# HBC6
## Selectable Low-Bay / High-Bay

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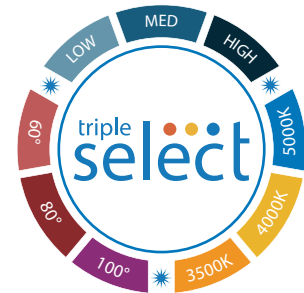
### Warranty
• 5-year limited system warranty standard
• Warranty does not cover product failure due to an overvoltage event (power surge)

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

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# HBC6
## **Selectable** Low-Bay / High-Bay

### 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 |

### 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
HBC5150 accessories fit the HBC6150

**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

| Model Number | CCT | 60° Beam Angle | | | 80° Beam Angle | | | 100° Beam Angle | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 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** | | | |

| 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 |

| 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 |

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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 |



17200
12900
8600
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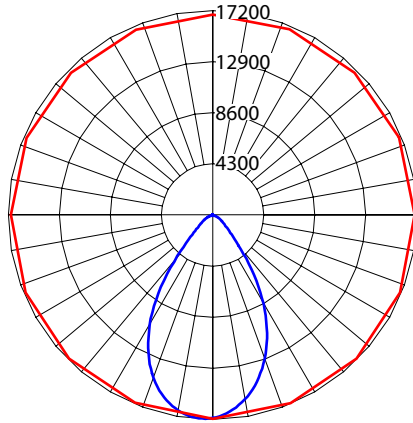
#### Cone of Light Tabulation

| 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 |



14309
10782
7165
3577
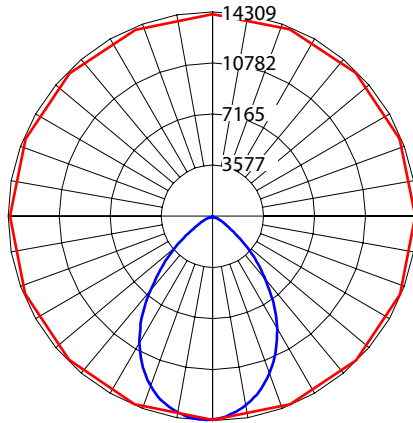
#### Cone of Light Tabulation

| 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 |



9000
6750
4500
2250
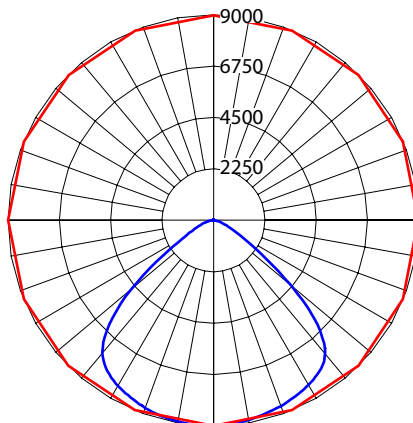
#### Cone of Light Tabulation

| 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 |
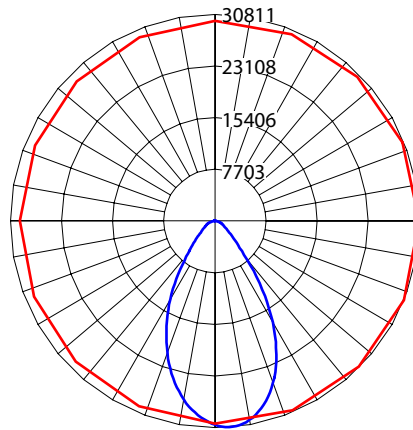
## HBC6 240W 5000K 80° Optic

| | |
|---|---|
| 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 |
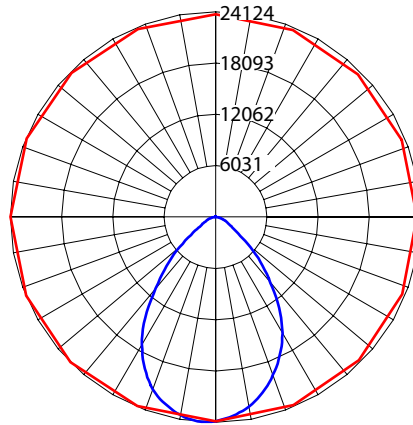
## HBC6 240W 5000K 100° Optic

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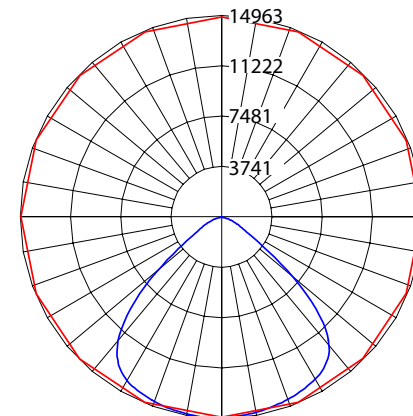
Fixture tested per LM-79-08.  Photometric data is of the performance of a representative fixture.  Results may vary in the field.

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## **Selectable** 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 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

150/240W

150/240W
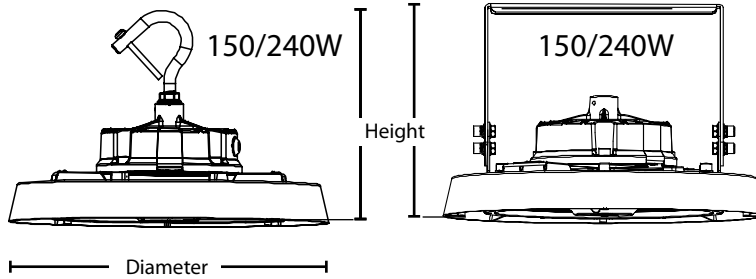
Height

Diameter

|  | **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) |

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