

NLCBC2-65 Series

6" Cobalt Click LED Retrofit Reflectors

Source: 10W to 13.5W LED
750lm 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. The 6" retrofit click luminaires product up to 1000 lumen output at 90+ CRI. The Cobalt series integrates a Signify COB family of LED arrays, giving bright spectacular light output and low power consumption.

SPECIFICATION

Trim: UTM thermal management features an integral driver, large heat sink and the latest COB technology. The patented "Click" system allows the aluminum spun trims to be easily changed in the field with the help of spring mounting clips which properly secure them to the LED module.

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-21ISM](#)) 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 / Wattage: See chart below

LED Module	Lumens / Wattage	Color Temperature
Dedicated CCT	750lm / 10W or 1000lm / 12W	2700K, 3000K, 3500K, 4000K
Selectable CCT	1000lm / 13.5W	2700K, 3000K, 3500K, 4000K, 5000K
Comfort Dim	900lm / 12W	3000K to 2000K

Color Temperature: Dedicated, Selectable or Comfort Dim

Color Rendering Index: 90+ CRI

Operating Temperature: 0-35°C

Lifetime:

36,000 hours @ L70 (Selectable CCT)

50,000 hours @ L70 (Dedicated CCT & Comfort Dim)

Comfort Dim: Comfort Dim color tunes the temperature from a bright 3000K, to a romantic and comfortable 2000K on a gradual, even curve. Available in 900lm / 12W /120V only.

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-6LMRATA*](#)

[NFBIC-6LMRATA/4W*](#)

[NFBIC-6INCATA](#)

New Construction

[NHIC-27LMRAT*](#)

[NHIC-6LMRAT*](#)

[NHIC-6LMRAT/4W*](#)

[NHIC-6LMRAT/EM*](#)

[NHIC-6LMRAT/6WEM*](#)

[NHIC-6LMRAT/277*](#)

(includes step-down transformer)

[NHICCP-6LMRAT*](#)

[NHIC-27QAT](#)

[NHIC-17QAT](#)

[NH-26Q](#)

[NHIC-6G24ATFL](#)

Remodel

[NHRIC-27LMRAT*](#)

[NHRIC-6LMRAT*](#)

[NHRIC-27QAT](#)

[NHRIC-17QAT](#)

[NHR-26Q](#)

[NHR-26Q](#)

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

ICAT Dedicated LED

ICAT Dedicated LED for LE4

ICAT Line Voltage

Shallow ICAT Dedicated LED

ICAT Dedicated LED

ICAT Dedicated LED for LE4

ICAT Dedicated LED for EM

ICAT Dedicated LED for EM+LE4

ICAT Dedicated LED, 277V

Chicago Plenum Dedicated LED

Shallow ICAT Line Voltage

ICAT Line Voltage

Non-IC Line Voltage

ICAT GU24

Shallow ICAT Dedicated LED

ICAT Dedicated LED

Shallow ICAT Line Voltage

ICAT Line Voltage

Non-IC Line Voltage

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".

LABELS AND LISTINGS

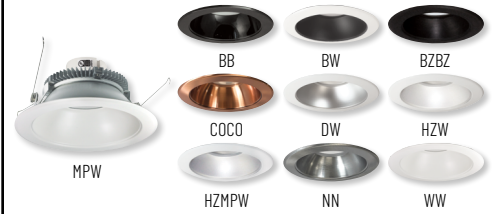
- cULus classified for Wet Locations
- [5-Year Limited Warranty](#)
- Meets ASTM-E283 Air-Tight requirements
- Patent #D797,977S; D871,644S; D824,568S
- FCC Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2022



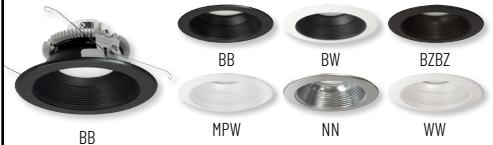
TRIM FINISHES

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

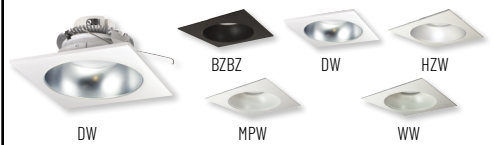
PRODUCT IMAGES & DIMENSIONS



NLCBC2-651
Round Reflector



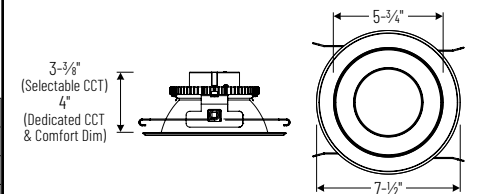
NLCBC2-652
Round Baffle



NLCBC2-653
Square Reflector with Round Aperture



NLCBC2-656
Square Reflector with Square Aperture



6" Cobalt Click LED Retrofit Reflectors

Reflector Type	Color Temperature	Finish (see chart above)	Lumens	Dimming & Emergency
NLCBC2-651 = Round Reflector	27 = 2700K	BB = Black / Black	/A = 750lm	(blank) = 120V Phase (Triac/ELV)
NLCBC2-652 = Round Baffle	30 = 3000K	BW = Black / White	/10 = 1000lm	LE4 = 120-277V Phase or 0-10V (requires Nora 4W housing)
NLCBC2-653 = Square Round	35 = 3500K	BZBZ = Bronze / Bronze		EM = 120V with Remote Emergency (requires Nora EM housing)
NLCBC2-656 = Square Regress	40 = 4000K	COCO = Copper / Copper		LE4EM = LE4 w/ Remote Emergency (requires Nora 6WEM housing)
	TW = Selectable CCT ¹	DW = Diffused / White		
	CD = Comfort Dim ²	HZMPW = Haze / MPW		
		HZW = Haze / White		
		MPW = Matte Powder White		
		NN = Natural Metal		
		PW = Pewter / White		
		WW = White / White		

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-21ISM = Medium base screw-in socket (included)
NRA-212SM = Socket adapter for use with GU24 housings

Example: **NLCBC2-65130MPW/A** = 6" Cobalt Click LED Retrofit Reflector, 750lm / 10W LED, 3000K, Matte Powder White Finish

PHOTOMETRICS

6" Cobalt Click LED Retrofit Downlights 750 lumens / Dedicated CCT

Type

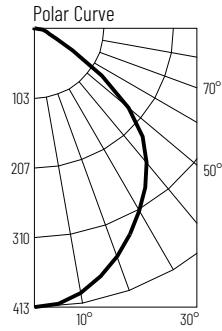
Project

Catalog No.

Notes

Test Information

Test Number: NTR1298
Part Number: NLCCB2-65127WW/A
Beam Spread: 95° Wide Flood
Lumens: 844lm
Wattage: 9.56W
Efficacy: 88lpw
CCT / CRI: 2700K / 90 CRI
Spacing Criteria (0°-180°): 1.14
Spacing Criteria (90°-270°): 1.14



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	25.8fc	8'-10"
6'	11.5fc	13'-1"
8'	6.5fc	17'-6"
10'	4.1fc	21'-11"
12'	2.9fc	26'-4"

Zonal Lumen Summary

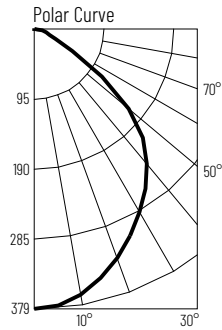
Zone	Lumens	% Luminaire
0-30	301	35.7
0-40	481	57
0-60	770	91.2
0-90	839	99.5
90-180	4	0.5
0-180	844	100

Candela Table

Vertical Angles	Candela
0	413
5	409
15	381
25	336
35	287
45	227

Test Information

Test Number: NTR1299
Part Number: NLCCB2-65130WW/A
Beam Spread: 101° Wide Flood
Lumens: 857lm
Wattage: 9.54W
Efficacy: 90lpw
CCT / CRI: 3000K / 90 CRI
Spacing Criteria (0°-180°): 1.22
Spacing Criteria (90°-270°): 1.22



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	23.7fc	9'-8"
6'	10.5fc	14'-7"
8'	5.9fc	19'-5"
10'	3.8fc	24'-4"
12'	2.6fc	29'-2"

Zonal Lumen Summary

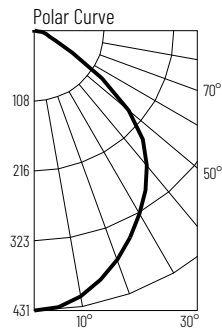
Zone	Lumens	% Luminaire
0-30	289	33.7
0-40	468	54.6
0-60	774	90.4
0-90	853	99.5
90-180	4	0.5
0-180	857	100

Candela Table

Vertical Angles	Candela
0	379
5	378
15	361
25	330
35	289
45	234

Test Information

Test Number: NTR1254
Part Number: NLCCB2-65135WW/A
Beam Spread: 101° Wide Flood
Lumens: 977lm
Wattage: 10W
Efficacy: 98lpw
CCT / CRI: 3500K / 90 CRI
Spacing Criteria (0°-180°): 1.24
Spacing Criteria (90°-270°): 1.24



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	26.9fc	9'-11"
6'	11.9fc	14'-10"
8'	6.7fc	19'-8"
10'	4.3fc	24'-7"
12'	3fc	29'-7"

Zonal Lumen Summary

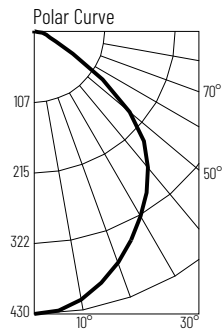
Zone	Lumens	% Luminaire
0-30	329	33.7
0-40	535	54.7
0-60	889	91
0-90	974	99.7
90-180	3	0.3
0-180	977	100

Candela Table

Vertical Angles	Candela
0	430
5	428
15	411
25	375
35	329
45	268

Test Information

Test Number: NTR1255
Part Number: NLCCB2-65140WW/A
Beam Spread: 101° Wide Flood
Lumens: 962lm
Wattage: 10W
Efficacy: 96lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 1.22
Spacing Criteria (90°-270°): 1.22



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	26.8fc	9'-10"
6'	11.9fc	14'-7"
8'	6.7fc	19'-6"
10'	4.3fc	24'-5"
12'	3fc	29'-4"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	327	33.9
0-40	530	55.1
0-60	879	91.3
0-90	960	99.8
90-180	2.2	0.2
0-180	962	100

Candela Table

Vertical Angles	Candela
0	429
5	427
15	408
25	371
35	326
45	265

Finish Multipliers

Finish: Black (0.74), Bronze (0.72), Diffused Clear (0.92), Haze (0.91), Matte Powder White (0.99), Natural Metal (0.94)

PHOTOMETRICS

6" Cobalt Click LED Retrofit Downlights 1000 lumens / Dedicated CCT

Type

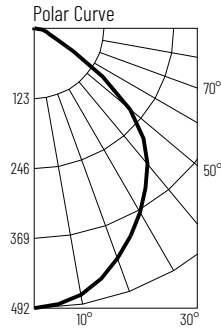
Project

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Notes

Test Information

Test Number: NTR1304
Part Number: NLCCB2-65127WW/10
Beam Spread: 95° Wide Flood
Lumens: 1006lm
Wattage: 11.58W
Efficacy: 87lpw
CCT / CRI: 2700K / 90 CRI
Spacing Criteria (0°-180°): 1.14
Spacing Criteria (90°-270°): 1.14



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	30.8fc	8'-8"
6'	13.7fc	13'-1"
8'	7.7fc	17'-6"
10'	4.9fc	21'-10"
12'	3.4fc	26'-2"

Zonal Lumen Summary

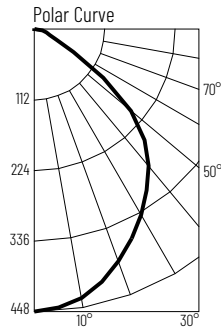
Zone	Lumens	% Luminaire
0-30	359	35.7
0-40	573	57
0-60	917	91.2
0-90	1001	99.5
90-180	5	0.5
0-180	1006	100

Candela Table

Vertical Angles	Candela
0	492
5	487
15	456
25	403
35	343
45	273

Test Information

Test Number: NTR1305
Part Number: NLCCB2-65130WW/10
Beam Spread: 101° Wide Flood
Lumens: 1021lm
Wattage: 11.35W
Efficacy: 90lpw
CCT / CRI: 3000K / 90 CRI
Spacing Criteria (0°-180°): 1.22
Spacing Criteria (90°-270°): 1.22



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	28fc	9'-10"
6'	12.4fc	14'-8"
8'	7fc	19'-7"
10'	4.5fc	24'-6"
12'	3.1fc	29'-5"

Zonal Lumen Summary

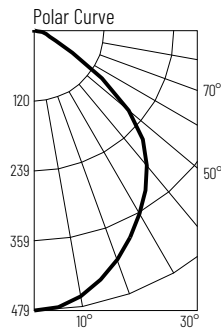
Zone	Lumens	% Luminaire
0-30	341	33.4
0-40	553	54.1
0-60	918	89.9
0-90	1013	99.2
90-180	8	0.8
0-180	1021	100

Candela Table

Vertical Angles	Candela
0	448
5	446
15	427
25	388
35	341
45	278

Test Information

Test Number: NTR2581R1
Part Number: NLCCB2-65135WW/10
Beam Spread: 101° Wide Flood
Lumens: 1082lm
Wattage: 11.35W
Efficacy: 95lpw
CCT / CRI: 3500K / 90 CRI
Spacing Criteria (0°-180°): 1.24
Spacing Criteria (90°-270°): 1.22



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	29.9fc	9'-10"
6'	13.3fc	14'-8"
8'	7.5fc	19'-7"
10'	4.8fc	24'-6"
12'	3.3fc	29'-5"

Zonal Lumen Summary

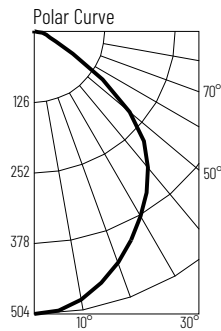
Zone	Lumens	% Luminaire
0-30	365	33.7
0-40	591	54.7
0-60	981	90.7
0-90	1082	100
90-180	0	0
0-180	1082	100

Candela Table

Vertical Angles	Candela
0	479
5	477
15	458
25	420
35	366
45	294

Test Information

Test Number: NTR2582R1
Part Number: NLCCB2-65140WW/10
Beam Spread: 101° Wide Flood
Lumens: 1132lm
Wattage: 11.22W
Efficacy: 101lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 1.22
Spacing Criteria (90°-270°): 1.2



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	31.5fc	9'-8"
6'	14fc	14'-7"
8'	7.9fc	19'-5"
10'	5fc	24'-4"
12'	3.5fc	29'-2"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	384	33.9
0-40	620	54.8
0-60	1027	90.7
0-90	1132	100
90-180	0	0
0-180	1132	100

Candela Table

Vertical Angles	Candela
0	504
5	501
15	480
25	438
35	380
45	305

Finish Multipliers

Finish: Black (0.74), Bronze (0.72), Diffused Clear (0.92), Haze (0.91), Matte Powder White (0.99), Natural Metal (0.94)

PHOTOMETRICS

6" Cobalt Click LED Retrofit Downlights 1000 lumens / Selectable CCT

Type

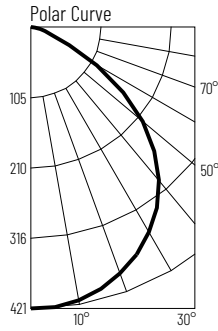
Project

Catalog No.

Notes

Test Information

Test Number: NTR2563R1
Part Number: NLBCB2-6512TWWW/10
Beam Spread: 102° Wide Flood
Lumens: 985lm
Wattage: 13.15W
Efficacy: 75lpw
CCT / CRI: 2700K / 90 CRI
Spacing Criteria (0°-180°): 1.26
Spacing Criteria (90°-270°): 1.24



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	26.3fc	10'
6'	11.7fc	15'
8'	6.6fc	20'
10'	4.2fc	25'
12'	2.9fc	29'-11"

Zonal Lumen Summary

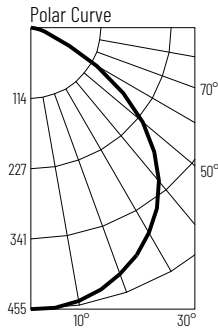
Zone	Lumens	% Luminaire
0-30	269	27.3
0-40	447	45.4
0-60	868	88.1
0-90	985	100
90-180	0	0
0-180	985	100

Candela Table

Vertical Angles	Candela
0	421
5	420
15	406
25	377
35	332
45	266

Test Information

Test Number: NTR2564R1
Part Number: NLBCB2-651TWWW/10
Beam Spread: 102° Wide Flood
Lumens: 1061lm
Wattage: 13.39W
Efficacy: 79lpw
CCT / CRI: 3000K / 90 CRI
Spacing Criteria (0°-180°): 1.26
Spacing Criteria (90°-270°): 1.24



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	28.4fc	9'-11"
6'	12.6fc	14'-10"
8'	7.1fc	19'-10"
10'	4.5fc	24'-8"
12'	3.2fc	29'-8"

Zonal Lumen Summary

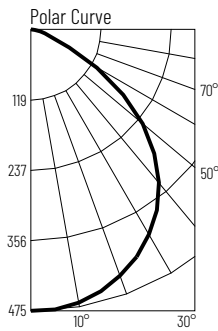
Zone	Lumens	% Luminaire
0-30	351	33.1
0-40	572	54
0-60	953	89.8
0-90	1061	100
90-180	0	0
0-180	1061	100

Candela Table

Vertical Angles	Candela
0	454
5	452
15	437
25	405
35	357
45	284

Test Information

Test Number: NTR2565R1
Part Number: NLBCB2-651TWWW/10
Beam Spread: 102° Wide Flood
Lumens: 1105lm
Wattage: 13.58W
Efficacy: 81lpw
CCT / CRI: 3500K / 90 CRI
Spacing Criteria (0°-180°): 1.26
Spacing Criteria (90°-270°): 1.24



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	29.6fc	9'-11"
6'	13.2fc	14'-10"
8'	7.4fc	19'-10"
10'	4.7fc	24'-8"
12'	3.3fc	29'-7"

Zonal Lumen Summary

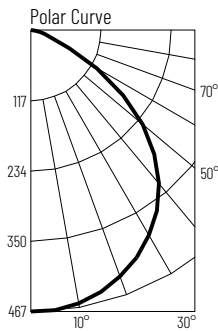
Zone	Lumens	% Luminaire
0-30	367	33.2
0-40	597	54.1
0-60	993	89.9
0-90	1105	100
90-180	0	0
0-180	1105	100

Candela Table

Vertical Angles	Candela
0	474
5	473
15	457
25	424
35	373
45	297

Test Information

Test Number: NTR2566R1
Part Number: NLBCB2-651TWWW/10
Beam Spread: 101° Wide Flood
Lumens: 1087lm
Wattage: 13.46W
Efficacy: 81lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 1.26
Spacing Criteria (90°-270°): 1.24



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	29.2fc	9'-10"
6'	13fc	14'-10"
8'	7.3fc	19'-8"
10'	4.7fc	24'-7"
12'	3.2fc	29'-6"

Zonal Lumen Summary

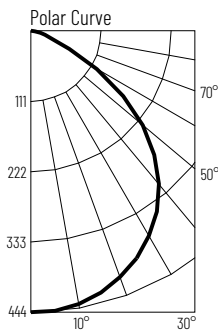
Zone	Lumens	% Luminaire
0-30	361	33.2
0-40	588	54.1
0-60	976	89.8
0-90	1087	100
90-180	0	0
0-180	1087	100

Candela Table

Vertical Angles	Candela
0	467
5	465
15	449
25	417
35	367
45	291

Test Information

Test Number: NTR2567R1
Part Number: NLBCB2-651TWWW/10
Beam Spread: 101° Wide Flood
Lumens: 1028lm
Wattage: 13.2W
Efficacy: 78lpw
CCT / CRI: 5000K / 90 CRI
Spacing Criteria (0°-180°): 1.26
Spacing Criteria (90°-270°): 1.24



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	27.7fc	9'-10"
6'	12.3fc	14'-8"
8'	6.9fc	19'-7"
10'	4.4fc	24'-6"
12'	3.1fc	29'-5"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	284	27.6
0-40	470	45.7
0-60	906	88.1
0-90	1028	100
90-180	0	0
0-180	1028	100

Candela Table

Vertical Angles	Candela
0	444
5	441
15	426
25	395
35	348
45	277