

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: P520636

Luminaire Tested: **8WSLA-100-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: P520636  
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-100-L850-UNV-U  
Description: 8 FOOT, 2000 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**

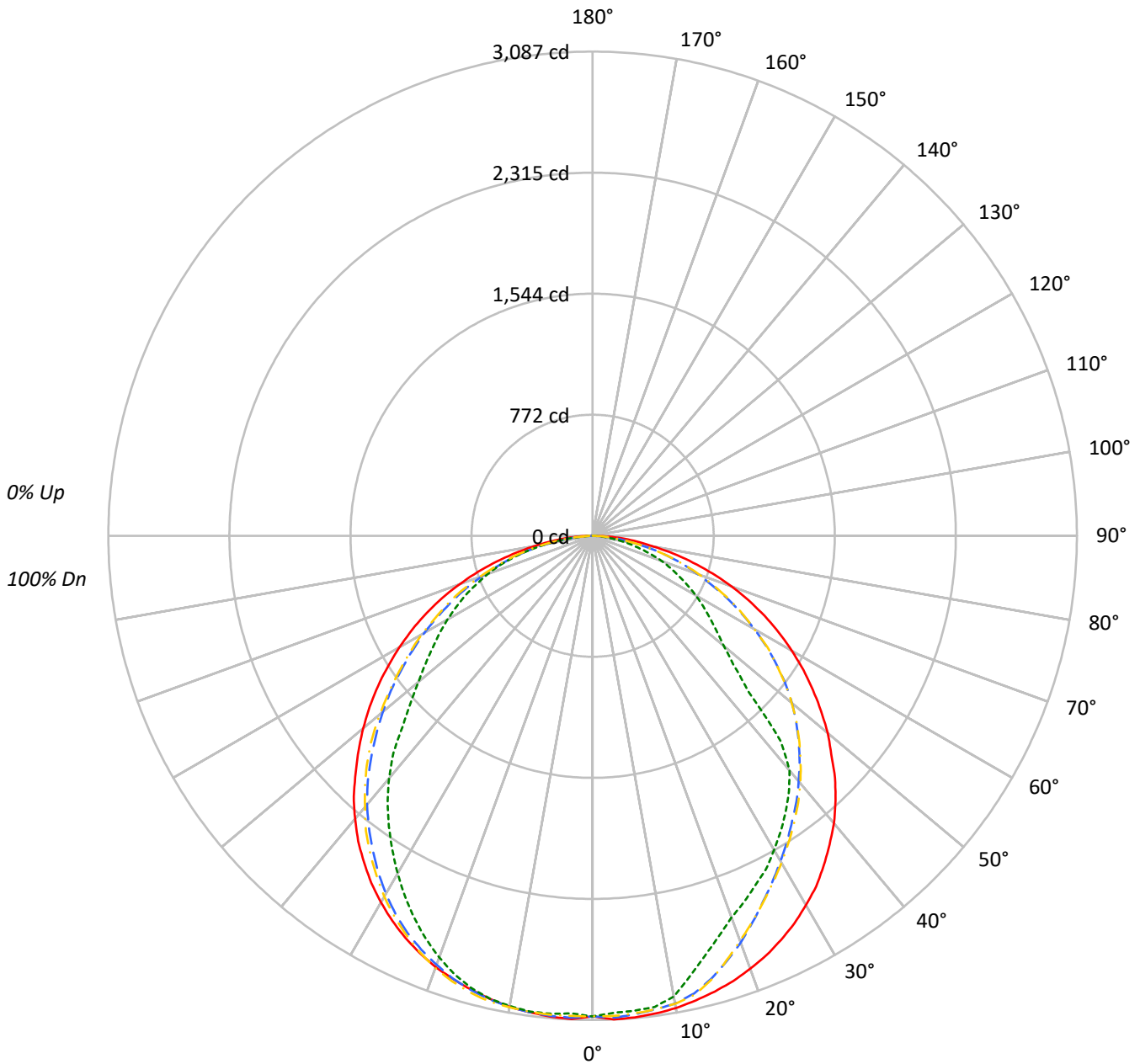
Lumens per Lamp: N/A  
Luminaire Lumens: 8220.0 lumens  
Efficiency: N/A  
Efficacy: 129.7 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 63.4  
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°	8245	8245	8245	8245
5°	8326	8210	8313	8264
10°	8355	8148	8332	8319
15°	8381	7717	8344	8316
20°	8412	7414	8379	8191
25°	8439	7292	8395	7985
30°	8448	7187	8387	7723
35°	8435	7047	8349	7436
40°	8408	6860	8275	7091
45°	8314	5330	8127	6506
50°	8189	4563	7990	6070
55°	8044	4273	7836	5838
60°	7892	4078	7653	5742
65°	7704	3862	7442	5673
70°	7398	3674	7087	5587
75°	6888	3230	6563	5315
80°	6113	2700	5732	4510
85°	5786	1930	5076	2587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	291.2	3.5
10°-20°	830.4	10.1
20°-30°	1240.8	15.1
30°-40°	1477.1	18.0
40°-50°	1476.4	18.0
50°-60°	1270.4	15.5
60°-70°	956.2	11.6
70°-80°	544.9	6.6
80°-90°	132.6	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°	2362.4	28.7
0°-40°	3839.5	46.7
0°-60°	6586.3	80.1
0°-90°	8220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8220.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3064	3064	3064	3064	3064	
5°	3082	3040	3077	3059	3082	293
15°	3008	2770	2995	2985	3008	850
25°	2842	2456	2827	2689	2842	1311
35°	2568	2145	2541	2264	2568	1607
45°	2185	1401	2135	1710	2185	1682
55°	1714	911	1670	1244	1714	1533
65°	1210	607	1169	891	1210	1195
75°	662	311	631	511	662	701
85°	187	62	164	84	187	204
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°	3064.1	3064.1	3064.1	3064.1	3064.1	3064.1	3064.1	3064.1	3064.1	3064.1	3064.1
2.5°	3087.2	3059.2	3075.7	3070.7	3044.4	3054.3	3064.1	3054.3	3083.9	3057.6	3075.7
5°	3082.2	3052.6	3062.5	3052.6	3039.5	3042.8	3057.6	3047.7	3077.3	3049.3	3072.4
7.5°	3072.4	3036.2	3046.1	3041.1	3029.6	3031.3	3046.1	3037.8	3064.1	3037.8	3064.1
10°	3057.6	3019.8	3028.0	3006.6	2982.0	3000.0	3029.6	3021.4	3049.3	3019.8	3049.3
12.5°	3034.6	2996.7	2988.5	2917.8	2873.5	2908.0	2998.4	2998.4	3024.7	2996.7	3028.0
15°	3008.3	2967.2	2922.8	2815.9	2769.9	2804.4	2929.3	2972.1	2995.1	2967.2	2998.4
17.5°	2977.0	2929.3	2843.9	2718.9	2676.2	2710.7	2838.9	2932.6	2962.2	2932.6	2960.6
20°	2937.6	2881.7	2760.0	2617.0	2589.1	2620.3	2748.5	2885.0	2926.1	2889.9	2909.6
22.5°	2894.8	2827.4	2666.3	2538.1	2525.0	2544.7	2661.4	2825.8	2880.0	2842.2	2855.4
25°	2842.2	2763.3	2572.6	2465.8	2455.9	2467.4	2575.9	2756.7	2827.4	2788.0	2792.9
27.5°	2786.3	2700.9	2483.9	2405.0	2395.1	2400.0	2490.4	2679.5	2766.6	2727.2	2718.9
30°	2718.9	2626.9	2395.1	2322.8	2312.9	2331.0	2408.2	2600.6	2699.2	2659.8	2635.1
32.5°	2651.5	2546.3	2308.0	2252.1	2232.4	2248.8	2322.8	2518.4	2625.2	2584.1	2543.0
35°	2567.7	2460.8	2217.6	2161.7	2145.2	2163.3	2237.3	2432.9	2541.4	2500.3	2444.4
37.5°	2480.6	2370.4	2135.4	2084.4	2054.8	2076.2	2150.2	2344.1	2454.3	2411.5	2342.5
40°	2393.5	2275.1	2043.3	1990.7	1952.9	1984.1	2059.7	2250.4	2355.6	2316.2	2237.3
42.5°	2291.5	2179.8	1952.9	1878.9	1772.1	1872.4	1962.8	2156.7	2253.7	2215.9	2120.6
45°	2184.7	2077.8	1857.6	1678.4	1400.6	1694.8	1864.1	2058.1	2135.4	2099.2	1995.6
47.5°	2063.0	1972.6	1760.6	1487.7	1218.1	1504.1	1763.9	1964.4	2023.6	1984.1	1869.1
50°	1956.2	1867.4	1658.6	1326.6	1089.9	1344.7	1657.0	1859.2	1908.5	1872.4	1744.1
52.5°	1834.5	1757.3	1548.5	1183.6	994.5	1201.7	1545.2	1750.7	1790.2	1747.4	1619.2
55°	1714.5	1645.5	1431.8	1057.0	910.7	1073.4	1428.5	1638.9	1670.2	1620.8	1487.7
57.5°	1592.9	1530.4	1311.8	943.6	833.4	961.7	1320.0	1523.9	1545.2	1482.8	1361.1
60°	1466.3	1413.7	1190.2	843.3	757.8	858.1	1186.9	1408.8	1421.9	1354.5	1237.8
62.5°	1339.7	1292.1	1068.5	751.2	680.6	761.1	1076.7	1287.1	1295.4	1231.2	1111.2
65°	1209.9	1165.5	950.1	654.3	606.6	670.7	958.4	1160.6	1168.8	1096.5	988.0
67.5°	1075.1	1038.9	823.6	580.3	535.9	585.2	840.0	1032.3	1037.3	966.6	868.0
70°	940.3	909.1	711.8	499.7	466.9	501.4	723.3	891.0	900.8	825.2	746.3
72.5°	802.2	777.5	603.3	415.9	386.3	415.9	609.9	761.1	767.7	705.2	628.0
75°	662.5	644.4	493.2	333.7	310.7	332.1	496.4	631.2	631.2	572.1	511.2
77.5°	527.7	514.5	378.1	256.4	240.0	253.2	379.7	499.7	496.4	450.4	402.7
80°	394.5	384.7	271.2	185.8	174.2	180.8	271.2	369.9	369.9	337.0	279.5
82.5°	282.7	271.2	179.2	121.6	115.1	118.4	175.9	258.1	263.0	238.4	189.0
85°	187.4	161.1	97.0	67.4	62.5	64.1	92.1	149.6	164.4	138.1	98.6
87.5°	82.2	54.2	24.7	9.9	4.9	6.6	19.7	47.7	62.5	41.1	13.2
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°	3064.1	3064.1	3064.1	3064.1	3064.1	3064.1
2.5°	3074.0	3047.7	3057.6	3064.1	3057.6	3087.2
5°	3070.7	3059.2	3057.6	3065.8	3052.6	3082.2
7.5°	3065.8	3059.2	3057.6	3060.9	3044.4	3072.4
10°	3054.3	3044.4	3047.7	3052.6	3031.3	3057.6
12.5°	3032.9	3023.0	3024.7	3041.1	3011.5	3034.6
15°	2996.7	2985.2	2996.7	3014.8	2988.5	3008.3
17.5°	2949.1	2931.0	2950.7	2978.7	2958.9	2977.0
20°	2888.3	2860.3	2881.7	2932.6	2914.6	2937.6
22.5°	2814.3	2779.8	2801.1	2875.1	2870.2	2894.8
25°	2730.4	2689.3	2718.9	2809.3	2819.2	2842.2
27.5°	2636.7	2590.7	2630.2	2737.0	2760.0	2786.3
30°	2534.8	2485.5	2531.5	2656.5	2691.0	2718.9
32.5°	2429.6	2375.4	2428.0	2566.1	2615.4	2651.5
35°	2319.5	2263.6	2322.8	2472.4	2531.5	2567.7
37.5°	2201.1	2146.9	2211.0	2373.7	2444.4	2480.6
40°	2079.5	2018.7	2091.0	2257.0	2350.7	2393.5
42.5°	1954.5	1878.9	1967.7	2146.9	2248.8	2291.5
45°	1814.8	1709.6	1829.6	2030.2	2137.0	2184.7
47.5°	1675.1	1569.9	1691.5	1905.2	2020.3	2063.0
50°	1540.3	1449.9	1546.9	1768.8	1901.9	1956.2
52.5°	1417.0	1343.0	1425.2	1635.6	1780.3	1834.5
55°	1301.9	1244.4	1311.8	1504.1	1652.1	1714.5
57.5°	1193.4	1157.3	1203.3	1379.2	1533.7	1592.9
60°	1091.5	1066.9	1099.7	1255.9	1394.0	1466.3
62.5°	991.2	978.1	1002.8	1126.0	1264.1	1339.7
65°	894.3	891.0	904.1	1012.6	1127.7	1209.9
67.5°	797.3	795.6	803.8	892.6	994.5	1075.1
70°	700.3	710.1	705.2	762.7	861.4	940.3
72.5°	601.7	616.4	608.2	644.4	739.7	802.2
75°	491.5	511.2	494.8	535.9	595.1	662.5
77.5°	378.1	399.5	379.7	415.9	480.0	527.7
80°	271.2	291.0	274.5	302.5	358.4	394.5
82.5°	171.0	185.8	172.6	200.6	256.4	282.7
85°	75.6	83.8	87.1	108.5	157.8	187.4
87.5°	3.3	1.6	3.3	21.4	55.9	82.2
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)