

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: P843530

Luminaire Tested: **LD4C25DE010B35 EU4C25B35 4LBSQLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843530
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: LD4C25DE010B35 EU4C25B35 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

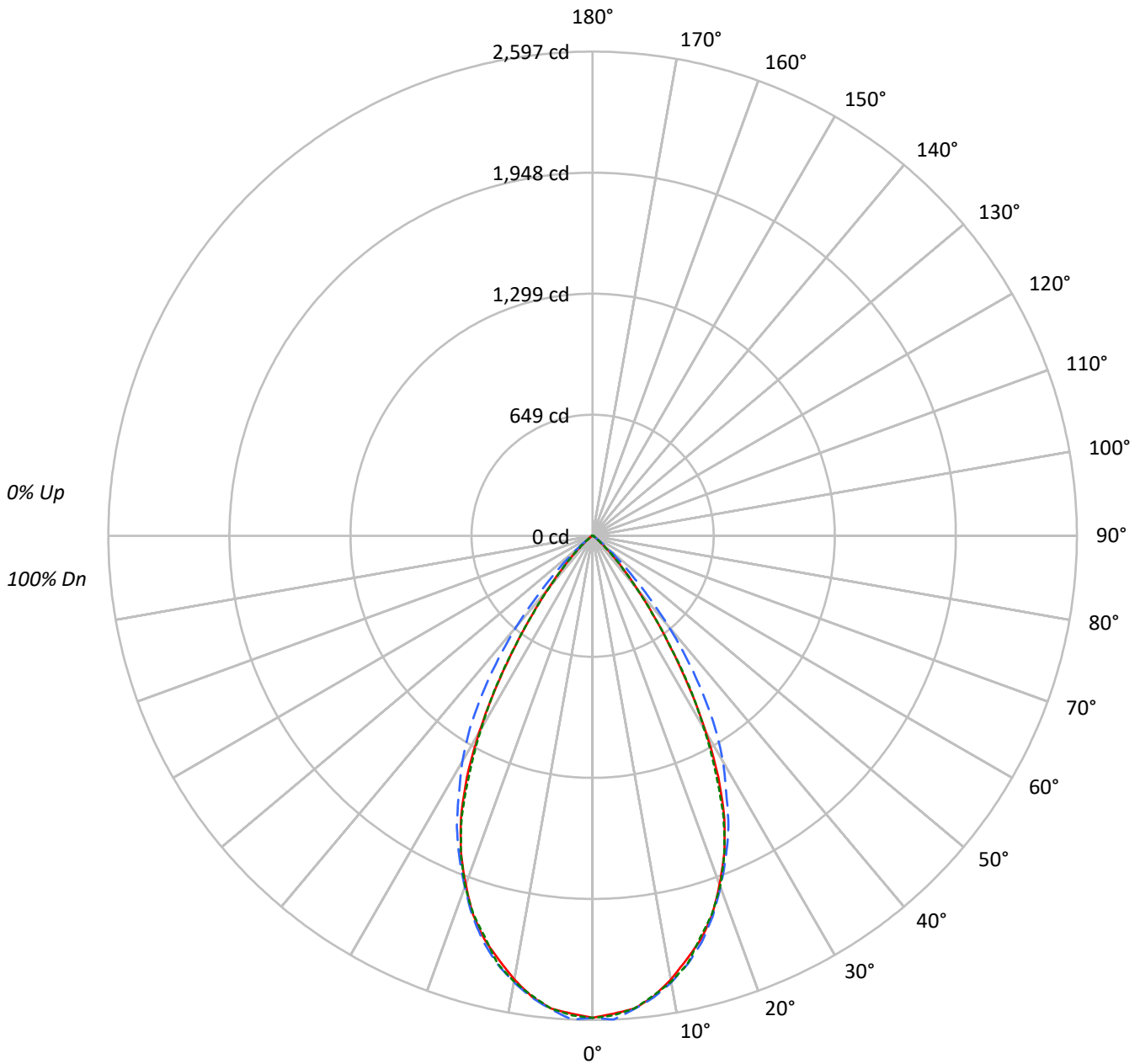
Lumens per Lamp: N/A
Luminaire Lumens: 2387.1 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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

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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°	249482	249482	249482
5°	246609	246928	246609
10°	236753	238203	237879
15°	223819	225468	222671
20°	204264	205773	205270
25°	177858	183458	176634
30°	135259	155570	133242
35°	85139	120924	85905
40°	45937	79870	45105
45°	21751	39463	21519
50°	8151	14801	8151
55°	3869	4693	3600
60°	2528	2219	2528
65°	1507	1507	1507
70°	931	1411	931
75°	634	634	634
80°	945	945	945
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.7	10.0
10°-20°	628.3	26.3
20°-30°	767.5	32.2
30°-40°	536.8	22.5
40°-50°	175.9	7.4
50°-60°	28.0	1.2
60°-70°	7.6	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°	1635.5	68.5
0°-40°	2172.3	91.0
0°-60°	2376.2	99.5
0°-90°	2387.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2387.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2586	2586	2586	2586	2586	
5°	2546	2547	2549	2534	2546	239
15°	2241	2250	2257	2242	2229	625
25°	1671	1696	1723	1692	1659	750
35°	723	853	1027	840	729	461
45°	159	196	289	194	158	134
55°	23	25	28	25	21	23
65°	7	8	7	8	7	7
75°	2	2	2	2	2	2
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6
2.5°	2565.8	2584.0	2579.0	2590.6	2590.6	2577.3	2580.7	2585.6	2592.2	2597.1	2557.7
5°	2546.1	2562.5	2547.7	2564.2	2554.3	2539.6	2564.2	2551.0	2559.3	2549.4	2556.0
7.5°	2493.6	2519.9	2490.3	2510.1	2503.4	2495.2	2505.1	2501.8	2506.7	2498.6	2480.5
10°	2416.4	2437.7	2418.1	2446.0	2432.8	2424.6	2432.8	2441.0	2439.3	2431.2	2441.0
12.5°	2327.7	2352.3	2342.4	2358.8	2344.1	2344.1	2363.8	2358.8	2360.5	2354.0	2365.4
15°	2240.6	2258.7	2243.9	2265.2	2258.7	2240.6	2248.8	2248.8	2262.0	2257.1	2243.9
17.5°	2132.2	2147.0	2130.6	2135.5	2128.9	2125.6	2160.1	2137.2	2150.3	2140.4	2142.1
20°	1989.3	1995.9	1990.9	2004.0	1995.9	2005.7	2002.4	1999.1	1999.1	2004.0	1992.6
22.5°	1844.7	1844.7	1849.7	1853.0	1859.5	1849.7	1869.4	1853.0	1854.6	1866.1	1862.8
25°	1670.6	1665.7	1677.2	1693.6	1700.1	1691.9	1718.2	1705.1	1715.0	1723.2	1705.1
27.5°	1458.7	1458.7	1470.2	1498.1	1503.0	1512.9	1549.0	1549.0	1562.1	1550.7	1563.8
30°	1214.0	1232.0	1246.7	1282.9	1294.4	1315.8	1353.6	1371.6	1401.3	1396.3	1389.7
32.5°	962.7	987.3	988.9	1026.6	1057.8	1094.0	1145.0	1187.6	1209.0	1223.8	1207.4
35°	722.8	737.6	750.7	777.0	829.5	877.2	923.2	979.1	1016.8	1026.6	1011.8
37.5°	528.9	532.2	545.4	570.0	609.4	655.4	711.3	772.1	811.5	826.2	809.8
40°	364.7	368.0	374.5	395.9	428.8	461.6	506.0	568.4	604.5	634.1	612.7
42.5°	244.7	248.0	254.6	271.1	289.2	320.3	354.8	394.2	428.8	441.9	430.4
45°	159.4	159.4	162.7	174.2	184.0	208.6	233.3	257.9	280.9	289.2	280.9
47.5°	93.6	95.3	98.6	106.8	118.2	128.1	146.2	162.7	169.2	175.8	172.5
50°	54.3	54.3	59.1	64.1	72.2	78.8	85.4	92.0	95.3	98.6	95.3
52.5°	29.6	31.2	32.9	34.5	37.8	44.4	49.3	49.3	51.0	52.6	51.0
55°	23.0	23.0	23.0	23.0	24.6	24.6	24.6	26.2	26.2	27.9	26.2
57.5°	16.4	16.4	16.4	18.1	18.1	18.1	16.4	16.4	16.4	16.4	16.4
60°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	11.5	11.5	11.5	11.5
62.5°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
65°	6.6	6.6	8.2	8.2	8.2	8.2	8.2	6.6	6.6	6.6	6.6
67.5°	5.0	5.0	5.0	5.0	6.6	6.6	5.0	5.0	5.0	5.0	5.0
70°	3.3	3.3	3.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6
2.5°	2585.6	2557.7	2561.0	2575.8	2567.5	2575.8	2574.1	2574.1
5°	2557.7	2549.4	2536.3	2531.3	2541.2	2562.5	2559.3	2546.1
7.5°	2505.1	2483.7	2498.6	2505.1	2496.9	2510.1	2516.6	2488.6
10°	2442.7	2434.5	2431.2	2434.5	2431.2	2444.3	2427.9	2427.9
12.5°	2354.0	2340.9	2340.9	2360.5	2349.0	2339.2	2352.3	2350.7
15°	2265.2	2238.9	2238.9	2245.5	2250.4	2243.9	2245.5	2229.1
17.5°	2133.9	2125.6	2114.1	2132.2	2137.2	2130.6	2135.5	2127.2
20°	2010.7	2010.7	1989.3	1997.4	2004.0	2009.0	2012.3	1999.1
22.5°	1853.0	1856.3	1841.4	1857.8	1862.8	1846.4	1849.7	1846.4
25°	1708.4	1706.8	1695.3	1688.6	1691.9	1685.3	1683.8	1659.1
27.5°	1549.0	1532.6	1508.0	1514.5	1486.6	1463.7	1463.7	1425.8
30°	1376.5	1348.7	1315.8	1282.9	1258.3	1232.0	1217.2	1195.9
32.5°	1174.5	1136.7	1095.7	1051.3	1023.4	984.0	962.7	974.2
35°	974.2	918.2	862.4	818.1	775.4	752.3	726.1	729.3
37.5°	780.3	701.4	652.1	604.5	568.4	538.9	527.3	524.1
40°	570.0	507.6	458.3	423.8	399.2	376.2	363.1	358.1
42.5°	394.2	349.9	310.4	282.6	266.1	251.3	244.7	243.1
45°	256.3	230.0	203.7	184.0	170.9	161.0	159.4	157.7
47.5°	161.0	147.9	131.4	116.7	105.1	98.6	93.6	93.6
50°	92.0	87.0	78.8	70.6	64.1	60.8	55.8	54.3
52.5°	49.3	49.3	46.0	39.4	34.5	31.2	31.2	29.6
55°	26.2	26.2	24.6	24.6	23.0	23.0	23.0	21.4
57.5°	16.4	16.4	18.1	18.1	16.4	16.4	16.4	16.4
60°	11.5	13.1	13.1	13.1	13.1	13.1	13.1	13.1
62.5°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
65°	6.6	8.2	8.2	8.2	8.2	6.6	6.6	6.6
67.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
70°	5.0	5.0	5.0	5.0	5.0	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)