

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: P840213

Luminaire Tested: **LD4C55D010 EU4559035 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: P840213  
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 EU4559035 4LBCSSQMW  
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS  
AND 4LBCSSQ TRIM WITH MW FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

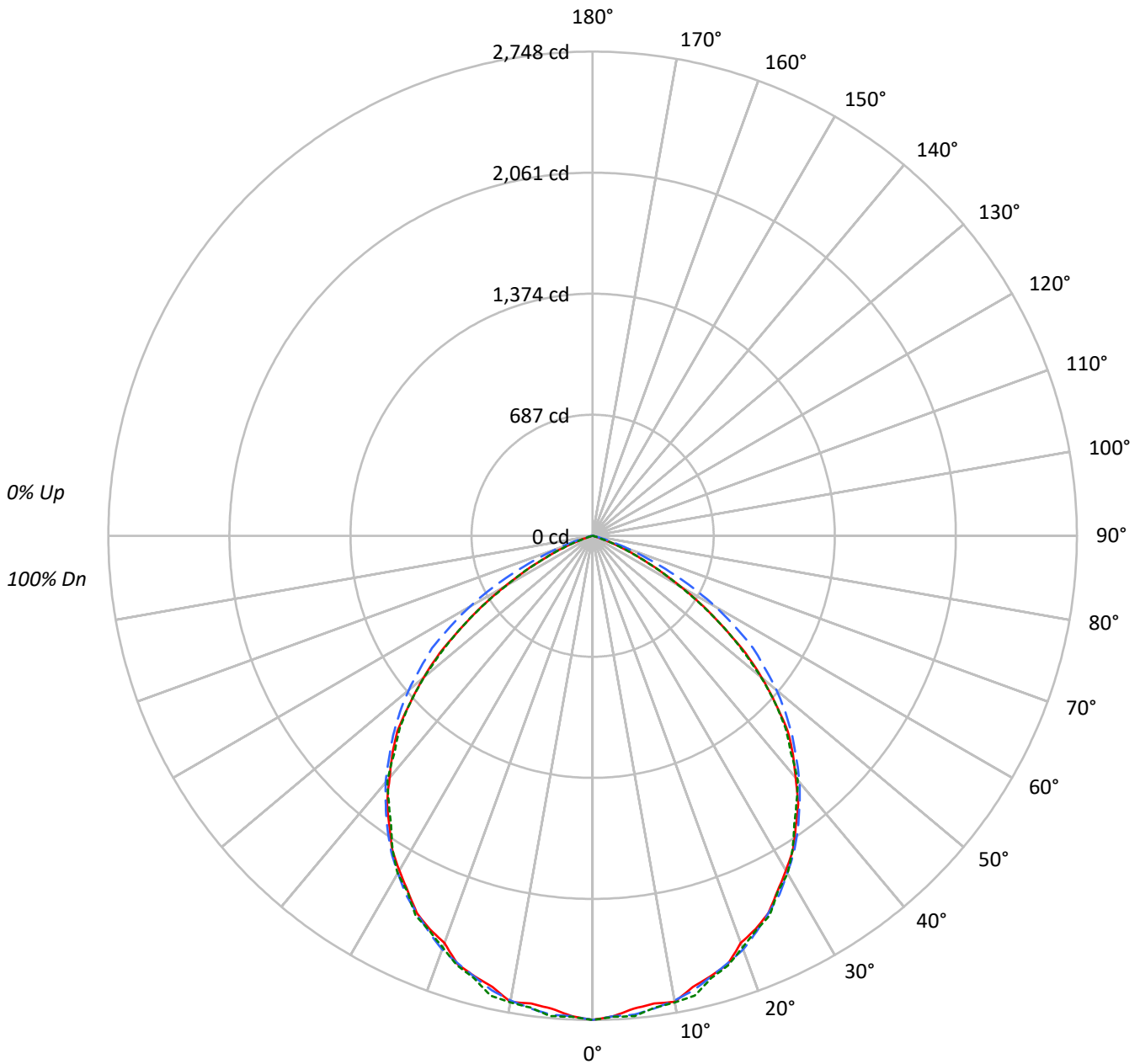
Lumens per Lamp: N/A  
Luminaire Lumens: 5870.0 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	265142	265142	265142
5°	260866	264256	265012
10°	263118	262354	263491
15°	258512	258892	259671
20°	252493	256508	255307
25°	251403	251403	253064
30°	244402	246140	246585
35°	236772	239081	234935
40°	225665	230074	228109
45°	213581	218370	211438
50°	188088	204495	186917
55°	152326	187132	152999
60°	111464	155173	109225
65°	67740	110503	65959
70°	26406	59470	25334
75°	2908	16031	2908
80°	2223	2223	2223
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	259.4	4.4
10°-20°	734.0	12.5
20°-30°	1089.1	18.6
30°-40°	1261.9	21.5
40°-50°	1209.9	20.6
50°-60°	889.6	15.2
60°-70°	384.2	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°	2082.4	35.5
0°-40°	3344.3	57.0
0°-60°	5443.8	92.7
0°-90°	5870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5870.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2748	2748	2748	2748	2748	
5°	2693	2720	2728	2732	2736	257
15°	2588	2604	2592	2596	2600	729
25°	2361	2358	2361	2365	2377	1081
35°	2010	2022	2030	2026	1994	1257
45°	1565	1569	1600	1577	1550	1190
55°	906	999	1112	995	910	815
65°	297	371	484	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°	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9
2.5°	2728.3	2759.6	2763.5	2744.0	2736.1	2724.5	2751.8	2732.3	2740.1	2732.3	2728.3
5°	2693.3	2728.3	2732.3	2732.3	2724.5	2720.5	2732.3	2728.3	2724.5	2716.7	2728.3
7.5°	2677.7	2697.1	2716.7	2693.3	2704.9	2701.1	2728.3	2716.7	2712.7	2712.7	2704.9
10°	2685.5	2681.5	2697.1	2673.7	2681.5	2673.7	2697.1	2697.1	2689.3	2681.5	2677.7
12.5°	2622.9	2654.1	2654.1	2650.3	2642.5	2630.7	2654.1	2669.9	2646.3	2646.3	2642.5
15°	2587.9	2595.7	2599.5	2599.5	2595.7	2603.5	2615.1	2599.5	2603.5	2583.9	2591.7
17.5°	2548.9	2533.3	2544.9	2537.1	2541.1	2548.9	2564.5	2564.5	2541.1	2537.1	2544.9
20°	2459.0	2505.9	2509.8	2486.4	2490.3	2490.3	2517.6	2494.2	2509.8	2490.3	2498.1
22.5°	2416.0	2447.3	2451.2	2420.0	2439.5	2416.0	2443.4	2408.2	2447.3	2420.0	2431.7
25°	2361.4	2357.6	2369.2	2353.6	2357.6	2357.6	2377.0	2361.4	2373.2	2357.6	2361.4
27.5°	2271.8	2303.0	2299.0	2283.4	2291.2	2287.4	2326.4	2283.4	2306.8	2287.4	2295.2
30°	2193.6	2221.0	2213.2	2197.5	2197.5	2185.8	2228.8	2217.0	2213.2	2213.2	2209.2
32.5°	2115.5	2119.5	2111.7	2115.5	2119.5	2103.9	2138.9	2123.3	2119.5	2123.3	2127.3
35°	2010.1	2010.1	2017.9	2006.3	2021.9	2021.9	2053.1	2033.5	2029.7	2017.9	2029.7
37.5°	1916.5	1904.8	1908.7	1908.7	1916.5	1924.3	1939.9	1932.1	1932.1	1920.4	1928.2
40°	1791.6	1783.8	1795.4	1795.4	1807.2	1807.2	1822.8	1815.0	1826.6	1826.6	1826.6
42.5°	1682.4	1682.4	1674.6	1686.2	1690.2	1686.2	1713.6	1709.6	1713.6	1705.8	1709.6
45°	1565.2	1565.2	1557.3	1553.5	1573.0	1569.1	1600.3	1588.6	1604.2	1596.4	1600.3
47.5°	1405.1	1424.7	1412.9	1424.7	1448.1	1452.1	1471.5	1463.7	1479.3	1467.7	1483.3
50°	1253.0	1253.0	1264.6	1280.2	1303.7	1307.6	1331.0	1346.7	1354.5	1358.3	1362.3
52.5°	1093.0	1089.0	1100.8	1120.2	1139.8	1155.4	1178.8	1202.2	1217.8	1241.2	1229.4
55°	905.5	913.3	925.1	948.5	979.7	999.2	1018.7	1050.0	1077.4	1089.0	1112.4
57.5°	745.5	737.7	745.5	776.7	811.9	827.5	854.9	886.1	925.1	948.5	956.3
60°	577.6	581.6	589.4	616.8	644.0	667.4	679.2	729.9	765.1	788.5	804.1
62.5°	425.5	433.3	441.1	464.5	491.8	511.4	530.8	573.8	605.0	628.4	644.0
65°	296.7	300.5	312.3	323.9	351.3	370.7	386.4	421.5	452.8	472.3	484.0
67.5°	183.5	187.3	195.1	210.8	230.3	245.9	261.5	284.9	312.3	331.7	335.7
70°	93.6	97.6	101.4	113.2	128.8	136.6	148.3	167.9	187.3	202.9	210.8
72.5°	31.2	31.2	35.2	43.0	50.8	58.6	62.4	82.0	97.6	105.4	109.3
75°	7.8	7.8	7.8	7.8	7.8	11.8	11.8	23.4	31.2	39.0	43.0
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°	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9
2.5°	2747.9	2740.1	2736.1	2740.1	2740.1	2736.1	2747.9	2763.5	2783.0	2732.3
5°	2744.0	2736.1	2744.0	2720.5	2732.3	2724.5	2740.1	2736.1	2751.8	2736.1
7.5°	2732.3	2716.7	2720.5	2708.9	2724.5	2704.9	2716.7	2740.1	2724.5	2701.1
10°	2693.3	2685.5	2712.7	2673.7	2665.9	2681.5	2712.7	2689.3	2681.5	2689.3
12.5°	2654.1	2654.1	2665.9	2634.7	2638.5	2646.3	2661.9	2646.3	2654.1	2673.7
15°	2611.3	2603.5	2622.9	2599.5	2595.7	2587.9	2603.5	2603.5	2611.3	2599.5
17.5°	2560.5	2548.9	2548.9	2541.1	2537.1	2556.7	2564.5	2568.3	2572.3	2556.7
20°	2498.1	2494.2	2505.9	2494.2	2498.1	2502.0	2502.0	2494.2	2529.3	2486.4
22.5°	2431.7	2443.4	2427.8	2420.0	2427.8	2435.6	2435.6	2439.5	2431.7	2423.9
25°	2365.4	2373.2	2377.0	2353.6	2365.4	2353.6	2381.0	2384.8	2369.2	2377.0
27.5°	2306.8	2295.2	2291.2	2275.6	2283.4	2279.6	2283.4	2283.4	2306.8	2275.6
30°	2217.0	2205.4	2209.2	2197.5	2201.4	2197.5	2201.4	2201.4	2217.0	2213.2
32.5°	2131.1	2119.5	2123.3	2111.7	2111.7	2115.5	2107.7	2107.7	2119.5	2111.7
35°	2049.1	2021.9	2025.7	2021.9	2025.7	2010.1	2010.1	2006.3	2014.1	1994.5
37.5°	1932.1	1920.4	1916.5	1912.6	1916.5	1908.7	1916.5	1904.8	1916.5	1900.9
40°	1826.6	1818.8	1822.8	1799.4	1799.4	1803.2	1795.4	1791.6	1795.4	1811.0
42.5°	1721.4	1705.8	1698.0	1690.2	1694.0	1682.4	1678.4	1670.6	1678.4	1662.8
45°	1596.4	1596.4	1592.5	1573.0	1576.9	1576.9	1561.3	1545.7	1549.5	1549.5
47.5°	1483.3	1475.5	1471.5	1452.1	1448.1	1444.3	1428.5	1416.9	1416.9	1405.1
50°	1358.3	1350.5	1338.8	1319.3	1311.5	1288.0	1276.4	1260.8	1245.2	1245.2
52.5°	1241.2	1213.8	1198.2	1167.0	1155.4	1143.6	1112.4	1100.8	1089.0	1077.4
55°	1100.8	1077.4	1046.1	1010.9	995.3	975.8	944.5	921.1	905.5	909.5
57.5°	964.1	925.1	893.9	847.1	827.5	815.7	784.5	753.3	737.7	737.7
60°	796.3	765.1	726.0	683.0	667.4	648.0	608.8	589.4	577.6	566.0
62.5°	636.2	612.8	577.6	523.0	511.4	491.8	464.5	441.1	429.3	429.3
65°	476.2	452.8	421.5	382.5	366.9	351.3	327.9	304.5	292.7	288.9
67.5°	335.7	308.3	281.1	249.9	238.1	230.3	206.9	191.3	183.5	179.5
70°	202.9	187.3	167.9	144.4	132.7	124.9	109.3	97.6	93.6	89.8
72.5°	105.4	93.6	78.0	62.4	54.6	46.8	39.0	31.2	27.4	27.4
75°	39.0	31.2	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)