HBC6

Selectable Low-Bay / High-Bay

Project

Catalog

Type

Date

Product Description

The HBC6 LED Circular Low-Bay/High-Bay is a leading high-performance lighting solution with selectable wattage, selectable color temperature, selectable beam angle, 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 HBC6 produces an impressive light output exceeding 135 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 HBC6 operates at 120-277V 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 HBC6 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
- 90° polycarbonate reflector available
- Polycarbonate glare shields available
- 90° aluminum reflector available
- Selectable CCT of 3500K/4000K/5000K
- Selectable beam angle of 60°/80°/100°
- Standard 80 CRI to improve safety and color definition in public places

Electrical
- Input voltage of 120-277VAC
- 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 accessory (0-10VDC 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
- 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)

HBC6
100W/120W/150W
200W/220W/240W
3500K/4000K/5000K
60°/80°/100°
LED Low-Bay/High-Bay

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Ordering Information						*Example: HBC6150SUS8BK*
Series	**Version**	**Wattage**	**Voltage**	**CCT's**	**CRI**	**Finish**
HBC	**6**	☐ **150S** (100/120/150W)	☐ **U** (120-277VAC)	**S** (3500K/4000K/5000K)	**8** (80+)	☐ **BK** (Black)
		☐ **240S** (200/220/240W)				☐ **WH** (White)

Specifications and dimensions subject to change without notice.

Optic Accessories *accessories sold separately*

90° Aluminum Reflector (150W) *	HBC5150RFLAL
90° Aluminum Reflector (240W) *	HBC4240RFLAL
90° Polycarbonate Reflector (150W) *	HBC5150RFLPC
90° Polycarbonate Reflector (240W) *	HBC4240RFLPC
Glare Shield for PC Reflector (150W)	HBC5150GSPC
Glare Shield for PC Reflector (240W)	HBC4240GSPC
"L" Shape Reflector Adapter	HBC6RFLADAPT
Wire Guard for Fixture (150W)	HBC6150WG
Wire Guard for Fixture (240W)	HBC6240WG

* Reflector requires HBC6RFLADAPT for proper installation

Mounting Accessories

3/4" NPT Pendant Adapter (HBC6)	HBC4100-240PEND
3/4" NPT Pendant Adapter, White (HBC6150 & 240W)	HBC4100-240PENDWH
Yoke Mount (HBC6150)	HBC4100-200YOKE
Yoke Mount - White (HBC6150)	HBC4100-200YOKEWH
Yoke Mount (HBC6240)	HBC4240YOKE
Yoke Mount - White (HBC6240)	HBC4240YOKEWH

Motion Sensor Accessories *(see specsheet for full information)*

PIR Motion Sensor (all models)	HBC5SENSORPIR
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

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

Note:
HBC4240 reflector accessories fit the HBC6240 using HBC6FRLADAPT
HBC5150 accessories fit the HBC6150 using HBC6FRLADAPT

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)

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)

HBC6150WG
Fixture Wire Guard
10.8 in Ø x 1.3 in H
(275 x 34 mm)

HBC6240WG
Fixture Wire Guard
12.4 in Ø x 2.1 in H
(315 x 53 mm)

Note: HBC4100-200 mounting accessories fit the HBC6150
HBC4240 mounting accessories fit the HBC6240

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)

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Performance Data

		60° Beam Angle			80° Beam Angle			100° Beam Angle		
Model Number	CCT	Lumens	Watts	Lumens/Watt	Lumens	Watts	Lumens/Watt	Lumens	Watts	Lumens/Watt
HBC6150SUS8	3500	13366	98.8	135.3	14298	93.1	153.5	13639	98.8	138.1
	4000	13997	93.7	149.4	15181	89.6	169.5	14403	93.7	153.8
	5000	13419	97.3	138.0	14883	93.2	159.7	14248	97.3	146.5
	3500	16039	118.6	135.3	17158	111.7	153.5	16367	118.6	138.1
	4000	16796	112.4	149.4	18217	107.5	169.5	17284	112.4	153.8
	5000	16102	116.7	138.0	17860	111.8	159.7	17098	116.7	146.5
	3500	20049	148.2	135.3	21447	139.7	153.5	20239	148.2	135.2
	4000	20995	140.5	149.5	22771	134.4	169.5	21372	140.5	150.4
	5000	20128	145.9	138.0	22325	139.8	159.7	21142	149.5	141.4
HBC6240SUS8	3500	28225	201.2	140.3	30378	191.2	158.9	28101	201.1	139.8
	4000	30256	194.3	155.7	32245	185.3	174.0	30476	194.2	156.9
	5000	29135	200.7	145.2	31523	191.1	164.9	29477	201.1	146.6
	3500	31048	221.3	140.3	33415	210.3	158.9	30911	221.2	139.8
	4000	33281	213.8	155.7	35470	203.8	174.0	33523	213.6	156.9
	5000	32049	220.7	145.2	34676	210.3	164.9	32425	221.2	146.6
	3500	32616	241.4	135.1	35637	229.4	155.3	32616	241.3	135.2
	4000	34962	233.2	149.9	37828	222.4	170.1	35373	233.1	151.8
	5000	33667	240.8	139.8	36981	229.4	161.2	34213	241.3	141.8

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**
HBC6150	-40°- 122°F (-40°- 50°C)	-22°-122°F (-30°- 50°C)	32°-122°F (0°- 50°C)
HBC6240			

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
HBC6150S*S8	60%	97
	75%	121
	100%	150
HBC6240S*S8	70%	196
	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

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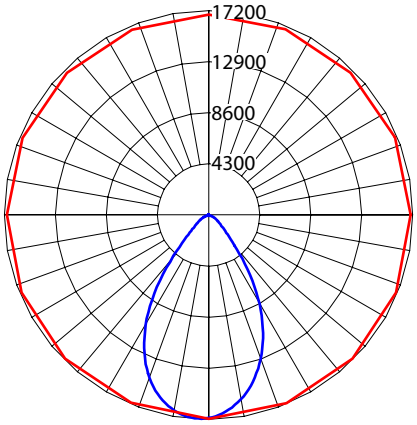
Photometric Data

HBC6 150W 5000K 60° Optic

Input Voltage (VAC)	120-277
System Level Power (W)	145.9
Delivered Lumens (Lm)	20128
System Efficacy (Lm/W)	138.0
Correlated Color Temp (K)	4953
Color Rendering Index (CRI)	83
Beam Angle	64.0
Spacing Criteria	0.94



Cone of Light Tabulation

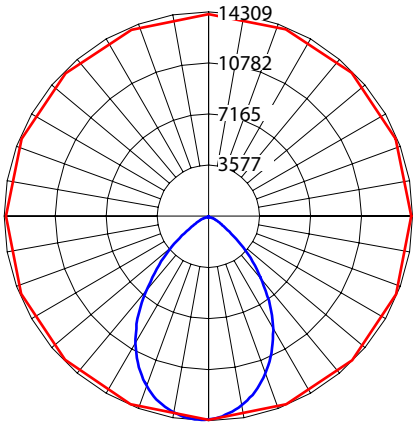
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
16	66.9	20.0
18	52.8	22.5
20	42.7	25.0
22	35.2	27.5
24	29.4	30.0
26	24.9	32.5
28	21.4	35.0

Data Multiplier

	3500K	4000K	5000K
100W	0.664	0.695	0.667
120W	0.797	0.834	0.800
150W	0.996	1.043	1.000

HBC6 150W 5000K 80° Optic

Input Voltage (VAC)	120-277
System Level Power (W)	139.8
Delivered Lumens (Lm)	22325
System Efficacy (Lm/W)	159.7
Correlated Color Temp (K)	4960
Color Rendering Index (CRI)	83
Beam Angle	76
Spacing Criteria	1.05



Cone of Light Tabulation

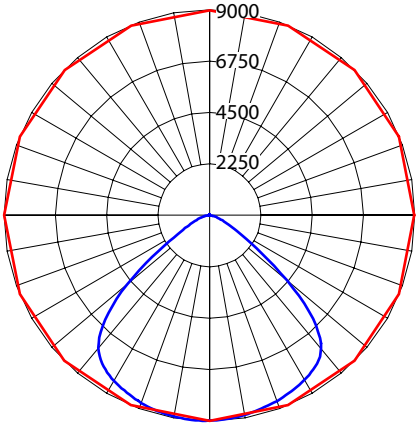
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
16	55.8	24.9
18	44.0	28.0
20	35.6	31.1
22	29.4	34.2
24	24.6	37.3
26	20.9	40.4
28	17.9	43.5

Data Multiplier

	3500K	4000K	5000K
100W	0.640	0.680	0.667
120W	0.769	0.816	0.800
150W	0.961	1.020	1.000

HBC6 150W 5000K 100° Optic

Input Voltage (VAC)	120-277
System Level Power (W)	149.5
Delivered Lumens (Lm)	21142
System Efficacy (Lm/W)	141.4
Correlated Color Temp (K)	4957
Color Rendering Index (CRI)	83
Beam Angle	100.4
Spacing Criteria	1.39



Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
16	35.1	38.4
18	27.7	43.2
20	22.4	48.0
22	18.5	52.8
24	15.6	57.6
26	13.3	62.4
28	11.4	67.2

Data Multiplier

	3500K	4000K	5000K
100W	0.638	0.674	0.667
120W	0.766	0.809	0.800
150W	0.957	1.011	1.000

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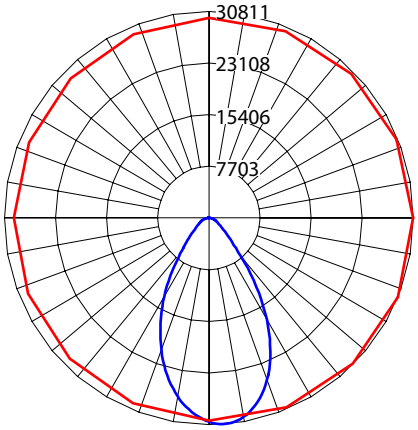
HBC6 240W 5000K 60° Optic

Input Voltage (VAC)	120
System Level Power (W)	240.8
Delivered Lumens (Lm)	33667
System Efficacy (Lm/W)	139.8
Correlated Color Temp (K)	4897
Color Rendering Index (CRI)	83
Beam Angle	59.7
Spacing Criteria	.98



Cone of Light Tabulation

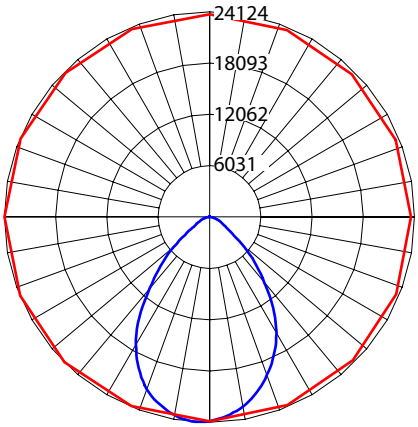
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
22	63.1	25.3
24	53.2	27.5
26	45.5	29.8
28	39.2	32.1
30	34.1	34.4
32	29.9	36.7
34	26.4	39.0

Data Multiplier

	3500K	4000K	5000K
200W	0.807	0.865	0.833
220W	0.888	0.952	0.917
240W	0.969	1.038	1.000

HBC6 240W 5000K 80° Optic

Input Voltage (VAC)	120-277
System Level Power (W)	229.4
Delivered Lumens (Lm)	36981
System Efficacy (Lm/W)	161.2
Correlated Color Temp (K)	4900
Color Rendering Index (CRI)	83
Beam Angle	74.9
Spacing Criteria	1.05



Cone of Light Tabulation

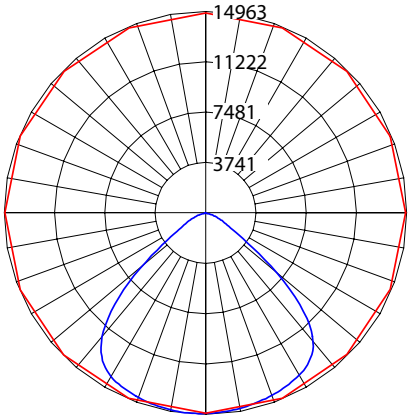
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
22	49.4	33.6
24	41.4	36.7
26	35.1	39.8
28	30.1	42.8
30	26.1	45.9
32	22.8	48.9
24	40.3	36.7

Data Multiplier

	3500K	4000K	5000K
200W	0.803	0.852	0.833
220W	0.883	0.938	0.917
240W	0.964	1.023	1.000

HBC6 240W 5000K 100° Optic

Input Voltage (VAC)	120-277
System Level Power (W)	241.3
Delivered Lumens (Lm)	34213
System Efficacy (Lm/W)	141.8
Correlated Color Temp (K)	4903
Color Rendering Index (CRI)	83
Beam Angle	97.3
Spacing Criteria	1.4



Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
22	30.9	49.6
24	25.9	54.1
26	22.1	58.6
28	19.0	63.1
30	16.5	67.6
32	14.5	72.1
34	12.9	76.6

Data Multiplier

	3500K	4000K	5000K
200W	0.794	0.862	0.833
220W	0.874	0.948	0.917
240W	0.953	1.034	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.

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

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Sensors (continued)

NLCSPEJ1WH-LHW WITH HBCSOCKETADAPT1

NLC Bluetooth PIR/Daylight Sensor & Adapter

See the individual spec sheet for further information

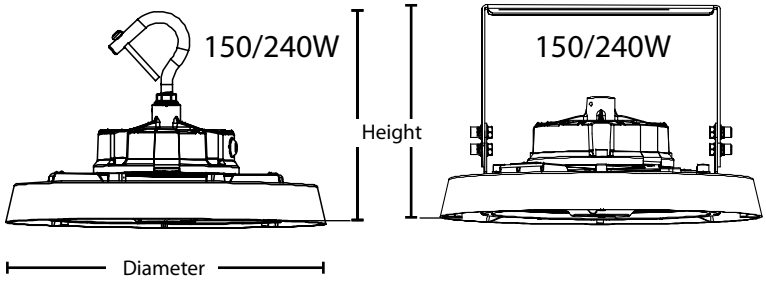
- Field installed 12VDC sensor
- Infrared motion detector with built in daylight sensor
- Commissioned with NLC App
- Highly configurable:
  - Occupancy/Vacancy Detection
  - Daylight Harvesting
  - High-End Trim
  - Full Range Dimming (0-10V)
  - Scene Control
  - Full Networking
- Max mounting height: 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



	HBC6150	HBC6240
Height w/ hook	5.8 in. (148mm)	6.2 in. (157 mm)
Height w/ yoke	7.3 in. (185mm)	7.3 in. (185mm)
Height w/ hook & sensor	6.7 in. (170mm)	7.1 in. (179mm)
Height w/ yoke & sensor	8.2 in. (207mm)	8.2 in. (207mm)
Fixture Diameter	11.8 in. (300mm)	14.2 in. (360mm)