

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: P520521

Luminaire Tested: **4WSLA-150-L930-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: P520521  
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: 4WSLA-150-L930-UPL8-UNV-U  
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 90 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

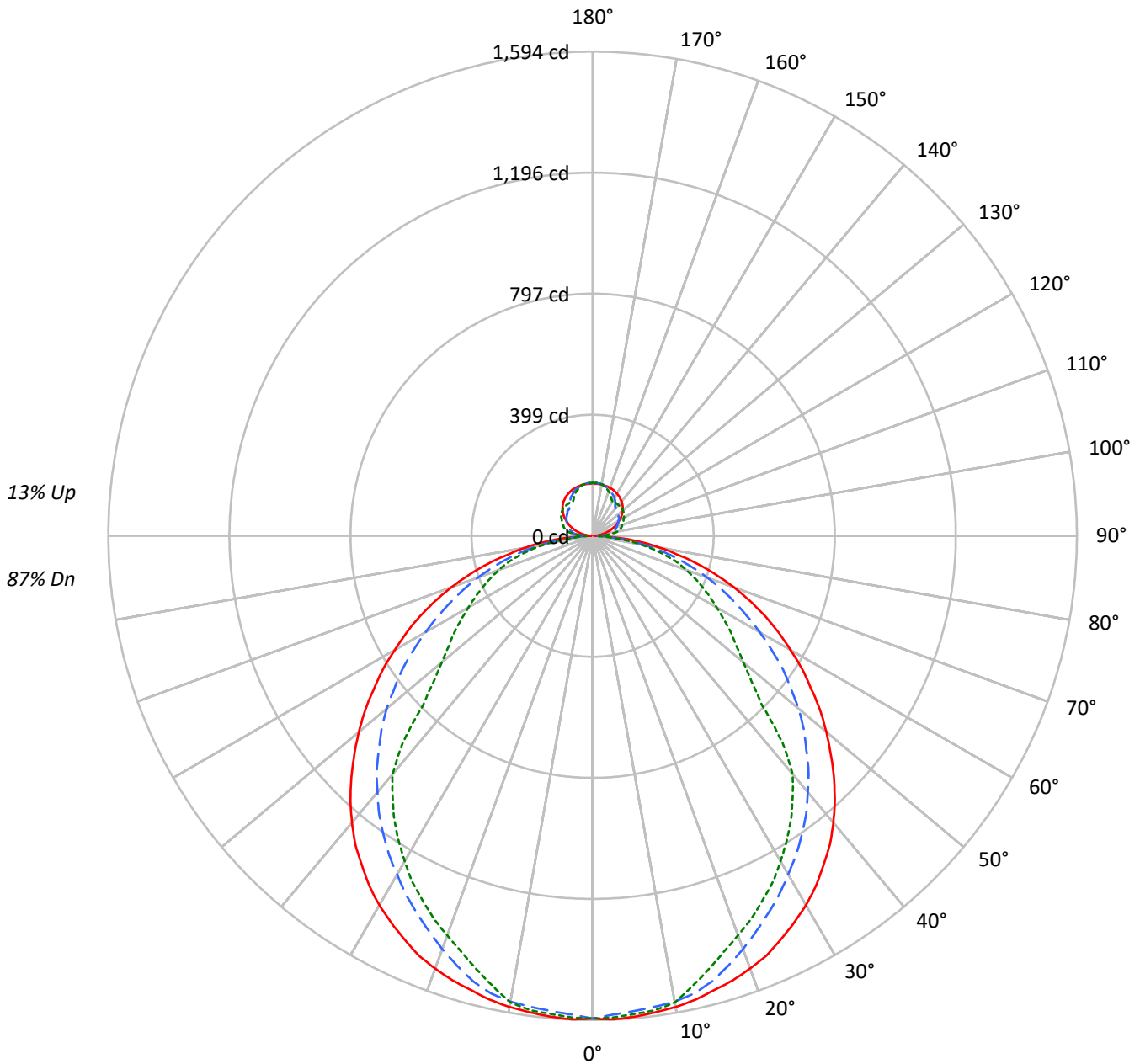
Lumens per Lamp: N/A  
Luminaire Lumens: 4946.0 lumens  
Efficiency: N/A  
Efficacy: 103.7 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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									
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°	8554	8554	8554
5°	8586	8487	8537
10°	8610	8511	8523
15°	8626	8460	8231
20°	8683	8290	8015
25°	8704	8134	7862
30°	8725	8001	7688
35°	8699	7887	7482
40°	8659	7744	7197
45°	8546	7571	6005
50°	8405	7410	5418
55°	8239	7167	5214
60°	8098	6843	5071
65°	7980	6552	5067
70°	7772	6297	5146
75°	7417	5991	5184
80°	6946	5387	4819
85°	6354	3810	3248



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.5	3.0
10°-20°	427.7	8.6
20°-30°	639.1	12.9
30°-40°	762.9	15.4
40°-50°	763.0	15.4
50°-60°	660.3	13.4
60°-70°	506.9	10.2
70°-80°	310.6	6.3
80°-90°	87.4	1.8
90°-100°	49.4	1.0
100°-110°	78.4	1.6
110°-120°	91.7	1.9
120°-130°	99.0	2.0
130°-140°	97.6	2.0
140°-150°	86.3	1.7
150°-160°	71.0	1.4
160°-170°	47.5	1.0
170°-180°	16.6	0.3
0°-30°	1217.3	24.6
0°-40°	1980.3	40.0
0°-60°	3403.6	68.8
0°-90°	4308.5	87.1
90°-120°	219.5	4.4
90°-150°	502.4	10.2
90°-180°	637.0	12.9
0°-180°	4946.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1589	1589	1589	1589	1589	
5°	1589	1585	1571	1582	1580	151
15°	1548	1546	1518	1491	1477	438
25°	1466	1448	1370	1333	1324	676
35°	1324	1290	1200	1157	1139	829
45°	1123	1091	995	906	789	866
55°	878	858	764	611	556	787
65°	627	604	514	414	398	619
75°	357	338	288	249	249	376
85°	103	85	62	53	53	108
90°	5	16	25	32	34	7
95°	18	39	53	55	55	18
105°	53	55	78	92	96	55
115°	87	73	92	105	112	85
125°	117	94	105	121	126	104
135°	140	126	117	128	135	108
145°	156	149	130	128	133	97
155°	165	162	153	146	144	76
165°	169	172	167	167	167	48
175°	172	174	174	176	176	16
180°	174	174	174	174	174	



TEST NUMBER: P520521

CATALOG NUMBER: 4WSLA-150-L930-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1589.3	1589.3	1589.3	1589.3	1589.3
2.5°	1593.8	1589.3	1577.8	1589.3	1587.0
5°	1589.3	1584.7	1571.0	1582.4	1580.1
7.5°	1582.4	1577.8	1564.1	1577.8	1575.5
10°	1575.5	1571.0	1557.3	1566.4	1559.5
12.5°	1564.1	1559.5	1543.5	1532.1	1518.4
15°	1548.1	1545.8	1518.4	1490.9	1477.2
17.5°	1534.4	1527.5	1484.1	1452.1	1436.1
20°	1516.1	1504.7	1447.5	1410.9	1399.5
22.5°	1495.5	1477.2	1408.6	1374.3	1365.2
25°	1465.8	1447.5	1369.7	1333.2	1324.0
27.5°	1436.1	1413.2	1330.9	1294.3	1285.1
30°	1404.0	1372.0	1287.4	1253.1	1237.1
32.5°	1367.5	1335.4	1246.3	1207.4	1189.1
35°	1324.0	1289.7	1200.5	1157.1	1138.8
37.5°	1282.8	1246.3	1154.8	1106.8	1081.6
40°	1232.5	1196.0	1102.2	1049.6	1024.4
42.5°	1179.9	1145.6	1051.9	987.9	926.1
45°	1122.8	1090.8	994.7	905.5	788.9
47.5°	1063.3	1035.9	942.1	820.9	708.9
50°	1003.9	976.4	885.0	740.9	647.1
52.5°	944.4	921.5	820.9	674.6	596.8
55°	878.1	857.5	763.8	610.6	555.7
57.5°	818.6	798.1	697.4	558.0	512.2
60°	752.3	734.0	635.7	505.4	471.1
62.5°	690.6	670.0	574.0	459.6	434.5
65°	626.6	603.7	514.5	413.9	397.9
67.5°	560.2	537.4	457.3	372.7	363.6
70°	493.9	475.6	400.2	331.6	327.0
72.5°	425.3	404.7	343.0	292.7	292.7
75°	356.7	338.4	288.1	249.3	249.3
77.5°	285.8	276.7	231.0	203.5	205.8
80°	224.1	212.7	173.8	155.5	155.5
82.5°	164.6	150.9	116.6	102.9	107.5
85°	102.9	84.6	61.7	52.6	52.6
87.5°	32.0	25.2	18.3	20.6	20.6
90°	4.6	16.0	25.2	32.0	34.3
92.5°	11.4	29.7	36.6	43.4	45.7
95°	18.3	38.9	52.6	54.9	54.9
97.5°	25.2	43.4	64.0	73.2	73.2
100°	34.3	45.7	68.6	82.3	84.6
102.5°	43.4	50.3	73.2	86.9	91.5
105°	52.6	54.9	77.7	91.5	96.0



TEST NUMBER: P520521

CATALOG NUMBER: 4WSLA-150-L930-UPL8-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	77.7	68.6	86.9	102.9	107.5
115°	86.9	73.2	91.5	105.2	112.0
117.5°	93.8	80.0	96.0	109.8	114.3
120°	100.6	84.6	98.3	114.3	118.9
122.5°	109.8	89.2	102.9	116.6	123.5
125°	116.6	93.8	105.2	121.2	125.8
127.5°	123.5	102.9	107.5	123.5	128.1
130°	128.1	112.0	109.8	125.8	130.3
132.5°	134.9	118.9	112.0	128.1	132.6
135°	139.5	125.8	116.6	128.1	134.9
137.5°	144.1	132.6	116.6	128.1	132.6
140°	148.6	139.5	118.9	128.1	132.6
142.5°	150.9	144.1	121.2	128.1	132.6
145°	155.5	148.6	130.3	128.1	132.6
147.5°	157.8	153.2	137.2	128.1	132.6
150°	160.1	157.8	144.1	130.3	130.3
152.5°	162.4	160.1	148.6	139.5	134.9
155°	164.6	162.4	153.2	146.3	144.1
157.5°	166.9	166.9	157.8	153.2	150.9
160°	166.9	169.2	162.4	157.8	155.5
162.5°	169.2	171.5	164.6	162.4	160.1
165°	169.2	171.5	166.9	166.9	166.9
167.5°	171.5	173.8	171.5	169.2	169.2
170°	171.5	173.8	171.5	171.5	171.5
172.5°	171.5	173.8	173.8	173.8	173.8
175°	171.5	173.8	173.8	176.1	176.1
177.5°	171.5	173.8	173.8	173.8	173.8
180°	173.8	173.8	173.8	173.8	173.8



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	61.7	59.5	80.0	96.0	100.6
110°	68.6	64.0	84.6	98.3	102.9



(END OF REPORT)