

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: FAIL-SAFE

Report Number: P520756

Luminaire Tested: **8WSLA-50-L850-UNV-U**

Issue Date: 5/3/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P520756  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-689-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 8WSLA-50-L850-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

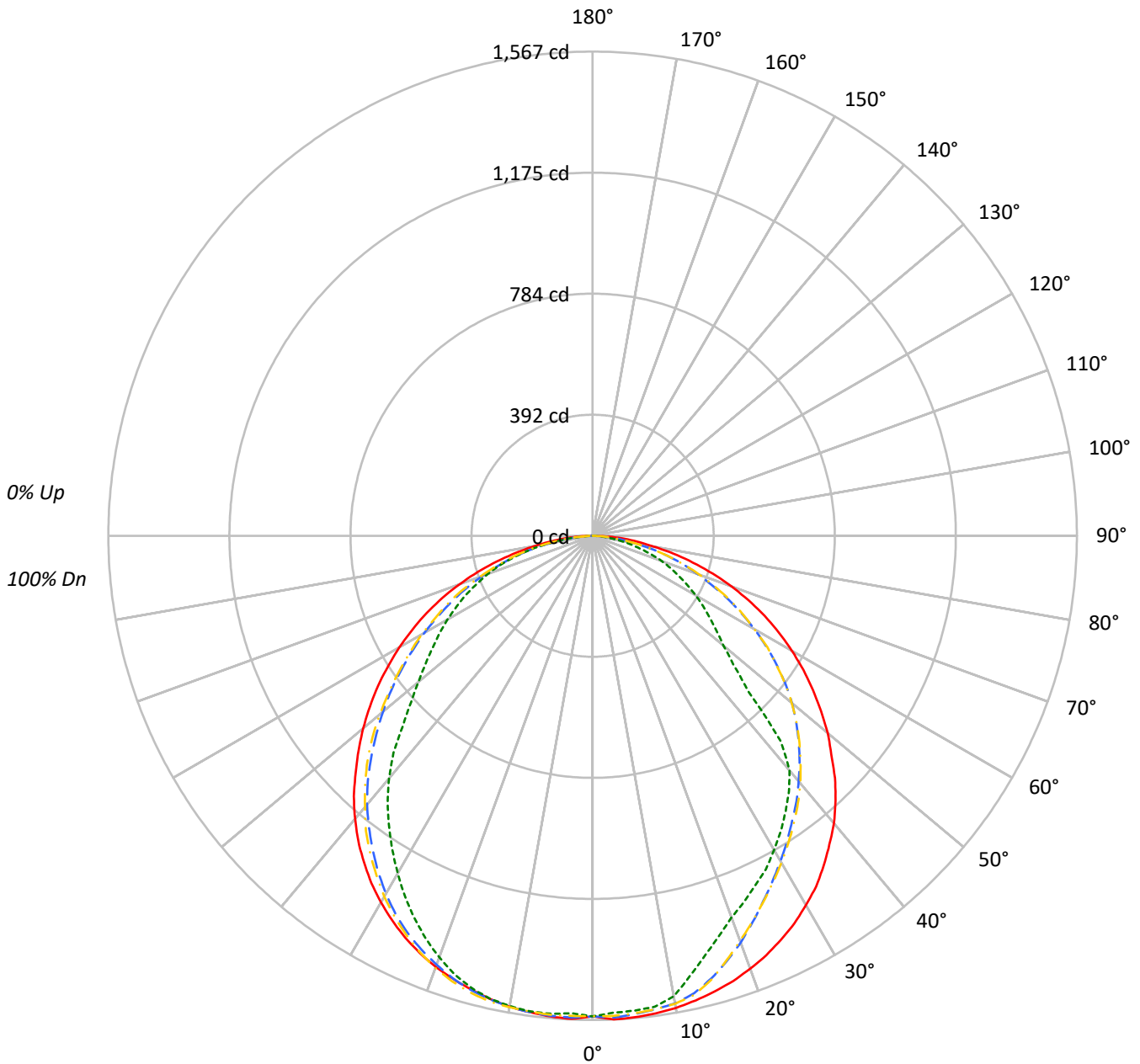
Lumens per Lamp: N/A  
Luminaire Lumens: 4172.0 lumens  
Efficiency: N/A  
Efficacy: 136.8 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 30.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																			

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

	0°	90°	180°	270°
0°	4185	4185	4185	4185
5°	4226	4167	4219	4194
10°	4240	4136	4229	4222
15°	4254	3916	4235	4221
20°	4269	3763	4253	4157
25°	4283	3701	4261	4053
30°	4288	3648	4257	3920
35°	4281	3577	4237	3774
40°	4267	3482	4200	3599
45°	4220	2705	4125	3302
50°	4156	2316	4055	3081
55°	4083	2168	3977	2963
60°	4005	2070	3884	2914
65°	3910	1961	3777	2879
70°	3755	1864	3597	2836
75°	3496	1640	3331	2698
80°	3102	1370	2909	2289
85°	2936	979	2575	1315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.8	3.5
10°-20°	421.5	10.1
20°-30°	629.8	15.1
30°-40°	749.7	18.0
40°-50°	749.3	18.0
50°-60°	644.8	15.5
60°-70°	485.3	11.6
70°-80°	276.5	6.6
80°-90°	67.3	1.6
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°	1199.0	28.7
0°-40°	1948.7	46.7
0°-60°	3342.8	80.1
0°-90°	4172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4172.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1555	1555	1555	1555	1555	
5°	1564	1543	1562	1553	1564	149
15°	1527	1406	1520	1515	1527	431
25°	1442	1246	1435	1365	1442	665
35°	1303	1089	1290	1149	1303	815
45°	1109	711	1084	868	1109	854
55°	870	462	848	632	870	778
65°	614	308	593	452	614	606
75°	336	158	320	260	336	356
85°	95	32	83	43	95	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1555.2	1555.2	1555.2	1555.2	1555.2	1555.2	1555.2	1555.2	1555.2	1555.2	1555.2
2.5°	1566.9	1552.7	1561.0	1558.5	1545.2	1550.2	1555.2	1550.2	1565.2	1551.8	1561.0
5°	1564.4	1549.3	1554.3	1549.3	1542.7	1544.3	1551.8	1546.8	1561.9	1547.7	1559.4
7.5°	1559.4	1541.0	1546.0	1543.5	1537.7	1538.5	1546.0	1541.8	1555.2	1541.8	1555.2
10°	1551.8	1532.7	1536.8	1526.0	1513.5	1522.6	1537.7	1533.5	1547.7	1532.7	1547.7
12.5°	1540.2	1521.0	1516.8	1480.9	1458.4	1475.9	1521.8	1521.8	1535.2	1521.0	1536.8
15°	1526.8	1506.0	1483.4	1429.2	1405.8	1423.4	1486.8	1508.5	1520.1	1506.0	1521.8
17.5°	1511.0	1486.8	1443.4	1380.0	1358.3	1375.8	1440.9	1488.4	1503.5	1488.4	1502.6
20°	1490.9	1462.6	1400.8	1328.2	1314.1	1329.9	1395.0	1464.2	1485.1	1466.7	1476.8
22.5°	1469.2	1435.0	1353.3	1288.2	1281.5	1291.5	1350.8	1434.2	1461.7	1442.5	1449.2
25°	1442.5	1402.5	1305.7	1251.5	1246.5	1252.3	1307.4	1399.2	1435.0	1415.0	1417.5
27.5°	1414.2	1370.8	1260.7	1220.6	1215.6	1218.1	1264.0	1360.0	1404.2	1384.1	1380.0
30°	1380.0	1333.3	1215.6	1178.9	1173.9	1183.1	1222.3	1319.9	1370.0	1349.9	1337.4
32.5°	1345.8	1292.4	1171.4	1143.0	1133.0	1141.4	1178.9	1278.2	1332.4	1311.6	1290.7
35°	1303.2	1249.0	1125.5	1097.1	1088.8	1098.0	1135.5	1234.8	1289.9	1269.0	1240.6
37.5°	1259.0	1203.1	1083.8	1057.9	1042.9	1053.8	1091.3	1189.7	1245.6	1224.0	1188.9
40°	1214.8	1154.7	1037.1	1010.4	991.2	1007.0	1045.4	1142.2	1195.6	1175.6	1135.5
42.5°	1163.1	1106.3	991.2	953.6	899.4	950.3	996.2	1094.6	1143.9	1124.7	1076.3
45°	1108.8	1054.6	942.8	851.8	710.8	860.2	946.1	1044.6	1083.8	1065.4	1012.9
47.5°	1047.1	1001.2	893.6	755.1	618.2	763.4	895.2	997.0	1027.1	1007.0	948.6
50°	992.8	947.8	841.8	673.3	553.2	682.5	841.0	943.6	968.7	950.3	885.2
52.5°	931.1	891.9	785.9	600.7	504.8	609.9	784.3	888.6	908.6	886.9	821.8
55°	870.2	835.2	726.7	536.5	462.2	544.8	725.0	831.8	847.7	822.6	755.1
57.5°	808.5	776.8	665.8	478.9	423.0	488.1	670.0	773.4	784.3	752.6	690.8
60°	744.2	717.5	604.1	428.0	384.6	435.5	602.4	715.0	721.7	687.5	628.2
62.5°	680.0	655.8	542.3	381.3	345.4	386.3	546.5	653.3	657.4	624.9	564.0
65°	614.1	591.5	482.2	332.1	307.9	340.4	486.4	589.0	593.2	556.5	501.4
67.5°	545.6	527.3	418.0	294.5	272.0	297.0	426.3	524.0	526.5	490.6	440.5
70°	477.2	461.4	361.3	253.6	236.9	254.5	367.1	452.2	457.2	418.8	378.8
72.5°	407.2	394.6	306.2	211.1	196.1	211.1	309.5	386.3	389.6	357.9	318.7
75°	336.2	327.1	250.3	169.4	157.7	168.5	252.0	320.4	320.4	290.3	259.5
77.5°	267.8	261.1	191.9	130.2	121.8	128.5	192.7	253.6	252.0	228.6	204.4
80°	200.2	195.2	137.7	94.3	88.4	91.8	137.7	187.7	187.7	171.0	141.8
82.5°	143.5	137.7	90.9	61.7	58.4	60.1	89.3	131.0	133.5	121.0	95.9
85°	95.1	81.8	49.2	34.2	31.7	32.5	46.7	75.9	83.4	70.1	50.1
87.5°	41.7	27.5	12.5	5.0	2.5	3.3	10.0	24.2	31.7	20.9	6.7
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):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1555.2	1555.2	1555.2	1555.2	1555.2	1555.2
2.5°	1560.2	1546.8	1551.8	1555.2	1551.8	1566.9
5°	1558.5	1552.7	1551.8	1556.0	1549.3	1564.4
7.5°	1556.0	1552.7	1551.8	1553.5	1545.2	1559.4
10°	1550.2	1545.2	1546.8	1549.3	1538.5	1551.8
12.5°	1539.3	1534.3	1535.2	1543.5	1528.5	1540.2
15°	1521.0	1515.1	1521.0	1530.2	1516.8	1526.8
17.5°	1496.8	1487.6	1497.6	1511.8	1501.8	1511.0
20°	1465.9	1451.7	1462.6	1488.4	1479.3	1490.9
22.5°	1428.4	1410.8	1421.7	1459.2	1456.7	1469.2
25°	1385.8	1365.0	1380.0	1425.9	1430.9	1442.5
27.5°	1338.3	1314.9	1334.9	1389.2	1400.8	1414.2
30°	1286.5	1261.5	1284.9	1348.3	1365.8	1380.0
32.5°	1233.1	1205.6	1232.3	1302.4	1327.4	1345.8
35°	1177.2	1148.9	1178.9	1254.8	1284.9	1303.2
37.5°	1117.2	1089.6	1122.2	1204.8	1240.6	1259.0
40°	1055.4	1024.6	1061.3	1145.5	1193.1	1214.8
42.5°	992.0	953.6	998.7	1089.6	1141.4	1163.1
45°	921.1	867.7	928.6	1030.4	1084.6	1108.8
47.5°	850.2	796.8	858.5	967.0	1025.4	1047.1
50°	781.8	735.9	785.1	897.7	965.3	992.8
52.5°	719.2	681.6	723.4	830.2	903.6	931.1
55°	660.8	631.6	665.8	763.4	838.5	870.2
57.5°	605.7	587.4	610.7	700.0	778.4	808.5
60°	554.0	541.5	558.2	637.4	707.5	744.2
62.5°	503.1	496.4	508.9	571.5	641.6	680.0
65°	453.9	452.2	458.9	513.9	572.3	614.1
67.5°	404.6	403.8	408.0	453.0	504.8	545.6
70°	355.4	360.4	357.9	387.1	437.2	477.2
72.5°	305.4	312.9	308.7	327.1	375.4	407.2
75°	249.5	259.5	251.1	272.0	302.0	336.2
77.5°	191.9	202.7	192.7	211.1	243.6	267.8
80°	137.7	147.7	139.3	153.5	181.9	200.2
82.5°	86.8	94.3	87.6	101.8	130.2	143.5
85°	38.4	42.6	44.2	55.1	80.1	95.1
87.5°	1.7	0.8	1.7	10.8	28.4	41.7
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)