

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: P520627

Luminaire Tested: **8WSLA-100-L830-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: P520627
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-L830-UNV-U
Description: 8 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 80 CRI
LEDS WITH NO UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

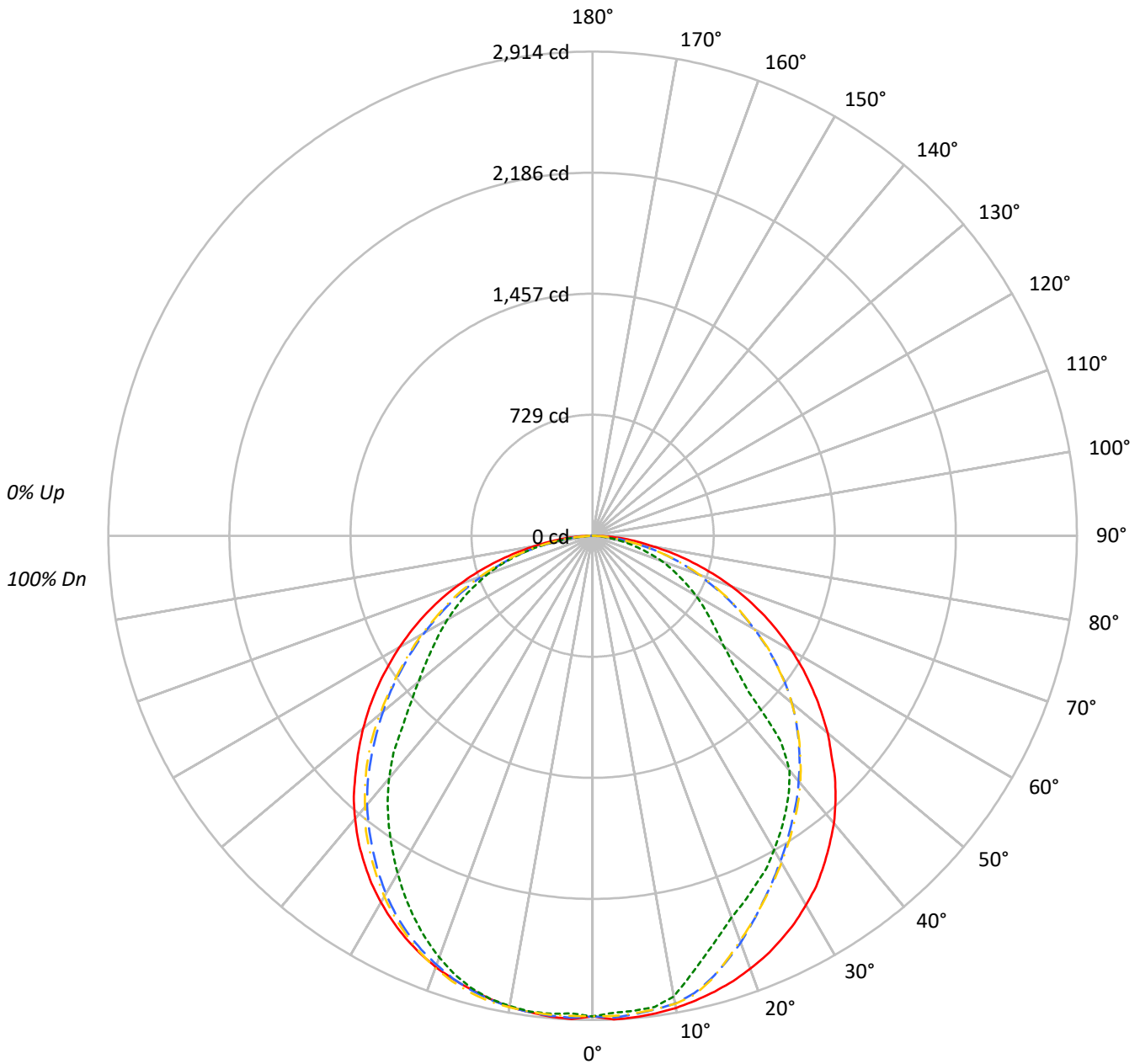
Lumens per Lamp: N/A
Luminaire Lumens: 7759.0 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 63.4
Input Voltage (V): NR
Input Current (A_{in}): 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°	7783	7783	7783	7783
5°	7859	7750	7846	7800
10°	7886	7691	7865	7852
15°	7911	7284	7876	7850
20°	7940	6999	7909	7732
25°	7966	6883	7924	7537
30°	7975	6784	7917	7290
35°	7962	6652	7881	7019
40°	7936	6476	7811	6693
45°	7848	5031	7671	6141
50°	7730	4307	7542	5730
55°	7593	4033	7396	5511
60°	7449	3850	7224	5420
65°	7272	3646	7025	5355
70°	6984	3467	6690	5274
75°	6501	3049	6195	5018
80°	5771	2549	5410	4255
85°	5462	1822	4792	2442



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.8	3.5
10°-20°	783.8	10.1
20°-30°	1171.3	15.1
30°-40°	1394.2	18.0
40°-50°	1393.6	18.0
50°-60°	1199.2	15.5
60°-70°	902.6	11.6
70°-80°	514.3	6.6
80°-90°	125.2	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°	2229.9	28.7
0°-40°	3624.1	46.7
0°-60°	6216.9	80.1
0°-90°	7759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7759.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2892	2892	2892	2892	2892	
5°	2909	2869	2905	2888	2909	277
15°	2840	2615	2827	2818	2840	802
25°	2683	2318	2669	2538	2683	1237
35°	2424	2025	2399	2137	2424	1517
45°	2062	1322	2016	1614	2062	1588
55°	1618	860	1576	1175	1618	1447
65°	1142	573	1103	841	1142	1128
75°	625	293	596	483	625	662
85°	177	59	155	79	177	193
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°	2892.3	2892.3	2892.3	2892.3	2892.3	2892.3	2892.3	2892.3	2892.3	2892.3	2892.3
2.5°	2914.0	2887.6	2903.2	2898.5	2873.7	2883.0	2892.3	2883.0	2910.9	2886.1	2903.2
5°	2909.4	2881.4	2890.7	2881.4	2869.0	2872.1	2886.1	2876.8	2904.7	2878.3	2900.1
7.5°	2900.1	2865.9	2875.2	2870.6	2859.7	2861.3	2875.2	2867.5	2892.3	2867.5	2892.3
10°	2886.1	2850.4	2858.2	2838.0	2814.7	2831.8	2859.7	2852.0	2878.3	2850.4	2878.3
12.5°	2864.4	2828.7	2820.9	2754.2	2712.3	2744.9	2830.2	2830.2	2855.1	2828.7	2858.2
15°	2839.5	2800.8	2758.9	2658.0	2614.6	2647.1	2765.1	2805.4	2827.1	2800.8	2830.2
17.5°	2810.1	2765.1	2684.4	2566.4	2526.1	2558.7	2679.7	2768.2	2796.1	2768.2	2794.5
20°	2772.8	2720.1	2605.2	2470.2	2443.9	2473.3	2594.4	2723.2	2762.0	2727.8	2746.4
22.5°	2732.5	2668.9	2516.8	2395.8	2383.4	2402.0	2512.1	2667.3	2718.5	2682.8	2695.2
25°	2682.8	2608.3	2428.4	2327.5	2318.2	2329.0	2431.5	2602.1	2668.9	2631.6	2636.3
27.5°	2630.1	2549.4	2344.6	2270.1	2260.8	2265.4	2350.8	2529.2	2611.4	2574.2	2566.4
30°	2566.4	2479.6	2260.8	2192.5	2183.2	2200.3	2273.2	2454.7	2547.8	2510.6	2487.3
32.5°	2502.8	2403.5	2178.5	2125.8	2107.2	2122.7	2192.5	2377.1	2478.0	2439.2	2400.4
35°	2423.7	2322.8	2093.2	2040.4	2024.9	2042.0	2111.8	2296.5	2398.9	2360.1	2307.3
37.5°	2341.5	2237.5	2015.6	1967.5	1939.6	1959.7	2029.6	2212.7	2316.6	2276.3	2211.1
40°	2259.2	2147.5	1928.7	1879.1	1843.4	1872.9	1944.2	2124.2	2223.5	2186.3	2111.8
42.5°	2163.0	2057.5	1843.4	1773.6	1672.7	1767.3	1852.7	2035.8	2127.3	2091.6	2001.6
45°	2062.2	1961.3	1753.4	1584.2	1322.0	1599.8	1759.6	1942.7	2015.6	1981.5	1883.7
47.5°	1947.3	1862.0	1661.8	1404.3	1149.8	1419.8	1664.9	1854.2	1910.1	1872.9	1764.2
50°	1846.5	1762.7	1565.6	1252.2	1028.8	1269.3	1564.1	1754.9	1801.5	1767.3	1646.3
52.5°	1731.7	1658.7	1461.7	1117.2	938.8	1134.3	1458.6	1652.5	1689.8	1649.4	1528.4
55°	1618.4	1553.2	1351.5	997.7	859.6	1013.2	1348.4	1547.0	1576.5	1529.9	1404.3
57.5°	1503.6	1444.6	1238.2	890.7	786.7	907.7	1246.0	1438.4	1458.6	1399.6	1284.8
60°	1384.1	1334.4	1123.4	796.0	715.3	810.0	1120.3	1329.8	1342.2	1278.6	1168.4
62.5°	1264.6	1219.6	1008.6	709.1	642.4	718.4	1016.3	1215.0	1222.7	1162.2	1048.9
65°	1142.0	1100.1	896.9	617.6	572.6	633.1	904.6	1095.5	1103.2	1035.0	932.5
67.5°	1014.8	980.7	777.4	547.7	505.8	552.4	792.9	974.4	979.1	912.4	819.3
70°	887.6	858.1	671.9	471.7	440.7	473.3	682.7	841.0	850.3	778.9	704.5
72.5°	757.2	733.9	569.5	392.6	364.6	392.6	575.7	718.4	724.6	665.7	592.7
75°	625.3	608.3	465.5	315.0	293.3	313.4	468.6	595.8	595.8	540.0	482.6
77.5°	498.1	485.7	356.9	242.1	226.5	239.0	358.4	471.7	468.6	425.2	380.2
80°	372.4	363.1	256.0	175.3	164.5	170.7	256.0	349.1	349.1	318.1	263.8
82.5°	266.9	256.0	169.1	114.8	108.6	111.7	166.0	243.6	248.3	225.0	178.4
85°	176.9	152.1	91.5	63.6	59.0	60.5	86.9	141.2	155.2	130.3	93.1
87.5°	77.6	51.2	23.3	9.3	4.7	6.2	18.6	45.0	59.0	38.8	12.4
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°	2892.3	2892.3	2892.3	2892.3	2892.3	2892.3
2.5°	2901.6	2876.8	2886.1	2892.3	2886.1	2914.0
5°	2898.5	2887.6	2886.1	2893.9	2881.4	2909.4
7.5°	2893.9	2887.6	2886.1	2889.2	2873.7	2900.1
10°	2883.0	2873.7	2876.8	2881.4	2861.3	2886.1
12.5°	2862.8	2853.5	2855.1	2870.6	2842.6	2864.4
15°	2828.7	2817.8	2828.7	2845.7	2820.9	2839.5
17.5°	2783.7	2766.6	2785.2	2811.6	2793.0	2810.1
20°	2726.3	2699.9	2720.1	2768.2	2751.1	2772.8
22.5°	2656.4	2623.9	2644.0	2713.9	2709.2	2732.5
25°	2577.3	2538.5	2566.4	2651.8	2661.1	2682.8
27.5°	2488.9	2445.4	2482.7	2583.5	2605.2	2630.1
30°	2392.7	2346.1	2389.6	2507.5	2540.1	2566.4
32.5°	2293.4	2242.2	2291.8	2422.1	2468.7	2502.8
35°	2189.4	2136.6	2192.5	2333.7	2389.6	2423.7
37.5°	2077.7	2026.5	2087.0	2240.6	2307.3	2341.5
40°	1962.9	1905.4	1973.7	2130.4	2218.9	2259.2
42.5°	1844.9	1773.6	1857.3	2026.5	2122.7	2163.0
45°	1713.0	1613.7	1727.0	1916.3	2017.2	2062.2
47.5°	1581.1	1481.8	1596.7	1798.4	1907.0	1947.3
50°	1453.9	1368.6	1460.1	1669.6	1795.3	1846.5
52.5°	1337.5	1267.7	1345.3	1543.9	1680.5	1731.7
55°	1228.9	1174.6	1238.2	1419.8	1559.4	1618.4
57.5°	1126.5	1092.4	1135.8	1301.8	1447.7	1503.6
60°	1030.3	1007.0	1038.1	1185.5	1315.8	1384.1
62.5°	935.7	923.2	946.5	1062.9	1193.2	1264.6
65°	844.1	841.0	853.4	955.8	1064.4	1142.0
67.5°	752.6	751.0	758.8	842.6	938.8	1014.8
70°	661.0	670.3	665.7	720.0	813.1	887.6
72.5°	567.9	581.9	574.1	608.3	698.2	757.2
75°	463.9	482.6	467.1	505.8	561.7	625.3
77.5°	356.9	377.1	358.4	392.6	453.1	498.1
80°	256.0	274.6	259.1	285.5	338.3	372.4
82.5°	161.4	175.3	162.9	189.3	242.1	266.9
85°	71.4	79.1	82.2	102.4	149.0	176.9
87.5°	3.1	1.6	3.1	20.2	52.8	77.6
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)