

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: P843362

Luminaire Tested: **LD4C15DE010B2750 EU4C15B27 4LBSQLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843362
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 EU4C15B27 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

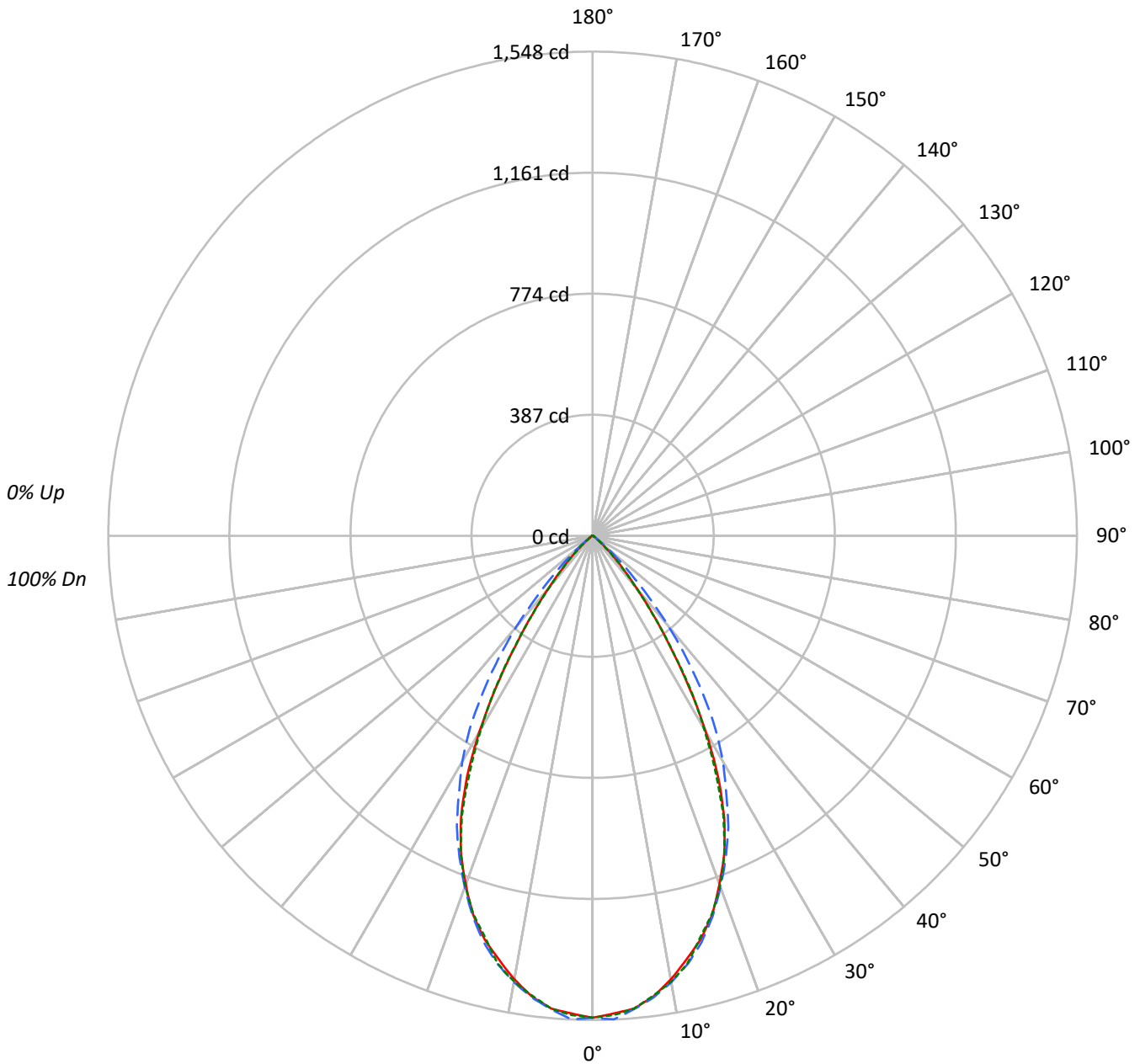
Lumens per Lamp: N/A
Luminaire Lumens: 1422.6 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	148670	148670	148670
5°	146962	147156	146962
10°	141087	141959	141754
15°	133387	134356	132697
20°	121729	122632	122324
25°	105995	109328	105261
30°	80598	92698	79395
35°	50733	72065	51192
40°	27371	47599	26879
45°	12963	23511	12813
50°	4864	8811	4864
55°	2305	2793	2136
60°	1505	1332	1505
65°	890	890	890
70°	564	846	564
75°	373	373	373
80°	556	556	556
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.9	10.0
10°-20°	374.4	26.3
20°-30°	457.4	32.2
30°-40°	319.9	22.5
40°-50°	104.8	7.4
50°-60°	16.7	1.2
60°-70°	4.6	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°	974.6	68.5
0°-40°	1294.5	91.0
0°-60°	1416.0	99.5
0°-90°	1422.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1541	1541	1541	1541	1541	
5°	1517	1518	1519	1510	1517	142
15°	1335	1341	1345	1336	1328	372
25°	996	1011	1027	1008	989	447
35°	431	509	612	501	435	275
45°	95	117	172	116	94	80
55°	14	15	17	15	13	14
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°	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8
2.5°	1529.0	1539.8	1536.8	1543.7	1543.7	1535.9	1537.9	1540.8	1544.7	1547.6	1524.2
5°	1517.3	1527.1	1518.2	1528.1	1522.1	1513.4	1528.1	1520.2	1525.1	1519.3	1523.2
7.5°	1486.0	1501.6	1484.1	1495.8	1491.9	1486.9	1492.8	1490.8	1493.8	1488.9	1478.1
10°	1440.0	1452.8	1441.0	1457.6	1449.8	1444.9	1449.8	1454.7	1453.7	1448.9	1454.7
12.5°	1387.1	1401.8	1396.0	1405.7	1396.9	1396.9	1408.7	1405.7	1406.7	1402.7	1409.6
15°	1335.3	1346.1	1337.2	1350.0	1346.1	1335.3	1340.1	1340.1	1348.0	1345.0	1337.2
17.5°	1270.6	1279.4	1269.7	1272.7	1268.7	1266.7	1287.2	1273.6	1281.4	1275.5	1276.6
20°	1185.5	1189.4	1186.5	1194.3	1189.4	1195.2	1193.3	1191.3	1191.3	1194.3	1187.4
22.5°	1099.3	1099.3	1102.3	1104.3	1108.2	1102.3	1114.0	1104.3	1105.2	1112.1	1110.1
25°	995.6	992.6	999.5	1009.3	1013.2	1008.2	1023.9	1016.1	1022.0	1026.9	1016.1
27.5°	869.3	869.3	876.1	892.7	895.7	901.5	923.1	923.1	930.9	924.1	931.9
30°	723.4	734.2	743.0	764.6	771.3	784.1	806.7	817.4	835.0	832.0	828.1
32.5°	573.7	588.4	589.3	611.8	630.5	651.9	682.3	707.8	720.5	729.2	719.5
35°	430.7	439.6	447.4	463.0	494.3	522.8	550.2	583.4	605.9	611.8	603.0
37.5°	315.2	317.2	325.0	339.7	363.2	390.6	423.9	460.1	483.6	492.4	482.6
40°	217.3	219.2	223.2	236.0	255.5	275.1	301.5	338.8	360.2	377.9	365.1
42.5°	145.8	147.9	151.8	161.5	172.3	190.9	211.4	234.9	255.5	263.4	256.5
45°	95.0	95.0	96.9	103.8	109.7	124.3	139.0	153.7	167.4	172.3	167.4
47.5°	55.8	56.8	58.7	63.7	70.4	76.4	87.1	96.9	100.8	104.7	102.8
50°	32.4	32.4	35.2	38.2	43.0	47.0	50.9	54.8	56.8	58.7	56.8
52.5°	17.7	18.6	19.6	20.6	22.5	26.4	29.4	29.4	30.4	31.3	30.4
55°	13.7	13.7	13.7	13.7	14.7	14.7	14.7	15.7	15.7	16.6	15.7
57.5°	9.8	9.8	9.8	10.8	10.8	10.8	9.8	9.8	9.8	9.8	9.8
60°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	6.9	6.9	6.9	6.9
62.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
65°	3.9	3.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9	3.9
67.5°	3.0	3.0	3.0	3.0	3.9	3.9	3.0	3.0	3.0	3.0	3.0
70°	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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°	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8
2.5°	1540.8	1524.2	1526.1	1534.9	1530.0	1534.9	1534.0	1534.0
5°	1524.2	1519.3	1511.5	1508.5	1514.3	1527.1	1525.1	1517.3
7.5°	1492.8	1480.2	1488.9	1492.8	1488.0	1495.8	1499.7	1483.0
10°	1455.6	1450.8	1448.9	1450.8	1448.9	1456.7	1446.8	1446.8
12.5°	1402.7	1394.9	1394.9	1406.7	1399.9	1394.0	1401.8	1400.8
15°	1350.0	1334.2	1334.2	1338.1	1341.1	1337.2	1338.1	1328.4
17.5°	1271.6	1266.7	1259.9	1270.6	1273.6	1269.7	1272.7	1267.7
20°	1198.2	1198.2	1185.5	1190.4	1194.3	1197.2	1199.1	1191.3
22.5°	1104.3	1106.2	1097.4	1107.1	1110.1	1100.3	1102.3	1100.3
25°	1018.1	1017.1	1010.3	1006.3	1008.2	1004.3	1003.4	988.7
27.5°	923.1	913.3	898.7	902.6	885.9	872.2	872.2	849.7
30°	820.3	803.7	784.1	764.6	749.9	734.2	725.3	712.6
32.5°	699.9	677.4	653.0	626.5	609.8	586.4	573.7	580.5
35°	580.5	547.2	513.9	487.6	462.1	448.3	432.7	434.6
37.5°	464.9	418.0	388.7	360.2	338.8	321.1	314.2	312.3
40°	339.7	302.5	273.1	252.6	237.9	224.2	216.4	213.4
42.5°	234.9	208.6	185.0	168.4	158.5	149.8	145.8	144.9
45°	152.7	137.1	121.4	109.7	101.9	95.9	95.0	93.9
47.5°	95.9	88.1	78.3	69.5	62.6	58.7	55.8	55.8
50°	54.8	51.9	47.0	42.1	38.2	36.3	33.3	32.4
52.5°	29.4	29.4	27.4	23.5	20.6	18.6	18.6	17.7
55°	15.7	15.7	14.7	14.7	13.7	13.7	13.7	12.7
57.5°	9.8	9.8	10.8	10.8	9.8	9.8	9.8	9.8
60°	6.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8
62.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
65°	3.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9
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	2.0	2.0	2.0
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)