

# NIOB-2RPH / NIOB-2RPHA

2" Iolite Round Pinhole

Source: 14W to 28W LED  
800lm to 2500lm

Type

Project

Catalog No.

Notes

## PRODUCT DESCRIPTION

2" Iolite reflectors can be specified for use with Iolite new construction or remodel housings. Pinhole reflector focuses the beam spread through small opening. Available in fixed downlight or adjustable.

## FEATURES

- 800lm, 1000lm, 1500lm, 2000lm or 2500lm LED packages
- 2700K, 3000K, 3500K, 4000K, 5000K @ 90+ CRI
- Cree® LED COB or Comfort Dim Technology
- Flood optic, narrow flood and spot optics (included)
- 5-Year limited warranty

## SPECIFICATION

**Construction:** Reflectors are constructed of heat dissipating, die-cast aluminum. The aluminum die-cast LED heat sink is threaded to fit the reflector and transfer heat.

**Mounting:** Reflector includes friction blades to mount securely to housing.

## OPTICS

**800-1000lm:** Each reflector includes field changeable optics (flood, narrow flood and spot). Premium 15° and 25° TIR optics are also available.

**1500-2500lm:** Each reflector includes field changeable TIR optics (flood, narrow flood and spot).

## ELECTRICAL

**Lumens / Wattage:** 800lm / 14W, 1000lm / 14W, 1500lm / 20W, 2000lm / 24W, 2500lm / 28W

**Color Temperature:** 2700K, 3000K, 3500K, 4000K, 5000K

**CRI:** 90+CRI

**Operating Temp.:** 0°C to 40°C ambient temperature

**Lifetime:** 50,000 hours @ L70

**Comfort Dim:** Comfort Dim color tunes the temperature from a bright 3100K, to a romantic and comfortable 2000K on a gradual, even curve. Available in 800lm only.

**Dimming:** Specified by housing

## COMPATIBLE HOUSINGS

Reflectors are compatible with respective Iolite housings manufactured by Nora Lighting.

CATALOG NO.	DESCRIPTION	LUMENS / WATTAGE
NHIOICD-28	ICAT New Construction	800-1000lm / 14W
NHIOICDCP-28	Chicago Plenum	800-1000lm / 14W
NHRIIC-28	ICAT Remodel	800-1000lm / 14W
NHIOICD-215	ICAT New Construction	1500lm / 20W
NHIOICDCP-215	Chicago Plenum	1500lm / 20W
NHIOICD-220	ICAT New Construction	2000lm / 24W
NHIOICDCP-220	Chicago Plenum	2000lm / 24W
NHIOICD-225	ICAT New Construction	2500lm / 28W
NHIOICDCP-225	Chicago Plenum	2500lm / 28W

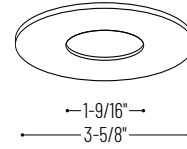
**Accessories:** Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

## LABELS AND LISTINGS

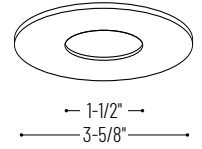
- cULus Listed for Wet Locations (NIOB-2RPHA is damp location)
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Can be used to comply with 2019 Title 24 - part 6 High Efficacy LED light source requirements



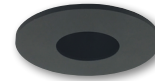
## PRODUCT IMAGES & DIMENSIONS



**NIOB-2RPH**  
Round Pinhole  
Non-Adjustable



**NIOB-2RPHA**  
Round Adjustable Pinhole  
Adjustability:  
New Construction:  
28° (800lm-1000lm)  
20° (1500lm-2500lm)  
Remodel: 15°



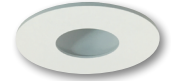
**BB**  
Black Pinhole  
Black Flange



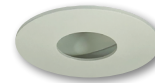
**BMPW**  
Black Pinhole  
Matte Powder White Flange



**HZMPW**  
Haze Pinhole  
Matte Powder White Flange



**MPW**  
Matte Powder White Pinhole  
Matte Powder White Flange



**WW**  
White Pinhole  
White Flange

## 2" Iolite Round Pinhole - Dedicated Housing Required

Reflector Type	Color Temp.	Finish	Lumens / Wattage
<b>NIOB-2RPH</b> = Round Pinhole	<b>27X</b> = 2700K	<b>BB</b> = Black / Black	(blank) = 800lm / 14W
<b>NIOB-2RPHA</b> = Round Adjustable Pinhole	<b>30X</b> = 3000K	<b>BMPW</b> = Black / Matte Powder White	<b>/10</b> = 1000lm / 14W
	<b>35X</b> = 3500K	<b>HZMPW</b> = Haze / Matte Powder White	<b>/HL</b> = 1500-2500lm
	<b>40X</b> = 4000K	<b>MPW</b> = Matte Powder White	(varies by housing)
	<b>50X</b> = 5000K	<b>WW</b> = White (NIOB-2RPHA only)	
	<b>CDX</b> = Comfort Dim <sup>†</sup>		

<sup>†</sup> Comfort Dim technology available in 800lm & uses non-Cree COB modules. 1" & 2" Iolite uses a different dimming curve than 4" Comfort Dim

## Compatible Housings

Housing Type
<b>NHIOICD-28</b> = ICAT New Construction / 800-100lm / 14W
<b>NHIOICDCP-28</b> = Chicago Plenum / 800-100lm / 14W
<b>NHRIIC-28</b> = ICAT Remodel / 800-100lm / 14W
<b>NHIOICD-215</b> = ICAT New Construction / 1500lm / 20W
<b>NHIOICDCP-215</b> = Chicago Plenum / 1500lm / 20W
<b>NHIOICD-220</b> = ICAT New Construction / 2000lm / 24W
<b>NHIOICDCP-220</b> = Chicago Plenum / 2000lm / 24W
<b>NHIOICD-225</b> = ICAT New Construction / 2500lm / 28W
<b>NHIOICDCP-225</b> = Chicago Plenum / 2500lm / 28W

Example: **NIOB-2RPH27XBB** = 2" Iolite Round Pinhole, 2700K, Black finish, 800lm / 14W

# 2" Iolite Accessories

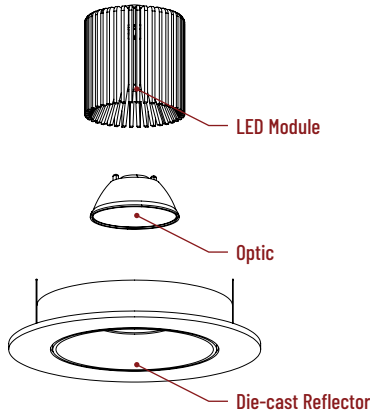
## 2" Iolite Round Pinhole

Type	
Project	
Catalog No.	
Notes	

### FIELD CHANGEABLE OPTICS

Iolite reflectors include spot, narrow flood and flood optics. Optics can be changed in the field by removing LED module from die-cast reflector. Replacement optics include an optional frosted lens.

**Note:** Frosted filter-optics and Premium TIR optics are not compatible with /HL LED modules.



Frosted Filter-Optic

NIO-REFL15FR	15° Optic
NIO-REFL25FR	25° Optic
NIO-REFL38FR	38° Optic
NIO-REFL60FR	60° Optic

Optic assembly includes optional frosted lens. 25°, 38° and 60° optics are included with 800lm and 1000lm reflector.  
**Not compatible with /HL LED module.**



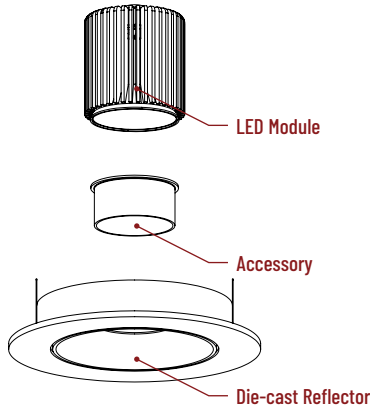
Premium TIR Optics

NIO-REFLTIR15	15° Optic
NIO-REFLTIR25	25° Optic

**Not compatible with /HL LED module or Comfort Dim (CDX) technology**

### ACCESSORIES

Iolite accessories can be added at any point in the design process. Accessories easily install between LED module and die-cast reflector. Luminaire will accommodate (1) hex louver and (1) collar accessory, no accessory holder required.



Translucent Decorative Collar

NIO-AS14(color)	5/8" length
NIO-AS19(color)	3/4" length
NIO-AS26(color)	1" length
<b>Color:</b>	
AM (amber), BLU (blue), FR (frosted), R (red)	

Translucent collars color the aperture with the specified color while producing white general light. Collars are available in different lengths. Use to add interest, create a theme, match a theme or define a space.



Opaque Collar Snoot

NIO-AS14(color)	5/8" length
NIO-AS19(color)	3/4" length
NIO-AS26(color)	1" length
<b>Color:</b>	
BLK (black), MPW (matte powder white), WH (white)	

Opaque snoot greatly reduces aperture brightness while preserving light output. (Note: Black snoot will reduce light)



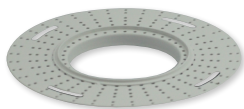
Hex Cell Louver

NIO-HC	Black
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Hex cell louver subtly reduces aperture brightness by reducing light output by about 20%.

### FLUSH MOUNT

2" Iolite reflectors can be installed flush with the drywall for a flush mount appearance. A flush mount mud ring is installed after the drywall and a professional drywall finisher floats the ceiling to blend in the mud ring.



Flush Mount Mud Ring

NIO-FMMR-2R	Round Mud Ring
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Mounts trim flush to ceiling with reflector flange visible. **Mud ring attaches to drywall. Requires and only for use with NHIOICD-28 or NHIOICDCP-28 new construction housings and NIOB-2R reflectors.**  
Dimensions: 7-7/8" diameter 1/2" thick

# PHOTOMETRICS

2" Iolite Round Pinhole  
800 lumens

Type \_\_\_\_\_

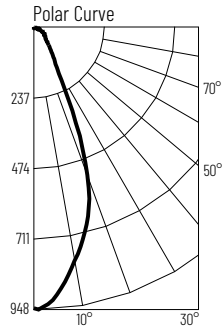
Project \_\_\_\_\_

Catalog No. \_\_\_\_\_

Notes \_\_\_\_\_

## Test Information

Test Number: NTR11323  
Part Number: NI0B-2RPH27XWW  
Beam Spread: 42° Flood  
Lumens: 650lm  
Wattage: 14.57W  
Efficacy: 45lpw  
CCT / CRI: 2700K / 90 CRI  
Spacing Criteria (0°-180): 0.72  
Spacing Criteria (90°-270): 0.68



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	59fc	3'-1"
6'	26.2fc	4'-8"
8'	14.7fc	6'-4"
10'	9.4fc	7'-11"
12'	6.6fc	9'-5"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	419	64.5
0-40	492	75.7
0-60	585	89.9
0-90	646	99.3
90-180	5	0.7
0-180	650	100

## Candela Table

Vertical Angles	Candela
0	944
5	898
15	688
25	283
35	112
45	60

## Lumen Output Multipliers

Color Temperature: 2700K (1.00), 3000K (1.03), 3500K (1.07), 4000K (1.2), 5000K (1.21)