

NHRIOIC-48

4" Iolite IC Air-Tight Remodel Housing

Source: 14W LED
800lm

PRODUCT DESCRIPTION

Remodel housing for use in insulated ceilings; can be in direct contact with insulation**. Air-tight construction provides energy savings by reducing the flow of air through the ceiling.

FEATURES

- IC rated for direct contact with insulation**
- Quick connect provided for electrical connection to the LED reflector
- ASTM E283 for Air-Tight
- Dimming down to 5%

SPECIFICATION

Housing 0.030 steel can connects to integrated 0.040 steel structural arm with J-box and driver compartment. Integral spring brackets provided.

Air Flow Restriction Housing has factory installed gaskets to restrict airflow from room into ceiling plenum to <2CFM (cubic feet per minute) in accordance with ASTM-283 Air-Tight requirements.

Clearance:** "IC" Insulated ceiling housings are direct contact rated. Not to be used in direct contact with spray foam insulation.

Mounting Four high-tension tempered steel springs secure remodel housing from 1/4" (min) to 5/8" (max) thick ceiling. Hole cutout template provided for convenience.

Junction Box Pre-wired 25 cubic inch 0.064" thick galvanized steel, with five 1/2", two 3/4" knockouts, four Romex® pryouts, and snap-on covers. All leads are #18AWG wire, the ground wire is connected to the bottom, and quick connectors are supplied on all leads. Through branch circuit wiring, (4-in, 4-out).

ELECTRICAL

Voltage: 120V or 120-277V
Power Factor: >0.90
Operating Temp.: 122°F (50°C) max. ambient temp.
Wattage: 14W
Dimming: Triac / ELV or 0-10V Dimming
[Click Here](#) or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE TRIMS

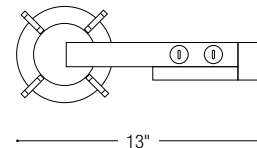
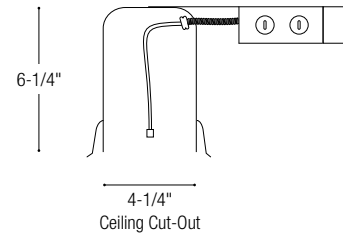
CATALOG NO.	DESCRIPTION
NIO-4RC	4" Round Cone Regress
NIO-4SC	4" Square Cone Regress
NIO-4RG	4" Round Adj. Surface Gimbal
NIO-4SG	4" Square Adj. Surface Gimbal
NIO-4RD	4" Round Adj. Deep Regress
NIO-4SD	4" Square Adj. Deep Regress
NIO-4RPH	4" Round Pinhole
NIO-4RSL	4" Round Slot Aperture
NIO-4RNB	4" Round Bullnose
NIO-4SNB	4" Square Bullnose
NIO-4RND	4" Round Non-Adj. Deep Cone Regress
NIO-4SND	4" Square Non-Adj. Deep Cone Regress
NIO-4SND	4" Square Non-Adj. Deep, Square Regress

LISTINGS AND WARRANTY

- cULus Listed for Damp Location
- cULus Listed for Wet Location (w/designated reflectors)
- [5-Year Limited Warranty](#)
- RoHS compliant
- Meets or exceeds ASTM-283 Air-Tight Requirements



PRODUCT IMAGES AND DIMENSIONS



4" Iolite IC Air-Tight Remodel Housing - Compatible with NIO-4 reflectors

Driver / Dimming

NHRIOIC-48LE3 = 120V input; Triac / ELV dimming

NHRIOIC-48LE4 = 120-277V input; 120V Triac/ELV/0-10V or 277V 0-10V dimming

Example: **NHRIOIC-48LE4** = 4" Iolite IC Air-Tight Remodel Housing, 120-277V Input; 120V Triac/ELV/0-10V or 277V 0-10V dimming

NIO-4

4" Iolite Reflectors (New Construction and Remodel)

Source: 14W LED
800lm

PRODUCT DESCRIPTION

4" Iolite reflectors can be specified for use in new construction or remodel applications. The die-cast aluminum reflectors are available in square and round designs, with sharp and clean edges. Reflectors ship with a 60° optic installed, 25° and 38° optics are included and can be easily changed in the field. The reflectors produce 800lm output at 90+ CRI, utilizing 14W.

FEATURES

- Cree® LED COB or Comfort Dim Technology
- Wide variety of reflectors and finishes
- 60° (Flood) optic installed, 38° (Narrow flood) and 25° (Spot) optics included
- 5-Year limited warranty

CONSTRUCTION

Reflectors are constructed of heat dissipating, die-cast aluminum. The aluminum die-cast LED heat sink is threaded to fit the trim and transfer heat.

Reflectors:

NIO-4RND / NIO-4SND / NIO-4SND: Deep regressed cone reflectors optimize visual cut-off.
 NIO-4RG / NIO-4SG: Adjustable surface gimbals adjust up to 40°. NIO-4SG adjust up to 35°.
 NIO-4RC / NIO-4SC: Regressed cone reflectors optimize visual cut-off and adjust up to 40°. NIO-4SC adjust up to 35°.
 NIO-4RD / NIO-4SD: Adjustable deep regressed cone reflectors optimize visual cut-off and adjust up to 40°. NIO-4SD adjust up to 35°.
 NIO-4RPH: Pinhole reflector focuses the beam spread through 2-1/4" opening.
 NIO-4RSL: Adjustable slot aperture focus the beam spread through 2-1/4" x 2" opening and adjust up to 15°.

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

Field Changeable Optics: Each reflector comes with a 60° (installed), 38° and 25° optics (included). Premium TIR optics are also available in 15° or 25°, see page 3.

ELECTRICAL

Lumens / Wattage: 800lm / 14W
Color Temperature: 2700K, 3000K, 3500K, 4000K, 5000K
CRI: 90+
Operating Temp.: 0°C to 45°C ambient temperature
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
NHIOICD-48	4" IC Air-Tight New Construction
NHRIIC-48	4" IC Air-Tight Remodel

Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see page 3.

LISTINGS AND WARRANTY

- cULus Listed for Wet Location (NIO-4RD and NIO-4SD are rated for damp location)
- ENERGY STAR® certified
- [5 Year Limited Warranty](#)
- RoHS Compliant
- Can be used to comply with 2016 Title 24 – part 6 High Efficacy LED light source requirements



PRODUCT IMAGES AND DIMENSIONS



4" Iolite Reflectors - Dedicated Housing Required

Shape	Reflector Style	Color Temp.	Finish ¹	Lumens
NIO-4R = Round	C = Cone Regress	27X = 2700K	BB = Black / Black	(blank) = 800lm
NIO-4S = Square	G = Adj. Surface Gimbal	30X = 3000K	BW = Black / White	
	D = Adj. Deep Cone Regress	35X = 3500K	BZ = Bronze / Bronze	
	NDC = Non-Adj. Deep Cone Regress	40X = 4000K	HN = Haze / Natural Metal	
	NDSQ = Deep Cone Non-Adj. Square Regress	50X = 5000K	HW = Haze / White	
		CDX = Comfort Dim [†]	HZMPW = Haze / Matte Powder White	
	NDSQ only available with square trim		MPW = Matte Powder White	
	PH = Non-Adj. Pinhole (round only)		NN = Natural Metal / Natural Metal	
	SL = Slot Adjustable (round only)		WW = White / White	
	NB = Non-Adj. Bullnose			

[†] Comfort Dim technology uses non-Cree COB modules. 1" & 2" Iolite uses a different dimming curve than 4" Comfort Dim
¹ Not all finishes are available on all trims

Example: NIO-4RG27XWW = 4" Iolite Round Adjustable Surface Gimbal, 2700K, White Finish, 800lm

4" Iolite Accessories

Iolite Accessories can be added at any point in the design process. Accessories easily install between module and die-cast reflector.



Frosted Filter-Optic

NIO-REFL15FR 15° Optic
 NIO-REFL25FR 25° Optic
 NIO-REFL38FR 38° Optic
 NIO-REFL60FR 60° Optic



Translucent Deco Collar

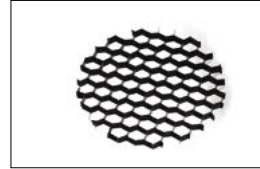
NIO-AS14(color) 5/8"
 NIO-AS19(color) 3/4"
 NIO-AS24(color) 1"
 Color: **BLU** Blue, **AM** Amber,
FR Frost, **R** Red



Opaque Collar Snoot

NIO-AS14(color) 5/8"
 NIO-AS19(color) 3/4"
 NIO-AS24(color) 1"

Color: **BLK** Black, **MPW** Matte
 Powder White, **WH** White



Hex Cell Louver

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



Premium TIR Optics

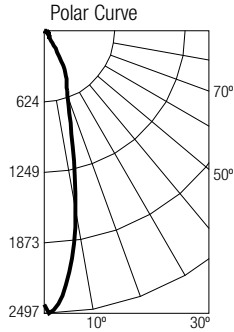
NIO-REFLTIR15 15° Optic
 NIO-REFLTIR25 25° Optic

PHOTOMETRICS

4" Iolite Series

Test Information

Test Number: NTR11248
 Part Number: NIO-4RG3025WW
 Beam Spread: 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

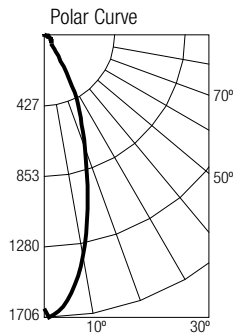
Zone	Lumens	% Luminaire
0-30	667	71
0-40	761	81
0-60	861	91.7
0-90	936	99.7
90-180	3	0.3
0-180	939	100

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-4RG3038WW
 Beam Spread: 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

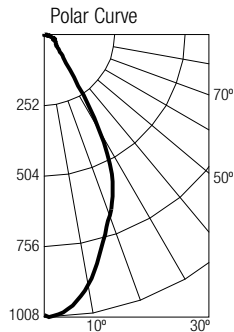
Zone	Lumens	% Luminaire
0-30	652	70.2
0-40	747	80.4
0-60	848	91.3
0-90	926	99.7
90-180	3	0.3
0-180	929	100

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-4RG3060WW
 Beam Spread: 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