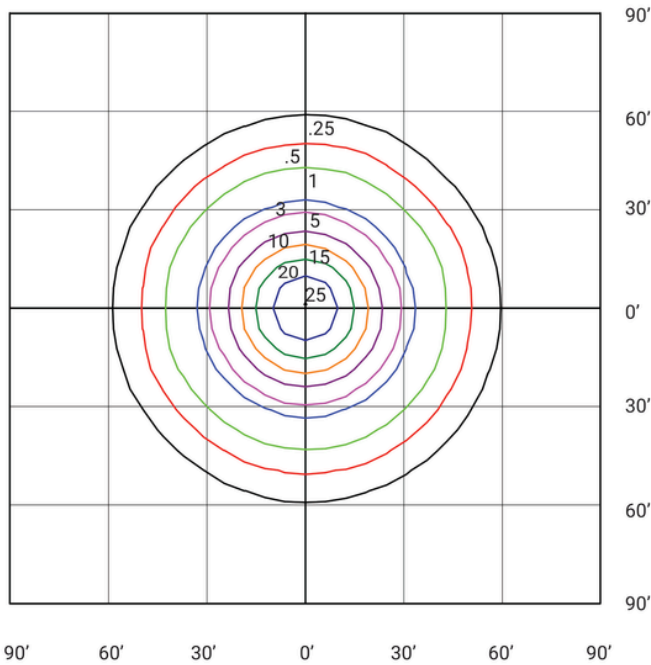
© RAB Design Lighting Inc. 2025. All rights reserved.
For more information, visit rabdesign.ca.

PHOTOMETRIC PLOT

RH3S-LED300A240 MOUNTED AT 30 FT

LUMENS 50946.9

MAX CALCULATED VALUE 29.20Fc



NOTE: Photometric plots are shown at the maximum lumen setting, 120V and 5000K