

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: P520708

Luminaire Tested: **8WSLA-175-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: P520708
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-L850-UNV-U
Description: 8 FOOT, 3500 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

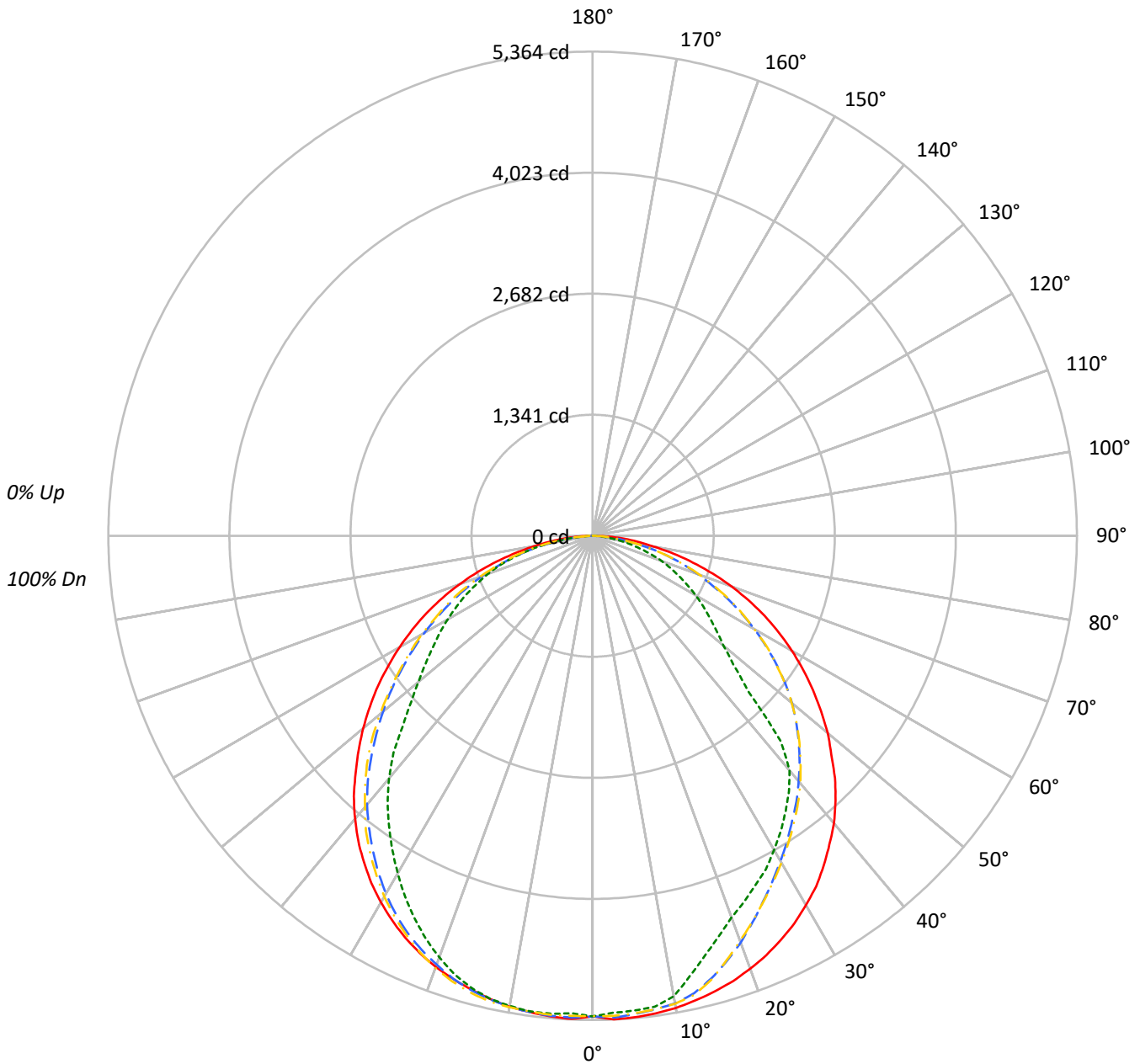
Lumens per Lamp: N/A
Luminaire Lumens: 14281.0 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 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									
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°	14325	14325	14325	14325
5°	14465	14264	14442	14357
10°	14515	14156	14476	14453
15°	14560	13407	14496	14449
20°	14615	12881	14558	14230
25°	14661	12669	14585	13873
30°	14678	12486	14572	13418
35°	14655	12243	14505	12919
40°	14607	11919	14377	12320
45°	14445	9260	14118	11303
50°	14228	7927	13881	10545
55°	13975	7423	13613	10143
60°	13711	7086	13296	9975
65°	13384	6710	12930	9856
70°	12853	6382	12314	9707
75°	11966	5612	11403	9235
80°	10621	4691	9958	7834
85°	10053	3350	8818	4499



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.8	3.5
10°-20°	1442.7	10.1
20°-30°	2155.8	15.1
30°-40°	2566.2	18.0
40°-50°	2565.0	18.0
50°-60°	2207.2	15.5
60°-70°	1661.2	11.6
70°-80°	946.7	6.6
80°-90°	230.4	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°	4104.3	28.7
0°-40°	6670.5	46.7
0°-60°	11442.7	80.1
0°-90°	14281.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14281.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5324	5324	5324	5324	5324	
5°	5355	5281	5346	5315	5355	510
15°	5226	4812	5204	5186	5226	1477
25°	4938	4267	4912	4672	4938	2277
35°	4461	3727	4415	3933	4461	2791
45°	3796	2433	3710	2970	3796	2923
55°	2979	1582	2902	2162	2979	2663
65°	2102	1054	2031	1548	2102	2076
75°	1151	540	1097	888	1151	1218
85°	326	108	286	146	326	354
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°	5323.5	5323.5	5323.5	5323.5	5323.5	5323.5	5323.5	5323.5	5323.5	5323.5	5323.5
2.5°	5363.5	5314.9	5343.5	5334.9	5289.2	5306.3	5323.5	5306.3	5357.8	5312.1	5343.5
5°	5354.9	5303.5	5320.6	5303.5	5280.6	5286.4	5312.1	5294.9	5346.3	5297.8	5337.8
7.5°	5337.8	5274.9	5292.1	5283.5	5263.5	5266.4	5292.1	5277.8	5323.5	5277.8	5323.5
10°	5312.1	5246.4	5260.7	5223.5	5180.7	5212.1	5263.5	5249.2	5297.8	5246.4	5297.8
12.5°	5272.1	5206.4	5192.1	5069.3	4992.2	5052.2	5209.2	5209.2	5254.9	5206.4	5260.7
15°	5226.4	5155.0	5077.9	4892.2	4812.3	4872.2	5089.3	5163.6	5203.5	5155.0	5209.2
17.5°	5172.1	5089.3	4940.8	4723.7	4649.5	4709.5	4932.2	5095.0	5146.4	5095.0	5143.6
20°	5103.6	5006.5	4795.1	4546.7	4498.1	4552.4	4775.1	5012.2	5083.6	5020.8	5055.0
22.5°	5029.3	4912.2	4632.3	4409.6	4386.7	4421.0	4623.8	4909.4	5003.6	4937.9	4960.8
25°	4937.9	4800.8	4469.6	4283.9	4266.8	4286.8	4475.3	4789.4	4912.2	4843.7	4852.3
27.5°	4840.8	4692.3	4315.3	4178.3	4161.1	4169.7	4326.8	4655.2	4806.6	4738.0	4723.7
30°	4723.7	4563.8	4161.1	4035.5	4018.3	4049.7	4184.0	4518.1	4689.5	4620.9	4578.1
32.5°	4606.6	4423.9	4009.7	3912.6	3878.4	3906.9	4035.5	4375.3	4560.9	4489.5	4418.1
35°	4461.0	4275.4	3852.7	3755.6	3727.0	3758.4	3886.9	4226.8	4415.3	4343.9	4246.8
37.5°	4309.6	4118.3	3709.9	3621.3	3569.9	3607.1	3735.6	4072.6	4263.9	4189.7	4069.7
40°	4158.3	3952.6	3549.9	3458.6	3392.9	3447.1	3578.5	3909.8	4092.6	4024.0	3886.9
42.5°	3981.2	3787.0	3392.9	3264.3	3078.7	3252.9	3410.0	3747.0	3915.5	3849.8	3684.2
45°	3795.6	3609.9	3227.2	2915.9	2433.3	2944.5	3238.6	3575.6	3709.9	3647.0	3467.1
47.5°	3584.2	3427.1	3058.7	2584.6	2116.3	2613.2	3064.4	3412.9	3515.7	3447.1	3247.2
50°	3398.6	3244.4	2881.7	2304.7	1893.5	2336.2	2878.8	3230.1	3315.8	3252.9	3030.2
52.5°	3187.2	3053.0	2690.3	2056.3	1727.8	2087.7	2684.6	3041.6	3110.1	3035.9	2813.1
55°	2978.8	2858.8	2487.5	1836.4	1582.2	1864.9	2481.8	2847.4	2901.6	2816.0	2584.6
57.5°	2767.4	2658.9	2279.0	1639.3	1448.0	1670.7	2293.3	2647.5	2684.6	2576.1	2364.7
60°	2547.5	2456.1	2067.7	1465.1	1316.6	1490.8	2062.0	2447.5	2470.4	2353.3	2150.5
62.5°	2327.6	2244.8	1856.4	1305.2	1182.4	1322.3	1870.6	2236.2	2250.5	2139.1	1930.6
65°	2102.0	2024.9	1650.7	1136.7	1053.8	1165.2	1665.0	2016.3	2030.6	1904.9	1716.4
67.5°	1867.8	1805.0	1430.8	1008.1	931.0	1016.7	1459.4	1793.5	1802.1	1679.3	1507.9
70°	1633.6	1579.3	1236.6	868.2	811.1	871.1	1256.6	1547.9	1565.1	1433.7	1296.6
72.5°	1393.7	1350.9	1048.1	722.6	671.1	722.6	1059.6	1322.3	1333.7	1225.2	1091.0
75°	1150.9	1119.5	856.8	579.8	539.8	576.9	862.5	1096.7	1096.7	993.9	888.2
77.5°	916.8	893.9	656.9	445.5	417.0	439.8	659.7	868.2	862.5	782.5	699.7
80°	685.4	668.3	471.2	322.7	302.7	314.2	471.2	642.6	642.6	585.5	485.5
82.5°	491.2	471.2	311.3	211.3	199.9	205.6	305.6	448.4	457.0	414.1	328.4
85°	325.6	279.9	168.5	117.1	108.5	111.4	159.9	259.9	285.6	239.9	171.4
87.5°	142.8	94.2	42.8	17.1	8.6	11.4	34.3	82.8	108.5	71.4	22.8
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°	5323.5	5323.5	5323.5	5323.5	5323.5	5323.5
2.5°	5340.6	5294.9	5312.1	5323.5	5312.1	5363.5
5°	5334.9	5314.9	5312.1	5326.3	5303.5	5354.9
7.5°	5326.3	5314.9	5312.1	5317.8	5289.2	5337.8
10°	5306.3	5289.2	5294.9	5303.5	5266.4	5312.1
12.5°	5269.2	5252.1	5254.9	5283.5	5232.1	5272.1
15°	5206.4	5186.4	5206.4	5237.8	5192.1	5226.4
17.5°	5123.6	5092.2	5126.4	5175.0	5140.7	5172.1
20°	5017.9	4969.3	5006.5	5095.0	5063.6	5103.6
22.5°	4889.4	4829.4	4866.5	4995.1	4986.5	5029.3
25°	4743.7	4672.3	4723.7	4880.8	4897.9	4937.9
27.5°	4580.9	4501.0	4569.5	4755.2	4795.1	4840.8
30°	4403.9	4318.2	4398.2	4615.2	4675.2	4723.7
32.5°	4221.1	4126.8	4218.2	4458.1	4543.8	4606.6
35°	4029.7	3932.6	4035.5	4295.3	4398.2	4461.0
37.5°	3824.1	3729.9	3841.2	4124.0	4246.8	4309.6
40°	3612.8	3507.1	3632.8	3921.2	4084.0	4158.3
42.5°	3395.7	3264.3	3418.6	3729.9	3906.9	3981.2
45°	3153.0	2970.2	3178.7	3527.1	3712.7	3795.6
47.5°	2910.2	2727.4	2938.8	3310.0	3510.0	3584.2
50°	2676.0	2518.9	2687.4	3073.0	3304.3	3398.6
52.5°	2461.8	2333.3	2476.1	2841.7	3093.0	3187.2
55°	2261.9	2162.0	2279.0	2613.2	2870.2	2978.8
57.5°	2073.4	2010.6	2090.6	2396.1	2664.6	2767.4
60°	1896.3	1853.5	1910.6	2181.9	2421.8	2547.5
62.5°	1722.1	1699.3	1742.1	1956.3	2196.2	2327.6
65°	1553.6	1547.9	1570.8	1759.3	1959.2	2102.0
67.5°	1385.1	1382.3	1396.6	1550.8	1727.8	1867.8
70°	1216.6	1233.8	1225.2	1325.2	1496.5	1633.6
72.5°	1045.3	1071.0	1056.7	1119.5	1285.2	1393.7
75°	853.9	888.2	859.6	931.0	1033.9	1150.9
77.5°	656.9	694.0	659.7	722.6	833.9	916.8
80°	471.2	505.5	476.9	525.5	622.6	685.4
82.5°	297.0	322.7	299.9	348.4	445.5	491.2
85°	131.4	145.7	151.4	188.5	274.2	325.6
87.5°	5.7	2.9	5.7	37.1	97.1	142.8
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)