

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: P858099

Luminaire Tested: **LD4C45D010 EU4459027 4LBMDSWH**

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-08
Report Number: P858099
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 EU4459027 4LBMDSWH
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBMDSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

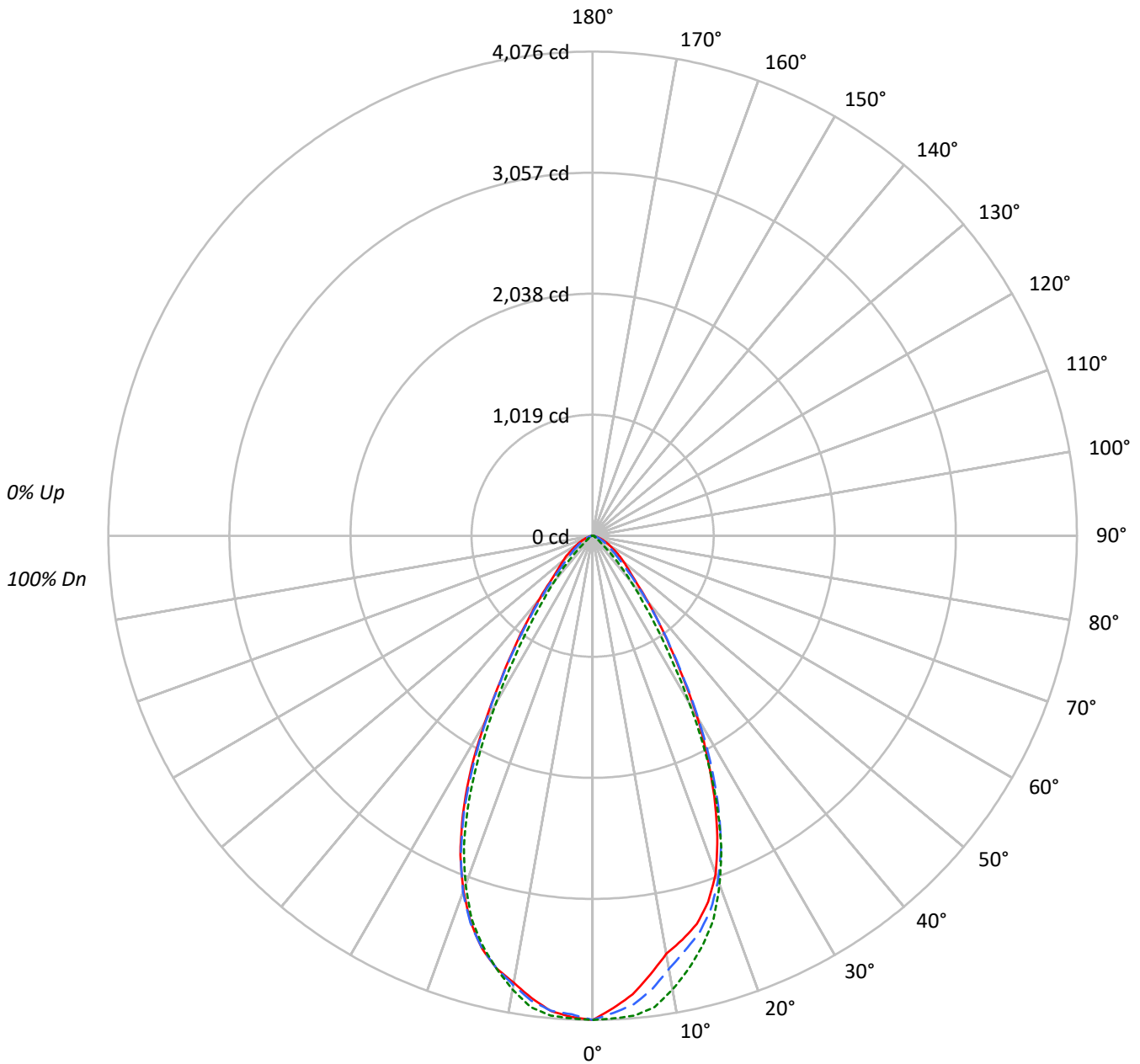
Lumens per Lamp: N/A
Luminaire Lumens: 3711.0 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 49.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	500812	500812	500812
5°	477876	500000	495351
10°	445702	483800	476727
15°	430402	454415	457620
20°	395901	408255	415655
25°	328135	334113	350325
30°	249629	230861	256765
35°	169008	138323	170898
40°	115100	79257	111572
45°	79851	39926	75473
50°	64983	16246	60759
55°	52583	10110	47871
60°	41770	7740	37888
65°	32936	6395	29273
70°	24893	5639	22630
75°	17943	4462	16424
80°	13371	4457	11108
85°	8880	4370	8880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	374.8	10.1
10°-20°	984.8	26.5
20°-30°	1129.9	30.4
30°-40°	686.4	18.5
40°-50°	294.2	7.9
50°-60°	141.1	3.8
60°-70°	68.6	1.8
70°-80°	25.4	0.7
80°-90°	5.8	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°	2489.4	67.1
0°-40°	3175.8	85.6
0°-60°	3611.1	97.3
0°-90°	3711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3711.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4076	4076	4076	4076	4076	
5°	3875	3960	4054	4014	4017	360
15°	3384	3463	3573	3595	3598	942
25°	2421	2499	2465	2559	2584	1098
35°	1127	1143	922	1114	1140	722
45°	460	409	230	368	434	373
55°	246	183	47	164	224	222
65°	113	76	22	69	101	115
75°	38	25	9	22	35	41
85°	6	6	3	3	6	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°	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5
2.5°	3978.9	4023.0	4019.8	4057.6	4067.0	4057.6	4032.4	4057.6	4054.4
5°	3875.0	3925.4	3960.0	4023.0	4054.4	4048.1	4013.5	4019.8	4016.7
7.5°	3723.9	3786.9	3846.7	3941.1	4000.9	3997.8	3947.4	3938.0	3925.4
10°	3572.8	3632.6	3701.9	3799.5	3878.2	3890.8	3840.4	3827.8	3821.5
12.5°	3484.7	3531.9	3579.1	3664.1	3733.4	3758.5	3730.2	3733.4	3730.2
15°	3384.0	3431.2	3462.6	3525.6	3572.8	3607.4	3594.9	3613.7	3598.0
17.5°	3232.9	3289.5	3302.1	3349.3	3384.0	3406.0	3418.6	3437.5	3412.3
20°	3028.2	3072.3	3088.1	3106.9	3122.7	3151.0	3188.8	3207.7	3179.3
22.5°	2741.8	2826.8	2823.6	2814.2	2829.9	2839.4	2899.2	2930.7	2908.6
25°	2420.7	2508.8	2499.4	2461.6	2464.8	2483.7	2559.2	2600.1	2584.4
27.5°	2083.9	2165.7	2143.7	2071.3	2052.4	2080.7	2178.3	2225.5	2216.1
30°	1759.7	1813.2	1778.5	1649.5	1627.4	1662.1	1788.0	1835.2	1810.0
32.5°	1410.2	1451.2	1435.4	1278.0	1240.3	1274.9	1422.8	1466.9	1438.6
35°	1126.9	1164.7	1142.7	956.9	922.3	960.1	1114.3	1164.7	1139.5
37.5°	903.4	931.8	903.4	705.1	673.6	711.4	859.4	925.5	894.0
40°	717.7	739.7	702.0	519.4	494.2	513.1	651.6	717.7	695.7
42.5°	566.6	582.4	541.4	380.9	352.6	377.7	491.1	550.9	538.3
45°	459.6	459.6	409.2	264.4	229.8	255.0	368.3	431.3	434.4
47.5°	393.5	384.0	321.1	176.3	132.2	166.8	292.8	358.9	368.3
50°	340.0	327.4	264.4	129.1	85.0	119.6	242.4	308.5	317.9
52.5°	292.8	283.3	220.4	100.7	59.8	91.3	204.6	267.6	277.0
55°	245.5	239.2	182.6	78.7	47.2	69.3	163.7	217.2	223.5
57.5°	201.5	192.0	147.9	66.1	37.8	56.7	135.4	179.4	185.7
60°	170.0	160.5	119.6	53.5	31.5	44.1	110.2	147.9	154.2
62.5°	141.7	132.2	97.6	44.1	25.2	37.8	88.1	119.6	125.9
65°	113.3	107.0	75.5	34.6	22.0	28.3	69.3	94.4	100.7
67.5°	91.3	85.0	59.8	28.3	18.9	22.0	53.5	75.5	81.8
70°	69.3	63.0	44.1	22.0	15.7	18.9	40.9	56.7	63.0
72.5°	50.4	47.2	34.6	18.9	12.6	15.7	28.3	40.9	47.2
75°	37.8	34.6	25.2	12.6	9.4	12.6	22.0	31.5	34.6
77.5°	25.2	25.2	18.9	9.4	9.4	9.4	15.7	22.0	22.0
80°	18.9	15.7	12.6	6.3	6.3	6.3	9.4	15.7	15.7
82.5°	12.6	9.4	9.4	6.3	6.3	6.3	6.3	9.4	9.4
85°	6.3	6.3	6.3	3.1	3.1	3.1	3.1	6.3	6.3
87.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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)