

NLCB-651 / NLCB-652 / NLCB-653 / NLCB-656

6" Cobalt Dedicated High Lumen Reflectors (New Construction / Remodel housing required)

Source: 21W to 34W LED
1500lm to 2000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

6" Cobalt dedicated series is cULus listed for use in with Cobalt high lumens housings. The 6" luminaires produce up to 2000 Lumen output at 90+ CRI. The Cobalt series intergrates a Cree® COB family of LED arrays, giving bright spectacular light output and low power consumption. An obvious and smart choice for Green Energy efficient lighting in commercial and residential applications.

FEATURES

- 1500lm or 2000lm LED packages
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- Cree® COB LED Technology
- 5-year limited warranty
- ENERGY STAR certified
- cULus listed for wet locations

SPECIFICATION

Trim: Aluminum spun reflector (NLCB-651) with deep set diffused lens for excellent visual comfort while providing high lumen output. Aluminum spun baffle trim (NLCB-652) with deep grooves to reduce aperture glare while providing high lumen output. Die-cast Aluminum Square aperture trim with deep regress (NLCB-656).

Mounting: Two torsion springs allow for easy and secure mounting in housing.

ELECTRICAL

Delivered Lumens / Wattage:

15 = 1797lm / 21W @ 3500K

20 = 2676lm / 34W @ 3500K

(Delivered lumens will vary depending on CCT and finish)

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

CRI: 90+CRI

Operating Temp.: 0°C to 45°C ambient temperature

Lifetime: 60,000 hours @ L70

Dimming: 0-10V dimming

[Click Here](#) or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE HOUSINGS

Reflectors are compatible with Cobalt High Lumen housings manufactured by Nora Lighting.

CATALOG NO. DESCRIPTION

NHCB-615 6" Non-IC New Construction (1500lm)

NHCB-620 6" Non-IC New Construction (2000lm)

NHRCB-615 6" Non-IC Remodel (1500lm)

NHRCB-620 6" Non-IC Remodel (2000lm)

ACCESSORIES

NLCBC-6EYELID: Round eyelid used to convert round reflector or baffle to half moon wall wash trim.

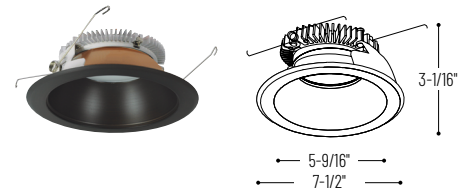
NLCBC-6OR: Round oversize ring used to cover ceiling cut-outs up to 8-1/4".

LABELS AND LISTINGS

- cULus Listed for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)

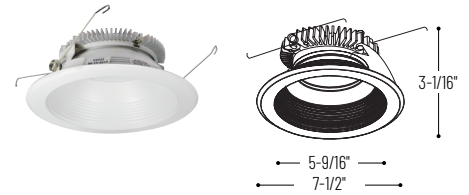


PRODUCT IMAGES & DIMENSIONS



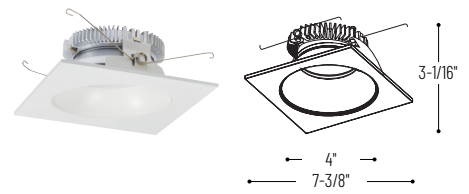
NLCB-651 Round Open Reflector

BB, BW, BZBZ, COCO, DW, HZW, MPW, NN, WW



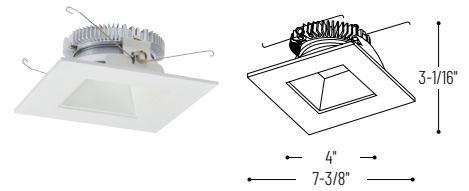
NLCB-652 Round Baffle

BB, BW, BZBZ, MPW, NN, WW



NLCB-653 Square with Round Aperture

BZBZ, DW, HZW, MPW, WW



NLCB-656 Square Regress

BB, BW, BZBZ, HZW, MPW, NN, PW, WW

6" Cobalt Dedicated High Lumen Reflectors - Dedicated New Construction or Remodel Housing Required

Reflector Type	Lumens / Wattage	Color Temp.	Finish (see chart below)
NLCB-651 = Round Reflector	15 = 1500lm / 21W	27 = 2700K	BB = Black / Black
NLCB-652 = Round Baffle	20 = 2000lm / 34W	30 = 3000K	BW = Black / White
NLCB-653 = Square with Round Aperture		35 = 3500K	BZBZ = Bronze / Bronze
NLCB-656 = Square with Square Aperture		40 = 4000K	COCO = Copper / Copper
			DW = Diffused / White
			HZW = Haze / White
			MPW = Matte Powder White
			NN = Natural Metal / Nat. Metal
			PW = Pewter / White
			WW = White / White

Available Trim Finishes

	BB	BW	BZBZ	COCO	DW	HZW	MPW	NN	PW	WW
651	*	*	*	*	*	*	*	*	*	*
652	*	*	*	*	*	*	*	*	*	*
653	*	*	*	*	*	*	*	*	*	*
656	*	*	*	*	*	*	*	*	*	*

Optional Accessories

Description
NLCBC-6EYELIDB = 6" Round Eyelid, Black
NLCBC-6EYELIDBZ = 6" Round Eyelid, Bronze
NLCBC-6EYELIDMPW = 6" Round Eyelid, Matte Powder White
NLCBC-6EYELIDW = 6" Round Eyelid, White
NLCBC-6OR-B = 6" Round Oversize Ring, Black
NLCBC-6OR-BZ = 6" Round Oversize Ring, Bronze
NLCBC-6OR-MPW = 6" Round Oversize Ring, Matte Powder White
NLCBC-6OR-W = 6" Round Oversize Ring, White

Example: **NLCB-6512035DW** = 6" Cobalt Dedicated High Lumen Round Reflector, 2000lm / 34W LED, 3500K, Diffused Clear Reflector / White Flange

NHCB-6

6" Cobalt Dedicated High Lumen New Construction Housing

Source: 21W to 34W LED
1500lm to 2000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Dedicated new construction housing for use where insulation can be kept 3" away from housing. The housing is dedicated and labeled for use with Cobalt High Lumens series.

CONSTRUCTION

Plaster Frame: High quality 0.040 aluminum die cut one piece frame.

Housing: 0.04" aluminum housing with riveted. Housing adjusts to a ceiling thicknesses from 1/2" to 1-1/4". Spring brackets accept torsion wing trim springs; slots inside housing accept standard coil springs.

Air Flow Restriction: Housing has factory installed gaskets to restrict airflow from room into ceiling plenum to <2CFM (cubic feet per minute) in accordance with ASTM-283 Air-Tight requirements.

Bar Hangers: Two 13-3/4" to 24-1/2" adjustable bar hangers with captive nails are included on frame. Bar hangers are parallel to junction box, but can be repositioned 90° perpendicular to junction box if desired. "L" Shaped bar hanger foot to align to bottom of construction joist. A T-Bar notch allow for easy installation in a suspended ceiling.

Junction Box: Prewired 25 cubic inch 0.064" thick galvanized steel, with seven 1/2" knockouts, four Romex® pryouts, and snap on covers. All leads are #18AWG wire, the ground wire is connected to the bottom, and quick connectors are supplied on all leads. Through branch circuit wiring, (4-in, 4-out).

CLEARANCE

Non-Insulated housings require a minimum clearance of 3" from thermal insulation and 1/2" from adjacent building components.

ELECTRICAL

Input Voltage: 120V or 277V

Operating Temp.: 0°C to 30°C ambient temperature

Delivered Lumens / Wattage:

15 = 1797lm / 21W @ 3500K

20 = 2676lm / 34W @ 3500K

(Delivered lumens will vary depending on CCT and finish)

Dimming: 0-10V dimming

[Click Here](#) or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

Emergency LED Driver (BSL17C-C2)

- Up to 7.5W emergency illumination with LEDs.
- Illumination Time: 90min
- Voltage: 120/277 VAC, 60Hz
- Output Voltage: 15.0-50.0 VDC

COMPATIBLE REFLECTORS

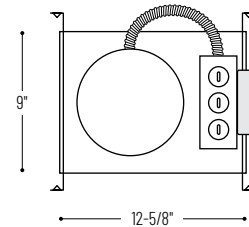
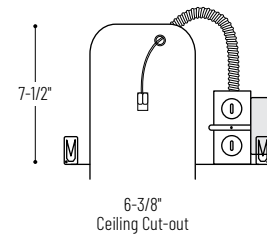
CATALOG NO.	DESCRIPTION
NLCB-651	6" Round Open Reflector
NLCB-652	6" Round Baffle
NLCB-653	6" Square with Round Aperture
NLCB-656	6" Square with Square Aperture

LABELS AND LISTINGS

- cULus Listed for Wet Location (only w/designated trims)
- Meets or exceeds ASTM-283 Air-Tight Requirements



PRODUCT IMAGES & DIMENSIONS



6" Cobalt Dedicated High Lumen New Construction Housing - Compatible with Cobalt High Lumen Reflectors

Installation Type	Lumens / Wattage	Driver / Dimming	Optional Emergency Battery
NHCB-6 = Non-IC New Construction	15 = 1500lm / 21W 20 = 2000lm / 34W	LE1 = 120V Input; 0-10V dimming LE2 = 277V Input; 0-10V dimming	EM - Emergency Pack w/ Remote Test Switch

Example: **NHCB-62015LE1** = 6" Cobalt Dedicated High Lumen New Construction Housing, 1500lm / 21W LED, 120V Input

NHRCB-6

6" Cobalt Dedicated High Lumen Remodel Housing

Source: 21W to 34W LED
1500lm to 2000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Dedicated remodel housing for use where insulation can be kept 3" away from housing. The housing is dedicated and labeled for use with Cobalt High Lumens series.

CONSTRUCTION

Housing: 0.040 aluminum housing adjusts to a ceiling thickness from 1/2" to 1-1/4". Housing terminates at a 1/4" ceiling flange for even positioning of housing angle within the ceiling. Structural arm consisting of 0.050 structural steel connects housing with junction box.

Air Flow Restriction: Housing has factory installed gaskets to restrict airflow from room into ceiling plenum to <2CFM (cubic feet per minute) in accordance with ASTM-283 Air-Tight requirements.

Mounting: Four high tension tempered steel springs accommodate ceiling thicknesses from 5/8" to 1-1/4" (Hole cutout template provided for convenience).

Junction Box: Prewired 25 cubic inch 0.064" thick galvanized steel, with seven 1/2" knockouts, four Romex® pryouts, and snap on covers. All leads are #18AWG wire, the ground wire is connected to the bottom, and quick connectors are supplied on all leads. Through branch circuit wiring, (4-in, 4-out).

CLEARANCE

Non-Insulated housings require a minimum clearance of 3" from thermal insulation and 1/2" from adjacent building components.

ELECTRICAL

Input Voltage: 120V or 277V

Operating Temp.: 0°C to 30°C ambient temperature

Delivered Lumens / Wattage:

15 = 1797lm / 21W @ 3500K

20 = 2676lm / 34W @ 3500K

(Delivered lumens will vary depending on CCT and finish)

Dimming: 0-10V dimming

[Click Here](#) or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE REFLECTORS

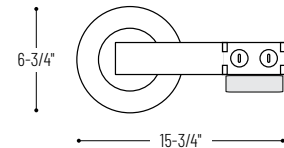
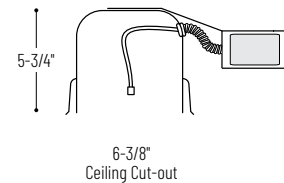
CATALOG NO.	DESCRIPTION
NLCB-651	6" Round Open Reflector
NLCB-652	6" Round Baffle
NLCB-653	6" Square with Round Aperture
NLCB-656	6" Square with Square Aperture

LABELS AND LISTINGS

- cULus Listed for Wet Location (only w/designated trims)
- Meets or exceeds ASTM-283 Air-Tight Requirements



PRODUCT IMAGES & DIMENSIONS



6" Cobalt Dedicated High Lumen Remodel Housing - Compatible with Cobalt High Lumen Reflectors

Installation Type	Lumens / Wattage	Driver / Dimming
NHRCB-6 = Non-IC Remodel	15 = 1500lm / 21W	LE1 = 120V Input; 0-10V dimming
	20 = 2000lm / 34W	LE2 = 277V Input; 0-10V dimming

Example: **NHRCB-62015LE1** = 6" Cobalt Dedicated High Lumen Remodel Housing, 1500lm / 21W LED, 120V Input

PHOTOMETRICS

6" Cobalt Dedicated High Lumen Reflectors

Type

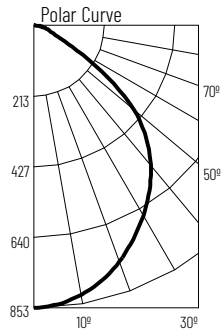
Project

Catalog No.

Notes

Test Information

Test Number: NTR1187
 Part Number: NLCB-6511535WW
 Lumens: 1797lm
 Wattage: 19.5W
 Efficacy: 92lpw
 CCT / CRI: 3500K / 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
6'	23.7fc	13'-6"
9'	10.5fc	20'-2"
12'	5.9fc	26'-11"
15'	3.8fc	33'-8"
18'	2.6fc	40'-5"

Zonal Lumen Summary

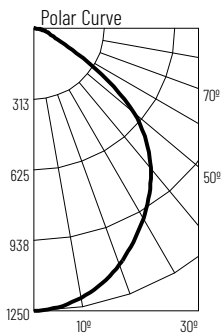
Zone	Lumens	% Luminaire
0-30	633	35.2
0-40	1014	56.5
0-60	1628	90.6
0-90	1777	98.9
90-180	20	1.1
0-180	1797	100

Candela Table

Vertical Angles	Candela
0	853
5	845
15	797
25	713
35	610
45	483

Test Information

Test Number: NTR1191
 Part Number: NLCB-6512035WW
 Lumens: 2676lm
 Wattage: 30.9W
 Efficacy: 87lpw
 CCT / CRI: 3500K / 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
6'	34.5fc	13'-7"
9'	15.3fc	20'-6"
12'	8.6fc	27'-4"
15'	5.5fc	34'-1"
18'	3.8fc	40'-11"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	927	34.6
0-40	1487	55.6
0-60	2401	89.7
0-90	2644	98.8
90-180	32	1.2
0-180	2676	100

Candela Table

Vertical Angles	Candela
0	1241
5	1239
15	1171
25	1050
35	900
45	714

Lumen Output Multipliers

Color Temperature: 2700K (0.91), 3000K (0.95), 3500K (1.00), 4000K (0.98)