

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: P520601

Luminaire Tested: **4WSLA-50-L950-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: P520601
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-50-L950-UPL15-UNV-U
Description: 4 FOOT, 500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

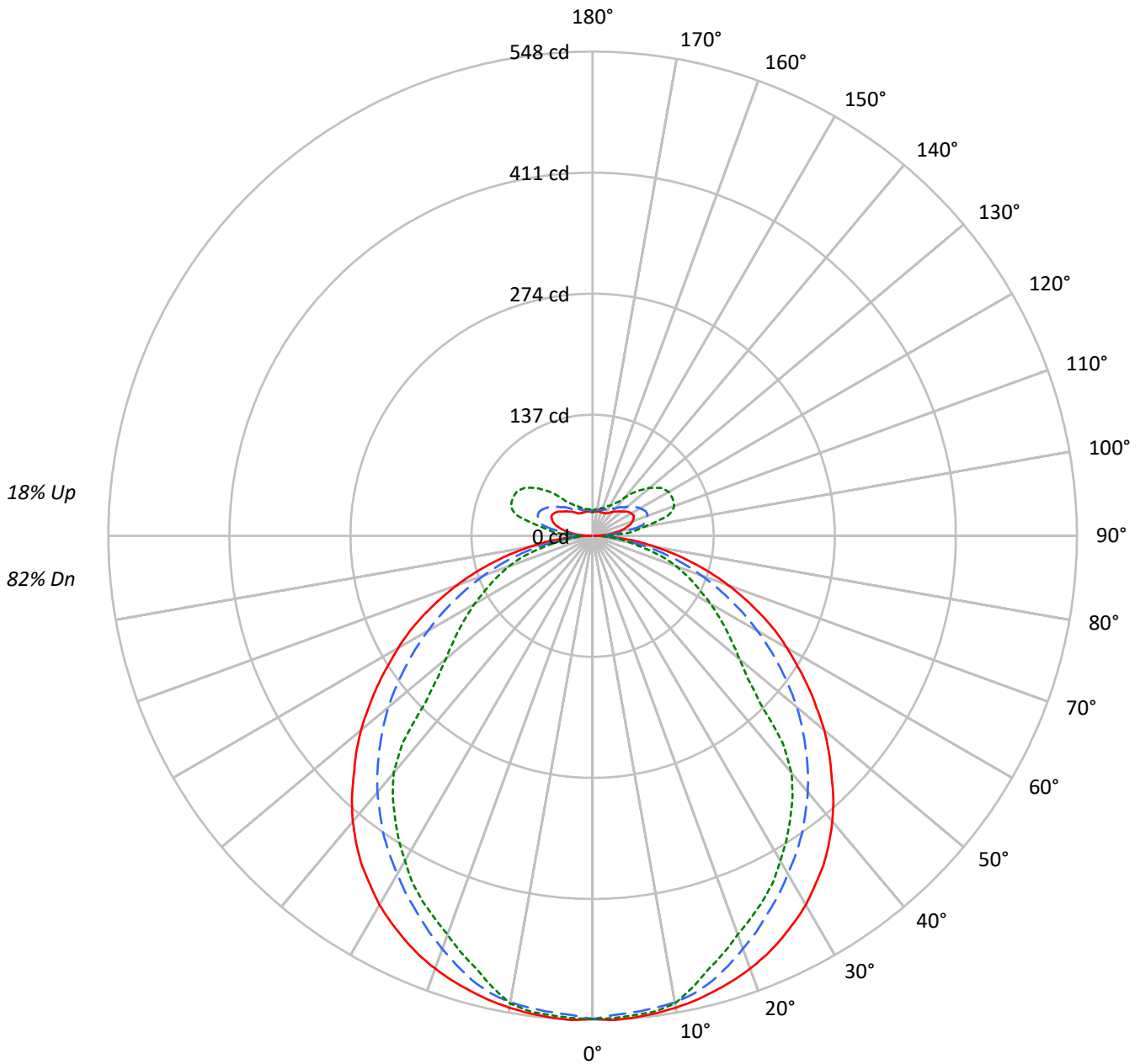
Lumens per Lamp: N/A
Luminaire Lumens: 1771.0 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 15.6
Input Voltage (V): NR
Input Current (A_{in}): 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	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°	2943	2943	2943
5°	2957	2924	2942
10°	2964	2931	2937
15°	2973	2908	2828
20°	2986	2849	2751
25°	2994	2793	2707
30°	2999	2747	2640
35°	2991	2711	2562
40°	2966	2661	2459
45°	2908	2596	2039
50°	2865	2526	1815
55°	2794	2425	1727
60°	2734	2316	1660
65°	2669	2189	1610
70°	2567	2050	1580
75°	2423	1880	1454
80°	2216	1581	1289
85°	1988	1371	1303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	2.9
10°-20°	147.2	8.3
20°-30°	219.7	12.4
30°-40°	261.8	14.8
40°-50°	260.4	14.7
50°-60°	223.2	12.6
60°-70°	168.1	9.5
70°-80°	97.3	5.5
80°-90°	29.3	1.7
90°-100°	31.4	1.8
100°-110°	64.5	3.6
110°-120°	68.2	3.9
120°-130°	56.9	3.2
130°-140°	39.7	2.2
140°-150°	24.7	1.4
150°-160°	15.3	0.9
160°-170°	8.6	0.5
170°-180°	2.8	0.2
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0°-30°	418.8	23.6
0°-40°	680.5	38.4
0°-60°	1164.1	65.7
0°-90°	1458.8	82.4
90°-120°	164.1	9.3
90°-150°	285.5	16.1
90°-180°	312.0	17.6
0°-180°	1771.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	547	547	547	547	547	
5°	547	546	541	545	545	52
15°	534	533	522	513	508	151
25°	504	497	470	459	456	232
35°	455	443	413	396	390	284
45°	382	373	341	307	268	295
55°	298	293	258	205	184	266
65°	210	205	172	134	126	207
75°	116	113	90	72	70	123
85°	32	28	22	21	21	34
90°	2	8	13	17	18	3
95°	18	24	27	40	43	17
105°	42	43	62	83	88	43
115°	52	44	66	91	100	50
125°	48	42	57	84	94	42
135°	39	42	46	62	72	30
145°	32	37	40	43	46	20
155°	29	30	33	36	36	13
165°	28	29	30	32	32	8
175°	28	28	29	29	30	3
180°	27	27	27	27	27	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	546.8	546.8	546.8	546.8	546.8
2.5°	548.5	547.4	543.0	547.4	546.3
5°	547.4	545.7	541.3	545.2	544.6
7.5°	545.2	544.1	539.1	543.5	543.0
10°	542.4	540.7	536.3	539.6	537.4
12.5°	538.5	537.4	530.8	528.0	523.5
15°	533.5	533.0	521.9	513.0	507.5
17.5°	528.0	525.8	510.2	499.7	494.7
20°	521.3	518.0	497.5	485.3	480.3
22.5°	513.6	508.6	484.7	473.1	468.1
25°	504.1	496.9	470.3	458.7	455.9
27.5°	493.6	485.3	457.0	445.3	442.0
30°	482.5	472.0	442.0	430.9	424.8
32.5°	468.6	458.7	427.6	414.8	408.2
35°	455.3	443.1	412.6	396.5	389.9
37.5°	439.2	427.0	395.4	379.3	371.6
40°	422.1	409.8	378.8	359.9	350.0
42.5°	403.2	392.1	360.5	337.8	318.3
45°	382.1	372.7	341.1	307.2	267.9
47.5°	362.7	353.8	321.7	277.9	237.4
50°	342.2	333.9	301.7	250.1	216.8
52.5°	319.4	313.3	280.1	226.3	199.7
55°	297.8	293.4	258.4	205.2	184.1
57.5°	275.1	270.6	236.8	185.2	168.6
60°	254.0	249.6	215.2	167.5	154.2
62.5°	232.9	226.8	194.1	150.3	139.2
65°	209.6	204.6	171.9	133.7	126.4
67.5°	186.3	181.9	151.4	118.1	113.1
70°	163.1	159.2	130.3	103.2	100.4
72.5°	140.3	135.3	111.5	88.2	87.1
75°	116.5	112.6	90.4	72.1	69.9
77.5°	93.7	90.4	71.0	54.9	53.2
80°	71.5	68.2	51.0	39.9	41.6
82.5°	52.7	48.3	34.4	31.1	32.7
85°	32.2	28.3	22.2	21.1	21.1
87.5°	11.1	10.5	10.0	11.6	12.2
90°	1.7	7.8	13.3	16.6	17.7
92.5°	9.4	13.9	18.3	21.6	22.7
95°	17.7	23.8	27.2	39.9	43.3
97.5°	24.4	31.6	35.5	47.1	50.5
100°	31.1	37.7	49.9	56.0	59.9
102.5°	36.6	41.6	58.8	71.0	73.2
105°	41.6	43.3	62.1	83.2	88.2



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CATALOG NUMBER: 4WSLA-50-L950-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	49.9	44.4	66.6	90.4	99.3
115°	51.6	43.8	66.0	91.0	99.8
117.5°	51.6	43.8	64.3	91.0	99.8
120°	50.5	44.4	62.1	89.8	99.3
122.5°	49.4	43.3	59.9	87.6	97.1
125°	47.7	42.1	57.1	83.7	94.3
127.5°	44.9	43.3	54.4	78.8	89.3
130°	42.7	43.8	51.0	73.8	84.3
132.5°	41.0	42.7	47.7	68.2	77.6
135°	38.8	42.1	46.0	62.1	71.5
137.5°	37.2	40.5	43.3	56.6	64.3
140°	35.5	39.4	40.5	49.4	56.0
142.5°	33.3	37.7	38.3	46.0	48.8
145°	31.6	36.6	39.9	42.7	45.5
147.5°	29.9	34.4	38.8	39.4	42.1
150°	29.4	32.2	37.2	37.7	38.8
152.5°	28.8	31.1	34.4	37.7	38.3
155°	28.8	30.5	32.7	35.5	36.0
157.5°	28.3	30.5	31.6	33.8	34.4
160°	28.3	29.9	31.1	32.7	33.3
162.5°	28.3	29.9	30.5	32.2	32.7
165°	28.3	29.4	30.5	31.6	31.6
167.5°	28.3	29.4	29.9	31.1	31.1
170°	28.3	28.8	29.9	30.5	30.5
172.5°	27.7	28.8	29.4	30.5	30.5
175°	27.7	28.3	28.8	29.4	29.9
177.5°	26.6	28.3	28.8	29.4	28.8
180°	27.2	27.2	27.2	27.2	27.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	45.5	43.8	64.3	87.6	94.8
110°	48.3	44.4	66.0	89.3	98.2



(END OF REPORT)