

Catalog # :

Project :

Prepared By :

Date :



CHB Compact High Bay



The CHB Compact High Bay is designed for a wide variety of commercial, industrial and retail settings such as warehouses, manufacturing plants, sporting venues, big-box stores and more. The housing material and finish provide high levels of durability and performance. Energy and maintenance cost savings are achievable via the CHB's high efficacy

Features & Specifications

Optical System

- Optional Less Lens version provides high efficacy.
- Use of closely spaced medium-power, high brightness chips provide uniform lens luminance with no dead spots.
- Available in 4000K color temperature.
- Minimum CRI of 80.

Electrical

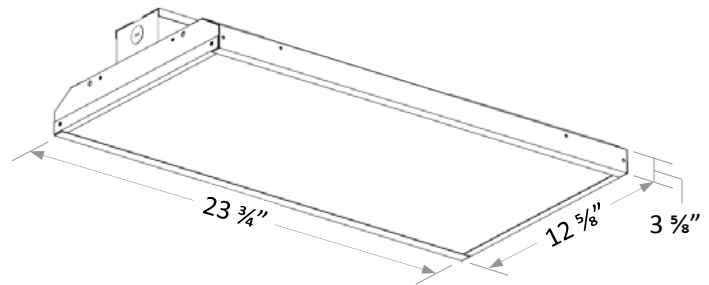
- High-performance drivers feature over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz
- L70 Calculated Life: >122K Hours
- Total harmonic distortion: <20%
- Operating temperature: -20°C to +50°C (-4°F to +122°F), 30°C (86°F) when equipped with EM option, 35°C (95°F) if surface mounted.
- Power factor: >.90
- Optional 120v-277v integral emergency battery pack is available to meet critical life safety lighting requirements. The 90-minute batteries provide constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance.
- Surge protector is integral to driver and not field replaceable. Device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

Construction

- Rigid housing is die-formed thick gauge steel for consistency and strength.
- Access panel provides quick access to wiring and driver connections.
- All metal parts are painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance white (minimum 92%) polyester powder.
- Shipping weight: 13 lbs. in carton.



Dimensions





Features & Specifications (cont.)

Installation

- Chain mounting with V-hooks is standard.
- Optional surface mounting kit provides attachment to flat ceilings.
- Optional pendant mounting kit provides pendant attachment to junction boxes.
- Optional cable mounting kits provide suspension at two lengths (i.e., 3 & 5 meters).

Warranty

- LSI LED Fixtures carry a 5-year warranty.
- 1 Year warranty on optional Battery Back Up. Test regularly in accordance with local codes.

Listings

- cETLus listed to UL 1598 and UL 8750.
- RoHS Compliant.
- Suitable For Damp Locations.
- DLC qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Performance

DELIVERED LUMENS*				
Lumen Package	CRI	4000K CCT		
		Delivered Lumens	Efficacy	Wattage
18L DA	80	17186	130	132
18L LL	80	18729	142	132
24L DA	80	22679	130	174
24L LL	80	24821	142	174

*LED Chips are frequently updated therefore values are nominal

RECOMMENDED LUMEN MAINTENANCE - 24L					
AMBIENT TEMP C	INITIAL ²	25K HR ²	50K HR ²	75K HR ³	100K HR ³
0 C	100%	94%	87%	81%	75%
10 C	100%	94%	87%	81%	75%
20 C	100%	94%	87%	81%	75%
25 C	100%	94%	87%	81%	75%
35 C	100%	92%	85%	78%	72%
40 C	100%	89%	79%	69%	62%

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

RECOMMENDED LUMEN MAINTENANCE - 18L					
AMBIENT TEMP C	INITIAL ²	25K HR ²	50K HR ²	75K HR ³	100K HR ³
0 C	101%	94%	87%	81%	75%
10 C	101%	94%	87%	81%	75%
20 C	101%	94%	87%	81%	75%
25 C	101%	94%	87%	81%	75%
35 C	101%	94%	87%	81%	75%
40 C	101%	94%	87%	81%	75%
50 C	100%	93%	86%	80%	74%

- 1 - Lumen maintenance values at 25C are calculated per TM-21 based on LM-80 data and in-situ testing.
- 2 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times the IESNA LM-80-08 total test duration for the device under testing.
- 3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80-08 total test duration for the device under testing.



Luminaire Ordering Guide

TYPICAL ORDER EXAMPLE: **CHB LED 24L DL UNV DIM 40 EM10**

Family/ Size	LED Gen	Lumen Package	Lens	Voltage	Driver	Color Temperature	Options	Packaging
CHB	LED	24L - 24,000 Lumens ^{1,2}	LL - Less Lens DA - Diffused Acrylic	UNV - Universal Voltage (120-277V)	DIM - Dims to 10% (0-10v dimming)	40 - 4000K	EM10 - 10 Watt Emergency Battery ³C - 3' 120V Cord (No Plug) ³T - 3' 120V Cord & Plug ³E - 3' 208V Cord & Plug ³F - 3' 240V Cord & Plug ³S - 3' 277V Cord & Plug	Blank - Unit

FOOTNOTES:

- 1 - No lens
- 2 - Diffused lens
- 3 - Also Available in 6', 10', 15' and 20' lengths

Accessory Ordering Information (Accessories are field installed)

Nomenclature	Description	Part Number
WG	Wire Guard Kit	689137
PMK	Pendant Mount Kit	689138
SMK6	Surface Mount Kit	689139
HCH10	Cable Mount Kit (10')	460149
HCH15	Cable Mount Kit (15')	460772

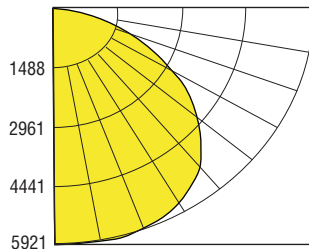


Photometry

All published luminaire photometric testing performed to IESNA LM-79 standards by NVLAP, certified laboratory. ISO footcandle plots below demonstrate the CBR7 light patterns only. Not for total fixture output. For complete specifications and IES files, see website.

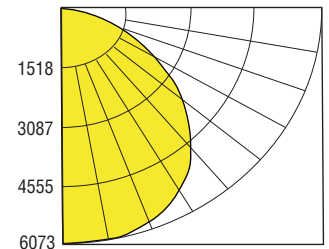
CHB 18L LL 40

ZONAL LUMEN SUMMARY		
Zone	Lumens	% of Luminaire
0-20	2,213	11.8%
0-30	4,826	25.8%
0-40	8,112	43.3%
0-60	14,926	79.7%
0-80	18,536	99.0%
0-90	18,728	100.0%
10-90	18,167	97.0%
20-40	5,899	31.5%
20-50	9,423	50.3%
40-70	9,251	49.4%
60-80	3,610	19.3%
70-80	1,174	6.3%
80-90	192	1.0%
90-180	0	0.0%
0-180	18,728	100.0%



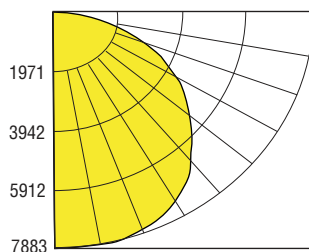
CHB 18L DA 40

ZONAL LUMEN SUMMARY		
Zone	Lumens	% of Luminaire
0-20	2,255	13.1%
0-30	4,860	28.3%
0-40	8,024	46.7%
0-60	13,982	81.4%
0-80	16,922	98.5%
0-90	17,186	100.0%
10-90	16,611	96.7%
20-40	5,769	33.6%
20-50	8,982	52.3%
40-70	7,884	45.9%
60-80	2,940	17.1%
70-80	1,014	5.9%
80-90	264	1.5%
90-180	0	0.0%
0-180	17,186	100.0%



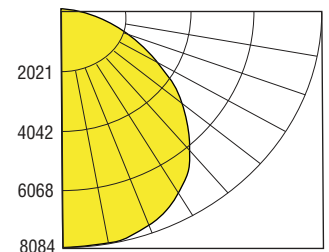
CHB 24L LL 40

ZONAL LUMEN SUMMARY		
Zone	Lumens	% of Luminaire
0-20	2,946	11.9%
0-30	6,422	25.9%
0-40	10,815	43.6%
0-60	19,881	80.1%
0-80	24,580	99.0%
0-90	24,821	100.0%
10-90	24,074	97.0%
20-40	7,869	31.7%
20-50	12,585	50.7%
40-70	12,202	49.2%
60-80	4,700	18.9%
70-80	1,564	6.3%
80-90	241	1.0%
90-180	0	0.0%
0-180	24,821	100.0%



CHB 24L DA 40

ZONAL LUMEN SUMMARY		
Zone	Lumens	% of Luminaire
0-20	3,000	13.2%
0-30	6,464	28.5%
0-40	10,667	47.0%
0-60	18,523	81.7%
0-80	22,344	98.5%
0-90	22,679	100.0%
10-90	21,913	96.6%
20-40	7,667	33.8%
20-50	11,917	52.5%
40-70	10,368	45.7%
60-80	3,822	16.9%
70-80	1,310	5.8%
80-90	334	1.5%
90-180	0	0.0%
0-180	22,679	100.0%





Occupancy Sensor Specifications (OCSUE)



Electrical

- Input Voltage: 120/227/347/VAC
- Operational Frequencies: 50/60Hz
- Wire Designation: Line - Black, Load - Red, Neutral - White
- Load Rating:
 - 800VA@120VAC
 - 1200VA@277VAC
 - 1500VA@347VAC
- Mounted: 1/4 HP Motor Load @ 120V

Environmental

- Operating Temperature Range: 14°F to 160°F

Construction

- High Impact Housing
- Injection Molded Plastic
- Color Coded Wire Leads are 42" Long

Specifications

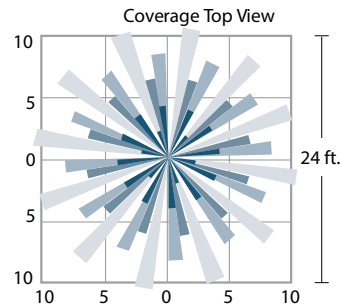
- Size: 3.5"W x 3.5"H x 1.25"D (8.89cm x 8.89cm x 3.175cm)
- Color: White
- UL and cUL certified, Photoelectric Switch, CEC Title 24 Compliant

Controls

Timer Setting: 30 seconds - 20 minutes

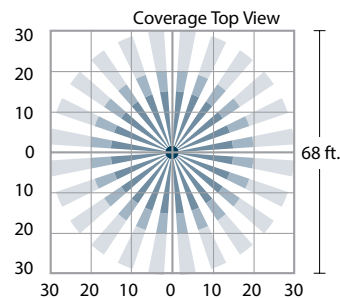
Range & Coverage

The 360° PIR lens provides a 2:1 spacing to mounting height coverage under 25 ft. mounting and a 1.5:1 for heights up to 40 ft. mounting. The aisle lens is designed to provide detection of 60 ft. long by 20 ft. wide for heights up to 40 ft. mounting.



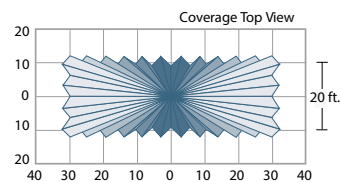
High Bay Lens

Typical Mounting Height: 20-40'
 Optimal Coverage
 24' diameter at 20' height;
 increased coverage density
 Application
 high bay, open area



Low Bay Lens

Typical Mounting Height: 8-20'
 Optimal Coverage
 40' diameter at 20' height;
 increased coverage density
 Application
 low bay, open area



Aisle Lens

Typical Mounting Height: 20-40'
 Optimal Coverage
 60' linear x 20' width
 Application
 high bay, aisle ways

Note: Ships standard with all three lens configurations

