

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: P520629

Luminaire Tested: **8WSLA-100-L830-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: P520629  
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-100-L830-UPL8-UNV-U  
Description: 8 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 80 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

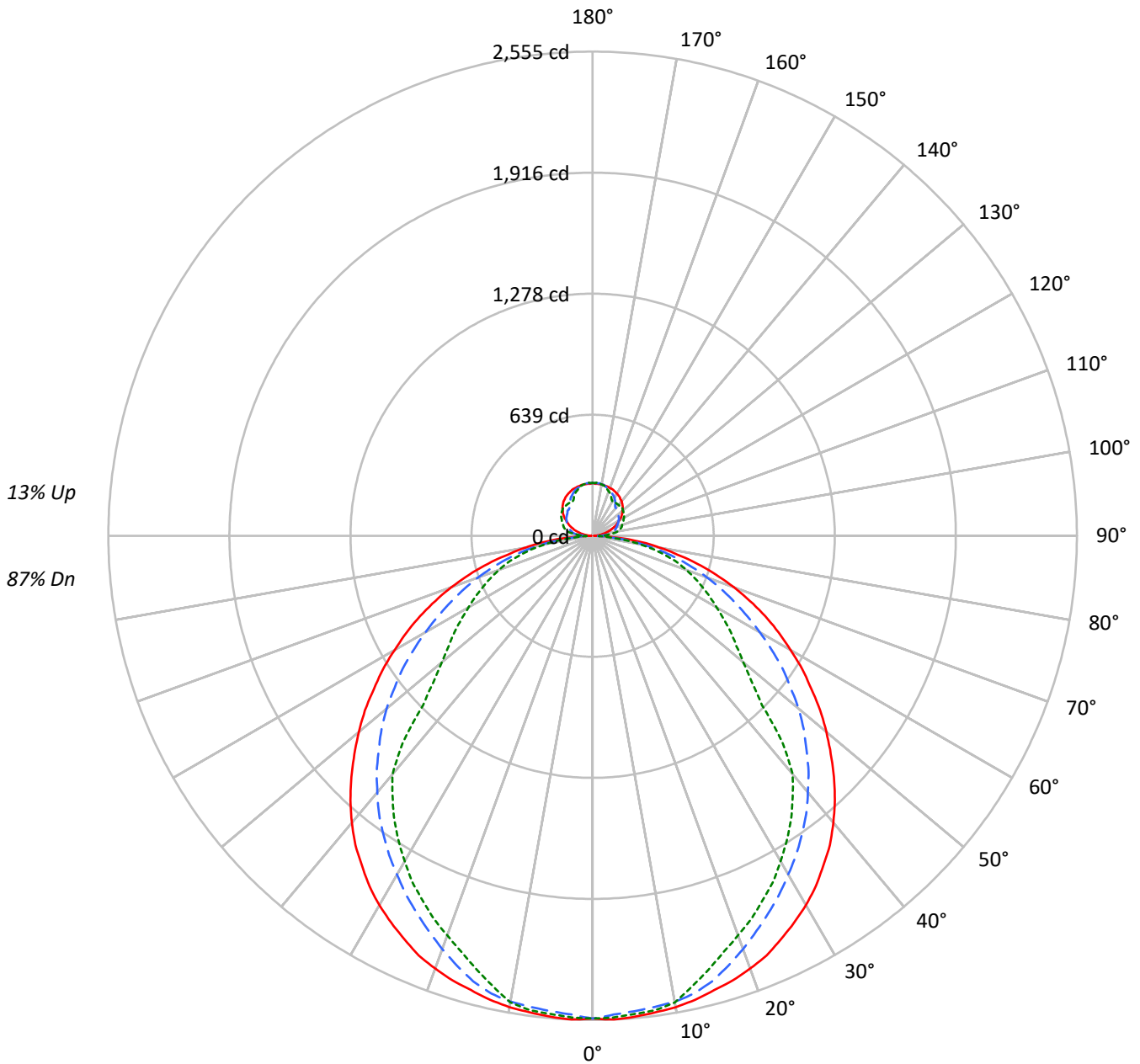
Lumens per Lamp: N/A  
Luminaire Lumens: 7929.0 lumens  
Efficiency: N/A  
Efficacy: 125.1 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 63.4  
Input Voltage (V): NR  
Input Current (Ain): 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: P520629

CATALOG NUMBER: 8WSLA-100-L830-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°	6856	6856	6856
5°	6882	6803	6843
10°	6902	6822	6832
15°	6914	6781	6597
20°	6960	6645	6425
25°	6977	6520	6302
30°	6994	6413	6162
35°	6973	6322	5997
40°	6941	6207	5769
45°	6850	6069	4813
50°	6737	5939	4343
55°	6604	5744	4179
60°	6491	5485	4064
65°	6395	5252	4062
70°	6230	5047	4124
75°	5946	4802	4155
80°	5568	4317	3863
85°	5094	3057	2603



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.2	3.0
10°-20°	685.7	8.6
20°-30°	1024.6	12.9
30°-40°	1223.1	15.4
40°-50°	1223.2	15.4
50°-60°	1058.6	13.4
60°-70°	812.5	10.2
70°-80°	497.9	6.3
80°-90°	140.2	1.8
90°-100°	79.2	1.0
100°-110°	125.7	1.6
110°-120°	147.0	1.9
120°-130°	158.7	2.0
130°-140°	156.4	2.0
140°-150°	138.3	1.7
150°-160°	113.9	1.4
160°-170°	76.2	1.0
170°-180°	26.5	0.3
0°-30°	1951.5	24.6
0°-40°	3174.6	40.0
0°-60°	5456.4	68.8
0°-90°	6907.0	87.1
90°-120°	352.0	4.4
90°-150°	805.4	10.2
90°-180°	1022.0	12.9
0°-180°	7929.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2548	2548	2548	2548	2548	
5°	2548	2540	2518	2537	2533	242
15°	2482	2478	2434	2390	2368	702
25°	2350	2320	2196	2137	2122	1084
35°	2122	2068	1925	1855	1826	1329
45°	1800	1749	1595	1452	1265	1388
55°	1408	1375	1224	979	891	1262
65°	1004	968	825	664	638	992
75°	572	542	462	400	400	603
85°	165	136	99	84	84	172
90°	7	26	40	51	55	12
95°	29	62	84	88	88	29
105°	84	88	125	147	154	89
115°	139	117	147	169	180	136
125°	187	150	169	194	202	167
135°	224	202	187	205	216	172
145°	249	238	209	205	213	155
155°	264	260	246	235	231	122
165°	271	275	268	268	268	77
175°	275	279	279	282	282	26
180°	279	279	279	279	279	



TEST NUMBER: P520629

CATALOG NUMBER: 8WSLA-100-L830-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2547.8	2547.8	2547.8	2547.8	2547.8
2.5°	2555.1	2547.8	2529.4	2547.8	2544.1
5°	2547.8	2540.4	2518.4	2536.8	2533.1
7.5°	2536.8	2529.4	2507.4	2529.4	2525.8
10°	2525.8	2518.4	2496.5	2511.1	2500.1
12.5°	2507.4	2500.1	2474.5	2456.1	2434.1
15°	2481.8	2478.1	2434.1	2390.1	2368.1
17.5°	2459.8	2448.8	2379.1	2327.8	2302.2
20°	2430.5	2412.1	2320.5	2261.8	2243.5
22.5°	2397.5	2368.1	2258.2	2203.2	2188.5
25°	2349.8	2320.5	2195.9	2137.2	2122.5
27.5°	2302.2	2265.5	2133.5	2074.9	2060.2
30°	2250.8	2199.5	2063.9	2008.9	1983.2
32.5°	2192.2	2140.9	1997.9	1935.6	1906.2
35°	2122.5	2067.5	1924.6	1854.9	1825.6
37.5°	2056.5	1997.9	1851.3	1774.3	1734.0
40°	1975.9	1917.2	1766.9	1682.6	1642.3
42.5°	1891.6	1836.6	1686.3	1583.7	1484.7
45°	1799.9	1748.6	1594.7	1451.7	1264.7
47.5°	1704.6	1660.6	1510.3	1316.0	1136.4
50°	1609.3	1565.3	1418.7	1187.7	1037.4
52.5°	1514.0	1477.3	1316.0	1081.4	956.8
55°	1407.7	1374.7	1224.4	978.8	890.8
57.5°	1312.4	1279.4	1118.1	894.5	821.2
60°	1206.1	1176.7	1019.1	810.2	755.2
62.5°	1107.1	1074.1	920.1	736.8	696.5
65°	1004.4	967.8	824.8	663.5	637.9
67.5°	898.1	861.5	733.2	597.5	582.9
70°	791.8	762.5	641.5	531.6	524.2
72.5°	681.9	648.9	549.9	469.2	469.2
75°	571.9	542.5	461.9	399.6	399.6
77.5°	458.2	443.6	370.3	326.3	329.9
80°	359.3	340.9	278.6	249.3	249.3
82.5°	263.9	241.9	187.0	165.0	172.3
85°	165.0	135.6	99.0	84.3	84.3
87.5°	51.3	40.3	29.3	33.0	33.0
90°	7.3	25.7	40.3	51.3	55.0
92.5°	18.3	47.7	58.7	69.7	73.3
95°	29.3	62.3	84.3	88.0	88.0
97.5°	40.3	69.7	102.6	117.3	117.3
100°	55.0	73.3	110.0	132.0	135.6
102.5°	69.7	80.6	117.3	139.3	146.6
105°	84.3	88.0	124.6	146.6	154.0



TEST NUMBER: P520629

CATALOG NUMBER: 8WSLA-100-L830-UPL8-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	124.6	110.0	139.3	165.0	172.3
115°	139.3	117.3	146.6	168.6	179.6
117.5°	150.3	128.3	154.0	176.0	183.3
120°	161.3	135.6	157.6	183.3	190.6
122.5°	176.0	143.0	165.0	187.0	198.0
125°	187.0	150.3	168.6	194.3	201.6
127.5°	198.0	165.0	172.3	198.0	205.3
130°	205.3	179.6	176.0	201.6	209.0
132.5°	216.3	190.6	179.6	205.3	212.6
135°	223.6	201.6	187.0	205.3	216.3
137.5°	230.9	212.6	187.0	205.3	212.6
140°	238.3	223.6	190.6	205.3	212.6
142.5°	241.9	230.9	194.3	205.3	212.6
145°	249.3	238.3	209.0	205.3	212.6
147.5°	252.9	245.6	220.0	205.3	212.6
150°	256.6	252.9	230.9	209.0	209.0
152.5°	260.3	256.6	238.3	223.6	216.3
155°	263.9	260.3	245.6	234.6	230.9
157.5°	267.6	267.6	252.9	245.6	241.9
160°	267.6	271.3	260.3	252.9	249.3
162.5°	271.3	274.9	263.9	260.3	256.6
165°	271.3	274.9	267.6	267.6	267.6
167.5°	274.9	278.6	274.9	271.3	271.3
170°	274.9	278.6	274.9	274.9	274.9
172.5°	274.9	278.6	278.6	278.6	278.6
175°	274.9	278.6	278.6	282.3	282.3
177.5°	274.9	278.6	278.6	278.6	278.6
180°	278.6	278.6	278.6	278.6	278.6



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	99.0	95.3	128.3	154.0	161.3
110°	110.0	102.6	135.6	157.6	165.0



(END OF REPORT)