

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: P520660

Luminaire Tested: **8WSLA-125-L850-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: P520660  
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-125-L850-UNV-U  
Description: 8 FOOT, 2500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

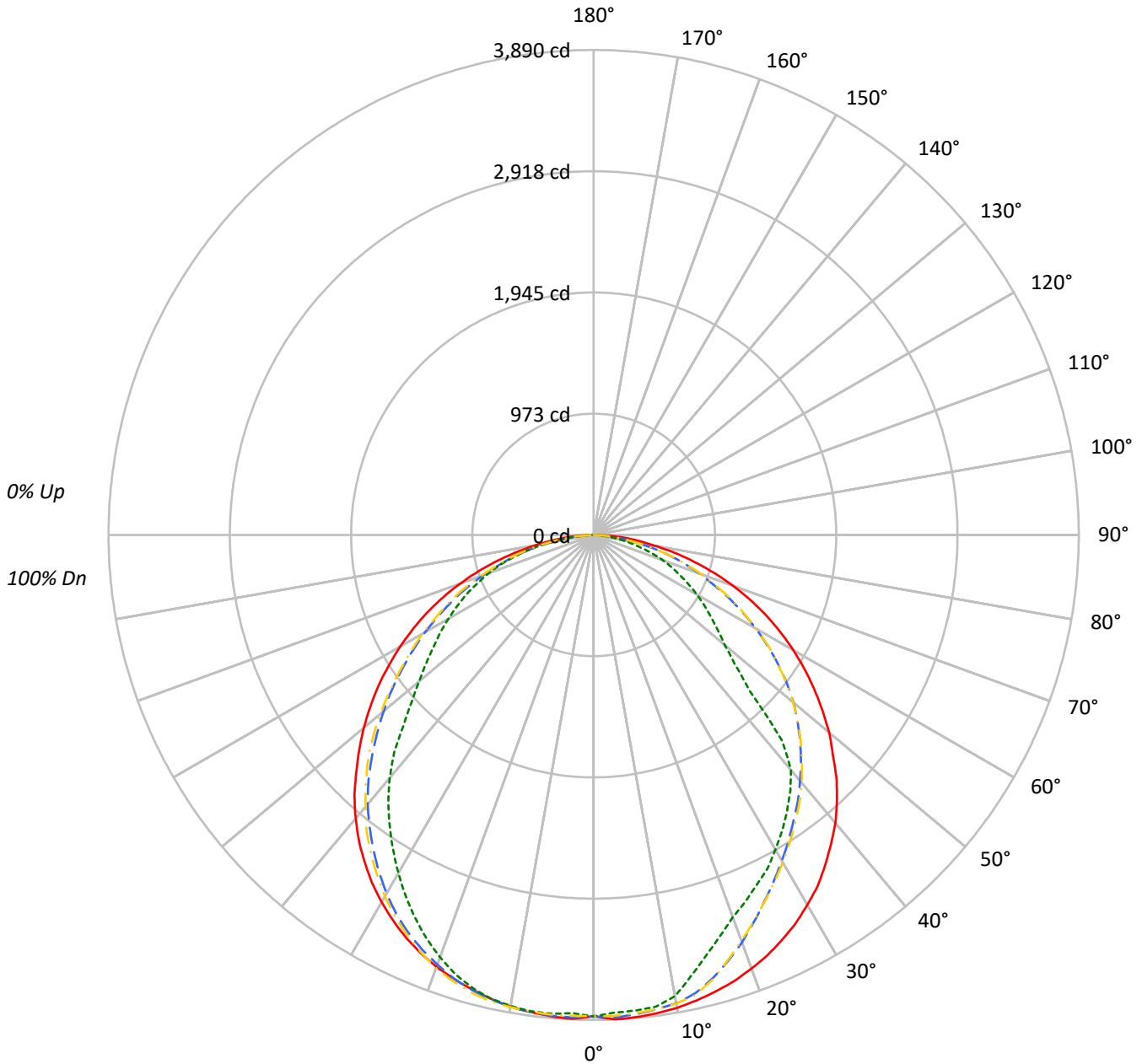
Lumens per Lamp: N/A  
Luminaire Lumens: 10357.0 lumens  
Efficiency: N/A  
Efficacy: 132.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 78.2  
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°	10389	10389	10389	10389
5°	10490	10345	10474	10412
10°	10527	10267	10499	10482
15°	10559	9723	10513	10479
20°	10599	9342	10558	10320
25°	10633	9188	10578	10061
30°	10645	9055	10568	9731
35°	10628	8879	10519	9369
40°	10594	8644	10426	8935
45°	10475	6716	10239	8198
50°	10318	5749	10067	7648
55°	10135	5384	9873	7356
60°	9943	5139	9642	7234
65°	9706	4867	9377	7148
70°	9321	4628	8930	7040
75°	8678	4070	8269	6697
80°	7703	3402	7221	5681
85°	7290	2430	6394	3260



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	366.8	3.5
10°-20°	1046.3	10.1
20°-30°	1563.4	15.1
30°-40°	1861.1	18.0
40°-50°	1860.2	18.0
50°-60°	1600.7	15.5
60°-70°	1204.8	11.6
70°-80°	686.5	6.6
80°-90°	167.1	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°	2976.6	28.7
0°-40°	4837.6	46.7
0°-60°	8298.6	80.1
0°-90°	10357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10357.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3861	3861	3861	3861	3861	
5°	3884	3830	3877	3854	3884	370
15°	3790	3490	3774	3761	3790	1071
25°	3581	3094	3562	3388	3581	1651
35°	3235	2703	3202	2852	3235	2024
45°	2753	1765	2690	2154	2753	2120
55°	2160	1148	2104	1568	2160	1931
65°	1524	764	1473	1123	1524	1505
75°	835	392	795	644	835	884
85°	236	79	207	106	236	257
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°	3860.7	3860.7	3860.7	3860.7	3860.7	3860.7	3860.7	3860.7	3860.7	3860.7	3860.7
2.5°	3889.7	3854.5	3875.2	3869.0	3835.9	3848.3	3860.7	3848.3	3885.6	3852.5	3875.2
5°	3883.5	3846.2	3858.7	3846.2	3829.7	3833.8	3852.5	3840.0	3877.3	3842.1	3871.1
7.5°	3871.1	3825.5	3838.0	3831.8	3817.3	3819.3	3838.0	3827.6	3860.7	3827.6	3860.7
10°	3852.5	3804.8	3815.2	3788.3	3757.2	3780.0	3817.3	3806.9	3842.1	3804.8	3842.1
12.5°	3823.5	3775.8	3765.5	3676.4	3620.5	3664.0	3777.9	3777.9	3811.0	3775.8	3815.2
15°	3790.3	3738.5	3682.6	3548.0	3490.0	3533.5	3690.9	3744.8	3773.8	3738.5	3777.9
17.5°	3751.0	3690.9	3583.2	3425.8	3371.9	3415.4	3577.0	3695.1	3732.3	3695.1	3730.3
20°	3701.3	3630.8	3477.6	3297.4	3262.2	3301.5	3463.1	3635.0	3686.8	3641.2	3666.1
22.5°	3647.4	3562.5	3359.5	3198.0	3181.4	3206.2	3353.3	3560.4	3628.8	3581.1	3597.7
25°	3581.1	3481.7	3241.5	3106.8	3094.4	3108.9	3245.6	3473.4	3562.5	3512.8	3519.0
27.5°	3510.7	3403.0	3129.6	3030.2	3017.8	3024.0	3137.9	3376.1	3485.9	3436.1	3425.8
30°	3425.8	3309.8	3017.8	2926.6	2914.2	2937.0	3034.3	3276.7	3400.9	3351.2	3320.2
32.5°	3340.9	3208.3	2908.0	2837.6	2812.7	2833.4	2926.6	3173.1	3307.7	3256.0	3204.2
35°	3235.2	3100.6	2794.1	2723.6	2702.9	2725.7	2818.9	3065.4	3202.1	3150.3	3079.9
37.5°	3125.5	2986.7	2690.5	2626.3	2589.0	2615.9	2709.2	2953.6	3092.3	3038.5	2951.5
40°	3015.7	2866.6	2574.5	2508.2	2460.6	2500.0	2595.2	2835.5	2968.1	2918.3	2818.9
42.5°	2887.3	2746.4	2460.6	2367.4	2232.8	2359.1	2473.0	2717.4	2839.6	2792.0	2671.9
45°	2752.6	2618.0	2340.5	2114.7	1764.7	2135.4	2348.8	2593.2	2690.5	2644.9	2514.5
47.5°	2599.4	2485.5	2218.3	1874.5	1534.8	1895.2	2222.4	2475.1	2549.7	2500.0	2355.0
50°	2464.7	2352.9	2089.9	1671.5	1373.2	1694.3	2087.8	2342.5	2404.7	2359.1	2197.6
52.5°	2311.5	2214.1	1951.1	1491.3	1253.1	1514.1	1946.9	2205.8	2255.6	2201.7	2040.1
55°	2160.3	2073.3	1804.0	1331.8	1147.5	1352.5	1799.9	2065.0	2104.4	2042.2	1874.5
57.5°	2007.0	1928.3	1652.8	1188.9	1050.1	1211.7	1663.2	1920.0	1946.9	1868.2	1715.0
60°	1847.5	1781.2	1499.6	1062.5	954.8	1081.2	1495.4	1775.0	1791.6	1706.7	1559.6
62.5°	1688.0	1628.0	1346.3	946.5	857.5	959.0	1356.6	1621.8	1632.1	1551.3	1400.1
65°	1524.4	1468.5	1197.2	824.3	764.3	845.1	1207.5	1462.3	1472.6	1381.5	1244.8
67.5°	1354.6	1309.0	1037.7	731.1	675.2	737.4	1058.4	1300.7	1306.9	1217.9	1093.6
70°	1184.7	1145.4	896.8	629.6	588.2	631.7	911.3	1122.6	1135.0	1039.8	940.3
72.5°	1010.8	979.7	760.1	524.0	486.7	524.0	768.4	959.0	967.3	888.6	791.2
75°	834.7	811.9	621.4	420.5	391.5	418.4	625.5	795.3	795.3	720.8	644.1
77.5°	664.9	648.3	476.4	323.1	302.4	319.0	478.5	629.6	625.5	567.5	507.4
80°	497.1	484.7	341.8	234.0	219.5	227.8	341.8	466.0	466.0	424.6	352.1
82.5°	356.2	341.8	225.8	153.3	145.0	149.1	221.6	325.2	331.4	300.3	238.2
85°	236.1	203.0	122.2	84.9	78.7	80.8	116.0	188.5	207.1	174.0	124.3
87.5°	103.6	68.4	31.1	12.4	6.2	8.3	24.9	60.1	78.7	51.8	16.6
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°	3860.7	3860.7	3860.7	3860.7	3860.7	3860.7
2.5°	3873.2	3840.0	3852.5	3860.7	3852.5	3889.7
5°	3869.0	3854.5	3852.5	3862.8	3846.2	3883.5
7.5°	3862.8	3854.5	3852.5	3856.6	3835.9	3871.1
10°	3848.3	3835.9	3840.0	3846.2	3819.3	3852.5
12.5°	3821.4	3809.0	3811.0	3831.8	3794.5	3823.5
15°	3775.8	3761.3	3775.8	3798.6	3765.5	3790.3
17.5°	3715.8	3693.0	3717.8	3753.0	3728.2	3751.0
20°	3639.1	3603.9	3630.8	3695.1	3672.3	3701.3
22.5°	3545.9	3502.4	3529.4	3622.6	3616.3	3647.4
25°	3440.3	3388.5	3425.8	3539.7	3552.1	3581.1
27.5°	3322.2	3264.2	3313.9	3448.6	3477.6	3510.7
30°	3193.8	3131.7	3189.7	3347.1	3390.6	3425.8
32.5°	3061.3	2992.9	3059.2	3233.2	3295.3	3340.9
35°	2922.5	2852.1	2926.6	3115.1	3189.7	3235.2
37.5°	2773.4	2705.0	2785.8	2990.8	3079.9	3125.5
40°	2620.1	2543.5	2634.6	2843.8	2961.8	3015.7
42.5°	2462.7	2367.4	2479.2	2705.0	2833.4	2887.3
45°	2286.6	2154.1	2305.3	2558.0	2692.6	2752.6
47.5°	2110.6	1978.0	2131.3	2400.5	2545.5	2599.4
50°	1940.7	1826.8	1949.0	2228.6	2396.4	2464.7
52.5°	1785.4	1692.2	1795.7	2060.9	2243.1	2311.5
55°	1640.4	1567.9	1652.8	1895.2	2081.6	2160.3
57.5°	1503.7	1458.1	1516.1	1737.8	1932.4	2007.0
60°	1375.3	1344.2	1385.6	1582.4	1756.4	1847.5
62.5°	1248.9	1232.4	1263.4	1418.8	1592.8	1688.0
65°	1126.7	1122.6	1139.2	1275.9	1420.9	1524.4
67.5°	1004.5	1002.5	1012.8	1124.7	1253.1	1354.6
70°	882.3	894.8	888.6	961.0	1085.3	1184.7
72.5°	758.1	776.7	766.4	811.9	932.0	1010.8
75°	619.3	644.1	623.4	675.2	749.8	834.7
77.5°	476.4	503.3	478.5	524.0	604.8	664.9
80°	341.8	366.6	345.9	381.1	451.5	497.1
82.5°	215.4	234.0	217.5	252.7	323.1	356.2
85°	95.3	105.6	109.8	136.7	198.8	236.1
87.5°	4.1	2.1	4.1	26.9	70.4	103.6
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)