

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: P858184

Luminaire Tested: **LD4C45D010 EU4459050 4LBMDSWMW**

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-08
Report Number: P858184
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 EU4459050 4LBMDSWMW
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

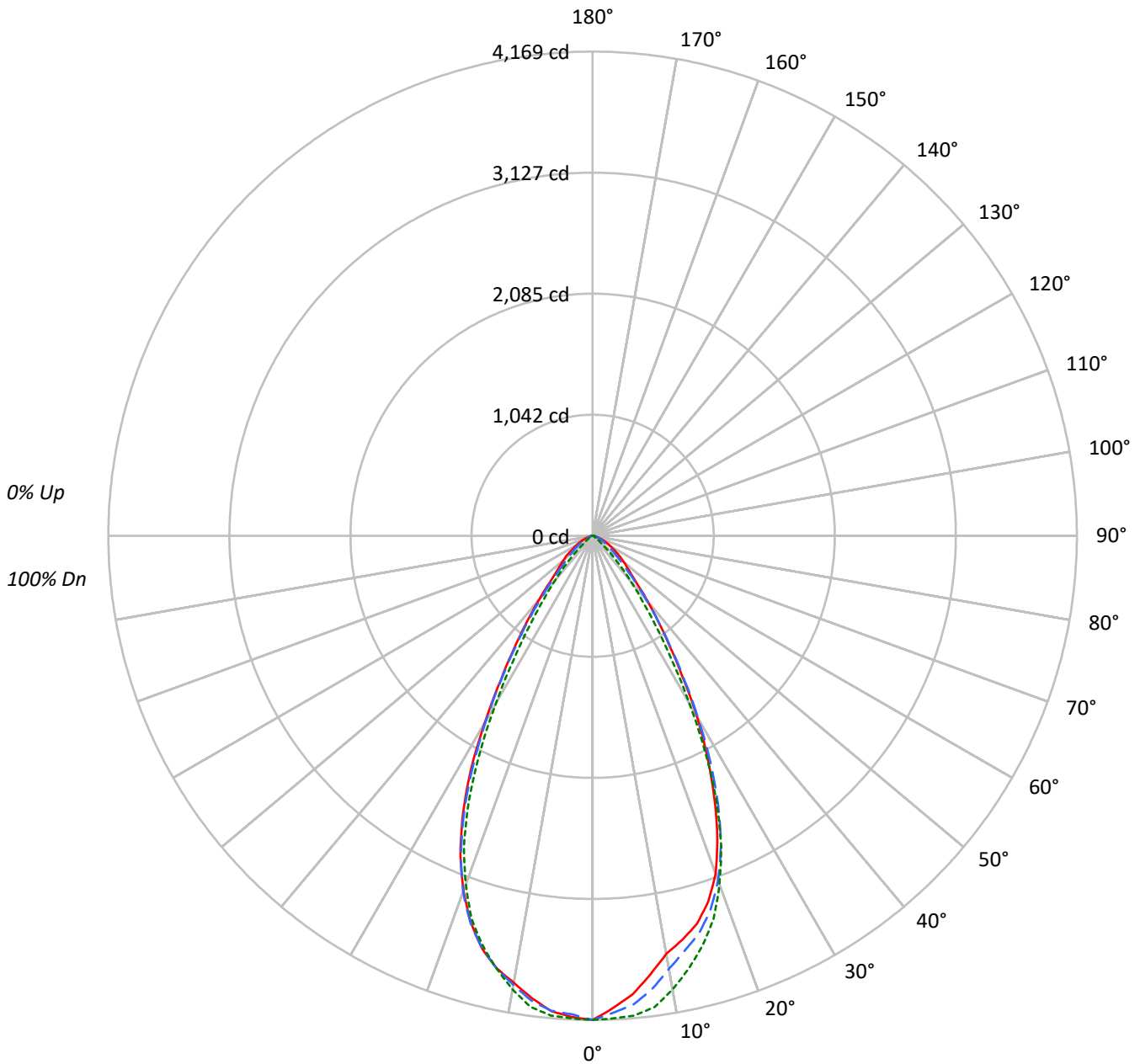
Lumens per Lamp: N/A
Luminaire Lumens: 3795.0 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P858184

CATALOG NUMBER: LD4C45D010 EU4459050 4LBMDSWMW

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°	512152	512152	512152
5°	488691	511321	506561
10°	455794	494741	487518
15°	440132	464704	467973
20°	404869	417499	425068
25°	335563	341677	358255
30°	255275	236096	262581
35°	172833	141458	174767
40°	117714	81053	114090
45°	81658	40829	77176
50°	66455	16609	62135
55°	53783	10345	48963
60°	42704	7912	38748
65°	33692	6541	29942
70°	25431	5783	23132
75°	18322	4604	16803
80°	13654	4528	11391
85°	9021	4511	9021



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.3	10.1
10°-20°	1007.1	26.5
20°-30°	1155.4	30.4
30°-40°	701.9	18.5
40°-50°	300.8	7.9
50°-60°	144.3	3.8
60°-70°	70.2	1.8
70°-80°	26.0	0.7
80°-90°	6.0	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°	2545.8	67.1
0°-40°	3247.7	85.6
0°-60°	3692.8	97.3
0°-90°	3795.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3795.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4169	4169	4169	4169	4169	
5°	3963	4050	4146	4104	4108	368
15°	3460	3541	3654	3676	3679	963
25°	2476	2556	2521	2617	2643	1123
35°	1152	1168	943	1140	1165	739
45°	470	418	235	377	444	382
55°	251	187	48	167	229	227
65°	116	77	22	71	103	118
75°	39	26	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°	4168.8	4168.8	4168.8	4168.8	4168.8	4168.8	4168.8	4168.8	4168.8
2.5°	4069.0	4114.0	4110.8	4149.4	4159.1	4149.4	4123.7	4149.4	4146.2
5°	3962.7	4014.2	4049.6	4114.0	4146.2	4139.8	4104.4	4110.8	4107.6
7.5°	3808.2	3872.6	3933.8	4030.3	4091.5	4088.3	4036.8	4027.1	4014.2
10°	3653.7	3714.9	3785.7	3885.5	3965.9	3978.8	3927.3	3914.4	3908.0
12.5°	3563.6	3611.8	3660.1	3747.0	3817.9	3843.6	3814.6	3817.9	3814.6
15°	3460.5	3508.8	3541.0	3605.4	3653.7	3689.1	3676.2	3695.5	3679.4
17.5°	3306.0	3364.0	3376.9	3425.1	3460.5	3483.1	3496.0	3515.3	3489.5
20°	3096.8	3141.9	3158.0	3177.3	3193.4	3222.3	3261.0	3280.3	3251.3
22.5°	2803.8	2890.8	2887.5	2877.9	2894.0	2903.6	2964.8	2997.0	2974.5
25°	2475.5	2565.6	2556.0	2517.3	2520.6	2539.9	2617.1	2659.0	2642.9
27.5°	2131.1	2214.8	2192.2	2118.2	2098.9	2127.8	2227.6	2275.9	2266.3
30°	1799.5	1854.2	1818.8	1686.8	1664.3	1699.7	1828.5	1876.7	1851.0
32.5°	1442.2	1484.0	1467.9	1307.0	1268.3	1303.7	1455.0	1500.1	1471.1
35°	1152.4	1191.1	1168.5	978.6	943.2	981.8	1139.6	1191.1	1165.3
37.5°	923.9	952.9	923.9	721.1	688.9	727.5	878.8	946.4	914.2
40°	734.0	756.5	717.9	531.2	505.4	524.7	666.4	734.0	711.4
42.5°	579.4	595.5	553.7	389.5	360.5	386.3	502.2	563.3	550.5
45°	470.0	470.0	418.5	270.4	235.0	260.7	376.6	441.0	444.2
47.5°	402.4	392.7	328.3	180.3	135.2	170.6	299.4	367.0	376.6
50°	347.7	334.8	270.4	132.0	86.9	122.3	247.9	315.5	325.1
52.5°	299.4	289.7	225.3	103.0	61.2	93.4	209.2	273.6	283.3
55°	251.1	244.7	186.7	80.5	48.3	70.8	167.4	222.1	228.6
57.5°	206.0	196.4	151.3	67.6	38.6	57.9	138.4	183.5	189.9
60°	173.8	164.2	122.3	54.7	32.2	45.1	112.7	151.3	157.7
62.5°	144.9	135.2	99.8	45.1	25.8	38.6	90.1	122.3	128.8
65°	115.9	109.4	77.3	35.4	22.5	29.0	70.8	96.6	103.0
67.5°	93.4	86.9	61.2	29.0	19.3	22.5	54.7	77.3	83.7
70°	70.8	64.4	45.1	22.5	16.1	19.3	41.8	57.9	64.4
72.5°	51.5	48.3	35.4	19.3	12.9	16.1	29.0	41.8	48.3
75°	38.6	35.4	25.8	12.9	9.7	12.9	22.5	32.2	35.4
77.5°	25.8	25.8	19.3	9.7	9.7	9.7	16.1	22.5	22.5
80°	19.3	16.1	12.9	6.4	6.4	6.4	9.7	16.1	16.1
82.5°	12.9	9.7	9.7	6.4	6.4	6.4	6.4	9.7	9.7
85°	6.4	6.4	6.4	3.2	3.2	3.2	3.2	6.4	6.4
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)