

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: P520700

Luminaire Tested: **8WSLA-175-L830-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: P520700  
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-L830-UPL15-UNV-U  
Description: 8 FOOT, 3500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 80 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

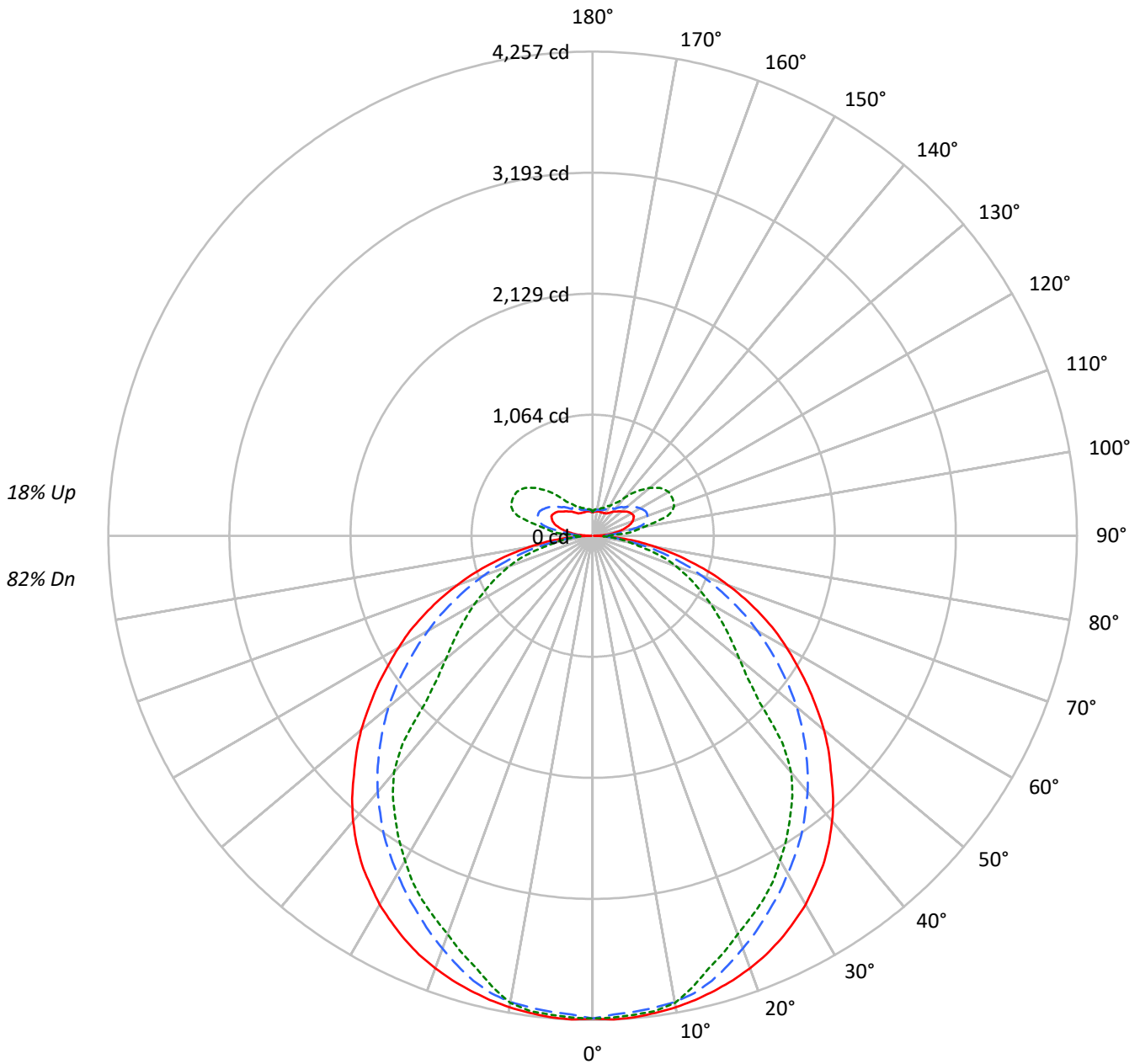
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13745.0 lumens  
Efficiency: N/A  
Efficacy: 115.5 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

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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°	11421	11421	11421
5°	11476	11348	11418
10°	11503	11373	11397
15°	11536	11284	10972
20°	11587	11057	10675
25°	11617	10838	10506
30°	11636	10660	10245
35°	11609	10520	9940
40°	11507	10327	9541
45°	11286	10074	7912
50°	11118	9803	7046
55°	10844	9410	6704
60°	10610	8988	6440
65°	10360	8496	6249
70°	9957	7958	6130
75°	9398	7295	5638
80°	8605	6137	5002
85°	7710	5317	5051



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	402.2	2.9
10°-20°	1142.6	8.3
20°-30°	1705.2	12.4
30°-40°	2031.8	14.8
40°-50°	2021.0	14.7
50°-60°	1732.0	12.6
60°-70°	1304.4	9.5
70°-80°	755.5	5.5
80°-90°	227.1	1.7
90°-100°	243.8	1.8
100°-110°	500.6	3.6
110°-120°	529.3	3.9
120°-130°	441.6	3.2
130°-140°	308.4	2.2
140°-150°	192.0	1.4
150°-160°	119.0	0.9
160°-170°	67.0	0.5
170°-180°	21.6	0.2
0°-30°	3250.0	23.6
0°-40°	5281.8	38.4
0°-60°	9034.8	65.7
0°-90°	11321.8	82.4
90°-120°	1273.6	9.3
90°-150°	2215.6	16.1
90°-180°	2423.0	17.6
0°-180°	13745.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4244	4244	4244	4244	4244	
5°	4248	4236	4201	4231	4227	404
15°	4141	4136	4050	3982	3938	1170
25°	3913	3857	3650	3560	3538	1804
35°	3534	3439	3202	3078	3026	2207
45°	2966	2892	2647	2385	2079	2293
55°	2311	2277	2006	1593	1429	2066
65°	1627	1588	1334	1037	981	1608
75°	904	874	702	560	542	957
85°	250	220	172	164	164	266
90°	13	60	103	129	138	25
95°	138	185	211	310	336	132
105°	323	336	482	646	684	335
115°	400	340	512	706	775	390
125°	370	327	443	650	732	329
135°	301	327	357	482	555	235
145°	245	284	310	331	353	156
155°	224	237	254	276	280	103
165°	220	228	237	245	245	62
175°	215	220	224	228	232	21
180°	211	211	211	211	211	



TEST NUMBER: P520700

CATALOG NUMBER: 8WSLA-175-L830-UPL15-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4244.1	4244.1	4244.1	4244.1	4244.1
2.5°	4257.0	4248.4	4213.9	4248.4	4239.8
5°	4248.4	4235.5	4201.0	4231.2	4226.9
7.5°	4231.2	4222.6	4183.8	4218.2	4213.9
10°	4209.6	4196.7	4162.3	4188.1	4170.9
12.5°	4179.5	4170.9	4119.2	4097.7	4063.3
15°	4140.8	4136.5	4050.4	3981.5	3938.5
17.5°	4097.7	4080.5	3960.0	3878.2	3839.5
20°	4046.1	4020.2	3861.0	3766.3	3727.6
22.5°	3985.8	3947.1	3762.0	3671.6	3632.9
25°	3912.6	3856.7	3650.1	3559.7	3538.2
27.5°	3830.9	3766.3	3546.8	3456.4	3430.6
30°	3744.8	3663.0	3430.6	3344.5	3297.1
32.5°	3637.2	3559.7	3318.6	3219.6	3168.0
35°	3533.9	3439.2	3202.4	3077.6	3025.9
37.5°	3409.0	3314.3	3069.0	2944.2	2883.9
40°	3275.6	3180.9	2939.9	2793.5	2716.0
42.5°	3129.3	3043.2	2797.8	2621.3	2470.7
45°	2965.7	2892.5	2647.2	2384.6	2079.0
47.5°	2815.0	2746.2	2496.5	2156.5	1842.3
50°	2655.8	2591.2	2341.6	1941.3	1683.0
52.5°	2479.3	2431.9	2173.7	1756.2	1549.6
55°	2311.4	2277.0	2005.8	1592.6	1429.0
57.5°	2135.0	2100.5	1838.0	1437.6	1308.5
60°	1971.4	1937.0	1670.1	1299.9	1196.6
62.5°	1807.8	1760.5	1506.5	1166.5	1080.4
65°	1627.0	1588.3	1334.3	1037.3	981.4
67.5°	1446.3	1411.8	1175.1	916.8	878.1
70°	1265.5	1235.3	1011.5	800.6	779.1
72.5°	1089.0	1050.3	865.2	684.4	675.8
75°	903.9	873.8	701.6	559.6	542.3
77.5°	727.4	701.6	551.0	426.1	413.2
80°	555.3	529.4	396.0	309.9	322.8
82.5°	408.9	374.5	266.9	241.0	254.0
85°	249.7	219.5	172.2	163.6	163.6
87.5°	86.1	81.8	77.5	90.4	94.7
90°	12.9	60.3	103.3	129.1	137.7
92.5°	73.2	107.6	142.0	167.9	176.5
95°	137.7	185.1	210.9	309.9	335.7
97.5°	189.4	245.3	275.5	365.9	391.7
100°	241.0	292.7	387.4	434.7	464.9
102.5°	284.1	322.8	456.3	551.0	568.2
105°	322.8	335.7	482.1	645.7	684.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	387.4	344.3	516.5	701.6	770.5
115°	400.3	340.0	512.2	705.9	774.8
117.5°	400.3	340.0	499.3	705.9	774.8
120°	391.7	344.3	482.1	697.3	770.5
122.5°	383.1	335.7	464.9	680.1	753.3
125°	370.2	327.1	443.3	650.0	731.7
127.5°	348.7	335.7	421.8	611.2	693.0
130°	331.4	340.0	396.0	572.5	654.3
132.5°	318.5	331.4	370.2	529.4	602.6
135°	301.3	327.1	357.3	482.1	555.3
137.5°	288.4	314.2	335.7	439.0	499.3
140°	275.5	305.6	314.2	383.1	434.7
142.5°	258.3	292.7	297.0	357.3	378.8
145°	245.3	284.1	309.9	331.4	353.0
147.5°	232.4	266.9	301.3	305.6	327.1
150°	228.1	249.7	288.4	292.7	301.3
152.5°	223.8	241.0	266.9	292.7	297.0
155°	223.8	236.7	254.0	275.5	279.8
157.5°	219.5	236.7	245.3	262.6	266.9
160°	219.5	232.4	241.0	254.0	258.3
162.5°	219.5	232.4	236.7	249.7	254.0
165°	219.5	228.1	236.7	245.3	245.3
167.5°	219.5	228.1	232.4	241.0	241.0
170°	219.5	223.8	232.4	236.7	236.7
172.5°	215.2	223.8	228.1	236.7	236.7
175°	215.2	219.5	223.8	228.1	232.4
177.5°	206.6	219.5	223.8	228.1	223.8
180°	210.9	210.9	210.9	210.9	210.9



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	353.0	340.0	499.3	680.1	736.0
110°	374.5	344.3	512.2	693.0	761.9



(END OF REPORT)