

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: P520651

Luminaire Tested: **8WSLA-125-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: P520651
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-L830-UNV-U
Description: 8 FOOT, 2500 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

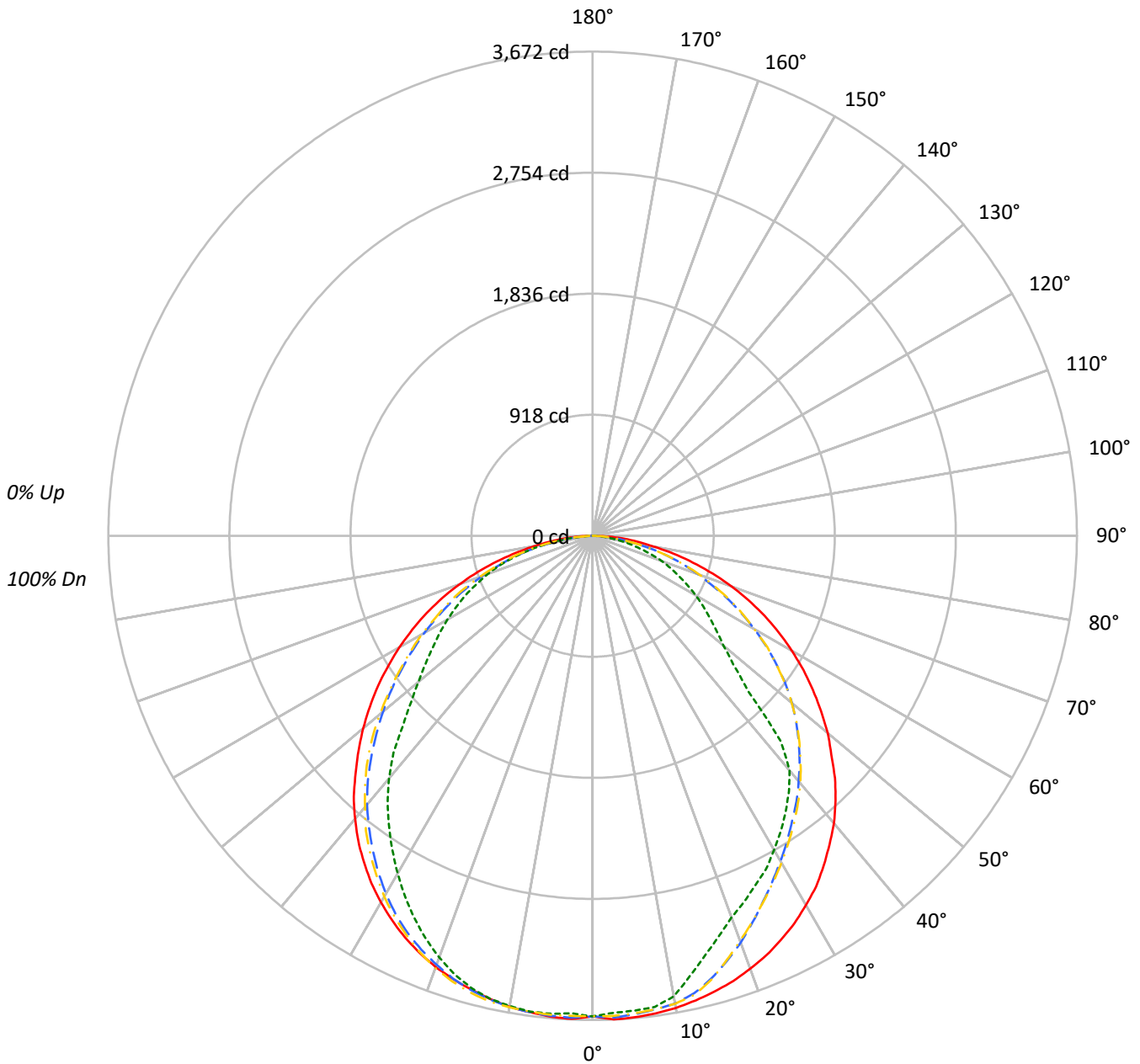
Lumens per Lamp: N/A
Luminaire Lumens: 9777.0 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 78.2
Input Voltage (V): NR
Input Current (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°	9807	9807	9807	9807
5°	9903	9766	9887	9829
10°	9937	9692	9910	9895
15°	9968	9178	9925	9892
20°	10006	8819	9966	9743
25°	10038	8673	9985	9498
30°	10049	8548	9976	9186
35°	10033	8382	9930	8844
40°	10000	8160	9842	8434
45°	9889	6340	9666	7738
50°	9741	5427	9503	7219
55°	9568	5082	9320	6944
60°	9387	4851	9103	6829
65°	9163	4594	8852	6748
70°	8799	4369	8430	6646
75°	8193	3842	7806	6323
80°	7273	3212	6817	5363
85°	6882	2294	6036	3078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.3	3.5
10°-20°	987.7	10.1
20°-30°	1475.9	15.1
30°-40°	1756.8	18.0
40°-50°	1756.1	18.0
50°-60°	1511.1	15.5
60°-70°	1137.3	11.6
70°-80°	648.1	6.6
80°-90°	157.7	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°	2809.9	28.7
0°-40°	4566.7	46.7
0°-60°	7833.8	80.1
0°-90°	9777.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9777.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3644	3644	3644	3644	3644	
5°	3666	3615	3660	3639	3666	349
15°	3578	3295	3562	3551	3578	1011
25°	3381	2921	3363	3199	3381	1559
35°	3054	2552	3023	2692	3054	1911
45°	2598	1666	2540	2033	2598	2001
55°	2039	1083	1986	1480	2039	1823
65°	1439	722	1390	1060	1439	1421
75°	788	370	751	608	788	834
85°	223	74	196	100	223	243
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°	3644.5	3644.5	3644.5	3644.5	3644.5	3644.5	3644.5	3644.5	3644.5	3644.5	3644.5
2.5°	3671.9	3638.7	3658.2	3652.4	3621.1	3632.8	3644.5	3632.8	3668.0	3636.7	3658.2
5°	3666.1	3630.9	3642.6	3630.9	3615.2	3619.1	3636.7	3625.0	3660.2	3626.9	3654.3
7.5°	3654.3	3611.3	3623.0	3617.2	3603.5	3605.4	3623.0	3613.3	3644.5	3613.3	3644.5
10°	3636.7	3591.8	3601.5	3576.1	3546.8	3568.3	3603.5	3593.7	3626.9	3591.8	3626.9
12.5°	3609.3	3564.4	3554.6	3470.5	3417.7	3458.8	3566.3	3566.3	3597.6	3564.4	3601.5
15°	3578.1	3529.2	3476.4	3349.3	3294.6	3335.6	3484.2	3535.0	3562.4	3529.2	3566.3
17.5°	3540.9	3484.2	3382.5	3233.9	3183.1	3224.2	3376.7	3488.1	3523.3	3488.1	3521.4
20°	3494.0	3427.5	3282.8	3112.7	3079.5	3116.6	3269.1	3431.4	3480.3	3437.3	3460.8
22.5°	3443.2	3363.0	3171.4	3018.9	3003.2	3026.7	3165.5	3361.0	3425.6	3380.6	3396.2
25°	3380.6	3286.7	3059.9	2932.8	2921.1	2934.8	3063.8	3278.9	3363.0	3316.1	3321.9
27.5°	3314.1	3212.4	2954.3	2860.5	2848.8	2854.6	2962.2	3187.0	3290.6	3243.7	3233.9
30°	3233.9	3124.5	2848.8	2762.7	2751.0	2772.5	2864.4	3093.2	3210.5	3163.6	3134.2
32.5°	3153.8	3028.6	2745.1	2678.7	2655.2	2674.8	2762.7	2995.4	3122.5	3073.6	3024.7
35°	3054.1	2927.0	2637.6	2571.1	2551.6	2573.1	2661.1	2893.7	3022.8	2973.9	2907.4
37.5°	2950.4	2819.4	2539.8	2479.2	2444.0	2469.5	2557.4	2788.2	2919.2	2868.3	2786.2
40°	2846.8	2706.0	2430.3	2367.8	2322.8	2360.0	2449.9	2676.7	2801.8	2754.9	2661.1
42.5°	2725.6	2592.6	2322.8	2234.8	2107.7	2227.0	2334.5	2565.3	2680.6	2635.6	2522.2
45°	2598.5	2471.4	2209.4	1996.3	1665.9	2015.8	2217.2	2447.9	2539.8	2496.8	2373.6
47.5°	2453.8	2346.3	2094.0	1769.5	1448.8	1789.0	2098.0	2336.5	2406.9	2360.0	2223.1
50°	2326.7	2221.1	1972.8	1577.9	1296.3	1599.4	1970.9	2211.4	2270.0	2227.0	2074.5
52.5°	2182.0	2090.1	1841.8	1407.8	1182.9	1429.3	1837.9	2082.3	2129.2	2078.4	1925.9
55°	2039.3	1957.2	1703.0	1257.2	1083.2	1276.8	1699.1	1949.4	1986.5	1927.9	1769.5
57.5°	1894.6	1820.3	1560.3	1122.3	991.3	1143.8	1570.0	1812.5	1837.9	1763.6	1618.9
60°	1744.1	1681.5	1415.6	1003.0	901.4	1020.6	1411.7	1675.6	1691.3	1611.1	1472.3
62.5°	1593.5	1536.8	1270.9	893.5	809.5	905.3	1280.7	1530.9	1540.7	1464.5	1321.7
65°	1439.0	1386.3	1130.1	778.2	721.5	797.7	1139.9	1380.4	1390.2	1304.1	1175.1
67.5°	1278.7	1235.7	979.6	690.2	637.4	696.1	999.1	1227.9	1233.7	1149.7	1032.4
70°	1118.4	1081.2	846.6	594.4	555.3	596.3	860.3	1059.7	1071.5	981.5	887.7
72.5°	954.2	924.8	717.6	494.7	459.5	494.7	725.4	905.3	913.1	838.8	746.9
75°	788.0	766.4	586.6	396.9	369.5	395.0	590.5	750.8	750.8	680.4	608.1
77.5°	627.6	612.0	449.7	305.0	285.5	301.1	451.7	594.4	590.5	535.7	479.0
80°	469.3	457.5	322.6	220.9	207.3	215.1	322.6	439.9	439.9	400.8	332.4
82.5°	336.3	322.6	213.1	144.7	136.9	140.8	209.2	307.0	312.8	283.5	224.9
85°	222.9	191.6	115.4	80.2	74.3	76.3	109.5	177.9	195.5	164.2	117.3
87.5°	97.8	64.5	29.3	11.7	5.9	7.8	23.5	56.7	74.3	48.9	15.6
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°	3644.5	3644.5	3644.5	3644.5	3644.5	3644.5
2.5°	3656.3	3625.0	3636.7	3644.5	3636.7	3671.9
5°	3652.4	3638.7	3636.7	3646.5	3630.9	3666.1
7.5°	3646.5	3638.7	3636.7	3640.6	3621.1	3654.3
10°	3632.8	3621.1	3625.0	3630.9	3605.4	3636.7
12.5°	3607.4	3595.7	3597.6	3617.2	3582.0	3609.3
15°	3564.4	3550.7	3564.4	3585.9	3554.6	3578.1
17.5°	3507.7	3486.2	3509.6	3542.9	3519.4	3540.9
20°	3435.3	3402.1	3427.5	3488.1	3466.6	3494.0
22.5°	3347.3	3306.3	3331.7	3419.7	3413.8	3443.2
25°	3247.6	3198.8	3233.9	3341.5	3353.2	3380.6
27.5°	3136.2	3081.4	3128.4	3255.5	3282.8	3314.1
30°	3015.0	2956.3	3011.0	3159.6	3200.7	3233.9
32.5°	2889.8	2825.3	2887.9	3052.1	3110.8	3153.8
35°	2758.8	2692.3	2762.7	2940.7	3011.0	3054.1
37.5°	2618.0	2553.5	2629.8	2823.3	2907.4	2950.4
40°	2473.4	2401.0	2487.0	2684.5	2796.0	2846.8
42.5°	2324.8	2234.8	2340.4	2553.5	2674.8	2725.6
45°	2158.6	2033.4	2176.2	2414.7	2541.8	2598.5
47.5°	1992.4	1867.2	2011.9	2266.1	2403.0	2453.8
50°	1832.0	1724.5	1839.9	2103.8	2262.2	2326.7
52.5°	1685.4	1597.4	1695.2	1945.5	2117.5	2182.0
55°	1548.5	1480.1	1560.3	1789.0	1965.0	2039.3
57.5°	1419.5	1376.5	1431.2	1640.4	1824.2	1894.6
60°	1298.3	1268.9	1308.0	1493.8	1658.0	1744.1
62.5°	1179.0	1163.4	1192.7	1339.3	1503.6	1593.5
65°	1063.6	1059.7	1075.4	1204.4	1341.3	1439.0
67.5°	948.3	946.3	956.1	1061.7	1182.9	1278.7
70°	832.9	844.7	838.8	907.2	1024.5	1118.4
72.5°	715.6	733.2	723.4	766.4	879.9	954.2
75°	584.6	608.1	588.5	637.4	707.8	788.0
77.5°	449.7	475.1	451.7	494.7	570.9	627.6
80°	322.6	346.1	326.5	359.8	426.2	469.3
82.5°	203.3	220.9	205.3	238.5	305.0	336.3
85°	89.9	99.7	103.6	129.0	187.7	222.9
87.5°	3.9	2.0	3.9	25.4	66.5	97.8
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)