

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: P858162

Luminaire Tested: **LD4C45D010 EU4459040 4LBMDSWLI**

Issue Date: 4/12/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P858162  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2309-186-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C45D010 EU4459040 4LBMDSWLI  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

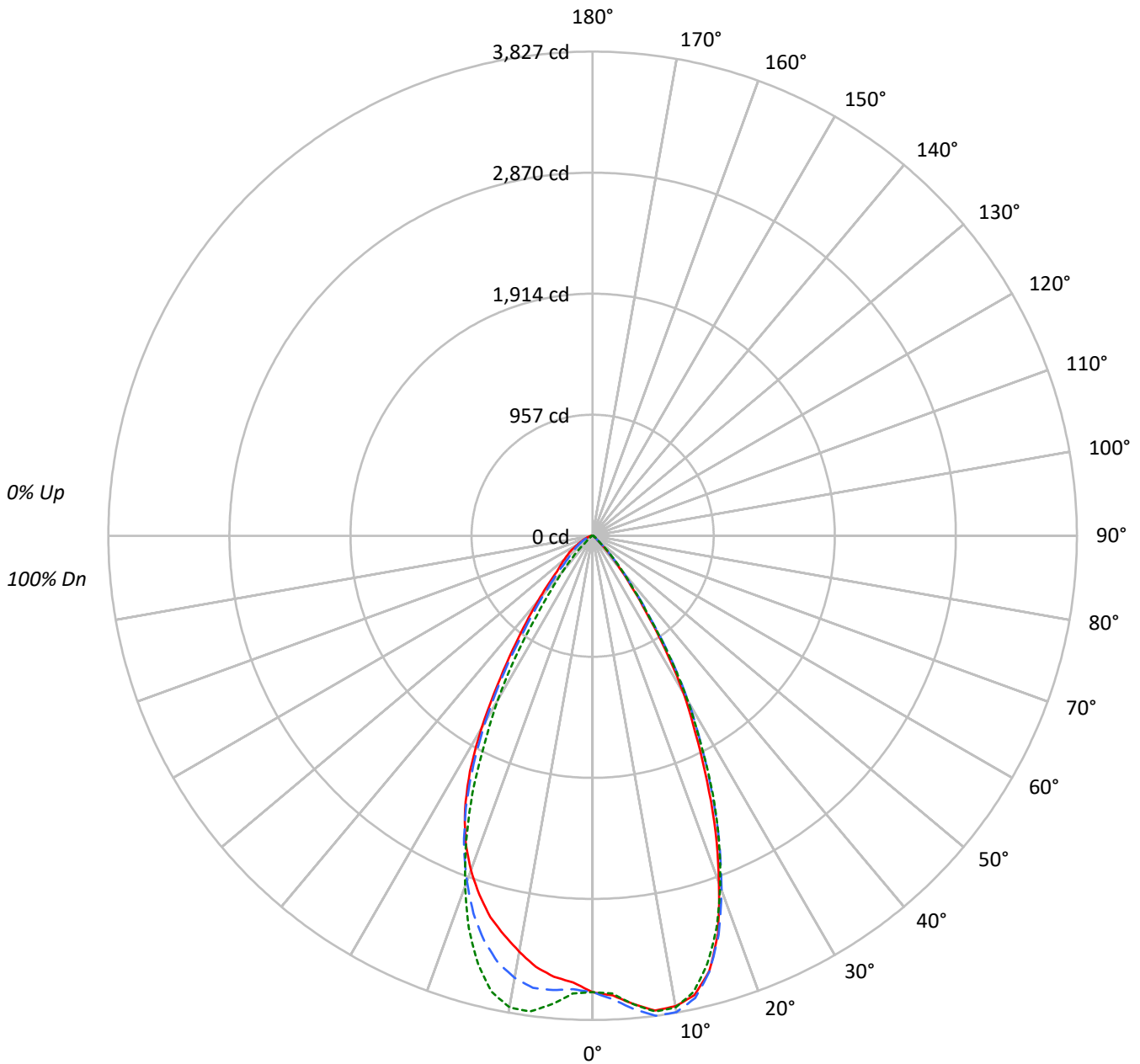
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3207.0 lumens  
Efficiency: N/A  
Efficacy: 64.7 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.9 / 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	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	85	89	86	83	87	84	82	80																			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75																			
5	92	84	78	74	91	83	77	73	81	76	73	79	75	72	78	74	71	70																			
6	88	79	73	68	86	78	72	68	76	71	68	75	71	67	74	70	67	65																			
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61																			
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59	58																			
9	76	66	60	56	75	66	60	56	65	60	56	64	59	56	63	59	56	54																			
10	72	63	57	53	71	62	57	53	61	56	53	61	56	53	60	56	52	51																			

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

	0°	90°	180°
0°	443157	443157	443157
5°	458243	458551	431445
10°	470926	472161	416411
15°	453130	445283	396926
20°	381533	385089	367648
25°	289828	304562	323635
30°	203837	212249	249019
35°	109978	115152	164779
40°	53052	58601	106905
45°	18868	25731	69496
50°	7072	8964	55675
55°	5290	6340	46008
60°	4251	4865	33367
65°	3576	4302	25843
70°	2658	3556	20403
75°	2326	3513	15237
80°	1769	3467	10471
85°	0	3524	6907



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	351.2	11.0
10°-20°	947.5	29.5
20°-30°	1027.8	32.0
30°-40°	570.2	17.8
40°-50°	181.6	5.7
50°-60°	73.2	2.3
60°-70°	37.0	1.2
70°-80°	15.3	0.5
80°-90°	3.2	0.1
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°	2326.4	72.5
0°-40°	2896.7	90.3
0°-60°	3151.5	98.3
0°-90°	3207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3207.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3607	3607	3607	3607	3607	
5°	3716	3755	3718	3605	3498	357
15°	3563	3565	3501	3313	3121	974
25°	2138	2227	2247	2368	2388	977
35°	733	792	768	1015	1099	486
45°	109	128	148	331	400	104
55°	25	25	30	158	215	23
65°	12	12	15	72	89	12
75°	5	5	7	25	32	6
85°	0	0	2	5	5	0
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°	3607.2	3607.2	3607.2	3607.2	3607.2	3607.2	3607.2	3607.2	3607.2
2.5°	3636.8	3668.9	3666.4	3641.7	3622.0	3614.6	3587.4	3555.3	3533.1
5°	3715.8	3755.3	3755.3	3735.5	3718.3	3676.3	3604.7	3535.6	3498.5
7.5°	3784.9	3824.4	3826.9	3812.1	3792.3	3723.2	3604.7	3493.6	3436.8
10°	3775.0	3804.7	3822.0	3807.1	3784.9	3693.6	3547.9	3399.8	3338.0
12.5°	3718.3	3745.4	3742.9	3720.7	3691.1	3597.3	3454.1	3301.0	3231.9
15°	3562.7	3577.5	3565.2	3540.5	3501.0	3429.4	3313.3	3182.5	3120.8
17.5°	3293.6	3313.3	3308.4	3268.9	3254.1	3185.0	3130.6	3029.4	2975.1
20°	2918.3	2980.0	2980.0	2950.4	2945.5	2898.6	2906.0	2851.7	2812.1
22.5°	2540.6	2594.9	2612.2	2599.8	2609.7	2587.5	2656.6	2641.8	2622.0
25°	2138.1	2192.4	2227.0	2222.1	2246.8	2246.8	2367.7	2397.4	2387.5
27.5°	1760.4	1812.2	1851.7	1861.6	1846.8	1873.9	2039.4	2098.6	2098.6
30°	1436.9	1478.9	1515.9	1515.9	1496.2	1515.9	1691.2	1760.4	1755.4
32.5°	1071.5	1118.4	1153.0	1148.1	1130.8	1157.9	1343.1	1412.2	1395.0
35°	733.3	765.4	792.5	782.7	767.8	812.3	1014.7	1101.2	1098.7
37.5°	496.3	525.9	543.2	535.8	530.8	582.7	767.8	864.1	859.2
40°	330.8	350.6	362.9	360.5	365.4	409.8	577.7	666.6	666.6
42.5°	209.9	222.2	234.6	234.6	246.9	293.8	439.5	516.0	516.0
45°	108.6	116.0	128.4	135.8	148.1	197.5	330.8	395.0	400.0
47.5°	51.8	54.3	59.3	61.7	71.6	123.4	254.3	323.4	338.2
50°	37.0	39.5	39.5	39.5	46.9	93.8	214.8	279.0	291.3
52.5°	29.6	29.6	29.6	32.1	37.0	79.0	185.2	242.0	251.8
55°	24.7	24.7	24.7	24.7	29.6	64.2	158.0	207.4	214.8
57.5°	19.8	19.8	19.8	19.8	24.7	51.8	130.9	165.4	167.9
60°	17.3	17.3	17.3	17.3	19.8	44.4	106.2	135.8	135.8
62.5°	14.8	14.8	14.8	14.8	17.3	37.0	88.9	111.1	108.6
65°	12.3	12.3	12.3	12.3	14.8	29.6	71.6	88.9	88.9
67.5°	9.9	9.9	9.9	9.9	12.3	24.7	56.8	71.6	71.6
70°	7.4	7.4	7.4	7.4	9.9	19.8	46.9	56.8	56.8
72.5°	7.4	7.4	7.4	7.4	7.4	14.8	34.6	44.4	42.0
75°	4.9	4.9	4.9	4.9	7.4	12.3	24.7	32.1	32.1
77.5°	4.9	4.9	4.9	4.9	4.9	9.9	19.8	22.2	22.2
80°	2.5	2.5	2.5	2.5	4.9	7.4	12.3	14.8	14.8
82.5°	0.0	2.5	0.0	2.5	2.5	4.9	9.9	9.9	9.9
85°	0.0	0.0	0.0	0.0	2.5	2.5	4.9	7.4	4.9
87.5°	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5
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)