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

Flectrica

- 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
- Safety cable 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
- $\bullet \, \mathsf{RoHS} \, \mathsf{compliant} \\$
- 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

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















LED Low Bay / High Bay

Ordering Information Example: HBC4150U508					imple: HBC4150U508BK	
Series	Version	Wattage	Voltage	CCT's	CRI	Finish
нвс	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

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 Safety Cable (3') HBC3SAFETYCABLE3

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

Emergency Accessories (see specsheet for full information)

40W Emergency Pack EMB4001UNVBK
40W Emergency Remote Control EMB4001REMOTE



17.2 in Ø x 6.5 in H (438 x 164 mm)

HBC4100-200RFLPC 90° Polycarbonate Reflector

17.2 in Ø x 6.5 in H (411 x 160 mm)

HBC4100-200GSPC 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) HBC4240RFLAL 90° Aluminum Reflector

17.2 in Ø x 7.2 in H (438 x 182 mm)

HBC4240RFLPC 90° Polycarbonate Reflector

17.2 in Ø x 7.2 in H (411 x 160 mm)

HBC4240GSPC Polycarbonate Glare Shield

> 16.0 in Ø x 1.6 in H (407 x 40 mm)

> HBC4240WG Fixture Wire Guard

12.4 in Ø x 2.1 in H (315 x 53 mm) HBC4300400WG Fixture Wire Guard

HBC4300400RFLAL

90° Aluminum Reflector

23.6 in Ø x 8.0 in H

(599 x 204 mm)

15.2 in Ø x 2.1 in H (385 x 53 mm)



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



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



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

	40W Emergency			
Model Number	Lumens	Watts	Lumens/Watt	Lumens
HBC4100U40K8	14945	102	147	5880
HBC4100U50K8	15157	102	149	5960
HBC4150U40K8	21549	152	142	5680
HBC4150U50K8	21851	152	144	5760
HBC4200U40K8	27998	200	140	5600
HBC4200U50K8	28396	200	142	5680
HBC4240U40K8	34446	241	143	5720
HBC4240U50K8	34935	241	145	5800
HBC4300U40K8	40557	207	137	5480
HBC4300U50K8	41133	297	139	5560
HBC4400U40K8	53747	202	137	5480
HBC4400U50K8	54510	392	139	5560

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

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

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		

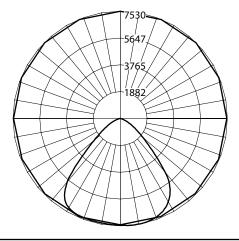


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Photometric Data

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

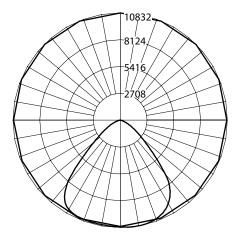


Cone of Light Tabulation				
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)		
15	33.3	29.4		
17	25.9	33.3		
20	18.7	39.2		
23	14.2	45.0		
25	12.0	49.0		
28	9.6	54.8		
30	8.3	58.8		

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

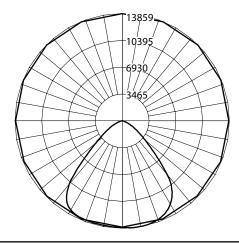


Cone of Light Tabulation				
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)		
15	48.0	28.8		
17	37.4	32.7		
20 23	27.0 20.4	38.4 44.2		
25	17.3	48.0		
28	13.8	53.8		
30	12.0	57.6		

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.

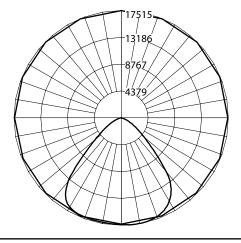


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Photometric Data

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

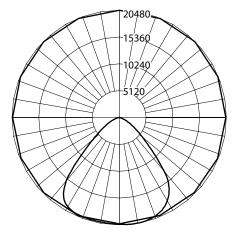


Cone of Light Tabulation		
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	77.7	28.7
17	60.5	32.5
20	43.7	38.3
23	33.0	44.0
25	27.9	47.9
28	22.3	53.6
30	19.4	57.4

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

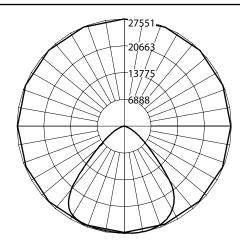


Cone of Light Tabulation			
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)	
15	88.8	23.7	
17	69.2	26.9	
20	50.0	31.6	
23	37.8	36.3	
25	31.9	39.5	
28	25.4	44.2	
30	22.1	47.4	

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	Footcandles	Diameter
(Feet)	Beam Center	(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	



LED Low Bay / High Bay

Dimmers and Sensors

Recommended Dimmers*

Lutron NTSTV Lutron DVSTV Cooper SF10P Legrand RH4FBL3PW

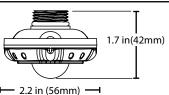
12VDC Output

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



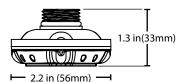




Microwave Motion Sensor

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 periodStand-by dimming
- Daylight harvesting threshold
- Max mounting height: 50ft (15m)
- IP65 Rated







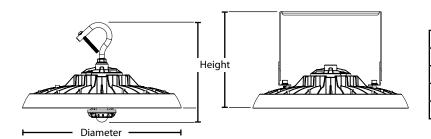
Remote Control for Sensors

- 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

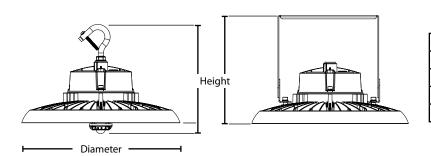




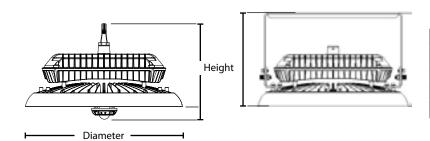
Dimensions



	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.

