## SPECIFICATION FEATURES

## **PORTFOLIO**

A low brightness 4" diameter wallwash downlight for use with A19 lamps (100W max, frosted lamps recommended). There is a 55° cutoff to lamp and lamp image in the downlight portion of the distribution. Unit provides a smooth vertical wash of light without flashback. The modular housing system supports various downlight and wallwash reflectors.

## SPECIFICATION FEATURES

## A ··· Reflector

Patented injection molded stepped kicker reflector is vacuum metallized with hardcoat finish. Positive reflector mounting pulls trim tight to ceiling. The housing is pre-set to allow reflector to be installed at 90° increments, aligned with fixture axes. Relocation of mounting screws and use of fine adjustment mechanism enable 360° adjustment. Reflectors are clearly

labeled to indicate correct orientation relative to wall(s).

### B...Trim Ring

High impact polymer with satin white finish or self flanged reflector. Metal trim ring and rimless trim ring accessories available (See Options and Accessories).

## C...Socket Cap

One piece heat dissipating die-cast aluminum.

## **D**...Housing

Precision die-cast aluminum 1 1/2" (38mm) deep collar. Optical assembly adjusts within the housing to accommodate ceilings up to 3 1/2" (89mm)

## thick.E...Universal Mounting Bracket

Accepts 1/2" EMT, C Channel, T bar fasteners and hanger bars. Provides 5" total adjustment.

## F...Conduit Fittings

Die-cast screw tight connectors.

## G...Junction Box

U.L. listed for four in, four out #12 at 90°C pull through branch wiring. Pry-outs for four 1/2" and two 3/4" conduits. Access to junction box by removing reflector.

## H...Socket

Medium base porcelain socket with nickel plated screw shell.

#### Insulation Detector

Self-resetting insulation detector opens circuit if insulation is improperly installed.

U.L. listed, C.S.A. certified, damp location, IBEW union made.

### Options & Accessories

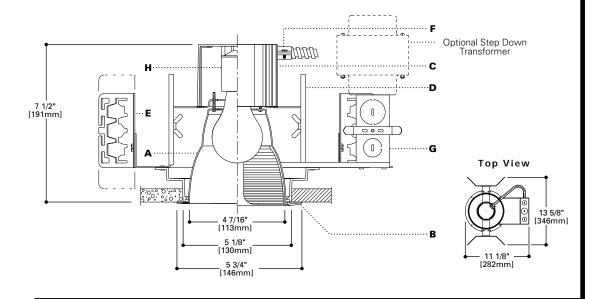
TRM=Metal Trim Rings to replace polymer trim ring TRR=Rimless Trim Rings for minimal flange appearance in plaster ceilings



HD4-4510

100W МΔХ A 19

4" WALL WASH DOWNLIGHT



## NOTES:

Accessories should be ordered separately. For additional options please consult your Cooper Lighting Representative. Alzak is a registered trademark of Aluminum Company of America.

ORDERING INFORMATION SAMPLE NUMBER: HD4-4510-LI

Complete unit consists of housing and reflector.

## Housing HD4

## HD4 HD4CP\* \*Chicago Plenum (supplied with gasketed wiring enclosure to comply with Chicago electrical

plenums)

# Reflector

Wallwash with Polymer Trim Ring 4510=Single 4520=Double 4530=Corner

Self Flanged Wallwash 4511=Single 4521=Double 4531=Corner

## Finish

LI=Specular Clear H=Haze S=Straw WH=Wheat

Clear Alzak finish available on special order. Change finish suffix to C

## Accessories

Metal Trim Rings TRM4-P=White TRM4-MB=Black Rimless Trim Rina TRR4

1 1/2" C Channel Bar Hangers (Set of Two) HB26=26" Long HB50=50" Long

Step Down Transformer H277=277V to 120V, 150VA Max. Mounts to Knockout on J-Box.

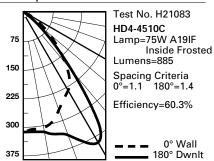






## **PHOTOMETRICS**

## Candlepower Distribution



## Candlepower

	~ P ~ ~ .	
Deg.	0° Wall	180° Dwnlt
0	314	314
5	304	316
15	293	328
25	243	372
35	194	295
45	113	87
55	58	12
65	27	1
75	8	0
85	1	0
90	0	0

## Average Luminance CD/SQM

	0°	180°
Deg.	Wall	Dwnlt
45	15541	12014
55	9817	1987
65	6201	184
75	2861	0
85	1453	0

## Single Fixture 2'6" From Wall

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

## 2' Distance From Wall

	Spacing Between Fixtures						
DD	2'			•	4'		
1	7	7	7	6	1	6	
2	15	14	15	10	5	10	
3	15	15	15	9	6	9	
4	12	12	12	6	6	6	
5	9	9	9	5	5	5	
6	6	7	6	4	4	4	
7	5	5	5	3	3	3	
8	3	4	3	2	2	2	
9	3	3	3	2	2	2	
10	2	2	2	2	2	2	

## 2'6" Distance From Wall

	Casaina Daturasa Firturas						
	Spacing Between Fixtures						
DD	-	— 3' —		■	— 4' —		
1	3	2	3	3	1	3	
2	7	6	7	6	4	6	
3	9	8	9	7	6	7	
4	8	8	8	6	6	6	
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	3	3	3	
9	3	3	3	2	2	2	
10	2	2	2	2	2	2	

## 3' Distance From Wall

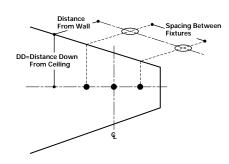
	Spacing Between Fixtures						
DD	-	— 3' —		-	— 4' —		
1	2	1	2	1	1	1	
2	5	4	5	4	3	4	
3	7	6	7	5	5	5	
4	7	7	7	6	5	6	
5	7	7	7	5	5	5	
6	5	6	5	4	4	4	
7	4	5	4	4	4	4	
8	4	4	4	3	3	3	
9	3	3	3	2	3	2	
10	2	2	2	2	2	2	

## 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.

New Fc=  $\frac{\text{Existing Spacing}}{\text{New Spacing}}$  x Average Table Fc Level

- When selecting colored cones option, only downlight cone is colored; the wall wash reflector is natural Alzak. This allows the color (CRI, °K) of the light source to be unaffected and maximizes lumen output.
- Illuminance in footcandles. Lux conversion factor: 1FC=10.76 LUX



Note: Specifications and Dimensions subject to change without notice.

Visit our website at www.cooperlighting.com

