

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: P520699

Luminaire Tested: **8WSLA-175-L830-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: P520699  
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-175-L830-UNV-U  
Description: 8 FOOT, 3500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

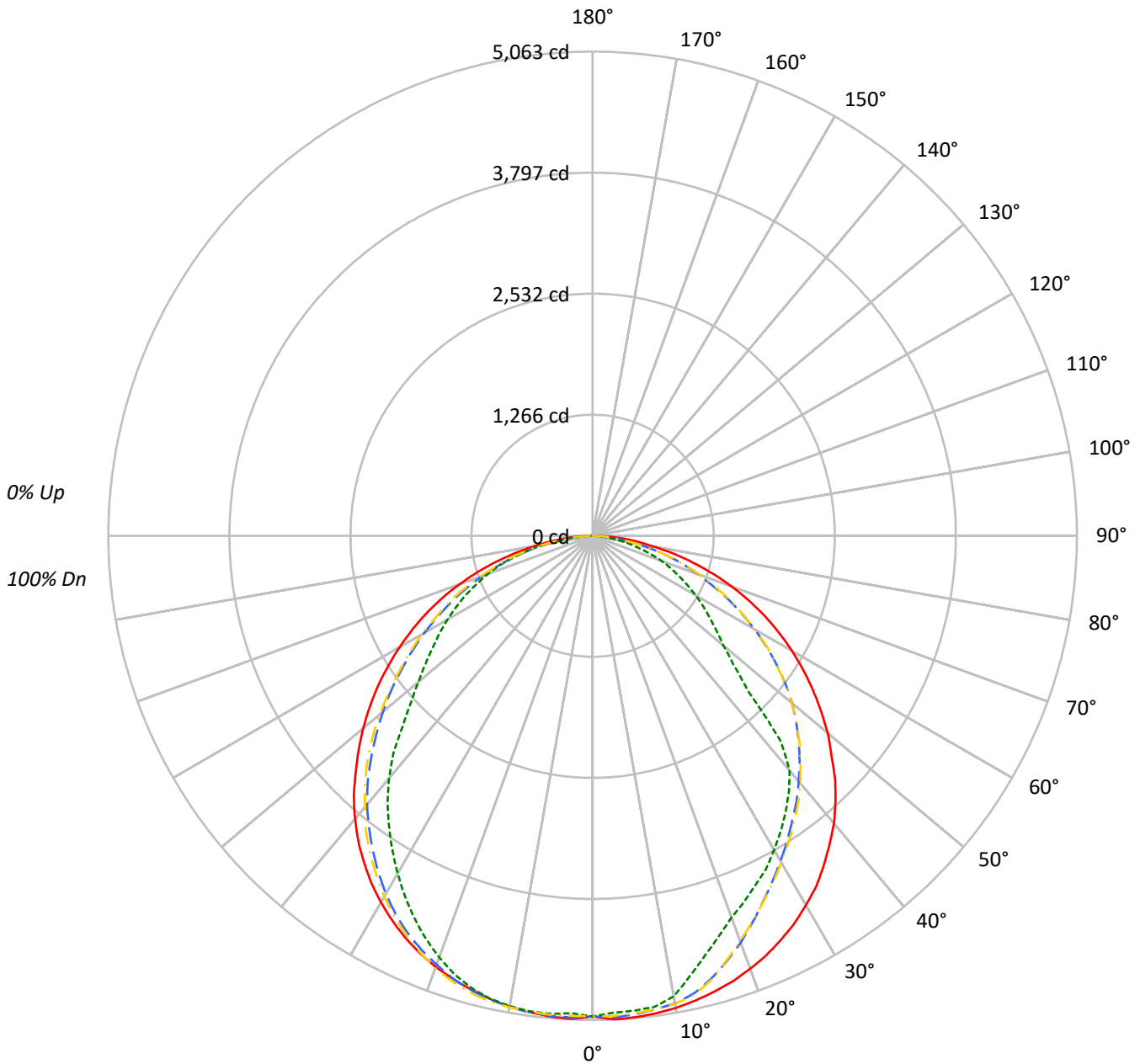
Lumens per Lamp: N/A  
Luminaire Lumens: 13480.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 119  
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				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	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°	13522	13522	13522	13522
5°	13654	13464	13632	13552
10°	13701	13362	13664	13642
15°	13743	12655	13684	13638
20°	13795	12159	13741	13432
25°	13839	11958	13767	13095
30°	13855	11786	13754	12665
35°	13833	11557	13691	12195
40°	13788	11250	13570	11629
45°	13634	8741	13327	10669
50°	13430	7482	13103	9954
55°	13191	7007	12850	9574
60°	12941	6688	12550	9416
65°	12634	6334	12204	9303
70°	12132	6024	11623	9163
75°	11295	5297	10763	8717
80°	10026	4429	9399	7393
85°	9488	3162	8324	4245



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	477.5	3.5
10°-20°	1361.8	10.1
20°-30°	2034.9	15.1
30°-40°	2422.2	18.0
40°-50°	2421.2	18.0
50°-60°	2083.4	15.5
60°-70°	1568.1	11.6
70°-80°	893.5	6.6
80°-90°	217.5	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°	3874.1	28.7
0°-40°	6296.3	46.7
0°-60°	10800.9	80.1
0°-90°	13480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13480.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5025	5025	5025	5025	5025	
5°	5055	4984	5046	5017	5055	481
15°	4933	4542	4912	4896	4933	1394
25°	4661	4028	4637	4410	4661	2149
35°	4211	3518	4168	3712	4211	2635
45°	3583	2297	3502	2804	3583	2759
55°	2812	1494	2739	2041	2812	2514
65°	1984	995	1917	1461	1984	1959
75°	1086	510	1035	838	1086	1150
85°	307	102	270	138	307	334
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°	5024.9	5024.9	5024.9	5024.9	5024.9	5024.9	5024.9	5024.9	5024.9	5024.9	5024.9
2.5°	5062.6	5016.8	5043.8	5035.7	4992.5	5008.7	5024.9	5008.7	5057.2	5014.1	5043.8
5°	5054.6	5006.0	5022.2	5006.0	4984.5	4989.9	5014.1	4997.9	5046.5	5000.6	5038.4
7.5°	5038.4	4979.1	4995.2	4987.2	4968.3	4971.0	4995.2	4981.8	5024.9	4981.8	5024.9
10°	5014.1	4952.1	4965.6	4930.5	4890.1	4919.8	4968.3	4954.8	5000.6	4952.1	5000.6
12.5°	4976.4	4914.4	4900.9	4785.0	4712.2	4768.8	4917.1	4917.1	4960.2	4914.4	4965.6
15°	4933.2	4865.8	4793.1	4617.8	4542.4	4599.0	4803.8	4873.9	4911.7	4865.8	4917.1
17.5°	4882.0	4803.8	4663.7	4458.8	4388.7	4445.3	4655.6	4809.2	4857.8	4809.2	4855.1
20°	4817.3	4725.7	4526.2	4291.7	4245.8	4297.0	4507.3	4731.1	4798.5	4739.1	4771.5
22.5°	4747.2	4636.7	4372.5	4162.3	4140.7	4173.0	4364.4	4634.0	4723.0	4661.0	4682.5
25°	4661.0	4531.6	4218.9	4043.6	4027.5	4046.3	4224.3	4520.8	4636.7	4572.0	4580.1
27.5°	4569.3	4429.1	4073.3	3943.9	3927.7	3935.8	4084.1	4394.1	4537.0	4472.3	4458.8
30°	4458.8	4307.8	3927.7	3809.1	3792.9	3822.6	3949.3	4264.7	4426.4	4361.7	4321.3
32.5°	4348.3	4175.7	3784.8	3693.2	3660.8	3687.8	3809.1	4129.9	4305.1	4237.7	4170.3
35°	4210.8	4035.6	3636.6	3544.9	3518.0	3547.6	3668.9	3989.7	4167.6	4100.3	4008.6
37.5°	4067.9	3887.3	3501.8	3418.2	3369.7	3404.7	3526.1	3844.2	4024.8	3954.7	3841.5
40°	3925.0	3730.9	3350.8	3264.6	3202.6	3253.8	3377.8	3690.5	3863.0	3798.3	3668.9
42.5°	3757.9	3574.6	3202.6	3081.3	2906.0	3070.5	3218.7	3536.8	3695.9	3633.9	3477.5
45°	3582.7	3407.4	3046.2	2752.4	2296.8	2779.3	3057.0	3375.1	3501.8	3442.5	3272.7
47.5°	3383.2	3234.9	2887.2	2439.7	1997.6	2466.6	2892.6	3221.4	3318.5	3253.8	3065.1
50°	3208.0	3062.4	2720.0	2175.5	1787.3	2205.1	2717.3	3048.9	3129.8	3070.5	2860.2
52.5°	3008.5	2881.8	2539.4	1940.9	1630.9	1970.6	2534.0	2871.0	2935.7	2865.6	2655.3
55°	2811.7	2698.5	2348.0	1733.4	1493.5	1760.3	2342.6	2687.7	2738.9	2658.0	2439.7
57.5°	2612.2	2509.8	2151.2	1547.4	1366.8	1577.0	2164.7	2499.0	2534.0	2431.6	2232.1
60°	2404.6	2318.4	1951.7	1382.9	1242.7	1407.2	1946.3	2310.3	2331.8	2221.3	2029.9
62.5°	2197.0	2118.9	1752.2	1232.0	1116.0	1248.1	1765.7	2110.8	2124.3	2019.1	1822.3
65°	1984.1	1911.3	1558.1	1072.9	994.7	1099.9	1571.6	1903.2	1916.7	1798.1	1620.2
67.5°	1763.0	1703.7	1350.6	951.6	878.8	959.7	1377.5	1692.9	1701.0	1585.1	1423.4
70°	1542.0	1490.8	1167.3	819.5	765.6	822.2	1186.1	1461.1	1477.3	1353.3	1223.9
72.5°	1315.5	1275.1	989.3	682.0	633.5	682.0	1000.1	1248.1	1258.9	1156.5	1029.8
75°	1086.4	1056.7	808.7	547.2	509.5	544.5	814.1	1035.2	1035.2	938.1	838.4
77.5°	865.3	843.8	620.0	420.5	393.6	415.1	622.7	819.5	814.1	738.6	660.5
80°	647.0	630.8	444.8	304.6	285.8	296.5	444.8	606.5	606.5	552.6	458.3
82.5°	463.7	444.8	293.8	199.5	188.7	194.1	288.4	423.2	431.3	390.9	310.0
85°	307.3	264.2	159.0	110.5	102.4	105.1	151.0	245.3	269.6	226.4	161.7
87.5°	134.8	89.0	40.4	16.2	8.1	10.8	32.3	78.2	102.4	67.4	21.6
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°	5024.9	5024.9	5024.9	5024.9	5024.9	5024.9
2.5°	5041.1	4997.9	5014.1	5024.9	5014.1	5062.6
5°	5035.7	5016.8	5014.1	5027.6	5006.0	5054.6
7.5°	5027.6	5016.8	5014.1	5019.5	4992.5	5038.4
10°	5008.7	4992.5	4997.9	5006.0	4971.0	5014.1
12.5°	4973.7	4957.5	4960.2	4987.2	4938.6	4976.4
15°	4914.4	4895.5	4914.4	4944.0	4900.9	4933.2
17.5°	4836.2	4806.5	4838.9	4884.7	4852.4	4882.0
20°	4736.5	4690.6	4725.7	4809.2	4779.6	4817.3
22.5°	4615.1	4558.5	4593.6	4714.9	4706.8	4747.2
25°	4477.7	4410.3	4458.8	4607.1	4623.2	4661.0
27.5°	4324.0	4248.5	4313.2	4488.4	4526.2	4569.3
30°	4156.9	4076.0	4151.5	4356.3	4413.0	4458.8
32.5°	3984.3	3895.4	3981.6	4208.1	4289.0	4348.3
35°	3803.7	3712.1	3809.1	4054.4	4151.5	4210.8
37.5°	3609.6	3520.7	3625.8	3892.7	4008.6	4067.9
40°	3410.1	3310.4	3429.0	3701.3	3854.9	3925.0
42.5°	3205.3	3081.3	3226.8	3520.7	3687.8	3757.9
45°	2976.1	2803.6	3000.4	3329.3	3504.5	3582.7
47.5°	2747.0	2574.5	2773.9	3124.4	3313.1	3383.2
50°	2525.9	2377.7	2536.7	2900.6	3119.0	3208.0
52.5°	2323.7	2202.4	2337.2	2682.3	2919.5	3008.5
55°	2135.0	2040.7	2151.2	2466.6	2709.2	2811.7
57.5°	1957.1	1897.8	1973.3	2261.7	2515.1	2612.2
60°	1790.0	1749.5	1803.5	2059.6	2286.0	2404.6
62.5°	1625.5	1604.0	1644.4	1846.6	2073.0	2197.0
65°	1466.5	1461.1	1482.7	1660.6	1849.3	1984.1
67.5°	1307.4	1304.7	1318.2	1463.8	1630.9	1763.0
70°	1148.4	1164.6	1156.5	1250.8	1412.6	1542.0
72.5°	986.6	1010.9	997.4	1056.7	1213.1	1315.5
75°	806.0	838.4	811.4	878.8	975.9	1086.4
77.5°	620.0	655.1	622.7	682.0	787.2	865.3
80°	444.8	477.1	450.2	496.0	587.7	647.0
82.5°	280.4	304.6	283.1	328.9	420.5	463.7
85°	124.0	137.5	142.9	177.9	258.8	307.3
87.5°	5.4	2.7	5.4	35.0	91.7	134.8
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)