

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P#

Luminaire Tested: **LD4C50D010 EX4C509030 4LBSQLI**

Issue Date: 2/9/2022

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209151)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C50D010 EX4C509030 4LBSQLI
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

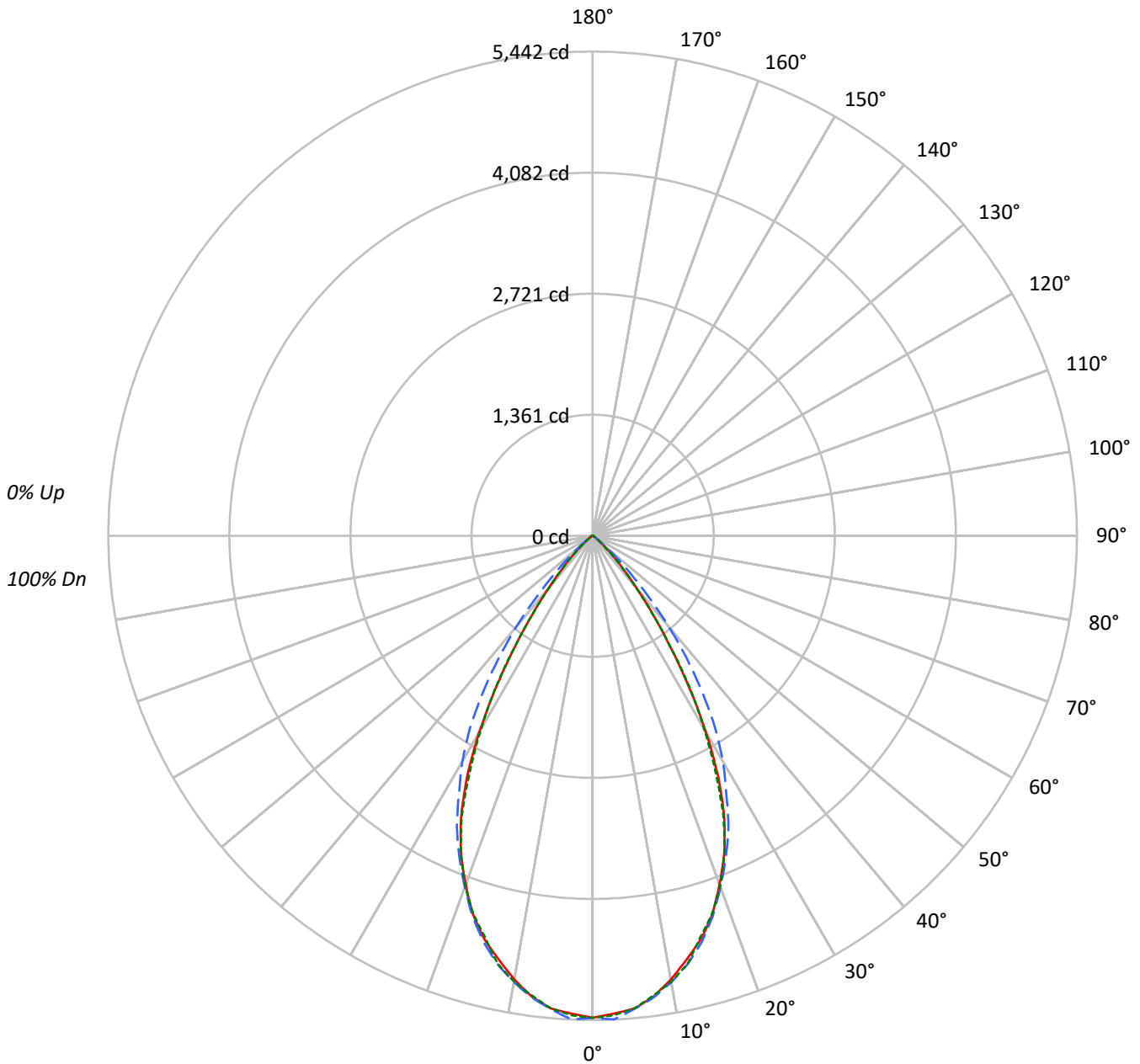
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5002.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
Input Voltage (V):
Input Current (Ain): 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: 25 FT

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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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	522767	522767	522767
5°	516764	517432	516764
10°	496099	499136	498470
15°	469006	472442	466589
20°	428027	431200	430142
25°	372698	384419	370132
30°	283408	325980	279197
35°	178395	253416	180020
40°	96244	167359	94518
45°	45563	82665	45085
50°	17053	30998	17053
55°	8108	9858	7536
60°	5307	4670	5307
65°	3151	3151	3151
70°	1947	2934	1947
75°	1305	1305	1305
80°	1945	1945	1945
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	502.3	10.0
10°-20°	1316.5	26.3
20°-30°	1608.2	32.2
30°-40°	1124.8	22.5
40°-50°	368.6	7.4
50°-60°	58.6	1.2
60°-70°	16.0	0.3
70°-80°	5.4	0.1
80°-90°	1.5	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°	3427.1	68.5
0°-40°	4551.9	91.0
0°-60°	4979.1	99.5
0°-90°	5002.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5002.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5418	5418	5418	5418	5418	
5°	5335	5337	5342	5310	5335	500
15°	4695	4714	4730	4698	4671	1310
25°	3501	3554	3611	3545	3477	1573
35°	1514	1788	2151	1761	1528	966
45°	334	411	606	406	330	280
55°	48	52	59	52	45	48
65°	14	17	14	17	14	15
75°	4	4	4	4	4	5
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9
2.5°	5376.6	5414.6	5404.2	5428.3	5428.3	5400.8	5407.7	5417.9	5431.7	5442.1	5359.4
5°	5335.3	5369.8	5338.7	5373.1	5352.5	5321.6	5373.1	5345.6	5362.9	5342.2	5356.0
7.5°	5225.2	5280.3	5218.3	5259.6	5245.9	5228.6	5249.2	5242.4	5252.8	5235.5	5197.7
10°	5063.4	5108.2	5066.9	5125.4	5097.8	5080.7	5097.8	5115.1	5111.6	5094.4	5115.1
12.5°	4877.6	4929.1	4908.5	4942.9	4912.0	4912.0	4953.3	4942.9	4946.4	4932.6	4956.7
15°	4695.1	4733.0	4702.0	4746.8	4733.0	4695.1	4712.2	4712.2	4739.9	4729.5	4702.0
17.5°	4468.0	4498.9	4464.5	4474.8	4461.1	4454.2	4526.4	4478.2	4505.8	4485.1	4488.6
20°	4168.5	4182.3	4171.9	4199.4	4182.3	4202.9	4196.0	4189.1	4189.1	4199.4	4175.4
22.5°	3865.5	3865.5	3875.9	3882.8	3896.5	3875.9	3917.2	3882.8	3886.2	3910.3	3903.4
25°	3500.7	3490.3	3514.5	3548.9	3562.7	3545.4	3600.4	3572.9	3593.6	3610.8	3572.9
27.5°	3056.7	3056.7	3080.7	3139.3	3149.5	3170.2	3245.9	3245.9	3273.4	3249.4	3276.9
30°	2543.7	2581.6	2612.5	2688.3	2712.4	2757.2	2836.3	2874.2	2936.2	2925.8	2912.0
32.5°	2017.1	2068.8	2072.2	2151.4	2216.7	2292.4	2399.2	2488.7	2533.5	2564.4	2529.9
35°	1514.5	1545.6	1573.1	1628.2	1738.3	1838.1	1934.5	2051.5	2130.7	2151.4	2120.3
37.5°	1108.4	1115.3	1142.8	1194.4	1277.0	1373.5	1490.5	1617.8	1700.5	1731.4	1697.0
40°	764.1	771.0	784.8	829.6	898.4	967.3	1060.2	1191.0	1266.7	1328.7	1283.9
42.5°	512.8	519.7	533.5	567.9	605.8	671.2	743.5	826.1	898.4	926.0	901.8
45°	333.9	333.9	340.8	364.9	385.6	437.1	488.8	540.4	588.6	605.8	588.6
47.5°	196.2	199.6	206.5	223.8	247.8	268.4	306.4	340.8	354.5	368.3	361.4
50°	113.6	113.6	123.9	134.3	151.4	165.2	179.0	192.7	199.6	206.5	199.6
52.5°	61.9	65.5	68.8	72.3	79.2	93.0	103.2	103.2	106.8	110.1	106.8
55°	48.2	48.2	48.2	48.2	51.7	51.7	51.7	55.1	55.1	58.6	55.1
57.5°	34.4	34.4	34.4	37.9	37.9	37.9	34.4	34.4	34.4	34.4	34.4
60°	27.5	27.5	27.5	27.5	27.5	27.5	27.5	24.2	24.2	24.2	24.2
62.5°	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
65°	13.8	13.8	17.3	17.3	17.3	17.3	17.3	13.8	13.8	13.8	13.8
67.5°	10.4	10.4	10.4	10.4	13.8	13.8	10.4	10.4	10.4	10.4	10.4
70°	6.9	6.9	6.9	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
72.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
75°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9	5417.9
2.5°	5417.9	5359.4	5366.3	5397.3	5380.0	5397.3	5393.9	5393.9
5°	5359.4	5342.2	5314.7	5304.3	5325.0	5369.8	5362.9	5335.3
7.5°	5249.2	5204.6	5235.5	5249.2	5232.1	5259.6	5273.4	5214.8
10°	5118.5	5101.3	5094.4	5101.3	5094.4	5122.0	5087.6	5087.6
12.5°	4932.6	4905.1	4905.1	4946.4	4922.2	4901.6	4929.1	4925.7
15°	4746.8	4691.6	4691.6	4705.4	4715.8	4702.0	4705.4	4670.9
17.5°	4471.3	4454.2	4430.0	4468.0	4478.2	4464.5	4474.8	4457.6
20°	4213.2	4213.2	4168.5	4185.6	4199.4	4209.8	4216.7	4189.1
22.5°	3882.8	3889.7	3858.6	3893.0	3903.4	3869.0	3875.9	3869.0
25°	3579.8	3576.4	3552.3	3538.5	3545.4	3531.6	3528.2	3476.6
27.5°	3245.9	3211.5	3159.9	3173.7	3115.1	3067.0	3067.0	2987.7
30°	2884.5	2826.0	2757.2	2688.3	2636.7	2581.6	2550.6	2505.9
32.5°	2461.1	2382.0	2295.9	2202.9	2144.5	2061.9	2017.1	2041.3
35°	2041.3	1924.1	1807.1	1714.3	1624.6	1576.5	1521.4	1528.3
37.5°	1635.0	1469.8	1366.6	1266.7	1191.0	1129.1	1104.9	1098.0
40°	1194.4	1063.6	960.4	888.0	836.5	788.3	760.8	750.4
42.5°	826.1	733.2	650.5	592.1	557.7	526.6	512.8	509.5
45°	537.0	481.9	426.9	385.6	358.0	337.4	333.9	330.4
47.5°	337.4	309.7	275.3	244.4	220.3	206.5	196.2	196.2
50°	192.7	182.5	165.2	148.1	134.3	127.4	117.0	113.6
52.5°	103.2	103.2	96.4	82.6	72.3	65.5	65.5	61.9
55°	55.1	55.1	51.7	51.7	48.2	48.2	48.2	44.8
57.5°	34.4	34.4	37.9	37.9	34.4	34.4	34.4	34.4
60°	24.2	27.5	27.5	27.5	27.5	27.5	27.5	27.5
62.5°	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
65°	13.8	17.3	17.3	17.3	17.3	13.8	13.8	13.8
67.5°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
70°	10.4	10.4	10.4	10.4	10.4	6.9	6.9	6.9
72.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
75°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°









(END OF REPORT)