# DESCRIPTION

Recessed 2.0" wide directional oval luminaire utilizing a 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 and reflector types providing design flexibility. Use where excellent light control and low aperture brightness are demanded.

# 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 visually dark interior. Removable access panels allow splice inspection and service of all electrical components including LED module and driver from below the ceiling thru the aperture. Removable hinged top allow 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

Field replaceable module utilizes Cree® MT-G2 LED array and conforms to Zhaga standards for interchangeability. Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation. Color accuracy within 2 SDCM and optional 90 CRI provides excellent color. Passive cooling achieves L70 at 40,000 hours.

### **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

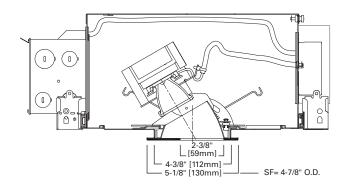
Optional media holder accepts one or two 2 inch [50mm] diameter L series color filters or beam modifying lens. Order media holder, color filters and lens separately.

#### Splay

Die cast aluminum splay with 2" oval aperture. 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



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Comments	Date
Prepared By	

# 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 constant current driver provides noise free operation. Continuous, flicker-free 1% dimming, available with 2 or 3 wire phase cut, and EcoSystem/DALI digital control interfaces. The DALI option is Fifth Light compatible.

# **Emergency Option**

Provides 90 minutes of standby lighting meeting most life safety codes for egress lighting. Remote charge indicator and test switch. The maximum battery pack ambient is 50°C.

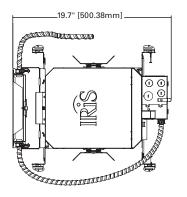
#### Compliance

Type IC inherently protected, suitable for direct contact with insulation and cULus listed for damp locations. Restrictive airflow per ASTM-E283. EMI/RFI emissions per FCC 47CFR Part 18 consumer limits. Contains no mercury or lead and RoHS compliant. Photometric testing in accordance with IES LM-79-08. Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11. Energy Star listed. Zhaga compliant. Meets EMI/ RFI emission per FCC 47CFR Part 18 consumer limits at 120V input. Lighting Facts Labeled.

# Warrantv

5 year warranty.

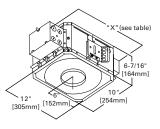
#### EM OPTION





# **P3LED09** E30VAL

LED Directional Oval 2.0" Aperture 900 Lumen Series



	Catalog #	X-Dimension
	P3LED09*E	16.4" (416mm)
	P3LED09*E010	16.25" (413mm)
Г	P3LED09*E5LT	16.25" (413mm)
Г	P3LED09*EDMX	16.25" (413mm)
Г	P3LED09*1ELTE	16.9"(429mm)
Г	P3LED09*EL3D	16.9" (429mm)

E Driver Option									
Input Voltage	120V	277V							
Input Current (A)	0.12	0.06							
Input Power (W)	14.3	15							
Inrush Current (A)	0.17	0.43							
THD: ≤ 20%									
PF: ≥ 0.90									
T Ambient: -20 to +4	0°C								
T Plenum: +65°C Ma	T Plenum: +65°C Max.								
Sound Rating: Class	A								
E010 Driver Option									
E010 D	river Opt	ion							
E010 D Input Voltage	river Opt 120V	277V							
Input Voltage	120V	277V							
Input Voltage Input Current (A)	120V 0.13	277V 0.06							
Input Voltage Input Current (A) Input Power (W)	120V 0.13 14.3	277V 0.06 15							
Input Voltage Input Current (A) Input Power (W) Inrush Current (A)	120V 0.13 14.3	277V 0.06 15							
Input Voltage Input Current (A) Input Power (W) Inrush Current (A) THD: ≤ 20%	120V 0.13 14.3 0.6	277V 0.06 15							



Sound Rating: Class A

Cooper Lighting Solutions is a founding member of the Zhaga Consortium





P3LED E3OVAL

P3LED E3OVAL

P3LED E3OVAL

Complete luminaire consists of a housing platform and optical element. Housing platform can be ordered without primary optic. Order primary optics separately.

# Example: P3LED09830E RG50FL40 E3OVALH

Platform	Lumens <sup>1</sup>	Distribution	Color	Driver		Options
P3LED = 3.5" Aperture IC, AT LED Housing Platform P3LEDCP = 3.5" Aperture IC, AT LED Housing Platform, CCEA listed for City of Chicago Plenum Requirements	09 = 900 Lumens (Nominal)	[Blank] = Omit Primary Optic NSP10 = 10° Beam SP15 = 15° Beam NFL25 = 25° Beam FL40 = 40° Beam	827 = 80 CRI Minimum, 2,700 K CCT 927 = 90 CRI Minimum, 2,700 K CCT 830 = 80 CRI Minimum, 3,000 K CCT 835 = 80 CRI Minimum, 3,500 K CCT 840 = 80 CRI Minimum, 4,000 K CCT	E = 120 – 277V 50/60 Leading or Trailing E Phase Cut 1% Dimm cut dimming at 1200 E010 = 120 – 277V 5 0 -10V 10% Dimming ED010 = 120 – 277V 0 -10V 1% Dimming E5LT = 120 – 277V 5 DALL 1% Dimming 1ELTE = 120V 60Hz 1 Edge 1% Dimming, A-Series EL3D = 120 – 277V 5 3-wire and EcoSyste Dimming, Lutron A-	dge hing (phase V only) 00/60Hz g 50/60Hz 50/60Hz Leading Lutron 0/60Hz em 1%	EM = Integral Battery Backup with Remote Test Switch and Indicator Light (Not available with 1ELTE and EL3D driver options)
Optical Elemen	t	Flange Style a	and Finish Options			Accessories
E30VAL						
E3OVAL = 2" Oval Apert Splay	POL = Po RAW = R	Matte White Die-cast Flange Dished Aluminum Die-cast Flange aw Aluminum Die-cast Flange atin Aluminum Die-cast Flange	l 3	R R R d A F P Z Z	G50SP15 = G50NFL25 = G50FL40 = 4 G50MH = M iameter L se ttaches dire MC3 = Flush LE3 = Plaste LM03 = Rep	<ul> <li>10° Beam Glass Reflector, 50mm</li> <li>15° Beam Glass Reflector, 50mm</li> <li>25° Beam Glass Reflector, 50mm</li> <li>00° Beam Glass Reflector, 50mm</li> <li>10° Beam</li></ul>

# ENERGY DATA

1ELTE Driver Option			EL3D D	river Op	tion	E5LT Driver Option			EDMX Driver Option			
Input Voltage	120V	277V	Input Voltage	120V	277V	Input Voltage	120V	277V	Input Voltage	120V	277V	
Input Current (A)	0.13		Input Current (A)	0.13	0.06	Input Current (A)	0.12	0.06	Input Current (A)	0.13	0.06	
Input Power (W)	15.7		Input Power (W)	15.6	16	Input Power (W)	14.3	15.2	Input Power (W)	15.1	16.1	
Inrush Current (A)	1.9		Inrush Current (A)	1.9	2	Inrush Current (A)	1.73	1.8	Inrush Current (A)	1.82	1.89	
THD: ≤ 20%			THD	≤2	20%	THD: ≤ 20%			THD	≤	20%	
PF: ≥ 0.90			PF	≥0.90	≥0.80	PF: ≥ 0.90 PF ≥0.90			≥0.60			
T Ambient: -20 to +40	)°C		T Ambient: -20 to +40	T Ambient: -20 to +40°C			T Ambient: -20 to +40°C			)°C		
T Plenum: +65°C Max. T Plenum: +65°C Max.				х.		T Plenum: +65°C Max.			T Plenum: +65°C Ma	х.		
Sound Rating: Class A			Sound Rating: Class	A		Sound Rating: Class A	4		Sound Rating: Class	A		

# PHOTOMETRICS

CANDLE	POWER DISTRIBUTION	
	Directional	
		90°
2000		75°
		60°
4000		45°
6000	15° 30°	
	LEGEND: 0-deg: 90-deg: 180-deg:	

Test Number	P106758	
Platform	P3LED09830E	
Element	E30VAL RG50SP15	
Lumens	757 Lm	
Efficacy	53.3 Lm/W	

30° H	ORIZO	NTAL I	PLANE			30	° VER	TICAL	PLAN		
	МН	FC	L	W	CB		D	FC	L	W	CB
⊢св⊣	5.5'	36.7	4.6	2.4	3.2		5.5'	147.6	2.1	1.6	9.5
	7'	22.7	5.9	3	4		7'	91.1	2.6	2	12.1
30° D	8'	17.3	6.8	3.6	4.6	30° - CB	8'	69.8	3.1	2.4	13.9
	9'	13.7	7.7	4	5.2	$    \langle V_{\ell'} \rangle^{\perp}$	9'	55.1	3.4	2.6	15.6
	10'	11.1	8.6	4.4	5.8		10'	44.7	3.8	3	17.3
	12'	7.7	10.2	5.4	6.9		12'	31	4.6	3.6	20.8

ZONAL LUMEN SUMMARY										
Lumens	%Fixture									
329	46.7									
611	86.8									
688	97.8									
704	100									
0	0									
704	100									
	Lumens 329 611 688 704 0									

SING	LE UNIT	FOOTC	ANDLE	S							
	3' FROM WALL (Distance From Fixture Along Wall)										
DD		1'	2'	3'	4'	5'	6'				
1'	1.2	0.3	0	0.2	0.2	0.1	0				
2'	3	0.7	0.1	0	0.1	0	0				
3'	27.7	6.2	1.5	0	0	0	0				
4'	109.3	17.1	2.9	0.1	0	0	0				
5'	100.3	28.8	5.1	0.7	0.1	0	0				
6'	63.3	24.5	6.2	0.9	0.3	0.1	0				
7'	32.8	14.3	5.4	0.7	0.3	0.1	0				
8'	14.3	7.9	3.8	0.5	0.3	0.1	0				
9'	6.6	4.4	2.5	0.4	0.2	0.1	0				
10'	3.3	2.4	1.5	0.4	0.2	0.1	0				



# DIG

CB

9.5

12.1

13.9

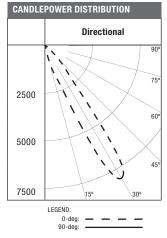
15.6

17.3

20.8

P3LED E3OVAL

# PHOTOMETRICS



Test Number	P106878	Г
Platform	P3LED09830E	
Element	E30VAL RG50NSP10	
Lumens	657 Lm	
Efficacy	46.3 Lm/W	

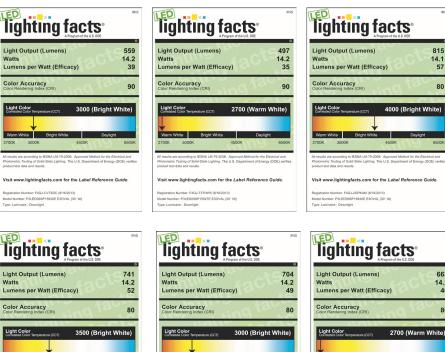
30° H	ORIZO	DNTAL	PLANE			30	° VER	TICAL I	PLAN	Ε
	D	FC	L	W	CB		D	FC	L	W
⊢св⊣	5.5'	37	4	2.2	3.2		5.5'	162.7	1.4	1.4
IN T	7'	22.8	5.1	2.8	4		7'	100.5	1.9	1.8
30° 1	8'	17.5	5.9	3.2	4.6	30° - 1 CB	8'	76.9	2.1	2
	9'	13.8	6.6	3.6	5.2	$    V_{i} \rangle^{\perp}$	9'	60.8	2.5	2.2
	10'	11.2	7.4	4	5.8		10'	49.2	2.8	2.4
	12'	7.8	8.9	4.8	6.9		12'	34.2	3.3	3

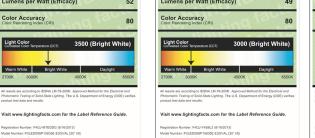
ZONAL LUMEN	ZONAL LUMEN SUMMARY								
Zone	Lumens	%Fixture							
0-30	299	48.9							
0-40	542	88.7							
0-60	602	98.5							
0-90	611	100							
90-180	0	0							
0-180	611	100							

	SING	LE UNIT	FOOTC	ANDLE	S						
		3' FROM WALL (Distance From Fixture Along Wall)									
	DD		1'	2'	3'	4'	5'	6'			
Ī	1'	0	0.1	0	0.1	0.1	0.1	0			
	2'	0.1	0.1	0.3	0.1	0	0	0			
	3'	31	2.2	0.3	0.1	0.1	0.1	0			
	4'	66.6	19.6	1.7	0	0.1	0.1	0.1			
	5'	111.4	24.5	5.7	0	0	0.1	0			
	6'	66.4	20.3	5.4	0.2	0	0	0			
	7'	24.4	11.7	4.5	0.1	0.1	0	0			
	8'	9.6	7.1	3.3	0.1	0	0	0			
	9'	5.5	4.5	2.4	0.1	0	0	0			
L	10'	3.4	2.9	1.7	0.2	0	0	0			

80

# LIGHTING FACTS







Please see LightingFacts.com for a complete listing of products.



Warm White Bright W

\*3LED08SP15835E E30VAL (30° HI)