

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: P520705

Luminaire Tested: **8WSLA-175-L840-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: P520705
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-L840-UNV-U
Description: 8 FOOT, 3500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI
LEDS WITH NO UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

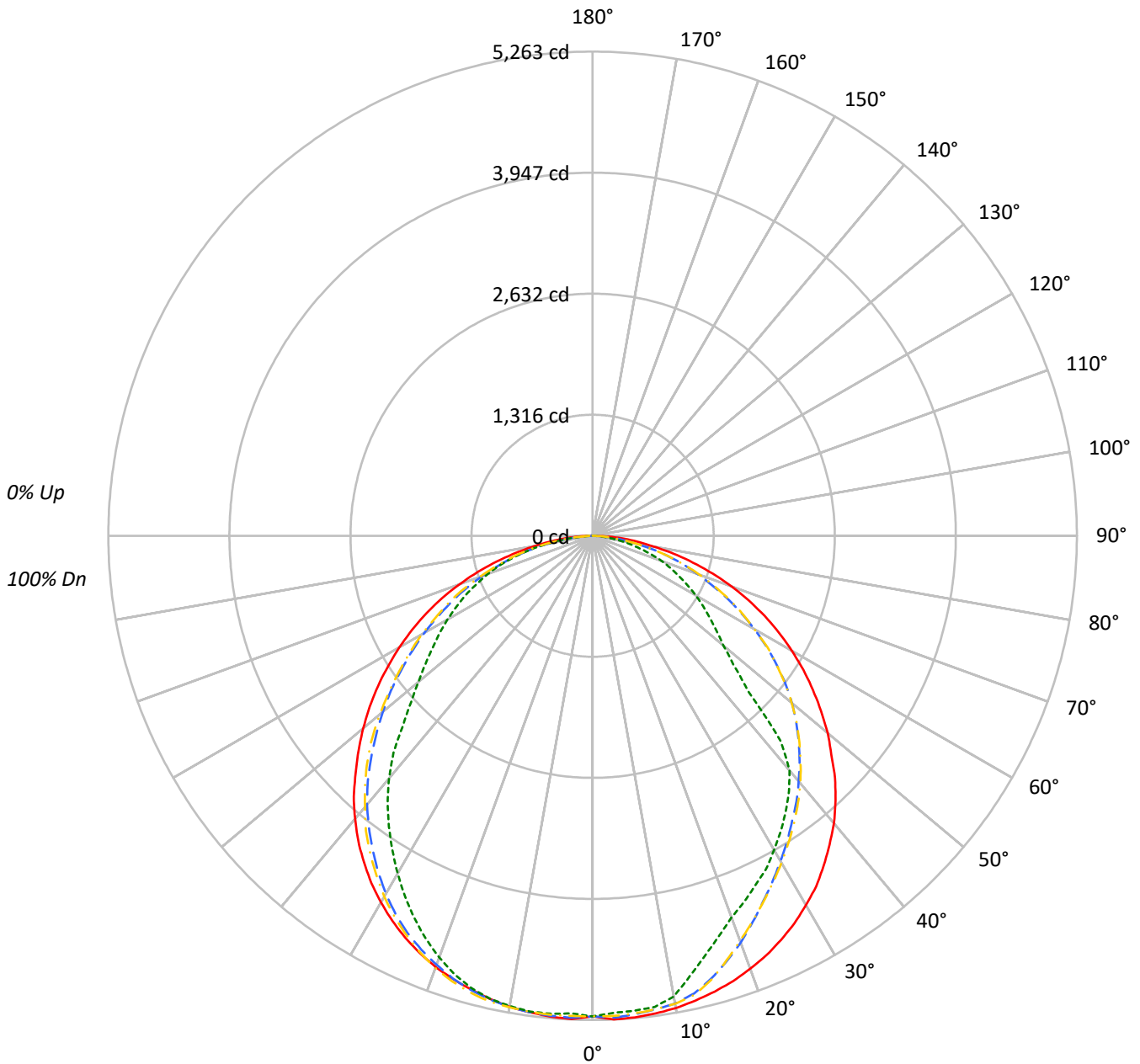
Lumens per Lamp: N/A
Luminaire Lumens: 14014.0 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

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°	14058	14058	14058	14058
5°	14195	13998	14172	14088
10°	14244	13891	14205	14182
15°	14288	13156	14225	14179
20°	14342	12640	14285	13964
25°	14387	12432	14313	13614
30°	14403	12253	14299	13167
35°	14381	12015	14233	12677
40°	14334	11696	14108	12089
45°	14174	9087	13854	11092
50°	13962	7779	13622	10348
55°	13714	7284	13359	9953
60°	13454	6953	13047	9789
65°	13134	6585	12688	9672
70°	12613	6262	12084	9526
75°	11743	5507	11189	9062
80°	10423	4604	9772	7688
85°	9865	3288	8654	4412



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	496.4	3.5
10°-20°	1415.7	10.1
20°-30°	2115.5	15.1
30°-40°	2518.2	18.0
40°-50°	2517.1	18.0
50°-60°	2165.9	15.5
60°-70°	1630.2	11.6
70°-80°	928.9	6.6
80°-90°	226.1	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°	4027.6	28.7
0°-40°	6545.8	46.7
0°-60°	11228.8	80.1
0°-90°	14014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14014.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5224	5224	5224	5224	5224	
5°	5255	5182	5246	5216	5255	500
15°	5129	4722	5106	5089	5129	1449
25°	4846	4187	4820	4585	4846	2234
35°	4378	3657	4333	3859	4378	2739
45°	3725	2388	3640	2915	3725	2868
55°	2923	1553	2847	2122	2923	2613
65°	2063	1034	1993	1519	2063	2037
75°	1129	530	1076	872	1129	1196
85°	320	106	280	143	320	348
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°	5224.0	5224.0	5224.0	5224.0	5224.0	5224.0	5224.0	5224.0	5224.0	5224.0	5224.0
2.5°	5263.2	5215.5	5243.6	5235.2	5190.3	5207.1	5224.0	5207.1	5257.6	5212.7	5243.6
5°	5254.8	5204.3	5221.2	5204.3	5181.9	5187.5	5212.7	5195.9	5246.4	5198.7	5238.0
7.5°	5238.0	5176.3	5193.1	5184.7	5165.1	5167.9	5193.1	5179.1	5224.0	5179.1	5224.0
10°	5212.7	5148.3	5162.3	5125.9	5083.8	5114.7	5165.1	5151.1	5198.7	5148.3	5198.7
12.5°	5173.5	5109.1	5095.0	4974.5	4898.9	4957.7	5111.9	5111.9	5156.7	5109.1	5162.3
15°	5128.7	5058.6	4982.9	4800.8	4722.3	4781.2	4994.1	5067.0	5106.2	5058.6	5111.9
17.5°	5075.4	4994.1	4848.4	4635.4	4562.6	4621.4	4840.0	4999.8	5050.2	4999.8	5047.4
20°	5008.2	4912.9	4705.5	4461.7	4414.0	4467.3	4685.9	4918.5	4988.5	4926.9	4960.5
22.5°	4935.3	4820.4	4545.7	4327.1	4304.7	4338.3	4537.3	4817.6	4910.1	4845.6	4868.0
25°	4845.6	4711.1	4386.0	4203.8	4187.0	4206.6	4391.6	4699.9	4820.4	4753.1	4761.5
27.5°	4750.3	4604.6	4234.7	4100.1	4083.3	4091.7	4245.9	4568.2	4716.7	4649.4	4635.4
30°	4635.4	4478.5	4083.3	3960.0	3943.2	3974.0	4105.7	4433.6	4601.8	4534.5	4492.5
32.5°	4520.5	4341.2	3934.8	3839.5	3805.9	3833.9	3960.0	4293.5	4475.7	4405.6	4335.5
35°	4377.6	4195.4	3780.6	3685.4	3657.3	3688.2	3814.3	4147.8	4332.7	4262.7	4167.4
37.5°	4229.1	4041.3	3640.5	3553.6	3503.2	3539.6	3665.7	3996.4	4184.2	4111.3	3993.6
40°	4080.5	3878.7	3483.6	3393.9	3329.4	3382.7	3511.6	3836.7	4016.1	3948.8	3814.3
42.5°	3906.8	3716.2	3329.4	3203.3	3021.2	3192.1	3346.2	3676.9	3842.3	3777.8	3615.3
45°	3724.6	3542.4	3166.9	2861.4	2387.8	2889.4	3178.1	3508.8	3640.5	3578.9	3402.3
47.5°	3517.2	3363.1	3001.5	2536.3	2076.7	2564.3	3007.1	3349.0	3449.9	3382.7	3186.5
50°	3335.0	3183.7	2827.8	2261.7	1858.1	2292.5	2825.0	3169.7	3253.8	3192.1	2973.5
52.5°	3127.6	2995.9	2640.0	2017.8	1695.5	2048.7	2634.4	2984.7	3052.0	2979.1	2760.5
55°	2923.1	2805.4	2441.0	1802.0	1552.6	1830.1	2435.4	2794.1	2847.4	2763.3	2536.3
57.5°	2715.7	2609.2	2236.4	1608.7	1420.9	1639.5	2250.4	2598.0	2634.4	2527.9	2320.5
60°	2499.9	2410.2	2029.0	1437.7	1292.0	1462.9	2023.4	2401.8	2424.2	2309.3	2110.3
62.5°	2284.1	2202.8	1821.7	1280.8	1160.3	1297.6	1835.7	2194.4	2208.4	2099.1	1894.5
65°	2062.7	1987.0	1619.9	1115.4	1034.1	1143.4	1633.9	1978.6	1992.6	1869.3	1684.3
67.5°	1832.9	1771.2	1404.1	989.3	913.6	997.7	1432.1	1760.0	1768.4	1647.9	1479.7
70°	1603.1	1549.8	1213.5	852.0	795.9	854.8	1233.1	1519.0	1535.8	1406.9	1272.4
72.5°	1367.6	1325.6	1028.5	709.0	658.6	709.0	1039.7	1297.6	1308.8	1202.3	1070.6
75°	1129.4	1098.6	840.8	568.9	529.7	566.1	846.4	1076.2	1076.2	975.3	871.6
77.5°	899.6	877.2	644.6	437.2	409.2	431.6	647.4	852.0	846.4	767.9	686.6
80°	672.6	655.8	462.4	316.7	297.1	308.3	462.4	630.6	630.6	574.5	476.4
82.5°	482.0	462.4	305.5	207.4	196.2	201.8	299.9	440.0	448.4	406.4	322.3
85°	319.5	274.7	165.4	114.9	106.5	109.3	156.9	255.0	280.3	235.4	168.2
87.5°	140.1	92.5	42.0	16.8	8.4	11.2	33.6	81.3	106.5	70.1	22.4
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°	5224.0	5224.0	5224.0	5224.0	5224.0	5224.0
2.5°	5240.8	5195.9	5212.7	5224.0	5212.7	5263.2
5°	5235.2	5215.5	5212.7	5226.8	5204.3	5254.8
7.5°	5226.8	5215.5	5212.7	5218.4	5190.3	5238.0
10°	5207.1	5190.3	5195.9	5204.3	5167.9	5212.7
12.5°	5170.7	5153.9	5156.7	5184.7	5134.3	5173.5
15°	5109.1	5089.4	5109.1	5139.9	5095.0	5128.7
17.5°	5027.8	4996.9	5030.6	5078.2	5044.6	5075.4
20°	4924.1	4876.4	4912.9	4999.8	4968.9	5008.2
22.5°	4798.0	4739.1	4775.5	4901.7	4893.3	4935.3
25°	4655.0	4585.0	4635.4	4789.6	4806.4	4845.6
27.5°	4495.3	4416.8	4484.1	4666.2	4705.5	4750.3
30°	4321.5	4237.5	4315.9	4528.9	4587.8	4635.4
32.5°	4142.2	4049.7	4139.4	4374.8	4458.9	4520.5
35°	3954.4	3859.1	3960.0	4215.0	4315.9	4377.6
37.5°	3752.6	3660.1	3769.4	4046.9	4167.4	4229.1
40°	3545.2	3441.5	3564.8	3847.9	4007.6	4080.5
42.5°	3332.2	3203.3	3354.7	3660.1	3833.9	3906.8
45°	3094.0	2914.7	3119.2	3461.2	3643.3	3724.6
47.5°	2855.8	2676.4	2883.8	3248.2	3444.3	3517.2
50°	2626.0	2471.9	2637.2	3015.5	3242.6	3335.0
52.5°	2415.8	2289.7	2429.8	2788.5	3035.2	3127.6
55°	2219.6	2121.5	2236.4	2564.3	2816.6	2923.1
57.5°	2034.7	1973.0	2051.5	2351.3	2614.8	2715.7
60°	1860.9	1818.9	1874.9	2141.1	2376.6	2499.9
62.5°	1689.9	1667.5	1709.6	1919.7	2155.2	2284.1
65°	1524.6	1519.0	1541.4	1726.4	1922.6	2062.7
67.5°	1359.2	1356.4	1370.4	1521.8	1695.5	1832.9
70°	1193.9	1210.7	1202.3	1300.4	1468.5	1603.1
72.5°	1025.7	1051.0	1036.9	1098.6	1261.1	1367.6
75°	838.0	871.6	843.6	913.6	1014.5	1129.4
77.5°	644.6	681.0	647.4	709.0	818.3	899.6
80°	462.4	496.1	468.0	515.7	611.0	672.6
82.5°	291.5	316.7	294.3	341.9	437.2	482.0
85°	128.9	142.9	148.5	185.0	269.0	319.5
87.5°	5.6	2.8	5.6	36.4	95.3	140.1
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)