

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: P858185

Luminaire Tested: **LD4C45D010 EU4459050 4LBMDSWWH**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P858185  
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 4LBMDSWWH  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH WH FINISH  
Light Source: -  
Ballast/Driver: -

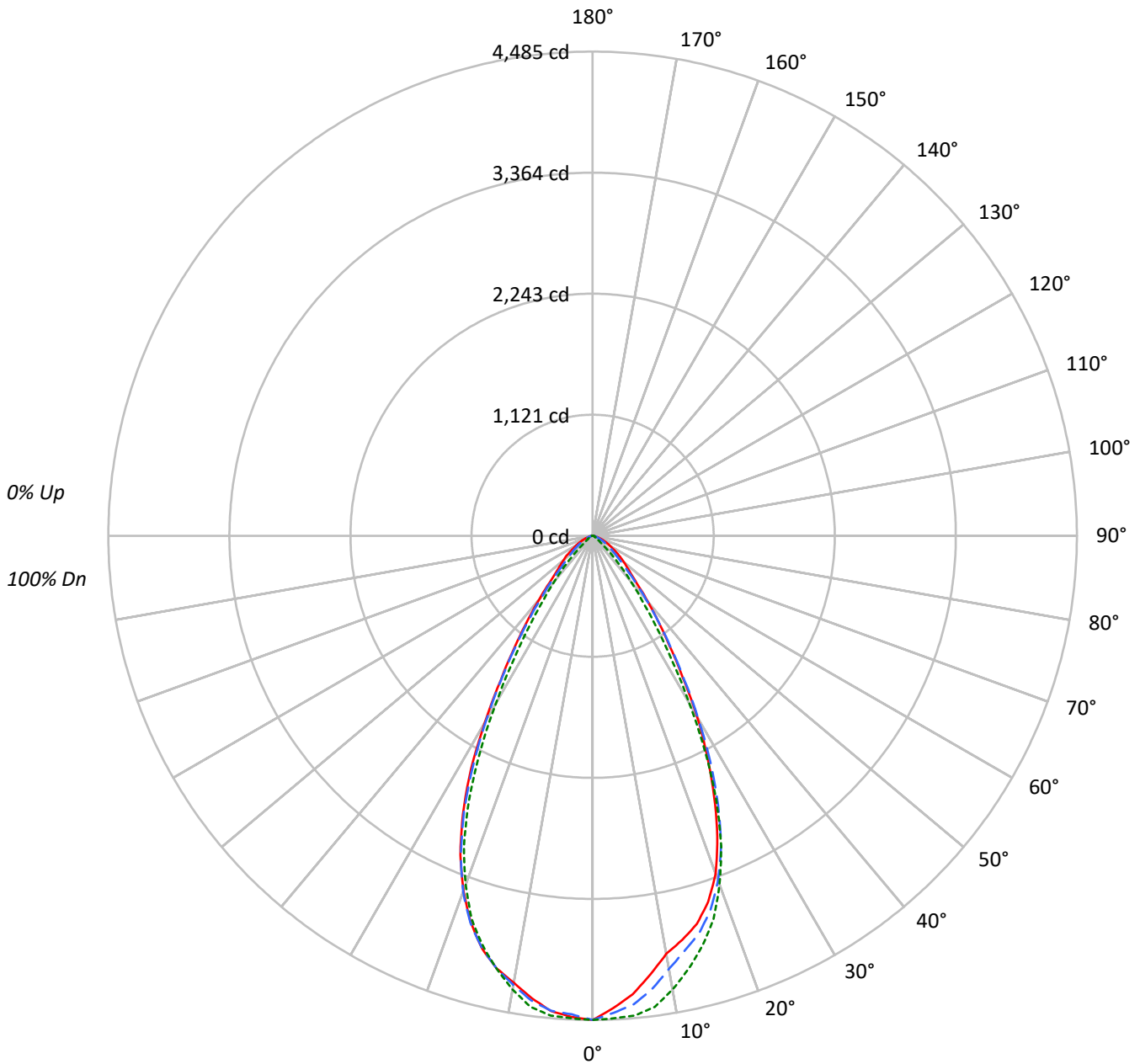
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4083.0 lumens  
Efficiency: N/A  
Efficacy: 82.3 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				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°	551010	551010	551010
5°	525787	550130	545000
10°	490387	532290	524518
15°	473544	499973	503496
20°	435593	449176	457321
25°	361034	367608	385447
30°	274639	254013	282512
35°	185956	152196	188040
40°	126647	87211	122750
45°	87861	43922	83048
50°	71481	17870	66856
55°	57852	11138	52669
60°	45947	8501	41696
65°	36250	7035	32209
70°	27371	6214	24893
75°	19746	4937	18085
80°	14716	4882	12239
85°	9726	4934	9726



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	412.4	10.1
10°-20°	1083.5	26.5
20°-30°	1243.1	30.4
30°-40°	755.2	18.5
40°-50°	323.6	7.9
50°-60°	155.3	3.8
60°-70°	75.5	1.8
70°-80°	28.0	0.7
80°-90°	6.5	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°	2739.0	67.1
0°-40°	3494.1	85.6
0°-60°	3973.0	97.3
0°-90°	4083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4083.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4485	4485	4485	4485	4485	
5°	4264	4357	4461	4416	4419	396
15°	3723	3810	3931	3955	3959	1037
25°	2663	2750	2712	2816	2844	1208
35°	1240	1257	1015	1226	1254	795
45°	506	450	253	405	478	411
55°	270	201	52	180	246	244
65°	125	83	24	76	111	127
75°	42	28	10	24	38	46
85°	7	7	4	4	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°	4485.1	4485.1	4485.1	4485.1	4485.1	4485.1	4485.1	4485.1	4485.1
2.5°	4377.8	4426.2	4422.8	4464.3	4474.7	4464.3	4436.6	4464.3	4460.9
5°	4263.5	4318.9	4357.0	4426.2	4460.9	4453.9	4415.8	4422.8	4419.3
7.5°	4097.2	4166.5	4232.3	4336.2	4402.0	4398.5	4343.1	4332.7	4318.9
10°	3931.0	3996.8	4073.0	4180.3	4266.9	4280.8	4225.4	4211.5	4204.6
12.5°	3834.0	3885.9	3937.9	4031.4	4107.6	4135.3	4104.1	4107.6	4104.1
15°	3723.2	3775.1	3809.8	3879.0	3931.0	3969.1	3955.2	3976.0	3958.7
17.5°	3556.9	3619.3	3633.1	3685.1	3723.2	3747.4	3761.3	3782.0	3754.3
20°	3331.8	3380.3	3397.6	3418.4	3435.7	3466.9	3508.4	3529.2	3498.0
22.5°	3016.6	3110.1	3106.7	3096.3	3113.6	3124.0	3189.8	3224.4	3200.2
25°	2663.4	2760.3	2749.9	2708.4	2711.9	2732.6	2815.8	2860.8	2843.5
27.5°	2292.8	2382.8	2358.6	2278.9	2258.1	2289.3	2396.7	2448.6	2438.2
30°	1936.0	1994.9	1956.8	1814.8	1790.6	1828.7	1967.2	2019.2	1991.5
32.5°	1551.6	1596.6	1579.3	1406.1	1364.6	1402.7	1565.5	1613.9	1582.8
35°	1239.9	1281.5	1257.2	1052.9	1014.8	1056.3	1226.0	1281.5	1253.8
37.5°	994.0	1025.2	994.0	775.8	741.2	782.7	945.5	1018.2	983.6
40°	789.7	813.9	772.3	571.5	543.8	564.5	716.9	789.7	765.4
42.5°	623.4	640.7	595.7	419.1	387.9	415.6	540.3	606.1	592.2
45°	505.7	505.7	450.2	290.9	252.8	280.5	405.2	474.5	478.0
47.5°	432.9	422.5	353.3	194.0	145.5	183.6	322.1	394.8	405.2
50°	374.0	360.2	290.9	142.0	93.5	131.6	266.7	339.4	349.8
52.5°	322.1	311.7	242.4	110.8	65.8	100.4	225.1	294.4	304.8
55°	270.1	263.2	200.9	86.6	52.0	76.2	180.1	239.0	245.9
57.5°	221.7	211.3	162.8	72.7	41.6	62.3	148.9	197.4	204.3
60°	187.0	176.6	131.6	58.9	34.6	48.5	121.2	162.8	169.7
62.5°	155.9	145.5	107.4	48.5	27.7	41.6	97.0	131.6	138.5
65°	124.7	117.8	83.1	38.1	24.2	31.2	76.2	103.9	110.8
67.5°	100.4	93.5	65.8	31.2	20.8	24.2	58.9	83.1	90.0
70°	76.2	69.3	48.5	24.2	17.3	20.8	45.0	62.3	69.3
72.5°	55.4	52.0	38.1	20.8	13.9	17.3	31.2	45.0	52.0
75°	41.6	38.1	27.7	13.9	10.4	13.9	24.2	34.6	38.1
77.5°	27.7	27.7	20.8	10.4	10.4	10.4	17.3	24.2	24.2
80°	20.8	17.3	13.9	6.9	6.9	6.9	10.4	17.3	17.3
82.5°	13.9	10.4	10.4	6.9	6.9	6.9	6.9	10.4	10.4
85°	6.9	6.9	6.9	3.5	3.5	3.5	3.5	6.9	6.9
87.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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)