NIOC-2RNDC
2" Iolite Can-less Round Downlight
Source: 12W LED
1000lm

Type	
Project	
Catalog No.	
Notes	

PRODUCT DESCRIPTION
2" 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
· ENERGY STAR certified
· 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.

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

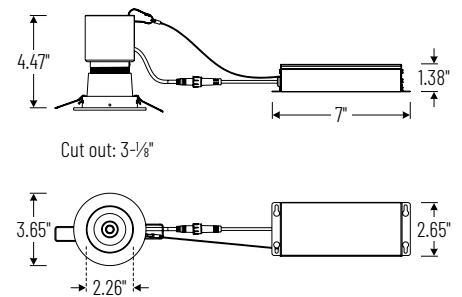### Performance Data

Part Number	Lumens	CCT	Optic
NIOC-2RNDC40XMPW	1018lm	4000K	Spot
NIOC-2RNDC40XMPW	1016lm	4000K	Narrow
NIOC-2RNDC40XMPW	1006lm	4000K	Flood

Delivered lumens will vary depending on CCT, optic and finish

PRODUCT IMAGES & DIMENSIONS

4.47"   1.38"   7"
Cut out: 3-⅛"
3.65"   2.65"   2.26"

2" Iolite Can-less Round Downlight Trim

HW	**MPW**	**WW**
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" Iolite Can-less LED Module

Three field changeable optics included

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
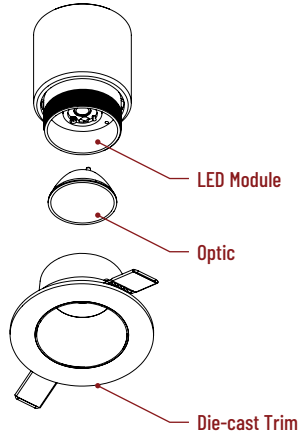
Iolite Can-less Accessories
2" Iolite Can-less Round Downlight

Type	
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Catalog No.	053123P2
Notes	

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 and TIR optics are also available.

LED Module

Optic

Die-cast Trim

Frosted Optics

|	
NIO-REFL38FR	60° Optic
NIO-REFL60FR	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

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
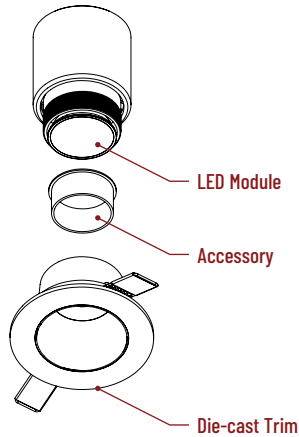
Translucent Decorative Collar

NIO-AS14(color)	⅝" length
NIO-AS19(color)	¾" length
NIO-AS26(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-AS14(color)	⅝" length
NIO-AS19(color)	¾" length
NIO-AS26(color)	1" length

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

Opaque snoot greatly reduces aperture brightness while preserving light output.

Hex Cell Louver

NIO-HC	Black

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

Hex cell louver is _not_ compatible with TIR optics.

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'.

New Construction Frame-In

NF-R124	

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

053123P2

PHOTOMETRICS
2" Iolite Can-less Round Downlight

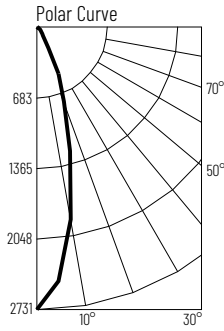| Type	
Project	
Catalog No.	053123P3
Notes	

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

Polar Curve

Values: 683, 1365, 2048, 2731 — 10°, 30°, 50°, 70°

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
Lumens: 1016lm
Wattage: 11.75W
Efficacy: 86lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.62
Spacing Criteria (90°-270°): 0.62

Polar Curve

Values: 490, 980, 1470, 1960 — 10°, 30°, 50°, 70°
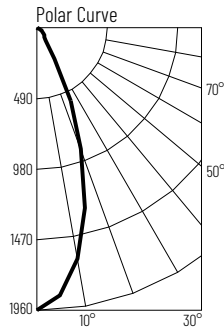
Illuminance at a Distance

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

Vertical Angles	Candela
0	1960
5	1865
15	1293
25	557
35	108
45	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

Polar Curve

Values: 329, 658, 988, 1317 — 10°, 30°, 50°, 70°
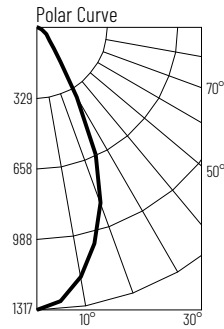
Illuminance at a Distance

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

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