NLCBC-469 Series

4" Cobalt Retrofit Adjustable Reflectors Source: 12W LED 900lm

PRODUCT DESCRIPTION

Cobalt retrofit series is cULus classified for use in existing IC or Non-IC housings manufactured by Nora and others. The adjustable design rotates and adjusts while never exposing an opening or breaking the ceiling plane. The luminaires produce over 900 lumens, drawing 12W at 90+ CRI. The Cobalt series intergrates a Cree® COB family of LED arrays, giving bright spectacular light output and low power consumption.

FEATURES

- Retrofit existing 4" recessed housings
- Field adjustable beam spreads
- (flood installed, spot and narrow flood included) Over 800 lumen output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- Cree® COB LED Technology
- . Integral dimmable driver
- Includes medium base socket adapter .
- ENERGY STAR certified

SPECIFICATION

Trim: Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. Adjustable design rotates and adjusts while never exposing an opening or breaking the ceiling plane. Reflector places the LED optics deeper than the standard increasing the visual comfort. Additionally the deep cones reduces board images when off.

Adjustability: 358° rotate and 30° tilt

Optics: Spot (included), Medium (included) and Flood optic (installed)

Lens: Frosted Lens (installed) and Semi-Frosted Lens (included)

ELECTRICAL

Input Voltage: 120V

Lumens / Wattage: 900lm / 12W (Delivered lumens will vary depending on CCT, beam spread and finish)

Color Temperature: 2700K, 3000K, 3500K or 4000K CRI: 90+CRI

Beam Spread: 48º Spot, 69º Narrow Flood, 99º Flood **Operating Temp.:** 0°C to 25°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 ICAT Dedicated LED

ICAT Dedicated LED for LE4

ICAT Line Voltage

NFBIC-4LMRATA* NFBIC-4LMRATA/4W NFBIC-4INCATA

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 tran	isformer)
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-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.

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.

ACCESSORIES

NLCBC-469TIR: Premium TIR optics optics are available in 25° or 45°, must specify ring finish.

LABELS AND LISTINGS

- cULus classified for Damp Location when used with compatible frame-in
- Suitable for Type IC and Non-IC
- Can be used to comply with 2016 Title 24 part 6 High Efficacy LED light source requirements
- ENERGY STAR certified (not BB or BZBZ finish)
- . RoHs Compliant 5-Year Limited Warranty
- CREE ÷ 5 YEA

Type

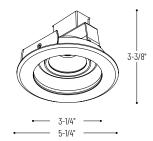
Project

Catalog No.

Notes

PRODUCT IMAGES & DIMENSIONS





4" Cobalt Retrofit Adjustable Reflector			Optional Accessories			
Reflector Type	Color Temp.	Finish	Dimming & Emergency	Description	Optic	Ring Finish
NLCBC-469 = Round Adjustable	27X = 2700K	BB = Black / Black	(blank) = 120V Triac/ELV	NLCBC-469TIR = TIR optic	25 = 25º	B = Black
	30X = 3000K	BZBZ = Bronze / Bronze	EM = Remote Emergency		45 = 45º	BZ = Bronze
	35X = 3500K	HZN = Haze / Natural Metal	(requires Nora EM housing)			HZ = Haze
	40X = 4000K	HZW = Haze / White				MPW = Matte Powder White
		MPW = Matte Powder White				WW = White / White
		WW = White / White		NRA-211SM = Medium bas	se screw-in so	icket (included)
NLCBC-469 = Round Adjustable	30X = 3000K	HZW = Haze / White	LE4 = 120V 0-10V/Triac/ELV	NRA-212SM = Socket ada	pter for use w	vith GU24 housings
	35X = 3500K	WW = White / White	277V O-10V (requires Nora 4W housing)			
			LE4EM = LE4 w/ Remote Emergency (requires Nora 6WEM housing)			

Example: NLCBC-46935XWW = 4" Cobalt Adjustable Retrofit Reflector, 900lm / 12W, 3500K, White Finish



PHOTOMETRICS

Test Information

Beam Spread: Spot

Lumens: 1011lm

Wattage: 11.4W Efficacy: 89lpw

Test Number: NTR11157 Part Number: NLCBC-46940SWW

CCT / CRI: 4000K / 90 CRI

Spacing Criteria (0º-180): 0.66 Spacing Criteria (90º-270): 0.66

4" Cobalt Retrofit Adjustable Reflector Series

Туре

Project

Catalog No.

Notes

Zonal Lumen Summary Са % V Beam Diameter Zone Lumens Luminaire 0-30 446 44.1 0-40 661 65.4 0-60 842 93.2 0-90 1004 99.4 90-180

6

1011

0-180

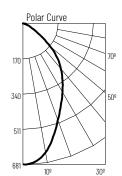
0.6

100

andela Table		
/ertical Angles	Candela	
0	926	
5	850	
15	588	
25	441	
35	343	
45	246	

Test Information

Test Number: NTR11156 Part Number: NLCBC-46940MWW Beam Spread: Narrow Flood Lumens: 988lm Wattage: 11.5W Efficacy: 86lpw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0º-180): 0.9 Spacing Criteria (90º-270): 0.92



Polar Curve

10º

232

463

695

926

Illuminance at a Distance

Illuminance at a Distance

FC at Nadir

57.9fc

25.7fc

14.5fc

9.3fc

6.4fc

3'-5"

5'-1"

6'-10"

8'-6"

10'-4"

Distance from

Luminaire

4'

6'

8'

10'

12'

7∩º

50º

30º

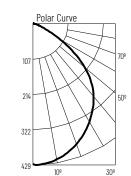
70º	Distance from Luminaire	FC at Nadir	Beam Diameter
4'	42.4fc	5'-6"	
:0º	6'	18.9fc	8'-4"
8'	10.6fc	11'	
	10'	6.8fc	13'-10"
	12'	4.7fc	16'-6"

Zonal Lumen Summary % 7one Lumens Luminaire 0-30 424 42.9 0-40 634 64.2 0-60 916 92.7 0-90 981 99.2 7 90-180 0.8 0-180 988 100

Candela Table			
Vertical Angles	Candela		
0	679		
5	670		
15	566		
25	437		
35	335		
45	239		

Test Information

Test Number: NTR11155 Part Number: NLCBC-46940FWW Beam Spread: Flood Lumens: 943lm Wattage: 11.5W Efficacy: 82lpw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0º-180): 1.2 Spacing Criteria (90º-270): 1.22



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	26.6fc	9'-2"
6'	11.8fc	13'-10"
8'	6.7fc	18'-5"
10'	4.3fc	23'-1"
12'	3fc	27'-8"
IZ	3fc 27-8"	

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	323	34.3
0-40	520	55.2
0-60	848	89.9
0-90	935	99.2
90-180	8	0.8
0-180	943	100

Candela Table

Vertical Angles	Candela
0	426
5	425
15	404
25	366
35	315
45	251