

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: P520735

Luminaire Tested: **8WSLA-200-L930-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: P520735
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-200-L930-UNV-U
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 90 CRI
LEDS WITH NO UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

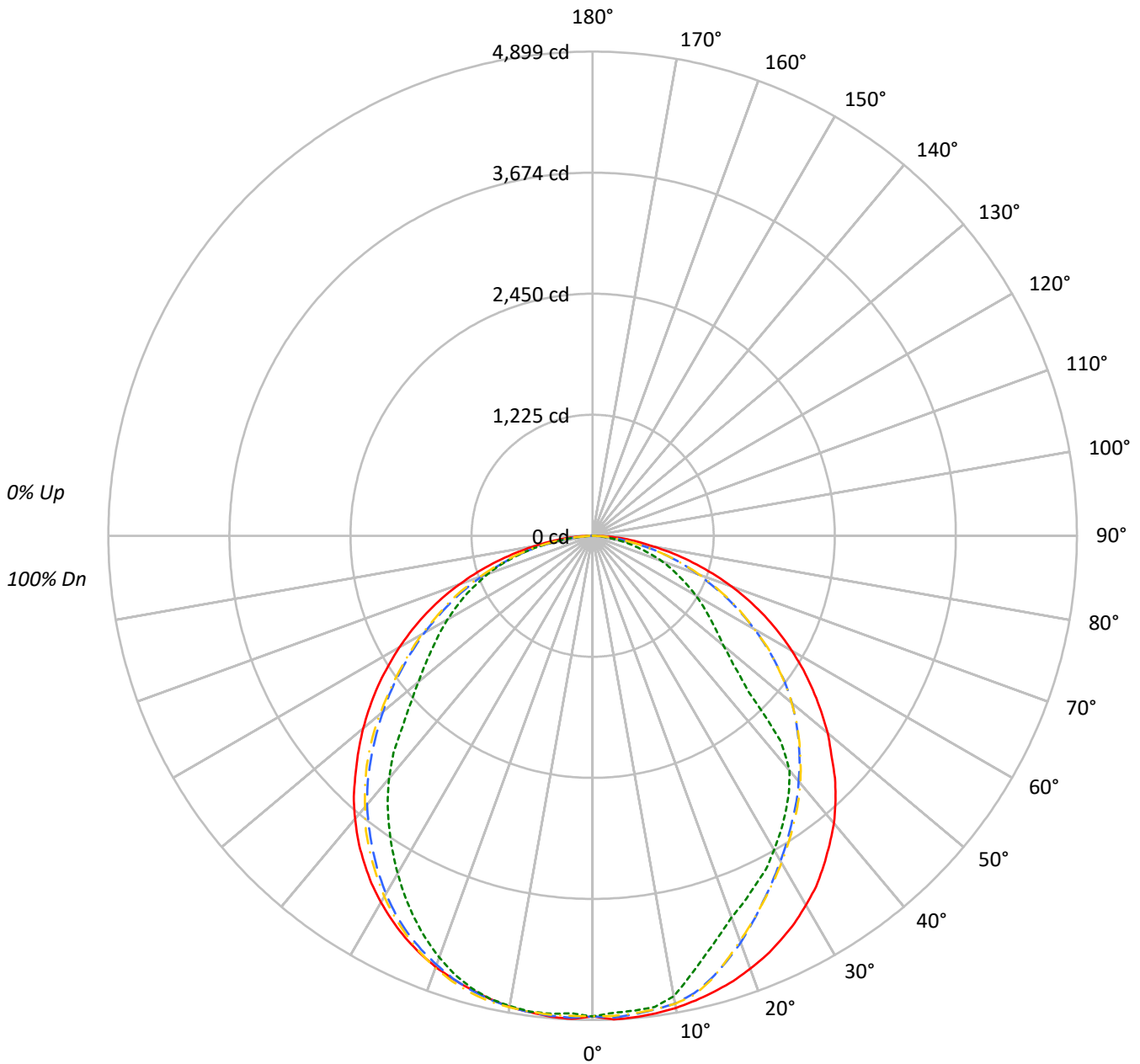
Lumens per Lamp: N/A
Luminaire Lumens: 13044.0 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 152.3
Input Voltage (V): NR
Input Current (A_{in}): 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°	13085	13085	13085	13085
5°	13212	13029	13191	13113
10°	13258	12930	13222	13201
15°	13299	12245	13241	13197
20°	13349	11765	13297	12998
25°	13392	11571	13322	12671
30°	13407	11405	13309	12256
35°	13385	11183	13248	11800
40°	13342	10886	13131	11253
45°	13193	8458	12895	10324
50°	12995	7240	12679	9632
55°	12764	6780	12434	9264
60°	12523	6472	12144	9112
65°	12225	6129	11810	9002
70°	11740	5829	11247	8866
75°	10931	5126	10415	8435
80°	9703	4285	9095	7155
85°	9182	3060	8055	4106



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.0	3.5
10°-20°	1317.7	10.1
20°-30°	1969.1	15.1
30°-40°	2343.9	18.0
40°-50°	2342.9	18.0
50°-60°	2016.0	15.5
60°-70°	1517.3	11.6
70°-80°	864.7	6.6
80°-90°	210.5	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°	3748.8	28.7
0°-40°	6092.7	46.7
0°-60°	10451.5	80.1
0°-90°	13044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13044.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4862	4862	4862	4862	4862	
5°	4891	4823	4883	4854	4891	466
15°	4774	4395	4753	4737	4774	1349
25°	4510	3897	4487	4268	4510	2080
35°	4075	3404	4033	3592	4075	2550
45°	3467	2222	3388	2713	3467	2670
55°	2721	1445	2650	1975	2721	2433
65°	1920	963	1855	1414	1920	1896
75°	1051	493	1002	811	1051	1113
85°	297	99	261	133	297	324
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°	4862.4	4862.4	4862.4	4862.4	4862.4	4862.4	4862.4	4862.4	4862.4	4862.4	4862.4
2.5°	4898.9	4854.5	4880.6	4872.8	4831.1	4846.7	4862.4	4846.7	4893.7	4851.9	4880.6
5°	4891.1	4844.1	4859.8	4844.1	4823.2	4828.5	4851.9	4836.3	4883.2	4838.9	4875.4
7.5°	4875.4	4818.0	4833.7	4825.9	4807.6	4810.2	4833.7	4820.6	4862.4	4820.6	4862.4
10°	4851.9	4791.9	4805.0	4771.1	4731.9	4760.6	4807.6	4794.5	4838.9	4791.9	4838.9
12.5°	4815.4	4755.4	4742.4	4630.2	4559.8	4614.6	4758.0	4758.0	4799.8	4755.4	4805.0
15°	4773.7	4708.5	4638.0	4468.5	4395.4	4450.2	4648.5	4716.3	4752.8	4708.5	4758.0
17.5°	4724.1	4648.5	4512.8	4314.6	4246.7	4301.5	4505.0	4653.7	4700.6	4653.7	4698.0
20°	4661.5	4572.8	4379.8	4152.8	4108.5	4158.1	4361.5	4578.0	4643.3	4585.9	4617.2
22.5°	4593.7	4486.7	4231.1	4027.6	4006.8	4038.1	4223.3	4484.1	4570.2	4510.2	4531.1
25°	4510.2	4385.0	4082.4	3912.9	3897.2	3915.5	4087.6	4374.6	4486.7	4424.1	4432.0
27.5°	4421.5	4285.9	3941.5	3816.3	3800.7	3808.5	3952.0	4252.0	4390.2	4327.6	4314.6
30°	4314.6	4168.5	3800.7	3685.9	3670.3	3699.0	3821.6	4126.8	4283.3	4220.7	4181.5
32.5°	4207.6	4040.7	3662.4	3573.7	3542.4	3568.5	3685.9	3996.3	4165.9	4100.7	4035.5
35°	4074.6	3905.0	3519.0	3430.3	3404.2	3432.9	3550.3	3860.7	4032.8	3967.6	3878.9
37.5°	3936.3	3761.6	3388.5	3307.7	3260.7	3294.6	3412.0	3719.8	3894.6	3826.8	3717.2
40°	3798.1	3610.3	3242.5	3159.0	3099.0	3148.5	3268.5	3571.1	3738.1	3675.5	3550.3
42.5°	3636.3	3459.0	3099.0	2981.6	2812.0	2971.2	3114.6	3422.4	3576.3	3516.4	3365.1
45°	3466.8	3297.2	2947.7	2663.3	2222.5	2689.4	2958.1	3265.9	3388.5	3331.1	3166.8
47.5°	3273.8	3130.3	2793.8	2360.8	1932.9	2386.8	2799.0	3117.2	3211.1	3148.5	2965.9
50°	3104.2	2963.3	2632.0	2105.1	1729.5	2133.8	2629.4	2950.3	3028.5	2971.2	2767.7
52.5°	2911.2	2788.6	2457.3	1878.2	1578.2	1906.9	2452.1	2778.1	2840.7	2772.9	2569.4
55°	2720.7	2611.2	2272.1	1677.3	1445.1	1703.4	2266.8	2600.7	2650.3	2572.0	2360.8
57.5°	2527.7	2428.6	2081.6	1497.3	1322.5	1526.0	2094.7	2418.1	2452.1	2352.9	2159.9
60°	2326.8	2243.4	1888.6	1338.2	1202.6	1361.7	1883.4	2235.5	2256.4	2149.5	1964.3
62.5°	2126.0	2050.3	1695.6	1192.1	1079.9	1207.8	1708.6	2042.5	2055.6	1953.8	1763.4
65°	1919.9	1849.5	1507.8	1038.2	962.6	1064.3	1520.8	1841.6	1854.7	1739.9	1567.7
67.5°	1706.0	1648.6	1306.9	920.8	850.4	928.7	1333.0	1638.2	1646.0	1533.8	1377.3
70°	1492.1	1442.5	1129.5	793.0	740.8	795.6	1147.8	1413.8	1429.5	1309.5	1184.3
72.5°	1273.0	1233.9	957.3	660.0	613.0	660.0	967.8	1207.8	1218.2	1119.1	996.5
75°	1051.3	1022.6	782.6	529.5	493.0	526.9	787.8	1001.7	1001.7	907.8	811.3
77.5°	837.4	816.5	600.0	406.9	380.9	401.7	602.6	793.0	787.8	714.7	639.1
80°	626.1	610.4	430.4	294.8	276.5	286.9	430.4	586.9	586.9	534.8	443.5
82.5°	448.7	430.4	284.3	193.0	182.6	187.8	279.1	409.5	417.4	378.2	300.0
85°	297.4	255.6	153.9	107.0	99.1	101.7	146.1	237.4	260.9	219.1	156.5
87.5°	130.4	86.1	39.1	15.7	7.8	10.4	31.3	75.6	99.1	65.2	20.9
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°	4862.4	4862.4	4862.4	4862.4	4862.4	4862.4
2.5°	4878.0	4836.3	4851.9	4862.4	4851.9	4898.9
5°	4872.8	4854.5	4851.9	4865.0	4844.1	4891.1
7.5°	4865.0	4854.5	4851.9	4857.2	4831.1	4875.4
10°	4846.7	4831.1	4836.3	4844.1	4810.2	4851.9
12.5°	4812.8	4797.2	4799.8	4825.9	4778.9	4815.4
15°	4755.4	4737.2	4755.4	4784.1	4742.4	4773.7
17.5°	4679.8	4651.1	4682.4	4726.7	4695.4	4724.1
20°	4583.3	4538.9	4572.8	4653.7	4625.0	4661.5
22.5°	4465.9	4411.1	4445.0	4562.4	4554.6	4593.7
25°	4332.8	4267.6	4314.6	4458.0	4473.7	4510.2
27.5°	4184.1	4111.1	4173.7	4343.3	4379.8	4421.5
30°	4022.4	3944.2	4017.2	4215.4	4270.2	4314.6
32.5°	3855.5	3769.4	3852.9	4072.0	4150.2	4207.6
35°	3680.7	3592.0	3685.9	3923.3	4017.2	4074.6
37.5°	3492.9	3406.8	3508.5	3766.8	3878.9	3936.3
40°	3299.8	3203.3	3318.1	3581.6	3730.3	3798.1
42.5°	3101.6	2981.6	3122.5	3406.8	3568.5	3636.3
45°	2879.9	2712.9	2903.3	3221.6	3391.1	3466.8
47.5°	2658.1	2491.2	2684.2	3023.3	3205.9	3273.8
50°	2444.2	2300.8	2454.7	2806.8	3018.1	3104.2
52.5°	2248.6	2131.2	2261.6	2595.5	2825.1	2911.2
55°	2066.0	1974.7	2081.6	2386.8	2621.6	2720.7
57.5°	1893.8	1836.4	1909.5	2188.6	2433.8	2527.7
60°	1732.1	1693.0	1745.1	1992.9	2212.1	2326.8
62.5°	1573.0	1552.1	1591.2	1786.9	2006.0	2126.0
65°	1419.1	1413.8	1434.7	1606.9	1789.5	1919.9
67.5°	1265.2	1262.5	1275.6	1416.5	1578.2	1706.0
70°	1111.3	1126.9	1119.1	1210.4	1366.9	1492.1
72.5°	954.7	978.2	965.2	1022.6	1173.9	1273.0
75°	780.0	811.3	785.2	850.4	944.3	1051.3
77.5°	600.0	633.9	602.6	660.0	761.7	837.4
80°	430.4	461.7	435.6	480.0	568.7	626.1
82.5°	271.3	294.8	273.9	318.2	406.9	448.7
85°	120.0	133.0	138.3	172.2	250.4	297.4
87.5°	5.2	2.6	5.2	33.9	88.7	130.4
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)