

# NIOB-2

## 2" Iolite Reflectors (New Construction and Remodel)

Source: 14W LED

800lm or 1000lm

### PRODUCT DESCRIPTION

2" 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:

NIOB-2RNDC / NIOB-2SNDC / NIOB-2SNSDQ: Deep regressed cone reflectors optimize visual cut-off.

NIOB-2RG / NIOB-2SG: Adjustable surface gimbals adjusts up to 15° (Remodel) or 30° (New Construction). NIOB-2SG adjust up to 15°.

NIOB-2RC / NIOB-2SC: Regressed cone reflectors optimize visual cut-off and adjust up to 15° (Remodel) or 30° (New Construction). NIOB-2SC adjust up to 15°.

NIOB-2RPH: Pinhole reflector focuses the beam spread through 1-5/8" opening.

NIOB-2RSL: Adjustable slot aperture focus the beam spread through 1-3/4" x 1-3/8" opening and adjust up to 15° (Remodel) or 30° (New Construction).

**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 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-28   | 2" IC Air-Tight New Construction   |
| NHIOICDCP-28 | 2" Chicago Plenum New Construction |
| NHROIC-28    | 2" 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
- 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



### Type

### Project

### Catalog No.

### Notes

### PRODUCT IMAGES & DIMENSIONS



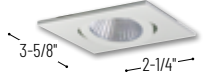
**NIOB-2RC**  
Round Cone Regress  
30° Adj. (New Const.) / 15° Adj. (Remodel)  
BB, BW, BZ, HW, MPW, NN, WW



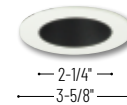
**NIOB-2SC**  
Square Cone Regress  
15° Adjustable  
BB, BW, BZ, HW, MPW, NN, WW



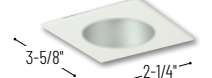
**NIOB-2RG**  
Round Adj. Surface Gimbal  
30° Adj. (New Const.) / 15° Adj. (Remodel)  
BB, BZ, MPW, NN, WW



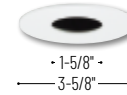
**NIOB-2SG**  
Square Adj. Surface Gimbal  
15° Adjustable  
BB, BZ, MPW, NN, WW



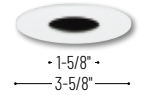
**NIOB-2RNDC**  
Round Deep Reflector  
Non Adjustable  
BB, BW, BZ, HW, MPW, NN, WW



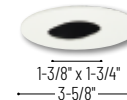
**NIOB-2SNDC**  
Square Deep Reflector  
Non Adjustable  
BB, BW, BZ, HW, MPW, NN, WW



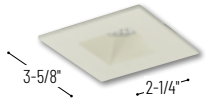
**NIOB-2RPH**  
Round Pinhole  
Non Adjustable  
BB, BMPW, HZMPW, MPW



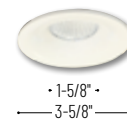
**NIOB-2RPHA**  
Round Adjustable Pinhole  
28° Adj. (New Const.) / 15° Adj. (Remodel)  
BB, BMPW, HZMPW, MPW, WW



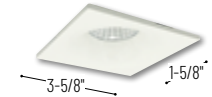
**NIOB-2RSL**  
Round Adj. Slot Aperture  
30° Adj. (New Const.) / 15° Adj. (Remodel)  
BB, BMPW, HZMPW, MPW



**NIOB-2SNSDQ**  
Square Reflector /  
Square Aperture  
Non Adjustable  
BB, BW, BZ, HW, MPW, WW



**NIOB-2RNB**  
Round Bullnose  
Non Adjustable  
BB, BZ, MPW, NN, WW



**NIOB-2SNB**  
Square Bullnose  
Non Adjustable  
BZ, MPW, NN, WW

### 2" Iolite Reflectors - Dedicated Housing Required

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

<sup>1</sup> Available in square aperture only

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

<sup>3</sup> Comfort Dim technology available in 800lm & uses non-Cree COB modules. 1" & 2" Iolite uses a different dimming curve than 4" Comfort Dim

<sup>4</sup> Not all finishes are available on all trims

Example: **NIOB-2RG27XWW** = 2" Iolite Round Adjustable Surface Gimbal, 2700K, White finish, 800lm

# NIO-2RTL

2" Iolite Trimless Reflectors (New Construction only)

Source: 14W LED

800lm or 1000lm

Type

Project

Catalog No.

Notes

## PRODUCT DESCRIPTION

2" 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 ship 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-2RTLNDCC: Deep regressed cone reflectors optimize visual cut-off.

NIO-2RTLTA: Regressed cone reflector optimizes visual cut-off and adjust up to 15°.

**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-28   | 2" IC Air-Tight New Construction   |
| NHIOICDCP-28 | 2" 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-2RTLTA 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



— 2-3/4" —

### NIO-2RTLTA

Round Trimless Adjustable Reflector

15° Adjustable

BB, BW, BZ, HW, HZ, MPW, WW



— 2-3/4" —

### NIO-2RTLNDCC

Round Trimless Reflector

Non-Adjustable

BB, BZ, HZ, MPW, WW

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

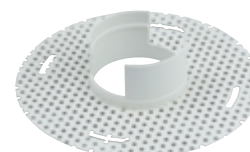
| Aperture         | Reflector Style      | Color Temp.                    | Finish <sup>1</sup>      | Lumens          |
|------------------|----------------------|--------------------------------|--------------------------|-----------------|
| NIO-2RTL = Round | A = Adjustable       | 27X = 2700K                    | BB = Black               | (blank) = 800lm |
|                  | NDC = Non-Adjustable | 30X = 3000K                    | BW = Black / White       | /10 = 1000lm    |
|                  |                      | 35X = 3500K                    | BZ = Bronze              |                 |
|                  |                      | 40X = 4000K                    | HZ = Haze                |                 |
|                  |                      | 50X = 5000K                    | HW = Haze / White        |                 |
|                  |                      | CDX = Comfort Dim <sup>1</sup> | MPW = Matte Powder White |                 |
|                  |                      |                                | WW = White               |                 |

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

<sup>1</sup> Not all finishes are available on all trims

## 2" Iolite Trimless Mud Ring

| Description                              |
|--|
| NIO-TLMR-2R = 2" Round Trimless Mud Ring |



Example: NIO-2RTLNDCC27XWW / NIO-TLMR-2R = 2" Iolite Round Trimless Non-Adjustable Reflector, 2700K, White finish, 800lm / 2" Round Trimless Mud Ring

## 2" 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

Catalog No.

Notes



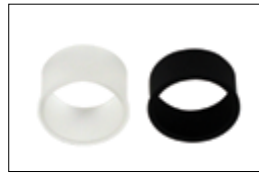
### Frosted Filter-Optic

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



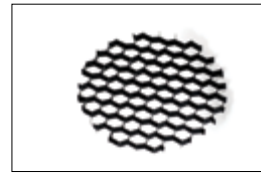
### Translucent Deco Collar

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%



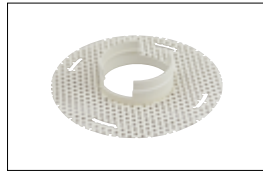
### Premium TIR Optics

NIO-REFLTIR15 15° Optic  
NIO-REFLTIR25 25° Optic  
TIR optics are not compatible with Comfort Dim technology.



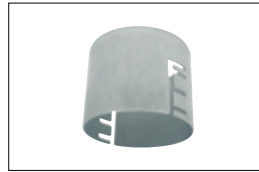
### Flush Mount Mud Ring

NIO-FMMR-2R 2" Round  
NIO-FMMR-2S 2" Square  
Mounts trim flush to ceiling with trim flange visible. Attaches to drywall. Requires professional drywall finishing. **Requires and only for use with NHIOICD-28 or NHIOICDCP-28 new construction housings and NIOB-2 reflectors.**  
7-7/8" Diameter 1/2" Thick



### Trimless Mud Ring

NIO-TLMR-2R 2" Round  
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-28 or NHIOICDCP-28 new construction housings and NIO-2RTL trimless reflectors.**  
7-7/8" Diameter 1/2" Thick



### Ceiling Extension Collar

NIO-2EXTC2  
Allows new construction housing to install in ceiling thicknesses up to 2". **Only for use with NHIOICD-28 or NHIOICDCP-28 new construction housings.**

# NHIOICD-28 / NHIOICDCP-28

2" 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-2EXTC2.

**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). Access above ceiling required.

## ELECTRICAL

**Voltage:** 120V or 120/277V (must specify)

**Power Factor:** >0.90

**Operatin 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](http://www.NoraLighting.com) in the "Compatibility" page under "Resources" tab

## COMPATIBLE REFLECTORS

| CATALOG NO. | DESCRIPTION                           |
|-------------|---------------------------------------|
| NI0B-2RC    | 2" Round Cone Regress                 |
| NI0B-2SC    | 2" Square Cone Regress                |
| NI0B-2RG    | 2" Round Adj. Surface Gimbal          |
| NI0B-2SG    | 2" Square Adj. Surface Gimbal         |
| NI0B-2RND   | 2" Round Deep Reflector               |
| NI0B-2SND   | 2" Square Deep Reflector              |
| NI0B-2RPHA  | 2" Round Adjustable Pinhole           |
| NI0B-2RPH   | 2" Round Pinhole                      |
| NI0B-2SND   | 2" Square Reflector / Square Aperture |
| NI0B-2RSL   | 2" Round Adj. Slot Aperture           |
| NI0B-2RNB   | 2" Round Bullnose                     |
| NI0B-2SNB   | 2" Square Bullnose                    |
| NI0-2RTL    | 2" Round Trimless Adj. Reflector      |
| NI0-2RTLND  | 2" Round Trimless Reflector           |

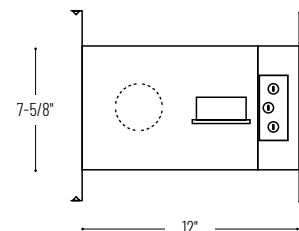
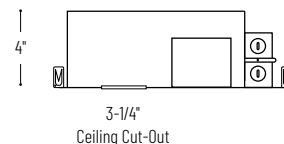
**Emergency:** Housing can be specified with connections for emergency battery installation. Requires top access. Must specify battery with remote test switch separately, NEPK-BSL17C-C2U.

## 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



## 2" Iolite IC Air-Tight New Construction Housing - Compatible with NI0B-2 & NI0-2 reflectors

| Housing Type                  | Driver / Dimming                                  | Optional Emergency Wiring         |
|-------------------------------|---|-----------------------------------|
| NHIOICD-28 = IC Air-Tight     | LE3 = 120V input; Triac / ELV dimming             | /PEM = Remote Emergency for LE3   |
| NHIOICDCP-28 = Chicago Plenum | LE4 = 120-277V input; Triac / ELV / 0-10V dimming | /6WPEM = Remote Emergency for LE4 |

## Optional Accessories

| Description  |
|--|
| NEPK-BSL17C-C2U = Remote Emergency Battery w/Test Switch |
| NI0-2EXTC2 = Ceiling Extension Collar up to 2"           |

Example: NHIOICD-28LE3 = 2" Iolite IC Air-Tight New Construction Housing, 120V input; Triac / ELV dimming

# NHRIOIC-28LE4

2" 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. Remodel housing swivels up to 35° depending on ceiling thickness. New construction flat frame available to convert remodel housing, must specify NHIOFK-2.

**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

**Power Factor:** >0.90

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

**Wattage:** 14W

**Dimming:** Triac / ELV or 0-10V

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

## COMPATIBLE REFLECTORS

| CATALOG NO.  | DESCRIPTION                           |
|--------------|---------------------------------------|
| NIOB-2RC     | 2" Round Cone Regress                 |
| NIOB-2SC     | 2" Square Cone Regress                |
| NIOB-2RG     | 2" Round Adj. Surface Gimbal          |
| NIOB-2SG     | 2" Square Adj. Surface Gimbal         |
| NIOB-2RND    | 2" Round Deep Reflector               |
| NIOB-2SND    | 2" Square Deep Reflector              |
| NIOB-2RPHA   | 2" Round Adjustable Pinhole           |
| NIOB-2RPH    | 2" Round Pinhole                      |
| NIOB-2SND SQ | 2" Square Reflector / Square Aperture |
| NIOB-2RSL    | 2" Round Adj. Slot Aperture           |
| NIOB-2RNB    | 2" Round Bullnose                     |
| NIOB-2SNB    | 2" Square Bullnose                    |

**Accessory:** New construction flat frame available to convert remodel housing, must specify NHIOFK-2.

## LABELS AND LISTINGS

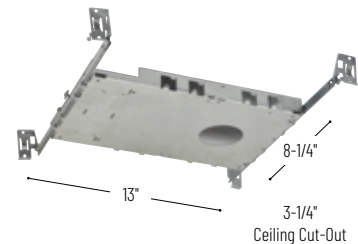
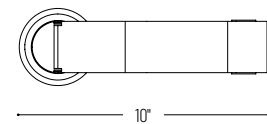
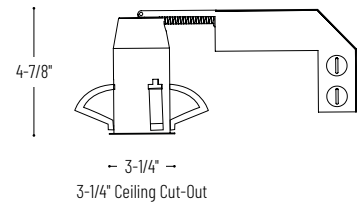
- cULus Listed for Damp Location
- cULus Listed for Wet Location (w/designated reflectors)
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Meets or exceeds ASTM-283 Air-Tight requirements



## PRODUCT IMAGES AND DIMENSIONS



**NHRIOIC-28LE4**  
2" Iolite IC Air-Tight Remodel Housing



**NHIOFK-2**  
New Construction Frame-In for 2" Remodel Housing

## 2" Iolite IC Air-Tight Remodel Housing - Compatible with NIOB-2 reflectors

Driver / Dimming

**NHRIOIC-28LE4** = 120-277V input; 120V Triac / ELV / 0-10V or 277V 0-10V dimming

## Optional Accessories

Description

**NHIOFK-2** = 2" New Construction flat frame with bar hangers

Example: **NHRIOIC-28LE4** = 2" Iolite IC Air-Tight Remodel Housing, 120-277V input; Triac / ELV / 0-10V dimming

# PHOTOMETRICS

## 2" Iolite Series

Type

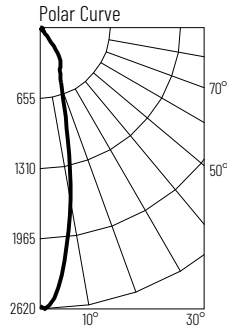
Project

Catalog No.

Notes

### Test Information

Test Number: NTR11264  
 Part Number: NIOB-2RC3025WW  
 Beam Spread: Spot  
 Lumens: 947lm  
 Wattage: 14.2W  
 Efficacy: 67lpw  
 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'                      | 162fc       | 1'-8"         |
| 6'                      | 72.1fc      | 2'-7"         |
| 8'                      | 40.5fc      | 3'-6"         |
| 10'                     | 25.9fc      | 4'-5"         |
| 12'                     | 18fc        | 5'-2"         |

### Zonal Lumen Summary

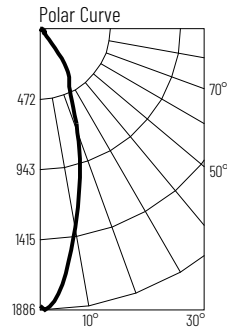
| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 675    | 71.2        |
| 0-40   | 839    | 88.6        |
| 0-60   | 906    | 95.7        |
| 0-90   | 945    | 99.8        |
| 90-180 | 2      | 0.2         |
| 0-180  | 947    | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 2594    |
| 5               | 2302    |
| 15              | 967     |
| 25              | 443     |
| 35              | 291     |
| 45              | 45      |

### Test Information

Test Number: NTR11265  
 Part Number: NIOB-2RC3038WW  
 Beam Spread: Narrow Flood  
 Lumens: 936lm  
 Wattage: 14.2W  
 Efficacy: 66lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.54  
 Spacing Criteria (90°-270): 0.54



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 116fc       | 2'-5"         |
| 6'                      | 51.6fc      | 3'-7"         |
| 8'                      | 29fc        | 4'-10"        |
| 10'                     | 18.6fc      | 5'-11"        |
| 12'                     | 12.9fc      | 7'-1"         |

### Zonal Lumen Summary

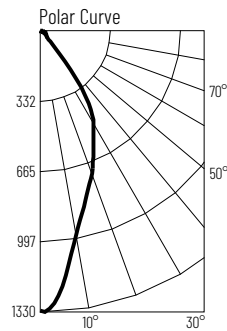
| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 623    | 70.8        |
| 0-40   | 824    | 88.1        |
| 0-60   | 892    | 95.3        |
| 0-90   | 934    | 99.8        |
| 90-180 | 2      | 0.2         |
| 0-180  | 936    | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 1858    |
| 5               | 1677    |
| 15              | 1021    |
| 25              | 480     |
| 35              | 279     |
| 45              | 45      |

### Test Information

Test Number: NTR11263  
 Part Number: NIOB-2RC3060WW  
 Beam Spread: Flood  
 Lumens: 962lm  
 Wattage: 14.2W  
 Efficacy: 68lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.64  
 Spacing Criteria (90°-270): 0.66



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 82.8fc      | 3'-4"         |
| 6'                      | 36.8fc      | 4'-11"        |
| 8'                      | 20.7fc      | 6'-6"         |
| 10'                     | 13.2fc      | 8'-1"         |
| 12'                     | 9.2fc       | 9'-10"        |

### Zonal Lumen Summary

| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 614    | 63.8        |
| 0-40   | 831    | 86.3        |
| 0-60   | 913    | 94.9        |
| 0-90   | 960    | 99.8        |
| 90-180 | 2      | 0.2         |
| 0-180  | 962    | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 1324    |
| 5               | 1199    |
| 15              | 826     |
| 25              | 594     |
| 35              | 371     |
| 45              | 56      |

# PHOTOMETRICS

## 2" Iolite Series

Type

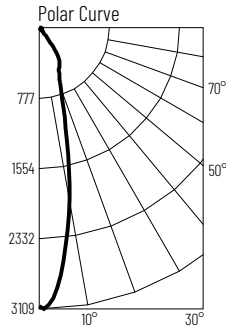
Project

Catalog No.

Notes

### Test Information

Test Number: NTR11273  
 Part Number: NIOB-2RC3025WW/10  
 Beam Spread: Spot  
 Lumens: 1253lm  
 Wattage: 13.2W  
 Efficacy: 95lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.44  
 Spacing Criteria (90°-270): 0.5



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 185fc       | 1'-11"        |
| 6'                      | 82.3fc      | 2'-10"        |
| 8'                      | 46.3fc      | 3'-8"         |
| 10'                     | 29.6fc      | 4'-7"         |
| 12'                     | 20.6fc      | 5'-7"         |

### Zonal Lumen Summary

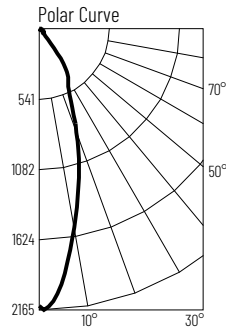
| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 881    | 70.4        |
| 0-40   | 1089   | 87          |
| 0-60   | 1193   | 95.3        |
| 0-90   | 1248   | 99.7        |
| 90-180 | 4      | 0.3         |
| 0-180  | 1253   | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 2964    |
| 5               | 2708    |
| 15              | 1198    |
| 25              | 558     |
| 35              | 367     |
| 45              | 60      |

### Test Information

Test Number: NTR11272  
 Part Number: NIOB-2RC3038WW/10  
 Beam Spread: Narrow Flood  
 Lumens: 1206lm  
 Wattage: 13W  
 Efficacy: 93lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.58  
 Spacing Criteria (90°-270): 0.6



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 132fc       | 2'-7"         |
| 6'                      | 58.9fc      | 3'-11"        |
| 8'                      | 33.1fc      | 5'-2"         |
| 10'                     | 21.2fc      | 6'-5"         |
| 12'                     | 14.7fc      | 7'-8"         |

### Zonal Lumen Summary

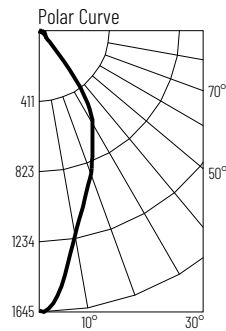
| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 840    | 69.6        |
| 0-40   | 1044   | 86.5        |
| 0-60   | 1146   | 95          |
| 0-90   | 1203   | 99.8        |
| 90-180 | 3      | 0.2         |
| 0-180  | 1206   | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 2119    |
| 5               | 1972    |
| 15              | 1264    |
| 25              | 605     |
| 35              | 357     |
| 45              | 57      |

### Test Information

Test Number: NTR11274  
 Part Number: NIOB-2RC3060WW/10  
 Beam Spread: Flood  
 Lumens: 1246lm  
 Wattage: 13.2W  
 Efficacy: 94lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.68  
 Spacing Criteria (90°-270): 0.68



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 102fc       | 3'-6"         |
| 6'                      | 45.4fc      | 5'-2"         |
| 8'                      | 25.5fc      | 6'-11"        |
| 10'                     | 16.4fc      | 8'-8"         |
| 12'                     | 11.4fc      | 10'-5"        |

### Zonal Lumen Summary

| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 793    | 63.7        |
| 0-40   | 1071   | 86          |
| 0-60   | 1180   | 94.7        |
| 0-90   | 1243   | 99.8        |
| 90-180 | 3      | 0.2         |
| 0-180  | 1246   | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 1635    |
| 5               | 1525    |
| 15              | 1070    |
| 25              | 768     |
| 35              | 474     |
| 45              | 74      |