

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: P520753

Luminaire Tested: **8WSLA-50-L840-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: P520753  
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-L840-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

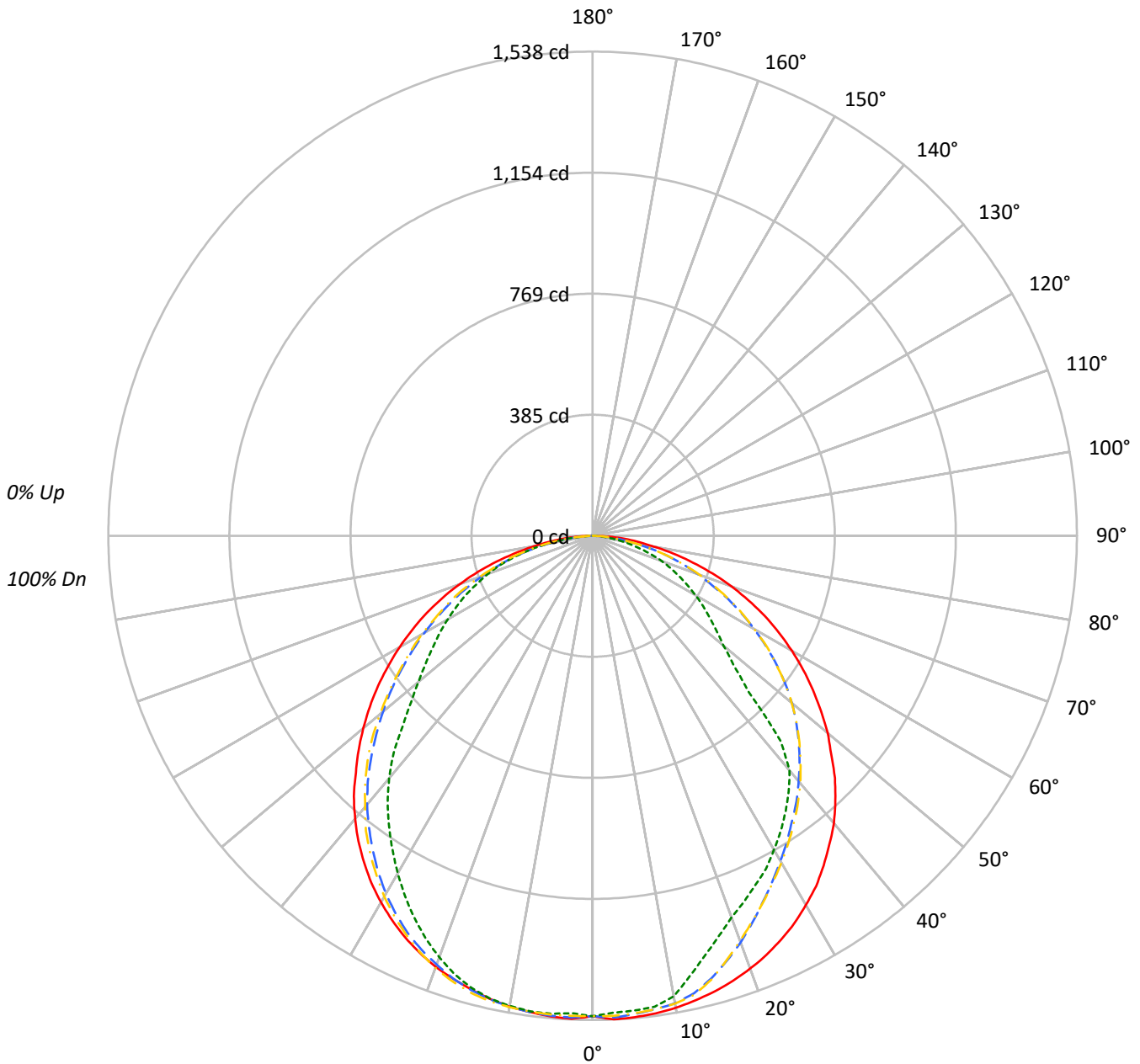
Lumens per Lamp: N/A  
Luminaire Lumens: 4094.0 lumens  
Efficiency: N/A  
Efficacy: 134.2 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

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°	4107	4107	4107	4107
5°	4147	4089	4140	4116
10°	4161	4058	4150	4143
15°	4174	3843	4156	4142
20°	4190	3693	4173	4080
25°	4203	3632	4181	3977
30°	4208	3579	4177	3846
35°	4201	3510	4158	3704
40°	4188	3417	4121	3532
45°	4141	2655	4047	3240
50°	4079	2272	3979	3023
55°	4006	2128	3902	2908
60°	3930	2031	3812	2860
65°	3837	1924	3706	2826
70°	3685	1829	3530	2783
75°	3430	1608	3269	2647
80°	3045	1345	2854	2245
85°	2881	960	2529	1291



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.0	3.5
10°-20°	413.6	10.1
20°-30°	618.0	15.1
30°-40°	735.7	18.0
40°-50°	735.3	18.0
50°-60°	632.7	15.5
60°-70°	476.2	11.6
70°-80°	271.4	6.6
80°-90°	66.0	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°	1176.6	28.7
0°-40°	1912.3	46.7
0°-60°	3280.3	80.1
0°-90°	4094.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4094.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1526	1526	1526	1526	1526	
5°	1535	1514	1533	1524	1535	146
15°	1498	1380	1492	1487	1498	423
25°	1416	1223	1408	1339	1416	653
35°	1279	1068	1266	1127	1279	800
45°	1088	698	1064	852	1088	838
55°	854	454	832	620	854	763
65°	603	302	582	444	603	595
75°	330	155	314	255	330	349
85°	93	31	82	42	93	102
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°	1526.1	1526.1	1526.1	1526.1	1526.1	1526.1	1526.1	1526.1	1526.1	1526.1	1526.1
2.5°	1537.6	1523.7	1531.8	1529.4	1516.3	1521.2	1526.1	1521.2	1535.9	1522.8	1531.8
5°	1535.1	1520.4	1525.3	1520.4	1513.8	1515.5	1522.8	1517.9	1532.7	1518.7	1530.2
7.5°	1530.2	1512.2	1517.1	1514.6	1508.9	1509.7	1517.1	1513.0	1526.1	1513.0	1526.1
10°	1522.8	1504.0	1508.1	1497.5	1485.2	1494.2	1508.9	1504.8	1518.7	1504.0	1518.7
12.5°	1511.4	1492.5	1488.4	1453.2	1431.1	1448.3	1493.4	1493.4	1506.5	1492.5	1508.1
15°	1498.3	1477.8	1455.7	1402.5	1379.6	1396.7	1459.0	1480.3	1491.7	1477.8	1493.4
17.5°	1482.7	1459.0	1416.4	1354.2	1332.9	1350.1	1413.9	1460.6	1475.3	1460.6	1474.5
20°	1463.1	1435.2	1374.6	1303.4	1289.5	1305.1	1368.9	1436.9	1457.3	1439.3	1449.1
22.5°	1441.8	1408.2	1328.0	1264.1	1257.6	1267.4	1325.5	1407.4	1434.4	1415.6	1422.1
25°	1415.6	1376.3	1281.3	1228.1	1223.2	1228.9	1282.9	1373.0	1408.2	1388.6	1391.0
27.5°	1387.7	1345.2	1237.1	1197.8	1192.9	1195.3	1240.4	1334.5	1377.9	1358.3	1354.2
30°	1354.2	1308.3	1192.9	1156.9	1151.9	1161.0	1199.4	1295.2	1344.4	1324.7	1312.4
32.5°	1320.6	1268.2	1149.5	1121.7	1111.8	1120.0	1156.9	1254.3	1307.5	1287.0	1266.6
35°	1278.9	1225.6	1104.5	1076.6	1068.4	1077.4	1114.3	1211.7	1265.8	1245.3	1217.4
37.5°	1235.5	1180.6	1063.5	1038.1	1023.4	1034.1	1070.9	1167.5	1222.4	1201.1	1166.7
40°	1192.1	1133.1	1017.7	991.5	972.6	988.2	1025.9	1120.8	1173.2	1153.6	1114.3
42.5°	1141.3	1085.6	972.6	935.8	882.6	932.5	977.6	1074.2	1122.5	1103.6	1056.2
45°	1088.1	1034.9	925.2	835.9	697.6	844.1	928.4	1025.0	1063.5	1045.5	993.9
47.5°	1027.5	982.5	876.9	740.9	606.7	749.1	878.5	978.4	1007.9	988.2	930.9
50°	974.3	930.1	826.1	660.7	542.8	669.7	825.3	926.0	950.5	932.5	868.7
52.5°	913.7	875.2	771.2	589.5	495.3	598.5	769.6	871.9	891.6	870.3	806.4
55°	853.9	819.5	713.1	526.4	453.6	534.6	711.5	816.3	831.8	807.3	740.9
57.5°	793.3	762.2	653.3	469.9	415.1	479.0	657.4	759.0	769.6	738.5	677.9
60°	730.3	704.1	592.8	420.0	377.4	427.4	591.1	701.6	708.2	674.6	616.5
62.5°	667.3	643.5	532.2	374.2	339.0	379.1	536.3	641.1	645.2	613.2	553.5
65°	602.6	580.5	473.2	325.9	302.1	334.0	477.3	578.0	582.1	546.1	492.1
67.5°	535.4	517.4	410.2	289.0	266.9	291.5	418.4	514.2	516.6	481.4	432.3
70°	468.3	452.8	354.5	248.9	232.5	249.7	360.2	443.8	448.7	411.0	371.7
72.5°	399.5	387.3	300.5	207.1	192.4	207.1	303.7	379.1	382.3	351.2	312.8
75°	329.9	320.9	245.6	166.2	154.7	165.4	247.3	314.4	314.4	284.9	254.6
77.5°	262.8	256.3	188.3	127.7	119.5	126.1	189.1	248.9	247.3	224.3	200.6
80°	196.5	191.6	135.1	92.5	86.8	90.1	135.1	184.2	184.2	167.8	139.2
82.5°	140.8	135.1	89.2	60.6	57.3	58.9	87.6	128.5	131.0	118.7	94.2
85°	93.3	80.2	48.3	33.6	31.1	31.9	45.8	74.5	81.9	68.8	49.1
87.5°	40.9	27.0	12.3	4.9	2.5	3.3	9.8	23.7	31.1	20.5	6.5
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°	1526.1	1526.1	1526.1	1526.1	1526.1	1526.1
2.5°	1531.0	1517.9	1522.8	1526.1	1522.8	1537.6
5°	1529.4	1523.7	1522.8	1526.9	1520.4	1535.1
7.5°	1526.9	1523.7	1522.8	1524.5	1516.3	1530.2
10°	1521.2	1516.3	1517.9	1520.4	1509.7	1522.8
12.5°	1510.6	1505.6	1506.5	1514.6	1499.9	1511.4
15°	1492.5	1486.8	1492.5	1501.5	1488.4	1498.3
17.5°	1468.8	1459.8	1469.6	1483.5	1473.7	1482.7
20°	1438.5	1424.6	1435.2	1460.6	1451.6	1463.1
22.5°	1401.7	1384.5	1395.1	1432.0	1429.5	1441.8
25°	1359.9	1339.4	1354.2	1399.2	1404.1	1415.6
27.5°	1313.2	1290.3	1310.0	1363.2	1374.6	1387.7
30°	1262.5	1237.9	1260.8	1323.1	1340.3	1354.2
32.5°	1210.1	1183.1	1209.3	1278.0	1302.6	1320.6
35°	1155.2	1127.4	1156.9	1231.4	1260.8	1278.9
37.5°	1096.3	1069.3	1101.2	1182.2	1217.4	1235.5
40°	1035.7	1005.4	1041.4	1124.1	1170.8	1192.1
42.5°	973.5	935.8	980.0	1069.3	1120.0	1141.3
45°	903.9	851.5	911.2	1011.1	1064.3	1088.1
47.5°	834.3	781.9	842.5	948.9	1006.2	1027.5
50°	767.1	722.1	770.4	881.0	947.3	974.3
52.5°	705.7	668.9	709.8	814.6	886.7	913.7
55°	648.4	619.8	653.3	749.1	822.8	853.9
57.5°	594.4	576.4	599.3	686.9	763.9	793.3
60°	543.6	531.4	547.7	625.5	694.3	730.3
62.5°	493.7	487.1	499.4	560.8	629.6	667.3
65°	445.4	443.8	450.3	504.3	561.6	602.6
67.5°	397.1	396.3	400.4	444.6	495.3	535.4
70°	348.8	353.7	351.2	379.9	429.0	468.3
72.5°	299.7	307.0	302.9	320.9	368.4	399.5
75°	244.8	254.6	246.4	266.9	296.4	329.9
77.5°	188.3	199.0	189.1	207.1	239.1	262.8
80°	135.1	144.9	136.7	150.6	178.5	196.5
82.5°	85.1	92.5	86.0	99.9	127.7	140.8
85°	37.7	41.8	43.4	54.0	78.6	93.3
87.5°	1.6	0.8	1.6	10.6	27.8	40.9
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)