

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: P520744

Luminaire Tested: **8WSLA-200-L950-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: P520744  
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-L950-UNV-U  
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

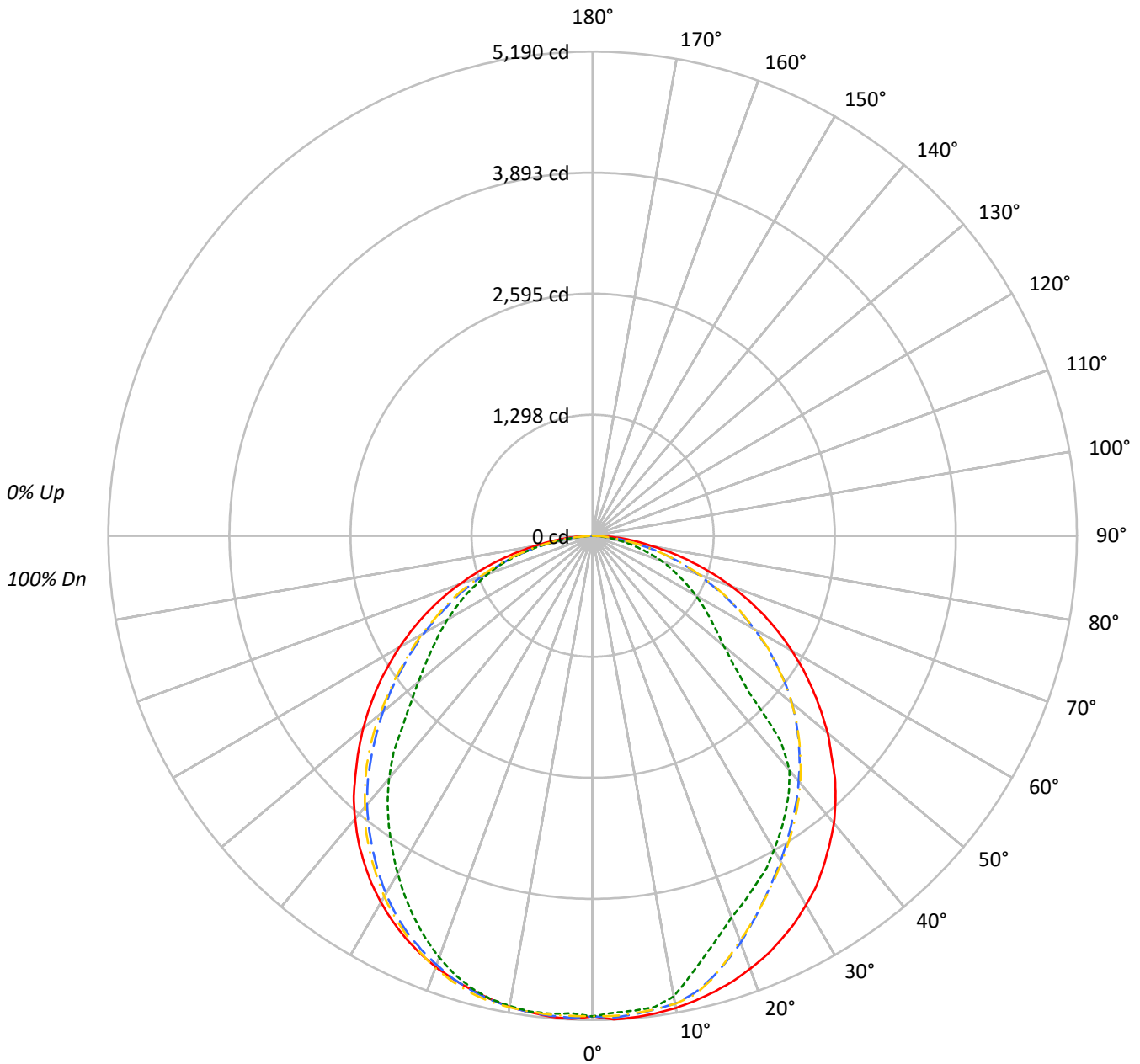
Lumens per Lamp: N/A  
Luminaire Lumens: 13819.0 lumens  
Efficiency: N/A  
Efficacy: 90.7 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

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°	13862	13862	13862	13862
5°	13997	13803	13975	13893
10°	14046	13698	14008	13985
15°	14089	12973	14028	13981
20°	14142	12464	14087	13770
25°	14187	12259	14113	13424
30°	14203	12082	14100	12984
35°	14181	11847	14035	12501
40°	14135	11533	13911	11921
45°	13977	8960	13662	10938
50°	13767	7670	13432	10204
55°	13523	7183	13173	9815
60°	13267	6857	12866	9653
65°	12951	6493	12511	9537
70°	12438	6175	11915	9393
75°	11579	5430	11033	8936
80°	10279	4539	9636	7579
85°	9726	3242	8534	4350



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	489.5	3.5
10°-20°	1396.0	10.1
20°-30°	2086.1	15.1
30°-40°	2483.1	18.0
40°-50°	2482.1	18.0
50°-60°	2135.8	15.5
60°-70°	1607.5	11.6
70°-80°	916.0	6.6
80°-90°	223.0	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°	3971.5	28.7
0°-40°	6454.7	46.7
0°-60°	11072.5	80.1
0°-90°	13819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13819.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5151	5151	5151	5151	5151	
5°	5182	5110	5173	5143	5182	493
15°	5057	4657	5035	5019	5057	1429
25°	4778	4129	4753	4521	4778	2203
35°	4317	3606	4272	3805	4317	2701
45°	3673	2354	3590	2874	3673	2828
55°	2882	1531	2808	2092	2882	2577
65°	2034	1020	1965	1498	2034	2009
75°	1114	522	1061	860	1114	1179
85°	315	105	276	141	315	343
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°	5151.3	5151.3	5151.3	5151.3	5151.3	5151.3	5151.3	5151.3	5151.3	5151.3	5151.3
2.5°	5190.0	5143.0	5170.6	5162.3	5118.1	5134.7	5151.3	5134.7	5184.4	5140.2	5170.6
5°	5181.7	5131.9	5148.5	5131.9	5109.8	5115.3	5140.2	5123.6	5173.4	5126.4	5165.1
7.5°	5165.1	5104.3	5120.9	5112.6	5093.2	5096.0	5120.9	5107.0	5151.3	5107.0	5151.3
10°	5140.2	5076.7	5090.5	5054.5	5013.1	5043.5	5093.2	5079.4	5126.4	5076.7	5126.4
12.5°	5101.5	5038.0	5024.1	4905.3	4830.7	4888.7	5040.7	5040.7	5084.9	5038.0	5090.5
15°	5057.3	4988.2	4913.6	4734.0	4656.6	4714.6	4924.7	4996.5	5035.2	4988.2	5040.7
17.5°	5004.8	4924.7	4781.0	4570.9	4499.1	4557.1	4772.7	4930.2	4979.9	4930.2	4977.2
20°	4938.5	4844.5	4640.0	4399.6	4352.6	4405.1	4620.7	4850.0	4919.1	4858.3	4891.5
22.5°	4866.6	4753.3	4482.5	4266.9	4244.8	4278.0	4474.2	4750.6	4841.7	4778.2	4800.3
25°	4778.2	4645.5	4325.0	4145.3	4128.8	4148.1	4330.5	4634.5	4753.3	4687.0	4695.3
27.5°	4684.2	4540.5	4175.7	4043.1	4026.5	4034.8	4186.8	4504.6	4651.1	4584.7	4570.9
30°	4570.9	4416.2	4026.5	3904.9	3888.3	3918.7	4048.6	4371.9	4537.8	4471.4	4430.0
32.5°	4457.6	4280.7	3880.0	3786.1	3752.9	3780.5	3904.9	4233.8	4413.4	4344.3	4275.2
35°	4316.7	4137.0	3728.0	3634.1	3606.4	3636.8	3761.2	4090.1	4272.5	4203.4	4109.4
37.5°	4170.2	3985.0	3589.9	3504.2	3454.4	3490.4	3614.7	3940.8	4126.0	4054.1	3938.1
40°	4023.7	3824.8	3435.1	3346.7	3283.1	3335.6	3462.7	3783.3	3960.2	3893.8	3761.2
42.5°	3852.4	3664.5	3283.1	3158.7	2979.1	3147.7	3299.7	3625.8	3788.8	3725.3	3565.0
45°	3672.8	3493.1	3122.8	2821.6	2354.5	2849.2	3133.9	3460.0	3589.9	3529.1	3355.0
47.5°	3468.3	3316.3	2959.8	2501.0	2047.8	2528.7	2965.3	3302.4	3401.9	3335.6	3142.2
50°	3288.6	3139.4	2788.4	2230.2	1832.2	2260.6	2785.7	3125.6	3208.5	3147.7	2932.1
52.5°	3084.1	2954.2	2603.3	1989.8	1672.0	2020.2	2597.7	2943.2	3009.5	2937.7	2722.1
55°	2882.4	2766.3	2407.1	1777.0	1531.0	1804.6	2401.5	2755.3	2807.8	2724.9	2501.0
57.5°	2677.9	2572.9	2205.3	1586.3	1401.1	1616.7	2219.1	2561.8	2597.7	2492.7	2288.2
60°	2465.1	2376.7	2000.8	1417.7	1274.0	1442.6	1995.3	2368.4	2390.5	2277.2	2081.0
62.5°	2252.3	2172.2	1796.3	1262.9	1144.1	1279.5	1810.1	2163.9	2177.7	2069.9	1868.2
65°	2034.0	1959.4	1597.3	1099.9	1019.8	1127.5	1611.2	1951.1	1964.9	1843.3	1660.9
67.5°	1807.4	1746.6	1384.5	975.5	900.9	983.8	1412.2	1735.5	1743.8	1625.0	1459.2
70°	1580.8	1528.2	1196.6	840.1	784.8	842.9	1216.0	1497.8	1514.4	1387.3	1254.7
72.5°	1348.6	1307.2	1014.2	699.2	649.4	699.2	1025.3	1279.5	1290.6	1185.6	1055.7
75°	1113.7	1083.3	829.1	561.0	522.3	558.2	834.6	1061.2	1061.2	961.7	859.5
77.5°	887.1	865.0	635.6	431.1	403.5	425.6	638.4	840.1	834.6	757.2	677.1
80°	663.3	646.7	456.0	312.3	292.9	304.0	456.0	621.8	621.8	566.5	469.8
82.5°	475.3	456.0	301.2	204.5	193.4	199.0	295.7	433.9	442.2	400.7	317.8
85°	315.0	270.8	163.0	113.3	105.0	107.8	154.8	251.5	276.4	232.1	165.8
87.5°	138.2	91.2	41.5	16.6	8.3	11.1	33.2	80.1	105.0	69.1	22.1
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°	5151.3	5151.3	5151.3	5151.3	5151.3	5151.3
2.5°	5167.8	5123.6	5140.2	5151.3	5140.2	5190.0
5°	5162.3	5143.0	5140.2	5154.0	5131.9	5181.7
7.5°	5154.0	5143.0	5140.2	5145.7	5118.1	5165.1
10°	5134.7	5118.1	5123.6	5131.9	5096.0	5140.2
12.5°	5098.8	5082.2	5084.9	5112.6	5062.8	5101.5
15°	5038.0	5018.6	5038.0	5068.4	5024.1	5057.3
17.5°	4957.8	4927.4	4960.6	5007.6	4974.4	5004.8
20°	4855.6	4808.6	4844.5	4930.2	4899.8	4938.5
22.5°	4731.2	4673.2	4709.1	4833.5	4825.2	4866.6
25°	4590.3	4521.2	4570.9	4722.9	4739.5	4778.2
27.5°	4432.7	4355.4	4421.7	4601.3	4640.0	4684.2
30°	4261.4	4178.5	4255.9	4465.9	4523.9	4570.9
32.5°	4084.5	3993.3	4081.8	4313.9	4396.8	4457.6
35°	3899.4	3805.4	3904.9	4156.4	4255.9	4316.7
37.5°	3700.4	3609.2	3717.0	3990.6	4109.4	4170.2
40°	3495.9	3393.6	3515.2	3794.4	3951.9	4023.7
42.5°	3285.9	3158.7	3308.0	3609.2	3780.5	3852.4
45°	3051.0	2874.1	3075.8	3413.0	3592.6	3672.8
47.5°	2816.1	2639.2	2843.7	3203.0	3396.4	3468.3
50°	2589.5	2437.5	2600.5	2973.6	3197.4	3288.6
52.5°	2382.2	2257.8	2396.0	2749.7	2992.9	3084.1
55°	2188.7	2092.0	2205.3	2528.7	2777.4	2882.4
57.5°	2006.3	1945.5	2022.9	2318.6	2578.4	2677.9
60°	1835.0	1793.5	1848.8	2111.4	2343.5	2465.1
62.5°	1666.4	1644.3	1685.8	1893.0	2125.2	2252.3
65°	1503.4	1497.8	1520.0	1702.3	1895.8	2034.0
67.5°	1340.3	1337.6	1351.4	1500.6	1672.0	1807.4
70°	1177.3	1193.9	1185.6	1282.3	1448.1	1580.8
72.5°	1011.5	1036.3	1022.5	1083.3	1243.6	1348.6
75°	826.3	859.5	831.8	900.9	1000.4	1113.7
77.5°	635.6	671.5	638.4	699.2	807.0	887.1
80°	456.0	489.1	461.5	508.5	602.5	663.3
82.5°	287.4	312.3	290.2	337.2	431.1	475.3
85°	127.1	140.9	146.5	182.4	265.3	315.0
87.5°	5.5	2.8	5.5	35.9	94.0	138.2
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)