

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 EX4C1009027 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 EX4C1009027 4LBCSSQMMS
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Summary

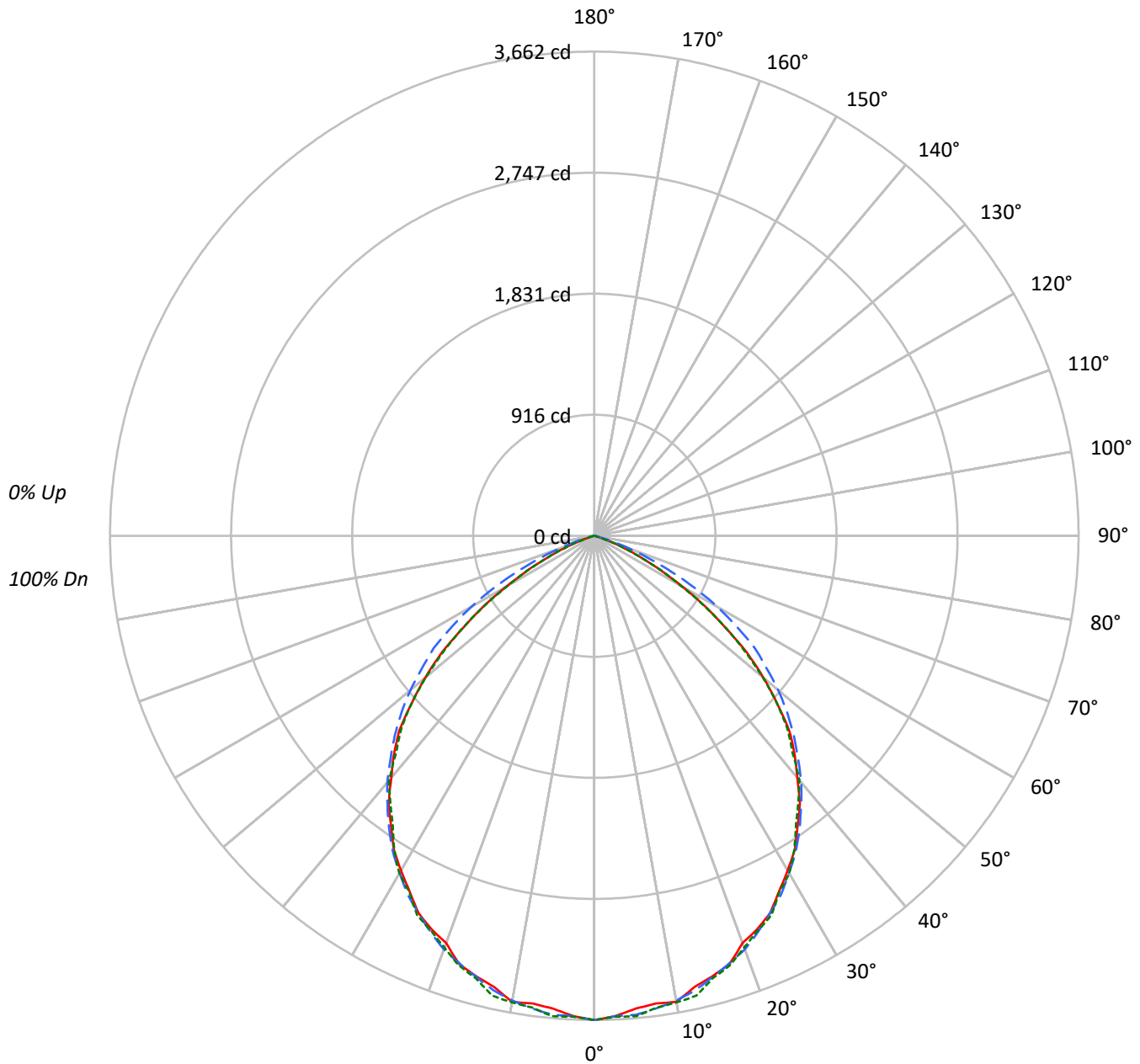
Lumens per Lamp: N/A
Luminaire Lumens: 7823.0 lumens
Efficiency: N/A
Efficacy: 68.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	353362	353362	353362
5°	347660	352183	353191
10°	350661	349642	351161
15°	344520	345029	346068
20°	336507	341847	340255
25°	335052	335052	337266
30°	325713	328030	328621
35°	315551	318625	313101
40°	300748	306630	304011
45°	284633	291033	281795
50°	250669	272525	249108
55°	203012	249391	203903
60°	148554	206795	145563
65°	90275	147261	87900
70°	35208	79274	33769
75°	3877	21362	3877
80°	2945	2945	2945
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.7	4.4
10°-20°	978.2	12.5
20°-30°	1451.4	18.6
30°-40°	1681.7	21.5
40°-50°	1612.4	20.6
50°-60°	1185.5	15.2
60°-70°	512.0	6.5
70°-80°	55.3	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°	2775.3	35.5
0°-40°	4457.0	57.0
0°-60°	7255.0	92.7
0°-90°	7823.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7823.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3662	3662	3662	3662	3662	
5°	3589	3626	3636	3641	3646	342
15°	3449	3470	3454	3459	3464	972
25°	3147	3142	3147	3152	3168	1441
35°	2679	2695	2705	2700	2658	1675
45°	2086	2091	2133	2102	2065	1586
55°	1207	1332	1482	1326	1212	1086
65°	395	494	645	489	385	406
75°	10	16	57	10	10	32
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°	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2
2.5°	3636.1	3677.7	3683.0	3656.9	3646.5	3631.0	3667.3	3641.4	3651.8	3641.4	3636.1
5°	3589.4	3636.1	3641.4	3641.4	3631.0	3625.7	3641.4	3636.1	3631.0	3620.6	3636.1
7.5°	3568.6	3594.5	3620.6	3589.4	3604.9	3599.8	3636.1	3620.6	3615.3	3615.3	3604.9
10°	3579.0	3573.7	3594.5	3563.3	3573.7	3563.3	3594.5	3594.5	3584.1	3573.7	3568.6
12.5°	3495.6	3537.2	3537.2	3532.1	3521.7	3506.0	3537.2	3558.2	3526.8	3526.8	3521.7
15°	3448.9	3459.3	3464.4	3464.4	3459.3	3469.7	3485.2	3464.4	3469.7	3443.6	3454.0
17.5°	3396.9	3376.1	3391.6	3381.2	3386.5	3396.9	3417.7	3417.7	3386.5	3381.2	3391.6
20°	3277.2	3339.6	3344.9	3313.7	3318.8	3318.8	3355.3	3324.1	3344.9	3318.8	3329.2
22.5°	3219.9	3261.5	3266.8	3225.2	3251.1	3219.9	3256.4	3209.5	3261.5	3225.2	3240.7
25°	3147.1	3142.0	3157.5	3136.7	3142.0	3142.0	3167.9	3147.1	3162.8	3142.0	3147.1
27.5°	3027.6	3069.2	3063.9	3043.1	3053.5	3048.4	3100.4	3043.1	3074.3	3048.4	3058.8
30°	2923.4	2959.9	2949.5	2928.7	2928.7	2913.0	2970.3	2954.6	2949.5	2949.5	2944.2
32.5°	2819.4	2824.7	2814.3	2819.4	2824.7	2803.9	2850.6	2829.8	2824.7	2829.8	2835.1
35°	2678.9	2678.9	2689.3	2673.8	2694.6	2694.6	2736.2	2710.1	2705.0	2689.3	2705.0
37.5°	2554.1	2538.6	2543.7	2543.7	2554.1	2564.5	2585.3	2574.9	2574.9	2559.4	2569.8
40°	2387.7	2377.3	2392.8	2392.8	2408.5	2408.5	2429.3	2418.9	2434.4	2434.4	2434.4
42.5°	2242.1	2242.1	2231.7	2247.2	2252.5	2247.2	2283.7	2278.4	2283.7	2273.3	2278.4
45°	2085.9	2085.9	2075.5	2070.4	2096.3	2091.2	2132.8	2117.1	2137.9	2127.5	2132.8
47.5°	1872.6	1898.7	1883.0	1898.7	1929.9	1935.2	1961.1	1950.7	1971.5	1956.0	1976.8
50°	1669.9	1669.9	1685.4	1706.2	1737.4	1742.7	1773.9	1794.7	1805.1	1810.2	1815.5
52.5°	1456.6	1451.3	1467.0	1492.9	1519.0	1539.8	1571.0	1602.2	1623.0	1654.2	1638.5
55°	1206.8	1217.2	1232.9	1264.1	1305.7	1331.6	1357.7	1399.3	1435.8	1451.3	1482.5
57.5°	993.5	983.1	993.5	1035.1	1082.0	1102.8	1139.3	1180.9	1232.9	1264.1	1274.5
60°	769.8	775.1	785.5	822.0	858.3	889.5	905.2	972.7	1019.6	1050.8	1071.6
62.5°	567.1	577.5	587.9	619.1	655.4	681.5	707.4	764.7	806.3	837.5	858.3
65°	395.4	400.5	416.2	431.7	468.2	494.1	514.9	561.8	603.4	629.5	645.0
67.5°	244.5	249.6	260.0	281.0	306.9	327.7	348.5	379.7	416.2	442.1	447.4
70°	124.8	130.1	135.2	150.9	171.7	182.1	197.6	223.7	249.6	270.4	281.0
72.5°	41.6	41.6	46.9	57.3	67.7	78.1	83.2	109.3	130.1	140.5	145.6
75°	10.4	10.4	10.4	10.4	10.4	15.7	15.7	31.2	41.6	52.0	57.3
77.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	10.4	10.4
80°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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°	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2	3662.2
2.5°	3662.2	3651.8	3646.5	3651.8	3651.8	3646.5	3662.2	3683.0	3708.9	3641.4
5°	3656.9	3646.5	3656.9	3625.7	3641.4	3631.0	3651.8	3646.5	3667.3	3646.5
7.5°	3641.4	3620.6	3625.7	3610.2	3631.0	3604.9	3620.6	3651.8	3631.0	3599.8
10°	3589.4	3579.0	3615.3	3563.3	3552.9	3573.7	3615.3	3584.1	3573.7	3584.1
12.5°	3537.2	3537.2	3552.9	3511.3	3516.4	3526.8	3547.6	3526.8	3537.2	3563.3
15°	3480.1	3469.7	3495.6	3464.4	3459.3	3448.9	3469.7	3469.7	3480.1	3464.4
17.5°	3412.4	3396.9	3396.9	3386.5	3381.2	3407.3	3417.7	3422.8	3428.1	3407.3
20°	3329.2	3324.1	3339.6	3324.1	3329.2	3334.5	3334.5	3324.1	3370.8	3313.7
22.5°	3240.7	3256.4	3235.6	3225.2	3235.6	3246.0	3246.0	3251.1	3240.7	3230.3
25°	3152.4	3162.8	3167.9	3136.7	3152.4	3136.7	3173.2	3178.3	3157.5	3167.9
27.5°	3074.3	3058.8	3053.5	3032.7	3043.1	3038.0	3043.1	3043.1	3074.3	3032.7
30°	2954.6	2939.1	2944.2	2928.7	2933.8	2928.7	2933.8	2933.8	2954.6	2949.5
32.5°	2840.2	2824.7	2829.8	2814.3	2814.3	2819.4	2809.0	2809.0	2824.7	2814.3
35°	2730.9	2694.6	2699.7	2694.6	2699.7	2678.9	2678.9	2673.8	2684.2	2658.1
37.5°	2574.9	2559.4	2554.1	2549.0	2554.1	2543.7	2554.1	2538.6	2554.1	2533.3
40°	2434.4	2424.0	2429.3	2398.1	2398.1	2403.2	2392.8	2387.7	2392.8	2413.6
42.5°	2294.1	2273.3	2262.9	2252.5	2257.6	2242.1	2236.8	2226.4	2236.8	2216.0
45°	2127.5	2127.5	2122.4	2096.3	2101.6	2101.6	2080.8	2060.0	2065.1	2065.1
47.5°	1976.8	1966.4	1961.1	1935.2	1929.9	1924.8	1903.8	1888.3	1888.3	1872.6
50°	1810.2	1799.8	1784.3	1758.2	1747.8	1716.6	1701.1	1680.3	1659.5	1659.5
52.5°	1654.2	1617.7	1596.9	1555.3	1539.8	1524.1	1482.5	1467.0	1451.3	1435.8
55°	1467.0	1435.8	1394.2	1347.3	1326.5	1300.4	1258.8	1227.6	1206.8	1212.1
57.5°	1284.9	1232.9	1191.3	1128.9	1102.8	1087.1	1045.5	1003.9	983.1	983.1
60°	1061.2	1019.6	967.6	910.3	889.5	863.6	811.4	785.5	769.8	754.3
62.5°	847.9	816.7	769.8	697.0	681.5	655.4	619.1	587.9	572.2	572.2
65°	634.6	603.4	561.8	509.8	489.0	468.2	437.0	405.8	390.1	385.0
67.5°	447.4	410.9	374.6	333.0	317.3	306.9	275.7	254.9	244.5	239.2
70°	270.4	249.6	223.7	192.5	176.8	166.4	145.6	130.1	124.8	119.7
72.5°	140.5	124.8	104.0	83.2	72.8	62.4	52.0	41.6	36.5	36.5
75°	52.0	41.6	26.1	15.7	10.4	10.4	10.4	10.4	10.4	10.4
77.5°	10.4	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
80°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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)