

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 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: LD4C100D010 EX4C1009040 4LBSQLI  
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

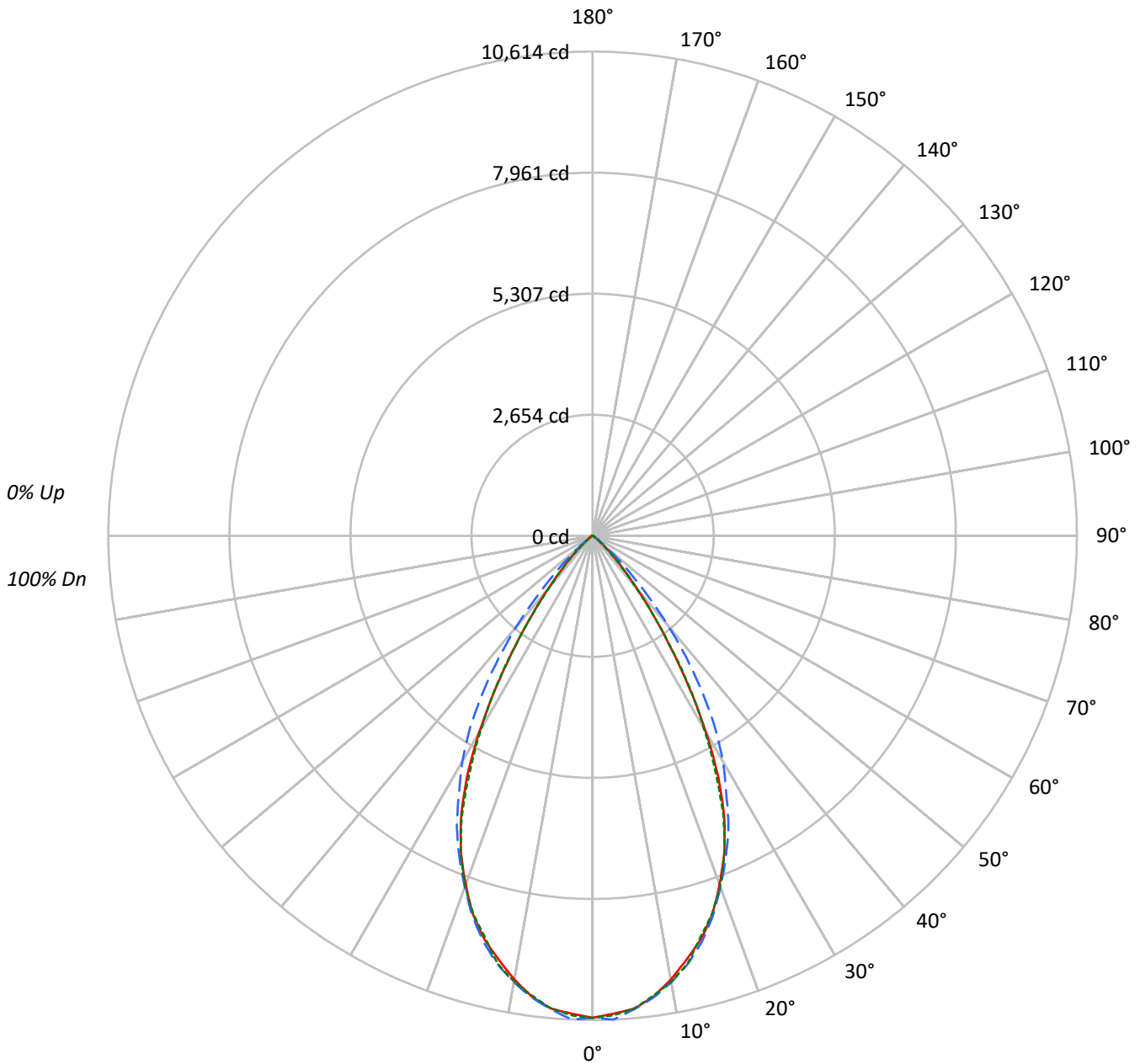
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9756.0 lumens  
Efficiency: N/A  
Efficacy: 85.3 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): 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			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°	1019627	1019627	1019627
5°	1007918	1009216	1007918
10°	967605	973533	972220
15°	914757	921460	910052
20°	834830	841022	838968
25°	726924	749792	721899
30°	552767	635794	544556
35°	347943	494264	351112
40°	187727	326418	184339
45°	88860	161236	87932
50°	33264	60449	33264
55°	15813	19211	14703
60°	10363	9089	10363
65°	6119	6119	6119
70°	3780	5727	3780
75°	2535	2535	2535
80°	3778	3778	3778
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	979.8	10.0
10°-20°	2567.7	26.3
20°-30°	3136.7	32.2
30°-40°	2193.9	22.5
40°-50°	719.0	7.4
50°-60°	114.3	1.2
60°-70°	31.2	0.3
70°-80°	10.4	0.1
80°-90°	2.9	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°	6684.2	68.5
0°-40°	8878.1	91.0
0°-60°	9711.4	99.5
0°-90°	9756.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9756.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10567	10567	10567	10567	10567	
5°	10406	10409	10420	10356	10406	976
15°	9157	9194	9224	9164	9110	2554
25°	6828	6932	7043	6915	6781	3067
35°	2954	3488	4196	3434	2981	1885
45°	651	802	1182	792	644	546
55°	94	101	114	101	87	93
65°	27	34	27	34	27	30
75°	7	7	7	7	7	10
85°	0	0	0	0	0	3
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°	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3
2.5°	10486.7	10560.7	10540.4	10587.5	10587.5	10533.8	10547.3	10567.3	10594.1	10614.4	10453.0
5°	10406.2	10473.3	10412.8	10479.9	10439.6	10379.3	10479.9	10426.2	10459.9	10419.6	10446.4
7.5°	10191.4	10298.8	10178.0	10258.5	10231.7	10198.0	10238.2	10224.8	10245.1	10211.4	10137.7
10°	9875.8	9963.2	9882.6	9996.6	9942.9	9909.5	9942.9	9976.6	9969.7	9936.3	9976.6
12.5°	9513.3	9613.9	9573.6	9640.7	9580.4	9580.4	9661.0	9640.7	9647.6	9620.7	9667.6
15°	9157.4	9231.4	9170.8	9258.2	9231.4	9157.4	9190.9	9190.9	9244.8	9224.5	9170.8
17.5°	8714.4	8774.7	8707.6	8727.8	8701.0	8687.6	8828.4	8734.4	8788.1	8747.8	8754.7
20°	8130.3	8157.2	8136.9	8190.6	8157.2	8197.4	8184.0	8170.6	8170.6	8190.6	8143.7
22.5°	7539.4	7539.4	7559.6	7573.1	7599.9	7559.6	7640.2	7573.1	7579.6	7626.8	7613.3
25°	6827.9	6807.6	6854.7	6921.8	6948.7	6915.0	7022.4	6968.7	7009.0	7042.7	6968.7
27.5°	5961.8	5961.8	6008.7	6122.9	6142.9	6183.2	6330.9	6330.9	6384.6	6337.7	6391.4
30°	4961.3	5035.3	5095.6	5243.2	5290.3	5377.7	5532.0	5606.0	5726.8	5706.5	5679.7
32.5°	3934.2	4035.0	4041.6	4196.1	4323.5	4471.2	4679.4	4853.9	4941.3	5001.6	4934.5
35°	2953.9	3014.5	3068.2	3175.6	3390.4	3585.2	3773.1	4001.3	4155.8	4196.1	4135.6
37.5°	2161.9	2175.3	2229.0	2329.6	2490.7	2678.9	2907.1	3155.3	3316.7	3376.9	3309.8
40°	1490.4	1503.8	1530.7	1618.1	1752.3	1886.6	2067.9	2323.0	2470.7	2591.5	2504.1
42.5°	1000.3	1013.7	1040.5	1107.7	1181.6	1309.0	1450.1	1611.2	1752.3	1806.0	1758.9
45°	651.2	651.2	664.6	711.8	752.0	852.6	953.4	1054.0	1147.9	1181.6	1147.9
47.5°	382.7	389.3	402.7	436.4	483.3	523.6	597.5	664.6	691.5	718.3	704.9
50°	221.6	221.6	241.6	261.9	295.3	322.2	349.0	375.9	389.3	402.7	389.3
52.5°	120.8	127.7	134.2	141.1	154.5	181.4	201.4	201.4	208.2	214.8	208.2
55°	94.0	94.0	94.0	94.0	100.8	100.8	100.8	107.4	107.4	114.2	107.4
57.5°	67.1	67.1	67.1	74.0	74.0	74.0	67.1	67.1	67.1	67.1	67.1
60°	53.7	53.7	53.7	53.7	53.7	53.7	53.7	47.1	47.1	47.1	47.1
62.5°	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3
65°	26.8	26.8	33.7	33.7	33.7	33.7	33.7	26.8	26.8	26.8	26.8
67.5°	20.3	20.3	20.3	20.3	26.8	26.8	20.3	20.3	20.3	20.3	20.3
70°	13.4	13.4	13.4	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
72.5°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
75°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
77.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	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°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
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°	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3	10567.3
2.5°	10567.3	10453.0	10466.5	10527.0	10493.3	10527.0	10520.4	10520.4
5°	10453.0	10419.6	10365.9	10345.6	10385.9	10473.3	10459.9	10406.2
7.5°	10238.2	10151.1	10211.4	10238.2	10204.8	10258.5	10285.4	10171.1
10°	9983.2	9949.7	9936.3	9949.7	9936.3	9990.0	9922.9	9922.9
12.5°	9620.7	9567.0	9567.0	9647.6	9600.4	9560.2	9613.9	9607.3
15°	9258.2	9150.6	9150.6	9177.4	9197.7	9170.8	9177.4	9110.3
17.5°	8721.0	8687.6	8640.4	8714.4	8734.4	8707.6	8727.8	8694.1
20°	8217.4	8217.4	8130.3	8163.7	8190.6	8210.9	8224.3	8170.6
22.5°	7573.1	7586.5	7525.9	7593.1	7613.3	7546.2	7559.6	7546.2
25°	6982.1	6975.5	6928.4	6901.6	6915.0	6888.1	6881.6	6780.7
27.5°	6330.9	6263.8	6163.2	6190.1	6075.8	5981.8	5981.8	5827.3
30°	5626.0	5512.0	5377.7	5243.2	5142.7	5035.3	4974.7	4887.6
32.5°	4800.2	4646.0	4478.0	4296.7	4182.7	4021.6	3934.2	3981.3
35°	3981.3	3752.8	3524.6	3343.5	3168.7	3074.8	2967.4	2980.8
37.5°	3189.0	2866.8	2665.4	2470.7	2323.0	2202.2	2155.0	2141.6
40°	2329.6	2074.5	1873.1	1732.0	1631.5	1537.5	1483.8	1463.5
42.5°	1611.2	1430.1	1268.8	1154.8	1087.7	1027.1	1000.3	993.7
45°	1047.4	940.0	832.6	752.0	698.3	658.1	651.2	644.4
47.5°	658.1	604.1	537.0	476.7	429.6	402.7	382.7	382.7
50°	375.9	355.9	322.2	288.8	261.9	248.5	228.2	221.6
52.5°	201.4	201.4	187.9	161.1	141.1	127.7	127.7	120.8
55°	107.4	107.4	100.8	100.8	94.0	94.0	94.0	87.4
57.5°	67.1	67.1	74.0	74.0	67.1	67.1	67.1	67.1
60°	47.1	53.7	53.7	53.7	53.7	53.7	53.7	53.7
62.5°	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3
65°	26.8	33.7	33.7	33.7	33.7	26.8	26.8	26.8
67.5°	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
70°	20.3	20.3	20.3	20.3	20.3	13.4	13.4	13.4
72.5°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
75°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
77.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
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°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
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)