

# NIO-4SG

## 4" Iolite Square Adjustable Gimbal

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. Die-cast adjustable reflectors optimize visual cut-off and adjustable to aim the light source in desired direction.

### 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
<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

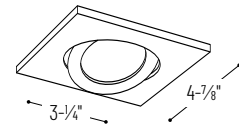
**Accessories:** Luminaires can accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless, compatible with new construction housing only.

### 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



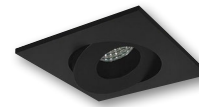
#### NIO-4SG

Square Adjustable Gimbal

Adjustability:

New Construction: 45° (800-1000lm) / 35° (1500-2500lm)

Remodel: 45° (800-1000lm)



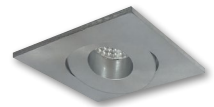
**BB**  
Black



**BZ**  
Bronze



**MPW**  
Matte Powder White



**NN**  
Natural Metal



**WW**  
White

### 4" Iolite Square Adjustable Gimbal - Dedicated Housing Required

Trim Type	Color Temp.	Finish	Lumens / Wattage
<b>NIO-4SG</b> = Square Adjustable Gimbal	<b>50X</b> = 5000K*	<b>BB</b> = Black	(blank) = 800lm / 14W
	<b>CDX</b> = Comfort Dim†	<b>BZ</b> = Bronze	
	<b>27X</b> = 2700K	<b>MPW</b> = Matte Powder White	<b>/10</b> = 1000lm / 14W
	<b>30X</b> = 3000K	<b>NN</b> = Natural Metal	<b>/HL</b> = 1500-2500lm
	<b>35X</b> = 3500K	<b>WW</b> = White	(varies by housing)
	<b>40X</b> = 4000K		
	<b>50X</b> = 5000K		

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

† Comfort Dim available in 800lm only and 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-4SG50XWW** = 4" Iolite Square Adjustable Gimbal, 5000K, White finish, 800lm

# 4" Iolite Accessories

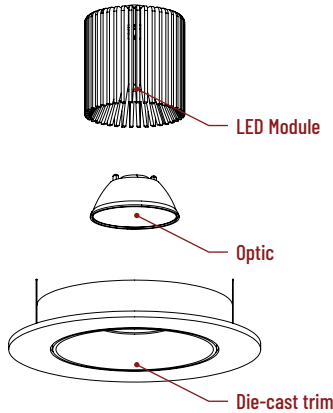
4" Iolite Square Adjustable Gimbal

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** 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

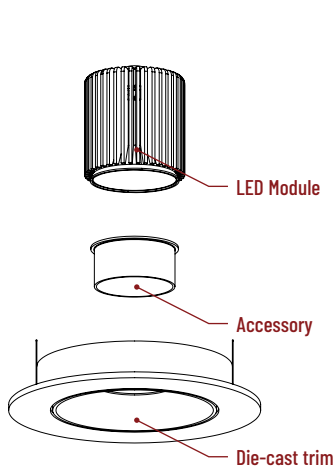
Specialized narrow spot LED module assembly is also available. Requires LE4 housing. [Click Here](#) for more information.



## 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-4S** Square Mud Ring

Mounts trim 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-4S reflectors.**  
 Dimensions: 7-7/8" diameter 1/2" thick



# PHOTOMETRICS

4" Iolite Square Adjustable Gimbal  
1000 lumens

Type

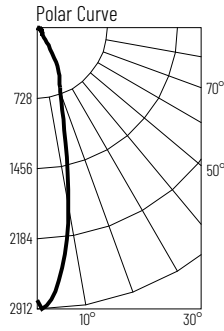
Project

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Notes

## Test Information

Test Number: NTR11236  
Part Number: NIO-4SG3025WW/10  
Beam Spread: 26° Spot  
Lumens: 1111lm  
Wattage: 13W  
Efficacy: 85lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.44  
Spacing Criteria (90°-270): 0.46



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	176fc	1'-10"
6'	78.4fc	2'-8"
8'	44.1fc	3'-7"
10'	28.2fc	4'-6"
12'	19.6fc	5'-5"

## Zonal Lumen Summary

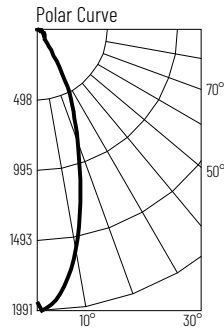
Zone	Lumens	% Luminaire
0-30	795	71.6
0-40	911	82
0-60	1022	92
0-90	1104	99.3
90-180	8	0.7
0-180	1111	100

## Candela Table

Vertical Angles	Candela
0	2822
5	2559
15	1111
25	550
35	150
45	76

## Test Information

Test Number: NTR11237  
Part Number: NIO-4SG3038WW/10  
Beam Spread: 36° Narrow Flood  
Lumens: 1098lm  
Wattage: 13W  
Efficacy: 84lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.6  
Spacing Criteria (90°-270): 0.62



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	120fc	2'-7"
6'	53.5fc	3'-11"
8'	30.1fc	5'-2"
10'	19.3fc	6'-6"
12'	13.4fc	7'-10"

## Zonal Lumen Summary

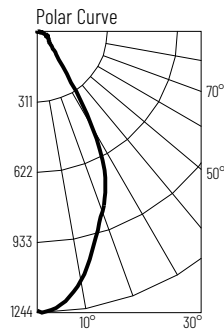
Zone	Lumens	% Luminaire
0-30	766	69.7
0-40	890	81.1
0-60	1005	91.5
0-90	1090	99.3
90-180	8	0.7
0-180	1098	100

## Candela Table

Vertical Angles	Candela
0	1928
5	1839
15	1187
25	578
35	163
45	76

## Test Information

Test Number: NTR11238  
Part Number: NIO-4SG3060WW/10  
Beam Spread: 55° Flood  
Lumens: 1084lm  
Wattage: 13W  
Efficacy: 83lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.84  
Spacing Criteria (90°-270): 0.84



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	77.3fc	4'-2"
6'	34.4fc	6'-2"
8'	19.3fc	8'-4"
10'	12.4fc	10'-5"
12'	8.6fc	12'-6"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	701	64.7
0-40	859	79.2
0-60	987	91.1
0-90	1077	99.3
90-180	7	0.7
0-180	1084	100

## Candela Table

Vertical Angles	Candela
0	1237
5	1212
15	971
25	713
35	227
45	89

## Lumen Output Multipliers

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