

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: P840252

Luminaire Tested: **LD4C75D010 EU4759035 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: P840252  
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 EU4759035 4LBCSSQMMS  
Description: 4 INCH 7500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS  
AND 4LBCSSQ TRIM WITH MMS FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

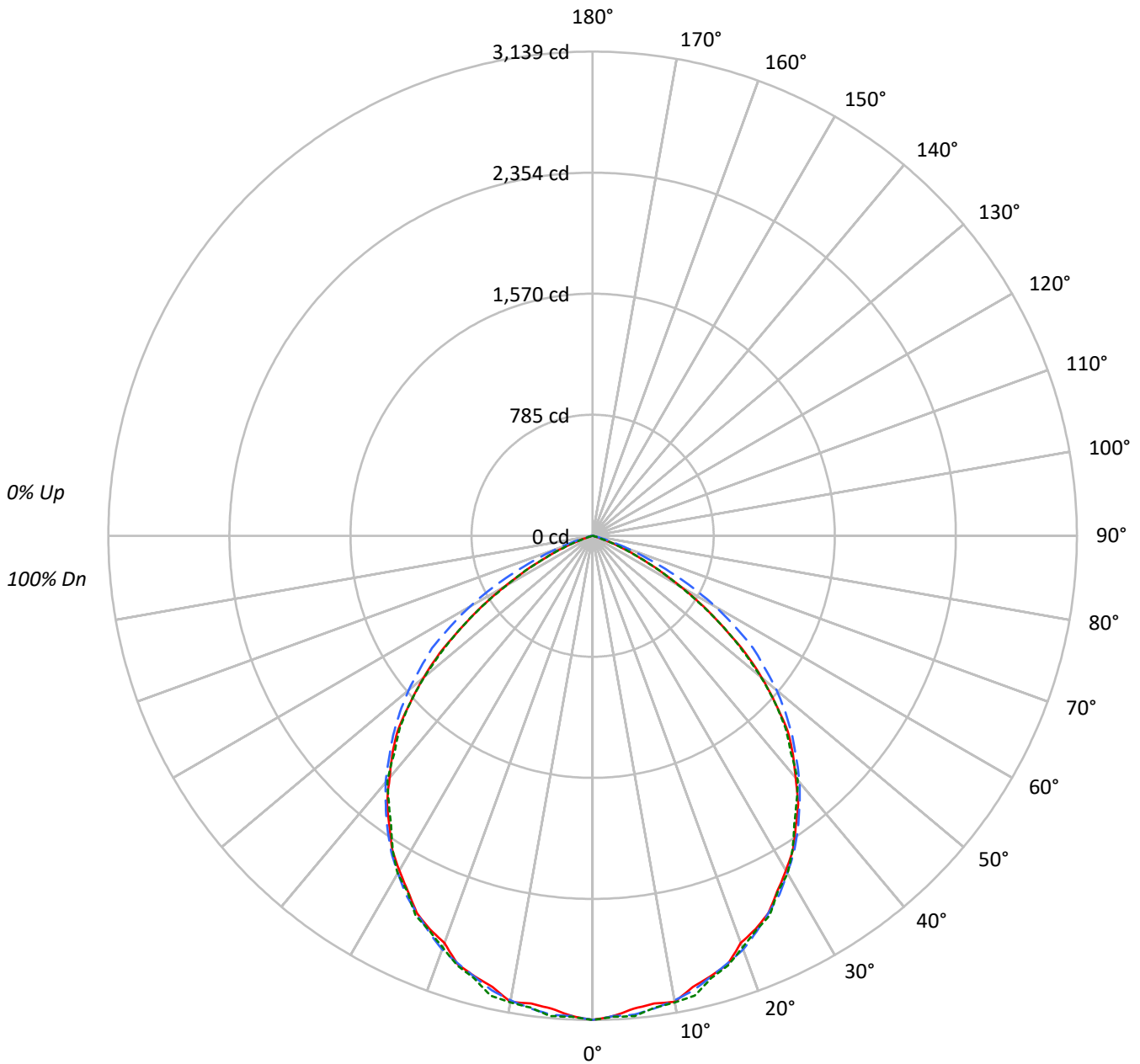
Lumens per Lamp: N/A  
Luminaire Lumens: 6705.0 lumens  
Efficiency: N/A  
Efficacy: 82.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	302859	302859	302859
5°	297972	301847	302718
10°	300546	299674	300977
15°	295283	295722	296611
20°	288411	292991	291625
25°	287165	287165	289070
30°	279163	281147	281659
35°	270449	273087	268352
40°	257772	262810	260568
45°	243956	249441	241527
50°	214838	233571	213502
55°	173993	213744	174767
60°	127327	177250	124760
65°	77375	126211	75343
70°	30186	67933	28945
75°	3318	18305	3318
80°	2500	2500	2500
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.3	4.4
10°-20°	838.4	12.5
20°-30°	1244.0	18.6
30°-40°	1441.4	21.5
40°-50°	1382.0	20.6
50°-60°	1016.1	15.2
60°-70°	438.9	6.5
70°-80°	47.4	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°	2378.6	35.5
0°-40°	3820.0	57.0
0°-60°	6218.1	92.7
0°-90°	6705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6705.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3139	3139	3139	3139	3139	
5°	3076	3108	3116	3121	3125	294
15°	2956	2974	2960	2965	2969	833
25°	2697	2693	2697	2702	2715	1235
35°	2296	2310	2318	2314	2278	1436
45°	1788	1792	1828	1801	1770	1359
55°	1034	1141	1271	1137	1039	931
65°	339	424	553	419	330	348
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°	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8
2.5°	3116.4	3152.1	3156.6	3134.3	3125.4	3112.1	3143.2	3121.0	3129.9	3121.0	3116.4
5°	3076.4	3116.4	3121.0	3121.0	3112.1	3107.5	3121.0	3116.4	3112.1	3103.2	3116.4
7.5°	3058.6	3080.8	3103.2	3076.4	3089.7	3085.3	3116.4	3103.2	3098.6	3098.6	3089.7
10°	3067.5	3063.0	3080.8	3054.1	3063.0	3054.1	3080.8	3080.8	3071.9	3063.0	3058.6
12.5°	2996.0	3031.7	3031.7	3027.3	3018.4	3004.9	3031.7	3049.7	3022.8	3022.8	3018.4
15°	2956.0	2964.9	2969.3	2969.3	2964.9	2973.8	2987.1	2969.3	2973.8	2951.5	2960.4
17.5°	2911.4	2893.6	2906.9	2898.0	2902.5	2911.4	2929.3	2929.3	2902.5	2898.0	2906.9
20°	2808.8	2862.3	2866.9	2840.1	2844.5	2844.5	2875.8	2849.0	2866.9	2844.5	2853.4
22.5°	2759.7	2795.4	2799.9	2764.3	2786.5	2759.7	2791.0	2750.8	2795.4	2764.3	2777.6
25°	2697.3	2693.0	2706.2	2688.4	2693.0	2693.0	2715.2	2697.3	2710.8	2693.0	2697.3
27.5°	2594.9	2630.6	2626.0	2608.2	2617.1	2612.7	2657.3	2608.2	2634.9	2612.7	2621.7
30°	2505.6	2536.9	2528.0	2510.1	2510.1	2496.7	2545.8	2532.3	2528.0	2528.0	2523.4
32.5°	2416.5	2421.0	2412.1	2416.5	2421.0	2403.2	2443.2	2425.4	2421.0	2425.4	2429.9
35°	2296.0	2296.0	2305.0	2291.7	2309.5	2309.5	2345.2	2322.8	2318.4	2305.0	2318.4
37.5°	2189.1	2175.8	2180.2	2180.2	2189.1	2198.0	2215.8	2206.9	2206.9	2193.6	2202.5
40°	2046.5	2037.5	2050.8	2050.8	2064.3	2064.3	2082.1	2073.2	2086.5	2086.5	2086.5
42.5°	1921.7	1921.7	1912.8	1926.0	1930.6	1926.0	1957.3	1952.8	1957.3	1948.4	1952.8
45°	1787.8	1787.8	1778.9	1774.5	1796.7	1792.3	1828.0	1814.5	1832.4	1823.4	1828.0
47.5°	1605.0	1627.3	1613.9	1627.3	1654.1	1658.6	1680.8	1671.9	1689.7	1676.5	1694.3
50°	1431.2	1431.2	1444.5	1462.4	1489.1	1493.6	1520.4	1538.2	1547.1	1551.5	1556.0
52.5°	1248.4	1243.9	1257.3	1279.5	1301.9	1319.7	1346.5	1373.2	1391.0	1417.8	1404.3
55°	1034.3	1043.2	1056.7	1083.4	1119.1	1141.3	1163.7	1199.3	1230.6	1243.9	1270.6
57.5°	851.5	842.6	851.5	887.2	927.4	945.2	976.5	1012.1	1056.7	1083.4	1092.4
60°	659.8	664.3	673.2	704.5	735.6	762.4	775.8	833.7	873.9	900.6	918.5
62.5°	486.1	495.0	503.9	530.6	561.7	584.1	606.3	655.4	691.1	717.8	735.6
65°	338.9	343.3	356.7	370.0	401.3	423.5	441.3	481.5	517.2	539.5	552.8
67.5°	209.6	213.9	222.8	240.8	263.0	280.9	298.7	325.4	356.7	378.9	383.5
70°	107.0	111.5	115.9	129.3	147.2	156.1	169.4	191.7	213.9	231.8	240.8
72.5°	35.7	35.7	40.2	49.1	58.0	66.9	71.3	93.7	111.5	120.4	124.8
75°	8.9	8.9	8.9	8.9	8.9	13.5	13.5	26.7	35.7	44.6	49.1
77.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	8.9	8.9
80°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
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°	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8	3138.8
2.5°	3138.8	3129.9	3125.4	3129.9	3129.9	3125.4	3138.8	3156.6	3178.8	3121.0
5°	3134.3	3125.4	3134.3	3107.5	3121.0	3112.1	3129.9	3125.4	3143.2	3125.4
7.5°	3121.0	3103.2	3107.5	3094.2	3112.1	3089.7	3103.2	3129.9	3112.1	3085.3
10°	3076.4	3067.5	3098.6	3054.1	3045.1	3063.0	3098.6	3071.9	3063.0	3071.9
12.5°	3031.7	3031.7	3045.1	3009.5	3013.9	3022.8	3040.6	3022.8	3031.7	3054.1
15°	2982.7	2973.8	2996.0	2969.3	2964.9	2956.0	2973.8	2973.8	2982.7	2969.3
17.5°	2924.7	2911.4	2911.4	2902.5	2898.0	2920.3	2929.3	2933.6	2938.2	2920.3
20°	2853.4	2849.0	2862.3	2849.0	2853.4	2858.0	2858.0	2849.0	2889.1	2840.1
22.5°	2777.6	2791.0	2773.2	2764.3	2773.2	2782.1	2782.1	2786.5	2777.6	2768.6
25°	2701.9	2710.8	2715.2	2688.4	2701.9	2688.4	2719.7	2724.1	2706.2	2715.2
27.5°	2634.9	2621.7	2617.1	2599.3	2608.2	2603.8	2608.2	2608.2	2634.9	2599.3
30°	2532.3	2519.1	2523.4	2510.1	2514.5	2510.1	2514.5	2514.5	2532.3	2528.0
32.5°	2434.3	2421.0	2425.4	2412.1	2412.1	2416.5	2407.6	2407.6	2421.0	2412.1
35°	2340.6	2309.5	2313.9	2309.5	2313.9	2296.0	2296.0	2291.7	2300.6	2278.2
37.5°	2206.9	2193.6	2189.1	2184.7	2189.1	2180.2	2189.1	2175.8	2189.1	2171.3
40°	2086.5	2077.6	2082.1	2055.4	2055.4	2059.7	2050.8	2046.5	2050.8	2068.7
42.5°	1966.2	1948.4	1939.5	1930.6	1935.0	1921.7	1917.1	1908.2	1917.1	1899.3
45°	1823.4	1823.4	1819.1	1796.7	1801.3	1801.3	1783.4	1765.6	1770.0	1770.0
47.5°	1694.3	1685.4	1680.8	1658.6	1654.1	1649.7	1631.7	1618.4	1618.4	1605.0
50°	1551.5	1542.6	1529.3	1506.9	1498.0	1471.3	1458.0	1440.2	1422.3	1422.3
52.5°	1417.8	1386.5	1368.7	1333.0	1319.7	1306.3	1270.6	1257.3	1243.9	1230.6
55°	1257.3	1230.6	1194.9	1154.8	1136.9	1114.6	1078.9	1052.2	1034.3	1038.9
57.5°	1101.3	1056.7	1021.0	967.6	945.2	931.7	896.1	860.4	842.6	842.6
60°	909.5	873.9	829.3	780.2	762.4	740.2	695.4	673.2	659.8	646.5
62.5°	726.7	700.0	659.8	597.4	584.1	561.7	530.6	503.9	490.4	490.4
65°	543.9	517.2	481.5	436.9	419.1	401.3	374.5	347.8	334.3	330.0
67.5°	383.5	352.2	321.1	285.4	272.0	263.0	236.3	218.5	209.6	205.0
70°	231.8	213.9	191.7	165.0	151.5	142.6	124.8	111.5	107.0	102.6
72.5°	120.4	107.0	89.1	71.3	62.4	53.5	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	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
80°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
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)