

NLCBC-45 Series

4" Cobalt Retrofit Reflectors

Source: 13W/16W LED
1000lm

Type
Project
Catalog No.
Notes

PRODUCT DESCRIPTION

Cobalt retrofit series is cULus classified for use in existing IC or Non-IC housings manufactured by Nora and others. The 4" retrofit luminaires produces 1000 lumen output at 90+ CRI. The Cobalt series integrates a Cree® COB family of LED arrays, giving bright spectacular light output and low power consumption. An obvious and smart choice for Green Energy efficient lighting in commercial and residential applications.

FEATURES

- 1000lm LED output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- CREE® COB LED
- Integral dimmable driver
- Includes medium base socket adapter for easy retrofitting in 4" recessed housings
- 5-year limited warranty
- ENERGY STAR certified
- cULus classified for wet locations

SPECIFICATION

Reflector: Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. The deep reflector places the LED optics deeper, increasing the visual comfort and reduces board images when off.

Mounting: Two steel, spring mounting blades allow for easy and secure mounting in most 4" housings.

Retrofit: Cobalt retrofit series includes medium base screw-socket adapter (NRA-211SM) for retrofitting into existing medium base downlight housings. GU24 socket adapter is available for use with GU24 housings, must specify NRA-212SM.

ELECTRICAL

Input Voltage: 120V or 120V-277V, must specify

Lumens: 1000lm

Wattage: 13W (120V) or 16W (LE4)

Color Temperature: 2700K, 3000K, 3500K or 4000K

CRI: 90+CRI

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

Lifetime: 50,000 hours @ L70

Dimming: Available in Triac/ELV/0-10V, must specify

[Click Here](#) or check complete dimmer list at

www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE HOUSINGS

Cobalt retrofit reflectors are compatible with most 4" IC and Non-IC housings by Nora and others.

Fire Box

NFBIC-4LMRAT*	ICAT Dedicated LED
NFBIC-4LMRAT/4W*	ICAT Dedicated LED for LE4
NFBIC-4INCAT	ICAT Line Voltage

New Construction

NHIC-4LMRAT*	ICAT Dedicated LED
NHIC-4LMRAT/4W*	ICAT Dedicated LED for LE4
NHIC-4LMRAT/EM*	ICAT Dedicated LED for EM
NHIC-4LMRAT/6WEM*	ICAT Dedicated LED for EM+LE4
NHIC-4LMRAT/277*	ICAT Dedicated LED, 277V (includes step-down transformer)
NHICCP-4LMRAT*	Chicago Plenum Dedicated LED
NSIC-401QAT	ICAT Line Voltage
NS-401QAT	AT Line Voltage
NHIC-4G24AT	ICAT GU24

Remodel

NHRIC-4LMRAT*	ICAT Dedicated LED
NSRIC-404QAT	ICAT Line Voltage
NSR-404QAT	AT Line Voltage
NHRIC-4G24AT	ICAT GU24

* Nora Dedicated LED housings are cULus listed for use only with Nora LED Retrofits.

ACCESSORIES

NLCBC-4EYELID: Round eyelid used to convert round reflector or baffle to half moon wall wash trim.

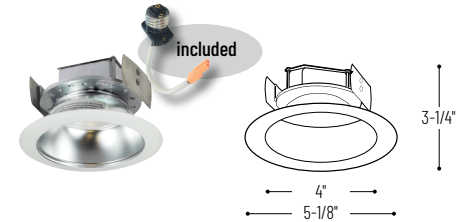
NLCBC-4OR: Round oversize ring used to cover ceiling cut-outs up to 5-3/4".

LABELS AND LISTINGS

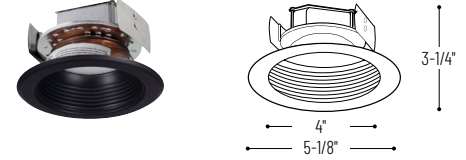
- cULus classified for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- Certified to the high efficacy requirements of California Title 24 JA8-2019



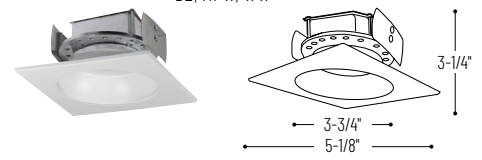
PRODUCT IMAGES & DIMENSIONS



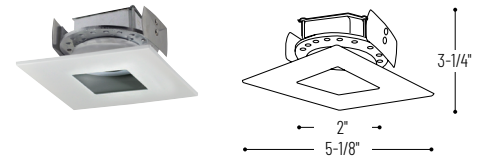
NLCBC-451D
Round Reflector
BZ, DD, DW, HZW, MPW, WW



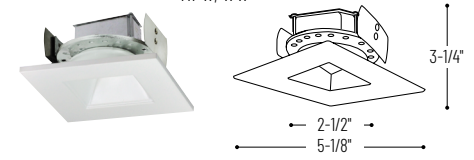
NLCBC-452D
Round Baffle
BZ, MPW, WW



NLCBC-453
Square Reflector with Round Aperture
MPW, WW



NLCBC-455
Square Reflector with Square Pinhole
MPW, WW



NLCBC-456
Square Reflector with Square Aperture
MPW, WW

4" Cobalt Retrofit Reflectors

Reflector Type	Color Temp.	Finish	Dimming & Emergency
NLCBC-453 = Square Round	27 = 2700K	WW = White / White	(blank) = 120V Triac/ELV
NLCBC-455 = Square Pinhole	30 = 3000K	MPW = Matte Powder White	EM = Remote Emergency (requires Nora EM housing)
NLCBC-456 = Square Regress	40 = 4000K (MPW only)		
NLCBC-451D = Round Reflector	27 = 2700K	BZ = Bronze / Bronze	(blank) = 120V Triac/ELV
NLCBC-452D = Round Baffle	30 = 3000K	DW = Diffused / White (451D only)	EM = Remote Emergency (requires Nora EM housing)
	40 = 4000K	HZW = Haze / White (451D only)	
		MPW = Matte Powder White	
		WW = White / White	
NLCBC-451D = Round Reflector	30 = 3000K	DD = Diffused / Diffused	LE4 = 120V Triac/ELV or 0-10V
	35 = 3500K	DW = Diffused / White	277V 0-10V (req. Nora 4W hsg.)
		WW = White / White	LE4EM = LE4 w/ Remote Emergency (requires Nora 6WEM housing)

Optional Accessories

Description
NLCBC-4EYELIDB = 4" Round Eyelid, Black
NLCBC-4EYELIDBZ = 4" Round Eyelid, Bronze
NLCBC-4EYELIDMPW = 4" Round Eyelid, Matte Powder White
NLCBC-4EYELIDW = 4" Round Eyelid, White
NLCBC-4OR-B = 4" Round Oversize Ring, Black
NLCBC-4OR-BZ = 4" Round Oversize Ring, Bronze
NLCBC-4OR-MPW = 4" Round Oversize Ring, Matte Powder White
NLCBC-4OR-W = 4" Round Oversize Ring, White
NRA-211SM = Medium base screw-in socket (included)
NRA-212SM = Socket adapter for use with GU24 housings

Example: **NLCBC-451D30MPW** = 4" Cobalt Retrofit Round Reflector, 1000lm / 13W LED, 3000K, Matte Powder White Finish

PHOTOMETRICS

4" Cobalt Retrofit Series

Type _____

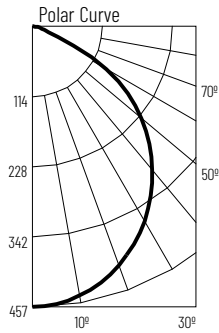
Project _____

Catalog No. _____

Notes _____

Test Information

Test Number: 795866
 Part Number: NLCBC-451D40WW
 Lumens: 1036lm
 Wattage: 15.3W
 Efficacy: 68lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 1.2
 Spacing Criteria (90°-270): 1.2



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	28.5fc	9'-8"
6'	12.7fc	14'-7"
8'	7.1fc	19'-5"
10'	4.6fc	24'-4"
12'	3.2fc	29'-1"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	345	33.3
0-40	556	53.6
0-60	932	90
0-90	1036	100
90-180	0	0
0-180	1036	100

Candela Table

Vertical Angles	Candela
0	457
5	454
15	432
25	392
35	337
45	270