

NC2-831 / NC2-836 / NC2-838

8" Sapphire II LED Reflectors

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

Type
Project
Catalog No.
Notes

PRODUCT DESCRIPTION

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 3 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

- Cree® COB technology
- Shatter resistant lens
- Specifiable beam spreads
- 8" deep cone reflectors, wall wash and deco glass
- 900lm, 1500lm, 2500lm, 3500lm and 4500lm LED packages
- 2700K, 3000K, 3500K and 4000K @ 90+ CRI
- 5-year limited warranty
- ENERGY STAR certified
- cULus Listed for Wet Locations

ELECTRICAL

Lumens / Wattage:

L09 = 900lm / 16W; **L15** = 1500lm / 18W; **L25** = 2500lm / 27W;

L35 = 3500lm / 46W; **L45** = 4500lm / 60W

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

Color Rendering Index: 90+CRI

Beam Spread: (S) 42° Spot, (M) 64° Narrow Flood, (F) 83° Flood

Operating Temperature: 0°C to 45°C

Lifetime: 60,000 hours @ L70

COMPATIBLE FRAME-INS

Reflector is only compatible with respective Sapphire II series frames manufactured by Nora Lighting.

CATALOG NO.	DESCRIPTION
NCAH2-830	8" Universal New Construction Frame-In
NCHR2-834	8" Remodel Frame-In

DECO GLASS OPTIONS

NC2-838 is compatible with up to two decorative glass options, sold separately. Each glass includes mounting hardware (NRA-203).

NTG-8B/167 8" Tempered Blue Glass with 6-5/8" Open Center

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

NTG-8HC 8" Tempered Clear Glass with Frosted Center and 3-1/8" Open Center

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. NC2-838 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.

Emergency: NC2-831 is compatible with integral emergency test switch, must specify.

LABELS AND LISTINGS

- cULus Listed for Wet Locations when used with compatible frame-in
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- FCC Compliant
- RoHS Compliant



PRODUCT IMAGES & DIMENSIONS



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

Trim Type	Lumen / Wattage	Color Temp.	Beam Spread	Reflector / Flange Finish	Emergency
NC2-831 = Open Reflector	L09 = 900lm / 16W	27 = 2700K	S = Spot	BFS = Black / Self Flanged	EMI = Integral emergency test switch (Compatible with NC2-831 only, must specify on frame-in)
NC2-836 = Wall Wash ¹	L15 = 1500lm / 18W	30 = 3000K	M = Narrow Flood	BWSF = Black / White	
NC2-838 = Deco Glass* ¹	L25 = 2500lm / 27W	35 = 3500K	F = Flood	CSF = Specular Clear / Self Flanged ¹	
¹ Not compatible with 1500lm or 4500lm	L35 = 3500lm / 46W	40 = 4000K		DSF = Clear Diffused / Self Flanged	
	L45 = 4500lm / 60W			DWSF = Clear Diffused / White	
				HSF = Haze / Self Flanged	
				HWSF = Haze / White	
				WSF = White / Self Flanged	

* Deco Glass Option

NTG-8B/167	Tempered Blue Glass with 6-5/8" Open Center
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
NTG-8HC	Tempered Clear Glass with Frosted Center and 3-1/8" Open Center

Example: **NC2-831L2530WSF** = 8" Sapphire II Open Reflector, 2500lm / 27W LED, 3000K, White / Self Flange Finish

NCAH2-830

8" Sapphire II New Construction Frame-In

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

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Architectural grade LED High Lumen Downlights featuring deep cone reflectors. Dimmable Cree® LEDs and Cree® LED drivers make for a solid, complete and tested package. The Sapphire series is available in 4", 6" or 8" sizes and also in new construction or remodel frame-ins.

CONSTRUCTION

Plaster Frame: Architectural quality 0.050" galvanized steel ring riveted to 0.064" steel junction box and driver tray. Plaster frame opening includes (3) "butterfly" spring clips to hold reflector assembly in place.

Mounting: Frame-in includes two adjustable bar hangers and universal brackets that accept flat bar hangers, C-Channel (ordered separately) or rigid 1/2" conduit. Adjustable hanger bars with captive nails, alignment foot, T-Bar slot are included on frame. Frame-in includes an adjustable deep ceiling collar that accommodates ceiling thickness from 1/2" to 2-1/2".

Minimum Clearances: Frames require a minimum of 3" from thermal insulation and 1/2" from adjacent building component.

Junction Box: Plaster frame integrated 29 cubic inch 0.064" thick galvanized steel, with seven 1/2" knockouts, four pryouts, and snap on cover. Electrical connections are made through a single junction box door. Green wire provided for installations with ground wire fed through PVC pipe conduit. Junction box connects to reflector assembly with lockable quick connect.

Thermal Protector: LE3: External thermal device is located on the junction box; LE6: Thermally protected driver

Driver: Isolated driver separates the primary side from the secondary side.

ELECTRICAL

Input Voltage: 120V or 120-277V

Operating Temperature: 0°C to 45°C

Lumens / Wattage: L09 = 900lm / 16W; L15 = 1500lm / 18W; L25 = 2500lm / 27W; L35 = 3500lm / 46W; L45 = 4500lm / 60W

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 REFLECTORS

CATALOG NO. DESCRIPTION

NC2-831	8" Open Reflector
NC2-836	8" Wall Wash Reflector
NC2-838	8" Decorative Glass Reflector

Emergency LED Driver

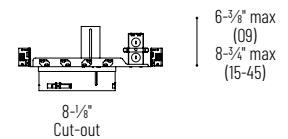
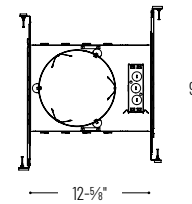
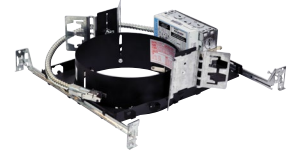
- Up to 7W emergency illumination with LEDs.
- Illumination Time: 90min
- Voltage: 120-277VAC, 50/60Hz
- Output Voltage: 10-60 VDC
- Available with remote or integral test switch, must specify

LABELS AND LISTINGS

- cULus Listed for Damp Locations (Wet Locations when used with compatible reflector)
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Emergency LED Driver meets Title 20 CEC efficiency standards
- FCC Compliant



PRODUCT IMAGES AND DIMENSIONS



8" Sapphire II New Construction Frame-In - Compatible with Sapphire II Reflectors

Lumens / Wattage	Driver	Optional Emergency
NCAH2-830/09 = 900lm / 16W	LE3 = 120V Input; Triac/ELV0-10V dimming	EM = Emergency Pack w/ Remote Test Switch
NCAH2-830/15 = 1500lm / 18W	LE6 = 120-277V Input; 0-10V dimming	EMI = Emergency Pack w/ Integral Test Switch, must specify on reflector
NCAH2-830/25 = 2500lm / 27W		
NCAH2-830/35 = 3500lm / 46W		
NCAH2-830/45 = 4500lm / 60W		

Example: **NCAH2-830/15LE6EM** = 8" Sapphire II Universal New Construction Frame-In, 1500lm / 18W, 120-277V Input, Emergency with Remote Test Switch

NCHR2-834

8" Sapphire II Remodel Frame-In

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

Type
Project
Catalog No.
Notes

PRODUCT DESCRIPTION

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 3 beam spreads. Beam spreads focus the light down to the work plane from high ceiling applications.

CONSTRUCTION

Plaster Frame: Architectural quality 0.050" galvanized steel ring riveted to 0.064" steel junction box and driver tray. Remodel frame opening includes (3) "butterfly" spring clips to hold reflector assembly in place.

Mounting: Designed for installation in existing ceilings. Three high tension tempered steel springs secure remodel housings evenly to the ceiling; hole cutout template provided for convenience. Remodel frame-in accommodates ceiling thickness from 1/2" to 1-1/4".

Minimum Clearances: Frames require a minimum of 3" from thermal insulation and 1/2" from adjacent building component.

Junction Box: Plaster frame integrated 29 cubic inch 0.064" thick galvanized steel, with seven 1/2" knockouts, four pryouts, and snap on cover. Electrical connections are made through a single junction box door. Green wire provided for installations with ground wire fed through PVC pipe conduit. Junction box connects to reflector assembly with lockable quick connect.

Thermal Protector: LE3: External thermal device is located on the junction box; LE6: Thermally protected driver

Driver: Isolated driver separates the primary side from the secondary side.

ELECTRICAL

Input Voltage: 120V or 120-277V

Lumens / Wattage: L09 = 900lm / 16W; L15 = 1500lm / 18W; L25 = 2500lm / 27W; L35 = 3500lm / 46W; L45 = 4500lm / 60W

Operating Temperature: 0°C to 45°C

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 REFLECTORS

CATALOG NO.	DESCRIPTION
NC2-831	8" Open Reflector
NC2-836	8" Wall Wash Reflector
NC2-838	8" Decorative Glass Reflector

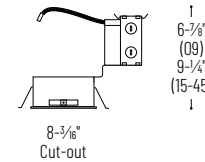
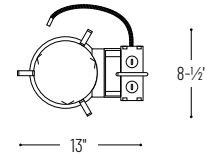
Emergency: Housing can be specified with connections for emergency battery installation. Requires top access. Must specify battery with remote test switch separately, NEPK-07LEDUNV.

LABELS AND LISTINGS

- cULus Listed for Damp Locations (Wet Locations when used with compatible reflector)
- [5-Year Limited Warranty](#)
- RoHS Compliant
- FCC Compliant
- Emergency LED Driver meets Title 20 CEC efficiency standards



PRODUCT IMAGES AND DIMENSIONS



8" Sapphire II Remodel Frame-In - Compatible with Sapphire II Reflectors

Lumens / Wattage	Driver
NCHR2-834/09 = 900lm / 16W	LE3 = 120V Input; Triac/ELV/0-10V dimming
NCHR2-834/15 = 1500lm / 18W	LE6 = 120-277V Input; 0-10V dimming
NCHR2-834/25 = 2500lm / 27W	
NCHR2-834/35 = 3500lm / 46W	
NCHR2-834/45 = 4500lm / 60W	

Optional Accessories

Description
NEPK-07LEDUNV = Remote Emergency Battery w/Test Switch

Example: **NCHR2-834/15LE6** = 8" Sapphire II Remodel Frame-In, 1500lm / 18W, 120-277V Input

PHOTOMETRICS

8" Sapphire II Series
900 lumens

Type

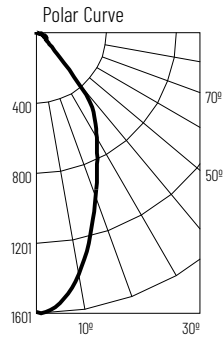
Project

Catalog No.

Notes

Test Information

Test Number: 727461
Part Number: NC2-831L0940SWSF
Beam Spread: 34° Spot
Lumens: 1151lm
Wattage: 15.06W
Efficacy: 76lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.54
Spacing Criteria (90°-270°): 0.54



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	99fc	2'-6"
6'	44fc	3'-8"
8'	24.8fc	4'-11"
10'	15.8fc	6'-2"
12'	11fc	7'-5"

Zonal Lumen Summary

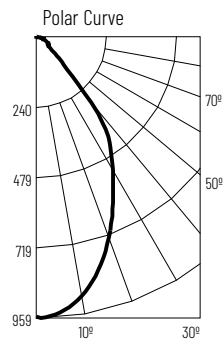
Zone	Lumens	% Luminaire
0-30	646	56.1
0-40	913	79.3
0-60	1073	93.2
0-90	1146	99.5
90-180	6	0.5
0-180	1151	100

Candela Table

Vertical Angles	Candela
0	1584
5	1416
15	869
25	594
35	438
45	121

Test Information

Test Number: 727477
Part Number: NC2-831L0940MWSF
Beam Spread: 65° Narrow Flood
Lumens: 1141lm
Wattage: 14.92W
Efficacy: 76lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.9
Spacing Criteria (90°-270°): 0.92



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	59.6fc	5'-2"
6'	26.5fc	7'-8"
8'	14.9fc	10'-4"
10'	9.5fc	12'-11"
12'	6.6fc	15'-6"

Zonal Lumen Summary

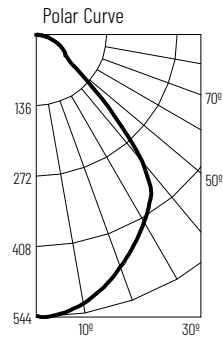
Zone	Lumens	% Luminaire
0-30	596	52.2
0-40	870	76.2
0-60	1055	92.5
0-90	1135	99.5
90-180	96	0.5
0-180	1141	100

Candela Table

Vertical Angles	Candela
0	954
5	936
15	807
25	612
35	445
45	153

Test Information

Test Number: 727489
Part Number: NC2-831L0940FWSF
Beam Spread: 84° Flood
Lumens: 962lm
Wattage: 15.04W
Efficacy: 64lpw
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'	33.9fc	7'-4"
6'	15.1fc	10'-11"
8'	8.5fc	14'-6"
10'	5.4fc	18'-1"
12'	3.8fc	21'-10"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	399	41.4
0-40	636	66.1
0-60	865	89.9
0-90	957	99.5
90-180	5	0.5
0-180	962	100

Candela Table

Vertical Angles	Candela
0	543
5	539
15	503
25	447
35	385
45	204

Lumen Output Multipliers

Color Temperature: 2700K (0.87), 3000K (0.91), 3500K (0.96), 4000K (1.00)

PHOTOMETRICS

8" Sapphire II Series
1500 lumens

Type

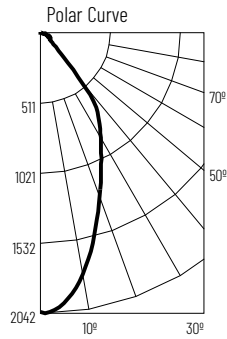
Project

Catalog No.

Notes

Test Information

Test Number: 727461
Part Number: NC2-831L1540SWSF
Beam Spread: 38° Spot
Lumens: 1544lm
Wattage: 16.84W
Efficacy: 92lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.6
Spacing Criteria (90°-270°): 0.6



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	55.8fc	4'-2"
9'	24.8fc	6'-4"
12'	14fc	8'-5"
15'	8.9fc	10'-6"
18'	6.2fc	12'-6"

Zonal Lumen Summary

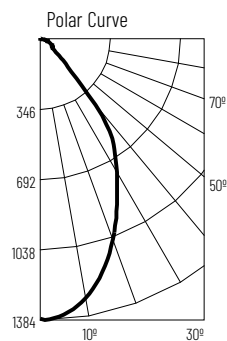
Zone	Lumens	% Luminaire
0-30	881	57
0-40	1234	79.9
0-60	1440	93.3
0-90	1535	99.4
90-180	9	0.6
0-180	1544	100

Candela Table

Vertical Angles	Candela
0	2010
5	1858
15	1207
25	808
35	581
45	159

Test Information

Test Number: 727477
Part Number: NC2-831L1540MWSF
Beam Spread: 64° Narrow Flood
Lumens: 1585lm
Wattage: 16.9W
Efficacy: 94lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.9
Spacing Criteria (90°-270°): 0.9



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	38.1fc	7'-6"
9'	17fc	11'-4"
12'	9.5fc	15'-1"
15'	6.1fc	18'-10"
18'	4.2fc	22'-7"

Zonal Lumen Summary

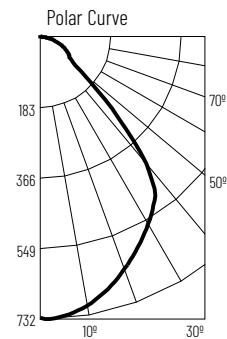
Zone	Lumens	% Luminaire
0-30	855	54
0-40	1219	76.9
0-60	1475	93.1
0-90	1576	99.4
90-180	9	0.6
0-180	1585	100

Candela Table

Vertical Angles	Candela
0	1373
5	1350
15	1162
25	880
35	589
45	238

Test Information

Test Number: 727489
Part Number: NC2-831L1540FWSF
Beam Spread: 83° Flood
Lumens: 1249lm
Wattage: 16.78W
Efficacy: 74lpw
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'	20.3fc	10'-8"
9'	9fc	16'
12'	5.1fc	21'-4"
15'	3.2fc	26'-7"
18'	2.3fc	32'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	533	42.7
0-40	848	67.9
0-60	1129	90.4
0-90	1242	99.4
90-180	7	0.6
0-180	1249	100

Candela Table

Vertical Angles	Candela
0	729
5	724
15	674
25	597
35	512
45	250

Lumen Output Multipliers

Color Temperature: 2700K (0.87), 3000K (0.91), 3500K (0.96), 4000K (1.00)

PHOTOMETRICS

8" Sapphire II Series
2500 lumens

Type

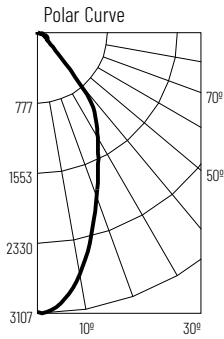
Project

Catalog No.

Notes

Test Information

Test Number: 727461
Part Number: NC2-831L2540SWSF
Beam Spread: 39° Spot
Lumens: 2411lm
Wattage: 28.88W
Efficacy: 83lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.6
Spacing Criteria (90°-270°): 0.6



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	85fc	4'-4"
9'	37.8fc	6'-6"
12'	21.2fc	8'-7"
15'	13.6fc	10'-10"
18'	9.4fc	12'-11"

Zonal Lumen Summary

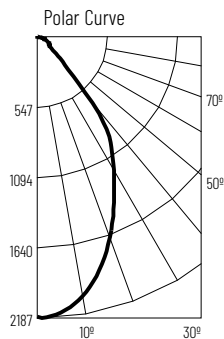
Zone	Lumens	% Luminaire
0-30	1365	56.6
0-40	1914	79.4
0-60	2232	92.6
0-90	2388	99
90-180	23	1
0-180	2411	100

Candela Table

Vertical Angles	Candela
0	3060
5	2870
15	1877
25	1262
35	913
45	242

Test Information

Test Number: 727477
Part Number: NC2-831L2540MWSF
Beam Spread: 63° Narrow Flood
Lumens: 2467lm
Wattage: 29.04W
Efficacy: 85lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.9
Spacing Criteria (90°-270°): 0.9



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	60.3fc	7'-4"
9'	26.8fc	11'
12'	15.1fc	14'-8"
15'	9.7fc	18'-5"
18'	6.7fc	22'

Zonal Lumen Summary

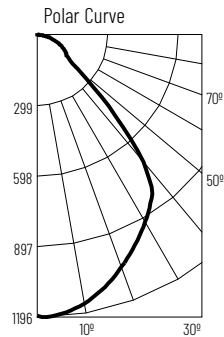
Zone	Lumens	% Luminaire
0-30	1334	54.1
0-40	1917	77.7
0-60	2277	92.3
0-90	2441	98.9
90-180	26	1.1
0-180	2467	100

Candela Table

Vertical Angles	Candela
0	2172
5	2136
15	1832
25	1359
35	968
45	290

Test Information

Test Number: 727489
Part Number: NC2-831L2540FWSF
Beam Spread: 81° Flood
Lumens: 1979lm
Wattage: 29.01W
Efficacy: 68lpw
CCT / CRI: 4000K / 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
6'	33.1fc	10'-4"
9'	14.7fc	15'-5"
12'	8.3fc	20'-7"
15'	5.3fc	25'-8"
18'	3.7fc	30'-11"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	865	43.7
0-40	1365	69
0-60	1787	90.3
0-90	1960	99.1
90-180	18	0.9
0-180	1979	100

Candela Table

Vertical Angles	Candela
0	1193
5	1181
15	1096
25	965
35	822
45	362

Lumen Output Multipliers

Color Temperature: 2700K (0.87), 3000K (0.91), 3500K (0.96), 4000K (1.00)

PHOTOMETRICS

8" Sapphire II Series
3500 lumens

Type

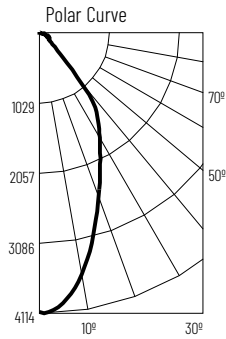
Project

Catalog No.

Notes

Test Information

Test Number: 727461
Part Number: NC2-831L3540SWSF
Beam Spread: 51° Spot
Lumens: 3820lm
Wattage: 43.98W
Efficacy: 87lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.76
Spacing Criteria (90°-270°): 0.74



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	114fc	5'-10"
9'	50.5fc	8'-8"
12'	28.4fc	11'-6"
15'	18.2fc	14'-5"
18'	12.6fc	17'-4"

Zonal Lumen Summary

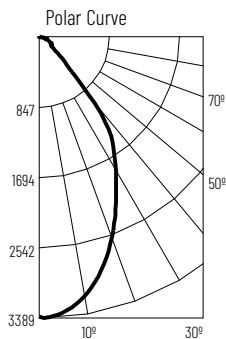
Zone	Lumens	% Luminaire
0-30	2172	56.9
0-40	3049	79.8
0-60	3559	93.2
0-90	3793	99.3
90-180	28	0.7
0-180	3820	100

Candela Table

Vertical Angles	Candela
0	4088
5	3977
15	3056
25	2094
35	1460
45	400

Test Information

Test Number: 727477
Part Number: NC2-831L3540MWSF
Beam Spread: 64° Narrow Flood
Lumens: 3816lm
Wattage: 44.29W
Efficacy: 86lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.92
Spacing Criteria (90°-270°): 0.9



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	93.8fc	7'-6"
9'	41.7fc	11'-4"
12'	23.5fc	15'-1"
15'	15fc	18'-10"
18'	10.4fc	22'-7"

Zonal Lumen Summary

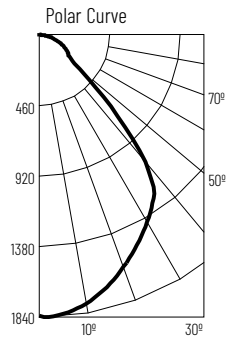
Zone	Lumens	% Luminaire
0-30	2119	55.5
0-40	3025	79.3
0-60	3553	93.1
0-90	3783	99.1
90-180	33	0.9
0-180	3816	100

Candela Table

Vertical Angles	Candela
0	3378
5	3338
15	2913
25	2183
35	1507
45	432

Test Information

Test Number: 727489
Part Number: NC2-831L3540FWSF
Beam Spread: 83° Flood
Lumens: 3149lm
Wattage: 43.85W
Efficacy: 72lpw
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'	51fc	10'-8"
9'	22.7fc	16'
12'	12.8fc	21'-5"
15'	8.2fc	26'-8"
18'	5.7fc	32'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1342	42.6
0-40	2133	67.7
0-60	2843	90.3
0-90	3128	99.3
90-180	21	0.7
0-180	3149	100

Candela Table

Vertical Angles	Candela
0	1836
5	1824
15	1698
25	1503
35	1291
45	635

Lumen Output Multipliers

Color Temperature: 2700K (0.87), 3000K (0.91), 3500K (0.96), 4000K (1.00)

PHOTOMETRICS

8" Sapphire II Series
4500 lumens

Type

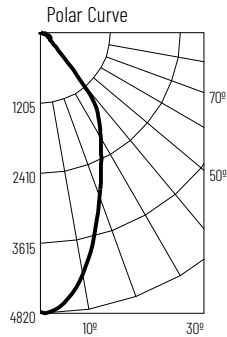
Project

Catalog No.

Notes

Test Information

Test Number: 727461
Part Number: NC2-831L4540SWSF
Beam Spread: 52° Spot
Lumens: 4630lm
Wattage: 56.3W
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

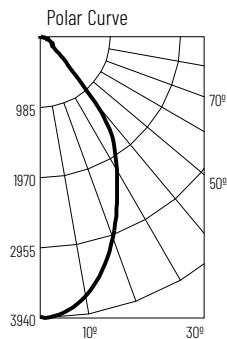
Zone	Lumens	% Luminaire
0-30	2573	55.6
0-40	3642	78.7
0-60	4298	92.8
0-90	4598	99.3
90-180	32	0.7
0-180	4630	100

Candela Table

Vertical Angles	Candela
0	4800
5	4667
15	3600
25	2485
35	1749
45	515

Test Information

Test Number: 727477
Part Number: NC2-831L4540MWSF
Beam Spread: 65° Narrow Flood
Lumens: 4596lm
Wattage: 56W
Efficacy: 82lpw
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'	109fc	7'-8"
9'	48.4fc	11'-7"
12'	27.2fc	15'-5"
15'	17.4fc	19'-4"
18'	12.1fc	23'-1"

Zonal Lumen Summary

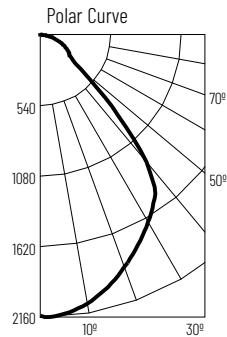
Zone	Lumens	% Luminaire
0-30	2475	53.8
0-40	3571	77.7
0-60	4266	92.8
0-90	4565	99.3
90-180	31	0.7
0-180	4596	100

Candela Table

Vertical Angles	Candela
0	3819
5	3864
15	3377
25	2555
35	1804
45	567

Test Information

Test Number: 727489
Part Number: NC2-831L4540FWSF
Beam Spread: 84° Flood
Lumens: 3762lm
Wattage: 56.2W
Efficacy: 67lpw
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'	59.7fc	10'-10"
9'	26.5fc	16'-2"
12'	14.9fc	21'-7"
15'	9.6fc	26'-11"
18'	6.6fc	32'-4"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1577	41.9
0-40	2514	66.8
0-60	3384	90
0-90	3737	99.3
90-180	25.2	0.7
0-180	3762	100

Candela Table

Vertical Angles	Candela
0	2150
5	2134
15	1991
25	1765
35	1521
45	786

Lumen Output Multipliers

Color Temperature: 2700K (0.87), 3000K (0.91), 3500K (0.96), 4000K (1.00)