

NC3-81 / NC3-88

8" Sapphire III LED Reflectors

Source: 11W to 60W

900lm to 5500lm

PRODUCT DESCRIPTION

The architectural grade Sapphire III high lumen LED downlights are a perfect solution for lobbies, corridors, offices and conference rooms. The Sapphire III utilizes Signify® Fortimo COB LED technology for better optic control with three specified 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.

FEATURES

- Signify® Fortimo COB LED technology
- Specifiable beam spreads
- 2700K, 3000K, 3500K and 4000K @ 90+ CRI
- 5-year limited warranty

SPECIFICATION

Reflector: Deep cone reflector spun from 0.050" high grade aluminum provides even illumination and visual comfort. The deep cone reflectors provide 55+ degree cut-off. NC3-88 includes 3 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 easily wires to dedicated frame with lockable quick connect.

Decorative Glass: NC3-88 is compatible with up to two decorative glass options (ordered separately). Each glass includes mounting hardware (NRA-203).

- NTG-8B/80** 8" Tempered Blue Glass with 3-1/8" Open Center
- NTG-8CF** 8" Tempered Clear Glass with Frosted Center
- NTG-8FC** 8" Tempered Frosted Glass with Clear Center

Integral Emergency Switch: NC3-81 is compatible with integral emergency test switch (must specify). EMI test switch for field install to the trim. EMI2 test switch is pre-installed to the trim.

Remote Emergency: All reflectors are compatible with remote emergency options.

LABELS AND LISTINGS

- Assembled in USA with domestic and foreign components
- cULus Listed for Wet Locations when used with compatible frame-in
- [5-Year Limited Warranty](#)
- ENERGY STAR certified (BB, BMPW, and CC finishes are not certified)
- RoHS Compliant
- FCC Compliant



PRODUCT IMAGES & DIMENSIONS



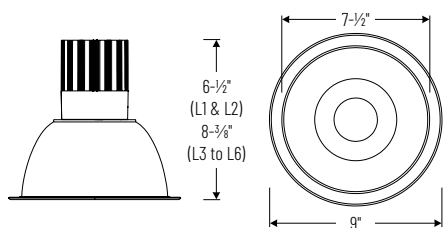
NC3-81
Open Reflector



NC3-88
Decorative Glass Reflector
(Specify glass separately)



NTG-8
8" Decorative Glass



ELECTRICAL	L1	L2	L3	L4	L5	L6
Delivered Lumens	900lm	1500lm	2500lm	3500lm	4500lm	5500lm
Wattage	11W max.	16W max.	24W max.	36W max.	46W max.	60W max.
Color Temperature	2700K, 3000K, 3500K or 4000K					
Color Rendering Index	90+ CRI					
Beam Spread	38° Spot, 57° Narrow Flood or 78° Flood					
Compatible Frame-In	NCH3-8L1 NCHR3-8L1	NCH3-8L2 NCHR3-8L2	NCH3-8L3 NCHR3-8L3	NCH3-8L4 NCHR3-8L4	NCH3-8L5 NCHR3-8L5	NCH3-8L6 NCHR3-8L6
Lifetime	50,000 hours @ L70					

8" Sapphire III LED Reflectors - Dedicated Frame-In Required

Reflector Type	Lumens / Wattage	CCT	Beam Spread	Reflector / Flange Finish	Optional Emergency
NC3-81 = Open Reflector	L1 = 900lm / 11W	27 = 2700K	S = Spot	BB = Specular Black Reflector / Specular Black Flange	/EMI = Integral Emergency Test Switch
NC3-88 = Deco Glass*	L2 = 1500lm / 16W	30 = 3000K	N = Narrow Flood	BMPW = Specular Black Reflector / White Flange	(Compatible with NC3-81 & new construction only, must specify on new construction, switch located on frame-in)
	L3 = 2500lm / 24W	35 = 3500K	F = Flood	CC = Specular Clear Reflector / Specular Clear Flange	/EMI2 = Integral Emergency Test Switch ¹
	L4 = 3500lm / 36W	40 = 4000K		DD = Clear Diffused Reflector / Clear Diffused Flange	(Compatible with NC3-81 up to 4500lm only, must specify on new construction/remodel, switch is located on reflector)
	L5 = 4500lm / 46W			DMPW = Clear Diffused Reflector / White Flange	¹ Not compatible with 5500lm
	L6 = 5500lm / 60W			HZ = Haze Reflector / Haze Flange	
				HZMPW = Haze Reflector / White Flange	
				MPW = White Reflector / White Flange	

* Decorative Glass Option

- NTG-8B/80 Tempered Blue Glass with 3-1/8" Open Center
- NTG-8CF Tempered Clear Glass with Frosted Center
- NTG-8FC Tempered Frosted Glass with Clear Center

Example: **NC3-81L630NMPW** = 8" Sapphire III Open Reflector, 5500lm / 60W, 3000K, Narrow Flood Beam Spread, White Reflector / White Flange

PHOTOMETRICS

8" Sapphire III LED Reflectors

5500lm / 60W

Type

Project

Catalog No.

Notes

Test Information

Test Number: NTR2368R1

Part Number: NC3-81L640SMPW

Beam Spread: 38° Spot

Lumens: 5778lm

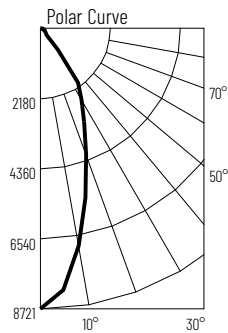
Wattage: 56.66W

Efficacy: 102lpw

CCT / CRI: 4000K / 90 CRI

Spacing Criteria (0°-180°): 0.62

Spacing Criteria (90°-270°): 0.62



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
8'	136fc	5'-7"
12'	60.6fc	8'-5"
16'	34.1fc	11'-2"
20'	21.8fc	14'
24'	15.1fc	16'-10"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	3776	65.4
0-40	4971	86
0-60	5506	95.3
0-90	5778	100
90-180	0	0
0-180	5778	100

Candela Table

Vertical Angles	Candela
0	8721
5	8166
15	5452
25	3212
35	2073
45	284

Test Information

Test Number: NTR2369R1

Part Number: NC3-81L640NMPW

Beam Spread: 57° Narrow Flood

Lumens: 5818lm

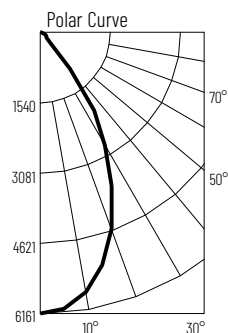
Wattage: 56.7W

Efficacy: 103lpw

CCT / CRI: 4000K / 90 CRI

Spacing Criteria (0°-180°): 0.88

Spacing Criteria (90°-270°): 0.88



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
8'	96.3fc	8'-8"
12'	42.8fc	13'-1"
16'	24.1fc	17'-6"
20'	15.4fc	21'-11"
24'	10.7fc	26'-2"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	3735	64.2
0-40	5017	86.2
0-60	5552	95.4
0-90	5818	100
90-180	0	0
0-180	5784	100

Candela Table

Vertical Angles	Candela
0	6161
5	6074
15	5281
25	3712
35	2079
45	327

Test Information

Test Number: NTR2370R1

Part Number: NC3-81L640FMPW

Beam Spread: 78° Flood

Lumens: 5140lm

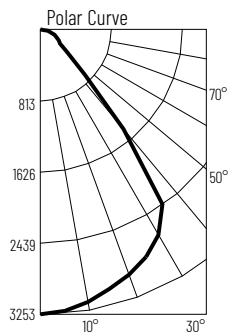
Wattage: 56.29W

Efficacy: 91lpw

CCT / CRI: 4000K / 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
8'	50.8fc	13'-1"
12'	22.6fc	19'-7"
16'	12.7fc	26'-1"
20'	8.1fc	32'-7"
24'	5.7fc	39'-2"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	2479	48.2
0-40	3867	75.2
0-60	4749	92.4
0-90	5140	100
90-180	0	0
0-180	5140	100

Candela Table

Vertical Angles	Candela
0	3253
5	3226
15	3070
25	2864
35	2439
45	722

Lumen Output Multipliers

Lumen Package: L1 (0.18), L2 (0.25), L3 (0.47), L4 (0.67), L5 (0.8), L6 (1.00)

Color Temperature: 2700K (0.5), 3000K (0.91), 3500K (0.97), 4000K (1.00)

Reflector Finish: Specular Black (0.68), Specular Clear (1.06), Diffused (1.08), Haze (0.96), White (1.00)