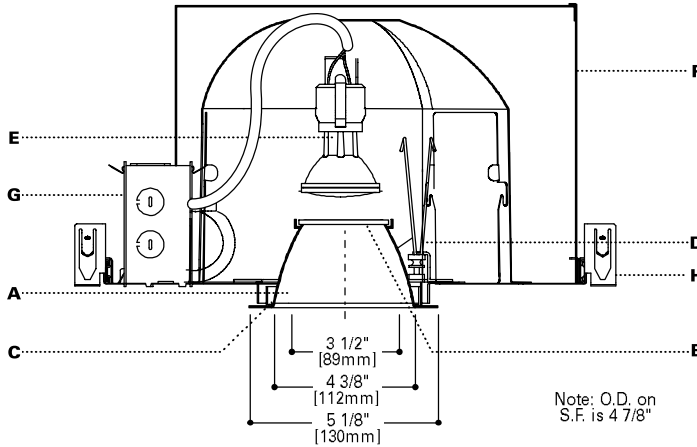


DESCRIPTION

Specification grade 50 watt PAR20 downlight shower fixture rated for direct contact with insulation. Optics provide glare free 50° cutoff to lamp and lamp image. Accommodates PAR20 and

PAR16 lamps. **Optical element can be changed after installation to provide a variety of distributions. e.g. into an Adjustable**



SPECIFICATION FEATURES

A...Reflector

.040 thick aluminum spun parabolic reflector in Clear, Gold, Haze, Warm Haze, Black Alzak® finish, painted gloss white or matte white. Special cone colors listed below.

B...Lens

.125 thick tempered glass protects lamps from direct spray of water and is retained during relamping.

C...Flange

Self flange reflector or die-cast flange with either matte white or clear coat finish. Die-cast flanges are easily removed for field painting. Elements are keyed for proper insertion.

D...Attachment

Positive torsion springs pull flange tight to ceiling. Mechanical light trap eliminates spill light at edge of flange or reflector.

E...Socket

Nickel plated porcelain socket. Two position socket ensures consistent lamp position.

F...Frame/Housing

Hot dipped galvanized 20 gauge steel frame with built in 1/2 inch plaster lip. Aluminum .032 thick housing allows for heat dissipation and reduces weight. Matte black housing interior.

G...Junction Box

18 cubic inches, listed for 4#12 AWG or 6#14 AWG 90° C additional feed through conductors, has six 1/2 inch pryouts.

H...Bar Hangers

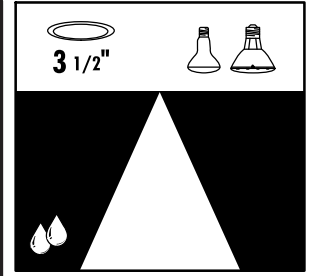
No Flex® bar hangers with positive locking, for use with joists spaced up to 24" O.C. ship with platform. For use in T-bar ceilings order accessory MBCLP. Nailless barb and locator lip provide consistent installation height.

I...Codes

Thermally protected, IP labeled, for use in direct contact with insulation. Meets Washington State Air tight requirements, 1995 CABO Model Energy Code.

J...Labels

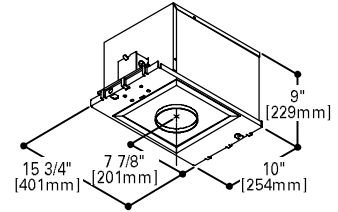
UL and cUL listed, standard wet label, IBEW union made.



**P3120
E3SR**

**50 W PAR20
50 W R20**

**3" DOWNLIGHT
SHOWER**



Ceiling Cutout
4 3/8" [112mm]

ORDERING INFORMATION

Complete unit consists of a platform and element

Platform	Optical Element	Finish		Flange	Accessories
P3120	E3SR				
P3120 = 3" Airtight IC Rated Housing	E3SR = 3" PAR Downlight Shower	Standard C=Clear H=Haze G=Gold WMH=Warm Haze W=Gloss White MW= Matte White B= Black Custom K=Cognac KH=Cognac Haze CC=Chocolate	Custom Cont. CCH=Chocolate Haze BU=Blush BUH=Blush Haze GP=Graphite GPH=Graphite Haze PN=Pine PNH=Pine Haze SK=Sky SKH=Sky Haze	Blank= Matte White die-cast SF= Self Flange RAW= Natural Die-cast SFWF= Self Flange Painted White	MBCLP = 40 Push On T Bar Clips (for 10 Units) PLE3 = Plaster Lip Extension for Max 2" Thick Ceiling

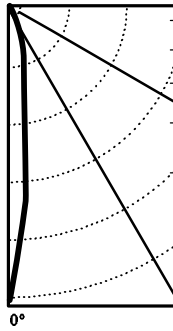
PHOTOMETRICS

P3120-E3SRC

Test No. H21293
 Lamp:50PAR20/H/SP10
 Lumens: 560
 Cutoff: 50°
 Spacing: 0.1
 Efficiency: 59.4%
 Unit LPW: 10.64

Candelas	
Vertical Angle	CD
90	0
85	1
75	1
65	1
55	1
45	1
35	5
25	71
15	428
5	1995
0	5229

Distribution



Luminance

Degree	cd/m ²
85°	1848
75°	622
65°	381
55°	281
45°	228

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
4'6"	83	2'0"
5'6"	56	2'6"
6'6"	40	3'0"
8'0"	26	4'0"
10'0"	17	5'0"
12'0"	12	6'0"

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	331	58.0	97.7
0-40	334	58.6	98.6
0-60	336	58.9	99.1
0-90	339	59.4	100.0
90-180	0	0.0	0.0
0-180	339	59.4	100.0

Coefficient of Utilization

Ceiling Reflectance	80%				70%		50%		30%		0%
	70	50	30	10	50	10	50	10	50	10	0
Room Cavity Ratio											
0	71	71	71	71	69	69	66	66	63	63	59
1	68	67	66	65	66	64	64	62	61	60	58
2	66	64	63	61	63	61	62	59	60	58	56
3	65	62	60	59	61	58	60	57	59	56	55
4	63	60	58	56	60	56	58	56	57	55	54
5	62	58	56	55	58	54	57	54	56	54	53
6	60	57	55	53	57	53	56	53	55	52	52
7	59	56	53	52	55	52	55	52	54	51	51
8	58	54	52	51	54	51	53	50	53	50	50
9	56	53	51	50	53	50	52	49	52	49	49
10	55	52	50	49	52	49	51	49	51	48	48

Notes and Formulas:

Cone of Light:

- Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
- Footcandle values are initial. Apply appropriate light loss factors where necessary.

CU Notes/Formulas:

- maintained illuminance = $\frac{\text{lamp lumens} \times \text{CU} \times \text{light loss factors}}{\text{room area}}$
- total number of luminaires = $\frac{\text{total room area} \times \text{maintained illuminance}}{\text{lamp lumens} \times \text{CU} \times \text{light loss factors}}$
- CU data based on 20% effective floor cavity reflectance.

Note: Specifications and Dimensions subject to change without notice.

Visit our web site at www.cooperlighting.com

