

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: P520754

Luminaire Tested: **8WSLA-50-L840-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: P520754  
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: 8WSLA-50-L840-UPL15-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

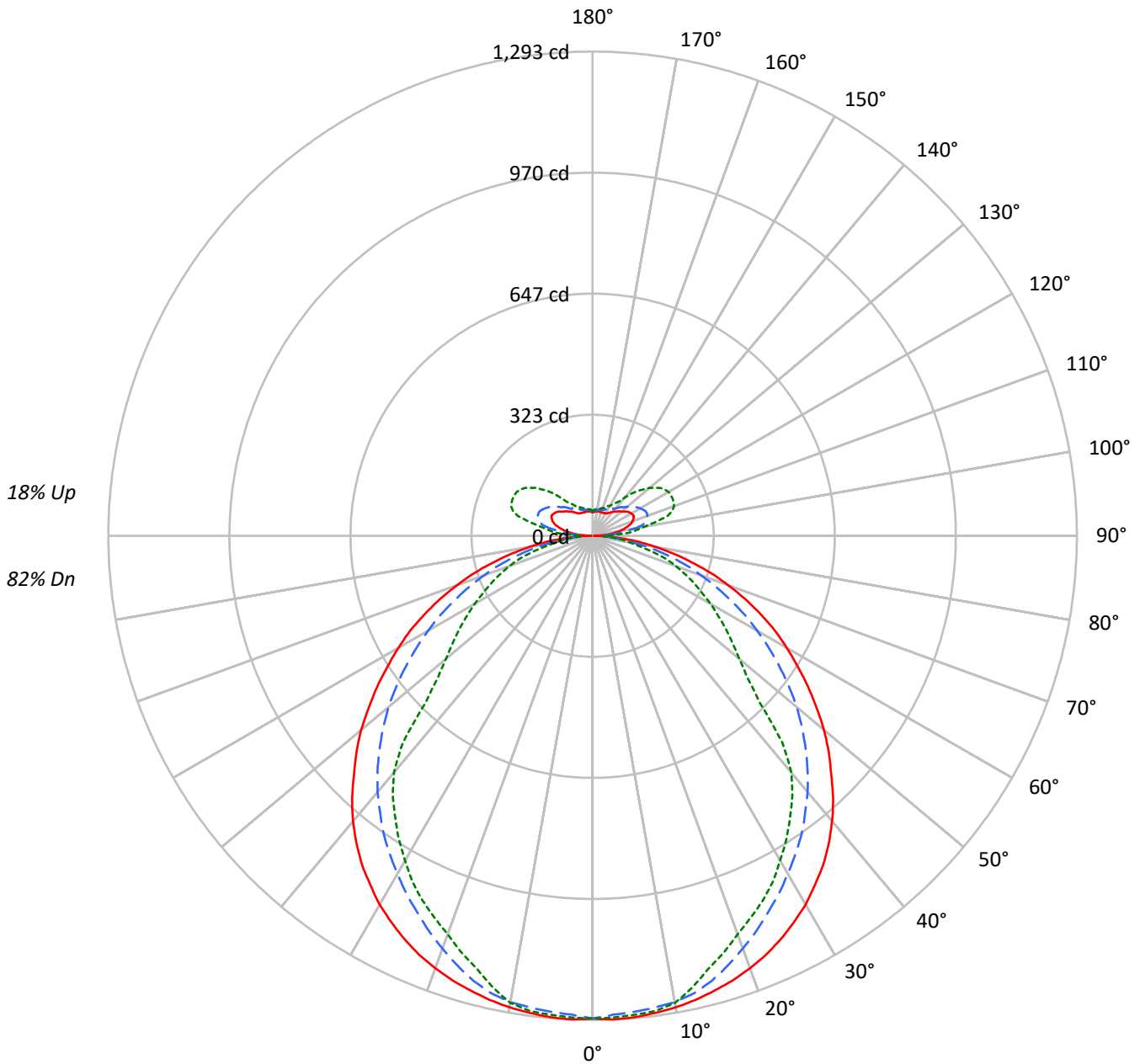
Lumens per Lamp: N/A  
Luminaire Lumens: 4175.0 lumens  
Efficiency: N/A  
Efficacy: 136.9 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 30.5  
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	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°	3469	3469	3469
5°	3486	3447	3468
10°	3494	3455	3462
15°	3504	3428	3333
20°	3519	3359	3242
25°	3529	3292	3191
30°	3535	3238	3112
35°	3526	3195	3019
40°	3495	3137	2898
45°	3428	3060	2403
50°	3377	2977	2140
55°	3294	2859	2037
60°	3223	2730	1956
65°	3147	2581	1898
70°	3024	2417	1862
75°	2855	2216	1712
80°	2614	1864	1520
85°	2340	1615	1535



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.2	2.9
10°-20°	347.1	8.3
20°-30°	517.9	12.4
30°-40°	617.1	14.8
40°-50°	613.9	14.7
50°-60°	526.1	12.6
60°-70°	396.2	9.5
70°-80°	229.5	5.5
80°-90°	69.0	1.7
90°-100°	74.0	1.8
100°-110°	152.1	3.6
110°-120°	160.8	3.9
120°-130°	134.1	3.2
130°-140°	93.7	2.2
140°-150°	58.3	1.4
150°-160°	36.1	0.9
160°-170°	20.4	0.5
170°-180°	6.6	0.2
0°-30°	987.2	23.6
0°-40°	1604.3	38.4
0°-60°	2744.3	65.7
0°-90°	3438.9	82.4
90°-120°	386.9	9.3
90°-150°	673.0	16.1
90°-180°	736.0	17.6
0°-180°	4175.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1289	1289	1289	1289	1289	
5°	1290	1286	1276	1285	1284	123
15°	1258	1256	1230	1209	1196	355
25°	1188	1172	1109	1081	1075	548
35°	1073	1045	973	935	919	670
45°	901	879	804	724	632	696
55°	702	692	609	484	434	628
65°	494	482	405	315	298	489
75°	275	265	213	170	165	291
85°	76	67	52	50	50	81
90°	4	18	31	39	42	8
95°	42	56	64	94	102	40
105°	98	102	146	196	208	102
115°	122	103	156	214	235	118
125°	112	99	135	197	222	100
135°	92	99	108	146	169	71
145°	74	86	94	101	107	47
155°	68	72	77	84	85	31
165°	67	69	72	74	74	19
175°	65	67	68	69	71	6
180°	64	64	64	64	64	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1289.1	1289.1	1289.1	1289.1	1289.1
2.5°	1293.0	1290.4	1280.0	1290.4	1287.8
5°	1290.4	1286.5	1276.0	1285.2	1283.9
7.5°	1285.2	1282.6	1270.8	1281.3	1280.0
10°	1278.7	1274.7	1264.3	1272.1	1266.9
12.5°	1269.5	1266.9	1251.2	1244.7	1234.2
15°	1257.7	1256.4	1230.3	1209.4	1196.3
17.5°	1244.7	1239.4	1202.8	1178.0	1166.2
20°	1229.0	1221.1	1172.8	1144.0	1132.2
22.5°	1210.7	1198.9	1142.7	1115.2	1103.5
25°	1188.5	1171.5	1108.7	1081.2	1074.7
27.5°	1163.6	1144.0	1077.3	1049.9	1042.0
30°	1137.5	1112.6	1042.0	1015.9	1001.5
32.5°	1104.8	1081.2	1008.0	978.0	962.3
35°	1073.4	1044.6	972.7	934.8	919.1
37.5°	1035.5	1006.7	932.2	894.3	876.0
40°	995.0	966.2	893.0	848.5	825.0
42.5°	950.5	924.4	849.8	796.2	750.5
45°	900.8	878.6	804.1	724.3	631.5
47.5°	855.1	834.1	758.3	655.0	559.6
50°	806.7	787.1	711.2	589.7	511.2
52.5°	753.1	738.7	660.3	533.4	470.7
55°	702.1	691.6	609.3	483.7	434.1
57.5°	648.5	638.0	558.3	436.7	397.5
60°	598.8	588.3	507.3	394.8	363.5
62.5°	549.1	534.7	457.6	354.3	328.2
65°	494.2	482.4	405.3	315.1	298.1
67.5°	439.3	428.8	356.9	278.5	266.7
70°	384.4	375.2	307.2	243.2	236.6
72.5°	330.8	319.0	262.8	207.9	205.3
75°	274.6	265.4	213.1	170.0	164.7
77.5°	221.0	213.1	167.4	129.4	125.5
80°	168.7	160.8	120.3	94.1	98.1
82.5°	124.2	113.7	81.1	73.2	77.1
85°	75.8	66.7	52.3	49.7	49.7
87.5°	26.1	24.8	23.5	27.5	28.8
90°	3.9	18.3	31.4	39.2	41.8
92.5°	22.2	32.7	43.1	51.0	53.6
95°	41.8	56.2	64.1	94.1	102.0
97.5°	57.5	74.5	83.7	111.1	119.0
100°	73.2	88.9	117.7	132.1	141.2
102.5°	86.3	98.1	138.6	167.4	172.6
105°	98.1	102.0	146.4	196.1	207.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	117.7	104.6	156.9	213.1	234.0
115°	121.6	103.3	155.6	214.4	235.3
117.5°	121.6	103.3	151.7	214.4	235.3
120°	119.0	104.6	146.4	211.8	234.0
122.5°	116.4	102.0	141.2	206.6	228.8
125°	112.4	99.4	134.7	197.4	222.3
127.5°	105.9	102.0	128.1	185.7	210.5
130°	100.7	103.3	120.3	173.9	198.7
132.5°	96.7	100.7	112.4	160.8	183.0
135°	91.5	99.4	108.5	146.4	168.7
137.5°	87.6	95.4	102.0	133.4	151.7
140°	83.7	92.8	95.4	116.4	132.1
142.5°	78.4	88.9	90.2	108.5	115.1
145°	74.5	86.3	94.1	100.7	107.2
147.5°	70.6	81.1	91.5	92.8	99.4
150°	69.3	75.8	87.6	88.9	91.5
152.5°	68.0	73.2	81.1	88.9	90.2
155°	68.0	71.9	77.1	83.7	85.0
157.5°	66.7	71.9	74.5	79.8	81.1
160°	66.7	70.6	73.2	77.1	78.4
162.5°	66.7	70.6	71.9	75.8	77.1
165°	66.7	69.3	71.9	74.5	74.5
167.5°	66.7	69.3	70.6	73.2	73.2
170°	66.7	68.0	70.6	71.9	71.9
172.5°	65.4	68.0	69.3	71.9	71.9
175°	65.4	66.7	68.0	69.3	70.6
177.5°	62.8	66.7	68.0	69.3	68.0
180°	64.1	64.1	64.1	64.1	64.1



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	107.2	103.3	151.7	206.6	223.6
110°	113.7	104.6	155.6	210.5	231.4



(END OF REPORT)