

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: P858123

Luminaire Tested: **LD4C45D010 EU4459030 4LBMDSWWMH**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P858123  
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 EU4459030 4LBMDSWWMH  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH WMH FINISH  
Light Source: -  
Ballast/Driver: -

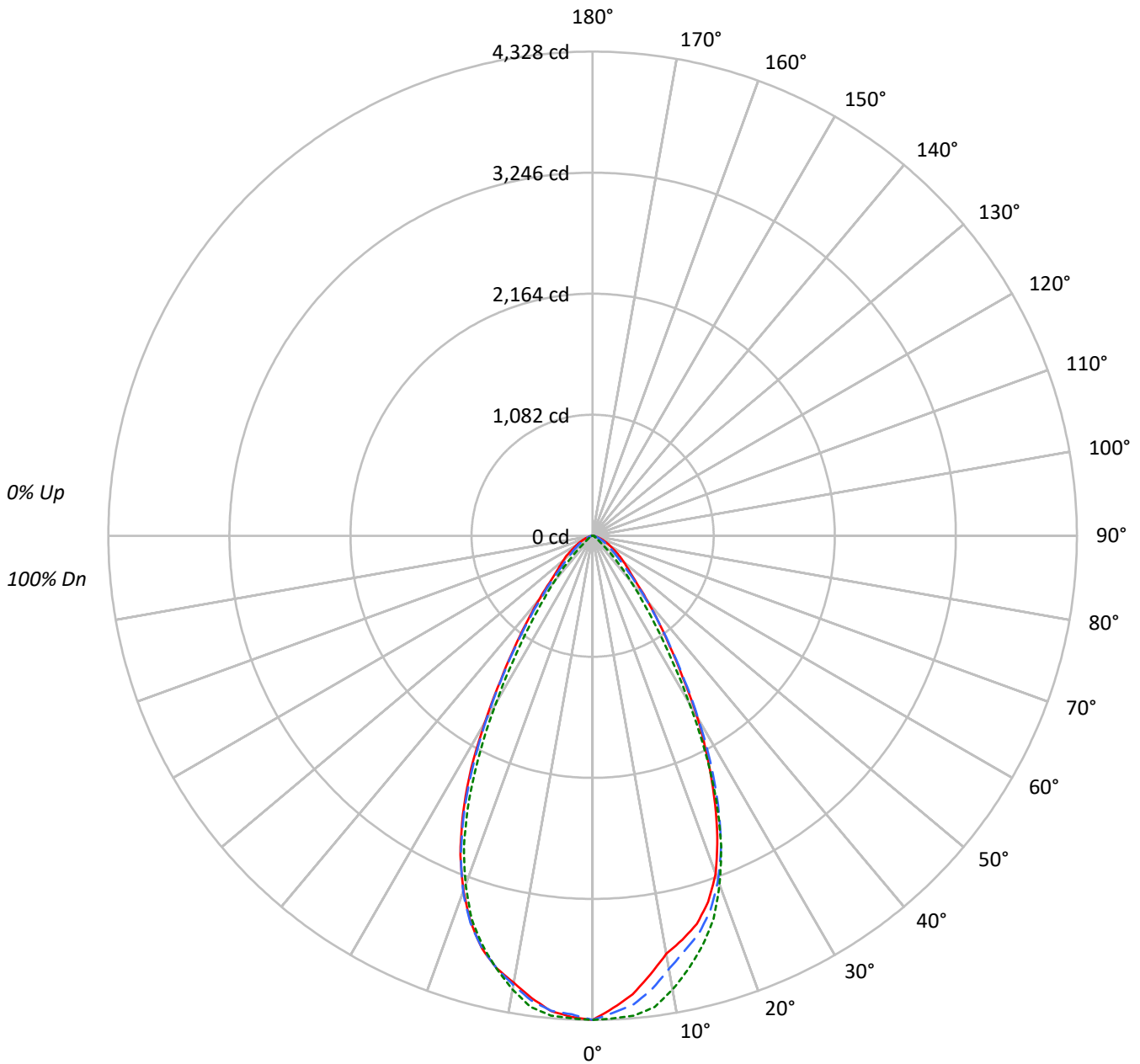
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3940.0 lumens  
Efficiency: N/A  
Efficacy: 79.4 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				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	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92	92	92	92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78	78	78	78
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55	55	55	55
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51	51	51	51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48	48	48	48

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

	0°	90°	180°
0°	531710	531710	531710
5°	507362	530855	525910
10°	473209	513653	506143
15°	456958	482459	485855
20°	420336	433449	441306
25°	348387	354731	371946
30°	265021	245118	272610
35°	179447	146857	181441
40°	122205	84148	118452
45°	84768	42393	80129
50°	68977	17240	64524
55°	55839	10731	50827
60°	44350	8207	40247
65°	34971	6802	31075
70°	26401	5999	23995
75°	19034	4747	17468
80°	14220	4740	11815
85°	9444	4652	9444



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	397.9	10.1
10°-20°	1045.5	26.5
20°-30°	1199.6	30.4
30°-40°	728.7	18.5
40°-50°	312.3	7.9
50°-60°	149.8	3.8
60°-70°	72.8	1.8
70°-80°	27.0	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°	2643.0	67.1
0°-40°	3371.8	85.6
0°-60°	3833.9	97.3
0°-90°	3940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3940.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4328	4328	4328	4328	4328	
5°	4114	4204	4305	4261	4264	382
15°	3593	3676	3793	3817	3820	1000
25°	2570	2654	2617	2717	2744	1166
35°	1196	1213	979	1183	1210	767
45°	488	434	244	391	461	396
55°	261	194	50	174	237	235
65°	120	80	23	74	107	122
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°	4328.0	4328.0	4328.0	4328.0	4328.0	4328.0	4328.0	4328.0	4328.0
2.5°	4224.4	4271.2	4267.9	4308.0	4318.0	4308.0	4281.2	4308.0	4304.6
5°	4114.1	4167.6	4204.4	4271.2	4304.6	4298.0	4261.2	4267.9	4264.5
7.5°	3953.7	4020.6	4084.1	4184.3	4247.8	4244.5	4191.0	4181.0	4167.6
10°	3793.3	3856.8	3930.3	4033.9	4117.5	4130.8	4077.4	4064.0	4057.3
12.5°	3699.7	3749.8	3800.0	3890.2	3963.7	3990.5	3960.4	3963.7	3960.4
15°	3592.8	3642.9	3676.3	3743.2	3793.3	3830.1	3816.7	3836.7	3820.0
17.5°	3432.3	3492.5	3505.9	3556.0	3592.8	3616.2	3629.5	3649.6	3622.8
20°	3215.1	3261.9	3278.6	3298.7	3315.4	3345.5	3385.6	3405.6	3375.5
22.5°	2911.0	3001.2	2997.9	2987.8	3004.6	3014.6	3078.1	3111.5	3088.1
25°	2570.1	2663.7	2653.6	2613.5	2616.9	2636.9	2717.1	2760.6	2743.9
27.5°	2212.5	2299.4	2276.0	2199.1	2179.1	2209.1	2312.7	2362.9	2352.8
30°	1868.2	1925.1	1888.3	1751.3	1727.9	1764.6	1898.3	1948.5	1921.7
32.5°	1497.3	1540.7	1524.0	1356.9	1316.8	1353.6	1510.6	1557.4	1527.3
35°	1196.5	1236.6	1213.2	1016.0	979.2	1019.3	1183.1	1236.6	1209.8
37.5°	959.2	989.3	959.2	748.6	715.2	755.3	912.4	982.6	949.2
40°	762.0	785.4	745.3	551.4	524.7	544.8	691.8	762.0	738.6
42.5°	601.6	618.3	574.8	404.4	374.3	401.1	521.4	584.9	571.5
45°	487.9	487.9	434.5	280.7	244.0	270.7	391.0	457.9	461.2
47.5°	417.8	407.7	340.9	187.2	140.4	177.1	310.8	381.0	391.0
50°	360.9	347.6	280.7	137.0	90.2	127.0	257.3	327.5	337.6
52.5°	310.8	300.8	233.9	106.9	63.5	96.9	217.2	284.1	294.1
55°	260.7	254.0	193.8	83.6	50.1	73.5	173.8	230.6	237.3
57.5°	213.9	203.9	157.1	70.2	40.1	60.2	143.7	190.5	197.2
60°	180.5	170.4	127.0	56.8	33.4	46.8	117.0	157.1	163.8
62.5°	150.4	140.4	103.6	46.8	26.7	40.1	93.6	127.0	133.7
65°	120.3	113.6	80.2	36.8	23.4	30.1	73.5	100.3	106.9
67.5°	96.9	90.2	63.5	30.1	20.1	23.4	56.8	80.2	86.9
70°	73.5	66.8	46.8	23.4	16.7	20.1	43.4	60.2	66.8
72.5°	53.5	50.1	36.8	20.1	13.4	16.7	30.1	43.4	50.1
75°	40.1	36.8	26.7	13.4	10.0	13.4	23.4	33.4	36.8
77.5°	26.7	26.7	20.1	10.0	10.0	10.0	16.7	23.4	23.4
80°	20.1	16.7	13.4	6.7	6.7	6.7	10.0	16.7	16.7
82.5°	13.4	10.0	10.0	6.7	6.7	6.7	6.7	10.0	10.0
85°	6.7	6.7	6.7	3.3	3.3	3.3	3.3	6.7	6.7
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)