# **PORTFOLIO™**

Low brightness 4-1/2-inch aperture open wall wash downlight for use with 13W Quad tube 4-pin compact fluorescent lamps. The Geometric reflector maximizes flux toward the wall and is spectrally neutral leaving the color temperature and color rendering unchanged. Available in single, double and corner wall wash versions. The one piece design eliminates light leaks at the ceiling. Standard features include low iridescent finish on all reflectors and venting to ensure maximum lamp life and lumen output. Optics offer unparalleled performance with uniform illuminance on wall, no flashback, and glare-free downlighting. Open downlight, lensed, and open wall wash trims are interchangeable within the same housing.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

### **SPECIFICATION FEATURES**

#### Reflector

Injection molded Geometric Reflector for Uniform Vertical Illumination is vacuum metallized with polysiloxane hardcoat finish. One piece spun macrofocal parabolic downlight reflector, .050 thick aluminum, available in a variety of Alzak® finishes. Positive reflector mounting pulls trim tight to ceiling.

### **Trim Ring Options**

Self flanged or molded white trim ring. Rimless or metal trim ring accessories available.

#### **Socket Cap**

One piece vented and finned die cast aluminum cap for maximum thermal performance.

### **Housing Mounting Frame**

One piece precision die cast aluminum 1-1/2" deep collar accommodates varying dimensions of ceiling materials.

#### **Universal Mounting Bracket**

Accepts 1/2" EMT, C Channel, T bar fasteners, and bar hangers. Adjusts 5" vertically from above or below ceiling.

### **Conduit Fittings**

Die cast screw tight connectors.

### **Junction Box**

Listed for eight #12AWG (four in, four out) 90°C conductors feed through branch wiring. 1/2" and two 3/4" pry outs. Positioned to allow straight conduit runs. Access to junction box by removing reflector.

#### Socket

4-pin G24q1 base with fatigue free stainless steel lamp spring ensures positive lamp retention.

### **Electronic Ballasts**

Electronic ballast provides full light output and rated lamp life. Provides flicker free and noise free operation and starting. End of lamp life protection is standard.

#### Labels

cULus listed, standard damp label.



C4013 4010/4011 4020/4021 4030/4031

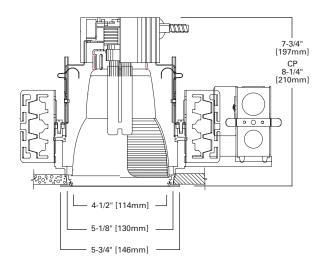
13W Quad Compact Fluorescent

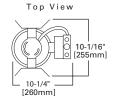
4-Inch Open Wall Wash

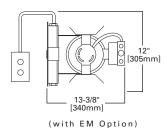
ENERGY DATA						
13W TT	13W TTT 4-pin					
Ballast: E	Electronic					
120V Input Watts: 16	Line Amps: 0.13					
277V Input Watts: 16	Line Amps: 0.06					
Power Factor: >0.99	Power Factor: >0.99 THD: <10%					
Min. Starting Temperature: -10°C (15°F)						
Sound Rating: C	Sound Rating: Class A Standards					

NOTES: Accessories should be ordered separately. For additional options, please consult your Cooper Lighting Representative.

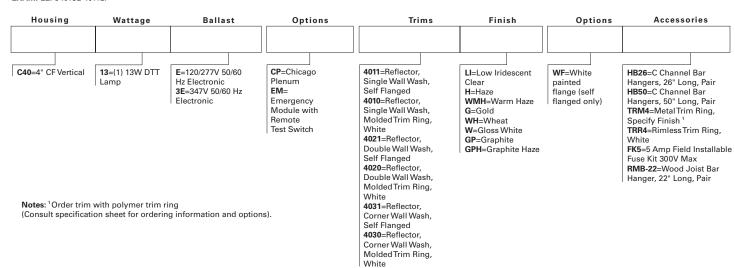
Alzak is a registered trademark of Aluminum Company of





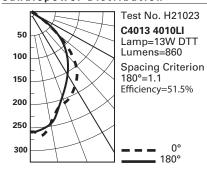


#### **EXAMPLE**: C4013E 4011LI



### **PHOTOMETRICS**

# Candlepower Distribution



Сa	n d	lе	ро	w	e r

Candiepower						
	0°	180°				
Deg.	Wall	Dwnlt				
0	261	261				
5	261	272				
15	219	224				
25	182	212				
35	149	181				
45	114	129				
55	63	52				
65	35	1				
75	13	0				
85	4	0				
90	0	0				

Average Luminance CD/SQM

Deg.	0° Wall	180° Dwnlt
45	15638	17704
55	10769	8849
65	8068	300
75	4931	0
85	4248	0

Single Fixture 2'6" From Wall

		Distance From Fixture Along Wall						
DD		1'	2'	3'	4'	5'	6'	
1	3	3	2	1	0	0	0	
2	6	6	3	1	1	0	0	
3	6	5	3	2	1	1	0	
4	4	4	3	2	1	1	0	
5	3	2	2	2	1	1	1	
6	2	2	1	1	1	1	1	
7	1	1	1	1	1	1	0	
8	1	1	1	1	1	0	0	
9	1	1	1	1	0	0	0	
10	1	1	1	0	0	0	0	

# 2' Distance From Wall

	Spacing Between Fixtures					
DD	-	3'			4'	
1	11	12	11	7	4	7
2	19	20	19	11	8	11
3	15	16	15	9	8	9
4	11	11	11	7	6	7
5	7	7	7	5	5	5
6	5	5	5	4	4	4
7	4	4	4	3	3	3
8	3	3	3	2	2	2
9	2	2	2	2	2	2
10	2	2	2	1	1	1

2'6" Distance From Wall

	Spacing Between Fixtures						
DD	-	3'		4'			
1	_5	5	5	4 3 4			
2	9	9	9	7 6 7			
3	10	10	10	8 7 8			
4	8	8	8	6 6 6			
5	6	6	6	5 5 5			
6	_5	5	5	4 4 4			
7	3	4	3	3 3 3			
8	3	3	3	2 2 2			
9	2	2	2	2 2 2			
10	2	2	2	1 2 1			

# 3' Distance From Wall

	Spacing Between Fixtures					
DD		4'		-	6'	
1	3	3	3	2	2	2
2	6	6	6	5	5	5
3	8	9	8	7	6	7
4	7	8	7	6	6	6
5	6	6	6	5	5	5
6	5	5	5	4	4	4
7	4	4	4	3	3	3
8	3	3	3	2	3	2
9	2	2	2	2	2	2
10	2	2	2	2	2	2

### Notes:

- Illuminance values for multiple fixtures are based upon the center two units of a four unit array. Footcandle values are centerline of fixtures and centered between fixtures.
- Illuminance values are cosine corrected initial values with no contribution from inter reflections from other room surfaces. Total illumination may increase from contributions from other surfaces.
- Changing fixture spacing will affect illuminance level.

 $\label{eq:NewFc} \text{New Fc-} \frac{\text{Existing Spacing}}{\text{New Spacing}} \;\; \text{x Average Table Fc Level}$ 

• When selecting colored cones option, only downlight cone is colored; the wall wash reflector is specular clear. This allows the color (CRI, °K) of the light source to be unaffected and maximizes lumen output.

