

# NIOB-2RPH

2" Iolite Round Pinhole

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

Type

Project

Catalog No.

Notes

## PRODUCT DESCRIPTION

2" Iolite downlights can be specified for use with Iolite new construction or remodel housings. Fixed pinhole focuses the beam spread through small opening. Also available in adjustable pinhole (NIOB-2RPHA).

## FEATURES

- 800lm, 1000lm, 1500lm, 2000lm or 2500lm LED packages
- 2700K, 3000K, 3500K, 4000K, 5000K @ 90+ CRI
- Comfort Dim (warm dimming) also available in 800lm only
- Flood optic, narrow flood and spot optics (included)
- 5-Year limited warranty

## SPECIFICATION

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

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

## OPTICS

**800-1000lm:** Three field changeable optics (22° spot, 33° narrow flood and 44° flood) are included with each LED module. Premium 10° TIR narrow spot optic assembly also available ([Click Here](#) for more information). Optional frosted and TIR optics are also available.

**1500-2500lm:** Three field changeable TIR optics (spot, narrow flood and flood) are included with each LED module.

## ELECTRICAL

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

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

**Color Rendering Index:** 90+ CRI

**Operating Temperature:** 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

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

CATALOG NO.	DESCRIPTION	LUMENS / WATTAGE
<a href="#">NHIOICD-28</a>	ICAT New Construction	800-1000lm / 14W
<a href="#">NHIOICDCP-28</a>	Chicago Plenum	800-1000lm / 14W
<a href="#">NHRIOIC-28</a>	ICAT Remodel	800-1000lm / 14W
<a href="#">NHIOICD-215</a>	ICAT New Construction	1500lm / 20W
<a href="#">NHIOICDCP-215</a>	Chicago Plenum	1500lm / 20W
<a href="#">NHIOICD-220</a>	ICAT New Construction	2000lm / 24W
<a href="#">NHIOICDCP-220</a>	Chicago Plenum	2000lm / 24W
<a href="#">NHIOICD-225</a>	ICAT New Construction	2500lm / 28W
<a href="#">NHIOICDCP-225</a>	Chicago Plenum	2500lm / 28W

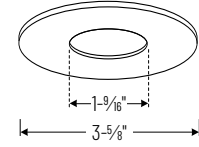
**Accessories:** Luminaires will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

## LABELS AND LISTINGS

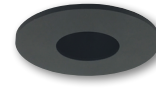
- cULus Listed for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2022



## PRODUCT IMAGES & DIMENSIONS



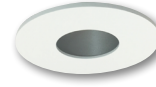
**NIO-2RPH**  
Round Adjustable Pinhole  
Non-Adjustable



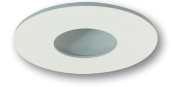
**BB**  
Black Pinhole  
Black Flange



**BMPW**  
Black Pinhole  
Matte Powder White Flange



**HZMPW**  
Haze Pinhole  
Matte Powder White Flange



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

## 2" Iolite Round Pinhole - Dedicated Housing Required

Color Temperature	Finish	Lumens / Wattage
<b>NIOB-2RPH50X</b> = 5000K*	<b>BB</b> = Black / Black	(blank) = 800lm / 14W
<b>NIOB-2RPHCDX</b> = Comfort Dim†	<b>BMPW</b> = Black / Matte Powder White	
	<b>HZMPW</b> = Haze / Matte Powder White	
<b>NIOB-2RPH27X</b> = 2700K	<b>MPW</b> = Matte Powder White	<b>/10</b> = 1000lm / 14W
<b>NIOB-2RPH30X</b> = 3000K		<b>/HL</b> = 1500-2500lm
<b>NIOB-2RPH35X</b> = 3500K		(varies by housing)
<b>NIOB-2RPH40X</b> = 4000K		
<b>NIOB-2RPH50X</b> = 5000K		

\* 5000K LED modules in 800lm are while supplies last

† Comfort Dim available in 800lm only and 2" Iolite uses a different dimming curve than 2" & 4" Iolite

## Compatible Housings

Housing Type
<b>NHIOICD-28</b> = ICAT New Construction / 800-1000lm / 14W
<b>NHIOICDCP-28</b> = Chicago Plenum / 800-1000lm / 14W
<b>NHRIOIC-28</b> = ICAT Remodel / 800-1000lm / 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-2RPH50XBB** = 2" Iolite Round Pinhole, 5000K, Black Pinhole / Black Flange, 800lm / 14W

## 2" Iolite Accessories

2" Iolite Round Pinhole

Type

Project

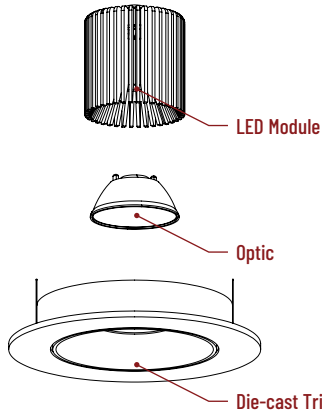
Catalog No.

Notes

### FIELD CHANGEABLE OPTICS

Iolite luminaires include spot, narrow flood and flood optics. Optics can be changed in the field by removing LED module from die-cast trim. Optional frosted optics are available.

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



#### Frosted Optics

NIO-REFL38FR  
NIO-REFL60FR

60° Optic  
73° Optic

Not compatible with /HL LED module.



#### Premium TIR Optics

NIO-REFLTIR15  
NIO-REFLTIR25

22° Optic  
26° Optic

Not compatible with /HL, Comfort Dim (CDX) LED modules or Hex Cell Louver.



#### 10° TIR Optic Assembly

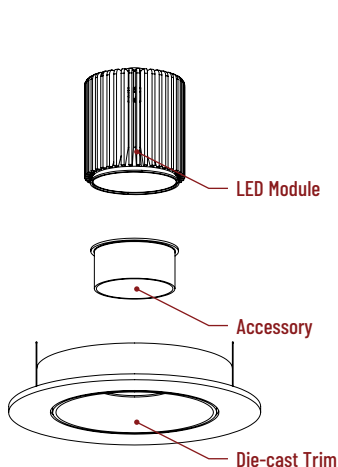
Specialized narrow spot LED module assembly is also available. Requires LE4 housing. [Click Here](#) for more information.



### ACCESSORIES

Iolite accessories can be added at any point in the design process. Accessories easily install between LED module and die-cast trim.

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  
**Color:**  
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  
**Color:**  
MPW (matte powder white), WH (white)

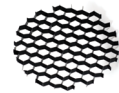
Opaque snoot greatly reduces aperture brightness while preserving light output.



#### Hex Cell Louver

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

**Hex cell louver is not compatible with TIR optics.**



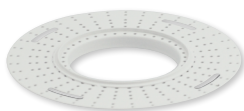
### FLUSH MOUNT

2" Iolite downlights 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

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 trims.**  
Dimensions: 7-7/8" diameter 1/2" thick



# PHOTOMETRICS

2" Iolite Round Pinhole  
800 lumens

Type

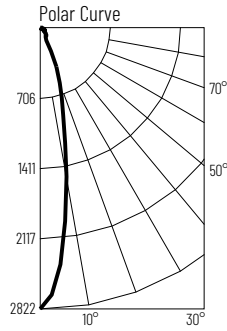
Project

Catalog No.

Notes

## Test Information

Test Number: NTR2233R1  
Part Number: NIOB-2RPH40XMPW/10  
Beam Spread: 22° Spot  
Lumens: 841lm  
Wattage: 13.41W  
Efficacy: 63lpw  
CCT / CRI: 4000K / 90 CRI  
Spacing Criteria (0°-180°): 0.38  
Spacing Criteria (90°-270°): 0.38



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	176fc	1'-6"
6'	78.4fc	2'-4"
8'	44.1fc	3'-1"
10'	28.2fc	3'-10"
12'	19.6fc	4'-7"

## Zonal Lumen Summary

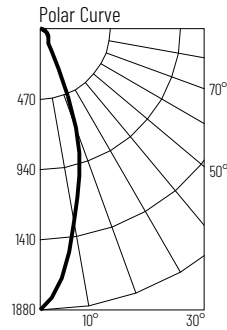
Zone	Lumens	% Luminaire
0-30	595	70.7
0-40	657	78.1
0-60	769	91.4
0-90	841	100
90-180	0	0
0-180	841	100

## Candela Table

Vertical Angles	Candela
0	2822
5	2381
15	906
25	262
35	103
45	80

## Test Information

Test Number: NTR2235R1  
Part Number: NIOB-2RPH40XMPW/10  
Beam Spread: 33° Narrow Flood  
Lumens: 847lm  
Wattage: 13.41W  
Efficacy: 63lpw  
CCT / CRI: 4000K / 90 CRI  
Spacing Criteria (0°-180°): 0.54  
Spacing Criteria (90°-270°): 0.54



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	117fc	2'-4"
6'	52.2fc	3'-6"
8'	29.4fc	4'-8"
10'	18.8fc	5'-10"
12'	13.1fc	7'

## Zonal Lumen Summary

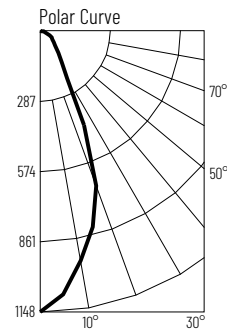
Zone	Lumens	% Luminaire
0-30	592	70
0-40	655	77.3
0-60	770	91
0-90	847	100
90-180	0	0
0-180	847	100

## Candela Table

Vertical Angles	Candela
0	1880
5	1674
15	1017
25	292
35	98
45	78

## Test Information

Test Number: NTR2234R1  
Part Number: NIOB-2RPH40XMPW/10  
Beam Spread: 44° Narrow Flood  
Lumens: 830lm  
Wattage: 13.41W  
Efficacy: 62lpw  
CCT / CRI: 4000K / 90 CRI  
Spacing Criteria (0°-180°): 0.72  
Spacing Criteria (90°-270°): 0.72



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	71.8fc	3'-2"
6'	31.9fc	4'-10"
8'	17.9fc	6'-6"
10'	11.5fc	8'-1"
12'	8fc	9'-8"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	526	63.4
0-40	627	75.5
0-60	751	90.5
0-90	830	100
90-180	0	0
0-180	830	100

## Candela Table

Vertical Angles	Candela
0	1148
5	1081
15	830
25	425
35	157
45	85

## Lumen Output Multipliers

Color Temperature: 2700K (0.83), 3000K (0.86), 3500K (0.89), 4000K (1.00), 5000K (1.01)