

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: P520751

Luminaire Tested: **8WSLA-50-L835-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: P520751  
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-L835-UPL15-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

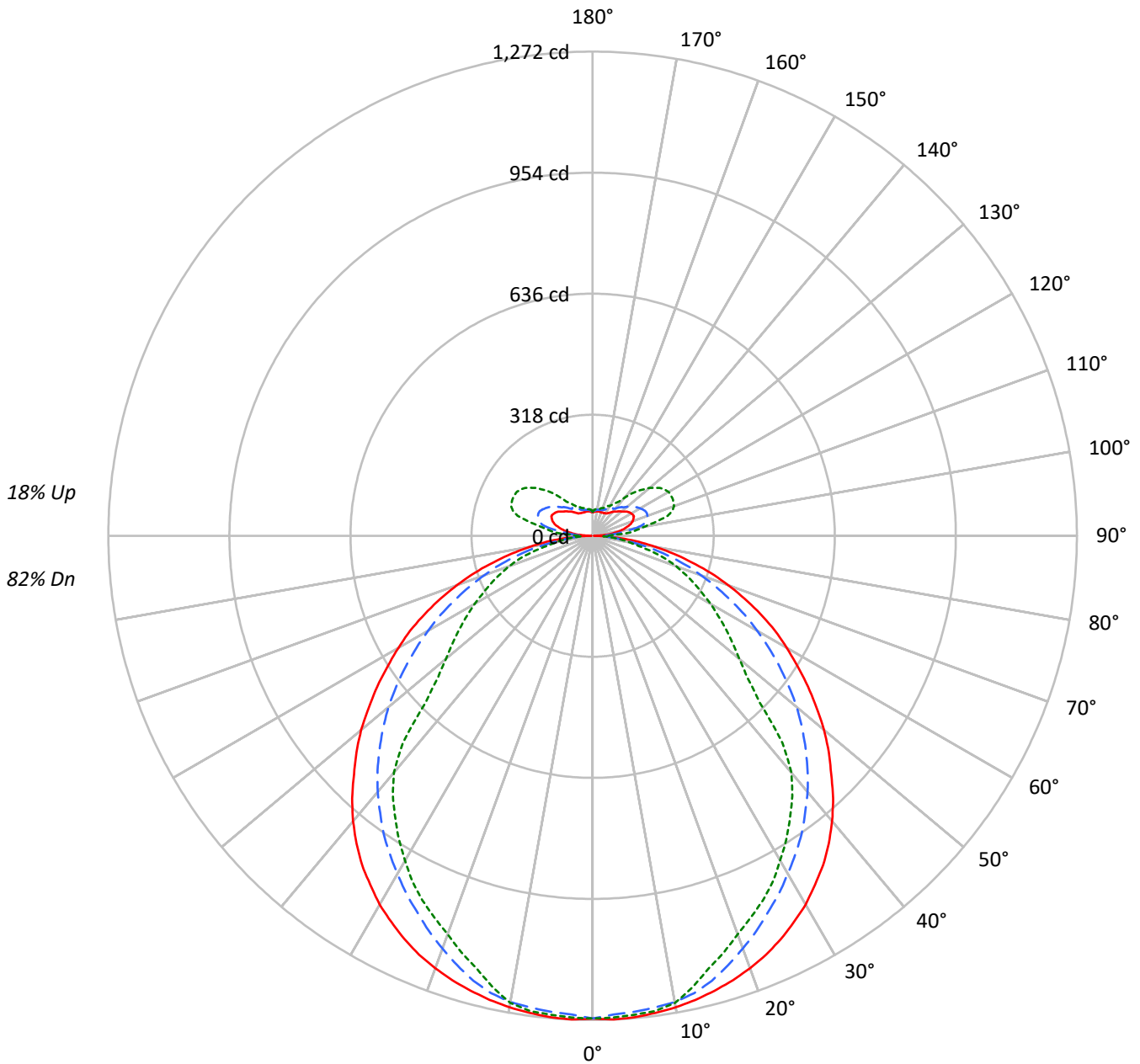
Lumens per Lamp: N/A  
Luminaire Lumens: 4107.0 lumens  
Efficiency: N/A  
Efficacy: 134.7 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

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°	3412	3412	3412
5°	3429	3391	3412
10°	3437	3398	3406
15°	3447	3372	3278
20°	3462	3304	3190
25°	3471	3238	3139
30°	3477	3185	3061
35°	3469	3143	2970
40°	3438	3086	2851
45°	3372	3010	2364
50°	3322	2929	2105
55°	3240	2812	2003
60°	3170	2686	1924
65°	3096	2539	1867
70°	2975	2378	1832
75°	2808	2179	1685
80°	2571	1833	1495
85°	2303	1587	1510



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.2	2.9
10°-20°	341.4	8.3
20°-30°	509.5	12.4
30°-40°	607.1	14.8
40°-50°	603.9	14.7
50°-60°	517.5	12.6
60°-70°	389.8	9.5
70°-80°	225.7	5.5
80°-90°	67.8	1.7
90°-100°	72.8	1.8
100°-110°	149.6	3.6
110°-120°	158.1	3.9
120°-130°	131.9	3.2
130°-140°	92.2	2.2
140°-150°	57.4	1.4
150°-160°	35.6	0.9
160°-170°	20.0	0.5
170°-180°	6.5	0.2
0°-30°	971.1	23.6
0°-40°	1578.2	38.4
0°-60°	2699.6	65.7
0°-90°	3382.9	82.4
90°-120°	380.5	9.3
90°-150°	662.0	16.1
90°-180°	724.0	17.6
0°-180°	4107.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1269	1266	1255	1264	1263	121
15°	1237	1236	1210	1190	1177	350
25°	1169	1152	1091	1064	1057	539
35°	1056	1028	957	920	904	659
45°	886	864	791	712	621	685
55°	691	680	599	476	427	617
65°	486	475	399	310	293	481
75°	270	261	210	167	162	286
85°	75	66	51	49	49	80
90°	4	18	31	39	41	8
95°	41	55	63	93	100	39
105°	96	100	144	193	204	100
115°	120	102	153	211	232	116
125°	111	98	132	194	219	98
135°	90	98	107	144	166	70
145°	73	85	93	99	106	47
155°	67	71	76	82	84	31
165°	66	68	71	73	73	19
175°	64	66	67	68	70	6
180°	63	63	63	63	63	



TEST NUMBER: P520751

CATALOG NUMBER: 8WSLA-50-L835-UPL15-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1268.1	1268.1	1268.1	1268.1	1268.1
2.5°	1272.0	1269.4	1259.1	1269.4	1266.8
5°	1269.4	1265.6	1255.3	1264.3	1263.0
7.5°	1264.3	1261.7	1250.1	1260.4	1259.1
10°	1257.8	1254.0	1243.7	1251.4	1246.3
12.5°	1248.8	1246.3	1230.8	1224.4	1214.1
15°	1237.3	1236.0	1210.3	1189.7	1176.8
17.5°	1224.4	1219.3	1183.2	1158.8	1147.2
20°	1209.0	1201.2	1153.7	1125.4	1113.8
22.5°	1191.0	1179.4	1124.1	1097.1	1085.5
25°	1169.1	1152.4	1090.6	1063.6	1057.2
27.5°	1144.7	1125.4	1059.8	1032.8	1025.0
30°	1118.9	1094.5	1025.0	999.3	985.2
32.5°	1086.8	1063.6	991.6	962.0	946.6
35°	1055.9	1027.6	956.9	919.6	904.2
37.5°	1018.6	990.3	917.0	879.7	861.7
40°	978.7	950.5	878.4	834.7	811.6
42.5°	935.0	909.3	836.0	783.3	738.2
45°	886.1	864.3	791.0	712.5	621.2
47.5°	841.1	820.6	746.0	644.4	550.5
50°	793.5	774.3	699.7	580.0	502.9
52.5°	740.8	726.7	649.5	524.7	463.0
55°	690.7	680.4	599.3	475.9	427.0
57.5°	637.9	627.6	549.2	429.6	391.0
60°	589.0	578.8	499.0	388.4	357.5
62.5°	540.2	526.0	450.1	348.5	322.8
65°	486.2	474.6	398.7	310.0	293.2
67.5°	432.1	421.9	351.1	273.9	262.4
70°	378.1	369.1	302.2	239.2	232.8
72.5°	325.4	313.8	258.5	204.5	201.9
75°	270.1	261.1	209.6	167.2	162.1
77.5°	217.4	209.6	164.6	127.3	123.5
80°	165.9	158.2	118.3	92.6	96.5
82.5°	122.2	111.9	79.7	72.0	75.9
85°	74.6	65.6	51.4	48.9	48.9
87.5°	25.7	24.4	23.2	27.0	28.3
90°	3.9	18.0	30.9	38.6	41.2
92.5°	21.9	32.2	42.4	50.2	52.7
95°	41.2	55.3	63.0	92.6	100.3
97.5°	56.6	73.3	82.3	109.3	117.0
100°	72.0	87.5	115.8	129.9	138.9
102.5°	84.9	96.5	136.3	164.6	169.8
105°	96.5	100.3	144.0	192.9	204.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	115.8	102.9	154.3	209.6	230.2
115°	119.6	101.6	153.0	210.9	231.5
117.5°	119.6	101.6	149.2	210.9	231.5
120°	117.0	102.9	144.0	208.4	230.2
122.5°	114.5	100.3	138.9	203.2	225.1
125°	110.6	97.7	132.5	194.2	218.6
127.5°	104.2	100.3	126.0	182.6	207.1
130°	99.0	101.6	118.3	171.1	195.5
132.5°	95.2	99.0	110.6	158.2	180.1
135°	90.0	97.7	106.7	144.0	165.9
137.5°	86.2	93.9	100.3	131.2	149.2
140°	82.3	91.3	93.9	114.5	129.9
142.5°	77.2	87.5	88.7	106.7	113.2
145°	73.3	84.9	92.6	99.0	105.5
147.5°	69.5	79.7	90.0	91.3	97.7
150°	68.2	74.6	86.2	87.5	90.0
152.5°	66.9	72.0	79.7	87.5	88.7
155°	66.9	70.7	75.9	82.3	83.6
157.5°	65.6	70.7	73.3	78.5	79.7
160°	65.6	69.5	72.0	75.9	77.2
162.5°	65.6	69.5	70.7	74.6	75.9
165°	65.6	68.2	70.7	73.3	73.3
167.5°	65.6	68.2	69.5	72.0	72.0
170°	65.6	66.9	69.5	70.7	70.7
172.5°	64.3	66.9	68.2	70.7	70.7
175°	64.3	65.6	66.9	68.2	69.5
177.5°	61.7	65.6	66.9	68.2	66.9
180°	63.0	63.0	63.0	63.0	63.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	105.5	101.6	149.2	203.2	219.9
110°	111.9	102.9	153.0	207.1	227.6



(END OF REPORT)