

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: P843544

Luminaire Tested: **LD4C25DE010B40 EU4C25B40 4LBSQLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843544
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: LD4C25DE010B40 EU4C25B40 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

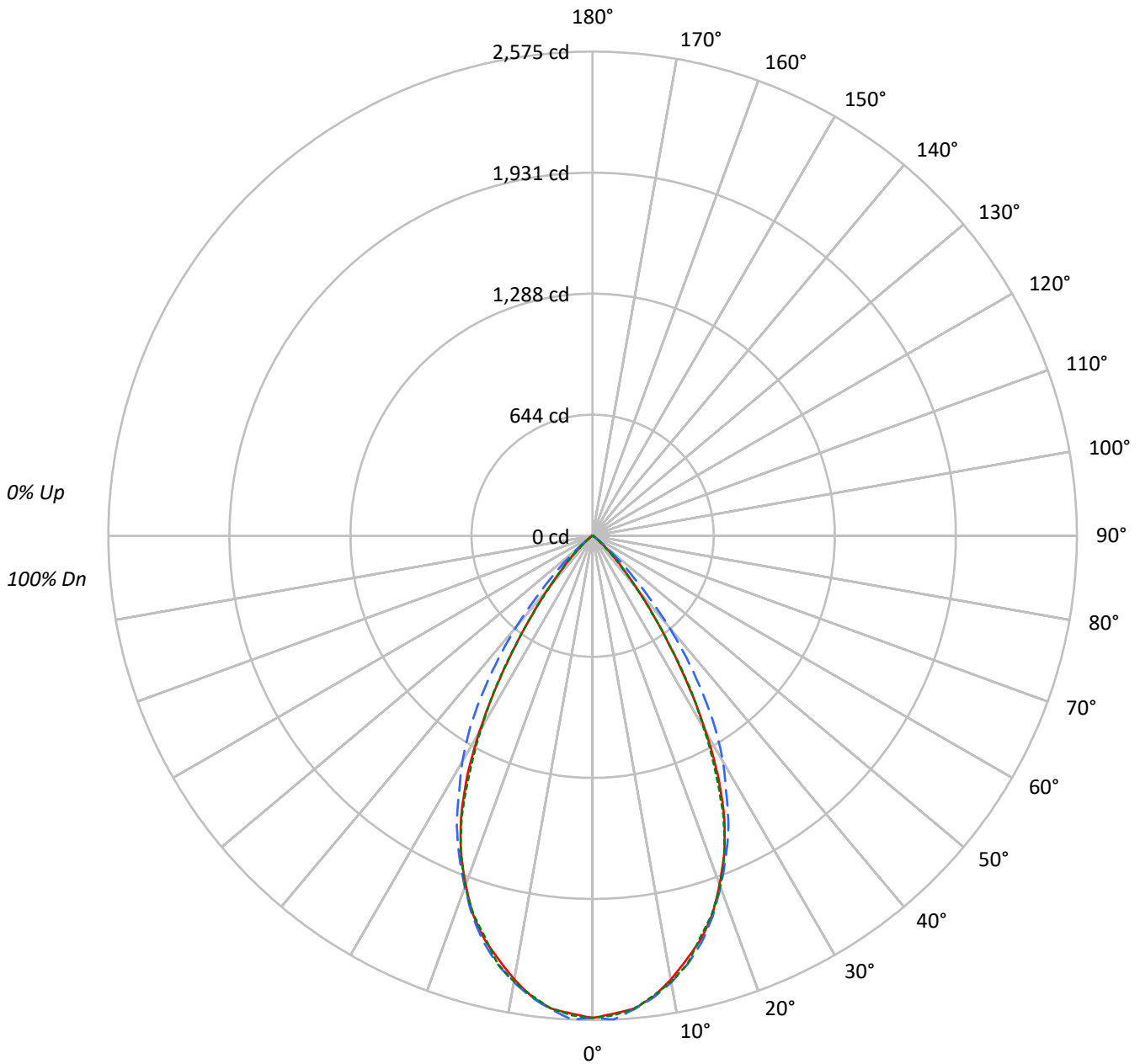
Lumens per Lamp: N/A
Luminaire Lumens: 2367.0 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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					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°	247378	247378	247378
5°	244536	244856	244536
10°	234764	236204	235881
15°	221941	223570	220793
20°	202549	204048	203545
25°	176368	181915	175143
30°	134111	154255	132117
35°	84421	119923	85187
40°	45546	79202	44715
45°	21560	39122	21328
50°	8061	14666	8061
55°	3835	4660	3566
60°	2509	2200	2509
65°	1507	1507	1507
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°	237.7	10.0
10°-20°	623.0	26.3
20°-30°	761.0	32.2
30°-40°	532.3	22.5
40°-50°	174.4	7.4
50°-60°	27.7	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°	1621.7	68.5
0°-40°	2154.0	91.0
0°-60°	2356.2	99.5
0°-90°	2367.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2367.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2564	2564	2564	2564	2564	
5°	2525	2526	2528	2512	2525	237
15°	2222	2231	2238	2223	2210	620
25°	1657	1682	1709	1678	1645	744
35°	717	846	1018	833	723	457
45°	158	195	287	192	156	133
55°	23	24	28	24	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°	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8
2.5°	2544.2	2562.2	2557.3	2568.8	2568.8	2555.7	2558.9	2563.8	2570.4	2575.2	2536.1
5°	2524.7	2541.0	2526.4	2542.7	2532.8	2518.2	2542.7	2529.5	2537.8	2528.0	2534.5
7.5°	2472.6	2498.7	2469.4	2488.9	2482.4	2474.2	2484.0	2480.7	2485.7	2477.5	2459.6
10°	2396.1	2417.2	2397.7	2425.4	2412.4	2404.2	2412.4	2420.5	2418.8	2410.8	2420.5
12.5°	2308.1	2332.5	2322.8	2339.1	2324.4	2324.4	2343.9	2339.1	2340.6	2334.2	2345.5
15°	2221.8	2239.8	2225.0	2246.2	2239.8	2221.8	2229.9	2229.9	2242.9	2238.1	2225.0
17.5°	2114.3	2128.9	2112.6	2117.5	2111.0	2107.8	2141.9	2119.2	2132.2	2122.4	2124.0
20°	1972.6	1979.0	1974.2	1987.2	1979.0	1988.9	1985.6	1982.3	1982.3	1987.2	1975.9
22.5°	1829.2	1829.2	1834.1	1837.3	1843.9	1834.1	1853.6	1837.3	1838.9	1850.4	1847.2
25°	1656.6	1651.6	1663.1	1679.3	1685.9	1677.7	1703.7	1690.7	1700.5	1708.7	1690.7
27.5°	1446.4	1446.4	1457.8	1485.6	1490.4	1500.1	1536.0	1536.0	1549.0	1537.7	1550.7
30°	1203.7	1221.7	1236.3	1272.1	1283.5	1304.7	1342.1	1360.1	1389.4	1384.5	1378.0
32.5°	954.5	978.9	980.5	1018.1	1049.0	1084.8	1135.3	1177.7	1198.8	1213.5	1197.2
35°	716.7	731.4	744.4	770.5	822.5	869.8	915.4	970.8	1008.2	1018.1	1003.4
37.5°	524.5	527.8	540.8	565.2	604.3	649.9	705.3	765.5	804.6	819.3	803.1
40°	361.6	364.9	371.3	392.6	425.2	457.7	501.7	563.6	599.5	628.8	607.5
42.5°	242.7	245.9	252.5	268.7	286.7	317.6	351.9	390.9	425.2	438.2	426.8
45°	158.0	158.0	161.3	172.7	182.4	206.9	231.3	255.7	278.5	286.7	278.5
47.5°	92.9	94.4	97.7	105.9	117.3	127.0	145.0	161.3	167.7	174.3	171.0
50°	53.7	53.7	58.6	63.6	71.7	78.2	84.7	91.2	94.4	97.7	94.4
52.5°	29.3	31.0	32.6	34.3	37.4	44.0	48.9	48.9	50.6	52.1	50.6
55°	22.8	22.8	22.8	22.8	24.4	24.4	24.4	26.0	26.0	27.7	26.0
57.5°	16.3	16.3	16.3	18.0	18.0	18.0	16.3	16.3	16.3	16.3	16.3
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°	6.6	6.6	8.1	8.1	8.1	8.1	8.1	6.6	6.6	6.6	6.6
67.5°	4.9	4.9	4.9	4.9	6.6	6.6	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8	2563.8
2.5°	2563.8	2536.1	2539.4	2554.1	2545.8	2554.1	2552.5	2552.5
5°	2536.1	2528.0	2514.9	2510.1	2519.8	2541.0	2537.8	2524.7
7.5°	2484.0	2462.8	2477.5	2484.0	2475.9	2488.9	2495.4	2467.7
10°	2422.1	2413.9	2410.8	2413.9	2410.8	2423.8	2407.5	2407.5
12.5°	2334.2	2321.1	2321.1	2340.6	2329.2	2319.5	2332.5	2330.9
15°	2246.2	2220.1	2220.1	2226.6	2231.5	2225.0	2226.6	2210.3
17.5°	2115.9	2107.8	2096.3	2114.3	2119.2	2112.6	2117.5	2109.3
20°	1993.7	1993.7	1972.6	1980.6	1987.2	1992.1	1995.3	1982.3
22.5°	1837.3	1840.6	1825.9	1842.2	1847.2	1830.9	1834.1	1830.9
25°	1694.0	1692.4	1681.0	1674.4	1677.7	1671.2	1669.6	1645.1
27.5°	1536.0	1519.7	1495.3	1501.8	1474.1	1451.3	1451.3	1413.8
30°	1365.0	1337.3	1304.7	1272.1	1247.7	1221.7	1207.0	1185.8
32.5°	1164.7	1127.2	1086.4	1042.4	1014.8	975.7	954.5	965.9
35°	965.9	910.5	855.1	811.2	768.8	745.9	719.9	723.2
37.5°	773.7	695.5	646.6	599.5	563.6	534.3	522.9	519.6
40°	565.2	503.3	454.5	420.2	395.9	373.0	360.0	355.0
42.5°	390.9	347.0	307.8	280.2	263.9	249.2	242.7	241.0
45°	254.1	228.0	202.0	182.4	169.4	159.7	158.0	156.3
47.5°	159.7	146.6	130.3	115.7	104.2	97.7	92.9	92.9
50°	91.2	86.3	78.2	70.0	63.6	60.3	55.4	53.7
52.5°	48.9	48.9	45.6	39.1	34.3	31.0	31.0	29.3
55°	26.0	26.0	24.4	24.4	22.8	22.8	22.8	21.2
57.5°	16.3	16.3	18.0	18.0	16.3	16.3	16.3	16.3
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°	6.6	8.1	8.1	8.1	8.1	6.6	6.6	6.6
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)