

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 EX4C659030 4LBSQLI**

Issue Date: 2/9/2022

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 (P209151)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/9/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C65D010 EX4C659030 4LBSQLI  
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

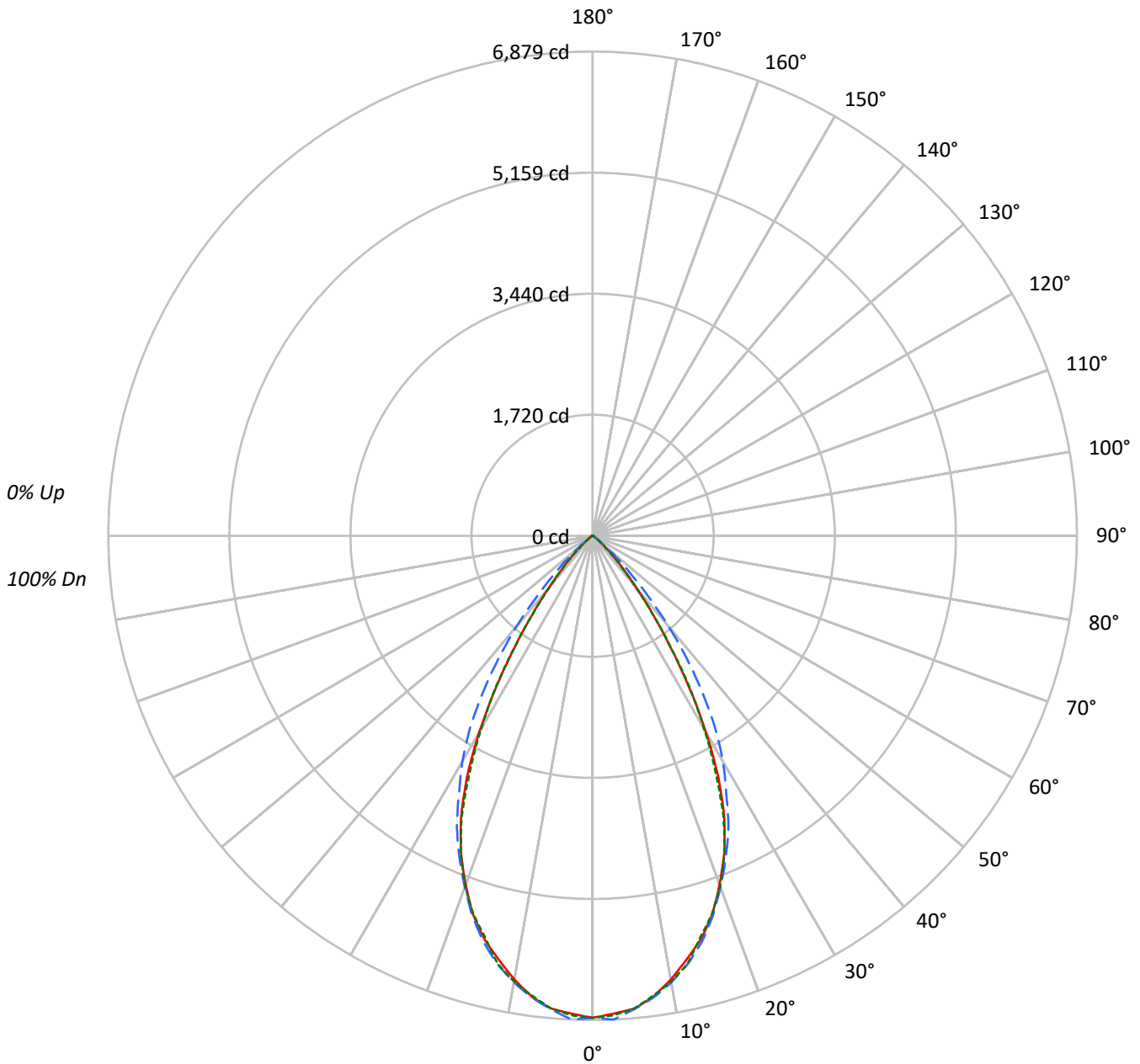
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6322.9 lumens  
Efficiency: N/A  
Efficacy: 87.3 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94  
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 (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									
RC	80									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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	660833	660833	660833
5°	653245	654088	653245
10°	627114	630965	630112
15°	592873	597218	589816
20°	541069	545074	543749
25°	471123	485943	467876
30°	358257	412071	352932
35°	225511	320345	227561
40°	121662	211558	119471
45°	57598	104498	56984
50°	21556	39179	21556
55°	10245	12449	9521
60°	6716	5886	6716
65°	3973	3973	3973
70°	2454	3696	2454
75°	1640	1640	1640
80°	2445	2445	2445
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	635.0	10.0
10°-20°	1664.2	26.3
20°-30°	2033.0	32.2
30°-40°	1421.9	22.5
40°-50°	466.0	7.4
50°-60°	74.1	1.2
60°-70°	20.2	0.3
70°-80°	6.7	0.1
80°-90°	1.9	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°	4332.1	68.5
0°-40°	5754.0	91.0
0°-60°	6294.1	99.5
0°-90°	6322.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6322.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6849	6849	6849	6849	6849	
5°	6744	6747	6753	6712	6744	633
15°	5935	5959	5979	5939	5904	1656
25°	4425	4493	4564	4482	4395	1988
35°	1914	2260	2720	2226	1932	1222
45°	422	520	766	514	418	354
55°	61	65	74	65	57	60
65°	17	22	17	22	17	19
75°	4	4	4	4	4	6
85°	0	0	0	0	0	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8
2.5°	6796.6	6844.5	6831.4	6861.9	6861.9	6827.1	6835.8	6848.8	6866.2	6879.3	6774.8
5°	6744.4	6787.9	6748.7	6792.2	6766.1	6727.0	6792.2	6757.4	6779.2	6753.1	6770.5
7.5°	6605.2	6674.8	6596.5	6648.7	6631.3	6609.4	6635.5	6626.8	6640.0	6618.1	6570.4
10°	6400.6	6457.3	6405.1	6478.9	6444.1	6422.5	6444.1	6466.0	6461.5	6439.9	6466.0
12.5°	6165.7	6230.9	6204.8	6248.3	6209.2	6209.2	6261.4	6248.3	6252.7	6235.3	6265.7
15°	5935.1	5983.0	5943.8	6000.4	5983.0	5935.1	5956.7	5956.7	5991.7	5978.6	5943.8
17.5°	5647.9	5687.0	5643.5	5656.6	5639.2	5630.5	5721.8	5660.9	5695.7	5669.6	5674.0
20°	5269.4	5286.8	5273.6	5308.4	5286.8	5312.9	5304.2	5295.5	5295.5	5308.4	5278.1
22.5°	4886.4	4886.4	4899.5	4908.2	4925.6	4899.5	4951.7	4908.2	4912.5	4943.0	4934.3
25°	4425.2	4412.1	4442.6	4486.1	4503.5	4481.7	4551.3	4516.5	4542.6	4564.4	4516.5
27.5°	3864.0	3864.0	3894.3	3968.4	3981.3	4007.4	4103.1	4103.1	4137.9	4107.6	4142.4
30°	3215.5	3263.4	3302.5	3398.2	3428.7	3485.4	3585.4	3633.3	3711.6	3698.5	3681.1
32.5°	2549.8	2615.1	2619.4	2719.6	2802.1	2897.8	3032.8	3145.9	3202.5	3241.6	3198.1
35°	1914.5	1953.7	1988.5	2058.1	2197.3	2323.6	2445.4	2593.3	2693.5	2719.6	2680.3
37.5°	1401.1	1409.9	1444.7	1509.8	1614.2	1736.2	1884.1	2045.0	2149.6	2188.6	2145.1
40°	965.9	974.6	992.0	1048.7	1135.7	1222.7	1340.2	1505.6	1601.3	1679.6	1622.9
42.5°	648.3	657.0	674.4	717.9	765.8	848.4	939.8	1044.3	1135.7	1170.5	1140.0
45°	422.1	422.1	430.8	461.3	487.4	552.6	617.9	683.1	744.0	765.8	744.0
47.5°	248.1	252.3	261.0	282.9	313.2	339.3	387.3	430.8	448.2	465.6	456.9
50°	143.6	143.6	156.6	169.7	191.4	208.8	226.2	243.6	252.3	261.0	252.3
52.5°	78.3	82.7	87.0	91.4	100.1	117.5	130.5	130.5	134.9	139.2	134.9
55°	60.9	60.9	60.9	60.9	65.3	65.3	65.3	69.6	69.6	74.0	69.6
57.5°	43.5	43.5	43.5	47.9	47.9	47.9	43.5	43.5	43.5	43.5	43.5
60°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	30.5	30.5	30.5	30.5
62.5°	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1
65°	17.4	17.4	21.8	21.8	21.8	21.8	21.8	17.4	17.4	17.4	17.4
67.5°	13.1	13.1	13.1	13.1	17.4	17.4	13.1	13.1	13.1	13.1	13.1
70°	8.7	8.7	8.7	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
72.5°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
75°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
77.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
80°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	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°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8	6848.8
2.5°	6848.8	6774.8	6783.5	6822.7	6800.9	6822.7	6818.4	6818.4
5°	6774.8	6753.1	6718.3	6705.1	6731.2	6787.9	6779.2	6744.4
7.5°	6635.5	6579.1	6618.1	6635.5	6613.9	6648.7	6666.1	6592.0
10°	6470.2	6448.6	6439.9	6448.6	6439.9	6474.7	6431.2	6431.2
12.5°	6235.3	6200.5	6200.5	6252.7	6222.2	6196.1	6230.9	6226.6
15°	6000.4	5930.6	5930.6	5948.0	5961.2	5943.8	5948.0	5904.5
17.5°	5652.2	5630.5	5600.0	5647.9	5660.9	5643.5	5656.6	5634.8
20°	5325.8	5325.8	5269.4	5291.0	5308.4	5321.6	5330.3	5295.5
22.5°	4908.2	4916.9	4877.7	4921.2	4934.3	4890.8	4899.5	4890.8
25°	4525.2	4520.9	4490.4	4473.0	4481.7	4464.3	4460.0	4394.7
27.5°	4103.1	4059.6	3994.5	4011.9	3937.8	3876.9	3876.9	3776.8
30°	3646.3	3572.4	3485.4	3398.2	3333.0	3263.4	3224.2	3167.7
32.5°	3111.1	3011.1	2902.3	2784.7	2710.9	2606.4	2549.8	2580.3
35°	2580.3	2432.3	2284.4	2167.0	2053.7	1992.8	1923.2	1931.9
37.5°	2066.8	1858.0	1727.5	1601.3	1505.6	1427.3	1396.7	1388.0
40°	1509.8	1344.5	1214.0	1122.6	1057.4	996.5	961.7	948.5
42.5°	1044.3	926.9	822.3	748.4	704.9	665.7	648.3	644.0
45°	678.8	609.2	539.6	487.4	452.6	426.5	422.1	417.6
47.5°	426.5	391.5	348.0	309.0	278.4	261.0	248.1	248.1
50°	243.6	230.7	208.8	187.1	169.7	161.0	147.9	143.6
52.5°	130.5	130.5	121.8	104.4	91.4	82.7	82.7	78.3
55°	69.6	69.6	65.3	65.3	60.9	60.9	60.9	56.6
57.5°	43.5	43.5	47.9	47.9	43.5	43.5	43.5	43.5
60°	30.5	34.8	34.8	34.8	34.8	34.8	34.8	34.8
62.5°	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1
65°	17.4	21.8	21.8	21.8	21.8	17.4	17.4	17.4
67.5°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
70°	13.1	13.1	13.1	13.1	13.1	8.7	8.7	8.7
72.5°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
75°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
77.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
80°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
82.5°	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
87.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
90°	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)