

HBC5

Selectable Low Bay / High Bay

Product Description

The HBC5 LED Circular Low-Bay/High-Bay is a leading high-performance lighting solution with Selectable wattage, Selectable color temperature, and wireless control technology. With a sleek and compact form, it offers improved energy efficiency with low-voltage accessory features. The die-cast aluminum housing with integrated heatsink is designed with multiple mounting points for added options and accessories. The HBC5 produces an impressive light output exceeding 130 lumens per watt and excellent color rendering for true clarity. The impact-resistant polycarbonate lens provides consistent light dispersion, while optional reflectors help reduce glare and provide specific light distribution. The HBC5 operates at 120-277V (or 277-480VAC) with 0-10V dimming and a 12V accessory wire for standard or smart (NLC) sensors. Add a 40W emergency backup for added safety and security. The HBC5 is the ideal fixture for warehouses, retail stores, gymnasiums, and other large indoor spaces.

Construction

- Ultra-slim construction with off-board driver for improved thermal management
- Vented aluminum heatsink provides superior cooling while reducing fixture weight
- Polyester powder coat

Optical System

- High efficiency LEDs with 90° polycarbonate optic
- Wide Optic available
- 90° polycarbonate reflector available
- Polycarbonate glare shields available
- 90° aluminum reflector available
- Selectable CCT of 3500K/4000K/5000K
- Standard 80 CRI to improve safety and color definition in public places

Electrical

- Input voltage of 120-277VAC, 277-480VAC optional
- Selectable wattage of 100/120/150W, 200/220/240W or 240/270/300W
- 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, 32° to 122°F (0° to 50°C) with EM pack installed.

Controls

- Sensor socket pre-installed on every fixture
- Field installable multifunction MW or PIR sensor available
- Note: When using H12V sensors, set the fixture Wattage Selection Switch to the highest wattage. Lower wattages can then be set via the H12V Remote Control.
- Standard full-range dimming with compatible 0-10VDC dimmers
- 12VDC output provides power to off-board sensors

NLC (Network Lighting Controls)

- Bluetooth Low Energy (BLE) mesh network providing Luminaire Level Lighting Control
- Field installable BLE PIR/Daylight sensor available. Requires HBCSOCKETADAPT1.
- Configurable with the NICOR NLC app available on iOS and Android devices
- Provides full dimming control, scheduling, LLLC with occupancy and daylight harvesting functions

Mounting and Installation

- Includes hook with locking bolt (M10 thread) for simple, secure mounting
- 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
- NSF/ANSI 2 - Food Equipment listed (for 150W and 240W models only)
- IP65 rated
- 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

Warranty

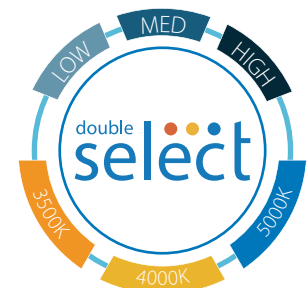
- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)

Project

Catalog

Type

Date



HBC5
100W/120W/150W
200W/220W/240W
240W/270W/300W
3500K/4000K/5000K
LED Low Bay/High Bay



NICOR®

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Ordering Information

Example: HBC5150SUS8BK

Series	Version	Wattage	Voltage	CCT's	CRI	Finish
HBC	5	☐ 150S (100/120/150W)	☐ U (120-277VAC)	S (3500K/4000K/5000K)	8 (80+)	☐ BK (Black)
		☐ 240S (200/220/240W)	☐ H (277-480VAC)			☐ WH (White)
		☐ 300S (240/270/300W) ¹				

Specifications and dimensions subject to change without notice.

1) 300W HV not available in white

Optic Accessories

accessories sold separately

Wide Optic (150W)	HBC5150-LENS-WIDE
Wide Optic (240W)	HBC5240-LENS-WIDE
Wide Optic (300W)	HBC5300-LENS-WIDE
90° Aluminum Reflector (150W)	HBC5150RFLAL
90° Aluminum Reflector (240W)	HBC4240RFLAL
90° Polycarbonate Reflector (150W)	HBC5150RFLPC
90° Polycarbonate Reflector (240W)	HBC4240RFLPC
90° Polycarbonate Reflector (300W)	HBC5300RFLPC
Glare Shield for PC Reflector (150W)	HBC5150GSPC
Glare Shield for PC Reflector (240W)	HBC4240GSPC
Wire Guard for Fixture (150W)	HBC5150WG
Wire Guard for Fixture (240W)	HBC4240WG

Note: HBC4240 reflector accessories fit the HBC5240



HBC5150RFLAL
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)



HBC5150RFLPC
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 183 mm)



HBC5300RFLPC
90° Polycarbonate Reflector
18.9 in Ø x 6.4 in H
(480 x 163 mm)

Mounting Accessories

3/4" NPT Pendant Adapter (HBC5150 & 240W)	HBC4100-240PEND
3/4" NPT Pendant Adapter, White (HBC5150 & 240W)	HBC4100-240PENDWH
3/4" NPT Pendant Adapter (HBC5300W)	HBC5300PEND
Yoke Mount (HBC5150)	HBC4100-200YOKE
Yoke Mount - White (HBC5150)	HBC4100-200YOKEWH
Yoke Mount (HBC5240)	HBC4240YOKE
Yoke Mount - White (HBC5240)	HBC4240YOKEWH



HBC5150GSPC
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)



HBC5150WG
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)

Motion Sensor Accessories (see specsheet for full information)

PIR Motion Sensor (all models)	H12V3SENSORPIR3PWH
Microwave Motion Sensor (all models)	HBC5SENSORMW
Remote Control for Sensors	H12V2REMOTE
NLC Wireless PIR/Daylight Sensor w/Lens (Requires HBCSOCKETADAPT1)	NLCSPEJ1WH-LHW
3.5mm Adaptor for HBC 4-pin Socket	HBCSOCKETADAPT1

Note: HBC4100-200 mounting accessories fit the HBC5150
HBC4240 mounting accessories fit the HBC5240
HBC5100-200YOKE fits the HBC5300

Emergency Accessories (see specsheet for full information)

40W Emergency Pack (120-277V)	EMB4002UNVBK
40W Emergency Remote Control	EMB4002REMOTE

High Voltage Transformer (see specsheet for full information)

High Voltage (277-480V) Transformer	NST1375HVWH
High Voltage (277-480V) Transformer IP65	NST1375HVWHIP



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)



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



HBC5300PEND
M12 to 3/4" NPT Pendant Adaptor
1.2" Ø x 1.3" L (30 x 32mm)

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Performance Data

Normal Operation				40W EM	
Model Number	CCT	Lumens	Watts	Lumens/Watt	Lumens
HBC5150S*S8	3500	13396	100	134	5358
	4000	14472		145	5789
	5000	13561		136	5424
	3500	16075	120	134	5358
	4000	17366		145	5789
	5000	16274		136	5424
	3500	20094	150	134	5358
	4000	21708		145	5789
	5000	20342		136	5424
HBC5240S*S8	3500	27183	200	136	5437
	4000	29140		146	5828
	5000	27545		138	5509
	3500	29901	220	136	5437
	4000	32054		146	5828
	5000	30300		138	5509
	3500	32619	240	136	5437
	4000	34968		146	5828
	5000	33054		138	5509
HBC5300S*S8	3500	33606	240	140	5600
	4000	36008		150	6000
	5000	34966		146	5840
	3500	37806	270	140	5600
	4000	40509		150	6000
	5000	39337		146	5840
	3500	42007	300	140	5600
	4000	45010		150	6000
	5000	43708		146	5840

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
HBC5150			
HBC5240	-40°- 122°F (-40°- 50°C)	-22°-122°F (-30°- 50°C)	32°-122°F (0°- 50°C)
HBC5300			

Operation with H12V sensors

The following table should be used to determine proper H12V2REMOTE "Brightness" setting to obtain desired fixture wattage. Set fixture wattage selection switch to highest setting.

Fixture	Brightness Setting	Wattage
HBC5150S*S8	60%	97
	75%	121
	100%	150
HBC5240S*S8	70%	196
	75%	210
	100%	240
HBC5300S*S8	80%	240
	90%	270
	100%	300

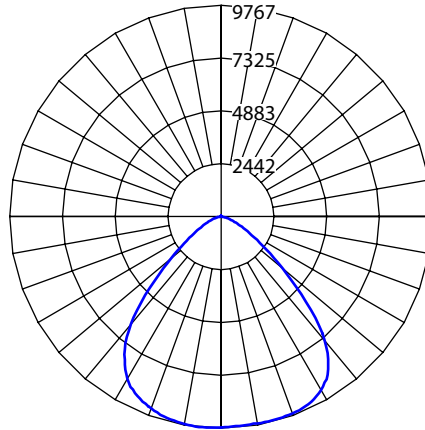
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Photometric Data

HBC5 150W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	150.1
Delivered Lumens (Lm)	20342
System Efficacy (Lm/W)	135.5
Correlated Color Temp (K)	5131
Color Rendering Index (CRI)	82
Beam Angle	90.8
Spacing Criteria	1.37



Cone of Light Tabulation

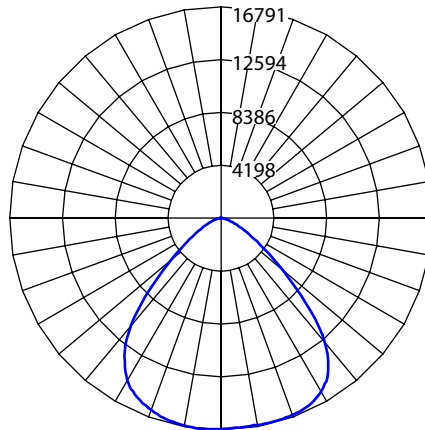
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	43.3	30.3
17	33.7	34.4
20	24.3	40.4
23	18.4	46.5
25	15.5	50.5
28	12.4	56.6
30	10.8	60.6

Data Multiplier

	3500K	4000K	5000K
100W	0.659	0.711	0.667
120W	0.790	0.854	0.800
150W	0.988	1.067	1.000

HBC5 240W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	243.6
Delivered Lumens (Lm)	33540
System Efficacy (Lm/W)	137.7
Correlated Color Temp (K)	5092
Color Rendering Index (CRI)	82
Beam Angle	90.8
Spacing Criteria	1.30



Cone of Light Tabulation

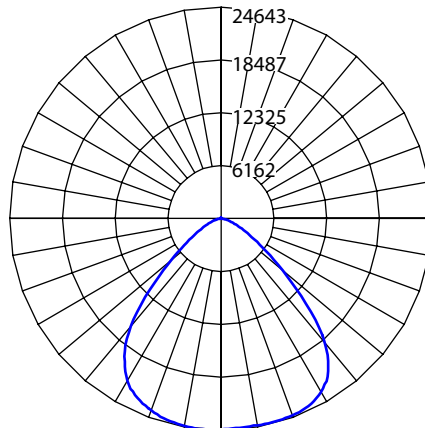
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	74.2	30.3
17	57.8	34.4
20	41.8	40.4
23	31.6	46.5
25	26.8	50.5
28	21.3	56.6
30	18.6	60.6

Data Multiplier

	3500K	4000K	5000K
200W	0.754	0.808	0.764
220W	0.905	0.970	0.917
240W	0.987	1.058	1.000

HBC5 300W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	292.4
Delivered Lumens (Lm)	43708
System Efficacy (Lm/W)	149.5
Correlated Color Temp (K)	5057
Color Rendering Index (CRI)	82
Beam Angle	80.6
Spacing Criteria	1.18



Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	109.4	25.4
17	85.1	28.8
20	61.4	33.9
23	46.4	39.0
25	39.2	42.4
28	31.2	47.5
30	27.1	50.9

Data Multiplier

	3500K	4000K	5000K
240W	0.769	0.824	0.800
270W	0.865	0.927	0.900
300W	0.961	1.030	1.000

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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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 off-board, low voltage sensor or controls. Do not use the 12VDC output if a sensor is installed in the fixture socket.

Note: When using H12V sensors, set the fixture Wattage Selection Switch to the highest wattage. Lower wattages can then be set via the H12V Remote Control.

H12V3SENSORPIR3PWH

Passive Infrared (PIR) Motion Sensor

See the individual spec sheet for further information

- Field installed 12VDC sensor
- PIR 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: 40ft (12m)
- IP65 Rated



HBC5SENSORMW

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



H12V2REMOTE

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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Sensors (continued)

NLCSPEJ1WH-LHW WITH HBCSOCKETADAPT1

NLC Bluetooth PIR/Daylight Sensor & Adapter

See the individual spec sheet for further information

• Field installed 12VDC sensor

• Infrared motion detector with built in daylight sensor

• Commissioned with NLC App

• Highly configurable:

• Occupancy/Vacancy Detection

• Daylight Harvesting

• High-End Trim

• Full Range Dimming (0-10V)

• Scene Control

• Full Networking

• Max mounting height: 40ft (12m)

• IP65 Rated



EMB400 Details

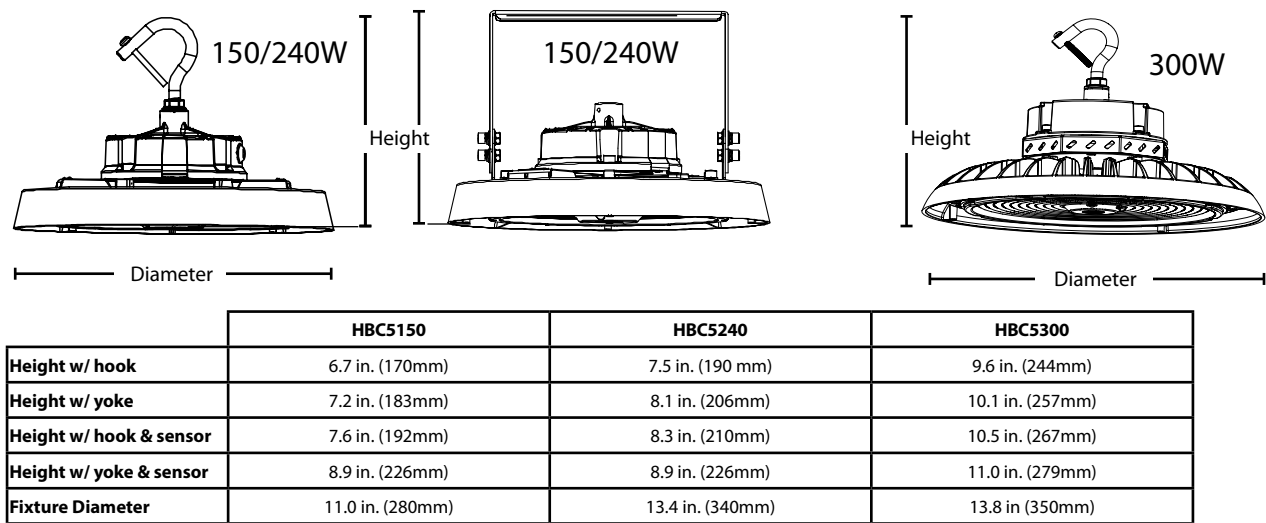


The NICOR EMB400 is an LED emergency driver for field installations. It enables normal and emergency operation of an LED fixture up to 300W (120-277V) that utilize 0-10V dimming or 40W non-dimming. During a power failure, the unit activates emergency mode to maintain constant output power to the fixture 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

Dimensions



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.

