# NIO-4

4" Iolite Reflectors (New Construction and Remodel)

Source: 14W LED

800lm or 1000lm

# PRODUCT DESCRIPTION

4" lolite 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-4RNDC / NIO-4SNDC / NIO-4SNDSQ: Deep regressed cone reflectors optimize visual cut-off.

NIO-4RG / NIO-4SG: Adjustable surface gimbals adjusts up to 40º (Remodel) or 45º (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 20º (Remodel) or 40º (New Construction).

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 15º (Remodel) or 35º (New Construction).

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

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

#### FI FCTRICAL

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 lolite housings manufactured by Nora Lighting.

CATALOG NO. DESCRIPTION

4" IC Air-Tight New Construction NHIOICD-48 NHIOICDCP-48 4" Chicago Plenum New Construction NHRIOIC-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. 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 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 & DIMENSIONS**

Type

Project

Notes

Catalog No.



#### NIO-4RC

Round Cone Regress 45º Adj. (New Const.) / 40º Adj. (Remodel) BB, BW, BZ, HW, MPW, NN, WW



#### NIO-4SC

Square Cone Regress 45º Adj. (New Const.) / 40º Adj. (Remodel) BB, BW, BZ, HW, MPW, NN, WW





#### NIO-4RD

Round Adj. Deep Cone 40º Adj. (New Const.) / 20º Adj. (Remodel) BB, BW, BZ, HW, MPW, NN, WW

# NIO-4SD

Square Adj. Deep Cone 40º Adj. (New Const.) / 20º Adj. (Remodel) BB, BZ, MPW, NN, WW

NIN-4SG

Square Adj. Surface Gimbal

45º Adj. (New Const.) / 40º Adj.(Remodel)

BB, BZ, MPW, NN, WW

NIO-4SNDC

Square Deep Reflector

Non Adjustable

BB, BW, BZ, HW, MPW, NN, WW



#### NIN-4RG

Round Adj. Surface Gimbal 45º Adj. (New Const.) / 40º Adj. (Remodel) BB, BZ, MPW, NN, WW



#### — 3-1/4" 4-7/8"

#### NIO-4RNDC

Round Deep Reflector Non Adjustable BB, BW, BZ, HW, MPW, NN, WW



# 4-7/8" NIO-4RPH

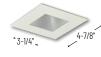
Round Pinhole Non Adjustable BB, BMPW, HZMPW, MPW



# — 2-1/4" → 4-7/8"

# NIO-4RPHA

Round Adj. Pinhole 35º Adj. (New Const.) / 10º Adj. (Remodel) BB, BMPW, HZMPW, MPW, WW



NIO-4SNDSO

Square Reflector / Square Aperture

# 4-7/8" NIN-4RSI

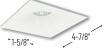
Round Adj. Slot Aperture 40º Adj. (New Const.) / 15º Adj. (Remodel) BB, BMPW, HZMPW, MPW



# NIO-4RNB

**Round Bullnose** Non Adjustable BB, BZ, MPW, NN, WW





# NIO-4SNB

Square Bullnose Non Adjustable BB. B7. MPW. NN. WW

# 4" lolite Reflectors - Dedicated Housing Required

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

<sup>2</sup> Available in round aperture only

† Comfort Dim technology available in 800lm & uses non-Cree COB modules. 1" & 2" Iolite uses a different dimming curve than 4" Comfort Dim

Not all finishes are available on all trims

Example: NIO-4RG27XWW = 4" lolite 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

# 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-4RTLNDC / NIO-4STLNDC: Deep regressed cone reflectors optimize visual cut-off.

NIO-4RTLA: Regressed cone reflector optimizes visual cutoff and adjust up to  $35^{\circ}$ .

**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.:  $0^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  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 lolite 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 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

Type

Project

Notes

Catalog No.



#### NIO-4RTLA

Round Trimless Adjustable Reflector 35º Adjustable BB, BW, BZ, HW, HZ, MPW, WW



### NIO-4RTLNDC

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



# NIO-4STLNDC

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

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

Shape	Reflector Style	Color Temp.	Finish <sup>1</sup>	Lumens
NIO-4RTL = Round	A = Adjustable	<b>27X</b> = 2700K	BB = Black	(blank) = 800lm
NIO-4STL = Square	NDC = Non-Adjustable	<b>30X</b> = 3000K	BW = Black / White	<b>/10</b> = 1000lm
		<b>35X</b> = 3500K	<b>BZ</b> = Bronze	
		<b>40X</b> = 4000K	<b>HZ</b> = Haze	
		<b>50X</b> = 5000K	HW = Haze / White	
		CDX = Comfort Dim <sup>†</sup>	MPW = Matte Powder White	
			<b>WW</b> = White	

<sup>†</sup> Comfort Dim technology available in 800lm & uses non-Cree COB modules. 1" & 2" lolite uses a different dimming curve than 4" Comfort Dim

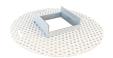
# 4" Iolite Trimless Mud Ring

Description

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







NIO-TLMR-4S Square Trimless Mud Ring

Example: NIO-4RTLNDC27XWW / NIO-TLMR-4R = 4" lolite Round Trimless Non-Adjustable Reflector, 2700K, White finish, 800lm / 4" Round Trimless Mud Ring



 $<sup>^{\</sup>scriptscriptstyle 1}\,$  Not all finishes are available on all trims

# 4" lolite Accessories

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

Type **Project** Catalog No. **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

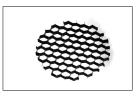


# **Opaque Collar Snoot**

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

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**

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



NIO-4EXTC2

# 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 requirments 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 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

CATALOGNO	DECORIDATION
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-4SNDSQ	4" Square Reflector / Square Aperture
NIO-4RSL	4" Round Adj. Slot Aperture
NIO-4RNB	4" Round Bullnose
NIO-4SNB	4" Square Bullnose
NIO-4RTLA	4" Round Trimless Adj. Reflector
NIO-4RTLNDC	4" Round Trimless Reflector
NIO-4STLNDC	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-BSL17C-C2U.

# **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

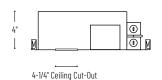


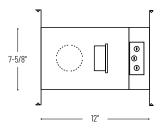




# PRODUCT IMAGES AND DIMENSIONS







4" Iolite IC Air-Tight New Construction Housin	<b>q</b> - Compatible with NIO-4 reflectors
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Housing Type Driver / Dimming Optional Emergency Wiring

NHIOICD-48 = IC Air-Tight LE3 = 120V input; Triac / ELV dimming /PEM = Remote Emergence

**LE4** = 120-277V input; Triac / ELV / 0-10V dimming

/PEM = Remote Emergency for LE3
/6WPEM = Remote Emergency for LE4

Optional Accessories

Description

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

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



NHIOICDCP-48 = Chicago Plenum

# NHRIOIC-48LE4

4" Iolite IC Air-Tight Remodel Housing

Source: 14W LED

PRODUCT DESCRIPTION

of air through the ceiling.

800lm or 1000lm

# **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

#### **FEATURES**

- · IC rated for direct contact with insulation\*\*
- Quick connect provided for electrical connection to the I FD reflector

Dedicated remodel housing for use in insulated ceilings

construction provides energy savings by reducing the flow

can be in direct contact with insulation\*\*. Air-tight

- 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).

### 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-4SNDSQ	4" Square Reflector / Square Aperture
NIU-Y'DGI	4" Pound Adi Slot Aporturo

4″ Round Adj. Slot Aperture

NIO-4RNB 4" Round Bullnose NIO-4SNB 4" Square Bullnose

#### LABELS AND LISTINGS

- · 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

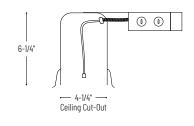
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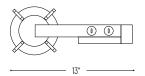
**Project** 

Notes

Catalog No.







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

Driver / Dimming Optional Emergency Wiring

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

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

/PEM = Remote Emergency for LE3 /6WPEM = Remote Emergency for LE4

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



# **PHOTOMETRICS**

4" Iolite Series

Type

Project

Catalog No.

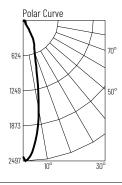
Notes

# **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 (0º-180): 0.42 Spacing Criteria (90º-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

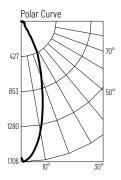
Calluela Lable		
Vertical Angles	Candela	
0	2497	
5	2255	
15	905	
25	466	
35	129	
45	68	

# **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 (0º-180): 0.58 Spacing Criteria (90º-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

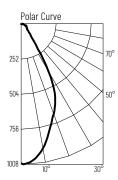
Candela
1697
1602
1013
495
126
68

# **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 (0º-180): 0.86 Spacing Criteria (90º-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.

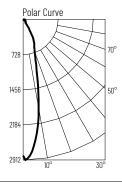
Notes

# **Test Information**

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

Beam Spread: Spot Lumens: 11111m Wattage: 13W Efficacy: 851pw

CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.44 Spacing Criteria (90º-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

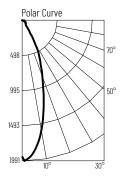
Landela	able
Vertical Angles	Candela
0	2822
5	2559
15	1111
25	550
35	150
45	76

# **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 (0º-180): 0.6 Spacing Criteria (90º-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

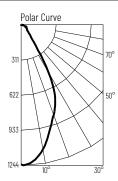
'	rtical gles	Candela
	0	1928
	5	1839
	15	1187
	25	578
	35	163
	45	76

# **Test Information**

Test Number: NTR11238 Part Number: NIO-4RG3060WW/10

Beam Spread: Flood Lumens: 1084lm Wattage: 13W Efficacy: 83lpw CCT / CRI: 3000K / 90

CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.84 Spacing Criteria (90º-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