

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: P520479

Luminaire Tested: **4WSLA-100-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: P520479
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: 4WSLA-100-L940-UPL8-UNV-U
Description: 4 FOOT, 1000 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

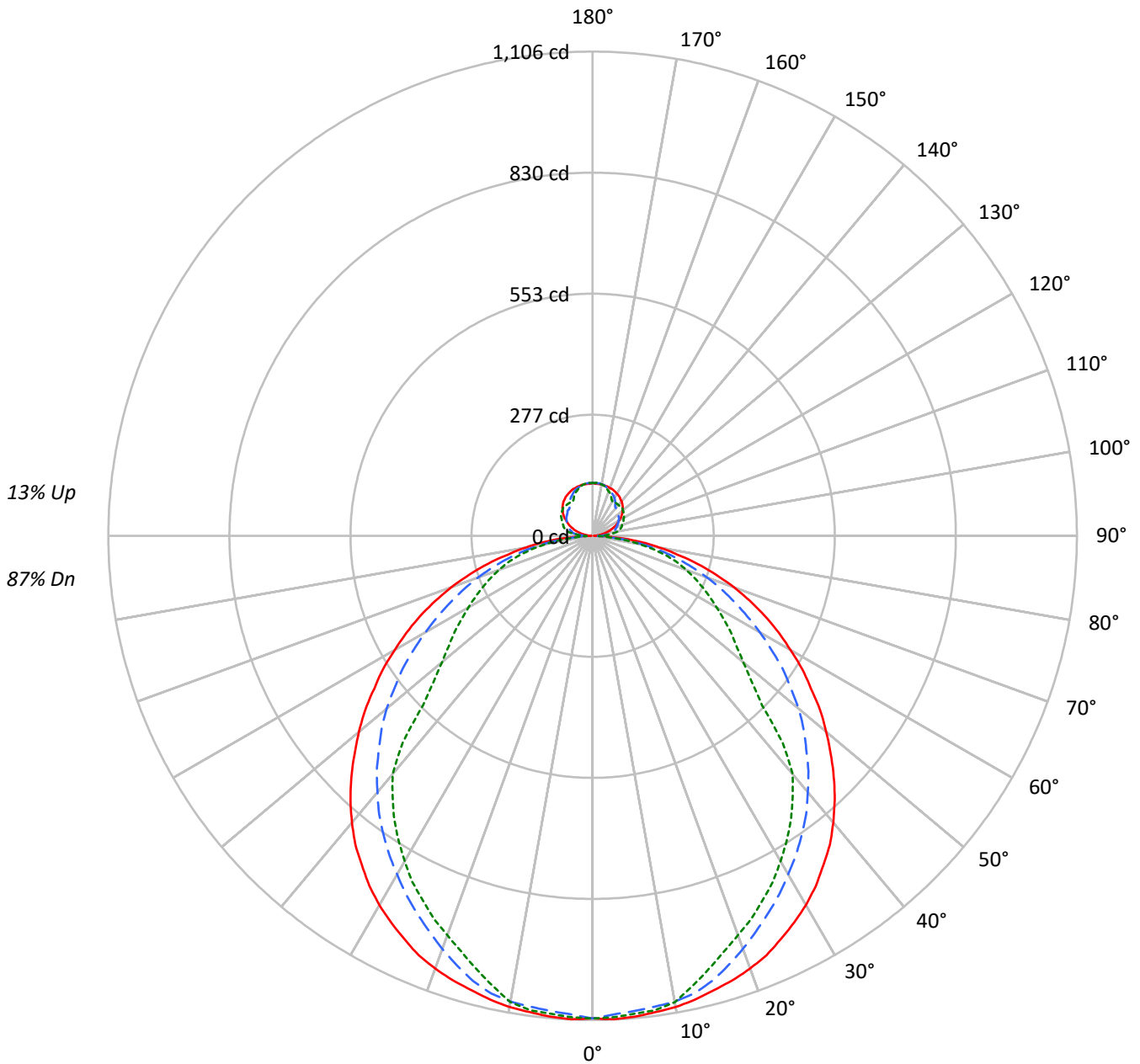
Lumens per Lamp: N/A
Luminaire Lumens: 3431.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 31.6
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°	5934	5934	5934
5°	5956	5888	5922
10°	5973	5904	5912
15°	5984	5869	5709
20°	6023	5751	5560
25°	6038	5643	5454
30°	6053	5550	5333
35°	6035	5472	5190
40°	6007	5372	4993
45°	5928	5252	4166
50°	5831	5140	3759
55°	5715	4971	3617
60°	5618	4747	3518
65°	5535	4545	3515
70°	5391	4368	3569
75°	5147	4157	3595
80°	4819	3738	3344
85°	4409	2643	2254



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	3.0
10°-20°	296.7	8.6
20°-30°	443.4	12.9
30°-40°	529.3	15.4
40°-50°	529.3	15.4
50°-60°	458.1	13.4
60°-70°	351.6	10.2
70°-80°	215.4	6.3
80°-90°	60.7	1.8
90°-100°	34.3	1.0
100°-110°	54.4	1.6
110°-120°	63.6	1.9
120°-130°	68.7	2.0
130°-140°	67.7	2.0
140°-150°	59.9	1.7
150°-160°	49.3	1.4
160°-170°	33.0	1.0
170°-180°	11.5	0.3
0°-30°	844.5	24.6
0°-40°	1373.7	40.0
0°-60°	2361.1	68.8
0°-90°	2988.8	87.1
90°-120°	152.3	4.4
90°-150°	348.5	10.2
90°-180°	442.0	12.9
0°-180°	3431.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1102	1099	1090	1098	1096	105
15°	1074	1072	1053	1034	1025	304
25°	1017	1004	950	925	918	469
35°	918	895	833	803	790	575
45°	779	757	690	628	547	601
55°	609	595	530	424	386	546
65°	435	419	357	287	276	429
75°	248	235	200	173	173	261
85°	71	59	43	36	36	75
90°	3	11	17	22	24	5
95°	13	27	36	38	38	13
105°	36	38	54	64	67	38
115°	60	51	64	73	78	59
125°	81	65	73	84	87	72
135°	97	87	81	89	94	75
145°	108	103	90	89	92	67
155°	114	113	106	102	100	53
165°	117	119	116	116	116	33
175°	119	121	121	122	122	11
180°	121	121	121	121	121	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1102.5	1102.5	1102.5	1102.5	1102.5
2.5°	1105.6	1102.5	1094.5	1102.5	1100.9
5°	1102.5	1099.3	1089.8	1097.7	1096.1
7.5°	1097.7	1094.5	1085.0	1094.5	1092.9
10°	1092.9	1089.8	1080.3	1086.6	1081.8
12.5°	1085.0	1081.8	1070.7	1062.8	1053.3
15°	1073.9	1072.3	1053.3	1034.3	1024.7
17.5°	1064.4	1059.6	1029.5	1007.3	996.2
20°	1051.7	1043.8	1004.1	978.7	970.8
22.5°	1037.4	1024.7	977.1	953.4	947.0
25°	1016.8	1004.1	950.2	924.8	918.5
27.5°	996.2	980.3	923.2	897.8	891.5
30°	974.0	951.8	893.1	869.3	858.2
32.5°	948.6	926.4	864.5	837.6	824.9
35°	918.5	894.7	832.8	802.7	790.0
37.5°	889.9	864.5	801.1	767.8	750.3
40°	855.0	829.6	764.6	728.1	710.7
42.5°	818.5	794.7	729.7	685.3	642.4
45°	778.9	756.7	690.0	628.2	547.3
47.5°	737.6	718.6	653.5	569.5	491.7
50°	696.4	677.3	613.9	514.0	448.9
52.5°	655.1	639.3	569.5	468.0	414.0
55°	609.1	594.9	529.8	423.5	385.5
57.5°	567.9	553.6	483.8	387.1	355.3
60°	521.9	509.2	441.0	350.6	326.8
62.5°	479.1	464.8	398.2	318.8	301.4
65°	434.6	418.8	356.9	287.1	276.0
67.5°	388.6	372.8	317.3	258.6	252.2
70°	342.6	329.9	277.6	230.0	226.8
72.5°	295.0	280.8	237.9	203.0	203.0
75°	247.5	234.8	199.9	172.9	172.9
77.5°	198.3	191.9	160.2	141.2	142.8
80°	155.5	147.5	120.6	107.9	107.9
82.5°	114.2	104.7	80.9	71.4	74.6
85°	71.4	58.7	42.8	36.5	36.5
87.5°	22.2	17.4	12.7	14.3	14.3
90°	3.2	11.1	17.4	22.2	23.8
92.5°	7.9	20.6	25.4	30.1	31.7
95°	12.7	27.0	36.5	38.1	38.1
97.5°	17.4	30.1	44.4	50.8	50.8
100°	23.8	31.7	47.6	57.1	58.7
102.5°	30.1	34.9	50.8	60.3	63.5
105°	36.5	38.1	53.9	63.5	66.6



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CATALOG NUMBER: 4WSLA-100-L940-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.9	47.6	60.3	71.4	74.6
115°	60.3	50.8	63.5	73.0	77.7
117.5°	65.0	55.5	66.6	76.1	79.3
120°	69.8	58.7	68.2	79.3	82.5
122.5°	76.1	61.9	71.4	80.9	85.7
125°	80.9	65.0	73.0	84.1	87.2
127.5°	85.7	71.4	74.6	85.7	88.8
130°	88.8	77.7	76.1	87.2	90.4
132.5°	93.6	82.5	77.7	88.8	92.0
135°	96.8	87.2	80.9	88.8	93.6
137.5°	99.9	92.0	80.9	88.8	92.0
140°	103.1	96.8	82.5	88.8	92.0
142.5°	104.7	99.9	84.1	88.8	92.0
145°	107.9	103.1	90.4	88.8	92.0
147.5°	109.5	106.3	95.2	88.8	92.0
150°	111.0	109.5	99.9	90.4	90.4
152.5°	112.6	111.0	103.1	96.8	93.6
155°	114.2	112.6	106.3	101.5	99.9
157.5°	115.8	115.8	109.5	106.3	104.7
160°	115.8	117.4	112.6	109.5	107.9
162.5°	117.4	119.0	114.2	112.6	111.0
165°	117.4	119.0	115.8	115.8	115.8
167.5°	119.0	120.6	119.0	117.4	117.4
170°	119.0	120.6	119.0	119.0	119.0
172.5°	119.0	120.6	120.6	120.6	120.6
175°	119.0	120.6	120.6	122.1	122.1
177.5°	119.0	120.6	120.6	120.6	120.6
180°	120.6	120.6	120.6	120.6	120.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	42.8	41.2	55.5	66.6	69.8
110°	47.6	44.4	58.7	68.2	71.4



(END OF REPORT)