

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: P520635

Luminaire Tested: **8WSLA-100-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: P520635
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-100-L840-UPL8-UNV-U
Description: 8 FOOT, 2000 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

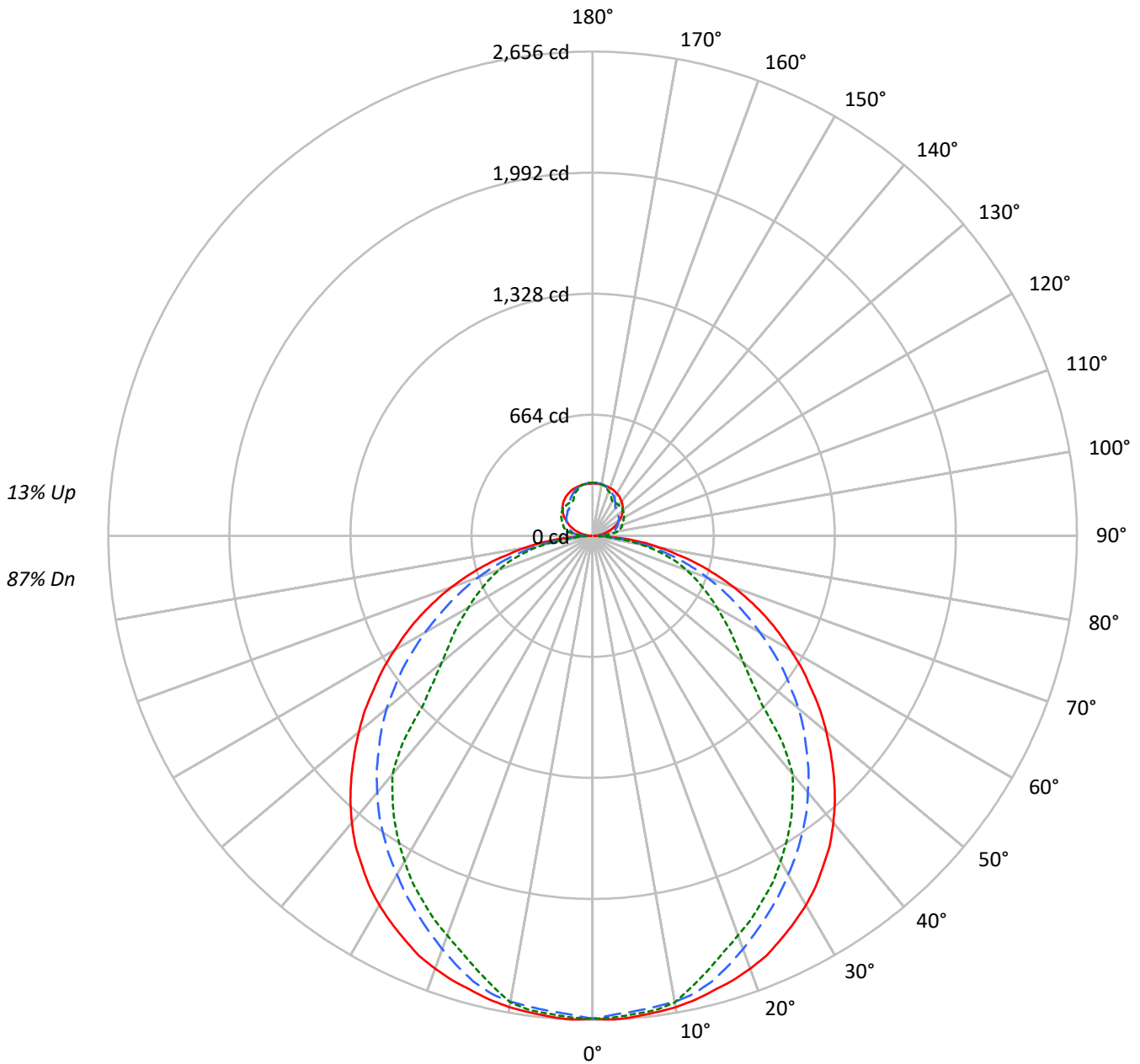
Lumens per Lamp: N/A
Luminaire Lumens: 8243.0 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 63.4
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°	7128	7128	7128
5°	7155	7072	7113
10°	7175	7092	7102
15°	7188	7050	6859
20°	7236	6908	6679
25°	7253	6778	6552
30°	7271	6667	6407
35°	7249	6573	6235
40°	7216	6453	5997
45°	7121	6309	5004
50°	7004	6175	4515
55°	6866	5972	4345
60°	6748	5702	4225
65°	6649	5460	4222
70°	6477	5247	4288
75°	6181	4993	4319
80°	5788	4488	4017
85°	5295	3177	2708



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.7	3.0
10°-20°	712.9	8.6
20°-30°	1065.2	12.9
30°-40°	1271.5	15.4
40°-50°	1271.6	15.4
50°-60°	1100.5	13.4
60°-70°	844.7	10.2
70°-80°	517.6	6.3
80°-90°	145.7	1.8
90°-100°	82.4	1.0
100°-110°	130.7	1.6
110°-120°	152.8	1.9
120°-130°	165.0	2.0
130°-140°	162.6	2.0
140°-150°	143.8	1.7
150°-160°	118.4	1.4
160°-170°	79.2	1.0
170°-180°	27.6	0.3
0°-30°	2028.8	24.6
0°-40°	3300.3	40.0
0°-60°	5672.5	68.8
0°-90°	7180.5	87.1
90°-120°	365.9	4.4
90°-150°	837.3	10.2
90°-180°	1062.0	12.9
0°-180°	8243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2649	2649	2649	2649	2649	
5°	2649	2641	2618	2637	2633	252
15°	2580	2576	2530	2485	2462	730
25°	2443	2412	2283	2222	2207	1127
35°	2207	2149	2001	1928	1898	1382
45°	1871	1818	1658	1509	1315	1443
55°	1463	1429	1273	1018	926	1312
65°	1044	1006	858	690	663	1031
75°	594	564	480	415	415	627
85°	172	141	103	88	88	179
90°	8	27	42	53	57	12
95°	30	65	88	92	92	30
105°	88	92	130	152	160	92
115°	145	122	152	175	187	142
125°	194	156	175	202	210	173
135°	232	210	194	213	225	179
145°	259	248	217	213	221	162
155°	274	271	255	244	240	127
165°	282	286	278	278	278	80
175°	286	290	290	293	293	27
180°	290	290	290	290	290	



TEST NUMBER: P520635

CATALOG NUMBER: 8WSLA-100-L840-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2648.7	2648.7	2648.7	2648.7	2648.7
2.5°	2656.3	2648.7	2629.6	2648.7	2644.9
5°	2648.7	2641.0	2618.2	2637.2	2633.4
7.5°	2637.2	2629.6	2606.7	2629.6	2625.8
10°	2625.8	2618.2	2595.3	2610.6	2599.1
12.5°	2606.7	2599.1	2572.4	2553.4	2530.5
15°	2580.1	2576.3	2530.5	2484.8	2461.9
17.5°	2557.2	2545.8	2473.4	2420.0	2393.3
20°	2526.7	2507.7	2412.4	2351.4	2332.4
22.5°	2492.4	2461.9	2347.6	2290.4	2275.2
25°	2442.9	2412.4	2282.8	2221.8	2206.6
27.5°	2393.3	2355.2	2218.0	2157.0	2141.8
30°	2340.0	2286.6	2145.6	2088.4	2061.8
32.5°	2279.0	2225.6	2077.0	2012.2	1981.7
35°	2206.6	2149.4	2000.8	1928.4	1897.9
37.5°	2138.0	2077.0	1924.6	1844.5	1802.6
40°	2054.1	1993.2	1836.9	1749.3	1707.3
42.5°	1966.5	1909.3	1753.1	1646.4	1543.5
45°	1871.2	1817.9	1657.8	1509.2	1314.8
47.5°	1772.1	1726.4	1570.1	1368.2	1181.4
50°	1673.0	1627.3	1474.9	1234.8	1078.5
52.5°	1574.0	1535.8	1368.2	1124.3	994.7
55°	1463.4	1429.1	1272.9	1017.5	926.1
57.5°	1364.4	1330.1	1162.4	929.9	853.7
60°	1253.8	1223.3	1059.5	842.2	785.1
62.5°	1150.9	1116.6	956.6	766.0	724.1
65°	1044.2	1006.1	857.5	689.8	663.1
67.5°	933.7	895.6	762.2	621.2	606.0
70°	823.2	792.7	666.9	552.6	545.0
72.5°	708.9	674.6	571.7	487.8	487.8
75°	594.5	564.0	480.2	415.4	415.4
77.5°	476.4	461.1	384.9	339.2	343.0
80°	373.5	354.4	289.6	259.2	259.2
82.5°	274.4	251.5	194.4	171.5	179.1
85°	171.5	141.0	102.9	87.7	87.7
87.5°	53.4	41.9	30.5	34.3	34.3
90°	7.6	26.7	41.9	53.4	57.2
92.5°	19.1	49.5	61.0	72.4	76.2
95°	30.5	64.8	87.7	91.5	91.5
97.5°	41.9	72.4	106.7	122.0	122.0
100°	57.2	76.2	114.3	137.2	141.0
102.5°	72.4	83.8	122.0	144.8	152.4
105°	87.7	91.5	129.6	152.4	160.1



TEST NUMBER: P520635

CATALOG NUMBER: 8WSLA-100-L840-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	129.6	114.3	144.8	171.5	179.1
115°	144.8	122.0	152.4	175.3	186.7
117.5°	156.3	133.4	160.1	182.9	190.6
120°	167.7	141.0	163.9	190.6	198.2
122.5°	182.9	148.6	171.5	194.4	205.8
125°	194.4	156.3	175.3	202.0	209.6
127.5°	205.8	171.5	179.1	205.8	213.4
130°	213.4	186.7	182.9	209.6	217.2
132.5°	224.9	198.2	186.7	213.4	221.0
135°	232.5	209.6	194.4	213.4	224.9
137.5°	240.1	221.0	194.4	213.4	221.0
140°	247.7	232.5	198.2	213.4	221.0
142.5°	251.5	240.1	202.0	213.4	221.0
145°	259.2	247.7	217.2	213.4	221.0
147.5°	263.0	255.3	228.7	213.4	221.0
150°	266.8	263.0	240.1	217.2	217.2
152.5°	270.6	266.8	247.7	232.5	224.9
155°	274.4	270.6	255.3	243.9	240.1
157.5°	278.2	278.2	263.0	255.3	251.5
160°	278.2	282.0	270.6	263.0	259.2
162.5°	282.0	285.8	274.4	270.6	266.8
165°	282.0	285.8	278.2	278.2	278.2
167.5°	285.8	289.6	285.8	282.0	282.0
170°	285.8	289.6	285.8	285.8	285.8
172.5°	285.8	289.6	289.6	289.6	289.6
175°	285.8	289.6	289.6	293.4	293.4
177.5°	285.8	289.6	289.6	289.6	289.6
180°	289.6	289.6	289.6	289.6	289.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	102.9	99.1	133.4	160.1	167.7
110°	114.3	106.7	141.0	163.9	171.5



(END OF REPORT)