

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: **LD4C70D010 EX4C709050 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: 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: LD4C70D010 EX4C709050 4LBCSSQMMMS
Description: 4 INCH 7000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

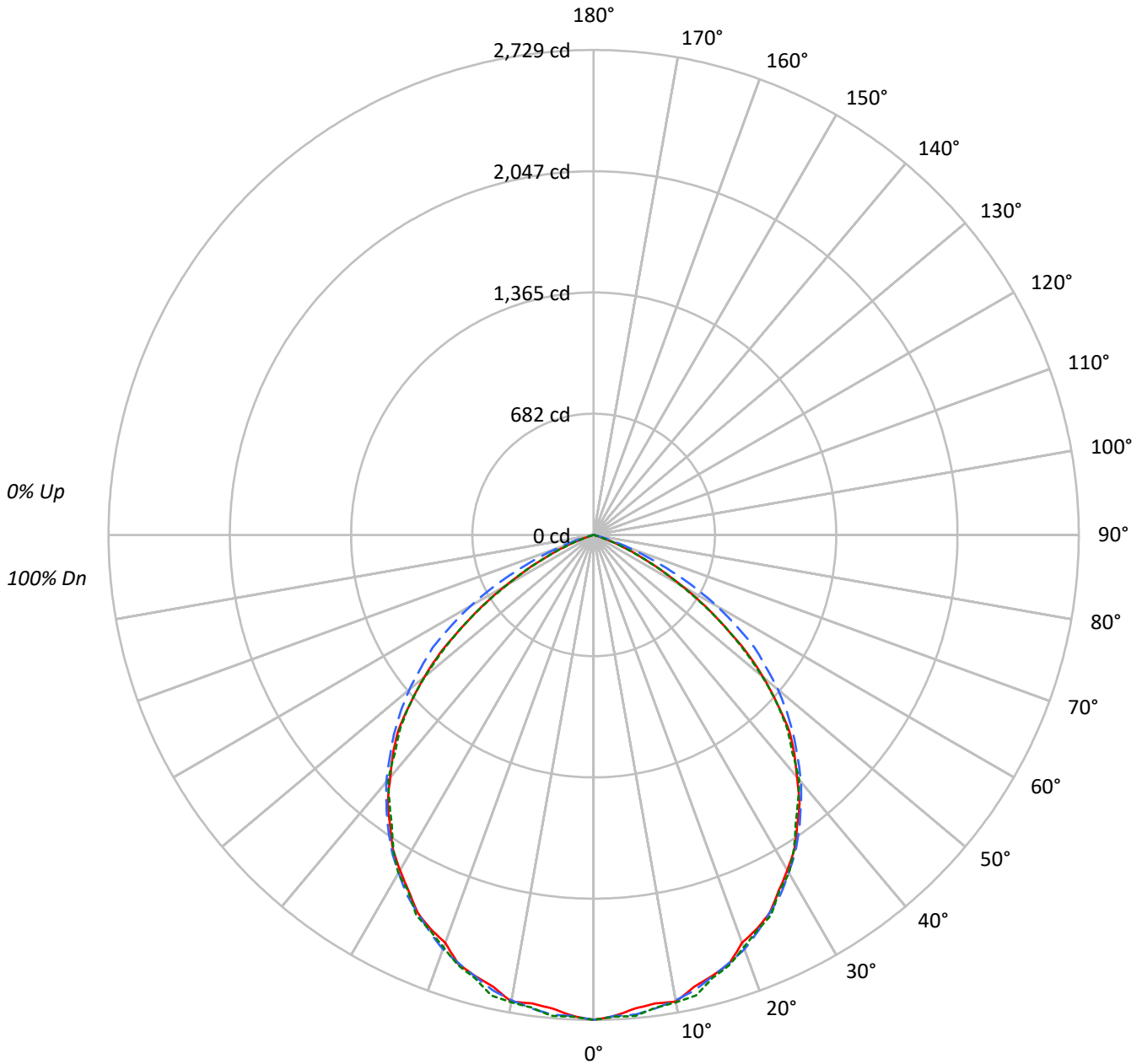
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5829.0 lumens
Efficiency: N/A
Efficacy: 74.7 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): 78
Input Voltage (V):
Input Current (Ain): 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									
RC	80									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°	263289	263289	263289
5°	259045	262416	263162
10°	261276	260522	261649
15°	256704	257084	257863
20°	250738	254711	253530
25°	249647	249647	251297
30°	242686	244413	244858
35°	235123	237408	233297
40°	224091	228474	226522
45°	212080	216856	209965
50°	186782	203054	185611
55°	151266	185819	151922
60°	110692	154093	108454
65°	67261	109727	65503
70°	26237	59075	25165
75°	2871	15919	2871
80°	2223	2223	2223
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.6	4.4
10°-20°	728.9	12.5
20°-30°	1081.5	18.6
30°-40°	1253.1	21.5
40°-50°	1201.4	20.6
50°-60°	883.4	15.2
60°-70°	381.5	6.5
70°-80°	41.2	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°	2067.9	35.5
0°-40°	3321.0	57.0
0°-60°	5405.7	92.7
0°-90°	5829.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5829.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2729	2729	2729	2729	2729	
5°	2674	2702	2709	2713	2717	255
15°	2570	2585	2574	2578	2581	724
25°	2345	2341	2345	2349	2360	1074
35°	1996	2008	2016	2012	1981	1248
45°	1554	1558	1589	1566	1539	1181
55°	899	992	1105	988	903	809
65°	295	368	481	364	287	303
75°	8	12	43	8	8	24
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7
2.5°	2709.3	2740.3	2744.2	2724.8	2717.0	2705.5	2732.5	2713.2	2721.0	2713.2	2709.3
5°	2674.5	2709.3	2713.2	2713.2	2705.5	2701.5	2713.2	2709.3	2705.5	2697.7	2709.3
7.5°	2659.0	2678.3	2697.7	2674.5	2686.0	2682.2	2709.3	2697.7	2693.8	2693.8	2686.0
10°	2666.7	2662.8	2678.3	2655.0	2662.8	2655.0	2678.3	2678.3	2670.5	2662.8	2659.0
12.5°	2604.6	2635.6	2635.6	2631.8	2624.0	2612.3	2635.6	2651.2	2627.8	2627.8	2624.0
15°	2569.8	2577.6	2581.4	2581.4	2577.6	2585.3	2596.8	2581.4	2585.3	2565.9	2573.6
17.5°	2531.1	2515.6	2527.1	2519.4	2523.3	2531.1	2546.6	2546.6	2523.3	2519.4	2527.1
20°	2441.9	2488.4	2492.3	2469.1	2472.9	2472.9	2500.1	2476.8	2492.3	2472.9	2480.6
22.5°	2399.2	2430.2	2434.1	2403.1	2422.4	2399.2	2426.4	2391.4	2430.2	2403.1	2414.7
25°	2344.9	2341.1	2352.7	2337.2	2341.1	2341.1	2360.4	2344.9	2356.6	2341.1	2344.9
27.5°	2255.9	2286.9	2282.9	2267.4	2275.2	2271.4	2310.1	2267.4	2290.7	2271.4	2279.1
30°	2178.2	2205.4	2197.7	2182.2	2182.2	2170.5	2213.2	2201.5	2197.7	2197.7	2193.7
32.5°	2100.8	2104.7	2097.0	2100.8	2104.7	2089.2	2124.0	2108.5	2104.7	2108.5	2112.5
35°	1996.1	1996.1	2003.8	1992.3	2007.8	2007.8	2038.8	2019.3	2015.5	2003.8	2015.5
37.5°	1903.1	1891.5	1895.3	1895.3	1903.1	1910.8	1926.3	1918.6	1918.6	1907.0	1914.8
40°	1779.1	1771.3	1782.9	1782.9	1794.6	1794.6	1810.1	1802.3	1813.9	1813.9	1813.9
42.5°	1670.6	1670.6	1662.9	1674.4	1678.4	1674.4	1701.6	1697.7	1701.6	1693.9	1697.7
45°	1554.2	1554.2	1546.5	1542.7	1562.0	1558.2	1589.2	1577.5	1593.0	1585.2	1589.2
47.5°	1395.3	1414.7	1403.0	1414.7	1438.0	1441.9	1461.2	1453.5	1469.0	1457.4	1472.9
50°	1244.3	1244.3	1255.8	1271.3	1294.5	1298.5	1321.7	1337.2	1345.0	1348.8	1352.7
52.5°	1085.3	1081.4	1093.1	1112.4	1131.8	1147.3	1170.6	1193.8	1209.3	1232.6	1220.9
55°	899.2	906.9	918.6	941.9	972.9	992.2	1011.6	1042.6	1069.8	1081.4	1104.6
57.5°	740.3	732.5	740.3	771.3	806.2	821.7	848.9	879.9	918.6	941.9	949.6
60°	573.6	577.5	585.3	612.5	639.5	662.8	674.5	724.8	759.7	783.0	798.5
62.5°	422.6	430.3	438.1	461.3	488.3	507.8	527.1	569.8	600.8	624.0	639.5
65°	294.6	298.4	310.1	321.7	348.9	368.2	383.7	418.6	449.6	469.0	480.6
67.5°	182.2	186.0	193.7	209.4	228.7	244.2	259.7	282.9	310.1	329.4	333.4
70°	93.0	96.9	100.7	112.4	127.9	135.7	147.2	166.7	186.0	201.5	209.4
72.5°	31.0	31.0	34.9	42.7	50.4	58.2	62.0	81.4	96.9	104.7	108.5
75°	7.7	7.7	7.7	7.7	7.7	11.7	11.7	23.2	31.0	38.7	42.7
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	7.7	7.7
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°	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7	2728.7
2.5°	2728.7	2721.0	2717.0	2721.0	2721.0	2717.0	2728.7	2744.2	2763.5	2713.2
5°	2724.8	2717.0	2724.8	2701.5	2713.2	2705.5	2721.0	2717.0	2732.5	2717.0
7.5°	2713.2	2697.7	2701.5	2690.0	2705.5	2686.0	2697.7	2721.0	2705.5	2682.2
10°	2674.5	2666.7	2693.8	2655.0	2647.3	2662.8	2693.8	2670.5	2662.8	2670.5
12.5°	2635.6	2635.6	2647.3	2616.3	2620.1	2627.8	2643.3	2627.8	2635.6	2655.0
15°	2593.1	2585.3	2604.6	2581.4	2577.6	2569.8	2585.3	2585.3	2593.1	2581.4
17.5°	2542.6	2531.1	2531.1	2523.3	2519.4	2538.8	2546.6	2550.4	2554.3	2538.8
20°	2480.6	2476.8	2488.4	2476.8	2480.6	2484.6	2484.6	2476.8	2511.6	2469.1
22.5°	2414.7	2426.4	2410.9	2403.1	2410.9	2418.6	2418.6	2422.4	2414.7	2406.9
25°	2348.9	2356.6	2360.4	2337.2	2348.9	2337.2	2364.4	2368.2	2352.7	2360.4
27.5°	2290.7	2279.1	2275.2	2259.7	2267.4	2263.6	2267.4	2267.4	2290.7	2259.7
30°	2201.5	2189.9	2193.7	2182.2	2186.0	2182.2	2186.0	2186.0	2201.5	2197.7
32.5°	2116.3	2104.7	2108.5	2097.0	2097.0	2100.8	2093.0	2093.0	2104.7	2097.0
35°	2034.8	2007.8	2011.6	2007.8	2011.6	1996.1	1996.1	1992.3	2000.0	1980.6
37.5°	1918.6	1907.0	1903.1	1899.3	1903.1	1895.3	1903.1	1891.5	1903.1	1887.6
40°	1813.9	1806.1	1810.1	1786.8	1786.8	1790.6	1782.9	1779.1	1782.9	1798.4
42.5°	1709.4	1693.9	1686.1	1678.4	1682.2	1670.6	1666.7	1658.9	1666.7	1651.2
45°	1585.2	1585.2	1581.4	1562.0	1565.9	1565.9	1550.4	1534.9	1538.7	1538.7
47.5°	1472.9	1465.2	1461.2	1441.9	1438.0	1434.2	1418.5	1407.0	1407.0	1395.3
50°	1348.8	1341.0	1329.5	1310.0	1302.3	1279.1	1267.5	1252.0	1236.5	1236.5
52.5°	1232.6	1205.4	1189.9	1158.9	1147.3	1135.6	1104.6	1093.1	1081.4	1069.8
55°	1093.1	1069.8	1038.8	1003.9	988.4	968.9	937.9	914.7	899.2	903.1
57.5°	957.4	918.6	887.6	841.2	821.7	810.0	779.0	748.0	732.5	732.5
60°	790.7	759.7	721.0	678.3	662.8	643.5	604.6	585.3	573.6	562.0
62.5°	631.8	608.5	573.6	519.3	507.8	488.3	461.3	438.1	426.4	426.4
65°	472.8	449.6	418.6	379.9	364.4	348.9	325.6	302.4	290.7	286.9
67.5°	333.4	306.2	279.1	248.1	236.4	228.7	205.4	189.9	182.2	178.2
70°	201.5	186.0	166.7	143.4	131.7	124.0	108.5	96.9	93.0	89.2
72.5°	104.7	93.0	77.5	62.0	54.2	46.5	38.7	31.0	27.2	27.2
75°	38.7	31.0	19.4	11.7	7.7	7.7	7.7	7.7	7.7	7.7
77.5°	7.7	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)