

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: P755384

Luminaire Tested: LD4D90BD010-EU4DR3070959040-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755384
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-EU4DR3070959040-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8762.2 lumens
Efficiency: N/A
Efficacy: 88.6 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

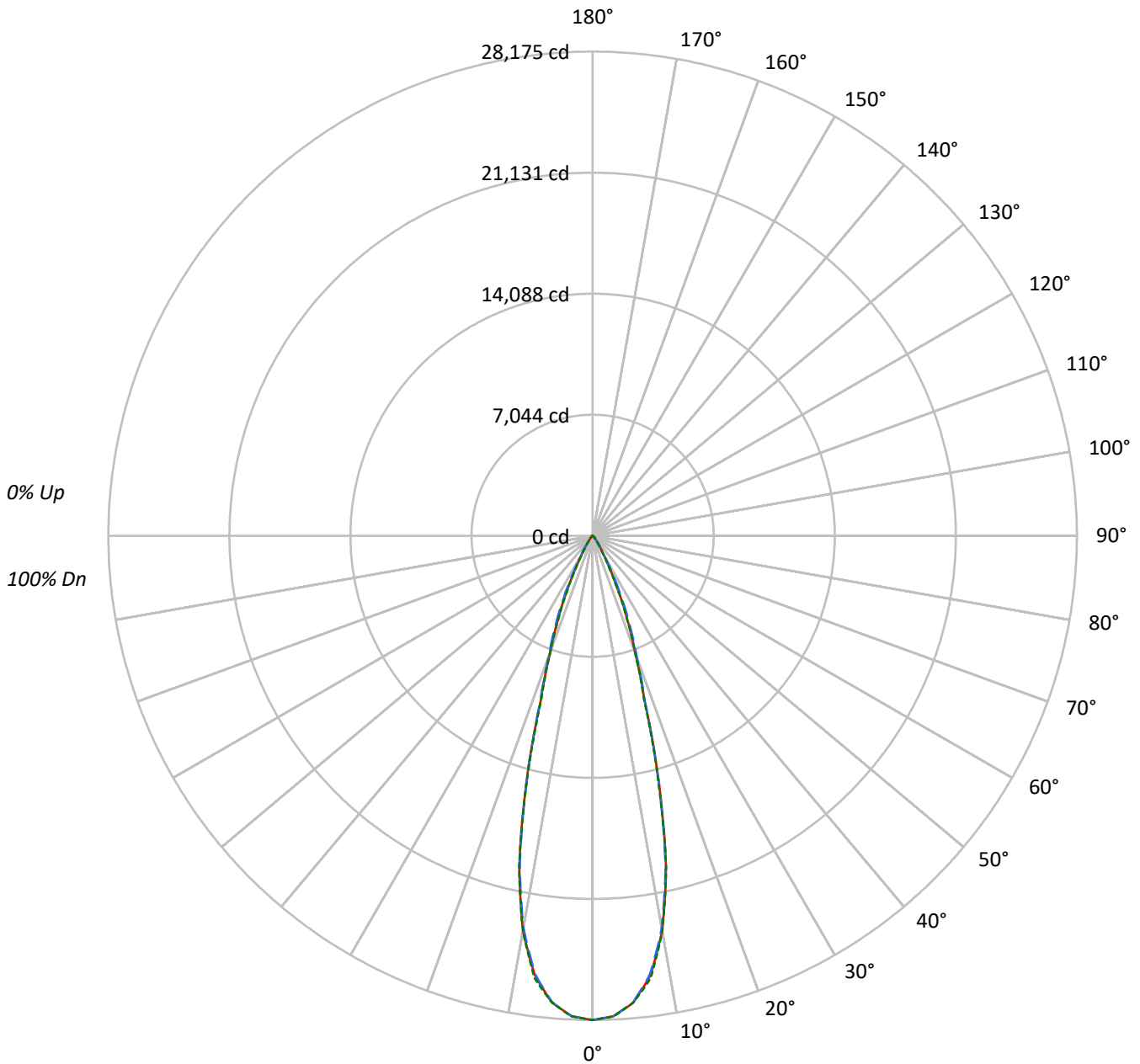


Downlight

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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°	2156580	2156580	2156580
5°	2094674	2092231	2094782
10°	1814300	1801507	1813873
15°	1183740	1177385	1171465
20°	588624	610707	587834
25°	296509	334354	290428
30°	118718	129351	103437
35°	55066	52739	44208
40°	23771	26399	22392
45°	16768	20816	16919
50°	5763	15159	6097
55°	3323	6272	3510
60°	2327	2756	2327
65°	1503	1503	1503
70°	918	627	918
75°	0	414	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 20816 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2477.5	28.3
10°-20°	3990.1	45.5
20°-30°	1724.2	19.7
30°-40°	393.0	4.5
40°-50°	134.9	1.5
50°-60°	33.0	0.4
60°-70°	8.5	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°	8191.8	93.5
0°-40°	8584.8	98.0
0°-60°	8752.7	99.9
0°-90°	8762.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8762.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	28175	28175	28175	28175	28175	
5°	27262	27235	27230	27287	27263	2480
15°	14938	14758	14858	14809	14783	4000
25°	3511	3644	3959	3551	3439	1680
35°	589	602	564	560	473	400
45°	155	192	192	192	156	110
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°	28174.6	28174.6	28174.6	28174.6	28174.6
2.5°	27987.9	27968.5	27979.6	27993.4	27999.0
5°	27261.7	27235.4	27229.9	27286.6	27263.1
7.5°	25796.8	25759.4	25702.7	25831.4	25951.7
10°	23342.8	23301.4	23178.2	23239.1	23337.3
12.5°	19720.0	19585.9	19583.1	19776.8	19750.5
15°	14938.0	14758.2	14857.8	14809.4	14783.1
17.5°	10045.4	9976.2	10109.0	10068.9	9896.0
20°	7226.3	7244.2	7497.4	7370.1	7216.6
22.5°	5273.1	5338.1	5638.2	5310.4	5190.1
25°	3510.8	3643.6	3958.9	3550.9	3438.8
27.5°	2159.3	2220.2	2539.7	2131.6	2070.8
30°	1343.2	1312.7	1463.5	1256.0	1170.3
32.5°	881.1	842.4	890.8	799.5	730.4
35°	589.3	601.7	564.4	560.2	473.1
37.5°	368.0	423.3	373.5	398.4	304.3
40°	237.9	307.1	264.2	291.9	224.1
42.5°	195.0	236.5	217.2	231.0	199.2
45°	154.9	192.3	192.3	192.3	156.3
47.5°	85.8	128.6	164.6	131.4	91.3
50°	48.4	65.0	127.3	67.8	51.2
52.5°	33.2	37.3	87.1	38.7	34.6
55°	24.9	26.3	47.0	27.7	26.3
57.5°	19.4	20.7	24.9	20.7	19.4
60°	15.2	15.2	18.0	16.6	15.2
62.5°	11.1	11.1	12.4	11.1	11.1
65°	8.3	8.3	8.3	8.3	8.3
67.5°	4.1	5.5	5.5	5.5	5.5
70°	4.1	2.8	2.8	2.8	4.1
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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