

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: P840254

Luminaire Tested: **LD4C75D010 EU4759040 4LBCSSQMMS**

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: P840254  
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: LD4C75D010 EU4759040 4LBCSSQMMS  
Description: 4 INCH 7500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBCSSQ TRIM WITH MMS FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

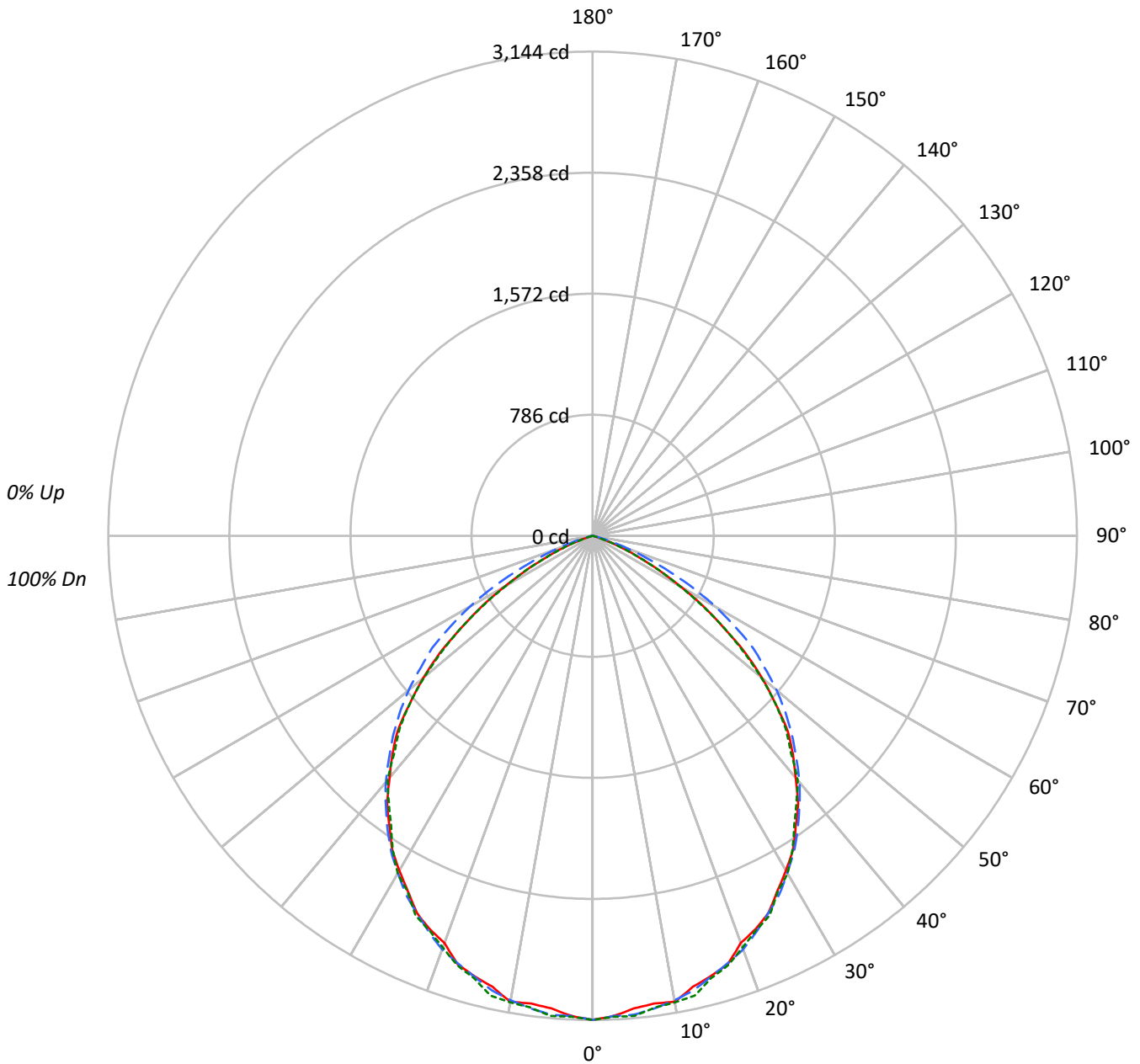
Lumens per Lamp: N/A  
Luminaire Lumens: 6715.0 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 81.5  
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°	303313	303313	303313
5°	298418	302302	303164
10°	300996	300124	301427
15°	295722	296162	297051
20°	288843	293432	292067
25°	287601	287601	289496
30°	279576	281570	282071
35°	270861	273499	268752
40°	258149	263200	260946
45°	244324	249810	241882
50°	215168	233932	213832
55°	174262	214064	175019
60°	127520	177501	124953
65°	77489	126394	75457
70°	30214	68046	28973
75°	3318	18342	3318
80°	2556	2556	2556
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.7	4.4
10°-20°	839.6	12.5
20°-30°	1245.8	18.6
30°-40°	1443.5	21.5
40°-50°	1384.0	20.6
50°-60°	1017.6	15.2
60°-70°	439.5	6.5
70°-80°	47.5	0.7
80°-90°	0.6	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°	2382.2	35.5
0°-40°	3825.7	57.0
0°-60°	6227.4	92.7
0°-90°	6715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6715.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3144	3144	3144	3144	3144	
5°	3081	3112	3121	3126	3130	294
15°	2960	2978	2965	2969	2974	834
25°	2701	2697	2701	2706	2719	1237
35°	2300	2313	2322	2317	2282	1438
45°	1790	1795	1831	1804	1773	1361
55°	1036	1143	1272	1139	1040	932
65°	339	424	554	420	330	349
75°	9	14	49	9	9	27
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°	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5
2.5°	3121.1	3156.8	3161.4	3138.9	3130.0	3116.7	3147.9	3125.6	3134.6	3125.6	3121.1
5°	3081.0	3121.1	3125.6	3125.6	3116.7	3112.2	3125.6	3121.1	3116.7	3107.8	3121.1
7.5°	3063.2	3085.4	3107.8	3081.0	3094.3	3089.9	3121.1	3107.8	3103.2	3103.2	3094.3
10°	3072.1	3067.5	3085.4	3058.6	3067.5	3058.6	3085.4	3085.4	3076.5	3067.5	3063.2
12.5°	3000.5	3036.2	3036.2	3031.8	3022.9	3009.4	3036.2	3054.2	3027.3	3027.3	3022.9
15°	2960.4	2969.3	2973.7	2973.7	2969.3	2978.3	2991.6	2973.7	2978.3	2955.9	2964.8
17.5°	2915.8	2897.9	2911.2	2902.3	2906.8	2915.8	2933.6	2933.6	2906.8	2902.3	2911.2
20°	2813.0	2866.6	2871.1	2844.4	2848.7	2848.7	2880.1	2853.3	2871.1	2848.7	2857.7
22.5°	2763.8	2799.6	2804.1	2768.4	2790.6	2763.8	2795.2	2754.9	2799.6	2768.4	2781.7
25°	2701.4	2697.0	2710.3	2692.4	2697.0	2697.0	2719.2	2701.4	2714.8	2697.0	2701.4
27.5°	2598.8	2634.5	2629.9	2612.1	2621.0	2616.6	2661.3	2612.1	2638.9	2616.6	2625.6
30°	2509.3	2540.7	2531.7	2513.9	2513.9	2500.4	2549.6	2536.1	2531.7	2531.7	2527.2
32.5°	2420.1	2424.6	2415.7	2420.1	2424.6	2406.8	2446.8	2429.0	2424.6	2429.0	2433.5
35°	2299.5	2299.5	2308.4	2295.1	2312.9	2312.9	2348.7	2326.2	2321.9	2308.4	2321.9
37.5°	2192.3	2179.0	2183.4	2183.4	2192.3	2201.3	2219.1	2210.2	2210.2	2196.9	2205.8
40°	2049.5	2040.6	2053.9	2053.9	2067.4	2067.4	2085.2	2076.3	2089.6	2089.6	2089.6
42.5°	1924.5	1924.5	1915.6	1928.9	1933.5	1928.9	1960.2	1955.7	1960.2	1951.3	1955.7
45°	1790.5	1790.5	1781.5	1777.2	1799.4	1795.0	1830.7	1817.2	1835.1	1826.2	1830.7
47.5°	1607.4	1629.8	1616.3	1629.8	1656.6	1661.1	1683.3	1674.4	1692.3	1679.0	1696.8
50°	1433.4	1433.4	1446.7	1464.5	1491.3	1495.9	1522.7	1540.5	1549.4	1553.8	1558.4
52.5°	1250.3	1245.7	1259.2	1281.4	1303.9	1321.7	1348.5	1375.3	1393.1	1419.9	1406.4
55°	1035.9	1044.8	1058.3	1085.1	1120.8	1143.0	1165.4	1201.1	1232.4	1245.7	1272.5
57.5°	852.8	843.9	852.8	888.5	928.7	946.6	977.9	1013.6	1058.3	1085.1	1094.0
60°	660.8	665.3	674.2	705.6	736.7	763.5	777.0	834.9	875.2	902.0	919.8
62.5°	486.8	495.7	504.6	531.4	562.6	585.0	607.2	656.4	692.1	718.9	736.7
65°	339.4	343.8	357.3	370.6	401.9	424.1	442.0	482.2	517.9	540.3	553.6
67.5°	209.9	214.2	223.2	241.2	263.4	281.3	299.1	325.9	357.3	379.5	384.0
70°	107.1	111.7	116.0	129.5	147.4	156.3	169.6	192.0	214.2	232.1	241.2
72.5°	35.7	35.7	40.3	49.2	58.1	67.0	71.4	93.8	111.7	120.6	125.0
75°	8.9	8.9	8.9	8.9	8.9	13.5	13.5	26.8	35.7	44.6	49.2
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	8.9	8.9
80°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
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°	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5	3143.5
2.5°	3143.5	3134.6	3130.0	3134.6	3134.6	3130.0	3143.5	3161.4	3183.6	3125.6
5°	3138.9	3130.0	3138.9	3112.2	3125.6	3116.7	3134.6	3130.0	3147.9	3130.0
7.5°	3125.6	3107.8	3112.2	3098.9	3116.7	3094.3	3107.8	3134.6	3116.7	3089.9
10°	3081.0	3072.1	3103.2	3058.6	3049.7	3067.5	3103.2	3076.5	3067.5	3076.5
12.5°	3036.2	3036.2	3049.7	3014.0	3018.3	3027.3	3045.1	3027.3	3036.2	3058.6
15°	2987.2	2978.3	3000.5	2973.7	2969.3	2960.4	2978.3	2978.3	2987.2	2973.7
17.5°	2929.1	2915.8	2915.8	2906.8	2902.3	2924.7	2933.6	2938.0	2942.6	2924.7
20°	2857.7	2853.3	2866.6	2853.3	2857.7	2862.2	2862.2	2853.3	2893.4	2844.4
22.5°	2781.7	2795.2	2777.3	2768.4	2777.3	2786.2	2786.2	2790.6	2781.7	2772.8
25°	2705.9	2714.8	2719.2	2692.4	2705.9	2692.4	2723.8	2728.1	2710.3	2719.2
27.5°	2638.9	2625.6	2621.0	2603.2	2612.1	2607.7	2612.1	2612.1	2638.9	2603.2
30°	2536.1	2522.8	2527.2	2513.9	2518.3	2513.9	2518.3	2518.3	2536.1	2531.7
32.5°	2437.9	2424.6	2429.0	2415.7	2415.7	2420.1	2411.1	2411.1	2424.6	2415.7
35°	2344.1	2312.9	2317.3	2312.9	2317.3	2299.5	2299.5	2295.1	2304.0	2281.6
37.5°	2210.2	2196.9	2192.3	2188.0	2192.3	2183.4	2192.3	2179.0	2192.3	2174.5
40°	2089.6	2080.7	2085.2	2058.4	2058.4	2062.8	2053.9	2049.5	2053.9	2071.7
42.5°	1969.2	1951.3	1942.4	1933.5	1937.8	1924.5	1920.0	1911.1	1920.0	1902.1
45°	1826.2	1826.2	1821.8	1799.4	1803.9	1803.9	1786.1	1768.2	1772.6	1772.6
47.5°	1696.8	1687.9	1683.3	1661.1	1656.6	1652.2	1634.2	1620.8	1620.8	1607.4
50°	1553.8	1544.9	1531.6	1509.2	1500.2	1473.5	1460.2	1442.3	1424.5	1424.5
52.5°	1419.9	1388.6	1370.7	1335.0	1321.7	1308.2	1272.5	1259.2	1245.7	1232.4
55°	1259.2	1232.4	1196.7	1156.5	1138.6	1116.2	1080.5	1053.7	1035.9	1040.4
57.5°	1102.9	1058.3	1022.6	969.0	946.6	933.1	897.4	861.7	843.9	843.9
60°	910.9	875.2	830.6	781.4	763.5	741.3	696.5	674.2	660.8	647.5
62.5°	727.8	701.0	660.8	598.3	585.0	562.6	531.4	504.6	491.2	491.2
65°	544.7	517.9	482.2	437.6	419.7	401.9	375.1	348.3	334.8	330.5
67.5°	384.0	352.7	321.5	285.8	272.4	263.4	236.7	218.8	209.9	205.3
70°	232.1	214.2	192.0	165.2	151.8	142.8	125.0	111.7	107.1	102.7
72.5°	120.6	107.1	89.3	71.4	62.5	53.6	44.6	35.7	31.3	31.3
75°	44.6	35.7	22.4	13.5	8.9	8.9	8.9	8.9	8.9	8.9
77.5°	8.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
80°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
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)