

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: P843306

Luminaire Tested: **LD4C10DE010B2750 EU4C10B30 4LBSQLI**

Issue Date: 5/7/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843306  
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: LD4C10DE010B2750 EU4C10B30 4LBSQLI  
Description: 4in Downlight with BioUp LEDs  
Light Source: -  
Ballast/Driver:

**Summary**

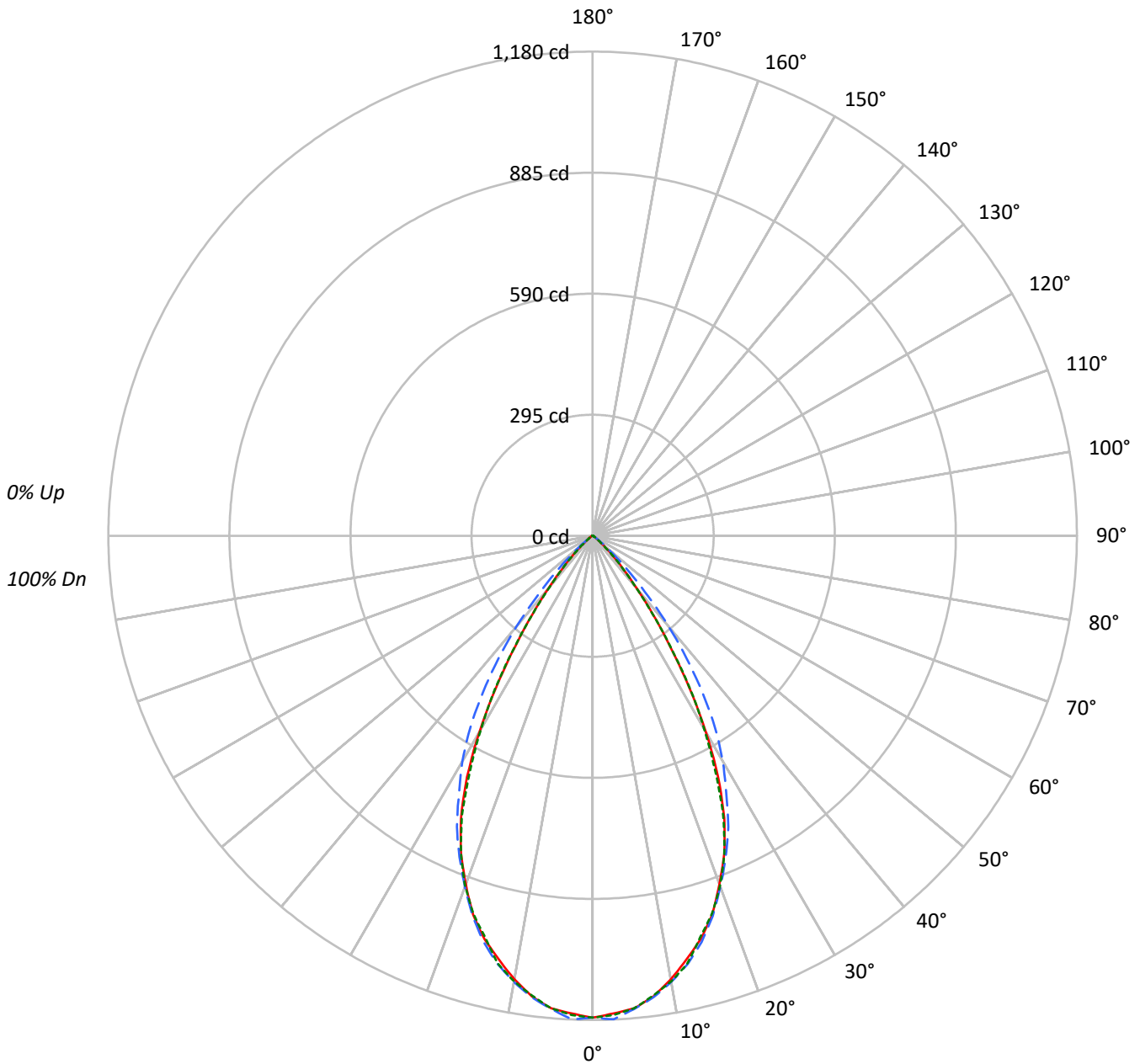
Lumens per Lamp: N/A  
Luminaire Lumens: 1084.0 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.3  
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: P843306

CATALOG NUMBER: LD4C10DE010B2750 EU4C10B30 4LBSQLI

### 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	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°	113297	113297	113297
5°	111996	112142	111996
10°	107520	108177	108030
15°	101641	102400	101131
20°	92762	93450	93224
25°	80774	83308	80220
30°	61424	70649	60510
35°	38671	54926	39024
40°	20859	36276	20493
45°	9866	17917	9770
50°	3693	6710	3693
55°	1766	2136	1632
60°	1139	1023	1139
65°	685	685	685
70°	423	621	423
75°	261	261	261
80°	389	389	389
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.9	10.0
10°-20°	285.3	26.3
20°-30°	348.6	32.2
30°-40°	243.8	22.5
40°-50°	79.9	7.4
50°-60°	12.7	1.2
60°-70°	3.4	0.3
70°-80°	1.1	0.1
80°-90°	0.3	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°	742.7	68.5
0°-40°	986.5	91.0
0°-60°	1079.1	99.6
0°-90°	1084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1084.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1174	1174	1174	1174	1174	
5°	1156	1157	1158	1151	1156	108
15°	1018	1022	1025	1018	1012	284
25°	759	770	782	768	754	341
35°	328	388	466	382	331	209
45°	72	89	131	88	72	61
55°	10	11	13	11	10	10
65°	3	4	3	4	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P843306

CATALOG NUMBER: LD4C10DE010B2750 EU4C10B30 4LBSQLI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2
2.5°	1165.3	1173.4	1171.2	1176.5	1176.5	1170.5	1172.0	1174.2	1177.3	1179.5	1161.5
5°	1156.3	1163.8	1157.1	1164.6	1160.0	1153.3	1164.6	1158.5	1162.3	1157.8	1160.8
7.5°	1132.4	1144.4	1130.9	1139.9	1137.0	1133.1	1137.7	1136.2	1138.4	1134.6	1126.5
10°	1097.4	1107.1	1098.1	1110.8	1104.8	1101.1	1104.8	1108.6	1107.9	1104.1	1108.6
12.5°	1057.1	1068.3	1063.8	1071.3	1064.6	1064.6	1073.5	1071.3	1072.0	1069.1	1074.2
15°	1017.5	1025.8	1019.0	1028.8	1025.8	1017.5	1021.3	1021.3	1027.3	1025.1	1019.0
17.5°	968.4	975.0	967.5	969.9	966.9	965.3	981.0	970.6	976.5	972.1	972.8
20°	903.4	906.4	904.2	910.1	906.4	910.9	909.4	907.9	907.9	910.1	904.9
22.5°	837.8	837.8	840.0	841.6	844.5	840.0	849.0	841.6	842.2	847.5	846.0
25°	758.7	756.4	761.7	769.1	772.2	768.4	780.3	774.4	778.8	782.5	774.4
27.5°	662.5	662.5	667.7	680.4	682.6	687.0	703.4	703.4	709.5	704.3	710.2
30°	551.3	559.5	566.3	582.7	587.8	597.6	614.7	622.9	636.4	634.1	631.1
32.5°	437.1	448.3	449.1	466.3	480.4	496.9	519.9	539.4	549.1	555.8	548.3
35°	328.3	335.0	341.0	352.8	376.7	398.4	419.2	444.6	461.8	466.3	459.5
37.5°	240.2	241.7	247.7	258.9	276.8	297.7	323.0	350.6	368.6	375.2	367.7
40°	165.6	167.1	170.1	179.8	194.7	209.6	229.8	258.2	274.6	288.0	278.3
42.5°	111.2	112.6	115.6	123.1	131.3	145.4	161.2	179.1	194.7	200.6	195.5
45°	72.3	72.3	73.8	79.1	83.6	94.8	106.0	117.1	127.6	131.3	127.6
47.5°	42.5	43.3	44.7	48.5	53.7	58.2	66.4	73.8	76.9	79.9	78.4
50°	24.6	24.6	26.9	29.1	32.8	35.9	38.8	41.8	43.3	44.7	43.3
52.5°	13.4	14.2	14.9	15.7	17.1	20.2	22.4	22.4	23.2	23.9	23.2
55°	10.5	10.5	10.5	10.5	11.2	11.2	11.2	12.0	12.0	12.7	12.0
57.5°	7.5	7.5	7.5	8.2	8.2	8.2	7.5	7.5	7.5	7.5	7.5
60°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.3	5.3	5.3	5.3
62.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
65°	3.0	3.0	3.7	3.7	3.7	3.7	3.7	3.0	3.0	3.0	3.0
67.5°	2.2	2.2	2.2	2.2	3.0	3.0	2.2	2.2	2.2	2.2	2.2
70°	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	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°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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: P843306

CATALOG NUMBER: LD4C10DE010B2750 EU4C10B30 4LBSQLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2	1174.2
2.5°	1174.2	1161.5	1163.0	1169.7	1166.0	1169.7	1169.0	1169.0
5°	1161.5	1157.8	1151.9	1149.5	1154.1	1163.8	1162.3	1156.3
7.5°	1137.7	1128.0	1134.6	1137.7	1134.0	1139.9	1142.9	1130.2
10°	1109.4	1105.7	1104.1	1105.7	1104.1	1110.1	1102.6	1102.6
12.5°	1069.1	1063.0	1063.0	1072.0	1066.8	1062.3	1068.3	1067.6
15°	1028.8	1016.8	1016.8	1019.8	1022.0	1019.0	1019.8	1012.4
17.5°	969.1	965.3	960.1	968.4	970.6	967.5	969.9	966.0
20°	913.2	913.2	903.4	907.1	910.1	912.4	913.9	907.9
22.5°	841.6	843.0	836.3	843.8	846.0	838.5	840.0	838.5
25°	775.9	775.1	769.9	766.9	768.4	765.4	764.7	753.5
27.5°	703.4	696.0	684.8	687.8	675.1	664.7	664.7	647.5
30°	625.2	612.5	597.6	582.7	571.4	559.5	552.8	543.1
32.5°	533.4	516.2	497.6	477.4	464.7	446.9	437.1	442.4
35°	442.4	417.0	391.6	371.5	352.1	341.6	329.8	331.3
37.5°	354.3	318.6	296.1	274.6	258.2	244.7	239.4	238.0
40°	258.9	230.6	208.1	192.5	181.3	170.8	164.9	162.7
42.5°	179.1	159.0	141.0	128.3	120.9	114.1	111.2	110.4
45°	116.3	104.5	92.5	83.6	77.6	73.1	72.3	71.6
47.5°	73.1	67.2	59.7	53.0	47.7	44.7	42.5	42.5
50°	41.8	39.6	35.9	32.0	29.1	27.6	25.4	24.6
52.5°	22.4	22.4	20.8	17.9	15.7	14.2	14.2	13.4
55°	12.0	12.0	11.2	11.2	10.5	10.5	10.5	9.7
57.5°	7.5	7.5	8.2	8.2	7.5	7.5	7.5	7.5
60°	5.3	5.9	5.9	5.9	5.9	5.9	5.9	5.9
62.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
65°	3.0	3.7	3.7	3.7	3.7	3.0	3.0	3.0
67.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
70°	2.2	2.2	2.2	2.2	2.2	1.5	1.5	1.5
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)