

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: P858103

Luminaire Tested: **LD4C45D010 EU4459027 4LBMDSWWMH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P858103
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 4LBMDSWWMH
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

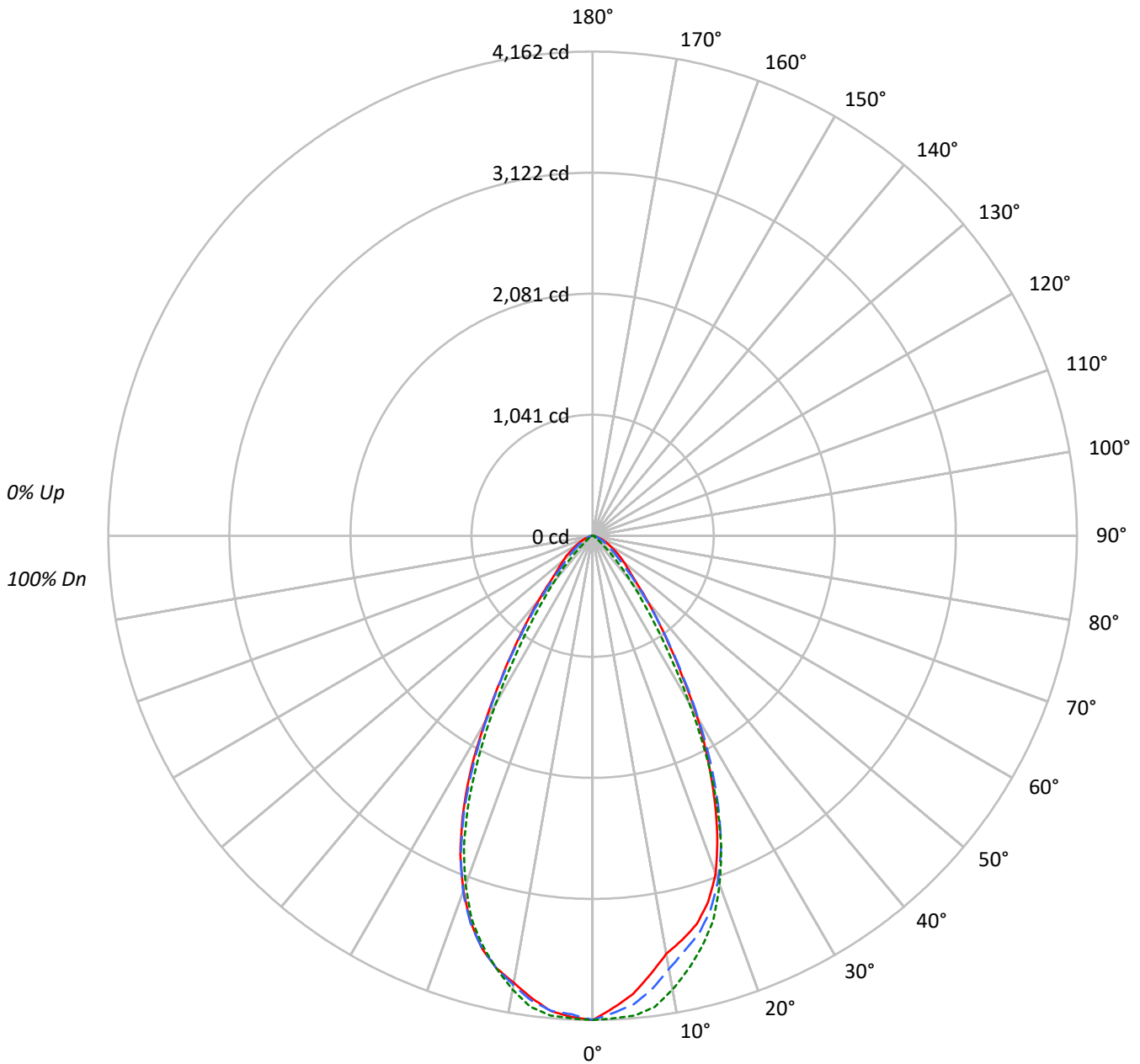
Lumens per Lamp: N/A
Luminaire Lumens: 3789.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	511341	511341	511341
5°	487926	510519	505759
10°	455071	493967	486744
15°	439445	463966	467235
20°	404229	416832	424401
25°	335035	341135	357686
30°	254864	235727	262170
35°	172563	141233	174498
40°	117522	80925	113914
45°	81519	40760	77054
50°	66340	16590	62040
55°	53697	10324	48878
60°	42655	7887	38699
65°	33634	6541	29884
70°	25395	5783	23097
75°	18322	4557	16803
80°	13654	4528	11391
85°	9021	4511	9021



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	382.7	10.1
10°-20°	1005.5	26.5
20°-30°	1153.6	30.4
30°-40°	700.8	18.5
40°-50°	300.3	7.9
50°-60°	144.1	3.8
60°-70°	70.1	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°	2541.7	67.1
0°-40°	3242.5	85.6
0°-60°	3687.0	97.3
0°-90°	3789.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3789.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4162	4162	4162	4162	4162	
5°	3956	4043	4140	4098	4101	368
15°	3455	3535	3648	3670	3674	962
25°	2472	2552	2517	2613	2639	1121
35°	1151	1167	942	1138	1164	737
45°	469	418	235	376	444	381
55°	251	186	48	167	228	226
65°	116	77	22	71	103	117
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°	4162.2	4162.2	4162.2	4162.2	4162.2	4162.2	4162.2	4162.2	4162.2
2.5°	4062.5	4107.5	4104.3	4142.9	4152.5	4142.9	4117.2	4142.9	4139.7
5°	3956.5	4007.9	4043.2	4107.5	4139.7	4133.2	4097.9	4104.3	4101.1
7.5°	3802.2	3866.5	3927.5	4024.0	4085.0	4081.8	4030.4	4020.7	4007.9
10°	3647.9	3709.0	3779.7	3879.3	3959.7	3972.5	3921.1	3908.3	3901.8
12.5°	3557.9	3606.1	3654.3	3741.1	3811.8	3837.5	3808.6	3811.8	3808.6
15°	3455.1	3503.3	3535.4	3599.7	3647.9	3683.3	3670.4	3689.7	3673.6
17.5°	3300.8	3358.7	3371.5	3419.7	3455.1	3477.6	3490.4	3509.7	3484.0
20°	3091.9	3136.9	3153.0	3172.2	3188.3	3217.2	3255.8	3275.1	3246.2
22.5°	2799.4	2886.2	2883.0	2873.3	2889.4	2899.0	2960.1	2992.3	2969.8
25°	2471.6	2561.6	2551.9	2513.4	2516.6	2535.9	2613.0	2654.8	2638.7
27.5°	2127.7	2211.2	2188.8	2114.8	2095.5	2124.5	2224.1	2272.3	2262.7
30°	1796.6	1851.3	1815.9	1684.1	1661.7	1697.0	1825.6	1873.8	1848.1
32.5°	1439.9	1481.7	1465.6	1304.9	1266.3	1301.7	1452.7	1497.7	1468.8
35°	1150.6	1189.2	1166.7	977.1	941.7	980.3	1137.8	1189.2	1163.5
37.5°	922.4	951.4	922.4	719.9	687.8	726.4	877.4	944.9	912.8
40°	732.8	755.3	716.7	530.3	504.6	523.9	665.3	732.8	710.3
42.5°	578.5	594.6	552.8	388.9	360.0	385.7	501.4	562.5	549.6
45°	469.2	469.2	417.8	270.0	234.6	260.3	376.0	440.3	443.5
47.5°	401.8	392.1	327.8	180.0	135.0	170.3	298.9	366.4	376.0
50°	347.1	334.3	270.0	131.8	86.8	122.1	247.5	315.0	324.6
52.5°	298.9	289.3	225.0	102.8	61.1	93.2	208.9	273.2	282.8
55°	250.7	244.3	186.4	80.4	48.2	70.7	167.1	221.8	228.2
57.5°	205.7	196.1	151.1	67.5	38.6	57.9	138.2	183.2	189.6
60°	173.6	163.9	122.1	54.6	32.1	45.0	112.5	151.1	157.5
62.5°	144.6	135.0	99.6	45.0	25.7	38.6	90.0	122.1	128.6
65°	115.7	109.3	77.1	35.4	22.5	28.9	70.7	96.4	102.8
67.5°	93.2	86.8	61.1	28.9	19.3	22.5	54.6	77.1	83.6
70°	70.7	64.3	45.0	22.5	16.1	19.3	41.8	57.9	64.3
72.5°	51.4	48.2	35.4	19.3	12.9	16.1	28.9	41.8	48.2
75°	38.6	35.4	25.7	12.9	9.6	12.9	22.5	32.1	35.4
77.5°	25.7	25.7	19.3	9.6	9.6	9.6	16.1	22.5	22.5
80°	19.3	16.1	12.9	6.4	6.4	6.4	9.6	16.1	16.1
82.5°	12.9	9.6	9.6	6.4	6.4	6.4	6.4	9.6	9.6
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)