

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: IRiS

Report Number: H21057

Luminaire Tested: **PN3120-E3P20BB**

Issue Date: 03/03/2020

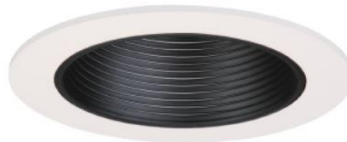
**Test Information**

Test Method: LM-79-08  
Report Number: H21057  
Test Lab:  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: IRiS  
Catalog Number: PN3120-E3P20BB  
Description: IRIS 3" DIA RECESSED DOWNLIGHT  
BLACK BAFFLE  
Light Source: 50PAR20/NFL 50 WATTS 560 LUMENS  
PAR20 NARROW FLOOD  
Ballast/Driver: -

**Summary**

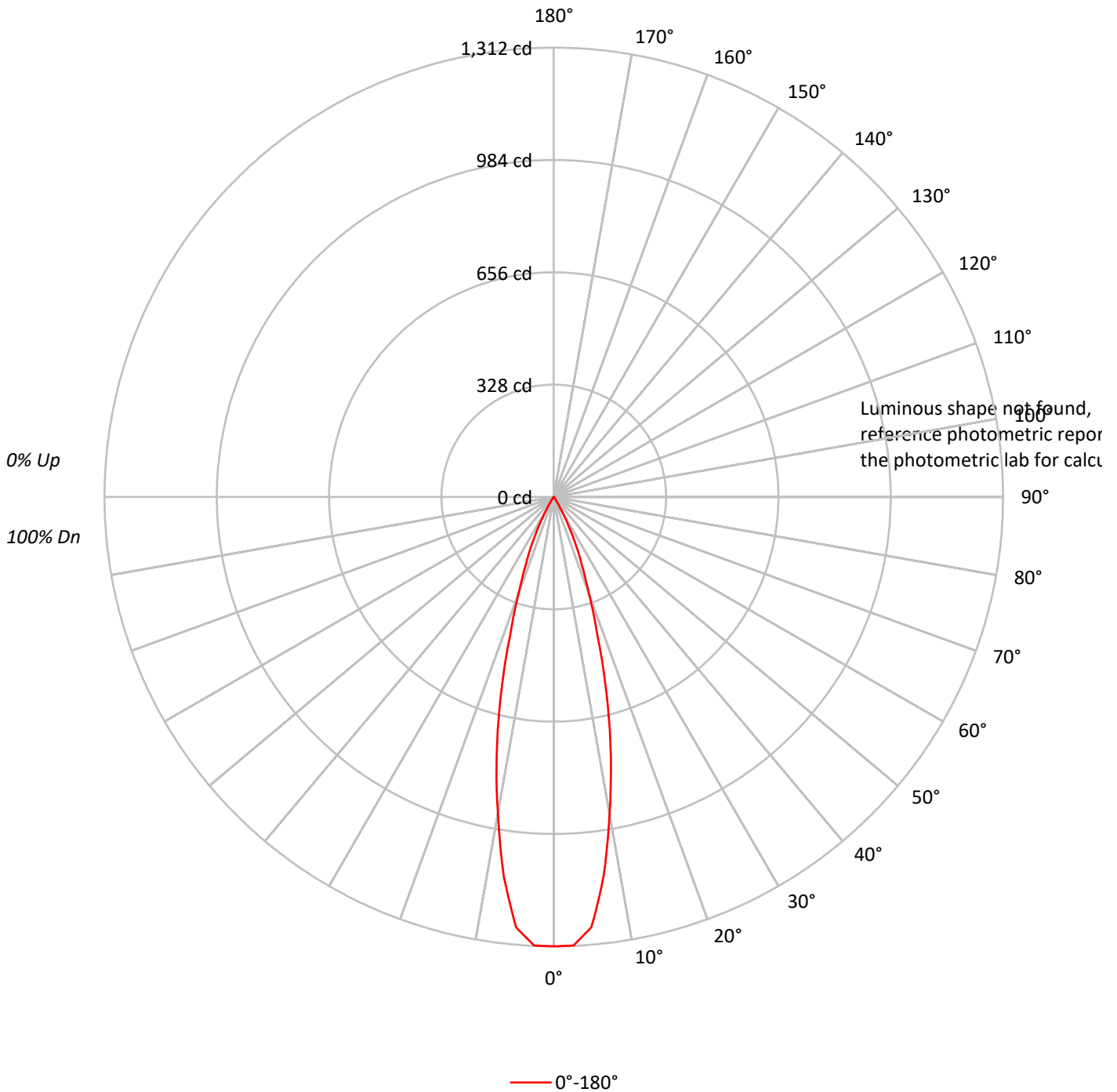
Lumens per Lamp: 560 (1 lamp)  
Luminaire Lumens: 347.1 lumens  
Efficiency: 62.0%  
Efficacy: 6.9 lumens/watt  
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.47  
Luminous Opening: (L: 0 ' x W: -0.29 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	74	74	74	74	72	72	72	72	69	69	69		66	66	66		63	63	63	62
1	71	70	69	68	70	69	68	67	66	65	65		64	63	63		62	61	61	60
2	69	67	65	63	68	66	64	63	64	62	61		62	61	60		60	59	59	58
3	67	64	62	60	66	63	61	59	61	60	58		60	59	57		59	58	57	56
4	65	61	59	57	64	61	58	57	59	57	56		58	57	55		57	56	55	54
5	63	59	56	54	62	58	56	54	57	55	54		56	55	53		56	54	53	52
6	61	57	54	52	60	56	54	52	56	53	52		55	53	52		54	52	51	51
7	59	55	52	50	58	55	52	50	54	52	50		53	51	50		53	51	50	49
8	57	53	51	49	57	53	50	49	52	50	48		52	50	48		51	49	48	48
9	56	52	49	47	55	51	49	47	51	49	47		50	48	47		50	48	47	46
10	54	50	47	46	54	50	47	46	49	47	46		49	47	46		49	47	45	45

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	109.3	31.5	19.5	0°	1312	
10°-20°	161.2	46.4	28.8	5°	1261	109
20°-30°	67.6	19.5	12.1	15°	595	161
30°-40°	7.4	2.1	1.3	25°	148	68
40°-50°	0.9	0.2	0.2	35°	8	7
50°-60°	0.8	0.2	0.1	45°	1	1
60°-70°	0.0	0.0	0.0	55°	1	1
70°-80°	0.0	0.0	0.0	65°	0	0
80°-90°	0.0	0.0	0.0	75°	0	0
90°-100°	0.0	0.0	0.0	85°	0	0
100°-110°	0.0	0.0	0.0	90°	0	0
110°-120°	0.0	0.0	0.0	95°	0	0
120°-130°	0.0	0.0	0.0	105°	0	0
130°-140°	0.0	0.0	0.0	115°	0	0
140°-150°	0.0	0.0	0.0	125°	0	0
150°-160°	0.0	0.0	0.0	135°	0	0
160°-170°	0.0	0.0	0.0	145°	0	0
170°-180°	0.0	0.0	0.0	155°	0	0
0°-30°	338.1	97.4	60.4	165°	0	0
0°-40°	345.5	99.5	61.7	175°	0	0
0°-60°	347.1	100.0	62.0	180°	0	0
0°-90°	347.1	100.0	62.0			
90°-120°	0.0	0.0	0.0			
90°-150°	0.0	0.0	0.0			
90°-180°	0.0	0.0	0.0			
0°-180°	347.1	100.0	62.0			



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1312
2.5°	1311
5°	1261
7.5°	1117
10°	939
12.5°	770
15°	595
17.5°	426
20°	298
22.5°	212
25°	148
27.5°	86
30°	39
32.5°	17
35°	8
37.5°	4
40°	2
42.5°	1
45°	1
47.5°	1
50°	1
52.5°	1
55°	1
57.5°	1
60°	0
62.5°	0
65°	0
67.5°	0
70°	0
72.5°	0
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0
92.5°	0
95°	0
97.5°	0
100°	0
102.5°	0
105°	0
107.5°	0
110°	0



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	0
115°	0
117.5°	0
120°	0
122.5°	0
125°	0
127.5°	0
130°	0
132.5°	0
135°	0
137.5°	0
140°	0
142.5°	0
145°	0
147.5°	0
150°	0
152.5°	0
155°	0
157.5°	0
160°	0
162.5°	0
165°	0
167.5°	0
170°	0
172.5°	0
175°	0
177.5°	0
180°	0

(END OF REPORT)