NIOC-1RNG

1" Iolite Can-less Round Downlight
Source: 9W LED
800lm

Type	
Project	
Catalog No.	
Notes	

PRODUCT DESCRIPTION

1" Iolite can-less downlights can be installed in new construction or remodel applications. Deep regressed cone reflectors optimize visual cut-off.

FEATURES

· No housing required - IC Air-Tight rated
· Easy installation for remodel or new construction applications
· Variety of trim accessories to configure desired appearance
· Quick disconnect allows for extended lengths
· Dedicated CCT or Comfort Dim (warm dim)
· Flood optic, narrow flood and spot optics (included)
· 5-Year limited warranty
· cULus Listed for Wet Locations

SPECIFICATION

Construction: Trims are constructed of heat dissipating, die-cast aluminum. Aluminum die-cast LED module is threaded to fit the trim and transfer heat.

Air Flow Restriction: Luminaire has factory installed gasket to restrict airflow from room into ceiling plenum to <2CFM (cubic feet per minute) in accordance with ASTM-283 Air-Tight requirements.

Clearance: IC rated luminaires are rated for direct contact with insulation (not spray foam insulation), no minimum clearance is required.

Driver Box: Prewired junction box includes 7" quick connect wire to LED module for ease of installation. Junction box includes two ½" trade size knockouts and snap on cover.
Maximum length between luminaire and driver is 40'. For longer remote driver remote run length, consult factory.

Mounting: No housing is required, two tensions steel spring clips secure luminaire to ceiling. Accommodates ceiling thickness up to ¾". New construction frame-in kit is available, see accessories.

OPTICS

Each module includes field changeable optics (spot, narrow flood and flood - preinstalled).

ELECTRICAL

Input Voltage: 120VAC
Lumens / Wattage: 800lm / 9W
Color Temperature: 2700K, 3000K, 3500K or 4000K
Color Rendering Index: 90+CRI
Operating Temperature: 0°-30°C
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 750lm only.
Dimming: Triac or ELV

Accessories: Luminaire will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page.

LABELS AND LISTINGS

· cULus Listed for Wet Locations
· 5-Year Limited Warranty
· RoHS Compliant
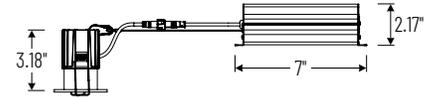· Certified to the high efficacy requirements of California Title 24 JA8-2022
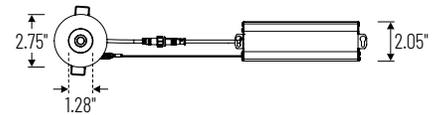
Performance Data

Part Numbers	Lumens	CCT	Optic
NIOC-1RNGMPW	824lm	4000K	Spot
NIOC-1LED940X	768lm	4000K	Narrow
NJCB-09	784lm	4000K	Flood

Delivered lumens will vary depending on CCT, optic and finish

PRODUCT IMAGES & DIMENSIONS

2.17"
3.18"
7"
Cut out: 2-⁵⁄₁₆"

2.75"
2.05"
1.28"

1" Iolite Can-less Round Downlight Trim

HW
Haze Reflector
White Flange

MPW
Matte Powder White
Reflector & Flange

WW
White Reflector
& Flange

Item Number

NIOC-1RNGHW = Haze Reflector / White Flange
NIOC-1RNGMPW = Matte Powder White Reflector & Flange
NIOC-1RNGWW = White Reflector & Flange

1" Iolite Can-less LED Module

Three field changeable
optics included

Color Temperature

NIOC-1LED927X = 2700K
NIOC-1LED930X = 3000K
NIOC-1LED935X = 3500K
NIOC-1LED940X = 4000K
NIOC-1LED9CDX = Comfort Dim (2900K~1900K)

Driver Box

Wattage

NJCB-09 = 9W / 120VAC input / Triac or ELV dimming

Example: **NIOC-1RNGMPW / NIOC-1LED930X / NJCB-09** = 1" Iolite Can-less Round Downlight Trim, Matte Powder White finish, 3000K LED Module, 9W Driver Box with 120VAC input; Triac or ELV dimming
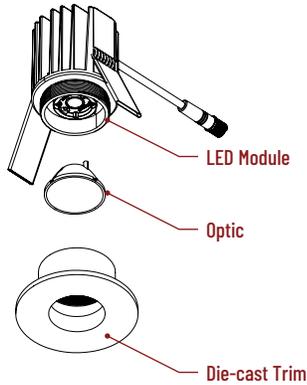
Iolite Can-less Accessories
1" Iolite Can-less Round Downlight

FIELD CHANGEABLE OPTICS

Iolite luminaires include spot, narrow flood and flood optics. Optics can be changed in the field by removing LED module from die-cast trim. Optional frosted optics are also available.

LED Module

Optic

Die-cast Trim

Frosted Optics

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

TRIM ACCESSORIES

Iolite accessories can be added at any point in the design process. Accessories easily install between LED module and die-cast trim.
Luminaire will accommodate (1) hex louver and (1) collar accessory, no accessory holder required.

LED Module

Accessory

Die-cast Trim
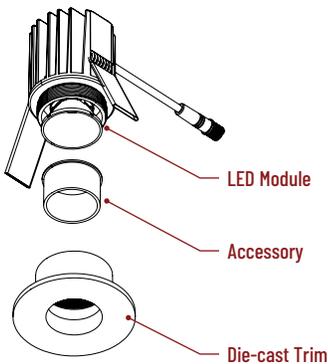
Translucent Decorative Collar

NIO-1AS15(color)	⅝" length
NIO-1AS19(color)	¾" length
NIO-1AS24(color)	1" length

Color:
AM (amber), BLU (blue), FR (frosted), R (red)

Translucent collars color the aperture with the specified color while producing white general light. Collars are available in different lengths. Use to add interest, create a theme, match a theme or define a space.

Opaque Collar Snoot

NIO-1AS15(color)	⅝" length
NIO-1AS19(color)	¾" length
NIO-1AS24(color)	1" length

Color:
MPW (matte powder white), WH (white)

Opaque snoot greatly reduces aperture brightness while preserving light output.

Hex Cell Louver

NIO-1HC	Black

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

MOUNTING ACCESSORIES

Iolite canless luminaires are ready to be installed out of the box. Additional mounting accessories can be used to assist during installation or extend length between driver box and luminaire.

Quick Connect Extension Cables

NCA-EW-4	4' Cable
NCA-EW-10	10' Cable

Use to extend the length between luminaire and driver box. Can be connected together to create custom lengths. Maximum length between luminaire and driver is 40'. For longer remote driver remote run length, consult factory.

New Construction Frame-In with Collar

NFC-R231

New construction frame-in with collar can be used to assist installing can-less downlights.

Universal New Construction Frame-In

NF-R124

Universal new construction frame-in can be used to assist installing can-less recessed downlighting.
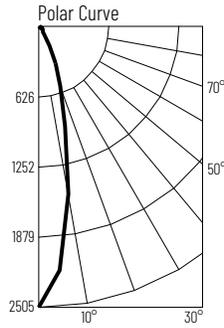
PHOTOMETRICS
1" Iolite Can-less Round Downlight

Test Information
Test Number: NTR2034R1
Part Number: NIOC-1RNG40XMPW
Beam Spread: 24° Spot
Lumens: 824lm
Wattage: 9.13W
Efficacy: 90lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.42
Spacing Criteria (90°-270°): 0.42

Polar Curve

Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	157fc	1'-8"
6'	69.6fc	2'-7"
8'	39.1fc	3'-6"
10'	25.0fc	4'-4"
12'	17.4fc	5'-2"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	620	75.2
0-40	689	83.6
0-60	768	93.1
0-90	824	100
90-180	0	0
0-180	824	100

Candela Table

Vertical Angles	Candela
0	2505
5	2182
15	922
25	361
35	86
45	58

Test Information
Test Number: NTR2035R1
Part Number: NIOC-1RNG40XMPW
Beam Spread: 37° Narrow Flood
Lumens: 768lm
Wattage: 9.11W
Efficacy: 84lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.62
Spacing Criteria (90°-270°): 0.62

Polar Curve
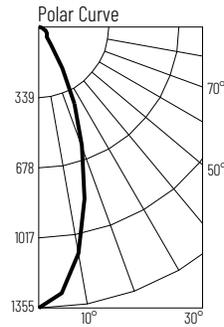
Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	84.7fc	2'-8"
6'	37.6fc	4'-0"
8'	21.2fc	5'-5"
10'	13.6fc	6'-8"
12'	9.41fc	8'-0"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	540	70.2
0-40	614	79.9
0-60	701	91.3
0-90	768	100
90-180	0	0
0-180	768	100

Candela Table

Vertical Angles	Candela
0	1355
5	1288
15	858
25	408
35	103
45	57

Test Information
Test Number: NTR2036R1
Part Number: NIOC-1RNG40XMPW
Beam Spread: 51° Flood
Lumens: 784lm
Wattage: 9.10W
Efficacy: 86lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.80
Spacing Criteria (90°-270°): 0.80

Polar Curve
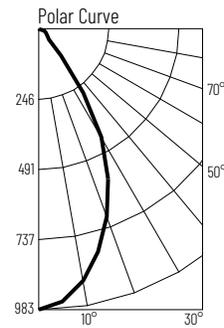
Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	61.4fc	3'-10"
6'	27.3fc	5'-8"
8'	15.4fc	7'-8"
10'	9.83fc	9'-7"
12'	6.83fc	11'-6"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	530	67.5
0-40	637	81.2
0-60	722	92.1
0-90	784	100
90-180	0	0
0-180	784	100

Candela Table

Vertical Angles	Candela
0	983
5	955
15	774
25	515
35	156
45	57

Lumen Output Multipliers
Color Temperature: 2700K (0.86), 3000K (0.90), 3500K (0.91), 4000K (1.00)