

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: **LD4C65D010 EX4C659050 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: 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: LD4C65D010 EX4C659050 4LBCSSQMW
Description: 4 INCH 6500 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

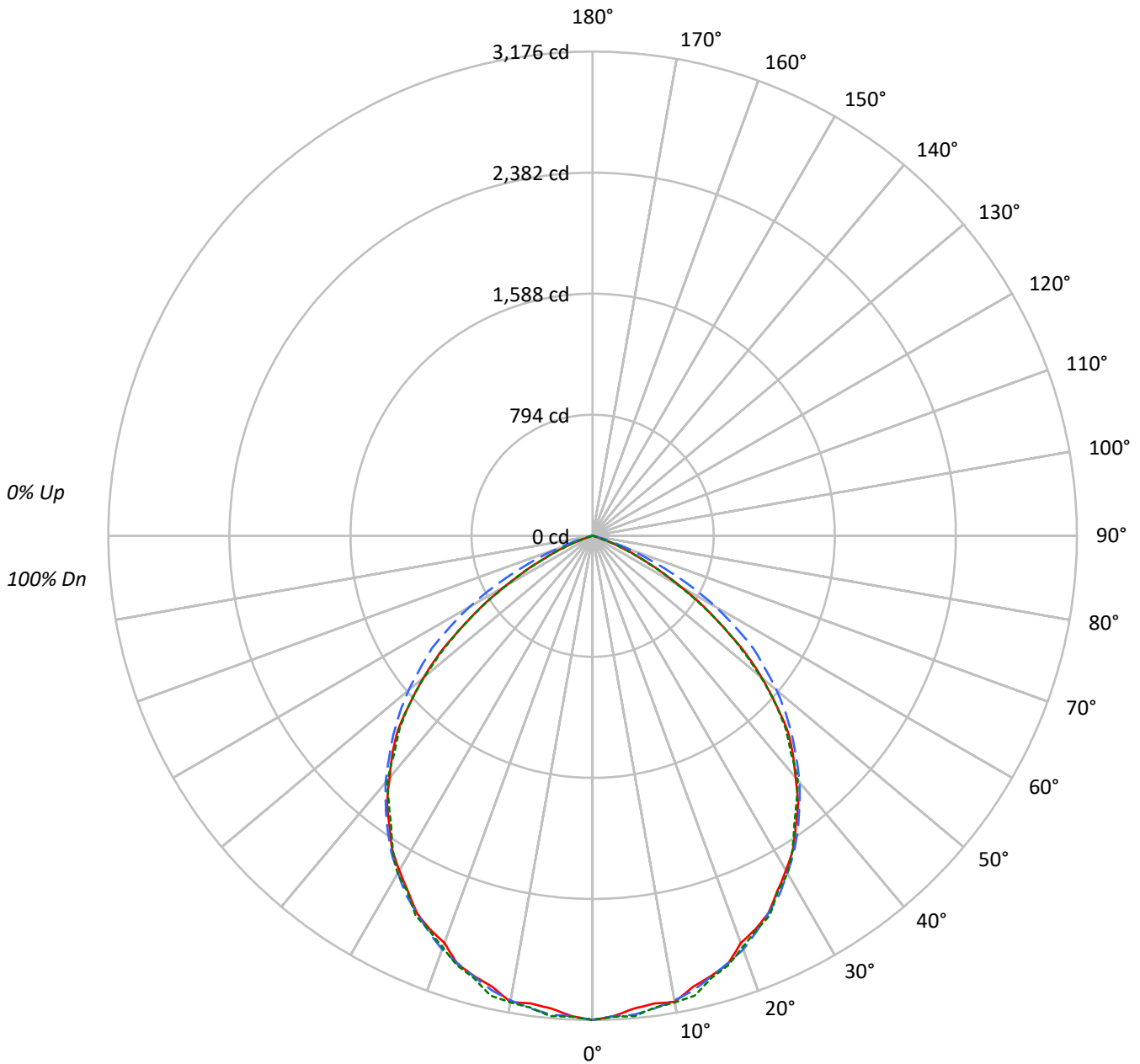
Lumens per Lamp: N/A
Luminaire Lumens: 6784.0 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72.4
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°	306429	306429	306429
5°	301488	305411	306283
10°	304092	303201	304524
15°	298759	299208	300107
20°	291810	296441	295065
25°	290550	290550	292466
30°	282450	284467	284979
35°	273641	276303	271520
40°	260807	265908	263629
45°	246835	252375	244365
50°	217374	236333	216023
55°	176046	216268	176819
60°	128832	179334	126227
65°	78288	127695	76233
70°	30525	68751	29284
75°	3355	18528	3355
80°	2556	2556	2556
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.8	4.4
10°-20°	848.3	12.5
20°-30°	1258.6	18.6
30°-40°	1458.4	21.5
40°-50°	1398.3	20.6
50°-60°	1028.1	15.2
60°-70°	444.0	6.5
70°-80°	47.9	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°	2406.7	35.5
0°-40°	3865.0	57.0
0°-60°	6291.4	92.7
0°-90°	6784.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6784.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3176	3176	3176	3176	3176	
5°	3113	3144	3153	3158	3162	297
15°	2991	3009	2995	3000	3004	843
25°	2729	2725	2729	2734	2747	1250
35°	2323	2337	2346	2341	2305	1453
45°	1809	1814	1850	1822	1791	1375
55°	1046	1155	1286	1150	1051	942
65°	343	428	559	424	334	352
75°	9	14	50	9	9	28
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°	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8
2.5°	3153.2	3189.2	3193.8	3171.2	3162.2	3148.7	3180.2	3157.8	3166.8	3157.8	3153.2
5°	3112.7	3153.2	3157.8	3157.8	3148.7	3144.1	3157.8	3153.2	3148.7	3139.7	3153.2
7.5°	3094.6	3117.1	3139.7	3112.7	3126.1	3121.7	3153.2	3139.7	3135.1	3135.1	3126.1
10°	3103.7	3099.1	3117.1	3090.0	3099.1	3090.0	3117.1	3117.1	3108.1	3099.1	3094.6
12.5°	3031.3	3067.4	3067.4	3063.0	3054.0	3040.3	3067.4	3085.6	3058.4	3058.4	3054.0
15°	2990.8	2999.8	3004.3	3004.3	2999.8	3008.9	3022.3	3004.3	3008.9	2986.2	2995.3
17.5°	2945.7	2927.7	2941.1	2932.1	2936.7	2945.7	2963.8	2963.8	2936.7	2932.1	2941.1
20°	2841.9	2896.0	2900.6	2873.6	2878.0	2878.0	2909.7	2882.6	2900.6	2878.0	2887.0
22.5°	2792.2	2828.3	2832.9	2796.8	2819.3	2792.2	2823.9	2783.2	2828.3	2796.8	2810.3
25°	2729.1	2724.7	2738.1	2720.1	2724.7	2724.7	2747.1	2729.1	2742.7	2724.7	2729.1
27.5°	2625.5	2661.6	2657.0	2638.9	2647.9	2643.5	2688.6	2638.9	2666.0	2643.5	2652.5
30°	2535.1	2566.8	2557.8	2539.7	2539.7	2526.1	2575.8	2562.2	2557.8	2557.8	2553.2
32.5°	2444.9	2449.5	2440.5	2444.9	2449.5	2431.5	2472.0	2454.0	2449.5	2454.0	2458.6
35°	2323.1	2323.1	2332.1	2318.7	2336.7	2336.7	2372.8	2350.2	2345.7	2332.1	2345.7
37.5°	2214.9	2201.4	2205.9	2205.9	2214.9	2223.9	2241.9	2232.9	2232.9	2219.5	2228.5
40°	2070.6	2061.6	2075.0	2075.0	2088.6	2088.6	2106.6	2097.6	2111.1	2111.1	2111.1
42.5°	1944.3	1944.3	1935.3	1948.7	1953.3	1948.7	1980.4	1975.8	1980.4	1971.4	1975.8
45°	1808.9	1808.9	1799.8	1795.4	1817.9	1813.5	1849.5	1835.9	1854.0	1844.9	1849.5
47.5°	1623.9	1646.5	1632.9	1646.5	1673.6	1678.2	1700.6	1691.6	1709.7	1696.2	1714.2
50°	1448.1	1448.1	1461.6	1479.6	1506.6	1511.2	1538.3	1556.3	1565.4	1569.8	1574.4
52.5°	1263.1	1258.5	1272.2	1294.6	1317.3	1335.3	1362.3	1389.4	1407.4	1434.5	1420.9
55°	1046.5	1055.5	1069.2	1096.2	1132.3	1154.7	1177.4	1213.4	1245.1	1258.5	1285.6
57.5°	861.5	852.5	861.5	897.6	938.3	956.3	988.0	1024.1	1069.2	1096.2	1105.2
60°	667.6	672.2	681.2	712.8	744.3	771.4	785.0	843.5	884.2	911.2	929.3
62.5°	491.8	500.8	509.8	536.9	568.4	591.0	613.4	663.1	699.2	726.3	744.3
65°	342.9	347.3	360.9	374.4	406.0	428.5	446.5	487.2	523.3	545.9	559.3
67.5°	212.0	216.4	225.5	243.7	266.1	284.2	302.2	329.3	360.9	383.4	388.0
70°	108.2	112.8	117.2	130.9	148.9	157.9	171.4	194.0	216.4	234.5	243.7
72.5°	36.1	36.1	40.7	49.7	58.7	67.7	72.1	94.8	112.8	121.8	126.3
75°	9.0	9.0	9.0	9.0	9.0	13.6	13.6	27.1	36.1	45.1	49.7
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	9.0	9.0
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°	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8
2.5°	3175.8	3166.8	3162.2	3166.8	3166.8	3162.2	3175.8	3193.8	3216.3	3157.8
5°	3171.2	3162.2	3171.2	3144.1	3157.8	3148.7	3166.8	3162.2	3180.2	3162.2
7.5°	3157.8	3139.7	3144.1	3130.7	3148.7	3126.1	3139.7	3166.8	3148.7	3121.7
10°	3112.7	3103.7	3135.1	3090.0	3081.0	3099.1	3135.1	3108.1	3099.1	3108.1
12.5°	3067.4	3067.4	3081.0	3044.9	3049.4	3058.4	3076.4	3058.4	3067.4	3090.0
15°	3017.9	3008.9	3031.3	3004.3	2999.8	2990.8	3008.9	3008.9	3017.9	3004.3
17.5°	2959.2	2945.7	2945.7	2936.7	2932.1	2954.8	2963.8	2968.2	2972.8	2954.8
20°	2887.0	2882.6	2896.0	2882.6	2887.0	2891.6	2891.6	2882.6	2923.1	2873.6
22.5°	2810.3	2823.9	2805.9	2796.8	2805.9	2814.9	2814.9	2819.3	2810.3	2801.3
25°	2733.7	2742.7	2747.1	2720.1	2733.7	2720.1	2751.7	2756.2	2738.1	2747.1
27.5°	2666.0	2652.5	2647.9	2629.9	2638.9	2634.5	2638.9	2638.9	2666.0	2629.9
30°	2562.2	2548.7	2553.2	2539.7	2544.1	2539.7	2544.1	2544.1	2562.2	2557.8
32.5°	2463.0	2449.5	2454.0	2440.5	2440.5	2444.9	2435.9	2435.9	2449.5	2440.5
35°	2368.2	2336.7	2341.1	2336.7	2341.1	2323.1	2323.1	2318.7	2327.7	2305.1
37.5°	2232.9	2219.5	2214.9	2210.5	2214.9	2205.9	2214.9	2201.4	2214.9	2196.8
40°	2111.1	2102.1	2106.6	2079.6	2079.6	2084.0	2075.0	2070.6	2075.0	2093.0
42.5°	1989.4	1971.4	1962.4	1953.3	1957.8	1944.3	1939.7	1930.7	1939.7	1921.7
45°	1844.9	1844.9	1840.5	1817.9	1822.5	1822.5	1804.4	1786.4	1790.8	1790.8
47.5°	1714.2	1705.2	1700.6	1678.2	1673.6	1669.2	1650.9	1637.5	1637.5	1623.9
50°	1569.8	1560.8	1547.3	1524.7	1515.7	1488.6	1475.2	1457.1	1439.1	1439.1
52.5°	1434.5	1402.8	1384.8	1348.7	1335.3	1321.7	1285.6	1272.2	1258.5	1245.1
55°	1272.2	1245.1	1209.0	1168.4	1150.3	1127.7	1091.6	1064.6	1046.5	1051.1
57.5°	1114.2	1069.2	1033.1	979.0	956.3	942.7	906.6	870.6	852.5	852.5
60°	920.3	884.2	839.1	789.4	771.4	748.9	703.6	681.2	667.6	654.1
62.5°	735.3	708.2	667.6	604.4	591.0	568.4	536.9	509.8	496.2	496.2
65°	550.3	523.3	487.2	442.1	424.1	406.0	379.0	351.9	338.3	333.9
67.5°	388.0	356.3	324.8	288.8	275.2	266.1	239.1	221.0	212.0	207.4
70°	234.5	216.4	194.0	166.9	153.3	144.3	126.3	112.8	108.2	103.8
72.5°	121.8	108.2	90.2	72.1	63.1	54.1	45.1	36.1	31.7	31.7
75°	45.1	36.1	22.6	13.6	9.0	9.0	9.0	9.0	9.0	9.0
77.5°	9.0	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)