

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: P520517

Luminaire Tested: **4WSLA-150-L850-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: P520517  
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-150-L850-UPL15-UNV-U  
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

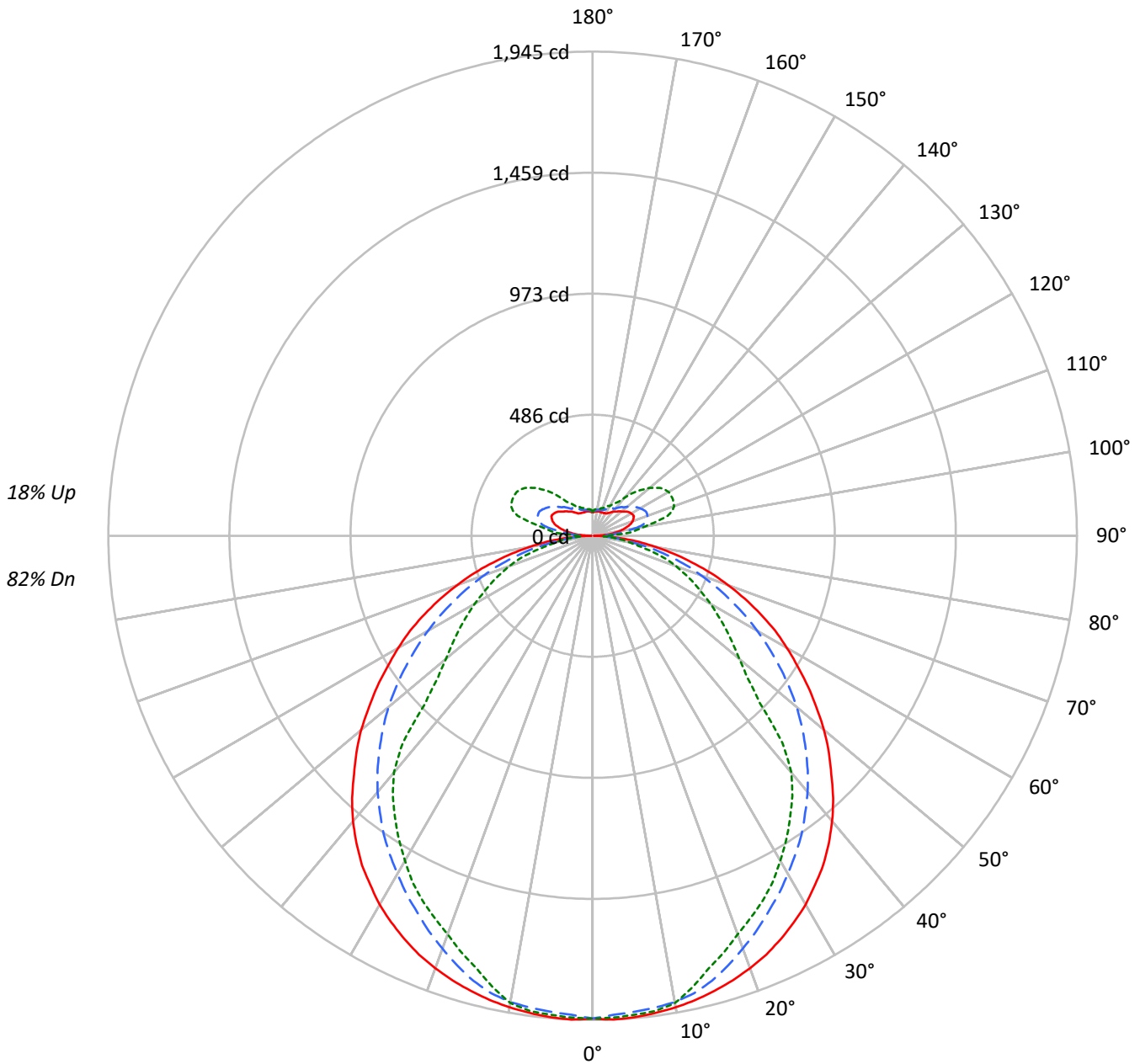
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6281.0 lumens  
Efficiency: N/A  
Efficacy: 131.7 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): 47.7  
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

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					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°	10438	10438	10438
5°	10488	10371	10435
10°	10513	10394	10416
15°	10543	10313	10028
20°	10589	10105	9756
25°	10617	9905	9601
30°	10634	9742	9363
35°	10610	9615	9085
40°	10516	9438	8720
45°	10315	9207	7231
50°	10161	8959	6440
55°	9910	8601	6127
60°	9697	8215	5886
65°	9468	7766	5712
70°	9100	7273	5602
75°	8590	6667	5153
80°	7863	5610	4572
85°	7046	4860	4613



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.8	2.9
10°-20°	522.1	8.3
20°-30°	779.2	12.4
30°-40°	928.5	14.8
40°-50°	923.5	14.7
50°-60°	791.5	12.6
60°-70°	596.1	9.5
70°-80°	345.2	5.5
80°-90°	103.7	1.7
90°-100°	111.4	1.8
100°-110°	228.7	3.6
110°-120°	241.9	3.9
120°-130°	201.8	3.2
130°-140°	141.0	2.2
140°-150°	87.7	1.4
150°-160°	54.4	0.9
160°-170°	30.6	0.5
170°-180°	9.9	0.2
0°-30°	1485.2	23.6
0°-40°	2413.6	38.4
0°-60°	4128.6	65.7
0°-90°	5173.7	82.4
90°-120°	582.0	9.3
90°-150°	1012.5	16.1
90°-180°	1107.0	17.6
0°-180°	6281.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1939	1939	1939	1939	1939	
5°	1941	1936	1920	1934	1932	185
15°	1892	1890	1851	1819	1800	535
25°	1788	1762	1668	1627	1617	824
35°	1615	1572	1463	1406	1383	1009
45°	1355	1322	1210	1090	950	1048
55°	1056	1040	917	728	653	944
65°	744	726	610	474	448	735
75°	413	399	321	256	248	438
85°	114	100	79	75	75	122
90°	6	28	47	59	63	12
95°	63	85	96	142	153	60
105°	148	153	220	295	313	153
115°	183	155	234	323	354	178
125°	169	150	203	297	334	150
135°	138	150	163	220	254	108
145°	112	130	142	152	161	71
155°	102	108	116	126	128	47
165°	100	104	108	112	112	28
175°	98	100	102	104	106	9
180°	96	96	96	96	96	



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CATALOG NUMBER: 4WSLA-150-L850-UPL15-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1939.4	1939.4	1939.4	1939.4	1939.4
2.5°	1945.3	1941.4	1925.6	1941.4	1937.4
5°	1941.4	1935.5	1919.7	1933.5	1931.5
7.5°	1933.5	1929.6	1911.9	1927.6	1925.6
10°	1923.7	1917.8	1902.0	1913.8	1906.0
12.5°	1909.9	1906.0	1882.4	1872.5	1856.8
15°	1892.2	1890.2	1850.9	1819.4	1799.7
17.5°	1872.5	1864.7	1809.6	1772.2	1754.5
20°	1848.9	1837.1	1764.3	1721.1	1703.4
22.5°	1821.4	1803.7	1719.1	1677.8	1660.1
25°	1787.9	1762.4	1668.0	1626.7	1616.8
27.5°	1750.6	1721.1	1620.8	1579.4	1567.6
30°	1711.2	1673.9	1567.6	1528.3	1506.7
32.5°	1662.1	1626.7	1516.5	1471.3	1447.7
35°	1614.9	1571.6	1463.4	1406.4	1382.8
37.5°	1557.8	1514.5	1402.4	1345.4	1317.8
40°	1496.8	1453.6	1343.4	1276.5	1241.1
42.5°	1430.0	1390.6	1278.5	1197.9	1129.0
45°	1355.2	1321.8	1209.7	1089.7	950.0
47.5°	1286.4	1254.9	1140.8	985.4	841.8
50°	1213.6	1184.1	1070.0	887.1	769.1
52.5°	1133.0	1111.3	993.3	802.5	708.1
55°	1056.2	1040.5	916.6	727.8	653.0
57.5°	975.6	959.9	839.9	657.0	597.9
60°	900.9	885.1	763.2	594.0	546.8
62.5°	826.1	804.5	688.4	533.0	493.7
65°	743.5	725.8	609.8	474.0	448.5
67.5°	660.9	645.2	537.0	419.0	401.3
70°	578.3	564.5	462.2	365.9	356.0
72.5°	497.6	479.9	395.4	312.7	308.8
75°	413.1	399.3	320.6	255.7	247.8
77.5°	332.4	320.6	251.8	194.7	188.8
80°	253.7	241.9	181.0	141.6	147.5
82.5°	186.9	171.1	122.0	110.1	116.0
85°	114.1	100.3	78.7	74.7	74.7
87.5°	39.3	37.4	35.4	41.3	43.3
90°	5.9	27.5	47.2	59.0	62.9
92.5°	33.4	49.2	64.9	76.7	80.6
95°	62.9	84.6	96.4	141.6	153.4
97.5°	86.5	112.1	125.9	167.2	179.0
100°	110.1	133.8	177.0	198.7	212.4
102.5°	129.8	147.5	208.5	251.8	259.6
105°	147.5	153.4	220.3	295.0	312.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	177.0	157.4	236.0	320.6	352.1
115°	182.9	155.4	234.1	322.6	354.0
117.5°	182.9	155.4	228.2	322.6	354.0
120°	179.0	157.4	220.3	318.6	352.1
122.5°	175.1	153.4	212.4	310.8	344.2
125°	169.2	149.5	202.6	297.0	334.4
127.5°	159.3	153.4	192.8	279.3	316.7
130°	151.5	155.4	181.0	261.6	299.0
132.5°	145.6	151.5	169.2	241.9	275.4
135°	137.7	149.5	163.3	220.3	253.7
137.5°	131.8	143.6	153.4	200.6	228.2
140°	125.9	139.7	143.6	175.1	198.7
142.5°	118.0	133.8	135.7	163.3	173.1
145°	112.1	129.8	141.6	151.5	161.3
147.5°	106.2	122.0	137.7	139.7	149.5
150°	104.2	114.1	131.8	133.8	137.7
152.5°	102.3	110.1	122.0	133.8	135.7
155°	102.3	108.2	116.0	125.9	127.9
157.5°	100.3	108.2	112.1	120.0	122.0
160°	100.3	106.2	110.1	116.0	118.0
162.5°	100.3	106.2	108.2	114.1	116.0
165°	100.3	104.2	108.2	112.1	112.1
167.5°	100.3	104.2	106.2	110.1	110.1
170°	100.3	102.3	106.2	108.2	108.2
172.5°	98.3	102.3	104.2	108.2	108.2
175°	98.3	100.3	102.3	104.2	106.2
177.5°	94.4	100.3	102.3	104.2	102.3
180°	96.4	96.4	96.4	96.4	96.4



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	161.3	155.4	228.2	310.8	336.3
110°	171.1	157.4	234.1	316.7	348.1



(END OF REPORT)