

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: P520600

Luminaire Tested: **4WSLA-50-L950-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: P520600  
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-L950-UNV-U  
Description: 4 FOOT, 500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

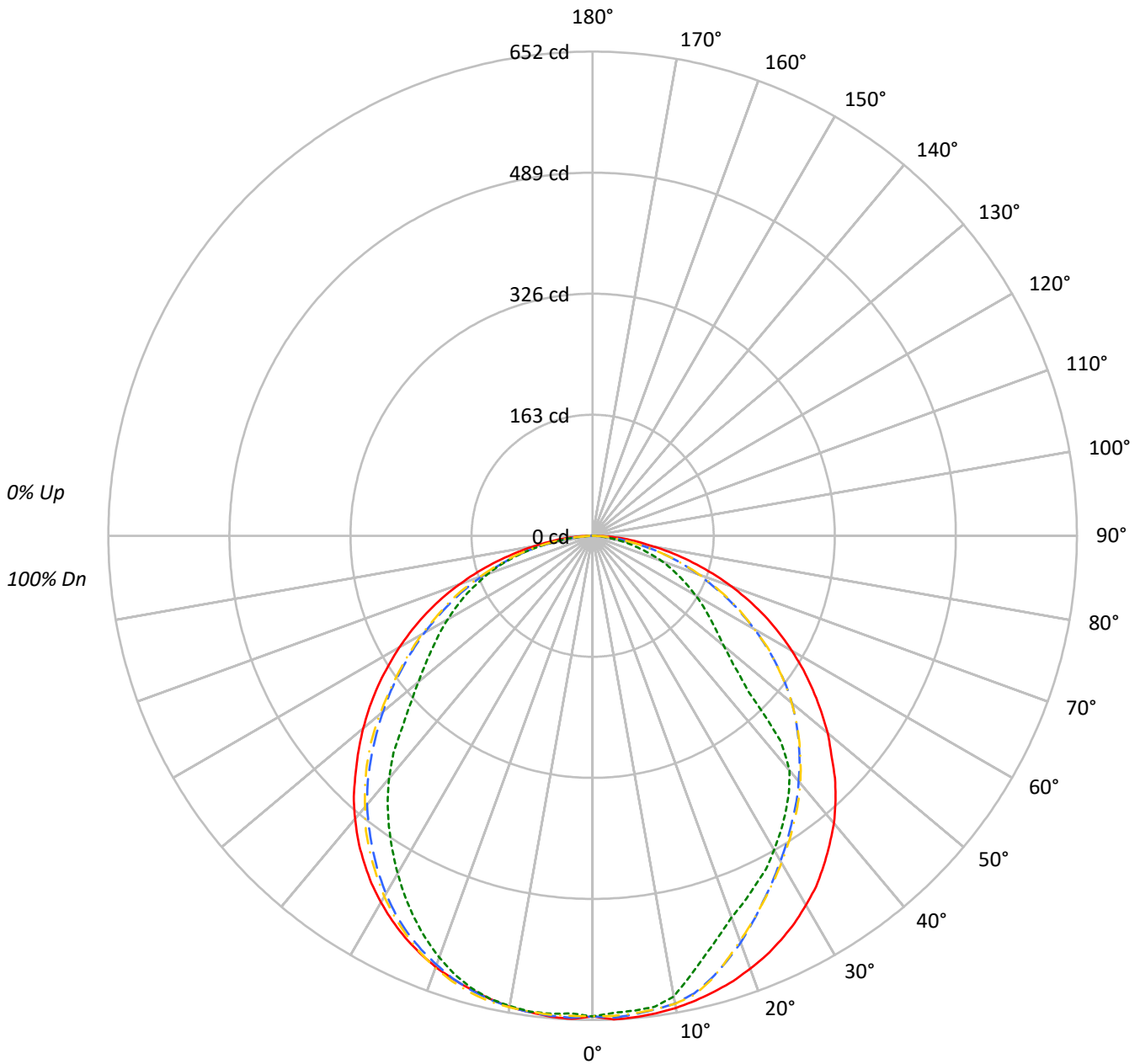
Lumens per Lamp: N/A  
Luminaire Lumens: 1736.0 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Direct

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°	3483	3483	3483	3483
5°	3516	3468	3511	3491
10°	3529	3442	3519	3514
15°	3540	3260	3524	3513
20°	3553	3132	3540	3460
25°	3565	3080	3546	3373
30°	3568	3036	3543	3262
35°	3563	2977	3526	3141
40°	3551	2897	3495	2995
45°	3512	2251	3433	2748
50°	3459	1927	3375	2564
55°	3398	1804	3309	2466
60°	3334	1722	3232	2425
65°	3254	1631	3143	2397
70°	3125	1552	2993	2360
75°	2909	1364	2772	2246
80°	2582	1141	2421	1903
85°	2445	815	2143	1093



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.5	3.5
10°-20°	175.4	10.1
20°-30°	262.1	15.1
30°-40°	311.9	18.0
40°-50°	311.8	18.0
50°-60°	268.3	15.5
60°-70°	201.9	11.6
70°-80°	115.1	6.6
80°-90°	28.0	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°	498.9	28.7
0°-40°	810.9	46.7
0°-60°	1391.0	80.1
0°-90°	1736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1736.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	647	647	647	647	647	
5°	651	642	650	646	651	62
15°	635	585	632	630	635	179
25°	600	519	597	568	600	277
35°	542	453	537	478	542	339
45°	461	296	451	361	461	355
55°	362	192	353	263	362	324
65°	256	128	247	188	256	252
75°	140	66	133	108	140	148
85°	40	13	35	18	40	43
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°	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1
2.5°	652.0	646.1	649.6	648.5	643.0	645.0	647.1	645.0	651.3	645.7	649.6
5°	650.9	644.7	646.8	644.7	641.9	642.6	645.7	643.7	649.9	644.0	648.9
7.5°	648.9	641.2	643.3	642.3	639.8	640.2	643.3	641.6	647.1	641.6	647.1
10°	645.7	637.7	639.5	635.0	629.8	633.6	639.8	638.1	644.0	637.7	644.0
12.5°	640.9	632.9	631.2	616.2	606.9	614.1	633.2	633.2	638.8	632.9	639.5
15°	635.3	626.6	617.3	594.7	585.0	592.3	618.7	627.7	632.5	626.6	633.2
17.5°	628.7	618.7	600.6	574.2	565.2	572.5	599.6	619.3	625.6	619.3	625.3
20°	620.4	608.6	582.9	552.7	546.8	553.4	580.5	609.3	618.0	610.3	614.5
22.5°	611.4	597.1	563.1	536.0	533.3	537.4	562.1	596.8	608.2	600.3	603.0
25°	600.3	583.6	543.3	520.8	518.7	521.1	544.0	582.2	597.1	588.8	589.8
27.5°	588.5	570.4	524.6	507.9	505.8	506.9	526.0	565.9	584.3	576.0	574.2
30°	574.2	554.8	505.8	490.6	488.5	492.3	508.6	549.2	570.1	561.7	556.5
32.5°	560.0	537.8	487.4	475.6	471.5	474.9	490.6	531.9	554.4	545.8	537.1
35°	542.3	519.7	468.3	456.5	453.1	456.9	472.5	513.8	536.7	528.0	516.2
37.5°	523.9	500.6	451.0	440.2	434.0	438.5	454.1	495.1	518.3	509.3	494.7
40°	505.5	480.5	431.5	420.4	412.4	419.0	435.0	475.3	497.5	489.2	472.5
42.5°	484.0	460.3	412.4	396.8	374.2	395.4	414.5	455.5	476.0	468.0	447.8
45°	461.4	438.8	392.3	354.5	295.8	357.9	393.7	434.7	451.0	443.3	421.5
47.5°	435.7	416.6	371.8	314.2	257.3	317.7	372.5	414.9	427.4	419.0	394.7
50°	413.1	394.4	350.3	280.2	230.2	284.0	349.9	392.6	403.1	395.4	368.3
52.5°	387.4	371.1	327.0	250.0	210.0	253.8	326.3	369.7	378.1	369.0	342.0
55°	362.1	347.5	302.4	223.2	192.3	226.7	301.7	346.1	352.7	342.3	314.2
57.5°	336.4	323.2	277.0	199.3	176.0	203.1	278.8	321.8	326.3	313.1	287.5
60°	309.7	298.6	251.4	178.1	160.0	181.2	250.7	297.5	300.3	286.1	261.4
62.5°	282.9	272.9	225.7	158.7	143.7	160.7	227.4	271.8	273.6	260.0	234.7
65°	255.5	246.1	200.7	138.2	128.1	141.6	202.4	245.1	246.8	231.6	208.6
67.5°	227.0	219.4	173.9	122.6	113.2	123.6	177.4	218.0	219.1	204.1	183.3
70°	198.6	192.0	150.3	105.5	98.6	105.9	152.8	188.2	190.2	174.3	157.6
72.5°	169.4	164.2	127.4	87.8	81.6	87.8	128.8	160.7	162.1	148.9	132.6
75°	139.9	136.1	104.2	70.5	65.6	70.1	104.8	133.3	133.3	120.8	108.0
77.5°	111.4	108.7	79.8	54.2	50.7	53.5	80.2	105.5	104.8	95.1	85.1
80°	83.3	81.2	57.3	39.2	36.8	38.2	57.3	78.1	78.1	71.2	59.0
82.5°	59.7	57.3	37.8	25.7	24.3	25.0	37.1	54.5	55.5	50.3	39.9
85°	39.6	34.0	20.5	14.2	13.2	13.5	19.4	31.6	34.7	29.2	20.8
87.5°	17.4	11.5	5.2	2.1	1.0	1.4	4.2	10.1	13.2	8.7	2.8
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°	647.1	647.1	647.1	647.1	647.1	647.1
2.5°	649.2	643.7	645.7	647.1	645.7	652.0
5°	648.5	646.1	645.7	647.5	644.7	650.9
7.5°	647.5	646.1	645.7	646.4	643.0	648.9
10°	645.0	643.0	643.7	644.7	640.2	645.7
12.5°	640.5	638.4	638.8	642.3	636.0	640.9
15°	632.9	630.5	632.9	636.7	631.2	635.3
17.5°	622.8	619.0	623.2	629.1	624.9	628.7
20°	610.0	604.1	608.6	619.3	615.5	620.4
22.5°	594.4	587.1	591.6	607.2	606.2	611.4
25°	576.6	568.0	574.2	593.3	595.4	600.3
27.5°	556.9	547.1	555.5	578.0	582.9	588.5
30°	535.3	524.9	534.6	561.0	568.3	574.2
32.5°	513.1	501.7	512.8	541.9	552.3	560.0
35°	489.9	478.1	490.6	522.1	534.6	542.3
37.5°	464.9	453.4	466.9	501.3	516.2	523.9
40°	439.2	426.3	441.6	476.7	496.5	505.5
42.5°	412.8	396.8	415.6	453.4	474.9	484.0
45°	383.3	361.1	386.4	428.8	451.3	461.4
47.5°	353.8	331.5	357.2	402.4	426.7	435.7
50°	325.3	306.2	326.7	373.6	401.7	413.1
52.5°	299.3	283.6	301.0	345.4	376.0	387.4
55°	275.0	262.8	277.0	317.7	348.9	362.1
57.5°	252.0	244.4	254.1	291.3	323.9	336.4
60°	230.5	225.3	232.3	265.2	294.4	309.7
62.5°	209.3	206.6	211.8	237.8	267.0	282.9
65°	188.9	188.2	190.9	213.9	238.2	255.5
67.5°	168.4	168.0	169.8	188.5	210.0	227.0
70°	147.9	150.0	148.9	161.1	181.9	198.6
72.5°	127.1	130.2	128.5	136.1	156.2	169.4
75°	103.8	108.0	104.5	113.2	125.7	139.9
77.5°	79.8	84.4	80.2	87.8	101.4	111.4
80°	57.3	61.4	58.0	63.9	75.7	83.3
82.5°	36.1	39.2	36.5	42.4	54.2	59.7
85°	16.0	17.7	18.4	22.9	33.3	39.6
87.5°	0.7	0.3	0.7	4.5	11.8	17.4
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)