NLCBC-669 Series

6" Cobalt Retrofit Adjustable Reflectors Source: 14W LED 1000lm

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 1000 lumens, drawing 14W 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 6" recessed housings
- . Field adjustable beam spreads
- (flood installed, spot and narrow flood included)
- . Over 1000 lumen output . 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- . Cree® COB LED Technology
- . Integral dimmable driver
- . Integral unimable univer
- . 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: 1000Im / 14W (Delivered lumens will vary depending on CCT, beam spread and finish)

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

Beam Spread: 27^a Spot, 53^a Narrow Flood, 99^a Flood Operating Temp.: 0°C to 45°C ambient temperature Dimming: Available in Triac/ELV/0-10V, must specify <u>Click Here</u> 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-6LMRATA* ICAT Dedicated LED NFBIC-6LMRATA/4W ICAT Dedicated LED for LE4 NFBIC-6INCATA ICAT Line Voltage New Construction NHIC-27LMRAT* Shallow ICAT Dedicated LED NHIC-6LMRAT* ICAT Dedicated LFD NHIC-6LMRAT/4W* ICAT Dedicated LED for LE4 NHIC-6LMRAT/EM* ICAT Dedicated LED for EM ICAT Dedicated LED for EM+LE4 NHIC-6LMRAT/6WEM* NHIC-6LMRAT/277* ICAT Dedicated LED, 277V (includes step-down transformer) NHICCP-6LMRAT* Chicago Plenum Dedicated LED NHIC-27QAT Shallow ICAT Line Voltage NHIC-170AT ICAT Line Voltage NH-260 Non-IC Line Voltage ICAT GU24 NHIC-6G24ATFL Remodel NHRIC-27LMRAT* Shallow ICAT Dedicated LED NHRIC-6LMRAT* ICAT Dedicated LED NHRIC-270AT Shallow ICAT Line Voltage NHRIC-170AT ICAT Line Voltage NHR-260 Non-IC Line Voltage NHRIC-6G24ATFL 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-669TIR: Premium TIR optics optics are available in 15° 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
- <u>5-Year Limited Warranty</u>



6" Cobalt Retrofit Adjustable Reflector

5" Cobait Retrotit Adjustable Reflector				Uptional Accessori	es	
Reflector Type	Color Temp.	Finish	Dimming & Emergency	Description	Optic	Ring Finish
NLCBC-669 = Round Adjustable	27X = 2700K	BB = Black / Black	(blank) = 120V Triac/ELV	NLCBC-669TIR = TIR optic	15 = 15º	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	ocket (included)
NLCBC-669 = Round Adjustable	30X = 3000K	HZW = Haze / White	LE4 = 120V 0-10V/Triac/ELV	NRA-212SM = Socket ada	pter for use v	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-66935XWW = 6" Cobalt Retrofit Adjustable Reflector, 1000lm / 14W, 3500K, White Finish



Туре

Project

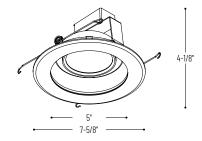
Catalog No.

Notes

PRODUCT IMAGES & DIMENSIONS

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PHOTOMETRICS

6" Cobalt Retrofit Adjustable Reflector Series

Туре

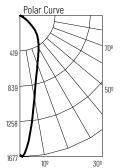
Project

Catalog No.

Notes

Test Information

Test Number: NTR11169 Part Number: NLCBC-66940SWW Beam Spread: Spot Lumens: 1194Im Wattage: 13.1W Efficacy: 91Ipw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0º-180): 0.42 Spacing Criteria (90º-270): 0.44



Illuminance at a Distance

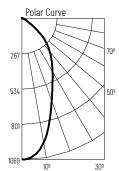
70º	Distance from Luminaire	FC at Nadir	Beam Diameter
	4'	57.9fc	3'-5"
> 50°	6'	25.7fc	5'-1"
> 50-	8'	14.5fc	6'-10"
	10'	9.3fc	8'-6"
	12'	6.4fc	10'-4"
30º			

Zonal Lumen Summary				
Zone	Lumens	% Luminaire		١
0-30	568	47.5		
0-40	808	67.7		
0-60	1114	93.3		
0-90	1183	99		
90-180	11	1		
0-180	1194	100		

Candela Table		
Vertical Angles	Candela	
0	1653	
5	1364	
15	748	
25	515	
35	386	
45	267	

Test Information

Test Number: NTR11168 Part Number: NLCBC-66940MWW Beam Spread: Narrow Flood Lumens: 1213Im Wattage: 13.1W Efficacy: 93Ipw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0º-180): 0.76 Spacing Criteria (90º-270): 0.76



Illuminanco at a Distanco

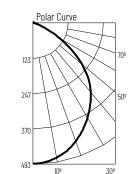
Illuminance at a Distance

liuminance at a Distance				
70º	Distance from Luminaire	FC at Nadir	Beam Diameter	
0	4'	42.4fc	5'-6"	
50º	6'	18.9fc	8'-4"	
0	8'	10.6fc	11'	
	10'	6.8fc	13'-10"	
12'		4.7fc	16'-6"	

Zonal Lumen Summary % 7one Lumens Luminaire 0-30 579 47.8 0-40 829 68.3 0-60 1136 93.7 0-90 1201 99 90-180 12 1 0-180 1213 100

Test Information

Test Number: NTR11167 Part Number: NLCBC-66940FWW Beam Spread: Flood Lumens: 1099Im Wattage: 13.1W Efficacy: 84Ipw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0º-180): 1.22 Spacing Criteria (90º-270): 1.18



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 Lumei		
Zone	Lumens	% Luminaire
0-30	369	33.6
0-40	592	53.8
0-60	975	88.7
0-90	1087	98.9
90-180	11.8	1.1
0-180	1099	100

Candela Table
Vertical
Angles
Candela
0
491

Angles	
0	491
5	490
15	472
25	430
35	372
45	300

Lumen Output Multipliers

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

