

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: P563844

Luminaire Tested: **LD4C45D010 EX4C459030 4LBSQLI**

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P563844
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: LD4C45D010 EX4C459030 4LBSQLI
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

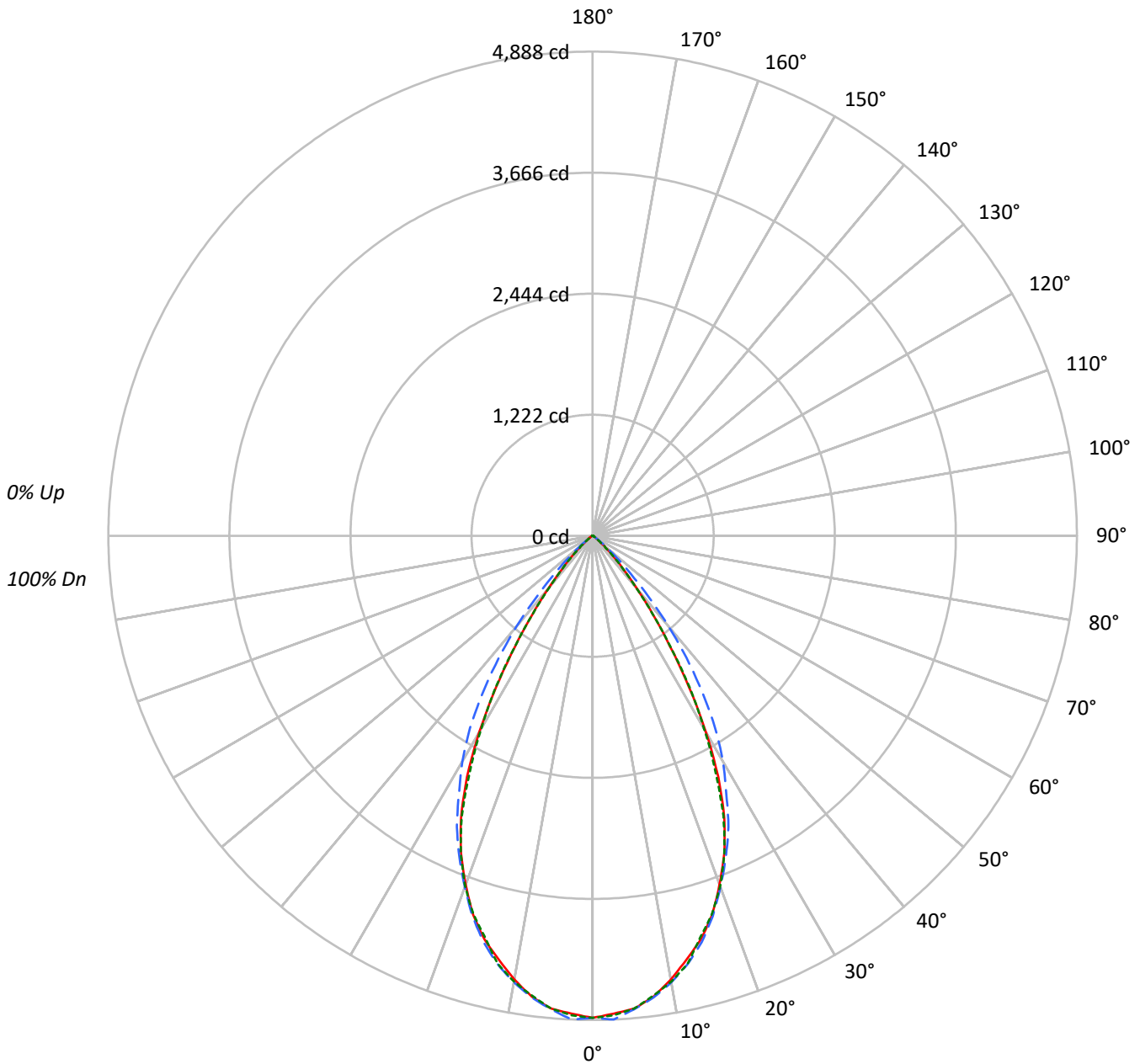
Lumens per Lamp: N/A
Luminaire Lumens: 4493.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 49.6
Input Voltage (V):
Input Current (A_{in}): 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

TEST NUMBER: P563844

CATALOG NUMBER: LD4C45D010 EX4C459030 4LBSQLI

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°	469573	469573	469573
5°	464180	464771	464180
10°	445611	448345	447747
15°	421277	424364	419110
20°	384470	387324	386369
25°	334775	345294	332465
30°	254563	292801	250786
35°	160243	227631	161692
40°	86457	150330	84895
45°	40923	74259	40486
50°	15311	27830	15311
55°	7267	8849	6779
60°	4767	4188	4767
65°	2831	2831	2831
70°	1749	2652	1749
75°	1193	1193	1193
80°	1778	1778	1778
85°	0	0	0



TEST NUMBER: P563844

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	451.2	10.0
10°-20°	1182.5	26.3
20°-30°	1444.6	32.2
30°-40°	1010.4	22.5
40°-50°	331.1	7.4
50°-60°	52.6	1.2
60°-70°	14.4	0.3
70°-80°	4.9	0.1
80°-90°	1.4	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°	3078.3	68.5
0°-40°	4088.7	91.0
0°-60°	4472.4	99.5
0°-90°	4493.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4493.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4867	4867	4867	4867	4867	
5°	4792	4794	4798	4769	4792	449
15°	4217	4234	4248	4220	4196	1176
25°	3144	3192	3243	3185	3123	1412
35°	1360	1606	1932	1582	1373	868
45°	300	370	544	365	297	252
55°	43	46	53	46	40	43
65°	12	16	12	16	12	14
75°	3	3	3	3	3	5
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P563844

CATALOG NUMBER: LD4C45D010 EX4C459030 4LBSQLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6
2.5°	4829.5	4863.5	4854.2	4875.9	4875.9	4851.2	4857.3	4866.6	4879.0	4888.3	4814.0
5°	4792.4	4823.4	4795.4	4826.3	4807.8	4780.0	4826.3	4801.6	4817.2	4798.5	4810.9
7.5°	4693.5	4742.9	4687.3	4724.4	4712.1	4696.5	4715.0	4708.9	4718.2	4702.7	4668.7
10°	4548.1	4588.4	4551.3	4603.7	4579.0	4563.7	4579.0	4594.6	4591.4	4576.0	4594.6
12.5°	4381.2	4427.5	4409.0	4439.9	4412.1	4412.1	4449.2	4439.9	4443.0	4430.6	4452.3
15°	4217.3	4251.4	4223.5	4263.7	4251.4	4217.3	4232.7	4232.7	4257.6	4248.2	4223.5
17.5°	4013.3	4041.0	4010.1	4019.5	4007.1	4001.0	4065.7	4022.5	4047.2	4028.7	4031.9
20°	3744.3	3756.6	3747.4	3772.1	3756.6	3775.2	3769.0	3762.8	3762.8	3772.1	3750.5
22.5°	3472.1	3472.1	3481.5	3487.7	3500.0	3481.5	3518.6	3487.7	3490.7	3512.4	3506.2
25°	3144.5	3135.1	3156.8	3187.7	3200.1	3184.5	3234.1	3209.4	3227.9	3243.3	3209.4
27.5°	2745.6	2745.6	2767.2	2819.8	2829.0	2847.5	2915.6	2915.6	2940.3	2918.8	2943.5
30°	2284.8	2318.9	2346.7	2414.7	2436.4	2476.7	2547.7	2581.8	2637.4	2628.0	2615.6
32.5°	1811.8	1858.2	1861.3	1932.5	1991.2	2059.1	2155.0	2235.4	2275.7	2303.4	2272.5
35°	1360.4	1388.3	1413.0	1462.4	1561.4	1651.1	1737.7	1842.8	1913.9	1932.5	1904.6
37.5°	995.6	1001.8	1026.6	1072.8	1147.0	1233.7	1338.8	1453.2	1527.4	1555.2	1524.3
40°	686.4	692.5	704.9	745.2	807.0	868.8	952.3	1069.8	1137.8	1193.5	1153.2
42.5°	460.7	466.8	479.2	510.1	544.2	602.9	667.8	742.0	807.0	831.8	810.0
45°	299.9	299.9	306.1	327.8	346.4	392.6	439.1	485.4	528.6	544.2	528.6
47.5°	176.3	179.3	185.4	201.0	222.6	241.1	275.2	306.1	318.5	330.8	324.7
50°	102.0	102.0	111.3	120.6	136.0	148.4	160.7	173.1	179.3	185.4	179.3
52.5°	55.6	58.8	61.8	65.0	71.2	83.5	92.8	92.8	95.9	98.9	95.9
55°	43.2	43.2	43.2	43.2	46.4	46.4	46.4	49.4	49.4	52.6	49.4
57.5°	30.9	30.9	30.9	34.1	34.1	34.1	30.9	30.9	30.9	30.9	30.9
60°	24.7	24.7	24.7	24.7	24.7	24.7	24.7	21.7	21.7	21.7	21.7
62.5°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
65°	12.4	12.4	15.6	15.6	15.6	15.6	15.6	12.4	12.4	12.4	12.4
67.5°	9.4	9.4	9.4	9.4	12.4	12.4	9.4	9.4	9.4	9.4	9.4
70°	6.2	6.2	6.2	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
72.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
75°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
77.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	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°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P563844

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6	4866.6
2.5°	4866.6	4814.0	4820.2	4848.1	4832.5	4848.1	4845.0	4845.0
5°	4814.0	4798.5	4773.8	4764.6	4783.1	4823.4	4817.2	4792.4
7.5°	4715.0	4674.9	4702.7	4715.0	4699.7	4724.4	4736.8	4684.1
10°	4597.5	4582.2	4576.0	4582.2	4576.0	4600.7	4569.9	4569.9
12.5°	4430.6	4405.9	4405.9	4443.0	4421.4	4402.7	4427.5	4424.5
15°	4263.7	4214.2	4214.2	4226.6	4235.8	4223.5	4226.6	4195.6
17.5°	4016.3	4001.0	3979.2	4013.3	4022.5	4010.1	4019.5	4003.9
20°	3784.4	3784.4	3744.3	3759.7	3772.1	3781.3	3787.5	3762.8
22.5°	3487.7	3493.9	3465.9	3496.8	3506.2	3475.3	3481.5	3475.3
25°	3215.5	3212.4	3190.8	3178.4	3184.5	3172.2	3169.2	3122.8
27.5°	2915.6	2884.7	2838.4	2850.7	2798.1	2754.9	2754.9	2683.7
30°	2590.9	2538.4	2476.7	2414.7	2368.3	2318.9	2291.0	2250.9
32.5°	2210.7	2139.6	2062.3	1978.8	1926.3	1852.1	1811.8	1833.5
35°	1833.5	1728.3	1623.2	1539.8	1459.3	1416.0	1366.6	1372.7
37.5°	1468.6	1320.2	1227.6	1137.8	1069.8	1014.1	992.5	986.3
40°	1072.8	955.4	862.7	797.7	751.3	708.1	683.4	674.0
42.5°	742.0	658.6	584.3	531.8	500.9	473.0	460.7	457.6
45°	482.4	432.9	383.5	346.4	321.6	303.0	299.9	296.7
47.5°	303.0	278.2	247.3	219.5	197.8	185.4	176.3	176.3
50°	173.1	163.9	148.4	132.9	120.6	114.4	105.1	102.0
52.5°	92.8	92.8	86.6	74.2	65.0	58.8	58.8	55.6
55°	49.4	49.4	46.4	46.4	43.2	43.2	43.2	40.3
57.5°	30.9	30.9	34.1	34.1	30.9	30.9	30.9	30.9
60°	21.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
62.5°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
65°	12.4	15.6	15.6	15.6	15.6	12.4	12.4	12.4
67.5°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
70°	9.4	9.4	9.4	9.4	9.4	6.2	6.2	6.2
72.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
75°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
77.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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)