

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 EX4C509040 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 EX4C509040 4LBSQLI
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

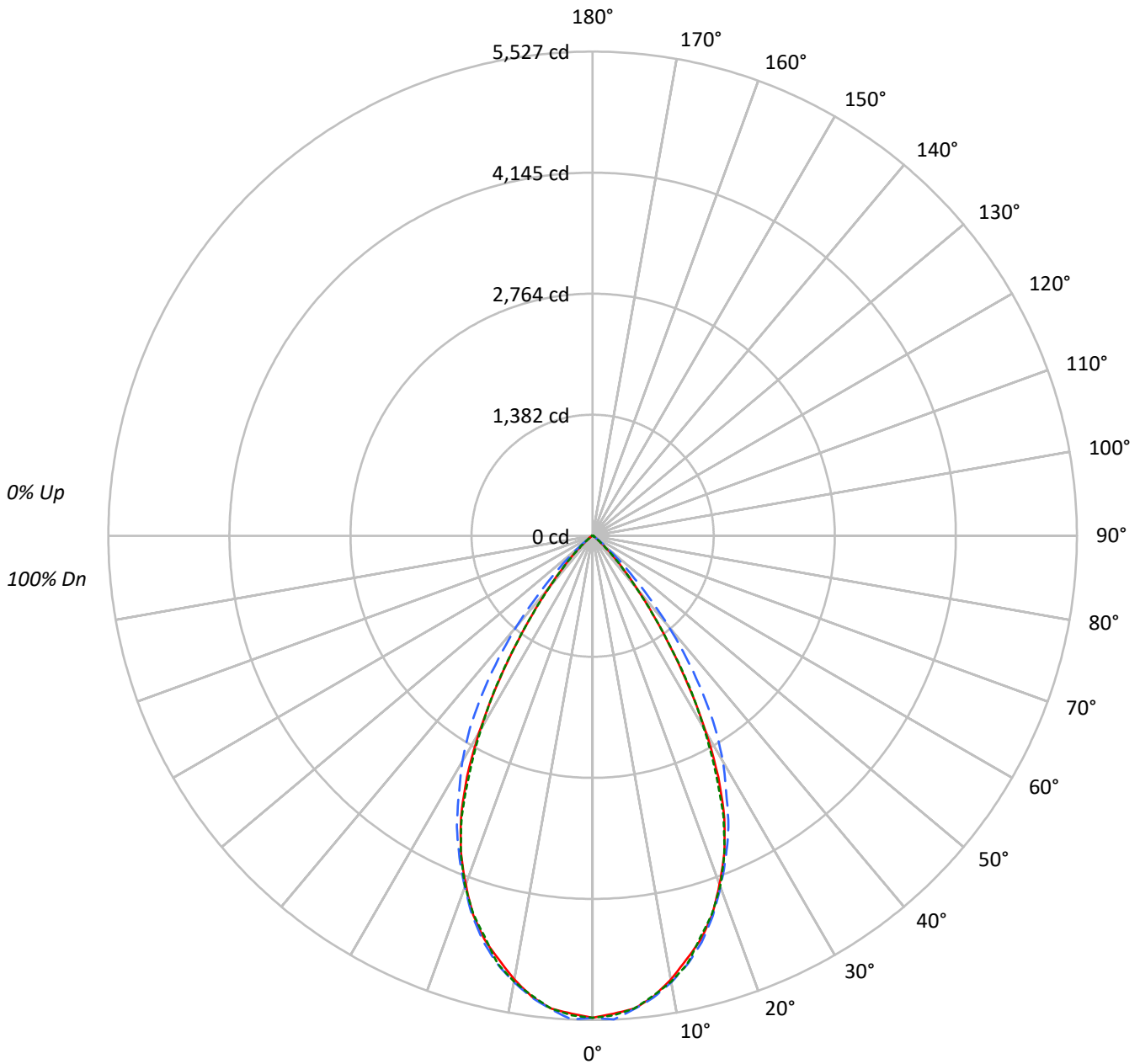
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5080.1 lumens
Efficiency: N/A
Efficacy: 87.0 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 (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: 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°	530920	530920	530920
5°	524822	525500	524822
10°	503839	506925	506239
15°	476318	479814	473871
20°	434701	437926	436858
25°	378510	390413	375902
30°	287832	331061	283553
35°	181175	257362	182824
40°	97755	169967	95992
45°	46272	83961	45781
50°	17323	31478	17323
55°	8226	10009	7654
60°	5403	4728	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°	510.2	10.0
10°-20°	1337.0	26.3
20°-30°	1633.3	32.2
30°-40°	1142.4	22.5
40°-50°	374.4	7.4
50°-60°	59.5	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°	3480.5	68.5
0°-40°	4622.9	91.0
0°-60°	5056.8	99.5
0°-90°	5080.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5080.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5502	5502	5502	5502	5502	
5°	5418	5420	5426	5392	5418	508
15°	4768	4788	4803	4772	4744	1330
25°	3555	3609	3667	3601	3531	1597
35°	1538	1816	2185	1788	1552	982
45°	339	418	615	413	336	284
55°	49	52	60	52	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°	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4
2.5°	5460.5	5499.0	5488.5	5513.0	5513.0	5485.0	5492.0	5502.4	5516.4	5527.0	5442.9
5°	5418.5	5453.5	5422.0	5456.9	5436.0	5404.6	5456.9	5429.0	5446.5	5425.5	5439.5
7.5°	5306.7	5362.6	5299.7	5341.7	5327.7	5310.1	5331.1	5324.1	5334.7	5317.1	5278.7
10°	5142.4	5187.9	5145.9	5205.3	5177.3	5159.9	5177.3	5194.9	5191.3	5173.9	5194.9
12.5°	4953.6	5006.0	4985.0	5020.0	4988.6	4988.6	5030.5	5020.0	5023.5	5009.5	5033.9
15°	4768.3	4806.8	4775.3	4820.8	4806.8	4768.3	4785.7	4785.7	4813.8	4803.3	4775.3
17.5°	4537.6	4569.0	4534.1	4544.6	4530.6	4523.7	4597.0	4548.1	4576.0	4555.0	4558.6
20°	4233.5	4247.5	4236.9	4264.9	4247.5	4268.4	4261.5	4254.5	4254.5	4264.9	4240.5
22.5°	3925.8	3925.8	3936.3	3943.3	3957.3	3936.3	3978.3	3943.3	3946.8	3971.3	3964.3
25°	3555.3	3544.7	3569.3	3604.2	3618.2	3600.7	3656.6	3628.6	3649.6	3667.1	3628.6
27.5°	3104.4	3104.4	3128.8	3188.2	3198.7	3219.6	3296.5	3296.5	3324.5	3300.1	3328.0
30°	2583.4	2621.9	2653.3	2730.2	2754.7	2800.2	2880.5	2919.1	2982.0	2971.4	2957.4
32.5°	2048.6	2101.1	2104.5	2184.9	2251.3	2328.2	2436.6	2527.5	2573.0	2604.4	2569.4
35°	1538.1	1569.7	1597.6	1653.5	1765.4	1866.8	1964.7	2083.5	2164.0	2184.9	2153.4
37.5°	1125.7	1132.7	1160.7	1213.0	1296.9	1394.9	1513.7	1643.0	1727.0	1758.4	1723.4
40°	776.1	783.0	797.0	842.5	912.4	982.3	1076.8	1209.6	1286.5	1349.4	1303.9
42.5°	520.8	527.8	541.8	576.8	615.3	681.6	755.1	839.0	912.4	940.4	915.9
45°	339.1	339.1	346.1	370.6	391.6	444.0	496.4	548.8	597.7	615.3	597.7
47.5°	199.3	202.7	209.7	227.3	251.6	272.6	311.1	346.1	360.1	374.0	367.1
50°	115.4	115.4	125.8	136.4	153.8	167.8	181.7	195.7	202.7	209.7	202.7
52.5°	62.9	66.5	69.9	73.5	80.5	94.4	104.9	104.9	108.4	111.8	108.4
55°	48.9	48.9	48.9	48.9	52.5	52.5	52.5	55.9	55.9	59.5	55.9
57.5°	35.0	35.0	35.0	38.5	38.5	38.5	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	24.5	24.5	24.5	24.5
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	17.5	17.5	17.5	17.5	17.5	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°	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4	5502.4
2.5°	5502.4	5442.9	5449.9	5481.5	5463.9	5481.5	5478.0	5478.0
5°	5442.9	5425.5	5397.6	5387.0	5408.0	5453.5	5446.5	5418.5
7.5°	5331.1	5285.7	5317.1	5331.1	5313.7	5341.7	5355.6	5296.1
10°	5198.3	5180.9	5173.9	5180.9	5173.9	5201.8	5166.9	5166.9
12.5°	5009.5	4981.6	4981.6	5023.5	4999.0	4978.0	5006.0	5002.6
15°	4820.8	4764.8	4764.8	4778.7	4789.3	4775.3	4778.7	4743.8
17.5°	4541.1	4523.7	4499.1	4537.6	4548.1	4534.1	4544.6	4527.1
20°	4278.9	4278.9	4233.5	4250.9	4264.9	4275.4	4282.4	4254.5
22.5°	3943.3	3950.3	3918.8	3953.7	3964.3	3929.3	3936.3	3929.3
25°	3635.6	3632.2	3607.7	3593.7	3600.7	3586.7	3583.3	3530.8
27.5°	3296.5	3261.6	3209.2	3223.2	3163.7	3114.8	3114.8	3034.3
30°	2929.5	2870.1	2800.2	2730.2	2677.8	2621.9	2590.4	2545.0
32.5°	2499.5	2419.2	2331.7	2237.3	2177.9	2094.1	2048.6	2073.1
35°	2073.1	1954.1	1835.3	1741.0	1650.0	1601.0	1545.1	1552.1
37.5°	1660.5	1492.8	1387.9	1286.5	1209.6	1146.7	1122.1	1115.2
40°	1213.0	1080.2	975.3	901.9	849.5	800.6	772.6	762.1
42.5°	839.0	744.7	660.6	601.3	566.3	534.8	520.8	517.4
45°	545.4	489.5	433.5	391.6	363.6	342.7	339.1	335.5
47.5°	342.7	314.6	279.6	248.2	223.7	209.7	199.3	199.3
50°	195.7	185.3	167.8	150.4	136.4	129.4	118.8	115.4
52.5°	104.9	104.9	97.9	83.9	73.5	66.5	66.5	62.9
55°	55.9	55.9	52.5	52.5	48.9	48.9	48.9	45.5
57.5°	35.0	35.0	38.5	38.5	35.0	35.0	35.0	35.0
60°	24.5	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	17.5	17.5	17.5	17.5	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)