

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: P858161

Luminaire Tested: **LD4C45D010 EU4459040 4LBMDSWH**

Issue Date: 4/12/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P858161  
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: LD4C45D010 EU4459040 4LBMDSWH  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

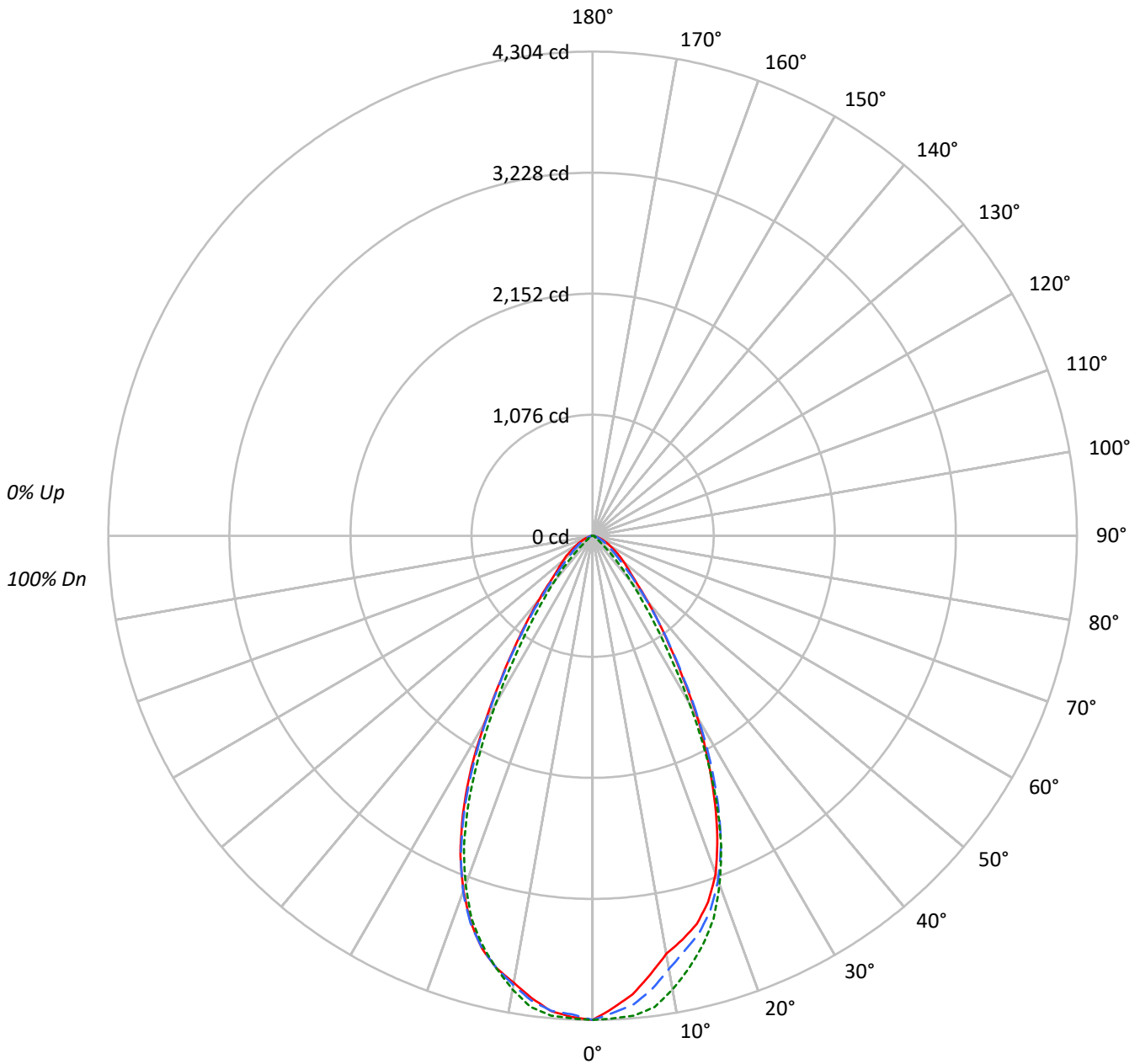
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3918.0 lumens  
Efficiency: N/A  
Efficacy: 79.0 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): 49.6  
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°	528749	528749	528749
5°	504538	527895	522975
10°	470565	510784	503324
15°	454402	479763	483146
20°	417995	431030	438848
25°	346435	352752	369872
30°	263546	243742	271092
35°	178442	146047	180437
40°	121515	83683	117795
45°	84299	42150	79678
50°	68595	17144	64161
55°	55518	10688	50548
60°	44104	8157	40001
65°	34767	6773	30930
70°	26257	5963	23887
75°	18939	4747	17373
80°	14079	4669	11744
85°	9303	4652	9303



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	395.7	10.1
10°-20°	1039.7	26.5
20°-30°	1192.9	30.4
30°-40°	724.7	18.5
40°-50°	310.6	7.9
50°-60°	149.0	3.8
60°-70°	72.4	1.8
70°-80°	26.9	0.7
80°-90°	6.2	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°	2628.3	67.1
0°-40°	3352.9	85.6
0°-60°	3812.5	97.3
0°-90°	3918.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3918.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4304	4304	4304	4304	4304	
5°	4091	4181	4281	4237	4241	380
15°	3573	3656	3772	3795	3799	995
25°	2556	2639	2602	2702	2729	1159
35°	1190	1206	974	1176	1203	763
45°	485	432	243	389	459	394
55°	259	193	50	173	236	234
65°	120	80	23	73	106	121
75°	40	27	10	23	37	44
85°	7	7	3	3	7	9
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°	4303.9	4303.9	4303.9	4303.9	4303.9	4303.9	4303.9	4303.9	4303.9
2.5°	4200.8	4247.4	4244.0	4283.9	4293.9	4283.9	4257.3	4283.9	4280.6
5°	4091.2	4144.3	4180.9	4247.4	4280.6	4274.0	4237.4	4244.0	4240.7
7.5°	3931.6	3998.1	4061.3	4161.0	4224.1	4220.8	4167.6	4157.6	4144.3
10°	3772.1	3835.3	3908.4	4011.4	4094.5	4107.8	4054.6	4041.3	4034.7
12.5°	3679.1	3728.9	3778.8	3868.5	3941.6	3968.2	3938.3	3941.6	3938.3
15°	3572.7	3622.6	3655.8	3722.3	3772.1	3808.7	3795.4	3815.3	3798.7
17.5°	3413.2	3473.0	3486.3	3536.1	3572.7	3596.0	3609.3	3629.2	3602.6
20°	3197.2	3243.7	3260.3	3280.2	3296.9	3326.8	3366.7	3386.6	3356.7
22.5°	2894.7	2984.5	2981.1	2971.2	2987.8	2997.8	3060.9	3094.1	3070.9
25°	2555.7	2648.8	2638.8	2598.9	2602.3	2622.2	2702.0	2745.2	2728.6
27.5°	2200.1	2286.5	2263.3	2186.8	2166.9	2196.8	2299.8	2349.7	2339.7
30°	1857.8	1914.3	1877.7	1741.5	1718.2	1754.8	1887.7	1937.6	1911.0
32.5°	1488.9	1532.1	1515.5	1349.3	1309.4	1346.0	1502.2	1548.7	1518.8
35°	1189.8	1229.7	1206.4	1010.3	973.8	1013.7	1176.5	1229.7	1203.1
37.5°	953.8	983.7	953.8	744.5	711.2	751.1	907.3	977.1	943.9
40°	757.7	781.0	741.1	548.4	521.8	541.7	688.0	757.7	734.5
42.5°	598.2	614.8	571.6	402.1	372.2	398.8	518.5	581.6	568.3
45°	485.2	485.2	432.0	279.2	242.6	269.2	388.8	455.3	458.6
47.5°	415.4	405.5	339.0	186.1	139.6	176.1	309.1	378.9	388.8
50°	358.9	345.6	279.2	136.3	89.7	126.3	255.9	325.7	335.7
52.5°	309.1	299.1	232.6	106.4	63.1	96.4	216.0	282.5	292.5
55°	259.2	252.6	192.8	83.1	49.9	73.1	172.8	229.3	236.0
57.5°	212.7	202.7	156.2	69.8	39.9	59.8	142.9	189.4	196.1
60°	179.5	169.5	126.3	56.5	33.2	46.5	116.3	156.2	162.8
62.5°	149.6	139.6	103.0	46.5	26.6	39.9	93.1	126.3	132.9
65°	119.6	113.0	79.8	36.6	23.3	29.9	73.1	99.7	106.4
67.5°	96.4	89.7	63.1	29.9	19.9	23.3	56.5	79.8	86.4
70°	73.1	66.5	46.5	23.3	16.6	19.9	43.2	59.8	66.5
72.5°	53.2	49.9	36.6	19.9	13.3	16.6	29.9	43.2	49.9
75°	39.9	36.6	26.6	13.3	10.0	13.3	23.3	33.2	36.6
77.5°	26.6	26.6	19.9	10.0	10.0	10.0	16.6	23.3	23.3
80°	19.9	16.6	13.3	6.6	6.6	6.6	10.0	16.6	16.6
82.5°	13.3	10.0	10.0	6.6	6.6	6.6	6.6	10.0	10.0
85°	6.6	6.6	6.6	3.3	3.3	3.3	3.3	6.6	6.6
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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)