

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: P520731

Luminaire Tested: **8WSLA-200-L840-UPL8-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: P520731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-174-3)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 8WSLA-200-L840-UPL8-UNV-U
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

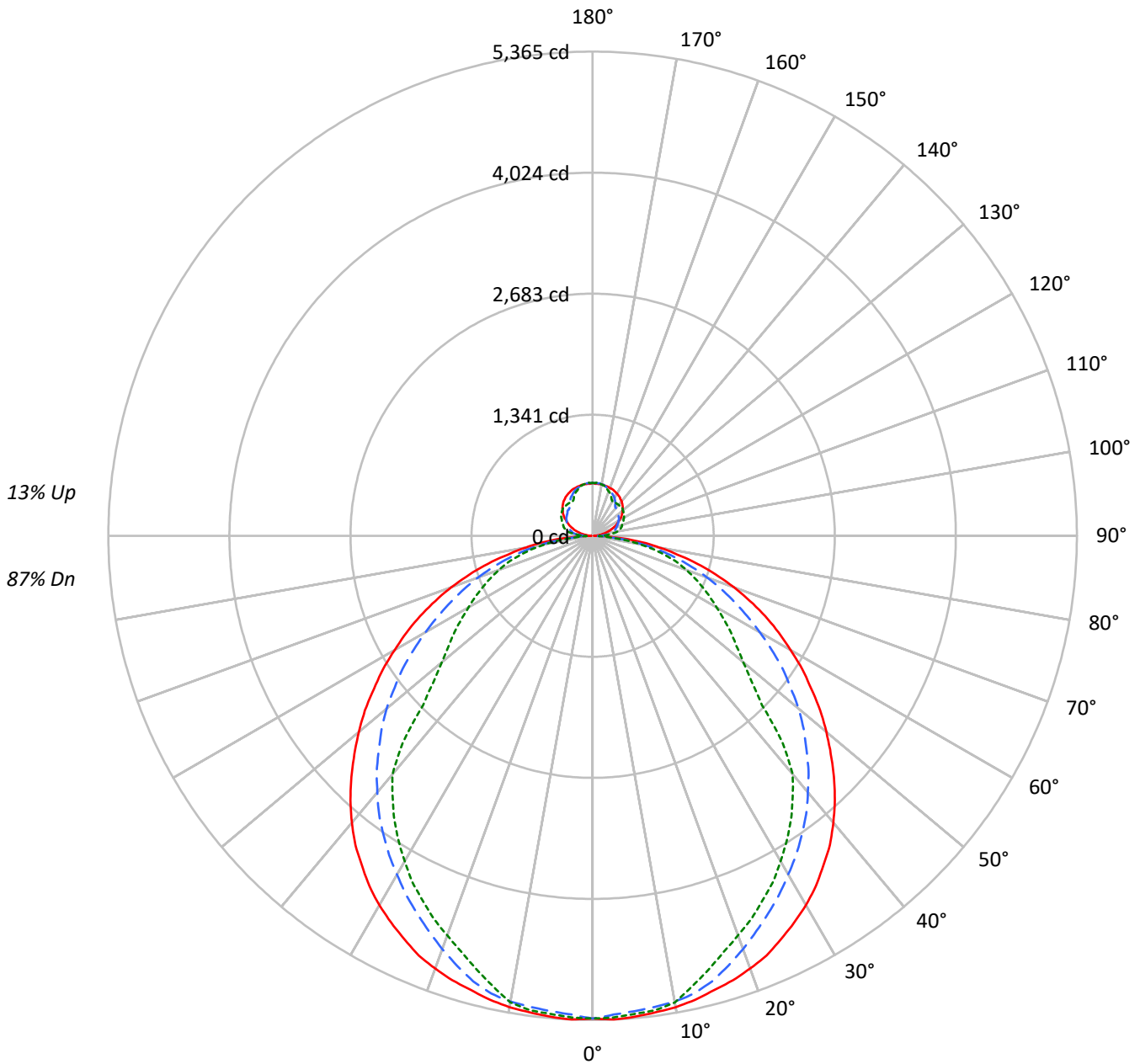
Lumens per Lamp: N/A
Luminaire Lumens: 16649.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 152.3
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

TEST NUMBER: P520731

CATALOG NUMBER: 8WSLA-200-L840-UPL8-UNV-U

Luminous Intensity Polar Plot





TEST NUMBER: P520731

CATALOG NUMBER: 8WSLA-200-L840-UPL8-UNV-U

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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87																			
1	106	101	97	93	102	98	94	90	91	88	85	85	83	80	79	78	76	73																			
2	96	88	82	76	92	85	79	74	80	75	70	74	70	67	70	66	64	61																			
3	88	78	70	63	84	75	68	62	70	64	59	66	61	56	62	58	54	51																			
4	80	69	60	54	77	67	59	53	62	56	50	59	53	48	55	50	46	44																			
5	74	61	53	46	71	60	51	45	56	49	44	53	47	42	50	45	40	38																			
6	68	55	47	40	66	54	46	40	51	44	38	48	42	37	45	40	36	33																			
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	32	30																			
8	59	46	37	32	57	44	37	31	42	35	30	40	34	29	38	32	28	26																			
9	55	42	34	28	53	41	33	28	39	32	27	37	31	26	35	30	26	24																			
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	32	27	23	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14396	14396	14396
5°	14451	14285	14368
10°	14492	14324	14344
15°	14518	14239	13853
20°	14615	13953	13490
25°	14650	13690	13233
30°	14686	13466	12940
35°	14641	13276	12593
40°	14574	13033	12114
45°	14383	12743	10106
50°	14147	12471	9120
55°	13867	12062	8776
60°	13630	11517	8534
65°	13429	11028	8528
70°	13081	10599	8660
75°	12485	10084	8723
80°	11689	9066	8111
85°	10695	6416	5465



TEST NUMBER: P520731

CATALOG NUMBER: 8WSLA-200-L840-UPL8-UNV-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	506.4	3.0
10°-20°	1439.9	8.6
20°-30°	2151.4	12.9
30°-40°	2568.2	15.4
40°-50°	2568.4	15.4
50°-60°	2222.8	13.4
60°-70°	1706.2	10.2
70°-80°	1045.4	6.3
80°-90°	294.3	1.8
90°-100°	166.3	1.0
100°-110°	264.0	1.6
110°-120°	308.7	1.9
120°-130°	333.3	2.0
130°-140°	328.4	2.0
140°-150°	290.5	1.7
150°-160°	239.1	1.4
160°-170°	160.0	1.0
170°-180°	55.7	0.3
0°-30°	4097.7	24.6
0°-40°	6665.9	40.0
0°-60°	11457.2	68.8
0°-90°	14503.1	87.1
90°-120°	739.0	4.4
90°-150°	1691.2	10.2
90°-180°	2146.0	12.9
0°-180°	16649.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5350	5350	5350	5350	5350	
5°	5350	5334	5288	5327	5319	509
15°	5211	5204	5111	5019	4972	1474
25°	4934	4872	4611	4488	4457	2276
35°	4457	4341	4041	3895	3833	2791
45°	3779	3672	3348	3048	2656	2914
55°	2956	2886	2571	2055	1870	2650
65°	2109	2032	1732	1393	1339	2083
75°	1201	1139	970	839	839	1267
85°	346	285	208	177	177	362
90°	15	54	85	108	116	24
95°	62	131	177	185	185	61
105°	177	185	262	308	323	186
115°	292	246	308	354	377	286
125°	393	316	354	408	423	350
135°	470	423	393	431	454	362
145°	523	500	439	431	446	326
155°	554	546	516	493	485	256
165°	570	577	562	562	562	162
175°	577	585	585	593	593	55
180°	585	585	585	585	585	



TEST NUMBER: P520731

CATALOG NUMBER: 8WSLA-200-L840-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5349.7	5349.7	5349.7	5349.7	5349.7
2.5°	5365.1	5349.7	5311.2	5349.7	5342.0
5°	5349.7	5334.3	5288.1	5326.6	5318.9
7.5°	5326.6	5311.2	5265.0	5311.2	5303.5
10°	5303.5	5288.1	5242.0	5272.7	5249.6
12.5°	5265.0	5249.6	5195.8	5157.3	5111.1
15°	5211.2	5203.5	5111.1	5018.7	4972.5
17.5°	5165.0	5141.9	4995.6	4887.9	4834.0
20°	5103.4	5064.9	4872.5	4749.3	4710.8
22.5°	5034.1	4972.5	4741.6	4626.2	4595.4
25°	4934.1	4872.5	4610.8	4487.6	4456.8
27.5°	4834.0	4757.0	4479.9	4356.7	4326.0
30°	4726.2	4618.5	4333.7	4218.2	4164.3
32.5°	4603.1	4495.3	4195.1	4064.2	4002.7
35°	4456.8	4341.4	4041.2	3894.9	3833.3
37.5°	4318.3	4195.1	3887.2	3725.6	3640.9
40°	4148.9	4025.8	3710.2	3533.1	3448.4
42.5°	3971.9	3856.4	3540.8	3325.3	3117.5
45°	3779.4	3671.7	3348.4	3048.2	2655.6
47.5°	3579.3	3486.9	3171.3	2763.4	2386.2
50°	3379.2	3286.8	2978.9	2494.0	2178.4
52.5°	3179.0	3102.1	2763.4	2270.7	2009.0
55°	2955.8	2886.5	2570.9	2055.2	1870.5
57.5°	2755.7	2686.4	2347.7	1878.2	1724.2
60°	2532.5	2470.9	2139.9	1701.1	1585.7
62.5°	2324.6	2255.3	1932.1	1547.2	1462.5
65°	2109.1	2032.1	1731.9	1393.2	1339.4
67.5°	1885.9	1808.9	1539.5	1254.7	1223.9
70°	1662.6	1601.1	1347.1	1116.1	1100.7
72.5°	1431.7	1362.4	1154.6	985.3	985.3
75°	1200.8	1139.2	969.9	839.0	839.0
77.5°	962.2	931.4	777.4	685.1	692.8
80°	754.3	715.9	585.0	523.4	523.4
82.5°	554.2	508.0	392.6	346.4	361.8
85°	346.4	284.8	207.8	177.0	177.0
87.5°	107.8	84.7	61.6	69.3	69.3
90°	15.4	53.9	84.7	107.8	115.5
92.5°	38.5	100.1	123.2	146.3	153.9
95°	61.6	130.9	177.0	184.7	184.7
97.5°	84.7	146.3	215.5	246.3	246.3
100°	115.5	153.9	230.9	277.1	284.8
102.5°	146.3	169.3	246.3	292.5	307.9
105°	177.0	184.7	261.7	307.9	323.3



TEST NUMBER: P520731

CATALOG NUMBER: 8WSLA-200-L840-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	261.7	230.9	292.5	346.4	361.8
115°	292.5	246.3	307.9	354.1	377.2
117.5°	315.6	269.4	323.3	369.5	384.9
120°	338.7	284.8	331.0	384.9	400.3
122.5°	369.5	300.2	346.4	392.6	415.7
125°	392.6	315.6	354.1	408.0	423.4
127.5°	415.7	346.4	361.8	415.7	431.1
130°	431.1	377.2	369.5	423.4	438.8
132.5°	454.1	400.3	377.2	431.1	446.5
135°	469.5	423.4	392.6	431.1	454.1
137.5°	484.9	446.5	392.6	431.1	446.5
140°	500.3	469.5	400.3	431.1	446.5
142.5°	508.0	484.9	408.0	431.1	446.5
145°	523.4	500.3	438.8	431.1	446.5
147.5°	531.1	515.7	461.8	431.1	446.5
150°	538.8	531.1	484.9	438.8	438.8
152.5°	546.5	538.8	500.3	469.5	454.1
155°	554.2	546.5	515.7	492.6	484.9
157.5°	561.9	561.9	531.1	515.7	508.0
160°	561.9	569.6	546.5	531.1	523.4
162.5°	569.6	577.3	554.2	546.5	538.8
165°	569.6	577.3	561.9	561.9	561.9
167.5°	577.3	585.0	577.3	569.6	569.6
170°	577.3	585.0	577.3	577.3	577.3
172.5°	577.3	585.0	585.0	585.0	585.0
175°	577.3	585.0	585.0	592.7	592.7
177.5°	577.3	585.0	585.0	585.0	585.0
180°	585.0	585.0	585.0	585.0	585.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	207.8	200.1	269.4	323.3	338.7
110°	230.9	215.5	284.8	331.0	346.4



(END OF REPORT)