

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 EX4C1009027 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 EX4C1009027 4LBSQLI
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

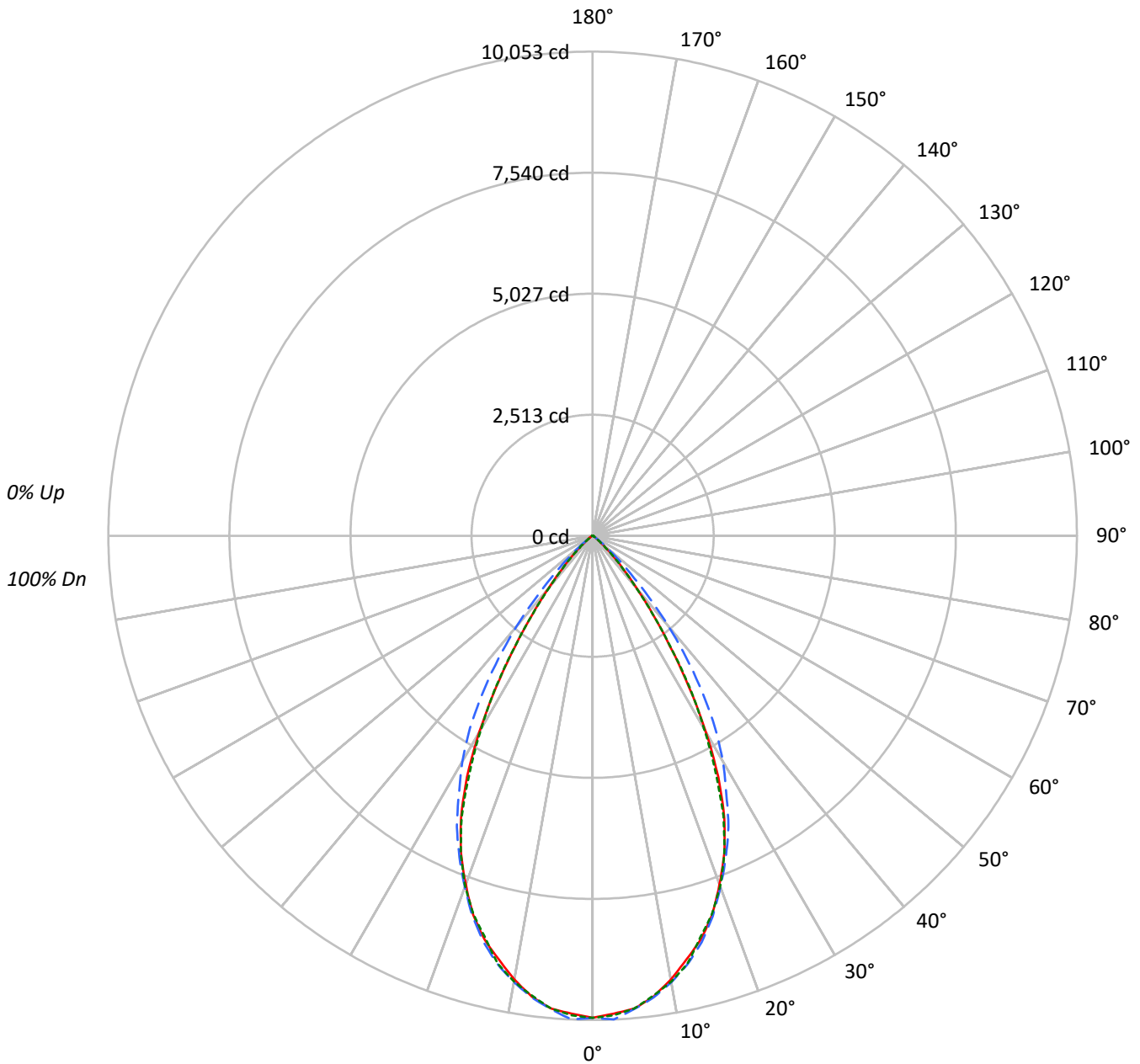
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9240.0 lumens
Efficiency: N/A
Efficacy: 80.8 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 (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

TEST NUMBER: P#
CATALOG NUMBER: LD4C100D010 EX4C1009027 4LBSQLI

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C100D010 EX4C1009027 4LBSQLI

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°	965699	965699	965699
5°	954608	955838	954608
10°	916422	922046	920801
15°	866379	872732	861924
20°	790677	796540	794589
25°	688469	710134	683721
30°	523532	602169	515755
35°	329544	468126	332536
40°	177801	309150	174589
45°	84166	152708	83279
50°	31508	57252	31508
55°	14972	18202	13929
60°	9823	8607	9823
65°	5799	5799	5799
70°	3583	5417	3583
75°	2423	2423	2423
80°	3612	3612	3612
85°	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: LD4C100D010 EX4C1009027 4LBSQLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	927.9	10.0
10°-20°	2431.9	26.3
20°-30°	2970.8	32.2
30°-40°	2077.9	22.5
40°-50°	681.0	7.4
50°-60°	108.3	1.2
60°-70°	29.5	0.3
70°-80°	9.9	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°	6330.7	68.5
0°-40°	8408.6	91.0
0°-60°	9197.8	99.5
0°-90°	9240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9240.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10008	10008	10008	10008	10008	
5°	9856	9859	9868	9808	9856	924
15°	8673	8708	8737	8679	8628	2419
25°	6467	6565	6670	6549	6422	2905
35°	2798	3303	3974	3252	2823	1785
45°	617	760	1119	750	610	517
55°	89	96	108	96	83	88
65°	25	32	25	32	25	28
75°	6	6	6	6	6	9
85°	0	0	0	0	0	3
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: LD4C100D010 EX4C1009027 4LBSQLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4
2.5°	9932.1	10002.1	9982.9	10027.6	10027.6	9976.7	9989.4	10008.4	10033.8	10053.0	9900.2
5°	9855.8	9919.4	9862.0	9925.6	9887.4	9830.4	9925.6	9874.7	9906.6	9868.5	9893.9
7.5°	9652.4	9754.1	9639.6	9715.9	9690.5	9658.6	9696.7	9684.0	9703.2	9671.3	9601.5
10°	9353.4	9436.2	9359.9	9467.9	9417.0	9385.3	9417.0	9448.9	9442.4	9410.8	9448.9
12.5°	9010.1	9105.4	9067.2	9130.8	9073.7	9073.7	9150.0	9130.8	9137.3	9111.9	9156.2
15°	8673.1	8743.1	8685.8	8768.6	8743.1	8673.1	8704.7	8704.7	8755.8	8736.7	8685.8
17.5°	8253.5	8310.6	8247.0	8266.2	8240.8	8228.1	8361.4	8272.4	8323.3	8285.2	8291.6
20°	7700.3	7725.7	7706.5	7757.4	7725.7	7763.9	7751.1	7738.4	7738.4	7757.4	7713.0
22.5°	7140.6	7140.6	7159.8	7172.5	7197.9	7159.8	7236.1	7172.5	7178.7	7223.4	7210.7
25°	6466.7	6447.5	6492.2	6555.7	6581.2	6549.2	6651.0	6600.1	6638.3	6670.2	6600.1
27.5°	5646.5	5646.5	5690.9	5799.1	5818.0	5856.2	5996.0	5996.0	6046.9	6002.5	6053.4
30°	4698.9	4769.0	4826.1	4965.9	5010.5	5093.3	5239.4	5309.5	5423.9	5404.7	5379.3
32.5°	3726.1	3821.6	3827.8	3974.2	4094.8	4234.7	4431.9	4597.2	4680.0	4737.0	4673.5
35°	2797.7	2855.0	2905.9	3007.6	3211.1	3395.5	3573.5	3789.7	3936.0	3974.2	3916.8
37.5°	2047.5	2060.3	2111.1	2206.4	2358.9	2537.2	2753.3	2988.4	3141.2	3198.3	3134.8
40°	1411.6	1424.3	1449.7	1532.5	1659.6	1786.8	1958.5	2200.1	2340.0	2454.4	2371.6
42.5°	947.4	960.1	985.5	1049.1	1119.1	1239.8	1373.4	1526.0	1659.6	1710.5	1665.9
45°	616.8	616.8	629.5	674.1	712.3	807.5	903.0	998.2	1087.2	1119.1	1087.2
47.5°	362.5	368.7	381.4	413.3	457.7	495.9	565.9	629.5	654.9	680.4	667.6
50°	209.9	209.9	228.9	248.1	279.7	305.1	330.6	356.0	368.7	381.4	368.7
52.5°	114.4	120.9	127.1	133.6	146.3	171.8	190.7	190.7	197.2	203.4	197.2
55°	89.0	89.0	89.0	89.0	95.5	95.5	95.5	101.7	101.7	108.2	101.7
57.5°	63.6	63.6	63.6	70.1	70.1	70.1	63.6	63.6	63.6	63.6	63.6
60°	50.9	50.9	50.9	50.9	50.9	50.9	50.9	44.6	44.6	44.6	44.6
62.5°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
65°	25.4	25.4	31.9	31.9	31.9	31.9	31.9	25.4	25.4	25.4	25.4
67.5°	19.2	19.2	19.2	19.2	25.4	25.4	19.2	19.2	19.2	19.2	19.2
70°	12.7	12.7	12.7	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
72.5°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
75°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
77.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
80°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	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°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: LD4C100D010 EX4C1009027 4LBSQLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4	10008.4
2.5°	10008.4	9900.2	9912.9	9970.2	9938.3	9970.2	9964.0	9964.0
5°	9900.2	9868.5	9817.6	9798.4	9836.6	9919.4	9906.6	9855.8
7.5°	9696.7	9614.2	9671.3	9696.7	9665.1	9715.9	9741.4	9633.2
10°	9455.2	9423.5	9410.8	9423.5	9410.8	9461.6	9398.1	9398.1
12.5°	9111.9	9061.0	9061.0	9137.3	9092.7	9054.5	9105.4	9099.1
15°	8768.6	8666.6	8666.6	8692.0	8711.2	8685.8	8692.0	8628.5
17.5°	8259.7	8228.1	8183.4	8253.5	8272.4	8247.0	8266.2	8234.3
20°	7782.8	7782.8	7700.3	7732.0	7757.4	7776.6	7789.3	7738.4
22.5°	7172.5	7185.2	7127.9	7191.5	7210.7	7147.1	7159.8	7147.1
25°	6612.8	6606.6	6562.0	6536.5	6549.2	6523.8	6517.6	6422.1
27.5°	5996.0	5932.5	5837.2	5862.7	5754.5	5665.5	5665.5	5519.1
30°	5328.4	5220.5	5093.3	4965.9	4870.7	4769.0	4711.6	4629.1
32.5°	4546.3	4400.2	4241.2	4069.4	3961.5	3808.9	3726.1	3770.7
35°	3770.7	3554.3	3338.2	3166.7	3001.1	2912.1	2810.4	2823.1
37.5°	3020.3	2715.2	2524.5	2340.0	2200.1	2085.7	2041.1	2028.3
40°	2206.4	1964.8	1774.1	1640.4	1545.2	1456.2	1405.3	1386.1
42.5°	1526.0	1354.5	1201.7	1093.7	1030.1	972.8	947.4	941.1
45°	992.0	890.3	788.6	712.3	661.4	623.3	616.8	610.3
47.5°	623.3	572.2	508.6	451.5	406.9	381.4	362.5	362.5
50°	356.0	337.1	305.1	273.5	248.1	235.3	216.1	209.9
52.5°	190.7	190.7	178.0	152.6	133.6	120.9	120.9	114.4
55°	101.7	101.7	95.5	95.5	89.0	89.0	89.0	82.8
57.5°	63.6	63.6	70.1	70.1	63.6	63.6	63.6	63.6
60°	44.6	50.9	50.9	50.9	50.9	50.9	50.9	50.9
62.5°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
65°	25.4	31.9	31.9	31.9	31.9	25.4	25.4	25.4
67.5°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
70°	19.2	19.2	19.2	19.2	19.2	12.7	12.7	12.7
72.5°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
75°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
77.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
80°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
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°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
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)