

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: P858163

Luminaire Tested: **LD4C45D010 EU4459040 4LBMDSWMW**

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-08
Report Number: P858163
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 4LBMDSWMW
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

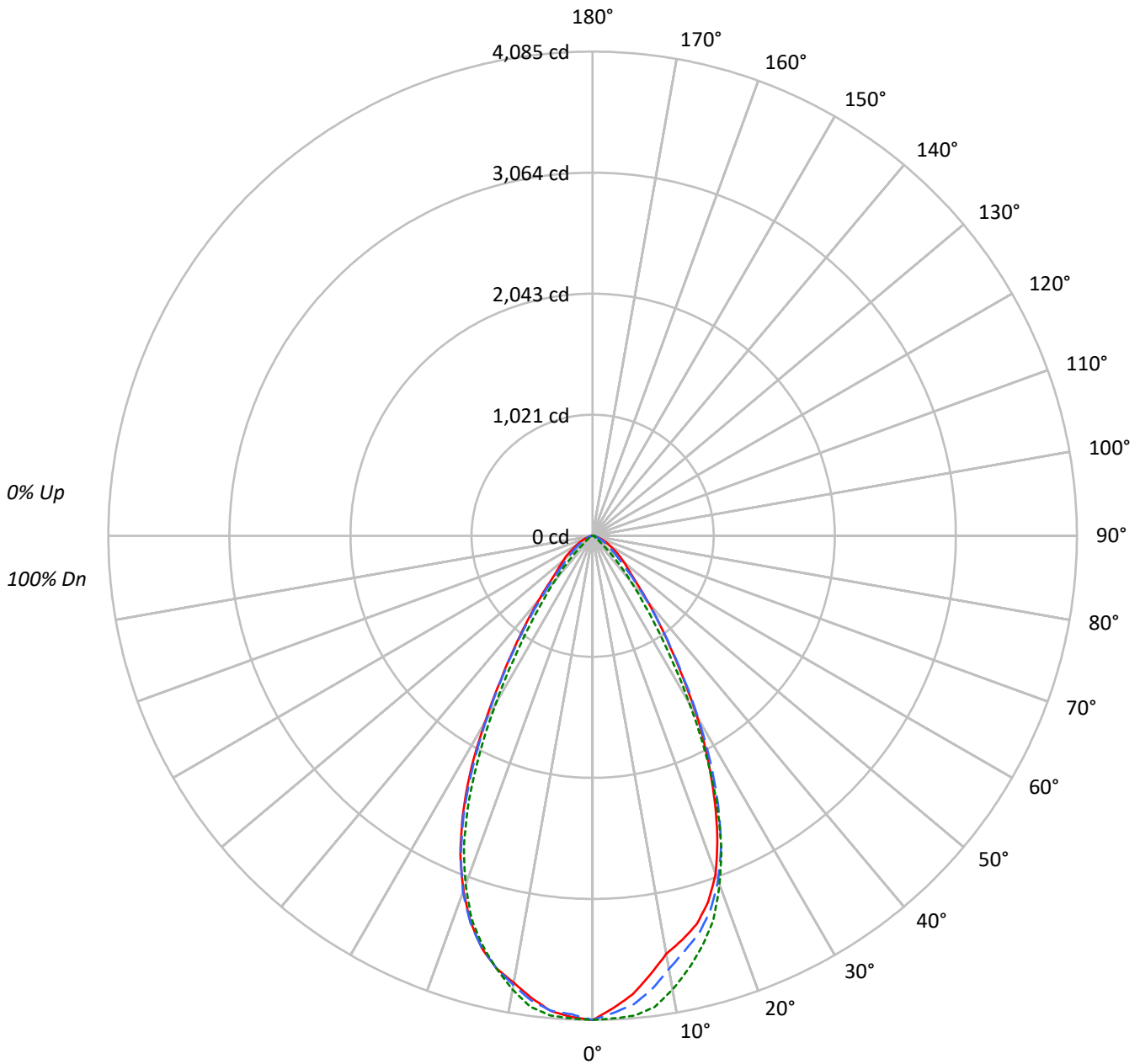
Lumens per Lamp: N/A
Luminaire Lumens: 3719.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	501893	501893	501893
5°	478912	501085	496411
10°	446663	484836	477750
15°	431317	455394	458612
20°	396763	409131	416557
25°	328840	334831	351084
30°	250154	231372	257318
35°	169383	138623	171273
40°	115357	79433	111813
45°	80025	40013	75629
50°	65117	16284	60893
55°	52712	10131	47978
60°	41868	7740	37986
65°	33023	6424	29331
70°	24928	5675	22665
75°	17990	4509	16471
80°	13371	4457	11178
85°	8880	4511	8880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.6	10.1
10°-20°	986.9	26.5
20°-30°	1132.3	30.4
30°-40°	687.9	18.5
40°-50°	294.8	7.9
50°-60°	141.4	3.8
60°-70°	68.8	1.8
70°-80°	25.5	0.7
80°-90°	5.9	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°	2494.8	67.1
0°-40°	3182.6	85.6
0°-60°	3618.8	97.3
0°-90°	3719.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3719.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4085	4085	4085	4085	4085	
5°	3883	3968	4063	4022	4025	361
15°	3391	3470	3580	3603	3606	944
25°	2426	2505	2470	2565	2590	1100
35°	1129	1145	924	1117	1142	724
45°	461	410	230	369	435	374
55°	246	183	47	164	224	222
65°	114	76	22	69	101	115
75°	38	25	10	22	35	42
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°	4085.3	4085.3	4085.3	4085.3	4085.3	4085.3	4085.3	4085.3	4085.3
2.5°	3987.5	4031.6	4028.5	4066.3	4075.8	4066.3	4041.1	4066.3	4063.2
5°	3883.4	3933.8	3968.5	4031.6	4063.2	4056.9	4022.2	4028.5	4025.3
7.5°	3731.9	3795.0	3855.0	3949.6	4009.6	4006.4	3955.9	3946.5	3933.8
10°	3580.5	3640.5	3709.9	3807.7	3886.5	3899.1	3848.7	3836.1	3829.7
12.5°	3492.2	3539.5	3586.8	3672.0	3741.4	3766.6	3738.3	3741.4	3738.3
15°	3391.2	3438.6	3470.1	3533.2	3580.5	3615.2	3602.6	3621.5	3605.8
17.5°	3239.8	3296.6	3309.2	3356.5	3391.2	3413.3	3425.9	3444.9	3419.6
20°	3034.8	3078.9	3094.7	3113.6	3129.4	3157.8	3195.7	3214.6	3186.2
22.5°	2747.7	2832.9	2829.7	2820.3	2836.0	2845.5	2905.4	2937.0	2914.9
25°	2425.9	2514.3	2504.8	2466.9	2470.1	2489.0	2564.7	2605.7	2590.0
27.5°	2088.4	2170.4	2148.3	2075.8	2056.8	2085.2	2183.0	2230.3	2220.9
30°	1763.4	1817.1	1782.4	1653.0	1631.0	1665.7	1791.8	1839.2	1813.9
32.5°	1413.3	1454.3	1438.5	1280.8	1242.9	1277.6	1425.9	1470.1	1441.7
35°	1129.4	1167.2	1145.1	959.0	924.3	962.2	1116.7	1167.2	1142.0
37.5°	905.4	933.8	905.4	706.6	675.1	713.0	861.2	927.5	895.9
40°	719.3	741.3	703.5	520.5	495.3	514.2	653.0	719.3	697.2
42.5°	567.8	583.6	542.6	381.7	353.3	378.6	492.1	552.1	539.4
45°	460.6	460.6	410.1	265.0	230.3	255.5	369.1	432.2	435.3
47.5°	394.3	384.9	321.8	176.7	132.5	167.2	293.4	359.6	369.1
50°	340.7	328.1	265.0	129.3	85.2	119.9	242.9	309.2	318.6
52.5°	293.4	283.9	220.8	100.9	59.9	91.5	205.1	268.1	277.6
55°	246.1	239.8	183.0	78.9	47.3	69.4	164.0	217.7	224.0
57.5°	201.9	192.4	148.3	66.2	37.9	56.8	135.6	179.8	186.1
60°	170.4	160.9	119.9	53.6	31.5	44.2	110.4	148.3	154.6
62.5°	142.0	132.5	97.8	44.2	25.2	37.9	88.3	119.9	126.2
65°	113.6	107.3	75.7	34.7	22.1	28.4	69.4	94.6	100.9
67.5°	91.5	85.2	59.9	28.4	18.9	22.1	53.6	75.7	82.0
70°	69.4	63.1	44.2	22.1	15.8	18.9	41.0	56.8	63.1
72.5°	50.5	47.3	34.7	18.9	12.6	15.8	28.4	41.0	47.3
75°	37.9	34.7	25.2	12.6	9.5	12.6	22.1	31.5	34.7
77.5°	25.2	25.2	18.9	9.5	9.5	9.5	15.8	22.1	22.1
80°	18.9	15.8	12.6	6.3	6.3	6.3	9.5	15.8	15.8
82.5°	12.6	9.5	9.5	6.3	6.3	6.3	6.3	9.5	9.5
85°	6.3	6.3	6.3	3.2	3.2	3.2	3.2	6.3	6.3
87.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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)