

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: P520743

Luminaire Tested: **8WSLA-200-L940-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: P520743
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-L940-UPL8-UNV-U
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

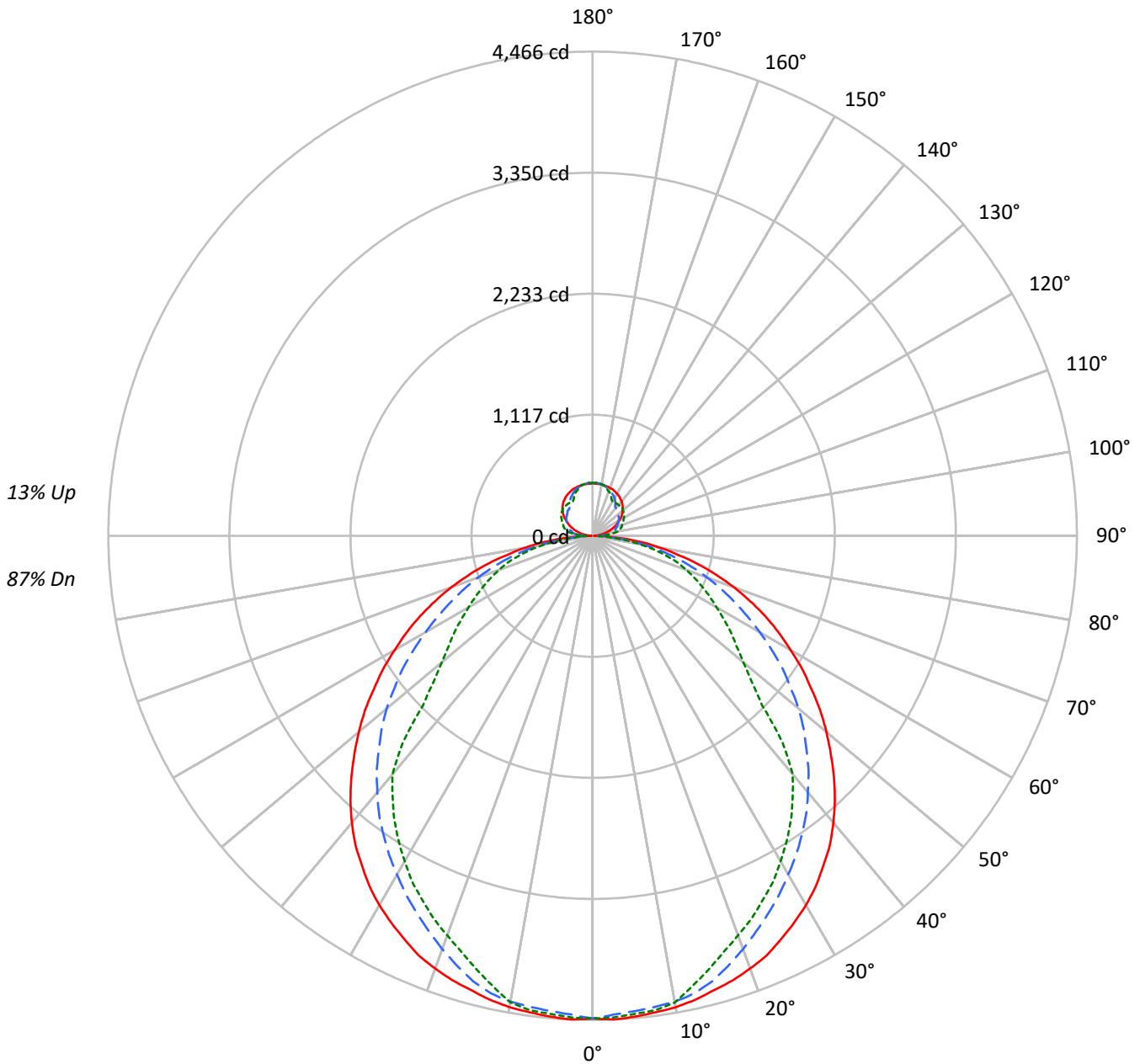
Lumens per Lamp: N/A
Luminaire Lumens: 13859.0 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

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				20				20	
RC	80				70				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				87
1	106	101	97	93	102	98	94	90	91	88	85	85	83	80	79	78	76	73				73
2	96	88	82	76	92	85	79	74	80	75	70	74	70	67	70	66	64	61				61
3	88	78	70	63	84	75	68	62	70	64	59	66	61	56	62	58	54	51				51
4	80	69	60	54	77	67	59	53	62	56	50	59	53	48	55	50	46	44				44
5	74	61	53	46	71	60	51	45	56	49	44	53	47	42	50	45	40	38				38
6	68	55	47	40	66	54	46	40	51	44	38	48	42	37	45	40	36	33				33
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	32	30				30
8	59	46	37	32	57	44	37	31	42	35	30	40	34	29	38	32	28	26				26
9	55	42	34	28	53	41	33	28	39	32	27	37	31	26	35	30	26	24				24
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	32	27	23	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11983	11983	11983
5°	12029	11891	11960
10°	12063	11923	11941
15°	12085	11853	11532
20°	12165	11615	11230
25°	12195	11396	11016
30°	12225	11209	10771
35°	12188	11051	10482
40°	12132	10849	10084
45°	11973	10607	8413
50°	11776	10381	7591
55°	11544	10040	7305
60°	11346	9587	7104
65°	11179	9180	7099
70°	10889	8822	7209
75°	10393	8394	7261
80°	9730	7547	6752
85°	8901	5341	4551



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.6	3.0
10°-20°	1198.6	8.6
20°-30°	1790.9	12.9
30°-40°	2137.8	15.4
40°-50°	2138.0	15.4
50°-60°	1850.3	13.4
60°-70°	1420.2	10.2
70°-80°	870.2	6.3
80°-90°	245.0	1.8
90°-100°	138.5	1.0
100°-110°	219.8	1.6
110°-120°	257.0	1.9
120°-130°	277.4	2.0
130°-140°	273.3	2.0
140°-150°	241.8	1.7
150°-160°	199.0	1.4
160°-170°	133.2	1.0
170°-180°	46.4	0.3
0°-30°	3411.0	24.6
0°-40°	5548.9	40.0
0°-60°	9537.2	68.8
0°-90°	12072.7	87.1
90°-120°	615.2	4.4
90°-150°	1407.7	10.2
90°-180°	1786.0	12.9
0°-180°	13859.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4453	4453	4453	4453	4453	
5°	4453	4440	4402	4434	4428	424
15°	4338	4332	4255	4178	4139	1227
25°	4107	4056	3838	3736	3710	1895
35°	3710	3614	3364	3242	3191	2323
45°	3146	3056	2787	2537	2211	2426
55°	2460	2403	2140	1711	1557	2206
65°	1756	1692	1442	1160	1115	1734
75°	1000	948	807	698	698	1054
85°	288	237	173	147	147	301
90°	13	45	70	90	96	20
95°	51	109	147	154	154	51
105°	147	154	218	256	269	155
115°	244	205	256	295	314	238
125°	327	263	295	340	352	291
135°	391	352	327	359	378	301
145°	436	416	365	359	372	272
155°	461	455	429	410	404	213
165°	474	481	468	468	468	135
175°	481	487	487	493	493	46
180°	487	487	487	487	487	



TEST NUMBER: P520743

CATALOG NUMBER: 8WSLA-200-L940-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4453.2	4453.2	4453.2	4453.2	4453.2
2.5°	4466.0	4453.2	4421.2	4453.2	4446.8
5°	4453.2	4440.4	4402.0	4434.0	4427.6
7.5°	4434.0	4421.2	4382.7	4421.2	4414.8
10°	4414.8	4402.0	4363.5	4389.1	4369.9
12.5°	4382.7	4369.9	4325.1	4293.0	4254.6
15°	4337.9	4331.5	4254.6	4177.7	4139.3
17.5°	4299.4	4280.2	4158.5	4068.8	4023.9
20°	4248.2	4216.1	4056.0	3953.4	3921.4
22.5°	4190.5	4139.3	3947.0	3850.9	3825.3
25°	4107.2	4056.0	3838.1	3735.6	3710.0
27.5°	4023.9	3959.8	3729.2	3626.7	3601.0
30°	3934.2	3844.5	3607.4	3511.3	3466.5
32.5°	3831.7	3742.0	3492.1	3383.2	3331.9
35°	3710.0	3613.8	3363.9	3242.2	3190.9
37.5°	3594.6	3492.1	3235.8	3101.2	3030.8
40°	3453.7	3351.1	3088.4	2941.0	2870.6
42.5°	3306.3	3210.2	2947.5	2768.0	2595.0
45°	3146.1	3056.4	2787.3	2537.4	2210.6
47.5°	2979.5	2902.6	2639.9	2300.3	1986.3
50°	2812.9	2736.0	2479.7	2076.0	1813.3
52.5°	2646.3	2582.2	2300.3	1890.2	1672.4
55°	2460.5	2402.8	2140.1	1710.8	1557.0
57.5°	2293.9	2236.2	1954.3	1563.4	1435.3
60°	2108.1	2056.8	1781.3	1416.1	1319.9
62.5°	1935.1	1877.4	1608.3	1287.9	1217.4
65°	1755.7	1691.6	1441.7	1159.8	1114.9
67.5°	1569.8	1505.8	1281.5	1044.4	1018.8
70°	1384.0	1332.8	1121.3	929.1	916.3
72.5°	1191.8	1134.1	961.1	820.2	820.2
75°	999.6	948.3	807.3	698.4	698.4
77.5°	800.9	775.3	647.2	570.3	576.7
80°	627.9	595.9	487.0	435.7	435.7
82.5°	461.3	422.9	326.8	288.3	301.2
85°	288.3	237.1	173.0	147.4	147.4
87.5°	89.7	70.5	51.3	57.7	57.7
90°	12.8	44.9	70.5	89.7	96.1
92.5°	32.0	83.3	102.5	121.7	128.2
95°	51.3	108.9	147.4	153.8	153.8
97.5°	70.5	121.7	179.4	205.0	205.0
100°	96.1	128.2	192.2	230.7	237.1
102.5°	121.7	141.0	205.0	243.5	256.3
105°	147.4	153.8	217.9	256.3	269.1



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CATALOG NUMBER: 8WSLA-200-L940-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	217.9	192.2	243.5	288.3	301.2
115°	243.5	205.0	256.3	294.7	314.0
117.5°	262.7	224.3	269.1	307.6	320.4
120°	281.9	237.1	275.5	320.4	333.2
122.5°	307.6	249.9	288.3	326.8	346.0
125°	326.8	262.7	294.7	339.6	352.4
127.5°	346.0	288.3	301.2	346.0	358.8
130°	358.8	314.0	307.6	352.4	365.2
132.5°	378.0	333.2	314.0	358.8	371.6
135°	390.9	352.4	326.8	358.8	378.0
137.5°	403.7	371.6	326.8	358.8	371.6
140°	416.5	390.9	333.2	358.8	371.6
142.5°	422.9	403.7	339.6	358.8	371.6
145°	435.7	416.5	365.2	358.8	371.6
147.5°	442.1	429.3	384.5	358.8	371.6
150°	448.5	442.1	403.7	365.2	365.2
152.5°	454.9	448.5	416.5	390.9	378.0
155°	461.3	454.9	429.3	410.1	403.7
157.5°	467.7	467.7	442.1	429.3	422.9
160°	467.7	474.2	454.9	442.1	435.7
162.5°	474.2	480.6	461.3	454.9	448.5
165°	474.2	480.6	467.7	467.7	467.7
167.5°	480.6	487.0	480.6	474.2	474.2
170°	480.6	487.0	480.6	480.6	480.6
172.5°	480.6	487.0	487.0	487.0	487.0
175°	480.6	487.0	487.0	493.4	493.4
177.5°	480.6	487.0	487.0	487.0	487.0
180°	487.0	487.0	487.0	487.0	487.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	173.0	166.6	224.3	269.1	281.9
110°	192.2	179.4	237.1	275.5	288.3



(END OF REPORT)