

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
- 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
NHIOICD-48	ICAT New Construction	800-1000lm / 14W
NHIOICDP-48	Chicago Plenum	800-1000lm / 14W
NHRIOIC-48	ICAT Remodel	800-1000lm / 14W
NHIOICD-415	ICAT New Construction	1500lm / 20W
NHIOICDP-415	Chicago Plenum	1500lm / 20W
NHIOICD-420	ICAT New Construction	2000lm / 24W
NHIOICDP-420	Chicago Plenum	2000lm / 24W
NHIOICD-425	ICAT New Construction	2500lm / 28W
NHIOICDP-425	Chicago Plenum	2500lm / 28W

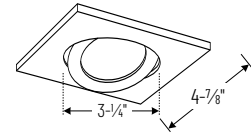
Accessories: Luminaires can accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless, compatible with new construction housing only.

LABELS AND LISTINGS

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



PRODUCT IMAGES & DIMENSIONS



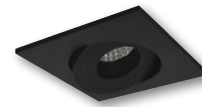
NIO-4SG

Square Adjustable Gimbal

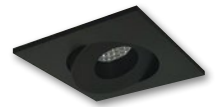
Adjustability:

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

Color Temperature	Finish	Lumens / Wattage
NIO-4SG50X = 5000K*	BB = Black	(blank) = 800lm / 14W
NIO-4SGCDX = Comfort Dim†	BZ = Bronze	
NIO-4SG27X = 2700K	MPW = Matte Powder White	/10 = 1000lm / 14W
NIO-4SG30X = 3000K	NN = Natural Metal	/HL = 1500-2500lm
NIO-4SG35X = 3500K	WW = White	(varies by housing)
NIO-4SG40X = 4000K		
NIO-4SG50X = 5000K		
NIO-4SGCDX = Comfort Dim†		

* 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
NHIOICD-48 = ICAT New Construction / 800-1000lm / 14W
NHIOICDP-48 = Chicago Plenum / 800-1000lm / 14W
NHRIOIC-48 = ICAT Remodel / 800-1000lm / 14W
NHIOICD-415 = ICAT New Construction / 1500lm / 20W
NHIOICDP-415 = Chicago Plenum / 1500lm / 20W
NHIOICD-420 = ICAT New Construction / 2000lm / 24W
NHIOICDP-420 = Chicago Plenum / 2000lm / 24W
NHIOICD-425 = ICAT New Construction / 2500lm / 28W
NHIOICDP-425 = Chicago Plenum / 2500lm / 28W

Example: **NIO-4SG50XWW** = 4" Iolite Square Adjustable Gimbal, 5000K, White finish, 800lm

4" Iolite Accessories

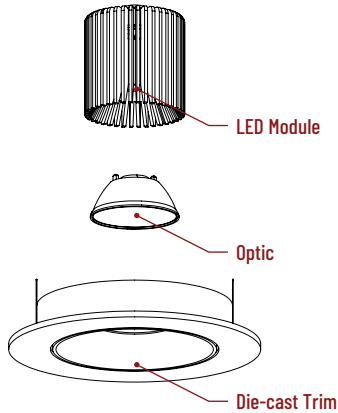
4" Iolite Square Adjustable Gimbal

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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.

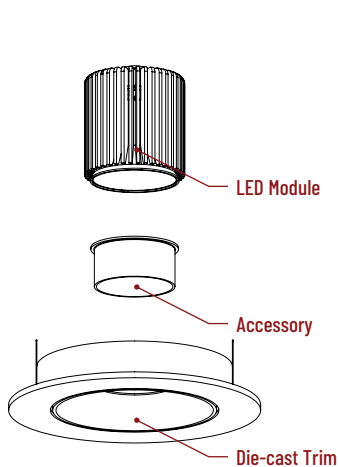
10° TIR Optic Assembly

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-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

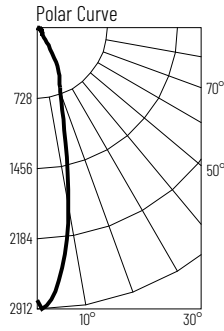
Project

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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

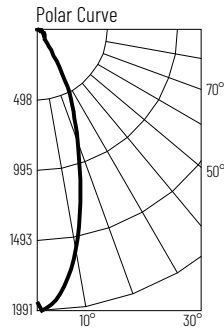
Zone	Lumens	% Luminaire
0-30	795	71.6
0-40	911	82
0-60	1022	92
0-90	1104	99.3
90-180	8	0.7
0-180	1111	100

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

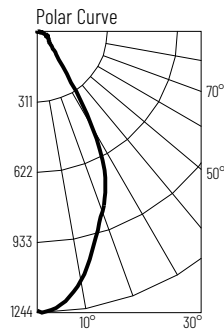
Zone	Lumens	% Luminaire
0-30	766	69.7
0-40	890	81.1
0-60	1005	91.5
0-90	1090	99.3
90-180	8	0.7
0-180	1098	100

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)