

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: P843222

Luminaire Tested: **LD4C08DE010B2750 EU4C08B27 4LBSQLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843222
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: LD4C08DE010B2750 EU4C08B27 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

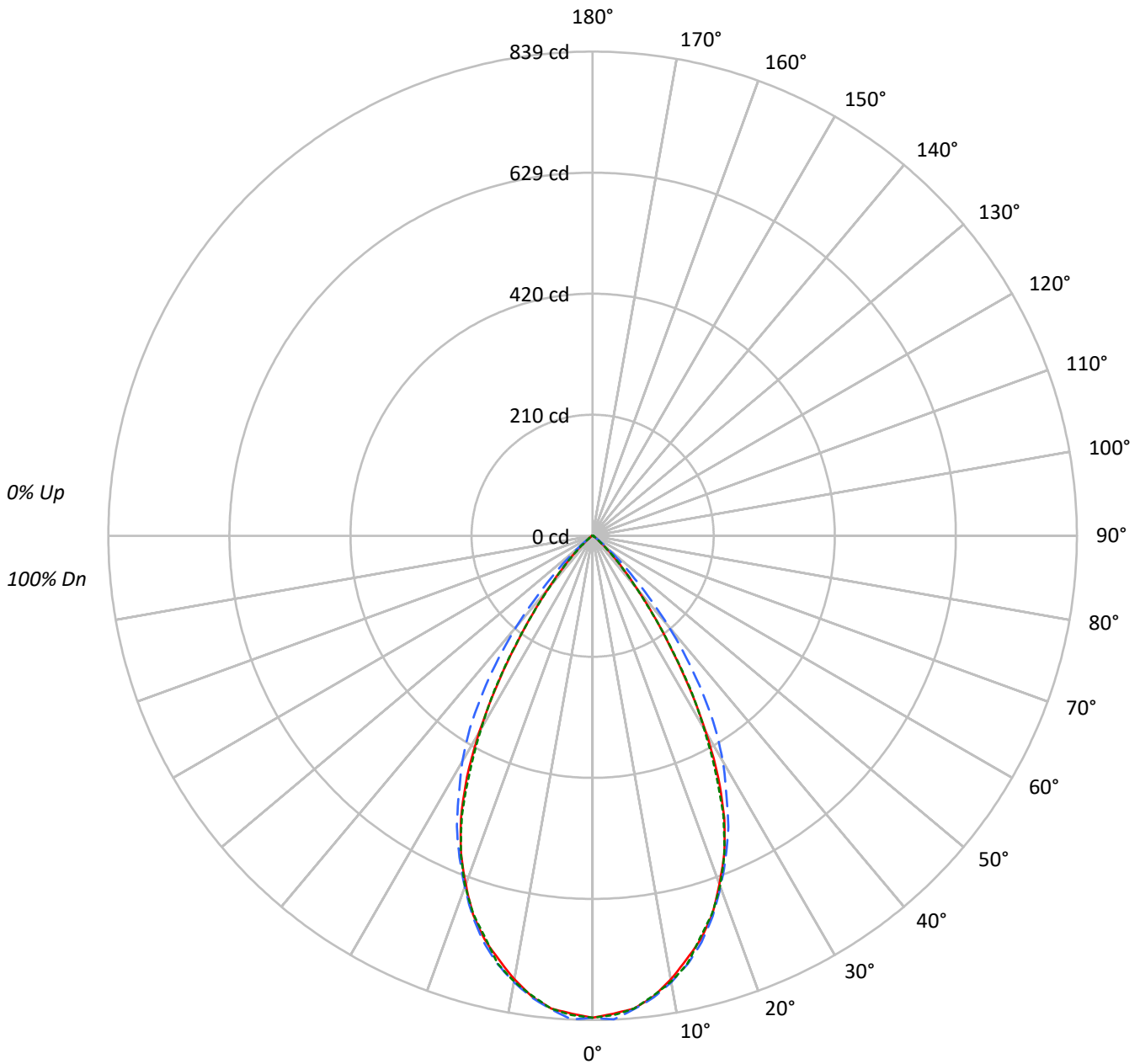
Lumens per Lamp: N/A
Luminaire Lumens: 771.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	80578	80578	80578
5°	79656	79762	79656
10°	76462	76942	76834
15°	72292	72822	71923
20°	65973	66466	66301
25°	57448	59247	57054
30°	43686	50249	43029
35°	27492	39060	27740
40°	14838	25796	14573
45°	7027	12745	6959
50°	2642	4774	2642
55°	1245	1514	1161
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°	77.4	10.0
10°-20°	202.9	26.3
20°-30°	247.9	32.2
30°-40°	173.4	22.5
40°-50°	56.8	7.4
50°-60°	9.0	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°	528.3	68.5
0°-40°	701.6	91.0
0°-60°	767.5	99.5
0°-90°	771.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	771.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	822	823	824	818	822	77
15°	724	727	729	724	720	202
25°	540	548	556	546	536	242
35°	233	276	332	271	236	149
45°	52	63	93	63	51	43
55°	7	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°	835.1	835.1	835.1	835.1	835.1	835.1	835.1	835.1	835.1	835.1	835.1
2.5°	828.8	834.6	833.0	836.7	836.7	832.5	833.5	835.1	837.2	838.8	826.1
5°	822.4	827.7	822.9	828.2	825.1	820.3	828.2	824.0	826.6	823.5	825.6
7.5°	805.4	814.0	804.3	810.7	808.6	805.9	809.1	808.0	809.6	807.0	801.2
10°	780.4	787.4	781.1	790.1	785.8	783.2	785.8	788.5	787.9	785.3	788.5
12.5°	751.9	759.8	756.6	761.9	757.2	757.2	763.5	761.9	762.4	760.3	764.0
15°	723.7	729.6	724.8	731.7	729.6	723.7	726.4	726.4	730.6	729.0	724.8
17.5°	688.7	693.5	688.2	689.8	687.7	686.6	697.7	690.3	694.5	691.4	691.9
20°	642.5	644.6	643.0	647.3	644.6	647.8	646.7	645.7	645.7	647.3	643.6
22.5°	595.9	595.9	597.5	598.5	600.6	597.5	603.8	598.5	599.0	602.7	601.7
25°	539.6	538.0	541.7	547.0	549.1	546.5	554.9	550.7	553.9	556.5	550.7
27.5°	471.2	471.2	474.9	483.9	485.5	488.6	500.4	500.4	504.6	500.9	505.1
30°	392.1	398.0	402.7	414.4	418.1	425.0	437.2	443.0	452.6	451.0	448.9
32.5°	310.9	318.9	319.4	331.6	341.7	353.4	369.9	383.6	390.5	395.2	389.9
35°	233.4	238.3	242.5	251.0	267.9	283.3	298.1	316.2	328.4	331.6	326.8
37.5°	170.8	171.9	176.2	184.1	196.8	211.7	229.7	249.4	262.1	266.8	261.6
40°	117.8	118.9	121.0	127.9	138.4	149.1	163.4	183.6	195.2	204.8	197.9
42.5°	79.0	80.1	82.3	87.6	93.4	103.4	114.6	127.3	138.4	142.8	139.0
45°	51.5	51.5	52.6	56.3	59.4	67.4	75.3	83.3	90.7	93.4	90.7
47.5°	30.2	30.8	31.8	34.5	38.2	41.4	47.2	52.6	54.7	56.8	55.7
50°	17.6	17.6	19.1	20.7	23.4	25.5	27.6	29.7	30.8	31.8	30.8
52.5°	9.5	10.0	10.6	11.1	12.2	14.4	15.9	15.9	16.5	17.0	16.5
55°	7.4	7.4	7.4	7.4	7.9	7.9	7.9	8.5	8.5	9.0	8.5
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°	835.1	835.1	835.1	835.1	835.1	835.1	835.1	835.1
2.5°	835.1	826.1	827.2	831.9	829.3	831.9	831.4	831.4
5°	826.1	823.5	819.2	817.7	820.8	827.7	826.6	822.4
7.5°	809.1	802.2	807.0	809.1	806.4	810.7	812.9	803.8
10°	789.0	786.4	785.3	786.4	785.3	789.5	784.2	784.2
12.5°	760.3	756.1	756.1	762.4	758.7	755.6	759.8	759.3
15°	731.7	723.2	723.2	725.3	726.9	724.8	725.3	720.0
17.5°	689.3	686.6	682.8	688.7	690.3	688.2	689.8	687.1
20°	649.4	649.4	642.5	645.2	647.3	648.9	649.9	645.7
22.5°	598.5	599.6	594.8	600.1	601.7	596.4	597.5	596.4
25°	551.8	551.2	547.5	545.4	546.5	544.4	543.8	535.9
27.5°	500.4	495.0	487.0	489.2	480.2	472.8	472.8	460.5
30°	444.6	435.6	425.0	414.4	406.4	398.0	393.1	386.2
32.5°	379.4	367.2	353.9	339.6	330.5	317.8	310.9	314.6
35°	314.6	296.6	278.6	264.2	250.4	243.0	234.5	235.5
37.5°	252.0	226.5	210.7	195.2	183.6	174.1	170.3	169.2
40°	184.1	163.9	148.1	136.9	128.9	121.5	117.3	115.7
42.5°	127.3	113.1	100.3	91.3	86.0	81.1	79.0	78.6
45°	82.8	74.2	65.8	59.4	55.2	52.0	51.5	51.0
47.5°	52.0	47.7	42.4	37.7	34.0	31.8	30.2	30.2
50°	29.7	28.1	25.5	22.8	20.7	19.7	18.1	17.6
52.5°	15.9	15.9	14.8	12.7	11.1	10.0	10.0	9.5
55°	8.5	8.5	7.9	7.9	7.4	7.4	7.4	6.9
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)