WHALE Field-Adjustable, Industrial-Grade Lighting

RAB

WHALE2 / WHALE2H

PROJECT:

DATE:

TYPE:

PREPARED BY:

WHALE4 / WHALE4H

The extra-wide, vapor-tight, power and CCT-adjustable washdown

100,000 HOURS	0-10V	FIELD ADJUSABLE	IP RATING	POWERED BY LIGHTCLOUD	BATTERY BACKUP	IK10 RATING	WET RATED

KEY FEATURES

- Available in standard & high output models with selectable wattages:
  WHALE2 (2 ft): 90/75/60W, factory default 90W
  WHALE2H (2 ft): 135/100/70W, factory default 135W
  WHALE4 (4 ft): 160/140/120W, factory default 160W
  WHALE4H (4 ft): 265/225/145W, factory default 265W
- Field-adjustable **CCT: 3500/4000/5000K,** factory default **4000K**
- **120-277V, 0-10V dimming**
- Available with **smart controls. Multi-sensor** remote sold separately.
- Battery backup option available
- Standard surface-mount brackets and V-hooks for chain mounting
- UL Listed for **wet** locations
- **NSF** certified, **IP67** rated, and IK09 rated.
- 5-Year, limited warranty

PERFORMANCE

WHALE2	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
WATTAGE	90W			75W			60W		
INPUT WATTS	90.2W	88.0W	90.1W	76.8W	75.1W	76.8W	66.6W	65.3W	66.8W
LUMENS	136,95	14,327	13,927	11,955	12,357	12,152	10,525	10,851	10,762
EFFICACY (LM/W)	151.8	162.8	154.6	155.7	164.5	158.2	158.0	166.2	161.1
CRI	85	86	85	85	86	85	85	86	86
VOLTAGE RATINGS	120-277V								

WHALE2H	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
WATTAGE	135W			100W			70W		
INPUT WATTS	127.7W	123.8W	128.4W	91.5W	89.7W	92.1W	65.4W	64.5W	66.0W
LUMENS	18,795	19,460	19,064	13,989	14,466	14,321	10,310	10,561	10,567
EFFICACY (LM/W)	147.2	157.2	148.5	152.9	161.3	155.5	157.6	163.7	160.1
CRI	84	86	85	84	86	85	84	86	85
VOLTAGE RATINGS	120-277V								

PERFORMANCE (CONTINUE)

WHALE4	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
WATTAGE	160W			140W			120W		
INPUT WATTS	158.0W	153.2W	157.5W	134.6W	131.2W	134.4W	114.6W	112.0W	114.8W
LUMENS	23,775	24,462	23,848	20,738	21,313	20,866	17,991	18,434	18,197
EFFICACY (LM/W)	150.5	159.7	151.4	154.1	162.4	155.3	157.0	164.6	158.5
CRI	85	86	85	85	86	85	85	86	85
VOLTAGE RATINGS	120-277V								

WHALE4H	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
WATTAGE	265W			225W			145W		
INPUT WATTS	252.5W	246.5W	254.1W	214.1W	209.3W	215.5W	136.5W	134.1W	137.4W
LUMENS	36,983	38,081	37,710	32,217	33,135	32,912	21,705	21,860	21,989
EFFICACY (LM/W)	146.5	154.5	148.4	150.5	158.3	152.7	159.0	163.0	160.0
CRI	84	86	85	84	86	85	84	86	85
VOLTAGE RATINGS	120-277V								

TECHNICAL SPECIFICATIONS

COMPLIANCE

UL Listed
Suitable for wet locations

IP Ratings
Ingress Protection rating of IP66 for dust and water

NSF
NSF certified by public health and safety

IK Ratings
IK10 rated for protection against impact

IESNA LM-79 & LM-80 Testing
RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

DLC Listed
This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.

CATALOG#	DLC ID
Stairwell and Passageway Luminaires:	
WHALE2	S-YHRHQR
WHALE2H	S-DC3JVX
WHALE4	S-P3YF6D
WHALE4H	S-3M6RH4
High-Bay Luminaires Commercial & Industrial Buildings:	
WHALE2	S-6J5K4S
WHALE2H	S-WZCD7L
WHALE4	S-WX78XF
WHALE4H	S-LQ560N

CONSTRUCTION

Cold Weather Starting
The minimum starting temperature is -40°C (-40°F)

Cold Weather Starting w/battery back-up
The minimum starting temperature is 0°C (32°F)

Maximum Ambient Temperature
Suitable for use in up to 40°C (104°F)

Maximum Ambient Temperature w/ battery back-up
Suitable for use in up to 60°C (140°F)

Mounting
Stainless steel, surface-mount brackets and v-hooks are supplied.

Housing
Polycarbonate

Lens
Polycarbonate

Gasket
Silicone

Finish
Formulated for high durability and long-lasting color

Green Technology
Mercury and UV free. RoHs-compliant components.

FACTORY DEFAULT

Selectable Wattages
WHALE2 (2 ft): 90/75/60W, factory default 90W
WHALE2H (2 ft): 135/100/70W, factory default 135W
WHALE4 (4 ft): 160/140/120W, factory default 160W
WHALE4H (4 ft): 265/225/145W, factory default 265W

Selectable Color Temperature: 3500/4000/5000K, factory default **4000K**

TECHNICAL SPECIFICATIONS (CONTINUED)

LED CHARACTERISTICS

LEDs
Long-life, high-efficacy, discrete, surface-mount LEDs

Color Uniformity
RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

ELECTRICAL

Drivers:
None insulation,Control circuit class 2, 120-277V, 50/60 Hz,
WHALE2: 90W: 120V: 0.75A, 208V: 0.43A, 240V: 0.38A, 277V: 0.32A
WHALE2: 75W: 120V: 0.63A, 208V: 0.36A, 240V: 0.31A, 277V: 0.27A
WHALE2: 60W: 120V: 0.50A, 208V: 0.29A, 240V: 0.25A, 277V: 0.22A

WHALE2H:135W: 120V: 1.13A, 208V: 0.65A, 240V: 0.56A, 277V: 0.49A
WHALE2H: 100W: 120V: 0.83A, 208V: 0.48A, 240V: 0.42A, 277V: 0.36A
WHALE2H: 70W: 120V: 0.50A, 208V: 0.29A, 240V: 0.25A, 277V: 0.22A

WHALE4: 160W: 120V: 1.33A, 208V: 0.77A, 240V: 0.67A, 277V: 0.58A
WHALE4: 140W: 120V: 1.17A, 208V: 0.67A, 240V: 0.58A, 277V: 0.51A
WHALE4: 120W: 120V: 1.00A, 208V: 0.58A, 240V: 0.50A, 277V: 0.43A

WHALE4H: 265W: 120V: 2.21A, 208V: 1.27A, 240V: 1.10A, 277V: 0.96A
WHALE4H: 225W: 120V: 1.88A, 208V: 1.08A, 240V: 0.94A, 277V: 0.81A
WHALE4H:145W: 120V: 1.21A, 208V: 0.70A, 240V: 0.60A, 277V: 0.52A

Dimming Driver:
Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD / Power Factor:

MODEL# @ 4000K	THD	PF	THD	PF
	120V		277V	
WHALE2 @90W	3.6%	99.8%	3.5%	97.3%
WHALE2H @135W	4.2%	99.8%	8.4%	94.9%
WHALE4 @160W	3.9%	99.8%	10.2%	97.4%
WHALE4H @265W	4.8%	99.9%	9.8%	97.0%

Surge Protection
Ringwave LN4kV/LN-GND 6kV

Battery Backup Light Loss Factor:
Powers the fixture for a minimum of 90 minutes in the event of a power failure

MODEL#	LIGHT LOSS FACTOR
WHALE2/E @60W	0.13
WHALE2/E @75W	0.21
WHALE2/E @90W	0.18
WHALE2H/E @60W	0.13
WHALE2H/E @100W	0.16
WHALE2H/E @135W	0.12
WHALE4/E @120W	0.21
WHALE4/E @140W	0.18
WHALE4/E @160W	0.16
WHALE4H/E @145W	0.17
WHALE4H/E @225W	0.11
WHALE4H/E @265W	0.09

Note: All values are typical (tolerance +/- 10%)

WIRELESS NETWORK LIGHTING CONTROL

Lightcloud-enabled products offer integrated network lighting control for a truly wireless solution that allows you to control RAB's various compatible devices. With RAB's patented Rapid Provisioning technology, devices can be quickly and easily commissioned for residential and commercial applications. Each device can then communicate with other devices in the mesh network. With two Lightcloud systems to choose from, it's easy to implement controls within any application.

DLC system - N1XMLOEATBA (Interior); NHCZ2BIA17L (Exterior)

Learn more at www.lightcloud.com

Lightcloud Blue (/LCB)
• Utilizes Bluetooth Mesh, eliminating the need for a Gateway or Hub.
• Ideal for applications that need basic wireless control such as ON/OFF, dimming, color tuning, Schedules, and SmartShift.
• Download the Lightcloud Blue mobile app for iOS or Android devices.

OCCUPANCY SENSORS

Sensor Type: Passive Infrared (PIR) or Microwave (MVS)

Input Voltage: 12VDC

Operating Frequency: 50/60Hz

Input Current: 30mA

Operating Temperature: -40°F to 140°F (-20°C to 60°C)

Max Mounting Height: 40 ft. (PIR); 50 ft (MVS)

Detection Range: PIR: 40 ft. diameter mounted at 40 ft. (/PIR & /LCBS); MVS: 50 ft. diameter mounted at 50 ft. (/MVS & /LCBS/MVS); PIR20[B][/LCB] and MVS20[B][/LCB] 20 ft. diameter mounted at 9 ft. (sold separately)

Daylight Sensing: The sensor will determine to trigger the light(s) on or not based on the daylight threshold level set.

Default Settings:

Motion Sensitivity: High

Brightness when triggered : 100%

Hold time: 20 minutes

Standby to dim: 20%

Standby time: 1 minute

When vacant: Off

Daylight: Disabled

Adjustable Settings: Settings for Lightcloud Blue-enabled sensors can be adjusted using the mobile app. All other sensors will require MSR1 Remote (sold separately) to adjust the following sensor settings:
Standby to dim: 10%/20%/30%/50%
Standby time: 0s/10s/30s/1min/5min/10min/30min/60min/+∞
Daylight Threshold: 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable

OTHER

Warranty
The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Lifespan
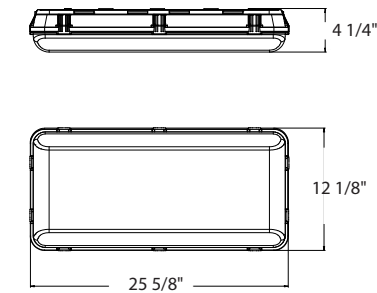100,000-hours LED Lifespan based on IES LM-80 results and TM-21 calculations
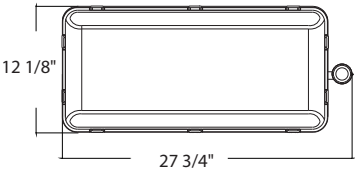
WHALE Field-Adjustable, Industrial-Grade Lighting
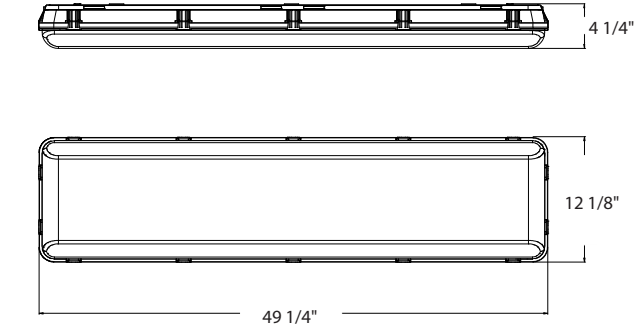
RAB®

DIMENSIONS

WHALE2 / WHALE2H
Weight: 11.6 lbs

4 1/4"

12 1/8"

25 5/8"

Models With Sensor:

12 1/8"

27 3/4"

WHALE4 / WHALE4H
Weight: 23.37 lbs

4 1/4"

12 1/8"

49 1/4"

Models With Sensor:

12 1/8"

51 3/8"
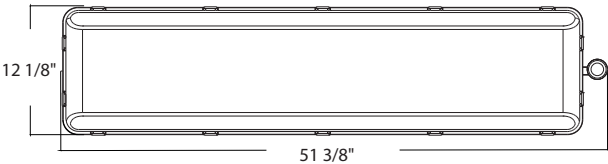
ACCESSORIES

IMAGE	SKU#	UPC	DESCRIPTION
	MSR1	192552026055	MULTI-SENSOR REMOTE CONTROL IP20

ORDERING MATRIX

WHALE Field-Adjustable Linear Washdown Light

Family	Size/Wattages		Mounting		Color Temperature		Finish		Driver		Options	
WHALE												
	2	2ft, 90/75/60W	**BLANK**	Metal Bracket and V- Hooks	**BLANK**	3500/4000/5000K	**BLANK**	Gray	**BLANK**	120-277V, 0-10V Dimming	**BLANK**	No Option
	2H	2ft, 135/100/70W									/E	Battery Backup
	4	4ft, 160/140/120W									/MVS	Microwave Occupancy Sensor
	4H	4ft, 265/225/145W									/PIR	Passive Infrared Occupancy Sensor
											/LCBS	Lightcloud Blue PIR Sensor
											/LCBS/MVS	Lightcloud Blue MVS Sensor
											/MVS/E	Microwave Occupancy Sensor /Battery Backup
											/PIR/E	Passive Infrared Occupancy Sensor /Battery Backup
											/LCBS/E	Lightcloud Blue PIR Sensor /Battery Backup
											/LCBS/MVS/E	Lightcloud Blue MVS Sensor /Battery Backup