

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 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

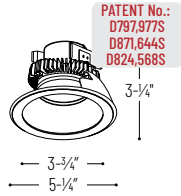
Catalog No.

Notes

PRODUCT IMAGES & DIMENSIONS



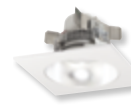
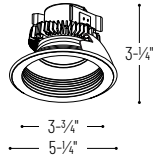
NLCBC2-451
Round Open Reflector



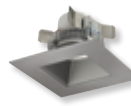
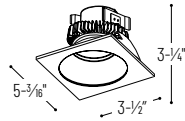
PATENT No.:
D797,977S
D871,644S
D824,568S



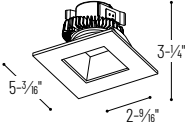
NLCBC2-452
Round Open Baffle



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

	BB	BW	BZBZ	COCO	DW	HZW	MPW	NN	PW	WW
451	*	*	*	*	*	*	*	*	*	*
452	*	*	*	*	*	*	*	*	*	*
453			*	*	*	*	*	*	*	*
455			*	*	*	*	*	*	*	*
456	*	*	*	*	*	*	*	*	*	*

¹ Comfort Dim technology available in 750lm & 120V only

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

PHOTOMETRICS

4" Cobalt Click Retrofit Series

Type

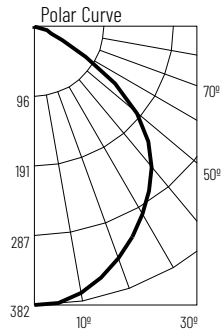
Project

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

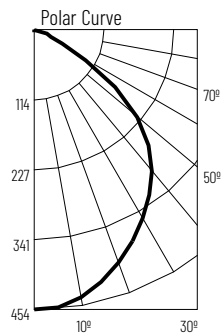
Zone	Lumens	% Luminaire
0-30	283	34.6
0-40	455	55.6
0-60	743	90.8
0-90	816	99.6
90-180	4	0.4
0-180	819	100

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

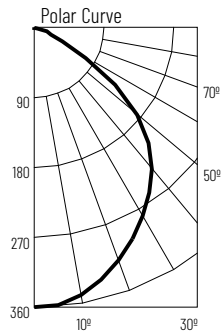
Zone	Lumens	% Luminaire
0-30	336	34.3
0-40	540	55.2
0-60	886	90.7
0-90	975	99.7
90-180	3	0.3
0-180	978	100

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

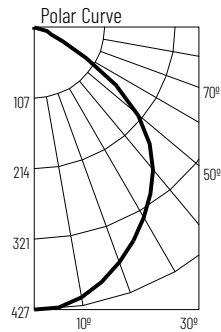
Zone	Lumens	% Luminaire
0-30	267	34.1
0-40	430	54.8
0-60	711	90.7
0-90	782	99.8
90-180	2	0.2
0-180	783	100

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