

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: P520767

Luminaire Tested: **8WSLA-50-L940-UPL8-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: P520767  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-174-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 8WSLA-50-L940-UPL8-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

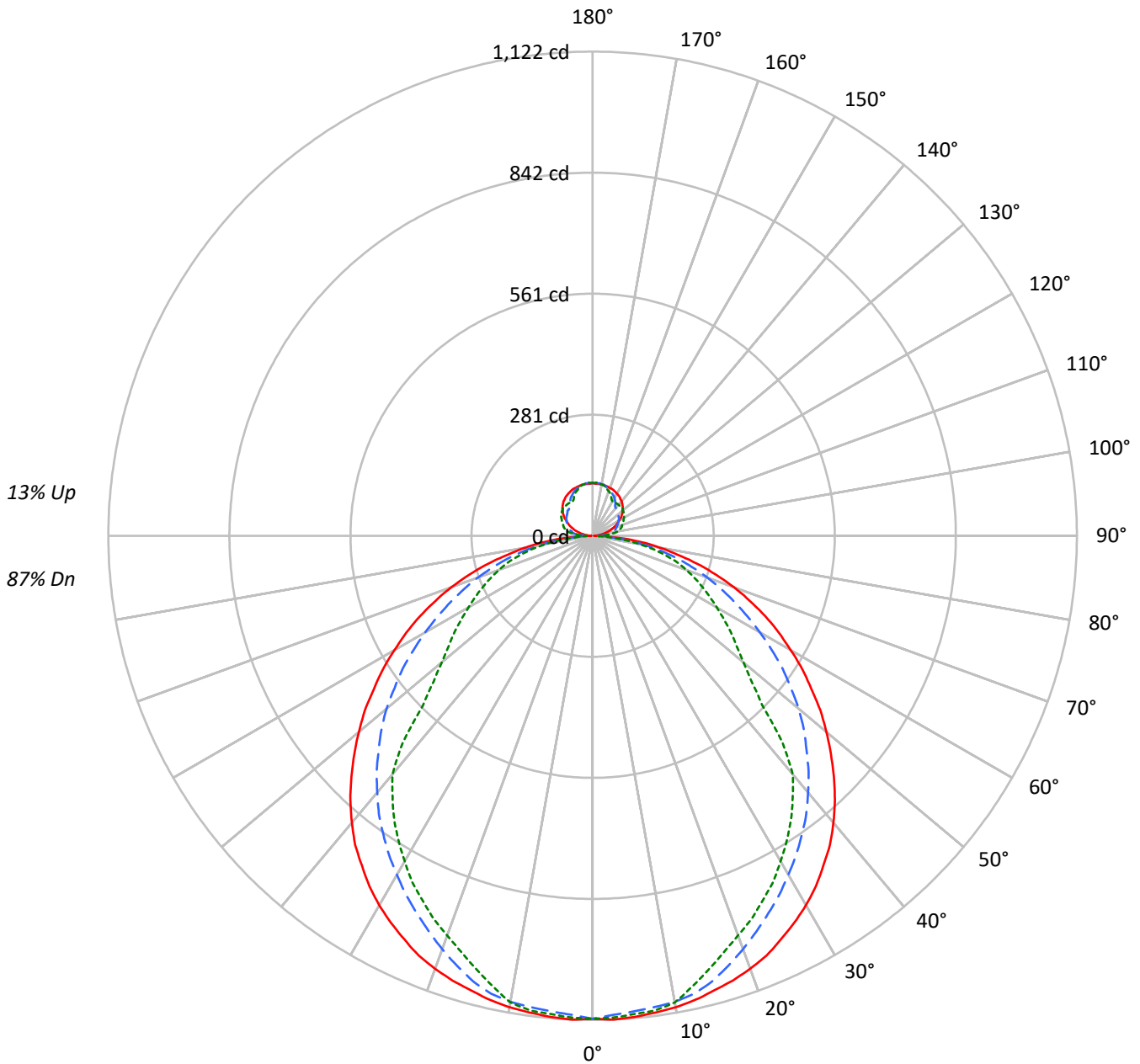
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3483.0 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 30.5  
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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87																			
1	106	101	97	93	102	98	94	90	91	88	85	85	83	80	79	78	76	73																			
2	96	88	82	76	92	85	79	74	80	75	70	74	70	67	70	66	64	61																			
3	88	78	70	63	84	75	68	62	70	64	59	66	61	56	62	58	54	51																			
4	80	69	60	54	77	67	59	53	62	56	50	59	53	48	55	50	46	44																			
5	74	61	53	46	71	60	51	45	56	49	44	53	47	42	50	45	40	38																			
6	68	55	47	40	66	54	46	40	51	44	38	48	42	37	45	40	36	33																			
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	32	30																			
8	59	46	37	32	57	44	37	31	42	35	30	40	34	29	38	32	28	26																			
9	55	42	34	28	53	41	33	28	39	32	27	37	31	26	35	30	26	24																			
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	32	27	23	22																			

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

	0°	45°	90°
0°	3012	3012	3012
5°	3023	2988	3006
10°	3032	2996	3001
15°	3037	2979	2898
20°	3057	2919	2822
25°	3065	2864	2768
30°	3072	2817	2707
35°	3063	2777	2634
40°	3049	2727	2534
45°	3009	2666	2114
50°	2959	2609	1908
55°	2901	2523	1836
60°	2851	2410	1785
65°	2809	2307	1784
70°	2736	2217	1812
75°	2612	2110	1825
80°	2445	1897	1697
85°	2238	1343	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	3.0
10°-20°	301.2	8.6
20°-30°	450.1	12.9
30°-40°	537.3	15.4
40°-50°	537.3	15.4
50°-60°	465.0	13.4
60°-70°	356.9	10.2
70°-80°	218.7	6.3
80°-90°	61.6	1.8
90°-100°	34.8	1.0
100°-110°	55.2	1.6
110°-120°	64.6	1.9
120°-130°	69.7	2.0
130°-140°	68.7	2.0
140°-150°	60.8	1.7
150°-160°	50.0	1.4
160°-170°	33.5	1.0
170°-180°	11.7	0.3
0°-30°	857.3	24.6
0°-40°	1394.5	40.0
0°-60°	2396.9	68.8
0°-90°	3034.1	87.1
90°-120°	154.6	4.4
90°-150°	353.8	10.2
90°-180°	449.0	12.9
0°-180°	3483.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1119	1116	1106	1114	1113	106
15°	1090	1089	1069	1050	1040	308
25°	1032	1019	965	939	932	476
35°	932	908	845	815	802	584
45°	791	768	700	638	556	610
55°	618	604	538	430	391	554
65°	441	425	362	292	280	436
75°	251	238	203	176	176	265
85°	72	60	44	37	37	76
90°	3	11	18	22	24	5
95°	13	27	37	39	39	13
105°	37	39	55	64	68	39
115°	61	52	64	74	79	60
125°	82	66	74	85	89	73
135°	98	89	82	90	95	76
145°	110	105	92	90	93	68
155°	116	114	108	103	101	53
165°	119	121	118	118	118	34
175°	121	122	122	124	124	12
180°	122	122	122	122	122	



TEST NUMBER: P520767

CATALOG NUMBER: 8WSLA-50-L940-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1119.2	1119.2	1119.2	1119.2	1119.2
2.5°	1122.4	1119.2	1111.1	1119.2	1117.6
5°	1119.2	1115.9	1106.3	1114.3	1112.7
7.5°	1114.3	1111.1	1101.5	1111.1	1109.5
10°	1109.5	1106.3	1096.6	1103.1	1098.2
12.5°	1101.5	1098.2	1087.0	1078.9	1069.3
15°	1090.2	1088.6	1069.3	1049.9	1040.3
17.5°	1080.5	1075.7	1045.1	1022.6	1011.3
20°	1067.6	1059.6	1019.3	993.6	985.5
22.5°	1053.1	1040.3	992.0	967.8	961.4
25°	1032.2	1019.3	964.6	938.8	932.4
27.5°	1011.3	995.2	937.2	911.4	905.0
30°	988.7	966.2	906.6	882.5	871.2
32.5°	963.0	940.4	877.6	850.2	837.4
35°	932.4	908.2	845.4	814.8	801.9
37.5°	903.4	877.6	813.2	779.4	761.7
40°	868.0	842.2	776.2	739.1	721.4
42.5°	830.9	806.8	740.7	695.7	652.2
45°	790.7	768.1	700.5	637.7	555.6
47.5°	748.8	729.5	663.5	578.1	499.2
50°	706.9	687.6	623.2	521.7	455.7
52.5°	665.1	649.0	578.1	475.0	420.3
55°	618.4	603.9	537.8	430.0	391.3
57.5°	576.5	562.0	491.1	392.9	360.7
60°	529.8	516.9	447.7	355.9	331.7
62.5°	486.3	471.8	404.2	323.7	306.0
65°	441.2	425.1	362.3	291.5	280.2
67.5°	394.5	378.4	322.1	262.5	256.0
70°	347.8	334.9	281.8	233.5	230.3
72.5°	299.5	285.0	241.5	206.1	206.1
75°	251.2	238.3	202.9	175.5	175.5
77.5°	201.3	194.8	162.6	143.3	144.9
80°	157.8	149.8	122.4	109.5	109.5
82.5°	115.9	106.3	82.1	72.5	75.7
85°	72.5	59.6	43.5	37.0	37.0
87.5°	22.5	17.7	12.9	14.5	14.5
90°	3.2	11.3	17.7	22.5	24.2
92.5°	8.1	20.9	25.8	30.6	32.2
95°	12.9	27.4	37.0	38.6	38.6
97.5°	17.7	30.6	45.1	51.5	51.5
100°	24.2	32.2	48.3	58.0	59.6
102.5°	30.6	35.4	51.5	61.2	64.4
105°	37.0	38.6	54.8	64.4	67.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	54.8	48.3	61.2	72.5	75.7
115°	61.2	51.5	64.4	74.1	78.9
117.5°	66.0	56.4	67.6	77.3	80.5
120°	70.9	59.6	69.2	80.5	83.7
122.5°	77.3	62.8	72.5	82.1	87.0
125°	82.1	66.0	74.1	85.3	88.6
127.5°	87.0	72.5	75.7	87.0	90.2
130°	90.2	78.9	77.3	88.6	91.8
132.5°	95.0	83.7	78.9	90.2	93.4
135°	98.2	88.6	82.1	90.2	95.0
137.5°	101.4	93.4	82.1	90.2	93.4
140°	104.7	98.2	83.7	90.2	93.4
142.5°	106.3	101.4	85.3	90.2	93.4
145°	109.5	104.7	91.8	90.2	93.4
147.5°	111.1	107.9	96.6	90.2	93.4
150°	112.7	111.1	101.4	91.8	91.8
152.5°	114.3	112.7	104.7	98.2	95.0
155°	115.9	114.3	107.9	103.1	101.4
157.5°	117.6	117.6	111.1	107.9	106.3
160°	117.6	119.2	114.3	111.1	109.5
162.5°	119.2	120.8	115.9	114.3	112.7
165°	119.2	120.8	117.6	117.6	117.6
167.5°	120.8	122.4	120.8	119.2	119.2
170°	120.8	122.4	120.8	120.8	120.8
172.5°	120.8	122.4	122.4	122.4	122.4
175°	120.8	122.4	122.4	124.0	124.0
177.5°	120.8	122.4	122.4	122.4	122.4
180°	122.4	122.4	122.4	122.4	122.4



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	43.5	41.9	56.4	67.6	70.9
110°	48.3	45.1	59.6	69.2	72.5



(END OF REPORT)