

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: P520752

Luminaire Tested: **8WSLA-50-L835-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: P520752  
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-L835-UPL8-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

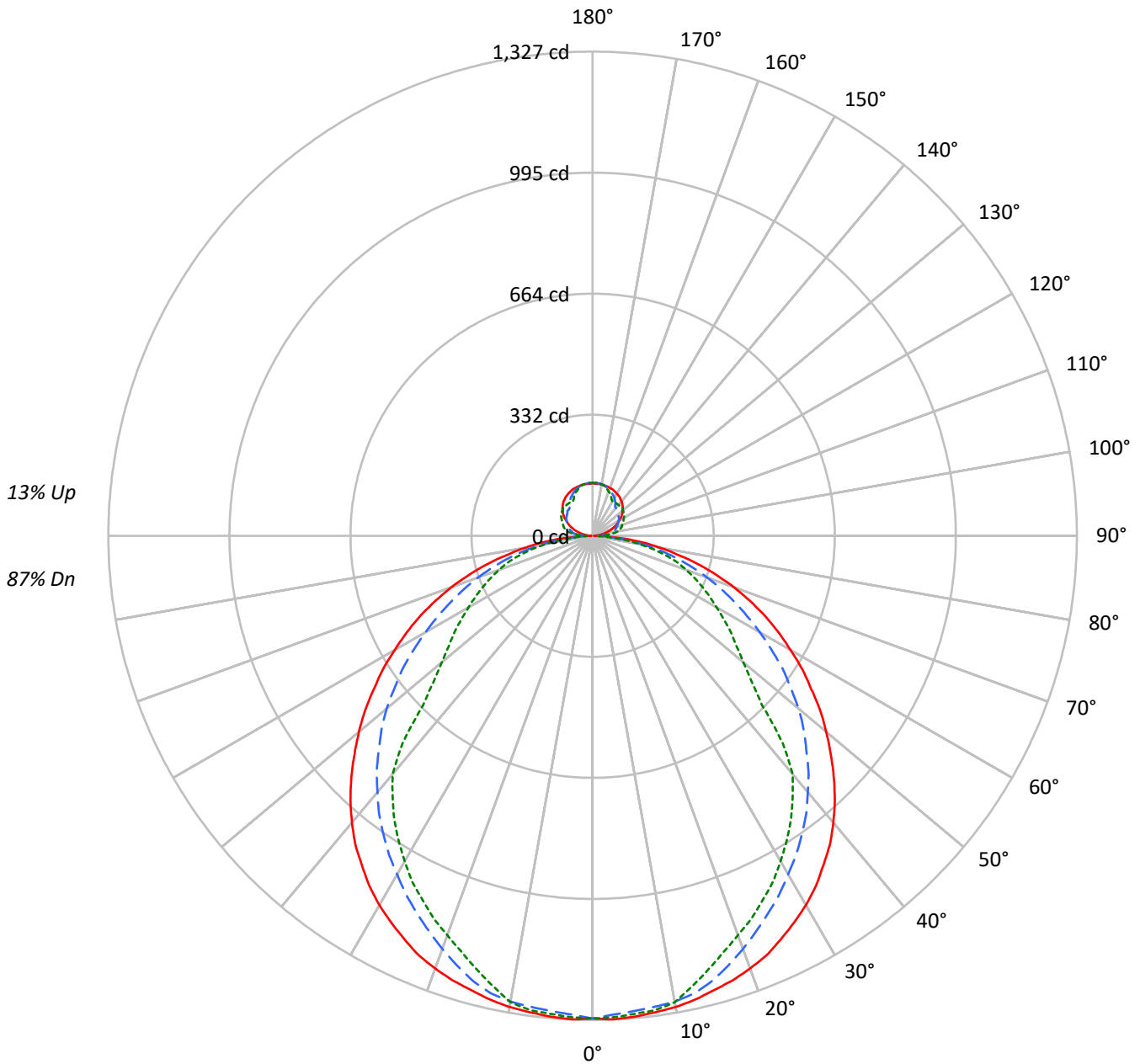
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4117.0 lumens  
Efficiency: N/A  
Efficacy: 135.0 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: P520752  
CATALOG NUMBER: 8WSLA-50-L835-UPL8-UNV-U

### 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	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°	3560	3560	3560
5°	3573	3532	3553
10°	3584	3542	3547
15°	3590	3521	3426
20°	3614	3450	3336
25°	3623	3385	3272
30°	3631	3330	3200
35°	3620	3283	3114
40°	3604	3223	2995
45°	3557	3151	2499
50°	3498	3084	2255
55°	3429	2982	2170
60°	3370	2848	2110
65°	3321	2727	2109
70°	3234	2621	2142
75°	3087	2493	2157
80°	2890	2242	2005
85°	2646	1587	1352



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.2	3.0
10°-20°	356.0	8.6
20°-30°	532.0	12.9
30°-40°	635.1	15.4
40°-50°	635.1	15.4
50°-60°	549.7	13.4
60°-70°	421.9	10.2
70°-80°	258.5	6.3
80°-90°	72.8	1.8
90°-100°	41.1	1.0
100°-110°	65.3	1.6
110°-120°	76.3	1.9
120°-130°	82.4	2.0
130°-140°	81.2	2.0
140°-150°	71.8	1.7
150°-160°	59.1	1.4
160°-170°	39.6	1.0
170°-180°	13.8	0.3
0°-30°	1013.3	24.6
0°-40°	1648.4	40.0
0°-60°	2833.2	68.8
0°-90°	3586.3	87.1
90°-120°	182.7	4.4
90°-150°	418.2	10.2
90°-180°	531.0	12.9
0°-180°	4117.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1323	1319	1308	1317	1315	126
15°	1289	1287	1264	1241	1230	365
25°	1220	1205	1140	1110	1102	563
35°	1102	1074	999	963	948	690
45°	935	908	828	754	657	721
55°	731	714	636	508	462	655
65°	522	502	428	344	331	515
75°	297	282	240	208	208	313
85°	86	70	51	44	44	90
90°	4	13	21	27	29	6
95°	15	32	44	46	46	15
105°	44	46	65	76	80	46
115°	72	61	76	88	93	71
125°	97	78	88	101	105	86
135°	116	105	97	107	112	90
145°	129	124	108	107	110	81
155°	137	135	128	122	120	63
165°	141	143	139	139	139	40
175°	143	145	145	147	147	14
180°	145	145	145	145	145	



TEST NUMBER: P520752

CATALOG NUMBER: 8WSLA-50-L835-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1322.9	1322.9	1322.9	1322.9	1322.9
2.5°	1326.7	1322.9	1313.4	1322.9	1321.0
5°	1322.9	1319.1	1307.7	1317.2	1315.3
7.5°	1317.2	1313.4	1302.0	1313.4	1311.5
10°	1311.5	1307.7	1296.2	1303.9	1298.1
12.5°	1302.0	1298.1	1284.8	1275.3	1263.9
15°	1288.6	1286.7	1263.9	1241.0	1229.6
17.5°	1277.2	1271.5	1235.3	1208.7	1195.4
20°	1262.0	1252.5	1204.9	1174.4	1164.9
22.5°	1244.8	1229.6	1172.5	1144.0	1136.4
25°	1220.1	1204.9	1140.2	1109.7	1102.1
27.5°	1195.4	1176.3	1107.8	1077.3	1069.7
30°	1168.7	1142.1	1071.6	1043.1	1029.8
32.5°	1138.3	1111.6	1037.4	1005.0	989.8
35°	1102.1	1073.5	999.3	963.1	947.9
37.5°	1067.8	1037.4	961.2	921.3	900.3
40°	1026.0	995.5	917.5	873.7	852.7
42.5°	982.2	953.6	875.6	822.3	770.9
45°	934.6	907.9	828.0	753.8	656.7
47.5°	885.1	862.3	784.2	683.3	590.1
50°	835.6	812.8	736.6	616.7	538.7
52.5°	786.1	767.1	683.3	561.5	496.8
55°	730.9	713.8	635.7	508.2	462.5
57.5°	681.4	664.3	580.5	464.4	426.4
60°	626.2	611.0	529.2	420.7	392.1
62.5°	574.8	557.7	477.8	382.6	361.7
65°	521.5	502.5	428.3	344.5	331.2
67.5°	466.3	447.3	380.7	310.3	302.6
70°	411.1	395.9	333.1	276.0	272.2
72.5°	354.0	336.9	285.5	243.6	243.6
75°	296.9	281.7	239.8	207.5	207.5
77.5°	237.9	230.3	192.2	169.4	171.3
80°	186.5	177.0	144.7	129.4	129.4
82.5°	137.0	125.6	97.1	85.7	89.5
85°	85.7	70.4	51.4	43.8	43.8
87.5°	26.6	20.9	15.2	17.1	17.1
90°	3.8	13.3	20.9	26.6	28.6
92.5°	9.5	24.7	30.5	36.2	38.1
95°	15.2	32.4	43.8	45.7	45.7
97.5°	20.9	36.2	53.3	60.9	60.9
100°	28.6	38.1	57.1	68.5	70.4
102.5°	36.2	41.9	60.9	72.3	76.1
105°	43.8	45.7	64.7	76.1	79.9



TEST NUMBER: P520752

CATALOG NUMBER: 8WSLA-50-L835-UPL8-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	64.7	57.1	72.3	85.7	89.5
115°	72.3	60.9	76.1	87.6	93.3
117.5°	78.0	66.6	79.9	91.4	95.2
120°	83.8	70.4	81.8	95.2	99.0
122.5°	91.4	74.2	85.7	97.1	102.8
125°	97.1	78.0	87.6	100.9	104.7
127.5°	102.8	85.7	89.5	102.8	106.6
130°	106.6	93.3	91.4	104.7	108.5
132.5°	112.3	99.0	93.3	106.6	110.4
135°	116.1	104.7	97.1	106.6	112.3
137.5°	119.9	110.4	97.1	106.6	110.4
140°	123.7	116.1	99.0	106.6	110.4
142.5°	125.6	119.9	100.9	106.6	110.4
145°	129.4	123.7	108.5	106.6	110.4
147.5°	131.3	127.5	114.2	106.6	110.4
150°	133.2	131.3	119.9	108.5	108.5
152.5°	135.1	133.2	123.7	116.1	112.3
155°	137.0	135.1	127.5	121.8	119.9
157.5°	139.0	139.0	131.3	127.5	125.6
160°	139.0	140.9	135.1	131.3	129.4
162.5°	140.9	142.8	137.0	135.1	133.2
165°	140.9	142.8	139.0	139.0	139.0
167.5°	142.8	144.7	142.8	140.9	140.9
170°	142.8	144.7	142.8	142.8	142.8
172.5°	142.8	144.7	144.7	144.7	144.7
175°	142.8	144.7	144.7	146.6	146.6
177.5°	142.8	144.7	144.7	144.7	144.7
180°	144.7	144.7	144.7	144.7	144.7



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	51.4	49.5	66.6	79.9	83.8
110°	57.1	53.3	70.4	81.8	85.7



(END OF REPORT)