

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: P520732

Luminaire Tested: **8WSLA-200-L850-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: P520732  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-689-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 8WSLA-200-L850-UNV-U  
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

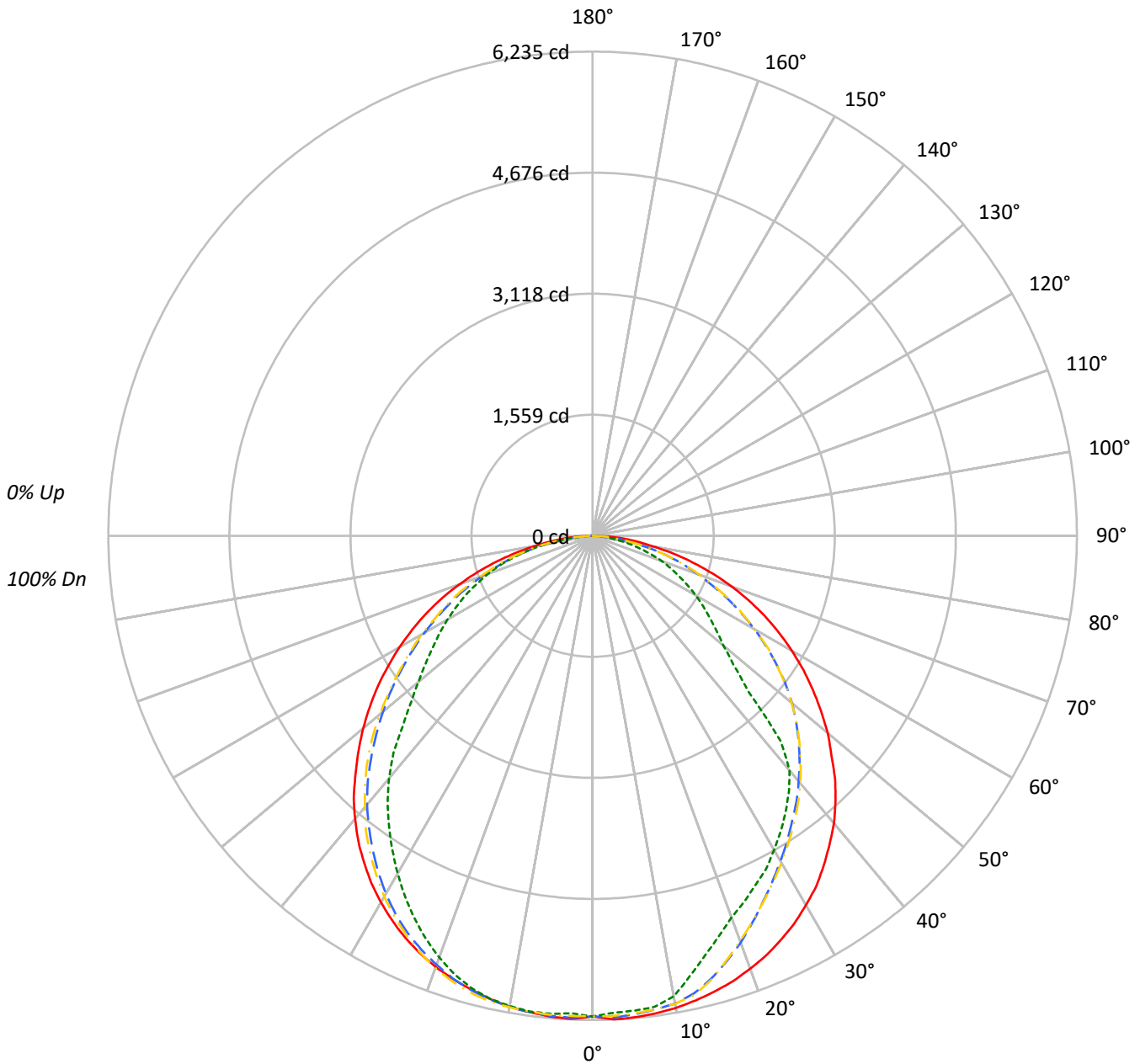
Lumens per Lamp: N/A  
Luminaire Lumens: 16601.0 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 152.3  
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: P520732

CATALOG NUMBER: 8WSLA-200-L850-UNV-U

### Luminous Intensity Polar Plot





TEST NUMBER: P520732

CATALOG NUMBER: 8WSLA-200-L850-UNV-U

**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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	16653	16653	16653	16653
5°	16815	16582	16788	16689
10°	16873	16456	16828	16801
15°	16925	15584	16852	16796
20°	16989	14974	16923	16542
25°	17043	14727	16955	16127
30°	17062	14514	16939	15598
35°	17035	14233	16861	15018
40°	16980	13855	16712	14321
45°	16791	10765	16412	13140
50°	16539	9215	16136	12259
55°	16246	8629	15825	11791
60°	15938	8237	15455	11596
65°	15559	7800	15030	11457
70°	14941	7419	14314	11284
75°	13910	6524	13254	10735
80°	12348	5453	11576	9106
85°	11686	3896	10251	5227



TEST NUMBER: P520732

CATALOG NUMBER: 8WSLA-200-L850-UNV-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	588.0	3.5
10°-20°	1677.1	10.1
20°-30°	2506.0	15.1
30°-40°	2983.0	18.0
40°-50°	2981.7	18.0
50°-60°	2565.7	15.5
60°-70°	1931.1	11.6
70°-80°	1100.4	6.6
80°-90°	267.9	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4771.1	28.7
0°-40°	7754.1	46.7
0°-60°	13301.6	80.1
0°-90°	16601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16601.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	6188	6188	6188	6188	6188	
5°	6225	6138	6215	6178	6225	592
15°	6075	5594	6049	6029	6075	1716
25°	5740	4960	5710	5431	5740	2647
35°	5186	4332	5133	4572	5186	3245
45°	4412	2829	4313	3453	4412	3398
55°	3463	1839	3373	2513	3463	3096
65°	2444	1225	2360	1799	2444	2413
75°	1338	628	1275	1032	1338	1416
85°	378	126	332	169	378	412
90°	0	0	0	0	0	



TEST NUMBER: P520732

CATALOG NUMBER: 8WSLA-200-L850-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	6188.3	6188.3	6188.3	6188.3	6188.3	6188.3	6188.3	6188.3	6188.3	6188.3	6188.3
2.5°	6234.8	6178.3	6211.5	6201.6	6148.5	6168.4	6188.3	6168.4	6228.1	6175.0	6211.5
5°	6224.8	6165.1	6185.0	6165.1	6138.5	6145.1	6175.0	6155.1	6214.9	6158.4	6204.9
7.5°	6204.9	6131.9	6151.8	6141.8	6118.6	6121.9	6151.8	6135.2	6188.3	6135.2	6188.3
10°	6175.0	6098.7	6115.3	6072.1	6022.3	6058.8	6118.6	6102.0	6158.4	6098.7	6158.4
12.5°	6128.5	6052.2	6035.6	5892.8	5803.2	5872.9	6055.5	6055.5	6108.6	6052.2	6115.3
15°	6075.4	5992.4	5902.8	5687.0	5594.0	5663.8	5916.1	6002.4	6048.9	5992.4	6055.5
17.5°	6012.3	5916.1	5743.4	5491.1	5404.8	5474.5	5733.5	5922.7	5982.5	5922.7	5979.2
20°	5932.7	5819.8	5574.1	5285.3	5228.9	5291.9	5550.9	5826.4	5909.4	5836.4	5876.2
22.5°	5846.4	5710.2	5384.9	5125.9	5099.4	5139.2	5374.9	5706.9	5816.5	5740.1	5766.7
25°	5740.1	5580.8	5195.7	4979.9	4959.9	4983.2	5202.3	5567.5	5710.2	5630.6	5640.5
27.5°	5627.2	5454.6	5016.4	4857.0	4837.1	4847.1	5029.7	5411.4	5587.4	5507.7	5491.1
30°	5491.1	5305.2	4837.1	4691.0	4671.1	4707.6	4863.7	5252.1	5451.3	5371.6	5321.8
32.5°	5355.0	5142.5	4661.1	4548.3	4508.4	4541.6	4691.0	5086.1	5301.9	5218.9	5135.9
35°	5185.7	4969.9	4478.6	4365.7	4332.5	4369.0	4518.4	4913.5	5132.6	5049.6	4936.7
37.5°	5009.7	4787.3	4312.6	4209.6	4149.9	4193.0	4342.4	4734.2	4956.6	4870.3	4730.9
40°	4833.8	4594.7	4126.6	4020.4	3944.0	4007.1	4159.8	4545.0	4757.4	4677.7	4518.4
42.5°	4627.9	4402.2	3944.0	3794.7	3578.9	3781.4	3964.0	4355.7	4551.6	4475.2	4282.7
45°	4412.2	4196.4	3751.5	3389.6	2828.6	3422.8	3764.8	4156.5	4312.6	4239.5	4030.4
47.5°	4166.5	3983.9	3555.6	3004.5	2460.1	3037.7	3562.3	3967.3	4086.8	4007.1	3774.7
50°	3950.7	3771.4	3349.8	2679.2	2201.1	2715.7	3346.5	3754.8	3854.4	3781.4	3522.4
52.5°	3705.0	3549.0	3127.4	2390.3	2008.5	2426.9	3120.7	3535.7	3615.4	3529.1	3270.1
55°	3462.7	3323.2	2891.6	2134.7	1839.2	2167.9	2885.0	3309.9	3373.0	3273.4	3004.5
57.5°	3217.0	3090.8	2649.3	1905.6	1683.2	1942.1	2665.9	3077.6	3120.7	2994.6	2748.9
60°	2961.4	2855.1	2403.6	1703.1	1530.5	1733.0	2397.0	2845.2	2871.7	2735.6	2499.9
62.5°	2705.7	2609.4	2157.9	1517.2	1374.4	1537.1	2174.5	2599.5	2616.1	2486.6	2244.3
65°	2443.5	2353.8	1918.9	1321.3	1225.0	1354.5	1935.5	2343.9	2360.5	2214.4	1995.3
67.5°	2171.2	2098.2	1663.3	1171.9	1082.3	1181.9	1696.5	2084.9	2094.9	1952.1	1752.9
70°	1899.0	1835.9	1437.5	1009.3	942.9	1012.6	1460.8	1799.4	1819.3	1666.6	1507.2
72.5°	1620.1	1570.3	1218.4	839.9	780.2	839.9	1231.7	1537.1	1550.4	1424.2	1268.2
75°	1337.9	1301.4	996.0	673.9	627.5	670.6	1002.6	1274.8	1274.8	1155.3	1032.5
77.5°	1065.7	1039.1	763.6	517.9	484.7	511.3	766.9	1009.3	1002.6	909.7	813.4
80°	796.8	776.9	547.8	375.1	351.9	365.2	547.8	747.0	747.0	680.6	564.4
82.5°	571.0	547.8	361.9	245.7	232.4	239.0	355.2	521.2	531.2	481.4	381.8
85°	378.5	325.4	195.9	136.1	126.2	129.5	185.9	302.1	332.0	278.9	199.2
87.5°	166.0	109.6	49.8	19.9	10.0	13.3	39.8	96.3	126.2	83.0	26.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P520732

CATALOG NUMBER: 8WSLA-200-L850-UNV-U

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	6188.3	6188.3	6188.3	6188.3	6188.3	6188.3
2.5°	6208.2	6155.1	6175.0	6188.3	6175.0	6234.8
5°	6201.6	6178.3	6175.0	6191.6	6165.1	6224.8
7.5°	6191.6	6178.3	6175.0	6181.7	6148.5	6204.9
10°	6168.4	6148.5	6155.1	6165.1	6121.9	6175.0
12.5°	6125.2	6105.3	6108.6	6141.8	6082.1	6128.5
15°	6052.2	6028.9	6052.2	6088.7	6035.6	6075.4
17.5°	5955.9	5919.4	5959.2	6015.7	5975.8	6012.3
20°	5833.1	5776.6	5819.8	5922.7	5886.2	5932.7
22.5°	5683.7	5614.0	5657.1	5806.5	5796.6	5846.4
25°	5514.4	5431.4	5491.1	5673.7	5693.6	5740.1
27.5°	5325.1	5232.2	5311.8	5527.6	5574.1	5627.2
30°	5119.3	5019.7	5112.7	5365.0	5434.7	5491.1
32.5°	4906.8	4797.3	4903.5	5182.4	5282.0	5355.0
35°	4684.4	4571.5	4691.0	4993.1	5112.7	5185.7
37.5°	4445.4	4335.8	4465.3	4793.9	4936.7	5009.7
40°	4199.7	4076.8	4222.9	4558.2	4747.5	4833.8
42.5°	3947.4	3794.7	3973.9	4335.8	4541.6	4627.9
45°	3665.2	3452.7	3695.1	4100.1	4315.9	4412.2
47.5°	3383.0	3170.5	3416.2	3847.8	4080.2	4166.5
50°	3110.8	2928.2	3124.0	3572.2	3841.1	3950.7
52.5°	2861.8	2712.4	2878.4	3303.3	3595.5	3705.0
55°	2629.4	2513.2	2649.3	3037.7	3336.5	3462.7
57.5°	2410.3	2337.2	2430.2	2785.4	3097.5	3217.0
60°	2204.4	2154.6	2221.0	2536.4	2815.3	2961.4
62.5°	2001.9	1975.3	2025.1	2274.1	2553.0	2705.7
65°	1806.0	1799.4	1825.9	2045.1	2277.5	2443.5
67.5°	1610.2	1606.8	1623.4	1802.7	2008.5	2171.2
70°	1414.3	1434.2	1424.2	1540.4	1739.6	1899.0
72.5°	1215.1	1245.0	1228.4	1301.4	1494.0	1620.1
75°	992.7	1032.5	999.3	1082.3	1201.8	1337.9
77.5°	763.6	806.7	766.9	839.9	969.4	1065.7
80°	547.8	587.6	554.4	610.9	723.7	796.8
82.5°	345.3	375.1	348.6	405.0	517.9	571.0
85°	152.7	169.3	176.0	219.1	318.7	378.5
87.5°	6.6	3.3	6.6	43.2	112.9	166.0
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)