

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: P749143

Luminaire Tested: LD4D50D010-EU4DR3040509040-4LBDP1MW

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P749143  
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: LD4D50D010-EU4DR3040509040-4LBDP1MW  
Description: 4 INCH ROUND DEEP 45° CUTOFF MATTE WHITE TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4459.3 lumens  
Efficiency: N/A  
Efficacy: 94.9 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): 47  
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

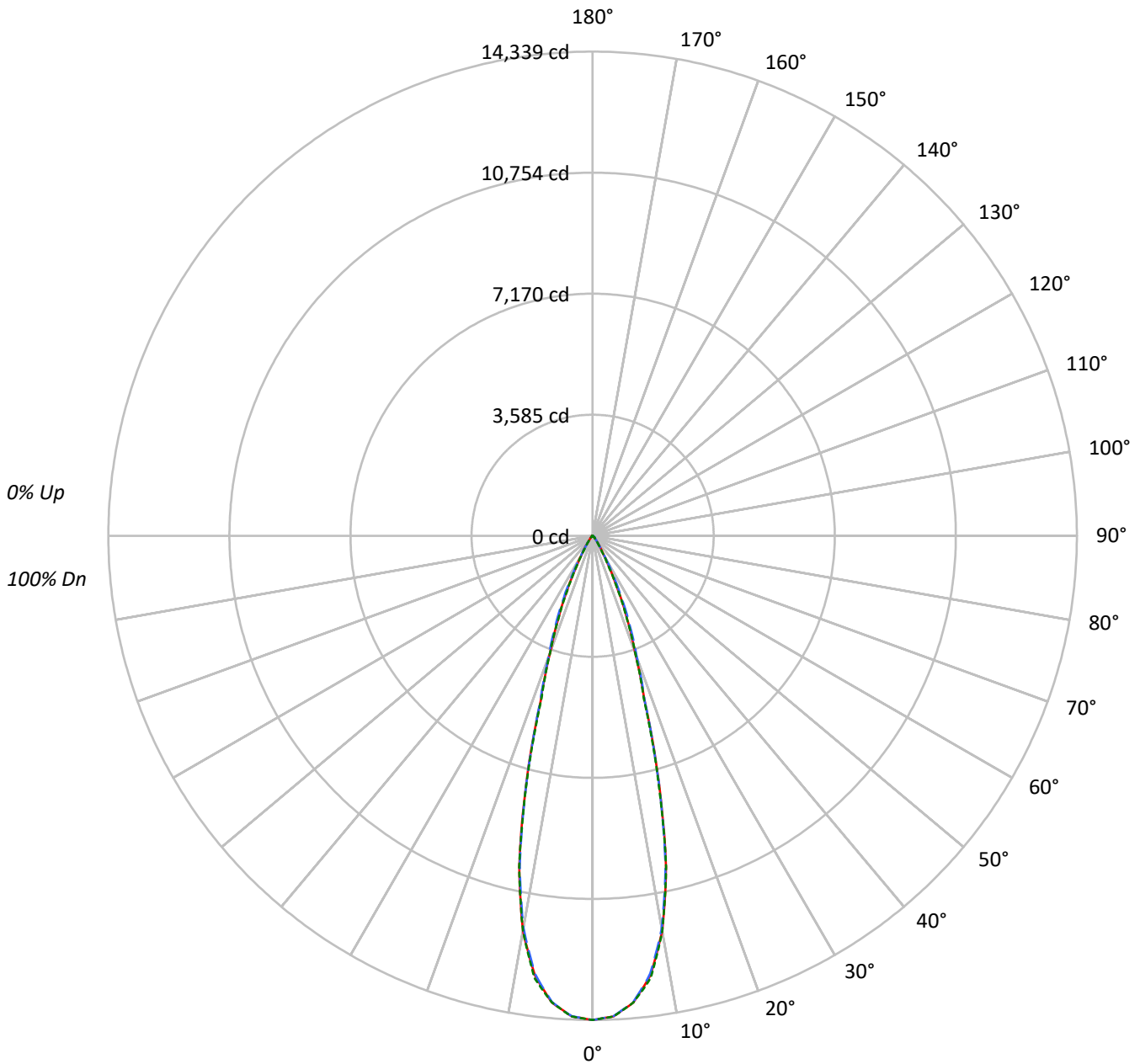


Downlight

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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	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°	1097556	1097556	1097556
5°	1066043	1064798	1066096
10°	923356	916842	923138
15°	602441	599208	596197
20°	299570	310811	299163
25°	150898	170163	147807
30°	60420	65829	52642
35°	28023	26837	22501
40°	12100	13439	11391
45°	8530	10598	8617
50°	2929	7716	3096
55°	1695	3189	1788
60°	1179	1408	1179
65°	761	761	761
70°	470	313	470
75°	0	207	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 10598 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1260.9	28.3
10°-20°	2030.7	45.5
20°-30°	877.5	19.7
30°-40°	200.0	4.5
40°-50°	68.7	1.5
50°-60°	16.8	0.4
60°-70°	4.3	0.1
70°-80°	0.5	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°	4169.1	93.5
0°-40°	4369.1	98.0
0°-60°	4454.6	99.9
0°-90°	4459.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4459.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14339	14339	14339	14339	14339	
5°	13874	13861	13858	13887	13875	1262
15°	7602	7511	7562	7537	7524	2036
25°	1787	1854	2015	1807	1750	855
35°	300	306	287	285	241	203
45°	79	98	98	98	80	56
55°	13	13	24	14	13	12
65°	4	4	4	4	4	4
75°	0	0	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14339.0	14339.0	14339.0	14339.0	14339.0
2.5°	14243.9	14234.1	14239.7	14246.8	14249.6
5°	13874.3	13861.0	13858.1	13887.0	13875.0
7.5°	13128.8	13109.8	13080.9	13146.4	13207.7
10°	11879.9	11858.8	11796.1	11827.1	11877.1
12.5°	10036.2	9967.9	9966.5	10065.0	10051.6
15°	7602.4	7510.9	7561.6	7537.0	7523.6
17.5°	5112.4	5077.2	5144.8	5124.4	5036.4
20°	3677.7	3686.8	3815.7	3750.9	3672.7
22.5°	2683.6	2716.7	2869.5	2702.6	2641.4
25°	1786.7	1854.3	2014.8	1807.2	1750.1
27.5°	1098.9	1129.9	1292.5	1084.9	1053.9
30°	683.6	668.1	744.8	639.2	595.6
32.5°	448.4	428.7	453.4	406.9	371.7
35°	299.9	306.2	287.2	285.1	240.8
37.5°	187.3	215.4	190.1	202.8	154.9
40°	121.1	156.3	134.5	148.5	114.0
42.5°	99.3	120.4	110.5	117.6	101.4
45°	78.8	97.9	97.9	97.9	79.6
47.5°	43.6	65.5	83.8	66.9	46.5
50°	24.6	33.1	64.8	34.5	26.0
52.5°	16.9	19.0	44.4	19.7	17.6
55°	12.7	13.4	23.9	14.1	13.4
57.5°	9.9	10.6	12.7	10.6	9.9
60°	7.7	7.7	9.2	8.4	7.7
62.5°	5.6	5.6	6.3	5.6	5.6
65°	4.2	4.2	4.2	4.2	4.2
67.5°	2.1	2.8	2.8	2.8	2.8
70°	2.1	1.4	1.4	1.4	2.1
72.5°	1.4	0.7	0.7	0.7	0.7
75°	0.0	0.0	0.7	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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