

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: **LD4C80D010 EX4C809027 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: LD4C80D010 EX4C809027 4LBSQLI  
Description: 4 INCH 8000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

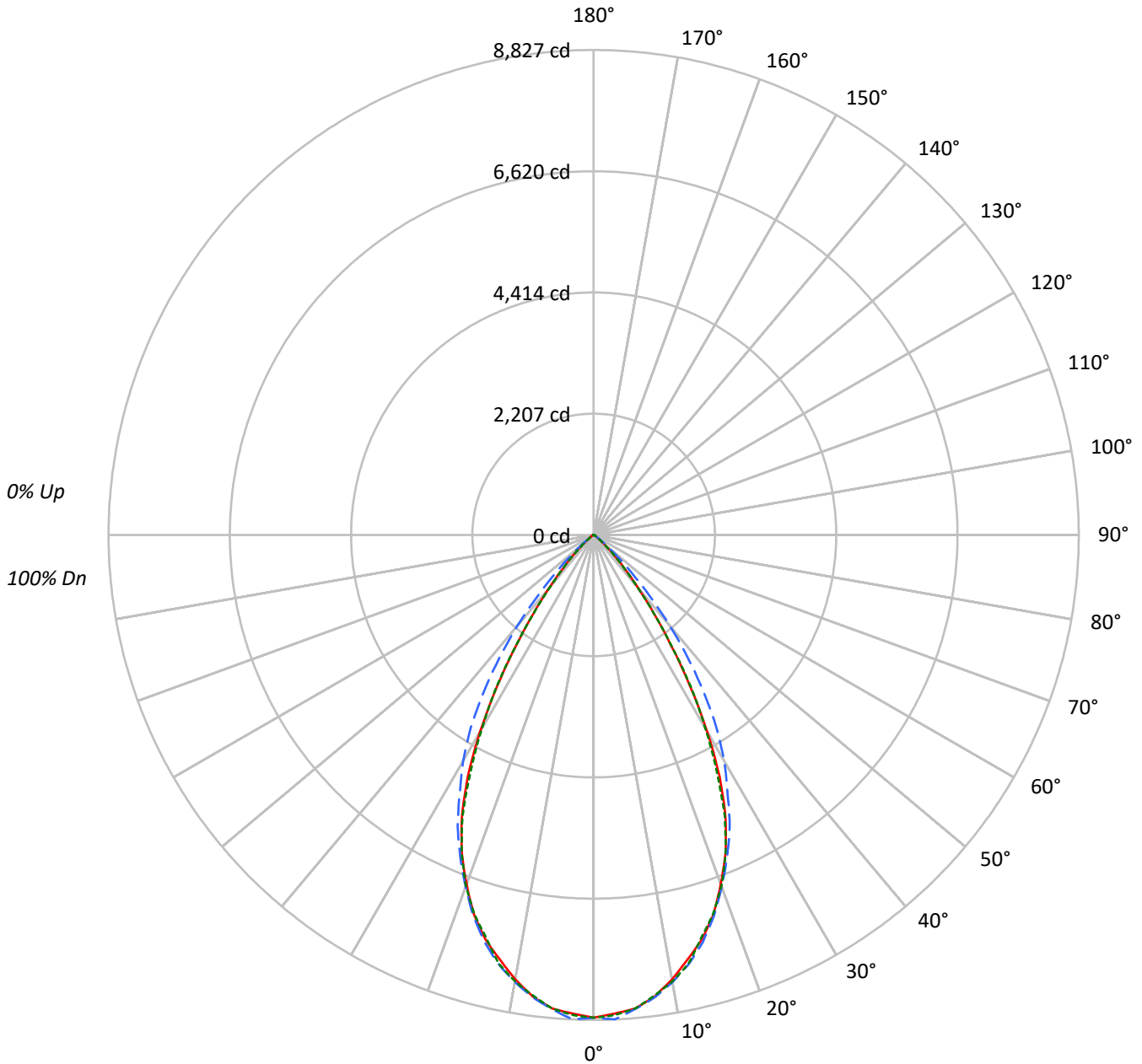
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8113.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 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): 89.5  
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					0
RW	70	50	30	10	70	50	30	10	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					100			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87					87			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80					80			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75					75			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69					69			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64					64			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60					60			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56					56			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53					53			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50					50			

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

	0°	45°	90°
0°	847906	847906	847906
5°	838175	839251	838175
10°	804649	809577	808490
15°	760703	766277	756787
20°	694239	699383	697679
25°	604501	623515	600328
30°	459679	528724	452849
35°	289354	411021	291981
40°	156111	271438	153303
45°	73905	134082	73127
50°	27665	50272	27665
55°	13138	15981	12230
60°	8626	7565	8626
65°	5091	5091	5091
70°	3160	4768	3160
75°	2125	2125	2125
80°	3167	3167	3167
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	814.8	10.0
10°-20°	2135.3	26.3
20°-30°	2608.5	32.2
30°-40°	1824.4	22.5
40°-50°	597.9	7.4
50°-60°	95.1	1.2
60°-70°	26.0	0.3
70°-80°	8.7	0.1
80°-90°	2.4	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°	5558.5	68.5
0°-40°	7383.0	91.0
0°-60°	8075.9	99.5
0°-90°	8113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8113.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8788	8788	8788	8788	8788	
5°	8654	8656	8665	8612	8654	812
15°	7615	7646	7671	7621	7576	2124
25°	5678	5764	5857	5750	5639	2551
35°	2456	2900	3489	2856	2479	1568
45°	542	667	983	659	536	454
55°	78	84	95	84	73	77
65°	22	28	22	28	22	25
75°	6	6	6	6	6	8
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°	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6
2.5°	8720.7	8782.2	8765.3	8804.5	8804.5	8759.8	8771.0	8787.6	8810.0	8826.8	8692.6
5°	8653.7	8709.5	8659.1	8715.0	8681.5	8631.3	8715.0	8670.3	8698.3	8664.8	8687.2
7.5°	8475.1	8564.4	8463.9	8530.9	8508.5	8480.5	8514.0	8502.9	8519.7	8491.7	8430.4
10°	8212.6	8285.3	8218.3	8313.1	8268.4	8240.6	8268.4	8296.4	8290.7	8262.9	8296.4
12.5°	7911.2	7994.8	7961.3	8017.1	7967.0	7967.0	8034.0	8017.1	8022.8	8000.5	8039.5
15°	7615.2	7676.7	7626.4	7699.1	7676.7	7615.2	7643.0	7643.0	7687.9	7671.0	7626.4
17.5°	7246.8	7297.0	7241.1	7258.0	7235.7	7224.5	7341.6	7263.5	7308.1	7274.6	7280.3
20°	6761.1	6783.4	6766.6	6811.2	6783.4	6816.9	6805.7	6794.6	6794.6	6811.2	6772.3
22.5°	6269.7	6269.7	6286.5	6297.7	6320.0	6286.5	6353.5	6297.7	6303.2	6342.3	6331.2
25°	5678.0	5661.1	5700.3	5756.1	5778.5	5750.4	5839.7	5795.1	5828.6	5856.6	5795.1
27.5°	4957.8	4957.8	4996.8	5091.8	5108.4	5141.9	5264.7	5264.7	5309.4	5270.4	5315.1
30°	4125.8	4187.3	4237.4	4360.2	4399.4	4472.1	4600.4	4661.9	4762.3	4745.5	4723.2
32.5°	3271.6	3355.5	3361.0	3489.4	3595.4	3718.2	3891.3	4036.5	4109.1	4159.3	4103.5
35°	2456.5	2506.8	2551.5	2640.8	2819.4	2981.4	3137.7	3327.5	3456.0	3489.4	3439.1
37.5°	1797.8	1809.0	1853.6	1937.2	2071.2	2227.7	2417.5	2623.9	2758.1	2808.2	2752.4
40°	1239.4	1250.6	1272.9	1345.6	1457.2	1568.8	1719.7	1931.8	2054.6	2155.0	2082.4
42.5°	831.8	843.0	865.3	921.1	982.6	1088.6	1205.9	1339.9	1457.2	1501.9	1462.7
45°	541.6	541.6	552.7	591.9	625.4	709.0	792.8	876.5	954.6	982.6	954.6
47.5°	318.3	323.7	334.9	362.9	401.9	435.4	496.9	552.7	575.0	597.4	586.2
50°	184.3	184.3	200.9	217.8	245.6	267.9	290.3	312.6	323.7	334.9	323.7
52.5°	100.5	106.2	111.6	117.3	128.5	150.8	167.5	167.5	173.1	178.6	173.1
55°	78.1	78.1	78.1	78.1	83.8	83.8	83.8	89.3	89.3	95.0	89.3
57.5°	55.8	55.8	55.8	61.5	61.5	61.5	55.8	55.8	55.8	55.8	55.8
60°	44.7	44.7	44.7	44.7	44.7	44.7	44.7	39.2	39.2	39.2	39.2
62.5°	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
65°	22.3	22.3	28.0	28.0	28.0	28.0	28.0	22.3	22.3	22.3	22.3
67.5°	16.9	16.9	16.9	16.9	22.3	22.3	16.9	16.9	16.9	16.9	16.9
70°	11.2	11.2	11.2	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
72.5°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
75°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
77.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
80°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	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°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
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°	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6	8787.6
2.5°	8787.6	8692.6	8703.8	8754.2	8726.1	8754.2	8748.7	8748.7
5°	8692.6	8664.8	8620.2	8603.3	8636.8	8709.5	8698.3	8653.7
7.5°	8514.0	8441.6	8491.7	8514.0	8486.2	8530.9	8553.2	8458.2
10°	8301.9	8274.1	8262.9	8274.1	8262.9	8307.6	8251.8	8251.8
12.5°	8000.5	7955.8	7955.8	8022.8	7983.6	7950.1	7994.8	7989.3
15°	7699.1	7609.5	7609.5	7631.9	7648.7	7626.4	7631.9	7576.0
17.5°	7252.3	7224.5	7185.3	7246.8	7263.5	7241.1	7258.0	7230.0
20°	6833.5	6833.5	6761.1	6788.9	6811.2	6828.1	6839.2	6794.6
22.5°	6297.7	6308.8	6258.5	6314.3	6331.2	6275.4	6286.5	6275.4
25°	5806.3	5800.8	5761.6	5739.3	5750.4	5728.1	5722.6	5638.8
27.5°	5264.7	5208.9	5125.3	5147.6	5052.6	4974.4	4974.4	4846.0
30°	4678.5	4583.7	4472.1	4360.2	4276.6	4187.3	4136.9	4064.5
32.5°	3991.8	3863.5	3723.9	3573.1	3478.3	3344.3	3271.6	3310.8
35°	3310.8	3120.8	2931.0	2780.4	2635.1	2556.9	2467.6	2478.8
37.5°	2651.9	2384.0	2216.6	2054.6	1931.8	1831.3	1792.1	1781.0
40°	1937.2	1725.1	1557.7	1440.3	1356.7	1278.6	1233.9	1217.1
42.5°	1339.9	1189.3	1055.1	960.3	904.5	854.1	831.8	826.3
45°	871.0	781.7	692.4	625.4	580.7	547.2	541.6	535.9
47.5°	547.2	502.4	446.6	396.4	357.2	334.9	318.3	318.3
50°	312.6	295.9	267.9	240.1	217.8	206.6	189.8	184.3
52.5°	167.5	167.5	156.3	134.0	117.3	106.2	106.2	100.5
55°	89.3	89.3	83.8	83.8	78.1	78.1	78.1	72.7
57.5°	55.8	55.8	61.5	61.5	55.8	55.8	55.8	55.8
60°	39.2	44.7	44.7	44.7	44.7	44.7	44.7	44.7
62.5°	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
65°	22.3	28.0	28.0	28.0	28.0	22.3	22.3	22.3
67.5°	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
70°	16.9	16.9	16.9	16.9	16.9	11.2	11.2	11.2
72.5°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
75°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
77.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
80°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
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°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
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)