

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: P520738

Luminaire Tested: **8WSLA-200-L935-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: P520738  
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-L935-UNV-U  
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 90 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

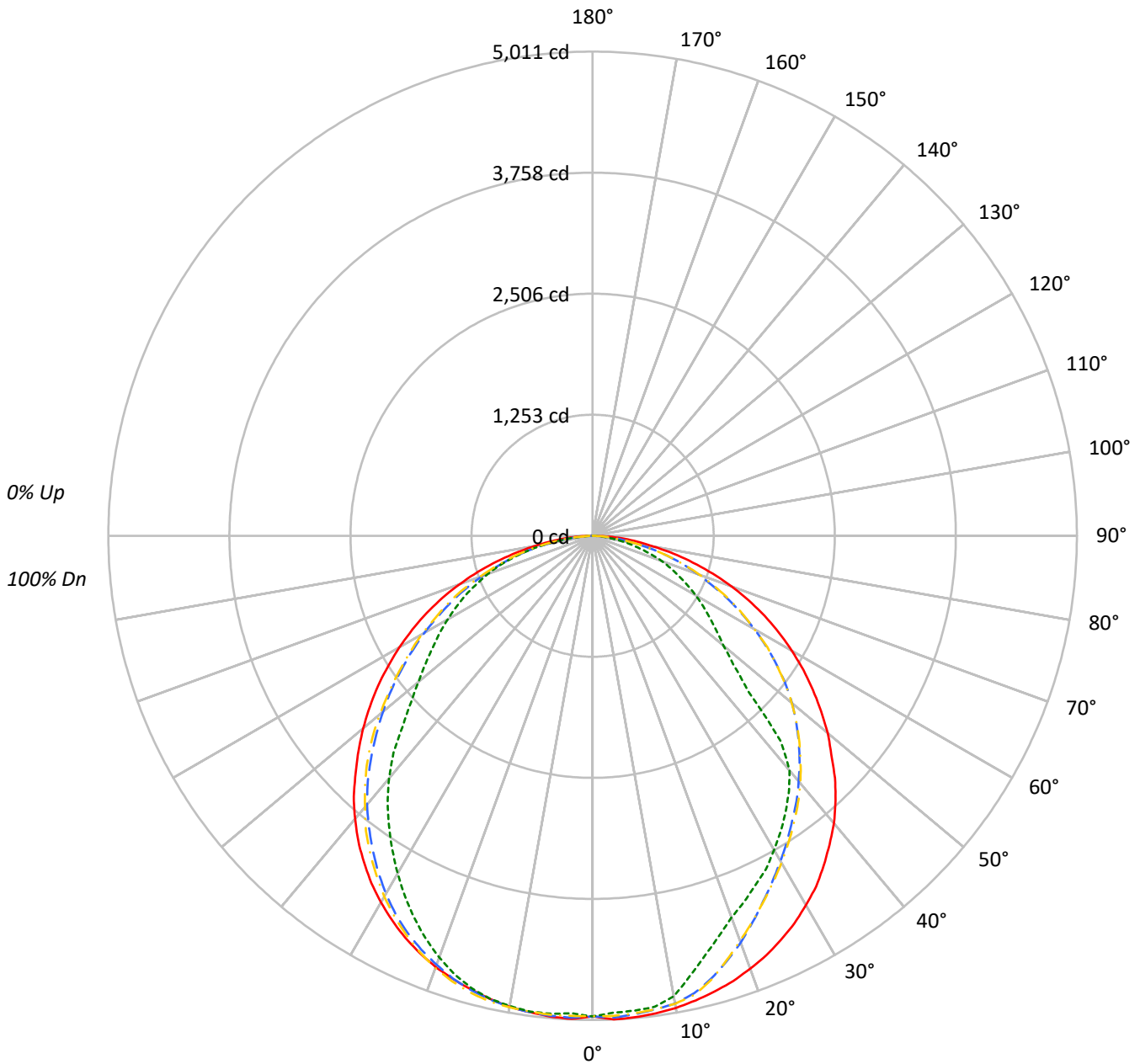
Lumens per Lamp: N/A  
Luminaire Lumens: 13342.0 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

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

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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°	13384	13384	13384	13384
5°	13514	13326	13492	13413
10°	13561	13225	13524	13502
15°	13603	12525	13543	13499
20°	13654	12034	13600	13295
25°	13698	11836	13626	12961
30°	13713	11665	13613	12536
35°	13691	11439	13551	12070
40°	13647	11135	13431	11510
45°	13495	8651	13190	10560
50°	13292	7406	12968	9852
55°	13056	6935	12718	9476
60°	12809	6620	12422	9319
65°	12504	6269	12080	9208
70°	12008	5962	11504	9069
75°	11180	5243	10653	8628
80°	9924	4382	9303	7319
85°	9392	3131	8238	4202



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	472.6	3.5
10°-20°	1347.8	10.1
20°-30°	2014.0	15.1
30°-40°	2397.4	18.0
40°-50°	2396.4	18.0
50°-60°	2062.0	15.5
60°-70°	1552.0	11.6
70°-80°	884.4	6.6
80°-90°	215.3	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°	3834.5	28.7
0°-40°	6231.9	46.7
0°-60°	10690.3	80.1
0°-90°	13342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13342.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4974	4974	4974	4974	4974	
5°	5003	4933	4995	4966	5003	476
15°	4883	4496	4861	4845	4883	1380
25°	4613	3986	4589	4365	4613	2127
35°	4168	3482	4125	3674	4168	2608
45°	3546	2273	3466	2775	3546	2731
55°	2783	1478	2711	2020	2783	2488
65°	1964	985	1897	1446	1964	1939
75°	1075	504	1025	830	1075	1138
85°	304	101	267	136	304	331
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°	4973.5	4973.5	4973.5	4973.5	4973.5	4973.5	4973.5	4973.5	4973.5	4973.5	4973.5
2.5°	5010.8	4965.5	4992.1	4984.1	4941.4	4957.4	4973.5	4957.4	5005.5	4962.8	4992.1
5°	5002.8	4954.8	4970.8	4954.8	4933.4	4938.8	4962.8	4946.8	4994.8	4949.4	4986.8
7.5°	4986.8	4928.1	4944.1	4936.1	4917.4	4920.1	4944.1	4930.8	4973.5	4930.8	4973.5
10°	4962.8	4901.4	4914.8	4880.1	4840.0	4869.4	4917.4	4904.1	4949.4	4901.4	4949.4
12.5°	4925.4	4864.1	4850.7	4736.0	4663.9	4720.0	4866.7	4866.7	4909.4	4864.1	4914.8
15°	4882.7	4816.0	4744.0	4570.6	4495.9	4551.9	4754.7	4824.0	4861.4	4816.0	4866.7
17.5°	4832.0	4754.7	4615.9	4413.1	4343.8	4399.8	4607.9	4760.0	4808.0	4760.0	4805.4
20°	4768.0	4677.3	4479.8	4247.7	4202.4	4253.1	4461.2	4682.6	4749.3	4690.6	4722.6
22.5°	4698.6	4589.2	4327.8	4119.6	4098.3	4130.3	4319.8	4586.6	4674.6	4613.3	4634.6
25°	4613.3	4485.2	4175.7	4002.2	3986.2	4004.9	4181.0	4474.5	4589.2	4525.2	4533.2
27.5°	4522.5	4383.8	4031.6	3903.5	3887.5	3895.5	4042.3	4349.1	4490.5	4426.5	4413.1
30°	4413.1	4263.7	3887.5	3770.1	3754.1	3783.5	3908.9	4221.0	4381.1	4317.1	4277.1
32.5°	4303.7	4133.0	3746.1	3655.4	3623.4	3650.0	3770.1	4087.6	4261.1	4194.4	4127.6
35°	4167.7	3994.2	3599.4	3508.6	3482.0	3511.3	3631.4	3948.9	4125.0	4058.3	3967.6
37.5°	4026.3	3847.5	3465.9	3383.2	3335.2	3369.9	3490.0	3804.8	3983.6	3914.2	3802.1
40°	3884.8	3692.7	3316.5	3231.1	3169.8	3220.5	3343.2	3652.7	3823.5	3759.4	3631.4
42.5°	3719.4	3538.0	3169.8	3049.7	2876.3	3039.0	3185.8	3500.6	3658.1	3596.7	3441.9
45°	3546.0	3372.6	3015.0	2724.2	2273.3	2750.9	3025.7	3340.5	3465.9	3407.2	3239.2
47.5°	3348.5	3201.8	2857.6	2414.7	1977.1	2441.4	2862.9	3188.5	3284.5	3220.5	3033.7
50°	3175.1	3031.0	2692.2	2153.2	1769.0	2182.6	2689.5	3017.7	3097.7	3039.0	2830.9
52.5°	2977.7	2852.3	2513.4	1921.1	1614.2	1950.4	2508.1	2841.6	2905.6	2836.3	2628.1
55°	2782.9	2670.8	2324.0	1715.6	1478.2	1742.3	2318.6	2660.2	2710.9	2630.8	2414.7
57.5°	2585.5	2484.1	2129.2	1531.5	1352.8	1560.9	2142.5	2473.4	2508.1	2406.7	2209.2
60°	2380.0	2294.6	1931.8	1368.8	1230.0	1392.8	1926.4	2286.6	2308.0	2198.6	2009.1
62.5°	2174.6	2097.2	1734.3	1219.4	1104.6	1235.4	1747.6	2089.2	2102.5	1998.5	1803.7
65°	1963.8	1891.7	1542.2	1061.9	984.6	1088.6	1555.5	1883.7	1897.1	1779.7	1603.6
67.5°	1745.0	1686.3	1336.7	941.9	869.8	949.9	1363.4	1675.6	1683.6	1568.9	1408.8
70°	1526.2	1475.5	1155.3	811.1	757.8	813.8	1174.0	1446.1	1462.2	1339.4	1211.3
72.5°	1302.1	1262.0	979.2	675.0	627.0	675.0	989.9	1235.4	1246.0	1144.6	1019.2
75°	1075.3	1045.9	800.4	541.6	504.3	539.0	805.8	1024.6	1024.6	928.5	829.8
77.5°	856.5	835.1	613.7	416.2	389.6	410.9	616.3	811.1	805.8	731.1	653.7
80°	640.4	624.4	440.2	301.5	282.8	293.5	440.2	600.3	600.3	547.0	453.6
82.5°	458.9	440.2	290.8	197.4	186.8	192.1	285.5	418.9	426.9	386.9	306.8
85°	304.2	261.5	157.4	109.4	101.4	104.1	149.4	242.8	266.8	224.1	160.1
87.5°	133.4	88.0	40.0	16.0	8.0	10.7	32.0	77.4	101.4	66.7	21.3
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°	4973.5	4973.5	4973.5	4973.5	4973.5	4973.5
2.5°	4989.5	4946.8	4962.8	4973.5	4962.8	5010.8
5°	4984.1	4965.5	4962.8	4976.1	4954.8	5002.8
7.5°	4976.1	4965.5	4962.8	4968.1	4941.4	4986.8
10°	4957.4	4941.4	4946.8	4954.8	4920.1	4962.8
12.5°	4922.8	4906.8	4909.4	4936.1	4888.1	4925.4
15°	4864.1	4845.4	4864.1	4893.4	4850.7	4882.7
17.5°	4786.7	4757.3	4789.4	4834.7	4802.7	4832.0
20°	4688.0	4642.6	4677.3	4760.0	4730.7	4768.0
22.5°	4567.9	4511.9	4546.6	4666.6	4658.6	4698.6
25°	4431.8	4365.1	4413.1	4559.9	4575.9	4613.3
27.5°	4279.7	4205.0	4269.1	4442.5	4479.8	4522.5
30°	4114.3	4034.3	4109.0	4311.8	4367.8	4413.1
32.5°	3943.5	3855.5	3940.9	4165.0	4245.0	4303.7
35°	3764.8	3674.1	3770.1	4012.9	4109.0	4167.7
37.5°	3572.7	3484.6	3588.7	3852.8	3967.6	4026.3
40°	3375.2	3276.5	3393.9	3663.4	3815.5	3884.8
42.5°	3172.4	3049.7	3193.8	3484.6	3650.0	3719.4
45°	2945.7	2774.9	2969.7	3295.2	3468.6	3546.0
47.5°	2718.9	2548.1	2745.5	3092.4	3279.2	3348.5
50°	2500.1	2353.3	2510.7	2870.9	3087.1	3175.1
52.5°	2300.0	2179.9	2313.3	2654.8	2889.6	2977.7
55°	2113.2	2019.8	2129.2	2441.4	2681.5	2782.9
57.5°	1937.1	1878.4	1953.1	2238.6	2489.4	2585.5
60°	1771.7	1731.6	1785.0	2038.5	2262.6	2380.0
62.5°	1608.9	1587.6	1627.6	1827.7	2051.8	2174.6
65°	1451.5	1446.1	1467.5	1643.6	1830.4	1963.8
67.5°	1294.1	1291.4	1304.7	1448.8	1614.2	1745.0
70°	1136.6	1152.6	1144.6	1238.0	1398.1	1526.2
72.5°	976.5	1000.6	987.2	1045.9	1200.7	1302.1
75°	797.8	829.8	803.1	869.8	965.9	1075.3
77.5°	613.7	648.4	616.3	675.0	779.1	856.5
80°	440.2	472.3	445.6	490.9	581.7	640.4
82.5°	277.5	301.5	280.2	325.5	416.2	458.9
85°	122.7	136.1	141.4	176.1	256.1	304.2
87.5°	5.3	2.7	5.3	34.7	90.7	133.4
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)