

NIO-4RPH / NIO-4RPHA

4" Iolite Round 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. 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.: 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

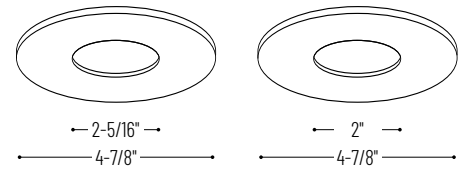
Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

LABELS AND LISTINGS

- cULus Listed for Wet Locations (NIO-4RPHA 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

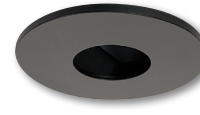


PRODUCT IMAGES & DIMENSIONS



NIO-4RPH
Round Pinhole
Non-Adjustable

NIO-4RPHA
Round Adjustable Pinhole
Adjustability:
New Construction: 30°
Remodel: 10°



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 Pinhole - Dedicated Housing Required

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

[†] 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
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-4RPH27XBB** = 4" Iolite Round Pinhole, 2700K, Black finish, 800lm / 14W

4" Iolite Accessories

4" 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
Color:	
AM (amber), BLU (blue), FR (frosted), R (red)	

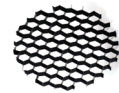
Translucent collars color the aperture with the specified color while producing white general light. Collars are available in different lengths. Use to add interest, create a theme, match a theme or define a space.



Opaque Collar Snoot

NIO-AS14(color)	5/8" length
NIO-AS19(color)	3/4" length
NIO-AS26(color)	1" length
Color:	
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 NH10ICD-48 or NH10ICDCP-48 new construction housings and NIO-4R reflectors.**
Dimensions: 7-7/8" diameter 1/2" thick



PHOTOMETRICS

4" Iolite Round Pinhole
800 lumens

Type

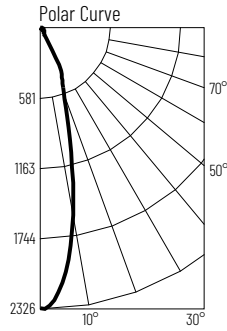
Project

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'-11"
6'	64.5fc	2'-10"
8'	36.3fc	3'-8"
10'	23.2fc	4'-8"
12'	16.1fc	5'-7"

Zonal Lumen Summary

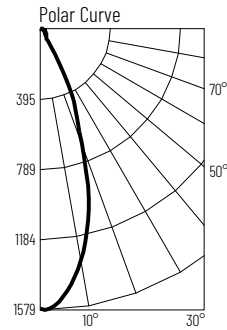
Zone	Lumens	% Luminaire
0-30	625	78.6
0-40	670	84.3
0-60	738	92.8
0-90	793	99.7
90-180	3	0.3
0-180	795	100

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

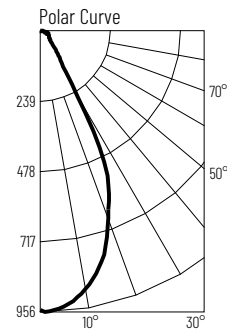
Zone	Lumens	% Luminaire
0-30	615	77.7
0-40	661	83.4
0-60	731	92.3
0-90	790	99.7
90-180	3	0.3
0-180	792	100

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 Pinhole
1000 lumens

Type

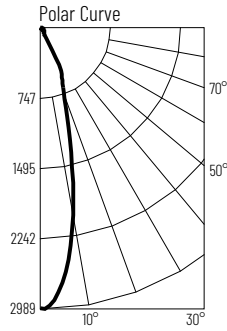
Project

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

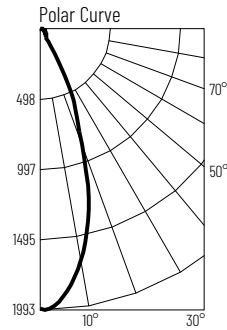
Zone	Lumens	% Luminaire
0-30	805	78.3
0-40	864	84.1
0-60	952	92.7
0-90	1024	99.6
90-180	4	0.4
0-180	1027	100

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

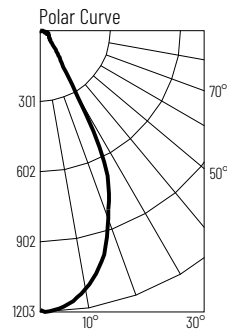
Zone	Lumens	% Luminaire
0-30	777	77.6
0-40	835	83.3
0-60	924	92.2
0-90	999	99.7
90-180	3	0.3
0-180	1002	100

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)