

# NIO-4RNDC

## 4" Iolite Round Reflector with Round Aperture

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. Deep regressed cone reflectors optimize visual cut-off.

### 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
NHRIIC-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

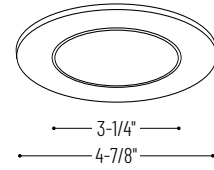
**Accessories:** Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

### LABELS AND LISTINGS

- cULus Listed for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Can be used to comply with 2019 Title 24 - part 6 High Efficacy LED light source requirements



### PRODUCT IMAGES & DIMENSIONS



**NIO-4RNDC**  
Round Reflector with Round Aperture  
Non-Adjustable



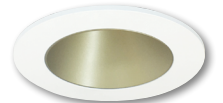
**BB**  
Black Reflector  
Black Flange



**BW**  
Black Reflector  
White Flange



**BZ**  
Bronze Reflector  
Bronze Flange



**CHMPW**  
Champagne Haze Reflector  
Matte Powder White Flange



**HW**  
Haze Reflector  
White Flange



**HZMPW**  
Haze Reflector  
Matte Powder White Flange



**MPW**  
Matte Powder White Reflector  
Matte Powder White Flange



**NN**  
Natural Metal Reflector  
Natural Metal Flange



**WW**  
White Reflector  
White Flange

### 4" Iolite Round Reflector with Round Aperture - Dedicated Housing Required

Reflector Type	Color Temp.	Finish	Lumens / Wattage
<b>NIO-4RNDC</b> = Round Reflector with Round Aperture	<b>27X</b> = 2700K	<b>BB</b> = Black / Black	(blank) = 800lm / 14W
	<b>30X</b> = 3000K	<b>BW</b> = Black / White	<b>/10</b> = 1000lm / 14W
	<b>35X</b> = 3500K	<b>BZ</b> = Bronze / Bronze	<b>/HL</b> = 1500-2500lm
	<b>40X</b> = 4000K	<b>CHMPW</b> = Champagne / Matte Powder White	(varies by housing)
	<b>50X</b> = 5000K	<b>HW</b> = Haze / White	
	<b>CDX</b> = Comfort Dim <sup>†</sup>	<b>HZMPW</b> = Haze / Matte Powder White	
		<b>MPW</b> = Matte Powder White	
	<b>NN</b> = Natural Metal / Natural Metal		
	<b>WW</b> = White / White		

### Compatible Housings

Housing Type
<b>NHIOICD-48</b> = ICAT New Construction / 800-1000lm / 14W
<b>NHIOICDCP-48</b> = Chicago Plenum / 800-1000lm / 14W
<b>NHRIIC-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

<sup>†</sup> Comfort Dim technology available in 800lm & uses non-Cree COB modules. 1" & 2" Iolite uses a different dimming curve than 4" Comfort Dim

Example: **NIO-4RNDC27XWW** = 4" Iolite Round Reflector with Round Aperture, 2700K, White finish, 800lm / 14W

# 4" Iolite Accessories

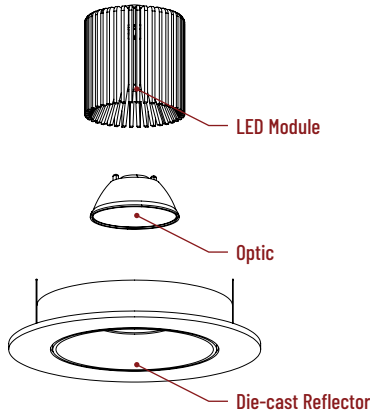
## 4" Iolite Round Reflector with Round Aperture

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.**



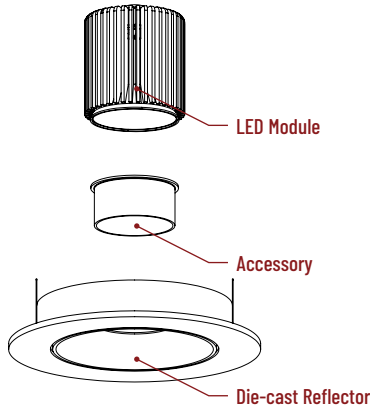
Premium TIR Optics

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
<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 NH10ICD-48 or NH10ICDCP-48 new construction housings and NIO-4R reflectors.**  
Dimensions: 7-7/8" diameter 1/2" thick



# PHOTOMETRICS

4" Iolite Round Reflector with Round Aperture  
800 lumens

Type

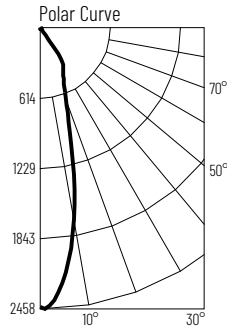
Project

Catalog No.

Notes

## Test Information

Test Number: NTR11291  
Part Number: NIO-4RNDC30XBW  
Beam Spread: 27° Spot  
Lumens: 880lm  
Wattage: 14.64W  
Efficacy: 60lpw  
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'	153fc	1'-11"
6'	67.8fc	2'-11"
8'	38.2fc	3'-11"
10'	24.4fc	4'-11"
12'	17fc	5'-10"

## Zonal Lumen Summary

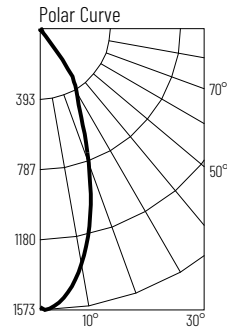
Zone	Lumens	% Luminaire
0-30	715	81.2
0-40	858	97.5
0-60	877	99.6
0-90	877	99.6
90-180	3	0.4
0-180	880	100

## Candela Table

Vertical Angles	Candela
0	2442
5	2220
15	1050
25	480
35	265
45	20

## Test Information

Test Number: NTR11299  
Part Number: NIO-4RNDC30XBW  
Beam Spread: 40° Narrow Flood  
Lumens: 850lm  
Wattage: 14.73W  
Efficacy: 58lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.66  
Spacing Criteria (90°-270): 0.66



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	97.4fc	2'-11"
6'	43.3fc	4'-5"
8'	24.3fc	5'-11"
10'	15.6fc	7'-4"
12'	10.8fc	8'-10"

## Zonal Lumen Summary

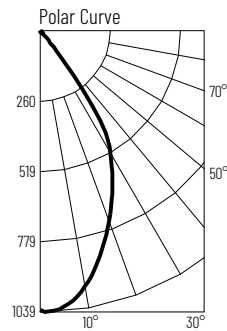
Zone	Lumens	% Luminaire
0-30	687	80.8
0-40	831	97.8
0-60	847	99.6
0-90	847	99.7
90-180	3	0.3
0-180	850	100

## Candela Table

Vertical Angles	Candela
0	1558
5	1484
15	1067
25	540
35	263
45	15

## Test Information

Test Number: NTR11231  
Part Number: NIO-4RNDC30XBW  
Beam Spread: 60° Flood  
Lumens: 841lm  
Wattage: 14.75W  
Efficacy: 57lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.88  
Spacing Criteria (90°-270): 0.88



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	64.5fc	4'-7"
6'	28.7fc	6'-10"
8'	16.1fc	9'-1"
10'	10.3fc	11'-5"
12'	7.2fc	13'-8"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	622	73.9
0-40	812	96.6
0-60	837	99.6
0-90	838	99.7
90-180	3	0.3
0-180	841	100

## Candela Table

Vertical Angles	Candela
0	1032
5	1017
15	855
25	625
35	327
45	26

## Lumen Output Multipliers

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

# PHOTOMETRICS

4" Iolite Round Reflector with Round Aperture  
1000 lumens

Type

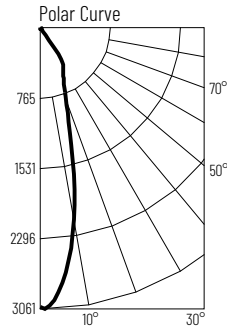
Project

Catalog No.

Notes

## Test Information

Test Number: NTR11291  
Part Number: NIO-4RNDC30XBW/10  
Beam Spread: 27° Spot  
Lumens: 1089lm  
Wattage: 13.53W  
Efficacy: 81lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.46  
Spacing Criteria (90°-270): 0.48



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	189fc	1'-11"
6'	84.1fc	2'-11"
8'	47.3fc	3'-11"
10'	30.3fc	4'-10"
12'	21fc	5'-10"

## Zonal Lumen Summary

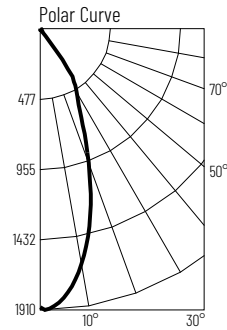
Zone	Lumens	% Luminaire
0-30	884	81.1
0-40	1062	97.5
0-60	1085	99.6
0-90	1085	99.6
90-180	4	0.4
0-180	1089	100

## Candela Table

Vertical Angles	Candela
0	3027
5	2721
15	1292
25	586
35	329
45	24

## Test Information

Test Number: NTR11230  
Part Number: NIO-4RNDC30XBW/10  
Beam Spread: 41° Narrow Flood  
Lumens: 1059lm  
Wattage: 13.42W  
Efficacy: 79lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.66  
Spacing Criteria (90°-270): 0.66



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	118fc	3'
6'	52.6fc	4'-6"
8'	29.6fc	5'-11"
10'	18.9fc	7'-5"
12'	13.1fc	8'-11"

## Zonal Lumen Summary

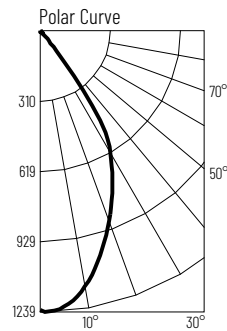
Zone	Lumens	% Luminaire
0-30	851	80.4
0-40	1028	97
0-60	1055	99.6
0-90	1055	99.7
90-180	4	0.3
0-180	1059	100

## Candela Table

Vertical Angles	Candela
0	1893
5	1805
15	1305
25	681
35	279
45	19

## Test Information

Test Number: NTR11232  
Part Number: NIO-4RNDC30XBW/10  
Beam Spread: 60° Flood  
Lumens: 1042lm  
Wattage: 13.5W  
Efficacy: 77lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.9  
Spacing Criteria (90°-270): 0.88



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	76.6fc	4'-6"
6'	34fc	6'-8"
8'	19.1fc	9'
10'	12.2fc	11'-2"
12'	8.5fc	13'-6"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	744	71.4
0-40	979	94
0-60	1037	99.6
0-90	1038	99.7
90-180	4	0.3
0-180	1042	100

## Candela Table

Vertical Angles	Candela
0	1225
5	1194
15	1024
25	767
35	367
45	57

## Lumen Output Multipliers

Color Temperature: 2700K (0.82), 3000K (0.84), 3500K (0.92), 4000K (1.00), 5000K (0.97)