

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: P856710

Luminaire Tested: **LD4C10D010 EU4109030 4LBMDSWH**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P856710  
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: LD4C10D010 EU4109030 4LBMDSWH  
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

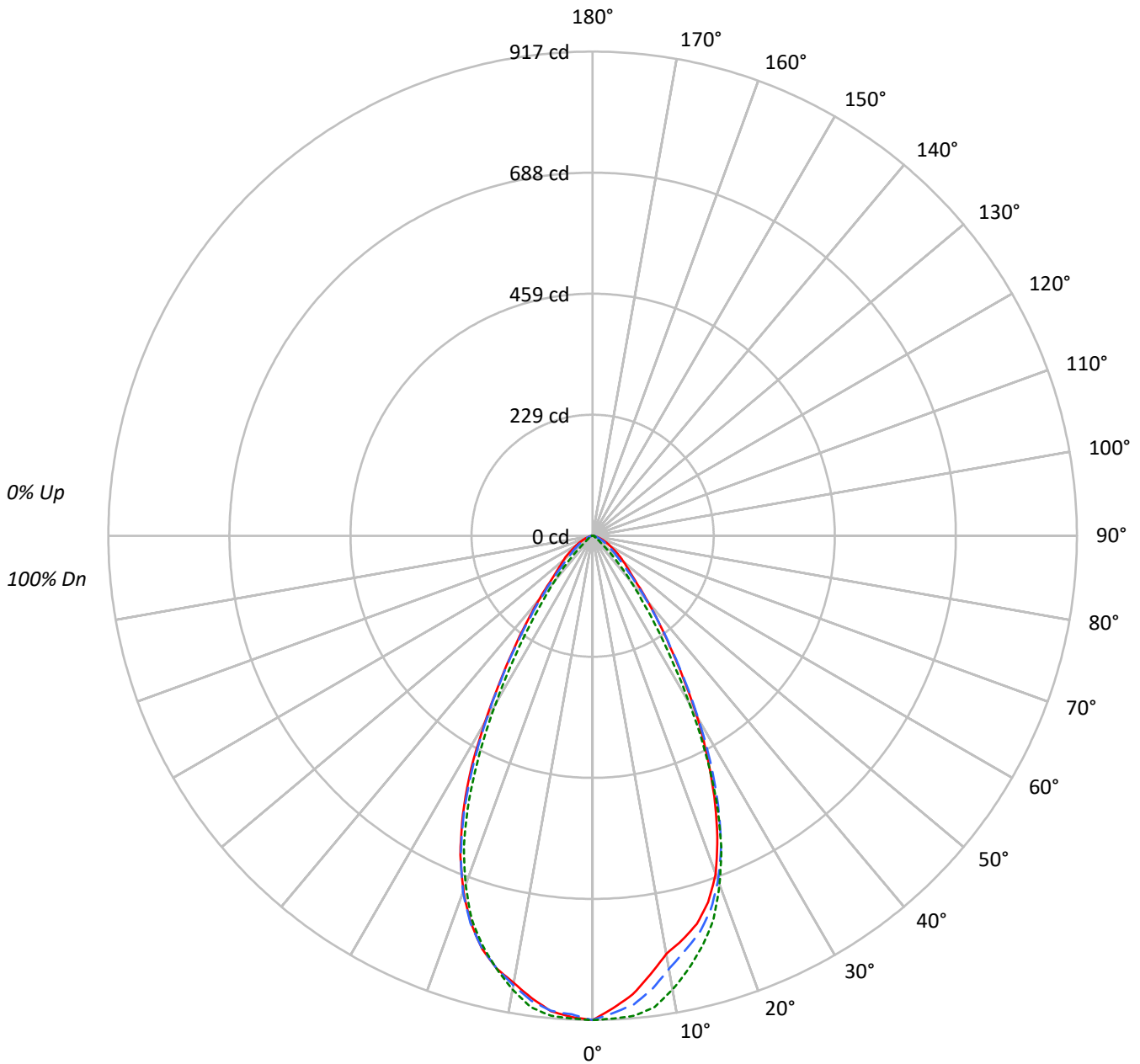
Lumens per Lamp: N/A  
Luminaire Lumens: 835.0 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.8  
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				
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°	112681	112681	112681
5°	107525	112507	111459
10°	100285	108856	107271
15°	96840	102246	102971
20°	89085	91856	93530
25°	73836	75178	78825
30°	56162	51949	57779
35°	38034	31120	38454
40°	25900	17834	25099
45°	17965	8982	16975
50°	14621	3651	13666
55°	11823	2270	10774
60°	9386	1745	8526
65°	7413	1453	6599
70°	5604	1257	5101
75°	4035	997	3702
80°	2971	990	2476
85°	1973	987	1973



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	10.1
10°-20°	221.6	26.5
20°-30°	254.2	30.4
30°-40°	154.4	18.5
40°-50°	66.2	7.9
50°-60°	31.7	3.8
60°-70°	15.4	1.8
70°-80°	5.7	0.7
80°-90°	1.3	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°	560.1	67.1
0°-40°	714.6	85.6
0°-60°	812.5	97.3
0°-90°	835.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	835.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	917	917	917	917	917	
5°	872	891	912	903	904	81
15°	761	779	804	809	810	212
25°	545	562	555	576	582	247
35°	254	257	208	251	256	163
45°	103	92	52	83	98	84
55°	55	41	11	37	50	50
65°	26	17	5	16	23	26
75°	8	6	2	5	8	9
85°	1	1	1	1	1	2
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°	917.2	917.2	917.2	917.2	917.2	917.2	917.2	917.2	917.2
2.5°	895.3	905.2	904.5	913.0	915.1	913.0	907.3	913.0	912.3
5°	871.9	883.2	891.0	905.2	912.3	910.9	903.1	904.5	903.8
7.5°	837.9	852.1	865.5	886.8	900.2	899.5	888.2	886.1	883.2
10°	803.9	817.4	832.9	854.9	872.6	875.4	864.1	861.3	859.9
12.5°	784.1	794.7	805.3	824.4	840.0	845.7	839.3	840.0	839.3
15°	761.4	772.0	779.1	793.3	803.9	811.7	808.9	813.1	809.6
17.5°	727.4	740.2	743.0	753.6	761.4	766.4	769.2	773.5	767.8
20°	681.4	691.3	694.8	699.1	702.6	709.0	717.5	721.7	715.4
22.5°	616.9	636.0	635.3	633.2	636.8	638.9	652.3	659.4	654.5
25°	544.7	564.5	562.4	553.9	554.6	558.8	575.8	585.0	581.5
27.5°	468.9	487.3	482.3	466.1	461.8	468.2	490.1	500.8	498.6
30°	395.9	408.0	400.2	371.1	366.2	374.0	402.3	412.9	407.3
32.5°	317.3	326.5	323.0	287.6	279.1	286.9	320.1	330.1	323.7
35°	253.6	262.1	257.1	215.3	207.5	216.0	250.7	262.1	256.4
37.5°	203.3	209.7	203.3	158.7	151.6	160.1	193.4	208.2	201.2
40°	161.5	166.4	157.9	116.9	111.2	115.5	146.6	161.5	156.5
42.5°	127.5	131.0	121.8	85.7	79.3	85.0	110.5	124.0	121.1
45°	103.4	103.4	92.1	59.5	51.7	57.4	82.9	97.0	97.7
47.5°	88.5	86.4	72.2	39.7	29.7	37.5	65.9	80.7	82.9
50°	76.5	73.7	59.5	29.0	19.1	26.9	54.5	69.4	71.5
52.5°	65.9	63.7	49.6	22.7	13.5	20.5	46.0	60.2	62.3
55°	55.2	53.8	41.1	17.7	10.6	15.6	36.8	48.9	50.3
57.5°	45.3	43.2	33.3	14.9	8.5	12.7	30.5	40.4	41.8
60°	38.2	36.1	26.9	12.0	7.1	9.9	24.8	33.3	34.7
62.5°	31.9	29.7	22.0	9.9	5.7	8.5	19.8	26.9	28.3
65°	25.5	24.1	17.0	7.8	5.0	6.4	15.6	21.2	22.7
67.5°	20.5	19.1	13.5	6.4	4.2	5.0	12.0	17.0	18.4
70°	15.6	14.2	9.9	5.0	3.5	4.2	9.2	12.7	14.2
72.5°	11.3	10.6	7.8	4.2	2.8	3.5	6.4	9.2	10.6
75°	8.5	7.8	5.7	2.8	2.1	2.8	5.0	7.1	7.8
77.5°	5.7	5.7	4.2	2.1	2.1	2.1	3.5	5.0	5.0
80°	4.2	3.5	2.8	1.4	1.4	1.4	2.1	3.5	3.5
82.5°	2.8	2.1	2.1	1.4	1.4	1.4	1.4	2.1	2.1
85°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	1.4	1.4
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)