

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: P843516

Luminaire Tested: **LD4C25DE010B2750 EU4C25B30 4LBSQLI**

Issue Date: 5/7/2024



Test Information

Test Method: LM-79-08
Report Number: P843516
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 EU4C25B30 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

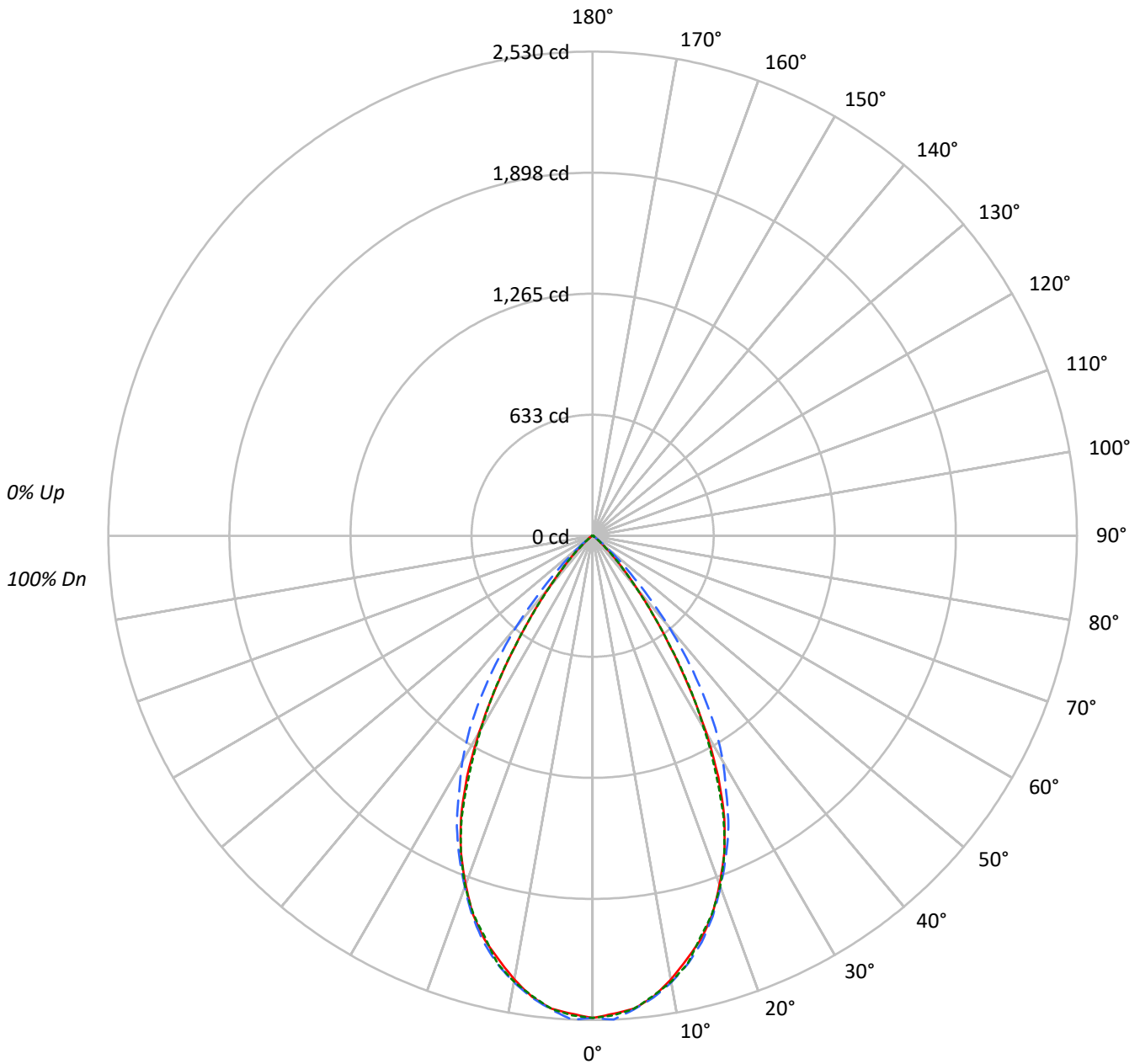
Lumens per Lamp: N/A
Luminaire Lumens: 2325.8 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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: P843516

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B30 4LBSQLI

Luminous Intensity Polar Plot





TEST NUMBER: P843516

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B30 4LBSQLI

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°	243075	243075	243075
5°	240274	240594	240274
10°	230668	232079	231766
15°	218076	219664	216957
20°	199017	200496	199992
25°	173291	178742	172099
30°	131783	151559	129822
35°	82949	117827	83702
40°	44753	77816	43947
45°	21192	38426	20960
50°	7941	14411	7941
55°	3768	4576	3499
60°	2470	2161	2470
65°	1484	1484	1484
70°	903	1382	903
75°	596	596	596
80°	889	889	889
85°	0	0	0



TEST NUMBER: P843516

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B30 4LBSQLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.6	10.0
10°-20°	612.1	26.3
20°-30°	747.8	32.2
30°-40°	523.0	22.5
40°-50°	171.4	7.4
50°-60°	27.3	1.2
60°-70°	7.5	0.3
70°-80°	2.5	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°	1593.5	68.5
0°-40°	2116.5	91.0
0°-60°	2315.1	99.5
0°-90°	2325.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2325.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2519	2519	2519	2519	2519	
5°	2481	2482	2484	2469	2481	233
15°	2183	2192	2199	2185	2172	609
25°	1628	1652	1679	1648	1616	731
35°	704	831	1000	819	711	449
45°	155	191	282	189	154	130
55°	22	24	27	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: P843516

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B30 4LBSQLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2
2.5°	2499.9	2517.6	2512.7	2523.9	2523.9	2511.1	2514.4	2519.2	2525.5	2530.4	2491.9
5°	2480.7	2496.8	2482.3	2498.3	2488.7	2474.3	2498.3	2485.5	2493.6	2484.0	2490.3
7.5°	2429.5	2455.1	2426.3	2445.6	2439.1	2431.1	2440.7	2437.5	2442.3	2434.2	2416.7
10°	2354.3	2375.1	2355.9	2383.1	2370.3	2362.3	2370.3	2378.3	2376.7	2368.7	2378.3
12.5°	2267.9	2291.9	2282.3	2298.2	2283.9	2283.9	2303.1	2298.2	2299.9	2293.5	2304.7
15°	2183.1	2200.7	2186.2	2207.1	2200.7	2183.1	2191.0	2191.0	2203.9	2199.0	2186.2
17.5°	2077.4	2091.8	2075.8	2080.7	2074.2	2071.1	2104.6	2082.2	2095.0	2085.4	2087.0
20°	1938.2	1944.6	1939.8	1952.6	1944.6	1954.2	1951.0	1947.7	1947.7	1952.6	1941.4
22.5°	1797.3	1797.3	1802.1	1805.4	1811.7	1802.1	1821.4	1805.4	1806.9	1818.2	1814.9
25°	1627.7	1622.8	1634.0	1650.1	1656.5	1648.4	1674.0	1661.2	1670.8	1678.9	1661.2
27.5°	1421.2	1421.2	1432.5	1459.6	1464.4	1474.0	1509.2	1509.2	1522.0	1510.8	1523.6
30°	1182.8	1200.4	1214.7	1249.9	1261.1	1282.0	1318.8	1336.4	1365.2	1360.3	1354.0
32.5°	937.9	961.9	963.5	1000.3	1030.7	1065.9	1115.5	1157.2	1178.0	1192.4	1176.3
35°	704.2	718.7	731.5	757.1	808.2	854.7	899.5	953.9	990.7	1000.3	985.9
37.5°	515.4	518.6	531.4	555.4	593.8	638.6	693.1	752.2	790.7	805.1	789.0
40°	355.3	358.5	364.9	385.7	417.8	449.7	493.0	553.8	589.0	617.8	596.9
42.5°	238.5	241.7	248.0	264.1	281.6	312.1	345.7	384.1	417.8	430.6	419.4
45°	155.3	155.3	158.4	169.6	179.3	203.3	227.3	251.3	273.6	281.6	273.6
47.5°	91.3	92.9	96.0	104.1	115.2	124.8	142.5	158.4	164.9	171.2	168.1
50°	52.9	52.9	57.6	62.4	70.4	76.8	83.2	89.6	92.9	96.0	92.9
52.5°	28.8	30.5	32.0	33.6	36.8	43.3	48.0	48.0	49.6	51.2	49.6
55°	22.4	22.4	22.4	22.4	24.0	24.0	24.0	25.6	25.6	27.2	25.6
57.5°	16.0	16.0	16.0	17.7	17.7	17.7	16.0	16.0	16.0	16.0	16.0
60°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	11.2	11.2	11.2	11.2
62.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
65°	6.5	6.5	8.0	8.0	8.0	8.0	8.0	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°	3.2	3.2	3.2	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	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°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: P843516

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B30 4LBSQLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2	2519.2
2.5°	2519.2	2491.9	2495.1	2509.6	2501.5	2509.6	2508.0	2508.0
5°	2491.9	2484.0	2471.2	2466.3	2475.9	2496.8	2493.6	2480.7
7.5°	2440.7	2420.0	2434.2	2440.7	2432.8	2445.6	2451.9	2424.7
10°	2379.9	2372.0	2368.7	2372.0	2368.7	2381.5	2365.5	2365.5
12.5°	2293.5	2280.7	2280.7	2299.9	2288.6	2279.1	2291.9	2290.3
15°	2207.1	2181.4	2181.4	2187.8	2192.7	2186.2	2187.8	2171.9
17.5°	2079.0	2071.1	2059.8	2077.4	2082.2	2075.8	2080.7	2072.6
20°	1958.9	1958.9	1938.2	1946.2	1952.6	1957.4	1960.6	1947.7
22.5°	1805.4	1808.6	1794.1	1810.1	1814.9	1798.9	1802.1	1798.9
25°	1664.5	1662.9	1651.7	1645.3	1648.4	1642.1	1640.5	1616.5
27.5°	1509.2	1493.3	1469.3	1475.6	1448.4	1426.0	1426.0	1389.2
30°	1341.2	1314.0	1282.0	1249.9	1226.0	1200.4	1185.9	1165.2
32.5°	1144.4	1107.6	1067.5	1024.3	997.1	958.7	937.9	949.1
35°	949.1	894.7	840.2	797.0	755.4	733.0	707.3	710.6
37.5°	760.2	683.4	635.4	589.0	553.8	525.0	513.7	510.5
40°	555.4	494.5	446.5	412.9	388.9	366.6	353.8	348.9
42.5°	384.1	340.9	302.5	275.3	259.3	244.8	238.5	236.9
45°	249.7	224.1	198.5	179.3	166.5	156.8	155.3	153.6
47.5°	156.8	144.0	128.0	113.6	102.4	96.0	91.3	91.3
50°	89.6	84.8	76.8	68.9	62.4	59.2	54.4	52.9
52.5°	48.0	48.0	44.8	38.4	33.6	30.5	30.5	28.8
55°	25.6	25.6	24.0	24.0	22.4	22.4	22.4	20.8
57.5°	16.0	16.0	17.7	17.7	16.0	16.0	16.0	16.0
60°	11.2	12.8	12.8	12.8	12.8	12.8	12.8	12.8
62.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
65°	6.5	8.0	8.0	8.0	8.0	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	3.2	3.2	3.2
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)