

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: **LD4C100D010 EX4C1009030 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: LD4C100D010 EX4C1009030 4LBSQLI
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

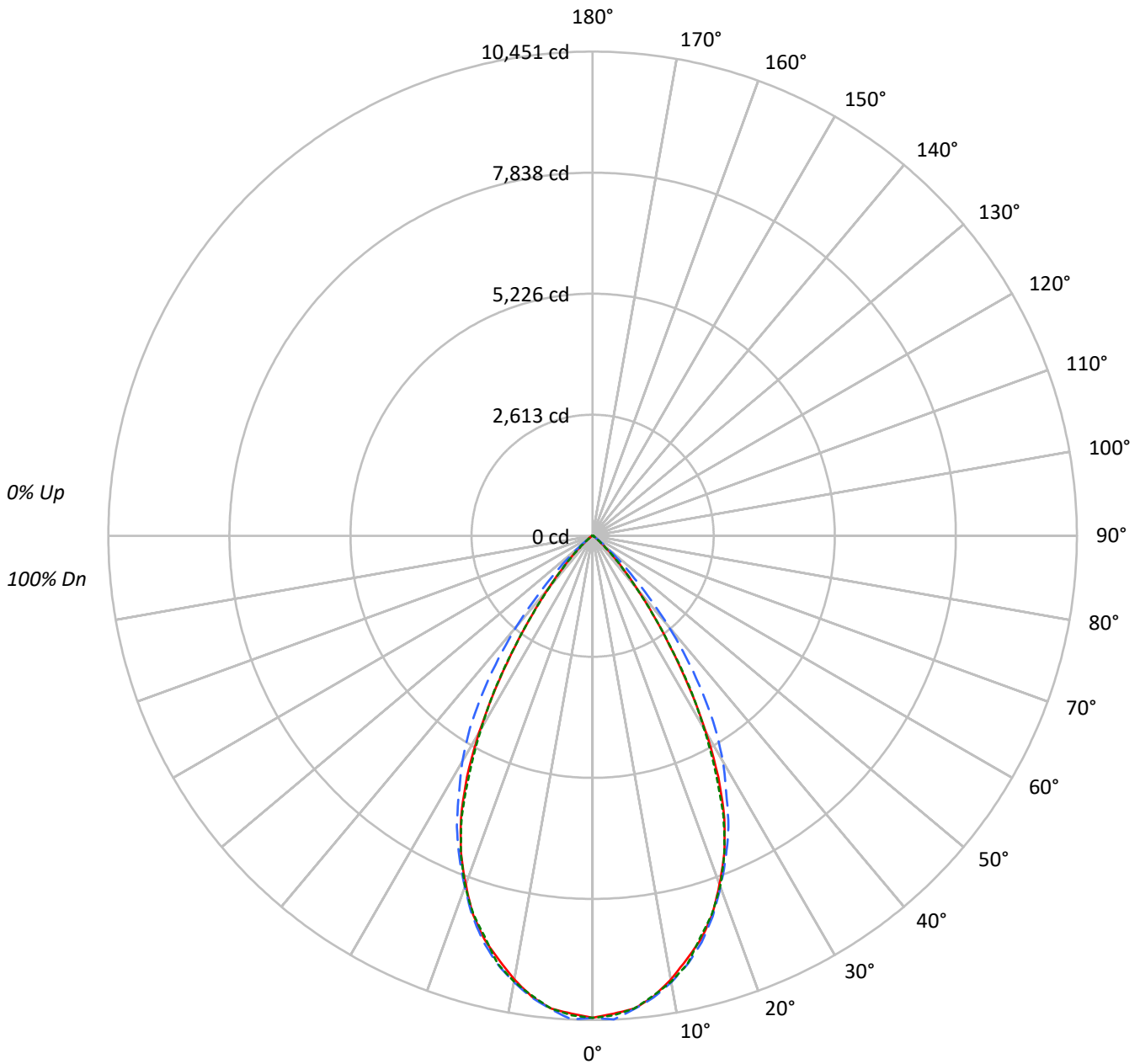
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9606.0 lumens
Efficiency: N/A
Efficacy: 84.0 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): 114.4
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°	1003948	1003948	1003948
5°	992421	993699	992421
10°	952722	958562	957268
15°	900692	907295	896057
20°	821995	828094	826071
25°	715745	738262	710805
30°	544266	626023	536188
35°	342596	486666	345717
40°	184842	321393	181504
45°	87496	158766	86581
50°	32754	59519	32754
55°	15561	18925	14467
60°	10209	8954	10209
65°	6027	6027	6027
70°	3724	5642	3724
75°	2498	2498	2498
80°	3723	3723	3723
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	964.7	10.0
10°-20°	2528.2	26.3
20°-30°	3088.5	32.2
30°-40°	2160.2	22.5
40°-50°	707.9	7.4
50°-60°	112.6	1.2
60°-70°	30.8	0.3
70°-80°	10.3	0.1
80°-90°	2.8	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°	6581.5	68.5
0°-40°	8741.6	91.0
0°-60°	9562.1	99.5
0°-90°	9606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9606.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10405	10405	10405	10405	10405	
5°	10246	10249	10259	10197	10246	961
15°	9017	9053	9083	9023	8970	2515
25°	6723	6825	6934	6809	6676	3020
35°	2908	3434	4132	3381	2935	1856
45°	641	790	1164	780	634	538
55°	92	99	112	99	86	91
65°	26	33	26	33	26	29
75°	7	7	7	7	7	10
85°	0	0	0	0	0	3
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°	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8
2.5°	10325.5	10398.3	10378.4	10424.8	10424.8	10371.9	10385.1	10404.8	10431.2	10451.2	10292.3
5°	10246.2	10312.3	10252.7	10318.7	10279.1	10219.7	10318.7	10265.9	10299.0	10259.4	10285.8
7.5°	10034.7	10140.4	10021.5	10100.8	10074.3	10041.2	10080.8	10067.6	10087.6	10054.4	9981.8
10°	9723.9	9810.0	9730.7	9842.9	9790.0	9757.1	9790.0	9823.2	9816.5	9783.5	9823.2
12.5°	9367.0	9466.0	9426.4	9492.5	9433.1	9433.1	9512.4	9492.5	9499.2	9472.8	9518.9
15°	9016.6	9089.5	9029.8	9115.9	9089.5	9016.6	9049.5	9049.5	9102.7	9082.7	9029.8
17.5°	8580.4	8639.8	8573.7	8593.6	8567.2	8554.0	8692.6	8600.1	8653.0	8613.3	8620.1
20°	8005.3	8031.7	8011.8	8064.7	8031.7	8071.4	8058.2	8045.0	8045.0	8064.7	8018.5
22.5°	7423.4	7423.4	7443.4	7456.6	7483.1	7443.4	7522.7	7456.6	7463.1	7509.5	7496.3
25°	6722.9	6702.9	6749.3	6815.4	6841.8	6808.7	6914.4	6861.5	6901.2	6934.4	6861.5
27.5°	5870.2	5870.2	5916.3	6028.8	6048.5	6088.1	6233.5	6233.5	6286.4	6240.3	6293.2
30°	4885.0	4957.9	5017.2	5162.6	5209.0	5295.1	5446.9	5519.8	5638.7	5618.8	5592.3
32.5°	3873.7	3973.0	3979.5	4131.6	4257.0	4402.4	4607.4	4779.3	4865.3	4924.7	4858.6
35°	2908.5	2968.1	3021.0	3126.8	3338.2	3530.0	3715.1	3939.8	4091.9	4131.6	4072.0
37.5°	2128.6	2141.9	2194.7	2293.7	2452.4	2637.7	2862.4	3106.8	3265.7	3325.0	3258.9
40°	1467.5	1480.7	1507.1	1593.2	1725.4	1857.5	2036.1	2287.3	2432.7	2551.6	2465.6
42.5°	984.9	998.1	1024.5	1090.6	1163.5	1288.9	1427.8	1586.4	1725.4	1778.2	1731.8
45°	641.2	641.2	654.4	700.8	740.5	839.5	938.8	1037.8	1130.3	1163.5	1130.3
47.5°	376.8	383.3	396.5	429.7	475.9	515.5	588.3	654.4	680.9	707.3	694.1
50°	218.2	218.2	237.9	257.9	290.8	317.2	343.7	370.1	383.3	396.5	383.3
52.5°	119.0	125.7	132.2	138.9	152.1	178.6	198.3	198.3	205.0	211.5	205.0
55°	92.5	92.5	92.5	92.5	99.3	99.3	99.3	105.7	105.7	112.5	105.7
57.5°	66.1	66.1	66.1	72.8	72.8	72.8	66.1	66.1	66.1	66.1	66.1
60°	52.9	52.9	52.9	52.9	52.9	52.9	52.9	46.4	46.4	46.4	46.4
62.5°	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
65°	26.4	26.4	33.2	33.2	33.2	33.2	33.2	26.4	26.4	26.4	26.4
67.5°	20.0	20.0	20.0	20.0	26.4	26.4	20.0	20.0	20.0	20.0	20.0
70°	13.2	13.2	13.2	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
72.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
75°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
77.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
80°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	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°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
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°	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8	10404.8
2.5°	10404.8	10292.3	10305.5	10365.1	10332.0	10365.1	10358.7	10358.7
5°	10292.3	10259.4	10206.5	10186.6	10226.2	10312.3	10299.0	10246.2
7.5°	10080.8	9995.0	10054.4	10080.8	10047.9	10100.8	10127.2	10014.7
10°	9829.7	9796.8	9783.5	9796.8	9783.5	9836.4	9770.3	9770.3
12.5°	9472.8	9419.9	9419.9	9499.2	9452.8	9413.2	9466.0	9459.6
15°	9115.9	9009.9	9009.9	9036.3	9056.3	9029.8	9036.3	8970.2
17.5°	8586.9	8554.0	8507.6	8580.4	8600.1	8573.7	8593.6	8560.5
20°	8091.1	8091.1	8005.3	8038.2	8064.7	8084.6	8097.8	8045.0
22.5°	7456.6	7469.8	7410.2	7476.3	7496.3	7430.2	7443.4	7430.2
25°	6874.8	6868.3	6821.9	6795.4	6808.7	6782.2	6775.8	6676.5
27.5°	6233.5	6167.5	6068.4	6094.9	5982.4	5889.9	5889.9	5737.7
30°	5539.5	5427.2	5295.1	5162.6	5063.6	4957.9	4898.2	4812.5
32.5°	4726.4	4574.5	4409.2	4230.6	4118.4	3959.8	3873.7	3920.1
35°	3920.1	3695.1	3470.4	3292.1	3120.0	3027.5	2921.7	2935.0
37.5°	3140.0	2822.7	2624.5	2432.7	2287.3	2168.3	2121.9	2108.7
40°	2293.7	2042.6	1844.3	1705.4	1606.4	1513.9	1461.0	1441.0
42.5°	1586.4	1408.1	1249.2	1137.0	1070.9	1011.3	984.9	978.4
45°	1031.3	925.5	819.8	740.5	687.6	648.0	641.2	634.5
47.5°	648.0	594.8	528.7	469.4	423.0	396.5	376.8	376.8
50°	370.1	350.4	317.2	284.3	257.9	244.7	224.7	218.2
52.5°	198.3	198.3	185.1	158.6	138.9	125.7	125.7	119.0
55°	105.7	105.7	99.3	99.3	92.5	92.5	92.5	86.0
57.5°	66.1	66.1	72.8	72.8	66.1	66.1	66.1	66.1
60°	46.4	52.9	52.9	52.9	52.9	52.9	52.9	52.9
62.5°	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
65°	26.4	33.2	33.2	33.2	33.2	26.4	26.4	26.4
67.5°	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
70°	20.0	20.0	20.0	20.0	20.0	13.2	13.2	13.2
72.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
75°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
77.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
80°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
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°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
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)