## NIOC-2RNDC

2" Iolite Can-less Round Downlight

Source: 12W LED 1000lm

#### PRODUCT DESCRIPTION

2" lolite 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 lenath between luminaire and driver is 40'. For longer remote driver remote run lenath, consult factory.

Mounting: No housing is required, two tensions steel spring clips secure luminaire to ceiling. Accommodates ceiling thickness up to 3/4". 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: 1000lm / 12W

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

- cll us Listed for Wet Locations
- 5-Year Limited Warranty
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2022









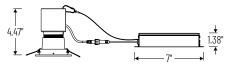


Туре	
Project	
Catalog No.	
Notes	

Performance Data			
Part Number	Lumens	CCT	Optic
NIOC-2RNDCMPW	1018lm	4000K	Spot
NIOC-24LED940X	1016lm	4000K	Narrow
NJCB-12	1006lm	4000K	Flood

Delivered lumens will vary depending on CCT, optic and finish

#### **PRODUCT IMAGES & DIMENSIONS**



Cut out: 3-1/8'



#### 2" Iolite Can-less Round Downlight Trim







Haze Reflector White Flange

Matte Powder White Reflector & Flange

White Reflector & Flange

#### Item Number

NIOC-2RNDCHW = Haze Reflector / White Flange NIOC-2RNDCMPW = Matte Powder White Reflector & Flange NIOC-2RNDCWW = White Reflector & Flange

#### 2" & 4" lolite Can-less LED Module



## Color Temperature

NIOC-24LED927X = 2700K NIOC-24LED930X = 3000K NIOC-24LED935X = 3500K NIOC-24LED940X = 4000K

NIOC-24LED9CDX = Comfort Dim (3100K~2000K)

#### **Driver Box**



Wattage

NJCB-12 = 12W / 120VAC input / Triac or ELV dimming

Example: NIOC-2RNDCMPW / NIOC-24LED930X / NJCB-12 = 2" Iolite Can-less Round Downlight Trim, Matte Powder White finish, 3000K LED Module, 12W Driver Box with 120VAC input; Triac or ELV dimming



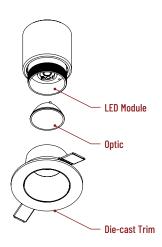
# **Iolite Can-less Accessories**

2" Iolite Can-less Round Downlight

Type
Project
Catalog No.
Notes

#### FIELD CHANGEABLE OPTICS

lolite 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 and TIR optics are also available.





Frosted Optics

NIO-REFL38FR NIO-REFL60FR 60° Optic 73° Optic



## Premium TIR Optics

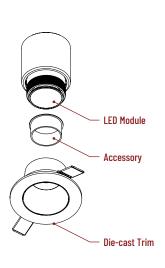
 NIO-REFLTIR15
 22° Optic

 NIO-REFLTIR25
 26° Optic

TIR optics are not compatible with hex cell louver accessory.

#### TRIM ACCESSORIES

lolite 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.





# Translucent Decorative Collar

 NIO-AS14(color)
 5%" length

 NIO-AS19(color)
 3½" length

 NIO-AS26(color)
 1" length

 Color:
 1" length

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-AS14(color) 5/4" length
NIO-AS19(color) 7' length
NIO-AS26(color) 7' length
Color:
MPW (matte powder white), WH (white)

Opaque snoot greatly reduces aperture brightness while preserving light output.



#### Hex Cell Louver

NIO-HC Blad

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

Hex cell louver is  $\underline{\it not}$  compatible with TIR optics.

#### **MOUNTING ACCESSORIES**

lolite 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

NF-R124

Universal new construction frame-in can be used to assist installing can-less recessed downlighting.



New Construction Frame-In with Collar

NFC-R313

New construction frame-in can be used to assist installing can-less recessed downlighting.



# **PHOTOMETRICS**

## 2" Iolite Can-less Round Downlight

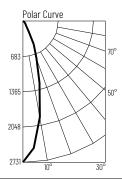
Type **Project** Catalog No. **Notes** 

#### **Test Information**

Test Number: NTR2044R1 Part Number: NIOC-2RNDC40XMPW Beam Spread: 28° Spot

Lumens: 1018lm Wattage: 11.74W Efficacy: 87lpw

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.48 Spacing Criteria (90°-270°): 0.48



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	171fc	2'-0"
6'	75.9fc	3'-0"
8'	42.7fc	4'-0"
10'	27.3fc	5'-0"
12'	19.0fc	6'-0"

#### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	796	78.1
0-40	876	86.0
0-60	973	95.6
0-90	1018	100
90-180	0	0
0-180	1018	100

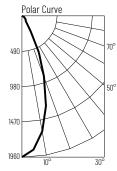
Candela Table		
Vertical Angles	Candela	
0	2731	
5	2467	
15	1240	
25	497	
35	105	
45	71	

#### **Test Information**

Test Number: NTR2045R1 Part Number: NIOC-2RNDC40XMPW Beam Spread: 38° Narrow Flood

Spacing Criteria (90°-270°): 0.62

Lumens: 1016lm Wattage: 11.75W Efficacy: 86lpw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.62



#### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	123fc	2'-8"
6'	54.5fc	4'-1"
8'	30.6fc	5'-6"
10'	19.6fc	6'-10"
12'	13.6fc	8'-2"

#### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	780	76.8
0-40	864	85.1
0-60	967	95.2
0-90	1016	100
90-180	0	0
0-180	1016	100

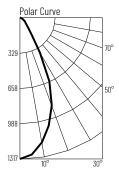
#### Candela Table

Candela
1960
1865
1293
557
108
73

## **Test Information**

Test Number: NTR2046R1 Part Number: NIOC-2RNDC40XMPW Beam Spread: 50° Flood Lumens: 1006lm Wattage: 11.77W

Efficacy: 85lpw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.80 Spacing Criteria (90°-270°): 0.80



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	82.3fc	3'-8"
6'	36.6fc	5'-7"
8'	20.6fc	7'-6"
10'	13.6fc	9'-4"
12'	9.14fc	11'-2"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	626	62.3
0-40	790	78.6
0-60	944	93.9
0-90	1006	100
90-180	0	0
0-180	1006	100

# Candela Table

Vertical Angles	Candela
0	1317
5	1279
15	1043
25	653
35	194
45	86
	Angles  0  5  15  25  35

## **Lumen Output Multipliers**

Color Temperature: 2700K (0.85), 3000K (0.92), 3500K (0.93), 4000K (1.00)

