

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: **LD4C55D010 EX4C559040 4LBCSSQMW**

Issue Date: 5/25/2022

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 (P209253)
Test Lab: INNOVATION CENTER
Issue Date: 5/25/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C55D010 EX4C559040 4LBCSSQMW
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

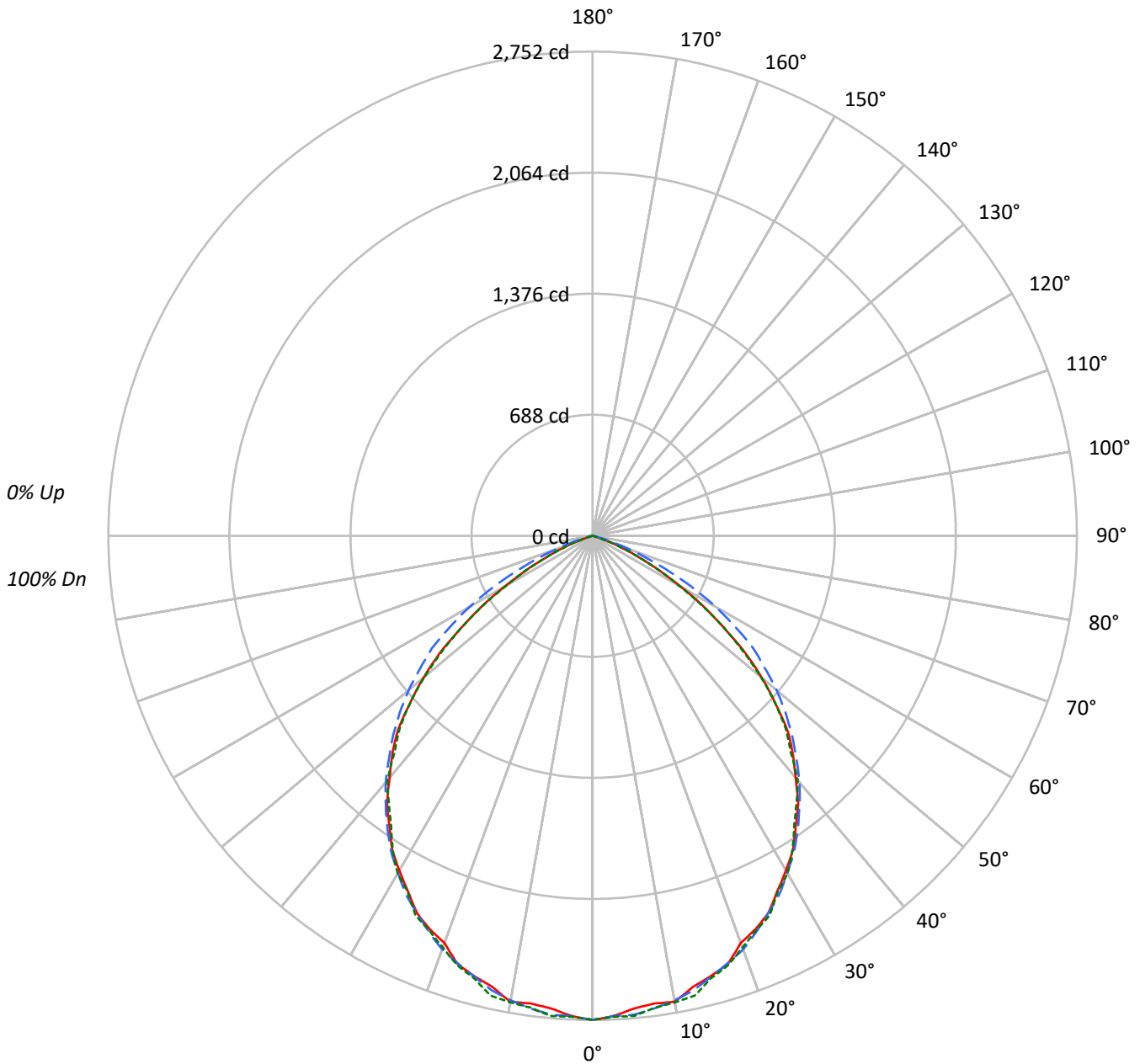
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5878.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
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				20				
RC	80				70				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	100	100	100
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89	89	89	89
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77	77	77	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67	67	67	67
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59	59	59	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52	52	52	52
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46	46	46	46
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41	41	41	41
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	37	37	37	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33	33	33	33
10	57	45	38	33	56	44	37	33	44	37	32	43	37	32	42	36	32	31	31	31	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	265508	265508	265508
5°	261225	264624	265380
10°	263481	262707	263853
15°	258862	259241	260031
20°	252843	256857	255656
25°	251744	251744	253416
30°	244736	246474	246920
35°	237090	239411	235253
40°	225980	230389	228424
45°	213867	218671	211739
50°	188343	204765	187172
55°	152545	187384	153201
60°	111618	155386	109380
65°	67832	110640	66051
70°	26462	59554	25362
75°	2908	16068	2908
80°	2223	2223	2223
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.7	4.4
10°-20°	735.0	12.5
20°-30°	1090.5	18.6
30°-40°	1263.6	21.5
40°-50°	1211.5	20.6
50°-60°	890.8	15.2
60°-70°	384.7	6.5
70°-80°	41.5	0.7
80°-90°	0.5	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°	2085.3	35.5
0°-40°	3348.9	57.0
0°-60°	5451.2	92.7
0°-90°	5878.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5878.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2752	2752	2752	2752	2752	
5°	2697	2724	2732	2736	2740	257
15°	2591	2607	2595	2599	2603	730
25°	2365	2361	2365	2369	2380	1083
35°	2013	2025	2032	2028	1997	1259
45°	1567	1571	1602	1579	1552	1191
55°	907	1000	1114	997	911	816
65°	297	371	485	367	289	305
75°	8	12	43	8	8	24
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°	22.5°	25°	30°	35°	40°	45°
0°	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7
2.5°	2732.1	2763.3	2767.3	2747.7	2739.9	2728.2	2755.5	2736.0	2743.9	2736.0	2732.1
5°	2697.0	2732.1	2736.0	2736.0	2728.2	2724.2	2736.0	2732.1	2728.2	2720.4	2732.1
7.5°	2681.3	2700.8	2720.4	2697.0	2708.6	2704.8	2732.1	2720.4	2716.4	2716.4	2708.6
10°	2689.2	2685.2	2700.8	2677.4	2685.2	2677.4	2700.8	2700.8	2693.0	2685.2	2681.3
12.5°	2626.5	2657.7	2657.7	2653.9	2646.1	2634.3	2657.7	2673.5	2649.9	2649.9	2646.1
15°	2591.4	2599.2	2603.1	2603.1	2599.2	2607.0	2618.7	2603.1	2607.0	2587.4	2595.2
17.5°	2552.3	2536.7	2548.4	2540.5	2544.5	2552.3	2568.0	2568.0	2544.5	2540.5	2548.4
20°	2462.4	2509.3	2513.3	2489.8	2493.7	2493.7	2521.1	2497.6	2513.3	2493.7	2501.5
22.5°	2419.3	2450.6	2454.6	2423.3	2442.8	2419.3	2446.8	2411.5	2450.6	2423.3	2435.0
25°	2364.6	2360.8	2372.5	2356.8	2360.8	2360.8	2380.3	2364.6	2376.4	2360.8	2364.6
27.5°	2274.9	2306.1	2302.1	2286.5	2294.3	2290.5	2329.6	2286.5	2309.9	2290.5	2298.3
30°	2196.6	2224.0	2216.2	2200.5	2200.5	2188.7	2231.8	2220.0	2216.2	2216.2	2212.2
32.5°	2118.4	2122.4	2114.6	2118.4	2122.4	2106.8	2141.9	2126.2	2122.4	2126.2	2130.2
35°	2012.8	2012.8	2020.7	2009.0	2024.6	2024.6	2055.9	2036.3	2032.5	2020.7	2032.5
37.5°	1919.1	1907.4	1911.3	1911.3	1919.1	1926.9	1942.5	1934.7	1934.7	1923.1	1930.9
40°	1794.1	1786.2	1797.9	1797.9	1809.7	1809.7	1825.3	1817.5	1829.1	1829.1	1829.1
42.5°	1684.7	1684.7	1676.8	1688.5	1692.5	1688.5	1715.9	1711.9	1715.9	1708.1	1711.9
45°	1567.3	1567.3	1559.5	1555.6	1575.1	1571.3	1602.5	1590.7	1606.4	1598.5	1602.5
47.5°	1407.0	1426.6	1414.8	1426.6	1450.1	1454.1	1473.5	1465.7	1481.3	1469.7	1485.3
50°	1254.7	1254.7	1266.4	1282.0	1305.4	1309.4	1332.9	1348.5	1356.3	1360.1	1364.1
52.5°	1094.4	1090.5	1102.3	1121.7	1141.3	1157.0	1180.4	1203.8	1219.5	1242.9	1231.1
55°	906.8	914.6	926.4	949.8	981.1	1000.5	1020.1	1051.4	1078.8	1090.5	1113.9
57.5°	746.5	738.7	746.5	777.7	813.0	828.6	856.0	887.3	926.4	949.8	957.6
60°	578.4	582.4	590.2	617.6	644.9	668.3	680.1	730.9	766.1	789.5	805.2
62.5°	426.1	433.9	441.7	465.2	492.4	512.1	531.5	574.6	605.8	629.3	644.9
65°	297.1	300.9	312.7	324.4	351.8	371.3	386.9	422.1	453.4	473.0	484.6
67.5°	183.7	187.5	195.4	211.1	230.6	246.2	261.9	285.3	312.7	332.2	336.2
70°	93.8	97.8	101.6	113.4	129.0	136.8	148.5	168.1	187.5	203.2	211.1
72.5°	31.3	31.3	35.2	43.1	50.9	58.7	62.5	82.1	97.8	105.6	109.4
75°	7.8	7.8	7.8	7.8	7.8	11.8	11.8	23.4	31.3	39.1	43.1
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	7.8	7.8
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7	2751.7
2.5°	2751.7	2743.9	2739.9	2743.9	2743.9	2739.9	2751.7	2767.3	2786.8	2736.0
5°	2747.7	2739.9	2747.7	2724.2	2736.0	2728.2	2743.9	2739.9	2755.5	2739.9
7.5°	2736.0	2720.4	2724.2	2712.6	2728.2	2708.6	2720.4	2743.9	2728.2	2704.8
10°	2697.0	2689.2	2716.4	2677.4	2669.5	2685.2	2716.4	2693.0	2685.2	2693.0
12.5°	2657.7	2657.7	2669.5	2638.3	2642.1	2649.9	2665.6	2649.9	2657.7	2677.4
15°	2614.8	2607.0	2626.5	2603.1	2599.2	2591.4	2607.0	2607.0	2614.8	2603.1
17.5°	2564.0	2552.3	2552.3	2544.5	2540.5	2560.1	2568.0	2571.8	2575.8	2560.1
20°	2501.5	2497.6	2509.3	2497.6	2501.5	2505.4	2505.4	2497.6	2532.7	2489.8
22.5°	2435.0	2446.8	2431.1	2423.3	2431.1	2439.0	2439.0	2442.8	2435.0	2427.2
25°	2368.6	2376.4	2380.3	2356.8	2368.6	2356.8	2384.3	2388.1	2372.5	2380.3
27.5°	2309.9	2298.3	2294.3	2278.7	2286.5	2282.7	2286.5	2286.5	2309.9	2278.7
30°	2220.0	2208.4	2212.2	2200.5	2204.4	2200.5	2204.4	2204.4	2220.0	2216.2
32.5°	2134.0	2122.4	2126.2	2114.6	2114.6	2118.4	2110.6	2110.6	2122.4	2114.6
35°	2051.9	2024.6	2028.5	2024.6	2028.5	2012.8	2012.8	2009.0	2016.8	1997.2
37.5°	1934.7	1923.1	1919.1	1915.2	1919.1	1911.3	1919.1	1907.4	1919.1	1903.4
40°	1829.1	1821.3	1825.3	1801.9	1801.9	1805.7	1797.9	1794.1	1797.9	1813.5
42.5°	1723.7	1708.1	1700.3	1692.5	1696.3	1684.7	1680.7	1672.9	1680.7	1665.0
45°	1598.5	1598.5	1594.7	1575.1	1579.1	1579.1	1563.5	1547.8	1551.7	1551.7
47.5°	1485.3	1477.5	1473.5	1454.1	1450.1	1446.2	1430.5	1418.8	1418.8	1407.0
50°	1360.1	1352.3	1340.7	1321.1	1313.2	1289.8	1278.2	1262.5	1246.9	1246.9
52.5°	1242.9	1215.5	1199.9	1168.6	1157.0	1145.2	1113.9	1102.3	1090.5	1078.8
55°	1102.3	1078.8	1047.6	1012.3	996.7	977.1	945.8	922.4	906.8	910.7
57.5°	965.4	926.4	895.1	848.2	828.6	816.8	785.6	754.3	738.7	738.7
60°	797.4	766.1	727.0	684.0	668.3	648.9	609.7	590.2	578.4	566.8
62.5°	637.1	613.6	578.4	523.7	512.1	492.4	465.2	441.7	429.9	429.9
65°	476.8	453.4	422.1	383.0	367.4	351.8	328.3	304.9	293.1	289.3
67.5°	336.2	308.7	281.5	250.2	238.4	230.6	207.2	191.5	183.7	179.7
70°	203.2	187.5	168.1	144.6	132.8	125.0	109.4	97.8	93.8	89.9
72.5°	105.6	93.8	78.1	62.5	54.7	46.9	39.1	31.3	27.4	27.4
75°	39.1	31.3	19.6	11.8	7.8	7.8	7.8	7.8	7.8	7.8
77.5°	7.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	0.0	0.0	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	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	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)