

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: **LD4C100D010 EX4C1009030 4LBCSSQMMS**

Issue Date: 5/25/2022



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: LD4C100D010 EX4C1009030 4LBCSSQMMS
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Summary

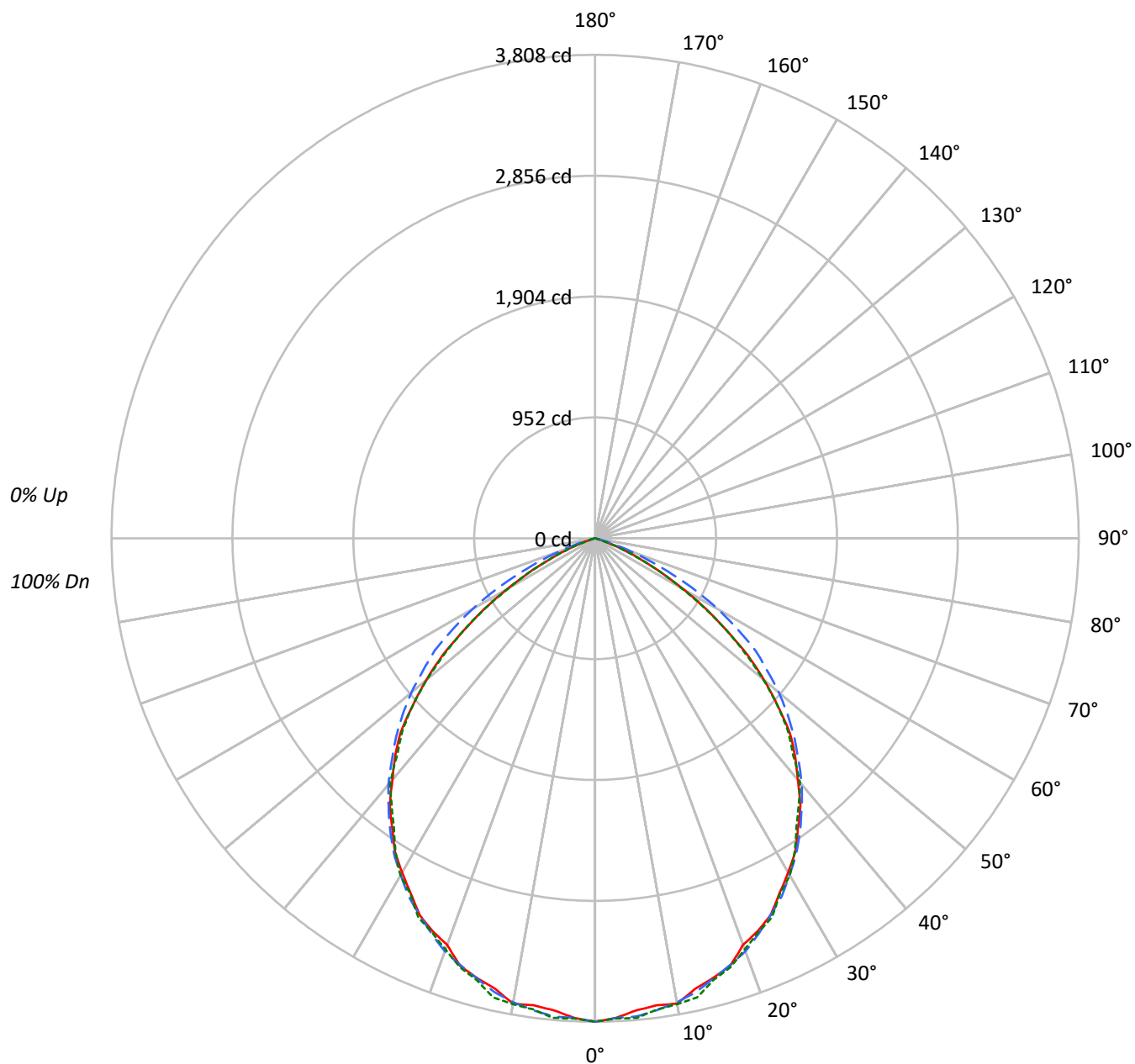
Lumens per Lamp: N/A
Luminaire Lumens: 8134.0 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 114.4
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					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	367410	367410	367410
5°	361482	366179	367235
10°	364603	363545	365123
15°	358215	358744	359823
20°	349887	355431	353778
25°	348371	348371	350670
30°	338659	341066	341679
35°	328096	331288	325551
40°	312702	318823	316090
45°	295946	302605	292998
50°	260636	283363	259015
55°	211087	259299	212012
60°	154459	215016	151352
65°	93859	153106	91393
70°	36618	82434	35123
75°	4026	22219	4026
80°	3056	3056	3056
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	359.4	4.4
10°-20°	1017.1	12.5
20°-30°	1509.1	18.6
30°-40°	1748.6	21.5
40°-50°	1676.5	20.6
50°-60°	1232.7	15.2
60°-70°	532.4	6.5
70°-80°	57.5	0.7
80°-90°	0.7	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°	2885.6	35.5
0°-40°	4634.2	57.0
0°-60°	7543.4	92.7
0°-90°	8134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3808	3808	3808	3808	3808	
5°	3732	3770	3781	3786	3792	356
15°	3586	3608	3591	3597	3602	1011
25°	3272	3267	3272	3278	3294	1498
35°	2785	2802	2812	2807	2764	1742
45°	2169	2174	2218	2185	2147	1649
55°	1255	1384	1541	1379	1260	1129
65°	411	514	671	508	400	423
75°	11	16	60	11	11	33
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°	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8
2.5°	3780.6	3823.9	3829.4	3802.3	3791.5	3775.3	3813.1	3786.2	3797.0	3786.2	3780.6
5°	3732.1	3780.6	3786.2	3786.2	3775.3	3769.8	3786.2	3780.6	3775.3	3764.5	3780.6
7.5°	3710.5	3737.4	3764.5	3732.1	3748.2	3742.9	3780.6	3764.5	3759.0	3759.0	3748.2
10°	3721.3	3715.8	3737.4	3704.9	3715.8	3704.9	3737.4	3737.4	3726.6	3715.8	3710.5
12.5°	3634.6	3677.8	3677.8	3672.5	3661.7	3645.4	3677.8	3699.6	3667.0	3667.0	3661.7
15°	3586.0	3596.8	3602.1	3602.1	3596.8	3607.6	3623.7	3602.1	3607.6	3580.5	3591.3
17.5°	3531.9	3510.3	3526.4	3515.6	3521.1	3531.9	3553.6	3553.6	3521.1	3515.6	3526.4
20°	3407.5	3472.4	3477.9	3445.4	3450.7	3450.7	3488.7	3456.2	3477.9	3450.7	3461.5
22.5°	3347.9	3391.1	3396.7	3353.4	3380.3	3347.9	3385.8	3337.1	3391.1	3353.4	3369.5
25°	3272.2	3266.9	3283.0	3261.4	3266.9	3266.9	3293.8	3272.2	3288.5	3266.9	3272.2
27.5°	3148.0	3191.2	3185.7	3164.1	3174.9	3169.6	3223.6	3164.1	3196.5	3169.6	3180.4
30°	3039.6	3077.6	3066.7	3045.1	3045.1	3028.8	3088.4	3072.0	3066.7	3066.7	3061.2
32.5°	2931.5	2937.0	2926.2	2931.5	2937.0	2915.4	2963.9	2942.3	2937.0	2942.3	2947.8
35°	2785.4	2785.4	2796.2	2780.1	2801.7	2801.7	2845.0	2817.8	2812.5	2796.2	2812.5
37.5°	2655.6	2639.5	2644.8	2644.8	2655.6	2666.4	2688.1	2677.3	2677.3	2661.1	2672.0
40°	2482.6	2471.8	2487.9	2487.9	2504.2	2504.2	2525.9	2515.1	2531.2	2531.2	2531.2
42.5°	2331.2	2331.2	2320.4	2336.5	2342.0	2336.5	2374.5	2369.0	2374.5	2363.7	2369.0
45°	2168.8	2168.8	2158.0	2152.7	2179.6	2174.3	2217.6	2201.3	2222.9	2212.1	2217.6
47.5°	1947.0	1974.2	1957.8	1974.2	2006.6	2012.1	2039.1	2028.2	2049.9	2033.8	2055.4
50°	1736.3	1736.3	1752.4	1774.0	1806.5	1812.0	1844.4	1866.0	1876.9	1882.2	1887.7
52.5°	1514.5	1509.0	1525.3	1552.2	1579.4	1601.0	1633.4	1665.9	1687.5	1720.0	1703.6
55°	1254.8	1265.6	1281.9	1314.3	1357.6	1384.5	1411.7	1454.9	1492.9	1509.0	1541.4
57.5°	1033.0	1022.2	1033.0	1076.2	1125.0	1146.6	1184.6	1227.8	1281.9	1314.3	1325.2
60°	800.4	805.9	816.7	854.7	892.4	924.9	941.2	1011.4	1060.1	1092.6	1114.2
62.5°	589.6	600.5	611.3	643.7	681.5	708.6	735.5	795.1	838.4	870.8	892.4
65°	411.1	416.4	432.7	448.9	486.8	513.7	535.4	584.1	627.4	654.5	670.6
67.5°	254.2	259.5	270.3	292.2	319.1	340.7	362.4	394.8	432.7	459.7	465.2
70°	129.8	135.3	140.6	156.9	178.5	189.3	205.5	232.6	259.5	281.1	292.2
72.5°	43.3	43.3	48.8	59.6	70.4	81.2	86.5	113.6	135.3	146.1	151.4
75°	10.8	10.8	10.8	10.8	10.8	16.3	16.3	32.4	43.3	54.1	59.6
77.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	10.8	10.8
80°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
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°	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8	3807.8
2.5°	3807.8	3797.0	3791.5	3797.0	3797.0	3791.5	3807.8	3829.4	3856.3	3786.2
5°	3802.3	3791.5	3802.3	3769.8	3786.2	3775.3	3797.0	3791.5	3813.1	3791.5
7.5°	3786.2	3764.5	3769.8	3753.7	3775.3	3748.2	3764.5	3797.0	3775.3	3742.9
10°	3732.1	3721.3	3759.0	3704.9	3694.1	3715.8	3759.0	3726.6	3715.8	3726.6
12.5°	3677.8	3677.8	3694.1	3650.9	3656.2	3667.0	3688.6	3667.0	3677.8	3704.9
15°	3618.4	3607.6	3634.6	3602.1	3596.8	3586.0	3607.6	3607.6	3618.4	3602.1
17.5°	3548.0	3531.9	3531.9	3521.1	3515.6	3542.7	3553.6	3558.9	3564.4	3542.7
20°	3461.5	3456.2	3472.4	3456.2	3461.5	3467.1	3467.1	3456.2	3504.8	3445.4
22.5°	3369.5	3385.8	3364.2	3353.4	3364.2	3375.0	3375.0	3380.3	3369.5	3358.7
25°	3277.7	3288.5	3293.8	3261.4	3277.7	3261.4	3299.3	3304.6	3283.0	3293.8
27.5°	3196.5	3180.4	3174.9	3153.3	3164.1	3158.8	3164.1	3164.1	3196.5	3153.3
30°	3072.0	3055.9	3061.2	3045.1	3050.4	3045.1	3050.4	3050.4	3072.0	3066.7
32.5°	2953.1	2937.0	2942.3	2926.2	2926.2	2931.5	2920.7	2920.7	2937.0	2926.2
35°	2839.5	2801.7	2807.0	2801.7	2807.0	2785.4	2785.4	2780.1	2790.9	2763.8
37.5°	2677.3	2661.1	2655.6	2650.3	2655.6	2644.8	2655.6	2639.5	2655.6	2634.0
40°	2531.2	2520.4	2525.9	2493.4	2493.4	2498.7	2487.9	2482.6	2487.9	2509.5
42.5°	2385.3	2363.7	2352.9	2342.0	2347.3	2331.2	2325.7	2314.9	2325.7	2304.1
45°	2212.1	2212.1	2206.8	2179.6	2185.1	2185.1	2163.5	2141.9	2147.2	2147.2
47.5°	2055.4	2044.6	2039.1	2012.1	2006.6	2001.3	1979.5	1963.4	1963.4	1947.0
50°	1882.2	1871.3	1855.2	1828.1	1817.3	1784.8	1768.7	1747.1	1725.5	1725.5
52.5°	1720.0	1682.0	1660.4	1617.1	1601.0	1584.7	1541.4	1525.3	1509.0	1492.9
55°	1525.3	1492.9	1449.6	1400.9	1379.2	1352.1	1308.8	1276.4	1254.8	1260.3
57.5°	1336.0	1281.9	1238.7	1173.8	1146.6	1130.3	1087.1	1043.8	1022.2	1022.2
60°	1103.4	1060.1	1006.1	946.5	924.9	897.9	843.7	816.7	800.4	784.3
62.5°	881.6	849.2	800.4	724.7	708.6	681.5	643.7	611.3	594.9	594.9
65°	659.8	627.4	584.1	530.1	508.4	486.8	454.4	421.9	405.6	400.3
67.5°	465.2	427.2	389.5	346.2	329.9	319.1	286.7	265.0	254.2	248.7
70°	281.1	259.5	232.6	200.2	183.8	173.0	151.4	135.3	129.8	124.5
72.5°	146.1	129.8	108.1	86.5	75.7	64.9	54.1	43.3	38.0	38.0
75°	54.1	43.3	27.1	16.3	10.8	10.8	10.8	10.8	10.8	10.8
77.5°	10.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
80°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
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)