

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: P859009

Luminaire Tested: **LD4C50D010 EU4509040 4LBMDDWLI**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P859009  
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 4LBMDDWLI  
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBMDDW TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

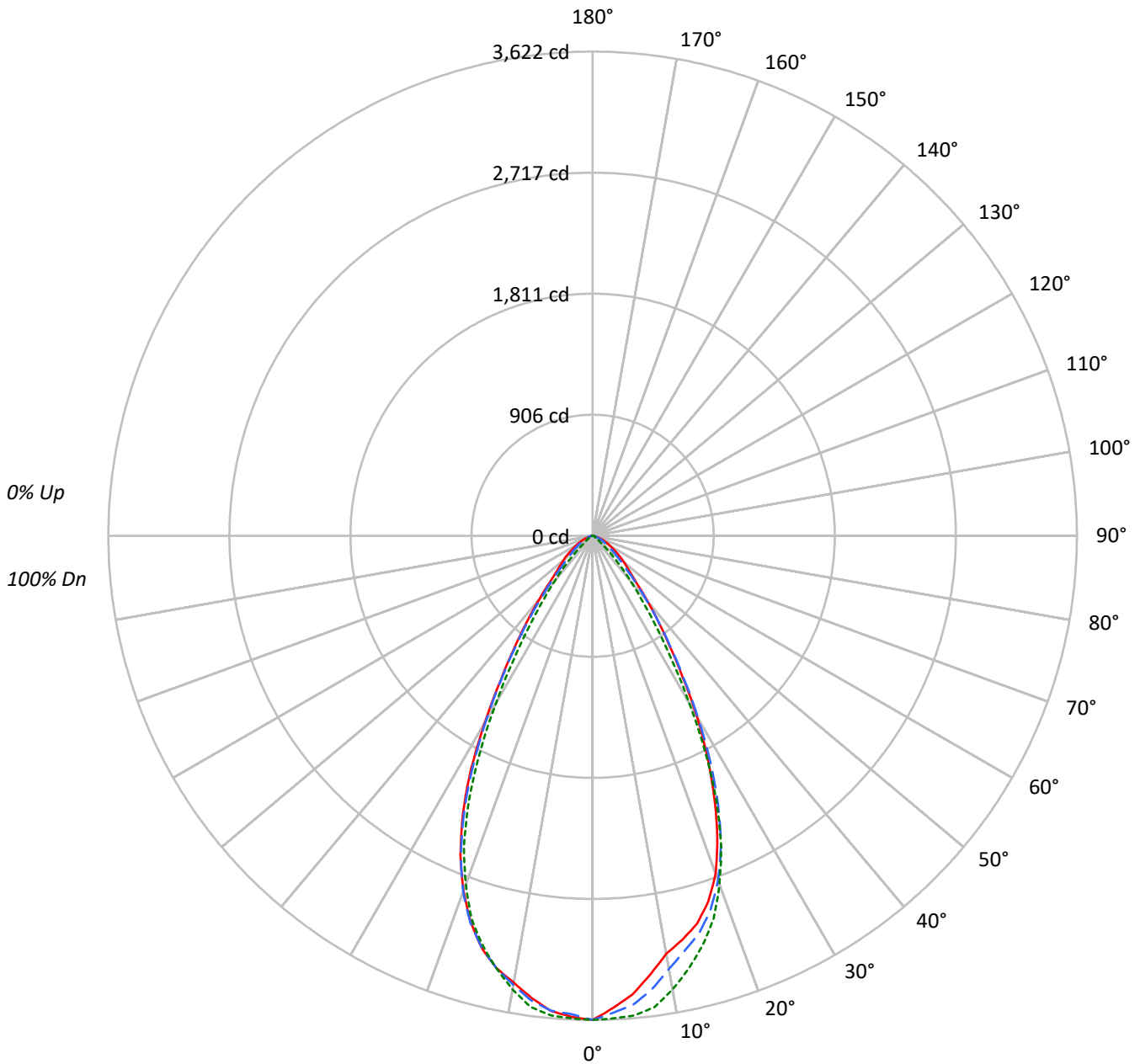
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3297.0 lumens  
Efficiency: N/A  
Efficacy: 56.5 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

TEST NUMBER: P859009

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### 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			100
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92			92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78			78
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72			72
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67			67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62			62
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58			58
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55			55
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51			51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48			48

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

	0°	90°	180°
0°	444938	444938	444938
5°	424563	444221	440090
10°	395977	429822	423547
15°	382376	403718	406567
20°	351737	362706	369295
25°	291536	296836	311245
30°	221768	205114	228123
35°	150156	122891	151836
40°	102254	70420	99127
45°	70938	35478	67047
50°	57720	14430	53993
55°	46715	8996	42538
60°	37102	6880	33662
65°	29273	5698	26017
70°	22091	5029	20079
75°	15949	3987	14620
80°	11886	3962	9905
85°	7894	3947	7894



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	333.0	10.1
10°-20°	874.9	26.5
20°-30°	1003.8	30.4
30°-40°	609.8	18.5
40°-50°	261.3	7.9
50°-60°	125.4	3.8
60°-70°	61.0	1.8
70°-80°	22.6	0.7
80°-90°	5.2	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°	2211.7	67.1
0°-40°	2821.5	85.6
0°-60°	3208.2	97.3
0°-90°	3297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3297.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3622	3622	3622	3622	3622	
5°	3443	3518	3602	3566	3569	320
15°	3006	3076	3174	3194	3197	837
25°	2151	2221	2190	2274	2296	976
35°	1001	1015	819	990	1012	642
45°	408	364	204	327	386	332
55°	218	162	42	145	199	197
65°	101	67	20	62	90	102
75°	34	22	8	20	31	37
85°	6	6	3	3	6	8
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°	3621.7	3621.7	3621.7	3621.7	3621.7	3621.7	3621.7	3621.7	3621.7
2.5°	3535.0	3574.2	3571.4	3604.9	3613.3	3604.9	3582.6	3604.9	3602.1
5°	3442.7	3487.5	3518.2	3574.2	3602.1	3596.5	3565.8	3571.4	3568.6
7.5°	3308.5	3364.4	3417.5	3501.4	3554.6	3551.8	3507.0	3498.7	3487.5
10°	3174.2	3227.4	3288.9	3375.6	3445.5	3456.7	3412.0	3400.8	3395.2
12.5°	3095.9	3137.9	3179.8	3255.3	3316.9	3339.2	3314.1	3316.9	3314.1
15°	3006.4	3048.4	3076.4	3132.3	3174.2	3205.0	3193.8	3210.6	3196.6
17.5°	2872.2	2922.5	2933.7	2975.7	3006.4	3026.0	3037.2	3054.0	3031.6
20°	2690.4	2729.6	2743.5	2760.3	2774.3	2799.5	2833.0	2849.8	2824.7
22.5°	2435.9	2511.4	2508.6	2500.2	2514.2	2522.6	2575.7	2603.7	2584.1
25°	2150.7	2229.0	2220.6	2187.0	2189.8	2206.6	2273.7	2310.1	2296.1
27.5°	1851.4	1924.1	1904.5	1840.2	1823.4	1848.6	1935.3	1977.3	1968.9
30°	1563.3	1610.9	1580.1	1465.5	1445.9	1476.6	1588.5	1630.5	1608.1
32.5°	1252.9	1289.3	1275.3	1135.5	1101.9	1132.7	1264.1	1303.3	1278.1
35°	1001.2	1034.8	1015.2	850.2	819.4	853.0	990.0	1034.8	1012.4
37.5°	802.6	827.8	802.6	626.5	598.5	632.1	763.5	822.2	794.3
40°	637.6	657.2	623.7	461.5	439.1	455.9	578.9	637.6	618.1
42.5°	503.4	517.4	481.0	338.4	313.2	335.6	436.3	489.4	478.2
45°	408.3	408.3	363.6	234.9	204.2	226.5	327.2	383.1	385.9
47.5°	349.6	341.2	285.3	156.6	117.5	148.2	260.1	318.8	327.2
50°	302.0	290.9	234.9	114.7	75.5	106.3	215.3	274.1	282.5
52.5°	260.1	251.7	195.8	89.5	53.1	81.1	181.8	237.7	246.1
55°	218.1	212.5	162.2	69.9	42.0	61.5	145.4	193.0	198.6
57.5°	179.0	170.6	131.4	58.7	33.6	50.3	120.3	159.4	165.0
60°	151.0	142.6	106.3	47.5	28.0	39.2	97.9	131.4	137.0
62.5°	125.9	117.5	86.7	39.2	22.4	33.6	78.3	106.3	111.9
65°	100.7	95.1	67.1	30.8	19.6	25.2	61.5	83.9	89.5
67.5°	81.1	75.5	53.1	25.2	16.8	19.6	47.5	67.1	72.7
70°	61.5	55.9	39.2	19.6	14.0	16.8	36.4	50.3	55.9
72.5°	44.7	42.0	30.8	16.8	11.2	14.0	25.2	36.4	42.0
75°	33.6	30.8	22.4	11.2	8.4	11.2	19.6	28.0	30.8
77.5°	22.4	22.4	16.8	8.4	8.4	8.4	14.0	19.6	19.6
80°	16.8	14.0	11.2	5.6	5.6	5.6	8.4	14.0	14.0
82.5°	11.2	8.4	8.4	5.6	5.6	5.6	5.6	8.4	8.4
85°	5.6	5.6	5.6	2.8	2.8	2.8	2.8	5.6	5.6
87.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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)