

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: P858182

Luminaire Tested: **LD4C45D010 EU4459050 4LBMDSWH**

Issue Date: 4/12/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P858182  
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 EU4459050 4LBMDSWH  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

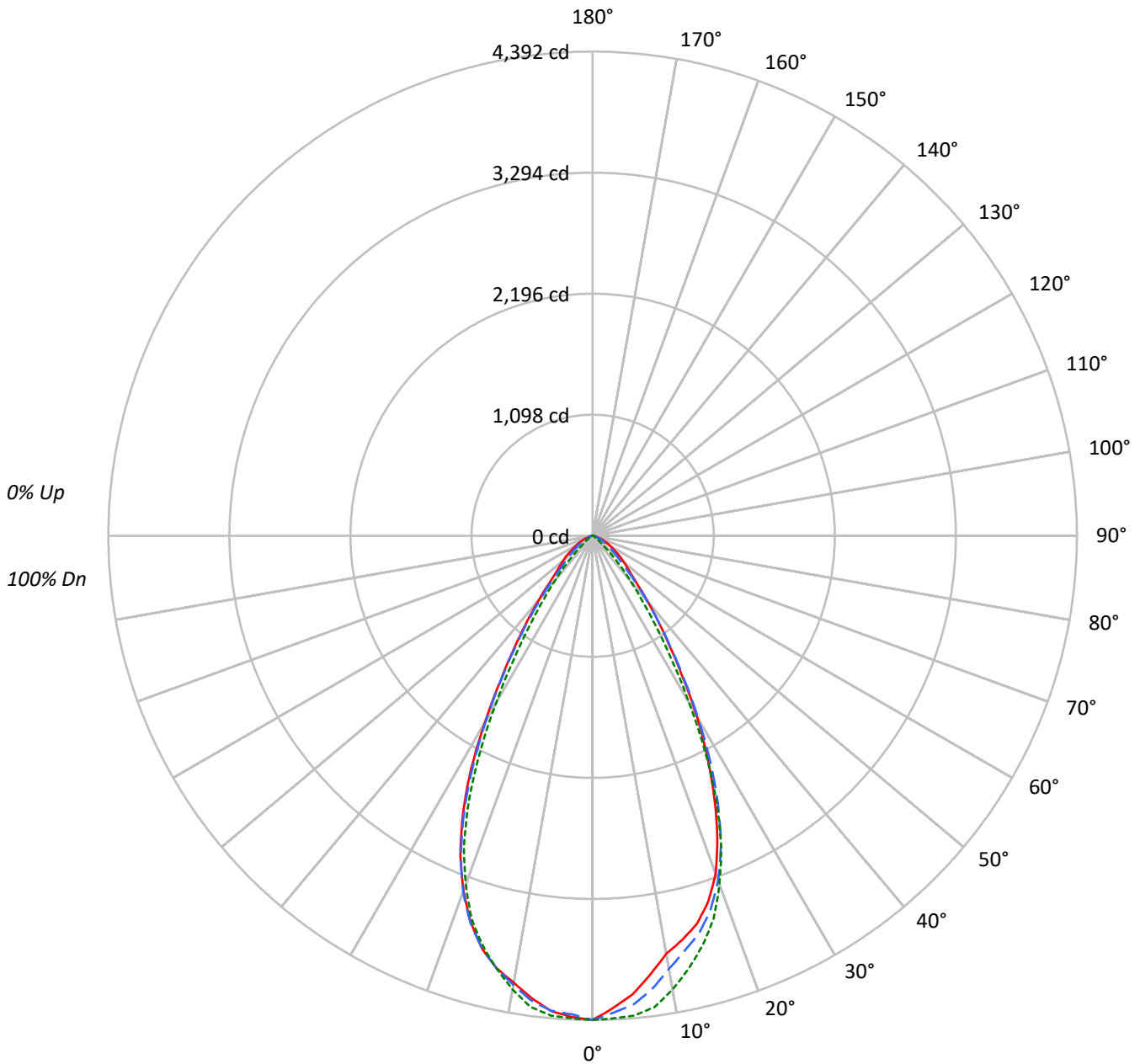
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3998.0 lumens  
Efficiency: N/A  
Efficacy: 80.6 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

TEST NUMBER: P858182

CATALOG NUMBER: LD4C45D010 EU4459050 4LBMDSWH

### 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°	539536	539536	539536
5°	514836	538674	533655
10°	480170	521212	513590
15°	463687	489557	493016
20°	426519	439829	447804
25°	353511	359950	377422
30°	268922	248721	276625
35°	182086	149032	184126
40°	124001	85383	120200
45°	86019	43018	81311
50°	70009	17507	65461
55°	56653	10902	51577
60°	44989	8329	40836
65°	35494	6889	31541
70°	26796	6106	24354
75°	19319	4842	17705
80°	14362	4811	12027
85°	9585	4793	9585



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	403.8	10.1
10°-20°	1060.9	26.5
20°-30°	1217.2	30.4
30°-40°	739.5	18.5
40°-50°	316.9	7.9
50°-60°	152.0	3.8
60°-70°	73.9	1.8
70°-80°	27.4	0.7
80°-90°	6.3	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°	2681.9	67.1
0°-40°	3421.4	85.6
0°-60°	3890.3	97.3
0°-90°	3998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3998.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4392	4392	4392	4392	4392	
5°	4175	4266	4368	4324	4327	388
15°	3646	3730	3849	3873	3876	1015
25°	2608	2693	2655	2757	2784	1183
35°	1214	1231	994	1200	1228	778
45°	495	441	248	397	468	402
55°	264	197	51	176	241	239
65°	122	81	24	75	108	124
75°	41	27	10	24	37	45
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°	4391.7	4391.7	4391.7	4391.7	4391.7	4391.7	4391.7	4391.7	4391.7
2.5°	4286.6	4334.1	4330.7	4371.4	4381.6	4371.4	4344.3	4371.4	4368.0
5°	4174.7	4229.0	4266.3	4334.1	4368.0	4361.2	4323.9	4330.7	4327.3
7.5°	4011.9	4079.7	4144.2	4245.9	4310.4	4307.0	4252.7	4242.5	4229.0
10°	3849.1	3913.6	3988.2	4093.3	4178.1	4191.7	4137.4	4123.8	4117.0
12.5°	3754.2	3805.0	3855.9	3947.5	4022.1	4049.2	4018.7	4022.1	4018.7
15°	3645.7	3696.5	3730.4	3798.3	3849.1	3886.4	3872.9	3893.2	3876.3
17.5°	3482.9	3543.9	3557.5	3608.4	3645.7	3669.4	3683.0	3703.3	3676.2
20°	3262.4	3309.9	3326.9	3347.2	3364.2	3394.7	3435.4	3455.7	3425.2
22.5°	2953.8	3045.4	3042.0	3031.8	3048.8	3059.0	3123.4	3157.3	3133.6
25°	2607.9	2702.9	2692.7	2652.0	2655.4	2675.7	2757.1	2801.2	2784.3
27.5°	2245.0	2333.2	2309.5	2231.5	2211.1	2241.7	2346.8	2397.7	2387.5
30°	1895.7	1953.4	1916.1	1777.0	1753.3	1790.6	1926.3	1977.1	1950.0
32.5°	1519.3	1563.4	1546.4	1376.9	1336.2	1373.5	1532.9	1580.3	1549.8
35°	1214.1	1254.8	1231.0	1031.0	993.7	1034.3	1200.5	1254.8	1227.7
37.5°	973.3	1003.8	973.3	759.7	725.7	766.4	925.8	997.0	963.1
40°	773.2	797.0	756.3	559.6	532.4	552.8	702.0	773.2	749.5
42.5°	610.4	627.4	583.3	410.3	379.8	407.0	529.0	593.5	579.9
45°	495.1	495.1	440.9	284.9	247.6	274.7	396.8	464.6	468.0
47.5°	423.9	413.7	345.9	189.9	142.4	179.7	315.4	386.6	396.8
50°	366.3	352.7	284.9	139.0	91.6	128.9	261.1	332.3	342.5
52.5°	315.4	305.2	237.4	108.5	64.4	98.3	220.4	288.3	298.4
55°	264.5	257.7	196.7	84.8	50.9	74.6	176.3	234.0	240.8
57.5°	217.0	206.9	159.4	71.2	40.7	61.0	145.8	193.3	200.1
60°	183.1	173.0	128.9	57.7	33.9	47.5	118.7	159.4	166.2
62.5°	152.6	142.4	105.1	47.5	27.1	40.7	95.0	128.9	135.7
65°	122.1	115.3	81.4	37.3	23.7	30.5	74.6	101.7	108.5
67.5°	98.3	91.6	64.4	30.5	20.3	23.7	57.7	81.4	88.2
70°	74.6	67.8	47.5	23.7	17.0	20.3	44.1	61.0	67.8
72.5°	54.3	50.9	37.3	20.3	13.6	17.0	30.5	44.1	50.9
75°	40.7	37.3	27.1	13.6	10.2	13.6	23.7	33.9	37.3
77.5°	27.1	27.1	20.3	10.2	10.2	10.2	17.0	23.7	23.7
80°	20.3	17.0	13.6	6.8	6.8	6.8	10.2	17.0	17.0
82.5°	13.6	10.2	10.2	6.8	6.8	6.8	6.8	10.2	10.2
85°	6.8	6.8	6.8	3.4	3.4	3.4	3.4	6.8	6.8
87.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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)