

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: P858165

Luminaire Tested: **LD4C45D010 EU4459040 4LBMDSWWMH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P858165
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 EU4459040 4LBMDSWWMH
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

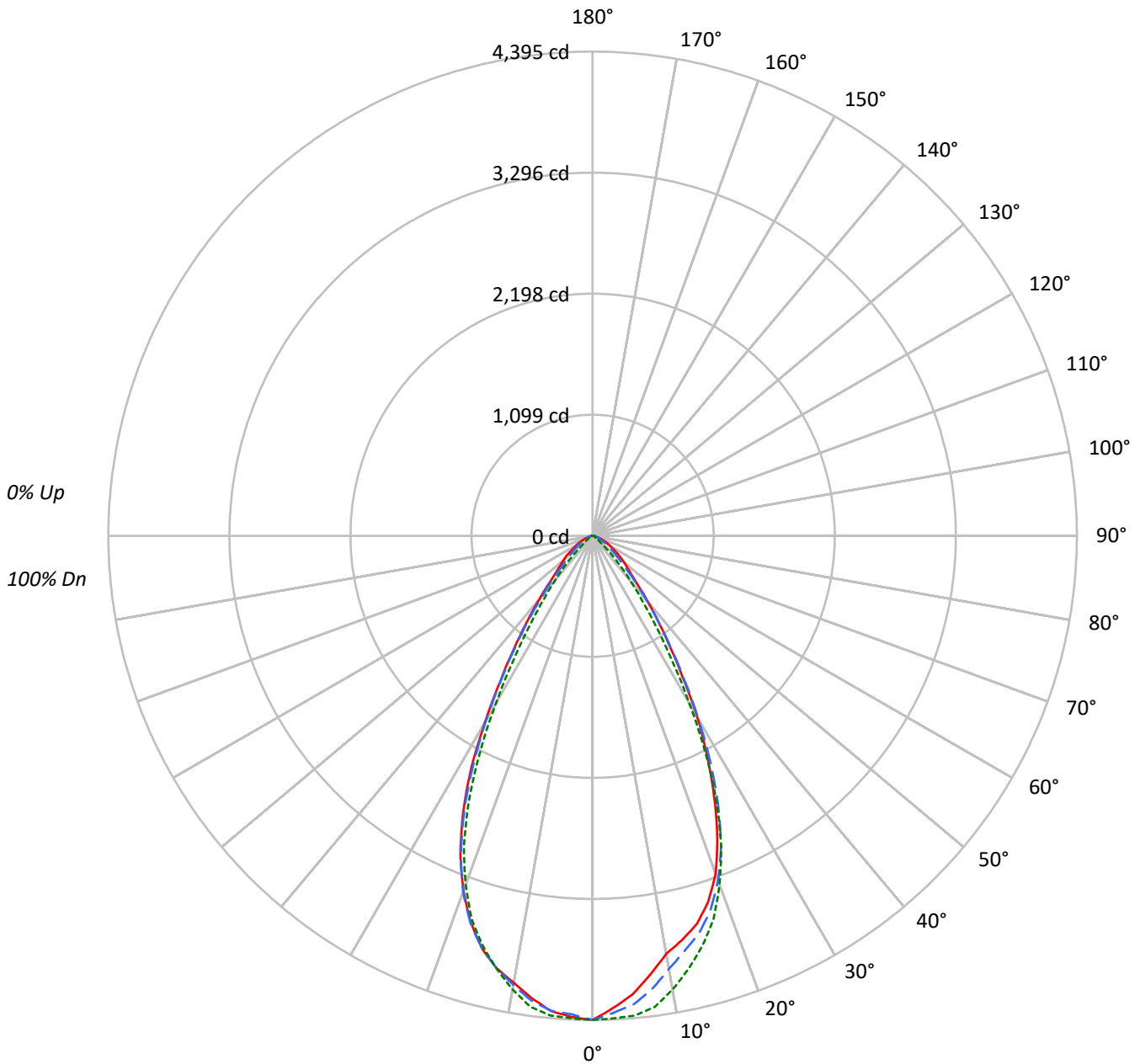
Lumens per Lamp: N/A
Luminaire Lumens: 4001.0 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P858165

CATALOG NUMBER: LD4C45D010 EU4459040 4LBMDSWWMH

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°	539941	539941	539941
5°	515218	539081	534062
10°	480532	521599	513977
15°	464030	489925	493385
20°	426846	440155	448144
25°	353782	360221	377707
30°	269135	248906	276838
35°	182221	149137	184261
40°	124097	85447	120280
45°	86089	43053	81380
50°	70048	17507	65518
55°	56696	10902	51619
60°	45038	8329	40861
65°	35523	6919	31570
70°	26832	6106	24390
75°	19319	4842	17705
80°	14433	4811	12027
85°	9585	4793	9585



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	404.1	10.1
10°-20°	1061.7	26.5
20°-30°	1218.2	30.4
30°-40°	740.0	18.5
40°-50°	317.1	7.9
50°-60°	152.1	3.8
60°-70°	74.0	1.8
70°-80°	27.5	0.7
80°-90°	6.3	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°	2684.0	67.1
0°-40°	3424.0	85.6
0°-60°	3893.2	97.3
0°-90°	4001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4001.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4395	4395	4395	4395	4395	
5°	4178	4270	4371	4327	4331	388
15°	3648	3733	3852	3876	3879	1016
25°	2610	2695	2657	2759	2786	1184
35°	1215	1232	994	1201	1229	779
45°	496	441	248	397	468	403
55°	265	197	51	176	241	239
65°	122	82	24	75	109	124
75°	41	27	10	24	37	45
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°	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0
2.5°	4289.8	4337.3	4334.0	4374.7	4384.9	4374.7	4347.5	4374.7	4371.3
5°	4177.8	4232.1	4269.5	4337.3	4371.3	4364.5	4327.2	4334.0	4330.6
7.5°	4014.9	4082.8	4147.3	4249.1	4313.6	4310.2	4255.9	4245.7	4232.1
10°	3852.0	3916.5	3991.2	4096.4	4181.2	4194.8	4140.5	4126.9	4120.1
12.5°	3757.0	3807.9	3858.8	3950.4	4025.1	4052.3	4021.7	4025.1	4021.7
15°	3648.4	3699.3	3733.2	3801.1	3852.0	3889.4	3875.8	3896.1	3879.2
17.5°	3485.5	3546.6	3560.2	3611.1	3648.4	3672.1	3685.7	3706.1	3678.9
20°	3264.9	3312.4	3329.4	3349.7	3366.7	3397.2	3438.0	3458.3	3427.8
22.5°	2956.0	3047.7	3044.3	3034.1	3051.1	3061.3	3125.7	3159.7	3135.9
25°	2609.9	2704.9	2694.7	2654.0	2657.4	2677.8	2759.2	2803.3	2786.4
27.5°	2246.7	2335.0	2311.2	2233.2	2212.8	2243.3	2348.5	2399.5	2389.3
30°	1897.2	1954.9	1917.5	1778.4	1754.6	1792.0	1927.7	1978.6	1951.5
32.5°	1520.4	1564.6	1547.6	1377.9	1337.2	1374.5	1534.0	1581.5	1551.0
35°	1215.0	1255.7	1232.0	1031.7	994.4	1035.1	1201.4	1255.7	1228.6
37.5°	974.0	1004.6	974.0	760.2	726.3	767.0	926.5	997.8	963.9
40°	773.8	797.6	756.8	560.0	532.8	553.2	702.5	773.8	750.0
42.5°	610.9	627.9	583.7	410.7	380.1	407.3	529.4	593.9	580.3
45°	495.5	495.5	441.2	285.1	247.8	274.9	397.1	465.0	468.4
47.5°	424.2	414.1	346.2	190.1	142.5	179.9	315.6	386.9	397.1
50°	366.5	353.0	285.1	139.1	91.6	129.0	261.3	332.6	342.8
52.5°	315.6	305.4	237.6	108.6	64.5	98.4	220.6	288.5	298.7
55°	264.7	257.9	196.8	84.8	50.9	74.7	176.5	234.2	241.0
57.5°	217.2	207.0	159.5	71.3	40.7	61.1	145.9	193.4	200.2
60°	183.3	173.1	129.0	57.7	33.9	47.5	118.8	159.5	166.3
62.5°	152.7	142.5	105.2	47.5	27.2	40.7	95.0	129.0	135.8
65°	122.2	115.4	81.5	37.3	23.8	30.5	74.7	101.8	108.6
67.5°	98.4	91.6	64.5	30.5	20.4	23.8	57.7	81.5	88.2
70°	74.7	67.9	47.5	23.8	17.0	20.4	44.1	61.1	67.9
72.5°	54.3	50.9	37.3	20.4	13.6	17.0	30.5	44.1	50.9
75°	40.7	37.3	27.2	13.6	10.2	13.6	23.8	33.9	37.3
77.5°	27.2	27.2	20.4	10.2	10.2	10.2	17.0	23.8	23.8
80°	20.4	17.0	13.6	6.8	6.8	6.8	10.2	17.0	17.0
82.5°	13.6	10.2	10.2	6.8	6.8	6.8	6.8	10.2	10.2
85°	6.8	6.8	6.8	3.4	3.4	3.4	3.4	6.8	6.8
87.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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)