

NIO-4

4" Iolite Reflectors (New Construction and Remodel)

Source: 14W LED

800lm or 1000lm

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 ships with a 60° optic installed, 25° and 38° optics are included and can be easily changed in the field. The reflectors produce 800lm or 1000lm 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

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.

Reflectors:

- NIO-4RND / NIO-4SND / NIO-4SNDQ: Deep regressed cone reflectors optimize visual cut-off.
- NIO-4RG / NIO-4SG: Adjustable surface gimbal adjusts up to 40° (Remodel) or 45° (New Construction).
- NIO-4RC / NIO-4SC: Regressed cone reflectors optimize visual cut-off and adjust up to 40° (Remodel) or 45° (New Construction).
- NIO-4RD / NIO-4SD: Adjustable deep regressed cone reflectors optimize visual cut-off and adjusts up to 20° (Remodel) or 40° (New Construction).
- NIO-4RPH / NIO-4RPHA: Pinhole reflector focuses the beam spread through 2-1/4" opening. Adjustable pinhole adjusts up to 10° (Remodel) or 35° (New Construction).
- NIO-4RSL: Adjustable slot aperture focus the beam spread through 2-1/4" x 2" opening and adjust up to 15° (Remodel) or 35° (New Construction).
- NIO-4RNB / NIO-4SNB: Bullnose reflector with a filleted aperture which allows for minimal aperture brightness while still producing the nadir footcandles.
- NIO-4SW: Wall wash reflector to illuminate a wall evenly at a fixed angle. Not compatible with remodel housings.

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

ELECTRICAL

Lumens / Wattage: 800lm or 1000lm / 14W
Color Temperature: 2700K, 3000K, 3500K, 4000K, 5000K
CRI: 90+CRI
Operating Temp.: 0°C to 40°C ambient temperature
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. **Note:** Wall wash reflector is not compatible with remodel housing.

CATALOG NO. DESCRIPTION

NHIOICD-48	4" IC Air-Tight New Construction
NHIOICDP-48	4" Chicago Plenum New Construction
NHROIC-48	4" IC Air-Tight Remodel

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.

Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see page 3. 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 Wet Locations (Non-adjustable reflectors)
- cULus Listed for Damp Locations (Adjustable reflectors)
- ENERGY STAR certified
- 5-Year Limited Warranty
- RoHS Compliant
- Can be used to comply with 2019 Title 24 - part 6 High Efficacy LED light source requirements



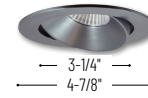
Type

Project

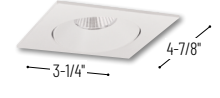
Catalog No.

Notes

PRODUCT IMAGES & DIMENSIONS



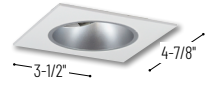
NIO-4RC
 Round Cone Regress
 45° Adj. (New Const.) / 40° Adj. (Remodel)
 BB, BW, BZ, HW, HZMPW, MPW, NN, WW



NIO-4SC
 Square Cone Regress
 45° Adj. (New Const.) / 40° Adj. (Remodel)
 BB, BW, BZ, HW, HZMPW, MPW, NN, WW



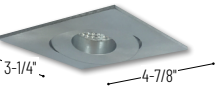
NIO-4RD
 Round Adj. Deep Cone
 40° Adj. (New Const.) / 20° Adj. (Remodel)
 BB, BW, BZ, CHMPW, HW, HZMPW, MPW, NN, WW



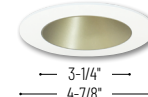
NIO-4SD
 Square Adj. Deep Cone
 40° Adj. (New Const.) / 20° Adj. (Remodel)
 BB, BW, BZ, CHMPW, HW, HZMPW, MPW, NN, WW



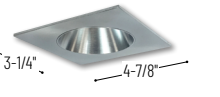
NIO-4RG
 Round Adj. Surface Gimbal
 45° Adj. (New Const.) / 40° Adj. (Remodel)
 BB, BZ, MPW, NN, WW



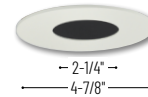
NIO-4SG
 Square Adj. Surface Gimbal
 45° Adj. (New Const.) / 40° Adj. (Remodel)
 BB, BZ, MPW, NN, WW



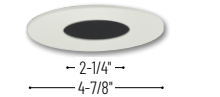
NIO-4RND
 Round Deep Reflector
 Non Adjustable
 BB, BW, BZ, CHMPW, HW, HZMPW, MPW, NN, WW



NIO-4SND
 Square Deep Reflector
 Non Adjustable
 BB, BW, BZ, CHMPW, HW, HZMPW, MPW, NN, WW



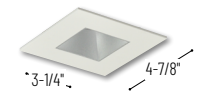
NIO-4RPH
 Round Pinhole
 Non Adjustable
 BB, BMPW, HZMPW, MPW



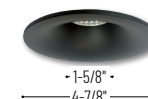
NIO-4RPHA
 Round Adj. Pinhole
 35° Adj. (New Const.) / 10° Adj. (Remodel)
 BB, BMPW, HZMPW, MPW, WW



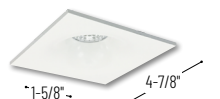
NIO-4RSL
 Round Adj. Slot Aperture
 40° Adj. (New Const.) / 15° Adj. (Remodel)
 BB, BMPW, HZMPW, MPW



NIO-4SNDQ
 Square Reflector / Square Aperture
 Non Adjustable
 BB, BW, BZ, CHMPW, HN, HW, HZMPW, MPW, WW



NIO-4RNB
 Round Bullnose
 Non Adjustable
 BB, BZ, MPW, NN, WW



NIO-4SNB
 Square Bullnose
 Non Adjustable
 BB, BZ, MPW, NN, WW



NIO-4SW
 Square Wall Wash
 Non Adjustable
 BB, CHMPW, HZMPW, HW, MPW, WW



NIO-4SDSQ
 Square Adjustable / Square Aperture
 38° Adj. (New Const.) / 20° Adj. (Remodel)
 BB, BW, BZ, CHMPW, HZMPW, HW, MPW, NN, WW

4" Iolite Reflectors - Dedicated Housing Required

Aperture	Reflector Style	Color Temp.	Finish ²	Lumens
NIO-4R = Round	C = Adj. Cone Regress	27X = 2700K	BB = Black / Black	(blank) = 800lm
NIO-4S = Square	D = Adj. Deep Cone Regress	30X = 3000K	BMPW = Black / Matte Powder White	/10 = 1000lm
	G = Adj. Surface Gimbal	35X = 3500K	BW = Black / White	
	NDC = Non-Adj. Deep Cone / Round Aperture	40X = 4000K	BZ = Bronze / Bronze	
	NDSO = Non-Adj. Deep Cone / Square Aperture ¹	50X = 5000K	CHMPW = Champagne / Matte Powder White	
	PHA = Adj. Pinhole ²	CDX = Comfort Dim ³	HN = Haze / Natural Metal	
	PH = Non-Adj. Pinhole ²		HW = Haze / White	
	SL = Slot Adjustable ²		HZMPW = Haze / Matte Powder White	
	NB = Non-Adj. Bullnose		MPW = Matte Powder White	
	DSO = Adj. Square Aperture ¹		NN = Natural Metal / Natural Metal	
	W = Non-Adj. Square Wall Wash ¹		WW = White / White	

¹ Available in square aperture only
² Available in round aperture only
³ Comfort Dim technology available in 800lm & uses non-Cree COB modules. 1" & 2" Iolite uses a different dimming curve than 4" Comfort Dim
³ Not all finishes are available on all trims

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

NIO-4RTL / NIO-4STL

4" Iolite Trimless Reflectors (New Construction only)

Source: 14W LED

800lm or 1000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

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

FEATURES

- Cree® LED COB or Comfort Dim Technology
- 60° (Flood) optic installed, 38° (Narrow flood) and 25° (Spot) optics included
- 800 or 1000 lumens @ 14W
- 5-Year limited warranty

SPECIFICATION

Construction: Trimless 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.

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 blades to mount securely in trimless 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 3.

ELECTRICAL

Lumens / Wattage: 800lm or 1000lm / 14W

Color Temperature: 2700K, 3000K, 3500K, 4000K, 5000K

CRI: 90+CRI

Operating Temp.: 0°C to 40°C ambient temperature

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

NHIOICD-48 4" IC Air-Tight New Construction

NHIOICDCP-48 4" Chicago Plenum New Construction

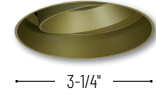
Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see page 3. A trimless mud ring is required per reflector.

LABELS AND LISTINGS

- cULus Listed for Wet Locations (Non-adjustable reflectors)
- cULus Listed for Damp Locations (Adjustable reflectors)
- 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

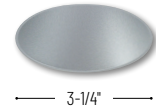


PRODUCT IMAGES AND DIMENSIONS



NIO-4RTLA

Round Trimless Adjustable Reflector
35° Adjustable
BB, BW, BZ, CH, CHMPW, HW, HZ, HZMPW, MPW, WW



NIO-4RTLND

Round Trimless Reflector
Non-Adjustable
BB, BZ, CH, HZ, MPW, WW



NIO-4STLND

Square Trimless Reflector
Non-Adjustable
BB, BZ, CH, HZ, MPW, WW

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

Reflector Style	Color Temp.	Finish ¹	Lumens
NIO-4RTLA = Round Adjustable	27X = 2700K	BB = Black	(blank) = 800lm
NIO-4RTLND = Round Non-Adjustable	30X = 3000K	BW = Black / White	/10 = 1000lm
NIO-4STL = Square Non-Adjustable	35X = 3500K	BZ = Bronze	
	40X = 4000K	CH = Champagne Haze	
	50X = 5000K	CHMPW = Champagne / Matte Powder White	
	CDX = Comfort Dim ¹	HZ = Haze	
		HW = Haze / White	
		MPW = Matte Powder White	
		WW = White	

¹ 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" Iolite Trimless Mud Ring

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



Example: NIO-4RTLND27XWW / NIO-TLMR-4R = 4" Iolite Round Trimless Non-Adjustable Reflector, 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.

Type

Project

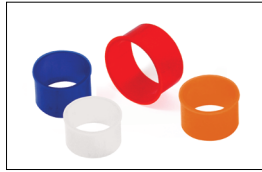
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Notes



Frosted Filter-Optic

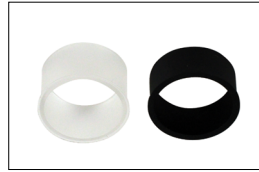
NIO-REFL15FR	15° Optic
NIO-REFL25FR	25° Optic
NIO-REFL38FR	38° Optic
NIO-REFL60FR	60° Optic



Translucent Deco Collar

NIO-AS14(color)	5/8"
NIO-AS19(color)	3/4"
NIO-AS26(color)	1"

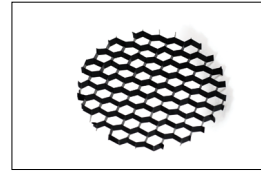
Color:
BLU Blue, AM Amber, FR Frost, R Red



Opaque Collar Snoot

NIO-AS14(color)	5/8"
NIO-AS19(color)	3/4"
NIO-AS26(color)	1"

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



Hex Cell Louver

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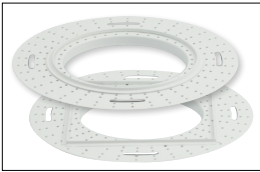
Hex cell louver subtly reduces aperture brightness by reducing light output by about 20%



Premium TIR Optics

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

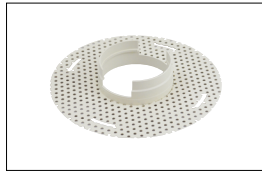
TIR optics are not compatible with Comfort Dim technology.



Flush Mount Mud Ring

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

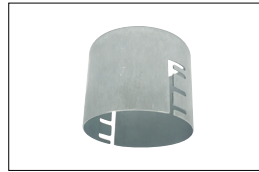
Mounts trim flush to ceiling with trim flange visible. Attaches to drywall. Requires professional drywall finishing. **Requires and only for use with NHIOICD-48 or NHIOICDCP-48 new construction housings and NIO-4 reflectors.**
7-7/8" Diameter 1/2" Thick



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 or NHIOICDCP-48 new construction housings and NIO-4RTL or NIO-4STL trimless reflectors.**
7-7/8" Diameter 1/2" Thick



Ceiling Extension Collar

NIO-4EXTC2	
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Allows new construction housing to install in ceiling thicknesses up to 2". **Only for use with NHIOICD-48 or NHIOICDCP-48 new construction housings.**

NHIOICD-48 / NHIOICDCP-48

4" Iolite IC Air-Tight New Construction Housing

Source: 14W LED

800lm or 1000lm

Type

Project

Catalog No.

Notes

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
- Patented driver assembly

SPECIFICATION

Housing: 0.040" Aluminum shallow housing with patented driver assembly, allows for driver to slide out without tools. Housing can be installed in 1/2" ceiling thickness, an 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 (must specify)

Power Factor: >0.90

Operating Temp.: 104°F (40°C) max. ambient temperature

Wattage: 14W

Dimming: Triac, ELV, 0-10V or EcoSystem (must specify)

[Click Here](#) or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE REFLECTORS

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-4RNDC	4" Round Deep Reflector
NIO-4SNDC	4" Square Deep Reflector
NIO-4RPHA	4" Round Adj. Pinhole
NIO-4RPH	4" Round Pinhole
NIO-4SNDQS	4" Square Reflector / Square Aperture
NIO-4RSL	4" Round Adj. Slot Aperture
NIO-4RNB	4" Round Bullnose
NIO-4SNB	4" Square Bullnose
NIO-4SDSQ	4" Square Adjustable / Square Aperture
NIO-4SW	4" Square Wall Wash
NIO-4RTLA	4" Round Trimless Adj. Reflector
NIO-4RTLND	4" Round Trimless Reflector
NIO-4STLND	4" Square Trimless Reflector

Emergency: Housing can be specified with connections for emergency battery installation. Requires top access. Must specify battery with remote test switch separately, NEPK-07LEDUNV.

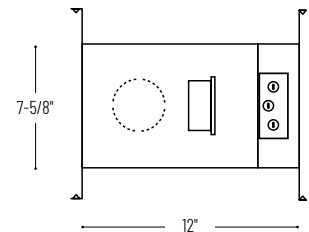
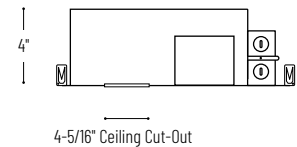
Note: Emergency is not compatible with NHIOICDCP-48

LABELS AND LISTINGS

- cULus Listed for Damp Location (Wet Location when used with compatible reflector)
- [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

Housing Type	Driver / Dimming	Optional Emergency
NHIOICD-48 = IC Air-Tight	LE3 = 120V input; Triac / ELV dimming	/PEM = Remote Emergency for LE3
	LE4 = 120-277V input; Triac / ELV / 0-10V dimming	/GWPEM = Remote Emergency for LE4
	LUPE0 = 120/277V input; Lutron Hi-lume Premier 0.1% EcoSystem with Soft-On, Fade-to-Black	
	LUPE01 = 120/277V input; Lutron Hi-lume 1% EcoSystem with Soft-On, Fade-to-Black	
NHIOICDCP-48 = Chicago Plenum	LE3 = 120V input; Triac / ELV dimming	
	LE4 = 120-277V input; Triac / ELV / 0-10V dimming	

Optional Accessories

Description
NEPK-07LEDUNV = Remote Emergency Battery w/Test Switch
NIO-4EXTC2 = Ceiling Extension Collar up to 2"

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

NHRI0IC-48LE4

4" Iolite IC Air-Tight Remodel Housing

Source: 14W LED

800lm or 1000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Dedicated 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 junction 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: 120/277V (must specify)

Power Factor: >0.90

Operating Temp.: 104°F (40°C) max. ambient temperature

Wattage: 14W

Dimming: Triac / ELV or 0-10V (must specify)

[Click Here](#) or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE REFLECTORS

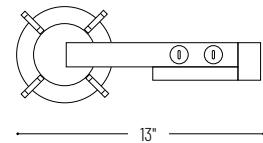
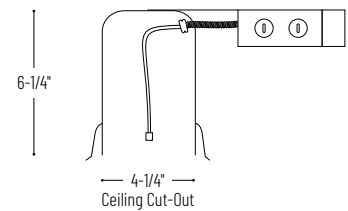
CATALOG NO.	DESCRIPTION
NIO-4RC	4" Round Cone Regress
NIO-4SC	4" Square Cone Regress
NIO-4RG	4" Round Adj. Surface Gimbal
NIO-4SG	4" Square Adj. Surface Gimbal
NIO-4RD	4" Round Adj. Deep Regress
NIO-4SD	4" Square Adj. Deep Regress
NIO-4RNDC	4" Round Deep Reflector
NIO-4SNDC	4" Square Deep Reflector
NIO-4RPHA	4" Round Adj. Pinhole
NIO-4RPH	4" Round Pinhole
NIO-4SND SQ	4" Square Reflector / Square Aperture
NIO-4RSL	4" Round Adj. Slot Aperture
NIO-4RNB	4" Round Bullnose
NIO-4SNB	4" Square Bullnose
NIO-4SDSQ	4" Square Adjustable / Square Aperture

LABELS AND LISTINGS

- cULus Listed for Damp Location (Wet Location when used with compatible reflector)
- [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

NHRI0IC-48LE3 = 120V input; 120V Triac / ELV dimming

NHRI0IC-48LE4 = 120-277V input; 120V Triac / ELV / 0-10V or 277V 0-10V dimming

Example: **NHRI0IC-48LE4** = 4" Iolite IC Air-Tight Remodel Housing, 120-277V input; Triac / ELV / 0-10V dimming

PHOTOMETRICS

4" Iolite Series

Type

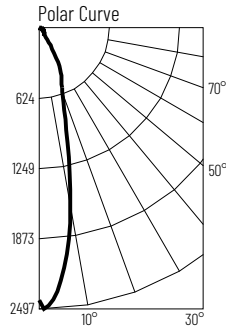
Project

Catalog No.

Notes

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

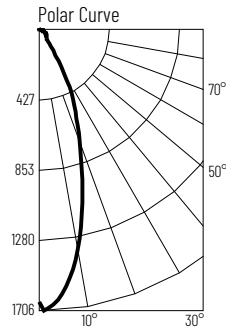
Zone	Lumens	% Luminaire
0-30	667	71
0-40	761	81
0-60	861	91.7
0-90	936	99.7
90-180	3	0.3
0-180	939	100

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

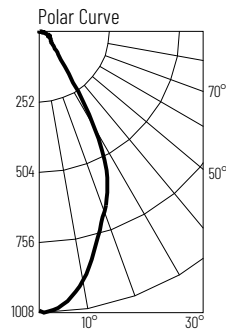
Zone	Lumens	% Luminaire
0-30	652	70.2
0-40	747	80.4
0-60	848	91.3
0-90	926	99.7
90-180	3	0.3
0-180	929	100

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

Type

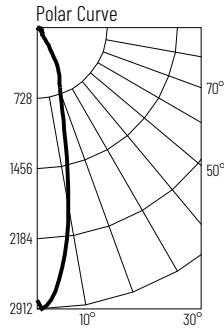
Project

Catalog No.

Notes

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

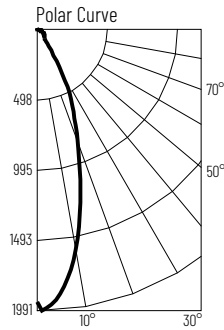
Zone	Lumens	% Luminaire
0-30	795	71.6
0-40	911	82
0-60	1022	92
0-90	1104	99.3
90-180	8	0.7
0-180	1111	100

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

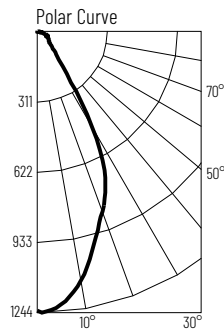
Zone	Lumens	% Luminaire
0-30	766	69.7
0-40	890	81.1
0-60	1005	91.5
0-90	1090	99.3
90-180	8	0.7
0-180	1098	100

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

PHOTOMETRICS

4" Iolite Wall Wash

Type _____

Project _____

Catalog No. _____

Notes _____

Test Information

Test Number: NTR1260
 Part Number: NIO-4SW40XWW/10
 Lumens: 893lm
 Wattage: 13.69W
 Efficacy: 65lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180°): 0.38
 Spacing Criteria (90°-270°): 1.06

Multiple unit data (footcandles)

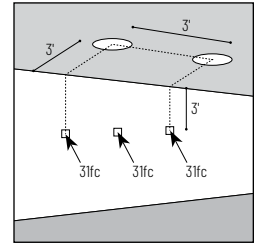
Distance from ceiling (ft.)	2' from wall 2' on center		
1'	30	27	30
2'	70	70	70
3'	41	41	41
4'	23	23	23
5'	13	14	13
6'	8	9	8
7'	6	6	6
8'	4	4	4
9'	3	3	3
10'	2	2	2

Multiple unit data (footcandles)

Distance from ceiling (ft.)	2' from wall 3' on center		
1'	28	15	28
2'	60	48	60
3'	35	31	35
4'	20	19	20
5'	12	12	12
6'	8	8	8
7'	5	5	5
8'	4	4	4
9'	3	3	3
10'	2	2	2

Multiple unit data (footcandles)

Distance from ceiling (ft.)	3' from wall 3' on center		
1'	8	7	8
2'	26	17	26
3'	31	31	31
4'	22	22	22
5'	15	15	15
6'	10	10	10
7'	7	7	7
8'	5	5	5
9'	4	4	4
10'	3	3	3



Example: Two luminaires located 3' from wall and spaced 3' on center, the illumination on the wall 3' down from ceiling will be 31fc beneath and 31fc between luminaires.