

NIOB-1

1" Iolite BWF Reflectors (New Construction or Remodel)

Source: 9W or 11W LED
 600lm

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 (2700K-5000K) or Premium non-Cree Comfort Dim Technology (3100K-2000K)
- Wide variety of reflectors and finishes
- 60° (Flood) reflector installed, 20° (Narrow flood) and 20° (Spot) reflector included
- 5-Year limited warranty

CONSTRUCTION

Reflectors are constructed of heat dissipating, die-cast aluminum. The aluminum die-cast LED heat sink is threaded to fit the trim and transfer heat.

Reflectors:

1" reflectors are offered in four styles; a sharp edge reflector, bullnosed soft edge reflector that blends into ceiling lines, pinhole reflector focuses the beam spread through 1-1/8" opening or slot aperture focuses the beam spread through 1-3/8" x 1-1/8" opening and adjust up to 15° (Remodel) or 30° (New Construction).

Mounting: Trim includes Friction Blades to mount trim 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 11W (LE4)

Color Temperature:

2700K, 3000K, 3500K, 4000K, 5000K

CRI: 90+

Operating Temp.: 0°C to 45°C ambient temperature

Comfort Dim: Comfort Dim color tunes the temperature from a bright 3100K, to a romantic and comfortable 2000K on a gradual, even curve. Available in 800lm only.

Dimming: Specified by housing

COMPATIBLE HOUSINGS

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

CATALOG NO. DESCRIPTION

NHIOIC-16 1" IC Air-Tight New Construction

NHRIIC-16 1" IC Air-Tight Remodel

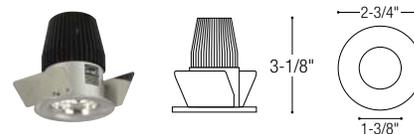
Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see page 2. Flush mount mud ring is available to give the appearance of a trimless reflector, compatible with new construction housing only.

LISTINGS AND WARRANTY

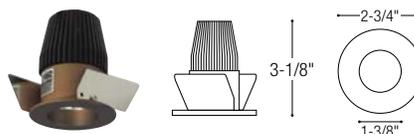
- cULus Listed for Wet Location
- ENERGY STAR certified
- [5 Year Limited Warranty](#)
- RoHS Compliant
- Can be used to comply with 2016 Title 24 – part 6 High Efficacy LED light source requirements



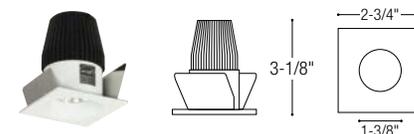
PRODUCT IMAGES AND DIMENSIONS



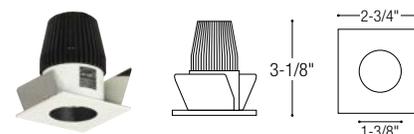
NIOB-1RNB
 Round Bullnose Regress
 BB, BZ, MPW, NN, WW



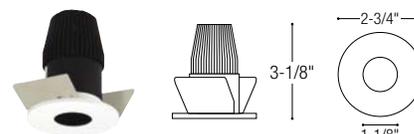
NIOB-1RNG
 Round Straight Regress
 BB, BW, BZ, HW, MPW, NN, WW



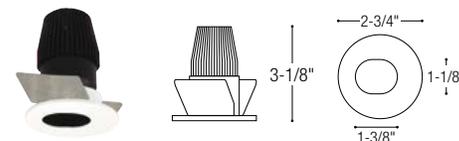
NIOB-1SNB
 Square Bullnose Regress
 BB, BZ, MPW, NN, WW



NIOB-1SNG
 Square Straight Regress
 BB, BW, BZ, HW, MPW, NN, WW



NIOB-1RPH
 Round Pinhole
 BB, BMPW, HZMPW, MPW



NIOB-1RSL
 Round Slot Aperture
 Adjustability: 15° (remodel) / 30° (new construction)
 BB, BMPW, HZMPW, MPW

1" Iolite BWF Reflectors - Dedicated Housing Required

Reflector Style	Color Temp.	Finish ¹
NIOB-1RNB = Round Bullnose Regress	27X = 2700K	BB = Black / Black
NIOB-1RNG = Round Straight Regress	30X = 3000K	BB = Black / Matte Powder White
NIOB-1SNB = Square Bullnose Regress	35X = 3500K	BW = Black / White
NIOB-1SNG = Square Straight Regress	40X = 4000K	BZ = Bronze / Bronze
NIOB-1RPH = Round Pinhole	50X = 5000K	HMPW = Haze / Matte Powder White
NIOB-1RSL = Round Slot Aperture	CDX¹ = Comfort Dim	HW = Haze / White
		MPW = Matte Powder White
		NN = Natural Metal / Natural Metal
		WW = White / White

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

¹ Not all finishes are available on all trims

Example: **NIOB-1RNG27XWW** = 1" Iolite BWF Round Straight Regress, 2700K, White Reflector / White Flange

1" Iolite Accessories

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



Frosted Filter-Optic

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



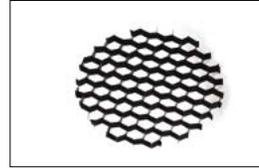
Translucent Deco Collar

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 new construction housing and NIOB-1 trims.**
 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 new construction housing.**

NHIOICD-16

1" Iolite IC Air-Tight New Construction Housing

Source: 9W or 11W LED
600lm

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. Patent-pending 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%

SPECIFICATION

Housing: 0.040" Aluminum shallow housing with patent pending driver mechanism, allowing driver to slide out. 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.**

ELECTRICAL

Voltage: 120V or 120-277V
Power Factor: >0.90
Operating Temp.: 122°F (50°C) max. ambient temp.
Wattage: 9W or 11W
Dimming: Triac / ELV or 0-10V Dimming
[Click Here](#) or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE TRIMS

CATALOG NO. DESCRIPTION

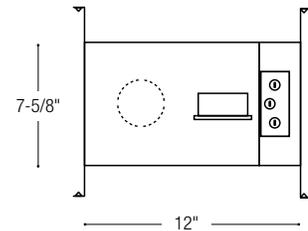
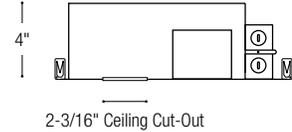
NIOB-1RNB	1" Round Bullnose Regress (BWF)
NIOB-1SNB	1" Square Bullnose Regress (BWF)
NIOB-1RNG	1" Round Straight Regress (BWF)
NIOB-1SNG	1" Square Straight Regress (BWF)
NIOB-1RH	1" Round Pinhole (BWF)
NIOB-1RSL	1" Round Slot Aperture (BWF)
NIO-1RNB	1" Round Bullnose Regress (NTF)
NIO-1SNB	1" Square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

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



1" Iolite IC Air-Tight New Construction Housing - Compatible with NIOB-1 and NIO-1 trims

Installation Type	Driver / Dimming / Wattage
NHIOICD-16 = 1" New Construction	LE3 = 120V Input; Triac/ELV dimming / 9W LE4 = 120-277V Input; 120V Triac/ELV/0-10V or 277V 0-10V dimming / 11W

Example: NHIOICD-16LE4 = 1" Iolite IC Air-Tight New Construction Housing, 120V Input; Triac/ELV dimming

NHRIOIC-16

1" Iolite IC Air-Tight Remodel Housing

Source: 11W 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. New construction flat frame available to allow access to junction box from below the ceiling, 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: Three 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

Operating Temp.: 122°F (50°C) max. ambient temp.

Wattage: 11W

Dimming: Triac / ELV or 0-10V Dimming

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

COMPATIBLE TRIMS

CATALOG NO. DESCRIPTION

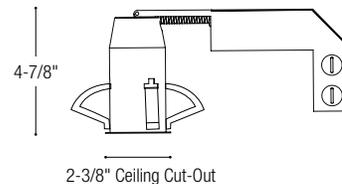
NIOB-1RNB	1" Round Bullnose Regress (BWF)
NIOB-1SNB	1" Square Bullnose Regress (BWF)
NIOB-1RNG	1" Round Straight Regress (BWF)
NIOB-1SNG	1" Square Straight Regress (BWF)
NIOB-1RH	1" Round Pinhole (BWF)
NIOB-1RSL	1" Round Slot Aperture (BWF)

LABELS AND LISTINGS

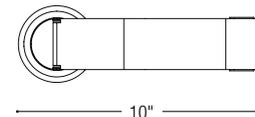
- cULus Listed for Damp Location
- cULus Listed for Wet Location (w/designated reflectors)
- 5-Year Limited Warranty
- RoHS compliant
- Meets or exceeds ASTM-283 Air-Tight Requirements



PRODUCT IMAGES AND DIMENSIONS



2-3/8" Ceiling Cut-Out



NHIOFK-1 New Construction Frame-In for 1"

Frame-In Length: 13"

Frame-In Width: 8-1/4"

Cut-out: 2-3/8"

1" Iolite IC Air-Tight Remodel Housing - Compatible with NIOB-1 trims

Installation Type	Driver / Dimming / Wattage
NHRIOIC-16 = 1" Remodel	LE4 = 120-277V Input; 120V Triac/ELV/0-10V or 277V 0-10V dimming / 11W

1" Iolite New Construction Flat Frame

Description
NHIOFK-1 = 1" New Construction flat frame w/ bar hangers

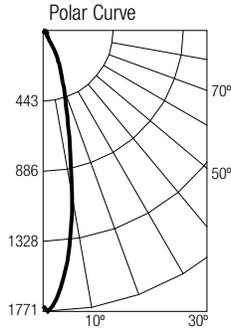
Example: NHRIOIC-16LE4 = 1" Iolite IC Air-Tight Remodel Housing, 120-277V Input; 120V Triac/ELV/0-10V or 277V 0-10V dimming

PHOTOMETRICS

1" Iolite Series

Test Information

Test Number: NTR11253
 Part Number: NIOB-1RNG3025WW
 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

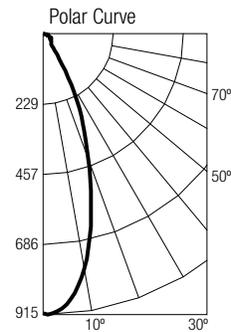
Zone	Lumens	% Luminaire
0-30	418	75.2
0-40	461	82.9
0-60	515	92.7
0-90	554	99.8
90-180	1	0.2
0-180	556	100

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-1RNG3038WW
 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'	6.32fc	8'-4"

Zonal Lumen Summary

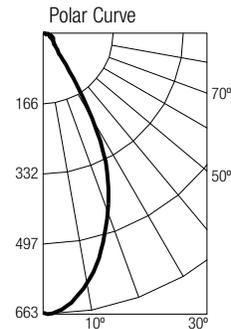
Zone	Lumens	% Luminaire
0-30	378	71
0-40	426	80.1
0-60	485	91.1
0-90	531	99.8
90-180	1	0.2
0-180	532	100

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-1RNG3060WW
 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