

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: P859013

Luminaire Tested: **LD4C50D010 EU4509040 4LBMDSWMW**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P859013
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: LD4C50D010 EU4509040 4LBMDSWMW
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

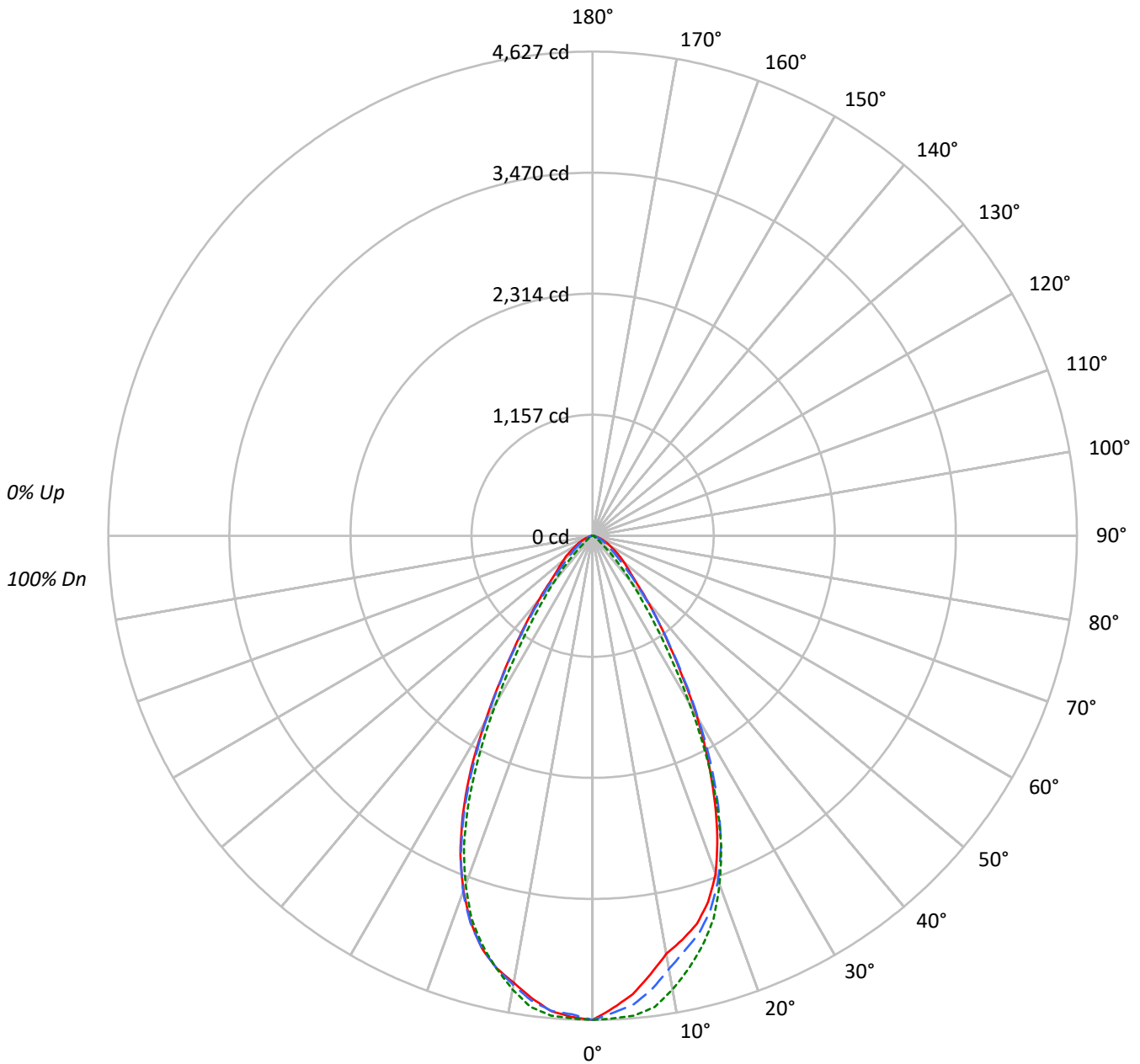
Lumens per Lamp: N/A
Luminaire Lumens: 4212.0 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
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	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92	92	92	92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78	78	78	78
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55	55	55	55
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51	51	51	51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48	48	48	48

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	568418	568418	568418
5°	542398	567507	562216
10°	505881	549106	541085
15°	488501	515770	519395
20°	449359	463374	471781
25°	372434	379212	397620
30°	283321	262042	291435
35°	191835	156995	193979
40°	130641	89954	126631
45°	90623	45312	85672
50°	73756	18444	68977
55°	59694	11481	54340
60°	47397	8772	43023
65°	37384	7267	33227
70°	28233	6430	25683
75°	20363	5079	18655
80°	15140	5023	12664
85°	10008	5075	10008



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	425.4	10.1
10°-20°	1117.7	26.5
20°-30°	1282.4	30.4
30°-40°	779.0	18.5
40°-50°	333.9	7.9
50°-60°	160.2	3.8
60°-70°	77.9	1.8
70°-80°	28.9	0.7
80°-90°	6.6	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°	2825.5	67.1
0°-40°	3604.5	85.6
0°-60°	4098.6	97.3
0°-90°	4212.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4212.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4627	4627	4627	4627	4627	
5°	4398	4495	4602	4555	4559	409
15°	3841	3930	4055	4080	4084	1069
25°	2748	2837	2798	2905	2933	1246
35°	1279	1297	1047	1265	1293	820
45°	522	464	261	418	493	424
55°	279	207	54	186	254	252
65°	129	86	25	79	114	130
75°	43	29	11	25	39	47
85°	7	7	4	4	7	10
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°	4626.8	4626.8	4626.8	4626.8	4626.8	4626.8	4626.8	4626.8	4626.8
2.5°	4516.1	4566.1	4562.5	4605.4	4616.1	4605.4	4576.8	4605.4	4601.8
5°	4398.2	4455.3	4494.6	4566.1	4601.8	4594.7	4555.4	4562.5	4558.9
7.5°	4226.7	4298.1	4366.0	4473.2	4541.1	4537.5	4480.3	4469.6	4455.3
10°	4055.2	4123.1	4201.7	4312.4	4401.7	4416.0	4358.9	4344.6	4337.4
12.5°	3955.1	4008.7	4062.3	4158.8	4237.4	4266.0	4233.8	4237.4	4233.8
15°	3840.8	3894.4	3930.1	4001.6	4055.2	4094.5	4080.2	4101.6	4083.7
17.5°	3669.3	3733.6	3747.9	3801.5	3840.8	3865.8	3880.1	3901.5	3873.0
20°	3437.1	3487.1	3505.0	3526.4	3544.3	3576.4	3619.3	3640.7	3608.6
22.5°	3111.9	3208.4	3204.8	3194.1	3212.0	3222.7	3290.6	3326.3	3301.3
25°	2747.5	2847.5	2836.8	2794.0	2797.5	2819.0	2904.7	2951.2	2933.3
27.5°	2365.2	2458.1	2433.1	2350.9	2329.5	2361.6	2472.4	2526.0	2515.3
30°	1997.2	2058.0	2018.7	1872.2	1847.2	1886.5	2029.4	2083.0	2054.4
32.5°	1600.6	1647.1	1629.2	1450.6	1407.7	1447.0	1614.9	1664.9	1632.8
35°	1279.1	1321.9	1296.9	1086.1	1046.8	1089.7	1264.8	1321.9	1293.4
37.5°	1025.4	1057.6	1025.4	800.3	764.6	807.5	975.4	1050.4	1014.7
40°	814.6	839.6	796.7	589.5	560.9	582.4	739.6	814.6	789.6
42.5°	643.1	661.0	614.5	432.3	400.2	428.7	557.4	625.2	611.0
45°	521.6	521.6	464.5	300.1	260.8	289.4	418.0	489.5	493.1
47.5°	446.6	435.9	364.4	200.1	150.1	189.4	332.3	407.3	418.0
50°	385.9	371.6	300.1	146.5	96.5	135.8	275.1	350.1	360.9
52.5°	332.3	321.6	250.1	114.3	67.9	103.6	232.2	303.7	314.4
55°	278.7	271.5	207.2	89.3	53.6	78.6	185.8	246.5	253.7
57.5°	228.7	217.9	167.9	75.0	42.9	64.3	153.6	203.7	210.8
60°	192.9	182.2	135.8	60.7	35.7	50.0	125.0	167.9	175.1
62.5°	160.8	150.1	110.8	50.0	28.6	42.9	100.0	135.8	142.9
65°	128.6	121.5	85.7	39.3	25.0	32.2	78.6	107.2	114.3
67.5°	103.6	96.5	67.9	32.2	21.4	25.0	60.7	85.7	92.9
70°	78.6	71.5	50.0	25.0	17.9	21.4	46.4	64.3	71.5
72.5°	57.2	53.6	39.3	21.4	14.3	17.9	32.2	46.4	53.6
75°	42.9	39.3	28.6	14.3	10.7	14.3	25.0	35.7	39.3
77.5°	28.6	28.6	21.4	10.7	10.7	10.7	17.9	25.0	25.0
80°	21.4	17.9	14.3	7.1	7.1	7.1	10.7	17.9	17.9
82.5°	14.3	10.7	10.7	7.1	7.1	7.1	7.1	10.7	10.7
85°	7.1	7.1	7.1	3.6	3.6	3.6	3.6	7.1	7.1
87.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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)