

# NLCBC2-45 Series

## 4" Cobalt Click LED Retrofit Reflectors

Source: 10W or 12W LED  
750lm or 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 click luminaires product up to 1000 lumen output at 90+ CRI. The Cobalt series intergrates a Signify COB family of LED arrays, giving bright spectacular light output and low power consumption.

### FEATURES

- 750lm or 1000lm LED output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- Signify COB LED or Comfort Dim technology
- 120V or 120V-277V input voltage
- 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

**Trim:** UTM thermal management features an integral driver, large heat sink and the latest COB technology. The patented "Click" system allows the aluminum spun trims to be easily changed in the field with the help of spring mounting clips which properly secure them to the LED module.

**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 / Wattage:** 750lm / 10W or 1000lm / 12W  
**Color Temperature:** 2700K, 3000K, 3500K or 4000K  
**Color Rendering Index:** 90+ CRI  
**Operating Temperature:** 0°C to 25°C  
**Lifetime:** 50,000 hours @ L70

**Comfort Dim:** Comfort Dim color tunes the temperature from a bright 3100K, to a romantic and comfortable 1700K on a gradual, even curve.

**Dimming:** Available in Triac/ELV/0-10V, must specify [Click Here](#) or check complete dimmer list at [www.NoraLighting.com](http://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-4LMRATA\\*](#) ICAT Dedicated LED  
[NFBIC-4LMRATA/4W\\*](#) ICAT Dedicated LED for LE4  
[NFBIC-4INCATA](#) 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-4010AT](#) ICAT Line Voltage  
[NS-4010AT](#) AT Line Voltage  
[NHIC-4G24AT](#) ICAT GU24

#### Remodel

[NHRIC-4LMRAT\\*](#) ICAT Dedicated LED  
[NSRIC-4040AT](#) ICAT Line Voltage  
[NSR-4040AT](#) 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 (not black, bronze or copper)
- 5-Year Limited Warranty
- Meets ASTM-E283 Air-Tight requirements
- Patent #D797,977S; D871,644S; D824,568S
- Certified to the high efficacy requirements of California Title 24 JA8-2019



Type

Project

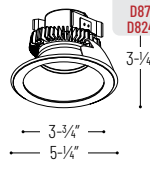
Catalog No.

Notes

### PRODUCT IMAGES & DIMENSIONS



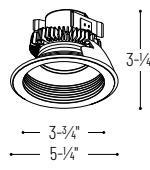
**NLCBC2-451**  
Round Open Reflector



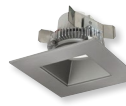
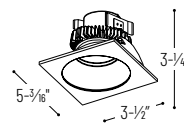
PATENT No.:  
D797,977S  
D871,644S  
D824,568S



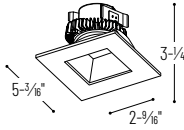
**NLCBC2-452**  
Round Open Baffle



**NLCBC2-453**  
Square Reflector w/ Round Aperture



**NLCBC2-456**  
Square Reflector w/ Square Aperture



## 4" Cobalt Click LED Retrofit Reflectors

| Reflector Type                      | Color Temp.                          | Finish (see chart below)               | Lumens / Wattage          | Dimming & Emergency   |
|-------------------------------------|--------------------------------------|--|---------------------------|---|
| <b>NLCBC2-451</b> = Round Reflector | <b>27</b> = 2700K                    | <b>BB</b> = Black / Black              | <b>/A</b> = 750lm / 10W   | (blank) = 120V Triac/ELV  |
| <b>NLCBC2-452</b> = Round Baffle    | <b>30</b> = 3000K                    | <b>BW</b> = Black / White              | <b>/10</b> = 1000lm / 12W | <b>EM</b> = Remote Emergency (requires Nora EM housing)             |
| <b>NLCBC2-453</b> = Square Round    | <b>35</b> = 3500K                    | <b>BZBZ</b> = Bronze / Bronze          |                           | <b>LE4</b> = 120V 0-10V/Triac/ELV 277V 0-10V (req. Nora 4W housing) |
| <b>NLCBC2-455</b> = Square Pinhole  | <b>40</b> = 4000K                    | <b>DW</b> = Diffused / White           |                           | <b>LE4EM</b> = LE4 w/ Remote Emergency (requires Nora 6WEM housing) |
| <b>NLCBC2-456</b> = Square Regress  | <b>CD</b> = Comfort Dim <sup>1</sup> | <b>HZW</b> = Haze / White              |                           |   |
|                                     |                                      | <b>MPW</b> = Matte Powder White        |                           |   |
|                                     |                                      | <b>NN</b> = Natural Metal / Nat. Metal |                           |   |
|                                     |                                      | <b>PW</b> = Pewter / White             |                           |   |
|                                     |                                      | <b>WW</b> = White / White              |                           |   |

|            | BB | BW | BZBZ | DW | HZW | MPW | NN | PW | WW |
|------------|----|----|------|----|-----|-----|----|----|----|
| <b>451</b> | *  | *  | *    | *  | *   | *   | *  | *  | *  |
| <b>452</b> | *  | *  | *    | *  | *   | *   | *  | *  | *  |
| <b>453</b> |    |    | *    | *  | *   | *   | *  | *  | *  |
| <b>455</b> |    |    | *    | *  | *   | *   | *  | *  | *  |
| <b>456</b> | *  | *  | *    | *  | *   | *   | *  | *  | *  |

<sup>1</sup> Comfort Dim technology available in 750lm & 120V only

## 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: **NLCBC2-45130MPW/A** = 4" Cobalt Click LED Retrofit Reflector, 750lm / 10W LED, 3000K, Matte Powder White Finish

# PHOTOMETRICS

## 4" Cobalt Click Retrofit Series

Type

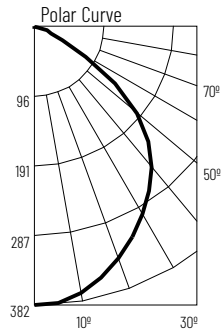
Project

Catalog No.

Notes

### Test Information

Test Number: NTR1294  
 Part Number: NLCBC2-45127WW/A  
 Beam Spread: 98° Wide Flood  
 Lumens: 819lm  
 Wattage: 9.44W  
 Efficacy: 87lpw  
 CCT / CRI: 2700K / 90 CRI  
 Spacing Criteria (0°-180): 1.18  
 Spacing Criteria (90°-270): 1.18



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 23.9fc      | 9'-4"         |
| 6'                      | 10.6fc      | 13'-11"       |
| 8'                      | 6fc         | 18'-6"        |
| 10'                     | 3.8fc       | 23'-1"        |
| 12'                     | 2.7fc       | 27'-10"       |

### Zonal Lumen Summary

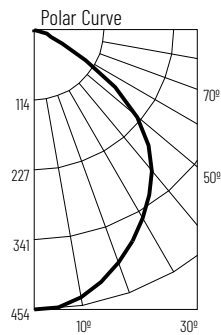
| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 283    | 34.6        |
| 0-40   | 455    | 55.6        |
| 0-60   | 743    | 90.8        |
| 0-90   | 816    | 99.6        |
| 90-180 | 4      | 0.4         |
| 0-180  | 819    | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 382     |
| 5               | 381     |
| 15              | 357     |
| 25              | 319     |
| 35              | 276     |
| 45              | 223     |

### Test Information

Test Number: NTR1300  
 Part Number: NLCBC2-45127WW/10  
 Beam Spread: 98° Wide Flood  
 Lumens: 978lm  
 Wattage: 11.56W  
 Efficacy: 85lpw  
 CCT / CRI: 2700K / 90 CRI  
 Spacing Criteria (0°-180): 1.18  
 Spacing Criteria (90°-270): 1.18



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 28.4fc      | 9'-4"         |
| 6'                      | 12.6fc      | 13'-11"       |
| 8'                      | 7.1fc       | 18'-6"        |
| 10'                     | 4.5fc       | 23'-2"        |
| 12'                     | 3.2fc       | 27'-10"       |

### Zonal Lumen Summary

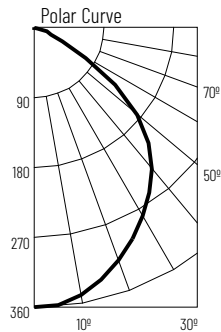
| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 336    | 34.3        |
| 0-40   | 540    | 55.2        |
| 0-60   | 886    | 90.7        |
| 0-90   | 975    | 99.7        |
| 90-180 | 3      | 0.3         |
| 0-180  | 978    | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 454     |
| 5               | 450     |
| 15              | 422     |
| 25              | 378     |
| 35              | 329     |
| 45              | 266     |

### Test Information

Test Number: NTR1295  
 Part Number: NLCBC2-45130WW/A  
 Beam Spread: 99° Wide Flood  
 Lumens: 783lm  
 Wattage: 9.49W  
 Efficacy: 83lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 1.18  
 Spacing Criteria (90°-270): 1.18



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 22.5fc      | 9'-6"         |
| 6'                      | 10fc        | 14'-4"        |
| 8'                      | 5.6fc       | 19'           |
| 10'                     | 3.6fc       | 23'-10"       |
| 12'                     | 2.5fc       | 28'-7"        |

### Zonal Lumen Summary

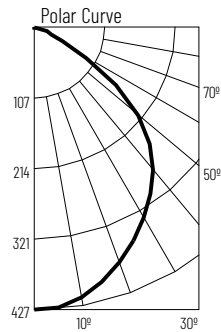
| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 267    | 34.1        |
| 0-40   | 430    | 54.8        |
| 0-60   | 711    | 90.7        |
| 0-90   | 782    | 99.8        |
| 90-180 | 2      | 0.2         |
| 0-180  | 783    | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 360     |
| 5               | 357     |
| 15              | 335     |
| 25              | 300     |
| 35              | 259     |
| 45              | 211     |

### Test Information

Test Number: NTR1301  
 Part Number: NLCBC2-45130WW/10  
 Beam Spread: 99° Wide Flood  
 Lumens: 924lm  
 Wattage: 11.43W  
 Efficacy: 81lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 1.18  
 Spacing Criteria (90°-270): 1.18



### Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|-------------------------|-------------|---------------|
| 4'                      | 26.7fc      | 9'-4"         |
| 6'                      | 11.9fc      | 14'           |
| 8'                      | 6.7fc       | 18'-7"        |
| 10'                     | 4.3fc       | 23'-4"        |
| 12'                     | 3fc         | 28'           |

### Zonal Lumen Summary

| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 317    | 34.3        |
| 0-40   | 509    | 55.1        |
| 0-60   | 837    | 90.6        |
| 0-90   | 920    | 99.5        |
| 90-180 | 5      | 0.5         |
| 0-180  | 924    | 100         |

### Candela Table

| Vertical Angles | Candela |
|-----------------|---------|
| 0               | 427     |
| 5               | 424     |
| 15              | 398     |
| 25              | 356     |
| 35              | 307     |
| 45              | 248     |