

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: P840211

Luminaire Tested: **LD4C55D010 EU4559030 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: P840211
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 EU4559030 4LBCSSQMW
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

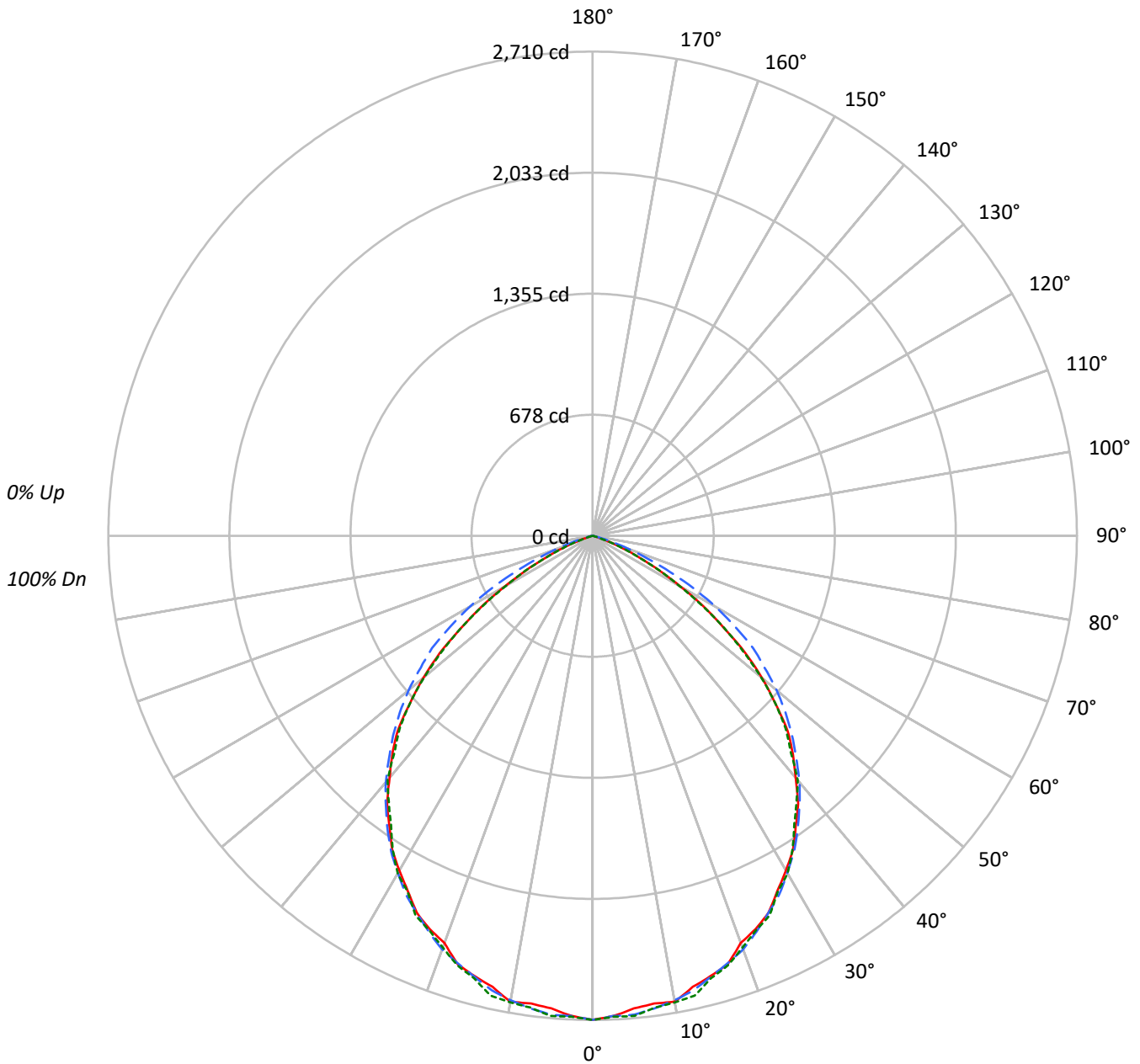
Lumens per Lamp: N/A
Luminaire Lumens: 5788.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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								
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°	261437	261437	261437
5°	257224	260566	261312
10°	259444	258690	259816
15°	254896	255276	256045
20°	248971	252925	251744
25°	247890	247890	249530
30°	240981	242697	243132
35°	233462	235736	231648
40°	222516	226862	224922
45°	210592	215327	208491
50°	185461	201628	184305
55°	150207	184524	150863
60°	109901	152993	107701
65°	66781	108951	65023
70°	26039	58652	24995
75°	2871	15807	2871
80°	2167	2167	2167
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.8	4.4
10°-20°	723.7	12.5
20°-30°	1073.8	18.6
30°-40°	1244.3	21.5
40°-50°	1193.0	20.6
50°-60°	877.2	15.2
60°-70°	378.8	6.5
70°-80°	40.9	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°	2053.3	35.5
0°-40°	3297.6	57.0
0°-60°	5367.7	92.7
0°-90°	5788.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5788.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2710	2710	2710	2710	2710	
5°	2656	2682	2690	2694	2698	253
15°	2552	2567	2556	2559	2563	719
25°	2328	2325	2328	2332	2344	1066
35°	1982	1994	2001	1997	1967	1239
45°	1543	1547	1578	1555	1528	1173
55°	893	985	1097	981	897	804
65°	292	366	477	362	285	301
75°	8	12	42	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°	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5
2.5°	2690.2	2721.0	2724.9	2705.6	2697.9	2686.5	2713.3	2694.2	2701.8	2694.2	2690.2
5°	2655.7	2690.2	2694.2	2694.2	2686.5	2682.5	2694.2	2690.2	2686.5	2678.8	2690.2
7.5°	2640.3	2659.5	2678.8	2655.7	2667.1	2663.4	2690.2	2678.8	2674.8	2674.8	2667.1
10°	2648.0	2644.1	2659.5	2636.4	2644.1	2636.4	2659.5	2659.5	2651.8	2644.1	2640.3
12.5°	2586.3	2617.1	2617.1	2613.3	2605.6	2594.0	2617.1	2632.6	2609.4	2609.4	2605.6
15°	2551.7	2559.4	2563.2	2563.2	2559.4	2567.1	2578.6	2563.2	2567.1	2547.8	2555.5
17.5°	2513.3	2497.9	2509.3	2501.6	2505.6	2513.3	2528.6	2528.6	2505.6	2501.6	2509.3
20°	2424.7	2470.9	2474.8	2451.7	2455.5	2455.5	2482.5	2459.4	2474.8	2455.5	2463.2
22.5°	2382.3	2413.1	2417.0	2386.2	2405.4	2382.3	2409.3	2374.6	2413.1	2386.2	2397.7
25°	2328.4	2324.7	2336.1	2320.7	2324.7	2324.7	2343.8	2328.4	2340.1	2324.7	2328.4
27.5°	2240.0	2270.8	2266.9	2251.5	2259.2	2255.4	2293.9	2251.5	2274.6	2255.4	2263.1
30°	2162.9	2189.9	2182.2	2166.8	2166.8	2155.2	2197.6	2186.0	2182.2	2182.2	2178.3
32.5°	2086.0	2089.9	2082.2	2086.0	2089.9	2074.5	2109.1	2093.7	2089.9	2093.7	2097.6
35°	1982.0	1982.0	1989.7	1978.3	1993.6	1993.6	2024.4	2005.1	2001.3	1989.7	2001.3
37.5°	1889.7	1878.2	1882.0	1882.0	1889.7	1897.4	1912.8	1905.1	1905.1	1893.6	1901.3
40°	1766.6	1758.9	1770.4	1770.4	1782.0	1782.0	1797.4	1789.7	1801.1	1801.1	1801.1
42.5°	1658.9	1658.9	1651.2	1662.6	1666.6	1662.6	1689.6	1685.7	1689.6	1681.9	1685.7
45°	1543.3	1543.3	1535.6	1531.8	1551.0	1547.2	1578.0	1566.4	1581.8	1574.1	1578.0
47.5°	1385.5	1404.8	1393.2	1404.8	1427.9	1431.8	1451.0	1443.3	1458.6	1447.2	1462.6
50°	1235.5	1235.5	1247.0	1262.4	1285.4	1289.4	1312.5	1327.8	1335.5	1339.3	1343.2
52.5°	1077.7	1073.8	1085.4	1104.5	1123.9	1139.2	1162.3	1185.4	1200.8	1223.9	1212.3
55°	892.9	900.6	912.2	935.3	966.0	985.2	1004.5	1035.3	1062.3	1073.8	1096.9
57.5°	735.1	727.4	735.1	765.8	800.5	815.9	842.9	873.7	912.2	935.3	943.0
60°	569.5	573.5	581.2	608.2	635.0	658.1	669.7	719.7	754.4	777.5	792.8
62.5°	419.6	427.3	435.0	458.1	484.9	504.2	523.4	565.8	596.6	619.6	635.0
65°	292.5	296.3	307.9	319.4	346.4	365.6	381.0	415.7	446.4	465.7	477.2
67.5°	180.9	184.7	192.4	207.9	227.1	242.5	257.8	280.9	307.9	327.1	331.0
70°	92.3	96.3	100.0	111.6	127.0	134.7	146.2	165.5	184.7	200.1	207.9
72.5°	30.8	30.8	34.7	42.4	50.1	57.8	61.6	80.9	96.3	104.0	107.7
75°	7.7	7.7	7.7	7.7	7.7	11.6	11.6	23.1	30.8	38.5	42.4
77.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	7.7	7.7
80°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
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°	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5	2709.5
2.5°	2709.5	2701.8	2697.9	2701.8	2701.8	2697.9	2709.5	2724.9	2744.1	2694.2
5°	2705.6	2697.9	2705.6	2682.5	2694.2	2686.5	2701.8	2697.9	2713.3	2697.9
7.5°	2694.2	2678.8	2682.5	2671.1	2686.5	2667.1	2678.8	2701.8	2686.5	2663.4
10°	2655.7	2648.0	2674.8	2636.4	2628.7	2644.1	2674.8	2651.8	2644.1	2651.8
12.5°	2617.1	2617.1	2628.7	2597.9	2601.7	2609.4	2624.8	2609.4	2617.1	2636.4
15°	2574.8	2567.1	2586.3	2563.2	2559.4	2551.7	2567.1	2567.1	2574.8	2563.2
17.5°	2524.7	2513.3	2513.3	2505.6	2501.6	2520.9	2528.6	2532.4	2536.3	2520.9
20°	2463.2	2459.4	2470.9	2459.4	2463.2	2467.1	2467.1	2459.4	2493.9	2451.7
22.5°	2397.7	2409.3	2393.9	2386.2	2393.9	2401.6	2401.6	2405.4	2397.7	2390.0
25°	2332.4	2340.1	2343.8	2320.7	2332.4	2320.7	2347.7	2351.5	2336.1	2343.8
27.5°	2274.6	2263.1	2259.2	2243.8	2251.5	2247.7	2251.5	2251.5	2274.6	2243.8
30°	2186.0	2174.5	2178.3	2166.8	2170.6	2166.8	2170.6	2170.6	2186.0	2182.2
32.5°	2101.4	2089.9	2093.7	2082.2	2082.2	2086.0	2078.3	2078.3	2089.9	2082.2
35°	2020.5	1993.6	1997.4	1993.6	1997.4	1982.0	1982.0	1978.3	1986.0	1966.6
37.5°	1905.1	1893.6	1889.7	1885.9	1889.7	1882.0	1889.7	1878.2	1889.7	1874.3
40°	1801.1	1793.4	1797.4	1774.3	1774.3	1778.0	1770.4	1766.6	1770.4	1785.7
42.5°	1697.3	1681.9	1674.2	1666.6	1670.3	1658.9	1654.9	1647.2	1654.9	1639.5
45°	1574.1	1574.1	1570.3	1551.0	1554.9	1554.9	1539.5	1524.1	1527.9	1527.9
47.5°	1462.6	1454.9	1451.0	1431.8	1427.9	1424.1	1408.6	1397.1	1397.1	1385.5
50°	1339.3	1331.6	1320.1	1300.8	1293.1	1270.1	1258.6	1243.2	1227.8	1227.8
52.5°	1223.9	1196.9	1181.5	1150.7	1139.2	1127.6	1096.9	1085.4	1073.8	1062.3
55°	1085.4	1062.3	1031.5	996.8	981.4	962.1	931.3	908.3	892.9	896.8
57.5°	950.7	912.2	881.4	835.2	815.9	804.3	773.5	742.8	727.4	727.4
60°	785.1	754.4	715.9	673.5	658.1	639.0	600.3	581.2	569.5	558.1
62.5°	627.3	604.2	569.5	515.7	504.2	484.9	458.1	435.0	423.4	423.4
65°	469.5	446.4	415.7	377.2	361.8	346.4	323.3	300.2	288.6	284.8
67.5°	331.0	304.0	277.2	246.4	234.8	227.1	204.0	188.6	180.9	177.0
70°	200.1	184.7	165.5	142.4	130.8	123.1	107.7	96.3	92.3	88.6
72.5°	104.0	92.3	76.9	61.6	53.9	46.2	38.5	30.8	27.0	27.0
75°	38.5	30.8	19.3	11.6	7.7	7.7	7.7	7.7	7.7	7.7
77.5°	7.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
80°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
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)