

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: P744161

Luminaire Tested: LD4D20D010-EU4DR3020359050-4LBDP1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P744161  
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: LD4D20D010-EU4DR3020359050-4LBDP1B  
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1554.2 lumens  
Efficiency: N/A  
Efficacy: 67.3 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): 23.1  
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

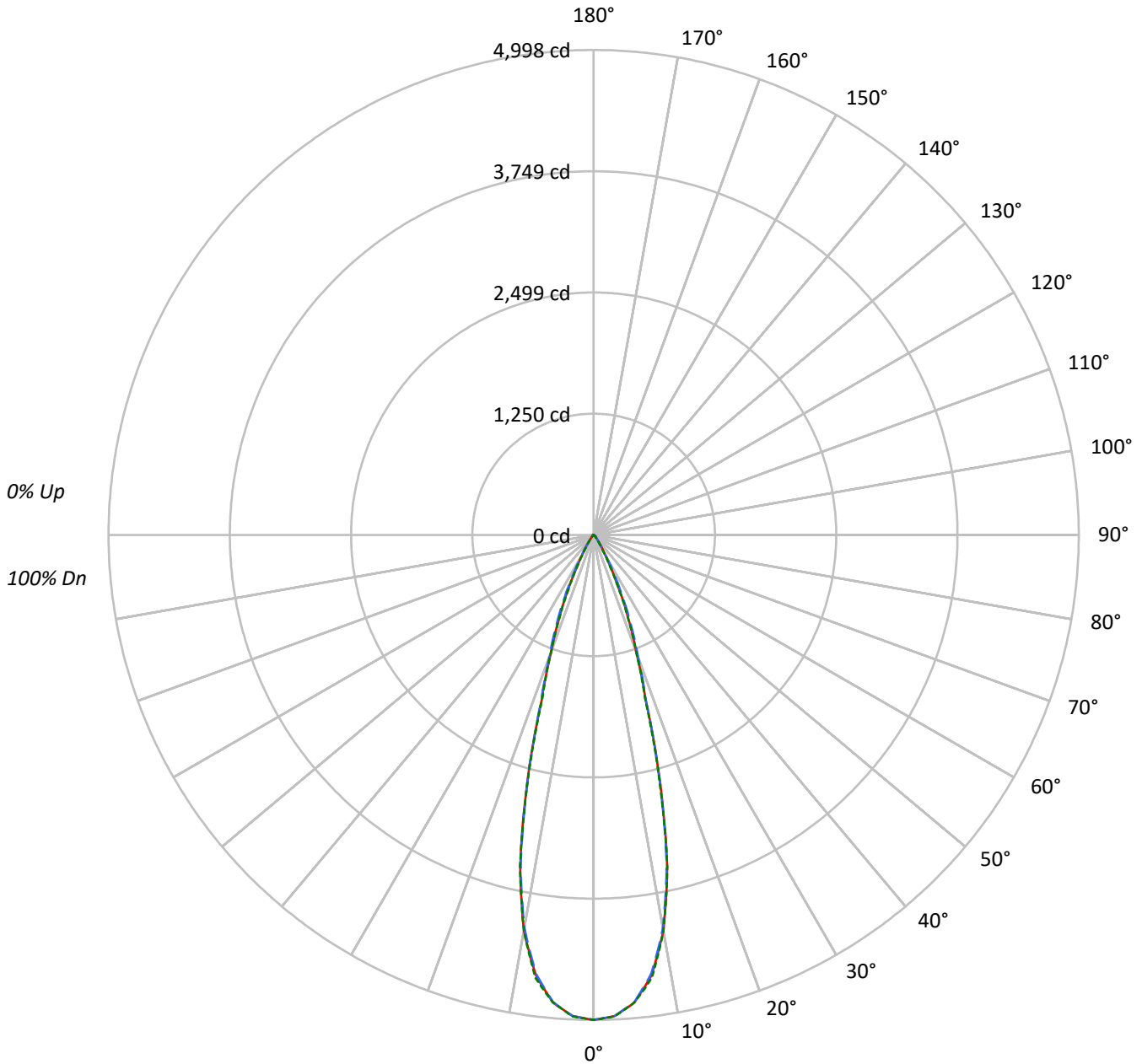


Downlight



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

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

	0°	45°	90°
0°	382526	382526	382526
5°	371547	371109	371562
10°	321817	319548	321739
15°	209972	208838	207792
20°	104402	108328	104263
25°	52591	59305	51518
30°	21053	22945	18349
35°	9765	9354	7840
40°	4217	4686	3977
45°	2977	3691	2998
50°	1024	2691	1084
55°	587	1121	614
60°	413	490	413
65°	272	272	272
70°	157	112	157
75°	0	59	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 3691 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	439.5	28.3
10°-20°	707.8	45.5
20°-30°	305.8	19.7
30°-40°	69.7	4.5
40°-50°	23.9	1.5
50°-60°	5.8	0.4
60°-70°	1.5	0.1
70°-80°	0.1	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°	1453.0	93.5
0°-40°	1522.7	98.0
0°-60°	1552.5	99.9
0°-90°	1554.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1554.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4998	4998	4998	4998	4998	
5°	4836	4831	4830	4840	4836	440
15°	2650	2618	2635	2627	2622	709
25°	623	646	702	630	610	298
35°	104	107	100	99	84	71
45°	28	34	34	34	28	20
55°	4	5	8	5	5	4
65°	2	2	2	2	2	1
75°	0	0	0	0	0	0
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°	4997.5	4997.5	4997.5	4997.5	4997.5
2.5°	4964.4	4961.0	4962.9	4965.4	4966.3
5°	4835.6	4830.9	4829.9	4840.0	4835.8
7.5°	4575.8	4569.1	4559.0	4581.9	4603.2
10°	4140.5	4133.1	4111.3	4122.0	4139.5
12.5°	3497.9	3474.1	3473.6	3507.9	3503.3
15°	2649.7	2617.8	2635.4	2626.8	2622.2
17.5°	1781.8	1769.6	1793.1	1786.0	1755.3
20°	1281.7	1285.0	1329.9	1307.3	1280.0
22.5°	935.3	946.9	1000.1	941.9	920.6
25°	622.7	646.3	702.2	629.8	610.0
27.5°	383.0	393.8	450.5	378.1	367.3
30°	238.2	232.8	259.6	222.8	207.6
32.5°	156.3	149.4	158.0	141.8	129.5
35°	104.5	106.7	100.1	99.3	83.9
37.5°	65.3	75.1	66.2	70.6	54.0
40°	42.2	54.5	46.9	51.8	39.8
42.5°	34.6	41.9	38.5	41.0	35.4
45°	27.5	34.1	34.1	34.1	27.7
47.5°	15.2	22.8	29.2	23.3	16.2
50°	8.6	11.5	22.6	12.0	9.1
52.5°	5.9	6.6	15.5	6.9	6.1
55°	4.4	4.6	8.4	4.9	4.6
57.5°	3.4	3.7	4.4	3.7	3.4
60°	2.7	2.7	3.2	2.9	2.7
62.5°	1.9	1.9	2.2	1.9	1.9
65°	1.5	1.5	1.5	1.5	1.5
67.5°	0.7	1.0	1.0	1.0	1.0
70°	0.7	0.5	0.5	0.5	0.7
72.5°	0.5	0.2	0.2	0.2	0.2
75°	0.0	0.0	0.2	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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