

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: P843376

Luminaire Tested: **LD4C15DE010B2750 EU4C15B30 4LBSQLI**

Issue Date: 5/7/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843376  
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: LD4C15DE010B2750 EU4C15B30 4LBSQLI  
Description: 4in Downlight with BioUp LEDs  
Light Source: -  
Ballast/Driver:

**Summary**

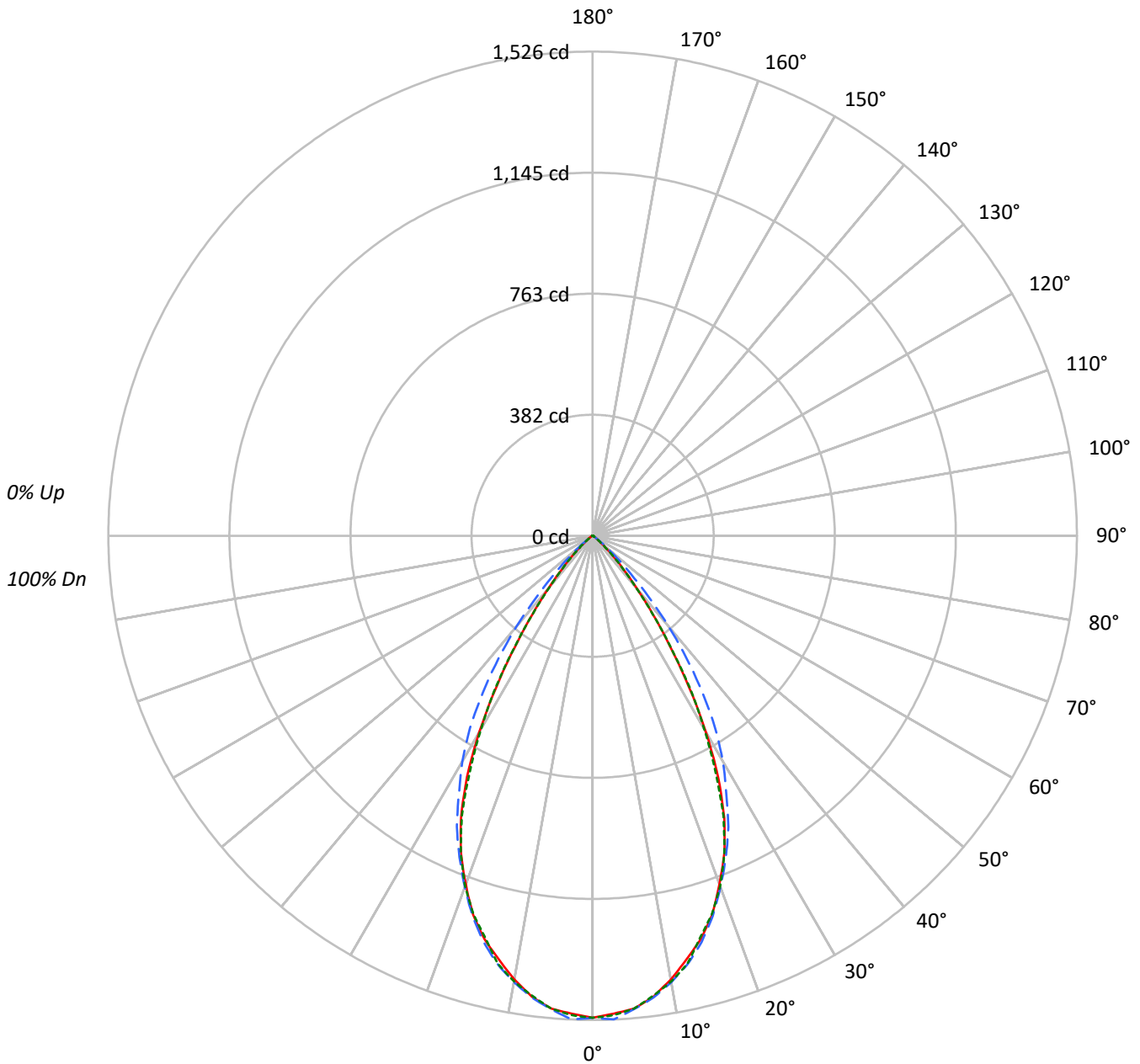
Lumens per Lamp: N/A  
Luminaire Lumens: 1402.5 lumens  
Efficiency: N/A  
Efficacy: 82.5 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 17  
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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87					87			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80					80			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75					75			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69					69			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64					64			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60					60			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56					56			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53					53			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50					50			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	146576	146576	146576
5°	144889	145073	144889
10°	139099	139941	139755
15°	131489	132468	130819
20°	120004	120897	120599
25°	104494	107784	103770
30°	79462	91394	78281
35°	50014	71052	50462
40°	26993	46919	26501
45°	12772	23184	12636
50°	4774	8691	4774
55°	2271	2759	2120
60°	1486	1312	1486
65°	868	868	868
70°	536	846	536
75°	373	373	373
80°	556	556	556
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.8	10.0
10°-20°	369.1	26.3
20°-30°	450.9	32.2
30°-40°	315.4	22.5
40°-50°	103.4	7.4
50°-60°	16.4	1.2
60°-70°	4.5	0.3
70°-80°	1.5	0.1
80°-90°	0.4	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°	960.9	68.5
0°-40°	1276.2	91.0
0°-60°	1396.0	99.5
0°-90°	1402.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1402.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1519	1519	1519	1519	1519	
5°	1496	1496	1498	1489	1496	140
15°	1316	1322	1326	1317	1310	367
25°	982	996	1012	994	975	441
35°	425	501	603	494	428	271
45°	94	115	170	114	93	79
55°	14	14	16	14	13	13
65°	4	5	4	5	4	4
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°	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1
2.5°	1507.4	1518.1	1515.2	1521.9	1521.9	1514.2	1516.1	1519.1	1522.9	1525.8	1502.6
5°	1495.9	1505.5	1496.9	1506.5	1500.7	1492.0	1506.5	1498.8	1503.6	1497.8	1501.6
7.5°	1465.0	1480.5	1463.1	1474.7	1470.7	1466.0	1471.7	1469.8	1472.8	1467.9	1457.3
10°	1419.7	1432.2	1420.6	1437.0	1429.3	1424.5	1429.3	1434.2	1433.2	1428.3	1434.2
12.5°	1367.5	1382.0	1376.2	1385.8	1377.1	1377.1	1388.8	1385.8	1386.9	1383.0	1389.7
15°	1316.3	1327.0	1318.3	1330.8	1327.0	1316.3	1321.2	1321.2	1328.9	1326.1	1318.3
17.5°	1252.7	1261.3	1251.7	1254.7	1250.8	1248.9	1269.1	1255.5	1263.2	1257.5	1258.5
20°	1168.7	1172.6	1169.6	1177.4	1172.6	1178.4	1176.4	1174.5	1174.5	1177.4	1170.7
22.5°	1083.8	1083.8	1086.7	1088.6	1092.5	1086.7	1098.2	1088.6	1089.6	1096.3	1094.4
25°	981.5	978.6	985.4	995.0	998.8	994.1	1009.5	1001.8	1007.5	1012.4	1001.8
27.5°	857.0	857.0	863.8	880.2	883.0	888.8	910.1	910.1	917.8	911.0	918.8
30°	713.2	723.8	732.5	753.7	760.4	773.0	795.2	805.8	823.3	820.3	816.5
32.5°	565.5	580.0	581.0	603.2	621.5	642.7	672.7	697.7	710.3	719.0	709.4
35°	424.6	433.3	441.0	456.5	487.4	515.4	542.4	575.1	597.4	603.2	594.5
37.5°	310.7	312.7	320.5	334.8	358.0	385.1	417.9	453.6	476.8	485.5	475.8
40°	214.3	216.2	220.0	232.6	251.9	271.2	297.3	333.9	355.2	372.5	359.9
42.5°	143.8	145.7	149.5	159.2	169.9	188.2	208.5	231.6	251.9	259.6	252.9
45°	93.6	93.6	95.5	102.3	108.1	122.6	137.1	151.6	165.0	169.9	165.0
47.5°	55.0	55.9	57.9	62.7	69.5	75.3	85.9	95.5	99.4	103.2	101.3
50°	31.8	31.8	34.7	37.7	42.4	46.3	50.1	54.0	55.9	57.9	55.9
52.5°	17.3	18.4	19.2	20.3	22.2	26.1	29.0	29.0	29.9	30.9	29.9
55°	13.5	13.5	13.5	13.5	14.5	14.5	14.5	15.4	15.4	16.4	15.4
57.5°	9.6	9.6	9.6	10.7	10.7	10.7	9.6	9.6	9.6	9.6	9.6
60°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.8	6.8	6.8	6.8
62.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
65°	3.8	3.8	4.9	4.9	4.9	4.9	4.9	3.8	3.8	3.8	3.8
67.5°	3.0	3.0	3.0	3.0	3.8	3.8	3.0	3.0	3.0	3.0	3.0
70°	1.9	1.9	1.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1	1519.1
2.5°	1519.1	1502.6	1504.6	1513.3	1508.4	1513.3	1512.3	1512.3
5°	1502.6	1497.8	1490.1	1487.1	1493.0	1505.5	1503.6	1495.9
7.5°	1471.7	1459.2	1467.9	1471.7	1466.9	1474.7	1478.5	1462.1
10°	1435.1	1430.2	1428.3	1430.2	1428.3	1436.1	1426.4	1426.4
12.5°	1383.0	1375.2	1375.2	1386.9	1380.1	1374.3	1382.0	1381.1
15°	1330.8	1315.4	1315.4	1319.3	1322.1	1318.3	1319.3	1309.6
17.5°	1253.6	1248.9	1242.1	1252.7	1255.5	1251.7	1254.7	1249.8
20°	1181.3	1181.3	1168.7	1173.6	1177.4	1180.3	1182.2	1174.5
22.5°	1088.6	1090.5	1081.9	1091.5	1094.4	1084.8	1086.7	1084.8
25°	1003.7	1002.7	996.0	992.1	994.1	990.2	989.2	974.7
27.5°	910.1	900.4	886.0	889.8	873.4	859.9	859.9	837.6
30°	808.8	792.4	773.0	753.7	739.3	723.8	715.1	702.6
32.5°	690.0	667.9	643.7	617.7	601.3	578.1	565.5	572.3
35°	572.3	539.5	506.7	480.6	455.5	442.0	426.5	428.4
37.5°	458.4	412.1	383.2	355.2	333.9	316.5	309.8	307.9
40°	334.8	298.3	269.3	249.0	234.5	221.0	213.3	210.4
42.5°	231.6	205.6	182.3	166.0	156.3	147.6	143.8	142.9
45°	150.6	135.2	119.7	108.1	100.4	94.6	93.6	92.6
47.5°	94.6	86.8	77.2	68.5	61.8	57.9	55.0	55.0
50°	54.0	51.2	46.3	41.5	37.7	35.7	32.8	31.8
52.5°	29.0	29.0	27.0	23.2	20.3	18.4	18.4	17.3
55°	15.4	15.4	14.5	14.5	13.5	13.5	13.5	12.6
57.5°	9.6	9.6	10.7	10.7	9.6	9.6	9.6	9.6
60°	6.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7
62.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
65°	3.8	4.9	4.9	4.9	4.9	3.8	3.8	3.8
67.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
70°	3.0	3.0	3.0	3.0	3.0	1.9	1.9	1.9
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)