

NCR2-61 / NCR2-66 / NCR2-68

6" Sapphire II High Lumen Retrofit Downlight

Source: 16W to 60W LED
900lm to 4500lm

Type
Project
Catalog No.
Notes

PRODUCT DESCRIPTION

The Sapphire II COB Retrofit Series is an architectural grade LED high lumen replacement. Using existing commercial or architectural frame-ins, replace old light source and reflectors with the latest LED technology. Each luminaire includes flexible conduit and junction box with dimmable drivers.

The Sapphire II COB Series is an architectural grade LED high lumen downlight. The Sapphire II uses the latest COB technology by Cree®. The COB allows for better optic control offering three beam spreads. Beam spreads focus the light down to the work plane from high ceiling applications. The reflectors have been designed for the high efficiency (LPW) while providing low aperture brightness. The Sapphire II COB Series is proudly assembled in the USA.

FEATURES

- Retrofit existing architectural or commercial frame-ins with the latest LED technology
- Over 80% energy savings when compared to incandescent
- Cree® COB technology
- Shatter resistant lens
- Specifiable beam spreads
- Deep cone reflector, wall wash or deco glass
- 900lm, 1500lm, 2500lm, 3500lm, and 4500lm LED packages
- 2700K, 3000K, 3500K and 4000K @ 90+ CRI
- 5-year limited warranty
- cULus classified for wet locations
- ENERGY STAR certified

SPECIFICATION

Reflector: Deep cone self flanged reflector spun from 0.050 high grade aluminum provides even illumination and visual comfort. The deep cone reflectors provide 55+ degree cut-off. NCR2-68 includes three studs mounted in the flange for attaching decorative glass. Decorative glass will reduce the amount of usable light by 10 to 30%, depending on the selected glass.

Reflector Assembly: The reflector assembly includes the LED optical package and heat sink mounted on top. Reflector assembly is connected to junction box and dimmable driver. Junction box easily wires to input voltage with wire nuts (included). Luminaire accommodates ceiling thickness from 3/8" to 1-1/2".

ELECTRICAL

Lumens / Wattage:

L09 = 900lm / 16W; **L15** = 1500lm / 18W;
L25 = 2500lm / 30W; **L35** = 3500lm / 46W;
L45 = 4500lm / 60W

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

CRI: 90+CRI

Beam Spread: (S) Spot; (M) Narrow Flood; (F) Flood

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

Lifetime: 60,000 hours @ L70

Dimming: Triac, ELV or 0-10V dimming

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

COMPATIBLE FRAME-INS

Reflector assembly is compatible with Nora 6" Commercial and Architectural Frames.

NHPT6, NHPT, NHRPT6, NHP6, NHP-1, NHP-2, NHRP6, NHPV-6, NHPV, NHRPV-6, NHFM-6, NHFM-7, NHRFM6, NHAV-6, NH-150, NHR-150

LABELS AND LISTINGS

- cULus classified for Wet Location
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant



PRODUCT IMAGES



NCR2-61 Open Reflector

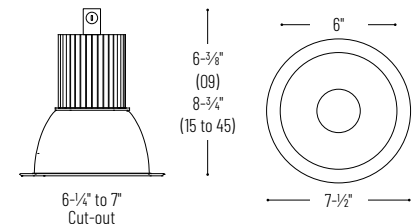


NCR2-66 Wall Wash Reflector



NCR2-68 Decorative Glass Reflector
(Specify glass separately)

PRODUCT DIMENSIONS



6" Sapphire II Retrofit Reflectors

Reflector Type	Lumens / Wattage	Color Temp.	Beam Spread	Driver	Reflector / Flange Finish
NCR2-61 = Open Reflector	09 = 900lm / 16W	27 = 2700K	S = Spot	E3 = 120V Input; Triac/ELV/0-10V dimming	BSF = Black / Self Flanged
NCR2-66 = Wall Wash ¹	15 = 1500lm / 18W	30 = 3000K	M = Narrow Flood	E6 = 120-277V Input; 0-10V dimming	BWSF = Black / White Flange
NCR2-68 = Deco Glass* ¹	25 = 2500lm / 30W	35 = 3500K	F = Flood		CSF = Specular Clear / Self Flanged [†]
	35 = 3500lm / 46W	40 = 4000K			DBSF = Clear Diffused / Black Flange
	45 = 4500lm / 60W				DSF = Clear Diffused / Self Flanged
					DWSF = Clear Diffused / White Flange
					HBSF = Haze / Black Flange
					HSF = Haze / Self Flanged
					HWSF = Haze / White Flange
					WSF = White / Self Flanged

[†] Not available with wall wash

* Deco Glass Option

NTG-6B/120	Tempered Blue Glass with 4-3/4" Open Center
NTG-6B/80	Tempered Blue Glass with 3-1/8" Open Center
NTG-6CF	Tempered Clear Glass with Frosted Center
NTG-6FC	Tempered Clear Glass with Clear Center
NTG-6HC	Tempered Clear Glass with Frosted Center and 3-1/8" Open Center

Example: **NCR2-613535ME6WSF** = 6" Sapphire II Retrofit Reflector, 3500lm / 46W, 3500K, Narrow Flood Beam Spread, 120-277V, White Finish / Self Flanged

PHOTOMETRICS

6" Sapphire II Retrofit Series

Type

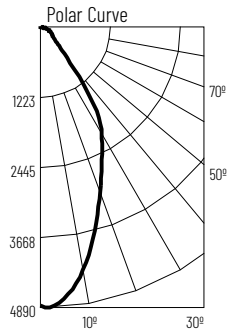
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Notes

Test Information

Test Number: 727461
 Part Number: NCR2-61L4540SWSF
 Lumens: 4585lm
 Wattage: 56.2W
 Efficacy: 82lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.76
 Spacing Criteria (90°-270): 0.76



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	135fc	5'-11"
9'	60fc	8'-10"
12'	33.8fc	11'-8"
15'	21.6fc	14'-8"
18'	15fc	17'-7"

Zonal Lumen Summary

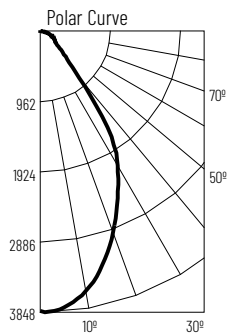
Zone	Lumens	% Luminaire
0-30	2624	57.2
0-40	3579	78.1
0-60	4198	91.6
0-90	4549	99.2
90-180	36	0.8
0-180	4585	100

Candela Table

Vertical Angles	Candela
0	4861
5	4724
15	3654
25	2535
35	1597
45	462

Test Information

Test Number: 727477
 Part Number: NCR2-61L4540MWSF
 Lumens: 4395lm
 Wattage: 55.5W
 Efficacy: 79lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.92
 Spacing Criteria (90°-270): 0.92



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	106fc	7'-7"
9'	47.3fc	11'-4"
12'	26.6fc	15'-1"
15'	17fc	18'-11"
18'	11.8fc	22'-8"

Zonal Lumen Summary

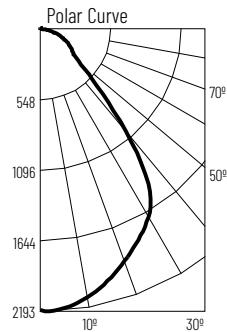
Zone	Lumens	% Luminaire
0-30	2429	55.3
0-40	3387	77.1
0-60	4021	91.5
0-90	4361	99.2
90-180	34.43	0.8
0-180	4395	100

Candela Table

Vertical Angles	Candela
0	3833
5	3769
15	3296
25	2587
35	1596
45	500

Test Information

Test Number: 727489
 Part Number: NCR2-61L4540FWSF
 Lumens: 3687lm
 Wattage: 56.5W
 Efficacy: 65lpw
 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
6'	60.6fc	9'-10"
9'	26.9fc	14'-10"
12'	15.2fc	19'-8"
15'	9.7fc	24'-7"
18'	6.7fc	29'-6"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1602	43.5
0-40	2487	67.4
0-60	3274	88.8
0-90	3659	99.2
90-180	28	0.8
0-180	3687	100

Candela Table

Vertical Angles	Candela
0	2182
5	2164
15	2018
25	1799
35	1454
45	643

Lumen Output Multipliers

Color Temperature: 2700K (0.87), 3000K (0.91), 3500K (0.96), 4000K (1.00)
 Lumen Package: L09 (0.25), L15 (0.33), L25 (0.54), L35 (0.85), L45 (1.00)