

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 EX4C1009040 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 EX4C1009040 4LBCSSQMMS
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Summary

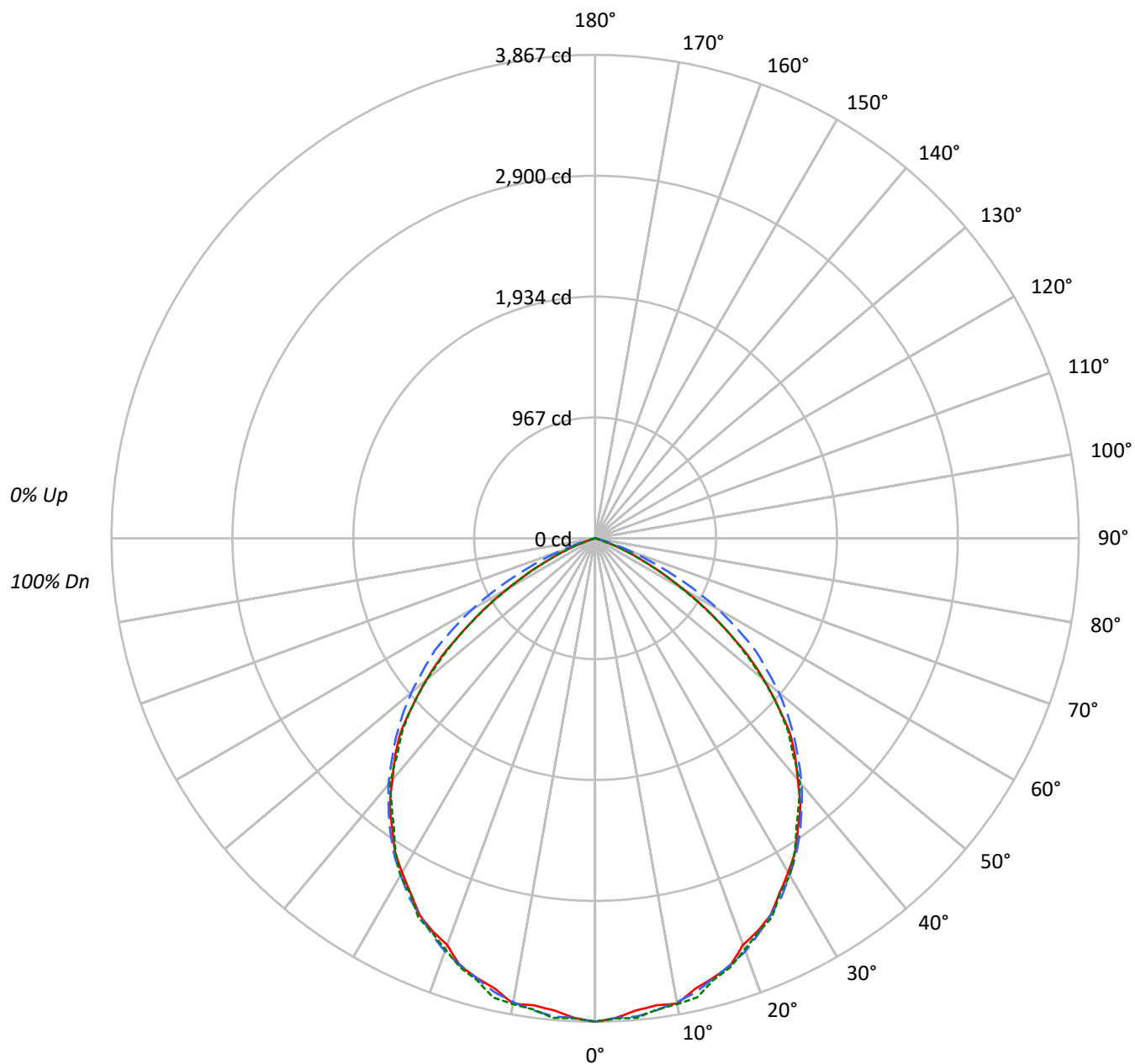
Lumens per Lamp: N/A
Luminaire Lumens: 8260.0 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	373103	373103	373103
5°	367080	371855	372921
10°	370247	369169	370776
15°	363759	364299	365397
20°	355308	360945	359261
25°	353768	353768	356100
30°	343907	346358	346982
35°	333172	336423	330593
40°	317551	323761	320990
45°	300530	307285	297528
50°	264674	287746	263023
55°	214350	263320	215292
60°	156852	218354	153688
65°	95320	155481	92809
70°	37183	83703	35659
75°	4101	22555	4101
80°	3112	3112	3112
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.0	4.4
10°-20°	1032.8	12.5
20°-30°	1532.5	18.6
30°-40°	1775.7	21.5
40°-50°	1702.5	20.6
50°-60°	1251.8	15.2
60°-70°	540.7	6.5
70°-80°	58.4	0.7
80°-90°	0.8	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°	2930.3	35.5
0°-40°	4706.0	57.0
0°-60°	7660.2	92.7
0°-90°	8260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3867	3867	3867	3867	3867	
5°	3790	3828	3839	3845	3850	362
15°	3642	3664	3647	3652	3658	1026
25°	3323	3318	3323	3328	3345	1521
35°	2828	2845	2856	2850	2807	1769
45°	2202	2208	2252	2219	2180	1674
55°	1274	1406	1565	1401	1280	1147
65°	418	522	681	516	406	429
75°	11	17	60	11	11	34
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°	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8
2.5°	3839.2	3883.1	3888.7	3861.2	3850.2	3833.8	3872.1	3844.8	3855.8	3844.8	3839.2
5°	3789.9	3839.2	3844.8	3844.8	3833.8	3828.2	3844.8	3839.2	3833.8	3822.8	3839.2
7.5°	3767.9	3795.3	3822.8	3789.9	3806.3	3800.9	3839.2	3822.8	3817.2	3817.2	3806.3
10°	3778.9	3773.3	3795.3	3762.3	3773.3	3762.3	3795.3	3795.3	3784.3	3773.3	3767.9
12.5°	3690.9	3734.8	3734.8	3729.4	3718.4	3701.8	3734.8	3757.0	3723.8	3723.8	3718.4
15°	3641.5	3652.5	3657.9	3657.9	3652.5	3663.5	3679.9	3657.9	3663.5	3635.9	3646.9
17.5°	3586.6	3564.7	3581.0	3570.1	3575.7	3586.6	3608.6	3608.6	3575.7	3570.1	3581.0
20°	3460.3	3526.1	3531.7	3498.8	3504.2	3504.2	3542.7	3509.8	3531.7	3504.2	3515.2
22.5°	3399.8	3443.7	3449.3	3405.4	3432.7	3399.8	3438.3	3388.8	3443.7	3405.4	3421.7
25°	3322.9	3317.5	3333.9	3311.9	3317.5	3317.5	3344.8	3322.9	3339.5	3317.5	3322.9
27.5°	3196.7	3240.6	3235.0	3213.1	3224.1	3218.7	3273.6	3213.1	3246.0	3218.7	3229.7
30°	3086.7	3125.2	3114.3	3092.3	3092.3	3075.7	3136.2	3119.6	3114.3	3114.3	3108.7
32.5°	2976.9	2982.5	2971.5	2976.9	2982.5	2960.5	3009.8	2987.9	2982.5	2987.9	2993.5
35°	2828.5	2828.5	2839.5	2823.2	2845.1	2845.1	2889.0	2861.5	2856.1	2839.5	2856.1
37.5°	2696.8	2680.4	2685.8	2685.8	2696.8	2707.7	2729.7	2718.7	2718.7	2702.4	2713.3
40°	2521.1	2510.1	2526.5	2526.5	2543.0	2543.0	2565.0	2554.0	2570.4	2570.4	2570.4
42.5°	2367.3	2367.3	2356.4	2372.7	2378.3	2372.7	2411.3	2405.7	2411.3	2400.3	2405.7
45°	2202.4	2202.4	2191.4	2186.0	2213.4	2208.0	2251.9	2235.4	2257.3	2246.3	2251.9
47.5°	1977.2	2004.8	1988.2	2004.8	2037.7	2043.3	2070.6	2059.7	2081.6	2065.3	2087.2
50°	1763.2	1763.2	1779.5	1801.5	1834.4	1840.0	1873.0	1894.9	1905.9	1911.3	1916.9
52.5°	1538.0	1532.4	1548.9	1576.3	1603.8	1625.8	1658.8	1691.7	1713.7	1746.6	1730.0
55°	1274.2	1285.2	1301.8	1334.7	1378.6	1406.0	1433.5	1477.5	1516.0	1532.4	1565.3
57.5°	1049.0	1038.0	1049.0	1092.9	1142.4	1164.4	1202.9	1246.9	1301.8	1334.7	1345.7
60°	812.8	818.4	829.4	867.9	906.2	939.2	955.8	1027.0	1076.6	1109.5	1131.5
62.5°	598.8	609.8	620.7	653.7	692.0	719.6	746.9	807.4	851.3	884.3	906.2
65°	417.5	422.9	439.4	455.8	494.4	521.7	543.7	593.2	637.1	664.7	681.0
67.5°	258.2	263.5	274.5	296.7	324.0	346.0	368.0	400.9	439.4	466.8	472.4
70°	131.8	137.4	142.8	159.3	181.3	192.3	208.6	236.2	263.5	285.5	296.7
72.5°	43.9	43.9	49.5	60.5	71.5	82.5	87.8	115.4	137.4	148.3	153.7
75°	11.0	11.0	11.0	11.0	11.0	16.6	16.6	32.9	43.9	54.9	60.5
77.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	11.0	11.0
80°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
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°	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8	3866.8
2.5°	3866.8	3855.8	3850.2	3855.8	3855.8	3850.2	3866.8	3888.7	3916.1	3844.8
5°	3861.2	3850.2	3861.2	3828.2	3844.8	3833.8	3855.8	3850.2	3872.1	3850.2
7.5°	3844.8	3822.8	3828.2	3811.9	3833.8	3806.3	3822.8	3855.8	3833.8	3800.9
10°	3789.9	3778.9	3817.2	3762.3	3751.4	3773.3	3817.2	3784.3	3773.3	3784.3
12.5°	3734.8	3734.8	3751.4	3707.4	3712.8	3723.8	3745.8	3723.8	3734.8	3762.3
15°	3674.5	3663.5	3690.9	3657.9	3652.5	3641.5	3663.5	3663.5	3674.5	3657.9
17.5°	3603.0	3586.6	3586.6	3575.7	3570.1	3597.6	3608.6	3614.0	3619.6	3597.6
20°	3515.2	3509.8	3526.1	3509.8	3515.2	3520.8	3520.8	3509.8	3559.1	3498.8
22.5°	3421.7	3438.3	3416.3	3405.4	3416.3	3427.3	3427.3	3432.7	3421.7	3410.7
25°	3328.5	3339.5	3344.8	3311.9	3328.5	3311.9	3350.4	3355.8	3333.9	3344.8
27.5°	3246.0	3229.7	3224.1	3202.1	3213.1	3207.7	3213.1	3213.1	3246.0	3202.1
30°	3119.6	3103.3	3108.7	3092.3	3097.7	3092.3	3097.7	3097.7	3119.6	3114.3
32.5°	2998.8	2982.5	2987.9	2971.5	2971.5	2976.9	2965.9	2965.9	2982.5	2971.5
35°	2883.4	2845.1	2850.5	2845.1	2850.5	2828.5	2828.5	2823.2	2834.1	2806.6
37.5°	2718.7	2702.4	2696.8	2691.4	2696.8	2685.8	2696.8	2680.4	2696.8	2674.8
40°	2570.4	2559.4	2565.0	2532.1	2532.1	2537.4	2526.5	2521.1	2526.5	2548.4
42.5°	2422.2	2400.3	2389.3	2378.3	2383.7	2367.3	2361.7	2350.8	2361.7	2339.8
45°	2246.3	2246.3	2241.0	2213.4	2219.0	2219.0	2197.0	2175.1	2180.4	2180.4
47.5°	2087.2	2076.2	2070.6	2043.3	2037.7	2032.3	2010.1	1993.8	1993.8	1977.2
50°	1911.3	1900.3	1884.0	1856.4	1845.4	1812.5	1796.1	1774.2	1752.2	1752.2
52.5°	1746.6	1708.1	1686.1	1642.2	1625.8	1609.2	1565.3	1548.9	1532.4	1516.0
55°	1548.9	1516.0	1472.1	1422.6	1400.6	1373.0	1329.1	1296.2	1274.2	1279.8
57.5°	1356.7	1301.8	1257.8	1192.0	1164.4	1147.8	1103.9	1060.0	1038.0	1038.0
60°	1120.5	1076.6	1021.6	961.1	939.2	911.8	856.7	829.4	812.8	796.4
62.5°	895.3	862.3	812.8	735.9	719.6	692.0	653.7	620.7	604.2	604.2
65°	670.0	637.1	593.2	538.3	516.3	494.4	461.4	428.5	411.9	406.5
67.5°	472.4	433.9	395.5	351.6	335.0	324.0	291.1	269.1	258.2	252.6
70°	285.5	263.5	236.2	203.3	186.7	175.7	153.7	137.4	131.8	126.4
72.5°	148.3	131.8	109.8	87.8	76.9	65.9	54.9	43.9	38.5	38.5
75°	54.9	43.9	27.6	16.6	11.0	11.0	11.0	11.0	11.0	11.0
77.5°	11.0	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
80°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
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)