

HBC3

LED Low Bay / High Bay

Product Description

The HBC3 LED Low Bay/High Bay is a high-performance fixture perfect for replacing 250W and 400W metal halide luminaires at an affordable price. This high bay fixture supplies an output greater than 150 lumens per watt and excellent color rendering at >80CRI. The die cast aluminum heatsink design allows for a lightweight unit. Improved reflector installation with only three keyholes. With consistent even light distribution this fixture is perfect for environments such as grocery stores, gymnasiums, hangers, industrial, retail, and warehouse spaces.

Construction

- Ultra slim construction with fully integrated driver
- Vented aluminum heatsink provides superior cooling while reducing fixture weight
- Black polyester powder coated
- White and Custom Color options available
- Accessory color matched to fixture color

Optical System

- High efficiency LEDs with tempered glass protective cover
- 120° No Reflector for overall general illumination
- 70° Polycarbonate Reflector
- 60° or 90° Aluminum Reflector
- Polycarbonate glare shields available
- 60° or 90° Polycarbonate Optics shape light without a reflector
- 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 or 347-480VAC
- Power factor: >0.9
- THD < 20%
- 4kA surge suppression (10kA for High Voltage) provides single phase protection for line/neutral, line/ground and neutral/ground in accordance with IEEE C62.41 2002 C High category
- 6ft power cord and 3ft control (dimming) cord standard
- Operating temperature range: -40° to 113°F (-40° to 45°C)

Controls

- Optional microwave sensor is remote controllable and provides up to 3-step dimming
- Standard full-range dimming with compatible 0-10VDC dimmers

Mounting and Installation

- Includes hook with locking bolt for simple, secure mounting
- Pendant Mount Kit available
- 3/4" NPT Pendant Adapter available
- U-Bracket accessory available
- Wire guard at lens location available
- Wire guard for reflectors 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

- LM-79, LM-80 testing performed in accordance with IESNA standards
- UL/cUL1598 Listed for wet locations
- DLC 5 Premium Listed (for standard version only. HV option not listed)
- IP65 Rated
- RoHS Compliant
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- TM-21 Reported L70(10k) life >72,000 hours

Warranty

- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel. For High Voltage (480V) installations, a minimum surge protection level of 20kV is recommended.

Project

Catalog

Type

Date

Universal Voltage



High Voltage



HBC3 100W, 150W, 200W LED Low Bay/High Bay



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Ordering Information

Example: HBC3150SUNV50K8

Series	Version	Wattage	Voltage	CCT's	CRI	Finish	Optic	Motion Sensor
HBC	3	100S (100W - 14500lm)	UNV (120-277)	40K (4000 K)	8 (80+)	___ (Black)	___ (120°)	___ (none)
		150S (153W - 23000lm)	HV (347-480) ¹	50K (5000 K)		WH (White)	60D (60°)	R (Microwave Sensor) ^{3,4}
		200S (201W - 30000lm)				CC (Custom Color) ²	90D (90°)	

Specifications and dimensions subject to change without notice.

1) HV option not available with 'R' Microwave Sensor Kit

2) Custom Color requires MOQ

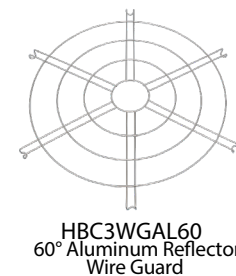
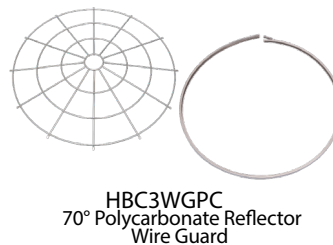
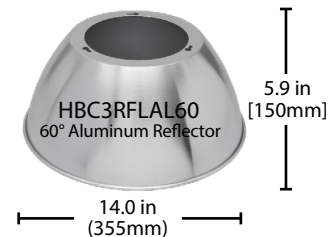
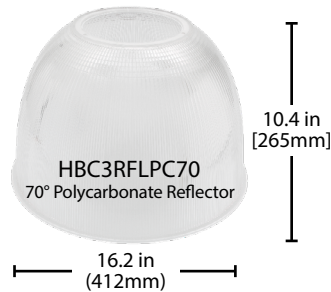
3) Microwave sensor option includes sensor, junction box, and all associated hardware pre-installed.

4) Microwave sensor not compatible when using glare shields: HBC3GSAL and HBC-20-GS-PC

Optic Accessories

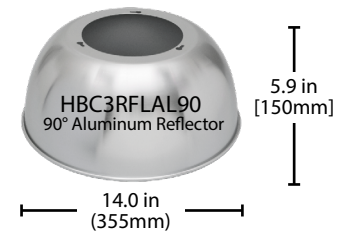
accessories sold separately

60° Aluminum Reflector	HBC3RFLAL60
90° Aluminum Reflector	HBC3RFLAL90
Glare Shield for Aluminum Reflectors	HBC3GSAL
Wire Guard for 60° Aluminum Reflector	HBC3WGAL60
Wire Guard for 90° Aluminum Reflector	HBC3WGAL90
70° Polycarbonate Reflector	HBC3RFLPC70
Glare Shield for Polycarbonate Reflector	HBC-20-GS-PC
Wire guard for Polycarbonate Reflector	HBC3WGPC
Wire Guard for fixture (no reflector)	HBC3WG



Mounting Accessories

Pendant Mount Kit - Black	HBC3PENDANTKIT
Pendant Mount Kit - White	HBC3PENDANTKITWH
Pendant Adapter (3/4" NPT) - Black	HBC3PENDANTADAPT
Pendant Adapter (3/4" NPT) - White	HBC3PENDANTADAPTWH
U-Bracket - Black	HBC3BRACKET
U-Bracket - White	HBC3BRACKETWH
Safety Cable (3')	HBC3SAFETYCABLE3



Motion Sensor Accessories

Remote Control for 'R' Sensor Option	MWOS-REMOTE
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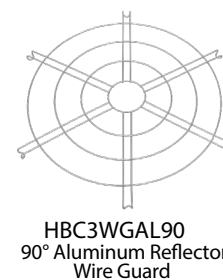
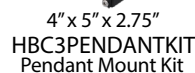
Emergency Accessories

40W Emergency Pack ⁵	EMB4001UNVBK
40W Emergency Remote Control	EMB4001REMOTE

5) Emergency not available on HV fixtures

Replacement Parts

60° Flat Optic	HBC3OPTIC60
90° Flat Optic	HBC3OPTIC90



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

Normal Operation				40W Emergency
Model Number	Lumens	Watts	Lumens/Watt	Lumens
HBC3100SUNV40K8	15369	103.4	148.6	5945
HBC3100SUNV50K8	15423		149.2	5966
HBC3100SHV40K8	15246		147.4	5898
HBC3100SHV50K8	15300		148.0	5919
HBC3150SUNV40K8	22743	153.8	147.9	5915
HBC3150SUNV50K8	22823		148.4	5936
HBC3150SHV40K8	22561		146.7	5868
HBC3150SHV50K8	22640		147.2	5888
HBC3200SUNV40K8	27787	189.5	146.6	5865
HBC3200SUNV50K8	27884		147.1	5886
HBC3200SHV40K8	27565		145.5	5818
HBC3200SHV50K8	27661		146.0	5839

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	EM
HBC3100	45°C	45°C
HBC3150		
HBC3200		

Projected Lumen Maintenance	
Operating Hours	Maintenance Factor
0	1
15,000	0.96
30,000	0.92
45,000	0.88
60,000	0.84
100,000	0.75

Lumens v. Ambient Temperature		
Ambient °C	Ambient °F	Lumen Multiplier
-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	0.99
35	95	0.99
40	104	0.98
45	113	0.97

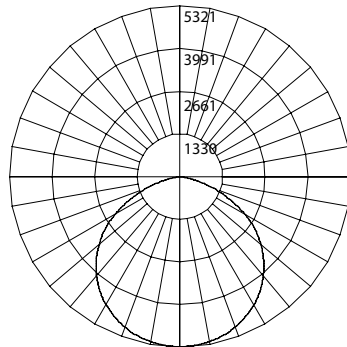
HBC3

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Photometric Data

HBC3 100W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	103.4
Delivered Lumens (Lm)	15423
System Efficacy (Lm/W)	149.2
Correlated Color Temp (K)	5016
Color Rendering Index (CRI)	83
Beam Angle	114.3°
Spacing Criteria	1.30



Cone of Light Tabulation

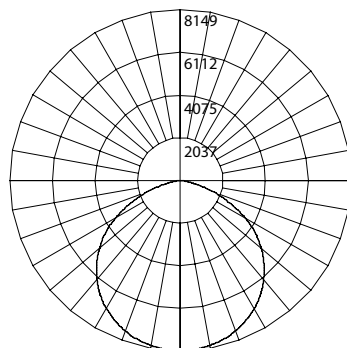
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	23.7	19.4
17	18.4	21.9
20	13.3	25.8
23	10.1	29.8
25	8.5	32.2
28	6.8	36.0
30	5.9	38.8

Data Multipliers

4000K CCT		0.950	
90° Reflector	0.970	90° Optic	0.997
70° Reflector	0.891	60° Optic	0.957
60° Reflector	0.941		
HV Option		0.992	

HBC3 150W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	153.8
Delivered Lumens (Lm)	22823
System Efficacy (Lm/W)	148.4
Correlated Color Temp (K)	5022
Color Rendering Index (CRI)	83
Beam Angle	114.0°
Spacing Criteria	1.30



Cone of Light Tabulation

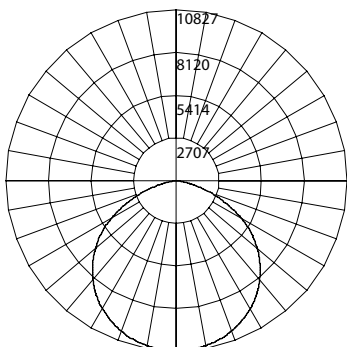
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	36.2	19.4
17	28.2	21.9
20	20.4	25.8
23	15.4	29.8
25	13.1	32.2
28	10.4	36.0
30	9.1	38.8

Data Multipliers

4000K CCT		0.950	
90° Reflector	0.970	90° Optic	0.997
70° Reflector	0.891	60° Optic	0.957
60° Reflector	0.941		
HV Option		0.992	

HBC3 200W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	189.5
Delivered Lumens (Lm)	27884
System Efficacy (Lm/W)	147.1
Correlated Color Temp (K)	5014
Color Rendering Index (CRI)	83
Beam Angle	113.4°
Spacing Criteria	1.30



Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	48.0	19.4
17	37.4	21.9
20	27.0	25.8
23	20.4	29.8
25	17.3	32.2
28	13.8	36.0
30	12.0	38.8

Data Multipliers

4000K CCT		0.950	
90° Reflector	0.970	90° Optic	0.997
70° Reflector	0.891	60° Optic	0.957
60° Reflector	0.941		
HV Option		0.992	

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

Dimmers and Sensors

Recommended Dimmers*

Lutron NTSTV

Lutron DVSTV

Cooper SF10P

Legrand RH4FBL3PW

*Not a complete list. Check compatibility before installation.

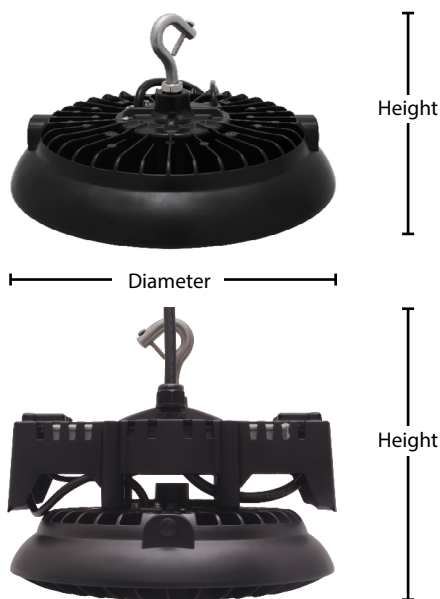
Microwave Motion Sensor ('R' Sensor Option)

See the individual spec sheet for further information

- Sensor option installed at factory
- Microwave motion sensor, junction box and mounting brackets included
- Microwave motion detector with built in daylight sensor
- Self contained relay, no power pack required
- Remote and DIP switch programmable, additional setting options via remote controller to adapt to different installation environments and applications
- Highly configurable: Detection Area, Time Delay, Daylight Threshold, Dimming Level, Stand-by Period
- Available with a remote control sold separately MWOS-REMOTE
- IP65 Rated



Dimensions



	HBC3100SUNV	HBC3150SUNV	HBC3200SUNV
Fixture Height	3.0 in (76mm)		
Fixture Height w/ hook	6.0 in (152mm)		
Fixture Diameter	10.8 in (275mm)		

	HBC3100SHV	HBC3150SHV	HBC3200SHV
Fixture Height	6.5 in (165mm)		
Fixture Height w/ hook	9.0 in (229mm)		
Fixture Diameter	10.8 in (275mm)		

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.