

# NIOB-1

## 1" Iolite BWF Reflectors (New Construction and Remodel)

Source: 9W or 10W LED  
600lm

Type

Project

Catalog No.

Notes

### PRODUCT DESCRIPTION

1" Iolite BWF 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, 20° and 40° optics are included and can be easily changed in the field. The reflectors produce 600lm output at 90+ CRI.

### FEATURES

- Cree® LED COB or Premium non-Cree Comfort Dim Technology (3100K-2000K)
- Wide variety of reflectors and finishes
- 60° (Flood) optic installed, 40° (Narrow flood) and 20° (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-IRNB / NIOB-ISNB:** Bullnose reflector with filleted aperture for minimal aperture brightness.  
**NIOB-IRNG / NIOB-ISNG:** Straight reflector with sharp edges.  
**NIOB-IRPH:** Pinhole reflector focuses the beam spread through 1-1/8" opening.  
**NIOB-IRSL:** Adjustable slot aperture focus the beam spread through 1-3/8" x 1-1/8" 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), 40° and 20° optics (included).

### ELECTRICAL

**Lumens / Wattage:** 600lm / 9W (LE3) or 10W (LE4)  
**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.  
**Dimming:** Specified by housing

### COMPATIBLE HOUSINGS

Reflectors are compatible with respective Iolite housings manufactured by Nora Lighting.

CATALOG NO.	DESCRIPTION
NH10ICD-16	1" IC Air-Tight New Construction
NH10ICDCP-16	1" Chicago Plenum New Construction
NH10IC-16	1" 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



### PRODUCT IMAGES & DIMENSIONS



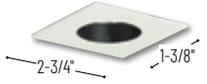
**NIOB-IRNB**  
Round Bullnose  
Non Adjustable  
BB, BZ, MPW, NN, WW



**NIOB-ISNB**  
Square Bullnose  
Non Adjustable  
BB, BZ, MPW, NN, WW



**NIOB-IRNG**  
Round Reflector  
Non Adjustable  
BB, BW, BZ, HW, MPW, NN, WW



**NIOB-ISNG**  
Square Reflector  
Non Adjustable  
BB, BW, BZ, HW, MPW, NN, WW



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



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

## 1" Iolite BWF Reflectors - Dedicated Housing Required

Reflector	Color Temp.	Finish <sup>1</sup>
<b>NIOB-IRNB</b> = Round Bullnose	<b>27X</b> = 2700K	<b>BB</b> = Black / Black
<b>NIOB-ISNB</b> = Square Bullnose	<b>30X</b> = 3000K	<b>BMPW</b> = Black / Matte Powder White
<b>NIOB-IRNG</b> = Round Reflector	<b>35X</b> = 3500K	<b>BW</b> = Black / White
<b>NIOB-ISNG</b> = Square Reflector	<b>40X</b> = 4000K	<b>BZ</b> = Bronze / Bronze
<b>NIOB-IRPH</b> = Round Pinhole	<b>50X</b> = 5000K	<b>HW</b> = Haze / White
<b>NIOB-IRSL</b> = Round Slot Aperture	<b>CDX</b> = Comfort Dim <sup>1</sup>	<b>HZMPW</b> = Haze / Matte Powder White
		<b>MPW</b> = Matte Powder White
		<b>NN</b> = Natural Metal / Natural Metal
		<b>WW</b> = White / White

<sup>1</sup> Comfort Dim technology 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

Example: **NIOB-IRNB27XWW** = 1" Iolite BWF Round Bullnose, 2700K, White finish

# NIO-1

## 1" Iolite NTF Reflectors (New Construction only)

Source: 9W or 10W LED  
600lm

Type

Project

Catalog No.

Notes

### PRODUCT DESCRIPTION

1" Iolite NTF reflectors can be specified for use in new construction 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. 20° and 40° optics are included and can be easily changed in the field. The reflectors produce 600lm output at 90+ CRI.

### FEATURES

- Cree® LED COB or Premium non-Cree Comfort Dim Technology (3100K-2000K)
- Wide variety of reflectors and finishes
- 60° (Flood) optic installed, 40° (Narrow flood) and 20° (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-1RNB / NIO-1SNB: Bullnose reflector with filleted aperture for minimal aperture brightness.  
NIO-1RNG / NIO-1SNG: Straight reflector with sharp edges.

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

**Field Changeable Optics:** Each reflector comes with a 60° (installed), 40° and 20° optics (included).

### ELECTRICAL

**Lumens / Wattage:** 600lm / 9W (LE3) or 10W (LE4)  
**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.  
**Dimming:** Specified by housing

### COMPATIBLE HOUSINGS

Reflectors are compatible with respective Iolite housings manufactured by Nora Lighting.

CATALOG NO.	DESCRIPTION
NH10ICD-16	1" IC Air-Tight New Construction
NH10ICDCP-16	1" Chicago Plenum New Construction

**Accessories:** Reflectors will accommodate a hex louver, no accessory holder is required, see page 3.

### 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



### PRODUCT IMAGES & DIMENSIONS



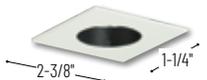
**NIO-1RNB**  
Round Bullnose  
Non Adjustable  
BB, BZ, MPW, NN, WW



**NIO-1SNB**  
Square Bullnose  
Non Adjustable  
BZ, MPW, NN, WW



**NIO-1RNG**  
Round Reflector  
Non Adjustable  
BW, BZ, HW, MPW, NN, WW



**NIO-1SNG**  
Square Reflector  
Non Adjustable  
BW, BZ, HW, MPW, NN, WW

## 1" Iolite NTF Reflectors - Dedicated New Construction Required

Reflector	Color Temp.	Finish <sup>1</sup>
<b>NIO-1RNB</b> = Round Bullnose	<b>27X</b> = 2700K	<b>BB</b> = Black / Black
<b>NIO-1SNB</b> = Square Bullnose	<b>30X</b> = 3000K	<b>BW</b> = Black / White
<b>NIO-1RNG</b> = Round Reflector	<b>35X</b> = 3500K	<b>BZ</b> = Bronze / Bronze
<b>NIO-1SNG</b> = Square Reflector	<b>40X</b> = 4000K	<b>HW</b> = Haze / White
	<b>50X</b> = 5000K	<b>MPW</b> = Matte Powder White
	<b>CDX</b> = Comfort Dim <sup>1</sup>	<b>NN</b> = Natural Metal / Natural Metal
		<b>WW</b> = White / White

<sup>1</sup> Comfort Dim technology 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

Example: **NIO-1RNB27XWW** = 1" Iolite NTF Round Bullnose, 2700K, White finish

# 1" 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-1REFL20FR 20° Optic
- NIO-1REFL40FR 40° Optic
- NIO-1REFL60FR 60° Optic



### Translucent Deco Collar

- NIO-1AS15(color) 5/8"
- NIO-1AS19(color) 3/4"
- NIO-1AS24(color) 1"

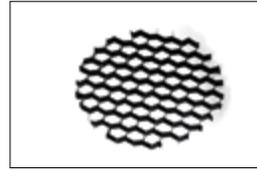
Color: BLU Blue, AM Amber, FR Frost, R Red



### Opaque Collar Snoot

- NIO-1AS15(color) 5/8"
- NIO-1AS19(color) 3/4"
- NIO-1AS24(color) 1"

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



### Hex Cell Louver

NIO-1HC

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



### Flush Mount Mud Ring

- NIO-FMMR-1R 1" Round
- NIO-FMMR-1S 1" Square

Mounts trim flush to ceiling with trim flange visible. Attaches to drywall. Requires professional drywall finishing. **Requires and only for use with NHIOICD-16 or NHIOICDCP-16 new construction housings and NIOB-1 reflectors.**

7-7/8" Diameter 1/2" Thick



### Ceiling Extension Collar

NIO-1EXTC2

Allows new construction housing to install in ceiling thicknesses up to 2". **Only for use with NHIOICD-16 or NHIOICDCP-16 new construction housings.**

# NHIOICD-16 / NHIOICDCP-16

1" Iolite IC Air-Tight New Construction Housing

Source: 9W or 10W LED

600lm

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
- Dimming down to 5%
- Patented driver assembly

## SPECIFICATION

**Housing:** 0.040" Aluminum shallow housing with patented driver assembly, allows for driver to slide out without tools. Housing can be installed in 1/2" ceiling thickness, an extension collar is available for ceiling thickness up to 2", must specify NIO-1EXTC2.

**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. **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:** 9W (LE3) or 10W (LE4)

**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
NIOB-1RNB	1" Round Bullnose (BWF)
NIOB-1SNB	1" Square Bullnose (BWF)
NIOB-1RNG	1" Round Straight Regress (BWF)
NIOB-1SNG	1" Square Straight Regress (BWF)
NIOB-1RPH	1" Round Pinhole (BWF)
NIOB-1RSL	1" Round Adj. Slot Aperture (BWF)
NIO-1RNB	1" Round Bullnose (NTF)
NIO-1SNB	1" Square Bullnose (NTF)
NIO-1RNG	1" Round Straight Regress (NTF)
NIO-1SNG	1" Square Straight Regress (NTF)

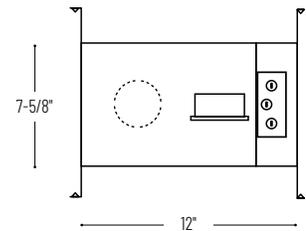
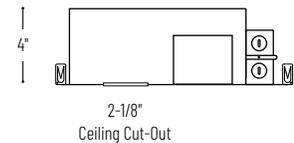
**Emergency:** Housing can be specified with connections for emergency battery installation. Requires top access. Must specify battery with remote test switch separately, NEPK-BSL17C-C2U.

## 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



## 1" Iolite IC Air-Tight New Construction Housing - Compatible with NIOB-1 & NIO-1 reflectors

Housing Type	Driver / Dimming	Optional Emergency Wiring
NHIOICD-16 = IC Air-Tight	LE3 = 120V input; Triac / ELV dimming	/PEM = Remote Emergency for LE3
NHIOICDCP-16 = 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
NIO-1EXTC2 = Ceiling Extension Collar up to 2"

Example: NHIOICD-16LE3 = 1" Iolite IC Air-Tight New Construction Housing, 120V input; Triac / ELV dimming

# NHRI0IC-16LE4

1" Iolite IC Air-Tight Remodel Housing

Source: 10W LED  
600lm

## 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-1.

**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:** 10W

**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**

NI0B-1RNB	1" Round Bullnose (BWF)
NI0B-1SNB	1" Square Bullnose (BWF)
NI0B-1RNG	1" Round Straight Regress (BWF)
NI0B-1SNG	1" Square Straight Regress (BWF)
NI0B-1RPH	1" Round Pinhole (BWF)
NI0B-1RSL	1" Round Adj. Slot Aperture (BWF)

**Accessory:** New construction flat frame available to convert remodel housing, must specify NHIOFK-1.

## 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



Type

Project

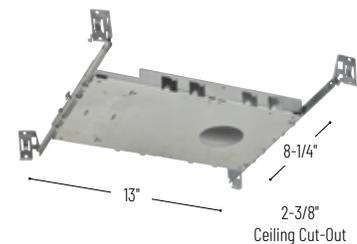
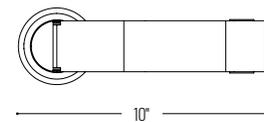
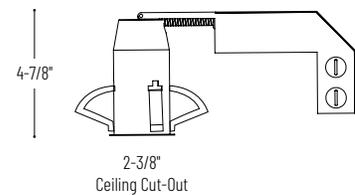
Catalog No.

Notes

## PRODUCT IMAGES AND DIMENSIONS



**NHRI0IC-16LE4**  
1" Iolite IC Air-Tight Remodel Housing



**NHIOFK-1**  
New Construction Frame-In for 1" Remodel Housing

## 1" Iolite IC Air-Tight Remodel Housing - Compatible with NI0B-1 reflectors

Driver / Dimming

**NHRI0IC-16LE4** = 120-277V input; 120V Triac / ELV / 0-10V or 277V 0-10V dimming

## Optional Accessories

Description

**NHIOFK-1** = 1" New Construction flat frame with bar hangers

Example: **NHRI0IC-16LE4** = 1" Iolite IC Air-Tight Remodel Housing, 120-277V input; Triac / ELV / 0-10V dimming

# PHOTOMETRICS

## 1" Iolite Series

Type

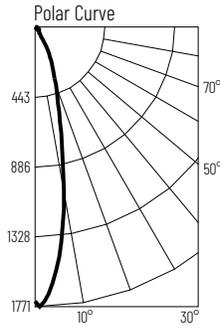
Project

Catalog No.

Notes

### Test Information

Test Number: NTR11253  
 Part Number: NIOB-IRNG3025WW  
 Beam Spread: Spot  
 Lumens: 556lm  
 Wattage: 9.2W  
 Efficacy: 61lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.4  
 Spacing Criteria (90°-270): 0.4



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	109fc	1'-8"
6'	48.3fc	2'-6"
8'	27.2fc	3'-4"
10'	17.4fc	4'-2"
12'	12.1fc	5'

### Zonal Lumen Summary

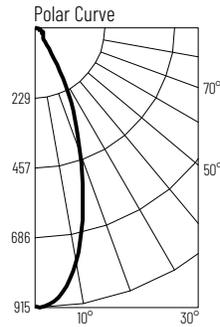
Zone	Lumens	% Luminaire
0-30	418	75.2
0-40	461	82.9
0-60	515	92.7
0-90	554	99.8
90-180	1	0.2
0-180	556	100

### Candela Table

Vertical Angles	Candela
0	1738
5	1499
15	612
25	252
35	58
45	39

### Test Information

Test Number: NTR11252  
 Part Number: NIOB-IRNG3038WW  
 Beam Spread: Narrow Flood  
 Lumens: 532lm  
 Wattage: 9.2W  
 Efficacy: 58lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.64  
 Spacing Criteria (90°-270): 0.64



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	56.9fc	2'-10"
6'	25.3fc	4'-2"
8'	14.2fc	5'-7"
10'	9.1fc	7'
12'	6.3fc	8'-4"

### Zonal Lumen Summary

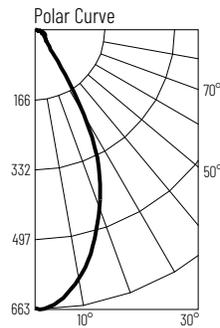
Zone	Lumens	% Luminaire
0-30	378	71
0-40	426	80.1
0-60	485	91.1
0-90	531	99.8
90-180	1	0.2
0-180	532	100

### Candela Table

Vertical Angles	Candela
0	910
5	879
15	606
25	291
35	66
45	38

### Test Information

Test Number: NTR11251  
 Part Number: NIOB-IRNG3060WW  
 Beam Spread: Flood  
 Lumens: 539lm  
 Wattage: 9.2W  
 Efficacy: 58lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.8  
 Spacing Criteria (90°-270): 0.82



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	41.2fc	3'-11"
6'	18.3fc	5'-10"
8'	10.3fc	7'-10"
10'	6.6fc	9'-8"
12'	4.6fc	11'-7"

### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	363	67.3
0-40	436	80.9
0-60	494	91.7
0-90	538	99.8
90-180	1	0.2
0-180	539	100

### Candela Table

Vertical Angles	Candela
0	660
5	645
15	521
25	352
35	108
45	39