

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: P520758

Luminaire Tested: **8WSLA-50-L850-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: P520758  
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: 8WSLA-50-L850-UPL8-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

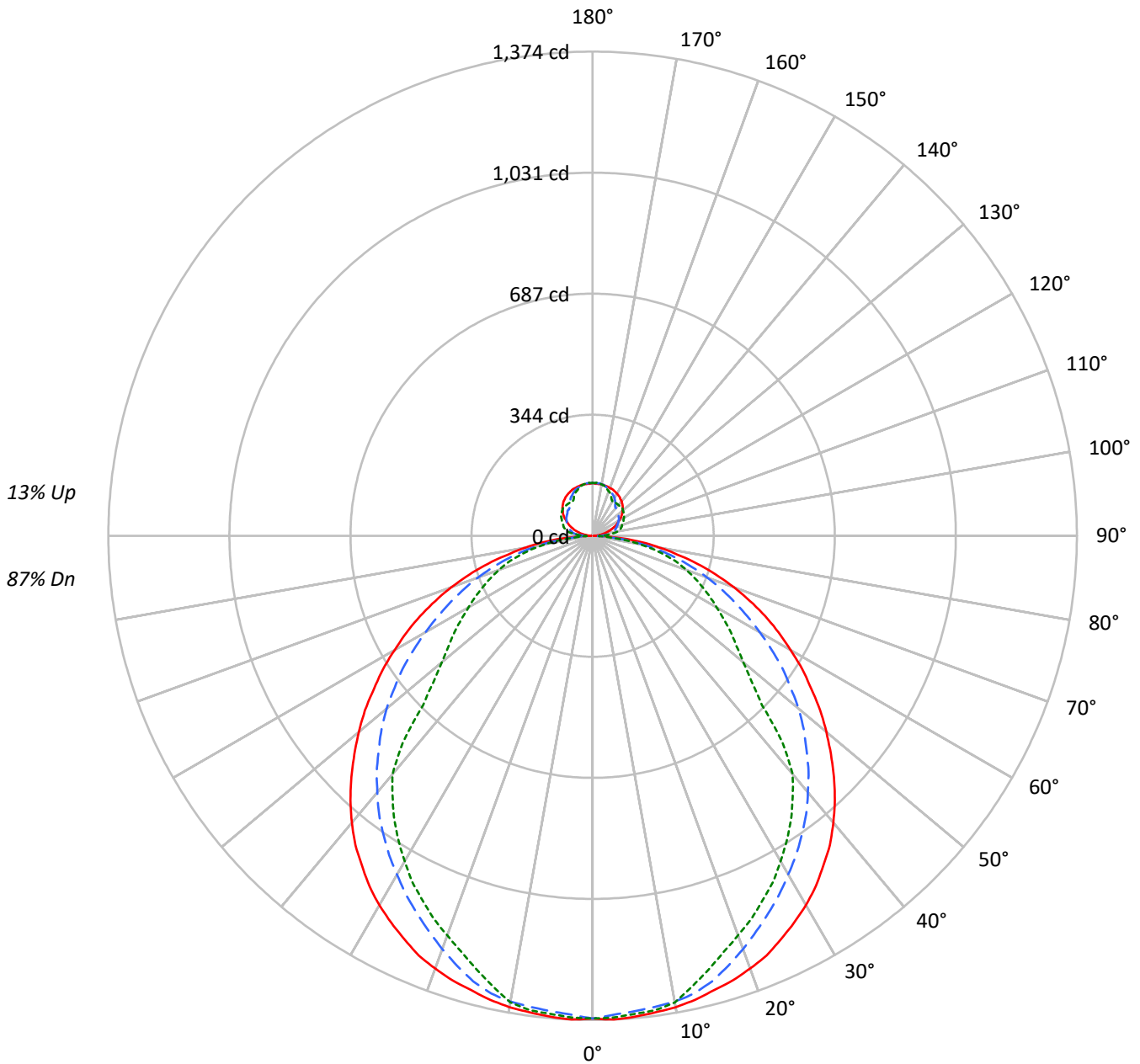
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4264.0 lumens  
Efficiency: N/A  
Efficacy: 139.8 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 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

TEST NUMBER: P520758  
CATALOG NUMBER: 8WSLA-50-L850-UPL8-UNV-U

### Luminous Intensity Polar Plot





TEST NUMBER: P520758

CATALOG NUMBER: 8WSLA-50-L850-UPL8-UNV-U

**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°	3687	3687	3687
5°	3701	3659	3680
10°	3712	3668	3674
15°	3718	3647	3548
20°	3743	3574	3455
25°	3752	3506	3389
30°	3761	3449	3314
35°	3750	3400	3225
40°	3733	3338	3103
45°	3684	3264	2588
50°	3623	3194	2336
55°	3552	3089	2248
60°	3491	2949	2186
65°	3440	2825	2184
70°	3350	2714	2218
75°	3197	2583	2234
80°	2994	2321	2078
85°	2739	1643	1399



TEST NUMBER: P520758

CATALOG NUMBER: 8WSLA-50-L850-UPL8-UNV-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.7	3.0
10°-20°	368.8	8.6
20°-30°	551.0	12.9
30°-40°	657.7	15.4
40°-50°	657.8	15.4
50°-60°	569.3	13.4
60°-70°	437.0	10.2
70°-80°	267.7	6.3
80°-90°	75.4	1.8
90°-100°	42.6	1.0
100°-110°	67.6	1.6
110°-120°	79.1	1.9
120°-130°	85.3	2.0
130°-140°	84.1	2.0
140°-150°	74.4	1.7
150°-160°	61.2	1.4
160°-170°	41.0	1.0
170°-180°	14.3	0.3
0°-30°	1049.5	24.6
0°-40°	1707.2	40.0
0°-60°	2934.3	68.8
0°-90°	3714.4	87.1
90°-120°	189.3	4.4
90°-150°	433.1	10.2
90°-180°	550.0	12.9
0°-180°	4264.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1370	1366	1354	1364	1362	130
15°	1335	1333	1309	1285	1274	378
25°	1264	1248	1181	1149	1141	583
35°	1141	1112	1035	998	982	715
45°	968	940	858	781	680	746
55°	757	739	658	526	479	679
65°	540	520	444	357	343	534
75°	308	292	248	215	215	324
85°	89	73	53	45	45	93
90°	4	14	22	28	30	6
95°	16	34	45	47	47	16
105°	45	47	67	79	83	48
115°	75	63	79	91	97	73
125°	100	81	91	104	108	90
135°	120	108	100	110	116	93
145°	134	128	112	110	114	84
155°	142	140	132	126	124	65
165°	146	148	144	144	144	41
175°	148	150	150	152	152	14
180°	150	150	150	150	150	



TEST NUMBER: P520758

CATALOG NUMBER: 8WSLA-50-L850-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1370.1	1370.1	1370.1	1370.1	1370.1
2.5°	1374.1	1370.1	1360.3	1370.1	1368.2
5°	1370.1	1366.2	1354.4	1364.2	1362.2
7.5°	1364.2	1360.3	1348.4	1360.3	1358.3
10°	1358.3	1354.4	1342.5	1350.4	1344.5
12.5°	1348.4	1344.5	1330.7	1320.8	1309.0
15°	1334.6	1332.7	1309.0	1285.4	1273.5
17.5°	1322.8	1316.9	1279.4	1251.8	1238.0
20°	1307.0	1297.2	1247.9	1216.4	1206.5
22.5°	1289.3	1273.5	1214.4	1184.8	1176.9
25°	1263.7	1247.9	1180.9	1149.3	1141.4
27.5°	1238.0	1218.3	1147.4	1115.8	1107.9
30°	1210.4	1182.8	1109.9	1080.3	1066.5
32.5°	1178.9	1151.3	1074.4	1040.9	1025.1
35°	1141.4	1111.9	1035.0	997.5	981.8
37.5°	1106.0	1074.4	995.6	954.2	932.5
40°	1062.6	1031.0	950.2	904.9	883.2
42.5°	1017.2	987.7	906.8	851.6	798.4
45°	968.0	940.4	857.6	780.7	680.1
47.5°	916.7	893.0	812.2	707.7	611.1
50°	865.4	841.8	762.9	638.7	557.9
52.5°	814.2	794.5	707.7	581.6	514.5
55°	757.0	739.3	658.4	526.4	479.1
57.5°	705.8	688.0	601.3	481.0	441.6
60°	648.6	632.8	548.0	435.7	406.1
62.5°	595.4	577.6	494.8	396.3	374.6
65°	540.2	520.4	443.6	356.8	343.0
67.5°	483.0	463.3	394.3	321.3	313.5
70°	425.8	410.1	345.0	285.9	281.9
72.5°	366.7	348.9	295.7	252.3	252.3
75°	307.5	291.8	248.4	214.9	214.9
77.5°	246.4	238.5	199.1	175.5	177.4
80°	193.2	183.3	149.8	134.1	134.1
82.5°	141.9	130.1	100.5	88.7	92.7
85°	88.7	72.9	53.2	45.3	45.3
87.5°	27.6	21.7	15.8	17.7	17.7
90°	3.9	13.8	21.7	27.6	29.6
92.5°	9.9	25.6	31.5	37.5	39.4
95°	15.8	33.5	45.3	47.3	47.3
97.5°	21.7	37.5	55.2	63.1	63.1
100°	29.6	39.4	59.1	71.0	72.9
102.5°	37.5	43.4	63.1	74.9	78.9
105°	45.3	47.3	67.0	78.9	82.8



TEST NUMBER: P520758

CATALOG NUMBER: 8WSLA-50-L850-UPL8-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	67.0	59.1	74.9	88.7	92.7
115°	74.9	63.1	78.9	90.7	96.6
117.5°	80.8	69.0	82.8	94.6	98.6
120°	86.7	72.9	84.8	98.6	102.5
122.5°	94.6	76.9	88.7	100.5	106.5
125°	100.5	80.8	90.7	104.5	108.4
127.5°	106.5	88.7	92.7	106.5	110.4
130°	110.4	96.6	94.6	108.4	112.4
132.5°	116.3	102.5	96.6	110.4	114.3
135°	120.3	108.4	100.5	110.4	116.3
137.5°	124.2	114.3	100.5	110.4	114.3
140°	128.1	120.3	102.5	110.4	114.3
142.5°	130.1	124.2	104.5	110.4	114.3
145°	134.1	128.1	112.4	110.4	114.3
147.5°	136.0	132.1	118.3	110.4	114.3
150°	138.0	136.0	124.2	112.4	112.4
152.5°	140.0	138.0	128.1	120.3	116.3
155°	141.9	140.0	132.1	126.2	124.2
157.5°	143.9	143.9	136.0	132.1	130.1
160°	143.9	145.9	140.0	136.0	134.1
162.5°	145.9	147.9	141.9	140.0	138.0
165°	145.9	147.9	143.9	143.9	143.9
167.5°	147.9	149.8	147.9	145.9	145.9
170°	147.9	149.8	147.9	147.9	147.9
172.5°	147.9	149.8	149.8	149.8	149.8
175°	147.9	149.8	149.8	151.8	151.8
177.5°	147.9	149.8	149.8	149.8	149.8
180°	149.8	149.8	149.8	149.8	149.8



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	53.2	51.3	69.0	82.8	86.7
110°	59.1	55.2	72.9	84.8	88.7



(END OF REPORT)