

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: P520757

Luminaire Tested: **8WSLA-50-L850-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: P520757
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-L850-UPL15-UNV-U
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

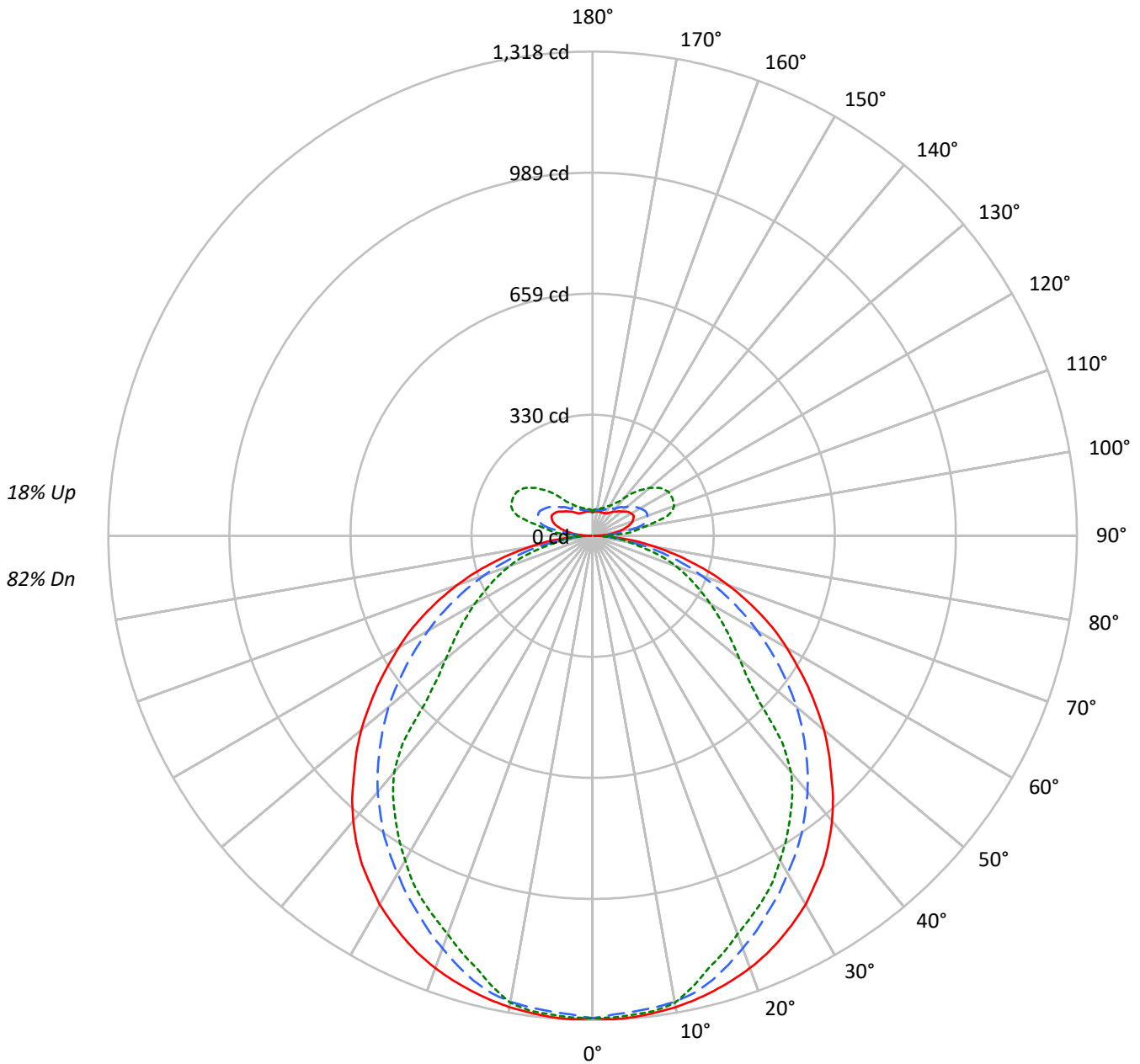
Lumens per Lamp: N/A
Luminaire Lumens: 4254.0 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 30.5
Input Voltage (V): NR
Input Current (A_{in}): 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°	3535	3535	3535
5°	3552	3512	3534
10°	3560	3520	3527
15°	3570	3492	3396
20°	3586	3422	3304
25°	3595	3354	3251
30°	3601	3299	3171
35°	3593	3256	3076
40°	3561	3196	2953
45°	3493	3118	2449
50°	3441	3034	2181
55°	3356	2913	2075
60°	3284	2782	1993
65°	3207	2630	1934
70°	3082	2463	1897
75°	2909	2257	1746
80°	2662	1900	1548
85°	2387	1646	1562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	2.9
10°-20°	353.6	8.3
20°-30°	527.7	12.4
30°-40°	628.8	14.8
40°-50°	625.5	14.7
50°-60°	536.1	12.6
60°-70°	403.7	9.5
70°-80°	233.8	5.5
80°-90°	70.3	1.7
90°-100°	75.4	1.8
100°-110°	154.9	3.6
110°-120°	163.8	3.9
120°-130°	136.7	3.2
130°-140°	95.5	2.2
140°-150°	59.4	1.4
150°-160°	36.8	0.9
160°-170°	20.7	0.5
170°-180°	6.7	0.2
0°-30°	1005.9	23.6
0°-40°	1634.7	38.4
0°-60°	2796.2	65.7
0°-90°	3504.0	82.4
90°-120°	394.2	9.3
90°-150°	685.7	16.1
90°-180°	750.0	17.6
0°-180°	4254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1315	1311	1300	1310	1308	125
15°	1282	1280	1254	1232	1219	362
25°	1211	1194	1130	1102	1095	558
35°	1094	1064	991	952	936	683
45°	918	895	819	738	643	710
55°	715	705	621	493	442	640
65°	504	492	413	321	304	498
75°	280	270	217	173	168	296
85°	77	68	53	51	51	82
90°	4	19	32	40	43	8
95°	43	57	65	96	104	41
105°	100	104	149	200	212	104
115°	124	105	158	218	240	121
125°	115	101	137	201	226	102
135°	93	101	111	149	172	73
145°	76	88	96	103	109	48
155°	69	73	79	85	87	32
165°	68	71	73	76	76	19
175°	67	68	69	71	72	6
180°	65	65	65	65	65	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1313.5	1313.5	1313.5	1313.5	1313.5
2.5°	1317.5	1314.8	1304.2	1314.8	1312.2
5°	1314.8	1310.9	1300.2	1309.5	1308.2
7.5°	1309.5	1306.9	1294.9	1305.5	1304.2
10°	1302.9	1298.9	1288.2	1296.2	1290.9
12.5°	1293.5	1290.9	1274.9	1268.2	1257.6
15°	1281.5	1280.2	1253.6	1232.3	1218.9
17.5°	1268.2	1262.9	1225.6	1200.3	1188.3
20°	1252.2	1244.2	1195.0	1165.6	1153.7
22.5°	1233.6	1221.6	1164.3	1136.3	1124.3
25°	1210.9	1193.6	1129.7	1101.7	1095.0
27.5°	1185.6	1165.6	1097.7	1069.7	1061.7
30°	1159.0	1133.7	1061.7	1035.1	1020.4
32.5°	1125.7	1101.7	1027.1	996.5	980.5
35°	1093.7	1064.4	991.1	952.5	936.5
37.5°	1055.1	1025.8	949.8	911.2	892.6
40°	1013.8	984.5	909.9	864.6	840.6
42.5°	968.5	941.8	865.9	811.3	764.7
45°	917.9	895.2	819.3	738.0	643.4
47.5°	871.2	849.9	772.7	667.4	570.2
50°	821.9	802.0	724.7	600.8	520.9
52.5°	767.3	752.7	672.7	543.5	479.6
55°	715.4	704.7	620.8	492.9	442.3
57.5°	660.8	650.1	568.8	444.9	405.0
60°	610.1	599.5	516.9	402.3	370.3
62.5°	559.5	544.9	466.3	361.0	334.4
65°	503.6	491.6	413.0	321.1	303.7
67.5°	447.6	437.0	363.7	283.8	271.8
70°	391.7	382.3	313.1	247.8	241.1
72.5°	337.0	325.0	267.8	211.8	209.2
75°	279.8	270.4	217.1	173.2	167.9
77.5°	225.1	217.1	170.5	131.9	127.9
80°	171.8	163.9	122.6	95.9	99.9
82.5°	126.6	115.9	82.6	74.6	78.6
85°	77.3	67.9	53.3	50.6	50.6
87.5°	26.6	25.3	24.0	28.0	29.3
90°	4.0	18.7	32.0	40.0	42.6
92.5°	22.6	33.3	44.0	52.0	54.6
95°	42.6	57.3	65.3	95.9	103.9
97.5°	58.6	75.9	85.3	113.2	121.2
100°	74.6	90.6	119.9	134.5	143.9
102.5°	87.9	99.9	141.2	170.5	175.8
105°	99.9	103.9	149.2	199.8	211.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.9	106.6	159.9	217.1	238.5
115°	123.9	105.2	158.5	218.5	239.8
117.5°	123.9	105.2	154.5	218.5	239.8
120°	121.2	106.6	149.2	215.8	238.5
122.5°	118.6	103.9	143.9	210.5	233.1
125°	114.6	101.2	137.2	201.2	226.5
127.5°	107.9	103.9	130.6	189.2	214.5
130°	102.6	105.2	122.6	177.2	202.5
132.5°	98.6	102.6	114.6	163.9	186.5
135°	93.3	101.2	110.6	149.2	171.8
137.5°	89.3	97.2	103.9	135.9	154.5
140°	85.3	94.6	97.2	118.6	134.5
142.5°	79.9	90.6	91.9	110.6	117.2
145°	75.9	87.9	95.9	102.6	109.2
147.5°	71.9	82.6	93.3	94.6	101.2
150°	70.6	77.3	89.3	90.6	93.3
152.5°	69.3	74.6	82.6	90.6	91.9
155°	69.3	73.3	78.6	85.3	86.6
157.5°	67.9	73.3	75.9	81.3	82.6
160°	67.9	71.9	74.6	78.6	79.9
162.5°	67.9	71.9	73.3	77.3	78.6
165°	67.9	70.6	73.3	75.9	75.9
167.5°	67.9	70.6	71.9	74.6	74.6
170°	67.9	69.3	71.9	73.3	73.3
172.5°	66.6	69.3	70.6	73.3	73.3
175°	66.6	67.9	69.3	70.6	71.9
177.5°	63.9	67.9	69.3	70.6	69.3
180°	65.3	65.3	65.3	65.3	65.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	109.2	105.2	154.5	210.5	227.8
110°	115.9	106.6	158.5	214.5	235.8



(END OF REPORT)