

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: P520637

Luminaire Tested: **8WSLA-100-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: P520637
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-100-L850-UPL15-UNV-U
Description: 8 FOOT, 2000 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

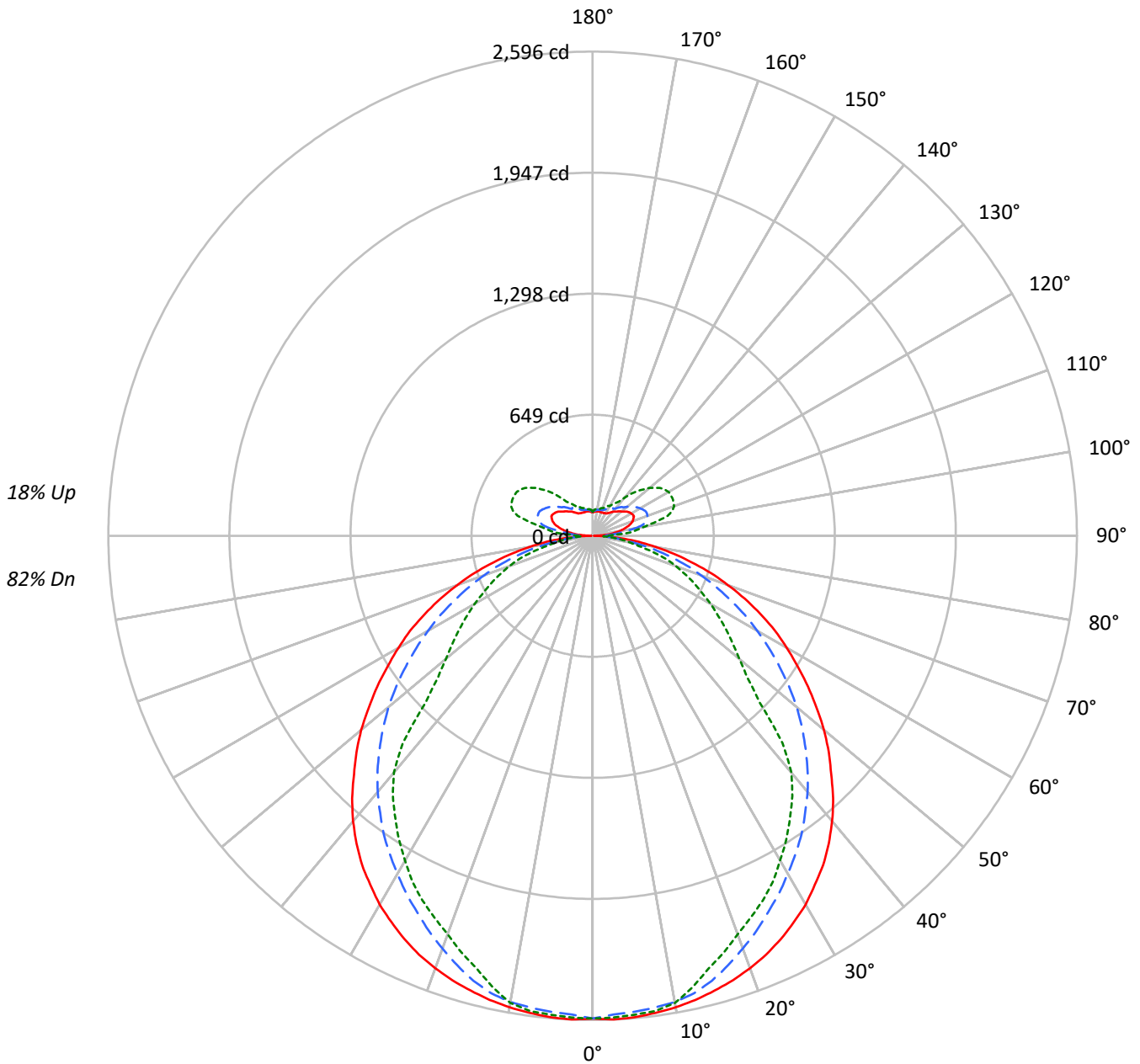
Lumens per Lamp: N/A
Luminaire Lumens: 8382.0 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 63.4
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				20				20
RC	80				70				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	86	86	86	82
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	72	72	72	69
2	96	88	81	76	91	84	78	73	78	73	69	72	68	65	67	64	61	61	61	61	58
3	87	77	69	63	83	74	67	61	69	63	58	64	59	55	59	55	52	52	52	52	49
4	80	68	60	53	76	66	58	52	61	55	50	57	51	47	53	48	45	45	45	45	42
5	73	61	52	46	70	59	51	45	55	48	43	51	45	41	48	43	39	39	39	39	36
6	68	55	46	40	65	53	45	39	50	43	38	46	40	36	43	38	34	34	34	34	32
7	63	50	41	35	60	48	40	35	45	38	33	42	36	32	39	34	30	30	30	30	28
8	58	45	37	32	56	44	36	31	41	35	30	39	33	29	36	31	27	27	27	27	25
9	55	42	34	28	52	40	33	28	38	31	27	36	30	26	33	28	25	25	25	25	23
10	51	38	31	26	49	37	30	25	35	29	24	33	27	23	31	26	23	23	23	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6965	6965	6965
5°	6998	6920	6963
10°	7015	6936	6950
15°	7035	6881	6691
20°	7066	6743	6509
25°	7084	6609	6406
30°	7096	6500	6248
35°	7079	6415	6062
40°	7017	6298	5818
45°	6882	6143	4825
50°	6780	5978	4297
55°	6613	5739	4089
60°	6470	5482	3927
65°	6318	5181	3811
70°	6072	4853	3738
75°	5731	4449	3438
80°	5247	3742	3051
85°	4699	3242	3078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.3	2.9
10°-20°	696.8	8.3
20°-30°	1039.9	12.4
30°-40°	1239.0	14.8
40°-50°	1232.4	14.7
50°-60°	1056.2	12.6
60°-70°	795.5	9.5
70°-80°	460.7	5.5
80°-90°	138.5	1.7
90°-100°	148.6	1.8
100°-110°	305.3	3.6
110°-120°	322.8	3.9
120°-130°	269.3	3.2
130°-140°	188.1	2.2
140°-150°	117.1	1.4
150°-160°	72.6	0.9
160°-170°	40.9	0.5
170°-180°	13.2	0.2
0°-30°	1981.9	23.6
0°-40°	3221.0	38.4
0°-60°	5509.6	65.7
0°-90°	6904.3	82.4
90°-120°	776.7	9.3
90°-150°	1351.1	16.1
90°-180°	1478.0	17.6
0°-180°	8382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2588	2588	2588	2588	2588	
5°	2591	2583	2562	2580	2578	246
15°	2525	2522	2470	2428	2402	714
25°	2386	2352	2226	2171	2158	1100
35°	2155	2097	1953	1877	1845	1346
45°	1808	1764	1614	1454	1268	1398
55°	1410	1389	1223	971	872	1260
65°	992	969	814	633	598	981
75°	551	533	428	341	331	584
85°	152	134	105	100	100	162
90°	8	37	63	79	84	15
95°	84	113	129	189	205	80
105°	197	205	294	394	417	204
115°	244	207	312	430	472	238
125°	226	200	270	396	446	200
135°	184	200	218	294	339	143
145°	150	173	189	202	215	95
155°	136	144	155	168	171	63
165°	134	139	144	150	150	38
175°	131	134	136	139	142	13
180°	129	129	129	129	129	



TEST NUMBER: P520637

CATALOG NUMBER: 8WSLA-100-L850-UPL15-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2588.1	2588.1	2588.1	2588.1	2588.1
2.5°	2596.0	2590.8	2569.8	2590.8	2585.5
5°	2590.8	2582.9	2561.9	2580.3	2577.6
7.5°	2580.3	2575.0	2551.4	2572.4	2569.8
10°	2567.1	2559.3	2538.3	2554.0	2543.5
12.5°	2548.8	2543.5	2512.0	2498.9	2477.9
15°	2525.1	2522.5	2470.0	2428.0	2401.8
17.5°	2498.9	2488.4	2414.9	2365.0	2341.4
20°	2467.4	2451.6	2354.5	2296.8	2273.1
22.5°	2430.6	2407.0	2294.1	2239.0	2215.4
25°	2386.0	2351.9	2225.9	2170.8	2157.6
27.5°	2336.1	2296.8	2162.9	2107.8	2092.0
30°	2283.6	2233.8	2092.0	2039.5	2010.7
32.5°	2218.0	2170.8	2023.8	1963.4	1931.9
35°	2155.0	2097.3	1952.9	1876.8	1845.3
37.5°	2078.9	2021.2	1871.5	1795.4	1758.7
40°	1997.5	1939.8	1792.8	1703.5	1656.3
42.5°	1908.3	1855.8	1706.2	1598.6	1506.7
45°	1808.5	1763.9	1614.3	1454.2	1267.8
47.5°	1716.7	1674.7	1522.4	1315.1	1123.4
50°	1619.5	1580.2	1427.9	1183.8	1026.3
52.5°	1511.9	1483.1	1325.6	1070.9	945.0
55°	1409.6	1388.6	1223.2	971.2	871.5
57.5°	1301.9	1280.9	1120.8	876.7	798.0
60°	1202.2	1181.2	1018.5	792.7	729.7
62.5°	1102.4	1073.6	918.7	711.3	658.8
65°	992.2	968.6	813.7	632.6	598.5
67.5°	882.0	861.0	716.6	559.1	535.5
70°	771.7	753.3	616.8	488.2	475.1
72.5°	664.1	640.5	527.6	417.4	412.1
75°	551.2	532.9	427.9	341.2	330.7
77.5°	443.6	427.9	336.0	259.9	252.0
80°	338.6	322.9	241.5	189.0	196.9
82.5°	249.4	228.4	162.7	147.0	154.9
85°	152.2	133.9	105.0	99.7	99.7
87.5°	52.5	49.9	47.2	55.1	57.7
90°	7.9	36.7	63.0	78.7	84.0
92.5°	44.6	65.6	86.6	102.4	107.6
95°	84.0	112.9	128.6	189.0	204.7
97.5°	115.5	149.6	168.0	223.1	238.9
100°	147.0	178.5	236.2	265.1	283.5
102.5°	173.2	196.9	278.2	336.0	346.5
105°	196.9	204.7	294.0	393.7	417.4



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CATALOG NUMBER: 8WSLA-100-L850-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.2	210.0	315.0	427.9	469.9
115°	244.1	207.4	312.4	430.5	472.5
117.5°	244.1	207.4	304.5	430.5	472.5
120°	238.9	210.0	294.0	425.2	469.9
122.5°	233.6	204.7	283.5	414.7	459.4
125°	225.7	199.5	270.4	396.4	446.2
127.5°	212.6	204.7	257.2	372.7	422.6
130°	202.1	207.4	241.5	349.1	399.0
132.5°	194.2	202.1	225.7	322.9	367.5
135°	183.7	199.5	217.9	294.0	338.6
137.5°	175.9	191.6	204.7	267.7	304.5
140°	168.0	186.4	191.6	233.6	265.1
142.5°	157.5	178.5	181.1	217.9	231.0
145°	149.6	173.2	189.0	202.1	215.2
147.5°	141.7	162.7	183.7	186.4	199.5
150°	139.1	152.2	175.9	178.5	183.7
152.5°	136.5	147.0	162.7	178.5	181.1
155°	136.5	144.4	154.9	168.0	170.6
157.5°	133.9	144.4	149.6	160.1	162.7
160°	133.9	141.7	147.0	154.9	157.5
162.5°	133.9	141.7	144.4	152.2	154.9
165°	133.9	139.1	144.4	149.6	149.6
167.5°	133.9	139.1	141.7	147.0	147.0
170°	133.9	136.5	141.7	144.4	144.4
172.5°	131.2	136.5	139.1	144.4	144.4
175°	131.2	133.9	136.5	139.1	141.7
177.5°	126.0	133.9	136.5	139.1	136.5
180°	128.6	128.6	128.6	128.6	128.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	215.2	207.4	304.5	414.7	448.9
110°	228.4	210.0	312.4	422.6	464.6



(END OF REPORT)