

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: **LD4C35D010 EX4C359027 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: LD4C35D010 EX4C359027 4LBSQLI
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

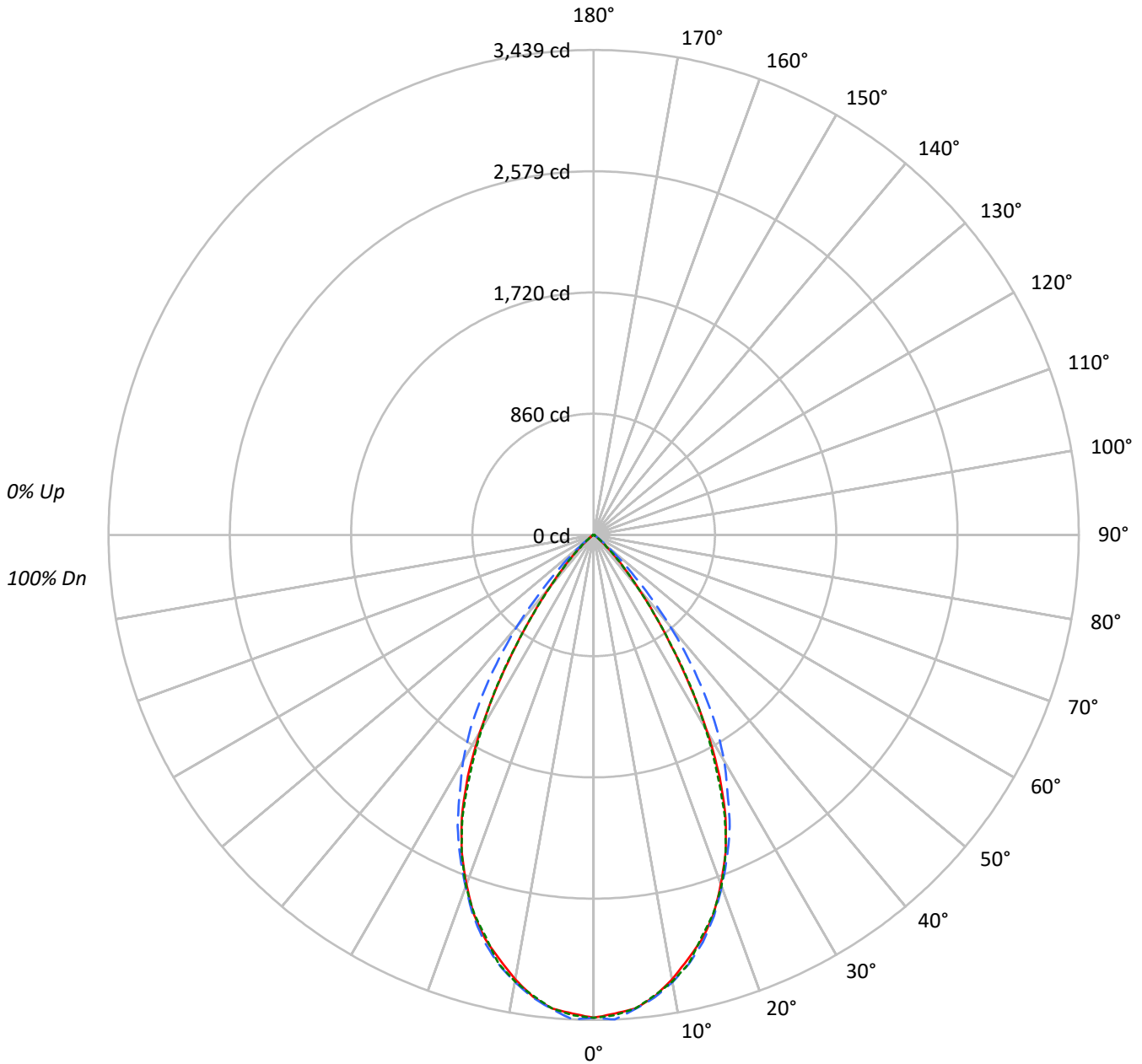
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3161.0 lumens
Efficiency: N/A
Efficacy: 78.2 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): 40.4
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°	330368	330368	330368
5°	326574	326991	326574
10°	313508	315428	315007
15°	296391	298559	294863
20°	270493	272496	271828
25°	235530	242940	233901
30°	179101	205997	176438
35°	112738	160149	113763
40°	60825	105766	59729
45°	28792	52249	28492
50°	10778	19589	10778
55°	5114	6224	4761
60°	3358	2953	3358
65°	1986	1986	1986
70°	1213	1862	1213
75°	820	820	820
80°	1222	1222	1222
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.4	10.0
10°-20°	832.0	26.3
20°-30°	1016.3	32.2
30°-40°	710.8	22.5
40°-50°	233.0	7.4
50°-60°	37.0	1.2
60°-70°	10.1	0.3
70°-80°	3.4	0.1
80°-90°	0.9	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°	2165.7	68.5
0°-40°	2876.6	91.0
0°-60°	3146.6	99.5
0°-90°	3161.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3161.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3424	3424	3424	3424	3424	
5°	3372	3373	3376	3355	3372	316
15°	2967	2979	2989	2969	2952	828
25°	2212	2246	2282	2240	2197	994
35°	957	1130	1360	1113	966	611
45°	211	260	383	257	209	177
55°	30	33	37	33	28	30
65°	9	11	9	11	9	10
75°	2	2	2	2	2	3
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9
2.5°	3397.8	3421.7	3415.2	3430.4	3430.4	3413.0	3417.4	3423.9	3432.6	3439.1	3386.8
5°	3371.7	3393.4	3373.8	3395.5	3382.5	3363.0	3395.5	3378.1	3389.1	3376.0	3384.7
7.5°	3302.1	3336.9	3297.7	3323.8	3315.1	3304.2	3317.2	3312.9	3319.5	3308.5	3284.7
10°	3199.8	3228.1	3202.0	3239.0	3221.6	3210.7	3221.6	3232.5	3230.3	3219.4	3232.5
12.5°	3082.4	3114.9	3101.9	3123.6	3104.1	3104.1	3130.2	3123.6	3125.9	3117.2	3132.3
15°	2967.1	2991.0	2971.4	2999.7	2991.0	2967.1	2977.9	2977.9	2995.4	2988.8	2971.4
17.5°	2823.5	2843.0	2821.3	2827.9	2819.2	2814.8	2860.4	2830.0	2847.4	2834.4	2836.6
20°	2634.3	2643.0	2636.4	2653.8	2643.0	2656.0	2651.7	2647.3	2647.3	2653.8	2638.6
22.5°	2442.8	2442.8	2449.4	2453.7	2462.4	2449.4	2475.5	2453.7	2455.8	2471.1	2466.8
25°	2212.3	2205.7	2221.0	2242.7	2251.4	2240.5	2275.3	2257.9	2270.9	2281.9	2257.9
27.5°	1931.7	1931.7	1946.9	1983.9	1990.3	2003.4	2051.2	2051.2	2068.6	2053.5	2070.9
30°	1607.5	1631.5	1651.0	1698.8	1714.1	1742.4	1792.4	1816.4	1855.5	1848.9	1840.2
32.5°	1274.7	1307.4	1309.5	1359.6	1400.8	1448.7	1516.2	1572.7	1601.0	1620.5	1598.8
35°	957.1	976.7	994.1	1028.9	1098.5	1161.6	1222.5	1296.5	1346.5	1359.6	1339.9
37.5°	700.5	704.8	722.2	754.8	807.0	868.0	941.9	1022.3	1074.6	1094.1	1072.4
40°	482.9	487.2	495.9	524.3	567.8	611.3	670.0	752.7	800.5	839.7	811.3
42.5°	324.1	328.4	337.1	358.9	382.9	424.1	469.8	522.0	567.8	585.2	569.9
45°	211.0	211.0	215.4	230.6	243.7	276.2	308.9	341.5	371.9	382.9	371.9
47.5°	124.0	126.1	130.5	141.4	156.6	169.6	193.6	215.4	224.0	232.7	228.4
50°	71.8	71.8	78.3	84.9	95.7	104.4	113.1	121.8	126.1	130.5	126.1
52.5°	39.1	41.4	43.5	45.7	50.1	58.8	65.2	65.2	67.5	69.6	67.5
55°	30.4	30.4	30.4	30.4	32.7	32.7	32.7	34.8	34.8	37.0	34.8
57.5°	21.7	21.7	21.7	24.0	24.0	24.0	21.7	21.7	21.7	21.7	21.7
60°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	15.3	15.3	15.3	15.3
62.5°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
65°	8.7	8.7	10.9	10.9	10.9	10.9	10.9	8.7	8.7	8.7	8.7
67.5°	6.6	6.6	6.6	6.6	8.7	8.7	6.6	6.6	6.6	6.6	6.6
70°	4.3	4.3	4.3	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
72.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	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°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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°	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9	3423.9
2.5°	3423.9	3386.8	3391.2	3410.8	3399.9	3410.8	3408.7	3408.7
5°	3386.8	3376.0	3358.6	3352.0	3365.1	3393.4	3389.1	3371.7
7.5°	3317.2	3289.0	3308.5	3317.2	3306.4	3323.8	3332.5	3295.5
10°	3234.6	3223.8	3219.4	3223.8	3219.4	3236.8	3215.1	3215.1
12.5°	3117.2	3099.8	3099.8	3125.9	3110.6	3097.5	3114.9	3112.8
15°	2999.7	2964.8	2964.8	2973.5	2980.1	2971.4	2973.5	2951.8
17.5°	2825.7	2814.8	2799.6	2823.5	2830.0	2821.3	2827.9	2817.0
20°	2662.5	2662.5	2634.3	2645.1	2653.8	2660.4	2664.7	2647.3
22.5°	2453.7	2458.1	2438.4	2460.2	2466.8	2445.0	2449.4	2445.0
25°	2262.2	2260.1	2244.8	2236.1	2240.5	2231.8	2229.7	2197.0
27.5°	2051.2	2029.5	1996.9	2005.6	1968.6	1938.2	1938.2	1888.1
30°	1822.8	1785.9	1742.4	1698.8	1666.3	1631.5	1611.8	1583.6
32.5°	1555.3	1505.3	1450.9	1392.1	1355.2	1303.0	1274.7	1290.0
35°	1290.0	1215.9	1142.0	1083.3	1026.7	996.2	961.4	965.8
37.5°	1033.3	928.9	863.6	800.5	752.7	713.5	698.2	693.9
40°	754.8	672.1	606.9	561.2	528.6	498.2	480.8	474.2
42.5°	522.0	463.4	411.1	374.2	352.4	332.8	324.1	322.0
45°	339.4	304.6	269.8	243.7	226.3	213.2	211.0	208.8
47.5°	213.2	195.7	174.0	154.5	139.2	130.5	124.0	124.0
50°	121.8	115.3	104.4	93.6	84.9	80.5	73.9	71.8
52.5°	65.2	65.2	60.9	52.2	45.7	41.4	41.4	39.1
55°	34.8	34.8	32.7	32.7	30.4	30.4	30.4	28.3
57.5°	21.7	21.7	24.0	24.0	21.7	21.7	21.7	21.7
60°	15.3	17.4	17.4	17.4	17.4	17.4	17.4	17.4
62.5°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
65°	8.7	10.9	10.9	10.9	10.9	8.7	8.7	8.7
67.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
70°	6.6	6.6	6.6	6.6	6.6	4.3	4.3	4.3
72.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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)