

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 EX4C109050 4LBSQLI**

Issue Date: 2/9/2022



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 EX4C109050 4LBSQLI
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Summary

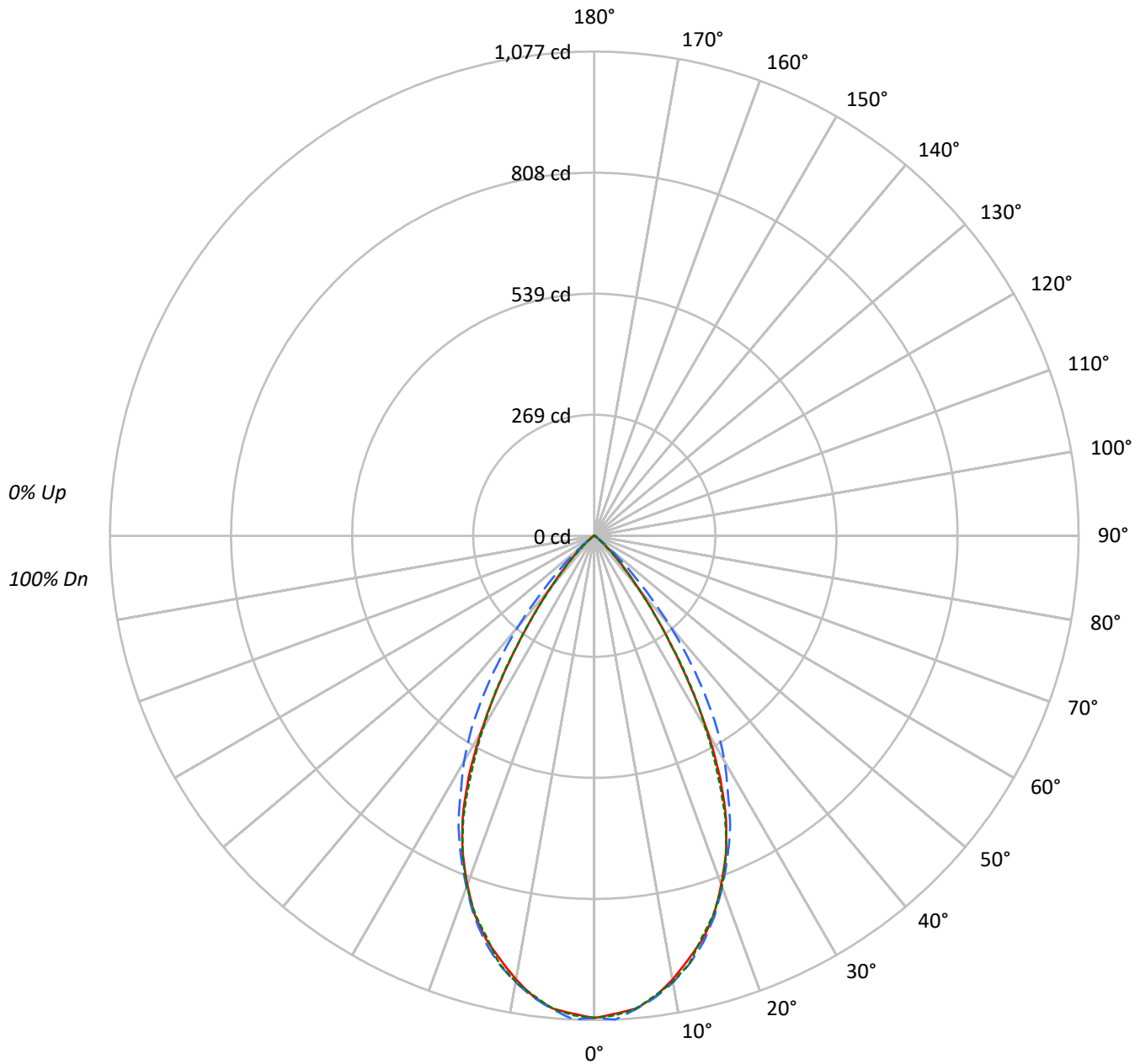
Lumens per Lamp: N/A
Luminaire Lumens: 990.0 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	113	111	108	106	111	108	106	104	104	103	101		101	99	98		97
2	108	103	99	95	105	101	97	94	98	95	92		95	92	90		92
3	102	96	91	87	100	94	90	86	92	88	84		89	86	83		87
4	97	89	84	79	95	88	83	79	86	81	78		84	80	77		82
5	92	83	77	73	90	82	77	73	81	76	72		79	75	71		77
6	87	78	72	68	86	77	71	67	76	71	67		74	70	66		73
7	83	73	67	63	81	73	67	63	71	66	62		70	65	62		69
8	79	69	63	59	77	68	62	58	67	62	58		66	61	58		65
9	75	65	59	55	74	64	59	55	63	58	55		63	58	54		62
10	71	61	55	51	70	61	55	51	60	55	51		59	54	51		58

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	103465	103465	103465
5°	102281	102407	102281
10°	98193	98791	98653
15°	92830	93510	92351
20°	84712	85338	85133
25°	73769	76090	73258
30°	56098	64521	55262
35°	35314	50155	35632
40°	19045	33127	18705
45°	9020	16361	8924
50°	3377	6140	3377
55°	1598	1951	1497
60°	1042	926	1042
65°	616	616	616
70°	395	592	395
75°	261	261	261
80°	389	389	389
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	10.0
10°-20°	260.6	26.3
20°-30°	318.3	32.2
30°-40°	222.6	22.5
40°-50°	73.0	7.4
50°-60°	11.6	1.2
60°-70°	3.2	0.3
70°-80°	1.1	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°	678.3	68.5
0°-40°	900.9	91.0
0°-60°	985.5	99.5
0°-90°	990.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	990.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1056	1056	1057	1051	1056	99
15°	929	933	936	930	924	259
25°	693	703	715	702	688	311
35°	300	354	426	348	302	191
45°	66	81	120	80	65	55
55°	10	10	12	10	9	9
65°	3	3	3	3	3	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°	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1064.2	1071.7	1069.6	1074.4	1074.4	1068.9	1070.3	1072.3	1075.0	1077.1	1060.7
5°	1056.0	1062.8	1056.6	1063.5	1059.4	1053.3	1063.5	1058.0	1061.4	1057.3	1060.1
7.5°	1034.2	1045.1	1032.8	1041.0	1038.3	1034.8	1038.9	1037.6	1039.6	1036.2	1028.7
10°	1002.2	1011.0	1002.8	1014.4	1009.0	1005.6	1009.0	1012.4	1011.7	1008.3	1012.4
12.5°	965.4	975.6	971.5	978.3	972.2	972.2	980.4	978.3	979.0	976.3	981.0
15°	929.3	936.8	930.6	939.5	936.8	929.3	932.7	932.7	938.1	936.1	930.6
17.5°	884.3	890.4	883.6	885.7	882.9	881.6	895.9	886.3	891.8	887.7	888.4
20°	825.0	827.8	825.7	831.1	827.8	831.8	830.5	829.1	829.1	831.1	826.4
22.5°	765.1	765.1	767.1	768.5	771.2	767.1	775.3	768.5	769.2	773.9	772.6
25°	692.9	690.8	695.6	702.4	705.1	701.7	712.6	707.2	711.2	714.7	707.2
27.5°	605.0	605.0	609.7	621.3	623.4	627.4	642.4	642.4	647.9	643.1	648.6
30°	503.5	511.0	517.1	532.1	536.8	545.7	561.4	568.9	581.1	579.1	576.3
32.5°	399.2	409.5	410.1	425.8	438.7	453.7	474.8	492.6	501.4	507.5	500.7
35°	299.8	305.9	311.3	322.2	344.0	363.8	382.9	406.0	421.7	425.8	419.7
37.5°	219.4	220.7	226.2	236.4	252.7	271.8	295.0	320.2	336.6	342.7	335.9
40°	151.2	152.6	155.3	164.2	177.8	191.4	209.8	235.7	250.7	263.0	254.1
42.5°	101.5	102.9	105.6	112.4	119.9	132.8	147.2	163.5	177.8	183.3	178.5
45°	66.1	66.1	67.4	72.2	76.3	86.5	96.7	107.0	116.5	119.9	116.5
47.5°	38.8	39.5	40.9	44.3	49.0	53.1	60.6	67.4	70.2	72.9	71.5
50°	22.5	22.5	24.5	26.6	30.0	32.7	35.4	38.1	39.5	40.9	39.5
52.5°	12.3	13.0	13.6	14.3	15.7	18.4	20.4	20.4	21.1	21.8	21.1
55°	9.5	9.5	9.5	9.5	10.2	10.2	10.2	10.9	10.9	11.6	10.9
57.5°	6.8	6.8	6.8	7.5	7.5	7.5	6.8	6.8	6.8	6.8	6.8
60°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	4.8	4.8	4.8	4.8
62.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
65°	2.7	2.7	3.4	3.4	3.4	3.4	3.4	2.7	2.7	2.7	2.7
67.5°	2.1	2.1	2.1	2.1	2.7	2.7	2.1	2.1	2.1	2.1	2.1
70°	1.4	1.4	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
72.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	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°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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°	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1072.3	1060.7	1062.1	1068.2	1064.8	1068.2	1067.6	1067.6
5°	1060.7	1057.3	1051.9	1049.8	1053.9	1062.8	1061.4	1056.0
7.5°	1038.9	1030.1	1036.2	1038.9	1035.5	1041.0	1043.7	1032.1
10°	1013.1	1009.7	1008.3	1009.7	1008.3	1013.7	1006.9	1006.9
12.5°	976.3	970.8	970.8	979.0	974.2	970.1	975.6	974.9
15°	939.5	928.6	928.6	931.3	933.3	930.6	931.3	924.5
17.5°	885.0	881.6	876.8	884.3	886.3	883.6	885.7	882.2
20°	833.9	833.9	825.0	828.4	831.1	833.2	834.6	829.1
22.5°	768.5	769.8	763.7	770.5	772.6	765.8	767.1	765.8
25°	708.5	707.8	703.1	700.3	701.7	699.0	698.3	688.1
27.5°	642.4	635.6	625.4	628.1	616.5	607.0	607.0	591.3
30°	570.9	559.3	545.7	532.1	521.9	511.0	504.8	496.0
32.5°	487.1	471.5	454.4	436.0	424.4	408.1	399.2	404.0
35°	404.0	380.8	357.7	339.3	321.6	312.0	301.1	302.5
37.5°	323.6	290.9	270.5	250.7	235.7	223.5	218.7	217.3
40°	236.4	210.5	190.1	175.8	165.6	156.0	150.6	148.5
42.5°	163.5	145.1	128.7	117.2	110.4	104.2	101.5	100.8
45°	106.3	95.4	84.5	76.3	70.9	66.8	66.1	65.4
47.5°	66.8	61.3	54.5	48.4	43.6	40.9	38.8	38.8
50°	38.1	36.1	32.7	29.3	26.6	25.2	23.2	22.5
52.5°	20.4	20.4	19.1	16.3	14.3	13.0	13.0	12.3
55°	10.9	10.9	10.2	10.2	9.5	9.5	9.5	8.9
57.5°	6.8	6.8	7.5	7.5	6.8	6.8	6.8	6.8
60°	4.8	5.4	5.4	5.4	5.4	5.4	5.4	5.4
62.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
65°	2.7	3.4	3.4	3.4	3.4	2.7	2.7	2.7
67.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
70°	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4
72.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)