

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: P858990

Luminaire Tested: **LD4C50D010 EU4509035 4LBMDSWH**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P858990  
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 EU4509035 4LBMDSWH  
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

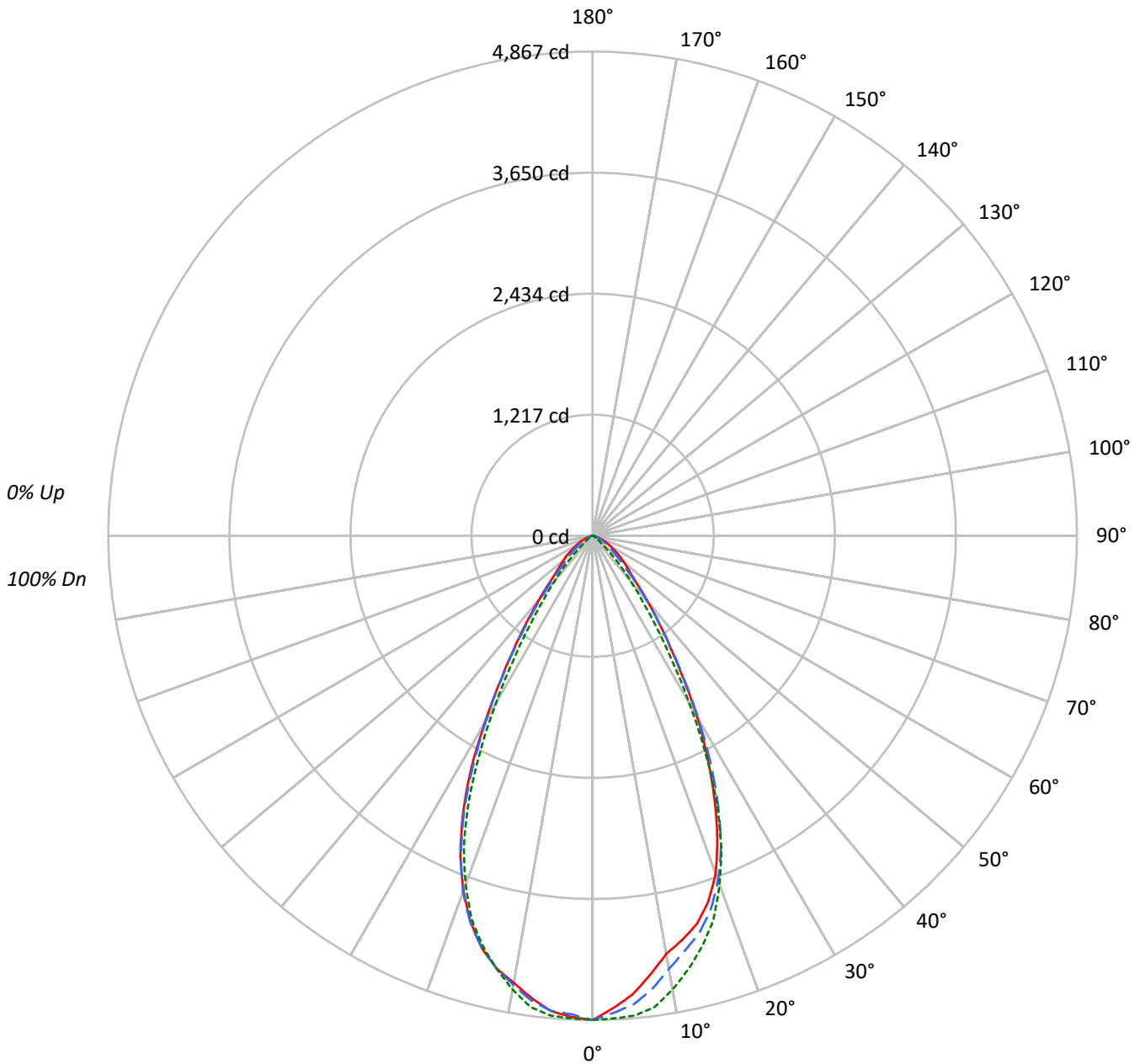
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4431.0 lumens  
Efficiency: N/A  
Efficacy: 75.9 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

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

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

	0°	90°	180°
0°	597977	597977	597977
5°	570590	597018	591456
10°	532178	577661	569216
15°	513900	542581	546409
20°	472722	487456	496307
25°	391805	398935	418292
30°	298060	275660	306586
35°	201808	165169	204058
40°	137440	94637	133223
45°	95349	47675	90119
50°	77578	19399	72551
55°	62800	12080	57167
60°	49879	9239	45259
65°	39331	7645	34971
70°	29706	6753	27012
75°	21408	5364	19604
80°	15989	5306	13301
85°	10572	5356	10572



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	447.5	10.1
10°-20°	1175.8	26.5
20°-30°	1349.1	30.4
30°-40°	819.5	18.5
40°-50°	351.2	7.9
50°-60°	168.5	3.8
60°-70°	81.9	1.8
70°-80°	30.4	0.7
80°-90°	7.0	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°	2972.4	67.1
0°-40°	3791.9	85.6
0°-60°	4311.7	97.3
0°-90°	4431.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4431.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4867	4867	4867	4867	4867	
5°	4627	4728	4841	4792	4796	430
15°	4040	4134	4266	4292	4296	1125
25°	2890	2984	2943	3056	3086	1311
35°	1346	1364	1101	1330	1361	862
45°	549	489	274	440	519	446
55°	293	218	56	195	267	265
65°	135	90	26	83	120	137
75°	45	30	11	26	41	49
85°	8	8	4	4	8	10
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°	4867.4	4867.4	4867.4	4867.4	4867.4	4867.4	4867.4	4867.4	4867.4
2.5°	4750.9	4803.5	4799.7	4844.8	4856.1	4844.8	4814.8	4844.8	4841.1
5°	4626.8	4687.0	4728.3	4803.5	4841.1	4833.6	4792.2	4799.7	4796.0
7.5°	4446.4	4521.6	4593.0	4705.8	4777.2	4773.4	4713.3	4702.0	4687.0
10°	4266.0	4337.4	4420.1	4536.6	4630.6	4645.6	4585.5	4570.5	4562.9
12.5°	4160.8	4217.2	4273.5	4375.0	4457.7	4487.8	4453.9	4457.7	4453.9
15°	4040.5	4096.9	4134.5	4209.6	4266.0	4307.4	4292.3	4314.9	4296.1
17.5°	3860.1	3927.7	3942.8	3999.2	4040.5	4066.8	4081.8	4104.4	4074.3
20°	3615.8	3668.4	3687.2	3709.7	3728.5	3762.4	3807.5	3830.0	3796.2
22.5°	3273.7	3375.2	3371.5	3360.2	3379.0	3390.3	3461.7	3499.3	3472.9
25°	2890.4	2995.6	2984.3	2939.2	2943.0	2965.5	3055.7	3104.6	3085.8
27.5°	2488.2	2585.9	2559.6	2473.2	2450.6	2484.4	2601.0	2657.3	2646.1
30°	2101.1	2165.0	2123.6	1969.5	1943.2	1984.5	2134.9	2191.3	2161.2
32.5°	1683.9	1732.7	1713.9	1526.0	1480.9	1522.2	1698.9	1751.5	1717.7
35°	1345.6	1390.7	1364.4	1142.6	1101.3	1146.4	1330.5	1390.7	1360.6
37.5°	1078.7	1112.5	1078.7	841.9	804.3	849.4	1026.1	1105.0	1067.4
40°	857.0	883.3	838.2	620.2	590.1	612.7	778.0	857.0	830.7
42.5°	676.5	695.3	646.5	454.8	421.0	451.0	586.3	657.8	642.7
45°	548.8	548.8	488.6	315.7	274.4	304.4	439.8	514.9	518.7
47.5°	469.8	458.5	383.4	210.5	157.9	199.2	349.5	428.5	439.8
50°	405.9	390.9	315.7	154.1	101.5	142.8	289.4	368.3	379.6
52.5°	349.5	338.3	263.1	120.3	71.4	109.0	244.3	319.5	330.8
55°	293.2	285.7	218.0	94.0	56.4	82.7	195.4	259.3	266.9
57.5°	240.6	229.3	176.7	78.9	45.1	67.7	161.6	214.2	221.8
60°	203.0	191.7	142.8	63.9	37.6	52.6	131.6	176.7	184.2
62.5°	169.1	157.9	116.5	52.6	30.1	45.1	105.2	142.8	150.3
65°	135.3	127.8	90.2	41.3	26.3	33.8	82.7	112.8	120.3
67.5°	109.0	101.5	71.4	33.8	22.6	26.3	63.9	90.2	97.7
70°	82.7	75.2	52.6	26.3	18.8	22.6	48.9	67.7	75.2
72.5°	60.1	56.4	41.3	22.6	15.0	18.8	33.8	48.9	56.4
75°	45.1	41.3	30.1	15.0	11.3	15.0	26.3	37.6	41.3
77.5°	30.1	30.1	22.6	11.3	11.3	11.3	18.8	26.3	26.3
80°	22.6	18.8	15.0	7.5	7.5	7.5	11.3	18.8	18.8
82.5°	15.0	11.3	11.3	7.5	7.5	7.5	7.5	11.3	11.3
85°	7.5	7.5	7.5	3.8	3.8	3.8	3.8	7.5	7.5
87.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
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)