

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: P840217

Luminaire Tested: **LD4C55D010 EU4559050 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: P840217
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 EU4559050 4LBCSSQMW
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

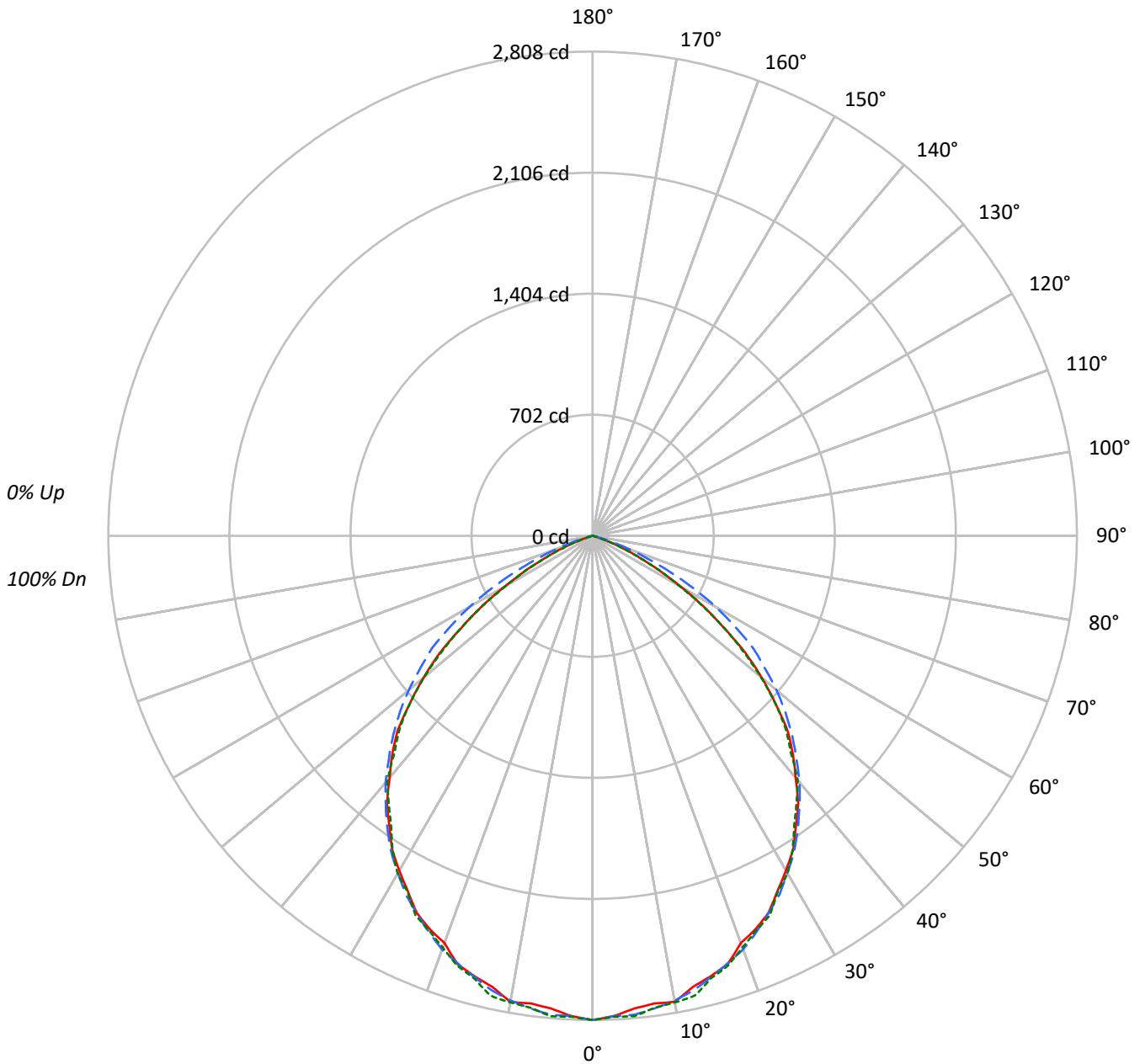
Lumens per Lamp: N/A
Luminaire Lumens: 5999.0 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
Input Voltage (V):
Input Current (A_{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

TEST NUMBER: P840217

CATALOG NUMBER: LD4C55D010 EU4559050 4LBCSSQMW

Luminous Intensity Polar Plot





TEST NUMBER: P840217

CATALOG NUMBER: LD4C55D010 EU4559050 4LBCSSQMW

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°	270970	270970	270970
5°	266600	270068	270843
10°	268899	268115	269281
15°	264196	264586	265375
20°	258048	262145	260924
25°	256929	256929	258632
30°	249772	251543	252000
35°	241978	244334	240094
40°	230628	235137	233122
45°	218261	223174	216092
50°	192216	208983	191030
55°	155674	191236	156364
60°	113915	158570	111618
65°	69224	112923	67398
70°	26998	60796	25898
75°	2982	16366	2982
80°	2278	2278	2278
85°	0	0	0



TEST NUMBER: P840217

CATALOG NUMBER: LD4C55D010 EU4559050 4LBCSSQMW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.1	4.4
10°-20°	750.1	12.5
20°-30°	1113.0	18.6
30°-40°	1289.6	21.5
40°-50°	1236.5	20.6
50°-60°	909.1	15.2
60°-70°	392.7	6.5
70°-80°	42.4	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°	2128.2	35.5
0°-40°	3417.8	57.0
0°-60°	5563.4	92.7
0°-90°	5999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2808	2808	2808	2808	2808	
5°	2752	2780	2788	2792	2796	263
15°	2645	2661	2649	2653	2657	745
25°	2413	2409	2413	2417	2429	1105
35°	2054	2066	2074	2070	2038	1285
45°	1600	1604	1636	1612	1584	1216
55°	925	1021	1137	1017	930	833
65°	303	379	495	375	295	312
75°	8	12	44	8	8	25
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P840217

CATALOG NUMBER: LD4C55D010 EU4559050 4LBCSSQMW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3
2.5°	2788.3	2820.2	2824.3	2804.3	2796.3	2784.4	2812.2	2792.4	2800.3	2792.4	2788.3
5°	2752.5	2788.3	2792.4	2792.4	2784.4	2780.3	2792.4	2788.3	2784.4	2776.4	2788.3
7.5°	2736.5	2756.4	2776.4	2752.5	2764.4	2760.5	2788.3	2776.4	2772.4	2772.4	2764.4
10°	2744.5	2740.5	2756.4	2732.5	2740.5	2732.5	2756.4	2756.4	2748.4	2740.5	2736.5
12.5°	2680.6	2712.5	2712.5	2708.6	2700.6	2688.5	2712.5	2728.6	2704.5	2704.5	2700.6
15°	2644.8	2652.7	2656.6	2656.6	2652.7	2660.7	2672.6	2656.6	2660.7	2640.7	2648.7
17.5°	2604.9	2588.9	2600.8	2592.8	2596.9	2604.9	2620.8	2620.8	2596.9	2592.8	2600.8
20°	2513.1	2560.9	2565.0	2541.1	2545.0	2545.0	2573.0	2549.0	2565.0	2545.0	2553.0
22.5°	2469.1	2501.0	2505.1	2473.2	2493.1	2469.1	2497.1	2461.2	2501.0	2473.2	2485.1
25°	2413.3	2409.4	2421.3	2405.3	2409.4	2409.4	2429.3	2413.3	2425.4	2409.4	2413.3
27.5°	2321.7	2353.6	2349.5	2333.6	2341.5	2337.6	2377.5	2333.6	2357.5	2337.6	2345.6
30°	2241.8	2269.8	2261.8	2245.8	2245.8	2233.8	2277.7	2265.7	2261.8	2261.8	2257.7
32.5°	2162.0	2166.1	2158.1	2162.0	2166.1	2150.1	2185.9	2170.0	2166.1	2170.0	2174.1
35°	2054.3	2054.3	2062.3	2050.4	2066.3	2066.3	2098.2	2078.2	2074.3	2062.3	2074.3
37.5°	1958.6	1946.7	1950.6	1950.6	1958.6	1966.6	1982.5	1974.5	1974.5	1962.6	1970.6
40°	1831.0	1823.0	1834.9	1834.9	1846.9	1846.9	1862.9	1854.9	1866.8	1866.8	1866.8
42.5°	1719.3	1719.3	1711.4	1723.2	1727.3	1723.2	1751.2	1747.2	1751.2	1743.3	1747.2
45°	1599.5	1599.5	1591.6	1587.7	1607.5	1603.6	1635.5	1623.5	1639.4	1631.4	1635.5
47.5°	1436.0	1456.0	1444.0	1456.0	1479.9	1484.0	1503.8	1495.9	1511.8	1499.9	1515.9
50°	1280.5	1280.5	1292.4	1308.4	1332.3	1336.4	1360.3	1376.2	1384.2	1388.1	1392.2
52.5°	1117.0	1112.9	1125.0	1144.8	1164.8	1180.8	1204.7	1228.6	1244.6	1268.5	1256.5
55°	925.4	933.4	945.4	969.4	1001.3	1021.1	1041.1	1073.0	1101.0	1112.9	1136.8
57.5°	761.9	753.9	761.9	793.8	829.7	845.7	873.7	905.6	945.4	969.4	977.3
60°	590.3	594.4	602.4	630.3	658.2	682.1	694.1	745.9	781.9	805.8	821.7
62.5°	434.9	442.9	450.8	474.8	502.6	522.6	542.5	586.4	618.3	642.2	658.2
65°	303.2	307.1	319.2	331.0	359.0	378.9	394.8	430.8	462.7	482.7	494.6
67.5°	187.5	191.4	199.4	215.5	235.3	251.3	267.2	291.2	319.2	339.0	343.1
70°	95.7	99.8	103.7	115.7	131.7	139.6	151.5	171.5	191.4	207.4	215.5
72.5°	31.9	31.9	36.0	43.9	51.9	59.9	63.8	83.8	99.8	107.7	111.7
75°	8.0	8.0	8.0	8.0	8.0	12.0	12.0	23.9	31.9	39.9	43.9
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	8.0	8.0
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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



TEST NUMBER: P840217

CATALOG NUMBER: LD4C55D010 EU4559050 4LBCSSQMW

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3	2808.3
2.5°	2808.3	2800.3	2796.3	2800.3	2800.3	2796.3	2808.3	2824.3	2844.1	2792.4
5°	2804.3	2796.3	2804.3	2780.3	2792.4	2784.4	2800.3	2796.3	2812.2	2796.3
7.5°	2792.4	2776.4	2780.3	2768.4	2784.4	2764.4	2776.4	2800.3	2784.4	2760.5
10°	2752.5	2744.5	2772.4	2732.5	2724.5	2740.5	2772.4	2748.4	2740.5	2748.4
12.5°	2712.5	2712.5	2724.5	2692.6	2696.5	2704.5	2720.4	2704.5	2712.5	2732.5
15°	2668.7	2660.7	2680.6	2656.6	2652.7	2644.8	2660.7	2660.7	2668.7	2656.6
17.5°	2616.8	2604.9	2604.9	2596.9	2592.8	2612.9	2620.8	2624.7	2628.8	2612.9
20°	2553.0	2549.0	2560.9	2549.0	2553.0	2557.0	2557.0	2549.0	2584.9	2541.1
22.5°	2485.1	2497.1	2481.2	2473.2	2481.2	2489.2	2489.2	2493.1	2485.1	2477.1
25°	2417.4	2425.4	2429.3	2405.3	2417.4	2405.3	2433.3	2437.2	2421.3	2429.3
27.5°	2357.5	2345.6	2341.5	2325.6	2333.6	2329.7	2333.6	2333.6	2357.5	2325.6
30°	2265.7	2253.8	2257.7	2245.8	2249.8	2245.8	2249.8	2249.8	2265.7	2261.8
32.5°	2178.0	2166.1	2170.0	2158.1	2158.1	2162.0	2154.0	2154.0	2166.1	2158.1
35°	2094.2	2066.3	2070.2	2066.3	2070.2	2054.3	2054.3	2050.4	2058.3	2038.3
37.5°	1974.5	1962.6	1958.6	1954.7	1958.6	1950.6	1958.6	1946.7	1958.6	1942.6
40°	1866.8	1858.8	1862.9	1839.0	1839.0	1842.9	1834.9	1831.0	1834.9	1850.8
42.5°	1759.2	1743.3	1735.3	1727.3	1731.2	1719.3	1715.3	1707.3	1715.3	1699.3
45°	1631.4	1631.4	1627.5	1607.5	1611.6	1611.6	1595.6	1579.7	1583.6	1583.6
47.5°	1515.9	1507.9	1503.8	1484.0	1479.9	1476.0	1459.9	1448.0	1448.0	1436.0
50°	1388.1	1380.2	1368.3	1348.3	1340.3	1316.4	1304.5	1288.5	1272.6	1272.6
52.5°	1268.5	1240.5	1224.6	1192.7	1180.8	1168.7	1136.8	1125.0	1112.9	1101.0
55°	1125.0	1101.0	1069.1	1033.2	1017.2	997.2	965.3	941.4	925.4	929.5
57.5°	985.3	945.4	913.5	865.7	845.7	833.6	801.7	769.8	753.9	753.9
60°	813.8	781.9	742.0	698.1	682.1	662.2	622.2	602.4	590.3	578.4
62.5°	650.2	626.3	590.3	534.5	522.6	502.6	474.8	450.8	438.8	438.8
65°	486.6	462.7	430.8	390.9	375.0	359.0	335.1	311.2	299.1	295.2
67.5°	343.1	315.1	287.3	255.4	243.3	235.3	211.4	195.5	187.5	183.4
70°	207.4	191.4	171.5	147.6	135.6	127.6	111.7	99.8	95.7	91.8
72.5°	107.7	95.7	79.8	63.8	55.8	47.9	39.9	31.9	28.0	28.0
75°	39.9	31.9	20.0	12.0	8.0	8.0	8.0	8.0	8.0	8.0
77.5°	8.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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)