

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: P563862

Luminaire Tested: **LD4C50D010 EX4C509030 4LBSQLI**

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P563862
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, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

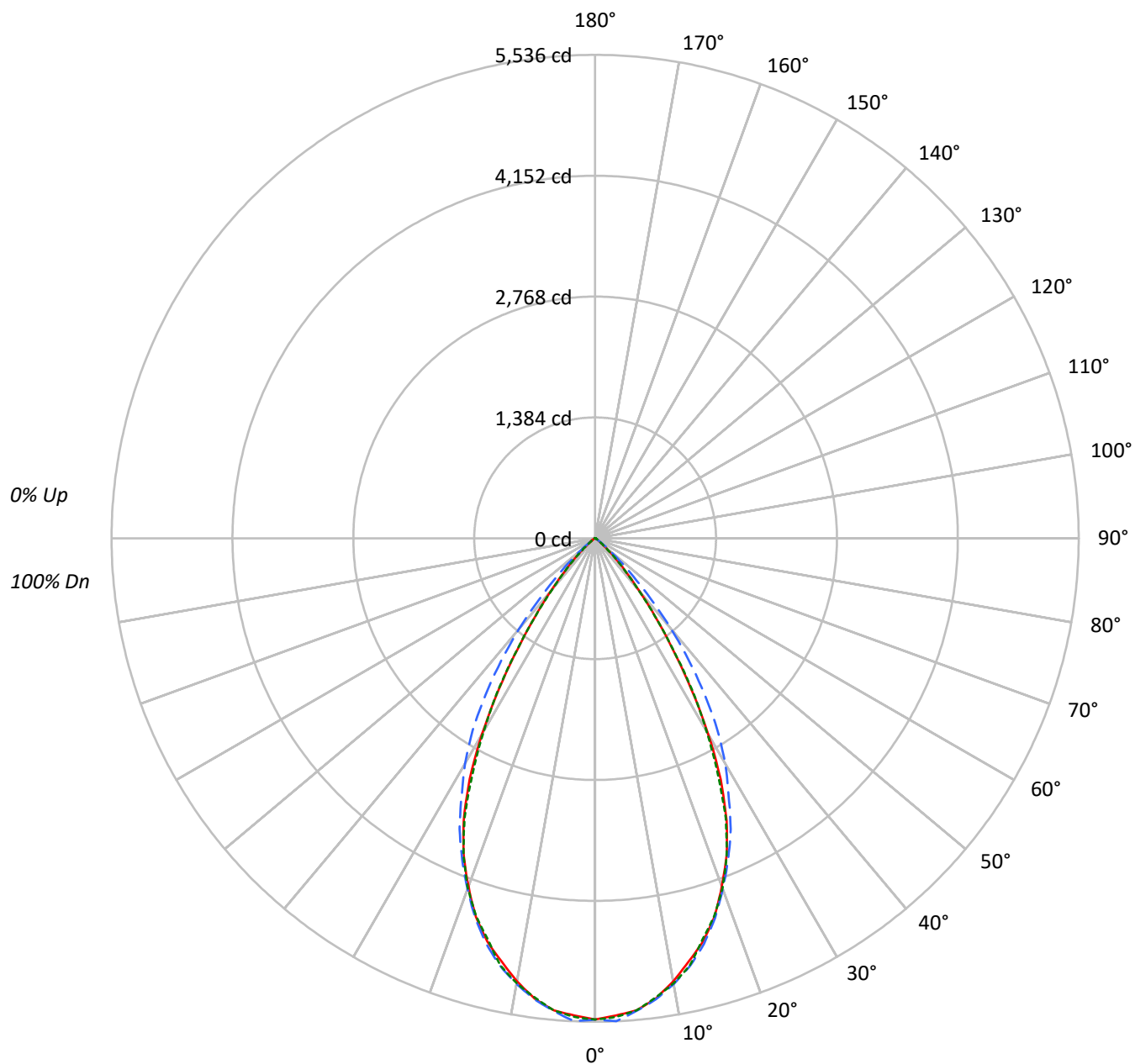
Lumens per Lamp: N/A
Luminaire Lumens: 5088.1 lumens
Efficiency: N/A
Efficacy: 87.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	531760	531760	531760
5°	525655	526333	525655
10°	504633	507719	507043
15°	477077	480564	474610
20°	435389	438614	437546
25°	379107	391031	376498
30°	288288	331584	283999
35°	181457	257774	183118
40°	97894	170244	96143
45°	46340	84084	45863
50°	17353	31538	17353
55°	8243	10026	7671
60°	5403	4747	5403
65°	3196	3196	3196
70°	1975	2990	1975
75°	1342	1342	1342
80°	2000	2000	2000
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	511.0	10.0
10°-20°	1339.1	26.3
20°-30°	1635.9	32.2
30°-40°	1144.2	22.5
40°-50°	375.0	7.4
50°-60°	59.6	1.2
60°-70°	16.3	0.3
70°-80°	5.5	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°	3486.0	68.5
0°-40°	4630.2	91.0
0°-60°	5064.8	99.5
0°-90°	5088.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5088.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5511	5511	5511	5511	5511	
5°	5427	5429	5434	5401	5427	509
15°	4776	4795	4811	4779	4751	1332
25°	3561	3615	3673	3606	3536	1600
35°	1540	1819	2188	1791	1555	983
45°	340	418	616	413	336	285
55°	49	53	60	53	46	48
65°	14	18	14	18	14	16
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°	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1
2.5°	5469.1	5507.7	5497.2	5521.7	5521.7	5493.7	5500.7	5511.1	5525.1	5535.7	5451.6
5°	5427.1	5462.2	5430.5	5465.5	5444.6	5413.1	5465.5	5437.5	5455.1	5434.1	5448.1
7.5°	5315.1	5371.1	5308.1	5350.1	5336.1	5318.5	5339.5	5332.6	5343.1	5325.6	5287.1
10°	5150.5	5196.1	5154.1	5213.6	5185.5	5168.1	5185.5	5203.1	5199.5	5182.0	5203.1
12.5°	4961.5	5013.9	4992.9	5027.9	4996.5	4996.5	5038.5	5027.9	5031.5	5017.4	5042.0
15°	4775.9	4814.4	4782.9	4828.4	4814.4	4775.9	4793.2	4793.2	4821.4	4810.8	4782.9
17.5°	4544.8	4576.3	4541.3	4551.8	4537.8	4530.8	4604.3	4555.2	4583.3	4562.2	4565.8
20°	4240.2	4254.2	4243.7	4271.6	4254.2	4275.2	4268.2	4261.2	4261.2	4271.6	4247.2
22.5°	3932.0	3932.0	3942.6	3949.6	3963.5	3942.6	3984.6	3949.6	3953.0	3977.6	3970.5
25°	3560.9	3550.3	3574.9	3609.9	3624.0	3606.4	3662.3	3634.4	3655.4	3672.9	3634.4
27.5°	3109.3	3109.3	3133.7	3193.3	3203.7	3224.7	3301.7	3301.7	3329.7	3305.3	3333.3
30°	2587.5	2626.0	2657.4	2734.5	2759.1	2804.6	2885.1	2923.6	2986.7	2976.1	2962.1
32.5°	2051.8	2104.4	2107.8	2188.4	2254.8	2331.8	2440.5	2531.5	2577.1	2608.5	2573.4
35°	1540.5	1572.2	1600.2	1656.2	1768.2	1869.7	1967.8	2086.8	2167.3	2188.4	2156.8
37.5°	1127.5	1134.5	1162.5	1214.9	1299.0	1397.1	1516.1	1645.6	1729.7	1761.2	1726.2
40°	777.2	784.3	798.3	843.9	913.9	983.9	1078.4	1211.5	1288.5	1351.6	1306.0
42.5°	521.6	528.6	542.7	577.7	616.2	682.7	756.3	840.3	913.9	941.9	917.3
45°	339.6	339.6	346.7	371.2	392.2	444.6	497.2	549.7	598.7	616.2	598.7
47.5°	199.6	203.0	210.1	227.6	252.1	273.0	311.7	346.7	360.6	374.6	367.6
50°	115.6	115.6	126.0	136.6	154.0	168.0	182.1	196.0	203.0	210.1	203.0
52.5°	63.0	66.6	70.0	73.5	80.6	94.6	105.0	105.0	108.6	112.0	108.6
55°	49.0	49.0	49.0	49.0	52.6	52.6	52.6	56.0	56.0	59.6	56.0
57.5°	35.0	35.0	35.0	38.6	38.6	38.6	35.0	35.0	35.0	35.0	35.0
60°	28.0	28.0	28.0	28.0	28.0	28.0	28.0	24.6	24.6	24.6	24.6
62.5°	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
65°	14.0	14.0	17.6	17.6	17.6	17.6	17.6	14.0	14.0	14.0	14.0
67.5°	10.6	10.6	10.6	10.6	14.0	14.0	10.6	10.6	10.6	10.6	10.6
70°	7.0	7.0	7.0	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	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°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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°	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1	5511.1
2.5°	5511.1	5451.6	5458.6	5490.1	5472.5	5490.1	5486.7	5486.7
5°	5451.6	5434.1	5406.1	5395.5	5416.6	5462.2	5455.1	5427.1
7.5°	5339.5	5294.1	5325.6	5339.5	5322.1	5350.1	5364.1	5304.5
10°	5206.5	5189.0	5182.0	5189.0	5182.0	5210.1	5175.1	5175.1
12.5°	5017.4	4989.5	4989.5	5031.5	5006.9	4985.9	5013.9	5010.4
15°	4828.4	4772.3	4772.3	4786.3	4796.9	4782.9	4786.3	4751.2
17.5°	4548.2	4530.8	4506.2	4544.8	4555.2	4541.3	4551.8	4534.3
20°	4285.7	4285.7	4240.2	4257.6	4271.6	4282.2	4289.2	4261.2
22.5°	3949.6	3956.6	3925.0	3960.0	3970.5	3935.5	3942.6	3935.5
25°	3641.4	3637.9	3613.4	3599.4	3606.4	3592.3	3588.9	3536.4
27.5°	3301.7	3266.7	3214.3	3228.3	3168.7	3119.8	3119.8	3039.1
30°	2934.1	2874.6	2804.6	2734.5	2682.1	2626.0	2594.5	2549.0
32.5°	2503.4	2423.0	2335.4	2240.8	2181.4	2097.4	2051.8	2076.4
35°	2076.4	1957.2	1838.2	1743.8	1652.5	1603.6	1547.6	1554.6
37.5°	1663.1	1495.1	1390.1	1288.5	1211.5	1148.5	1123.9	1116.9
40°	1214.9	1081.9	976.9	903.3	850.9	801.9	773.9	763.3
42.5°	840.3	745.8	661.7	602.3	567.3	535.7	521.6	518.3
45°	546.2	490.2	434.2	392.2	364.2	343.2	339.6	336.1
47.5°	343.2	315.0	280.0	248.6	224.1	210.1	199.6	199.6
50°	196.0	185.6	168.0	150.6	136.6	129.6	119.0	115.6
52.5°	105.0	105.0	98.1	84.0	73.5	66.6	66.6	63.0
55°	56.0	56.0	52.6	52.6	49.0	49.0	49.0	45.6
57.5°	35.0	35.0	38.6	38.6	35.0	35.0	35.0	35.0
60°	24.6	28.0	28.0	28.0	28.0	28.0	28.0	28.0
62.5°	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
65°	14.0	17.6	17.6	17.6	17.6	14.0	14.0	14.0
67.5°	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
70°	10.6	10.6	10.6	10.6	10.6	7.0	7.0	7.0
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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)