

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: P755397

Luminaire Tested: LD4D90BD010-EU4DR3070959050-4LBS1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P755397  
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: LD4D90BD010-EU4DR3070959050-4LBS1B  
Description: 4 INCH ROUND SHALLOW 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: 8824.8 lumens  
Efficiency: N/A  
Efficacy: 89.2 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): 98.9  
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

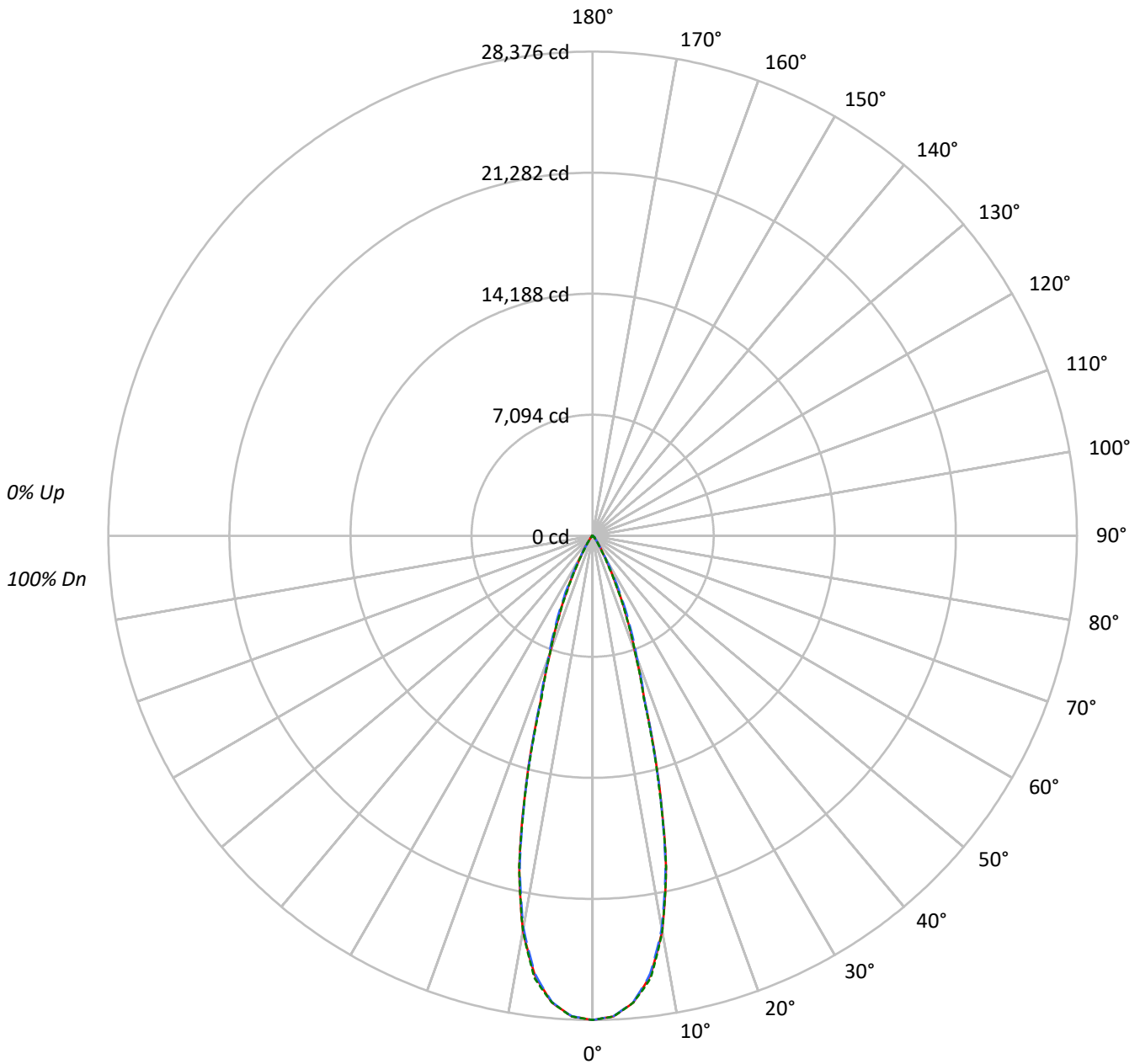


Downlight

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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°	2171988	2171988	2171988
5°	2109634	2107175	2109741
10°	1827265	1814378	1826830
15°	1192196	1185793	1179834
20°	592827	615064	592029
25°	298621	336744	292506
30°	119567	130279	104170
35°	55458	53113	44525
40°	23941	26589	22552
45°	16887	20957	17038
50°	5811	15266	6133
55°	3350	6325	3536
60°	2342	2771	2342
65°	1521	1521	1521
70°	940	627	940
75°	0	414	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 20957 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2495.2	28.3
10°-20°	4018.6	45.5
20°-30°	1736.5	19.7
30°-40°	395.8	4.5
40°-50°	135.9	1.5
50°-60°	33.2	0.4
60°-70°	8.6	0.1
70°-80°	0.9	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°	8250.4	93.5
0°-40°	8646.1	98.0
0°-60°	8815.2	99.9
0°-90°	8824.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8824.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	28376	28376	28376	28376	28376	
5°	27456	27430	27424	27482	27458	2497
15°	15045	14864	14964	14915	14889	4028
25°	3536	3670	3987	3576	3463	1692
35°	594	606	568	564	476	403
45°	156	194	194	194	157	111
55°	25	26	47	28	26	24
65°	8	8	8	8	8	8
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°	28375.9	28375.9	28375.9	28375.9	28375.9
2.5°	28187.8	28168.3	28179.5	28193.4	28199.0
5°	27456.4	27429.9	27424.4	27481.5	27457.8
7.5°	25981.0	25943.4	25886.3	26015.9	26137.1
10°	23509.6	23467.8	23343.8	23405.1	23504.0
12.5°	19860.9	19725.8	19723.0	19918.0	19891.5
15°	15044.7	14863.6	14963.9	14915.2	14888.7
17.5°	10117.1	10047.5	10181.2	10140.8	9966.7
20°	7277.9	7296.0	7550.9	7422.8	7268.1
22.5°	5310.7	5376.2	5678.5	5348.3	5227.1
25°	3535.8	3669.6	3987.2	3576.2	3463.4
27.5°	2174.7	2236.0	2557.8	2146.9	2085.6
30°	1352.8	1322.1	1474.0	1265.0	1178.6
32.5°	887.4	848.4	897.2	805.2	735.6
35°	593.5	606.0	568.4	564.2	476.5
37.5°	370.6	426.3	376.2	401.2	306.5
40°	239.6	309.3	266.1	294.0	225.7
42.5°	196.4	238.2	218.7	232.7	200.6
45°	156.0	193.6	193.6	193.6	157.4
47.5°	86.4	129.6	165.8	132.4	91.9
50°	48.8	65.5	128.2	68.3	51.5
52.5°	33.4	37.6	87.8	39.0	34.8
55°	25.1	26.5	47.4	27.9	26.5
57.5°	19.5	20.9	25.1	20.9	19.5
60°	15.3	15.3	18.1	16.7	15.3
62.5°	11.1	11.1	12.5	11.1	11.1
65°	8.4	8.4	8.4	8.4	8.4
67.5°	4.2	5.6	5.6	5.6	5.6
70°	4.2	2.8	2.8	2.8	4.2
72.5°	2.8	1.4	1.4	1.4	1.4
75°	0.0	0.0	1.4	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)