

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: P520682

Luminaire Tested: **8WSLA-150-L840-UPL15-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: P520682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-174-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 8WSLA-150-L840-UPL15-UNV-U  
Description: 8 FOOT, 3000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

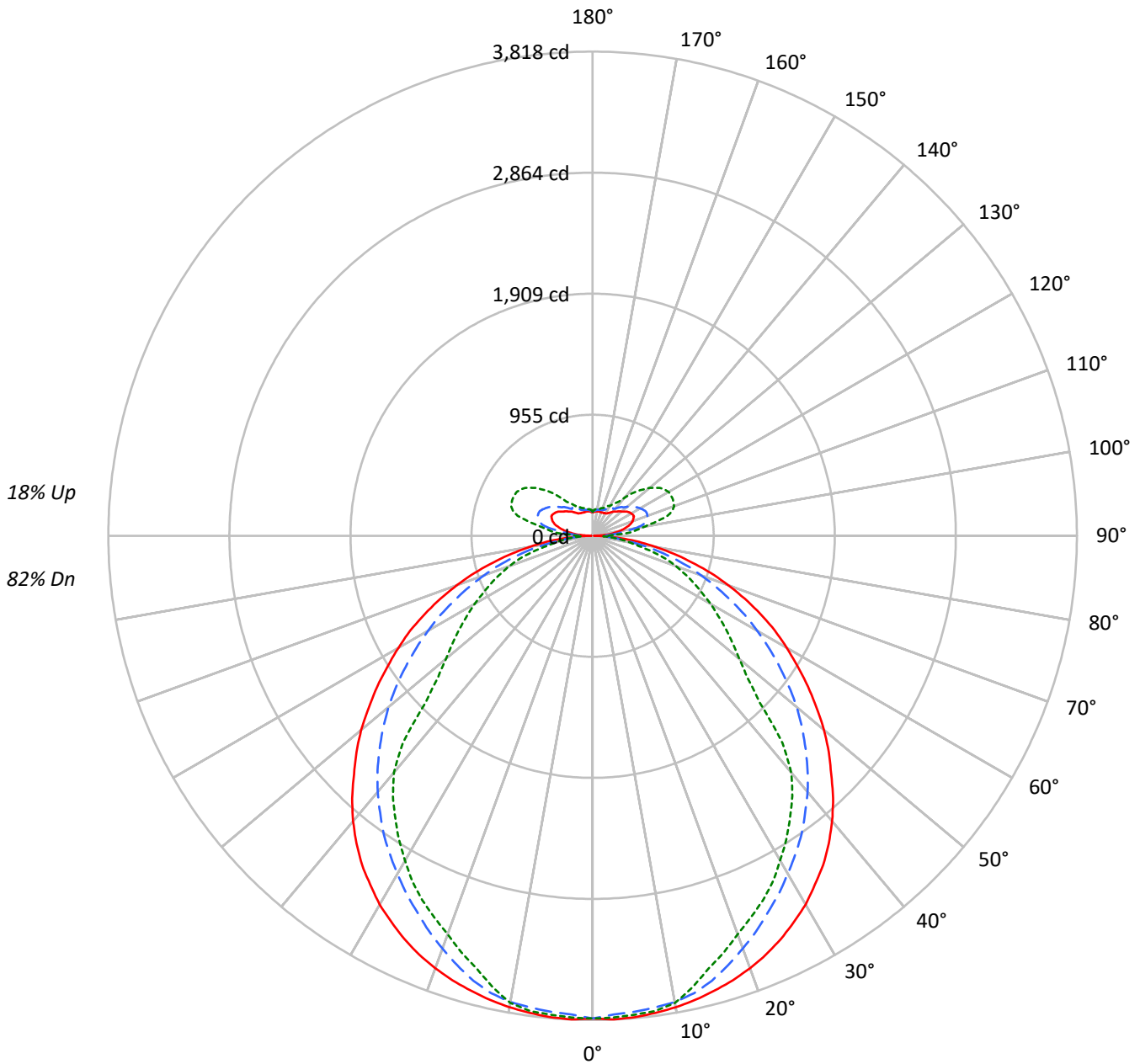
Lumens per Lamp: N/A  
Luminaire Lumens: 12327.0 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 93.6  
Input Voltage (V): NR  
Input Current (Ain): 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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	82																			
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69																			
2	96	88	81	76	91	84	78	73	78	73	69	72	68	65	67	64	61	58																			
3	87	77	69	63	83	74	67	61	69	63	58	64	59	55	59	55	52	49																			
4	80	68	60	53	76	66	58	52	61	55	50	57	51	47	53	48	45	42																			
5	73	61	52	46	70	59	51	45	55	48	43	51	45	41	48	43	39	36																			
6	68	55	46	40	65	53	45	39	50	43	38	46	40	36	43	38	34	32																			
7	63	50	41	35	60	48	40	35	45	38	33	42	36	32	39	34	30	28																			
8	58	45	37	32	56	44	36	31	41	35	30	39	33	29	36	31	27	25																			
9	55	42	34	28	52	40	33	28	38	31	27	36	30	26	33	28	25	23																			
10	51	38	31	26	49	37	30	25	35	29	24	33	27	23	31	26	23	21																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10242	10242	10242
5°	10292	10177	10240
10°	10316	10200	10221
15°	10346	10120	9840
20°	10391	9916	9573
25°	10419	9720	9421
30°	10435	9560	9188
35°	10411	9435	8915
40°	10320	9262	8557
45°	10122	9035	7096
50°	9971	8791	6319
55°	9726	8440	6013
60°	9515	8061	5776
65°	9291	7620	5604
70°	8929	7138	5497
75°	8429	6542	5057
80°	7717	5503	4486
85°	6913	4767	4529



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	360.7	2.9
10°-20°	1024.7	8.3
20°-30°	1529.3	12.4
30°-40°	1822.2	14.8
40°-50°	1812.5	14.7
50°-60°	1553.4	12.6
60°-70°	1169.9	9.5
70°-80°	677.5	5.5
80°-90°	203.6	1.7
90°-100°	218.6	1.8
100°-110°	448.9	3.6
110°-120°	474.7	3.9
120°-130°	396.0	3.2
130°-140°	276.6	2.2
140°-150°	172.2	1.4
150°-160°	106.7	0.9
160°-170°	60.1	0.5
170°-180°	19.4	0.2
0°-30°	2914.7	23.6
0°-40°	4736.9	38.4
0°-60°	8102.7	65.7
0°-90°	10153.7	82.4
90°-120°	1142.2	9.3
90°-150°	1987.0	16.1
90°-180°	2173.0	17.6
0°-180°	12327.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3806	3806	3806	3806	3806	
5°	3810	3798	3768	3795	3791	363
15°	3714	3710	3632	3571	3532	1049
25°	3509	3459	3274	3192	3173	1618
35°	3169	3084	2872	2760	2714	1979
45°	2660	2594	2374	2139	1864	2056
55°	2073	2042	1799	1428	1282	1853
65°	1459	1424	1197	930	880	1442
75°	811	784	629	502	486	859
85°	224	197	154	147	147	239
90°	12	54	93	116	124	23
95°	124	166	189	278	301	118
105°	290	301	432	579	614	300
115°	359	305	459	633	695	350
125°	332	293	398	583	656	295
135°	270	293	320	432	498	211
145°	220	255	278	297	316	140
155°	201	212	228	247	251	93
165°	197	205	212	220	220	56
175°	193	197	201	205	208	18
180°	189	189	189	189	189	



TEST NUMBER: P520682

CATALOG NUMBER: 8WSLA-150-L840-UPL15-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3806.2	3806.2	3806.2	3806.2	3806.2
2.5°	3817.8	3810.1	3779.2	3810.1	3802.4
5°	3810.1	3798.5	3767.6	3794.7	3790.8
7.5°	3794.7	3786.9	3752.2	3783.1	3779.2
10°	3775.4	3763.8	3732.9	3756.1	3740.6
12.5°	3748.3	3740.6	3694.3	3675.0	3644.1
15°	3713.6	3709.7	3632.5	3570.8	3532.2
17.5°	3675.0	3659.5	3551.5	3478.1	3443.4
20°	3628.7	3605.5	3462.7	3377.7	3343.0
22.5°	3574.6	3539.9	3373.9	3292.8	3258.1
25°	3509.0	3458.8	3273.5	3192.5	3173.1
27.5°	3435.6	3377.7	3180.9	3099.8	3076.6
30°	3358.4	3285.1	3076.6	2999.4	2957.0
32.5°	3261.9	3192.5	2976.3	2887.5	2841.2
35°	3169.3	3084.4	2872.0	2760.1	2713.8
37.5°	3057.3	2972.4	2752.4	2640.4	2586.4
40°	2937.7	2852.7	2636.6	2505.3	2435.8
42.5°	2806.4	2729.2	2509.2	2350.9	2215.8
45°	2659.7	2594.1	2374.1	2138.6	1864.5
47.5°	2524.6	2462.9	2239.0	1934.0	1652.2
50°	2381.8	2323.9	2100.0	1741.0	1509.4
52.5°	2223.5	2181.1	1949.4	1575.0	1389.7
55°	2073.0	2042.1	1798.9	1428.3	1281.6
57.5°	1914.7	1883.8	1648.3	1289.3	1173.5
60°	1768.0	1737.1	1497.8	1165.8	1073.2
62.5°	1621.3	1578.9	1351.1	1046.1	968.9
65°	1459.2	1424.4	1196.7	930.3	880.1
67.5°	1297.1	1266.2	1053.9	822.2	787.5
70°	1134.9	1107.9	907.2	718.0	698.7
72.5°	976.7	941.9	775.9	613.8	606.1
75°	810.7	783.6	629.2	501.8	486.4
77.5°	652.4	629.2	494.1	382.2	370.6
80°	498.0	474.8	355.1	277.9	289.5
82.5°	366.7	335.8	239.3	216.2	227.8
85°	223.9	196.9	154.4	146.7	146.7
87.5°	77.2	73.3	69.5	81.1	84.9
90°	11.6	54.0	92.6	115.8	123.5
92.5°	65.6	96.5	127.4	150.6	158.3
95°	123.5	166.0	189.2	277.9	301.1
97.5°	169.9	220.0	247.1	328.1	351.3
100°	216.2	262.5	347.4	389.9	416.9
102.5°	254.8	289.5	409.2	494.1	509.6
105°	289.5	301.1	432.4	579.0	613.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	347.4	308.8	463.2	629.2	691.0
115°	359.0	305.0	459.4	633.1	694.9
117.5°	359.0	305.0	447.8	633.1	694.9
120°	351.3	308.8	432.4	625.4	691.0
122.5°	343.6	301.1	416.9	609.9	675.5
125°	332.0	293.4	397.6	582.9	656.2
127.5°	312.7	301.1	378.3	548.2	621.5
130°	297.2	305.0	355.1	513.4	586.8
132.5°	285.7	297.2	332.0	474.8	540.4
135°	270.2	293.4	320.4	432.4	498.0
137.5°	258.6	281.8	301.1	393.7	447.8
140°	247.1	274.1	281.8	343.6	389.9
142.5°	231.6	262.5	266.4	320.4	339.7
145°	220.0	254.8	277.9	297.2	316.5
147.5°	208.5	239.3	270.2	274.1	293.4
150°	204.6	223.9	258.6	262.5	270.2
152.5°	200.7	216.2	239.3	262.5	266.4
155°	200.7	212.3	227.8	247.1	250.9
157.5°	196.9	212.3	220.0	235.5	239.3
160°	196.9	208.5	216.2	227.8	231.6
162.5°	196.9	208.5	212.3	223.9	227.8
165°	196.9	204.6	212.3	220.0	220.0
167.5°	196.9	204.6	208.5	216.2	216.2
170°	196.9	200.7	208.5	212.3	212.3
172.5°	193.0	200.7	204.6	212.3	212.3
175°	193.0	196.9	200.7	204.6	208.5
177.5°	185.3	196.9	200.7	204.6	200.7
180°	189.2	189.2	189.2	189.2	189.2



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	316.5	305.0	447.8	609.9	660.1
110°	335.8	308.8	459.4	621.5	683.3



(END OF REPORT)