

# NIO-4RPH

4" Iolite Round Fixed Pinhole

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

Type

Project

Catalog No.

Notes

## PRODUCT DESCRIPTION

4" Iolite reflectors can be specified for use with Iolite new construction or remodel housings. Fixed Pinhole reflector focuses the beam spread through small opening. Also available in adjustable pinhole (NIO-4RPHA).

## 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:** 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 (26° spot, 37° narrow flood and 52° flood - preinstalled). Premium 15° and 25° TIR optics are also available.

**1500-2500lm:** Each reflector includes field changeable TIR optics (30° spot, 45° narrow flood - preinstalled and 65° flood).

## 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.:** Specified by housing

**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-48	ICAT New Construction	800-1000lm / 14W
NHIOICDCP-48	Chicago Plenum	800-1000lm / 14W
NHRIOIC-48	ICAT Remodel	800-1000lm / 14W
NHIOICD-415	ICAT New Construction	1500lm / 20W
NHIOICDCP-415	Chicago Plenum	1500lm / 20W
NHIOICD-420	ICAT New Construction	2000lm / 24W
NHIOICDCP-420	Chicago Plenum	2000lm / 24W
NHIOICD-425	ICAT New Construction	2500lm / 28W
NHIOICDCP-425	Chicago Plenum	2500lm / 28W

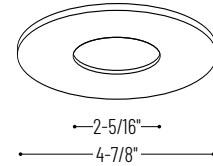
**Accessories:** Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

## LABELS AND LISTINGS

- cULus Listed for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2019



## PRODUCT IMAGES & DIMENSIONS



**NIO-4RPH**  
Round Fixed 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

## 4" Iolite Round Fixed Pinhole - Dedicated Housing Required

Reflector Type	Color Temp.	Finish	Lumens / Wattage
<b>NIO-4RPH</b> = Round Fixed Pinhole	<b>50X</b> = 5000K*	<b>BB</b> = Black / Black	(blank) = 800lm / 14W
	<b>CDX</b> = Comfort Dim (3100K-2000K) <sup>†</sup>	<b>BMPW</b> = Black / Matte Powder White	
	<b>27X</b> = 2700K	<b>HZMPW</b> = Haze / Matte Powder White	
	<b>30X</b> = 3000K	<b>MPW</b> = Matte Powder White	
	<b>35X</b> = 3500K		<b>/10</b> = 1000lm / 14W
	<b>40X</b> = 4000K		<b>/HL</b> = 1500-2500lm (varies by housing)
	<b>50X</b> = 5000K		

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

<sup>†</sup> Comfort Dim available in 800lm only and 1" Iolite uses a different dimming curve than 2" & 4" Iolite

## Compatible Housings

Housing Type
<b>NHIOICD-48</b> = ICAT New Construction / 800-1000lm / 14W
<b>NHIOICDCP-48</b> = Chicago Plenum / 800-1000lm / 14W
<b>NHRIOIC-48</b> = ICAT Remodel / 800-1000lm / 14W
<b>NHIOICD-415</b> = ICAT New Construction / 1500lm / 20W
<b>NHIOICDCP-415</b> = Chicago Plenum / 1500lm / 20W
<b>NHIOICD-420</b> = ICAT New Construction / 2000lm / 24W
<b>NHIOICDCP-420</b> = Chicago Plenum / 2000lm / 24W
<b>NHIOICD-425</b> = ICAT New Construction / 2500lm / 28W
<b>NHIOICDCP-425</b> = Chicago Plenum / 2500lm / 28W

Example: **NIO-4RPH50XBB** = 4" Iolite Round Fixed Pinhole, 5000K, Black finish, 800lm / 14W

# 4" Iolite Accessories

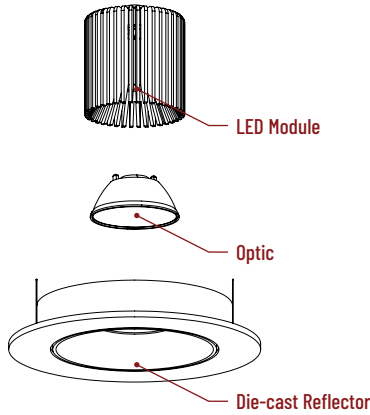
## 4" Iolite Round Fixed Pinhole

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	26° Optic
NIO-REFL38FR	37° Optic
NIO-REFL60FR	52° Optic

Optic assembly includes optional frosted lens. 26°, 37° and 60° optics are included with 800lm and 1000lm reflector.  
**Not compatible with /HL LED module.**



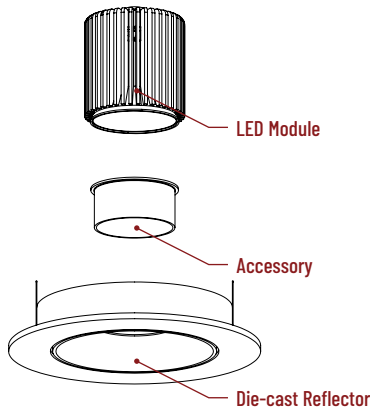
Premium TIR Optics

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)	

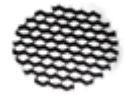
Translucent collars color the aperture with the specified color while producing white general light. Collars are available in different lengths. Use to add interest, create a theme, match a theme or define a space.



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

4" 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-4R	Round Mud Ring
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Mounts reflector flush to ceiling with flange visible. Mud ring attaches to drywall. **Only for use with NHIOICD-48 or NHIOICDCP-48 new construction housings and NIO-4R reflectors.** Dimensions: 7-7/8" diameter 1/2" thick



# PHOTOMETRICS

4" Iolite Round Fixed Pinhole  
800 lumens

Type

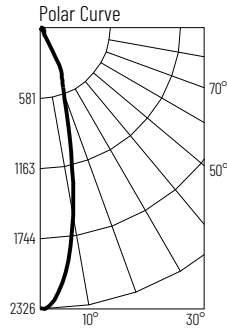
Project

Catalog No.

Notes

## Test Information

Test Number: NTR11294  
Part Number: NIO-4RPH30XMPW  
Beam Spread: 26° Spot  
Lumens: 795lm  
Wattage: 14.24W  
Efficacy: 56lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.46  
Spacing Criteria (90°-270): 0.46



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	145fc	1'-1"
6'	64.5fc	2'-10"
8'	36.3fc	3'-8"
10'	23.2fc	4'-8"
12'	16.1fc	5'-7"

## Zonal Lumen Summary

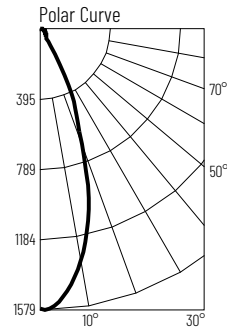
Zone	Lumens	% Luminaire
0-30	625	78.6
0-40	670	84.3
0-60	738	92.8
0-90	793	99.7
90-180	3	0.3
0-180	795	100

## Candela Table

Vertical Angles	Candela
0	2321
5	2099
15	939
25	418
35	65
45	48

## Test Information

Test Number: NTR11296  
Part Number: NIO-4RPH30XMPW  
Beam Spread: 37° Narrow Flood  
Lumens: 792lm  
Wattage: 14.34W  
Efficacy: 55lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.64  
Spacing Criteria (90°-270): 0.64



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	98.1fc	2'-8"
6'	43.6fc	4'-1"
8'	24.5fc	5'-5"
10'	15.7fc	6'-10"
12'	10.9fc	8'-2"

## Zonal Lumen Summary

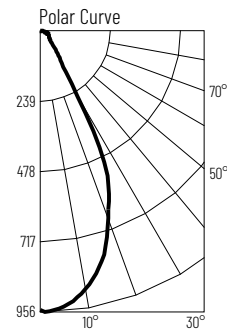
Zone	Lumens	% Luminaire
0-30	615	77.7
0-40	661	83.4
0-60	731	92.3
0-90	790	99.7
90-180	3	0.3
0-180	792	100

## Candela Table

Vertical Angles	Candela
0	1570
5	1505
15	1056
25	452
35	63
45	48

## Test Information

Test Number: NTR11298  
Part Number: NIO-4RPH30XMPW  
Beam Spread: 52° Flood  
Lumens: 766lm  
Wattage: 14.35W  
Efficacy: 53lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.84  
Spacing Criteria (90°-270): 0.86



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	59.4fc	3'-11"
6'	26.4fc	5'-11"
8'	14.8fc	7'-10"
10'	9.5fc	9'-10"
12'	6.6c	11'-8"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	540	70.4
0-40	622	81.1
0-60	700	91.3
0-90	764	99.7
90-180	3	0.3
0-180	766	100

## Candela Table

Vertical Angles	Candela
0	950
5	936
15	811
25	535
35	122
45	53

## Lumen Output Multipliers

Color Temperature: 2700K (0.97), 3000K (1.00), 3500K (1.04), 4000K (1.16), 5000K (1.17)

# PHOTOMETRICS

4" Iolite Round Fixed Pinhole  
1000 lumens

Type

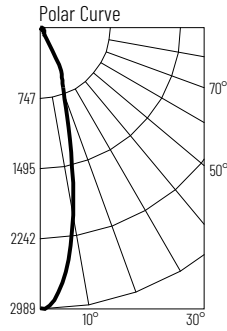
Project

Catalog No.

Notes

## Test Information

Test Number: NTR11295  
Part Number: NIO-4RPH30XMPW/10  
Beam Spread: 26° Spot  
Lumens: 1027lm  
Wattage: 13.35W  
Efficacy: 77lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.46  
Spacing Criteria (90°-270): 0.46



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	186fc	1'-11"
6'	82.6fc	2'-10"
8'	46.5fc	3'-10"
10'	29.7fc	4'-8"
12'	20.7fc	5'-7"

## Zonal Lumen Summary

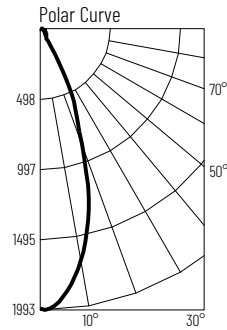
Zone	Lumens	% Luminaire
0-30	805	78.3
0-40	864	84.1
0-60	952	92.7
0-90	1024	99.6
90-180	4	0.4
0-180	1027	100

## Candela Table

Vertical Angles	Candela
0	2975
5	2684
15	1221
25	544
35	84
45	62

## Test Information

Test Number: NTR11297  
Part Number: NIO-4RPH30XMPW/10  
Beam Spread: 37° Narrow Flood  
Lumens: 1002lm  
Wattage: 13.36W  
Efficacy: 75lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.64  
Spacing Criteria (90°-270): 0.64



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	124fc	2'-8"
6'	55fc	4'-1"
8'	30.9fc	5'-5"
10'	19.8fc	6'-10"
12'	13.8fc	8'-1"

## Zonal Lumen Summary

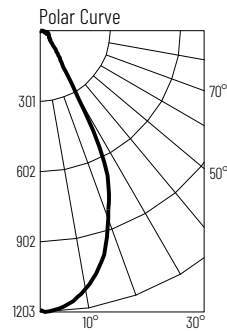
Zone	Lumens	% Luminaire
0-30	777	77.6
0-40	835	83.3
0-60	924	92.2
0-90	999	99.7
90-180	3	0.3
0-180	1002	100

## Candela Table

Vertical Angles	Candela
0	1980
5	1888
15	1327
25	572
35	81
45	62

## Test Information

Test Number: NTR11299  
Part Number: NIO-4RPH30XMPW/10  
Beam Spread: 52° Flood  
Lumens: 973lm  
Wattage: 13.32W  
Efficacy: 73lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.86  
Spacing Criteria (90°-270): 0.86



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	74.5fc	3'-11"
6'	33.1fc	5'-11"
8'	18.6fc	7'-10"
10'	11.9fc	9'-10"
12'	8.3fc	11'-10"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	682	70.1
0-40	787	80.9
0-60	888	91.3
0-90	970	99.7
90-180	3	0.3
0-180	973	100

## Candela Table

Vertical Angles	Candela
0	1193
5	1175
15	1022
25	679
35	156
45	70

## Lumen Output Multipliers

Color Temperature: 2700K (0.98), 3000K (1.00), 3500K (1.09), 4000K (1.19), 5000K (1.16)