

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: P858160

Luminaire Tested: **LD4C45D010 EU4459040 4LBMDSWGPH**

Issue Date: 4/12/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P858160  
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 4LBMDSWGPH  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH GPH FINISH  
Light Source: -  
Ballast/Driver: -

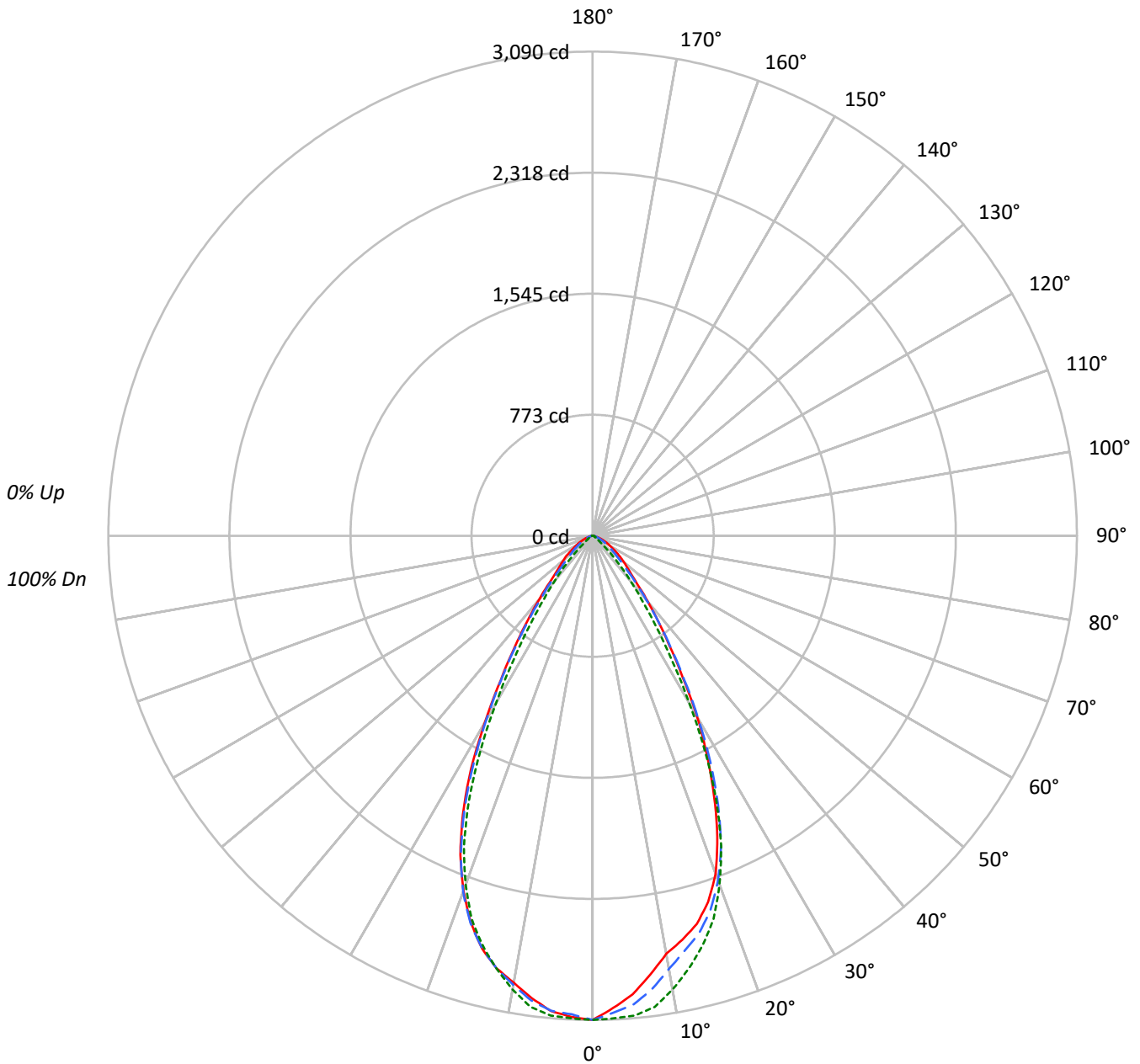
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2813.0 lumens  
Efficiency: N/A  
Efficacy: 56.7 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°	379617	379617	379617
5°	362236	379008	375481
10°	337857	366724	361372
15°	326248	344461	346878
20°	300109	309457	315078
25°	248728	253255	265550
30°	189211	174997	194631
35°	128110	104849	129550
40°	87243	60076	84565
45°	60531	30266	57213
50°	49253	12309	46061
55°	39860	7668	36284
60°	31672	5872	28723
65°	24971	4855	22209
70°	18858	4274	17134
75°	13576	3418	12436
80°	10117	3396	8419
85°	6766	3383	6766



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.1	10.1
10°-20°	746.5	26.5
20°-30°	856.4	30.4
30°-40°	520.3	18.5
40°-50°	223.0	7.9
50°-60°	107.0	3.8
60°-70°	52.0	1.8
70°-80°	19.3	0.7
80°-90°	4.5	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°	1887.0	67.1
0°-40°	2407.3	85.6
0°-60°	2737.2	97.3
0°-90°	2813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2813.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3090	3090	3090	3090	3090	
5°	2937	3002	3073	3042	3045	273
15°	2565	2625	2708	2725	2727	714
25°	1835	1895	1868	1940	1959	832
35°	854	866	699	845	864	547
45°	348	310	174	279	329	283
55°	186	138	36	124	169	168
65°	86	57	17	52	76	87
75°	29	19	7	17	26	31
85°	5	5	2	2	5	6
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°	3090.0	3090.0	3090.0	3090.0	3090.0	3090.0	3090.0	3090.0	3090.0
2.5°	3016.1	3049.5	3047.1	3075.7	3082.9	3075.7	3056.6	3075.7	3073.3
5°	2937.3	2975.5	3001.8	3049.5	3073.3	3068.6	3042.3	3047.1	3044.7
7.5°	2822.8	2870.5	2915.9	2987.4	3032.8	3030.4	2992.2	2985.0	2975.5
10°	2708.3	2753.6	2806.1	2880.1	2939.7	2949.3	2911.1	2901.5	2896.8
12.5°	2641.4	2677.2	2713.0	2777.5	2830.0	2849.0	2827.6	2830.0	2827.6
15°	2565.1	2600.9	2624.7	2672.5	2708.3	2734.5	2725.0	2739.3	2727.3
17.5°	2450.6	2493.5	2503.1	2538.8	2565.1	2581.8	2591.3	2605.7	2586.6
20°	2295.5	2328.9	2340.8	2355.1	2367.0	2388.5	2417.2	2431.5	2410.0
22.5°	2078.3	2142.7	2140.4	2133.2	2145.1	2152.3	2197.6	2221.5	2204.8
25°	1834.9	1901.7	1894.6	1866.0	1868.3	1882.7	1939.9	1970.9	1959.0
27.5°	1579.6	1641.7	1625.0	1570.1	1555.8	1577.2	1651.2	1687.0	1679.8
30°	1333.8	1374.4	1348.2	1250.3	1233.6	1259.9	1355.3	1391.1	1372.0
32.5°	1069.0	1100.0	1088.1	968.8	940.1	966.4	1078.5	1111.9	1090.5
35°	854.2	882.9	866.2	725.4	699.1	727.8	844.7	882.9	863.8
37.5°	684.8	706.3	684.8	534.5	510.6	539.3	651.4	701.5	677.7
40°	544.0	560.7	532.1	393.7	374.6	388.9	493.9	544.0	527.3
42.5°	429.5	441.4	410.4	288.7	267.2	286.3	372.2	417.6	408.0
45°	348.4	348.4	310.2	200.4	174.2	193.3	279.2	326.9	329.3
47.5°	298.3	291.1	243.4	133.6	100.2	126.5	221.9	272.0	279.2
50°	257.7	248.2	200.4	97.8	64.4	90.7	183.7	233.8	241.0
52.5°	221.9	214.8	167.0	76.4	45.3	69.2	155.1	202.8	210.0
55°	186.1	181.3	138.4	59.7	35.8	52.5	124.1	164.6	169.4
57.5°	152.7	145.6	112.1	50.1	28.6	43.0	102.6	136.0	140.8
60°	128.9	121.7	90.7	40.6	23.9	33.4	83.5	112.1	116.9
62.5°	107.4	100.2	74.0	33.4	19.1	28.6	66.8	90.7	95.4
65°	85.9	81.1	57.3	26.2	16.7	21.5	52.5	71.6	76.4
67.5°	69.2	64.4	45.3	21.5	14.3	16.7	40.6	57.3	62.0
70°	52.5	47.7	33.4	16.7	11.9	14.3	31.0	43.0	47.7
72.5°	38.2	35.8	26.2	14.3	9.5	11.9	21.5	31.0	35.8
75°	28.6	26.2	19.1	9.5	7.2	9.5	16.7	23.9	26.2
77.5°	19.1	19.1	14.3	7.2	7.2	7.2	11.9	16.7	16.7
80°	14.3	11.9	9.5	4.8	4.8	4.8	7.2	11.9	11.9
82.5°	9.5	7.2	7.2	4.8	4.8	4.8	4.8	7.2	7.2
85°	4.8	4.8	4.8	2.4	2.4	2.4	2.4	4.8	4.8
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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)