# CLHB-RD 100W & 150W Round LED High Bay



Project:	
Type:	
Catalog #:	

#### STANDARD











The CLHB-RD is a round LED high bay luminaire, which is designed to illuminate a wide variety of settings, including commercial, industrial & retail settings such as warehouses, manufacturing plants, sporting venues and big-box retailers. With a die cast aluminum housing and polycarbonate lens, the CLHB-RD provides durability and high performance. High-efficacy, long-life LEDs provide both energy and maintenance cost savings compared to traditional, HID high bays.

#### **FEATURES**

- Available in 4000k (neutral white) and 5000k (cool white) color temperatures.
- Long-life LEDs provide 80,000 hours of operation with at least 70% of initial lumen output ( $L_{70}$ ).
- CLHB-RD-100 provides 13,093 lumens (127 lumens per watt, LPW) at 4000k, and 13,116 lumens (127 LPW) 5000k.\*
- CLHB-RD-150 provides 18,240 lumens (120 LPW) at 4000k, and 18,450 lumens (121 LPW) 5000k.
- Universal 120-277 AC voltage (50-60Hz) is standard. Stepdown transformers are required for 347-480V applications.
- 0-10vdc dimming drivers are standard.
- Watertight, compression-type electrical connectors prevent moisture intrusion.
- Standard mounting bracket and optional mounting accessories provide ceiling and conduit mounting, and up to 100° of adjustability.
- Optional wet-location junction box & bracket (CLHB-RD-JBOX) attaches to luminaire housing, and simplifies wiring connections in wet locations.
- Optional Merrytek occupancy sensor (IP65 rated) and junction box assembly provides a factory-ready, fully-wired luminaire & control package.
- Power factor > 0.90
- Total harmonic distortion < 20%.
- Color rendering index > 80.
- Painted die cast aluminum housing.
- Easy installation in new construction or retrofit.
- Contact factory for other color temperatures and lumen packages. L<sub>70</sub> hours are IES TM-21-11 calculated hours.

### **WARRANTY & LISTINGS**

- cULus listed for wet locations in ambient temperatures from -20°C to 50°C (-4°F to 122°F).
- IP65 rated for ingress protection.
- DLC standard approved.
- IK 7 rated for protection from external impacts.
- Complies with FCC Part 15, class B.
- Complies with EN61000-4-5, surge immunity protection (4kV).
- 5-year warranty of all electronics and housing.

#### **MOUNTING OPTIONS**

- Suspension from pre-installed mounting hook (cast iron M10 eyebolt) with locking set screw is standard.
- Ceiling-mounted installation (using optional yoke mounting bracket, CLHB-RD-YOKE) provides up to 100° of adjustability.
- Two ways to mount luminaire to electrical conduit:
  - Attach conduit (½" NPS) to optional yoke mounting bracket (CLHB-RD-YOKE).
  - Optional snap hook (CLHB-RD-PSH) attaches to electrical conduit (34" NPS).



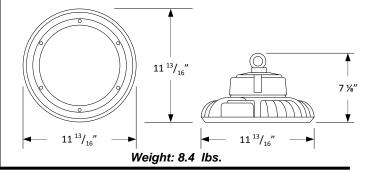
Ceiling-Mounted (CLHB-RD-YOKE)

(CLHB-RD-YOKE)

Conduit-Mounted (CLHB-RD-PSH)

Adjustable

#### **DIMENSIONS**



#### **ORDERING INFORMATION**

Example: CLHB-RD-					
Model	Luminaire Watts	Luminaire Lumens	Lumens Per Watt	Color Temperature	Options (Order Separately)*
CLHB-RD-100	103	13,093 13,116	127 127	40 = 4000k 50 = 5000k	CLHB-RD-PSH = Snap hook CLHB-RD-YOKE = Yoke mount bracket
CLHB-RD-150	152	18,240 18,450	120 121	40 = 4000k 50 = 5000k	CLHB-RD-JBOX = Junction box & mounting bracket  CLHB-RD-OSJBOX = Merrytek IP65-Rated, microwave occupancy sensor, junction box & mounting bracket

Luminaire must be voke mounted if installing the JBOX or OSJBOX.

CLHB-RD With Waterproof Junction Box, Mounting Bracket &

Merrytek Sensor



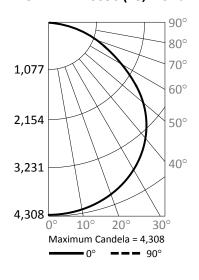
### **ELECTRICAL DATA**

Model	Color CRI <sup>1</sup>	Luminaire	Luminaire	Lumens/	Input	Input Current (A)		Power	THD <sup>3</sup>	L <sub>70</sub> .		
Wiodei	Temp.	CKI	Lumens	Watts	Watt	Voltage <sup>2</sup>	120V	240V	277V	Factor	1110	Hours <sup>4</sup>
CLHB-RD-10040 CLHB-RD-10050 CLHB-RD-15040 CLHB-RD-15050	4000k 5000k 4000k 5000k	>80 >80 >80 >80 >80	13,093 13,116 18,240 18,450	103 103 152 152	127 127 120 121	120-277 120-277 120-277 120-277	0.86 0.86 1.27 1.27	0.43 0.43 0.63 0.63	0.37 0.37 0.55 0.55	>90% >90% >90% >90%	<20% <20% <20% <20%	80,000 80,000 80,000 80,000

<sup>&</sup>lt;sup>1</sup> Color rendering index.

### PHOTOMETRIC DATA

### CLHB-RD-10050 (13,116 Lumens)



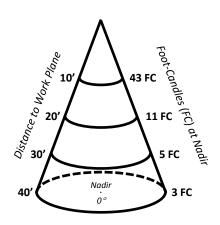
### Candlepower Summary

	-	
	0°	90°
0°	4,308	4,308
10°	4,265	4,259
20°	4,089	4,073
30°	3,788	3,758
40°	3,345	3,305
50°	2,755	2,727
60°	1,918	1,878
70°	1,012	974
80°	220	199
90°	2	3

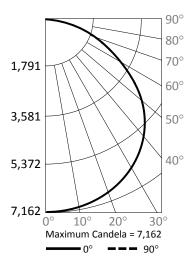
#### **Zonal Lumen** Summary

Zone	Lumens	% Fixture
0° - 10°	636	4.9%
0° - 20°	2,527	19.3%
0° - 30°	5,561	42.4%
0° - 40°	9.158	69.8%
0° - 50°	11,544	88.0%
0° - 60°	12,434	94.8%
0° - 70°	12,870	98.1%
0° - 80°	13,066	99.6%
0° - 90°	13,090	99.8%
90°- 180°	26	0.2%
0° - 180°	13,116	100.0%

### **Cone of Light**



#### CLHB-RD-15050 (18,450 Lumens)



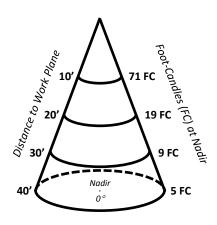
#### Candlepower Summary

	-	
	0°	90°
0°	7,162	7,162
10°	7,105	7,127
20°	6,837	6,839
30°	6,357	6,373
40°	5,626	5,623
50°	4,610	4,626
60°	3,223	3,233
70°	1,644	1,683
80°	273	332
90°	1	1

#### **Zonal Lumen** Summary

Zone	Lumens	% Fixture
0° - 10°	620	3.4%
0° - 20°	2,415	13.1%
0° - 30°	5,184	28.1%
0° - 40°	8,594	46.6%
0° - 50°	12,190	66.1%
0° - 60°	15,334	83.1%
0° - 70°	17,491	94.8%
0° - 80°	18,343	99.4%
0° - 90°	18,409	99.8%
90°- 180°	41	0.2%
0° - 180°	18.450	100.0%

**Cone of Light** 



<sup>&</sup>lt;sup>2</sup> All 50-60Hz.

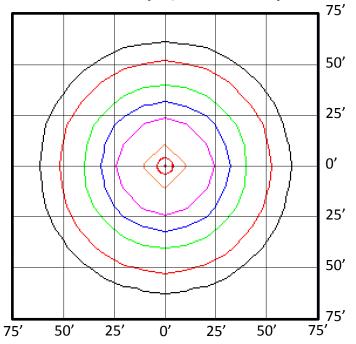
<sup>&</sup>lt;sup>3</sup> Total harmonic distortion.

 $<sup>^4</sup>$  L $_{70}$  refers to the number of hours at which lumen output declines to 70% of the initial level. L $_{70}$  hours are IES TM-21-11 calculated hours.

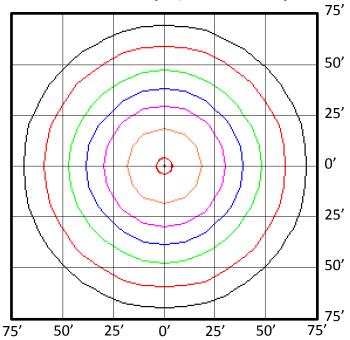


### PHOTOMETRIC DATA

## CLHB-RD-10050 (13,116 Lumens)



### CLHB-RD-15050 (18,450 Lumens)



#### **Foot Candles**

**5.0** 2.0 **1.0** 0.5

- 0.1

### Notes:

- Isofootcandle plots depict initial footcandles at grade.
- Gridlines represent units of mounting height of 25 feet.