

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: P520684

Luminaire Tested: **8WSLA-150-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: P520684
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-150-L850-UNV-U
Description: 8 FOOT, 3000 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

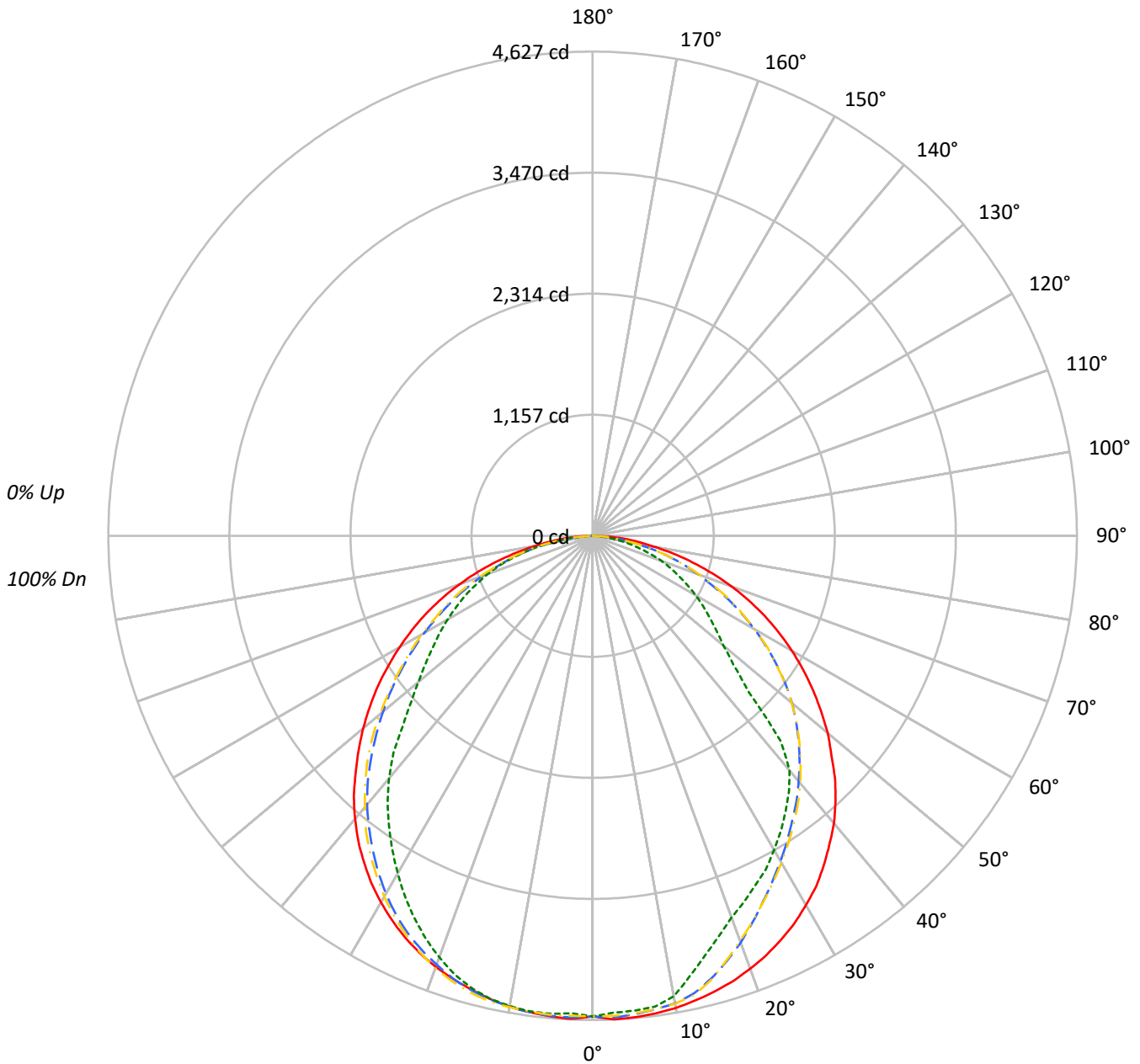
Lumens per Lamp: N/A
Luminaire Lumens: 12319.0 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 93.6
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°	12357	12357	12357	12357
5°	12478	12305	12458	12384
10°	12521	12211	12487	12467
15°	12560	11565	12505	12464
20°	12607	11111	12558	12275
25°	12647	10928	12582	11967
30°	12662	10771	12570	11574
35°	12641	10562	12512	11144
40°	12600	10281	12401	10627
45°	12460	7988	12179	9750
50°	12273	6838	11974	9097
55°	12055	6403	11743	8749
60°	11827	6112	11469	8605
65°	11545	5789	11153	8502
70°	11087	5505	10622	8374
75°	10322	4841	9836	7966
80°	9163	4046	8590	6758
85°	8670	2890	7608	3878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	436.3	3.5
10°-20°	1244.5	10.1
20°-30°	1859.6	15.1
30°-40°	2213.6	18.0
40°-50°	2212.6	18.0
50°-60°	1903.9	15.5
60°-70°	1433.0	11.6
70°-80°	816.6	6.6
80°-90°	198.8	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°	3540.5	28.7
0°-40°	5754.1	46.7
0°-60°	9870.6	80.1
0°-90°	12319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12319.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4592	4592	4592	4592	4592	
5°	4619	4555	4612	4585	4619	440
15°	4508	4151	4489	4474	4508	1274
25°	4260	3681	4237	4030	4260	1964
35°	3848	3215	3809	3392	3848	2408
45°	3274	2099	3200	2562	3274	2521
55°	2570	1365	2503	1865	2570	2297
65°	1813	909	1752	1335	1813	1791
75°	993	466	946	766	993	1051
85°	281	94	246	126	281	306
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°	4592.1	4592.1	4592.1	4592.1	4592.1	4592.1	4592.1	4592.1	4592.1	4592.1	4592.1
2.5°	4626.6	4584.7	4609.4	4602.0	4562.6	4577.3	4592.1	4577.3	4621.7	4582.3	4609.4
5°	4619.2	4574.9	4589.7	4574.9	4555.2	4560.1	4582.3	4567.5	4611.8	4569.9	4604.4
7.5°	4604.4	4550.2	4565.0	4557.6	4540.4	4542.8	4565.0	4552.7	4592.1	4552.7	4592.1
10°	4582.3	4525.6	4537.9	4505.9	4468.9	4496.0	4540.4	4528.1	4569.9	4525.6	4569.9
12.5°	4547.8	4491.1	4478.8	4372.9	4306.3	4358.1	4493.6	4493.6	4533.0	4491.1	4537.9
15°	4508.4	4446.8	4380.2	4220.1	4151.1	4202.9	4390.1	4454.2	4488.6	4446.8	4493.6
17.5°	4461.5	4390.1	4262.0	4074.8	4010.7	4062.4	4254.6	4395.0	4439.4	4395.0	4436.9
20°	4402.4	4318.7	4136.4	3922.0	3880.1	3926.9	4119.1	4323.6	4385.2	4331.0	4360.5
22.5°	4338.4	4237.4	3995.9	3803.8	3784.1	3813.6	3988.5	4234.9	4316.2	4259.5	4279.2
25°	4259.5	4141.3	3855.5	3695.4	3680.6	3697.8	3860.4	4131.4	4237.4	4178.2	4185.6
27.5°	4175.8	4047.7	3722.5	3604.2	3589.4	3596.8	3732.3	4015.6	4146.2	4087.1	4074.8
30°	4074.8	3936.8	3589.4	3481.0	3466.3	3493.4	3609.1	3897.4	4045.2	3986.1	3949.1
32.5°	3973.8	3816.1	3458.9	3375.1	3345.5	3370.2	3481.0	3774.2	3934.3	3872.8	3811.2
35°	3848.1	3688.0	3323.4	3239.6	3215.0	3242.1	3352.9	3646.1	3808.7	3747.1	3663.3
37.5°	3717.5	3552.5	3200.2	3123.8	3079.5	3111.5	3222.4	3513.1	3678.1	3614.1	3510.6
40°	3587.0	3409.6	3062.2	2983.4	2926.7	2973.5	3086.9	3372.6	3530.3	3471.2	3352.9
42.5°	3434.2	3266.7	2926.7	2815.9	2655.7	2806.0	2941.5	3232.2	3377.6	3320.9	3178.0
45°	3274.1	3114.0	2783.8	2515.3	2099.0	2540.0	2793.7	3084.4	3200.2	3146.0	2990.8
47.5°	3091.8	2956.3	2638.5	2229.5	1825.5	2254.2	2643.4	2944.0	3032.7	2973.5	2801.1
50°	2931.7	2798.6	2485.8	1988.1	1633.4	2015.2	2483.3	2786.3	2860.2	2806.0	2613.9
52.5°	2749.4	2633.6	2320.7	1773.8	1490.5	1800.9	2315.8	2623.7	2682.8	2618.8	2426.6
55°	2569.5	2466.0	2145.8	1584.1	1364.8	1608.7	2140.9	2456.2	2503.0	2429.1	2229.5
57.5°	2387.2	2293.6	1965.9	1414.1	1249.0	1441.2	1978.3	2283.7	2315.8	2222.2	2039.8
60°	2197.5	2118.7	1783.6	1263.8	1135.7	1286.0	1778.7	2111.3	2131.0	2030.0	1855.1
62.5°	2007.8	1936.4	1601.3	1125.9	1019.9	1140.6	1613.6	1929.0	1941.3	1845.2	1665.4
65°	1813.2	1746.7	1424.0	980.5	909.1	1005.1	1436.3	1739.3	1751.6	1643.2	1480.6
67.5°	1611.2	1557.0	1234.3	869.6	803.1	877.0	1258.9	1547.1	1554.5	1448.6	1300.8
70°	1409.2	1362.4	1066.7	748.9	699.7	751.4	1084.0	1335.3	1350.0	1236.7	1118.5
72.5°	1202.2	1165.3	904.1	623.3	578.9	623.3	914.0	1140.6	1150.5	1056.9	941.1
75°	992.8	965.7	739.1	500.1	465.6	497.6	744.0	946.0	946.0	857.3	766.2
77.5°	790.8	771.1	566.6	384.3	359.7	379.4	569.1	748.9	744.0	675.0	603.6
80°	591.3	576.5	406.5	278.4	261.1	271.0	406.5	554.3	554.3	505.0	418.8
82.5°	423.7	406.5	268.5	182.3	172.5	177.4	263.6	386.8	394.2	357.2	283.3
85°	280.8	241.4	145.4	101.0	93.6	96.1	138.0	224.2	246.4	206.9	147.8
87.5°	123.2	81.3	37.0	14.8	7.4	9.9	29.6	71.4	93.6	61.6	19.7
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°	4592.1	4592.1	4592.1	4592.1	4592.1	4592.1
2.5°	4606.9	4567.5	4582.3	4592.1	4582.3	4626.6
5°	4602.0	4584.7	4582.3	4594.6	4574.9	4619.2
7.5°	4594.6	4584.7	4582.3	4587.2	4562.6	4604.4
10°	4577.3	4562.6	4567.5	4574.9	4542.8	4582.3
12.5°	4545.3	4530.5	4533.0	4557.6	4513.3	4547.8
15°	4491.1	4473.9	4491.1	4518.2	4478.8	4508.4
17.5°	4419.7	4392.6	4422.1	4464.0	4434.4	4461.5
20°	4328.5	4286.6	4318.7	4395.0	4367.9	4402.4
22.5°	4217.7	4165.9	4197.9	4308.8	4301.4	4338.4
25°	4092.0	4030.4	4074.8	4210.3	4225.0	4259.5
27.5°	3951.6	3882.6	3941.7	4101.9	4136.4	4175.8
30°	3798.8	3724.9	3793.9	3981.1	4032.9	4074.8
32.5°	3641.2	3559.9	3638.7	3845.7	3919.6	3973.8
35°	3476.1	3392.4	3481.0	3705.2	3793.9	3848.1
37.5°	3298.7	3217.4	3313.5	3557.4	3663.3	3717.5
40°	3116.4	3025.3	3133.7	3382.5	3522.9	3587.0
42.5°	2929.2	2815.9	2948.9	3217.4	3370.2	3434.2
45°	2719.8	2562.1	2742.0	3042.5	3202.7	3274.1
47.5°	2510.4	2352.7	2535.0	2855.3	3027.7	3091.8
50°	2308.4	2172.9	2318.2	2650.8	2850.4	2931.7
52.5°	2123.6	2012.7	2135.9	2451.3	2668.1	2749.4
55°	1951.2	1864.9	1965.9	2254.2	2475.9	2569.5
57.5°	1788.6	1734.4	1803.3	2066.9	2298.5	2387.2
60°	1635.8	1598.9	1648.1	1882.2	2089.1	2197.5
62.5°	1485.5	1465.8	1502.8	1687.6	1894.5	2007.8
65°	1340.2	1335.3	1355.0	1517.6	1690.0	1813.2
67.5°	1194.8	1192.4	1204.7	1337.7	1490.5	1611.2
70°	1049.5	1064.3	1056.9	1143.1	1290.9	1409.2
72.5°	901.7	923.8	911.5	965.7	1108.6	1202.2
75°	736.6	766.2	741.5	803.1	891.8	992.8
77.5°	566.6	598.7	569.1	623.3	719.4	790.8
80°	406.5	436.1	411.4	453.3	537.1	591.3
82.5°	256.2	278.4	258.7	300.6	384.3	423.7
85°	113.3	125.6	130.6	162.6	236.5	280.8
87.5°	4.9	2.5	4.9	32.0	83.8	123.2
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)