

NIO-4SDSQ

4" Iolite Square Adjustable Reflector with Square Aperture with 10° Optic

Source: 12W
800lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

4" Iolite luminaires can be specified for use with Iolite new construction or remodel housings. Die-cast adjustable reflectors optimize visual cut-off and adjustable to aim the light source in desired direction.

FEATURES

- Delivering up to 8730 center beam candlepower (CBCP)
- 2700K, 3000K, 3500K, 4000K @ 90+ CRI
- 10° TIR optic delivers luminous intensity of higher lumen downlights
- 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 reflector and transfer heat.

Mounting: Trim includes friction blades to mount securely to housing.

OPTIC

Each luminaire includes 10° TIR optic (Note: cannot be changed in the field)
Luminaire is also available with field changeable optics, [Click Here](#) for more information.

ELECTRICAL

Lumens / Wattage: 800lm / 12W
Color Temperature: 2700K, 3000K, 3500K, 4000K
Color Rendering Index: 90+CRI
Operating Temperature: Specified by housing
Lifetime: 50,000 hours @ L70
Dimming: Specified by housing

COMPATIBLE HOUSINGS

Luminaires are compatible with respective Iolite housings manufactured by Nora Lighting.

CATALOG NO.	DESCRIPTION
NHIOICD-48LE4	ICAT New Construction, 120-277V; Triac / ELV / 0-10V
NHIOICD-48LUPEQ	ICAT New Construction, 120/277V; Lutron EcoSystem
NHIOICDCP-48LE4	Chicago Plenum, 120-277V; Triac / ELV / 0-10V
NHIOICDCP-48LUPEQ	Chicago Plenum, 120/277V; Lutron EcoSystem
NHRIOIC-48LE4	ICAT Remodel, 120-277V; Triac / ELV / 0-10V

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

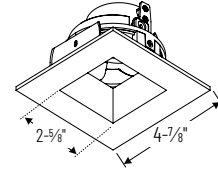
- cULus Listed for Damp Locations
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2022



Performance Data			
Part Number	Lumens	CCT	CBCP
NIO-4SDSQ40QWW	817lm	4000K	8730 cd

Delivered lumens will vary depending on CCT and finish

PRODUCT IMAGES & DIMENSIONS



NIO-4SDSQ

Square Adjustable Reflector with Square Aperture

Adjustability:

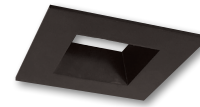
New Construction: 38° / Remodel: 20°



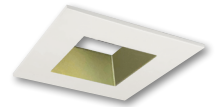
BB
Black Reflector
Black Flange



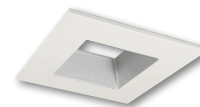
BW
Black Reflector
White Flange



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



WW
White Reflector
White Flange

4" Iolite Square Adjustable Reflector with Square Aperture with 10° Optic - Dedicated Housing Required

Color Temperature	Finish
NIO-4SDSQ270 = 2700K	BB = Black / Black
NIO-4SDSQ300 = 3000K	BW = Black / White
NIO-4SDSQ350 = 3500K	BZ = Bronze / Bronze
NIO-4SDSQ400 = 4000K	CHMPW = Champagne / Matte Powder White
	HN = Haze / Natural Metal
	HW = Haze / White
	HZMPW = Haze / Matte Powder White
	MPW = Matte Powder White
	WW = White / White

Compatible Housings

Housing Type
NHIOICD-48LE4 = ICAT New Construction; Triac / ELV / 0-10V
NHIOICD-48LUPEQ = ICAT New Construction; Lutron EcoSystem
NHIOICDCP-48LE4 = Chicago Plenum; Triac / ELV / 0-10V
NHIOICDCP-48LUPEQ = Chicago Plenum; Lutron EcoSystem
NHRIOIC-48LE4 = ICAT Remodel; Triac / ELV / 0-10V

Example: **NIO-4SDSQ40QWW** = 4" Iolite Square Adjustable Reflector with Square Aperture with 10° Optic, 4000K, White finish

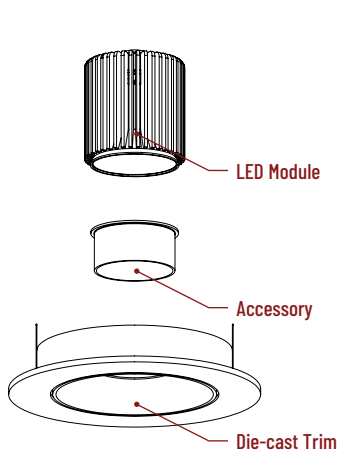
4" Iolite Accessories

4" Iolite Square Adjustable Reflector with Square Aperture with 10° Optic

Type
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Notes

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.



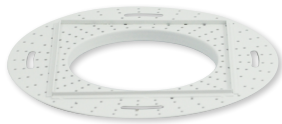
Hex Cell Louver

NIO-HC Black
 Hex cell louver subtly reduces aperture brightness by reducing light output by about 20%.

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 trims.**
 Dimensions: 7-7/8" diameter 1/2" thick

PHOTOMETRICS

4" Iolite Square Adjustable Reflector with Square Aperture with 10° Optic

Type _____

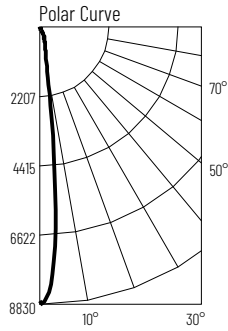
Project _____

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Notes _____

Test Information

Test Number: NTR1900R1
 Part Number: NIO-4SDSQ40QWW
 Beam Spread: 12° Spot
 Lumens: 817lm
 Wattage: 12.42W
 Efficacy: 66lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180°): 0.22
 Spacing Criteria (90°-270°): 0.22



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	242fc	1'-4"
8'	136fc	1'-8"
10'	87.3fc	2'-2"
12'	60.6fc	2'-7"
14'	44.5fc	3'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	740	90.7
0-40	788	96.5
0-60	806	98.7
0-90	817	100
90-180	0	0
0-180	817	100

Candela Table

Vertical Angles	Candela
0	8730
5	5736
15	683
25	232
35	21
45	7

Lumen Output Multipliers

Color Temperature: 2700K (0.9), 3000K (0.96), 3500K (0.96), 4000K (1.00)