

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: **LD4C30D010 EX4C309030 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: LD4C30D010 EX4C309030 4LBSQLI  
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

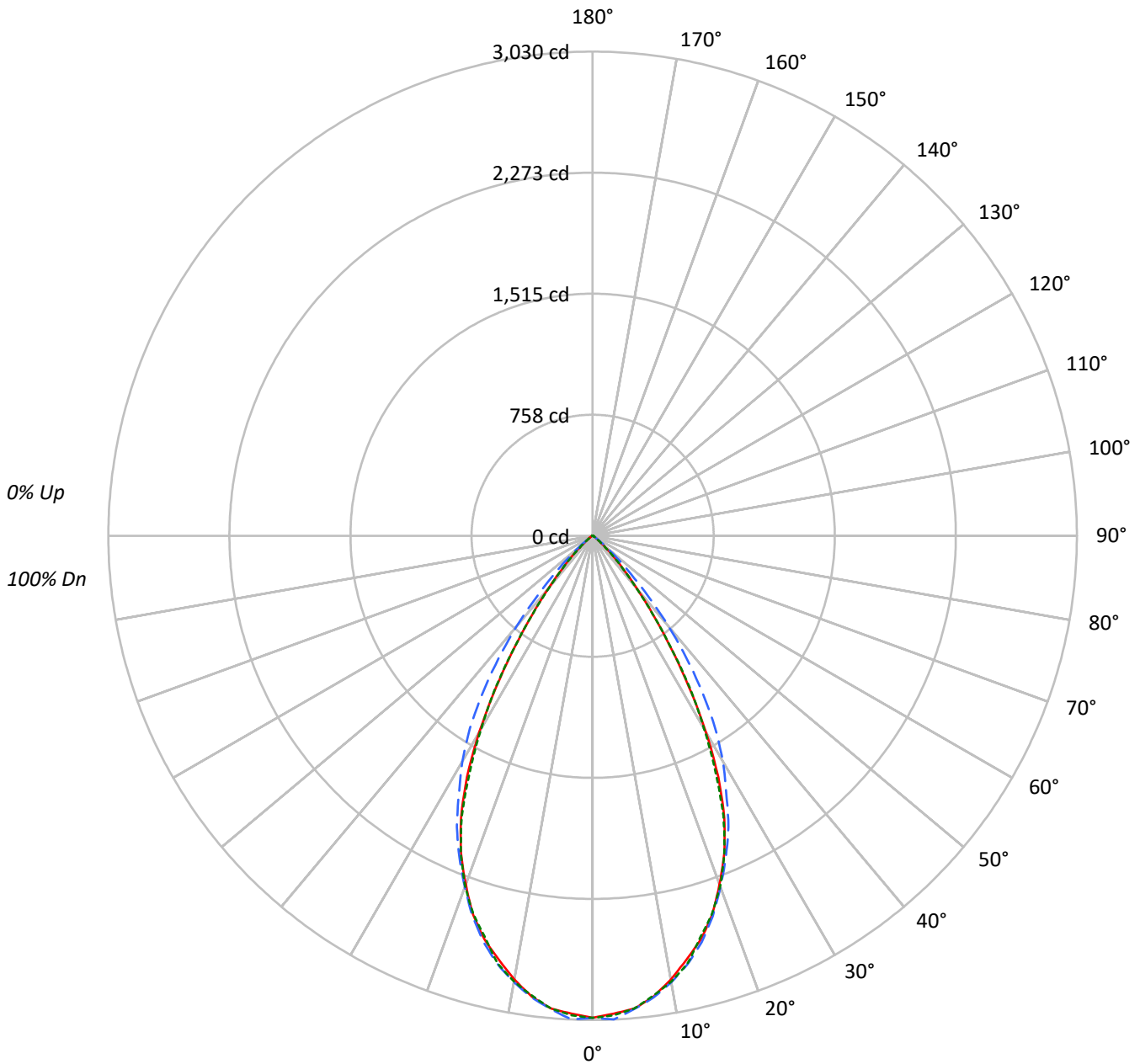
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2785.1 lumens  
Efficiency: N/A  
Efficacy: 88.1 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): 31.6  
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°	291068	291068	291068
5°	287725	288093	287725
10°	276218	277913	277531
15°	261129	263047	259791
20°	238313	240079	239494
25°	207508	214035	206082
30°	157798	181496	155447
35°	99322	141090	100229
40°	53595	93183	52625
45°	25367	46027	25094
50°	9502	17263	9502
55°	4508	5484	4189
60°	2953	2605	2953
65°	1758	1758	1758
70°	1072	1636	1072
75°	746	746	746
80°	1111	1111	1111
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	279.7	10.0
10°-20°	733.0	26.3
20°-30°	895.4	32.2
30°-40°	626.3	22.5
40°-50°	205.2	7.4
50°-60°	32.6	1.2
60°-70°	8.9	0.3
70°-80°	3.0	0.1
80°-90°	0.8	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°	1908.1	68.5
0°-40°	2534.4	91.0
0°-60°	2772.3	99.5
0°-90°	2785.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2785.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3017	3017	3017	3017	3017	
5°	2971	2972	2974	2956	2971	279
15°	2614	2625	2633	2616	2601	729
25°	1949	1979	2010	1974	1936	876
35°	843	996	1198	980	851	538
45°	186	229	337	226	184	156
55°	27	29	33	29	25	27
65°	8	10	8	10	8	9
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°	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6
2.5°	2993.6	3014.7	3008.9	3022.4	3022.4	3007.0	3010.9	3016.6	3024.3	3030.0	2984.0
5°	2970.6	2989.8	2972.5	2991.6	2980.1	2962.9	2991.6	2976.3	2985.9	2974.4	2982.1
7.5°	2909.3	2939.9	2905.5	2928.4	2920.8	2911.2	2922.7	2918.8	2924.6	2915.0	2894.0
10°	2819.2	2844.1	2821.1	2853.7	2838.4	2828.8	2838.4	2848.0	2846.0	2836.5	2848.0
12.5°	2715.7	2744.4	2732.9	2752.1	2734.9	2734.9	2757.9	2752.1	2754.0	2746.4	2759.8
15°	2614.1	2635.2	2618.0	2642.9	2635.2	2614.1	2623.7	2623.7	2639.1	2633.3	2618.0
17.5°	2487.7	2504.9	2485.7	2491.5	2483.8	2480.0	2520.2	2493.4	2508.7	2497.2	2499.2
20°	2320.9	2328.6	2322.8	2338.1	2328.6	2340.1	2336.3	2332.4	2332.4	2338.1	2324.8
22.5°	2152.2	2152.2	2158.0	2161.8	2169.5	2158.0	2181.0	2161.8	2163.7	2177.2	2173.3
25°	1949.1	1943.3	1956.8	1975.9	1983.6	1974.0	2004.6	1989.3	2000.8	2010.4	1989.3
27.5°	1701.9	1701.9	1715.3	1747.9	1753.6	1765.1	1807.2	1807.2	1822.6	1809.2	1824.5
30°	1416.3	1437.4	1454.6	1496.8	1510.2	1535.2	1579.2	1600.3	1634.8	1629.0	1621.3
32.5°	1123.1	1151.9	1153.7	1197.8	1234.2	1276.4	1335.8	1385.6	1410.6	1427.8	1408.6
35°	843.2	860.5	875.9	906.5	967.8	1023.4	1077.1	1142.2	1186.3	1197.8	1180.6
37.5°	617.1	621.0	636.3	665.0	711.0	764.7	829.9	900.7	946.8	964.0	944.8
40°	425.5	429.3	437.0	461.9	500.2	538.5	590.3	663.1	705.3	739.8	714.8
42.5°	285.5	289.4	297.0	316.2	337.3	373.7	414.0	459.9	500.2	515.6	502.1
45°	185.9	185.9	189.7	203.2	214.7	243.4	272.2	300.9	327.7	337.3	327.7
47.5°	109.3	111.1	115.0	124.6	138.0	149.5	170.6	189.7	197.4	205.1	201.2
50°	63.3	63.3	69.0	74.8	84.3	92.0	99.6	107.3	111.1	115.0	111.1
52.5°	34.5	36.4	38.3	40.3	44.1	51.8	57.5	57.5	59.4	61.3	59.4
55°	26.8	26.8	26.8	26.8	28.8	28.8	28.8	30.7	30.7	32.6	30.7
57.5°	19.2	19.2	19.2	21.1	21.1	21.1	19.2	19.2	19.2	19.2	19.2
60°	15.3	15.3	15.3	15.3	15.3	15.3	15.3	13.5	13.5	13.5	13.5
62.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
65°	7.7	7.7	9.6	9.6	9.6	9.6	9.6	7.7	7.7	7.7	7.7
67.5°	5.8	5.8	5.8	5.8	7.7	7.7	5.8	5.8	5.8	5.8	5.8
70°	3.8	3.8	3.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
72.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	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°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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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CATALOG NUMBER: LD4C30D010 EX4C309030 4LBSQLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6
2.5°	3016.6	2984.0	2987.8	3005.1	2995.5	3005.1	3003.2	3003.2
5°	2984.0	2974.4	2959.1	2953.3	2964.8	2989.8	2985.9	2970.6
7.5°	2922.7	2897.8	2915.0	2922.7	2913.1	2928.4	2936.1	2903.5
10°	2849.8	2840.3	2836.5	2840.3	2836.5	2851.8	2832.6	2832.6
12.5°	2746.4	2731.0	2731.0	2754.0	2740.6	2729.1	2744.4	2742.5
15°	2642.9	2612.2	2612.2	2619.8	2625.6	2618.0	2619.8	2600.7
17.5°	2489.5	2480.0	2466.5	2487.7	2493.4	2485.7	2491.5	2481.9
20°	2345.8	2345.8	2320.9	2330.5	2338.1	2343.9	2347.7	2332.4
22.5°	2161.8	2165.7	2148.4	2167.6	2173.3	2154.2	2158.0	2154.2
25°	1993.2	1991.3	1977.8	1970.2	1974.0	1966.3	1964.4	1935.7
27.5°	1807.2	1788.1	1759.4	1767.0	1734.4	1707.6	1707.6	1663.5
30°	1606.0	1573.5	1535.2	1496.8	1468.1	1437.4	1420.1	1395.2
32.5°	1370.3	1326.3	1278.3	1226.5	1194.0	1148.0	1123.1	1136.5
35°	1136.5	1071.3	1006.2	954.5	904.6	877.7	847.1	850.9
37.5°	910.3	818.4	760.9	705.3	663.1	628.6	615.2	611.4
40°	665.0	592.2	534.7	494.4	465.7	438.9	423.6	417.8
42.5°	459.9	408.2	362.2	329.6	310.5	293.2	285.5	283.7
45°	299.0	268.3	237.7	214.7	199.4	187.9	185.9	183.9
47.5°	187.9	172.5	153.3	136.1	122.6	115.0	109.3	109.3
50°	107.3	101.6	92.0	82.4	74.8	70.9	65.1	63.3
52.5°	57.5	57.5	53.7	46.0	40.3	36.4	36.4	34.5
55°	30.7	30.7	28.8	28.8	26.8	26.8	26.8	24.9
57.5°	19.2	19.2	21.1	21.1	19.2	19.2	19.2	19.2
60°	13.5	15.3	15.3	15.3	15.3	15.3	15.3	15.3
62.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
65°	7.7	9.6	9.6	9.6	9.6	7.7	7.7	7.7
67.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
70°	5.8	5.8	5.8	5.8	5.8	3.8	3.8	3.8
72.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)