

# NLCBC2-45 Series

## 4" Cobalt Click LED Retrofit Reflectors

Source: 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 produce up to 1000 lumen output at 90+ CRI. The Cobalt series integrates an array of COB LEDs, giving bright spectacular light output and low power consumption.

### FEATURES

- 750lm or 1000lm LED output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- 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 / 12W 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 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\\*](#)

[NFBIC-4LMRATA/4W\\*](#)

[NFBIC-4INCATA](#)

ICAT Dedicated LED

ICAT Dedicated LED for LE4

ICAT Line Voltage

#### New Construction

[NHIC-4LMRAT\\*](#)

[NHIC-4LMRAT/4W\\*](#)

[NHIC-4LMRAT/EM\\*](#)

[NHIC-4LMRAT/6WEM\\*](#)

[NHIC-4LMRAT/277\\*](#)

ICAT Dedicated LED

ICAT Dedicated LED for LE4

ICAT Dedicated LED for EM

ICAT Dedicated LED for EM+LE4

ICAT Dedicated LED, 277V

(includes step-down transformer)

[NHICCP-4LMRAT\\*](#)

[NSIC-4010AT](#)

[NS-4010AT](#)

[NHIC-4G24AT](#)

Chicago Plenum Dedicated LED

ICAT Line Voltage

AT Line Voltage

ICAT GU24

#### Remodel

[NHRIC-4LMRAT\\*](#)

[NSRIC-4040AT](#)

[NSR-4040AT](#)

[NHRIC-4G24AT](#)

ICAT Dedicated LED

ICAT Line Voltage

AT Line Voltage

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

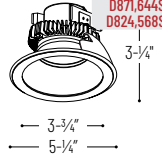


**NLCBC2-451**

Round Open Reflector

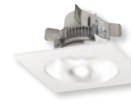
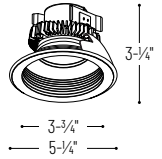


PATENT No.:  
D797,977S  
D871,644S  
D824,568S



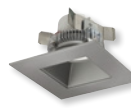
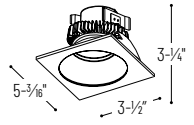
**NLCBC2-452**

Round Open Baffle



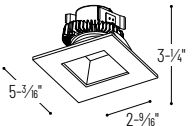
**NLCBC2-453**

Square Reflector w/ Round Aperture



**NLCBC2-456**

Square Reflector w/ Square Aperture



## 4" Cobalt Click LED Retrofit Reflectors

Reflector Type	Color Temperature	Finish (see chart below)	Lumens / Wattage	Dimming & Emergency
<b>NLCBC2-451</b> = Round Reflector	<b>27</b> = 2700K	<b>BB</b> = Black / Black	(blank) = 750lm / 12W	(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>COCO</b> = Copper / Copper		<b>LE4EM</b> = LE4 w/ Remote Emergency (requires Nora 6WEM housing)
<b>NLCBC2-456</b> = Square Regress	<b>CD</b> = Comfort Dim <sup>†</sup>	<b>DW</b> = Diffused / White		
		<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		

<sup>†</sup> Available in 750lm & 120V only

Available Finishes

	BB	BW	BZBZ	COCO	DW	HZW	MPW	NN	PW	WW
<b>451</b>	•	•	•	•	•	•	•	•	•	•
<b>452</b>	•	•	•	•	•	•	•	•	•	•
<b>453</b>	•	•	•	•	•	•	•	•	•	•
<b>455</b>	•	•	•	•	•	•	•	•	•	•
<b>456</b>	•	•	•	•	•	•	•	•	•	•

## 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/10** = 4" Cobalt Click LED Retrofit Reflector, 1000lm / 12W LED, 3000K, Matte Powder White Finish

# PHOTOMETRICS

4" Cobalt Click Retrofit Series  
750 lumens

Type

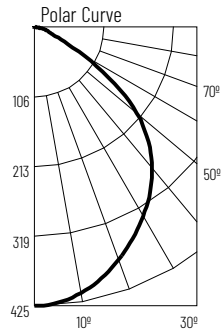
Project

Catalog No.

Notes

## Test Information

Test Number: 795866  
Part Number: NLCBC2-45130WWLE4  
Lumens: 910lm  
Wattage: 12.2W  
Efficacy: 75lpw  
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'	26.6fc	9'-4"
6'	11.8fc	13'-11"
8'	6.6fc	18'-7"
10'	4.3fc	23'-2"
12'	3fc	27'-10"

## Zonal Lumen Summary

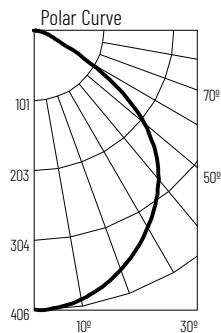
Zone	Lumens	% Luminaire
0-30	317	34.8
0-40	509	55.9
0-60	832	91.4
0-90	907	99.7
90-180	3	0.3
0-180	910	100

## Candela Table

Vertical Angles	Candela
0	425
5	422
15	399
25	357
35	308
45	247

## Test Information

Test Number: 795866  
Part Number: NLCBC2-45230WWLE4  
Lumens: 908lm  
Wattage: 12.2W  
Efficacy: 75lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 1.22  
Spacing Criteria (90°-270): 1.22



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	25.3fc	9'-10"
6'	11.3fc	14'-7"
8'	6.3fc	19'-6"
10'	4.1fc	24'-5"
12'	2.8fc	29'-4"

## Zonal Lumen Summary

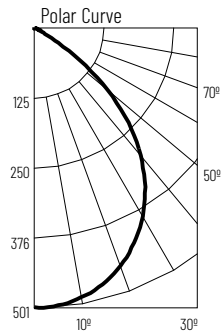
Zone	Lumens	% Luminaire
0-30	308	33.9
0-40	500	55.1
0-60	828	91.2
0-90	905	99.7
90-180	3	0.3
0-180	908	100

## Candela Table

Vertical Angles	Candela
0	405
5	403
15	384
25	351
35	307
45	249

## Test Information

Test Number: 795866  
Part Number: NLCBC2-45330HZWLE4  
Lumens: 892lm  
Wattage: 12.2W  
Efficacy: 73lpw  
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'	31.2fc	7'-8"
6'	13.9fc	11'-7"
8'	7.8fc	15'-5"
10'	5fc	19'-4"
12'	3.5fc	23'-1"

## Zonal Lumen Summary

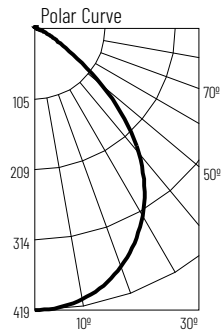
Zone	Lumens	% Luminaire
0-30	375	42.1
0-40	590	66.2
0-60	862	96.6
0-90	889	99.7
90-180	3	0.3
0-180	892	100

## Candela Table

Vertical Angles	Candela
0	500
5	496
15	474
25	424
35	345
45	237

## Test Information

Test Number: 795866  
Part Number: NLCBC2-45630WWLE4  
Lumens: 755lm  
Wattage: 12.2W  
Efficacy: 62lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 1.14  
Spacing Criteria (90°-270): 1.14



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	26.1fc	7'
6'	11.6fc	10'-5"
8'	6.5fc	13'-11"
10'	4.2fc	17'-5"
12'	2.9fc	20'-11"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	312	41.3
0-40	486	64.4
0-60	690	91.4
0-90	734	97.2
90-180	21	2.8
0-180	755	100

## Candela Table

Vertical Angles	Candela
0	418
5	416
15	395
25	350
35	274
45	160

# PHOTOMETRICS

4" Cobalt Click Retrofit Series  
1000 lumens

Type \_\_\_\_\_

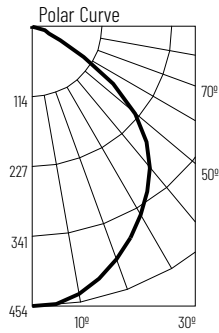
Project \_\_\_\_\_

Catalog No. \_\_\_\_\_

Notes \_\_\_\_\_

## 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

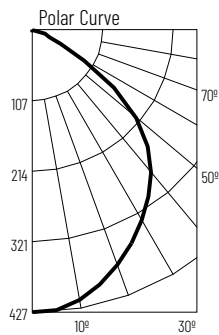
Zone	Lumens	% Luminaire
0-30	336	34.3
0-40	540	55.2
0-60	886	90.7
0-90	975	99.7
90-180	3	0.3
0-180	978	100

## Candela Table

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

## Test Information

Test Number: 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