

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 EX4C1009050 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 EX4C1009050 4LBSQLI
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

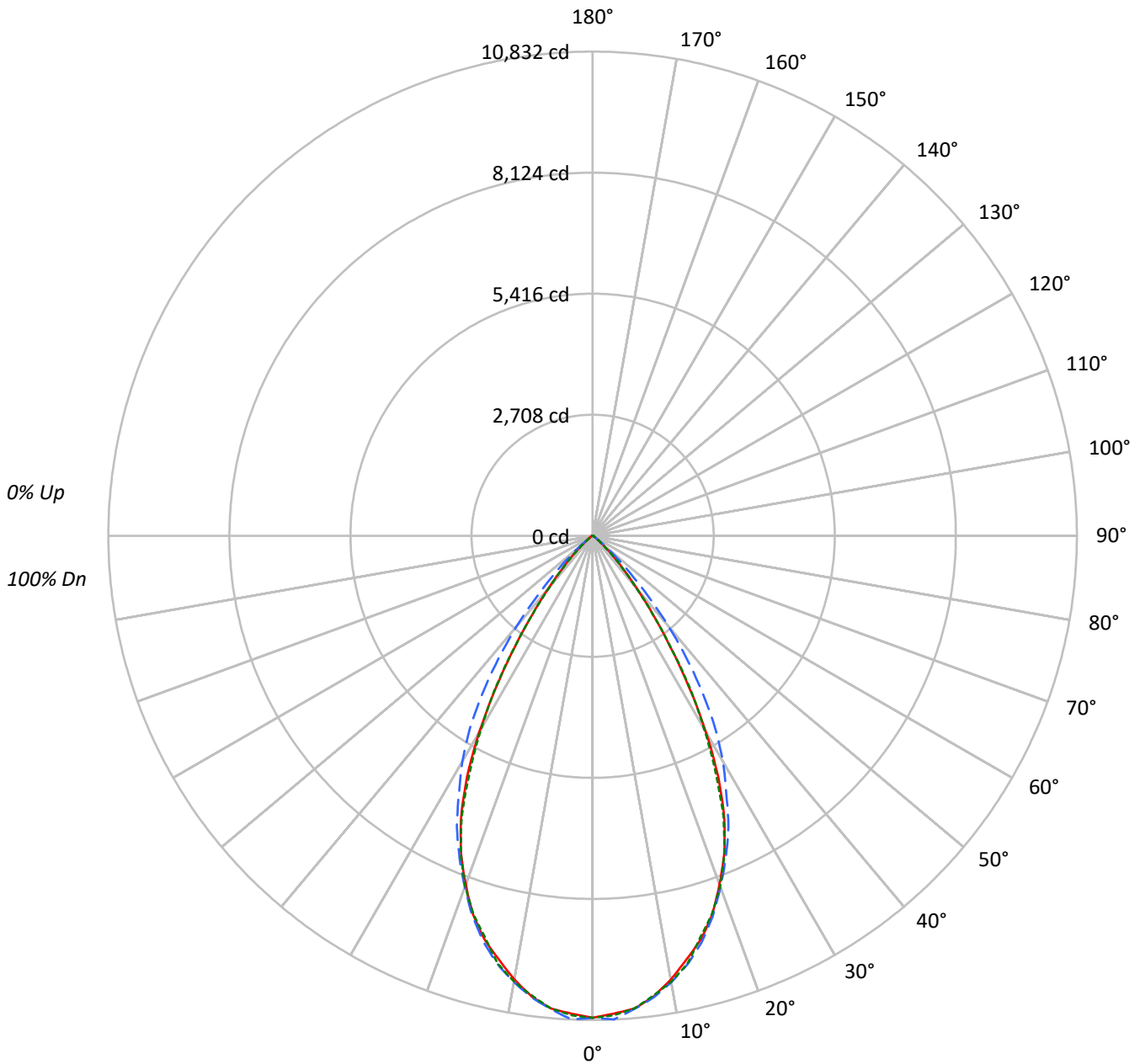
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9956.0 lumens
Efficiency: N/A
Efficacy: 87.0 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°	1040527	1040527	1040527
5°	1028578	1029905	1028578
10°	987436	993491	992148
15°	933507	940349	928712
20°	851947	858262	856167
25°	741818	765155	736697
30°	564098	648830	555720
35°	355082	504394	358309
40°	191568	333107	188117
45°	90689	164552	89733
50°	33955	61695	33955
55°	16133	19615	15006
60°	10575	9282	10575
65°	6256	6256	6256
70°	3865	5840	3865
75°	2610	2610	2610
80°	3890	3890	3890
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	999.8	10.0
10°-20°	2620.4	26.3
20°-30°	3201.0	32.2
30°-40°	2238.9	22.5
40°-50°	733.7	7.4
50°-60°	116.7	1.2
60°-70°	31.9	0.3
70°-80°	10.7	0.1
80°-90°	3.0	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°	6821.3	68.5
0°-40°	9060.1	91.0
0°-60°	9910.5	99.5
0°-90°	9956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9956.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10784	10784	10784	10784	10784	
5°	10620	10623	10633	10568	10620	996
15°	9345	9383	9414	9352	9297	2607
25°	6968	7074	7187	7057	6920	3130
35°	3014	3559	4282	3504	3042	1924
45°	665	819	1206	809	658	557
55°	96	103	117	103	89	95
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°	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9
2.5°	10701.7	10777.2	10756.5	10804.6	10804.6	10749.8	10763.5	10783.9	10811.3	10832.0	10667.3
5°	10619.5	10688.0	10626.2	10694.7	10653.6	10592.1	10694.7	10639.9	10674.3	10633.2	10660.6
7.5°	10400.3	10509.9	10386.6	10468.8	10441.4	10407.0	10448.1	10434.4	10455.1	10420.7	10345.5
10°	10078.2	10167.4	10085.2	10201.5	10146.7	10112.6	10146.7	10181.1	10174.1	10140.0	10181.1
12.5°	9708.3	9810.9	9769.8	9838.3	9776.8	9776.8	9859.0	9838.3	9845.3	9817.9	9865.7
15°	9345.1	9420.6	9358.8	9448.0	9420.6	9345.1	9379.3	9379.3	9434.3	9413.6	9358.8
17.5°	8893.1	8954.6	8886.1	8906.8	8879.4	8865.7	9009.4	8913.5	8968.3	8927.2	8934.2
20°	8297.0	8324.4	8303.7	8358.5	8324.4	8365.5	8351.8	8338.1	8338.1	8358.5	8310.7
22.5°	7693.9	7693.9	7714.6	7728.3	7755.7	7714.6	7796.8	7728.3	7735.0	7783.1	7769.4
25°	6967.8	6947.1	6995.2	7063.7	7091.1	7056.7	7166.3	7111.5	7152.6	7187.0	7111.5
27.5°	6084.1	6084.1	6131.9	6248.5	6268.9	6310.0	6460.7	6460.7	6515.5	6467.7	6522.5
30°	5063.0	5138.5	5200.0	5350.7	5398.8	5488.0	5645.4	5720.9	5844.2	5823.5	5796.1
32.5°	4014.8	4117.7	4124.4	4282.1	4412.1	4562.8	4775.3	4953.4	5042.6	5104.1	5035.6
35°	3014.5	3076.3	3131.1	3240.7	3459.9	3658.7	3850.5	4083.3	4241.0	4282.1	4220.3
37.5°	2206.2	2219.9	2274.7	2377.3	2541.7	2733.8	2966.7	3220.0	3384.7	3446.2	3377.7
40°	1520.9	1534.6	1562.0	1651.2	1788.2	1925.2	2110.3	2370.6	2521.3	2644.6	2555.4
42.5°	1020.8	1034.5	1061.9	1130.4	1205.9	1335.9	1479.8	1644.2	1788.2	1843.0	1794.9
45°	664.6	664.6	678.3	726.4	767.5	870.1	973.0	1075.6	1171.5	1205.9	1171.5
47.5°	390.6	397.3	411.0	445.4	493.2	534.3	609.8	678.3	705.7	733.1	719.4
50°	226.2	226.2	246.6	267.3	301.4	328.8	356.2	383.6	397.3	411.0	397.3
52.5°	123.3	130.3	137.0	144.0	157.7	185.1	205.5	205.5	212.5	219.2	212.5
55°	95.9	95.9	95.9	95.9	102.9	102.9	102.9	109.6	109.6	116.6	109.6
57.5°	68.5	68.5	68.5	75.5	75.5	75.5	68.5	68.5	68.5	68.5	68.5
60°	54.8	54.8	54.8	54.8	54.8	54.8	54.8	48.1	48.1	48.1	48.1
62.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
65°	27.4	27.4	34.4	34.4	34.4	34.4	34.4	27.4	27.4	27.4	27.4
67.5°	20.7	20.7	20.7	20.7	27.4	27.4	20.7	20.7	20.7	20.7	20.7
70°	13.7	13.7	13.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
72.5°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
75°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
77.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
80°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	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°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
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°	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9	10783.9
2.5°	10783.9	10667.3	10681.0	10742.8	10708.4	10742.8	10736.1	10736.1
5°	10667.3	10633.2	10578.4	10557.7	10598.8	10688.0	10674.3	10619.5
7.5°	10448.1	10359.2	10420.7	10448.1	10414.0	10468.8	10496.2	10379.6
10°	10187.8	10153.7	10140.0	10153.7	10140.0	10194.8	10126.3	10126.3
12.5°	9817.9	9763.1	9763.1	9845.3	9797.2	9756.1	9810.9	9804.2
15°	9448.0	9338.2	9338.2	9365.6	9386.2	9358.8	9365.6	9297.1
17.5°	8899.8	8865.7	8817.6	8893.1	8913.5	8886.1	8906.8	8872.4
20°	8385.9	8385.9	8297.0	8331.1	8358.5	8379.2	8392.9	8338.1
22.5°	7728.3	7742.0	7680.2	7748.7	7769.4	7700.9	7714.6	7700.9
25°	7125.2	7118.5	7070.4	7043.0	7056.7	7029.3	7022.6	6919.7
27.5°	6460.7	6392.2	6289.6	6317.0	6200.4	6104.5	6104.5	5946.8
30°	5741.3	5625.0	5488.0	5350.7	5248.1	5138.5	5076.7	4987.8
32.5°	4898.6	4741.2	4569.8	4384.7	4268.4	4104.0	4014.8	4062.9
35°	4062.9	3829.8	3596.9	3412.1	3233.7	3137.8	3028.2	3041.9
37.5°	3254.4	2925.6	2720.1	2521.3	2370.6	2247.3	2199.2	2185.5
40°	2377.3	2117.0	1911.5	1767.5	1664.9	1569.0	1514.2	1493.5
42.5°	1644.2	1459.4	1294.8	1178.5	1110.0	1048.2	1020.8	1014.1
45°	1068.9	959.3	849.7	767.5	712.7	671.6	664.6	657.6
47.5°	671.6	616.5	548.0	486.5	438.4	411.0	390.6	390.6
50°	383.6	363.2	328.8	294.7	267.3	253.6	232.9	226.2
52.5°	205.5	205.5	191.8	164.4	144.0	130.3	130.3	123.3
55°	109.6	109.6	102.9	102.9	95.9	95.9	95.9	89.2
57.5°	68.5	68.5	75.5	75.5	68.5	68.5	68.5	68.5
60°	48.1	54.8	54.8	54.8	54.8	54.8	54.8	54.8
62.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
65°	27.4	34.4	34.4	34.4	34.4	27.4	27.4	27.4
67.5°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
70°	20.7	20.7	20.7	20.7	20.7	13.7	13.7	13.7
72.5°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
75°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
77.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
80°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
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°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
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)