

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: P520726

Luminaire Tested: **8WSLA-200-L835-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: P520726  
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-L835-UNV-U  
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

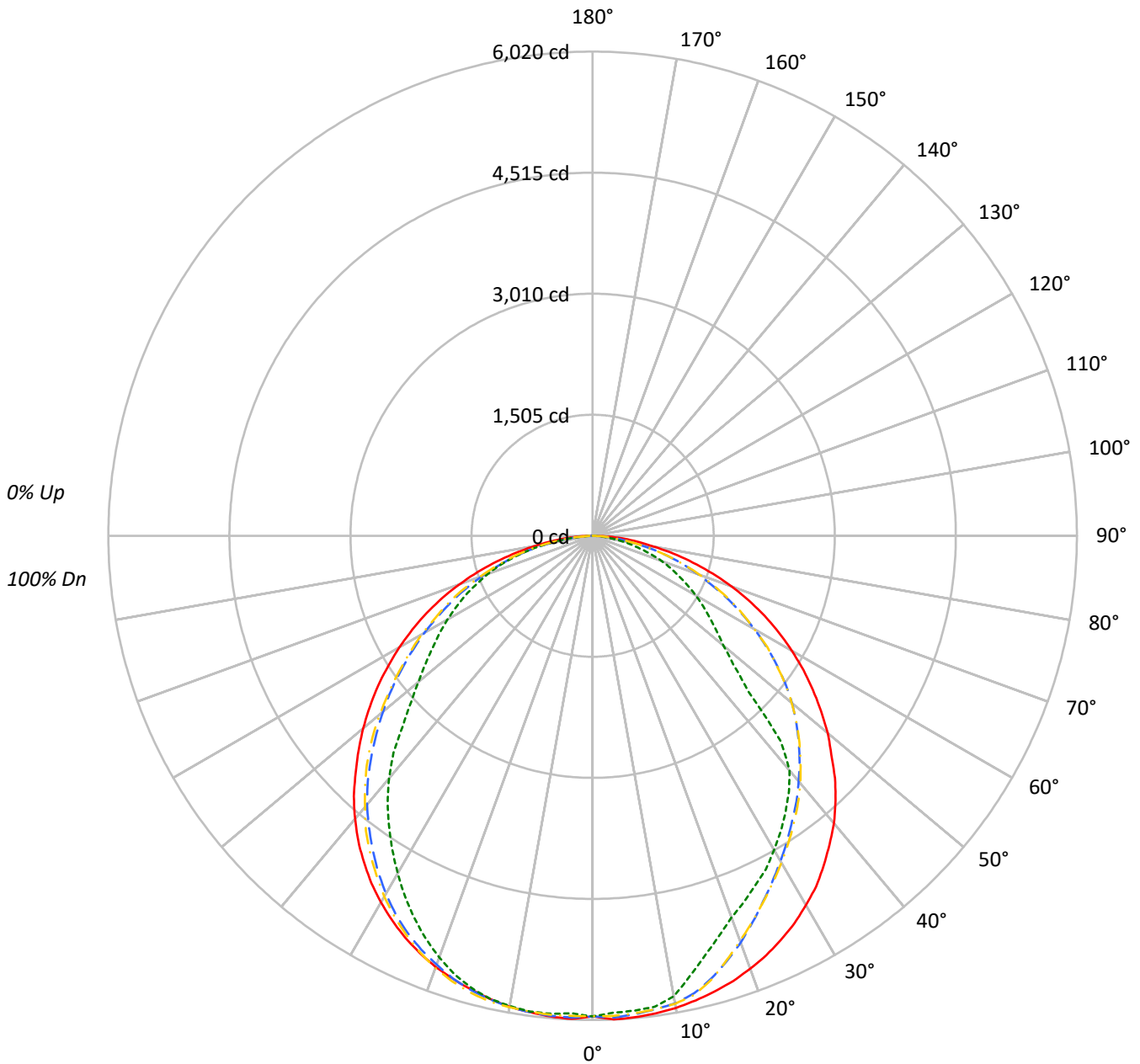
Lumens per Lamp: N/A  
Luminaire Lumens: 16028.0 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 152.3  
Input Voltage (V): NR  
Input Current (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	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°	16078	16078	16078	16078
5°	16235	16009	16209	16113
10°	16291	15888	16247	16221
15°	16341	15047	16270	16216
20°	16403	14457	16339	15971
25°	16455	14218	16369	15570
30°	16474	14013	16354	15059
35°	16447	13741	16279	14499
40°	16394	13376	16135	13827
45°	16212	10393	15845	12686
50°	15968	8897	15579	11835
55°	15684	8331	15279	11384
60°	15388	7953	14922	11196
65°	15021	7531	14511	11062
70°	14425	7162	13820	10895
75°	13430	6299	12797	10365
80°	11922	5266	11176	8791
85°	11282	3761	9896	5048



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	567.7	3.5
10°-20°	1619.2	10.1
20°-30°	2419.5	15.1
30°-40°	2880.1	18.0
40°-50°	2878.8	18.0
50°-60°	2477.2	15.5
60°-70°	1864.5	11.6
70°-80°	1062.5	6.6
80°-90°	258.6	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°	4606.4	28.7
0°-40°	7486.5	46.7
0°-60°	12842.5	80.1
0°-90°	16028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16028.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5975	5975	5975	5975	5975	
5°	6010	5927	6000	5965	6010	572
15°	5866	5401	5840	5821	5866	1657
25°	5542	4789	5513	5244	5542	2556
35°	5007	4183	4955	4414	5007	3133
45°	4260	2731	4164	3334	4260	3281
55°	3343	1776	3257	2426	3343	2989
65°	2359	1183	2279	1737	2359	2330
75°	1292	606	1231	997	1292	1367
85°	365	122	320	164	365	398
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	5974.7	5974.7	5974.7	5974.7	5974.7	5974.7	5974.7	5974.7	5974.7	5974.7	5974.7
2.5°	6019.6	5965.1	5997.1	5987.5	5936.2	5955.5	5974.7	5955.5	6013.2	5961.9	5997.1
5°	6010.0	5952.3	5971.5	5952.3	5926.6	5933.0	5961.9	5942.7	6000.4	5945.9	5990.7
7.5°	5990.7	5920.2	5939.5	5929.8	5907.4	5910.6	5939.5	5923.4	5974.7	5923.4	5974.7
10°	5961.9	5888.2	5904.2	5862.5	5814.4	5849.7	5907.4	5891.4	5945.9	5888.2	5945.9
12.5°	5917.0	5843.3	5827.3	5689.4	5602.9	5670.2	5846.5	5846.5	5897.8	5843.3	5904.2
15°	5865.7	5785.6	5699.1	5490.7	5401.0	5468.3	5711.9	5795.2	5840.1	5785.6	5846.5
17.5°	5804.8	5711.9	5545.2	5301.6	5218.3	5285.6	5535.6	5718.3	5776.0	5718.3	5772.8
20°	5727.9	5618.9	5381.7	5102.9	5048.4	5109.3	5359.3	5625.3	5705.5	5634.9	5673.4
22.5°	5644.6	5513.1	5199.0	4949.0	4923.4	4961.8	5189.4	5509.9	5615.7	5542.0	5567.6
25°	5542.0	5388.1	5016.3	4808.0	4788.7	4811.2	5022.7	5375.3	5513.1	5436.2	5445.8
27.5°	5433.0	5266.3	4843.2	4689.4	4670.1	4679.8	4856.1	5224.7	5394.5	5317.6	5301.6
30°	5301.6	5122.1	4670.1	4529.1	4509.9	4545.1	4695.8	5070.8	5263.1	5186.2	5138.1
32.5°	5170.2	4965.0	4500.3	4391.3	4352.8	4384.9	4529.1	4910.5	5118.9	5038.8	4958.6
35°	5006.7	4798.4	4324.0	4215.0	4182.9	4218.2	4362.4	4743.9	4955.4	4875.3	4766.3
37.5°	4836.8	4622.1	4163.7	4064.3	4006.6	4048.3	4192.6	4570.8	4785.5	4702.2	4567.6
40°	4666.9	4436.2	3984.2	3881.6	3807.9	3868.8	4016.3	4388.1	4593.2	4516.3	4362.4
42.5°	4468.2	4250.2	3807.9	3663.7	3455.3	3650.9	3827.1	4205.4	4394.5	4320.8	4134.9
45°	4259.9	4051.5	3622.0	3272.6	2730.9	3304.7	3634.8	4013.1	4163.7	4093.2	3891.3
47.5°	4022.7	3846.4	3432.9	2900.8	2375.1	2932.9	3439.3	3830.4	3945.7	3868.8	3644.4
50°	3814.3	3641.2	3234.2	2586.7	2125.1	2621.9	3231.0	3625.2	3721.4	3650.9	3400.8
52.5°	3577.1	3426.5	3019.4	2307.8	1939.2	2343.1	3013.0	3413.7	3490.6	3407.3	3157.2
55°	3343.1	3208.5	2791.8	2061.0	1775.7	2093.1	2785.4	3195.7	3256.6	3160.4	2900.8
57.5°	3106.0	2984.1	2557.8	1839.9	1625.1	1875.1	2573.9	2971.3	3013.0	2891.2	2654.0
60°	2859.1	2756.6	2320.6	1644.3	1477.7	1673.2	2314.2	2747.0	2772.6	2641.2	2413.6
62.5°	2612.3	2519.4	2083.5	1464.8	1327.0	1484.1	2099.5	2509.8	2525.8	2400.8	2166.8
65°	2359.1	2272.6	1852.7	1275.7	1182.8	1307.8	1868.7	2263.0	2279.0	2137.9	1926.4
67.5°	2096.3	2025.8	1605.9	1131.5	1044.9	1141.1	1637.9	2012.9	2022.6	1884.7	1692.4
70°	1833.4	1772.5	1387.9	974.4	910.3	977.6	1410.3	1737.3	1756.5	1609.1	1455.2
72.5°	1564.2	1516.1	1176.4	810.9	753.2	810.9	1189.2	1484.1	1496.9	1375.1	1224.4
75°	1291.7	1256.5	961.6	650.7	605.8	647.5	968.0	1230.8	1230.8	1115.4	996.9
77.5°	1028.9	1003.3	737.2	500.0	468.0	493.6	740.4	974.4	968.0	878.3	785.3
80°	769.3	750.0	528.9	362.2	339.8	352.6	528.9	721.2	721.2	657.1	544.9
82.5°	551.3	528.9	349.4	237.2	224.4	230.8	343.0	503.2	512.9	464.8	368.6
85°	365.4	314.1	189.1	131.4	121.8	125.0	179.5	291.7	320.5	269.2	192.3
87.5°	160.3	105.8	48.1	19.2	9.6	12.8	38.5	93.0	121.8	80.1	25.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	5974.7	5974.7	5974.7	5974.7	5974.7	5974.7
2.5°	5993.9	5942.7	5961.9	5974.7	5961.9	6019.6
5°	5987.5	5965.1	5961.9	5977.9	5952.3	6010.0
7.5°	5977.9	5965.1	5961.9	5968.3	5936.2	5990.7
10°	5955.5	5936.2	5942.7	5952.3	5910.6	5961.9
12.5°	5913.8	5894.6	5897.8	5929.8	5872.1	5917.0
15°	5843.3	5820.9	5843.3	5878.5	5827.3	5865.7
17.5°	5750.3	5715.1	5753.5	5808.0	5769.6	5804.8
20°	5631.7	5577.2	5618.9	5718.3	5683.0	5727.9
22.5°	5487.5	5420.2	5461.9	5606.1	5596.5	5644.6
25°	5324.0	5243.9	5301.6	5477.9	5497.1	5542.0
27.5°	5141.3	5051.6	5128.5	5336.9	5381.7	5433.0
30°	4942.6	4846.4	4936.2	5179.8	5247.1	5301.6
32.5°	4737.5	4631.7	4734.3	5003.5	5099.7	5170.2
35°	4522.7	4413.7	4529.1	4820.8	4936.2	5006.7
37.5°	4291.9	4186.1	4311.1	4628.5	4766.3	4836.8
40°	4054.7	3936.1	4077.2	4400.9	4583.6	4666.9
42.5°	3811.1	3663.7	3836.8	4186.1	4384.9	4468.2
45°	3538.7	3333.5	3567.5	3958.6	4166.9	4259.9
47.5°	3266.2	3061.1	3298.3	3715.0	3939.3	4022.7
50°	3003.4	2827.1	3016.2	3448.9	3708.6	3814.3
52.5°	2763.0	2618.7	2779.0	3189.3	3471.4	3577.1
55°	2538.6	2426.4	2557.8	2932.9	3221.3	3343.1
57.5°	2327.1	2256.5	2346.3	2689.3	2990.6	3106.0
60°	2128.3	2080.3	2144.4	2448.9	2718.1	2859.1
62.5°	1932.8	1907.2	1955.2	2195.6	2464.9	2612.3
65°	1743.7	1737.3	1762.9	1974.5	2198.8	2359.1
67.5°	1554.6	1551.4	1567.4	1740.5	1939.2	2096.3
70°	1365.5	1384.7	1375.1	1487.3	1679.6	1833.4
72.5°	1173.1	1202.0	1186.0	1256.5	1442.4	1564.2
75°	958.4	996.9	964.8	1044.9	1160.3	1291.7
77.5°	737.2	778.9	740.4	810.9	936.0	1028.9
80°	528.9	567.3	535.3	589.8	698.8	769.3
82.5°	333.4	362.2	336.6	391.0	500.0	551.3
85°	147.4	163.5	169.9	211.6	307.7	365.4
87.5°	6.4	3.2	6.4	41.7	109.0	160.3
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)