## 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 347-480VAC) 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, 347-480VAC optional
- Selectable wattage of 100/120/150W or 200/220/240W
- 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
- 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
- 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

Туре

Date







# HBC5 Selectable Low Bay / High Bay

Ordering Information Example: HBC5					mple: HBC5150SUS8BK	
Series	Version	Wattage	Voltage	CCT's	CRI	Finish
НВС	5	<b>150S</b> (100/120/150W)	<b>U</b> (120-277VAC)	<b>S</b> (3500K/4000K/5000K)	<b>8</b> (80+)	<b>BK</b> (Black)
		2405 (200/220/240W)	<b>H</b> (347-480VAC)			<b>WH</b> (White)

Specifications and dimensions subject to change without notice.

Optic Accessories	accessories sold separately		Note: HBC4240 reflector accessories fit the HBC5240
Wide Optic (150W)	HBC5150-LENS-WIDE		
Wide Optic (240W)	HBC5240-LENS-WIDE		
90° Aluminum Reflector (150W)	HBC5150RFLAL	HBC5150RFLAL	HBC4240RFLAL
90° Aluminum Reflector (240W)	HBC4240RFLAL	90° Aluminum Reflector	90° Aluminum Reflector
90° Polycarbonate Reflector (150W)	HBC5150RFLPC		
90° Polycarbonate Reflector (240W)	HBC4240RFLPC		
Glare Shield for PC Reflector (150W)	HBC5150GSPC	17.2 in Ø x 6.5 in H (438 x 164 mm)	17.2 in Ø x 7.2 in H (438 x 182 mm)
Glare Shield for PC Reflector (240W)	HBC4240GSPC	(	(
Wire Guard for Fixture (150W)	HBC5150WG		
Wire Guard for Fixture (240W)	HBC4240WG	HBC5150RFLPC 90° Polycarbonate Reflector	HBC4240RFLPC 90° Polycarbonate Reflector
Mounting Accessories			
3/4″ NPT Pendant Adapter (HBC5150 & 240W)	HBC4100-240PEND	17.2 in Ø x 6.5 in H (411 x 160 mm)	17.2 in Ø x 7.2 in H (411 x 160 mm)
3/4" NPT Pendant Adapter, White ( HBC5150 & 240W)	HBC4100-240PENDWH		
Yoke Mount (HBC5150)	HBC4100-200YOKE	HBC5150GSPC	HBC4240GSPC
Yoke Mount - White (HBC5150)	HBC4100-200YOKEWH	Polycarbonate Glare Shield	Polycarbonate Glare Shield
Yoke Mount (HBC5240)	HBC4240YOKE	16.0 in Ø x 1.6 in H (407 x 40 mm)	16.0 in Ø x 1.6 in H (407 x 40 mm)
Motion Sensor Accessories (see	specsheet for full information)		
PIR Motion Sensor (all models)	HBC5SENSORPIR		
Microwave Motion Sensor (all models)	HBC5SEMSORMW	HBC5150WG Fixture Wire Guard	HBC4240WG
Remote Control for Sensors	H12V2REMOTE		Fixture Wire Guard
NLC Wireless PIR/Daylight Sensor w/Lens (Requires HBCSOCKETADAPT1)	NLCSPEJ1WH-LHW	10.8 in Ø x 1.3 in H (275 x 34 mm)	12.4 in Ø x 2.1 in H
3.5mm Adaptor for HBC 4-pin Socket	HBCSOCKETADAPT1		(315 x 53 mm)
Emergency Accessories (see specs)		Note: HBC4100-200 mounting HBC4240 mounting acc	g accessories fit the HBC5150 cessories fit the HBC5240
40W Emergency Pack (120-277V)	EMB4002UNVBK		
40W Emergency Remote Control	EMB4002REMOTE		
High Voltage Transformer (see spe	ecsheet for full information)	HBC4100-200YOKE Yoke Mount Kit	

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



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



# Selectable Low Bay / High Bay

# Performance Data

	Normal Operation				40W EM
Model Number	CCT	Lumens	Watts	Lumens/Watt	Lumens
	3500	13396		134	5358
	4000	14472	100	145	5789
	5000	13561		136	5424
	3500	16075		134	5358
HBC5150S*S8	4000	17366	120	145	5789
	5000	16274		136	5424
	3500	20094	150	134	5358
	4000	21708		145	5789
	5000	20342		136	5424
	3500	27183	200	136	5437
	4000	29140		146	5828
	5000	27545		138	5509
	3500	29901	220	136	5437
HBC5240S*S8	4000	32054		146	5828
	5000	30300		138	5509
	3500	32619	240	136	5437
	4000	34968		146	5828
	5000	33054		138	5509

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

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.

	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Fixture	Brightness Setting	Wattage
	60%	97
HBC5150S*S8	75%	121
	100%	150
	70%	196
HBC5240S*S8	75%	210
	100%	240

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	Normal	Sensor	EM		
HBC5150		-22°-122°F (-30°- 50°C)	14°-122°F (-10°- 50°C)		



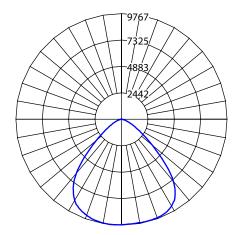
# HBC5

## Selectable Low Bay / High Bay

## **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

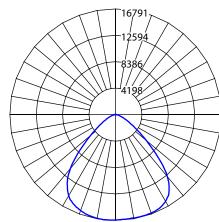


Cone of Light Tabulation				
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)		
15	43.3	30.3		
17	33.7	34.4		
20	24.3	40.4		
23	18.4	46.5		
25	15.5	50.5		
28	12.4	56.6		
30	10.8	60.6		

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	

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

### 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.

# **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



# HBC5

# Selectable Low Bay / High Bay

## **HBC5SENSORPIR**

## **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

## 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:

• High-End Trim

- Occupancy/Vacancy Detection
  Full Range Dimming (0-10V) Daylight Harvesting
  - Scene Control
  - Full Networking
- Max mounting height: 40ft (12m)
- IP65 Rated









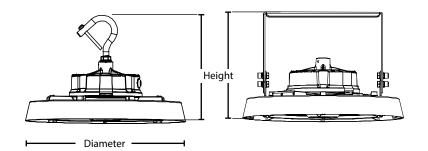




# HBC5

Selectable Low Bay / High Bay

## Dimensions



	HBC5150	HBC5240
Height w/ hook	6.7 in. (170mm)	7.5 in. (190 mm)
Height w/ yoke	7.2 in. (183mm)	8.1 in. (206mm)
Height w/ hook & sensor	7.6 in. (192mm)	8.3 in. (210mm)
Height w/ yoke & sensor	8.9 in. (226mm)	8.9 in. (226mm)
Fixture Diameter	11.0 in. (280mm)	13.4 in. (340mm)

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.

