



# 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 ControlledLED 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
- ✔ Gymnasiums
- ✔ Factories
- ✔ Service Bays
- ✔ Food & Beverage Processing
- ✔ 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		
<b>L90</b>	<b>L80</b>	<b>L70</b>
43,000 Hrs	90,000 Hrs	145,000 Hrs

All reported values were tested at 120V and 4000K and shown for the highest lumen setting.

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



**ORDERING GUIDE**

<b>RH3S</b>	<b>LED300A240</b>	<b>H</b>	<b>VK</b>	<b>BLK</b>	<b>DIM</b>	<b>PCL</b>	<b>FS</b>	<b>N4X</b>
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

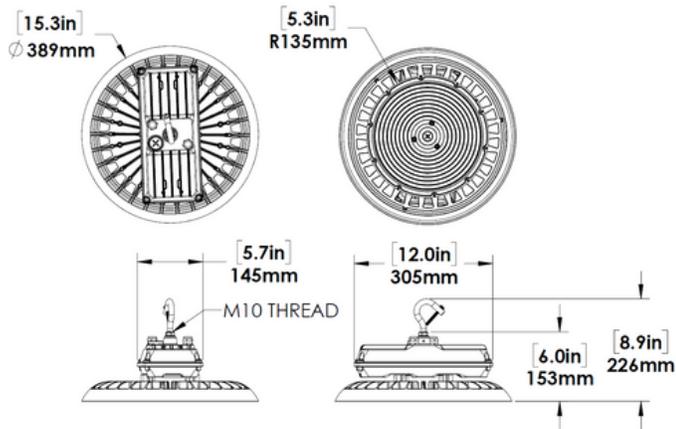
**ACCESSORIES SOLD SEPARATELY**

	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

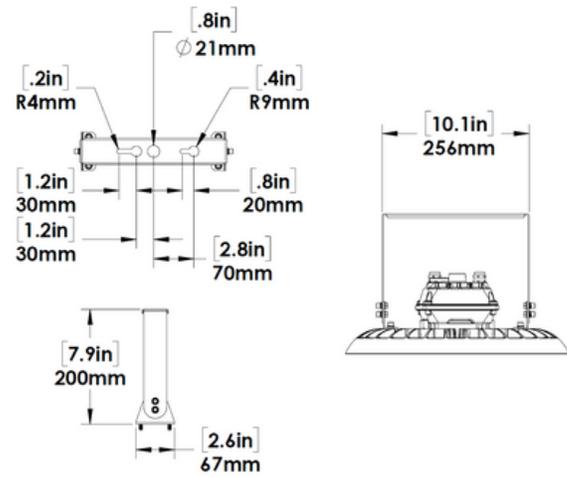
\*Lutron Athena Wireless Node with RF only (A-WN-D01-RF-BL) is installed in the junction box. Gateway and controller not included.

**DIMENSIONS**

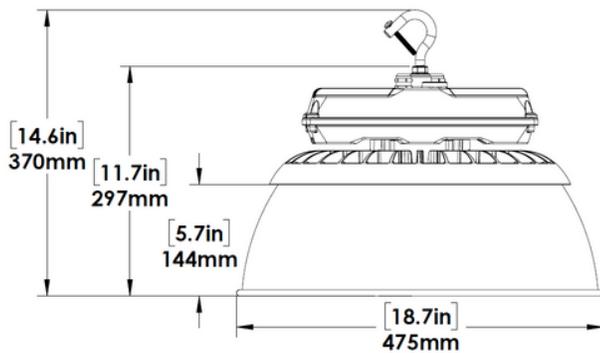
**Fixture & Standard Suspension Mount**



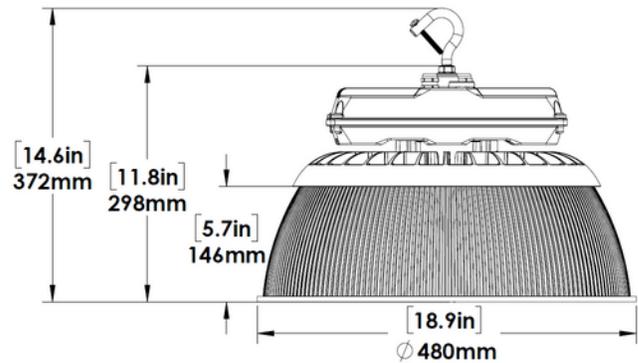
**Yoke Mount**



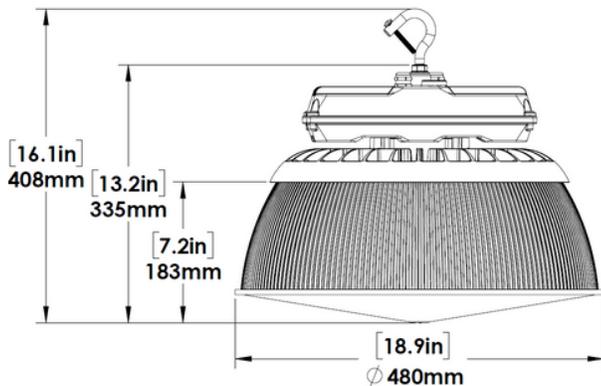
**Aluminum Reflector**



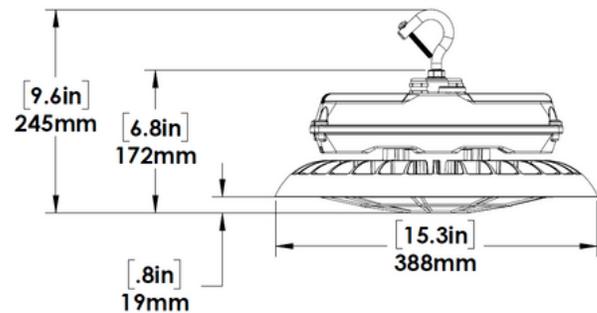
**Polycarbonate Reflector**



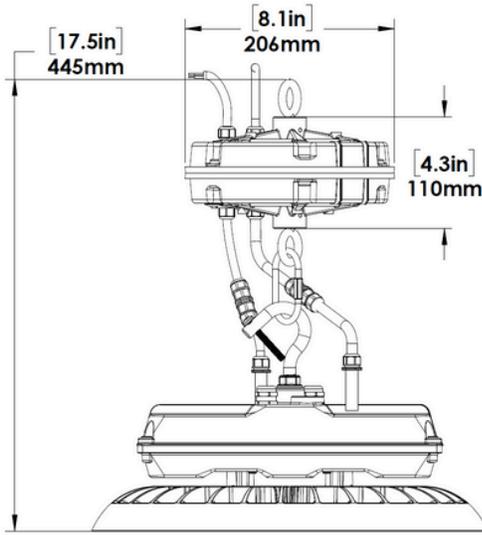
**Polycarbonate Reflector & Cover**



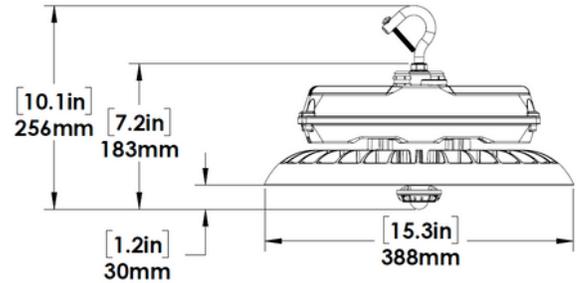
**Wire Guard**



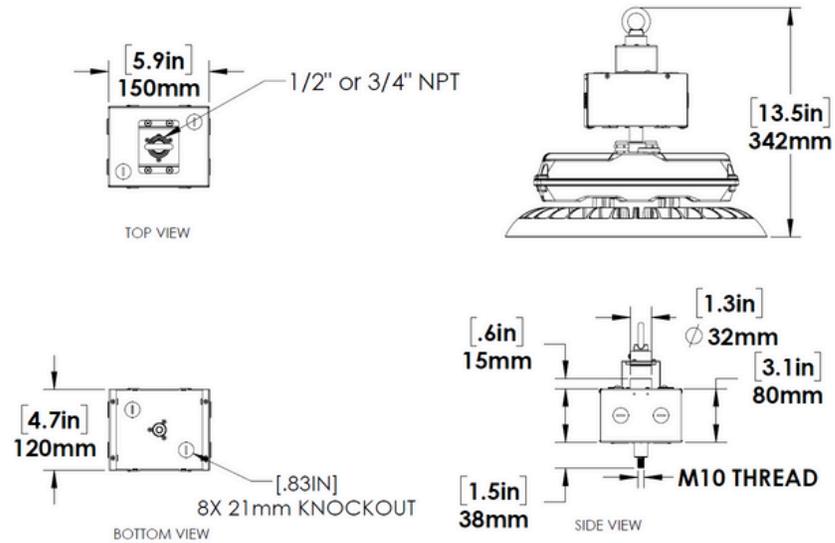
**Battery Backup**



**Motion Sensor**



**Junction Box Pendant Kit**



**MOTION SENSOR SPECIFICATIONS - PROGRAM USING REMOTE CONTROL**

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

**MOTION SENSOR PROGRAMMING**

<b>Programming Tool</b>	Highbay Motion Sensor Remote Control
<b>Brightness</b>	70%/80%/90%/100%*
<b>Sensitivity</b>	20%/50%/75%/100%*
<b>Hold Time</b>	10s/1min*/10min/30min
<b>Daylight Sensor</b>	10Lux/30Lux/50Lux/100Lux/Disabled*
<b>Standby Dim</b>	10%/20%*/30%/50%
<b>Standby Time</b>	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.
- <sup>1</sup>When installed in the fixture, the system's ambient operating temperature is limited by the component with the lowest allowable range.

**BATTERY BACKUP SPECIFICATIONS**

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



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

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

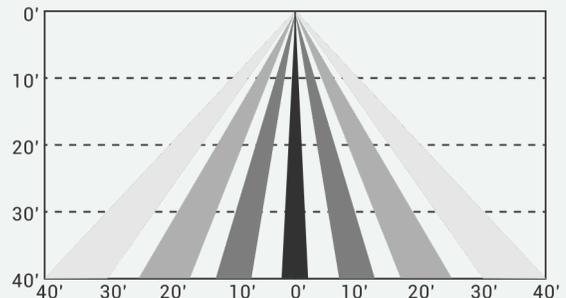
DEFAULT SETTINGS	
<b>Motion Sensor</b>	ON
<b>Mode</b>	Occupancy
<b>High End Trim</b>	100%
<b>Sensitivity</b>	High
<b>Hold Time (T1)</b>	20 min
<b>Standby Dim</b>	50%
<b>Standby Time (T2)</b>	1 min
<b>Photocell</b>	Off
<b>Linkage</b>	Off
<b>Linkage Level</b>	100%

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

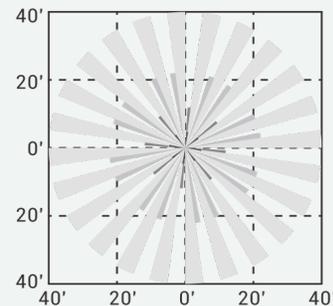


### DETECTION COVERAGE

Side View (at 40ft Height)



Top View (at 40ft Height)



Bluetooth

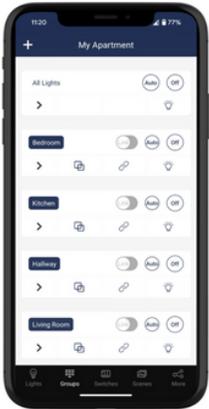


SPECIFICATIONS & COMMISSIONING

# CONTROLLED



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.

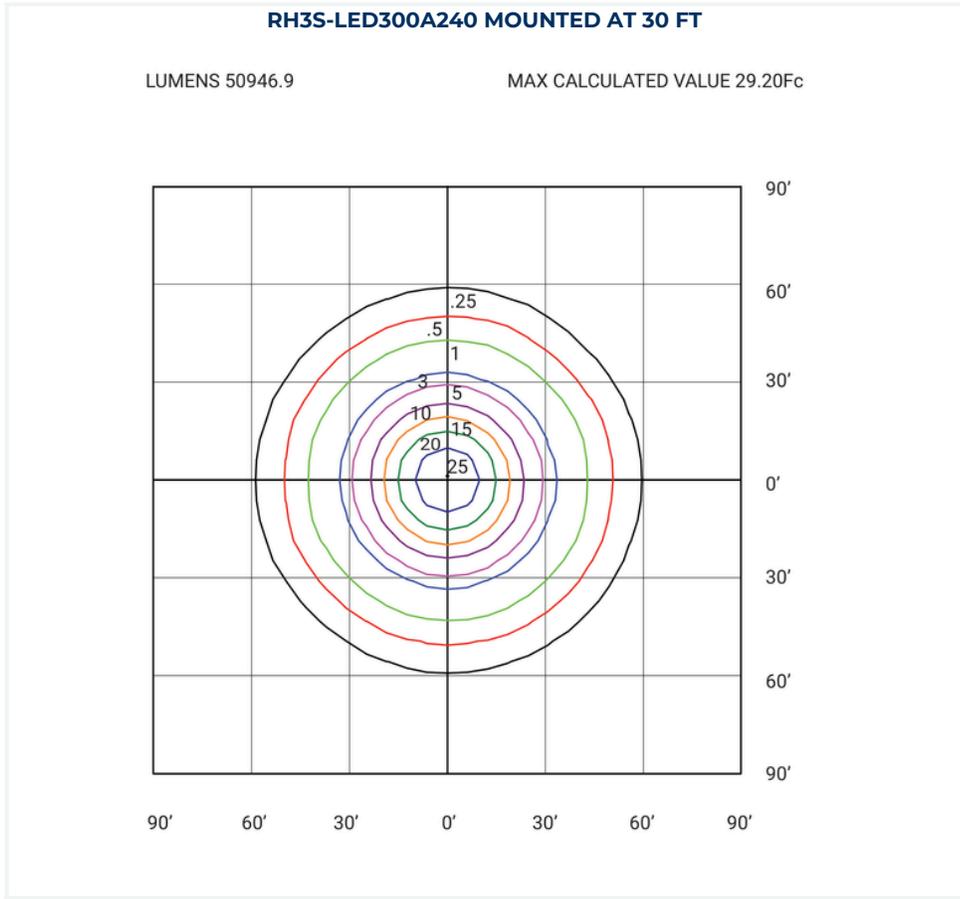
## Get the App!



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

© RAB Design Lighting Inc. 2025. All rights reserved.  
For more information, visit [rabdesign.ca](http://rabdesign.ca).

### PHOTOMETRIC PLOT



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