

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: P520646

Luminaire Tested: **8WSLA-100-L940-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: P520646  
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-100-L940-UPL15-UNV-U  
Description: 8 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

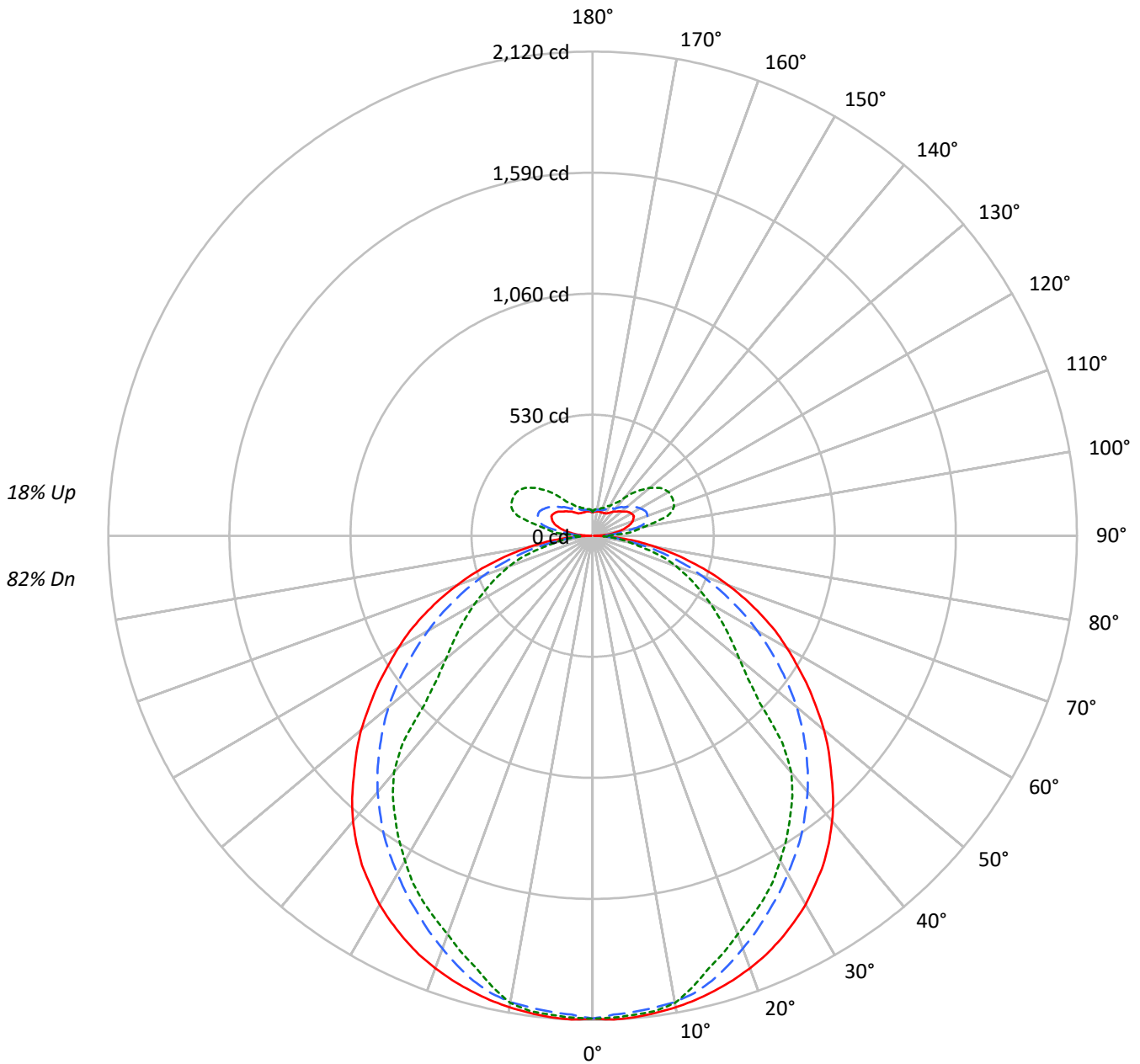
Lumens per Lamp: N/A  
Luminaire Lumens: 6846.0 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 63.4  
Input Voltage (V): NR  
Input Current (Ain): 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: P520646

CATALOG NUMBER: 8WSLA-100-L940-UPL15-UNV-U

### Luminous Intensity Polar Plot





TEST NUMBER: P520646

CATALOG NUMBER: 8WSLA-100-L940-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	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°	5688	5688	5688
5°	5716	5652	5687
10°	5729	5665	5676
15°	5746	5620	5465
20°	5771	5507	5317
25°	5786	5398	5233
30°	5796	5309	5103
35°	5782	5240	4951
40°	5731	5144	4752
45°	5621	5018	3941
50°	5538	4883	3509
55°	5401	4687	3339
60°	5285	4477	3208
65°	5160	4232	3112
70°	4959	3964	3053
75°	4681	3634	2808
80°	4286	3056	2492
85°	3838	2649	2516



TEST NUMBER: P520646

CATALOG NUMBER: 8WSLA-100-L940-UPL15-UNV-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.3	2.9
10°-20°	569.1	8.3
20°-30°	849.3	12.4
30°-40°	1012.0	14.8
40°-50°	1006.6	14.7
50°-60°	862.7	12.6
60°-70°	649.7	9.5
70°-80°	376.3	5.5
80°-90°	113.1	1.7
90°-100°	121.4	1.8
100°-110°	249.3	3.6
110°-120°	263.6	3.9
120°-130°	219.9	3.2
130°-140°	153.6	2.2
140°-150°	95.6	1.4
150°-160°	59.3	0.9
160°-170°	33.4	0.5
170°-180°	10.8	0.2
0°-30°	1618.7	23.6
0°-40°	2630.7	38.4
0°-60°	4500.0	65.7
0°-90°	5639.1	82.4
90°-120°	634.4	9.3
90°-150°	1103.5	16.1
90°-180°	1207.0	17.6
0°-180°	6846.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2114	2114	2114	2114	2114	
5°	2116	2110	2092	2107	2105	201
15°	2062	2060	2017	1983	1962	583
25°	1949	1921	1818	1773	1762	898
35°	1760	1713	1595	1533	1507	1099
45°	1477	1441	1318	1188	1036	1142
55°	1151	1134	999	793	712	1029
65°	810	791	665	517	489	801
75°	450	435	350	279	270	477
85°	124	109	86	82	82	133
90°	6	30	52	64	69	13
95°	69	92	105	154	167	66
105°	161	167	240	322	341	167
115°	199	169	255	352	386	194
125°	184	163	221	324	364	164
135°	150	163	178	240	277	117
145°	122	142	154	165	176	78
155°	112	118	126	137	139	51
165°	109	114	118	122	122	31
175°	107	109	112	114	116	10
180°	105	105	105	105	105	



TEST NUMBER: P520646

CATALOG NUMBER: 8WSLA-100-L940-UPL15-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2113.9	2113.9	2113.9	2113.9	2113.9
2.5°	2120.3	2116.0	2098.8	2116.0	2111.7
5°	2116.0	2109.6	2092.4	2107.4	2105.3
7.5°	2107.4	2103.1	2083.8	2101.0	2098.8
10°	2096.7	2090.3	2073.1	2086.0	2077.4
12.5°	2081.7	2077.4	2051.7	2041.0	2023.8
15°	2062.4	2060.3	2017.4	1983.1	1961.6
17.5°	2041.0	2032.4	1972.4	1931.6	1912.3
20°	2015.2	2002.4	1923.1	1875.9	1856.6
22.5°	1985.2	1965.9	1873.7	1828.7	1809.4
25°	1948.8	1920.9	1818.0	1773.0	1762.3
27.5°	1908.0	1875.9	1766.5	1721.5	1708.7
30°	1865.2	1824.4	1708.7	1665.8	1642.2
32.5°	1811.6	1773.0	1652.9	1603.6	1577.9
35°	1760.1	1713.0	1595.0	1532.9	1507.1
37.5°	1697.9	1650.8	1528.6	1466.4	1436.4
40°	1631.5	1584.3	1464.3	1391.4	1352.8
42.5°	1558.6	1515.7	1393.5	1305.6	1230.6
45°	1477.1	1440.7	1318.5	1187.7	1035.5
47.5°	1402.1	1367.8	1243.4	1074.1	917.6
50°	1322.8	1290.6	1166.3	966.9	838.3
52.5°	1234.9	1211.3	1082.7	874.7	771.8
55°	1151.3	1134.1	999.0	793.2	711.8
57.5°	1063.4	1046.2	915.4	716.1	651.7
60°	981.9	964.7	831.8	647.4	596.0
62.5°	900.4	876.8	750.4	581.0	538.1
65°	810.4	791.1	664.6	516.7	488.8
67.5°	720.3	703.2	585.3	456.6	437.3
70°	630.3	615.3	503.8	398.8	388.0
72.5°	542.4	523.1	430.9	340.9	336.6
75°	450.2	435.2	349.5	278.7	270.1
77.5°	362.3	349.5	274.4	212.2	205.8
80°	276.6	263.7	197.2	154.4	160.8
82.5°	203.7	186.5	132.9	120.1	126.5
85°	124.3	109.3	85.8	81.5	81.5
87.5°	42.9	40.7	38.6	45.0	47.2
90°	6.4	30.0	51.5	64.3	68.6
92.5°	36.4	53.6	70.7	83.6	87.9
95°	68.6	92.2	105.0	154.4	167.2
97.5°	94.3	122.2	137.2	182.2	195.1
100°	120.1	145.8	192.9	216.5	231.5
102.5°	141.5	160.8	227.3	274.4	283.0
105°	160.8	167.2	240.1	321.6	340.9



TEST NUMBER: P520646

CATALOG NUMBER: 8WSLA-100-L940-UPL15-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	192.9	171.5	257.3	349.5	383.8
115°	199.4	169.4	255.1	351.6	385.9
117.5°	199.4	169.4	248.7	351.6	385.9
120°	195.1	171.5	240.1	347.3	383.8
122.5°	190.8	167.2	231.5	338.7	375.2
125°	184.4	162.9	220.8	323.7	364.5
127.5°	173.7	167.2	210.1	304.4	345.2
130°	165.1	169.4	197.2	285.1	325.9
132.5°	158.6	165.1	184.4	263.7	300.1
135°	150.1	162.9	177.9	240.1	276.6
137.5°	143.6	156.5	167.2	218.7	248.7
140°	137.2	152.2	156.5	190.8	216.5
142.5°	128.6	145.8	147.9	177.9	188.7
145°	122.2	141.5	154.4	165.1	175.8
147.5°	115.8	132.9	150.1	152.2	162.9
150°	113.6	124.3	143.6	145.8	150.1
152.5°	111.5	120.1	132.9	145.8	147.9
155°	111.5	117.9	126.5	137.2	139.4
157.5°	109.3	117.9	122.2	130.8	132.9
160°	109.3	115.8	120.1	126.5	128.6
162.5°	109.3	115.8	117.9	124.3	126.5
165°	109.3	113.6	117.9	122.2	122.2
167.5°	109.3	113.6	115.8	120.1	120.1
170°	109.3	111.5	115.8	117.9	117.9
172.5°	107.2	111.5	113.6	117.9	117.9
175°	107.2	109.3	111.5	113.6	115.8
177.5°	102.9	109.3	111.5	113.6	111.5
180°	105.0	105.0	105.0	105.0	105.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	175.8	169.4	248.7	338.7	366.6
110°	186.5	171.5	255.1	345.2	379.5



(END OF REPORT)