

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: P520633

Luminaire Tested: **8WSLA-100-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: P520633
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-L840-UNV-U
Description: 8 FOOT, 2000 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

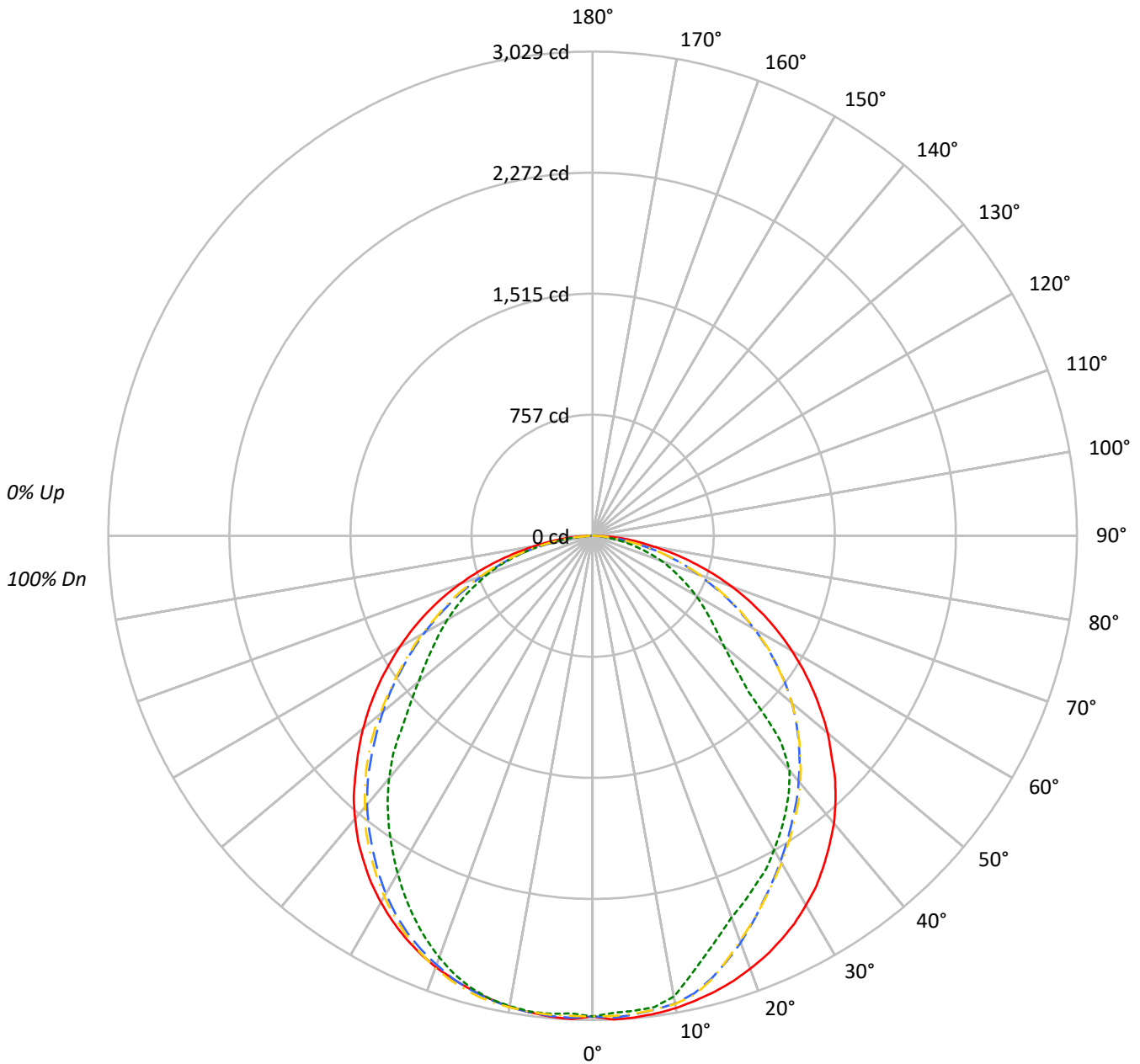
Lumens per Lamp: N/A
Luminaire Lumens: 8066.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 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				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84			84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70			70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60			60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51			51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44			44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39			39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34			34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31			31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28			28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25			25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8091	8091	8091	8091
5°	8170	8057	8157	8109
10°	8198	7996	8176	8163
15°	8224	7572	8188	8161
20°	8255	7275	8222	8037
25°	8281	7155	8238	7836
30°	8290	7052	8230	7578
35°	8277	6915	8192	7297
40°	8250	6732	8120	6958
45°	8158	5230	7974	6384
50°	8036	4477	7840	5956
55°	7893	4192	7689	5729
60°	7744	4002	7509	5634
65°	7559	3790	7303	5567
70°	7260	3604	6955	5482
75°	6759	3170	6440	5216
80°	5999	2650	5624	4424
85°	5678	1893	4980	2541



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.7	3.5
10°-20°	814.8	10.1
20°-30°	1217.6	15.1
30°-40°	1449.4	18.0
40°-50°	1448.8	18.0
50°-60°	1246.6	15.5
60°-70°	938.3	11.6
70°-80°	534.7	6.6
80°-90°	130.1	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°	2318.1	28.7
0°-40°	3767.5	46.7
0°-60°	6462.9	80.1
0°-90°	8066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8066.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3007	3007	3007	3007	3007	
5°	3024	2982	3020	3002	3024	288
15°	2952	2718	2939	2929	2952	834
25°	2789	2410	2774	2639	2789	1286
35°	2520	2105	2494	2221	2520	1577
45°	2144	1374	2095	1678	2144	1651
55°	1682	894	1639	1221	1682	1504
65°	1187	595	1147	874	1187	1172
75°	650	305	619	502	650	688
85°	184	61	161	82	184	200
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°	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7
2.5°	3029.3	3001.9	3018.0	3013.2	2987.4	2997.1	3006.7	2997.1	3026.1	3000.3	3018.0
5°	3024.5	2995.4	3005.1	2995.4	2982.5	2985.8	3000.3	2990.6	3019.6	2992.2	3014.8
7.5°	3014.8	2979.3	2989.0	2984.2	2972.9	2974.5	2989.0	2980.9	3006.7	2980.9	3006.7
10°	3000.3	2963.2	2971.3	2950.3	2926.1	2943.8	2972.9	2964.8	2992.2	2963.2	2992.2
12.5°	2977.7	2940.6	2932.5	2863.2	2819.6	2853.5	2942.2	2942.2	2968.0	2940.6	2971.3
15°	2951.9	2911.6	2868.0	2763.2	2718.0	2751.9	2874.5	2916.4	2939.0	2911.6	2942.2
17.5°	2921.2	2874.5	2790.6	2668.0	2626.1	2659.9	2785.7	2877.7	2906.7	2877.7	2905.1
20°	2882.5	2827.7	2708.3	2568.0	2540.6	2571.2	2697.0	2830.9	2871.2	2835.8	2855.1
22.5°	2840.6	2774.5	2616.4	2490.6	2477.7	2497.0	2611.5	2772.8	2826.1	2789.0	2801.9
25°	2789.0	2711.5	2524.4	2419.6	2409.9	2421.2	2527.7	2705.1	2774.5	2735.7	2740.6
27.5°	2734.1	2650.3	2437.3	2359.9	2350.2	2355.1	2443.8	2629.3	2714.8	2676.1	2668.0
30°	2668.0	2577.7	2350.2	2279.2	2269.6	2287.3	2363.1	2551.9	2648.6	2609.9	2585.7
32.5°	2601.9	2498.6	2264.7	2209.9	2190.5	2206.7	2279.2	2471.2	2576.1	2535.7	2495.4
35°	2519.6	2414.7	2176.0	2121.2	2105.0	2122.8	2195.4	2387.3	2493.8	2453.5	2398.6
37.5°	2434.1	2326.0	2095.4	2045.4	2016.3	2037.3	2109.9	2300.2	2408.3	2366.4	2298.6
40°	2348.6	2232.5	2005.0	1953.4	1916.3	1947.0	2021.2	2208.3	2311.5	2272.8	2195.4
42.5°	2248.6	2138.9	1916.3	1843.7	1738.9	1837.3	1926.0	2116.3	2211.5	2174.4	2080.8
45°	2143.8	2038.9	1822.8	1646.9	1374.3	1663.1	1829.2	2019.5	2095.4	2059.9	1958.3
47.5°	2024.4	1935.7	1727.6	1459.8	1195.3	1475.9	1730.8	1927.6	1985.7	1947.0	1834.0
50°	1919.5	1832.4	1627.6	1301.7	1069.5	1319.5	1626.0	1824.4	1872.8	1837.3	1711.5
52.5°	1800.2	1724.4	1519.5	1161.4	975.9	1179.1	1516.3	1717.9	1756.6	1714.7	1588.9
55°	1682.4	1614.7	1405.0	1037.2	893.6	1053.3	1401.7	1608.2	1638.9	1590.5	1459.8
57.5°	1563.1	1501.8	1287.2	925.9	817.8	943.6	1295.3	1495.3	1516.3	1455.0	1335.6
60°	1438.8	1387.2	1167.9	827.5	743.6	842.0	1164.6	1382.4	1395.3	1329.2	1214.6
62.5°	1314.6	1267.9	1048.5	737.2	667.8	746.8	1056.6	1263.0	1271.1	1208.2	1090.4
65°	1187.2	1143.7	932.3	642.0	595.2	658.1	940.4	1138.8	1146.9	1075.9	969.4
67.5°	1054.9	1019.5	808.1	569.4	525.9	574.2	824.3	1013.0	1017.8	948.5	851.7
70°	922.7	892.0	698.5	490.4	458.1	492.0	709.7	874.3	884.0	809.8	732.3
72.5°	787.2	763.0	592.0	408.1	379.1	408.1	598.4	746.8	753.3	692.0	616.2
75°	650.1	632.3	483.9	327.5	304.9	325.8	487.1	619.4	619.4	561.3	501.7
77.5°	517.8	504.9	371.0	251.6	235.5	248.4	372.6	490.4	487.1	442.0	395.2
80°	387.1	377.5	266.2	182.3	171.0	177.4	266.2	362.9	362.9	330.7	274.2
82.5°	277.4	266.2	175.8	119.4	112.9	116.1	172.6	253.2	258.1	233.9	185.5
85°	183.9	158.1	95.2	66.1	61.3	62.9	90.3	146.8	161.3	135.5	96.8
87.5°	80.7	53.2	24.2	9.7	4.8	6.5	19.4	46.8	61.3	40.3	12.9
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°	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7
2.5°	3016.4	2990.6	3000.3	3006.7	3000.3	3029.3
5°	3013.2	3001.9	3000.3	3008.4	2995.4	3024.5
7.5°	3008.4	3001.9	3000.3	3003.5	2987.4	3014.8
10°	2997.1	2987.4	2990.6	2995.4	2974.5	3000.3
12.5°	2976.1	2966.4	2968.0	2984.2	2955.1	2977.7
15°	2940.6	2929.3	2940.6	2958.3	2932.5	2951.9
17.5°	2893.8	2876.1	2895.4	2922.9	2903.5	2921.2
20°	2834.1	2806.7	2827.7	2877.7	2860.0	2882.5
22.5°	2761.6	2727.7	2748.6	2821.2	2816.4	2840.6
25°	2679.3	2639.0	2668.0	2756.7	2766.4	2789.0
27.5°	2587.3	2542.2	2580.9	2685.7	2708.3	2734.1
30°	2487.3	2438.9	2484.1	2606.7	2640.6	2668.0
32.5°	2384.1	2330.9	2382.5	2518.0	2566.4	2601.9
35°	2276.0	2221.2	2279.2	2426.0	2484.1	2519.6
37.5°	2159.9	2106.7	2169.6	2329.3	2398.6	2434.1
40°	2040.5	1980.8	2051.8	2214.7	2306.7	2348.6
42.5°	1917.9	1843.7	1930.8	2106.7	2206.7	2248.6
45°	1780.8	1677.6	1795.3	1992.1	2097.0	2143.8
47.5°	1643.7	1540.5	1659.8	1869.5	1982.4	2024.4
50°	1511.4	1422.7	1517.9	1735.6	1866.3	1919.5
52.5°	1390.5	1317.9	1398.5	1605.0	1746.9	1800.2
55°	1277.5	1221.1	1287.2	1475.9	1621.1	1682.4
57.5°	1171.1	1135.6	1180.8	1353.4	1505.0	1563.1
60°	1071.1	1046.9	1079.1	1232.4	1367.9	1438.8
62.5°	972.7	959.8	984.0	1104.9	1240.4	1314.6
65°	877.5	874.3	887.2	993.6	1106.6	1187.2
67.5°	782.3	780.7	788.8	875.9	975.9	1054.9
70°	687.2	696.8	692.0	748.5	845.2	922.7
72.5°	590.4	604.9	596.8	632.3	725.9	787.2
75°	482.3	501.7	485.5	525.9	583.9	650.1
77.5°	371.0	392.0	372.6	408.1	471.0	517.8
80°	266.2	285.5	269.4	296.8	351.6	387.1
82.5°	167.8	182.3	169.4	196.8	251.6	277.4
85°	74.2	82.3	85.5	106.5	154.9	183.9
87.5°	3.2	1.6	3.2	21.0	54.8	80.7
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)