

# NIO-4RPHA

4" Iolite Round Adjustable Pinhole

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

Type

Project

Catalog No.

Notes

## PRODUCT DESCRIPTION

4" Iolite LED downlights require a dedicated Iolite new construction or remodel housing. Adjustable pinhole reflector focuses the beam spread through small opening.

## FEATURES

- 800lm, 1000lm, 1500lm, 2000lm or 2500lm LED packages
- 2700K, 3000K, 3500K, 4000K, 5000K @ 90+ CRI
- Comfort Dim (warm dimming) also available
- 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 (spot, narrow flood and 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:** Specified by housing

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

**Comfort Dim:** Comfort Dim color tunes the temperature from a bright 3100K (800lm) or 3000K (HL), to a romantic and comfortable 2000K on a gradual, even curve. Available in 800lm or HL (1500lm-2500lm).

**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-48</a>	ICAT New Construction	800-1000lm / 14W
<a href="#">NHIOICDCP-48</a>	Chicago Plenum	800-1000lm / 14W
<a href="#">NHRIOIC-48</a>	ICAT Remodel	800-1000lm / 14W
<a href="#">NHIOICD-415</a>	ICAT New Construction	1500lm / 20W
<a href="#">NHIOICDCP-415</a>	Chicago Plenum	1500lm / 20W
<a href="#">NHIOICD-420</a>	ICAT New Construction	2000lm / 24W
<a href="#">NHIOICDCP-420</a>	Chicago Plenum	2000lm / 24W
<a href="#">NHIOICD-425</a>	ICAT New Construction	2500lm / 28W
<a href="#">NHIOICDCP-425</a>	Chicago Plenum	2500lm / 28W

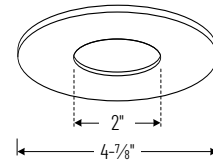
**Accessories:** Luminaires will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

## LABELS AND LISTINGS

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



## PRODUCT IMAGES & DIMENSIONS



**NIO-4RPHA**  
Round Adjustable Pinhole  
Adjustability:  
New Construction: 30° / Remodel: 20°



**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

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

Color Temperature	Finish	Lumens / Wattage
<b>NIO-4RPHA50X</b> = 5000K*	<b>BB</b> = Black / Black	(blank) = 800lm / 14W
<b>NIO-4RPHACDX</b> = Comfort Dim†	<b>BMPW</b> = Black / Matte Powder White	
	<b>HZMPW</b> = Haze / Matte Powder White	
<b>NIO-4RPHA27X</b> = 2700K	<b>MPW</b> = Matte Powder White	/10 = 1000lm / 14W
<b>NIO-4RPHA30X</b> = 3000K	<b>WW</b> = White	/HL = 1500-2500lm
<b>NIO-4RPHA35X</b> = 3500K		(varies by housing)
<b>NIO-4RPHA40X</b> = 4000K		
<b>NIO-4RPHA50X</b> = 5000K		
<b>NIO-4RPHACDX</b> = Comfort Dim†		

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

† 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-4RPHA50XBB** = 4" Iolite Round Adjustable Pinhole, 5000K, Black finish, 800lm

# 4" Iolite Accessories

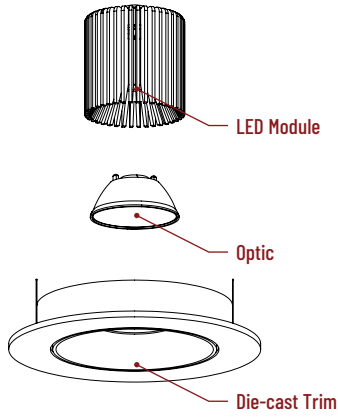
## 4" Iolite Round Adjustable Pinhole

Type
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### 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 and TIR optics are also available.

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



#### Frosted Optics

**NIO-REFL38FR** 60° Optic  
**NIO-REFL60FR** 73° Optic  
**Not compatible with /HL LED module.**

#### Premium TIR Optics

**NIO-REFLTIR15** 22° Optic  
**NIO-REFLTIR25** 26° Optic  
**Not compatible with /HL, Comfort Dim (CDX) LED modules or Hex Cell Louver.**

#### 10° TIR Optic Assembly

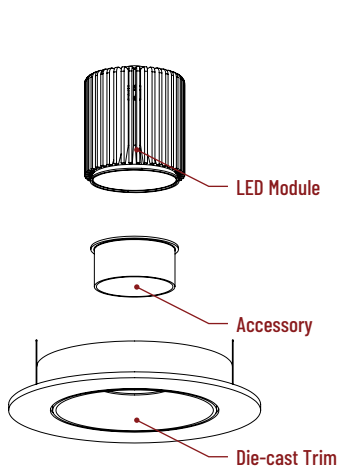
Specialized narrow spot LED module assembly is also available. Requires LE4 housing. [Click Here](#) for more information.



### 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

4" Iolite trims 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

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



# PHOTOMETRICS

4" Iolite Round Adjustable Pinhole  
800 lumens

Type

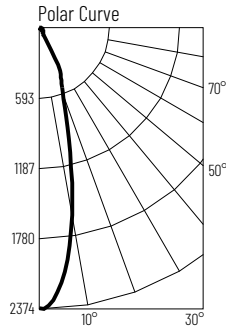
Project

Catalog No.

Notes

## Test Information

Test Number: NTR1555  
Part Number: NIO-4RPHA30XWW  
Beam Spread: 26° Spot  
Lumens: 669lm  
Wattage: 13.99W  
Efficacy: 48lpw  
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'	148fc	1'-11"
6'	65.8fc	2'-10"
8'	37fc	3'-8"
10'	23.7fc	4'-8"
12'	16.4fc	5'-7"

## Zonal Lumen Summary

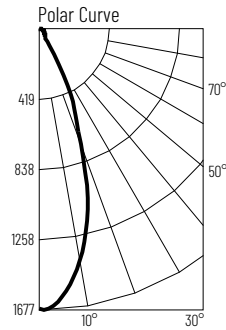
Zone	Lumens	% Luminaire
0-30	555	83.1
0-40	588	87.9
0-60	632	94.5
0-90	667	99.7
90-180	2	0.3
0-180	669	100

## Candela Table

Vertical Angles	Candela
0	2367
5	2176
15	919
25	190
35	50
45	30

## Test Information

Test Number: NTR1556  
Part Number: NIO-4RPHA30XWW  
Beam Spread: 34° Narrow Flood  
Lumens: 659lm  
Wattage: 14.07W  
Efficacy: 47lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180°): 0.58  
Spacing Criteria (90°-270°): 0.58



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	105fc	2'-6"
6'	46.5fc	3'-8"
8'	26.1fc	4'-11"
10'	16.7fc	6'-2"
12'	11.6fc	7'-5"

## Zonal Lumen Summary

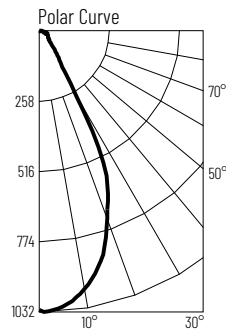
Zone	Lumens	% Luminaire
0-30	544	82.6
0-40	573	87
0-60	621	94.3
0-90	657	99.8
90-180	2	0.2
0-180	659	100

## Candela Table

Vertical Angles	Candela
0	1673
5	1595
15	983
25	241
35	49
45	30

## Test Information

Test Number: NTR1557  
Part Number: NIO-4RPHA30XMPW  
Beam Spread: 45° Flood  
Lumens: 618lm  
Wattage: 14.04W  
Efficacy: 44lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180°): 0.76  
Spacing Criteria (90°-270°): 0.76



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	64.4fc	3'-4"
6'	28.6fc	4'-11"
8'	16.1fc	6'-6"
10'	10.3fc	8'-2"
12'	7.2fc	9'-10"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	468	75.7
0-40	526	85.1
0-60	576	93.2
0-90	616	99.7
90-180	2	0.3
0-180	618	100

## Candela Table

Vertical Angles	Candela
0	1030
5	1002
15	790
25	320
35	93
45	32

## Lumen Output Multipliers

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

# PHOTOMETRICS

4" Iolite Round Adjustable Pinhole  
1000 lumens

Type

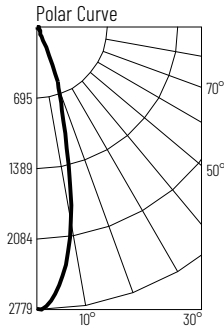
Project

Catalog No.

Notes

## Test Information

Test Number: NTR1558  
Part Number: NIO-4RPHA30XWW/10  
Beam Spread: 26° Spot  
Lumens: 795lm  
Wattage: 13.51W  
Efficacy: 59pw  
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'	173fc	1'-11"
6'	77.1fc	2'-10"
8'	43.3fc	3'-8"
10'	27.7fc	4'-7"
12'	19.3fc	5'-7"

## Zonal Lumen Summary

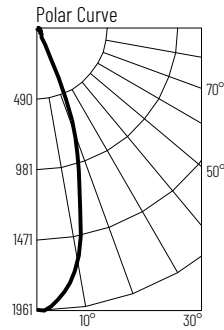
Zone	Lumens	% Luminaire
0-30	658	82.8
0-40	697	87.7
0-60	750	94.4
0-90	792	99.7
90-180	2	0.3
0-180	795	100

## Candela Table

Vertical Angles	Candela
0	2774
5	2542
15	1079
25	234
35	62
45	36

## Test Information

Test Number: NTR1559  
Part Number: NIO-4RPHA30XWW/10  
Beam Spread: 35° Narrow Flood  
Lumens: 779lm  
Wattage: 13.52W  
Efficacy: 58pw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180°): 0.58  
Spacing Criteria (90°-270°): 0.58



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	123fc	2'-6"
6'	54.5fc	3'-8"
8'	30.6fc	5'
10'	19.6fc	6'-2"
12'	13.6fc	7'-6"

## Zonal Lumen Summary

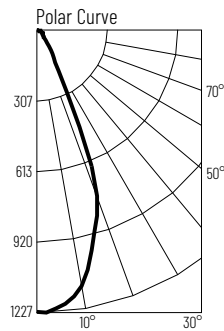
Zone	Lumens	% Luminaire
0-30	642	82.4
0-40	676	86.8
0-60	734	94.2
0-90	777	99.7
90-180	2	0.3
0-180	779	100

## Candela Table

Vertical Angles	Candela
0	1961
5	1860
15	1162
25	285
35	59
45	36

## Test Information

Test Number: NTR1560  
Part Number: NIO-4RPHA30XWW/10  
Beam Spread: 44° Flood  
Lumens: 732lm  
Wattage: 13.54W  
Efficacy: 54pw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180°): 0.74  
Spacing Criteria (90°-270°): 0.76



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	76.4fc	3'-2"
6'	33.9fc	4'-11"
8'	19.1fc	6'-6"
10'	12.2fc	8'-1"
12'	8.5fc	9'-8"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	555	75.8
0-40	624	85.2
0-60	683	93.3
0-90	730	99.8
90-180	2	0.2
0-180	732	100

## Candela Table

Vertical Angles	Candela
0	1222
5	1193
15	938
25	386
35	108
45	38

## Lumen Output Multipliers

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