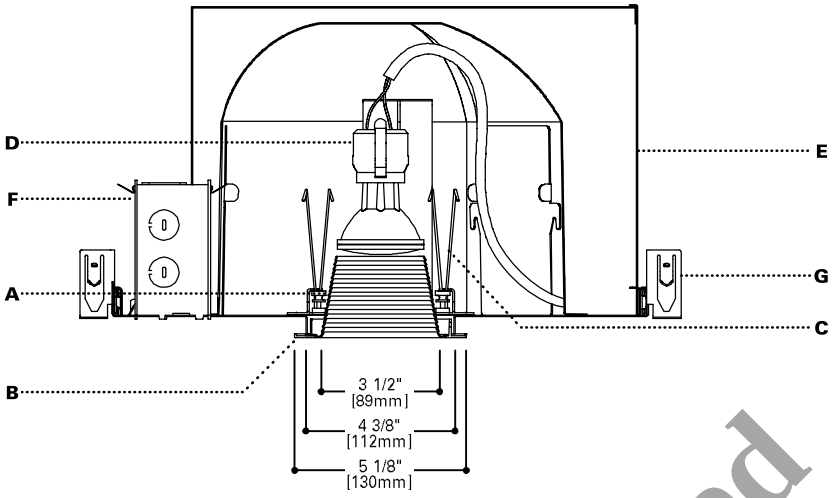
IRiS

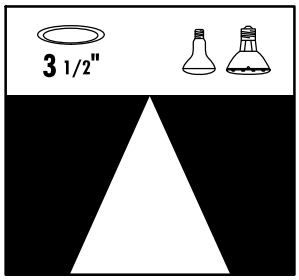
CATALOG#:

TYPE:

DESCRIPTION

Specification grade fixture rated for direct contact with insulation. The 50° cutoff to lamp provides a glare free, smooth distribution of light. Accommodates PAR 20, PAR16, R20, and BR19 lamps. Halogen lamps provide excellent color and long life. **Optical element can be changed after installation to provide a variety of distributions. e.g. into an Adjustable**

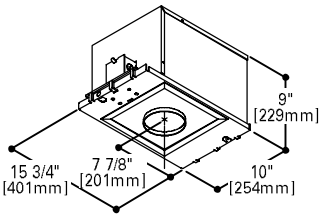




P3120
E3P20BB

50W PAR20
60W PAR16
50W BR19
50W R20

3" DOWNLIGHT BAFFLE



Ceiling Cutout
4 3/8" (112mm)

SPECIFICATION FEATURES

A···Baffle
.040 thick aluminum spun sawtooth baffle in black or white powdercoat finish.

B···Flange
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.

C···Attachment
Positive torsion springs pull flange tight to ceiling. Mechanical light trap eliminates spill light at edge of flange or baffle.

D···Socket
Nickel plated porcelain socket. Two position socket ensures consistent lamp position.

E···Frame/Housing
Hot dipped galvanized 20 gauge steel frame with built in 1/2 inch plaster lip. Gunsights allow for consistent alignment. Aluminum .032 thick housing allows for heat dissipation and reduces weight. Matte black housing interior.

F···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.

G···Bar Hangers
No Flex® bar hangers with positive locking, for use with wood, engineered wood and steel frame joists spaced up to 24" O.C. shipped with platform. For use in T-bar ceilings order accessory MBCLP. Nailess barb and locator lip provide consistent installation height.

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

Labels
UL and cUL listed, standard damp label, IBEW union made.

ORDERING INFORMATION

Complete unit consists of a platform, and element

Platform	Optical Element	Finish	Flange	Accessories
P3120				
P3120=3" Airtight IC Rated Housing	E3P20= 3" PAR/R Downlight Baffle	BB=Black Baffle WB=White Baffle	Blank=White Die-cast RAW=Natural Die-cast	MBCLP=40 Push On T Bar Clips (for 10 Units) PLE3=Plaster Lip Extension for Max 2" Thick Ceiling FMC3= Flush Mount Collar

Consult your representative for ordering components separately. For additional options please consult factory.

PHOTOMETRICS

P3120-E3P20BB

Test No. H21057

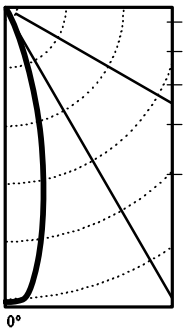
Lamp: 50PAR20NFL
Lumens: 560

Cutoff: 50°
Spacing: 0.5
Efficiency: 62.0%
Unit LPW: 6.94

Candelas

Vertical Angle	CD
90	0
85	0
75	0
65	0
55	1
45	1
35	8
25	148
15	595
5	1261
0	1312

Distribution



Luminance

Degree	cd/m²
85°	0
75°	0
65°	0
55°	281
45°	228

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
4'6"	65	2'0"
5'6"	43	2'6"
6'6"	31	3'0"
8'0"	20	4'0"
10'0"	13	5'0"
12'0"	9	6'0"

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	339	60.5	97.7
0-40	345	61.7	99.5
0-60	347	62.0	100.0
0-90	347	62.0	100.0
90-180	0	0.0	0.0
0-180	347	62.0	100.0

Coefficient of Utilization

Ceiling Reflectance	80%				70%		50%		30%		0%
Wall Reflectance	70	50	30	10	50	10	50	10	50	10	0
Room Cavity Ratio											
0	74	74	74	74	72	72	69	69	66	66	62
1	72	71	70	69	69	68	67	66	65	64	61
2	70	68	66	65	67	64	65	63	63	62	60
3	68	66	64	63	65	62	64	61	62	60	59
4	67	64	62	61	64	60	62	60	61	59	58
5	65	62	60	59	62	59	61	58	60	58	57
6	64	61	59	58	61	57	60	57	59	57	56
7	63	60	58	56	59	56	59	56	58	55	55
8	61	58	56	55	58	55	57	55	57	54	54
9	60	57	55	54	57	54	56	53	56	53	53
10	59	56	54	53	56	53	55	52	55	52	52

P3120-E3P20WB

Test No. H21062

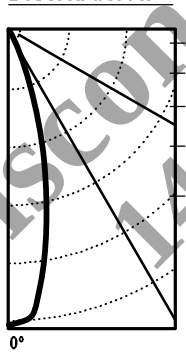
Lamp: 50PAR20NFL
Lumens: 560

Cutoff: 50°
Spacing: 0.5
Efficiency: 66.0%
Unit LPW: 7.39

Candelas

Vertical Angle	CD
90	0
85	1
75	2
65	4
55	7
45	7
35	14
25	153
15	578
5	1258
0	1373

Distribution



Luminance

Degree	cd/m²
85°	1848
75°	1244
65°	1524
55°	1965
45°	1594

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
4'6"	68	2'0"
5'6"	45	2'6"
6'6"	32	3'0"
8'0"	21	3'6"
10'0"	14	4'6"
12'0"	10	5'5"

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	341	60.9	92.2
0-40	351	62.7	94.9
0-60	362	64.7	97.9
0-90	370	66.0	100.0
90-180	0	0.0	0.0
0-180	370	66.0	100.0

Coefficient of Utilization

Ceiling Reflectance	80%				70%		50%		30%		0%
Wall Reflectance	70	50	30	10	50	10	50	10	50	10	0
Room Cavity Ratio											
0	79	79	79	79	77	77	73	73	70	70	66
1	76	75	73	72	73	71	71	69	68	67	64
2	74	72	70	68	70	67	68	66	67	64	62
3	72	69	67	65	68	65	67	64	65	63	61
4	70	67	64	63	66	62	65	62	64	61	59
5	68	65	62	60	64	60	63	60	62	59	58
6	67	63	61	59	63	59	62	58	61	58	57
7	65	61	59	57	61	57	60	57	59	56	55
8	64	60	57	56	59	55	59	55	58	55	54
9	62	58	56	54	58	54	57	54	56	53	53
10	61	57	55	53	57	53	56	53	56	53	52

Notes and Formulas:

Luminance: To convert cd/m² to footlamberts, multiply by 0.2919

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. See page 64-65 of catalog.

CU Notes/Formulas:
- maintained illuminance=$\frac{\text{lamp lumens x CU x light loss factors}}{\text{room area}}$
- total number of luminaires=$\frac{\text{total room area x maintained illuminance}}{\text{lamp lumens x CU x light loss factors}}$
- 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