

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: P858159

Luminaire Tested: **LD4C45D010 EU4459040 4LBMDDWLI**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P858159
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 4LBMDDWLI
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBMDDW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Summary

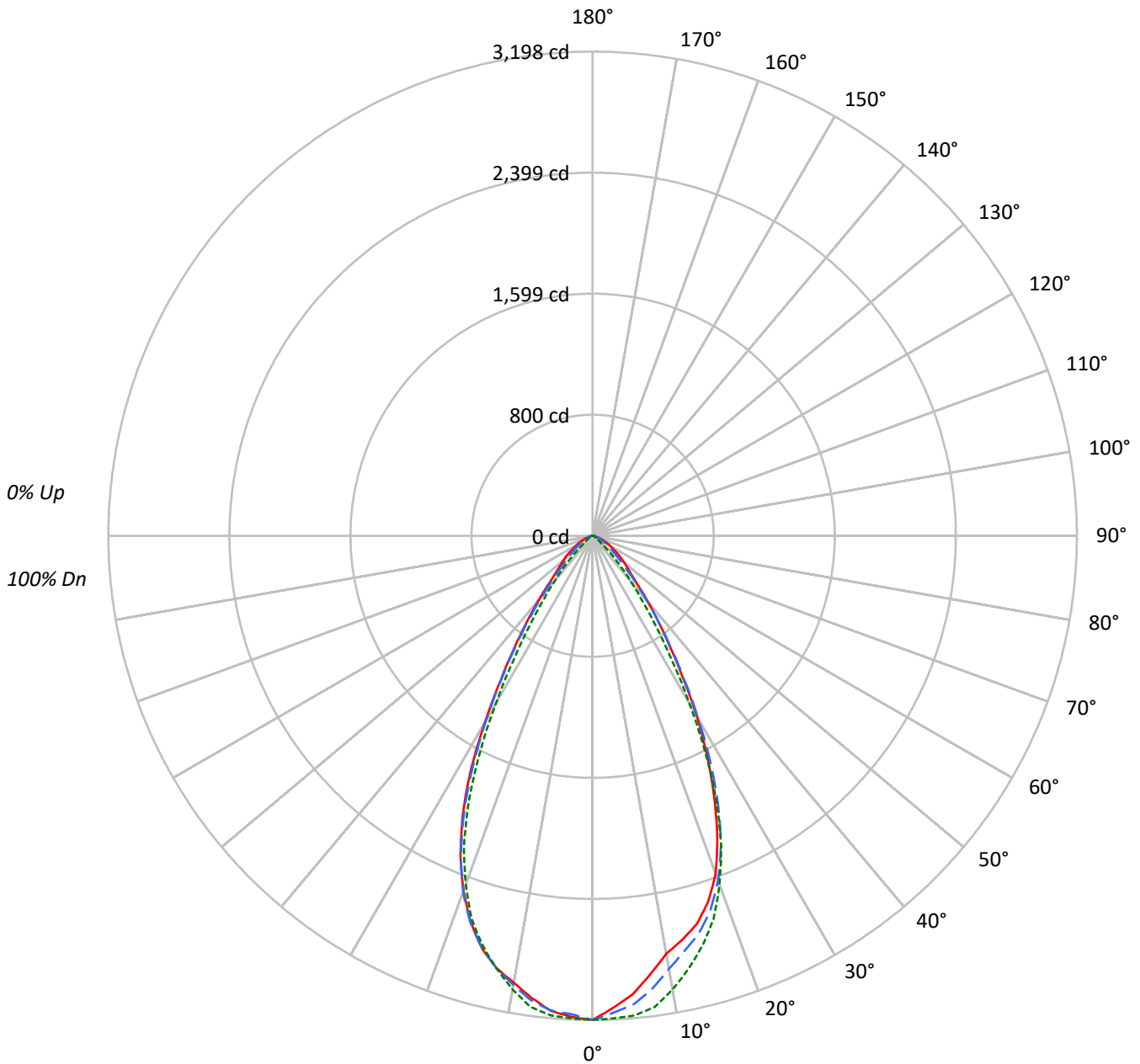
Lumens per Lamp: N/A
Luminaire Lumens: 2911.0 lumens
Efficiency: N/A
Efficacy: 58.7 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P858159

CATALOG NUMBER: LD4C45D010 EU4459040 4LBMDDWLI

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°	392849	392849	392849
5°	374864	392216	388565
10°	349621	379498	373959
15°	337619	356455	358973
20°	310555	320243	326060
25°	257403	262080	274808
30°	195808	181097	201411
35°	132579	108508	134064
40°	90290	62177	87516
45°	62634	31326	59211
50°	50973	12748	47667
55°	41253	7925	37547
60°	32753	6069	29731
65°	25843	5029	22965
70°	19505	4418	17744
75°	14050	3513	12911
80°	10471	3467	8702
85°	6907	3524	6907



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.0	10.1
10°-20°	772.5	26.5
20°-30°	886.3	30.4
30°-40°	538.4	18.5
40°-50°	230.7	7.9
50°-60°	110.7	3.8
60°-70°	53.8	1.8
70°-80°	20.0	0.7
80°-90°	4.6	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°	1952.8	67.1
0°-40°	2491.2	85.6
0°-60°	2832.6	97.3
0°-90°	2911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2911.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3198	3198	3198	3198	3198	
5°	3040	3106	3180	3148	3151	282
15°	2654	2716	2803	2820	2822	739
25°	1899	1961	1933	2008	2027	861
35°	884	896	724	874	894	567
45°	360	321	180	289	341	293
55°	193	143	37	128	175	174
65°	89	59	17	54	79	90
75°	30	20	7	17	27	32
85°	5	5	2	2	5	7
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°	3197.7	3197.7	3197.7	3197.7	3197.7	3197.7	3197.7	3197.7	3197.7
2.5°	3121.1	3155.7	3153.2	3182.9	3190.3	3182.9	3163.1	3182.9	3180.4
5°	3039.7	3079.2	3106.3	3155.7	3180.4	3175.5	3148.3	3153.2	3150.8
7.5°	2921.1	2970.5	3017.4	3091.5	3138.4	3136.0	3096.5	3089.0	3079.2
10°	2802.6	2849.5	2903.8	2980.4	3042.1	3052.0	3012.5	3002.6	2997.7
12.5°	2733.5	2770.5	2807.5	2874.2	2928.5	2948.3	2926.1	2928.5	2926.1
15°	2654.5	2691.5	2716.2	2765.6	2802.6	2829.8	2819.9	2834.7	2822.4
17.5°	2535.9	2580.4	2590.3	2627.3	2654.5	2671.7	2681.6	2696.4	2676.7
20°	2375.4	2410.0	2422.3	2437.2	2449.5	2471.7	2501.4	2516.2	2494.0
22.5°	2150.7	2217.4	2214.9	2207.5	2219.9	2227.3	2274.2	2298.9	2281.6
25°	1898.9	1968.0	1960.6	1931.0	1933.4	1948.2	2007.5	2039.6	2027.3
27.5°	1634.6	1698.9	1681.6	1624.8	1610.0	1632.2	1708.7	1745.8	1738.4
30°	1380.3	1422.3	1395.1	1293.9	1276.6	1303.8	1402.5	1439.6	1419.8
32.5°	1106.2	1138.3	1126.0	1002.5	972.9	1000.1	1116.1	1150.7	1128.5
35°	884.0	913.6	896.3	750.7	723.5	753.1	874.1	913.6	893.9
37.5°	708.7	730.9	708.7	553.1	528.4	558.1	674.1	726.0	701.3
40°	563.0	580.3	550.6	407.4	387.7	402.5	511.1	563.0	545.7
42.5°	444.5	456.8	424.7	298.8	276.6	296.3	385.2	432.1	422.2
45°	360.5	360.5	321.0	207.4	180.3	200.0	288.9	338.3	340.8
47.5°	308.7	301.2	251.9	138.3	103.7	130.9	229.6	281.5	288.9
50°	266.7	256.8	207.4	101.2	66.7	93.8	190.1	242.0	249.4
52.5°	229.6	222.2	172.8	79.0	46.9	71.6	160.5	209.9	217.3
55°	192.6	187.7	143.2	61.7	37.0	54.3	128.4	170.4	175.3
57.5°	158.0	150.6	116.1	51.9	29.6	44.4	106.2	140.7	145.7
60°	133.3	125.9	93.8	42.0	24.7	34.6	86.4	116.1	121.0
62.5°	111.1	103.7	76.5	34.6	19.8	29.6	69.1	93.8	98.8
65°	88.9	84.0	59.3	27.2	17.3	22.2	54.3	74.1	79.0
67.5°	71.6	66.7	46.9	22.2	14.8	17.3	42.0	59.3	64.2
70°	54.3	49.4	34.6	17.3	12.3	14.8	32.1	44.4	49.4
72.5°	39.5	37.0	27.2	14.8	9.9	12.3	22.2	32.1	37.0
75°	29.6	27.2	19.8	9.9	7.4	9.9	17.3	24.7	27.2
77.5°	19.8	19.8	14.8	7.4	7.4	7.4	12.3	17.3	17.3
80°	14.8	12.3	9.9	4.9	4.9	4.9	7.4	12.3	12.3
82.5°	9.9	7.4	7.4	4.9	4.9	4.9	4.9	7.4	7.4
85°	4.9	4.9	4.9	2.5	2.5	2.5	2.5	4.9	4.9
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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)