

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: P858140

Luminaire Tested: **LD4C45D010 EU4459035 4LBMDSWH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P858140
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 EU4459035 4LBMDSWH
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBMDSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

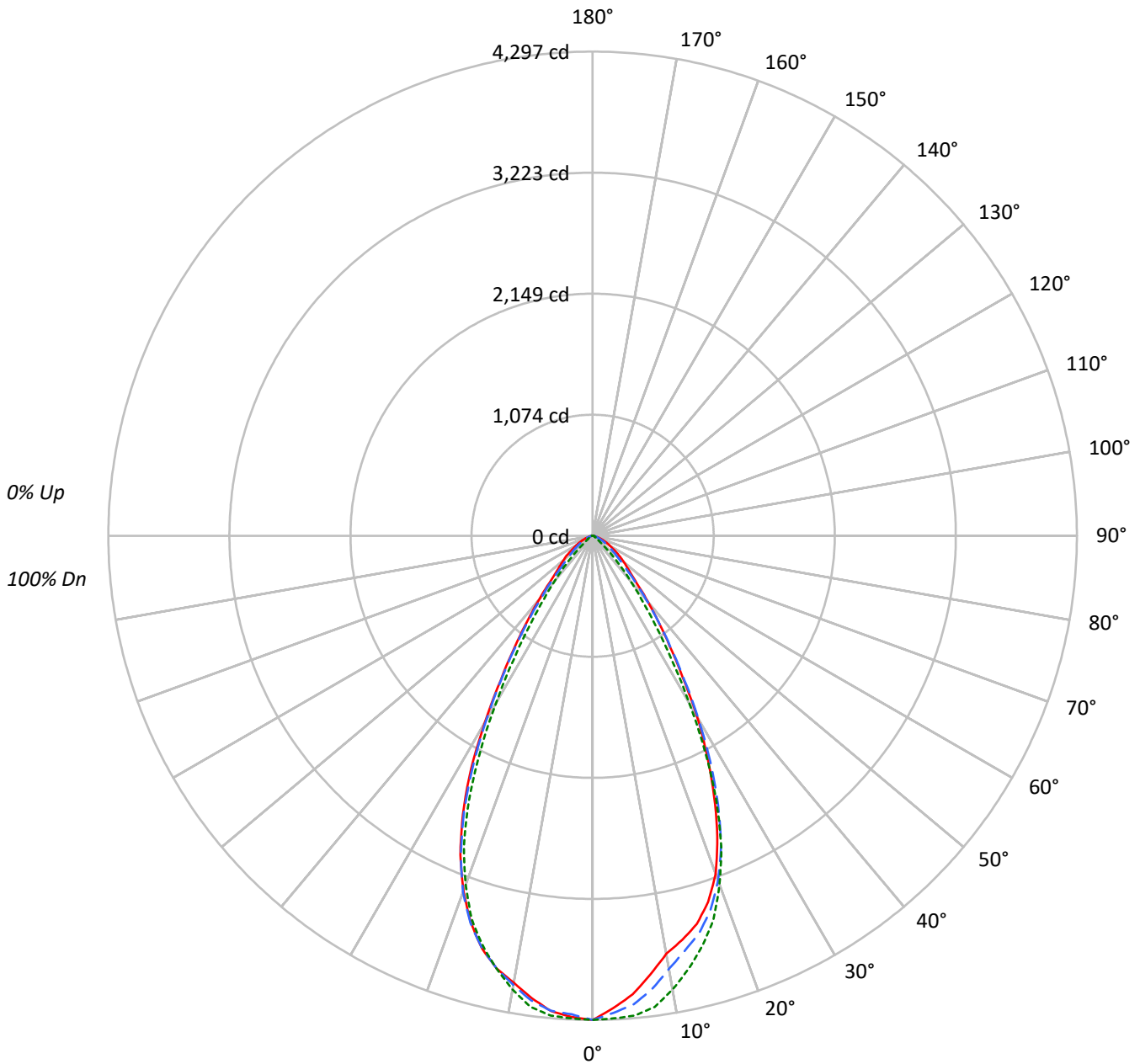
Lumens per Lamp: N/A
Luminaire Lumens: 3912.0 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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					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°	527938	527938	527938
5°	503761	527081	522173
10°	469841	509998	502550
15°	453702	479025	482409
20°	417355	430363	438168
25°	345906	352209	369303
30°	263148	243373	270681
35°	178172	145822	180152
40°	121339	83555	117618
45°	84178	42080	79556
50°	68500	17125	64065
55°	55432	10667	50463
60°	44031	8157	39952
65°	34738	6744	30872
70°	26222	5963	23851
75°	18892	4747	17325
80°	14079	4669	11744
85°	9303	4652	9303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.1	10.1
10°-20°	1038.1	26.5
20°-30°	1191.1	30.4
30°-40°	723.5	18.5
40°-50°	310.1	7.9
50°-60°	148.8	3.8
60°-70°	72.3	1.8
70°-80°	26.8	0.7
80°-90°	6.2	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°	2624.3	67.1
0°-40°	3347.8	85.6
0°-60°	3806.7	97.3
0°-90°	3912.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3912.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4297	4297	4297	4297	4297	
5°	4085	4174	4274	4231	4234	380
15°	3567	3650	3766	3790	3793	993
25°	2552	2635	2598	2698	2724	1158
35°	1188	1205	972	1175	1201	761
45°	484	431	242	388	458	394
55°	259	192	50	173	236	234
65°	120	80	23	73	106	121
75°	40	26	10	23	36	44
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°	4297.3	4297.3	4297.3	4297.3	4297.3	4297.3	4297.3	4297.3	4297.3
2.5°	4194.4	4240.9	4237.5	4277.4	4287.3	4277.4	4250.8	4277.4	4274.0
5°	4084.9	4138.0	4174.5	4240.9	4274.0	4267.4	4230.9	4237.5	4234.2
7.5°	3925.6	3992.0	4055.0	4154.6	4217.6	4214.3	4161.2	4151.3	4138.0
10°	3766.3	3829.4	3902.4	4005.3	4088.2	4101.5	4048.4	4035.1	4028.5
12.5°	3673.4	3723.2	3773.0	3862.6	3935.6	3962.1	3932.3	3935.6	3932.3
15°	3567.2	3617.0	3650.2	3716.6	3766.3	3802.8	3789.6	3809.5	3792.9
17.5°	3408.0	3467.7	3481.0	3530.7	3567.2	3590.5	3603.7	3623.6	3597.1
20°	3192.3	3238.7	3255.3	3275.2	3291.8	3321.7	3361.5	3381.4	3351.5
22.5°	2890.3	2979.9	2976.6	2966.6	2983.2	2993.2	3056.2	3089.4	3066.2
25°	2551.8	2644.7	2634.8	2595.0	2598.3	2618.2	2697.8	2741.0	2724.4
27.5°	2196.8	2283.0	2259.8	2183.5	2163.6	2193.4	2296.3	2346.1	2336.1
30°	1855.0	1911.4	1874.9	1738.8	1715.6	1752.1	1884.8	1934.6	1908.1
32.5°	1486.6	1529.8	1513.2	1347.3	1307.4	1343.9	1499.9	1546.4	1516.5
35°	1188.0	1227.8	1204.6	1008.8	972.3	1012.1	1174.7	1227.8	1201.2
37.5°	952.4	982.2	952.4	743.3	710.1	749.9	905.9	975.6	942.4
40°	756.6	779.8	740.0	547.5	521.0	540.9	686.9	756.6	733.4
42.5°	597.3	613.9	570.8	401.5	371.7	398.2	517.7	580.7	567.4
45°	484.5	484.5	431.4	278.7	242.2	268.8	388.2	454.6	457.9
47.5°	414.8	404.8	338.5	185.8	139.4	175.9	308.6	378.3	388.2
50°	358.4	345.1	278.7	136.1	89.6	126.1	255.5	325.2	335.2
52.5°	308.6	298.7	232.3	106.2	63.0	96.2	215.7	282.1	292.0
55°	258.8	252.2	192.5	83.0	49.8	73.0	172.6	229.0	235.6
57.5°	212.4	202.4	156.0	69.7	39.8	59.7	142.7	189.1	195.8
60°	179.2	169.2	126.1	56.4	33.2	46.5	116.1	156.0	162.6
62.5°	149.3	139.4	102.9	46.5	26.5	39.8	92.9	126.1	132.7
65°	119.5	112.8	79.6	36.5	23.2	29.9	73.0	99.6	106.2
67.5°	96.2	89.6	63.0	29.9	19.9	23.2	56.4	79.6	86.3
70°	73.0	66.4	46.5	23.2	16.6	19.9	43.1	59.7	66.4
72.5°	53.1	49.8	36.5	19.9	13.3	16.6	29.9	43.1	49.8
75°	39.8	36.5	26.5	13.3	10.0	13.3	23.2	33.2	36.5
77.5°	26.5	26.5	19.9	10.0	10.0	10.0	16.6	23.2	23.2
80°	19.9	16.6	13.3	6.6	6.6	6.6	10.0	16.6	16.6
82.5°	13.3	10.0	10.0	6.6	6.6	6.6	6.6	10.0	10.0
85°	6.6	6.6	6.6	3.3	3.3	3.3	3.3	6.6	6.6
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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)