

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: P859011

Luminaire Tested: **LD4C50D010 EU4509040 4LBMDSWH**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P859011  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2309-186-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C50D010 EU4509040 4LBMDSWH  
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

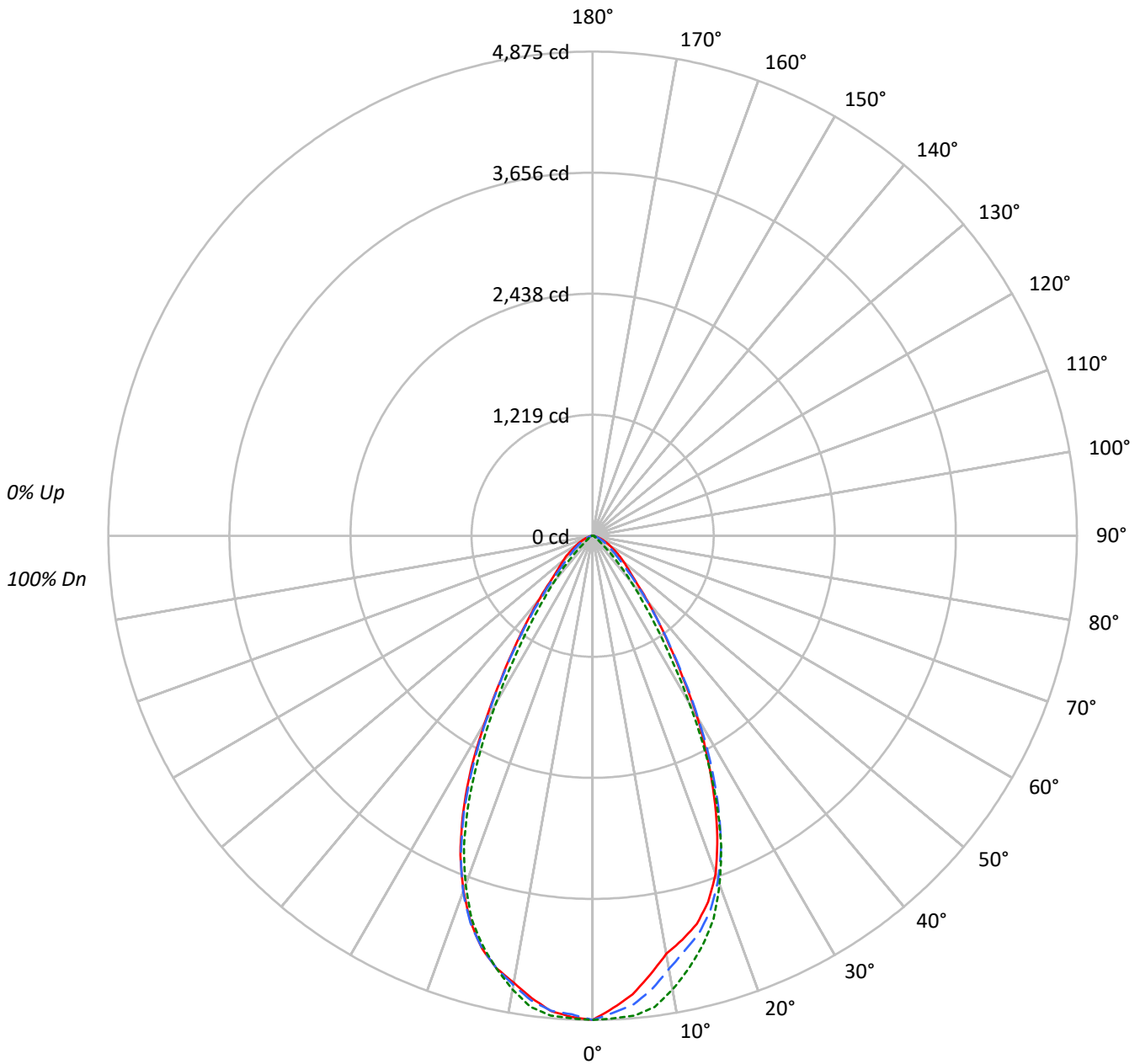
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4438.0 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 58.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92																			
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85																			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78																			
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72																			
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67																			
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62																			
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58																			
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55																			
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51																			
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	598923	598923	598923
5°	571490	597955	592393
10°	533026	578572	570126
15°	514714	543446	547274
20°	473467	488228	497092
25°	392415	399558	418956
30°	298528	276100	307068
35°	202123	165424	204388
40°	137649	94781	133431
45°	95488	47744	90258
50°	77712	19418	72666
55°	62886	12102	57253
60°	49952	9239	45333
65°	39389	7674	35029
70°	29742	6753	27048
75°	21455	5364	19651
80°	15989	5306	13301
85°	10572	5356	10572



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	448.2	10.1
10°-20°	1177.7	26.5
20°-30°	1351.2	30.4
30°-40°	820.8	18.5
40°-50°	351.8	7.9
50°-60°	168.8	3.8
60°-70°	82.1	1.8
70°-80°	30.5	0.7
80°-90°	7.0	0.2
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°	2977.1	67.1
0°-40°	3797.9	85.6
0°-60°	4318.5	97.3
0°-90°	4438.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4438.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4875	4875	4875	4875	4875	
5°	4634	4736	4849	4800	4804	431
15°	4047	4141	4273	4299	4303	1127
25°	2895	2989	2948	3061	3091	1313
35°	1348	1366	1103	1333	1363	864
45°	550	489	275	440	520	447
55°	294	218	56	196	267	265
65°	136	90	26	83	120	137
75°	45	30	11	26	41	50
85°	8	8	4	4	8	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	4875.1	4875.1	4875.1	4875.1	4875.1	4875.1	4875.1	4875.1	4875.1
2.5°	4758.4	4811.1	4807.3	4852.5	4863.8	4852.5	4822.4	4852.5	4848.7
5°	4634.1	4694.4	4735.8	4811.1	4848.7	4841.2	4799.8	4807.3	4803.6
7.5°	4453.5	4528.7	4600.3	4713.2	4784.7	4781.0	4720.7	4709.4	4694.4
10°	4272.8	4344.3	4427.1	4543.8	4637.9	4653.0	4592.7	4577.7	4570.2
12.5°	4167.3	4223.8	4280.3	4381.9	4464.7	4494.9	4461.0	4464.7	4461.0
15°	4046.9	4103.3	4141.0	4216.3	4272.8	4314.2	4299.1	4321.7	4302.9
17.5°	3866.2	3933.9	3949.0	4005.5	4046.9	4073.2	4088.3	4110.9	4080.8
20°	3621.5	3674.2	3693.0	3715.6	3734.4	3768.3	3813.5	3836.1	3802.2
22.5°	3278.9	3380.6	3376.8	3365.5	3384.3	3395.6	3467.1	3504.8	3478.4
25°	2894.9	3000.3	2989.0	2943.9	2947.6	2970.2	3060.6	3109.5	3090.7
27.5°	2492.1	2590.0	2563.7	2477.1	2454.5	2488.4	2605.1	2661.5	2650.2
30°	2104.4	2168.4	2127.0	1972.6	1946.3	1987.7	2138.3	2194.7	2164.6
32.5°	1686.5	1735.5	1716.6	1528.4	1483.2	1524.6	1701.6	1754.3	1720.4
35°	1347.7	1392.9	1366.5	1144.4	1103.0	1148.2	1332.6	1392.9	1362.8
37.5°	1080.4	1114.3	1080.4	843.3	805.6	850.8	1027.7	1106.8	1069.1
40°	858.3	884.7	839.5	621.1	591.0	613.6	779.3	858.3	832.0
42.5°	677.6	696.4	647.5	455.5	421.6	451.7	587.3	658.8	643.7
45°	549.6	549.6	489.4	316.2	274.8	304.9	440.5	515.7	519.5
47.5°	470.6	459.3	384.0	210.8	158.1	199.5	350.1	429.2	440.5
50°	406.6	391.5	316.2	154.3	101.6	143.1	289.9	368.9	380.2
52.5°	350.1	338.8	263.5	120.5	71.5	109.2	244.7	320.0	331.3
55°	293.6	286.1	218.3	94.1	56.5	82.8	195.8	259.8	267.3
57.5°	240.9	229.6	176.9	79.1	45.2	67.8	161.9	214.6	222.1
60°	203.3	192.0	143.1	64.0	37.6	52.7	131.8	176.9	184.5
62.5°	169.4	158.1	116.7	52.7	30.1	45.2	105.4	143.1	150.6
65°	135.5	128.0	90.3	41.4	26.4	33.9	82.8	112.9	120.5
67.5°	109.2	101.6	71.5	33.9	22.6	26.4	64.0	90.3	97.9
70°	82.8	75.3	52.7	26.4	18.8	22.6	48.9	67.8	75.3
72.5°	60.2	56.5	41.4	22.6	15.1	18.8	33.9	48.9	56.5
75°	45.2	41.4	30.1	15.1	11.3	15.1	26.4	37.6	41.4
77.5°	30.1	30.1	22.6	11.3	11.3	11.3	18.8	26.4	26.4
80°	22.6	18.8	15.1	7.5	7.5	7.5	11.3	18.8	18.8
82.5°	15.1	11.3	11.3	7.5	7.5	7.5	7.5	11.3	11.3
85°	7.5	7.5	7.5	3.8	3.8	3.8	3.8	7.5	7.5
87.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
90°	0.0	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)