

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: **LD4C10D010 EX4C109027 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: LD4C10D010 EX4C109027 4LBSQLI
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

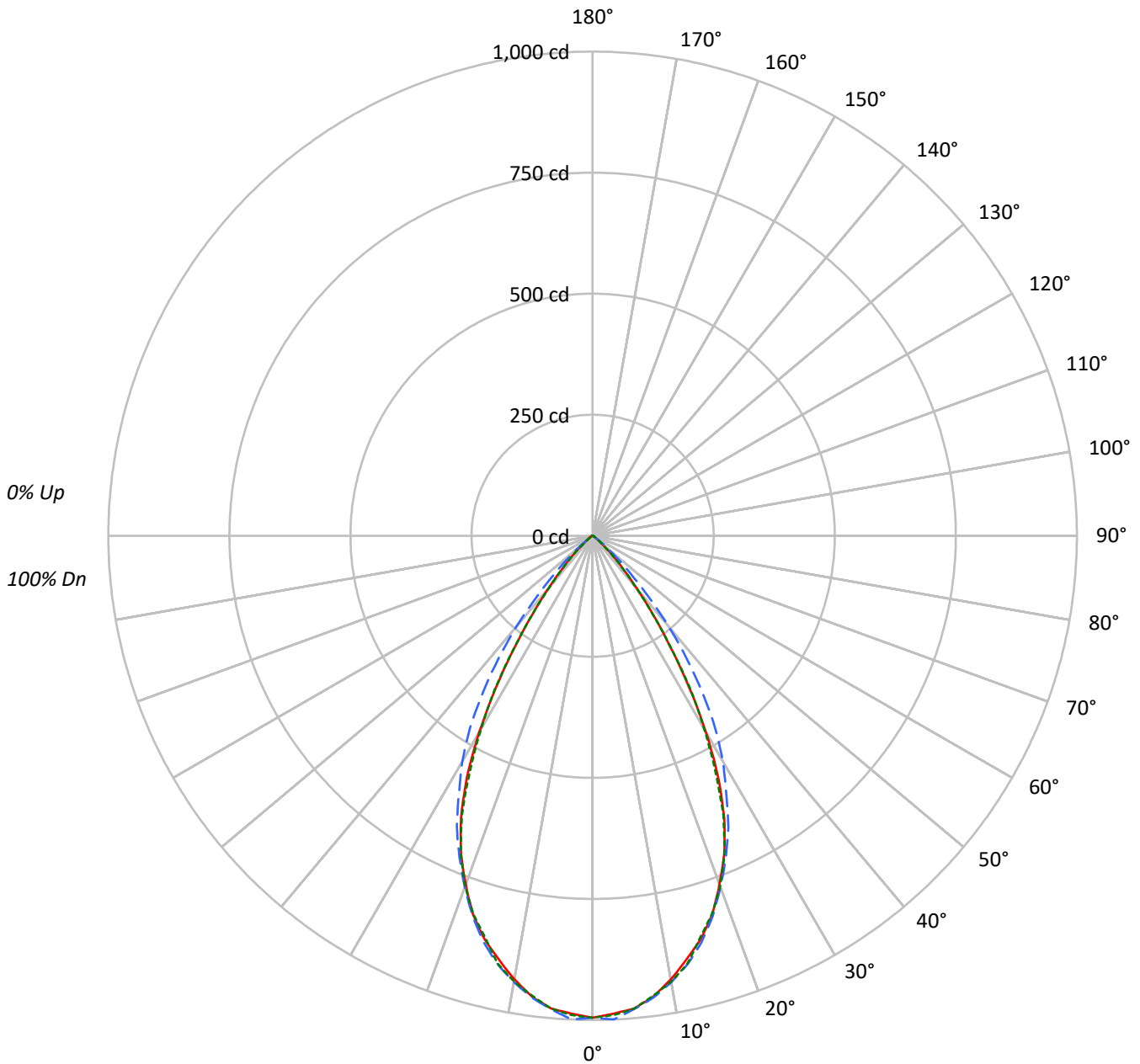
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 919.0 lumens
Efficiency: N/A
Efficacy: 93.8 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): 9.8
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	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°	96045	96045	96045
5°	94940	95066	94940
10°	91148	91707	91579
15°	86167	86797	85728
20°	78644	79219	79034
25°	68477	70628	67998
30°	52065	59886	51296
35°	32781	46563	33076
40°	17684	30746	17370
45°	8365	15188	8283
50°	3137	5689	3137
55°	1497	1817	1379
60°	984	849	984
65°	571	571	571
70°	367	536	367
75°	224	224	224
80°	333	333	333
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.3	10.0
10°-20°	241.9	26.3
20°-30°	295.5	32.2
30°-40°	206.7	22.5
40°-50°	67.7	7.4
50°-60°	10.8	1.2
60°-70°	2.9	0.3
70°-80°	1.0	0.1
80°-90°	0.3	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°	629.6	68.5
0°-40°	836.3	91.0
0°-60°	914.8	99.5
0°-90°	919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	919.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	995	995	995	995	995	
5°	980	981	982	976	980	92
15°	863	866	869	863	858	241
25°	643	653	663	651	639	289
35°	278	329	395	324	281	178
45°	61	76	111	75	61	51
55°	9	10	11	10	8	9
65°	2	3	2	3	2	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
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°	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4
2.5°	987.8	994.8	992.9	997.3	997.3	992.3	993.5	995.4	997.9	999.9	984.7
5°	980.2	986.6	980.9	987.2	983.4	977.7	987.2	982.1	985.3	981.5	984.0
7.5°	960.0	970.1	958.7	966.3	963.8	960.6	964.4	963.2	965.1	961.9	955.0
10°	930.3	938.5	930.9	941.7	936.6	933.5	936.6	939.8	939.1	936.0	939.8
12.5°	896.1	905.6	901.8	908.1	902.5	902.5	910.0	908.1	908.8	906.3	910.7
15°	862.6	869.6	863.9	872.1	869.6	862.6	865.8	865.8	870.8	868.9	863.9
17.5°	820.9	826.6	820.2	822.1	819.6	818.4	831.6	822.8	827.8	824.0	824.7
20°	765.9	768.4	766.5	771.5	768.4	772.2	770.9	769.7	769.7	771.5	767.1
22.5°	710.2	710.2	712.1	713.4	715.9	712.1	719.7	713.4	714.0	718.4	717.2
25°	643.2	641.3	645.7	652.0	654.6	651.4	661.5	656.4	660.2	663.4	656.4
27.5°	561.6	561.6	566.0	576.8	578.7	582.4	596.4	596.4	601.4	597.0	602.1
30°	467.3	474.3	480.0	493.9	498.3	506.6	521.1	528.1	539.5	537.5	535.0
32.5°	370.6	380.1	380.7	395.3	407.3	421.2	440.8	457.2	465.5	471.1	464.8
35°	278.3	284.0	289.0	299.1	319.4	337.7	355.4	376.9	391.5	395.3	389.6
37.5°	203.6	204.9	210.0	219.4	234.6	252.3	273.8	297.2	312.4	318.1	311.8
40°	140.4	141.7	144.2	152.4	165.1	177.7	194.8	218.8	232.7	244.1	235.9
42.5°	94.2	95.5	98.0	104.3	111.3	123.3	136.6	151.8	165.1	170.1	165.7
45°	61.3	61.3	62.6	67.0	70.8	80.3	89.8	99.3	108.1	111.3	108.1
47.5°	36.1	36.7	37.9	41.1	45.5	49.3	56.3	62.6	65.1	67.7	66.4
50°	20.9	20.9	22.8	24.7	27.8	30.3	32.9	35.4	36.7	37.9	36.7
52.5°	11.4	12.0	12.6	13.3	14.6	17.1	19.0	19.0	19.6	20.2	19.6
55°	8.9	8.9	8.9	8.9	9.5	9.5	9.5	10.1	10.1	10.8	10.1
57.5°	6.3	6.3	6.3	7.0	7.0	7.0	6.3	6.3	6.3	6.3	6.3
60°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	4.4	4.4	4.4	4.4
62.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
65°	2.5	2.5	3.2	3.2	3.2	3.2	3.2	2.5	2.5	2.5	2.5
67.5°	1.9	1.9	1.9	1.9	2.5	2.5	1.9	1.9	1.9	1.9	1.9
70°	1.3	1.3	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	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°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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°	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4
2.5°	995.4	984.7	985.9	991.6	988.5	991.6	991.0	991.0
5°	984.7	981.5	976.5	974.5	978.3	986.6	985.3	980.2
7.5°	964.4	956.2	961.9	964.4	961.3	966.3	968.9	958.1
10°	940.4	937.2	936.0	937.2	936.0	941.0	934.7	934.7
12.5°	906.3	901.2	901.2	908.8	904.3	900.6	905.6	905.0
15°	872.1	862.0	862.0	864.5	866.4	863.9	864.5	858.2
17.5°	821.5	818.4	813.9	820.9	822.8	820.2	822.1	819.0
20°	774.1	774.1	765.9	769.0	771.5	773.4	774.7	769.7
22.5°	713.4	714.6	708.9	715.3	717.2	710.8	712.1	710.8
25°	657.7	657.1	652.6	650.1	651.4	648.9	648.2	638.7
27.5°	596.4	590.0	580.6	583.1	572.3	563.5	563.5	548.9
30°	530.0	519.2	506.6	493.9	484.4	474.3	468.6	460.4
32.5°	452.2	437.6	421.8	404.7	394.0	378.8	370.6	375.0
35°	375.0	353.5	332.0	315.0	298.5	289.6	279.5	280.8
37.5°	300.4	270.0	251.1	232.7	218.8	207.4	203.0	201.7
40°	219.4	195.4	176.4	163.2	153.7	144.8	139.8	137.9
42.5°	151.8	134.7	119.5	108.8	102.5	96.8	94.2	93.6
45°	98.7	88.5	78.4	70.8	65.8	62.0	61.3	60.7
47.5°	62.0	56.9	50.6	44.9	40.5	37.9	36.1	36.1
50°	35.4	33.5	30.3	27.2	24.7	23.4	21.5	20.9
52.5°	19.0	19.0	17.7	15.2	13.3	12.0	12.0	11.4
55°	10.1	10.1	9.5	9.5	8.9	8.9	8.9	8.2
57.5°	6.3	6.3	7.0	7.0	6.3	6.3	6.3	6.3
60°	4.4	5.1	5.1	5.1	5.1	5.1	5.1	5.1
62.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
65°	2.5	3.2	3.2	3.2	3.2	2.5	2.5	2.5
67.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
70°	1.9	1.9	1.9	1.9	1.9	1.3	1.3	1.3
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)