

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: P843558

Luminaire Tested: **LD4C25DE010B50 EU4C25B50 4LBSQLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843558
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: LD4C25DE010B50 EU4C25B50 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

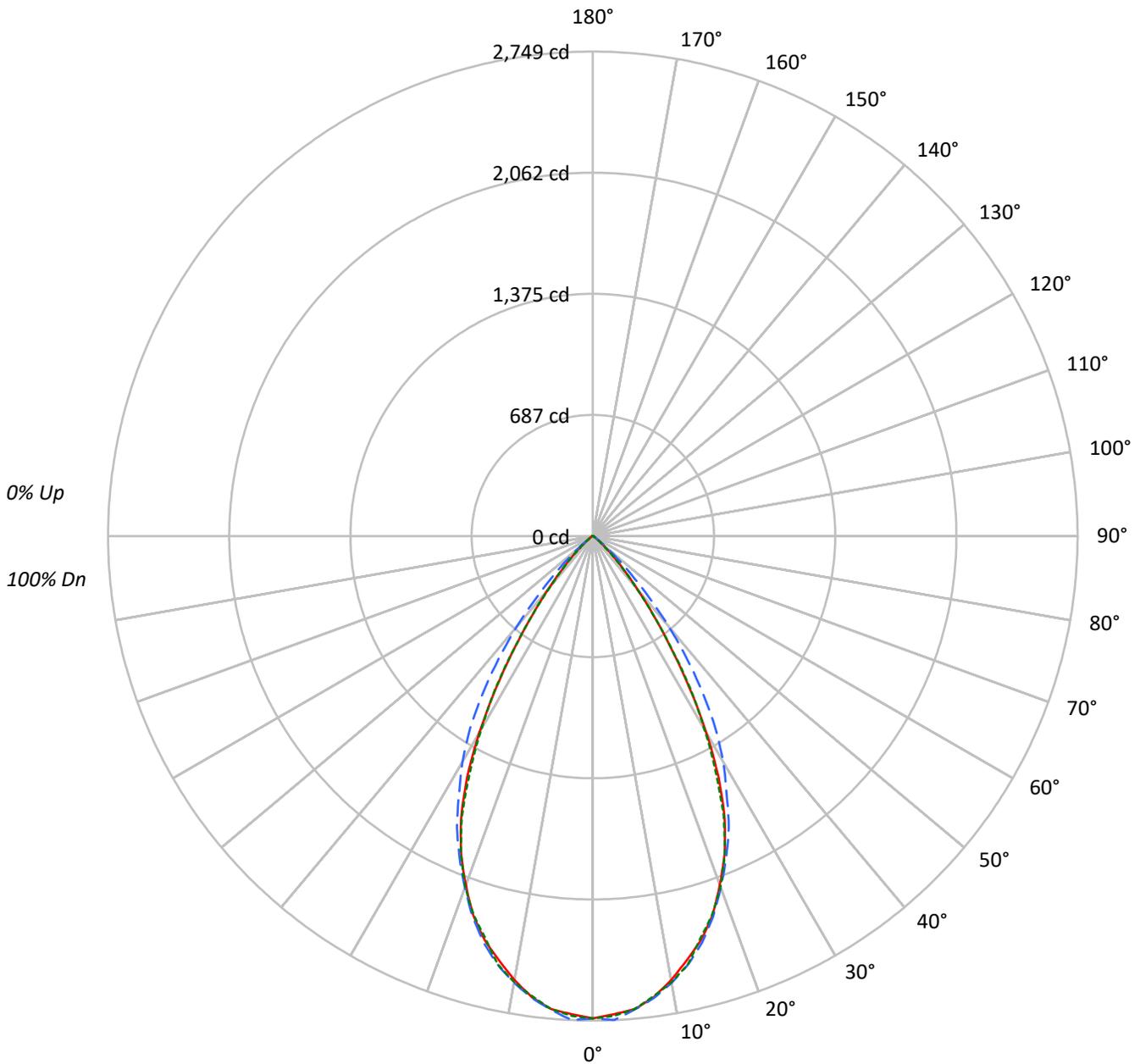
Lumens per Lamp: N/A
Luminaire Lumens: 2526.7 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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: P843558

CATALOG NUMBER: LD4C25DE010B50 EU4C25B50 4LBSQLI

Luminous Intensity Polar Plot





TEST NUMBER: P843558

CATALOG NUMBER: LD4C25DE010B50 EU4C25B50 4LBSQLI

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								
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°	264071	264071	264071
5°	261041	261380	261041
10°	250597	252135	251792
15°	236905	238654	235697
20°	216206	217818	217284
25°	188270	194190	186961
30°	143158	164661	141041
35°	90110	128004	90935
40°	48620	84543	47750
45°	23020	41769	22774
50°	8616	15656	8616
55°	4088	4979	3802
60°	2682	2354	2682
65°	1598	1598	1598
70°	987	1495	987
75°	671	671	671
80°	1000	1000	1000
85°	0	0	0



TEST NUMBER: P843558

CATALOG NUMBER: LD4C25DE010B50 EU4C25B50 4LBSQLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.7	10.0
10°-20°	665.0	26.3
20°-30°	812.4	32.2
30°-40°	568.2	22.5
40°-50°	186.2	7.4
50°-60°	29.6	1.2
60°-70°	8.1	0.3
70°-80°	2.7	0.1
80°-90°	0.8	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°	1731.1	68.5
0°-40°	2299.3	91.0
0°-60°	2515.1	99.5
0°-90°	2526.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2526.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2737	2737	2737	2737	2737	
5°	2695	2696	2699	2682	2695	253
15°	2372	2381	2389	2373	2360	662
25°	1768	1795	1824	1791	1756	794
35°	765	903	1087	889	772	488
45°	169	208	306	205	167	141
55°	24	26	30	26	23	24
65°	7	9	7	9	7	8
75°	2	2	2	2	2	3
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P843558

CATALOG NUMBER: LD4C25DE010B50 EU4C25B50 4LBSQLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8
2.5°	2715.9	2735.0	2729.9	2742.0	2742.0	2728.2	2731.7	2736.8	2743.7	2749.0	2707.2
5°	2695.1	2712.4	2696.8	2714.2	2703.7	2688.1	2714.2	2700.2	2709.0	2698.6	2705.5
7.5°	2639.4	2667.2	2635.9	2656.9	2649.9	2641.1	2651.6	2648.1	2653.4	2644.6	2625.6
10°	2557.7	2580.3	2559.5	2589.0	2575.1	2566.5	2575.1	2583.8	2582.0	2573.4	2583.8
12.5°	2463.9	2489.9	2479.4	2496.9	2481.2	2481.2	2502.0	2496.9	2498.6	2491.7	2503.7
15°	2371.6	2390.8	2375.1	2397.8	2390.8	2371.6	2380.3	2380.3	2394.3	2389.1	2375.1
17.5°	2256.9	2272.5	2255.2	2260.4	2253.5	2250.0	2286.5	2262.1	2276.0	2265.6	2267.4
20°	2105.6	2112.6	2107.3	2121.3	2112.6	2123.0	2119.6	2116.1	2116.1	2121.3	2109.1
22.5°	1952.6	1952.6	1957.9	1961.4	1968.3	1957.9	1978.7	1961.4	1963.1	1975.2	1971.7
25°	1768.4	1763.1	1775.2	1792.7	1799.7	1790.9	1818.7	1804.9	1815.2	1824.0	1804.9
27.5°	1544.0	1544.0	1556.2	1585.8	1591.0	1601.4	1639.6	1639.6	1653.5	1641.4	1655.3
30°	1284.9	1304.1	1319.7	1357.9	1370.2	1392.8	1432.7	1451.9	1483.1	1477.9	1471.0
32.5°	1018.9	1045.0	1046.7	1086.7	1119.7	1158.0	1211.9	1257.1	1279.7	1295.4	1277.9
35°	765.0	780.7	794.6	822.4	878.0	928.5	977.1	1036.3	1076.4	1086.7	1071.1
37.5°	559.9	563.4	577.3	603.4	645.1	693.8	752.9	817.2	859.0	874.6	857.2
40°	386.0	389.4	396.4	419.0	453.8	488.6	535.6	601.6	639.9	671.2	648.5
42.5°	259.0	262.5	269.5	286.8	306.1	339.0	375.6	417.2	453.8	467.7	455.5
45°	168.7	168.7	172.2	184.3	194.8	220.8	247.0	273.0	297.3	306.1	297.3
47.5°	99.1	100.8	104.3	113.1	125.1	135.6	154.7	172.2	179.1	186.0	182.5
50°	57.4	57.4	62.6	67.8	76.5	83.4	90.4	97.3	100.8	104.3	100.8
52.5°	31.3	33.1	34.8	36.5	40.0	47.0	52.1	52.1	53.9	55.6	53.9
55°	24.3	24.3	24.3	24.3	26.1	26.1	26.1	27.8	27.8	29.6	27.8
57.5°	17.3	17.3	17.3	19.1	19.1	19.1	17.3	17.3	17.3	17.3	17.3
60°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	12.2	12.2	12.2	12.2
62.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
65°	7.0	7.0	8.8	8.8	8.8	8.8	8.8	7.0	7.0	7.0	7.0
67.5°	5.3	5.3	5.3	5.3	7.0	7.0	5.3	5.3	5.3	5.3	5.3
70°	3.5	3.5	3.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
72.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	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°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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: P843558

CATALOG NUMBER: LD4C25DE010B50 EU4C25B50 4LBSQLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8	2736.8
2.5°	2736.8	2707.2	2710.7	2726.4	2717.6	2726.4	2724.7	2724.7
5°	2707.2	2698.6	2684.6	2679.4	2689.8	2712.4	2709.0	2695.1
7.5°	2651.6	2629.1	2644.6	2651.6	2642.9	2656.9	2663.8	2634.2
10°	2585.5	2576.8	2573.4	2576.8	2573.4	2587.3	2569.9	2569.9
12.5°	2491.7	2477.7	2477.7	2498.6	2486.4	2475.9	2489.9	2488.2
15°	2397.8	2369.8	2369.8	2376.8	2382.1	2375.1	2376.8	2359.5
17.5°	2258.7	2250.0	2237.7	2256.9	2262.1	2255.2	2260.4	2251.7
20°	2128.2	2128.2	2105.6	2114.3	2121.3	2126.5	2130.0	2116.1
22.5°	1961.4	1964.8	1949.1	1966.6	1971.7	1954.4	1957.9	1954.4
25°	1808.2	1806.5	1794.4	1787.4	1790.9	1783.9	1782.2	1756.1
27.5°	1639.6	1622.2	1596.2	1603.2	1573.5	1549.2	1549.2	1509.2
30°	1457.1	1427.5	1392.8	1357.9	1331.9	1304.1	1288.4	1265.9
32.5°	1243.2	1203.3	1159.8	1112.7	1083.2	1041.6	1018.9	1031.1
35°	1031.1	972.0	912.8	865.9	820.6	796.3	768.5	772.0
37.5°	825.9	742.5	690.3	639.9	601.6	570.4	558.1	554.6
40°	603.4	537.3	485.1	448.5	422.5	398.2	384.2	379.1
42.5°	417.2	370.4	328.6	299.1	281.6	266.0	259.0	257.3
45°	271.3	243.5	215.7	194.8	180.9	170.4	168.7	166.9
47.5°	170.4	156.4	139.1	123.4	111.3	104.3	99.1	99.1
50°	97.3	92.1	83.4	74.8	67.8	64.3	59.1	57.4
52.5°	52.1	52.1	48.7	41.7	36.5	33.1	33.1	31.3
55°	27.8	27.8	26.1	26.1	24.3	24.3	24.3	22.6
57.5°	17.3	17.3	19.1	19.1	17.3	17.3	17.3	17.3
60°	12.2	13.9	13.9	13.9	13.9	13.9	13.9	13.9
62.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
65°	7.0	8.8	8.8	8.8	8.8	7.0	7.0	7.0
67.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
70°	5.3	5.3	5.3	5.3	5.3	3.5	3.5	3.5
72.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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)