

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: P520524

Luminaire Tested: **4WSLA-150-L935-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: P520524  
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-L935-UPL8-UNV-U  
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 90 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

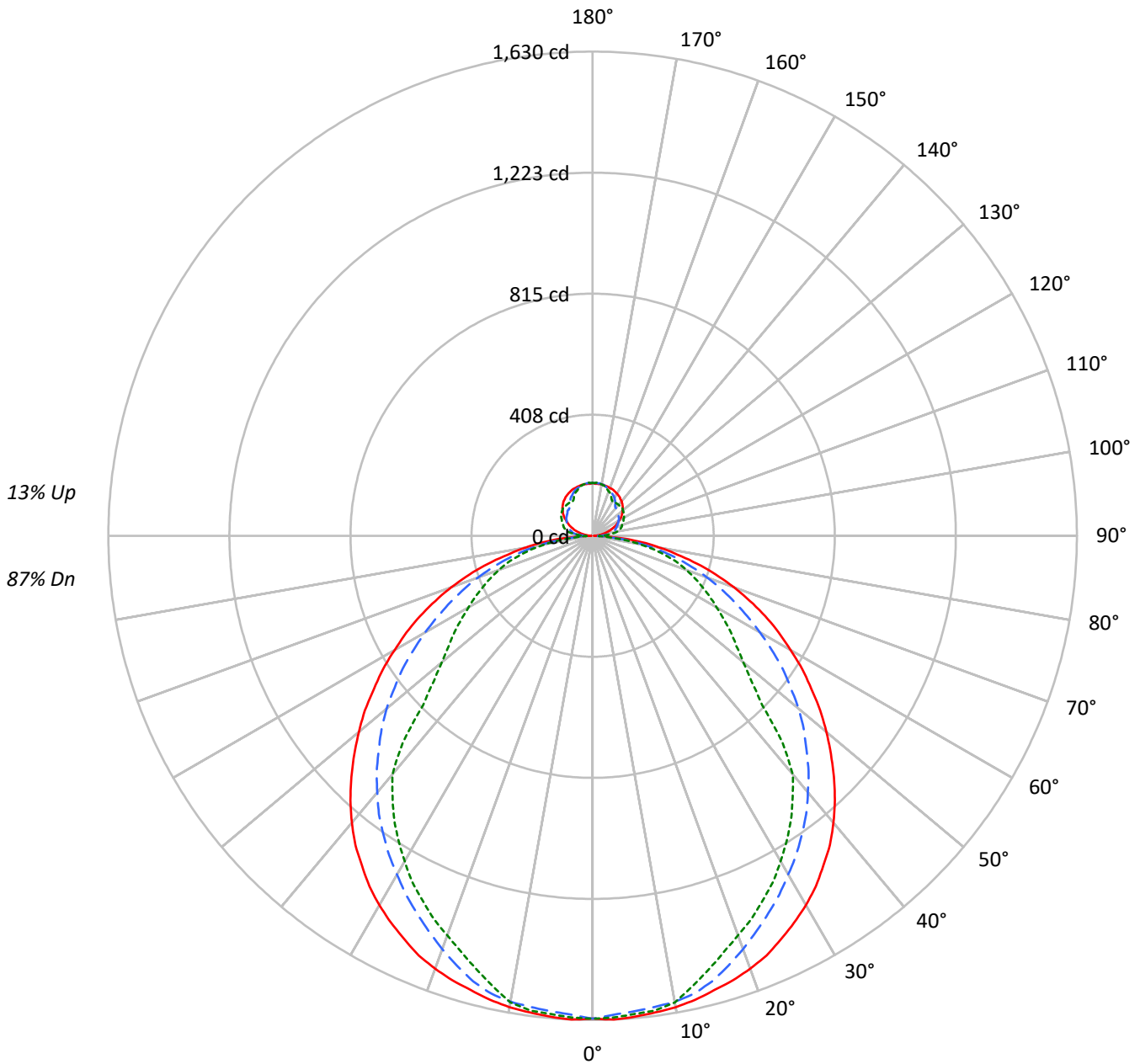
Lumens per Lamp: N/A  
Luminaire Lumens: 5059.0 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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					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	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°	8749	8749	8749
5°	8782	8681	8732
10°	8807	8705	8718
15°	8823	8654	8419
20°	8881	8480	8198
25°	8903	8320	8042
30°	8925	8183	7864
35°	8898	8068	7653
40°	8857	7921	7362
45°	8741	7744	6142
50°	8597	7579	5542
55°	8428	7330	5333
60°	8283	6999	5186
65°	8162	6702	5183
70°	7950	6441	5264
75°	7588	6128	5300
80°	7104	5511	4928
85°	6502	3903	3322



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.9	3.0
10°-20°	437.5	8.6
20°-30°	653.7	12.9
30°-40°	780.4	15.4
40°-50°	780.4	15.4
50°-60°	675.4	13.4
60°-70°	518.4	10.2
70°-80°	317.7	6.3
80°-90°	89.4	1.8
90°-100°	50.5	1.0
100°-110°	80.2	1.6
110°-120°	93.8	1.9
120°-130°	101.3	2.0
130°-140°	99.8	2.0
140°-150°	88.3	1.7
150°-160°	72.6	1.4
160°-170°	48.6	1.0
170°-180°	16.9	0.3
0°-30°	1245.1	24.6
0°-40°	2025.5	40.0
0°-60°	3481.4	68.8
0°-90°	4406.9	87.1
90°-120°	224.6	4.4
90°-150°	513.9	10.2
90°-180°	652.0	12.9
0°-180°	5059.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1626	1626	1626	1626	1626	
5°	1626	1621	1607	1619	1616	155
15°	1584	1581	1553	1525	1511	448
25°	1499	1481	1401	1364	1354	692
35°	1354	1319	1228	1184	1165	848
45°	1148	1116	1017	926	807	886
55°	898	877	781	624	568	805
65°	641	618	526	423	407	633
75°	365	346	295	255	255	385
85°	105	86	63	54	54	110
90°	5	16	26	33	35	7
95°	19	40	54	56	56	18
105°	54	56	80	94	98	56
115°	89	75	94	108	115	87
125°	119	96	108	124	129	106
135°	143	129	119	131	138	110
145°	159	152	133	131	136	99
155°	168	166	157	150	147	78
165°	173	175	171	171	171	49
175°	175	178	178	180	180	17
180°	178	178	178	178	178	



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CATALOG NUMBER: 4WSLA-150-L935-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1625.6	1625.6	1625.6	1625.6	1625.6
2.5°	1630.3	1625.6	1613.9	1625.6	1623.2
5°	1625.6	1620.9	1606.9	1618.6	1616.2
7.5°	1618.6	1613.9	1599.8	1613.9	1611.5
10°	1611.5	1606.9	1592.8	1602.2	1595.2
12.5°	1599.8	1595.2	1578.8	1567.1	1553.1
15°	1583.5	1581.1	1553.1	1525.0	1511.0
17.5°	1569.4	1562.4	1518.0	1485.2	1468.9
20°	1550.7	1539.0	1480.6	1443.1	1431.4
22.5°	1529.7	1511.0	1440.8	1405.7	1396.4
25°	1499.3	1480.6	1401.0	1363.6	1354.3
27.5°	1468.9	1445.5	1361.3	1323.9	1314.5
30°	1436.1	1403.4	1316.8	1281.7	1265.4
32.5°	1398.7	1366.0	1274.7	1235.0	1216.3
35°	1354.3	1319.2	1228.0	1183.5	1164.8
37.5°	1312.2	1274.7	1181.2	1132.1	1106.3
40°	1260.7	1223.3	1127.4	1073.6	1047.9
42.5°	1206.9	1171.8	1075.9	1010.4	947.3
45°	1148.4	1115.7	1017.4	926.2	806.9
47.5°	1087.6	1059.5	963.7	839.7	725.1
50°	1026.8	998.7	905.2	757.8	661.9
52.5°	966.0	942.6	839.7	690.0	610.5
55°	898.2	877.1	781.2	624.5	568.4
57.5°	837.3	816.3	713.4	570.7	523.9
60°	769.5	750.8	650.2	516.9	481.8
62.5°	706.4	685.3	587.1	470.1	444.4
65°	640.9	617.5	526.3	423.4	407.0
67.5°	573.0	549.7	467.8	381.3	371.9
70°	505.2	486.5	409.3	339.1	334.5
72.5°	435.0	414.0	350.8	299.4	299.4
75°	364.9	346.2	294.7	254.9	254.9
77.5°	292.4	283.0	236.2	208.2	210.5
80°	229.2	217.5	177.8	159.0	159.0
82.5°	168.4	154.4	119.3	105.3	109.9
85°	105.3	86.5	63.2	53.8	53.8
87.5°	32.7	25.7	18.7	21.1	21.1
90°	4.7	16.4	25.7	32.7	35.1
92.5°	11.7	30.4	37.4	44.4	46.8
95°	18.7	39.8	53.8	56.1	56.1
97.5°	25.7	44.4	65.5	74.8	74.8
100°	35.1	46.8	70.2	84.2	86.5
102.5°	44.4	51.5	74.8	88.9	93.6
105°	53.8	56.1	79.5	93.6	98.2



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CATALOG NUMBER: 4WSLA-150-L935-UPL8-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	79.5	70.2	88.9	105.3	109.9
115°	88.9	74.8	93.6	107.6	114.6
117.5°	95.9	81.9	98.2	112.3	116.9
120°	102.9	86.5	100.6	116.9	121.6
122.5°	112.3	91.2	105.3	119.3	126.3
125°	119.3	95.9	107.6	124.0	128.6
127.5°	126.3	105.3	109.9	126.3	131.0
130°	131.0	114.6	112.3	128.6	133.3
132.5°	138.0	121.6	114.6	131.0	135.7
135°	142.7	128.6	119.3	131.0	138.0
137.5°	147.4	135.7	119.3	131.0	135.7
140°	152.0	142.7	121.6	131.0	135.7
142.5°	154.4	147.4	124.0	131.0	135.7
145°	159.0	152.0	133.3	131.0	135.7
147.5°	161.4	156.7	140.3	131.0	135.7
150°	163.7	161.4	147.4	133.3	133.3
152.5°	166.1	163.7	152.0	142.7	138.0
155°	168.4	166.1	156.7	149.7	147.4
157.5°	170.7	170.7	161.4	156.7	154.4
160°	170.7	173.1	166.1	161.4	159.0
162.5°	173.1	175.4	168.4	166.1	163.7
165°	173.1	175.4	170.7	170.7	170.7
167.5°	175.4	177.8	175.4	173.1	173.1
170°	175.4	177.8	175.4	175.4	175.4
172.5°	175.4	177.8	177.8	177.8	177.8
175°	175.4	177.8	177.8	180.1	180.1
177.5°	175.4	177.8	177.8	177.8	177.8
180°	177.8	177.8	177.8	177.8	177.8



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	63.2	60.8	81.9	98.2	102.9
110°	70.2	65.5	86.5	100.6	105.3



(END OF REPORT)