

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: P520681

Luminaire Tested: **8WSLA-150-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: P520681  
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-L840-UNV-U  
Description: 8 FOOT, 3000 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**

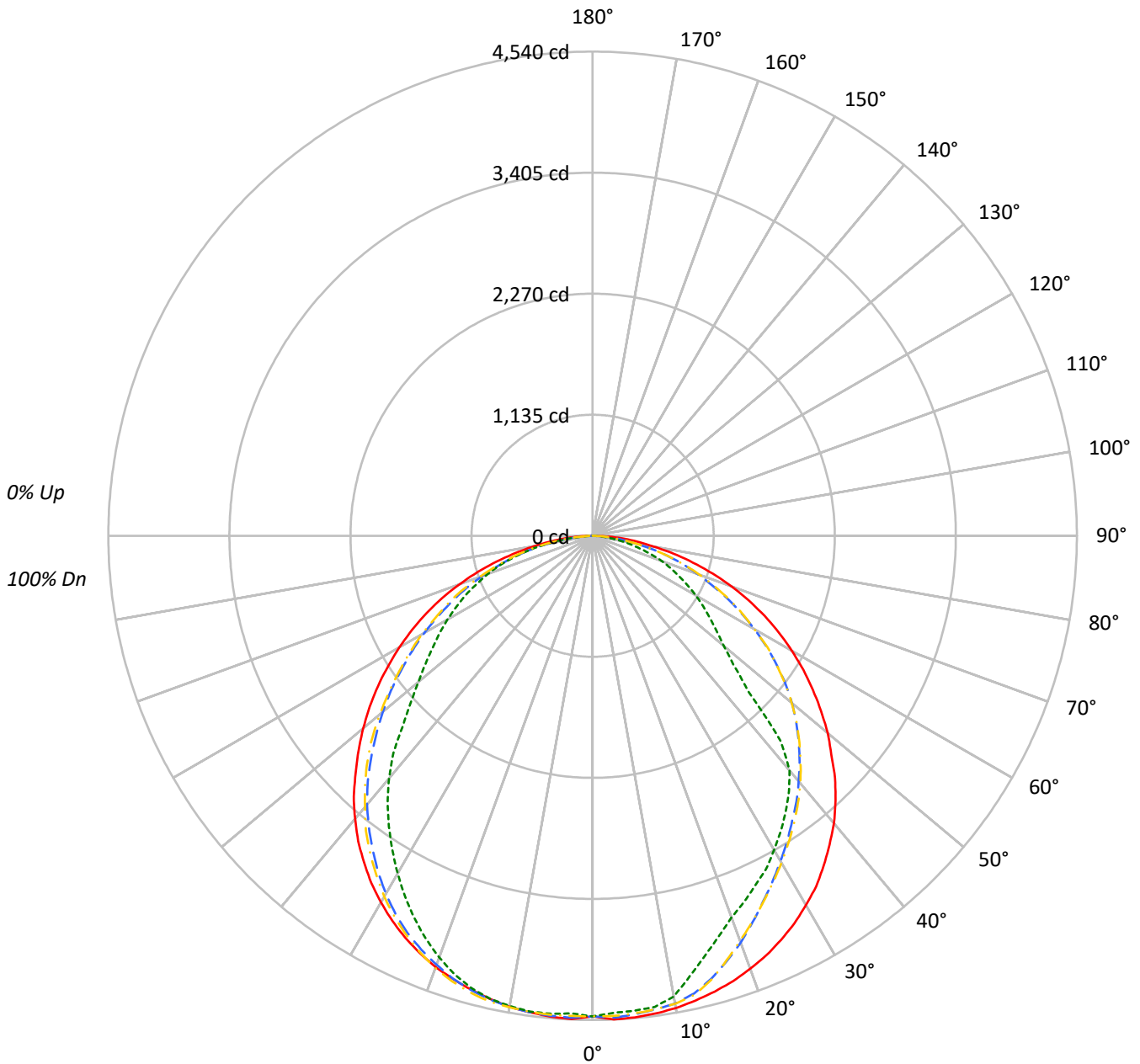
Lumens per Lamp: N/A  
Luminaire Lumens: 12089.0 lumens  
Efficiency: N/A  
Efficacy: 129.2 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 93.6  
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°	12127	12127	12127	12127
5°	12245	12075	12225	12153
10°	12287	11983	12254	12234
15°	12325	11349	12271	12231
20°	12372	10904	12323	12046
25°	12411	10724	12346	11744
30°	12425	10569	12335	11358
35°	12405	10364	12278	10936
40°	12365	10089	12170	10429
45°	12227	7839	11951	9568
50°	12044	6710	11750	8927
55°	11830	6283	11524	8586
60°	11606	5998	11255	8444
65°	11330	5680	10945	8343
70°	10881	5402	10423	8217
75°	10130	4750	9653	7818
80°	8991	3972	8430	6631
85°	8509	2837	7466	3807



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	428.2	3.5
10°-20°	1221.3	10.1
20°-30°	1824.9	15.1
30°-40°	2172.3	18.0
40°-50°	2171.3	18.0
50°-60°	1868.4	15.5
60°-70°	1406.2	11.6
70°-80°	801.3	6.6
80°-90°	195.0	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°	3474.4	28.7
0°-40°	5646.6	46.7
0°-60°	9686.3	80.1
0°-90°	12089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12089.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4506	4506	4506	4506	4506	
5°	4533	4470	4526	4499	4533	431
15°	4424	4074	4405	4390	4424	1250
25°	4180	3612	4158	3955	4180	1928
35°	3776	3155	3738	3329	3776	2363
45°	3213	2060	3140	2514	3213	2474
55°	2522	1339	2456	1830	2522	2254
65°	1779	892	1719	1310	1779	1757
75°	974	457	928	752	974	1031
85°	276	92	242	123	276	300
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°	4506.4	4506.4	4506.4	4506.4	4506.4	4506.4	4506.4	4506.4	4506.4	4506.4	4506.4
2.5°	4540.2	4499.1	4523.3	4516.1	4477.4	4491.9	4506.4	4491.9	4535.4	4496.7	4523.3
5°	4533.0	4489.5	4504.0	4489.5	4470.1	4475.0	4496.7	4482.2	4525.7	4484.6	4518.5
7.5°	4518.5	4465.3	4479.8	4472.5	4455.6	4458.0	4479.8	4467.7	4506.4	4467.7	4506.4
10°	4496.7	4441.1	4453.2	4421.8	4385.5	4412.1	4455.6	4443.5	4484.6	4441.1	4484.6
12.5°	4462.9	4407.3	4395.2	4291.2	4225.9	4276.7	4409.7	4409.7	4448.4	4407.3	4453.2
15°	4424.2	4363.7	4298.5	4141.3	4073.6	4124.4	4308.1	4371.0	4404.8	4363.7	4409.7
17.5°	4378.2	4308.1	4182.4	3998.7	3935.8	3986.6	4175.2	4313.0	4356.5	4313.0	4354.1
20°	4320.2	4238.0	4059.1	3848.8	3807.7	3853.6	4042.2	4242.9	4303.3	4250.1	4279.1
22.5°	4257.4	4158.2	3921.3	3732.8	3713.4	3742.4	3914.1	4155.8	4235.6	4180.0	4199.3
25°	4180.0	4064.0	3783.5	3626.4	3611.9	3628.8	3788.4	4054.3	4158.2	4100.2	4107.5
27.5°	4097.8	3972.1	3653.0	3536.9	3522.4	3529.7	3662.6	3940.7	4068.8	4010.8	3998.7
30°	3998.7	3863.3	3522.4	3416.0	3401.5	3428.1	3541.8	3824.6	3969.7	3911.7	3875.4
32.5°	3899.6	3744.8	3394.3	3312.1	3283.1	3307.3	3416.0	3703.7	3860.9	3800.4	3740.0
35°	3776.3	3619.1	3261.3	3179.1	3154.9	3181.5	3290.3	3578.0	3737.6	3677.1	3594.9
37.5°	3648.1	3486.2	3140.4	3065.5	3022.0	3053.4	3162.2	3447.5	3609.5	3546.6	3445.1
40°	3520.0	3345.9	3005.1	2927.7	2872.1	2918.0	3029.2	3309.7	3464.4	3406.4	3290.3
42.5°	3370.1	3205.7	2872.1	2763.3	2606.2	2753.6	2886.6	3171.9	3314.5	3258.9	3118.7
45°	3213.0	3055.8	2731.9	2468.4	2059.8	2492.5	2741.5	3026.8	3140.4	3087.3	2934.9
47.5°	3034.1	2901.1	2589.2	2187.9	1791.4	2212.1	2594.1	2889.0	2976.0	2918.0	2748.8
50°	2876.9	2746.4	2439.3	1951.0	1602.9	1977.6	2436.9	2734.3	2806.8	2753.6	2565.1
52.5°	2698.0	2584.4	2277.4	1740.7	1462.6	1767.3	2272.5	2574.7	2632.8	2569.9	2381.3
55°	2521.5	2420.0	2105.7	1554.5	1339.3	1578.7	2100.9	2410.3	2456.3	2383.7	2187.9
57.5°	2342.6	2250.8	1929.2	1387.7	1225.7	1414.3	1941.3	2241.1	2272.5	2180.7	2001.8
60°	2156.5	2079.1	1750.3	1240.2	1114.5	1262.0	1745.5	2071.9	2091.2	1992.1	1820.4
62.5°	1970.3	1900.2	1571.4	1104.8	1000.9	1119.3	1583.5	1893.0	1905.1	1810.8	1634.3
65°	1779.3	1714.1	1397.4	962.2	892.1	986.4	1409.5	1706.8	1718.9	1612.5	1453.0
67.5°	1581.1	1527.9	1211.2	853.4	788.1	860.7	1235.4	1518.2	1525.5	1421.5	1276.5
70°	1382.9	1336.9	1046.8	734.9	686.6	737.4	1063.7	1310.3	1324.8	1213.6	1097.6
72.5°	1179.8	1143.5	887.3	611.6	568.1	611.6	896.9	1119.3	1129.0	1037.1	923.5
75°	974.3	947.7	725.3	490.8	456.9	488.4	730.1	928.4	928.4	841.3	751.9
77.5°	776.0	756.7	556.0	377.1	353.0	372.3	558.5	734.9	730.1	662.4	592.3
80°	580.2	565.7	398.9	273.2	256.3	265.9	398.9	544.0	544.0	495.6	411.0
82.5°	415.8	398.9	263.5	178.9	169.2	174.1	258.7	379.6	386.8	350.5	278.0
85°	275.6	236.9	142.6	99.1	91.9	94.3	135.4	220.0	241.8	203.1	145.1
87.5°	120.9	79.8	36.3	14.5	7.3	9.7	29.0	70.1	91.9	60.4	19.3
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°	4506.4	4506.4	4506.4	4506.4	4506.4	4506.4
2.5°	4520.9	4482.2	4496.7	4506.4	4496.7	4540.2
5°	4516.1	4499.1	4496.7	4508.8	4489.5	4533.0
7.5°	4508.8	4499.1	4496.7	4501.5	4477.4	4518.5
10°	4491.9	4477.4	4482.2	4489.5	4458.0	4496.7
12.5°	4460.4	4445.9	4448.4	4472.5	4429.0	4462.9
15°	4407.3	4390.3	4407.3	4433.9	4395.2	4424.2
17.5°	4337.1	4310.6	4339.6	4380.7	4351.7	4378.2
20°	4247.7	4206.6	4238.0	4313.0	4286.4	4320.2
22.5°	4138.9	4088.1	4119.6	4228.4	4221.1	4257.4
25°	4015.6	3955.2	3998.7	4131.7	4146.2	4180.0
27.5°	3877.8	3810.1	3868.1	4025.3	4059.1	4097.8
30°	3727.9	3655.4	3723.1	3906.8	3957.6	3998.7
32.5°	3573.2	3493.4	3570.8	3773.9	3846.4	3899.6
35°	3411.2	3329.0	3416.0	3636.0	3723.1	3776.3
37.5°	3237.1	3157.4	3251.7	3491.0	3594.9	3648.1
40°	3058.2	2968.8	3075.2	3319.3	3457.1	3520.0
42.5°	2874.5	2763.3	2893.9	3157.4	3307.3	3370.1
45°	2669.0	2514.3	2690.8	2985.7	3142.9	3213.0
47.5°	2463.5	2308.8	2487.7	2802.0	2971.2	3034.1
50°	2265.3	2132.3	2274.9	2601.3	2797.1	2876.9
52.5°	2084.0	1975.2	2096.0	2405.5	2618.2	2698.0
55°	1914.7	1830.1	1929.2	2212.1	2429.7	2521.5
57.5°	1755.2	1702.0	1769.7	2028.4	2255.6	2342.6
60°	1605.3	1569.0	1617.4	1847.0	2050.1	2156.5
62.5°	1457.8	1438.5	1474.7	1656.0	1859.1	1970.3
65°	1315.2	1310.3	1329.7	1489.2	1658.5	1779.3
67.5°	1172.5	1170.1	1182.2	1312.7	1462.6	1581.1
70°	1029.9	1044.4	1037.1	1121.8	1266.8	1382.9
72.5°	884.8	906.6	894.5	947.7	1087.9	1179.8
75°	722.9	751.9	727.7	788.1	875.2	974.3
77.5°	556.0	587.5	558.5	611.6	705.9	776.0
80°	398.9	427.9	403.7	444.8	527.0	580.2
82.5°	251.4	273.2	253.8	294.9	377.1	415.8
85°	111.2	123.3	128.1	159.6	232.1	275.6
87.5°	4.8	2.4	4.8	31.4	82.2	120.9
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)