

DESCRIPTION

Recessed 3.5" aperture lens downlight luminaire utilizing an LED array. Housing is suitable for 2x8 residential or commercial constructions, airtight and can be used in direct contact with insulation. Housing platform + primary reflector + optical element combination supports various distributions, providing design flexibility. Use where high efficiency, excellent light control and low aperture brightness are demanded.

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

Frame

Galvanized steel plaster frame with integral bar hanger receivers. Setscrews provide positive horizontal locking. Integral gun sights facilitate the use of guide strings or laser lines. Shipped with overspray protector installed.

Housing

Steel housing painted matte black for a visually dark interior. Removable hinged top allows top access. All fasteners are captive.

Bar Hangers

Captive preinstalled bar hangers adjust from 8-1/2" to 24" wide; pass thru feature allows shortening without removal. Captive nail penetrates standard and engineered lumber. Mounting flange levels platform with ceiling. Integral clip attached directly to tee-bar.

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 3" vertically from above the ceiling.

Gaskets

Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

Adjustment Mechanism

Dynamic aiming rotates 365°, tilts 45° and locks in position. Angle markings assist in repeatable settings. Translating center beam optics aligns axis of primary reflector with aperture from nadir to 45°.

LED Module

LED array is field replaceable and conforms to emerging industry standards. Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation. Color rendering index 85 typical, accuracy within 3 SDCM provides excellent color. Proportional active cooling achieves L70B50 at 50,000 hours in IC and non IC applications.

Primary Optic

Borosilicate glass segmented optic with > 95% reflective multi-layer hard coating delivers a highly efficient and uniform beam. Various distributions are available and can be interchanged without tools. Elastomeric glare shield accepts theatrical color filters and diffusion films.

Media

Optional media holder accepts one or two 3.0mm thick color filters or beam modifying lens. Order media holder, color filters and lens separately.

Lower Reflector

Spun 0.04" thick aluminum parabolic contour with integral clear glass lens provides 60° lens and lens image cutoff. Available in a wide range of specular and semi-specular Alzak® finishes. Light trap eliminates spill light at edge of flange and reflector. Metal trim ring can be removed for painting and can be installed flush mount with optional flush mount collar accessory.

Trim Retention

Retained with two torsion springs holding the flange tightly to the finished ceiling surface and accommodates ceiling thickness from 1/2 - 1" thick.

Junction Box

(6) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs.

Driver

Integral 120 or 277V 60 Hz constant current driver provides noise free operation. Monitors LED array and reduces power if safe operating temperature of LED's is exceeded. Continuous, flicker-free dimming from 100% to 10%. Available with trailing edge phase cut, 0 -10V and DALI digital control interfaces.

Compliance

Type IC inherently protected, suitable for direct contact to insulation and cULus listed for wet locations. Restrictive airflow per ASTM E283. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 consumer limits. Contains no mercury or lead and RoHS compliant. Photometric testing is in accordance with IES LM79. LED life claims are in accordance with IES LM80 testing. Can be used for State of California Title 24 high efficacy luminaire compliance, reference the California Energy Commission Appliance Efficiency Database for current listings. Can also be used for international Energy Conservation Code (IECC) high efficiency luminaire compliance. Energy Star listed pending. Zhaga compliance pending.

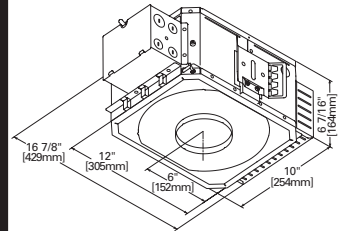
Warranty

5 year warranty.



**P3LED
E3SR**

**LED Lens Downlight
3.5" Aperture
900 Lumen Series**

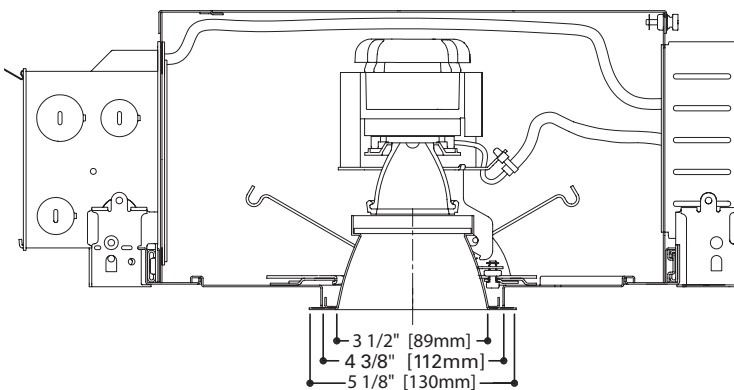


Energy Data

Lumens	900 Series	
Input Voltage (V)	120	277
Input Current (A)	0.18	0.09
Input Power (W)	20.4	22
THD: ≤ 20%		
PF: ≥ 0.90		
T Ambient -20 to +40°C		
Sound Rating: A		



Cooper Lighting is a member of the Zhaga Consortium



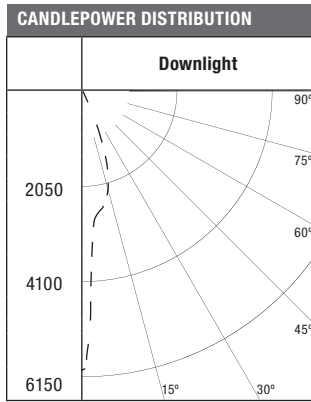
ORDERING INFORMATION

Complete luminaire consists of a housing platform and optical element. Housing platform can be ordered without primary optic. Order primary optics separately.
Example: P3LED9NFL258301E0-10V/TE = 3.5" aperture LED housing platform, 900 lumens nominal, 25° narrow flood 3,000°K, 85 CRI, 120V 60Hz, 0 – 10V and trailing edge 10% dimming
 E3SRH = 3.5" aperture lens downlight reflector, Semi-specular clear, matte white metal trim ring

Platform	Lumens	Distribution	Color	Driver	Optical Element	Finish	Flange Style	Accessories
P3LED					E3SR			
P3LED = 3.5" aperture LED housing platform P3LEDCP = 3.5" aperture LED housing platform, CCEA listed for City of Chicago plenum requirements	9 = 900 lumens (nominal)	[blank] = omit primary optic NSP10 = 10° beam SP15 = 15° beam NFL25 = 25° beam FL40 = 40° beam	830 = 85 CRI typical, 3,000° K CCT	1E 0-10V/TE = 120V 60Hz 0 – 10V and trailing edge 10% dimming 2E 0-10V = 277V 60Hz 0 – 10V – 10% dimming 1E DALI = 120V 60Hz DALI – 10% dimming	E3SR = 3.5" aperture lens downlight reflector	Finishes Alzak® Finishes C = Specular Clear H = Semi-Specular Clear WMH = Warm Haze G = Gold WH = Wheat WHH = Wheat Haze GP = Graphite GPH = Graphite Haze K = Cognac KH = Cognac Haze CC = Chocolate CCH = Chocolate Haze B = Black Painted Finishes MW = Matte white W = Gloss white	[Blank] = Metal trim ring, matte white SF = Self flanged SFWF = Self flanged, matte white flange	RG50NSP10 = 10° beam glass reflector, 50mm RG50SP15 = 15° beam glass reflector, 50mm RG50NFL25 = 25° beam glass reflector, 50mm RG50FL40 = 40° beam glass reflector, 50mm RG50MH = Media holder for 50mm reflector FMC3 = Flush mount collar accessory PLE3 = Plaster lip extender for up to 2" thick ceilings

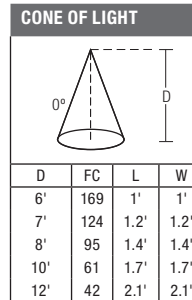
PHOTOMETRICS

P3LED E3SR



Test Number	P21965
Platform	P3LED
Element	E3SRC RG50FL40
Lumens	935
Efficacy	48.7 Lm/W

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-30	924	98.8
0-40	932	99.7
0-60	935	100.0
0-90	935	100.0
90-180	0	0.0
0-180	935	100.0



Lighting facts
A Program of the U.S. DOE

Light Output (Lumens) 1000
Watts 20.4
Lumens per Watt (Efficacy) 49

Color Accuracy
Color Rendering Index (CRI) 82

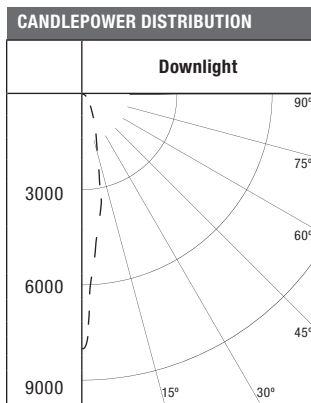
Light Color
Correlated Color Temperature (CCT) 3100 (Bright White)

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

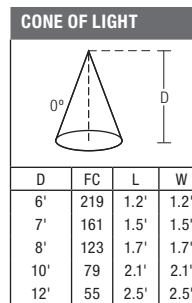
Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: F4QJ-YRZKNG (2/24/2012)
 Model Number: P3LED98301E0-10V/TEE3*[all Paint Finishes]**
 Type: Recessed downlight



Test Number	P21966
Platform	P3LED
Element	E3SRC RG50NFL25
Lumens	912
Efficacy	47.5 Lm/W

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-30	898	98.4
0-40	908	99.5
0-60	912	100.0
0-90	912	100.0
90-180	0	0.0
0-180	912	100.0



Lighting facts
A Program of the U.S. DOE

Light Output (Lumens) 1025
Watts 20.4
Lumens per Watt (Efficacy) 50

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Color Rendering Index (CRI) 82

Light Color
Correlated Color Temperature (CCT) 3100 (Bright White)

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Registration Number: F4QJ-YFCHZV (2/24/2012)
 Model Number: P3LED98301E0-10V/TEE3*[all Alzak Finishes]**
 Type: Recessed downlight