# NLCBC-469

4" Cobalt LED Adjustable Retrofit

Source: 12W LED Up to 1000lm

# Type Project Catalog No. Notes

## PRODUCT DESCRIPTION

Cobalt retrofit series is cULus classified for use in existing IC or Non-IC housings manufactured by Nora and others. Patented adjustable mechanism rotates and adjusts while never exposing an opening or breaking the ceiling plane. Retrofit luminaires deliver up to 1000 lumens in various color temperature options. Cobalt series integrates the latest COB LED technology, 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)
- Up to 1000 lumen output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- 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: Up to 1000lm / 12W

(Delivered lumens will vary depending on CCT, optic & finish)

Color Temperature: 2700K, 3000K, 3500K or 4000K

Color Rendering Index: 90+ CRI

**Beam Spread:** 48° Spot, 69° Narrow Flood, 99° Flood Operating Temperature: 0°C to 25°C

Life Expectancy: 54,000 Hours @ L70 Dimming: Triac, ELV or 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 LFD 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-401QAT ICAT Line Voltage AT Line Voltage NS-4010AT ICAT GU24 NHIC-4G24AT

#### Remodel

NHRIC-4LMRAT\* ICAT Dedicated LED NSRIC-404QAT 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 housing
- Suitable for Type IC and Non-IC
- Certified to the high efficacy requirements of California Title 24 JA8-2019
- ENERGY STAR certified (not BB or BZBZ finish)
- RoHs Compliant
- 5-Year Limited Warranty















#### **Performance Data** Part Number Lumens CCT NLCBC-46927XWW 881lm 2700K NLCBC-46930XWW 970lm 3000K NLCBC-46935XWW 972lm 3500K 4000K NLCBC-46940XWW 1011lm

Delivered lumens will vary depending on CCT, optic and finish

## **PRODUCT IMAGES & DIMENSIONS**



RR Black Reflector Black Flange

Bronze Reflector Bronze Flange

R7R7



H7N Haze Reflector Natural Metal Flange



MPW Matte Powder White Reflector Matte Powder White Flange

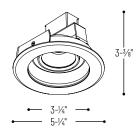
**Optional Accessories** 



HZW

Haze Reflector

White Reflector White Flange



## 4" Cobalt LED Adjustable Retrofit

Color Temperature	Reflector Finish / Flange Finish	Dimming & Emergency	Description	Optic	Ring Finish
NLCBC-46927X = 2700K NLCBC-46930X = 3000K NLCBC-46935X = 3500K NLCBC-46940X = 4000K	BB = Black Reflector / Black Flange BZBZ = Bronze Reflector/ Bronze Flange HZN = Haze Reflector/ Natural Metal Flange HZW = Haze Reflector / White Flange MPW = Matte Powder White Reflector /	(blank) = 120V Triac/ELV EM = Remote Emergency (requires Nora EM housing)	NLCBC-469TIR = TIR optic	<b>25</b> = 25° <b>45</b> = 45°	B = Black BZ = Bronze HZ = Haze MPW = Matte Powder White WW = White / White
NLCBC-46930X = 3000K NLCBC-46935X = 3500K	Matte Powder White Flange  WW = White Reflector / White Flange  HZW = Haze Reflector / White  WW = White Reflector / White	LE4 = 120V 0-10V/Triac/ELV 277V 0-10V (requires Nora 4W housing) LE4EM = LE4 w/ Remote Emergency (requires Nora 6WEM housing)	NRA-211SM = Medium ba: NRA-212SM = Socket ada		

Example: NLCBC-46935XWW = 4" Cobalt LED Adjustable Retrofit, 3500K, White Reflector / White Flange, 120V input; Triac / ELV dimming



# **PHOTOMETRICS**

4" Cobalt LED Adjustable Retrofit

Type

**Project** 

Catalog No.

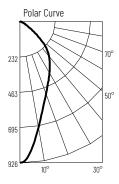
Notes

## **Test Information**

Test Number: NTR11157
Part Number: NLCBC-46940SWW

Beam Spread: Spot Lumens: 1011lm Wattage: 11.4W Efficacy: 89lpw

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180): 0.66 Spacing Criteria (90°-270): 0.66



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	57.9fc	3'-5"
6'	25.7fc	5'-1"
8'	14.5fc	6'-10"
10'	9.3fc	8'-6"
12'	6.4fc	10'-4"

## Zonal Lumen Summary

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	0.6
0-180	1011	100

## Candela Table

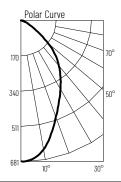
Candela Table		
Vertical Angles	Candela	
0	926	
5	850	
15	588	
25	441	
35	343	
45	246	

## **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 (0°-180): 0.9 Spacing Criteria (90°-270): 0.92



## Illuminance at a Distance

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

## Zonal Lumen Summary

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

## Candela Table

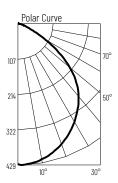
Vertical Angles	Candela
0	679
5	670
15	566
25	437
35	335
45	239

# **Test Information**

Test Number: NTR11155 Part Number: NLCBC-46940FWW Beam Spread: Flood

Beam Spread: Flood Lumens: 943lm Wattage: 11.5W Efficacy: 82lpw CCT / CRI: 4000K / 90 CRI

Spacing Criteria (0°-180): 1.2 Spacing Criteria (90°-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"

# 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

## **Lumen Output Multipliers**

Color Temperature: 2700K (0.87), 3000K (0.96), 3500K (0.96), 4000K (1.00)