

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: P520604

Luminaire Tested: **4WSLA-75-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: P520604  
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: 4WSLA-75-L830-UPL15-UNV-U  
Description: 4 FOOT, 750 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**

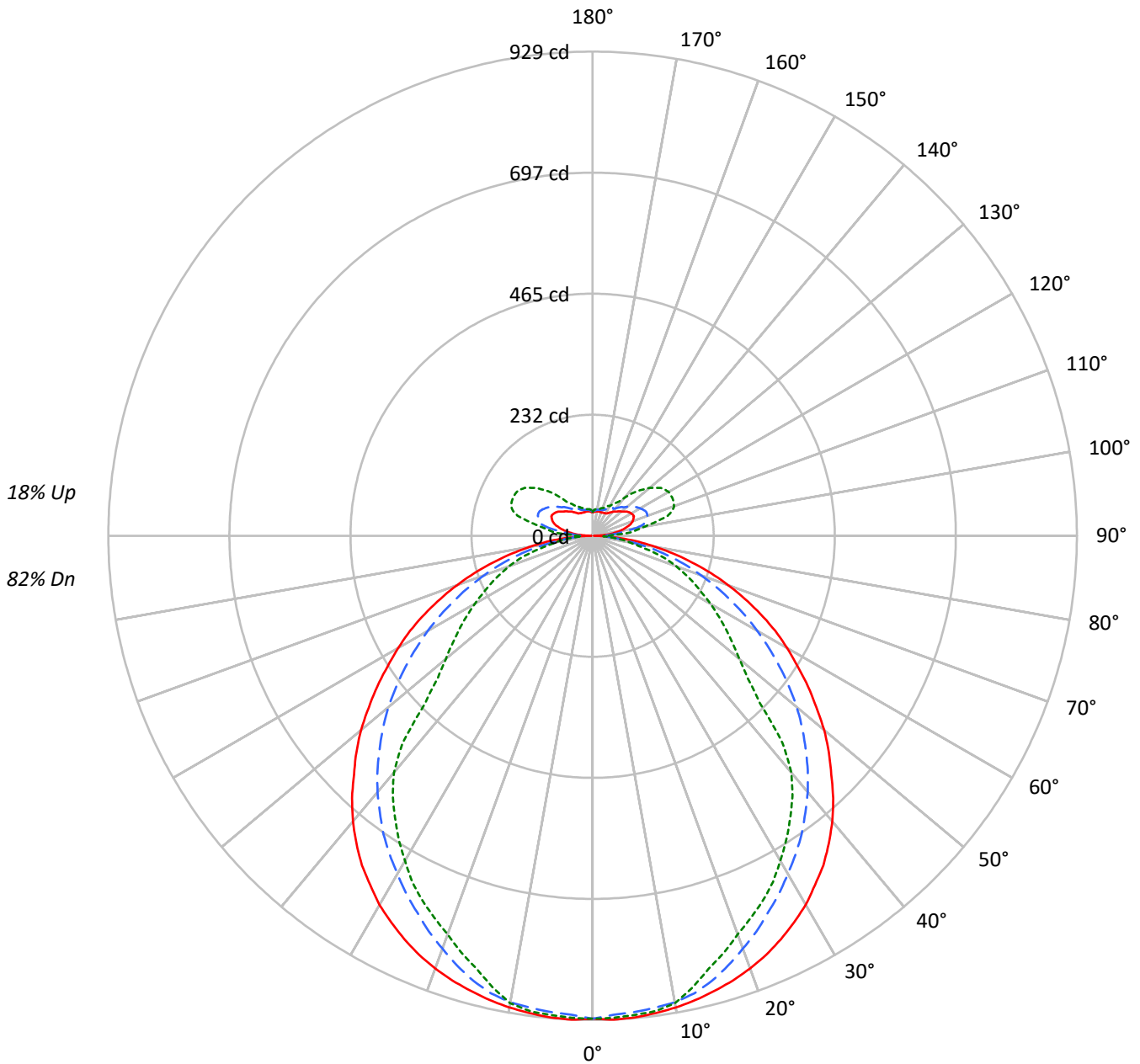
Lumens per Lamp: N/A  
Luminaire Lumens: 3001.0 lumens  
Efficiency: N/A  
Efficacy: 129.4 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 23.2  
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°	4987	4987	4987
5°	5011	4955	4986
10°	5023	4967	4976
15°	5037	4927	4791
20°	5060	4828	4661
25°	5073	4732	4587
30°	5081	4655	4474
35°	5070	4594	4341
40°	5025	4510	4166
45°	4928	4399	3455
50°	4855	4280	3077
55°	4736	4109	2928
60°	4633	3925	2813
65°	4523	3710	2729
70°	4348	3474	2677
75°	4105	3186	2462
80°	3756	2681	2185
85°	3365	2322	2205



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.8	2.9
10°-20°	249.5	8.3
20°-30°	372.3	12.4
30°-40°	443.6	14.8
40°-50°	441.2	14.7
50°-60°	378.2	12.6
60°-70°	284.8	9.5
70°-80°	164.9	5.5
80°-90°	49.6	1.7
90°-100°	53.2	1.8
100°-110°	109.3	3.6
110°-120°	115.6	3.9
120°-130°	96.4	3.2
130°-140°	67.3	2.2
140°-150°	41.9	1.4
150°-160°	26.0	0.9
160°-170°	14.6	0.5
170°-180°	4.7	0.2
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0°-30°	709.6	23.6
0°-40°	1153.2	38.4
0°-60°	1972.6	65.7
0°-90°	2471.9	82.4
90°-120°	278.1	9.3
90°-150°	483.7	16.1
90°-180°	529.0	17.6
0°-180°	3001.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	927	927	927	927	927	
5°	928	925	917	924	923	88
15°	904	903	884	869	860	255
25°	854	842	797	777	772	394
35°	772	751	699	672	661	482
45°	648	632	578	521	454	501
55°	505	497	438	348	312	451
65°	355	347	291	226	214	351
75°	197	191	153	122	118	209
85°	54	48	38	36	36	58
90°	3	13	23	28	30	6
95°	30	40	46	68	73	29
105°	70	73	105	141	149	73
115°	87	74	112	154	169	85
125°	81	71	97	142	160	72
135°	66	71	78	105	121	51
145°	54	62	68	72	77	34
155°	49	52	55	60	61	23
165°	48	50	52	54	54	14
175°	47	48	49	50	51	4
180°	46	46	46	46	46	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	926.6	926.6	926.6	926.6	926.6
2.5°	929.4	927.6	920.0	927.6	925.7
5°	927.6	924.7	917.2	923.8	922.9
7.5°	923.8	921.9	913.5	921.0	920.0
10°	919.1	916.3	908.8	914.4	910.6
12.5°	912.5	910.6	899.4	894.7	887.2
15°	904.1	903.1	884.3	869.3	859.9
17.5°	894.7	890.9	864.6	846.7	838.3
20°	883.4	877.8	843.0	822.3	813.9
22.5°	870.2	861.8	821.4	801.6	793.2
25°	854.3	842.0	796.9	777.2	772.5
27.5°	836.4	822.3	774.4	754.6	749.0
30°	817.6	799.8	749.0	730.2	719.9
32.5°	794.1	777.2	724.6	703.0	691.7
35°	771.6	750.9	699.2	671.9	660.7
37.5°	744.3	723.6	670.1	642.8	629.7
40°	715.2	694.5	641.9	609.9	593.0
42.5°	683.2	664.4	610.9	572.3	539.4
45°	647.5	631.5	578.0	520.6	453.9
47.5°	614.6	599.6	545.1	470.8	402.2
50°	579.8	565.7	511.2	423.8	367.5
52.5°	541.3	531.0	474.6	383.4	338.3
55°	504.7	497.1	437.9	347.7	312.0
57.5°	466.1	458.6	401.3	313.9	285.7
60°	430.4	422.9	364.6	283.8	261.3
62.5°	394.7	384.4	328.9	254.7	235.9
65°	355.2	346.8	291.3	226.5	214.3
67.5°	315.8	308.2	256.6	200.2	191.7
70°	276.3	269.7	220.8	174.8	170.1
72.5°	237.8	229.3	188.9	149.4	147.5
75°	197.4	190.8	153.2	122.2	118.4
77.5°	158.8	153.2	120.3	93.0	90.2
80°	121.2	115.6	86.5	67.7	70.5
82.5°	89.3	81.8	58.3	52.6	55.4
85°	54.5	47.9	37.6	35.7	35.7
87.5°	18.8	17.9	16.9	19.7	20.7
90°	2.8	13.2	22.6	28.2	30.1
92.5°	16.0	23.5	31.0	36.7	38.5
95°	30.1	40.4	46.0	67.7	73.3
97.5°	41.4	53.6	60.1	79.9	85.5
100°	52.6	63.9	84.6	94.9	101.5
102.5°	62.0	70.5	99.6	120.3	124.1
105°	70.5	73.3	105.3	141.0	149.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	84.6	75.2	112.8	153.2	168.2
115°	87.4	74.2	111.8	154.1	169.2
117.5°	87.4	74.2	109.0	154.1	169.2
120°	85.5	75.2	105.3	152.2	168.2
122.5°	83.6	73.3	101.5	148.5	164.5
125°	80.8	71.4	96.8	141.9	159.8
127.5°	76.1	73.3	92.1	133.4	151.3
130°	72.4	74.2	86.5	125.0	142.8
132.5°	69.5	72.4	80.8	115.6	131.6
135°	65.8	71.4	78.0	105.3	121.2
137.5°	63.0	68.6	73.3	95.9	109.0
140°	60.1	66.7	68.6	83.6	94.9
142.5°	56.4	63.9	64.8	78.0	82.7
145°	53.6	62.0	67.7	72.4	77.1
147.5°	50.7	58.3	65.8	66.7	71.4
150°	49.8	54.5	63.0	63.9	65.8
152.5°	48.9	52.6	58.3	63.9	64.8
155°	48.9	51.7	55.4	60.1	61.1
157.5°	47.9	51.7	53.6	57.3	58.3
160°	47.9	50.7	52.6	55.4	56.4
162.5°	47.9	50.7	51.7	54.5	55.4
165°	47.9	49.8	51.7	53.6	53.6
167.5°	47.9	49.8	50.7	52.6	52.6
170°	47.9	48.9	50.7	51.7	51.7
172.5°	47.0	48.9	49.8	51.7	51.7
175°	47.0	47.9	48.9	49.8	50.7
177.5°	45.1	47.9	48.9	49.8	48.9
180°	46.0	46.0	46.0	46.0	46.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	77.1	74.2	109.0	148.5	160.7
110°	81.8	75.2	111.8	151.3	166.3



(END OF REPORT)