

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: P520530

Luminaire Tested: **4WSLA-150-L950-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: P520530  
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-L950-UPL8-UNV-U  
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

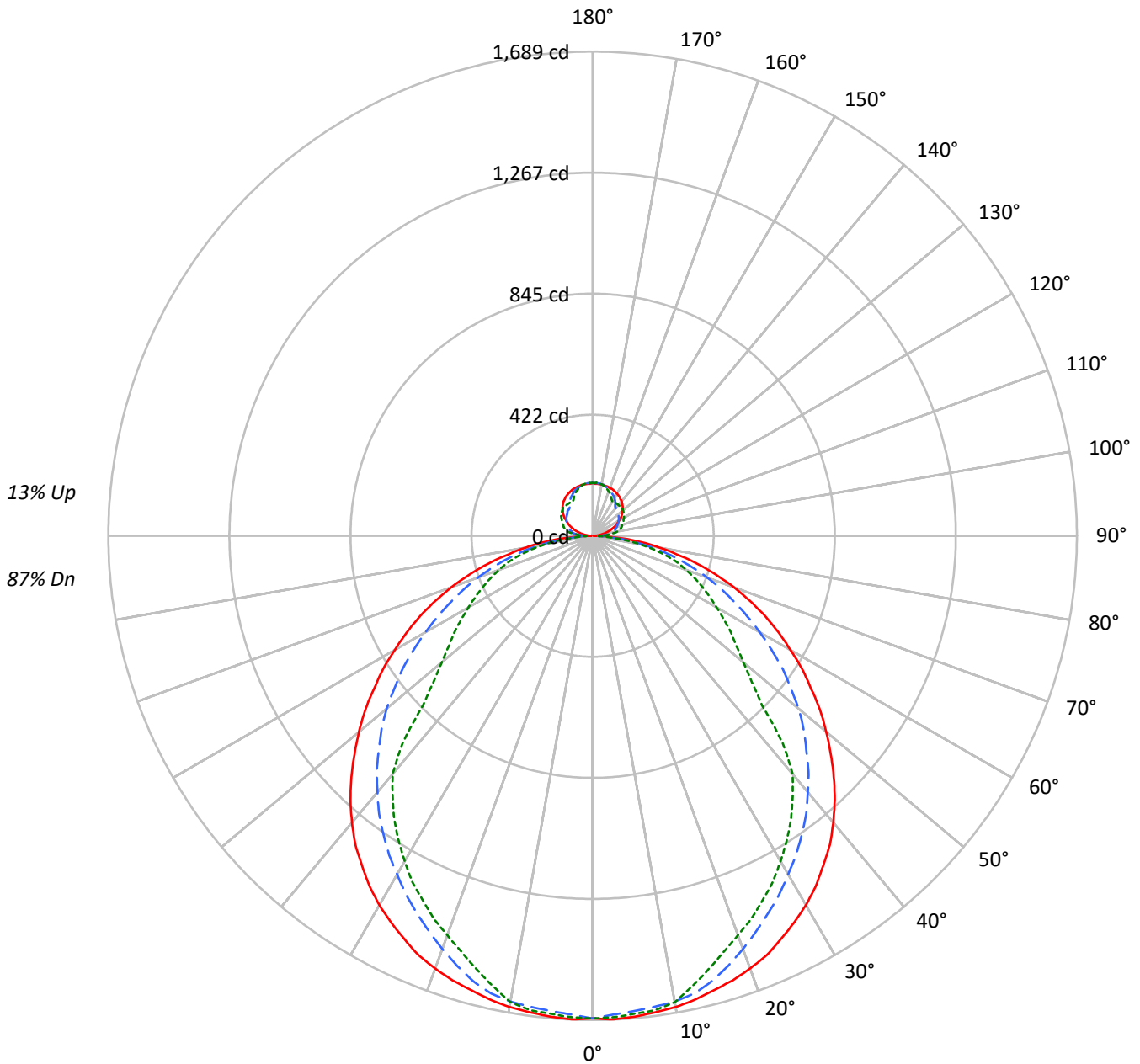
Lumens per Lamp: N/A  
Luminaire Lumens: 5240.0 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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°	9062	9062	9062
5°	9096	8992	9044
10°	9122	9016	9029
15°	9138	8963	8720
20°	9199	8783	8492
25°	9222	8618	8330
30°	9244	8476	8145
35°	9216	8357	7927
40°	9174	8204	7625
45°	9054	8021	6361
50°	8905	7850	5740
55°	8729	7593	5524
60°	8579	7249	5372
65°	8453	6942	5368
70°	8235	6672	5451
75°	7858	6348	5492
80°	7358	5706	5105
85°	6731	4039	3440



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.4	3.0
10°-20°	453.2	8.6
20°-30°	677.1	12.9
30°-40°	808.3	15.4
40°-50°	808.4	15.4
50°-60°	699.6	13.4
60°-70°	537.0	10.2
70°-80°	329.0	6.3
80°-90°	92.6	1.8
90°-100°	52.3	1.0
100°-110°	83.1	1.6
110°-120°	97.2	1.9
120°-130°	104.9	2.0
130°-140°	103.4	2.0
140°-150°	91.4	1.7
150°-160°	75.2	1.4
160°-170°	50.4	1.0
170°-180°	17.5	0.3
0°-30°	1289.7	24.6
0°-40°	2098.0	40.0
0°-60°	3605.9	68.8
0°-90°	4564.6	87.1
90°-120°	232.6	4.4
90°-150°	532.3	10.2
90°-180°	675.0	12.9
0°-180°	5240.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1684	1684	1684	1684	1684	
5°	1684	1679	1664	1676	1674	160
15°	1640	1638	1609	1580	1565	464
25°	1553	1534	1451	1412	1403	716
35°	1403	1366	1272	1226	1206	878
45°	1190	1156	1054	959	836	917
55°	930	908	809	647	589	834
65°	664	640	545	438	422	656
75°	378	359	305	264	264	399
85°	109	90	65	56	56	114
90°	5	17	27	34	36	8
95°	19	41	56	58	58	19
105°	56	58	82	97	102	58
115°	92	78	97	111	119	90
125°	124	99	111	128	133	110
135°	148	133	124	136	143	114
145°	165	158	138	136	140	103
155°	174	172	162	155	153	80
165°	179	182	177	177	177	51
175°	182	184	184	186	186	17
180°	184	184	184	184	184	



TEST NUMBER: P520530

CATALOG NUMBER: 4WSLA-150-L950-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1683.7	1683.7	1683.7	1683.7	1683.7
2.5°	1688.6	1683.7	1671.6	1683.7	1681.3
5°	1683.7	1678.9	1664.4	1676.5	1674.0
7.5°	1676.5	1671.6	1657.1	1671.6	1669.2
10°	1669.2	1664.4	1649.8	1659.5	1652.2
12.5°	1657.1	1652.2	1635.3	1623.2	1608.6
15°	1640.1	1637.7	1608.6	1579.6	1565.0
17.5°	1625.6	1618.3	1572.3	1538.4	1521.4
20°	1606.2	1594.1	1533.5	1494.8	1482.7
22.5°	1584.4	1565.0	1492.3	1456.0	1446.3
25°	1552.9	1533.5	1451.2	1412.4	1402.7
27.5°	1521.4	1497.2	1410.0	1371.2	1361.5
30°	1487.5	1453.6	1363.9	1327.6	1310.6
32.5°	1448.7	1414.8	1320.3	1279.2	1259.8
35°	1402.7	1366.4	1271.9	1225.9	1206.5
37.5°	1359.1	1320.3	1223.4	1172.6	1145.9
40°	1305.8	1267.0	1167.7	1112.0	1085.3
42.5°	1250.1	1213.7	1114.4	1046.6	981.2
45°	1189.5	1155.6	1053.8	959.4	835.8
47.5°	1126.5	1097.5	998.1	869.7	751.0
50°	1063.5	1034.5	937.6	784.9	685.6
52.5°	1000.6	976.3	869.7	714.7	632.3
55°	930.3	908.5	809.2	646.8	588.7
57.5°	867.3	845.5	738.9	591.1	542.7
60°	797.0	777.7	673.5	535.4	499.1
62.5°	731.6	709.8	608.1	487.0	460.3
65°	663.8	639.6	545.1	438.5	421.5
67.5°	593.5	569.3	484.5	394.9	385.2
70°	523.3	503.9	424.0	351.3	346.4
72.5°	450.6	428.8	363.4	310.1	310.1
75°	377.9	358.6	305.3	264.1	264.1
77.5°	302.8	293.1	244.7	215.6	218.0
80°	237.4	225.3	184.1	164.7	164.7
82.5°	174.4	159.9	123.6	109.0	113.9
85°	109.0	89.6	65.4	55.7	55.7
87.5°	33.9	26.6	19.4	21.8	21.8
90°	4.8	17.0	26.6	33.9	36.3
92.5°	12.1	31.5	38.8	46.0	48.5
95°	19.4	41.2	55.7	58.1	58.1
97.5°	26.6	46.0	67.8	77.5	77.5
100°	36.3	48.5	72.7	87.2	89.6
102.5°	46.0	53.3	77.5	92.1	96.9
105°	55.7	58.1	82.4	96.9	101.8



TEST NUMBER: P520530

CATALOG NUMBER: 4WSLA-150-L950-UPL8-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	82.4	72.7	92.1	109.0	113.9
115°	92.1	77.5	96.9	111.4	118.7
117.5°	99.3	84.8	101.8	116.3	121.1
120°	106.6	89.6	104.2	121.1	126.0
122.5°	116.3	94.5	109.0	123.6	130.8
125°	123.6	99.3	111.4	128.4	133.2
127.5°	130.8	109.0	113.9	130.8	135.7
130°	135.7	118.7	116.3	133.2	138.1
132.5°	142.9	126.0	118.7	135.7	140.5
135°	147.8	133.2	123.6	135.7	142.9
137.5°	152.6	140.5	123.6	135.7	140.5
140°	157.5	147.8	126.0	135.7	140.5
142.5°	159.9	152.6	128.4	135.7	140.5
145°	164.7	157.5	138.1	135.7	140.5
147.5°	167.2	162.3	145.4	135.7	140.5
150°	169.6	167.2	152.6	138.1	138.1
152.5°	172.0	169.6	157.5	147.8	142.9
155°	174.4	172.0	162.3	155.0	152.6
157.5°	176.9	176.9	167.2	162.3	159.9
160°	176.9	179.3	172.0	167.2	164.7
162.5°	179.3	181.7	174.4	172.0	169.6
165°	179.3	181.7	176.9	176.9	176.9
167.5°	181.7	184.1	181.7	179.3	179.3
170°	181.7	184.1	181.7	181.7	181.7
172.5°	181.7	184.1	184.1	184.1	184.1
175°	181.7	184.1	184.1	186.5	186.5
177.5°	181.7	184.1	184.1	184.1	184.1
180°	184.1	184.1	184.1	184.1	184.1



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	65.4	63.0	84.8	101.8	106.6
110°	72.7	67.8	89.6	104.2	109.0



(END OF REPORT)