

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: P520702

Luminaire Tested: **8WSLA-175-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: P520702  
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-L835-UNV-U  
Description: 8 FOOT, 3500 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**

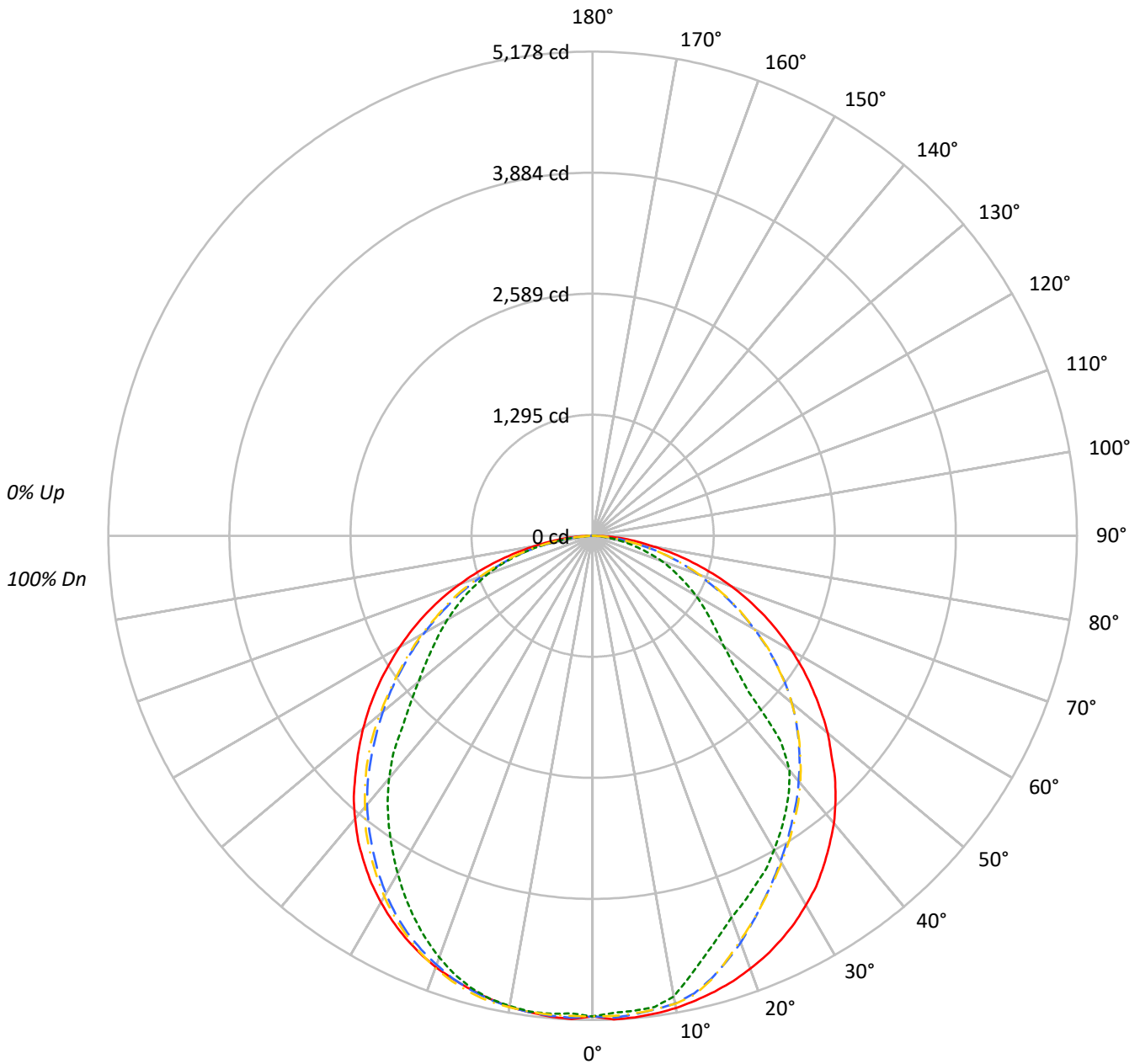
Lumens per Lamp: N/A  
Luminaire Lumens: 13788.0 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 119  
Input Voltage (V): NR  
Input Current (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°	13831	13831	13831	13831
5°	13966	13772	13943	13861
10°	14014	13667	13976	13954
15°	14058	12944	13996	13950
20°	14110	12436	14055	13739
25°	14156	12231	14082	13394
30°	14171	12055	14068	12955
35°	14149	11821	14004	12473
40°	14103	11507	13880	11894
45°	13946	8941	13631	10913
50°	13737	7653	13402	10181
55°	13493	7167	13143	9793
60°	13237	6841	12837	9631
65°	12922	6479	12483	9516
70°	12409	6161	11888	9372
75°	11553	5418	11008	8916
80°	10256	4530	9614	7564
85°	9704	3236	8512	4341



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	488.4	3.5
10°-20°	1392.9	10.1
20°-30°	2081.4	15.1
30°-40°	2477.6	18.0
40°-50°	2476.5	18.0
50°-60°	2131.0	15.5
60°-70°	1603.9	11.6
70°-80°	914.0	6.6
80°-90°	222.5	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°	3962.6	28.7
0°-40°	6440.2	46.7
0°-60°	11047.7	80.1
0°-90°	13788.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13788.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5140	5140	5140	5140	5140	
5°	5170	5098	5162	5131	5170	492
15°	5046	4646	5024	5007	5046	1426
25°	4768	4120	4743	4511	4768	2198
35°	4307	3598	4263	3797	4307	2695
45°	3664	2349	3582	2868	3664	2822
55°	2876	1528	2802	2087	2876	2571
65°	2029	1018	1960	1494	2029	2004
75°	1111	521	1059	858	1111	1176
85°	314	105	276	141	314	342
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°	5139.7	5139.7	5139.7	5139.7	5139.7	5139.7	5139.7	5139.7	5139.7	5139.7	5139.7
2.5°	5178.3	5131.4	5159.0	5150.7	5106.6	5123.2	5139.7	5123.2	5172.8	5128.7	5159.0
5°	5170.0	5120.4	5137.0	5120.4	5098.4	5103.9	5128.7	5112.1	5161.8	5114.9	5153.5
7.5°	5153.5	5092.8	5109.4	5101.1	5081.8	5084.6	5109.4	5095.6	5139.7	5095.6	5139.7
10°	5128.7	5065.3	5079.0	5043.2	5001.8	5032.2	5081.8	5068.0	5114.9	5065.3	5114.9
12.5°	5090.1	5026.7	5012.9	4894.3	4819.9	4877.8	5029.4	5029.4	5073.5	5026.7	5079.0
15°	5046.0	4977.0	4902.6	4723.4	4646.1	4704.0	4913.6	4985.3	5023.9	4977.0	5029.4
17.5°	4993.6	4913.6	4770.2	4560.7	4489.0	4546.9	4762.0	4919.1	4968.8	4919.1	4966.0
20°	4927.4	4833.6	4629.6	4389.7	4342.8	4395.2	4610.3	4839.2	4908.1	4847.4	4880.5
22.5°	4855.7	4742.7	4472.4	4257.4	4235.3	4268.4	4464.2	4739.9	4830.9	4767.5	4789.5
25°	4767.5	4635.1	4315.3	4136.0	4119.5	4138.8	4320.8	4624.1	4742.7	4676.5	4684.7
27.5°	4673.7	4530.3	4166.4	4034.0	4017.5	4025.7	4177.4	4494.5	4640.6	4574.5	4560.7
30°	4560.7	4406.3	4017.5	3896.1	3879.6	3909.9	4039.5	4362.1	4527.6	4461.4	4420.0
32.5°	4447.6	4271.1	3871.3	3777.6	3744.5	3772.1	3896.1	4224.3	4403.5	4334.6	4265.6
35°	4307.0	4127.8	3719.7	3625.9	3598.3	3628.7	3752.8	4080.9	4262.9	4193.9	4100.2
37.5°	4160.8	3976.1	3581.8	3496.3	3446.7	3482.5	3606.6	3932.0	4116.7	4045.0	3929.2
40°	4014.7	3816.2	3427.4	3339.2	3275.7	3328.1	3455.0	3774.8	3951.3	3885.1	3752.8
42.5°	3843.8	3656.3	3275.7	3151.7	2972.4	3140.6	3292.3	3617.7	3780.3	3716.9	3557.0
45°	3664.5	3485.3	3115.8	2815.3	2349.3	2842.8	3126.8	3452.2	3581.8	3521.1	3347.4
47.5°	3460.5	3308.8	2953.1	2495.4	2043.2	2523.0	2958.6	3295.0	3394.3	3328.1	3135.1
50°	3281.3	3132.4	2782.2	2225.2	1828.1	2255.5	2779.4	3118.6	3201.3	3140.6	2925.6
52.5°	3077.2	2947.6	2597.4	1985.3	1668.2	2015.6	2591.9	2936.6	3002.8	2931.1	2716.0
55°	2875.9	2760.1	2401.7	1773.0	1527.6	1800.6	2396.1	2749.1	2801.5	2718.8	2495.4
57.5°	2671.9	2567.1	2200.4	1582.7	1398.0	1613.1	2214.2	2556.1	2591.9	2487.1	2283.1
60°	2459.6	2371.3	1996.3	1414.5	1271.1	1439.3	1990.8	2363.1	2385.1	2272.1	2076.3
62.5°	2247.2	2167.3	1792.3	1260.1	1141.5	1276.7	1806.1	2159.0	2172.8	2065.3	1864.0
65°	2029.4	1955.0	1593.8	1097.4	1017.5	1125.0	1607.5	1946.7	1960.5	1839.2	1657.2
67.5°	1803.3	1742.6	1381.4	973.3	898.9	981.6	1409.0	1731.6	1739.9	1621.3	1455.9
70°	1577.2	1524.8	1193.9	838.2	783.1	841.0	1213.2	1494.5	1511.0	1384.2	1251.8
72.5°	1345.6	1304.2	1011.9	697.6	648.0	697.6	1023.0	1276.7	1287.7	1182.9	1053.3
75°	1111.2	1080.9	827.2	559.7	521.1	557.0	832.7	1058.8	1058.8	959.6	857.5
77.5°	885.1	863.1	634.2	430.1	402.6	424.6	636.9	838.2	832.7	755.5	675.6
80°	661.8	645.2	455.0	311.6	292.3	303.3	455.0	620.4	620.4	565.3	468.8
82.5°	474.3	455.0	300.6	204.0	193.0	198.5	295.0	432.9	441.2	399.8	317.1
85°	314.3	270.2	162.7	113.1	104.8	107.5	154.4	250.9	275.7	231.6	165.4
87.5°	137.9	91.0	41.4	16.5	8.3	11.0	33.1	80.0	104.8	68.9	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°	5139.7	5139.7	5139.7	5139.7	5139.7	5139.7
2.5°	5156.3	5112.1	5128.7	5139.7	5128.7	5178.3
5°	5150.7	5131.4	5128.7	5142.5	5120.4	5170.0
7.5°	5142.5	5131.4	5128.7	5134.2	5106.6	5153.5
10°	5123.2	5106.6	5112.1	5120.4	5084.6	5128.7
12.5°	5087.3	5070.8	5073.5	5101.1	5051.5	5090.1
15°	5026.7	5007.4	5026.7	5057.0	5012.9	5046.0
17.5°	4946.7	4916.4	4949.5	4996.3	4963.2	4993.6
20°	4844.7	4797.8	4833.6	4919.1	4888.8	4927.4
22.5°	4720.6	4662.7	4698.5	4822.6	4814.3	4855.7
25°	4580.0	4511.0	4560.7	4712.3	4728.9	4767.5
27.5°	4422.8	4345.6	4411.8	4591.0	4629.6	4673.7
30°	4251.8	4169.1	4246.3	4455.9	4513.8	4560.7
32.5°	4075.4	3984.4	4072.6	4304.2	4387.0	4447.6
35°	3890.6	3796.9	3896.1	4147.1	4246.3	4307.0
37.5°	3692.1	3601.1	3708.6	3981.6	4100.2	4160.8
40°	3488.1	3386.0	3507.4	3785.8	3943.0	4014.7
42.5°	3278.5	3151.7	3300.6	3601.1	3772.1	3843.8
45°	3044.1	2867.6	3068.9	3405.3	3584.6	3664.5
47.5°	2809.7	2633.3	2837.3	3195.8	3388.8	3460.5
50°	2583.6	2432.0	2594.7	2966.9	3190.3	3281.3
52.5°	2376.8	2252.8	2390.6	2743.6	2986.2	3077.2
55°	2183.8	2087.3	2200.4	2523.0	2771.1	2875.9
57.5°	2001.8	1941.2	2018.4	2313.4	2572.6	2671.9
60°	1830.9	1789.5	1844.7	2106.6	2338.2	2459.6
62.5°	1662.7	1640.6	1682.0	1888.8	2120.4	2247.2
65°	1500.0	1494.5	1516.5	1698.5	1891.5	2029.4
67.5°	1337.3	1334.6	1348.3	1497.2	1668.2	1803.3
70°	1174.6	1191.2	1182.9	1279.4	1444.9	1577.2
72.5°	1009.2	1034.0	1020.2	1080.9	1240.8	1345.6
75°	824.4	857.5	830.0	898.9	998.2	1111.2
77.5°	634.2	670.0	636.9	697.6	805.1	885.1
80°	455.0	488.1	460.5	507.4	601.1	661.8
82.5°	286.8	311.6	289.5	336.4	430.1	474.3
85°	126.8	140.6	146.1	182.0	264.7	314.3
87.5°	5.5	2.8	5.5	35.8	93.8	137.9
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)