

## NLCBC-45 Series

### 4" Cobalt Retrofit Reflectors

Source: 13W/16W LED  
1000lm

#### 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

**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 6".

#### LABELS AND LISTINGS

- cULus classified for Wet Locations
- ENERGY STAR certified
- 5-Year Limited Warranty
- Can be used to comply with 2016 Title 24 - part 6 High Efficacy LED light source requirements



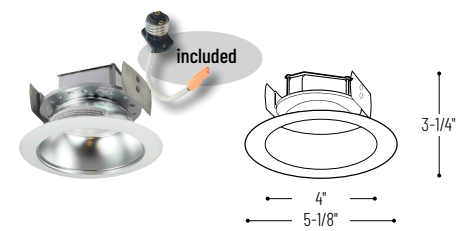
Type

Project

Catalog No.

Notes

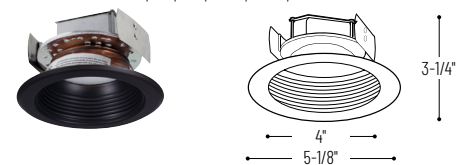
#### PRODUCT IMAGES & DIMENSIONS



##### NLCBC-451D

Round Reflector

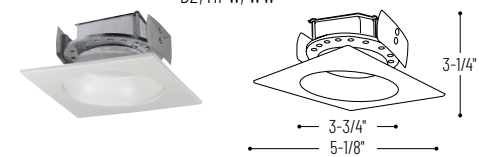
BZ, DD, DW, HZW, MPW, WW



##### NLCBC-452D

Round Baffle

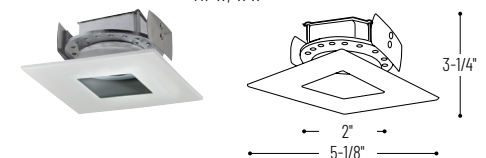
BZ, MPW, WW



##### NLCBC-453

Square Reflector with Round Aperture

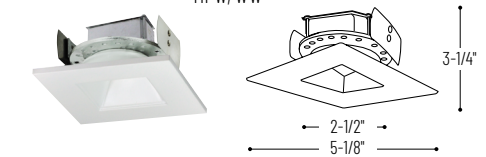
MPW, WW



##### 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
<b>NLCBC-453</b> = Square Round	<b>27</b> = 2700K	<b>WW</b> = White / White	<b>(blank)</b> = 120V Triac/ELV
<b>NLCBC-455</b> = Square Pinhole	<b>30</b> = 3000K	<b>MPW</b> = Matte Powder White	<b>EM</b> = Remote Emergency
<b>NLCBC-456</b> = Square Regress	<b>40</b> = 4000K (MPW only)		(requires Nora EM housing)
<b>NLCBC-451D</b> = Round Reflector	<b>27</b> = 2700K	<b>BZ</b> = Bronze / Bronze	<b>(blank)</b> = 120V Triac/ELV
<b>NLCBC-452D</b> = Round Baffle	<b>30</b> = 3000K	<b>DW</b> = Diffused / White (451D only)	<b>EM</b> = Remote Emergency
	<b>40</b> = 4000K	<b>HZW</b> = Haze / White (451D only)	(requires Nora EM housing)
		<b>MPW</b> = Matte Powder White	
		<b>WW</b> = White / White	
<b>NLCBC-451D</b> = Round Reflector	<b>30</b> = 3000K	<b>DD</b> = Diffused / Diffused	<b>LE4</b> = 120V Triac/ELV or 0-10V
	<b>35</b> = 3500K	<b>DW</b> = Diffused / White	277V 0-10V
		<b>WW</b> = White / White	<b>LE4EM</b> = LE4 w/ Remote Emergency
			(requires Nora EM housing)

### Optional Accessories

Description
<b>NLCBC-4EYELIDB</b> = 4" Round Eyelid, Black
<b>NLCBC-4EYELIDBZ</b> = 4" Round Eyelid, Bronze
<b>NLCBC-4EYELIDMPW</b> = 4" Round Eyelid, Matte Powder White
<b>NLCBC-4EYELIDW</b> = 4" Round Eyelid, White
<b>NLCBC-4OR-B</b> = 4" Round Oversize Ring, Black
<b>NLCBC-4OR-BZ</b> = 4" Round Oversize Ring, Bronze
<b>NLCBC-4OR-MPW</b> = 4" Round Oversize Ring, Matte Powder White
<b>NLCBC-4OR-W</b> = 4" Round Oversize Ring, White
<b>NRA-211SM</b> = Medium base screw-in socket (included)
<b>NRA-212SM</b> = 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

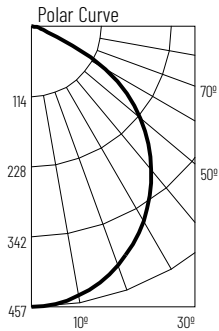
Project

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