

NIO-4SG

4" Iolite Square Adjustable Surface Gimbal

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. Die-cast adjustable surface gimbals adjust to aim the light source in desired direction.

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 (25° spot, 35° narrow flood and 55° flood - preinstalled). Premium 15° and 25° TIR optics are also available.

1500-2500lm: Each reflector includes field changeable TIR optics (30° spot, 45° narrow flood - preinstalled and 65° flood).

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

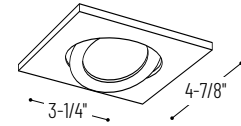
Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

LABELS AND LISTINGS

- cULus Listed for Damp Locations
- ENERGY STAR certified
- 5-Year Limited Warranty
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2019



PRODUCT IMAGES & DIMENSIONS

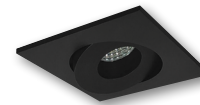


NIO-4SG

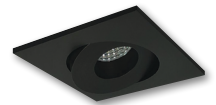
Square Adjustable Surface Gimbal

Adjustability:

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



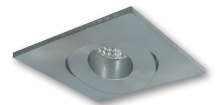
BB
Black



BZ
Bronze



MPW
Matte Powder White



NN
Natural Metal



WW
White

4" Iolite Square Adjustable Surface Gimbal - Dedicated Housing Required

Reflector Type	Color Temp.	Finish	Lumens / Wattage
NIO-4SG = Square Adjustable Surface Gimbal	27X = 2700K	BB = Black	(blank) = 800lm / 14W
	30X = 3000K	BZ = Bronze	/10 = 1000lm / 14W
	35X = 3500K	MPW = Matte Powder White	/HL = 1500-2500lm
	40X = 4000K	NN = Natural Metal	(varies by housing)
	50X = 5000K	WW = White	
	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-4SG27XWW = 4" Iolite Square Adjustable Surface Gimbal, 2700K, White finish, 800lm

4" Iolite Accessories

4" Iolite Square Adjustable Surface Gimbal

Type

Project

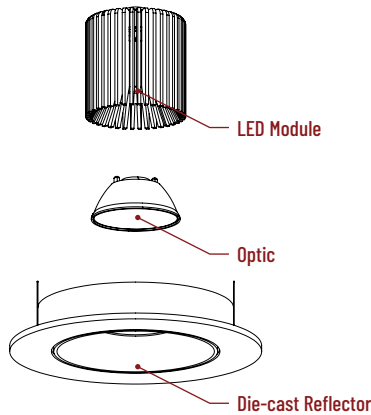
Catalog No.

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
NIO-REFL25FR
NIO-REFL38FR
NIO-REFL60FR

15° Optic
25° Optic
38° Optic
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

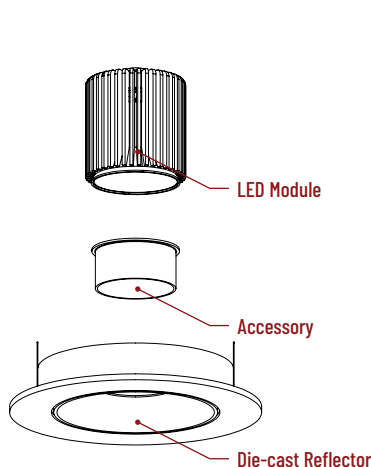
NIO-REFLTIR15
NIO-REFLTIR25

15° Optic
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)

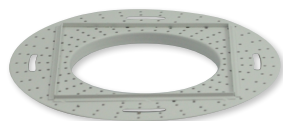


Hex Cell Louver

NIO-HC Black
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-4S

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

PHOTOMETRICS

4" Iolite Square Adjustable Surface Gimbal

800 lumens

Type

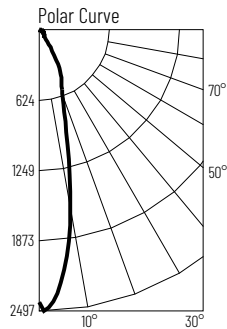
Project

Catalog No.

Notes

Test Information

Test Number: NTR11248
Part Number: NIO-4SG3025WW
Beam Spread: 25° Spot
Lumens: 939lm
Wattage: 14.4W
Efficacy: 65lpw
CCT / CRI: 3000K / 90 CRI
Spacing Criteria (0°-180): 0.42
Spacing Criteria (90°-270): 0.42



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	156fc	1'-10"
6'	69.4fc	2'-7"
8'	39fc	3'-6"
10'	25fc	4'-5"
12'	17.3fc	5'-4"

Zonal Lumen Summary

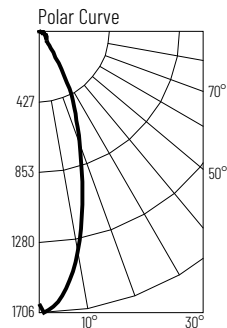
Zone	Lumens	% Luminaire
0-30	667	71
0-40	761	81
0-60	861	91.7
0-90	936	99.7
90-180	3	0.3
0-180	939	100

Candela Table

Vertical Angles	Candela
0	2497
5	2255
15	905
25	466
35	129
45	68

Test Information

Test Number: NTR11249
Part Number: NIO-4SG3038WW
Beam Spread: 35° Narrow Flood
Lumens: 929lm
Wattage: 14.6W
Efficacy: 64lpw
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'	106fc	2'-6"
6'	47.1fc	3'-10"
8'	26.5fc	5'
10'	17fc	6'-4"
12'	11.8fc	7'-6"

Zonal Lumen Summary

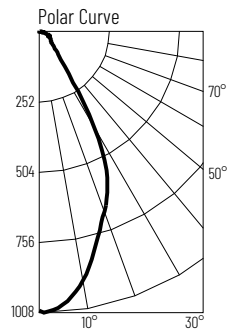
Zone	Lumens	% Luminaire
0-30	652	70.2
0-40	747	80.4
0-60	848	91.3
0-90	926	99.7
90-180	3	0.3
0-180	929	100

Candela Table

Vertical Angles	Candela
0	1697
5	1602
15	1013
25	495
35	126
45	68

Test Information

Test Number: NTR11250
Part Number: NIO-4SG3060WW
Beam Spread: 56° Flood
Lumens: 927lm
Wattage: 14.5W
Efficacy: 64lpw
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'	62.7fc	4'-2"
6'	27.9fc	6'-5"
8'	15.7fc	8'-6"
10'	10fc	10'-7"
12'	7fc	12'-8"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	583	62.9
0-40	726	78.3
0-60	841	90.7
0-90	924	99.7
90-180	3	0.3
0-180	927	100

Candela Table

Vertical Angles	Candela
0	1003
5	979
15	802
25	594
35	212
45	80

Lumen Output Multipliers

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

PHOTOMETRICS

4" Iolite Square Adjustable Surface Gimbal
1000 lumens

Type

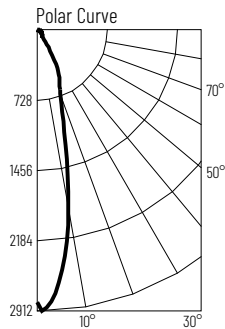
Project

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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

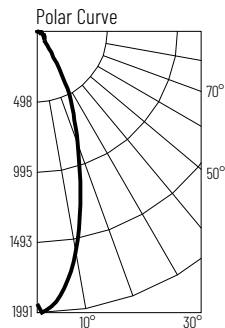
Zone	Lumens	% Luminaire
0-30	795	71.6
0-40	911	82
0-60	1022	92
0-90	1104	99.3
90-180	8	0.7
0-180	1111	100

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

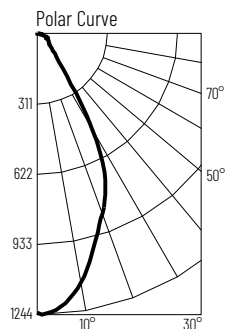
Zone	Lumens	% Luminaire
0-30	766	69.7
0-40	890	81.1
0-60	1005	91.5
0-90	1090	99.3
90-180	8	0.7
0-180	1098	100

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 (0.82), 3000K (0.84), 3500K (0.92), 4000K (1.00), 5000K (0.97)