

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: P520734

Luminaire Tested: **8WSLA-200-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: P520734
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-L850-UPL8-UNV-U
Description: 8 FOOT, 4000 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

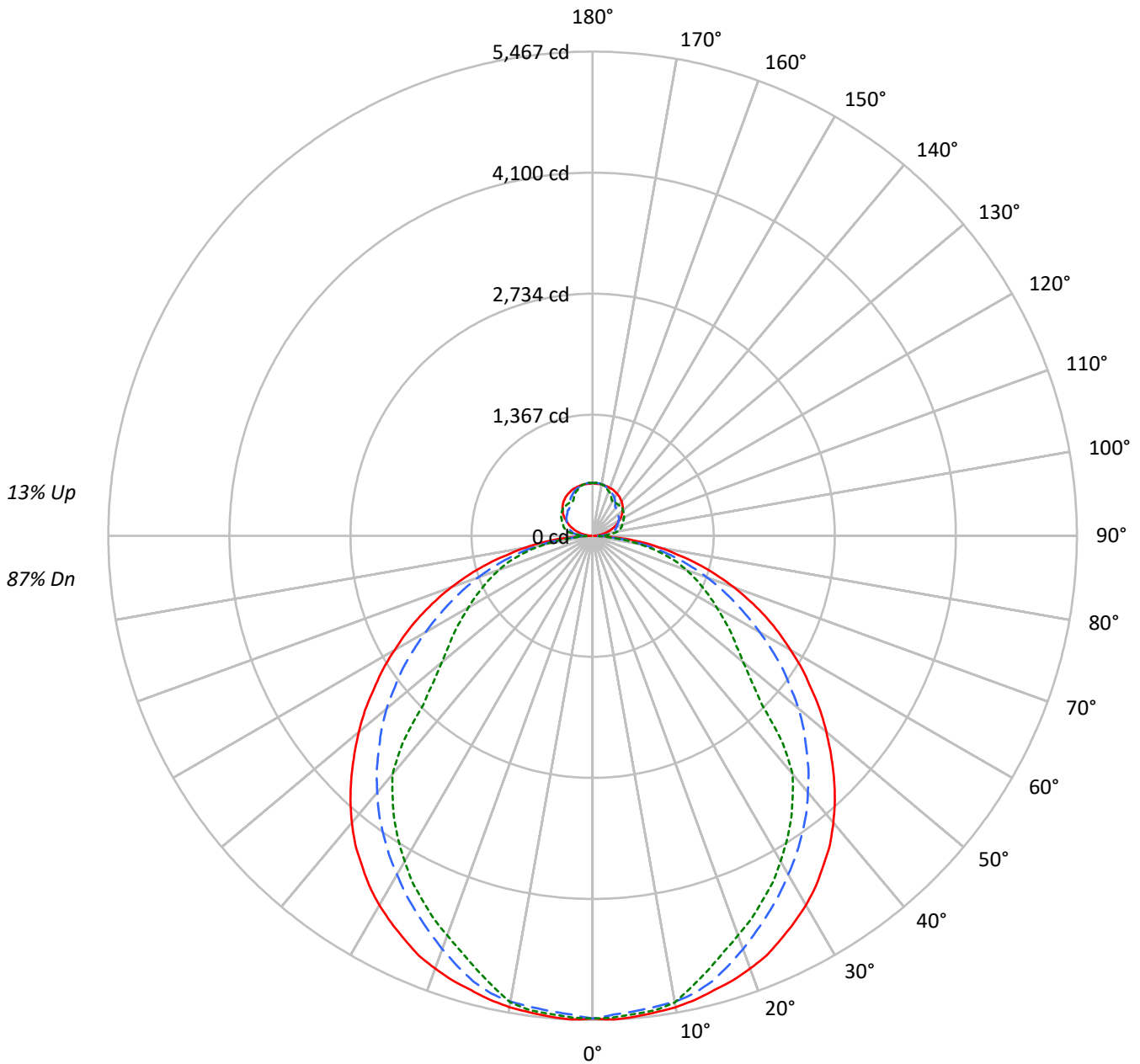
Lumens per Lamp: N/A
Luminaire Lumens: 16966.0 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

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

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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°	14670	14670	14670
5°	14726	14557	14641
10°	14768	14596	14618
15°	14794	14510	14117
20°	14893	14219	13747
25°	14929	13951	13485
30°	14965	13722	13186
35°	14920	13528	12833
40°	14852	13281	12344
45°	14657	12985	10299
50°	14416	12708	9293
55°	14132	12291	8943
60°	13889	11736	8697
65°	13685	11238	8691
70°	13331	10800	8825
75°	12723	10275	8890
80°	11912	9238	8266
85°	10899	6539	5570



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	516.1	3.0
10°-20°	1467.3	8.6
20°-30°	2192.4	12.9
30°-40°	2617.1	15.4
40°-50°	2617.3	15.4
50°-60°	2265.2	13.4
60°-70°	1738.6	10.2
70°-80°	1065.3	6.3
80°-90°	299.9	1.8
90°-100°	169.5	1.0
100°-110°	269.0	1.6
110°-120°	314.6	1.9
120°-130°	339.6	2.0
130°-140°	334.6	2.0
140°-150°	296.0	1.7
150°-160°	243.6	1.4
160°-170°	163.0	1.0
170°-180°	56.8	0.3
0°-30°	4175.7	24.6
0°-40°	6792.8	40.0
0°-60°	11675.3	68.8
0°-90°	14779.2	87.1
90°-120°	753.1	4.4
90°-150°	1723.4	10.2
90°-180°	2187.0	12.9
0°-180°	16966.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5452	5452	5452	5452	5452	
5°	5452	5436	5389	5428	5420	519
15°	5310	5302	5208	5114	5067	1502
25°	5028	4965	4699	4573	4542	2320
35°	4542	4424	4118	3969	3906	2844
45°	3851	3742	3412	3106	2706	2970
55°	3012	2942	2620	2094	1906	2700
65°	2149	2071	1765	1420	1365	2123
75°	1224	1161	988	855	855	1291
85°	353	290	212	180	180	369
90°	16	55	86	110	118	25
95°	63	133	180	188	188	62
105°	180	188	267	314	329	189
115°	298	251	314	361	384	291
125°	400	322	361	416	431	356
135°	478	431	400	439	463	369
145°	533	510	447	439	455	333
155°	565	557	526	502	494	261
165°	580	588	573	573	573	165
175°	588	596	596	604	604	56
180°	596	596	596	596	596	



TEST NUMBER: P520734

CATALOG NUMBER: 8WSLA-200-L850-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5451.6	5451.6	5451.6	5451.6	5451.6
2.5°	5467.3	5451.6	5412.4	5451.6	5443.7
5°	5451.6	5435.9	5388.8	5428.0	5420.2
7.5°	5428.0	5412.4	5365.3	5412.4	5404.5
10°	5404.5	5388.8	5341.8	5373.1	5349.6
12.5°	5365.3	5349.6	5294.7	5255.5	5208.4
15°	5310.4	5302.5	5208.4	5114.3	5067.2
17.5°	5263.3	5239.8	5090.8	4980.9	4926.0
20°	5200.6	5161.3	4965.2	4839.7	4800.5
22.5°	5130.0	5067.2	4831.9	4714.2	4682.9
25°	5028.0	4965.2	4698.6	4573.0	4541.7
27.5°	4926.0	4847.6	4565.2	4439.7	4408.3
30°	4816.2	4706.4	4416.2	4298.5	4243.6
32.5°	4690.7	4580.9	4275.0	4141.6	4078.9
35°	4541.7	4424.0	4118.1	3969.1	3906.3
37.5°	4400.5	4275.0	3961.2	3796.5	3710.2
40°	4227.9	4102.4	3780.8	3600.4	3514.1
42.5°	4047.5	3929.8	3608.2	3388.6	3176.8
45°	3851.4	3741.6	3412.1	3106.2	2706.2
47.5°	3647.5	3553.3	3231.7	2816.0	2431.6
50°	3443.5	3349.4	3035.6	2541.5	2219.9
52.5°	3239.6	3161.1	2816.0	2314.0	2047.3
55°	3012.1	2941.5	2619.9	2094.3	1906.1
57.5°	2808.1	2737.6	2392.4	1913.9	1757.1
60°	2580.7	2517.9	2180.6	1733.5	1615.9
62.5°	2368.9	2298.3	1968.8	1576.6	1490.4
65°	2149.3	2070.8	1764.9	1419.8	1364.9
67.5°	1921.8	1843.3	1568.8	1278.6	1247.2
70°	1694.3	1631.6	1372.7	1137.4	1121.7
72.5°	1459.0	1388.4	1176.6	1004.0	1004.0
75°	1223.7	1160.9	988.3	855.0	855.0
77.5°	980.5	949.1	792.2	698.1	706.0
80°	768.7	729.5	596.1	533.4	533.4
82.5°	564.8	517.7	400.0	353.0	368.7
85°	353.0	290.2	211.8	180.4	180.4
87.5°	109.8	86.3	62.8	70.6	70.6
90°	15.7	54.9	86.3	109.8	117.7
92.5°	39.2	102.0	125.5	149.0	156.9
95°	62.8	133.3	180.4	188.3	188.3
97.5°	86.3	149.0	219.6	251.0	251.0
100°	117.7	156.9	235.3	282.4	290.2
102.5°	149.0	172.6	251.0	298.1	313.8
105°	180.4	188.3	266.7	313.8	329.4



TEST NUMBER: P520734

CATALOG NUMBER: 8WSLA-200-L850-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	235.3	298.1	353.0	368.7
115°	298.1	251.0	313.8	360.8	384.4
117.5°	321.6	274.5	329.4	376.5	392.2
120°	345.1	290.2	337.3	392.2	407.9
122.5°	376.5	305.9	353.0	400.0	423.6
125°	400.0	321.6	360.8	415.7	431.4
127.5°	423.6	353.0	368.7	423.6	439.3
130°	439.3	384.4	376.5	431.4	447.1
132.5°	462.8	407.9	384.4	439.3	455.0
135°	478.5	431.4	400.0	439.3	462.8
137.5°	494.2	455.0	400.0	439.3	455.0
140°	509.9	478.5	407.9	439.3	455.0
142.5°	517.7	494.2	415.7	439.3	455.0
145°	533.4	509.9	447.1	439.3	455.0
147.5°	541.2	525.5	470.6	439.3	455.0
150°	549.1	541.2	494.2	447.1	447.1
152.5°	556.9	549.1	509.9	478.5	462.8
155°	564.8	556.9	525.5	502.0	494.2
157.5°	572.6	572.6	541.2	525.5	517.7
160°	572.6	580.5	556.9	541.2	533.4
162.5°	580.5	588.3	564.8	556.9	549.1
165°	580.5	588.3	572.6	572.6	572.6
167.5°	588.3	596.1	588.3	580.5	580.5
170°	588.3	596.1	588.3	588.3	588.3
172.5°	588.3	596.1	596.1	596.1	596.1
175°	588.3	596.1	596.1	604.0	604.0
177.5°	588.3	596.1	596.1	596.1	596.1
180°	596.1	596.1	596.1	596.1	596.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	211.8	203.9	274.5	329.4	345.1
110°	235.3	219.6	290.2	337.3	353.0



(END OF REPORT)