

NC-631

6" Sapphire I High Lumen LED Reflector

Source: 85W or 105W LED
6000lm or 8000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

The Sapphire Series is an architectural grade LED high lumen downlight. The Sapphire Series features deep cone reflector and dimmable LEDs. Cree LEDs and Drivers make for a solid, tested package. The reflector has been designed for the high efficiency (LPW) while providing low aperture brightness. The Sapphire Series is proudly assembled in the USA. Cree TrueWhite technology with the highest performing commercially available LEDs and mixes in complementary light from red and unsaturated yellow LEDs to create beautiful, warm, white light. This patented approach enables precise color management to preserve reliable high color consistency over the life of the product.

FEATURES

- Cree TrueWhite® Technology
- 6000lm or 8000lm LED packages
- 3000K, 3500K or 4000K @ 90+ CRI
- 10-year limited warranty
- ENERGY STAR certified
- cULus Listed for Wet Locations

ELECTRICAL

Delivered Lumens / Wattage: L60 = 5594lm / 85W; L80 = 6542lm / 105W

Color Temperature: 3000K, 3500K, 4000K

Color Rendering Index: 90+CRI

Beam Spread: 74° Flood

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

Lifetime: 36,300 hours @ L70

COMPATIBLE FRAME-INS

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

CATALOG NO.	DESCRIPTION
NCAH-630	6" Universal New Construction Frame-In
NCHR-634	6" Remodel Frame-In

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.

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: Compatible with integral emergency test switch, must specify.

LABELS AND LISTINGS

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



PRODUCT IMAGES AND DIMENSIONS



BSF

BWSF

CSF



DBSF

DSF

DWSF



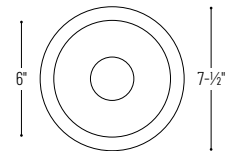
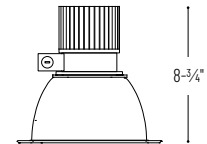
HBSF

HSF

HWSF



WSF



6" Sapphire I High Lumen LED Reflector - Dedicated Frame-In Required

Reflector Type	Lumens / Wattage	Color Temp.	Reflector / Flange Finish	Optional Emergency
NC-631 = Open Reflector	L60 = 6000lm / 85W L80 = 8000lm / 105W	30 = 3000K	BSF = Black / Self Flanged	EMI = Integral emergency test switch, must specify on frame-in
		35 = 3500K	BWSF = Black / White Flange	
		40 = 4000K	CSF = Specular Clear / Self Flanged	
	DBSF = Clear Diffused / Black Flange			
	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			

Example: **NC-631L6030WSF** = 6" Sapphire I Open Reflector, 6000lm / 85W LED, 3000K, White / Self Flange Finish

NCAH-630

6" Sapphire I High Lumen New Construction Frame-In

Source: 85W or 105W LED
6000lm or 8000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Architectural grade LED High Lumen Downlights featuring deep cone reflector. 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" apertures 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".

Minimum Clearances: Minimum clearance of 24" from thermal insulation and adjacent building component, and 48" between any recessed fixtures.

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: External thermal device is located on the junction box.

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

ELECTRICAL

Input Voltage: 120V or 277V

Operating Temperature: 0°C to 45°C

Lumens / Wattage: L60 = 6000lm / 85W; L80 = 8000lm / 105W

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 REFLECTOR

CATALOG NO.	DESCRIPTION
NC-631	6" Open Reflector

Emergency LED Driver (NEPK-07LEDUNV)

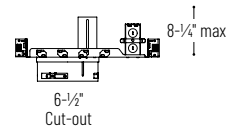
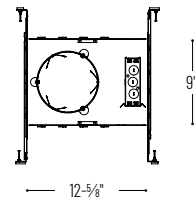
- Up to 7.5W emergency illumination with LEDs.
- Illumination Time: 90min
- Voltage: 120/277 VAC, 60Hz
- Output Voltage: 15.0-50.0 VDC
- Available with remote or integral test switch, must specify

LABELS AND LISTINGS

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



PRODUCT IMAGES AND DIMENSIONS



6" Sapphire I High Lumen New Construction Frame-In - Compatible with Sapphire I High Lumen Reflector

Lumens / Wattage	LED Module	Driver	Emergency
NCAH-630/60 = 6000lm / 85W	(blank) = Cree TrueWhite®	LE1 = 120V Input; 0-10V dimming	EM - Emergency Pack w/ Remote Test Switch
NCAH-630/80 = 8000lm / 105W		LE2 = 277V Input; 0-10V dimming	EMI - Emergency Pack w/ Integral Test Switch, must specify on reflector
		LE4 = 120V Input; Triac/ELV dimming	

Example: **NCAH-630/60LE1EM** = 6" Sapphire I Universal New Construction Frame-In, 6000lm / 85W, 120V Input, Emergency with Remote Test Switch

NCHR-634

6" Sapphire I High Lumen Remodel Frame-In

Source: 85W or 105W LED
6000lm or 8000lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Architectural grade LED High Lumen Downlights featuring deep cone reflector. 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" apertures 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: 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: Minimum clearance of 24" from thermal insulation and adjacent building component, and 48" between any recessed fixtures.

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: External thermal device is located on the junction box.

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

ELECTRICAL

Input Voltage: 120V or 277V

Operating Temperature: 0°C to 45°C

Lumens / Wattage: L60 = 6000lm / 85W; L80 = 8000lm / 105W

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 REFLECTOR

CATALOG NO.	DESCRIPTION
NC-631	6" Open Reflector

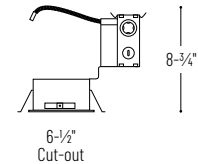
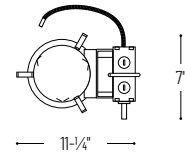
Emergency: Housing can be specified with connections for emergency battery installation. Requires top access. Must specify battery with remote test switch separately, [NEPK-07LEDUNV](#).

LABELS AND LISTINGS

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



PRODUCT IMAGES AND DIMENSIONS



6" Sapphire I High Lumen Remodel Frame-In - Compatible with Sapphire I High Lumen Reflector

Lumens / Wattage	LED Module	Driver
NCHR-634/60 = 6000lm / 85W	(blank) = Cree TrueWhite®	LE1 = 120V Input; 0-10V dimming
NCHR-634/80 = 8000lm / 105W		LE2 = 277V Input; 0-10V dimming
		LE4 = 120V Input; Triac/ELV dimming

Optional Accessories

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

Example: NCHR-634/60LE1 = 6" Sapphire I High Lumen Remodel Frame-In, 6000lm / 85W, 120V Input

PHOTOMETRICS

6" Sapphire I High Lumen Series

Type _____

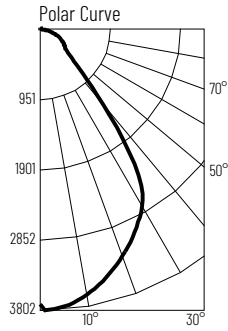
Project _____

Catalog No. _____

Notes _____

Test Information

Test Number: 727489
 Part Number: NC-631L6040WSF
 Lumens: 5594lm
 Wattage: 86W
 Efficacy: 65lpw
 CCT / CRI: 4000K / 90 CRI
 Beam Spread: 74°
 Spacing Criteria (0°-180°): 1.1
 Spacing Criteria (90°-270°): 1.12



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	104fc	9'
9'	46.3fc	13'-5"
12'	26.1fc	17'-11"
15'	16.7fc	22'-5"
18'	11.6fc	26'-11"

Zonal Lumen Summary

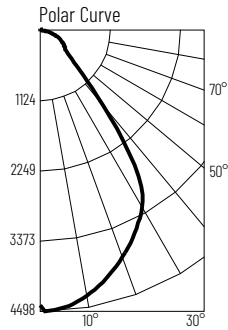
Zone	Lumens	% Luminaire
0-30	2692	48.1
0-40	4022	71.9
0-60	5023	89.8
0-90	5549	99.2
90-180	44.5	0.8
0-180	5594	100

Candela Table

Vertical Angles	Candela
0	3754
5	3703
15	3418
25	2978
35	2209
45	774

Test Information

Test Number: 727489
 Part Number: NC-631L8040WSF
 Lumens: 6542lm
 Wattage: 107.7W
 Efficacy: 61lpw
 CCT / CRI: 4000K / 90 CRI
 Beam Spread: 73°
 Spacing Criteria (0°-180°): 1.1
 Spacing Criteria (90°-270°): 1.14



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	122fc	8'-11"
9'	54.4fc	13'-5"
12'	30.6fc	17'-10"
15'	19.6fc	22'-4"
18'	13.6fc	26'-10"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	3153	48.2
0-40	4709	72
0-60	5869	89.7
0-90	6488	99.2
90-180	53.56	0.8
0-180	6542	100

Candela Table

Vertical Angles	Candela
0	4405
5	4334
15	4002
25	3487
35	2577
45	902