

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: P520582

Luminaire Tested: **4WSLA-50-L835-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: P520582  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-689-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 4WSLA-50-L835-UNV-U  
Description: 4 FOOT, 500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

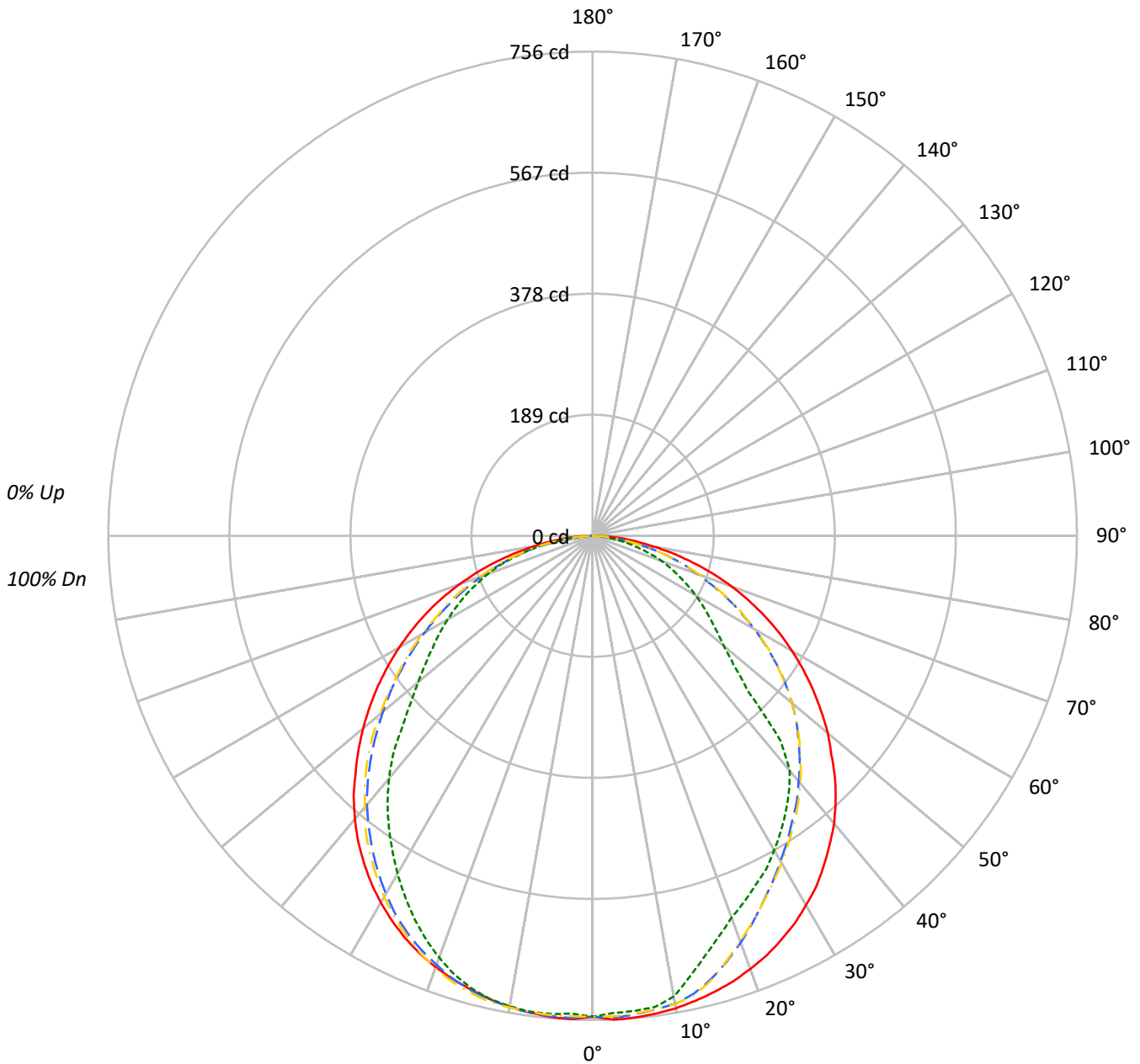
Lumens per Lamp: N/A  
Luminaire Lumens: 2014.0 lumens  
Efficiency: N/A  
Efficacy: 129.1 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 15.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	4041	4041	4041	4041
5°	4080	4023	4073	4049
10°	4094	3993	4083	4076
15°	4107	3782	4089	4075
20°	4122	3633	4106	4014
25°	4135	3573	4114	3913
30°	4140	3522	4110	3785
35°	4133	3453	4091	3644
40°	4120	3362	4055	3475
45°	4074	2612	3982	3188
50°	4013	2236	3915	2974
55°	3942	2093	3840	2861
60°	3867	1999	3750	2814
65°	3775	1892	3647	2780
70°	3626	1800	3473	2738
75°	3375	1582	3217	2606
80°	2997	1323	2808	2210
85°	2834	945	2489	1266



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	3.5
10°-20°	203.5	10.1
20°-30°	304.0	15.1
30°-40°	361.9	18.0
40°-50°	361.7	18.0
50°-60°	311.3	15.5
60°-70°	234.3	11.6
70°-80°	133.5	6.6
80°-90°	32.5	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	578.8	28.7
0°-40°	940.7	46.7
0°-60°	1613.7	80.1
0°-90°	2014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	751	751	751	751	751	
5°	755	745	754	750	755	72
15°	737	679	734	731	737	208
25°	696	602	693	659	696	321
35°	629	526	623	555	629	394
45°	535	343	523	419	535	412
55°	420	223	409	305	420	376
65°	296	149	286	218	296	293
75°	162	76	155	125	162	172
85°	46	15	40	20	46	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	750.8	750.8	750.8	750.8	750.8	750.8	750.8	750.8	750.8	750.8	750.8
2.5°	756.4	749.5	753.6	752.4	745.9	748.3	750.8	748.3	755.6	749.1	753.6
5°	755.2	747.9	750.3	747.9	744.7	745.5	749.1	746.7	754.0	747.1	752.8
7.5°	752.8	743.9	746.3	745.1	742.3	742.7	746.3	744.3	750.8	744.3	750.8
10°	749.1	739.9	741.9	736.7	730.6	735.0	742.3	740.3	747.1	739.9	747.1
12.5°	743.5	734.2	732.2	714.9	704.0	712.5	734.6	734.6	741.1	734.2	741.9
15°	737.1	727.0	716.1	689.9	678.7	687.1	717.7	728.2	733.8	727.0	734.6
17.5°	729.4	717.7	696.8	666.2	655.7	664.2	695.6	718.5	725.8	718.5	725.4
20°	719.7	706.0	676.2	641.2	634.4	642.0	673.4	706.9	716.9	708.1	712.9
22.5°	709.3	692.8	653.3	621.9	618.6	623.5	652.1	692.4	705.6	696.4	699.6
25°	696.4	677.0	630.3	604.1	601.7	604.5	631.1	675.4	692.8	683.1	684.3
27.5°	682.7	661.7	608.6	589.2	586.8	588.0	610.2	656.5	677.9	668.2	666.2
30°	666.2	643.6	586.8	569.1	566.7	571.1	590.0	637.2	661.3	651.7	645.6
32.5°	649.7	623.9	565.5	551.8	547.0	551.0	569.1	617.0	643.2	633.1	623.1
35°	629.1	602.9	543.3	529.6	525.6	530.0	548.2	596.1	622.7	612.6	598.9
37.5°	607.8	580.8	523.2	510.7	503.5	508.7	526.8	574.3	601.3	590.9	573.9
40°	586.4	557.4	500.6	487.7	478.5	486.1	504.7	551.4	577.2	567.5	548.2
42.5°	561.5	534.1	478.5	460.4	434.2	458.7	480.9	528.4	552.2	542.9	519.6
45°	535.3	509.1	455.1	411.2	343.2	415.2	456.7	504.3	523.2	514.3	489.0
47.5°	505.5	483.3	431.4	364.5	298.4	368.5	432.2	481.3	495.8	486.1	457.9
50°	479.3	457.5	406.4	325.0	267.0	329.5	406.0	455.5	467.6	458.7	427.3
52.5°	449.5	430.6	379.4	290.0	243.7	294.4	378.6	428.9	438.6	428.1	396.7
55°	420.1	403.2	350.8	259.0	223.1	263.0	350.0	401.6	409.2	397.1	364.5
57.5°	390.3	375.0	321.4	231.2	204.2	235.6	323.4	373.4	378.6	363.3	333.5
60°	359.3	346.4	291.6	206.6	185.7	210.2	290.8	345.2	348.4	331.9	303.3
62.5°	328.3	316.6	261.8	184.1	166.7	186.5	263.8	315.4	317.4	301.7	272.3
65°	296.4	285.6	232.8	160.3	148.6	164.3	234.8	284.4	286.4	268.6	242.1
67.5°	263.4	254.5	201.8	142.2	131.3	143.4	205.8	252.9	254.1	236.8	212.7
70°	230.4	222.7	174.4	122.4	114.4	122.8	177.2	218.3	220.7	202.2	182.9
72.5°	196.5	190.5	147.8	101.9	94.6	101.9	149.4	186.5	188.1	172.8	153.9
75°	162.3	157.9	120.8	81.8	76.1	81.4	121.6	154.7	154.7	140.2	125.3
77.5°	129.3	126.1	92.6	62.8	58.8	62.0	93.0	122.4	121.6	110.4	98.7
80°	96.7	94.2	66.5	45.5	42.7	44.3	66.5	90.6	90.6	82.6	68.5
82.5°	69.3	66.5	43.9	29.8	28.2	29.0	43.1	63.2	64.4	58.4	46.3
85°	45.9	39.5	23.8	16.5	15.3	15.7	22.6	36.7	40.3	33.8	24.2
87.5°	20.1	13.3	6.0	2.4	1.2	1.6	4.8	11.7	15.3	10.1	3.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	750.8	750.8	750.8	750.8	750.8	750.8
2.5°	753.2	746.7	749.1	750.8	749.1	756.4
5°	752.4	749.5	749.1	751.2	747.9	755.2
7.5°	751.2	749.5	749.1	749.9	745.9	752.8
10°	748.3	745.9	746.7	747.9	742.7	749.1
12.5°	743.1	740.7	741.1	745.1	737.9	743.5
15°	734.2	731.4	734.2	738.7	732.2	737.1
17.5°	722.6	718.1	723.0	729.8	725.0	729.4
20°	707.7	700.8	706.0	718.5	714.1	719.7
22.5°	689.5	681.1	686.3	704.4	703.2	709.3
25°	669.0	658.9	666.2	688.3	690.7	696.4
27.5°	646.0	634.8	644.4	670.6	676.2	682.7
30°	621.1	609.0	620.3	650.9	659.3	666.2
32.5°	595.3	582.0	594.9	628.7	640.8	649.7
35°	568.3	554.6	569.1	605.8	620.3	629.1
37.5°	539.3	526.0	541.7	581.6	598.9	607.8
40°	509.5	494.6	512.3	553.0	576.0	586.4
42.5°	478.9	460.4	482.1	526.0	551.0	561.5
45°	444.7	418.9	448.3	497.4	523.6	535.3
47.5°	410.4	384.6	414.4	466.8	495.0	505.5
50°	377.4	355.2	379.0	433.4	466.0	479.3
52.5°	347.2	329.1	349.2	400.8	436.2	449.5
55°	319.0	304.9	321.4	368.5	404.8	420.1
57.5°	292.4	283.5	294.8	337.9	375.8	390.3
60°	267.4	261.4	269.4	307.7	341.5	359.3
62.5°	242.9	239.6	245.7	275.9	309.7	328.3
65°	219.1	218.3	221.5	248.1	276.3	296.4
67.5°	195.3	194.9	197.0	218.7	243.7	263.4
70°	171.6	174.0	172.8	186.9	211.0	230.4
72.5°	147.4	151.0	149.0	157.9	181.2	196.5
75°	120.4	125.3	121.2	131.3	145.8	162.3
77.5°	92.6	97.9	93.0	101.9	117.6	129.3
80°	66.5	71.3	67.3	74.1	87.8	96.7
82.5°	41.9	45.5	42.3	49.1	62.8	69.3
85°	18.5	20.5	21.3	26.6	38.7	45.9
87.5°	0.8	0.4	0.8	5.2	13.7	20.1
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)