

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: P843264

Luminaire Tested: **LD4C08DE010B40 EU4C08B40 4LBSQLI**

Issue Date: 5/7/2024



Test Information

Test Method: LM-79-08
Report Number: P843264
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: LD4C08DE010B40 EU4C08B40 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

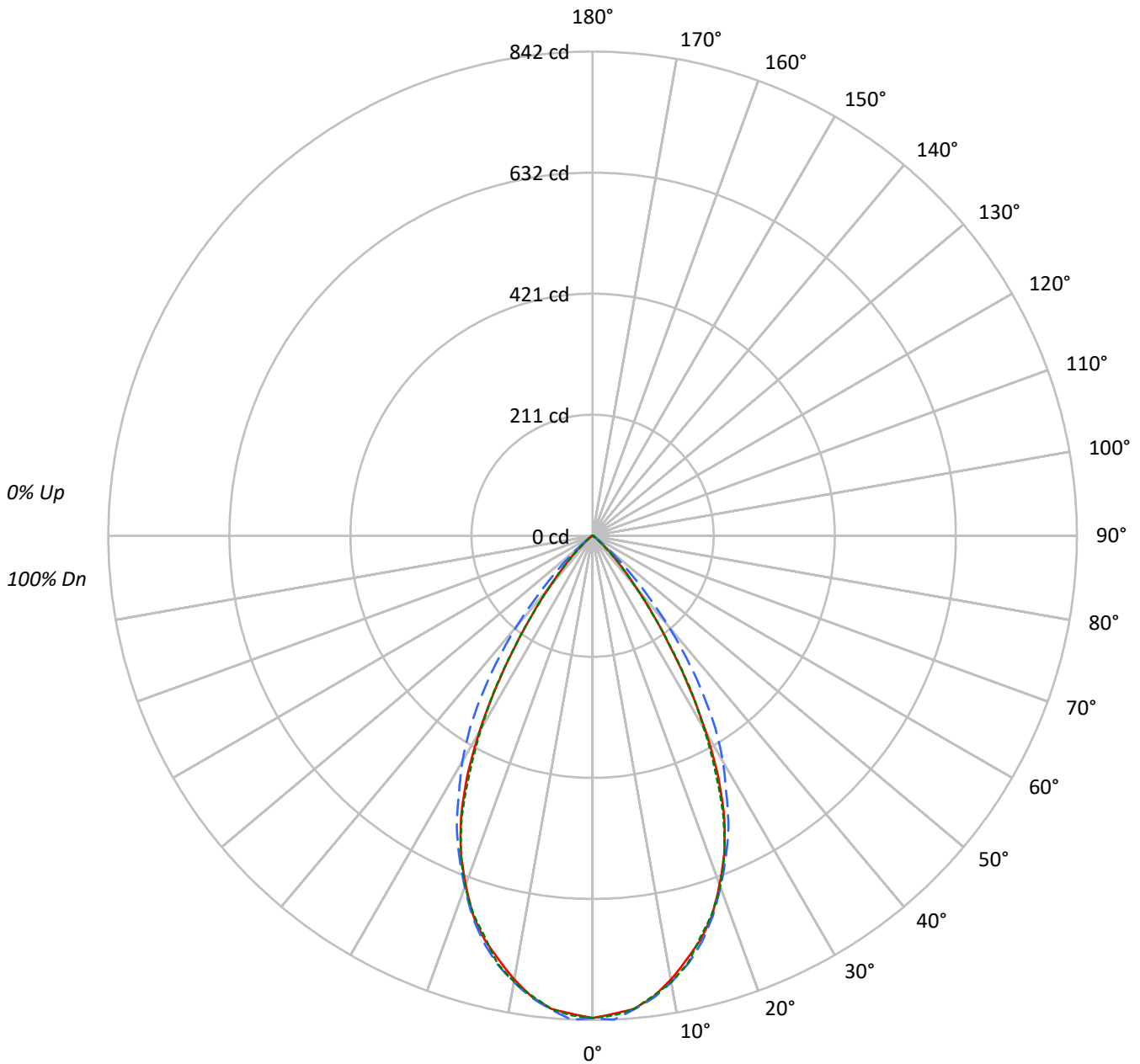
Lumens per Lamp: N/A
Luminaire Lumens: 774.1 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.6
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	72	67	76	71	67	74	70	66	73	69	66	65																			
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°	80916	80916	80916
5°	79985	80091	79985
10°	76785	77255	77147
15°	72592	73121	72222
20°	66250	66733	66568
25°	57682	59503	57288
30°	43876	50460	43207
35°	27610	39213	27869
40°	14888	25897	14624
45°	7055	12800	6973
50°	2642	4789	2642
55°	1262	1531	1178
60°	811	714	811
65°	479	479	479
70°	310	451	310
75°	186	186	186
80°	278	278	278
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	10.0
10°-20°	203.8	26.3
20°-30°	248.9	32.2
30°-40°	174.1	22.5
40°-50°	57.1	7.4
50°-60°	9.1	1.2
60°-70°	2.5	0.3
70°-80°	0.8	0.1
80°-90°	0.2	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°	530.4	68.5
0°-40°	704.5	91.0
0°-60°	770.7	99.6
0°-90°	774.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	774.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	826	826	827	822	826	77
15°	727	730	732	727	723	203
25°	542	550	559	549	538	243
35°	234	277	333	273	237	150
45°	52	64	94	63	51	43
55°	8	8	9	8	7	7
65°	2	3	2	3	2	2
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
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°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6
2.5°	832.1	838.1	836.5	840.2	840.2	836.0	837.0	838.6	840.7	842.3	829.5
5°	825.8	831.1	826.3	831.6	828.4	823.7	831.6	827.4	830.0	826.9	829.0
7.5°	808.8	817.2	807.7	814.1	811.9	809.3	812.5	811.4	813.0	810.4	804.4
10°	783.7	790.6	784.2	793.3	789.0	786.4	789.0	791.7	791.1	788.5	791.7
12.5°	754.9	762.9	759.7	765.0	760.2	760.2	766.7	765.0	765.6	763.4	767.2
15°	726.7	732.5	727.8	734.7	732.5	726.7	729.3	729.3	733.6	732.0	727.8
17.5°	691.5	696.3	691.0	692.6	690.4	689.4	700.6	693.1	697.4	694.2	694.8
20°	645.2	647.3	645.7	649.9	647.3	650.6	649.5	648.3	648.3	649.9	646.2
22.5°	598.3	598.3	599.9	600.9	603.1	599.9	606.2	600.9	601.5	605.2	604.1
25°	541.8	540.2	543.9	549.3	551.5	548.7	557.3	553.0	556.2	558.9	553.0
27.5°	473.1	473.1	476.8	485.9	487.5	490.6	502.4	502.4	506.6	502.9	507.2
30°	393.8	399.6	404.3	416.1	419.8	426.8	439.0	444.8	454.5	452.9	450.7
32.5°	312.2	320.3	320.7	332.9	343.1	354.8	371.3	385.2	392.1	396.9	391.5
35°	234.4	239.2	243.5	252.0	269.1	284.5	299.4	317.5	329.8	332.9	328.2
37.5°	171.5	172.6	176.8	184.9	197.7	212.6	230.7	250.3	263.2	268.0	262.6
40°	118.2	119.3	121.4	128.4	139.1	149.7	164.1	184.3	196.1	205.6	198.7
42.5°	79.4	80.5	82.6	87.9	93.8	103.9	115.1	127.9	139.1	143.3	139.6
45°	51.7	51.7	52.8	56.5	59.7	67.7	75.6	83.7	91.1	93.8	91.1
47.5°	30.4	30.9	31.9	34.6	38.4	41.6	47.4	52.8	54.9	57.0	55.9
50°	17.6	17.6	19.1	20.8	23.5	25.6	27.7	29.8	30.9	31.9	30.9
52.5°	9.6	10.2	10.7	11.2	12.3	14.4	16.0	16.0	16.5	17.0	16.5
55°	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.6	8.6	9.1	8.6
57.5°	5.3	5.3	5.3	5.8	5.8	5.8	5.3	5.3	5.3	5.3	5.3
60°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.7	3.7	3.7	3.7
62.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
65°	2.1	2.1	2.6	2.6	2.6	2.6	2.6	2.1	2.1	2.1	2.1
67.5°	1.6	1.6	1.6	1.6	2.1	2.1	1.6	1.6	1.6	1.6	1.6
70°	1.1	1.1	1.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	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°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6
2.5°	838.6	829.5	830.6	835.3	832.7	835.3	834.9	834.9
5°	829.5	826.9	822.6	820.9	824.2	831.1	830.0	825.8
7.5°	812.5	805.5	810.4	812.5	809.8	814.1	816.2	807.1
10°	792.2	789.5	788.5	789.5	788.5	792.8	787.4	787.4
12.5°	763.4	759.2	759.2	765.6	761.8	758.6	762.9	762.3
15°	734.7	726.2	726.2	728.3	729.9	727.8	728.3	723.0
17.5°	692.0	689.4	685.7	691.5	693.1	691.0	692.6	689.9
20°	652.1	652.1	645.2	647.8	649.9	651.6	652.7	648.3
22.5°	600.9	602.0	597.2	602.5	604.1	598.8	599.9	598.8
25°	554.1	553.6	549.8	547.6	548.7	546.6	546.1	538.1
27.5°	502.4	497.1	489.0	491.2	482.2	474.7	474.7	462.4
30°	446.4	437.4	426.8	416.1	408.1	399.6	394.8	387.8
32.5°	381.0	368.7	355.4	341.0	331.9	319.1	312.2	315.9
35°	315.9	297.8	279.7	265.4	251.5	244.0	235.4	236.6
37.5°	253.1	227.5	211.5	196.1	184.3	174.7	171.0	170.0
40°	184.9	164.7	148.6	137.5	129.5	122.1	117.7	116.1
42.5°	127.9	113.5	100.7	91.6	86.3	81.5	79.4	78.9
45°	83.1	74.6	66.1	59.7	55.4	52.2	51.7	51.1
47.5°	52.2	47.9	42.6	37.9	34.1	31.9	30.4	30.4
50°	29.8	28.2	25.6	23.0	20.8	19.7	18.1	17.6
52.5°	16.0	16.0	14.9	12.8	11.2	10.2	10.2	9.6
55°	8.6	8.6	8.0	8.0	7.5	7.5	7.5	7.0
57.5°	5.3	5.3	5.8	5.8	5.3	5.3	5.3	5.3
60°	3.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
62.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
65°	2.1	2.6	2.6	2.6	2.6	2.1	2.1	2.1
67.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
70°	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)