

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: P744165

Luminaire Tested: LD4D20D010-EU4DR3020359050-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P744165
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-EU4DR3020359050-4LBS1B
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: 1905.2 lumens
Efficiency: N/A
Efficacy: 82.5 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_{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

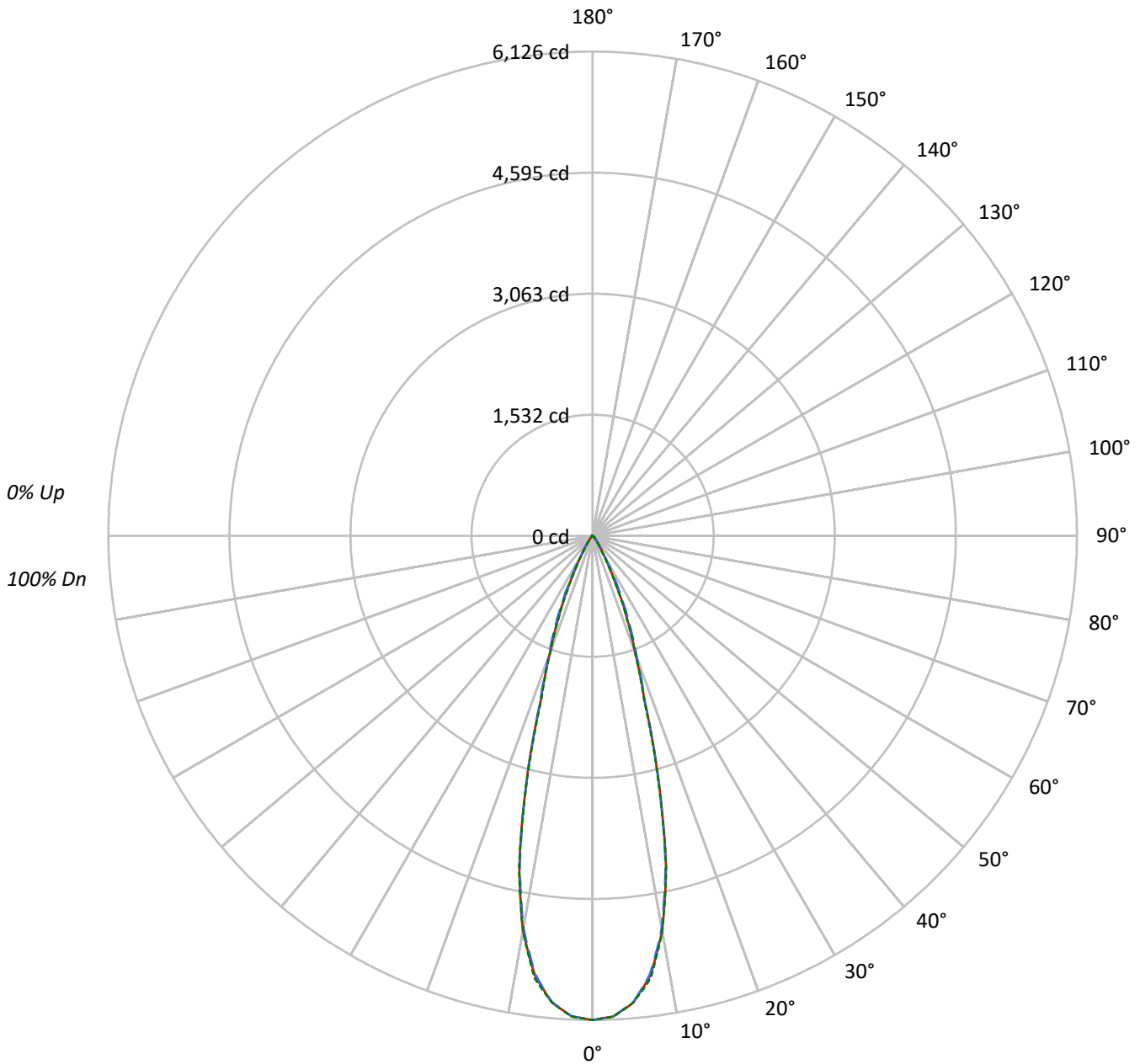


Downlight



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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	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°	468920	468920	468920
5°	455459	454929	455482
10°	394497	391714	394404
15°	257391	256004	254720
20°	127991	132789	127812
25°	64465	72700	63156
30°	25808	28124	22485
35°	11970	11465	9606
40°	5166	5745	4866
45°	3648	4525	3680
50°	1250	3299	1322
55°	721	1361	761
60°	505	597	505
65°	326	326	326
70°	201	134	201
75°	0	89	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 4525 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	538.7	28.3
10°-20°	867.6	45.5
20°-30°	374.9	19.7
30°-40°	85.4	4.5
40°-50°	29.3	1.5
50°-60°	7.2	0.4
60°-70°	1.9	0.1
70°-80°	0.2	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°	1781.2	93.5
0°-40°	1866.7	98.0
0°-60°	1903.2	99.9
0°-90°	1905.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6126	6126	6126	6126	6126	
5°	5928	5922	5921	5933	5928	539
15°	3248	3209	3231	3220	3214	870
25°	763	792	861	772	748	365
35°	128	131	123	122	103	87
45°	34	42	42	42	34	24
55°	5	6	10	6	6	5
65°	2	2	2	2	2	2
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°	6126.2	6126.2	6126.2	6126.2	6126.2
2.5°	6085.6	6081.4	6083.8	6086.8	6088.0
5°	5927.7	5922.0	5920.8	5933.1	5928.0
7.5°	5609.2	5601.1	5588.7	5616.7	5642.9
10°	5075.6	5066.6	5039.8	5053.0	5074.4
12.5°	4287.8	4258.7	4258.1	4300.2	4294.5
15°	3248.1	3209.0	3230.6	3220.1	3214.4
17.5°	2184.3	2169.2	2198.1	2189.4	2151.8
20°	1571.3	1575.2	1630.2	1602.5	1569.1
22.5°	1146.5	1160.7	1225.9	1154.7	1128.5
25°	763.3	792.2	860.8	772.1	747.8
27.5°	469.5	482.8	552.2	463.5	450.3
30°	292.0	285.4	318.2	273.1	254.4
32.5°	191.6	183.2	193.7	173.8	158.8
35°	128.1	130.9	122.7	121.8	102.8
37.5°	80.0	92.0	81.2	86.6	66.2
40°	51.7	66.7	57.5	63.5	48.7
42.5°	42.4	51.5	47.2	50.2	43.3
45°	33.7	41.8	41.8	41.8	34.0
47.5°	18.6	28.0	35.8	28.6	19.8
50°	10.5	14.2	27.7	14.7	11.1
52.5°	7.2	8.1	19.0	8.4	7.5
55°	5.4	5.7	10.2	6.0	5.7
57.5°	4.2	4.5	5.4	4.5	4.2
60°	3.3	3.3	3.9	3.6	3.3
62.5°	2.4	2.4	2.7	2.4	2.4
65°	1.8	1.8	1.8	1.8	1.8
67.5°	0.9	1.2	1.2	1.2	1.2
70°	0.9	0.6	0.6	0.6	0.9
72.5°	0.6	0.3	0.3	0.3	0.3
75°	0.0	0.0	0.3	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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