

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: **LD4C05D010 EX4C059027 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: LD4C05D010 EX4C059027 4LBSQLI  
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

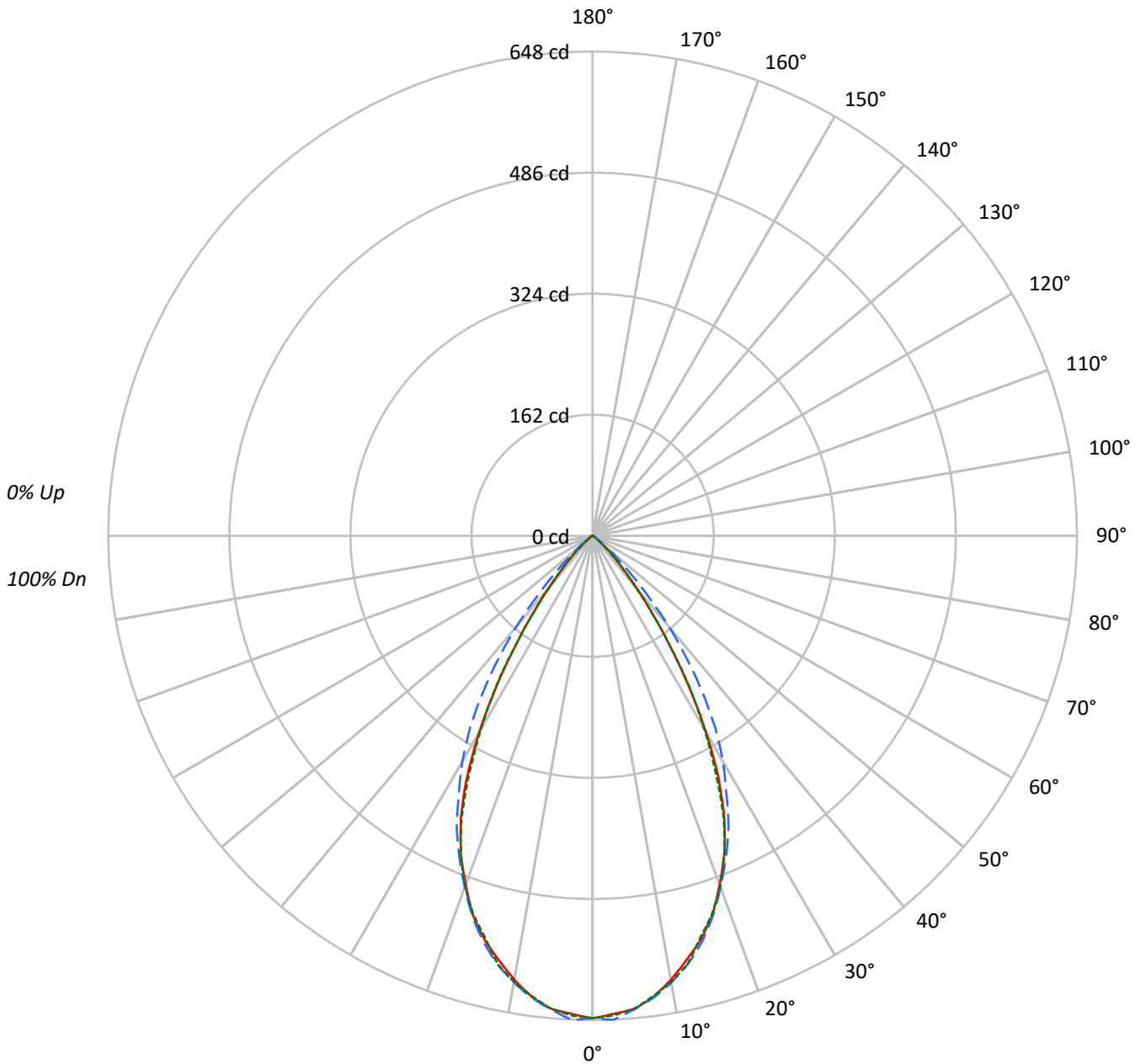
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 596.0 lumens  
Efficiency: N/A  
Efficacy: 82.8 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): 7.2  
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	72	67	76	71	67	74	70	66	73	69	66	65																			
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°	62293	62293	62293
5°	61572	61650	61572
10°	59110	59472	59394
15°	55880	56290	55600
20°	51002	51382	51248
25°	44406	45801	44097
30°	33770	38840	33269
35°	21261	30190	21450
40°	11462	19939	11261
45°	5431	9852	5376
50°	2026	3693	2026
55°	959	1178	892
60°	637	560	637
65°	365	365	365
70°	226	339	226
75°	149	149	149
80°	222	222	222
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.9	10.0
10°-20°	156.9	26.3
20°-30°	191.6	32.2
30°-40°	134.0	22.5
40°-50°	43.9	7.4
50°-60°	7.0	1.2
60°-70°	1.9	0.3
70°-80°	0.6	0.1
80°-90°	0.2	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°	408.3	68.5
0°-40°	542.4	91.0
0°-60°	593.3	99.5
0°-90°	596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	596.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	646	646	646	646	646	
5°	636	636	636	633	636	60
15°	559	562	564	560	557	156
25°	417	423	430	422	414	187
35°	180	213	256	210	182	115
45°	40	49	72	48	39	33
55°	6	6	7	6	5	6
65°	2	2	2	2	2	2
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6
2.5°	640.6	645.2	643.9	646.8	646.8	643.5	644.3	645.6	647.2	648.4	638.6
5°	635.7	639.8	636.1	640.2	637.8	634.1	640.2	636.9	639.0	636.5	638.2
7.5°	622.6	629.2	621.8	626.7	625.1	623.0	625.5	624.6	625.9	623.8	619.3
10°	603.3	608.7	603.7	610.7	607.4	605.4	607.4	609.5	609.1	607.0	609.5
12.5°	581.2	587.3	584.9	589.0	585.3	585.3	590.2	589.0	589.4	587.7	590.6
15°	559.4	564.0	560.3	565.6	564.0	559.4	561.5	561.5	564.8	563.5	560.3
17.5°	532.4	536.1	532.0	533.2	531.5	530.7	539.3	533.6	536.9	534.4	534.8
20°	496.7	498.3	497.1	500.4	498.3	500.8	500.0	499.1	499.1	500.4	497.5
22.5°	460.6	460.6	461.8	462.6	464.3	461.8	466.7	462.6	463.0	465.9	465.1
25°	417.1	415.9	418.8	422.9	424.5	422.4	429.0	425.7	428.2	430.2	425.7
27.5°	364.2	364.2	367.1	374.1	375.3	377.7	386.8	386.8	390.0	387.2	390.5
30°	303.1	307.6	311.3	320.3	323.2	328.5	338.0	342.5	349.9	348.6	347.0
32.5°	240.3	246.5	246.9	256.3	264.1	273.1	285.9	296.5	301.9	305.5	301.4
35°	180.5	184.2	187.4	194.0	207.1	219.0	230.5	244.4	253.9	256.3	252.6
37.5°	132.1	132.9	136.2	142.3	152.2	163.7	177.6	192.8	202.6	206.3	202.2
40°	91.0	91.9	93.5	98.8	107.0	115.3	126.3	141.9	150.9	158.3	153.0
42.5°	61.1	61.9	63.6	67.7	72.2	80.0	88.6	98.4	107.0	110.3	107.5
45°	39.8	39.8	40.6	43.5	45.9	52.1	58.2	64.4	70.1	72.2	70.1
47.5°	23.4	23.8	24.6	26.7	29.5	32.0	36.5	40.6	42.2	43.9	43.1
50°	13.5	13.5	14.8	16.0	18.0	19.7	21.3	23.0	23.8	24.6	23.8
52.5°	7.4	7.8	8.2	8.6	9.4	11.1	12.3	12.3	12.7	13.1	12.7
55°	5.7	5.7	5.7	5.7	6.2	6.2	6.2	6.6	6.6	7.0	6.6
57.5°	4.1	4.1	4.1	4.5	4.5	4.5	4.1	4.1	4.1	4.1	4.1
60°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.9	2.9	2.9	2.9
62.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
65°	1.6	1.6	2.1	2.1	2.1	2.1	2.1	1.6	1.6	1.6	1.6
67.5°	1.2	1.2	1.2	1.2	1.6	1.6	1.2	1.2	1.2	1.2	1.2
70°	0.8	0.8	0.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	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°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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°	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6
2.5°	645.6	638.6	639.4	643.1	641.0	643.1	642.7	642.7
5°	638.6	636.5	633.3	632.0	634.5	639.8	639.0	635.7
7.5°	625.5	620.1	623.8	625.5	623.4	626.7	628.3	621.4
10°	609.9	607.8	607.0	607.8	607.0	610.3	606.2	606.2
12.5°	587.7	584.5	584.5	589.4	586.5	584.0	587.3	586.9
15°	565.6	559.0	559.0	560.7	561.9	560.3	560.7	556.6
17.5°	532.8	530.7	527.8	532.4	533.6	532.0	533.2	531.1
20°	502.0	502.0	496.7	498.7	500.4	501.6	502.4	499.1
22.5°	462.6	463.5	459.8	463.9	465.1	461.0	461.8	461.0
25°	426.5	426.1	423.3	421.6	422.4	420.8	420.4	414.2
27.5°	386.8	382.7	376.5	378.2	371.2	365.4	365.4	356.0
30°	343.7	336.7	328.5	320.3	314.2	307.6	303.9	298.6
32.5°	293.2	283.8	273.6	262.5	255.5	245.7	240.3	243.2
35°	243.2	229.3	215.3	204.3	193.6	187.8	181.3	182.1
37.5°	194.8	175.1	162.8	150.9	141.9	134.5	131.7	130.8
40°	142.3	126.7	114.4	105.8	99.7	93.9	90.6	89.4
42.5°	98.4	87.4	77.5	70.5	66.4	62.7	61.1	60.7
45°	64.0	57.4	50.9	45.9	42.7	40.2	39.8	39.4
47.5°	40.2	36.9	32.8	29.1	26.2	24.6	23.4	23.4
50°	23.0	21.7	19.7	17.6	16.0	15.2	13.9	13.5
52.5°	12.3	12.3	11.5	9.8	8.6	7.8	7.8	7.4
55°	6.6	6.6	6.2	6.2	5.7	5.7	5.7	5.3
57.5°	4.1	4.1	4.5	4.5	4.1	4.1	4.1	4.1
60°	2.9	3.3	3.3	3.3	3.3	3.3	3.3	3.3
62.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
65°	1.6	2.1	2.1	2.1	2.1	1.6	1.6	1.6
67.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
70°	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)