

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 EX4C309040 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 EX4C309040 4LBSQLI  
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

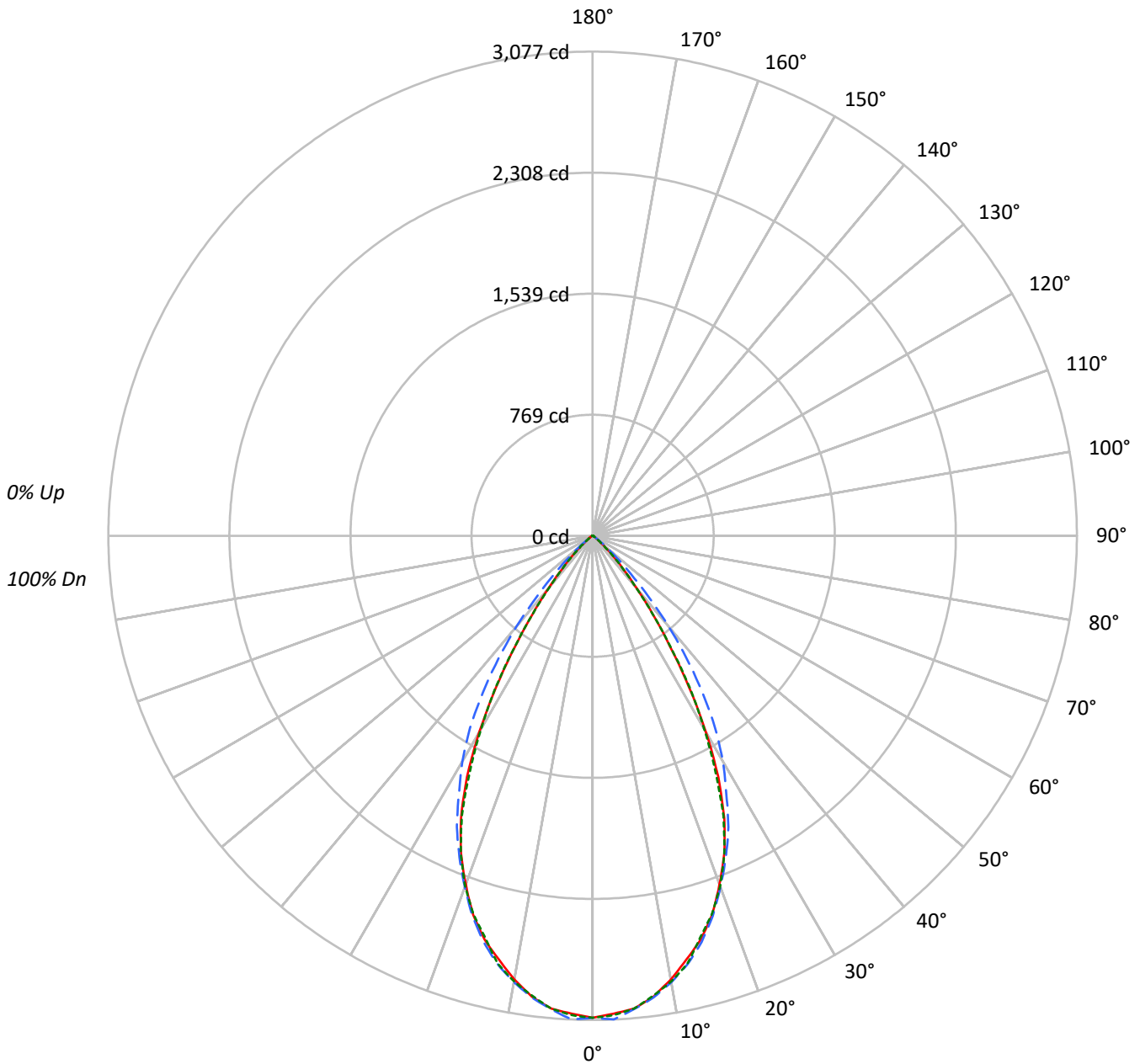
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2828.1 lumens  
Efficiency: N/A  
Efficacy: 89.5 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°	295565	295565	295565
5°	292171	292548	292171
10°	280480	282204	281822
15°	265165	267103	263797
20°	241999	243786	243190
25°	210713	217346	209265
30°	160227	184304	157854
35°	100865	143269	101772
40°	54414	94619	53431
45°	25763	46736	25490
50°	9637	17518	9637
55°	4576	5568	4256
60°	3010	2644	3010
65°	1781	1781	1781
70°	1100	1664	1100
75°	746	746	746
80°	1111	1111	1111
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.0	10.0
10°-20°	744.3	26.3
20°-30°	909.3	32.2
30°-40°	636.0	22.5
40°-50°	208.4	7.4
50°-60°	33.1	1.2
60°-70°	9.1	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°	1937.6	68.5
0°-40°	2573.5	91.0
0°-60°	2815.1	99.5
0°-90°	2828.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2828.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3063	3063	3063	3063	3063	
5°	3016	3017	3020	3002	3016	283
15°	2654	2665	2674	2656	2641	740
25°	1979	2009	2042	2004	1966	889
35°	856	1011	1216	995	864	546
45°	189	233	342	230	187	158
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2
2.5°	3039.8	3061.3	3055.4	3069.0	3069.0	3053.5	3057.4	3063.2	3070.9	3076.8	3030.0
5°	3016.5	3035.9	3018.4	3037.8	3026.2	3008.7	3037.8	3022.3	3032.0	3020.4	3028.1
7.5°	2954.2	2985.3	2950.3	2973.7	2965.9	2956.1	2967.8	2963.9	2969.8	2960.0	2938.6
10°	2862.7	2888.1	2864.7	2897.7	2882.2	2872.5	2882.2	2891.9	2890.0	2880.3	2891.9
12.5°	2757.6	2786.8	2775.1	2794.6	2777.1	2777.1	2800.5	2794.6	2796.6	2788.8	2802.4
15°	2654.5	2675.9	2658.4	2683.7	2675.9	2654.5	2664.2	2664.2	2679.8	2673.9	2658.4
17.5°	2526.1	2543.5	2524.1	2530.0	2522.2	2518.3	2559.1	2531.9	2547.4	2535.8	2537.7
20°	2356.8	2364.5	2358.7	2374.2	2364.5	2376.2	2372.3	2368.4	2368.4	2374.2	2360.6
22.5°	2185.5	2185.5	2191.3	2195.2	2203.0	2191.3	2214.7	2195.2	2197.1	2210.8	2206.9
25°	1979.2	1973.3	1987.0	2006.5	2014.2	2004.5	2035.6	2020.0	2031.7	2041.5	2020.0
27.5°	1728.2	1728.2	1741.8	1774.9	1780.7	1792.3	1835.2	1835.2	1850.7	1837.1	1852.7
30°	1438.1	1459.6	1477.1	1519.9	1533.5	1558.9	1603.6	1625.0	1660.0	1654.2	1646.4
32.5°	1140.4	1169.6	1171.5	1216.3	1253.3	1296.1	1356.4	1407.0	1432.4	1449.8	1430.4
35°	856.3	873.8	889.4	920.5	982.8	1039.2	1093.7	1159.9	1204.7	1216.3	1198.8
37.5°	626.7	630.6	646.1	675.3	722.0	776.5	842.7	914.6	961.4	978.9	959.4
40°	432.0	435.9	443.7	469.0	507.9	546.9	599.4	673.4	716.2	751.2	725.9
42.5°	289.9	293.8	301.6	321.1	342.5	379.5	420.4	467.0	507.9	523.5	509.9
45°	188.8	188.8	192.7	206.3	218.0	247.1	276.4	305.5	332.8	342.5	332.8
47.5°	110.9	112.9	116.7	126.5	140.1	151.8	173.2	192.7	200.4	208.2	204.3
50°	64.2	64.2	70.0	75.9	85.6	93.4	101.2	109.0	112.9	116.7	112.9
52.5°	35.0	37.0	38.9	40.9	44.8	52.6	58.4	58.4	60.4	62.3	60.4
55°	27.2	27.2	27.2	27.2	29.2	29.2	29.2	31.1	31.1	33.1	31.1
57.5°	19.5	19.5	19.5	21.4	21.4	21.4	19.5	19.5	19.5	19.5	19.5
60°	15.6	15.6	15.6	15.6	15.6	15.6	15.6	13.7	13.7	13.7	13.7
62.5°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
65°	7.8	7.8	9.8	9.8	9.8	9.8	9.8	7.8	7.8	7.8	7.8
67.5°	5.9	5.9	5.9	5.9	7.8	7.8	5.9	5.9	5.9	5.9	5.9
70°	3.9	3.9	3.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
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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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2	3063.2
2.5°	3063.2	3030.0	3033.9	3051.5	3041.7	3051.5	3049.6	3049.6
5°	3030.0	3020.4	3004.8	2998.9	3010.6	3035.9	3032.0	3016.5
7.5°	2967.8	2942.5	2960.0	2967.8	2958.1	2973.7	2981.4	2948.3
10°	2893.8	2884.2	2880.3	2884.2	2880.3	2895.8	2876.4	2876.4
12.5°	2788.8	2773.2	2773.2	2796.6	2782.9	2771.2	2786.8	2784.9
15°	2683.7	2652.5	2652.5	2660.3	2666.2	2658.4	2660.3	2640.8
17.5°	2528.0	2518.3	2504.6	2526.1	2531.9	2524.1	2530.0	2520.2
20°	2382.0	2382.0	2356.8	2366.4	2374.2	2380.1	2384.0	2368.4
22.5°	2195.2	2199.1	2181.6	2201.0	2206.9	2187.4	2191.3	2187.4
25°	2023.9	2022.0	2008.4	2000.6	2004.5	1996.7	1994.8	1965.6
27.5°	1835.2	1815.7	1786.5	1794.3	1761.2	1734.0	1734.0	1689.2
30°	1630.8	1597.8	1558.9	1519.9	1490.7	1459.6	1442.0	1416.8
32.5°	1391.5	1346.7	1298.1	1245.5	1212.4	1165.7	1140.4	1154.1
35°	1154.1	1087.8	1021.7	969.2	918.5	891.3	860.2	864.0
37.5°	924.4	831.0	772.6	716.2	673.4	638.3	624.7	620.8
40°	675.3	601.3	543.0	502.1	472.9	445.7	430.1	424.2
42.5°	467.0	414.6	367.8	334.7	315.3	297.7	289.9	288.0
45°	303.6	272.5	241.3	218.0	202.4	190.8	188.8	186.8
47.5°	190.8	175.1	155.7	138.2	124.5	116.7	110.9	110.9
50°	109.0	103.2	93.4	83.7	75.9	72.0	66.2	64.2
52.5°	58.4	58.4	54.5	46.7	40.9	37.0	37.0	35.0
55°	31.1	31.1	29.2	29.2	27.2	27.2	27.2	25.3
57.5°	19.5	19.5	21.4	21.4	19.5	19.5	19.5	19.5
60°	13.7	15.6	15.6	15.6	15.6	15.6	15.6	15.6
62.5°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
65°	7.8	9.8	9.8	9.8	9.8	7.8	7.8	7.8
67.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
70°	5.9	5.9	5.9	5.9	5.9	3.9	3.9	3.9
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
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)