

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 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 (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, 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
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

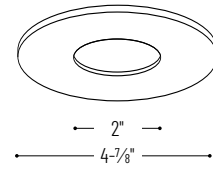
Accessories: Luminaires will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

LABELS AND LISTINGS

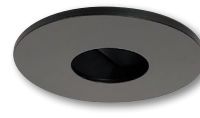
- cULus Listed for Damp Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2022



PRODUCT IMAGES & DIMENSIONS



NIO-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

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

* 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
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

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

4" Iolite Accessories

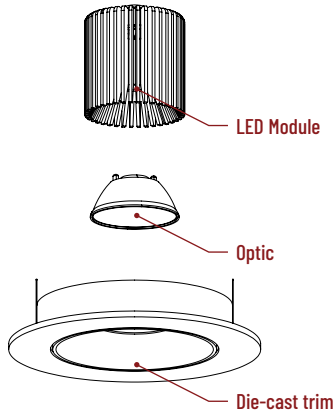
4" Iolite Round Adjustable Pinhole

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 and TIR optics are also available.

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



Frosted Filter-Optic

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.



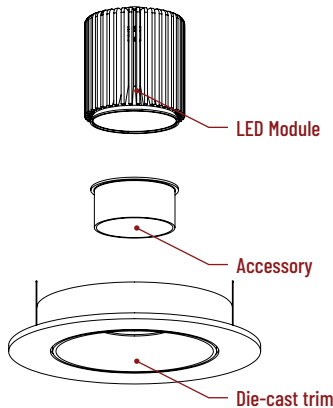
10° TIR Optic Assembly

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

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 NH10ICD-48 or NH10ICDCP-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

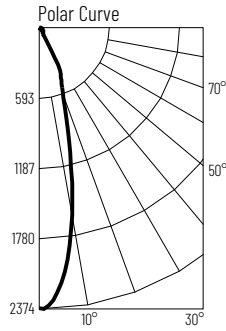
Project

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

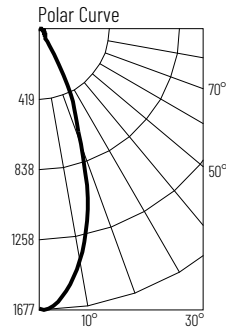
Zone	Lumens	% Luminaire
0-30	555	83.1
0-40	588	87.9
0-60	632	94.5
0-90	667	99.7
90-180	2	0.3
0-180	669	100

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

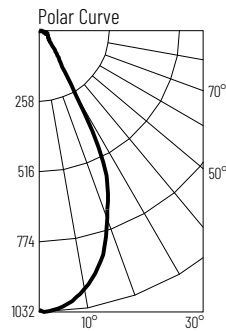
Zone	Lumens	% Luminaire
0-30	544	82.6
0-40	573	87
0-60	621	94.3
0-90	657	99.8
90-180	2	0.2
0-180	659	100

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

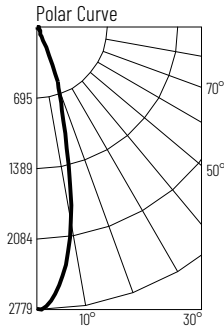
Project

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

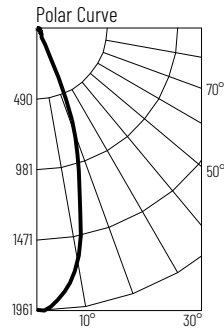
Zone	Lumens	% Luminaire
0-30	658	82.8
0-40	697	87.7
0-60	750	94.4
0-90	792	99.7
90-180	2	0.3
0-180	795	100

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

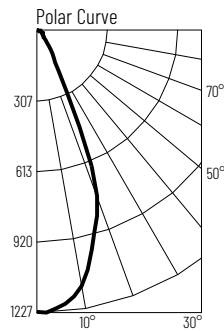
Zone	Lumens	% Luminaire
0-30	642	82.4
0-40	676	86.8
0-60	734	94.2
0-90	777	99.7
90-180	2	0.3
0-180	779	100

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)