

HBC4

LED Low Bay / High Bay

Product Description

The HBC4 LED Circular Low Bay/High Bay is a high-performance fixture that produces an output greater than 135 lumens per watt, includes an integrated socket for a field install motion sensor, 90-degree optic, and excellent color rendering at >80CRI. The die cast aluminum heatsink design allows for a lightweight unit and with the multiple mounting options and accessories, the fixture can address a variety of applications. With consistent light distribution, this fixture is perfect for environments such as grocery stores, gymnasiums, big box retail, and warehouse spaces.

Construction

- Ultra-slim construction with fully integrated driver on 100W and 150W fixtures
- Off-board drivers for 200W, 240W, 300W & 400W fixtures to manage heat
- Vented aluminum heatsink provides superior cooling while reducing fixture weight
- Polyester powder coat

Optical System

- High efficiency LEDs with 90° polycarbonate optic
- 90° polycarbonate reflector available
- Polycarbonate glare shields available
- 90° aluminum reflector available
- Utilizes advanced LED technology and available in 4000K and 5000K
- Standard 80 CRI to improve safety and color definition in public places

Electrical

- Input voltage of 120-277VAC
- Power factor: >0.9
- THD < 20%
- Luminaire surge protection level: designed to withstand up to 6kV ring wave and 6kV/3kA combination wave per ANSI C82.77-5-2017 requirements for high bay luminaires.
- 6ft power cord and 3ft control (0-10 dimming & 12VDC output) cord standard
- Operating temperature range: -40° to 122°F (-40° to 50°C), -22° to 122°F (-30° to 50°C) with sensor installed.

Controls

- Sensor socket pre-installed on every fixture
- Field installable multifunction MW or PIR sensor available
- Standard full-range dimming with compatible 0-10VDC dimmers
- 12VDC output provides power to off-board sensors

Mounting and Installation

- Includes hook with locking bolt for simple, secure mounting
- 100W-240W : M10 thread, 300-400W: 1/2NPT thread
- 3/4" NPT pendant adapter available
- Yoke accessory available
- Wire guard at lens location available
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

Listings

- cULus 1598 Listed for wet locations
- DLC 5.1 Premium listed
- IP65 rated
- NSF/ANSI 2 Splash Zone certified
- RoHS compliant
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- TM-21 Reported L70(9k) life >54,000 hours
- LM-79, LM-80 testing performed in accordance with IESNA standards
- UL impact test rated IK08/5 joules with wire guard in place

Warranty

- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)

Project

Catalog

Type

Date



HBC4
100W, 150W, 200W
240W, 300W, 400W
LED Low Bay/High Bay



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Ordering Information

Example: HBC4150U508BK

Series	Version	Wattage	Voltage	CCT's	CRI	Finish
HBC	4	100 (102W - 15000lm)	U (120-277VAC)	40 (4000 K)	8 (80+)	BK (Black)
		150 (152W - 21500lm)	H (277-480VAC)	50 (5000 K)		WH (White)
		200 (200W - 28000lm)				
		240 (241W - 34500lm)				
		300 (297W - 40500lm)				
		400 (392W - 53700lm)				

Specifications and dimensions subject to change without notice.

Optic Accessories

accessories sold separately

90° Aluminum Reflector (100-200W)	HBC4100-200RFLAL
90° Aluminum Reflector (240W)	HBC4240RFLAL
90° Aluminum Reflector (300/400W)	HBC4300400RFLAL
90° Polycarbonate Reflector (100-200W)	HBC4100-200RFLPC
90° Polycarbonate Reflector (240W)	HBC4240RFLPC
Glare Shield for PC Reflector (100-200W)	HBC4100-200GSPC
Glare Shield for PC Reflector (240W)	HBC4240GSPC
Wire Guard for Fixture (100-200W)	HBC4100-200WG
Wire Guard for Fixture (240W)	HBC4240WG
Wire Guard for Fixture (300/400W)	HBC4300400WG



HBC4100-200RFLAL
90° Aluminum Reflector

17.2 in Ø x 6.5 in H
(438 x 164 mm)



HBC4240RFLAL
90° Aluminum Reflector

17.2 in Ø x 7.2 in H
(438 x 182 mm)



HBC4300400RFLAL
90° Aluminum Reflector

23.6 in Ø x 8.0 in H
(599 x 204 mm)



HBC4100-200RFLPC
90° Polycarbonate Reflector

17.2 in Ø x 6.5 in H
(411 x 160 mm)



HBC4240RFLPC
90° Polycarbonate Reflector

17.2 in Ø x 7.2 in H
(411 x 160 mm)



HBC4100-200GSPC
Polycarbonate Glare Shield

16.0 in Ø x 1.6 in H
(407 x 40 mm)



HBC4240GSPC
Polycarbonate Glare Shield

16.0 in Ø x 1.6 in H
(407 x 40 mm)



HBC4100-200WG
Fixture Wire Guard

10.8 in Ø x 1.3 in H
(275 x 34 mm)



HBC4240WG
Fixture Wire Guard

12.4 in Ø x 2.1 in H
(315 x 53 mm)



HBC4300400WG
Fixture Wire Guard

15.2 in Ø x 2.1 in H
(385 x 53 mm)

Mounting Accessories

3/4" NPT Pendant Adapter (100-240W)	HBC4100-240PEND
3/4" NPT Pendant Adapter, White (100-240W)	HBC4100-240PENDWH
3/4" NPT Pendant Adapter (300/400W)	HBC4300400PEND
Yoke Mount (100-200W)	HBC4100-200YOKE
Yoke Mount - White (100-200W)	HBC4100-200YOKEWH
Yoke Mount (240W)	HBC4240YOKE
Yoke Mount - White (240W)	HBC4240YOKEWH



HBC4100-200YOKE
Yoke Mount Kit
5.9" H x 8.1" L x 1.8" W
(150 x 207 x 46mm)



HBC4240YOKE
Yoke Mount Kit
6.7" H x 10.1" L x 1.8" W
(170 x 256 x 46mm)

Motion Sensor Accessories (see specsheet for full information)

PIR Motion Sensor (all models)	HBC4SENSORPIR
Microwave Motion Sensor (all models)	HBC4SENSORMW
Remote Control for Sensors	HBC4REMOTE
HBC DAYLIGHT/OCC Sensor V2	HBC-MWOSR2
MWOS360R2 Handheld Remote	MWOS360R2-REMOTE
Bracket for EMB w/Sensor	HBC4-EMB400-MWOSR2-BRACKET

Emergency Accessories (see specsheet for full information)

40W Emergency Pack	EMB4001UNVBK
40W Emergency Remote Control	EMB4001REMOTE



HBC4100-240PEND
M10 to 3/4" NPT Pendant Adaptor
1.2" Ø x 1.3" L (30 x 32mm)



HBC4300400PEND
1/2" NPT to 3/4" NPT
Pendant Adaptor
1.0" Ø x 1.3" L (26 x 32mm)

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EMB400 Details



The NICOR EMB400 is an LED emergency driver for field installations. It enables normal and emergency operation of an LED fixture up to 300W that utilize 0-10V dimming or 40W non-dimming. During a power failure, the unit activates emergency mode to maintain constant output power to the fixture for a minimum of 90 minutes without light degradation. The unit contains a lithium battery, charger, and converter circuit in a single housing and features a built-in junction box for simple installation. The EMB400 also features automatic monthly and annual self-testing features with unit status communicated via the illuminated test button.



Optional remote test controller

Performance Data

Model Number	Normal Operation			40W Emergency
	Lumens	Watts	Lumens/Watt	Lumens
HBC4100U40K8	14945	102	147	5880
HBC4100U50K8	15157		149	5960
HBC4150U40K8	21549	152	142	5680
HBC4150U50K8	21851		144	5760
HBC4200U40K8	27998	200	140	5600
HBC4200U50K8	28396		142	5680
HBC4240U40K8	34446	241	143	5720
HBC4240U50K8	34935		145	5800
HBC4300U40K8	40557	297	137	5480
HBC4300U50K8	41133		139	5560
HBC4400U40K8	53747	392	137	5480
HBC4400U50K8	54510		139	5560

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Lumens v. Ambient Temperature		
Ambient °C	Ambient °F	Lumen Multiplier
-40	-40	1.15
-35	-31	1.12
-30	-22	1.10
-25	-13	1.0
-20	-4	1.05
-15	5	1.04
-10	14	1.04
-5	23	1.03
0	32	1.03
5	41	1.03
10	50	1.02
15	59	1.01
20	68	1.00
25	77	1.00
30	86	0.98
35	95	0.96
40	104	0.94
45	113	0.92
50	122	0.90

Ambient Temperature Ratings			
Model Number	Normal	Sensor	EM
HBC4100	-40°- 122°F (-40°- 50°C)	-22°-122°F (-30°- 50°C)	14°-122°F (-10°- 50°C)
HBC4150			
HBC4200			
HBC4240			
HBC4300			
HBC4400			

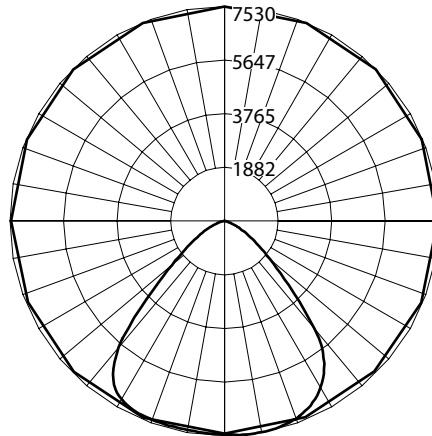
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Photometric Data

HBC4 100W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	102.0
Delivered Lumens (Lm)	15157
System Efficacy (Lm/W)	148.6
Correlated Color Temp (K)	5072
Color Rendering Index (CRI)	82
Beam Angle	88.8
Spacing Criteria	1.34



Cone of Light Tabulation

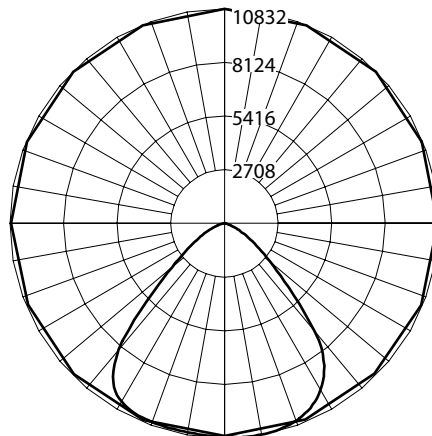
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	33.3	29.4
17	25.9	33.3
20	18.7	39.2
23	14.2	45.0
25	12.0	49.0
28	9.6	54.8
30	8.3	58.8

Data Multipliers

4000K	0.986
AL Reflector	0.945
PC Reflector	0.979
PC Reflector & Shield	0.862

HBC4 150W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	151.7
Delivered Lumens (Lm)	21851
System Efficacy (Lm/W)	144.0
Correlated Color Temp (K)	5078
Color Rendering Index (CRI)	84
Beam Angle	88.3
Spacing Criteria	1.39



Cone of Light Tabulation

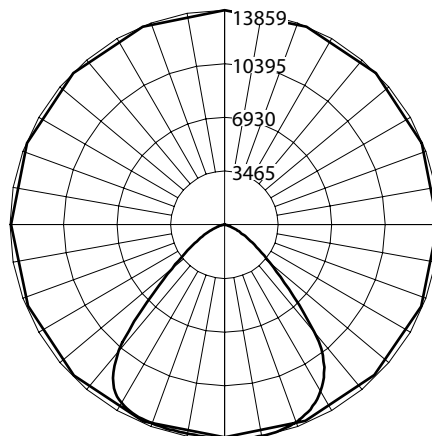
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	48.0	28.8
17	37.4	32.7
20	27.0	38.4
23	20.4	44.2
25	17.3	48.0
28	13.8	53.8
30	12.0	57.6

Data Multipliers

4000K	0.986
AL Reflector	0.945
PC Reflector	0.979
PC Reflector & Shield	0.862

HBC4 200W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	199.9
Delivered Lumens (Lm)	28396
System Efficacy (Lm/W)	142.1
Correlated Color Temp (K)	4995
Color Rendering Index (CRI)	84
Beam Angle	88.8
Spacing Criteria	1.42



Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	59.8	29.4
17	46.5	33.3
20	33.6	39.2
23	25.4	45.0
25	21.5	49.0
28	17.2	54.8
30	15.0	58.8

Data Multipliers

4000K	0.986
AL Reflector	0.945
PC Reflector	0.979
PC Reflector & Shield	0.862

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

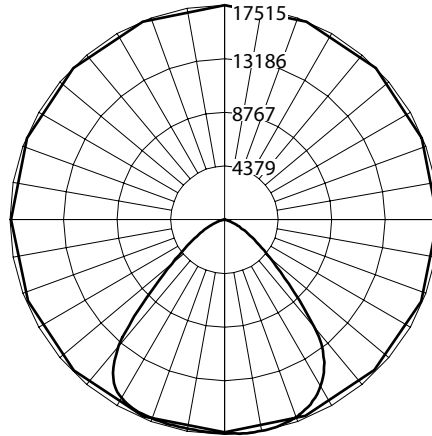
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Photometric Data

HBC4 240W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	241.4
Delivered Lumens (Lm)	34935
System Efficacy (Lm/W)	144.7
Correlated Color Temp (K)	5091
Color Rendering Index (CRI)	84
Beam Angle	87.5
Spacing Criteria	1.28



Cone of Light Tabulation

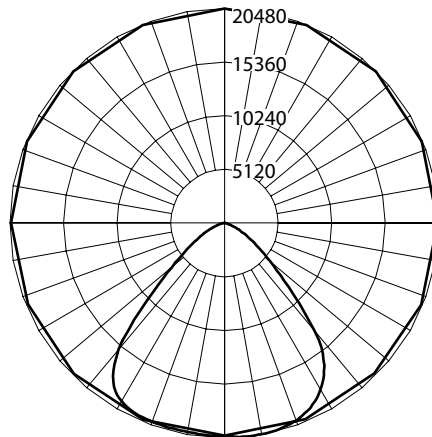
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	77.7	28.7
17	60.5	32.5
20	43.7	38.3
23	33.0	44.0
25	27.9	47.9
28	22.3	53.6
30	19.4	57.4

Data Multipliers

4000K	0.986
AL Reflector	0.945
PC Reflector	0.979
PC Reflector & Shield	0.862

HBC4 300W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	296.7
Delivered Lumens (Lm)	41133
System Efficacy (Lm/W)	138.6
Correlated Color Temp (K)	5026
Color Rendering Index (CRI)	84
Beam Angle	85.3
Spacing Criteria	1.41



Cone of Light Tabulation

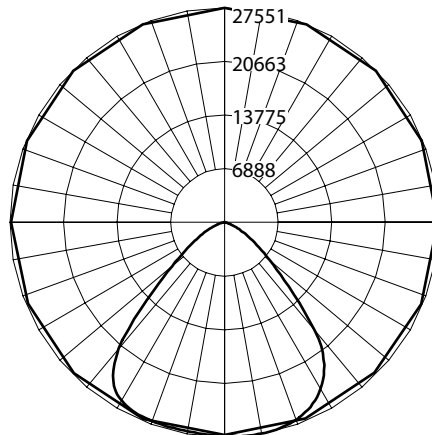
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	88.8	23.7
17	69.2	26.9
20	50.0	31.6
23	37.8	36.3
25	31.9	39.5
28	25.4	44.2
30	22.1	47.4

Data Multipliers

4000K	0.986
AL Reflector	0.945
PC Reflector	0.979
PC Reflector & Shield	0.862

HBC4 400W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	392.3
Delivered Lumens (Lm)	54510
System Efficacy (Lm/W)	138.9
Correlated Color Temp (K)	5104
Color Rendering Index (CRI)	82
Beam Angle	81.1
Spacing Criteria	1.38



Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	118.3	25.7
17	92.1	29.1
20	66.6	34.2
23	50.3	39.4
25	42.6	42.8
28	33.9	47.9
30	29.5	51.3

Data Multipliers

4000K	0.986
AL Reflector	0.945
PC Reflector	0.979
PC Reflector & Shield	0.862

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Dimmers and Sensors

Recommended Dimmers*

- Lutron NTSTV
- Lutron DVSTV
- Cooper SF10P
- Legrand RH4FBL3PW

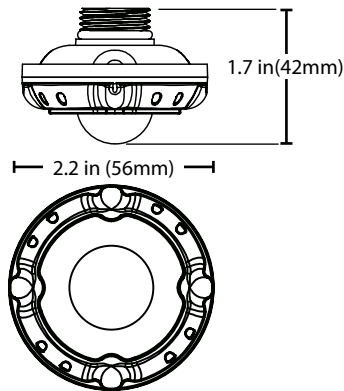
12VDC Output

Included 12VDC output can be used to provide power to low voltage sensor or controls. Do not use the 12VDC output if a sensor is installed.

Passive Infrared (PIR) Motion Sensor

See the individual spec sheet for further information

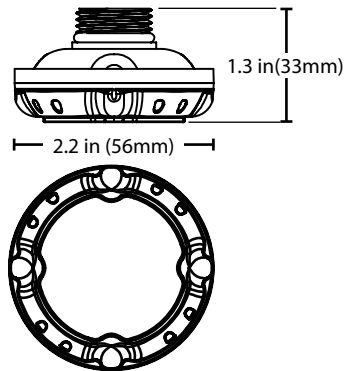
- Field installed 12VDC sensor
- Microwave motion detector with built in daylight sensor
- Remote control programmable
- Highly configurable:
 - Detection area
 - Hold time
 - Dimming level
 - Stand-by period
 - Stand-by dimming
 - Daylight harvesting threshold
- Max mounting height: 20ft (6m)
- IP65 Rated



Microwave Motion Sensor

See the individual spec sheet for further information

- Field installed 12VDC sensor
- Microwave motion detector with built in daylight sensor
- Remote control programmable
- Highly configurable:
 - Detection area
 - Hold time
 - Dimming level
 - Stand-by period
 - Stand-by dimming
 - Daylight harvesting threshold
- Max mounting height: 50ft (15m)
- IP65 Rated



Remote Control for Sensors

See the individual spec sheet for further information

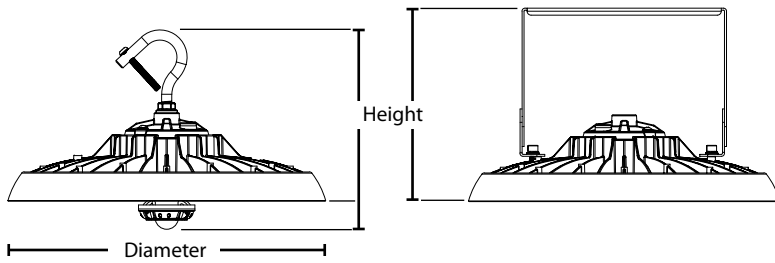
- Allows programming of MW or PIR sensors
- Allows adjustment of:
 - Brightness
 - Hold time
 - Stand-by dim level
 - Stand-by time
 - Sensor sensitivity
 - Daylight harvesting threshold



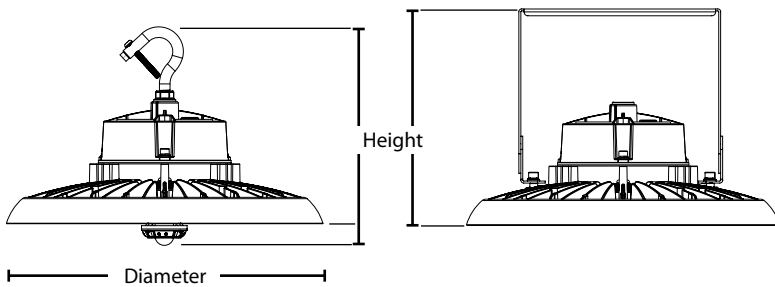
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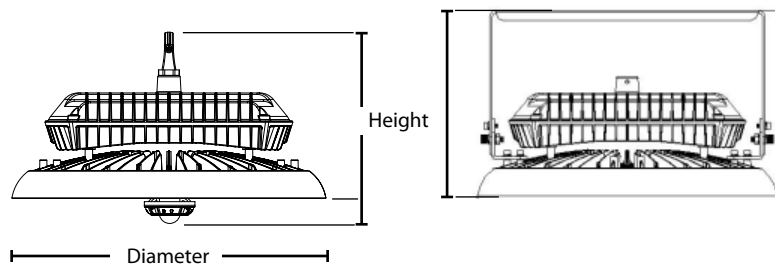
Dimensions



	HBC4100U	HBC4150U
Height w/ hook	6.7 in. (170mm)	
Height w/ yoke	7.7 in. (196mm)	
Height w/ hook & sensor	7.8 in. (198mm)	
Height w/ yoke & sensor	8.8 in. (224mm)	
Fixture Diameter	12.4 in. (315mm)	



	HBC4200U	HBC4240U
Height w/ hook	8.9 in. (226mm)	
Height w/ yoke	8.4 in. (214mm)	
Height w/ hook & sensor	9.6 in. (243mm)	
Height w/ yoke & sensor	9.1 in. (231mm)	
Fixture Diameter	14.2 in. (360mm)	



	HBC4300U	HBC4400U
Height w/ hook	9.4 in. (238mm)	
Height w/ yoke	10.9 in (278mm)	
Height w/ hook & sensor	10.3 in. (262mm)	
Height w/ yoke & sensor	11.9 in (302mm)	
Fixture Diameter	17.7 in. (450mm)	

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.