

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: P843502

Luminaire Tested: **LD4C25DE010B2750 EU4C25B27 4LBSQLI**

Issue Date: 5/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P843502  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209151)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C25DE010B2750 EU4C25B27 4LBSQLI  
Description: 4in Downlight with BioUp LEDs  
Light Source: -  
Ballast/Driver:

**Summary**

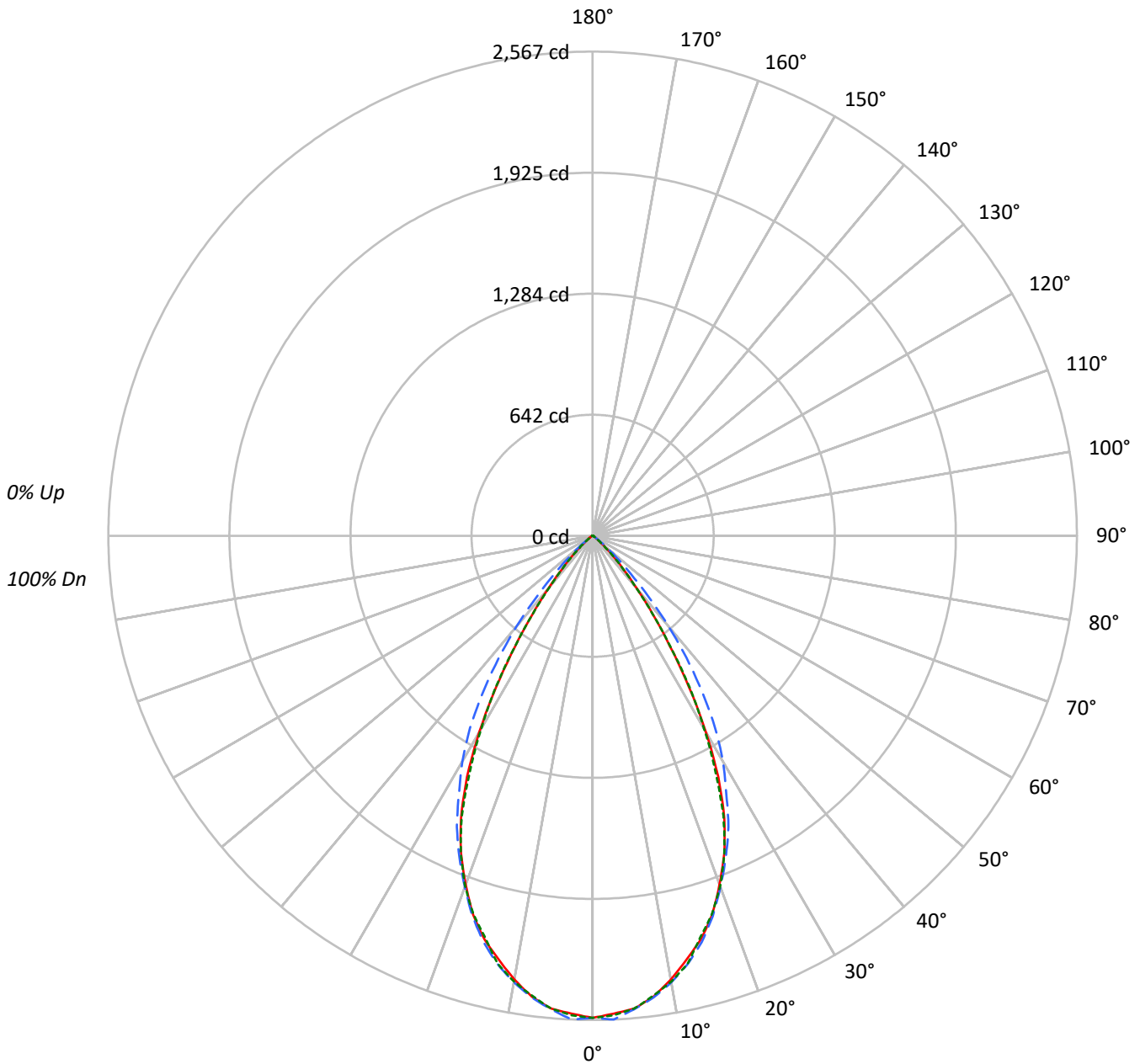
Lumens per Lamp: N/A  
Luminaire Lumens: 2359.6 lumens  
Efficiency: N/A  
Efficacy: 79.2 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.8  
Input Voltage (V):  
Input Current (Ain): 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: P843502

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B27 4LBSQLI

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	246606	246606	246606
5°	243781	244090	243781
10°	234029	235459	235146
15°	221242	222870	220103
20°	201913	203401	202909
25°	175814	181340	174600
30°	133699	153776	131705
35°	84150	119546	84916
40°	45395	78950	44589
45°	21492	38999	21273
50°	8046	14621	8046
55°	3819	4643	3566
60°	2509	2200	2509
65°	1484	1484	1484
70°	931	1382	931
75°	634	634	634
80°	945	945	945
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.0	10.0
10°-20°	621.0	26.3
20°-30°	758.6	32.2
30°-40°	530.6	22.5
40°-50°	173.9	7.4
50°-60°	27.6	1.2
60°-70°	7.5	0.3
70°-80°	2.6	0.1
80°-90°	0.7	0.0
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°	1616.6	68.5
0°-40°	2147.3	91.0
0°-60°	2348.8	99.5
0°-90°	2359.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2556	2556	2556	2556	2556	
5°	2517	2518	2520	2505	2517	236
15°	2215	2224	2231	2216	2203	618
25°	1651	1676	1703	1672	1640	742
35°	714	844	1015	831	721	456
45°	158	194	286	192	156	132
55°	23	24	28	24	21	22
65°	6	8	6	8	6	7
75°	2	2	2	2	2	2
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P843502

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B27 4LBSQLI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8
2.5°	2536.3	2554.2	2549.3	2560.7	2560.7	2547.7	2550.9	2555.8	2562.3	2567.2	2528.2
5°	2516.9	2533.0	2518.4	2534.6	2524.9	2510.3	2534.6	2521.7	2529.9	2520.1	2526.6
7.5°	2464.9	2490.8	2461.6	2481.1	2474.7	2466.5	2476.2	2473.0	2477.8	2469.7	2451.9
10°	2388.6	2409.7	2390.3	2417.8	2404.7	2396.7	2404.7	2412.9	2411.3	2403.2	2412.9
12.5°	2300.9	2325.2	2315.5	2331.7	2317.2	2317.2	2336.6	2331.7	2333.4	2326.9	2338.2
15°	2214.8	2232.7	2218.1	2239.2	2232.7	2214.8	2222.9	2222.9	2235.9	2231.1	2218.1
17.5°	2107.7	2122.2	2106.0	2110.9	2104.4	2101.2	2135.3	2112.5	2125.5	2115.8	2117.4
20°	1966.4	1972.9	1967.9	1980.9	1972.9	1982.6	1979.4	1976.1	1976.1	1980.9	1969.6
22.5°	1823.5	1823.5	1828.3	1831.6	1838.1	1828.3	1847.9	1831.6	1833.2	1844.6	1841.3
25°	1651.4	1646.5	1657.8	1674.1	1680.6	1672.4	1698.5	1685.4	1695.2	1703.3	1685.4
27.5°	1442.0	1442.0	1453.3	1480.9	1485.8	1495.5	1531.1	1531.1	1544.1	1532.8	1545.8
30°	1200.0	1217.9	1232.5	1268.1	1279.5	1300.7	1338.0	1355.9	1385.1	1380.2	1373.7
32.5°	951.6	975.9	977.5	1014.9	1045.7	1081.4	1131.8	1174.0	1195.1	1209.7	1193.4
35°	714.4	729.1	742.0	768.1	820.0	867.2	912.5	967.7	1005.2	1014.9	1000.2
37.5°	522.9	526.1	539.1	563.4	602.4	647.9	703.1	763.2	802.2	816.7	800.5
40°	360.4	363.7	370.2	391.3	423.8	456.3	500.2	561.8	597.6	626.8	605.6
42.5°	241.9	245.2	251.7	267.9	285.8	316.5	350.7	389.7	423.8	436.8	425.4
45°	157.5	157.5	160.8	172.2	181.9	206.2	230.6	254.9	277.6	285.8	277.6
47.5°	92.5	94.1	97.4	105.6	116.9	126.6	144.5	160.8	167.2	173.8	170.5
50°	53.6	53.6	58.5	63.4	71.4	77.9	84.4	91.0	94.1	97.4	94.1
52.5°	29.2	30.9	32.5	34.2	37.3	43.9	48.7	48.7	50.3	51.9	50.3
55°	22.7	22.7	22.7	22.7	24.4	24.4	24.4	26.0	26.0	27.6	26.0
57.5°	16.2	16.2	16.2	17.9	17.9	17.9	16.2	16.2	16.2	16.2	16.2
60°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	11.4	11.4	11.4	11.4
62.5°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
65°	6.5	6.5	8.1	8.1	8.1	8.1	8.1	6.5	6.5	6.5	6.5
67.5°	4.9	4.9	4.9	4.9	6.5	6.5	4.9	4.9	4.9	4.9	4.9
70°	3.3	3.3	3.3	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
72.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
75°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P843502

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B27 4LBSQLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8	2555.8
2.5°	2555.8	2528.2	2531.4	2546.0	2537.9	2546.0	2544.5	2544.5
5°	2528.2	2520.1	2507.1	2502.1	2511.9	2533.0	2529.9	2516.9
7.5°	2476.2	2455.2	2469.7	2476.2	2468.1	2481.1	2487.7	2460.0
10°	2414.5	2406.4	2403.2	2406.4	2403.2	2416.2	2400.0	2400.0
12.5°	2326.9	2313.9	2313.9	2333.4	2321.9	2312.2	2325.2	2323.6
15°	2239.2	2213.2	2213.2	2219.7	2224.5	2218.1	2219.7	2203.4
17.5°	2109.2	2101.2	2089.8	2107.7	2112.5	2106.0	2110.9	2102.8
20°	1987.5	1987.5	1966.4	1974.5	1980.9	1985.9	1989.1	1976.1
22.5°	1831.6	1834.9	1820.2	1836.5	1841.3	1825.2	1828.3	1825.2
25°	1688.7	1687.1	1675.7	1669.2	1672.4	1666.0	1664.4	1640.0
27.5°	1531.1	1515.0	1490.6	1497.1	1469.5	1446.7	1446.7	1409.4
30°	1360.6	1333.1	1300.7	1268.1	1243.8	1217.9	1203.2	1182.1
32.5°	1161.0	1123.6	1083.0	1039.2	1011.6	972.7	951.6	962.9
35°	962.9	907.7	852.5	808.7	766.4	743.6	717.7	720.9
37.5°	771.3	693.4	644.6	597.6	561.8	532.6	521.2	517.9
40°	563.4	501.7	453.0	418.9	394.6	371.9	358.9	354.0
42.5°	389.7	345.8	306.8	279.3	263.0	248.4	241.9	240.3
45°	253.3	227.4	201.4	181.9	168.9	159.2	157.5	155.9
47.5°	159.2	146.1	129.9	115.3	103.9	97.4	92.5	92.5
50°	91.0	86.1	77.9	69.8	63.4	60.1	55.2	53.6
52.5°	48.7	48.7	45.5	38.9	34.2	30.9	30.9	29.2
55°	26.0	26.0	24.4	24.4	22.7	22.7	22.7	21.2
57.5°	16.2	16.2	17.9	17.9	16.2	16.2	16.2	16.2
60°	11.4	13.0	13.0	13.0	13.0	13.0	13.0	13.0
62.5°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
65°	6.5	8.1	8.1	8.1	8.1	6.5	6.5	6.5
67.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
70°	4.9	4.9	4.9	4.9	4.9	3.3	3.3	3.3
72.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
75°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
90°	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)