

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: P843292

Luminaire Tested: **LD4C10DE010B2750 EU4C10B27 4LBSQLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843292
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 EU4C10B27 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

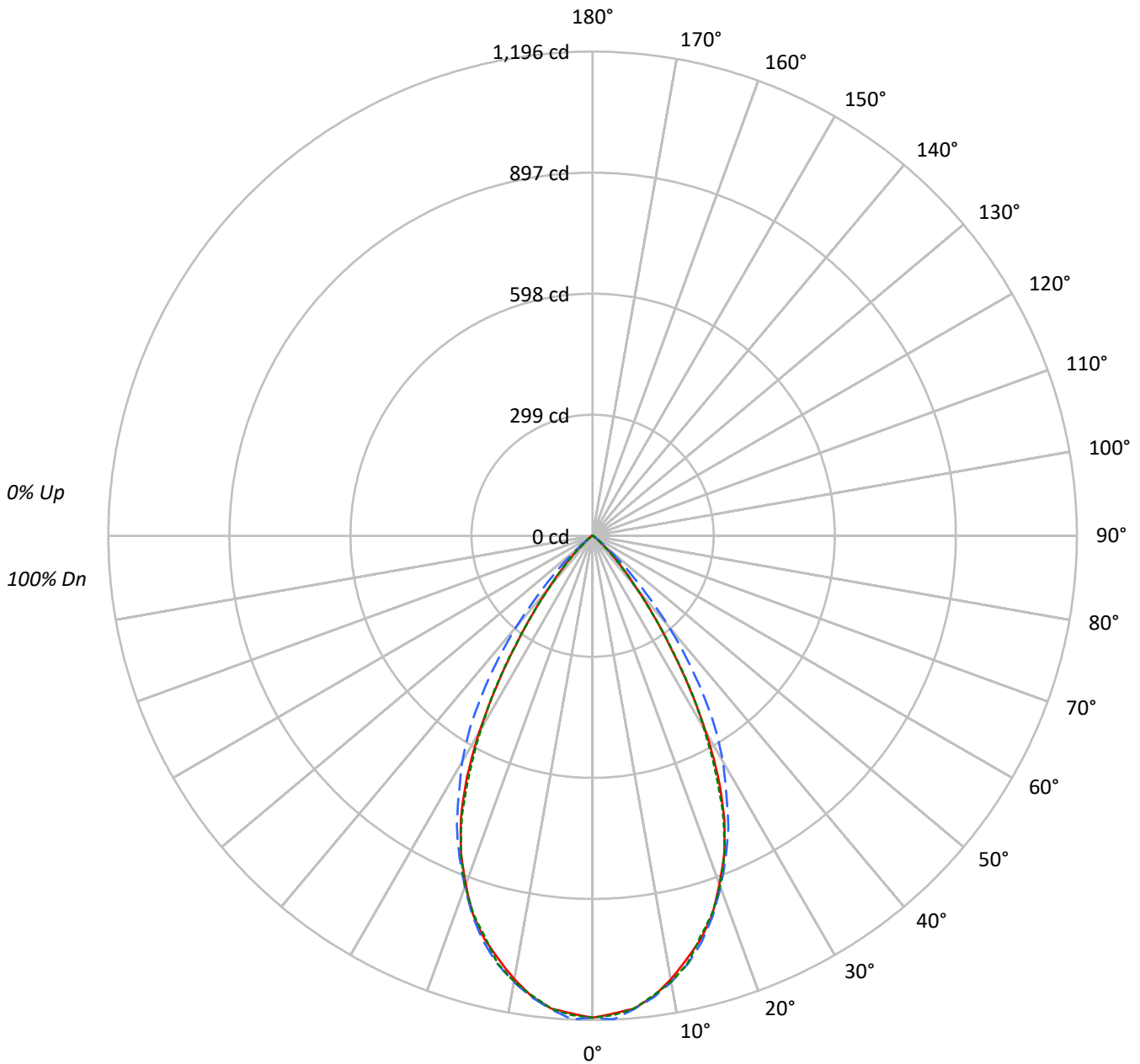
Lumens per Lamp: N/A
Luminaire Lumens: 1098.8 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	114851	114851	114851
5°	113527	113682	113527
10°	108990	109656	109509
15°	103039	103788	102500
20°	94036	94734	94508
25°	81881	84447	81306
30°	62270	71607	61334
35°	39189	55680	39543
40°	21136	36767	20770
45°	10016	18162	9907
50°	3753	6815	3753
55°	1783	2170	1649
60°	1158	1023	1158
65°	708	708	708
70°	423	649	423
75°	261	261	261
80°	389	389	389
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	10.0
10°-20°	289.2	26.3
20°-30°	353.3	32.2
30°-40°	247.1	22.5
40°-50°	81.0	7.4
50°-60°	12.9	1.2
60°-70°	3.5	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°	752.9	68.5
0°-40°	1000.0	91.0
0°-60°	1093.9	99.6
0°-90°	1098.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1190	1190	1190	1190	1190	
5°	1172	1172	1174	1166	1172	110
15°	1032	1036	1039	1032	1026	288
25°	769	781	793	779	764	345
35°	333	393	473	387	336	212
45°	73	90	133	89	73	62
55°	11	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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3
2.5°	1181.2	1189.5	1187.2	1192.6	1192.6	1186.5	1188.0	1190.3	1193.3	1195.5	1177.4
5°	1172.1	1179.7	1172.8	1180.4	1175.9	1169.1	1180.4	1174.4	1178.2	1173.7	1176.6
7.5°	1148.0	1160.0	1146.4	1155.5	1152.5	1148.7	1153.2	1151.7	1154.0	1150.2	1141.8
10°	1112.4	1122.3	1113.2	1126.0	1119.9	1116.1	1119.9	1123.7	1123.0	1119.2	1123.7
12.5°	1071.6	1082.9	1078.4	1085.9	1079.1	1079.1	1088.2	1085.9	1086.7	1083.7	1088.9
15°	1031.5	1039.8	1033.0	1042.8	1039.8	1031.5	1035.2	1035.2	1041.3	1039.0	1033.0
17.5°	981.6	988.4	980.7	983.1	980.0	978.5	994.4	983.8	989.8	985.3	986.1
20°	915.8	918.8	916.5	922.6	918.8	923.3	921.8	920.4	920.4	922.6	917.3
22.5°	849.2	849.2	851.5	853.0	856.0	851.5	860.6	853.0	853.7	859.0	857.5
25°	769.1	766.8	772.1	779.7	782.6	778.8	791.0	785.0	789.4	793.2	785.0
27.5°	671.5	671.5	676.8	689.7	691.9	696.5	713.1	713.1	719.1	713.9	719.9
30°	558.9	567.1	574.0	590.6	595.9	605.7	623.1	631.4	645.1	642.7	639.8
32.5°	443.1	454.5	455.2	472.7	486.9	503.6	527.0	546.7	556.5	563.4	555.8
35°	332.7	339.5	345.6	357.7	381.9	403.8	425.0	450.7	468.1	472.7	465.8
37.5°	243.5	245.1	251.1	262.4	280.6	301.7	327.4	355.4	373.6	380.3	372.8
40°	167.8	169.4	172.4	182.2	197.4	212.5	232.9	261.7	278.3	291.9	282.1
42.5°	112.6	114.2	117.2	124.8	133.1	147.4	163.3	181.5	197.4	203.4	198.1
45°	73.4	73.4	74.9	80.2	84.7	96.0	107.3	118.7	129.3	133.1	129.3
47.5°	43.2	43.9	45.4	49.2	54.5	59.0	67.3	74.9	77.8	80.9	79.4
50°	25.0	25.0	27.2	29.5	33.3	36.3	39.3	42.3	43.9	45.4	43.9
52.5°	13.6	14.4	15.1	15.9	17.5	20.4	22.6	22.6	23.5	24.2	23.5
55°	10.6	10.6	10.6	10.6	11.3	11.3	11.3	12.1	12.1	12.9	12.1
57.5°	7.5	7.5	7.5	8.4	8.4	8.4	7.5	7.5	7.5	7.5	7.5
60°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.3	5.3	5.3	5.3
62.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
65°	3.1	3.1	3.8	3.8	3.8	3.8	3.8	3.1	3.1	3.1	3.1
67.5°	2.3	2.3	2.3	2.3	3.1	3.1	2.3	2.3	2.3	2.3	2.3
70°	1.5	1.5	1.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3
2.5°	1190.3	1177.4	1178.9	1185.7	1181.9	1185.7	1185.0	1185.0
5°	1177.4	1173.7	1167.6	1165.3	1169.8	1179.7	1178.2	1172.1
7.5°	1153.2	1143.4	1150.2	1153.2	1149.4	1155.5	1158.5	1145.6
10°	1124.5	1120.7	1119.2	1120.7	1119.2	1125.2	1117.7	1117.7
12.5°	1083.7	1077.6	1077.6	1086.7	1081.3	1076.8	1082.9	1082.2
15°	1042.8	1030.7	1030.7	1033.7	1036.0	1033.0	1033.7	1026.1
17.5°	982.3	978.5	973.2	981.6	983.8	980.7	983.1	979.3
20°	925.5	925.5	915.8	919.5	922.6	924.8	926.4	920.4
22.5°	853.0	854.5	847.7	855.2	857.5	850.0	851.5	850.0
25°	786.5	785.7	780.4	777.4	778.8	775.9	775.1	763.7
27.5°	713.1	705.5	694.2	697.2	684.4	673.8	673.8	656.4
30°	633.7	620.8	605.7	590.6	579.3	567.1	560.3	550.5
32.5°	540.7	523.3	504.4	484.0	471.1	453.0	443.1	448.4
35°	448.4	422.7	397.0	376.6	357.0	346.4	334.2	335.7
37.5°	359.2	322.9	300.3	278.3	261.7	248.0	242.7	241.2
40°	262.4	233.6	211.0	195.1	183.8	173.1	167.1	164.9
42.5°	181.5	161.1	142.9	130.1	122.5	115.7	112.6	111.9
45°	117.9	105.9	93.8	84.7	78.7	74.1	73.4	72.6
47.5°	74.1	68.0	60.5	53.7	48.4	45.4	43.2	43.2
50°	42.3	40.1	36.3	32.6	29.5	28.0	25.7	25.0
52.5°	22.6	22.6	21.2	18.2	15.9	14.4	14.4	13.6
55°	12.1	12.1	11.3	11.3	10.6	10.6	10.6	9.8
57.5°	7.5	7.5	8.4	8.4	7.5	7.5	7.5	7.5
60°	5.3	6.0	6.0	6.0	6.0	6.0	6.0	6.0
62.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
65°	3.1	3.8	3.8	3.8	3.8	3.1	3.1	3.1
67.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
70°	2.3	2.3	2.3	2.3	2.3	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)