

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: P520710

Luminaire Tested: **8WSLA-175-L850-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: P520710
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-175-L850-UPL8-UNV-U
Description: 8 FOOT, 3500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

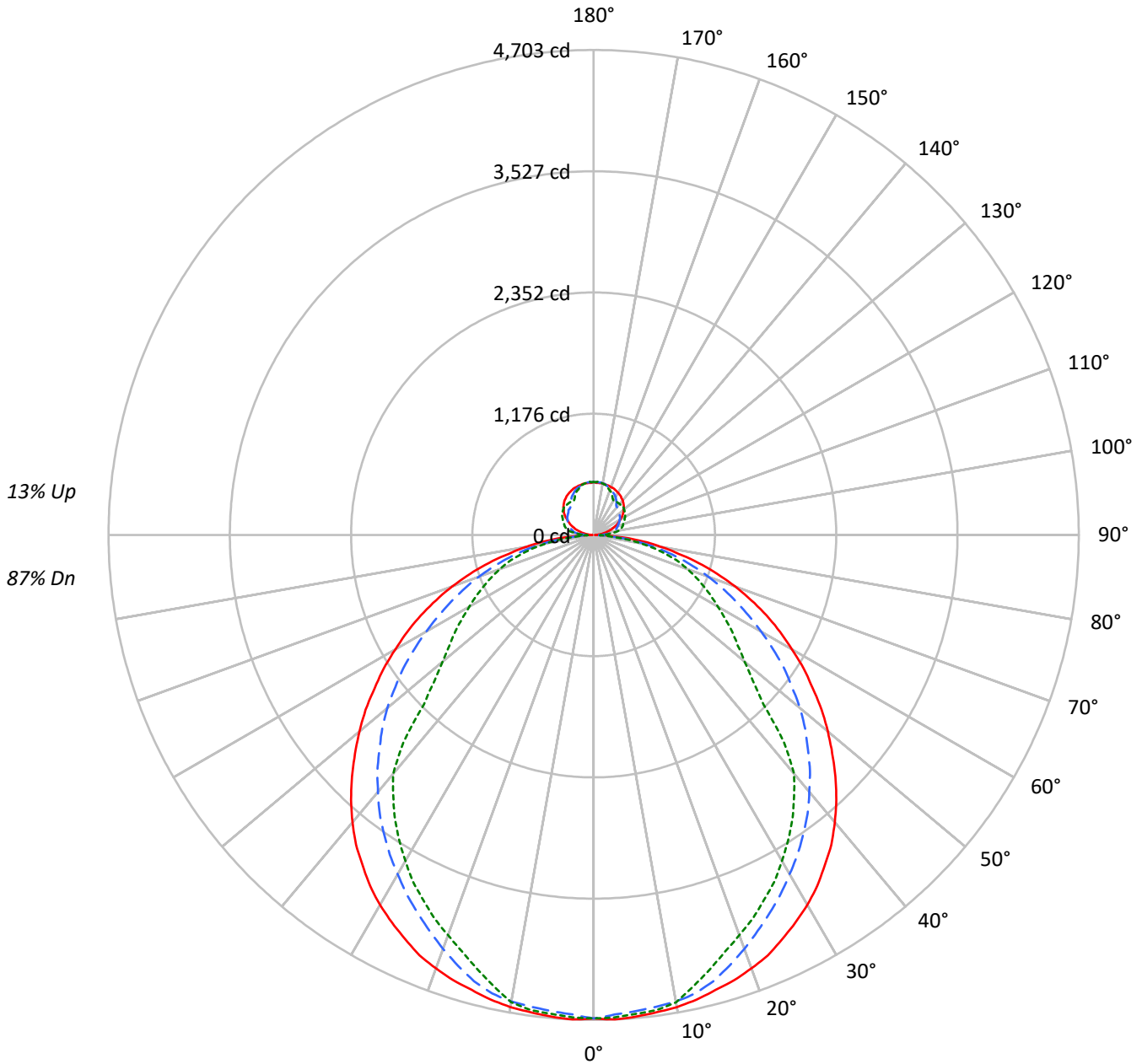
Lumens per Lamp: N/A
Luminaire Lumens: 14595.0 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

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	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°	12620	12620	12620
5°	12668	12522	12595
10°	12704	12556	12575
15°	12727	12482	12144
20°	12812	12232	11826
25°	12843	12001	11601
30°	12874	11805	11343
35°	12835	11638	11039
40°	12776	11425	10619
45°	12609	11171	8859
50°	12401	10932	7994
55°	12157	10574	7693
60°	11948	10096	7481
65°	11773	9668	7476
70°	11467	9291	7592
75°	10945	8840	7647
80°	10248	7947	7111
85°	9377	5626	4792



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.0	3.0
10°-20°	1262.2	8.6
20°-30°	1886.0	12.9
30°-40°	2251.3	15.4
40°-50°	2251.6	15.4
50°-60°	1948.6	13.4
60°-70°	1495.7	10.2
70°-80°	916.5	6.3
80°-90°	258.0	1.8
90°-100°	145.8	1.0
100°-110°	231.4	1.6
110°-120°	270.6	1.9
120°-130°	292.1	2.0
130°-140°	287.9	2.0
140°-150°	254.7	1.7
150°-160°	209.6	1.4
160°-170°	140.3	1.0
170°-180°	48.8	0.3
0°-30°	3592.2	24.6
0°-40°	5843.5	40.0
0°-60°	10043.7	68.8
0°-90°	12713.8	87.1
90°-120°	647.9	4.4
90°-150°	1482.5	10.2
90°-180°	1881.0	12.9
0°-180°	14595.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4690	4690	4690	4690	4690	
5°	4690	4676	4636	4670	4663	446
15°	4568	4562	4480	4400	4359	1292
25°	4325	4271	4042	3934	3907	1996
35°	3907	3806	3543	3414	3360	2447
45°	3313	3219	2935	2672	2328	2555
55°	2591	2530	2254	1802	1640	2323
65°	1849	1781	1518	1221	1174	1826
75°	1053	999	850	736	736	1111
85°	304	250	182	155	155	317
90°	14	47	74	94	101	21
95°	54	115	155	162	162	53
105°	155	162	229	270	283	163
115°	256	216	270	310	331	251
125°	344	277	310	358	371	307
135°	412	371	344	378	398	318
145°	459	439	385	378	391	286
155°	486	479	452	432	425	224
165°	499	506	493	493	493	142
175°	506	513	513	520	520	48
180°	513	513	513	513	513	



TEST NUMBER: P520710

CATALOG NUMBER: 8WSLA-175-L850-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4689.7	4689.7	4689.7	4689.7	4689.7
2.5°	4703.2	4689.7	4656.0	4689.7	4683.0
5°	4689.7	4676.2	4635.7	4669.5	4662.7
7.5°	4669.5	4656.0	4615.5	4656.0	4649.2
10°	4649.2	4635.7	4595.2	4622.2	4602.0
12.5°	4615.5	4602.0	4554.8	4521.0	4480.5
15°	4568.3	4561.5	4480.5	4399.6	4359.1
17.5°	4527.8	4507.5	4379.3	4284.8	4237.6
20°	4473.8	4440.0	4271.4	4163.4	4129.7
22.5°	4413.1	4359.1	4156.6	4055.4	4028.4
25°	4325.3	4271.4	4041.9	3934.0	3907.0
27.5°	4237.6	4170.1	3927.2	3819.3	3792.3
30°	4143.1	4048.7	3799.0	3697.8	3650.6
32.5°	4035.2	3940.7	3677.5	3562.8	3508.9
35°	3907.0	3805.8	3542.6	3414.4	3360.4
37.5°	3785.5	3677.5	3407.6	3265.9	3191.7
40°	3637.1	3529.1	3252.4	3097.2	3023.0
42.5°	3481.9	3380.6	3104.0	2915.0	2732.9
45°	3313.2	3218.7	2935.3	2672.1	2328.0
47.5°	3137.7	3056.8	2780.1	2422.5	2091.8
50°	2962.3	2881.3	2611.4	2186.3	1909.6
52.5°	2786.8	2719.4	2422.5	1990.6	1761.2
55°	2591.2	2530.4	2253.8	1801.7	1639.7
57.5°	2415.7	2355.0	2058.1	1646.5	1511.5
60°	2220.0	2166.0	1875.9	1491.3	1390.0
62.5°	2037.8	1977.1	1693.7	1356.3	1282.1
65°	1848.9	1781.4	1518.3	1221.4	1174.1
67.5°	1653.2	1585.7	1349.6	1099.9	1072.9
70°	1457.5	1403.5	1180.9	978.4	964.9
72.5°	1255.1	1194.4	1012.2	863.7	863.7
75°	1052.7	998.7	850.2	735.5	735.5
77.5°	843.5	816.5	681.5	600.6	607.3
80°	661.3	627.5	512.8	458.9	458.9
82.5°	485.8	445.4	344.1	303.7	317.1
85°	303.7	249.7	182.2	155.2	155.2
87.5°	94.5	74.2	54.0	60.7	60.7
90°	13.5	47.2	74.2	94.5	101.2
92.5°	33.7	87.7	108.0	128.2	135.0
95°	54.0	114.7	155.2	161.9	161.9
97.5°	74.2	128.2	188.9	215.9	215.9
100°	101.2	135.0	202.4	242.9	249.7
102.5°	128.2	148.5	215.9	256.4	269.9
105°	155.2	161.9	229.4	269.9	283.4



TEST NUMBER: P520710

CATALOG NUMBER: 8WSLA-175-L850-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.4	202.4	256.4	303.7	317.1
115°	256.4	215.9	269.9	310.4	330.6
117.5°	276.7	236.2	283.4	323.9	337.4
120°	296.9	249.7	290.2	337.4	350.9
122.5°	323.9	263.2	303.7	344.1	364.4
125°	344.1	276.7	310.4	357.6	371.1
127.5°	364.4	303.7	317.1	364.4	377.9
130°	377.9	330.6	323.9	371.1	384.6
132.5°	398.1	350.9	330.6	377.9	391.4
135°	411.6	371.1	344.1	377.9	398.1
137.5°	425.1	391.4	344.1	377.9	391.4
140°	438.6	411.6	350.9	377.9	391.4
142.5°	445.4	425.1	357.6	377.9	391.4
145°	458.9	438.6	384.6	377.9	391.4
147.5°	465.6	452.1	404.9	377.9	391.4
150°	472.3	465.6	425.1	384.6	384.6
152.5°	479.1	472.3	438.6	411.6	398.1
155°	485.8	479.1	452.1	431.9	425.1
157.5°	492.6	492.6	465.6	452.1	445.4
160°	492.6	499.3	479.1	465.6	458.9
162.5°	499.3	506.1	485.8	479.1	472.3
165°	499.3	506.1	492.6	492.6	492.6
167.5°	506.1	512.8	506.1	499.3	499.3
170°	506.1	512.8	506.1	506.1	506.1
172.5°	506.1	512.8	512.8	512.8	512.8
175°	506.1	512.8	512.8	519.6	519.6
177.5°	506.1	512.8	512.8	512.8	512.8
180°	512.8	512.8	512.8	512.8	512.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	182.2	175.4	236.2	283.4	296.9
110°	202.4	188.9	249.7	290.2	303.7



(END OF REPORT)