

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: P520593

Luminaire Tested: **4WSLA-50-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: P520593
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-50-L930-UPL8-UNV-U
Description: 4 FOOT, 500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

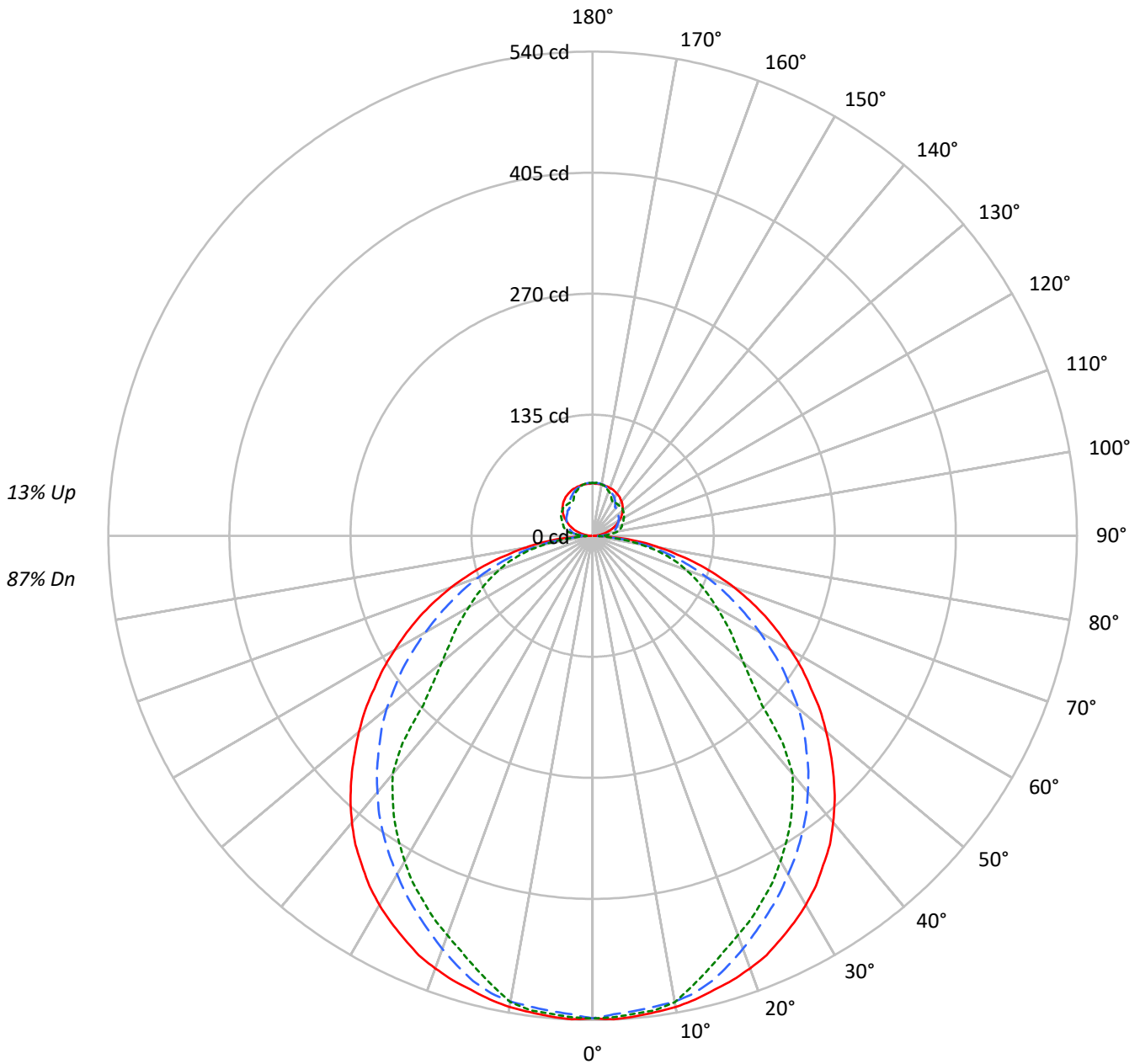
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1675.0 lumens
Efficiency: N/A
Efficacy: 107.4 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): 15.6
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°	2897	2897	2897
5°	2908	2874	2891
10°	2916	2882	2886
15°	2921	2865	2788
20°	2940	2808	2714
25°	2948	2755	2663
30°	2955	2710	2604
35°	2946	2671	2534
40°	2933	2623	2437
45°	2894	2564	2034
50°	2847	2509	1835
55°	2791	2427	1766
60°	2743	2317	1717
65°	2702	2218	1715
70°	2633	2132	1742
75°	2512	2030	1755
80°	2352	1826	1633
85°	2149	1291	1099



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.0	3.0
10°-20°	144.9	8.6
20°-30°	216.4	12.9
30°-40°	258.4	15.4
40°-50°	258.4	15.4
50°-60°	223.6	13.4
60°-70°	171.6	10.2
70°-80°	105.2	6.3
80°-90°	29.6	1.8
90°-100°	16.7	1.0
100°-110°	26.6	1.6
110°-120°	31.0	1.9
120°-130°	33.5	2.0
130°-140°	33.0	2.0
140°-150°	29.2	1.7
150°-160°	24.0	1.4
160°-170°	16.1	1.0
170°-180°	5.6	0.3
0°-30°	412.3	24.6
0°-40°	670.6	40.0
0°-60°	1152.7	68.8
0°-90°	1459.1	87.1
90°-120°	74.3	4.4
90°-150°	170.1	10.2
90°-180°	216.0	12.9
0°-180°	1675.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	538	537	532	536	535	51
15°	524	524	514	505	500	148
25°	496	490	464	452	448	229
35°	448	437	407	392	386	281
45°	380	369	337	307	267	293
55°	297	290	259	207	188	267
65°	212	204	174	140	135	210
75°	121	115	98	84	84	127
85°	35	29	21	18	18	36
90°	2	5	8	11	12	2
95°	6	13	18	19	19	6
105°	18	19	26	31	32	19
115°	29	25	31	36	38	29
125°	40	32	36	41	43	35
135°	47	43	40	43	46	36
145°	53	50	44	43	45	33
155°	56	55	52	50	49	26
165°	57	58	56	56	56	16
175°	58	59	59	60	60	6
180°	59	59	59	59	59	



TEST NUMBER: P520593

CATALOG NUMBER: 4WSLA-50-L930-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	538.2	538.2	538.2	538.2	538.2
2.5°	539.8	538.2	534.3	538.2	537.4
5°	538.2	536.7	532.0	535.9	535.1
7.5°	535.9	534.3	529.7	534.3	533.6
10°	533.6	532.0	527.4	530.5	528.1
12.5°	529.7	528.1	522.7	518.9	514.2
15°	524.3	523.5	514.2	504.9	500.3
17.5°	519.6	517.3	502.6	491.8	486.3
20°	513.4	509.6	490.2	477.8	473.9
22.5°	506.5	500.3	477.0	465.4	462.3
25°	496.4	490.2	463.9	451.5	448.4
27.5°	486.3	478.6	450.7	438.3	435.2
30°	475.5	464.6	436.0	424.4	419.0
32.5°	463.1	452.3	422.1	408.9	402.7
35°	448.4	436.8	406.6	391.9	385.7
37.5°	434.4	422.1	391.1	374.8	366.3
40°	417.4	405.0	373.3	355.5	346.9
42.5°	399.6	388.0	356.2	334.5	313.6
45°	380.2	369.4	336.9	306.7	267.2
47.5°	360.1	350.8	319.1	278.0	240.1
50°	340.0	330.7	299.7	250.9	219.2
52.5°	319.8	312.1	278.0	228.5	202.1
55°	297.4	290.4	258.7	206.8	188.2
57.5°	277.2	270.3	236.2	189.0	173.5
60°	254.8	248.6	215.3	171.1	159.5
62.5°	233.9	226.9	194.4	155.7	147.1
65°	212.2	204.4	174.2	140.2	134.7
67.5°	189.7	182.0	154.9	126.2	123.1
70°	167.3	161.1	135.5	112.3	110.7
72.5°	144.0	137.1	116.2	99.1	99.1
75°	120.8	114.6	97.6	84.4	84.4
77.5°	96.8	93.7	78.2	68.9	69.7
80°	75.9	72.0	58.9	52.7	52.7
82.5°	55.8	51.1	39.5	34.8	36.4
85°	34.8	28.7	20.9	17.8	17.8
87.5°	10.8	8.5	6.2	7.0	7.0
90°	1.5	5.4	8.5	10.8	11.6
92.5°	3.9	10.1	12.4	14.7	15.5
95°	6.2	13.2	17.8	18.6	18.6
97.5°	8.5	14.7	21.7	24.8	24.8
100°	11.6	15.5	23.2	27.9	28.7
102.5°	14.7	17.0	24.8	29.4	31.0
105°	17.8	18.6	26.3	31.0	32.5



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CATALOG NUMBER: 4WSLA-50-L930-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	26.3	23.2	29.4	34.8	36.4
115°	29.4	24.8	31.0	35.6	37.9
117.5°	31.8	27.1	32.5	37.2	38.7
120°	34.1	28.7	33.3	38.7	40.3
122.5°	37.2	30.2	34.8	39.5	41.8
125°	39.5	31.8	35.6	41.0	42.6
127.5°	41.8	34.8	36.4	41.8	43.4
130°	43.4	37.9	37.2	42.6	44.1
132.5°	45.7	40.3	37.9	43.4	44.9
135°	47.2	42.6	39.5	43.4	45.7
137.5°	48.8	44.9	39.5	43.4	44.9
140°	50.3	47.2	40.3	43.4	44.9
142.5°	51.1	48.8	41.0	43.4	44.9
145°	52.7	50.3	44.1	43.4	44.9
147.5°	53.4	51.9	46.5	43.4	44.9
150°	54.2	53.4	48.8	44.1	44.1
152.5°	55.0	54.2	50.3	47.2	45.7
155°	55.8	55.0	51.9	49.6	48.8
157.5°	56.5	56.5	53.4	51.9	51.1
160°	56.5	57.3	55.0	53.4	52.7
162.5°	57.3	58.1	55.8	55.0	54.2
165°	57.3	58.1	56.5	56.5	56.5
167.5°	58.1	58.9	58.1	57.3	57.3
170°	58.1	58.9	58.1	58.1	58.1
172.5°	58.1	58.9	58.9	58.9	58.9
175°	58.1	58.9	58.9	59.6	59.6
177.5°	58.1	58.9	58.9	58.9	58.9
180°	58.9	58.9	58.9	58.9	58.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	20.9	20.1	27.1	32.5	34.1
110°	23.2	21.7	28.7	33.3	34.8



(END OF REPORT)