

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: P858143

Luminaire Tested: **LD4C45D010 EU4459035 4LBMDSWWH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P858143
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 EU4459035 4LBMDSWWH
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WH FINISH
Light Source: -
Ballast/Driver: -

Summary

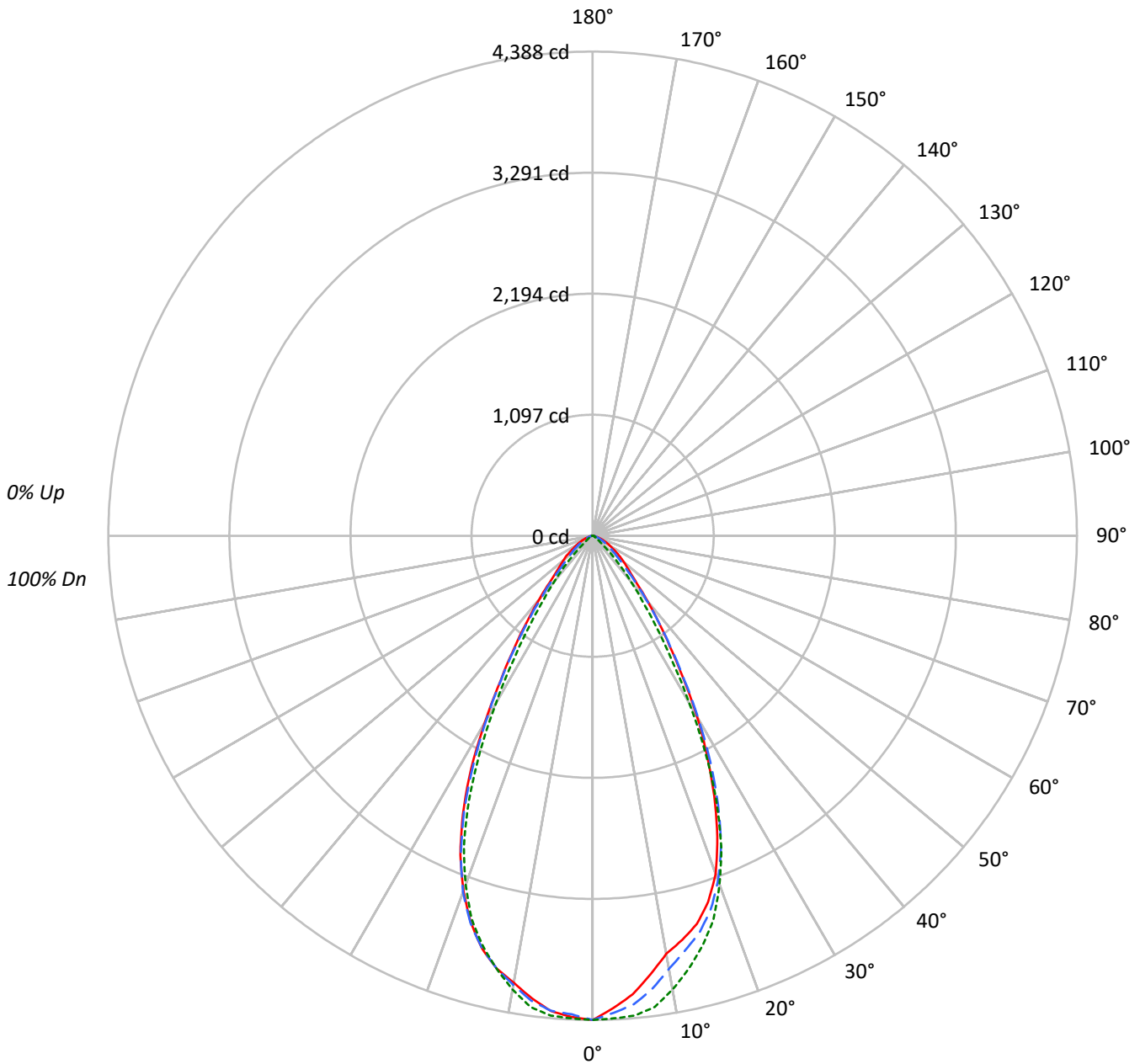
Lumens per Lamp: N/A
Luminaire Lumens: 3995.0 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

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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°	539130	539130	539130
5°	514453	538267	533260
10°	479808	520826	513216
15°	463331	489188	492647
20°	426206	439502	447477
25°	353253	359678	377138
30°	268723	248537	276412
35°	181951	148912	183976
40°	123905	85319	120104
45°	85967	42984	81241
50°	69952	17488	65422
55°	56610	10881	51534
60°	44964	8329	40787
65°	35465	6889	31511
70°	26796	6070	24354
75°	19319	4842	17705
80°	14362	4811	11956
85°	9585	4793	9585



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	403.5	10.1
10°-20°	1060.1	26.5
20°-30°	1216.3	30.4
30°-40°	738.9	18.5
40°-50°	316.7	7.9
50°-60°	151.9	3.8
60°-70°	73.9	1.8
70°-80°	27.4	0.7
80°-90°	6.3	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°	2679.9	67.1
0°-40°	3418.8	85.6
0°-60°	3887.4	97.3
0°-90°	3995.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3995.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4388	4388	4388	4388	4388	
5°	4172	4263	4365	4321	4324	388
15°	3643	3728	3846	3870	3873	1014
25°	2606	2691	2653	2755	2782	1182
35°	1213	1230	993	1200	1227	778
45°	495	440	247	396	468	402
55°	264	196	51	176	241	239
65°	122	81	24	75	108	124
75°	41	27	10	24	37	45
85°	7	7	3	3	7	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°	4388.4	4388.4	4388.4	4388.4	4388.4	4388.4	4388.4	4388.4	4388.4
2.5°	4283.4	4330.8	4327.5	4368.1	4378.3	4368.1	4341.0	4368.1	4364.7
5°	4171.6	4225.8	4263.1	4330.8	4364.7	4358.0	4320.7	4327.5	4324.1
7.5°	4008.9	4076.7	4141.1	4242.7	4307.1	4303.7	4249.5	4239.3	4225.8
10°	3846.2	3910.6	3985.2	4090.2	4175.0	4188.5	4134.3	4120.7	4114.0
12.5°	3751.4	3802.2	3853.0	3944.5	4019.1	4046.2	4015.7	4019.1	4015.7
15°	3642.9	3693.8	3727.6	3795.4	3846.2	3883.5	3870.0	3890.3	3873.4
17.5°	3480.3	3541.3	3554.8	3605.6	3642.9	3666.6	3680.2	3700.5	3673.4
20°	3260.0	3307.4	3324.4	3344.7	3361.7	3392.2	3432.8	3453.2	3422.7
22.5°	2951.6	3043.1	3039.7	3029.6	3046.5	3056.7	3121.1	3154.9	3131.2
25°	2606.0	2700.8	2690.7	2650.0	2653.4	2673.7	2755.1	2799.1	2782.2
27.5°	2243.4	2331.5	2307.7	2229.8	2209.5	2240.0	2345.0	2395.9	2385.7
30°	1894.3	1951.9	1914.7	1775.7	1752.0	1789.3	1924.8	1975.6	1948.5
32.5°	1518.2	1562.2	1545.3	1375.8	1335.2	1372.4	1531.7	1579.2	1548.7
35°	1213.2	1253.8	1230.1	1030.2	992.9	1033.6	1199.6	1253.8	1226.7
37.5°	972.6	1003.1	972.6	759.1	725.2	765.9	925.1	996.3	962.4
40°	772.6	796.4	755.7	559.1	532.0	552.4	701.5	772.6	748.9
42.5°	610.0	626.9	582.9	410.0	379.5	406.7	528.6	593.0	579.5
45°	494.8	494.8	440.5	284.7	247.4	274.5	396.5	464.3	467.6
47.5°	423.6	413.4	345.7	189.8	142.3	179.6	315.2	386.3	396.5
50°	366.0	352.4	284.7	138.9	91.5	128.8	260.9	332.1	342.3
52.5°	315.2	305.0	237.2	108.4	64.4	98.3	220.3	288.0	298.2
55°	264.3	257.5	196.5	84.7	50.8	74.6	176.2	233.8	240.6
57.5°	216.9	206.7	159.3	71.2	40.7	61.0	145.7	193.2	199.9
60°	183.0	172.8	128.8	57.6	33.9	47.4	118.6	159.3	166.0
62.5°	152.5	142.3	105.1	47.4	27.1	40.7	94.9	128.8	135.6
65°	122.0	115.2	81.3	37.3	23.7	30.5	74.6	101.7	108.4
67.5°	98.3	91.5	64.4	30.5	20.3	23.7	57.6	81.3	88.1
70°	74.6	67.8	47.4	23.7	16.9	20.3	44.1	61.0	67.8
72.5°	54.2	50.8	37.3	20.3	13.6	16.9	30.5	44.1	50.8
75°	40.7	37.3	27.1	13.6	10.2	13.6	23.7	33.9	37.3
77.5°	27.1	27.1	20.3	10.2	10.2	10.2	16.9	23.7	23.7
80°	20.3	16.9	13.6	6.8	6.8	6.8	10.2	16.9	16.9
82.5°	13.6	10.2	10.2	6.8	6.8	6.8	6.8	10.2	10.2
85°	6.8	6.8	6.8	3.4	3.4	3.4	3.4	6.8	6.8
87.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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)