

NLCBC-45 Series
4" Cobalt Retrofit Reflectors

Source: 13W/16W 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 4" retrofit luminaires produces 1000 lumen output at 90+ CRI. The Cobalt series integrates 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

- 1000lm LED output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- CREE® COB LED
- Integral dimmable driver
- 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: Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. The deep trim places the LED optics deeper, increasing the visual comfort and reduces board images when off.

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: 1000lm

Wattage: 13W (120V) or 16W (LE4)

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

CRI: 90+CRI

Operating Temp.: 0°C to 45°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

NFBIC-4LMRAT* ICAT Dedicated LED

NFBIC-4LMRAT/4W ICAT Dedicated LED for LE4

NFBIC-4INCAT ICAT Line Voltage

New Construction

NHIC-4LMRAT* ICAT Dedicated LED

NHICCP-4LMRAT* Chicago Plenum Dedicated LED

(Note: NHICCP-4LMRAT is not compatible with LE4)

NHIC-4LMRAT/277* ICAT Dedicated LED, 277V

(includes step-down transformer)

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

NSIC-401QAT ICAT Line Voltage

NS-401QAT AT Line Voltage

NHIC-4G24AT ICAT GU24

Remodel

NHRIC-4LMRAT* ICAT Dedicated LED

NSRIC-404QAT ICAT Line Voltage

NSR-404QAT 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 6".

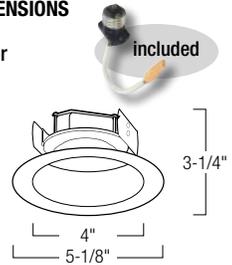
LABELS AND LISTINGS

- cULus classified for Wet Locations
- ENERGY STAR certified
- 5-Year Limited Warranty
- Can be used to comply with 2016 Title 24 – part 6 High Efficacy LED light source requirements

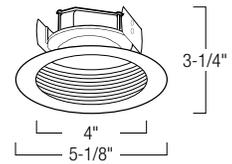


PRODUCT IMAGES AND DIMENSIONS

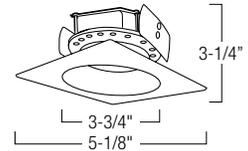
NLCBC-451D Round Reflector



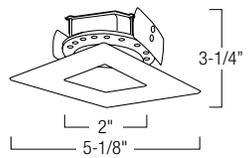
NLCBC-452D Round Baffle



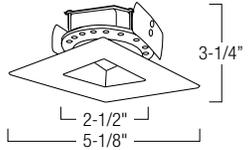
NLCBC-453 Square Round



NLCBC-455 Square Pinhole



NLCBC-456 Square Regress



4" Cobalt Retrofit Reflectors

Reflector Type	Color Temp.	Finish	Dimming & Emergency
NLCBC-453 = Square Round	27 = 2700K	WW = White / White	(blank) = 120V Triac/ELV
NLCBC-455 = Square Pinhole	30 = 3000K	MPW = Matte Powder White	EM = Remote Emergency (requires Nora EM housing)
NLCBC-456 = Square Regress	40 = 4000K (MPW only)		
NLCBC-451D = Round Reflector	27 = 2700K	BZ = Bronze / Bronze	(blank) = 120V Triac/ELV
NLCBC-452D = Round Baffle	30 = 3000K	DW = Diffused / White (451D only)	EM = Remote Emergency (requires Nora EM housing)
	40 = 4000K	HZW = Haze / White (451D only)	
		MPW = Matte Powder White	
		WW = White / White	
NLCBC-451D = Round Reflector	30 = 3000K	DD = Diffused / Diffused	LE4 = 120V Triac/ELV or 0-10V
	35 = 3500K	DW = Diffused / White	277V 0-10V
		WW = White / White	LE4EM = LE4 w/ Remote Emergency (requires Nora EM housing)

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
NRA-211SM = Medium base screw-in socket (included)
NRA-212SM = Socket adapter for use with GU24 housings

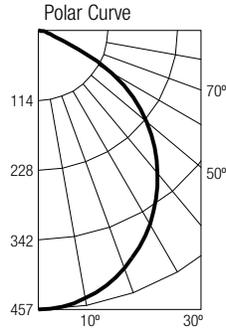
Example: **NLCBC-451D30MPW** = 4" Cobalt Retrofit Round Reflector, 1000lm / 13W LED, 3000K, Matte Powder White Finish

PHOTOMETRICS

4" Cobalt Retrofit Series

Test Information

Test Number: 795866
 Part Number: NLCBC-451D40WW
 Lumens: 1036lm
 Wattage: 15.3W
 Efficacy: 68lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 1.2
 Spacing Criteria (90°-270): 1.2



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	28.5fc	9'-8"
6'	12.7fc	14'-7"
8'	7.1fc	19'-5"
10'	4.6fc	24'-4"
12'	3.2fc	29'-1"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	345	33.3
0-40	556	53.6
0-60	932	90
0-90	1036	100
90-180	0	0
0-180	1036	100

Candela Table

Vertical Angles	Candela
0	457
5	454
15	432
25	392
35	337
45	270

NLCBC-55 Series
5" Cobalt Retrofit Reflectors

Source: 13W 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 5" retrofit luminaires produces 1000 lumen output at 90+ CRI. The Cobalt series integrates 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

- 1000lm LED output
- 2700K, 3000K or 4000K @ 90+ CRI
- CREE® COB LED
- Integral dimmable driver
- Includes medium base socket adapter for easy retrofitting in 5" recessed housings
- 5-year limited warranty
- ENERGY STAR certified
- cULus classified for wet locations

SPECIFICATION

Trim: Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. The deep trim places the LED optics deeper, increasing the visual comfort and reduces board images when off.

Mounting: Two steel, spring mounting blades allow for easy and secure mounting in most 5" 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

Lumens: 1000lm

Wattage: 13W

Color Temperature: 2700K, 3000K or 4000K

CRI: 90+CRI

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

Dimming: Available in Triac/ELV, 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 5" IC and Non-IC housings by Nora and others.

Fire Box

- NFBIC-5LMRAT*** ICAT Dedicated LED
- NFBIC-5INCAT** ICAT Line Voltage

New Construction

- NHIC-527LMRAT*** Shallow ICAT Dedicated LED
- NHIC-5LMRAT*** ICAT Dedicated LED
- NHICCP-5LMRAT*** Chicago Plenum Dedicated LED
- NHIC-5LMRAT/277*** ICAT Dedicated LED, 277V (includes step-down transformer)
- NHIC-5LMRAT/EM*** ICAT Dedicated LED for EM
- NHIC-527QAT** Shallow ICAT Line Voltage
- NHIC-501QAT** ICAT Line Voltage
- NH-501Q** Non-IC Line Voltage
- NHIC-5G24ATFL** ICAT GU24

Remodel

- NHRIC-527LMRAT*** Shallow ICAT Dedicated LED
- NHRIC-5LMRAT*** ICAT Dedicated LED
- NHRIC-527QAT** Shallow ICAT Line Voltage
- NHRIC-504QAT** ICAT Line Voltage
- NHR-504Q** Non-IC Line Voltage
- NHRIC-5G24ATFL** ICAT GU24

* Nora Dedicated LED housings are cULus listed for use only with Nora LED Retrofits.

ACCESSORIES

NLCBC-5EYELID: Round eyelid used to convert round reflector or baffle to half moon wall wash trim.

NLCBC-5OR: Round oversize ring used to cover ceiling cut-outs up to 7-1/8".

LABELS AND LISTINGS

- cULus classified for Wet Locations
- ENERGY STAR certified
- 5-Year Limited Warranty
- Can be used to comply with 2016 Title 24 – part 6 High Efficacy LED light source requirements

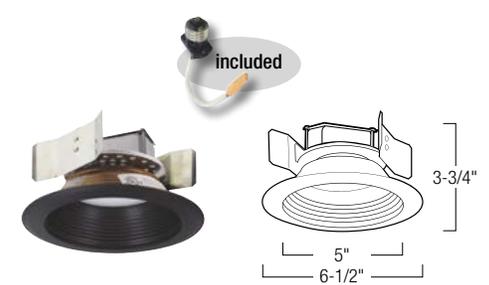


PRODUCT IMAGES AND DIMENSIONS

NLCBC-551 Round Reflector



NLCBC-552 Round Baffle



5" Cobalt Retrofit Reflectors

Reflector Type	Color Temp.	Finish	Dimming & Emergency
NLCBC-551 = Round Reflector	27 = 2700K	BZ = Bronze / Bronze	(blank) = 120V Triac/ELV
NLCBC-552 = Round Baffle	30 = 3000K	DW = Diffused / White (551D only)	EM = Remote Emergency
	40 = 4000K	HZW = Haze / White (551D only)	(requires Nora EM housing)
		MPW = Matte Powder White	
		WW = White / White	

Optional Accessories

Description
NLCBC-5EYELIDB = 5" Round Eyelid, Black
NLCBC-5EYELIDBZ = 5" Round Eyelid, Bronze
NLCBC-5EYELIDMPW = 5" Round Eyelid, Matte Powder White
NLCBC-5EYELIDW = 5" Round Eyelid, White
NLCBC-5OR-B = 5" Round Oversize Ring, Black
NLCBC-5OR-BZ = 5" Round Oversize Ring, Bronze
NLCBC-5OR-MPW = 5" Round Oversize Ring, Matte Powder White
NLCBC-5OR-W = 5" Round Oversize Ring, White
NRA-211SM = Medium base screw-in socket (included)
NRA-212SM = Socket adapter for use with GU24 housings

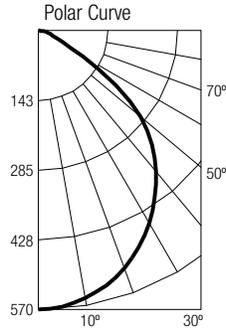
Example: **NLCBC-55130MPW** = 5" Cobalt Retrofit Reflector, 1000lm / 13W LED, 3000K, Matte Powder White Finish

PHOTOMETRICS

5" Cobalt Retrofit Series

Test Information

Test Number: 795870
 Part Number: NLCBC-55140WW
 Lumens: 1207lm
 Wattage: 16.3W
 Efficacy: 74lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 1.2
 Spacing Criteria (90°-270): 1.2



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	35.6fc	9'-2"
6'	15.8fc	13'-10"
8'	8.9fc	18'-5"
10'	5.7fc	23'
12'	4fc	27'-7"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	430	35.6
0-40	690	57.2
0-60	1114	92.2
0-90	1207	100
90-180	0	0
0-180	1207	100

Candela Table

Vertical Angles	Candela
0	570
5	567
15	539
25	488
35	416
45	329

NLCBC-65 Series
6" Cobalt Retrofit Reflectors

Source: 13W/16W 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 6" retrofit luminaires produces 1000 lumen output at 90+ CRI. The Cobalt series integrates 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

- 1000lm LED output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- CREE® COB LED technology
- Integral dimmable driver
- Includes medium base socket adapter for easy retrofitting in 6" recessed housings
- 5-year limited warranty
- ENERGY STAR certified
- cULus classified for wet locations

SPECIFICATION

Trim: Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. The deep trim places the LED optics deeper, increasing the visual comfort and reduces board images when off.

Mounting: Two steel, spring mounting blades allow for easy and secure mounting in most 6" 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: 1000lm

Wattage: 13W (120V) or 16W (LE4)

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

CRI: 90+CRI

Operating Temp.: 0°C to 45°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 6" IC and Non-IC housings by Nora and others.

Fire Box

- NFBIC-6LMRAT*** ICAT Dedicated LED
- NFBIC-6LMRAT/4W** ICAT Dedicated LED for LE4
- NFBIC-6INCAT** ICAT Line Voltage

New Construction

- NHIC-27LMRAT*** Shallow ICAT Dedicated LED
- NHIC-6LMRAT*** ICAT Dedicated LED
- NHICCP-6LMRAT*** Chicago Plenum Dedicated LED
- NHIC-6LMRAT/277*** ICAT Dedicated LED, 277V (includes step-down transformer)
- NHIC-6LMRAT/4W*** ICAT Dedicated LED for LE4
- NHIC-6LMRAT/EM*** ICAT Dedicated LED for EM
- NHIC-6LMRAT/6WEM*** ICAT Dedicated LED for EM+LE4
- NHIC-27QAT** Shallow ICAT Line Voltage
- NHIC-17QAT** ICAT Line Voltage
- NH-26Q** Non-IC Line Voltage
- NHIC-6G24ATFL** ICAT GU24

Remodel

- NHRIC-27LMRAT*** Shallow ICAT Dedicated LED
- NHRIC-6LMRAT*** ICAT Dedicated LED
- NHRIC-27QAT** Shallow ICAT Line Voltage
- NHRIC-17QAT** ICAT Line Voltage
- NHR-26Q** Non-IC Line Voltage
- NHRIC-6G24ATFL** ICAT GU24

* Nora Dedicated LED housings are cULus listed for use only with Nora LED Retrofits.

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 classified for Wet Locations
- ENERGY STAR certified
- 5-Year Limited Warranty
- Can be used to comply with 2016 Title 24 – part 6 High Efficacy LED light source requirements

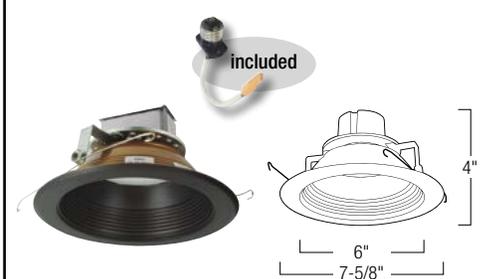


PRODUCT IMAGES AND DIMENSIONS

NLCBC-651 Round Reflector



NLCBC-652 Round Baffle



6" Cobalt Retrofit Reflectors

Reflector Type	Color Temp.	Finish	Dimming & Emergency
NLCBC-651 = Round Reflector	27 = 2700K	BZ = Bronze / Bronze	(blank) = 120V Triac/ELV
NLCBC-652 = Round Baffle	30 = 3000K 40 = 4000K	DW = Diffused / White (651 only) HZW = Haze / White (651 only) MPW = Matte Powder White WW = White / White	EM = Remote Emergency (requires Nora EM housing)
NLCBC-651 = Round Reflector	35 = 3500K	WW = White / White	(blank) = 120V Triac/ELV
NLCBC-652 = Round Baffle			EM = Remote Emergency (requires Nora EM housing)
NLCBC-651 = Round Reflector	30 = 3000K 35 = 3500K	DD = Diffused / Diffused DW = Diffused / White WW = White / White	LE4 = 120V Triac/ELV or 0-10V 277V 0-10V LE4EM = LE4 w/ Remote Emergency (requires Nora EM housing)

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
NRA-211SM = Medium base screw-in socket (included)
NRA-212SM = Socket adapter for use with GU24 housings

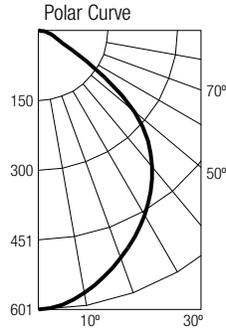
Example: **NLCBC-65130MPW** = 6" Cobalt Retrofit Reflector, 1000lm / 13W LED, 3000K, Matte Powder White Finish

PHOTOMETRICS

6" Cobalt Retrofit Series

Test Information

Test Number: 795874
 Part Number: NLCBC-65140WW
 Lumens: 1202lm
 Wattage: 15.7W
 Efficacy: 77lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 1.16
 Spacing Criteria (90°-270): 1.16



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	37.5fc	8'-11"
6'	16.7fc	13'-4"
8'	9.4fc	17'-8"
10'	6fc	22'-2"
12'	4.2fc	26'-7"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	437	36.4
0-40	701	58.3
0-60	1113	92.7
0-90	1202	100
90-180	0	0
0-180	1202	100

Candela Table

Vertical Angles	Candela
0	601
5	593
15	549
25	491
35	423
45	335