

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P747545

Luminaire Tested: LD4D40BD010-EU4DR3040509027-4LBS1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P747545  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/30/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D40BD010-EU4DR3040509027-4LBS1B  
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3519.3 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

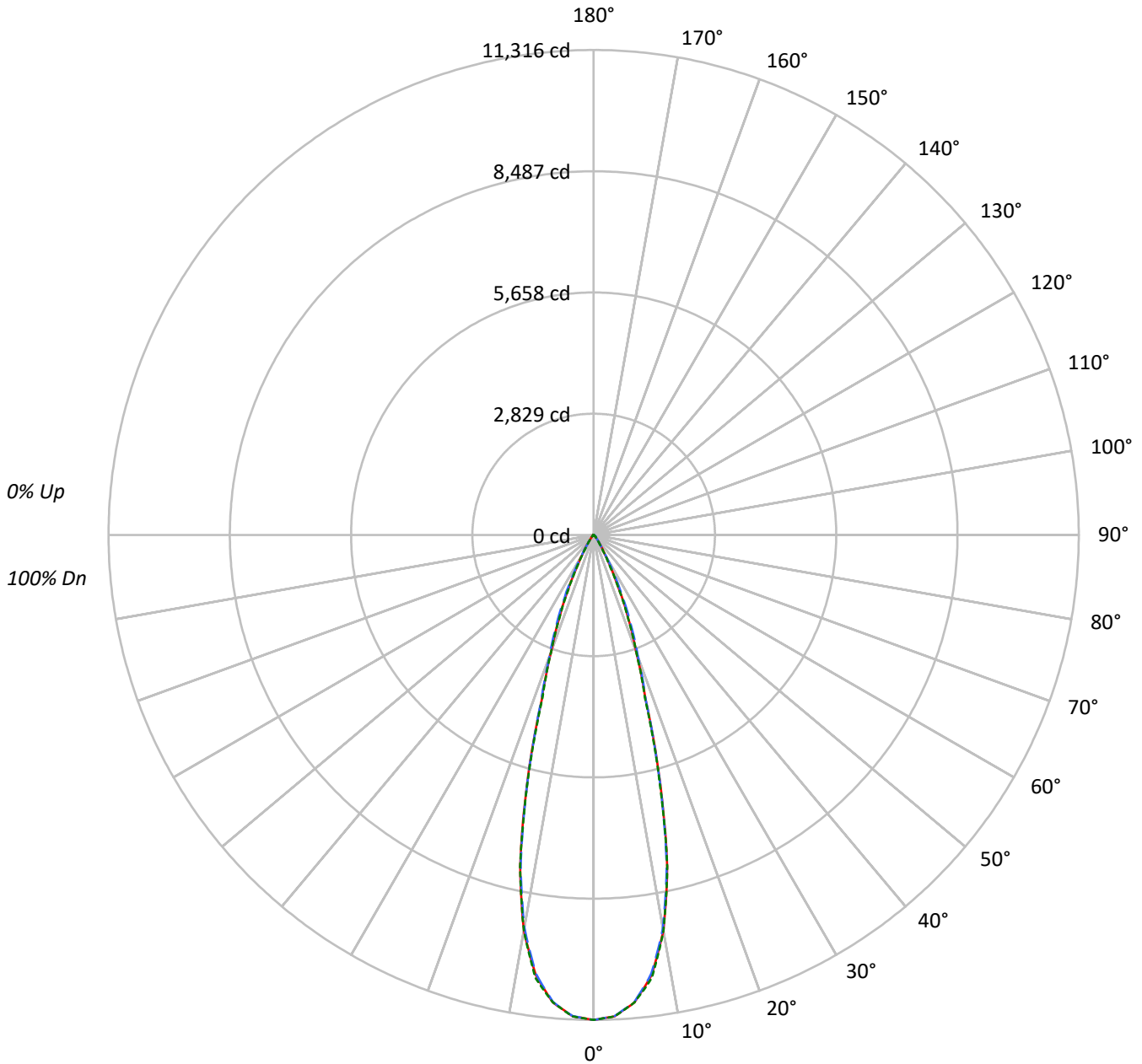
Input Watts (W): 35.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



Downlight

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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																			
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92																			
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89																			
4	103	98	93	90	102	96	93	90	94	91	89	93	90	88	91	89	87	85																			
5	100	94	89	86	98	93	89	86	91	88	85	90	86	84	88	86	83	82																			
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79																			
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77																			
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74																			
9	88	81	76	73	87	80	76	73	80	76	73	79	75	73	78	75	73	72																			
10	85	78	74	71	85	78	74	71	77	73	71	76	73	71	76	73	70	69																			

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

	0°	45°	90°
0°	866173	866173	866173
5°	841313	840330	841352
10°	728703	723566	728532
15°	475445	472886	470509
20°	236417	245288	236100
25°	119092	134294	116651
30°	47684	51953	41541
35°	22118	21183	17754
40°	9552	10602	8993
45°	6733	8357	6798
50°	2310	6085	2453
55°	1334	2522	1415
60°	934	1102	934
65°	598	598	598
70°	380	246	380
75°	0	177	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 8357 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	995.1	28.3
10°-20°	1602.6	45.5
20°-30°	692.5	19.7
30°-40°	157.8	4.5
40°-50°	54.2	1.5
50°-60°	13.2	0.4
60°-70°	3.4	0.1
70°-80°	0.4	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3290.2	93.5
0°-40°	3448.0	98.0
0°-60°	3515.5	99.9
0°-90°	3519.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3519.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11316	11316	11316	11316	11316	
5°	10950	10939	10937	10960	10950	996
15°	6000	5928	5968	5948	5938	1607
25°	1410	1463	1590	1426	1381	675
35°	237	242	227	225	190	161
45°	62	77	77	77	63	44
55°	10	11	19	11	11	10
65°	3	3	3	3	3	3
75°	0	0	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11316.1	11316.1	11316.1	11316.1	11316.1
2.5°	11241.1	11233.4	11237.8	11243.4	11245.6
5°	10949.5	10938.9	10936.7	10959.5	10950.0
7.5°	10361.1	10346.1	10323.3	10375.0	10423.3
10°	9375.5	9358.8	9309.4	9333.8	9373.3
12.5°	7920.4	7866.5	7865.4	7943.2	7932.6
15°	5999.8	5927.5	5967.5	5948.1	5937.5
17.5°	4034.7	4006.9	4060.2	4044.1	3974.7
20°	2902.4	2909.6	3011.3	2960.2	2898.5
22.5°	2117.9	2144.0	2264.6	2132.9	2084.6
25°	1410.1	1463.4	1590.1	1426.2	1381.2
27.5°	867.3	891.7	1020.1	856.2	831.7
30°	539.5	527.2	587.8	504.5	470.0
32.5°	353.9	338.4	357.8	321.1	293.3
35°	236.7	241.7	226.7	225.0	190.0
37.5°	147.8	170.0	150.0	160.0	122.2
40°	95.6	123.3	106.1	117.2	90.0
42.5°	78.3	95.0	87.2	92.8	80.0
45°	62.2	77.2	77.2	77.2	62.8
47.5°	34.4	51.7	66.1	52.8	36.7
50°	19.4	26.1	51.1	27.2	20.6
52.5°	13.3	15.0	35.0	15.6	13.9
55°	10.0	10.6	18.9	11.1	10.6
57.5°	7.8	8.3	10.0	8.3	7.8
60°	6.1	6.1	7.2	6.7	6.1
62.5°	4.4	4.4	5.0	4.4	4.4
65°	3.3	3.3	3.3	3.3	3.3
67.5°	1.7	2.2	2.2	2.2	2.2
70°	1.7	1.1	1.1	1.1	1.7
72.5°	1.1	0.6	0.6	0.6	0.6
75°	0.0	0.0	0.6	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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(END OF REPORT)