

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: P755345

Luminaire Tested: LD4D90BD010-EU4DR3070959027-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755345
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-EU4DR3070959027-4LBS1B
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: 8040.6 lumens
Efficiency: N/A
Efficacy: 81.3 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): 98.9
Input Voltage (V): NR
Input Current (A_{in}): 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

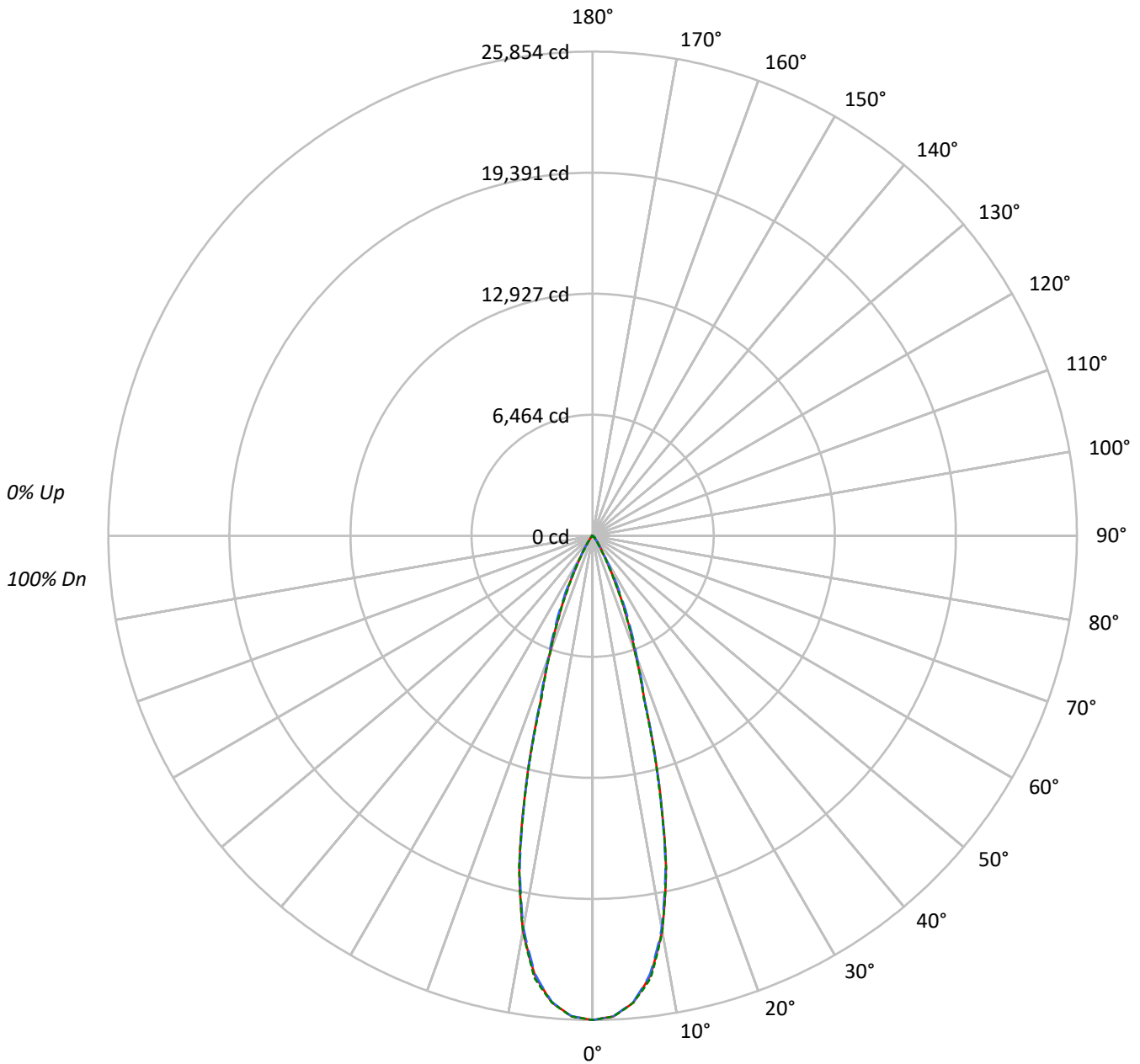


Downlight

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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°	1978984	1978984	1978984
5°	1922170	1919926	1922270
10°	1664891	1653147	1664495
15°	1086255	1080422	1074994
20°	540150	560408	539425
25°	272084	306821	266510
30°	108943	118701	94916
35°	50524	48394	40563
40°	21813	24221	20544
45°	15393	19095	15523
50°	5287	13909	5597
55°	3043	5765	3216
60°	2143	2526	2143
65°	1376	1376	1376
70°	850	559	850
75°	0	384	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 19095 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2273.5	28.3
10°-20°	3661.5	45.5
20°-30°	1582.2	19.7
30°-40°	360.6	4.5
40°-50°	123.8	1.5
50°-60°	30.2	0.4
60°-70°	7.8	0.1
70°-80°	0.8	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°	7517.2	93.5
0°-40°	7877.8	98.0
0°-60°	8031.9	99.9
0°-90°	8040.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8040.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	25854	25854	25854	25854	25854	
5°	25017	24992	24987	25039	25018	2275
15°	13708	13543	13634	13590	13566	3670
25°	3222	3344	3633	3258	3156	1542
35°	541	552	518	514	434	367
45°	142	176	176	176	143	101
55°	23	24	43	25	24	22
65°	8	8	8	8	8	7
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°	25854.4	25854.4	25854.4	25854.4	25854.4
2.5°	25683.0	25665.2	25675.4	25688.1	25693.2
5°	25016.6	24992.5	24987.4	25039.4	25017.9
7.5°	23672.3	23638.1	23586.0	23704.1	23814.5
10°	21420.5	21382.4	21269.4	21325.3	21415.4
12.5°	18096.0	17972.9	17970.4	18148.1	18124.0
15°	13707.8	13542.8	13634.2	13589.8	13565.7
17.5°	9218.1	9154.6	9276.5	9239.7	9081.0
20°	6631.2	6647.7	6879.9	6763.2	6622.3
22.5°	4838.8	4898.5	5173.9	4873.1	4762.6
25°	3221.6	3343.5	3632.9	3258.5	3155.6
27.5°	1981.5	2037.3	2330.6	1956.1	1900.2
30°	1232.6	1204.6	1343.0	1152.6	1073.9
32.5°	808.6	773.0	817.5	733.7	670.2
35°	540.7	552.2	517.9	514.1	434.1
37.5°	337.7	388.4	342.7	365.6	279.3
40°	218.3	281.8	242.4	267.8	205.6
42.5°	179.0	217.1	199.3	212.0	182.8
45°	142.2	176.4	176.4	176.4	143.4
47.5°	78.7	118.1	151.1	120.6	83.8
50°	44.4	59.7	116.8	62.2	47.0
52.5°	30.5	34.3	80.0	35.5	31.7
55°	22.8	24.1	43.2	25.4	24.1
57.5°	17.8	19.0	22.8	19.0	17.8
60°	14.0	14.0	16.5	15.2	14.0
62.5°	10.2	10.2	11.4	10.2	10.2
65°	7.6	7.6	7.6	7.6	7.6
67.5°	3.8	5.1	5.1	5.1	5.1
70°	3.8	2.5	2.5	2.5	3.8
72.5°	2.5	1.3	1.3	1.3	1.3
75°	0.0	0.0	1.3	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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