

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: P520706

Luminaire Tested: **8WSLA-175-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: P520706  
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-L840-UPL15-UNV-U  
Description: 8 FOOT, 3500 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**

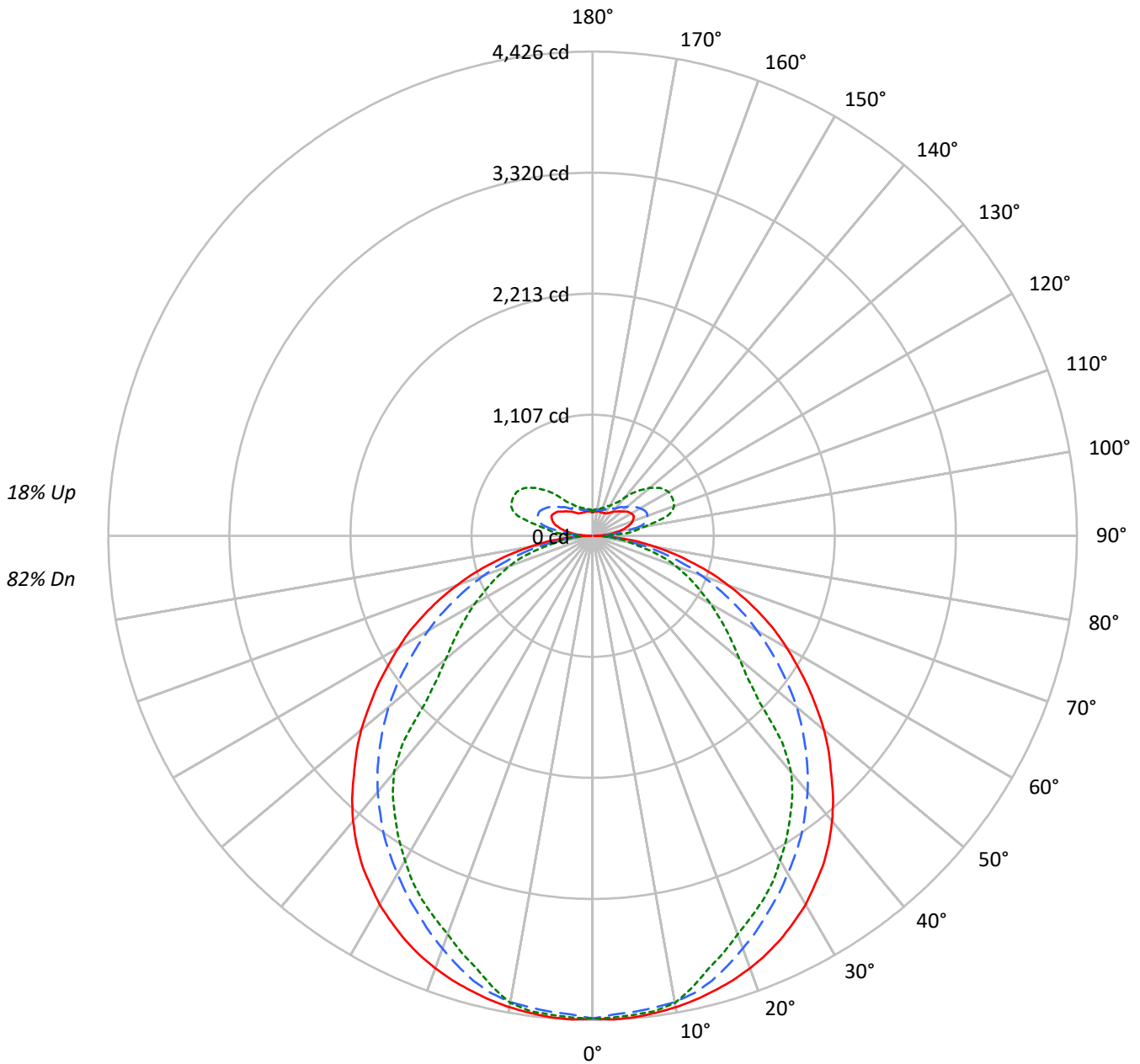
Lumens per Lamp: N/A  
Luminaire Lumens: 14290.1 lumens  
Efficiency: N/A  
Efficacy: 120.1 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

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°	11874	11874	11874
5°	11931	11798	11871
10°	11959	11824	11849
15°	11993	11731	11407
20°	12046	11495	11098
25°	12078	11267	10922
30°	12098	11082	10651
35°	12069	10937	10335
40°	11963	10737	9919
45°	11734	10473	8225
50°	11559	10191	7325
55°	11274	9784	6970
60°	11031	9345	6696
65°	10771	8833	6497
70°	10352	8274	6373
75°	9771	7584	5863
80°	8946	6380	5201
85°	8015	5527	5252



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.2	2.9
10°-20°	1187.9	8.3
20°-30°	1772.8	12.4
30°-40°	2112.3	14.8
40°-50°	2101.1	14.7
50°-60°	1800.7	12.6
60°-70°	1356.2	9.5
70°-80°	785.4	5.5
80°-90°	236.1	1.7
90°-100°	253.4	1.8
100°-110°	520.4	3.6
110°-120°	550.3	3.9
120°-130°	459.1	3.2
130°-140°	320.7	2.2
140°-150°	199.6	1.4
150°-160°	123.7	0.9
160°-170°	69.7	0.5
170°-180°	22.5	0.2
0°-30°	3378.9	23.6
0°-40°	5491.2	38.4
0°-60°	9393.0	65.7
0°-90°	11770.7	82.4
90°-120°	1324.1	9.3
90°-150°	2303.5	16.1
90°-180°	2519.0	17.6
0°-180°	14290.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4412	4412	4412	4412	4412	
5°	4417	4403	4368	4399	4394	420
15°	4305	4300	4211	4139	4095	1217
25°	4068	4010	3795	3701	3678	1875
35°	3674	3576	3329	3200	3146	2295
45°	3083	3007	2752	2479	2161	2384
55°	2403	2367	2085	1656	1486	2148
65°	1692	1651	1387	1078	1020	1672
75°	940	908	729	582	564	995
85°	260	228	179	170	170	277
90°	13	63	107	134	143	26
95°	143	192	219	322	349	137
105°	336	349	501	671	712	348
115°	416	354	532	734	806	405
125°	385	340	461	676	761	342
135°	313	340	371	501	577	245
145°	255	295	322	345	367	162
155°	233	246	264	286	291	107
165°	228	237	246	255	255	65
175°	224	228	233	237	242	21
180°	219	219	219	219	219	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4412.4	4412.4	4412.4	4412.4	4412.4
2.5°	4425.8	4416.8	4381.0	4416.8	4407.9
5°	4416.8	4403.4	4367.6	4398.9	4394.5
7.5°	4398.9	4390.0	4349.7	4385.5	4381.0
10°	4376.6	4363.1	4327.3	4354.2	4336.3
12.5°	4345.2	4336.3	4282.6	4260.2	4224.4
15°	4305.0	4300.5	4211.0	4139.4	4094.6
17.5°	4260.2	4242.3	4117.0	4032.0	3991.7
20°	4206.5	4179.7	4014.1	3915.6	3875.4
22.5°	4143.9	4103.6	3911.2	3817.2	3776.9
25°	4067.8	4009.6	3794.8	3700.8	3678.5
27.5°	3982.8	3915.6	3687.4	3593.4	3566.6
30°	3893.3	3808.2	3566.6	3477.1	3427.9
32.5°	3781.4	3700.8	3450.2	3347.3	3293.6
35°	3674.0	3575.5	3329.4	3199.6	3145.9
37.5°	3544.2	3445.8	3190.7	3060.9	2998.3
40°	3405.5	3307.0	3056.4	2904.3	2823.7
42.5°	3253.3	3163.8	2908.8	2725.3	2568.7
45°	3083.3	3007.2	2752.1	2479.2	2161.4
47.5°	2926.7	2855.1	2595.5	2242.0	1915.3
50°	2761.1	2694.0	2434.4	2018.2	1749.7
52.5°	2577.6	2528.4	2259.9	1825.8	1611.0
55°	2403.1	2367.3	2085.4	1655.8	1485.7
57.5°	2219.6	2183.8	1910.8	1494.7	1360.4
60°	2049.6	2013.8	1736.3	1351.5	1244.1
62.5°	1879.5	1830.3	1566.3	1212.7	1123.2
65°	1691.6	1651.3	1387.3	1078.5	1020.3
67.5°	1503.6	1467.8	1221.7	953.2	912.9
70°	1315.7	1284.3	1051.6	832.4	810.0
72.5°	1132.2	1091.9	899.5	711.5	702.6
75°	939.8	908.4	729.4	581.8	563.9
77.5°	756.3	729.4	572.8	443.0	429.6
80°	577.3	550.4	411.7	322.2	335.6
82.5°	425.1	389.3	277.5	250.6	264.0
85°	259.6	228.2	179.0	170.1	170.1
87.5°	89.5	85.0	80.6	94.0	98.5
90°	13.4	62.7	107.4	134.3	143.2
92.5°	76.1	111.9	147.7	174.5	183.5
95°	143.2	192.4	219.3	322.2	349.1
97.5°	196.9	255.1	286.4	380.4	407.2
100°	250.6	304.3	402.8	452.0	483.3
102.5°	295.4	335.6	474.4	572.8	590.7
105°	335.6	349.1	501.2	671.3	711.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	402.8	358.0	537.0	729.4	801.0
115°	416.2	353.5	532.5	733.9	805.5
117.5°	416.2	353.5	519.1	733.9	805.5
120°	407.2	358.0	501.2	725.0	801.0
122.5°	398.3	349.1	483.3	707.1	783.1
125°	384.9	340.1	460.9	675.7	760.8
127.5°	362.5	349.1	438.6	635.5	720.5
130°	344.6	353.5	411.7	595.2	680.2
132.5°	331.2	344.6	384.9	550.4	626.5
135°	313.3	340.1	371.4	501.2	577.3
137.5°	299.8	326.7	349.1	456.5	519.1
140°	286.4	317.7	326.7	398.3	452.0
142.5°	268.5	304.3	308.8	371.4	393.8
145°	255.1	295.4	322.2	344.6	367.0
147.5°	241.7	277.5	313.3	317.7	340.1
150°	237.2	259.6	299.8	304.3	313.3
152.5°	232.7	250.6	277.5	304.3	308.8
155°	232.7	246.1	264.0	286.4	290.9
157.5°	228.2	246.1	255.1	273.0	277.5
160°	228.2	241.7	250.6	264.0	268.5
162.5°	228.2	241.7	246.1	259.6	264.0
165°	228.2	237.2	246.1	255.1	255.1
167.5°	228.2	237.2	241.7	250.6	250.6
170°	228.2	232.7	241.7	246.1	246.1
172.5°	223.8	232.7	237.2	246.1	246.1
175°	223.8	228.2	232.7	237.2	241.7
177.5°	214.8	228.2	232.7	237.2	232.7
180°	219.3	219.3	219.3	219.3	219.3



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	367.0	353.5	519.1	707.1	765.2
110°	389.3	358.0	532.5	720.5	792.1



(END OF REPORT)