

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: P858180

Luminaire Tested: **LD4C45D010 EU4459050 4LBMDDWLI**

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-08
Report Number: P858180
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 4LBMDDWLI
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBMDDW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Summary

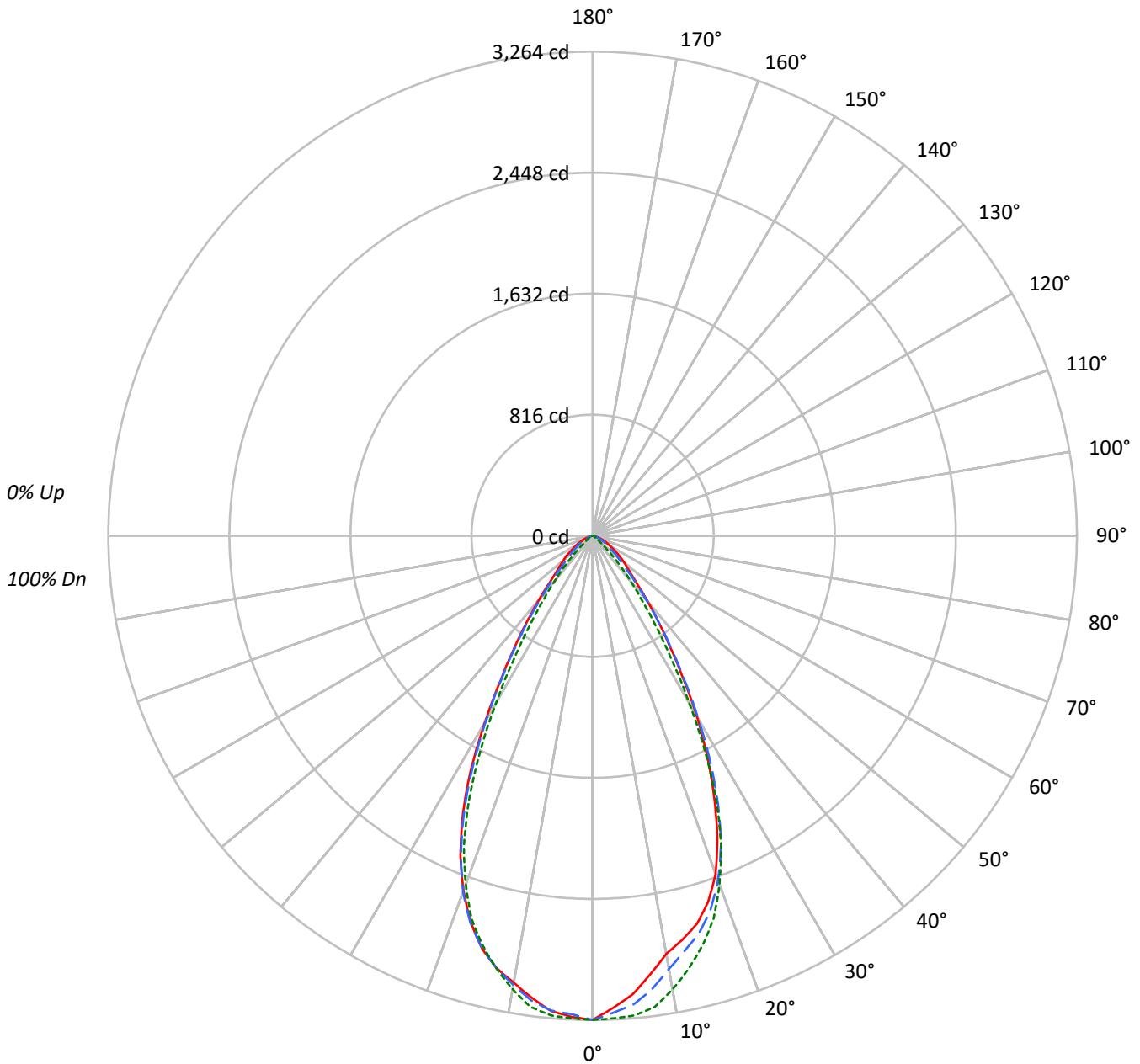
Lumens per Lamp: N/A
Luminaire Lumens: 2971.0 lumens
Efficiency: N/A
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	400945	400945	400945
5°	382584	400306	396569
10°	356831	387320	381669
15°	344576	363806	366363
20°	316961	326845	332780
25°	262703	267488	280461
30°	199851	184828	205568
35°	135309	110743	136823
40°	92151	63460	89328
45°	63919	31968	60427
50°	52025	12997	48642
55°	42109	8096	38318
60°	33441	6192	30345
65°	26366	5116	23430
70°	19900	4526	18104
75°	14335	3607	13148
80°	10683	3537	8914
85°	7048	3524	7048



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.1	10.1
10°-20°	788.4	26.5
20°-30°	904.6	30.4
30°-40°	549.5	18.5
40°-50°	235.5	7.9
50°-60°	113.0	3.8
60°-70°	54.9	1.8
70°-80°	20.4	0.7
80°-90°	4.7	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°	1993.0	67.1
0°-40°	2542.5	85.6
0°-60°	2891.0	97.3
0°-90°	2971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2971.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3264	3264	3264	3264	3264	
5°	3102	3170	3246	3213	3216	288
15°	2709	2772	2860	2878	2880	754
25°	1938	2001	1973	2049	2069	879
35°	902	915	738	892	912	578
45°	368	328	184	295	348	299
55°	197	146	38	131	179	177
65°	91	60	18	55	81	92
75°	30	20	8	18	28	33
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°	3263.6	3263.6	3263.6	3263.6	3263.6	3263.6	3263.6	3263.6	3263.6
2.5°	3185.5	3220.8	3218.2	3248.5	3256.0	3248.5	3228.3	3248.5	3246.0
5°	3102.3	3142.6	3170.4	3220.8	3246.0	3240.9	3213.2	3218.2	3215.7
7.5°	2981.3	3031.7	3079.6	3155.2	3203.1	3200.6	3160.3	3152.7	3142.6
10°	2860.4	2908.3	2963.7	3041.8	3104.8	3114.9	3074.6	3064.5	3059.5
12.5°	2789.8	2827.6	2865.4	2933.5	2988.9	3009.1	2986.4	2988.9	2986.4
15°	2709.2	2747.0	2772.2	2822.6	2860.4	2888.1	2878.0	2893.1	2880.5
17.5°	2588.2	2633.6	2643.6	2681.4	2709.2	2726.8	2736.9	2752.0	2731.8
20°	2424.4	2459.7	2472.3	2487.4	2500.0	2522.7	2552.9	2568.0	2545.4
22.5°	2195.1	2263.1	2260.6	2253.0	2265.6	2273.2	2321.1	2346.3	2328.6
25°	1938.0	2008.6	2001.0	1970.8	1973.3	1988.4	2048.9	2081.6	2069.0
27.5°	1668.3	1733.9	1716.2	1658.3	1643.1	1665.8	1743.9	1781.7	1774.2
30°	1408.8	1451.6	1423.9	1320.6	1302.9	1330.6	1431.4	1469.3	1449.1
32.5°	1129.0	1161.8	1149.2	1023.2	992.9	1020.7	1139.1	1174.4	1151.7
35°	902.2	932.5	914.8	766.1	738.4	768.6	892.1	932.5	912.3
37.5°	723.3	746.0	723.3	564.5	539.3	569.6	688.0	740.9	715.7
40°	574.6	592.2	562.0	415.8	395.7	410.8	521.7	574.6	557.0
42.5°	453.6	466.2	433.5	304.9	282.3	302.4	393.1	441.0	430.9
45°	367.9	367.9	327.6	211.7	184.0	204.1	294.9	345.3	347.8
47.5°	315.0	307.5	257.1	141.1	105.8	133.6	234.4	287.3	294.9
50°	272.2	262.1	211.7	103.3	68.0	95.8	194.1	247.0	254.5
52.5°	234.4	226.8	176.4	80.6	47.9	73.1	163.8	214.2	221.8
55°	196.6	191.5	146.2	63.0	37.8	55.4	131.0	173.9	178.9
57.5°	161.3	153.7	118.4	52.9	30.2	45.4	108.4	143.6	148.7
60°	136.1	128.5	95.8	42.8	25.2	35.3	88.2	118.4	123.5
62.5°	113.4	105.8	78.1	35.3	20.2	30.2	70.6	95.8	100.8
65°	90.7	85.7	60.5	27.7	17.6	22.7	55.4	75.6	80.6
67.5°	73.1	68.0	47.9	22.7	15.1	17.6	42.8	60.5	65.5
70°	55.4	50.4	35.3	17.6	12.6	15.1	32.8	45.4	50.4
72.5°	40.3	37.8	27.7	15.1	10.1	12.6	22.7	32.8	37.8
75°	30.2	27.7	20.2	10.1	7.6	10.1	17.6	25.2	27.7
77.5°	20.2	20.2	15.1	7.6	7.6	7.6	12.6	17.6	17.6
80°	15.1	12.6	10.1	5.0	5.0	5.0	7.6	12.6	12.6
82.5°	10.1	7.6	7.6	5.0	5.0	5.0	5.0	7.6	7.6
85°	5.0	5.0	5.0	2.5	2.5	2.5	2.5	5.0	5.0
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)