RAB® DESIGN

Linear Highbay
LH4S

The LHS-LED series delivers versatile, high-efficiency linear highbay luminaires with selectable features and a compact design. Durable and contractor-friendly, it's perfect for industrial and commercial applications, replacing HID and fluorescent systems. 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

- ✓ Large Distribution Centers
- ✓ Factories
- ✓ Gymnasiums
- ✓ Service Bays
- ✓ Big-Box Retail

SPECIFICATIONS

PERFORMANCE	
Light Output	Lumen Selectable
	69400/65200/58700/52200 lm
Efficacy	163lm/W
CCT	4000K/5000K (CCT Selectable)
Beam Distribution	Wide (90°x90°)
Replaces up to	1000W MH
CRI	85

ELECTRICAL	
Wattage	440/400/360/320W
Voltage	120-347V
Surge Protection	6kV (Built-in Driver) as per IEC/EN61000-4-5
Power Factor	0.99
THD	<3%
Cord	Pre-installed 10' Power Cable (3x18 AWG)
Battery Backup	9W (Option Available)

CONSTRUCTION	
Housing	Die-cast Aluminum
Paint	Glossy White, Polyester Powder Coat
Lens	Glare-free Polycarbonate
Weight	12.8lbs

AMBIENT OPERATING TEMPERATURE
-40°C to 50°C (-40°F to 122°F)

MOUNTING
Suspension Mount - V-Hooks & Chain (Included), Aircraft Cable Surface Mount, Pendant Mount

CERTIFICATIONS
cULus Listed for Canada and USA, per UL 1598, CSA C22.2 No. 250.0, DLC Premium

CONTROLS	
Dimming	0-10V (Dim to Off) 10%-100%
Sensor	PIR/Microwave Motion Sensor/Dimmer with Remote Control, Bluetooth PIR Motion & Daylight Harvest Sensor
Switch	Bluetooth Line Voltage switch, Bluetooth Battery Powered switch/Handheld Remote

LUMEN MAINTENANCE	
L80	L90
>100,000 hrs	>60,000 hrs

MAX AMPERAGE DRAW (A)	
120V	4.074
208V	2.350
240V	2.037
277V	1.765
347V	1.409

Note: Electrical and light performance data is based on LM79 test reports, measured at maximum wattage, 4000K, and 120V.

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 | IP20 RATED | 5 YEAR WARRANTY

ORDERING GUIDE

LH4S	LED440A320	H	VK	W	WHT	DIM	
Fixture	**Wattage**	**Voltage**	**Colour Temp.**	**Beam Distribution**	**Finish**	**Dimming**	**Battery Backup**
LH4S	LED440A320	H - 120-347V	VK - CCT Selectable (4000K/ 5000K)	W - Wide Beam Distribution (90°x90°)	WHT - White	DIM - 0-10V Dimming	BLANK - No Battery Backup BBK9 - 9W Battery Backup

Default Setting: 440W, 4000K

STOCK CODE

084597	LH4S-LED440A320-H-VK-W-WHT-DIM

INCLUDED IN THE BOX

PRE-INSTALLED 10 FT POWER CORD	
V HOOKS & 6 FT SUSPENSION CHAIN	

ACCESSORIES SOLD SEPARATELY

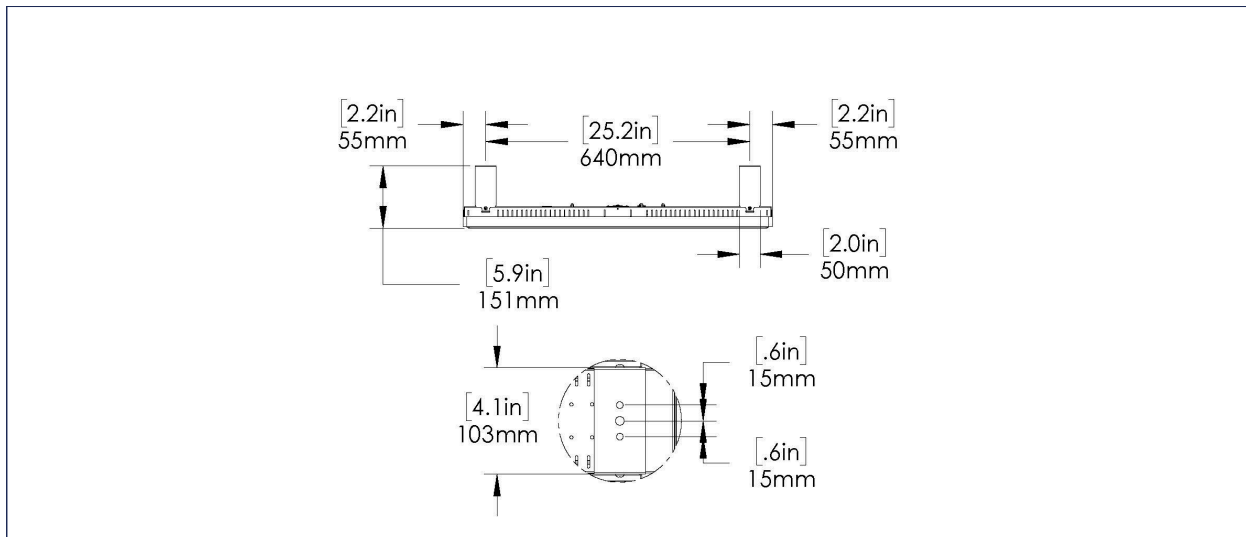| 081960	AIRCRAFT CABLE - 10 FT LENGTH		084210	HIGHBAY BLUETOOTH PIR MOTION/DLH SENSOR & ADAPTER	
084616	LH4S SURFACE MOUNT KIT		084215	BLUETOOTH 3-KEY AC LINE VOLTAGE WALL SWITCH	
084617	LH4S PENDANT MOUNT KIT		084633	BLUETOOTH 5-KEY BATTERY POWERED WIRELESS WALL SWITCH & PLATE[2]	
084618	LH4S WIRE GUARD				
080909	MICROWAVE SENSOR (50 ft max height)[1]				
081300	PIR SENSOR 1 (20ft max height)[1]				
081837	PIR SENSOR 2 (40ft max height)[1]				
080970	MOTION SENSOR REMOTE CONTROL				

[1] Occupancy sensing can be disabled to use as a dimmer only.
[2] Wireless Bluetooth module can also be used as portable handheld remote control.

DIMENSIONS

LH4S FIXTURE
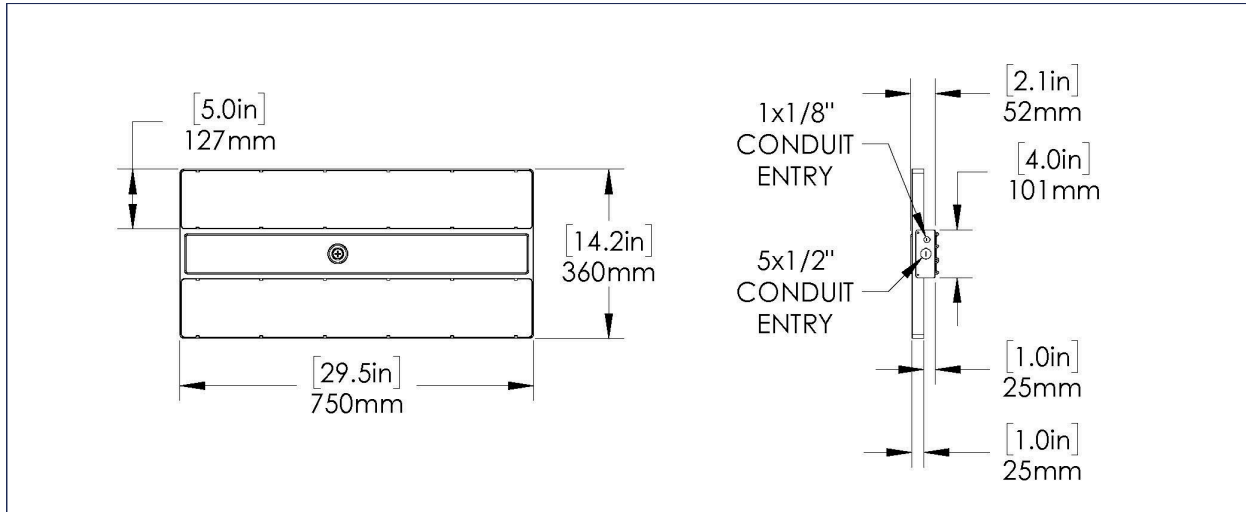
5.0in / 127mm
14.2in / 360mm
29.5in / 750mm

1x1/8" CONDUIT ENTRY
5x1/2" CONDUIT ENTRY
2.1in / 52mm
4.0in / 101mm
1.0in / 25mm
1.0in / 25mm

LH4S WIRE GUARD

2.8in / 70mm
.9in / 22mm
29.9in / 759mm

LH4S SURFACE MOUNT KIT

2.2in / 55mm
25.2in / 640mm
2.2in / 55mm
2.0in / 50mm
5.9in / 151mm
4.1in / 103mm
.6in / 15mm
.6in / 15mm

LH4S PENDANT MOUNT KIT

3/4" CONDUIT ENTRY

[3.4in] 86mm

[3.0in] 77mm

[5.1in] 129mm

[14.8in] 375mm

[14.8in] 375mm

LH4S BATTERY BACKUP

[4.0in] 100mm

[7.6in] 192mm

[1.9in] 48mm

[4.2in] 108mm
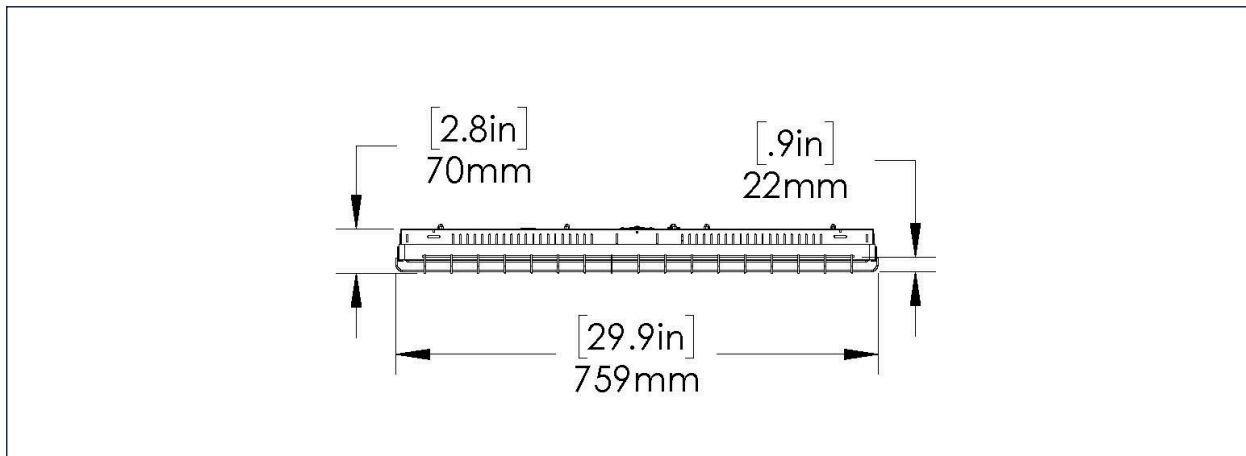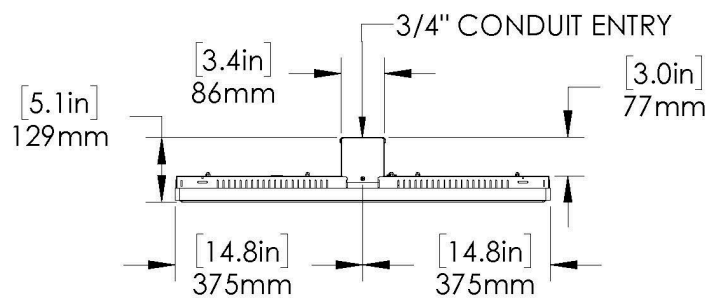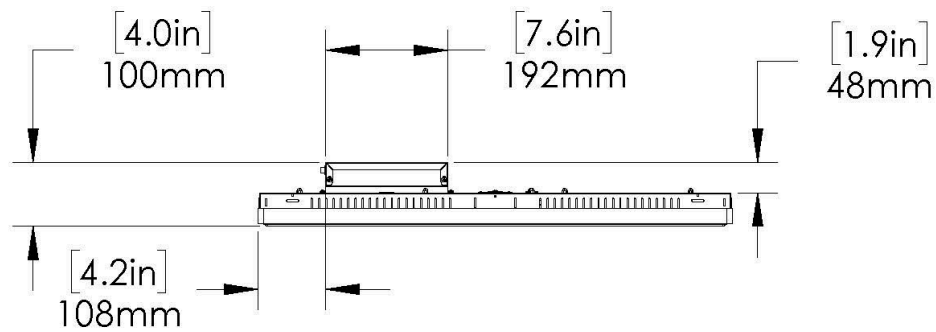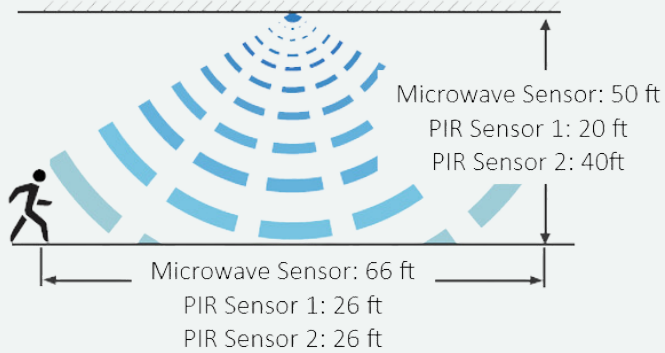
MOTION SENSOR SPECIFICATIONS - PROGRAM USING REMOTE CONTROL	
Sensor Type	Microwave & PIR
Microwave Frequency	5.8GHz +/- 75MHz
Operating Voltage	12VDC
Operating Current	30mA
Output Voltage	0-10V
Stand-by Power	<0.5W
Detection Range	Microwave Sensor: 50 ft PIR Sensor 1: 20 ft PIR Sensor 2: 40ft Microwave Sensor: 66 ft PIR Sensor 1: 26 ft PIR Sensor 2: 26 ft
Maximum Detection Angle	360°
Ambient Operating Temperature[1]	-30℃ to 60℃ (-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.
- [1]When 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)	9W
Recharge Current	0-500mA
Recharge Time	24 to 48 Hrs
Discharge Time	90 min
Ambient Operating Temperature[1]	0℃ to 60℃ (32F to 140F)
Service Life	50,000 Hrs
IP Rating	IP20
Installation	Factory installed in a junction box that comes mounted on the fixture
Light Output[2]	1400 lm

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

RAB DESIGN

CONTROLLED

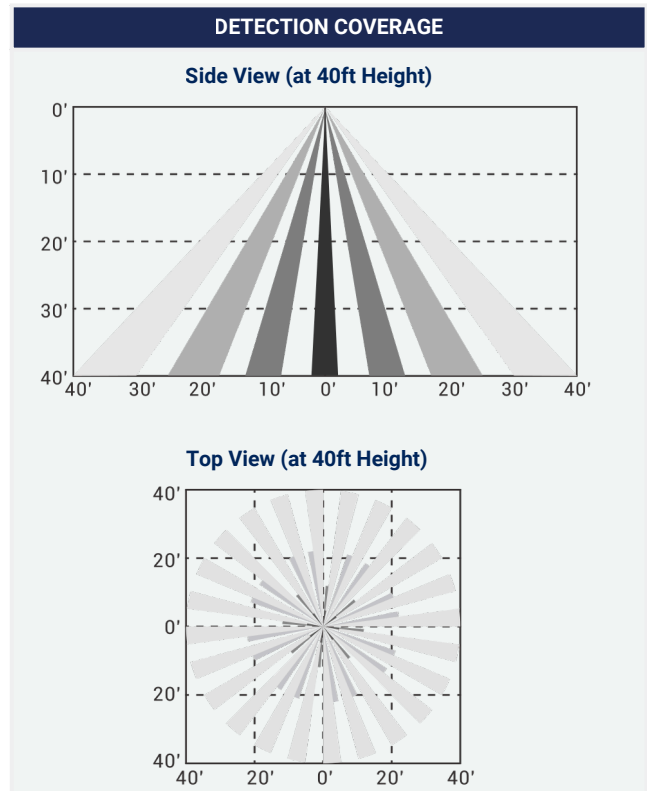## BLUETOOTH PIR MOTION & DAYLIGHT HARVEST SENSOR

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 Temperature[1]	-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]

[1]When 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

DLC LISTED

5 YEAR WARRANTY

SPECIFICATIONS & COMMISSIONING

CONTROL**LED**

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.

Get the App!

GET IT ON Google Play

Download on the App Store
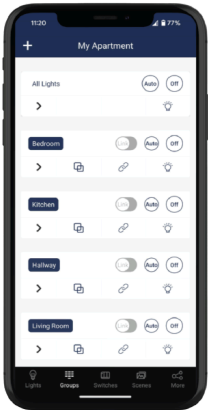
Organized Workspaces:
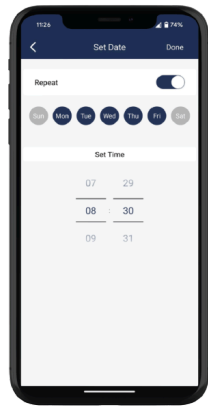Create Zones, Groups and Group Linkages.

Dimming Lights:
Set dim level for groups or individual lights.
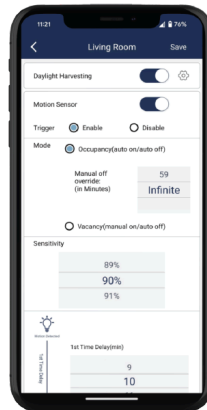
Motion and Daylight Harvest Sensors:
Custom sensor settings for groups or individual lights.

Scenes:
Create custom scenes for different scenarios.

Schedules:
Create custom schedules for recurring events.

Share Access:
Share access using QR codes.

RAB® DESIGN
Engineered by skilled hands, for skilled hands.

PHOTOMETRIC PLOTS

**LH4S-LED440A320-H-VK-W-WHT-DIM(440W 120V WIDE 4000K)
MOUNTED AT 30 FEET**

LUMENS 69432.4   MAX CALCULATED VALUE 36.99