

NIO-4RTL / NIO-4STL

4" Iolite Trimless Reflectors (New Construction only)

Source: 14W LED
800lm or 1000lm

PRODUCT DESCRIPTION

4" Trimless Iolite reflectors have no exposed trim flange and does not extend beyond the ceiling plane. Iolite Trimless requires a Trimless Mud Ring and New Construction housing. Reflectors ship with a 60° optic installed, 25° and 38° optics are included and can be easily changed in the field. The reflectors produce 800 or 1000 lumen output at 90+ CRI, utilizing 14W.

FEATURES

- Cree[®] LED COB or Comfort Dim Technology
- Variety of reflectors and finishes
- 60° (Flood) optic installed, 38° (Narrow flood) and 25° (Spot) optics included
- 800 or 1000 lumens @ 14W
- 5-year limited warranty
- ENERGY STAR certified

CONSTRUCTION

Trimless 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-4RTLND / NIO-4STLND: Deep regressed cone reflectors optimize visual cut-off.
NIO-4RTLA: Regressed cone reflector optimizes visual cut-off and adjust up to 35°.

Mounting: Reflector includes friction clips to mount securely in trimless die-cast mud-ring.

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 2.

ELECTRICAL

Lumens / Wattage:
800lm or 1000lm / 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 housing manufactured by Nora Lighting.

CATALOG NO.	DESCRIPTION
NHIOICD-48	4" IC Air-Tight New Construction

Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see page 2.

LISTINGS AND WARRANTY

- cULus Listed for Wet Location (NIO-4RTLA is 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



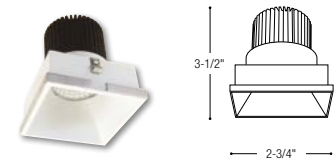
PRODUCT IMAGES AND DIMENSIONS



NIO-4RTLA Round Trimless Surface
40° - 45° Adjustable
BB, BW, BZ, HW, HZ, MPW, WW



NIO-4RTLND Round Trimless Deep Regressed Cone
Non-Adjustable
BB, BW, BZ, MPW, WW



NIO-4STLND Square Trimless Deep Regressed Cone
Non-Adjustable
BB, BZ, HZ, MPW, WW

4" Iolite Trimless Reflectors - New Construction Housing & Trimless Mud Ring Required

Shape	Reflector Style	Color Temp.	Finish [†]	Lumens
NIO-4RTL = Round	A = Adjustable (round only)	27X = 2700K	BB = Black	(blank) = 800lm
NIO-4STL = Square	NDC = Non-Adj. Deep Cone Regress	30X = 3000K	BW = Black / White	/10 = 1000lm
		35X = 3500K	BZ = Bronze	
		40X = 4000K	HW = Haze / White	
		50X = 5000K	HZ = Haze	
		CDX = Comfort Dim [†]	MPW = Matte Powder White	
			WW = White	

[†] Comfort Dim technology available in 800lm & 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

4" Trimless Mud Ring

Aperture
NIO-TLMR-4R = 4" Round Trimless Mud Ring
NIO-TLMR-4S = 4" Square Trimless Mud Ring
NIO-TLMR-4R Round Trimless Mud Ring
NIO-TLMR-4S Square Trimless Mud Ring

Example: NIO-4RTLND27XWW / NIO-TLMR-4R = 4" Iolite Round Trimless Non-Adjustable Deep Cone Regress, 2700K, White Finish, 800lm / 4" Round Trimless Mud Ring

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 38° Optic



Translucent Deco Collar

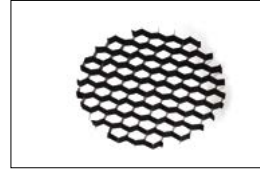
NIO-AS14(color) 5/8"
NIO-AS19(color) 3/4"
NIO-AS24(color) 1"
Color: BLU Blue, AM Amber, FR Frost, R Red



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

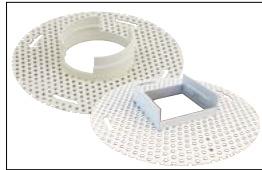
NIO-REFLTIR15 15° Optic
NIO-REFLTIR25 25° Optic



Flush Mount Mud Ring

NIO-FMMR-4R 4" Round
NIO-FMMR-4S 4" Square

Mounts trim flush to ceiling with trim flange visible. Attaches to drywall. Requires professional drywall finishing. **Requires and only for use with NHIOICD-48 new construction housing and NIO-4 trims.**
 7-7/8" Diameter 1/2" Thick



Trimless Mud Ring

NIO-TLMR-4R 4" Round
NIO-TLMR-4S 4" Square

Mounts Trimless trim with no exposed flange and no extension beyond ceiling plane. Attaches to drywall. Requires professional drywall finishing. **Requires and only for use with NHIOICD-48 new construction housing and NIO-4RTL or NIO-4STL Trimless reflector.**
 7-7/8" Diameter 1/2" Thick



Ceiling Extension Collar

NIO-4EXTC2

Allows new construction housing to install in ceiling thicknesses up to 2". **Only for use with NHIOICD-48 new construction housing.**

NHIOICD-48

4" Iolite IC Air-Tight New Construction Housing

Source: 14W LED
800lm to 1000lm

PRODUCT DESCRIPTION

New construction 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. Patented design allows for easy, tool-less removal of the driver.

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%
- Patented driver assembly

SPECIFICATION

Housing: 0.040" Aluminum shallow housing with patented driver assembly, allows for driver to slide out without tools. Extension collar is available for ceiling thickness up to 2", must specify NIO-4EXTC2.

Air Flow Restriction: Meets requirements of Air Tight (AT) <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.

Bar Hangers: Two 13-3/4" to 24-1/2" adjustable bar hangers with captive nails are included on housing. Bar hangers are parallel to junction box, but can be repositioned 90° perpendicular to junction box if desired. "L"-shaped bar hanger foot to align to bottom of construction joist. A T-bar notch allows for easy installation in a suspended ceiling.

Junction Box: Pre-wired 25 cubic inch 0.064" thick galvanized steel, with seven 1/2" 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
NIO-4RTLA	4" Round Trimless Surface Adj.
NIO-4RTLND	4" Round Trimless Deep Regress
NIO-4STLND	4" Square Trimless Deep Regress

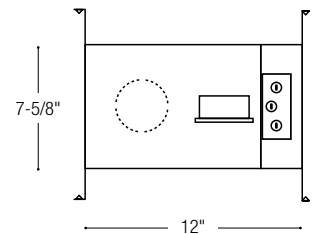
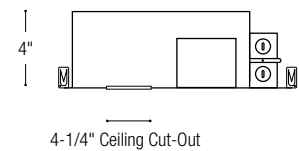
Emergency: Housing can be specified with connections for emergency battery installation. Requires top access. Must specify battery with remote test switch separately, NEPK-BSL17C-C2U.

LISTINGS AND WARRANTY

- cULus Listed for Damp Location
- cULus Listed for Wet Location (w/designated reflectors)
- [5-Year Limited Warranty](#)
- RoHS compliant
- Patent #D824567S
- Meets or exceeds ASTM-283 Air-Tight Requirements



PRODUCT IMAGES AND DIMENSIONS



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

Driver / Dimming	Optional Emergency
NHIOICD-48LE3 = 120V input; Triac / ELV dimming	EM = Wire for Remote Emergency Battery (ordered separately)
NHIOICD-48LE4 = 120-277V input; Triac / ELV / 0-10V dimming	

Optional Accessories

Description
NEPK-BSL17C-C2U = Remote Emergency Battery w/Test Switch
NIO-4EXTC2 = Ceiling Extension Collar up to 2"

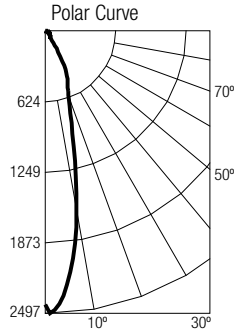
Example: NHIOICD-48LE3 = 4" Iolite IC Air-Tight LED Dedicated New Construction Housing, 120V input; Triac / ELV dimming

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

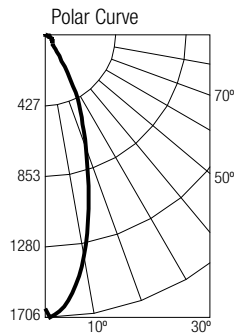
Zone	Lumens	% Luminaire
0-30	667	71
0-40	761	81
0-60	861	91.7
0-90	936	99.7
90-180	3	0.3
0-180	939	100

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

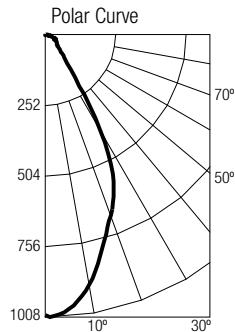
Zone	Lumens	% Luminaire
0-30	652	70.2
0-40	747	80.4
0-60	848	91.3
0-90	926	99.7
90-180	3	0.3
0-180	929	100

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

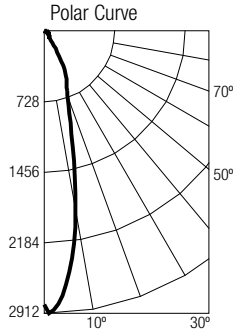
Vertical Angles	Candela
0	1003
5	979
15	802
25	594
35	212
45	80

PHOTOMETRICS

4" Iolite Series

Test Information

Test Number: NTR11236
 Part Number: NIO-4RG3025WW/10
 Beam Spread: 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

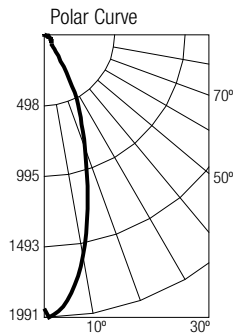
Zone	Lumens	% Luminaire
0-30	795	71.6
0-40	911	82
0-60	1022	92
0-90	1104	99.3
90-180	8	0.7
0-180	1111	100

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-4RG3038WW/10
 Beam Spread: 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

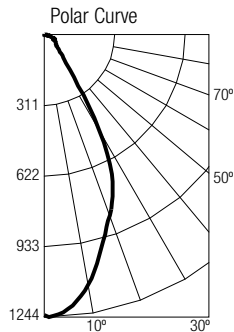
Zone	Lumens	% Luminaire
0-30	766	69.7
0-40	890	81.1
0-60	1005	91.5
0-90	1090	99.3
90-180	8	0.7
0-180	1098	100

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-4RG3060WW/10
 Beam Spread: 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