

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 EX4C809050 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 EX4C809050 4LBSQLI
Description: 4 INCH 8000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

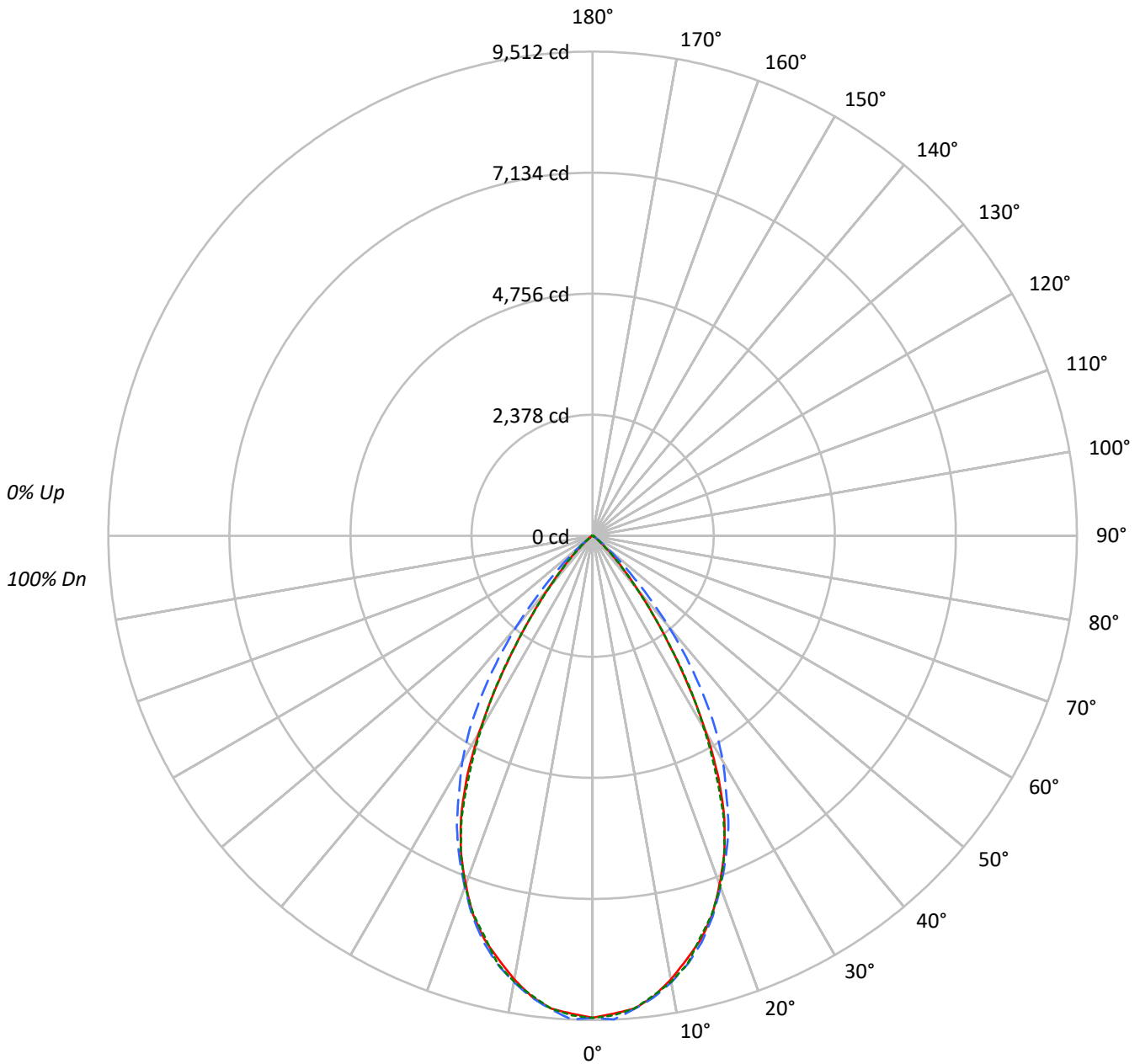
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8743.0 lumens
Efficiency: N/A
Efficacy: 97.7 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				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°	913750	913750	913750
5°	903264	904426	903264
10°	867129	872449	871274
15°	819779	825783	815554
20°	748146	753691	751853
25°	651441	671935	646948
30°	495377	569780	488012
35°	311817	442942	314656
40°	168229	292523	165206
45°	79636	144493	78803
50°	29812	54175	29812
55°	14164	17226	13172
60°	9282	8144	9282
65°	5502	5502	5502
70°	3385	5134	3385
75°	2274	2274	2274
80°	3390	3390	3390
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	878.0	10.0
10°-20°	2301.1	26.3
20°-30°	2811.0	32.2
30°-40°	1966.1	22.5
40°-50°	644.3	7.4
50°-60°	102.5	1.2
60°-70°	28.0	0.3
70°-80°	9.3	0.1
80°-90°	2.6	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°	5990.2	68.5
0°-40°	7956.3	91.0
0°-60°	8703.1	99.5
0°-90°	8743.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8743.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9470	9470	9470	9470	9470	
5°	9326	9329	9338	9280	9326	875
15°	8207	8240	8267	8212	8164	2289
25°	6119	6212	6311	6197	6077	2749
35°	2647	3126	3760	3077	2671	1689
45°	584	719	1059	710	578	490
55°	84	90	102	90	78	83
65°	24	30	24	30	24	27
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°	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0
2.5°	9397.8	9464.1	9446.0	9488.2	9488.2	9440.1	9452.1	9470.0	9494.1	9512.3	9367.7
5°	9325.7	9385.8	9331.6	9391.7	9355.6	9301.6	9391.7	9343.6	9373.8	9337.7	9361.8
7.5°	9133.2	9229.4	9121.1	9193.3	9169.3	9139.1	9175.2	9163.1	9181.3	9151.1	9085.0
10°	8850.3	8928.7	8856.5	8958.6	8910.5	8880.5	8910.5	8940.7	8934.5	8904.6	8940.7
12.5°	8525.5	8615.6	8579.5	8639.7	8585.7	8585.7	8657.8	8639.7	8645.8	8621.7	8663.7
15°	8206.6	8272.9	8218.6	8296.9	8272.9	8206.6	8236.5	8236.5	8284.9	8266.7	8218.6
17.5°	7809.6	7863.6	7803.4	7821.6	7797.5	7785.5	7911.7	7827.5	7875.6	7839.5	7845.7
20°	7286.1	7310.2	7292.0	7340.1	7310.2	7346.3	7334.2	7322.2	7322.2	7340.1	7298.1
22.5°	6756.5	6756.5	6774.7	6786.7	6810.8	6774.7	6846.9	6786.7	6792.6	6834.8	6822.8
25°	6118.9	6100.7	6143.0	6203.1	6227.2	6197.0	6293.2	6245.1	6281.2	6311.4	6245.1
27.5°	5342.8	5342.8	5384.8	5487.2	5505.1	5541.2	5673.5	5673.5	5721.6	5679.7	5727.8
30°	4446.2	4512.4	4566.5	4698.8	4741.0	4819.3	4957.6	5023.9	5132.1	5114.0	5089.9
32.5°	3525.7	3616.0	3621.9	3760.4	3874.6	4006.9	4193.5	4349.9	4428.2	4482.3	4422.1
35°	2647.2	2701.5	2749.6	2845.8	3038.3	3212.9	3381.3	3585.8	3724.3	3760.4	3706.2
37.5°	1937.4	1949.4	1997.6	2087.7	2232.0	2400.7	2605.2	2827.7	2972.3	3026.3	2966.2
40°	1335.6	1347.7	1371.7	1450.1	1570.4	1690.7	1853.2	2081.8	2214.1	2322.4	2244.1
42.5°	896.4	908.4	932.5	992.6	1058.9	1173.1	1299.5	1443.9	1570.4	1618.5	1576.3
45°	583.6	583.6	595.6	637.9	674.0	764.1	854.4	944.5	1028.7	1058.9	1028.7
47.5°	343.0	348.9	360.9	391.1	433.1	469.2	535.5	595.6	619.7	643.8	631.7
50°	198.6	198.6	216.6	234.7	264.7	288.7	312.8	336.9	348.9	360.9	348.9
52.5°	108.3	114.4	120.3	126.4	138.5	162.5	180.5	180.5	186.6	192.5	186.6
55°	84.2	84.2	84.2	84.2	90.3	90.3	90.3	96.2	96.2	102.4	96.2
57.5°	60.2	60.2	60.2	66.3	66.3	66.3	60.2	60.2	60.2	60.2	60.2
60°	48.1	48.1	48.1	48.1	48.1	48.1	48.1	42.2	42.2	42.2	42.2
62.5°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
65°	24.1	24.1	30.2	30.2	30.2	30.2	30.2	24.1	24.1	24.1	24.1
67.5°	18.2	18.2	18.2	18.2	24.1	24.1	18.2	18.2	18.2	18.2	18.2
70°	12.0	12.0	12.0	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
72.5°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
75°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
77.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
80°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	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°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
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°	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0	9470.0
2.5°	9470.0	9367.7	9379.7	9433.9	9403.7	9433.9	9428.0	9428.0
5°	9367.7	9337.7	9289.6	9271.4	9307.5	9385.8	9373.8	9325.7
7.5°	9175.2	9097.1	9151.1	9175.2	9145.2	9193.3	9217.4	9115.0
10°	8946.6	8916.6	8904.6	8916.6	8904.6	8952.7	8892.6	8892.6
12.5°	8621.7	8573.6	8573.6	8645.8	8603.6	8567.5	8615.6	8609.7
15°	8296.9	8200.4	8200.4	8224.5	8242.7	8218.6	8224.5	8164.3
17.5°	7815.5	7785.5	7743.3	7809.6	7827.5	7803.4	7821.6	7791.4
20°	7364.2	7364.2	7286.1	7316.1	7340.1	7358.3	7370.3	7322.2
22.5°	6786.7	6798.7	6744.5	6804.6	6822.8	6762.7	6774.7	6762.7
25°	6257.1	6251.2	6209.0	6184.9	6197.0	6172.9	6167.0	6076.7
27.5°	5673.5	5613.4	5523.3	5547.3	5444.9	5360.7	5360.7	5222.3
30°	5041.8	4939.7	4819.3	4698.8	4608.7	4512.4	4458.2	4380.1
32.5°	4301.8	4163.6	4013.1	3850.5	3748.4	3604.0	3525.7	3567.9
35°	3567.9	3363.2	3158.6	2996.3	2839.7	2755.5	2659.3	2671.3
37.5°	2857.9	2569.1	2388.7	2214.1	2081.8	1973.5	1931.3	1919.2
40°	2087.7	1859.1	1678.6	1552.2	1462.1	1377.9	1329.7	1311.6
42.5°	1443.9	1281.6	1137.0	1034.9	974.7	920.5	896.4	890.5
45°	938.6	842.4	746.1	674.0	625.8	589.7	583.6	577.5
47.5°	589.7	541.4	481.2	427.2	385.0	360.9	343.0	343.0
50°	336.9	318.9	288.7	258.8	234.7	222.7	204.5	198.6
52.5°	180.5	180.5	168.4	144.4	126.4	114.4	114.4	108.3
55°	96.2	96.2	90.3	90.3	84.2	84.2	84.2	78.3
57.5°	60.2	60.2	66.3	66.3	60.2	60.2	60.2	60.2
60°	42.2	48.1	48.1	48.1	48.1	48.1	48.1	48.1
62.5°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
65°	24.1	30.2	30.2	30.2	30.2	24.1	24.1	24.1
67.5°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
70°	18.2	18.2	18.2	18.2	18.2	12.0	12.0	12.0
72.5°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
75°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
77.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
80°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
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°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
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)