RAB® DESIGN

RHB1S-LED
LED Round Highbay

Colour Selectable

Lumen Adjustable

Voltage Range 120-277V

Voltage Range 120-347V

IDEAL APPLICATIONS

✔ Warehouses ✔ Factories ✔ Gyms ✔ Industrial Applications

DESCRIPTION:

The Round Highbay provides optimal widespread illumination ideal for warehouses, factories, gyms and other highbay applications. This fixture is color selectable and lumen adjustable.

FEATURES:

- Colour Selectable fixture allows Installer to choose between 4000K/5000K at the time of installation.
- The Lumen adjustable fixture allows installer to select between 3 wattage settings:
  RHB1S-LED100A60 - 100W/80W/60W
  RHB1S-LED150A100 - 150W/120W/100W
- At each wattage setting, the brightness can be adjusted using the DC dimmer and remote control
- Ruggedly designed with die cast aluminum body and polycarbonate lens.
- Easy to install with mounting hook and 2 meter cord for line voltage and 0.5 meter cord for 0 -10V dimming.
- Fixture can be suspended or yoke mounted.
  (Yoke sold as a separate accessory)
- Accessories include Aluminum Reflector, Yoke, PC reflectors, PC Reflector Cover and Ring, Wire Guard, M10/M12 to 1/2" / 3/4" Adaptor with Junction Box, Motion Sensor and Remote Control.
- Optional dual-functionality motion sensor/dimmer with easy plug-and-play install (More details on page 10)

SPECIFICATIONS*

	RHB1S-LED100A60	RHB1S-LED150A100
Watts	99.9W	150.4W
Lumens (Maximum)	14300.6 lm	21827 lm
Efficacy (Lm/W)	143.2	145.1
Colour Temp	VK - Colour Selectable (4000K,5000K)	
Voltage	120-277V, 120-347V	
CRI	85	
THD	15%	
PF	0.9	
Dimming	0-10V Dimming (Range: 10%-100%)*	
LED Life @ 100,000 Hours	81%	
Beam Distribution	90 Degrees	
Finish	**Matte Black**	
Housing Details	Die Cast Aluminum	
Lens Details	Clear PC Lens	
Mounting	Pendant, Suspended*, Yoke	
Operating Temp.	Without Motion Sensor: -40°C to 50°C With Motion Sensor: -30°C to 50°C With Battery Back Up: 10°C to 50°C	
Certifications	UL, Wet Location, IP65, 3G, NEMA4X**, NSF**, DLC 5.1 Premium	
Options Sold Separately	Yoke, Junction box with adapter, Wire guard, Polycarbonate/Aluminum Reflectors and Cover, DC Microwave Motion Sensor/ DC dimmer and Remote and Remote, Emergency Battery Back Up	

* Specs shown are for 120-347V, 4000K setting

Note: For lumen outputs at other wattage settings, please view Lumen Adjustable Settings table on page 6.
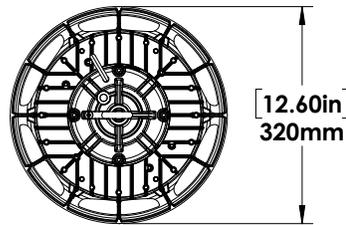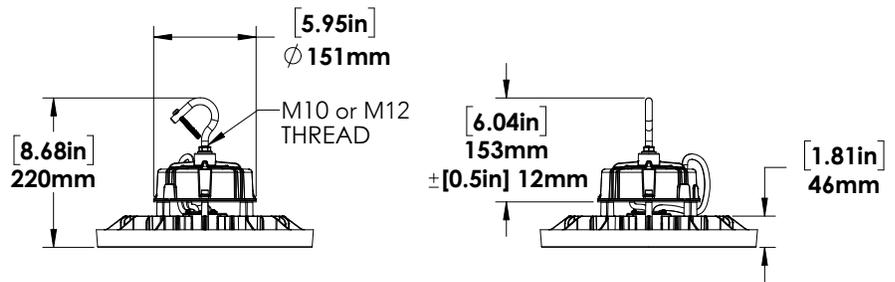** Only available in RHB1S-LED150A100-H-VK

3G VIBRATION TESTED · IP65 RATED · APPROVED FOR WET LOCATION · 5 YEAR WARRANTY · NEMA 4X CERTIFIED · NSF · DLC LISTED PREMIUM · UL CERTIFIED SAFETY US c.U.S E361278

120-347V Versions Only

DIMENSIONS:

FIXTURE DIMENSIONS

TOP VIEW

[12.60in]
320mm

SIDE VIEW

[5.95in]
∅ 151mm

M10 or M12
THREAD

[8.68in]
220mm

[6.04in]
153mm
±[0.5in] 12mm

[1.81in]
46mm

YOKE

TOP VIEW

[8.23in]
209mm

SIDE VIEW

[.71in]
2X ∅ 18mm

[.31in]
2X ∅ 8mm

[.83in]
∅ 21mm

[.79in]
20mm

[1.18in]
30mm

[1.97in]
50mm

[1.18in]
30mm

[2.64in]
67mm

[5.91in]
150mm
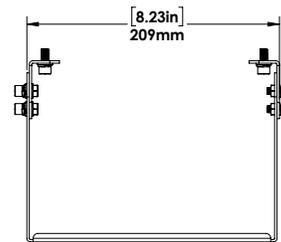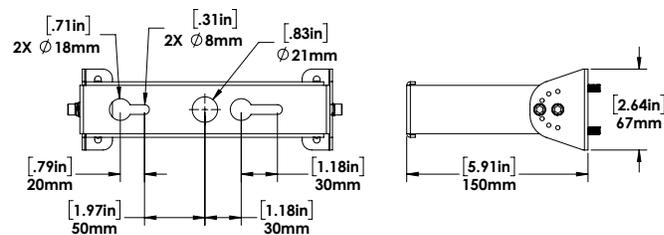
Note: Can be adjusted to increments of 30 Degrees

DIMENSIONS:

SIDE VIEW

⌀ **8.12in**
206mm

**FIXTURE DIMENSIONS
WITH BATTERY
BACK UP KIT**

16.25in
≈ **413mm**

4.33in
110mm

5.84in
148mm
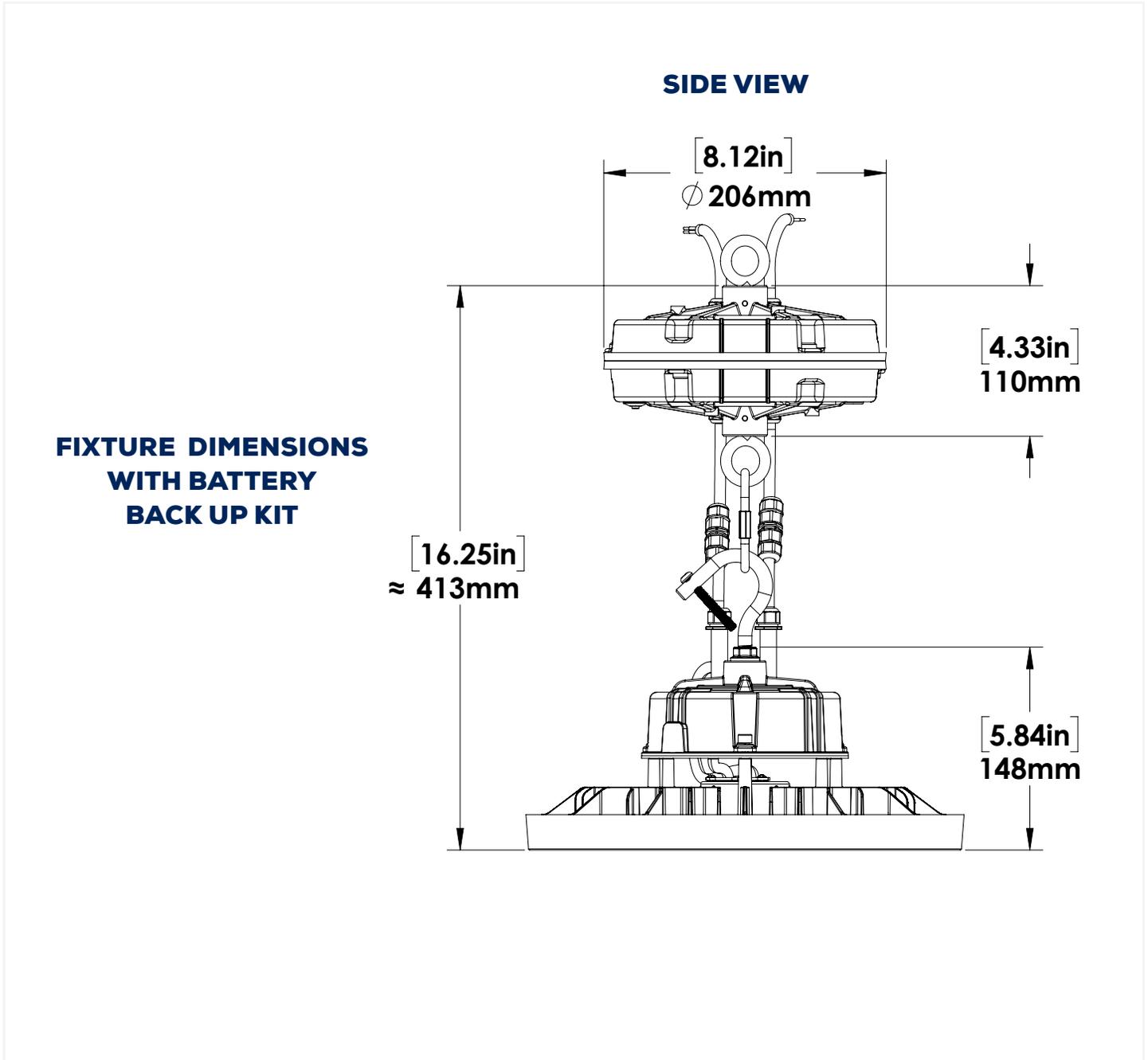
DIMENSIONS:

ALUMINUM REFLECTOR

TOP VIEW

[18.46in]
∅ 469mm

SIDE VIEW

[6.00in]
152mm
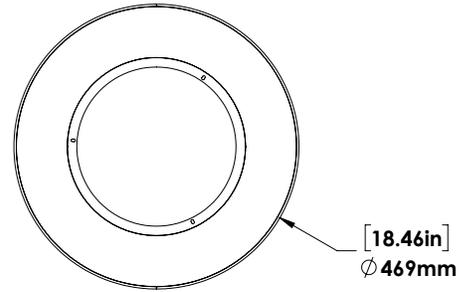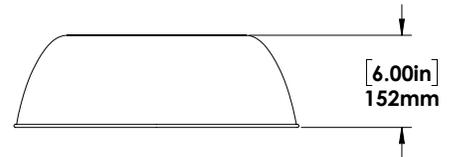
PC REFLECTOR (CLEAR PRISMATIC)

TOP VIEW

[16.29in]
∅ 414mm

SIDE VIEW

[5.59in]
142mm
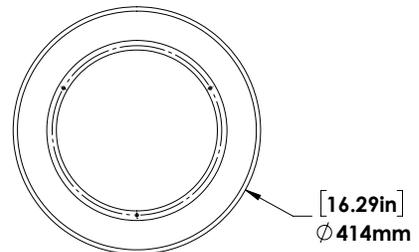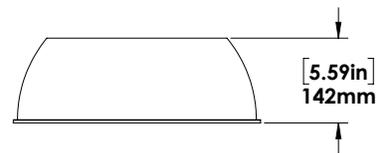
PC REFLECTOR COVER (CLEAR PRISMATIC)

SIDE VIEW

[1.67in]
42mm

TOP VIEW

[16.34in]
∅ 415mm

DIMENSIONS:

SIDE VIEW

$\left[1.10in\right]$ 28mm

WIRE GUARD

TOP VIEW

$\left[10.20in\right]$ ⌀ 259mm

TOP VIEW

1/2" or 3/4" NPT

$\left[5.91in\right]$ 150mm

$\left[.59in\right]$ 15mm

$\left[1.26in\right]$ ⌀ 32mm

$\left[4.74in\right]$ 120mm

$\left[1.56in\right]$ 40mm

$\left[3.15in\right]$ 80mm

⌀ 10mm or ⌀ 12mm

$\left[.83in\right]$ 8X ⌀ 21mm KNOCKOUT

JUNCTION BOX WITH 1/2" OR 3/4" NPT ADAPTER

SIDE VIEW
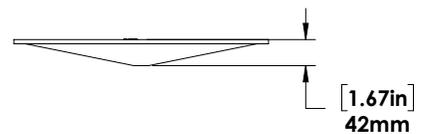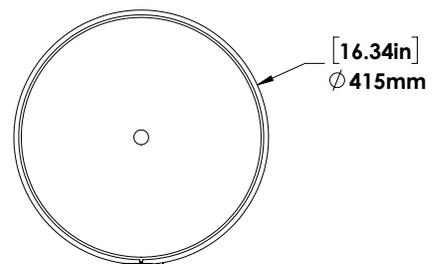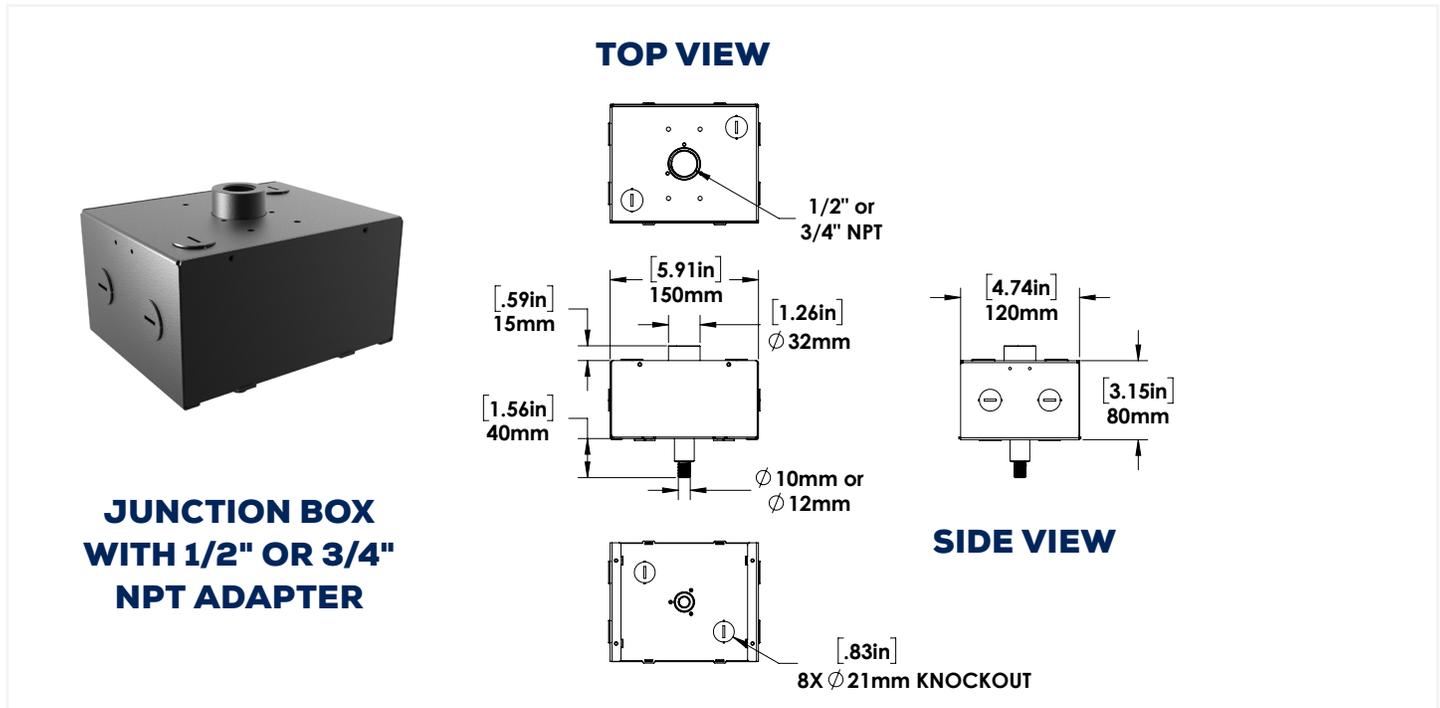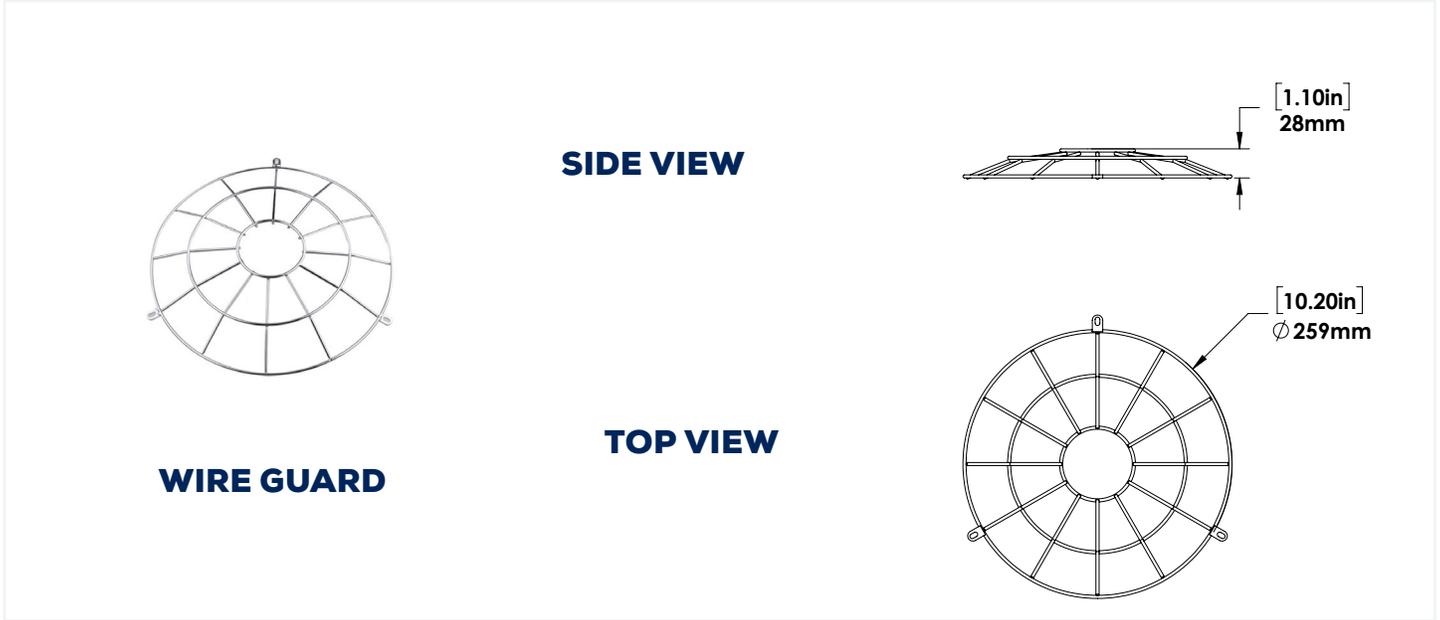
AMPERAGE DRAW & SURGE PROTECTION

	CURRENT (A)					SURGE PROTECTION (kV)	
	120V	208V	240V	277V	347V	120-277V	120-347V
RHB1S-LED100A60	0.88A	0.51A	0.44A	0.38A	0.31A	6kV	
RHB1S-LED150A100	1.32A	0.76A	0.66A	0.57A	0.57A		

LUMEN ADJUSTABLE SETTINGS*

RHB1S-LED100A60			
WATTS	60W	80W	100W
LUMENS	8591	11454	14301
RHB1S-LED150A100			
WATTS	100W	120W	150W
LUMENS	14510	17412	21827

*These lumen values are for 120-277V.

WEIGHT (LBS)*

RHB1S-LED100A60	6.39
RHB1S-LED150A100	

*These weight values are for120-277V.

LUMEN MAINTENANCE

	50,000 HRS	75,000 HRS	100,000 HRS
RHB1S-LED100A60	90.3%	85.7%	81.4%
RHB1S-LED150A100	90.3%	85.7%	81.4%

SPECIFICATIONS

Model Number	Voltage (V)	Max Power (W)	Max Light Output (lm)	Effic y (lm/W)	THD (%)	PF	CCT (K)
RHB1S-LED100A60-B-VK-BLK-DIM-PCL	120-277	100	14301	143.2	15.0	0.900	4000/5000
RHB1S-LED150A100-B-VK-BLK-DIM-PCL	120-277	150	21827	145.1	15.0	0.900	4000/5000
RHB1S-LED100A60-H-VK-BLK-DIM-PCL	120-347	102	14113	138.9	15.0	0.900	4000/5000
RHB1S-LED150A100-H-VK-BLK-DIM-PCL	120-347	160	22079	138.0	15.0	0.900	4000/5000

DIMMING WIRE ACCESSIBILITY:

Dimming wire free to use (Capped when not in use)

2 meter power cord
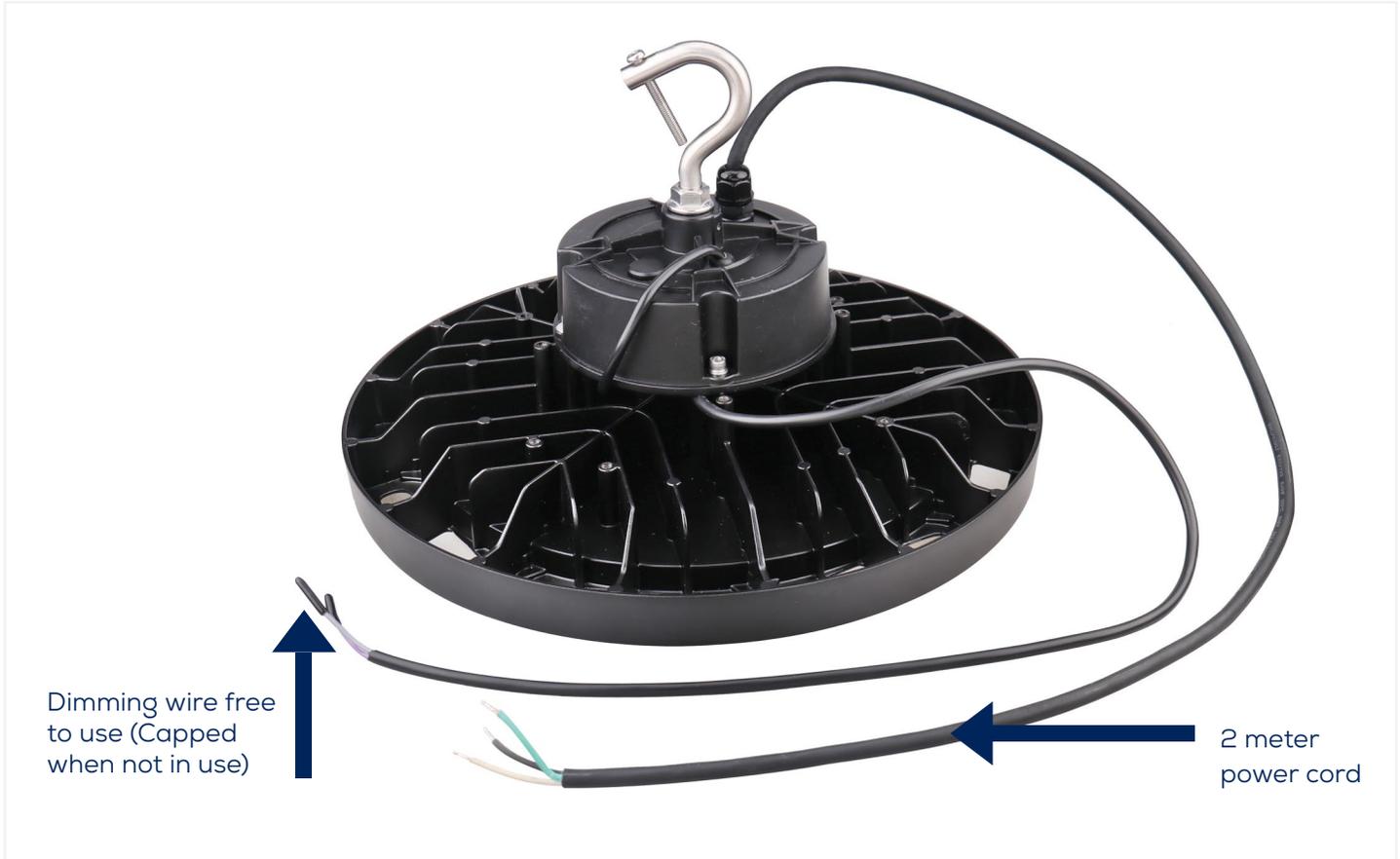
DIMMING WIRE ACCESSIBLE FOR WALL SWITCH WITHOUT THE NEED OF OPENING THE FIXTURE OR CUTTING THE CABLE

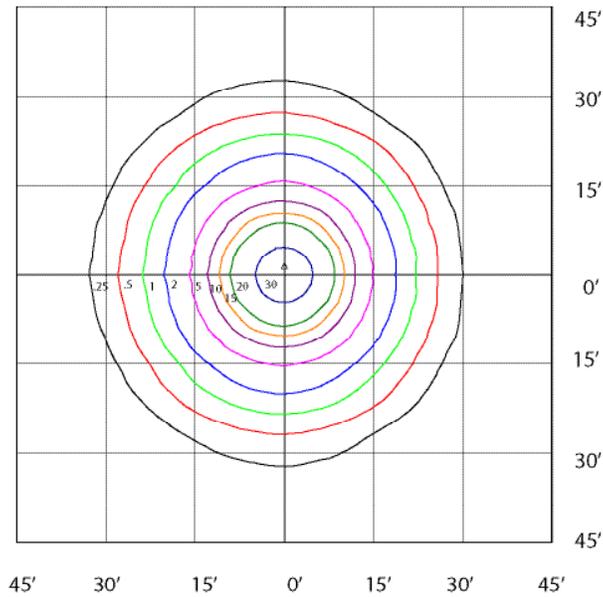Socket for field installed motion sensor/ dimmer

RHB1S-LED150A100-B-VK-DIM (150WATT 4000K)
MOUNTED AT 20 FEET

Total Lumens = 20899   Mounting 20 Feet   Maximum Calculated Value = 26.58 Fc
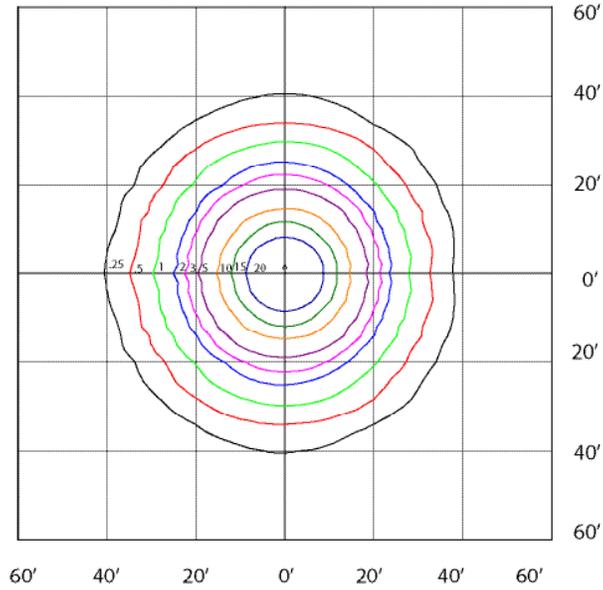
RHB1S-LED100A60-B-VK-DIM (100WATT 4000K)
MOUNTED AT 15 FEET

Total Lumens = 15351   Mounting 15 Feet   Maximum Calculated Value = 34.79 Fc
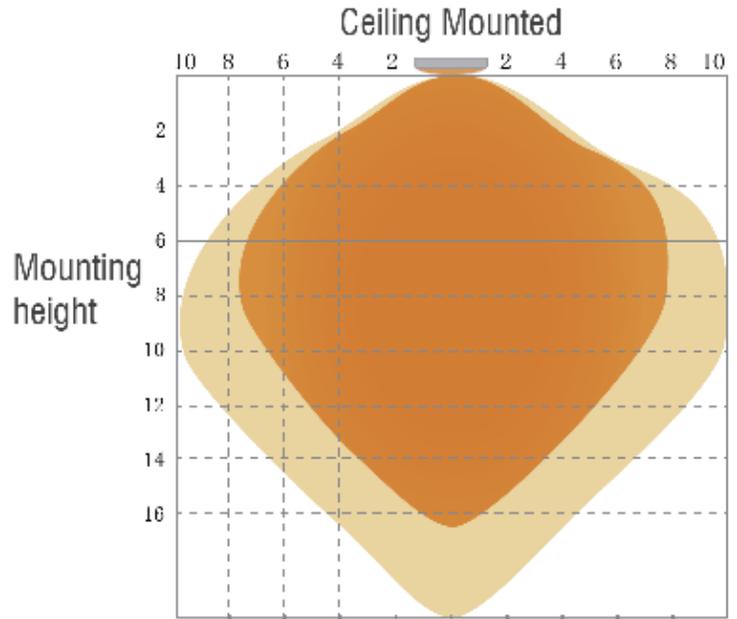
DC MOTION SENSOR/ DIMMER SETTINGS

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 (M)

Ceiling Mounted

Mounting height

DC MOTION SENSOR/DIMMER
REMOTE CONTROL SETTINGS

SPECIFICATIONS		
BUTTON	**FUNCTION**	
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.	
SEND	Uploads the selected remote-control parameters to the light fixture sensor.	
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.	
RESET	Resets the light fixture sensor parameters to the default settings.	
-/+	Press to increase or decrease brightness from 0% to 100%.	
TEST	Press to test the sensor (hold time is only 3s).	

TOP SECTION:
Settings Display Area
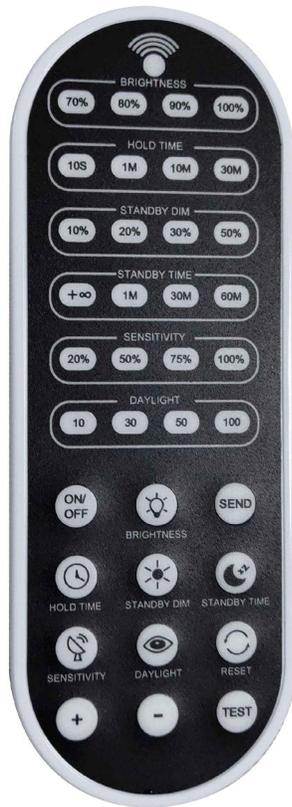
Bottom Section:
Button Setting Area

To switch from motion sensor mode to just 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.

LED EMERGENCY DRIVER

TECHNICAL DATA

ITEM	DATA
Rated Input Voltage	100-277 VAC, 50-60Hz
Input Current	40-150mA
Input Power	8.5W max
Power Factor°	0.6 @ 100VAC
Output Wire (LED load input)	AC 6A, Max. 40W
Output Voltage Range	DC 120-200V
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

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

PROTECTIONS

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

INSTALLATION INSTRUCTIONS

- It is only used for 1-10V dimmable <300W lighting fixtures.
- Please check and confirm all the data and usage surrounding before installation.
- Damp or wet location is OK.
- Please keep it away from any flammable materials with a place of good heat dissipation.
- Please charge the battery consistently for >24 hours for the first time usage to activate the whole battery cells of discharging/charging duration.

REMOTE CONTROL

- If you press the TEST button once, the system will go into discharging mode for 5 seconds then returns to charging mode.
- If you press H-T (Hold test button), the system will go into charging mode and will keep discharging. By pressing it again, the system will stop discharging and go back into working mode.
- The Max remote control distance is 15 meters.
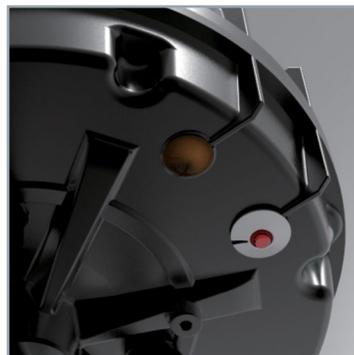
TEST SWITCH

- Emergency conversion Kit will go into emergency mode if test switch is pressed when main supply is on, while it will go into charging mode if test switch is not pressed.
- In emergency mode, press the test switch for 3 seconds to turn off the current emergency state.

LED INDICATOR

- Red stable: charging mode or charging full.
- Red off: main power off or discharging.

ORDERING GUIDE:

| RHB1S | | | VK | BLK | DIM | PCL | | |

Fixture	Wattage	Voltage	Colour Temp.	Finish	Dimming	Lens	NSF Certification	NEMA 4X Certification
	LED100A60	B -120-277V	VK-Colour Selectable (4000K/5000K)	BLK - Matte Black	DIM - 0-10V Dimming	PCL - Polycarbonate Lens	BLANK	BLANK
	LED150A100	H - 120-347V					FS - NSF*	N4X - NEMA 4X*

WATTAGE MAPPING TABLE	
100A60	60W/80W/100W
150A100	100W/120W/150W

*Only available with LED150A100 and H voltage

Ordering Guide For Accessories
Check the items that you wish to order:

- [ ] 080564   RHB1/RHB1S YOKE BLK
- [ ] 002327   RHB1S/RHB2S/RHB3S JUNCTION BOX PENDANT KIT
- [ ] 080902   RHB1S ALUMINUM REFLECTOR
- [ ] 080904   RHB1S POLYCARBONATE REFLECTOR
- [ ] 080905   RHB1S POLYCARBONATE REFLECTOR COVER
- [ ] 002312   RHB1S STEEL WIRE GUARD
- [ ] 080909   DC MOTION SENSOR/DIMMER
- [ ] 080970   DC MOTION SENSOR/DIMMER REMOTE CONTROL
- [ ] 002329   ROUND HIGHBAY 40W 120-277V LED EMERGENCY BBK
- [ ] 002318   ROUND HIGHBAY 40W 120-347V LED EMERGENCY BBK

Note: All accessories complete with hardware for installation