

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: P520709

Luminaire Tested: **8WSLA-175-L850-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: P520709  
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-175-L850-UPL15-UNV-U  
Description: 8 FOOT, 3500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

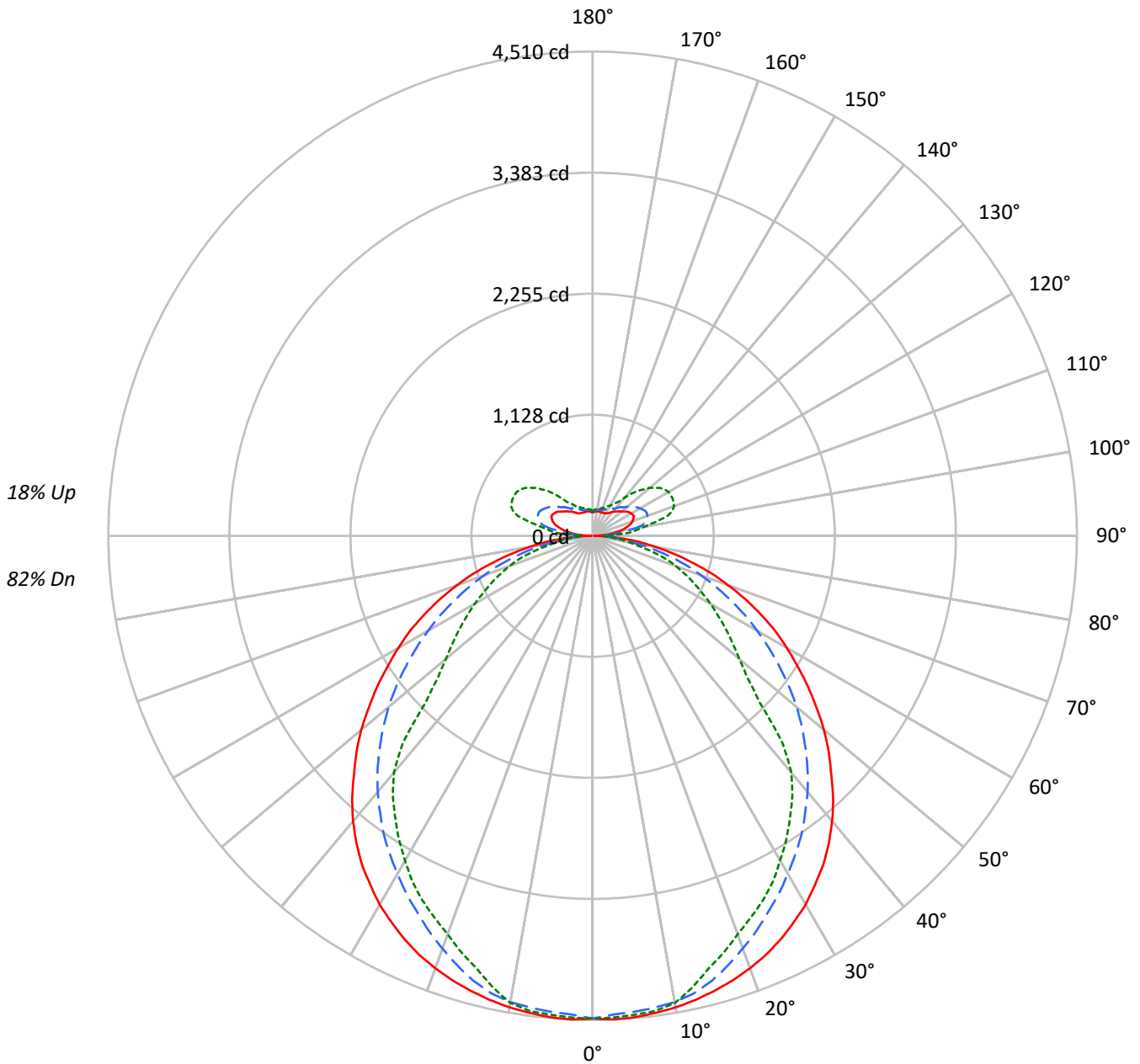
Lumens per Lamp: N/A  
Luminaire Lumens: 14562.0 lumens  
Efficiency: N/A  
Efficacy: 122.4 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 119  
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

TEST NUMBER: P520709

CATALOG NUMBER: 8WSLA-175-L850-UPL15-UNV-U

### Luminous Intensity Polar Plot





TEST NUMBER: P520709

CATALOG NUMBER: 8WSLA-175-L850-UPL15-UNV-U

**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°	12099	12099	12099
5°	12158	12022	12097
10°	12187	12049	12074
15°	12221	11955	11624
20°	12275	11714	11309
25°	12308	11482	11130
30°	12328	11293	10854
35°	12299	11146	10531
40°	12191	10941	10108
45°	11957	10673	8382
50°	11779	10385	7464
55°	11489	9970	7103
60°	11241	9523	6823
65°	10975	9002	6620
70°	10548	8431	6494
75°	9956	7728	5974
80°	9117	6501	5300
85°	8167	5632	5351



TEST NUMBER: P520709

CATALOG NUMBER: 8WSLA-175-L850-UPL15-UNV-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	426.2	2.9
10°-20°	1210.5	8.3
20°-30°	1806.6	12.4
30°-40°	2152.5	14.8
40°-50°	2141.1	14.7
50°-60°	1835.0	12.6
60°-70°	1382.0	9.5
70°-80°	800.4	5.5
80°-90°	240.5	1.7
90°-100°	258.2	1.8
100°-110°	530.3	3.6
110°-120°	560.8	3.9
120°-130°	467.8	3.2
130°-140°	326.8	2.2
140°-150°	203.4	1.4
150°-160°	126.1	0.9
160°-170°	71.0	0.5
170°-180°	22.9	0.2
0°-30°	3443.2	23.6
0°-40°	5595.8	38.4
0°-60°	9571.8	65.7
0°-90°	11994.7	82.4
90°-120°	1349.3	9.3
90°-150°	2347.3	16.1
90°-180°	2567.0	17.6
0°-180°	14562.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4496	4496	4496	4496	4496	
5°	4501	4487	4451	4483	4478	428
15°	4387	4382	4291	4218	4173	1240
25°	4145	4086	3867	3771	3748	1911
35°	3744	3644	3393	3260	3206	2338
45°	3142	3064	2804	2526	2203	2429
55°	2449	2412	2125	1687	1514	2189
65°	1724	1683	1414	1099	1040	1704
75°	958	926	743	593	575	1014
85°	264	233	182	173	173	282
90°	14	64	109	137	146	27
95°	146	196	223	328	356	140
105°	342	356	511	684	725	355
115°	424	360	543	748	821	413
125°	392	347	470	689	775	348
135°	319	347	378	511	588	249
145°	260	301	328	351	374	165
155°	237	251	269	292	296	109
165°	233	242	251	260	260	66
175°	228	233	237	242	246	22
180°	223	223	223	223	223	



TEST NUMBER: P520709

CATALOG NUMBER: 8WSLA-175-L850-UPL15-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4496.3	4496.3	4496.3	4496.3	4496.3
2.5°	4510.0	4500.9	4464.4	4500.9	4491.8
5°	4500.9	4487.2	4450.7	4482.7	4478.1
7.5°	4482.7	4473.5	4432.5	4469.0	4464.4
10°	4459.9	4446.2	4409.7	4437.1	4418.8
12.5°	4427.9	4418.8	4364.1	4341.3	4304.8
15°	4386.9	4382.3	4291.1	4218.2	4172.6
17.5°	4341.3	4323.1	4195.4	4108.7	4067.7
20°	4286.6	4259.2	4090.5	3990.2	3949.1
22.5°	4222.7	4181.7	3985.6	3889.8	3848.8
25°	4145.2	4085.9	3867.0	3771.3	3748.5
27.5°	4058.6	3990.2	3757.6	3661.8	3634.5
30°	3967.4	3880.7	3634.5	3543.3	3493.1
32.5°	3853.4	3771.3	3515.9	3411.0	3356.3
35°	3743.9	3643.6	3392.8	3260.5	3205.8
37.5°	3611.7	3511.3	3251.4	3119.2	3055.3
40°	3470.3	3370.0	3114.6	2959.6	2877.5
42.5°	3315.3	3224.1	2964.1	2777.2	2617.5
45°	3142.0	3064.4	2804.5	2526.3	2202.6
47.5°	2982.4	2909.4	2644.9	2284.7	1951.8
50°	2813.6	2745.2	2480.7	2056.6	1783.0
52.5°	2626.7	2576.5	2302.9	1860.6	1641.7
55°	2448.8	2412.3	2125.0	1687.3	1514.0
57.5°	2261.9	2225.4	1947.2	1523.1	1386.3
60°	2088.6	2052.1	1769.4	1377.2	1267.7
62.5°	1915.3	1865.1	1596.1	1235.8	1144.6
65°	1723.7	1682.7	1413.7	1099.0	1039.7
67.5°	1532.2	1495.7	1244.9	971.3	930.3
70°	1340.7	1308.8	1071.6	848.2	825.4
72.5°	1153.7	1112.7	916.6	725.1	715.9
75°	957.6	925.7	743.3	592.8	574.6
77.5°	770.7	743.3	583.7	451.5	437.8
80°	588.3	560.9	419.5	328.3	342.0
82.5°	433.2	396.7	282.7	255.4	269.1
85°	264.5	232.6	182.4	173.3	173.3
87.5°	91.2	86.6	82.1	95.8	100.3
90°	13.7	63.8	109.4	136.8	145.9
92.5°	77.5	114.0	150.5	177.8	187.0
95°	145.9	196.1	223.4	328.3	355.7
97.5°	200.6	259.9	291.9	387.6	415.0
100°	255.4	310.1	410.4	460.6	492.5
102.5°	301.0	342.0	483.4	583.7	601.9
105°	342.0	355.7	510.7	684.0	725.1



TEST NUMBER: P520709

CATALOG NUMBER: 8WSLA-175-L850-UPL15-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	410.4	364.8	547.2	743.3	816.3
115°	424.1	360.3	542.7	747.9	820.8
117.5°	424.1	360.3	529.0	747.9	820.8
120°	415.0	364.8	510.7	738.7	816.3
122.5°	405.9	355.7	492.5	720.5	798.0
125°	392.2	346.6	469.7	688.6	775.2
127.5°	369.4	355.7	446.9	647.5	734.2
130°	351.1	360.3	419.5	606.5	693.1
132.5°	337.5	351.1	392.2	560.9	638.4
135°	319.2	346.6	378.5	510.7	588.3
137.5°	305.5	332.9	355.7	465.1	529.0
140°	291.9	323.8	332.9	405.9	460.6
142.5°	273.6	310.1	314.7	378.5	401.3
145°	259.9	301.0	328.3	351.1	373.9
147.5°	246.2	282.7	319.2	323.8	346.6
150°	241.7	264.5	305.5	310.1	319.2
152.5°	237.1	255.4	282.7	310.1	314.7
155°	237.1	250.8	269.1	291.9	296.4
157.5°	232.6	250.8	259.9	278.2	282.7
160°	232.6	246.2	255.4	269.1	273.6
162.5°	232.6	246.2	250.8	264.5	269.1
165°	232.6	241.7	250.8	259.9	259.9
167.5°	232.6	241.7	246.2	255.4	255.4
170°	232.6	237.1	246.2	250.8	250.8
172.5°	228.0	237.1	241.7	250.8	250.8
175°	228.0	232.6	237.1	241.7	246.2
177.5°	218.9	232.6	237.1	241.7	237.1
180°	223.4	223.4	223.4	223.4	223.4



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	373.9	360.3	529.0	720.5	779.8
110°	396.7	364.8	542.7	734.2	807.2



(END OF REPORT)