

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 intergrates 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

CRI: 90+CRI

Operating Temp.: 0°C to 25°C ambient temperature

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".

NLCBC-4DR: Frosted round decorative ring ships with white reflector.

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.

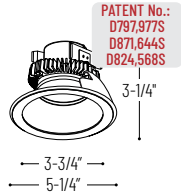
Notes

PRODUCT IMAGES & DIMENSIONS



NLCBC2-451

Round Open Reflector

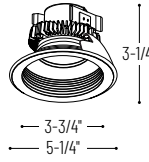


PATENT No.:
D797,977S
D871,644S
D824,568S



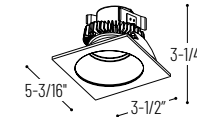
NLCBC2-452

Round Open Baffle



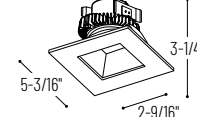
NLCBC2-453

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	(blank) = 750lm / 12W	(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				

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
NLCBC2-4DRFA = 4" Round Decorative Ring, Frosted Amber
NLCBC2-4DRFB = 4" Round Decorative Ring, Frosted Blue
NLCBC2-4DRFR = 4" Round Decorative Ring, Frosted Red
NLCBC2-4DRFW = 4" Round Decorative Ring, Frosted White
NRA-211SM = Medium base screw-in socket (included)
NRA-212SM = 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

NLCBC2-45 Series

4" Cobalt Click Retrofit Reflector Accessories

Type	_____
Project	_____
Catalog No.	_____
Notes	_____



Cobalt Eyelid

NLCBC-4EYELID-B Black
NLCBC-4EYELID-BZ Bronze
NLCBC-4EYELID-MPW Matte Powder White
NLCBC-4EYELID-W White
Round eyelid clips on reflector to convert into half moon wall wash



Cobalt Oversize Ring

NLCBC-4OR-B Black
NLCBC-4OR-BZ Bronze
NLCBC-4OR-MPW Matte Powder White
NLCBC-4OR-W White
Round oversize ring covers ceiling cut-outs up to 5-3/4"



Cobalt Click Decorative Ring

NLCBC2-4DRFA Frosted Amber
NLCBC2-4DRFB Frosted Blue
NLCBC2-4DRFR Frosted Red
NLCBC2-4DRFW Frosted White
Decorative ring ships with white reflector

PHOTOMETRICS

4" Cobalt Click Retrofit Series
750 lumens

Type

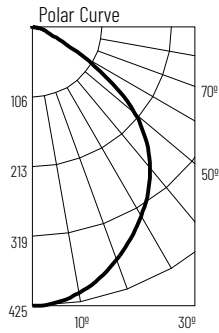
Project

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

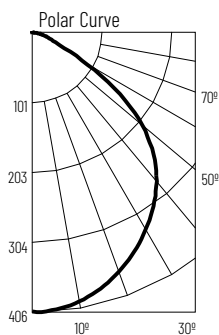
Zone	Lumens	% Luminaire
0-30	317	34.8
0-40	509	55.9
0-60	832	91.4
0-90	907	99.7
90-180	3	0.3
0-180	910	100

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

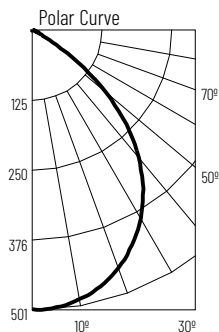
Zone	Lumens	% Luminaire
0-30	308	33.9
0-40	500	55.1
0-60	828	91.2
0-90	905	99.7
90-180	3	0.3
0-180	908	100

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

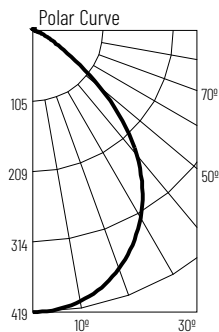
Zone	Lumens	% Luminaire
0-30	375	42.1
0-40	590	66.2
0-60	862	96.6
0-90	889	99.7
90-180	3	0.3
0-180	892	100

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 _____

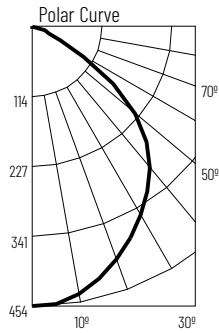
Project _____

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

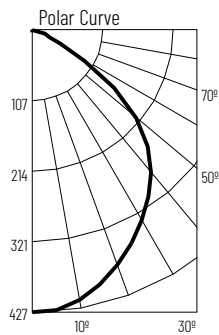
Zone	Lumens	% Luminaire
0-30	336	34.3
0-40	540	55.2
0-60	886	90.7
0-90	975	99.7
90-180	3	0.3
0-180	978	100

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