

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 EX4C809040 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 EX4C809040 4LBSQLI  
Description: 4 INCH 8000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

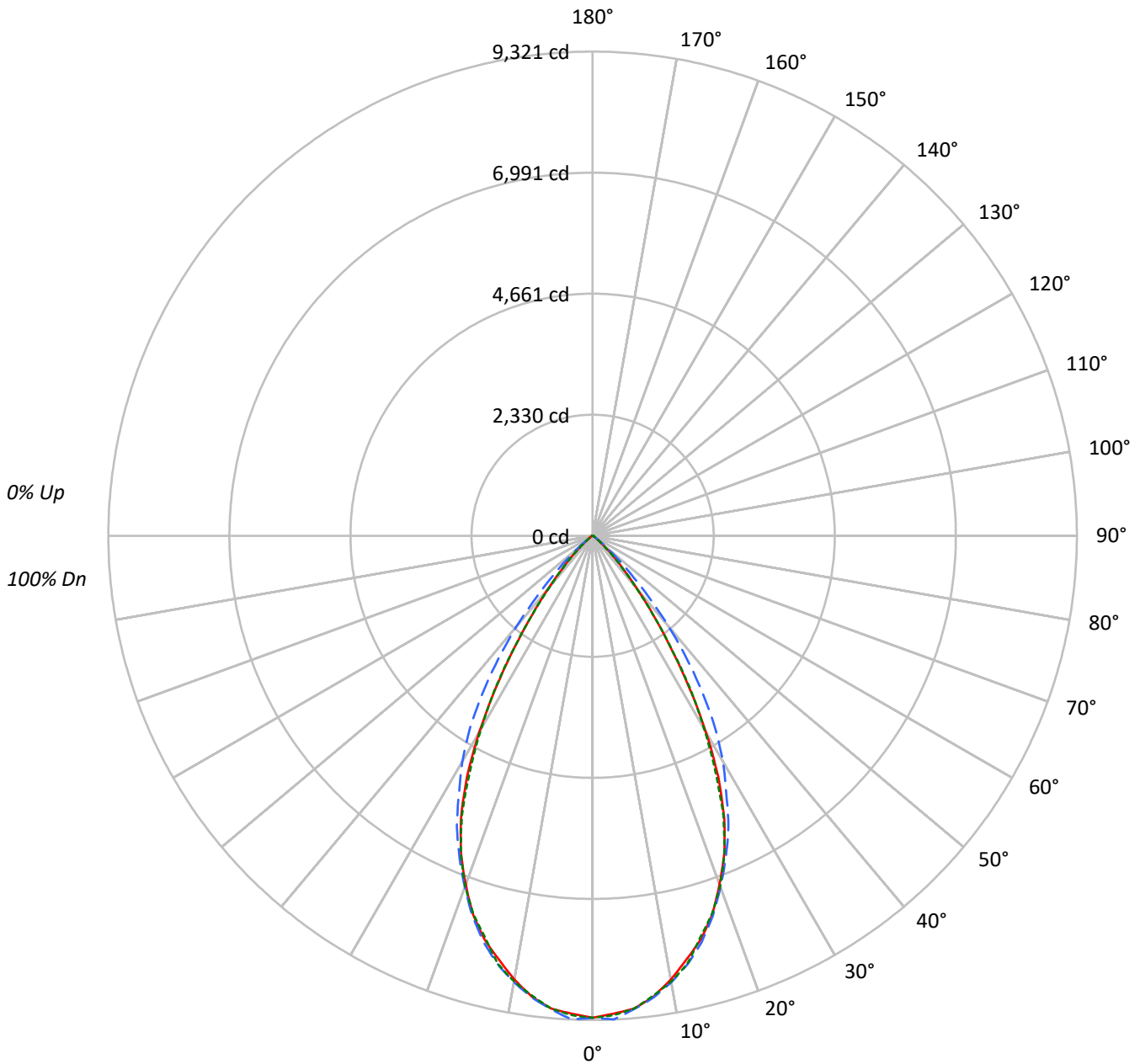
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8567.0 lumens  
Efficiency: N/A  
Efficacy: 95.7 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									
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°	895359	895359	895359
5°	885074	886217	885074
10°	849680	854882	853726
15°	803277	809160	799141
20°	733083	738525	736718
25°	638324	658404	633917
30°	485405	558304	478185
35°	305539	434025	308318
40°	164853	286628	161880
45°	78039	141587	77207
50°	29211	53094	29211
55°	13878	16873	12903
60°	9109	7989	9109
65°	5388	5388	5388
70°	3329	5022	3329
75°	2237	2237	2237
80°	3334	3334	3334
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	860.4	10.0
10°-20°	2254.8	26.3
20°-30°	2754.5	32.2
30°-40°	1926.5	22.5
40°-50°	631.4	7.4
50°-60°	100.4	1.2
60°-70°	27.4	0.3
70°-80°	9.2	0.1
80°-90°	2.5	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°	5869.6	68.5
0°-40°	7796.1	91.0
0°-60°	8527.9	99.5
0°-90°	8567.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8567.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9279	9279	9279	9279	9279	
5°	9138	9141	9150	9094	9138	857
15°	8041	8074	8100	8047	8000	2243
25°	5996	6087	6184	6072	5954	2693
35°	2594	3063	3685	3016	2618	1655
45°	572	705	1038	696	566	480
55°	82	88	100	88	77	82
65°	24	30	24	30	24	26
75°	6	6	6	6	6	9
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°	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4
2.5°	9208.7	9273.6	9255.8	9297.2	9297.2	9250.0	9261.8	9279.4	9303.0	9320.8	9179.1
5°	9137.9	9196.9	9143.7	9202.7	9167.3	9114.4	9202.7	9155.5	9185.1	9149.7	9173.3
7.5°	8949.3	9043.6	8937.5	9008.3	8984.7	8955.1	8990.5	8978.7	8996.5	8966.9	8902.2
10°	8672.2	8748.9	8678.2	8778.3	8731.1	8701.8	8731.1	8760.7	8754.7	8725.3	8760.7
12.5°	8353.9	8442.2	8406.8	8465.8	8412.8	8412.8	8483.6	8465.8	8471.8	8448.2	8489.3
15°	8041.4	8106.3	8053.2	8129.9	8106.3	8041.4	8070.7	8070.7	8118.1	8100.3	8053.2
17.5°	7652.4	7705.3	7646.3	7664.1	7640.6	7628.8	7752.4	7669.9	7717.1	7681.7	7687.7
20°	7139.4	7163.0	7145.2	7192.4	7163.0	7198.4	7186.6	7174.8	7174.8	7192.4	7151.2
22.5°	6620.5	6620.5	6638.3	6650.1	6673.7	6638.3	6709.0	6650.1	6655.9	6697.3	6685.5
25°	5995.7	5977.9	6019.3	6078.2	6101.8	6072.2	6166.5	6119.4	6154.8	6184.3	6119.4
27.5°	5235.2	5235.2	5276.4	5376.7	5394.3	5429.6	5559.3	5559.3	5606.5	5565.3	5612.5
30°	4356.7	4421.6	4474.5	4604.2	4645.6	4722.3	4857.8	4922.7	5028.8	5011.0	4987.5
32.5°	3454.7	3543.3	3549.0	3684.7	3796.6	3926.3	4109.1	4262.4	4339.1	4392.0	4333.1
35°	2593.9	2647.1	2694.2	2788.6	2977.2	3148.2	3313.3	3513.7	3649.3	3684.7	3631.6
37.5°	1898.4	1910.2	1957.4	2045.7	2187.1	2352.4	2552.8	2770.8	2912.5	2965.4	2906.4
40°	1308.8	1320.5	1344.1	1420.9	1538.7	1656.6	1815.9	2039.9	2169.5	2275.6	2198.9
42.5°	878.4	890.1	913.7	972.7	1037.6	1149.5	1273.4	1414.9	1538.7	1585.9	1544.5
45°	571.9	571.9	583.6	625.0	660.4	748.7	837.2	925.5	1008.0	1037.6	1008.0
47.5°	336.1	341.9	353.7	383.2	424.4	459.8	524.7	583.6	607.2	630.8	619.0
50°	194.6	194.6	212.2	230.0	259.3	282.9	306.5	330.1	341.9	353.7	341.9
52.5°	106.1	112.1	117.9	123.9	135.7	159.3	176.8	176.8	182.8	188.6	182.8
55°	82.5	82.5	82.5	82.5	88.5	88.5	88.5	94.3	94.3	100.3	94.3
57.5°	58.9	58.9	58.9	65.0	65.0	65.0	58.9	58.9	58.9	58.9	58.9
60°	47.2	47.2	47.2	47.2	47.2	47.2	47.2	41.4	41.4	41.4	41.4
62.5°	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
65°	23.6	23.6	29.6	29.6	29.6	29.6	29.6	23.6	23.6	23.6	23.6
67.5°	17.8	17.8	17.8	17.8	23.6	23.6	17.8	17.8	17.8	17.8	17.8
70°	11.8	11.8	11.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
72.5°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
75°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
77.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
80°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	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°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4	9279.4
2.5°	9279.4	9179.1	9190.9	9244.0	9214.4	9244.0	9238.3	9238.3
5°	9179.1	9149.7	9102.6	9084.8	9120.1	9196.9	9185.1	9137.9
7.5°	8990.5	8914.0	8966.9	8990.5	8961.1	9008.3	9031.8	8931.5
10°	8766.5	8737.1	8725.3	8737.1	8725.3	8772.5	8713.5	8713.5
12.5°	8448.2	8401.0	8401.0	8471.8	8430.4	8395.0	8442.2	8436.4
15°	8129.9	8035.4	8035.4	8058.9	8076.7	8053.2	8058.9	8000.0
17.5°	7658.1	7628.8	7587.4	7652.4	7669.9	7646.3	7664.1	7634.6
20°	7215.9	7215.9	7139.4	7168.8	7192.4	7210.2	7222.0	7174.8
22.5°	6650.1	6661.9	6608.7	6667.7	6685.5	6626.5	6638.3	6626.5
25°	6131.2	6125.4	6084.0	6060.4	6072.2	6048.7	6042.9	5954.3
27.5°	5559.3	5500.4	5412.1	5435.7	5335.3	5252.8	5252.8	5117.1
30°	4940.3	4840.2	4722.3	4604.2	4515.9	4421.6	4368.4	4291.9
32.5°	4215.2	4079.7	3932.3	3773.0	3672.9	3531.5	3454.7	3496.1
35°	3496.1	3295.5	3095.1	2936.0	2782.5	2700.0	2605.7	2617.5
37.5°	2800.3	2517.4	2340.6	2169.5	2039.9	1933.8	1892.4	1880.6
40°	2045.7	1821.7	1644.8	1520.9	1432.6	1350.1	1303.0	1285.2
42.5°	1414.9	1255.8	1114.1	1014.0	955.1	901.9	878.4	872.6
45°	919.7	825.4	731.1	660.4	613.2	577.9	571.9	565.8
47.5°	577.9	530.5	471.5	418.6	377.2	353.7	336.1	336.1
50°	330.1	312.5	282.9	253.6	230.0	218.2	200.4	194.6
52.5°	176.8	176.8	165.0	141.5	123.9	112.1	112.1	106.1
55°	94.3	94.3	88.5	88.5	82.5	82.5	82.5	76.7
57.5°	58.9	58.9	65.0	65.0	58.9	58.9	58.9	58.9
60°	41.4	47.2	47.2	47.2	47.2	47.2	47.2	47.2
62.5°	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
65°	23.6	29.6	29.6	29.6	29.6	23.6	23.6	23.6
67.5°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
70°	17.8	17.8	17.8	17.8	17.8	11.8	11.8	11.8
72.5°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
75°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
77.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
80°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
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°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
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)