

# NHBR1

## Round High Bay



### DESCRIPTION

Nordeon's round high bay fixture is a perfect fit for numerous applications including manufacturing plants, industrial facilities, warehouses, and retail spaces. With a broad range of input voltages, lumen packages, color temperatures, and mounting accessories, the round high bay is both a functional and versatile light source. Numerous occupancy sensor options and lensing allows you to configure the light perfectly for your application. With significant energy savings over HID, this LED high bay is a clear choice for performance and cost savings.



Date: \_\_\_\_\_ Type: \_\_\_\_\_ Catalog Number: \_\_\_\_\_

Project Name: \_\_\_\_\_

### ORDERING INFORMATION

LUMINAIRE									
MODEL	OUTPUT	CCT	VOLTAGE	ELECTRICAL OPTIONS		MOUNTING	PHYSICAL OPTIONS	FINISH	CORD
NHBR1 Round High Bay	<b>12L</b> 12,000 Nominal Lumens	<b>30K</b> 3000K	<b>UNV</b> 120-277V Dimming	<b>None*</b> <sup>2</sup> * <sup>2</sup> Leave Blank	<b>OC3</b> Smart Occupancy Sensor for 20' Height/ ø40'	<b>NPT12</b> ½" Female Pendant Mount Threads (STANDARD)	<b>OPN</b> Open Lens	<b>BL</b> Black	<b>BC6</b> Black SO Cord, 6' Length
	<b>18L</b> 18,000 Nominal Lumens	<b>35K</b> 3500K	<b>347V*</b> <sup>1</sup> 347-480V Dimming	<b>OC1</b> Occupancy Sensor for ø20-60'	<b>OC3R</b> Smart Occupancy Sensor With Refractor for 20' Height/ø40'	<b>NPT34</b> ½" to ¾" Pendant Adapter	<b>WG</b> Wire Guard	<b>WH</b> White	<b>BC10</b> Black SO Cord, 10' Length
	<b>24L</b> 24,000 Nominal Lumens	<b>40K</b> 4000K		<b>OC1R</b> Occupancy Sensor for ø20-60' With Refractor	<b>OC3W</b> Smart Occupancy Sensor With Widebay for 20' Height/ø40'	<b>HK</b> Hook	<b>JBOX</b> Junction Box		
	<b>30L</b> 30,000 Nominal Lumens	<b>50K</b> 5000K		<b>OC1W</b> Occupancy Sensor for ø20-60' With Widebay	<b>OC4</b> Smart Occupancy Sensor for 40' Height/ ø100'	<b>TN</b> Trunnion			
				<b>OC2</b> Smart Occupancy Sensor for 8' Height/ ø48'	<b>OC4R</b> Smart Occupancy Sensor With Refractor for 40' Height/ø100'	<b>ACH</b> Adjustable Cable Hanger Plate (Cable Sold Separately)			
				<b>OC2R</b> Smart Occupancy Sensor With Refractor for 8' Height/ø48'	<b>OC4W</b> Smart Occupancy Sensor With Widebay for 40' Height/ø100'				
				<b>OC2W</b> Smart Occupancy Sensor With Widebay for 8' Height/ø48'	<b>EM*</b> <sup>1</sup> Emergency Battery Backup				

See Page 2 for ordering information of available accessories.

Custom solutions are available; consult factory via phone at (864) 487-3535 ext. 258 or via email at DesignServices@EXP-Brands.com.

<sup>1</sup>Trunnion Mount Required with 347V or EM Option



# NHBR1

## Round High Bay

### OPTICAL ACCESSORIES

**NHBR1-PCR**

Prismatic Clear Ribbed Refractor (Acrylic)

**NHBR1-PFR**

Prismatic Frosted Refractor (Acrylic)

**NHBR1-SAR**

Satin Aluminum Reflector

**NHBR1-FL**

Flat Clear Lens (For use with NHBR1-PCR, NHBR1-PFR, or NHBR1-SAR)

**NHBR1-CL**

Conical Clear Ribbed Lens (For use with NHBR1-PCR, NHBR1-PFR, or NHBR1-SAR)

**NHBR1-WPC**

Widebay Polycarbonate Clear Lens (For use with NHBR1-PCR, NHBR1-PFR, or NHBR1-SAR)

### MOUNTING CABLE ACCESSORIES (For use with ACH mounting option)

**ACH05**

5-foot Adjustable Cable

**ACH10**

10-foot Adjustable Cable

**ACH15**

15-foot Adjustable Cable

**ACH20**

20-foot Adjustable Cable

### PENDANT QUICK-HANG KIT

**QHP12**

½" Pendant Quick Hang Kit

**QHP34**

¾" Pendant Quick Hang Kit



**NHBR1-PCR**  
Prismatic Clear Ribbed  
Refractor (Acrylic)



**NHBR1-PFR**  
Prismatic Frosted Refractor  
(Acrylic)



**NHBR1-SAR**  
Satin Aluminum Reflector  
(Anodized)



**NHBR1-FL**  
Flat Clear Lens



**NHBR1-CL**  
Conical Clear Ribbed Lens



**NHBR1-WG**  
Wire Guard (Cannot be used with  
refractor or lens accessories)



**NHBR1-WPC**  
Widebay Polycarbonate  
Clear Lens

		12L	18L	24L	30L
PHYSICAL	HOUSING	Die-Cast Aluminum			
	DIMENSIONS <small>(Bottom Diameter x Top Diameter x Height)</small>	ø13.5" x ø5.12" x 6.51" H	ø13.5" x ø5.93" x 6.66" H	ø13.5" x ø7.13" x 7.48" H	
	OPERATING TEMPERATURE	-40°F to 122°F (-40°C to 50°C)			
	MOUNTING OPTIONS	½" Female Threads for Pendant Mounting Standard ½" and ¾" Pendant Quick Hang Kits, Hook Mount, Trunnion Mount, Cable Hanger Plate, ½" to ¾" NPT Pendant Adapter			
ELECTRICAL	POWER <small>(Maximum Watts)</small>	90	126	184	237
	AMPERAGE AT 120 VOLTS	0.75	1.05	1.53	1.98
	AMPERAGE AT 277 VOLTS	0.32	0.45	0.66	0.86
	AMPERAGE AT 347 VOLTS	0.26	0.36	0.53	0.68
	AMPERAGE AT 480 VOLTS	0.19	0.26	0.38	0.49
	CONTROL	0-10V Dimming			
Values based on full output at 5000K.					
PHOTOMETRIC	LED	Static White 3000K, 3500K, 4000K, or 5000K			
	NUMBER OF DISTRIBUTIONS	One, With Optical Accessories Available			
	LUMEN MAINTENANCE	L90 > 100,000 Hours at 77°F*			
CERTIFICATIONS	SAFETY	ETL Certified for Damp Locations			
	INGRESS PROTECTION	IP65			
LUMEN MULTIPLIER VARIABLE CCT (Applies to Light Distribution Data on Page 4)	3000K			0.978	
	3500K			0.983	
	4000K			0.982	
	5000K			1.0	

LIGHT DISTRIBUTIONS	LENS/OPTICS	EFFICACY (lm/w)	LUMEN OUTPUT
	12L		
	Open	127	11459
	Prismatic Clear Ribbed Refractor	124	11127
	Prismatic Frosted Refractor	123	11040
	Satin Aluminum Reflector	116	11040
	Prismatic Clear Ribbed Refractor with Conical Clear Ribbed Lens	117	10572
	Prismatic Frosted Refractor with Conical Clear Ribbed Lens	117	10565
	Prismatic Clear Ribbed Refractor with Flat Clear Lens	117	10541
	Prismatic Frosted Refractor with Flat Clear Lens	120	10784
	Widebay Polycarbonate Clear Lens	107	9619
	18L		
	Open	140	17559
	Prismatic Clear Ribbed Refractor	135	17051
	Prismatic Frosted Refractor	134	16917
	Satin Aluminum Reflector	127	16045
	Prismatic Clear Ribbed Refractor with Conical Clear Ribbed Lens	128	16200
	Prismatic Frosted Refractor with Conical Clear Ribbed Lens	129	16190
	Prismatic Clear Ribbed Refractor with Flat Clear Lens	128	16153
	Prismatic Frosted Refractor with Flat Clear Lens	131	16525
	Widebay Polycarbonate Clear Lens	111	14012
	24L		
	Open	132	24213
	Prismatic Clear Ribbed Refractor	128	23512
	Prismatic Frosted Refractor	127	23328
	Satin Aluminum Reflector	120	22125
	Prismatic Clear Ribbed Refractor with Conical Clear Ribbed Lens	121	22339
	Prismatic Frosted Refractor with Conical Clear Ribbed Lens	121	22325
	Prismatic Clear Ribbed Refractor with Flat Clear Lens	121	22274
	Prismatic Frosted Refractor with Flat Clear Lens	124	22787
	Widebay Polycarbonate Clear Lens	105	19370
	30L		
	Open	124	29264
	Prismatic Clear Ribbed Refractor	120	28417
	Prismatic Frosted Refractor	119	28194
	Satin Aluminum Reflector	113	26741
	Prismatic Clear Ribbed Refractor with Conical Clear Ribbed Lens	114	26999
	Prismatic Frosted Refractor with Conical Clear Ribbed Lens	114	26982
	Prismatic Clear Ribbed Refractor with Flat Clear Lens	114	26921
	Prismatic Frosted Refractor with Flat Clear Lens	116	27541
	Widebay Polycarbonate Clear Lens	99	23411

Values based on full output at 5000K\*.

\*For other color temperatures, see Lumen Multiplier Table on Page 3.

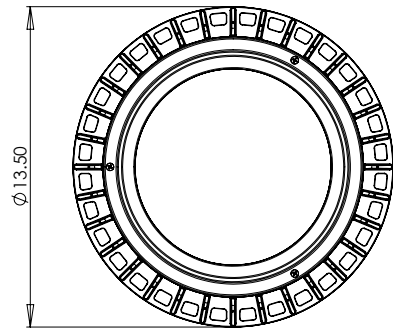
# NHBR1

## Round High Bay

**NORDEON**

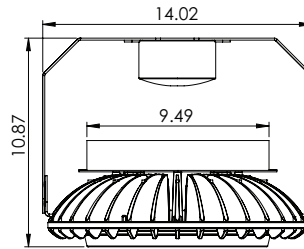
LIGHTING SOLUTIONS

### DIMENSIONS

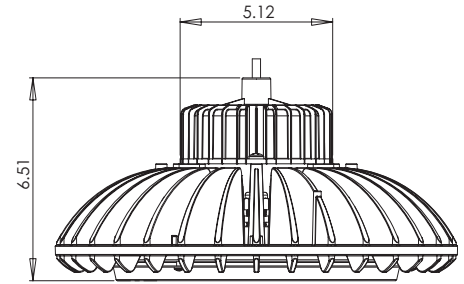


BOTTOM VIEW

(Shown with 347-480V Dimming Driver)

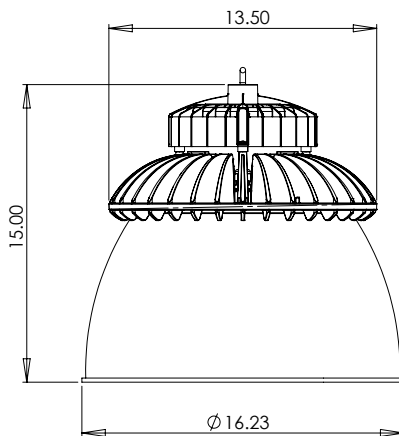


**NHBR1-12L**

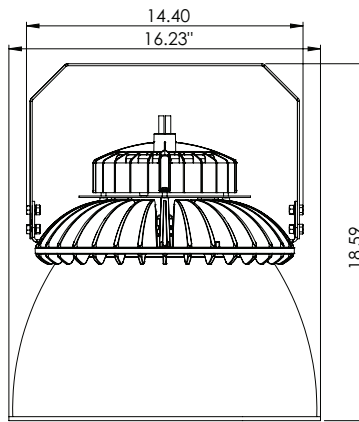


Weight - 15.4 lbs.

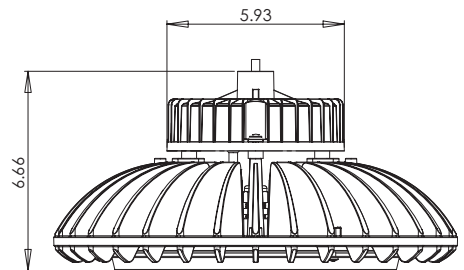
Shown With  
Reflector Accessory



Shown With Reflector Accessory and  
Trunnion Mount

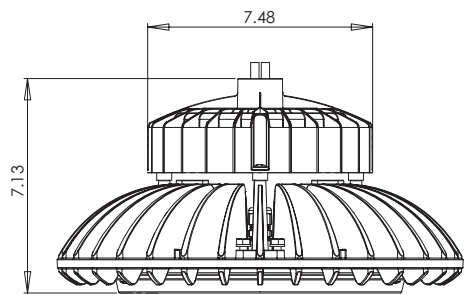


**NHBR1-18L**



Weight - 16.5 lbs.

**NHBR1-24L, 30L**



Weight - 17.8 lbs.

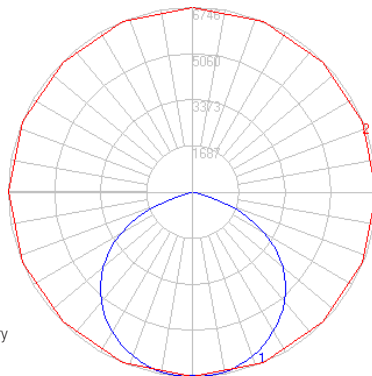
### PHOTOMETRIC DATA

#### NHBR1-18L-50K

Catalog Number:  
NHBR1-18L-50K

Lens/Optics: Clear Glass Lens  
CCT: 5000K  
IESNA: LM-63-2002  
Total Input Watts: 130.1  
Efficacy (Lm/W): 143.0  
Total Lumens: 18609

Prepared by: American Testing & Assessment Laboratory  
NOTE: Data shown is absolute for product shown.



Model	CCT	Lumens	System Wattage	Lm/W
<b>12L</b>	3000K	11709	86.7	135.0
	3500K	11073	86.1	128.6
	4000K	12166	86.3	140.9
	5000K	12176	84.6	143.9
<b>18L</b>	3000K	15791	119.5	132.1
	3500K	15002	118.3	126.8
	4000K	18578	134.1	138.5
	5000K	18609	130.1	143.0
<b>24L</b>	3000K	23510	195.4	120.3
	3500K	22444	193.5	115.9
	4000K	25202	198.5	126.9
	5000K	25721	194.6	132.1
<b>30L</b>	5000K	29441	234.3	125.7

## LIGHTING CONTROLS

### Passive Infrared (PIR)



### Adjustable Control Parameters [Defaults]

**HIGH Mode** - sensor detects motion, light output will RAMP UP to HIGH [DEFAULT = 10V].

**LOW Mode** - sensor stops detecting motion, TIME DELAY expires, light output will FADE DOWN to LOW [DEFAULT = 1V].

**TIME DELAY** - period that must elapse after sensor stops detecting motion, resuming LOW mode [DEFAULT = 5 MINUTES].

**CUT OFF** - period that must elapse after resuming LOW mode before luminaire is switched OFF [DEFAULT = 1 HOUR].

**SENSITIVITY** - response of the PIR to motion within the sensor coverage area [DEFAULT = MAXIMUM].

**SETPOINT** - when enabled, the selectable ambient light level that will hold the luminaire OFF or LOW when motion is detected [DEFAULT = DISABLED].

**PHOTOCELL** - when enabled, sensor will force the load OFF after the ambient light has exceeded the SETPOINT for at least one minute, or ON when the ambient light level goes below the SETPOINT [DEFAULT = DISABLED].

**RAMP UP TIME** - period for light output to change from LOW to HIGH [DEFAULT = DISABLED, instantly to HIGH].

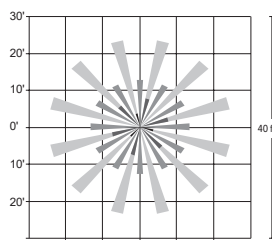
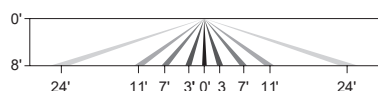
**FADE DOWN TIME** - period for light output to change from HIGH to LOW [DEFAULT = DISABLED, instantly to LOW].

**LOCK SETTINGS** - time delayed IR communication lock initiated from a FSIR-100 handheld remote to prevent unauthorized changes to the parameters. [DEFAULT = DISABLED].

## SENSOR COVERAGE OPTIONS

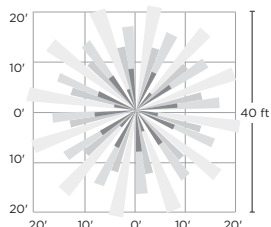
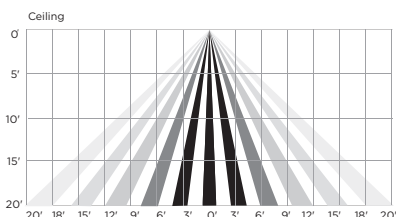
### OPTION OC2

8' Mounting Height  
40' Diameter



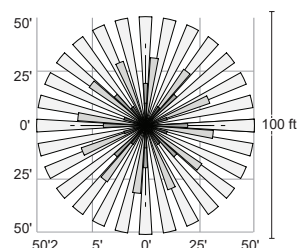
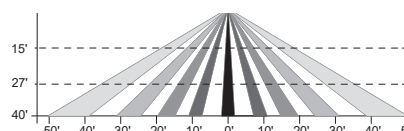
### OPTION OC3

20' Mounting Height  
40' Diameter



### OPTION OC4

40' Mounting Height  
100' Diameter



## LIGHTING CONTROLS

### Passive Infrared Surface Mount High Bay Occupancy Sensor



### Adjustable Control Parameters [Defaults]

**Fast, easy time delay setting:** can be set at any time without requiring power to the sensor; time delay is variable from 30s-30m

#### Instantly verify fixture operation and wiring

**connections:** "instant ON" closing relay fires lamps in under 5 seconds

#### High Inrush Stability (H.I.S. Technology):

- Zero crossing circuitry optimizes relay operation for reliable, long-life operation

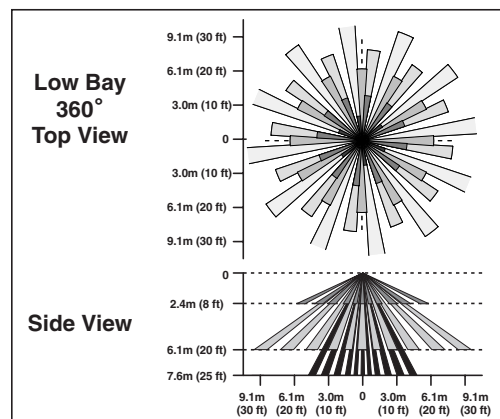
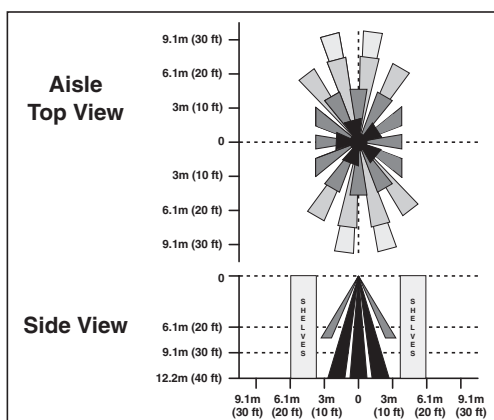
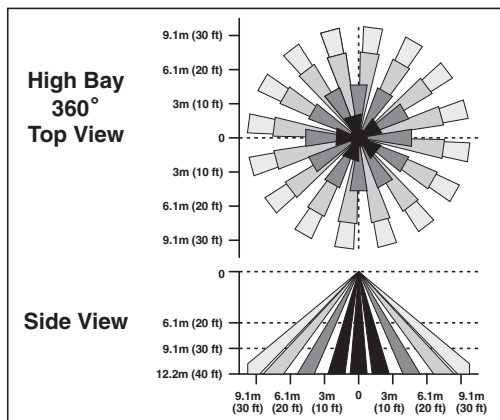
- Robust mechanical latching relay is durable for all load types

**Auto temperature calibration:** automatically adjusts the PIR sensitivity as ambient temperatures rises to increase detection of heat movement through the field-of-view

**Return to last state:** for safety and energy savings, the OSFHS contains a latching relay so that in the event power is lost to the device, the device will return to the last known state of the relay

**False detection intelligence:** for increased energy savings and to mitigate nuisance tripping, the super bright LED indicates advanced detection has been activated and the lights will only turn ON when true occupancy has been determined

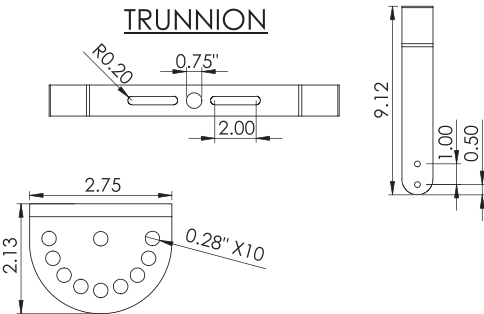
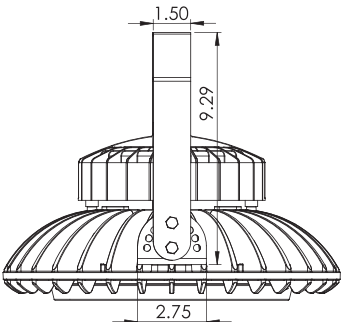
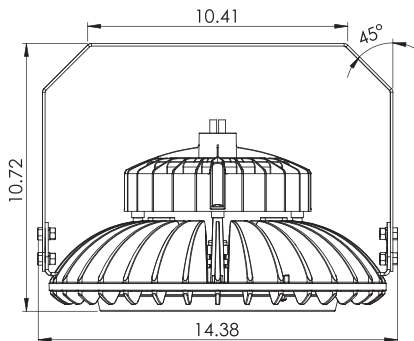
## SENSOR COVERAGE OPTIONS





MOUNTING OPTIONS

Shown With Trunnion Mount



Hook Mount  
(HK)



3 1/4" H x 1 1/2" W x 2" D

1/2" or 3/4" Quick-Hang Pendant  
(QHP12 or QHP34)



11 Gauge, Black Powder Coat, Auto-Leveling

1/2" to 3/4" NPT Pendant Adapter  
(NPT34)



1 1/2" H x 1 1/2" D